

Friday, January 22, 2010

Page 1 of 4
REQUEST NUMBER: 10-1390

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: 10-1390
Per Agreement Number: 126310011
Project Cost Code: MR3A05529E00

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 1/22/2010
TURNAROUND/REPORT DUE: 2/21/2010
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-846:6020		1	RE15-10-7914	R	1/19/2010	
		1	RE15-10-7915	R	1/19/2010	
		1	RE15-10-7916	R	1/19/2010	
		1	RE15-10-7917	R	1/19/2010	
		1	RE15-10-7918	R	1/19/2010	
		1	RE15-10-7919	R	1/19/2010	
		1	RE15-10-7920	R	1/19/2010	
		1	RE15-10-7921	R	1/19/2010	
		1	RE15-10-7922	R	1/19/2010	

Friday, January 22, 2010

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REQUEST NUMBER: 10-1390

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
SW-846:6020						
		1	RE15-10-8053	R	1/19/2010	
		1	RE15-10-8054	R	1/19/2010	
		1	RE15-10-8074	W	1/19/2010	
		1	RE15-10-8075	W	1/19/2010	
SW-846:6850						
		1	RE15-10-7914	R	1/19/2010	
		1	RE15-10-7915	R	1/19/2010	
		1	RE15-10-7916	R	1/19/2010	
		1	RE15-10-7917	R	1/19/2010	
		1	RE15-10-7918	R	1/19/2010	
		1	RE15-10-7919	R	1/19/2010	
		1	RE15-10-7920	R	1/19/2010	
		1	RE15-10-7921	R	1/19/2010	
		1	RE15-10-7922	R	1/19/2010	
		1	RE15-10-8053	R	1/19/2010	
		1	RE15-10-8054	R	1/19/2010	
		1	RE15-10-8074	W	1/19/2010	
		1	RE15-10-8075	W	1/19/2010	
SW-846:7470A						
		1	RE15-10-8074	W	1/19/2010	
		1	RE15-10-8075	W	1/19/2010	
SW-846:7471A						
		1	RE15-10-7914	R	1/19/2010	
		1	RE15-10-7915	R	1/19/2010	
		1	RE15-10-7916	R	1/19/2010	
		1	RE15-10-7917	R	1/19/2010	
		1	RE15-10-7918	R	1/19/2010	
		1	RE15-10-7919	R	1/19/2010	
		1	RE15-10-7920	R	1/19/2010	
		1	RE15-10-7921	R	1/19/2010	
		1	RE15-10-7922	R	1/19/2010	

Friday, January 22, 2010

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REQUEST NUMBER: 10-1390

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:7471A	1	RE15-10-8053	R	1/19/2010	
		1	RE15-10-8054	R	1/19/2010	
	SW-846:8082	1	RE15-10-8053	R	1/19/2010	
		1	RE15-10-8054	R	1/19/2010	
	SW-846:8321A_MOD	1	RE15-10-7914	R	1/19/2010	
		1	RE15-10-7915	R	1/19/2010	
		1	RE15-10-7916	R	1/19/2010	
		1	RE15-10-7917	R	1/19/2010	
		1	RE15-10-7918	R	1/19/2010	
		1	RE15-10-7919	R	1/19/2010	
		1	RE15-10-7920	R	1/19/2010	
		1	RE15-10-7921	R	1/19/2010	
		1	RE15-10-7922	R	1/19/2010	
		1	RE15-10-8053	R	1/19/2010	
	SW-846:9012A	1	RE15-10-7914	R	1/19/2010	
		1	RE15-10-7915	R	1/19/2010	
		1	RE15-10-7916	R	1/19/2010	
		1	RE15-10-7917	R	1/19/2010	
		1	RE15-10-7918	R	1/19/2010	
		1	RE15-10-7919	R	1/19/2010	
		1	RE15-10-7920	R	1/19/2010	
		1	RE15-10-7921	R	1/19/2010	
		1	RE15-10-7922	R	1/19/2010	
		1	RE15-10-8053	R	1/19/2010	
		1	RE15-10-8054	R	1/19/2010	
		1	RE15-10-8074	W	1/19/2010	
		1	RE15-10-8075	W	1/19/2010	
		1	RE15-10-8075	W	1/19/2010	

Friday, January 22, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1390C

LOS ALAMOS

REQUEST NUMBER: 10-1390

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 2/21/2010

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
RE15-10-7918	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7918	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7915	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7915	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7920	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7920	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7914	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7914	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7919	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7919	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7921	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7921	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7916	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7916	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7917	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7917	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7922	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7922	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-8053	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE15-10-8053	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-8054	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE15-10-8054	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-8074	1	POLY	METALS+U-GEL	Nitric Acid	W
RE15-10-8074	1	POLY	SW-846:6850	Ice	W
RE15-10-8074	1	POLY	TCN	Sodium Hydroxide	W
RE15-10-8075	1	POLY	METALS+U-GEL	Nitric Acid	W
RE15-10-8075	1	POLY	SW-846:6850	Ice	W
RE15-10-8075	1	POLY	TCN	Sodium Hydroxide	W

Relinquished By:

Date

Time

Received By:

Date

Time

Printed Name

Signature

Printed Name

Signature

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2499

EVENT NAME: 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-7914

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/19/2010		MEDIA:	QBT3		ok
TIME COLLECTED (HH:MM)		1155		SUB-MEDIA:	TUFF 1		↓
PRS ID:	15-008(b)	ok		SAMPLE TECH CODE:	HA		ok
LOCATION ID:	15-610726	↓		FIELD QC TYPE:	NA		↓
LOCATION TYPE:	GENERIC			FIELD PREP:	NA		↓
TOP DEPTH:	0	2.0		SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0	3.0		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	AM241+GS+ISO PU+ISOU	1 LITER POLY	None		
1		H3	500 ML POLY	Ice		
1		Met+U+ClO4+C N	1 LITER POLY 1 Liter RS 01-11-10	Ice		
1		NMED Explosives list	250 ML AMBER GLASS	Ice		
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None		

SAMPLE DESC:

Gray tuff

SAMPLE COMMENTS:

NA

LOCATION DESC:

8b-60, mesa top

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 22 dpm
Beta/Gamma = 2390 dpm

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

COLLECTED BY (PRINT)

TLMcfarland

REVIEWED BY (PRINT)

Nicholas Gallegos

RELINQUISHED BY (Printed Name) MARY (Signature) Mary	Date/Time 1/20/10 9:44	RECEIVED BY (Printed Name) Sherri Sherwood (Signature) Sherri Sherwood	Date/Time 1/20/10 9:44
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2499

EVENT NAME: 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-7915

WORK ORDER:

AS PLANNED	AS COLLECTED	AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):	01/19/2010	MEDIA:	OBT3
TIME COLLECTED (HH:MM)	1326	SUB-MEDIA:	TUFF1
PRS ID: 15-008(b)	OK	SAMPLE TECH CODE: HA	OK
LOCATION ID: 15-610727	↓	FIELD QC TYPE: NA	↓
LOCATION TYPE: GENERIC	↓	FIELD PREP: NA	↓
TOP DEPTH: 0	0-0	SAMPLE USAGE: INV	↓
BOTTOM DEPTH: 0	0.4	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	AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		Met+U+CLO4+C N	1 LITER POLY IL RS 01-11-10	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, few gray tuff fragments

SAMPLE COMMENTS:

NA

LOCATION DESC:

8b-76 mesa top

FIELD SCREENING/MEASUREMENT RESULTS:

HE negative

Alpha = 27 dpm
Beta/Gamma = 5480 dpmPID $\frac{\text{Ambient Reading}}{0.0} = 0.0$ ppm

COLLECTED BY (PRINT)

JLMcFarlane

REVIEWED BY (PRINT)

R Saunders

RELINQUISHED BY (Printed Name) MARIN (Signature) J. R. Marin	Date/Time 1/20/10 09:44	RECEIVED BY (Printed Name) Sherri Sherwood (Signature) Sherri Sherwood	Date/Time 1/20/10 9:44
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2499

EVENT NAME: 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-7916

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/19/2010		MEDIA:	QBT3		OK
TIME COLLECTED (HH:MM)		1334		SUB-MEDIA:	TUFF 1		↓
PRS ID:	15-008(b)		OK	SAMPLE TECH CODE:	HA		Dk
LOCATION ID:	15-610727		↓	FIELD QC TYPE:	NA		↓
LOCATION TYPE:	GENERIC		↓	FIELD PREP:	NA		↓
TOP DEPTH:	0		2.0	SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0		3.1	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	AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		Met+U+CLO4+C N	TOTAL POLY 1L RS 01-11-10	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:

Gray tuff

SAMPLE COMMENTS:

NA

LOCATION DESC:

8b.-76, mesa top

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha $\leq$ 38 dpm
Beta/Gamma $\leq$ 2480 dpm

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

COLLECTED BY (PRINT)

T. McFarlane

REVIEWED BY (PRINT)

R. Saunders

RELINQUISHED BY (Printed Name) MARIN (Signature) [Signature]	Date/Time 1/20/10 09:44	RECEIVED BY (Printed Name) Sherri Sherwood (Signature) [Signature]	Date/Time 1/20/10 9:44
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2499

EVENT NAME: 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-7917

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/19/2010		MEDIA:	QBT3		Alth
TIME COLLECTED (HH:MM)		1400		SUB-MEDIA:	TUFF.1		NA
PRS ID:	15-008(b)	ok		SAMPLE TECH CODE:	HA		ok
LOCATION ID:	15-610728	↓		FIELD QC TYPE:	NA		↓
LOCATION TYPE:	GENERIC			FIELD PREP:	NA		↓
TOP DEPTH:	0	0.0		SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0	0.6		SCREEN/PORT DESC:			NA
FIELD MATRIX:	B	5		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	AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		Met+U+CLO4+C N	1 GAL POLY IL RS 01-11-10	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

SAMPLE COMMENTS:

NA

LOCATION DESC:

8b-67 mesa top

FIELD SCREENING/MEASUREMENT RESULTS:

HE negative

Alpha $\leq$ 38 dpmBeta/Gamma $\leq$ 2350 dpmPID $\frac{\text{Ambient Reading}}{0.0} = 0.0$ ppm

COLLECTED BY (PRINT)

TLMC Farland

REVIEWED BY (PRINT)

R Saunders

RELINQUISHED BY (Printed Name) <u>MAKIN</u> (Signature) <u>Jan R. Makin</u>	Date/Time <u>1/20/10</u> <u>09:44</u>	RECEIVED BY (Printed Name) <u>Sherri Sherwood</u> (Signature) <u>Sherri Sherwood</u>	Date/Time <u>1/20/10</u> <u>944</u>
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2499

EVENT NAME: 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-7918

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/19/2010		MEDIA:	QBT3		OK
TIME COLLECTED (HH:MM)		1425		SUB-MEDIA:	TUFF 1		↓
PRS ID:	15-008(b)	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	15-610728	↓		FIELD QC TYPE:	NA		↓
LOCATION TYPE:	GENERIC	↓		FIELD PREP:	NA		↓
TOP DEPTH:	0	1.3		SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0	3.6		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	AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1	↓	H3	500 ML POLY	Ice	Y	
1	↓	Met+U+ClO4+C N	1 GAL POLY IL RS 01-11-10	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:

Gray tuff and orange clay
FD: RE15-10-8054

SAMPLE COMMENTS:

NA

LOCATION DESC:

8b-67 mesa top

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 55 dpm
Beta/Gamma = 2240 dpmPID $\frac{\text{Ambient}}{\text{Reading}} = \frac{0.0}{0.0}$ ppm

COLLECTED BY (PRINT)

Th McFarlane

REVIEWED BY (PRINT) R Saunders

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) MARIN	1/20/10	(Printed Name) Jay Wells	1/20/10
(Signature) [Signature]	9:44	(Signature) [Signature]	10:10
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2499

EVENT NAME: 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-7919

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/19/2010		MEDIA:	QBT3		Allh
TIME COLLECTED (HH:MM)		1510		SUB-MEDIA:	TUFF 1		NA
PRS ID:	15-008(b)	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	15-610729			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	AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		Met+U+CLO4+C N	1 GAL POLY 1L RS 01-11-10	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 moist silty clay

SAMPLE COMMENTS:

NA

LOCATION DESC:

8b-62 mesa top

FIELD SCREENING/MEASUREMENT RESULTS:

HE negative

Alpha ≤ 49 dpm

Beta/Gamma ≤ 3290 dpm

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

COLLECTED BY (PRINT)

Th McFarland

REVIEWED BY (PRINT)

R Saunders

RELINQUISHED BY (Printed Name) MARIN (Signature) [Signature]	Date/Time 1/20/10 9:44	RECEIVED BY (Printed Name) Sherri Sherwood (Signature) [Signature]	Date/Time 1/20/10 9:44
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2499

EVENT NAME: 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-7920

WORK ORDER:

AS PLANNED		AS COLLECTED	AS PLANNED		AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		01/19/2010	MEDIA:	QBT3	ok
TIME COLLECTED (HH:MM)		1522	SUB-MEDIA:	TUFF 1	L
PRS ID:	15-008(b)	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	15-610729	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	2.0	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	3.3	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	Regular	AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		Met+U+CLO4+C N	1 GAL POLY IL RS 01/11/10	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:

Gray, tuff

FR RE15-10-8075

SAMPLE COMMENTS:

NA

LOCATION DESC:

8b-62 mesa top

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 27 dpm
Beta/Gamma = 2680 dpm

PID $\frac{\text{Ambient}}{\text{Reading}} = \frac{0.0}{1.1}$ ppm

COLLECTED BY (PRINT)

TL McFarland

REVIEWED BY (PRINT)

R Saunders

RELINQUISHED BY (Printed Name) MARIN (Signature) Jon R. Marin	Date/Time 1/20/10 9:44	RECEIVED BY (Printed Name) Sherri Shewood (Signature) Sherri Shewood	Date/Time 1/20/10 9:44
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2499

EVENT NAME: 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-7921

WORK ORDER:

AS PLANNED	AS COLLECTED	AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):	01/19/2010	MEDIA:	QBT3
TIME COLLECTED (HH:MM)	1600	SUB-MEDIA:	TUFF1
PRS ID: 15-008(b)	OK	SAMPLE TECH CODE: HA	OK
LOCATION ID: 15-610730	↓	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	AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1	↓	H3	500 ML POLY	Ice	Y	
1	↓	Met+U+CLO4+C N	1 GAL POLY IL RS 01-11-10	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

SAMPLE COMMENTS:

NA

LOCATION DESC:

8b-44, mesa Top

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha ≤ 38 dpm
Beta/Gamma ≤ 2920 dpm

HE NEG
PID $\frac{\text{Ambient Reading}}{0.0} \frac{0.0}{0.0}$ ppm

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TL McFarland

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R Saunders

RELINQUISHED BY (Printed Name) MARIN (Signature) <i>Jan A. Marin</i>	Date/Time 1/20/10 09:44	RECEIVED BY (Printed Name) (Signature) <i>[Signature]</i>	Date/Time 1/20/10 10:10
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2499

EVENT NAME: 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-7922

WORK ORDER:

AS PLANNED	AS COLLECTED	AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):	01/19/2010	MEDIA:	QBT3
TIME COLLECTED (HH:MM)	16 15	SUB-MEDIA:	TUFF 1
PRS ID: 15-008(b)	OK	SAMPLE TECH CODE: HA	OK
LOCATION ID: 15-610730	↓	FIELD QC TYPE: NA	↓
LOCATION TYPE: GENERIC	↓	FIELD PREP: NA	↓
TOP DEPTH: 0	2.0	SAMPLE USAGE: INV	↓
BOTTOM DEPTH: 0	3.0	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	AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1	↓	H3	500 ML POLY	Ice	Y	
1	↓	Met+U+CLO4+C N	1 GAL POLY 1L RS 01-11-10	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:

Gray Tuff

SAMPLE COMMENTS:

NA

LOCATION DESC:

8b-44 mesa top

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 66 dpm
Beta/Gamma = 2600 dpm

PID $\frac{\text{Ambient}}{\text{Reading}} = \frac{0.0}{2.7}$ ppm

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TL McFarland

REVIEWED BY (PRINT)

R. Saunders

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) MARIN	1/20/10	(Printed Name) Jay Weber	1/20/10
(Signature) Jan R. Marin	09:45	(Signature)	1010
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2499

EVENT NAME: 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-8053

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/19/2010		MEDIA:	QBT3		Allh
TIME COLLECTED (HH:MM)		0945		SUB-MEDIA:	TUFF 1		NA
PRS ID:	15-008(b)	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	UNK	15-610723		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:	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	72m 1/19/10 8082+NMED-HEXP	250 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		Met+U+CLO4+C N	1 GAL POLY 1 liter 1-11-10 LC	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: QC Sample of

RE15-10-7907

Brown silty sand, some clay and rocks

SAMPLE COMMENTS:

NA

LOCATION DESC:

8b-72, mesa top

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha $\leq$ 44 dpm
Beta/Gamma $\leq$ 3760 dpm

HE negative

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

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Th McFarland

REVIEWED BY (PRINT)

Nikolas Gallegos

RELINQUISHED BY (Printed Name) MARIN (Signature) <i>Janet Marin</i>	Date/Time 1/20/10 09:45	RECEIVED BY (Printed Name) <i>Janet Marin</i> (Signature) <i>Janet Marin</i>	Date/Time 1/20/10 1010
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2499

EVENT NAME: 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-8054

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		61/19/2010		MEDIA: OBT3		ok	
TIME COLLECTED (HH:MM)		1425		SUB-MEDIA: TUFF 1		L	
PRS ID: 15-008(b)		ok		SAMPLE TECH CODE: HA		ok	
LOCATION ID: UNK		15-610728		FIELD QC TYPE: FD			
LOCATION TYPE: GENERIC		ok		FIELD PREP: NA			
TOP DEPTH: 0		1.3		SAMPLE USAGE: QC		↓	
BOTTOM DEPTH: 0		3.6		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	72m 1/19/10 8082+NMED-HEXP	250 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		Met+U+CLO4+C N	1 GAL POLY 11 liter 1.11.10 RC	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: QC Sample of RE15-10-7918

Gray tuff and orange clay

SAMPLE COMMENTS:

NA

LOCATION DESC:

8b-67 mesa top

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha $\pm$ 55 dpm
Beta/Gamma $\pm$ 2360 dpm

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

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T. McFarland

REVIEWED BY (PRINT)

R. Saunders

RELINQUISHED BY (Printed Name) MARIN (Signature) Jan R. Marin	Date/Time 1/20/10 09:45	RECEIVED BY (Printed Name) (Signature) Jay Bulwag	Date/Time 1/20/10 1010
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2499

EVENT NAME: 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-8074

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/19/2010		MEDIA:	NA		OK
TIME COLLECTED (HH:MM)		1108		SUB-MEDIA:	OTHER		
PRS ID:	15-008(b)	OK		SAMPLE TECH CODE:	DC		
LOCATION ID:	UNK	15-610704		FIELD QC TYPE:	ER		
LOCATION TYPE:	GENERIC	OK		FIELD PREP:	UF		
TOP DEPTH:	0			SAMPLE USAGE:	QC		
BOTTOM DEPTH:	0			SCREEN/PORT DESC:	NA		7m 1/19/10
FIELD MATRIX:	W			EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		WATER FLOWING: YES/NO/NA
BOREHOLE: YES/NO/NA				BOREHOLE DECLINATION:	NA		BOREHOLE DIRECTION: NA

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

SAMPLE DESC: QC Sample of RE15-10-7869

SAMPLE COMMENTS:

Ringsatc

LOCATION DESC:

NA

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = $\frac{7m}{1/19/10}$ dpm NA
 Beta/Gamma = _____ dpm

7m 1/19/10
 PHD ~~Ambient~~ = ppm

COLLECTED BY (PRINT)

TLMcFarland

REVIEWED BY (PRINT)

Nicholas Gallagos

RELINQUISHED BY (Printed Name) MARIN (Signature) <i>Jim R. Y. Marin</i>	Date/Time 01/20/10 08:45	RECEIVED BY (Printed Name) (Signature) <i>Jim R. Y. Marin</i>	Date/Time 1/20/10 10:16
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2499

EVENT NAME: 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-8075

WORK ORDER:

AS PLANNED	AS COLLECTED	AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):	01/19/2010	MEDIA:	NA
TIME COLLECTED (HH:MM)	1530	SUB-MEDIA:	OTHER
PRS ID: 15-008(b)	OK	SAMPLE TECH CODE:	DC
LOCATION ID: UNK	15-610729	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	W	EXCAVATED: YES/NO/NA	
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA	
		WATER FLOWING: YES/NO/NA	
BOREHOLE: YES/NO/NA		BOREHOLE DECLINATION: NA	
		BOREHOLE DIRECTION: NA	

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

SAMPLE DESC: QC Sample of RE15-10-7920

SAMPLE COMMENTS:

Rinsete

LOCATION DESC:

NA

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = ~~NA~~ dpm
Beta/Gamma = ~~NA~~ dpm

73m 1/19/10

73m 1/19/10
PID ~~Ambient Reading~~ = ppm

COLLECTED BY (PRINT)

TLMcFarlane

REVIEWED BY (PRINT)

R Saunders

RELINQUISHED BY (Printed Name) MARIN (Signature) <i>Jan R. Marin</i>	Date/Time 0945 1/20/10	RECEIVED BY (Printed Name) (Signature) <i>Jaywitz</i>	Date/Time 1/20/10 1010
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

DATA VALIDATION COVER SHEET	
5116-1	Data Validation Cover Sheet Records Use only 

Section I.	
REQUEST NUMBER: <u>10-1390</u>	VALIDATION DATE: <u>3/2/10</u>
LAB CODE: <u>GEL</u>	
CONTRACT LABORATORY NAME: <u>GEL Laboratories LLC</u>	
VALIDATOR: <u>Eric T. Mink</u>	ORGANIZATION: <u>Analytical Quality Associates, Inc.</u>
ANALYTICAL SUITE (CHECK ALL THAT APPLY):	
☐ TPH-GRO	☐ HIGH EXPLOSIVES
☐ TPH-DRO	☐ METALS
☐ GENERAL CHEMISTRY	☐ RADIOCHEMISTRY
☐ OTHER (DESCRIBE): <u>PCBs</u>	
☐ DIOXIN FURANS	☐ LCMSMS PERCHLORATES
☐ PCB CONGENERS	☒ ORGANOCHLORINE
☐ LCMSMS HIGH EXPLOSIVES	☐ PESTICIDES/POLYCHLORINATED BIPHENYLS

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

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

1. It should be noted that the MS/MSD analyses were performed on a LANL sample from a different RN. However, MS/MSD analyses are not required for this analysis and, thus, no sample data were qualified.

Reviewed by: Mary DonovanLevel: IDate: 03/03/10VALIDATOR'S SIGNATURE: Eric T. MinkDATE: 3/2/10

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

5116-2

**Organochlorine Pesticide (PEST) and Polychlorinated
Biphenyl (PCB) Analytical Data Validation Checklist**

Records Use only



Yes No N/A (Check One)				Assign Qualifier Listed Below If Criterion = Yes	
				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, P9	J-, P9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, P9	J-, P9a
☐	☒	☐	3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.	R, P9b	R, P9b
☐	☒	☐	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
☐	☒	☐	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
☐	☒	☐	6. The Initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, P7c	J, P7c
☐	☒	☐	7. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, P7d	J, P7d
☐	☒	☐	8. The multicomponent standard was not analyzed within 72 hours of the initial analysis.	R, P7e	J, P7e
☐	☒	☐	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
☐	☐	☒	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
☐	☐	☒	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
☐	☐	☒	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
☐	☒	☐	13. The sample result is $\leq 5X$ the concentration of the related analyte in the method blank.	U, P4	N/A
☐	☒	☐	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
☐	☐	☒	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
☐	☐	☒	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
☐	☒	☐	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
☐	☒	☐	18. The analyte RT shifted by more than 0.05 minutes from the mid-level standard of the initial calibration.	R, P0	J, P0
☐	☒	☐	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
☐	☒	☐	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 (Check One)				Assign Qualifier Listed Below if Criterion = Yes	
				Non-detected Analyte	Detected Analyte
☐	☒	☐	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
☐	☒	☐	22. The surrogate %R value is > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, P3b
☐	☒	☐	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
☐	☒	☐	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
☐	☒	☐	25. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, P12	J-, P12
☐	☒	☐	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
☐	☒	☐	27. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, P12b
☐	☒	☐	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
☐	☒	☐	29. The analyte was not confirmed on a second dissimilar column.	N/A	R, P8
☐	☒	☐	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
☐	☒	☐	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
☐	☐	☒	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
☒	☐	☐	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
☐	☒	☐	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
Certificate of Analysis
Sample Summary

Page 1 of 1

SDG Number: 10-1390
Lab Sample ID: 245391010

Client ID: RE15-10-8053
Batch ID: 945979
Run Date: 01/28/2010 09:57
Prep Date: 01/27/2010 20:26
Data File: 017f1701.d
017b1701.d

Date Collected: 01/19/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8082
Inst: ECD2A.J
Analyst: JAOC
Allquot: 30.12 g
Column: 1 CLP1
2 CLP2

Matrix: R
%Moisture: 19.2
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	4.11	ug/kg	1.37	4.11	1
11104-28-2	Aroclor-1221	U	4.11	ug/kg	1.37	4.11	1
11141-16-5	Aroclor-1232	U	4.11	ug/kg	1.37	4.11	1
53469-21-9	Aroclor-1242	U	4.11	ug/kg	1.37	4.11	1
12672-29-6	Aroclor-1248	U	4.11	ug/kg	1.37	4.11	1
11097-69-1	Aroclor-1254		18.7	ug/kg	1.37	4.11	1
11096-82-5	Aroclor-1260		15.9	ug/kg	1.37	4.11	2

ETM
3/2/10

PCB
Certificate of Analysis
Sample Summary

SDG Number: 10-1390
Lab Sample ID: 245391011

Client ID: RE15-10-8054
Batch ID: 945979
Run Date: 01/28/2010 10:08
Prep Date: 01/27/2010 20:26
Data File: 018f1801.d
018b1801.d

Date Collected: 01/19/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8082
Inst: ECD2A.I
Analyst: JAOC
Aliquot: 30.15 g
Column: 1 CLP1
2 CLP2

Matrix: R
%Moisture: 9.5
Project: LANL01004
SOP Ref: GL-OA-E-040
Dilution: 1
Inj. Vol: 1 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.66	ug/kg	1.22	3.66	1
11104-28-2	Aroclor-1221	U	3.66	ug/kg	1.22	3.66	1
11141-16-5	Aroclor-1232	U	3.66	ug/kg	1.22	3.66	1
53469-21-9	Aroclor-1242	U	3.66	ug/kg	1.22	3.66	1
12672-29-6	Aroclor-1248	U	3.66	ug/kg	1.22	3.66	1
11097-69-1	Aroclor-1254	U	3.66	ug/kg	1.22	3.66	1
11096-82-5	Aroclor-1260	U	3.66	ug/kg	1.22	3.66	1

ETM
3/2/10

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

Section I.

REQUEST NUMBER: 10-1390 VALIDATION DATE: 3/2/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Eric T. Mink ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

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

☐ OTHER (DESCRIBE): _____

Section II. Completeness Check

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

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

1. It should be noted that the aqueous MS/MSD analyses were performed on a LANL sample from a different RN. Also, the raw data for the parent samples were not provided in the data package. No sample data were qualified.

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

VALIDATOR'S SIGNATURE: Eric T. Mink DATE: 3/2/10

Form 5121-1, Revision 0.0	LOS ALAMOS Environmental Restoration Project
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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
☐	☒	☐	1. The Internal Standard (IS) relative retention time has shifted by more than 0.98 to 1.02 seconds.	R, PERC0	J, PERC0
☐	☒	☐	2. Required IS retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, PERC0b	R, PERC0b
☐	☐	☒	3. The IS are count is <25% of the expected value.	UJ, PERC1a	J, PERC1a
☐	☐	☒	4. The IS area count is <70% but >25% of the average of that obtained from the calibration standards.	UJ, PERC1b	J, PERC1b
☐	☐	☒	5. The IS area count is >130% of the average of that obtained from the calibration standards.	UJ, PERC1c	J, PERC1c
☐	☐	☒	6. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, PERC1d	R, PERC1d
☐	☒	☐	7. The sample result is $\leq 5X$ the concentration of the related analyte in the method blank.	U, PERC4	N/A
☐	☒	☐	8. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X.	N/A	J+, PERC4a
☐	☒	☐	9. The sample result is $\leq 5X$ the concentration of the related analyte in the trip blank, rinsate blank, and/or equipment blank.	U, PERC4d	N/A
☐	☒	☐	10. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, PERC4e	R, PERC4e
☐	☒	☐	11. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, PERC7	J, PERC7
☐	☒	☐	12. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.99.	UJ, R, PERC7a	J, PERC7a

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

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

LC/MS/MS PERCHLORATE ANALYTICAL DATA VALIDATION CHECKLIST	
5121-2	Records Use only
LC/MS/MS Perchlorate Analytical Data Validation Checklist	 Los Alamos NATIONAL LABORATORY EST. 1942

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

Form 1

Perchlorate Analysis Data Sheet

Client Sample No.
RE15-10-7918

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Date Received: 23-JAN-10

Instrument: LCMSMS

GEL Job No (SDG): 10-1390

Method: SW846 6850 Modified

GEL Sample ID: 245391001

Matrix: SOIL

Date Filtered: 03-FEB-10

Extraction Batch ID: 247103

Injection Volume (uL): 20

Extraction Type: Solid Prep

%Solids: 90.4

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.553	2.21	1.81	ug/kg	J	1	04-FEB-10 19:47	per0204049a
	Perchlorate Isotope Ratio			3.14			1	04-FEB-10 19:47	per0204049a
14797-73-0	Perchlorate-101	.553	2.21	1.84	ug/kg	J	1	04-FEB-10 19:47	per0204049a
	Perchlorate-O(18)			6.17	ug/kg		1	04-FEB-10 19:47	per0204049a

[^] 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

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Client Sample No.

RE15-10-7215

Instrument: LCMSMS

Date Received: 23-JAN-10

Method: SW846 6850 Modified

GEL Job No (SDG): 10-1390

Matrix: SOIL

GEL Sample ID: 245391002

Extraction Batch ID: 247103

Date Filtered: 03-FEB-10

Extraction Type: Solid Prep

Injection Volume (uL): 20

Sample Volume/Weight: 2.00 g

%Solids: 82

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.612	2.45	0.612	ug/kg	U	1	04-FEB-10 20:08	per0204052a
	Perchlorate Isotope Ratio						1	04-FEB-10 20:08	per0204052a
14797-73-0	Perchlorate-101	.612	2.45	0.612	ug/kg	U	1	04-FEB-10 20:08	per0204052a
	Perchlorate-O(18)			6.39	ug/kg		1	04-FEB-10 20:08	per0204052a

[^] 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

Perchlorate Analysis Data Sheet

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

Lab Name: GEL Laboratories LLCLab Code: GEL

Client Sample No.

RE15-10-7920Instrument: LCMSMSDate Received: 23-JAN-10Method: SW846 6850 ModifiedGEL Job No (SDG): 10-1390Matrix: SOILGEL Sample ID: 245391003Extraction Batch ID: 247103Date Filtered: 03-FEB-10Extraction Type: Solid PrepInjection Volume (uL): 20Sample Volume/Weight: 2.00 g%Solids: 96.3Concentrated Extract Volume: 20.0

CAS No.	Analyte ^a	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.519	2.08	0.519	ug/kg	U	1	04-FEB-10 20:15	per0204053a
	Perchlorate Isotope Ratio						1	04-FEB-10 20:15	per0204053a
14797-73-0	Perchlorate-101	.519	2.08	0.519	ug/kg	U	1	04-FEB-10 20:15	per0204053a
	Perchlorate-O(18)			5.55	ug/kg		1	04-FEB-10 20:15	per0204053a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1 %Solids
Aliquot

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 947103

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-7914

Date Received: 23-JAN-10

GEL Job No (SDC): 10-1390

GEL Sample ID: 245391004

Date Filtered: 03-FEB-10

Injection Volume (uL): 20

%Solids: 90.4

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.553	2.21	0.553	ug/kg	U	1	04-FEB-10 20:22	per0204054a
	Perchlorate Isotope Ratio						1	04-FEB-10 20:22	per0204054a
14797-73-0	Perchlorate-101	.553	2.21	0.553	ug/kg	U	1	04-FEB-10 20:22	per0204054a
	Perchlorate-O(18)			6.30	ug/kg		1	04-FEB-10 20:22	per0204054a

[^] 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

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Client Sample No.

RE15-10-7919

Instrument: LCMSMS

Date Received: 23-JAN-10

Method: SW846 6850 Modified

GEL Job No (SDG): 10-1390

Matrix: SOIL

GEL Sample ID: 245391005

Extraction Batch ID: 247103

Date Filtered: 03-FEB-10

Extraction Type: Solid Prep

Injection Volume (uL): 20

Sample Volume/Weight: 2.00 g

%Solids: 77

Concentrated Extract Volume: 20.0

CAS No.	Analyte ^a	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.646	2.58	0.646	ug/kg	U	1	04-FEB-10 20:29	per0204055a
	Perchlorate Isotope Ratio						1	04-FEB-10 20:29	per0204055a
14797-73-0	Perchlorate-101	.646	2.58	0.646	ug/kg	U	1	04-FEB-10 20:29	per0204055a
	Perchlorate-O(18)			7.14	ug/kg		1	04-FEB-10 20:29	per0204055a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1
Aliquot %Solids

Perchlorate Analysis Data Sheet

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Lab Name: GEL Laboratories LLC Client Sample No. RE15-10-7921

Lab Code: GEL Date Received: 23-JAN-10

Instrument: LCMSMS GEL Job No (SDG): 10-1390

Method: SW846 6850 Modified GEL Sample ID: 245391006

Matrix: SOIL Date Filtered: 03-FEB-10

Extraction Batch ID: 247103 Injection Volume (uL): 20

Extraction Type: Solid Prep %Solids: 82

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.609	2.43	0.609	ug/kg	U	1	05-FEB-10 12:35	per0205012a
	Perchlorate Isotope Ratio						1	05-FEB-10 12:35	per0205012a
14797-73-0	Perchlorate-101	.609	2.43	0.609	ug/kg	U	1	05-FEB-10 12:35	per0205012a
	Perchlorate-O(18)			6.13	ug/kg		1	05-FEB-10 12:35	per0205012a

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

*Concentration =

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

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 947103

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-7916

Date Received: 23-JAN-10

GEL Job No (SDG): 10-1390

GEL Sample ID: 245391007

Date Filtered: 03-FEB-10

Injection Volume (uL): 20

%Solids: 93.2

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.536	2.15	0.536	ug/kg	U	1	05-FEB-10 12:42	per0205013a
	Perchlorate Isotope Ratio						1	05-FEB-10 12:42	per0205013a
14797-73-0	Perchlorate-101	.536	2.15	0.536	ug/kg	U	1	05-FEB-10 12:42	per0205013a
	Perchlorate-O(18)			5.38	ug/kg		1	05-FEB-10 12:42	per0205013a

[^] 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
 Client Sample No. RE15-10-7917

Instrument: LCMSMS
 Date Received: 23-JAN-10

Method: SW846 6850 Modified
 GEL Job No (SDG): 10-1390

Matrix: SOIL
 GEL Sample ID: 245391008

Extraction Batch ID: 247103
 Date Filtered: 03-FEB-10

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

Sample Volume/Weight: 2.00 g
 % Solids: 80

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.627	2.51	0.627	ug/kg	U	1	05-FEB-10 12:49	per0205014a
	Perchlorate Isotope Ratio						1	05-FEB-10 12:49	per0205014a
14797-73-0	Perchlorate-101	.627	2.51	0.627	ug/kg	U	1	05-FEB-10 12:49	per0205014a
	Perchlorate-O(18)			6.11	ug/kg		1	05-FEB-10 12:49	per0205014a

[^] 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

Form 1

Perchlorate Analysis Data Sheet

Client Sample No.
RE15-10-7922

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Date Received: 23-JAN-10

Instrument: LCMSMS

GEL Job No (SDG): 10-1390

Method: SW846 6850 Modified

GEL Sample ID: 245391009

Matrix: SOIL

Date Filtered: 03-FEB-10

Extraction Batch ID: 947103

Injection Volume (uL): 20

Extraction Type: Solid Prep

%Solids: 20.1

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte ^A	MDL	RL	Conc.*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.555	2.22	0.587	ug/kg	J	1	05-FEB-10 12:56	per0205015a
	Perchlorate Isotope Ratio			3.07			1	05-FEB-10 12:56	per0205015a
14797-73-0	Perchlorate-101	.555	2.22	0.629	ug/kg	J	1	05-FEB-10 12:56	per0205015a
	Perchlorate-O(18)			5.95	ug/kg		1	05-FEB-10 12:56	per0205015a

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

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

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 247103

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8053

Date Received: 23-JAN-10

GEL Job No (SDG): 10-1390

GEL Sample ID: 245391010

Date Filtered: 03-FEB-10

Injection Volume (mL): 20

% Solids: 81

CAS No.	Analyte [^]	MDL	RL	Conc.*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.619	2.48	0.619	ug/kg	U	1	05-FEB-10 13:03	per0205016a
	Perchlorate Isotope Ratio						1	05-FEB-10 13:03	per0205016a
14797-73-0	Perchlorate-101	.619	2.48	0.619	ug/kg	U	1	05-FEB-10 13:03	per0205016a
	Perchlorate-O(18)			6.16	ug/kg		1	05-FEB-10 13:03	per0205016a

[^] 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 Client Sample No. RE15-10-8054

Lab Code: GEL Date Received: 23-JAN-10

Instrument: LCMSMS GEL Job No (SDG): 10-1390

Method: SW846 6850 Modified GEL Sample ID: 245391011

Matrix: SOIL Date Filtered: 03-FEB-10

Extraction Batch ID: 247103 Injection Volume (uL): 20

Extraction Type: Solid Prep %Solids: 90.5

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.552	2.21	2.25	ug/kg		1	05-FEB-10 13:10	per0205017a
	Perchlorate Isotope Ratio			3.24			1	05-FEB-10 13:10	per0205017a
14797-73-0	Perchlorate-101	.552	2.21	2.28	ug/kg		1	05-FEB-10 13:10	per0205017a
	Perchlorate-O(18)			6.05	ug/kg		1	05-FEB-10 13:10	per0205017a

[^] 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

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC Client Sample No. RE15-10-8074

Lab Code: GEL Date Received: 23-JAN-10

Instrument: LCMSMS GEL Job No (SDG): 10-1390-1

Method: SW846 6850 Modified GEL Sample ID: 245392001

Matrix: WATER Date Filtered: 30-JAN-10

Extraction Batch ID: 945225 Injection Volume (uL): 20

Extraction Type: Filter/DAI % Solids:

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

CAS No.	Analyte ^a	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	01-FEB-10 23:03	per0201067a
	Perchlorate Isotope Ratio						1	01-FEB-10 23:03	per0201067a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	01-FEB-10 23:03	per0201067a
	Perchlorate-O(18)			0.459	ug/L		1	01-FEB-10 23:03	per0201067a

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

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

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC Client Sample No. RE15-10-8075

Lab Code: GEL Date Received: 23-JAN-10

Instrument: LCMSMS GEL Job No (SDG): 10-1390-1

Method: SW846 6850 Modified GEL Sample ID: 245392002

Matrix: WATER Date Filtered: 30-JAN-10

Extraction Batch ID: 245225 Injection Volume (uL): 20

Extraction Type: Filter/DAI

% Solids:

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

CAS No.	Analyte [^]	MDL	RL	Conc**	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	01-FEB-10 23:10	per0201068a
	Perchlorate Isotope Ratio						1	01-FEB-10 23:10	per0201068a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	01-FEB-10 23:10	per0201068a
	Perchlorate-O(18)			0.470	ug/L		1	01-FEB-10 23:10	per0201068a

[^] 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

DATA VALIDATION COVER SHEET	
5122-1	Records Use only 
Data Validation Cover Sheet	

Section I.

REQUEST NUMBER: 10-1390 VALIDATION DATE: 3/2/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Eric T. Mink ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

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

Section II. Completeness Check

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

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

1. In the CCVs associated with all the samples, the %D was >20% with a positive bias for 3,5-dinitroaniline. In the CCV associated with sample RE15-10-7920 and the HMX analysis of sample -7915, the %Ds were >20% with a positive bias for HMX, PETN and tetryl. In the CCV associated with all the other samples, the %Ds were >20% with a positive bias for PETN and 2,4,6-trinitrotoluene. The HMX result for sample -7915 was a detect and, thus, was qualified J,HE7c. The associated sample result was an ND and, thus, was not qualified.
2. The LCS %R was < the laboratory's LAL but $\geq 10\%$ for tetryl. The associated sample results were NDs and, thus, were qualified UJ,HE12a.
3. The MSD %R was > the laboratory's UAL for 3,5-dinitroaniline. The associated sample results were NDs and, thus, were not qualified.
4. It should be noted that the raw ICAL data from the instrument used for the secondary HE analysis was not reported in the data package. Thus, surrogate RT criteria could not be evaluated. No sample data were qualified as a result.

Reviewed by: Mary DonovanLevel: IDate: 03/03/10

VALIDATOR'S SIGNATURE: _____

Eric T. MinkDATE: 3/2/10

DATA VALIDATION COVER SHEET		
5122-1	Data Validation Cover Sheet	Records Use only  EST. 1945
Form 5122-1, Revision 0.0		LOS ALAMOS Environmental Restoration Project

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
☐	☒	☐	1. The IS retention time has shifted by more than 30 seconds.	R, UJ, HE0	J, HE0
☐	☒	☐	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
☐	☐	☒	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
☐	☐	☒	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
☐	☐	☒	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
☐	☐	☒	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
☐	☒	☐	7. The surrogate is <10%R. Follow the external laboratory limits.	R, HE3	J-, HE3
☐	☒	☐	8. The surrogate is < the Lower Acceptance Limit but ≥10% recovery. Follow the external laboratory limits.	UJ, HE3a	J-, HE3a
☐	☒	☐	9. The surrogate %R value is > the Upper Acceptance Limit. Follow the external laboratory limits.	N/A	J+, HE3b
☐	☐	☒	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		
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
☐	☒	☐	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
☐	☒	☐	12. The sample result is ≤ 5 times the concentration of the related analyte in the method blank.	U, HE4	N/A
☐	☒	☐	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
☐	☐	☒	14. The sample result is ≤ 5 times the concentration of the related analyte in the trip blank, rinsate blank, and/or equipment blank.	U, HE4d	N/A
☐	☒	☐	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
☐	☒	☐	16. The absence of sample carry-over must be determined and verified.	N/A	R, N, HE4f
☐	☒	☐	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
☐	☒	☐	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
☐	☒	☐	19. The affected analytes were analyzed with a RRF of < 0.05 in the initial calibration and/or CCV.	UJ, R, HE7b	J, HE7b
☒	☐	☐	20. The ICV and/or CCV were recovered outside the method limits.	UJ, R, HE7c	J, HE7c
☐	☒	☐	21. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, R, HE7d	J, HE7d
☐	☒	☐	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
☐	☒	☐	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
☐	☒	☐	24. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, HE9	J-, HE9
☐	☒	☐	25. The holding time was >2 times the applicable holding time requirement.	R, HE9a	J-, HE9a
☐	☒	☐	26. The LCS percent recovery was <10%. Follow the external laboratory limits.	R, HE12	J-, HE12
☒	☐	☐	27. The LCS percent recovery was < the Lower Acceptance Limit but >10%. Follow the external laboratory limits.	UJ, HE12a	J-, HE12a
☐	☒	☐	28. The LCS percent recovery was > the Upper Acceptance Limit. Follow the external laboratory limits.	N/A	J+, HE12b
☐	☒	☐	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
☐	☒	☐	30. The MS/MSD percent recovery was <10%.	R, HE12d	R, HE12d
☐	☒	☐	31. The MS/MSD percent recovery was >10% but <70%.	UJ, HE12e	J, HE12e
☒	☐	☐	32. The MS/MSD percent recover was >70%.	N/A	J+, HE12f
☐	☒	☐	33. The MS/MSD relative percent difference was >30%.	UJ, HE12g	J, HE12g
☐	☐	☒	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
☐	☐	☒	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
☐	☐	☒	36. The Contract Required Detection Limit Check Standard (CRI) sample did not pass method acceptance criteria.	UJ, R, HE16	J, HE16
☐	☐	☒	37. The required CRI sample Information is missing. Contact the SMO or external laboratory for information.	R, HE16c	R, HE16c
☐	☒	☐	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
☐	☒	☐	39. Duplicate, dilution, or reanalysis.	UJ, HE88	J, HE88

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7918

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391001

Sample Amount 2

Moisture: 9.6

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208256a

Date Analyzed: 13-FEB-10 20:11

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 UJ,HE12a	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

ETM
3/2/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7918

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391001

Sample Amount 2

Moisture: 9.6

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02130087.wiff

Date Analyzed: 14-FEB-10 08:43

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

ETM
3/2/10

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7915

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391002

Sample Amount 2

Moisture: 18.3

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208259a

Date Analyzed: 13-FEB-10 21:40

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	242	J
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl UJ,HE12a	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

ETM
3/2/10

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7915

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391002

Sample Amount 2

Moisture: 18.3

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 10

Injection Volume (uL): 50

GEL data file: EXP0208300a

Date Analyzed: 14-FEB-10 17:53

Units: ug/kg

Cas No.	Compound	Concentration*	Q
2691-41-0	HMX J,HE7c	16100	

*Concentration =

Instrument Value	X	Concentrated Extract Volume	X	Dilution Factor
		Sample Amount		

ETM
3/2/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7915

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391002

Sample Amount 2

Moisture: 18.3

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02130090.wiff

Date Analyzed: 14-FEB-10 09:30

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	7390	
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

ETM
3/2/10

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7920

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391003

Sample Amount 2

Moisture: 3.7

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208301a

Date Analyzed: 14-FEB-10 18:22

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 UJ,HE12a	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

ETM
3/2/10

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7920

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391003

Sample Amount 2

Moisture: 3.7

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02130091.wiff

Date Analyzed: 14-FEB-10 09:45

Units: ug/kg

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

*Concentration =

Instrument Value	X	<u>Concentrated Extract Volume</u>	X	Dilution Factor
		<u>Sample Amount</u>		

ETM
3/2/10

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7914

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391004

Sample Amount 2

Moisture: 9.6

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208261a

Date Analyzed: 13-FEB-10 22:39

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 UJ,HE12a	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

ETM
3/2/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7914

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391004

Sample Amount 2

Moisture: 9.6

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02130092.wiff

Date Analyzed: 14-FEB-10 10:01

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 $\times$ $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ $\times$ Dilution Factor

ETM
3/2/10

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7919

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391005

Sample Amount 2

Moisture: 22.6

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208262a

Date Analyzed: 13-FEB-10 23:09

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 UJ,HE12a	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

ETM
3/2/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7919

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391005

Sample Amount 2

Moisture: 22.6

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02130093.wiff

Date Analyzed: 14-FEB-10 10:17

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

ETM
3/2/10

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7921

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391006

Sample Amount 2

Moisture: 17.8

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208263a

Date Analyzed: 13-FEB-10 23:38

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 UJ,HE12a	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

ETM
3/2/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7921

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391006

Sample Amount 2

Moisture: 17.8

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02130094.wiff

Date Analyzed: 14-FEB-10 10:33

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

ETM
3/2/10

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7916

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391007

Sample Amount 2

Moisture: 6.8

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208267a

Date Analyzed: 14-FEB-10 01:36

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 UJ,HE12a	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

ETM
3/2/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7916

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391007

Sample Amount 2

Moisture: 6.8

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02130098.wiff

Date Analyzed: 14-FEB-10 11:35

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

ETM
3/2/10

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7917

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391008

Sample Amount 2

Moisture: 20.2

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208268a

Date Analyzed: 14-FEB-10 02:06

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 UJ,HE12a	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

ETM
3/2/10

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7917

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391008

Sample Amount 2

Moisture: 20.2

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02130099.wiff

Date Analyzed: 14-FEB-10 11:51

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	<u>Concentrated Extract Volume</u>	X	Dilution Factor
		<u>Sample Amount</u>		

ETM
3/2/10

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7922

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391009

Sample Amount 2

Moisture: 9.9

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208269a

Date Analyzed: 14-FEB-10 02:35

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 UJ,HE12a	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

ETM
3/2/10

Page 1 of 2

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7922

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391009

Sample Amount 2

Moisture: 9.9

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02130100.wiff

Date Analyzed: 14-FEB-10 12:07

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	Concentrated Extract Volume	X	Dilution Factor
		Sample Amount		

ETM
3/2/10

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8053

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391010

Sample Amount 2

Moisture: 19.2

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208270a

Date Analyzed: 14-FEB-10 03:05

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 UJ,HE12a	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

ETM
3/2/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8053

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391010

Sample Amount 2

Moisture: 19.2

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02130101.wiff

Date Analyzed: 14-FEB-10 12:22

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

ETM
3/2/10

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1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8054

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391011

Sample Amount 2

Moisture: 9.5

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208271a

Date Analyzed: 14-FEB-10 03:34

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 UJ,HE12a	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

ETM
3/2/10

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8054

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391011

Sample Amount 2

Moisture: 9.5

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02130102.wiff

Date Analyzed: 14-FEB-10 12:38

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	<u>Concentrated Extract Volume</u>	X	Dilution Factor
		Sample Amount		

ETM
3/2/10

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

Section I.

REQUEST NUMBER: 10-1390 VALIDATION DATE: 3/2/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Eric T. Mink ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

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

Section II. Completeness Check

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

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

- In the soil MB, Al, Sb, Ba, Ca, Cr, Fe, Pb, Mn, Co, K, Na, V and Zn were detected. The Sb results for samples RE15-10-7915, -7920 through -7922 and -8053; the Cr result for sample -7916 and the Na results for samples -7919, -7921 and -8053 were detects $\leq 5X$ the blank concentration and, thus, were qualified U,I4. All the other associated Sb sample results were NDs and, thus, were not qualified. All the other associated Cr and Na sample results; all the associated Co and Zn sample results; the Ca results for samples -7920, -7916 and -7917; the Pb results for samples -7914, -7916 through -7918 and -8054, the K result for sample -7916 and the V results for all associated samples except -7915, -7919 and -7917 were detects $> 5X$ but $\leq 50X$ the blank concentrations and, thus, were qualified J,I4a. All the other associated sample results were detects $> 50X$ the blank concentrations and, thus, were not qualified, based on professional judgment.
- In the CCB associated with the soil samples, Sb, Na and Tl were detected. The Tl results for all associated sample results except -7920 and -7916 were detects $\leq 5X$ the blank concentration and, thus, were qualified U,I4b. All the

DATA VALIDATION COVER SHEET		
5118-1	Data Validation Cover Sheet	Records Use only 
other associated sample results were either NDs or detects >5X the blank concentration and, thus, were not qualified. In the aqueous CCB, Na was detected. The associated sample results were detects ≤5X the blank concentration and, thus, were qualified U,I4b. 3. In the FR blanks, samples -8074 and -8075, associated with all the soil samples, Al, Ca, Fe, Pb, Mn, K and U were detected. All the associated sample results were detects >5X the blank concentrations and, thus, were not qualified. 4. The soil MS %Rs were > the laboratory's UAL for Mg and K. The associated sample results were detects and, thus, were qualified J+,I6b. The soil MS %Rs were < the laboratory's LAL but ≥10% for Ni, Se, Ba and Mn. The associated Se sample results were NDs and, thus, were qualified UJ,I6a. All the other associated sample results were detects and, thus, were qualified J-,I6a. The soil MS %Rs were also > the laboratory's UAL for Al, Ca and Fe. However, the associated parent sample concentrations were >4X the spike concentrations. Thus, the associated sample results were not qualified, based on professional judgment. Reviewed by: <u>Mary Donovan</u> Level: <u>I</u> Date: <u>03/03/10</u>		
VALIDATOR'S SIGNATURE: <u>Eli T. Mih</u> DATE: <u>3/2/10</u>		
Form 5118-1, Revision 0.0		LOS ALAMOS Environmental Restoration Project

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

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

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

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

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

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

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

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

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1390

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245391001

BASIS: Dry Weight

DATE COLLECTED 19-JAN-10

CLIENT ID: RE15-10-7918

LEVEL: Low

DATE RECEIVED 23-JAN-10

MATRIX: SOIL

%SOLIDS: 90.4

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	7110000	ug/Kg		7340	21600	21600	1	P	HSC	02/16/10 20:08	021610-1	945417
7440-36-0	Antimony	1080	ug/Kg	U	356	1080	1080	1	P	HSC	02/16/10 20:08	021610-1	945417
7440-38-2	Arsenic	2.25	mg/kg		0.213	1.07	1.07	2	MS	BAJ	02/16/10 03:52	100215-2	945412
7440-39-3	Barium J-,16a	88200	ug/Kg	*N	108	539	539	1	P	HSC	02/16/10 20:08	021610-1	945417
7440-41-7	Beryllium	0.908	mg/kg		0.0213	0.107	0.107	2	MS	BAJ	02/16/10 16:48	100216-8	945412
7440-43-9	Cadmium	539	ug/Kg	U	108	539	539	1	P	HSC	02/16/10 20:08	021610-1	945417
7440-70-2	Calcium	2480000	ug/Kg		8630	27000	27000	1	P	HSC	02/16/10 20:08	021610-1	945417
7440-47-3	Chromium J,14a	19600	ug/Kg		162	539	539	1	P	HSC	02/16/10 20:08	021610-1	945417
7440-48-4	Cobalt J,14a	2460	ug/Kg	*	162	539	539	1	P	HSC	02/16/10 20:08	021610-1	945417
7440-50-8	Copper	4570	ug/Kg		324	1080	1080	1	P	HSC	02/16/10 20:08	021610-1	945417
7439-89-6	Iron	10600000	ug/Kg		8630	27000	27000	1	P	HSC	02/16/10 20:08	021610-1	945417
7439-92-1	Lead J,14a	5380	ug/Kg	*	270	1080	1080	1	P	HSC	02/16/10 20:08	021610-1	945417
7439-95-4	Magnesium J+,16b	1440000	ug/Kg	N	9170	32400	32400	1	P	HSC	02/16/10 20:08	021610-1	945417
7439-96-5	Manganese J-,16a	202000	ug/Kg	N	216	1080	1080	1	P	HSC	02/16/10 20:08	021610-1	945417
7439-97-6	Mercury	25.6	ug/kg		4.15	12.2	12.2	1	AV	JXL1	02/04/10 11:20	020410S1-9	945625
7440-02-0	Nickel J-,16a	7.97	mg/kg	N	0.107	0.426	0.426	2	MS	BAJ	02/16/10 16:48	100216-8	945412
7440-09-7	Potassium J+,16b	888000	ug/Kg	N	6900	27000	27000	1	P	HSC	02/16/10 20:08	021610-1	945417
7782-49-2	Selenium UJ,16a	1.07	mg/kg	UN	0.533	1.07	1.07	2	MS	BAJ	02/16/10 03:52	100215-2	945412
7440-22-4	Silver	574	ug/Kg		108	539	539	1	P	HSC	02/16/10 20:08	021610-1	945417
7440-23-5	Sodium J,14a	352000	ug/Kg		7550	27000	27000	1	P	HSC	02/16/10 20:08	021610-1	945417
7440-28-0	Thallium U,14b	0.172	mg/kg	J	0.064	0.213	0.213	2	MS	BAJ	02/16/10 03:52	100215-2	945412
7440-61-1	Uranium	1.31	mg/kg		0.0141	0.0426	0.0426	2	MS	BAJ	02/16/10 10:28	100216-3	945412
7440-62-2	Vanadium J,14a	9930	ug/Kg		108	539	539	1	P	HSC	02/16/10 20:08	021610-1	945417
7440-66-6	Zinc J,14a	34000	ug/Kg		356	1080	1080	1	P	HSC	02/16/10 20:08	021610-1	945417

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
945412	945411	SW846 3050B	0.519	g	50	mL	02/04/10	BXA1
945417	945415	SW846 3050B	0.513	g	50	mL	02/04/10	BXA1
945625	945624	SW846 7471A Prep	0.544	g	30	mL	02/03/10	TXB3

ETM
3/2/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1390

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245391002

BASIS: Dry Weight

DATE COLLECTED 19-JAN-10

CLIENT ID: RE15-10-7915

LEVEL: Low

DATE RECEIVED 23-JAN-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	7420000	ug/Kg		8240	24200	24200	1	P	HSC	02/16/10 20:43	021610-1	945417
7440-36-0	Antimony U,14	2160	ug/Kg		400	1210	1210	1	P	HSC	02/16/10 20:43	021610-1	945417
7440-38-2	Arsenic	1.79	mg/kg		0.231	1.15	1.15	2	MS	BAJ	02/16/10 04:35	100215-2	945412
7440-39-3	Barium J-,16a	125000	ug/Kg	*N	121	606	606	1	P	HSC	02/16/10 20:43	021610-1	945417
7440-41-7	Beryllium	5.87	mg/kg		0.0231	0.115	0.115	2	MS	BAJ	02/16/10 16:59	100216-8	945412
7440-43-9	Cadmium	164	ug/Kg	J	121	606	606	1	P	HSC	02/16/10 20:43	021610-1	945417
7440-70-2	Calcium	2150000	ug/Kg		9690	30300	30300	1	P	HSC	02/16/10 20:43	021610-1	945417
7440-47-3	Chromium J,14a	12600	ug/Kg		182	606	606	1	P	HSC	02/16/10 20:43	021610-1	945417
7440-48-4	Cobalt J,14a	3660	ug/Kg	*	182	606	606	1	P	HSC	02/16/10 20:43	021610-1	945417
7440-50-8	Copper	451000	ug/Kg		363	1210	1210	1	P	HSC	02/16/10 20:43	021610-1	945417
7439-89-6	Iron	12200000	ug/Kg		9690	30300	30300	1	P	HSC	02/16/10 20:43	021610-1	945417
7439-92-1	Lead	125000	ug/Kg	*	303	1210	1210	1	P	HSC	02/16/10 20:43	021610-1	945417
7439-95-4	Magnesium J+,16b	1640000	ug/Kg	N	10300	36300	36300	1	P	HSC	02/16/10 20:43	021610-1	945417
7439-96-5	Manganese J-,16a	220000	ug/Kg	N	242	1210	1210	1	P	HSC	02/16/10 20:43	021610-1	945417
7439-97-6	Mercury	6.39	ug/kg	J	4.43	13	13	1	AV	JXL1	02/04/10 11:34	02041051-9	945625
7440-02-0	Nickel J-,16a	7.02	mg/kg	N	0.115	0.462	0.462	2	MS	BAJ	02/16/10 16:59	100216-8	945412
7440-09-7	Potassium J+,16b	1070000	ug/Kg	N	7750	30300	30300	1	P	HSC	02/16/10 20:43	021610-1	945417
7782-49-2	Selenium UJ,16a	1.15	mg/kg	UN	0.577	1.15	1.15	2	MS	BAJ	02/16/10 04:35	100215-2	945412
7440-22-4	Silver	1150	ug/Kg		121	606	606	1	P	HSC	02/16/10 20:43	021610-1	945417
7440-23-5	Sodium J,14a	94600	ug/Kg		8480	30300	30300	1	P	HSC	02/16/10 20:43	021610-1	945417
7440-28-0	Thallium U,14b	0.129	mg/kg	J	0.0692	0.231	0.231	2	MS	BAJ	02/16/10 04:35	100215-2	945412
7440-61-1	Uranium	73.1	mg/kg		0.762	2.31	2.31	100	MS	BAJ	02/16/10 10:36	100216-3	945412
7440-62-2	Vanadium	19900	ug/Kg		121	606	606	1	P	HSC	02/16/10 20:43	021610-1	945417
7440-66-6	Zinc J,14a	56100	ug/Kg		400	1210	1210	1	P	HSC	02/16/10 20:43	021610-1	945417

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
945412	945411	SW846 3050B	0.53	g	50	mL	02/04/10	BXA1
945417	945415	SW846 3050B	0.505	g	50	mL	02/04/10	BXA1
945625	945624	SW846 7471A Prep	0.563	g	30	mL	02/03/10	TXB3

ETM
3/2/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1390

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245391003

BASIS: Dry Weight

DATE COLLECTED 19-JAN-10

CLIENT ID: RE15-10-7920

LEVEL: Low

DATE RECEIVED 23-JAN-10

MATRIX: SOIL

%SOLIDS: 96.3

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	3000000	ug/Kg		7020	20700	20700	1	P	HSC	02/16/10 20:50	021610-1	945417
7440-36-0	Antimony U,14	464	ug/Kg	J	341	1030	1030	1	P	HSC	02/16/10 20:50	021610-1	945417
7440-38-2	Arsenic	1.37	mg/kg		0.208	1.04	1.04	2	MS	BAJ	02/16/10 04:41	100215-2	945412
7440-39-3	Barium J-,16a	45900	ug/Kg	*N	103	516	516	1	P	HSC	02/16/10 20:50	021610-1	945417
7440-41-7	Beryllium	1.29	mg/kg		0.0208	0.104	0.104	2	MS	BAJ	02/16/10 17:01	100216-8	945412
7440-43-9	Cadmium	516	ug/Kg	U	103	516	516	1	P	HSC	02/16/10 20:50	021610-1	945417
7440-70-2	Calcium J,14a	773000	ug/Kg		8260	25800	25800	1	P	HSC	02/16/10 20:50	021610-1	945417
7440-47-3	Chromium	7830	ug/Kg		155	516	516	1	P	HSC	02/16/10 20:50	021610-1	945417
7440-48-4	Cobalt	2800	ug/Kg	*	155	516	516	1	P	HSC	02/16/10 20:50	021610-1	945417
7440-50-8	Copper	47600	ug/Kg		310	1030	1030	1	P	HSC	02/16/10 20:50	021610-1	945417
7439-89-6	Iron	12900000	ug/Kg		8260	25800	25800	1	P	HSC	02/16/10 20:50	021610-1	945417
7439-92-1	Lead	25800	ug/Kg	*	258	1030	1030	1	P	HSC	02/16/10 20:50	021610-1	945417
7439-95-4	Magnesium J+,16b	489000	ug/Kg	N	8780	31000	31000	1	P	HSC	02/16/10 20:50	021610-1	945417
7439-96-5	Manganese J-,16a	382000	ug/Kg	N	207	1030	1030	1	P	HSC	02/16/10 20:50	021610-1	945417
7439-97-6	Mercury	7.49	ug/kg	J	4.08	12	12	1	AV	JXL1	02/04/10 11:36	020410S1-9	945625
7440-02-0	Nickel J-,16a	4.74	mg/kg	N	0.104	0.416	0.416	2	MS	BAJ	02/16/10 17:01	100216-8	945412
7440-09-7	Potassium J+,16b	583000	ug/Kg	N	6610	25800	25800	1	P	HSC	02/16/10 20:50	021610-1	945417
7782-49-2	Selenium UJ,16a	1.04	mg/kg	UN	0.519	1.04	1.04	2	MS	BAJ	02/16/10 04:41	100215-2	945412
7440-22-4	Silver	1230	ug/Kg		103	516	516	1	P	HSC	02/16/10 20:50	021610-1	945417
7440-23-5	Sodium J,14a	229000	ug/Kg		7230	25800	25800	1	P	HSC	02/16/10 20:50	021610-1	945417
7440-28-0	Thallium	0.208	mg/kg	U	0.0623	0.208	0.208	2	MS	BAJ	02/16/10 04:41	100215-2	945412
7440-61-1	Uranium	26.1	mg/kg		0.686	2.08	2.08	100	MS	BAJ	02/16/10 10:38	100216-3	945412
7440-62-2	Vanadium J,14a	5400	ug/Kg		103	516	516	1	P	HSC	02/16/10 20:50	021610-1	945417
7440-66-6	Zinc J,14a	34600	ug/Kg		341	1030	1030	1	P	HSC	02/16/10 20:50	021610-1	945417

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
945412	945411	SW846 3050B	0.5	g	50	mL	02/04/10	BXA1
945417	945415	SW846 3050B	0.503	g	50	mL	02/04/10	BXA1
945625	945624	SW846 7471A Prep	0.52	g	30	mL	02/03/10	TXB3

ETM
3/2/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1390

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245391004

BASIS: Dry Weight

DATE COLLECTED 19-JAN-10

CLIENT ID: RE15-10-7914

LEVEL: Low

DATE RECEIVED 23-JAN-10

MATRIX: SOIL

%SOLIDS: 90.4

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	6160000	ug/Kg		7260	21400	21400	1	P	HSC	02/16/10 21:10	021610-1	945417
7440-36-0	Antimony	1070	ug/Kg	U	352	1070	1070	1	P	HSC	02/16/10 21:10	021610-1	945417
7440-38-2	Arsenic	1.44	mg/kg		0.21	1.05	1.05	2	MS	BAJ	02/16/10 04:48	100215-2	945412
7440-39-3	Barium J-,16a	93600	ug/Kg	*N	107	534	534	1	P	HSC	02/16/10 21:10	021610-1	945417
7440-41-7	Beryllium	0.529	mg/kg		0.021	0.105	0.105	2	MS	BAJ	02/16/10 17:10	100216-8	945412
7440-43-9	Cadmium	534	ug/Kg	U	107	534	534	1	P	HSC	02/16/10 21:10	021610-1	945417
7440-70-2	Calcium	2250000	ug/Kg		8540	26700	26700	1	P	HSC	02/16/10 21:10	021610-1	945417
7440-47-3	Chromium J,14a	7790	ug/Kg		160	534	534	1	P	HSC	02/16/10 21:10	021610-1	945417
7440-48-4	Cobalt J,14a	8490	ug/Kg	*	160	534	534	1	P	HSC	02/16/10 21:10	021610-1	945417
7440-50-8	Copper	6430	ug/Kg		320	1070	1070	1	P	HSC	02/16/10 21:10	021610-1	945417
7439-89-6	Iron	15000000	ug/Kg		8540	26700	26700	1	P	HSC	02/16/10 21:10	021610-1	945417
7439-92-1	Lead J,14a	5190	ug/Kg	*	267	1070	1070	1	P	HSC	02/16/10 21:10	021610-1	945417
7439-95-4	Magnesium J+,16b	1350000	ug/Kg	N	9080	32000	32000	1	P	HSC	02/16/10 21:10	021610-1	945417
7439-96-5	Manganese J-,16a	257000	ug/Kg	N	214	1070	1070	1	P	HSC	02/16/10 21:10	021610-1	945417
7439-97-6	Mercury	19.6	ug/kg		4.05	11.9	11.9	1	AV	JXL1	02/04/10 11:38	020410S1-9	945625
7440-02-0	Nickel J-,16a	6.09	mg/kg	N	0.105	0.421	0.421	2	MS	BAJ	02/16/10 17:10	100216-8	945412
7440-09-7	Potassium J+,16b	847000	ug/Kg	N	6840	26700	26700	1	P	HSC	02/16/10 21:10	021610-1	945417
7782-49-2	Selenium UJ,16a	1.05	mg/kg	UN	0.526	1.05	1.05	2	MS	BAJ	02/16/10 04:48	100215-2	945412
7440-22-4	Silver	976	ug/Kg		107	534	534	1	P	HSC	02/16/10 21:10	021610-1	945417
7440-23-5	Sodium J,14a	206000	ug/Kg		7480	26700	26700	1	P	HSC	02/16/10 21:10	021610-1	945417
7440-28-0	Thallium U,14b	0.0785	mg/kg	J	0.0631	0.21	0.21	2	MS	BAJ	02/16/10 04:48	100215-2	945412
7440-61-1	Uranium	5.45	mg/kg		0.0139	0.0421	0.0421	2	MS	BAJ	02/16/10 10:43	100216-3	945412
7440-62-2	Vanadium J,14a	10200	ug/Kg		107	534	534	1	P	HSC	02/16/10 21:10	021610-1	945417
7440-66-6	Zinc J,14a	47100	ug/Kg		352	1070	1070	1	P	HSC	02/16/10 21:10	021610-1	945417

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
945412	945411	SW846 3050B	0.526	g	50	mL	02/04/10	BXA1
945417	945415	SW846 3050B	0.518	g	50	mL	02/04/10	BXA1
945625	945624	SW846 7471A Prep	0.558	g	30	mL	02/03/10	TXB3

ETM
3/2/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1390

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245391005

BASIS: Dry Weight

DATE COLLECTED 19-JAN-10

CLIENT ID: RE15-10-7919

LEVEL: Low

DATE RECEIVED 23-JAN-10

MATRIX: SOIL

%SOLIDS: 77

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	8030000	ug/Kg		7840	23100	23100	1	P	HSC	02/16/10 21:17	021610-1	945417
7440-36-0	Antimony	1150	ug/Kg	U	381	1150	1150	1	P	HSC	02/16/10 21:17	021610-1	945417
7440-38-2	Arsenic	2.13	mg/kg		0.258	1.29	1.29	2	MS	BAJ	02/16/10 04:54	100215-2	945412
7440-39-3	Barium J-,16a	84600	ug/Kg	*N	115	577	577	1	P	HSC	02/16/10 21:17	021610-1	945417
7440-41-7	Beryllium	2.95	mg/kg		0.0258	0.129	0.129	2	MS	BAJ	02/16/10 17:12	100216-8	945412
7440-43-9	Cadmium	577	ug/Kg	U	115	577	577	1	P	HSC	02/16/10 21:17	021610-1	945417
7440-70-2	Calcium	1830000	ug/Kg		9230	28800	28800	1	P	HSC	02/16/10 21:17	021610-1	945417
7440-47-3	Chromium J-,14a	8280	ug/Kg		173	577	577	1	P	HSC	02/16/10 21:17	021610-1	945417
7440-48-4	Cobalt J-,14a	3450	ug/Kg	*	173	577	577	1	P	HSC	02/16/10 21:17	021610-1	945417
7440-50-8	Copper	156000	ug/Kg		346	1150	1150	1	P	HSC	02/16/10 21:17	021610-1	945417
7439-89-6	Iron	12900000	ug/Kg		9230	28800	28800	1	P	HSC	02/16/10 21:17	021610-1	945417
7439-92-1	Lead	36100	ug/Kg	*	288	1150	1150	1	P	HSC	02/16/10 21:17	021610-1	945417
7439-95-4	Magnesium J+,16b	1550000	ug/Kg	N	9800	34600	34600	1	P	HSC	02/16/10 21:17	021610-1	945417
7439-96-5	Manganese J-,16a	250000	ug/Kg	N	231	1150	1150	1	P	HSC	02/16/10 21:17	021610-1	945417
7439-97-6	Mercury	23	ug/kg		4.97	14.6	14.6	1	AV	JXL1	02/04/10 11:40	020410S1-9	945625
7440-02-0	Nickel J-,16a	6.72	mg/kg	N	0.129	0.517	0.517	2	MS	BAJ	02/16/10 17:12	100216-8	945412
7440-09-7	Potassium J+,16b	1240000	ug/Kg	N	7380	28800	28800	1	P	HSC	02/16/10 21:17	021610-1	945417
7782-49-2	Selenium UJ,16a	1.29	mg/kg	UN	0.646	1.29	1.29	2	MS	BAJ	02/16/10 04:54	100215-2	945412
7440-22-4	Silver	917	ug/Kg		115	577	577	1	P	HSC	02/16/10 21:17	021610-1	945417
7440-23-5	Sodium U,14	69600	ug/Kg		8070	28800	28800	1	P	HSC	02/16/10 21:17	021610-1	945417
7440-28-0	Thallium U,14b	0.137	mg/kg	J	0.0775	0.258	0.258	2	MS	BAJ	02/16/10 04:54	100215-2	945412
7440-61-1	Uranium	38.2	mg/kg		0.853	2.58	2.58	100	MS	BAJ	02/16/10 10:45	100216-3	945412
7440-62-2	Vanadium	18400	ug/Kg		115	577	577	1	P	HSC	02/16/10 21:17	021610-1	945417
7440-66-6	Zinc J,14a	41000	ug/Kg		381	1150	1150	1	P	HSC	02/16/10 21:17	021610-1	945417

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
945412	945411	SW846 3050B	0.5	g	50	mL	02/04/10	BXA1
945417	945415	SW846 3050B	0.56	g	50	mL	02/04/10	BXA1
945625	945624	SW846 7471A Prep	0.53	g	30	mL	02/03/10	TXB3

ETM
3/2/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1390

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245391006

BASIS: Dry Weight

DATE COLLECTED 19-JAN-10

CLIENT ID: RE15-10-7921

LEVEL: Low

DATE RECEIVED 23-JAN-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	5090000	ug/Kg		7710	22700	22700	1	P	HSC	02/16/10 21:25	021610-1	945417
7440-36-0	Antimony U,14	2200	ug/Kg		374	1130	1130	1	P	HSC	02/16/10 21:25	021610-1	945417
7440-38-2	Arsenic	1.89	mg/kg		0.243	1.22	1.22	2	MS	BAJ	02/16/10 05:00	100215-2	945412
7440-39-3	Barium J-,16a	64900	ug/Kg	*N	113	567	567	1	P	HSC	02/16/10 21:25	021610-1	945417
7440-41-7	Beryllium	2.32	mg/kg		0.0243	0.122	0.122	2	MS	BAJ	02/16/10 17:14	100216-8	945412
7440-43-9	Cadmium	143	ug/Kg	J	113	567	567	1	P	HSC	02/16/10 21:25	021610-1	945417
7440-70-2	Calcium	1200000	ug/Kg		9070	28300	28300	1	P	HSC	02/16/10 21:25	021610-1	945417
7440-47-3	Chromium J,14a	6380	ug/Kg		170	567	567	1	P	HSC	02/16/10 21:25	021610-1	945417
7440-48-4	Cobalt J,14a	3450	ug/Kg	*	170	567	567	1	P	HSC	02/16/10 21:25	021610-1	945417
7440-50-8	Copper	260000	ug/Kg		340	1130	1130	1	P	HSC	02/16/10 21:25	021610-1	945417
7439-89-6	Iron	9890000	ug/Kg		9070	28300	28300	1	P	HSC	02/16/10 21:25	021610-1	945417
7439-92-1	Lead	91800	ug/Kg	*	283	1130	1130	1	P	HSC	02/16/10 21:25	021610-1	945417
7439-95-4	Magnesium J+,16b	945000	ug/Kg	N	9630	34000	34000	1	P	HSC	02/16/10 21:25	021610-1	945417
7439-96-5	Manganese J-,16a	252000	ug/Kg	N	227	1130	1130	1	P	HSC	02/16/10 21:25	021610-1	945417
7439-97-6	Mercury	8.69	ug/kg	J	4.73	13.9	13.9	1	AV	JXL1	02/04/10 11:42	020410S1-9	945625
7440-02-0	Nickel J-,16a	5.06	mg/kg	N	0.122	0.487	0.487	2	MS	BAJ	02/16/10 17:14	100216-8	945412
7440-09-7	Potassium J+,16b	885000	ug/Kg	N	7250	28300	28300	1	P	HSC	02/16/10 21:25	021610-1	945417
7782-49-2	Selenium UJ,16a	1.22	mg/kg	UN	0.609	1.22	1.22	2	MS	BAJ	02/16/10 05:00	100215-2	945412
7440-22-4	Silver	697	ug/Kg		113	567	567	1	P	HSC	02/16/10 21:25	021610-1	945417
7440-23-5	Sodium U,14	56800	ug/Kg		7930	28300	28300	1	P	HSC	02/16/10 21:25	021610-1	945417
7440-28-0	Thallium U,14b	0.0854	mg/kg	J	0.073	0.243	0.243	2	MS	BAJ	02/16/10 05:00	100215-2	945412
7440-61-1	Uranium	30.9	mg/kg		0.803	2.43	2.43	100	MS	BAJ	02/16/10 10:47	100216-3	945412
7440-62-2	Vanadium J,14a	13700	ug/Kg		113	567	567	1	P	HSC	02/16/10 21:25	021610-1	945417
7440-66-6	Zinc J,14a	44600	ug/Kg		374	1130	1130	1	P	HSC	02/16/10 21:25	021610-1	945417

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
945412	945411	SW846 3050B	0.5	g	50	mL	02/04/10	BXA1
945417	945415	SW846 3050B	0.537	g	50	mL	02/04/10	BXA1
945625	945624	SW846 7471A Prep	0.525	g	30	mL	02/03/10	TXB3

ETM
3/2/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1390

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245391007

BASIS: Dry Weight

DATE COLLECTED 19-JAN-10

CLIENT ID: RE15-10-7916

LEVEL: Low

DATE RECEIVED 23-JAN-10

MATRIX: SOIL

%SOLIDS: 93.2

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1140000	ug/Kg		7000	20600	20600	1	P	HSC	02/16/10 21:32	021610-1	945417
7440-36-0	Antimony	1030	ug/Kg	U	340	1030	1030	1	P	HSC	02/16/10 21:32	021610-1	945417
7440-38-2	Arsenic	0.899	mg/kg	J	0.195	0.977	0.977	2	MS	BAJ	02/16/10 05:18	100215-2	945412
7440-39-3	Barium	22900	ug/Kg	*N	103	515	515	1	P	HSC	02/16/10 21:32	021610-1	945417
7440-41-7	Beryllium	0.609	mg/kg		0.0195	0.0977	0.0977	2	MS	BAJ	02/16/10 17:17	100216-8	945412
7440-43-9	Cadmium	515	ug/Kg	U	103	515	515	1	P	HSC	02/16/10 21:32	021610-1	945417
7440-70-2	Calcium	379000	ug/Kg		8240	25700	25700	1	P	HSC	02/16/10 21:32	021610-1	945417
7440-47-3	Chromium	1950	ug/Kg		154	515	515	1	P	HSC	02/16/10 21:32	021610-1	945417
7440-48-4	Cobalt	1920	ug/Kg	*	154	515	515	1	P	HSC	02/16/10 21:32	021610-1	945417
7440-50-8	Copper	7130	ug/Kg		309	1030	1030	1	P	HSC	02/16/10 21:32	021610-1	945417
7439-89-6	Iron	10900000	ug/Kg		8240	25700	25700	1	P	HSC	02/16/10 21:32	021610-1	945417
7439-92-1	Lead	6050	ug/Kg	*	257	1030	1030	1	P	HSC	02/16/10 21:32	021610-1	945417
7439-95-4	Magnesium	148000	ug/Kg	N	8750	30900	30900	1	P	HSC	02/16/10 21:32	021610-1	945417
7439-96-5	Manganese	252000	ug/Kg	N	206	1030	1030	1	P	HSC	02/16/10 21:32	021610-1	945417
7439-97-6	Mercury	10.1	ug/kg	J	4.24	12.5	12.5	1	AV	JXL1	02/04/10 11:44	020410S1-9	945625
7440-02-0	Nickel	3.6	mg/kg	N	0.0977	0.391	0.391	2	MS	BAJ	02/16/10 17:17	100216-8	945412
7440-09-7	Potassium	413000	ug/Kg	N	6590	25700	25700	1	P	HSC	02/16/10 21:32	021610-1	945417
7782-49-2	Selenium	0.977	mg/kg	UN	0.489	0.977	0.977	2	MS	BAJ	02/16/10 05:18	100215-2	945412
7440-22-4	Silver	738	ug/Kg		103	515	515	1	P	HSC	02/16/10 21:32	021610-1	945417
7440-23-5	Sodium	241000	ug/Kg		7210	25700	25700	1	P	HSC	02/16/10 21:32	021610-1	945417
7440-28-0	Thallium	0.195	mg/kg	U	0.0586	0.195	0.195	2	MS	BAJ	02/16/10 05:18	100215-2	945412
7440-61-1	Uranium	8.75	mg/kg		0.0129	0.0391	0.0391	2	MS	BAJ	02/16/10 10:49	100216-3	945412
7440-62-2	Vanadium	1990	ug/Kg		103	515	515	1	P	HSC	02/16/10 21:32	021610-1	945417
7440-66-6	Zinc	33800	ug/Kg		340	1030	1030	1	P	HSC	02/16/10 21:32	021610-1	945417

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
945412	945411	SW846 3050B	0.549	g	50	mL	02/04/10	BXA1
945417	945415	SW846 3050B	0.521	g	50	mL	02/04/10	BXA1
945625	945624	SW846 7471A Prep	0.516	g	30	mL	02/03/10	TXB3

ETM
3/2/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1390

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245391008

BASIS: Dry Weight

DATE COLLECTED 19-JAN-10

CLIENT ID: RE15-10-7917

LEVEL: Low

DATE RECEIVED 23-JAN-10

MATRIX: SOIL

%SOLIDS: 80

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	5210000	ug/Kg		8160	24000	24000	1	P	HSC	02/16/10 21:39	021610-1	945417
7440-36-0	Antimony	1200	ug/Kg	U	396	1200	1200	1	P	HSC	02/16/10 21:39	021610-1	945417
7440-38-2	Arsenic	1.8	mg/kg		0.246	1.23	1.23	2	MS	BAJ	02/16/10 05:25	100215-2	945412
7440-39-3	Barium	J-,16a	ug/Kg	*N	120	600	600	1	P	HSC	02/16/10 21:39	021610-1	945417
7440-41-7	Beryllium		mg/kg		0.0246	0.123	0.123	2	MS	BAJ	02/16/10 17:19	100216-8	945412
7440-43-9	Cadmium		ug/Kg	U	120	600	600	1	P	HSC	02/16/10 21:39	021610-1	945417
7440-70-2	Calcium	J,14a	ug/Kg		9600	30000	30000	1	P	HSC	02/16/10 21:39	021610-1	945417
7440-47-3	Chromium		ug/Kg		180	600	600	1	P	HSC	02/16/10 21:39	021610-1	945417
7440-48-4	Cobalt	↓	ug/Kg	*	180	600	600	1	P	HSC	02/16/10 21:39	021610-1	945417
7440-50-8	Copper		ug/Kg		360	1200	1200	1	P	HSC	02/16/10 21:39	021610-1	945417
7439-89-6	Iron		ug/Kg		9600	30000	30000	1	P	HSC	02/16/10 21:39	021610-1	945417
7439-92-1	Lead	J,14a	ug/Kg	*	300	1200	1200	1	P	HSC	02/16/10 21:39	021610-1	945417
7439-95-4	Magnesium	J+,16b	ug/Kg	N	10200	36000	36000	1	P	HSC	02/16/10 21:39	021610-1	945417
7439-96-5	Manganese	J-,16a	ug/Kg	N	240	1200	1200	1	P	HSC	02/16/10 21:39	021610-1	945417
7439-97-6	Mercury		ug/kg	J	5.02	14.8	14.8	1	AV	JXL1	02/04/10 11:49	020410S1-9	945625
7440-02-0	Nickel	J-,16a	mg/kg	N	0.123	0.492	0.492	2	MS	BAJ	02/16/10 17:19	100216-8	945412
7440-09-7	Potassium	J+,16b	ug/Kg	N	7680	30000	30000	1	P	HSC	02/16/10 21:39	021610-1	945417
7782-49-2	Selenium	UJ,16a	mg/kg	UN	0.614	1.23	1.23	2	MS	BAJ	02/16/10 05:25	100215-2	945412
7440-22-4	Silver		ug/Kg		120	600	600	1	P	HSC	02/16/10 21:39	021610-1	945417
7440-23-5	Sodium	J,14a	ug/Kg		8400	30000	30000	1	P	HSC	02/16/10 21:39	021610-1	945417
7440-28-0	Thallium	U,14b	mg/kg	J	0.0737	0.246	0.246	2	MS	BAJ	02/16/10 05:25	100215-2	945412
7440-61-1	Uranium		mg/kg		0.0162	0.0492	0.0492	2	MS	BAJ	02/16/10 10:50	100216-3	945412
7440-62-2	Vanadium		ug/Kg		120	600	600	1	P	HSC	02/16/10 21:39	021610-1	945417
7440-66-6	Zinc	J,14a	ug/Kg		396	1200	1200	1	P	HSC	02/16/10 21:39	021610-1	945417

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
945412	945411	SW846 3050B	0.51	g	50	mL	02/04/10	BXA1
945417	945415	SW846 3050B	0.522	g	50	mL	02/04/10	BXA1
945625	945624	SW846 7471A Prep	0.509	g	30	mL	02/03/10	TXB3

ETM
3/2/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1390

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245391009

BASIS: Dry Weight

DATE COLLECTED 19-JAN-10

CLIENT ID: RE15-10-7922

LEVEL: Low

DATE RECEIVED 23-JAN-10

MATRIX: SOIL

%SOLIDS: 90.1

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	7490000	ug/Kg		7230	21300	21300	1	P	HSC	02/16/10 21:46	021610-1	945417
7440-36-0	Antimony U,14	836	ug/Kg	J	351	1060	1060	1	P	HSC	02/16/10 21:46	021610-1	945417
7440-38-2	Arsenic	2.2	mg/kg		0.209	1.04	1.04	2	MS	BAJ	02/16/10 05:31	100215-2	945412
7440-39-3	Barium J-,16a	71800	ug/Kg	*N	106	531	531	1	P	HSC	02/16/10 21:46	021610-1	945417
7440-41-7	Beryllium	1.6	mg/kg		0.0209	0.104	0.104	2	MS	BAJ	02/16/10 17:21	100216-8	945412
7440-43-9	Cadmium	531	ug/Kg	U	106	531	531	1	P	HSC	02/16/10 21:46	021610-1	945417
7440-70-2	Calcium	1750000	ug/Kg		8500	26600	26600	1	P	HSC	02/16/10 21:46	021610-1	945417
7440-47-3	Chromium J,14a	9580	ug/Kg		159	531	531	1	P	HSC	02/16/10 21:46	021610-1	945417
7440-48-4	Cobalt J,14a	5920	ug/Kg	*	159	531	531	1	P	HSC	02/16/10 21:46	021610-1	945417
7440-50-8	Copper	726000	ug/Kg		319	1060	1060	1	P	HSC	02/16/10 21:46	021610-1	945417
7439-89-6	Iron	19900000	ug/Kg		8500	26600	26600	1	P	HSC	02/16/10 21:46	021610-1	945417
7439-92-1	Lead	65800	ug/Kg	*	266	1060	1060	1	P	HSC	02/16/10 21:46	021610-1	945417
7439-95-4	Magnesium J+,16b	1430000	ug/Kg	N	9030	31900	31900	1	P	HSC	02/16/10 21:46	021610-1	945417
7439-96-5	Manganese J-,16a	246000	ug/Kg	N	213	1060	1060	1	P	HSC	02/16/10 21:46	021610-1	945417
7439-97-6	Mercury	26.4	ug/kg		4.21	12.4	12.4	1	AV	JXL1	02/04/10 11:51	020410S1-9	945625
7440-02-0	Nickel J-,16a	7.35	mg/kg	N	0.104	0.418	0.418	2	MS	BAJ	02/16/10 17:21	100216-8	945412
7440-09-7	Potassium J+,16b	1000000	ug/Kg	N	6800	26600	26600	1	P	HSC	02/16/10 21:46	021610-1	945417
7782-49-2	Selenium UJ,16a	1.04	mg/kg	UN	0.522	1.04	1.04	2	MS	BAJ	02/16/10 05:31	100215-2	945412
7440-22-4	Silver	1260	ug/Kg		106	531	531	1	P	HSC	02/16/10 21:46	021610-1	945417
7440-23-5	Sodium J,14a	152000	ug/Kg		7440	26600	26600	1	P	HSC	02/16/10 21:46	021610-1	945417
7440-28-0	Thallium U,14b	0.103	mg/kg	J	0.0627	0.209	0.209	2	MS	BAJ	02/16/10 05:31	100215-2	945412
7440-61-1	Uranium	23.5	mg/kg		0.689	2.09	2.09	100	MS	BAJ	02/16/10 10:52	100216-3	945412
7440-62-2	Vanadium J,14a	14700	ug/Kg		106	531	531	1	P	HSC	02/16/10 21:46	021610-1	945417
7440-66-6	Zinc J,14a	44200	ug/Kg		351	1060	1060	1	P	HSC	02/16/10 21:46	021610-1	945417

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
945412	945411	SW846 3050B	0.531	g	50	mL	02/04/10	BXA1
945417	945415	SW846 3050B	0.522	g	50	mL	02/04/10	BXA1
945625	945624	SW846 7471A Prep	0.537	g	30	mL	02/03/10	TXB3

ETM
3/2/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1390

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245391010

BASIS: Dry Weight

DATE COLLECTED 19-JAN-10

CLIENT ID: RE15-10-8053

LEVEL: Low

DATE RECEIVED 23-JAN-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	6860000	ug/Kg		7450	21900	21900	1	P	HSC	02/16/10 21:53	021610-1	945417
7440-36-0	Antimony U,14	1380	ug/Kg		361	1100	1100	1	P	HSC	02/16/10 21:53	021610-1	945417
7440-38-2	Arsenic	3.28	mg/kg		0.248	1.24	1.24	2	MS	BAJ	02/16/10 05:37	100215-2	945412
7440-39-3	Barium J-,16a	111000	ug/Kg	*N	110	548	548	1	P	HSC	02/16/10 21:53	021610-1	945417
7440-41-7	Beryllium	5.2	mg/kg		0.0248	0.124	0.124	2	MS	BAJ	02/16/10 17:23	100216-8	945412
7440-43-9	Cadmium	548	ug/Kg	U	110	548	548	1	P	HSC	02/16/10 21:53	021610-1	945417
7440-70-2	Calcium	2040000	ug/Kg		8760	27400	27400	1	P	HSC	02/16/10 21:53	021610-1	945417
7440-47-3	Chromium J,14a	7330	ug/Kg		164	548	548	1	P	HSC	02/16/10 21:53	021610-1	945417
7440-48-4	Cobalt J,14a	2530	ug/Kg	*	164	548	548	1	P	HSC	02/16/10 21:53	021610-1	945417
7440-50-8	Copper	609000	ug/Kg		329	1100	1100	1	P	HSC	02/16/10 21:53	021610-1	945417
7439-89-6	Iron	10400000	ug/Kg		8760	27400	27400	1	P	HSC	02/16/10 21:53	021610-1	945417
7439-92-1	Lead	131000	ug/Kg	*	274	1100	1100	1	P	HSC	02/16/10 21:53	021610-1	945417
7439-95-4	Magnesium J+,16b	1260000	ug/Kg	N	9310	32900	32900	1	P	HSC	02/16/10 21:53	021610-1	945417
7439-96-5	Manganese J-,16a	285000	ug/Kg	N	219	1100	1100	1	P	HSC	02/16/10 21:53	021610-1	945417
7439-97-6	Mercury	28	ug/kg		4.75	14	14	1	AV	JXL1	02/04/10 11:53	020410S1-9	945625
7440-02-0	Nickel J-,16a	7.85	mg/kg	N	0.124	0.495	0.495	2	MS	BAJ	02/16/10 17:23	100216-8	945412
7440-09-7	Potassium J+,16b	935000	ug/Kg	N	7010	27400	27400	1	P	HSC	02/16/10 21:53	021610-1	945417
7782-49-2	Selenium U,J,16a	1.24	mg/kg	UN	0.619	1.24	1.24	2	MS	BAJ	02/16/10 05:37	100215-2	945412
7440-22-4	Silver	959	ug/Kg		110	548	548	1	P	HSC	02/16/10 21:53	021610-1	945417
7440-23-5	Sodium U,14	55200	ug/Kg		7670	27400	27400	1	P	HSC	02/16/10 21:53	021610-1	945417
7440-28-0	Thallium U,14b	0.134	mg/kg	J	0.0743	0.248	0.248	2	MS	BAJ	02/16/10 05:37	100215-2	945412
7440-61-1	Uranium	87	mg/kg		0.817	2.48	2.48	100	MS	BAJ	02/16/10 10:54	100216-3	945412
7440-62-2	Vanadium J,14a	14000	ug/Kg		110	548	548	1	P	HSC	02/16/10 21:53	021610-1	945417
7440-66-6	Zinc J,14a	35100	ug/Kg		361	1100	1100	1	P	HSC	02/16/10 21:53	021610-1	945417

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
945412	945411	SW846 3050B	0.5	g	50	mL	02/04/10	BXA1
945417	945415	SW846 3050B	0.565	g	50	mL	02/04/10	BXA1
945625	945624	SW846 7471A Prep	0.532	g	30	mL	02/03/10	TXB3

ETM
3/2/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1390

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245391011

BASIS: Dry Weight

DATE COLLECTED 19-JAN-10

CLIENT ID: RE15-10-8054

LEVEL: Low

DATE RECEIVED 23-JAN-10

MATRIX: SOIL

%SOLIDS: 90.5

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	5680000	ug/Kg		7090	20800	20800	1	P	HSC	02/16/10 22:00	021610-1	945417
7440-36-0	Antimony	1040	ug/Kg	U	344	1040	1040	1	P	HSC	02/16/10 22:00	021610-1	945417
7440-38-2	Arsenic	1.52	mg/kg		0.207	1.03	1.03	2	MS	BAJ	02/16/10 05:43	100215-2	945412
7440-39-3	Barium J-,16a	52600	ug/Kg	*N	104	521	521	1	P	HSC	02/16/10 22:00	021610-1	945417
7440-41-7	Beryllium	0.598	mg/kg		0.0207	0.103	0.103	2	MS	BAJ	02/16/10 17:26	100216-8	945412
7440-43-9	Cadmium	521	ug/Kg	U	104	521	521	1	P	HSC	02/16/10 22:00	021610-1	945417
7440-70-2	Calcium	2060000	ug/Kg		8340	26100	26100	1	P	HSC	02/16/10 22:00	021610-1	945417
7440-47-3	Chromium J,14a	17400	ug/Kg		156	521	521	1	P	HSC	02/16/10 22:00	021610-1	945417
7440-48-4	Cobalt J,14a	2440	ug/Kg	*	156	521	521	1	P	HSC	02/16/10 22:00	021610-1	945417
7440-50-8	Copper	3960	ug/Kg		313	1040	1040	1	P	HSC	02/16/10 22:00	021610-1	945417
7439-89-6	Iron	9630000	ug/Kg		8340	26100	26100	1	P	HSC	02/16/10 22:00	021610-1	945417
7439-92-1	Lead J,14a	4800	ug/Kg	*	261	1040	1040	1	P	HSC	02/16/10 22:00	021610-1	945417
7439-95-4	Magnesium J+,16b	1190000	ug/Kg	N	8860	31300	31300	1	P	HSC	02/16/10 22:00	021610-1	945417
7439-96-5	Manganese J-,16a	178000	ug/Kg	N	208	1040	1040	1	P	HSC	02/16/10 22:00	021610-1	945417
7439-97-6	Mercury	24.2	ug/kg		4.43	13	13	1	AV	JXL1	02/04/10 11:55	02041051-9	945625
7440-02-0	Nickel J-,16a	5.5	mg/kg	N	0.103	0.413	0.413	2	MS	BAJ	02/16/10 17:26	100216-8	945412
7440-09-7	Potassium J+,16b	720000	ug/Kg	N	6670	26100	26100	1	P	HSC	02/16/10 22:00	021610-1	945417
7782-49-2	Selenium UJ,16a	1.03	mg/kg	UN	0.516	1.03	1.03	2	MS	BAJ	02/16/10 05:43	100215-2	945412
7440-22-4	Silver	577	ug/Kg		104	521	521	1	P	HSC	02/16/10 22:00	021610-1	945417
7440-23-5	Sodium J,14a	280000	ug/Kg		7300	26100	26100	1	P	HSC	02/16/10 22:00	021610-1	945417
7440-28-0	Thallium U,14b	0.0795	mg/kg	J	0.062	0.207	0.207	2	MS	BAJ	02/16/10 05:43	100215-2	945412
7440-61-1	Uranium	1.24	mg/kg		0.0136	0.0413	0.0413	2	MS	BAJ	02/16/10 10:55	100216-3	945412
7440-62-2	Vanadium J,14a	8030	ug/Kg		104	521	521	1	P	HSC	02/16/10 22:00	021610-1	945417
7440-66-6	Zinc J,14a	31800	ug/Kg		344	1040	1040	1	P	HSC	02/16/10 22:00	021610-1	945417

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
945412	945411	SW846 3050B	0.535	g	50	mL	02/04/10	BXA1
945417	945415	SW846 3050B	0.53	g	50	mL	02/04/10	BXA1
945625	945624	SW846 7471A Prep	0.509	g	30	mL	02/03/10	TXB3

ETM
3/2/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1390-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245392001

BASIS: As Received

DATE COLLECTED 19-JAN-10

CLIENT ID: RE15-10-8074

LEVEL: Low

DATE RECEIVED 23-JAN-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 17:13	021110B-1	945379
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	02/13/10 03:50	100212-3	945381
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	02/11/10 17:13	021110B-1	945379
7440-39-3	Barium	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 17:13	021110B-1	945379
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	02/13/10 03:50	100212-3	945381
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BAJ	02/13/10 03:50	100212-3	945381
7440-70-2	Calcium	200	ug/L	U	50	200	200	1	P	HSC	02/11/10 17:13	021110B-1	945379
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 17:13	021110B-1	945379
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 17:13	021110B-1	945379
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	02/11/10 17:13	021110B-1	945379
7439-89-6	Iron	100	ug/L	U	30	100	100	1	P	HSC	02/11/10 17:13	021110B-1	945379
7439-92-1	Lead	1.75	ug/L	J	0.5	2	2	1	MS	BAJ	02/13/10 20:45	100213-5	945381
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	02/11/10 17:13	021110B-1	945379
7439-96-5	Manganese	1.87	ug/L	J	1	5	5	1	MS	BAJ	02/13/10 20:45	100213-5	945381
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL	02/04/10 10:15	020410W1-6	945416
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	02/11/10 17:13	021110B-1	945379
7440-09-7	Potassium	197	ug/L		50	150	150	1	P	HSC	02/11/10 17:13	021110B-1	945379
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	02/11/10 17:13	021110B-1	945379
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 17:13	021110B-1	945379
7440-23-5	Sodium	162	ug/L	J	100	300	300	1	P	HSC	02/11/10 17:13	021110B-1	945379
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	BAJ	02/13/10 17:37	100213-4	945381
7440-61-1	Uranium	0.688	ug/L		0.05	0.2	0.2	1	MS	SKJ	02/13/10 19:45	100213-2	945381
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 17:13	021110B-1	945379
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	02/11/10 17:13	021110B-1	945379

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
945379	945378	SW846 3005A	50	mL	50	mL	02/03/10	FGA
945381	945380	SW846 3005A	50	mL	50	mL	02/03/10	FGA
945416	945413	SW846 7470A Prep	20	mL	20	mL	02/03/10	TXB3

ETM
3/2/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1390-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245392002

BASIS: As Received

DATE COLLECTED 19-JAN-10

CLIENT ID: RE15-10-8075

LEVEL: Low

DATE RECEIVED 23-JAN-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	83.1	ug/L	J	68	200	200	1	P	HSC	02/11/10 18:00	021110B-1	945379
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	02/13/10 04:15	100212-3	945381
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	02/11/10 18:00	021110B-1	945379
7440-39-3	Barium	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 18:00	021110B-1	945379
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	02/13/10 04:15	100212-3	945381
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BAJ	02/13/10 04:15	100212-3	945381
7440-70-2	Calcium	65.3	ug/L	J	50	200	200	1	P	HSC	02/11/10 18:00	021110B-1	945379
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 18:00	021110B-1	945379
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 18:00	021110B-1	945379
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	02/11/10 18:00	021110B-1	945379
7439-89-6	Iron	57.3	ug/L	J	30	100	100	1	P	HSC	02/11/10 18:00	021110B-1	945379
7439-92-1	Lead	1.21	ug/L	J	0.5	2	2	1	MS	BAJ	02/13/10 20:57	100213-5	945381
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	02/11/10 18:00	021110B-1	945379
7439-96-5	Manganese	2.3	ug/L	J	1	5	5	1	MS	BAJ	02/13/10 20:57	100213-5	945381
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL	02/04/10 10:27	020410W1-6	945416
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	02/11/10 18:00	021110B-1	945379
7440-09-7	Potassium	118	ug/L	J	50	150	150	1	P	HSC	02/11/10 18:00	021110B-1	945379
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	02/11/10 18:00	021110B-1	945379
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 18:00	021110B-1	945379
7440-23-5	Sodium	200	ug/L	J	100	300	300	1	P	HSC	02/11/10 18:00	021110B-1	945379
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	BAJ	02/13/10 17:55	100213-4	945381
7440-61-1	Uranium	0.435	ug/L		0.05	0.2	0.2	1	MS	SKJ	02/13/10 19:52	100213-2	945381
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 18:00	021110B-1	945379
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	02/11/10 18:00	021110B-1	945379

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
945379	945378	SW846 3005A	50	mL	50	mL	02/03/10	FGA
945381	945380	SW846 3005A	50	mL	50	mL	02/03/10	FGA
945416	945413	SW846 7470A Prep	20	mL	20	mL	02/03/10	TXB3

ETM
3/2/10

DATA VALIDATION COVER SHEET		
5120-1	Data Validation Cover Sheet	Records Use only 

Section I.

REQUEST NUMBER: 10-1390 VALIDATION DATE: 3/2/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Eric T. Mink ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

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

Section II. Completeness Check

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

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

1. In the MB associated with all the soil samples except RE15-10-7918, total CN was detected. The associated sample results were NDs and, thus, were not qualified.
2. It should be noted that the matrix QC analyses associated with the aqueous samples and all the soil samples except - 7918 were performed on LANL samples from different RNs. No sample data were qualified.

Reviewed by: Mary Donovan

Level: I

Date: 03/03/10

VALIDATOR'S SIGNATURE: Eric T. Mink

DATE: 3/2/10

GENERAL CHEMISTRY ANALYTICAL DATA VALIDATION CHECKLIST		
5120-2		Records Use only
General Chemistry Analytical Data Validation Checklist		 Los Alamos NATIONAL LABORATORY ESTABLISHED 1942

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

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

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

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

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

GEL LABORATORIES LLC

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

Certificate of Analysis

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

Report Date: February 9, 2010

Client SDG: 10-1390

Client Sample ID: RE15-10-7918
Sample ID: 245391001
Matrix: R
Collect Date: 19-JAN-10 12:00
Receive Date: 23-JAN-10
Collector: Client
Moisture: 9.65%

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	73.8	271	ug/kg	1	AXC2	02/02/10	1634	944836	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	02/01/10	1455	944835

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

ETM
3/2/10

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

Report Date: February 9, 2010

Client SDG: 10-1390

Client Sample ID: RE15-10-7915
Sample ID: 245391002
Matrix: R
Collect Date: 19-JAN-10 12:00
Receive Date: 23-JAN-10
Collector: Client
Moisture: 18.3%

Project: LANL01004
Client ID: LANL010

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

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	U	ND	80.0	294	ug/kg	1	AXC2	02/02/10	1637	944841	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	02/02/10	1539	944840

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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

Report Date: February 9, 2010

Client SDG: 10-1390

Client Sample ID: RE15-10-7920
Sample ID: 245391003
Matrix: R
Collect Date: 19-JAN-10 12:00
Receive Date: 23-JAN-10
Collector: Client
Moisture: 3.74%

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	69.3	255	ug/kg	1	AXC2	02/02/10	1644	944841	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	02/02/10	1539	944840

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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

Report Date: February 9, 2010

Client SDG: 10-1390

Client Sample ID: RE15-10-7914
Sample ID: 245391004
Matrix: R
Collect Date: 19-JAN-10 12:00
Receive Date: 23-JAN-10
Collector: Client
Moisture: 9.63%

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	71.0	261	ug/kg	1	AXC2	02/02/10	1648	944841	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	02/02/10	1539	944840

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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

Report Date: February 9, 2010

Client SDG: 10-1390

Client Sample ID: RE15-10-7919
Sample ID: 245391005
Matrix: R
Collect Date: 19-JAN-10 12:00
Receive Date: 23-JAN-10
Collector: Client
Moisture: 22.6%

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	87.8	323	ug/kg	1	AXC2	02/02/10	1649	944841	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	02/02/10	1539	944840

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 9, 2010

Client SDG: 10-1390

Client Sample ID: RE15-10-7921
Sample ID: 245391006
Matrix: R
Collect Date: 19-JAN-10 12:00
Receive Date: 23-JAN-10
Collector: Client
Moisture: 17.8%

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	81.1	298	ug/kg	1	AXC2	02/02/10	1650	944841	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	02/02/10	1539	944840

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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

Report Date: February 9, 2010

Client SDG: 10-1390

Client Sample ID: RE15-10-7916
Sample ID: 245391007
Matrix: R
Collect Date: 19-JAN-10 12:00
Receive Date: 23-JAN-10
Collector: Client
Moisture: 6.8%

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	67.6	248	ug/kg	1	AXC2	02/02/10	1650	944841	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	02/02/10	1539	944840

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

ETM
3/2/10

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

Report Date: February 9, 2010

Client SDG: 10-1390

Client Sample ID: RE15-10-7917
Sample ID: 245391008
Matrix: R
Collect Date: 19-JAN-10 12:00
Receive Date: 23-JAN-10
Collector: Client
Moisture: 20.2%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	83.6	307	ug/kg	1	AXC2	02/02/10	1655	944841	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/02/10	1539	944840

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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

Report Date: February 9, 2010

Client SDG: 10-1390

Client Sample ID: RE15-10-7922
Sample ID: 245391009
Matrix: R
Collect Date: 19-JAN-10 12:00
Receive Date: 23-JAN-10
Collector: Client
Moisture: 9.86%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	74.0	272	ug/kg	1	AXC2	02/02/10	1656	944841	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/02/10	1539	944840

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

ETM
3/2/10

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
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Los Alamos, New Mexico 87545
Contact: Ms. Joylena Valdez
Project: LANL ER Project

Report Date: February 9, 2010

Client SDG: 10-1390

Client Sample ID: RE15-10-8053
Sample ID: 245391010
Matrix: R
Collect Date: 19-JAN-10 12:00
Receive Date: 23-JAN-10
Collector: Client
Moisture: 19.2%

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	84.2	309	ug/kg	1	AXC2	02/02/10	1657	944841	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	02/02/10	1539	944840

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

ETM
3/2/10

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Certificate of Analysis

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

Report Date: February 9, 2010

Client SDG: 10-1390

Client Sample ID: RE15-10-8054
Sample ID: 245391011
Matrix: R
Collect Date: 19-JAN-10 12:00
Receive Date: 23-JAN-10
Collector: Client
Moisture: 9.5%

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	73.7	271	ug/kg	1	AXC2	02/02/10	1658	944841	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	02/02/10	1539	944840

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

ETM
3/2/10

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Certificate of Analysis

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

Report Date: February 4, 2010

Client SDG: 10-1390-1

Client Sample ID: RE15-10-8074
Sample ID: 245392001
Matrix: W
Collect Date: 19-JAN-10 12:00
Receive Date: 23-JAN-10
Collector: Client

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "As Received"</i>											
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2	01/26/10	1125	943824	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/25/10	1448	943821

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

ETM
3/2/10

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

Report Date: February 4, 2010

Client SDG: 10-1390-1

Client Sample ID: RE15-10-8075
Sample ID: 245392002
Matrix: W
Collect Date: 19-JAN-10 12:00
Receive Date: 23-JAN-10
Collector: Client

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "As Received"</i>											
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2	01/26/10	1125	943824	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/25/10	1448	943821

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

ETM
3/2/10

Friday, January 22, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1390C

LOS ALAMOS

REQUEST NUMBER: 10-1390

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 2/21/2010

General Engineering Laboratories, Inc.,
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

245391, 245392/

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE15-10-7918	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7918	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7915	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7915	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7920	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7920	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7914	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7914	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7919	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7919	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7921	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7921	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7916	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7916	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7917	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7917	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7922	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7922	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-8053	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE15-10-8053	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-8054	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE15-10-8054	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-8074	1	POLY	METALS+U-GEL	Nitric Acid	W
RE15-10-8074	1	POLY	SW-846:6850	Ice	W
RE15-10-8074	1	POLY	TCN	Sodium Hydroxide	W
RE15-10-8076	1	POLY	METALS+U-GEL	Nitric Acid	W
RE15-10-8075	1	POLY	SW-846:6850	Ice	W
RE15-10-8075	1	POLY	TCN	Sodium Hydroxide	W

Relinquished By:

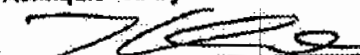
Date

Time

Received By:

Date

Time


 Printed Name Signature

1/22/10

3:00


 Printed Name Signature

Friday, January 22, 2010

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 1/22/2010

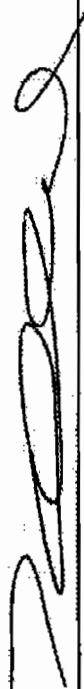
TURNAROUND/REPORT DUE: 2/21/2010

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature: 

These Samples are on:

LANL Request Number: 10-1390

Per Agreement Number: 126310011

Project Cost Code: MR3A05529E00

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846-8020	1	RE15-10-7914	R	1/19/2010	
		1	RE15-10-7915	R	1/19/2010	
		1	RE15-10-7916	R	1/19/2010	
		1	RE15-10-7917	R	1/19/2010	
		1	RE15-10-7918	R	1/19/2010	
		1	RE15-10-7919	R	1/19/2010	
		1	RE15-10-7920	R	1/19/2010	
		1	RE15-10-7921	R	1/19/2010	
		1	RE15-10-7922	R	1/19/2010	

Friday, January 22, 2010

Page 2 of 4

REQUEST NUMBER: 10-1390

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846-8020	1	RE15-10-8053	R	1/19/2010	
		1	RE15-10-8054	R	1/19/2010	
		1	RE15-10-8074	W	1/19/2010	
		1	RE15-10-8075	W	1/19/2010	
	SW-846-6850	1	RE15-10-7914	R	1/19/2010	
		1	RE15-10-7915	R	1/19/2010	
		1	RE15-10-7916	R	1/19/2010	
		1	RE15-10-7917	R	1/19/2010	
		1	RE15-10-7918	R	1/19/2010	
		1	RE15-10-7919	R	1/19/2010	
		1	RE15-10-7920	R	1/19/2010	
		1	RE15-10-7921	R	1/19/2010	
		1	RE15-10-7922	R	1/19/2010	
		1	RE15-10-8053	R	1/19/2010	
		1	RE15-10-8054	R	1/19/2010	
		1	RE15-10-8074	W	1/19/2010	
		1	RE15-10-8075	W	1/19/2010	
	SW-846-7470A	1	RE15-10-8074	W	1/19/2010	
		1	RE15-10-8075	W	1/19/2010	
	SW-846-7471A	1	RE15-10-7914	R	1/19/2010	
		1	RE15-10-7915	R	1/19/2010	
		1	RE15-10-7916	R	1/19/2010	
		1	RE15-10-7917	R	1/19/2010	
		1	RE15-10-7918	R	1/19/2010	
		1	RE15-10-7919	R	1/19/2010	
		1	RE15-10-7920	R	1/19/2010	
		1	RE15-10-7921	R	1/19/2010	
		1	RE15-10-7922	R	1/19/2010	

Friday, January 22, 2010

Page 3 of 4

REQUEST NUMBER: 10-1380

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846-7471A	1	RE15-10-8053	R	1/19/2010	
		1	RE15-10-8054	R	1/19/2010	
	SW-846-8082	1	RE15-10-8053	R	1/19/2010	
		1	RE15-10-8054	R	1/19/2010	
	SW-846-8321A_MOD	1	RE15-10-7914	R	1/19/2010	
		1	RE15-10-7915	R	1/19/2010	
		1	RE15-10-7916	R	1/19/2010	
		1	RE15-10-7917	R	1/19/2010	
		1	RE15-10-7918	R	1/19/2010	
		1	RE15-10-7919	R	1/19/2010	
		1	RE15-10-7920	R	1/19/2010	
		1	RE15-10-7921	R	1/19/2010	
		1	RE15-10-7922	R	1/19/2010	
		1	RE15-10-8053	R	1/19/2010	
		1	RE15-10-8054	R	1/19/2010	
	SW-846-9012A	1	RE15-10-7914	R	1/19/2010	
		1	RE15-10-7915	R	1/19/2010	
		1	RE15-10-7916	R	1/19/2010	
		1	RE15-10-7917	R	1/19/2010	
		1	RE15-10-7918	R	1/19/2010	
		1	RE15-10-7919	R	1/19/2010	
		1	RE15-10-7920	R	1/19/2010	
		1	RE15-10-7921	R	1/19/2010	
		1	RE15-10-7922	R	1/19/2010	
		1	RE15-10-8053	R	1/19/2010	
		1	RE15-10-8054	R	1/19/2010	
		1	RE15-10-8074	W	1/19/2010	
		1	RE15-10-8075	W	1/19/2010	



January 27, 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: 245391 245392
SDG: 10-1390

Dear Ms. Valdez:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on January 23, 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: 10-1390
Enclosures

Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Work Order #: 245391 and 245392
SDG: 10-1390

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Cyanide, Total	1940

Case Narrative

**Case Narrative for
Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Workorder #: 245391 and 245392
SDG # : 10-1390**

January 27, 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 January 23, 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 original chain of custody was received on 1/26/10. All sample containers arrived without any visible signs of tampering or breakage. Containers were checked for pH, where appropriate, and matched the preservative as documented on the accompanying chain of custody. Shipping container temperature was within specification (0 - 6C).

Sample Identification The laboratory received the following samples:

<u>Laboratory ID</u>	<u>Client ID</u>
245391001	RE15-10-7918
245391002	RE15-10-7915
245391003	RE15-10-7920
245391004	RE15-10-7914
245391005	RE15-10-7919
245391006	RE15-10-7921
245391007	RE15-10-7916
245391008	RE15-10-7917
245391009	RE15-10-7922
245391010	RE15-10-8053
245391011	RE15-10-8054
245392001	RE15-10-8074
245392002	RE15-10-8075

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 27 January 2010

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

Chain of Custody and Supporting Documentation

Friday, January 22, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1390C

LOS ALAMOS

REQUEST NUMBER: 10-1390

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 2/21/2010

General Engineering Laboratories, Inc.,
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

245391, 245392%

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE15-10-7918	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7918	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7915	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7915	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7920	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7920	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7914	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7914	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7919	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7919	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7921	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7921	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7916	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7916	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7917	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7917	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7922	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7922	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-8053	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE15-10-8053	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-8054	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE15-10-8054	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-8074	1	POLY	METALS+U-GEL	Nitric Acid	W
RE15-10-8074	1	POLY	SW-846:6850	Ice	W
RE15-10-8074	1	POLY	TCN	Sodium Hydroxide	W
RE15-10-8075	1	POLY	METALS+U-GEL	Nitric Acid	W
RE15-10-8075	1	POLY	SW-846:6850	Ice	W
RE15-10-8075	1	POLY	TCN	Sodium Hydroxide	W

Relinquished By:

Date

Time

Received By:

Date

Time

Printed Name

Signature

Printed Name

Signature

Friday, January 22, 2010

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

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

Page 1 of 4

REQUEST NUMBER: 10-1390

These Samples are on:

LANL Request Number: 10-1390

Per Agreement Number: 126310011

Project Cost Code: MR3A05529E00

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 1/22/2010

TURNAROUND/REPORT DUE: 2/21/2010

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-846:6020	1	RE15-10-7914	R	1/19/2010	
		1	RE15-10-7915	R	1/19/2010	
		1	RE15-10-7916	R	1/19/2010	
		1	RE15-10-7917	R	1/19/2010	
		1	RE15-10-7918	R	1/19/2010	
		1	RE15-10-7919	R	1/19/2010	
		1	RE15-10-7920	R	1/19/2010	
		1	RE15-10-7921	R	1/19/2010	
		1	RE15-10-7922	R	1/19/2010	

Friday, January 22, 2010

Page 2 of 4

REQUEST NUMBER: 10-1390

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6020	1	RE15-10-8053	R	1/19/2010	
		1	RE15-10-8054	R	1/19/2010	
		1	RE15-10-8074	W	1/19/2010	
		1	RE15-10-8075	W	1/19/2010	
	SW-846:6850	1	RE15-10-7914	R	1/19/2010	
		1	RE15-10-7915	R	1/19/2010	
		1	RE15-10-7916	R	1/19/2010	
		1	RE15-10-7917	R	1/19/2010	
		1	RE15-10-7918	R	1/19/2010	
		1	RE15-10-7919	R	1/19/2010	
		1	RE15-10-7920	R	1/19/2010	
		1	RE15-10-7921	R	1/19/2010	
		1	RE15-10-7922	R	1/19/2010	
		1	RE15-10-8053	R	1/19/2010	
		1	RE15-10-8054	R	1/19/2010	
		1	RE15-10-8074	W	1/19/2010	
		1	RE15-10-8075	W	1/19/2010	
	SW-846:7470A	1	RE15-10-8074	W	1/19/2010	
		1	RE15-10-8075	W	1/19/2010	
	SW-846:7471A	1	RE15-10-7914	R	1/19/2010	
		1	RE15-10-7915	R	1/19/2010	
		1	RE15-10-7916	R	1/19/2010	
		1	RE15-10-7917	R	1/19/2010	
		1	RE15-10-7918	R	1/19/2010	
		1	RE15-10-7919	R	1/19/2010	
		1	RE15-10-7920	R	1/19/2010	
		1	RE15-10-7921	R	1/19/2010	
		1	RE15-10-7922	R	1/19/2010	

Friday, January 22, 2010

REQUEST NUMBER: 10-1390

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:7471A	1	RE15-10-8053	R	1/19/2010	
		1	RE15-10-8054	R	1/19/2010	
	SW-846:8082	1	RE15-10-8053	R	1/19/2010	
		1	RE15-10-8054	R	1/19/2010	
	SW-846:8321A_MOD	1	RE15-10-7914	R	1/19/2010	
		1	RE15-10-7915	R	1/19/2010	
		1	RE15-10-7916	R	1/19/2010	
		1	RE15-10-7917	R	1/19/2010	
		1	RE15-10-7918	R	1/19/2010	
		1	RE15-10-7919	R	1/19/2010	
		1	RE15-10-7920	R	1/19/2010	
		1	RE15-10-7921	R	1/19/2010	
		1	RE15-10-7922	R	1/19/2010	
		1	RE15-10-8053	R	1/19/2010	
		1	RE15-10-8054	R	1/19/2010	
	SW-846:9012A	1	RE15-10-7914	R	1/19/2010	
		1	RE15-10-7915	R	1/19/2010	
		1	RE15-10-7916	R	1/19/2010	
		1	RE15-10-7917	R	1/19/2010	
		1	RE15-10-7918	R	1/19/2010	
		1	RE15-10-7919	R	1/19/2010	
		1	RE15-10-7920	R	1/19/2010	
		1	RE15-10-7921	R	1/19/2010	
		1	RE15-10-7922	R	1/19/2010	
		1	RE15-10-8053	R	1/19/2010	
		1	RE15-10-8054	R	1/19/2010	
		1	RE15-10-8074	W	1/19/2010	
		1	RE15-10-8075	W	1/19/2010	

SAMPLE RECEIPT & REVIEW FORM

Client: LANL		SDG/ARCOC/Work Order: 10-1390	
Received By: Patricia Dover-Dent		Date Received: January 23, 2009	
Suspected Hazard Information	Yes	No	*If Counts > x2 area background on samples not marked "radioactive", contact the Radiation Safety Group of further investigation.
COC/Samples marked as radioactive?		X	Maximum Counts Observed*: 60 CPM
Classified Radioactive II by RSO?		X	
COC/Samples marked containing PCBs?		X	
Shipped as a DOT Hazardous?		X	Hazard Class Shipped: UN#:
Samples identified as Foreign Soil?		X	

Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1 Shipping containers received intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
2 Samples requiring cold preservation within 0 ≤ 6 deg. C?	X			Preservation Method: ice bags blue ice dry ice none other (describe) 1-4 12,13,15C
3 Chain of custody documents included with shipment?			X	Original COC was received 01/26/10
4 Sample containers intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
5 Samples requiring chemical preservation at proper pH?		X		Sample ID's, containers affected and observed pH: If Preservation added, Lot#:
6 VOA vials free of headspace (defined as < 6mm bubble)?		X		Sample ID's and containers affected:
7 Are Encore containers present?			X	(If yes, immediately deliver to Volatiles laboratory)
8 Samples received within holding time?	X			Id's and tests affected:
9 Sample ID's on COC match ID's on bottles?	X			Sample ID's and containers affected:
10 Date & time on COC match date & time on bottles?			X	Sample ID's affected: time written on containers, not on COC
11 Number of containers received match number indicated on COC?	X			Sample ID's affected:
12 COC form is properly signed in relinquished/received sections?	X			

Comments: FEDEX#S

7209 7849 6695 1C	7209 7849 6560 4C
7209 7849 6776 1C	7209 7849 6559 4C
7209 7849 6526 2C	7209 7849 6684 4C
7209 7849 6700 2C	7209 7849 6732 12C
7209 7849 6710 2C	7209 7849 6504 13C
7209 7849 6548 2C	7209 7849 6743 13C
7209 7849 6537 3C	7209 7849 6765 13C
7209 7849 6570 3C	7209 7849 6754 15C
7209 7849 6515 4C	

 PM (or PMA) review: Initials YSO

 Date 1/26/10

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

SHIP DATE: 22JAN10
ACTNGT: 55.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

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

SHIP DATE: 22JAN10
ACTNGT: 55.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

1°
VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 68010AMR2A0515BYD0

1°
VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 68010AMR2A0515BYD0



2 of 2
PSN 7209 7849 6695
Matr# 7209 7849 6684 [0201]
SATURDAY ### A1
PRIORITY OVERNIGHT

X0 CHSA

29407
SC-US
CHS



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

CAD: 0014176/CAFE2449
BILL SENDER

2°
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4 of 4
PSN 7209 7849 6526
Matr# 7209 7849 6490 [0201]
SATURDAY ### A1
PRIORITY OVERNIGHT

X0 CHSA

29407
SC-US
CHS



TRKH 7209 7849 6776
[0201]
SATURDAY ### A1
PRIORITY OVERNIGHT

X0 CHSA

29407
SC-US
CHS



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

SHIP DATE: 22JAN10
ACTNGT: 55.0 LB MAN
CAD: 0014176/CAFE2449

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1 of 2
TRKH 7209 7849 6700
[0201]
SATURDAY ### A1
PRIORITY OVERNIGHT

X0 CHSA

29407
SC-US
CHS



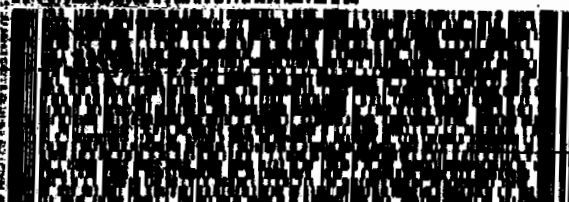
ORIGIN ID: SAFA (505) 665-8968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 22JAN10
ACTMGT: 57.0 LB MAN
CRD: 0014176/CAFE2449
BILL SENDER

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2 of 2
MPSN 7209 7849 6710
Matr-N 7209 7849 6700 [0201]

SATURDAY ###
PRIORITY OVERNIGHT

X0 CHSA

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LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

ACTMGT: 57.0 LB MAN
CRD: 0014176/CAFE2449

LOS ALAMOS, NM 87545
UNITED STATES US

BILL SENDER

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2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 68010AMR2A0515BYD0

3c



1 of 3
MPSN 7209 7849 6537
Matr-N 7209 7849 6537

SATURDAY ###
PRIORITY OVERNIGHT

X0 CHSA

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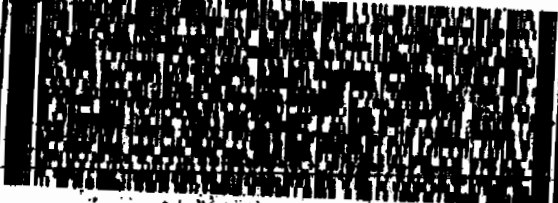
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 22JAN10
ACTMGT: 58.0 LB MAN
CRD: 0014176/CAFE2449
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2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 68010AMR2A0515BYD0

2°



2 of 3
MPSN 7209 7849 6548
Matr-N 7209 7849 6537 [0201]

SATURDAY ###
PRIORITY OVERNIGHT

X0 CHSA

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SC-US
CHS



LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

SHIP DATE: 22JAN10
ACTMGT: 58.0 LB MAN
CRD: 0014176/CAFE2449

LOS ALAMOS, NM 87545
UNITED STATES US

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 68010AMR3A0352VA00

3°



2 of 2
MPSN 7209 7849 6570
Matr-N 7209 7849 6560 [0201]

SATURDAY ###
PRIORITY OVERNIGHT

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Page 1 of 1

LOS ALAMOS MAIL LAB
TAGS BLDG 1237 DPU 83

LOS ALAMOS, NM 87545
UNITED STATES US

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR2A0515BYD0

ALAMOS, NM 87545
UNITED STATES US

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR3A0352VA00

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3 of 4

SATURDAY ### A1
PRIORITY OVERNIGHT

NPS# 7209 7849 6515

Matr# 7209 7849 6490 8281

X0 CHSA

29407
SC-US
CHS



1 of 2

SATURDAY ### A1
PRIORITY OVERNIGHT

NPS# 7209 7849 6560

MASTER #

X0 CHSA

29407
SC-US
CHS



ORIGIN ID: SAFA (506) 665-8968
JOYLENE VALDEZ
LOS ALAMOS MAIL LAB
TAGS BLDG 1237 DPU 83

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 22JAN10
ACTN# 48.8 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

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GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR2A0515BYD0

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ORIGIN ID: SAFA (506) 665-8968
JOYLENE VALDEZ
LOS ALAMOS MAIL LAB
TAGS BLDG 1237 DPU 83

LOS ALAMOS, NM 87545
UNITED STATES US

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GENERAL ENGINEERING LAB
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REF: 6B010AMR2A0515BYD0

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3 of 3

SATURDAY ### A1
PRIORITY OVERNIGHT

NPS# 7209 7849 6559

Matr# 7209 7849 6537 8281

X0 CHSA

29407
SC-US
CHS



1 of 2

SATURDAY ### A1
PRIORITY OVERNIGHT

NPS# 7209 7849 6684

MASTER #

X0 CHSA

29407
SC-US
CHS



JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 83
LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 22JAN18
ACTMGT: 68 8 LB MAN
CAD: 0014176/CAFE2440

BILL SENDER

LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 83
LOS ALAMOS, NM 87545
UNITED STATES US

CAD: 0014176/CAFE2440

BILL SENDER

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GENERAL ENGINEERING LAB
2040 SAVAGE RD

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2040 SAVAGE RD

CHARLESTON SC 29407

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REF: 68010AMR2A0515BYD0

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7209 7849 6732

SATURDAY ### A1
PRIORITY OVERNIGHT

X0 CHSA

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File 133998 22JAN18 SAFA

ORIGIN ID: SAFA (506) 665-0968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 83
LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 22JAN18
ACTMGT: 68 8 LB MAN
CAD: 0014176/CAFE2440

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SATURDAY ### A1
PRIORITY OVERNIGHT

7209 7849 6743

7209 7849 6732

29407
SC-US
CHS

X0 CHSA

ORIGIN ID: SAFA (506) 665-0968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 83
LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 22JAN18

ACTMGT: 68 8 LB MAN

CAD: 0014176/CAFE2440

BILL SENDER

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CHARLESTON SC 29407

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SATURDAY ### A1
PRIORITY OVERNIGHT

7209 7849 6765

7209 7849 6754

29407
SC-US
CHS

X0 CHSA

ORIGIN ID: SAFA (605) 665-8968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAGS BLDG 1287 CPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 22JAN10
ACTWGT: 22.0 LB MAN
CNO: 0014176/CAPE2449

BILL SENDER

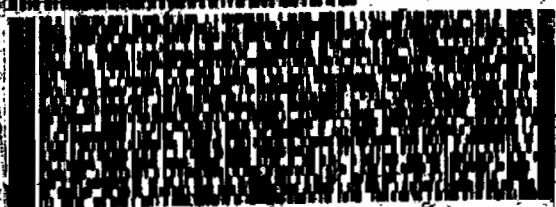
VALERIE DAVIS
GENERAL ENGINEERING LAB
2840 SAVAGE RD

CHARLESTON SC 29407

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REF: 68010AMR2A0515BYD0

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1 of 2
TRACK 7209 7849 6754
NM MASTER NM

SATURDAY ### A1 2
PRIORITY OVERNIGHT

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3148-434 NRT 93 04 09

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.

GC
SEMIVOLATILE
PCB
ANALYSIS

PCB Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1390

Method/Analysis Information

Procedure: Analysis of Polychlorinated Biphenyls by ECD
Analytical Method: SW846 8082
Prep Method: SW846 3550B
Analytical Batch Number: 945979
Prep Batch Number: 945978

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8082:

Sample ID	Client ID
245391010	RE15-10-8053
245391011	RE15-10-8054
1202026167	Method Blank (MB)
1202026168	Laboratory Control Sample (LCS)
1202026169	245394002(RE15-10-7874) Matrix Spike (MS)
1202026170	245394002(RE15-10-7874) 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# 14.

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 (#10-1392) was selected for the matrix spike and matrix spike duplicate analysis. A Form III and QC raw data are included in the package summarizing the results.

Matrix Spike (MS) Recovery Statement

The MS recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement

The MSD recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement

The RPD between the MS and MSD met the acceptance limits.

Technical Information

Holding Time Specifications

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

Preparation/Analytical Method Verification

All procedures were performed as stated in the SOP. All sample extracts were cleaned using alumina. Additionally, copper was added to all sample extracts to remove sulfur.

Sample Dilutions

The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis

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

Miscellaneous Information

Electronic Package Comment

The following package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Data Exception (DER) Documentation

Data exception 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:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
ECD2A.I_1	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP I	30m x 0.25mm, 0.25um (Rtx-CLPesticide)
ECD2A.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: Trini Coo

Date: 2/19/10

Roadmap for LANL 10-1390 PCB

This roadmap was analyzed by jen01212 on 01-29-2010, 09:28.

This roadmap was reviewed by jim01140 on 02-01-2010, 16:08.

This roadmap was packaged by yml on 02-19-2010, 07:10.

This roadmap was validated by jim01140 on 02-19-2010, 14:06.

Front Sample Column

exclude	manual	datafile	smplid	sampletype	injdate	injtime	sublist	clientid	dilution	prebatchid	comment
☐	N	/chem/ecd2a.i/012810.b/017f1701.d	245391010	sample	28-JAN-2010	09:57	10-1390.sub	RE15-10-8053	1.00000	945979	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/012810.b/018f1801.d	245391011	sample	28-JAN-2010	10:08	10-1390.sub	RE15-10-8054	1.00000	945979	UPLOAD BOTH, USE HIGHER

Back Sample Column

exclude	manual	datafile	smplid	sampletype	injdate	injtime	sublist	clientid	dilution	prebatchid	comment
☐	N	/chem/ecd2a.i/012810.b/017b1701.d	245391010	sample	28-JAN-2010	09:57	10-1390.sub	RE15-10-8053	1.00000	945979	UPLOAD BOTH, USE HIGHER
☐	N	/chem/ecd2a.i/012810.b/018b1801.d	245391011	sample	28-JAN-2010	10:08	10-1390.sub	RE15-10-8054	1.00000	945979	UPLOAD BOTH, USE HIGHER

Front QC Sample Column

exclude	manual	datafile	smplid	sampletype	injdate	injtime	snblist	clientid	dilution	prebatchid	comment
☐	N	/chem/ecd2a.i/012810.b/012f1201-1.d	1202026167	mb	28-JAN-2010	09:02	10-1390.sub	PBLK01	1.00000	945979	
☐	N	/chem/ecd2a.i/012810.b/013f1301-1.d	1202026168	lcs	28-JAN-2010	09:13	10-1390.sub	PBLK01LCS	1.00000	945979	

Back QC Sample Column

exclude	manual	datafile	smplid	sampletype	injdate	injtime	sublist	clientid	dilution	prebatchid	comment
☐	N	/chem/ecd2a.i/012810.b/012b1201-1.d	1202026167	mb	28-JAN-2010	09:02	10-1390.sub	PBLK01	1.00000	945979	
☐	N	/chem/ecd2a.i/012810.b/013b1301-1.d	1202026168	lcs	28-JAN-2010	09:13	10-1390.sub	PBLK01LCS	1.00000	945979	

SAMPLE DATA SUMMARY

PCB
Certificate of Analysis
Sample Summary

SDG Number: 10-1390
Lab Sample ID: 245391010

Client ID: RE15-10-8053
Batch ID: 945979
Run Date: 01/28/2010 09:57
Prep Date: 01/27/2010 20:26
Data File: 017f1701.d
017b1701.d

Date Collected: 01/19/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8082
Inst: ECD2AJ
Analyst: JAOC
Aliquot: 30.12 g
Column: 1 CLP1
2 CLP2

Matrix: R
%Moisture: 19.2
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	4.11	ug/kg	1.37	4.11	1
11104-28-2	Aroclor-1221	U	4.11	ug/kg	1.37	4.11	1
11141-16-5	Aroclor-1232	U	4.11	ug/kg	1.37	4.11	1
53469-21-9	Aroclor-1242	U	4.11	ug/kg	1.37	4.11	1
12672-29-6	Aroclor-1248	U	4.11	ug/kg	1.37	4.11	1
11097-69-1	Aroclor-1254		18.7	ug/kg	1.37	4.11	1
11096-82-5	Aroclor-1260		15.9	ug/kg	1.37	4.11	2

PCB

Page 1 of 1

Certificate of Analysis
Sample SummarySDG Number: 10-1390
Lab Sample ID: 245391011Client ID: RE15-10-8054
Batch ID: 945979
Run Date: 01/28/2010 10:08
Prep Date: 01/27/2010 20:26
Data File: 018f1801.d
018b1801.dDate Collected: 01/19/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8082
Inst: ECD2A.I
Analyst: JAOC
Aliquot: 30.15 g
Column: 1 CLP1
2 CLP2Matrix: R
%Moisture: 9.5
Project: LANL01004
SOP Ref: GL-OA-E-040
Dilution: 1
Inj. Vol: 1 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.66	ug/kg	1.22	3.66	1
11104-28-2	Aroclor-1221	U	3.66	ug/kg	1.22	3.66	1
11141-16-5	Aroclor-1232	U	3.66	ug/kg	1.22	3.66	1
53469-21-9	Aroclor-1242	U	3.66	ug/kg	1.22	3.66	1
12672-29-6	Aroclor-1248	U	3.66	ug/kg	1.22	3.66	1
11097-69-1	Aroclor-1254	U	3.66	ug/kg	1.22	3.66	1
11096-82-5	Aroclor-1260	U	3.66	ug/kg	1.22	3.66	1

QUALITY CONTROL SUMMARY

PCB
Surrogate Recovery Report

Page 1 of 1

SDG Number: 10-1390

Matrix Type: SOLID

CAP Column (1) : CLP1

CAP Column (2) : CLP2

Sample ID	Client ID	4CMX 1 %REC #	4CMX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #
1202026167	MB for batch 945978	63	67	66	70
1202026168	LCS for batch 945978	64	67	69	73
245391010	RE15-10-8053	63	65	64	68
245391011	RE15-10-8054	66	62	67	69

Surrogate

Acceptance Limits

4CMX = 4cmx

(34%-105%)

DCB = Decachlorobiphenyl

(33%-115%)

* 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: 10-1390

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 945978

Matrix: SOIL

Lab Sample ID:1202026168

Instrument: ECD2A.I

Analysis Date: 01/28/2010 09:13

Dilution: 1

Analyst: JAOC

Prep Batch ID: 945978

Inj. Vol: 1 uL

Batch ID: 945979

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
12674-11-2	LCS Aroclor-1016	33.3	0.0	21.8	65	41-110
11096-82-5	LCS Aroclor-1260	33.3	0.0	25.7	77	48-110

PCB

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Quality Control Summary
Spike Recovery Report

SDG Number: 10-1392

Sample Type: Matrix Spike

Client ID: RE15-10-7874MS

Matrix: R

Lab Sample ID:1202026169

%Moisture: 4.1

Instrument: ECD2A.I

Analysis Date: 01/28/2010 11:04

Dilution: 1

Analyst: JAOC

Pren Batch II 945978

Inj. Vol: 1 uL

Batch ID: 945979

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
12674-11-2	MS Aroclor-1016	34.7	0.00 U	24.3	70	23-117
11096-82-5	MS Aroclor-1260	34.7	3.20 J	31.9	83	27-116

PCB

Page 2 of 2

Quality Control Summary
Spike Recovery Report

SDG Number: 10-1392

Sample Type: Matrix Spike Duplicate

Client ID: RE15-10-7874MSD

Matrix: R

Lab Sample ID:1202026170

%Moisture: 4.1

Instrument: ECD2A.1

Analysis Date: 01/28/2010 11:15

Dilution: 1

Analyst: JAOC

Prep Batch ID: 945978

Inj. Vol: 1 uL

Batch ID: 945979

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD	Acceptance Limits	
12674-11-2	MSD	Aroclor-1016	34.6	0.00	U	23.4	68	23-117	4	0-30
11096-82-5	MSD	Aroclor-1260	34.6	3.20	J	30.8	80	27-116	4	0-30

Method Blank Summary

Page 1 of 1

SDG Number:	10-1390	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 945978	Instrument ID:	ECD2A.I_2	Data File:	012b1201-1.d
Lab Sample ID:	1202026167		ECD2A.I_1		012f1201-1.d
Column:	CLP2	Prep Date:	01/27/2010 20:26	Analyzed:	01/28/10 09:02
	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 945978	1202026168	013f1301-1.d 013b1301-1.d	01/28/10	0913
02 RE15-10-8053	245391010	017f1701.d 017b1701.d	01/28/10	0957
03 RE15-10-8054	245391011	018f1801.d 018b1801.d	01/28/10	1008

SAMPLE DATA

PCB
Certificate of Analysis
Sample Summary

SDG Number: 10-1390
Lab Sample ID: 245391010

Client ID: RE15-10-8053
Batch ID: 945979
Run Date: 01/28/2010 09:57
Prep Date: 01/27/2010 20:26
Data File: 017f1701.d
017b1701.d

Date Collected: 01/19/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8082
Inst: ECD2A.I
Analyst: JAOC
Aliquot: 30.12 g
Column: 1 CLP1
2 CLP2

Matrix: R
%Moisture: 19.2
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	4.11	ug/kg	1.37	4.11	1
11104-28-2	Aroclor-1221	U	4.11	ug/kg	1.37	4.11	1
11141-16-5	Aroclor-1232	U	4.11	ug/kg	1.37	4.11	1
53469-21-9	Aroclor-1242	U	4.11	ug/kg	1.37	4.11	1
12672-29-6	Aroclor-1248	U	4.11	ug/kg	1.37	4.11	1
11097-69-1	Aroclor-1254		18.7	ug/kg	1.37	4.11	1
11096-82-5	Aroclor-1260		15.9	ug/kg	1.37	4.11	2

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/017f1701.d

Lab Smp Id: 245391010

Client Smp ID: RE15-10-8053

Inj Date : 28-JAN-2010 09:57

Operator : JAOC

Inst ID: ecd2a.i

Smp Info : |245391010|1|

Misc Info : |ECD82P_1S|945979|SVA|LANL|SOIL|RE15-10-8053|||

Comment :

Method : /chem/ecd2a.i/012810.b/ECD2-F-8082-111209A.m

Meth Date : 28-Jan-2010 11:03 jen01212 Quant Type: ESTD

Cal Date : 21-JAN-2010 08:45

Cal File: 010f1001.d

Als bottle: 17

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: 10-1390.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	30.12000	Weight of sample extracted (g)
M	19.19330	% Moisture

Cpnd Variable Local Compound Variable

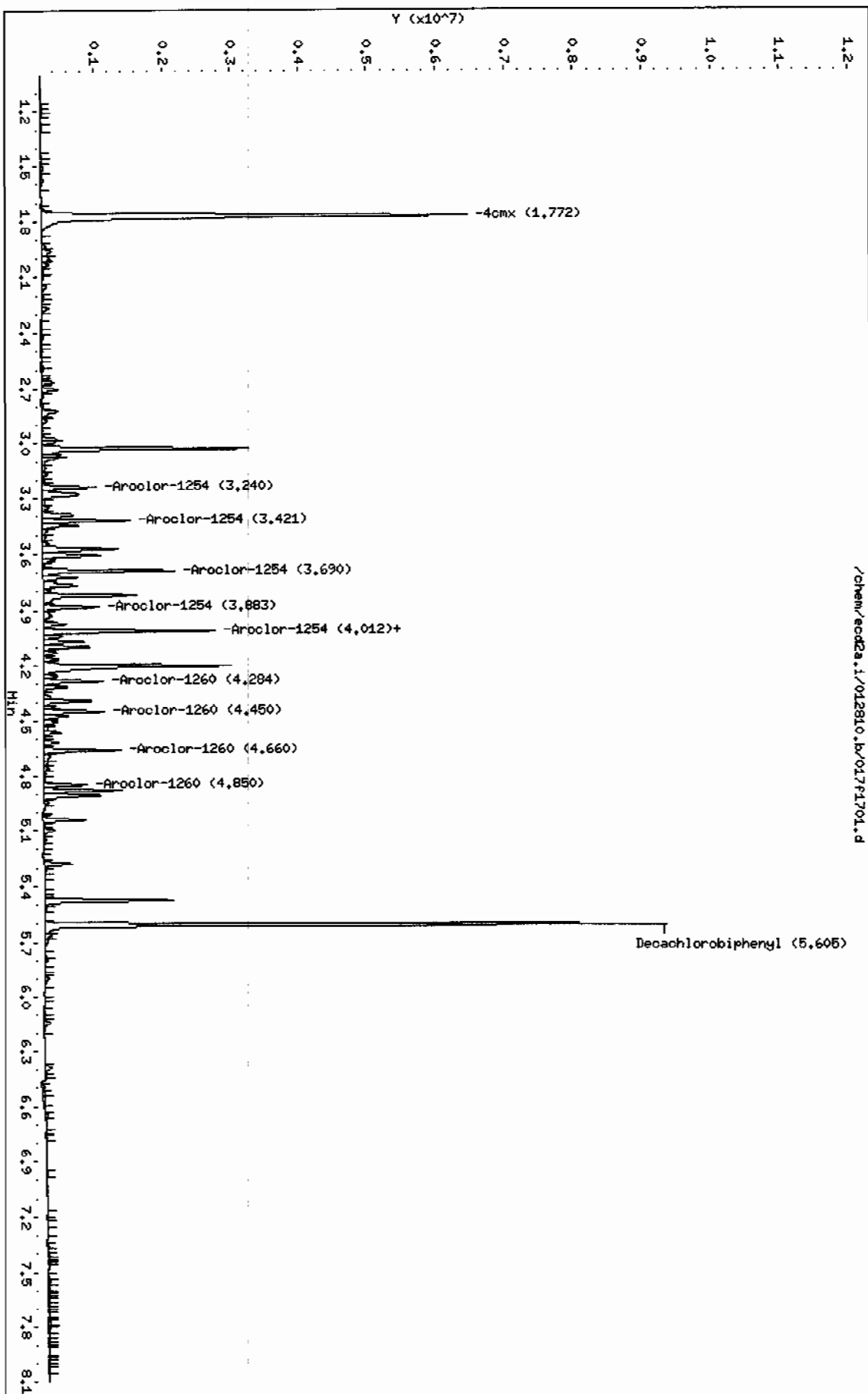
CONCENTRATIONS

RT	EXP RT	DLT RT	RESPONSE (ug/L)	ON-COL	FINAL	TARGET RANGE	RATIO
\$ 11 4cmx					CAS #: 877-09-8		
1.772	1.770	0.002	8438773 125.891	5.2	80.00- 120.00	100.00	
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.605	5.604	0.001	8068424 127.264	5.2	80.00- 120.00	100.00	
6 Aroclor-1254					CAS #: 11097-69-1		
3.240	3.239	0.001	727454 349.729	14.4	80.00- 120.00	100.00	
3.421	3.422	-0.001	1147503 413.942	17.0	112.37- 152.37	157.74	
3.690	3.691	-0.001	1621770 433.350	17.8	163.94- 203.94	222.94	
3.883	3.884	-0.001	793408 285.121	11.7	115.35- 155.35	109.07	
4.012	4.012	0.000	2184581 791.502	32.5	118.56- 158.56	300.30	
Average of Peak Concentrations =				18.7			

			CONCENTRATIONS				
			ON-COL	FINAL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	
7 Aroclor-1260				CAS #: 11096-82-5			
4.012	4.011	0.001	2184581	507.727	20.9	80.00- 120.00	100.00
4.284	4.282	0.002	773556	277.158	11.4	42.81- 82.81	35.41
4.450	4.449	0.001	834994	291.261	12.0	45.95- 85.95	38.22
4.660	4.661	-0.001	1024571	155.729	6.4	132.37- 172.37	46.90
4.850	4.850	0.000	532695	166.816	6.8	53.57- 93.57	24.38
Average of Peak Concentrations =				11.5			

Data File: /chem/ecod2a.i/012810.b/017f1701.d
Date: 28-JAN-2010 09:57
Client ID: RELS-10-8053
Sample Info: 124539101011
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecod2a.i
Operator: JADC
Column diameter: 0.25



Data File: /chem/ecd2a.i/012810.b/017b1701.d
 Report Date: 28-Jan-2010 11:31

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/017b1701.d
 Lab Smp Id: 245391010 Client Smp ID: RE15-10-8053
 Inj Date : 28-JAN-2010 09:57
 Operator : JAOC Inst ID: ecd2a.i
 Smp Info : |245391010|1|
 Misc Info : |ECD82P_1\$|945979|SVA|LANL|SOIL|RE15-10-8053|
 Comment :
 Method : /chem/ecd2a.i/012810.b/ECD2-B-8082-111209A.m
 Meth Date : 28-Jan-2010 11:03 jen01212 Quant Type: ESTD
 Cal Date : 21-JAN-2010 08:45 Cal File: 010b1001.d
 Als bottle: 17
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: 10-1390.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	30.12000	Weight of sample extracted (g)
M	19.19330	% Moisture

Cpnd Variable Local Compound Variable

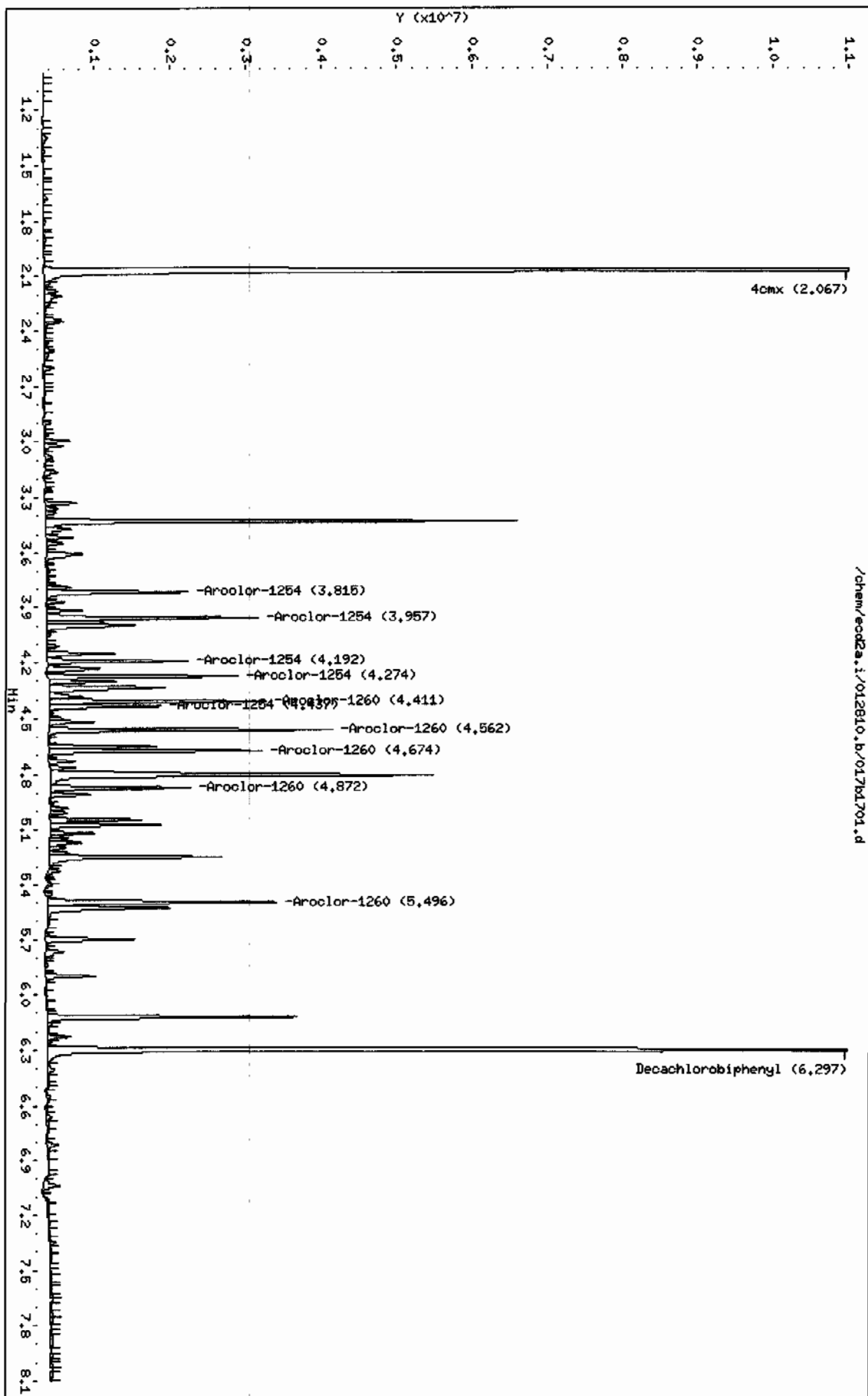
CONCENTRATIONS

RT	EXP RT	DLT RT	ON-COL	FINAL	TARGET RANGE	RATIO
=====	=====	=====	RESPONSE (ug/L)	(ug/Kg)	=====	=====
CAS #: 877-09-8						
11.4cmx	2.067	2.067	0.000	18082682 129.572	5.3 80.00- 120.00	100.00
CAS #: 2051-24-3						
12 Decachlorobiphenyl	6.297	6.297	0.000	16963461 136.196	5.6 80.00- 120.00	100.00
CAS #: 11097-69-1						
6 Aroclor-1254	3.815	3.815	0.000	1744706 349.970	14.4 80.00- 120.00	100.00
	3.957	3.956	0.001	2594152 447.349	18.4 94.13- 134.13	148.69
	4.192	4.193	-0.001	1597531 397.100	16.3 61.98- 101.98	91.56
	4.274	4.274	0.000	2050083 265.164	10.9 136.55- 176.55	117.50
	4.437	4.437	0.000	1229354 219.202	9.0 92.78- 132.78	70.46
Average of Peak Concentrations =				13.8		

CONCENTRATIONS						
			ON-COL		FINAL	
RT	EXP RT	DLT RT	RESPONSE (ug/L)		TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
7 Aroclor-1260			CAS #: 11096-82-5			
4.411	4.411	0.000	2514356	434.619	17.8 80.00- 120.00	100.00
4.562	4.562	0.000	3068060	422.415	17.4 106.27- 146.27	122.02
4.674	4.674	0.000	2476647	494.917	20.3 66.48- 106.48	98.50
4.872	4.872	0.000	1623255	280.104	11.5 78.00- 118.00	64.56
5.496	5.497	-0.001	2880226	306.588	12.6 140.50- 180.50	114.55
Average of Peak Concentrations =				15.9		

Data File: /chem/ecod2a.i/012810.b/017b1701.d
 Date : 28-JAN-2010 09:57
 Client ID: RE15-10-8053
 Sample Info: 124539101011
 Volume Injected (uL): 1.0
 Column phase: CLP2

Instrument: ecod2a.i
 Operator: JROC
 Column diameter: 0.25



PCB
Certificate of Analysis
Sample Summary

SDG Number: 10-1390
Lab Sample ID: 245391011

Date Collected: 01/19/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8082
Inst: ECD2A.I
Analyst: JAOC
Aliquot: 30.15 g
Column: 1 CLP1
2 CLP2

Matrix: R
%Moisture: 9.5
Project: LANL01004
SOP Ref: GL-OA-E-040
Dilution: 1
Inj. Vol: 1 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.66	ug/kg	1.22	3.66	1
11104-28-2	Aroclor-1221	U	3.66	ug/kg	1.22	3.66	1
11141-16-5	Aroclor-1232	U	3.66	ug/kg	1.22	3.66	1
53469-21-9	Aroclor-1242	U	3.66	ug/kg	1.22	3.66	1
12672-29-6	Aroclor-1248	U	3.66	ug/kg	1.22	3.66	1
11097-69-1	Aroclor-1254	U	3.66	ug/kg	1.22	3.66	1
11096-82-5	Aroclor-1260	U	3.66	ug/kg	1.22	3.66	1

Data File: /chem/ecd2a.i/012810.b/018f1801.d
Report Date: 28-Jan-2010 11:32

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/018f1801.d
Lab Smp Id: 245391011 Client Smp ID: RE15-10-8054
Inj Date : 28-JAN-2010 10:08
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |245391011|1|
Misc Info : |ECD82P_1S|945979|SVA|LANL|SOIL|RE15-10-8054|||
Comment :
Method : /chem/ecd2a.i/012810.b/ECD2-F-8082-111209A.m
Meth Date : 28-Jan-2010 11:03 jen01212 Quant Type: ESTD
Cal Date : 21-JAN-2010 08:45 Cal File: 010f1001.d
Als bottle: 18
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1390.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

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	30.15000	Weight of sample extracted (g)
M	9.49650	% Moisture

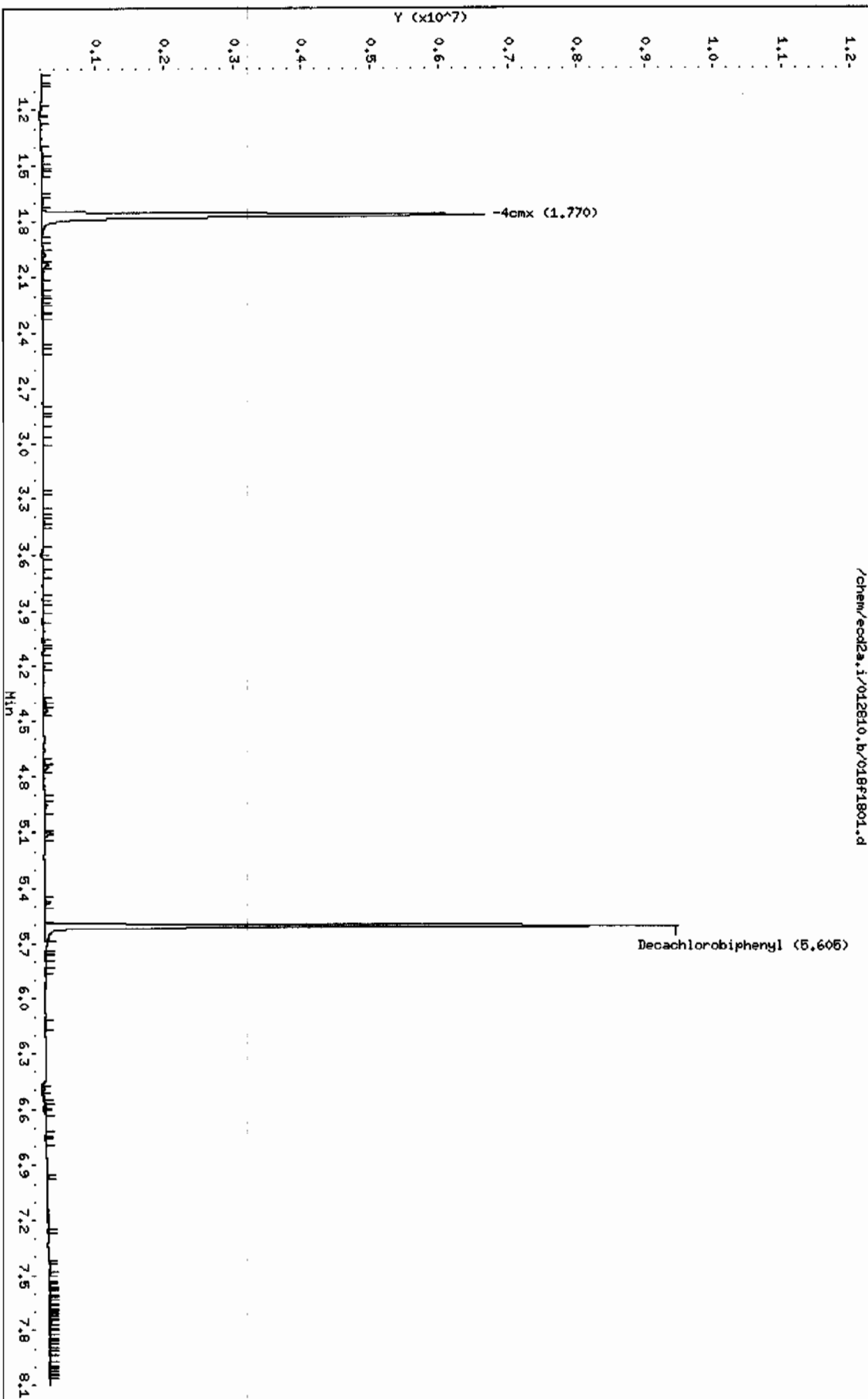
Cpnd Variable Local Compound Variable

		CONCENTRATIONS					
		ON-COL	FINAL				
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	
\$ 11 4cmx				CAS #: 877-09-8			
1.770	1.770	0.000	8841835 131.904	4.8	80.00- 120.00	100.00	

\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3			
5.605	5.604	0.001	8533948 134.606	4.9	80.00- 120.00	100.00	

Data File: /chem/ecod2a.i/012810.b/018f1801.d
Date: 28-JAN-2010 10:08
Client ID: RE18-10-8084
Sample Info: 124539101111
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecod2a.i
Operator: JADG
Column diameter: 0.25



Data File: /chem/ecd2a.i/012810.b/018b1801.d
Report Date: 28-Jan-2010 11:28

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL
Data file : /chem/ecd2a.i/012810.b/018b1801.d
Lab Smp Id: 245391011 Client Smp ID: RE15-10-8054
Inj Date : 28-JAN-2010 10:08
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |245391011|1|
Misc Info : |ECD82P_1\$|945979|SVA|LANL|SOIL|RE15-10-8054|||
Comment :
Method : /chem/ecd2a.i/012810.b/ECD2-B-8082-111209A.m
Meth Date : 28-Jan-2010 11:03 jen01212 Quant Type: ESTD
Cal Date : 21-JAN-2010 08:45 Cal File: 010b1001.d
Als bottle: 18
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1390.sub
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

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	30.15000	Weight of sample extracted (g)
M	9.49650	% Moisture

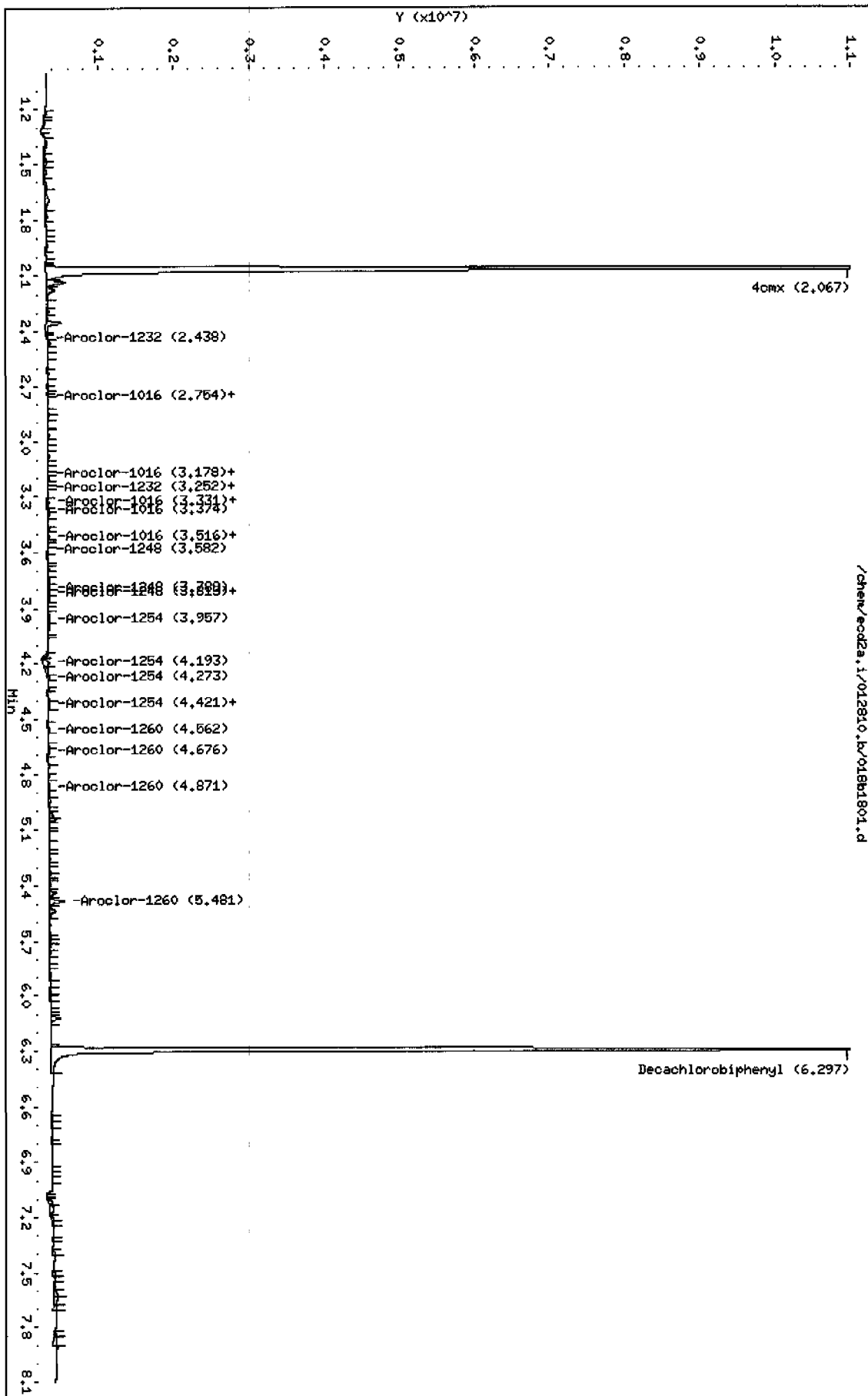
Cpnd Variable Local Compound Variable

CONCENTRATIONS					
			ON-COL	FINAL	
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE RATIO
==	=====	=====	=====	=====	=====
\$ 11 4cmx				CAS #: 877-09-8	
2.067	2.067	0.000	17226966 123.440	4.5 80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3	
6.297	6.297	0.000	17273335 138.684	5.1 80.00- 120.00	100.00

Data File: /chem/ecd2a.i/012810.b/018b1801.d
 Date: 28-JAN-2010 10:08
 Client ID: RELS-10-8064
 Sample Info: 124539101111
 Volume Injected (uL): 1.0
 Column phase: CLP2

Instrument: ecd2a.i
 Operator: JROC
 Column diameter: 0.25



STANDARDS DATA

Report Date: 17-Feb-2010 14:36

Calibration History

Method : /chem/ecd2a.i/012810.b/ECD2-F-8082-111209A.m
Start Cal Date: 12-NOV-2009 11:00
End Cal Date : 21-JAN-2010 08:45

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
21-JAN-2010 08:01	AR1232	/chem/ecd2a.i/012110.b/006f0601.d
02-DEC-2009 07:05	AR1262	/chem/ecd2a.i/120209.b/008f0801.d
07-JAN-2010 08:16	AR1268	/chem/ecd2a.i/010710.b/009f0901.d
30-NOV-2009 10:12	AR1248	/chem/ecd2a.i/113009a.b/011f1101.d
12-NOV-2009 14:09	AR1242	/chem/ecd2a.i/111209a.b/023f2301.d
30-NOV-2009 08:43	AR1254	/chem/ecd2a.i/113009a.b/003f0301.d
20-JAN-2010 09:46	AR1660	/chem/ecd2a.i/012010.b/009f0901.d

Cal Level: 2 , Cal Amount: 250.00000		
21-JAN-2010 08:12	AR1232	/chem/ecd2a.i/012110.b/007f0701.d
02-DEC-2009 07:16	AR1262	/chem/ecd2a.i/120209.b/009f0901.d
07-JAN-2010 08:27	AR1268	/chem/ecd2a.i/010710.b/010f1001.d
30-NOV-2009 10:23	AR1248	/chem/ecd2a.i/113009a.b/012f1201.d
12-NOV-2009 14:20	AR1242	/chem/ecd2a.i/111209a.b/024f2401.d
30-NOV-2009 08:54	AR1254	/chem/ecd2a.i/113009a.b/004f0401.d
20-JAN-2010 09:57	AR1660	/chem/ecd2a.i/012010.b/010f1001.d

Cal Level: 3 , Cal Amount: 500.00000		
21-JAN-2010 08:23	AR1232	/chem/ecd2a.i/012110.b/008f0801.d
02-DEC-2009 07:27	AR1262	/chem/ecd2a.i/120209.b/010f1001.d
07-JAN-2010 08:38	AR1268	/chem/ecd2a.i/010710.b/011f1101.d
30-NOV-2009 10:34	AR1248	/chem/ecd2a.i/113009a.b/013f1301.d
12-NOV-2009 14:31	AR1242	/chem/ecd2a.i/111209a.b/025f2501.d
30-NOV-2009 09:05	AR1254	/chem/ecd2a.i/113009a.b/005f0501.d
20-JAN-2010 10:09	AR1660	/chem/ecd2a.i/012010.b/011f1101.d

Cal Level: 4 , Cal Amount: 1000.00000		
30-NOV-2009 10:45	AR1248	/chem/ecd2a.i/113009a.b/014f1401.d
12-NOV-2009 14:42	AR1242	/chem/ecd2a.i/111209a.b/026f2601.d
30-NOV-2009 09:16	AR1254	/chem/ecd2a.i/113009a.b/006f0601.d
20-JAN-2010 10:20	AR1660	/chem/ecd2a.i/012010.b/012f1201.d
12-NOV-2009 11:45	DDTANALOGSTD	/chem/ecd2a.i/111209a.b/010f1001.d
07-JAN-2010 08:49	AR1268	/chem/ecd2a.i/010710.b/012f1201.d
02-DEC-2009 07:38	AR1262	/chem/ecd2a.i/120209.b/011f1101.d
12-NOV-2009 11:11	AR1221	/chem/ecd2a.i/111209a.b/007f0701.d
21-JAN-2010 08:34	AR1232	/chem/ecd2a.i/012110.b/009f0901.d

Cal Level: 5 , Cal Amount: 4000.00000		
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21-JAN-2010 08:45	AR1232	/chem/ecd2a.i/012110.b/010f1001.d
02-DEC-2009 07:50	AR1262	/chem/ecd2a.i/120209.b/012f1201.d
07-JAN-2010 09:00	AR1268	/chem/ecd2a.i/010710.b/013f1301.d
30-NOV-2009 10:56	AR1248	/chem/ecd2a.i/113009a.b/015f1501.d
12-NOV-2009 14:53	AR1242	/chem/ecd2a.i/111209a.b/027f2701.d
30-NOV-2009 09:27	AR1254	/chem/ecd2a.i/113009a.b/007f0701.d
20-JAN-2010 10:31	AR1660	/chem/ecd2a.i/012010.b/013f1301.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 17:10	AR1660	/chem/ecd2a.i/012810.b/052f5201.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 15:08	AR1660	/chem/ecd2a.i/012810.b/041f4101.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 12:10	AR1660	/chem/ecd2a.i/012810.b/029f2901.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 10:19	AR1660	/chem/ecd2a.i/012810.b/019f1901.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 08:29	AR1268	/chem/ecd2a.i/012810.b/009f0901.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 08:18	AR1262	/chem/ecd2a.i/012810.b/008f0801.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 08:07	AR1221	/chem/ecd2a.i/012810.b/007f0701.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 07:55	AR1232	/chem/ecd2a.i/012810.b/006f0601.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 07:44	AR1248	/chem/ecd2a.i/012810.b/005f0501.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 07:33	AR1242	/chem/ecd2a.i/012810.b/004f0401.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 07:22	AR1254	/chem/ecd2a.i/012810.b/003f0301.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 07:11	AR1660	/chem/ecd2a.i/012810.b/002f0201.d

Report Date: 29-Jan-2010 08:42

Calibration History

Method : /chem/ecd2a.i/012810.b/ECD2-B-8082-111209A.m
Start Cal Date: 12-NOV-2009 11:00
End Cal Date : 21-JAN-2010 08:45

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
21-JAN-2010 08:01	AR1232	/chem/ecd2a.i/012110.b/006b0601.d
02-DEC-2009 07:05	AR1262	/chem/ecd2a.i/120209.b/008b0801.d
07-JAN-2010 08:16	AR1268	/chem/ecd2a.i/010710.b/009b0901.d
30-NOV-2009 10:12	AR1248	/chem/ecd2a.i/113009a.b/011b1101.d
12-NOV-2009 14:09	AR1242	/chem/ecd2a.i/111209a.b/023b2301.d
30-NOV-2009 08:43	AR1254	/chem/ecd2a.i/113009a.b/003b0301.d
20-JAN-2010 09:46	AR1660	/chem/ecd2a.i/012010.b/009b0901.d

Cal Level: 2 , Cal Amount: 250.00000		
21-JAN-2010 08:12	AR1232	/chem/ecd2a.i/012110.b/007b0701.d
02-DEC-2009 07:16	AR1262	/chem/ecd2a.i/120209.b/009b0901.d
07-JAN-2010 08:27	AR1268	/chem/ecd2a.i/010710.b/010b1001.d
30-NOV-2009 10:23	AR1248	/chem/ecd2a.i/113009a.b/012b1201.d
12-NOV-2009 14:20	AR1242	/chem/ecd2a.i/111209a.b/024b2401.d
30-NOV-2009 08:54	AR1254	/chem/ecd2a.i/113009a.b/004b0401.d
20-JAN-2010 09:57	AR1660	/chem/ecd2a.i/012010.b/010b1001.d

Cal Level: 3 , Cal Amount: 500.00000		
21-JAN-2010 08:23	AR1232	/chem/ecd2a.i/012110.b/008b0801.d
02-DEC-2009 07:27	AR1262	/chem/ecd2a.i/120209.b/010b1001.d
07-JAN-2010 08:38	AR1268	/chem/ecd2a.i/010710.b/011b1101.d
30-NOV-2009 10:34	AR1248	/chem/ecd2a.i/113009a.b/013b1301.d
12-NOV-2009 14:31	AR1242	/chem/ecd2a.i/111209a.b/025b2501.d
30-NOV-2009 09:05	AR1254	/chem/ecd2a.i/113009a.b/005b0501.d
20-JAN-2010 10:09	AR1660	/chem/ecd2a.i/012010.b/011b1101.d

Cal Level: 4 , Cal Amount: 1000.00000		
30-NOV-2009 10:45	AR1248	/chem/ecd2a.i/113009a.b/014b1401.d
12-NOV-2009 14:42	AR1242	/chem/ecd2a.i/111209a.b/026b2601.d
30-NOV-2009 09:16	AR1254	/chem/ecd2a.i/113009a.b/006b0601.d
20-JAN-2010 10:20	AR1660	/chem/ecd2a.i/012010.b/012b1201.d
12-NOV-2009 11:45	DDTANALOGSTD	/chem/ecd2a.i/111209a.b/010b1001.d
07-JAN-2010 08:49	AR1268	/chem/ecd2a.i/010710.b/012b1201.d
02-DEC-2009 07:38	AR1262	/chem/ecd2a.i/120209.b/011b1101.d
12-NOV-2009 11:11	AR1221	/chem/ecd2a.i/111209a.b/007b0701.d
21-JAN-2010 08:34	AR1232	/chem/ecd2a.i/012110.b/009b0901.d

Cal Level: 5 , Cal Amount: 4000.00000		
21-JAN-2010 08:45	AR1232	/chem/ecd2a.i/012110.b/010b1001.d
02-DEC-2009 07:50	AR1262	/chem/ecd2a.i/120209.b/012b1201.d
07-JAN-2010 09:00	AR1268	/chem/ecd2a.i/010710.b/013b1301.d
30-NOV-2009 10:56	AR1248	/chem/ecd2a.i/113009a.b/015b1501.d
12-NOV-2009 14:53	AR1242	/chem/ecd2a.i/111209a.b/027b2701.d

30-NOV-2009 09:27	AR1254	/chem/ecd2a.i/113009a.b/007b0701.d
20-JAN-2010 10:31	AR1660	/chem/ecd2a.i/012010.b/013b1301.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 17:10	AR1660	/chem/ecd2a.i/012810.b/052b5201.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 15:08	AR1660	/chem/ecd2a.i/012810.b/041b4101.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 12:10	AR1660	/chem/ecd2a.i/012810.b/029b2901.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 10:19	AR1660	/chem/ecd2a.i/012810.b/019b1901.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 08:29	AR1268	/chem/ecd2a.i/012810.b/009b0901.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 08:18	AR1262	/chem/ecd2a.i/012810.b/008b0801.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 08:07	AR1221	/chem/ecd2a.i/012810.b/007b0701.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 07:55	AR1232	/chem/ecd2a.i/012810.b/006b0601.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 07:44	AR1248	/chem/ecd2a.i/012810.b/005b0501.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 07:33	AR1242	/chem/ecd2a.i/012810.b/004b0401.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 07:22	AR1254	/chem/ecd2a.i/012810.b/003b0301.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 07:11	AR1660	/chem/ecd2a.i/012810.b/002b0201.d

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd2a.i/012810.b/ECD2-F-8082-111209A.m
 Quant Method : ESTD Target Version : 3.50
 Last Update : 29-Jan-2010 07:51 Number of Cpnds : 15
 Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events Values

 Initial:Start Threshold 500.000000
 Initial:End Threshold 250.000000
 Initial:Area Threshold 10000.000000
 Initial:P-P Resolution 1.000000
 Initial:Bunch Factor 2.000000
 Initial:Negative Peaks OFF
 Initial:Tension 1.100000
 8.500:Bunch Factor 2.000000

Compound	RT	RT Window	RF
1 Aroclor-1016	2.271	2.241-2.301	2.258e+03
	2.595	2.565-2.625	4.629e+03
	2.685	2.655-2.715	1.900e+03
	2.820	2.790-2.850	9.835e+02
	2.971	2.941-3.001	1.450e+03
2 Aroclor-1221	1.438	1.408-1.468	4.641e+02
	1.897	1.867-1.927	6.570e+02
	1.996	1.966-2.026	3.467e+02
3 Aroclor-1232	2.025	1.995-2.055	1.478e+03
	2.273	2.243-2.303	1.092e+03
	2.687	2.657-2.717	8.910e+02
	2.729	2.699-2.759	5.508e+02
4 Aroclor-1242	2.973	2.943-3.003	6.246e+02
	2.273	2.243-2.303	1.733e+03
	2.687	2.657-2.717	1.484e+03
	2.730	2.700-2.760	9.058e+02
	2.822	2.792-2.852	7.269e+02
5 Aroclor-1248	2.974	2.944-3.004	1.120e+03
	2.822	2.792-2.852	1.527e+03
	2.973	2.943-3.003	2.027e+03
	3.033	3.003-3.063	1.571e+03
	3.268	3.238-3.298	2.218e+03
	3.420	3.390-3.450	1.913e+03

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd2a.i/012810.b/ECD2-F-8082-111209A.m

Compound	RT	RT Window	RF
6 Aroclor-1254	3.239	3.209-3.269	2.080e+03
	3.422	3.392-3.452	2.772e+03
	3.691	3.661-3.721	3.742e+03
	3.884	3.854-3.914	2.783e+03
	4.012	3.982-4.042	2.760e+03
7 Aroclor-1260	4.011	3.981-4.041	4.303e+03
	4.282	4.252-4.312	2.791e+03
	4.449	4.419-4.479	2.867e+03
	4.661	4.631-4.691	6.579e+03
	4.850	4.820-4.880	3.193e+03
8 Aroclor-1262	3.821	3.791-3.851	2.273e+03
	4.013	3.982-4.043	3.072e+03
	4.284	4.254-4.314	4.004e+03
	4.449	4.419-4.479	3.573e+03
	4.851	4.821-4.881	2.501e+03
9 Aroclor-1268	4.880	4.850-4.910	9.782e+03
	4.907	4.877-4.937	9.839e+03
	5.040	5.010-5.070	7.469e+03
	5.279	5.249-5.309	3.239e+03
	5.475	5.445-5.505	2.294e+04
M 10 Aroclor-Total	1.000	0.980-1.020	
\$ 11 4cmx	1.770	1.740-1.800	6.703e+04
\$ 12 Decachlorobiphenyl	5.604	5.574-5.634	6.340e+04
13 4,4'-DDT	4.229	4.209-4.249	5.006e+04
14 4,4'-DDD	4.036	4.016-4.056	7.298e+04
15 4,4'-DDE	3.632	3.612-3.652	7.426e+04

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd2a.i/012810.b/ECD2-B-8082-111209A.m
 Quant Method : ESTD Target Version : 3.50
 Last Update : 29-Jan-2010 07:38 Number of Cpnds : 15
 Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events Values

 Initial:Start Threshold 1000.000000
 Initial:End Threshold 500.000000
 Initial:Area Threshold 500.000000
 Initial:P-P Resolution 0.000000
 Initial:Bunch Factor 3.000000
 Initial:Negative Peaks OFF
 Initial:Tension 4.000000
 4.200:Tension 1.000000

Compound	RT	RT Window	RF
1 Aroclor-1016	2.742	2.712-2.772	4.489e+03
	3.177	3.147-3.207	3.434e+03
	3.327	3.297-3.357	2.017e+03
	3.356	3.326-3.386	2.106e+03
	3.515	3.485-3.545	2.794e+03
2 Aroclor-1221	2.290	2.260-2.320	1.263e+03
	2.395	2.365-2.425	7.739e+02
	2.440	2.410-2.470	3.051e+03
3 Aroclor-1232	2.440	2.410-2.470	2.542e+03
	2.743	2.713-2.773	2.197e+03
	3.177	3.147-3.207	1.559e+03
	3.250	3.220-3.280	9.480e+02
4 Aroclor-1242	3.516	3.486-3.546	1.167e+03
	2.743	2.713-2.773	3.445e+03
	3.178	3.148-3.208	2.681e+03
	3.250	3.220-3.280	1.637e+03
	3.328	3.298-3.358	1.508e+03
5 Aroclor-1248	3.516	3.486-3.546	2.145e+03
	3.329	3.299-3.359	3.282e+03
	3.515	3.485-3.545	4.187e+03
	3.602	3.572-3.632	4.451e+03
	3.791	3.761-3.821	4.697e+03
	3.820	3.790-3.850	5.389e+03

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd2a.i/012810.b/ECD2-B-8082-111209A.m

Compound	RT	RT Window	RF
6 Aroclor-1254	3.815	3.785-3.845	4.985e+03
	3.956	3.926-3.986	5.799e+03
	4.193	4.163-4.223	4.023e+03
	4.274	4.244-4.304	7.731e+03
	4.437	4.407-4.467	5.608e+03
7 Aroclor-1260	4.411	4.381-4.441	5.785e+03
	4.562	4.532-4.592	7.263e+03
	4.674	4.644-4.704	5.004e+03
	4.872	4.842-4.902	5.795e+03
	5.497	5.467-5.527	9.394e+03
8 Aroclor-1262	4.412	4.382-4.442	4.703e+03
	4.563	4.533-4.593	5.853e+03
	4.872	4.842-4.902	8.946e+03
	5.072	5.042-5.102	7.772e+03
	5.250	5.220-5.280	1.672e+04
9 Aroclor-1268	5.496	5.466-5.526	2.078e+04
	5.527	5.497-5.557	2.083e+04
	5.699	5.669-5.729	1.556e+04
	5.900	5.870-5.930	6.423e+03
	6.123	6.093-6.153	4.919e+04
M 10 Aroclor-Total	1.000	0.980-1.020	
\$ 11 4cmx	2.067	2.037-2.097	1.396e+05
\$ 12 Decachlorobiphenyl	6.297	6.267-6.327	1.246e+05
13 4,4'-DDT	4.814	4.794-4.834	8.705e+04
14 4,4'-DDD	4.600	4.580-4.620	1.499e+05
15 4,4'-DDE	4.195	4.175-4.215	1.504e+05

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 12-NOV-2009 11:00
 End Cal Date : 21-JAN-2010 08:45
 Quant Method : ESTD
 Origin : Disabled
 Target Version : 3.50
 Integrator : Falcon
 Method file : /chem/ecd2a.i/012810.b/ECD2-F-8082-111209A.m
 Cal Date : 29-Jan-2010 07:51 jen01212
 Curve Type : Average

Calibration File Names:

Level 1: /chem/ecd2a.i/012110.b/006f0601.d
 Level 2: /chem/ecd2a.i/012110.b/007f0701.d
 Level 3: /chem/ecd2a.i/012110.b/008f0801.d
 Level 4: /chem/ecd2a.i/113009a.b/014f1401.d
 Level 5: /chem/ecd2a.i/012110.b/010f1001.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)	2582	2384	2270	2158	1895	2258	11.359
(2)	4964	4712	4611	4536	4322	4629	5.094
(3)	2119	1992	1883	1834	1673	1900	8.824
(4)	1123	1028	978	934	855	983	10.212
(5)	1592	1492	1430	1418	1320	1450	6.903
2 Aroclor-1221(1)	++++	++++	++++	464	++++	464	0.000
(2)	++++	++++	++++	657	++++	657	0.000
(3)	++++	++++	++++	347	++++	347	0.000
3 Aroclor-1232(1)	1693	1584	1484	1409	1220	1478	12.117
(2)	1305	1155	1079	1032	890	1092	14.062
(3)	1013	935	891	855	761	891	10.499
(4)	596	581	554	535	488	551	7.655
(5)	770	637	618	566	533	625	14.598
4 Aroclor-1242(1)	1990	1799	1692	1619	1566	1733	9.686
(2)	1678	1536	1439	1387	1381	1484	8.410
(3)	1015	931	874	843	866	906	7.639
(4)	817	761	714	669	673	727	8.615
(5)	1272	1143	1059	1036	1087	1120	8.434
5 Aroclor-1248(1)	1738	1529	1527	1515	1325	1527	9.560
(2)	2238	2070	1990	2006	1832	2027	7.247
(3)	1706	1611	1571	1551	1415	1571	6.718
(4)	2322	2198	2161	2230	2178	2218	2.874
(5)	2083	1922	1902	1885	1770	1913	5.861
6 Aroclor-1254(1)	2304	2118	2048	2007	1924	2080	6.888
(2)	2981	2797	2739	2702	2642	2772	4.677
(3)	3870	3712	3711	3744	3675	3742	2.011
(4)	2886	2776	2725	2760	2767	2783	2.186
(5)	2994	2820	2741	2711	2533	2760	6.080

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 12-NOV-2009 11:00
 End Cal Date : 21-JAN-2010 08:45
 Quant Method : ESTD
 Origin : Disabled
 Target Version : 3.50
 Integrator : Falcon
 Method file : /chem/ecd2a.i/012810.b/ECD2-F-8082-111209A.m
 Cal Date : 29-Jan-2010 07:51 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)	4564	4184	4324	4273	4168	4303	3.706
(2)	3136	2679	2808	2745	2587	2791	7.510
(3)	3148	2736	2898	2878	2673	2867	6.405
(4)	6841	6399	6600	6582	6474	6579	2.551
(5)	3315	3117	3229	3192	3115	3193	2.623
8 Aroclor-1262(1)	2530	2266	2239	2239	2092	2273	6.993
(2)	3295	3066	3031	3051	2917	3072	4.482
(3)	4237	3997	3977	3997	3815	4004	3.763
(4)	3754	3532	3556	3594	3430	3573	3.295
(5)	2578	2453	2481	2538	2454	2501	2.217
9 Aroclor-1268(1)	9960	9712	9638	9856	9743	9782	1.295
(2)	10427	9736	9819	9812	9401	9839	3.768
(3)	7803	7453	7371	7450	7266	7469	2.702
(4)	3410	3296	3214	3182	3091	3239	3.727
(5)	23130	22747	22846	23230	22770	22944	0.963
10 Aroclor-Total	+++++	+++++	+++++	+++++	+++++	+++++	+++++
13 4,4'-DDT	+++++	+++++	+++++	50063	+++++	50063	0.000
14 4,4'-DDD	+++++	+++++	+++++	72978	+++++	72978	0.000
15 4,4'-DDE	+++++	+++++	+++++	74262	+++++	74262	0.000
11 4cmx	71691	67209	66904	66042	63316	67033	4.509
12 Decachlorobiphenyl	69072	64043	62394	61590	59897	63399	5.529

GEL Laboratories LLC
INITIAL CALIBRATION DATA

Start Cal Date : 12-NOV-2009 11:00
 End Cal Date : 21-JAN-2010 08:45
 Quant Method : ESTD
 Origin : Disabled
 Target Version : 3.50
 Integrator : Falcon
 Method file : /chem/ecd2a.i/012810.b/ECD2-B-8082-111209A.m
 Cal Date : 29-Jan-2010 07:38 jen01212
 Curve Type : Average

Calibration File Names:

Level 1: /chem/ecd2a.i/012110.b/006b0601.d
 Level 2: /chem/ecd2a.i/012110.b/007b0701.d
 Level 3: /chem/ecd2a.i/012110.b/008b0801.d
 Level 4: /chem/ecd2a.i/113009a.b/014b1401.d
 Level 5: /chem/ecd2a.i/012110.b/010b1001.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)	4662	4548	4537	4546	4153	4489	4.347
(2)	3382	3406	3459	3527	3397	3434	1.731
(3)	2031	1985	2035	2051	1984	2017	1.523
(4)	2110	2098	2116	2131	2073	2106	1.046
(5)	2721	2745	2805	2886	2815	2794	2.320
2 Aroclor-1221(1)	++++	++++	++++	1263	++++	1263	0.000
(2)	++++	++++	++++	774	++++	774	0.000
(3)	++++	++++	++++	3051	++++	3051	0.000
3 Aroclor-1232(1)	2686	2595	2551	2554	2323	2542	5.267
(2)	2414	2215	2163	2169	2023	2197	6.413
(3)	1656	1537	1539	1521	1542	1559	3.506
(4)	997	928	922	933	961	948	3.293
(5)	1358	1132	1098	1113	1134	1167	9.225
4 Aroclor-1242(1)	3674	3489	3409	3384	3271	3445	4.346
(2)	2815	2677	2634	2637	2644	2681	2.863
(3)	1696	1624	1594	1606	1663	1637	2.599
(4)	1601	1513	1471	1467	1487	1508	3.655
(5)	2235	2100	2068	2141	2180	2145	3.068
5 Aroclor-1248(1)	3439	3315	3263	3296	3099	3282	3.723
(2)	4291	4205	4192	4250	3996	4187	2.717
(3)	4601	4495	4377	4484	4299	4451	2.609
(4)	4665	4612	4696	4831	4682	4697	1.733
(5)	5471	5399	5390	5477	5208	5389	2.022
6 Aroclor-1254(1)	5121	4955	4998	5025	4828	4985	2.145
(2)	5885	5693	5812	5852	5753	5799	1.330
(3)	4010	3906	3992	4126	4082	4023	2.109
(4)	7559	7611	7766	7925	7797	7731	1.909
(5)	5659	5569	5439	5821	5553	5608	2.538

GEL Laboratories LLC
INITIAL CALIBRATION DATA

Start Cal Date : 12-NOV-2009 11:00
 End Cal Date : 21-JAN-2010 08:45
 Quant Method : ESTD
 Origin : Disabled
 Target Version : 3.50
 Integrator : Falcon
 Method file : /chem/ecd2a.i/012810.b/ECD2-B-8082-111209A.m
 Cal Date : 29-Jan-2010 07:38 jen01212
 Curve Type : Average

Compound	100.000	250.000	500.000	1000.000	4000.000	RRF	% RSD
Level 1	Level 2	Level 3	Level 4	Level 5			
7 Aroclor-1260(1)	5608	5607	5911	6004	5797	5785	3.079
(2)	6845	7033	7506	7660	7272	7263	4.586
(3)	4810	4804	5158	5233	5016	5004	3.919
(4)	5752	5570	5927	6012	5715	5795	3.029
(5)	8958	8757	9595	9936	9726	9394	5.425
8 Aroclor-1262(1)	4855	4536	4634	4812	4677	4703	2.776
(2)	5760	5648	5834	6083	5942	5853	2.859
(3)	8687	8674	9001	9349	9021	8946	3.121
(4)	7559	7507	7790	8124	7880	7772	3.221
(5)	15890	16154	16824	17584	17141	16719	4.167
9 Aroclor-1268(1)	19681	20538	20944	21652	21077	20778	3.522
(2)	20049	20780	21168	21526	20631	20831	2.683
(3)	14816	15313	15674	16201	15813	15563	3.374
(4)	6082	6303	6421	6627	6683	6423	3.811
(5)	47383	48640	49735	50972	49227	49192	2.697
M 10 Aroclor-Total	+++++	+++++	+++++	+++++	+++++	+++++	+++++
13 4,4'-DDT	+++++	+++++	+++++	87046	+++++	87046	0.000
14 4,4'-DDD	+++++	+++++	+++++	149858	+++++	149858	0.000
15 4,4'-DDE	+++++	+++++	+++++	150414	+++++	150414	0.000
\$ 11 4cmx	134308	136410	140413	144013	142640	139557	2.945
\$ 12 Decachlorobiphenyl	121777	119955	124484	128763	127780	124552	3.031

7

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.: 10-1390
 Instrument ID: ECD2A Calibration Date: 01/28/10 Time: 0711
 Lab File ID: 002F0201 Init. Calib. Date(s): 01/20/10 01/20/10
 Heated Purge: (Y/N) N Init. Calib. Times: 0946 1031
 GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	2257.882	2165.015	0.01	-4.1	15.0
(2)	4628.914	4547.039	0.01	-1.8	15.0
(3)	1900.304	1844.960	0.01	-2.9	15.0
(4)	983.497	933.841	0.01	-5.0	15.0
(5)	1450.304	1422.773	0.01	-1.9	15.0
Aroclor-1260	4302.665	4458.287	0.01	3.6	15.0
(2)	2791.028	2841.552	0.01	1.8	15.0
(3)	2866.828	2963.380	0.01	3.4	15.0
(4)	6579.193	6827.078	0.01	3.8	15.0
(5)	3193.316	3275.889	0.01	2.6	15.0
4cmx	67032.526	68204.450	0.01	1.7	15.0
Decachlorobiphenyl	63399.298	62456.940	0.01	-1.5	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.: 10-1390
 Instrument ID: ECD2A Calibration Date: 01/28/10 Time: 0711
 Lab File ID: 002B0201 Init. Calib. Date(s): 01/20/10 01/20/10
 Heated Purge: (Y/N) N Init. Calib. Times: 0946 1031
 GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	4489.288	4486.152	0.01	-0.1	15.0
(2)	3434.131	3512.523	0.01	2.3	15.0
(3)	2017.371	2045.938	0.01	1.4	15.0
(4)	2105.569	2148.450	0.01	2.0	15.0
(5)	2794.468	2882.428	0.01	3.1	15.0
Aroclor-1260	5785.200	6061.628	0.01	4.8	15.0
(2)	7263.142	7607.488	0.01	4.7	15.0
(3)	5004.167	5271.440	0.01	5.3	15.0
(4)	5795.185	5999.470	0.01	3.5	15.0
(5)	9394.449	9853.934	0.01	4.9	15.0
4cmx	139556.85	146083.54	0.01	4.7	15.0
Decachlorobiphenyl	124551.80	123071.07	0.01	-1.2	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.: 10-1390
 Instrument ID: ECD2A Calibration Date: 01/28/10 Time: 0722
 Lab File ID: 003F0301 Init. Calib. Date(s): 11/30/09 11/30/09
 Heated Purge: (Y/N) N Init. Calib. Times: 0843 0927
 GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1254	2080.052	2231.410	0.01	7.3	15.0
(2)	2772.138	2953.628	0.01	6.5	15.0
(3)	3742.400	4104.386	0.01	9.7	15.0
(4)	2782.705	3020.233	0.01	8.5	15.0
(5)	2760.043	3091.881	0.01	12.0	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.: 10-1390
 Instrument ID: ECD2A Calibration Date: 01/28/10 Time: 0722
 Lab File ID: 003B0301 Init. Calib. Date(s): 11/30/09 11/30/09
 Heated Purge: (Y/N) N Init. Calib. Times: 0843 0927
 GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1254	4985.297	5493.306	0.01	10.2	15.0
(2)	5798.946	6269.646	0.01	8.1	15.0
(3)	4022.990	4503.313	0.01	11.9	15.0
(4)	7731.372	8599.512	0.01	11.2	15.0
(5)	5608.308	6195.247	0.01	10.5	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.: 10-1390
 Instrument ID: ECD2A Calibration Date: 01/28/10 Time: 1019
 Lab File ID: 019F1901 Init. Calib. Date(s): 01/20/10 01/20/10
 Heated Purge: (Y/N) N Init. Calib. Times: 0946 1031
 GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	2257.882	2164.216	0.01	-4.1	15.0
(2)	4628.914	4634.918	0.01	0.1	15.0
(3)	1900.304	1858.717	0.01	-2.2	15.0
(4)	983.497	959.884	0.01	-2.4	15.0
(5)	1450.304	1428.210	0.01	-1.5	15.0
Aroclor-1260	4302.665	4504.739	0.01	4.7	15.0
(2)	2791.028	2829.388	0.01	1.4	15.0
(3)	2866.828	2970.753	0.01	3.6	15.0
(4)	6579.193	6864.066	0.01	4.3	15.0
(5)	3193.316	3314.063	0.01	3.8	15.0
4cmx	67032.526	68277.630	0.01	1.8	15.0
Decachlorobiphenyl	63399.298	59882.750	0.01	-5.5	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.: 10-1390
 Instrument ID: ECD2A Calibration Date: 01/28/10 Time: 1019
 Lab File ID: 019B1901 Init. Calib. Date(s): 01/20/10 01/20/10
 Heated Purge: (Y/N) N Init. Calib. Times: 0946 1031
 GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	4489.288	4526.496	0.01	0.8	15.0
(2)	3434.131	3578.610	0.01	4.2	15.0
(3)	2017.371	2069.036	0.01	2.6	15.0
(4)	2105.569	2178.329	0.01	3.4	15.0
(5)	2794.468	2933.668	0.01	5.0	15.0
Aroclor-1260	5785.200	6203.061	0.01	7.2	15.0
(2)	7263.142	7832.586	0.01	7.8	15.0
(3)	5004.167	5364.318	0.01	7.2	15.0
(4)	5795.185	6078.704	0.01	4.9	15.0
(5)	9394.449	9956.098	0.01	6.0	15.0
4cmx	139556.85	147358.12	0.01	5.6	15.0
Decachlorobiphenyl	124551.80	118391.93	0.01	-4.9	15.0

FORM VII PEST

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/002f0201.d

Lab Smp Id: WAR100104-60 01

Client Smp ID: AR166001

Inj Date : 28-JAN-2010 07:11

Operator : JAOC

Inst ID: ecd2a.i

Smp Info : |WAR100104-60 01

Misc Info : |PCB_CVS|1660|CVS|

Comment :

Method : /chem/ecd2a.i/012810.b/ECD2-F-8082-111209A.m

Meth Date : 28-Jan-2010 11:03 jen01212 Quant Type: ESTD

Cal Date : 21-JAN-2010 08:45

Cal File: 010f1001.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

CAL-AMT ON-COL

RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/L)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
\$ 11 4cmx			CAS #: 877-09-8			
1.770	1.770	0.000	6820445 100.000	102	80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl			CAS #: 2051-24-3			
5.604	5.604	0.000	6245694 100.000	98.5	80.00- 120.00	100.00

1 Aroclor-1016			CAS #: 12674-11-2			
2.271	2.271	0.000	2165015 1000.00	959	80.00- 120.00	100.00 (M)
2.595	2.595	0.000	4547039 1000.00	982	194.16- 234.16	210.02
2.685	2.685	0.000	1844960 1000.00	971	65.88- 105.88	85.22
2.820	2.820	0.000	933841 1000.00	950	24.35- 64.35	43.13
2.971	2.971	0.000	1422773 1000.00	981	45.99- 85.99	65.72
Average of Peak Amounts =			969			

7 Aroclor-1260			CAS #: 11096-82-5			
4.011	4.011	0.000	4458287 1000.00	1040	80.00- 120.00	100.00
4.282	4.282	0.000	2841552 1000.00	1020	42.81- 82.81	63.74
4.449	4.449	0.000	2963380 1000.00	1030	45.95- 85.95	66.47
4.661	4.661	0.000	6827078 1000.00	1040	132.37- 172.37	153.13
4.850	4.850	0.000	3275889 1000.00	1020	53.57- 93.57	73.48
Average of Peak Amounts =			1.03e+03			

Data File: /chem/ecd2a.i/012810.b/002f0201.d
Report Date: 28-Jan-2010 11:26

Page 2

QC Flag Legend

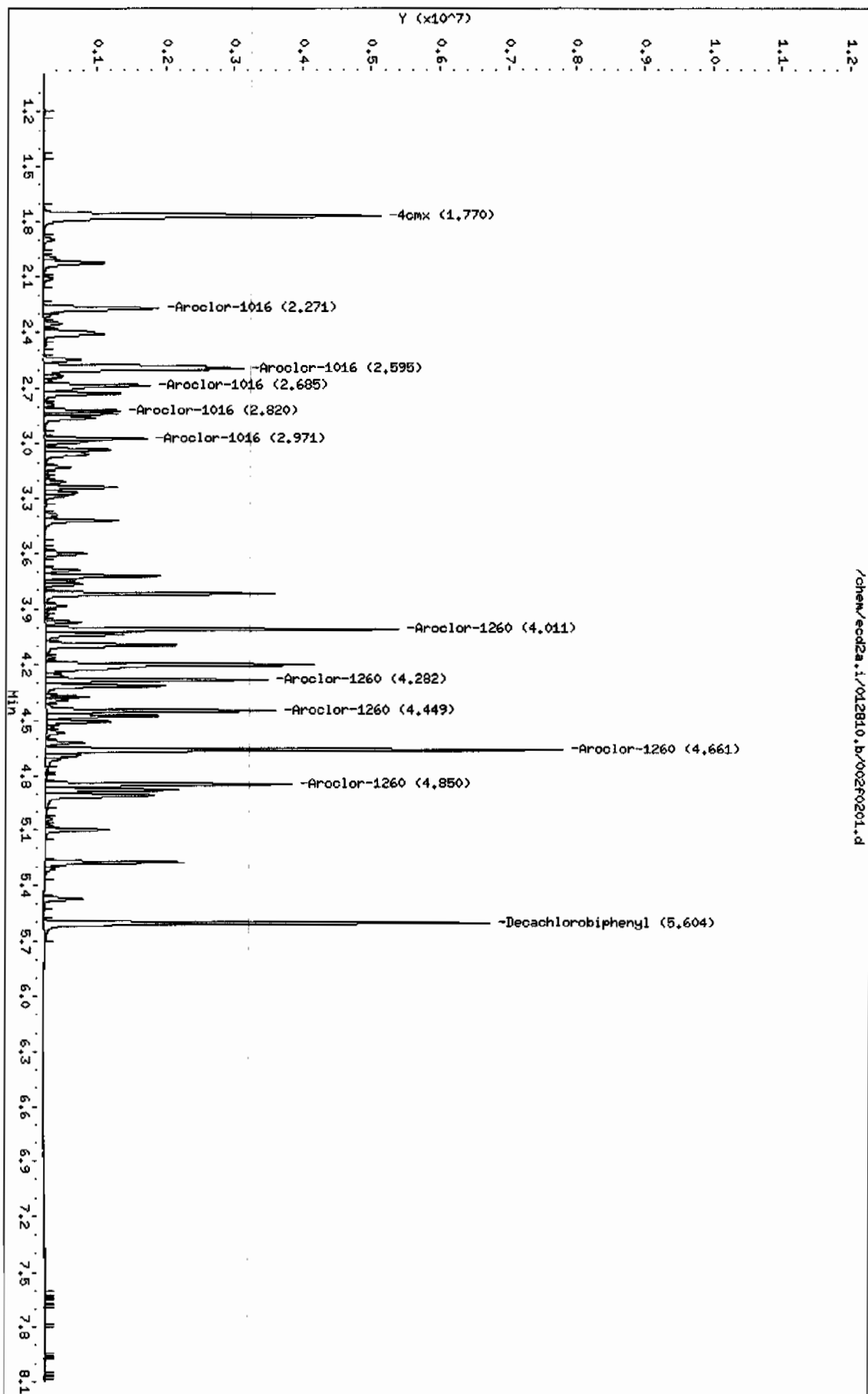
M - Compound response manually integrated.

Data File: /chem/ecd2a.i/012810.b/002f0201.d
Date: 28-JAN-2010 07:11
Client ID: PR166001
Sample Info: IMR100104-60 01

Column Phase: CLP1

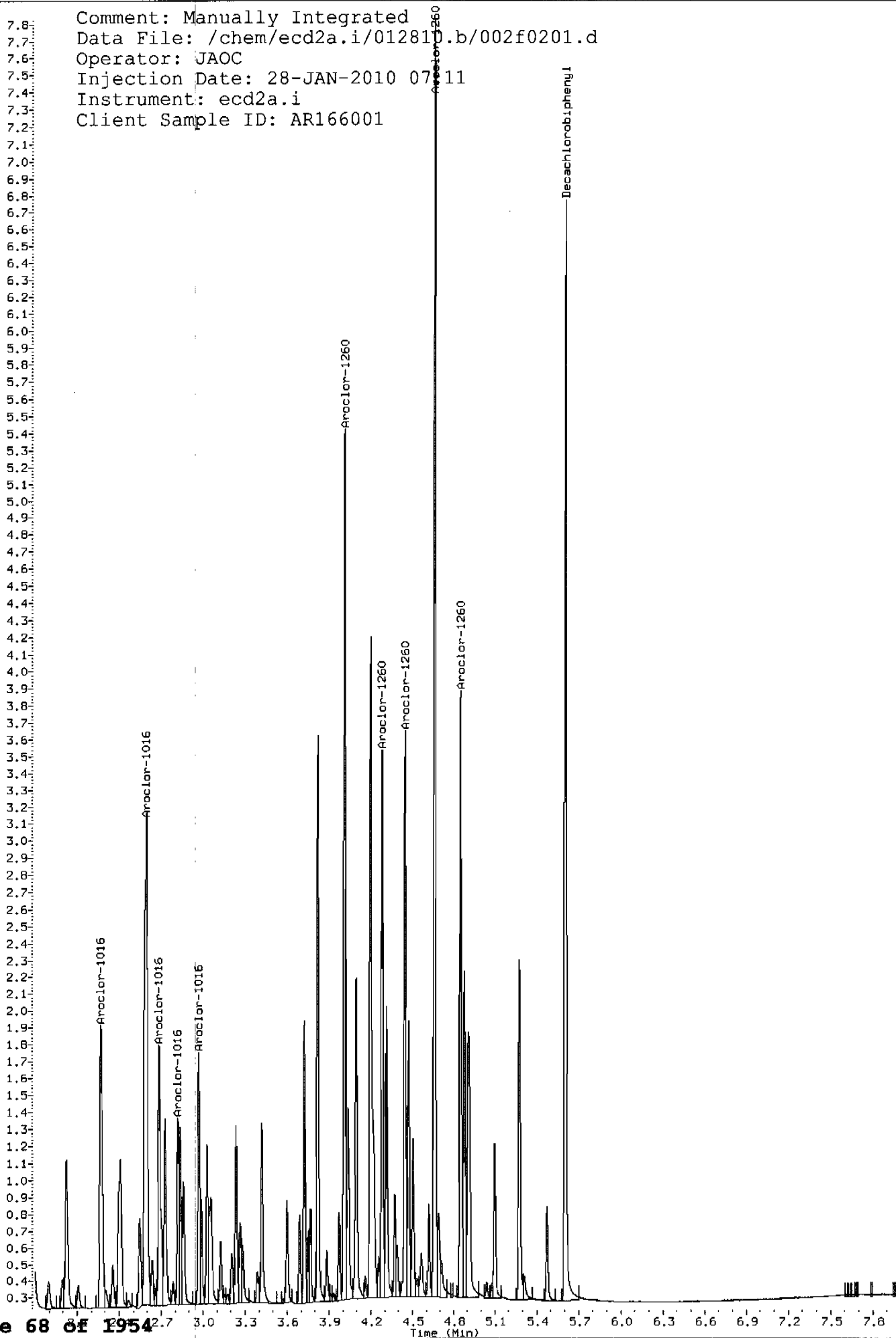
Instrument: ecd2a.i
Operator: JROC
Column diameter: 0.25

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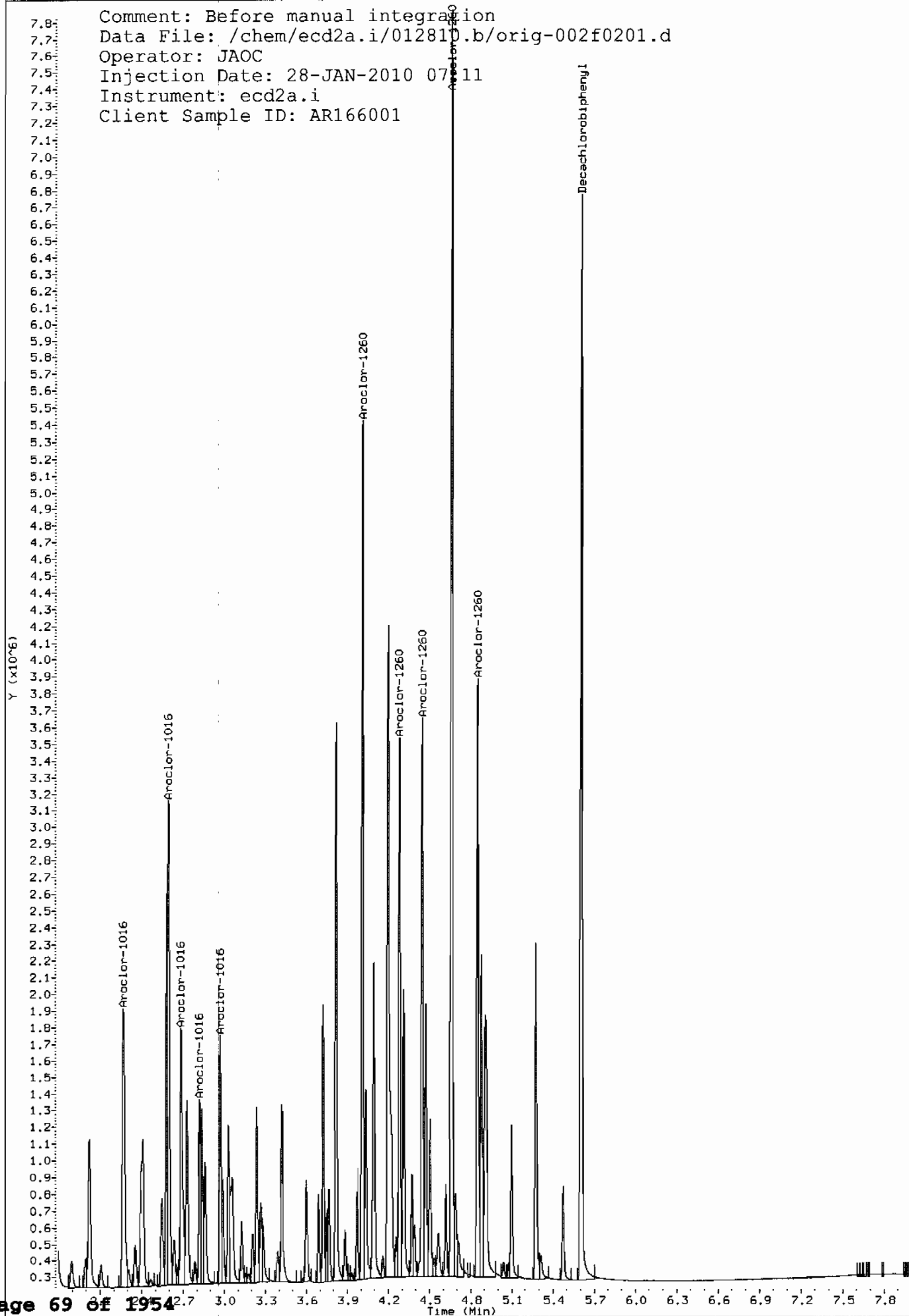


Comment: Manually Integrated
Data File: /chem/ecd2a.i/012810.b/002f0201.d
Operator: JAOC
Injection Date: 28-JAN-2010 07:11
Instrument: ecd2a.i
Client Sample ID: AR166001

Y (x10⁻⁶)



Comment: Before manual integration
Data File: /chem/ecd2a.i/012810.b/orig-002f0201.d
Operator: JAOC
Injection Date: 28-JAN-2010 07:11
Instrument: ecd2a.i
Client Sample ID: AR166001



Data File: /chem/ecd2a.i/012810.b/002b0201.d
 Report Date: 28-Jan-2010 11:26

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/002b0201.d

Lab Smp Id: WAR100104-60 01

Client Smp ID: AR166001

Inj Date : 28-JAN-2010 07:11

Operator : JAOC

Inst ID: ecd2a.i

Smp Info : |WAR100104-60 01

Misc Info : |PCB_CVS|1660|CVS|

Comment :

Method : /chem/ecd2a.i/012810.b/ECD2-B-8082-111209A.m

Meth Date : 28-Jan-2010 11:03 jen01212 Quant Type: ESTD

Cal Date : 21-JAN-2010 08:45

Cal File: 010b1001.d

Als bottle: 2

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1660.sub

Target Version: 3.50

Sample Matrix: None

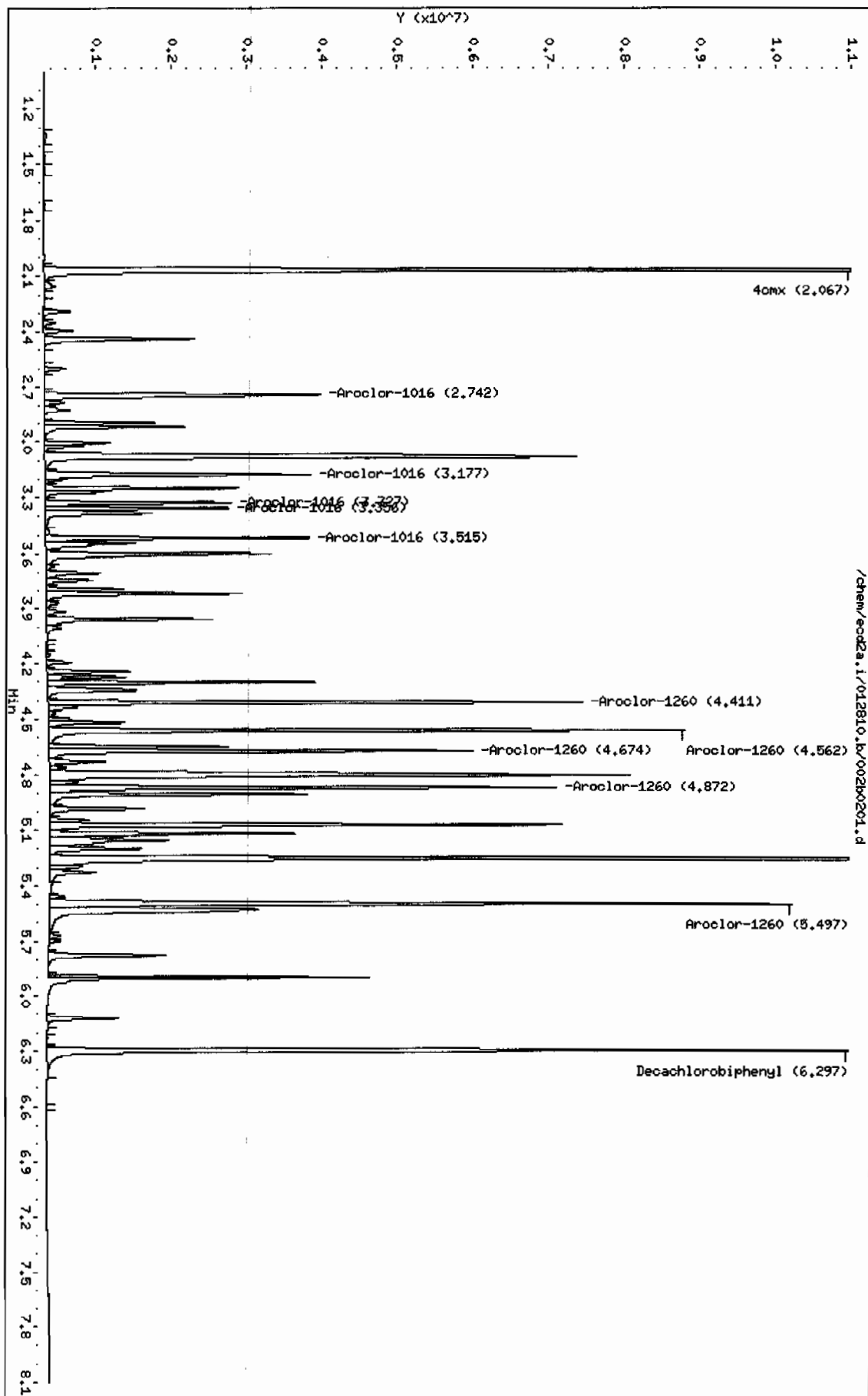
AMOUNTS

			CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/L)	TARGET RANGE	RATIO	
\$ 11 4cmx				CAS #: 877-09-8			
2.067	2.067	0.000	14608354	100.000	105 80.00- 120.00	100.00	
\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3			
6.297	6.297	0.000	12307107	100.000	98.8 80.00- 120.00	100.00	
1 Aroclor-1016				CAS #: 12674-11-2			
2.742	2.742	0.000	4486151	1000.00	999 80.00- 120.00	100.00	
3.177	3.177	0.000	3512523	1000.00	1020 59.06- 99.06	78.30	
3.327	3.327	0.000	2045937	1000.00	1010 25.71- 65.71	45.61	
3.356	3.356	0.000	2148449	1000.00	1020 28.12- 68.12	47.89	
3.515	3.515	0.000	2882428	1000.00	1030 44.81- 84.81	64.25	
Average of Peak Amounts =				1.02e+03			
7 Aroclor-1260				CAS #: 11096-82-5			
4.411	4.411	0.000	6061627	1000.00	1050 80.00- 120.00	100.00	
4.562	4.562	0.000	7607487	1000.00	1050 106.27- 146.27	125.50	
4.674	4.674	0.000	5271440	1000.00	1050 66.48- 106.48	86.96	
4.872	4.872	0.000	5999470	1000.00	1040 78.00- 118.00	98.97	
5.497	5.497	0.000	9853934	1000.00	1050 140.50- 180.50	162.56	
Average of Peak Amounts =				1.05e+03			

Data File: /chem/ecd2a.i/012810.b/00280201.d
Date: 28-JAN-2010 07:11
Client ID: AR166001
Sample Info: IMAR100104-60 01

Column phase: CLP2

Instrument: ecd2a.i
Operator: JHOC
Column diameter: 0.25



Data File: /chem/ecd2a.i/012810.b/003f0301.d
Report Date: 28-Jan-2010 11:26

Page 1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/003f0301.d

Lab Smp Id: WAR091102-54

Client Smp ID: AR125401

Inj Date : 28-JAN-2010 07:22

Operator : JAOC

Inst ID: ecd2a.i

Smp Info : |WAR091102-54

Misc Info : |PCB_CVS|1254||CVS|

Comment :

Method : /chem/ecd2a.i/012810.b/ECD2-F-8082-111209A.m

Meth Date : 28-Jan-2010 11:03 jen01212

Quant Type: ESTD

Cal Date : 21-JAN-2010 08:45

Cal File: 010f1001.d

Als bottle: 3

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1254.sub

Target Version: 3.50

Sample Matrix: None

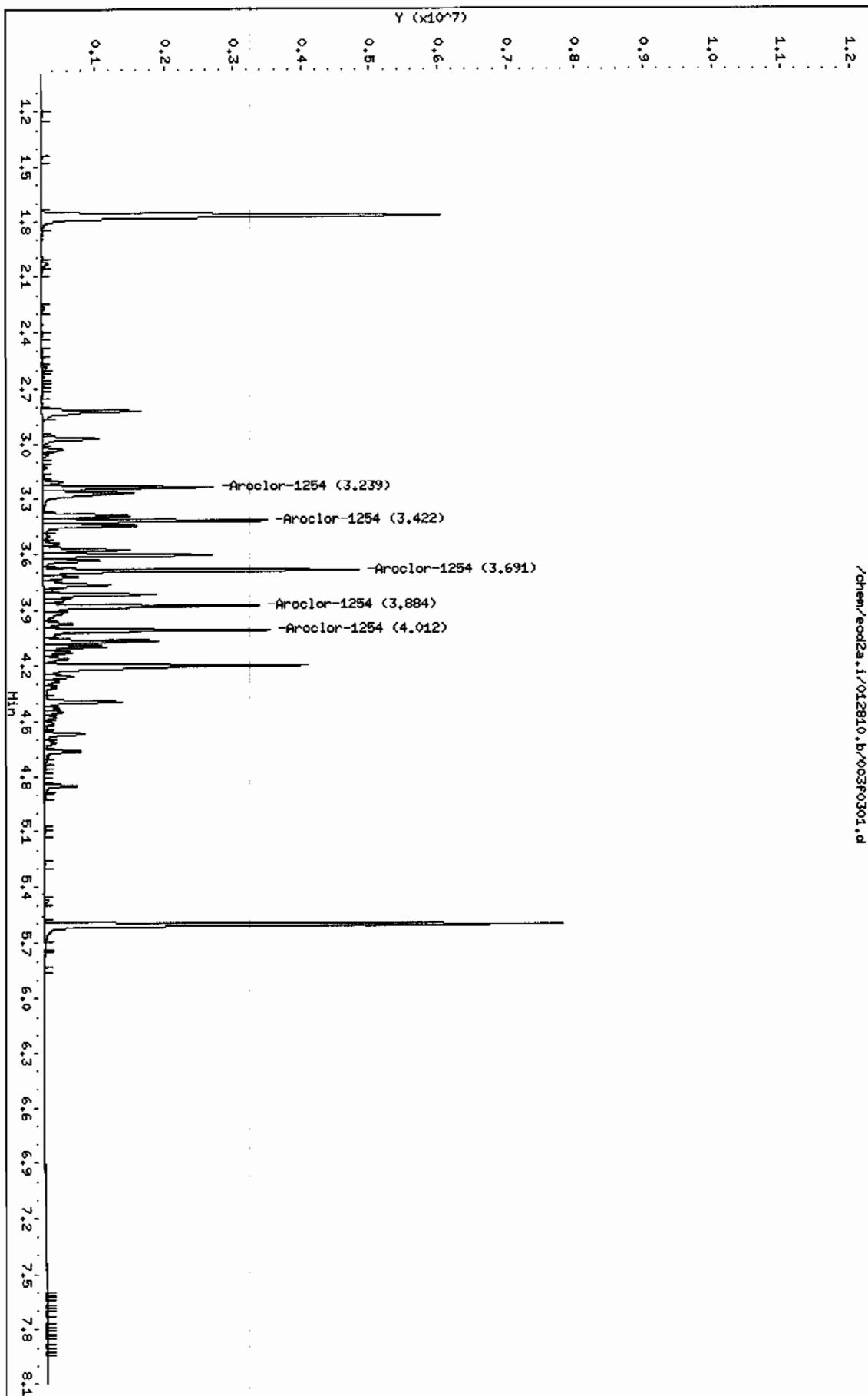
AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
6 Aroclor-1254						
3.239	3.239	0.000	2231409 1000.00	1070 80.00- 120.00	100.00	
3.422	3.422	0.000	2953627 1000.00	1060 112.37- 152.37	132.37	
3.691	3.691	0.000	4104385 1000.00	1100 163.94- 203.94	183.94	
3.884	3.884	0.000	3020232 1000.00	1080 115.35- 155.35	135.35	
4.012	4.012	0.000	3091881 1000.00	1120 118.56- 158.56	138.56	
Average of Peak Amounts =			1.09e+03			

Data File: /chem/eod2a.i/012810.b/003f0301.d
Date : 28-JAN-2010 07:22
Client ID: RR125401
Sample Info: 1MAR091102-54

Column phase: CLP1

Instrument: eod2a.i
Operator: JROC
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/003b0301.d

Lab Smp Id: WAR091102-54

Client Smp ID: AR125401

Inj Date : 28-JAN-2010 07:22

Operator : JAOC

Inst ID: ecd2a.i

Smp Info : |WAR091102-54

Misc Info : |PCB_CVS|1254||CVS|

Comment :

Method : /chem/ecd2a.i/012810.b/ECD2-B-8082-111209A.m

Meth Date : 28-Jan-2010 11:03 jen01212

Quant Type: ESTD

Cal Date : 21-JAN-2010 08:45

Cal File: 010b1001.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

CAL-AMT ON-COL

RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/L)	TARGET RANGE	RATIO
----	--------	--------	------------------	---------	--------------	-------

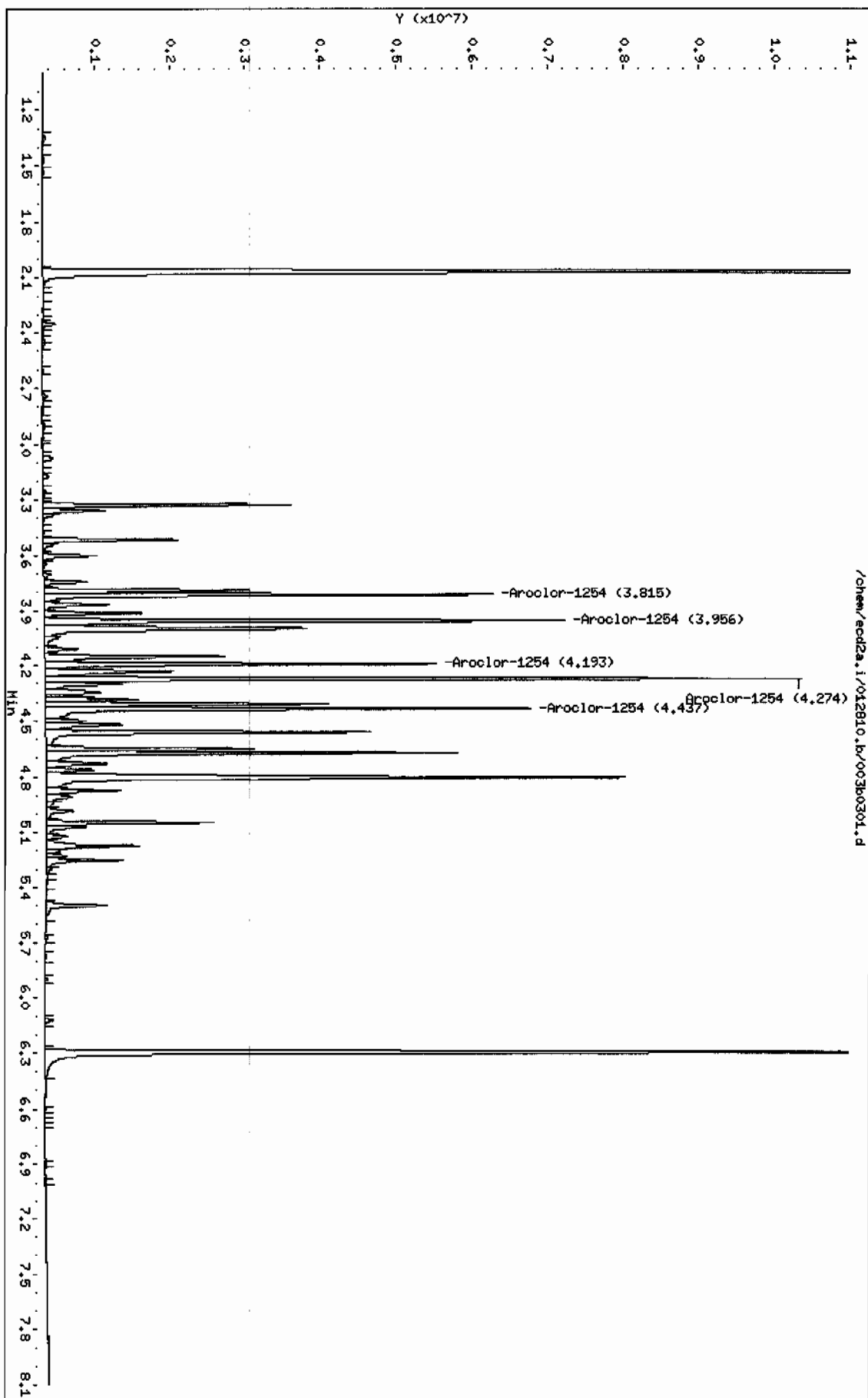
6 Aroclor-1254			CAS #: 11097-69-1			
3.815	3.815	0.000	5493305	1000.00	1100 80.00- 120.00	100.00
3.956	3.956	0.000	6269646	1000.00	1080 94.13- 134.13	114.13
4.193	4.193	0.000	4503313	1000.00	1120 61.98- 101.98	81.98
4.274	4.274	0.000	8599512	1000.00	1110 136.55- 176.55	156.55
4.437	4.437	0.000	6195246	1000.00	1100 92.78- 132.78	112.78

Average of Peak Amounts = 1.1e+03

Data File: /chem/eod2a.i/012810.b/00360301.d
Date: 28-JAN-2010 07:22
Client ID: AR128401
Sample Info: IMAR091102-54

Column phase: CLP2

Instrument: eod2a.i
Operator: JHOC
Column diameter: 0.25



Data File: /chem/ecd2a.i/012810.b/004f0401.d
Report Date: 28-Jan-2010 11:26

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/004f0401.d

Lab Smp Id: WAR100104-42

Client Smp ID: AR124201

Inj Date : 28-JAN-2010 07:33

Operator : JAOC

Inst ID: ecd2a.i

Smp Info : |WAR100104-42

Misc Info : |PCB_CVS|1242||CVS|

Comment :

Method : /chem/ecd2a.i/012810.b/ECD2-F-8082-111209A.m

Meth Date : 28-Jan-2010 11:03 jen01212 Quant Type: ESTD

Cal Date : 21-JAN-2010 08:45

Cal File: 010f1001.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

CAL-AMT ON-COL

RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/L)	TARGET RANGE	RATIO
----	--------	--------	------------------	---------	--------------	-------

4 Aroclor-1242

CAS #: 53469-21-9

2.273	2.273	0.000	1855361	1000.00	1070 80.00- 120.00	100.00
2.687	2.687	0.000	1559676	1000.00	1050 64.06- 104.06	84.06
2.730	2.730	0.000	955434	1000.00	1050 31.50- 71.50	51.50
2.822	2.822	0.000	783755	1000.00	1080 22.24- 62.24	42.24
2.974	2.974	0.000	1195977	1000.00	1070 44.46- 84.46	64.46

Average of Peak Amounts = 1.06e+03

Data File: /chem/ecd2a.i/012810.b/004f0401.d

Date : 28-JAN-2010 07:33

Client ID: AR124201

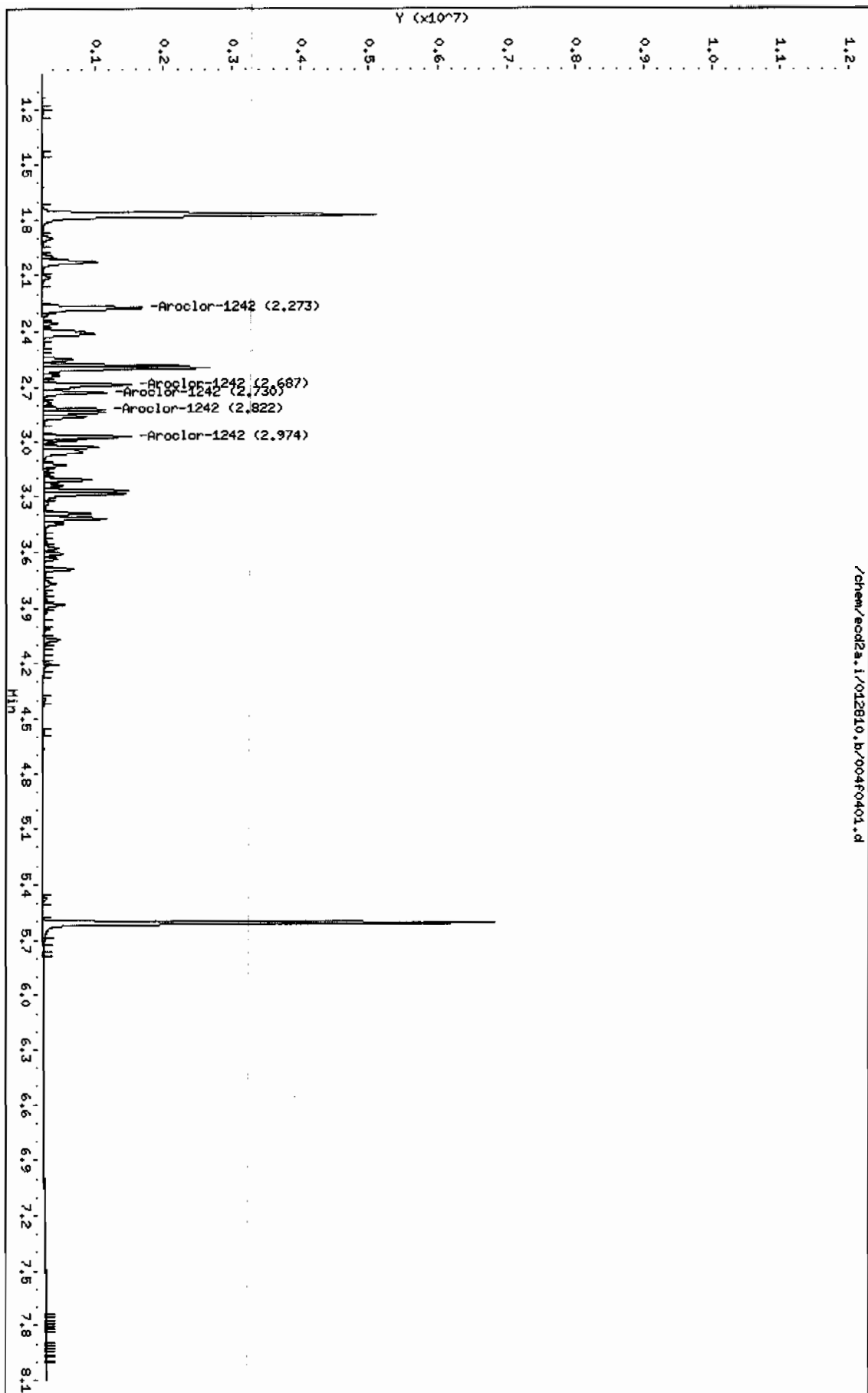
Sample Info: IMR091217-42

Column phase: CLP1

Instrument: ecd2a.i

Operator: JADC

Column diameter: 0.25



Data File: /chem/ecd2a.i/012810.b/004b0401.d
 Report Date: 28-Jan-2010 11:26

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/004b0401.d
 Lab Smp Id: WAR100104-42 Client Smp ID: AR124201
 Inj Date : 28-JAN-2010 07:33
 Operator : JAOC Inst ID: ecd2a.i
 Smp Info : |WAR100104-42
 Misc Info : |PCB_CVS|1242||CVS|
 Comment :
 Method : /chem/ecd2a.i/012810.b/ECD2-B-8082-111209A.m
 Meth Date : 28-Jan-2010 11:03 jen01212 Quant Type: ESTD
 Cal Date : 21-JAN-2010 08:45 Cal File: 010b1001.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
2.743	2.743	0.000	3843908	1000.00	1120 80.00- 120.00	100.00
3.178	3.178	0.000	2922890	1000.00	1090 56.04- 96.04	76.04
3.250	3.250	0.000	1743190	1000.00	1060 25.35- 65.35	45.35
3.328	3.328	0.000	1655624	1000.00	1100 23.07- 63.07	43.07
3.516	3.516	0.000	2427737	1000.00	1130 43.16- 83.16	63.16
Average of Peak Amounts =			1.1e+03			

CAS #: 53469-21-9

Data File: /chem/ecod2a.i/012810.b/004b0401.d

Date: 28-JAN-2010 07:33

Client ID: AR124201

Sample Info: IMR091217-42

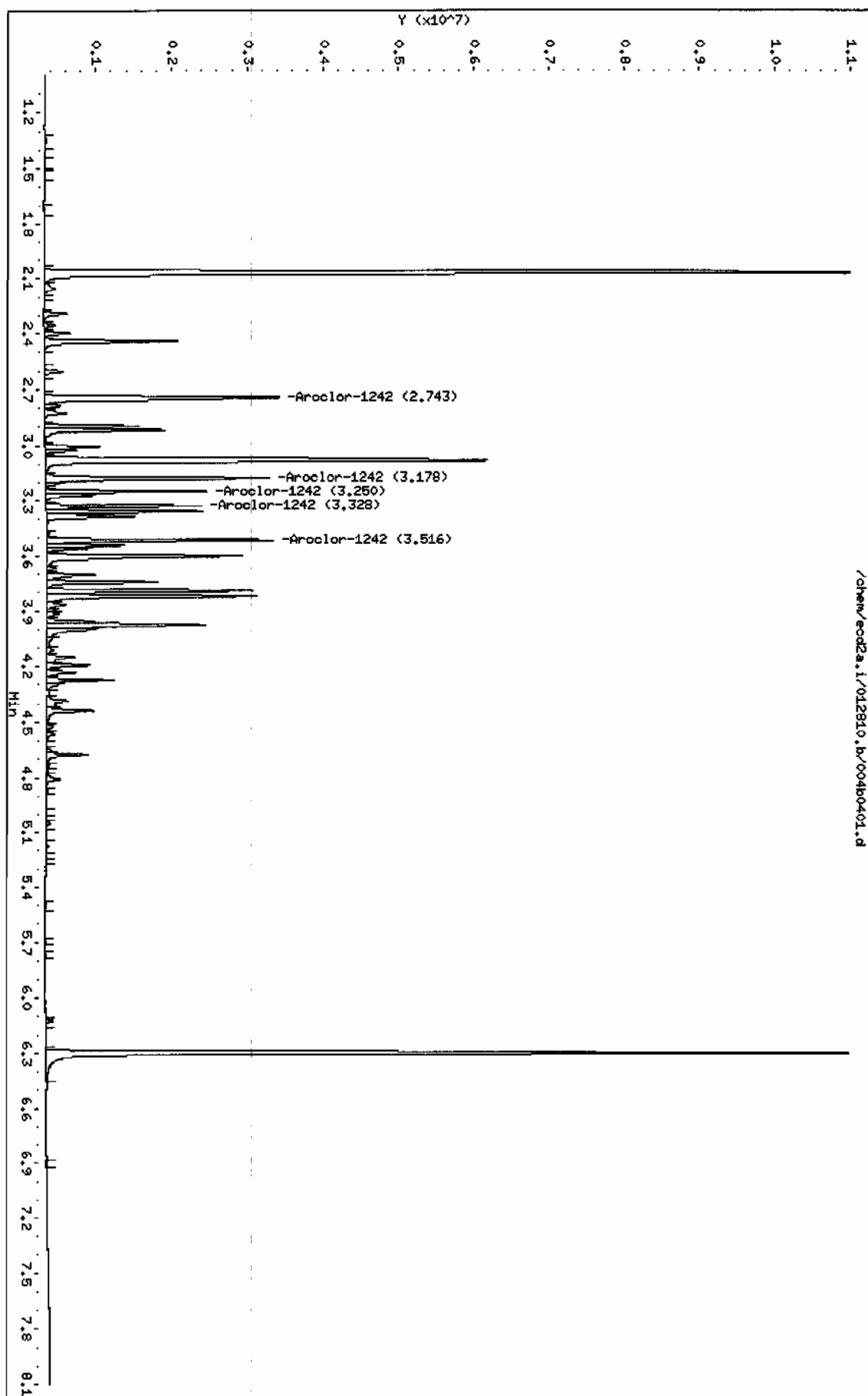
Column phase: CLP2

Instrument: ecod2a.i

Operator: jhdc

Column diameter: 0.25

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Data File: /chem/ecd2a.i/012810.b/005f0501.d
Report Date: 28-Jan-2010 11:27

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/005f0501.d

Lab Smp Id: WAR100104-48

Client Smp ID: AR124801

Inj Date : 28-JAN-2010 07:44

Operator : JAOC

Inst ID: ecd2a.i

Smp Info : |WAR100104-48

Misc Info : |PCB_CVS|1248||CVS|

Comment :

Method : /chem/ecd2a.i/012810.b/ECD2-F-8082-111209A.m

Meth Date : 28-Jan-2010 11:03 jen01212

Quant Type: ESTD

Cal Date : 21-JAN-2010 08:45

Cal File: 010f1001.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

2.822	2.822	0.000	1497341	1000.00	981 80.00- 120.00	100.00
2.973	2.973	0.000	2062982	1000.00	1020 117.78- 157.78	137.78
3.033	3.033	0.000	1565209	1000.00	996 84.53- 124.53	104.53
3.268	3.268	0.000	2178226	1000.00	982 125.47- 165.47	145.47
3.420	3.420	0.000	1870723	1000.00	978 104.94- 144.94	124.94

Average of Peak Amounts =

991

Data File: /chem/ecod2a.i/012810.b/005f0501.d

Date: 28-JAN-2010 07:44

Client ID: AR124801

Sample Info: IMA091217-48

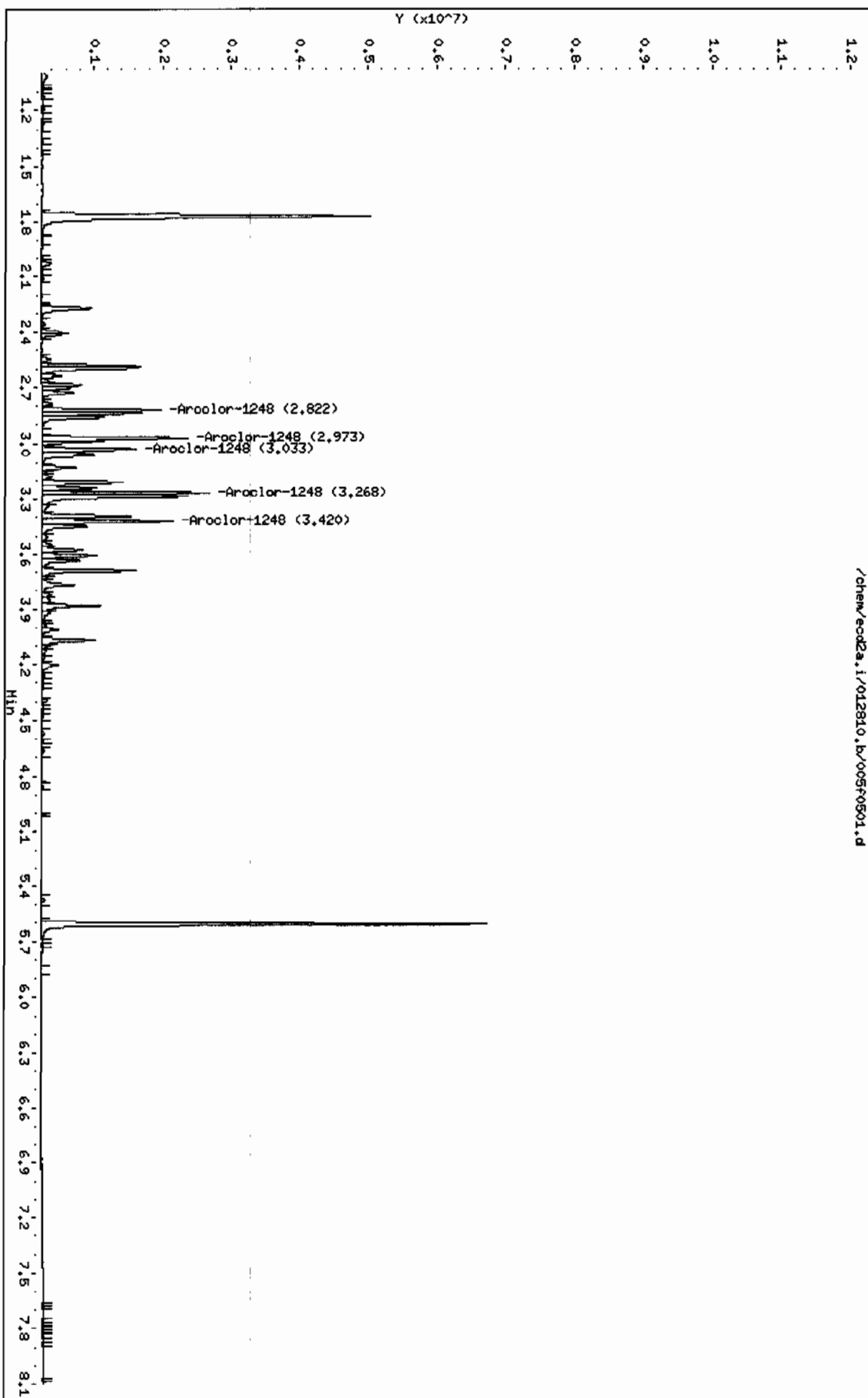
Column phase: CLP1

Instrument: ecod2a.i

Operator: JAOC

Column diameter: 0.25

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Data File: /chem/ecd2a.i/012810.b/005b0501.d
Report Date: 28-Jan-2010 11:26

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/005b0501.d
Lab Smp Id: WAR100104-48 Client Smp ID: AR124801
Inj Date : 28-JAN-2010 07:44
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR100104-48
Misc Info : |PCB_CVS|1248||CVS|
Comment :
Method : /chem/ecd2a.i/012810.b/ECD2-B-8082-111209A.m
Meth Date : 28-Jan-2010 11:03 jen01212 Quant Type: ESTD
Cal Date : 21-JAN-2010 08:45 Cal File: 010b1001.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	
3.329	3.329	0.000	3215095 1000.00	979 80.00- 120.00	100.00	
3.515	3.515	0.000	4142321 1000.00	989 108.84- 148.84	128.84	
3.602	3.602	0.000	4435829 1000.00	996 117.97- 157.97	137.97	
3.791	3.791	0.000	4552663 1000.00	969 121.60- 161.60	141.60	
3.820	3.820	0.000	5384914 1000.00	999 147.49- 187.49	167.49	
Average of Peak Amounts =				987		

Data File: /chem/ecod2a.i/012810.b/005b0501.d

Date : 28-JAN-2010 07:44

Client ID: AR124801

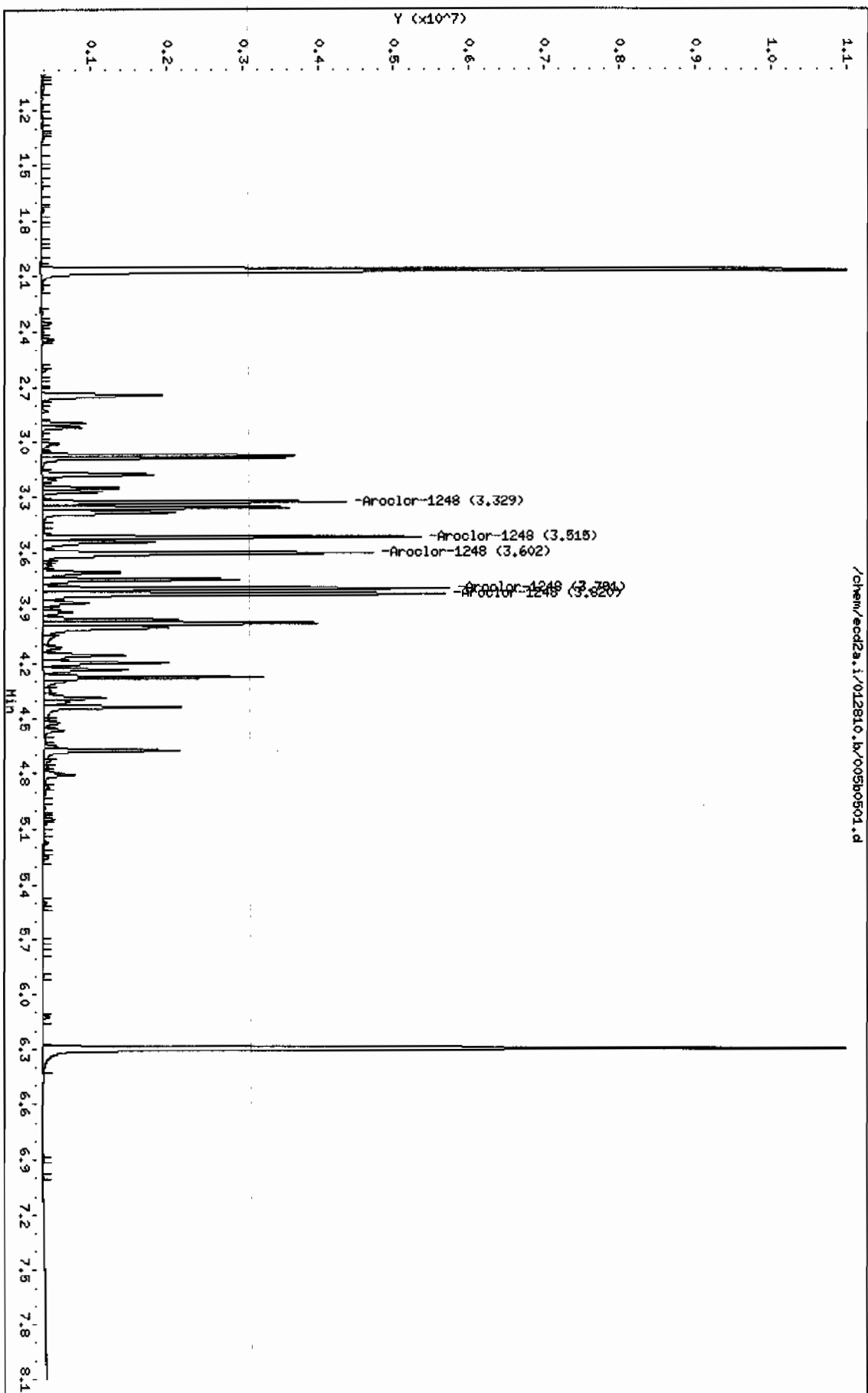
Sample Info: IHR091217-48

Column phase: CLP2

Instrument: ecod2a.i

Operator: JAO

Column diameter: 0.25



Data File: /chem/ecd2a.i/012810.b/006f0601.d
 Report Date: 28-Jan-2010 11:27

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/006f0601.d

Lab Smp Id: WAR100104-32

Client Smp ID: AR123201

Inj Date : 28-JAN-2010 07:55

Operator : JAOC

Inst ID: ecd2a.i

Smp Info : |WAR100104-32

Misc Info : |PCB_CVS|1232||CVS|

Comment :

Method : /chem/ecd2a.i/012810.b/ECD2-F-8082-111209A.m

Meth Date : 28-Jan-2010 11:03 jen01212 Quant Type: ESTD

Cal Date : 21-JAN-2010 08:45

Cal File: 010f1001.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	
2.025	2.025	0.000	1262370 1000.00	854	80.00- 120.00	100.00
2.273	2.273	0.000	1025064 1000.00	939	61.20- 101.20	81.20
2.687	2.687	0.000	867854 1000.00	974	48.75- 88.75	68.75
2.729	2.729	0.000	550974 1000.00	1000	23.65- 63.65	43.65
2.973	2.973	0.000	644223 1000.00	1030	31.03- 71.03	51.03
Average of Peak Amounts =				960		

Data File: /chem/eod2a.i/012810.b/006f0601.d

Date : 28-JAN-2010 07:55

Client ID: AR123204

Sample Info: 1MR100104-32

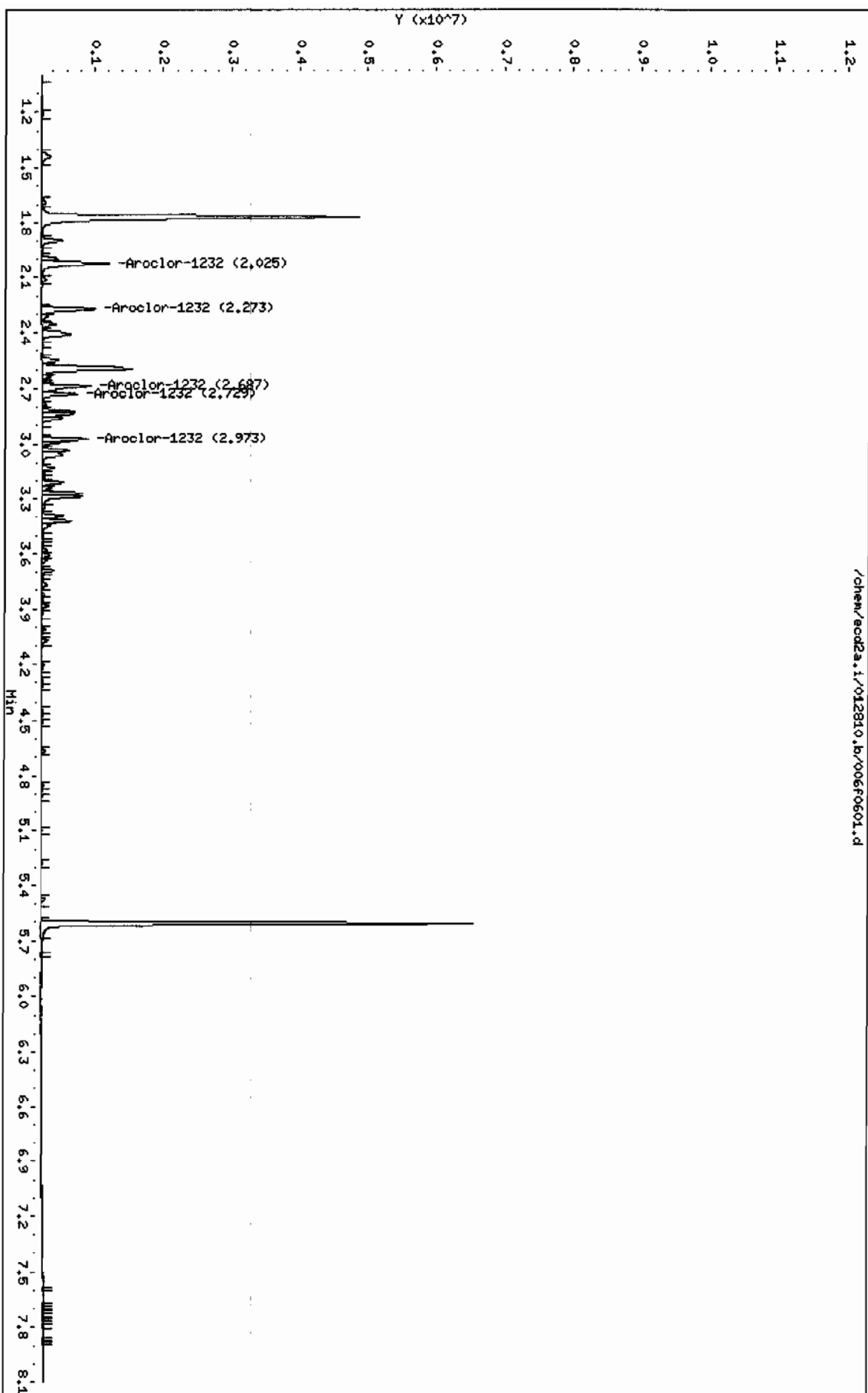
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Instrument: eod2a.i

Column phase: CLP1

Operator: JAC

Column diameter: 0.25



Data File: /chem/ecd2a.i/012810.b/006b0601.d
Report Date: 28-Jan-2010 11:27

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/006b0601.d
Lab Smp Id: WAR100104-32 Client Smp ID: AR123201
Inj Date : 28-JAN-2010 07:55
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR100104-32|
Misc Info : |PCB_CVS|1232|CVS|
Comment :
Method : /chem/ecd2a.i/012810.b/ECD2-B-8082-111209A.m
Meth Date : 28-Jan-2010 11:03 jen01212 Quant Type: ESTD
Cal Date : 21-JAN-2010 08:45 Cal File: 010b1001.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	
2.440	2.440	0.000	2212125 1000.00	870	80.00- 120.00	100.00
2.743	2.743	0.000	2121886 1000.00	966	75.92- 115.92	95.92
3.177	3.177	0.000	1658555 1000.00	1060	54.98- 94.98	74.98
3.250	3.250	0.000	961205 1000.00	1010	23.45- 63.45	43.45
3.516	3.516	0.000	1197709 1000.00	1030	34.14- 74.14	54.14
Average of Peak Amounts =				988		

Data File: /chem/ecd2a.i/012810.b/0060601.d

Date: 28-JAN-2010 07:55

Client ID: AR123201

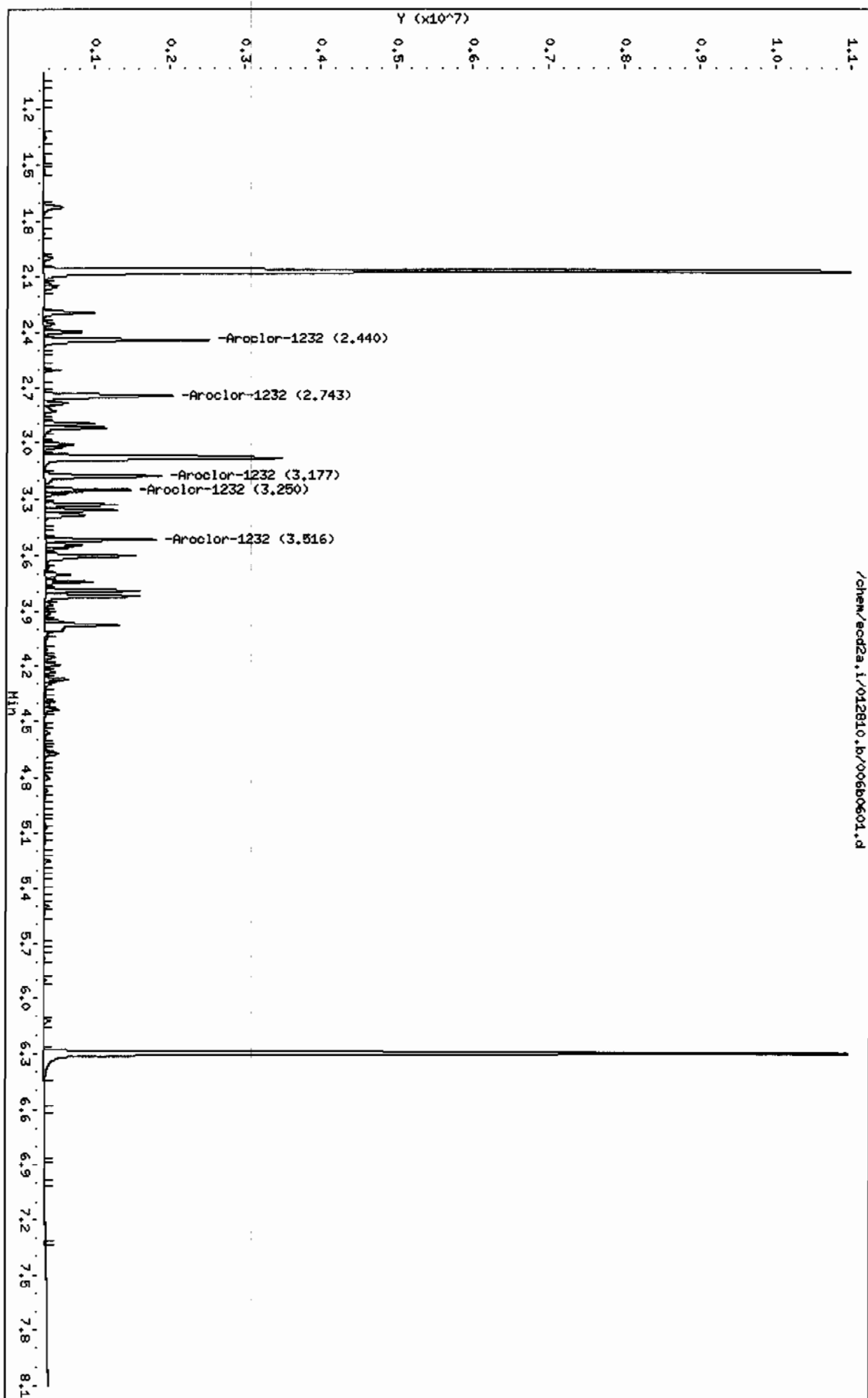
Sample Info: IMA100104-32

Column phase: CLP2

Instrument: ecd2a.i

Operator: JAO

Column diameter: 0.25



Data File: /chem/ecd2a.i/012810.b/007f0701.d
Report Date: 28-Jan-2010 11:27

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/007f0701.d

Lab Smp Id: WAR100104-21

Client Smp ID: AR122101

Inj Date : 28-JAN-2010 08:07

Operator : JAOC

Inst ID: ecd2a.i

Smp Info : |WAR100104-21

Misc Info : |PCB_CVS|1221||CVS|

Comment :

Method : /chem/ecd2a.i/012810.b/ECD2-F-8082-111209A.m

Meth Date : 28-Jan-2010 11:03 jen01212 Quant Type: ESTD

Cal Date : 21-JAN-2010 08:45 Cal File: 010f1001.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

1.438	1.438	0.000	535862	1000.00	1150 80.00- 120.00	100.00
1.897	1.897	0.000	723428	1000.00	1100 115.00- 155.00	135.00
1.996	1.996	0.000	372186	1000.00	1070 49.46- 89.46	69.46

Average of Peak Amounts = 1.11e+03

Data File: /chem/ecd2a.i/012810.k/007f0701.d

Date: 28-JAN-2010 08:07

Client ID: AR122104

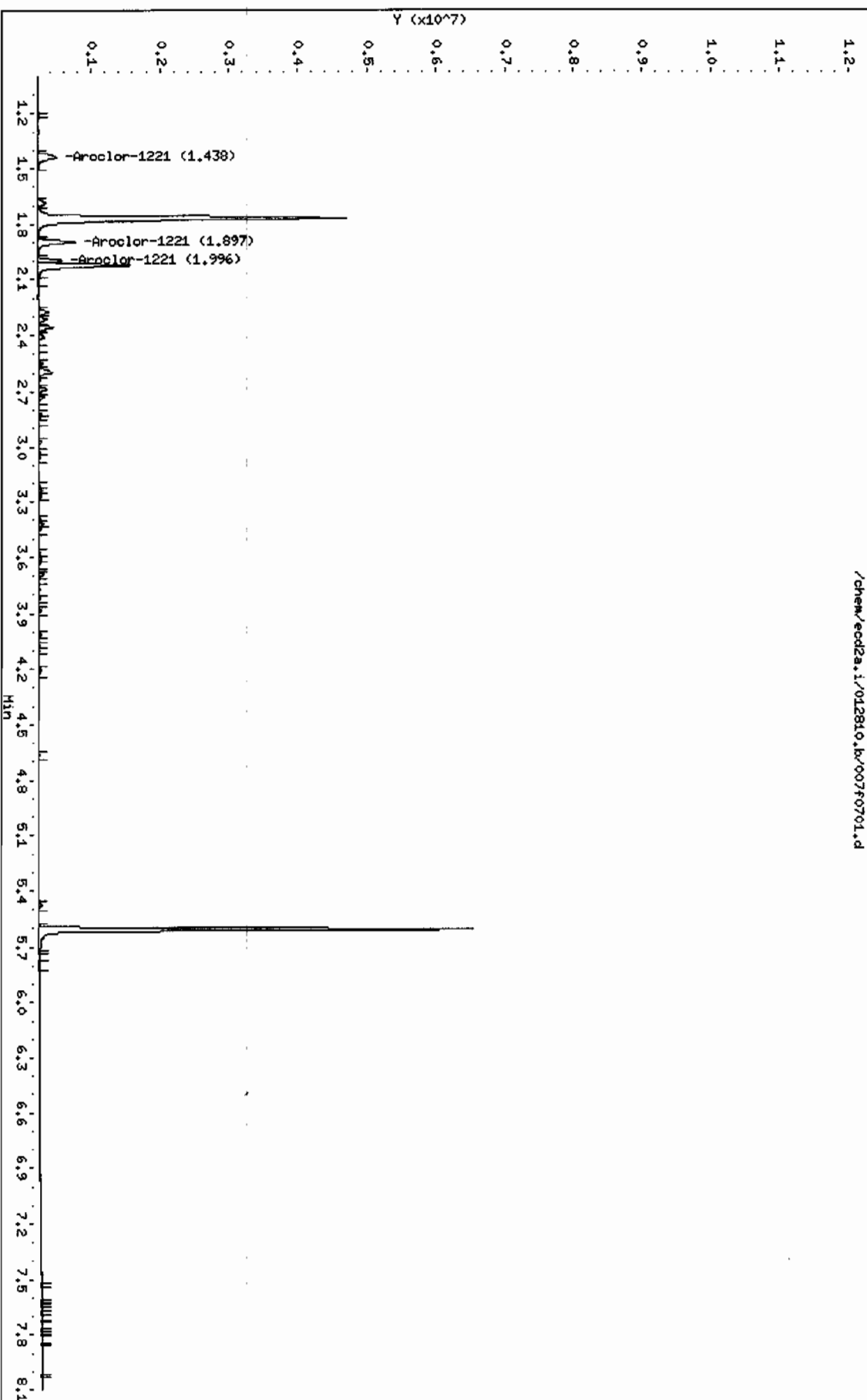
Sample Info: IHR100104-21

Column phase: CLP1

Instrument: ecd2a.i

Operator: JROC

Column diameter: 0.25



Data File: /chem/ecd2a.i/012810.b/007b0701.d
Report Date: 28-Jan-2010 11:27

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/007b0701.d
Lab Smp Id: WAR100104+21 Client Smp ID: AR122101
Inj Date : 28-JAN-2010 08:07
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |WAR100104-21
Misc Info : |PCB_CVS|1221||CVS|
Comment :
Method : /chem/ecd2a.i/012810.b/ECD2-B-8082-111209A.m
Meth Date : 28-Jan-2010 11:03 jen01212 Quant Type: ESTD
Cal Date : 21-JAN-2010 08:45 Cal File: 010b1001.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

2.290	2.290	0.000	1324627	1000.00	1050 80.00~ 120.00	100.00
2.395	2.395	0.000	802230	1000.00	1040 40.56~ 80.56	60.56
2.440	2.440	0.000	3180455	1000.00	1040 220.10~ 260.10	240.10

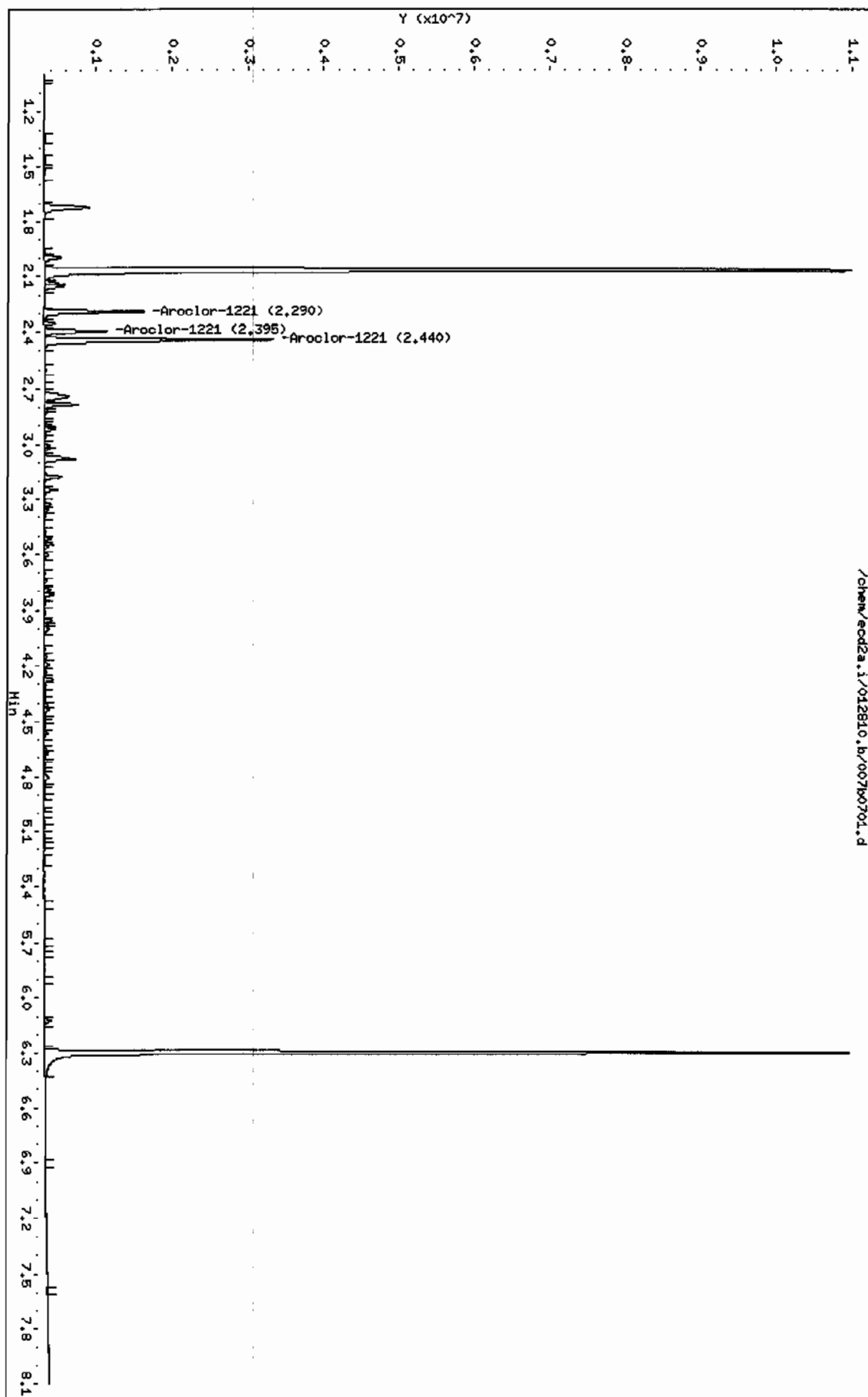
Average of Peak Amounts = 1.04e+03

Data File: /chem/eod2a.i/012810.b/007b0701.d
Date : 28-JAN-2010 08:07
Client ID: AR122101
Sample Info: IMR100104-21

Column phase: CLP2

Instrument: eod2a.i
Operator: JADC
Column diameter: 0.25

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/019f1901.d

Lab Smp Id: WAR100104+60 02

Client Smp ID: AR166002

Inj Date : 28-JAN-2010 10:19

Operator : JAOC

Inst ID: ecd2a.i

Smp Info : |WAR100104-60 02

Misc Info : |PCB_CVS|1660||CVS|

Comment :

Method : /chem/ecd2a.i/012810.b/ECD2-F-8082-111209A.m

Meth Date : 28-Jan-2010 11:03 jen01212

Quant Type: ESTD

Cal Date : 21-JAN-2010 08:45

Cal File: 010f1001.d

Als bottle: 19

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			
1.771	1.770	0.001	6827763	100.000	102	80.00- 120.00	100.00	

\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3			
5.606	5.604	0.002	5988275	100.000	94.4	80.00- 120.00	100.00	

1 Aroclor-1016					CAS #: 12674-11-2			
2.273	2.271	0.002	2164216	1000.00	958	80.00- 120.00	100.00	
2.596	2.595	0.001	4634917	1000.00	1000	194.16- 234.16	214.16	
2.687	2.685	0.002	1858717	1000.00	978	65.88- 105.88	85.88	
2.821	2.820	0.001	959884	1000.00	976	24.35- 64.35	44.35	
2.973	2.971	0.002	1428209	1000.00	985	45.99- 85.99	65.99	
Average of Peak Amounts =					980			

7 Aroclor-1260					CAS #: 11096-82-5			
4.013	4.011	0.002	4504738	1000.00	1050	80.00- 120.00	100.00	
4.284	4.282	0.002	2829387	1000.00	1010	42.81- 82.81	62.81	
4.450	4.449	0.001	2970753	1000.00	1040	45.95- 85.95	65.95	
4.662	4.661	0.001	6864066	1000.00	1040	132.37- 172.37	152.37	
4.851	4.850	0.001	3314063	1000.00	1040	53.57- 93.57	73.57	
Average of Peak Amounts =					1.04e+03			

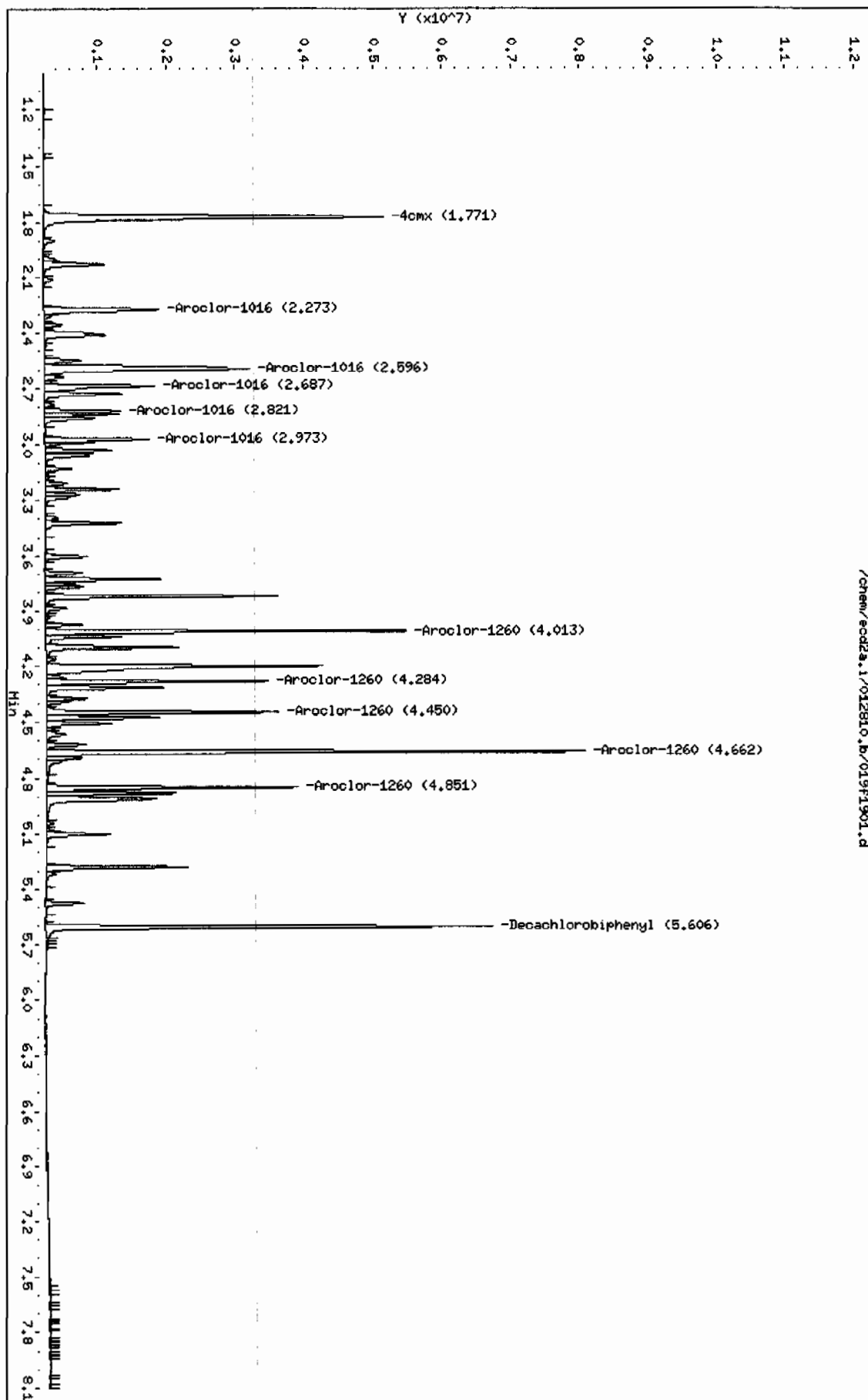
Data File: /chem/ecod2a.i/012810.b/019f1901.d
Date: 28-JAN-2010 10:19
Client ID: AR166002
Sample Info: 14MR100104-60 02

Column phase: CLP1

Instrument: ecod2a.i

Operator: JADC

Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/019b1901.d

Lab Smp Id: WAR100104-60 02

Client Smp ID: AR166002

Inj Date : 28-JAN-2010 10:19

Operator : JAOC

Inst ID: ecd2a.i

Smp Info : |WAR100104-60 02

Misc Info : |PCB_CVS|1660||CVS|

Comment :

Method : /chem/ecd2a.i/012810.b/ECD2-B-8082-111209A.m

Meth Date : 28-Jan-2010 11:03 jen01212

Quant Type: ESTD

Cal Date : 21-JAN-2010 08:45

Cal File: 010b1001.d

Als bottle: 19

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			
2.068	2.067	0.001	14735812 100.000	106	80.00- 120.00	100.00
\$ 12 Decachlorobiphenyl			CAS #: 2051-24-3			
6.298	6.297	0.001	11839193 100.000	95.0	80.00- 120.00	100.00
1 Aroclor-1016			CAS #: 12674-11-2			
2.743	2.742	0.001	4526495 1000.00	1010	80.00- 120.00	100.00
3.178	3.177	0.001	3578609 1000.00	1040	59.06- 99.06	79.06
3.328	3.327	0.001	2069035 1000.00	1020	25.71- 65.71	45.71
3.358	3.356	0.002	2178329 1000.00	1030	28.12- 68.12	48.12
3.515	3.515	0.000	2933668 1000.00	1050	44.81- 84.81	64.81
Average of Peak Amounts =			1.03e+03			
7 Aroclor-1260			CAS #: 11096-82-5			
4.411	4.411	0.000	6203060 1000.00	1070	80.00- 120.00	100.00
4.563	4.562	0.001	7832586 1000.00	1080	106.27- 146.27	126.27
4.674	4.674	0.000	5364318 1000.00	1070	66.48- 106.48	86.48
4.872	4.872	0.000	6078704 1000.00	1050	78.00- 118.00	98.00
5.498	5.497	0.001	9956097 1000.00	1060	140.50- 180.50	160.50
Average of Peak Amounts =			1.07e+03			

Data File: /chem/eod2a.i/012810.b/019b1901.d

Date: 28-JAN-2010 10:19

Client ID: AR166002

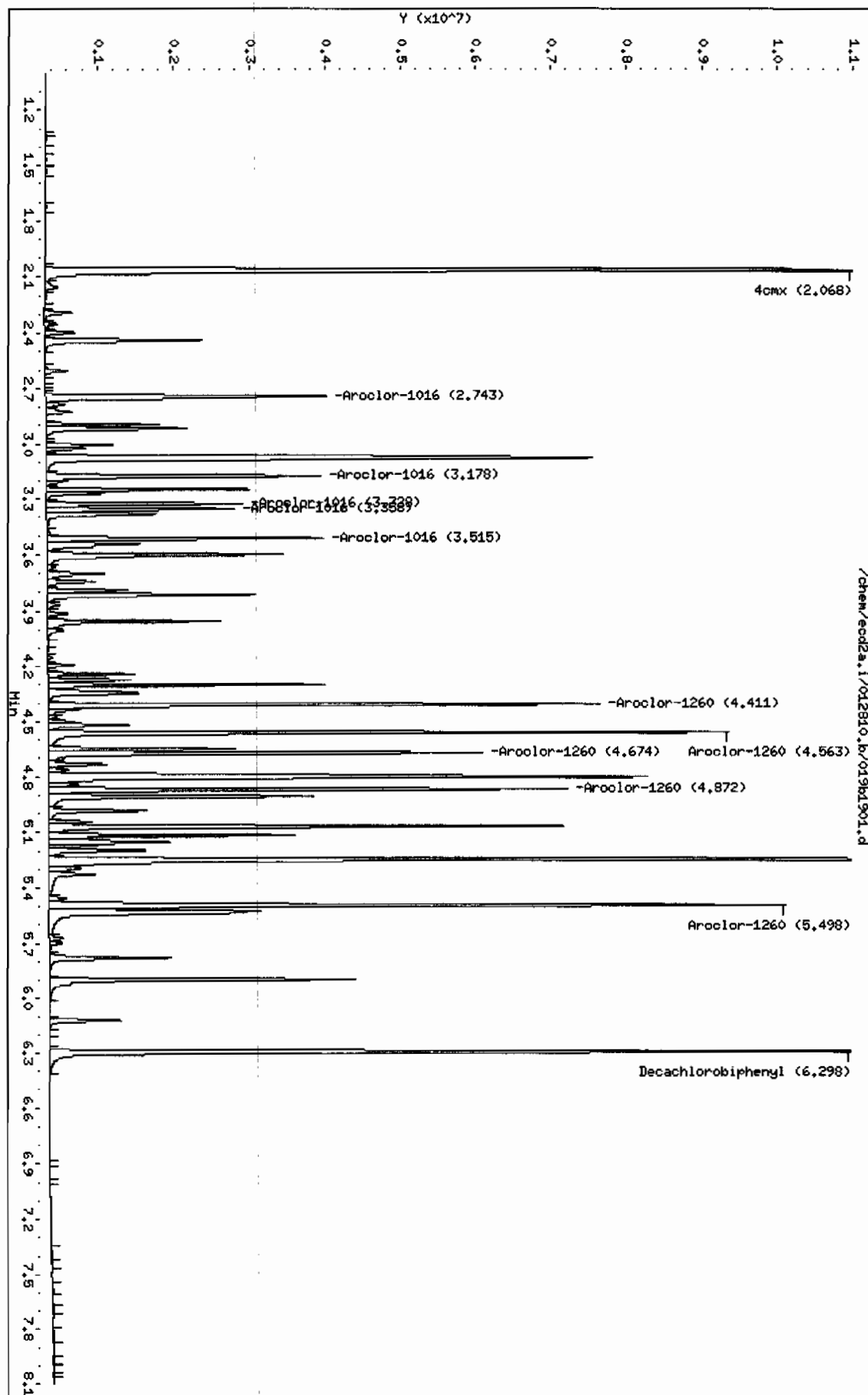
Sample Info: IMA100104-60 02

Column phase: CLP2

Instrument: eod2a.i

Operator: JHOC

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.: 10-1390

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/30/09 11/30/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION						
S1 : 1.78			DCB: 5.61			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #	
01	PIBLK01	WAR090916-99	11/30/09	0821	1.78	5.62
02	ZZZZZ	ZZZZZ	11/30/09	0832	1.78	5.61
03	AR125401	WAR091130-05	11/30/09	0843	1.78	5.61
04	AR125402	WAR091130-06	11/30/09	0854	1.78	5.61
05	AR125403	WAR091130-07	11/30/09	0905	1.78	5.61
06	AR125404	WAR091130-08	11/30/09	0916	1.78	5.61
07	AR125405	IAR091027-01	11/30/09	0927	1.78	5.61
08	AR125401	WAR091102-54	11/30/09	0938	1.78	5.61
09	AR124201	WAR091102-42	11/30/09	0950	1.78	5.61
10	AR166001	WAR091119-60	11/30/09	1001	1.78	5.61
11	AR124801	WAR091130-13	11/30/09	1012	1.78	5.61
12	AR124802	WAR091130-14	11/30/09	1023	1.78	5.61
13	AR124803	WAR091130-15	11/30/09	1034	1.78	5.61
14	AR124804	WAR091130-16	11/30/09	1045	1.78	5.61
15	AR124805	IAR091027-02	11/30/09	1056	1.78	5.61
16	ZZZZZ	ZZZZZ	11/30/09	1107	1.78	5.61
17	AR123201	WAR090930-32	11/30/09	1118	1.78	5.61
18	AR124801	WAR091027-48	11/30/09	1129	1.78	5.61
19	AR122101	WAR091111-21	11/30/09	1140	1.78	5.61
20	AR126201	WAR091111-62	11/30/09	1151	1.78	5.61
21	AR126801	WAR091106-68	11/30/09	1202	1.78	5.61
22	DDTANALOGSTD	WAR091020-DD	11/30/09	1213		
23	PIBLK02	WAR090916-99	11/30/09	1225	1.78	5.61
24	ZZZZZ	ZZZZZ	11/30/09	1236	1.78	5.61
25	ZZZZZ	ZZZZZ	11/30/09	1247	1.78	5.61
26	ZZZZZ	ZZZZZ	11/30/09	1258	1.78	5.61
27	ZZZZZ	ZZZZZ	11/30/09	1309	1.78	5.61
28	ZZZZZ	ZZZZZ	11/30/09	1320	1.78	5.61
29	AR166002	WAR091119-60	11/30/09	1336	1.78	5.61
30	PIBLK03	WAR090916-99	11/30/09	1347	1.78	5.61
31	ZZZZZ	ZZZZZ	11/30/09	1358	1.78	5.61
32	ZZZZZ	ZZZZZ	11/30/09	1409	1.78	5.61

S1 = 4cmx (+/- 0.03 MINUTES) QC LIMITS
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.: 10-1390

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/30/09 11/30/09

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION					
S1 : 2.08			DCB: 6.30		
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR090916-99	11/30/09	0821	2.08 6.31
02	AR166001	WAR091119-60	11/30/09	0832	2.08 6.31
03	AR125401	WAR091130-05	11/30/09	0843	2.08 6.31
04	AR125402	WAR091130-06	11/30/09	0854	2.08 6.31
05	AR125403	WAR091130-07	11/30/09	0905	2.08 6.31
06	AR125404	WAR091130-08	11/30/09	0916	2.08 6.31
07	AR125405	IAR091027-01	11/30/09	0927	2.08 6.31
08	AR125401	WAR091102-54	11/30/09	0938	2.08 6.30
09	AR124201	WAR091102-42	11/30/09	0950	2.08 6.31
10	AR166001	WAR091119-60	11/30/09	1001	2.08 6.30
11	AR124801	WAR091130-13	11/30/09	1012	2.08 6.30
12	AR124802	WAR091130-14	11/30/09	1023	2.08 6.31
13	AR124803	WAR091130-15	11/30/09	1034	2.08 6.31
14	AR124804	WAR091130-16	11/30/09	1045	2.08 6.31
15	AR124805	IAR091027-02	11/30/09	1056	2.08 6.31
16	AR124801	WAR091027-48	11/30/09	1107	2.08 6.31
17	AR123201	WAR090930-32	11/30/09	1118	2.08 6.31
18	AR124801	WAR091027-48	11/30/09	1129	2.08 6.31
19	AR122101	WAR091111-21	11/30/09	1140	2.08 6.30
20	AR126201	WAR091111-62	11/30/09	1151	2.08 6.31
21	AR126801	WAR091106-68	11/30/09	1202	2.08 6.30
22	DDTANALOGSTD	WAR091020-DD	11/30/09	1213	
23	PIBLK02	WAR090916-99	11/30/09	1225	2.08 6.31
24	ZZZZZ	ZZZZZ	11/30/09	1236	2.07 6.30
25	ZZZZZ	ZZZZZ	11/30/09	1247	2.08 6.30
26	ZZZZZ	ZZZZZ	11/30/09	1258	2.08 6.30
27	ZZZZZ	ZZZZZ	11/30/09	1309	2.08 6.31
28	ZZZZZ	ZZZZZ	11/30/09	1320	2.08 6.30
29	AR166002	WAR091119-60	11/30/09	1336	2.07 6.30
30	PIBLK03	WAR090916-99	11/30/09	1347	2.08 6.30
31	ZZZZZ	ZZZZZ	11/30/09	1358	2.07 6.30
32	ZZZZZ	ZZZZZ	11/30/09	1409	2.08 6.30

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.: 10-1390

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 01/20/10 01/20/10

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION							
S1 : 1.77 DCB: 5.61							
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #		
01	PIBLK01	WAR091130-99	01/20/10 0817	1.77	5.60		
02	ZZZZZ	ZZZZZ	01/20/10 0829	1.77	5.61		
03	AR125401	WAR091102-54	01/20/10 0840				
04	AR124201	WAR100104-42	01/20/10 0851				
05	AR124801	WAR100104-48	01/20/10 0902				
06	AR123201	WAR100104-32	01/20/10 0913				
07	AR122101	WAR100104-21	01/20/10 0924				
08	AR126201	WAR100104-62	01/20/10 0935				
09	AR166001	WAR100120-01	01/20/10 0946	1.77	5.61		
10	AR166002	WAR100120-02	01/20/10 0957	1.77	5.61		
11	AR166003	WAR100120-03	01/20/10 1009	1.77	5.61		
12	AR166004	WAR100120-04	01/20/10 1020	1.77	5.61		
13	AR166005	WAR100104-01	01/20/10 1031	1.77	5.61		
14	AR166001	WAR100104-60	01/20/10 1042	1.77	5.61		
15	AR126801	WAR091106-68	01/20/10 1053				
16	DDTANALOGSTD	WAR091219-DD	01/20/10 1104				
17	PIBLK02	WAR091130-99	01/20/10 1115	1.77	5.61		
18	ZZZZZ	ZZZZZ	01/20/10 1126	1.77	5.61		
19	ZZZZZ	ZZZZZ	01/20/10 1138	1.77	5.61		
20	ZZZZZ	ZZZZZ	01/20/10 1149	1.77	5.61		
21	ZZZZZ	ZZZZZ	01/20/10 1200	1.77	5.61		
22	ZZZZZ	ZZZZZ	01/20/10 1211	1.77	5.61		
23	ZZZZZ	ZZZZZ	01/20/10 1222	1.77	5.61		
24	ZZZZZ	ZZZZZ	01/20/10 1233	1.77	5.61		
25	ZZZZZ	ZZZZZ	01/20/10 1244	1.77	5.61		
26	ZZZZZ	ZZZZZ	01/20/10 1255	1.77	5.61		
27	ZZZZZ	ZZZZZ	01/20/10 1306	1.77	5.61		
28	AR166002	WAR100104-60	01/20/10 1317	1.77	5.61		
29	PIBLK03	WAR091130-99	01/20/10 1328	1.77	5.61		
30	ZZZZZ	ZZZZZ	01/20/10 1340	1.77	5.61		
31	ZZZZZ	ZZZZZ	01/20/10 1351	1.77	5.61		
32	ZZZZZ	ZZZZZ	01/20/10 1402	1.77	5.61		

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.: 10-1390

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 01/20/10 01/20/10

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION							
S1 : 2.07				DCB: 6.30			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #		
01	PIBLK01	WAR091130-99	01/20/10	0817	2.06	6.29	
02	ZZZZZ	ZZZZZ	01/20/10	0829	2.07	6.30	
03	AR125401	WAR091102-54	01/20/10	0840			
04	AR124201	WAR100104-42	01/20/10	0851			
05	AR124801	WAR100104-48	01/20/10	0902			
06	AR123201	WAR100104-32	01/20/10	0913			
07	AR122101	WAR100104-21	01/20/10	0924			
08	AR126201	WAR100104-62	01/20/10	0935			
09	AR166001	WAR100120-01	01/20/10	0946	2.07	6.30	
10	AR166002	WAR100120-02	01/20/10	0957	2.07	6.30	
11	AR166003	WAR100120-03	01/20/10	1009	2.07	6.30	
12	AR166004	WAR100120-04	01/20/10	1020	2.07	6.30	
13	AR166005	IAR100104-01	01/20/10	1031	2.07	6.30	
14	AR166001	WAR100104-60	01/20/10	1042	2.07	6.30	
15	AR126801	WAR091106-68	01/20/10	1053			
16	DDTANALOGSTD	WAR091219-DD	01/20/10	1104			
17	PIBLK02	WAR091130-99	01/20/10	1115	2.07	6.30	
18	ZZZZZ	ZZZZZ	01/20/10	1126	2.07	6.30	
19	ZZZZZ	ZZZZZ	01/20/10	1138	2.07	6.30	
20	ZZZZZ	ZZZZZ	01/20/10	1149	2.07	6.30	
21	ZZZZZ	ZZZZZ	01/20/10	1200	2.07	6.30	
22	ZZZZZ	ZZZZZ	01/20/10	1211	2.07	6.30	
23	ZZZZZ	ZZZZZ	01/20/10	1222	2.07	6.30	
24	ZZZZZ	ZZZZZ	01/20/10	1233	2.07	6.30	
25	ZZZZZ	ZZZZZ	01/20/10	1244	2.07	6.30	
26	ZZZZZ	ZZZZZ	01/20/10	1255	2.07	6.30	
27	ZZZZZ	ZZZZZ	01/20/10	1306	2.07	6.30	
28	AR166002	WAR100104-60	01/20/10	1317	2.07	6.30	
29	PIBLK03	WAR091130-99	01/20/10	1328	2.07	6.30	
30	ZZZZZ	ZZZZZ	01/20/10	1340	2.07	6.30	
31	ZZZZZ	ZZZZZ	01/20/10	1351	2.07	6.30	
32	ZZZZZ	ZZZZZ	01/20/10	1402	2.07	6.30	

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.: 10-1390

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/30/09 01/20/10

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION						
S1 : 1.77			DCB: 5.60			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #	
01	PIBLK01	WAR100105-99	01/28/10	0700	1.77	5.60
02	AR166001	WAR100104-60	01/28/10	0711	1.77	5.60
03	AR125401	WAR091102-54	01/28/10	0722		
04	AR124201	WAR100104-42	01/28/10	0733		
05	AR124801	WAR100104-48	01/28/10	0744		
06	AR123201	WAR100104-32	01/28/10	0755		
07	AR122101	WAR100104-21	01/28/10	0807		
08	AR126201	WAR100104-62	01/28/10	0818		
09	AR126801	WAR091106-68	01/28/10	0829		
10	DDTANALOGSTD	WAR091219-DD	01/28/10	0840		
11	PIBLK02	WAR100105-99	01/28/10	0851	1.77	5.61
12	PBLK01	1202026167	01/28/10	0902	1.77	5.61
13	PBLK01LCS	1202026168	01/28/10	0913	1.77	5.61
14	ZZZZZ	ZZZZZ	01/28/10	0924	1.77	5.60
15	ZZZZZ	ZZZZZ	01/28/10	0935	1.77	5.60
16	ZZZZZ	ZZZZZ	01/28/10	0946	1.77	5.61
17	RE15-10-8053	245391010	01/28/10	0957	1.77	5.60
18	RE15-10-8054	245391011	01/28/10	1008	1.77	5.61
19	AR166002	WAR100104-60	01/28/10	1019	1.77	5.61
20	PIBLK03	WAR100105-99	01/28/10	1030	1.77	5.61
21	ZZZZZ	ZZZZZ	01/28/10	1041	1.77	5.61
22	ZZZZZ	ZZZZZ	01/28/10	1053	1.77	5.61
23	ZZZZZ	ZZZZZ	01/28/10	1104	1.77	5.60
24	ZZZZZ	ZZZZZ	01/28/10	1115	1.77	5.61
25	ZZZZZ	ZZZZZ	01/28/10	1126	1.77	5.61
26	ZZZZZ	ZZZZZ	01/28/10	1137	1.77	5.61
27	ZZZZZ	ZZZZZ	01/28/10	1148	1.77	5.61
28	ZZZZZ	ZZZZZ	01/28/10	1159	1.77	5.61
29	AR166003	WAR100104-60	01/28/10	1210	1.77	5.61
30	PIBLK04	WAR100105-99	01/28/10	1221	1.77	5.61
31	ZZZZZ	ZZZZZ	01/28/10	1314	1.77	5.61
32	ZZZZZ	ZZZZZ	01/28/10	1325	1.77	5.61

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.: 10-1390

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/30/09 01/20/10

Instrument ID: ECD2A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION							
S1 : 2.07				DCB: 6.30			
EPA	LAB	DATE	TIME	S1	DCB		
SAMPLE NO.	SAMPLE ID	ANALYZED	ANALYZED	RT	RT	#	#
01	PIBLK01	WAR100105-99	01/28/10	0700	2.06		6.29
02	AR166001	WAR100104-60	01/28/10	0711	2.07		6.30
03	AR125401	WAR091102-54	01/28/10	0722			
04	AR124201	WAR100104-42	01/28/10	0733			
05	AR124801	WAR100104-48	01/28/10	0744			
06	AR123201	WAR100104-32	01/28/10	0755			
07	AR122101	WAR100104-21	01/28/10	0807			
08	AR126201	WAR100104-62	01/28/10	0818			
09	AR126801	WAR091106-68	01/28/10	0829			
10	DDTANALOGSTD	WAR091219-DD	01/28/10	0840			
11	PIBLK02	WAR100105-99	01/28/10	0851	2.07		6.30
12	PBLK01	1202026167	01/28/10	0902	2.07		6.30
13	PBLK01LCS	1202026168	01/28/10	0913	2.07		6.30
14	ZZZZZ	ZZZZZ	01/28/10	0924	2.07		6.30
15	ZZZZZ	ZZZZZ	01/28/10	0935	2.07		6.30
16	ZZZZZ	ZZZZZ	01/28/10	0946	2.07		6.30
17	RE15-10-8053	245391010	01/28/10	0957	2.07		6.30
18	RE15-10-8054	245391011	01/28/10	1008	2.07		6.30
19	AR166002	WAR100104-60	01/28/10	1019	2.07		6.30
20	PIBLK03	WAR100105-99	01/28/10	1030	2.07		6.30
21	ZZZZZ	ZZZZZ	01/28/10	1041	2.07		6.30
22	ZZZZZ	ZZZZZ	01/28/10	1053	2.07		6.30
23	ZZZZZ	ZZZZZ	01/28/10	1104	2.07		6.30
24	ZZZZZ	ZZZZZ	01/28/10	1115	2.07		6.30
25	ZZZZZ	ZZZZZ	01/28/10	1126	2.07		6.30
26	ZZZZZ	ZZZZZ	01/28/10	1137	2.07		6.30
27	ZZZZZ	ZZZZZ	01/28/10	1148	2.07		6.30
28	ZZZZZ	ZZZZZ	01/28/10	1159	2.07		6.30
29	AR166003	WAR100104-60	01/28/10	1210	2.07		6.30
30	PIBLK04	WAR100105-99	01/28/10	1221	2.07		6.30
31	ZZZZZ	ZZZZZ	01/28/10	1314	2.07		6.30
32	ZZZZZ	ZZZZZ	01/28/10	1325	2.07		6.30

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: 10-1390

Client ID: LCS for batch 945978

Lab Sample ID: 1202026168

Data File: 013f1301.d

Data File: 013b1301.d

Inst: ECD2AJ_1

Inst: ECD2AJ_2

Column: CLP1

Column: CLP2

Analyzed: 28-JAN-10 09:13

Analyzed: 28-JAN-10 09:13

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor-1016							1.8
Column 1	1	2.27	2.24 - 2.3	21.6		ug/kg	
	2	2.6	2.56 - 2.62	21.5		ug/kg	
	3	2.69	2.66 - 2.72	21.2		ug/kg	
	4	2.82	2.79 - 2.85	21.4		ug/kg	
	5	2.97	2.94 - 3	21.2		ug/kg	
					21.4		
Column 2	1	2.74	2.71 - 2.77	21.6		ug/kg	
	2	3.18	3.15 - 3.21	21.9		ug/kg	
	3	3.33	3.3 - 3.36	21.7		ug/kg	
	4	3.36	3.33 - 3.39	21.5		ug/kg	
	5	3.52	3.48 - 3.54	22.1		ug/kg	
					21.8		
Aroclor-1260							.803
Column 1	1	4.01	3.98 - 4.04	25.2		ug/kg	
	2	4.28	4.25 - 4.31	25.1		ug/kg	
	3	4.45	4.42 - 4.48	25.8		ug/kg	
	4	4.66	4.63 - 4.69	26.1		ug/kg	
	5	4.85	4.82 - 4.88	26.2		ug/kg	
					25.7		
Column 2	1	4.41	4.38 - 4.44	25.1		ug/kg	
	2	4.56	4.53 - 4.59	25.4		ug/kg	
	3	4.67	4.64 - 4.7	25.1		ug/kg	
	4	4.87	4.84 - 4.9	25.2		ug/kg	
	5	5.5	5.47 - 5.53	26.6		ug/kg	
					25.5		

Identification Summary

Page 1 of 1

SDG Number: 10-1390

Client ID: RE15-10-8053

Lab Sample ID: 245391010

Data File: 017f1701.d

Data File: 017b1701.d

Inst: ECD2AJ_1

Inst: ECD2AJ_2

Column: CLP1

Column: CLP2

Analyzed: 28-JAN-10 09:57

Analyzed: 28-JAN-10 09:57

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor-1254							30.1
Column 1	1	3.24	3.21 - 3.27	14.4		ug/kg	
	2	3.42	3.39 - 3.45	17		ug/kg	
	3	3.69	3.66 - 3.72	17.8		ug/kg	
	4	3.88	3.85 - 3.91	11.7		ug/kg	
	5	4.01	3.98 - 4.04	32.5		ug/kg	
					18.7		
Column 2	1	3.81	3.78 - 3.84	14.4		ug/kg	
	2	3.96	3.93 - 3.99	18.4		ug/kg	
	3	4.19	4.16 - 4.22	16.3		ug/kg	
	4	4.27	4.24 - 4.3	10.9		ug/kg	
	5	4.44	4.41 - 4.47	9.01		ug/kg	
					13.8		
Aroclor-1260							32.4
Column 1	1	4.01	3.98 - 4.04	20.9		ug/kg	
	2	4.28	4.25 - 4.31	11.4		ug/kg	
	3	4.45	4.42 - 4.48	12		ug/kg	
	4	4.66	4.63 - 4.69	6.4		ug/kg	
	5	4.85	4.82 - 4.88	6.85		ug/kg	
					11.5		
Column 2	1	4.41	4.38 - 4.44	17.9		ug/kg	
	2	4.56	4.53 - 4.59	17.4		ug/kg	
	3	4.67	4.64 - 4.7	20.3		ug/kg	
	4	4.87	4.84 - 4.9	11.5		ug/kg	
	5	5.5	5.47 - 5.53	12.6		ug/kg	
					15.9		

QUALITY CONTROL DATA

PCB
Certificate of Analysis
Sample Summary

Page 1 of 1

SDG Number: 10-1390

Lab Sample ID: 1202026167

Client Sample: QC for batch 945978

Client ID: MB for batch 945978

Batch ID: 945979

Run Date: 01/28/2010 09:02

Prep Date: 01/27/2010 20:26

Data File: 012f1201-1.d

012b1201-1.d

Client: LANL010

Method: SW846 8082

Inst: ECD2A.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	U	3.33	ug/kg	1.11	3.33	1
11104-28-2	Aroclor-1221	U	3.33	ug/kg	1.11	3.33	1
11141-16-5	Aroclor-1232	U	3.33	ug/kg	1.11	3.33	1
53469-21-9	Aroclor-1242	U	3.33	ug/kg	1.11	3.33	1
12672-29-6	Aroclor-1248	U	3.33	ug/kg	1.11	3.33	1
11097-69-1	Aroclor-1254	U	3.33	ug/kg	1.11	3.33	1
11096-82-5	Aroclor-1260	U	3.33	ug/kg	1.11	3.33	1

Data File: /chem/ecd2a.i/012810.b/012f1201-1.d
Report Date: 28-Jan-2010 11:38

Page 1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL
Data file : /chem/ecd2a.i/012810.b/012f1201-1.d
Lab Smp Id: 1202026167 Client Smp ID: PBLK01
Inj Date : 28-JAN-2010 09:02
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1202026167|1|
Misc Info : |ECD82P_1S|945979|SVA|QC A|SOIL|MB|1|
Comment :
Method : /chem/ecd2a.i/012810.b/ECD2-F-8082-111209A.m
Meth Date : 28-Jan-2010 11:03 jen01212 Quant Type: ESTD
Cal Date : 21-JAN-2010 08:45 Cal File: 010f1001.d
Als bottle: 12 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1390.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS

RT	EXP RT	DLT RT	ON-COL	FINAL	TARGET RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====
			RESPONSE (ug/L)	(ug/Kg)		
\$ 11 4cmx				CAS #: 877-09-8		
1.772	1.770	0.002	8446933	126.012	4.2 80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3		
5.606	5.604	0.002	8391794	132.364	4.4 80.00- 120.00	100.00

Data File: /chem/ecd2a.1/012810.b/012f1201-1.d

Date : 28-JAN-2010 09:02

Client ID: PBLK01

Sample Info: 1120202616711

Volume Injected (uL): 1.0

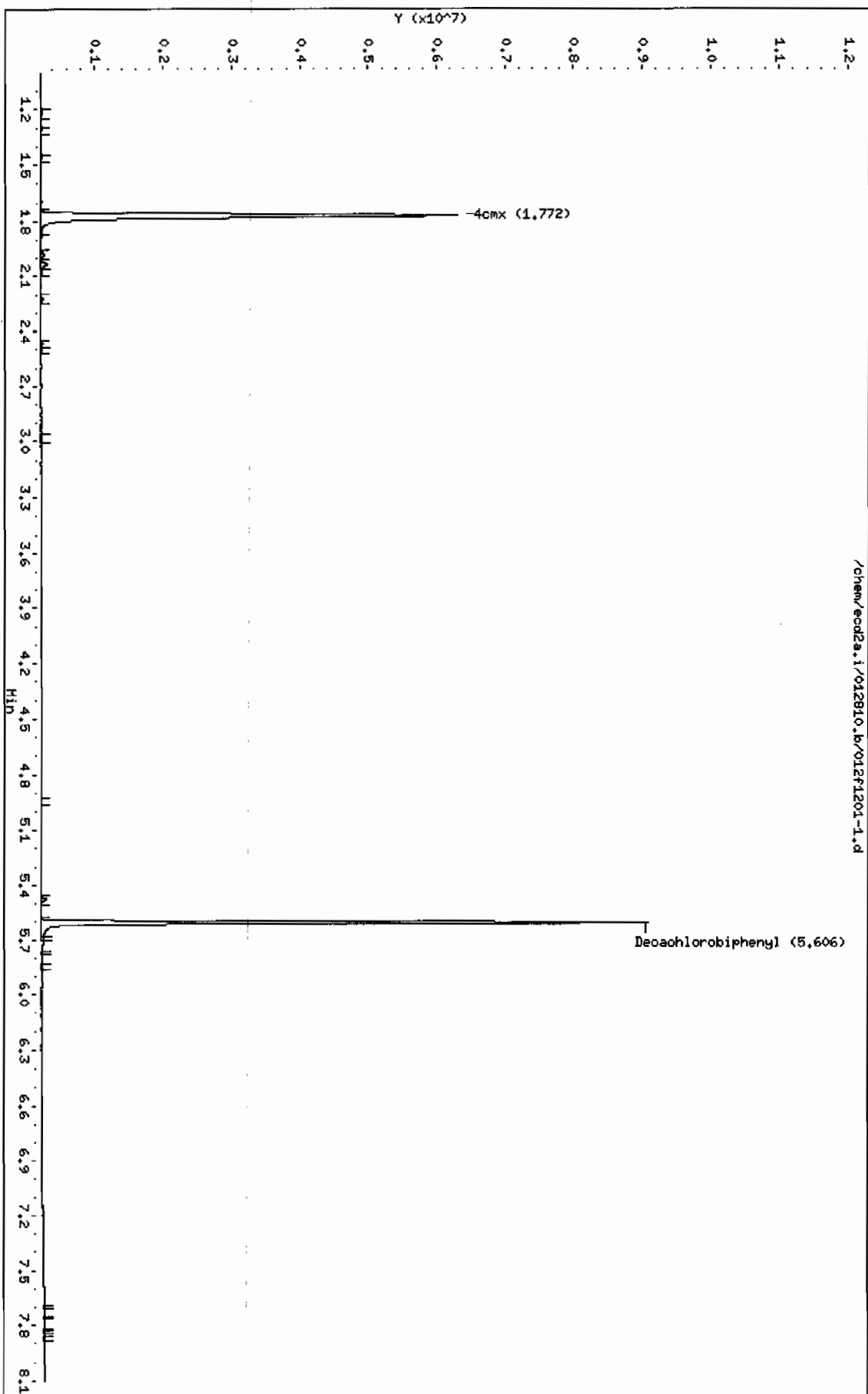
Column phase: CLP1

Page 1

Instrument: ecd2a.1

Operator: JADC

Column diameter: 0.25



Data File: /chem/ecd2a.i/012810.b/012b1201-1.d
Report Date: 28-Jan-2010 11:37

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/012b1201-1.d
Lab Smp Id: 1202026167 Client Smp ID: PBLK01
Inj Date : 28-JAN-2010 09:02
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1202026167|1|
Misc Info : |ECD82P_1S|945979|SVA|QC A|SOIL|MB|||
Comment :
Method : /chem/ecd2a.i/012810.b/ECD2-B-8082-111209A.m
Meth Date : 28-Jan-2010 11:03 jen01212 Quant Type: ESTD
Cal Date : 21-JAN-2010 08:45 Cal File: 010b1001.d
Als bottle: 12 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1390.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

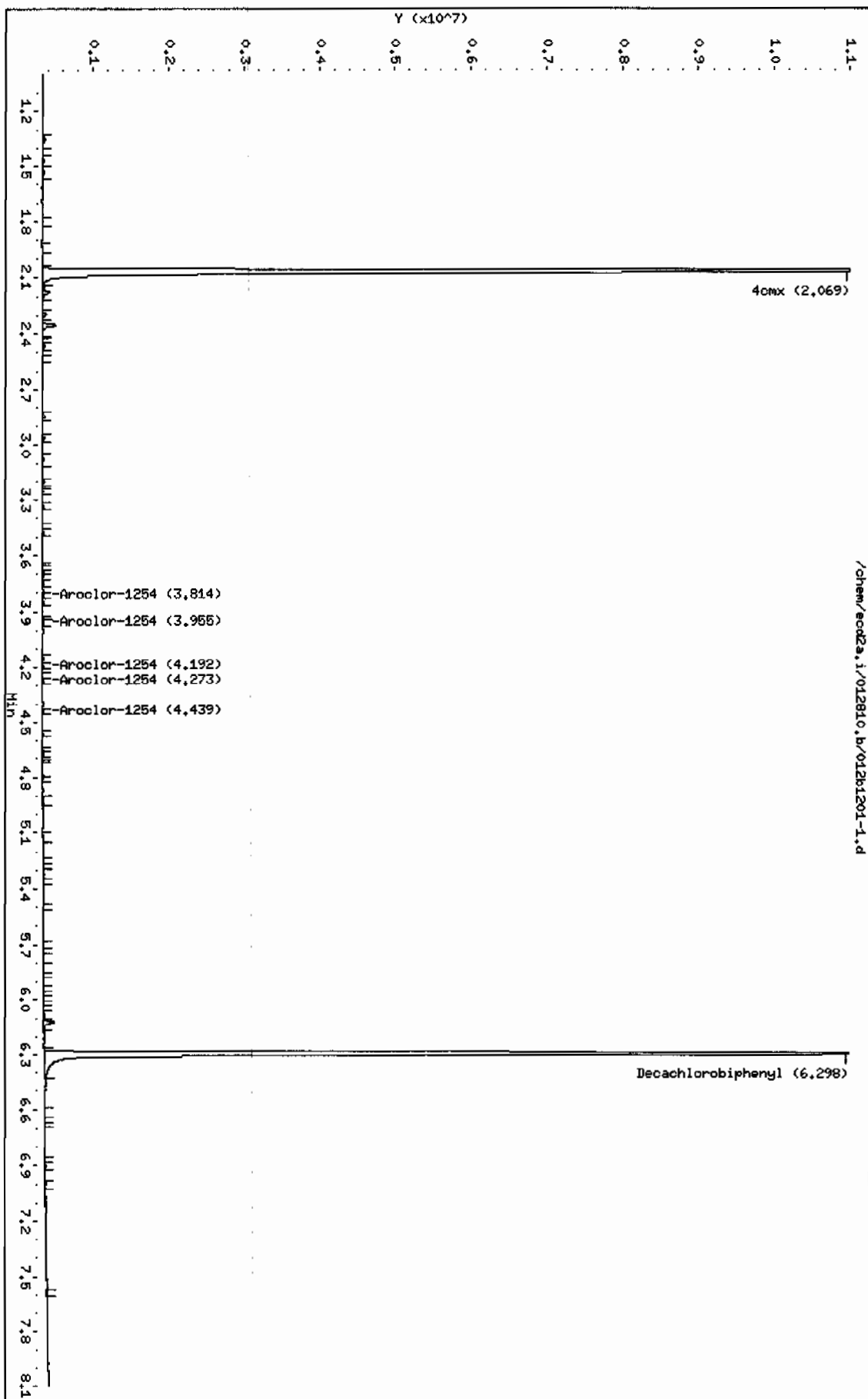
Cpnd Variable Local Compound Variable

CONCENTRATIONS						
		ON-COL		FINAL		
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO
**	=====	=====	=====	=====	=====	=====
\$ 11 4cmx CAS #: 877-09-8						
2.069	2.067	0.002	18565342	133.031	4.4 80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl CAS #: 2051-24-3						
6.298	6.297	0.001	17479977	140.343	4.7 80.00- 120.00	100.00

Data File: /chem/eod2a.i/012810.b/012b1201-1.d
Date : 28-JAN-2010 09:02
Client ID: PBLX01
Sample Info: 11202026167111
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: eod2a.i
Operator: JROC
Column diameter: 0.25



PCB
Certificate of Analysis
Sample Summary

Page 1 of 1

SDG Number: 10-1390

Lab Sample ID: 1202026168

Client Sample: QC for batch 945978

Client ID: LCS for batch 945978

Batch ID: 945979

Run Date: 01/28/2010 09:13

Prep Date: 01/27/2010 20:26

Data File: 013f1301-1.d

013b1301-1.d

Client: LANL010

Method: SW846 8082

Inst: ECD2A.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		21.8	ug/kg	1.11	3.33	2
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		25.7	ug/kg	1.11	3.33	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/013f1301-1.d
Lab Smp Id: 1202026168 Client Smp ID: PBLK01LCS
Inj Date : 28-JAN-2010 09:13
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1202026168|1|
Misc Info : |ECD82P_1S|945979|SVA|QC A|SOIL|LCS|||
Comment :
Method : /chem/ecd2a.i/012810.b/ECD2-F-8082-111209A.m
Meth Date : 28-Jan-2010 11:03 jen01212 Quant Type: ESTD
Cal Date : 21-JAN-2010 08:45 Cal File: 010f1001.d
Als bottle: 13 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1390.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							
1.771	1.770	0.001	8526056	127.193	4.2 80.00- 120.00	100.00	
CAS #: 2051-24-3							
\$ 12 Decachlorobiphenyl							
5.605	5.604	0.001	8799365	138.793	4.6 80.00- 120.00	100.00	
CAS #: 12674-11-2							
1 Aroclor-1016							
2.272	2.271	0.001	1465182	648.919	21.6 80.00- 120.00	100.00(M)	
2.596	2.595	0.001	2990284	646.001	21.5 194.16- 234.16	204.09	
2.687	2.685	0.002	1208347	635.870	21.2 65.88- 105.88	82.47	
2.822	2.820	0.002	630462	641.041	21.4 24.35- 64.35	43.03	

CONCENTRATIONS									
			ON-COL		FINAL				
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/Kg)	TARGET	RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	=====	=====	
1 Aroclor-1016 (continued)									
2.973	2.971	0.002	921337	635.272	21.2	45.99-	85.99	62.88	
Average of Peak Concentrations =					21.4				

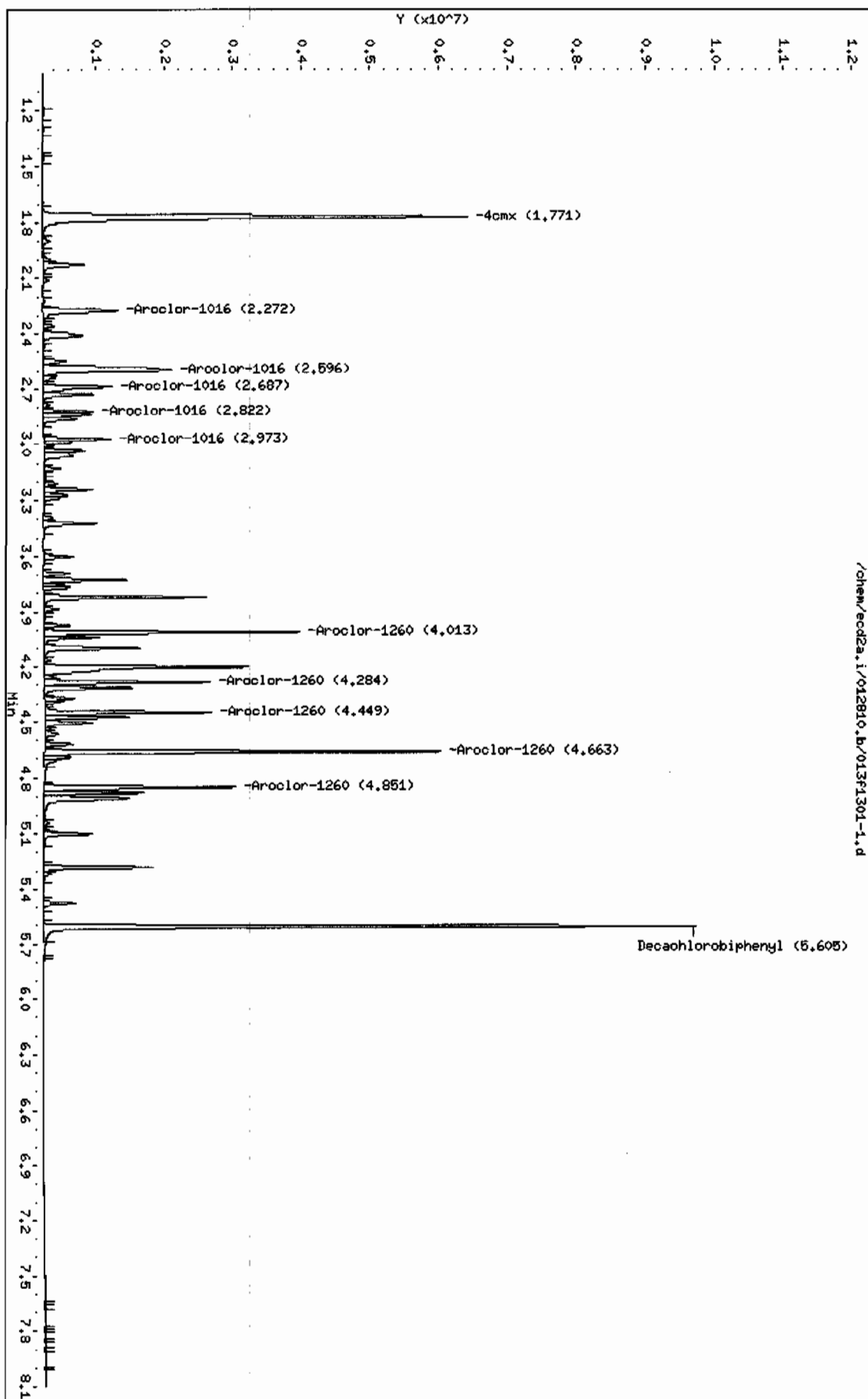
7 Aroclor-1260					CAS #: 11096-82-5				
4.013	4.011	0.002	3248607	755.022	25.2	80.00-	120.00	100.00	
4.284	4.282	0.002	2098956	752.037	25.1	42.81-	82.81	64.61	
4.449	4.449	0.000	2217059	773.349	25.8	45.95-	85.95	68.25	
4.663	4.661	0.002	5149255	782.658	26.1	132.37-	172.37	158.51	
4.851	4.850	0.001	2514477	787.419	26.2	53.57-	93.57	77.40	
Average of Peak Concentrations =					25.7				

QC Flag Legend

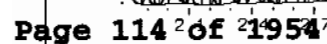
M - Compound response manually integrated.

Data File: /chem/eod2a.i/012810.b/013F1301-1.d
Date : 28-JAN-2010 09:13
Client ID: PBLK01LCS
Sample Info: 11202026168111
Volume Injected (uL): 1.0
Column phase: CLP1

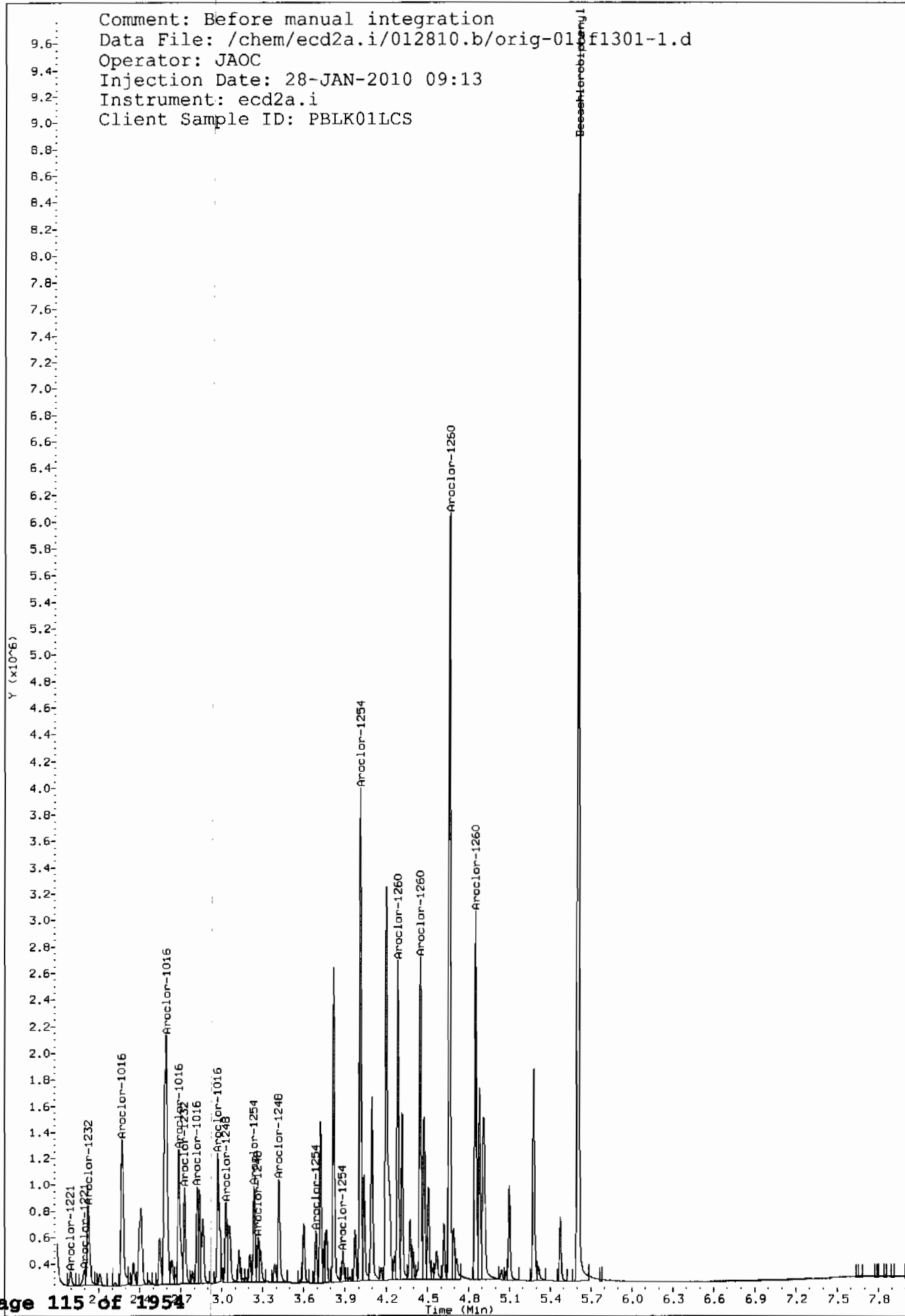
Instrument: eod2a.i
Operator: JHDC
Column diameter: 0.25



Tuesday, October 19, 2016



Comment: Before manual integration
Data File: /chem/ecd2a.i/012810.b/orig-01f1301-1.d
Operator: JAOC
Injection Date: 28-JAN-2010 09:13
Instrument: ecd2a.i
Client Sample ID: PBLK01LCS



Data File: /chem/ecd2a.i/012810.b/013b1301-1.d
 Report Date: 28-Jan-2010 11:37

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/013b1301-1.d
 Lab Smp Id: 1202026168 Client Smp ID: PBLK01LCS
 Inj Date : 28-JAN-2010 09:13
 Operator : JAOC Inst ID: ecd2a.i
 Smp Info : |1202026168|1|
 Misc Info : |ECD82P_1\$|945979|SVA|QC A|SOIL|LCS|||
 Comment :
 Method : /chem/ecd2a.i/012810.b/ECD2-B-8082-111209A.m
 Meth Date : 28-Jan-2010 11:03 jen01212 Quant Type: ESTD
 Cal Date : 21-JAN-2010 08:45 Cal File: 010b1001.d
 Als bottle: 13 QC Sample: LCS
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: 10-1390.sub
 Target Version: 3.50 Sample Matrix: Soil
 Processing Host: hpc1p1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

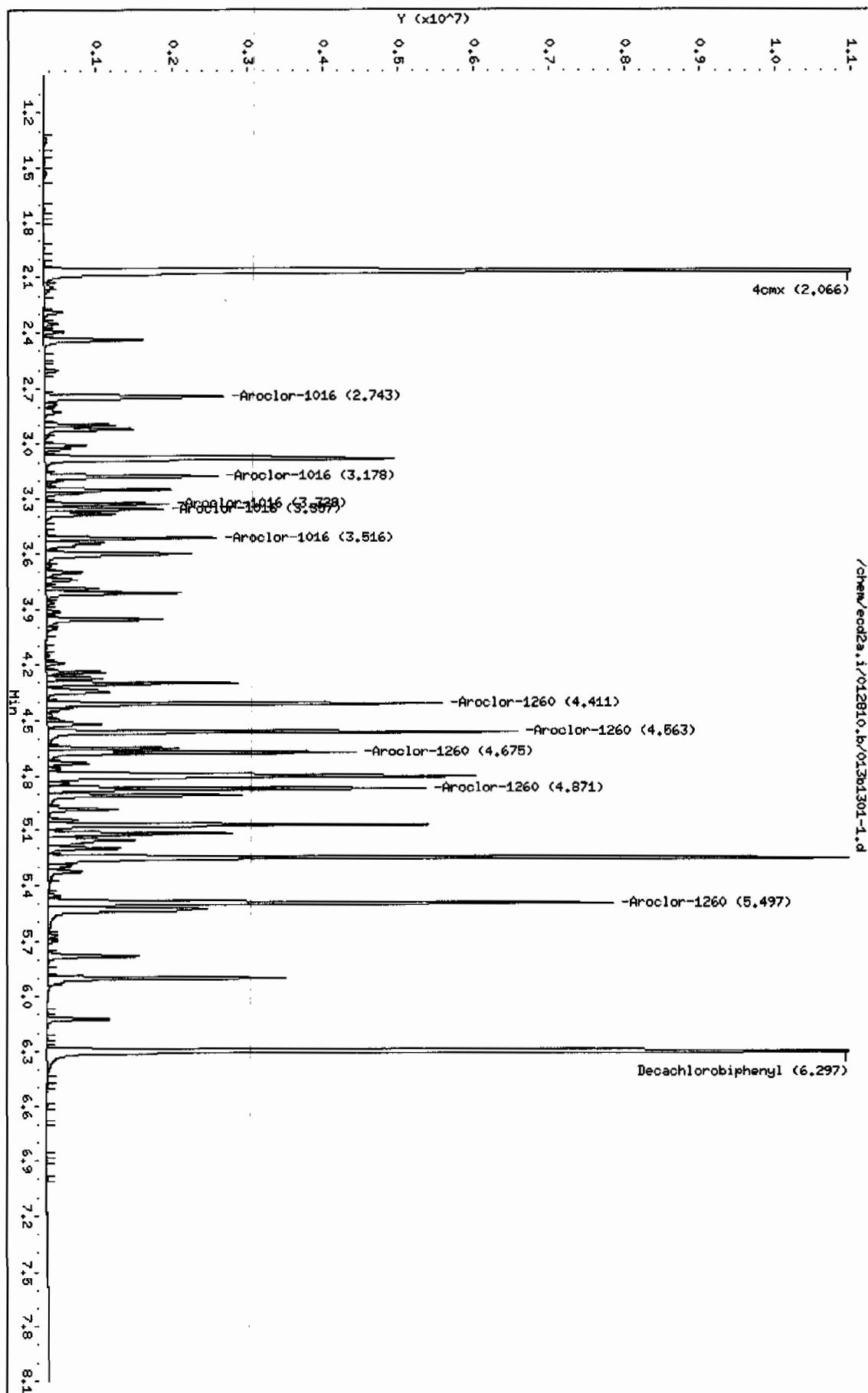
CONCENTRATIONS						
		ON-COL	FINAL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO
\$ 11 4cmx					CAS #: 877-09-8	
2.066	2.067	-0.001	18720257 134.141	4.5	80.00- 120.00	100.00
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3	
6.297	6.297	0.000	18116994 145.457	4.8	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2	
2.743	2.742	0.001	2914344 649.177	21.6	80.00- 120.00	100.00
3.178	3.177	0.001	2253621 656.242	21.9	59.06- 99.06	77.33
3.329	3.327	0.002	1313577 651.133	21.7	25.71- 65.71	45.07
3.357	3.356	0.001	1360252 646.026	21.5	28.12- 68.12	46.67

CONCENTRATIONS									
			ON-COL		FINAL				
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/Kg)	TARGET RANGE		RATIO	
==	=====	=====	=====	=====	=====	=====		=====	
1 Aroclor-1016 (continued).									
3.516	3.515	0.001	1851763	662.653	22.1	44.81-	84.81	63.54	
Average of Peak Concentrations =					21.8				

7 Aroclor-1260					CAS #: 11096-82-5				
4.411	4.411	0.000	4350169	751.948	25.1	80.00-	120.00	100.00	
4.563	4.562	0.001	5529385	761.294	25.4	106.27-	146.27	127.11	
4.675	4.674	0.001	3766386	752.650	25.1	66.48-	106.48	86.58	
4.871	4.872	-0.001	4376102	755.127	25.2	78.00-	118.00	100.60	
5.497	5.497	0.000	7503084	798.672	26.6	140.50-	180.50	172.48	
Average of Peak Concentrations =					25.5				

Data File: /chem/ecod2a.i/012810.b/01301301-1.d
Date: 28-JAN-2010 09:13
Client ID: PBLK01LCS
Sample Info: 1120202616811
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecod2a.i
Operator: JMO
Column diameter: 0.25



MISCELLANEOUS DATA

GEL ORGANIC RUN LOG

INSTRUMENT ID: ECD2

DATE: 12/01/2009 METHOD: ECD2-F-8082-111209A.m OPERATOR: JAOC REVIEWED BY: _____
DATE: _____HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT: DA385
ALUMINA LOT: 1206399-A
COPPER LOT: 207783-ACalibration & 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: 113009A
Injection Volume: 1.0 uL

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f001.d	WAR090916-99 IB	JAOC	30-NOV-2009 08:21		113009a	1.01	CLEAN	
002f0201.d	WAR091119-60 01	JAOC	30-NOV-2009 08:32		113009a	1.01	DUSE	
003f0301.d	WAR091130-05 54	JAOC	30-NOV-2009 08:43		113009a	1.01	1254 LEVEL 1	
004f0401.d	WAR091130-06 54	JAOC	30-NOV-2009 08:54		113009a	1.01	1254 LEVEL 2	
005f0501.d	WAR091130-07 54	JAOC	30-NOV-2009 09:05		113009a	1.01	1254 LEVEL 3	
006f0601.d	WAR091130-08 54	JAOC	30-NOV-2009 09:16		113009a	1.01	1254 LEVEL 4	
007f0701.d	WAR091027-01 54	JAOC	30-NOV-2009 09:27		113009a	1.01	1254 LEVEL 5	
008f0801.d	WAR091102-54	JAOC	30-NOV-2009 09:38		113009a	1.01	PASSES BOTH COLUMNS	
009f0901.d	WAR091102-42	JAOC	30-NOV-2009 09:50		113009a	1.01	PASSES BOTH COLUMNS	
010f1001.d	WAR091119-60 01	JAOC	30-NOV-2009 10:01		113009a	1.01	PASSES BOTH COLUMNS	
011f1101.d	WAR091130-13 48	JAOC	30-NOV-2009 10:12		113009a	1.01	1248 LEVEL 1	
012f1201.d	WAR091130-14 48	JAOC	30-NOV-2009 10:23		113009a	1.01	1248 LEVEL 2	
013f1301.d	WAR091130-15 48	JAOC	30-NOV-2009 10:34		113009a	1.01	1248 LEVEL 3	
014f1401.d	WAR091130-16 48	JAOC	30-NOV-2009 10:45		113009a	1.01	1248 LEVEL 4	
015f1501.d	WAR091027-02 48	JAOC	30-NOV-2009 10:56		113009a	1.01	1248 LEVEL 5	

Instrument Batch: /chem/ecd2a.i/113009a.b

Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	WAR091027-48	JAOC	30-NOV-2009 11:07		113009a	1.01	DUSE	

1017f1701.d	1WAR090930-32	1JAO	130-NOV-2009 11:18	1	113009a	1	1.01	1	PATTERN ONLY
1018f1801.d	1WAR091027-48	1JAO	130-NOV-2009 11:29	1	113009a	1	1.01	1	PASSES BOTH COLUMNS
1019f1901.d	1WAR091111-21	1JAO	130-NOV-2009 11:40	1	113009a	1	1.01	1	PATTERN ONLY
1020f2001.d	1WAR091111-62	1JAO	130-NOV-2009 11:51	1	113009a	1	1.01	1	PATTERN ONLY
1021f2101.d	1WAR091106-68	1JAO	130-NOV-2009 12:02	1	113009a	1	1.01	1	PATTERN ONLY
1022f2201.d	1WAR091020-DDT	1JAO	130-NOV-2009 12:13	1	113009a	1	1.01	1	DDT
1023f2301.d	1WAR090916-99 02	1JAO	130-NOV-2009 12:25	1	113009a	1	1.01	1	CLEAN
1024f2401.d	11201981402	1JAO	130-NOV-2009 12:36	1	926725	1EUI-7399	1	1.01QC A	1 UPLOAD BOTH, USE HIGHER
1025f2501.d	11201981405	1JAO	130-NOV-2009 12:47	1	926725	1EUI-7399	1	1.01QC A	1 UPLOAD BOTH, USE HIGHER
1026f2601.d	1241672001	1JAO	130-NOV-2009 12:58	1	926725	1EUI-7399	1	200.01CARE	1 UPLOAD BOTH, USE HIGHER
1027f2701.d	11201981403	1JAO	130-NOV-2009 13:09	1	926725	1EUI-7399	1	200.01QC A	1 UPLOAD BOTH, USE HIGHER
1028f2801.d	11201981404	1JAO	130-NOV-2009 13:20	1	926725	1EUI-7399	1	200.01QC A	1 UPLOAD BOTH, USE HIGHER
1029f2901.d	1WAR091119-60 02	1JAO	130-NOV-2009 13:36	1	113009a	1	1.01	1	PASSES BOTH COLUMNS
1030f3001.d	1WAR090916-99 03	1JAO	130-NOV-2009 13:47	1	113009a	1	1.01	1	CLEAN
1031f3101.d	11201981478	1JAO	130-NOV-2009 13:58	1	926760	1241688	1	1.01QC A	1 UPLOAD BOTH, USE HIGHER
1032f3201.d	11201981479	1JAO	130-NOV-2009 14:09	1	926760	1241688	1	1.01QC A	1 UPLOAD BOTH, USE HIGHER
1033f3301.d	11201981480	1JAO	130-NOV-2009 14:34	1	926760	1241688	1	1.01QC A	1 UPLOAD BOTH, USE HIGHER
1034f3401.d	1241688001	1JAO	130-NOV-2009 14:45	1	926760	1241688	1	1000.01ROIT	1 UPLOAD BOTH, USE HIGHER
1035f3501.d	1241688002	1JAO	130-NOV-2009 14:56	1	926760	1241688	1	1000.01ROIT	1 UPLOAD BOTH, USE HIGHER

Instrument Batch: /chem/ecd2a.i/113009a.b

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Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
1036f3601.d	WAR091119-60 03	JAO	30-NOV-2009 15:12		4113009a		1.01	PASSES BOTH COLUMNS
1037f3701.d	WAR090916-99 04	JAO	30-NOV-2009 15:23		4113009a		1.01	CLEAN
1038f3801.d	241034012	JAO	30-NOV-2009 15:34	925599	110-463		100.01LANL	UPLOAD BOTH, USE HIGHER
1039f3901.d	241034013	JAO	30-NOV-2009 15:45	925599	110-463		1.01LANL	UPLOAD BOTH, USE HIGHER
1040f4001.d	241034014	JAO	30-NOV-2009 15:56	925599	110-463		5.01LANL	UPLOAD BOTH, USE HIGHER
1041f4101.d	241034015	JAO	30-NOV-2009 16:07	925599	110-463		20.01LANL	UPLOAD BOTH, USE HIGHER

1042f4201.d	1241034016	1JAOC	130-NOV-2009 16:18	1925599	110-463	1	100.0	LANL	1	UPLOAD BOTH, USE HIGHER
1043f4301.d	1241034017	1JAOC	130-NOV-2009 16:29	1925599	110-463	1	100.0	LANL	1	UPLOAD BOTH, USE HIGHER
1044f4401.d	1241038002	1JAOC	130-NOV-2009 16:40	1925599	110-462	1	10.0	LANL	1	UPLOAD BOTH, USE HIGHER
1045f4501.d	1WAR091119-60 04	1JAOC	130-NOV-2009 16:51	1113009a	1	1.0	1	PASSES BOTH COLUMNS	1	
1046f4601.d	1WAR090916-99 05	1JAOC	130-NOV-2009 17:02	1113009a	1	1.0	1	CLEAN	1	
1047f4701.d	11201980278	1JAOC	130-NOV-2009 17:13	1926186	110-390	1	1.0	QC A	1	UPLOAD BOTH, USE HIGHER
1048f4801.d	11201980281	1JAOC	130-NOV-2009 17:24	1926186	110-390	1	1.0	QC A	1	UPLOAD BOTH, USE HIGHER
1049f4901.d	1240638001	1JAOC	130-NOV-2009 17:36	1926186	110-390	1	1.0	LANL	1	UPLOAD BOTH, USE HIGHER
1050f5001.d	11201980279	1JAOC	130-NOV-2009 17:47	1926186	110-390	1	1.0	QC A	1	UPLOAD BOTH, USE HIGHER
1051f5101.d	11201980280	1JAOC	130-NOV-2009 17:58	1926186	110-390	1	1.0	QC A	1	UPLOAD BOTH, USE HIGHER
1052f5201.d	1240740003	1JAOC	130-NOV-2009 18:09	1926186	110-407	1	1.0	LANL	1	UPLOAD BOTH, USE HIGHER
1053f5301.d	1240740005	1JAOC	130-NOV-2009 18:20	1926186	110-407	1	5.0	LANL	1	UPLOAD BOTH, USE HIGHER
1054f5401.d	1WAR091119-60 05	1JAOC	130-NOV-2009 18:31	1113009a	1	1.0	1	PASSES BOTH COLUMNS	1	
1055f5501.d	1WAR090916-99 06	1JAOC	130-NOV-2009 18:42	1113009a	1	1.0	1	CLEAN	1	
1056f5601.d	11201981445	1JAOC	130-NOV-2009 18:53	1926744	1241365	1	1.0	QC A	1	DUSE, SAMPLE HAS SULFUR HITS
1057f5701.d	11201981446	1JAOC	130-NOV-2009 19:04	1926744	1241365	1	1.0	QC A	1	DUSE, SAMPLE HAS SULFUR HITS
1058f5801.d	11201981447	1JAOC	130-NOV-2009 19:15	1926744	1241365	1	1.0	QC A	1	DUSE, SAMPLE HAS SULFUR HITS
1059f5901.d	1241365001	1JAOC	130-NOV-2009 19:26	1926744	1241365	1	1.0	GELC	1	DUSE, SAMPLE HAS SULFUR HITS
1060f6001.d	1WAR091119-60 06	1JAOC	130-NOV-2009 19:42	1113009a	1	1.0	1	PASSES BOTH COLUMNS	1	
1061f6101.d	1WAR090916-99 07	1JAOC	130-NOV-2009 19:53	1113009a	1	1.0	1	CLEAN	1	
1062f6201.d	11201981383	1JAOC	130-NOV-2009 20:05	1926712	110-519	1	1.0	QC A	1	UPLOAD BOTH, USE HIGHER
1063f6301.d	11201981386	1JAOC	130-NOV-2009 20:16	1926712	110-519	1	1.0	QC A	1	UPLOAD BOTH, USE HIGHER
1064f6401.d	1241033012	1JAOC	130-NOV-2009 20:27	1926712	110-460	1	10.0	LANL	1	UPLOAD BOTH, USE HIGHER
1065f6501.d	1241183002	1JAOC	130-NOV-2009 20:38	1926712	110-519	1	5.0	LANL	1	UPLOAD BOTH, USE HIGHER

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1066f6601.d	1241183003	JAOC	130-NOV-2009 20:49	1926712	110-519	10.0 LANL	1	UPLOAD BOTH, USE HIGHER
1067f6701.d	1241183004	JAOC	130-NOV-2009 21:00	1926712	110-519	1.0 LANL	1	UPLOAD BOTH, USE HIGHER
1068f6801.d	124118001	JAOC	130-NOV-2009 21:11	1926712	110-543	10.0 LANL	1	UPLOAD BOTH, USE HIGHER
1069f6901.d	124118002	JAOC	130-NOV-2009 21:22	1926712	110-543	5.0 LANL	1	UPLOAD BOTH, USE HIGHER
1070f7001.d	124118003	JAOC	130-NOV-2009 21:33	1926712	110-543	5.0 LANL	1	UPLOAD BOTH, USE HIGHER
1071f7101.d	124118004	JAOC	130-NOV-2009 21:44	1926712	110-543	5.0 LANL	1	UPLOAD BOTH, USE HIGHER
1072f7201.d	1072f7201.d	JAOC	130-NOV-2009 21:55	1113009a	1.0	PASSES BOTH COLUMNS	1	
1073f7301.d	1073f7301.d	JAOC	130-NOV-2009 22:07	1113009a	1.0	CLEAN	1	
1074f7401.d	124118005	JAOC	130-NOV-2009 22:18	1926712	110-543	5.0 LANL	1	UPLOAD BOTH, USE HIGHER
1075f7501.d	124118006	JAOC	130-NOV-2009 22:29	1926712	110-543	1.0 LANL	1	UPLOAD BOTH, USE HIGHER
1076f7601.d	124118007	JAOC	130-NOV-2009 22:40	1926712	110-543	5.0 LANL	1	UPLOAD BOTH, USE HIGHER
1077f7701.d	124118008	JAOC	130-NOV-2009 22:51	1926712	110-543	1.0 LANL	1	UPLOAD BOTH, USE HIGHER
1078f7801.d	124118009	JAOC	130-NOV-2009 23:02	1926712	110-543	1.0 LANL	1	UPLOAD BOTH, USE HIGHER
1079f7901.d	124118010	JAOC	130-NOV-2009 23:13	1926712	110-543	5.0 LANL	1	UPLOAD BOTH, USE HIGHER
1080f8001.d	124118013	JAOC	130-NOV-2009 23:24	1926712	110-543	5.0 LANL	1	UPLOAD BOTH, USE HIGHER
1081f8101.d	124118014	JAOC	130-NOV-2009 23:36	1926712	110-543	1.0 LANL	1	UPLOAD BOTH, USE HIGHER
1082f8201.d	124118001	JAOC	130-NOV-2009 23:47	1926712	110-546	1.0 LANL	1	UPLOAD BOTH, USE HIGHER
1083f8301.d	124118002	JAOC	130-NOV-2009 23:58	1926712	110-546	5.0 LANL	1	UPLOAD BOTH, USE HIGHER
1084f8401.d	1084f8401.d	JAOC	101-DEC-2009 00:09	1113009a	1.0	PASSES BOTH COLUMNS	1	
1085f8501.d	1085f8501.d	JAOC	101-DEC-2009 00:20	1113009a	1.0	CLEAN	1	
1086f8601.d	1241417001	JAOC	101-DEC-2009 00:31	1926712	110-575	10.0 LANL	1	UPLOAD BOTH, USE HIGHER
1087f8701.d	1201981384	JAOC	101-DEC-2009 00:42	1926712	110-575	10.0 QC A	1	UPLOAD BOTH, USE HIGHER
1088f8801.d	1201981385	JAOC	101-DEC-2009 00:53	1926712	110-575	10.0 QC A	1	UPLOAD BOTH, USE HIGHER
1089f8901.d	1241417002	JAOC	101-DEC-2009 01:05	1926712	110-575	1.0 LANL	1	UPLOAD BOTH, USE HIGHER
1090f9001.d	1090f9001.d	JAOC	101-DEC-2009 01:16	1113009a	1.0	PASSES BOTH COLUMNS	1	

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1091f9101.d	1WAR090916-99 10	1JAO	01-DEC-2009 01:27	1	113009a	1	1.01	1	CLEAN
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GEL ORGANIC RUN LOG

INSTRUMENT ID: ECD2

DATE: 01/21/2010 METHOD: ECD2-F-8082-111209A.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: 012010.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 IB	JAOC	120-JAN-2010 08:17	1	012010	1.0	CLEAN	
002f0201.d	WAR100104-60 01	JAOC	120-JAN-2010 08:29	1	012010	1.0	DUSE	
003f0301.d	WAR091102-54	JAOC	120-JAN-2010 08:40	1	012010	1.0	PASSES BOTH COLUMNS	
004f0401.d	WAR091217-42	JAOC	120-JAN-2010 08:51	1	012010	1.0	PASSES BOTH COLUMNS	
005f0501.d	WAR091217-48	JAOC	120-JAN-2010 09:02	1	012010	1.0	PASSES BOTH COLUMNS	
006f0601.d	WAR100104-32	JAOC	120-JAN-2010 09:13	1	012010	1.0	PATTERN ONLY	
007f0701.d	WAR100104-21	JAOC	120-JAN-2010 09:24	1	012010	1.0	PATTERN ONLY	
008f0801.d	WAR100104-62	JAOC	120-JAN-2010 09:35	1	012010	1.0	PASSES BOTH COLUMNS	
009f0901.d	WAR100120-01 60	JAOC	120-JAN-2010 09:46	1	012010	1.0	1660 LEVEL 1	
010f1001.d	WAR100120-02 60	JAOC	120-JAN-2010 09:57	1	012010	1.0	1660 LEVEL 2	
011f1101.d	WAR100120-03 60	JAOC	120-JAN-2010 10:09	1	012010	1.0	1660 LEVEL 3	
012f1201.d	WAR100120-04 60	JAOC	120-JAN-2010 10:20	1	012010	1.0	1660 LEVEL 4	
013f1301.d	WAR100104-01 60	JAOC	120-JAN-2010 10:31	1	012010	1.0	1660 LEVEL 5	
014f1401.d	WAR100104-60 01	JAOC	120-JAN-2010 10:42	1	012010	1.0	PASSES BOTH COLUMNS	
015f1501.d	WAR091106-68	JAOC	120-JAN-2010 10:53	1	012010	1.0	PASSES BOTH COLUMNS	

Instrument Batch: /chem/ecd2a.i/012010.b

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Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	WAR091219-DDT	JAOC	120-JAN-2010 11:04	1	012010	1.0	DDT	

017f1701.d	WAR091130-99 02	JAO	20-JAN-2010 11:15		1012010	1.0	CLEAN	
018f1801.d	1202019498	JAO	20-JAN-2010 11:26	943205	10-1256	1.0	QC A	UPLOAD BOTH, USE HIGHER
019f1901.d	1202019499	JAO	20-JAN-2010 11:38	943205	10-1256	1.0	QC A	UPLOAD BOTH, USE HIGHER
020f2001.d	244837001	JAO	20-JAN-2010 11:49	943205	10-1256	1.0	LANL	UPLOAD BOTH, USE HIGHER
021f2101.d	244837002	JAO	20-JAN-2010 12:00	943205	10-1256	1.0	LANL	UPLOAD BOTH, USE HIGHER
022f2201.d	244837003	JAO	20-JAN-2010 12:11	943205	10-1256	1.0	LANL	UPLOAD BOTH, USE HIGHER
023f2301.d	244837004	JAO	20-JAN-2010 12:22	943205	10-1256	1.0	LANL	UPLOAD BOTH, USE HIGHER
024f2401.d	244837005	JAO	20-JAN-2010 12:33	943205	10-1256	1.0	LANL	UPLOAD BOTH, USE HIGHER
025f2501.d	244837006	JAO	20-JAN-2010 12:44	943205	10-1256	1.0	LANL	UPLOAD BOTH, USE HIGHER
026f2601.d	244847004	JAO	20-JAN-2010 12:55	943205	10-1262	5.0	LANL	UPLOAD BOTH, USE HIGHER
027f2701.d	244852001	JAO	20-JAN-2010 13:06	943205	10-1263	1.0	LANL	UPLOAD BOTH, USE HIGHER
028f2801.d	WAR100104-60 02	JAO	20-JAN-2010 13:17		1012010	1.0	CCV	PASSES BOTH COLUMNS
029f2901.d	WAR091130-99 03	JAO	20-JAN-2010 13:28		1012010	1.0	IB	CLEAN
030f3001.d	244852002	JAO	20-JAN-2010 13:40	943205	10-1263	1.0	LANL	UPLOAD BOTH, USE HIGHER
031f3101.d	244881001	JAO	20-JAN-2010 13:51	943205	10-1264-1	1.0	LANL	UPLOAD BOTH, USE HIGHER
032f3201.d	1202019500	JAO	20-JAN-2010 14:02	943205	10-1264-1	1.0	QC A	UPLOAD BOTH, USE HIGHER
033f3301.d	1202019501	JAO	20-JAN-2010 14:13	943205	10-1264-1	1.0	QC A	UPLOAD BOTH, USE HIGHER
034f3401.d	244881002	JAO	20-JAN-2010 14:24	943205	10-1264-1	10.0	LANL	UPLOAD BOTH, USE HIGHER
035f3501.d	244881003	JAO	20-JAN-2010 14:35	943205	10-1264-1	1.0	LANL	UPLOAD BOTH, USE HIGHER

Instrument Batch: /chem/ecd2a.i/012010.b

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036f3601.d	244881004	JAO	20-JAN-2010 14:46	943205	10-1264-1	1.0	LANL	UPLOAD BOTH, USE HIGHER
037f3701.d	WAR100104-60 03	JAO	20-JAN-2010 14:57		1012010	1.0		PASSES BOTH COLUMNS
038f3801.d	WAR091130-99 04	JAO	20-JAN-2010 15:09		1012010	1.0		CLEAN
039f3901.d	1202018783	JAO	20-JAN-2010 15:20	942921	244874	1.0	QC A	UPLOAD BOTH, USE HIGHER
040f4001.d	1202018784	JAO	20-JAN-2010 15:31	942921	244874	1.0	QC A	UPLOAD BOTH, USE HIGHER
041f4101.d	244937001	JAO	20-JAN-2010 15:42	942921	244937	1.0	WSRB	UPLOAD BOTH, USE HIGHER

042f4201.d	1202018785	JAO	120-JAN-2010 15:53	1942921	1244937	1	1.0IMS		UPLOAD BOTH, USE HIGHER
043f4301.d	1202018786	JAO	120-JAN-2010 16:04	1942921	1244937	1	1.0MSD		UPLOAD BOTH, USE HIGHER
044f4401.d	1244937002	JAO	120-JAN-2010 16:15	1942921	1244937	1	1.0WSRB		UPLOAD BOTH, USE HIGHER
045f4501.d	1244874002	JAO	120-JAN-2010 16:26	1942921	1244874	1	1.0GEEL		SENT FOR RE, LOW SURROGATES
046f4601.d	WAR100104-60 04	JAO	120-JAN-2010 16:37		1012010	1	1.0I		PASSES BOTH COLUMNS
047f4701.d	WAR091130-99 05	JAO	120-JAN-2010 16:48		1012010	1	1.0I		CLEAN
048f4801.d	1202017036	JAO	120-JAN-2010 17:00	1942243	12010MDLVECD21254-S	1	1.0QC A		UPLOAD BOTH, USE BOTH
049f4901.d	1202017037	JAO	120-JAN-2010 17:11	1942243	12010MDLVECD21254-S	1	1.0QC A		UPLOAD BOTH, USE BOTH
050f5001.d	1244388001	JAO	120-JAN-2010 17:22	1942243	12010MDLVECD21254-S	1	1.0QCQA		UPLOAD BOTH, USE BOTH
051f5101.d	1244388002	JAO	120-JAN-2010 17:33	1942243	12010MDLVECD21254-S	1	1.0QCQA		UPLOAD BOTH, USE BOTH
052f5201.d	1244388003	JAO	120-JAN-2010 17:44	1942243	12010MDLVECD21254-S	1	1.0QCQA		UPLOAD BOTH, USE BOTH
053f5301.d	1244388004	JAO	120-JAN-2010 17:55	1942243	12010MDLVECD21254-S	1	1.0QCQA		UPLOAD BOTH, USE BOTH
054f5401.d	WAR100104-60 05	JAO	120-JAN-2010 18:06		1012010	1	1.0I		PASSES BOTH COLUMNS
055f5501.d	WAR091130-99 06	JAO	120-JAN-2010 18:18		1012010	1	1.0I		CLEAN
056f5601.d	1202016956	JAO	120-JAN-2010 18:29	1942219	12010MDLVECD21254-L	1	1.0QC A		UPLOAD BOTH, USE BOTH
057f5701.d	1202016957	JAO	120-JAN-2010 18:40	1942219	12010MDLVECD21254-L	1	1.0QC A		UPLOAD BOTH, USE BOTH
058f5801.d	1243868001	JAO	120-JAN-2010 18:51	1942219	12010MDLVECD21254-L	1	1.0QCQA		UPLOAD BOTH, USE BOTH
059f5901.d	1243868002	JAO	120-JAN-2010 19:02	1942219	12010MDLVECD21254-L	1	1.0QCQA		UPLOAD BOTH, USE BOTH
060f6001.d	1243868003	JAO	120-JAN-2010 19:13	1942219	12010MDLVECD21254-L	1	1.0QCQA		UPLOAD BOTH, USE BOTH
061f6101.d	1243868004	JAO	120-JAN-2010 19:24	1942219	12010MDLVECD21254-L	1	1.0QCQA		UPLOAD BOTH, USE BOTH
062f6201.d	WAR100104-60 06	JAO	120-JAN-2010 19:35		1012010	1	1.0I		PASSES BOTH COLUMNS
063f6301.d	WAR091130-99 07	JAO	120-JAN-2010 19:47		1012010	1	1.0I		CLEAN

Instrument Batch: /chem/ecd2a.i/012010.b

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GEL ORGANIC RUN LOG

INSTRUMENT ID: ECD2

DATE: 01/29/2010 METHOD: ECD2-F-8082-111209A.m OPERATOR: JAOO REVIEWED BY: _____
DATE: _____HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT: DA699
ALUMINA LOT: 1240553-A
COPPER LOT: 236547-ACalibration & 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: 012810 Injection Volume: 1.0 uL

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WAR100105-99 IB	JAOO	28-JAN-2010 07:00		012810	1.0	CLEAN	
002f0201.d	WAR100104-60 01	JAOO	28-JAN-2010 07:11		012810	1.0	PASSES BOTH COLUMNS	
003f0301.d	WAR091102-54	JAOO	28-JAN-2010 07:22		012810	1.0	PASSES BOTH COLUMNS	
004f0401.d	WAR091217-42	JAOO	28-JAN-2010 07:33		012810	1.0	PASSES BOTH COLUMNS	
005f0501.d	WAR091217-48	JAOO	28-JAN-2010 07:44		012810	1.0	PASSES BOTH COLUMNS	
006f0601.d	WAR100104-32	JAOO	28-JAN-2010 07:55		012810	1.0	PASSES BOTH COLUMNS	
007f0701.d	WAR100104-21	JAOO	28-JAN-2010 08:07		012810	1.0	PATTERN ONLY	
008f0801.d	WAR100104-62	JAOO	28-JAN-2010 08:18		012810	1.0	PASSES BOTH COLUMNS	
009f0901.d	WAR091106-68	JAOO	28-JAN-2010 08:29		012810	1.0	PASSES BOTH COLUMNS	
010f1001.d	WAR091219-DDT	JAOO	28-JAN-2010 08:40		012810	1.0	DDT	
011f1101.d	WAR100105-99 02	JAOO	28-JAN-2010 08:51		012810	1.0	CLEAN	
012f1201.d	1202026167	JAOO	28-JAN-2010 09:02	945979	10-1384	1.0	QC A	UPLOAD BOTH, USE HIGHER
013f1301.d	1202026168	JAOO	28-JAN-2010 09:13	945979	10-1384	1.0	QC A	UPLOAD BOTH, USE HIGHER
014f1401.d	1245387001	JAOO	28-JAN-2010 09:24	945979	10-1384	1.0	LANL	UPLOAD BOTH, USE HIGHER
015f1501.d	1245387002	JAOO	28-JAN-2010 09:35	945979	10-1384	1.0	LANL	UPLOAD BOTH, USE HIGHER

Instrument Batch: /chem/ecd2a.i/012810.b

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Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	1245387003	JAOO	28-JAN-2010 09:46	945979	10-1384	1.0	LANL	UPLOAD BOTH, USE HIGHER

1017f1701.d	245391010	JAO	28-JAN-2010 09:57	945979	10-1390	1.0	LANL	UPLOAD BOTH, USE HIGHER
1018f1801.d	245391011	JAO	28-JAN-2010 10:08	945979	10-1390	1.0	LANL	UPLOAD BOTH, USE HIGHER
1019f1901.d	WAR100104-60 02	JAO	28-JAN-2010 10:19		1012810	1.0		PASSES BOTH COLUMNS
1020f2001.d	WAR100105-99 03	JAO	28-JAN-2010 10:30		1012810	1.0		CLEAN
1021f2101.d	245394001	JAO	28-JAN-2010 10:41	945979	10-1392	1.0	LANL	UPLOAD BOTH, USE HIGHER
1022f2201.d	245394002	JAO	28-JAN-2010 10:53	945979	10-1392	1.0	LANL	UPLOAD BOTH, USE HIGHER
1023f2301.d	1202026169	JAO	28-JAN-2010 11:04	945979	10-1392	1.0	QC A	UPLOAD BOTH, USE HIGHER
1024f2401.d	1202026170	JAO	28-JAN-2010 11:15	945979	10-1392	1.0	QC A	UPLOAD BOTH, USE HIGHER
1025f2501.d	245394003	JAO	28-JAN-2010 11:26	945979	10-1392	1.0	LANL	UPLOAD BOTH, USE HIGHER
1026f2601.d	245394004	JAO	28-JAN-2010 11:37	945979	10-1392	1.0	LANL	UPLOAD BOTH, USE HIGHER
1027f2701.d	245394005	JAO	28-JAN-2010 11:48	945979	10-1392	1.0	LANL	UPLOAD BOTH, USE HIGHER
1028f2801.d	245394006	JAO	28-JAN-2010 11:59	945979	10-1392	1.0	LANL	DUSE, RERUN 5X FILE 51
1029f2901.d	WAR100104-60 03	JAO	28-JAN-2010 12:10		1012810	1.0		PASSES BOTH COLUMNS
1030f3001.d	WAR100105-99 04	JAO	28-JAN-2010 12:21		1012810	1.0		CLEAN
1031f3101.d	1202025574	JAO	28-JAN-2010 13:14	945758	10-1364	1.0	QC A	UPLOAD BOTH, USE HIGHER
1032f3201.d	1202025575	JAO	28-JAN-2010 13:25	945758	10-1364	1.0	QC A	UPLOAD BOTH, USE HIGHER
1033f3301.d	245312001	JAO	28-JAN-2010 13:36	945758	10-1364	1.0	LANL	UPLOAD BOTH, USE HIGHER
1034f3401.d	1202025576	JAO	28-JAN-2010 13:47	945758	10-1364	1.0	QC A	UPLOAD BOTH, USE HIGHER
1035f3501.d	1202025577	JAO	28-JAN-2010 13:58	945758	10-1364	1.0	QC A	UPLOAD BOTH, USE HIGHER

Instrument Batch: /chem/ecd2a.i/012810.b

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Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
1036f3601.d	245312002	JAO	28-JAN-2010 14:13	945758	10-1364	5.0	LANL	UPLOAD BOTH, USE HIGHER
1037f3701.d	245312003	JAO	28-JAN-2010 14:24	945758	10-1364	5.0	LANL	UPLOAD BOTH, USE HIGHER
1038f3801.d	245312004	JAO	28-JAN-2010 14:35	945758	10-1364	5.0	LANL	UPLOAD BOTH, USE HIGHER
1039f3901.d	245312005	JAO	28-JAN-2010 14:46	945758	10-1364	5.0	LANL	UPLOAD BOTH, USE HIGHER
1040f4001.d	245312006	JAO	28-JAN-2010 14:57	945758	10-1364	1.0	LANL	UPLOAD BOTH, USE HIGHER
1041f4101.d	WAR100104-60 04	JAO	28-JAN-2010 15:08		1012810	1.0		PASSES BOTH COLUMNS

1042f4201.d	WAR100105-99 05	JAOC	128-JAN-2010 15:19	1	1012810	1	1.01	1	CLEAN	
1043f4301.d	245312007	JAOC	128-JAN-2010 15:31	1945758	110-1364	1	1.01	LANL	1	UPLOAD BOTH, USE HIGHER
1044f4401.d	245312008	JAOC	128-JAN-2010 15:42	1945758	110-1364	1	1.01	LANL	1	UPLOAD BOTH, USE HIGHER
1045f4501.d	245312009	JAOC	128-JAN-2010 15:53	1945758	110-1364	1	1.01	LANL	1	UPLOAD BOTH, USE HIGHER
1046f4601.d	245312010	JAOC	128-JAN-2010 16:04	1945758	110-1364	1	1.01	LANL	1	UPLOAD BOTH, USE HIGHER
1047f4701.d	245312011	JAOC	128-JAN-2010 16:15	1945758	110-1364	1	1.01	LANL	1	UPLOAD BOTH, USE HIGHER
1048f4801.d	245312012	JAOC	128-JAN-2010 16:26	1945758	110-1364	1	5.01	LANL	1	UPLOAD BOTH, USE HIGHER
1049f4901.d	245312013	JAOC	128-JAN-2010 16:37	1945758	110-1364	1	1.01	LANL	1	UPLOAD BOTH, USE HIGHER
1050f5001.d	245312014	JAOC	128-JAN-2010 16:48	1945758	110-1364	1	1.01	LANL	1	UPLOAD BOTH, USE HIGHER
1051f5101.d	245394006	JAOC	128-JAN-2010 16:59	1945979	110-1392	1	5.01	LANL	1	UPLOAD BOTH, USE HIGHER
1052f5201.d	WAR100104-60 05	JAOC	128-JAN-2010 17:10	1	1012810	1	1.01	1	PASSES BOTH COLUMNS	
1053f5301.d	WAR100105-99 06	JAOC	128-JAN-2010 17:21	1	1012810	1	1.01	1	CLEAN	

Data File: /chem/ecd2a.i/012810.b/023b2301.d
Report Date: 28-Jan-2010 11:33

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/023b2301.d
Lab Smp Id: 1202026169 Client Smp ID: RE15-10-7874MS
Inj Date : 28-JAN-2010 11:04
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |1202026169|1|
Misc Info : |ECD82P_1\$|945979|SVA|QC A|SOIL|MS|||
Comment :
Method : /chem/ecd2a.i/012810.b/ECD2-B-8082-111209A.m
Meth Date : 28-Jan-2010 11:03 jen01212 Quant Type: ESTD
Cal Date : 21-JAN-2010 08:45 Cal File: 010b1001.d
Als bottle: 23 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1392.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	30.04000	Weight of sample extracted (g)
M	4.11510	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS

RT	EXP RT	DLT RT	ON-COL	FINAL	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO
=====								
CAS #: 877-09-8								
2.067	2.067	0.000	16906491	121.144	4.2	80.00- 120.00	100.00	

CAS #: 2051-24-3								
6.298	6.297	0.001	18129870	145.561	5.0	80.00- 120.00	100.00	

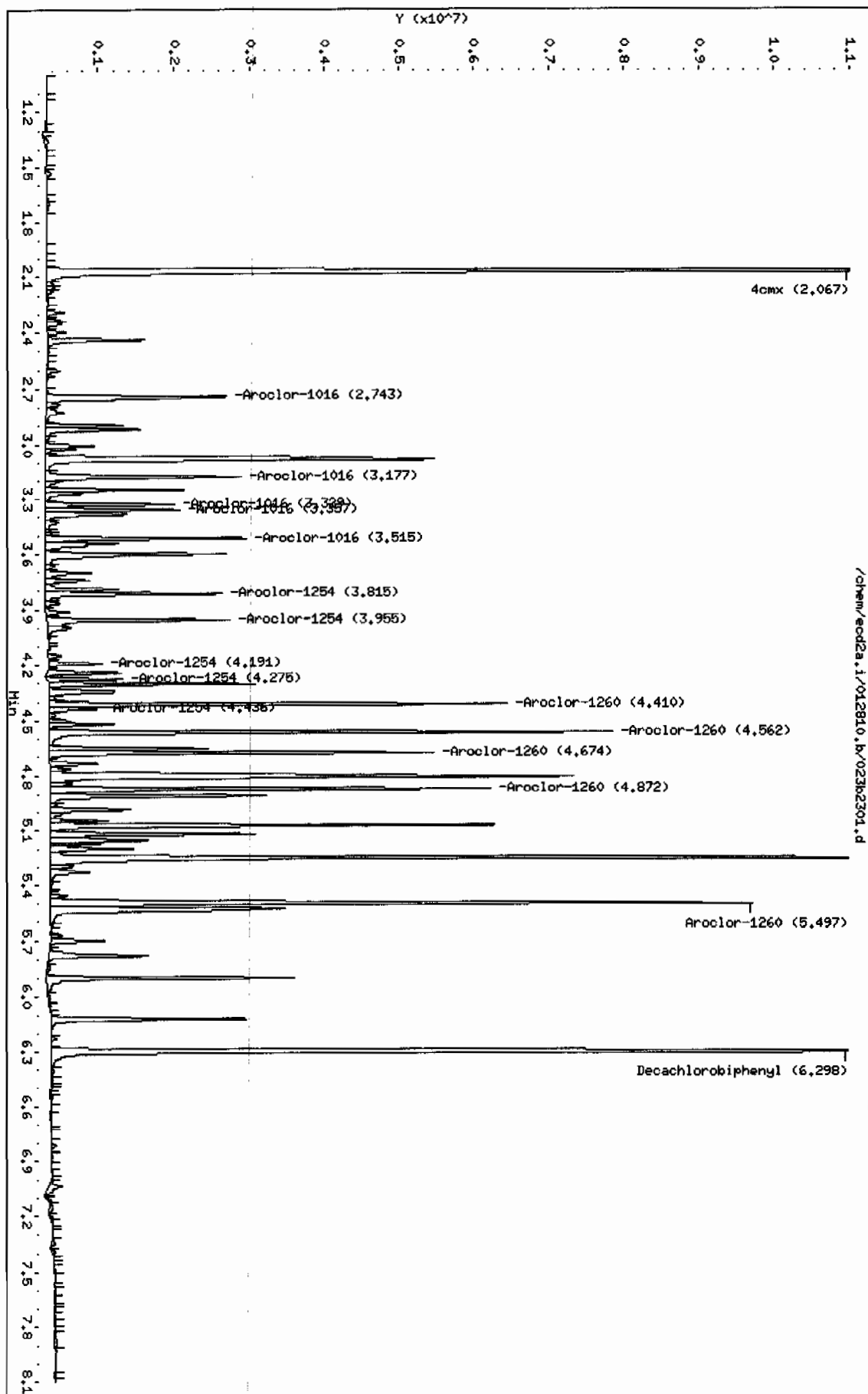
CAS #: 12674-11-2								
2.743	2.742	0.001	2975871	662.883	23.0	80.00- 120.00	100.00	
3.177	3.177	0.000	2563795	746.563	25.9	59.06- 99.06	86.15	
3.329	3.327	0.002	1466508	726.940	25.2	25.71- 65.71	49.28	
3.357	3.356	0.001	1593785	756.938	26.3	28.12- 68.12	53.56	
3.515	3.515	0.000	2229849	797.951	27.7	44.81- 84.81	74.93	
Average of Peak Concentrations =					25.6			

CONCENTRATIONS						
			ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO
---	-----	-----	-----	-----	-----	-----
6 Aroclor-1254				CAS #: 11097-69-1		
3.815	3.815	0.000	2305298	462.419	16.0 80.00- 120.00	100.00
3.955	3.956	-0.001	2259834	389.697	13.5 94.13- 134.13	98.03
4.191	4.193	-0.002	654361	162.655	5.6 61.98- 101.98	28.39
4.275	4.274	0.001	740471	95.7748	3.3 136.55- 176.55	32.12
4.436	4.437	-0.001	567754	101.234	3.5 92.78- 132.78	24.63
Average of Peak Concentrations =				8.4		

7 Aroclor-1260				CAS #: 11096-82-5		
4.410	4.411	-0.001	5181249	895.604	31.1 80.00- 120.00	100.00
4.562	4.562	0.000	6606489	909.591	31.6 106.27- 146.27	127.51
4.674	4.674	0.000	4608343	920.901	32.0 66.48- 106.48	88.94
4.872	4.872	0.000	5142506	887.376	30.8 78.00- 118.00	99.25
5.497	5.497	0.000	9204106	979.739	34.0 140.50- 180.50	177.64
Average of Peak Concentrations =				31.9		

Data File: /chem/eod2a.i/012810.b/02362301.d
 Date : 28-JAN-2010 11:04
 Client ID: REIS-10-7874HS
 Sample Info: 1120202616911
 Volume Injected (uL): 1.0
 Column phase: CLP2

Instrument: eod2a.i
 Operator: J90C
 Column diameter: 0.25



Data File: /chem/ecd2a.i/012810.b/023f2301.d
 Report Date: 28-Jan-2010 11:34

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RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/023f2301.d
 Lab Smp Id: 1202026169 Client Smp ID: RE15-10-7874MS
 Inj Date : 28-JAN-2010 11:04
 Operator : JAOC Inst ID: ecd2a.i
 Smp Info : |1202026169|1|
 Misc Info : |ECD82P_1\$|945979|SVA|QC A|SOIL|MS|||
 Comment :
 Method : /chem/ecd2a.i/012810.b/ECD2-F-8082-111209A.m
 Meth Date : 28-Jan-2010 11:03 jen01212 Quant Type: ESTD
 Cal Date : 21-JAN-2010 08:45 Cal File: 010f1001.d
 Als bottle: 23 QC Sample: MS
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: 10-1392.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	30.04000	Weight of sample extracted (g)
M	4.11510	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS

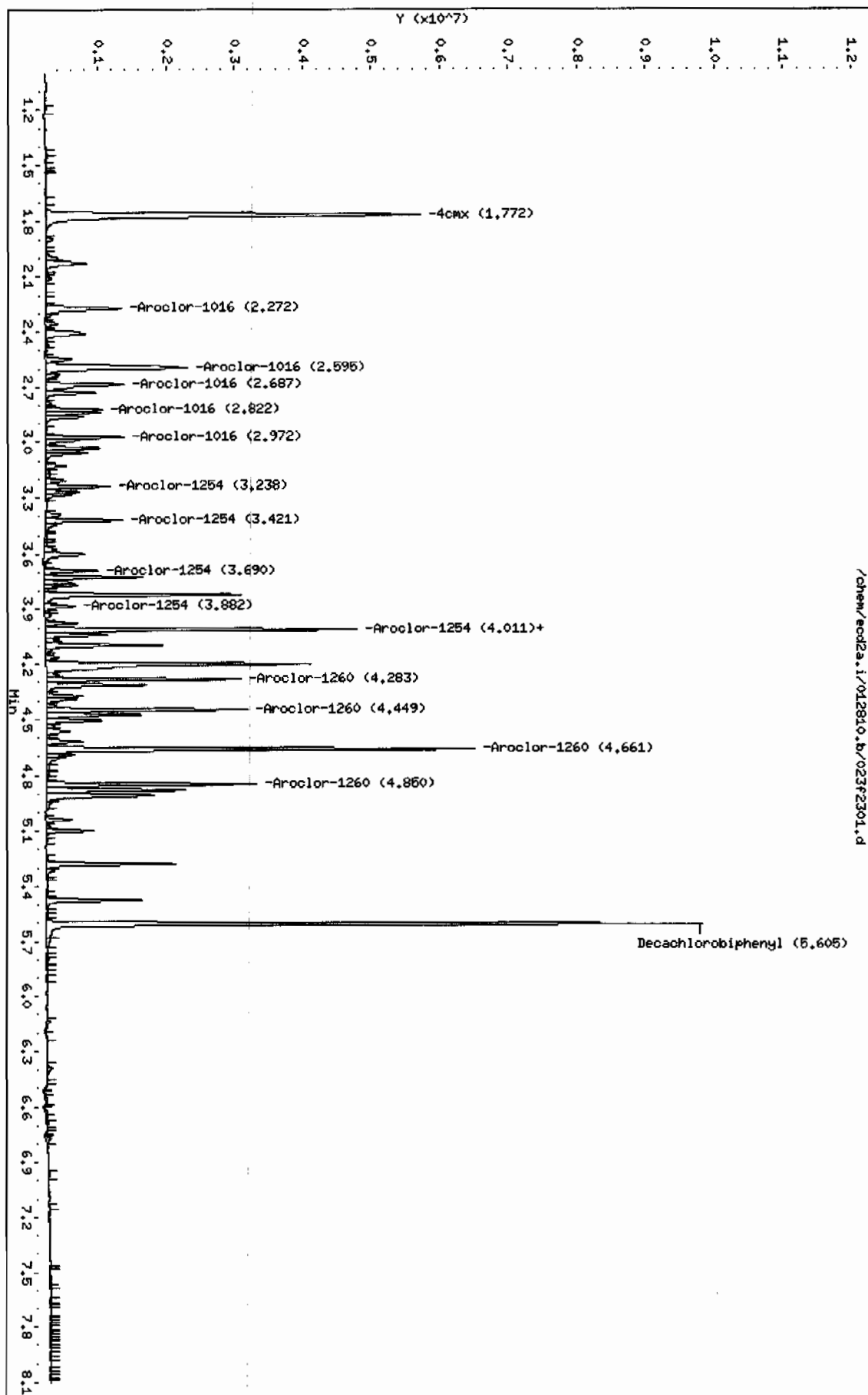
RT	EXP RT	DLT RT	RESPONSE (ug/L)	ON-COL	FINAL	TARGET RANGE	RATIO
\$ 11 4cmx						CAS #: 877-09-8	
1.772	1.770	0.002	7792486 116.249	4.0	80.00- 120.00	100.00	
\$ 12 Decachlorobiphenyl						CAS #: 2051-24-3	
5.605	5.604	0.001	8833374 139.329	4.8	80.00- 120.00	100.00	
1 Aroclor-1016						CAS #: 12674-11-2	
2.272	2.271	0.001	1414142 626.313	21.7	80.00- 120.00	100.00	
2.595	2.595	0.000	3255242 703.241	24.4	194.16- 234.16	230.19	
2.687	2.685	0.002	1315669 692.347	24.0	65.88- 105.88	93.04	
2.822	2.820	0.002	720216 732.301	25.4	24.35- 64.35	50.93	
2.972	2.971	0.001	1090278 751.758	26.1	45.99- 85.99	77.10	
Average of Peak Concentrations =				24.3			

CONCENTRATIONS								
			ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/Kg)	TARGET RANGE		RATIO
==	=====	=====	=====	=====	=====	=====	=====	=====
6 Aroclor-1254					CAS #: 11097-69-1			
3.238	3.239	-0.001	867082	416.856	14.5	80.00-	120.00	100.00
3.421	3.422	-0.001	1011788	364.985	12.7	112.37-	152.37	116.69
3.690	3.691	-0.001	711020	189.990	6.6	163.94-	203.94	82.00
3.882	3.884	-0.002	501264	180.136	6.2	115.35-	155.35	57.81
4.011	4.012	-0.001	3956570	1433.52	49.8	118.56-	158.56	456.31
Average of Peak Concentrations =					18.0			

7 Aroclor-1260					CAS #: 11096-82-5			
4.011	4.011	0.000	3956570	919.563	31.9	80.00-	120.00	100.00
4.283	4.282	0.001	2450661	878.049	30.5	42.81-	82.81	61.94
4.449	4.449	0.000	2552780	890.455	30.9	45.95-	85.95	64.52
4.661	4.661	0.000	5563056	845.553	29.4	132.37-	172.37	140.60
4.850	4.850	0.000	2690086	842.412	29.2	53.57-	93.57	67.99
Average of Peak Concentrations =					30.4			

Data File: /chem/ecd2a.i/012810.b/023f2301.d
Date: 28-JUN-2010 11:04
Client ID: REIS-10-7874HS
Sample Info: 11202026169111
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd2a.i
Operator: JROC
Column diameter: 0.25



Data File: /chem/ecd2a.i/012810.b/024b2401.d
 Report Date: 28-Jan-2010 11:34

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RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/024b2401.d
 Lab Smp Id: 1202026170 Client Smp ID: RE15-10-7874MSD
 Inj Date : 28-JAN-2010 11:15
 Operator : JAOC Inst ID: ecd2a.i
 Smp Info : |1202026170|1|
 Misc Info : |ECD82P_1\$|945979|SVA|QC A|SOIL|MSD|||
 Comment :
 Method : /chem/ecd2a.i/012810.b/ECD2-B-8082-111209A.m
 Meth Date : 28-Jan-2010 11:03 jen01212 Quant Type: ESTD
 Cal Date : 21-JAN-2010 08:45 Cal File: 010b1001.d
 Als bottle: 24 QC Sample: MSD
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: 10-1392.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	30.13000	Weight of sample extracted (g)
M	4.11510	% 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	
2.068	2.067	0.001	18233519	130.653	4.5 80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3	
6.297	6.297	0.000	17260834	138.584	4.8 80.00- 120.00	100.00

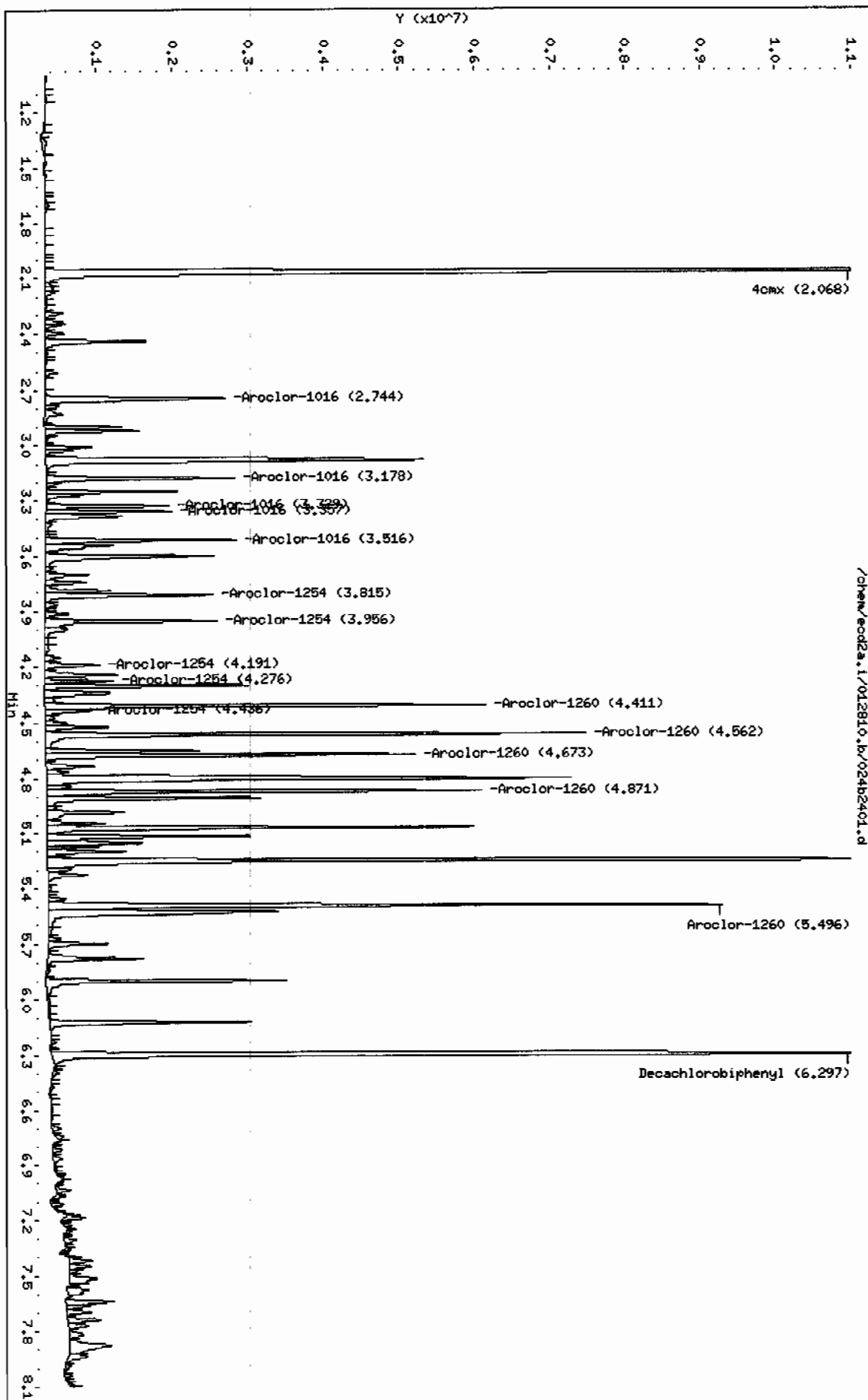
1 Aroclor-1016					CAS #: 12674-11-2	
2.744	2.742	0.002	2956190	658.499	22.8 80.00- 120.00	100.00
3.178	3.177	0.001	2396416	697.823	24.2 59.06- 99.06	81.06
3.329	3.327	0.002	1365410	676.827	23.4 25.71- 65.71	46.19
3.357	3.356	0.001	1478515	702.193	24.3 28.12- 68.12	50.01
3.516	3.515	0.001	2074698	742.431	25.7 44.81- 84.81	70.18
Average of Peak Concentrations =			24.1			

CONCENTRATIONS								
			ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/Kg)	TARGET RANGE		RATIO
==	=====	=====	=====	=====	=====	=====	=====	=====
6 Aroclor-1254					CAS #: 11097-69-1			
3.815	3.815	0.000	2133733	428.005	14.8	80.00~	120.00	100.00
3.956	3.956	0.000	2171131	374.401	13.0	94.13~	134.13	101.75
4.191	4.193	-0.002	747621	185.837	6.4	61.98~	101.98	35.04
4.276	4.274	0.002	734159	94.9584	3.3	136.55~	176.55	34.41
4.436	4.437	-0.001	573795	102.312	3.5	92.78~	132.78	26.89
Average of Peak Concentrations =					8.2			

7 Aroclor-1260					CAS #: 11096-82-5			
4.411	4.411	0.000	5020415	867.803	30.0	80.00~	120.00	100.00
4.562	4.562	0.000	6442825	887.058	30.7	106.27~	146.27	128.33
4.673	4.674	-0.001	4459665	891.190	30.8	66.48~	106.48	88.83
4.871	4.872	-0.001	5010178	864.541	29.9	78.00~	118.00	99.80
5.496	5.497	-0.001	8891169	946.428	32.8	140.50~	180.50	177.10
Average of Peak Concentrations =					30.8			

Data File: /chem/eod2a.i/012810.b/024b2401.d
 Date: 28-JAN-2010 11:15
 Client ID: RE15-10-7874MSD
 Sample Info: 1120202617011
 Volume Injected (uL): 1.0
 Column phase: CLP2

Instrument: eod2a.1
 Operator: JROC
 Column diameter: 0.25



Data File: /chem/ecd2a.i/012810.b/024f2401.d
 Report Date: 28-Jan-2010 11:35

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RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/024f2401.d
 Lab Smp Id: 1202026170 Client Smp ID: RE15-10-7874MSD
 Inj Date : 28-JAN-2010 11:15
 Operator : JAOC Inst ID: ecd2a.i
 Smp Info : |1202026170|1|
 Misc Info : |ECD82P_1\$|945979|SVA|QC A|SOIL|MSD|
 Comment :
 Method : /chem/ecd2a.i/012810.b/ECD2-F-8082-111209A.m
 Meth Date : 28-Jan-2010 11:03 jen01212 Quant Type: ESTD
 Cal Date : 21-JAN-2010 08:45 Cal File: 010f1001.d
 Als bottle: 24 QC Sample: MSD
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: 10-1392.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	30.13000	Weight of sample extracted (g)
M	4.11510	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS						
			ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO

\$ 11 4cmx				CAS #: 877-09-8		
1.772	1.770	0.002	8323518 124.171	4.3	80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3		
5.605	5.604	0.001	8566767 135.124	4.7	80.00- 120.00	100.00

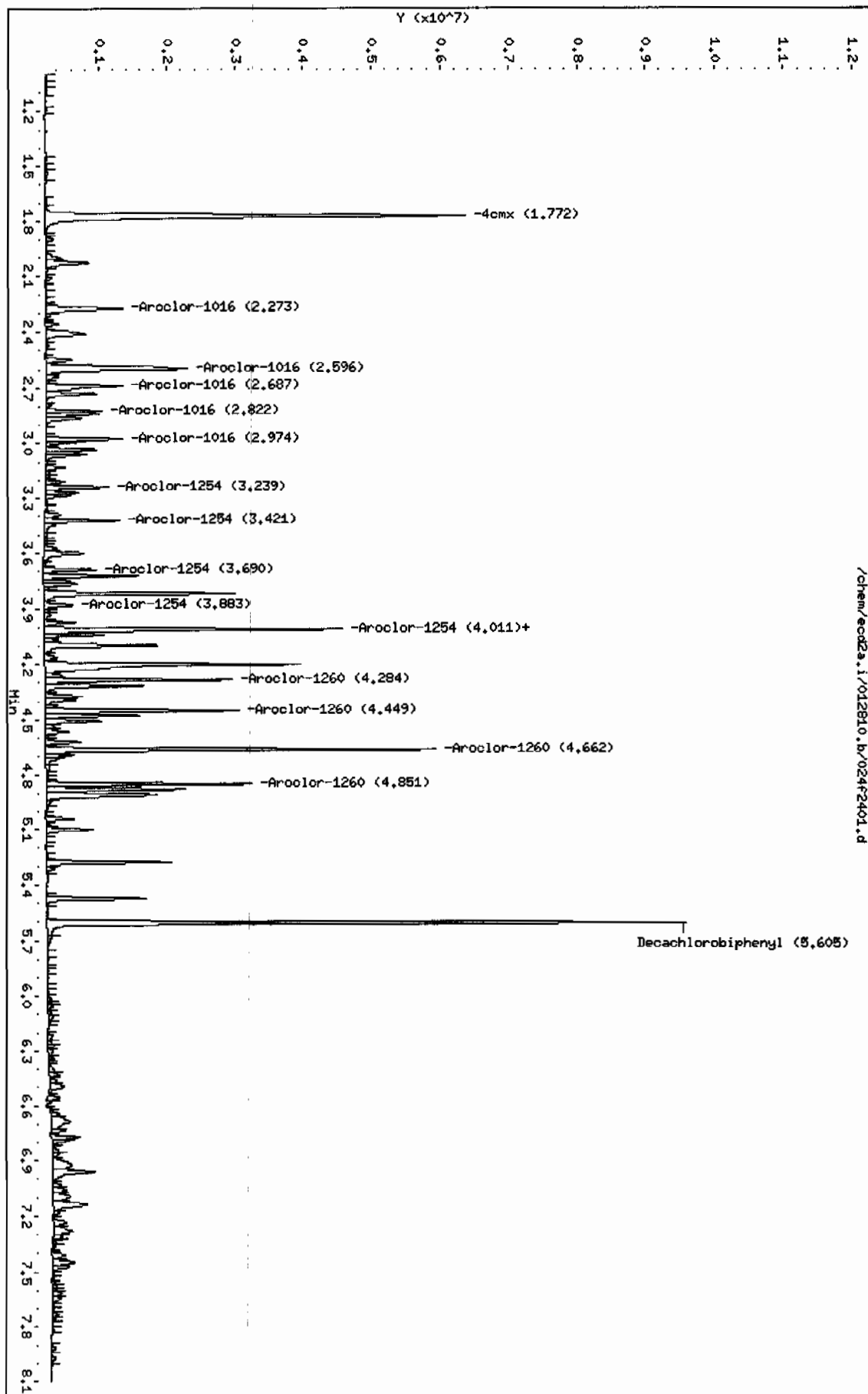
1 Aroclor-1016				CAS #: 12674-11-2		
2.273	2.271	0.002	1405803 622.620	21.6	80.00- 120.00	100.00
2.596	2.595	0.001	3150164 680.541	23.6	194.16- 234.16	224.08
2.687	2.685	0.002	1305014 686.740	23.8	65.88- 105.88	92.83
2.822	2.820	0.002	659326 670.390	23.2	24.35- 64.35	46.90
2.974	2.971	0.003	1039354 716.646	24.8	45.99- 85.99	73.93
Average of Peak Concentrations =				23.4		

CONCENTRATIONS								
			ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/Kg)	TARGET RANGE		RATIO
==	=====	=====	=====	=====	=====	=====	=====	=====
6 Aroclor-1254					CAS #: 11097-69-1			
3.239	3.239	0.000	817567	393.051	13.6	80.00-	120.00	100.00
3.421	3.422	-0.001	960655	346.539	12.0	112.37-	152.37	117.50
3.690	3.691	-0.001	680478	181.829	6.3	163.94-	203.94	83.23
3.883	3.884	-0.001	491334	176.567	6.1	115.35-	155.35	60.10
4.011	4.012	-0.001	3783495	1370.81	47.4	118.56-	158.56	462.77
Average of Peak Concentrations =					17.1			

7 Aroclor-1260					CAS #: 11096-82-5			
4.011	4.011	0.000	3783495	879.338	30.4	80.00-	120.00	100.00
4.284	4.282	0.002	2407684	862.651	29.8	42.81-	82.81	63.64
4.449	4.449	0.000	2490280	868.653	30.1	45.95-	85.95	65.82
4.662	4.661	0.001	5108700	776.493	26.9	132.37-	172.37	135.03
4.851	4.850	0.001	2630949	823.893	28.5	53.57-	93.57	69.54
Average of Peak Concentrations =					29.1			

Data File: /chem/ecd2a.i/012810.b/024f2401.d
Date : 28-JAN-2010 11:15
Client ID: REIS-10-7874MSD
Sample Info: 11202026170111
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd2a.i
Operator: JAC
Column diameter: 0.25



Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 945978
 Analyst: Andrew Schwemin
 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)	Clean/Prepped Aliquot (mL)	Prepped Factor (mL/g)
1202026167 MB	27-JAN-2010 20:26:22	30	H2SO4/KM2	2	9	1	0.03333	
1202026168 LCS	27-JAN-2010 20:26:22	30	H2SO4/KM2	2	9	1	0.03333	
245387001	27-JAN-2010 20:26:22	30.06	H2SO4/KM2	2	9	1	0.03327	
245387002	27-JAN-2010 20:26:22	30.19	H2SO4/KM2	2	9	1	0.03312	
245387003	27-JAN-2010 20:26:22	30.16	H2SO4/KM2	2	9	1	0.03316	
245391010	27-JAN-2010 20:26:22	30.12	H2SO4/KM2	2	9	1	0.0332	
245391011	27-JAN-2010 20:26:22	30.15	H2SO4/KM2	2	9	1	0.03317	
245394001	27-JAN-2010 20:26:22	30.01	H2SO4/KM2	2	9	1	0.03332	
245394002	27-JAN-2010 20:26:22	30.08	H2SO4/KM2	2	9	1	0.03324	
1202026169 MS (245394002)	27-JAN-2010 20:26:22	30.04	H2SO4/KM2	2	9	1	0.03329	
1202026170 MSD (245394002)	27-JAN-2010 20:26:22	30.13	H2SO4/KM2	2	9	1	0.03319	
245394003	27-JAN-2010 20:26:22	30.07	H2SO4/KM2	2	9	1	0.03326	
245394004	27-JAN-2010 20:26:22	30.05	H2SO4/KM2	2	9	1	0.03328	
245394005	27-JAN-2010 20:26:22	30.02	H2SO4/KM2	2	9	1	0.03331	
245394006	27-JAN-2010 20:26:22	30.19	H2SO4/KM2	2	9	1	0.03312	
Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:		
LCS	1202026168	PCB Laboratory Control	WE100126-07	1	mL	Clean up Date: 01/27/10		
MS	1202026169	PCB Laboratory Control	WE100126-07	1	mL	Clean up Initials: AJS		
MSD	1202026170	PCB Laboratory Control	WE100126-07	1	mL	Verified By: AV		
SURR	All	PEST LOW LEVEL SURROGATE 200 UG/L	UE100108-15	1	mL	Final Solvent: Hexane		
REGNT	All	Acetone	1259670	150	mL	Clean Up SOP: GL-OA-E-037		
REGNT	All	Hexane	1259672-B2	150	mL			
REGNT	All	1:1 sulfuric acid	1260695a	5	mL			
REGNT	All	5% Potassium Permanganate	B1202457-F	5	mL			
SOURC	All	SODIUM SULFATE	1256907	30	g			

LC/MS/MS PERCHLORATE ANALYSIS

**Perchlorate by LC/MSMS
Los Alamos National Laboratory (LANL)
SDG 10-1390**

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: 947108

Prep Batch Number: 947103

Sample Analysis

Sample ID	Client ID
245391001	RE15-10-7918
245391002	RE15-10-7915
245391003	RE15-10-7920
245391004	RE15-10-7914
245391005	RE15-10-7919
245391006	RE15-10-7921
245391007	RE15-10-7916
245391008	RE15-10-7917
245391009	RE15-10-7922
245391010	RE15-10-8053
245391011	RE15-10-8054
1202028743	Interference Check Sample (ICS)
1202028739	Method Blank (MB)
1202028740	Laboratory Control Sample (LCS)
1202028741	245391001(RE15-10-7918) Matrix Spike (MS)
1202028742	245391001(RE15-10-7918) Matrix Spike Duplicate (MSD)

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

10-1390-PERLCMS

Page 1 of 4

Preparation/Analytical Method Verification

SOP Reference

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

Calibration Information

Initial Calibration

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

CCV Requirements

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

CCB Requirements

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

CCV Requirements

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

Low Level Standard (CRI) Requirements

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

Quality Control (QC) Information

Method Blank (MB) Statement

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

Interference Check Sample (ICS)

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

Laboratory Control Sample (LCS) Recovery

The LCS spike recoveries met the acceptance limits.

QC Sample Designation

Sample 245391001 (RE15-10-7918) 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.

10-1390-PERLCMS

Page 2 of 4

Retention Time

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

Technical Information

Holding Time Specifications

All samples in this SDG in this analytical batch met the specified holding time. GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection or 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

On 02/04/10 the sequence was terminated early due to an instrument error. The remaining samples, 245391006 (RE15-10-7921), 245391007 (RE15-10-7916), 245391008 (RE15-10-7917), 245391009 (RE15-10-7922), 245391010 (RE15-10-8053) and 245391011 (RE15-10-8054), were analyzed the following day.

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: Hebert M. Mauer

Date: 02/09/10

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SAMPLE DATA SUMMARY

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 247103
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE15-10-7918
 Date Received: 23-JAN-10
 GEL Job No (SDG): 10-1390
 GEL Sample ID: 245391001
 Date Filtered: 03-FEB-10
 Injection Volume (uL): 20
 %Solids: 90.4

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.553	2.21	1.81	ug/kg	J	1	04-FEB-10 19:47	per0204049a
	Perchlorate Isotope Ratio			3.14			1	04-FEB-10 19:47	per0204049a
14797-73-0	Perchlorate-101	.553	2.21	1.84	ug/kg	J	1	04-FEB-10 19:47	per0204049a
	Perchlorate-O(18)			6.17	ug/kg		1	04-FEB-10 19:47	per0204049a

[^] 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 perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC Client Sample No. RE15-10-7915

Lab Code: GEL Date Received: 23-JAN-10

Instrument: LCMSMS GEL Job No (SDG): 10-1390

Method: SW846 6850 Modified GEL Sample ID: 245391002

Matrix: SOIL Date Filtered: 03-FEB-10

Extraction Batch ID: 247103 Injection Volume (uL): 20

Extraction Type: Solid Prep %Solids: 82

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.612	2.45	0.612	ug/kg	U	1	04-FEB-10 20:08	per0204052a
	Perchlorate Isotope Ratio						1	04-FEB-10 20:08	per0204052a
14797-73-0	Perchlorate-101	.612	2.45	0.612	ug/kg	U	1	04-FEB-10 20:08	per0204052a
	Perchlorate-O(18)			6.39	ug/kg		1	04-FEB-10 20:08	per0204052a

[^] 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

Client Sample No.

RE15-10-7920Lab Code: GELInstrument: LCMSMSDate Received: 23-JAN-10Method: SW846 6850 ModifiedGEL Job No (SDG): 10-1390Matrix: SOILGEL Sample ID: 245391003Extraction Batch ID: 247103Date Filtered: 03-FEB-10Extraction Type: Solid PrepInjection Volume (uL): 20Sample Volume/Weight: 2.00 g%Solids: 96.3Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.519	2.08	0.519	ug/kg	U	1	04-FEB-10 20:15	per0204053a
	Perchlorate Isotope Ratio						1	04-FEB-10 20:15	per0204053a
14797-73-0	Perchlorate-101	.519	2.08	0.519	ug/kg	U	1	04-FEB-10 20:15	per0204053a
	Perchlorate-O(18)			5.55	ug/kg		1	04-FEB-10 20:15	per0204053a

[^] 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

Aliquot

X

%Solids

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 247103
 Extraction Type: Solid Prep
 Client Sample No. RE15-10-7914
 Date Received: 23-JAN-10
 GEL Job No (SDG): 10-1390
 GEL Sample ID: 245391004
 Date Filtered: 03-FEB-10
 Injection Volume (uL): 20
 %Solids: 90.4

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

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.553	2.21	0.553	ug/kg	U	1	04-FEB-10 20:22	per0204054a
	Perchlorate Isotope Ratio						1	04-FEB-10 20:22	per0204054a
14797-73-0	Perchlorate-101	.553	2.21	0.553	ug/kg	U	1	04-FEB-10 20:22	per0204054a
	Perchlorate-O(18)			6.30	ug/kg		1	04-FEB-10 20:22	per0204054a

[^] 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: 247103

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-7919

Date Received: 23-JAN-10

GEL Job No (SDG): 10-1390

GEL Sample ID: 245391005

Date Filtered: 03-FEB-10

Injection Volume (uL): 20

%Solids: 77

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.646	2.58	0.646	ug/kg	U	1	04-FEB-10 20:29	per0204055a
	Perchlorate Isotope Ratio						1	04-FEB-10 20:29	per0204055a
14797-73-0	Perchlorate-101	.646	2.58	0.646	ug/kg	U	1	04-FEB-10 20:29	per0204055a
	Perchlorate-O(18)			7.14	ug/kg		1	04-FEB-10 20:29	per0204055a

[^] 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

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Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 247103
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE15-10-7921
 Date Received: 23-JAN-10
 GEL Job No (SDG): 10-1390
 GEL Sample ID: 245391006
 Date Filtered: 03-FEB-10
 Injection Volume (uL): 20
 % Solids: 82

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.609	2.43	0.609	ug/kg	U	1	05-FEB-10 12:35	per0205012a
	Perchlorate Isotope Ratio						1	05-FEB-10 12:35	per0205012a
14797-73-0	Perchlorate-101	.609	2.43	0.609	ug/kg	U	1	05-FEB-10 12:35	per0205012a
	Perchlorate-O(18)			6.13	ug/kg		1	05-FEB-10 12:35	per0205012a

[^] 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: 947103

Extraction Type: Solid Prep

Client Sample No.

RE15-10-7916

Date Received: 23-JAN-10

GEL Job No (SDG): 10-1390

GEL Sample ID: 245391007

Date Filtered: 03-FEB-10

Injection Volume (uL): 20

%Solids: 93.2

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.536	2.15	0.536	ug/kg	U	1	05-FEB-10 12:42	per0205013a
	Perchlorate Isotope Ratio						1	05-FEB-10 12:42	per0205013a
14797-73-0	Perchlorate-101	.536	2.15	0.536	ug/kg	U	1	05-FEB-10 12:42	per0205013a
	Perchlorate-O(18)			5.38	ug/kg		1	05-FEB-10 12:42	per0205013a

[^] 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: 947103

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-7917

Date Received: 23-JAN-10

GEL Job No (SDG): 10-1390

GEL Sample ID: 245391008

Date Filtered: 03-FEB-10

Injection Volume (uL): 20

%Solids: 80

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.627	2.51	0.627	ug/kg	U	1	05-FEB-10 12:49	per0205014a
	Perchlorate Isotope Ratio						1	05-FEB-10 12:49	per0205014a
14797-73-0	Perchlorate-101	.627	2.51	0.627	ug/kg	U	1	05-FEB-10 12:49	per0205014a
	Perchlorate-O(18)			6.11	ug/kg		1	05-FEB-10 12:49	per0205014a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1
Aliquot %Solids

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 247103

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-7922

Date Received: 23-JAN-10

GEL Job No (SDG): 10-1390

GEL Sample ID: 245391002

Date Filtered: 03-FEB-10

Injection Volume (uL): 20

%Solids: 20.1

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.555	2.22	0.587	ug/kg	J	1	05-FEB-10 12:56	per0205015a
	Perchlorate Isotope Ratio			3.07			1	05-FEB-10 12:56	per0205015a
14797-73-0	Perchlorate-101	.555	2.22	0.629	ug/kg	J	1	05-FEB-10 12:56	per0205015a
	Perchlorate-O(18)			5.95	ug/kg		1	05-FEB-10 12:56	per0205015a

[^] 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: 947103

Extraction Type: Solid Prep

Client Sample No.

RE15-10-8053

Date Received: 23-JAN-10

GEL Job No (SDG): 10-1390

GEL Sample ID: 245391010

Date Filtered: 03-FEB-10

Injection Volume (uL): 20

%Solids: 81

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.619	2.48	0.619	ug/kg	U	1	05-FEB-10 13:03	per0205016a
	Perchlorate Isotope Ratio						1	05-FEB-10 13:03	per0205016a
14797-73-0	Perchlorate-101	.619	2.48	0.619	ug/kg	U	1	05-FEB-10 13:03	per0205016a
	Perchlorate-O(18)			6.16	ug/kg		1	05-FEB-10 13:03	per0205016a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1 %Solids
Aliquot

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 247103
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE15-10-8054
 Date Received: 23-JAN-10
 GEL Job No (SDG): 10-1390
 GEL Sample ID: 245391011
 Date Filtered: 03-FEB-10
 Injection Volume (uL): 20
 %Solids: 90.5

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.552	2.21	2.25	ug/kg		1	05-FEB-10 13:10	per0205017a
	Perchlorate Isotope Ratio			3.24			1	05-FEB-10 13:10	per0205017a
14797-73-0	Perchlorate-101	.552	2.21	2.28	ug/kg		1	05-FEB-10 13:10	per0205017a
	Perchlorate-O(18)			6.05	ug/kg		1	05-FEB-10 13:10	per0205017a

[^] 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): 10-1390

Extract Batch Code: 947103

Date Filtered: 03-FEB-10

Matrix: SOIL

Sample ID: 1202028740

Analyte [^]	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	2.00	2.2	ug/kg	110		70 - 130
Perchlorate Isotope Ratio		3.32				-
Perchlorate-101	2.00	2.12	ug/kg	106		70 - 130
Perchlorate-O(18)		5.14	ug/kg			-

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

Perchlorate Interference Check Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10-1390

Extract Batch Code: 947103

Date Filtered: 03-FEB-10

Matrix: SOIL

Sample ID: 1202028743

Analyte [^]	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	2.00	2.16	ug/kg	108		70 - 130
Perchlorate Isotope Ratio		3.11				
Perchlorate-101	2.00	2.22	ug/kg	111		70 - 130
Perchlorate-O(18)		5	ug/kg			

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

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

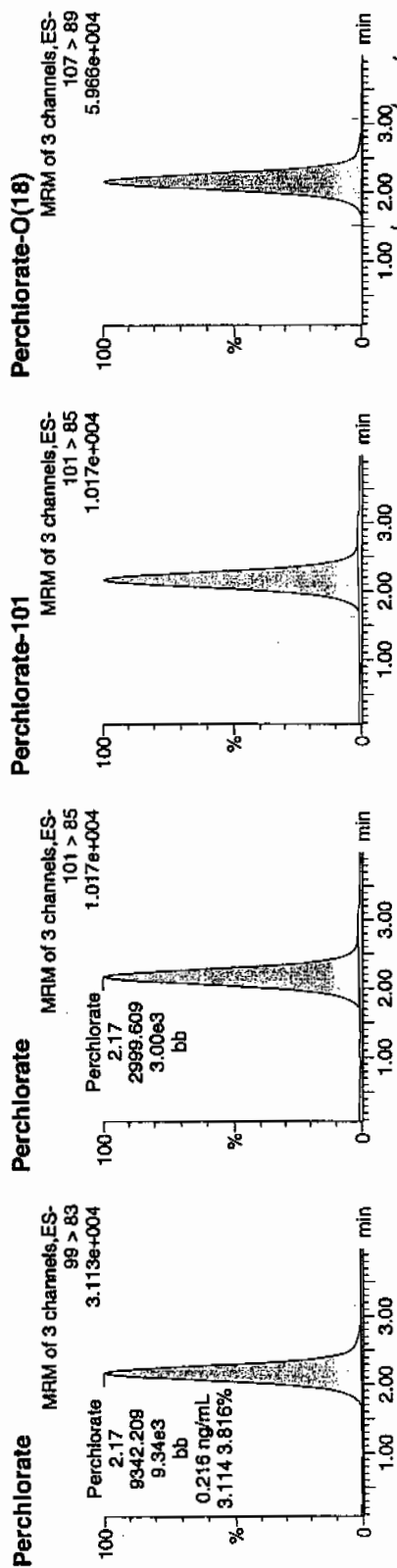
Dataset: C:\MassLynx\Perchlorate.PRO\per020410a.qld

Last Altered: Friday, February 05, 2010 9:19:58 AM Eastern Standard Time
Printed: Friday, February 05, 2010 9:28:02 AM Eastern Standard Time

Name: per0204048a
Date: 04-Feb-2010
Time: 19:40:01
ID: 1202028743
Vial: 2:1,C

02-05-10

LANL | 947108 | 5070 | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
1202028743	Perchlorate	99 > 83	2.17	9342.209	9342.209	bb			0.2159	107.95	7.95	1185.9...	3.11
1202028743	Perchlorate-101	101 > 85	2.17	2999.609	2999.609	bb			0.2216	110.79	10.79	699.022	
1202028743	Perchlorate-O(18)	107 > 89	2.15	17766.137	17766.137	bb			0.5003	100.06	0.06	3164.7...	

Form 6

Perchlorate Spike/Spike Duplicate Summary

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No (SDG): 10-1390

Extract Batch Code: 947103

Date Extracted: 03-FEB-10

GEL MS/PS ID: 1202028741

Client ID: RE15-10-7918

GEL MSD/PSD ID: 1202028742

QC Type: MS

Compound [^]	Spike Added	Sample Conc	Units	MS Conc	MS Rec	#	MSD Conc	MSD Rec	#	RPD	#	RPD Limit	Recovery Limit
Perchlorate	2.21	1.81	ug/kg	4.25	110		4.57	125		7.07		30	75 - 125
Perchlorate Isotope Ratio	0	0.00		3.22			3.36			0			-
Perchlorate-101	2.21	1.84	ug/kg	4.22	108		4.34	113		2.74		30	75 - 125
Perchlorate-O(18)	0	6.17	ug/kg	6.26			6.52			4.09			-

[^] 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

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

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1390

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	04-FEB-10	per0204001a	IPB001
Perchlorate-101	0.00	0	NA	04-FEB-10	per0204001a	IPB001
Perchlorate	0.00	0	NA	04-FEB-10	per0204002a	IPB001
Perchlorate-101	0.00	0	NA	04-FEB-10	per0204002a	IPB001
Perchlorate	0.00	0	NA	05-FEB-10	per0205001a	IPB001
Perchlorate-101	0.00	0	NA	05-FEB-10	per0205001a	IPB001
Perchlorate	0.00	0	NA	05-FEB-10	per0205002a	IPB001
Perchlorate-101	0.00	0	NA	05-FEB-10	per0205002a	IPB001

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

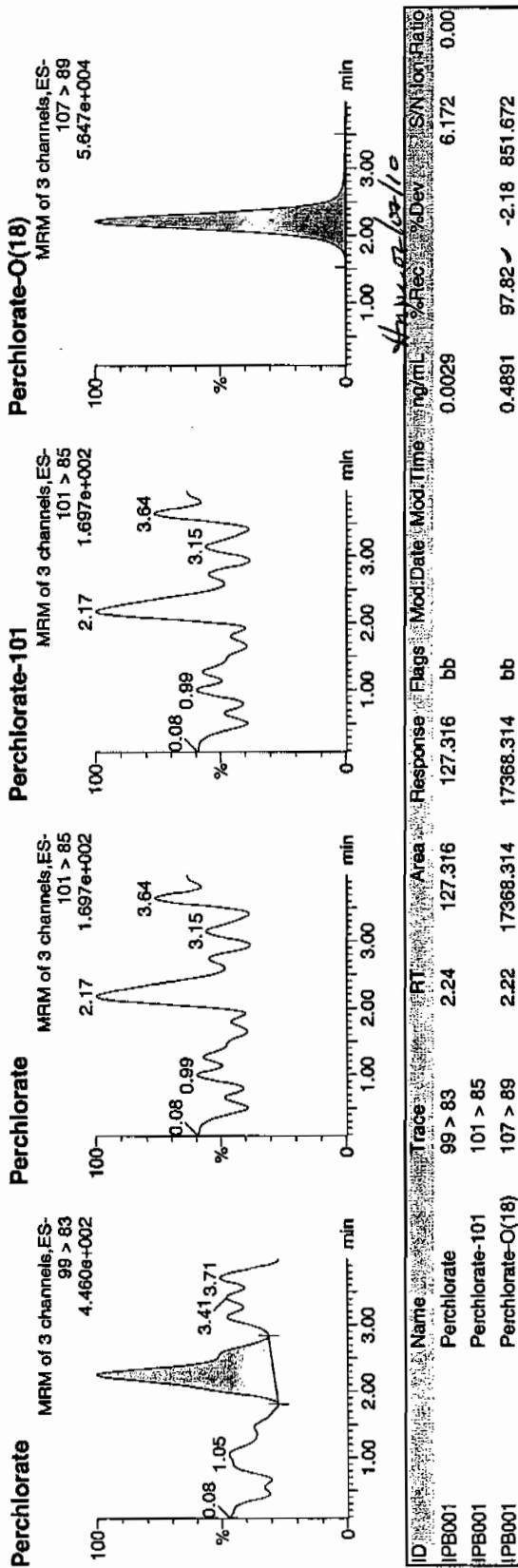
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Last Altered: Friday, February 05, 2010 9:19:58 AM Eastern Standard Time
Printed: Friday, February 05, 2010 9:28:02 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per020410a.mdb 05 Feb 2010 09:19:36
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per020410a.cdb 05 Feb 2010 09:19:57

Name: per0204001a
Date: 04-Feb-2010
Time: 14:04:26
ID: IPB001
Vial: 1:1,A

02-05-10



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

Dataset: C:\MassLynx\Perchlorate.PRO\per020410a.qld

Last Altered: Friday, February 05, 2010 9:19:58 AM Eastern Standard Time
Printed: Friday, February 05, 2010 9:28:02 AM Eastern Standard Time

Name: per0204002a

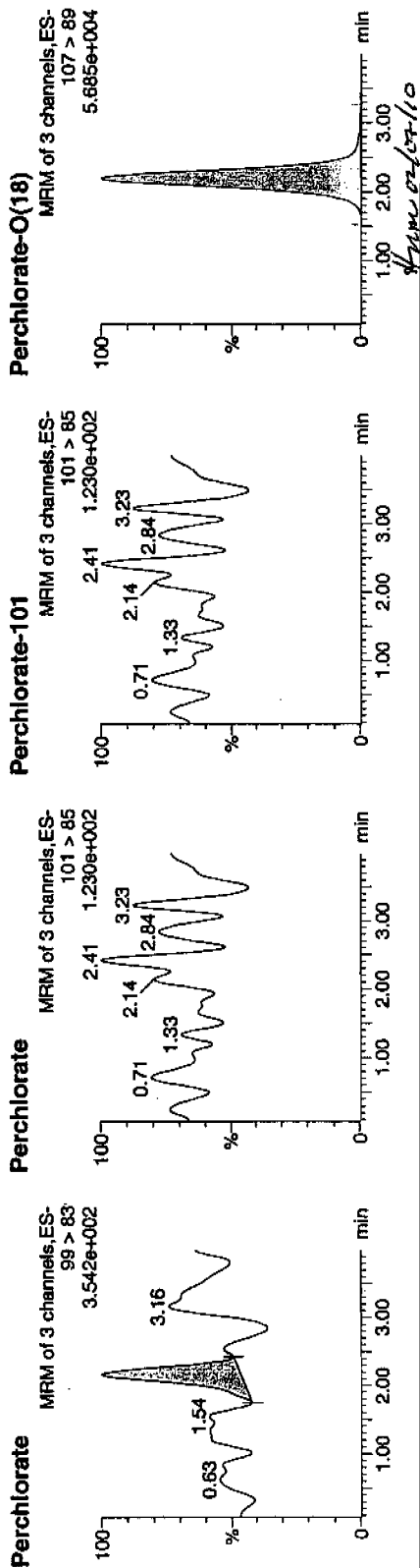
Date: 04-Feb-2010

Time: 14:11:38

ID: IPB001

Vial: 1:1.A

02-05-10



ID	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	Conc (ng/ml)	%Rec	%Dev	SN	Ion Ratio
IPB001	Perchlorate	99 > 83	2.17	51.503	51.503	bb			0.0012			11.899	0.00
IPB001	Perchlorate-101	101 > 85											
IPB001	Perchlorate-O(18)	107 > 89	2.20	17302.453	17302.453	bb			0.4872	97.45	-2.55	5273.6...	

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

Dataset: C:\MassLynx\Perchlorate.PRO\per020510a.qld

Last Altered: Saturday, February 06, 2010 9:57:33 AM Eastern Standard Time
Printed: Saturday, February 06, 2010 10:23:49 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per020510a.mdb 06 Feb 2010 09:50:39
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per020510a.cdb 06 Feb 2010 09:57:31

Name: per0205001a

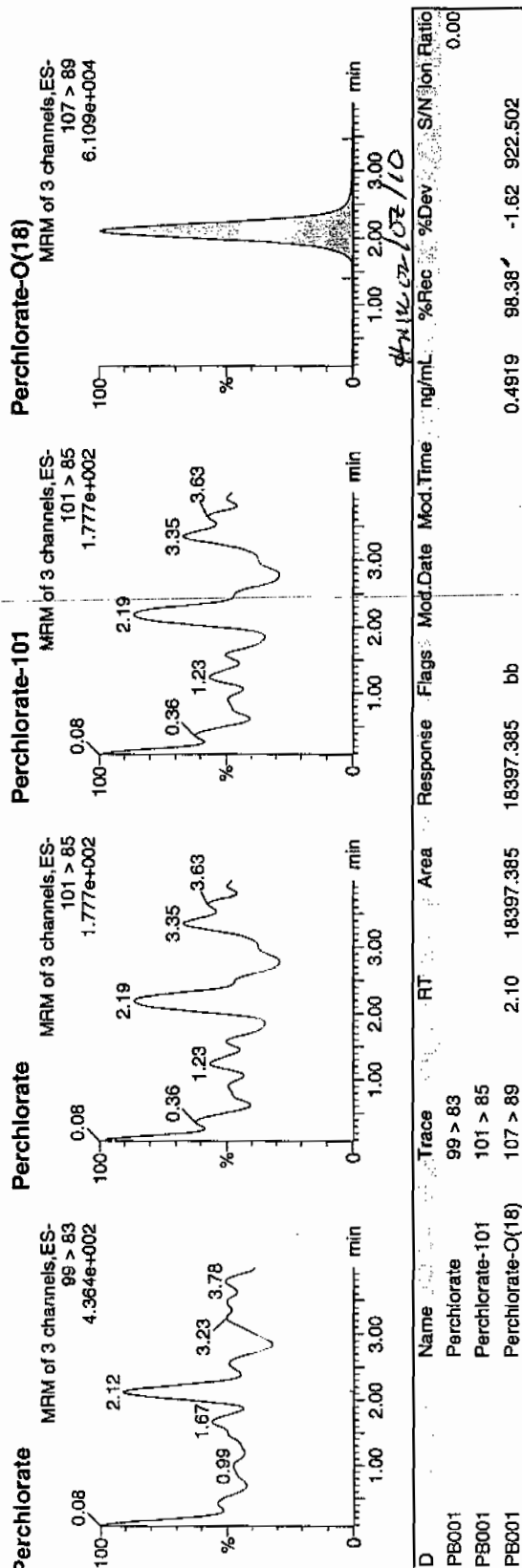
Date: 05-Feb-2010

Time: 11:17:09

ID: IPB001

Vial: 1:1,A

02-06-10



iEL 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\per020510a.qld

Last Altered: Saturday, February 06, 2010 9:57:33 AM Eastern Standard Time
Printed: Saturday, February 06, 2010 10:23:49 AM Eastern Standard Time

Name: per0205002a

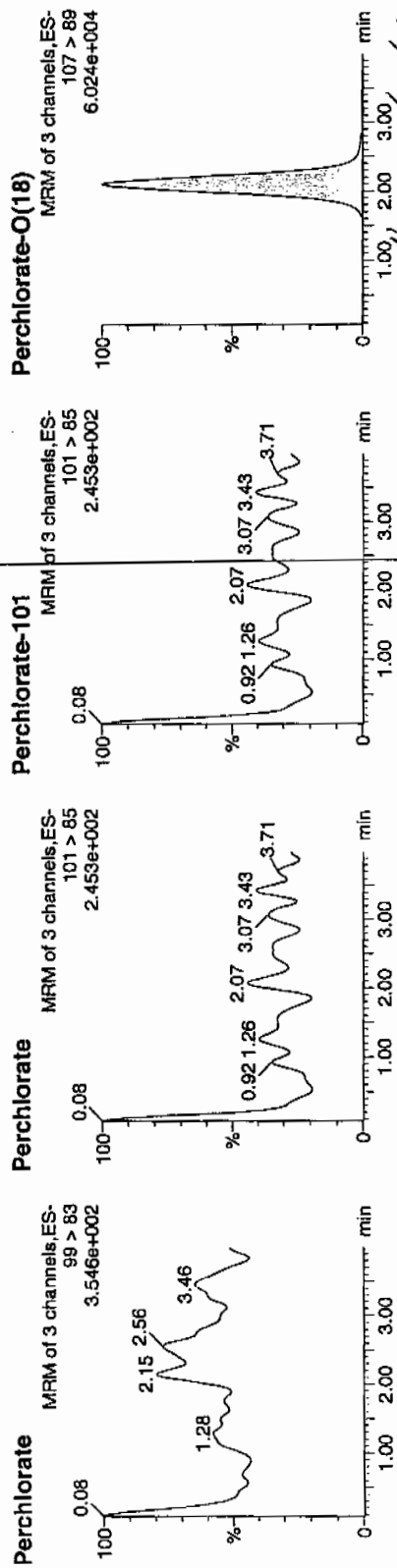
Date: 05-Feb-2010

Time: 11:24:19

ID: IPB001

Vial: 1:1,A

02-06-10



D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
PB001	Perchlorate	99 > 83											0.00
PB001	Perchlorate-101	101 > 85	2.10	18180.080	18180.080	bb			0.4861	97.21	-2.79	3976.9...	
PB001	Perchlorate-O(18)	107 > 89											

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

Perchlorate Continuing Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1390

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	04-FEB-10	per0204008a	IPB002
Perchlorate-101	0.00	0	NA	04-FEB-10	per0204008a	IPB002
Perchlorate	0.00	0	NA	04-FEB-10	per0204010a	IPB003
Perchlorate-101	0.00	0	NA	04-FEB-10	per0204010a	IPB003
Perchlorate	0.00	0	NA	04-FEB-10	per0204022a	IPB004
Perchlorate-101	0.00	0	NA	04-FEB-10	per0204022a	IPB004
Perchlorate	0.00	0	NA	04-FEB-10	per0204033a	IPB005
Perchlorate-101	0.00	0	NA	04-FEB-10	per0204033a	IPB005
Perchlorate	0.00	0	NA	04-FEB-10	per0204044a	IPB006
Perchlorate-101	0.00	0	NA	04-FEB-10	per0204044a	IPB006
Perchlorate	0.00	0	NA	04-FEB-10	per0204057a	IPB007
Perchlorate-101	0.00	0	NA	04-FEB-10	per0204057a	IPB007
Perchlorate	0.00	0	NA	05-FEB-10	per0205008a	IPB002

Perchlorate Continuing Calibration Blank

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-1390

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	05-FEB-10	per0205008a	IPB002
Perchlorate	0.00	0	NA	05-FEB-10	per0205010a	IPB003
Perchlorate-101	0.00	0	NA	05-FEB-10	per0205010a	IPB003
Perchlorate	0.00	0	NA	05-FEB-10	per0205023a	IPB004
Perchlorate-101	0.00	0	NA	05-FEB-10	per0205023a	IPB004

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

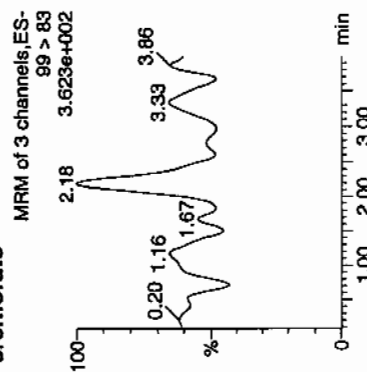
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Last Altered: Friday, February 05, 2010 9:19:58 AM Eastern Standard Time
Printed: Friday, February 05, 2010 9:28:02 AM Eastern Standard Time

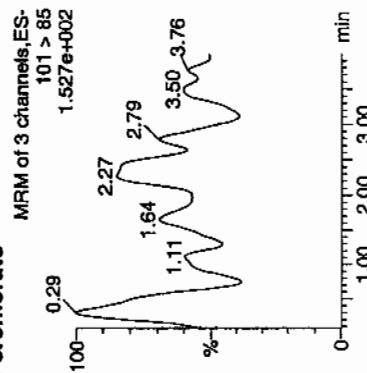
Name: per0204008a
Date: 04-Feb-2010
Time: 14:53:47
ID: IPB002
Vial: 1:1,A

02-05-10

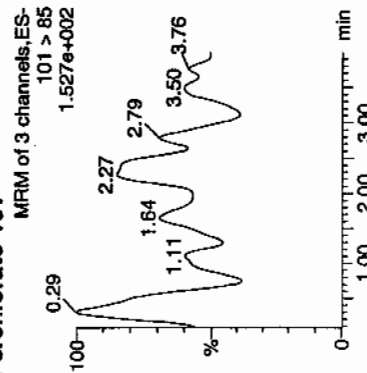
Perchlorate



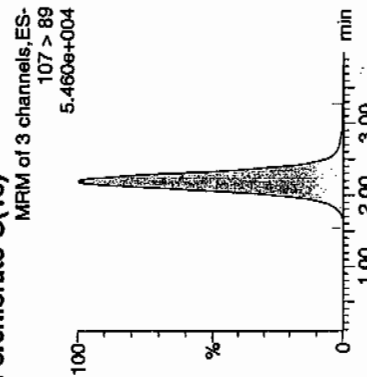
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	nd/ml	%Rec	%Dev	S/N	Ion Ratio
IPB002	Perchlorate	99 > 83											0.00
IPB002	Perchlorate-101	101 > 85											
IPB002	Perchlorate-O(18)	107 > 89	2.19	16909.783	16909.783	bb			0.4762	95.24	-	-4.76	4628.9...

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

Dataset: C:\MassLynx\Perchlorate.PRO\per020410a.qld

Last Altered: Friday, February 05, 2010 9:19:58 AM Eastern Standard Time
Printed: Friday, February 05, 2010 9:28:02 AM Eastern Standard Time

Name: per0204010a

Date: 04-Feb-2010

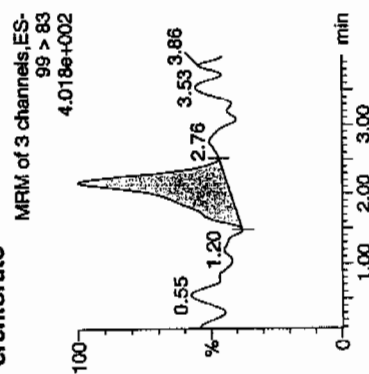
Time: 15:07:51

ID: IPB003

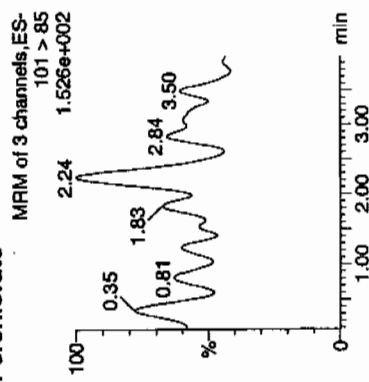
Vial: 1:1,A

02-05-10

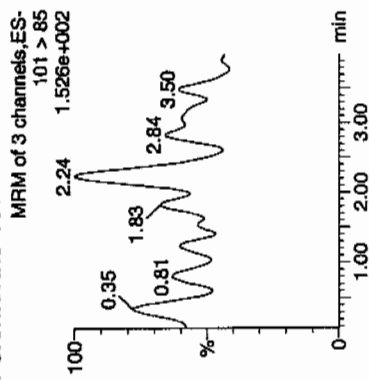
Perchlorate



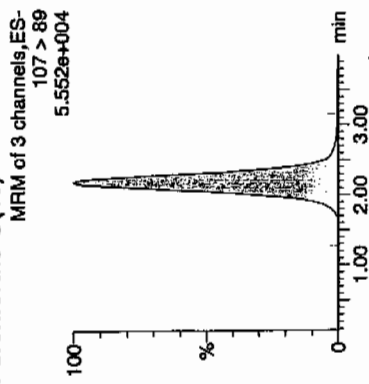
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ratio
IPB003	Perchlorate	99 > 83	2.17	92.177	92.177	bb			0.0021			8.630	0.00
IPB003	Perchlorate-101	101 > 85											
IPB003	Perchlorate-O(18)	107 > 89	2.18	16954.426	16954.426	bb			0.4774	95.49	-4.51	1701.8...	

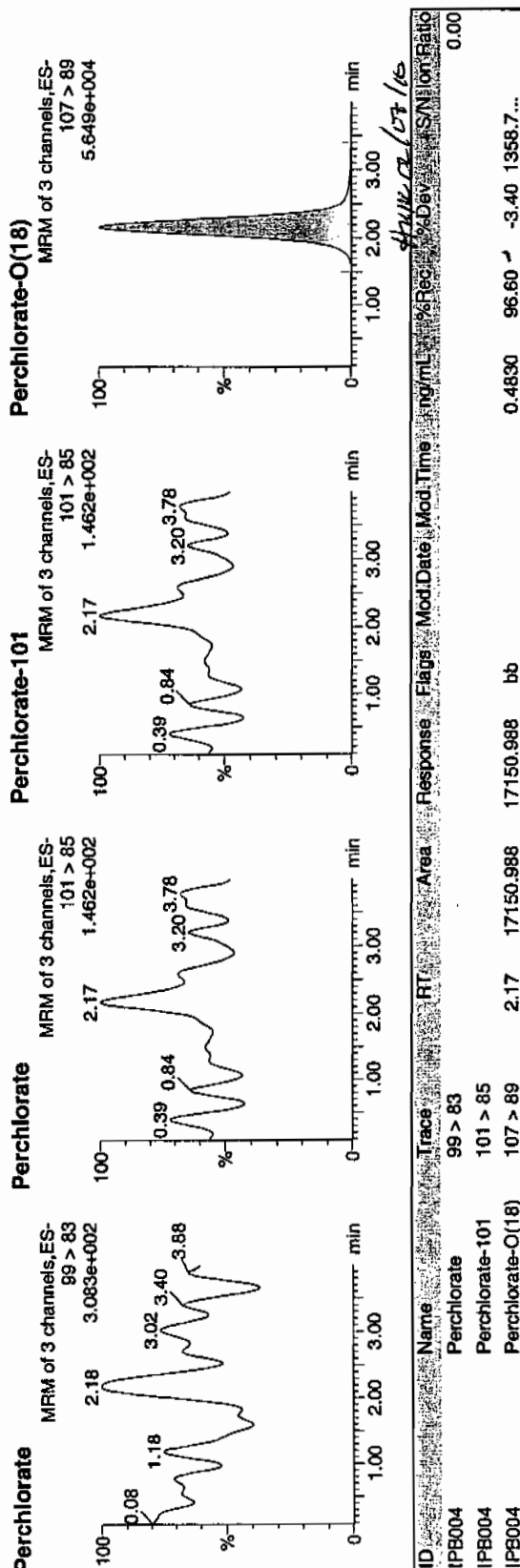
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charters W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020410a.qld

Last Altered: Friday, February 05, 2010 9:19:58 AM Eastern Standard Time
Printed: Friday, February 05, 2010 9:28:02 AM Eastern Standard Time

Name: per0204022a
Date: 04-Feb-2010
Time: 16:34:33
ID: IPB004
Vial: 1-1, A

02-05-10

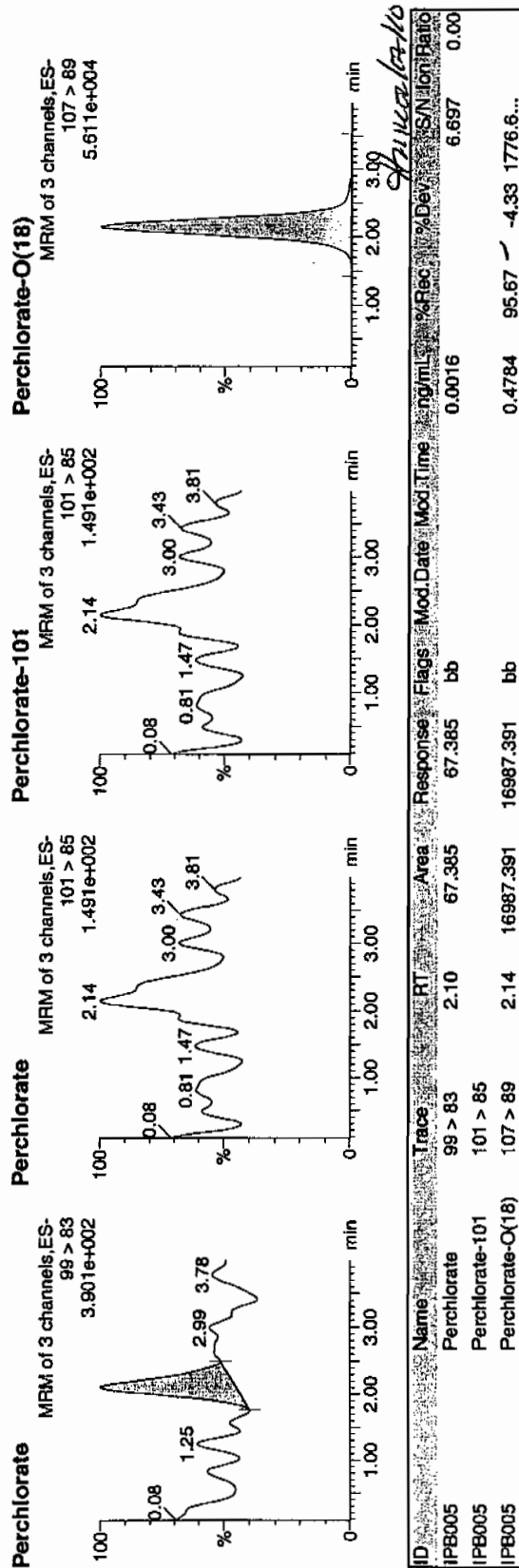


Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson
Dataset: C:\MassLynx\Perchlorate.PRO\per020410a.qld

Last Altered: Friday, February 05, 2010 9:19:58 AM Eastern Standard Time
Printed: Friday, February 05, 2010 9:28:02 AM Eastern Standard Time

Name: per0204033a
Date: 04-Feb-2010
Time: 17:52:23
ID: IPB005
Vial: 1:1-A

02-05-10



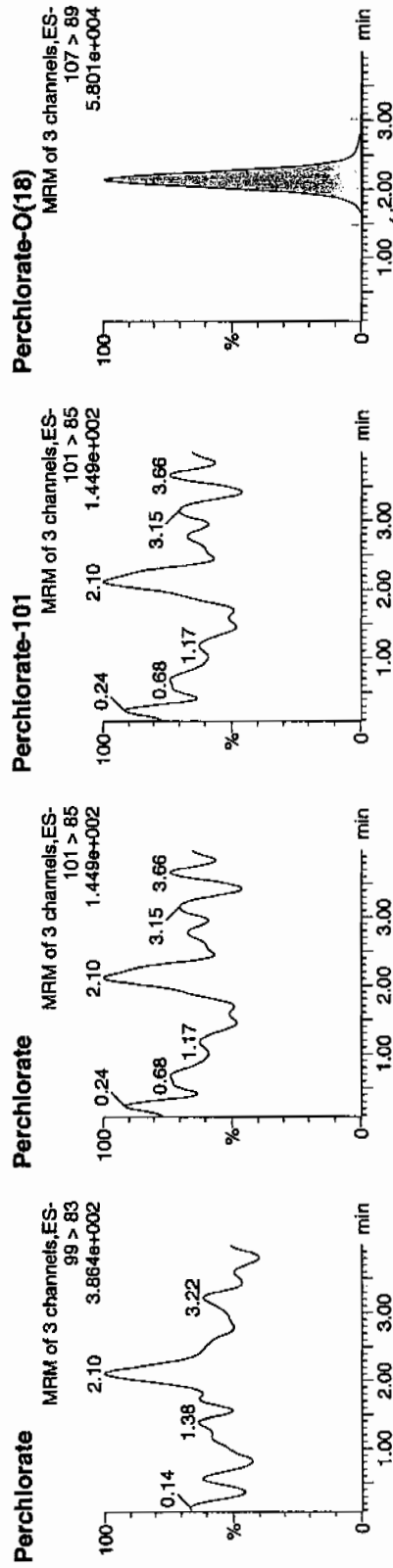
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020410a.qld

Last Altered: Friday, February 05, 2010 9:19:58 AM Eastern Standard Time
Printed: Friday, February 05, 2010 9:28:02 AM Eastern Standard Time

Name: per0204044a
Date: 04-Feb-2010
Time: 19:11:11
ID: IPB006
Vial: 1:1-A

02-05-10



ID	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	IS	Ratio
IPB006	Perchlorate	99 > 83											0.00
IPB006	Perchlorate-101	101 > 85											
IPB006	Perchlorate-O(18)	107 > 89	2.14	17519.281	17519.281	bb			0.4934	98.67	-1.33	2582.3...	

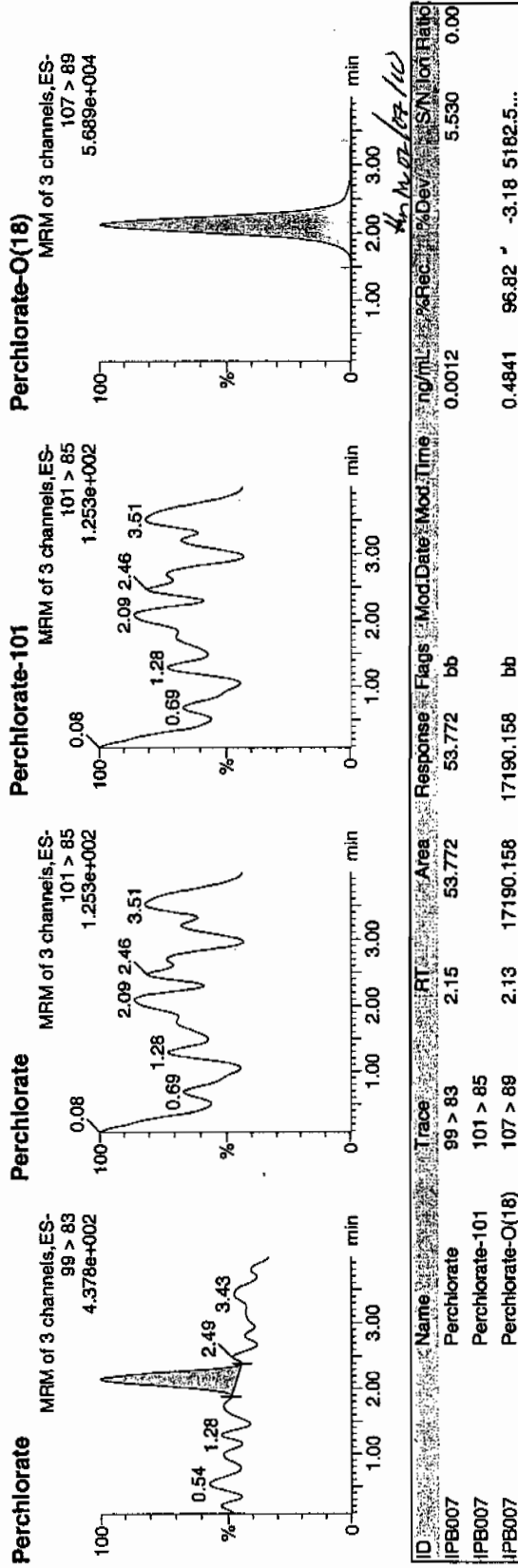
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020410a.qld

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Printed: Friday, February 05, 2010 9:28:02 AM Eastern Standard Time

Name: per0204057a
Date: 04-Feb-2010
Time: 20:44:01
ID: IPB007
Vial: 1:1.A

02-05-10



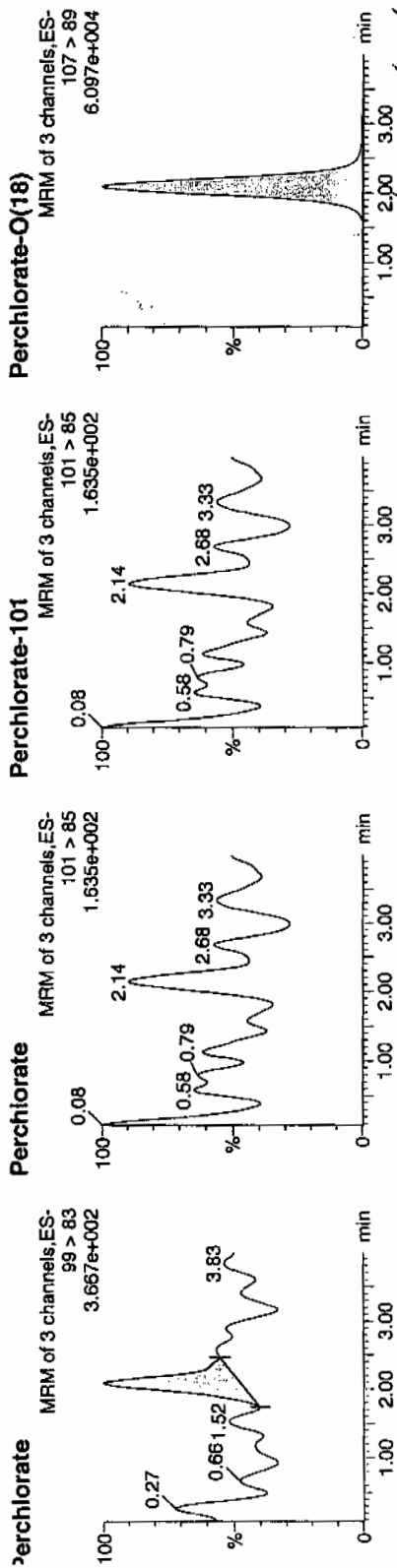
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020510a.qld

Last Altered: Saturday, February 06, 2010 9:57:33 AM Eastern Standard Time
Printed: Saturday, February 06, 2010 10:23:49 AM Eastern Standard Time

Name: per0205008a
Date: 05-Feb-2010
Time: 12:06:43
D: IPB002
/ial: 1:1,A

02-06-10



D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
PB002	Perchlorate	99 > 83	2.09	52.232	52.232	bb			0.0011			7.386	0.00
PB002	Perchlorate-101	101 > 85											
PB002	Perchlorate-O(18)	107 > 89	2.09	18000.494	18000.494	bb			0.4813	96.25	-3.75	2375.6...	

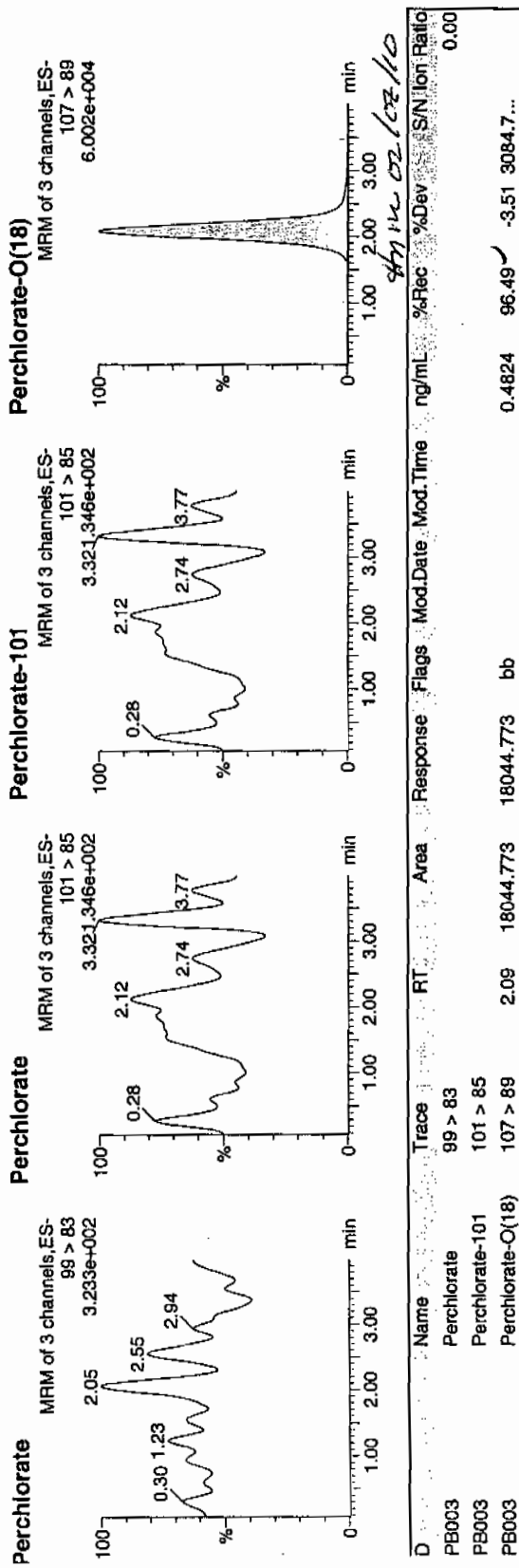
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charliers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020510a.qld

Last Altered: Saturday, February 06, 2010 9:57:33 AM Eastern Standard Time
Printed: Saturday, February 06, 2010 10:23:49 AM Eastern Standard Time

Name: per0205010a
Date: 05-Feb-2010
Time: 12:21:03
ID: IPB003
Vial: 1:1,A

6.002e+004
02-06-10



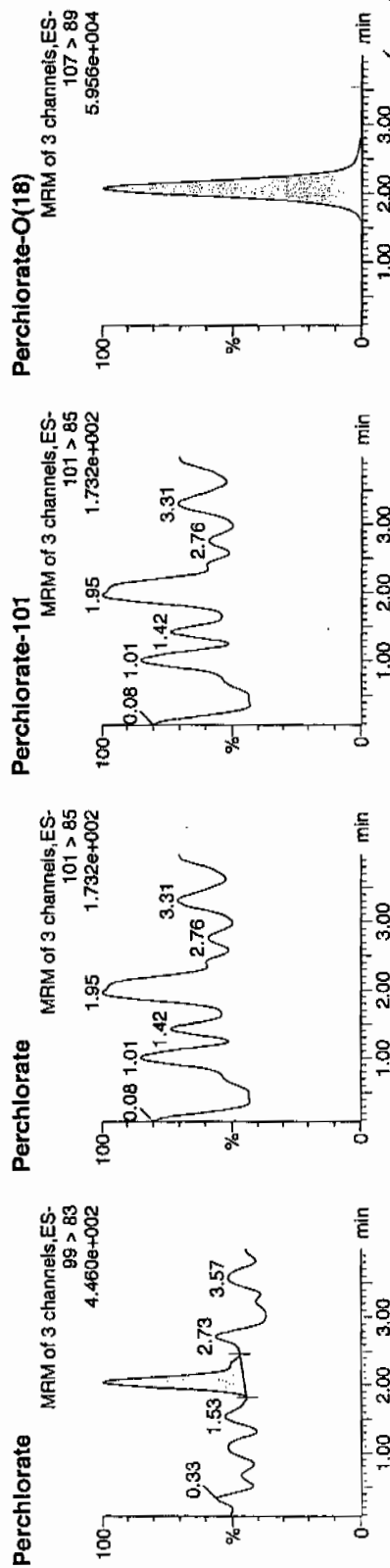
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charliers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020510a.qld

Last Altered: Saturday, February 06, 2010 9:57:33 AM Eastern Standard Time
Printed: Saturday, February 06, 2010 10:23:49 AM Eastern Standard Time

Name: per0205023a
Date: 05-Feb-2010
Time: 13:52:57
ID: IPB004
Vial: 1:1,A

02-06-10



D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
PB004	Perchlorate	99 > 83	2.04	52.063	52.063	bb			0.0011			11,890	0.00
PB004	Perchlorate-101	101 > 85											
PB004	Perchlorate-O(18)	107 > 89	2.07	17703.031	17703.031	bb			0.4733	94.66	-5.34	1064.5...	

Nairb.ref

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

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

QUATRO ULTIMA: nairb 01-08-08.cal

Calibration Report - MS1 Static

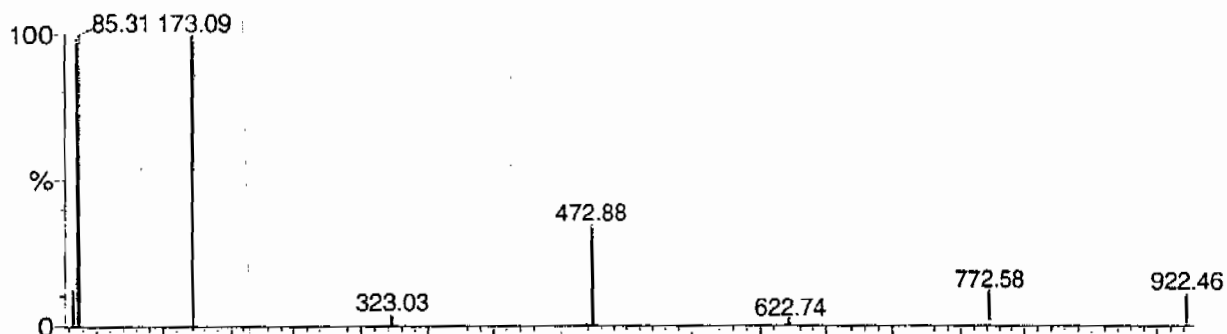
Page 1 of 1

Printed: Tue Jan 08 12:19:12 2008

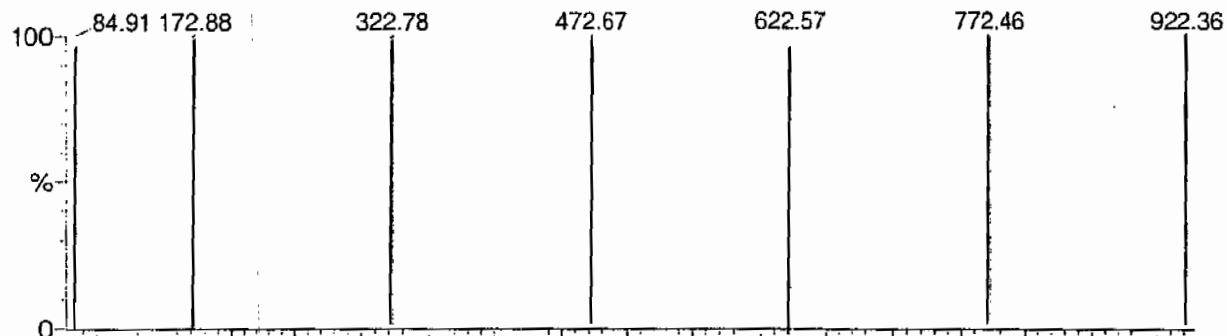
POINTS HIGHLIGHTED BY CURVED 01-07-03

Data file: STATMS1 - Uncalibrated

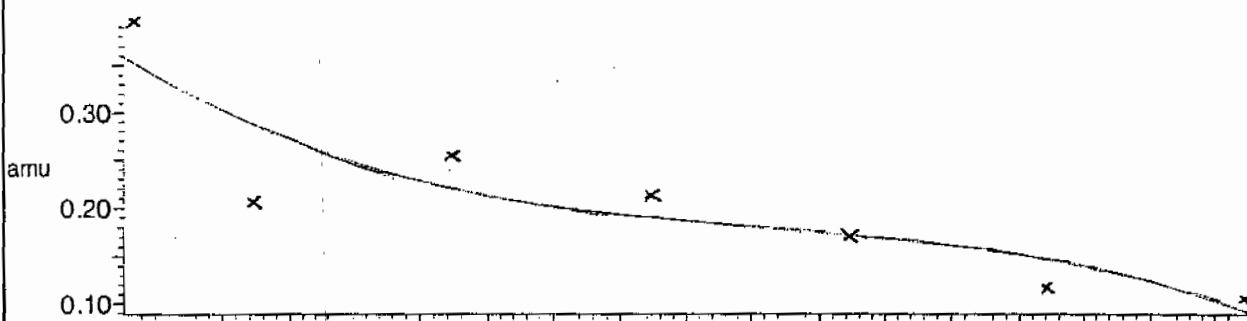
7 matches of 7 tested references



Reference file: Nairb

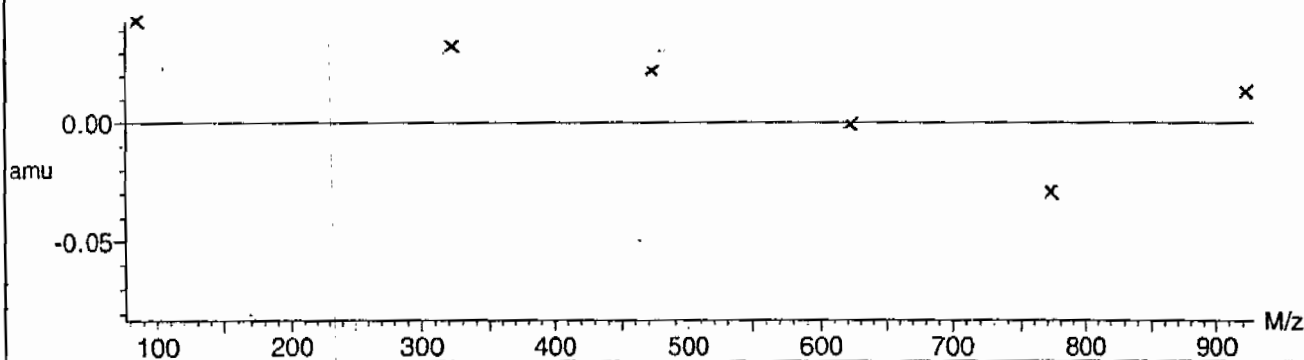


Mass difference (Raw - Ref mass)



Residuals

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



Calibration Report - MS1 Scanning

Page 1 of 1

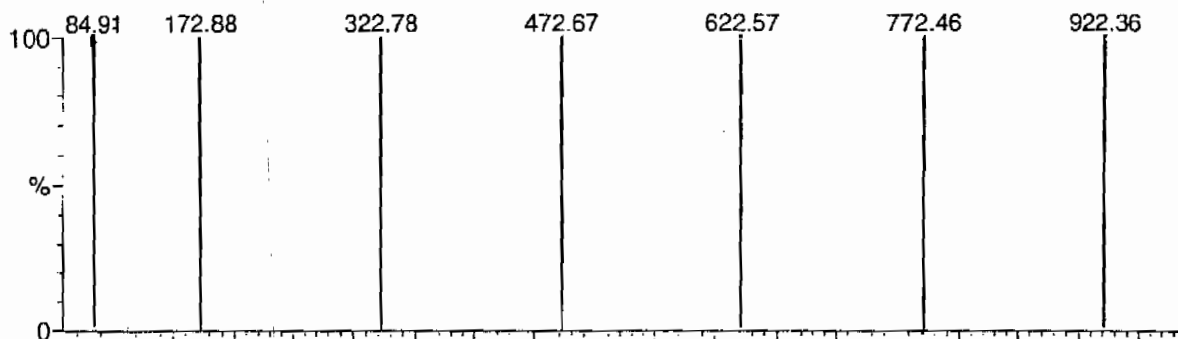
Printed: Tue Jan 08 12:20:09 2008

Data file: SCNMS1 - Uncalibrated

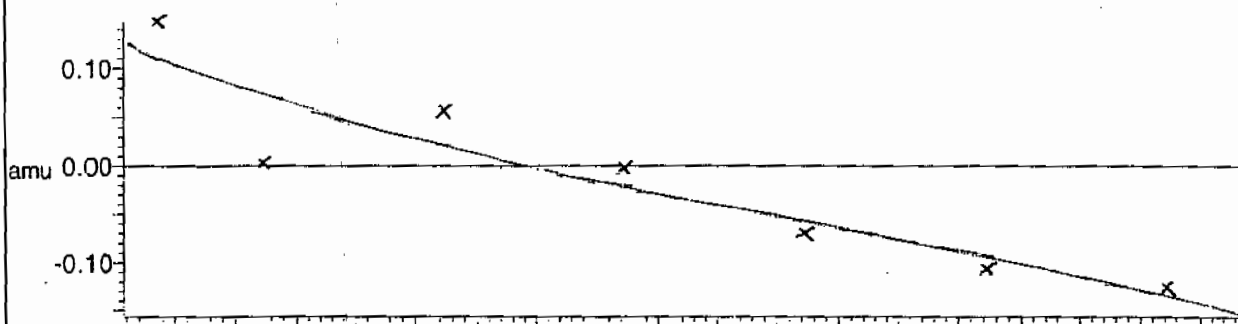
7 matches of 7 tested references



Reference file: Nairb

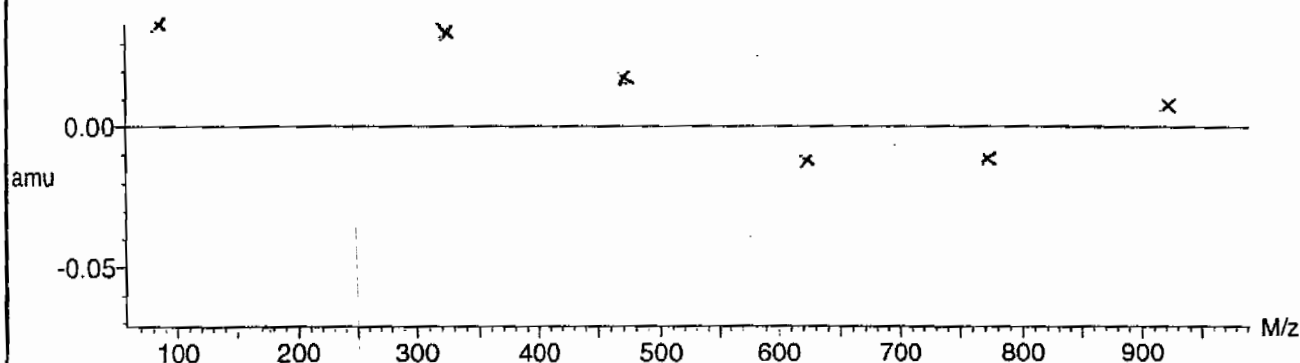


Mass difference (Raw - Ref mass)



Residuals

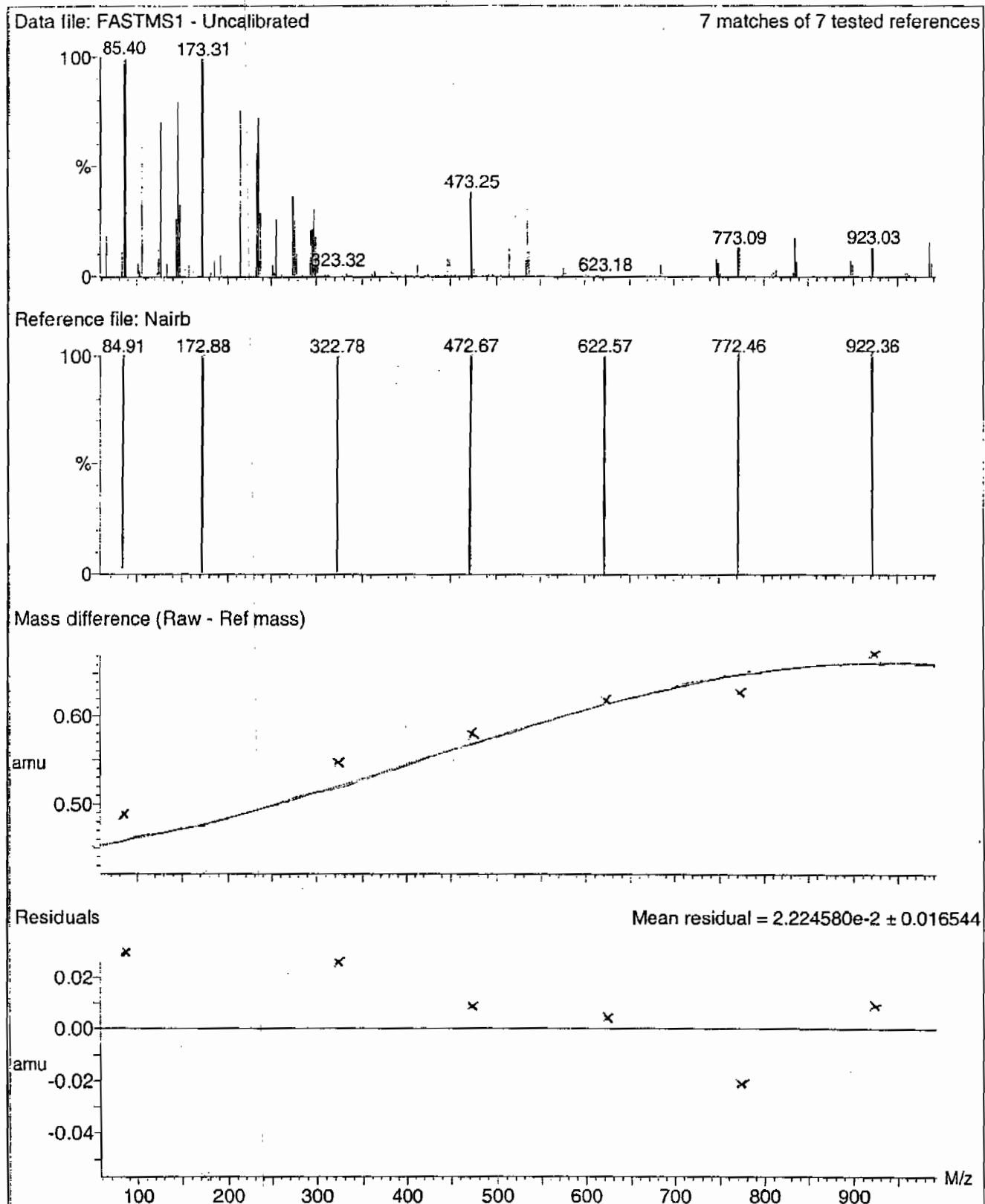
Mean residual = $2.732691 \times 10^{-2} \pm 0.020653$



Calibration Report - MS1 Scan Speed Compensation

Page 1 of 1

Printed: Tue Jan 08 12:21:04 2008



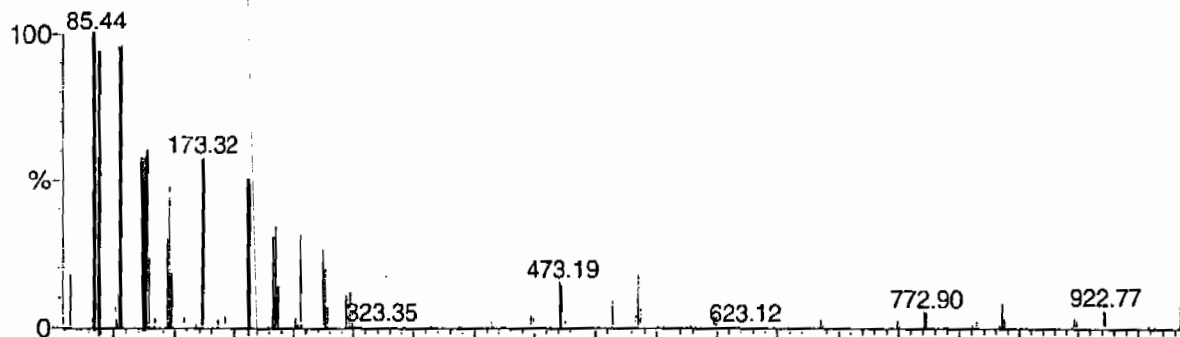
Calibration Report - MS2 Scan Speed Compensation

Page 1 of 1

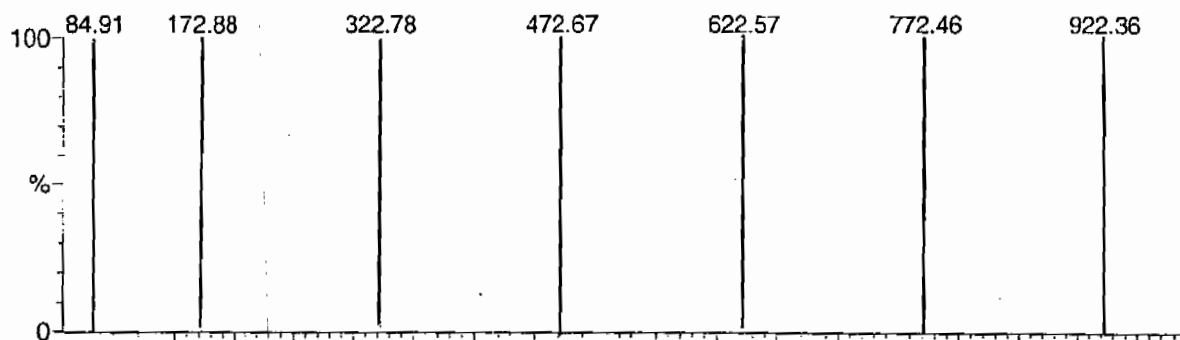
Printed: Tue Jan 08 12:23:51 2008

Data file: FASTMS2 - Uncalibrated

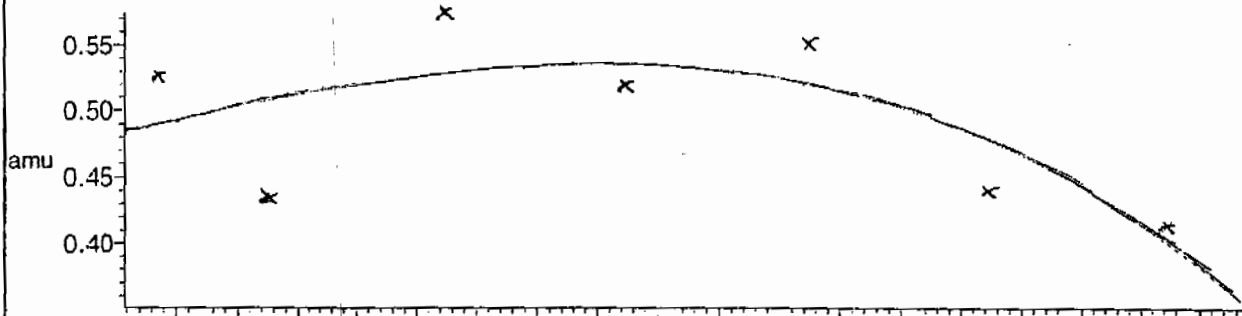
7 matches of 7 tested references



Reference file: Nairb

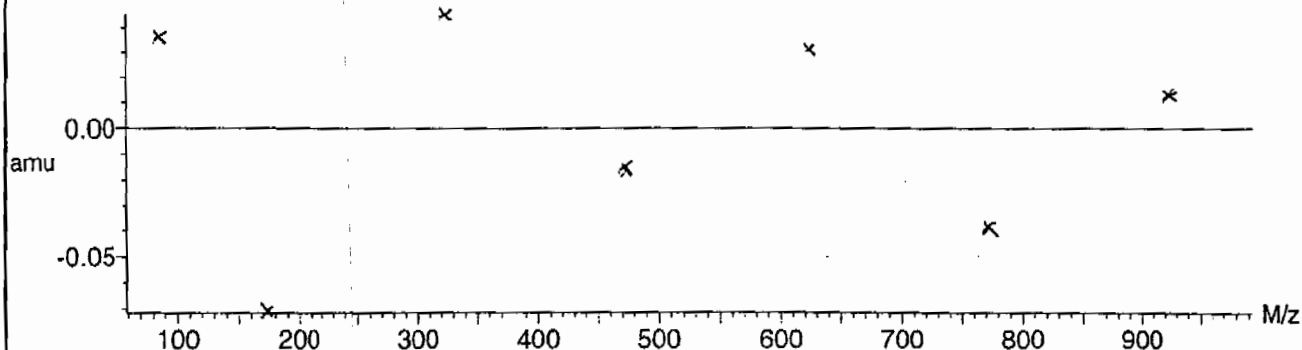


Mass difference (Raw - Ref mass)



Residuals

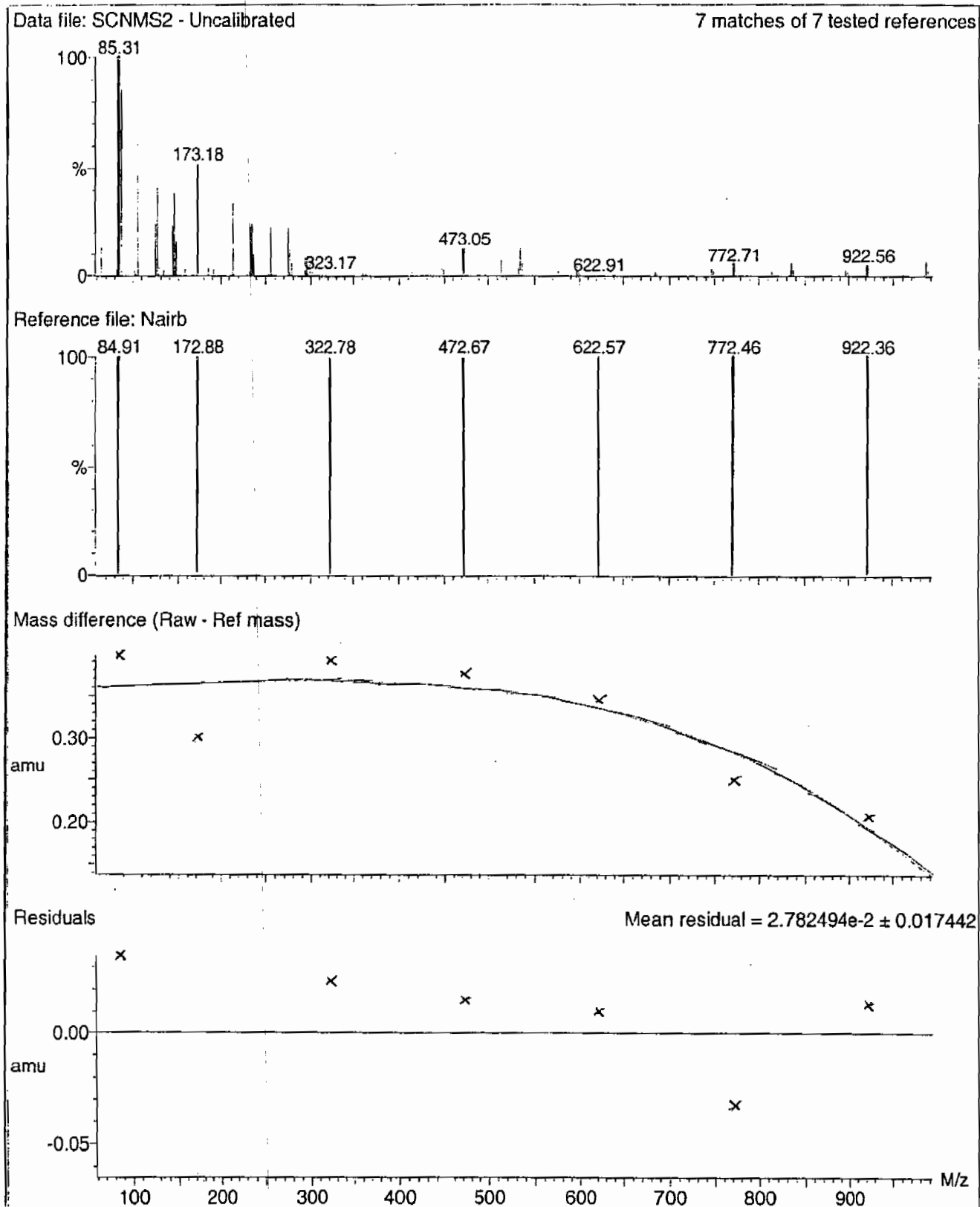
Mean residual = $3.598289 \times 10^{-2} \pm 0.017899$



Calibration Report - MS2 Scanning

Page 1 of 1

Printed: Tue Jan 08 12:22:56 2008



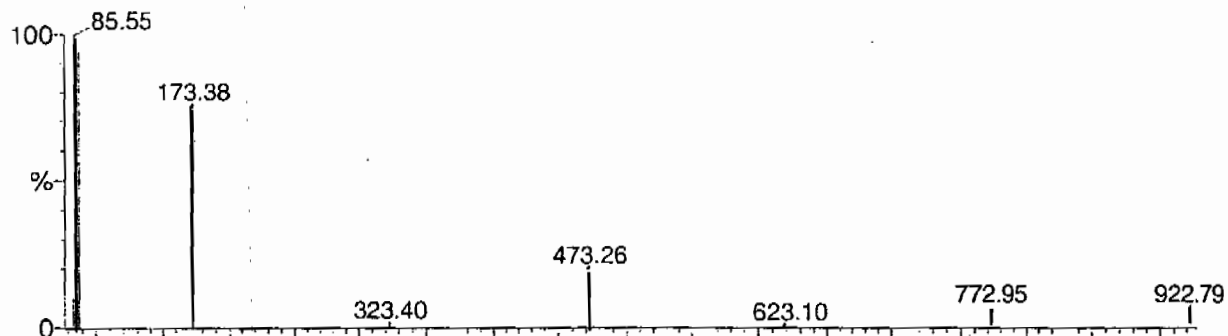
Calibration Report - MS2 Static

Page 1 of 1

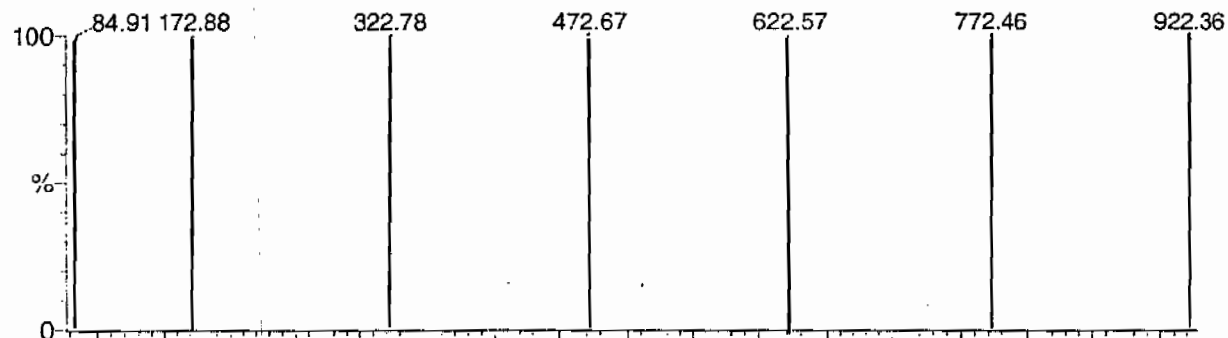
Printed: Tue Jan 08 12:21:59 2008

Data file: STATMS2 - Uncalibrated

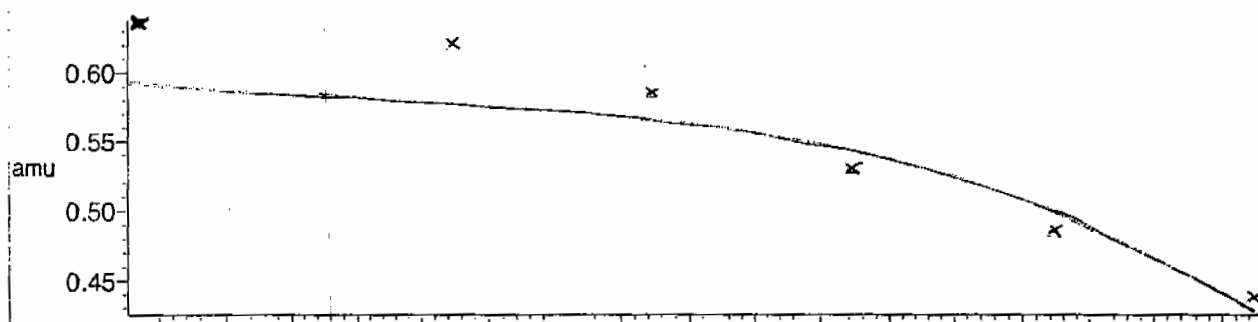
7 matches of 7 tested references



Reference file: Nairb

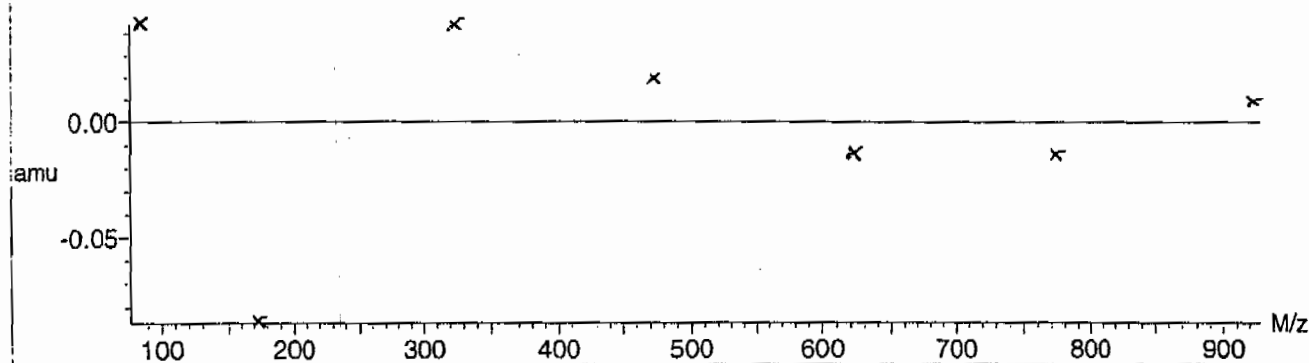


Mass difference (Raw - Ref mass)



Residuals

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



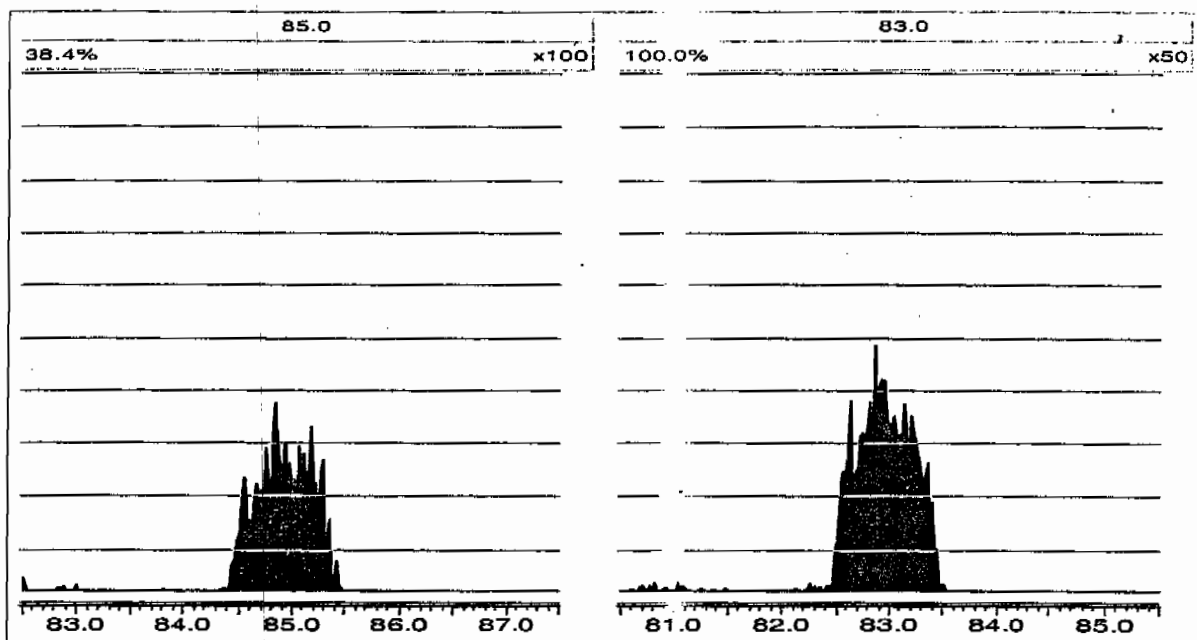
Tune Parameters

MassLynx 4.0 SP4

Page 1 of 1

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

Printed: Thursday, February 04, 2010 12:41:10 Eastern Standard Time



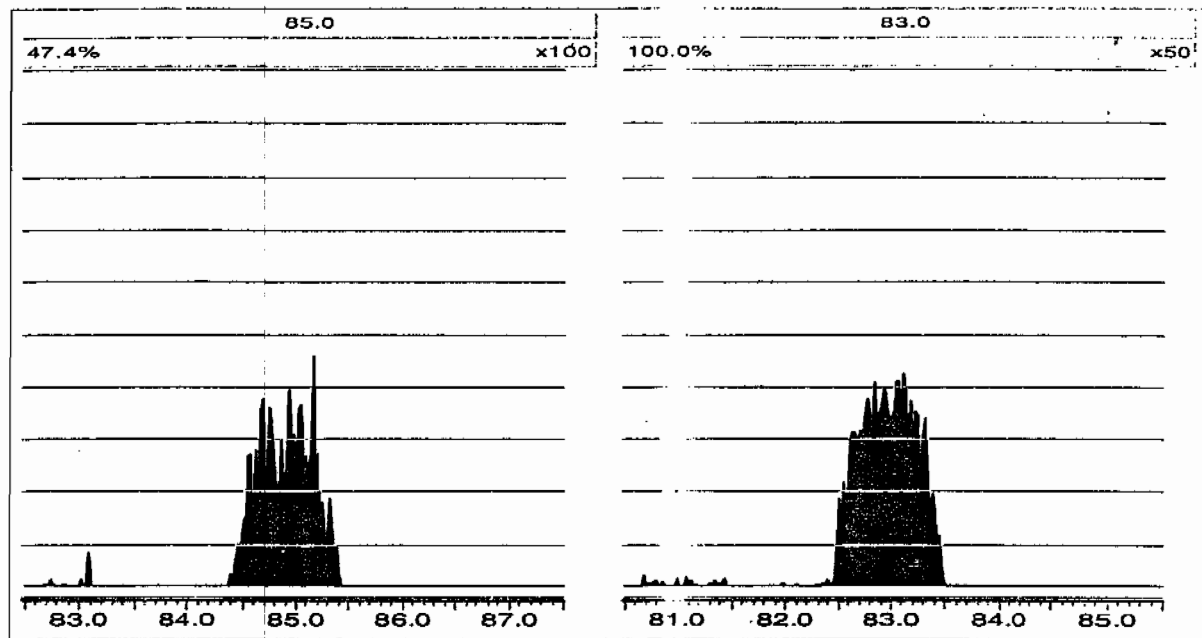
Tune Parameters

MassLynx 4.0 SP4

Page 1 of 1

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

Printed: Friday, February 05, 2010 09:41:42 Eastern Standard Time



Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1390

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	per0204006a	04-FEB-10	17751				
Lower Area Limit			8875.5				
Upper Area Limit			35502				
1202028739	per0204046a	04-FEB-10 19:25	17578.1	2.13	2.14118	1.005	
1202028740	per0204047a	04-FEB-10 19:32	18254.2	2.13	2.14115	1.005	
1202028743	per0204048a	04-FEB-10 19:40	17766.1	2.15	2.16608	1.007	
245391001	per0204049a	04-FEB-10 19:47	19812.6	2.12	2.12883	1.004	
1202028741	per0204050a	04-FEB-10 19:54	20074.9	2.12	2.12888	1.004	
1202028742	per0204051a	04-FEB-10 20:01	20912.7	2.12	2.1288	1.004	
245391002	per0204052a	04-FEB-10 20:08	18548	2.13	2.14117	1.005	
245391003	per0204053a	04-FEB-10 20:15	18982.8	2.13	2.14122	1.005	

Perchlorate RT And Area Summary

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Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1390

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	per0204006a	04-FEB-10	17751				
Lower Area Limit			8875.5				
Upper Area Limit			35502				
245391004	per0204054a	04-FEB-10 20:22	20209.6	2.12	2.12897	1.004	
245391005	per0204055a	04-FEB-10 20:29	19640.5	2.13	2.1412	1.005	

Sample ID	Datafile	Run Date	Area	RT	RT CLO4	RRT	Q 0.98-1.02
MidLevel Standard Area	per0205006a	05-FEB-10	18717.4				
Lower Area Limit			9358.7				
Upper Area Limit			37434.8				
245391006	per0205012a	05-FEB-10 12:35	18828	2.08	2.09157	1.006	

Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1390

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	per0205006a	05-FEB-10	18717.4				
Lower Area Limit			9358.7				
Upper Area Limit			37434.8				
245391007	per0205013a	05-FEB-10 12:42	18738.2	2.09	2.1039	1.007	
245391008	per0205014a	05-FEB-10 12:49	18228.9	2.08	2.09158	1.006	
245391009	per0205015a	05-FEB-10 12:56	20046.6	2.08	2.0916	1.006	
245391010	per0205016a	05-FEB-10 13:03	18621.2	2.09	2.10395	1.007	
245391011	per0205017a	05-FEB-10 13:10	20476	2.07	2.0916	1.01	

SAMPLE DATA

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 947103
 Extraction Type: Solid Prep
 Client Sample No. RE15-10-7918
 Date Received: 23-JAN-10
 GEL Job No (SDG): 10-1390
 GEL Sample ID: 245391001
 Date Filtered: 03-FEB-10
 Injection Volume (uL): 20
 %Solids: 90.4

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.553	2.21	1.81	ug/kg	J	1	04-FEB-10 19:47	per0204049a
	Perchlorate Isotope Ratio			3.14			1	04-FEB-10 19:47	per0204049a
14797-73-0	Perchlorate-101	.553	2.21	1.84	ug/kg	J	1	04-FEB-10 19:47	per0204049a
	Perchlorate-O(18)			6.17	ug/kg		1	04-FEB-10 19:47	per0204049a

[^] 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\per020410a.qld

Last Altered: Friday, February 05, 2010 9:19:58 AM Eastern Standard Time
Printed: Friday, February 05, 2010 9:28:02 AM Eastern Standard Time

Name: per0204049a

Date: 04-Feb-2010

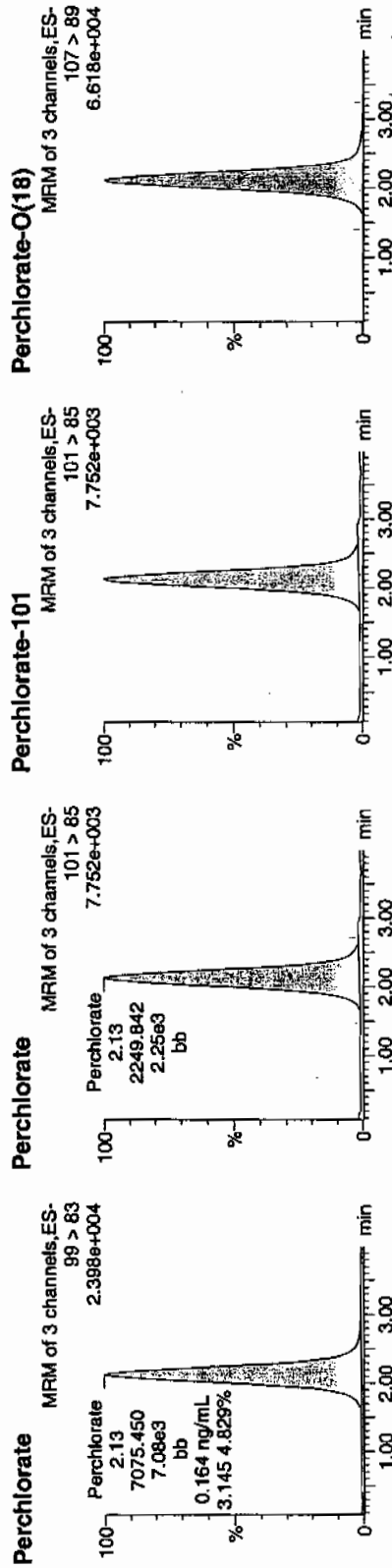
Time: 19:47:10

ID: 245391001

Vial: 2:1.D

6205-10

12700 | 947103 | 3010 | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod	Date	Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
245391001	Perchlorate	99 > 83	2.13	7075.450	7075.450	bb				0.1635			988.928	3.14
245391001	Perchlorate-101	101 > 85	2.13	2249.842	2249.842	bb				0.1662			278.794	
245391001	Perchlorate-O(18)	107 > 89	2.12	19812.590	19812.590	bb				0.5579	111.59	11.59	1564.0...	

$$\frac{7075.450}{43271.8} \times 100 = 1.81$$

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: 947103
 Extraction Type: Solid Prep
 Client Sample No. RE15-10-7915
 Date Received: 23-JAN-10
 GEL Job No (SDG): 10-1390
 GEL Sample ID: 245391002
 Date Filtered: 03-FEB-10
 Injection Volume (uL): 20
 Sample Volume/Weight: 2.00 g
 % Solids: 82
 Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.612	2.45	0.612	ug/kg	U	1	04-FEB-10 20:08	per0204052a
	Perchlorate Isotope Ratio						1	04-FEB-10 20:08	per0204052a
14797-73-0	Perchlorate-101	.612	2.45	0.612	ug/kg	U	1	04-FEB-10 20:08	per0204052a
	Perchlorate-O(18)			6.39	ug/kg		1	04-FEB-10 20:08	per0204052a

[^] 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\per020410a.qld

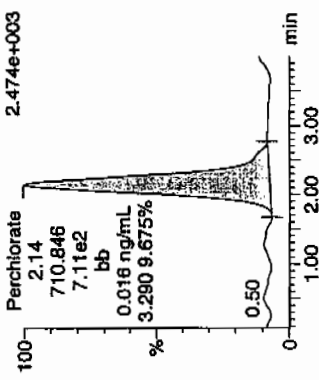
Last Altered: Friday, February 05, 2010 9:19:58 AM Eastern Standard Time
Printed: Friday, February 05, 2010 9:28:02 AM Eastern Standard Time

Name: per0204052a
Date: 04-Feb-2010
Time: 20:08:13
ID: 245391002
Vial: 2:2,A

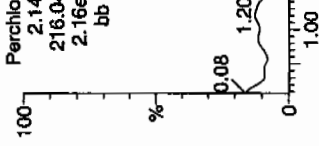
02-05-10

1247102 | 2020 | 11

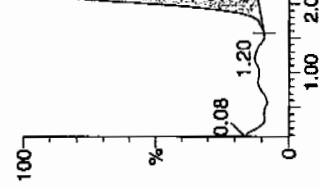
Perchlorate MRM of 3 channels, ES-
99 > 83 2.474e+003



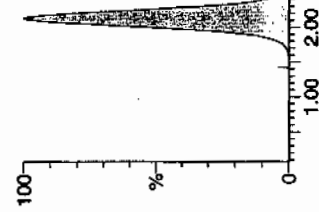
Perchlorate MRM of 3 channels, ES-
101 > 85 8.323e+002



Perchlorate-101 MRM of 3 channels, ES-
101 > 85 8.323e+002



Perchlorate-O(18) MRM of 3 channels, ES-
107 > 89 6.175e+004



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
245391002	Perchlorate	99 > 83	2.14	710.846	710.846	bb			0.0164	-	183.576	3.29	
245391002	Perchlorate-101	101 > 85	2.14	216.046	216.046	bb			0.0160		113.513		
245391002	Perchlorate-O(18)	107 > 89	2.13	18547.959	18547.959	bb			0.5223	104.46	4.46	9651.8...	

done at 12410

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 947103

Extraction Type: Solid Prep

Client Sample No.

RE15-10-7920

Date Received: 23-JAN-10

GEL Job No (SDG): 10-1390

GEL Sample ID: 245391003

Date Filtered: 03-FEB-10

Injection Volume (uL): 20

%Solids: 96.3

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.519	2.08	0.519	ug/kg	U	1	04-FEB-10 20:15	per0204053a
	Perchlorate Isotope Ratio						1	04-FEB-10 20:15	per0204053a
14797-73-0	Perchlorate-101	.519	2.08	0.519	ug/kg	U	1	04-FEB-10 20:15	per0204053a
	Perchlorate-O(18)			5.55	ug/kg		1	04-FEB-10 20:15	per0204053a

[^] 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

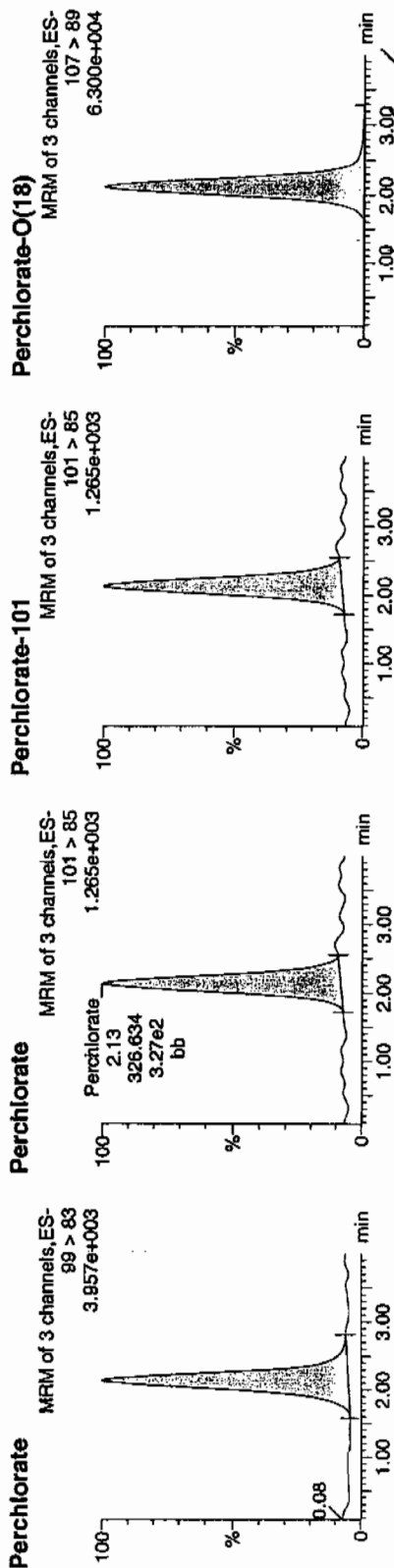
Dataset: C:\MassLynx\Perchlorate.PRO\per020410a.qld

Last Altered: Friday, February 05, 2010 9:19:58 AM Eastern Standard Time
Printed: Friday, February 05, 2010 9:28:02 AM Eastern Standard Time

Name: per0204053a
Date: 04-Feb-2010
Time: 20:15:15
ID: 245391003
Vial: 2:2,B

02-05-10

LANU | 947108 | 5020 (1)



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	IS/N	Ion Ratio
245391003	Perchlorate	99 > 83	2.14	1134.793	1134.793	bb			0.0262			325.476	3.47
245391003	Perchlorate-101	101 > 85	2.13	326.634	326.634	bb			0.0241			127.183	
245391003	Perchlorate-O(18)	107 > 89	2.13	18982.781	18982.781	bb			0.5346	106.91	6.91	5147.7...	

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC Client Sample No. RE15-10-7914
 Lab Code: GEL

Instrument: LCMSMS Date Received: 23-JAN-10

Method: SW846 6850 Modified GEL Job No (SDG): 10-1390

Matrix: SOIL GEL Sample ID: 245391004

Extraction Batch ID: 247103 Date Filtered: 03-FEB-10

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

Sample Volume/Weight: 2.00 g %Solids: 90.4

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.553	2.21	0.553	ug/kg	U	1	04-FEB-10 20:22	per0204054a
	Perchlorate Isotope Ratio						1	04-FEB-10 20:22	per0204054a
14797-73-0	Perchlorate-101	.553	2.21	0.553	ug/kg	U	1	04-FEB-10 20:22	per0204054a
	Perchlorate-O(18)			6.30	ug/kg		1	04-FEB-10 20:22	per0204054a

[^] 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

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

Dataset: C:\MassLynx\Perchlorate.PRO\per020410a.qld

Last Altered: Friday, February 05, 2010 9:19:58 AM Eastern Standard Time
Printed: Friday, February 05, 2010 9:28:02 AM Eastern Standard Time

Name: per0204054a

Date: 04-Feb-2010

Time: 20:22:25

ID: 245391004

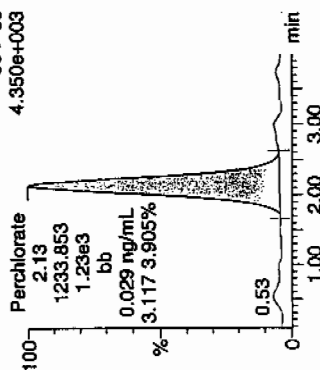
Vial: 2:2,C

02-05-10

117200 | 947108 | 20020 | 11

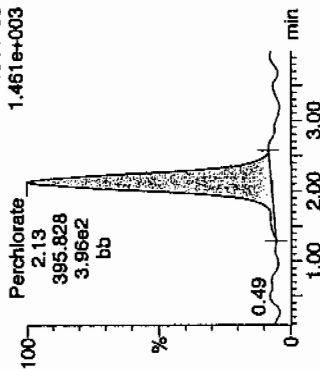
Perchlorate

MRM of 3 channels, ES-
99 > 83



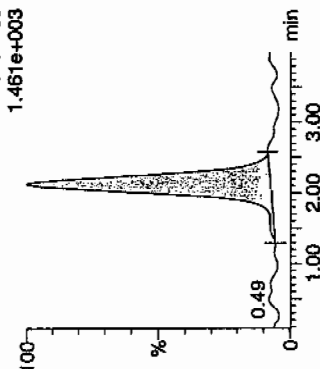
Perchlorate

MRM of 3 channels, ES-
101 > 85



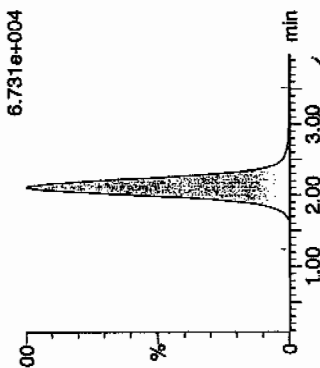
Perchlorate-101

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	Conc./mL	%Rec	%Dev	SN	Ion Ratio
245391004	Perchlorate	99 > 83	2.13	1233.853	1233.853	bb			0.0285			396.338	3.12
245391004	Perchlorate-101	101 > 85	2.13	395.828	395.828	bb			0.0292			154.399	
245391004	Perchlorate-O(18)	107 > 89	2.12	20209.611	20209.611	bb			0.5691	113.82	13.82	1401.6...	

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: 947103
 Extraction Type: Solid Prep
 Client Sample No. RE15-10-7919
 Date Received: 23-JAN-10
 GEL Job No (SDG): 10-1390
 GEL Sample ID: 245391005
 Date Filtered: 03-FEB-10
 Injection Volume (uL): 20
 Sample Volume/Weight: 2.00 g
 %Solids: 77
 Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.646	2.58	0.646	ug/kg	U	1	04-FEB-10 20:29	per0204055a
	Perchlorate Isotope Ratio						1	04-FEB-10 20:29	per0204055a
14797-73-0	Perchlorate-101	.646	2.58	0.646	ug/kg	U	1	04-FEB-10 20:29	per0204055a
	Perchlorate-O(18)			7.14	ug/kg		1	04-FEB-10 20:29	per0204055a

[^] 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

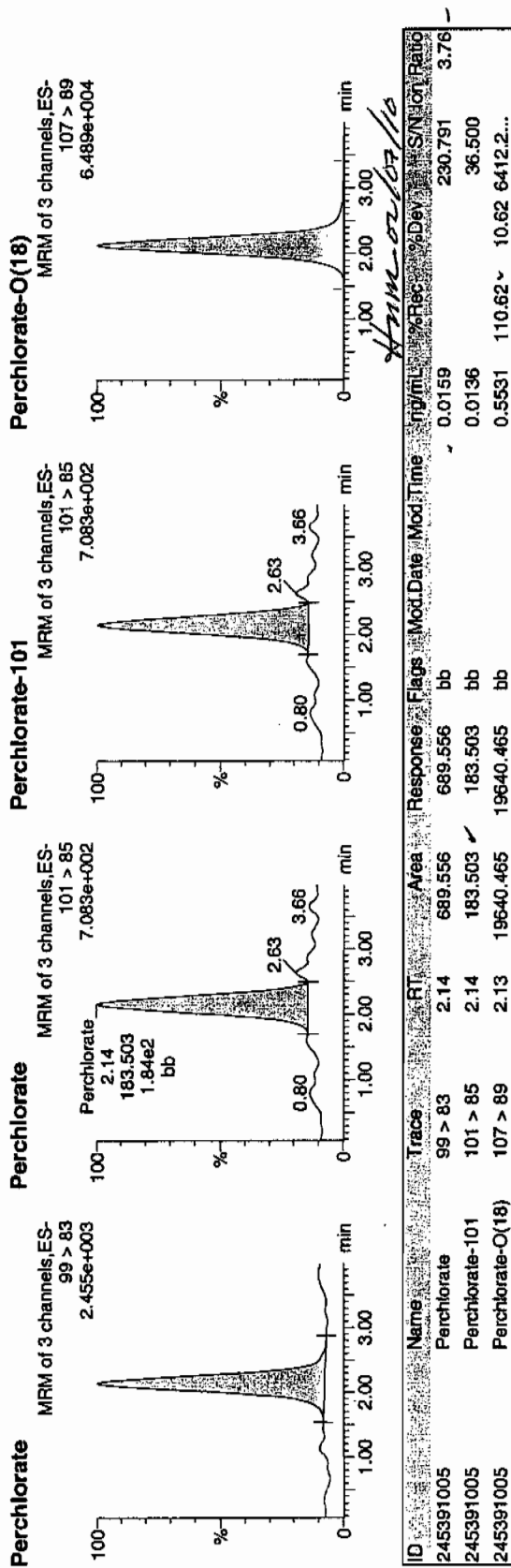
Dataset: C:\MassLynx\Perchlorate.PRO\per020410a.qld

Last Altered: Friday, February 05, 2010 9:19:58 AM Eastern Standard Time
Printed: Friday, February 05, 2010 9:28:02 AM Eastern Standard Time

Name: per0204055a
Date: 04-Feb-2010
Time: 20:29:35
ID: 245391005
Vial: 2:2,D

07-05-ID

1422-1947108 | 30720 | 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: 947103
 Extraction Type: Solid Prep
 Client Sample No. RE15-10-7921
 Date Received: 23-JAN-10
 GEL Job No (SDG): 10-1390
 GEL Sample ID: 245391006
 Date Filtered: 03-FEB-10
 Injection Volume (uL): 20
 Sample Volume/Weight: 2.00 g
 %Solids: 82
 Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.609	2.43	0.609	ug/kg	U	1	05-FEB-10 12:35	per0205012a
	Perchlorate Isotope Ratio						1	05-FEB-10 12:35	per0205012a
14797-73-0	Perchlorate-101	.609	2.43	0.609	ug/kg	U	1	05-FEB-10 12:35	per0205012a
	Perchlorate-O(18)			6.13	ug/kg		1	05-FEB-10 12:35	per0205012a

[^] 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

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

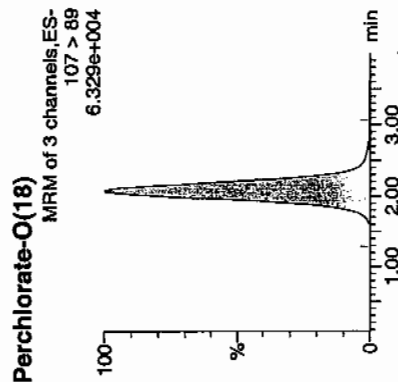
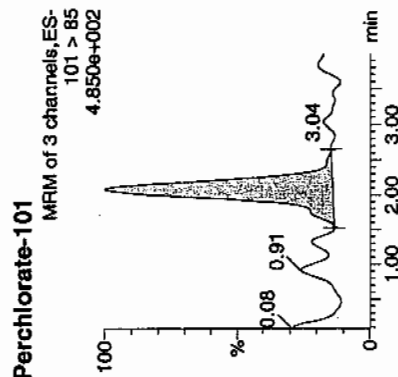
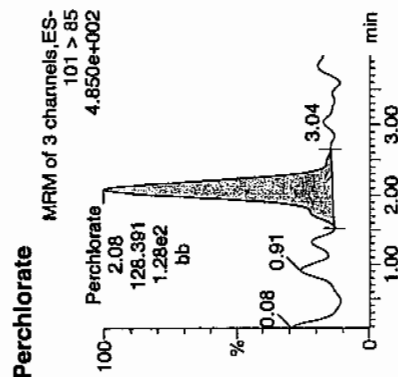
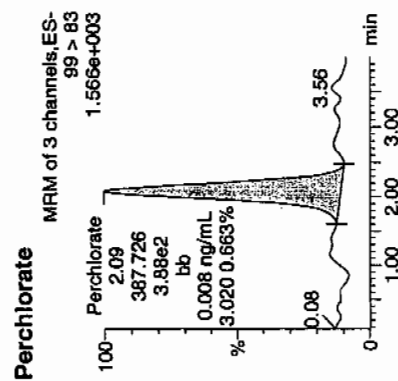
Dataset: C:\MassLynx\Perchlorate.PRO\per020510a.qld

Last Altered: Saturday, February 06, 2010 9:57:33 AM Eastern Standard Time
Printed: Saturday, February 06, 2010 10:23:49 AM Eastern Standard Time

Name: per0205012a
Date: 05-Feb-2010
Time: 12:35:24
ID: 245391006
Vial: 1:3,A

02-06-10

1222 | 947108 | 3020 | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
245391006	Perchlorate	99 > 83	2.09	387.726	387.726	bb			0.0084	100.68	0.68	64.060	3.02
245391006	Perchlorate-101	101 > 85	2.08	128.391	128.391	bb			0.0092	100.68	0.68	33.541	
245391006	Perchlorate-O(18)	107 > 89	2.08	18827.984	18827.984	bb			0.5034	100.68	0.68	2319.4...	

Perchlorate Analysis Data Sheet

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Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 247103
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE15-10-7916
 Date Received: 23-JAN-10
 GEL Job No (SDG): 10-1390
 GEL Sample ID: 245391007
 Date Filtered: 03-FEB-10
 Injection Volume (uL): 20
 %Solids: 93.2

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.536	2.15	0.536	ug/kg	U	1	05-FEB-10 12:42	per0205013a
	Perchlorate Isotope Ratio						1	05-FEB-10 12:42	per0205013a
14797-73-0	Perchlorate-101	.536	2.15	0.536	ug/kg	U	1	05-FEB-10 12:42	per0205013a
	Perchlorate-O(18)			5.38	ug/kg		1	05-FEB-10 12:42	per0205013a

[^] 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

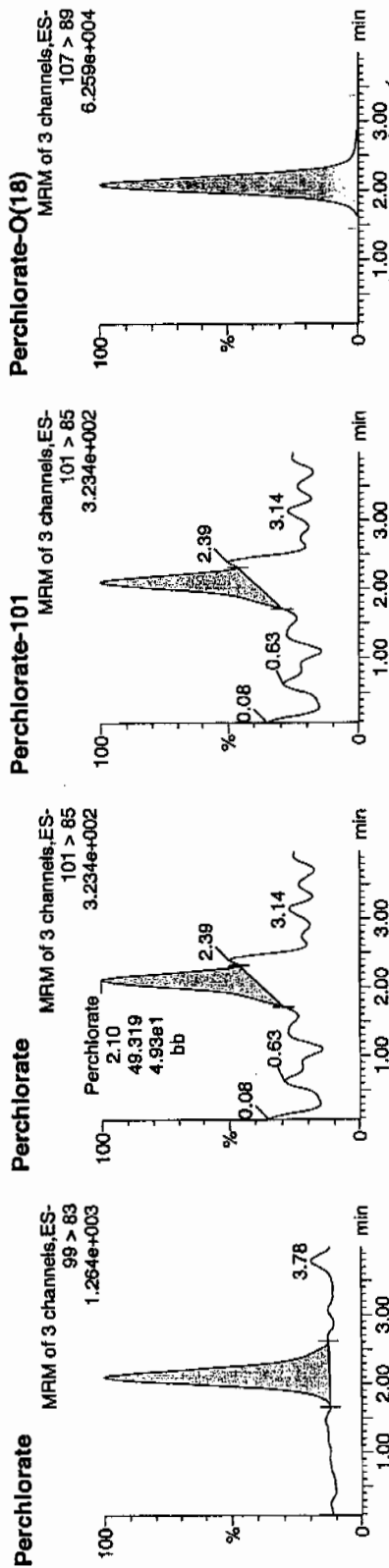
Dataset: C:\MassLynx\Perchlorate.PRO\per020510a.qld

Last Altered: Saturday, February 06, 2010 9:57:33 AM Eastern Standard Time
Printed: Saturday, February 06, 2010 10:23:49 AM Eastern Standard Time

Name: per0205013a
Date: 05-Feb-2010
Time: 12:42:27
ID: 245391007
Vial: 1:3,B

07 06-10

1242 | 947103 | 3070 | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/ml	%Rec	%Dev	S/N	Ion Ratio
245391007	Perchlorate	99 > 83	2.10	331.065	331.065	bb			0.0072	100.20	0.20	28.468	6.71
245391007	Perchlorate-101	101 > 85	2.10	49.319	49.319	bb			0.0035			11.424	
245391007	Perchlorate-O(18)	107 > 89	2.09	18738.170	18738.170	bb			0.5010			5396.1...	

0694
20.0520

Form 1

Perchlorate Analysis Data Sheet

Client Sample No.
RE15-10-7917

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Date Received: 23-JAN-10

Method: SW846 6850 Modified

GEL Job No (SDG): 10-1390

Matrix: SOIL

GEL Sample ID: 245391008

Extraction Batch ID: 247103

Date Filtered: 03-FEB-10

Extraction Type: Solid Prep

Injection Volume (uL): 20

Sample Volume/Weight: 2.00 g

%Solids: 80

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.627	2.51	0.627	ug/kg	U	1	05-FEB-10 12:49	per0205014a
	Perchlorate Isotope Ratio						1	05-FEB-10 12:49	per0205014a
14797-73-0	Perchlorate-101	.627	2.51	0.627	ug/kg	U	1	05-FEB-10 12:49	per0205014a
	Perchlorate-O(18)			6.11	ug/kg		1	05-FEB-10 12:49	per0205014a

[^] 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

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

Dataset: C:\MassLynx\Perchlorate.PRO\per020510a.qld

Last Altered: Saturday, February 06, 2010 9:57:33 AM Eastern Standard Time
Printed: Saturday, February 06, 2010 10:23:49 AM Eastern Standard Time

Name: per0205014a

Date: 05-Feb-2010

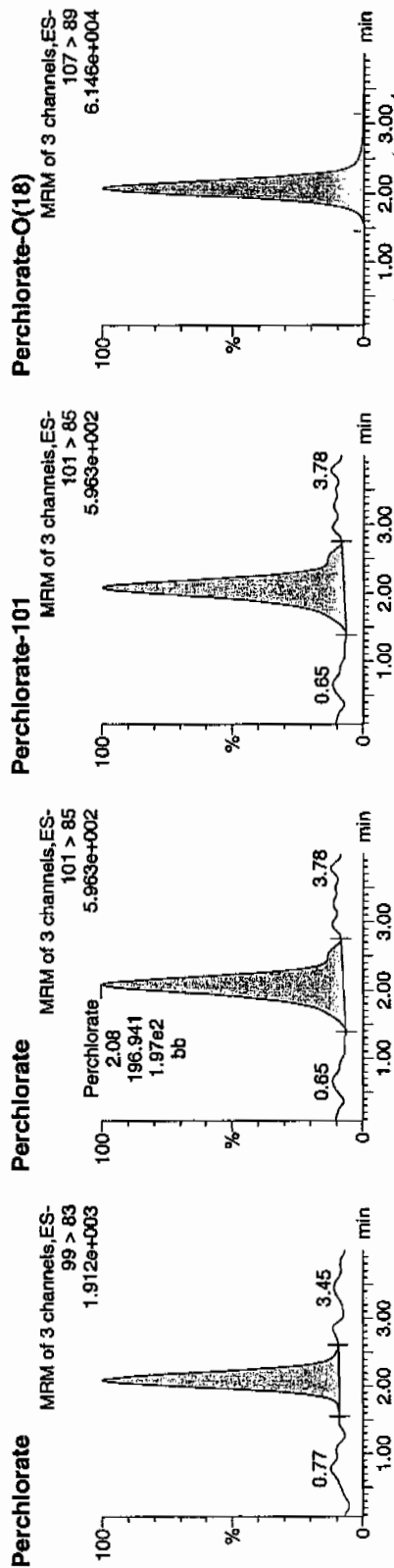
Time: 12:49:30

ID: 245391008

Vial: 1:3,C

6.146e+004
02-06-10

1245391008 | 2020/11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	Id/mL	%Rec	%Dev	SN/No	Ratio
245391008	Perchlorate	99 > 83	2.08	490.850	490.850	bb			0.0107	0.0107	0.0140	131.458	2.49
245391008	Perchlorate-101	101 > 85	2.08	196.941	196.941	bb			0.0140	0.0140	0.0140	65.747	
245391008	Perchlorate-O(18)	107 > 89	2.08	18228.906	18228.906	bb			0.4874	97.47	-2.53	2141.1...	

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: 947103

Extraction Type: Solid Prep

Client Sample No.

RE15-10-7922

Date Received: 23-JAN-10

GEL Job No (SDG): 10-1390

GEL Sample ID: 245391009

Date Filtered: 03-FEB-10

Injection Volume (uL): 20

%Solids: 90.1

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.555	2.22	0.587	ug/kg	J	1	05-FEB-10 12:56	per0205015a
	Perchlorate Isotope Ratio			3.07			1	05-FEB-10 12:56	per0205015a
14797-73-0	Perchlorate-101	.555	2.22	0.629	ug/kg	J	1	05-FEB-10 12:56	per0205015a
	Perchlorate-O(18)			5.95	ug/kg		1	05-FEB-10 12:56	per0205015a

[^] 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\per020510a.qld

Last Altered: Saturday, February 06, 2010 9:57:33 AM Eastern Standard Time
Printed: Saturday, February 06, 2010 10:23:49 AM Eastern Standard Time

Name: per0205015a

Date: 05-Feb-2010

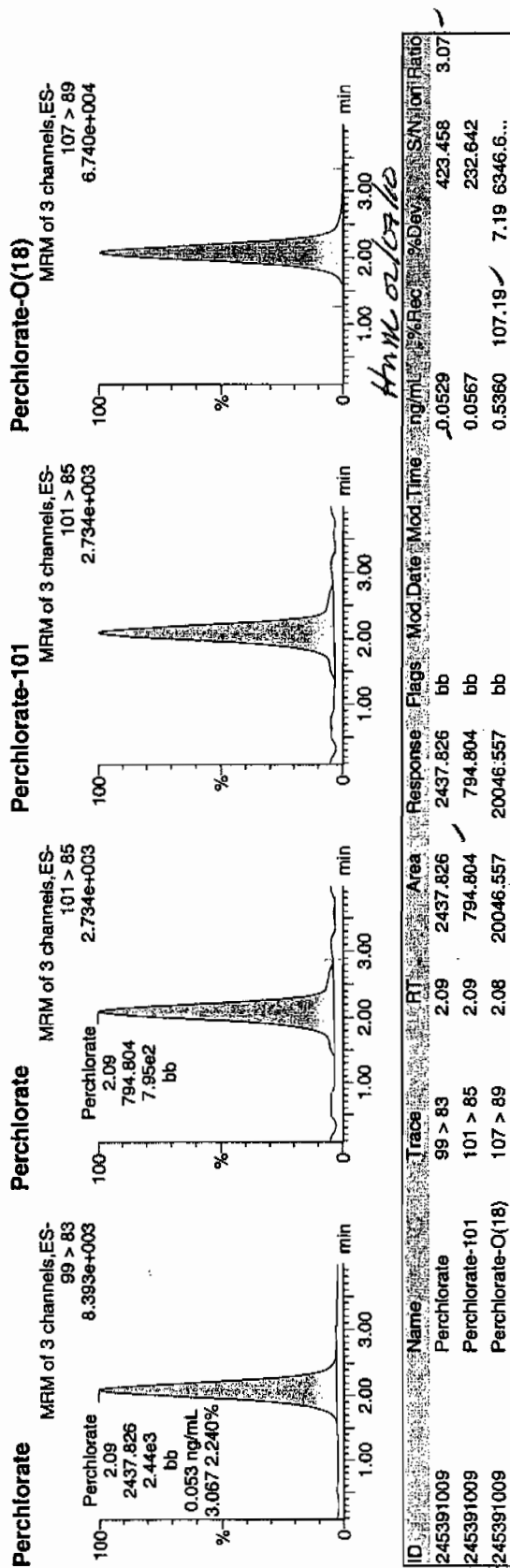
Time: 12:56:32

ID: 245391009

Vial: 1:3,D

02-06-10

12:56:32 | 245391009 | 1:3,D



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: 947103

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8053

Date Received: 23-JAN-10

GEL Job No (SDG): 10-1390

GEL Sample ID: 245391010

Date Filtered: 03-FEB-10

Injection Volume (uL): 20

%Solids: 81

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.619	2.48	0.619	ug/kg	U	1	05-FEB-10 13:03	per0205016a
	Perchlorate Isotope Ratio						1	05-FEB-10 13:03	per0205016a
14797-73-0	Perchlorate-101	.619	2.48	0.619	ug/kg	U	1	05-FEB-10 13:03	per0205016a
	Perchlorate-O(18)			6.16	ug/kg		1	05-FEB-10 13:03	per0205016a

[^] 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

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

Dataset: C:\MassLynx\Perchlorate.PRO\per020510a.qld

Last Altered: Saturday, February 06, 2010 9:57:33 AM Eastern Standard Time
Printed: Saturday, February 06, 2010 10:23:49 AM Eastern Standard Time

Name: per0205016a

Date: 05-Feb-2010

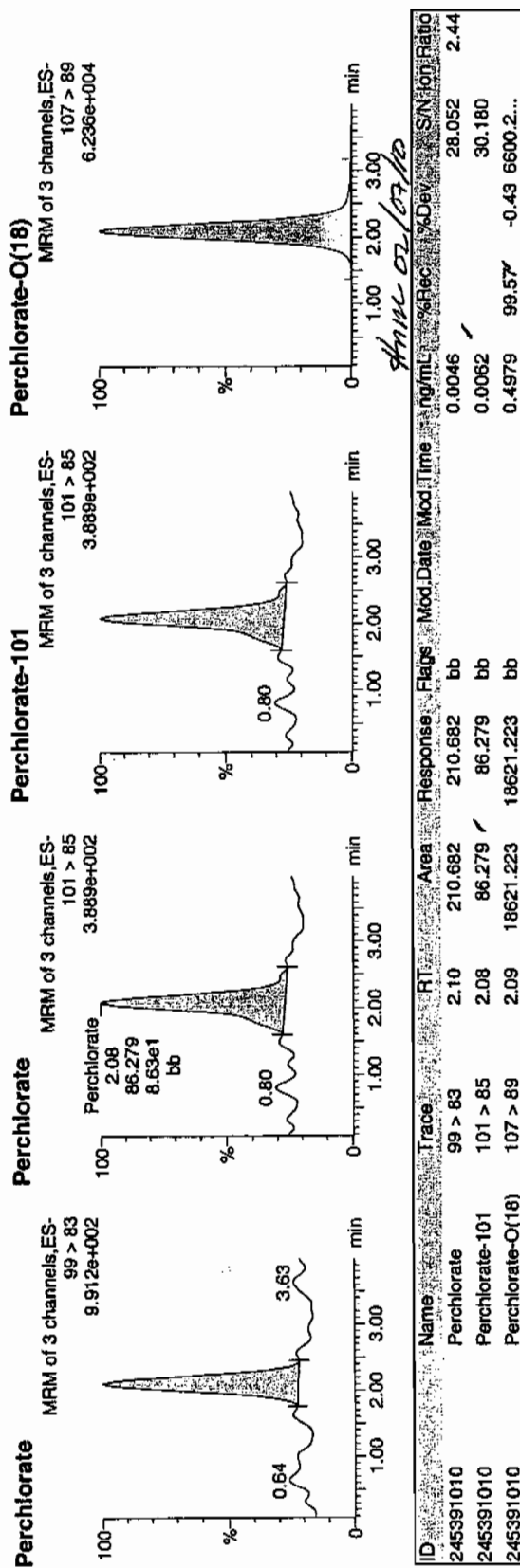
Time: 13:03:34

ID: 245391010

Vial: 1-3,E

02-06-10

1920-1947103 | 50720 | 11



Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample No.

RE15-10-8054

Lab Code: GEL

Instrument: LCMSMS

Date Received: 23-JAN-10

Method: SW846 6850 Modified

GEL Job No (SDG): 10-1390

Matrix: SOIL

GEL Sample ID: 245391011

Extraction Batch ID: 247103

Date Filtered: 03-FEB-10

Extraction Type: Solid Prep

Injection Volume (uL): 20

Sample Volume/Weight: 2.00 g

%Solids: 20.5

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.552	2.21	2.25	ug/kg		1	05-FEB-10 13:10	per0205017a
	Perchlorate Isotope Ratio			3.24			1	05-FEB-10 13:10	per0205017a
14797-73-0	Perchlorate-101	.552	2.21	2.28	ug/kg		1	05-FEB-10 13:10	per0205017a
	Perchlorate-O(18)			6.05	ug/kg		1	05-FEB-10 13:10	per0205017a

[^] 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

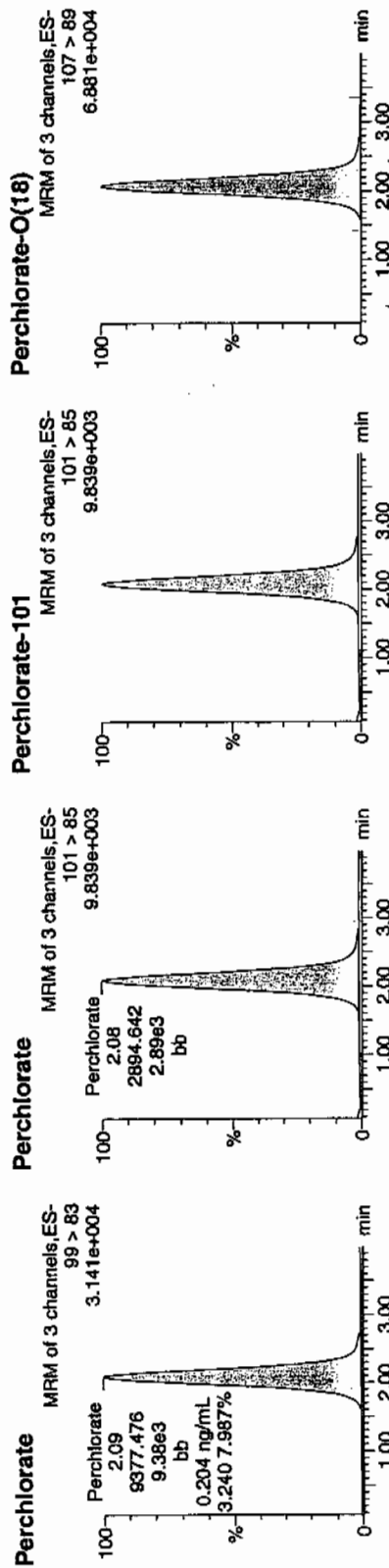
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Last Altered: Saturday, February 06, 2010 9:57:33 AM Eastern Standard Time
Printed: Saturday, February 06, 2010 10:23:49 AM Eastern Standard Time

Name: per0205017a
Date: 05-Feb-2010
Time: 13:10:35
ID: 245391011
Vial: 1:3,F

02-06-10

1222 | 947108 | 8070 | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
245391011	Perchlorate	99 > 83	2.09	9377.476	9377.476	bb			0.2035			1193.0...	3.24
245391011	Perchlorate-101	101 > 85	2.08	2894.642	2894.642	bb			0.2064			271.180	
245391011	Perchlorate-O(18)	107 > 89	2.07	20475.986	20475.986	bb			0.5475	109.49	9.49	5045.6...	

STANDARDS DATA

Perchlorate Initial Calibration

GEL Job No.(SDG): 10-1390

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument ID: LCMSMS Date Analyzed: 04-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: 43271.78

Response Type: External Standard

Curve Type: RF

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-1390

Lab Code: GEL

Instrument ID: LCMSMS Date Analyzed: 04-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: 13537.74

Response Type: External Standard

Curve Type: RF

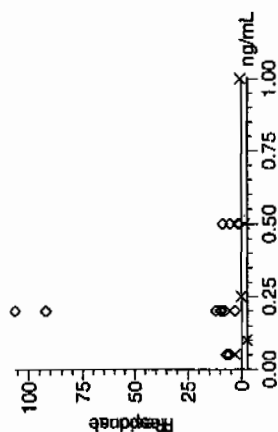
Quantity Calibration Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020410a.qld

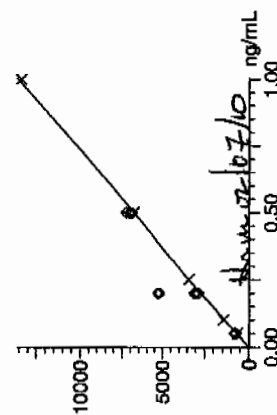
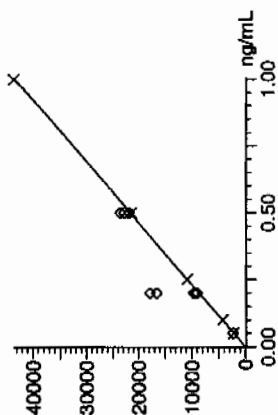
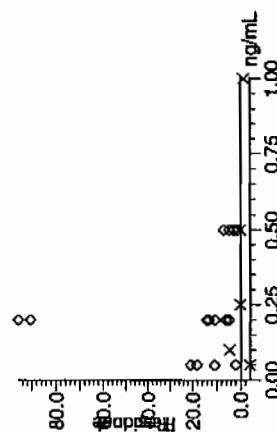
Last Altered: Friday, February 05, 2010 9:19:58 AM Eastern Standard Time
Printed: Friday, February 05, 2010 9:28:02 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per020410a.mdb 05 Feb 2010 09:19:36
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per020410a.cdb 05 Feb 2010 09:19:57

Compound name: Perchlorate
Response Factor: 43271.8
RRF SD: 916.878, % Relative SD: 2.11888
Response type: External Std, Area
Curve type: RF



Compound name: Perchlorate-101
Response Factor: 13537.7
RRF SD: 413.226, % Relative SD: 3.0524
Response type: External Std, Area
Curve type: RF



02-05-10

Quantify Calibration Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charles W. Wilson

Page 2 of 2

Dataset: C:\MassLynx\Perchlorate.PRO\per020410a.qld

Last Altered: Friday, February 05, 2010 9:19:58 AM Eastern Standard Time

Printed: Friday, February 05, 2010 9:28:02 AM Eastern Standard Time

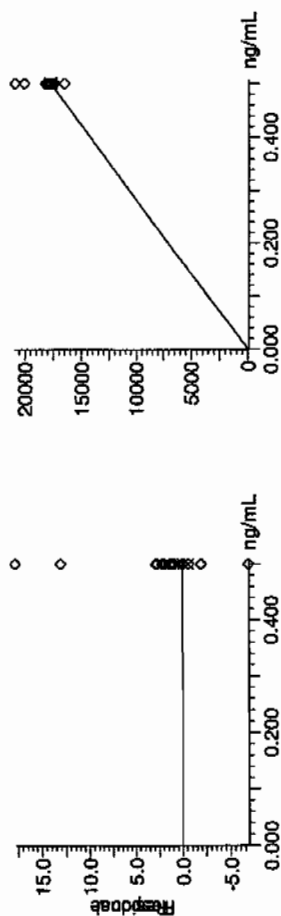
Compound name: Perchlorate-O(18)

Response Factor: 35510.7

RRF SD: 140.667, % Relative SD: 0.396127

Response type: External Std, Area

Curve type: RF



Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-1390

Lab Code: GEL

Instrument ID: LCMSMS Date Analyzed: 05-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: 46080.66

Response Type: External Standard

Curve Type: RF

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-1390

Lab Code: GEL

Instrument ID: LCMSMS Date Analyzed: 05-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: 14026.52

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\per020510a.qld

Last Altered: Saturday, February 06, 2010 9:57:33 AM Eastern Standard Time
Printed: Saturday, February 06, 2010 10:23:49 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per020510a.mdb 06 Feb 2010 09:50:39
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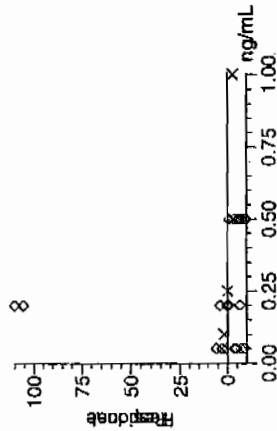
Compound name: Perchlorate

Response Factor: 46080.7

RF SD: 1224.29, % Relative SD: 2.65683

Response type: External Std, Area

Curve type: RF



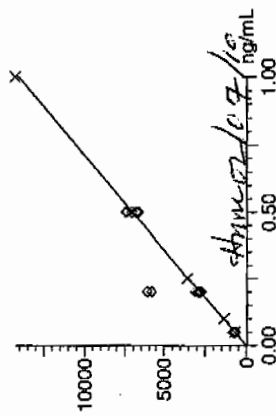
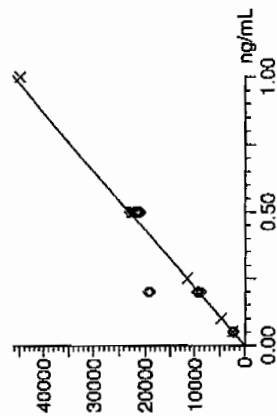
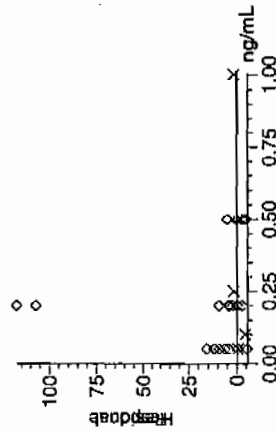
Compound name: Perchlorate-101

Response Factor: 14026.5

RF SD: 372.04, % Relative SD: 2.6524

Response type: External Std, Area

Curve type: RF



02-06-10

Quantify Calibration Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020510a.qld

Last Altered: Saturday, February 06, 2010 9:57:33 AM Eastern Standard Time
Printed: Saturday, February 06, 2010 10:23:49 AM Eastern Standard Time

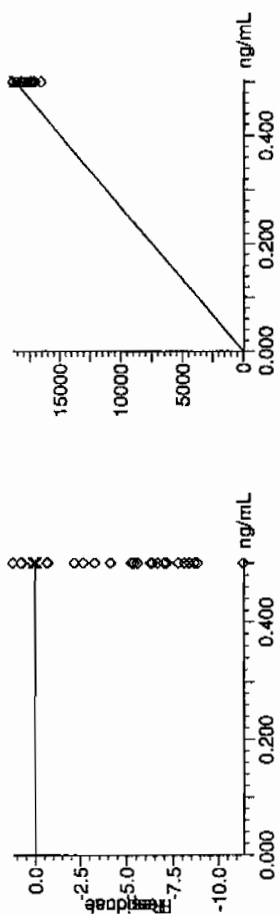
Compound name: Perchlorate-O(18)

Response Factor: 37402.4

RRF SD: 109.222, % Relative SD: 0.29202

Response type: External Std, Area

Curve type: RF



Form 3

Perchlorate Initial Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1390

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.51	101.61	04-FEB-10 15:00	per0204009a
Perchlorate Isotope Ratio		3.21		04-FEB-10 15:00	per0204009a
Perchlorate-101	.5	.51	101.3	04-FEB-10 15:00	per0204009a
Perchlorate	.5	.5	99.37	05-FEB-10 12:13	per0205009a
Perchlorate Isotope Ratio		3.11		05-FEB-10 12:13	per0205009a
Perchlorate-101	.5	.53	105.07	05-FEB-10 12:13	per0205009a

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

Dataset: C:\MassLynx\Perchlorate.PRO\per020410a.qld

Last Altered: Friday, February 05, 2010 9:19:58 AM Eastern Standard Time
Printed: Friday, February 05, 2010 9:28:02 AM Eastern Standard Time

Name: per0204009a

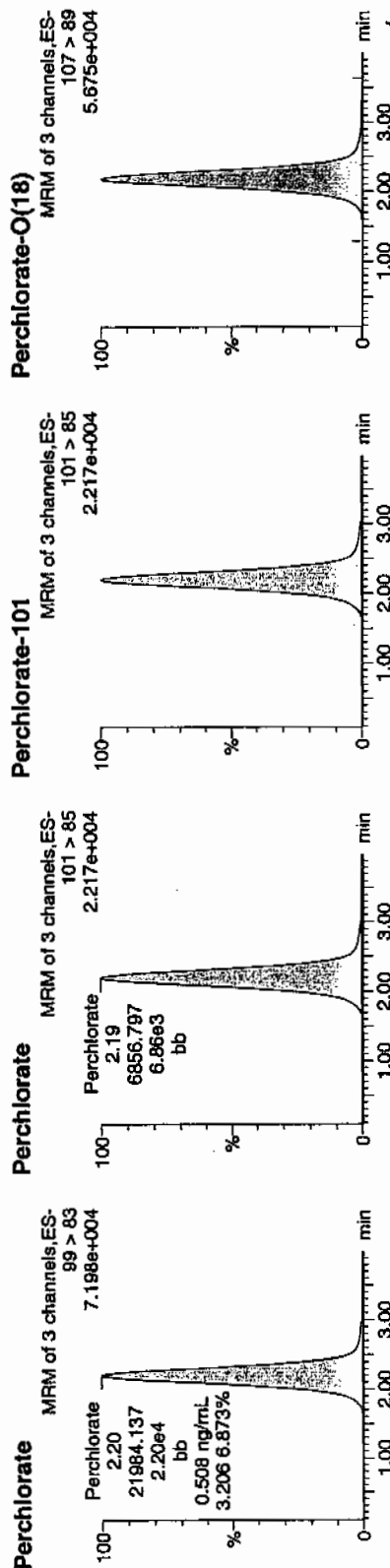
Date: 04-Feb-2010

Time: 15:00:49

ID: WCL100128-06ICV

Vial: 1:2,A

Pass and 02.05.10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100128-06ICV	Perchlorate	99 > 83	2.20	21984.137	21984.137	bb			0.5080	101.61	1.61	2842.7...	3.21
WCL100128-06ICV	Perchlorate-101	101 > 85	2.19	6856.797	6856.797	bb			0.5065	101.30	1.30	3401.4...	
WCL100128-06ICV	Perchlorate-O(18)	107 > 89	2.19	17416.377	17416.377	bb			0.4905	98.09	-1.91	4166.8...	

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

Dataset: C:\MassLynx\Perchlorate.PRO\per020510a.qld

Last Altered: Saturday, February 06, 2010 9:57:33 AM Eastern Standard Time
Printed: Saturday, February 06, 2010 10:23:49 AM Eastern Standard Time

Name: per0205009a

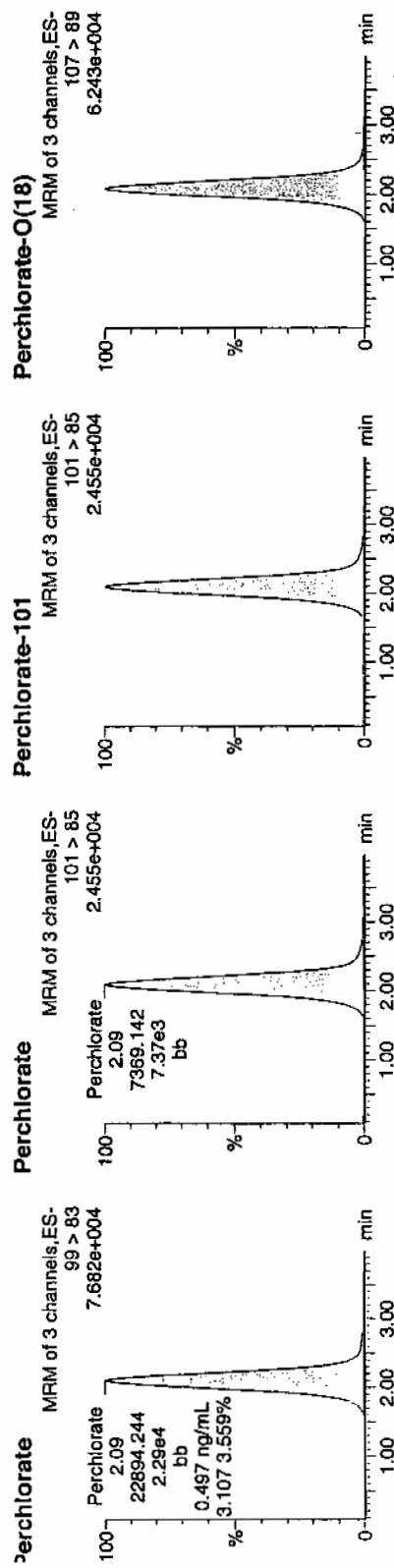
Date: 05-Feb-2010

Time: 12:13:53

D: WCL100128-06ICV

Vial: 1:2,A

*Per
and
0206-10*



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
VCL100128-06ICV	Perchlorate	99 > 83	2.09	22894.244	bb			0.4968	99.37	-0.63	2074.7...	3.11
VCL100128-06ICV	Perchlorate-101	101 > 85	2.09	7369.142	bb			0.5254	105.07	5.07	1461.4...	
VCL100128-06ICV	Perchlorate-O(18)	107 > 89	2.08	18290.613	bb			0.4890	97.80	-2.20	1772.3...	

Perchlorate Continuing Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1390

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.54	108.75	04-FEB-10 16:27	per0204021a
Perchlorate Isotope Ratio		3.25		04-FEB-10 16:27	per0204021a
Perchlorate-101	.5	.54	107.02	04-FEB-10 16:27	per0204021a
Perchlorate	.5	.5	100.7	04-FEB-10 17:45	per0204032a
Perchlorate Isotope Ratio		3.12		04-FEB-10 17:45	per0204032a
Perchlorate-101	.5	.52	103.09	04-FEB-10 17:45	per0204032a
Perchlorate	.5	.53	105.35	04-FEB-10 19:04	per0204043a
Perchlorate Isotope Ratio		3.28		04-FEB-10 19:04	per0204043a
Perchlorate-101	.5	.51	102.8	04-FEB-10 19:04	per0204043a
Perchlorate	.5	.53	105.39	04-FEB-10 20:36	per0204056a
Perchlorate Isotope Ratio		3.22		04-FEB-10 20:36	per0204056a
Perchlorate-101	.5	.52	104.66	04-FEB-10 20:36	per0204056a
Perchlorate	.5	.47	94.72	05-FEB-10 13:45	per0205022a

Form 3

Perchlorate Continuing Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1390

Lab Code: GEL

Reporting Units: ug/kg

Perchlorate Isotope Ratio		3.1		05-FEB-10 13:45	per0205022a
Perchlorate-101	.5	.5	100.4	05-FEB-10 13:45	per0205022a

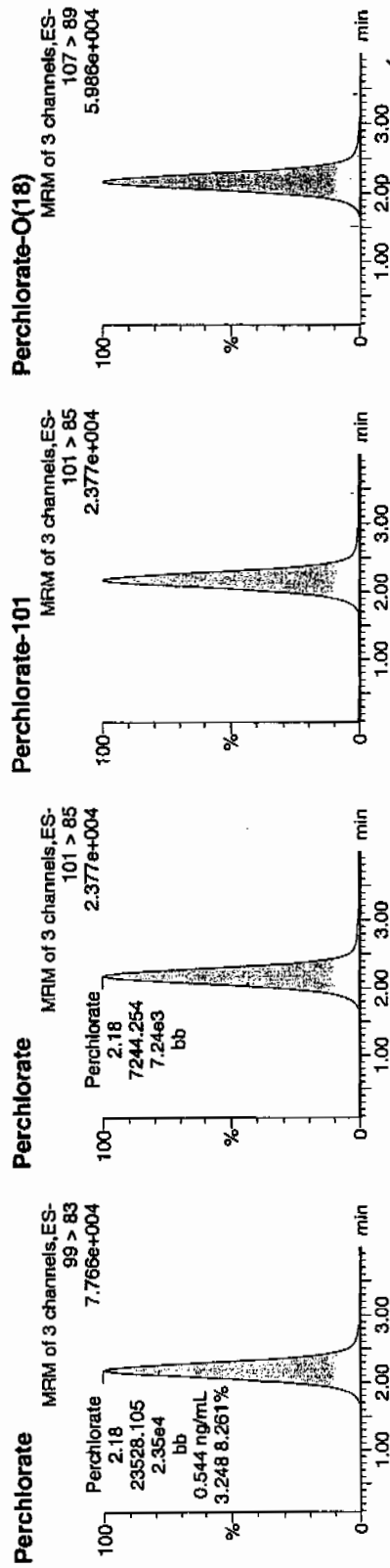
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020410a.qld

Last Altered: Friday, February 05, 2010 9:19:58 AM Eastern Standard Time
Printed: Friday, February 05, 2010 9:28:02 AM Eastern Standard Time

Name: per0204021a
Date: 04-Feb-2010
Time: 16:27:30
ID: WCL100128-06CCV
Vial: 1:2,A

Perchlorate
02-05-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100128-06CCV	Perchlorate	99 > 83	2.18	23528.105	23528.105	bb			0.5437	108.75	8.75	1451.2...	3.25
WCL100128-06CCV	Perchlorate-101	101 > 85	2.18	7244.254	7244.254	bb			0.5351	107.02	7.02	1212.3...	
WCL100128-06CCV	Perchlorate-O(18)	107 > 89	2.17	18226.914	18226.914	bb			0.5133	102.66	2.66	5073.3...	

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020410a.qld

Last Altered: Friday, February 05, 2010 9:19:58 AM Eastern Standard Time
Printed: Friday, February 05, 2010 9:28:02 AM Eastern Standard Time

Name: per0204032a

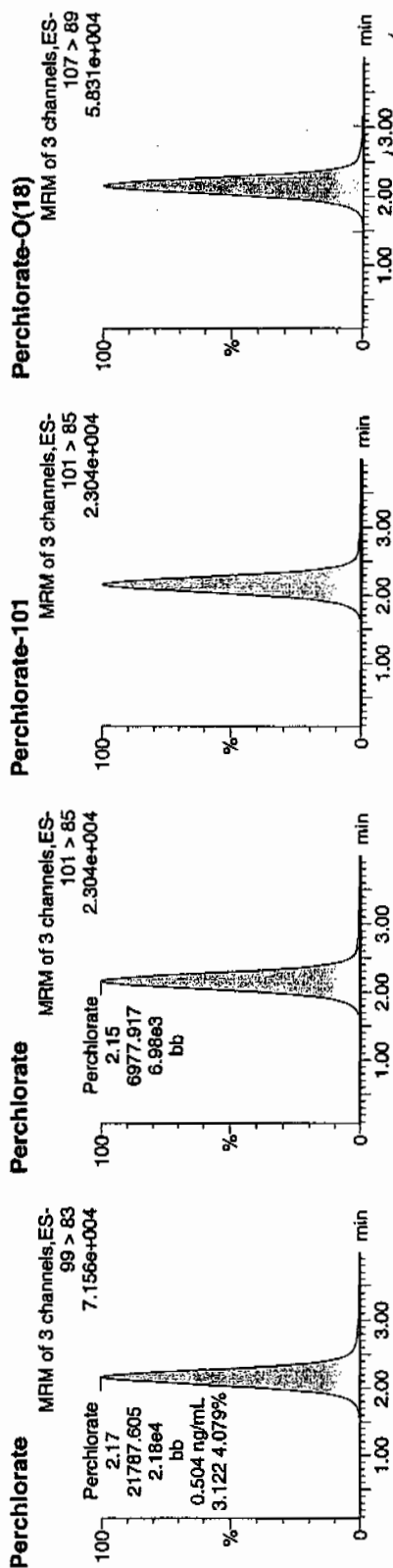
Date: 04-Feb-2010

Time: 17:45:13

ID: WCL100128-06CCV

Vial: 1;2,A

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02-25-10



ID	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
WCL100128-06CCV	Perchlorate	99 > 83	2.17	21787.605	21787.605	bb			0.5035	100.70	0.70	1296.1...	3.12
WCL100128-06CCV	Perchlorate-101	101 > 85	2.15	6977.917	6977.917	bb			0.5154	103.09	3.09	911.136	
WCL100128-06CCV	Perchlorate-O(18)	107 > 89	2.15	17405.166	17405.166	bb			0.4901	98.03	-1.97	1495.5...	

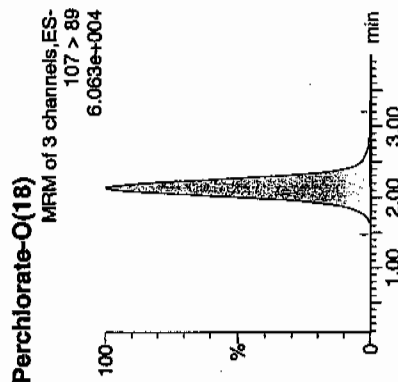
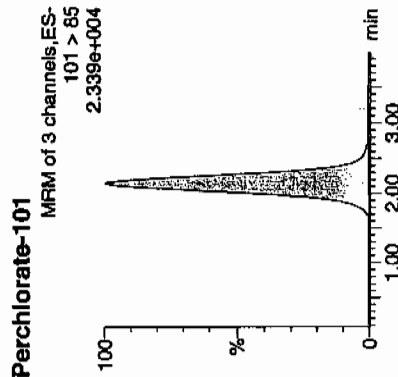
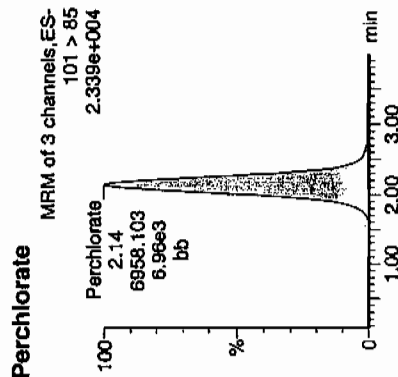
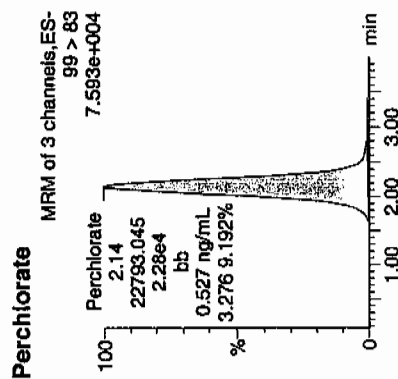
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charliers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020410a.qld

Last Altered: Friday, February 05, 2010 9:19:58 AM Eastern Standard Time
Printed: Friday, February 05, 2010 9:28:02 AM Eastern Standard Time

Name: per0204043a
Date: 04-Feb-2010
Time: 19:04:01
ID: WCL100128-06CCV
Vial: 1:2,A

Pass and 02-05-10



ID	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100128-06CCV	Perchlorate	99 > 83	2.14	22793.045	22793.045	bb			0.5267	105.35	5.35	1932.6...	3.28
WCL100128-06CCV	Perchlorate-101	101 > 85	2.14	6958.103	6958.103	bb			0.5140	102.80	2.80	859.936	
WCL100128-06CCV	Perchlorate-O(18)	107 > 89	2.13	18265.703	18265.703	bb			0.5144	102.87	2.87	1153.2...	

Quantify Sample Report MassLynx 4.0 SP4

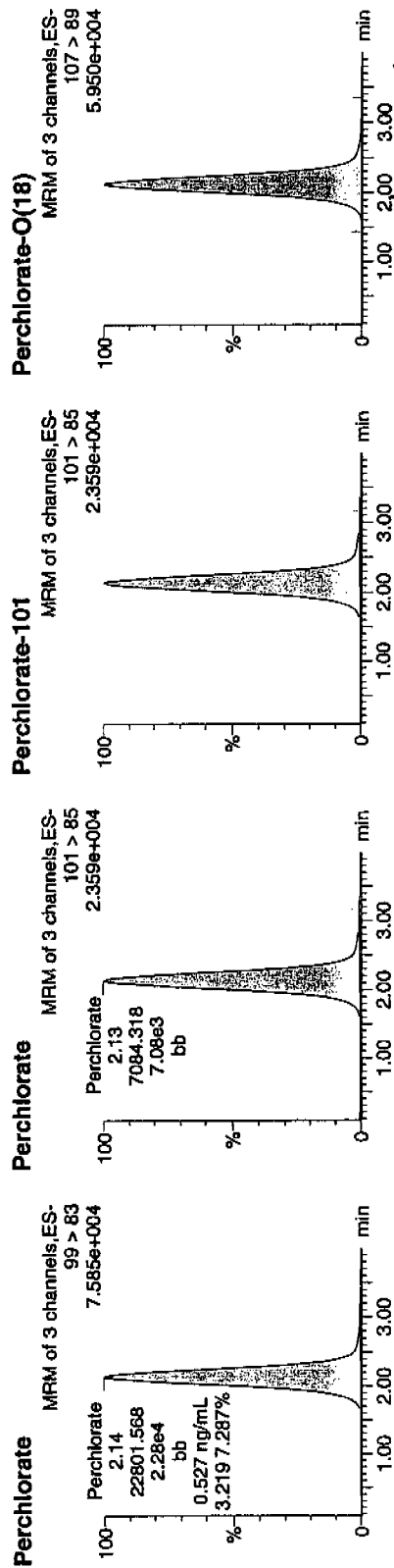
The GEL Group, LLC Analyst: Charfers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020410a.qld

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 Printed: Friday, February 05, 2010 9:28:02 AM Eastern Standard Time

Name: per0204056a
 Date: 04-Feb-2010
 Time: 20:36:44
 ID: WCL100128-06CCV
 Vial: 1:2,A

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 07-25-10



ID	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100128-06CCV	Perchlorate	99 > 83	2.14	22801.568	22801.568	bb			0.5269	105.39	5.39	1390.0...	3.22
WCL100128-06CCV	Perchlorate-101	101 > 85	2.13	7084.318	7084.318	bb			0.5233	104.66	4.66	2370.7...	
WCL100128-06CCV	Perchlorate-O(18)	107 > 89	2.12	17967.961	17967.961	bb			0.5060	101.20	1.20	853.606	

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

Dataset: C:\MassLynx\Perchlorate.PRO\per020510a.qld

Last Altered: Saturday, February 06, 2010 9:57:33 AM Eastern Standard Time
Printed: Saturday, February 06, 2010 10:23:49 AM Eastern Standard Time

Name: per0205022a

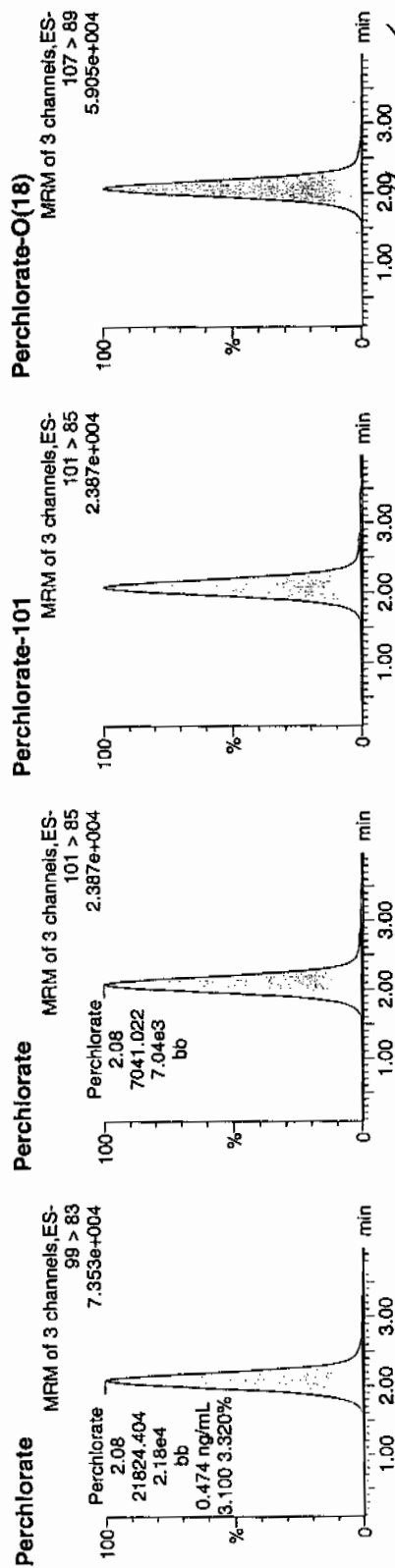
Date: 05-Feb-2010

Time: 13:45:46

ID: WCL100128-06CCV

Vial: 1-2,A

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and
02-06-10*



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100128-06CCV	Perchlorate	99 > 83	2.08	21824.404	21824.404	bb			0.4736	94.72	-5.28	1526.5...	3.10
WCL100128-06CCV	Perchlorate-101	101 > 85	2.08	7041.022	7041.022	bb			0.5020	100.40	0.40	2932.2...	
WCL100128-06CCV	Perchlorate-O(18)	107 > 89	2.07	17453.566	17453.566	bb			0.4666	93.33	-6.67	2479.7...	

Form 3

Perchlorate MDL Verification

GEL Job No.(SDG): 10-1390

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.05	.05	107.29	04-FEB-10 15:14	per0204011a
Perchlorate Isotope Ratio		3.35		04-FEB-10 15:14	per0204011a
Perchlorate-101	.05	.05	102.23	04-FEB-10 15:14	per0204011a
Perchlorate	.05	.05	106.87	04-FEB-10 16:41	per0204023a
Perchlorate Isotope Ratio		3.08		04-FEB-10 16:41	per0204023a
Perchlorate-101	.05	.06	110.97	04-FEB-10 16:41	per0204023a
Perchlorate	.05	.05	107.19	04-FEB-10 18:00	per0204034a
Perchlorate Isotope Ratio		3.36		04-FEB-10 18:00	per0204034a
Perchlorate-101	.05	.05	102.02	04-FEB-10 18:00	per0204034a
Perchlorate	.05	.05	106.66	04-FEB-10 19:18	per0204045a
Perchlorate Isotope Ratio		2.82		04-FEB-10 19:18	per0204045a

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1390

Lab Code: GEL

Reporting Units: ug/kg

Perchlorate-101	.05	.06	120.92	04-FEB-10 19:18	per0204045a
Perchlorate	.05	.05	105.56	04-FEB-10 20:51	per0204058a
Perchlorate Isotope Ratio		2.86		04-FEB-10 20:51	per0204058a
Perchlorate-101	.05	.06	118.15	04-FEB-10 20:51	per0204058a
Perchlorate	.05	.05	96	05-FEB-10 12:28	per0205011a
Perchlorate Isotope Ratio		2.72		05-FEB-10 12:28	per0205011a
Perchlorate-101	.05	.06	115.84	05-FEB-10 12:28	per0205011a
Perchlorate	.05	.05	105.92	05-FEB-10 13:59	per0205024a
Perchlorate Isotope Ratio		3.28		05-FEB-10 13:59	per0205024a
Perchlorate-101	.05	.05	106.19	05-FEB-10 13:59	per0205024a

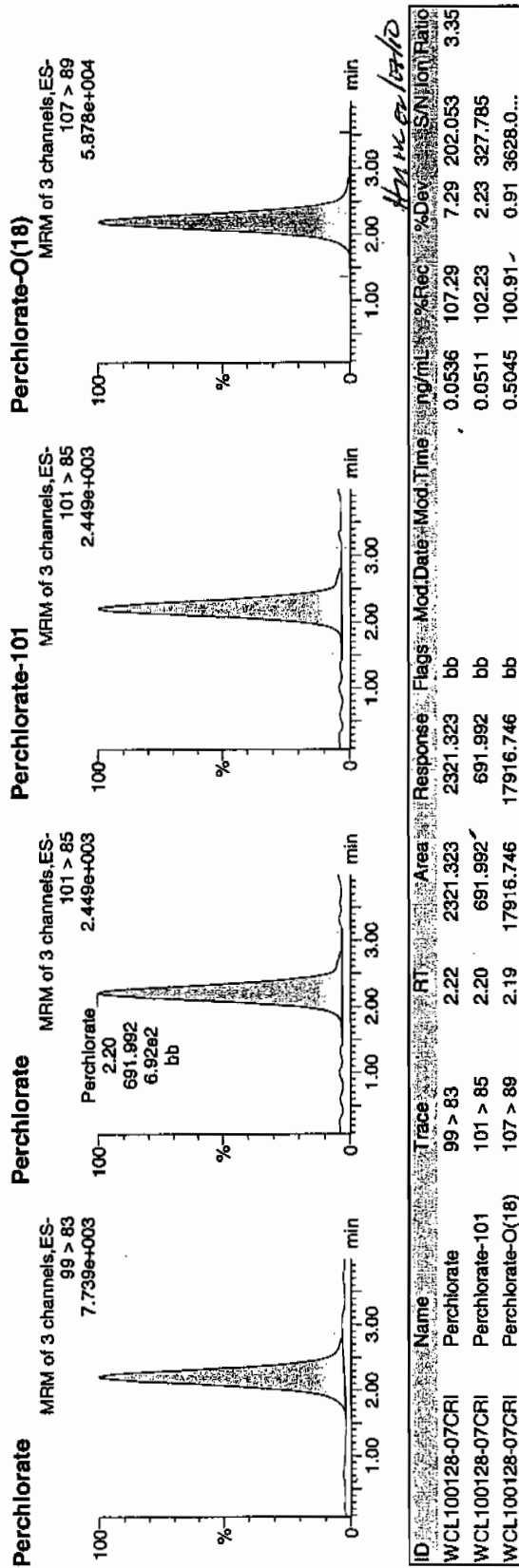
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020410a.qld

Last Altered: Friday, February 05, 2010 9:19:58 AM Eastern Standard Time
Printed: Friday, February 05, 2010 9:28:02 AM Eastern Standard Time

Name: per0204011a
Date: 04-Feb-2010
Time: 15:14:54
ID: WCL100128-07CRI
Vial: 1:2,B

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WCL
02-25-10*



for use on 107/10

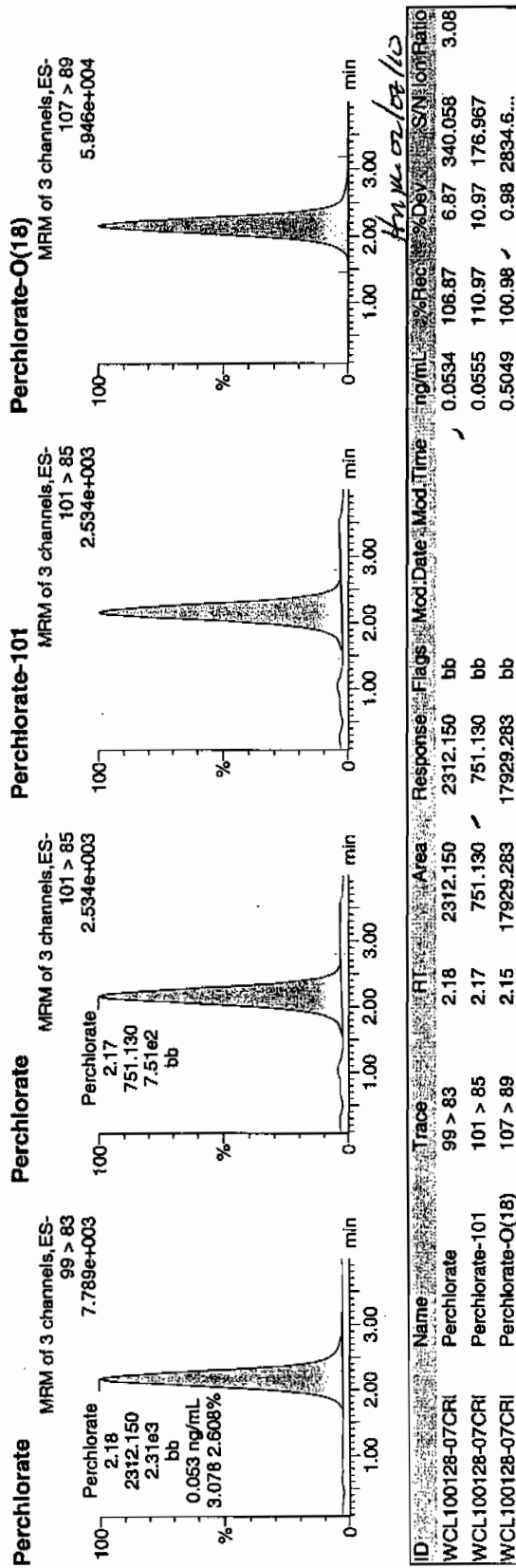
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020410a.qld

Last Altered: Friday, February 05, 2010 9:19:58 AM Eastern Standard Time
Printed: Friday, February 05, 2010 9:28:02 AM Eastern Standard Time

Name: per0204023a
Date: 04-Feb-2010
Time: 16:41:44
ID: WCL100128-07CRI
Vial: 1:2,B

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02-08-10*

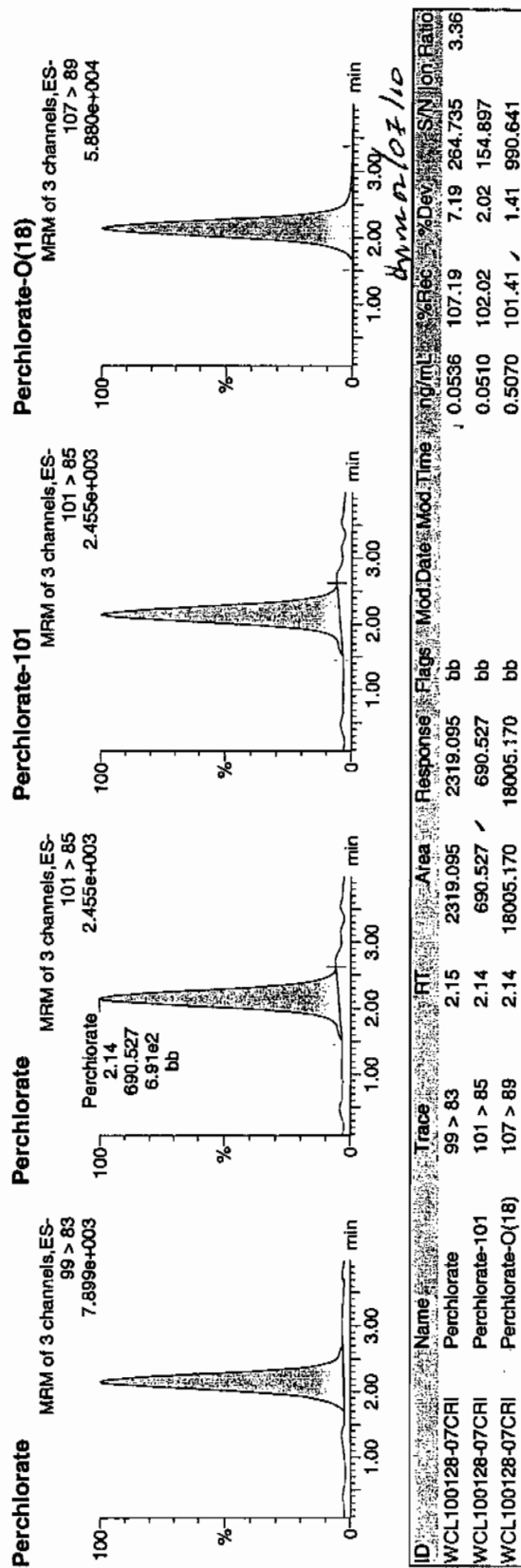


Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020410a.qld
Last Altered: Friday, February 05, 2010 9:19:58 AM Eastern Standard Time
Printed: Friday, February 05, 2010 9:28:02 AM Eastern Standard Time

Name: per0204034a
Date: 04-Feb-2010
Time: 18:00:24
ID: WCL100128-07CRI
Vial: 1:2,B

Per
02-05-10

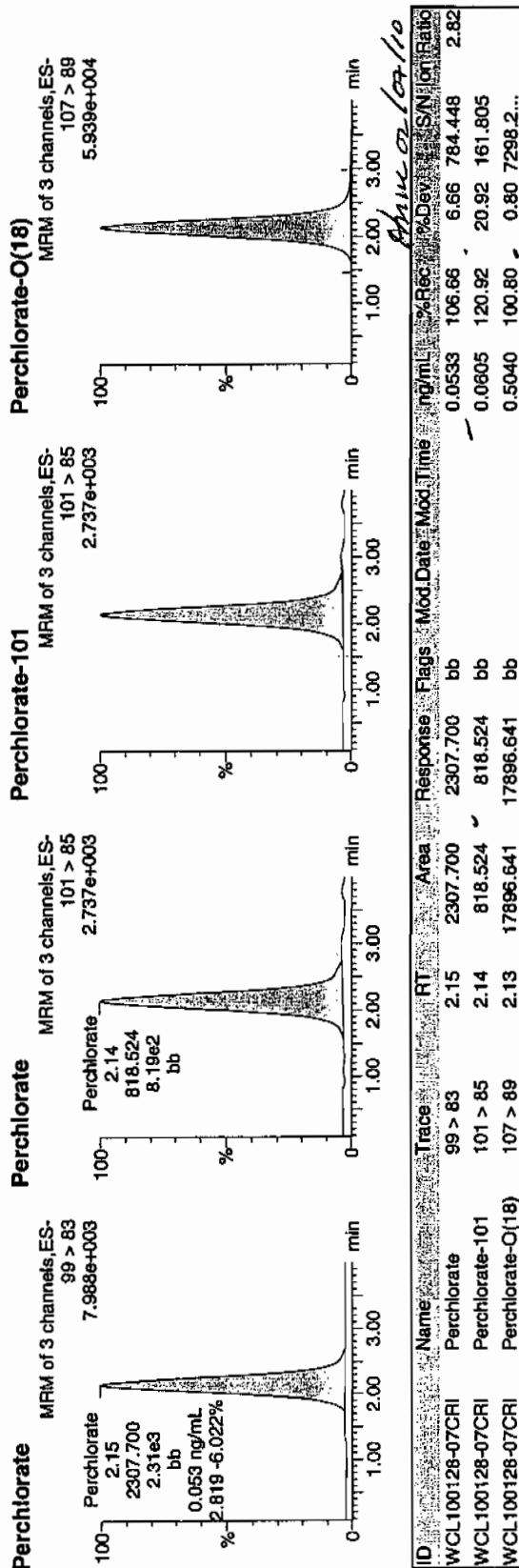


Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson
Dataset: C:\MassLynx\Perchlorate.PRO\per020410a.qld

Last Altered: Friday, February 05, 2010 9:19:58 AM Eastern Standard Time
Printed: Friday, February 05, 2010 9:28:02 AM Eastern Standard Time

Name: per0204045a
Date: 04-Feb-2010
Time: 19:18:21
ID: WCL100128-07CRI
Vial: 1:2,B

Pass and OLS-D



Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020410a.qld

Last Altered: Friday, February 05, 2010 9:19:58 AM Eastern Standard Time
Printed: Friday, February 05, 2010 9:28:02 AM Eastern Standard Time

Name: per0204058a

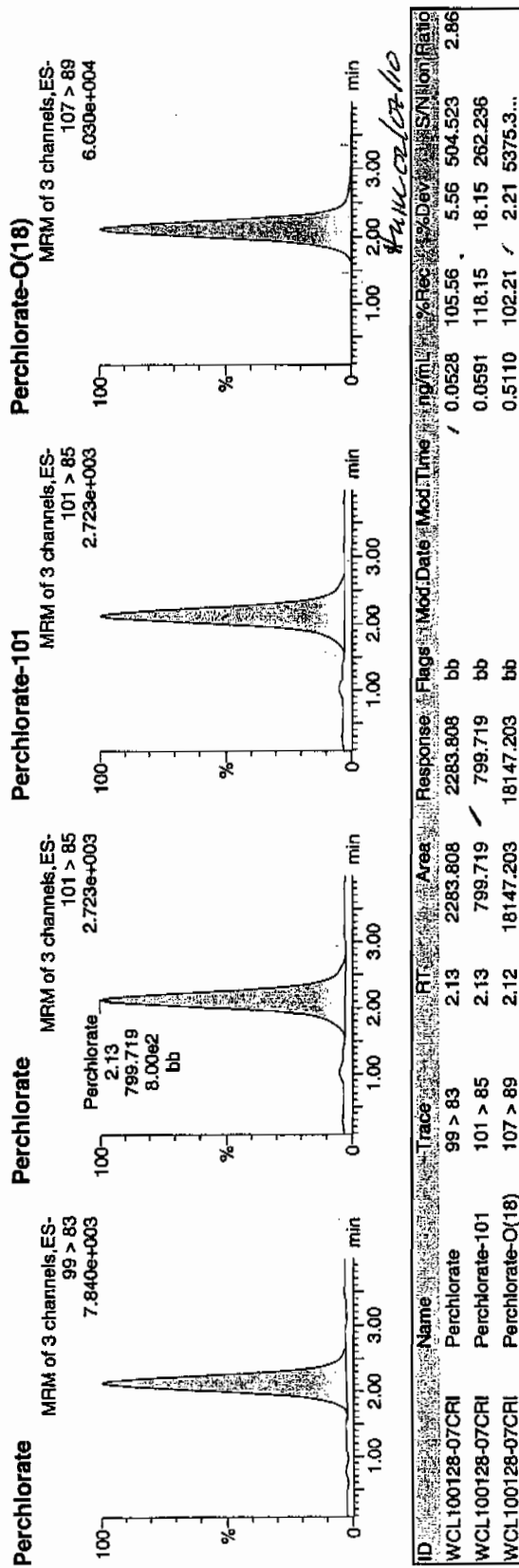
Date: 04-Feb-2010

Time: 20:51:11

ID: WCL100128-07CRI

Vial: 1;2,B

*Per
and
02-05-10*



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

Dataset: C:\MassLynx\Perchlorate.PRO\per020510a.qld

Last Altered: Saturday, February 06, 2010 9:57:33 AM Eastern Standard Time
Printed: Saturday, February 06, 2010 10:23:49 AM Eastern Standard Time

Name: per0205011a

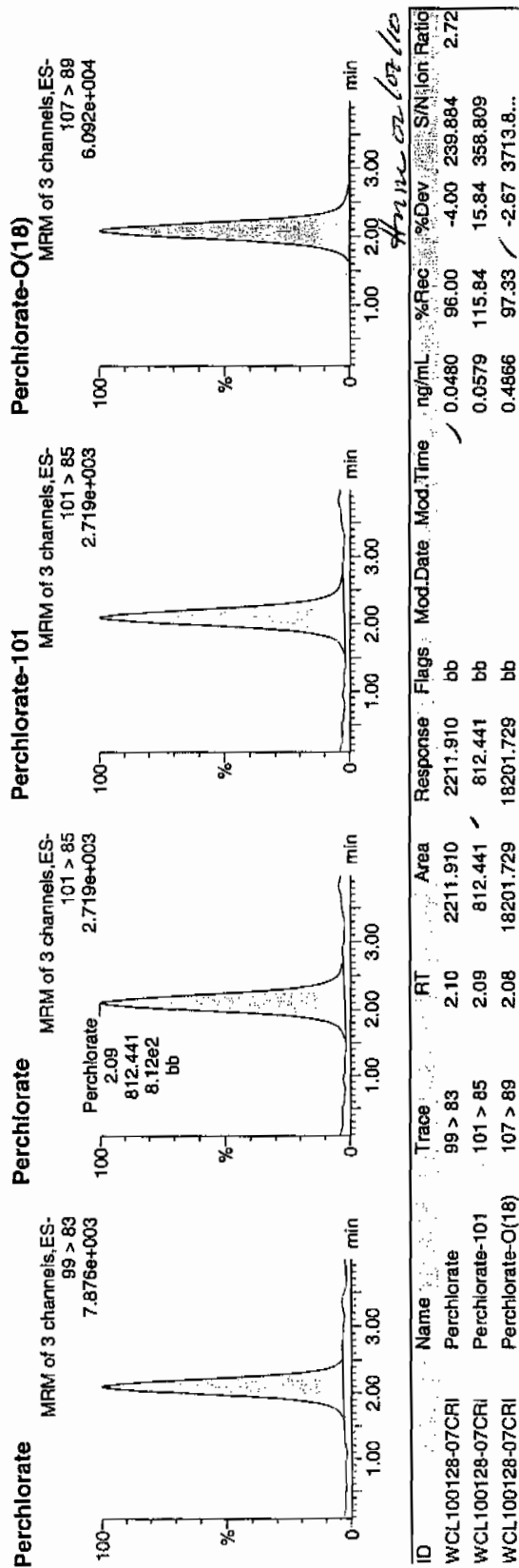
Date: 05-Feb-2010

Time: 12:28:13

ID: WCL100128-07CRI

Vial: 1-2,B

Pass
CWS
02-06-10



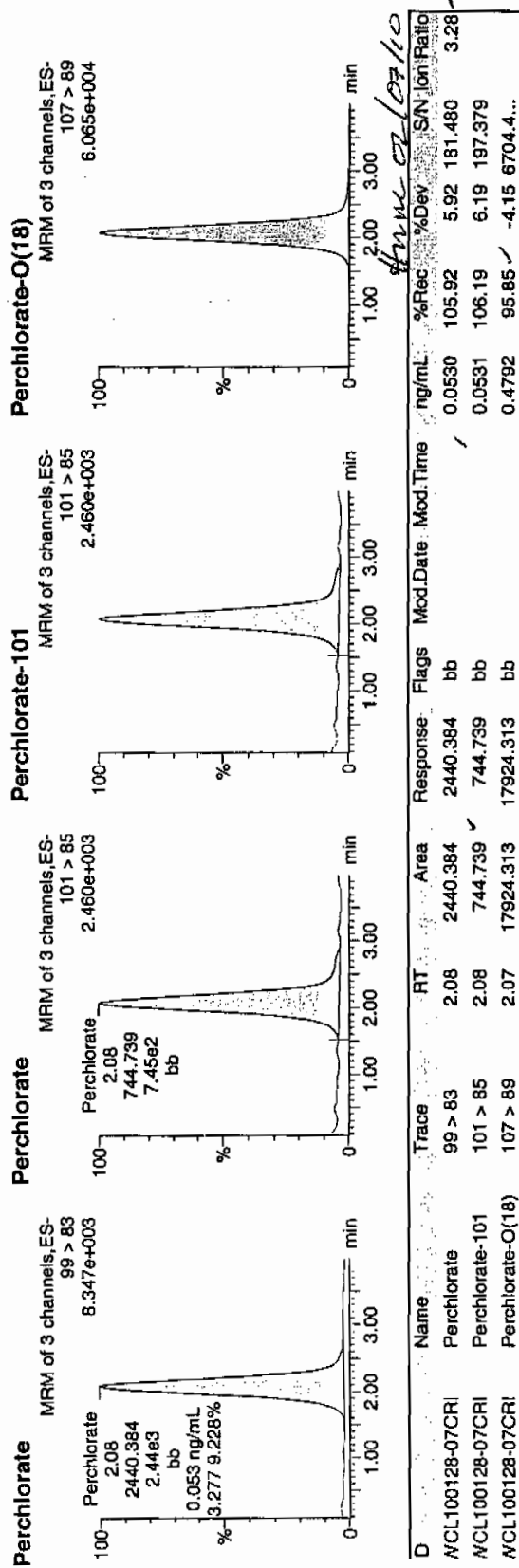
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020510a.qld

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Printed: Saturday, February 06, 2010 10:23:49 AM Eastern Standard Time

Name: per0205024a
Date: 05-Feb-2010
Time: 13:59:59
ID: WCL100128-07CRI
Vial: 1:2,B

Puro
CWW
02-06-10



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

QUALITY CONTROL

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: EPA 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 247103
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. MB
 Date Received: 03-FEB-10
 GEL Job No (SDG): 10-1390
 GEL Sample ID: 1202028739
 Date Filtered: 03-FEB-10
 Injection Volume (uL): 20
 %Solids: 100

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.5	2	0.500	ug/kg	U	1	04-FEB-10 19:25	per0204046a
	Perchlorate Isotope Ratio						1	04-FEB-10 19:25	per0204046a
14797-73-0	Perchlorate-101	.5	2	0.500	ug/kg	U	1	04-FEB-10 19:25	per0204046a
	Perchlorate-O(18)			4.95	ug/kg		1	04-FEB-10 19:25	per0204046a

[^] 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

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

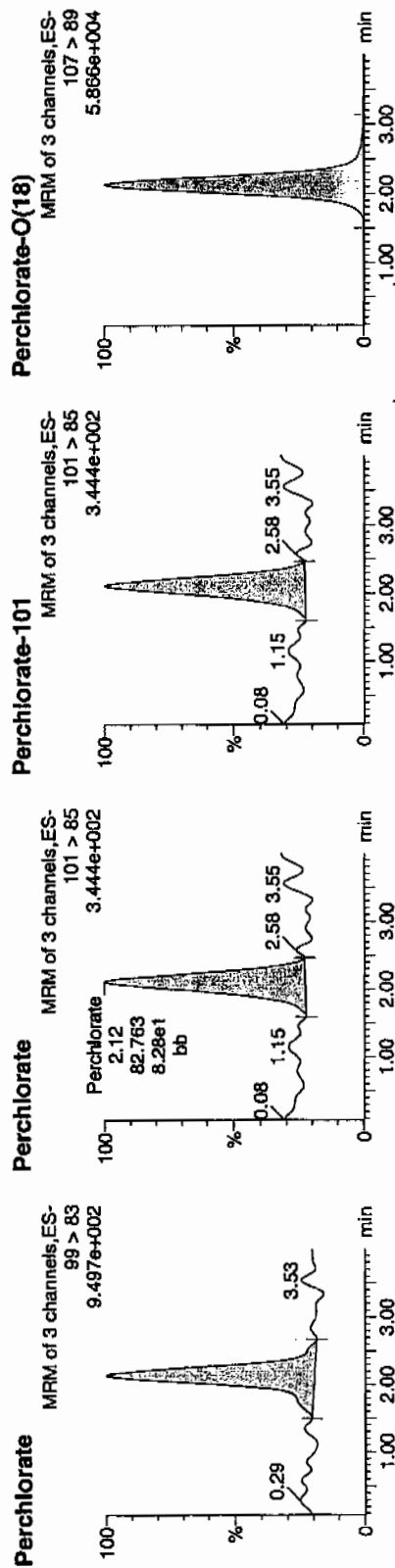
Dataset: C:\MassLynx\Perchlorate.PRO\per020410a.qld

Last Altered: Friday, February 05, 2010 9:19:58 AM Eastern Standard Time
Printed: Friday, February 05, 2010 9:28:02 AM Eastern Standard Time

Name: per0204046a
Date: 04-Feb-2010
Time: 19:25:31
ID: 1202028739
Vial: 2:1,A

WWS
02-05-10

1202028739 | 1947108 | 50020 | MB | 11



44mm 02-109/110

ID	Name	Trace	RT	Area	Response	Flags	Mod	Date	Mod	Time	ng/ml	%Rec	%Dev	S/N	Ratio
1202028739	Perchlorate	99 > 83	2.14	237.739	237.739	bb					0.0055			18.095	2.87
1202028739	Perchlorate-101	101 > 85	2.12	82.763	82.763	bb					0.0061			27.867	
1202028739	Perchlorate-O(18)	107 > 89	2.13	17578.129	17578.129	bb					0.4950	98.00	-1.00	4236.3...	

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: 247103
 Extraction Type: Solid Prep
 Client Sample No. LCS
 Date Received: 03-FEB-10
 GEL Job No (SDG): 10-1390
 GEL Sample ID: 1202028740
 Date Filtered: 03-FEB-10
 Injection Volume (uL): 20
 %Solids: 100

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.5	2	2.20	ug/kg		1	04-FEB-10 19:32	per0204047a
	Perchlorate Isotope Ratio			3.32			1	04-FEB-10 19:32	per0204047a
14797-73-0	Perchlorate-101	.5	2	2.12	ug/kg		1	04-FEB-10 19:32	per0204047a
	Perchlorate-O(18)			5.14	ug/kg		1	04-FEB-10 19:32	per0204047a

[^] 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

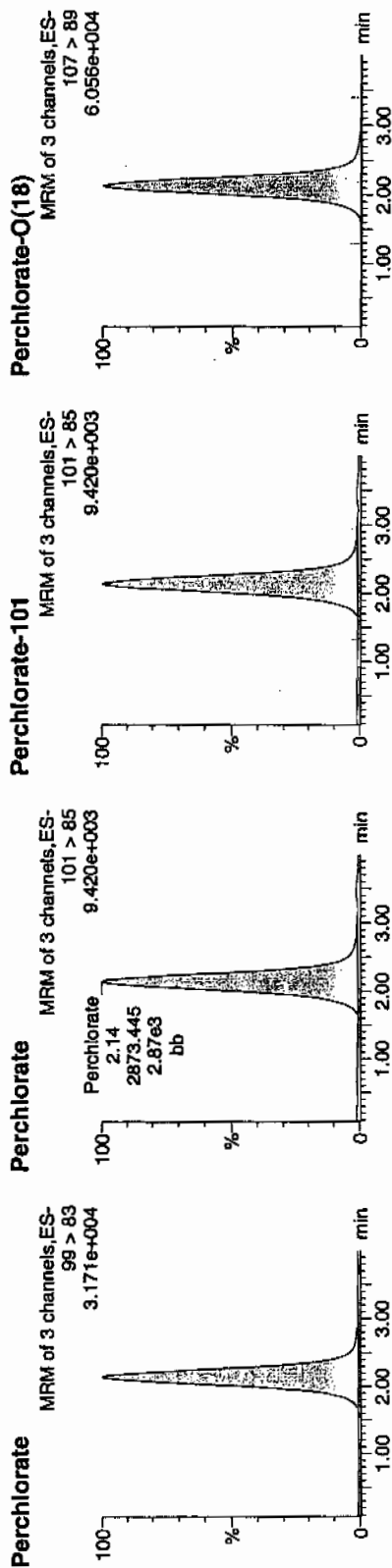
Dataset: C:\MassLynx\Perchlorate.PRO\per020410a.qld

Last Altered: Friday, February 05, 2010 9:19:58 AM Eastern Standard Time
Printed: Friday, February 05, 2010 9:28:02 AM Eastern Standard Time

Name: per0204047a
Date: 04-Feb-2010
Time: 19:32:51
ID: 1202028740
Vial: 2-1,B

02-05-10

LAJL 947108 | 5020 | LCS | 1 |



ID	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202028740	Perchlorate	99 > 83	2.14	9531.108	9531.108	bb			0.2203	110.13	10.13	1553.9...	3.32
1202028740	Perchlorate-101	101 > 85	2.14	2873.445	2873.445	bb			0.2123	106.13	6.13	2478.7...	
1202028740	Perchlorate-O(18)	107 > 89	2.13	18254.203	18254.203	bb			0.5140	102.81	2.81	8308.0...	

$$\frac{9531.108}{43271.8} = 0.2203$$

Handwritten note: 43271.8

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: SOIL

Extraction Batch ID: 247103

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-7918MS

Date Received: 23-JAN-10

GEL Job No (SDG): 10-1390

GEL Sample ID: 1202028741

Date Filtered: 03-FEB-10

Injection Volume (uL): 20

%Solids: 90.4

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.553	2.21	4.25	ug/kg		1	04-FEB-10 19:54	per0204050a
	Perchlorate Isotope Ratio			3.22			1	04-FEB-10 19:54	per0204050a
14797-73-0	Perchlorate-101	.553	2.21	4.22	ug/kg		1	04-FEB-10 19:54	per0204050a
	Perchlorate-O(18)			6.26	ug/kg		1	04-FEB-10 19:54	per0204050a

[^] 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: Charters W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020410a.qld

Last Altered: Friday, February 05, 2010 9:19:58 AM Eastern Standard Time
Printed: Friday, February 05, 2010 9:28:02 AM Eastern Standard Time

Name: per0204050a

Date: 04-Feb-2010

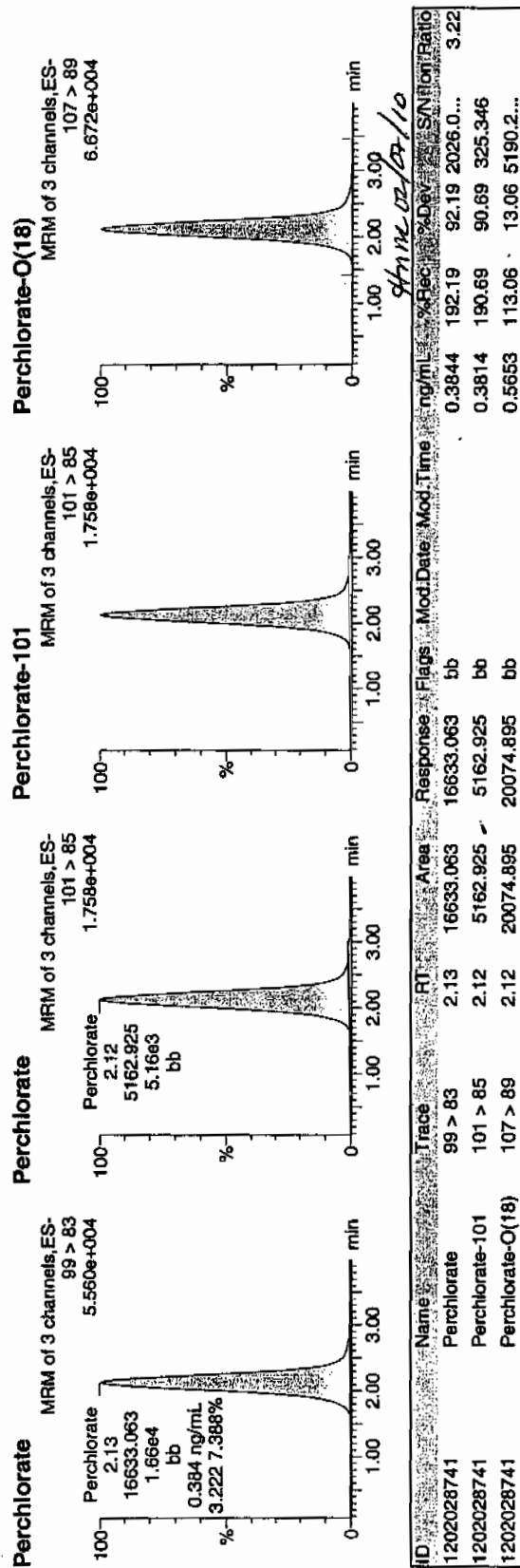
Time: 19:54:12

ID: 1202028741

Vial: 2:1,E

02-05-10

LANC | 947108 | 5070 | MS | 11



Perchlorate Analysis Data Sheet

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

Client Sample No.
RE15-10-7918MSD

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Date Received: 23-JAN-10

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

GEL Sample ID: 1202028742

Extraction Batch ID: 247103

Date Filtered: 03-FEB-10

Extraction Type: Solid Prep

Injection Volume (uL): 20

Sample Volume/Weight: 2.00 g

%Solids: 20.4

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.553	2.21	4.57	ug/kg		1	04-FEB-10 20:01	per0204051a
	Perchlorate Isotope Ratio			3.36			1	04-FEB-10 20:01	per0204051a
14797-73-0	Perchlorate-101	.553	2.21	4.34	ug/kg		1	04-FEB-10 20:01	per0204051a
	Perchlorate-O(18)			6.52	ug/kg		1	04-FEB-10 20:01	per0204051a

[^] 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

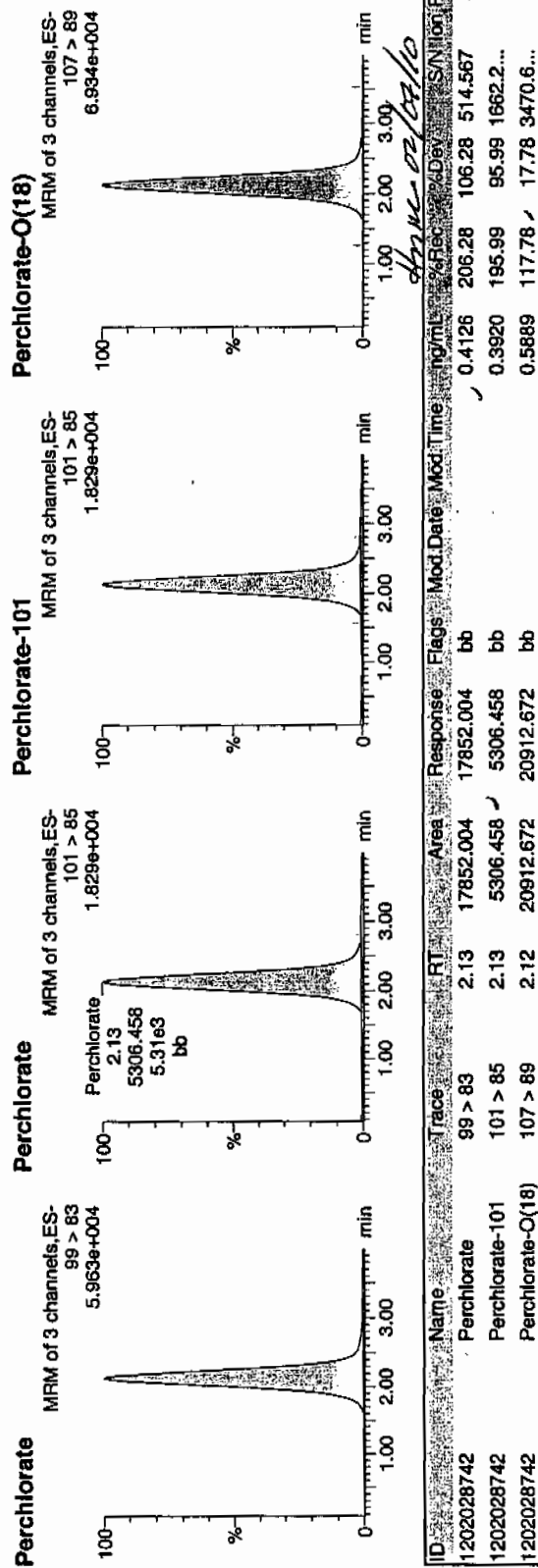
Dataset: C:\MassLynx\Perchlorate.PRO\per020410a.qld

Last Altered: Friday, February 05, 2010 9:19:58 AM Eastern Standard Time
Printed: Friday, February 05, 2010 9:28:02 AM Eastern Standard Time

Name: per0204051a
Date: 04-Feb-2010
Time: 20:01:12
ID: 1202028742
Vial: 2:1.F

6.934e+004
02-05-10

1202028742 | 5070 | MSO | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	mg/mL	%Rec	%Dev	S/N	Ion Ratio
1202028742	Perchlorate	99 > 83	2.13	17852.004	17852.004	bb			0.4126	206.28	106.28	514.567	3.36
1202028742	Perchlorate-101	101 > 85	2.13	5306.458	5306.458	bb			0.3920	195.99	95.99	1662.2...	
1202028742	Perchlorate-O(18)	107 > 89	2.12	20912.672	20912.672	bb			0.5889	117.78	17.78	3470.6...	

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: 947103 Verified by: _____ Lab SOP: GL-OA-E-067 REV# 6
 Analyst: Charles Wilson Instrument: MicroMass Quatro Ultima
 Method: SW846 6850 Modified

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1202028739 MB	03-FEB-2010 18:06:45	2	20	10
1202028740 LCS	03-FEB-2010 18:06:45	2	20	10
245391001	03-FEB-2010 18:06:45	2	20	10
1202028741 MS (245391001)	03-FEB-2010 18:06:45	2	20	10
1202028742 MSD (245391001)	03-FEB-2010 18:06:45	2	20	10
245391002	03-FEB-2010 18:06:45	2	20	10
245391003	03-FEB-2010 18:06:45	2	20	10
245391004	03-FEB-2010 18:06:45	2	20	10
245391005	03-FEB-2010 18:06:45	2	20	10
245391006	03-FEB-2010 18:06:45	2	20	10
245391007	03-FEB-2010 18:06:45	2	20	10
245391008	03-FEB-2010 18:06:45	2	20	10
245391009	03-FEB-2010 18:06:45	2	20	10
245391010	03-FEB-2010 18:06:45	2	20	10
245391011	03-FEB-2010 18:06:45	2	20	10
245628002	03-FEB-2010 18:06:45	2	20	10
245628003	03-FEB-2010 18:06:45	2	20	10
245628004	03-FEB-2010 18:06:45	2	20	10
245631002	03-FEB-2010 18:06:45	2	20	10
245631003	03-FEB-2010 18:06:45	2	20	10
1202028743 ICS	03-FEB-2010 18:06:45	2	20	10

Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:
ICS	1202028743	10 ug/L ICV/CCV Second Source	UCL091230-01.2	.4	mL	Desalting cartridges used: 090812-1-Ba & 091230-1-H
LCS	1202028740	10 ug/L ICV/CCV Second Source	UCL091230-01.2	.4	mL	
MS	1202028741	10 ug/L ICV/CCV Second Source	UCL091230-01.2	.4	mL	
MSD	1202028742	10 ug/L ICV/CCV Second Source	UCL091230-01.2	.4	mL	

GEL ORGANIC RUN LOG

INSTRUMENT ID: LOMSMS#2

Date: 02/04/10

Extr. Injection Volume: 20uL

Sequence Number: per020410a

Initial Calibration Date: 02/04/10

Method: EPA 6850-Modified

Int. Std.: UCL100122-01

Mobile Phase Lot#: 1254342, 1246195

Standard-Samp Reagent Lot#: 1233976

Reviewed By: *dhmc*
Date: *02/10*
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
per0204001a	IPB001	CWW	2/4/2010 14:04			1		USE	B
per0204002a	IPB001	CWW	2/4/2010 14:11			1		USE	B
per0204003a	WCLICAL-01	CWW	2/4/2010 14:18			1		USE	I
per0204004a	WCLICAL-02	CWW	2/4/2010 14:25			1		USE	I
per0204005a	WCLICAL-03	CWW	2/4/2010 14:32			1		USE	I
per0204006a	WCLICAL-04	CWW	2/4/2010 14:39			1		USE	I
per0204007a	WCLICAL-05	CWW	2/4/2010 14:46			1		USE	I
per0204008a	IPB002	CWW	2/4/2010 14:53			1		USE	B
per0204009a	WCLICV	CWW	2/4/2010 15:00			1		USE	C
per0204010a	IPB003	CWW	2/4/2010 15:07			1		USE	B
per0204011a	WCLCRI	CWW	2/4/2010 15:14			1		USE	C
per0204012a	1202028759	CWW	2/4/2010 15:21	947116	VARIOUS	1	LANL	USE	S
per0204013a	1202028760	CWW	2/4/2010 15:29	947116	VARIOUS	1	LANL	USE	S
per0204014a	1202028763	CWW	2/4/2010 15:36	947116	VARIOUS	1	LANL	USE	S
per0204015a	245602001	CWW	2/4/2010 15:43	947116	10-1409-1	1	LANL	USE	S
per0204016a	245602002	CWW	2/4/2010 15:50	947116	10-1409-1	1	LANL	USE	S
per0204017a	245602003	CWW	2/4/2010 15:57	947116	10-1409-1	1	LANL	USE	S
per0204018a	245602004	CWW	2/4/2010 16:05	947116	10-1409-1	1	LANL	USE	S
per0204019a	245602005	CWW	2/4/2010 16:12	947116	10-1409-1	1	LANL	USE	S
per0204020a	245602006	CWW	2/4/2010 16:20	947116	10-1409-1	1	LANL	USE	S
per0204021a	WCLCCV	CWW	2/4/2010 16:27			1		USE	C
per0204022a	IPB004	CWW	2/4/2010 16:34			1		USE	B
per0204023a	WCLCRI	CWW	2/4/2010 16:41			1		USE	C
per0204024a	245602007	CWW	2/4/2010 16:48	947116	10-1409-1	1	LANL	USE	S
per0204025a	245602008	CWW	2/4/2010 16:55	947116	10-1409-1	1	LANL	USE	S
per0204026a	245602009	CWW	2/4/2010 17:02	947116	10-1409-1	1	LANL	USE	S
per0204027a	245602010	CWW	2/4/2010 17:09	947116	10-1409-1	1	LANL	USE	S
per0204028a	245626001	CWW	2/4/2010 17:17	947116	10-1425-1	1	LANL	USE	S
per0204029a	1202028761	CWW	2/4/2010 17:24	947116	10-1425-1	1	LANL	USE	S

dhmc
02/04/10

per0204030a	1202028762	CWW	2/4/2010 17:31	947116	10-1425-1	1	LANL	USE	S
per0204031a	245626002	CWW	2/4/2010 17:38	947116	10-1425-1	1	LANL	USE	S
per0204032a	WCLCCV	CWW	2/4/2010 17:45			1		USE	C
per0204033a	IPB005	CWW	2/4/2010 17:52			1		USE	B
per0204034a	WCLCRI	CWW	2/4/2010 18:00			1		USE	C
per0204035a	245626003	CWW	2/4/2010 18:07	947116	10-1425-1	1	LANL	USE	S
per0204036a	245626004	CWW	2/4/2010 18:14	947116	10-1425-1	1	LANL	USE	S
per0204037a	245626005	CWW	2/4/2010 18:21	947116	10-1425-1	1	LANL	USE	S
per0204038a	245626006	CWW	2/4/2010 18:28	947116	10-1425-1	1	LANL	USE	S
per0204039a	245626007	CWW	2/4/2010 18:35	947116	10-1425-1	1	LANL	USE	S
per0204040a	245626008	CWW	2/4/2010 18:42	947116	10-1425-1	1	LANL	USE	S
per0204041a	245626009	CWW	2/4/2010 18:49	947116	10-1425-1	1	LANL	USE	S
per0204042a	245626010	CWW	2/4/2010 18:56	947116	10-1425-1	1	LANL	USE	S
per0204043a	WCLCCV	CWW	2/4/2010 19:04			1		USE	C
per0204044a	IPB006	CWW	2/4/2010 19:11			1		USE	B
per0204045a	WCLCRI	CWW	2/4/2010 19:18			1		USE	C
per0204046a	1202028739	CWW	2/4/2010 19:25	947108	VARIOUS	1	LANL	USE	S
per0204047a	1202028740	CWW	2/4/2010 19:32	947108	VARIOUS	1	LANL	USE	S
per0204048a	1202028743	CWW	2/4/2010 19:40	947108	VARIOUS	1	LANL	USE	S
per0204049a	245391001	CWW	2/4/2010 19:47	947108	10-1390	1	LANL	USE	S
per0204050a	1202028741	CWW	2/4/2010 19:54	947108	10-1390	1	LANL	USE	S
per0204051a	1202028742	CWW	2/4/2010 20:01	947108	10-1390	1	LANL	USE	S
per0204052a	245391002	CWW	2/4/2010 20:08	947108	10-1390	1	LANL	USE	S
per0204053a	245391003	CWW	2/4/2010 20:15	947108	10-1390	1	LANL	USE	S
per0204054a	245391004	CWW	2/4/2010 20:22	947108	10-1390	1	LANL	USE	S
per0204055a	245391005	CWW	2/4/2010 20:29	947108	10-1390	1	LANL	USE	S
per0204056a	WCLCCV	CWW	2/4/2010 20:36			1		USE	C
per0204057a	IPB007	CWW	2/4/2010 20:44			1		USE	B
per0204058a	WCLCRI	CWW	2/4/2010 20:51	947108	10-1390	1	LANL	USE	C

GEL ORGANIC RUN LOG

INSTRUMENT ID: LOMSMS#2

Date: 02/05/10
 Extr. Injection Volume: 20uL
 Sequence Number: per020510a
 Initial Calibration Date: 02/05/10

Method: EPA 6850-Modified
 Int. Std.: UCL100122-01
 Mobile Phase Lot#: 1254342, 1246195
 Standard-Samp Reagent Lot#: 1233976

Reviewed BY: *Hyne*
 Date: *02/07/10*
 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
per0205001a	IPB001	CWW	2/5/2010 11:17			1		USE	B
per0205002a	IPB001	CWW	2/5/2010 11:24			1		USE	B
per0205003a	WCLICAL-01	CWW	2/5/2010 11:31			1		USE	I
per0205004a	WCLICAL-02	CWW	2/5/2010 11:38			1		USE	I
per0205005a	WCLICAL-03	CWW	2/5/2010 11:45			1		USE	I
per0205006a	WCLICAL-04	CWW	2/5/2010 11:52			1		USE	I
per0205007a	WCLICAL-05	CWW	2/5/2010 11:59			1		USE	I
per0205008a	IPB002	CWW	2/5/2010 12:06			1		USE	B
per0205009a	WCLICV	CWW	2/5/2010 12:13			1		USE	C
per0205010a	IPB003	CWW	2/5/2010 12:21			1		USE	B
per0205011a	WCLCRI	CWW	2/5/2010 12:28			1		USE	C
per0205012a	245391006	CWW	2/5/2010 12:35	947108	10-1390	1	LANL	USE	S
per0205013a	245391007	CWW	2/5/2010 12:42	947108	10-1390	1	LANL	USE	S
per0205014a	245391008	CWW	2/5/2010 12:49	947108	10-1390	1	LANL	USE	S
per0205015a	245391009	CWW	2/5/2010 12:56	947108	10-1390	1	LANL	USE	S
per0205016a	245391010	CWW	2/5/2010 13:03	947108	10-1390	1	LANL	USE	S
per0205017a	245391011	CWW	2/5/2010 13:10	947108	10-1390	1	LANL	USE	S
per0205018a	245628002	CWW	2/5/2010 13:17	947108	10-1427	1	LANL	USE	S
per0205019a	245628003	CWW	2/5/2010 13:24	947108	10-1427	1	LANL	USE	S
per0205020a	245628004	CWW	2/5/2010 13:31	947108	10-1427	1	LANL	USE	S
per0205021a	245631002	CWW	2/5/2010 13:38	947108	10-1428	1	LANL	USE	S
per0205022a	WCLCCV	CWW	2/5/2010 13:45			1		USE	C
per0205023a	IPB004	CWW	2/5/2010 13:52			1		USE	B
per0205024a	WCLCRI	CWW	2/5/2010 13:59			1		USE	C
per0205025a	245631003	CWW	2/5/2010 14:07	947108	10-1428	1	LANL	USE	S
per0205026a	IPB005	CWW	2/5/2010 14:14			1		USE	B
per0205027a	1202024370	CWW	2/5/2010 14:21	945214	VARIOUS	1	LANL	USE	S
per0205028a	1202024371	CWW	2/5/2010 14:28	945214	VARIOUS	1	LANL	USE	S
per0205029a	1202024374	CWW	2/5/2010 14:35	945214	VARIOUS	1	LANL	USE	S

per0205030a	245243001	CWW	2/5/2010 14:42	945214	10-1348-1	1	LANL	USE	S
per0205031a	245243002	CWW	2/5/2010 14:49	945214	10-1348-1	1	LANL	USE	S
per0205032a	245243003	CWW	2/5/2010 14:56	945214	10-1348-1	1	LANL	USE	S
per0205033a	245243004	CWW	2/5/2010 15:03	945214	10-1348-1	1	LANL	USE	S
per0205034a	245243005	CWW	2/5/2010 15:10	945214	10-1348-1	1	LANL	USE	S
per0205035a	WCLCCV	CWW	2/5/2010 15:17			1		USE	C
per0205036a	IPB006	CWW	2/5/2010 15:24			1		USE	B
per0205037a	WCLCRI	CWW	2/5/2010 15:31			1		USE	C
per0205038a	245243006	CWW	2/5/2010 15:38	945214	10-1348-1	1	LANL	USE	S
per0205039a	245243007	CWW	2/5/2010 15:45	945214	10-1348-1	1	LANL	USE	S
per0205040a	245243008	CWW	2/5/2010 15:52	945214	10-1348-1	1	LANL	USE	S
per0205041a	245243009	CWW	2/5/2010 15:59	945214	10-1348-1	1	LANL	USE	S
per0205042a	245243010	CWW	2/5/2010 16:06	945214	10-1348-1	1	LANL	USE	S
per0205043a	245243011	CWW	2/5/2010 16:13	945214	10-1348-1	1	LANL	USE	S
per0205044a	245243012	CWW	2/5/2010 16:20	945214	10-1348-1	1	LANL	USE	S
per0205045a	245249001	CWW	2/5/2010 16:27	945214	10-1351	1	LANL	USE	S
per0205046a	1202024372	CWW	2/5/2010 16:35	945214	10-1351	1	LANL	USE	S
per0205047a	1202024373	CWW	2/5/2010 16:42	945214	10-1351	1	LANL	USE	S
per0205048a	WCLCCV	CWW	2/5/2010 16:49			1		USE	C
per0205049a	IPB007	CWW	2/5/2010 16:56			1		USE	B
per0205050a	WCLCRI	CWW	2/5/2010 17:03			1		USE	C
per0205051a	245249002	CWW	2/5/2010 17:10	945214	10-1351	1	LANL	USE	S
per0205052a	245249003	CWW	2/5/2010 17:17	945214	10-1351	1	LANL	USE	S
per0205053a	245249004	CWW	2/5/2010 17:24	945214	10-1351	1	LANL	USE	S
per0205054a	245249005	CWW	2/5/2010 17:31	945214	10-1351	1	LANL	USE	S
per0205055a	245249006	CWW	2/5/2010 17:38	945214	10-1351	1	LANL	USE	S
per0205056a	245249007	CWW	2/5/2010 17:45	945214	10-1351	1	LANL	USE	S
per0205057a	245249008	CWW	2/5/2010 17:52	945214	10-1351	1	LANL	USE	S
per0205058a	WCLCCV	CWW	2/5/2010 17:59			1		USE	C
per0205059a	IPB008	CWW	2/5/2010 18:06			1		USE	B
per0205060a	WCLCRI	CWW	2/5/2010 18:13			1		USE	C
per0205061a	1202024375	CWW	2/5/2010 18:20	945217	VARIOUS	1	LANL	USE	S
per0205062a	1202024376	CWW	2/5/2010 18:28	945217	VARIOUS	1	LANL	USE	S
per0205063a	1202024379	CWW	2/5/2010 18:35	945217	VARIOUS	1	LANL	USE	S
per0205064a	245313001	CWW	2/5/2010 18:42	945217	10-1365	1	LANL	USE	S
per0205065a	245313002	CWW	2/5/2010 18:49	945217	10-1365	1	LANL	USE	S
per0205066a	1202024377	CWW	2/5/2010 18:56	945217	10-1365	1	LANL	USE	S

per0205067a	1202024378	CWW	2/5/2010 19:03	945217	10-1365	1	LANL	USE	S
per0205068a	245313003	CWW	2/5/2010 19:10	945217	10-1365	1	LANL	USE	S
per0205069a	WCLCCV	CWW	2/5/2010 19:17			1		USE	C
per0205070a	IPB009	CWW	2/5/2010 19:24			1		USE	B
per0205071a	WCLCRI	CWW	2/5/2010 19:31			1		USE	C
per0205072a	245313004	CWW	2/5/2010 19:38	945217	10-1365	1	LANL	USE	S
per0205073a	245313005	CWW	2/5/2010 19:45	945217	10-1365	1	LANL	USE	S
per0205074a	245313006	CWW	2/5/2010 19:52	945217	10-1365	1	LANL	USE	S
per0205075a	245313007	CWW	2/5/2010 19:59	945217	10-1365	1	LANL	USE	S
per0205076a	245313008	CWW	2/5/2010 20:06	945217	10-1365	1	LANL	USE	S
per0205077a	245313009	CWW	2/5/2010 20:13	945217	10-1365	1	LANL	USE	S
per0205078a	245313010	CWW	2/5/2010 20:20	945217	10-1365	1	LANL	USE	S
per0205079a	245313011	CWW	2/5/2010 20:27	945217	10-1365	1	LANL	USE	S
per0205080a	WCLCCV	CWW	2/5/2010 20:35			1		USE	C
per0205081a	IPB010	CWW	2/5/2010 20:42			1		USE	B
per0205082a	WCLCRI	CWW	2/5/2010 20:49			1		USE	C
per0205083a	245313012	CWW	2/5/2010 20:56	945217	10-1365	1	LANL	USE	S
per0205084a	245313013	CWW	2/5/2010 21:03	945217	10-1365	1	LANL	USE	S
per0205085a	245313014	CWW	2/5/2010 21:10	945217	10-1365	1	LANL	USE	S
per0205086a	245383001	CWW	2/5/2010 21:17	945217	10-1381-1	1	LANL	USE	S
per0205087a	245383002	CWW	2/5/2010 21:24	945217	10-1381-1	1	LANL	USE	S
per0205088a	245383003	CWW	2/5/2010 21:31	945217	10-1381-1	1	LANL	USE	S
per0205089a	245383004	CWW	2/5/2010 21:38	945217	10-1381-1	1	LANL	USE	S
per0205090a	245383005	CWW	2/5/2010 21:45	945217	10-1381-1	1	LANL	USE	S
per0205091a	WCLCCV	CWW	2/5/2010 21:52			1		USE	C
per0205092a	IPB011	CWW	2/5/2010 22:00			1		USE	B
per0205093a	WCLCRI	CWW	2/5/2010 22:07			1		USE	C

Isotope Ratio Criteria

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

2.31-3.85

Tune Criteria

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

LC/MS/MS PERCHLORATE ANALYSIS

**Perchlorate by LC/MSMS
Los Alamos National Laboratory (LANL)
SDG 10-1390-1**

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: 945227

Prep Batch Number: 945225

Sample Analysis

Sample ID	Client ID
245392001	RE15-10-8074
245392002	RE15-10-8075
1202024399	Interference Check Sample (ICS)
1202024390	Method Blank (MB)
1202024391	Laboratory Control Sample (LCS)
1202024392	245375001(RE46-10-11834) Matrix Spike (MS)
1202024393	245375001(RE46-10-11834) Matrix Spike Duplicate (MSD)

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

Preparation/Analytical Method Verification

SOP Reference

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

Calibration Information

Initial Calibration

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

10-1390-1-PERLCMS

Page 1 of 4

CCV Requirements

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

CCB Requirements

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

CCV Requirements

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

Low Level Standard (CRI) Requirements

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

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

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

Interference Check Sample (ICS)

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

Laboratory Control Sample (LCS) Recovery

The LCS spike recoveries met the acceptance limits.

QC Sample Designation

Client sample 245375001 (RE46-10-11834) from SDG 10-1373-1 was chosen for matrix spike and matrix spike duplicate analysis. Please see the raw data in the Miscellaneous Section.

Matrix Spike (MS) Recovery Statement

The MS recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement

The MSD recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement

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

Retention Time Standard Area Acceptance

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

Retention Time

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

10-1390-1-PERLCMS

Page 2 of 4

Technical Information

Holding Time Specifications

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

Preparation/Analytical Method Verification

All procedures were performed as stated in the SOP.

Sample Dilutions

The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis

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

Miscellaneous Information

Data Exception (DER) Documentation

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

Manual Integrations

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

Method Comments

The 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. Maurer Date: 02/08/10

SAMPLE DATA SUMMARY

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 945225

Extraction Type: Filter/DAI

Client Sample No.

RE15-10-8074

Date Received: 23-JAN-10

GEL Job No (SDG): 10-1390-1

GEL Sample ID: 245392001

Date Filtered: 30-JAN-10

Injection Volume (uL): 20

%Solids:

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	01-FEB-10 23:03	per0201067a
	Perchlorate Isotope Ratio						1	01-FEB-10 23:03	per0201067a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	01-FEB-10 23:03	per0201067a
	Perchlorate-O(18)			0.459	ug/L		1	01-FEB-10 23:03	per0201067a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1
Aliquot %Solids

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: WATER
 Extraction Batch ID: 245225
 Extraction Type: Filter/DAI
 Client Sample No. RE15-10-8075
 Date Received: 23-JAN-10
 GEL Job No (SDG): 10-1390-1
 GEL Sample ID: 245392002
 Date Filtered: 30-JAN-10
 Injection Volume (uL): 20
 %Solids:

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

CAS No.	Analyte ^A	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	01-FEB-10 23:10	per0201068a
	Perchlorate Isotope Ratio						1	01-FEB-10 23:10	per0201068a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	01-FEB-10 23:10	per0201068a
	Perchlorate-O(18)			0.470	ug/L		1	01-FEB-10 23:10	per0201068a

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

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

QUALITY CONTROL SUMMARY

Perchlorate Laboratory Control Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10-1390-1

Extract Batch Code: 945225

Date Filtered: 30-JAN-10

Matrix: WATER

Sample ID: 1202024391

Analyte [^]	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	0.200	.192	ug/L	96.0		85 - 115
Perchlorate Isotope Ratio		3.05				-
Perchlorate-101	0.200	.191	ug/L	95.6		85 - 115
Perchlorate-O(18)		.453	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): 10-1390-1

Extract Batch Code: 945225

Date Filtered: 30-JAN-10

Matrix: WATER

Sample ID: 1202024399

Analyte [^]	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	0.200	.187	ug/L	93.5		70 - 130
Perchlorate Isotope Ratio		2.94				
Perchlorate-101	0.200	.193	ug/L	96.7		70 - 130
Perchlorate-O(18)		.442	ug/L			

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

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

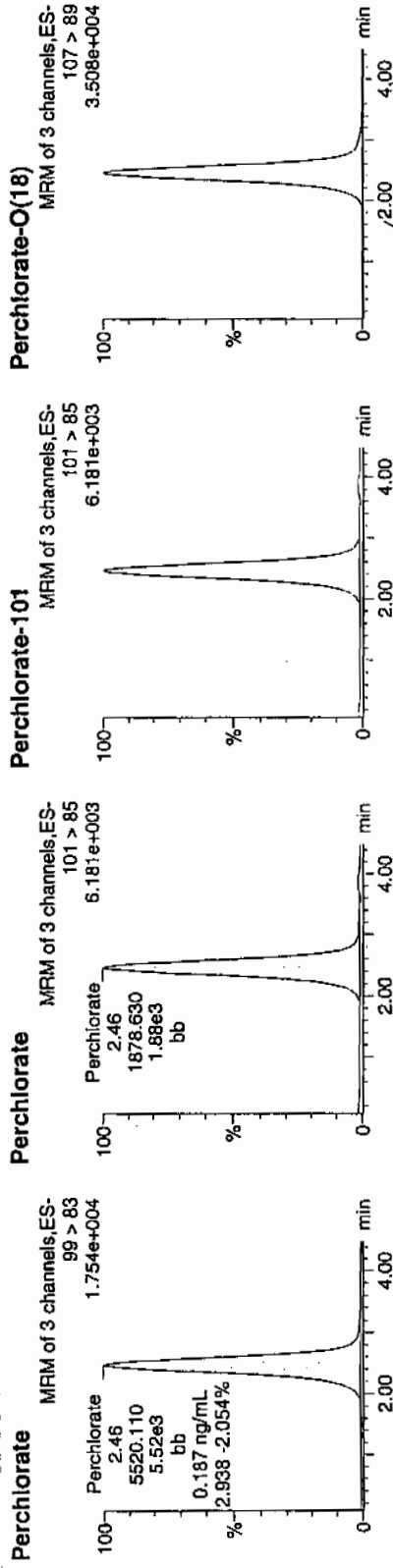
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Printed: Tuesday, February 02, 2010 2:30:40 PM Eastern Standard Time

Name: per0201051a
Date: 01-Feb-2010
Time: 21:02:22
ID: 1202024399
Vial: 2:1,C

02-02-10

1202024399 | 1202024399 | 1202024399



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202024399	Perchlorate	99 > 83	2.46	5520.110	5520.110	bb			0.1871	93.53	-6.47	193.382	2.94
1202024399	Perchlorate-101	101 > 85	2.46	1878.630	1878.630	bb			0.1934	96.69	-3.31	928.112	
1202024399	Perchlorate-O(18)	107 > 89	2.45	11020.399	11020.399	bb			0.4416	88.32	-11.68	2633.5...	

Perchlorate Spike/Spike Duplicate Summary

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No (SDG): 10-1390-1

Extract Batch Code: 945225

Date Extracted: 30-JAN-10

GEL MS/PS ID: 1202024392

Client ID: RE46-10-11834

GEL MSD/PSD ID: 1202024393

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	0.00236	ug/L	0.186	91.6		.195	96.2		4.83		30	75 - 125
Perchlorate Isotope Ratio	0	0.00		3.04			2.92			0			-
Perchlorate-101	0.200	0.00	ug/L	0.186	92.8		.202	101		8.63		30	75 - 125
Perchlorate-O(18)	0	0.442	ug/L	0.443			.455			2.78			-

[^] 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): 10-1390-1

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	01-FEB-10	per0201001a	IPB001
Perchlorate-101	0.00	0	NA	01-FEB-10	per0201001a	IPB001
Perchlorate	0.00	0	NA	01-FEB-10	per0201002a	IPB001
Perchlorate-101	0.00	0	NA	01-FEB-10	per0201002a	IPB001

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

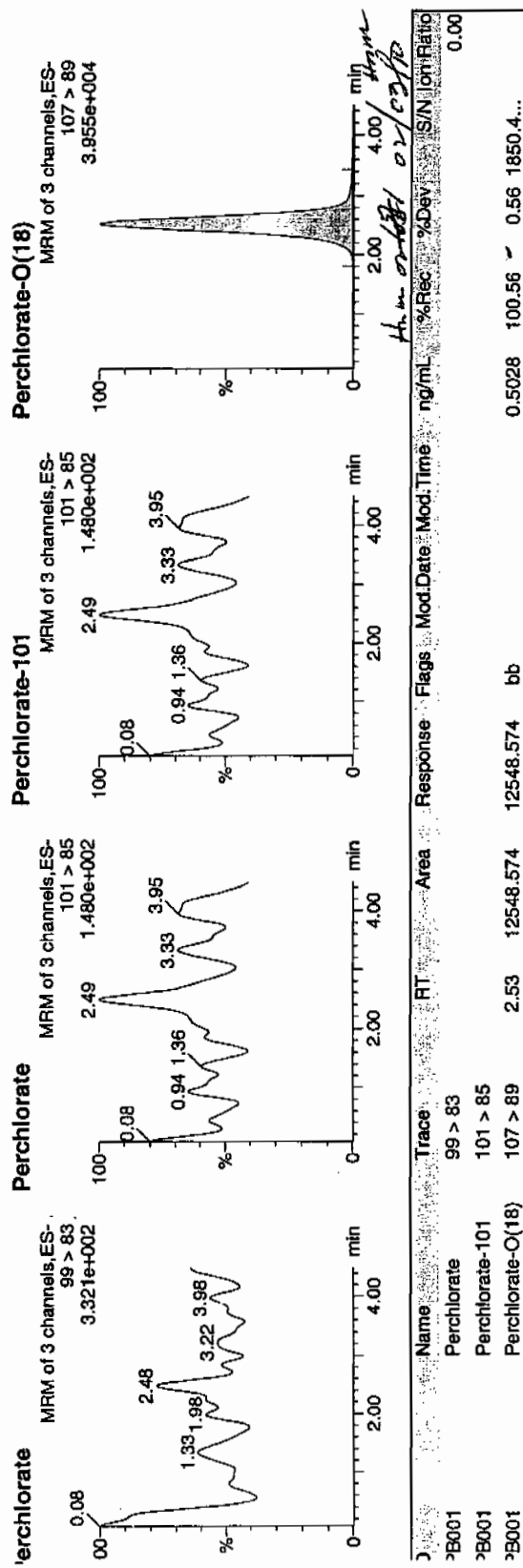
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Last Altered: Tuesday, February 02, 2010 2:28:24 PM Eastern Standard Time
Printed: Tuesday, February 02, 2010 2:30:40 PM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per020110a.mdb 02 Feb 2010 07:54:05
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per020110a.cdb 02 Feb 2010 14:28:23

Sample Name: per0201001a
Date: 01-Feb-2010
Time: 14:44:45
ID: IPB001
Label: 1:1,A

02-01-10



Quantify Sample Report MassLynx 4.0 SP4

the GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020110a.qld

Last Altered: Tuesday, February 02, 2010 2:28:24 PM Eastern Standard Time
Printed: Tuesday, February 02, 2010 2:30:40 PM Eastern Standard Time

Sample Name: per0201002a

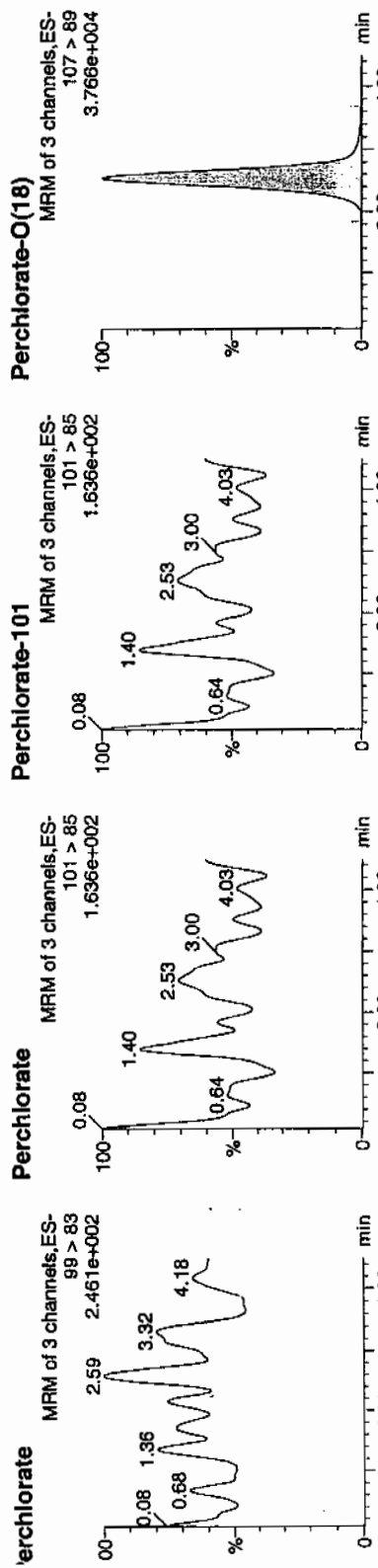
Sample Date: 01-Feb-2010

Sample Time: 14:52:28

Sample ID: IPB001

Sample Label: 1:1,A

02-01-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
Perchlorate	99 > 83											0.00
Perchlorate-101	101 > 85											
Perchlorate-O(18)	107 > 89	2.54	12279.958	12279.958	bb			0.4920	98.41	-1.59	1440.2	

Perchlorate Continuing Calibration Blank

GEL Job No.(SDG): 10-1390-1

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	01-FEB-10	per0201008a	IPB002
Perchlorate-101	0.00	0	NA	01-FEB-10	per0201008a	IPB002
Perchlorate	0.00	0	NA	01-FEB-10	per0201010a	IPB003
Perchlorate-101	0.00	0	NA	01-FEB-10	per0201010a	IPB003
Perchlorate	0.00	0	NA	01-FEB-10	per0201015a	IPB004
Perchlorate-101	0.00	0	NA	01-FEB-10	per0201015a	IPB004
Perchlorate	0.00	0	NA	01-FEB-10	per0201021a	IPB005
Perchlorate-101	0.00	0	NA	01-FEB-10	per0201021a	IPB005
Perchlorate	0.00	0	NA	01-FEB-10	per0201034a	IPB006
Perchlorate-101	0.00	0	NA	01-FEB-10	per0201034a	IPB006
Perchlorate	0.00	0	NA	01-FEB-10	per0201047a	IPB007
Perchlorate-101	0.00	0	NA	01-FEB-10	per0201047a	IPB007
Perchlorate	0.00	0	NA	01-FEB-10	per0201059a	IPB008

Perchlorate Continuing Calibration Blank

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Lab Name: General Engineering LaboratoriesGEL Job No.(SDG): 10-1390-1Lab Code: GELReporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate-101	0.00	0	NA	01-FEB-10	per0201059a	IPB008
Perchlorate	0.00	0	NA	01-FEB-10	per0201070a	IPB009
Perchlorate-101	0.00	0	NA	01-FEB-10	per0201070a	IPB009

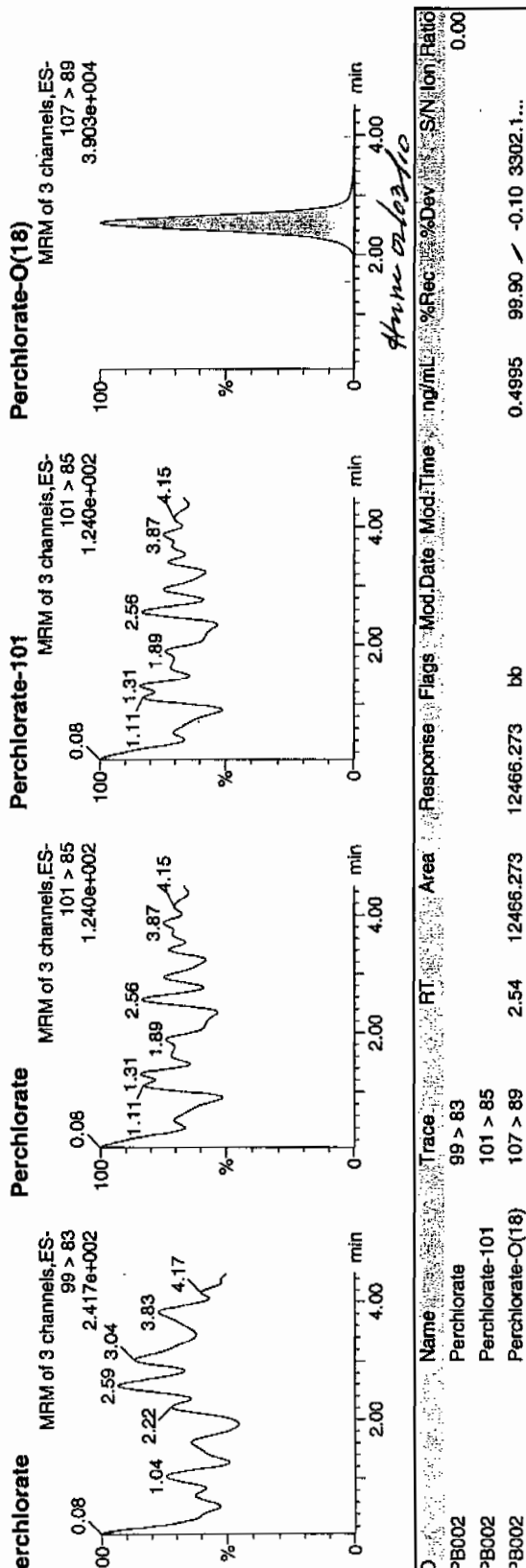
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020110a.qld

Last Altered: Tuesday, February 02, 2010 2:28:24 PM Eastern Standard Time
Printed: Tuesday, February 02, 2010 2:30:40 PM Eastern Standard Time

Sample Name: per0201008a
Sample Date: 01-Feb-2010
Sample Time: 15:37:36
Sample ID: IPB002
Sample Label: 1:1,A

02-02-10



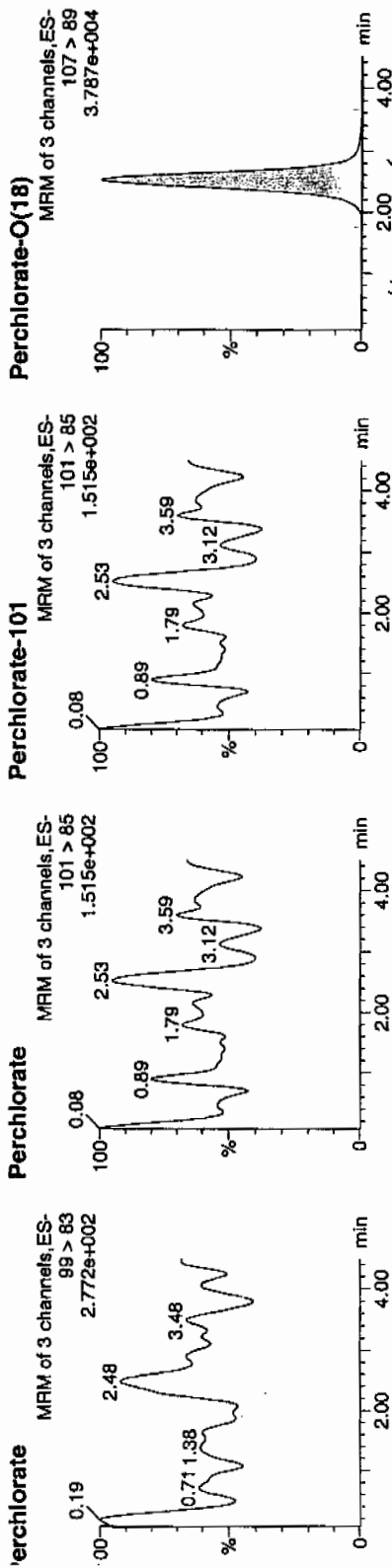
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020110a.qld

Last Altered: Tuesday, February 02, 2010 2:28:24 PM Eastern Standard Time
Printed: Tuesday, February 02, 2010 2:30:40 PM Eastern Standard Time

Sample Name: per0201010a
Date: 01-Feb-2010
Time: 15:52:41
ID: IPB003
Label: 1:1,A

02-02-10



Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
Perchlorate	99 > 83											0.00
Perchlorate-101	101 > 85											
Perchlorate-O(18)	107 > 89	2.51	12216.218	12216.218	bb			0.4895	97.90	-2.10	3557.9...	

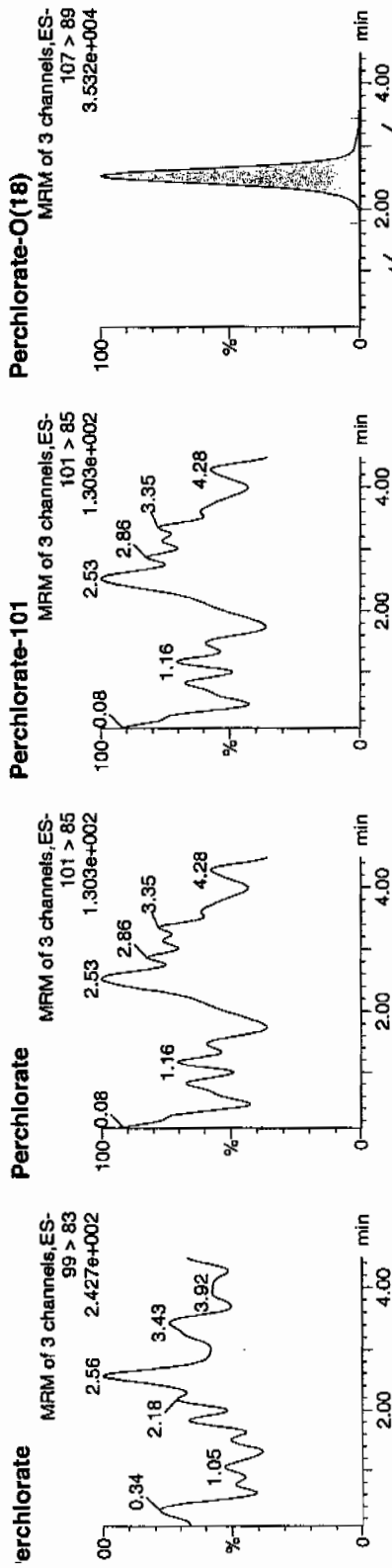
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020110a.qld

Last Altered: Tuesday, February 02, 2010 2:28:24 PM Eastern Standard Time
Printed: Tuesday, February 02, 2010 2:30:40 PM Eastern Standard Time

Sample Name: per0201015a
Date: 01-Feb-2010
Time: 16:30:26
ID: IPB004
Label: 1:1,A

02-02-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
Perchlorate	99 > 83											0.00
Perchlorate-101	101 > 85											
Perchlorate-O(18)	107 > 89	2.53	11317.529	11317.529	bb			0.4535	90.70	-9.30	873.039	

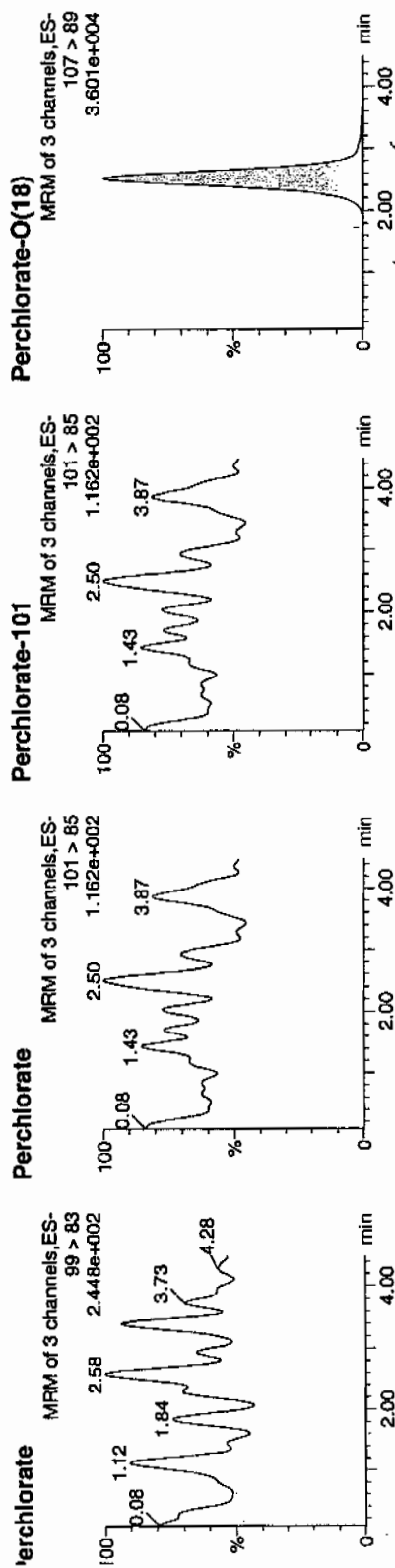
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charfers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020110a.qld

Last Altered: Tuesday, February 02, 2010 2:28:24 PM Eastern Standard Time
Printed: Tuesday, February 02, 2010 2:30:40 PM Eastern Standard Time

Sample Name: per0201021a
Date: 01-Feb-2010
Time: 17:15:41
ID: IPB005
File: 1:1,A

02-02-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
Perchlorate	99 > 83											0.00
Perchlorate-101	101 > 85											
Perchlorate-O(18)	107 > 89	2.51	11657.459	11657.459	bb			0.4671	93.42	-6.58	6561.5...	

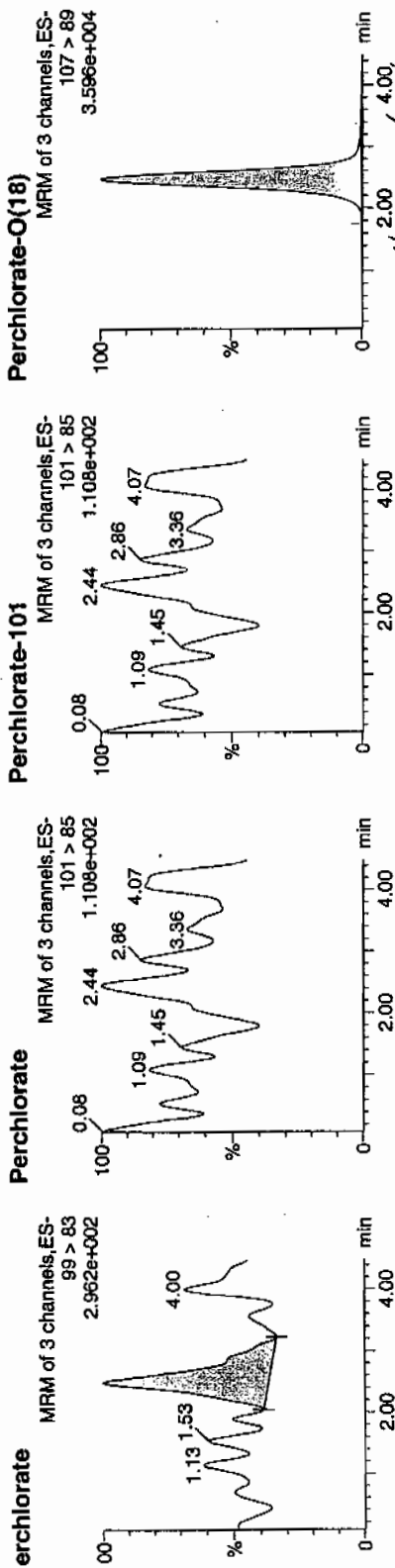
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

atset: C:\MassLynx\Perchlorate.PRO\per020110a.qld

ast Altered: Tuesday, February 02, 2010 2:28:24 PM Eastern Standard Time
rinted: Tuesday, February 02, 2010 2:30:40 PM Eastern Standard Time

ame: per0201034a
ate: 01-Feb-2010
ime: 18:53:47
): IPB006
ial: 1:1,A

02-02-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
Perchlorate	99 > 83	2.49	82,470	82,470	bb			0.0028			11.134	0.00
Perchlorate-101	101 > 85											
Perchlorate-O(18)	107 > 89	2.48	11318.907	11318.907	bb			0.4535	90.71	-9.29	3567.0...	

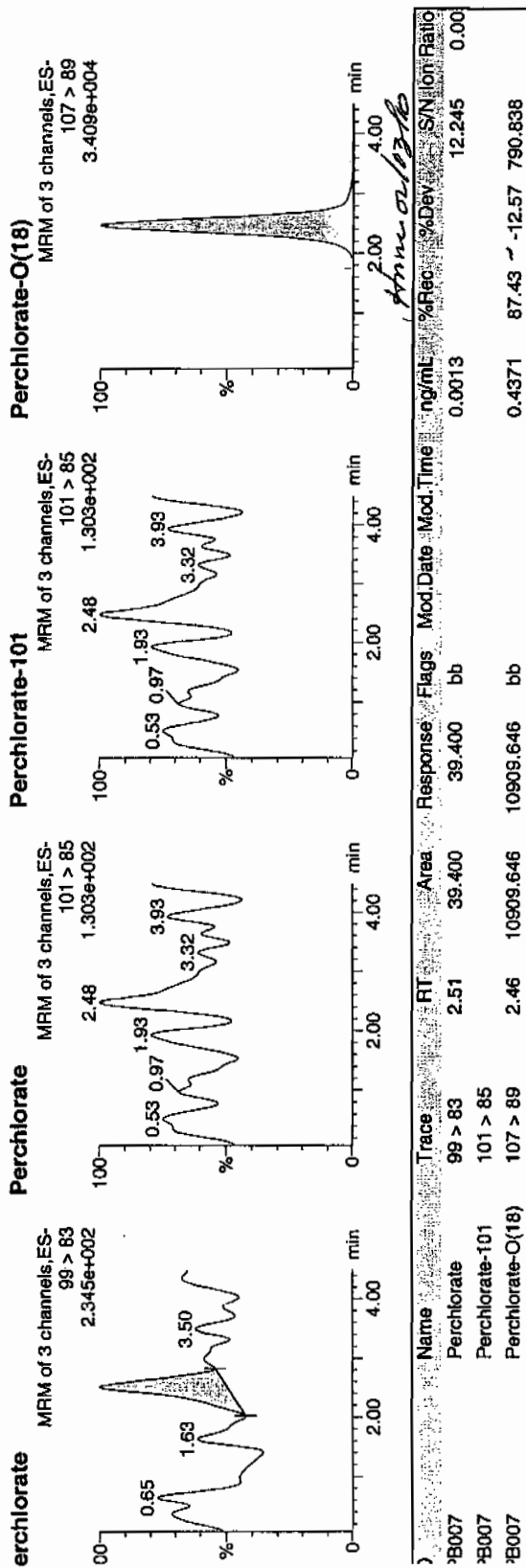
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charliers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020110a.qld

Acquired: Tuesday, February 02, 2010 2:28:24 PM Eastern Standard Time
Printed: Tuesday, February 02, 2010 2:30:40 PM Eastern Standard Time

Sample: per0201047a
Date: 01-Feb-2010
Time: 20:32:02
Lab: IPB007
Label: 1:1,A

02-02-10



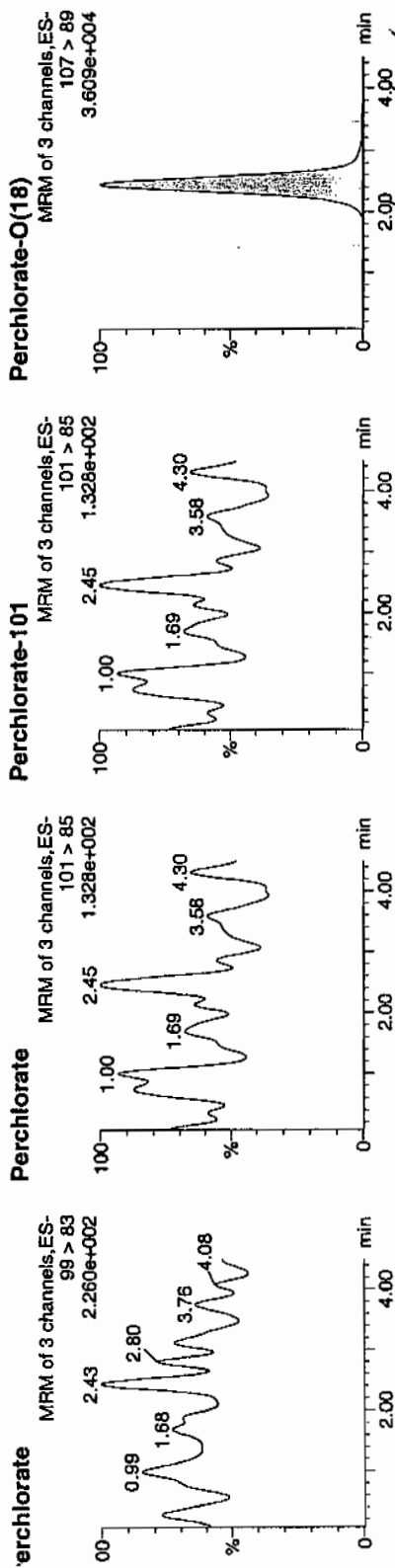
Quantify Sample Report MassLynx 4.0 SP4
 he GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020110a.qld

Last Altered: Tuesday, February 02, 2010 2:28:24 PM Eastern Standard Time
 Printed: Tuesday, February 02, 2010 2:30:40 PM Eastern Standard Time

Sample Name: per0201059a
 Date: 01-Feb-2010
 Time: 22:02:51
 ID: IPB008
 Lot: 1:1,A

02-02-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
Perchlorate	99 > 83											
Perchlorate-101	101 > 85											
Perchlorate-O(18)	107 > 89	2.45	11358.744	11358.744	bb			0.4551	91.03	-8.97	4159.0...	0.00

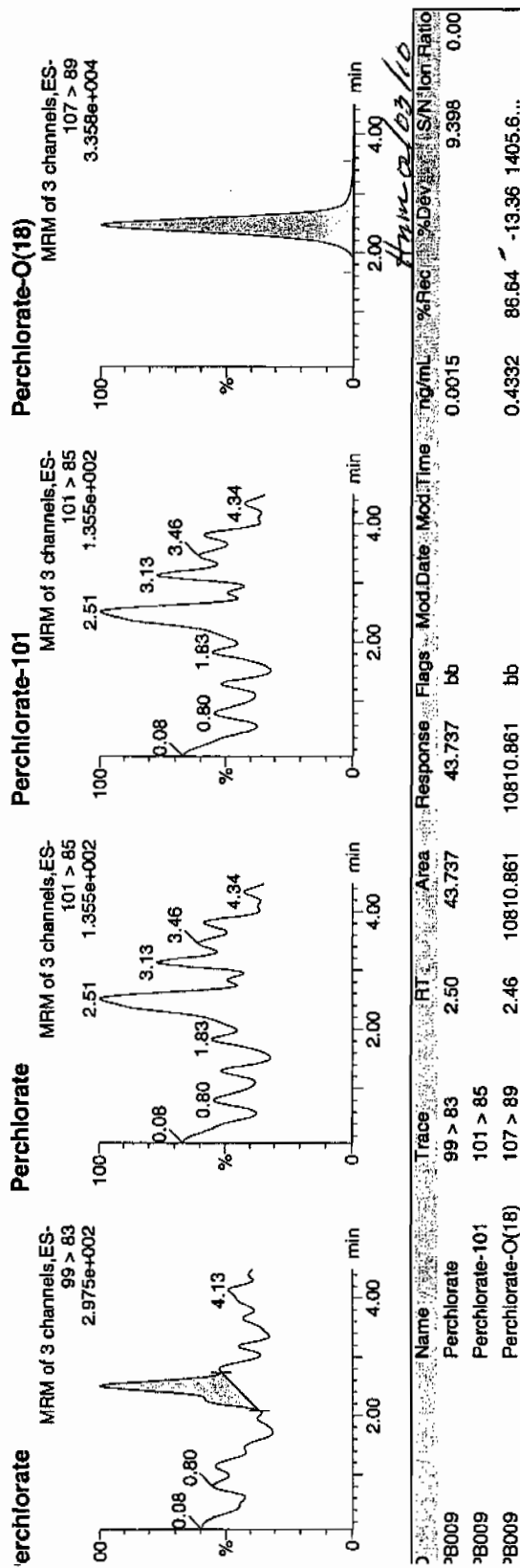
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charters W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020110a.qld

Last Altered: Tuesday, February 02, 2010 2:28:24 PM Eastern Standard Time
Printed: Tuesday, February 02, 2010 2:30:40 PM Eastern Standard Time

Sample Name: per0201070a
Date: 01-Feb-2010
Time: 23:26:09
ID: IPB009
Label: 1:1,A

02-02-10



Nairb.ref

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

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

QUANTO ULTIMA: nairb 01_08_08.ca

Calibration Report - MS1 Static

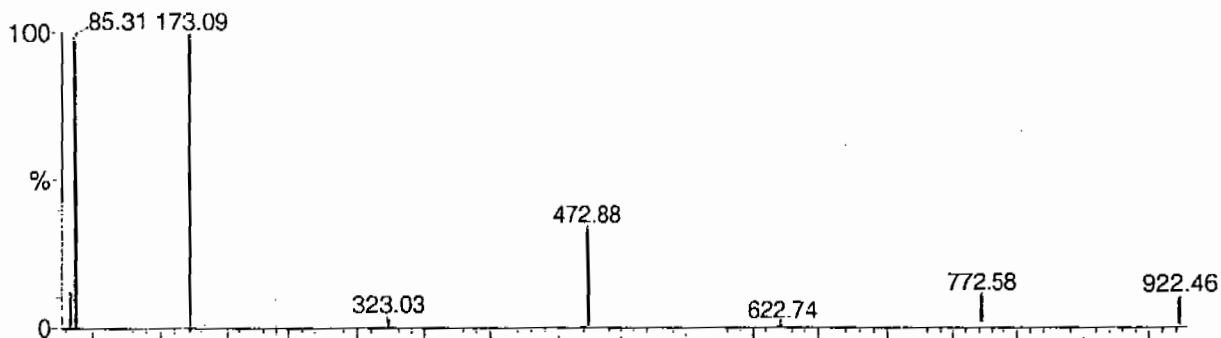
Page 1 of 1

Printed: Tue Jan 08 12:19:12 2008

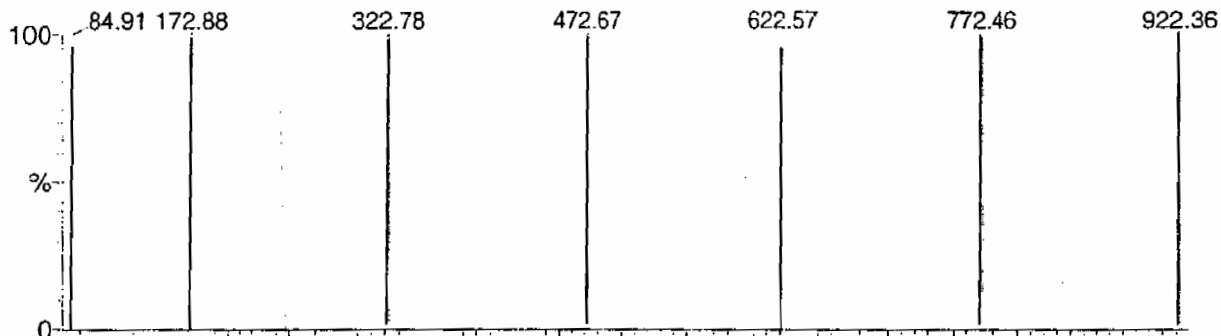
POINTS HIGHLIGHTED BY CURVED 01-01-08

Data file: STATMS1 - Uncalibrated

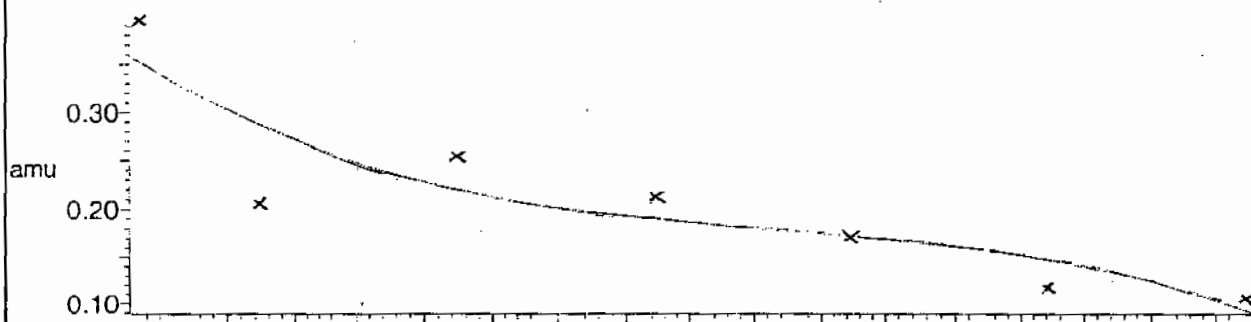
7 matches of 7 tested references



Reference file: Nairb

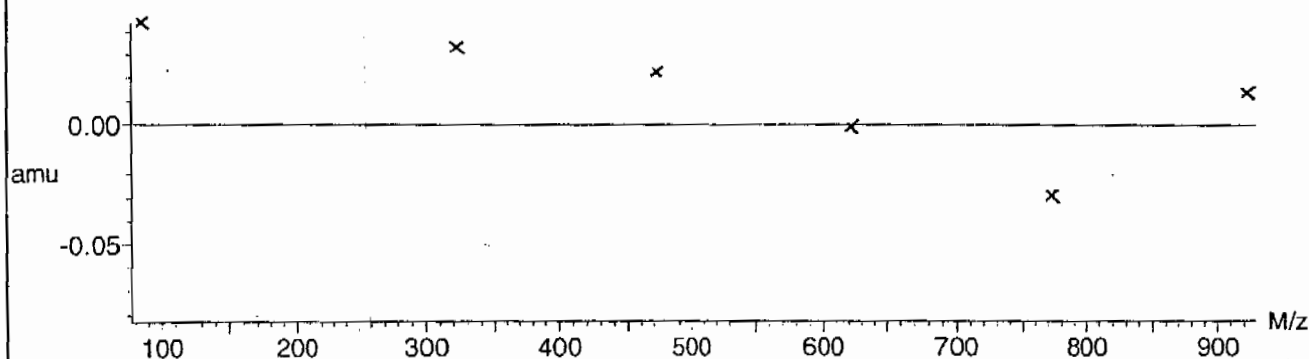


Mass difference (Raw - Ref mass)



Residuals

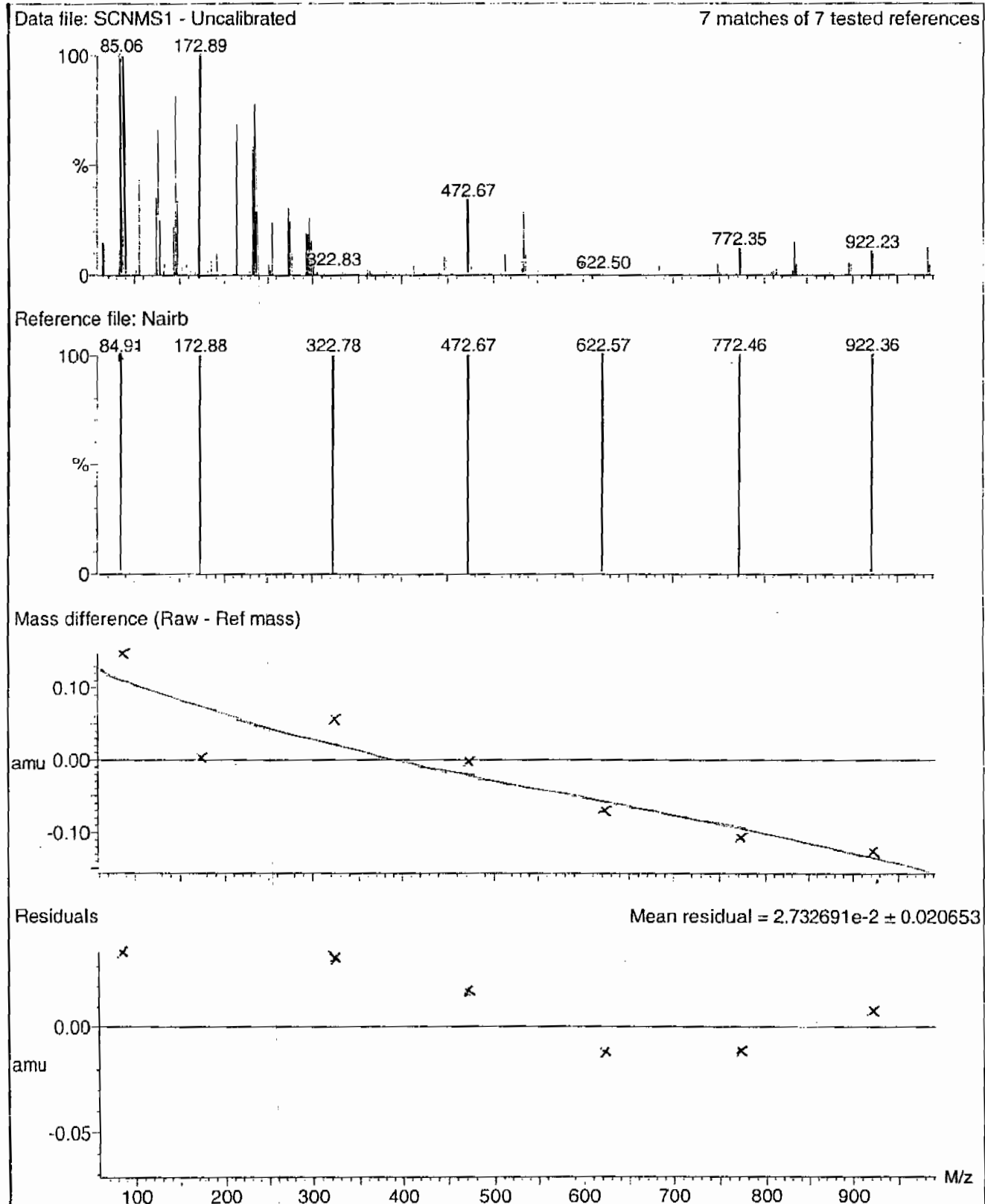
Mean residual = $3.212012 \times 10^{-2} \pm 0.024108$



Calibration Report - MS1 Scanning

Page 1 of 1

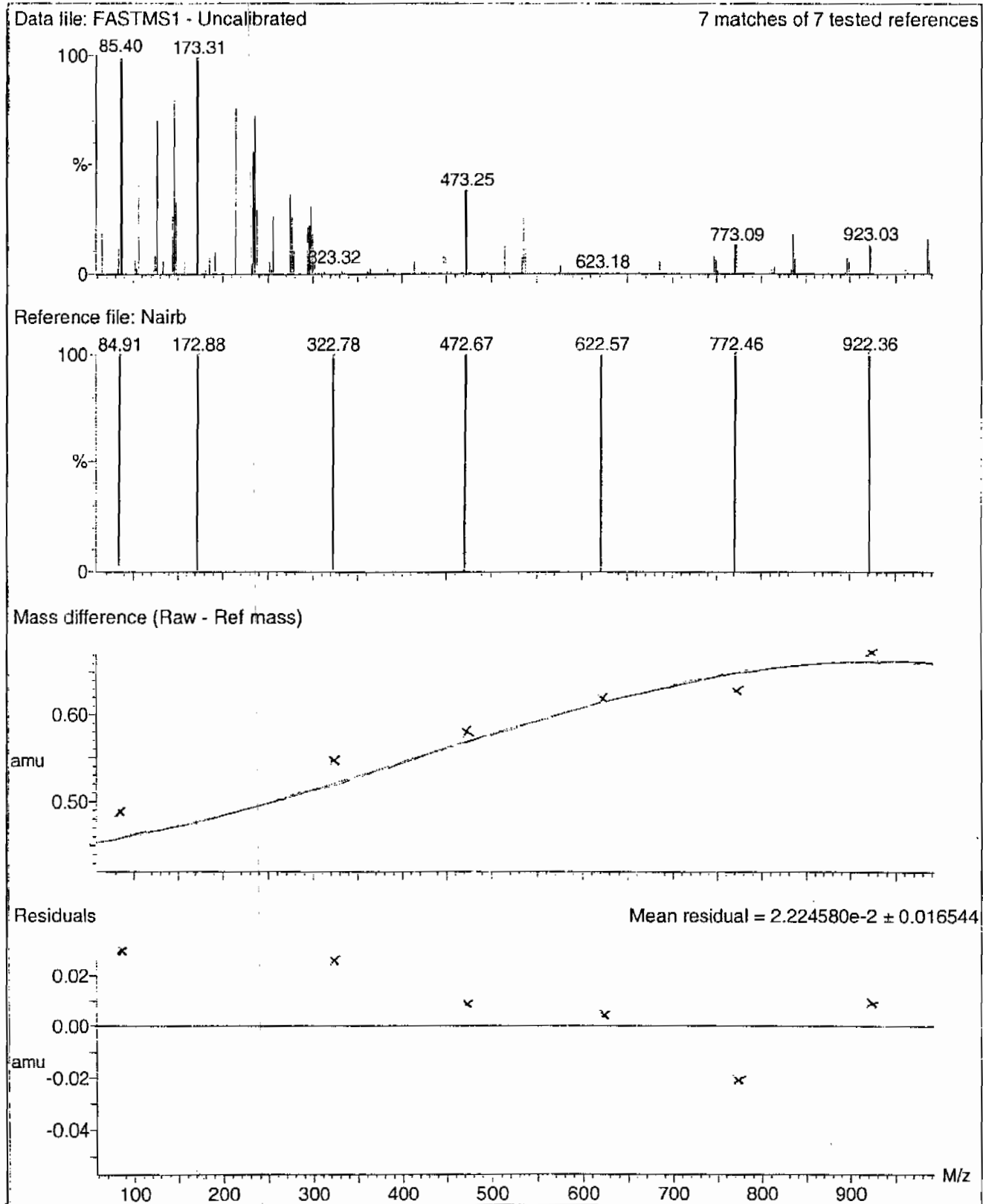
Printed: Tue Jan 08 12:20:09 2008



Calibration Report - MS1 Scan Speed Compensation

Page 1 of 1

Printed: Tue Jan 08 12:21:04 2008



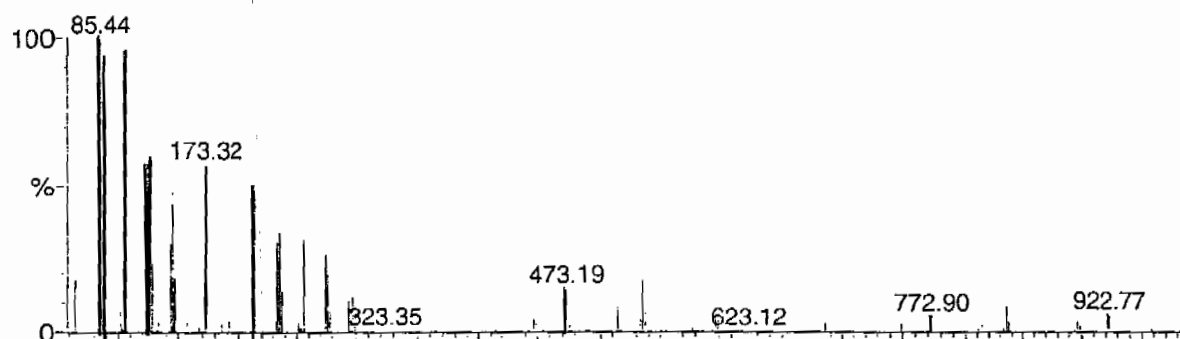
Calibration Report - MS2 Scan Speed Compensation

Page 1 of 1

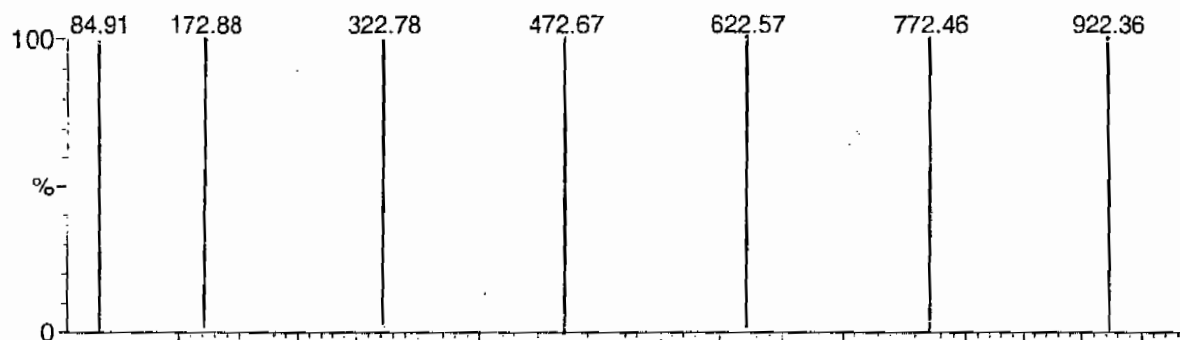
Printed: Tue Jan 08 12:23:51 2008

Data file: FASTMS2 - Uncalibrated

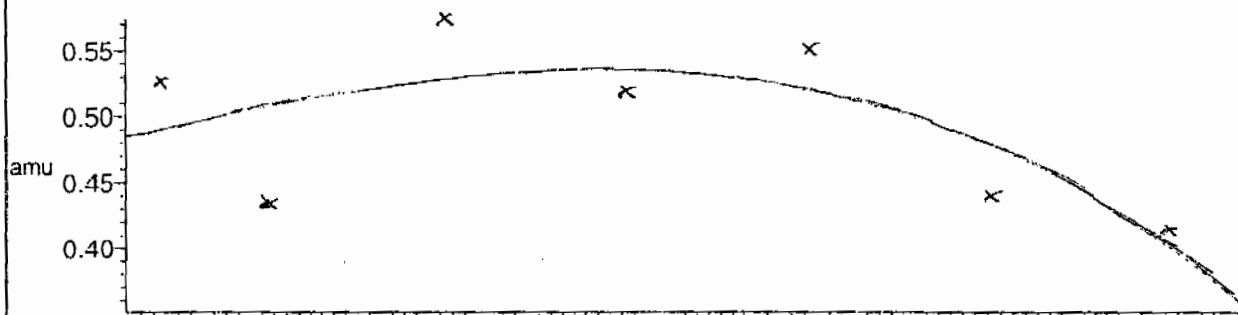
7 matches of 7 tested references



Reference file: Nairb

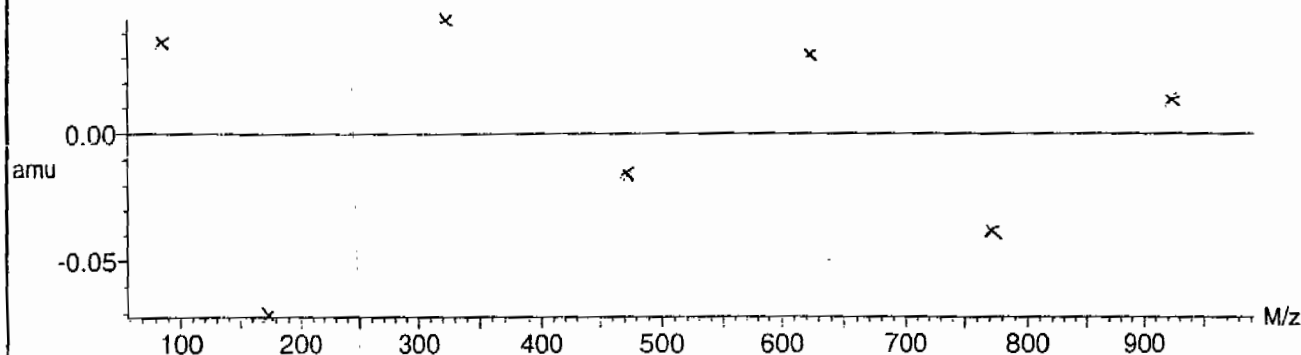


Mass difference (Raw - Ref mass)



Residuals

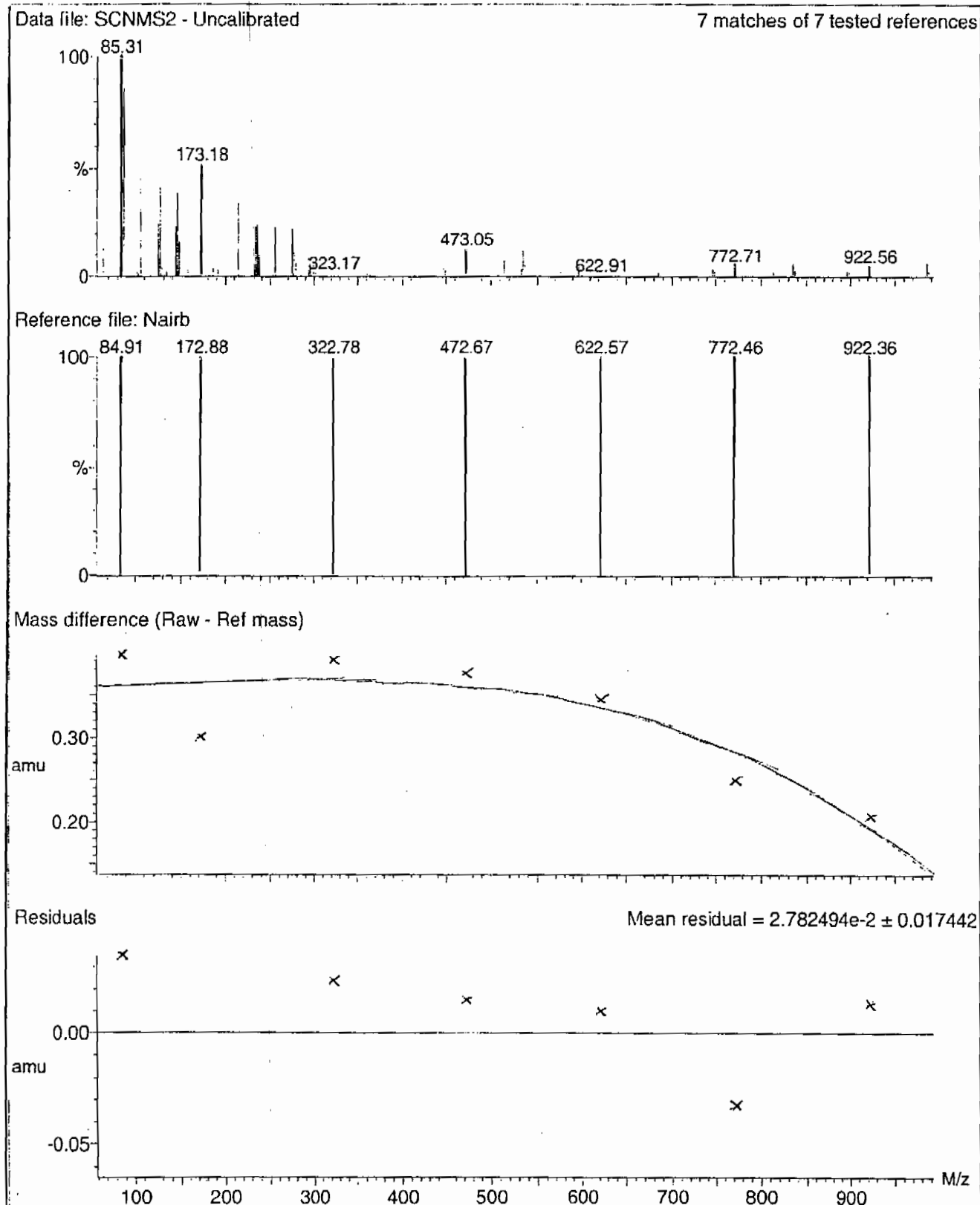
Mean residual = $3.598289 \times 10^{-2} \pm 0.017899$



Calibration Report - MS2 Scanning

Page 1 of 1

Printed: Tue Jan 08 12:22:56 2008



Calibration Report - MS2 Static

Page 1 of 1

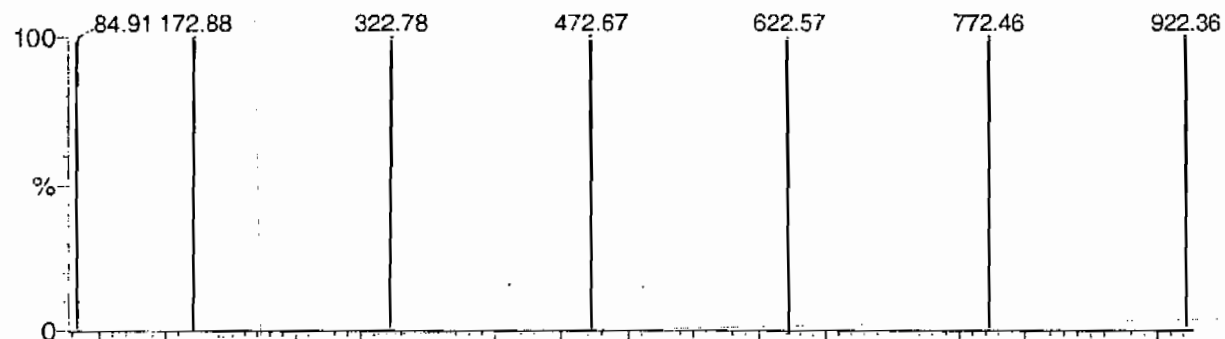
Printed: Tue Jan 08 12:21:59 2008

Data file: STATMS2 - Uncalibrated

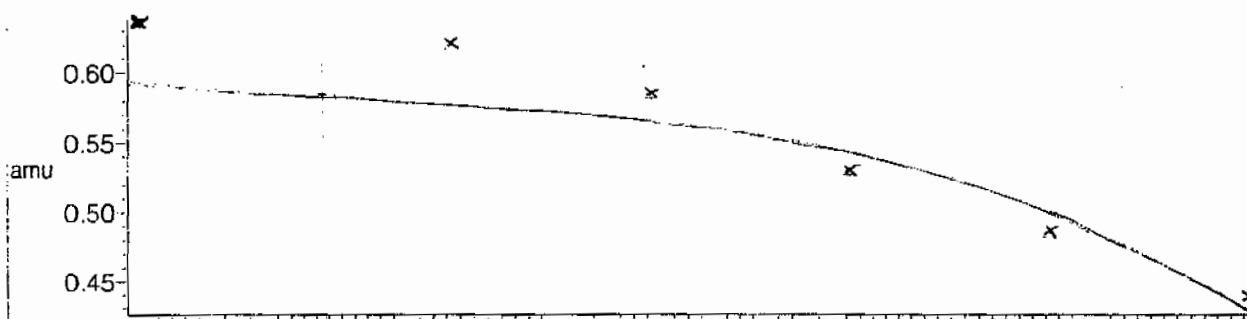
7 matches of 7 tested references



Reference file: Nairb

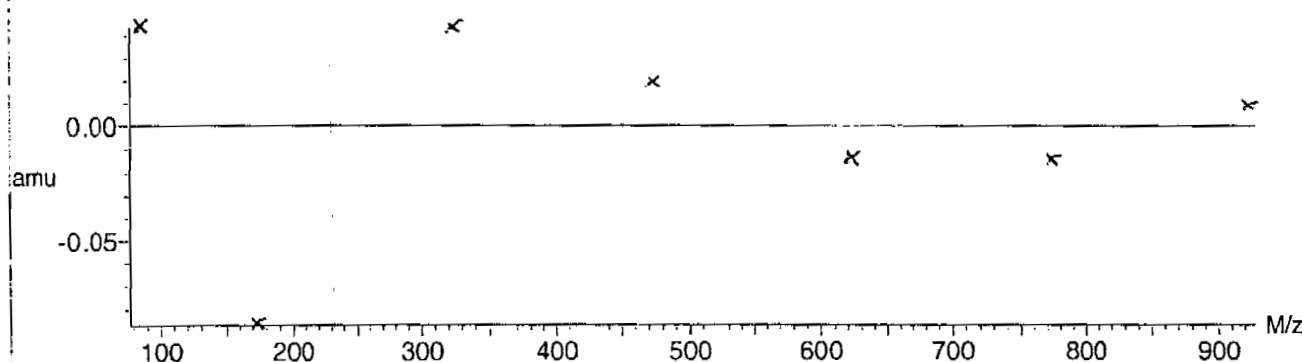


Mass difference (Raw - Ref mass)



Residuals

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



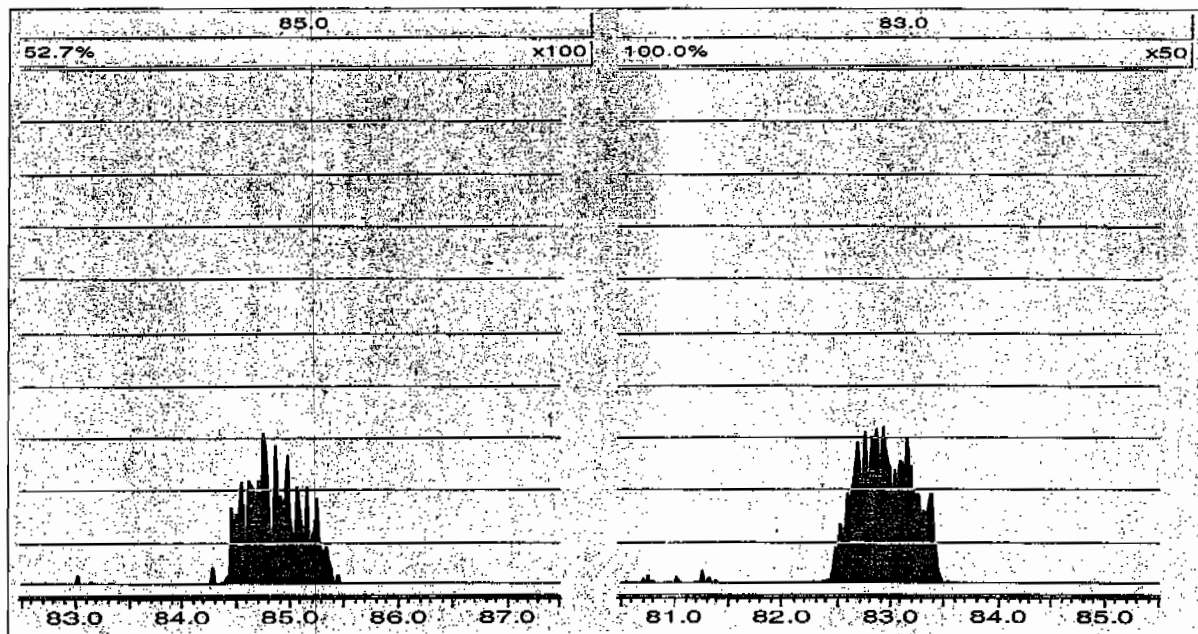
Tune Parameters

MassLynx 4.0 SP4

Page 1 of 1

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

Printed: Monday, February 01, 2010 12:58:34 Eastern Standard Time



Perchlorate RT And Area Summary

Lab Name: General Engineering LaboratoriesGEL Job No.(SDG): 10-1390-1Lab Code: GELInstrument ID: LCMSMSHPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

Sample ID	Datafile	Run Date	Area	RT	RT CLO4	RRT	Q 0.98-1.02
MidLevel Standard Area	per0201006a	01-FEB-10	12552.6				
Lower Area Limit			6276.3				
Upper Area Limit			25105.2				
1202024390	per0201049a	01-FEB-10 20:47	11140.6	2.46	2.48902	1.012	
1202024391	per0201050a	01-FEB-10 20:54	11307.9	2.46	2.47657	1.007	
1202024399	per0201051a	01-FEB-10 21:02	11020.4	2.45	2.46422	1.006	
245392001	per0201067a	01-FEB-10 23:03	11460.5	2.46	2.50148	1.017	
245392002	per0201068a	01-FEB-10 23:10	11719.7	2.46	2.45175	.997	

SAMPLE DATA

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 245225

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.

RE15-10-8074

Date Received: 23-JAN-10

GEL Job No (SDG): 10-1390-1

GEL Sample ID: 245392001

Date Filtered: 30-JAN-10

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	01-FEB-10 23:03	per0201067a
	Perchlorate Isotope Ratio						1	01-FEB-10 23:03	per0201067a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	01-FEB-10 23:03	per0201067a
	Perchlorate-O(18)			0.459	ug/L		1	01-FEB-10 23:03	per0201067a

[^] 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 $\frac{1}{\text{Aliquot}}$ %Solids

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

atset: C:\MassLynx\Perchlorate.PRO\per020110a.qld

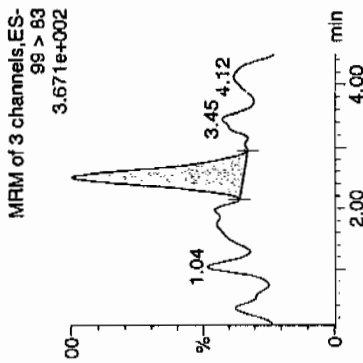
ast Altered: Tuesday, February 02, 2010 2:28:24 PM Eastern Standard Time
rinted: Tuesday, February 02, 2010 2:30:40 PM Eastern Standard Time

ame: per0201067a
ate: 01-Feb-2010
ime: 23:03:18
): 245392001
ial: 2:3.D

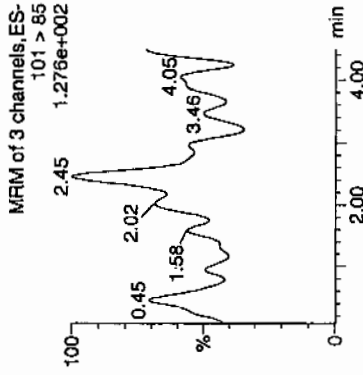
02-02-10

LANC | 945227 | L72 | 11

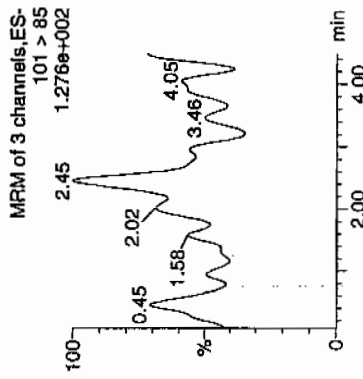
Perchlorate



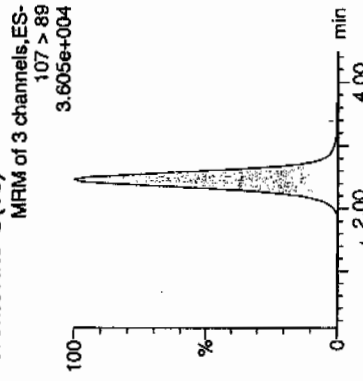
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
45392001	Perchlorate	99 > 83	2.50	81.114	bb			0.0027			9.435	0.00
45392001	Perchlorate-101	101 > 85										
45392001	Perchlorate-O(18)	107 > 89	2.46	11460.542	bb			0.4592	91.84	-8.16	2489.7...	

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix:

Extraction Batch ID: 945225

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.

RE15-10-8075

Date Received: 23-JAN-10

GEL Job No (SDG): 10-1390-1

GEL Sample ID: 245392002

Date Filtered: 30-JAN-10

Injection Volume (uL): 20

% Solids:

CAS No.	Analyte^A	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	01-FEB-10 23:10	per0201068a
	Perchlorate Isotope Ratio						1	01-FEB-10 23:10	per0201068a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	01-FEB-10 23:10	per0201068a
	Perchlorate-O(18)			0.470	ug/L		1	01-FEB-10 23:10	per0201068a

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

***Concentration =**

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

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

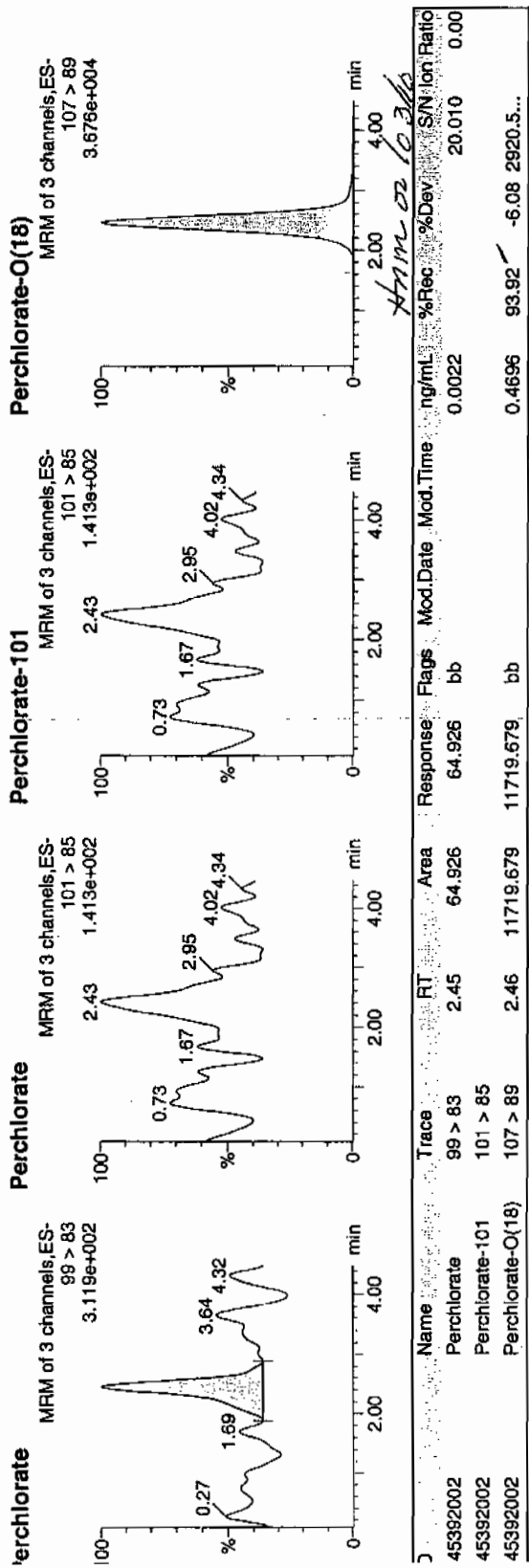
Dataset: C:\MassLynx\Perchlorate.PRO\per020110a.qld

Last Altered: Tuesday, February 02, 2010 2:28:24 PM Eastern Standard Time
Printed: Tuesday, February 02, 2010 2:30:40 PM Eastern Standard Time

Sample Name: per0201068a
Date: 01-Feb-2010
Time: 23:10:50
ID: 245392002
File: 2.3.E

02-02-10

17474 1945227 130 111



STANDARDS DATA

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-1390-1

Lab Code: GEL

Instrument ID: LCMSMS Date Analyzed: 01-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: 29509.02
 Response Type: External Standard
 Curve Type: RF

Perchlorate Initial Calibration

GEL Job No.(SDG): 10-1390-1

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument ID: LCMSMS Date Analyzed: 01-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: 9714.282

Response Type: External Standard

Curve Type: RF

Quantify Calibration Report MassLynx 4.0 SP4

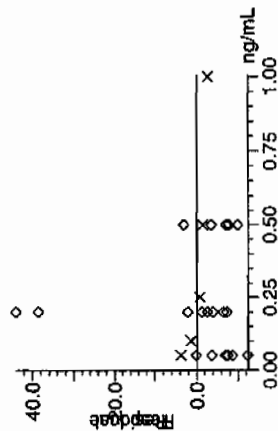
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020110a.qld

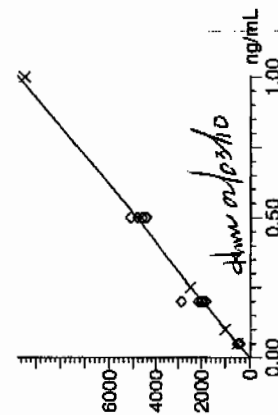
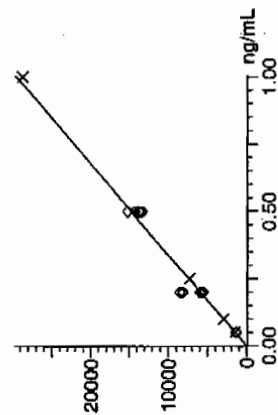
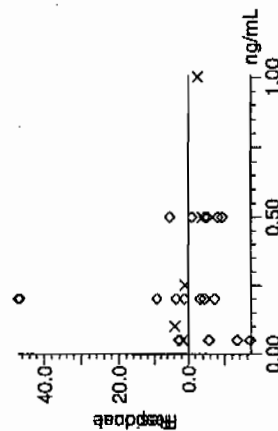
Last Altered: Tuesday, February 02, 2010 2:28:24 PM Eastern Standard Time
Printed: Tuesday, February 02, 2010 2:30:40 PM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per020110a.mdb 02 Feb 2010 07:54:05
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per020110a.cdb 02 Feb 2010 14:28:23

Compound name: Perchlorate
Response Factor: 29509
IRF SD: 760.836, % Relative SD: 2.57832
Response type: External Std, Area
Curve type: RF



Compound name: Perchlorate-101
Response Factor: 9714.29
RF SD: 312.663, % Relative SD: 3.21858
Response type: External Std, Area
Curve type: RF



02-02-10

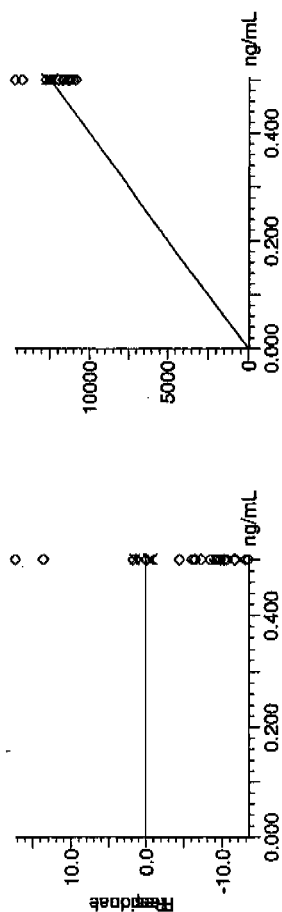
02-02-10

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

Dataset: C:\MassLynx\Perchlorate.PRO\per020110a.qld

Fast Altered: Tuesday, February 02, 2010 2:28:24 PM Eastern Standard Time
 Printed: Tuesday, February 02, 2010 2:30:40 PM Eastern Standard Time

Compound name: Perchlorate-O(18)
 Response Factor: 24957
 R² SD: 251.821, % Relative SD: 1.00902
 Response type: External Std, Area
 Curve type: RIF



Perchlorate Initial Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1390-1

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.52	103.11	01-FEB-10 15:45	per0201009a
Perchlorate Isotope Ratio		2.98		01-FEB-10 15:45	per0201009a
Perchlorate-101	.5	.53	105.27	01-FEB-10 15:45	per0201009a

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

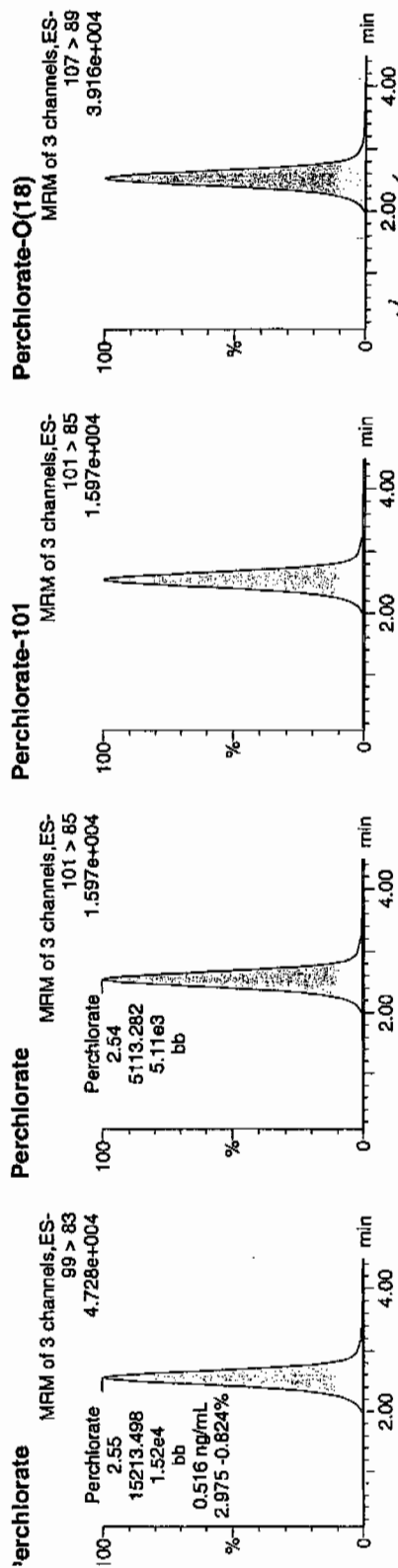
Dataset: C:\MassLynx\Perchlorate.PRO\per020110a.qld

Last Altered: Tuesday, February 02, 2010 2:28:24 PM Eastern Standard Time
Printed: Tuesday, February 02, 2010 2:30:40 PM Eastern Standard Time

Sample: per0201009a
Date: 01-Feb-2010
Time: 15:45:09
D: WCL100128-06ICV
File: 1:2,A

Per02

02-02-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
/CL100128-06ICV	Perchlorate	99 > 83	2.55	15213.498	15213.498	bb		0.5156	103.11	3.11	1234.0...	2.98
/CL100128-06ICV	Perchlorate-101	101 > 85	2.54	5113.282	5113.282	bb		0.5264	105.27	5.27	2547.6...	
/CL100128-06ICV	Perchlorate-O(18)	107 > 89	2.53	12695.416	12695.416	bb		0.5087	101.74	1.74	962.638	

4.728e+004

Form 3

Perchlorate Continuing Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1390-1

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.48	96.42	01-FEB-10 17:08	per0201020a
Perchlorate Isotope Ratio		2.96		01-FEB-10 17:08	per0201020a
Perchlorate-101	.5	.49	98.95	01-FEB-10 17:08	per0201020a
Perchlorate	.5	.48	96.31	01-FEB-10 18:46	per0201033a
Perchlorate Isotope Ratio		3.06		01-FEB-10 18:46	per0201033a
Perchlorate-101	.5	.48	95.52	01-FEB-10 18:46	per0201033a
Perchlorate	.5	.46	92.9	01-FEB-10 20:24	per0201046a
Perchlorate Isotope Ratio		2.98		01-FEB-10 20:24	per0201046a
Perchlorate-101	.5	.47	94.76	01-FEB-10 20:24	per0201046a
Perchlorate	.5	.46	92.24	01-FEB-10 21:55	per0201058a
Perchlorate Isotope Ratio		3.05		01-FEB-10 21:55	per0201058a
Perchlorate-101	.5	.46	91.91	01-FEB-10 21:55	per0201058a
Perchlorate	.5	.45	90.12	01-FEB-10 23:18	per0201069a

Form 3

Perchlorate Continuing Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1390-1

Lab Code: GEL

Reporting Units: ug/L

Perchlorate Isotope Ratio		3.02		01-FEB-10 23:18	per0201069a
Perchlorate-101	.5	.45	90.69	01-FEB-10 23:18	per0201069a

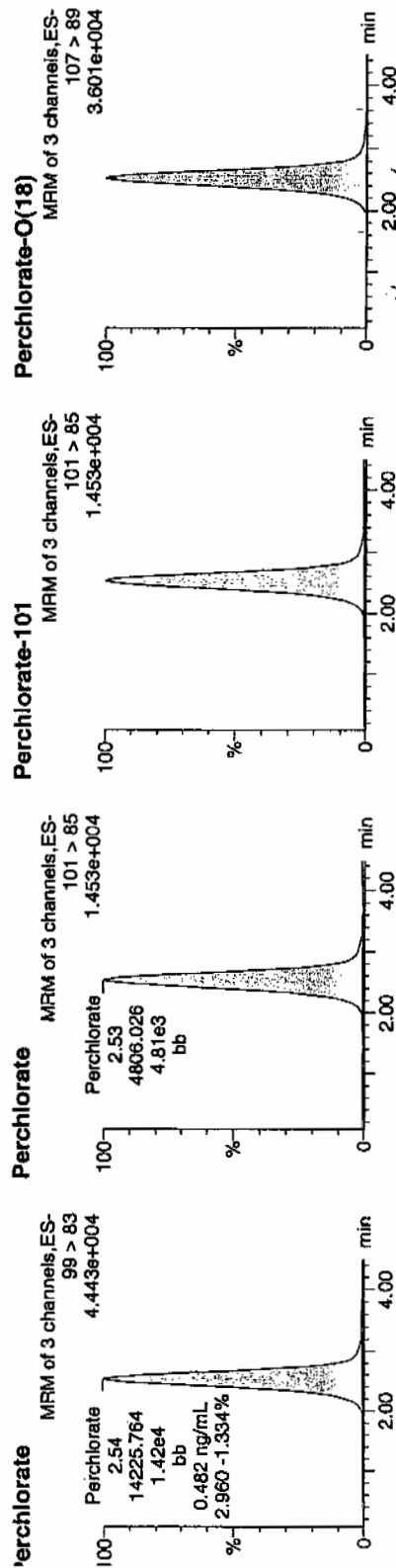
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020110a.qld

Last Altered: Tuesday, February 02, 2010 2:28:24 PM Eastern Standard Time
Printed: Tuesday, February 02, 2010 2:30:40 PM Eastern Standard Time

Name: per0201020a
Date: 01-Feb-2010
Time: 17:08:09
D: WCL100128-06CCV
File: 1:2.A

Pure
and
02-02-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
VCL100128-06CCV	Perchlorate	2.54	14225.764	14225.764	bb			0.4821	96.42	-3.58	786.613	2.96
VCL100128-06CCV	Perchlorate-101	2.53	4806.026	4806.026	bb			0.4947	98.95	-1.05	491.086	
VCL100128-06CCV	Perchlorate-O(18)	2.51	11571.769	11571.769	bb			0.4637	92.73	-7.27	6320.0...	

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

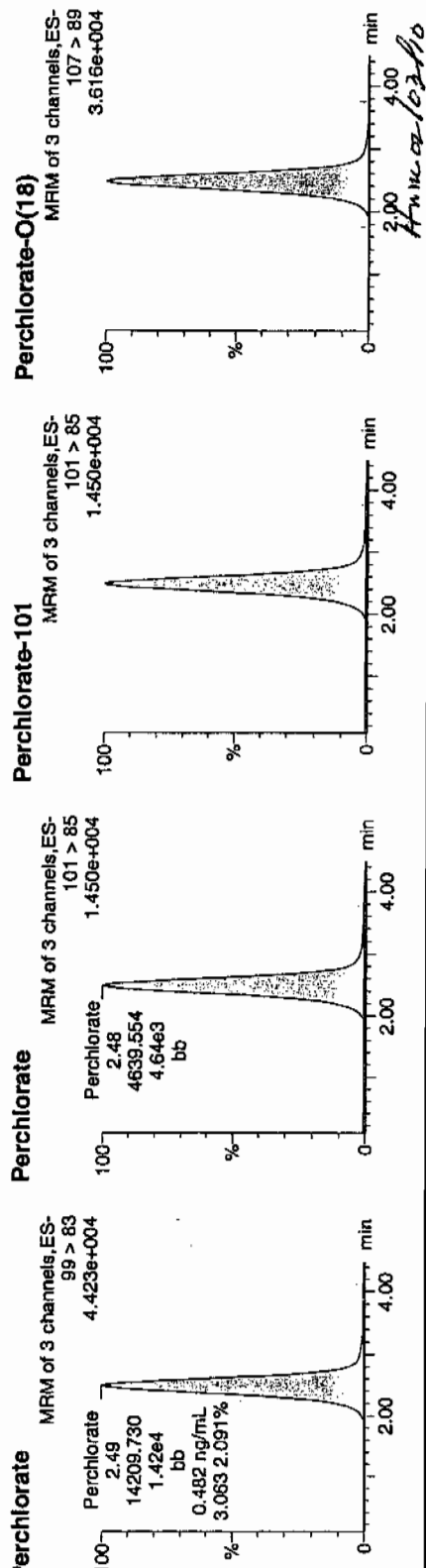
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020110a.qld

Acquired: Tuesday, February 02, 2010 2:28:24 PM Eastern Standard Time
Printed: Tuesday, February 02, 2010 2:30:40 PM Eastern Standard Time

Sample Name: per0201033a
Date: 01-Feb-2010
Time: 18:46:14
File: WCL100128-06CCV
Label: 1:2,A

Pass and 02-02-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
VCL100128-06CCV	Perchlorate	2.48	14209.730	14209.730	bb			0.4815	96.31	-3.69	2292.7...	3.06
VCL100128-06CCV	Perchlorate-101	2.48	4639.554	4639.554	bb			0.4776	95.52	-4.48	923.216	
VCL100128-06CCV	Perchlorate-O(18)	2.48	11687.697	11687.697	bb			0.4675	93.50	-6.50	1169.8...	

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

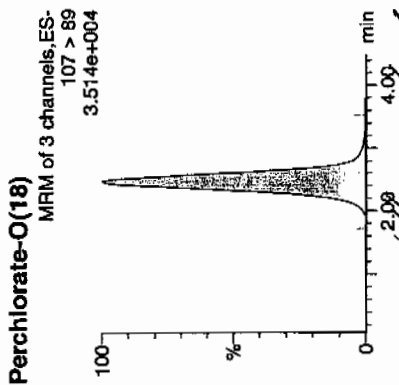
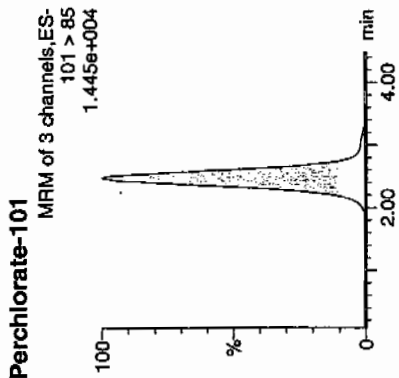
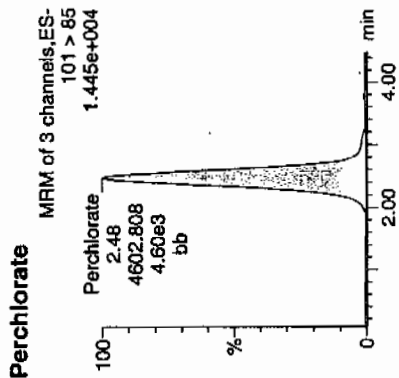
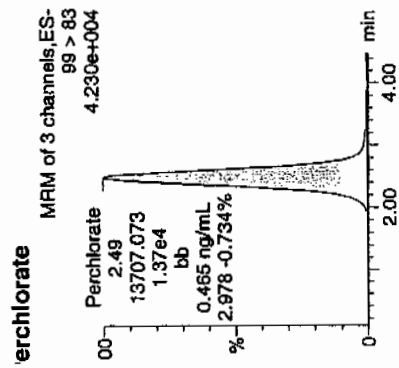
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020110a.qld

Last Altered: Tuesday, February 02, 2010 2:28:24 PM Eastern Standard Time
Printed: Tuesday, February 02, 2010 2:30:40 PM Eastern Standard Time

Sample Name: per0201046a
Date: 01-Feb-2010
Time: 20:24:29
File: WCL100128-06CCV
Label: 1:2,A

Perchlorate
02-02-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
per0201046a	99 > 83	2.49	13707.073	13707.073	bb			0.465	92.90	-7.10	6224.1...	2.98
per0201046a	101 > 85	2.48	4602.808	4602.808	bb			0.4738	94.76	-5.24	263.218	
per0201046a	107 > 89	2.46	11264.321	11264.321	bb			0.4513	90.27	-9.73	8833.5...	

Dataset: C:\MassLynx\Perchlorate.PRO\per020110a.qld

Last Altered: Tuesday, February 02, 2010 2:28:24 PM Eastern Standard Time
 Printed: Tuesday, February 02, 2010 2:30:40 PM Eastern Standard Time

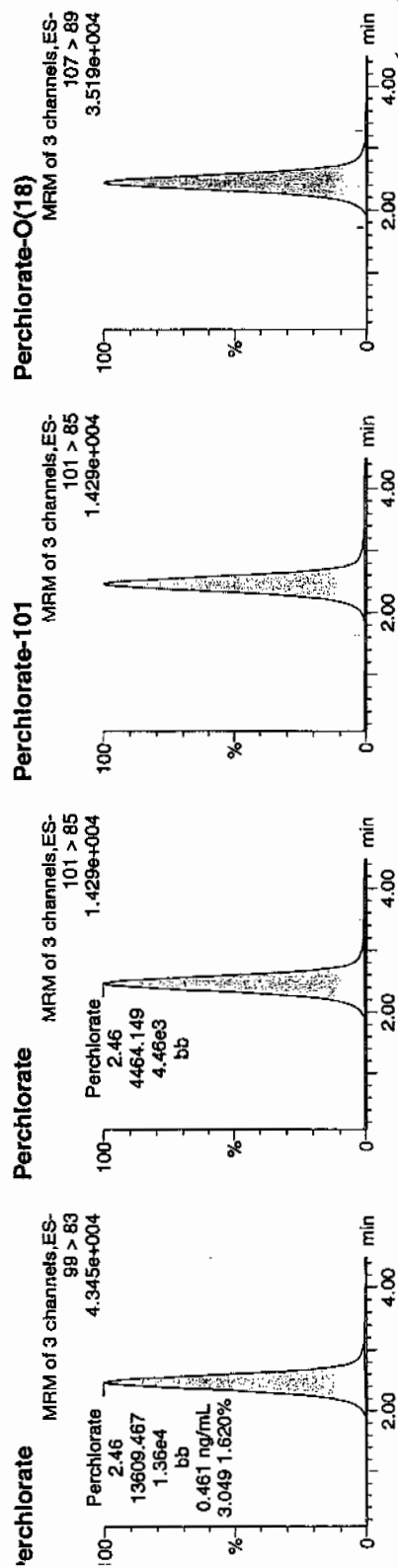
lame: per0201058a

Date: 01-Feb-2010

Time: 21:55:04

C: WCL100128-06CCV

Tal: 1:2,A



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
Perchlorate	99 > 83	2.46	13609.467	13609.467	bb			0.4612	92.24	-7.76	2053.2...	3.05
Perchlorate-101	101 > 85	2.46	4464.149	4464.149	bb			0.4595	91.91	-8.09	799.870	
Perchlorate-O(18)	107 > 89	2.45	11157.476	11157.476	bb			0.4471	89.41	-10.59	1020.7...	

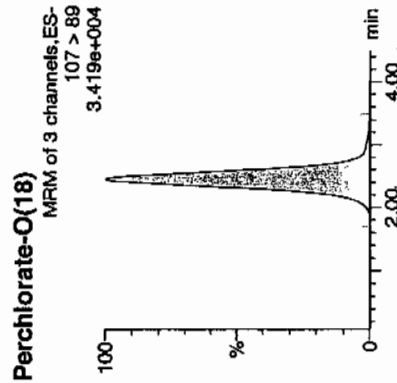
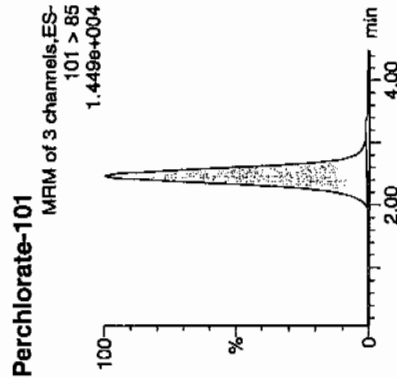
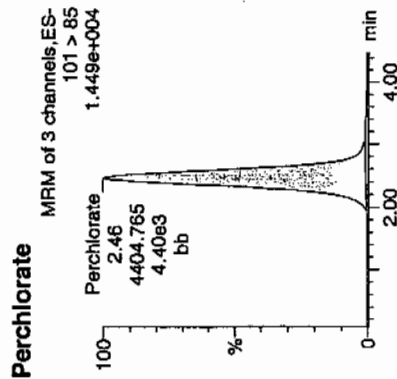
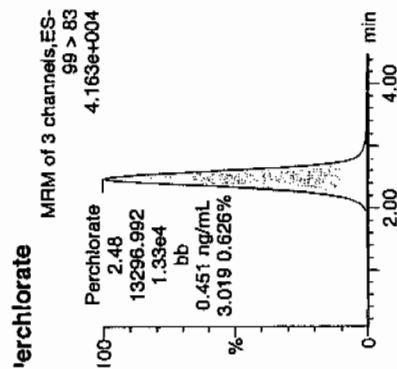
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020110a.qld

Last Altered: Tuesday, February 02, 2010 2:28:24 PM Eastern Standard Time
Printed: Tuesday, February 02, 2010 2:30:40 PM Eastern Standard Time

Sample Name: per0201069a
Date: 01-Feb-2010
Time: 23:18:22
D: WCL100128-06CCV
Tial: 1:2,A

Pass
CWS
02-02-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
VCL100128-06CCV	Perchlorate	99 > 83	2.48	13296.992	bb			0.4506	90.12	-9.88	1185.3...	3.02
VCL100128-06CCV	Perchlorate-101	101 > 85	2.46	4404.765	bb			0.4534	90.69	-9.31	307.571	
VCL100128-06CCV	Perchlorate-O(18)	107 > 89	2.45	10816.826	bb			0.4334	86.68	-13.32	3489.5...	

Perchlorate MDL Verification

GEL Job No.(SDG): 10-1390-1

Lab Name: General Engineering Laboratories

Lab Code: GEL

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

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.05	.05	100.09	01-FEB-10 16:00	per0201011a
Perchlorate Isotope Ratio		2.95		01-FEB-10 16:00	per0201011a
Perchlorate-101	.05	.05	102.95	01-FEB-10 16:00	per0201011a
Perchlorate	.05	.05	93.07	01-FEB-10 17:23	per0201022a
Perchlorate Isotope Ratio		3		01-FEB-10 17:23	per0201022a
Perchlorate-101	.05	.05	94.25	01-FEB-10 17:23	per0201022a
Perchlorate	.05	.05	92.48	01-FEB-10 19:01	per0201035a
Perchlorate Isotope Ratio		2.74		01-FEB-10 19:01	per0201035a
Perchlorate-101	.05	.05	102.43	01-FEB-10 19:01	per0201035a
Perchlorate	.05	.05	91.45	01-FEB-10 20:39	per0201048a
Perchlorate Isotope Ratio		3.34		01-FEB-10 20:39	per0201048a

Form 3

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1390-1

Lab Code: GEL

Reporting Units: ug/L

Perchlorate-101	.05	.04	83.22	01-FEB-10 20:39	per0201048a
Perchlorate	.05	.05	96.23	01-FEB-10 22:10	per0201060a
Perchlorate Isotope Ratio		3.09		01-FEB-10 22:10	per0201060a
Perchlorate-101	.05	.05	94.5	01-FEB-10 22:10	per0201060a
Perchlorate	.05	.04	87.63	01-FEB-10 23:33	per0201071a
Perchlorate Isotope Ratio		3.07		01-FEB-10 23:33	per0201071a
Perchlorate-101	.05	.04	86.66	01-FEB-10 23:33	per0201071a

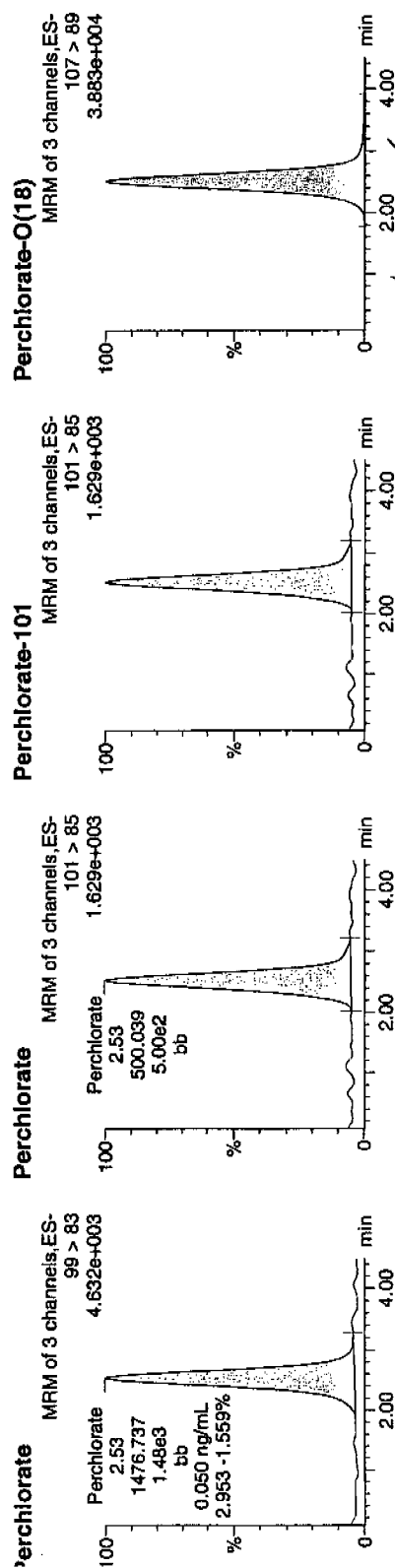
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020110a.qld

Last Altered: Tuesday, February 02, 2010 2:28:24 PM Eastern Standard Time
Printed: Tuesday, February 02, 2010 2:30:40 PM Eastern Standard Time

Sample Name: per0201011a
Date: 01-Feb-2010
Time: 16:00:14
D: WCL100128-07CRI
File: 1:2,B

Pass
02-02-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
VCL100128-07CRI	Perchlorate	2.53	1476.737	1476.737	bb			0.0500	100.09	0.09	417.546	2.95
VCL100128-07CRI	Perchlorate-101	2.53	500.039	500.039	bb			0.0515	102.95	2.95	65.424	
VCL100128-07CRI	Perchlorate-O(18)	2.51	12467.722	12467.722	bb			0.4996	99.91	-0.09	1252.1...	

02/02/10

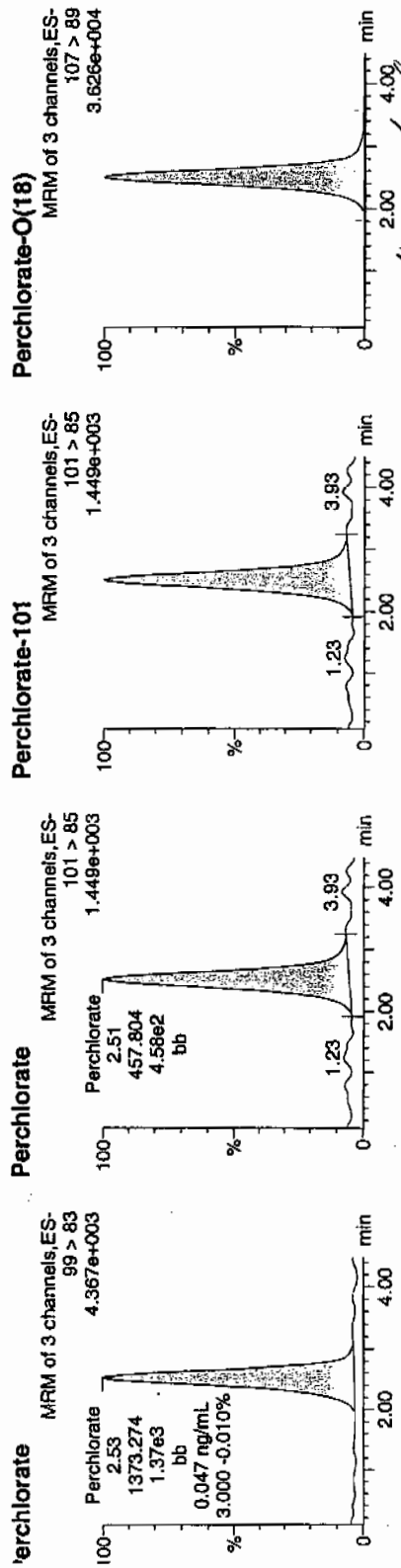
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020110a.qld

Last Altered: Tuesday, February 02, 2010 2:28:24 PM Eastern Standard Time
Printed: Tuesday, February 02, 2010 2:30:40 PM Eastern Standard Time

Sample Name: per0201022a
Date: 01-Feb-2010
Time: 17:23:13
D: WCL100128-07CRI
File: 1:2,B

Pass
CWS
02.02.10



Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
VCL100128-07CRI	Perchlorate	99 > 83	2.53	1373.274	1373.274	bb		0.0465	93.07	-6.93	234.582	3.00
VCL100128-07CRI	Perchlorate-101	101 > 85	2.51	457.804	457.804	bb		0.0471	94.25	-5.75	66.529	
VCL100128-07CRI	Perchlorate-O(18)	107 > 89	2.50	11662.440	11662.440	bb		0.4673	93.46	-6.54	3818.4...	

Time 02/03/10

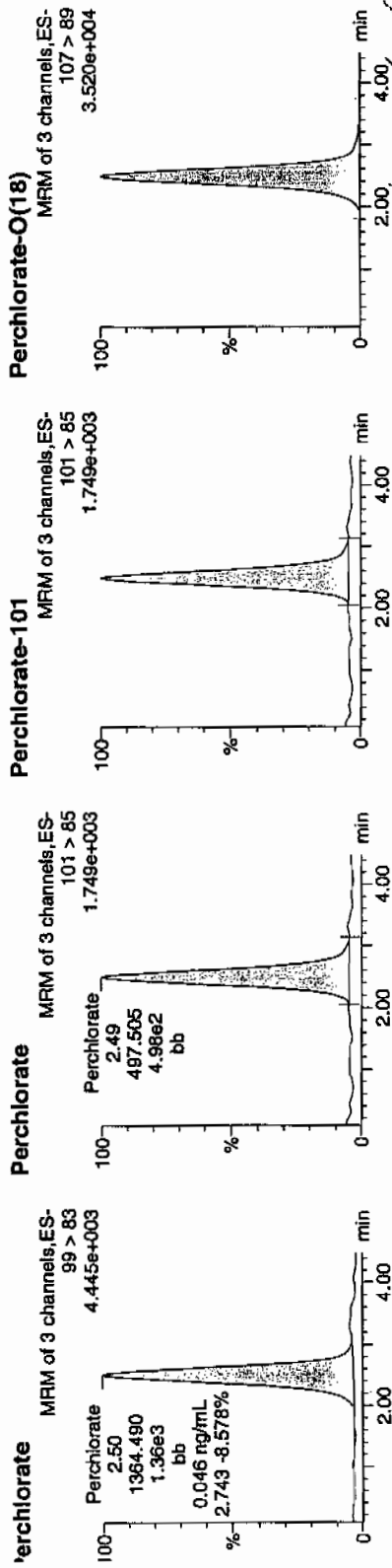
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charters W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020110a.qld

Last Altered: Tuesday, February 02, 2010 2:28:24 PM Eastern Standard Time
Printed: Tuesday, February 02, 2010 2:30:40 PM Eastern Standard Time

Sample Name: per0201035a
Date: 01-Feb-2010
Time: 19:01:19
D: WCL100128-07CRI
File: 1:2,B

Pure
02-02-10



D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
VCL100128-07CRI	Perchlorate	99 > 83	2.50	1364.490	1364.490	bb			0.0462	92.48	-7.52	124.313	2.74
VCL100128-07CRI	Perchlorate-101	101 > 85	2.49	497.505	497.505	bb			0.0512	102.43	2.43	233.335	
VCL100128-07CRI	Perchlorate-O(18)	107 > 89	2.49	11314.174	11314.174	bb			0.4533	90.67	-9.33	3148.7...	

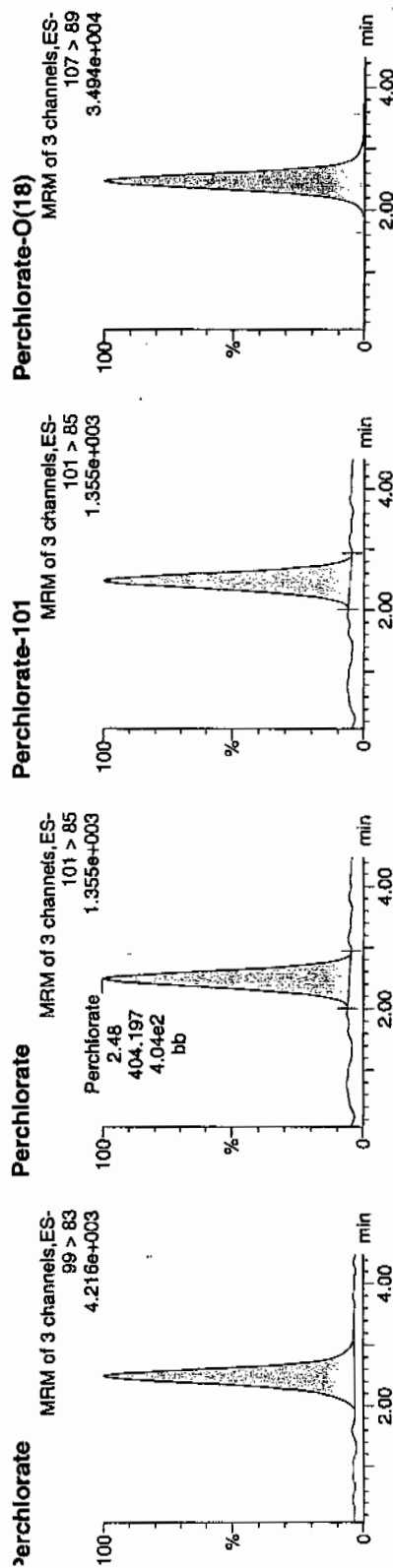
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020110a.qtd

Last Altered: Tuesday, February 02, 2010 2:28:24 PM Eastern Standard Time
Printed: Tuesday, February 02, 2010 2:30:40 PM Eastern Standard Time

Name: per0201048a
Date: 01-Feb-2010
Time: 20:39:34
D: WCL100128-07CRI
/lal: 1:2,B

*Pass
and
02-02-10*



D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/ml	%Rec	%Dev	S/N	Ion Ratio
WCL100128-07CRI	Perchlorate	99 > 83	2.49	1349.276	1349.276	bb			0.0457	91.45	-8.55	181.749	3.34
WCL100128-07CRI	Perchlorate-101	101 > 85	2.48	404.197	404.197	bb			0.0416	83.22	-16.78	309.135	
WCL100128-07CRI	Perchlorate-O(18)	107 > 89	2.48	11204.420	11204.420	bb			0.4489	89.79	-10.21	1622.4...	

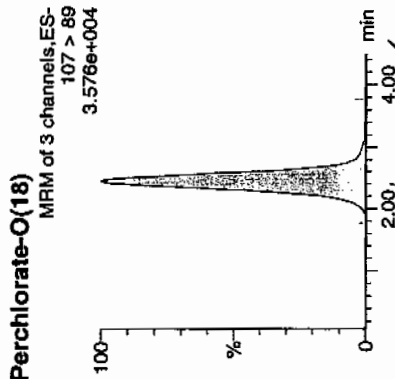
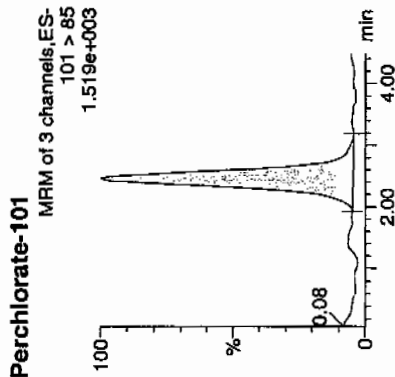
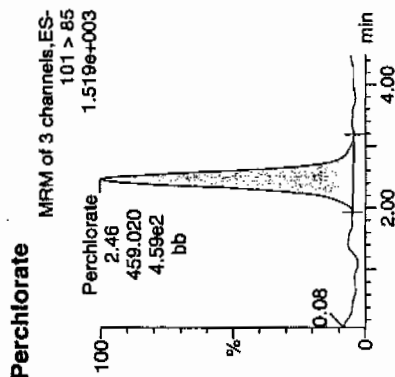
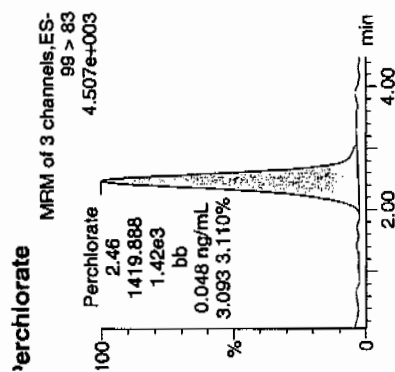
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020110a.qld

Last Altered: Tuesday, February 02, 2010 2:28:24 PM Eastern Standard Time
Printed: Tuesday, February 02, 2010 2:30:40 PM Eastern Standard Time

Sample Name: per0201060a
Date: 01-Feb-2010
Time: 22:10:24
D: WCL100128-07CRI
File: 1:2,B

Pure
02-02-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
VCL100128-07CRI	Perchlorate	2.46	1419.888	1419.888	bb			0.0481	96.23	-3.77	351.804	3.09
VCL100128-07CRI	Perchlorate-101	2.46	459.020	459.020	bb			0.0473	94.50	-5.50	164.351	
VCL100128-07CRI	Perchlorate-O(18)	2.45	11428.174	11428.174	bb			0.4579	91.58	-8.42	4052.4...	

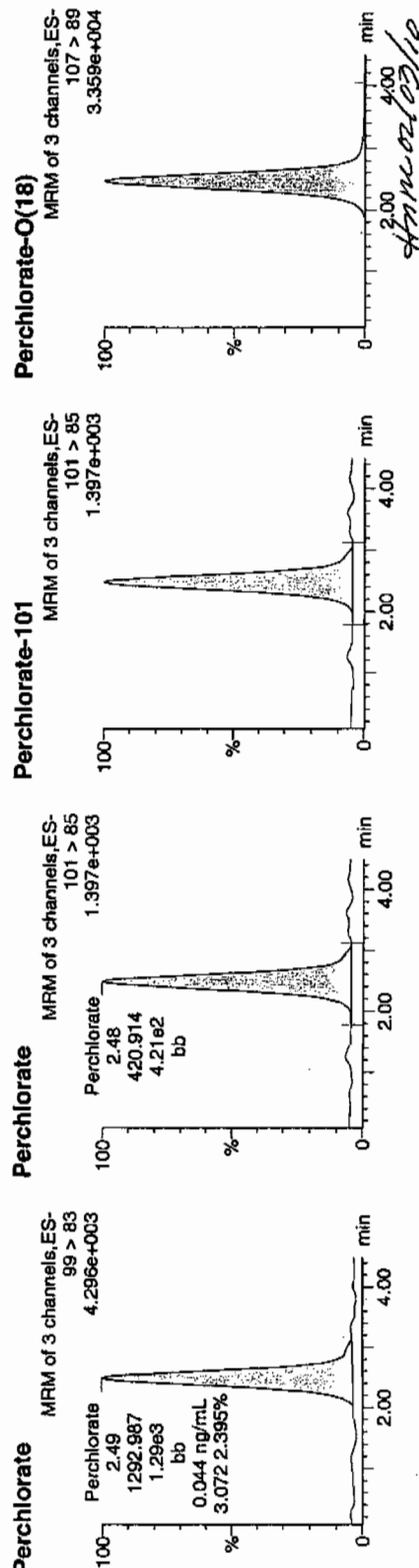
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charliers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020110a.qld

Last Altered: Tuesday, February 02, 2010 2:28:24 PM Eastern Standard Time
Printed: Tuesday, February 02, 2010 2:30:40 PM Eastern Standard Time

Name: per0201071a
Date: 01-Feb-2010
Time: 23:33:41
D: WCL100128-07CRI
/lat: 1:2,B

Perp
ans
02-02-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100128-07CRI	Perchlorate	99 > 83	2.49	1292.987	1292.987	bb			0.0438	87.63	-12.37	180.715	3.07
WCL100128-07CRI	Perchlorate-101	101 > 85	2.48	420.914	420.914	bb			0.0433	86.66	-13.34	137.376	
WCL100128-07CRI	Perchlorate-O(18)	107 > 89	2.46	10863.334	10863.334	bb			0.4353	87.06	-12.94	4010.0...	

QUALITY CONTROL

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: WATER

Extraction Batch ID: 245225

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.

MB

Date Received: 30-JAN-10

GEL Job No (SDG): 10-1390-1

GEL Sample ID: 1202024390

Date Filtered: 30-JAN-10

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	01-FEB-10 20:47	per0201049a
	Perchlorate Isotope Ratio						1	01-FEB-10 20:47	per0201049a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	01-FEB-10 20:47	per0201049a
	Perchlorate-O(18)			0.446	ug/L		1	01-FEB-10 20:47	per0201049a

[^] 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

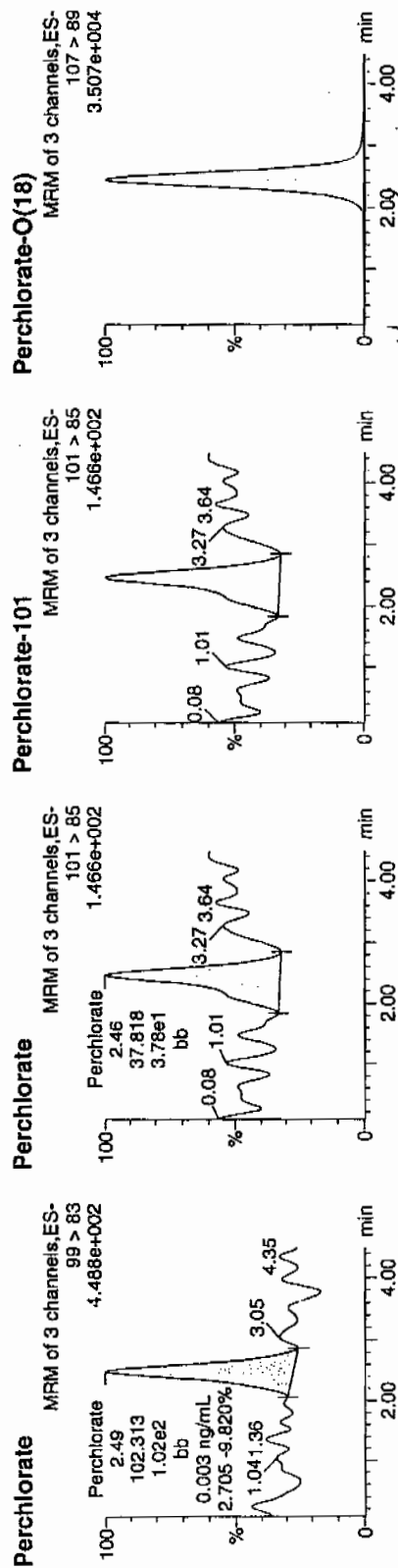
Dataset: C:\MassLynx\Perchlorate.PRO\per020110a.qld

Last Altered: Tuesday, February 02, 2010 2:28:24 PM Eastern Standard Time
Printed: Tuesday, February 02, 2010 2:30:40 PM Eastern Standard Time

Name: per0201049a
Date: 01-Feb-2010
Time: 20:47:06
ID: 1202024390
Vial: 2:1A

0000
02-02-10

1202024390 | 1202024390 | 1202024390



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202024390	Perchlorate	99 > 83	2.49	102.313	102.313	bb			0.0035			15.491	2.71
1202024390	Perchlorate-101	101 > 85	2.46	37.818	37.818	bb			0.0039			2.888	
1202024390	Perchlorate-O(18)	107 > 89	2.46	11140.639	11140.639	bb			0.4464	89.28	-10.72	3432.5...	

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: EPA 6850 Modified
 Matrix: WATER
 Extraction Batch ID: 245225
 Extraction Type: Filter/DAI
 Client Sample No. LCS
 Date Received: 30-JAN-10
 GEL Job No (SDG): 10-1390-1
 GEL Sample ID: 1202024391
 Date Filtered: 30-JAN-10
 Injection Volume (uL): 20
 %Solids:

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.192	ug/L	J	1	01-FEB-10 20:54	per0201050a
	Perchlorate Isotope Ratio			3.05			1	01-FEB-10 20:54	per0201050a
14797-73-0	Perchlorate-101	.05	.2	0.191	ug/L	J	1	01-FEB-10 20:54	per0201050a
	Perchlorate-O(18)			0.453	ug/L		1	01-FEB-10 20:54	per0201050a

[^] 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

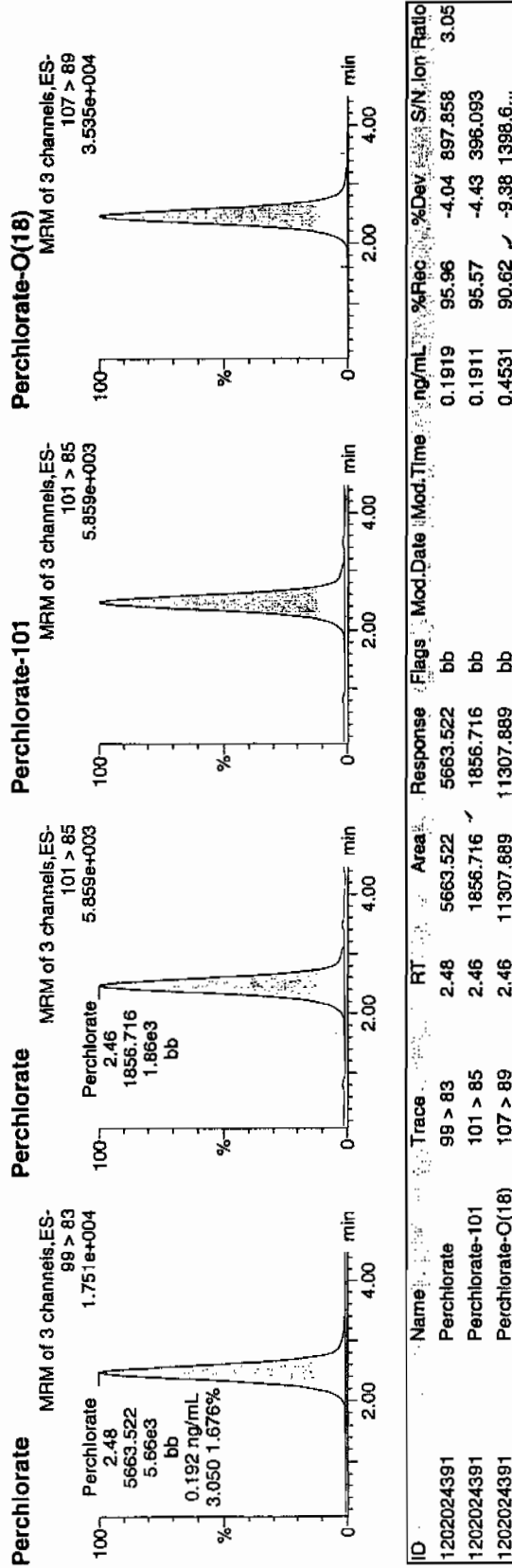
Dataset: C:\MassLynx\Perchlorate.PRO\per020110a.qld

Last Altered: Tuesday, February 02, 2010 2:28:24 PM Eastern Standard Time
Printed: Tuesday, February 02, 2010 2:30:40 PM Eastern Standard Time

Name: per0201050a
Date: 01-Feb-2010
Time: 20:54:50
ID: 1202024391
Vial: 2:1,B

02-02-10

1202024391 | 1202024391 | 1202024391



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202024391	Perchlorate	99 > 83	2.46	5663.522	5663.522	bb			0.1919	95.96	-4.04	897.858	3.05
1202024391	Perchlorate-101	101 > 85	2.46	1856.716	1856.716	bb			0.1911	95.57	-4.43	396.093	
1202024391	Perchlorate-O(18)	107 > 89	2.46	11307.689	11307.689	bb			0.4531	90.62	-9.38	1398.6...	

$$\frac{5663.522}{29509} = 0.1919$$

41mL 02/02/10

MISCELLANEOUS DATA

Prep Logbook

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

Batch ID: 945225 Verified by: Lab SOP: GL-OA-E-067 REV# 6
 Analyst: Jareth Shirley Instrument: MicroMass Quatro Ultima
 Method: SW846 6850 Modified

Sample ID	Run Date	Initial Volume (mL)	Final Volume (mL)	Prepped Factor (mL/mL)
1202024390 MB	30-JAN-2010 11:51:28	10	10	1
1202024391 LCS	30-JAN-2010 11:51:28	10	10	1
245250001	30-JAN-2010 11:51:28	10	10	1
245250002	30-JAN-2010 11:51:28	10	10	1
245373001	30-JAN-2010 11:51:28	10	10	1
245375001	30-JAN-2010 11:51:28	10	10	1
1202024392 MS (245375001)	30-JAN-2010 11:51:28	10	10	1
1202024393 MSD (245375001)	30-JAN-2010 11:51:28	10	10	1
245375002	30-JAN-2010 11:51:28	10	10	1
245378001	30-JAN-2010 11:51:28	10	10	1
245378002	30-JAN-2010 11:51:28	10	10	1
245382001	30-JAN-2010 11:51:28	10	10	1
245386001	30-JAN-2010 11:51:28	10	10	1
245390001	30-JAN-2010 11:51:28	10	10	1
245392001	30-JAN-2010 11:51:28	10	10	1
245392002	30-JAN-2010 11:51:28	10	10	1
1202024399 ICS	30-JAN-2010 11:51:28	10	10	1

Comments:

Desalting cartridges used: 090414-1-Ba & 091130-1-H

Type	Sample Id	Description	Serial Number	Spike Amt	Units
ICS	1202024399	10 ug/L ICV/CCV Second Source	UCL091230-01.2	.2	mL
LCS	1202024391	10 ug/L ICV/CCV Second Source	UCL091230-01.2	.2	mL
MS	1202024392	10 ug/L ICV/CCV Second Source	UCL091230-01.2	.2	mL
MSD	1202024393	10 ug/L ICV/CCV Second Source	UCL091230-01.2	.2	mL
RGNT	All	500 ppm Carbonate, Bicarbonate, Chloride, Sulfate	1236492	10	mL
RGNT	All	Q251 HPLC Grade Water	1246195	10	mL

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS#2

Reviewed BY: *hmc*
Date: 02/03/10
SOP: GL-OA-E-067 Rev.6
Alt Check Std. ID: WCL100128-06

Method: EPA 6850-Modified
Int. Std.: UCL100122-01
Mobile Phase Lot#: 1254342, 1246195
Standard-Samp Reagent Lot#: 1233976

Date: 02/01/10
Extr. Injection Volume: 20uL
Sequence Number: per020110a
Initial Calibration Date: 02/01/10

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
per0201001a	IPB001	CWW	2/1/2010 14:44			1		USE	B
per0201002a	IPB001	CWW	2/1/2010 14:52			1		USE	B
per0201003a	WCLICAL-01	CWW	2/1/2010 15:00			1		USE	I
per0201004a	WCLICAL-02	CWW	2/1/2010 15:07			1		USE	I
per0201005a	WCLICAL-03	CWW	2/1/2010 15:15			1		USE	I
per0201006a	WCLICAL-04	CWW	2/1/2010 15:22			1		USE	I
per0201007a	WCLICAL-05	CWW	2/1/2010 15:30			1		USE	I
per0201008a	IPB002	CWW	2/1/2010 15:37			1		USE	B
per0201009a	WCLICV	CWW	2/1/2010 15:45			1		USE	C
per0201010a	IPB003	CWW	2/1/2010 15:52			1		USE	B
per0201011a	WCLCRI	CWW	2/1/2010 16:00			1		USE	C
per0201012a	245777001	CWW	2/1/2010 16:07	947199	10-1458	10	LANL	USE	S
per0201013a	245777005	CWW	2/1/2010 16:15	947199	10-1458	10	LANL	USE	S
per0201014a	245807001	CWW	2/1/2010 16:22	947199	10-1474-1	1	LANL	USE	S
per0201015a	IPB004	CWW	2/1/2010 16:30			1		USE	B
per0201016a	1202024354	CWW	2/1/2010 16:37	945206	VARIOUS	1	LANL	USE	S
per0201017a	1202024355	CWW	2/1/2010 16:45	945206	VARIOUS	1	LANL	USE	S
per0201018a	1202024358	CWW	2/1/2010 16:53	945206	VARIOUS	1	LANL	USE	S
per0201019a	245113001	CWW	2/1/2010 17:00	945206	10-1325-1	1	LANL	USE	S
per0201020a	WCLCCV	CWW	2/1/2010 17:08			1		USE	C
per0201021a	IPB005	CWW	2/1/2010 17:15			1		USE	B
per0201022a	WCLCRI	CWW	2/1/2010 17:23			1		USE	C
per0201023a	245113002	CWW	2/1/2010 17:30	945206	10-1325-1	1	LANL	USE	S
per0201024a	1202024356	CWW	2/1/2010 17:38	945206	10-1325-1	1	LANL	USE	S
per0201025a	1202024357	CWW	2/1/2010 17:45	945206	10-1325-1	1	LANL	USE	S
per0201026a	245113003	CWW	2/1/2010 17:53	945206	10-1325-1	1	LANL	USE	S
per0201027a	245113004	CWW	2/1/2010 18:00	945206	10-1325-1	1	LANL	USE	S
per0201028a	245113005	CWW	2/1/2010 18:08	945206	10-1325-1	1	LANL	USE	S
per0201029a	245113006	CWW	2/1/2010 18:16	945206	10-1325-1	1	LANL	USE	S

per0201030a	245113007	CWW	2/1/2010 18:23	945206	10-1325-1	1	LANL	USE	S
per0201031a	245113008	CWW	2/1/2010 18:31	945206	10-1325-1	1	LANL	USE	S
per0201032a	245113009	CWW	2/1/2010 18:38	945206	10-1325-1	1	LANL	USE	S
per0201033a	WCLCCV	CWW	2/1/2010 18:46			1		USE	C
per0201034a	IPB006	CWW	2/1/2010 18:53			1		USE	B
per0201035a	WCLCRI	CWW	2/1/2010 19:01			1		USE	C
per0201036a	245113010	CWW	2/1/2010 19:08	945206	10-1325-1	1	LANL	USE	S
per0201037a	245113011	CWW	2/1/2010 19:16	945206	10-1325-1	1	LANL	USE	S
per0201038a	245113012	CWW	2/1/2010 19:24	945206	10-1325-1	1	LANL	USE	S
per0201039a	245113013	CWW	2/1/2010 19:31	945206	10-1325-1	1	LANL	USE	S
per0201040a	245113014	CWW	2/1/2010 19:39	945206	10-1325-1	1	LANL	USE	S
per0201041a	245371001	CWW	2/1/2010 19:46	945206	10-1374	1	LANL	USE	S
per0201042a	245371002	CWW	2/1/2010 19:54	945206	10-1374	1	LANL	USE	S
per0201043a	245372002	CWW	2/1/2010 20:01	945206	10-1375	1	LANL	USE	S
per0201044a	245372003	CWW	2/1/2010 20:09	945206	10-1375	1	LANL	USE	S
per0201045a	245372004	CWW	2/1/2010 20:16	945206	10-1375	1	LANL	USE	S
per0201046a	WCLCCV	CWW	2/1/2010 20:24			1		USE	C
per0201047a	IPB007	CWW	2/1/2010 20:32			1		USE	B
per0201048a	WCLCRI	CWW	2/1/2010 20:39			1		USE	C
per0201049a	1202024390	CWW	2/1/2010 20:47	945227	VARIOUS	1	LANL	USE	S
per0201050a	1202024391	CWW	2/1/2010 20:54	945227	VARIOUS	1	LANL	USE	S
per0201051a	1202024399	CWW	2/1/2010 21:02	945227	VARIOUS	1	LANL	USE	S
per0201052a	245250001	CWW	2/1/2010 21:09	945227	10-1351-1	1	LANL	USE	S
per0201053a	245250002	CWW	2/1/2010 21:17	945227	10-1351-1	1	LANL	USE	S
per0201054a	245373001	CWW	2/1/2010 21:24	945227	10-1375-1	1	LANL	USE	S
per0201055a	245375001	CWW	2/1/2010 21:32	945227	10-1373-1	1	LANL	USE	S
per0201056a	1202024392	CWW	2/1/2010 21:40	945227	10-1373-1	1	LANL	USE	S
per0201057a	1202024393	CWW	2/1/2010 21:47	945227	10-1373-1	1	LANL	USE	S
per0201058a	WCLCCV	CWW	2/1/2010 21:55			1		USE	C
per0201059a	IPB008	CWW	2/1/2010 22:02			1		USE	B
per0201060a	WCLCRI	CWW	2/1/2010 22:10			1		USE	C
per0201061a	245375002	CWW	2/1/2010 22:17	945227	10-1373-1	1	LANL	USE	S
per0201062a	245378001	CWW	2/1/2010 22:25	945227	10-1378-1	1	LANL	USE	S
per0201063a	245378002	CWW	2/1/2010 22:33	945227	10-1378-1	1	LANL	USE	S
per0201064a	245382001	CWW	2/1/2010 22:40	945227	10-1381	1	LANL	USE	S
per0201065a	245386001	CWW	2/1/2010 22:48	945227	10-1383-1	1	LANL	USE	S
per0201066a	245390001	CWW	2/1/2010 22:55	945227	10-1386-1	1	LANL	USE	S

per0201067a	245392001	CWW	2/1/2010 23:03	945227	10-1390-1	1	LANL	USE	S
per0201068a	245392002	CWW	2/1/2010 23:10	945227	10-1390-1	1	LANL	USE	S
per0201069a	WCLCCV	CWW	2/1/2010 23:18			1		USE	C
per0201070a	IPB009	CWW	2/1/2010 23:26			1		USE	B
per0201071a	WCLCRI	CWW	2/1/2010 23:33			1		USE	C

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

Dataset: C:\MassLynx\Perchlorate.PRO\per020110a.qld

Last Altered: Tuesday, February 02, 2010 2:28:24 PM Eastern Standard Time
Printed: Tuesday, February 02, 2010 2:30:40 PM Eastern Standard Time

Name: per0201056a

Date: 01-Feb-2010

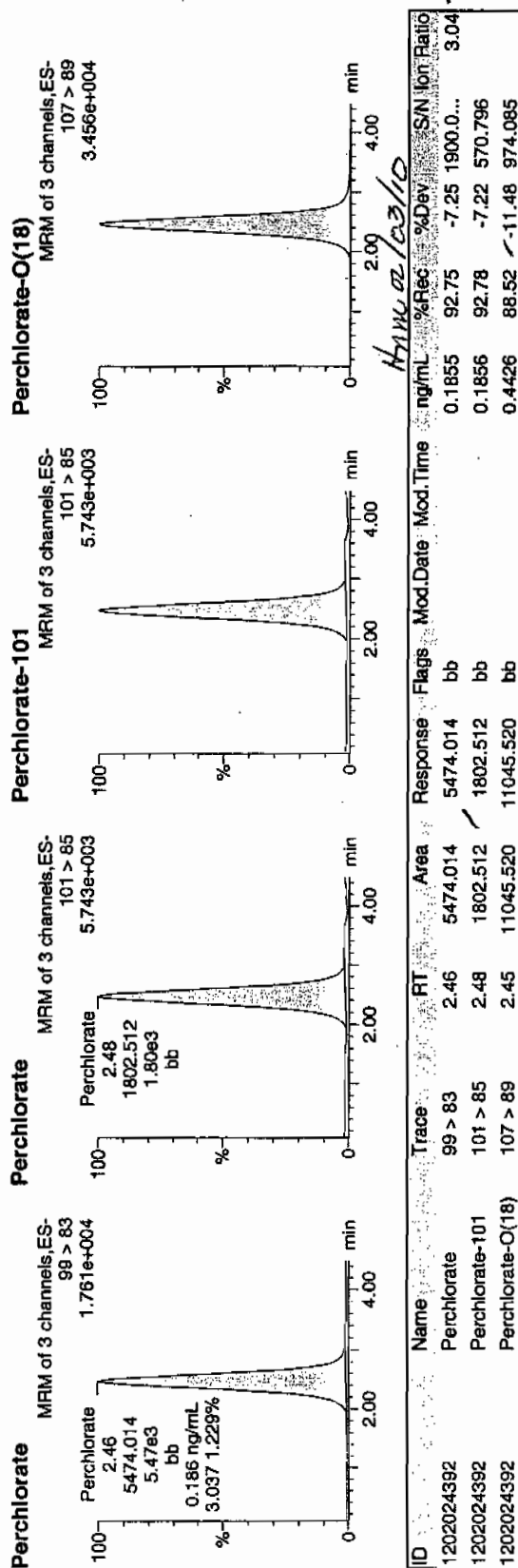
Time: 21:40:00

ID: 1202024392

Vial: 2:2,B

02-02-10

LANC-945227/LZC/MS/11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
1202024392	Perchlorate	99 > 83	2.46	5474.014	5474.014	bb			0.1855	92.75	-7.25	1900.0...	3.04
1202024392	Perchlorate-101	101 > 85	2.48	1802.512	1802.512	bb			0.1856	92.78	-7.22	570.796	
1202024392	Perchlorate-O(18)	107 > 89	2.45	11045.520	11045.520	bb			0.4426	88.52	-11.48	974.085	

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

Dataset: C:\MassLynx\Perchlorate.PRO\per020110a.qld

Last Altered: Tuesday, February 02, 2010 2:28:24 PM Eastern Standard Time
Printed: Tuesday, February 02, 2010 2:30:40 PM Eastern Standard Time

Name: per0201057a

Date: 01-Feb-2010

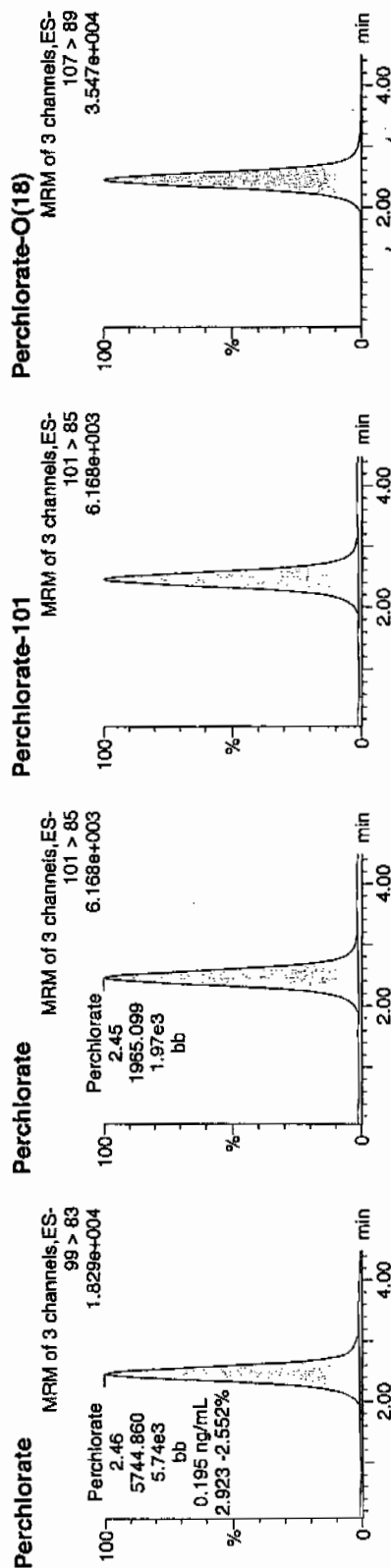
Time: 21:47:32

ID: 1202024393

Vial: 2:2,C

02-02-10

LANC | 945327 | 072 | MSO | 1 |



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202024393	Perchlorate	99 > 83	2.45	5744.860	5744.860	bb			0.1947	97.34	-2.66	635.440	2.92
1202024393	Perchlorate-101	101 > 85	2.45	1965.099	1965.099	bb			0.2023	101.14	1.14	223.698	
1202024393	Perchlorate-O(18)	107 > 89	2.45	11357.204	11357.204	bb			0.4551	91.01	-8.99	564.726	

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 10-1390**

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: 944929

Prep Batch Number: 944927

Sample Analysis

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

Sample ID	Client ID
245391001	RE15-10-7918
245391002	RE15-10-7915
245391003	RE15-10-7920
245391004	RE15-10-7914
245391005	RE15-10-7919
245391006	RE15-10-7921
245391007	RE15-10-7916
245391008	RE15-10-7917
245391009	RE15-10-7922
245391010	RE15-10-8053
245391011	RE15-10-8054
1202023615	Method Blank (MB)
1202023616	Laboratory Control Sample (LCS)
1202023617	245391001(RE15-10-7918) Matrix Spike (MS)
1202023618	245391001(RE15-10-7918) Matrix Spike Duplicate (MSD)

10-1390-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 recovered Tetraol at 36.3%. The limits are 51-112%. Both the MS and MSD had passing recoveries for Tetraol at 89.6 % and 88% respectively. The data are reported. Please see data exception report 792179.

QC Sample Designation

Sample 245391001 (RE15-10-7918) 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.

10-1390-EXPLCMS

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Technical Information

Holding Time Specifications

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

Preparation/Analytical Method Verification

All procedures were performed as stated in the SOP.

Sample Dilutions

According to the GEL SOP for Method 8321A, all sample and QC extracts are diluted 1:1 v/v with HPLC grade water. Sample 245391002 (RE15-10-7915) was further diluted to bring the over range concentration within the calibration range. The final dilution in each case takes the 1:1 v/v dilution into account.

Sample Re-extraction/Re-analysis

Sample 245391003 (RE15-10-7920) was re-analyzed for primary analytes for possible carryover from the previous sample. Only the data from the re-analysis are reported.

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 recovered 2,4-Diamino-6-nitrotoluene at 114.2%. The limits are 52-114%. Both the MS and MSD had passing recoveries for 2,4-Diamino-6-nitrotoluene at 113% and 110%, respectively. The data are reported. Please see data exception report 792179.

10-1390-EXPLCMS

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QC Sample Designation

Sample 245391001 (RE15-10-7918) was chosen for matrix spike and matrix spike duplicate analysis.

Matrix Spike (MS) Recovery Statement

The MS recovered 3,5-Dinitroaniline at 135%. The limits are 73-129%. Both the LCS) and MSD had passing recoveries for 3,5-Dinitroaniline at 119% and 127% respectively. The analyte was not detected in the parent sample. The data are reported. Please see data exception report 792179.

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 report 792179 was generated for this SDG.

The LCS recovered Tetryl at 36.3%. The limits are 51-112%. Both the MS and MSD had passing recoveries for Tetryl at 89.6 % and 88% respectively. The LCS recovered 2,4-Diamino-6-nitrotoluene at 114.2%. The limits are 52-114%. Both the MS and MSD had passing recoveries for 2,4-Diamino-6-nitrotoluene at 113% and 110%, respectively. The data are reported.

The MS recovered 3,5-Dinitroaniline at 135%. The limits are 73-129%. Both the LCS) and MSD had passing recoveries for 3,5-Dinitroaniline at 119% and 127% respectively. The analyte was not detected in the parent sample. The data are reported.

Manual Integrations

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

10-1390-EXPLCMS

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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 Mauer Date: 02/15/10

10-1390-EXPLCMS

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SAMPLE DATA SUMMARY

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7918

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391001

Sample Amount 2

Moisture: 9.6

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208256a

Date Analyzed: 13-FEB--10 20:11

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7918

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391001

Sample Amount 2

Moisture: 9.6

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02130087.wiff

Date Analyzed: 14-FEB-10 08:43

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: RE15-10-7915

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391002

Sample Amount 2

Moisture: 18.3

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208259a

Date Analyzed: 13-FEB-10 21:40

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	242	J
19406-51-0	4-Amino-2,6-dinitrotoluene	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: RE15-10-7915

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391002

Sample Amount 2

Moisture: 18.3

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 10

Injection Volume (uL): 50

GEL data file: EXP0208300a

Date Analyzed: 14-FEB-10 17:53

Units: ug/kg

Cas No.	Compound	Concentration*	Q
2691-41-0	HMX	16100	

*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: RE15-10-7915

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391002

Sample Amount 2

Moisture: 18.3

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02130090.wiff

Date Analyzed: 14-FEB-10 09:30

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	7390	
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: RE15-10-7920

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391003

Sample Amount 2

Moisture: 3.7

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208301a

Date Analyzed: 14-FEB-10 18:22

Units: ug/kg

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

*Concentration =

Instrument	X	Concentrated Extract Volume	X	Dilution
Value		Sample Amount		Factor

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7920

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391003

Sample Amount 2

Moisture: 3.7

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02130091.wiff

Date Analyzed: 14-FEB-10 09:45

Units: ug/kg

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

*Concentration =

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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7914

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391004

Sample Amount 2

Moisture: 9.6

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208261a

Date Analyzed: 13-FEB-10 22:39

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: RE15-10-7914

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391004

Sample Amount 2

Moisture: 9.6

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02130092.wiff

Date Analyzed: 14-FEB-10 10:01

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: RE15-10-7919

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391005

Sample Amount 2

Moisture: 22.6

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208262a

Date Analyzed: 13-FEB-10 23:09

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: RE15-10-7919

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391005

Sample Amount 2

Moisture: 22.6

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02130093.wiff

Date Analyzed: 14-FEB-10 10:17

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: RE15-10-7921

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391006

Sample Amount 2

Moisture: 17.8

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208263a

Date Analyzed: 13-FEB-10 23:38

Units: ug/kg

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

*Concentration =

Instrument	X	Concentrated Extract Volume	X	Dilution
Value		Sample Amount		Factor

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7921

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391006

Sample Amount 2

Moisture: 17.8

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02130094.wiff

Date Analyzed: 14-FEB-10 10:33

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: RE15-10-7916

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391007

Sample Amount 2

Moisture: 6.8

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208267a

Date Analyzed: 14-FEB-10 01:36

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: RE15-10-7916

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391007

Sample Amount 2

Moisture: 6.8

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02130098.wiff

Date Analyzed: 14-FEB-10 11:35

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: RE15-10-7917

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391008

Sample Amount 2

Moisture: 20.2

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208268a

Date Analyzed: 14-FEB-10 02:06

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: RE15-10-7917

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391008

Sample Amount 2

Moisture: 20.2

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02130099.wiff

Date Analyzed: 14-FEB-10 11:51

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: RE15-10-7922

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391009

Sample Amount 2

Moisture: 9.9

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208269a

Date Analyzed: 14-FEB-10 02:35

Units: ug/kg

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

*Concentration =

Instrument	X	Concentrated Extract Volume	X	Dilution
Value		Sample Amount		Factor

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7922

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391009

Sample Amount 2

Moisture: 9.9

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02130100.wiff

Date Analyzed: 14-FEB-10 12:07

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: RE15-10-8053

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391010

Sample Amount 2

Moisture: 19.2

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208270a

Date Analyzed: 14-FEB-10 03:05

Units: ug/kg

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

*Concentration =

Instrument		X	Concentrated Extract Volume		X	Dilution
Value			Sample Amount			Factor

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8053

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391010

Sample Amount 2

Moisture: 19.2

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02130101.wiff

Date Analyzed: 14-FEB-10 12:22

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: RE15-10-8054

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391011

Sample Amount 2

Moisture: 9.5

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208271a

Date Analyzed: 14-FEB-10 03:34

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: RE15-10-8054

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391011

Sample Amount 2

Moisture: 9.5

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02130102.wiff

Date Analyzed: 14-FEB-10 12:38

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): 10-1390

Lab Code: GEL

HPLC Column: Phenomenex Ultracarb 5u ODS(20)

Lab Sample ID	Client Sample ID	DNT	QC Limits	Flg
245391001	RE15-10-7918	113	70 - 144	
245391001	RE15-10-7918	140	70 - 144	
245391002	RE15-10-7915	114	70 - 144	
245391002	RE15-10-7915	143	70 - 144	
245391002	RE15-10-7915	89	70 - 144	
245391003	RE15-10-7920	112	70 - 144	
245391003	RE15-10-7920	144	70 - 144	
245391004	RE15-10-7914	121	70 - 144	
245391004	RE15-10-7914	137	70 - 144	
245391005	RE15-10-7919	113	70 - 144	
245391005	RE15-10-7919	136	70 - 144	
245391006	RE15-10-7921	119	70 - 144	
245391006	RE15-10-7921	143	70 - 144	
245391007	RE15-10-7916	119	70 - 144	
245391007	RE15-10-7916	136	70 - 144	
245391008	RE15-10-7917	113	70 - 144	
245391008	RE15-10-7917	122	70 - 144	
245391009	RE15-10-7922	113	70 - 144	
245391009	RE15-10-7922	143	70 - 144	
245391010	RE15-10-8053	102	70 - 144	
245391010	RE15-10-8053	126	70 - 144	
245391011	RE15-10-8054	122	70 - 144	
245391011	RE15-10-8054	140	70 - 144	
1202023615	MB for batch 944927	123	70 - 144	
1202023615	MB for batch 944927	132	70 - 144	
1202023616	LCS for batch 944927	125	70 - 144	
1202023616	LCS for batch 944927	124	70 - 144	
1202023617	RE15-10-7918(245391001MS)	106	70 - 144	
1202023617	RE15-10-7918(245391001MS)	135	70 - 144	
1202023618	RE15-10-7918(245391001MSD)	116	70 - 144	
1202023618	RE15-10-7918(245391001MSD)	134	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) 10-1390

Extract Batch Code: 944927

Date Extracted: 28-JAN-10

GEL LCS ID: 1202023616

GEL LCSDUP ID:

Analysis Date/Time: 13-FEB-10 19:42

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	5620	112					69 - 126
2,4,6-Trinitrotoluene	5000	5000	100					73 - 149
2,4-Dinitrotoluene	5000	4950	99					87 - 137
2,6-Dinitrotoluene	5000	5050	101					89 - 120
2-Amino-4,6-dinitrotoluene	5000	5860	117					90 - 130
4-Amino-2,6-dinitrotoluene	5000	5230	105					84 - 130
HMX	5000	5580	112					58 - 138
Nitrobenzene	5000	4870	97.3					71 - 122
PETN	5000	4020	80.4					64 - 137
RDX	5000	5650	113					81 - 137
Tetryl	5000	1820	36.3 *					51 - 112
m-Dinitrobenzene	5000	4950	99					83 - 122
m-Nitrotoluene	5000	4410	88.3					73 - 118
o-Nitrotoluene	5000	4760	95.1					72 - 119
p-Nitrotoluene	5000	4760	95.2					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) 10-1390

Extract Batch Code: 944927

Date Extracted: 28-JAN-10

GEL LCS ID: 1202023616

GEL LCSDUP ID:

Analysis Date/Time: 14-FEB-10 08:27

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	5710	114 *					52 - 114
2,6-Diamino-4-nitrotoluene	5000	5740	115					64 - 122
3,5-Dinitroaniline	5000	5940	119					70 - 127
TATB	5000	5570	111					28 - 162
tris(o-cresyl) phosphate	5000	5170	103					84 - 119

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

* Values outside of QC limits

High Explosives MS/MSD Summary

Lab Name: GEL Laboratories LLC

Client ID: RE15-10-7918

Lab Code: GEL

GEL Job No (SDG) 10-1390

Extract Batch Code: 944927

Date Extracted:28-JAN-10

GEL Spike ID: 1202023617

GEL SpikeDup ID:1202023618

Analysis Date/Time: 13-FEB-10 20:41

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
p-Nitrotoluene	5000	0	4900	98	4900	97.9	.049	30	65 – 133
1,3,5-Trinitrobenzene	5000	0	4780	95.6	4690	93.8	1.95	30	50 – 140
2,4,6-Trinitrotoluene	5000	0	4860	97.3	5430	109	11	30	76 – 144
2-Amino-4,6-dinitrotoluene	5000	0	5130	103	5720	114	10.9	30	85 – 137
2,6-Dinitrotoluene	5000	0	5390	108	5110	102	5.35	30	90 – 118
2,4-Dinitrotoluene	5000	0	5320	106	5080	102	4.74	30	86 – 135
4-Amino-2,6-dinitrotoluene	5000	0	4720	94.4	5450	109	14.3	30	72 – 143
Nitrobenzene	5000	0	4540	90.9	4640	92.8	2.14	30	70 – 122
RDX	5000	0	4670	93.5	5000	99.9	6.69	30	59 – 152
o-Nitrotoluene	5000	0	4710	94.1	4920	98.4	4.38	30	69 – 123
m-Nitrotoluene	5000	0	4040	80.9	4570	91.4	12.2	30	70 – 120
m-Dinitrobenzene	5000	0	5120	102	4920	98.5	3.9	30	85 – 118
Tetryl	5000	0	4480	89.6	4400	88	1.75	30	36 – 124
PETN	5000	0	4670	93.4	5930	119	23.8	30	60 – 140
HMX	5000	0	5230	105	5390	108	2.96	30	51 – 144

#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: RE15-10-7918

Lab Code: GEL

GEL Job No (SDG) 10-1390

Extract Batch Code: 944927

Date Extracted:28-JAN-10

GEL Spike ID:1202023617

GEL SpikeDup ID:1202023618

Analysis Date/Time: 14-FEB-10 08:58

MSD Analysis Date/Time:

Reporting Units: ug/kg

QC Type: MS/MSD

Compound	Spike Added	Sample Conc	MS Conc	MS Rec #	MSD Conc	MSD Rec #	RPD #	RPD Limit	Rec Limits
2,4-Diamino-6-nitrotoluene	5000	0	5650	113	5490	110	2.87	26	34 - 135
2,6-Diamino-4-nitrotoluene	5000	56.4	6140	122	6010	119	2.14	30	55 - 130
3,5-Dinitroaniline	5000	0	6760	135 *	6350	127	6.26	30	73 - 129
TATB	5000	0	6050	121	5740	115	5.26	30	29 - 155
tris(o-cresyl) phosphate	5000	7.39	5370	107	5310	106	1.12	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): 10-1390

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 08-FEB-10 14:44

GEL Data File: EXP0208001a

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	481.075
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	515.914
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

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

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

Method: C:\MASSLYNX\New_Exp.PRO\MethDB\020810expa.mdb, Time: Tue Feb 09 09:17:48 2010
Calibration: Untitled, Time: Tue Feb 09 10:19:05 2010

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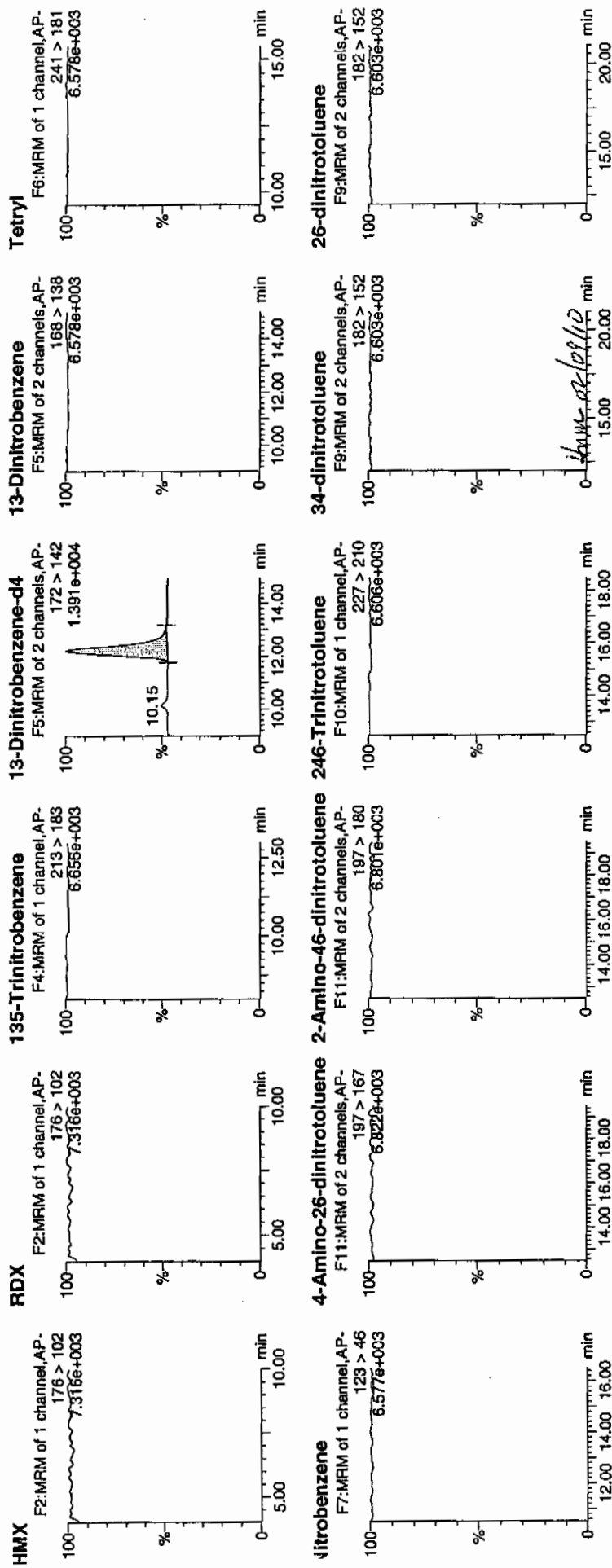
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Time: 14:44:17

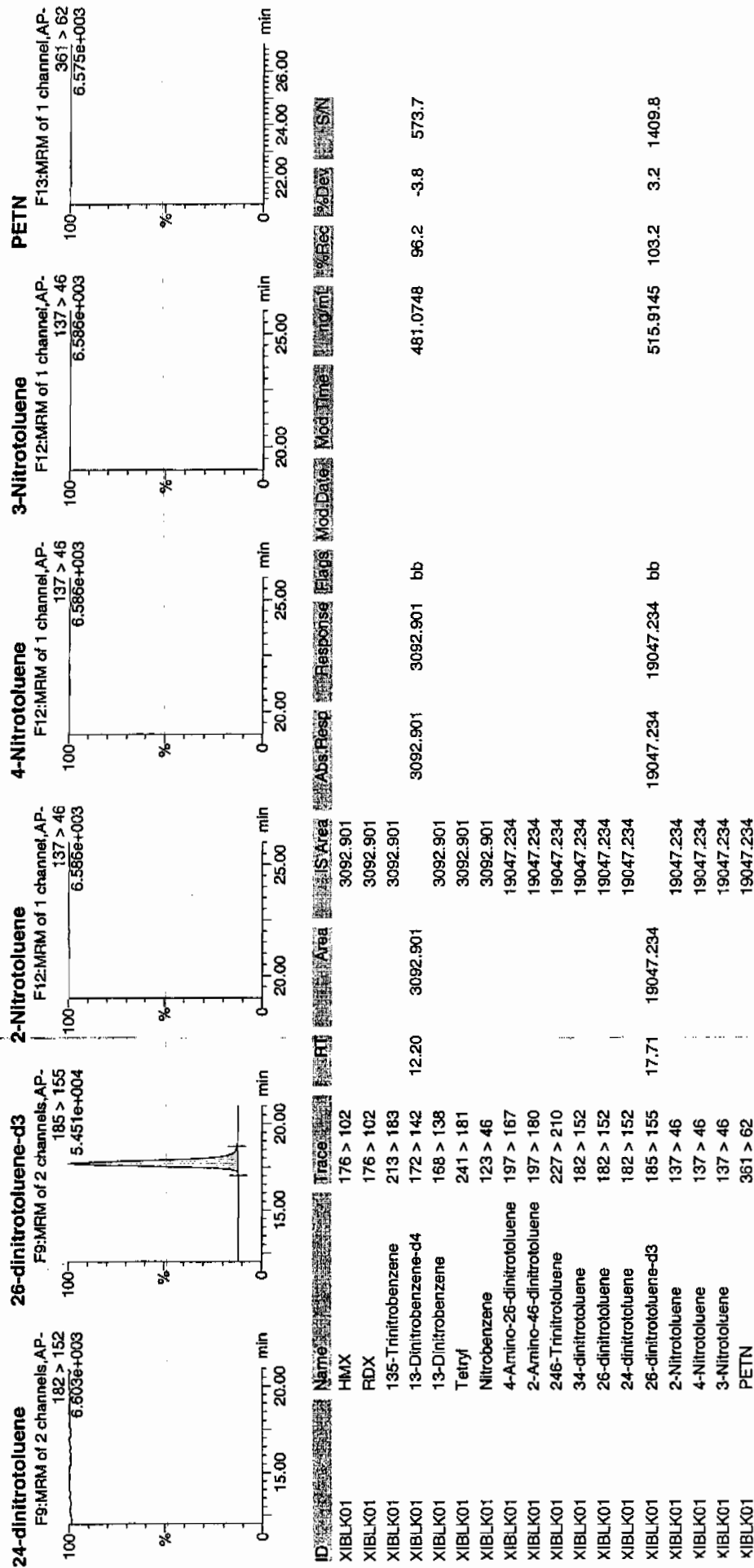
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Vial: 1:1,A

1477
2/9/10



Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA.qtd, Time: Tue Feb 09 10:19:05 2010



Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1390

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 08-FEB-10 15:13

GEL Data File: EXP0208002a

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	552.32
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	568.377
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: Tue Feb 09 10:21:18 2010, Page 3 of 77

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

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

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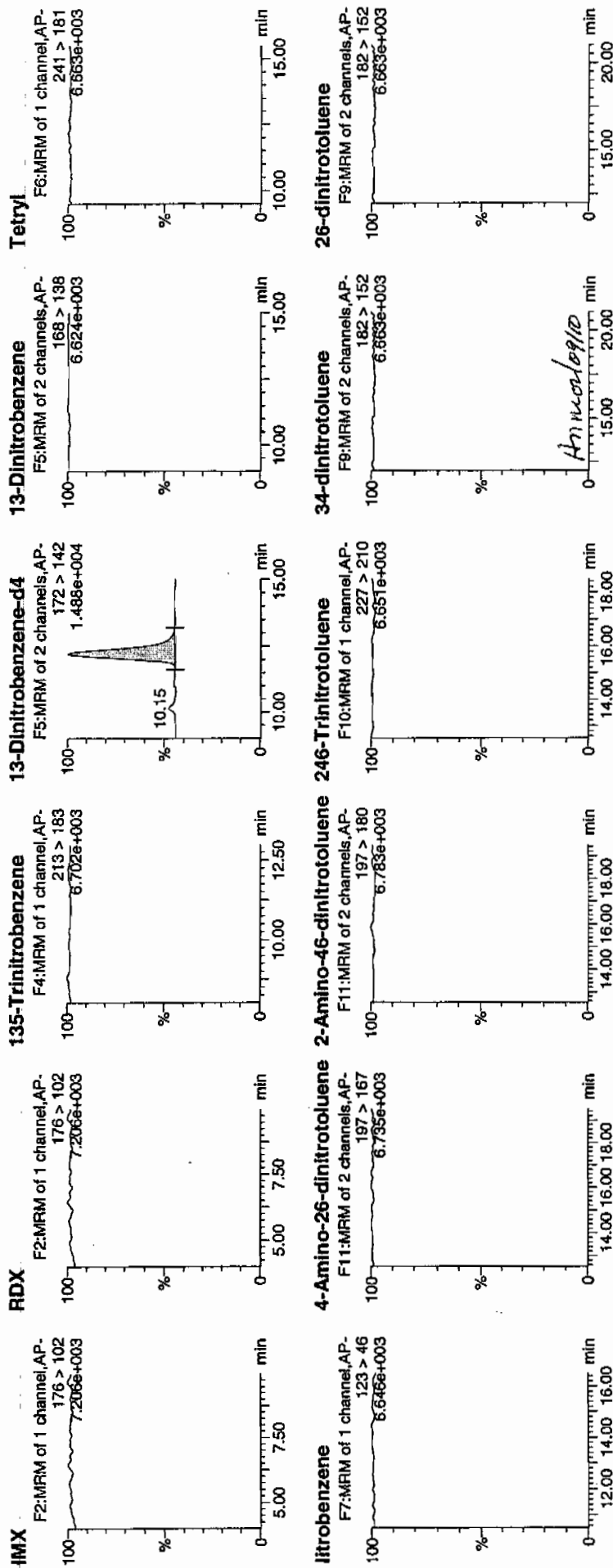
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File: 1:1.A

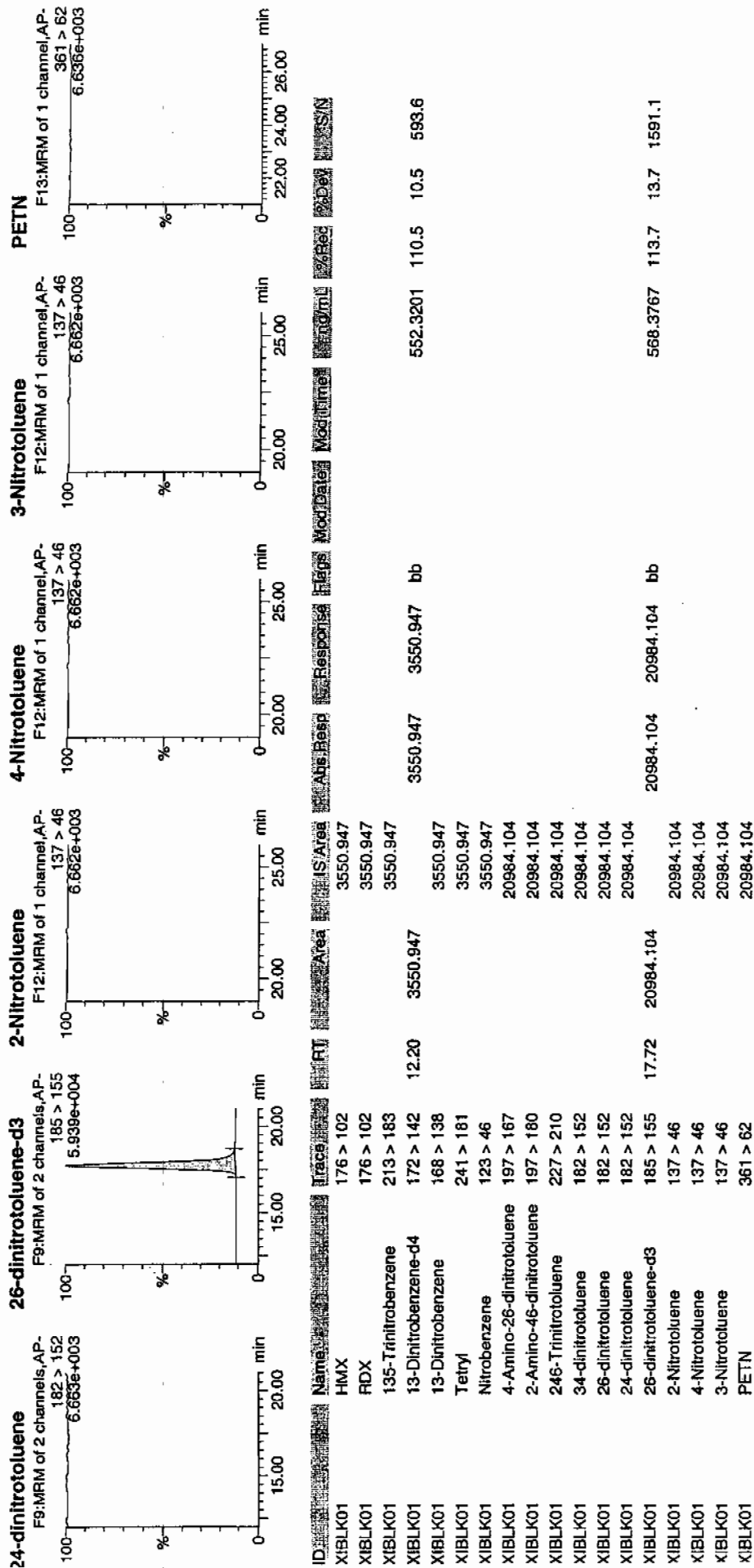
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2/9/10



Printed: Tue Feb 09 10:21:18 2010, Page 4 of 77

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

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010



Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1390

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 13-FEB-10 10:12

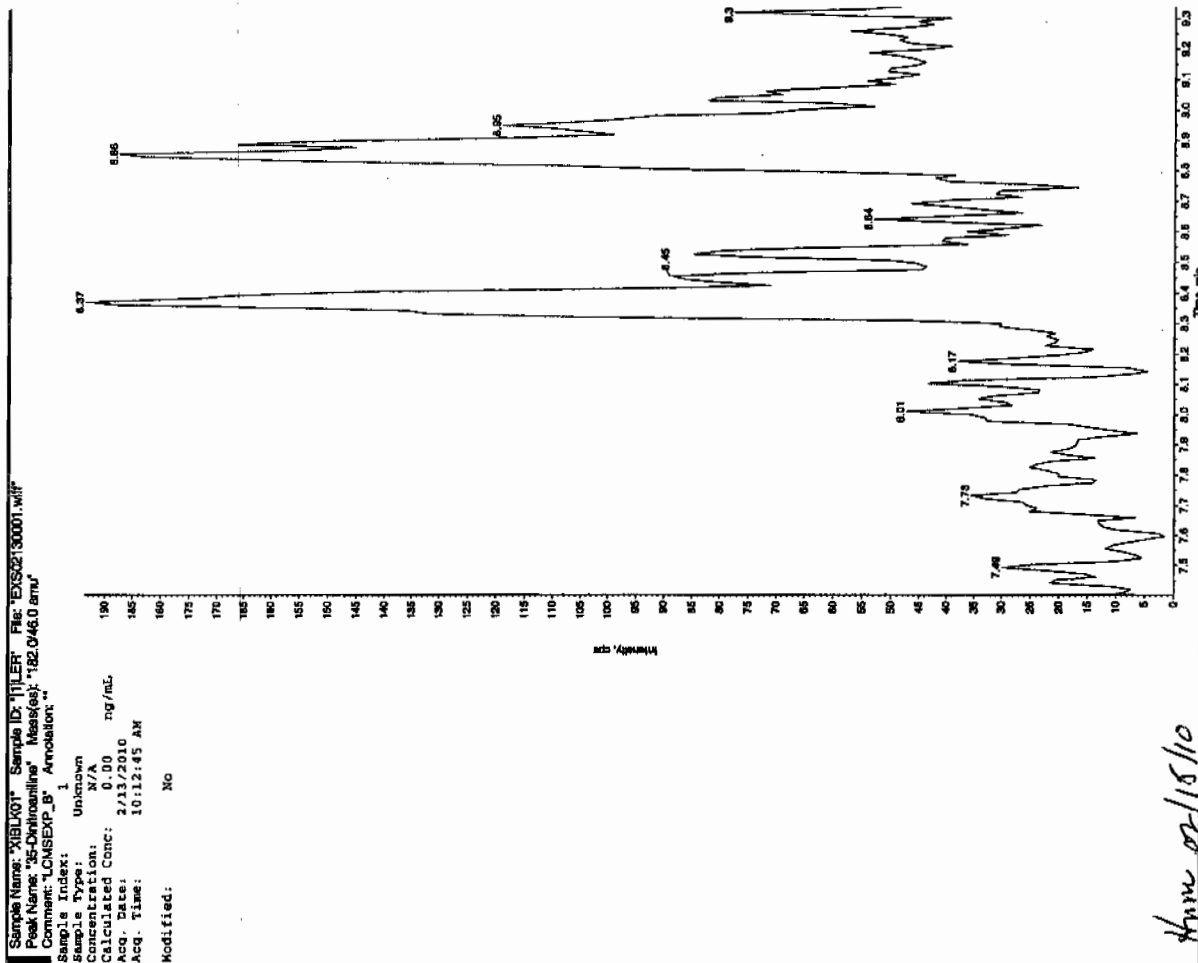
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Instrument ID: LCMSMS

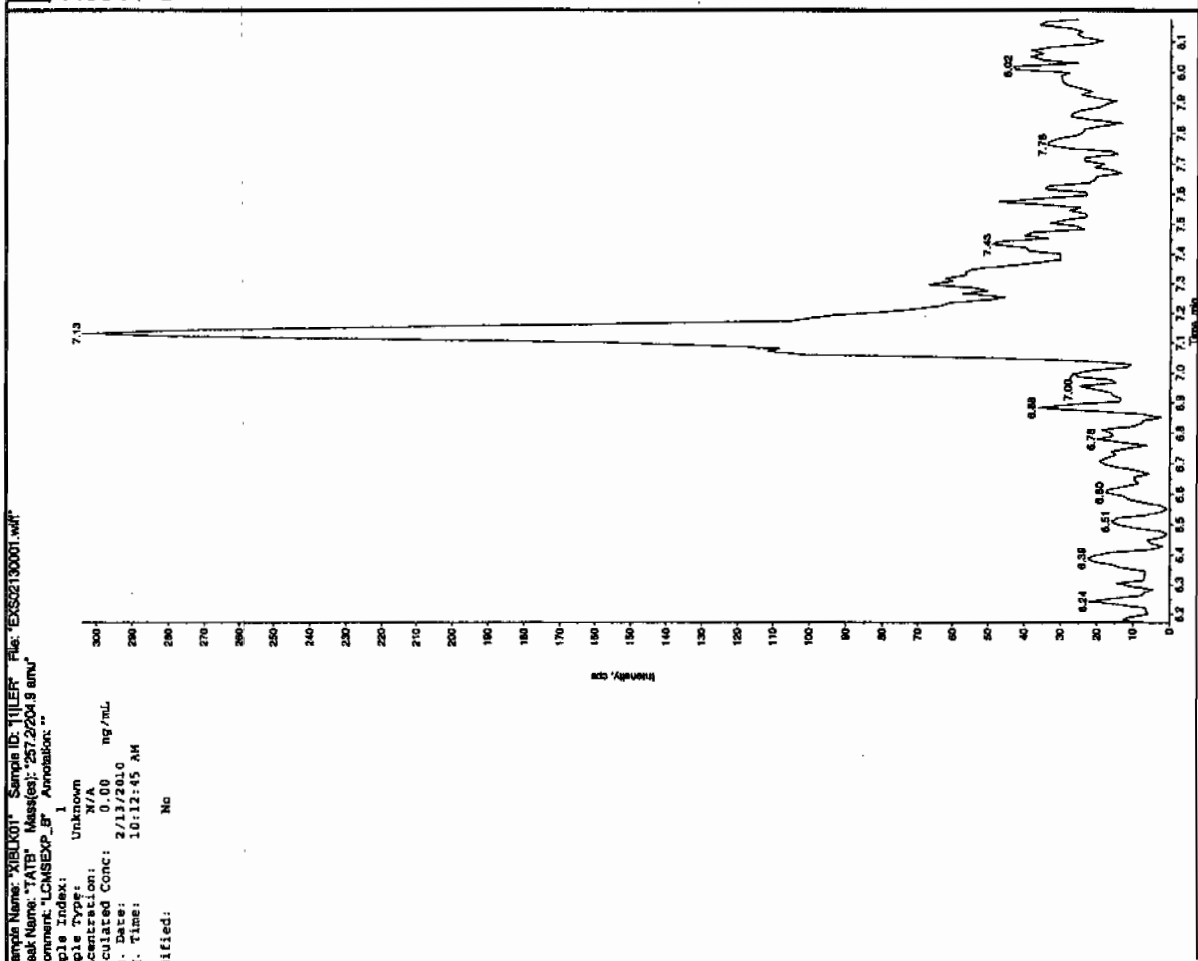
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	.56
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

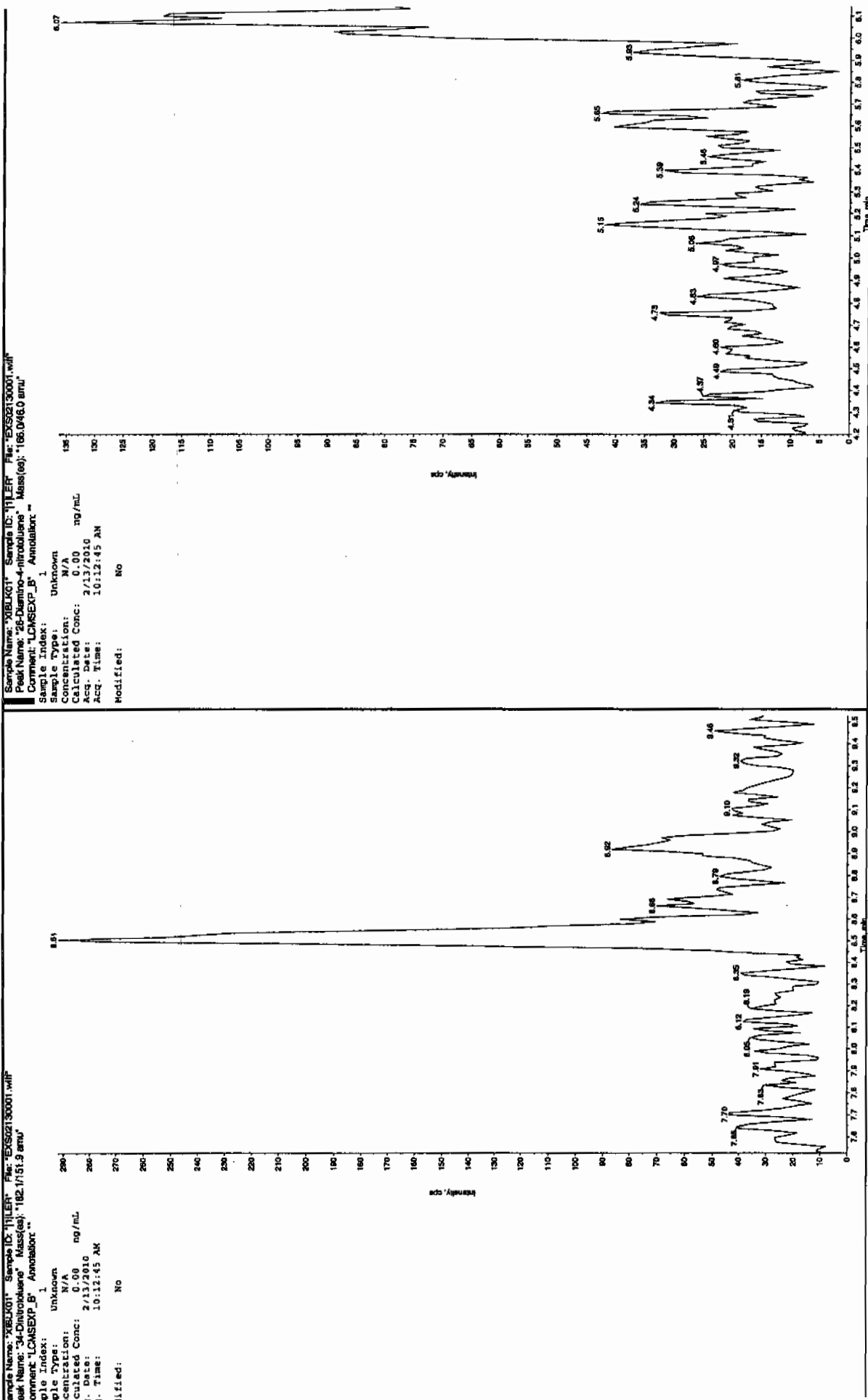
San 2/15/10



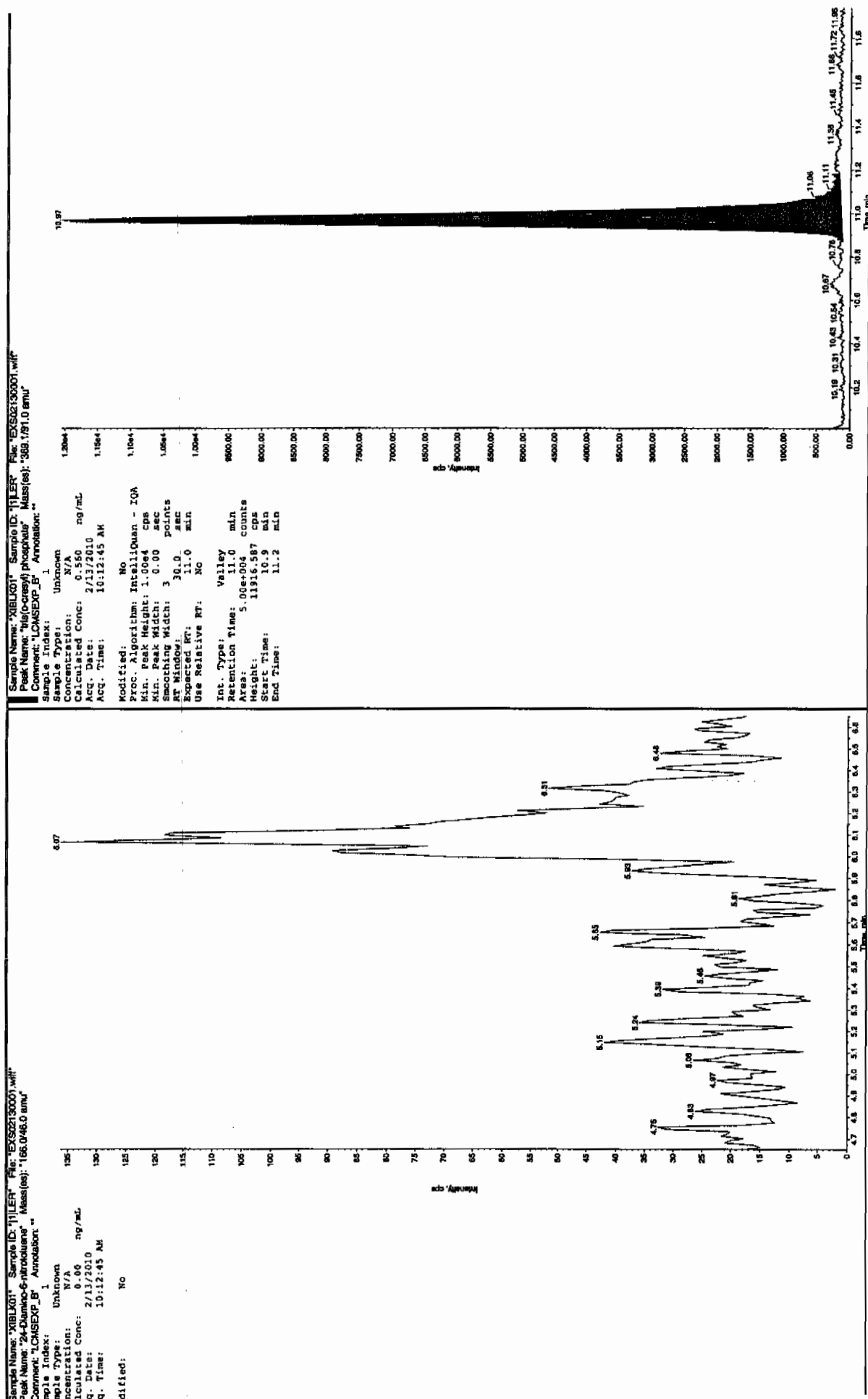
San 2/15/10



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



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



Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1390

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 13-FEB-10 10:28

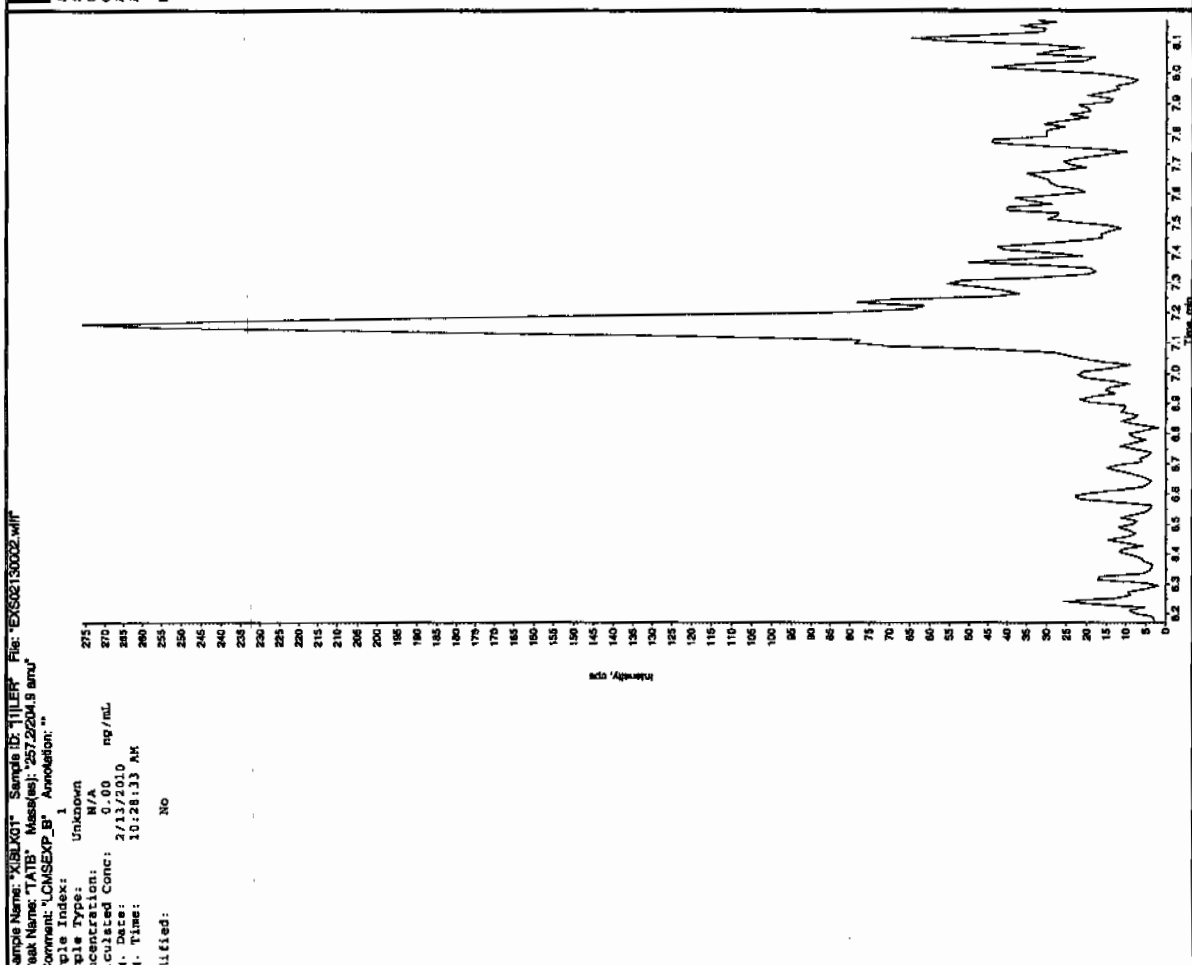
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Instrument ID: LCMSMS

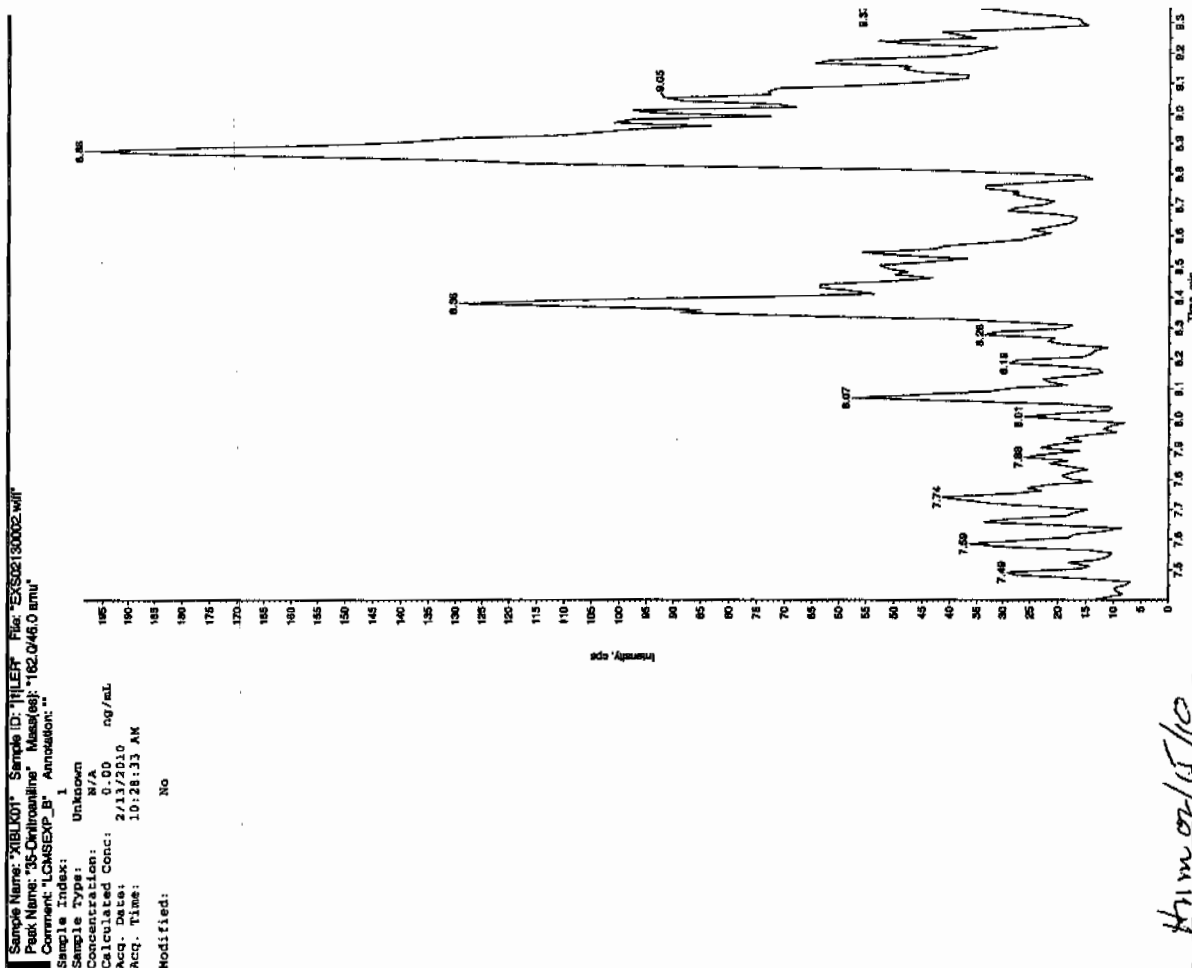
Column: Phenomenex Ultracarb 5u ODS(20)

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

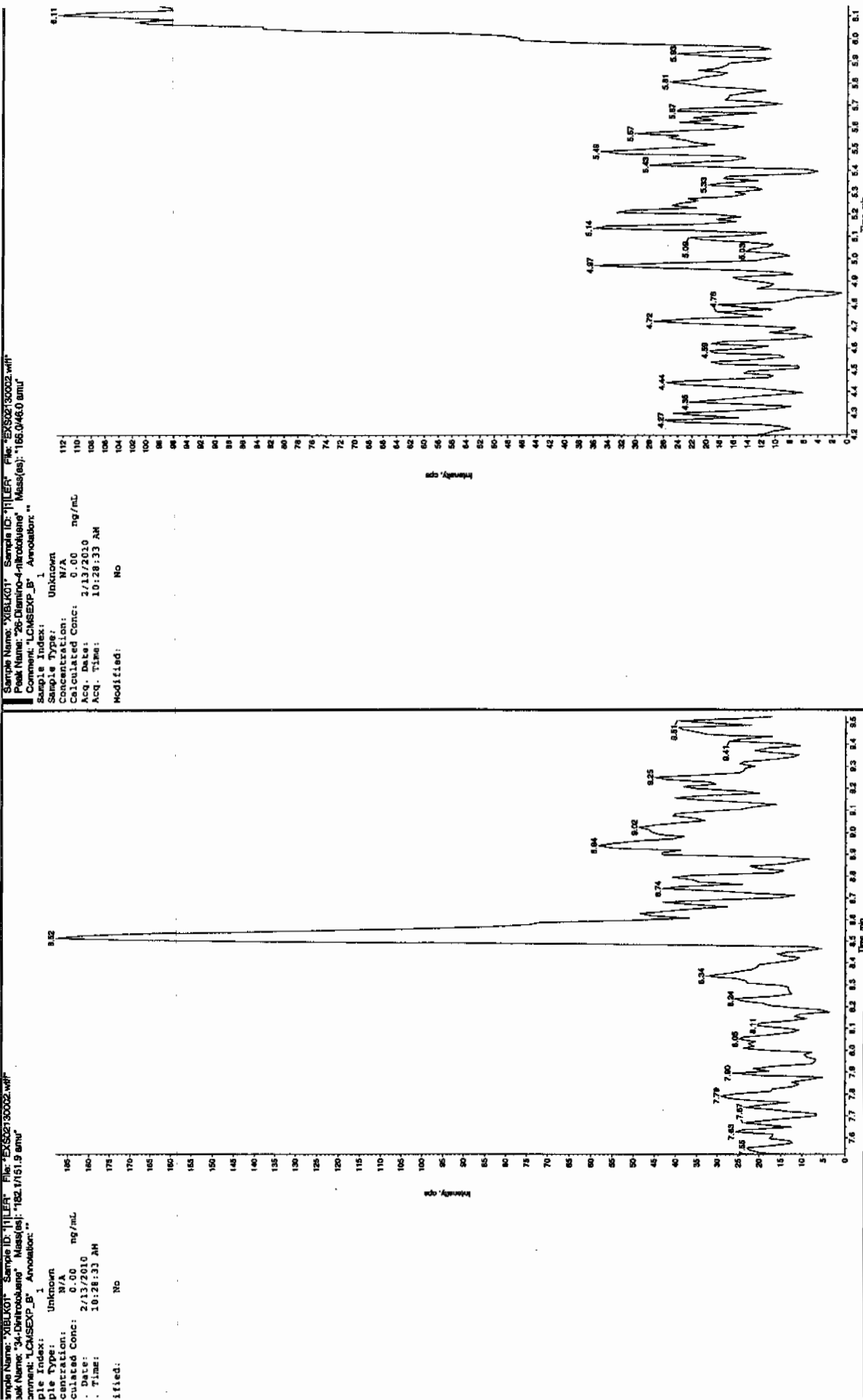
See 2/15/10



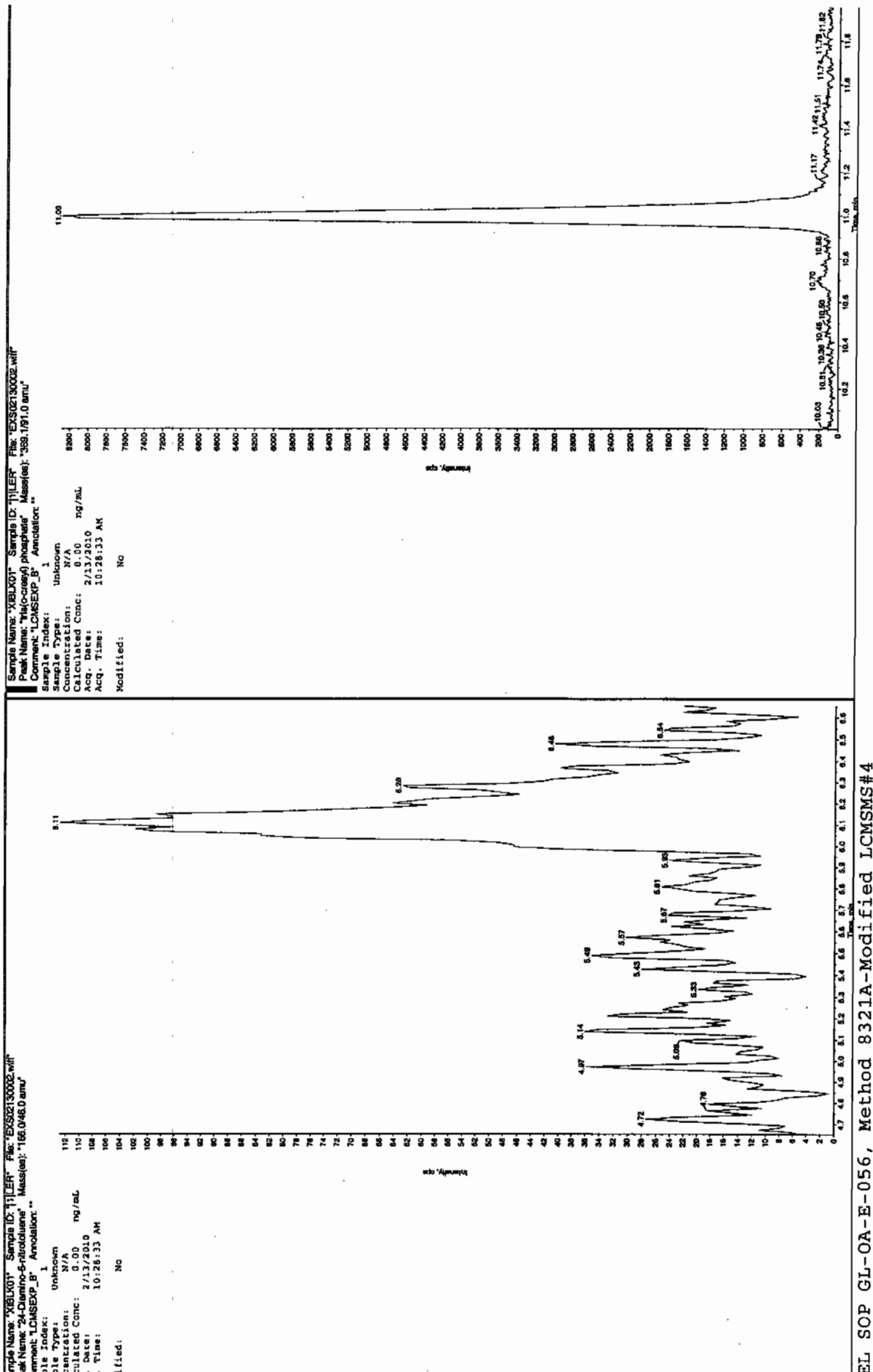
EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



See 2/15/10



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



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

4/A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1390

Lab Code: GEL

Lab Sample ID: XIBLK02

Analysis Date: 08-FEB-10 18:40

GEL Data File: EXP0208009a

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
RDX	0	0
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	519.67
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	546.786
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0

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

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP02080009a

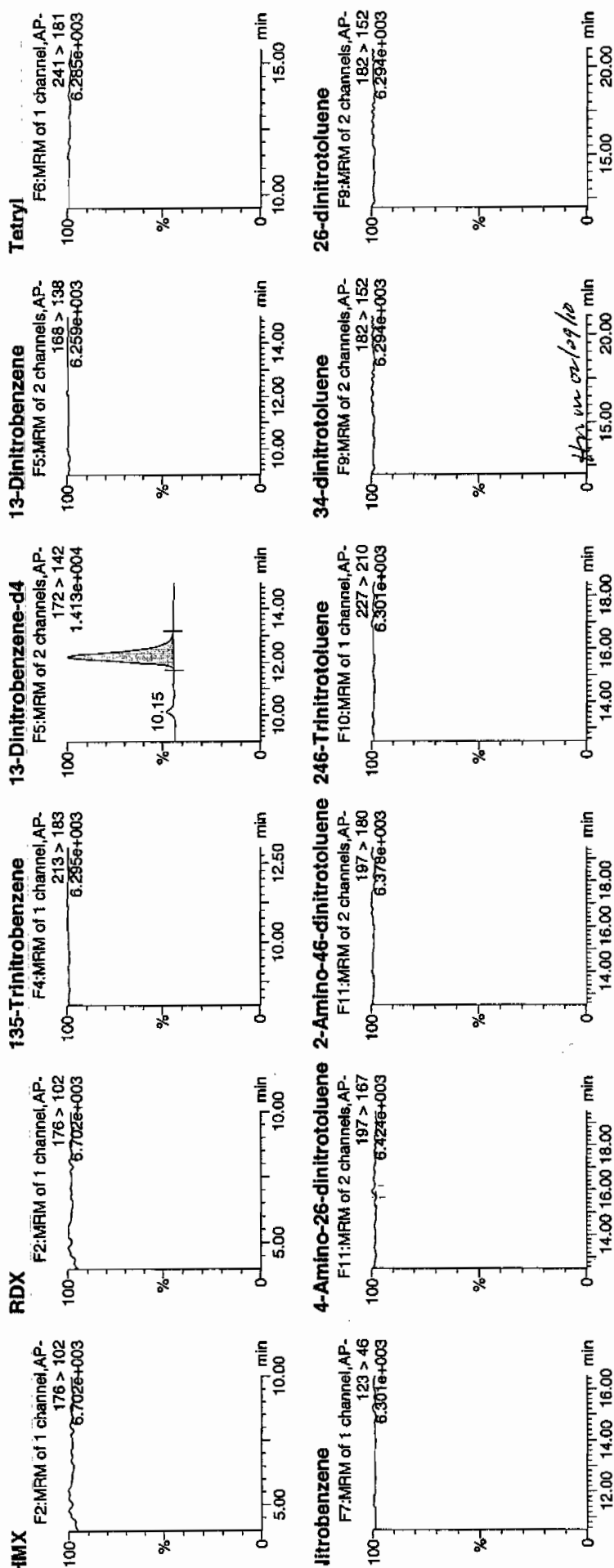
Date: 08-Feb-2010

Time: 18:40:36

D: XIBLK02

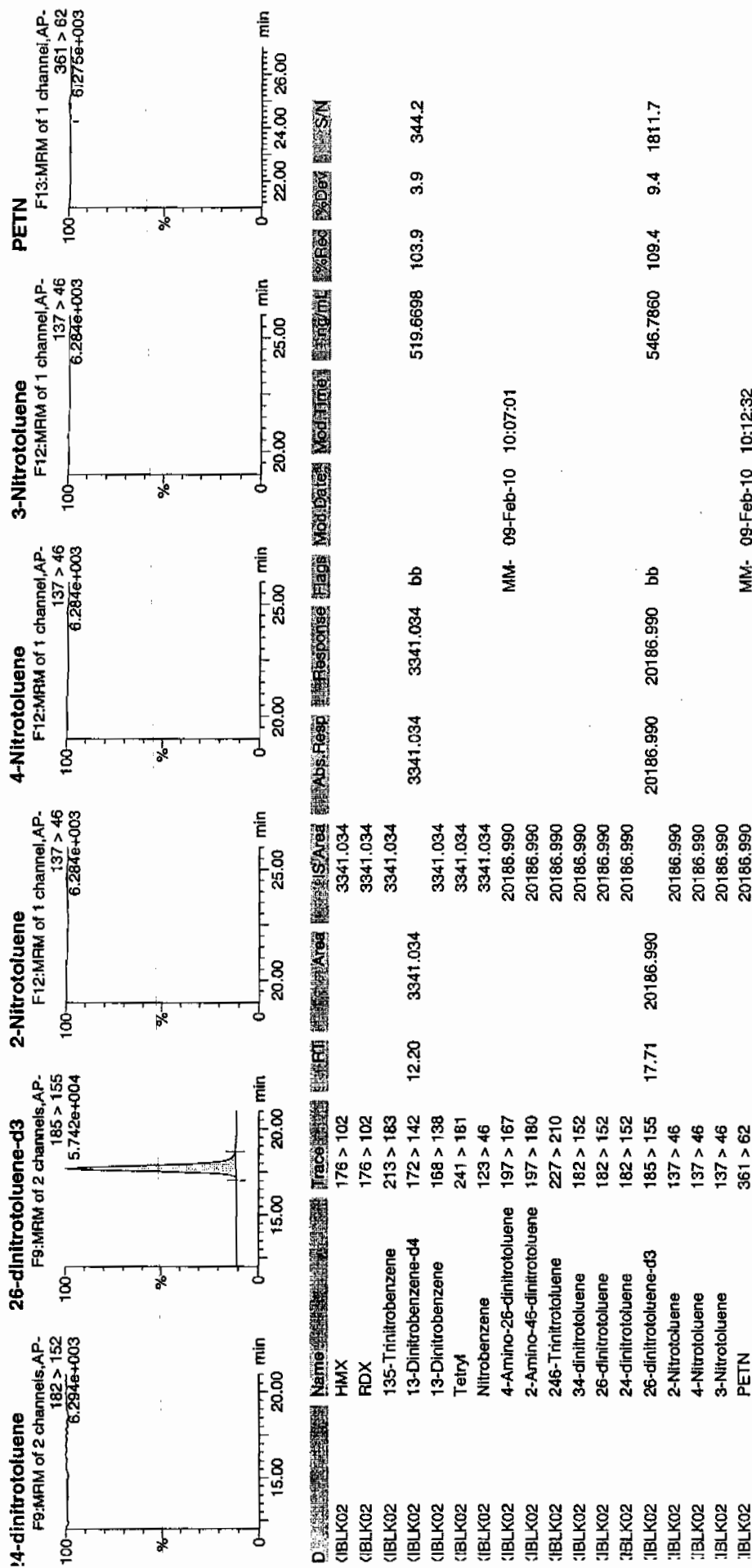
File: 1:1,A

10/10



Quantify Sample Report
 3EL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp\PRO020810expA.qld, Time: Tue Feb 09 10:19:05 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1390

Lab Code: GEL

Lab Sample ID: XIBLK03

Analysis Date: 08-FEB-10 19:39

GEL Data File: EXP0208011a

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	534.714
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	583.46
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: Tue Feb 09 10:21:18 2010, Page 21 of 77

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

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208011a

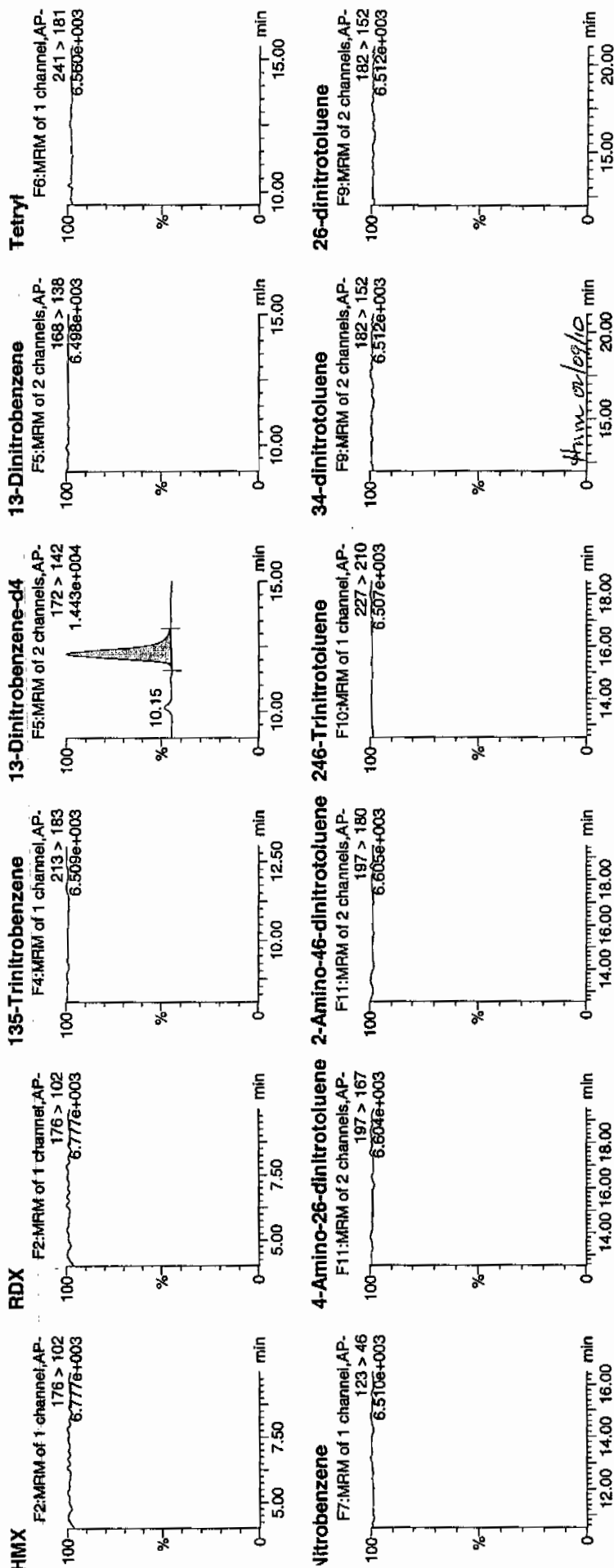
Date: 08-Feb-2010

Time: 19:39:33

ID: XIBLK03

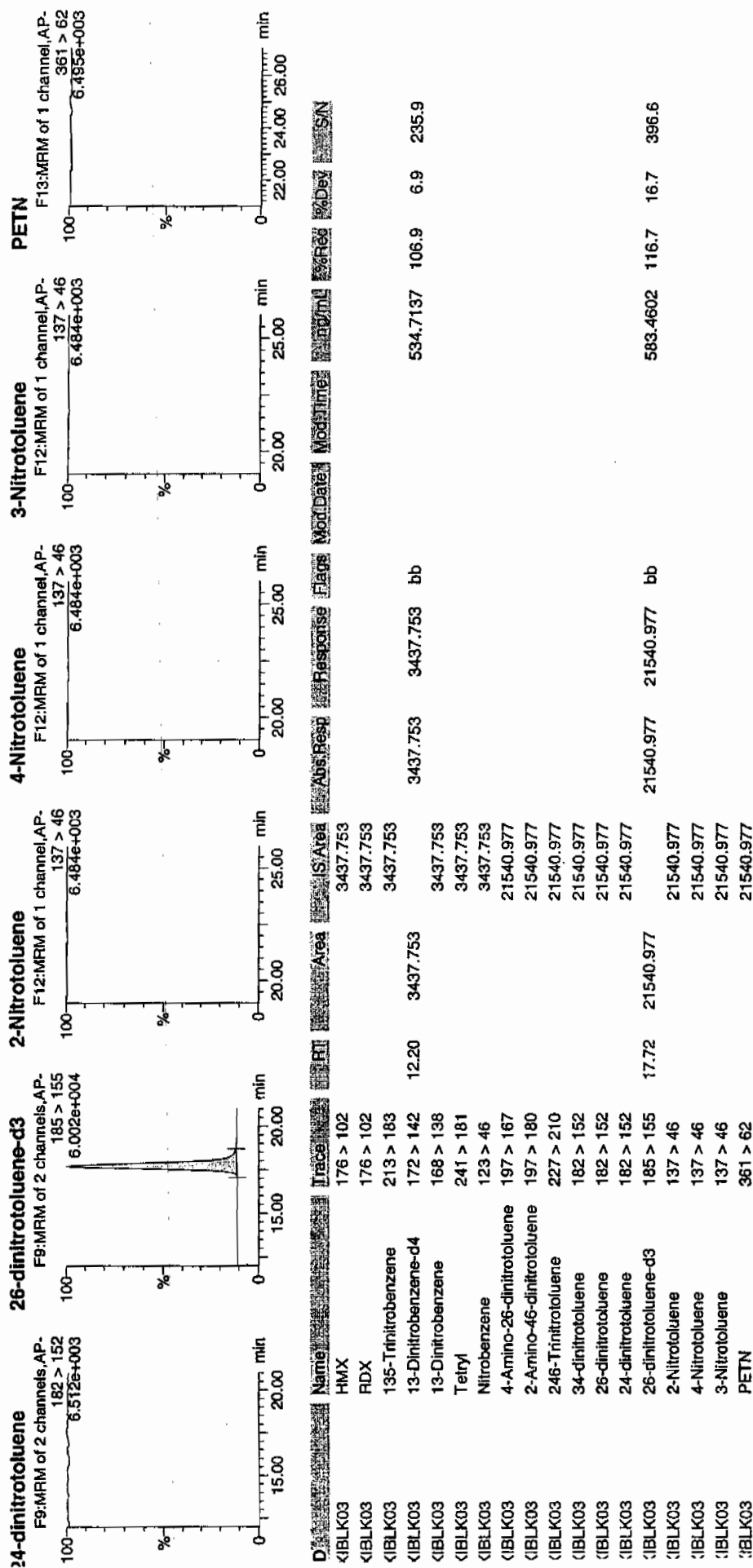
Vial: 1:1,A

10.15
2/9/10



Quantify Sample Report
 3EL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1390

Lab Code: GEL

Lab Sample ID: XIBLK04

Analysis Date: 09-FEB-10 02:02

GEL Data File: EXP0208024a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
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	594.411
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	592.137
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0

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

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208024a

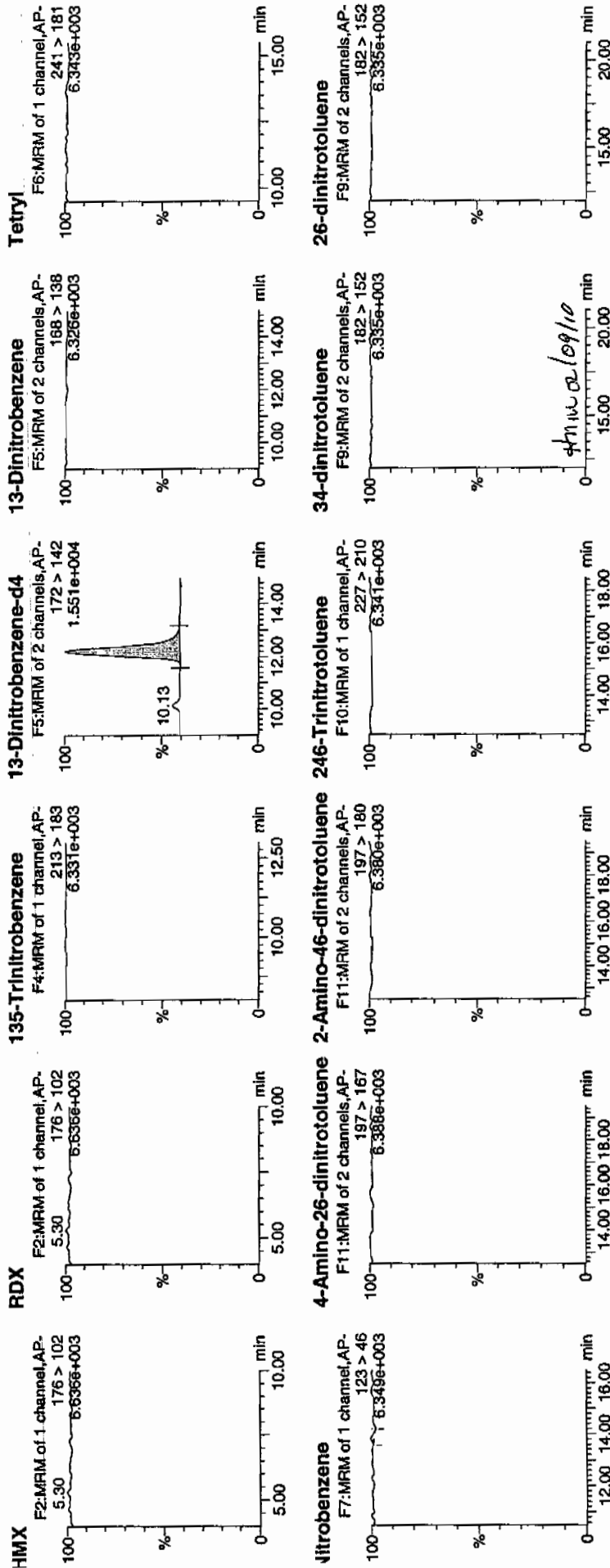
Date: 09-Feb-2010

Time: 02:02:53

ID: XIBLK04

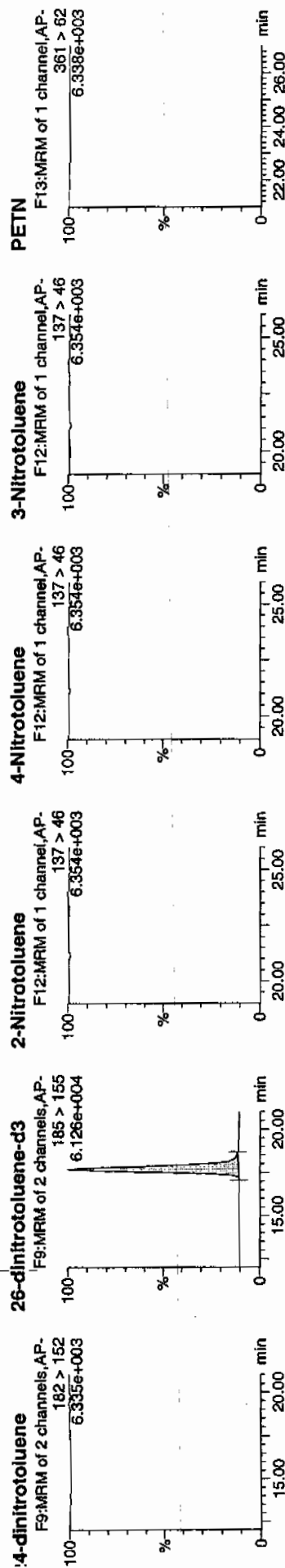
Vial: 1:1,A

10/10
2/10/10



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

Dataset: C:\MASSLYNX\New_Exp\PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010



D	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Unit/mg	% Rec	% Dev	SIN
(BLK04	HMIX	176 > 102			3821.559									
(BLK04	RDX	176 > 102			3821.559									
(BLK04	135-Trinitrobenzene	213 > 183			3821.559									
(BLK04	13-Dinitrobenzene-d4	172 > 142	12.20	3821.559		3821.559	3821.559	bb			594.4115	118.9	18.9	582.0
(BLK04	13-Dinitrobenzene	168 > 138			3821.559									
(BLK04	Tetryl	241 > 181			3821.559									
(BLK04	Nitrobenzene	123 > 46			3821.559									
(BLK04	4-Amino-26-dinitrotoluene	197 > 167			21861.324									
(BLK04	2-Amino-46-dinitrotoluene	197 > 180			21861.324									
(BLK04	246-Trinitrotoluene	227 > 210			21861.324									
(BLK04	34-dinitrotoluene	182 > 152			21861.324									
(BLK04	26-dinitrotoluene	182 > 152			21861.324									
(BLK04	24-dinitrotoluene	182 > 152			21861.324									
(BLK04	26-dinitrotoluene-d3	185 > 155	17.71	21861.324		21861.324	21861.324	bb			592.1371	118.4	18.4	2394.8
(BLK04	2-Nitrotoluene	137 > 46			21861.324									
(BLK04	4-Nitrotoluene	137 > 46			21861.324									
(BLK04	3-Nitrotoluene	137 > 46			21861.324									
(BLK04	PETN	361 > 62			21861.324									

MM- 09-Feb-10 10:05:00

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1390

Lab Code: GEL

Lab Sample ID: XIBLK05

Analysis Date: 09-FEB-10 08:26

GEL Data File: EXP0208037a

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	592.976
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	568.449
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
 JEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp_PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

Sample Name: C:\MASSLYNX\NEW_EXP_PRO\Data\EXP0208037a

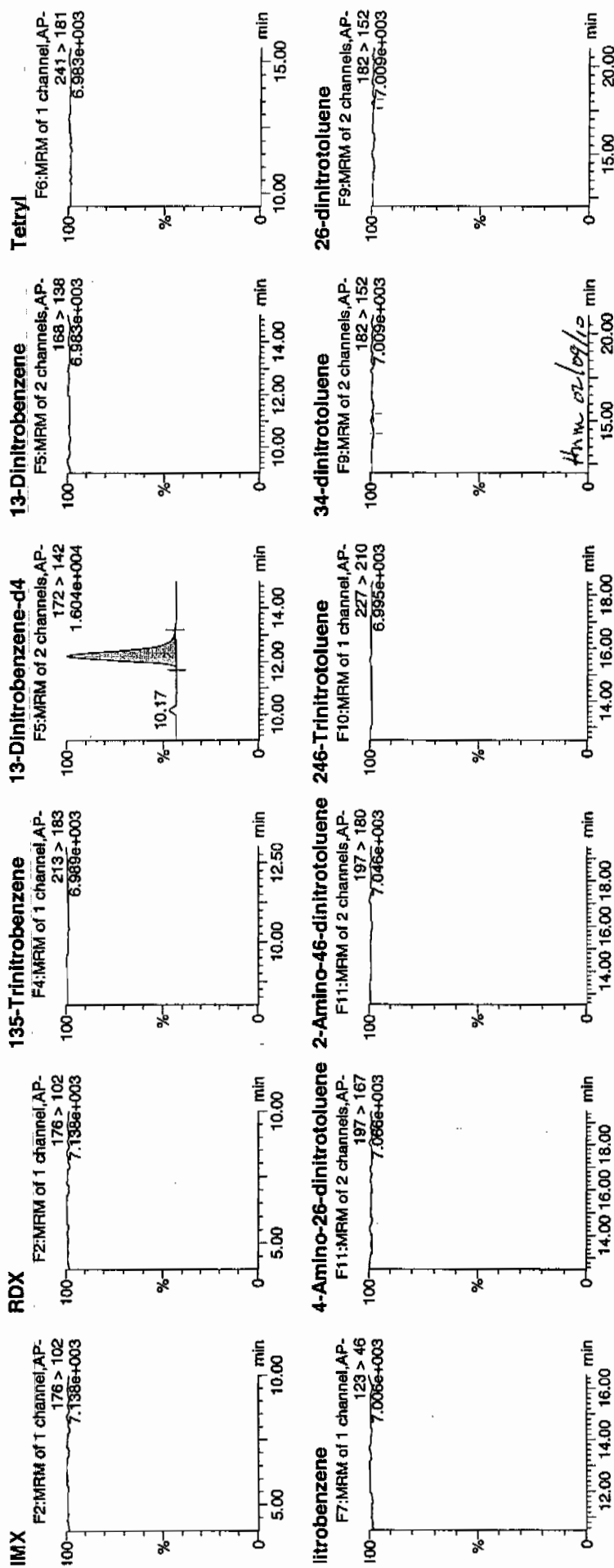
Date: 09-Feb-2010

Time: 08:26:48

Operator: XIBLK05

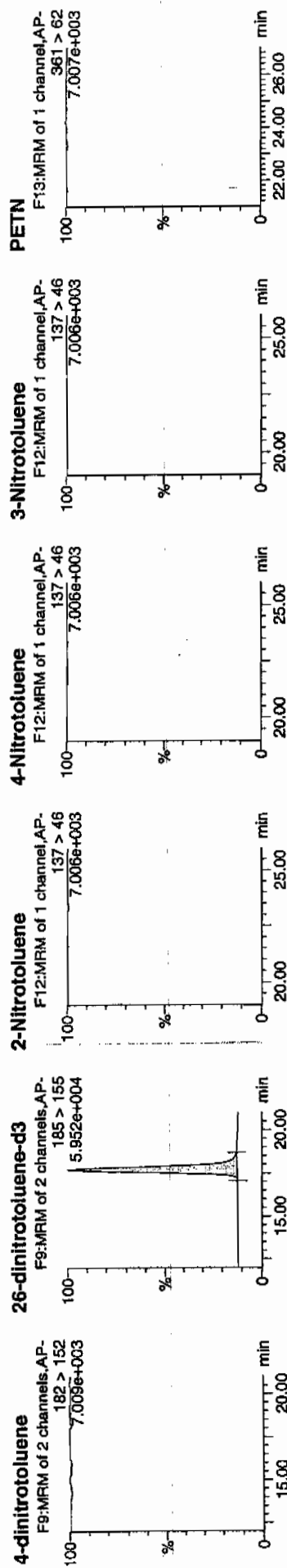
File: 1:1,A

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

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010



Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Acq Date	Acq Time	SN
1BLK05	HMZ	176 > 102		3812.331								
1BLK05	ROX	176 > 102		3812.331								
1BLK05	135-Trinitrobenzene	213 > 183		3812.331								
1BLK05	13-Dinitrobenzene-d4	172 > 142	12.20	3812.331	3812.331	3812.331	bb			592.9761	118.6	397.2
1BLK05	13-Dinitrobenzene	168 > 138		3812.331								
1BLK05	Tetryl	241 > 181		3812.331								
1BLK05	Nitrobenzene	123 > 46		3812.331								
1BLK05	4-Amino-26-dinitrotoluene	197 > 167		20986.781								
1BLK05	2-Amino-46-dinitrotoluene	197 > 180		20986.781								
1BLK05	246-Trinitrotoluene	227 > 210		20986.781						MM- 09-Feb-10 10:09:37		
1BLK05	34-dinitrotoluene	182 > 152		20986.781						MM- 09-Feb-10 10:15:23		
1BLK05	26-dinitrotoluene	182 > 152		20986.781								
1BLK05	24-dinitrotoluene	182 > 152		20986.781								
1BLK05	26-dinitrotoluene-d3	185 > 155	17.71	20986.781	20986.781	20986.781	bb			568.4492	113.7	1868.8
1BLK05	2-Nitrotoluene	137 > 46		20986.781								
1BLK05	4-Nitrotoluene	137 > 46		20986.781								
1BLK05	3-Nitrotoluene	137 > 46		20986.781								
1BLK05	PETN	361 > 62		20986.781								

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1390

Lab Code: GEL

Lab Sample ID: XIBLK06

Analysis Date: 09-FEB-10 14:50

GEL Data File: EXP0208050a

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	619.031
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	615.609
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0

Printed: Wed Feb 10 09:25:16 2010, Page 23 of 79

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

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208050a

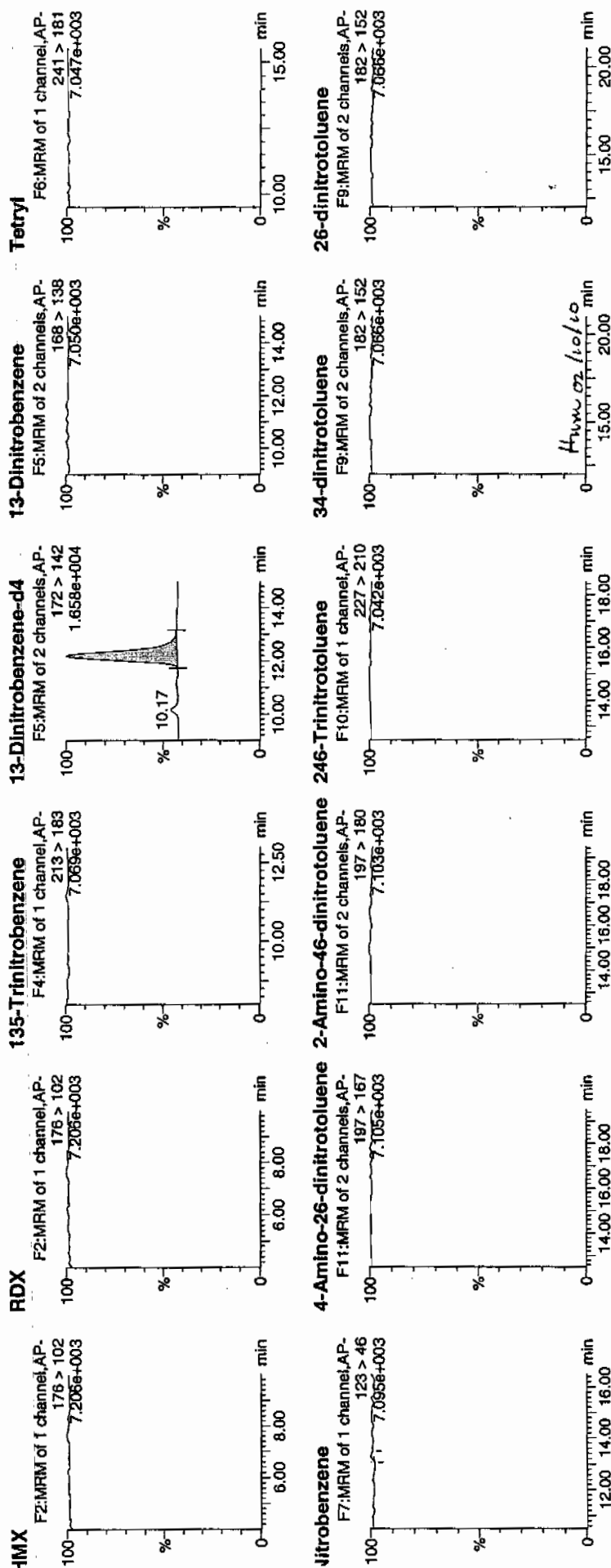
Date: 09-Feb-2010

Time: 14:50:17

ID: XIBLK06

Vial: 1:1,A

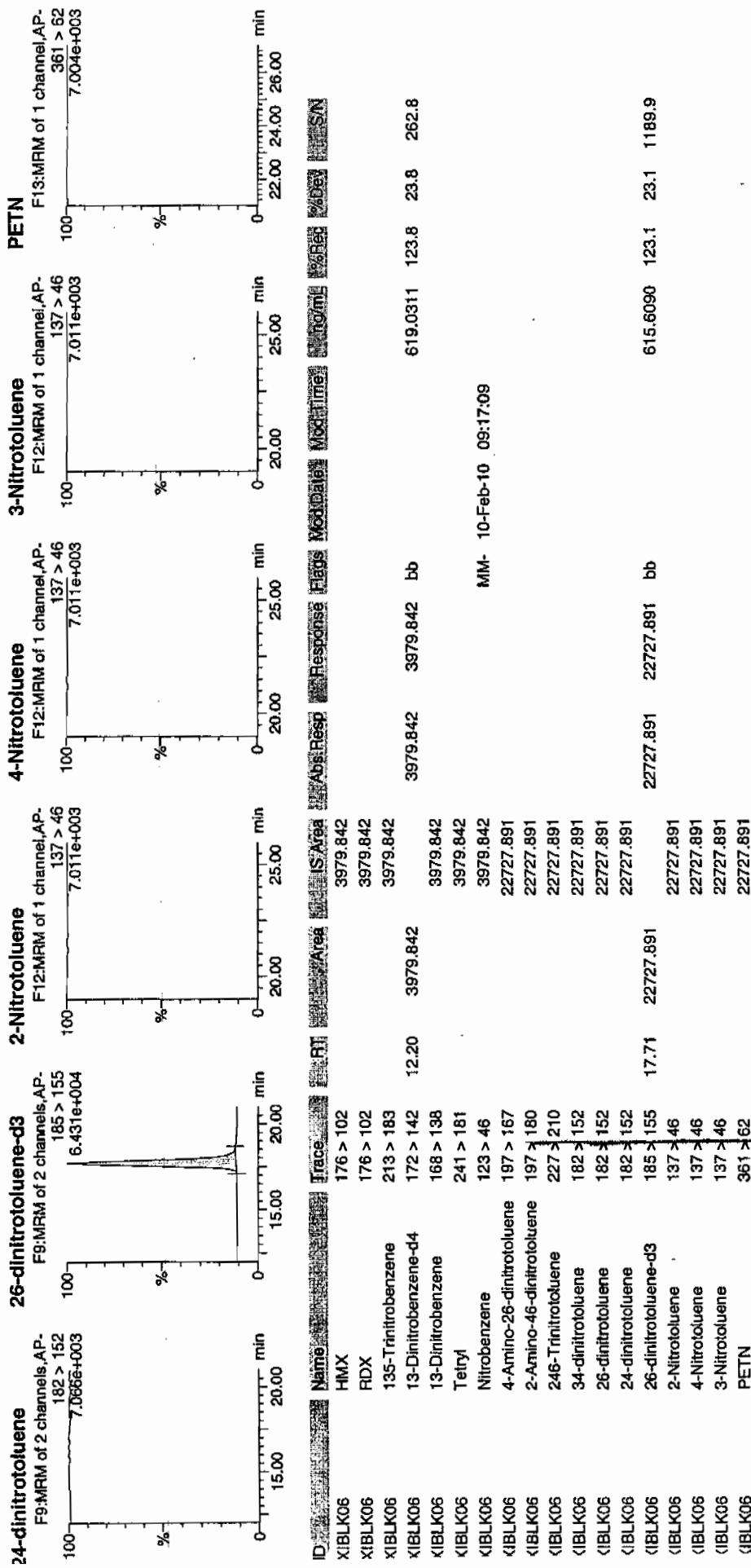
2/10/10



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

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

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1390

Lab Code: GEL

Lab Sample ID: XIBLK07

Analysis Date: 09-FEB-10 21:13

GEL Data File: EXP0208063a

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	602.957
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	577.242
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\1020810expA1.qld, Time: Wed Feb 10 09:19:53 2010

Name: C:\MASSLYNX\NEW_EXP_PRO\Data\EXP0208063a

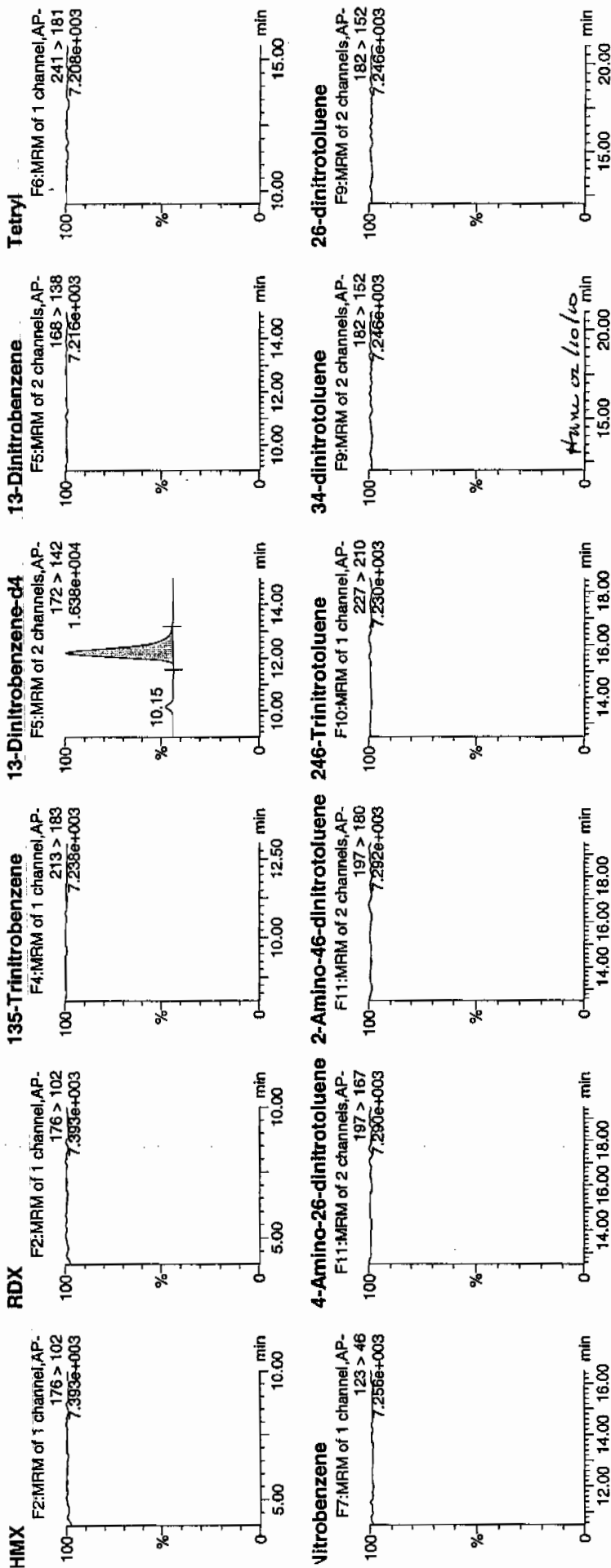
Date: 09-Feb-2010

Time: 21:13:58

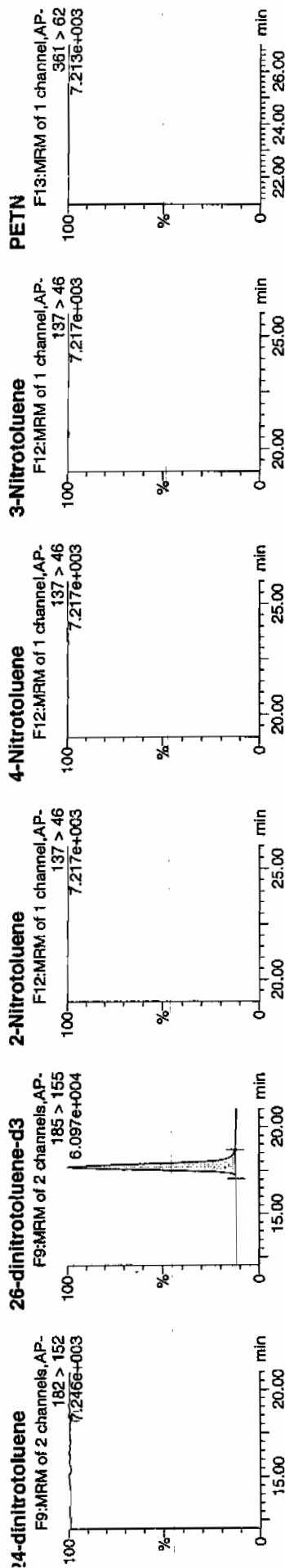
ID: XIBLK07

Vial: 1:1,A

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2/10/10



Dataset: C:\MASSLYNX\New_Exp_PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Conc/mL	%Rec	%Dev	S/N
XIBLK07	HMX		176 > 102		3876.500									
XIBLK07	RDX		176 > 102		3876.500									
XIBLK07	135-Trinitrobenzene		213 > 183		3876.500									
XIBLK07	13-Dinitrobenzene-d4		172 > 142	12.20	3876.500		3876.500	bb			602.9571	120.6	20.6	383.4
XIBLK07	13-Dinitrobenzene		168 > 138		3876.500									
XIBLK07	Tetryl		241 > 181		3876.500									
XIBLK07	Nitrobenzene		123 > 46		3876.500									
XIBLK07	4-Amino-26-dinitrotoluene		197 > 167		21311.416									
XIBLK07	2-Amino-46-dinitrotoluene		197 > 180		21311.416									
XIBLK07	246-Trinitrotoluene		227 > 210		21311.416									
XIBLK07	34-dinitrotoluene		182 > 152		21311.416									
XIBLK07	26-dinitrotoluene		182 > 152		21311.416									
XIBLK07	24-dinitrotoluene		182 > 152		21311.416									
XIBLK07	26-dinitrotoluene-d3		185 > 155	17.71	21311.416		21311.416		MM-	10-Feb-10	09:08:37	577.2423	115.4	1930.8
XIBLK07	2-Nitrotoluene		137 > 46		21311.416									
XIBLK07	4-Nitrotoluene		137 > 46		21311.416									
XIBLK07	3-Nitrotoluene		137 > 46		21311.416									
XIBLK07	PETN		361 > 62		21311.416									

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1390

Lab Code: GEL

Lab Sample ID: XIBLK08

Analysis Date: 10-FEB-10 03:37

GEL Data File: EXP0208076a

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
HMX	0	0
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	571.729
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	557.496
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0

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

Dataset: C:\MASSLYNX\New_Exp_PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010

Sample Name: C:\MASSLYNX\NEW_EXP_PRO\Data\EXP0208076a

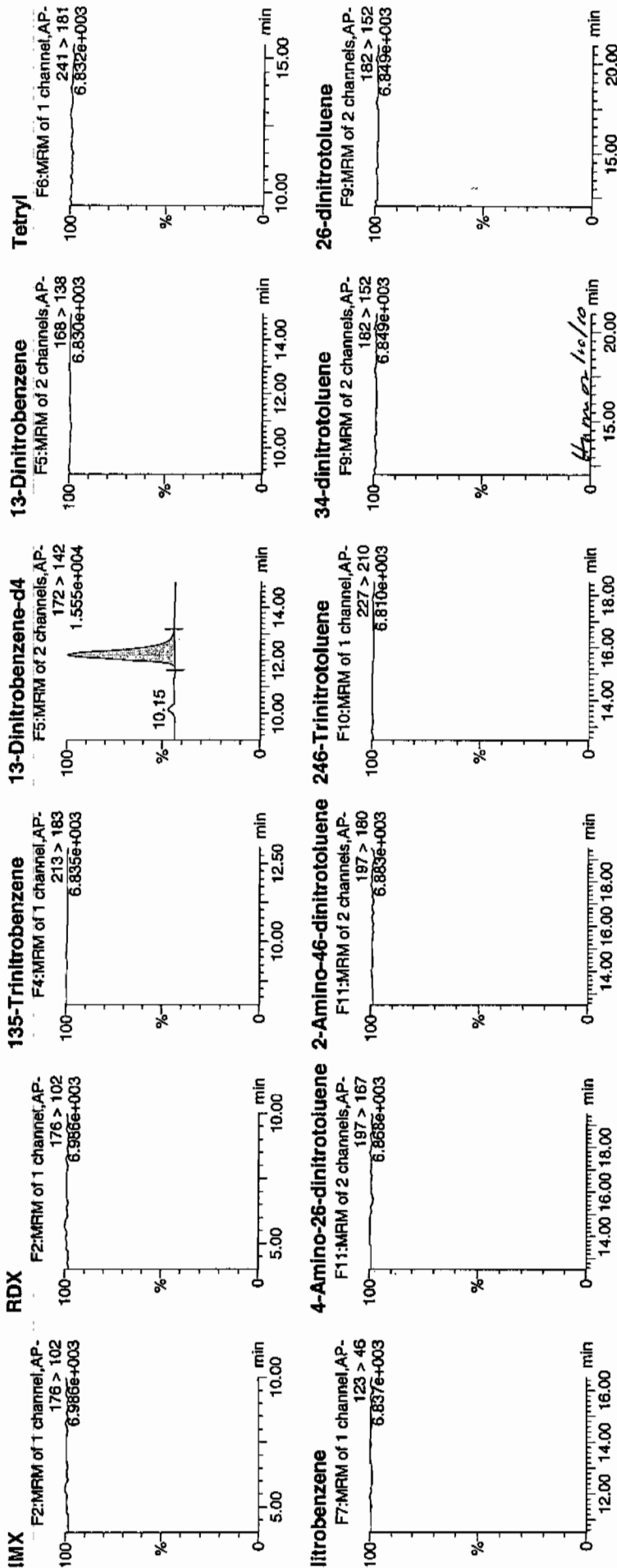
Date: 10-Feb-2010

Time: 03:37:30

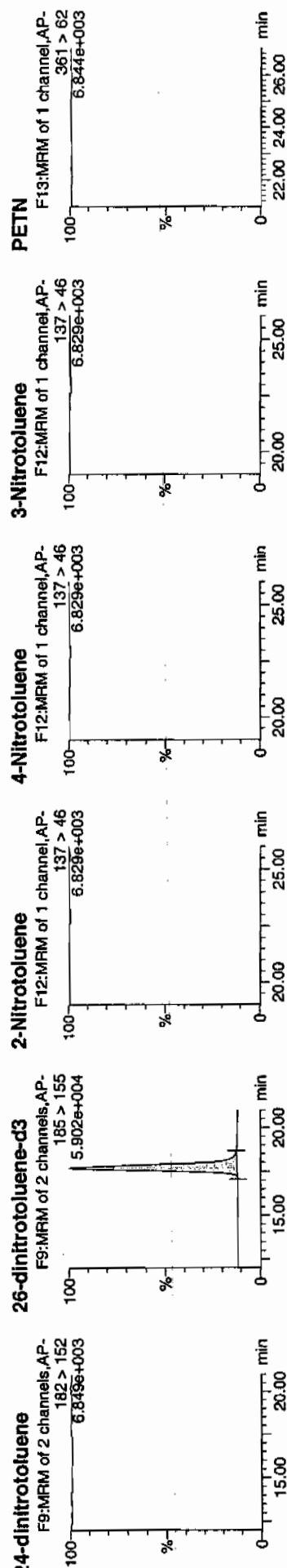
Sample: XIBLK08

Vial: 1:1,A

2/10/10



Dataset: C:\MASSLYN\New_Exp.PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010

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4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1390

Lab Code: GEL

Lab Sample ID: XIBLK09

Analysis Date: 10-FEB-10 10:01

GEL Data File: EXP0208089a

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	589.535
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	534.323
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: Thu Feb 11 10:09:12 2010, Page 23 of 117

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

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208089a

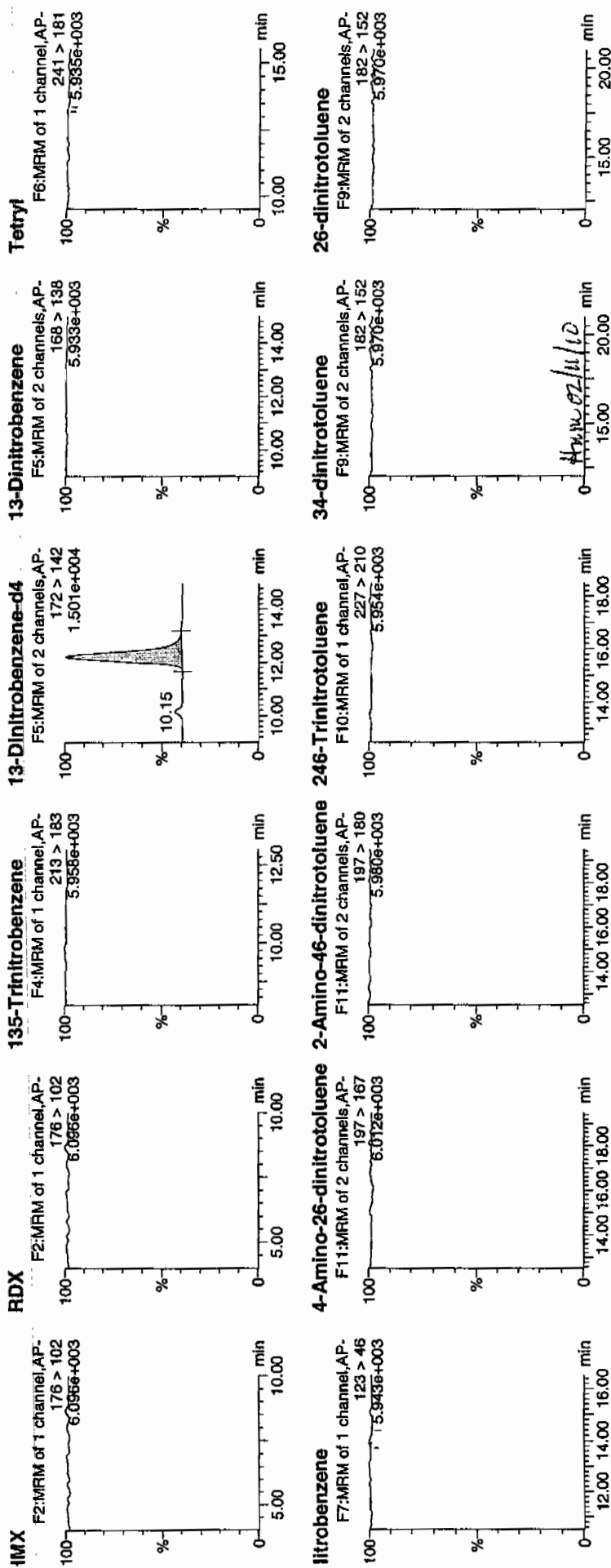
Date: 10-Feb-2010

Time: 10:01:12

D: XIBLK09

/ial: 1:1,A

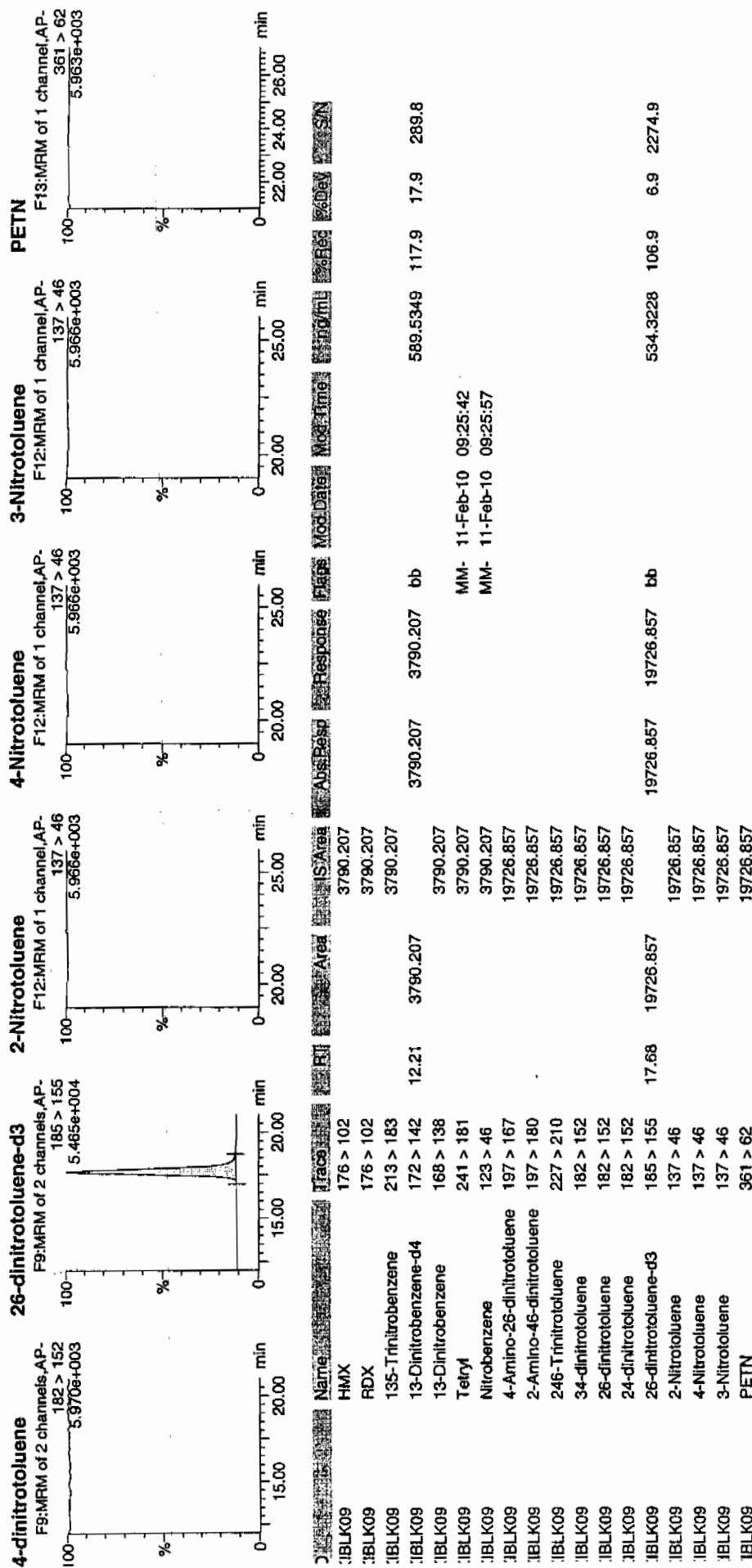
Handwritten: *Handwritten*
2/11/10



Printed: Thu Feb 11 10:09:12 2010, Page 24 of 117

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

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1390

Lab Code: GEL

Lab Sample ID: XIBLK10

Analysis Date: 10-FEB-10 11:59

GEL Data File: EXP0208093a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
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	518.982
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	590.034
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0

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

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010

Sample Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208093a

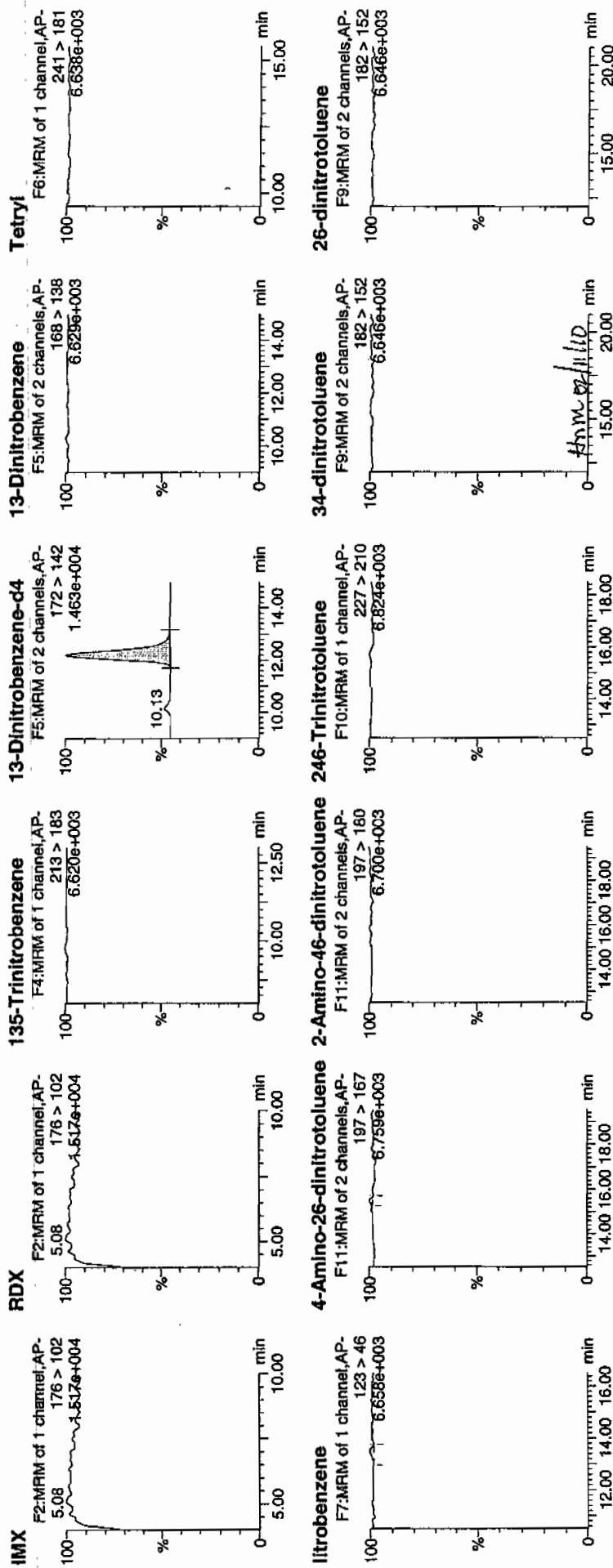
Date: 10-Feb-2010

Time: 11:59:19

D: XIBLK10

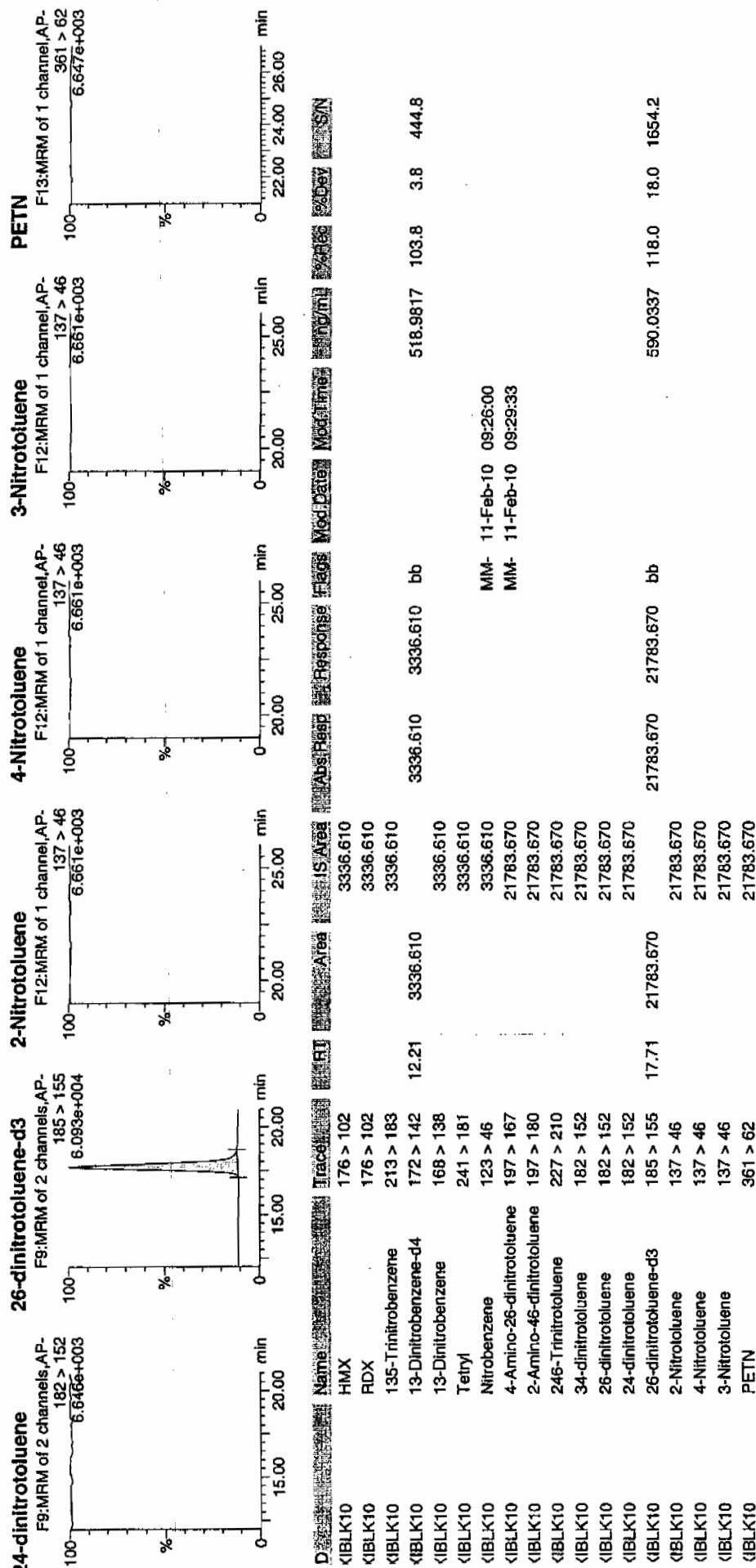
File: 1:1,F

11/10



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

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1390

Lab Code: GEL

Lab Sample ID: XIBLK11

Analysis Date: 10-FEB-10 13:28

GEL Data File: EXP0208096a

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	515.625
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	487.539
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
 JEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp_PRO\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010

Sample: C:\MASSLYNX\NEW_EXP_PRO\Data\EXP0208096a

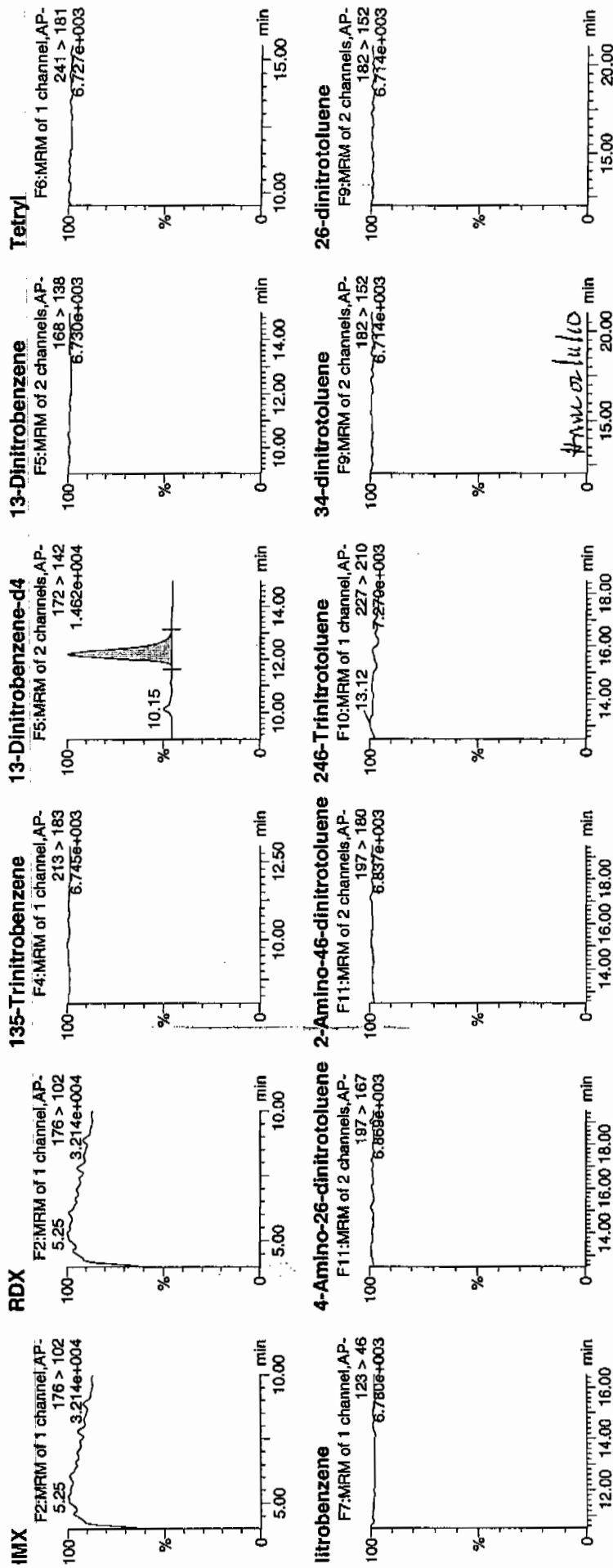
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Time: 13:28:03

D: XIBLK11

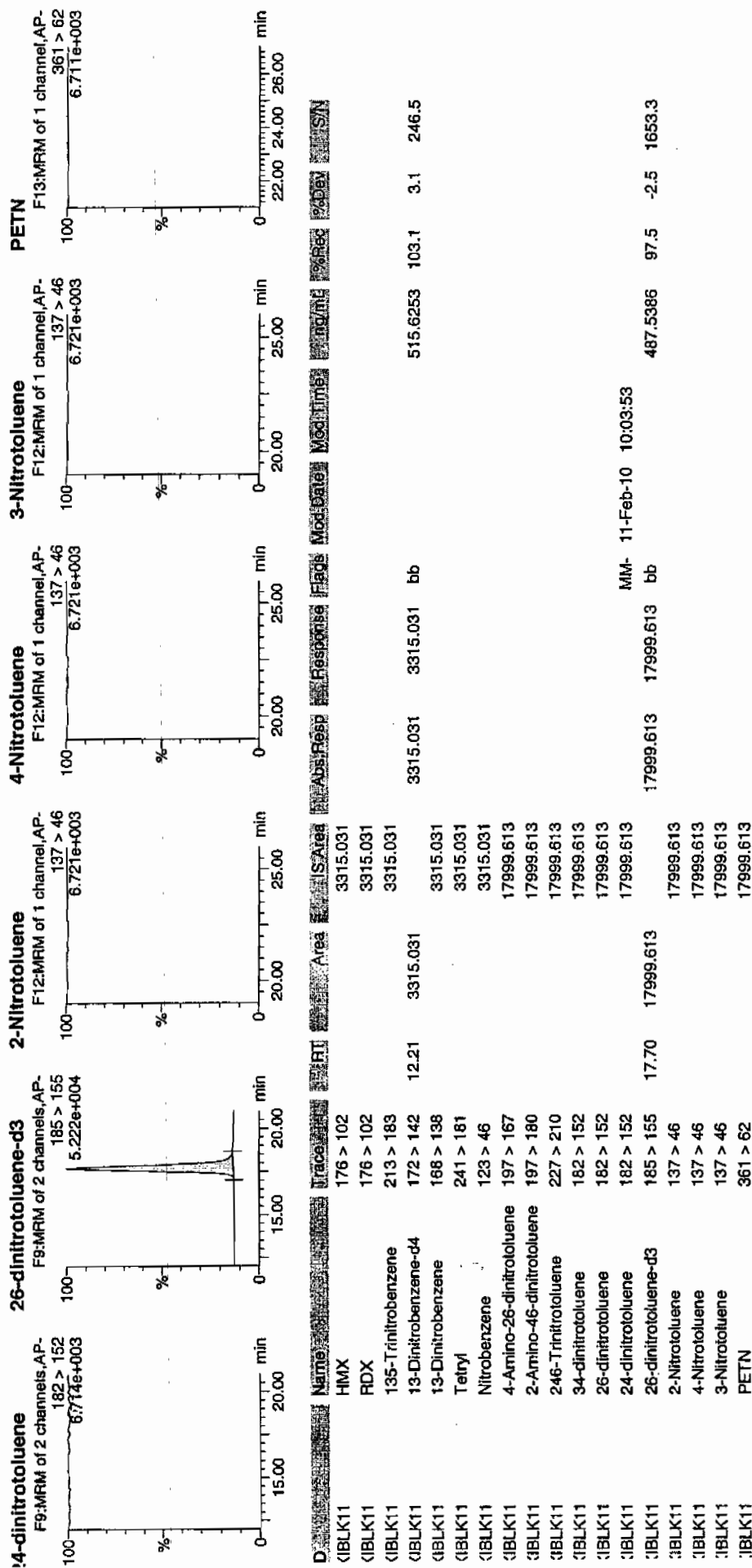
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2/11/10



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

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1390

Lab Code: GEL

Lab Sample ID: XIBLK12

Analysis Date: 10-FEB-10 15:55

GEL Data File: EXP0208101a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
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	493.427
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	444.368
2-Amino-4,6-dinitrotoluene	0	0

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

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010

Sample Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208101a

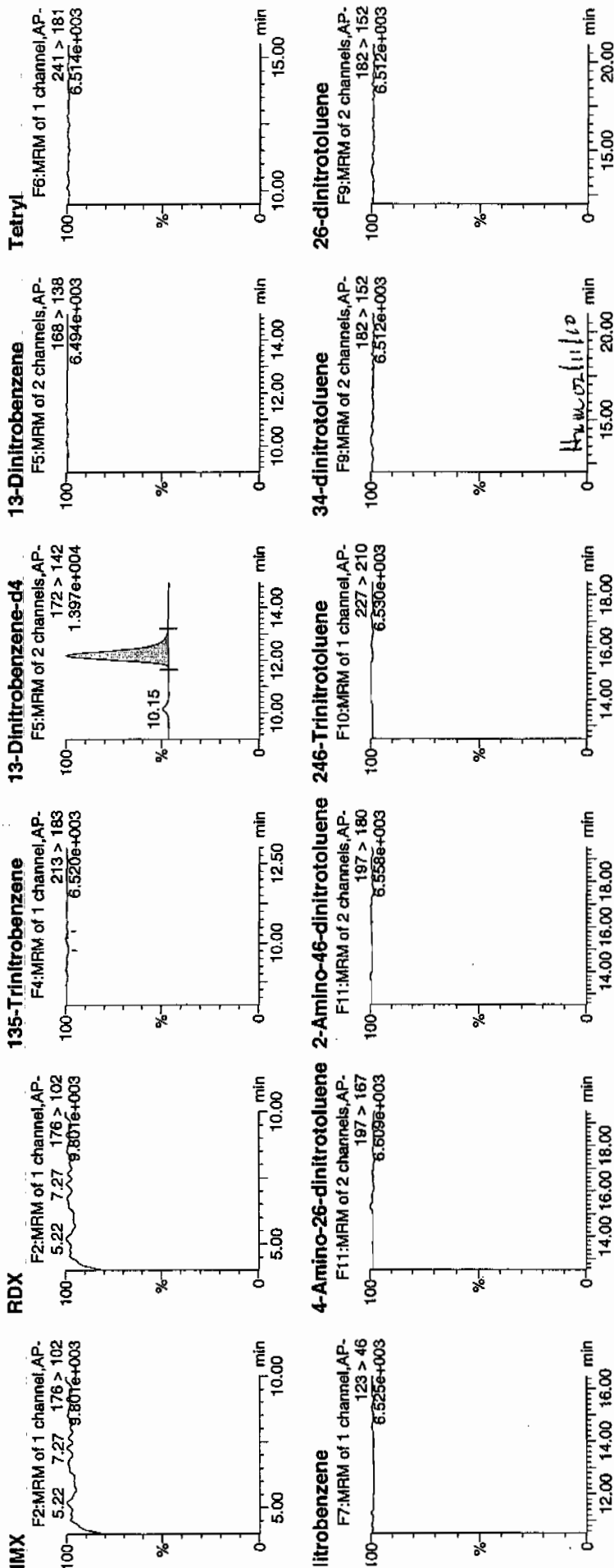
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D: XIBLK12

File: 1:1,A

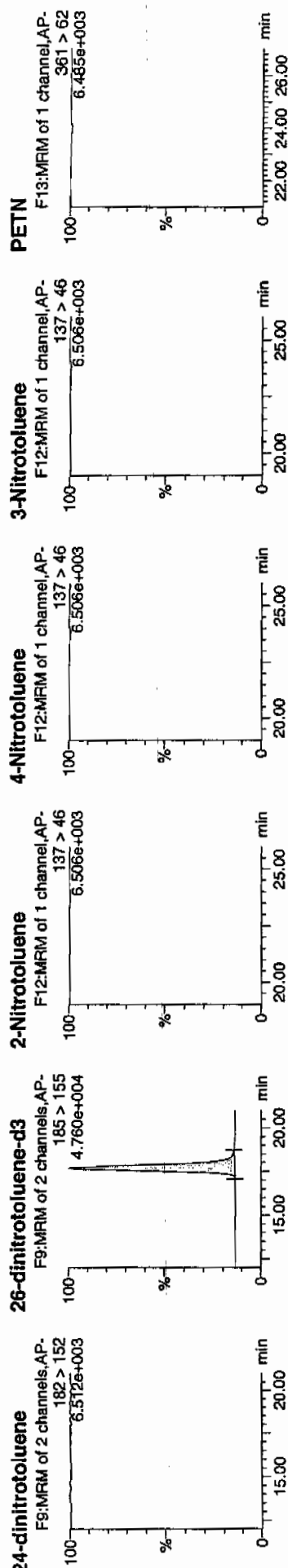
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Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010

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Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1390

Lab Code: GEL

Lab Sample ID: XIBLK13

Analysis Date: 10-FEB-10 22:19

GEL Data File: EXP0208114a

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	507.231
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	572.472
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

Quantify Sample Report
3EL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208114a

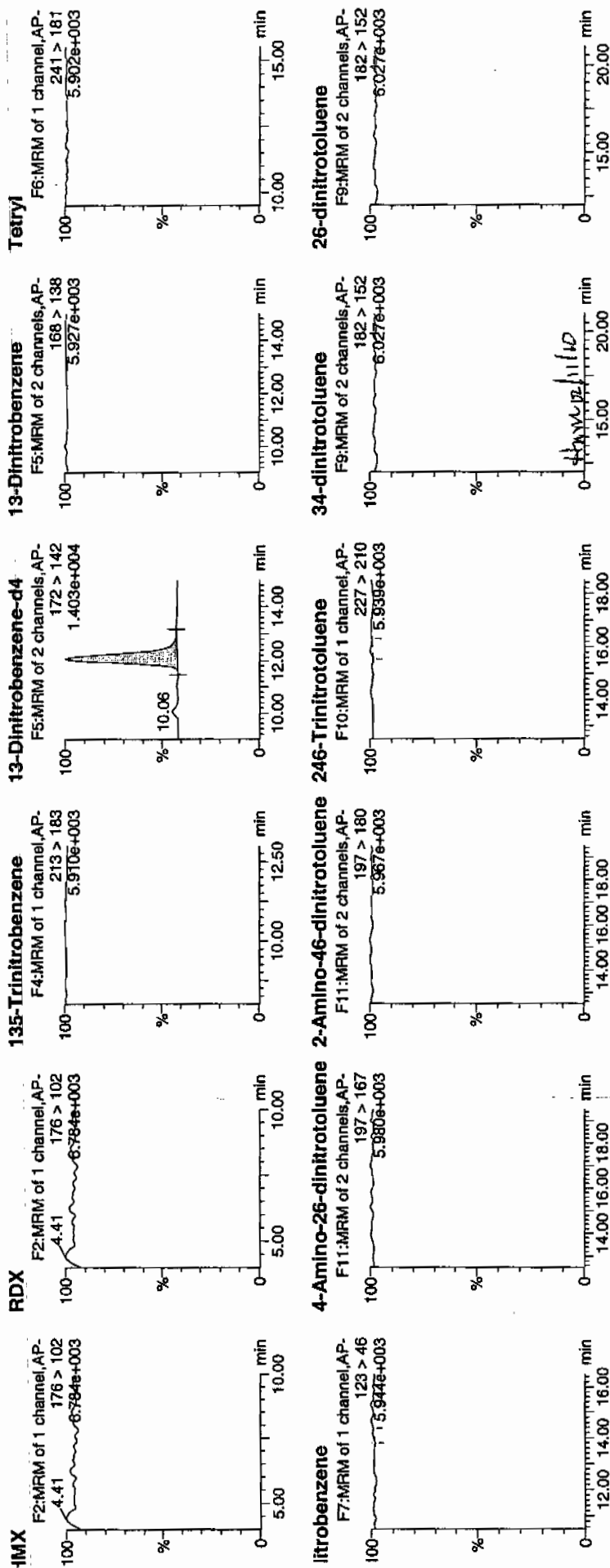
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D: XIBLK13

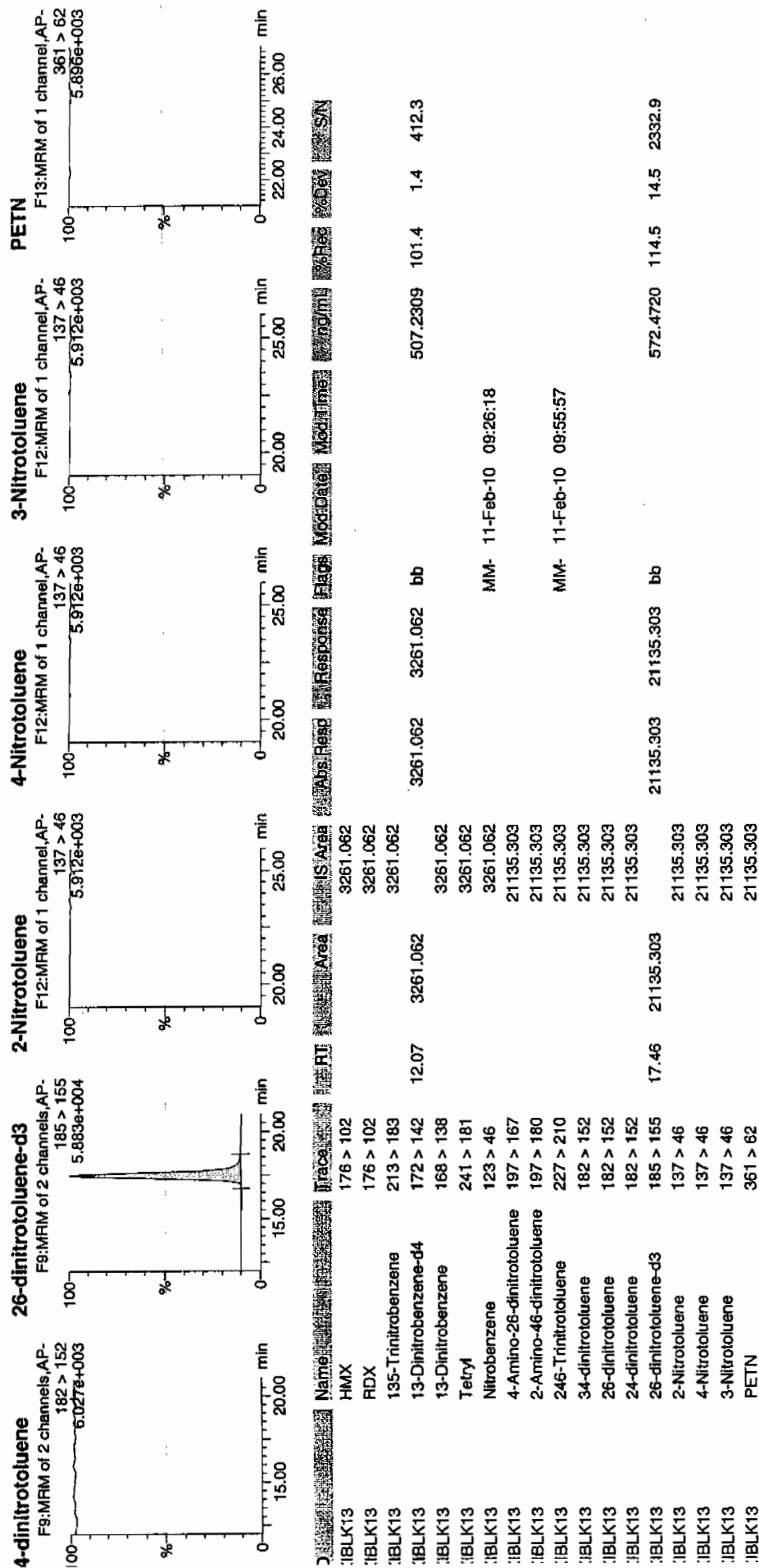
/lal: 1:1,A

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

Dataset: C:\MASSLYNX\New_Exp\PRO\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1390

Lab Code: GEL

Lab Sample ID: XIBLK14

Analysis Date: 11-FEB-10 01:45

GEL Data File: EXP0208121a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	460.845
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	484.127

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

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208121a

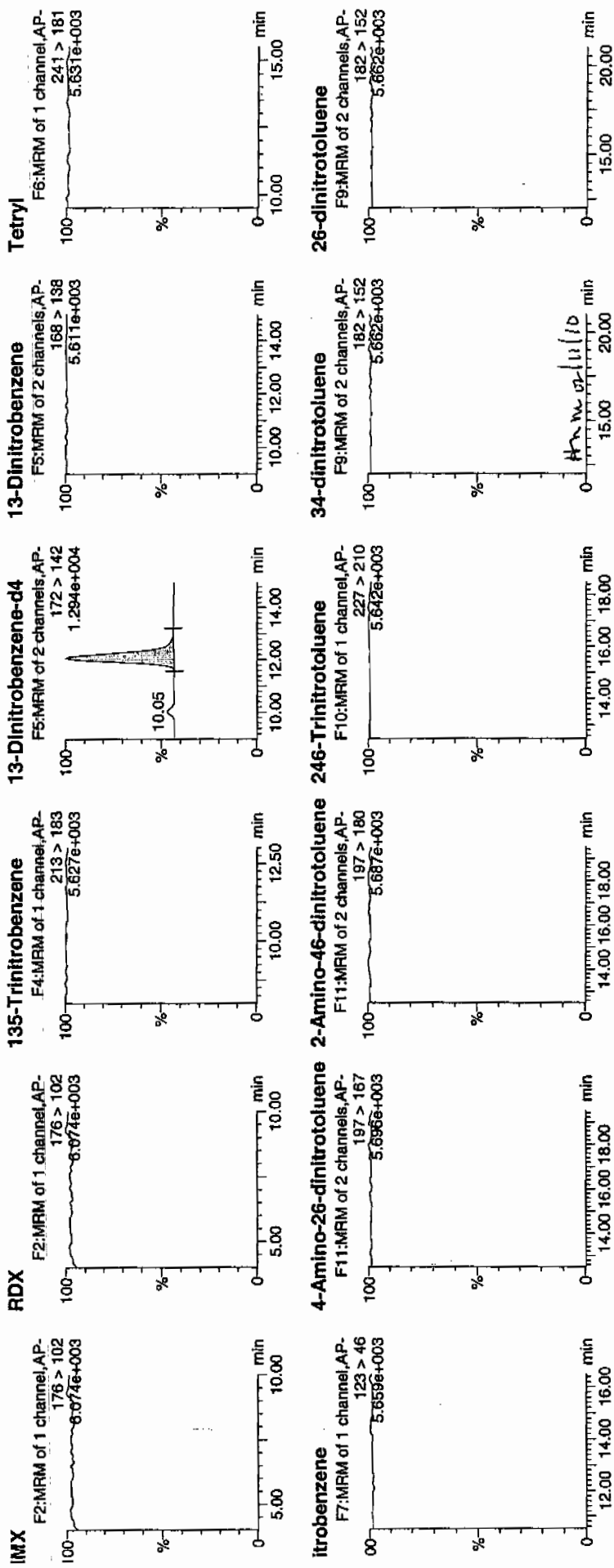
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Time: 01:45:43

ID: XIBLK14

File: 1:1,A

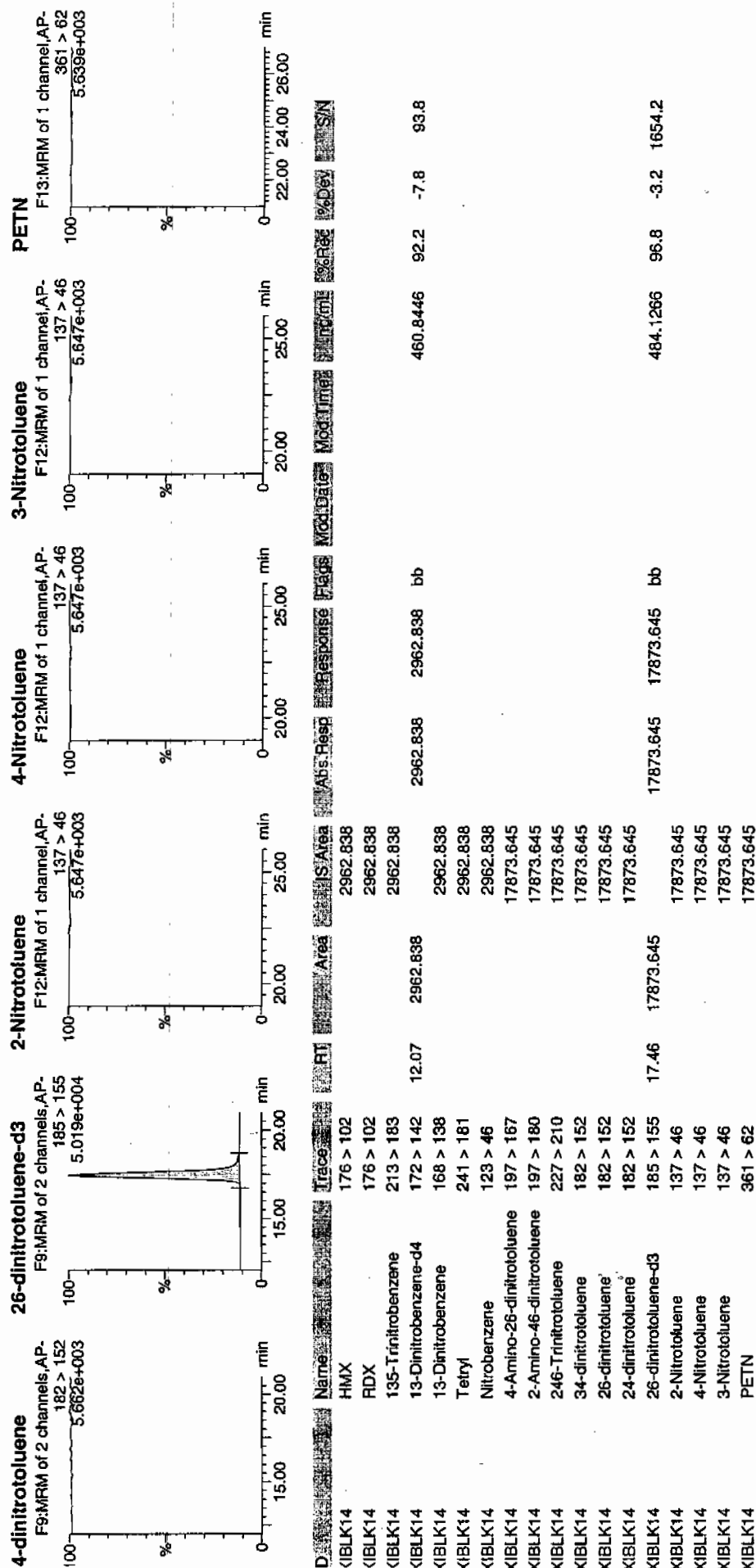
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Printed: Thu Feb 11 10:09:12 2010, Page 88 of 117

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

ataset: C:\MASSLYNX\New_Exp.PRO\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1390

Lab Code: GEL

Lab Sample ID: XIBLK15

Analysis Date: 11-FEB-10 08:09

GEL Data File: EXP0208134a

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	574.283
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	594.383
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
 JEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010

Sample Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208134a

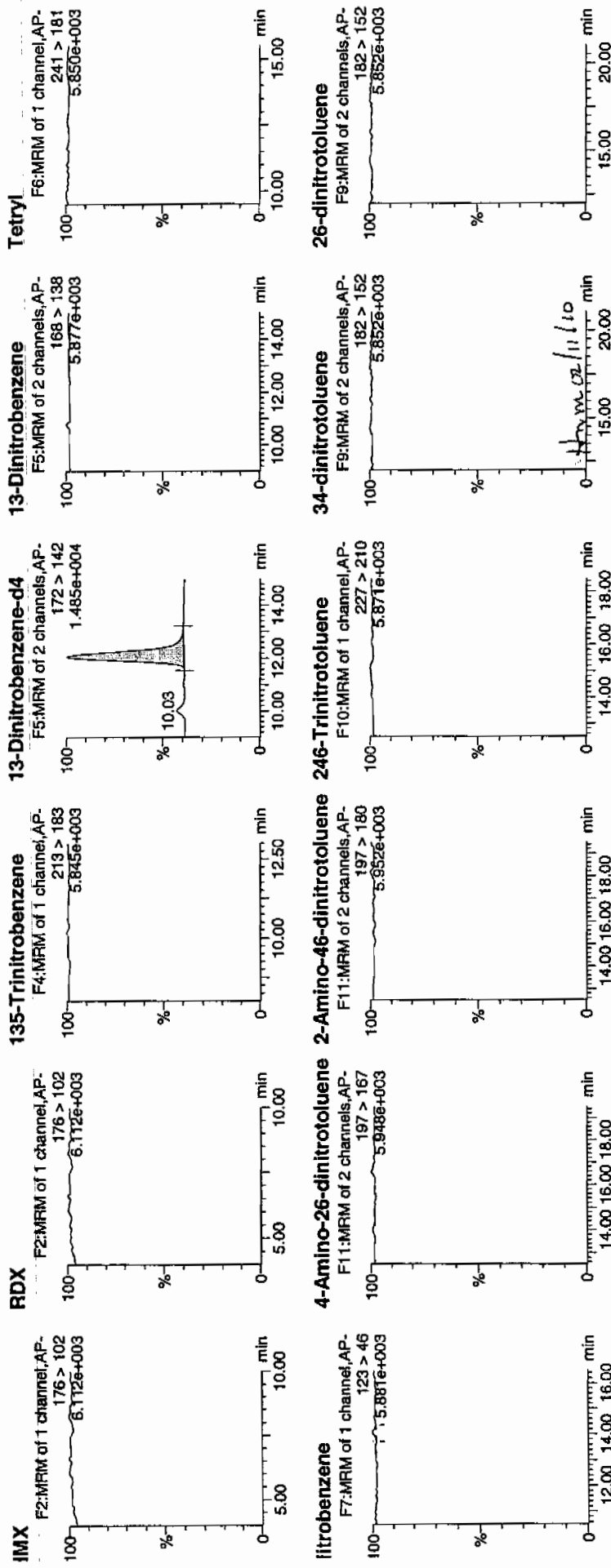
Date: 11-Feb-2010

Time: 08:09:15

D: XIBLK15

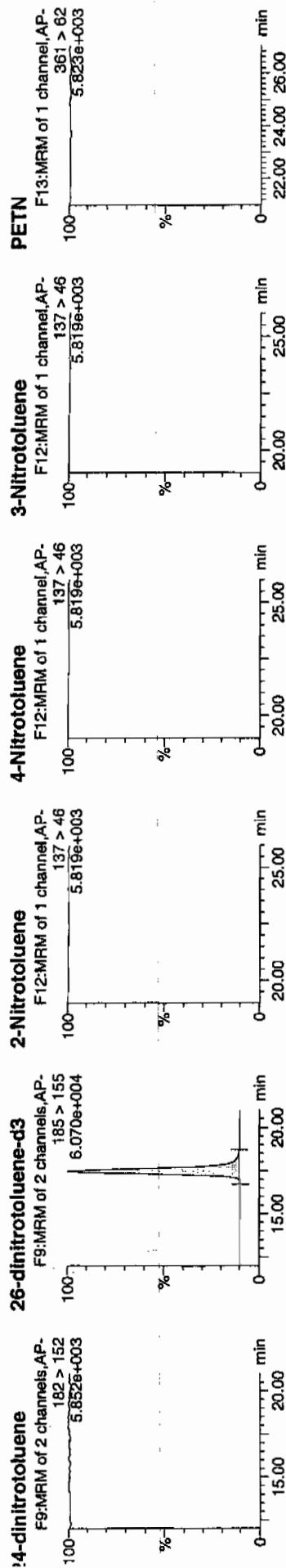
File: 1:1,A

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

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010



Name	RT	Area	IS Area	Abs:Resp	Response	Flags	Mod:Date	Mod:Time	%Rec	%Dev	SN
4-BLK15	176 > 102	3692.150	3692.150								
4-BLK15	176 > 102	3692.150	3692.150								
135-Trinitrobenzene	213 > 183	3692.150	3692.150								
13-Dinitrobenzene-d4	172 > 142	12.07	3692.150								
13-Dinitrobenzene	168 > 138		3692.150								
Tetryl	241 > 181		3692.150								
Nitrobenzene	123 > 46		3692.150								
4-Amino-26-dinitrotoluene	197 > 167		21944.232								
2-Amino-46-dinitrotoluene	197 > 180		21944.232								
246-Trinitrotoluene	227 > 210		21944.232								
34-dinitrotoluene	182 > 152		21944.232								
26-dinitrotoluene	182 > 152		21944.232								
24-dinitrotoluene	182 > 152		21944.232								
26-dinitrotoluene-d3	185 > 155	17.46	21944.232								
2-Nitrotoluene	137 > 46		21944.232								
4-Nitrotoluene	137 > 46		21944.232								
3-Nitrotoluene	137 > 46		21944.232								
PETN	361 > 62		21944.232								
4-BLK15	176 > 102										
4-BLK15	176 > 102										
135-Trinitrobenzene	213 > 183										
13-Dinitrobenzene-d4	172 > 142										
13-Dinitrobenzene	168 > 138										
Tetryl	241 > 181										
Nitrobenzene	123 > 46										
4-Amino-26-dinitrotoluene	197 > 167										
2-Amino-46-dinitrotoluene	197 > 180										
246-Trinitrotoluene	227 > 210										
34-dinitrotoluene	182 > 152										
26-dinitrotoluene	182 > 152										
24-dinitrotoluene	182 > 152										
26-dinitrotoluene-d3	185 > 155										
2-Nitrotoluene	137 > 46										
4-Nitrotoluene	137 > 46										
3-Nitrotoluene	137 > 46										
PETN	361 > 62										

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4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1390

Lab Code: GEL

Lab Sample ID: XIBLK16

Analysis Date: 11-FEB-10 14:03

GEL Data File: EXP0208146a

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	571.158
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	588.501
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: Fri Feb 12 08:13:51 2010, Page 21 of 93

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

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA3.qld, Time: Fri Feb 12 08:08:48 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208146a

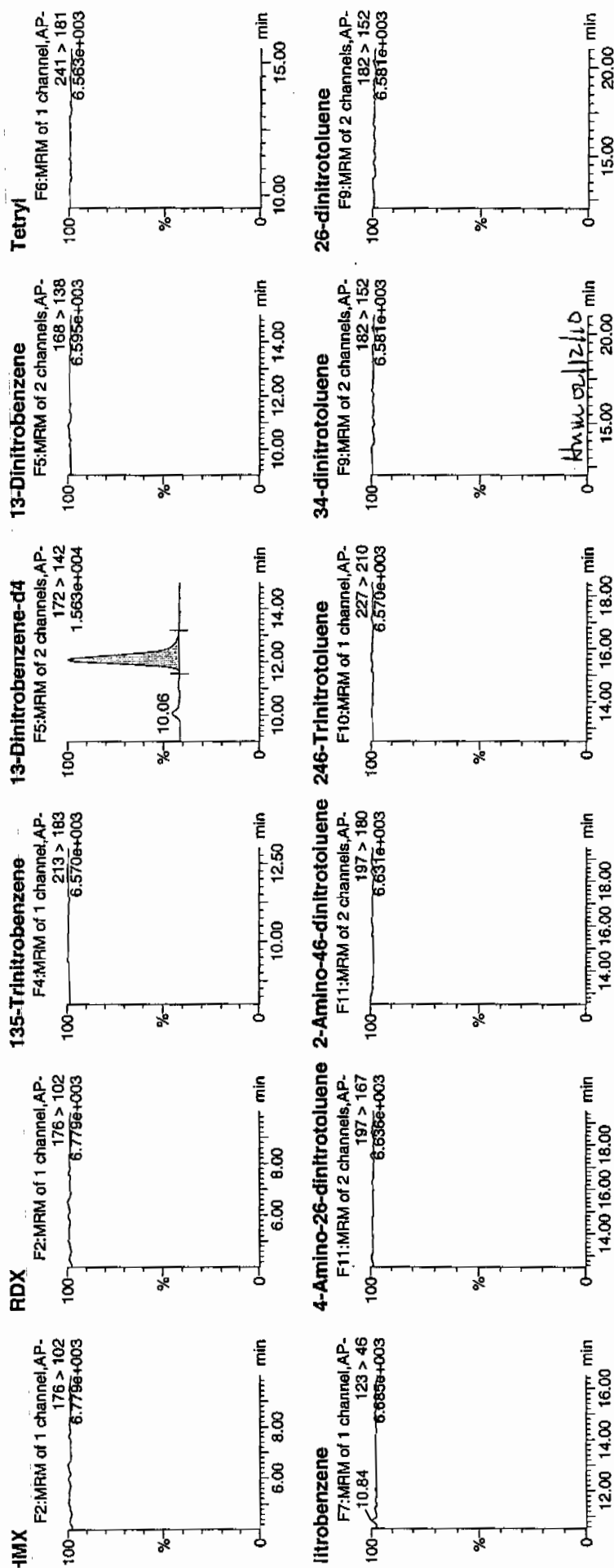
Date: 11-Feb-2010

Time: 14:03:38

D: XIBLK16

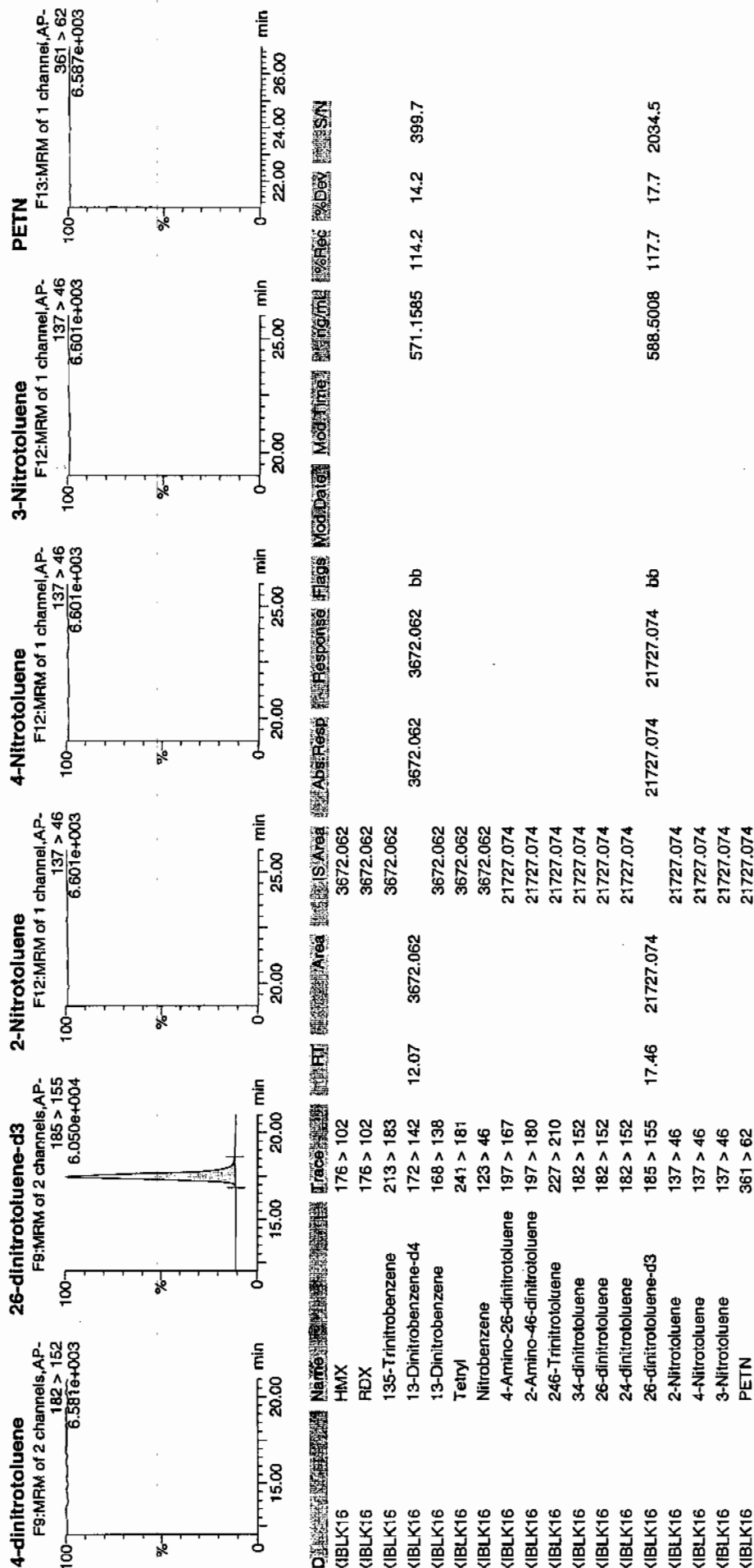
Vial: 1:1,A

4/12/10



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

Dataset: C:\MASSLYN\New_Exp.PRO\020810expA3.qld, Time: Fri Feb 12 08:08:48 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1390

Lab Code: GEL

Lab Sample ID: XIBLK17

Analysis Date: 11-FEB-10 18:58

GEL Data File: EXP0208156a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
1,3-Dinitrobenzene-d4	500	492.787
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	564
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

Printed: Fri Feb 12 08:13:51 2010, Page 41 of 93

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

Dataset: C:\MASSLYNX\New_Exp_PRO\020810expA3.qld, Time: Fri Feb 12 08:08:48 2010

Sample: C:\MASSLYNX\NEW_EXP_PRO\Data\EXP0208156a

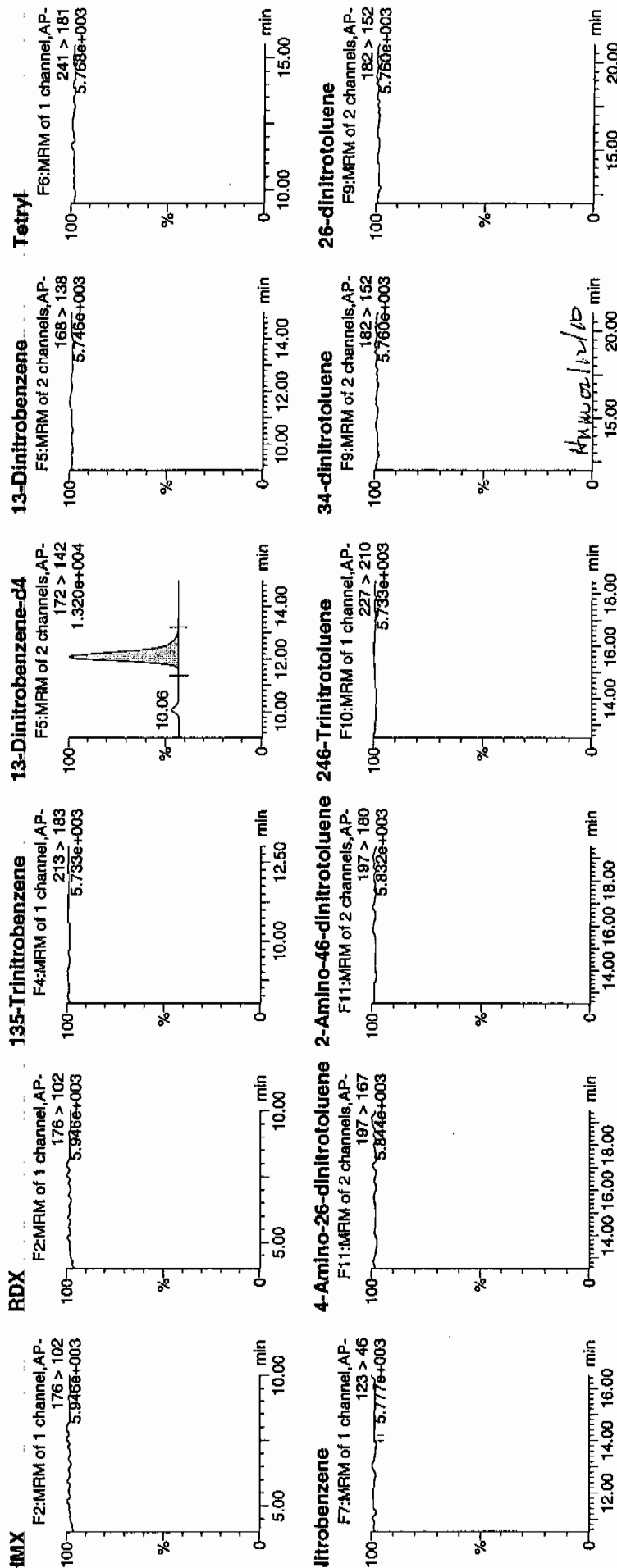
Date: 11-Feb-2010

Time: 18:58:59

D: XIBLK17

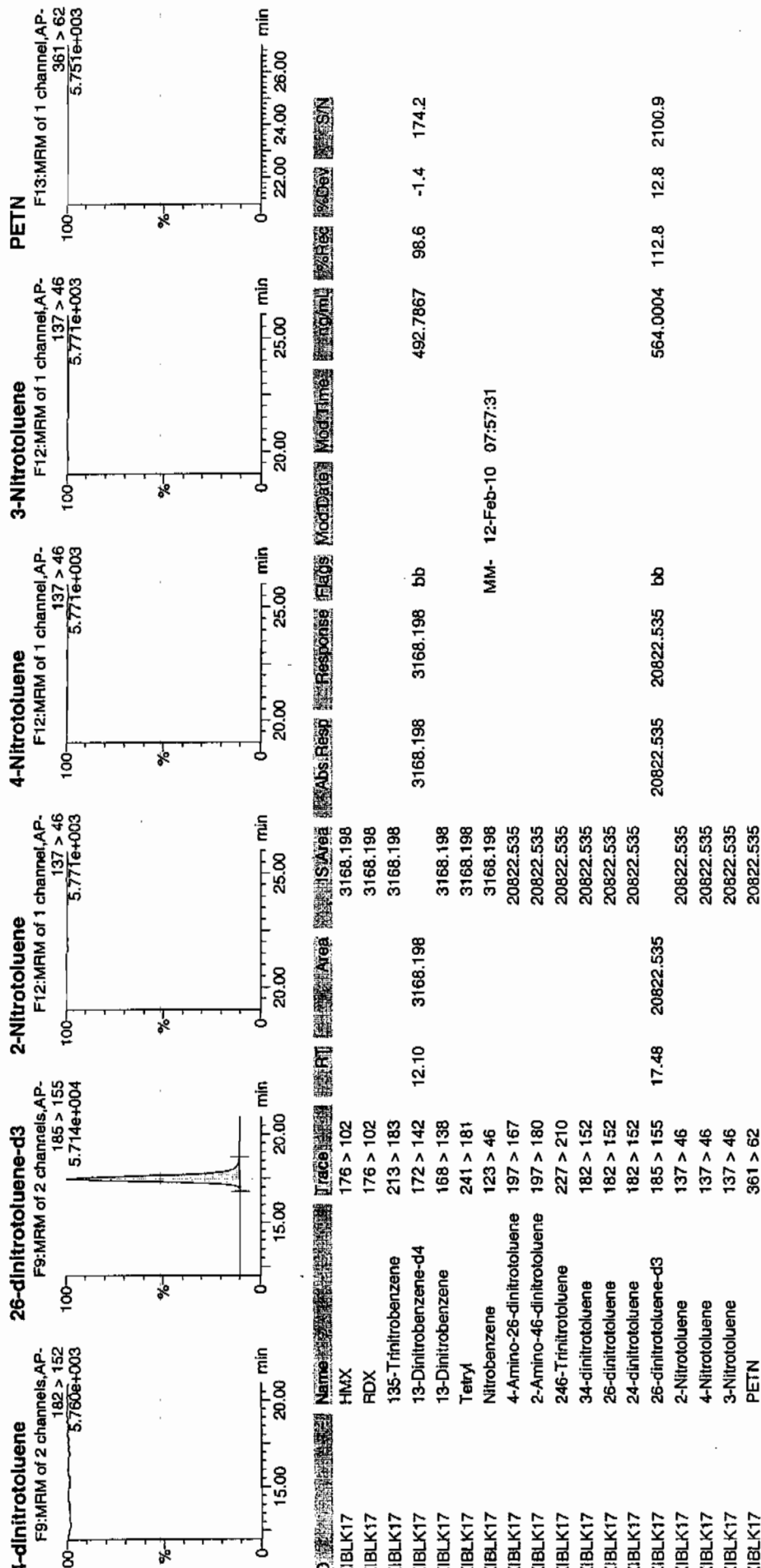
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uantify Sample Report
EL Laboratories, LLC / Analyst : Michael A. Penny

atset: C:\MASSLYNX\New_Exp.PRO\020810expA3.qld, Time: Fri Feb 12 08:08:48 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1390

Lab Code: GEL

Lab Sample ID: XIBLK18

Analysis Date: 12-FEB-10 01:22

GEL Data File: EXP0208169a

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	437.531
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	440.022
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: Fri Feb 12 08:13:51 2010, Page 67 of 93

Quantity Sample Report
 3EL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA3.qld, Time: Fri Feb 12 08:08:48 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208169a

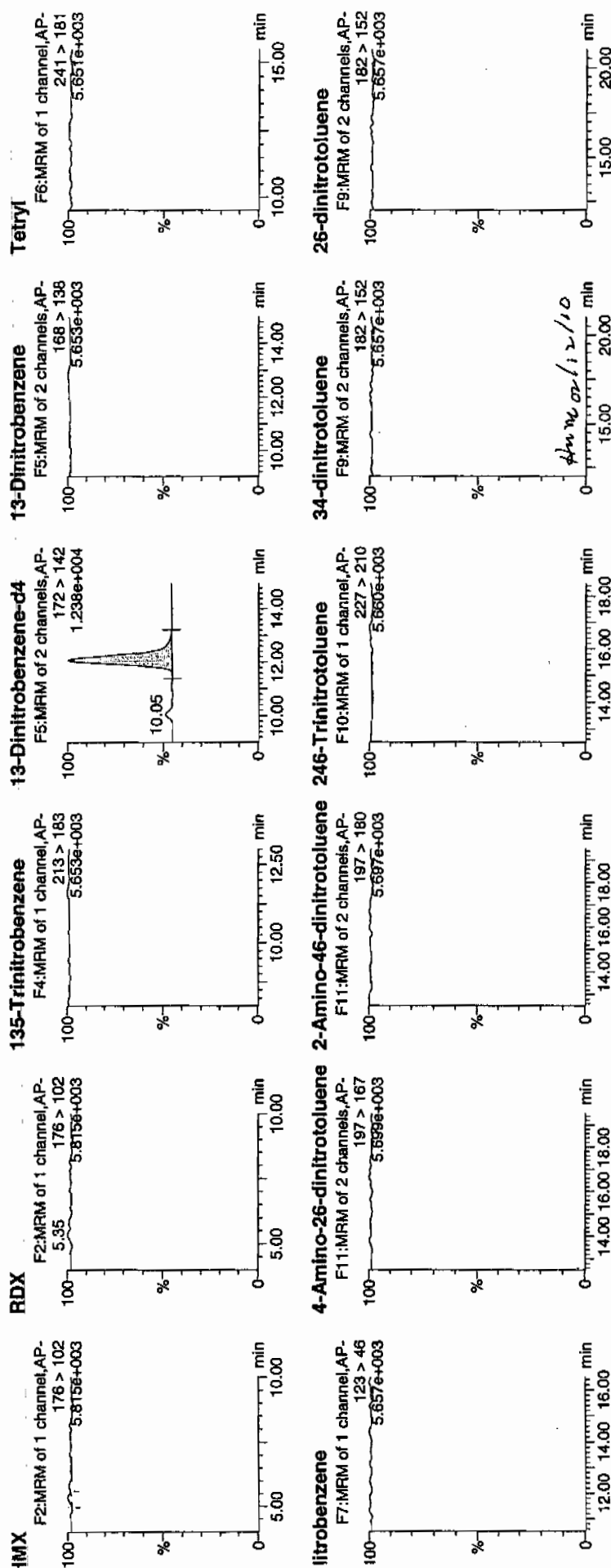
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Time: 01:22:24

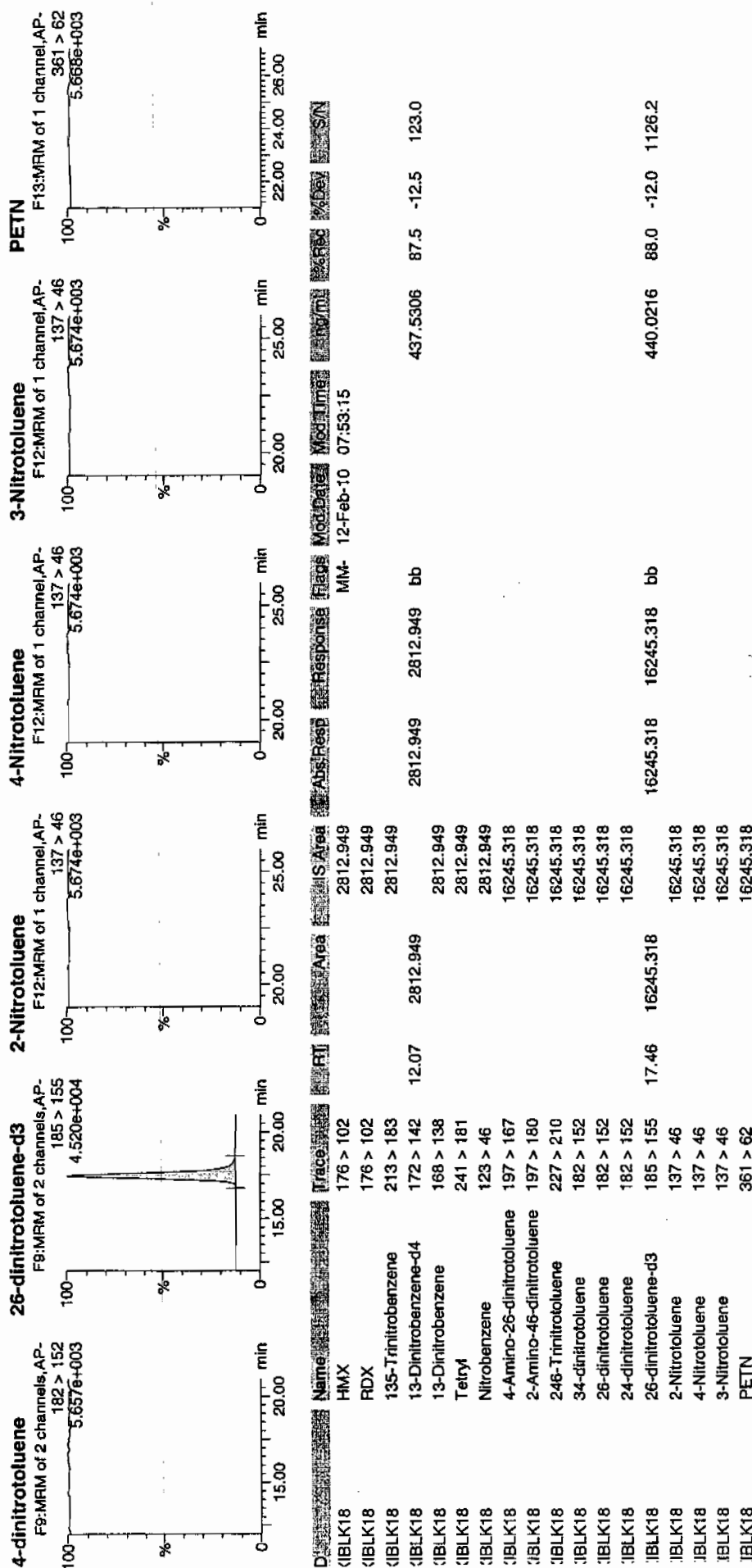
D: XIBLK18

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Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA3.qld, Time: Fri Feb 12 08:08:48 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1390

Lab Code: GEL

Lab Sample ID: XIBLK19

Analysis Date: 12-FEB-10 06:47

GEL Data File: EXP0208180a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0
m-Nitrotoluene	0	0
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	487.474
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	475.411
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\020810expA3.qld, Time: Fri Feb 12 08:08:48 2010

Sample Name: C:\MASSLYNX\NEW_EXP_PRO\Data\EXP0208180a

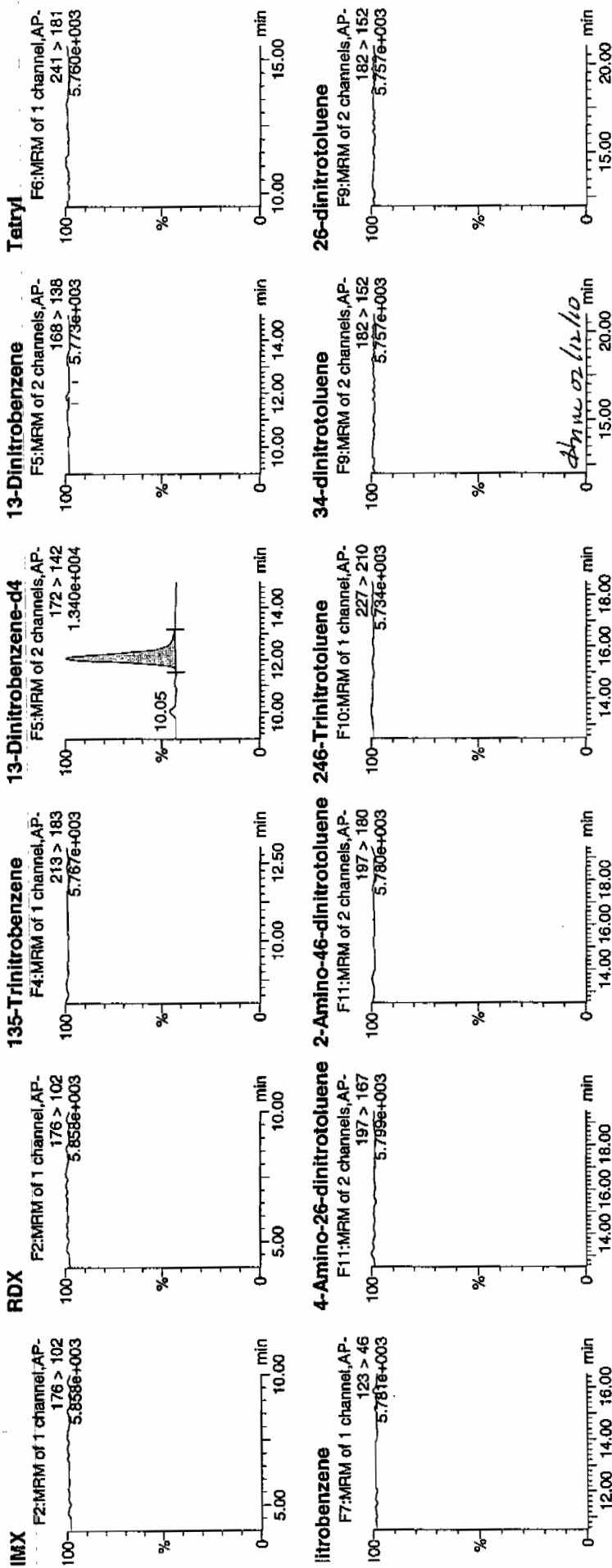
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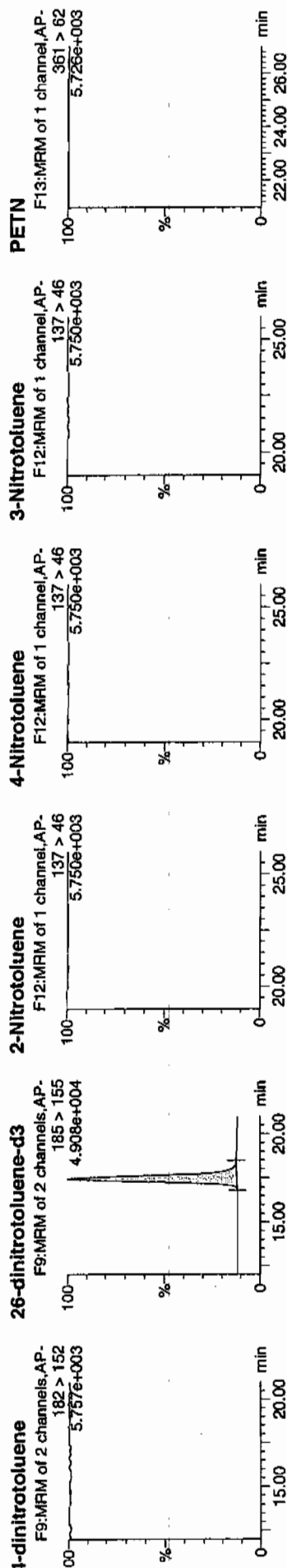
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Dataset: C:\MASSLYN\New_Exp.PRO\020810expA3.qld, Time: Fri Feb 12 08:08:48 2010

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4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1390

Lab Code: GEL

Lab Sample ID: XIBLK20

Analysis Date: 12-FEB-10 13:11

GEL Data File: EXP0208193a

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	497.184
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	467.617
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
iEL Laboratories, LLC / Analyst : Michael A. Penny

atset: C:\MASSLYNX\New_Exp.PRO\020810expA4.qld, Time: Sat Feb 13 09:30:34 2010

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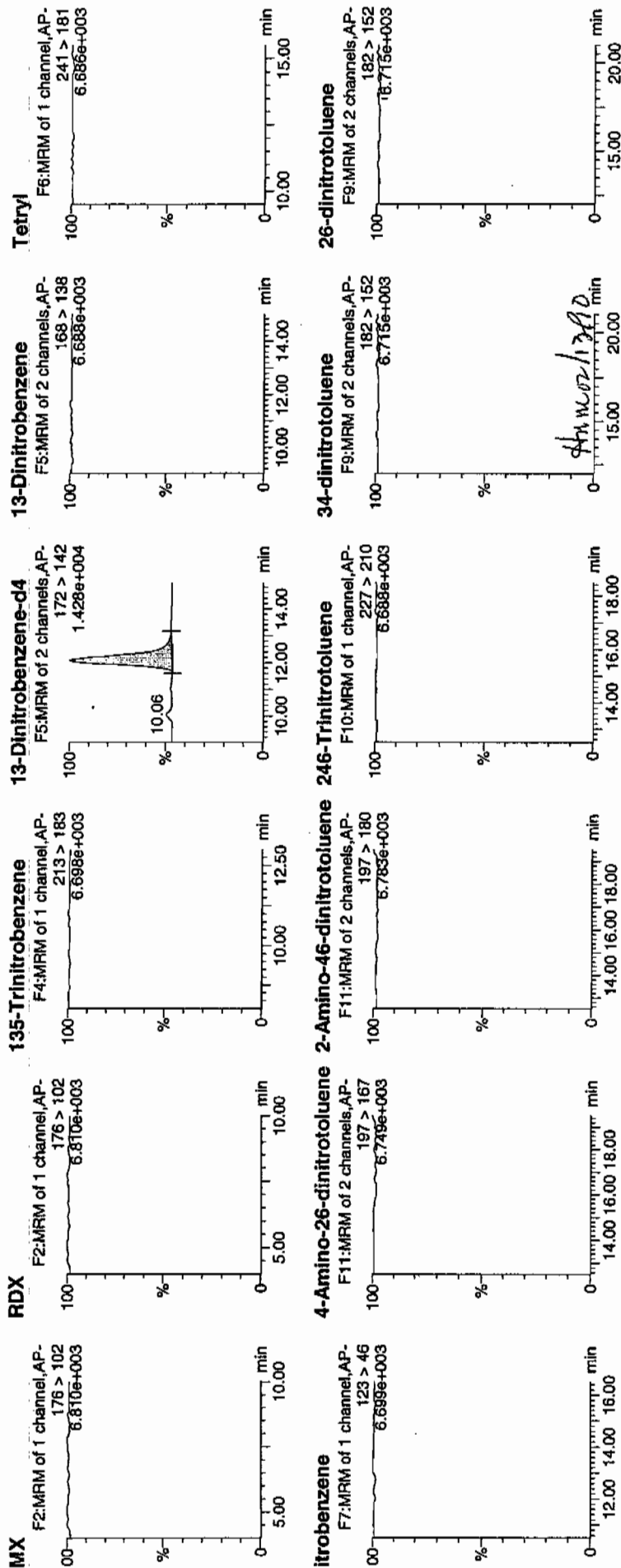
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ime: 13:11:28

2: XIBLK20

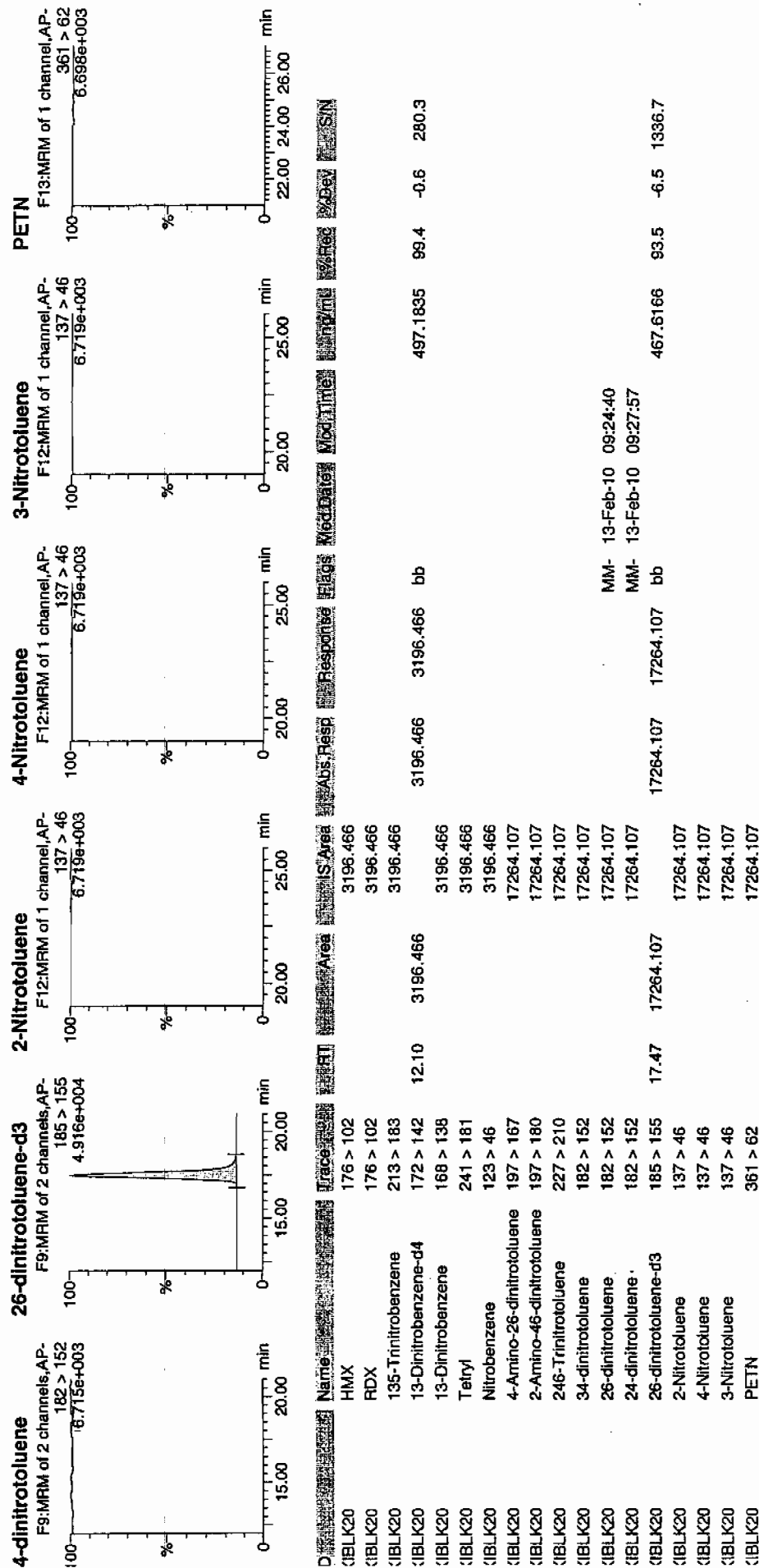
lal: 1:1,A

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

Dataset: C:\MASSLYNX\New_Exp\PRO\020810expA4.qld, Time: Sat Feb 13 09:30:34 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1390

Lab Code: GEL

Lab Sample ID: XIBLK21

Analysis Date: 12-FEB-10 19:05

GEL Data File: EXP0208205a

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	437.64
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	490.15
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
 3EL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA4.qld, Time: Sat Feb 13 09:30:34 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208205a

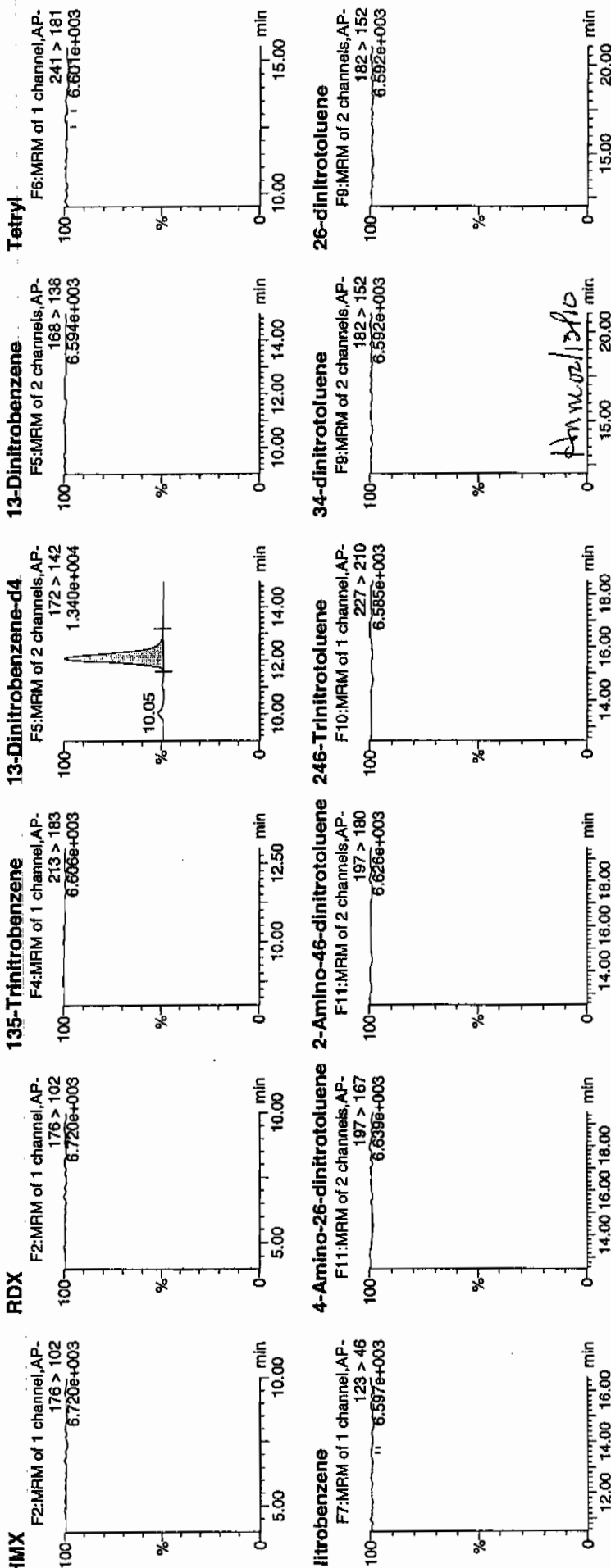
Date: 12-Feb-2010

Time: 19:05:45

D: XIBLK21

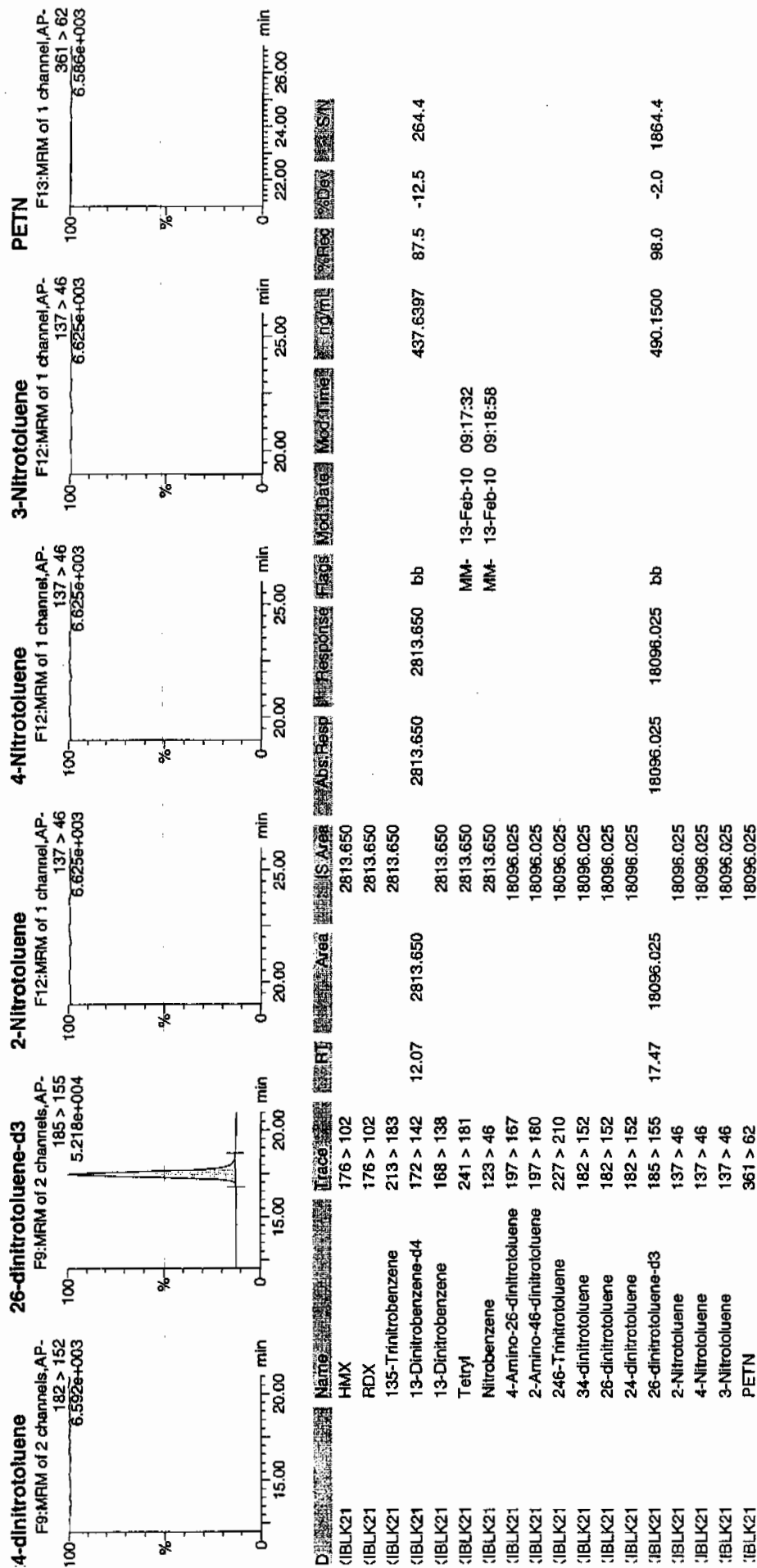
/ial: 1:1,A

1/12/10



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

Dataset: C:\MASSLYNX\New_Exp\PRO020810expA4.qld, Time: Sat Feb 13 09:30:34 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1390

Lab Code: GEL

Lab Sample ID: XIBLK22

Analysis Date: 13-FEB-10 01:29

GEL Data File: EXP0208218a

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
HMX	0	0
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	483.394
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	560.546
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0

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

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA4.qld, Time: Sat Feb 13 09:30:34 2010

Sample Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208218a

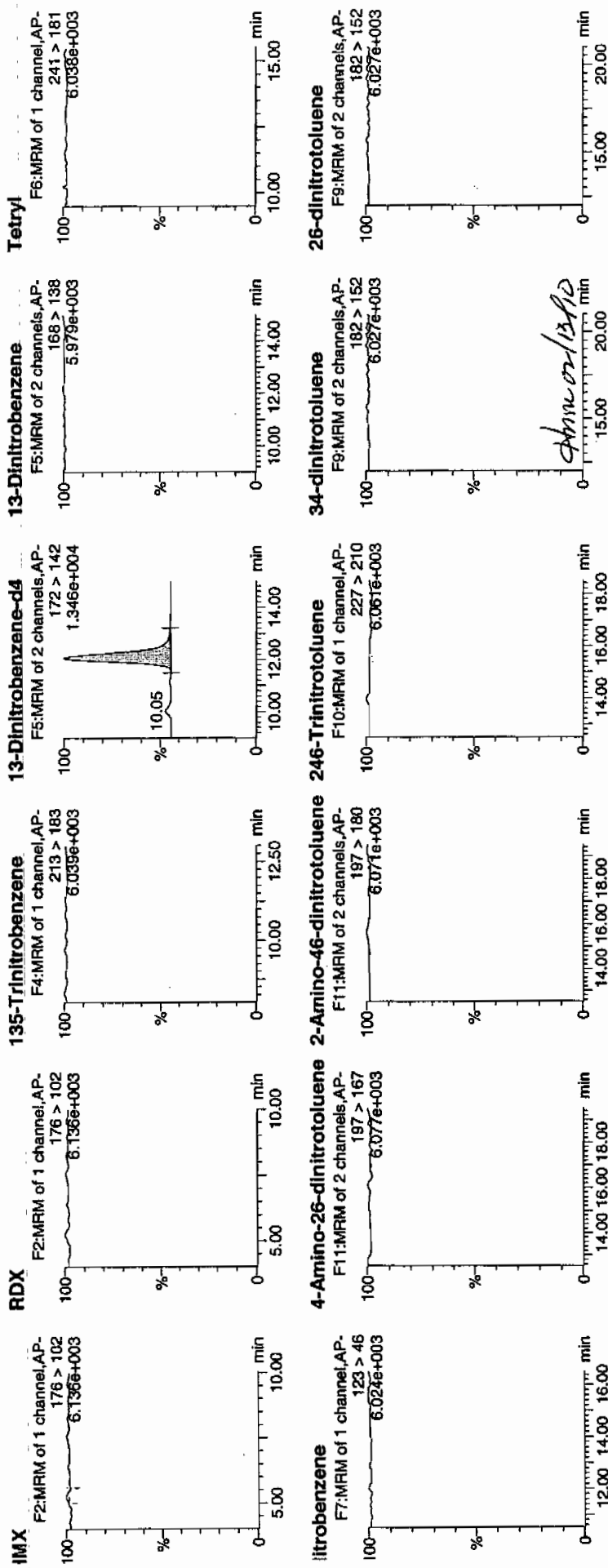
Date: 13-Feb-2010

Time: 01:29:19

D: XIBLK22

File: 1:1,A

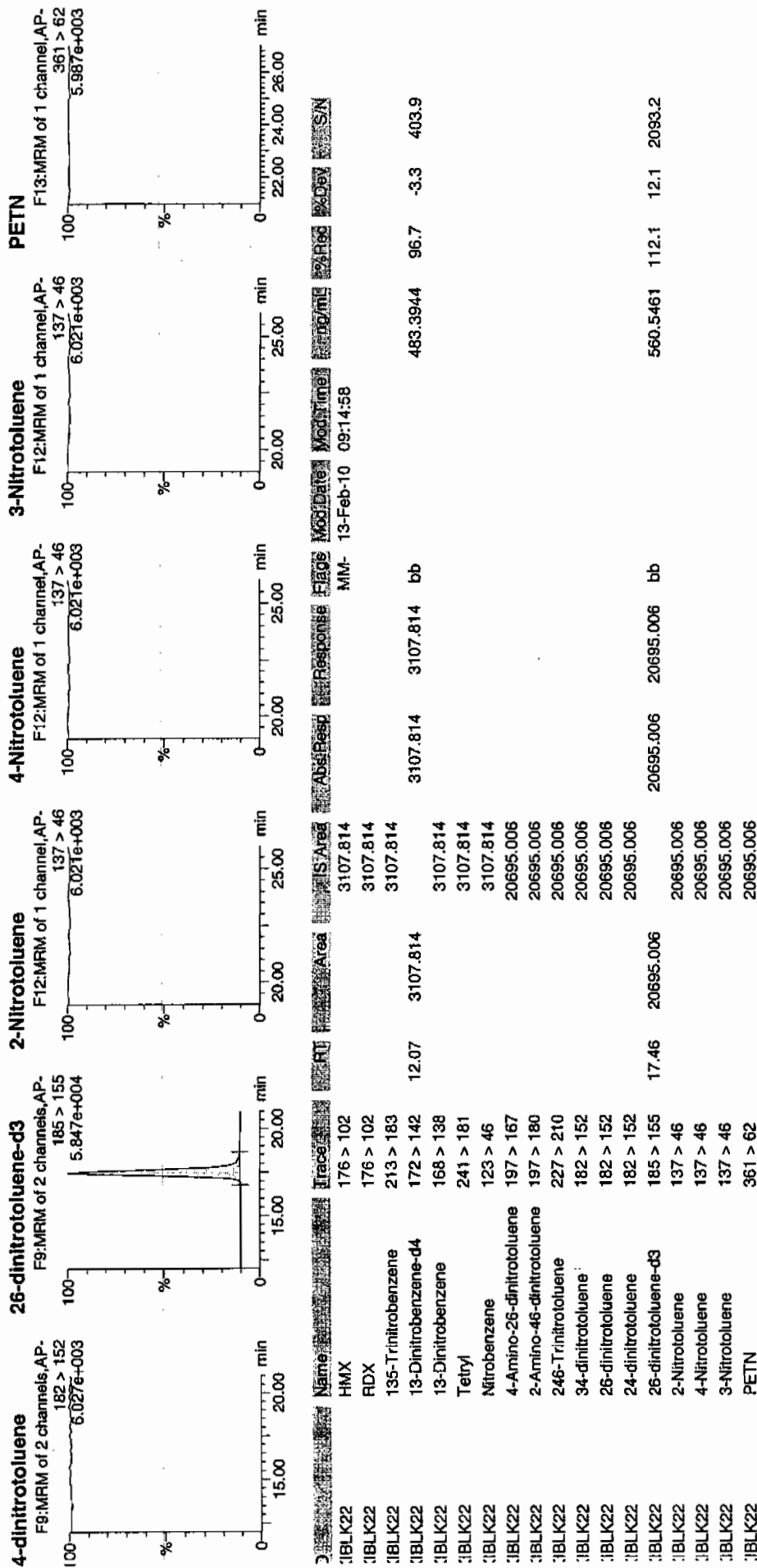
177
178
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Printed: Sat Feb 13 09:33:08 2010, Page 74 of 93

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

Dataset: C:\MASSLYNX\New_Exp\PRO\020810expA4.qld, Time: Sat Feb 13 09:30:34 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1390

Lab Code: GEL

Lab Sample ID: XIBLK23

Analysis Date: 13-FEB-10 05:25

GEL Data File: EXP0208226a

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	462.967
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	437.383
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
 iEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp\PRO\020810expA4.qld, Time: Sat Feb 13 09:30:34 2010

Sample Name: C:\MASSLYNX\NEW_EXP\PRO\Data\EXP0208226a

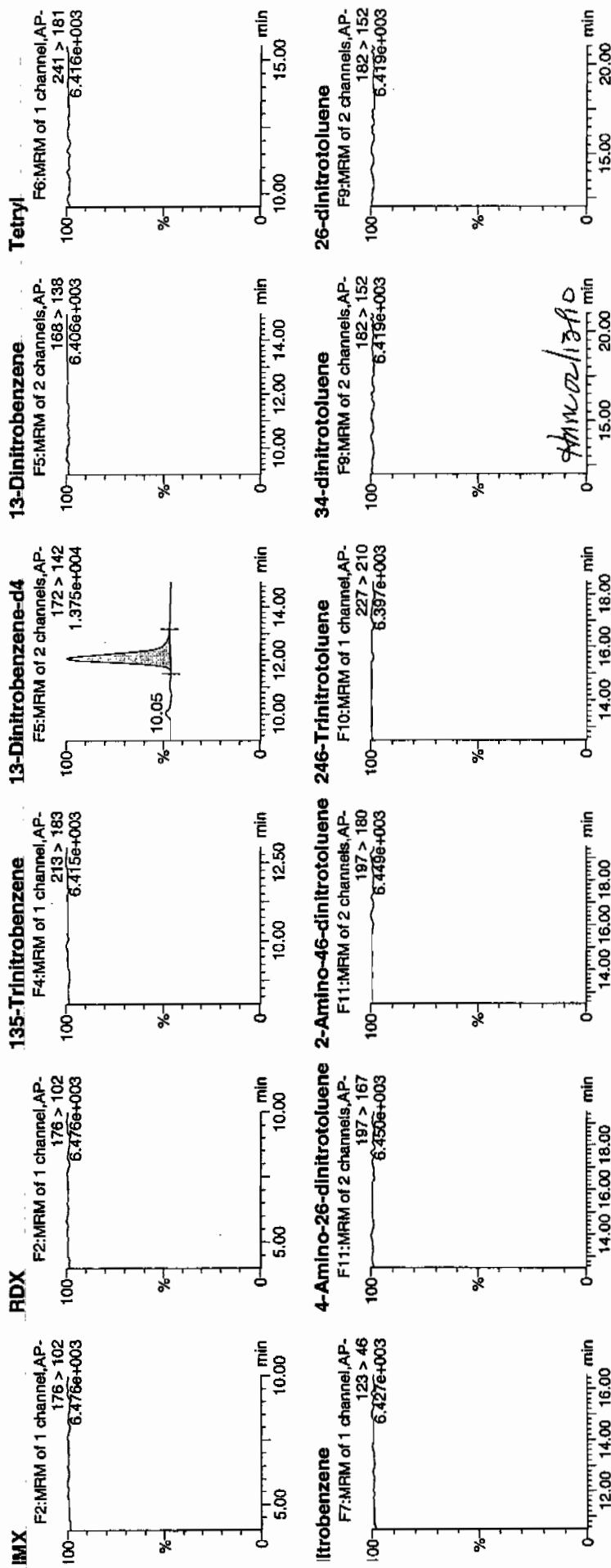
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Time: 05:25:41

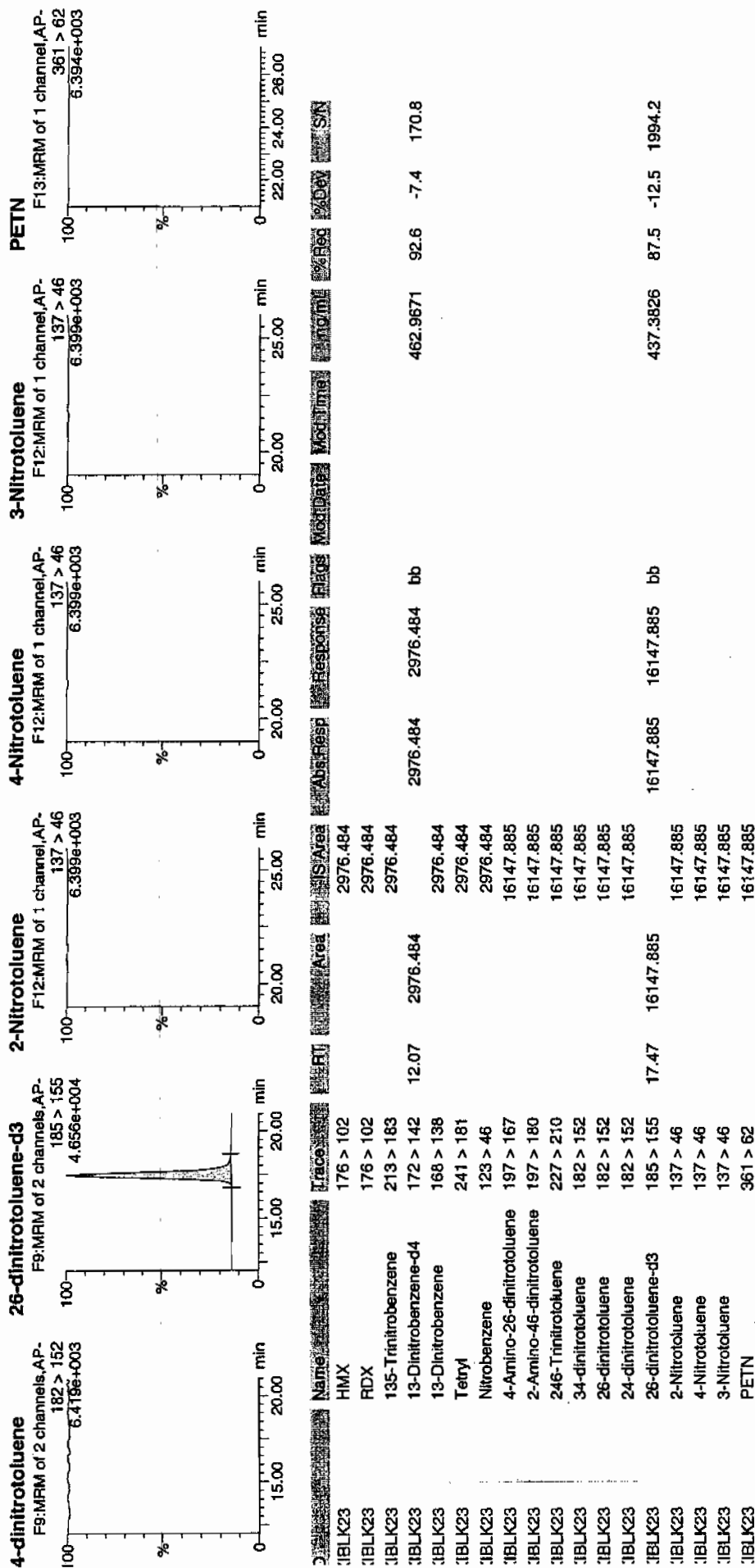
Job: XIBLK23

File: 1:1,A

177
 2/13/10



Dataset: C:\MASSLYNX\New_Exp_PROV020810expA4.qld, Time: Sat Feb 13 09:30:34 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1390

Lab Code: GEL

Lab Sample ID: XIBLK24

Analysis Date: 13-FEB-10 11:50

GEL Data File: EXP0208239a

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	501.563
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	508.159
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
3EL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208238a

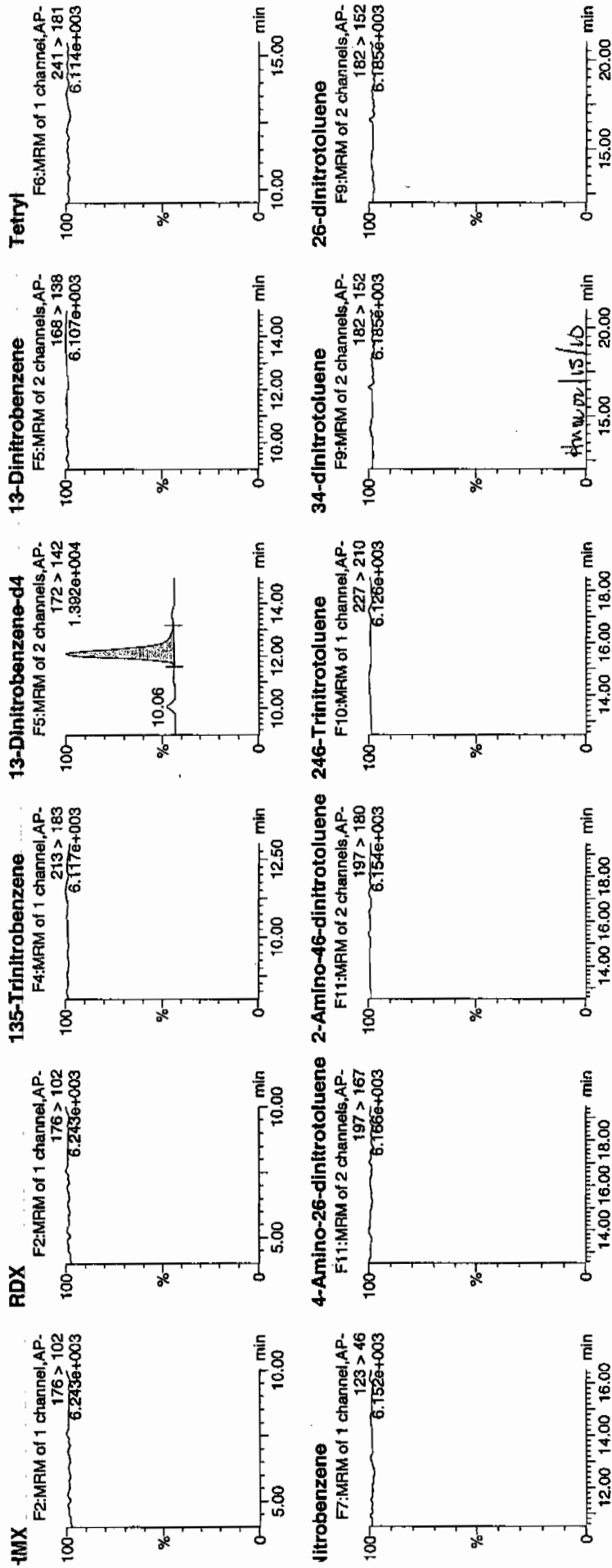
Date: 13-Feb-2010

Time: 11:50:16

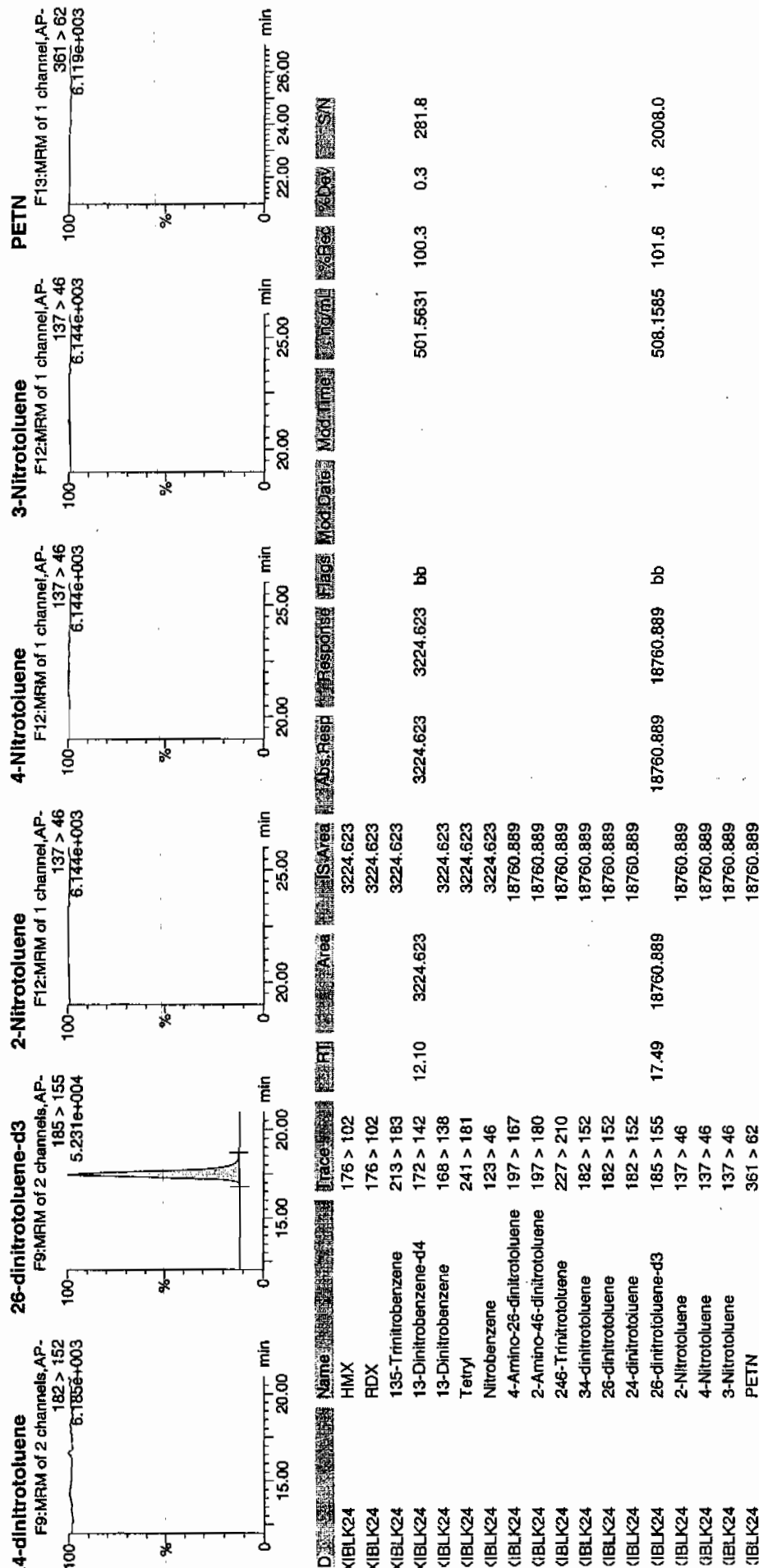
D: XIBLK24

Vial: 1:1,A

WAT
2/14/10



Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1390

Lab Code: GEL

Lab Sample ID: XIBLK25

Analysis Date: 13-FEB-10 18:13

GEL Data File: EXP0208252a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	540.338
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
2,4-Dinitrotoluene	0	0
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	554.342
2,4,6-Trinitrotoluene	0	0

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

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208252a

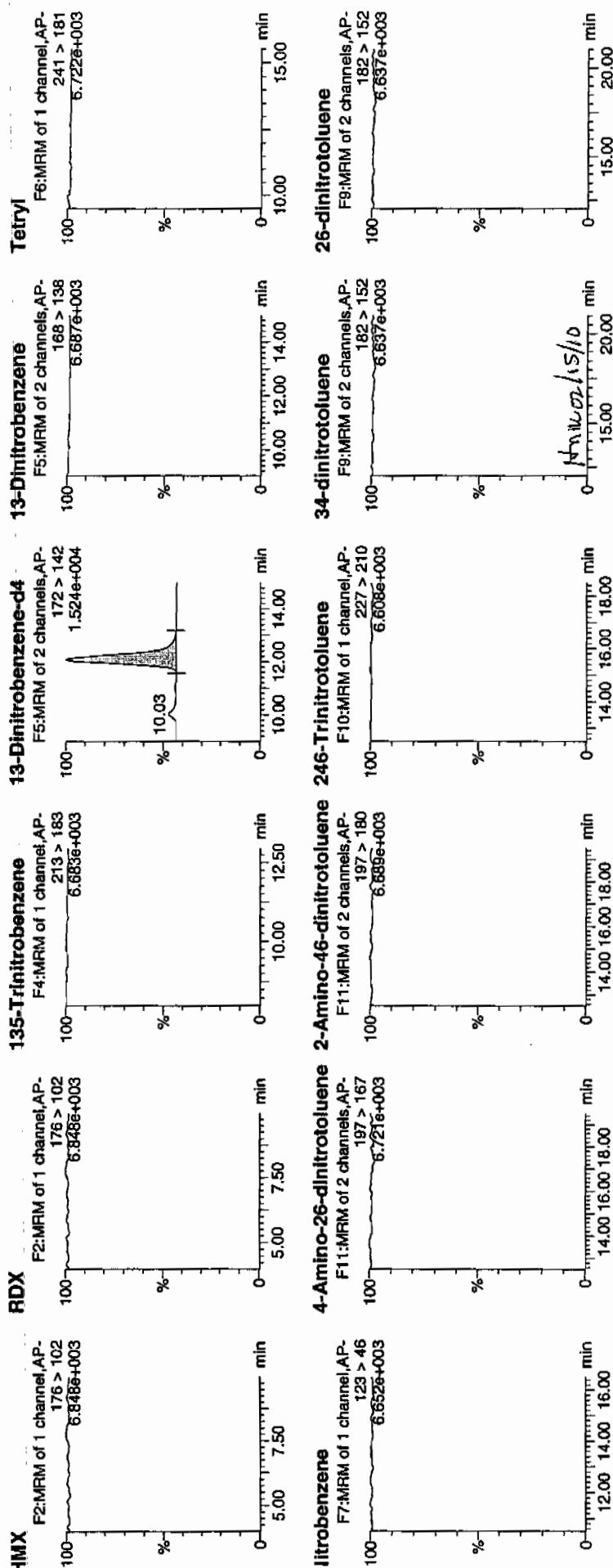
Date: 13-Feb-2010

Time: 18:13:44

D: XIBLK25

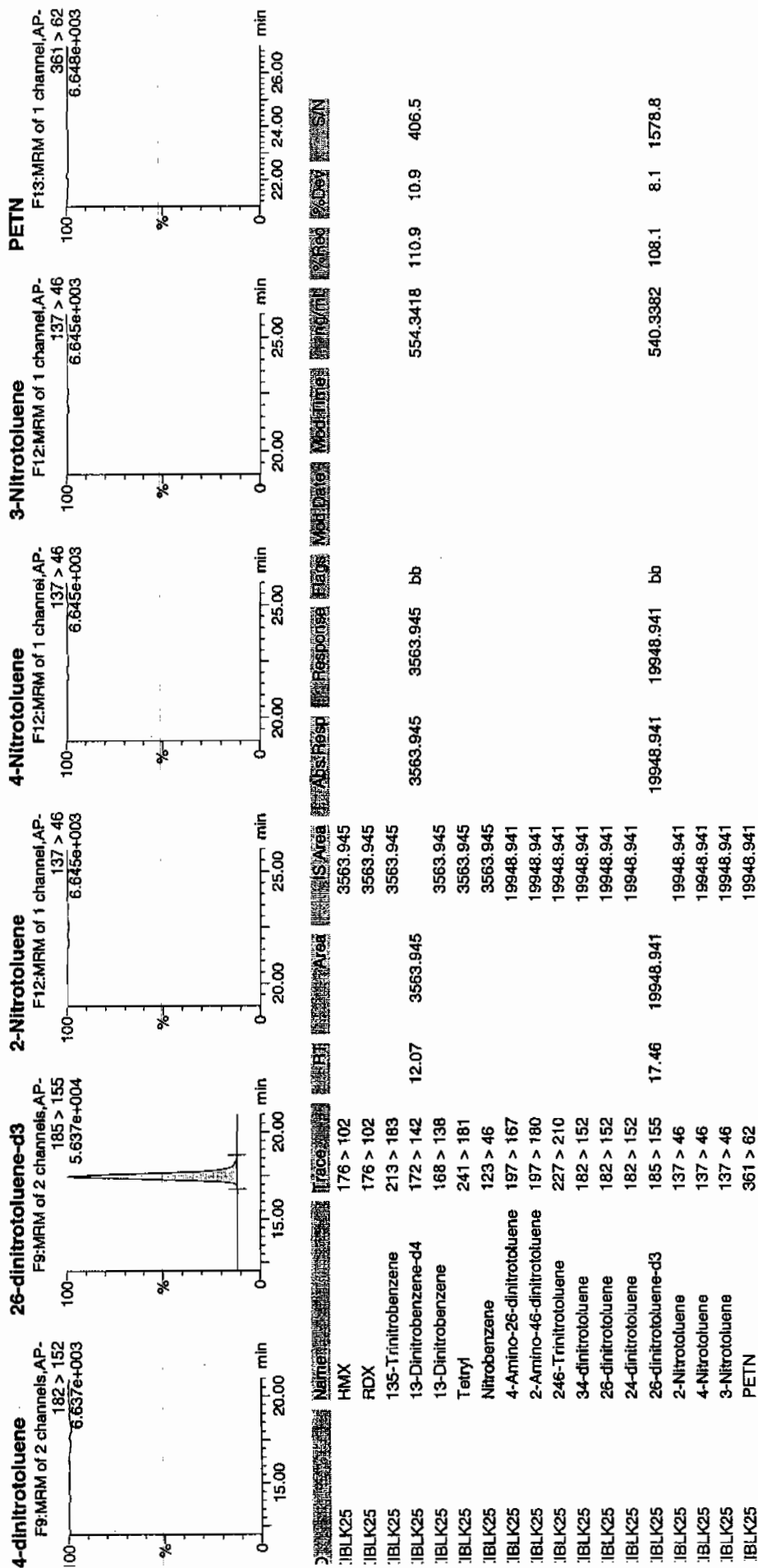
/ial: 1:1,A

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

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010



4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1390

Lab Code: GEL

Lab Sample ID: XIBLK26

Analysis Date: 14-FEB-10 00:37

GEL Data File: EXP0208265a

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	497.906
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	499.636
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 Feb 14 11:45:22 2010, Page 75 of 95

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

ataset: C:\MASSLYNX\New_Exp.PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010

ame: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208265a

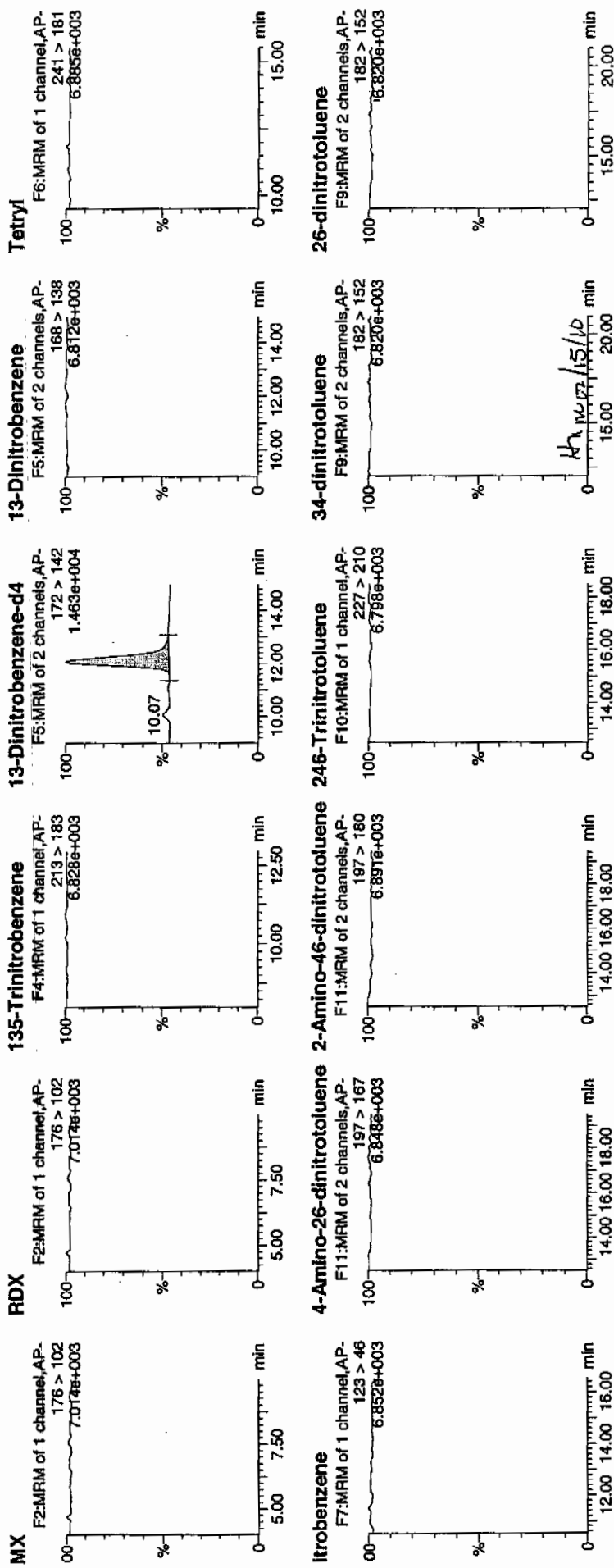
ate: 14-Feb-2010

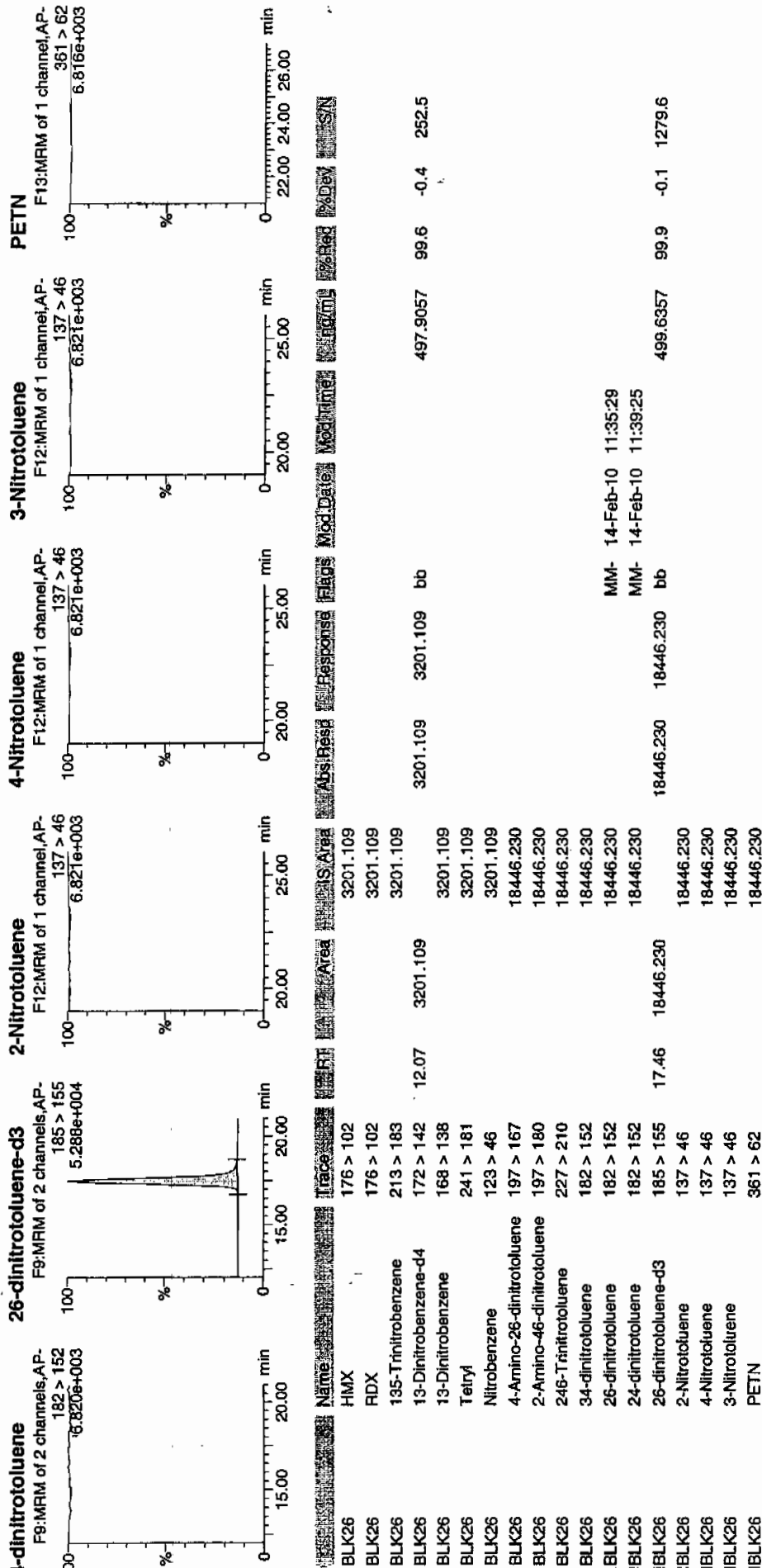
ime: 00:37:44

J: XIBLK26

ial: 1:1,A

11/11/10





4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1390

Lab Code: GEL

Lab Sample ID: XIBLK27

Analysis Date: 14-FEB-10 04:34

GEL Data File: EXP0208273a

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	548.138
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	533.174
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

Printed: Sun Feb 14 11:45:22 2010, Page 91 of 95

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

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208273a

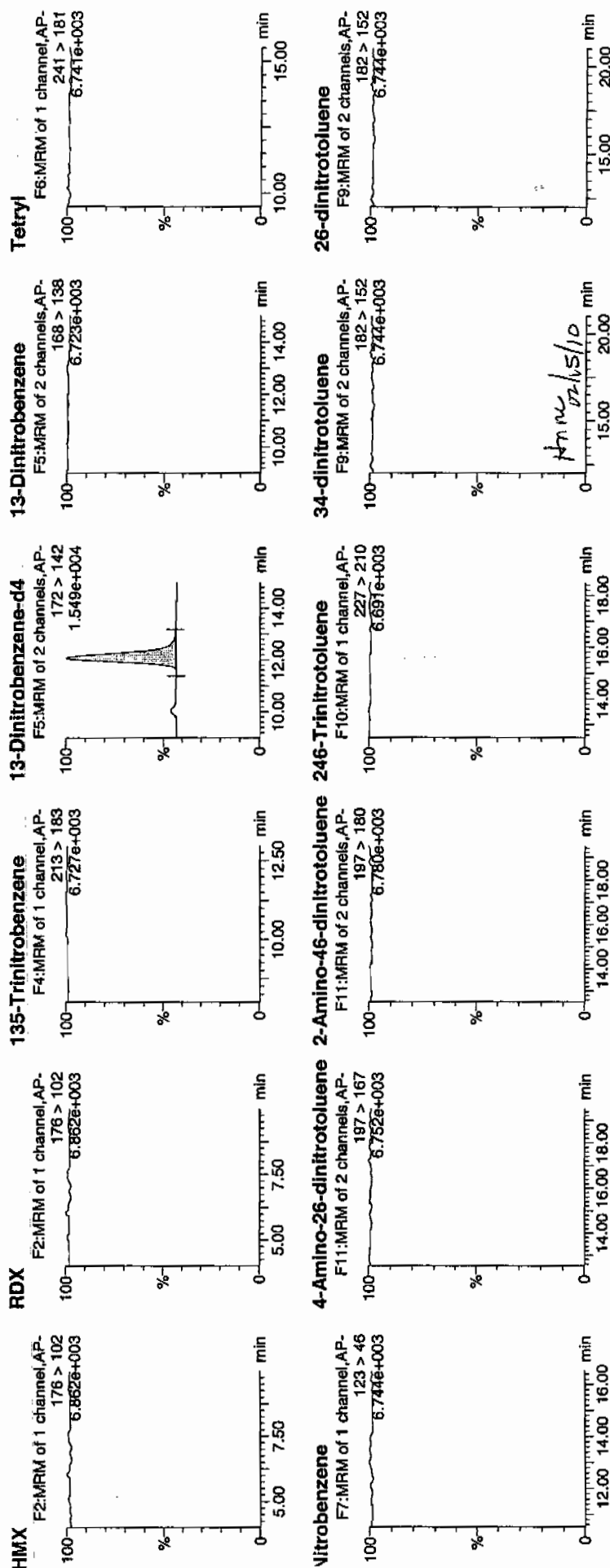
Date: 14-Feb-2010

Time: 04:34:04

ID: XIBLK27

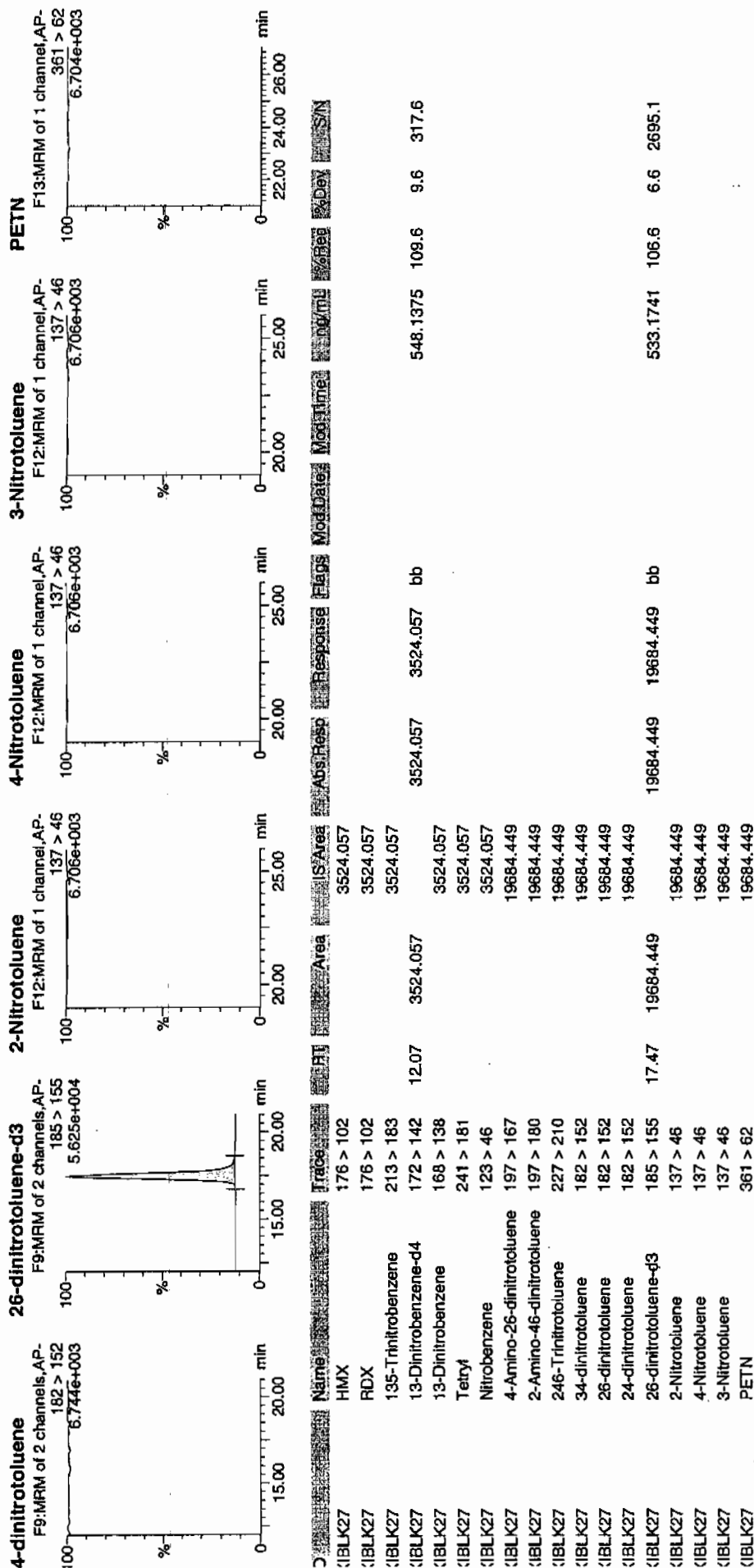
Vial: 1:1,A

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2/14/10



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

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1390

Lab Code: GEL

Lab Sample ID: XIBLK28

Analysis Date: 14-FEB-10 10:57

GEL Data File: EXP0208286a

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	549.775
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	537.816
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

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Quantify Sample Report
 2EL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA6.qld, Time: Mon Feb 15 07:43:55 2010

Sample: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208286a

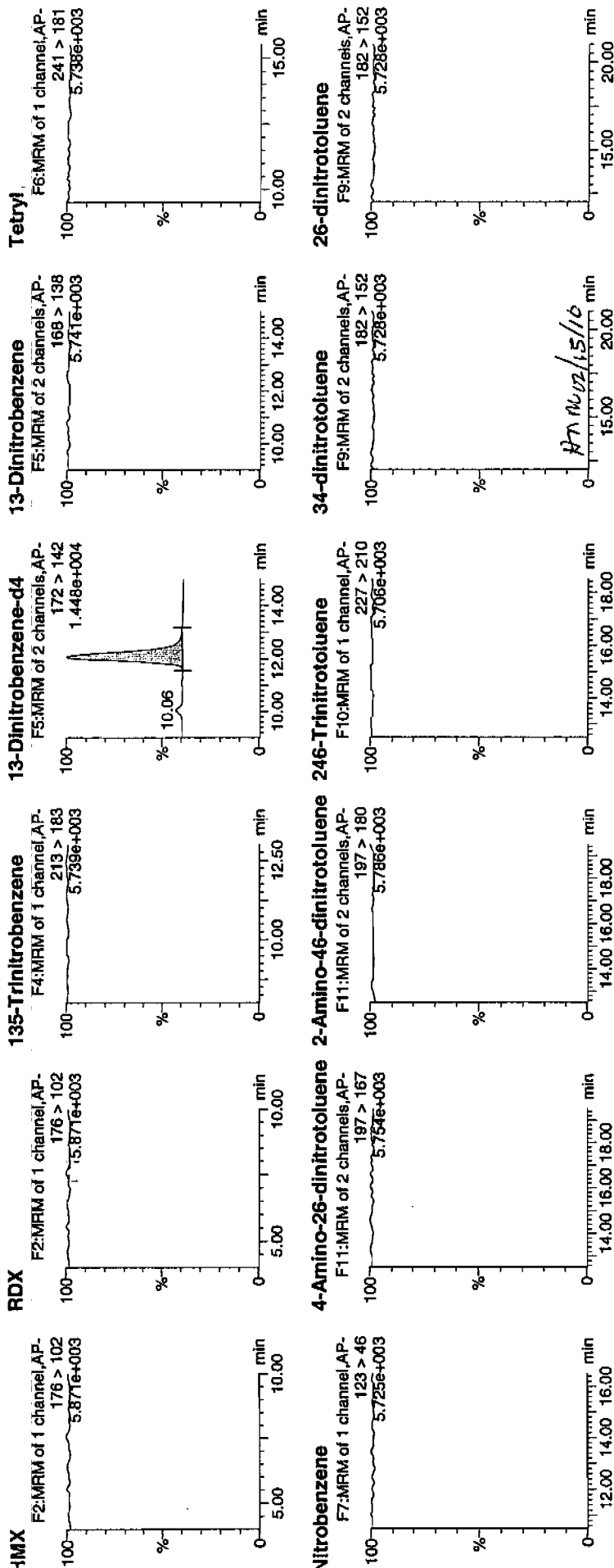
Date: 14-Feb-2010

Time: 10:57:40

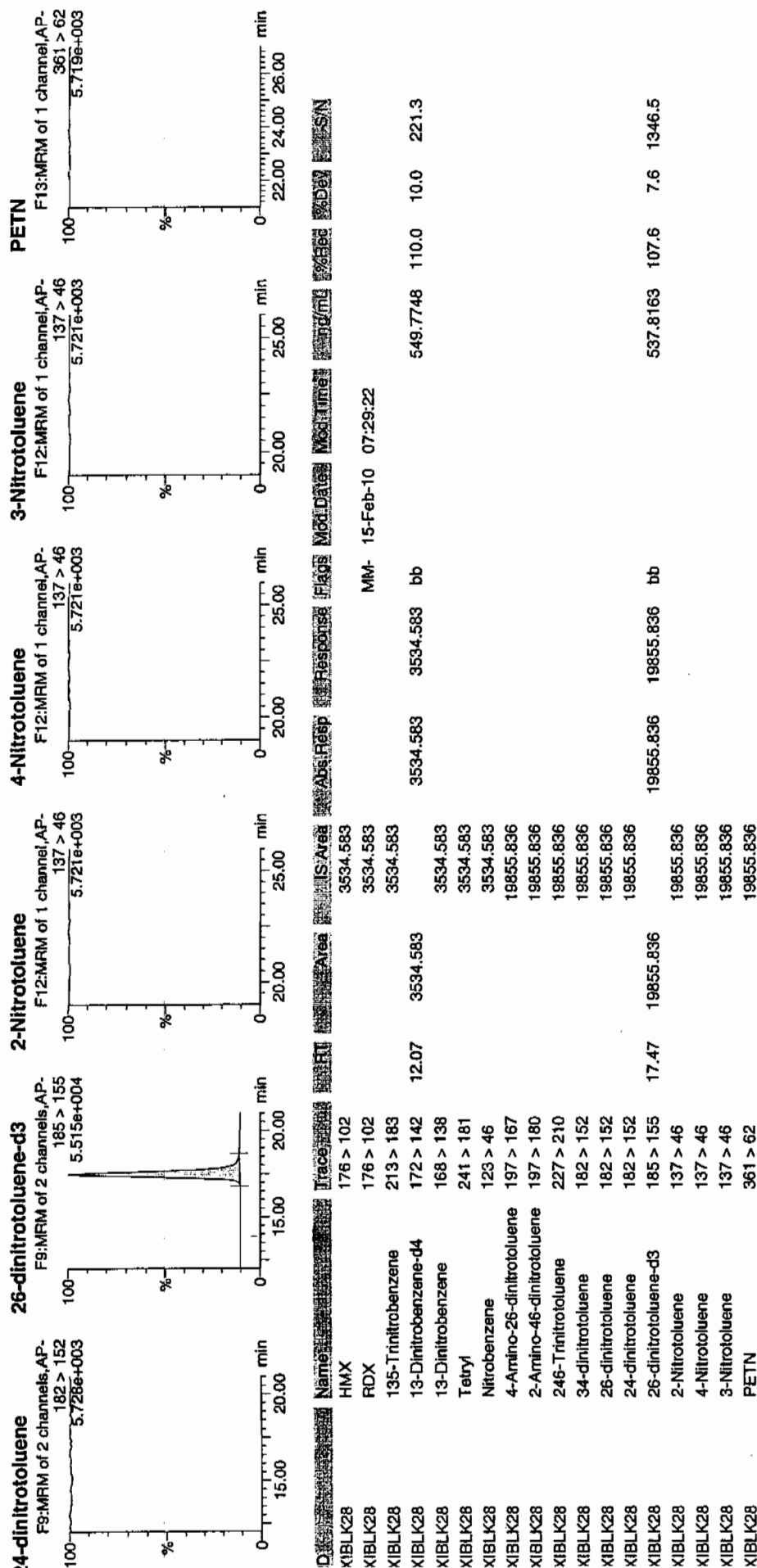
D: XIBLK28

/ial: 1:1,A

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Dataset: C:\MASSLYNX\New_Exp_PRO\020810expA6.qld, Time: Mon Feb 15 07:43:55 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1390

Lab Code: GEL

Lab Sample ID: XIBLK29

Analysis Date: 14-FEB-10 16:54

GEL Data File: EXP0208298a

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	576.011
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	570.792
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
 JEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA6.qld, Time: Mon Feb 15 07:43:55 2010

Sample Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208298a

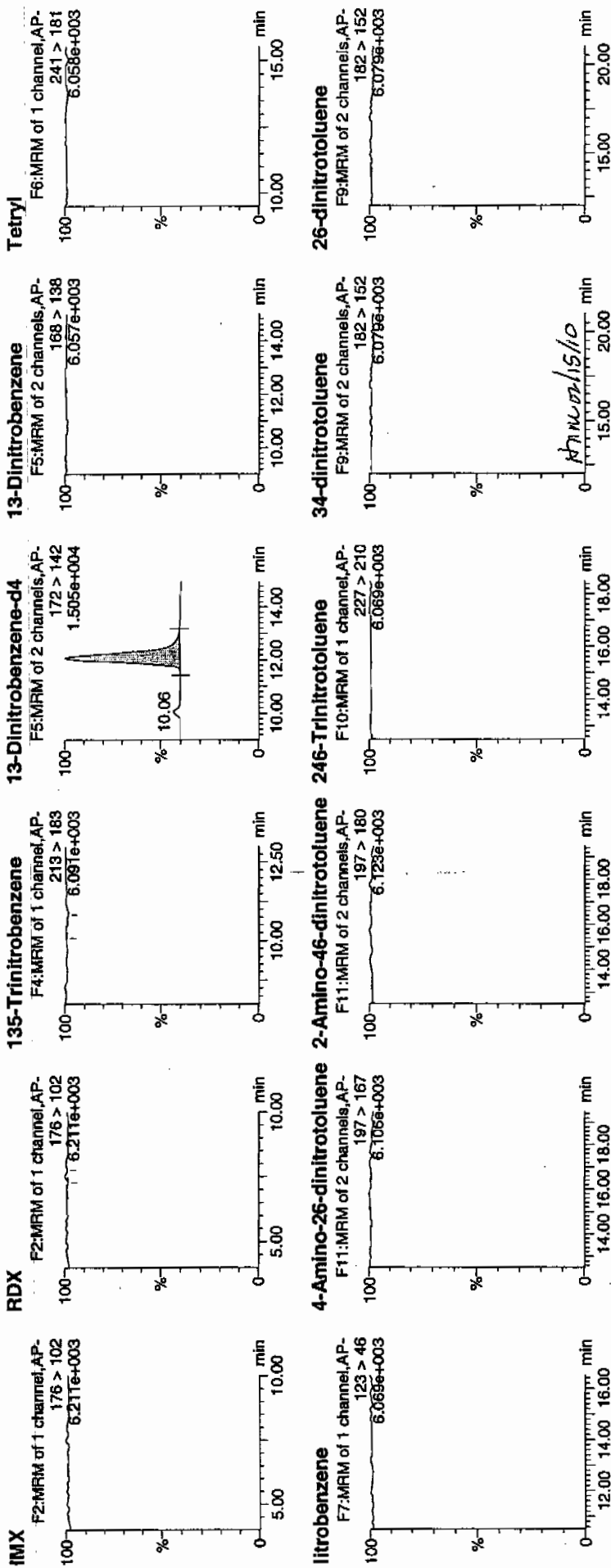
Date: 14-Feb-2010

Time: 16:54:03

D: XIBLK29

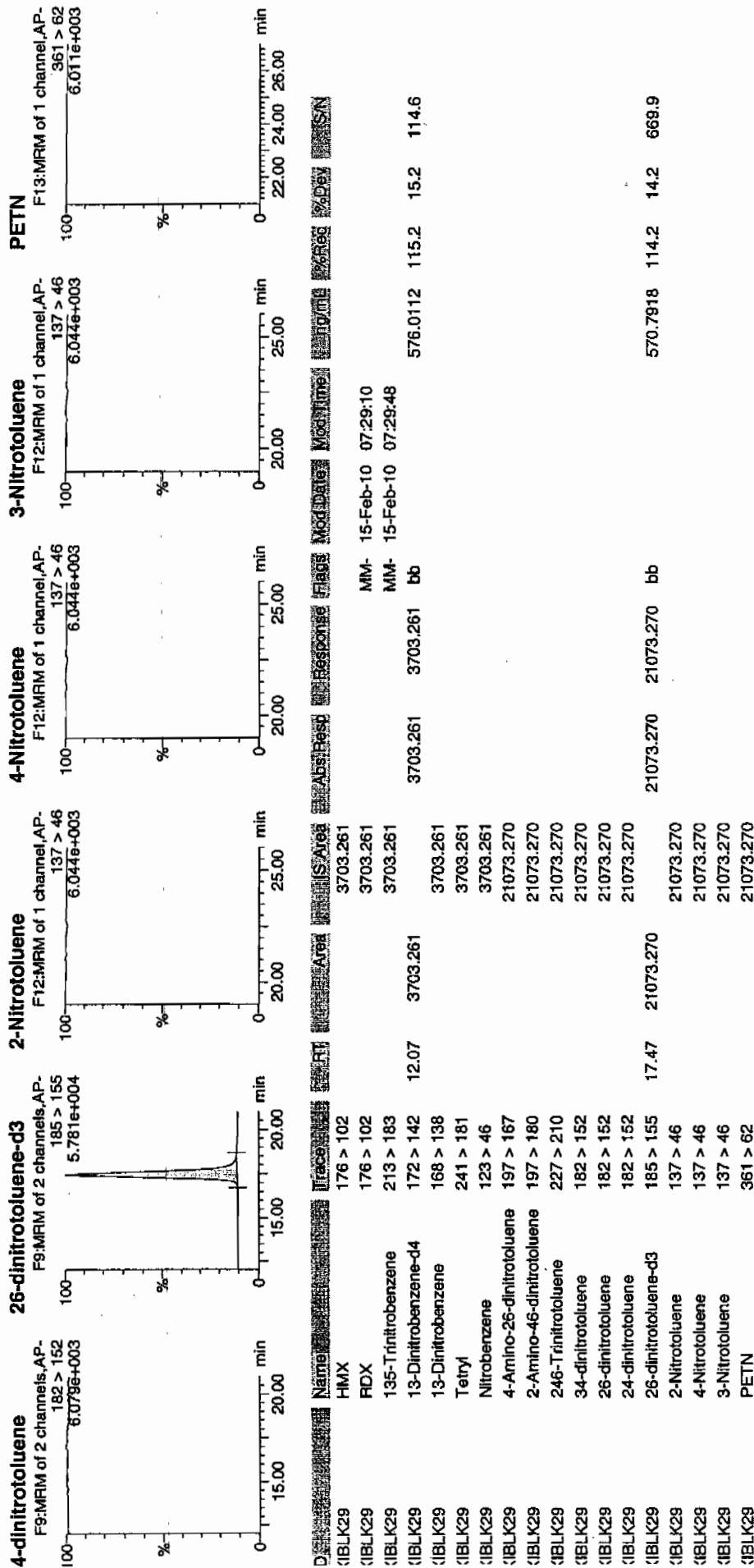
File: 1:1,A

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

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA6.qld, Time: Mon Feb 15 07:43:55 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1390

Lab Code: GEL

Lab Sample ID: XIBLK30

Analysis Date: 14-FEB-10 20:50

GEL Data File: EXP0208306a

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	534.131
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	564.742
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0

Quantify Sample Report
3EL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA6.qld, Time: Mon Feb 15 07:43:55 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208306a

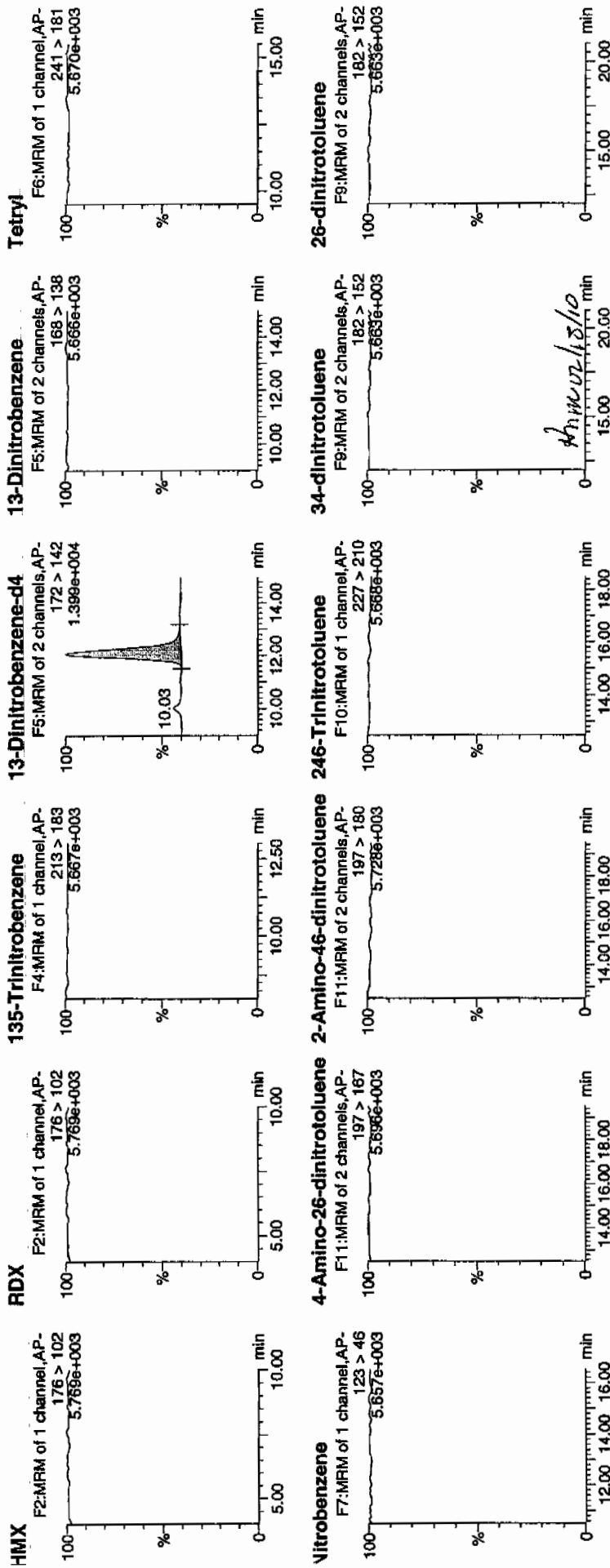
Date: 14-Feb-2010

Time: 20:50:24

ID: XIBLK30

Vial: 1:1,A

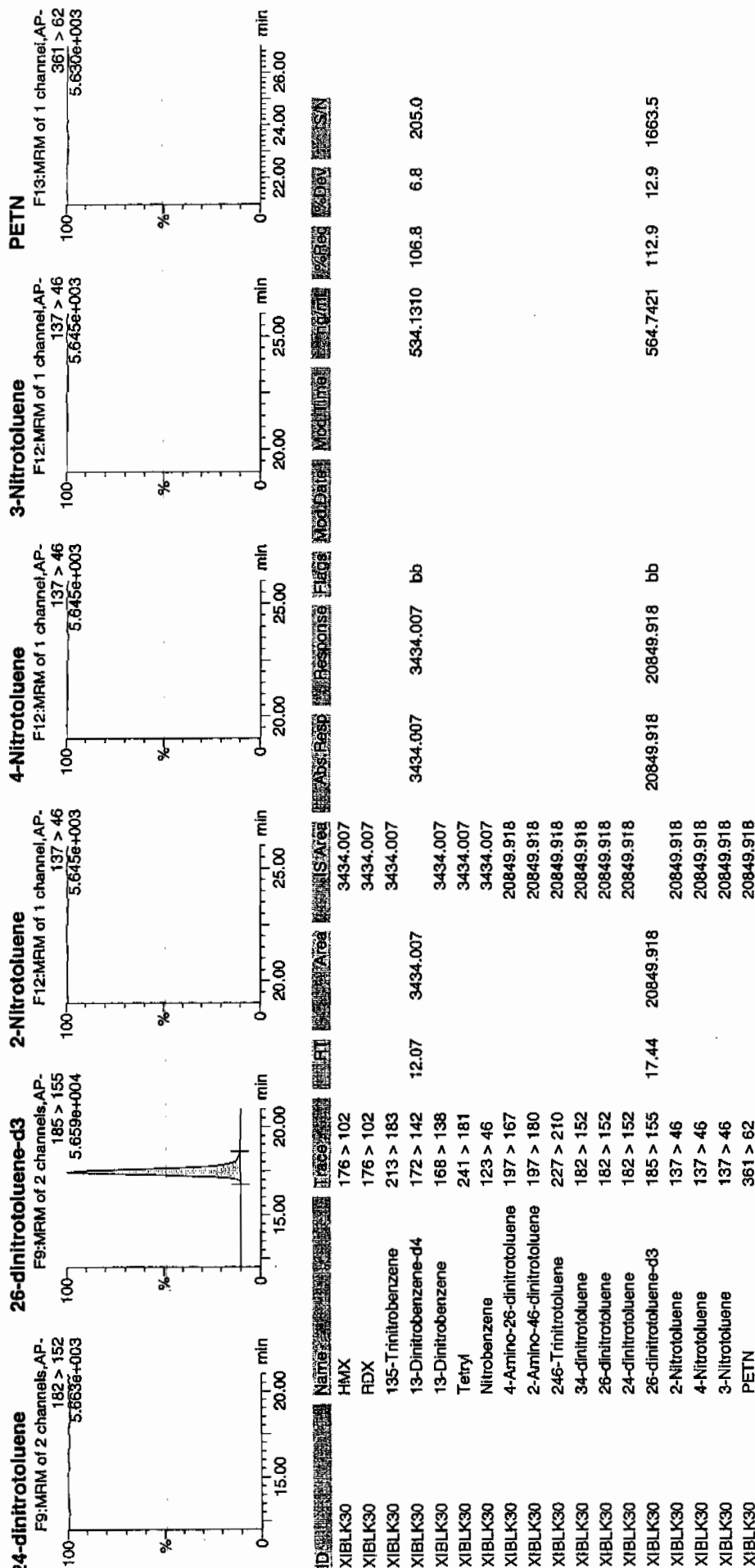
WAT
2/15/10



Printed: Mon Feb 15 07:46:07 2010, Page 64 of 67

Quantify Sample Report
3EL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp_PRO\020810expA6.qld, Time: Mon Feb 15 07:43:55 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1390

Lab Code: GEL

Lab Sample ID: XIBLK02

Analysis Date: 13-FEB-10 12:34

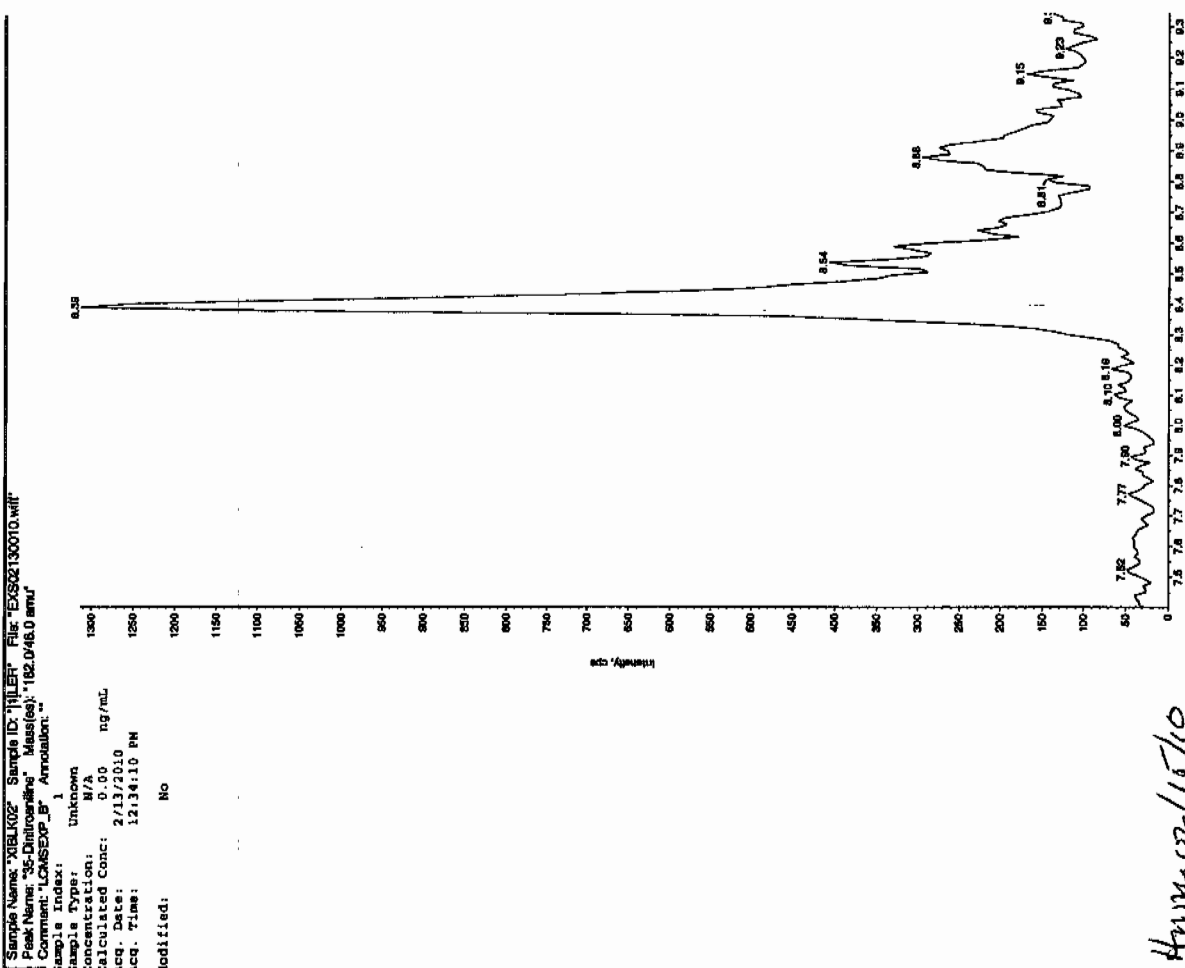
GEL Data File: EXS02130010.wiff

Instrument ID: LCMSMS

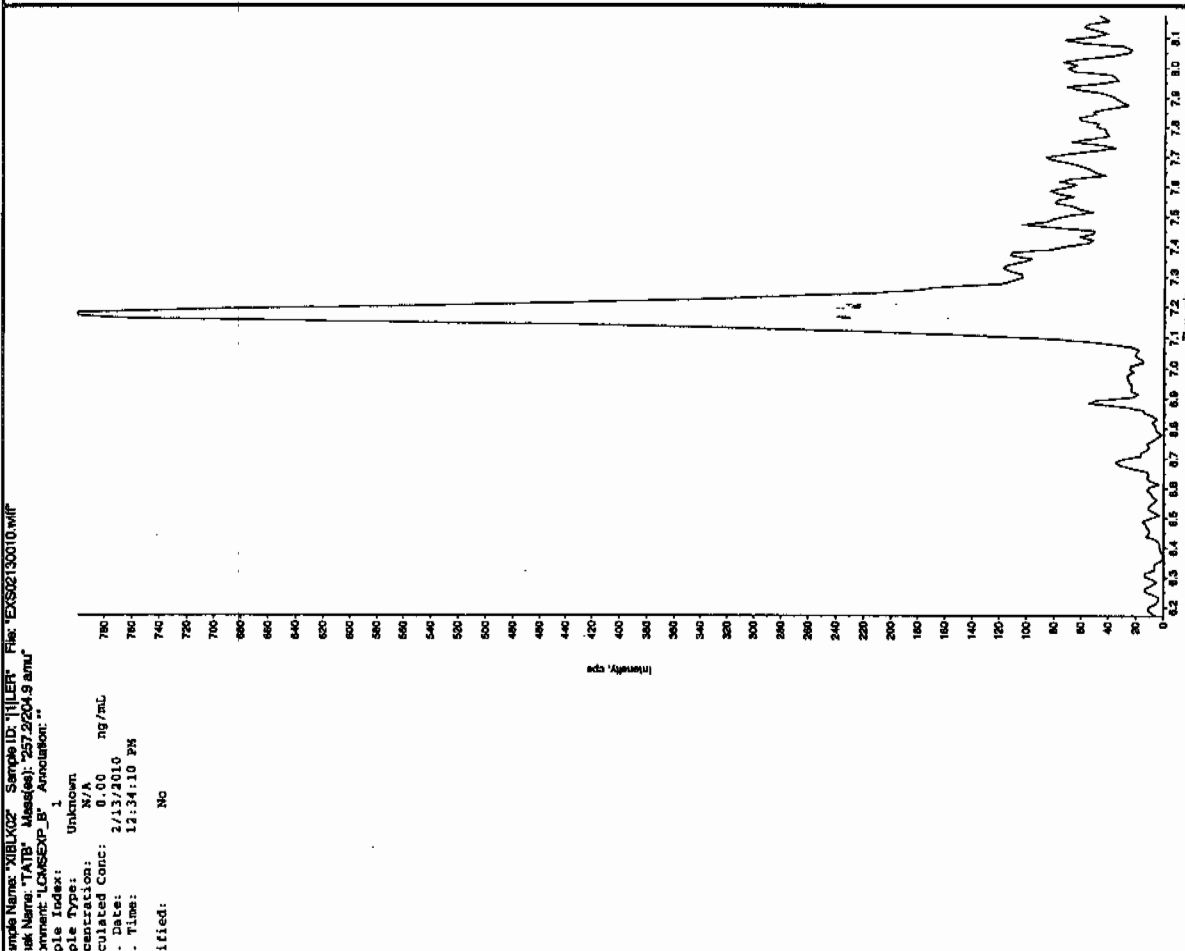
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	9.65
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

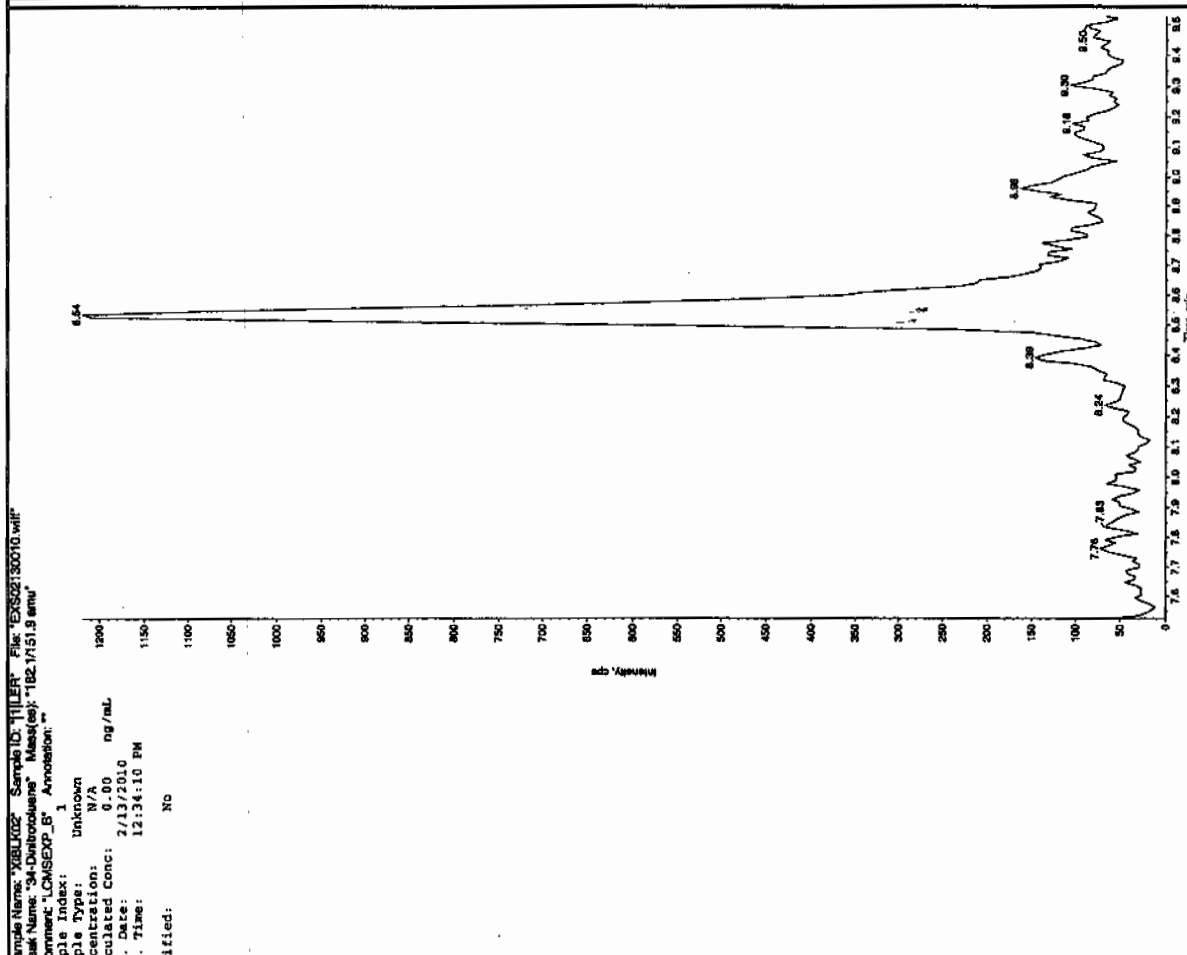
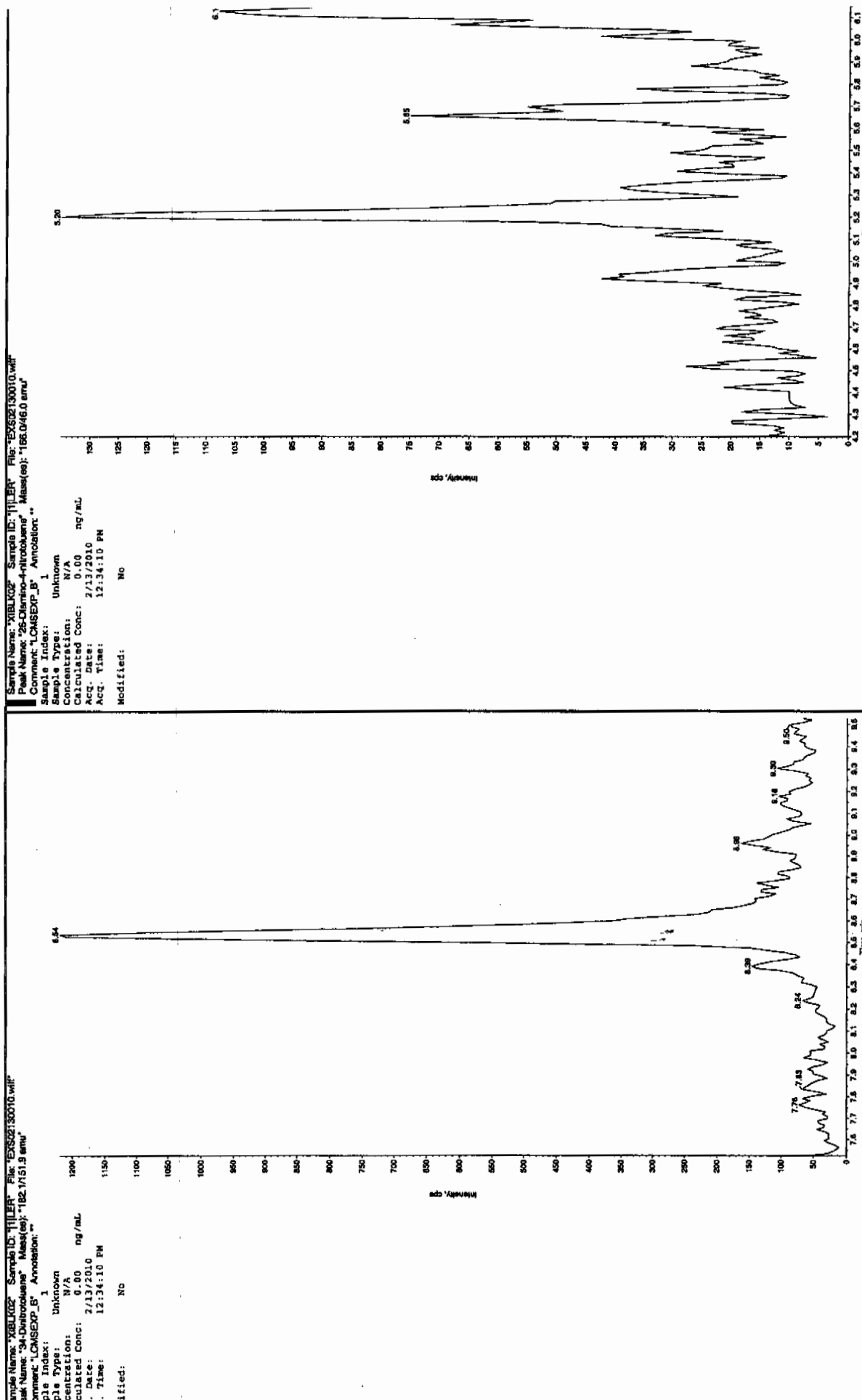
Jan 2/15/10



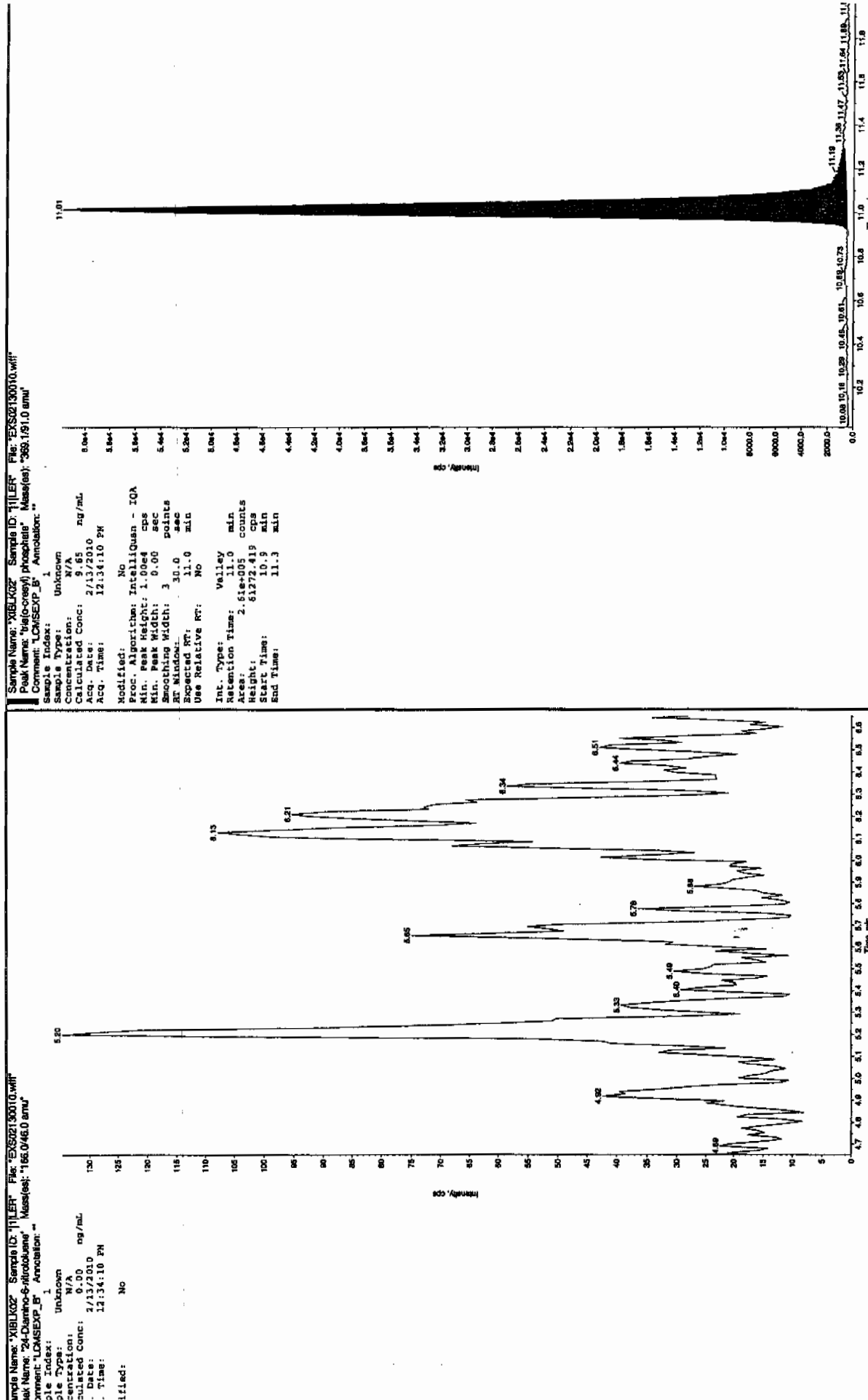
Jan 02/15/10



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 LCMSENS#4

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1390

Lab Code: GEL

Lab Sample ID: XIBLK03

Analysis Date: 13-FEB-10 13:05

GEL Data File: EXS02130012.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	3.76
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Jan 21/10

Sample Name: "XELK03" Sample ID: "JILLER" File: "EX502130012.wif"

Peak Name: "ATB" Mass(es): "267.2204.9 amu"

Comment: "LCMS EXP_B" Annotation: "

Sample Index: 1

Sample Type: Unknown

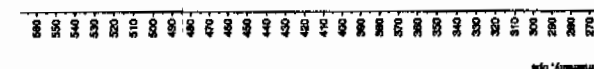
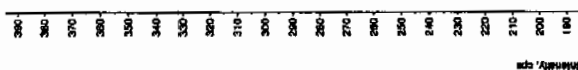
Concentration: N/A

Calculated Conc: 0.00 ng/mL

Acq. Date: 2/13/2010

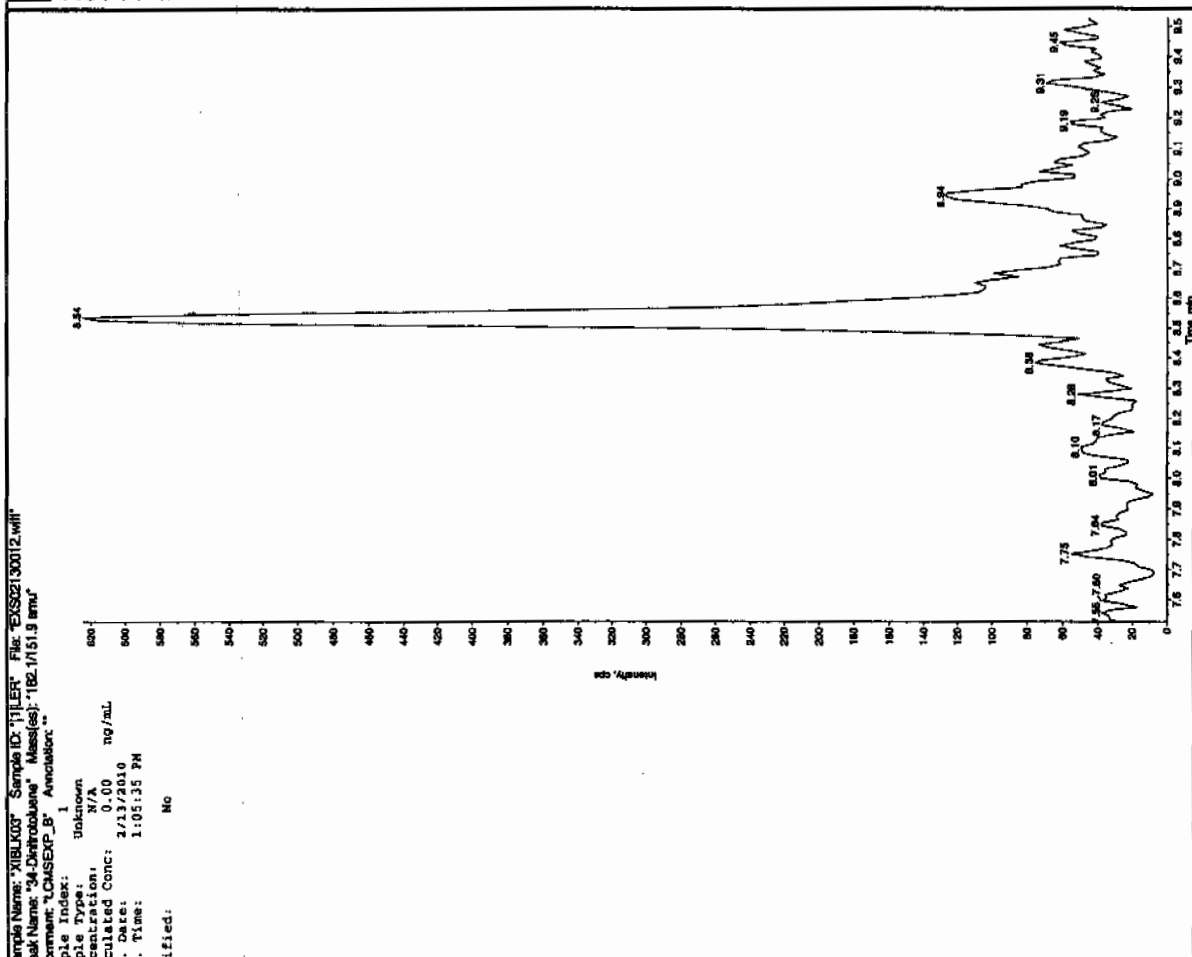
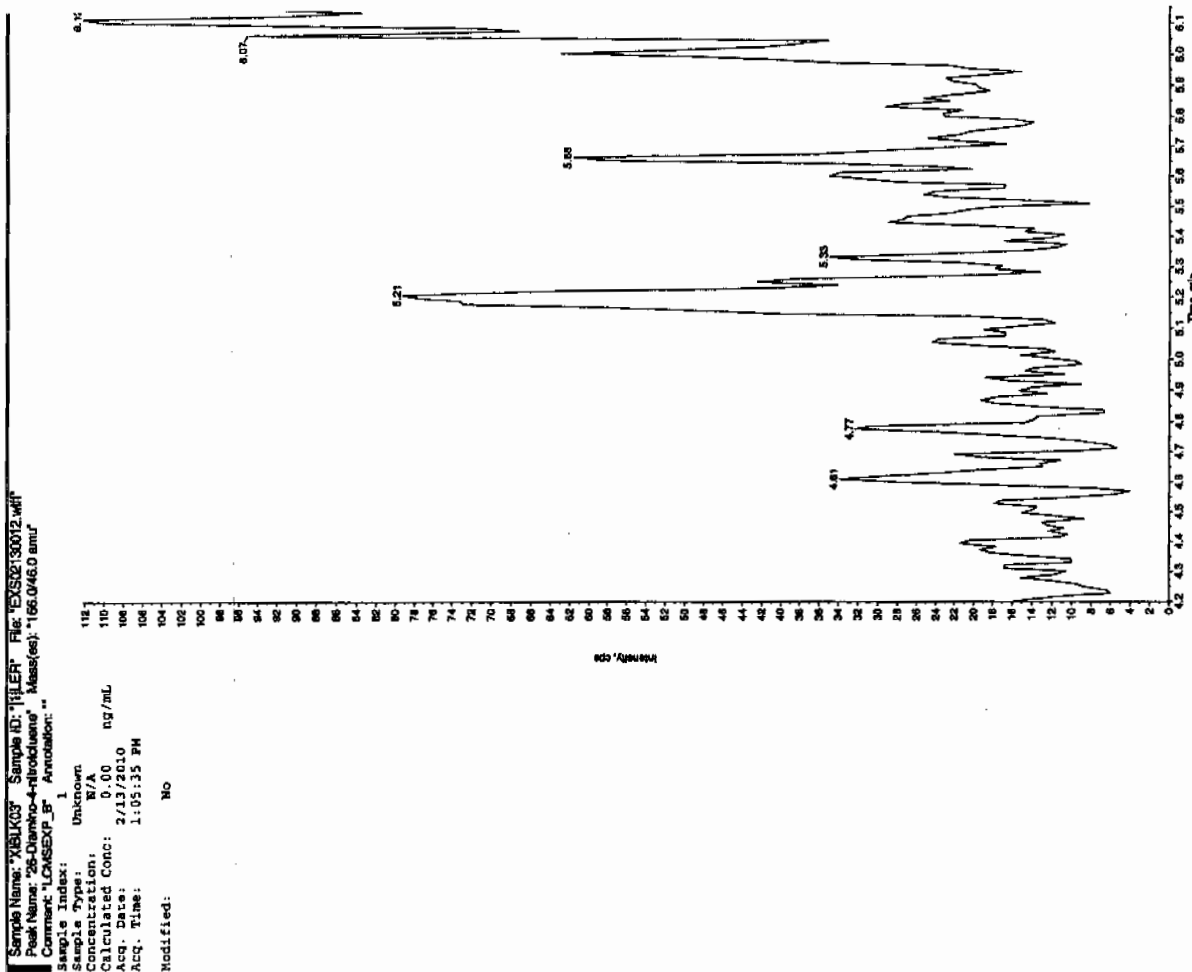
Acq. Time: 1:05:35 PM

Modified: No

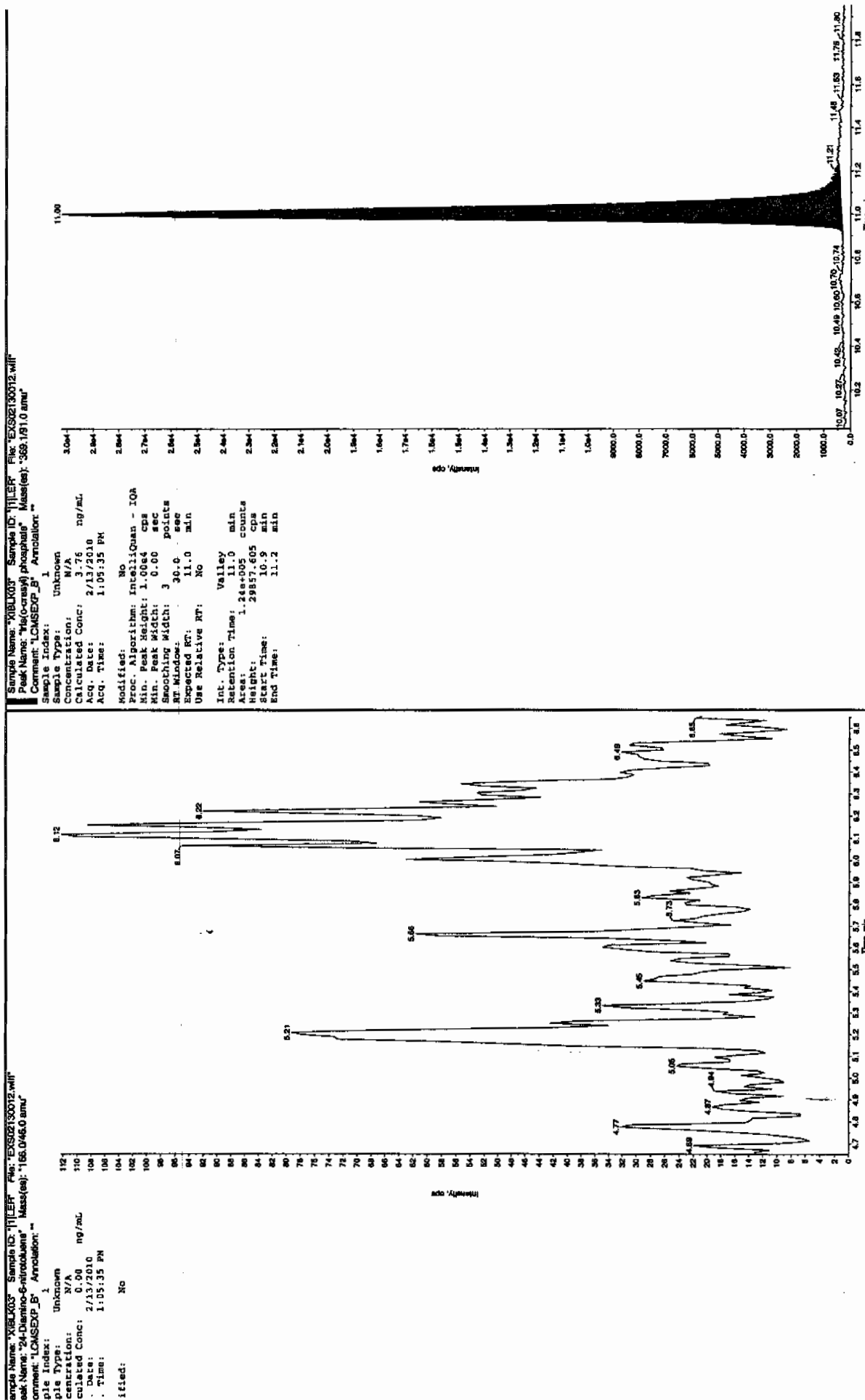


EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Jan 21/10



3L 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): 10-1390

Lab Code: GEL

Lab Sample ID: XIBLK04

Analysis Date: 13-FEB-10 16:29

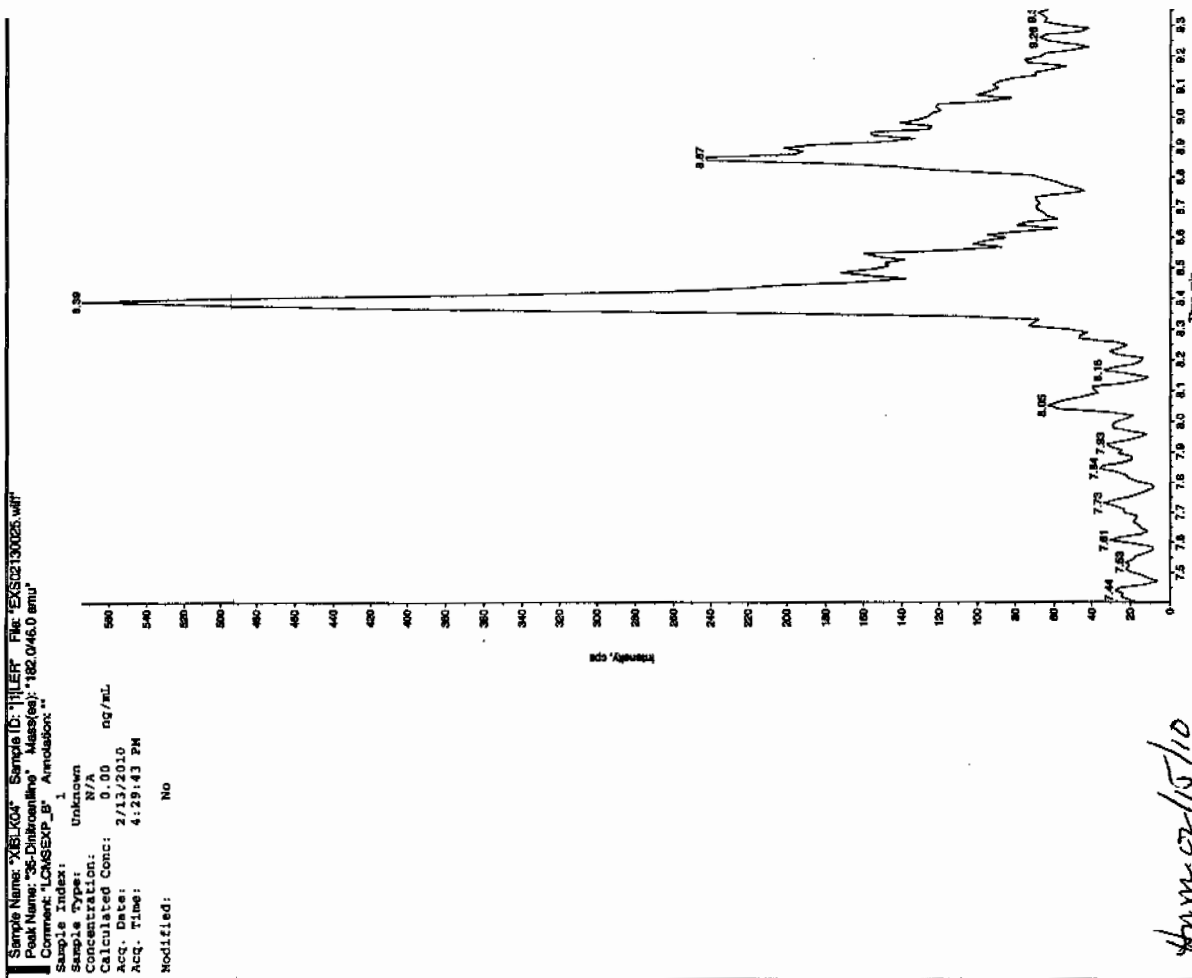
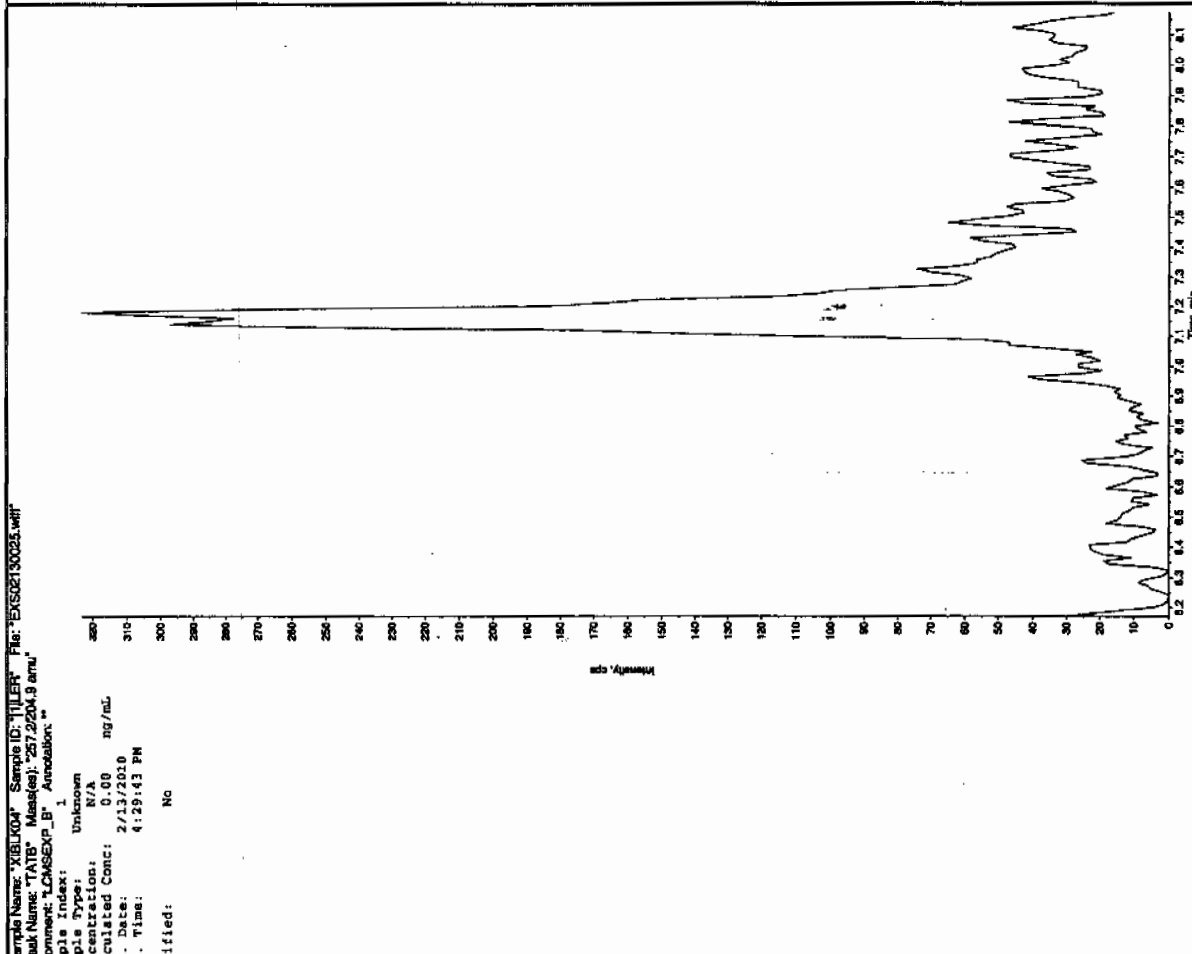
GEL Data File: EXS02130025.wiff

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

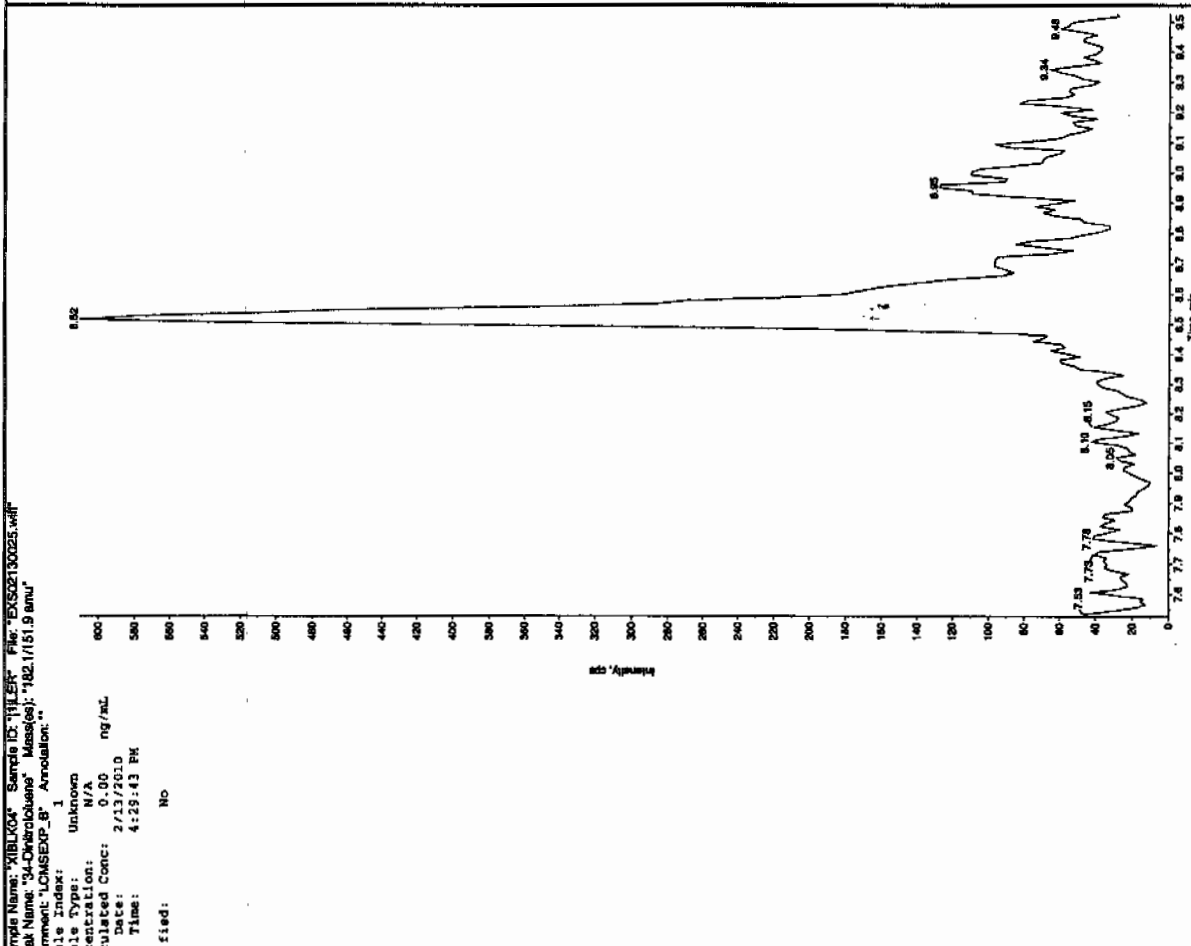
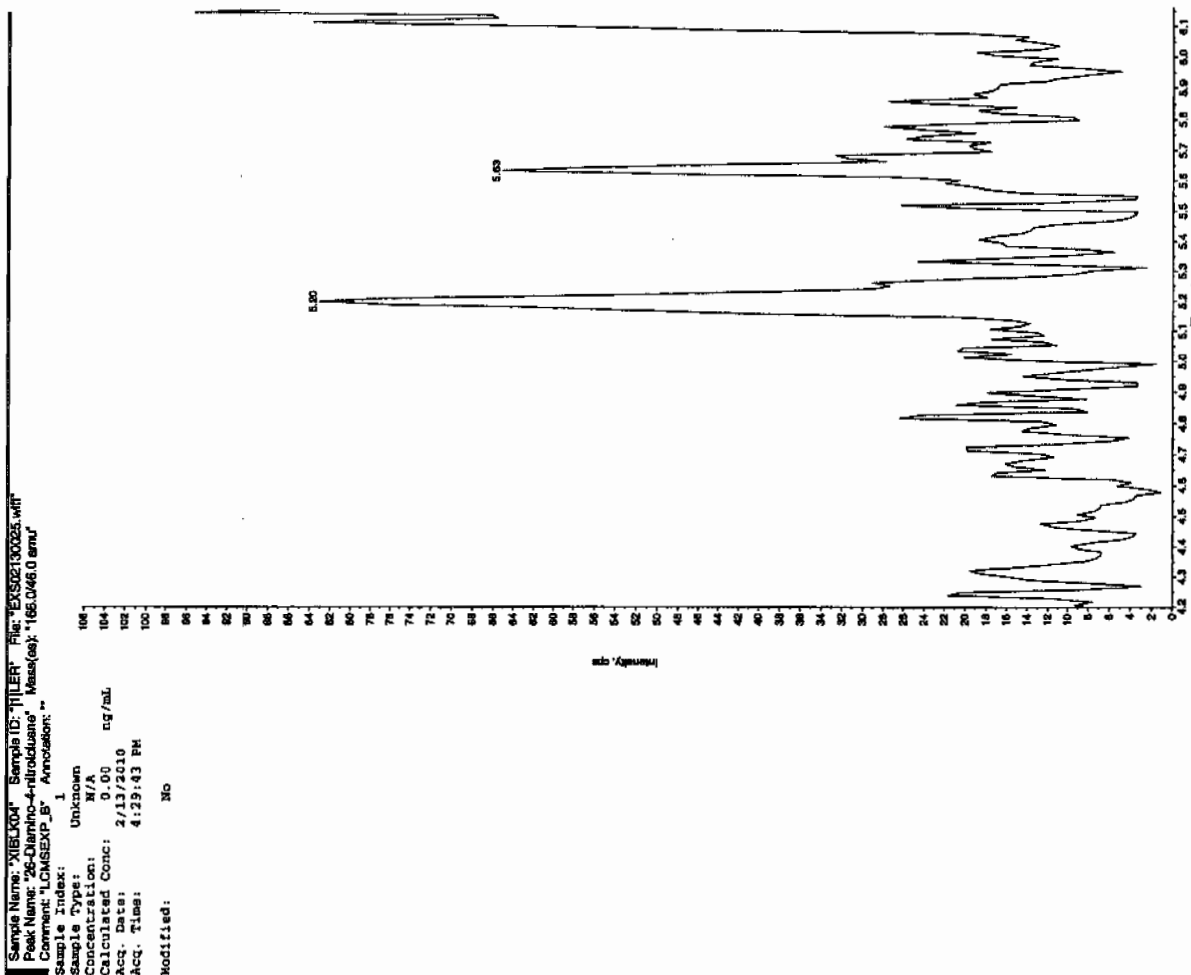
Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	2.63
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Sen 2/15/10

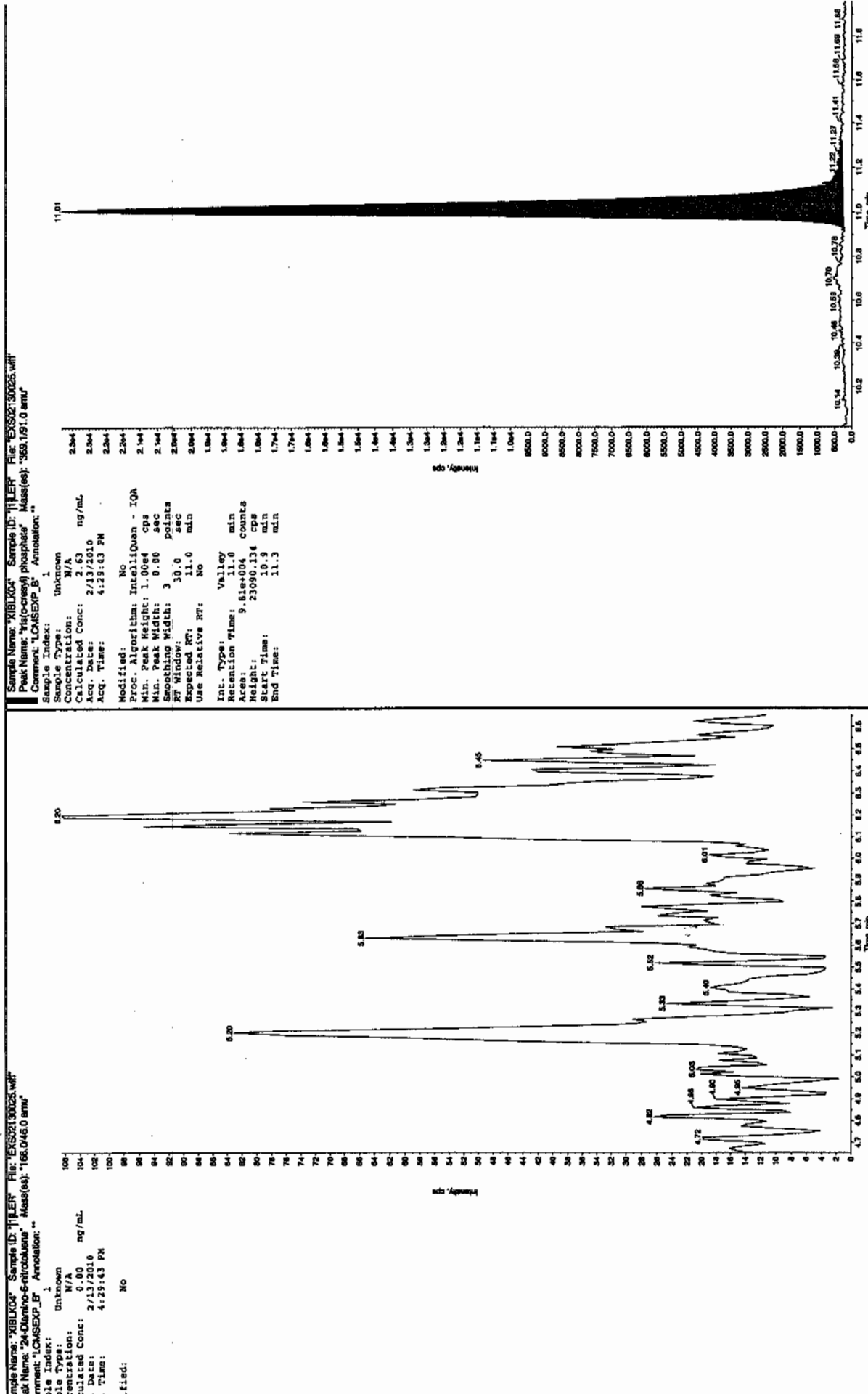


Sen 2/15/10

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



XL 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): 10-1390

Lab Code: GEL

Lab Sample ID: XIBLK05

Analysis Date: 13-FEB-10 19:38

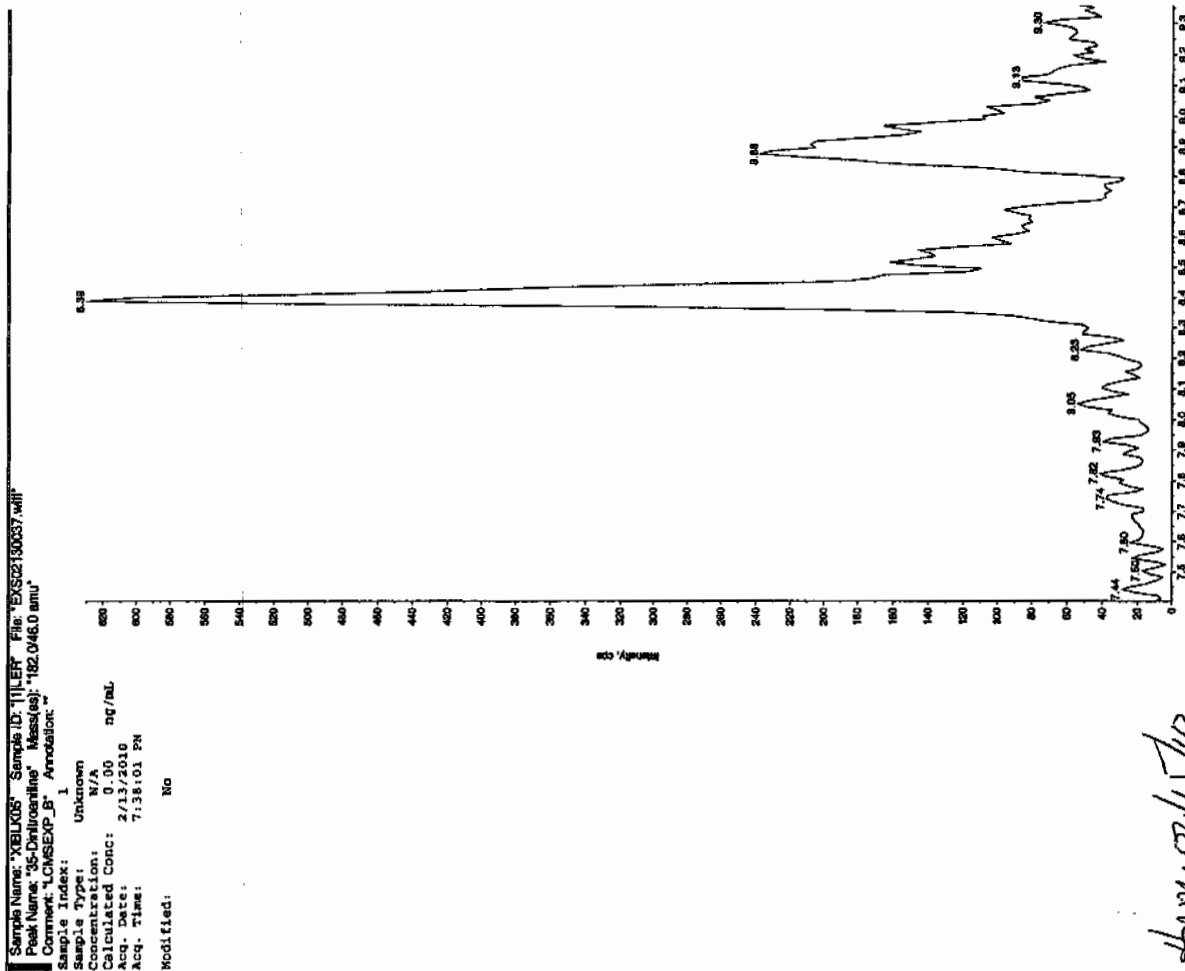
GEL Data File: EXS02130037.wiff

Instrument ID: LCMSMS

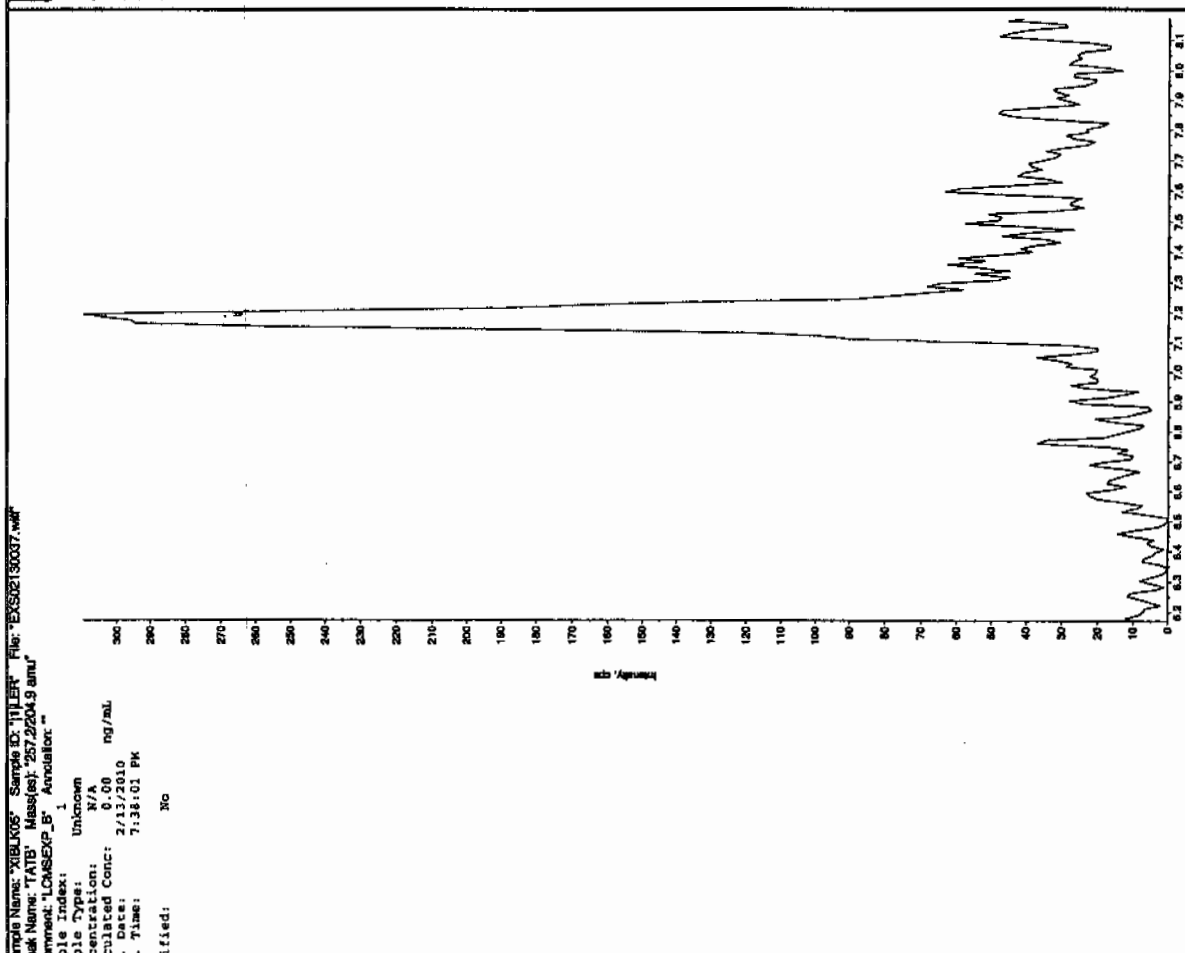
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	2.67
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

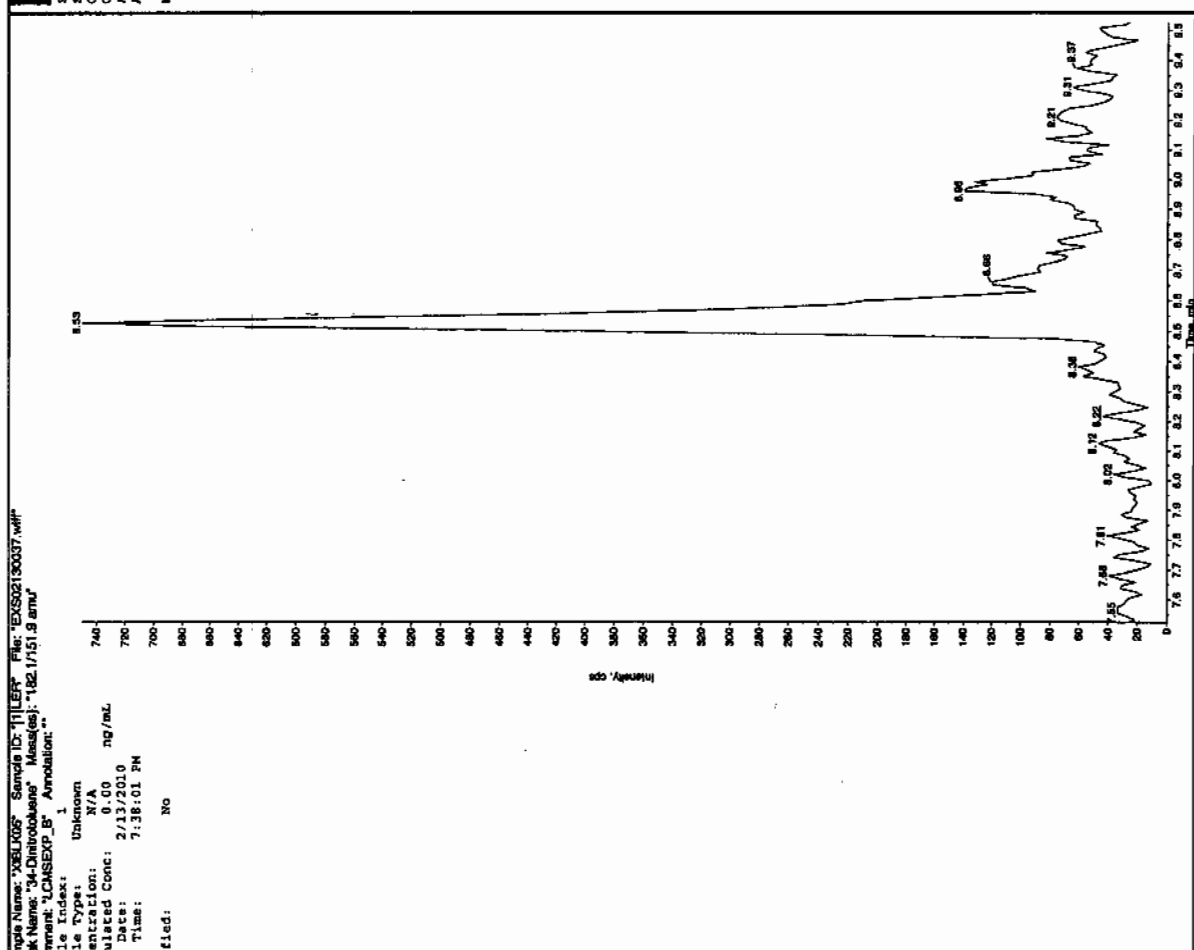
See 2/15/10



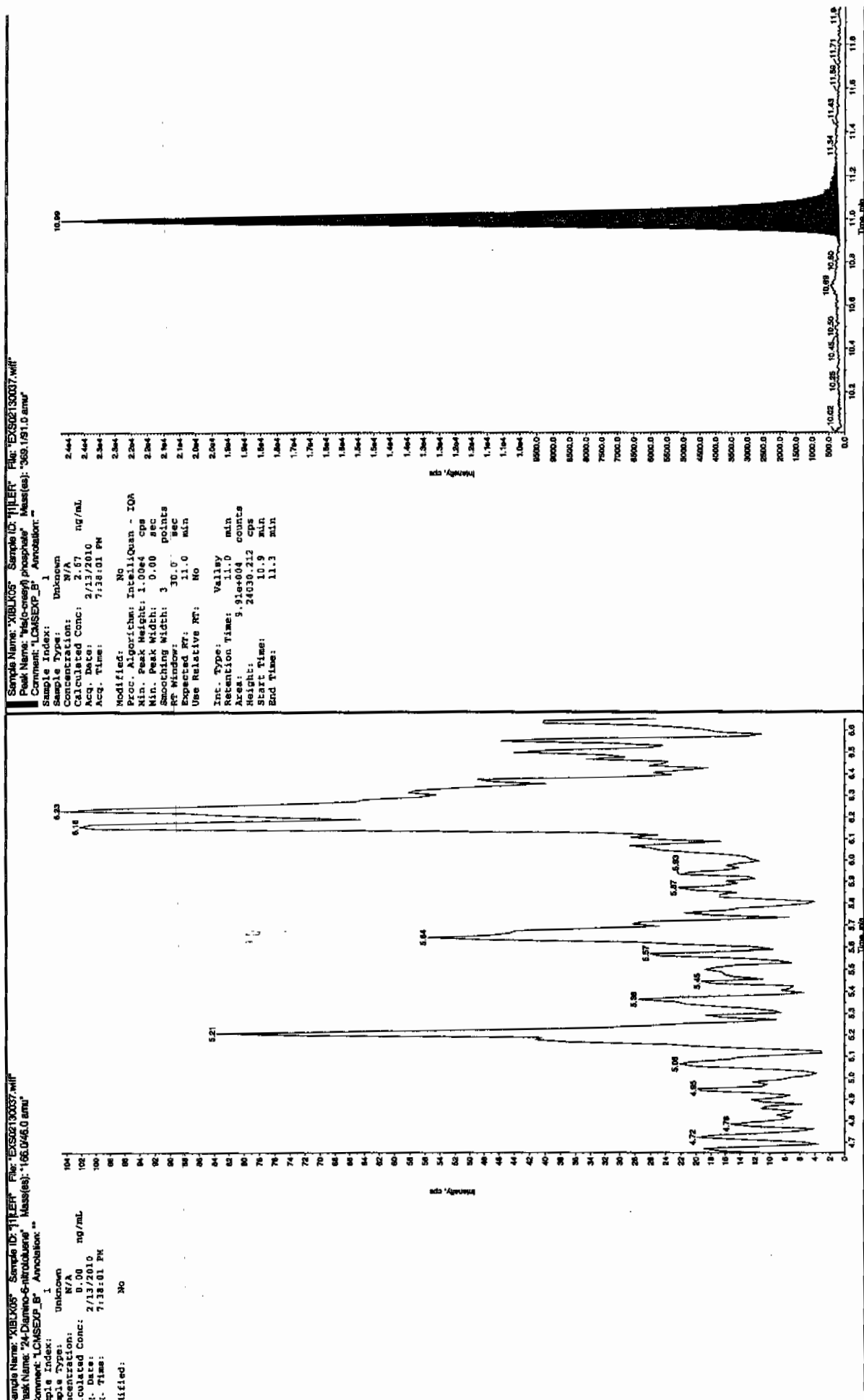
See 02/15/10



3L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



3EL SOP GL-0A-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): 10-1390

Lab Code: GEL

Lab Sample ID: XIBLK06

Analysis Date: 13-FEB-10 20:25

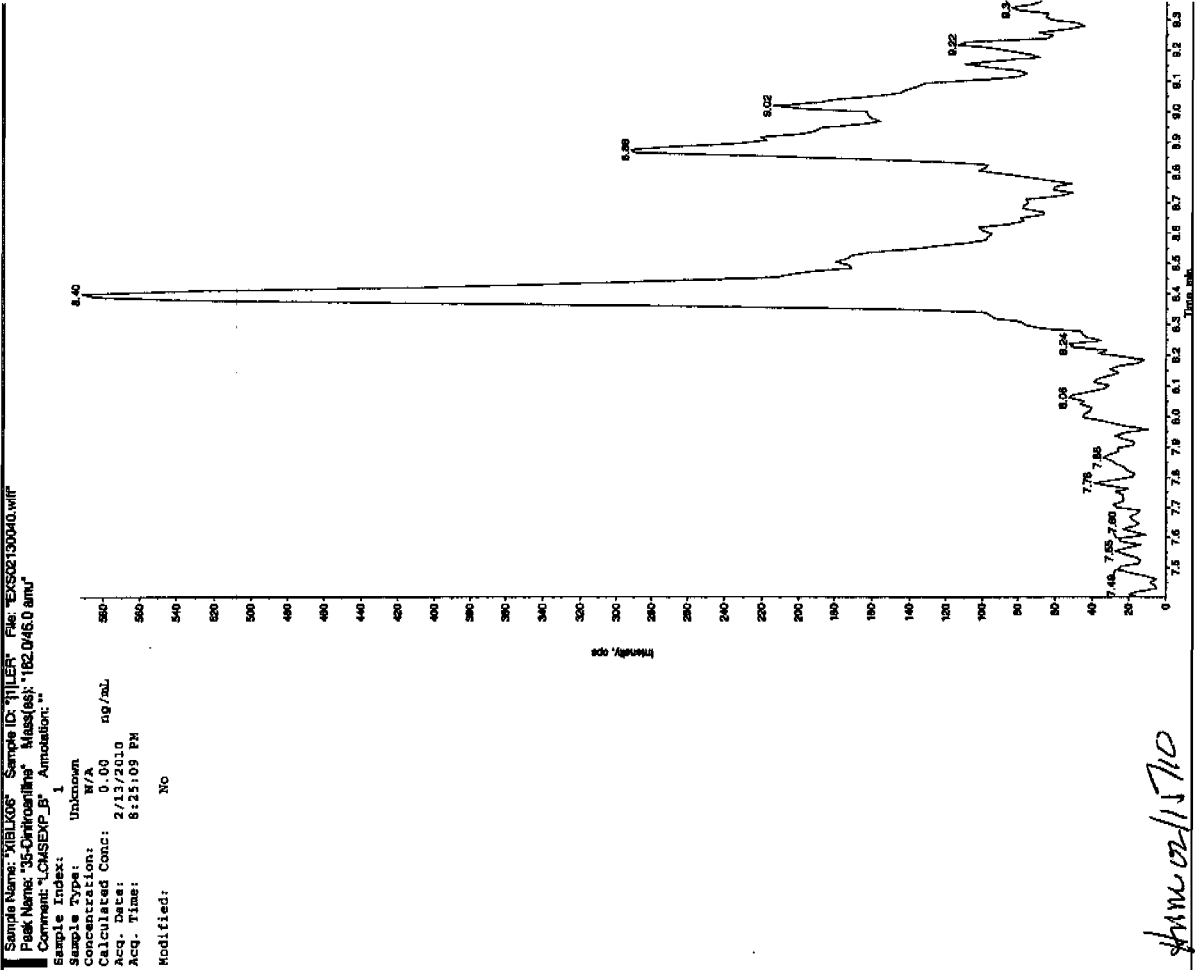
GEL Data File: EXS02130040.wiff

Instrument ID: LCMSMS

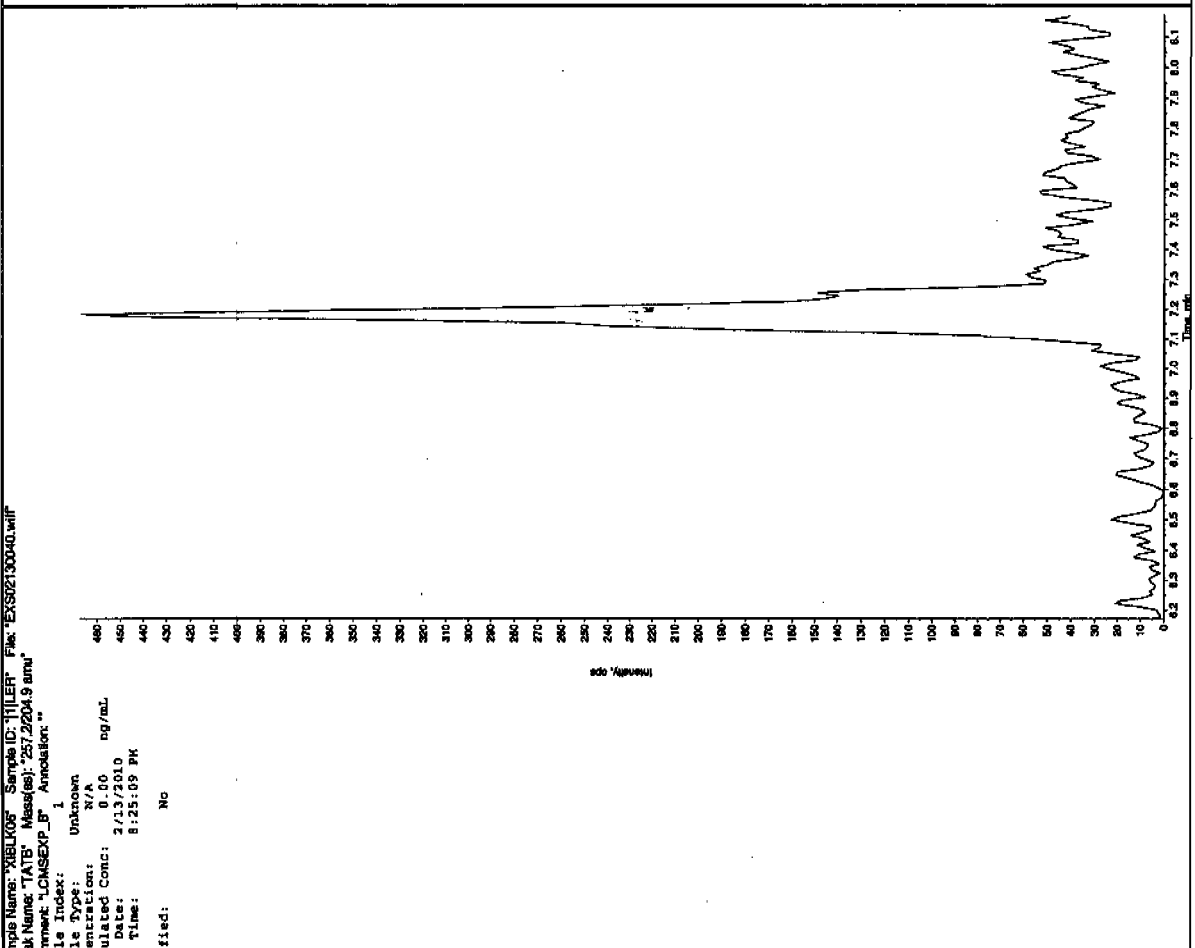
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	2.58
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

flow 2/15/10

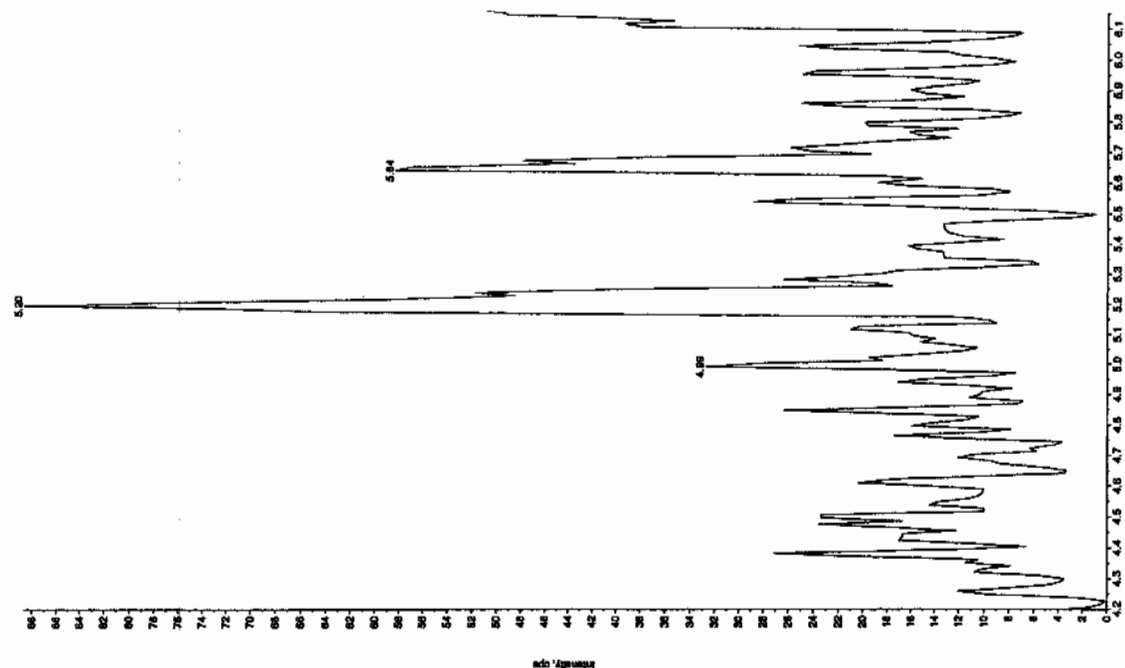
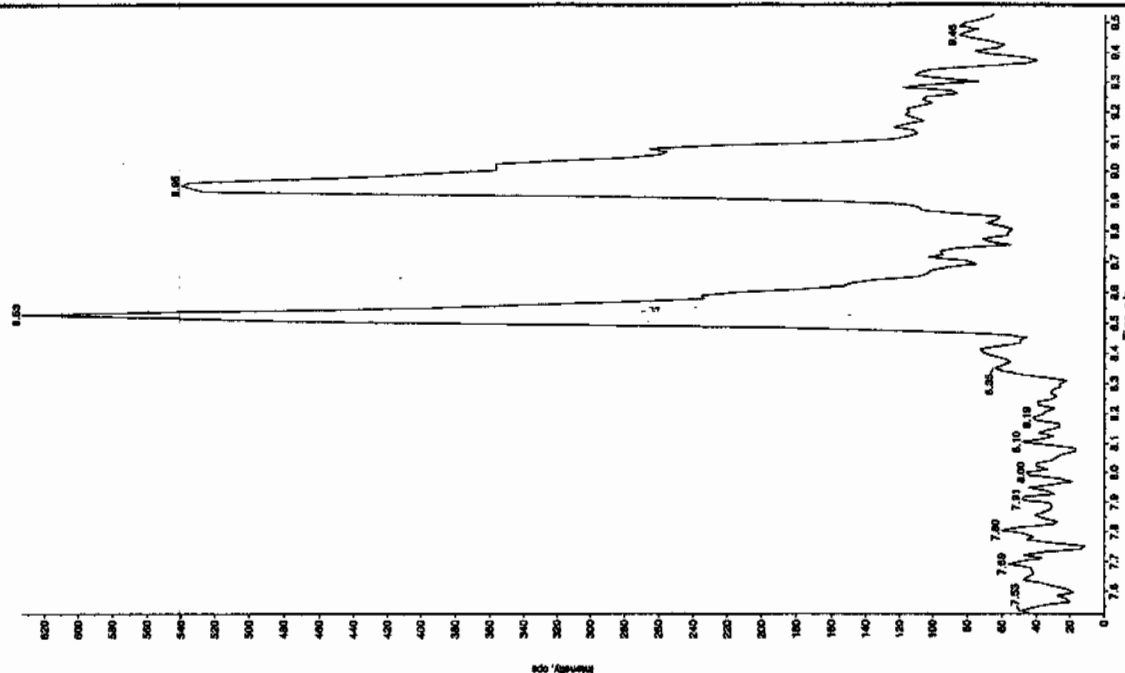


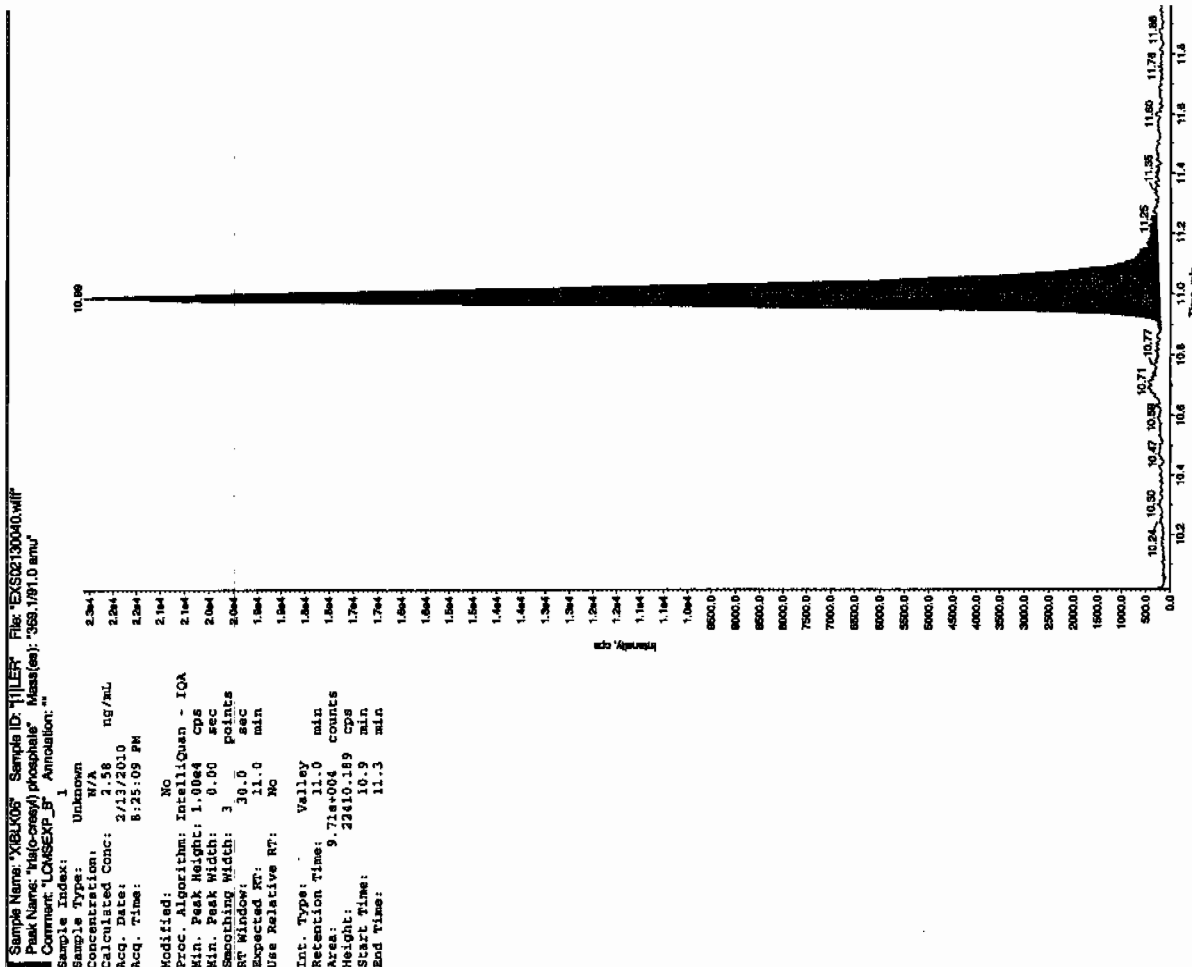
flow 2/15/10



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

Sample Name: "XIBLK06" Sample ID: "11JER" File: "EXS02130040.wiff"
 Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"





4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1390

Lab Code: GEL

Lab Sample ID: XIBLK07

Analysis Date: 13-FEB-10 23:02

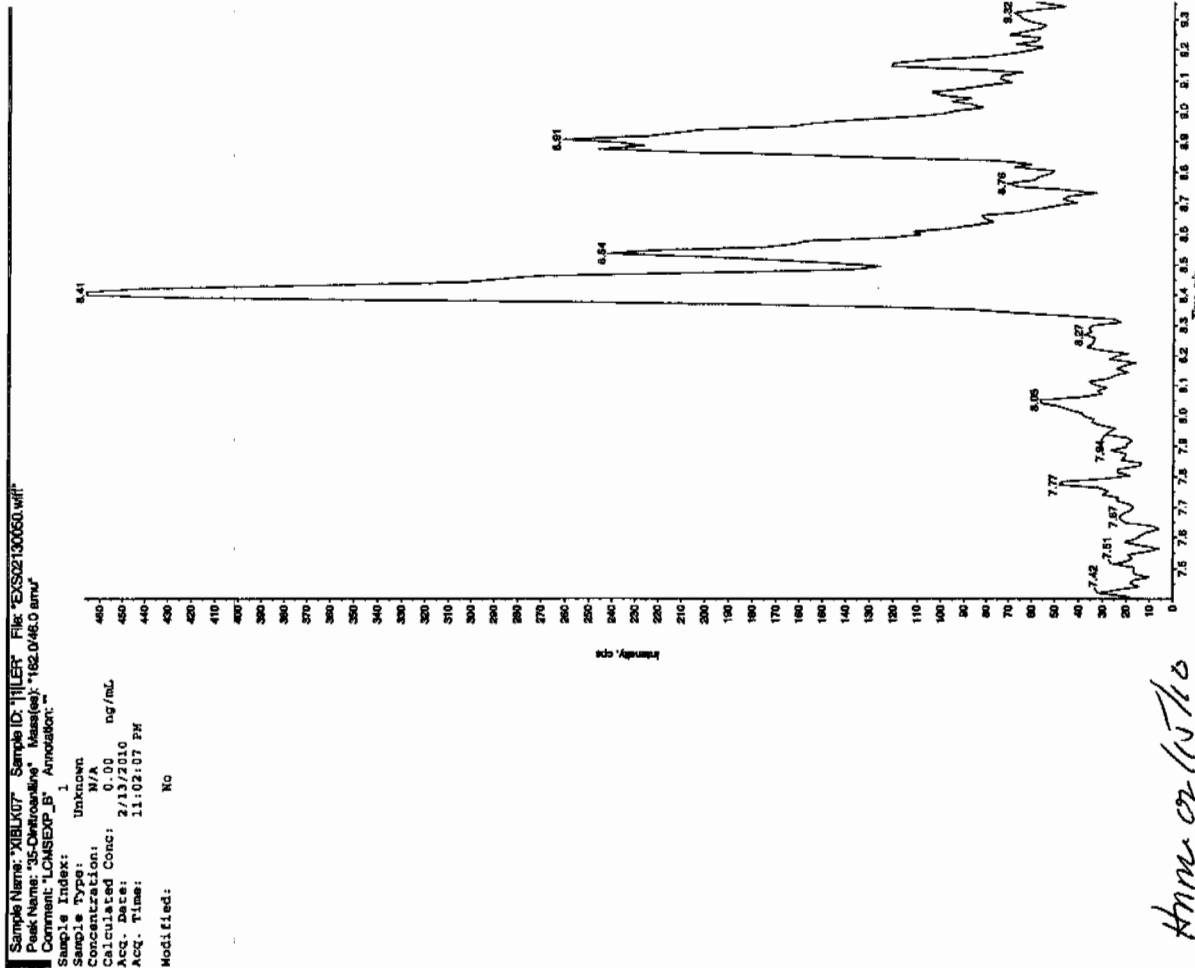
GEL Data File: EXS02130050.wiff

Instrument ID: LCMSMS

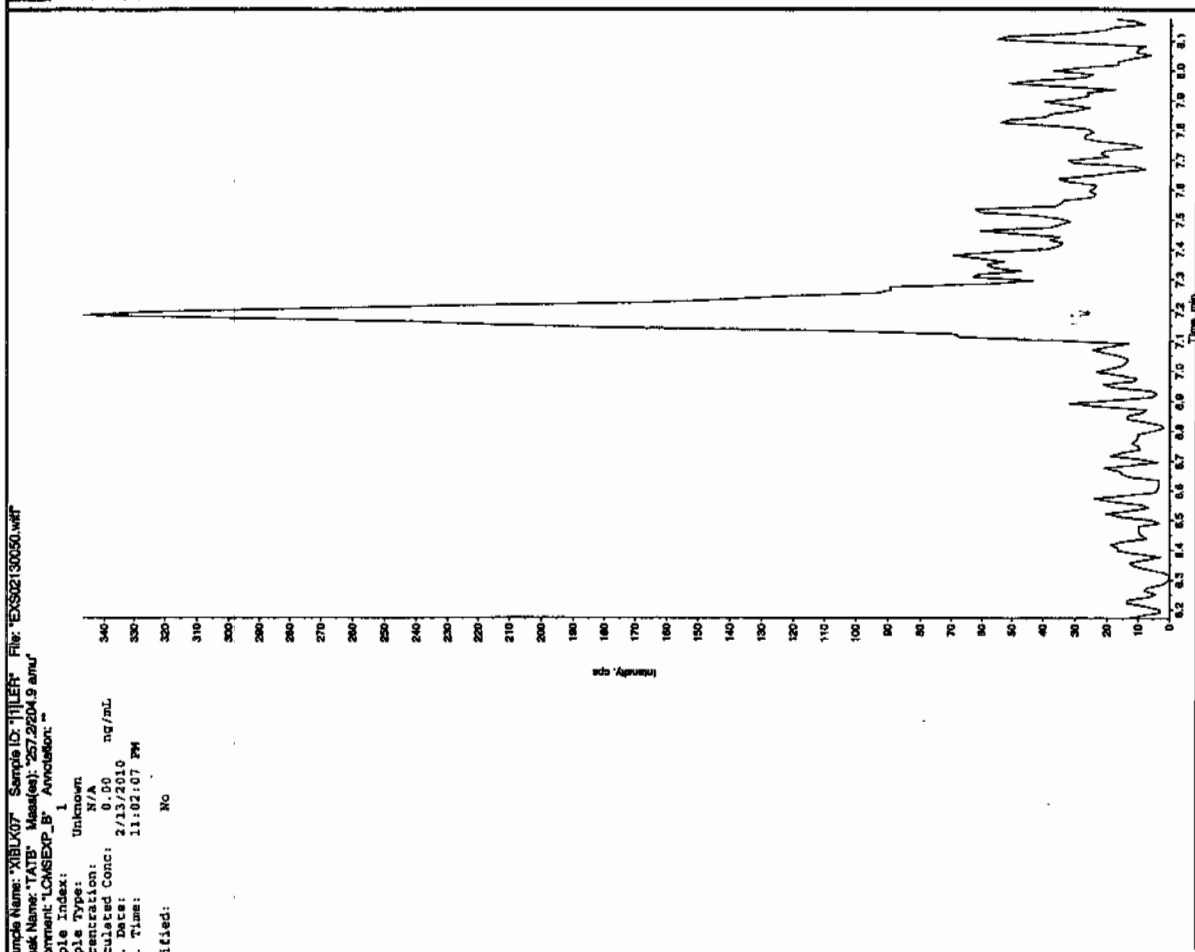
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	2.83
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

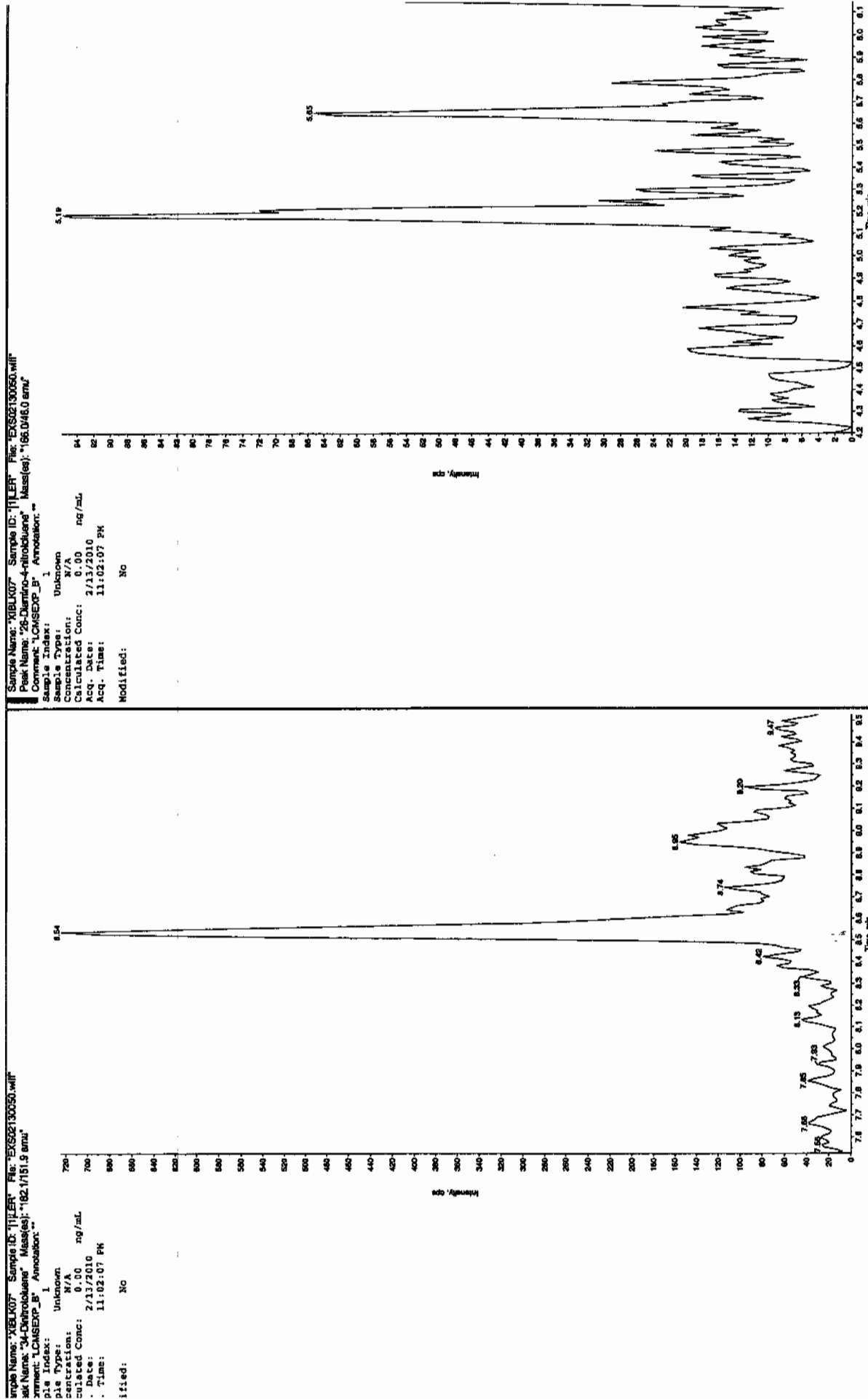
OK 2/15/10

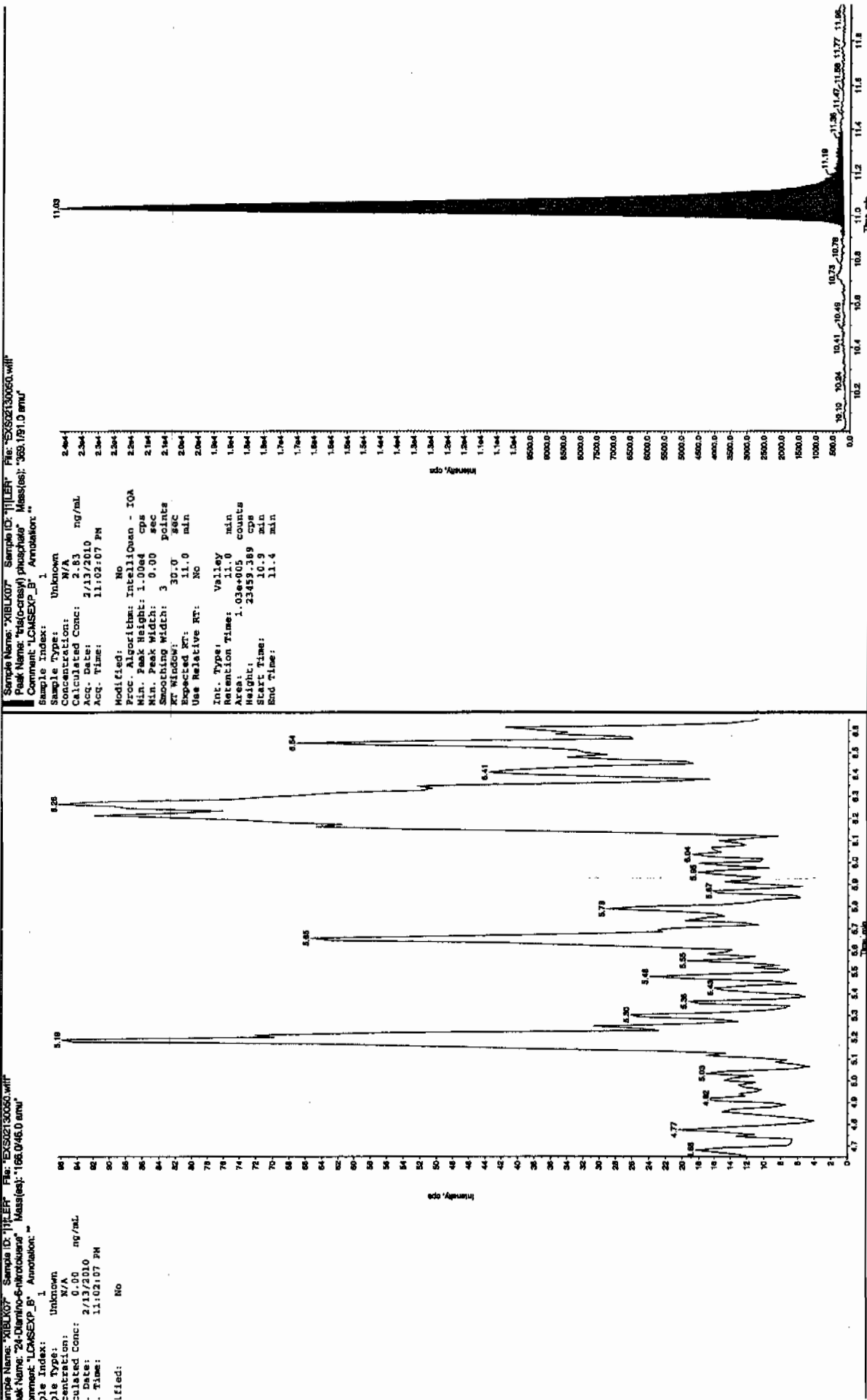


Am 02/15/10



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): 10-1390

Lab Code: GEL

Lab Sample ID: XIBLK08

Analysis Date: 14-FEB-10 01:23

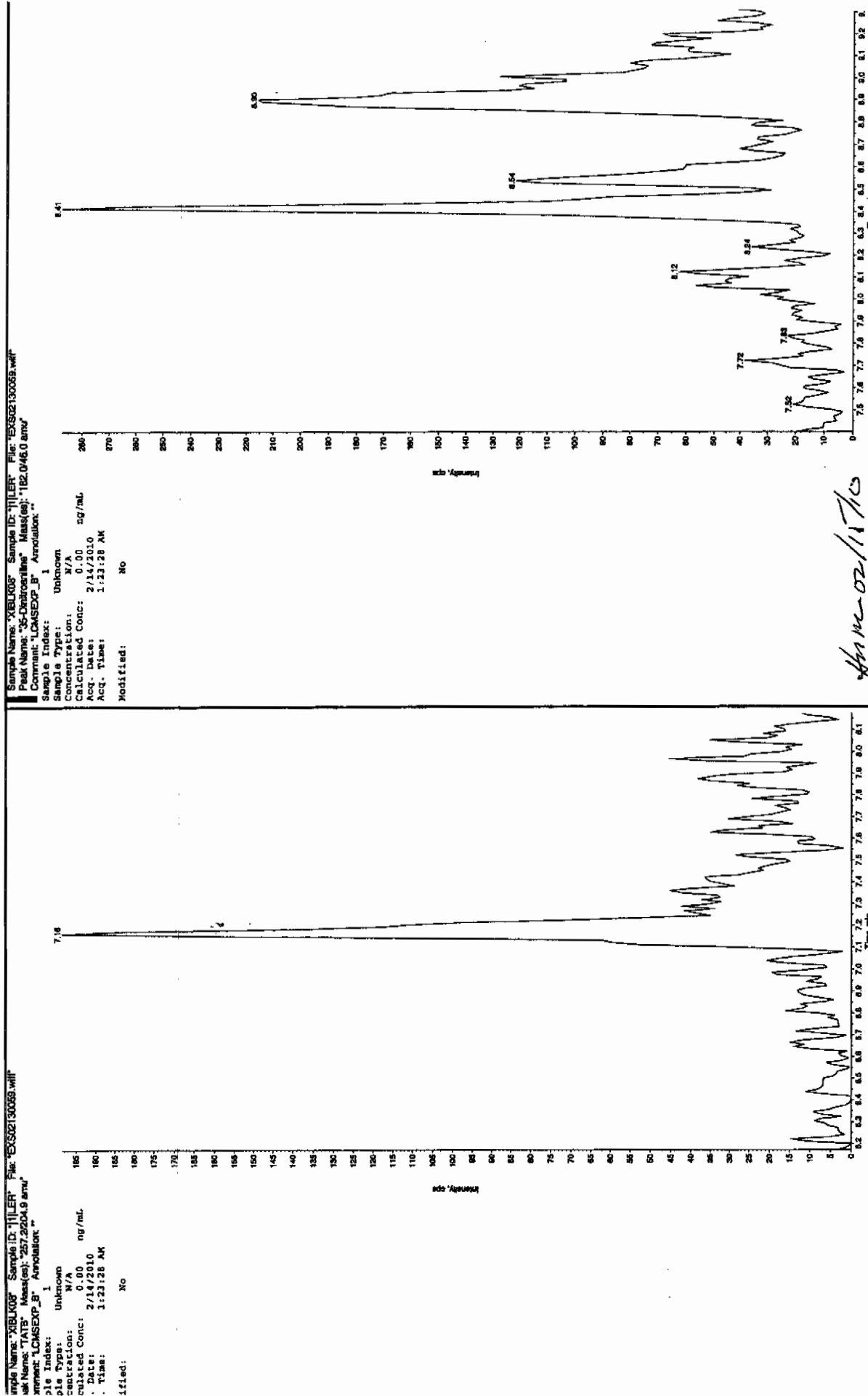
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Instrument ID: LCMSMS

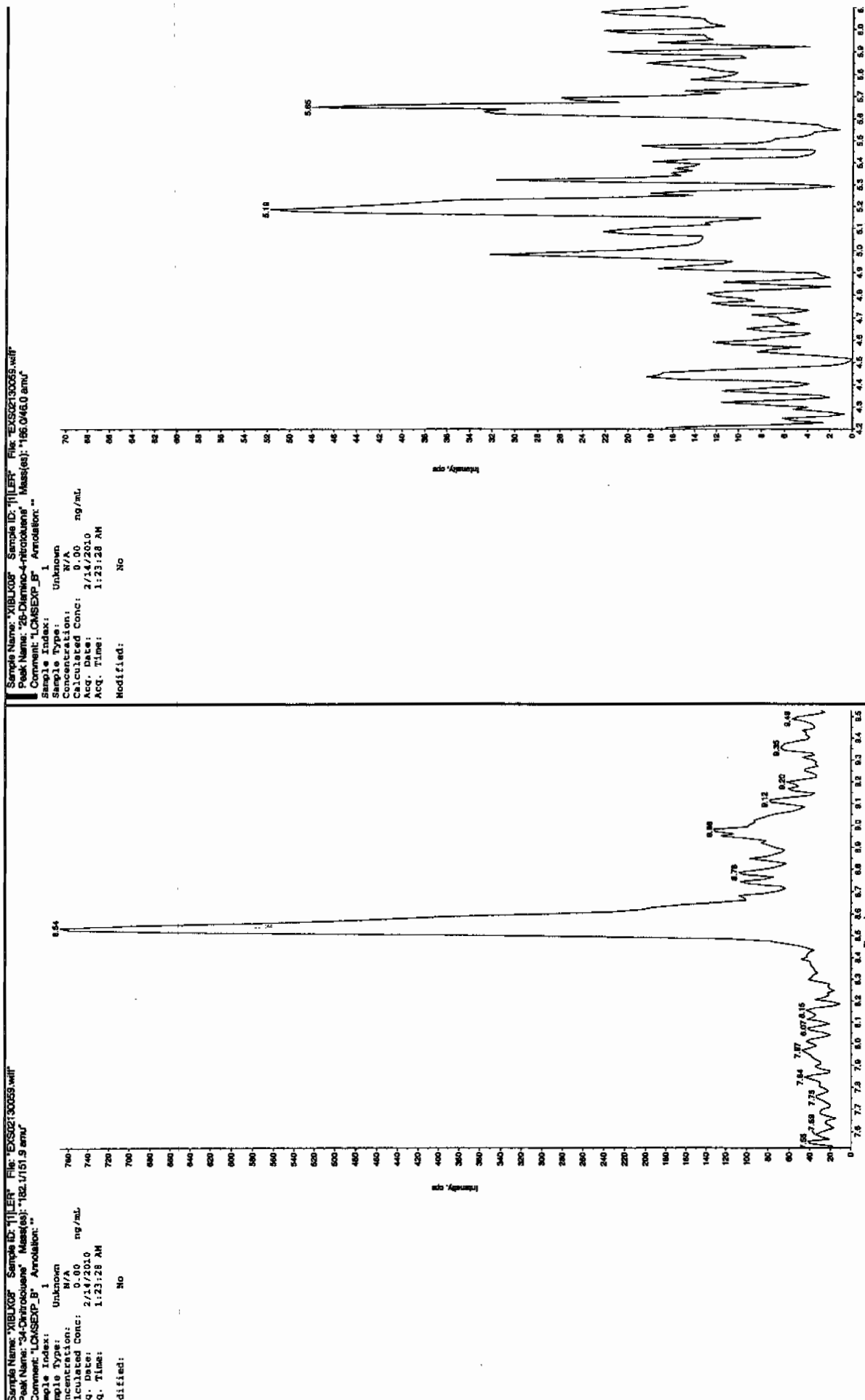
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	.642
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

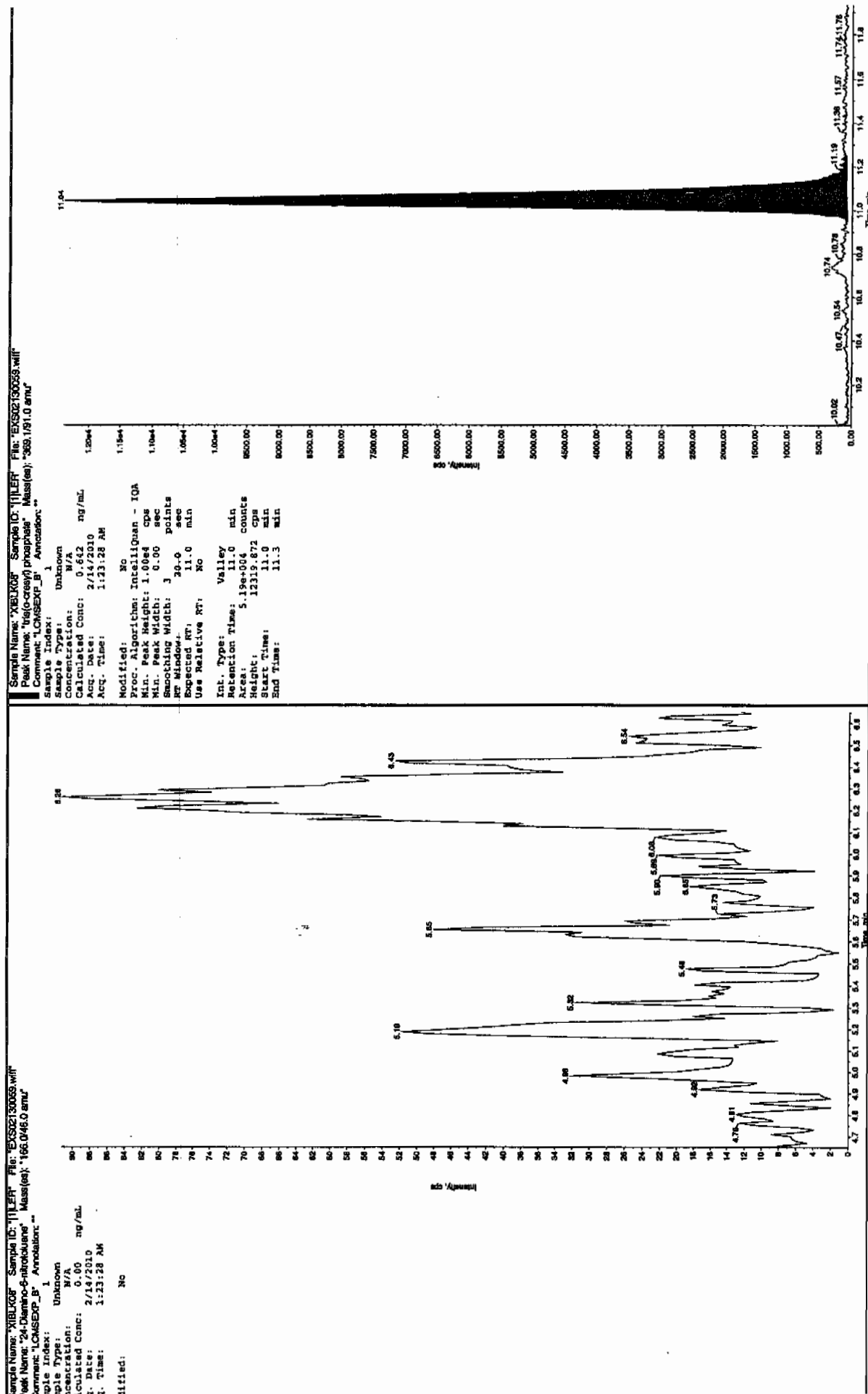
See 2/15/10



See 02/11/10



DEL 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): 10-1390

Lab Code: GEL

Lab Sample ID: XIBLK09

Analysis Date: 14-FEB-10 02:10

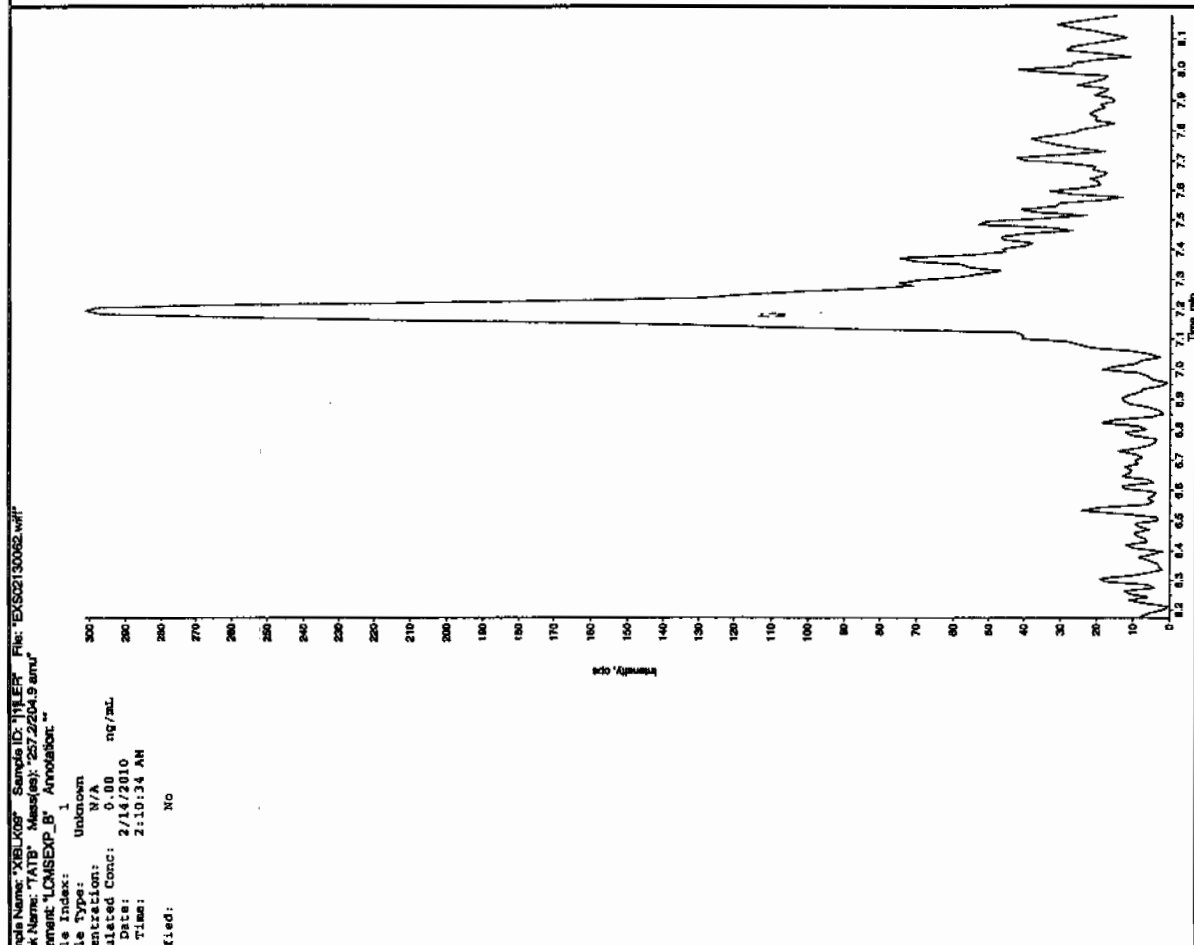
GEL Data File: EXS02130062.wiff

Instrument ID: LCMSMS

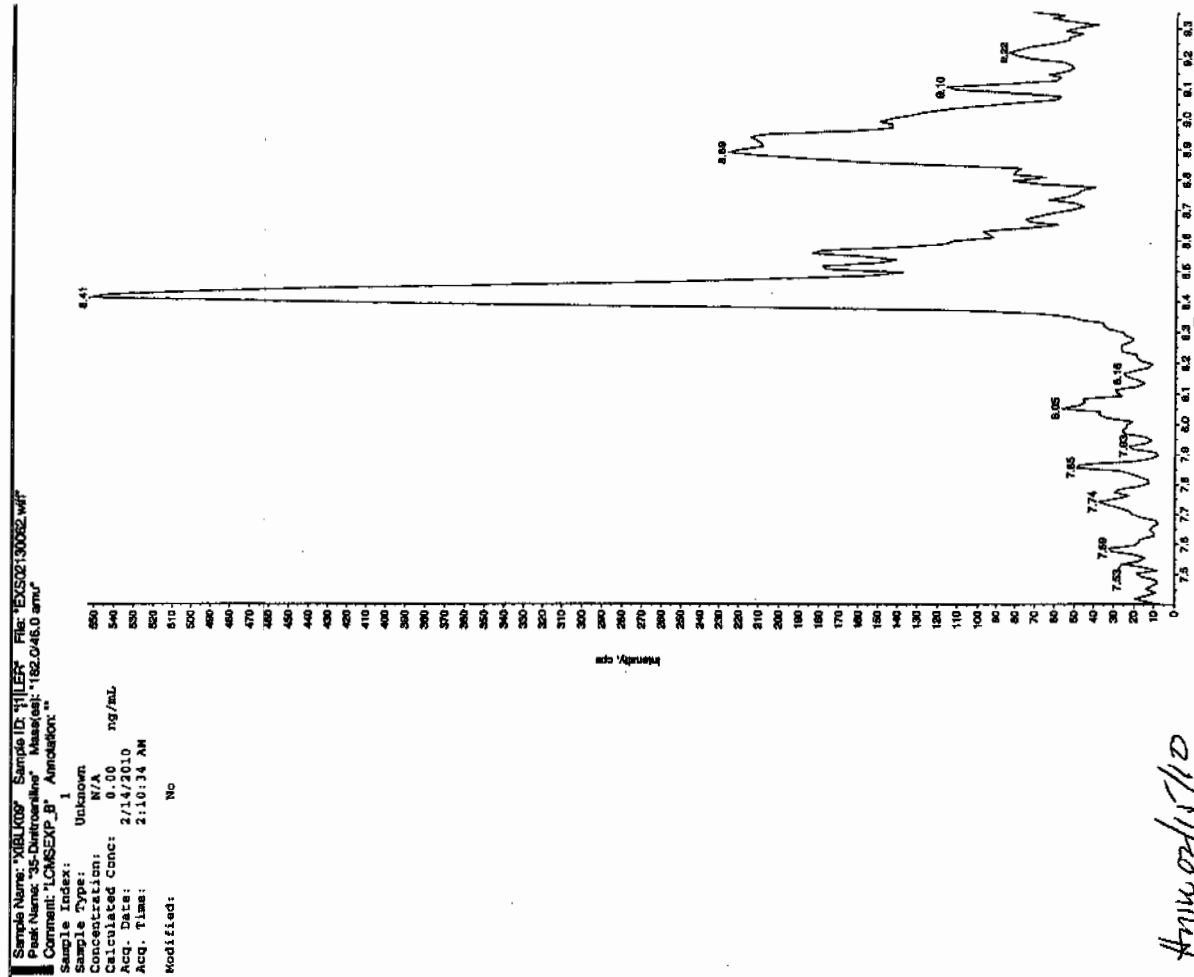
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	2.66
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

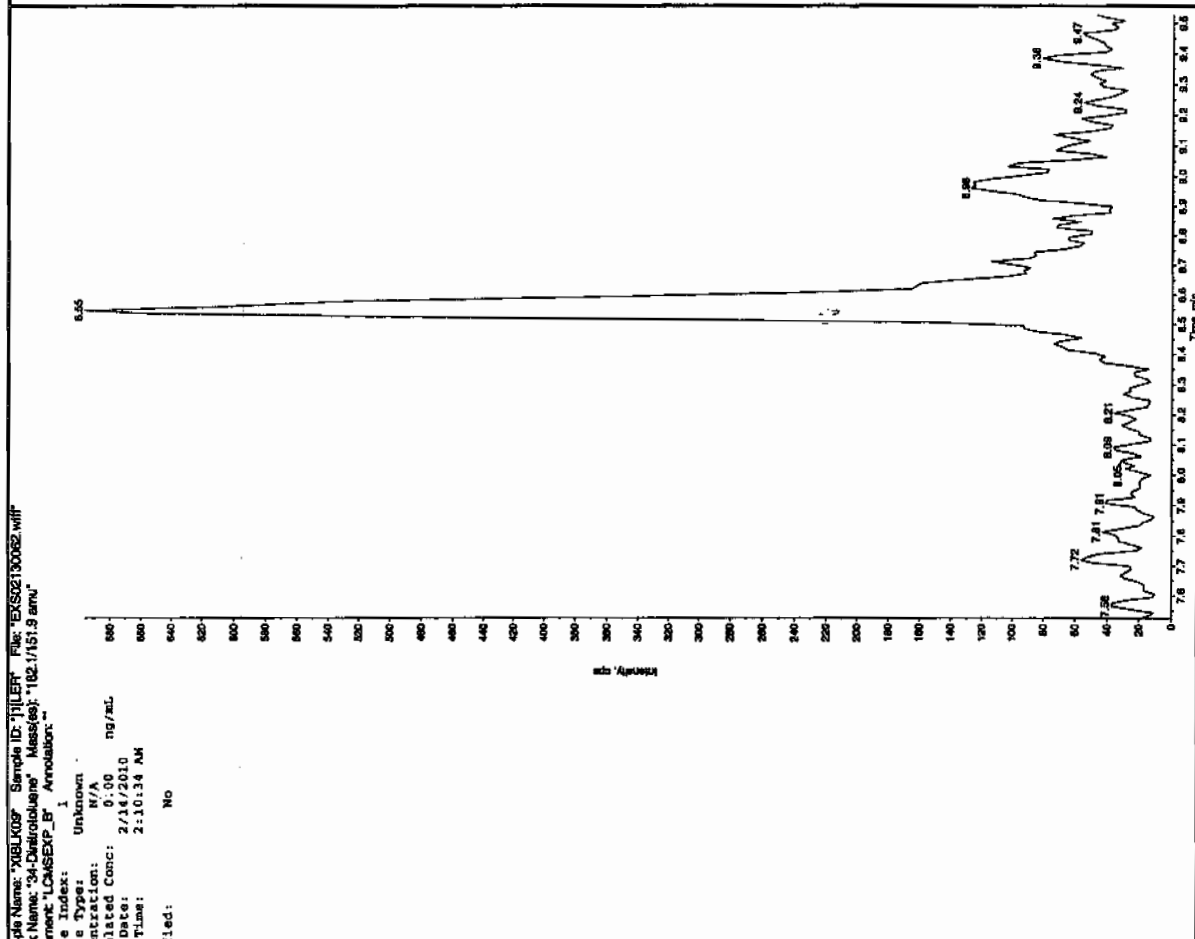
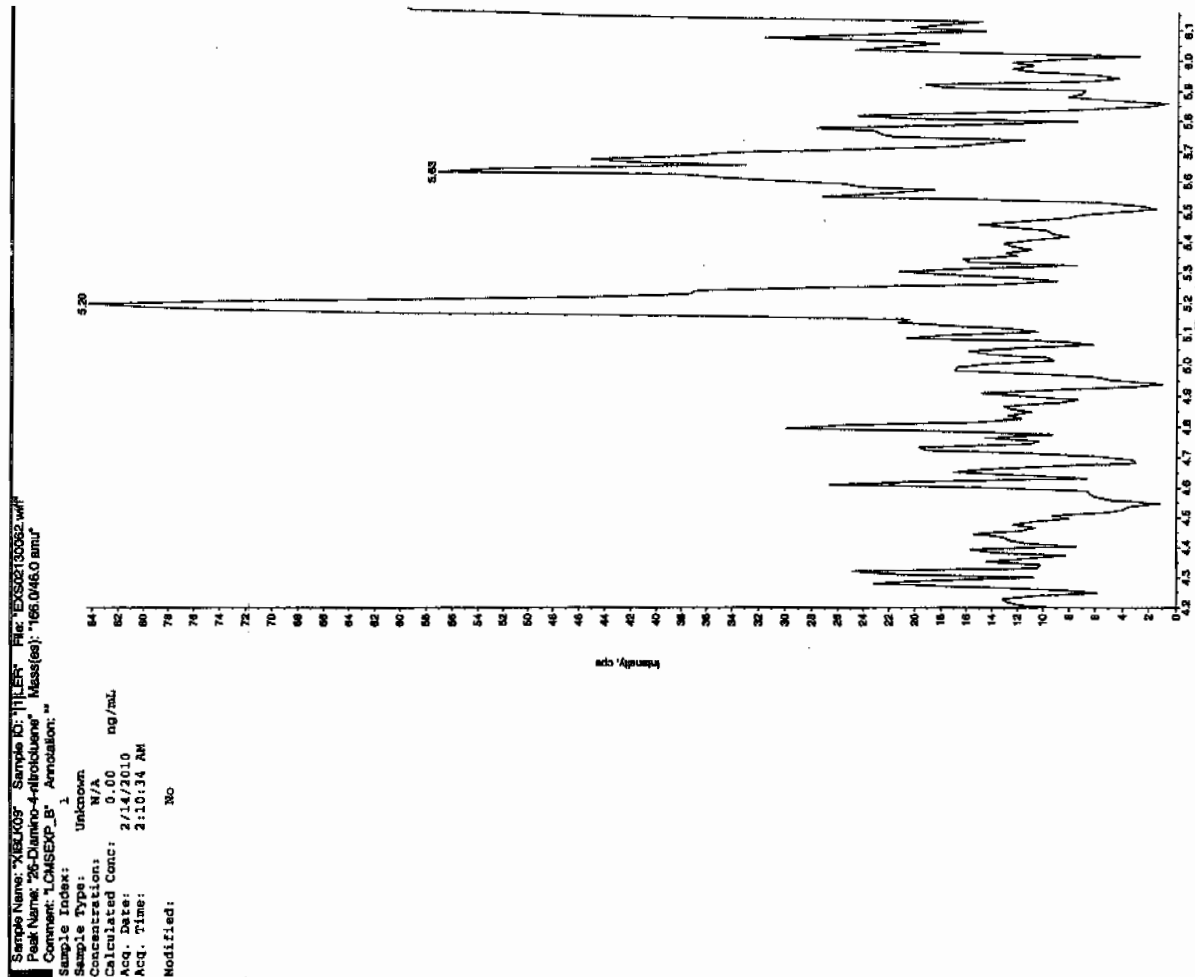
See 2/15/10



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



See 2/15/10

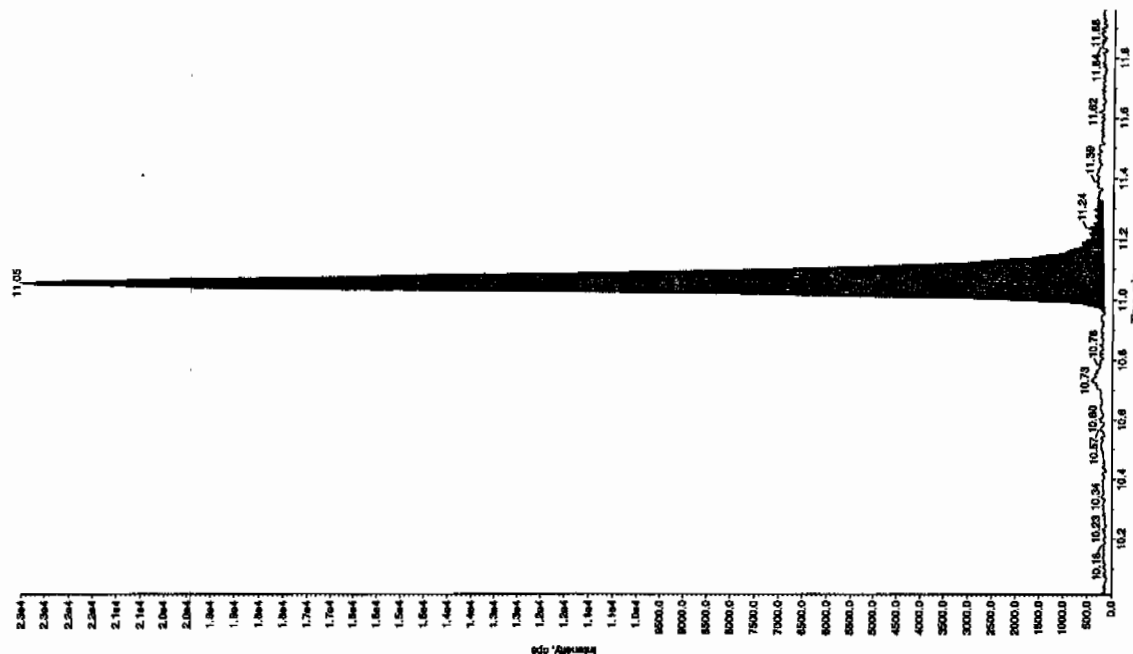
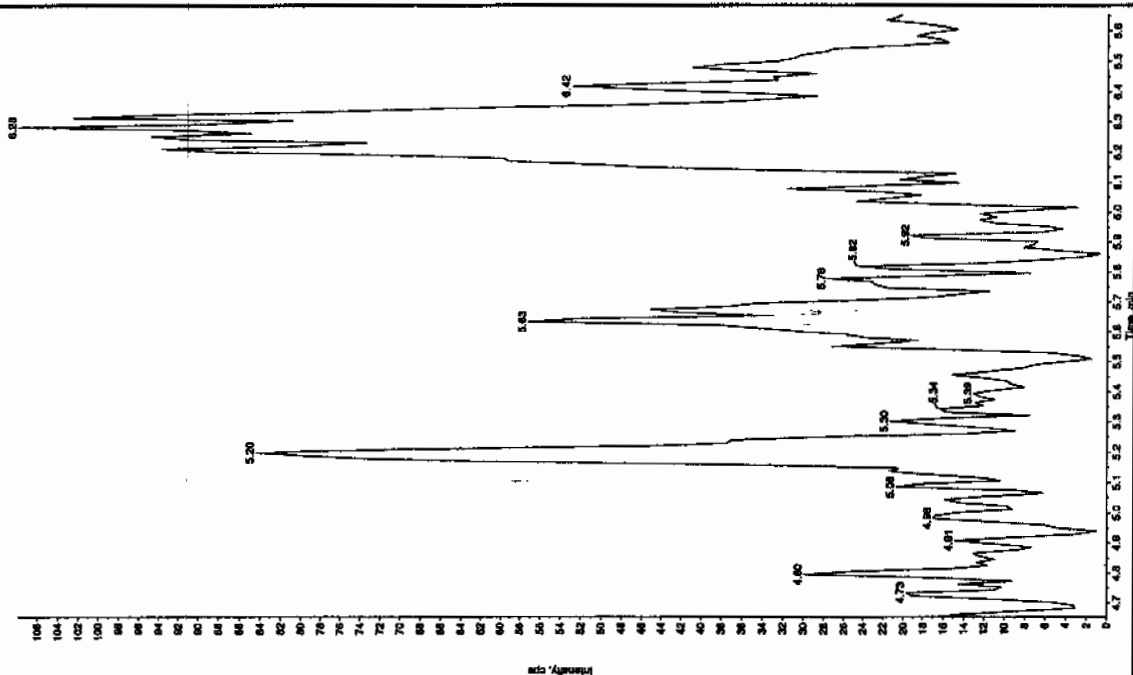


3L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4


```
Sample Name: "XIBLK09" Sample ID: "11LEF" File: "EXS02130062.wif"
k Name: "24-Diamino-6-nitrothioben" Mass(es): "166.0746.0 amu"
Comment: "LCMSEXP_B" Annotation: ""
```

Index:	1
Unknown:	Unknown
Concentration:	N/A
Diluted Conc:	0.00 ng/mL
Date:	2/14/2010
Time:	2:10:34 AM
Used:	No

Sample Index:	1	Source:	Unknown
Sample Type:			
Concentration:	N/A		
Calculated Conc:	2.56		Hg/mL
Acq. Date:	2/14/2010		
Acq. Time:	2:10:34 AM		
Modified:	No		
Proc Algorithm:	IntelliQuan - ICA		
Min. Peak Height:	1.0044		CPS
Min. Peak Width:	3.00		sec
Smoothing Width:	3.00		points
Min Window:	10.0		sec
Expected Nt:	11.0		min
Use Relative Nt:	No		
Int. Type:	Valley		
Retention Time:	9.88		min
Area:	23820.542		counts
Height:	23820.542		CPS
Start Time:	11.0		min
End Time:	11.3		min



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1390

Lab Code: GEL

Lab Sample ID: XIBLK10

Analysis Date: 14-FEB-10 05:34

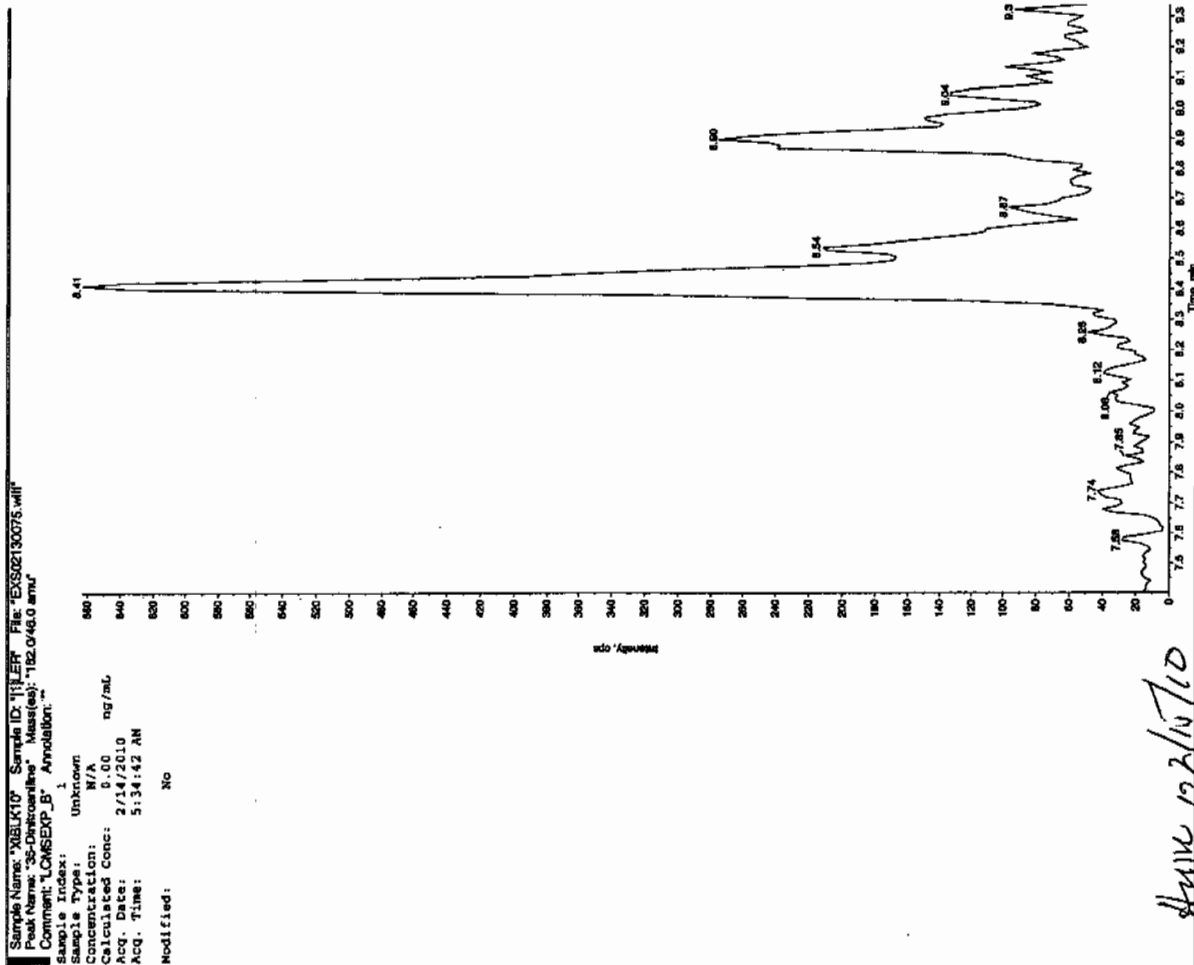
GEL Data File: EXS02130075.wiff

Instrument ID: LCMSMS

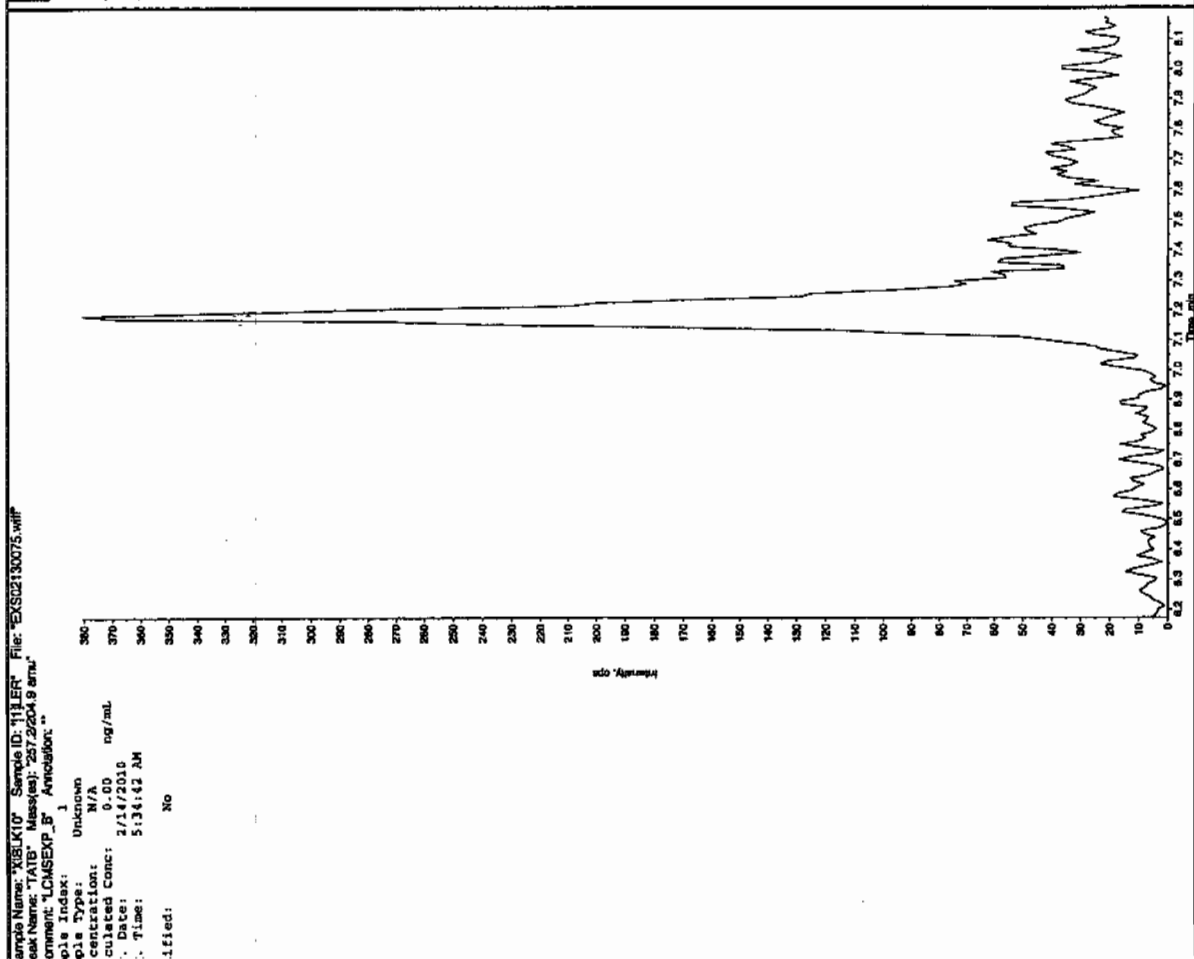
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	3.1
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

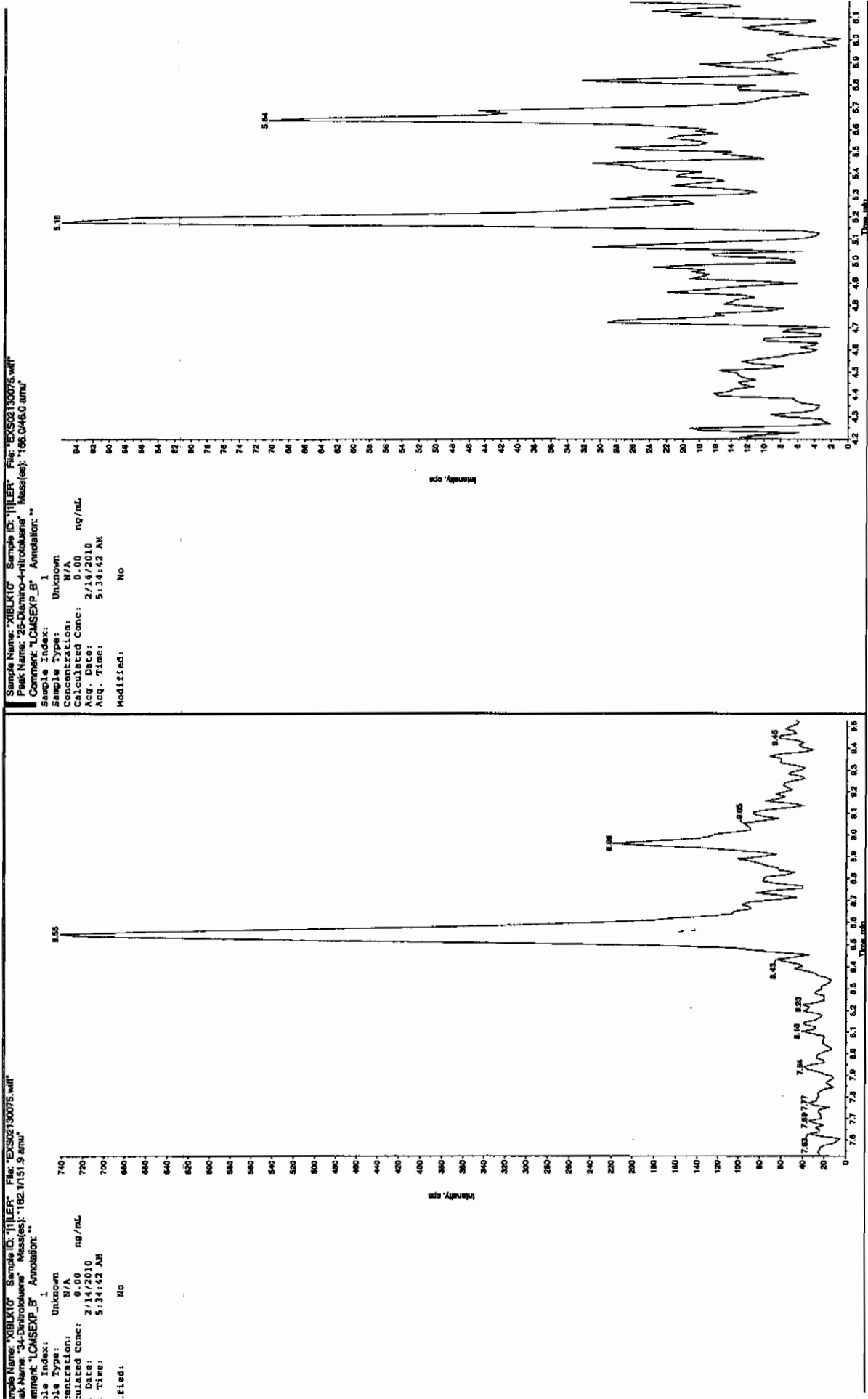
Jan 2/15/10



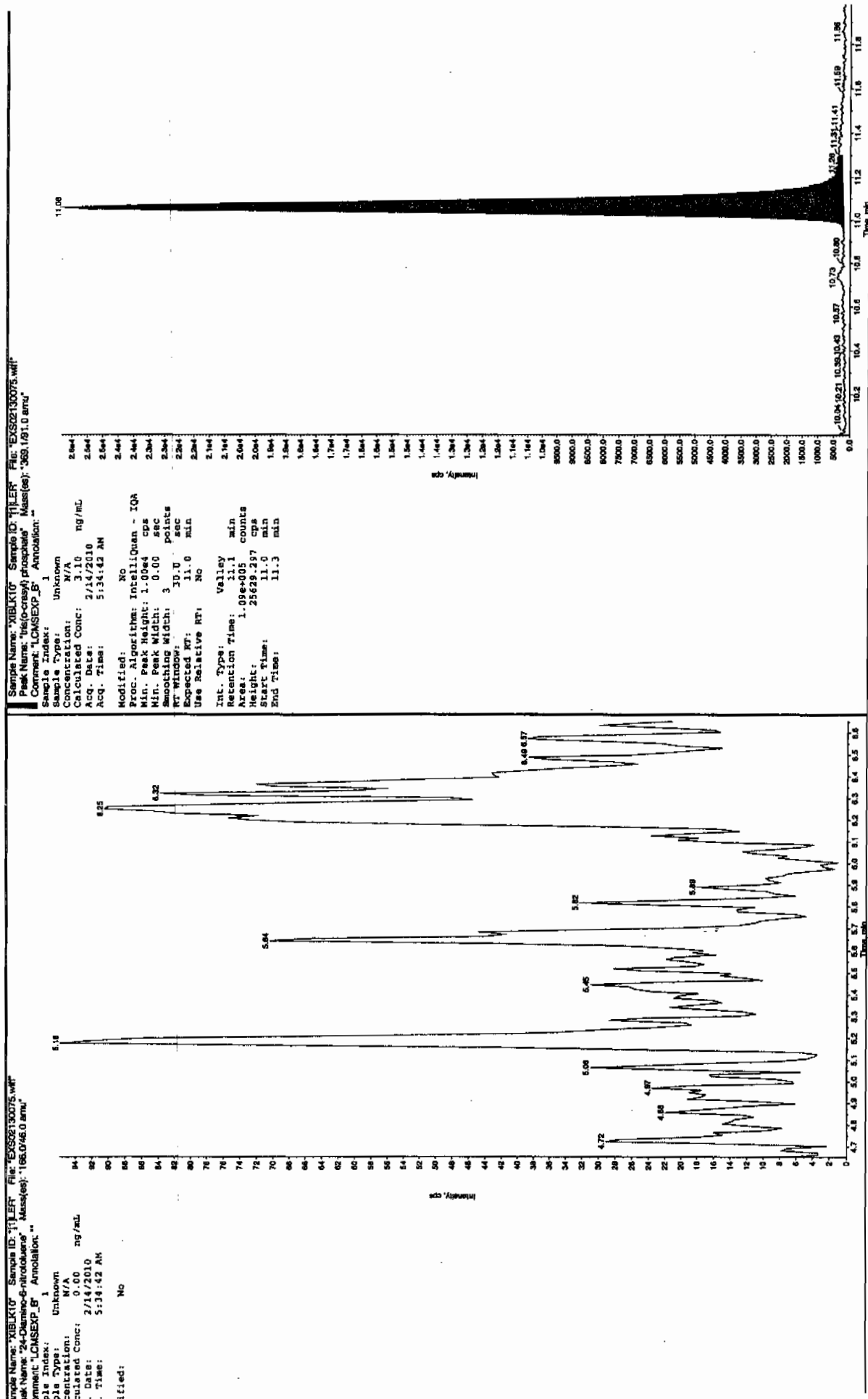
Jan 2/10/10



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): 10-1390

Lab Code: GEL

Lab Sample ID: XIBLK11

Analysis Date: 14-FEB-10 07:40

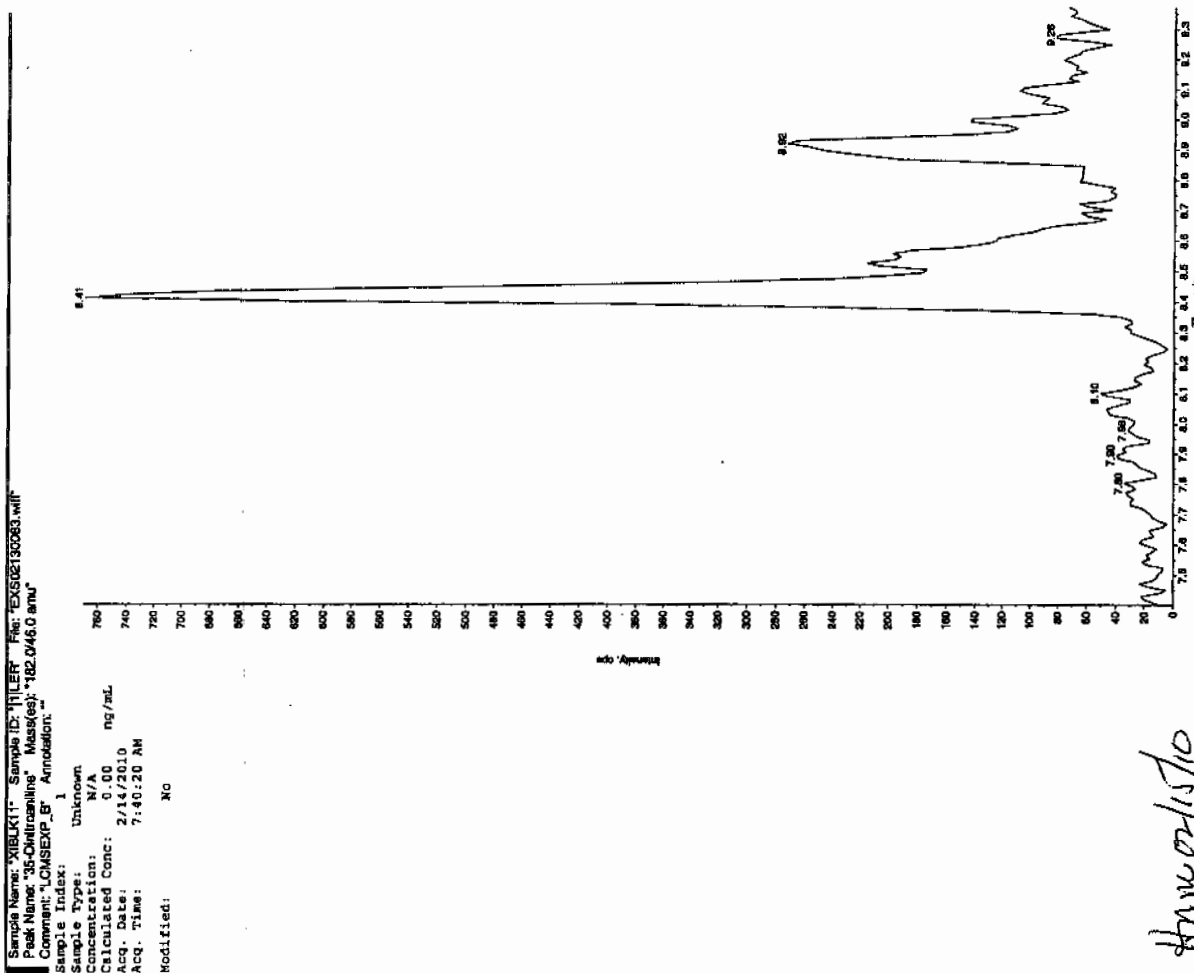
GEL Data File: EXS02130083.wiff

Instrument ID: LCMSMS

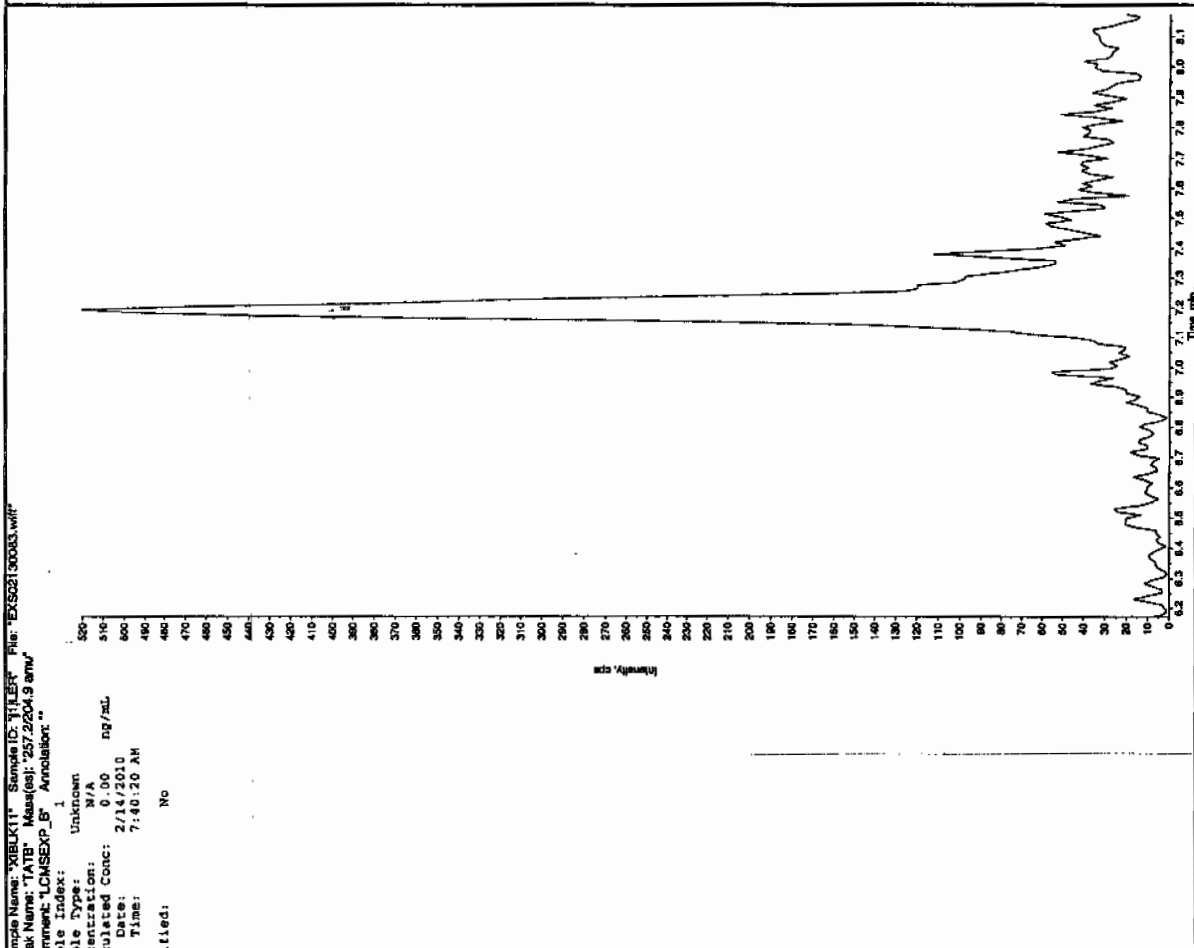
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	3.86
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

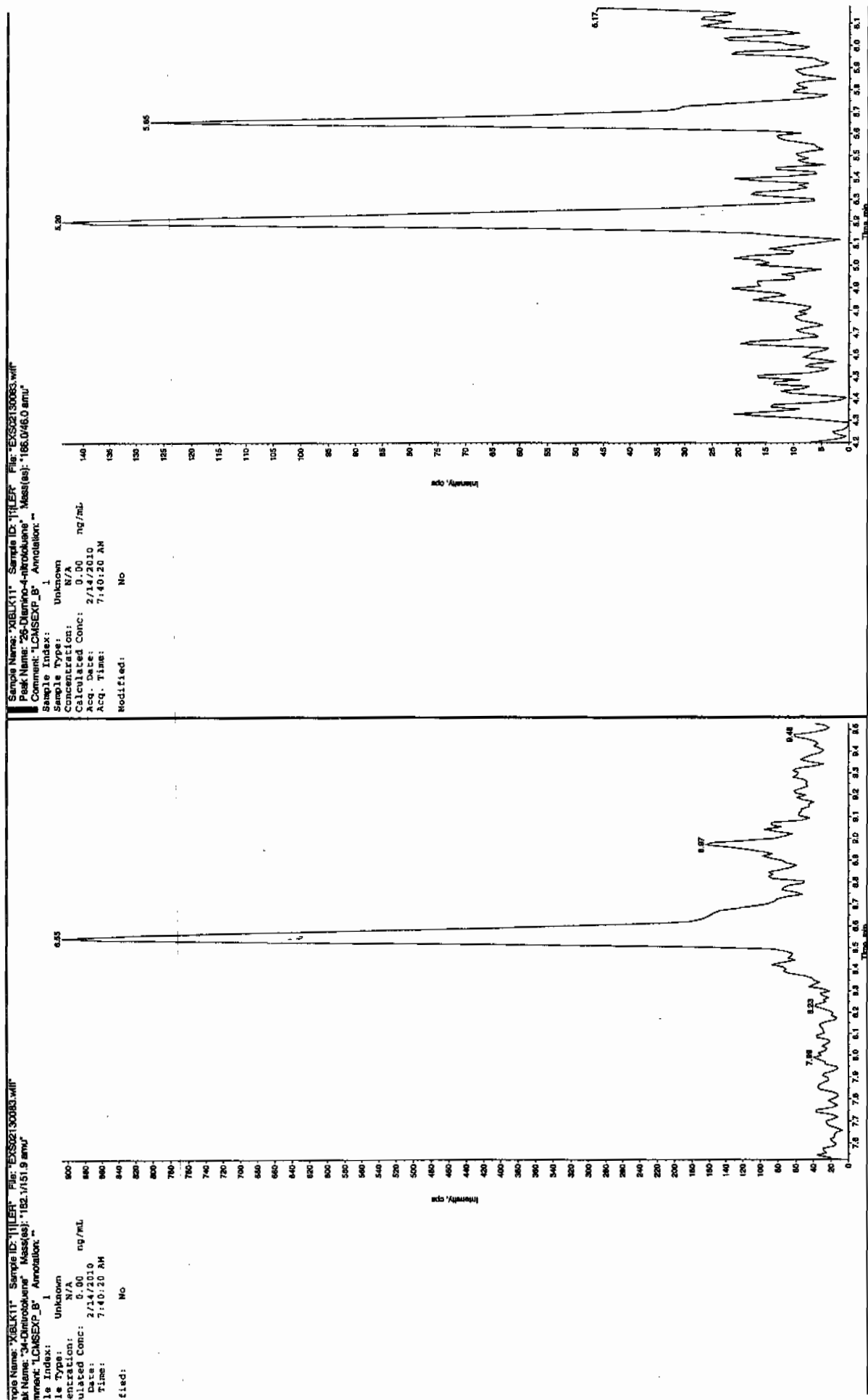
Jan 21/15/10



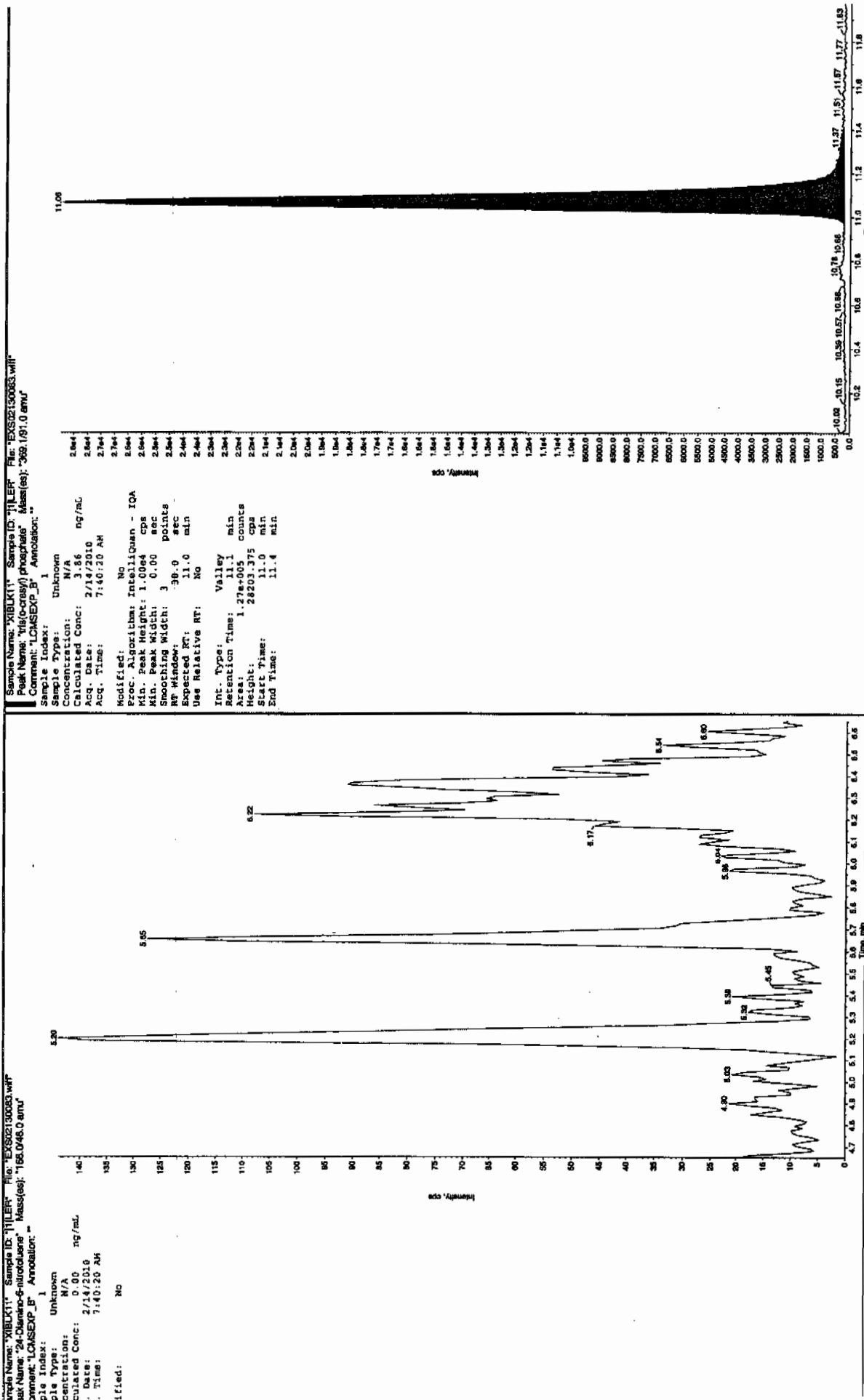
Jan 21/15/10



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



IL 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): 10-1390

Lab Code: GEL

Lab Sample ID: XIBLK12

Analysis Date: 14-FEB-10 11:04

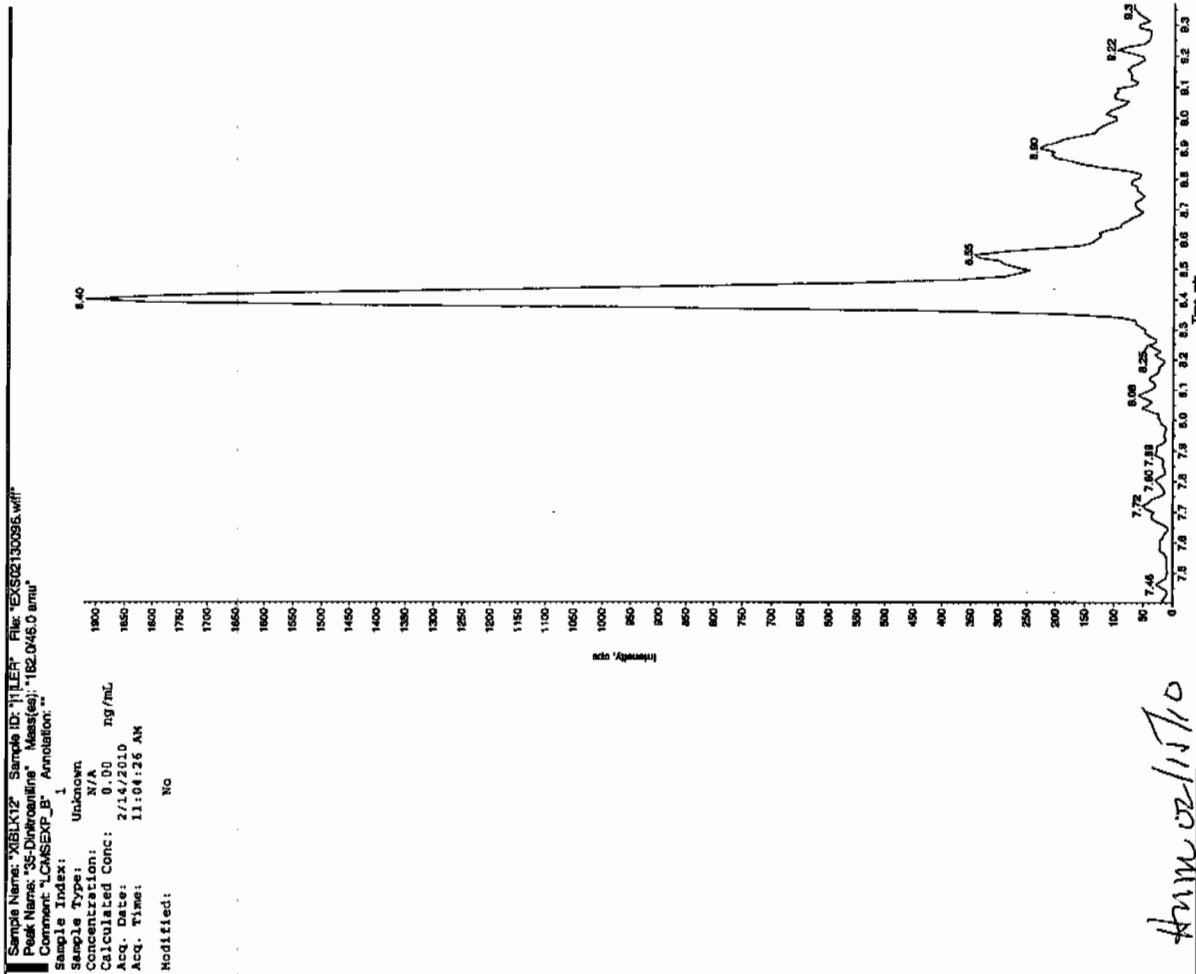
GEL Data File: EXS02130096.wiff

Instrument ID: LCM\$MS

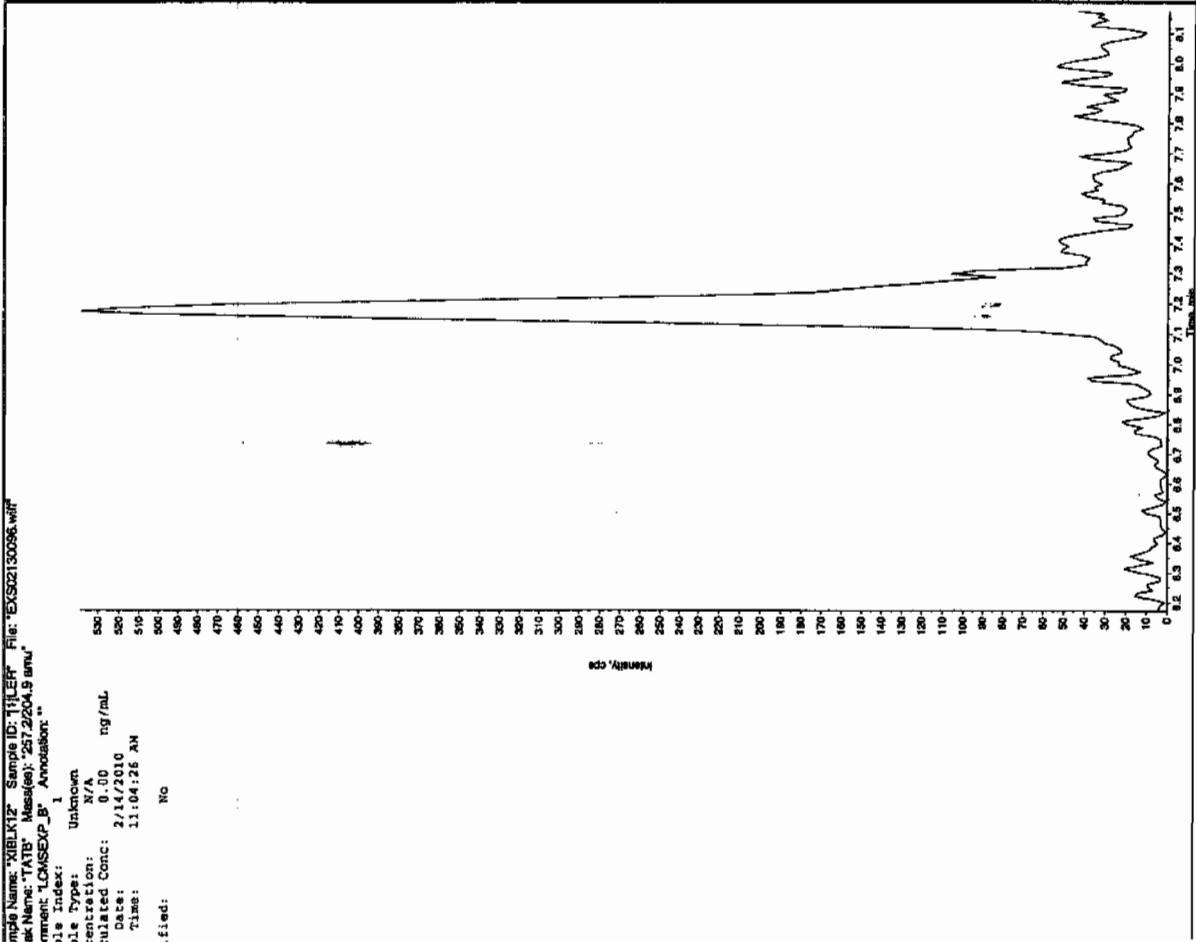
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	5.94
tris(o-cresyl) phosphate	0	2.78
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	20.2
2,6-Diamino-4-nitrotoluene	0	5.77

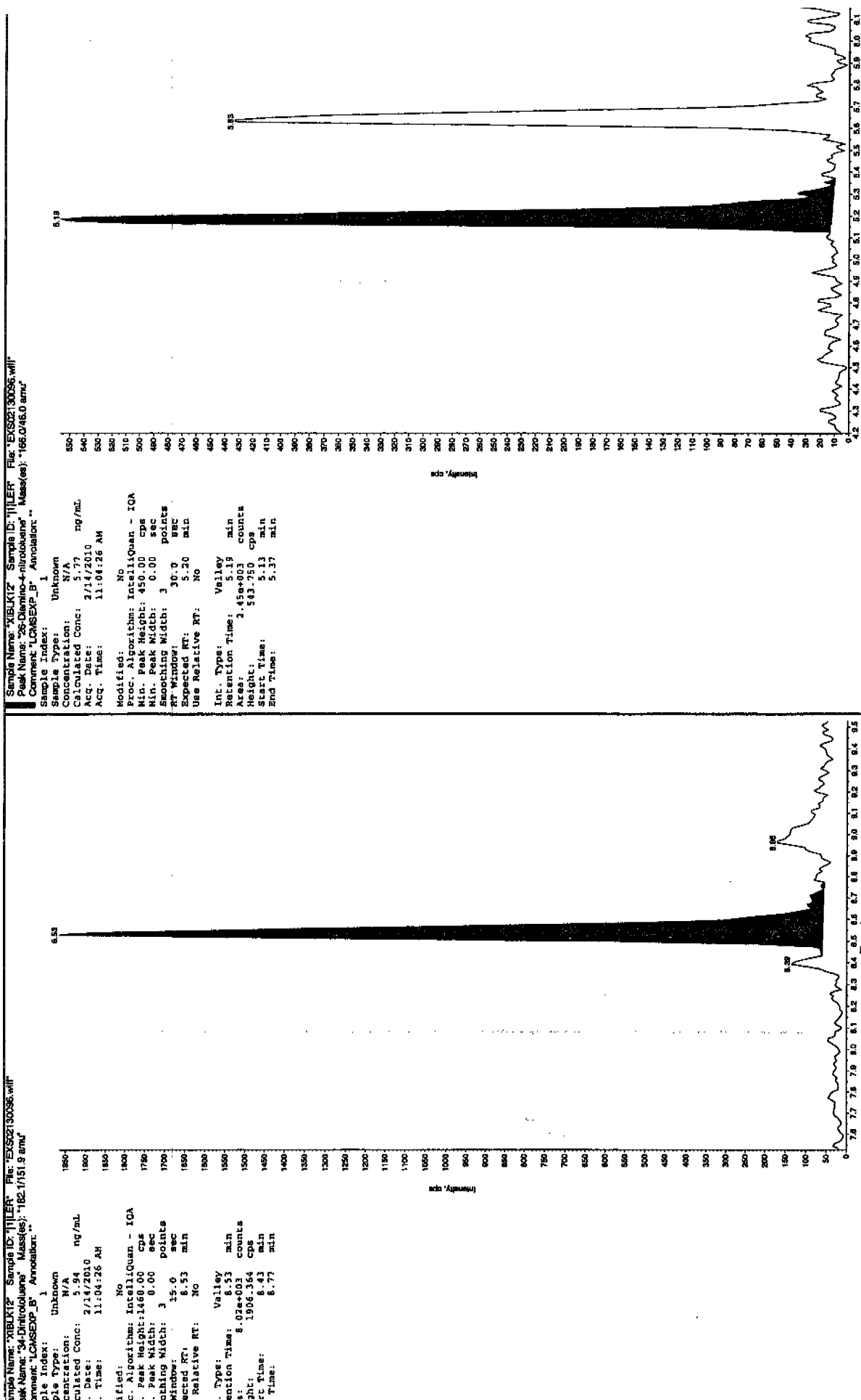
See 2/15/10



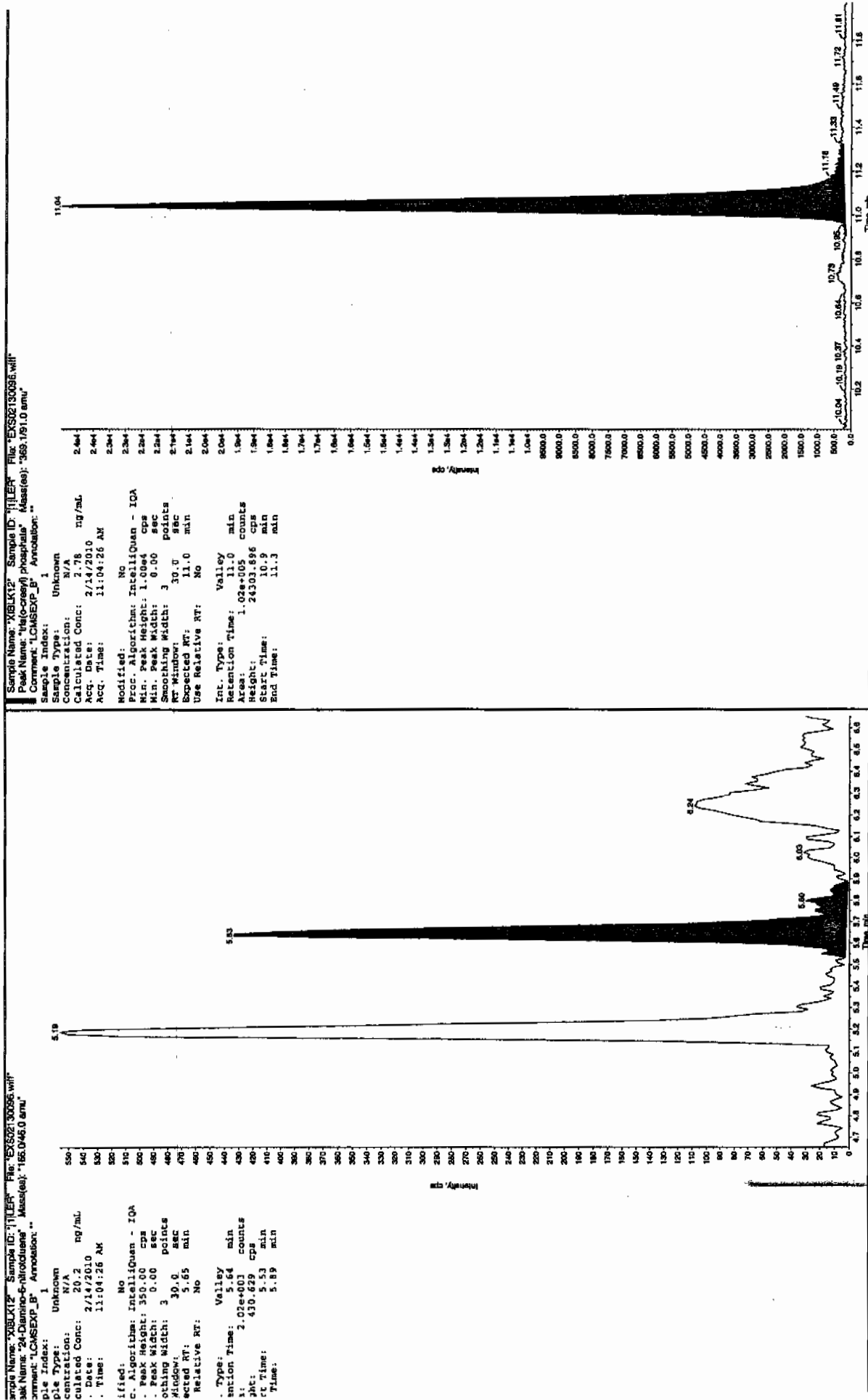
See 02/15/10



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



3L 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): 10-1390

Lab Code: GEL

Lab Sample ID: XIBLK13

Analysis Date: 14-FEB-10 13:10

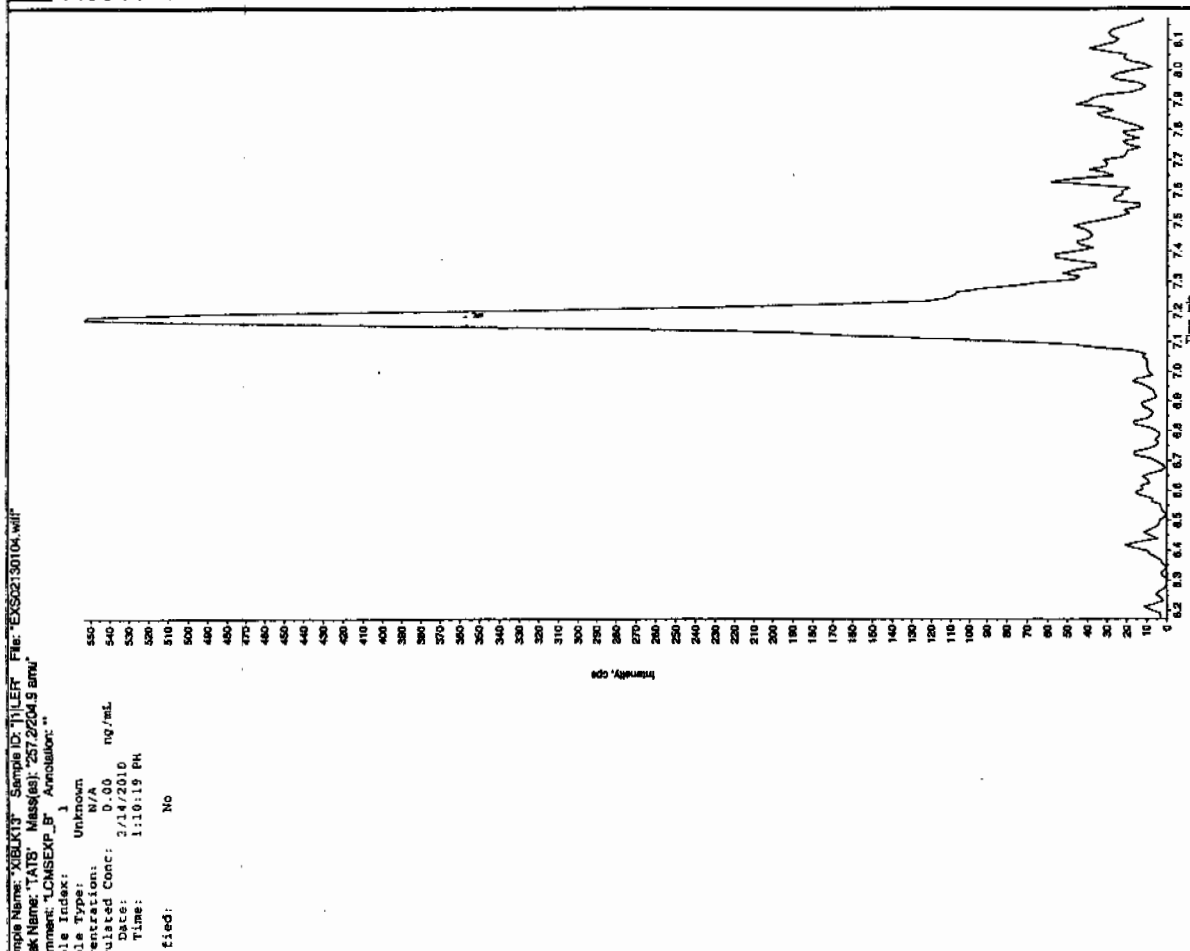
GEL Data File: EXS02130104.wiff

Instrument ID: LCMSMS

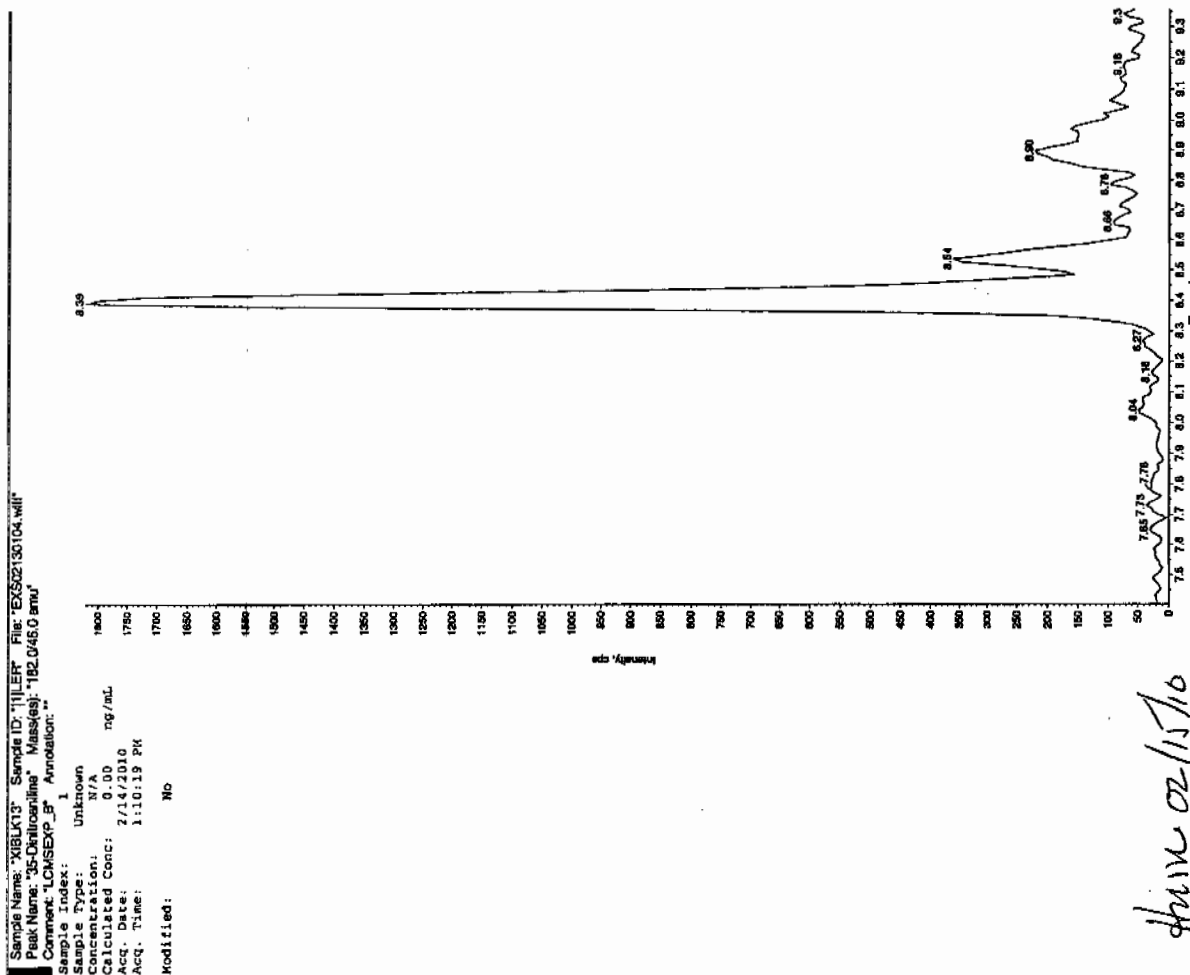
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	5.9
tris(o-cresyl) phosphate	0	2.45
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	20
2,6-Diamino-4-nitrotoluene	0	5.65

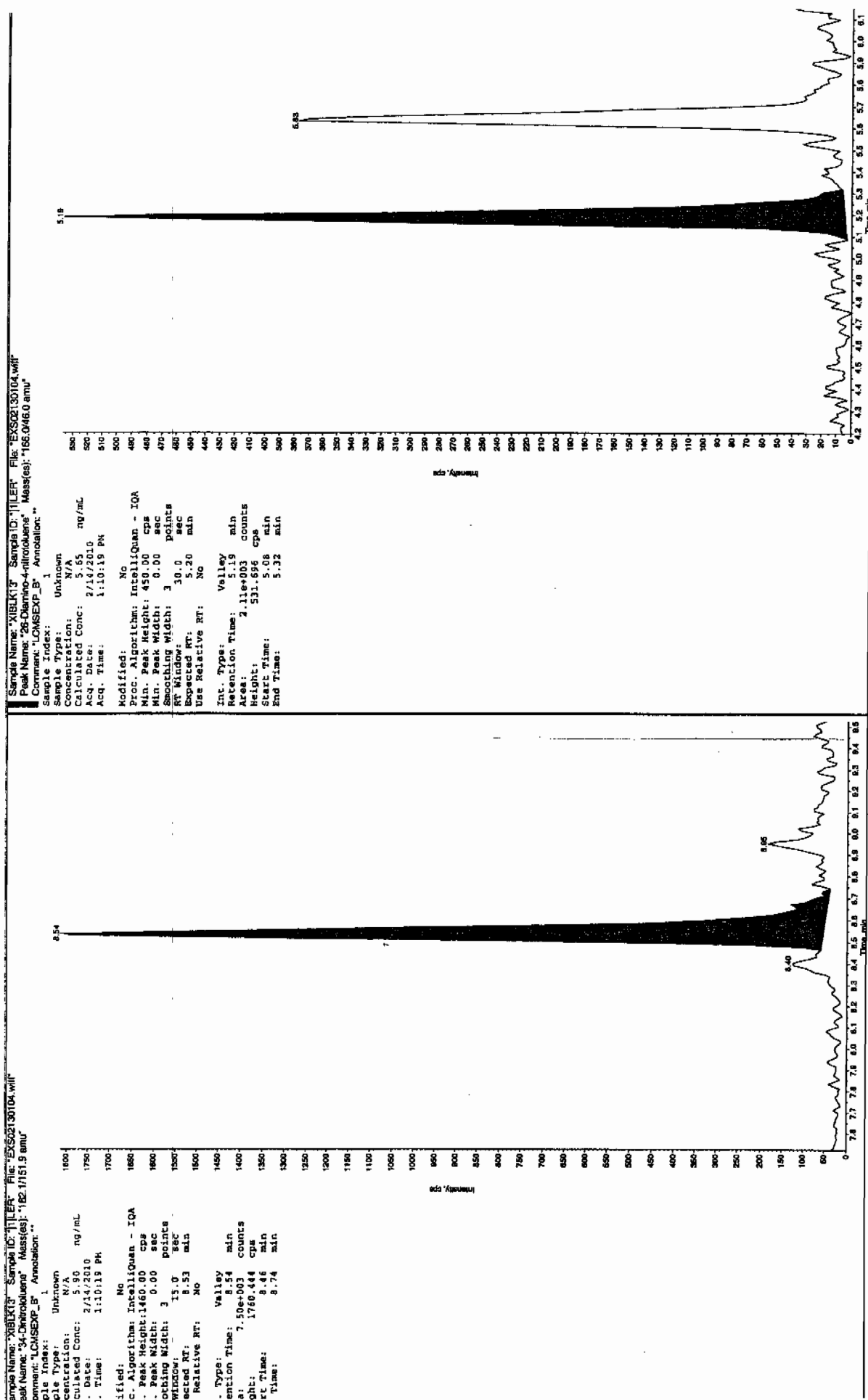
See 2/15/10



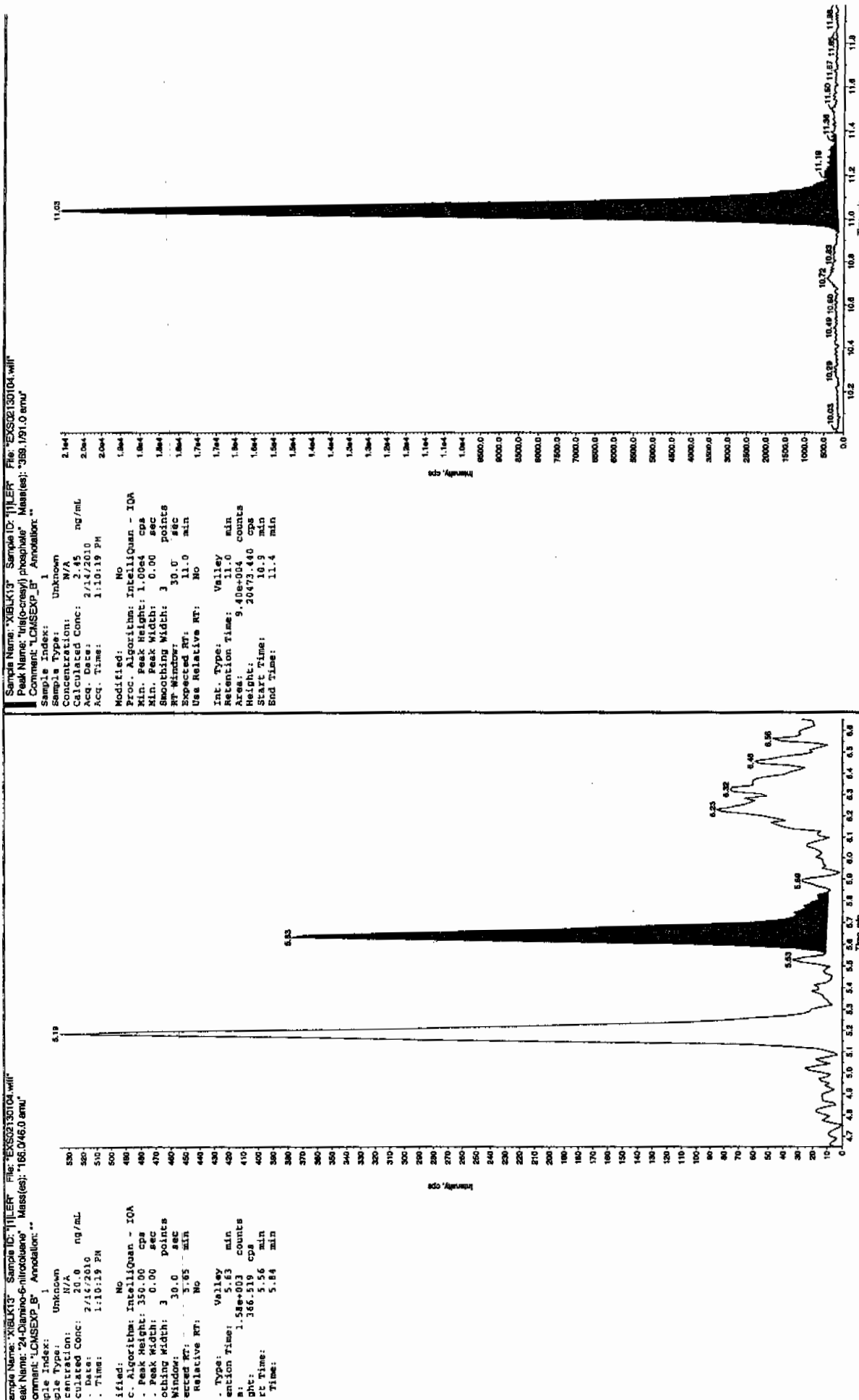
3L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



See 2/15/10



EL 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
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; 3620.4515	100
; 3770.3457	100
; 3920.2400	100

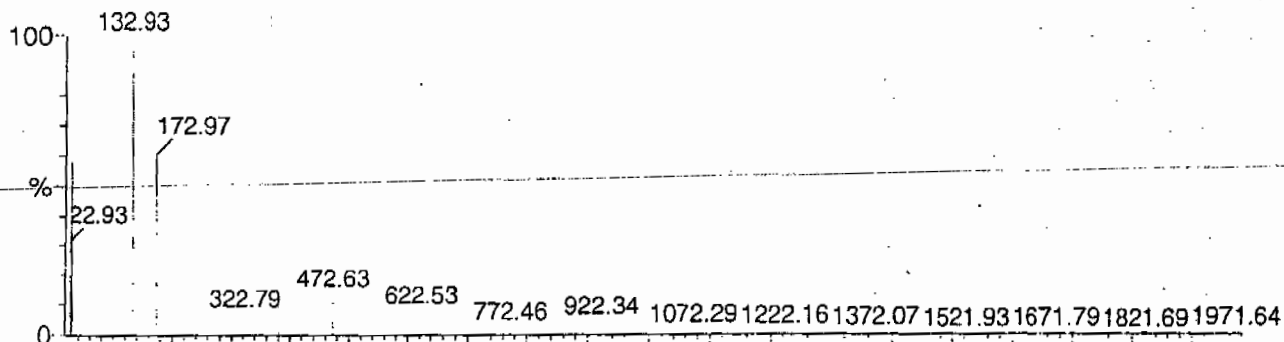
Calibration Report - MS1 Static

Page 1 of 1

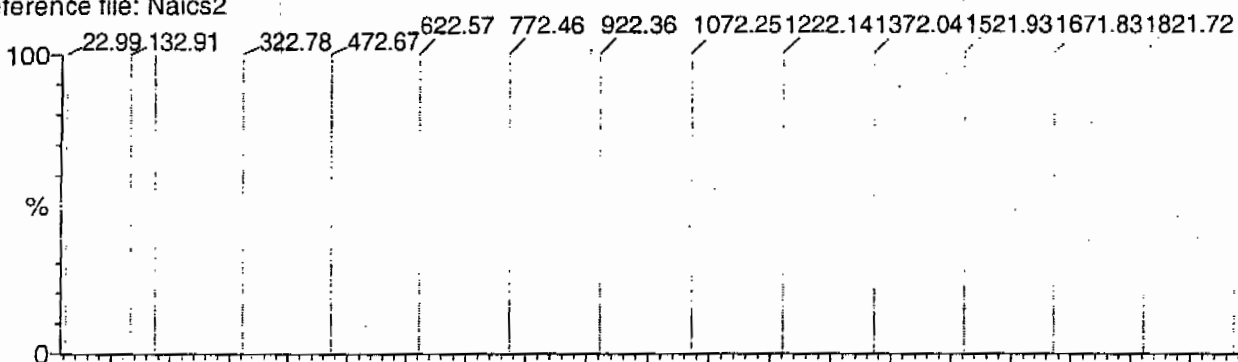
Printed: Fri Aug 25 10:50:01 2006

Data file: STATMS1 - Calibrated

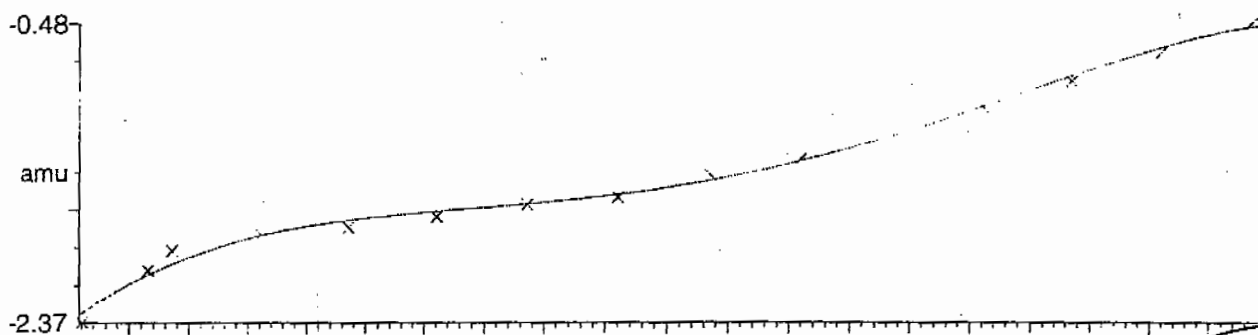
15 matches of 15 tested references



Reference file: Naics2

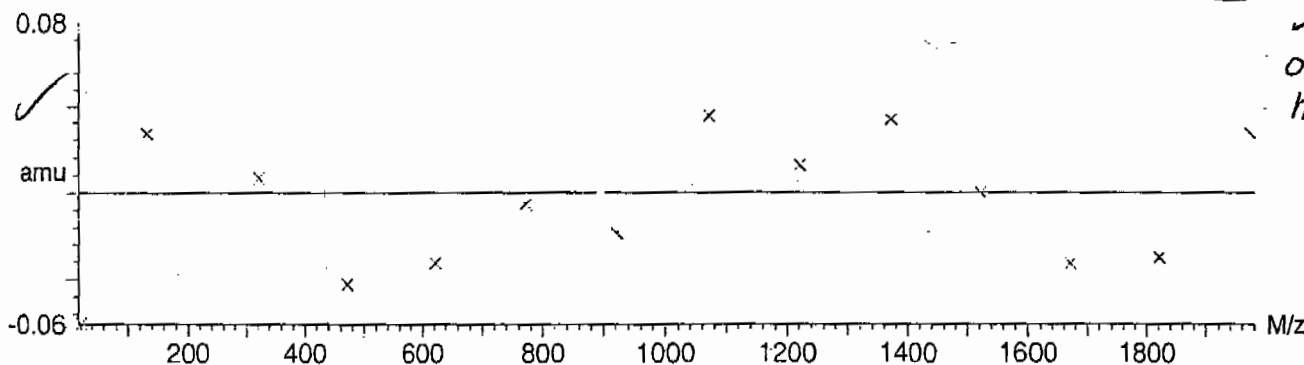


Mass difference (Raw - Ref mass)



Residuals

Mean residual = $-1.673470 \times 10^{-9} \pm 0.036953$

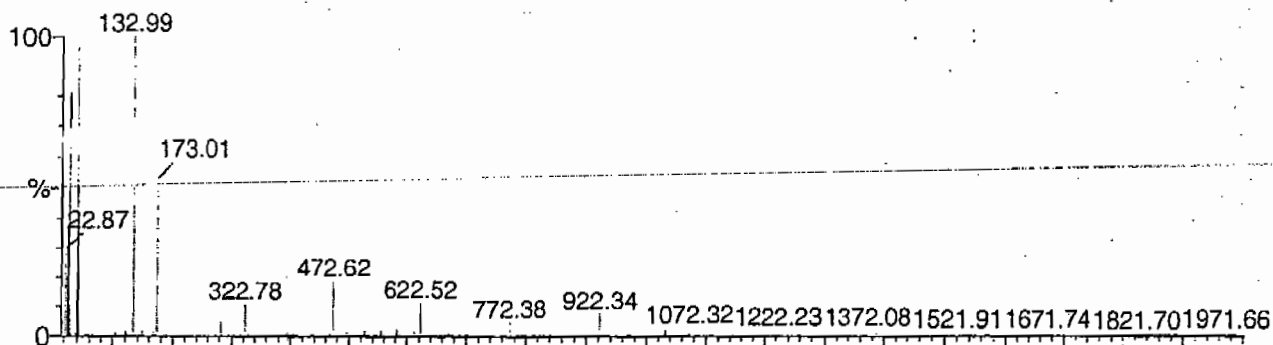


Calibration Report - MS1 Scanning

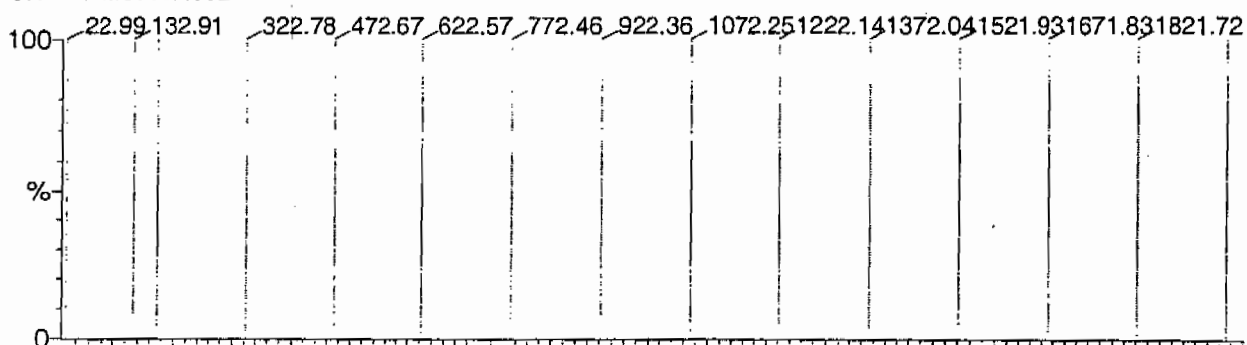
Page 1 of 1

Printed: Fri Aug 25 10:51:06 2006

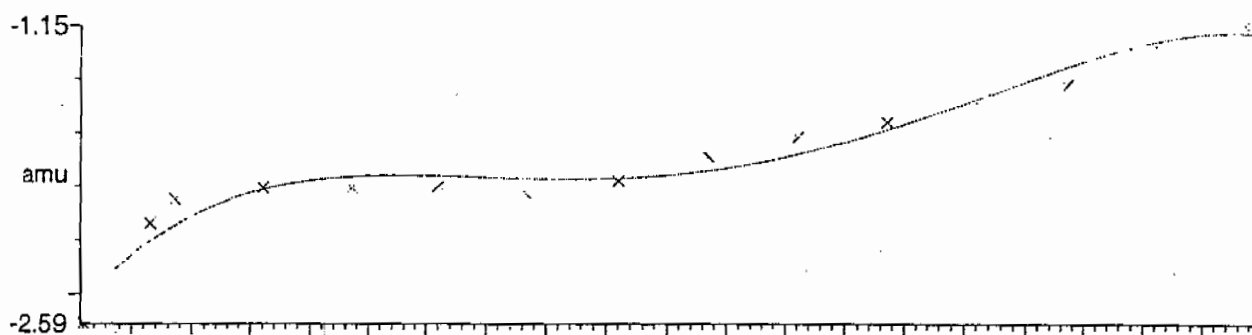
Data file: SCNMS1 - Calibrated 15 matches of 15 tested references



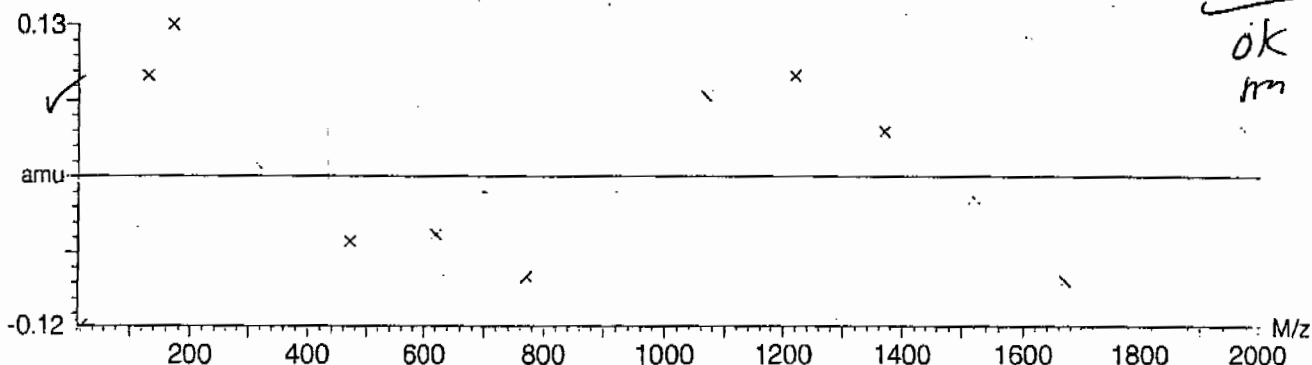
Reference file: Naics2



Mass difference (Raw - Ref mass)



Residuals



Mean residual = $-5.432715 \times 10^{-9} \pm 0.069858$

ok
m

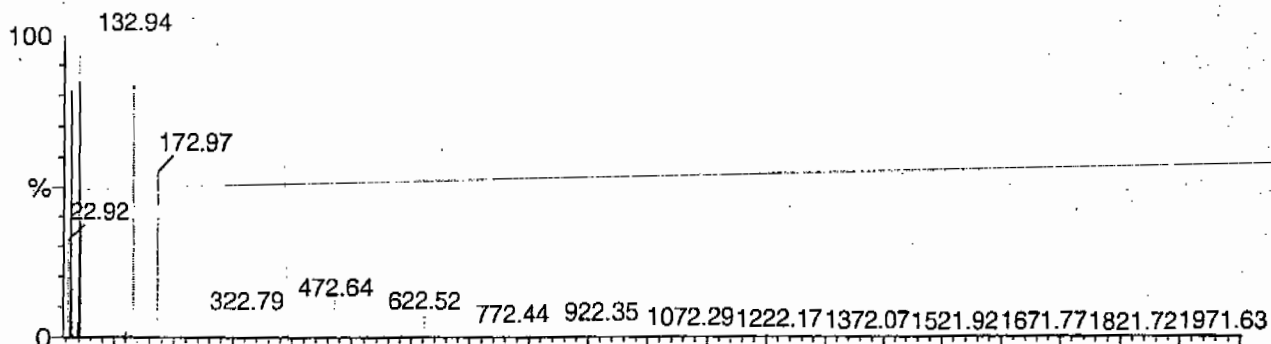
Calibration Report - MS1 Scan Speed Compensation

Page 1 of 1

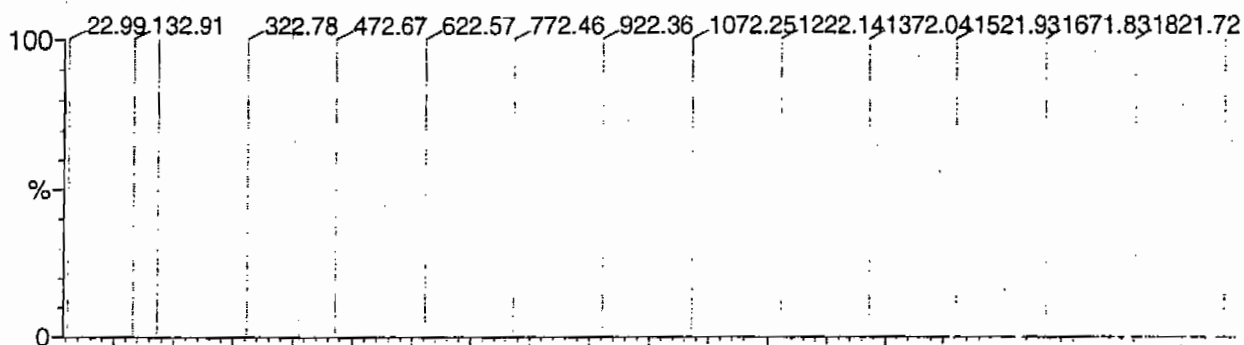
Printed: Fri Aug 25 10:52:01 2006

Data file: FASTMS1 - Calibrated

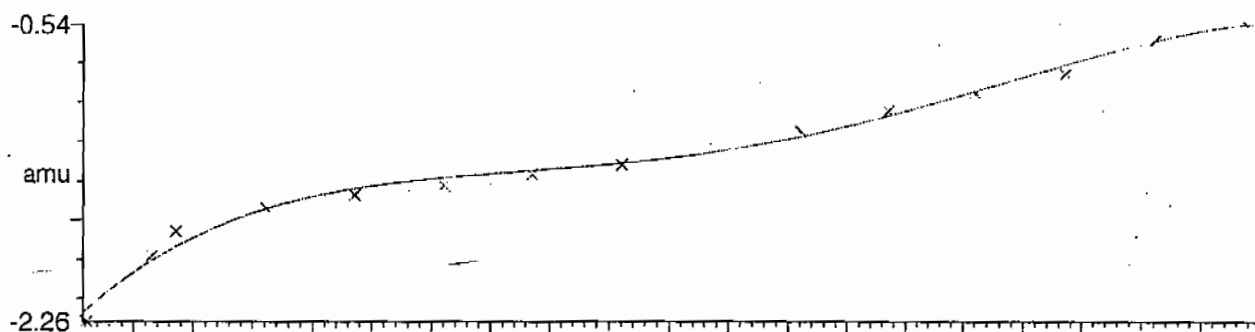
15 matches of 15 tested references



Reference file: Naics2

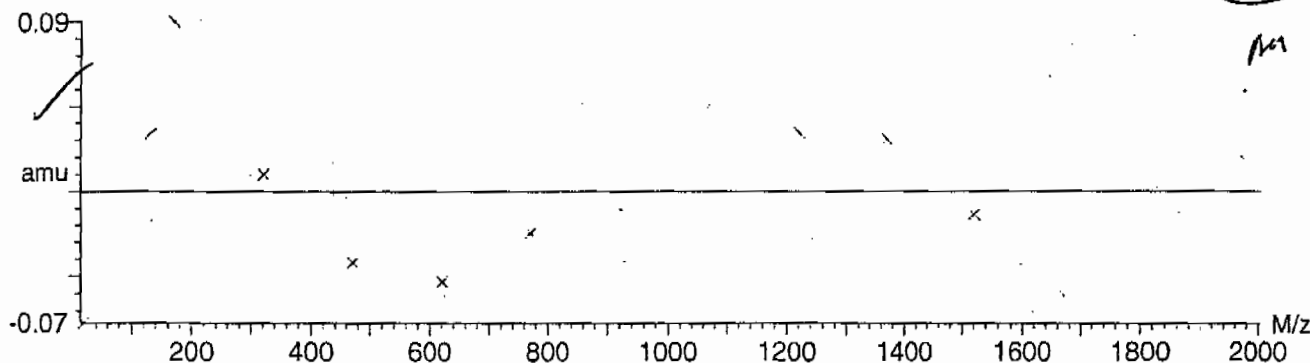


Mass difference (Raw - Ref mass)



Residuals

Mean residual = $3.486639 \times 10^{-9} \pm 0.040487$

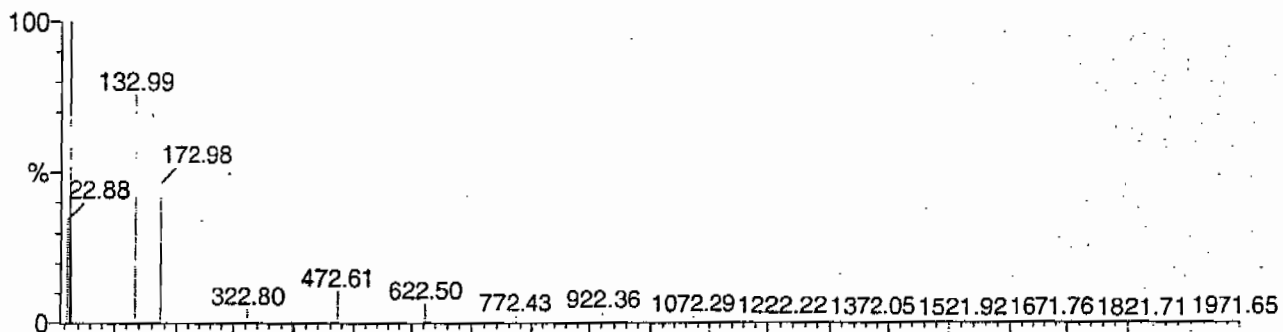


Calibration Report - MS2 Static

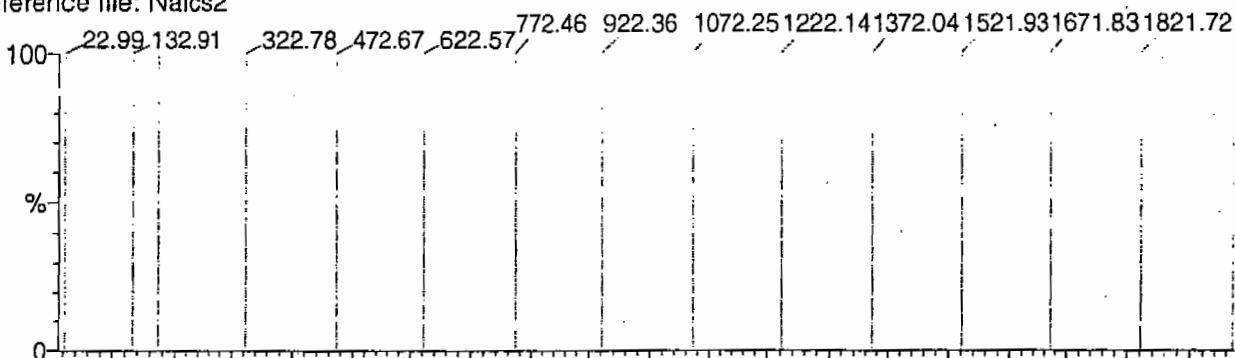
Page 1 of 1

Printed: Fri Aug 25 10:52:54 2006

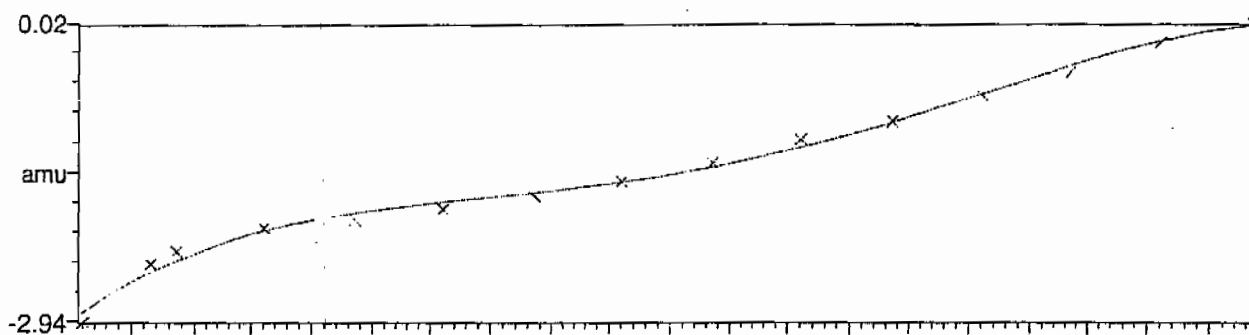
Data file: STATMS2 - Calibrated 15 matches of 15 tested references



Reference file: Naics2

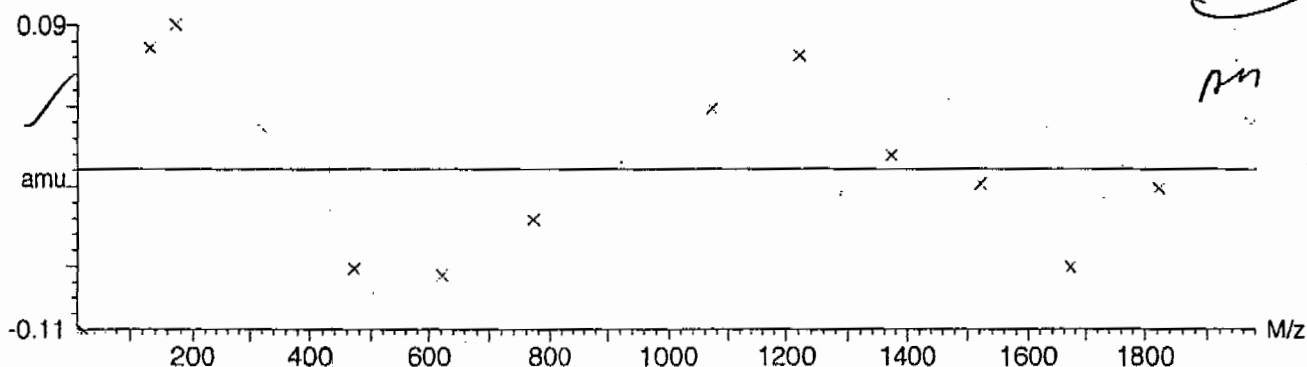


Mass difference (Raw - Ref mass)



Residuals

Mean residual = $2.048910 \times 10^{-9} \pm 0.057803$



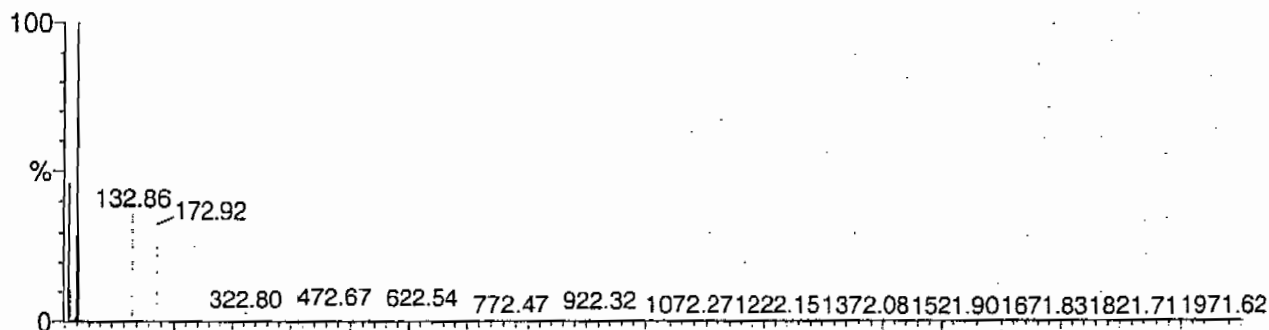
Calibration Report - MS2 Scanning

Page 1 of 1

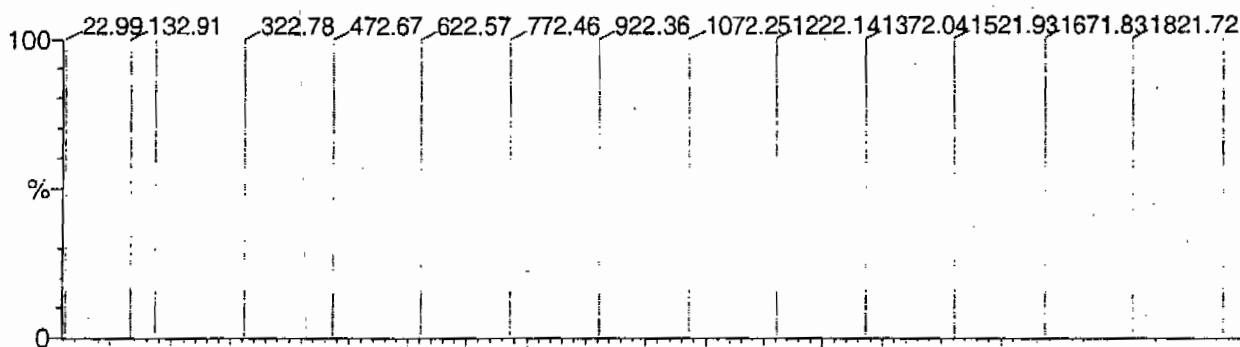
Printed: Fri Aug 25 10:54:00 2006

Data file: SCNMS2 - Calibrated

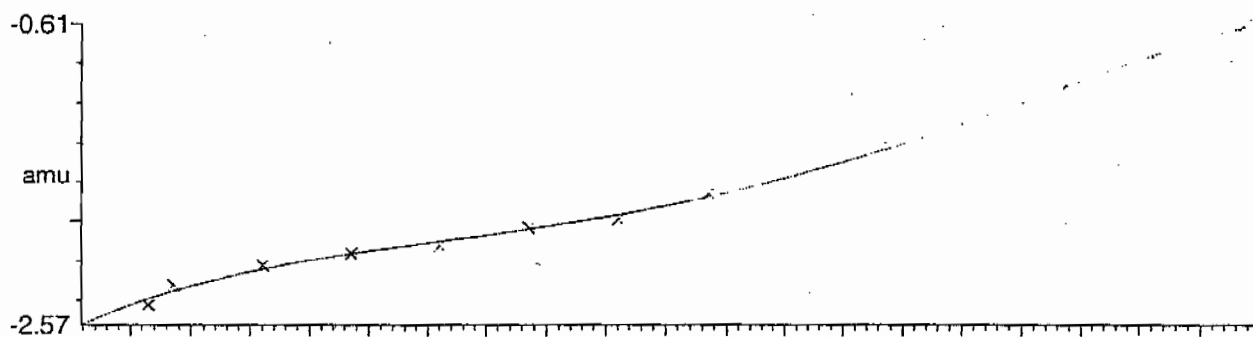
14 matches of 15 tested references



Reference file: Naics2

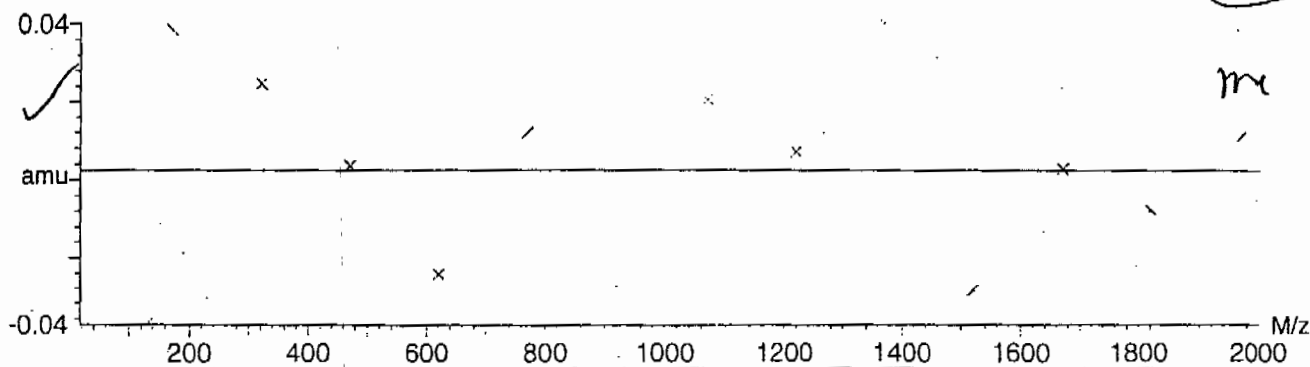


Mass difference (Raw - Ref mass)



Residuals

Mean residual = $-2.623502 \times 10^{-9} \pm 0.025622$



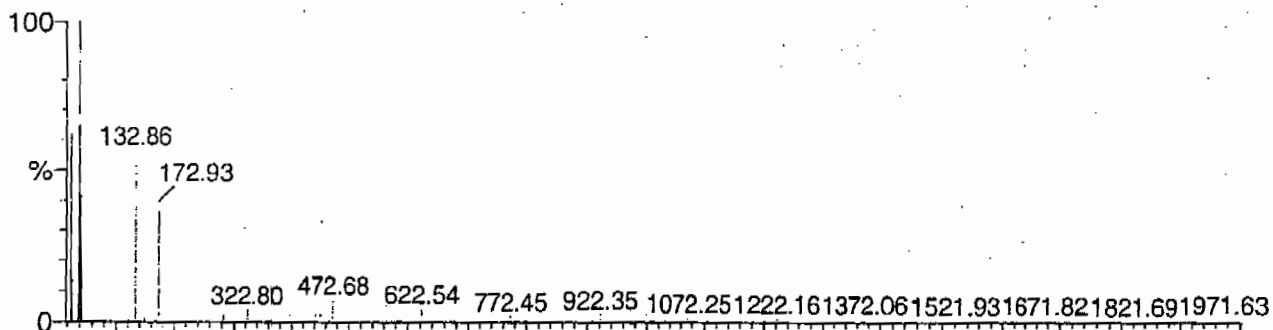
Calibration Report - MS2 Scan Speed Compensation

Page 1 of 1

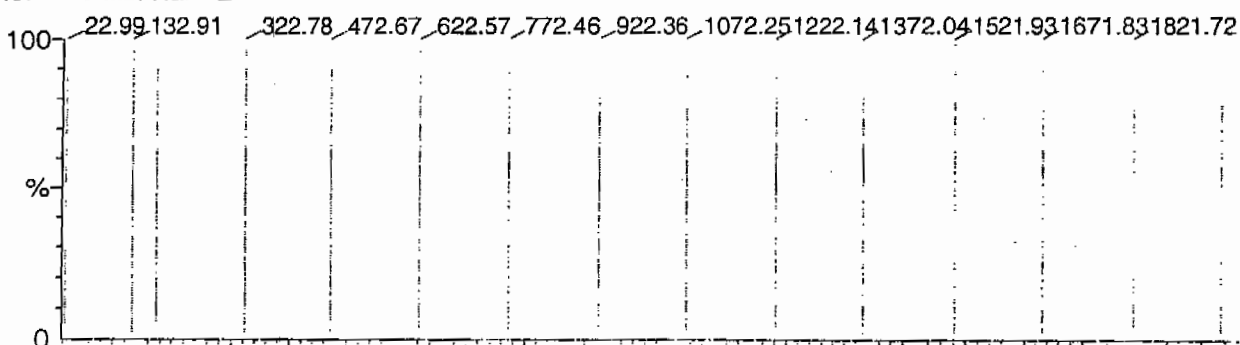
Printed: Fri Aug 25 10:54:54 2006

Data file: FASTMS2 - Calibrated

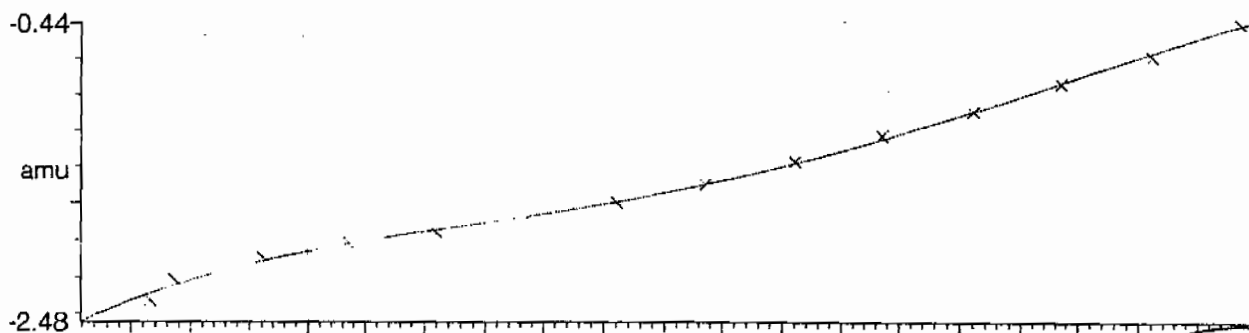
14 matches of 15 tested references



Reference file: Naics2

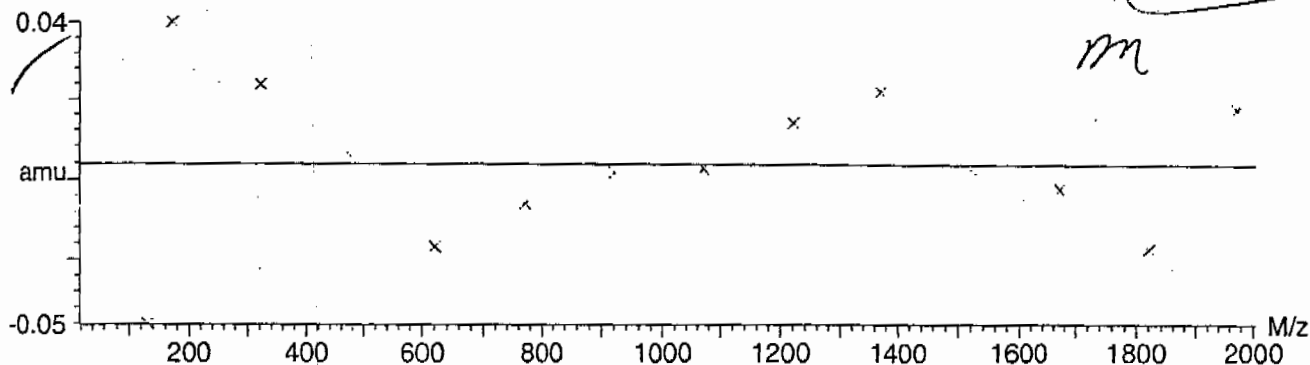


Mass difference (Raw - Ref mass)



Residuals

Mean residual = $-6.785350 \times 10^{-9} \pm 0.023134$

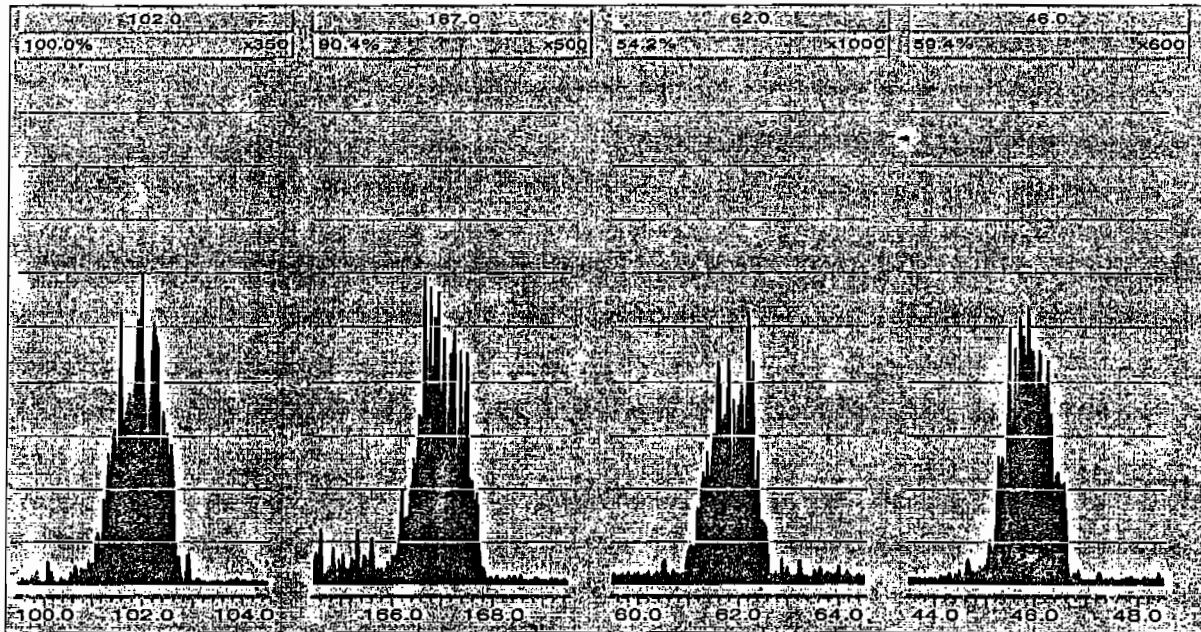


Quattro Micro Tune Parameters

Page 1

Parameter File: C:\MASSLYNX\NEW_EXP.PROVACQUDB\explosives04.ipr

Printed : Mon Feb 08 14:05:58 2010



High Explosives Internal Standard Summary

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1390

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) #
			3214.577	12.205	18459.667	17.697
Upper Limit			4178.9501	12.705	23997.5671	18.197
Lower Limit			2250.2039	11.705	12921.7669	17.197
MB for batch 944927	13-feb-10 19:12	EXP0208254a	3539.38	12.072	18942.8	17.463
LCS for batch 944927	13-feb-10 19:42	EXP0208255a	3356.51	12.069	19356.1	17.463
RE15-10-7918	13-feb-10 20:11	EXP0208256a	3115.03	12.072	18439.5	17.463
RE15-10-7918(245391001MS)	13-feb-10 20:41	EXP0208257a	3464.18	12.073	21973.2	17.465
RE15-10-7918(245391001MSD)	13-feb-10 21:10	EXP0208258a	3451.87	12.065	18561.6	17.455
RE15-10-7915	13-feb-10 21:40	EXP0208259a	3130.2	12.069	17489.4	17.463
RE15-10-7914	13-feb-10 22:39	EXP0208261a	2890	12.074	17232	17.466
RE15-10-7919	13-feb-10 23:09	EXP0208262a	2841.21	12.073	16350.9	17.464
RE15-10-7921	13-feb-10 23:38	EXP0208263a	2994	12.073	16233.5	17.465
RE15-10-7916	14-feb-10 01:36	EXP0208267a	2911.07	12.07	16791.6	17.465
RE15-10-7917	14-feb-10 02:06	EXP0208268a	2598.57	12.067	14973.4	17.467
RE15-10-7922	14-feb-10 02:35	EXP0208269a	2776.14	12.067	15215.3	17.466
RE15-10-8053	14-feb-10 03:05	EXP0208270a	2858.84	12.067	16418.7	17.467
RE15-10-8054	14-feb-10 03:34	EXP0208271a	3031.23	12.067	16806.2	17.467
RE15-10-7915	14-feb-10 17:53	EXP0208300a	2829.24	12.074	18653.9	17.444
RE15-10-7920	14-feb-10 18:22	EXP0208301a	3568.34	12.039	18289.8	17.444

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: RE15-10-7918

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391001

Sample Amount 2

Moisture: 9.6

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208256a

Date Analyzed: 13-FEB-10 20:11

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

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

Dataset: C:\MASSLYNX\New_Exp\PROV020810expA5.qld, Time: Sun Feb 14 11:43:22 2010

Name: C:\MASSLYNX\NEW_EXP\PROVData\EXP0208256a

Date: 13-Feb-2010

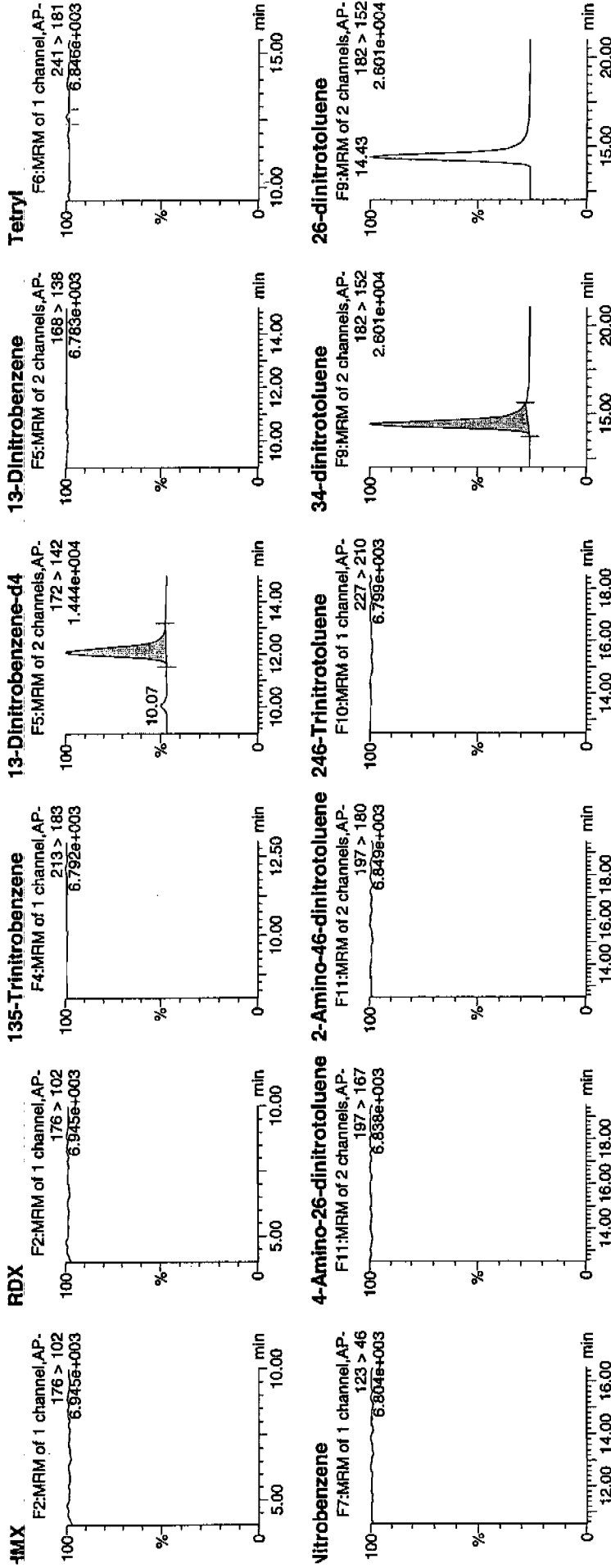
Time: 20:11:47

D: 245391001

/Ial: 2:4,C

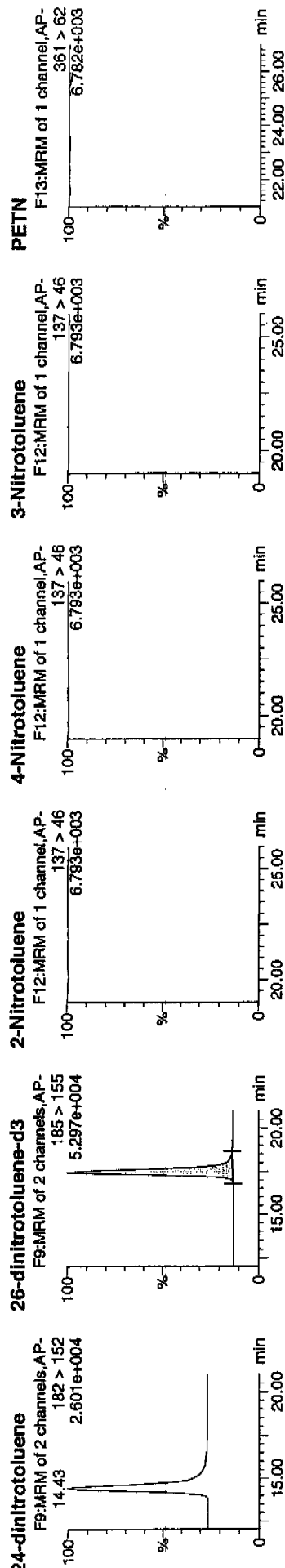
not
2/14/10

WAX 944929 / Solz / 2 /



not
2/14/10

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010



Name	Trace	RT	Area	IS Area	Abs. Resp	Response	Flags	Mod Date	Conc mg/ml	% Rec	% Dev	S/N
245391001	HMIX	176 > 102		3115.035								
245391001	RDX	176 > 102		3115.035								
245391001	135-Trinitrobenzene	213 > 183		3115.035								
245391001	13-Dinitrobenzene-d4	172 > 142	12.07	3115.035	3115.035	bb			484.5176	98.9	-3.1	370.8
245391001	13-Dinitrobenzene	168 > 138		3115.035								
245391001	Tetryl	241 > 181		3115.035								
245391001	Nitrobenzene	123 > 46		3115.035			MM-	14-Feb-10	11:28:46			
245391001	4-Amino-26-dinitrotoluene	197 > 167		18439.514								
245391001	2-Amino-46-dinitrotoluene	197 > 180		18439.514								
245391001	246-Trinitrotoluene	227 > 210		18439.514								
245391001	34-dinitrotoluene	182 > 152	14.43	9389.392	9389.392	254.600	bb		282.8911	113.2	13.2	596.4
245391001	26-dinitrotoluene	182 > 152		18439.514								
245391001	24-dinitrotoluene	182 > 152		18439.514								
245391001	26-dinitrotoluene-d3	185 > 155	17.46	18439.514	18439.514	18439.514	bb		499.4537	99.9	-0.1	1416.1
245391001	2-Nitrotoluene	137 > 46		18439.514								
245391001	4-Nitrotoluene	137 > 46		18439.514								
245391001	3-Nitrotoluene	137 > 46		18439.514								
245391001	PETN	361 > 62		18439.514								

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7918

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391001

Sample Amount 2

Moisture: 9.6

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02130087.wiff

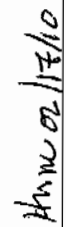
Date Analyzed: 14-FEB-10 08:43

Units: ug/kg

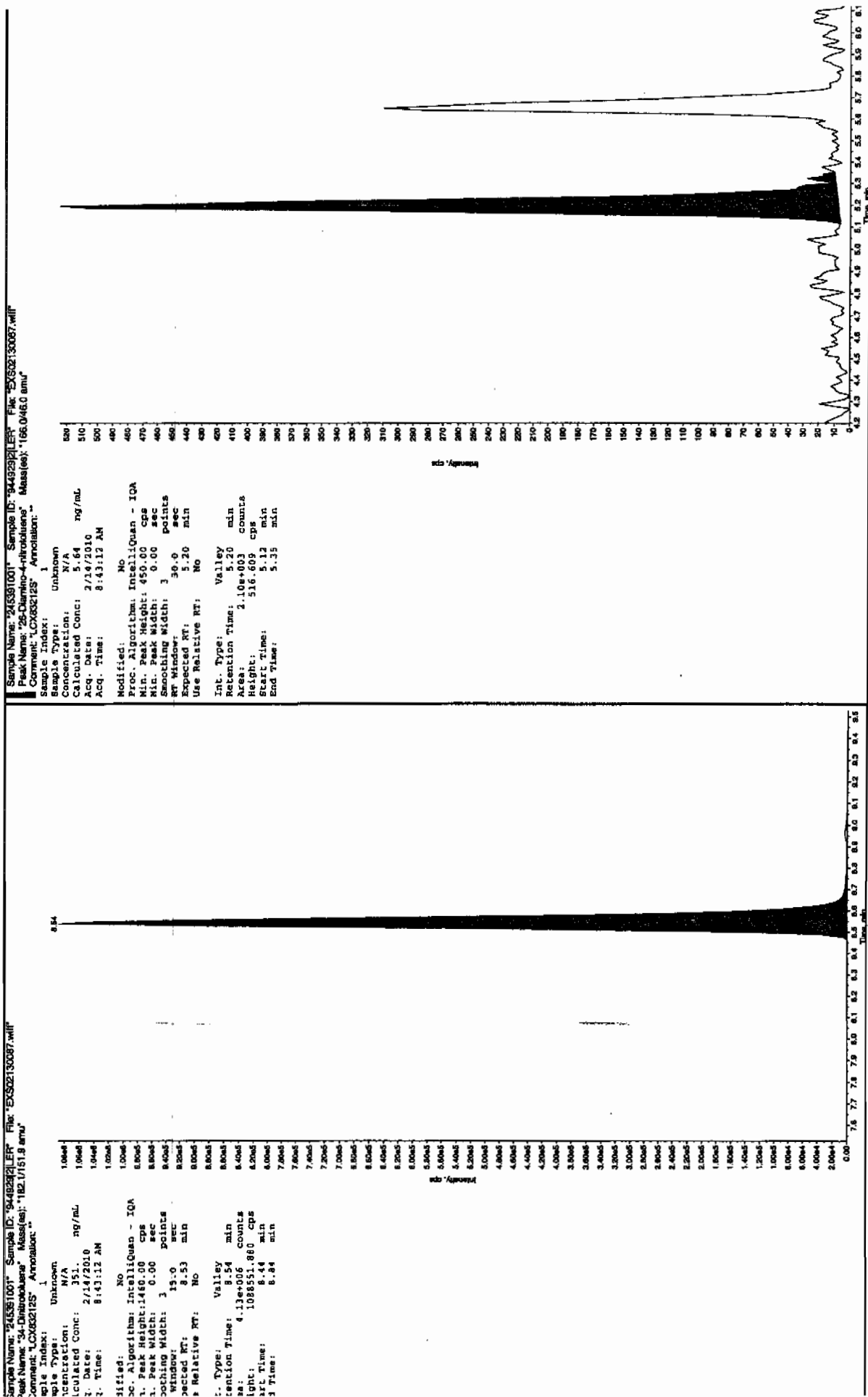
Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

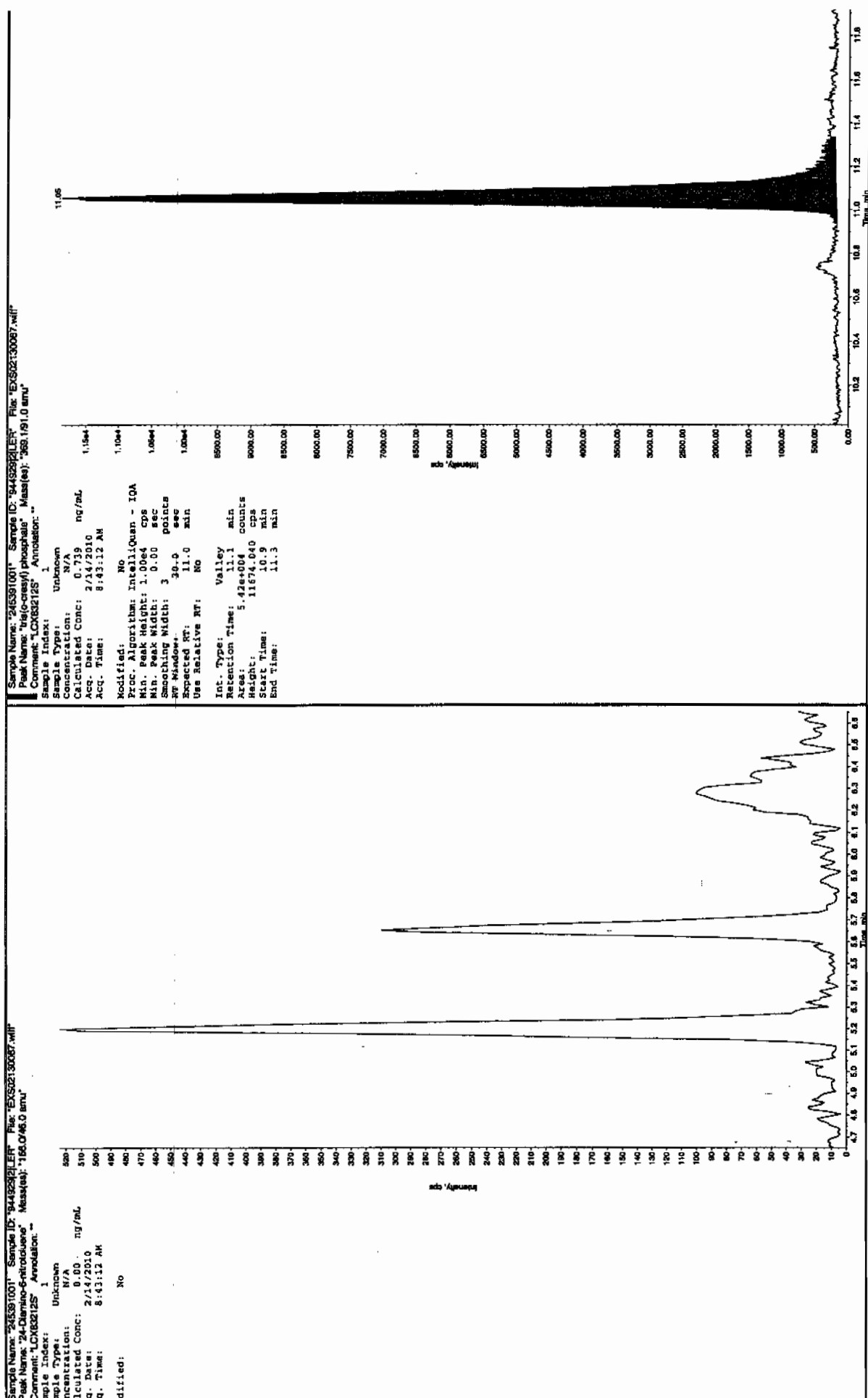
Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor



Page 536 of 1954



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: RE15-10-7915

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391002

Sample Amount 2

Moisture: 18.3

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208259a

Date Analyzed: 13-FEB-10 21:40

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	242	J
19406-51-0	4-Amino-2,6-dinitrotoluene	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: Sun Feb 14 14:16:28 2010, Page 1 of 3

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

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010

Method: C:\MASSLYNX\New_Exp.PRO\MethDB\020810expa.mdb, Time: Tue Feb 09 09:17:48 2010
Calibration: C:\MASSLYNX\New_Exp.PRO\CurveDB\020810expa.cdb, Time: Tue Feb 09 10:19:06 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208259a

Date: 13-Feb-2010

Time: 21:40:13

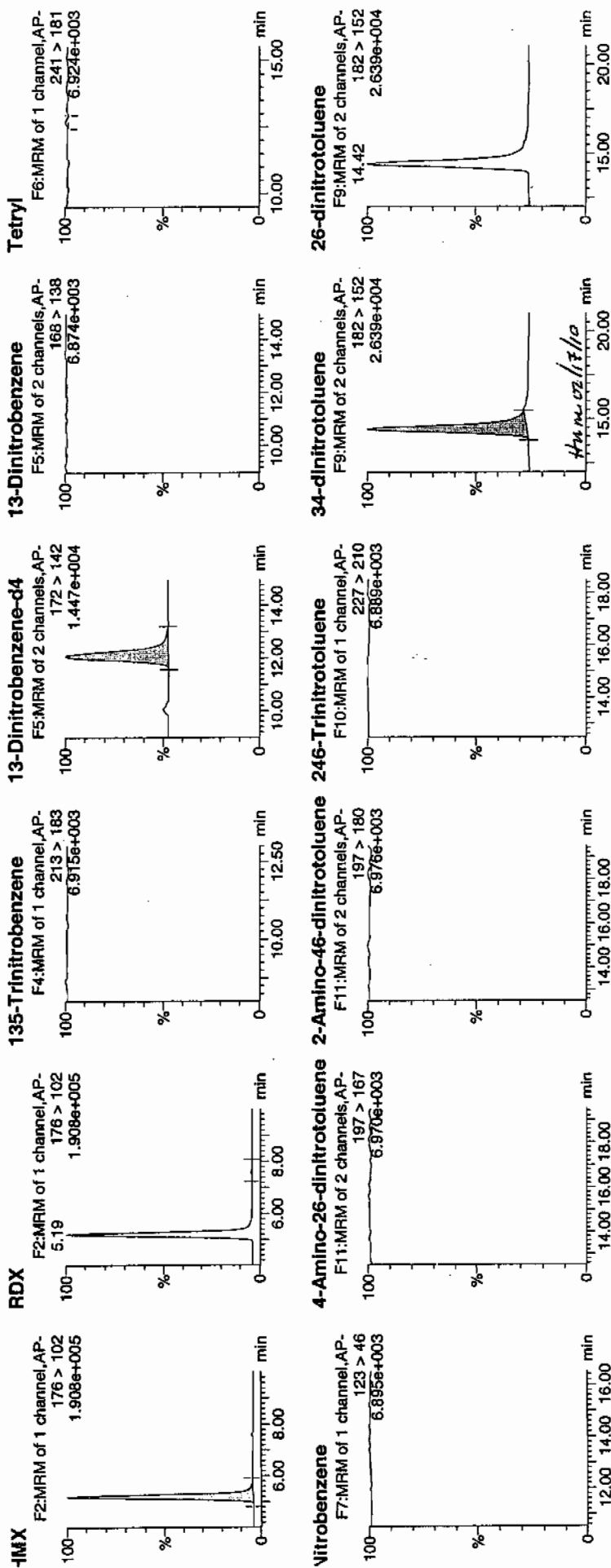
D: 245391002

/lat: 2:4,F

not
2/14/10

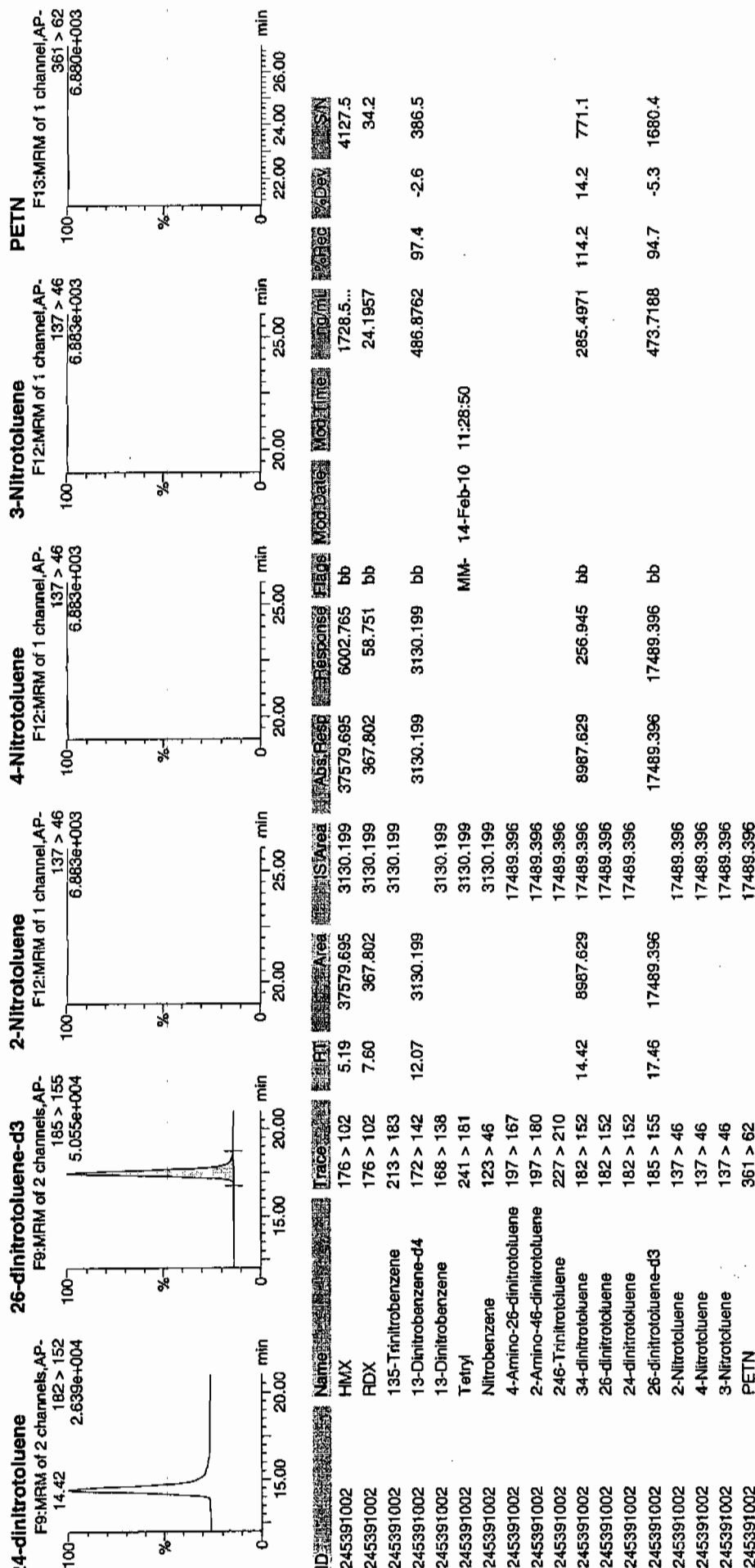
WAL 944929 / 8032 / 21

see 10x for full
see EXP02083009



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

Dataset: C:\MASSLYNX\New_Exp_PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7915

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391002

Sample Amount 2

Moisture: 18.3

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 10

Injection Volume (uL): 50

GEL data file: EXP0208300a

Date Analyzed: 14-FEB-10 17:53

Units: ug/kg

Cas No.	Compound	Concentration*	Q
2691-41-0	HMX	16100	

*Concentration =

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

Printed: Mon Feb 15 07:46:07 2010, Page 51 of 67

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

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA6.qld, Time: Mon Feb 15 07:43:55 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208300a

Date: 14-Feb-2010

Time: 17:53:01

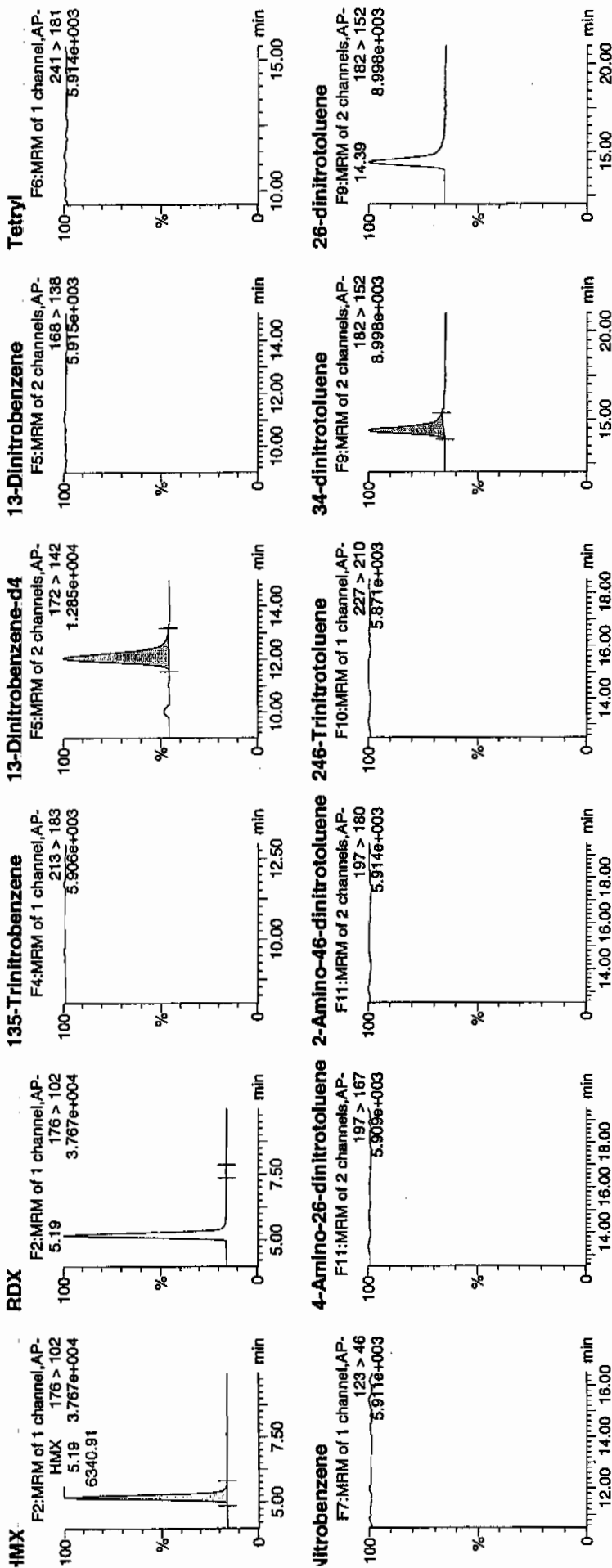
D: 245391002

/lat: 2:6,D

Report HMX w/ EXP0208300a

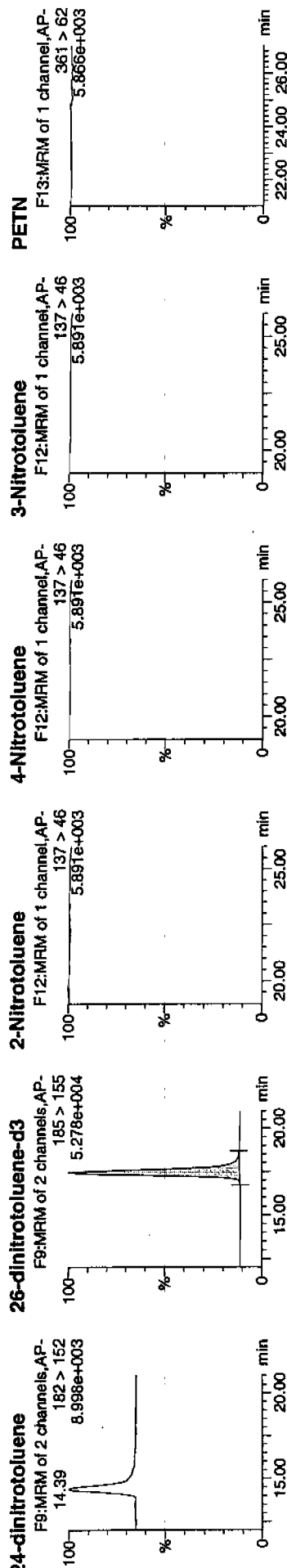
not
2/15/10

WAV 944929 / 8022 / 12/10



from 2/17/10

Dataset: C:\MASSLYN\New_Exp.PRO\020810expA6.qld, Time: Mon Feb 15 07:43:55 2010

[illegible]

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7915

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391002

Sample Amount 2

Moisture: 18.3

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02130090.wiff

Date Analyzed: 14-FEB-10 09:30

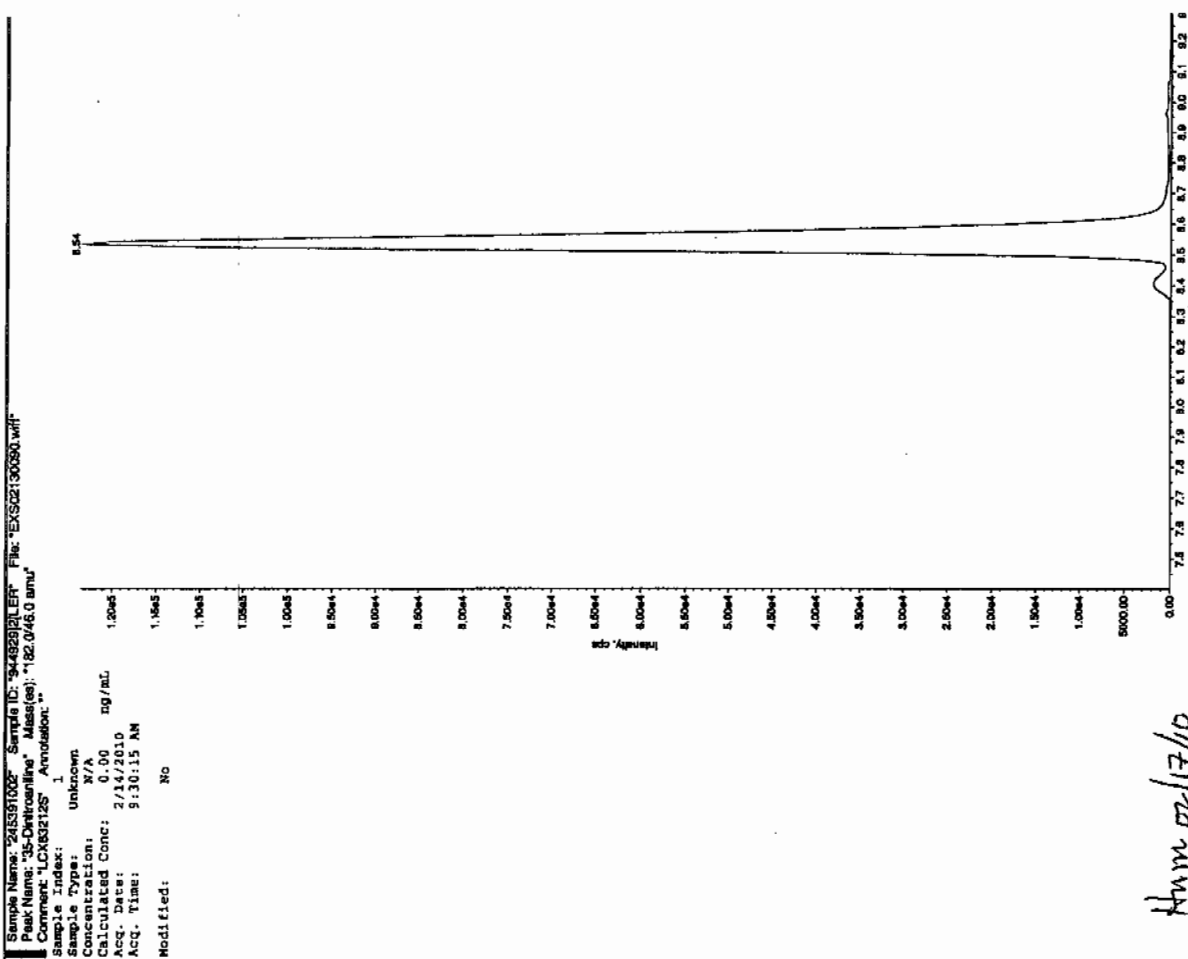
Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	7390	
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

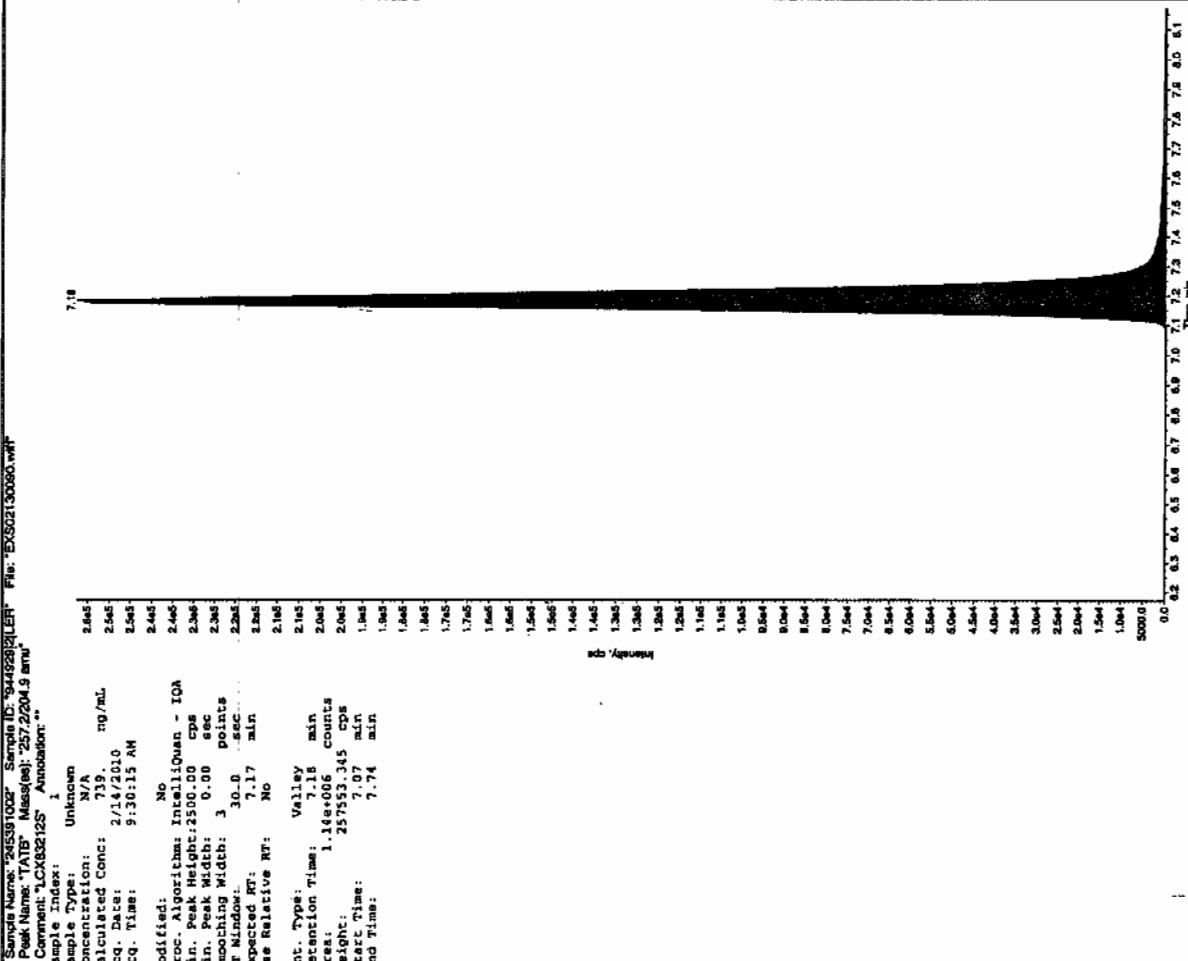
*Concentration =

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

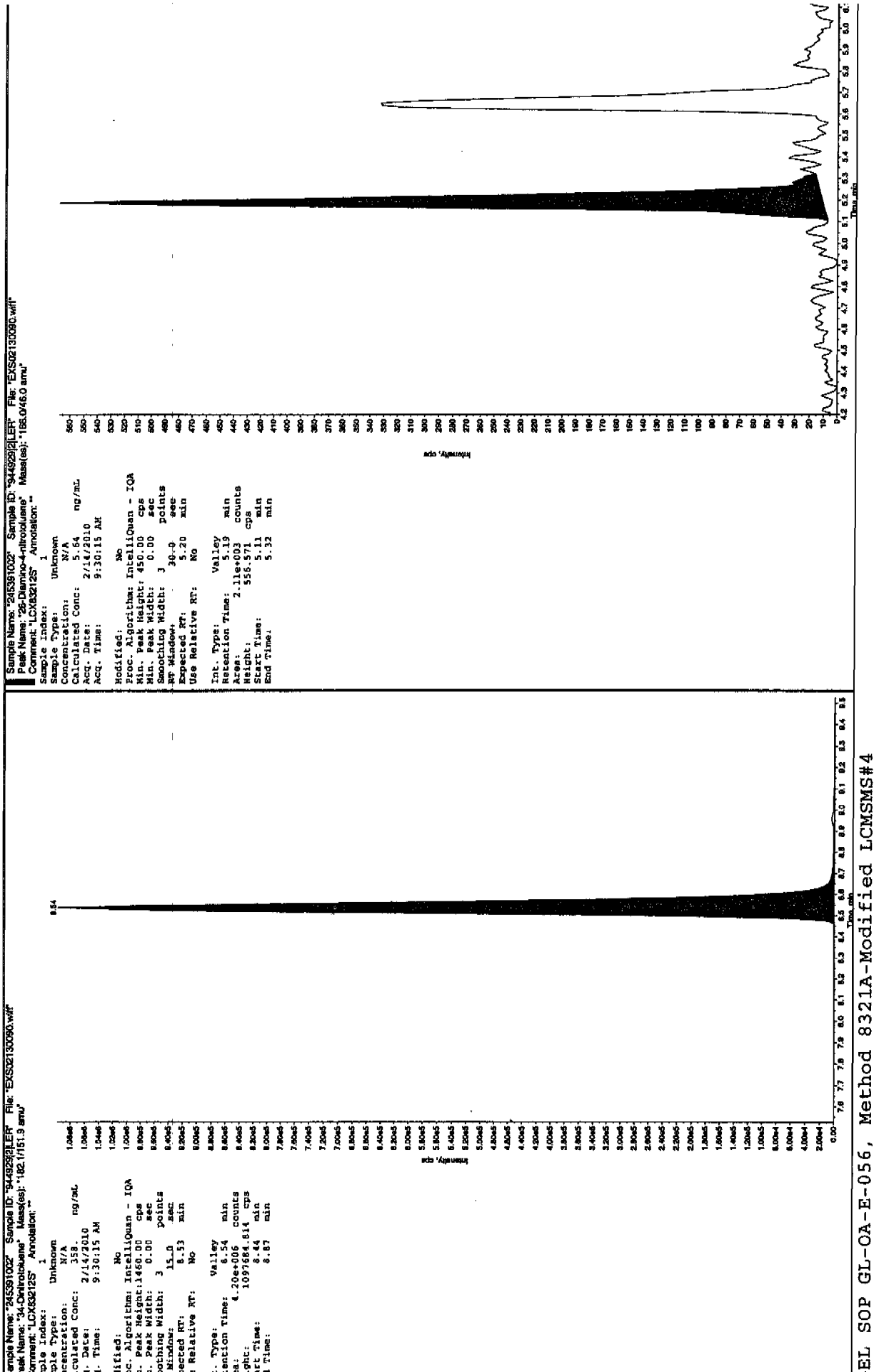
Don 2/15/10



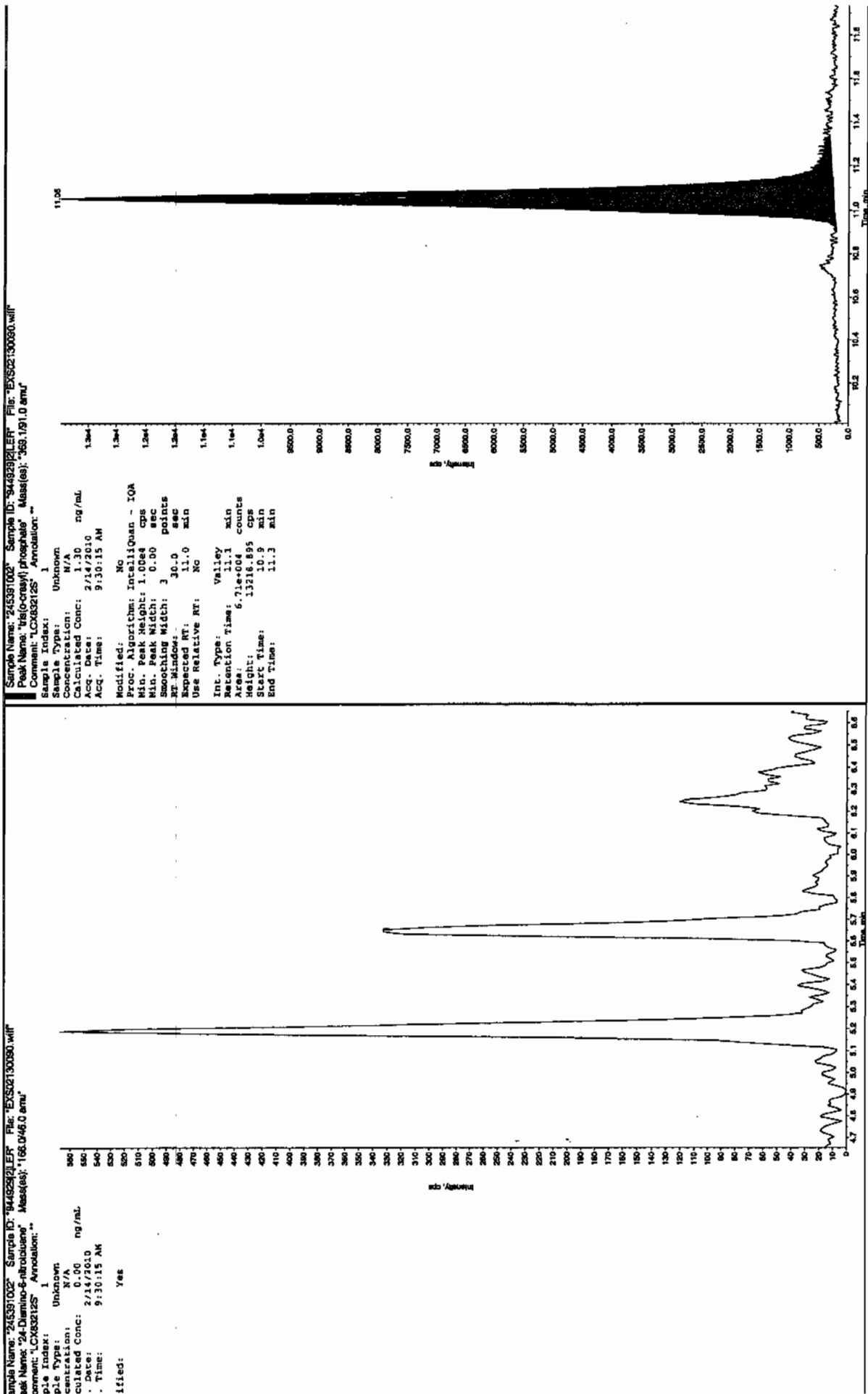
Ann 02/17/10



3EL SOP GL-OA-E-056, Method 8321A-Modified LCM SMS#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: RE15-10-7920

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391003

Sample Amount 2

Moisture: 3.7

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208301a

Date Analyzed: 14-FEB-10 18:22

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\020810expA6.qld, Time: Mon Feb 15 07:43:55 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208301a

Date: 14-Feb-2010

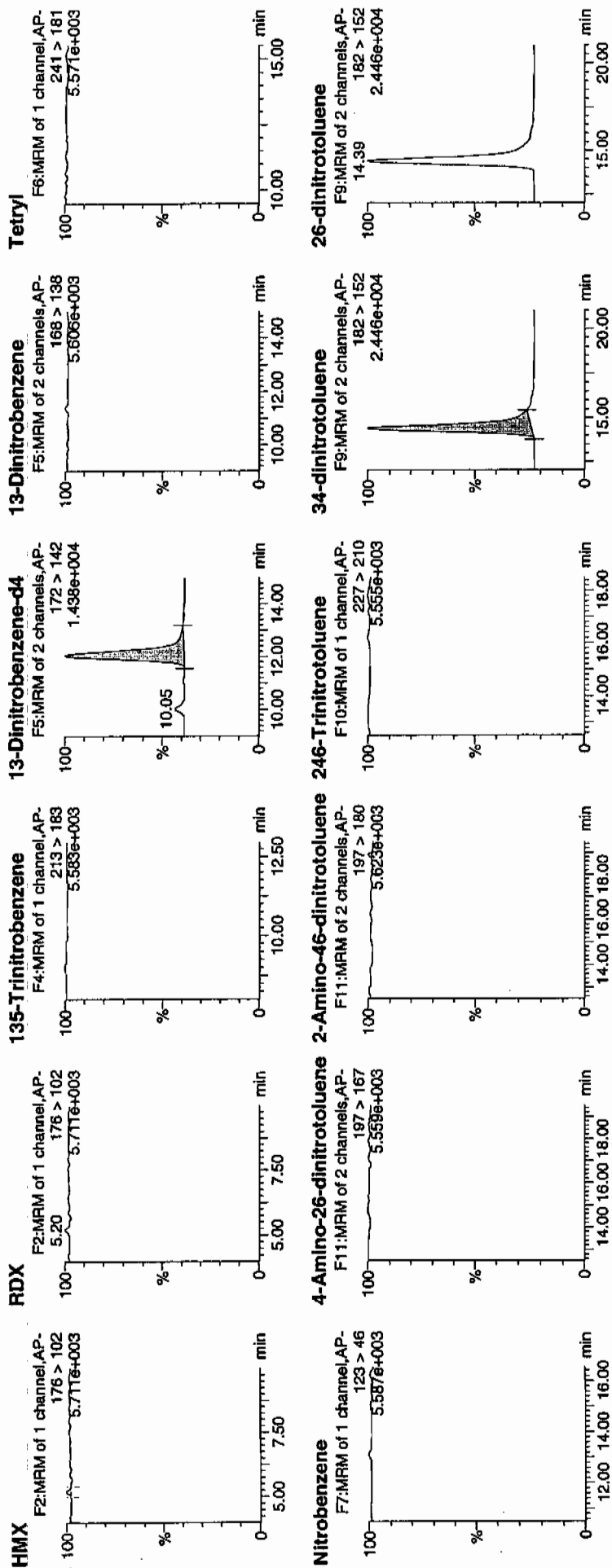
Time: 18:22:34

ID: 245391003

Vial: 2:5,A

2/15/10

944929 / 8022 / 21

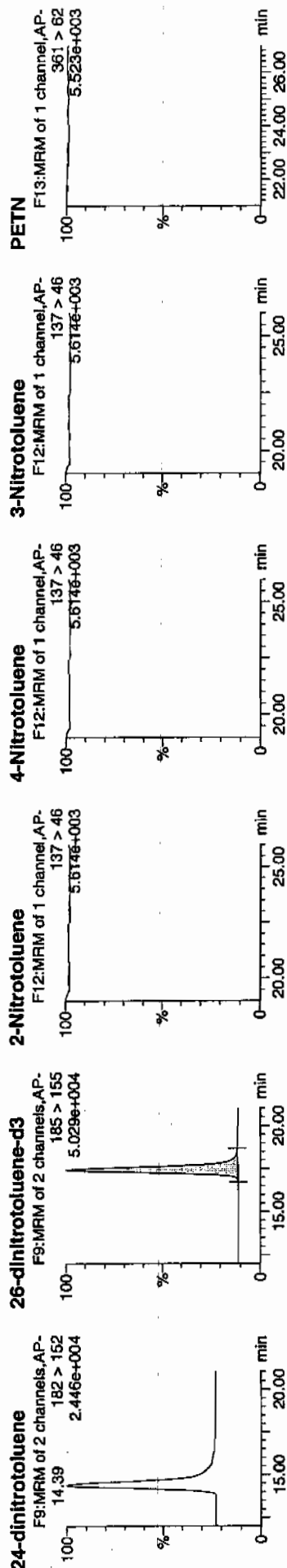


same on 1/17/10

Printed: Mon Feb 15 07:46:07 2010, Page 54 of 67

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

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA6.qld, Time: Mon Feb 15 07:43:55 2010



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	MM	MM-15-Feb-10	07:28:50
245391003	HMX	176 > 102		3568.343	3568.343								
245391003	RDX	176 > 102		3568.343	3568.343								
245391003	135-Trinitrobenzene	213 > 183		3568.343	3568.343								
245391003	13-Dinitrobenzene-d4	172 > 142	12.04	3568.343	3568.343			bb					
245391003	13-Dinitrobenzene	168 > 138		3568.343	3568.343								
245391003	Tetryl	241 > 181		3568.343	3568.343								
245391003	Nitrobenzene	123 > 46		18289.832	18289.832								
245391003	4-Amino-26-dinitrotoluene	197 > 167		18289.832	18289.832								
245391003	2-Amino-46-dinitrotoluene	197 > 180		18289.832	18289.832								
245391003	246-Trinitrotoluene	227 > 210		18289.832	18289.832								
245391003	34-dinitrotoluene	182 > 152	14.39	9183.696	18289.832			bb					
245391003	26-dinitrotoluene	182 > 152		18289.832	18289.832								
245391003	24-dinitrotoluene	182 > 152		18289.832	18289.832								
245391003	26-dinitrotoluene-d3	185 > 155	17.44	18289.832	18289.832			bb					
245391003	2-Nitrotoluene	137 > 46		18289.832	18289.832								
245391003	4-Nitrotoluene	137 > 46		18289.832	18289.832								
245391003	3-Nitrotoluene	137 > 46		18289.832	18289.832								
245391003	PETN	361 > 62											

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7920

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391003

Sample Amount 2

Moisture: 3.7

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02130091.wiff

Date Analyzed: 14-FEB-10 09:45

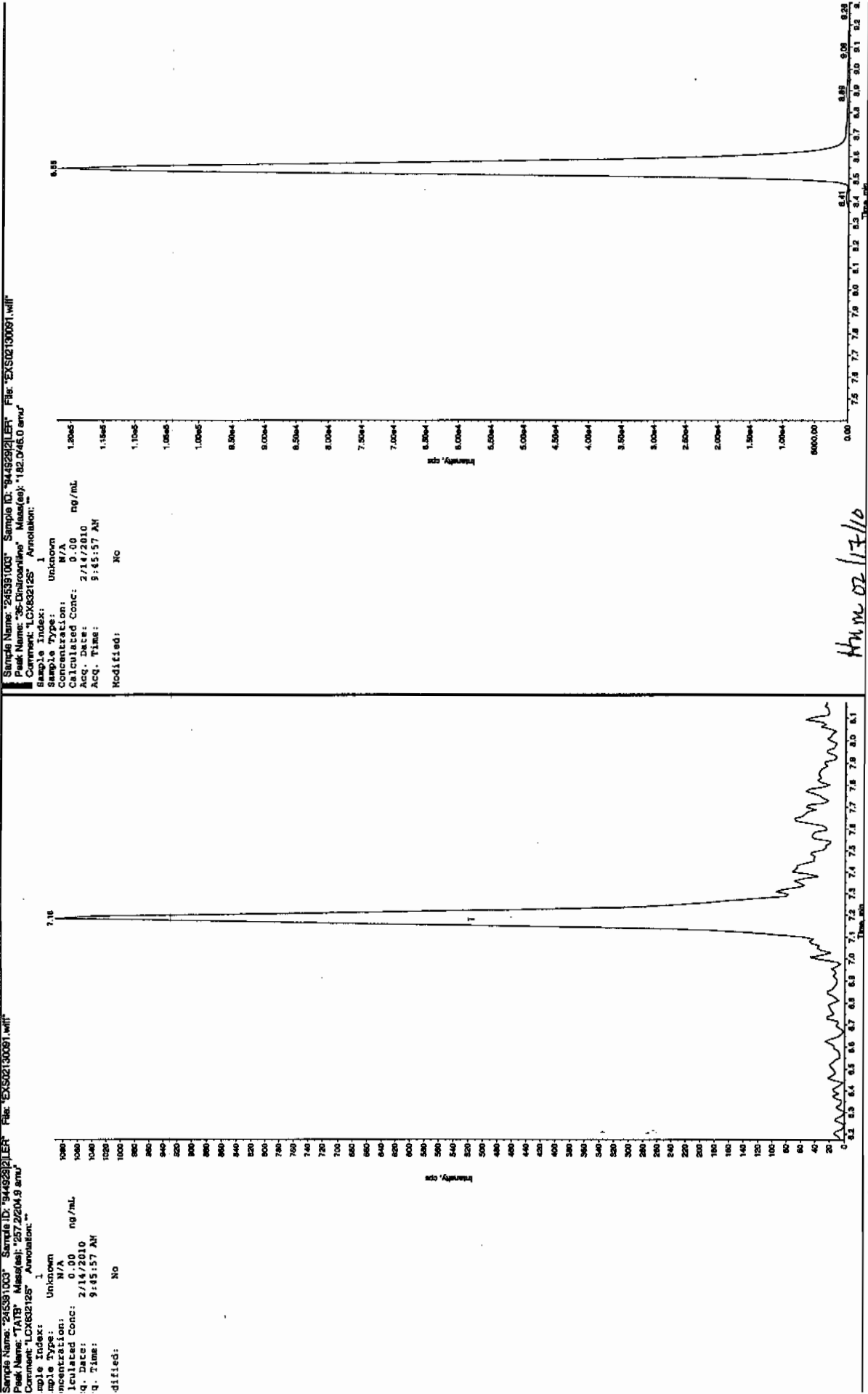
Units: ug/kg

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

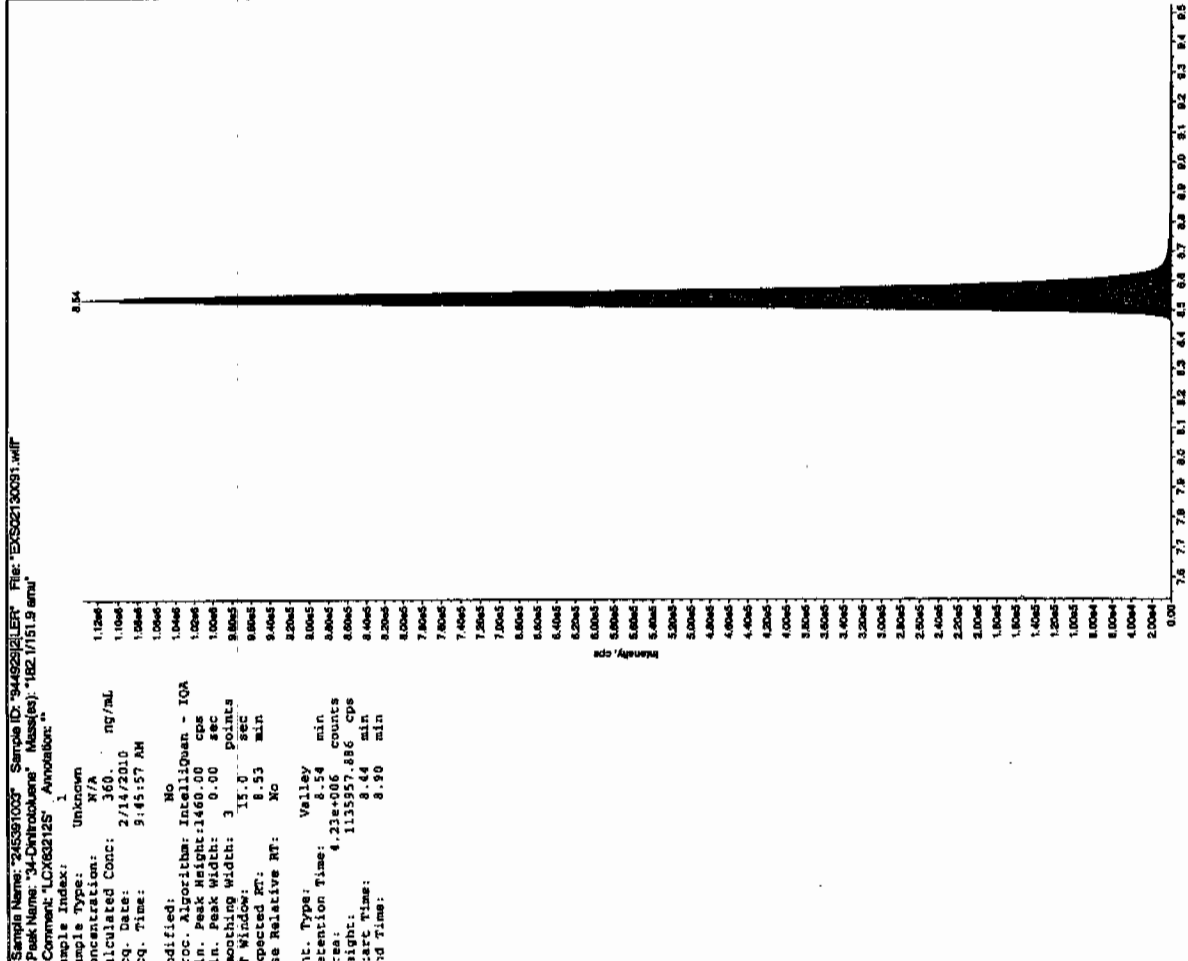
*Concentration =

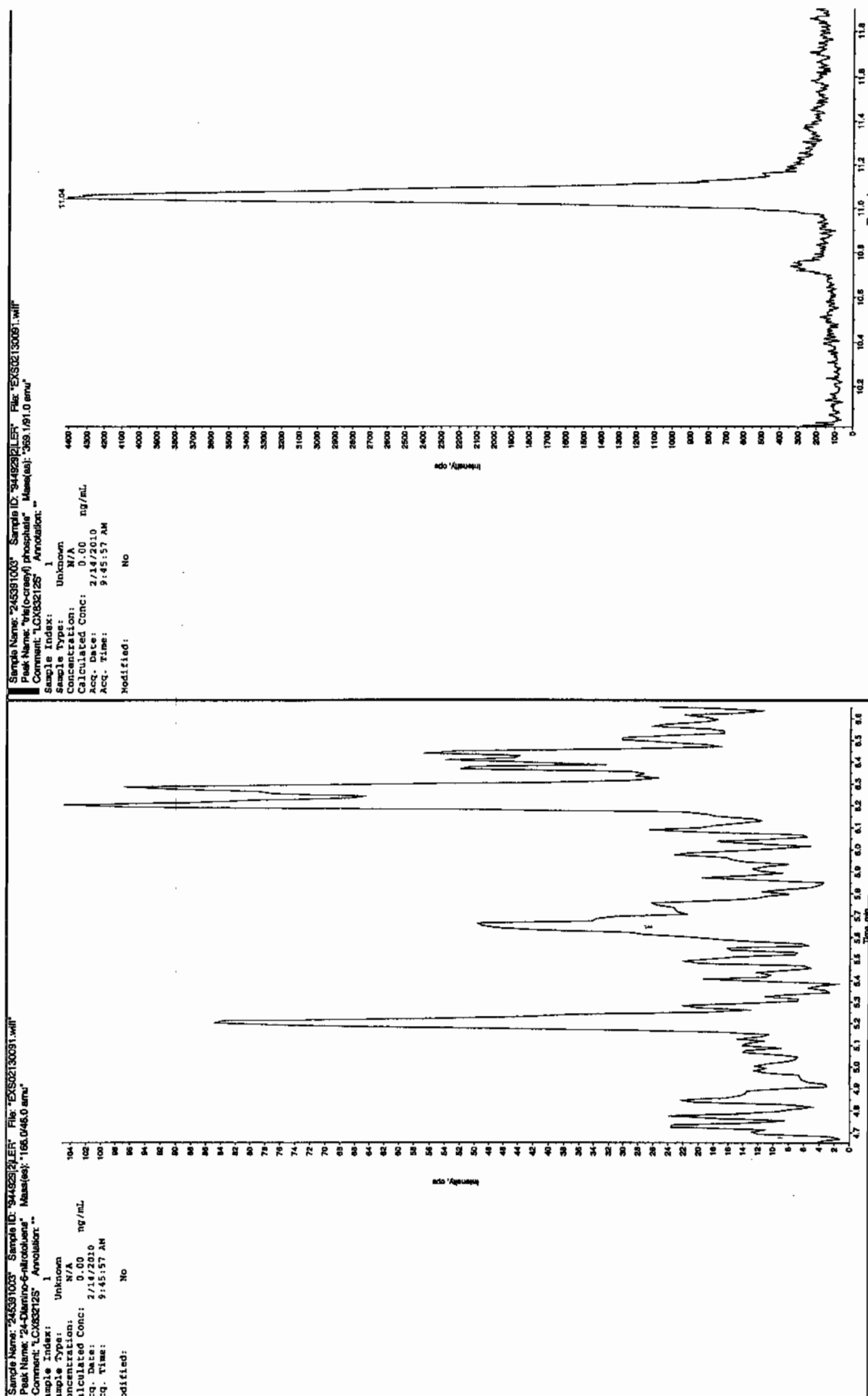
Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

Jan 2/15/10



3EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4





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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7914

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391004

Sample Amount 2

Moisture: 9.6

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208261a

Date Analyzed: 13-FEB-10 22:39

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

Analyst : Michael A. Penny

Dataset: C:\MASSLYN\New_Exp.PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\PRO\Data\EXP0208261a

Date: 13-Feb-2010

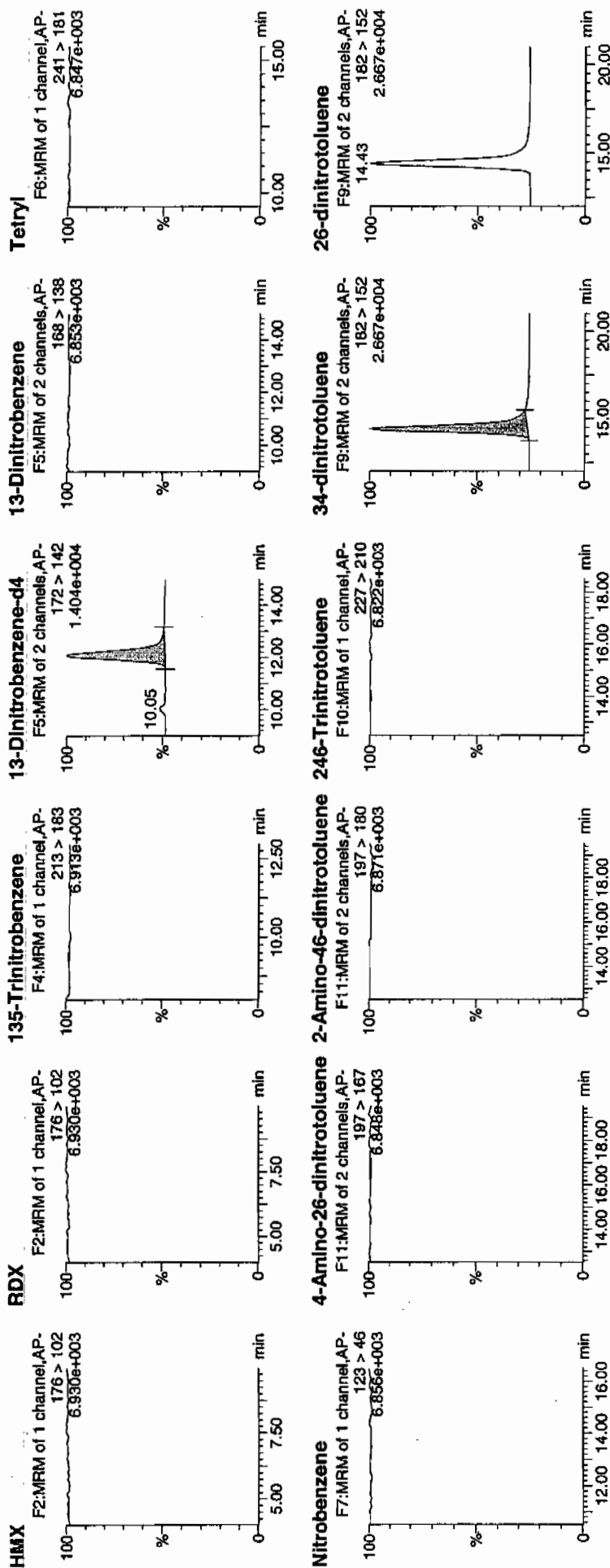
Time: 22:39:26

ID: 245391004

Vial: 2:5,B

2/14/10
1077

144494929 / 21

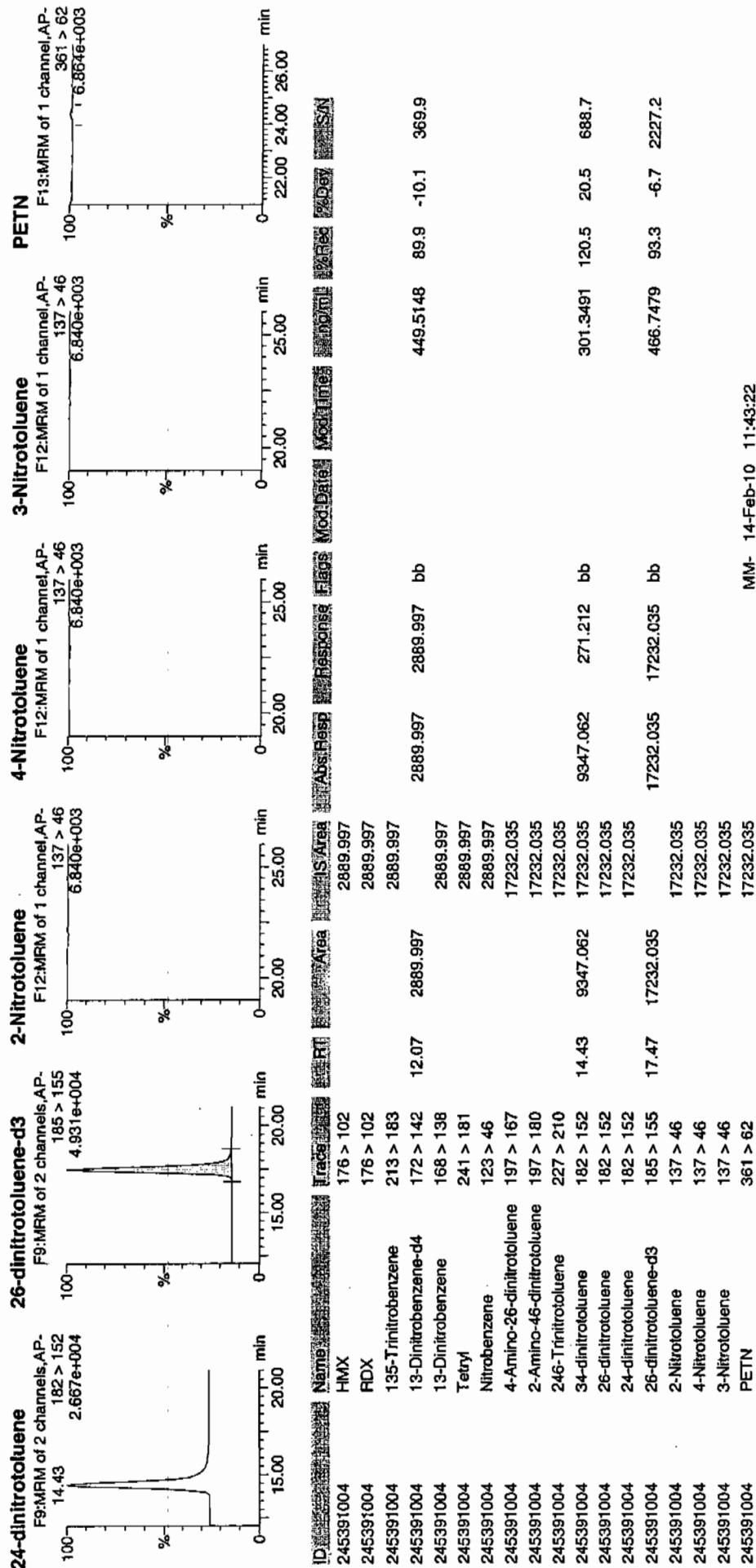


07/02/17/10

Printed: Sun Feb 14 11:45:22 2010, Page 68 of 95

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

Dataset: C:\MASSLYNX\New_Exp\PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010



MM- 14-Feb-10 11:43:22

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7914

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391004

Sample Amount 2

Moisture: 9.6

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02130092.wiff

Date Analyzed: 14-FEB-10 10:01

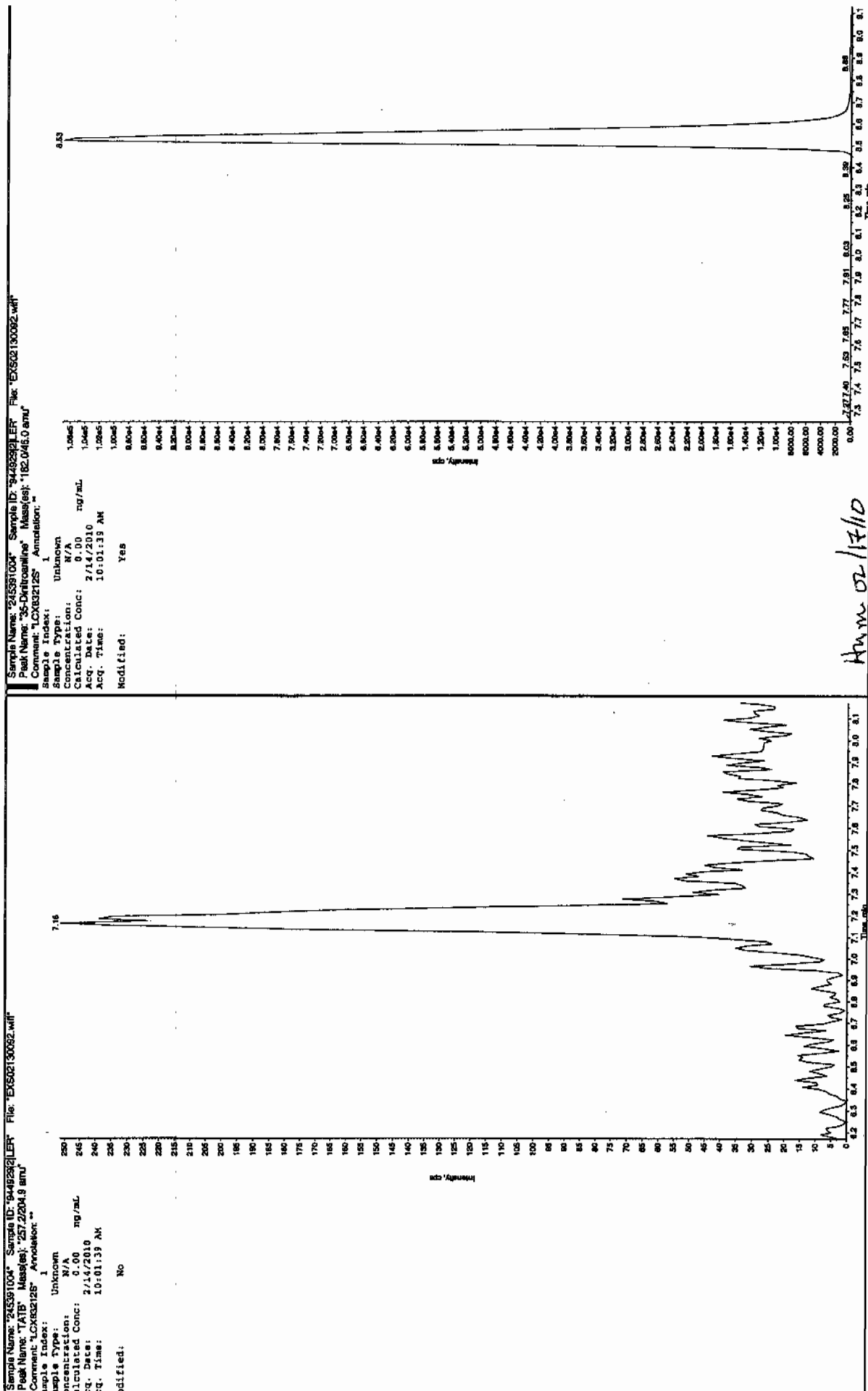
Units: ug/kg

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

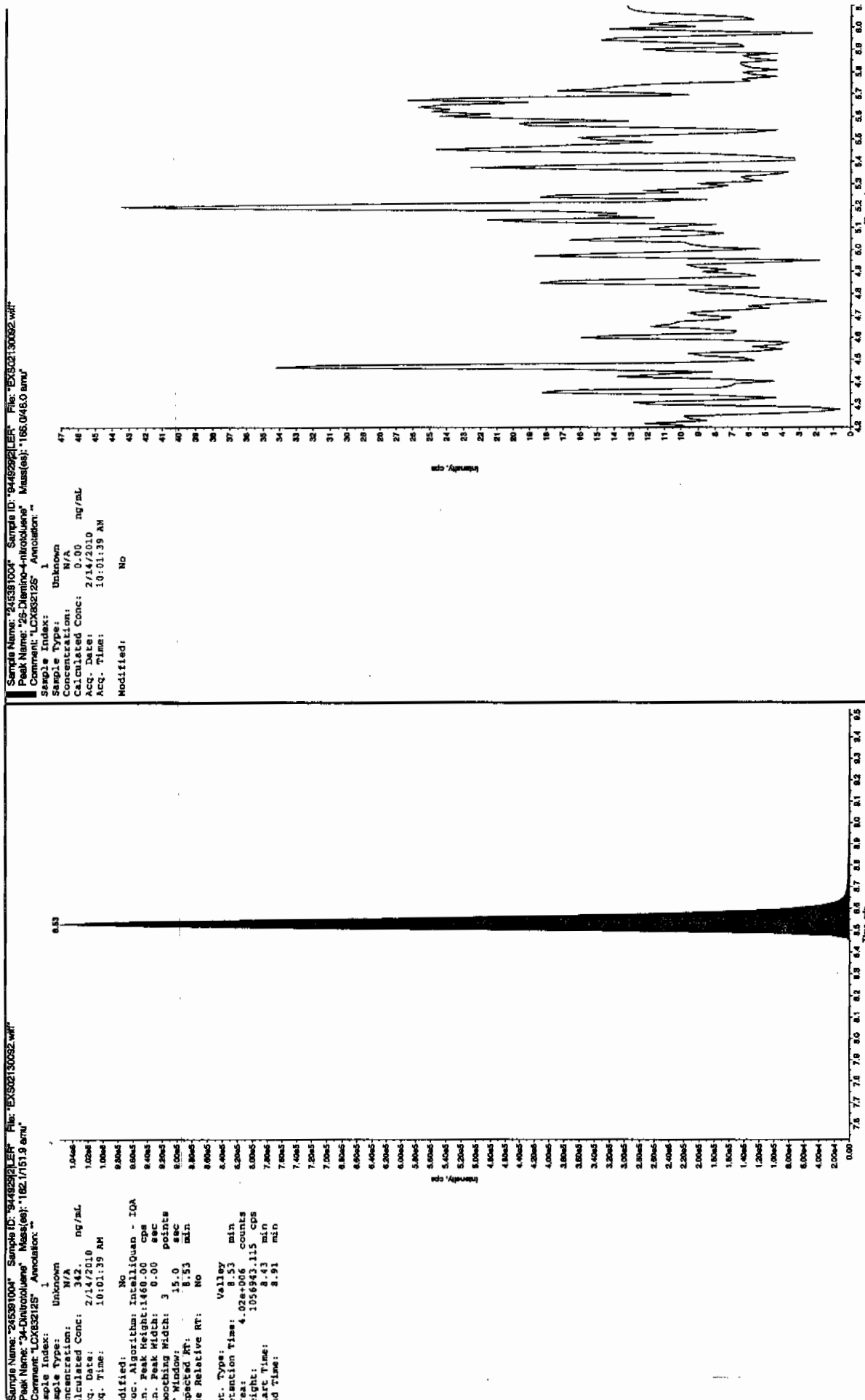
*Concentration =

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

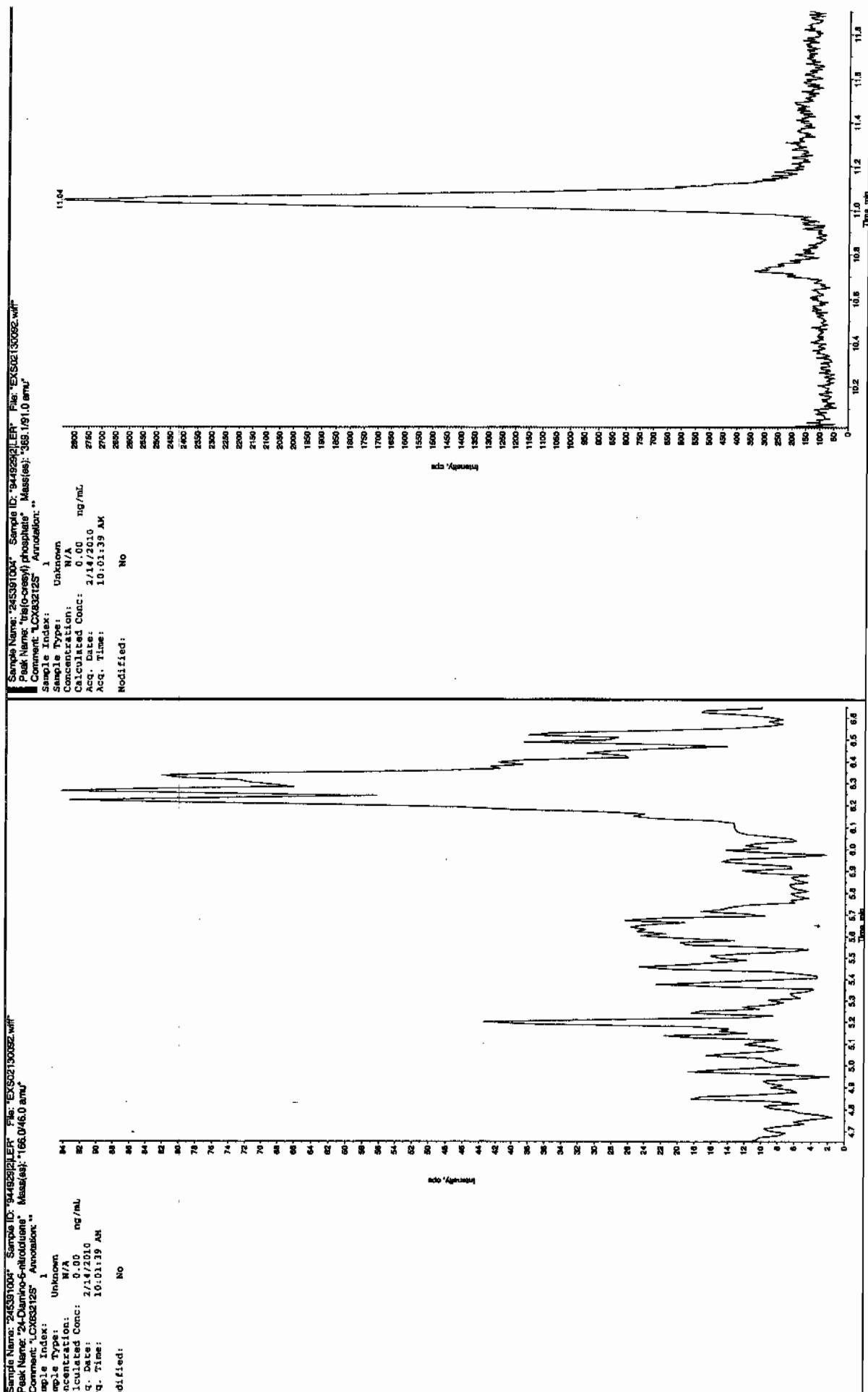
See 2/15/10



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



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



3EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7919

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391005

Sample Amount 2

Moisture: 22.6

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208262a

Date Analyzed: 13-FEB-10 23:09

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\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010

Sample Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208262a

Date: 13-Feb-2010

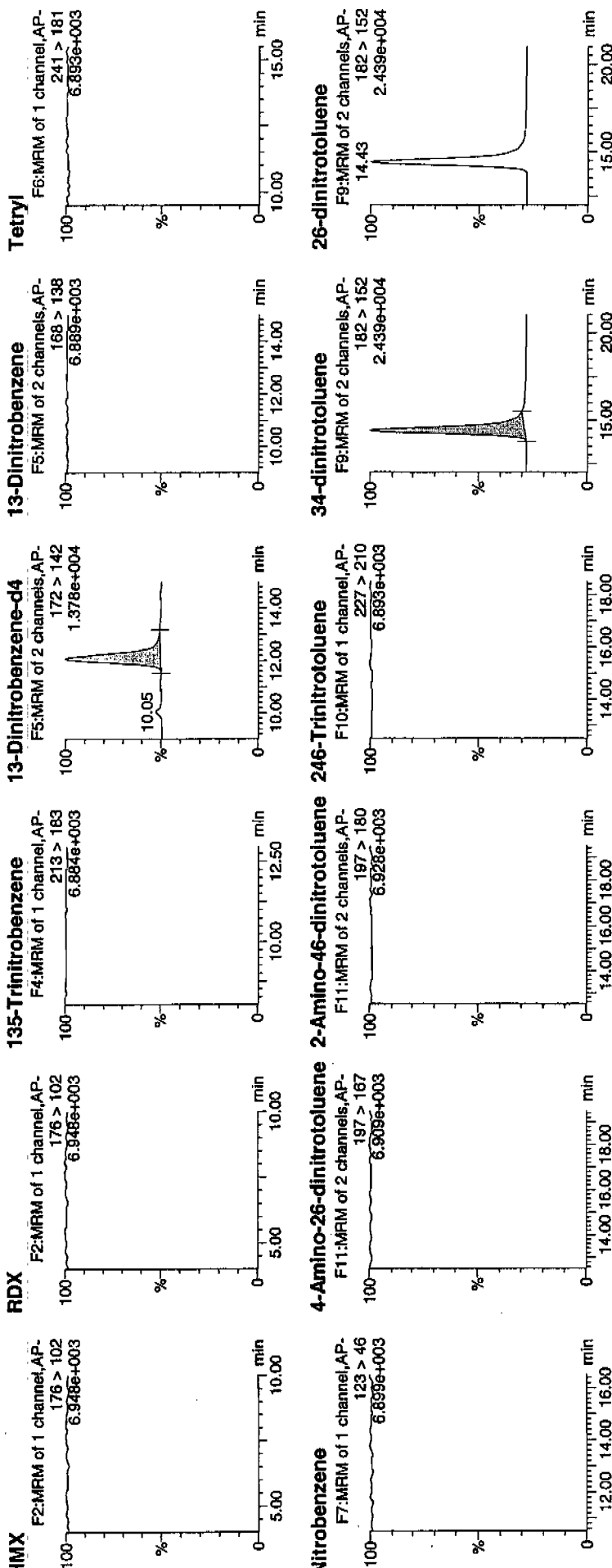
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D: 245391005

File: 2:5,C

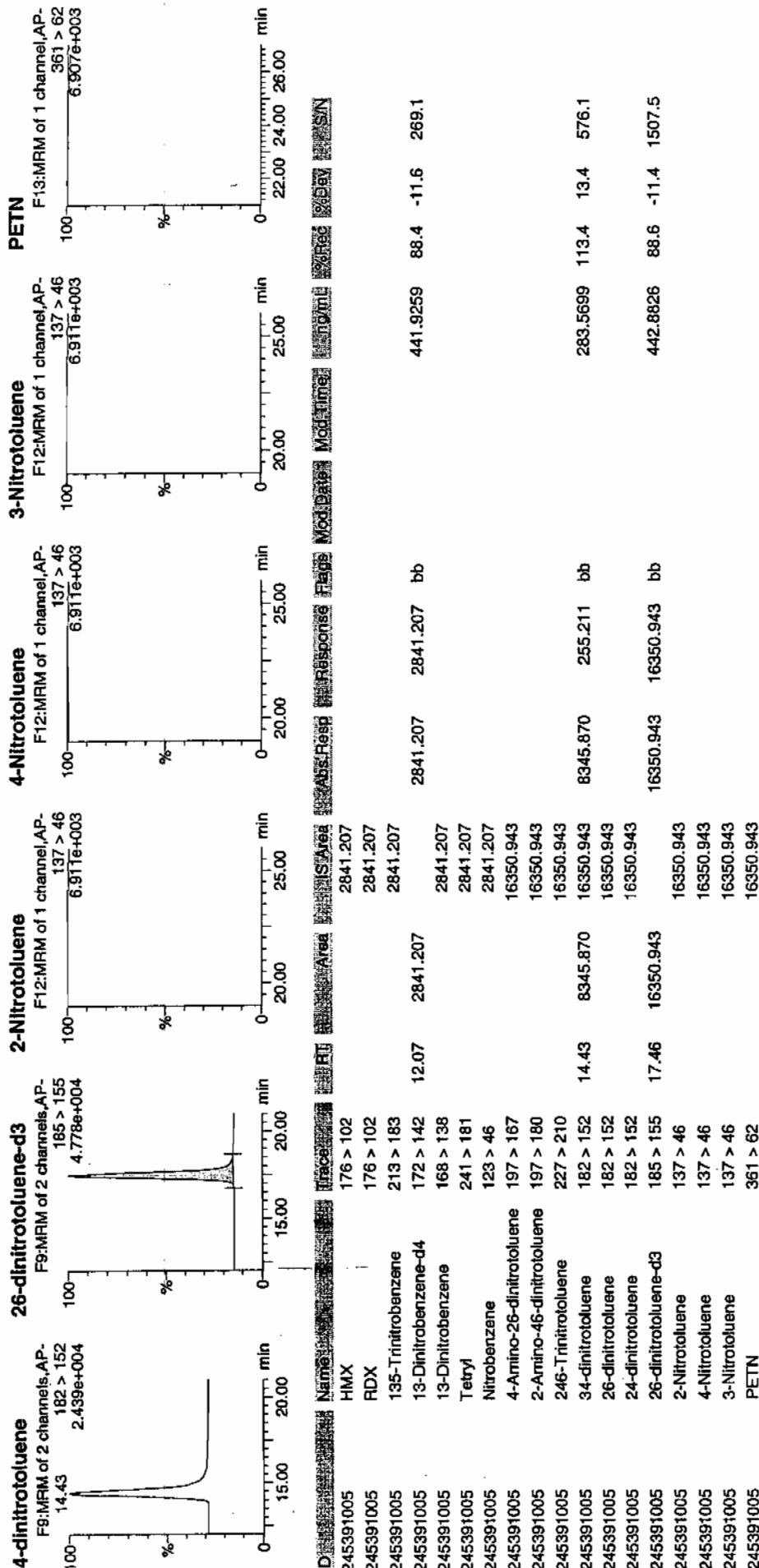
not
2/14/10

WAW 944929 / 21
SOW



done 2/14/10

Dataset: C:\MASSLYN\New_Exp\PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7919

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391005

Sample Amount 2

Moisture: 22.6

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02130093.wiff

Date Analyzed: 14-FEB-10 10:17

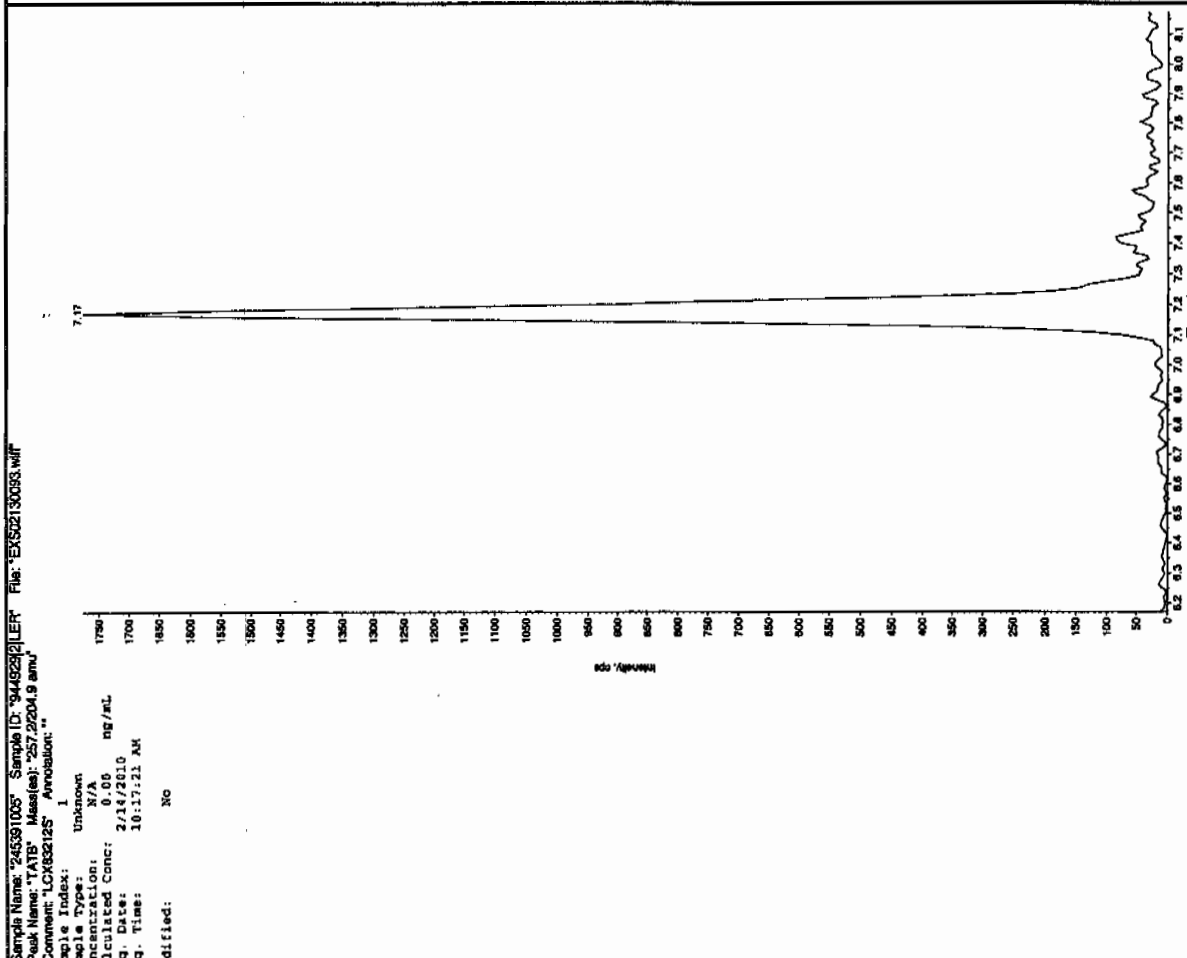
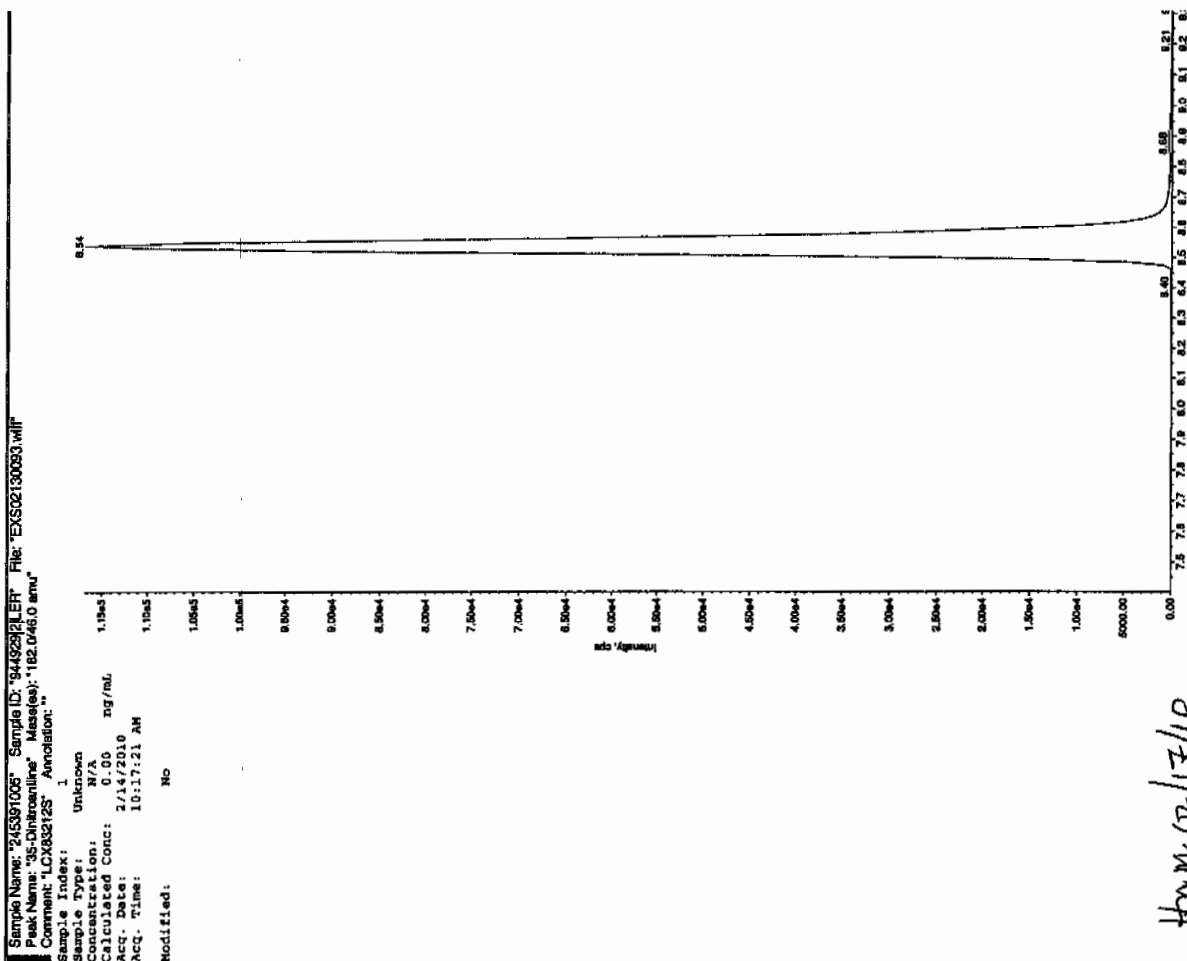
Units: ug/kg

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

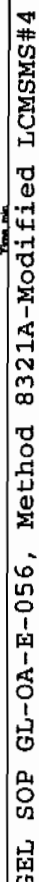
*Concentration =

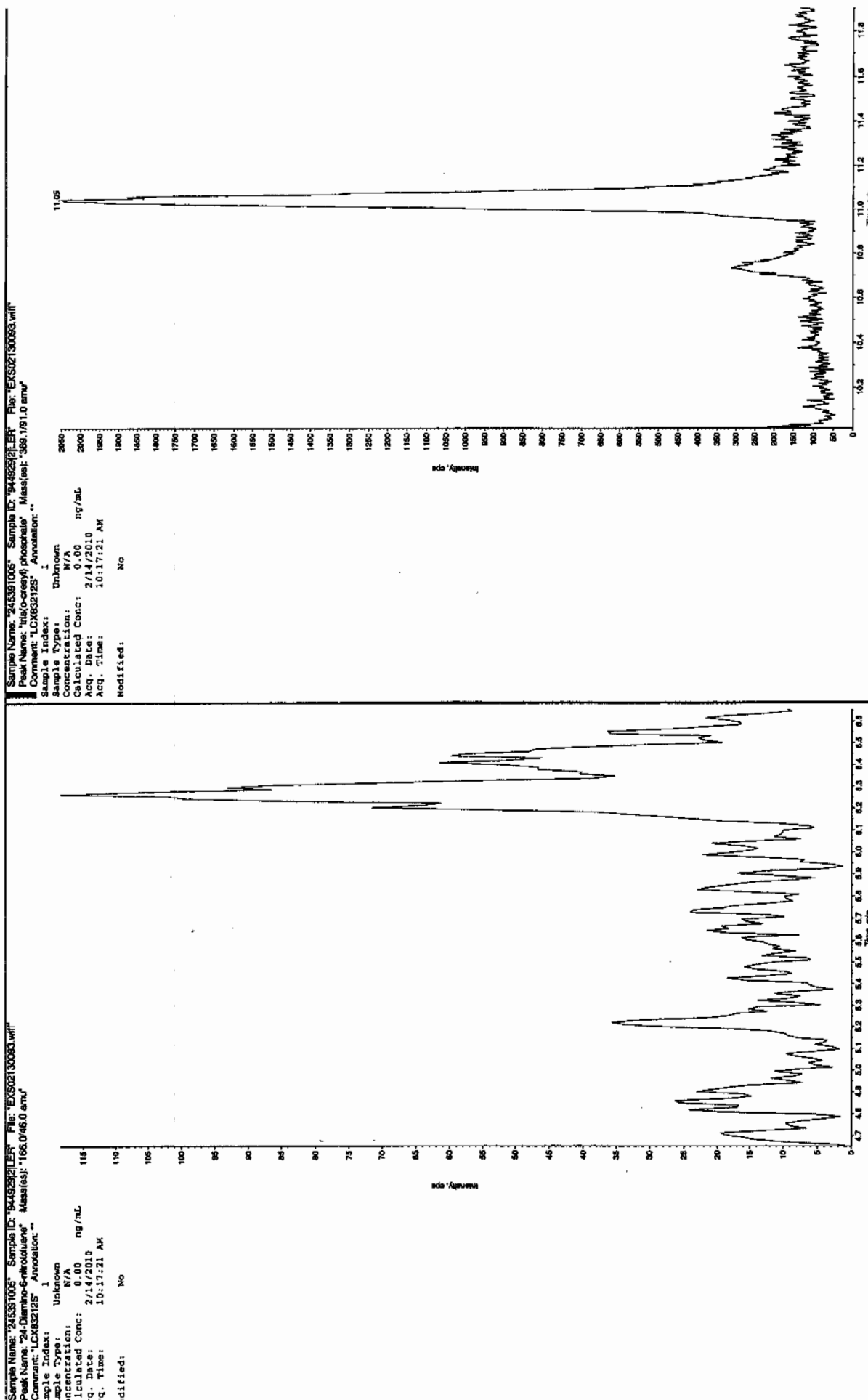
Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

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





3EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7921

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391006

Sample Amount 2

Moisture: 17.8

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208263a

Date Analyzed: 13-FEB-10 23:38

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

Printed: Sun Feb 14 11:45:22 2010, Page 71 of 95

Dataset: C:\MASSLYNX\New_Exp_PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010

Sample Name: C:\MASSLYNX\NEW_EXP_PRO\Data\EXP0208263a

Date: 13-Feb-2010

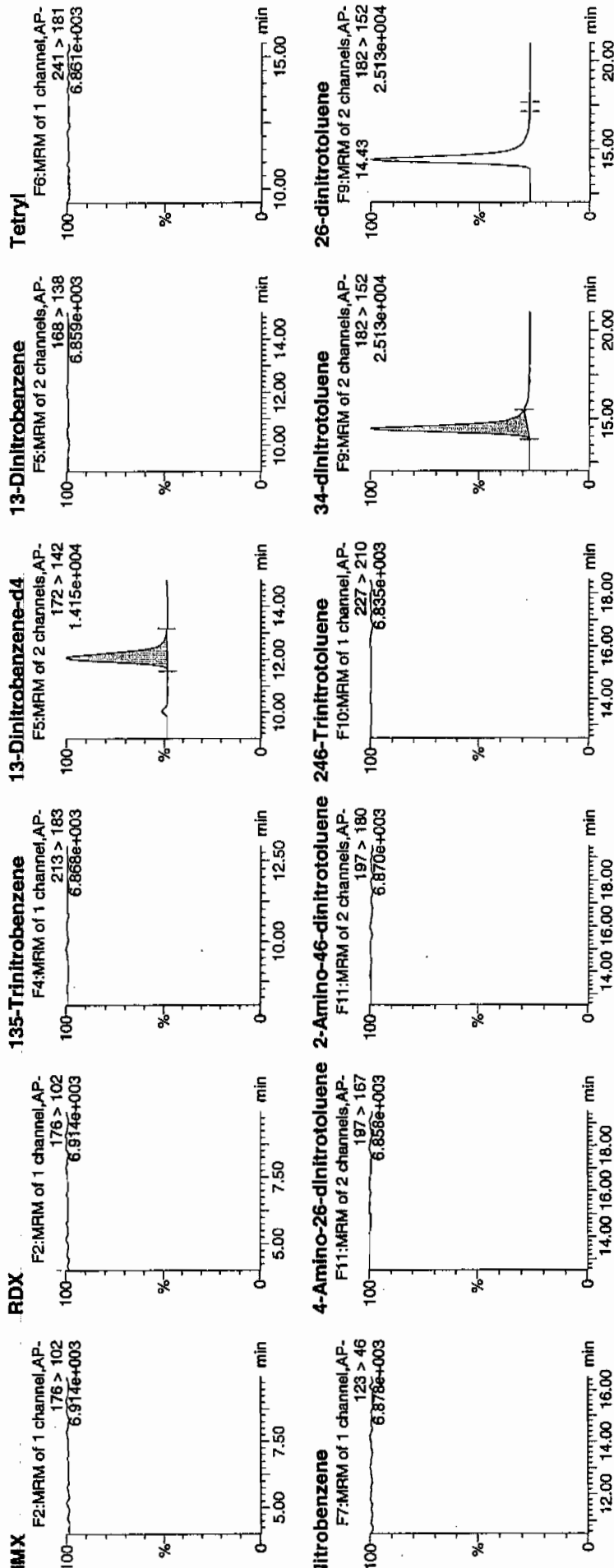
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ID: 245391006

File: 2:5.D

2/14/10

944929 / 8022 / 21

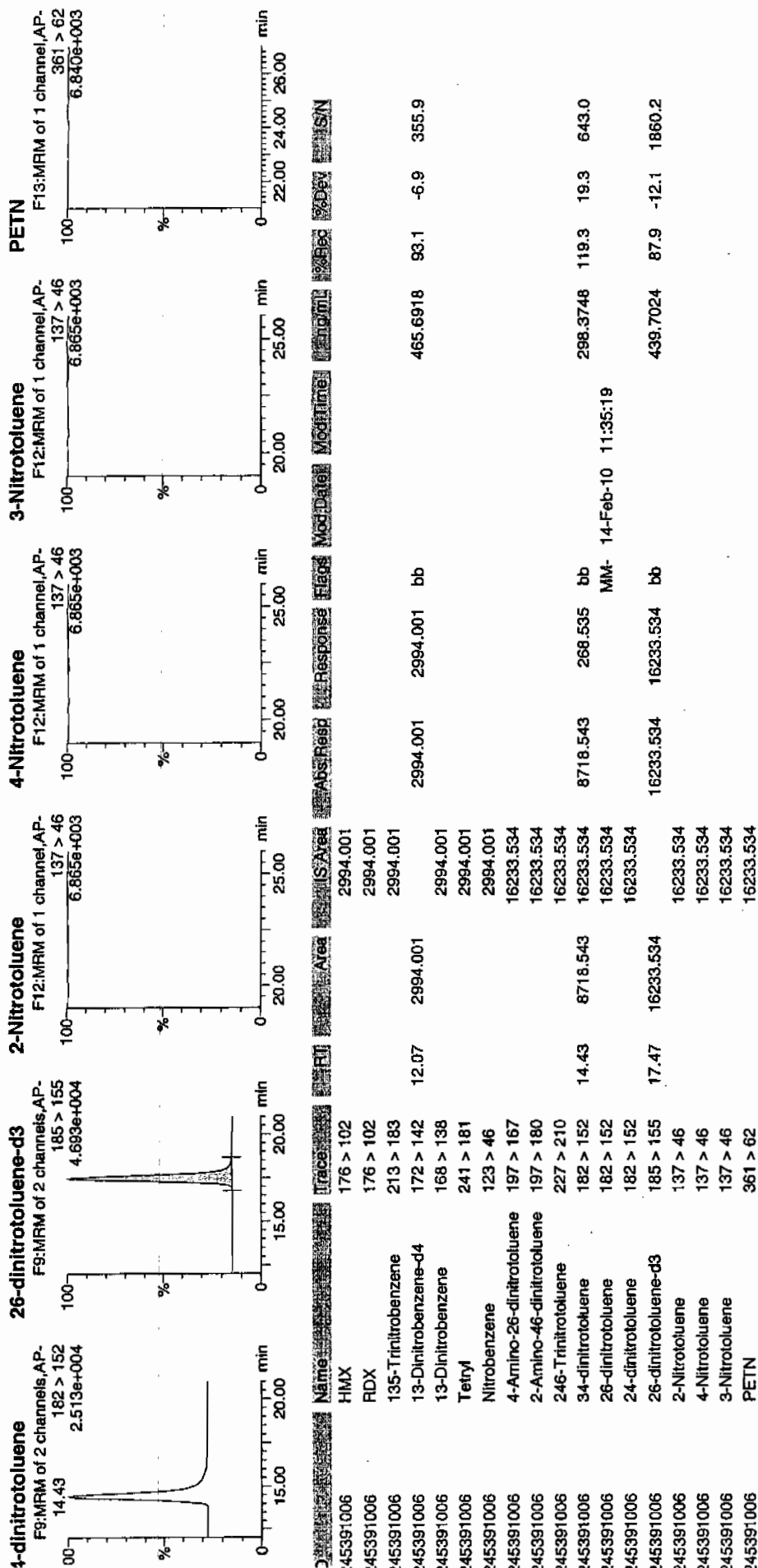


Handwritten signature

Printed: Sun Feb 14 11:45:22 2010, Page 72 of 95

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

atset: C:\MASSLYNX\New_Exp.PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010



1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7921

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391006

Sample Amount 2

Moisture: 17.8

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02130094.wiff

Date Analyzed: 14-FEB-10 10:33

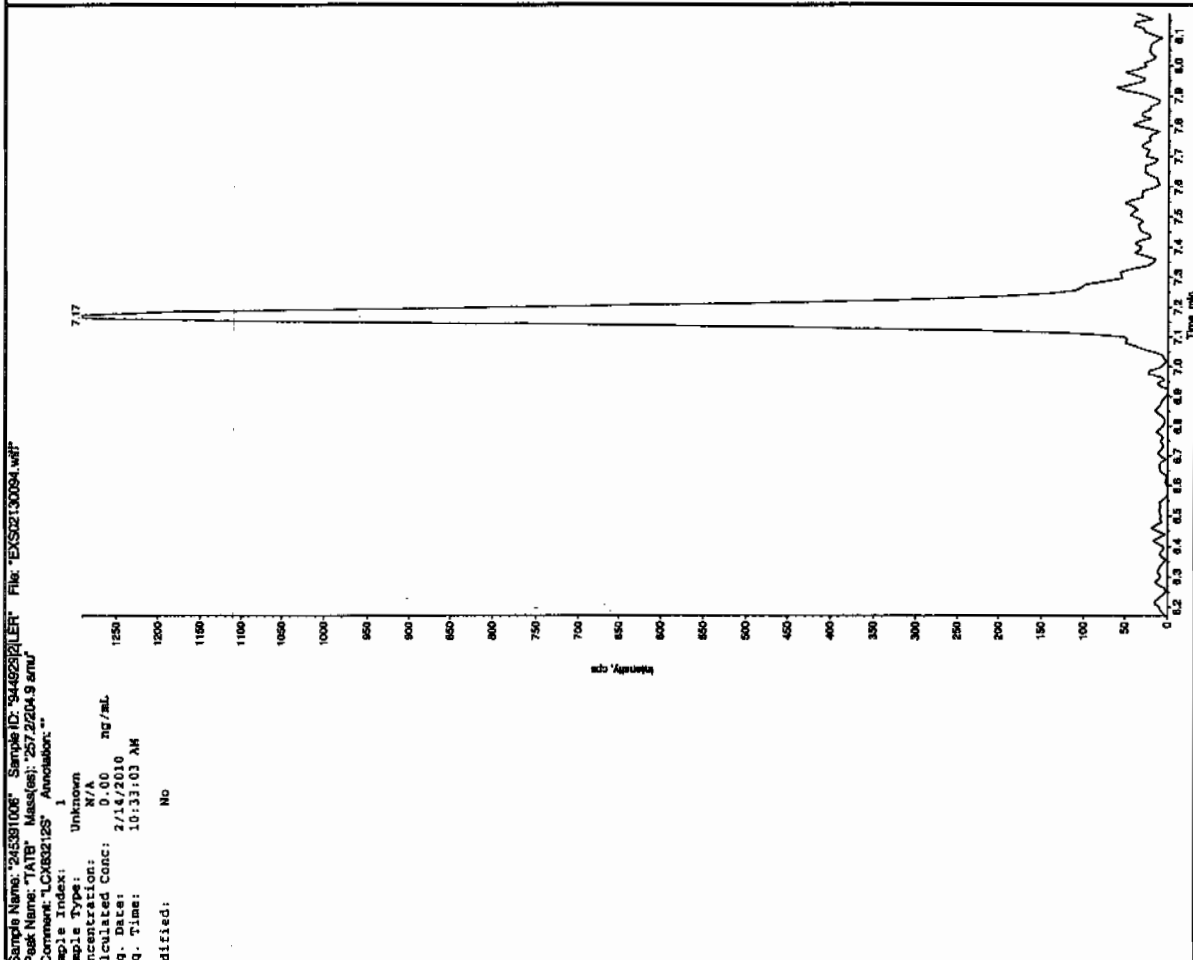
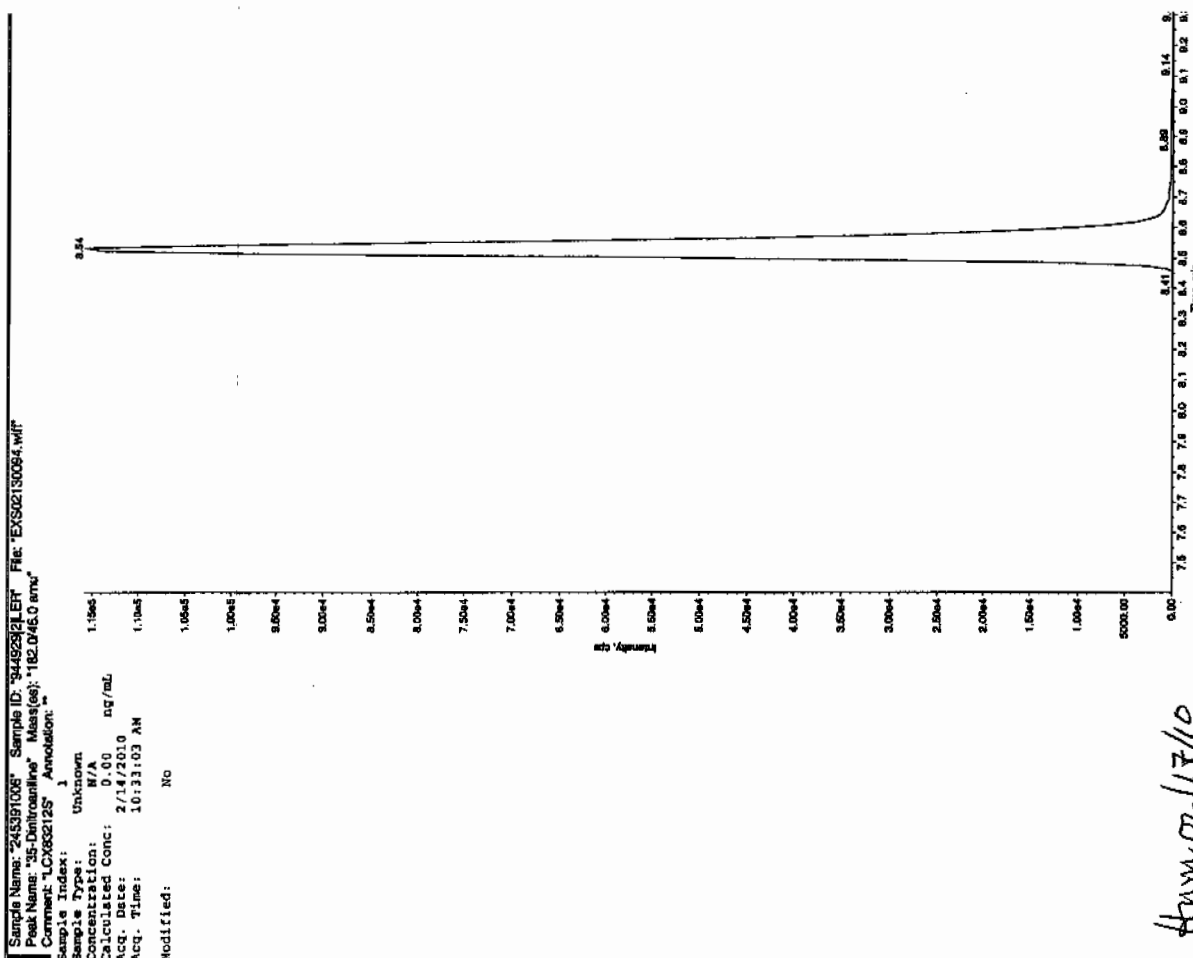
Units: ug/kg

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

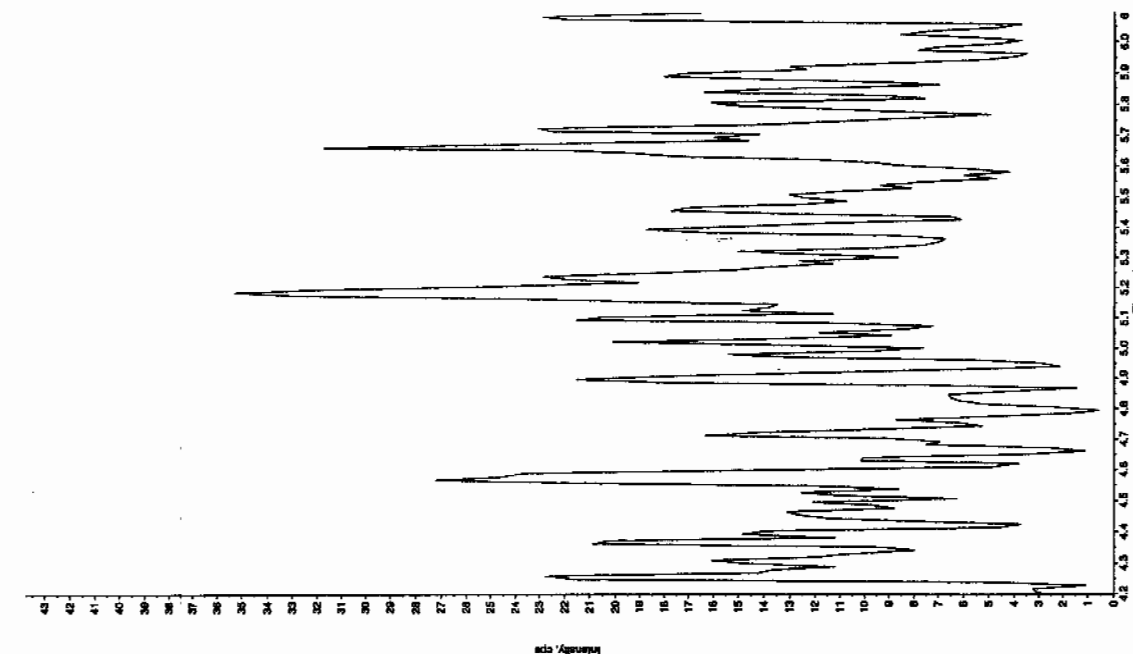
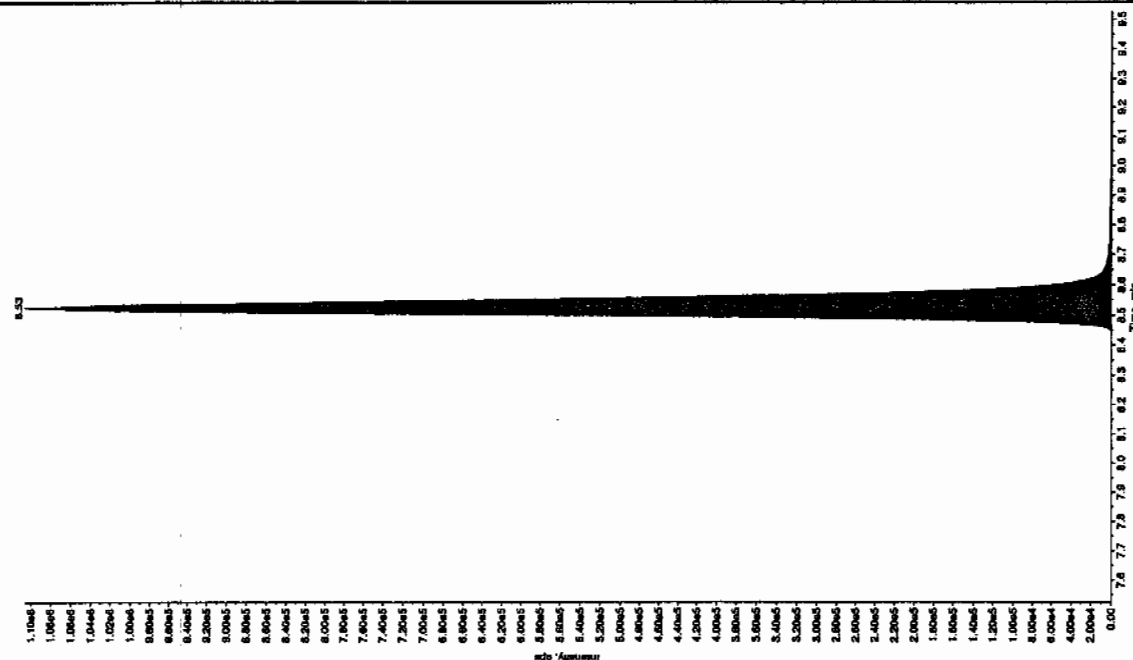
Jan 2/15/10

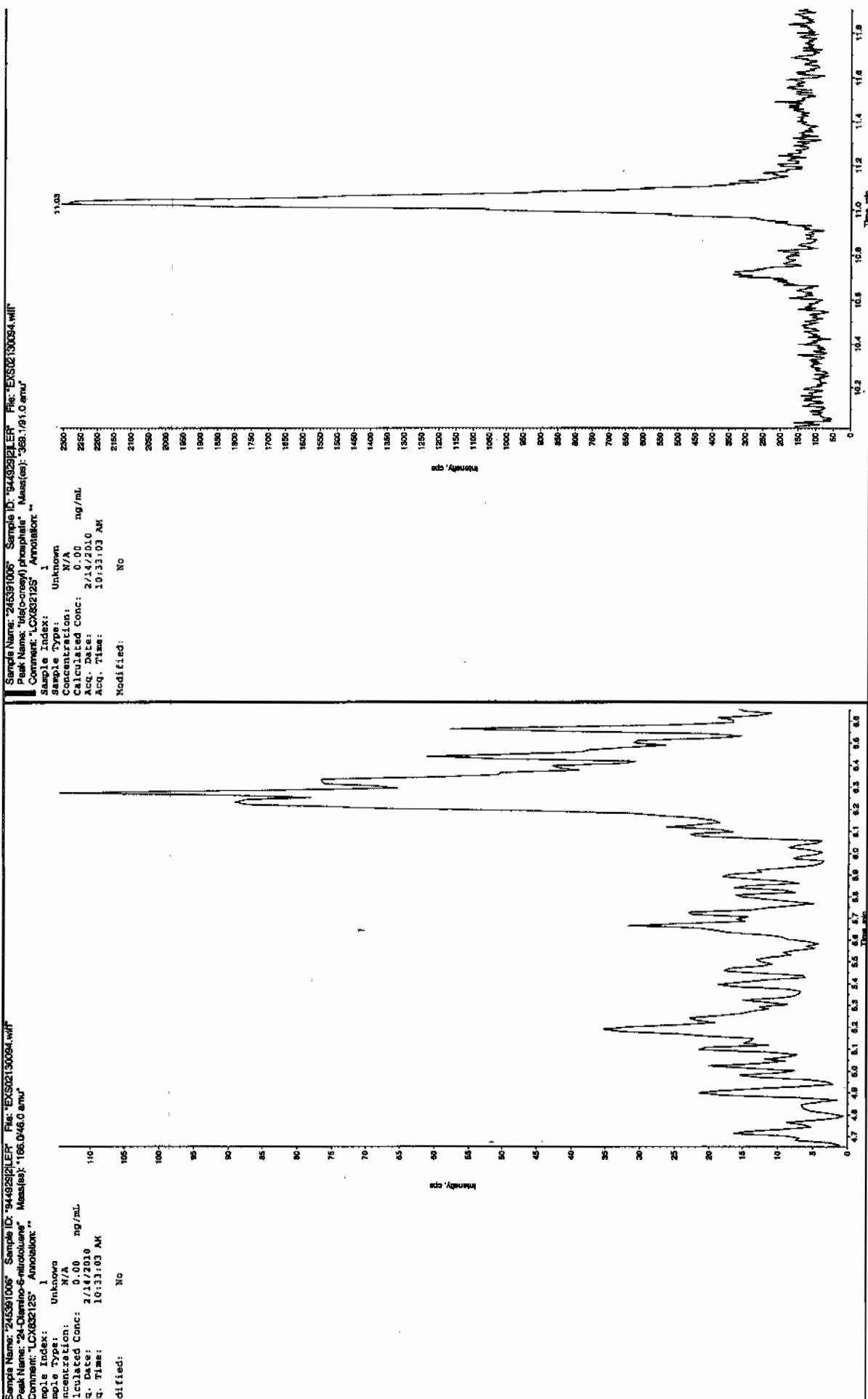


JEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "245391006" Sample ID: "944929[2]LER" File: "EXS02130094.wiff"
Peak Name: "34-Dinitrolobutene" Mass(es): "182.1/151.9 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index:	1	Unknown
Concentration:	35%	
Conc.:	2.14/2010	ng/mL
Q. P. Time:	10:33:03 AM	
Modified:	No	
Software:	IntelliQuan - IQA	
n. n. Peak Height:	1460.00	cps
n. n. Peak Width:	0.00	sec
Coeluting Width:	3	points
Window:	10.0	sec
Prepared At:	8.53	min
Relative RT:	No	
E. Type:	Valley	
Retention Time:	8.53	min
Count:	4,206+006	counts
Height:	1106545.044	cps
Start Time:	8.43	min
End Time:	8.91	min





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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7916

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391007

Sample Amount 2

Moisture: 6.8

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208267a

Date Analyzed: 14-FEB-10 01:36

Units: ug/kg

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

*Concentration =

Instrument	X	Concentrated Extract Volume	X	Dilution
Value		Sample Amount		Factor

Printed: Sun Feb 14 11:45:22 2010, Page 79 of 95

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

Dataset: C:\MASSLYNX\New_Exp\PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010

Name: C:\MASSLYNX\NEW_EXP\PRO\data\EXP0208267a

Date: 14-Feb-2010

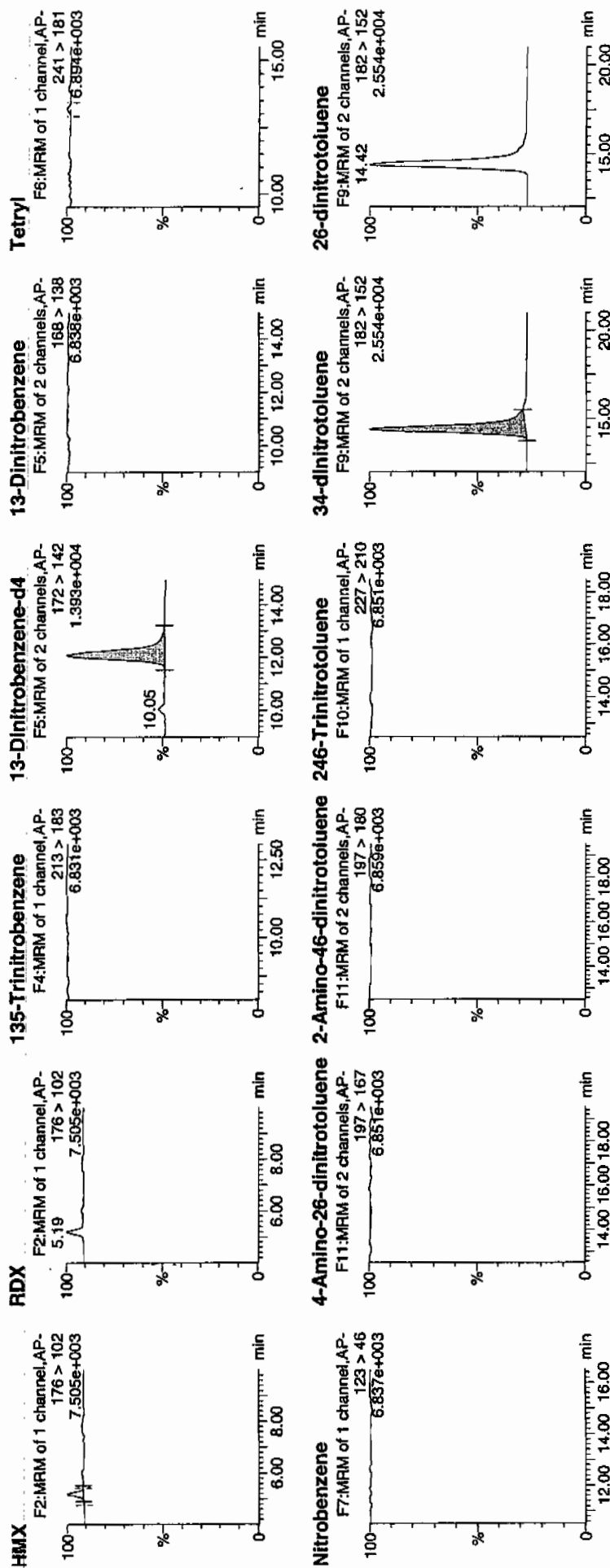
Time: 01:36:41

ID: 245391007

Vial: 2:5,E

14577
2/14/10

1944929 / 2 /



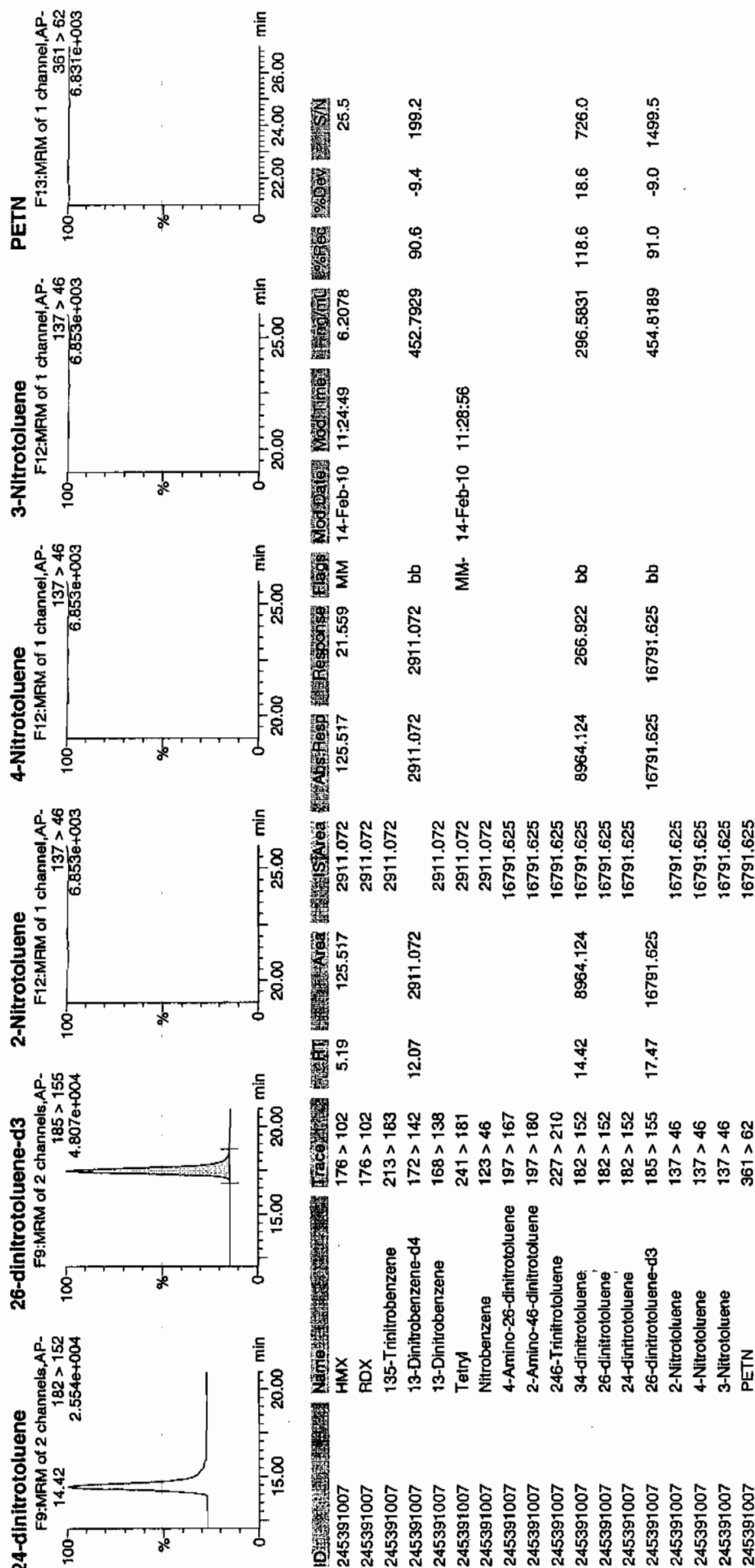
Handwritten signature/initials.

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Sun Feb 14 11:45:22 2010, Page 80 of 95

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA5.qtd, Time: Sun Feb 14 11:43:22 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: RE15-10-7916

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391007

Sample Amount 2

Moisture: 6.8

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02130098.wiff

Date Analyzed: 14-FEB-10 11:35

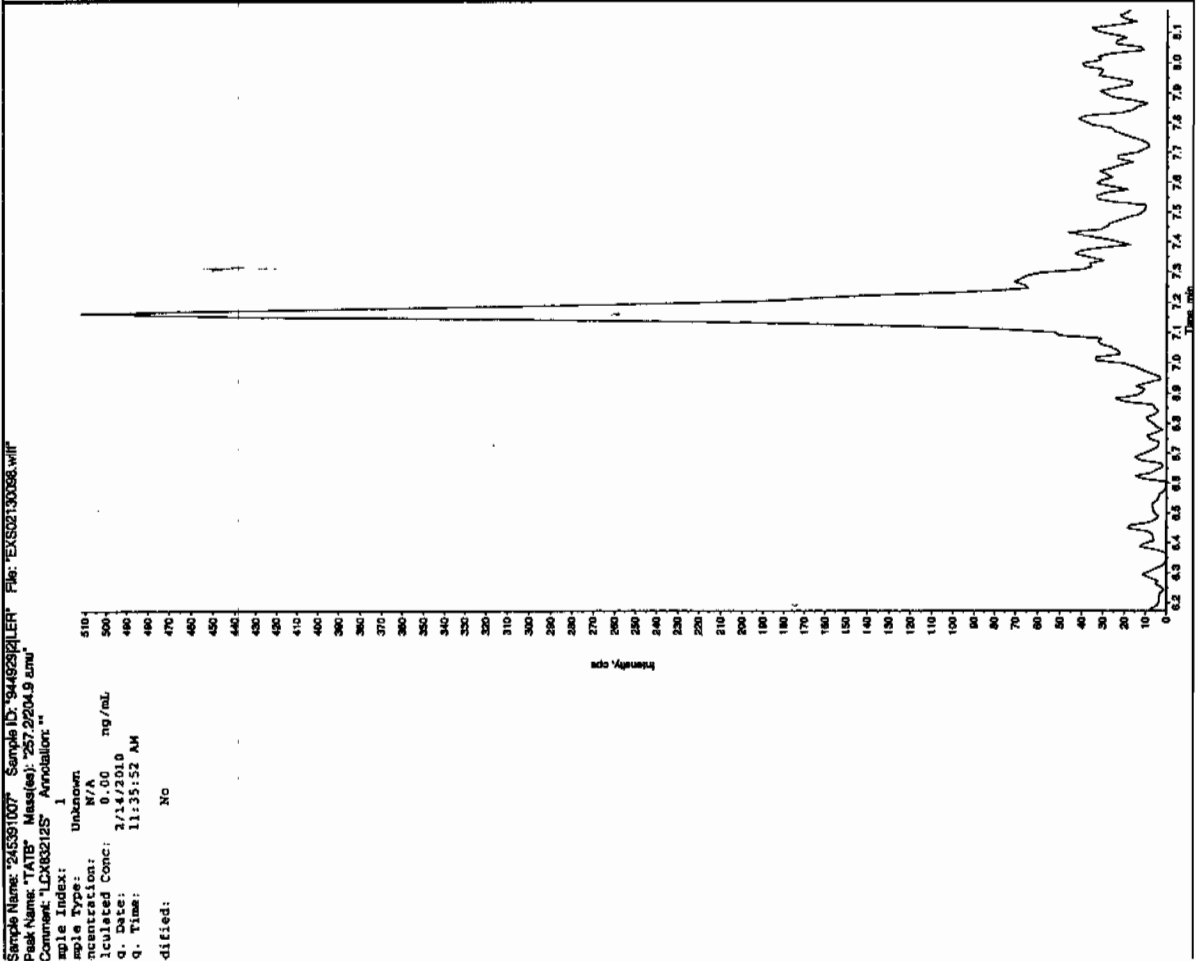
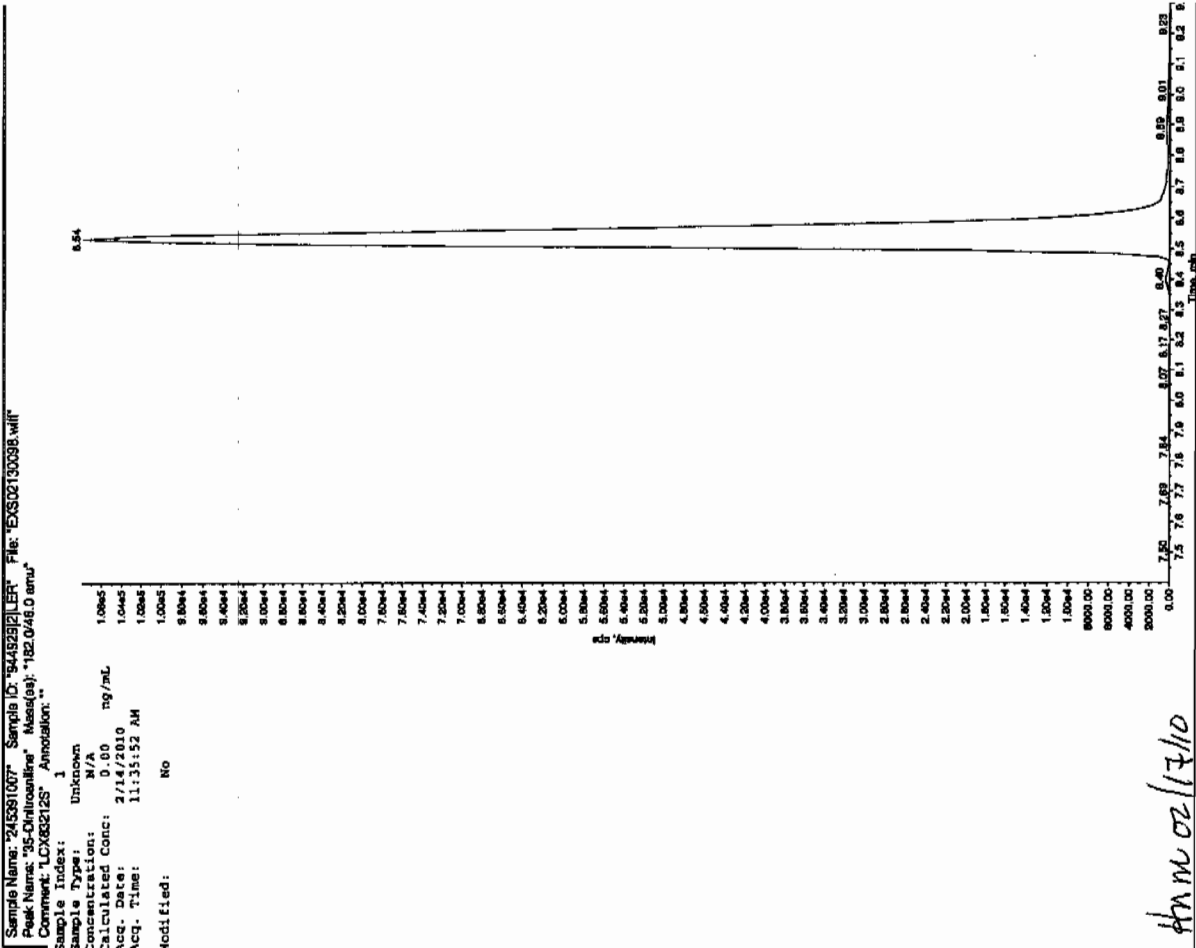
Units: ug/kg

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

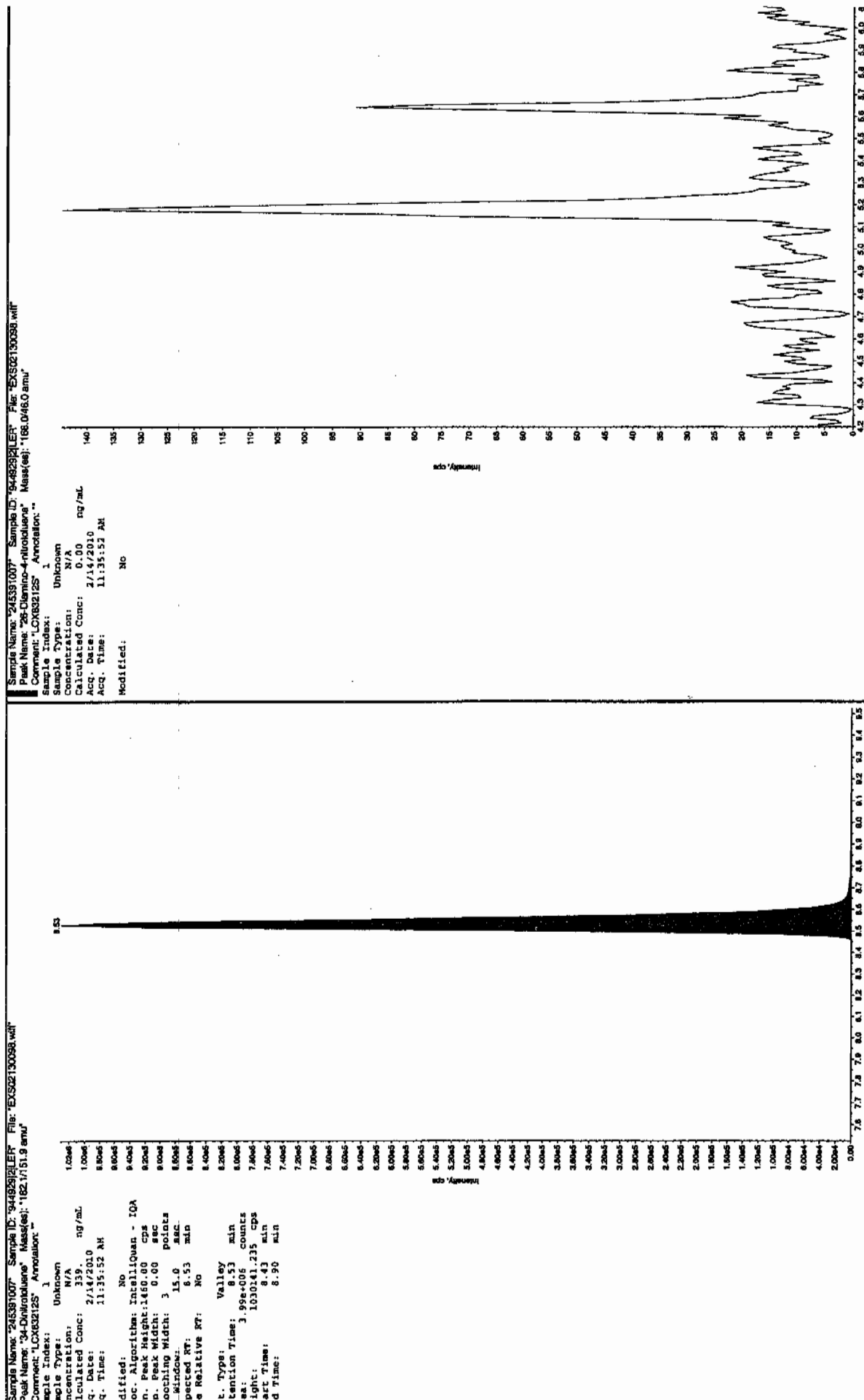
*Concentration =

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

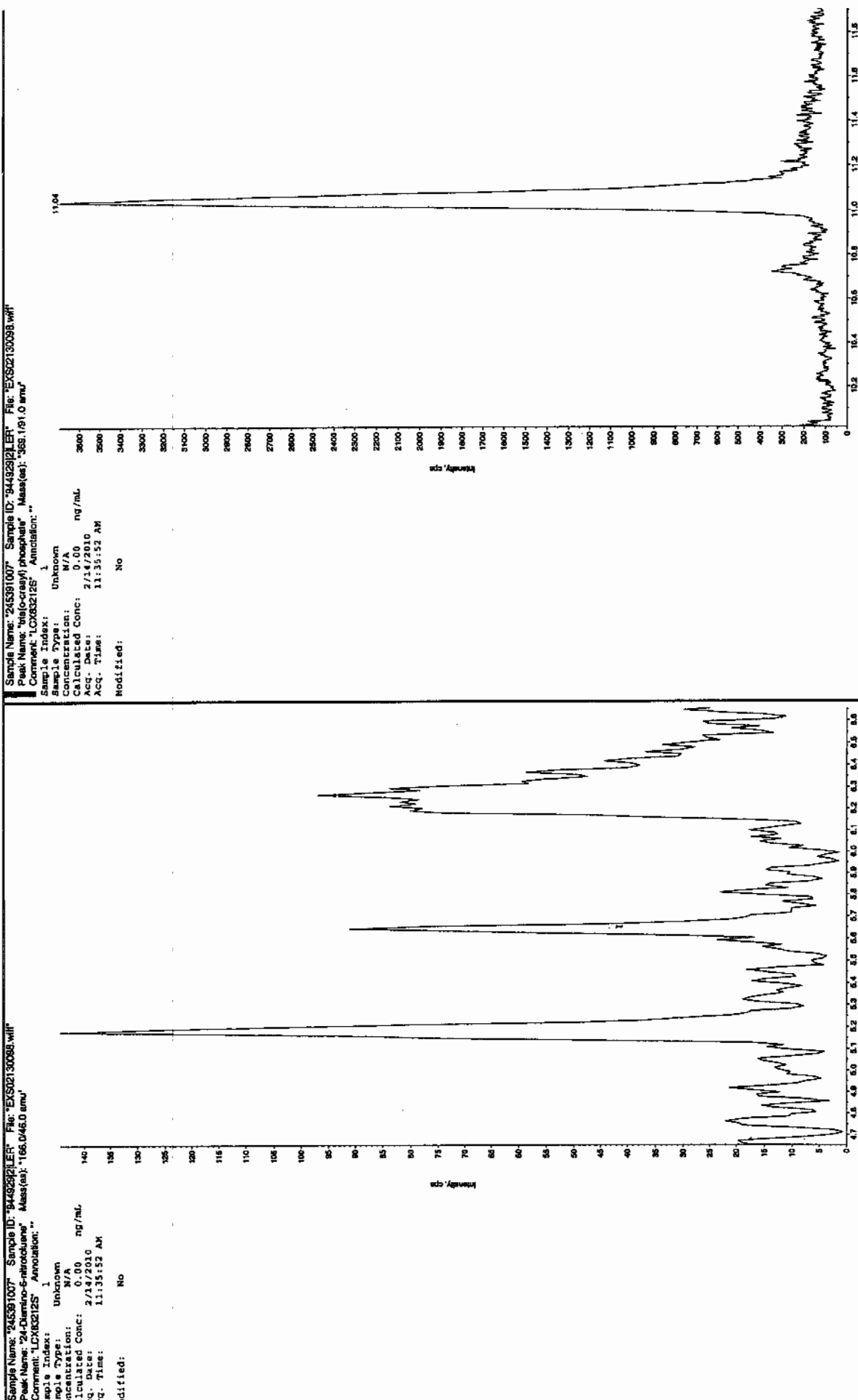
Jan 21/5/10



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



3EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7917

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391008

Sample Amount 2

Moisture: 20.2

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208268a

Date Analyzed: 14-FEB-10 02:06

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\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208268a

Date: 14-Feb-2010

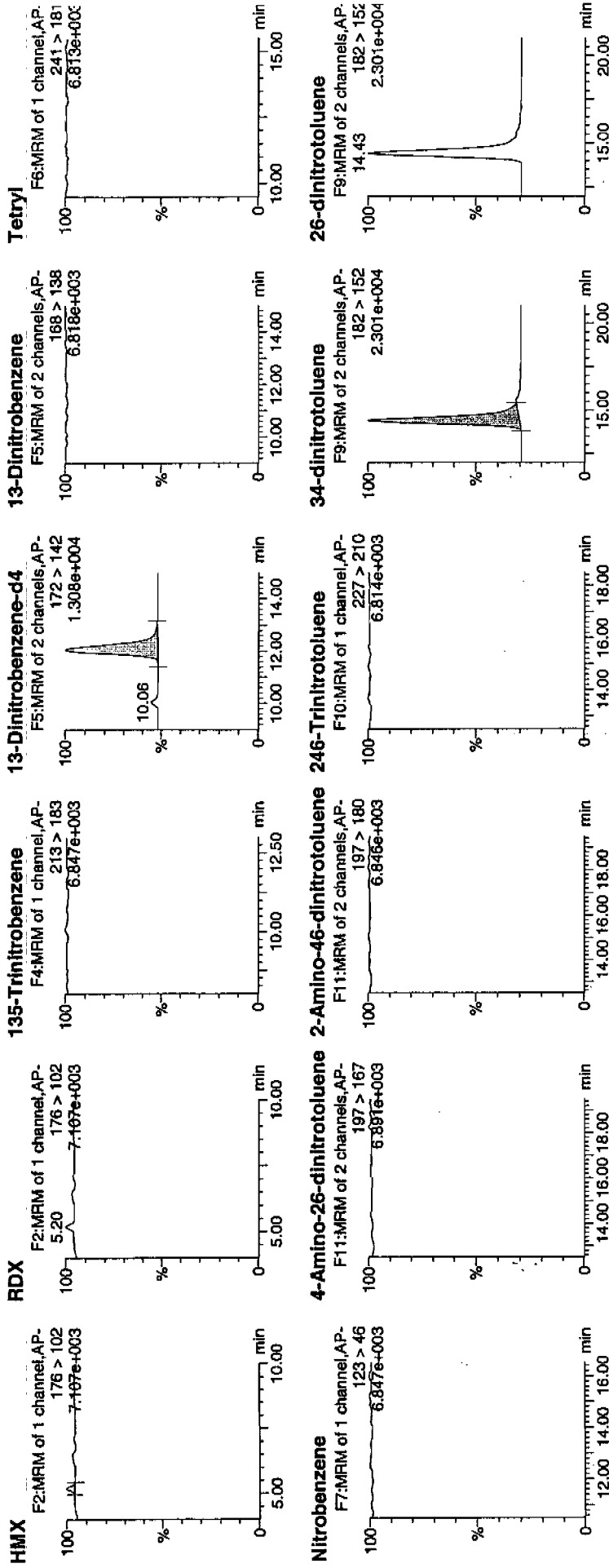
Time: 02:06:13

ID: 245391008

Vial: 2:5,F

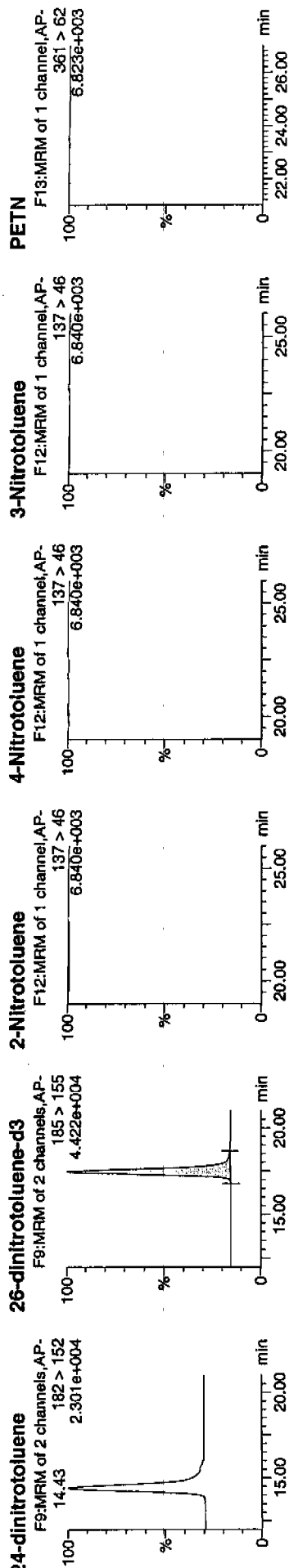
14477
2/14/10

14477
2/14/10
944929 / 8025 / 21



Handwritten signature: 14477 / 2/14/10

Dataset: C:\MASSLYN\New_Exp.PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010



Name	Trace	RT	Area	%Area	Abs.Ret	Response	Flags	ModDate	ModTime	Height	%Ref	%Dev	S/N
HMX	245391008	176 > 102	55.607	2598.572	55.607	10.700	bb			3.0809			7.0
RDX	245391008	176 > 102		2598.572									
135-Trinitrobenzene	245391008	213 > 183		2598.572									
13-Dinitrobenzene-d4	245391008	172 > 142	12.07	2598.572	2598.572	2598.572	bb			404.1861	80.8	-19.2	200.3
13-Dinitrobenzene	245391008	168 > 138		2598.572									
Tetryl	245391008	241 > 181		2598.572									
Nitrobenzene	245391008	123 > 46		2598.572									
4-Amino-26-dinitrotoluene	245391008	197 > 167		14973.381	14973.381								
2-Amino-46-dinitrotoluene	245391008	197 > 180		14973.381	14973.381								
245-Trinitrotoluene	245391008	227 > 210		14973.381	14973.381								
34-dinitrotoluene	245391008	182 > 152	14.43	7624.268	14973.381	254.594	bb			282.8848	113.2	13.2	483.5
26-dinitrotoluene	245391008	182 > 152		14973.381	14973.381								
24-dinitrotoluene	245391008	182 > 152		14973.381	14973.381								
26-dinitrotoluene-d3	245391008	185 > 155	17.47	14973.381	14973.381	14973.381	bb			405.5699	81.1	-18.9	790.1
2-Nitrotoluene	245391008	137 > 46		14973.381	14973.381								
4-Nitrotoluene	245391008	137 > 46		14973.381	14973.381								
3-Nitrotoluene	245391008	137 > 46		14973.381	14973.381								
PETN	245391008	361 > 62		14973.381	14973.381								

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7917

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391008

Sample Amount 2

Moisture: 20.2

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02130099.wiff

Date Analyzed: 14-FEB-10 11:51

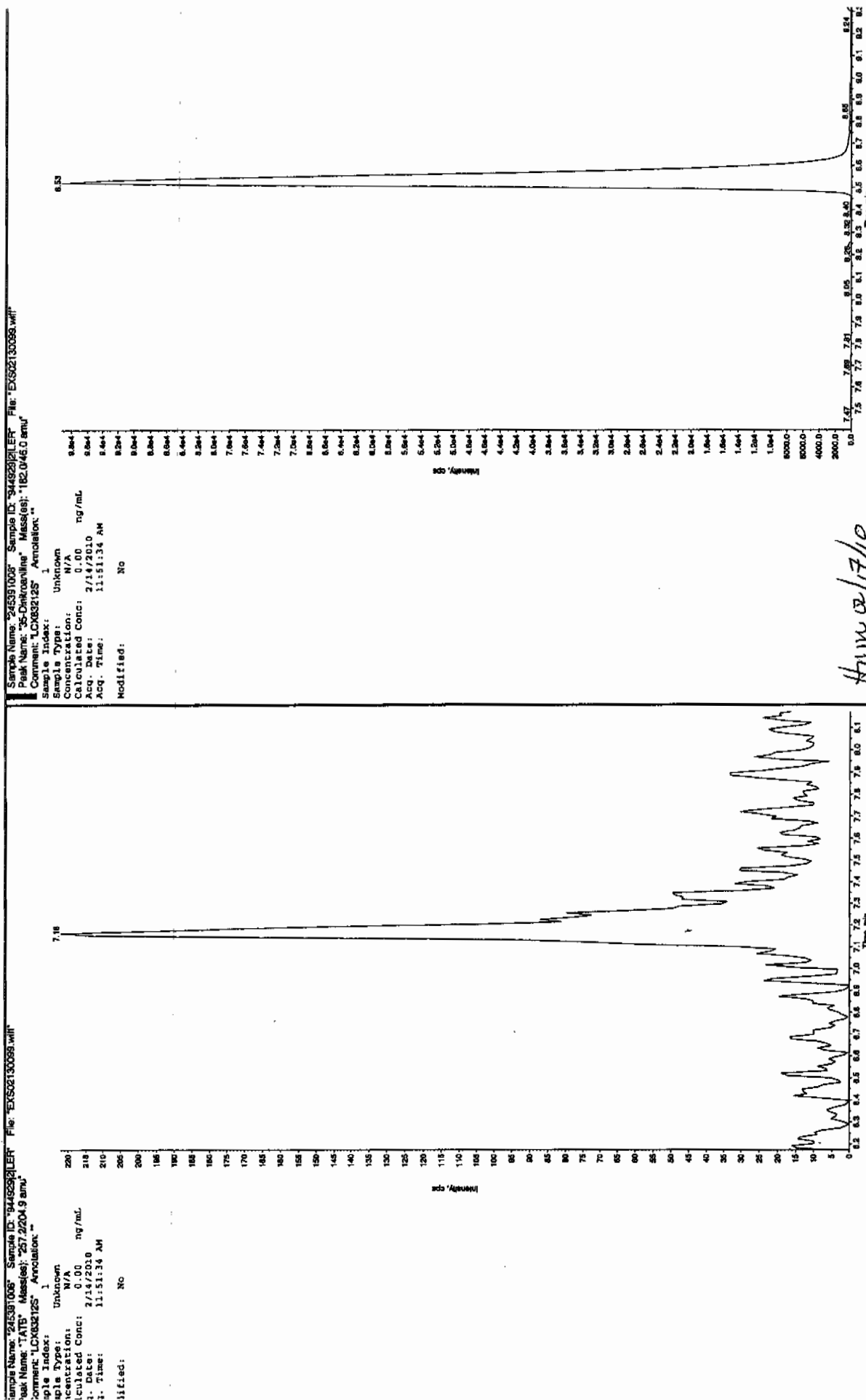
Units: ug/kg

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

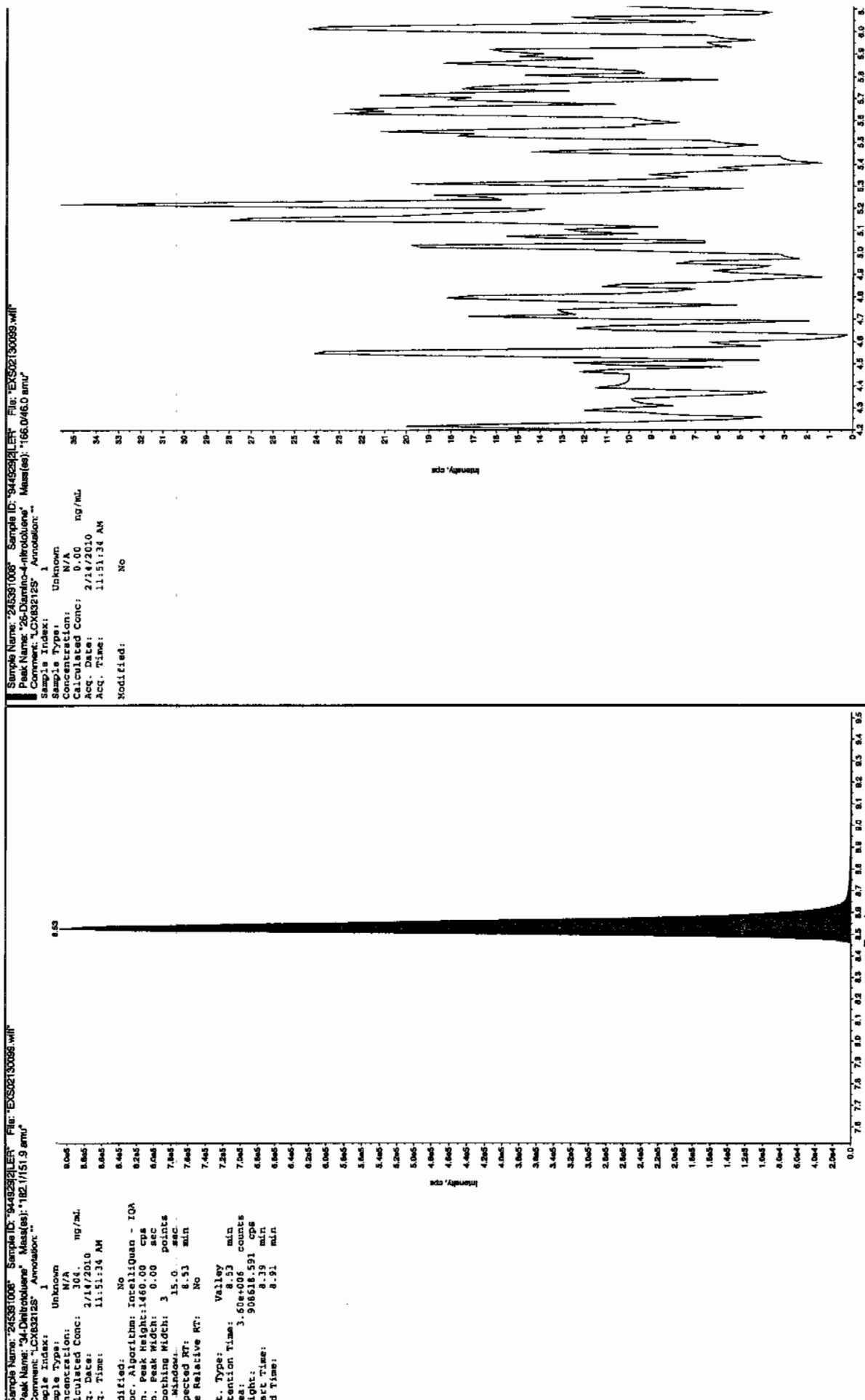
*Concentration =

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

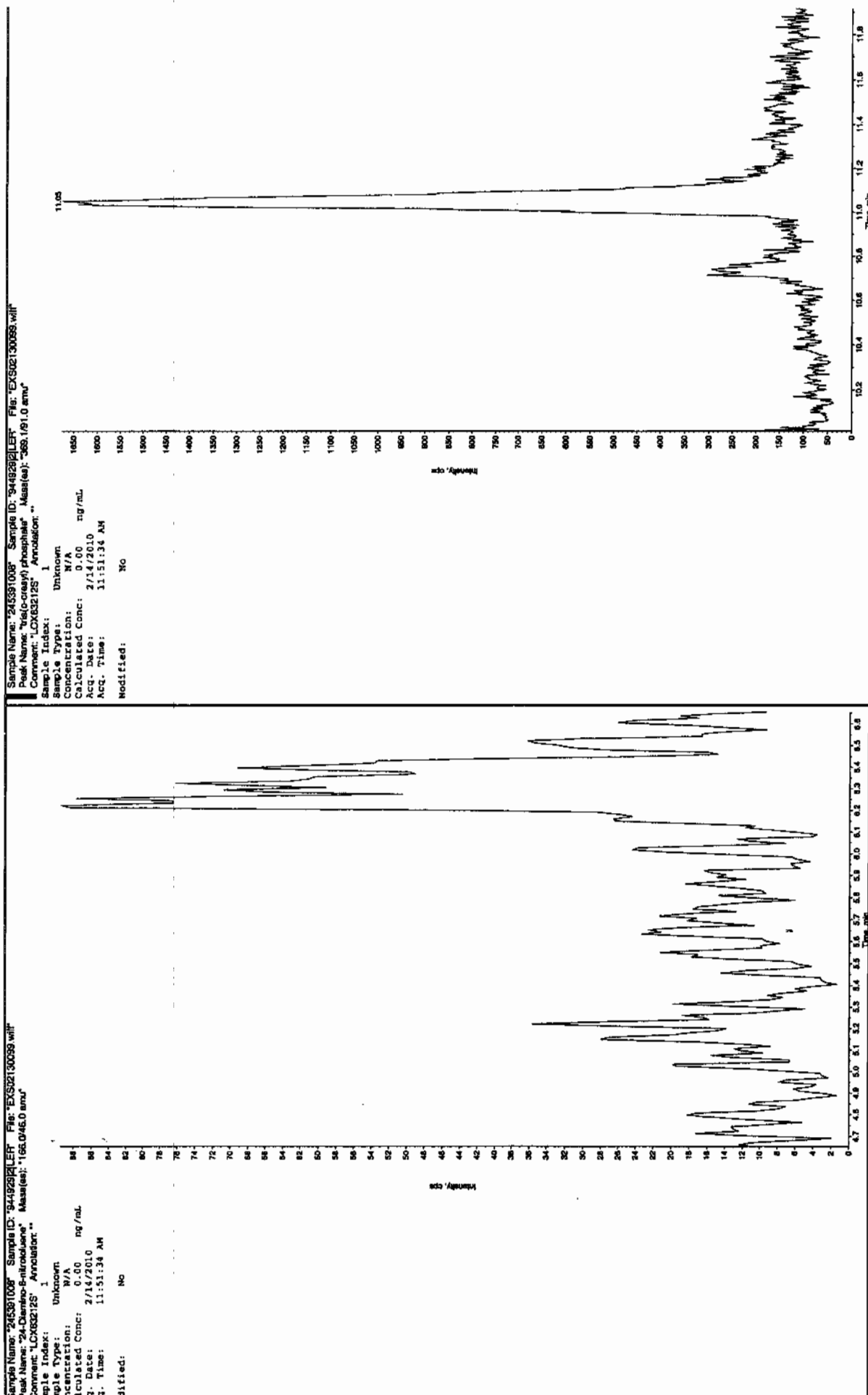
for 2/15/10



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



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



JEL SOP GL-0A-E-056, Method 8321A-Modified LCMSMS#4

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7922

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391009

Sample Amount 2

Moisture: 9.9

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208269a

Date Analyzed: 14-FEB-10 02:35

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

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Date: 14-Feb-2010

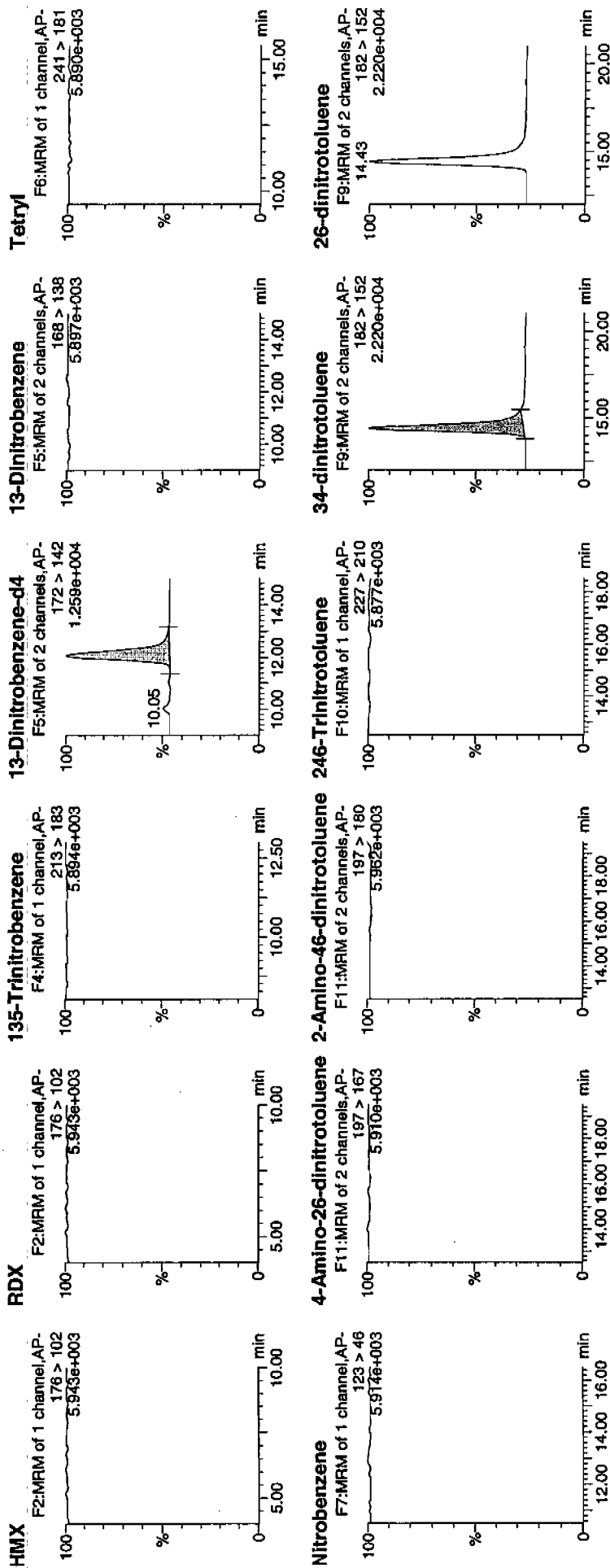
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ID: 245391009

Vial: 2:6,A

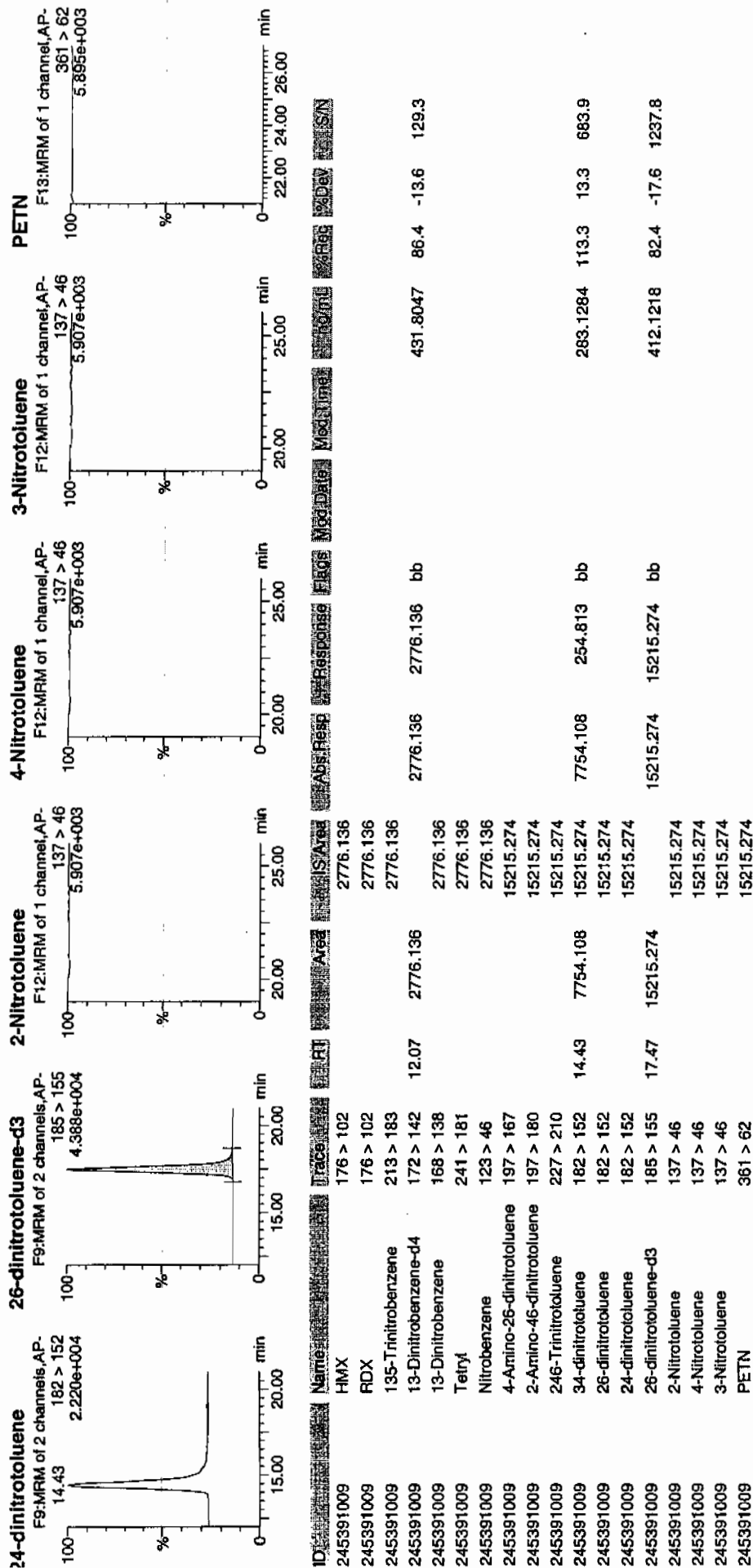
2/14/10

245391009



Amme 2/17/10

Dataset: C:\MASSL\YNX\New_Exp\PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7922

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391009

Sample Amount 2

Moisture: 9.9

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02130100.wiff

Date Analyzed: 14-FEB-10 12:07

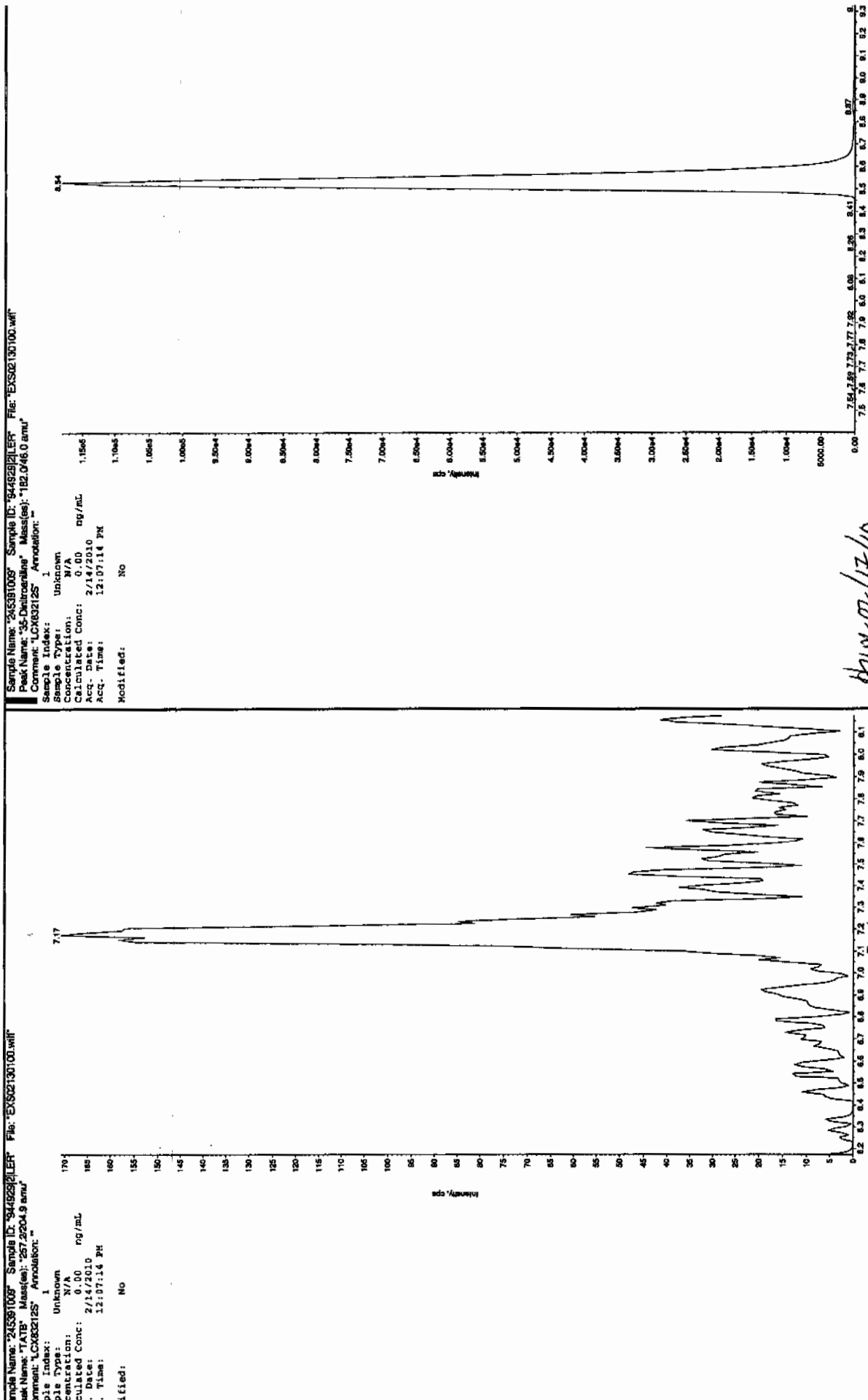
Units: ug/kg

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 =

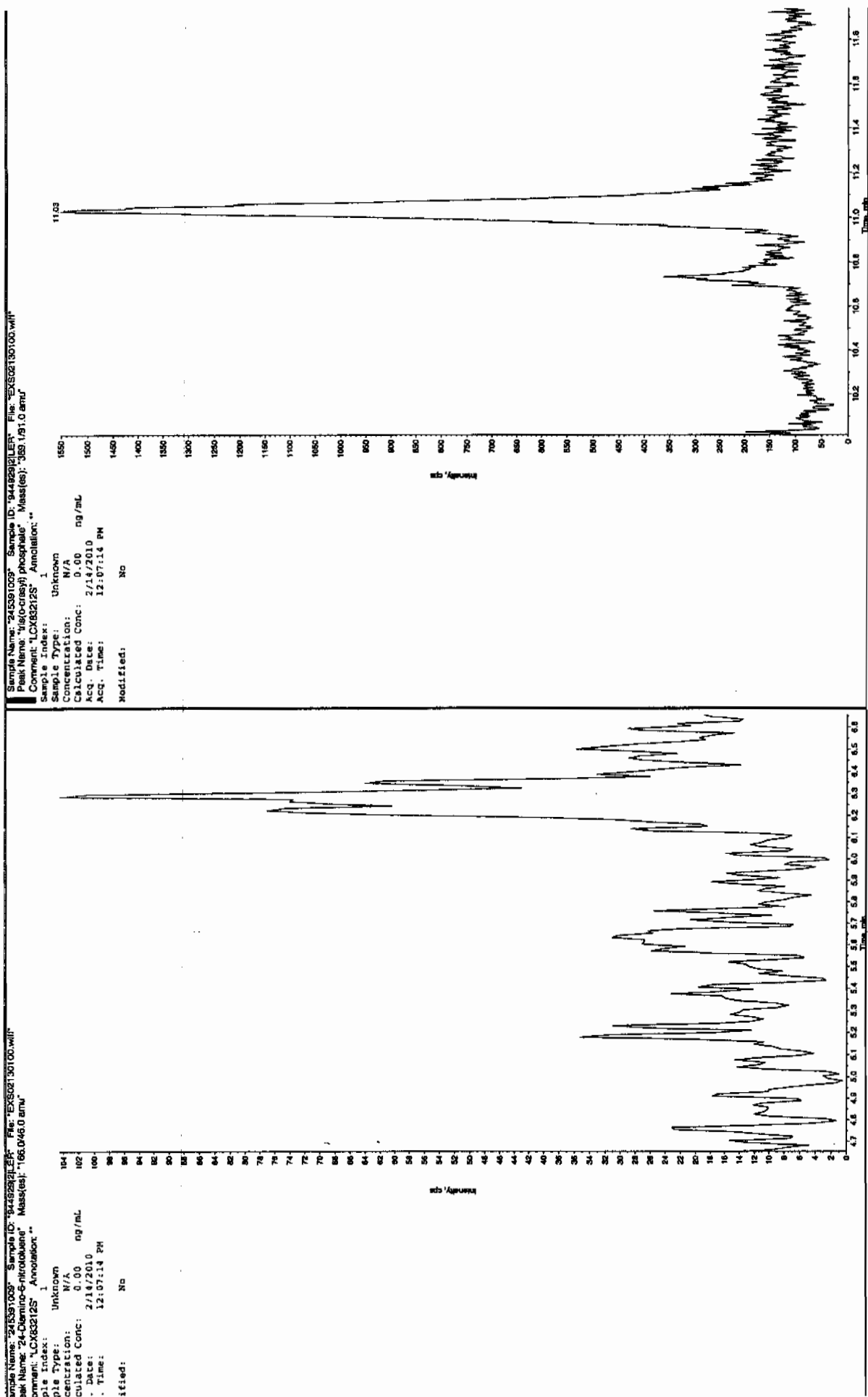
Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

Run 21/5/10



Run 02/17/10

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: RE15-10-8053

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391010

Sample Amount 2

Moisture: 19.2

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208270a

Date Analyzed: 14-FEB-10 03:05

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

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Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208270a

Date: 14-Feb-2010

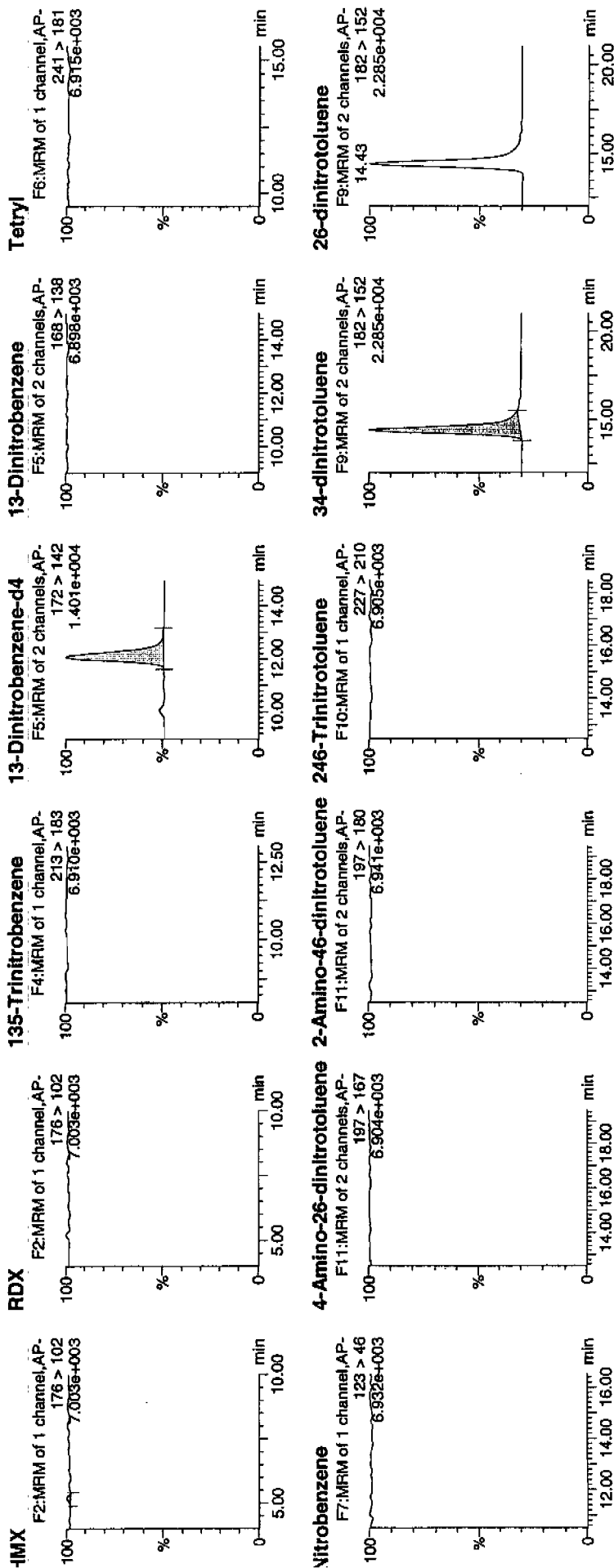
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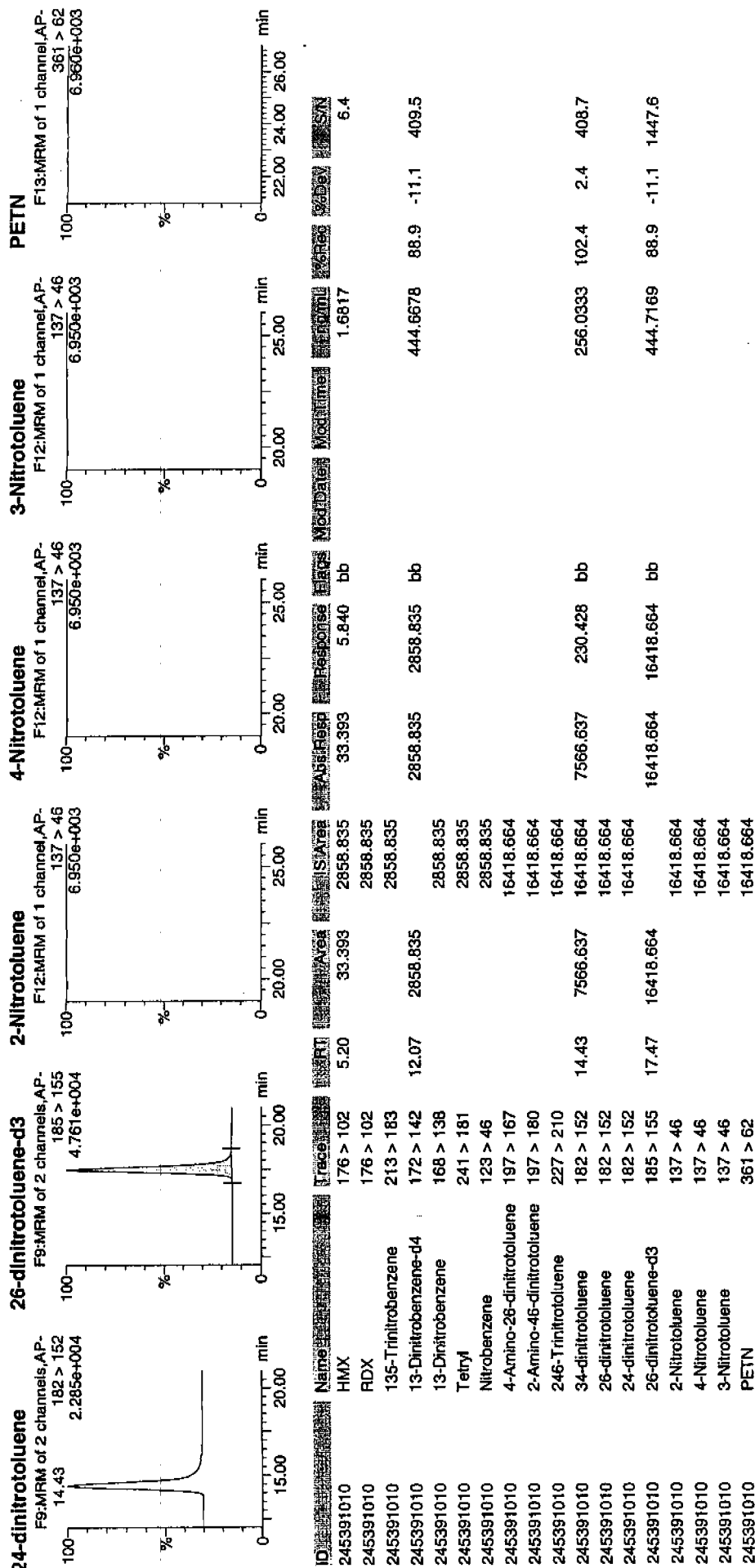
not
 2/14/10

944929 / 21



have
 02/17/10

Dataset: C:\MASSLYNX\New_Exp_PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8053

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391010

Sample Amount 2

Moisture: 19.2

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02130101.wiff

Date Analyzed: 14-FEB-10 12:22

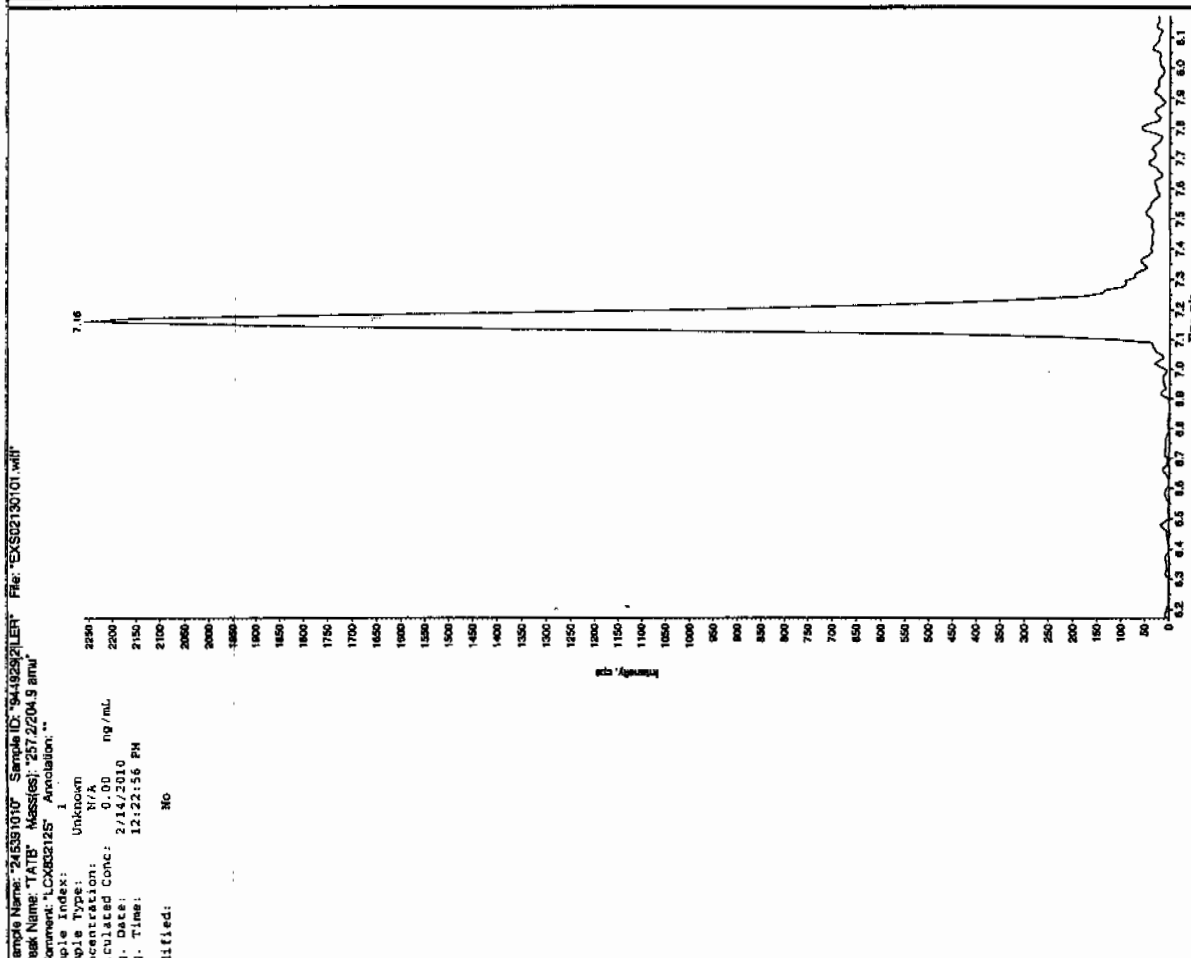
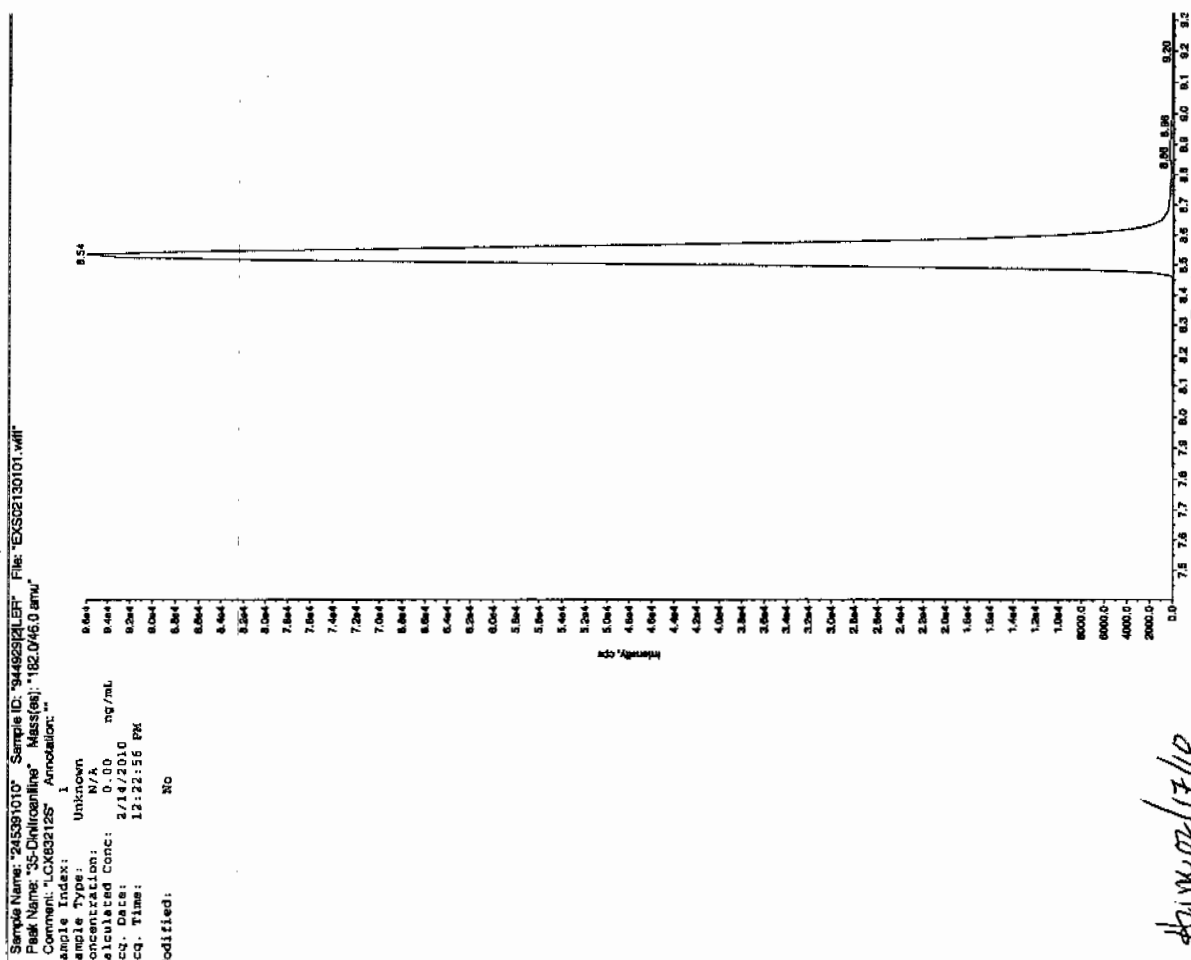
Units: ug/kg

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

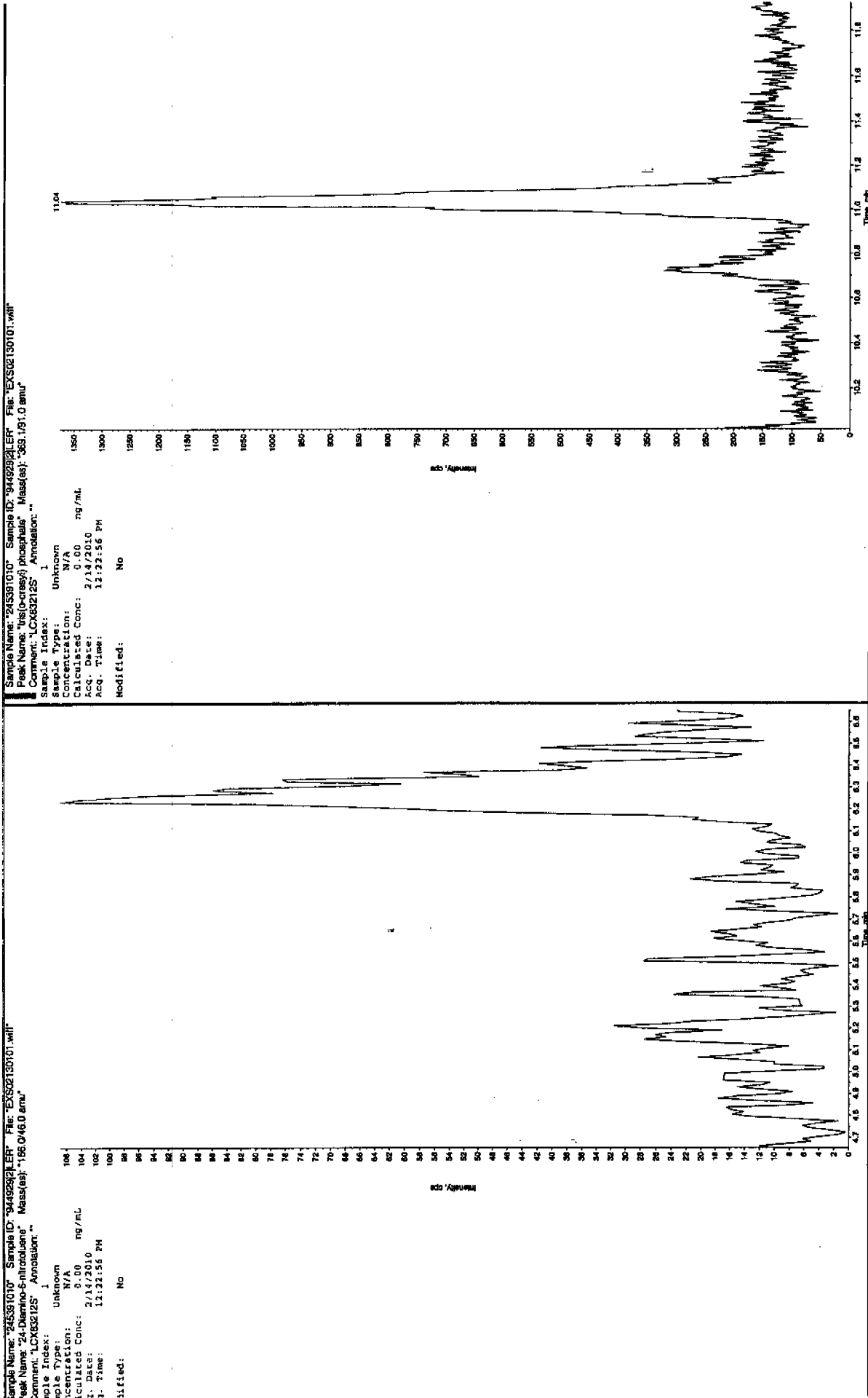
*Concentration =

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

for 2/15/10



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



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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8054

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391011

Sample Amount 2

Moisture: 9.5

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208271a

Date Analyzed: 14-FEB-10 03:34

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: Sun Feb 14 11:45:22 2010, Page 87 of 95

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

Dataset: C:\MASSLYNX\New_Exp\PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010

Sample Name: C:\MASSLYNX\NEW_EXP\PRO\Data\EXP0208271a

Date: 14-Feb-2010

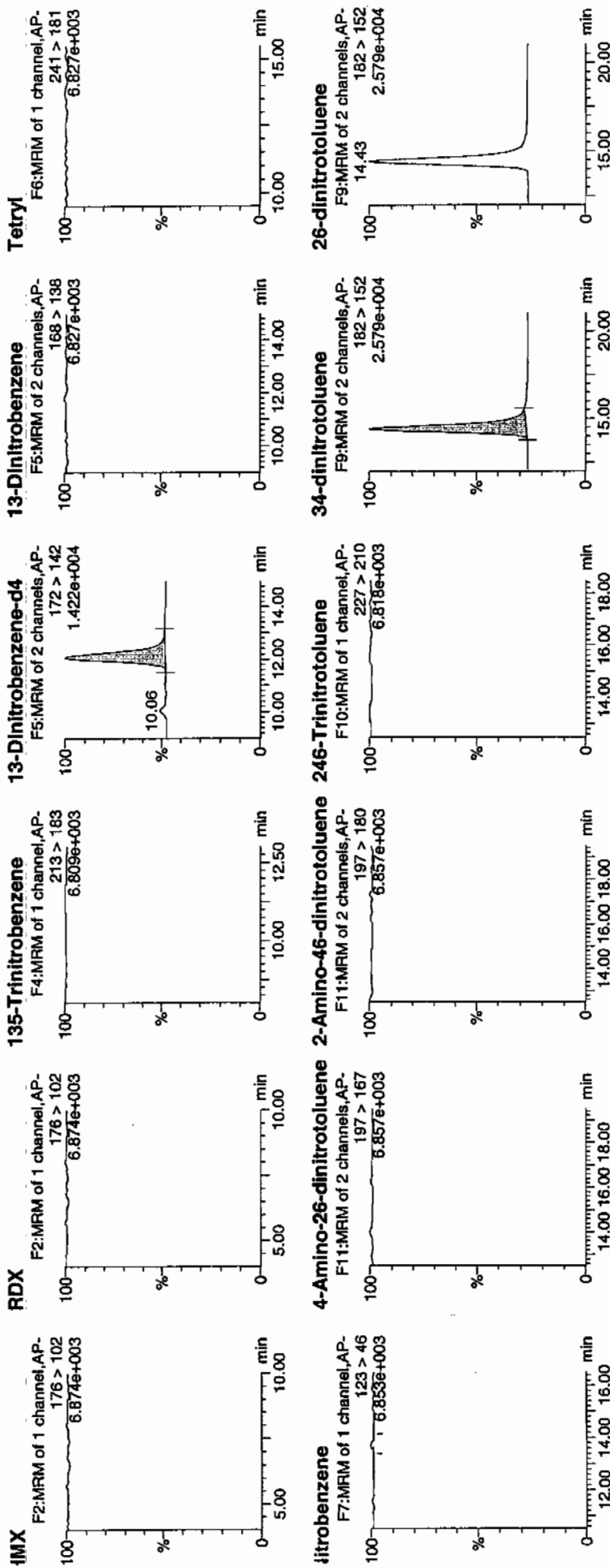
Time: 03:34:58

D: 245391011

Vial: 2:6,C

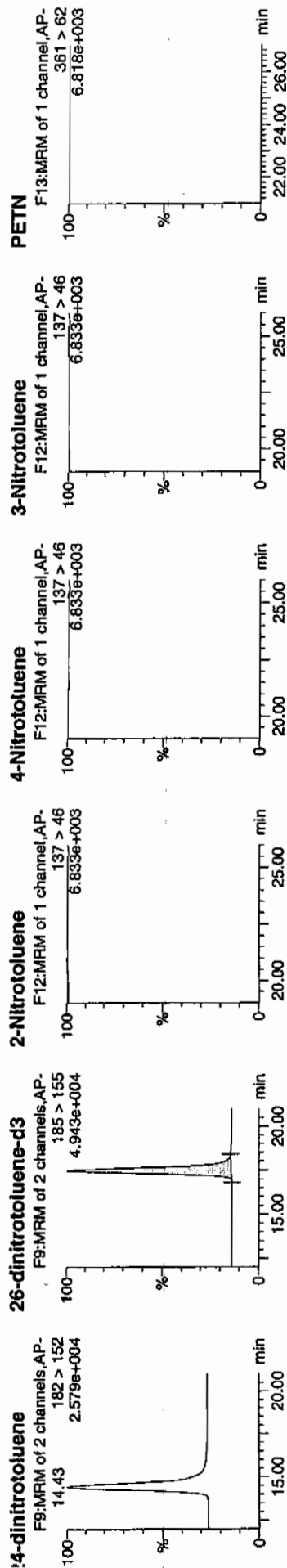
1477
 2/14/10

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 or 11/10

Dataset: C:\MASSLYN\New_Exp.PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8054

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 245391011

Sample Amount 2

Moisture: 9.5

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02130102.wiff

Date Analyzed: 14-FEB-10 12:38

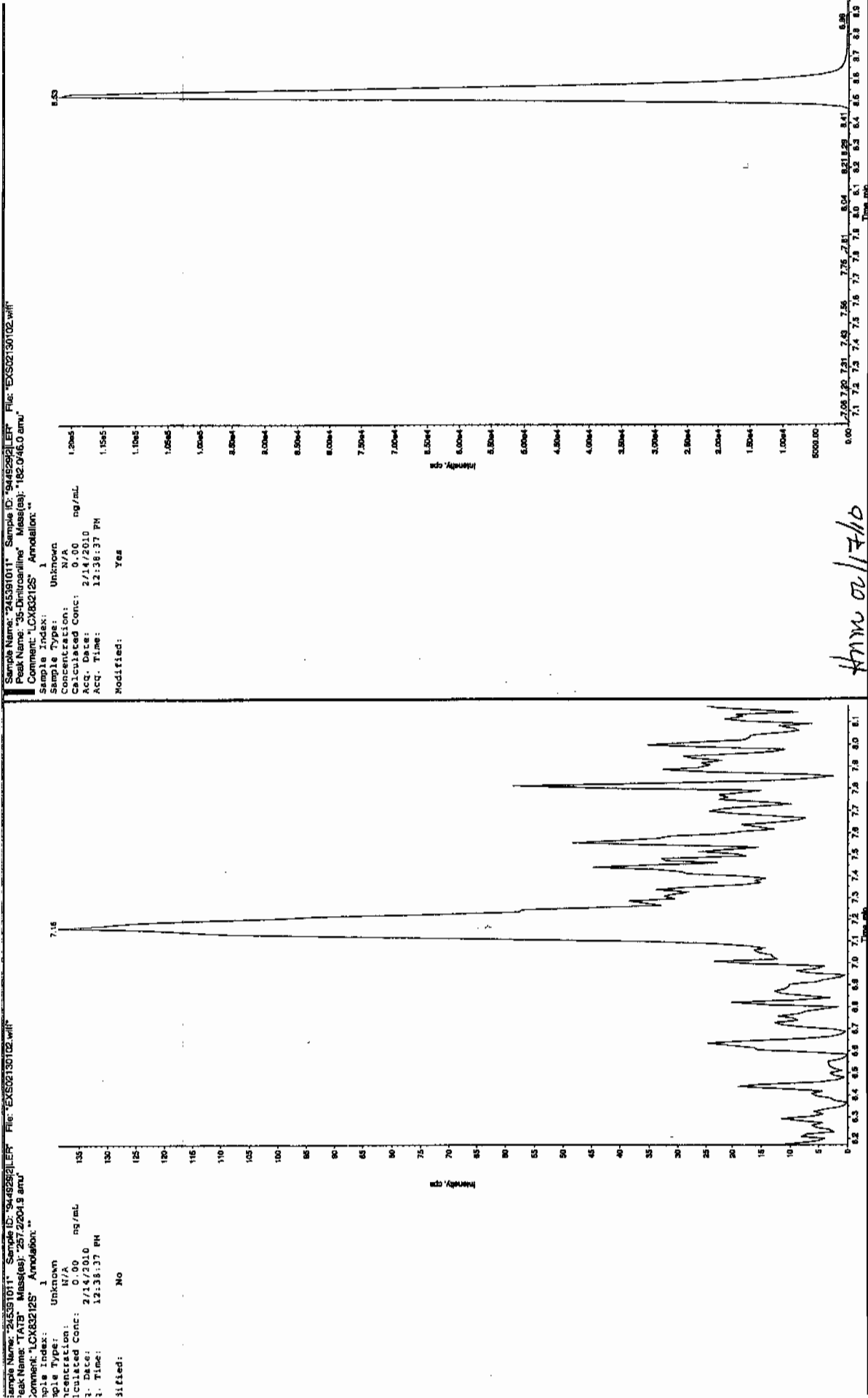
Units: ug/kg

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

Run 2/15/10

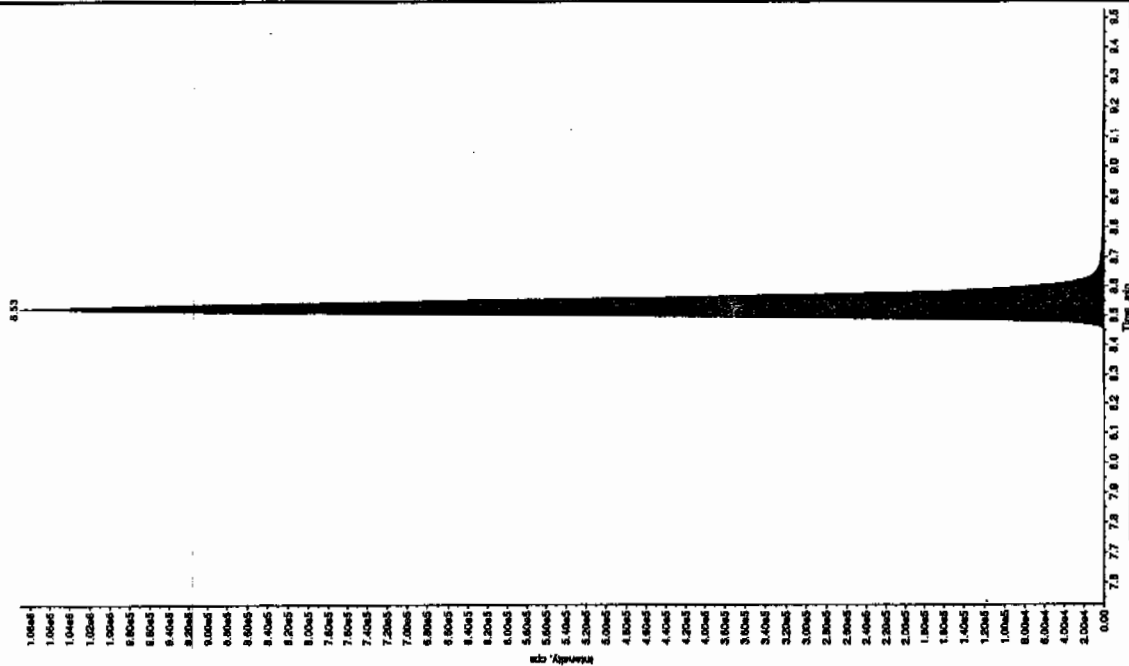


Run 02/17/10

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

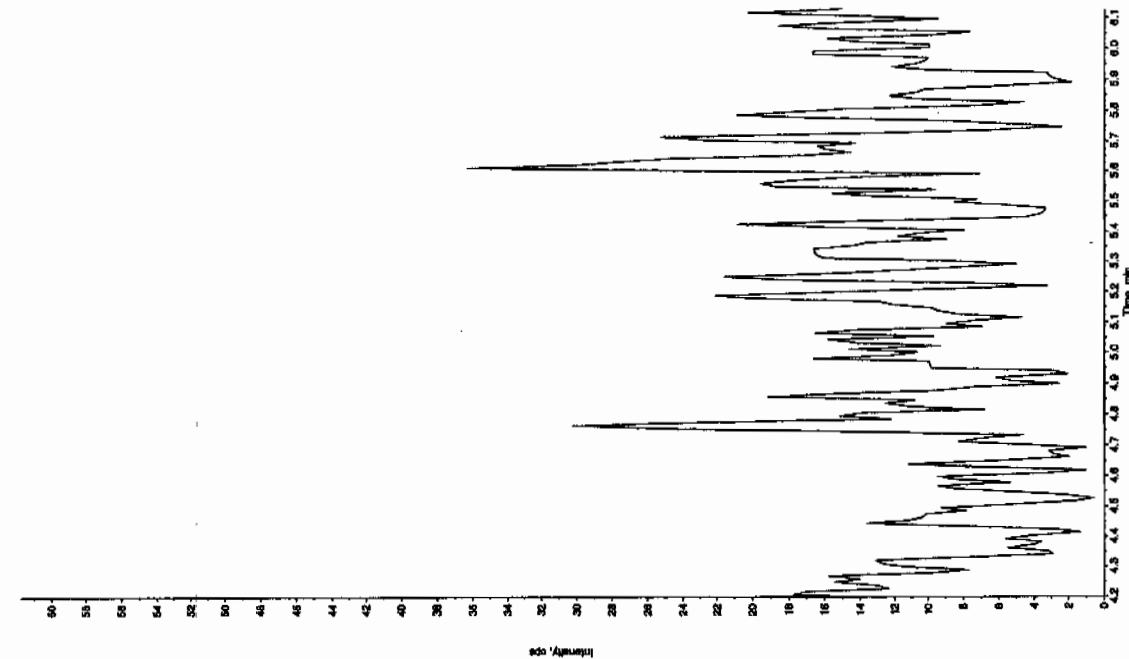
Sample Name: "245391011" Sample ID: "949292JLER" File: "EXS02130102.wif"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"

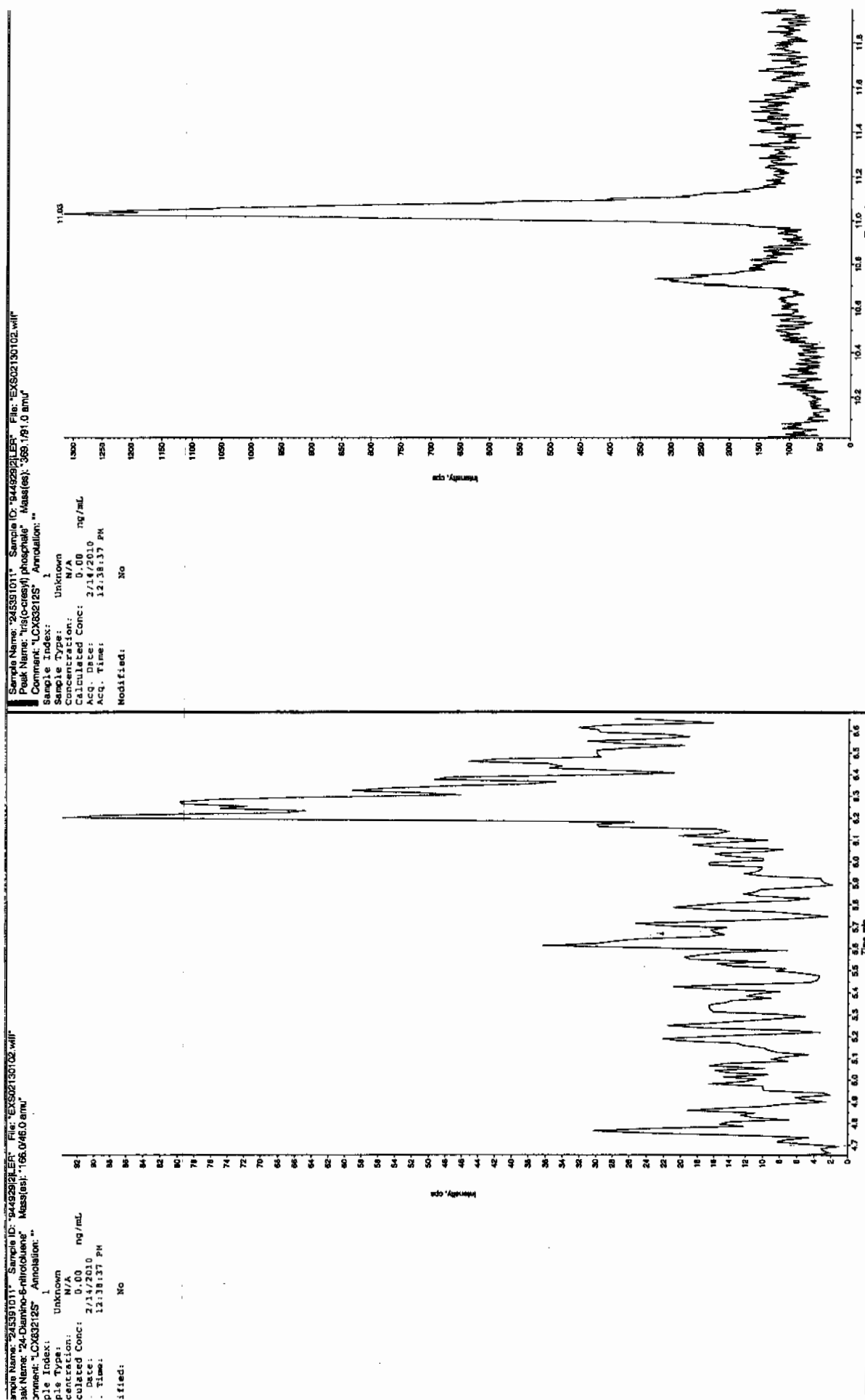
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Sample Type:	N/A	ng/mL
Concentration:	35%	
Diluted Conc:	2/14/2010	
Date:	12/18/07 PM	
Time:		
Method:	No	IntelliQuan - 10A
Peak Height:	1460.00	cps
Peak Width:	0.00	sec
Windowing Method:	3	points
Window:	15.0	sec
Acquired RT:	8.93	min
Relative RT:	No	
Type:	Valley	
Count Time:	8.53	min
Concentration:	4.13e+006	counts
Count Rate:	1090870.239	cps
Time:	8.43	min
Time:	8.92	min



Sample Name: "245391011" Sample ID: "944929121ER" File: "EXS06"
Peak Name: "25-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	2/14/2010
Acq. Time:	12:38:37 PM
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
Primary Analytes								
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
MX	25	50	200	400	800	1000	na	600
TNX	25	50	200	400	800	1000	na	600
1,3,5-Trinitrobenzene	25	50	200	400	800	1000	na	600
1,3-Dinitrobenzene	25	50	200	400	800	1000	na	600
Nitrobenzene	25	50	200	400	800	1000	na	600
Tetryl	25	50	200	400	800	1000	na	600
Nitroglycerin	50	100	200	400	800	1000	na	600
2,4,6-Trinitrotoluene	25	50	200	400	800	1000	na	600
2-Amino-4,6-dinitrotoluene	25	50	200	400	800	1000	na	600
4-Amino-2,6-dinitrotoluene	25	50	200	400	800	1000	na	600
2,4-Dinitrotoluene	25	50	200	400	800	1000	na	600
2,6-Dinitrotoluene	25	50	200	400	800	1000	na	600
2-Nitrotoluene	25	50	200	400	800	1000	na	600
4-Nitrotoluene	25	50	200	400	800	1000	na	600
3-Nitrotoluene	25	50	200	400	800	1000	na	600
PETN	25	50	200	400	800	1000	na	600
Picric Acid	200	400	1600	3200	6400	8000	na	4800
3,4-Dinitrotoluene (Surrogate)	25	50	125	250	375	500	1000	250
Secondary Analytes								
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: 10-1390
 Lab Code: GEL Run Date: 08-FEB-10.13-FEB-10
 LCMSMS Instrument ID: LCMSMS Method: 8321A Modified HPLC Column: Phenomenex Ultracarb 5 ODS(20)

Calibration Type: Average RF

Paraname	1	2	3	4	5	6	Ave RF	RSD	Q
Data File:	EXP0208003a	EXP0208004a	EXP0208005a	EXP0208006a	EXP0208007a	EXP0208008a			
1,3,5-Trinitrobenzene	3.548	3.943	4.247	3.451	3.361	3.547	3.683	9.244	
1,3-Dinitrobenzene-d4	6.149	6.436	6.465	6.633	6.717	6.174	6.429	3.612	
2,4,6-Trinitrotoluene	.299	.308	.311	.323	.348	.347	0.323	6.431	
2,4-Dinitrotoluene	.243	.236	.232	.24	.256	.258	0.244	4.271	
2,6-Dinitrotoluene	1.071	1.092	1.008	1.066	1.112	1.095	1.074	3.4	
2,6-Dinitrotoluene-d3	34.376	37.613	37.768	39.993	37.032	34.734	36.919	5.669	
2-Amino-4,6-dinitrotoluene	.361	.359	.391	.411	.422	.432	0.396	7.897	
3,4-Dinitrotoluene	.793	.884	.838	.907	.976	1	0.900	8.794	
4-Amino-2,6-dinitrotoluene	.279	.278	.264	.289	.311	.303	0.287	6.027	
HMX	3.402	3.005	4.021	3.584	3.432	3.392	3.473	9.511	
Nitrobenzene	.773	.761	.821	.856	.825	.812	0.808	4.332	
RDX	2.405	2.171	2.783	2.361	2.379	2.47	2.428	8.269	
m-Dinitrobenzene	1.257	1.065	1.193	1.226	1.214	1.259	1.202	5.994	
m-Nitrotoluene	.103	.107	.082	.087	.09	.089	0.093	10.689	
o-Nitrotoluene	.173	.148	.144	.152	.156	.157	0.155	6.405	
p-Nitrotoluene	.071	.091	.069	.074	.076	.075	0.076	10.145	

Q column used to flag RSD values outside of Limit (>20%)
 * Values outside of QC Limit

Form 6

Explosives Initial Calibration

Lab Name: GEL Laboratories LLC

GEL Job No: 10-1390

Lab Code: GEL

Run Date: 08-FEB-10.13-FEB-10

LCMSMS Instrument ID: LCMSMS

Method: 8321A Modified

HPLC Column: Phenomenex Ultracarb 5 ODS(20)

Calibration Type: 2nd Order

	1	2	3	4	5	6	X	X^2	Intercept	COD	Q
Calibration Level:	EXP0208003a	EXP0208004a	EXP0208005a	EXP0208006a	EXP0208007a	EXP0208008a					
Data File:											
Parname:											
PETN	1686.42	3643.3	12841.7	23262.7	39238.6	44182	1.544	-0002977	21.056	.9994	
Tetryl	213.659	359.657	1210.76	2567.13	4763.44	5400.44	.962	-0000981	8.004	.9996	

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)

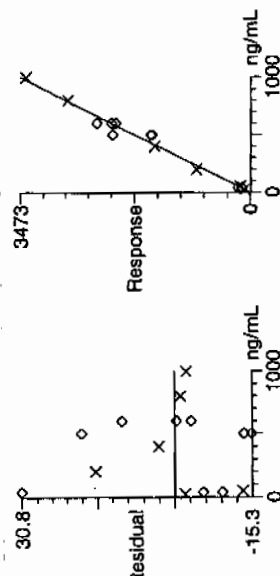
* Values outside of QC Limit

Quantify Calibration Report
JEL Laboratories, LLC / Analyst: Michael A. Penny

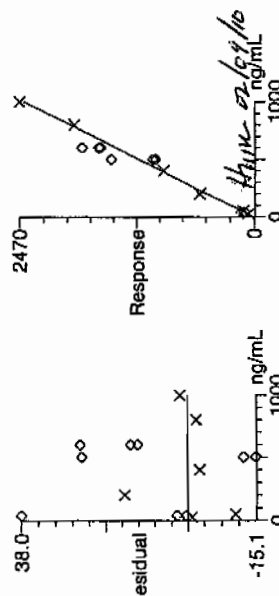
Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

Method: C:\MASSLYNX\New_Exp.PRO\Method\020810expa.mdb, Time: Tue Feb 09 09:17:48 2010
Calibration: Untitled, Time: Tue Feb 09 10:19:05 2010

Compound name: HMX
Response Factor: 3.4728
RF SD: 0.330307, % Relative SD: 9.51126
Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
Curve type: RF



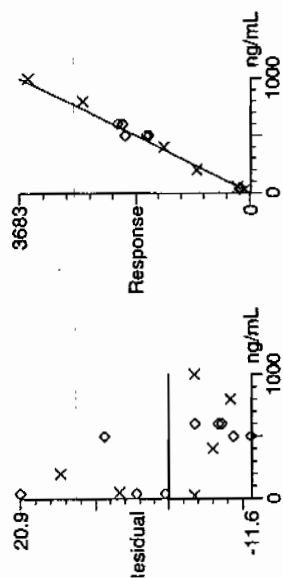
Compound name: RDX
Response Factor: 2.42814
RF SD: 0.200785, % Relative SD: 8.26908
Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
Curve type: RF



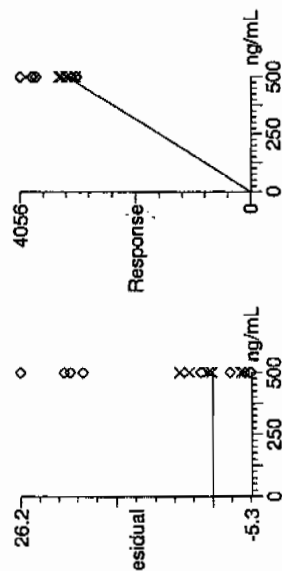
Quantify Calibration Report
iEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

Compound name: 135-Trinitrobenzene
Response Factor: 3.68306
RF SD: 0.340458, % Relative SD: 9.2439
Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
Curve type: RF



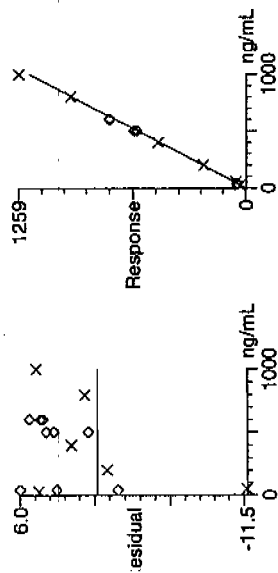
Compound name: 13-Dinitrobenzene-d4
Response Factor: 6.42915
RF SD: 0.232214, % Relative SD: 3.6119
Response type: External Std, Area
Curve type: RF



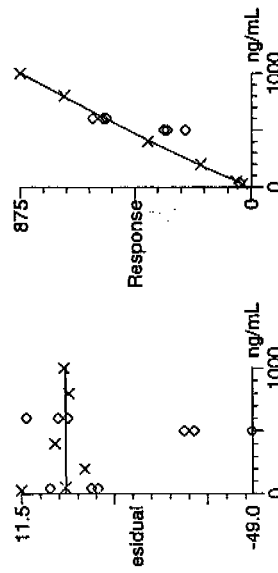
uantify Calibration Report
EL Laboratories, LLC / Analyst : Michael A. Penny

ataset: C:\MASSLYNX\New_Exp.PRO\020810expA.qtd, Time: Tue Feb 09 10:19:05 2010

ompound name: 13-Dinitrobenzene
esponse Factor: 1.2024
RF SD: 0.0720671, % Relative SD: 5.99362
esponse type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
urve type: RF

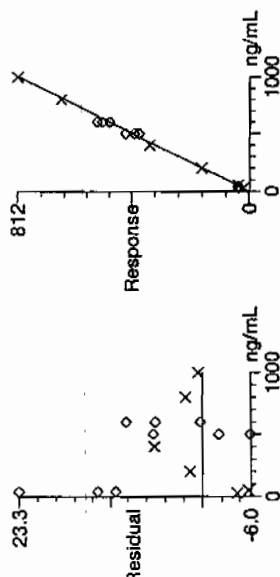


ompound name: Tetral
oefficient of Determination: 0.999624
alibration curve: $-9.80877e-005 * x^2 + 0.962233 * x + 8.00395$
esponse type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
urve type: 2nd Order, Origin: Exclude, Weighting: Null, Axis trans: None

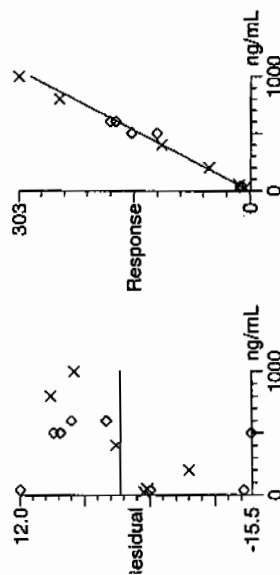


Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA.qtd, Time: Tue Feb 09 10:19:05 2010

Compound name: Nitrobenzene
Response Factor: 0.807771
RF SD: 0.034992, % Relative SD: 4.33192
Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
Curve type: RF



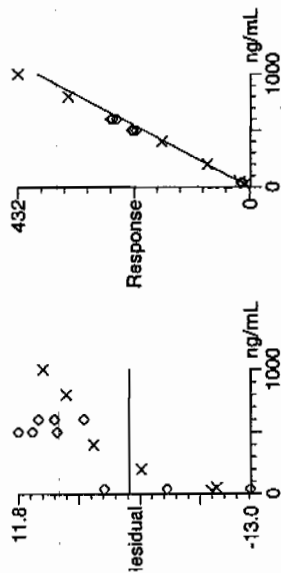
Compound name: 4-Amino-26-dinitrotoluene
Response Factor: 0.287245
RF SD: 0.0173125, % Relative SD: 6.02707
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



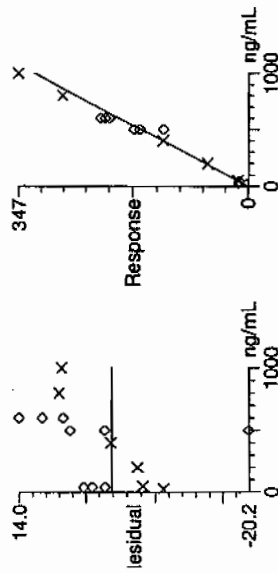
Quantify Calibration Report
iEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

Compound name: 2-Amino-4,6-dinitrotoluene
Response Factor: 0.39603
RF SD: 0.0312733, % Relative SD: 7.8967
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



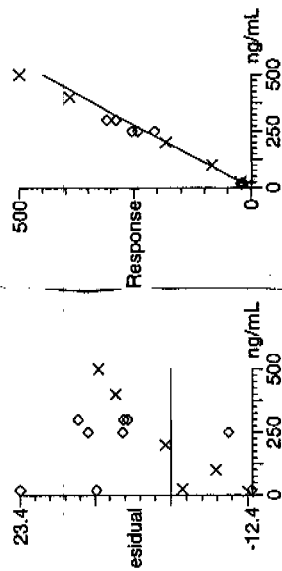
Compound name: 2,4,6-Trinitrotoluene
Response Factor: 0.322663
RF SD: 0.0207501, % Relative SD: 6.43088
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



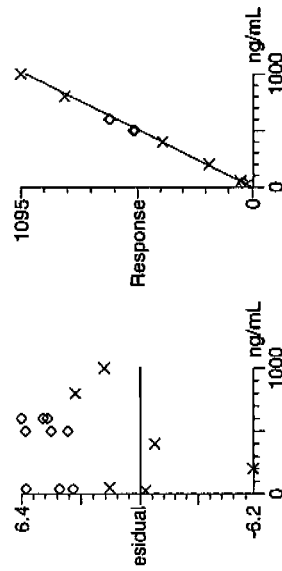
uantify Calibration Report
EL Laboratories, LLC / Analyst : Michael A. Penny

at aset: C:\MASSLYNX\New_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

Compound name: 34-dinitrotoluene
Response Factor: 0.899992
RF SD: 0.0791463, % Relative SD: 8.79411
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



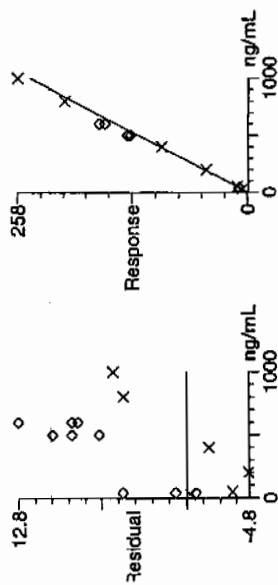
Compound name: 26-dinitrotoluene
Response Factor: 1.07409
RF SD: 0.0365192, % Relative SD: 3.40002
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



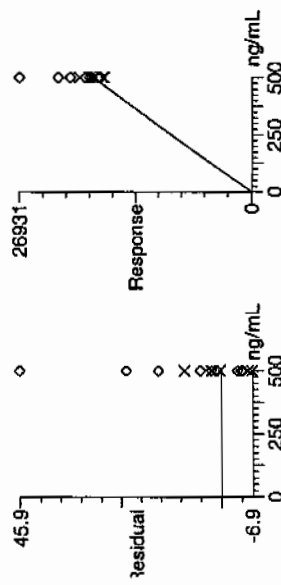
Quantify Calibration Report
 iEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

Compound name: 24-dinitrotoluene
 Response Factor: 0.244052
 RF SD: 0.010423, % Relative SD: 4.27082
 Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
 Curve type: RF



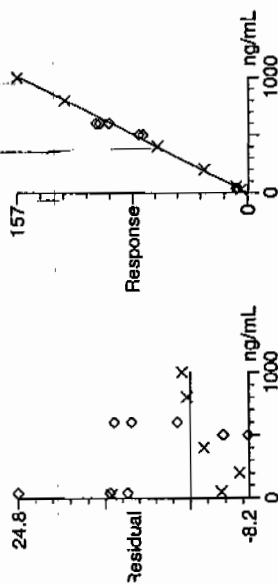
Compound name: 26-dinitrotoluene-d3
 Response Factor: 36.9194
 RF SD: 2.09302, % Relative SD: 5.66917
 Response type: External Std, Area
 Curve type: RF



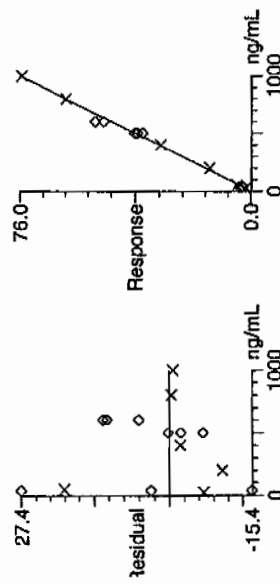
Quantify Calibration Report
 EL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

Compound name: 2-Nitrotoluene
 Response Factor: 0.155048
 RF SD: 0.00993156, % Relative SD: 6.40546
 Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
 Curve type: RF



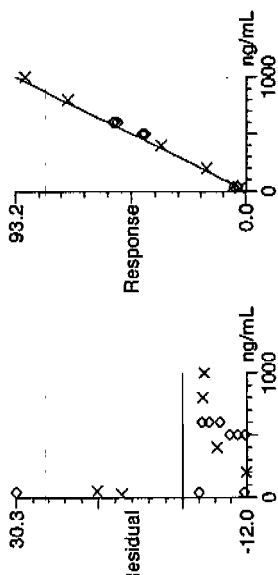
Compound name: 4-Nitrotoluene
 Response Factor: 0.0760026
 RF SD: 0.00771034, % Relative SD: 10.1448
 Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
 Curve type: RF



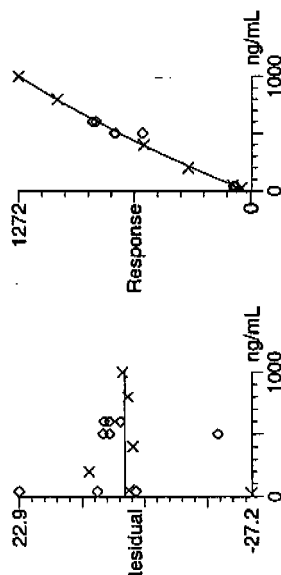
Quantify Calibration Report
EL Laboratories, LLC / Analyst : Michael A. Penny

atlas: C:\MASSLYNX\New_Exp\PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

compound name: 3-Nitrotoluene
response factor: 0.0931713
RF SD: 0.0099588, % Relative SD: 10.6887
response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
curve type: RF



compound name: PETN
coefficient of Determination: 0.999420
calibration curve: $-0.000297734 \cdot x^2 + 1.54409 \cdot x + 21.0556$
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): 10-1390

Lab Code: GEL

GEL Sample ID: WXXICV

GEL Data File EXP0208010a

Analysis Date: 08-FEB-10 19:10

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	577.44	96	
1,3-Dinitrobenzene-d4	500	477.774	96	
2,4,6-Trinitrotoluene	600	643.695	107	
2,4-Dinitrotoluene	600	652.405	109	
2,6-Dinitrotoluene	600	631.529	105	
2,6-Dinitrotoluene-d3	500	481.745	96	
2-Amino-4,6-dinitrotoluene	600	657.981	110	
3,4-Dinitrotoluene	300	321.546	107	
4-Amino-2,6-dinitrotoluene	600	609.28	102	
HMX	600	598.223	100	
Nitrobenzene	600	634.828	106	
PETN	600	620.504	103	
RDX	600	679.292	113	
Tetryl	600	611.62	102	
m-Dinitrobenzene	600	625.274	104	
m-Nitrotoluene	600	570.29	95	
o-Nitrotoluene	600	651.604	109	
p-Nitrotoluene	600	672.143	112	

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\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

Name: C:\MASSLYNX\NEW_EXP_PRO\Data\EXP0208010a

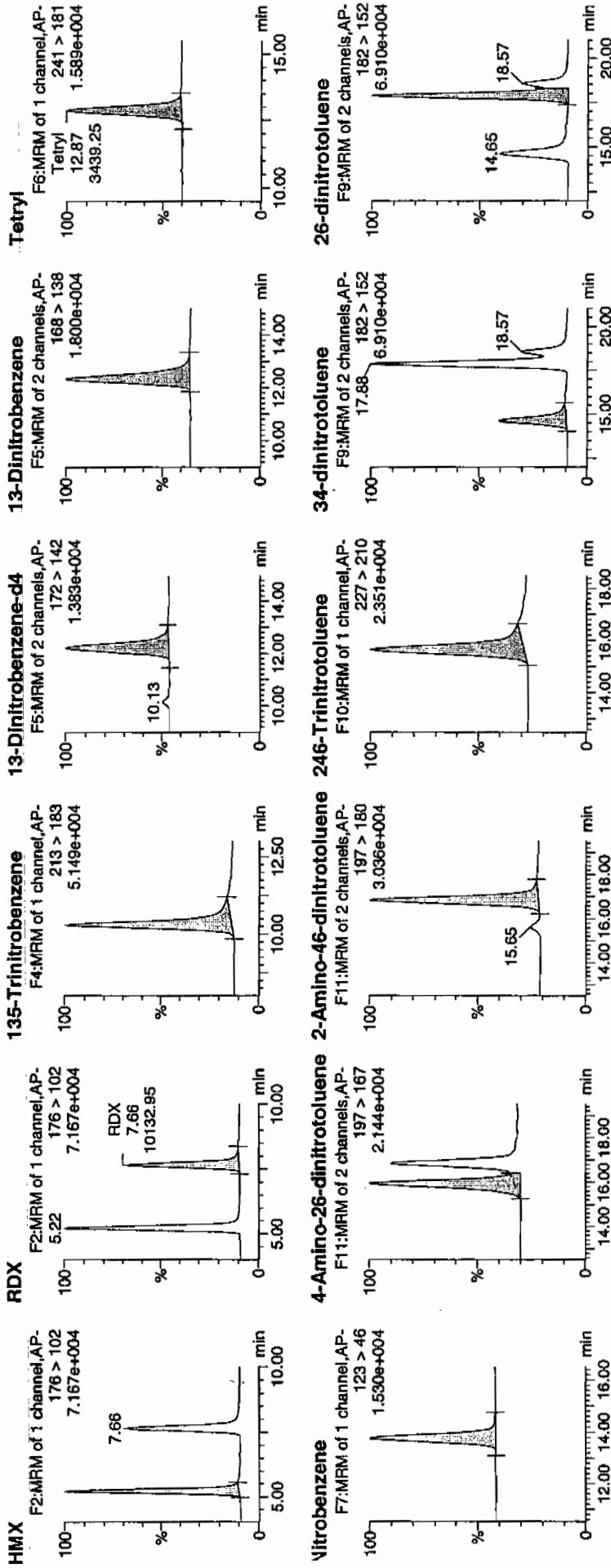
Date: 08-Feb-2010

Time: 19:10:05

ID: WXX100208-071CV

Vial: 1:1,B

WXX
2/9/10

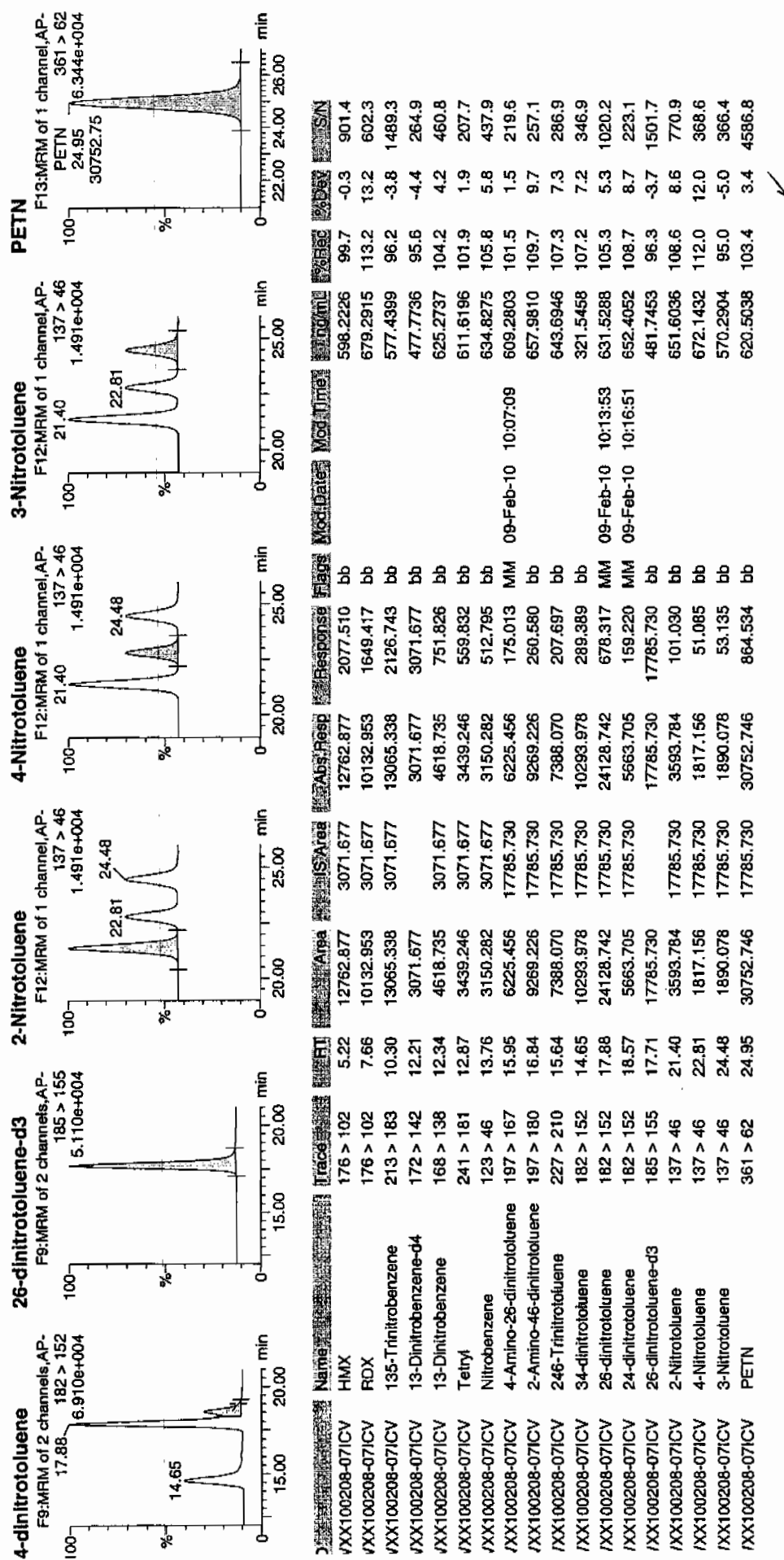


WXX
2/9/10

Printed: Tue Feb 09 10:21:18 2010, Page 20 of 77

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

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/08/10
 Time of Injection: 1910
 Standard Number: WXX100208-07ICV
 Data File: EXP0208010a

HMX	99.7
RDX	113.2
135-TNB	96.2
13-DNB	104.2
Tetryl	101.9
Nitrobenzene	105.8
4A-26-DNT	101.5
2A-46-DNT	109.7
246-TNT	107.3
34-DNT(surr)	107.2
26-DNT	105.3
24-DNT	108.7
2-NT	108.6
4-NT	112.0
3-NT	95.0
PETN	103.4

1017
2/9/10

Total 1679.7

Average 105.0

1017
2/9/10

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: 10-1390
 Lab Code: GEL Run Date: 08-FEB-10 13-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:	EXS02130003.wiff	EXS02130004.wiff	EXS02130005.wiff	EXS02130006.wiff	EXS02130007.wiff	EXS02130008.wiff	EXS02130009.wiff					
Parname:												
2,4-Diamino-6-nitrotoluene	69200	161000	406000	857000	1260000	1740000	3150000	-35800	1870	-.139	.9998	
2,6-Diamino-4-nitrotoluene	124000	261000	621000	1330000	1880000	2670000	5260000	-12700	2620	.009	.9997	
3,4-Dinitrotoluene	300000	580000	1420000	2730000	4160000	5660000	10400000	-67600	12700	-2.26	.9988	
3,5-Dinitroaniline	334000	612000	1410000	2880000	4620000	5850000	10700000	-60100	6420	-.509	.9996	
TATB	79400	155000	384000	753000	1200000	1510000	2940000	-5110	1600	-.063	.9997	
tris(o-cresyl) phosphate	1230000	2370000	5560000	10600000	15300000	19600000	31300000	36900	23300	-3.82	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

021310ICAL

Peak Name: TATB
No Internal Standard
Q1/Q3 Masses: 257.20/204.90 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	-5.11e+003			
a1	1.6e+003			
a2	-0.0629			
Correlation coefficient 0.9997				
Use Area				

Peak Name: 35-Dinitroaniline
No Internal Standard
Q1/Q3 Masses: 182.00/46.00 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	-6.01e+004			
a1	6.42e+003			
a2	-0.509			
Correlation coefficient 0.9996				
Use Area				

Peak Name: 34-Dinitrotoluene
No Internal Standard
Q1/Q3 Masses: 182.08/151.90 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	-6.76e+004			
a1	1.27e+004			
a2	-2.26			
Correlation coefficient 0.9988				
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	-1.27e+004			
a1	2.62e+003			
a2	0.00918			
Correlation coefficient 0.9997				
Use Area				

Peak Name: 24-Diamino-6-nitrotoluene
No Internal Standard
Q1/Q3 Masses: 165.97/46.00 amu

Lur
2/15/10

Ham
02/11/10

Page 1

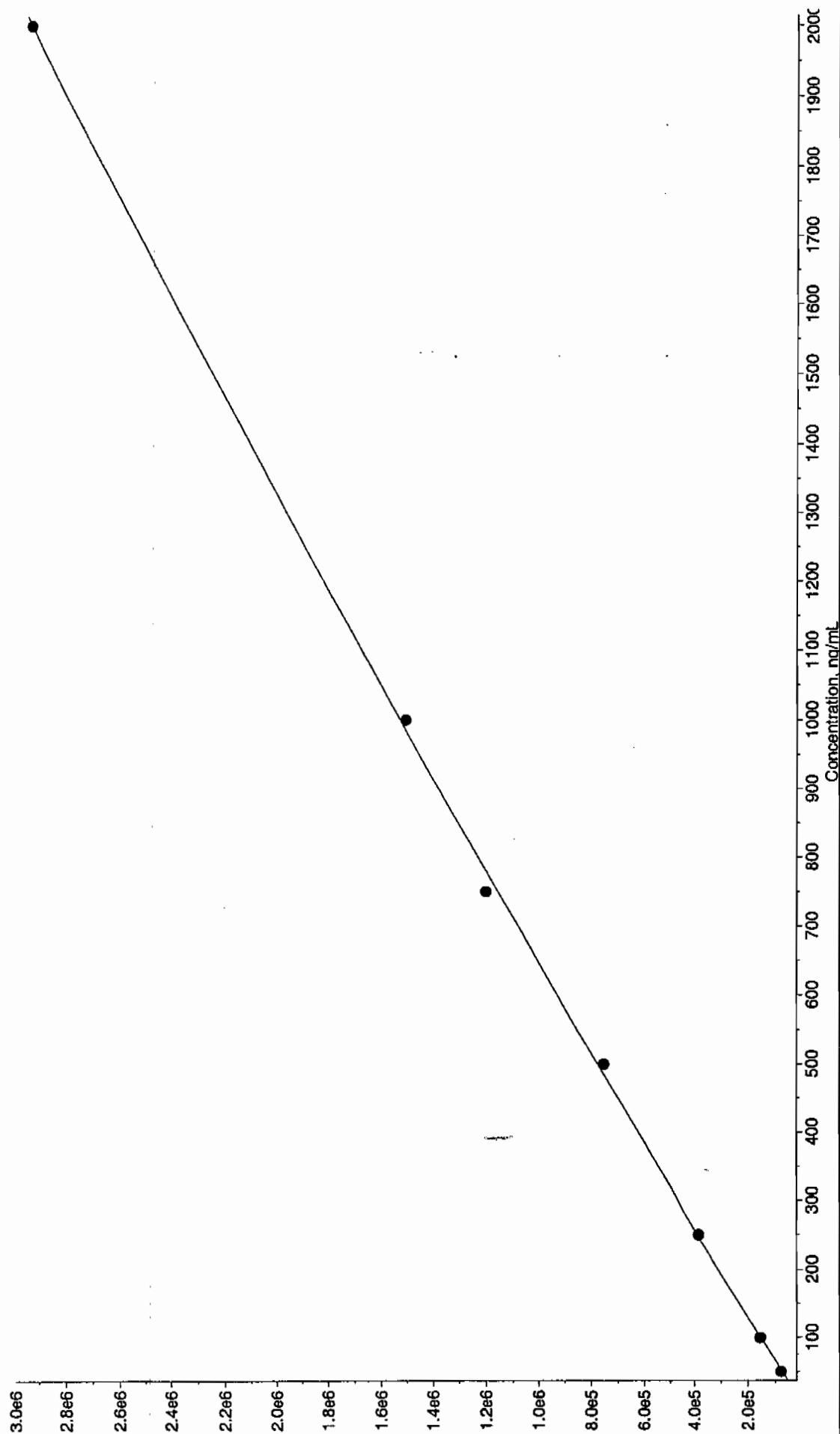
021310ICAL

Fit	Quadratic	Weighting	None	Iterate No
a0	-3.58e+004			
a1	1.87e+003			
a2	-0.139			
	Correlation coefficient 0.9998			
	Use Area			

Peak Name: tris(o-cresyl) phosphate
No Internal Standard
Q1/Q3 Masses: 369.15/91.00 amu

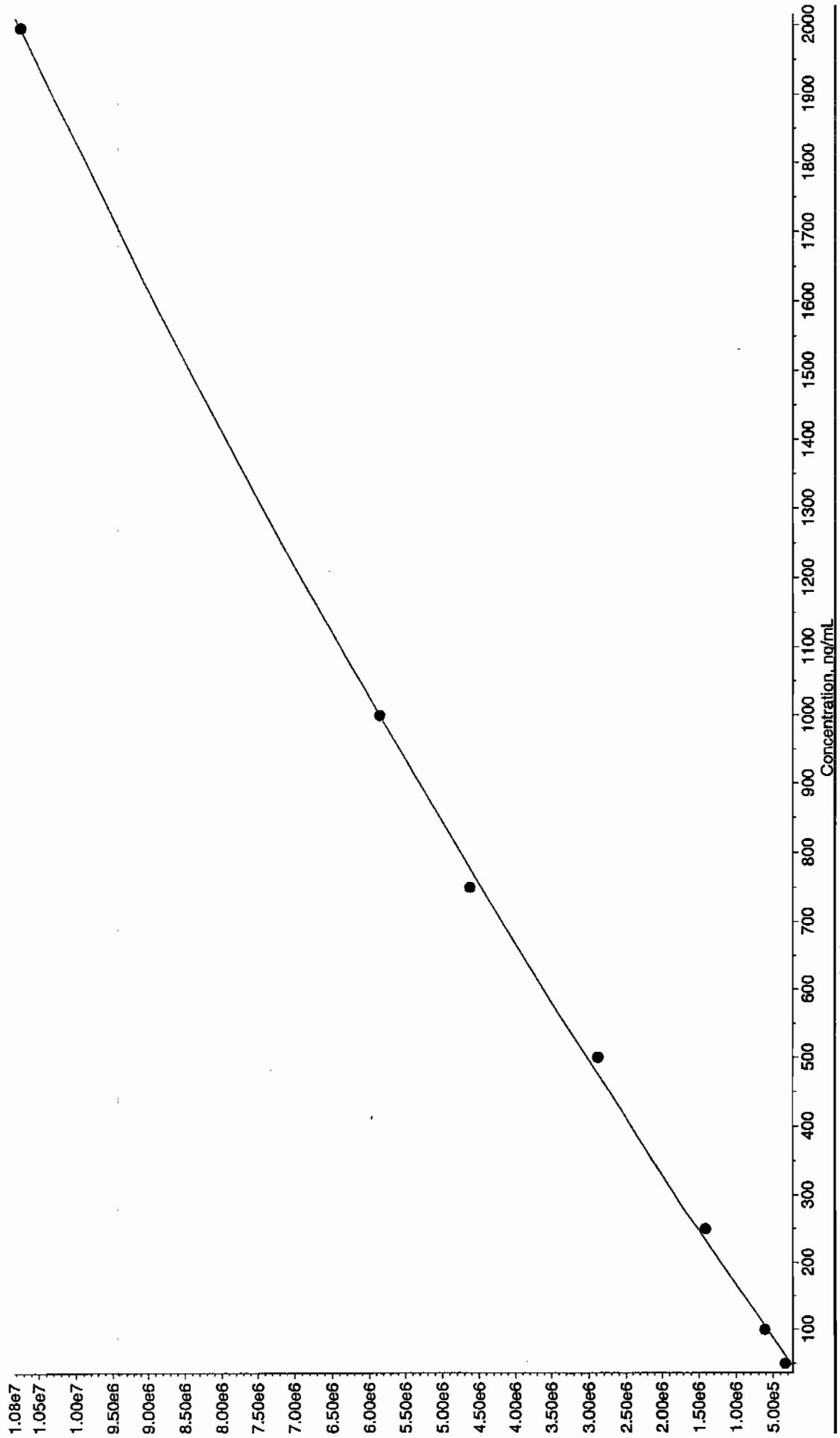
Fit	Quadratic	Weighting	None	Iterate No
a0	3.69e+004			
a1	2.33e+004			
a2	-3.82			
	Correlation coefficient 1.0000			
	Use Area			

021310.rdb (TATB): "Quadratic" Regression ("No" weighting): $y = -0.0629 x^2 + 1.6e+003 x + -5.11e+003$ ($r = 0.9997$)



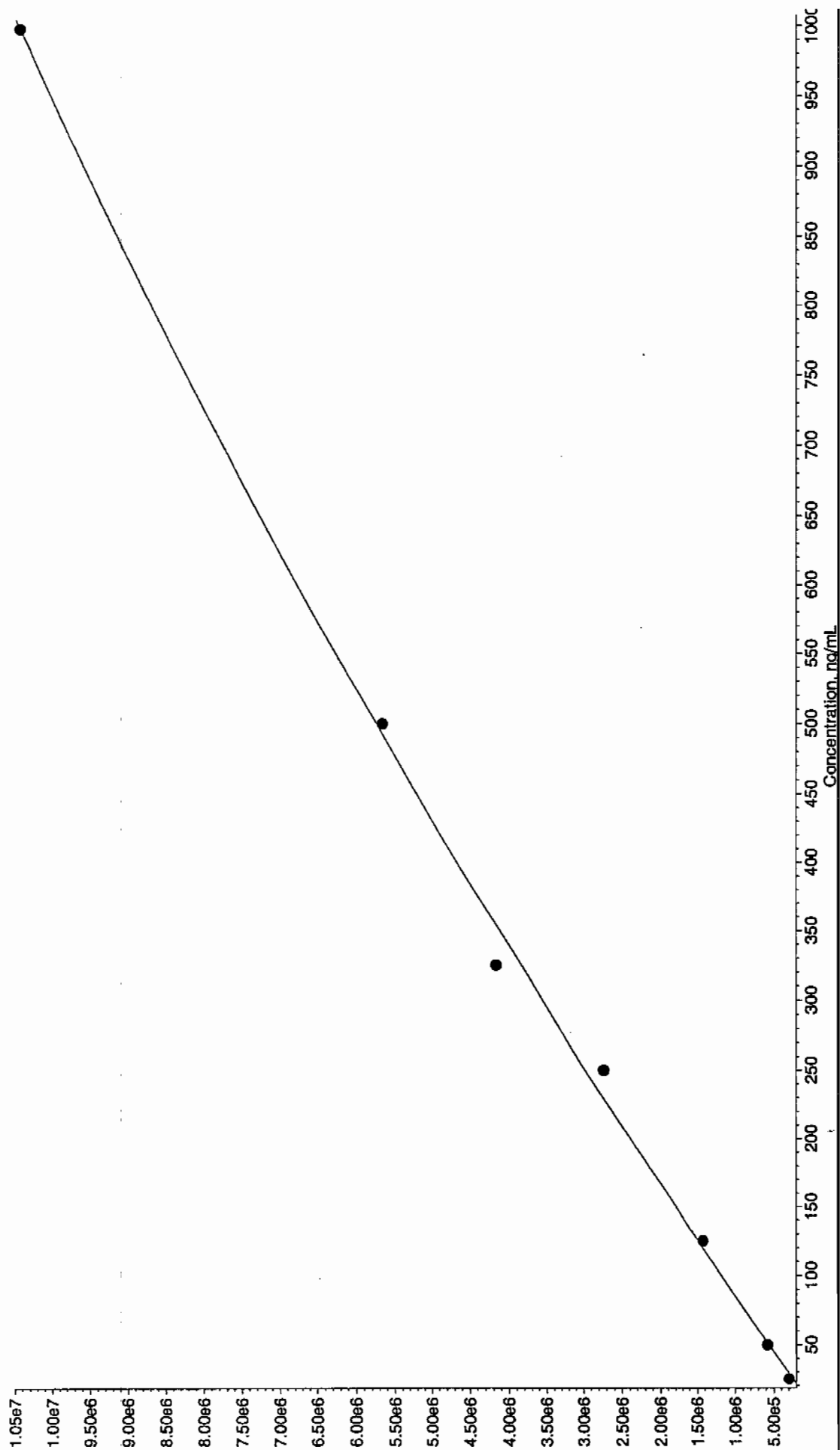
3L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

021310.rdb (35-Dinitroaniline): "Quadratic" Regression ("No" weighting): $y = -0.509 x^2 + 6.42e+003 x + -6.01e+004$ ($r = 0.9996$)



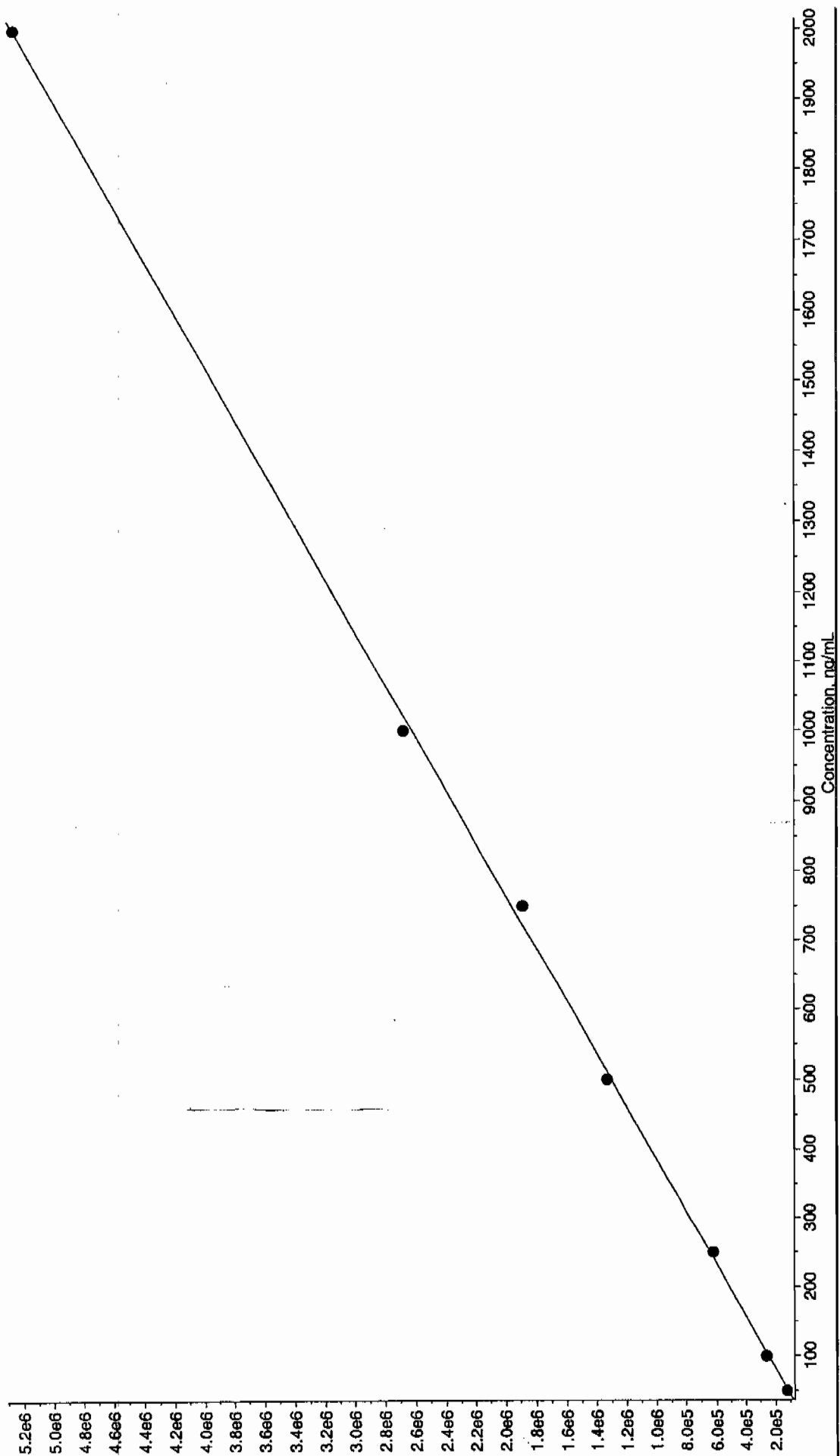
IL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

021310.rdb (34-Dinitrotoluene): "Quadratic" Regression ("No" weighting): $y = -2.26 x^2 + 1.27e+004 x + -6.76e+004$ ($r = 0.9988$)



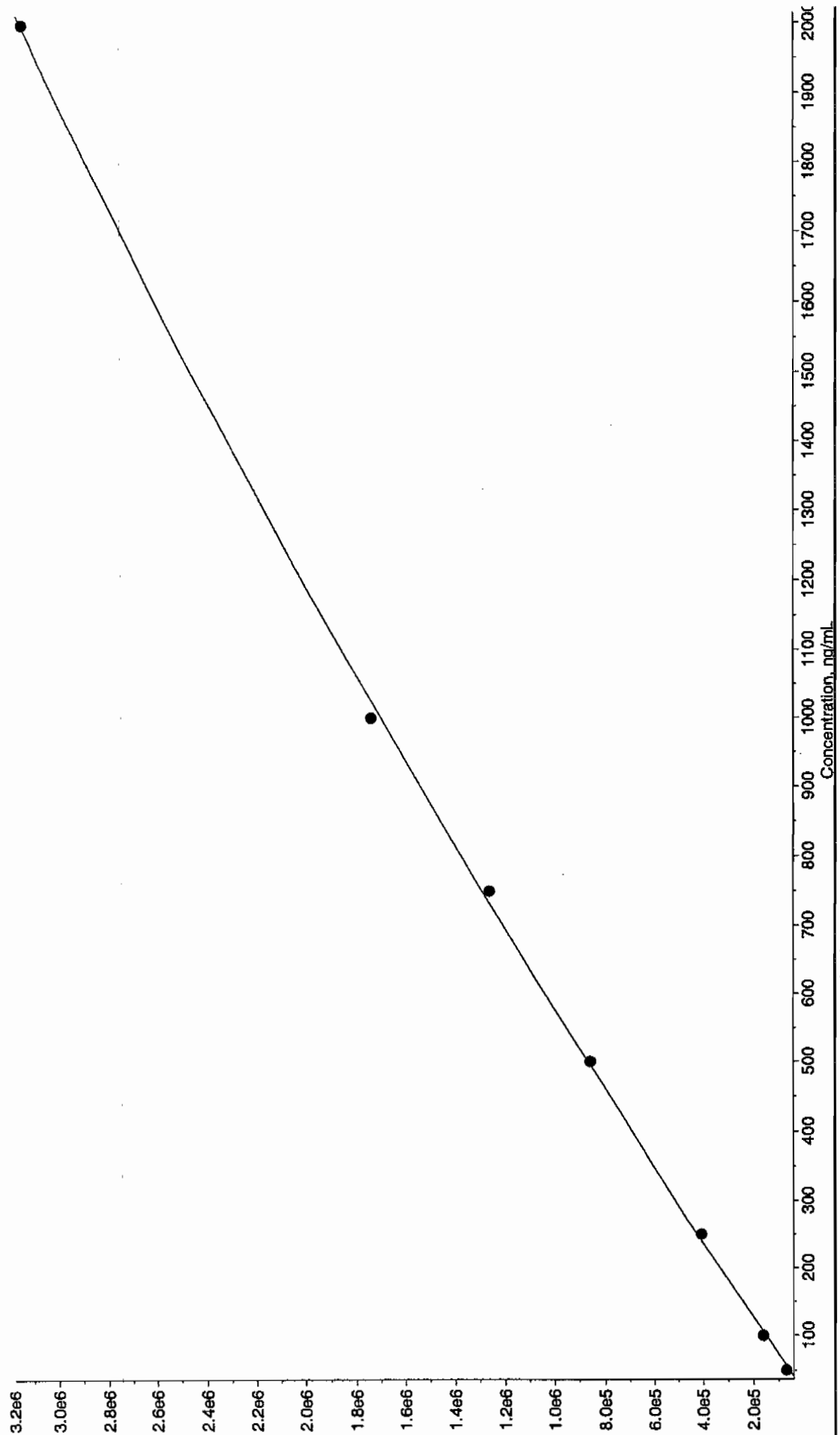
3L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

021310.rdb (26-Diamino-4-nitrotoluene): "Quadratic" Regression ("No" weighting): $y = 0.00918 x^2 + 2.62e+003 x + -1.27e+004$ ($r = 0.9997$)



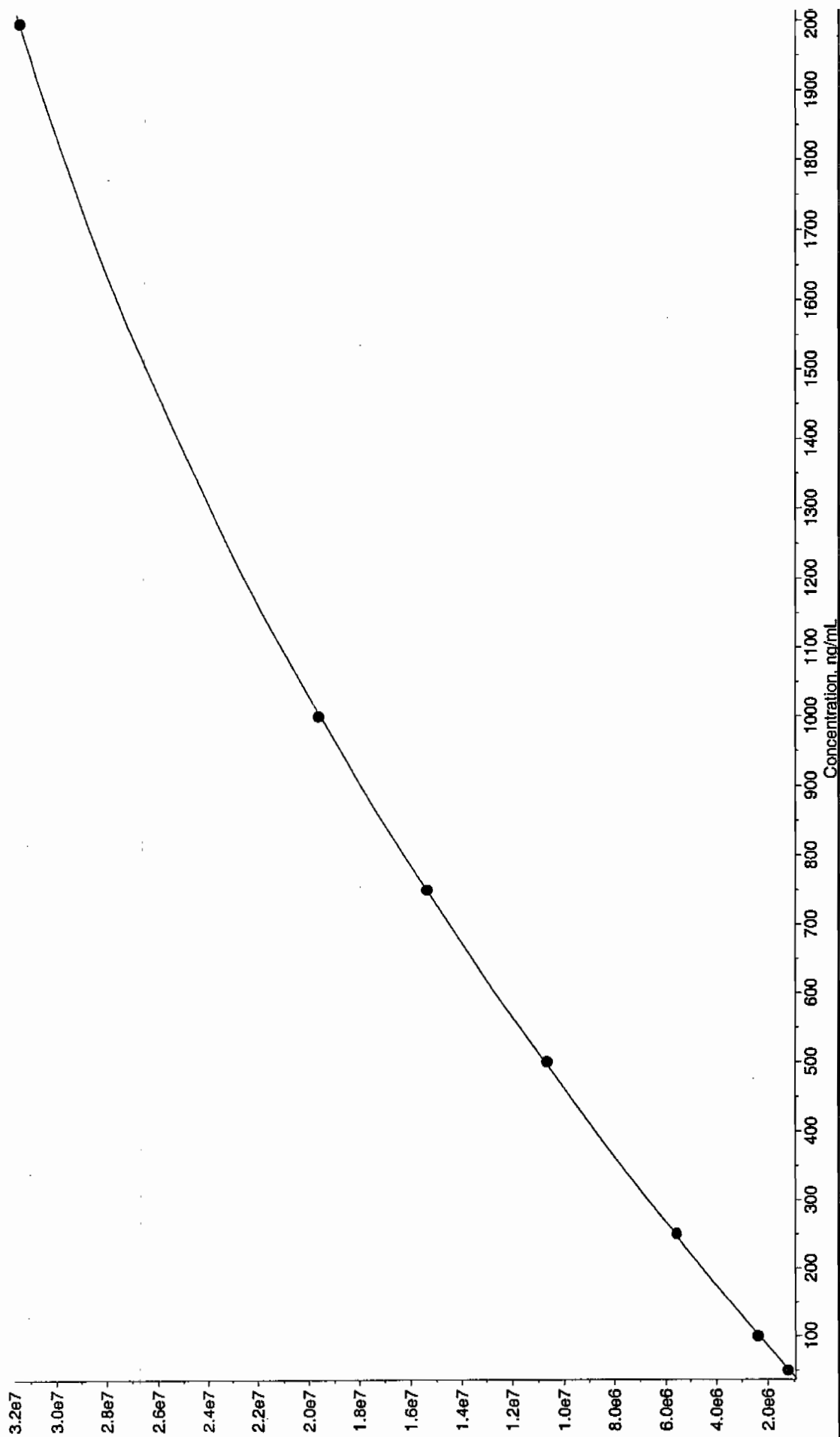
IL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

021310.rdb (24-Diamino-6-nitrotoluene): "Quadratic" Regression ("No" weighting): $y = -0.139 x^2 + 1.87e+003 x + -3.58e+004$ ($r = 0.9998$)



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

021310.rdb (tris(o-cresyl) phosphate): "Quadratic" Regression ("No" weighting): $y = -3.82 \times 10^{-4} x^2 + 2.33 \times 10^{-4} x + 3.69 \times 10^{-4}$ ($r = 1.0000$)



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

Explosives Initial Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1390

Lab Code: GEL

GEL Sample ID: WXXICV

GEL Data File EXS02130011.wiff

Analysis Date: 13-FEB-10 12:49

LCMSMS ID: 1358

Column ID: Sphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	503	101	
2,6-Diamino-4-nitrotoluene	500	509	102	
3,4-Dinitrotoluene	250	232	93	
3,5-Dinitroaniline	500	503	101	
TATB	500	514	103	
tris(o-cresyl) phosphate	500	501	100	

Recovery Limits:

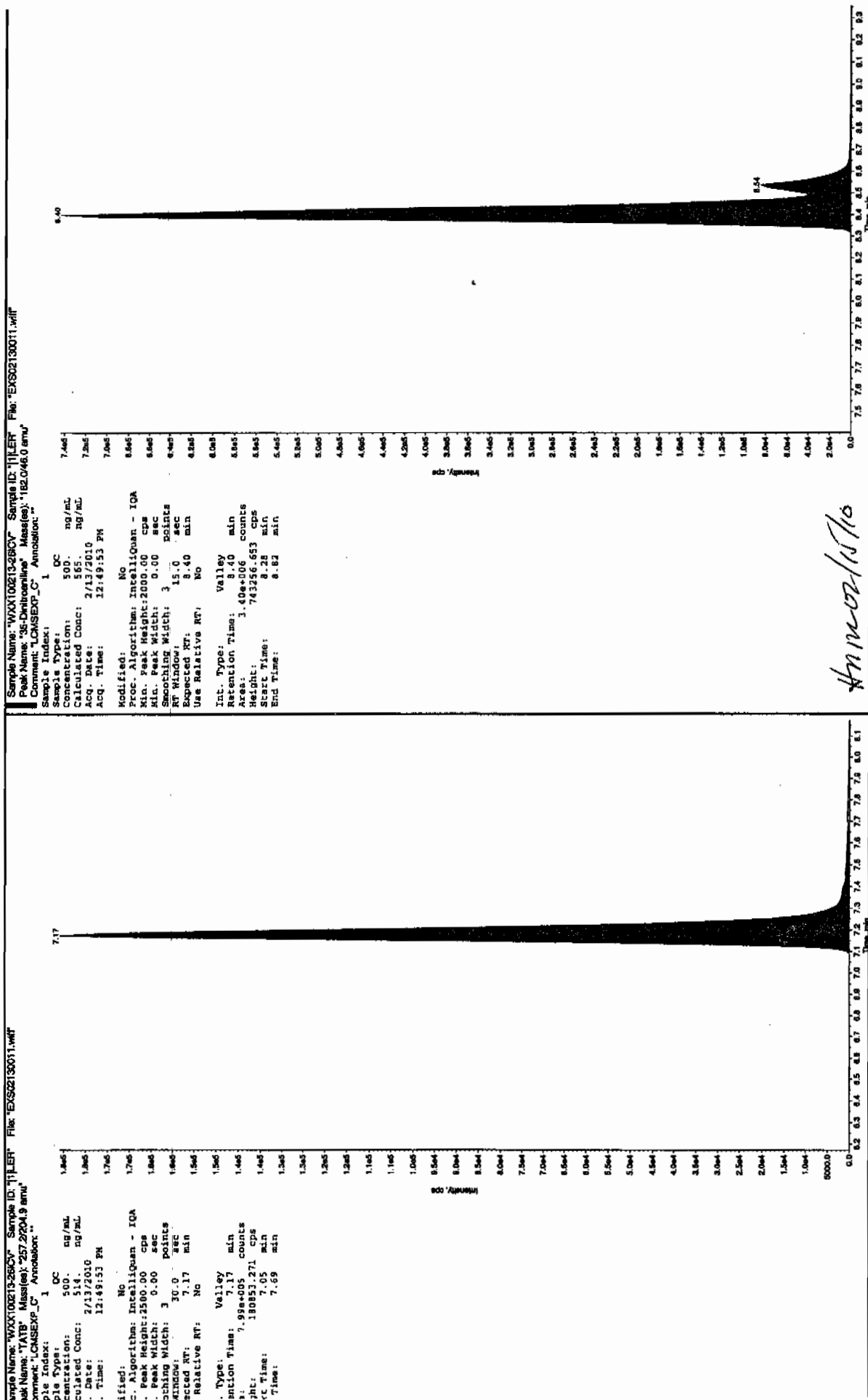
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

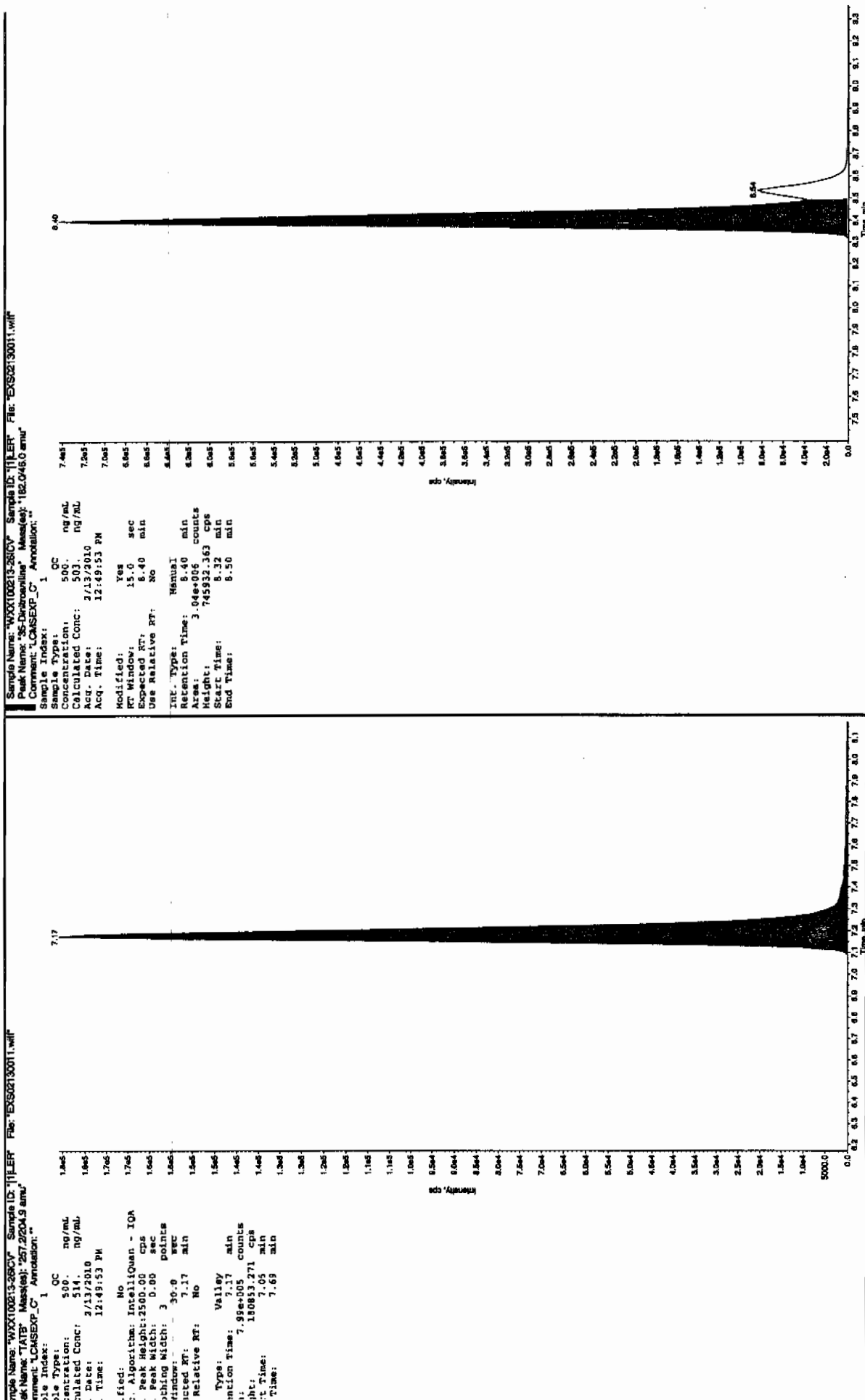
Before Jan 21/10



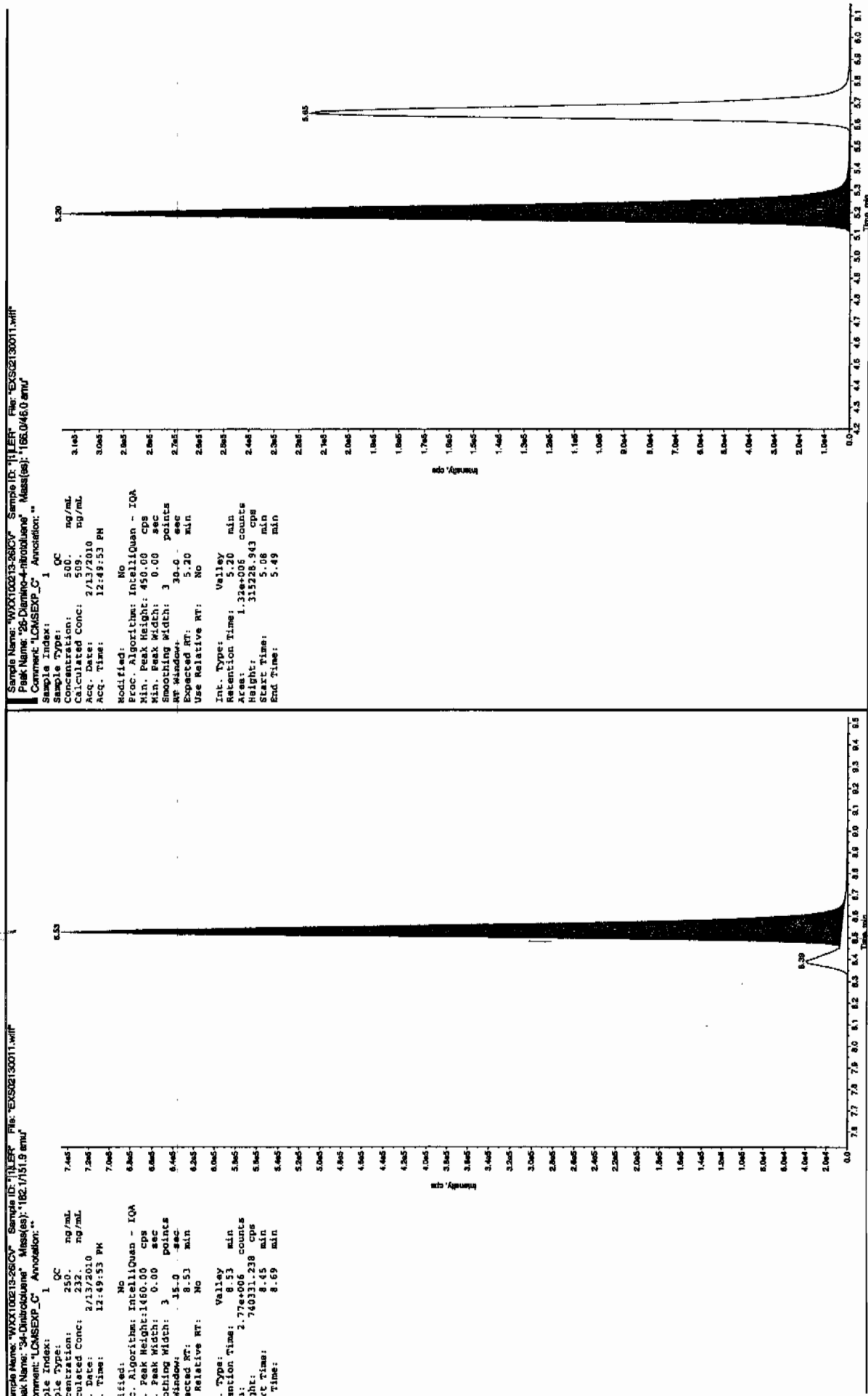
After Jan 21/10

3L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

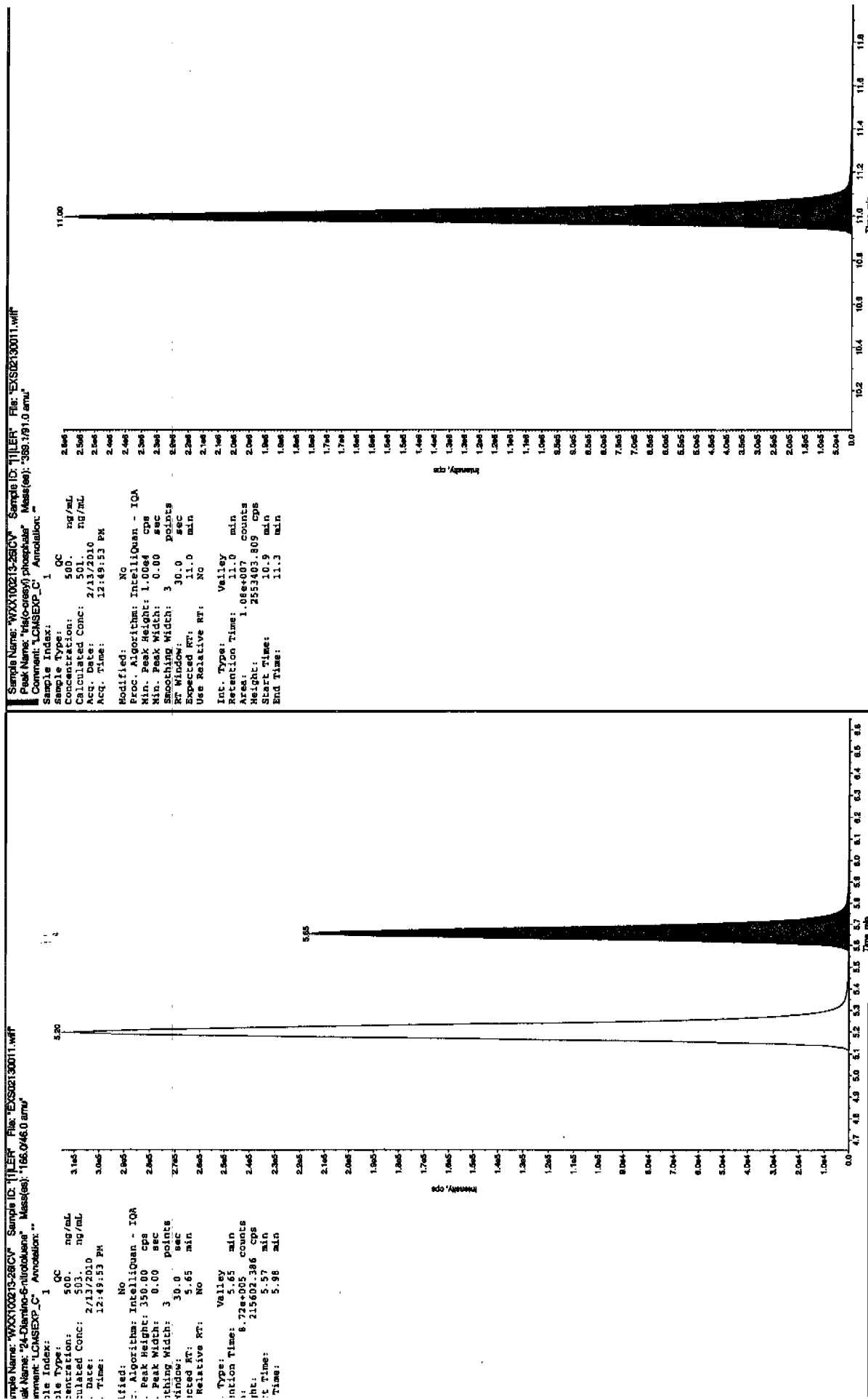
after Jan 21/5/10



3L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



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



3L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0208012a

Analysis Date: 08-FEB-10 20:09

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
2,4,6-Trinitrotoluene	40	41.689	104	
2,4-Dinitrotoluene	40	40.338	101	
2,6-Dinitrotoluene	40	41.76	104	
2,6-Dinitrotoluene-d3	500	475.508	95	
2-Amino-4,6-dinitrotoluene	40	38.358	96	
3,4-Dinitrotoluene	20	17.528	88	
4-Amino-2,6-dinitrotoluene	40	38.578	96	
HMX	40	37.759	94	
Nitrobenzene	40	49.333	123	
PETN	40	39.026	98	
RDX	40	41.043	103	
Tetryl	40	37.278	93	
m-Dinitrobenzene	40	39.387	98	
m-Nitrotoluene	40	35.357	88	
o-Nitrotoluene	40	44.694	112	
p-Nitrotoluene	40	41.348	103	
1,3,5-Trinitrobenzene	40	40.21	101	
1,3-Dinitrobenzene-d4	500	487.883	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

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

Dataset: C:\MASSLYNX\New_Exp_PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

Sample Name: C:\MASSLYNX\NEW_EXP_PRO\Data\EXP0208012a

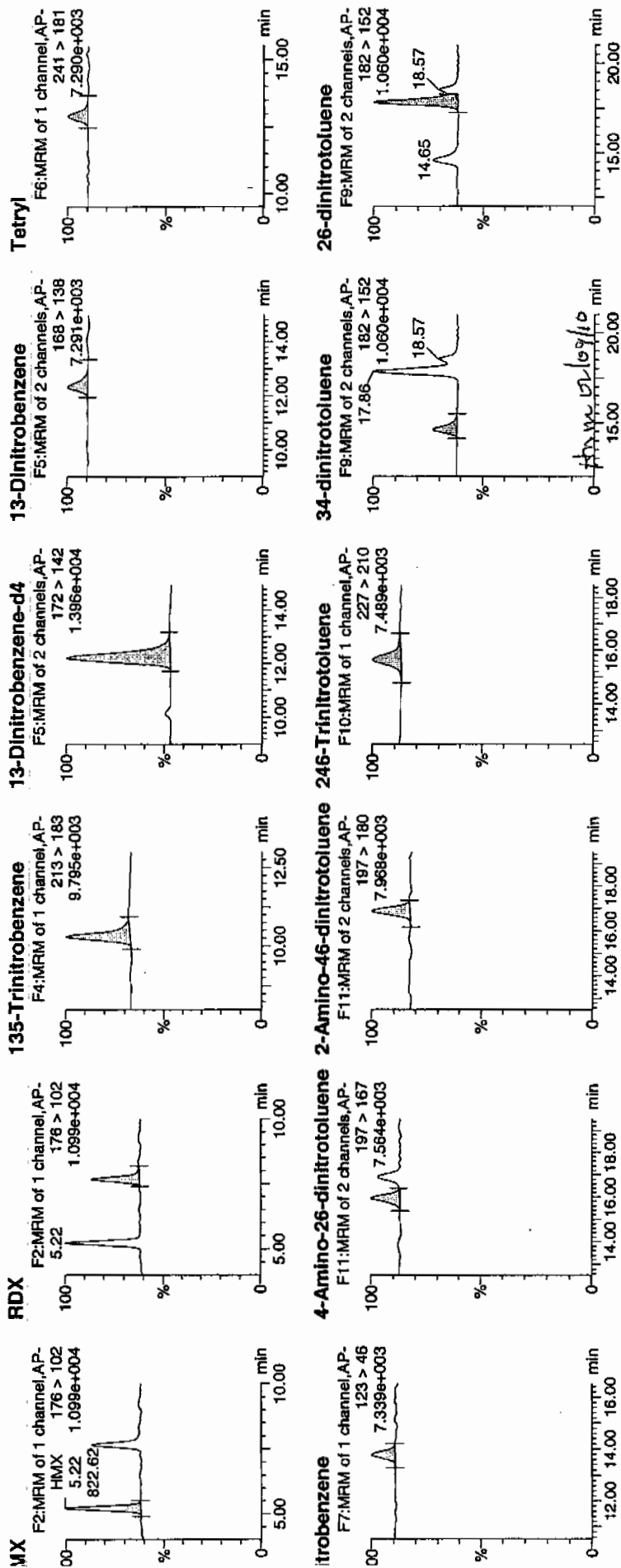
Date: 08-Feb-2010

Time: 20:09:03

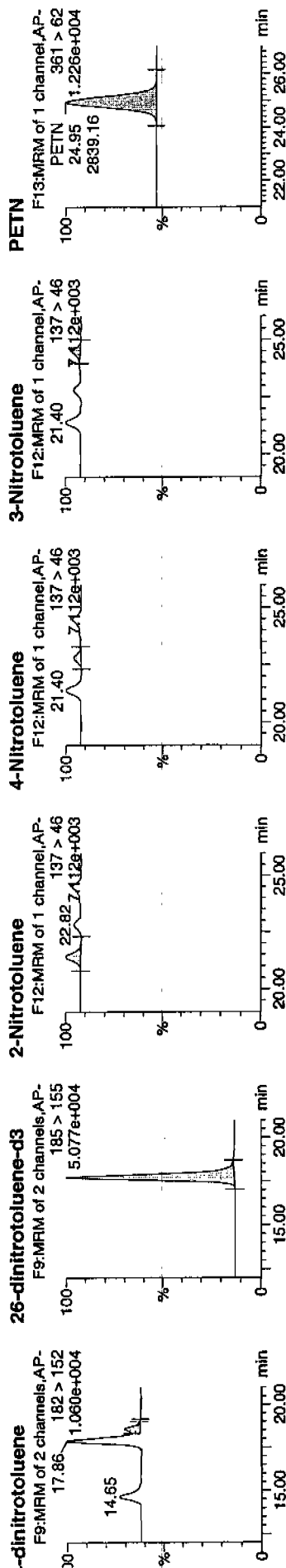
File: WXX100208-08CRI

Alt: 1:1,C

10/10
2/10



Dataset: C:\MASSLYNX\New_Exp_PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010



Name	Trace	RT	Area	IS:Area	Abs:Resp	Response	Flags	Mod	Date	Mod	Time	Area	%	Dev	SN
XX100208-08CRI	HMZ	176 > 102	5.22	822.619	3136.673	822.619	131.129	bb				37.7589	94.4	-5.6	95.4
XX100208-08CRI	RDX	176 > 102	7.66	625.184	3136.673	625.184	99.657	bb				41.0425	102.6	2.6	61.5
XX100208-08CRI	135-Trinitrobenzene	213 > 183	10.30	929.059	3136.673	929.059	148.096	bb				40.2102	100.5	0.5	111.3
XX100208-08CRI	13-Dinitrobenzene-d4	172 > 142	12.20	3136.673	3136.673	3136.673	3136.673	bb				487.8832	97.6	-2.4	122.8
XX100208-08CRI	13-Dinitrobenzene	168 > 138	12.34	297.097	3136.673	297.097	47.359	bb				39.3869	98.5	-1.5	19.3
XX100208-08CRI	Tetryl	241 > 181	12.92	274.384	3136.673	274.384	43.738	bb				37.2783	93.2	-6.8	24.6
XX100208-08CRI	Nitrobenzene	123 > 46	13.76	249.993	3136.673	249.993	39.850	bb				49.3333	123.3	23.3	23.5
XX100208-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.92	389.077	17555.461	389.077	11.081	MM	09-Feb-10	10:07:17		38.5781	96.4	-3.6	24.6
XX100208-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.86	533.368	17555.461	533.368	15.191	bb				38.3580	95.9	-4.1	43.1
XX100208-08CRI	246-Trinitrotoluene	227 > 210	15.64	472.299	17555.461	472.299	13.452	bb				41.6894	104.2	4.2	65.7
XX100208-08CRI	34-dinitrotoluene	182 > 152	14.65	553.874	17555.461	553.874	15.775	bb				17.5279	87.6	-12.4	33.8
XX100208-08CRI	26-dinitrotoluene	182 > 152	17.86	1574.877	17555.461	1574.877	44.854	MM	09-Feb-10	10:14:02		41.7604	104.4	4.4	116.4
XX100208-08CRI	24-dinitrotoluene	182 > 152	18.57	345.648	17555.461	345.648	9.844	MM	09-Feb-10	10:17:05		40.3376	100.8	0.8	25.5
XX100208-08CRI	26-dinitrotoluene-d3	185 > 155	17.71	17555.461	17555.461	17555.461	17555.461	bb				475.5082	95.1	-4.9	2857.9
XX100208-08CRI	2-Nitrotoluene	137 > 46	21.40	243.311	17555.461	243.311	6.930	bb				44.6944	111.7	11.7	27.5
XX100208-08CRI	4-Nitrotoluene	137 > 46	22.82	110.338	17555.461	110.338	3.143	bb				41.3480	103.4	3.4	12.6
XX100208-08CRI	3-Nitrotoluene	137 > 46	24.51	115.663	17555.461	115.663	3.294	bb				35.3566	88.4	-11.6	14.1
XX100208-08CRI	PETN	361 > 62	24.95	2839.157	17555.461	2839.157	80.863	bb				39.0264	97.6	-2.4	1037.0

✓

GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/08/10
 Time of Injection 2009
 Standard Number WXX100208-08CRI
 Data File EXP0208012a

HMX	94.4
RDX	102.6
135-TNB	100.5
13-DNB	98.5
Tetryl	93.2
Nitrobenzene	123.3
4A-26-DNT	96.4
2A-46-DNT	95.9
246-TNT	104.2
34-DNT(surr)	87.6
26-DNT	104.4
24-DNT	100.8
2-NT	111.7
4-NT	103.4
3-NT	88.4
PETN	97.6

Handwritten: 100.2
2/8/10

Total 1602.9

Average 100.2

Handwritten: HMM on 2/8/10

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): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0208023a

Analysis Date: 09-FEB-10 01:33

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	554.897	92	
1,3-Dinitrobenzene-d4	500	508.101	102	
2,4,6-Trinitrotoluene	600	663.13	111	
2,4-Dinitrotoluene	600	649.62	108	
2,6-Dinitrotoluene	600	630.157	105	
2,6-Dinitrotoluene-d3	500	523.831	105	
2-Amino-4,6-dinitrotoluene	600	647.652	108	
3,4-Dinitrotoluene	300	319.699	107	
4-Amino-2,6-dinitrotoluene	600	634.612	106	
HMX	600	662.759	110	
Nitrobenzene	600	657.025	110	
PETN	600	606.078	101	
RDX	600	749.058	125	*
Tetryl	600	660.942	110	
m-Dinitrobenzene	600	626.395	104	
m-Nitrotoluene	600	578.428	96	
o-Nitrotoluene	600	666.647	111	
p-Nitrotoluene	600	667.754	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 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

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

atset: C:\MASSLYNX\New_Exp_PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

ame: C:\MASSLYNX\NEW_EXP_PRO\Data\EXP0208023a

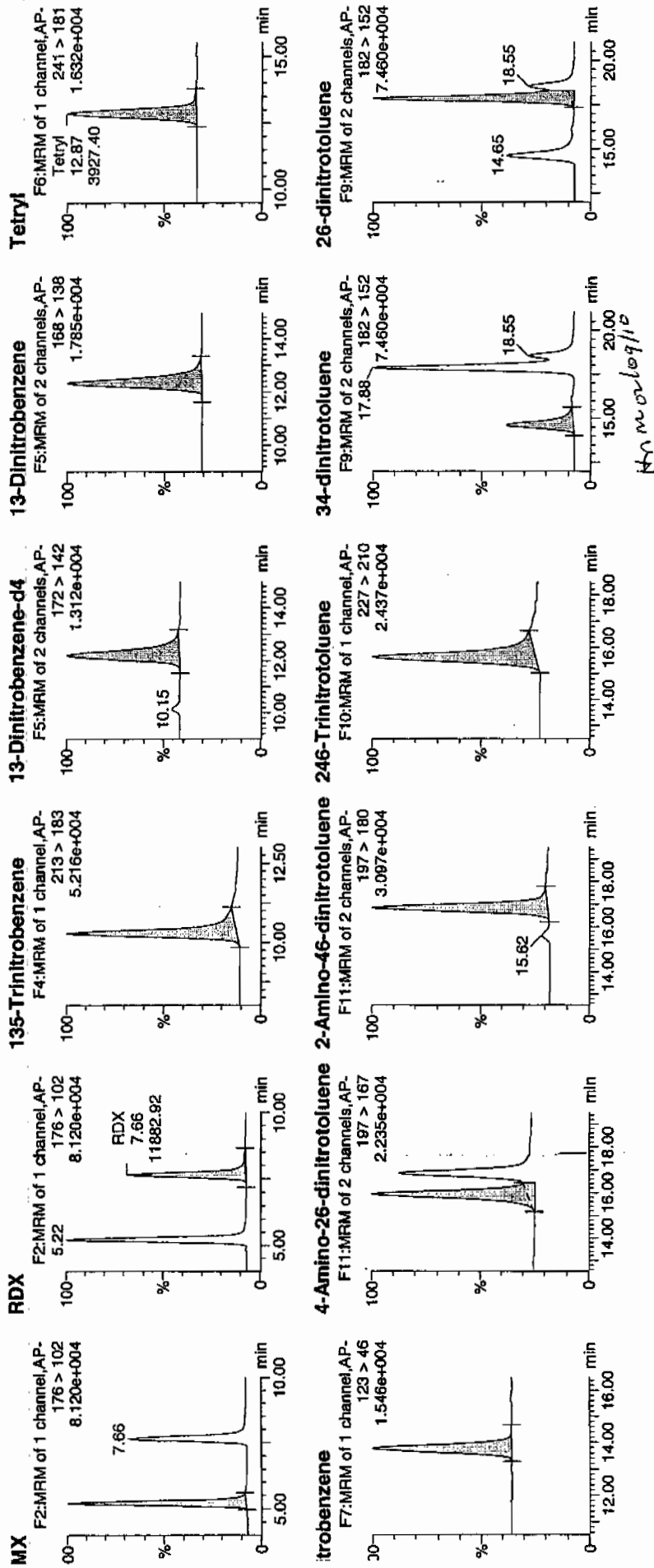
ate: 09-Feb-2010

ime: 01:33:25

): WXX100208-07CCV

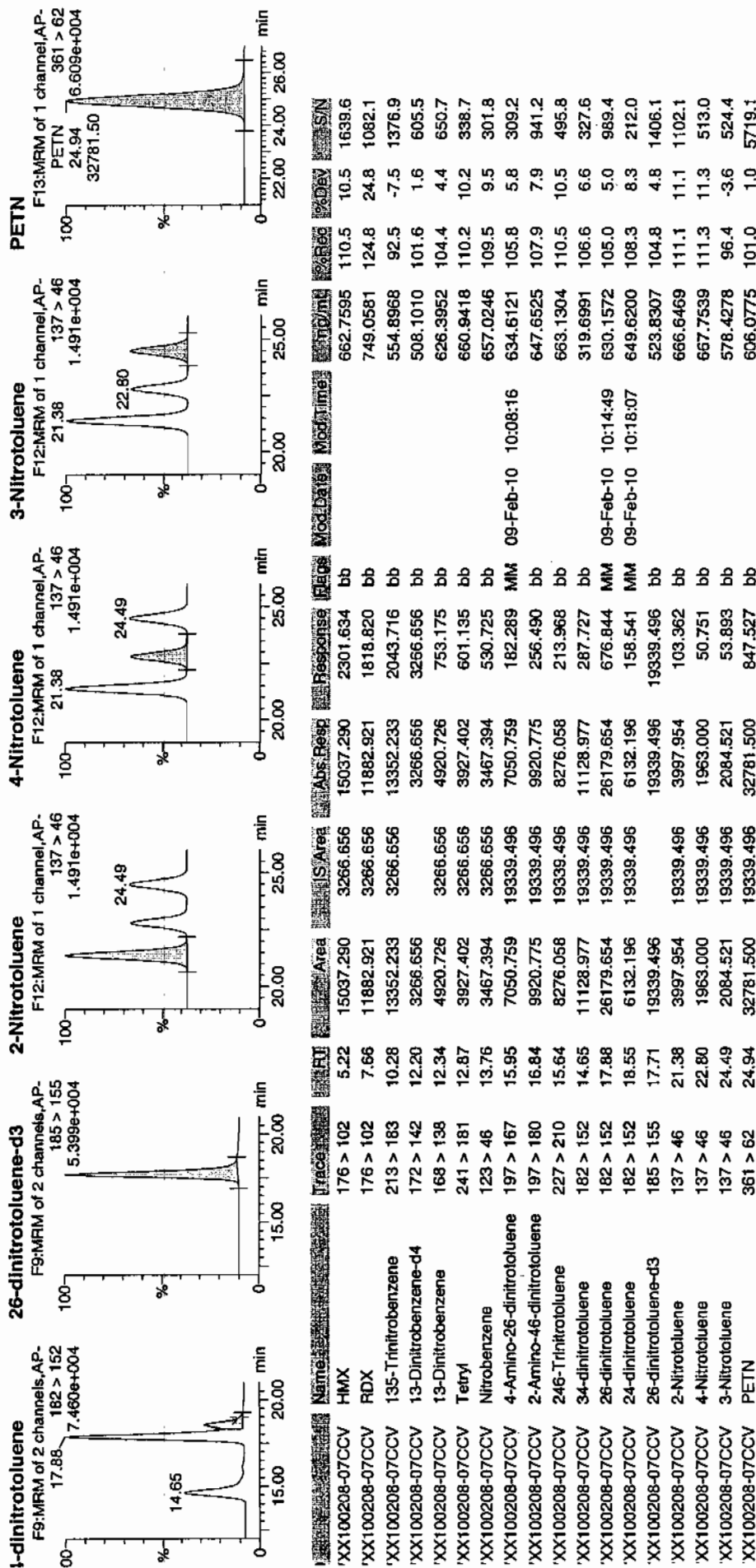
ial: 1:1,B

1/27
2/9/10



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

atset: C:\MASSLYNX\New_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/09/10
 Time of Injection: 0133
 Standard Number: WXX100208-07CCV
 Data File: EXP0208023a

HMX	110.5
RDX	124.8
135-TNB	92.5
13-DNB	104.4
Tetryl	110.2
Nitrobenzene	109.5
4A-26-DNT	105.8
2A-46-DNT	107.9
246-TNT	110.5
34-DNT(surr)	106.6
26-DNT	105.0
24-DNT	108.3
2-NT	111.1
4-NT	111.3
3-NT	96.4
PETN	101.0

*mtf
2/9/10*

Total 1715.8

Average 107.2

4/11/10 on 02/09/10

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): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0208025a

Analysis Date: 09-FEB-10 02:32

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
RDX	40	55.212	138	*
Tetryl	40	41.653	104	
m-Dinitrobenzene	40	42.381	106	
m-Nitrotoluene	40	52.115	130	*
o-Nitrotoluene	40	49.924	125	
p-Nitrotoluene	40	50.961	127	
1,3,5-Trinitrobenzene	40	48.344	121	
1,3-Dinitrobenzene-d4	500	473.5	95	
2,4,6-Trinitrotoluene	40	40.42	101	
2,4-Dinitrotoluene	40	41.928	105	
2,6-Dinitrotoluene	40	42.477	106	
2,6-Dinitrotoluene-d3	500	478.268	96	
2-Amino-4,6-dinitrotoluene	40	34.805	87	
3,4-Dinitrotoluene	20	22.301	112	
4-Amino-2,6-dinitrotoluene	40	34.146	85	
HMX	40	52.317	131	*
Nitrobenzene	40	45.327	113	
PETN	40	49.164	123	

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

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

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

Sample Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208025a

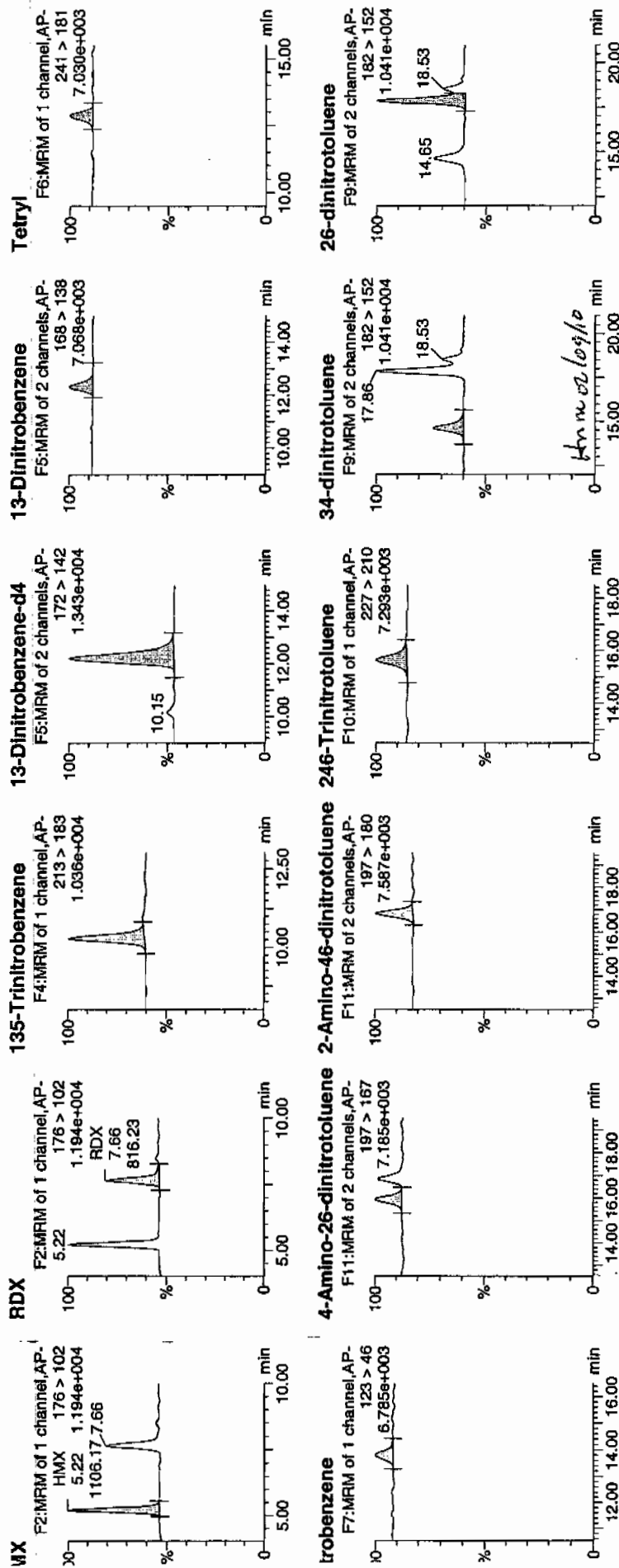
Sample Date: 09-Feb-2010

Sample Time: 02:32:22

Sample ID: WXX100208-08CRI

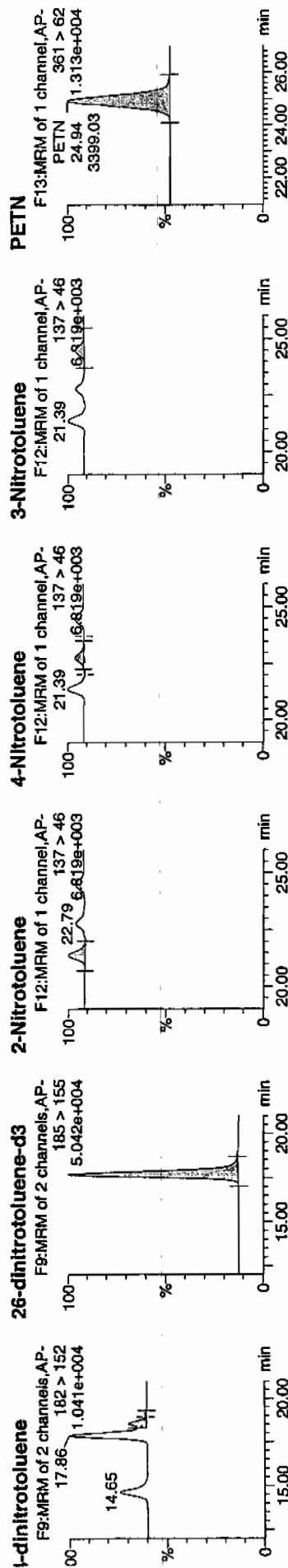
Sample Label: 1:1,C

WXX
1/10



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

Dataset: C:\MASSL\YXX\New_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010



Name	Trace	Area	S:Area	Abs.Resp	Response	Flags	Mod:Time	Mod:Date	%Rec	%Dev	SN	
XX100208-08CRI	HMZ	176 > 102	5.22	1106.172	3044.203	1106.172	181.685	bb	52.3165	130.8	30.8	145.7
XX100208-08CRI	RDX	176 > 102	7.66	816.232	3044.203	816.232	134.063	bb	55.2123	138.0	38.0	85.9
XX100208-08CRI	135-Trinitrobenzene	213 > 183	10.28	1084.060	3044.203	1084.060	178.053	bb	48.3439	120.9	20.9	161.9
XX100208-08CRI	13-Dinitrobenzene-d4	172 > 142	12.20	3044.203	3044.203	3044.203	3044.203	bb	473.5003	94.7	-5.3	257.8
XX100208-08CRI	13-Dinitrobenzene	168 > 138	12.34	310.255	3044.203	310.255	50.958	bb	42.3807	106.0	6.0	45.2
XX100208-08CRI	Tetryl	241 > 181	12.87	291.717	3044.203	291.717	47.914	bb	41.6529	104.1	4.1	19.9
XX100208-08CRI	Nitrobenzene	123 > 46	13.80	222.919	3044.203	222.919	36.614	bb	45.3268	113.3	13.3	14.9
XX100208-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.92	346.380	17657.348	346.380	9.808	bb	34.1464	85.4	-14.6	22.4
XX100208-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.84	486.778	17657.348	486.778	13.784	bb	34.8054	87.0	-13.0	49.4
XX100208-08CRI	246-Trinitrotoluene	227 > 210	15.64	460.576	17657.348	460.576	13.042	bb	40.4200	101.1	1.1	89.9
XX100208-08CRI	34-dinitrotoluene	182 > 152	14.65	708.785	17657.348	708.785	20.071	bb	22.3008	111.5	11.5	40.3
XX100208-08CRI	26-dinitrotoluene	182 > 152	17.86	1611.184	17657.348	1611.184	45.624	MM	42.4766	106.2	6.2	118.7
XX100208-08CRI	24-dinitrotoluene	182 > 152	18.53	361.362	17657.348	361.362	10.233	MM	41.9281	104.8	4.8	26.4
XX100208-08CRI	26-dinitrotoluene-d3	185 > 155	17.68	17657.348	17657.348	17657.348	17657.348	bb	478.2680	95.7	-4.3	1801.9
XX100208-08CRI	2-Nitrotoluene	137 > 46	21.39	273.359	17657.348	273.359	7.741	bb	49.9242	124.8	24.8	22.3
XX100208-08CRI	4-Nitrotoluene	137 > 46	22.79	136.781	17657.348	136.781	3.873	MM	50.9614	127.4	27.4	11.4
XX100208-08CRI	3-Nitrotoluene	137 > 46	24.49	171.475	17657.348	171.475	4.856	bb	52.1151	130.3	30.3	12.0
XX100208-08CRI	PETN	361 > 62	24.94	3399.029	17657.348	3399.029	96.250	bb	49.1641	122.9	22.9	286.4

GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/09/10
 Time of Injection 0232
 Standard Number WXX100208-08CRI
 Data File EXP0208025a

HMX	130.8
RDX	138.0
135-TNB	120.9
13-DNB	106.0
Tetryl	104.1
Nitrobenzene	113.3
4A-26-DNT	85.4
2A-46-DNT	87.0
246-TNT	101.1
34-DNT(surr)	111.5
26-DNT	106.2
24-DNT	104.8
2-NT	124.8
4-NT	127.4
3-NT	130.3
PETN	122.9

*not
2/9/10*

Total 1814.5

Average 113.4

from 02/09/10

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): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0208036a

Analysis Date: 09-FEB-10 07:57

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3-Dinitrobenzene-d4	500	507.978	102	
2,4,6-Trinitrotoluene	600	683.818	114	
2,4-Dinitrotoluene	600	677.06	113	
2,6-Dinitrotoluene	600	638.573	106	
2,6-Dinitrotoluene-d3	500	505.031	101	
2-Amino-4,6-dinitrotoluene	600	628.37	105	
3,4-Dinitrotoluene	300	343.206	114	
4-Amino-2,6-dinitrotoluene	600	610.088	102	
HMX	600	580.276	97	
Nitrobenzene	600	601.509	100	
PETN	600	627.319	105	
RDX	600	669.645	112	
Tetryl	600	596.357	99	
m-Dinitrobenzene	600	631.512	105	
m-Nitrotoluene	600	558.007	93	
o-Nitrotoluene	600	611.096	102	
p-Nitrotoluene	600	633.085	106	
1,3,5-Trinitrobenzene	600	557.726	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 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Printed: Tue Feb 09 10:21:18 2010, Page 71 of 77

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

Dataset: C:\MASSLYN\New_Exp\PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

Sample Name: C:\MASSLYN\NEW_EXP\PRO\Data\EXP0208036a

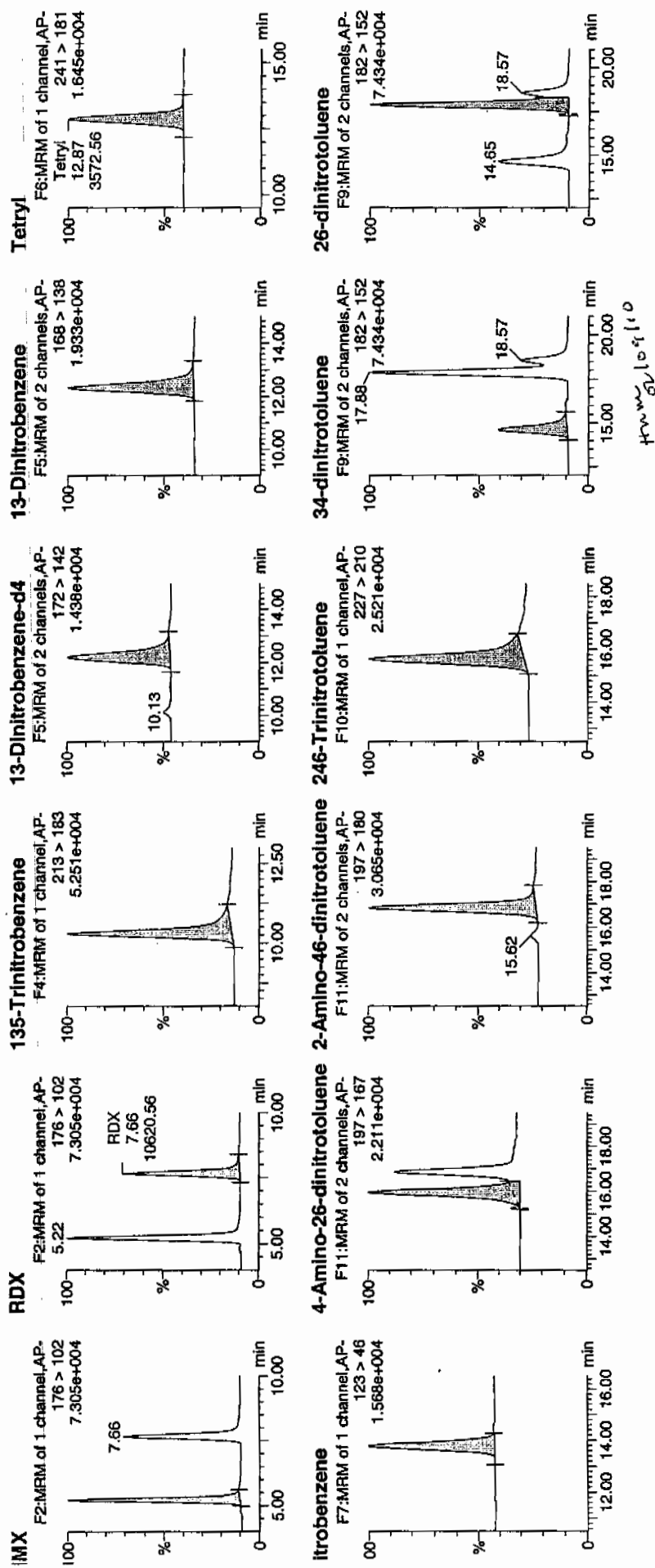
Date: 09-Feb-2010

Time: 07:57:19

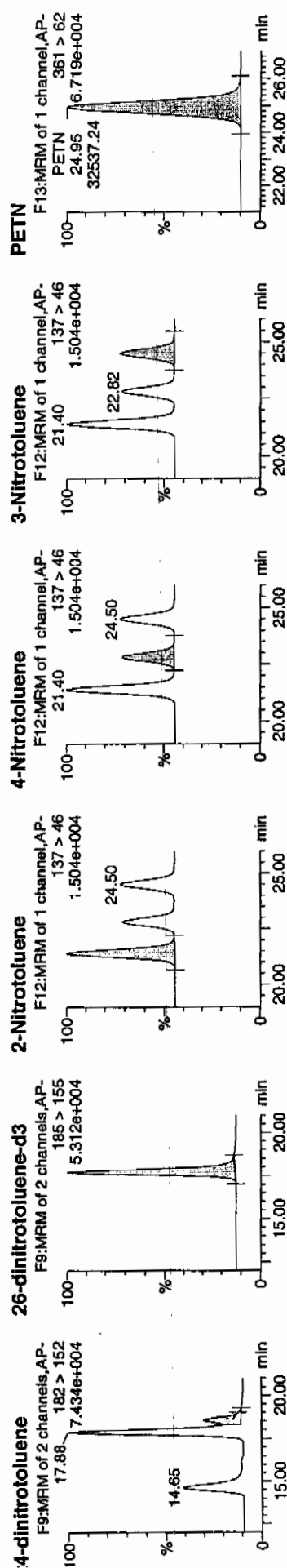
Job: WXX100208-07CCV

Ratio: 1:1,B

2/9/10



Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010



DTG	Name	Trace	RT	Area	IS Area	Aus Resp	Response	Flags	Mod Date	Mod Time	Intum	Seled	%Dev	SN
	HMIX	176 > 102	5.22	13162.657	3265.867	13162.657	2015.186	bb			580.2763	96.7	-3.3	1346.4
	ROX	176 > 102	7.66	10620.564	3265.867	10620.564	1625.995	bb			669.6453	111.6	11.6	912.9
	135-Trinitrobenzene	213 > 183	10.30	13417.060	3265.867	13417.060	2054.134	bb			557.7256	93.0	-7.0	1689.0
	13-Dinitrobenzene-d4	172 > 142	12.20	3265.867		3265.867	3265.867	bb			507.9782	101.6	1.6	605.7
	13-Dinitrobenzene	168 > 138	12.34	4959.725	3265.867	4959.725	759.327	bb			631.5122	105.3	5.3	605.8
	Tetryl	241 > 181	12.87	3572.560	3265.867	3572.560	546.954	bb			596.3571	99.4	-0.6	266.7
	Nitrobenzene	123 > 46	13.80	3173.647	3265.867	3173.647	485.881	bd			601.5068	100.3	0.3	397.7
	4-Amino-26-dinitrotoluene	197 > 167	15.95	6535.022	18645.436	6535.022	175.245	MM	09-Feb-10	10:08:38	610.0875	101.7	1.7	220.1
	2-Amino-46-dinitrotoluene	197 > 180	16.84	9279.965	18645.436	9279.965	248.854	bb			628.3699	104.7	4.7	600.3
	246-Trinitrotoluene	227 > 210	15.64	8227.966	18645.436	8227.966	220.543	bb			683.8179	114.0	14.0	212.5
	34-dinitrotoluene	182 > 152	14.65	11518.506	18645.436	11518.506	308.883	bb			343.2061	114.4	14.4	186.4
	26-dinitrotoluene	182 > 152	17.88	25577.211	18645.436	25577.211	685.884	MM	09-Feb-10	10:15:19	638.5734	106.4	6.4	536.5
	26-dinitrotoluene	182 > 152	18.57	6161.852	18645.436	6161.852	165.238	MM	09-Feb-10	10:18:29	677.0601	112.8	12.8	117.9
	26-dinitrotoluene-d3	185 > 155	17.71	18645.436		18645.436	18645.436	bb			505.0314	101.0	1.0	1377.3
	2-Nitrotoluene	137 > 46	21.40	3533.284	18645.436	3533.284	94.749	bb			611.0957	101.8	1.8	676.4
	4-Nitrotoluene	137 > 46	22.82	1794.293	18645.436	1794.293	48.116	bb			633.0852	105.5	5.5	322.7
	3-Nitrotoluene	137 > 46	24.50	1938.759	18645.436	1938.759	51.990	bb			558.0066	93.0	-7.0	336.8
	PETN	361 > 62	24.95	32537.242	18645.436	32537.242	872.526	bb			627.3190	104.6	4.6	16599.7

GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/09/10
 Time of Injection: 0757
 Standard Number: WXX100208-07CCV
 Data File: EXP0208036a

HMX	96.7
RDX	111.6
135-TNB	93.0
13-DNB	105.3
Tetryl	99.4
Nitrobenzene	100.3
4A-26-DNT	101.7
2A-46-DNT	104.7
246-TNT	114.0
34-DNT(surr)	114.4
26-DNT	106.4
24-DNT	112.8
2-NT	101.8
4-NT	105.5
3-NT	93.0
PETN	104.6

Handwritten: 100.3
2/9/10

Total 1665.2

Average 104.1

Handwritten: 100.3
2/9/10

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): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0208038a

Analysis Date: 09-FEB-10 08:56

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	41.878	105	
1,3-Dinitrobenzene-d4	500	600.974	120	
2,4,6-Trinitrotoluene	40	41.161	103	
2,4-Dinitrotoluene	40	39.718	99	
2,6-Dinitrotoluene	40	41.46	104	
2,6-Dinitrotoluene-d3	500	511.208	102	
2-Amino-4,6-dinitrotoluene	40	41.059	103	
3,4-Dinitrotoluene	20	24.686	123	
4-Amino-2,6-dinitrotoluene	40	44.787	112	
HMX	40	36.25	91	
Nitrobenzene	40	44.383	111	
PETN	40	42.434	106	
RDX	40	40.143	100	
Tetryl	40	36.6	92	
m-Dinitrobenzene	40	41.257	103	
m-Nitrotoluene	40	38.786	97	
o-Nitrotoluene	40	43.692	109	
p-Nitrotoluene	40	33.849	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

IEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Tue Feb 09 10:21:18 2010, Page 75 of 77

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

Sample Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208038a

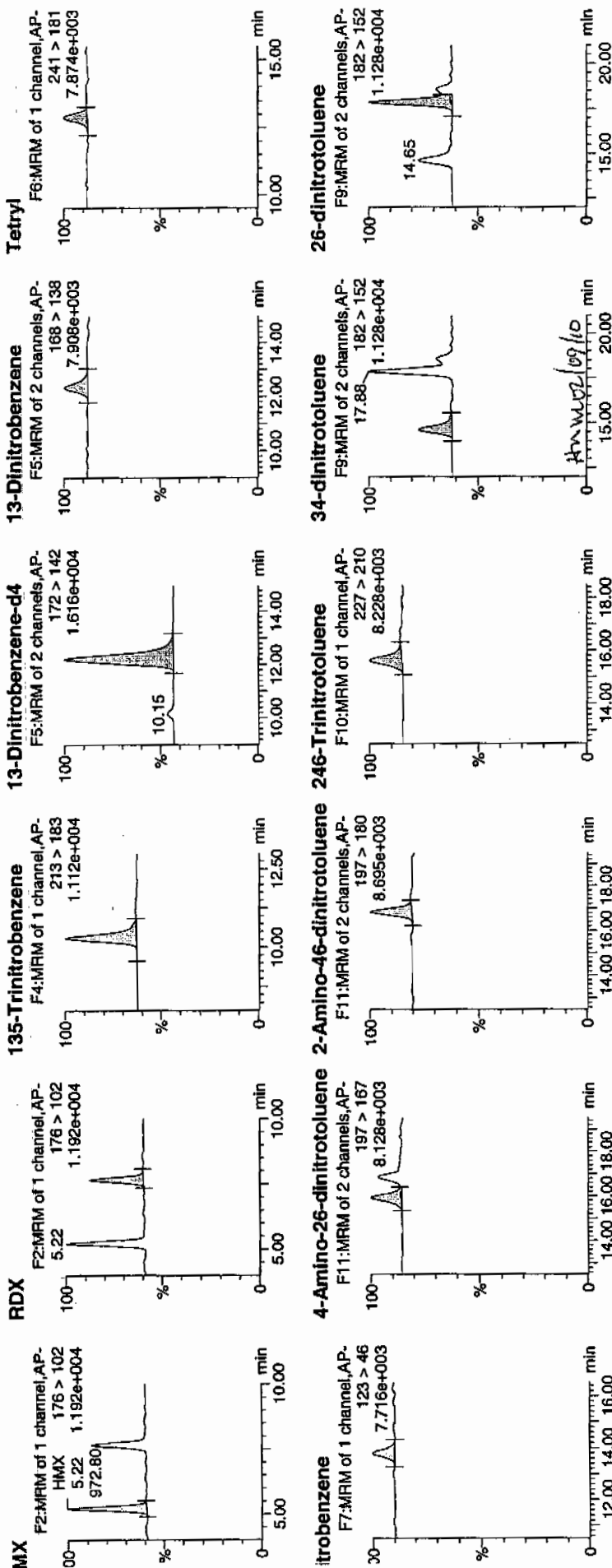
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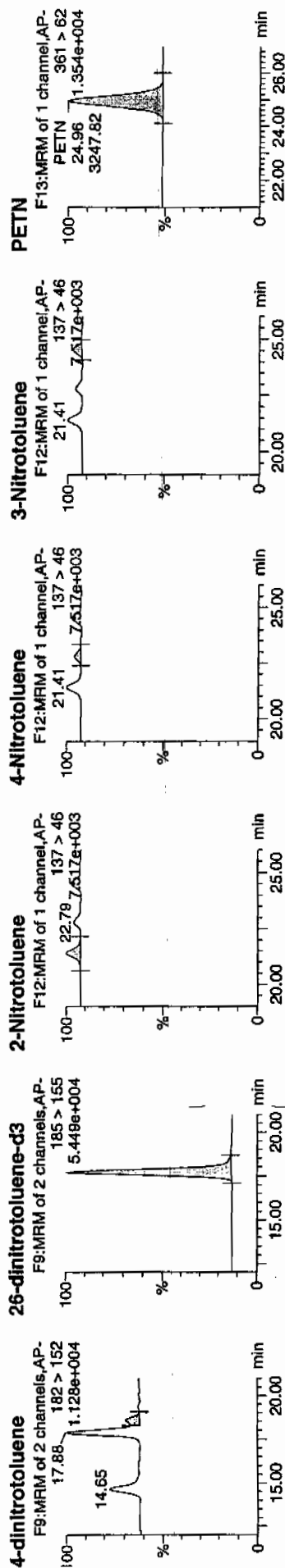
Time: 08:56:17

File: WXX100208-08CRI

Label: 1:1,C

WAT
2/9/10





Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Int Time	% Rec	% Dev	SN
/XX100208-08CRI	HMX	176 > 102	5.22	972.801	3863.752	972.801	125.888	bb		36.2497	90.6	-9.4	111.9
/XX100208-08CRI	RDX	176 > 102	7.66	753.223	3863.752	753.223	97.473	bb		40.1430	100.4	0.4	77.4
/XX100208-08CRI	135-Trinitrobenzene	213 > 183	10.28	1191.883	3863.752	1191.883	154.239	bb		41.8780	104.7	4.7	118.4
/XX100208-08CRI	13-Dinitrobenzene-d4	172 > 142	12.20	3863.752	3863.752	3863.752	3663.752	bb		600.9743	120.2	20.2	435.6
/XX100208-08CRI	13-Dinitrobenzene	168 > 138	12.34	383.336	3863.752	383.336	49.607	bb		41.2566	103.1	3.1	20.7
/XX100208-08CRI	Tetryl	241 > 181	12.87	332.982	3863.752	332.982	43.090	bb		36.6002	91.5	-8.5	27.6
/XX100208-08CRI	Nitrobenzene	123 > 46	13.80	277.043	3863.752	277.043	35.852	bb		44.3833	111.0	11.0	19.4
/XX100208-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.92	485.610	18873.490	485.610	12.865	MM	09-Feb-10 10:08:44	44.7871	112.0	12.0	52.7
/XX100208-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.84	613.793	18873.490	613.793	16.261	bb		41.0593	102.6	2.6	87.6
/XX100208-08CRI	246-Trinitrotoluene	227 > 210	15.64	501.319	18873.490	501.319	13.281	bb		41.1607	102.9	2.9	66.2
/XX100208-08CRI	34-dinitrotoluene	182 > 152	14.65	838.618	18873.490	838.618	22.217	bb		24.6856	123.4	23.4	48.7
/XX100208-08CRI	26-dinitrotoluene	182 > 152	17.88	1680.954	18873.490	1680.954	44.532	MM	09-Feb-10 10:15:31	41.4604	103.7	3.7	121.8
/XX100208-08CRI	24-dinitrotoluene	182 > 152	18.59	365.888	18873.490	365.888	9.693	MM	09-Feb-10 10:18:38	39.7177	99.3	-0.7	22.8
/XX100208-08CRI	26-dinitrotoluene-d3	185 > 155	17.71	18873.490	18873.490	18873.490	18873.490	bb		511.2084	102.2	2.2	1598.8
/XX100208-08CRI	2-Nitrotoluene	137 > 46	21.41	255.711	18873.490	255.711	6.774	bb		43.6918	109.2	9.2	36.6
/XX100208-08CRI	4-Nitrotoluene	137 > 46	22.79	97.109	18873.490	97.109	2.573	bb		33.8492	84.6	-15.4	15.6
/XX100208-08CRI	3-Nitrotoluene	137 > 46	24.53	136.407	18873.490	136.407	3.614	bb		38.7858	97.0	-3.0	22.9
/XX100208-08CRI	PETN	361 > 62	24.96	3247.825	18873.490	3247.825	86.042	bb		42.4344	106.1	6.1	522.7

✓

GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/09/10
 Time of Injection 0856
 Standard Number WXX100208-08CRI
 Data File EXP0208038a

HMX	90.6
RDX	100.4
135-TNB	104.7
13-DNB	103.1
Tetryl	91.5
Nitrobenzene	111.0
4A-26-DNT	112.0
2A-46-DNT	102.6
246-TNT	102.9
34-DNT(surr)	123.4
26-DNT	103.7
24-DNT	99.3
2-NT	109.2
4-NT	84.6
3-NT	97.0
PETN	106.1
Total	1642.1

*WXX
2/9/10*

Average

102.6

Time average

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): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0208049a

Analysis Date: 09-FEB-10 14:20

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
PETN	600	566.64	94	
RDX	600	721.033	120	*
Tetryl	600	576.02	96	
m-Dinitrobenzene	600	635.781	106	
m-Nitrotoluene	600	523.672	87	
o-Nitrotoluene	600	534.766	89	
p-Nitrotoluene	600	557.168	93	
1,3,5-Trinitrobenzene	600	581.172	97	
1,3-Dinitrobenzene-d4	500	549.978	110	
2,4,6-Trinitrotoluene	600	711.282	119	
2,4-Dinitrotoluene	600	646.244	108	
2,6-Dinitrotoluene	600	631.864	105	
2,6-Dinitrotoluene-d3	500	554.109	111	
2-Amino-4,6-dinitrotoluene	600	637.752	106	
3,4-Dinitrotoluene	300	327.767	109	
4-Amino-2,6-dinitrotoluene	600	652.073	109	
HMX	600	648.743	108	
Nitrobenzene	600	534.529	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 70-130%

Other Target Analytes 80-120%

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\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010

Sample Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208049a

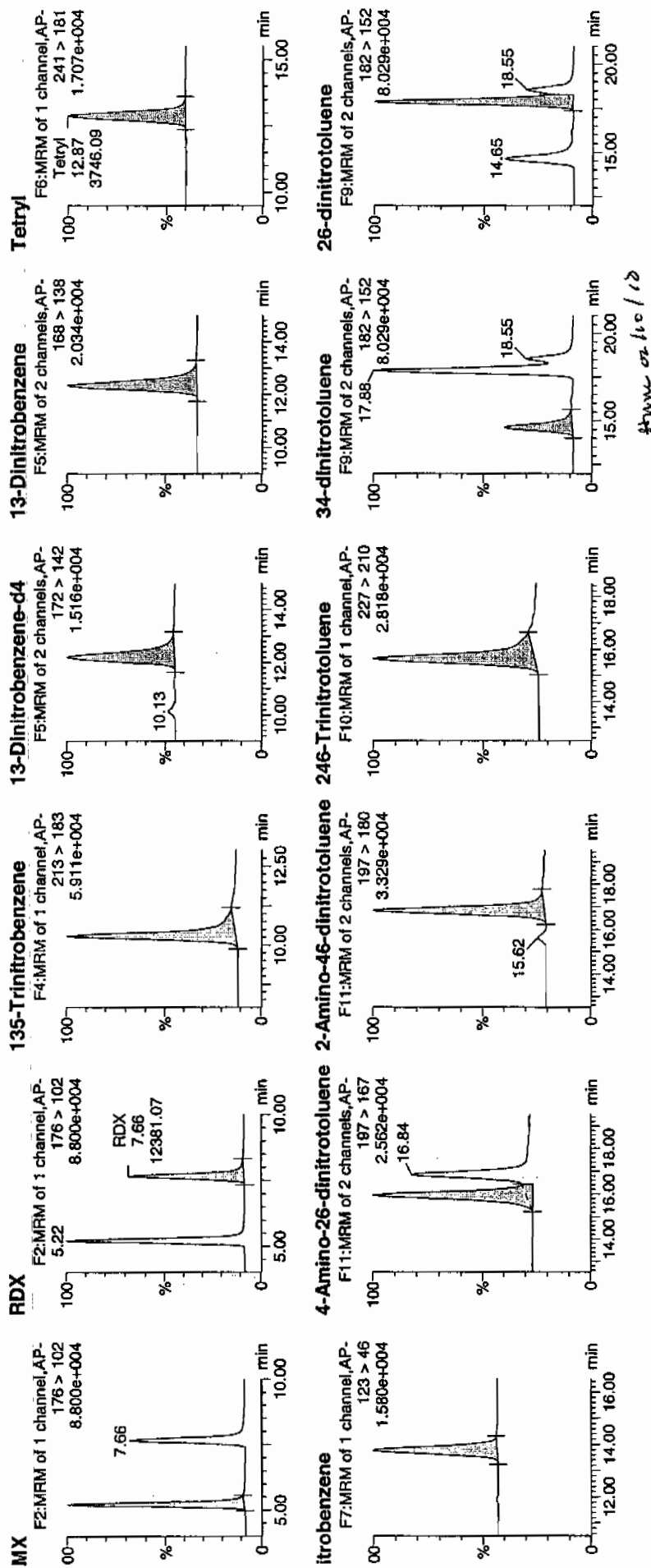
Date: 09-Feb-2010

Time: 14:20:41

Job: WXX100208-07CCV

Label: 1:1,B

2/10/10

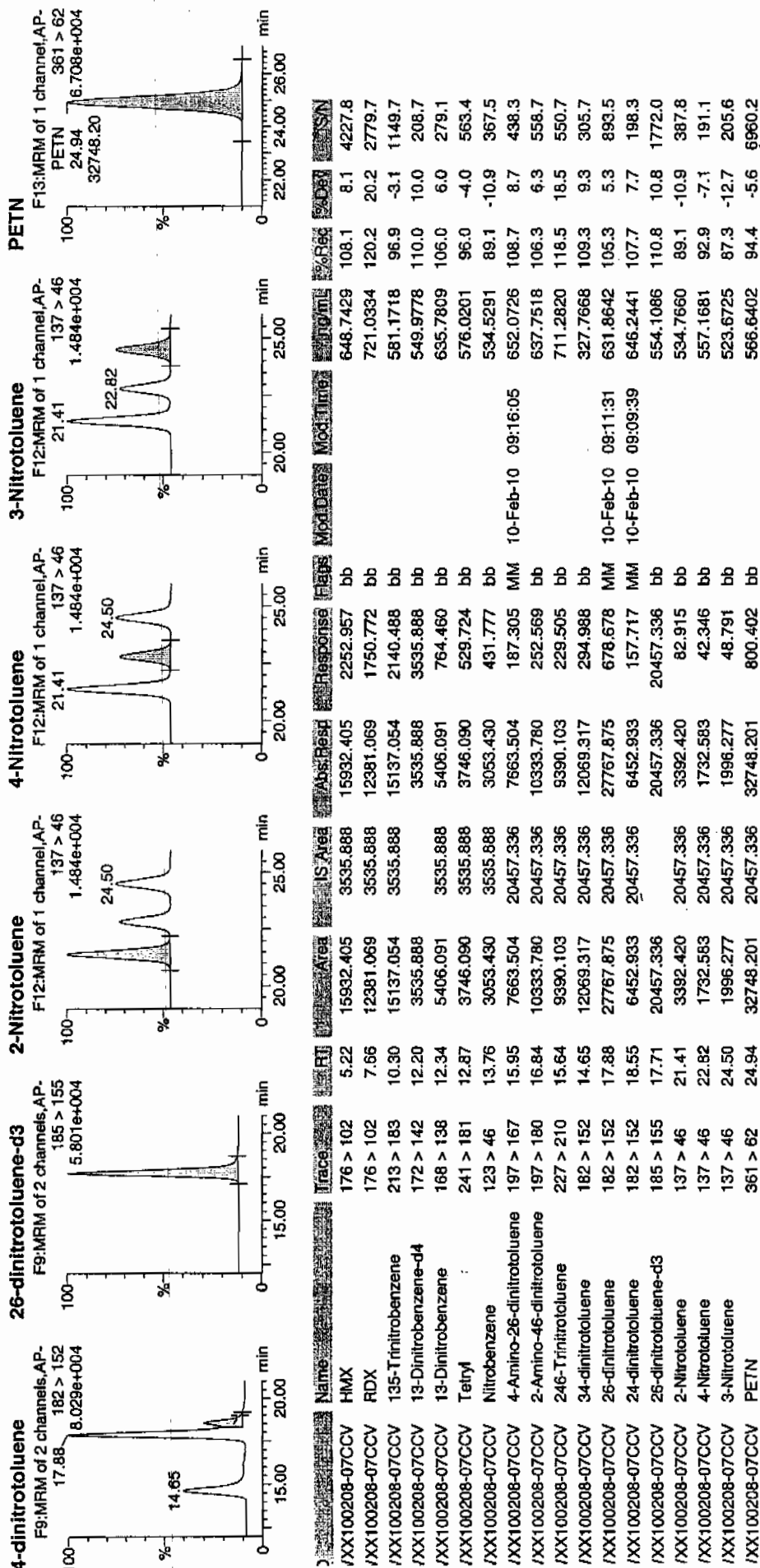


Identify Sample Report

iEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Wed Feb 10 09:25:16 2010, Page 22 of 79

Dataset: C:\MASSLYNX\New_Exp_PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010



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

GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/09/10
 Time of Injection: 1420
 Standard Number: WXX100208-07CCV
 Data File: EXP0208049a

HMX	108.1
RDX	120.2
135-TNB	96.9
13-DNB	106.0
Tetryl	96.0
Nitrobenzene	89.1
4A-26-DNT	108.7
2A-46-DNT	106.3
246-TNT	118.5
34-DNT(surr)	109.3
26-DNT	105.3
24-DNT	107.7
2-NT	89.1
4-NT	92.9
3-NT	87.3
PETN	94.4

*not
2/10/10*

Total 1635.8

Average 102.2

Hmm or 1/10/10

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): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0208051a

Analysis Date: 09-FEB-10 15:19

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
2,6-Dinitrotoluene	40	44.458	111	
2,6-Dinitrotoluene-d3	500	556.656	111	
2-Amino-4,6-dinitrotoluene	40	44.445	111	
3,4-Dinitrotoluene	20	22.823	114	
4-Amino-2,6-dinitrotoluene	40	42.665	107	
HMX	40	42.028	105	
Nitrobenzene	40	40.451	101	
PETN	40	36.261	91	
RDX	40	37.937	95	
Tetryl	40	44.71	112	
m-Dinitrobenzene	40	44.913	112	
m-Nitrotoluene	40	32.902	82	
o-Nitrotoluene	40	39.318	98	
p-Nitrotoluene	40	38.91	97	
1,3,5-Trinitrobenzene	40	43.499	109	
1,3-Dinitrobenzene-d4	500	575.339	115	
2,4,6-Trinitrotoluene	40	37.174	93	
2,4-Dinitrotoluene	40	39.545	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

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

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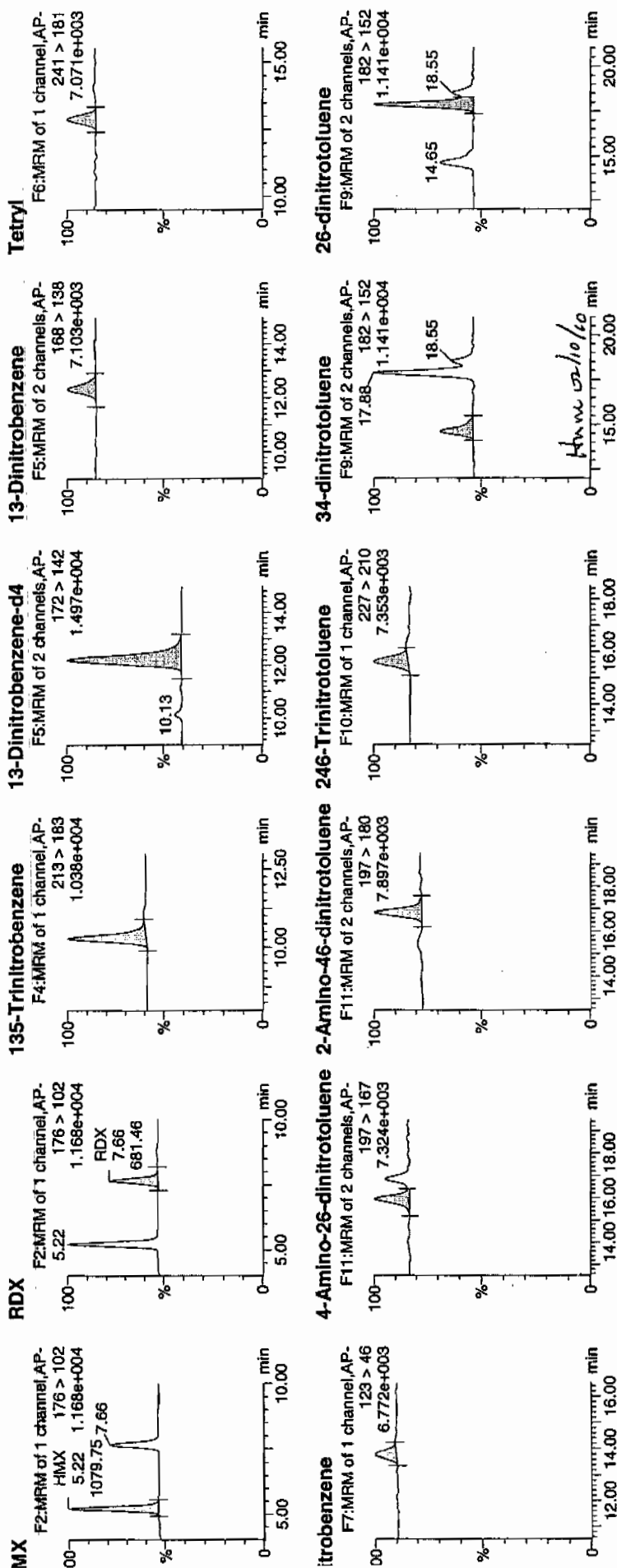
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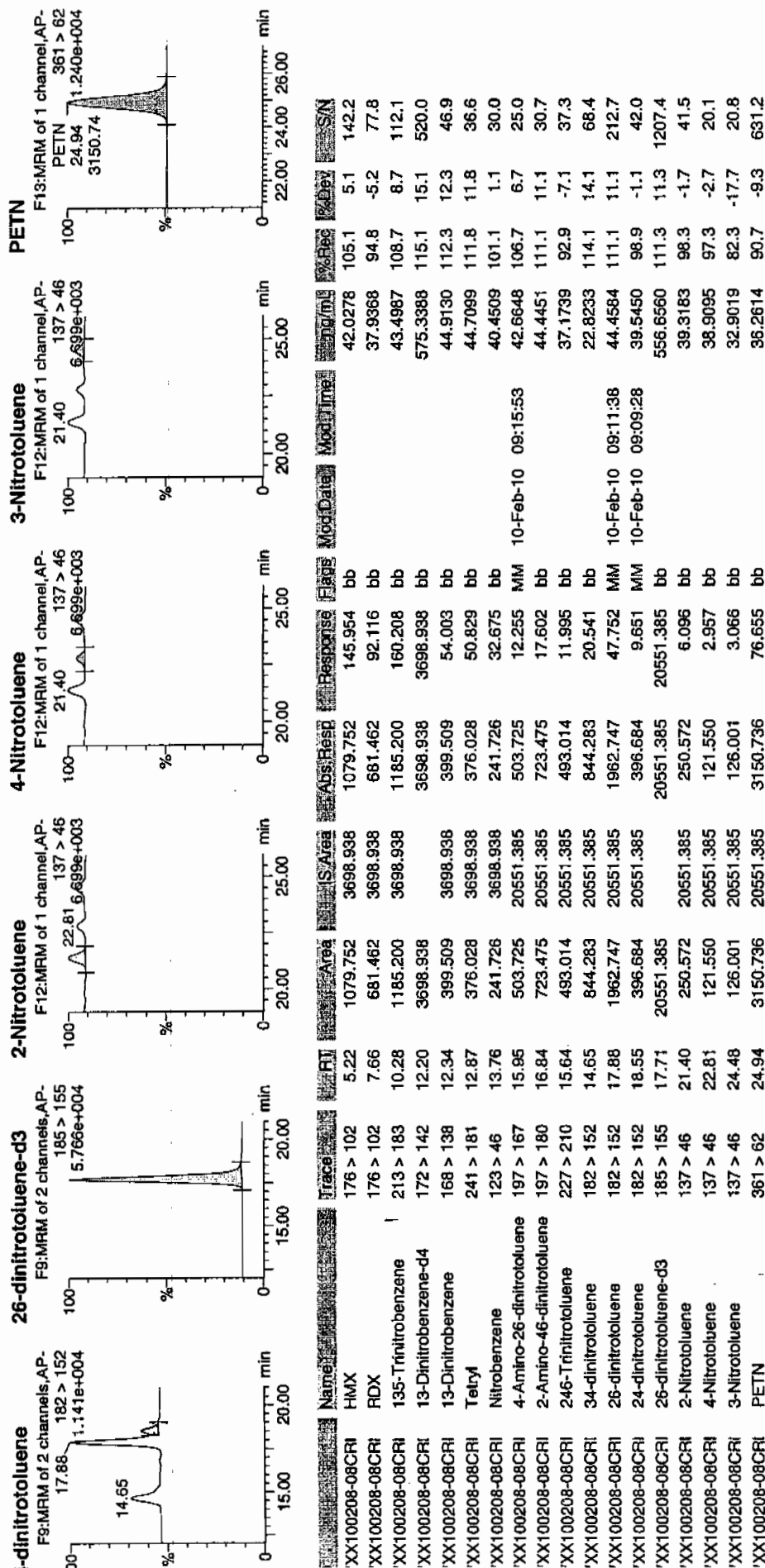
WXX
2/10/10



Printed: Wed Feb 10 09:25:16 2010, Page 26 of 79

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

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/09/10
 Time of Injection 1519
 Standard Number WXX100208-08CRI
 Data File EXP0208051a

HMX	105.1
RDX	94.8
135-TNB	108.7
13-DNB	112.3
Tetryl	111.8
Nitrobenzene	101.1
4A-26-DNT	106.7
2A-46-DNT	111.1
246-TNT	92.9
34-DNT(surr)	114.1
26-DNT	111.1
24-DNT	98.9
2-NT	98.3
4-NT	97.3
3-NT	82.3
PETN	90.7

*MTT
2/9/10*

Total 1637.2

Average 102.3

MTT 2/9/10

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): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0208062a

Analysis Date: 09-FEB-10 20:44

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	547.737	91	
1,3-Dinitrobenzene-d4	500	567.181	113	
2,4,6-Trinitrotoluene	600	715.292	119	
2,4-Dinitrotoluene	600	646.614	108	
2,6-Dinitrotoluene	600	637.73	106	
2,6-Dinitrotoluene-d3	500	528.196	106	
2-Amino-4,6-dinitrotoluene	600	658.061	110	
3,4-Dinitrotoluene	300	330.267	110	
4-Amino-2,6-dinitrotoluene	600	627.96	105	
HMX	600	599.91	100	
Nitrobenzene	600	551.5	92	
PETN	600	580.031	97	
RDX	600	625.098	104	
Tetryl	600	563.424	94	
m-Dinitrobenzene	600	616.138	103	
m-Nitrotoluene	600	563.078	94	
o-Nitrotoluene	600	586.398	98	
p-Nitrotoluene	600	590.193	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

Printed: Wed Feb 10 09:25:16 2010, Page 47 of 79

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

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010

Sample Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208062a

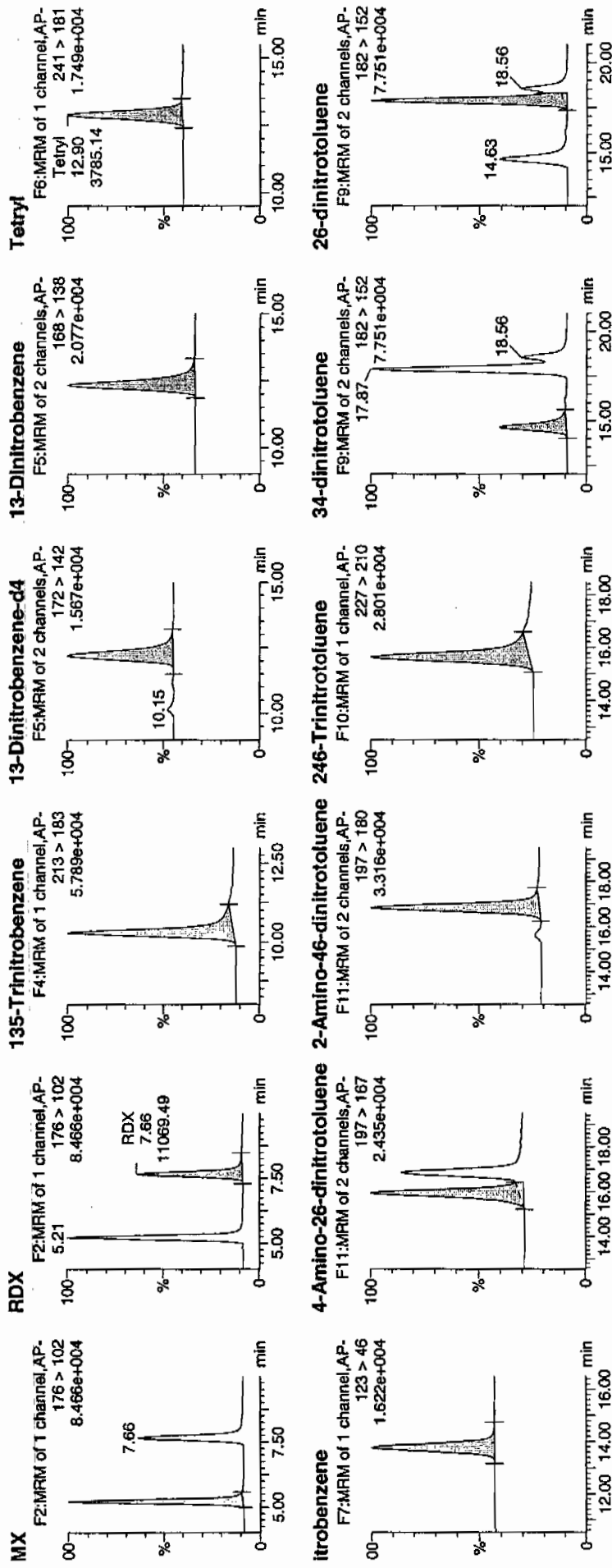
Date: 09-Feb-2010

Time: 20:44:30

File: WXX100208-07CCV

Label: 1:1,B

MM
2/10/10



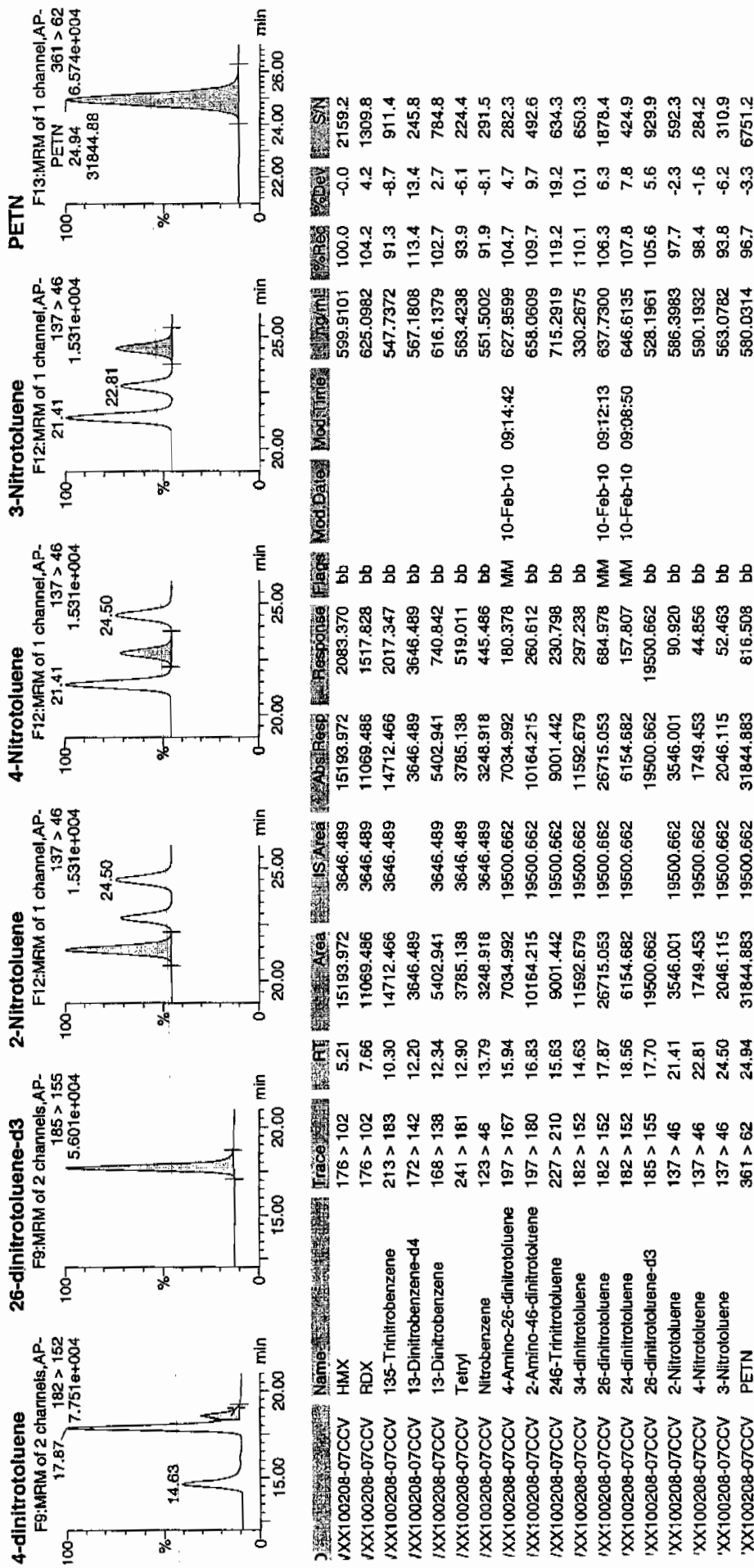
MM 02 10/10

Quantify Sample Report

IEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Wed Feb 10 09:25:16 2010, Page 48 of 79

Dataset: C:\MASSLYN\New_Exp.PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/09/10
 Time of Injection: 2044
 Standard Number: WXX100208-07CCV
 Data File: EXP0208062a

HMX	100.0
RDX	104.2
135-TNB	91.3
13-DNB	102.7
Tetryl	93.9
Nitrobenzene	91.9
4A-26-DNT	104.7
2A-46-DNT	109.7
246-TNT	119.2
34-DNT(surr)	110.1
26-DNT	106.3
24-DNT	107.8
2-NT	97.7
4-NT	98.4
3-NT	93.8
PETN	96.7

101.8
2/10/10

Total 1628.4

Average 101.8

from 02/10/10

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): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0208064a

Analysis Date: 09-FEB-10 21:43

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
m-Nitrotoluene	40	38.95	97	
o-Nitrotoluene	40	40.457	101	
p-Nitrotoluene	40	34.567	86	
1,3,5-Trinitrobenzene	40	43.241	108	
1,3-Dinitrobenzene-d4	500	602.61	121	
2,4,6-Trinitrotoluene	40	38.148	95	
2,4-Dinitrotoluene	40	39.085	98	
2,6-Dinitrotoluene	40	43.106	108	
2,6-Dinitrotoluene-d3	500	567.8	114	
2-Amino-4,6-dinitrotoluene	40	39.591	99	
3,4-Dinitrotoluene	20	24.084	120	
4-Amino-2,6-dinitrotoluene	40	41.143	103	
HMX	40	39.239	98	
Nitrobenzene	40	38.933	97	
PETN	40	36.686	92	
RDX	40	36.427	91	
Tetryl	40	34.123	85	
m-Dinitrobenzene	40	38.756	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 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

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

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010

File: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208064a

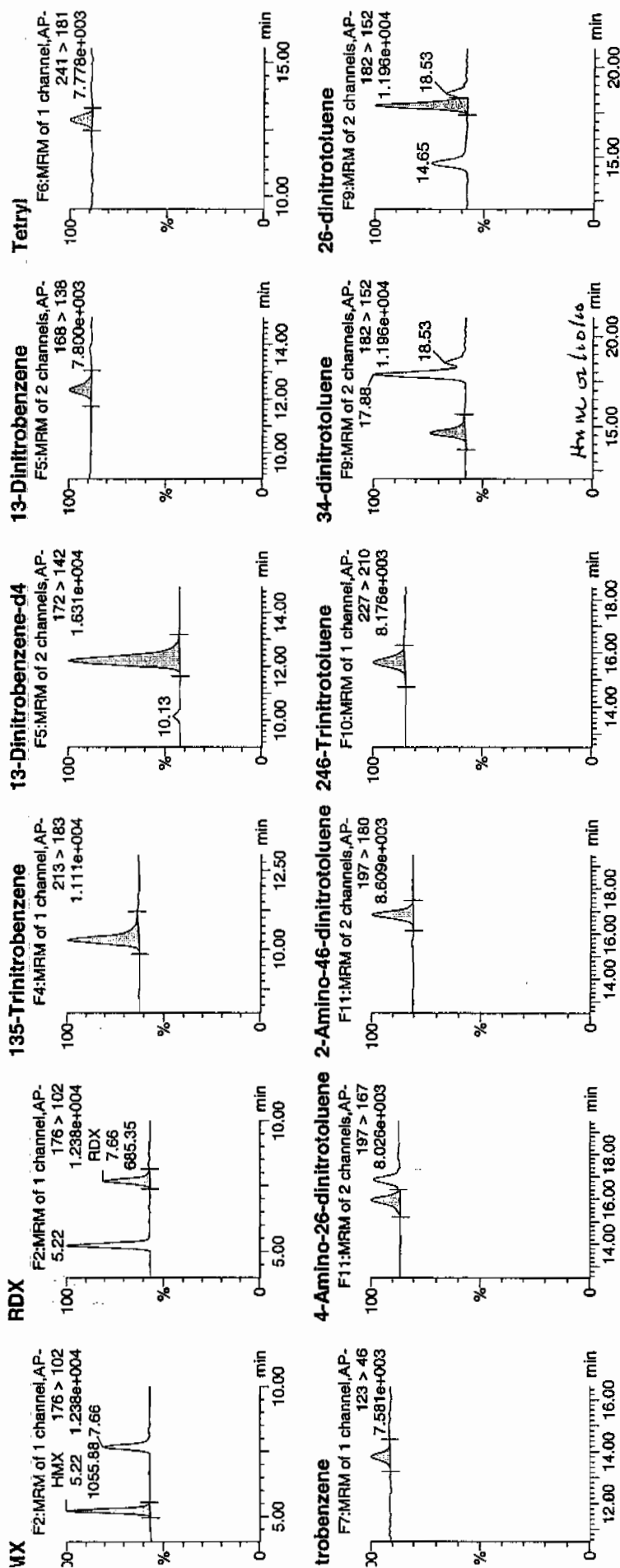
Date: 09-Feb-2010

Time: 21:43:27

File: WXX100208-08CRI

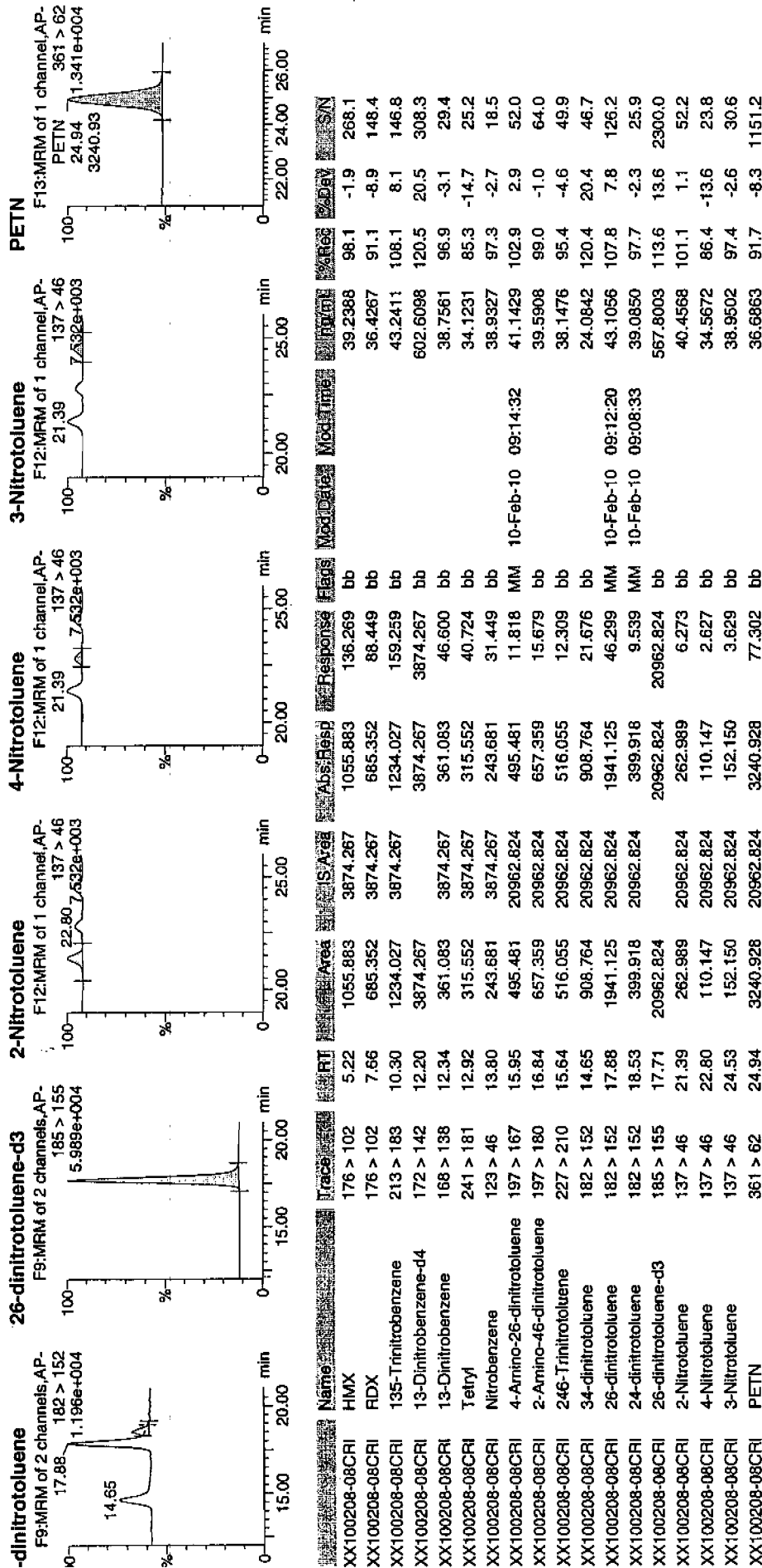
Alt: 1:1,C

WAT
2/10/10



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

Dataset: C:\MASSLYNX\New_Exp_PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/09/10
 Time of Injection 2143
 Standard Number WXX100208-08CRI
 Data File EXP0208064a

HMX	98.1
RDX	91.1
135-TNB	108.1
13-DNB	96.9
Tetryl	85.3
Nitrobenzene	97.3
4A-26-DNT	102.9
2A-46-DNT	99.0
246-TNT	95.4
34-DNT(surr)	120.4
26-DNT	107.8
24-DNT	97.7
2-NT	101.1
4-NT	86.4
3-NT	97.4
PETN	91.7

*mtf
2/10/10*

Total 1576.6

Average 98.5

mtf 02/10/10

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): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0208075a

Analysis Date: 10-FEB-10 03:07

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
2,4-Dinitrotoluene	600	649.004	108	
2,6-Dinitrotoluene	600	623.523	104	
2,6-Dinitrotoluene-d3	500	505.287	101	
2-Amino-4,6-dinitrotoluene	600	658.154	110	
3,4-Dinitrotoluene	300	327.707	109	
4-Amino-2,6-dinitrotoluene	600	625.18	104	
HMX	600	619.895	103	
Nitrobenzene	600	588.662	98	
PETN	600	650.959	108	
RDX	600	712.542	119	
Tetryl	600	559.722	93	
m-Dinitrobenzene	600	613.819	102	
m-Nitrotoluene	600	614.037	102	
o-Nitrotoluene	600	663.004	111	
p-Nitrotoluene	600	675.946	113	
1,3,5-Trinitrobenzene	600	550.541	92	
1,3-Dinitrobenzene-d4	500	536.255	107	
2,4,6-Trinitrotoluene	600	692.977	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 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\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010

Sample Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208075a

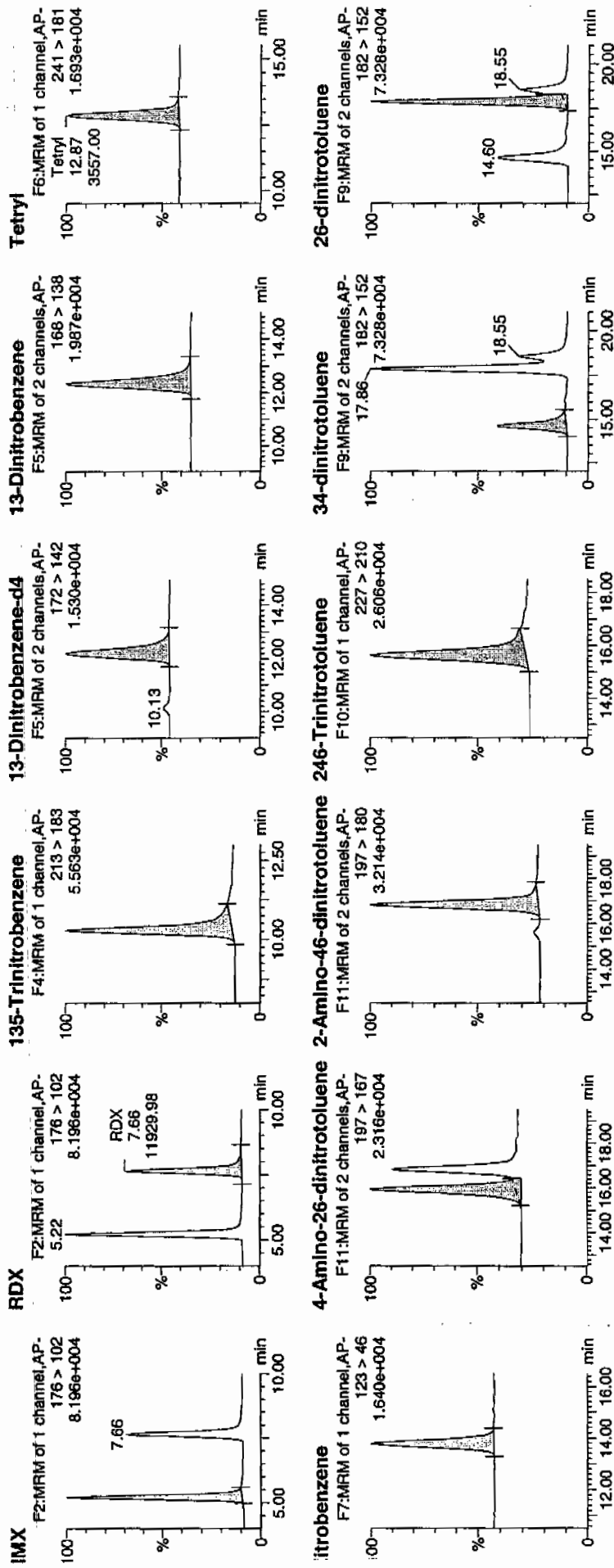
Date: 10-Feb-2010

Time: 03:07:54

D: WXX100208-07CCV

Ratio: 1:1,B

MA
2/10/10



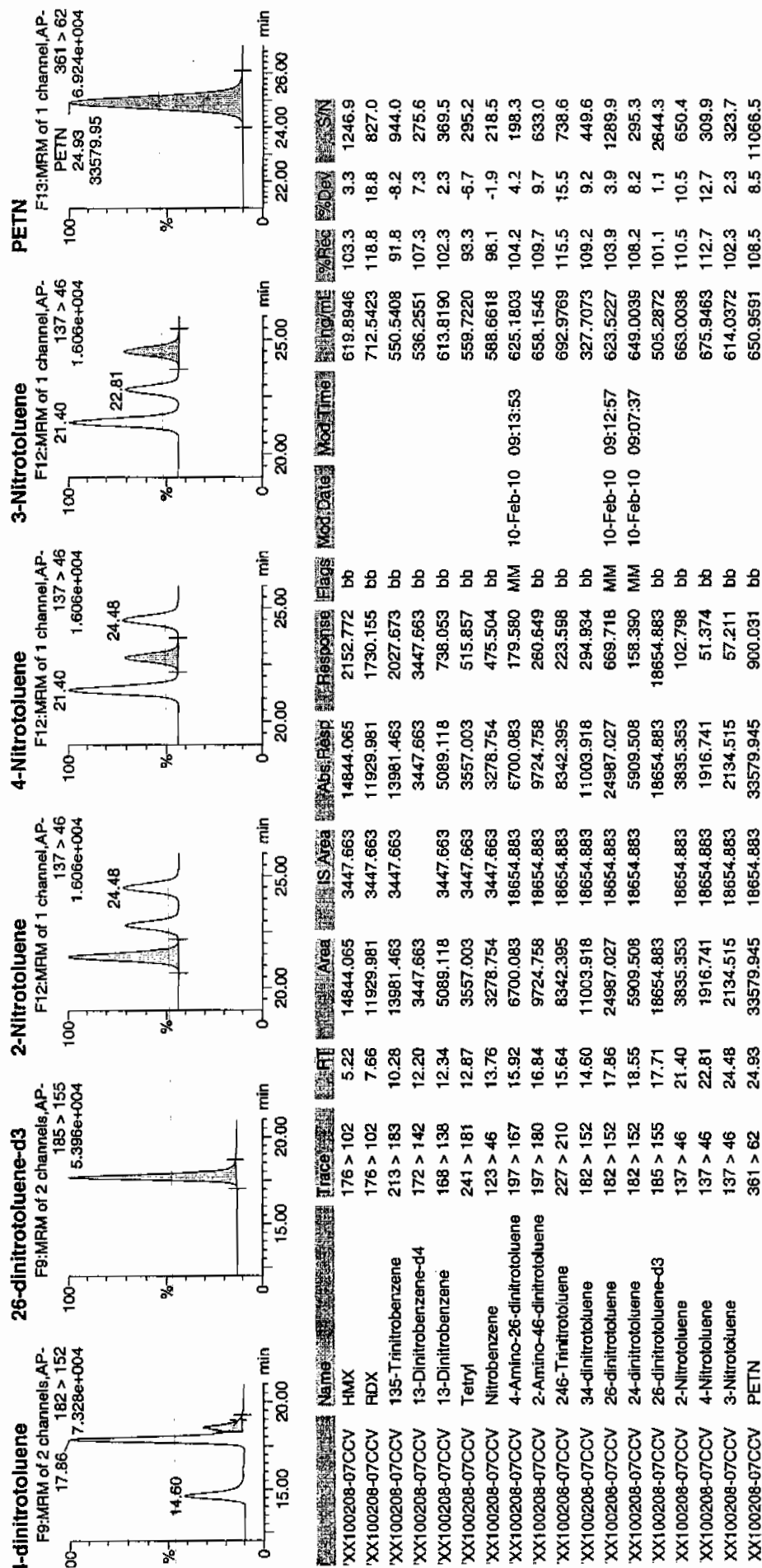
Hammer 10/10

Quantify Sample Report

EL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Wed Feb 10 09:25:16 2010, Page 74 of 79

atlas: C:\MASSLYNX\New_Exp.PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/10/10
 Time of Injection: 0307
 Standard Number: WXX100208-07CCV
 Data File: EXP0208075a

HMX	103.3
RDX	118.8
135-TNB	91.8
13-DNB	102.3
Tetryl	93.3
Nitrobenzene	98.1
4A-26-DNT	104.2
2A-46-DNT	109.7
246-TNT	115.5
34-DNT(surr)	109.2
26-DNT	103.9
24-DNT	108.2
2-NT	110.5
4-NT	112.7
3-NT	102.3
PETN	108.5

*not
2/10/10*

Total 1692.3

Average 105.8

4711-02/10/10

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): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0208077a

Analysis Date: 10-FEB-10 04:06

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	43.814	110	
1,3-Dinitrobenzene-d4	500	565.719	113	
2,4,6-Trinitrotoluene	40	37.653	94	
2,4-Dinitrotoluene	40	39.671	99	
2,6-Dinitrotoluene	40	41.489	104	
2,6-Dinitrotoluene-d3	500	565.139	113	
2-Amino-4,6-dinitrotoluene	40	39.866	100	
3,4-Dinitrotoluene	20	21.452	107	
4-Amino-2,6-dinitrotoluene	40	37.145	93	
HMX	40	44.845	112	
Nitrobenzene	40	36.774	92	
PETN	40	41.094	103	
RDX	40	40.397	101	
Tetryl	40	40.051	100	
m-Dinitrobenzene	40	42.442	106	
m-Nitrotoluene	40	42.653	107	
o-Nitrotoluene	40	37.743	94	
p-Nitrotoluene	40	39.09	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
iEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010

Sample Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208077a

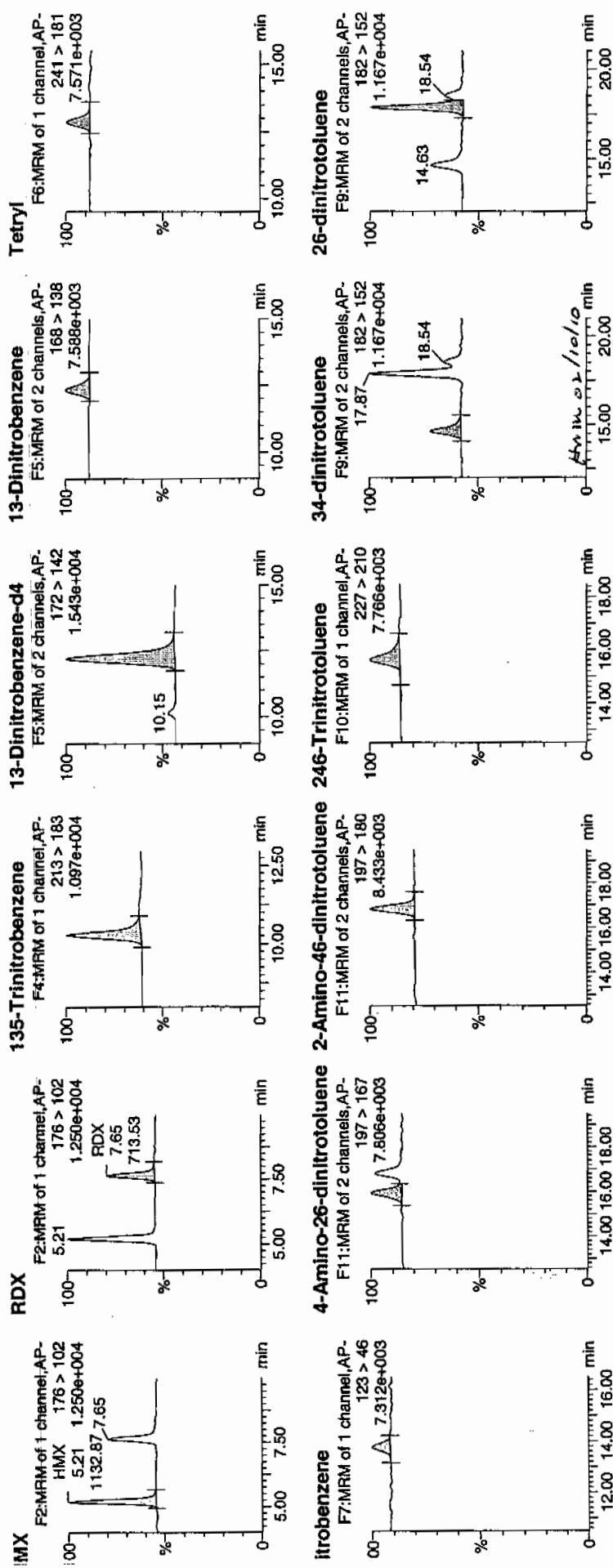
Date: 10-Feb-2010

Time: 04:06:59

Operator: WXX100208-08CRI

Label: 1:1,C

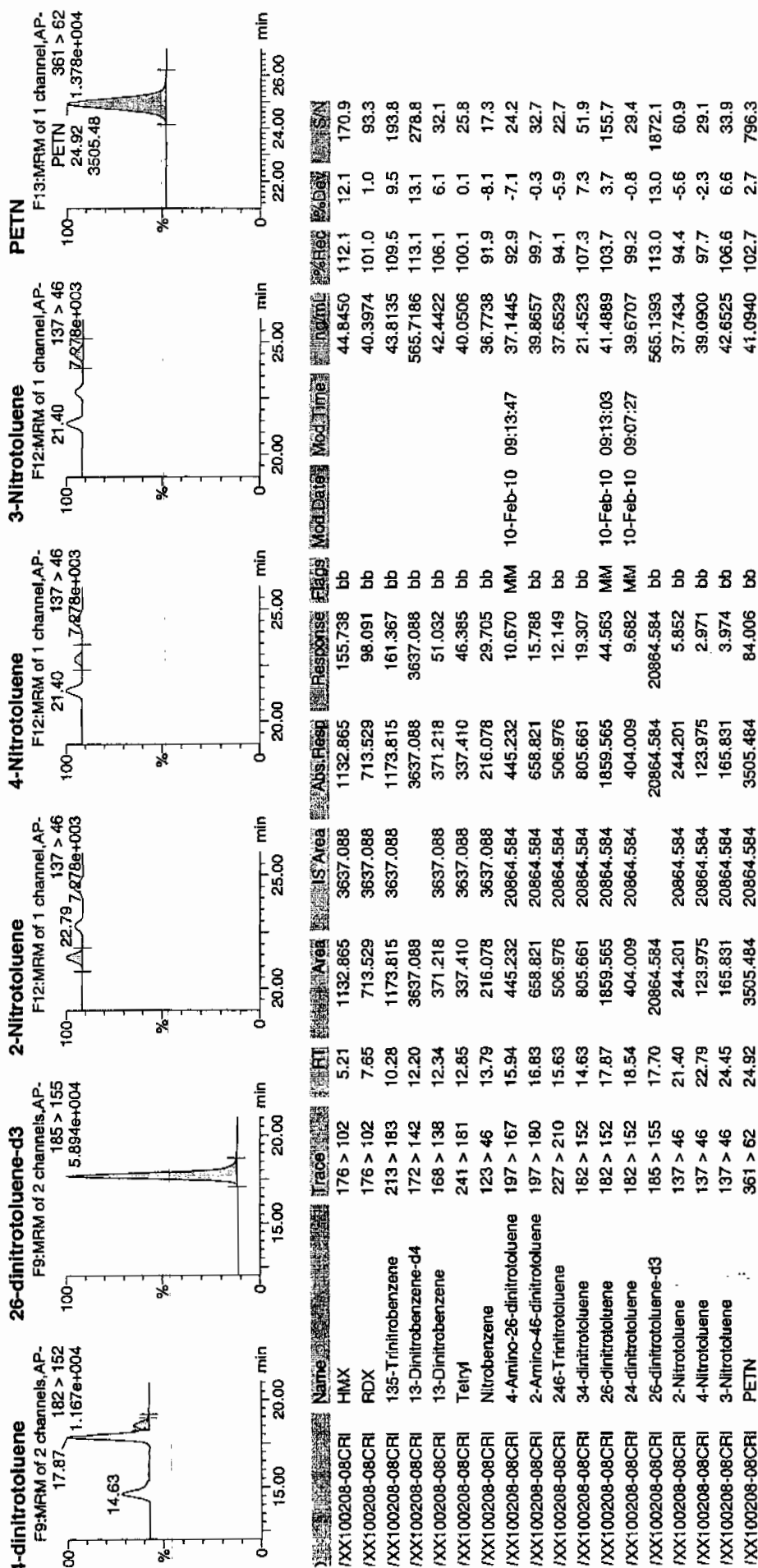
MR
2/10/10



Printed: Wed Feb 10 09:25:16 2010, Page 78 of 79

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

atset: C:\MASSLYNX\New_Exp.PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/10/10
 Time of Injection 0406
 Standard Number WXX100208-08CRI
 Data File EXP0208077a

HMX	112.1
RDX	101.0
135-TNB	109.5
13-DNB	106.1
Tetryl	100.1
Nitrobenzene	91.9
4A-26-DNT	92.9
2A-46-DNT	99.7
246-TNT	94.1
34-DNT(surr)	107.3
26-DNT	103.7
24-DNT	99.2
2-NT	94.4
4-NT	97.7
3-NT	106.6
PETN	102.7

Handwritten: 101.2
2/10/10

Total 1619.0

Average 101.2

Handwritten: 101.2

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): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0208088a

Analysis Date: 10-FEB-10 09:31

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
Tetryl	600	602.321	100	
m-Dinitrobenzene	600	605.649	101	
m-Nitrotoluene	600	598.093	100	
o-Nitrotoluene	600	665.518	111	
p-Nitrotoluene	600	667.409	111	
1,3,5-Trinitrobenzene	600	541.95	90	
1,3-Dinitrobenzene-d4	500	565.857	113	
2,4,6-Trinitrotoluene	600	708.706	118	
2,4-Dinitrotoluene	600	606.731	101	
2,6-Dinitrotoluene	600	600.008	100	
2,6-Dinitrotoluene-d3	500	520.615	104	
2-Amino-4,6-dinitrotoluene	600	614.083	102	
3,4-Dinitrotoluene	300	347.135	116	
4-Amino-2,6-dinitrotoluene	600	606.995	101	
HMX	600	579.88	97	
Nitrobenzene	600	606.863	101	
PETN	600	627.526	105	
RDX	600	633.367	106	

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

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

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA2.qtd, Time: Thu Feb 11 10:06:10 2010

Sample Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208088a

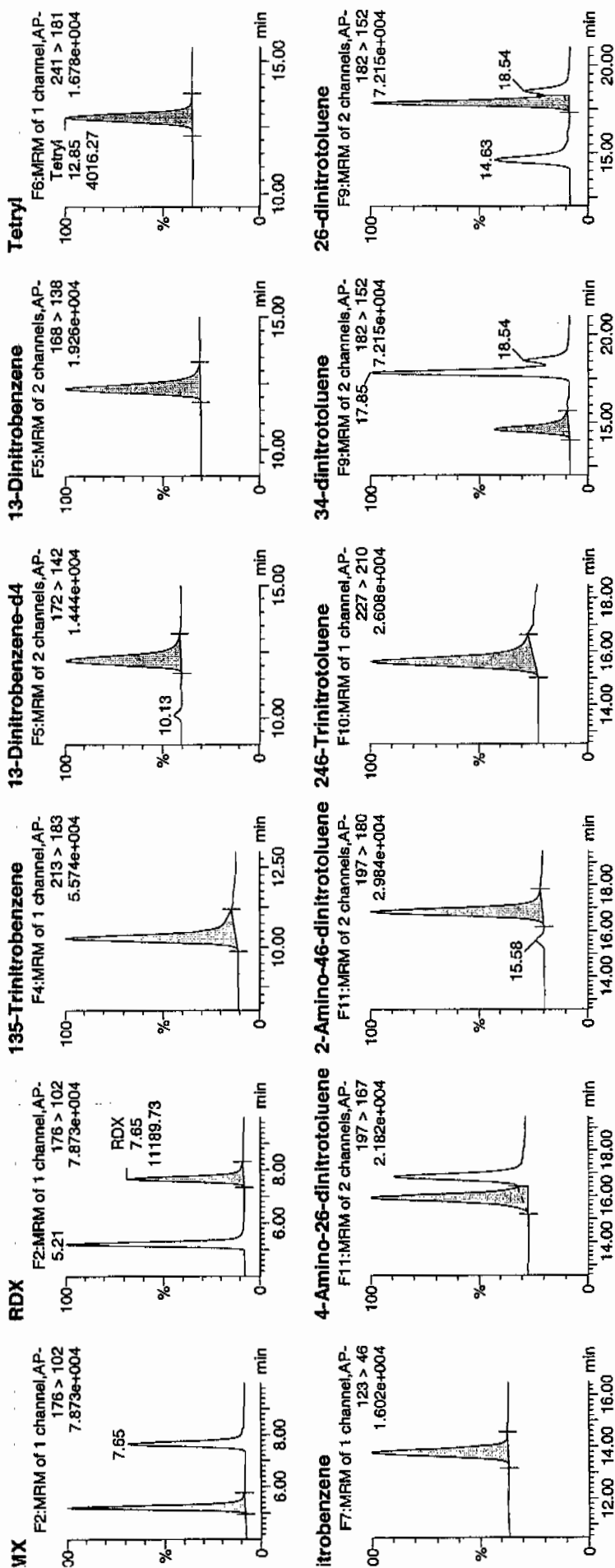
Date: 10-Feb-2010

Time: 09:31:30

File: WXX100208-07CCV

Alt: 1:1,B

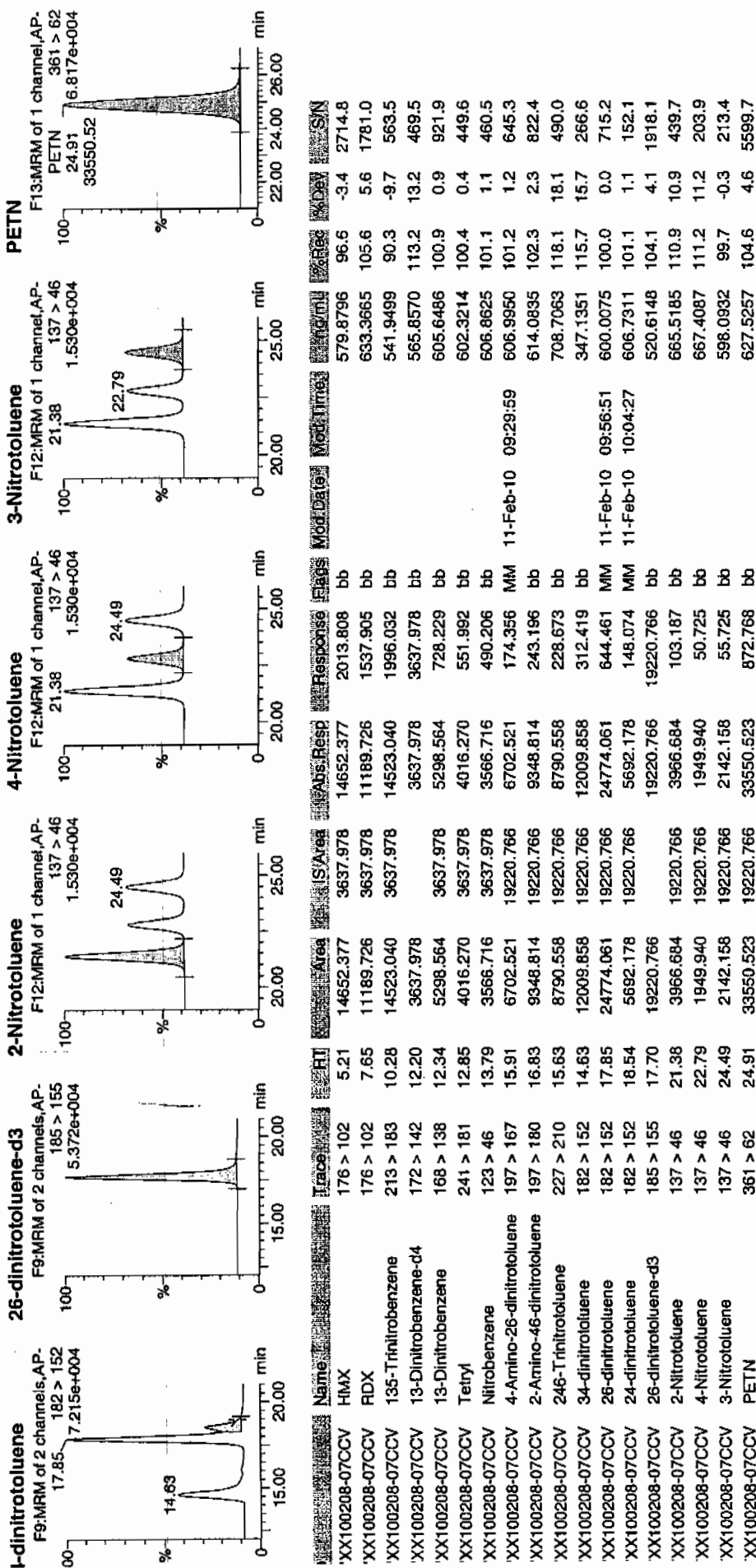
11/10



11/10

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

atset: C:\MASSLYNX\New_Exp.PRO\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/10/10
 Time of Injection: 0931
 Standard Number: WXX100208-07CCV
 Data File: EXP0208088a

HMX	96.6
RDX	105.6
135-TNB	90.3
13-DNB	100.9
Tetryl	100.4
Nitrobenzene	101.1
4A-26-DNT	101.2
2A-46-DNT	102.3
246-TNT	118.1
34-DNT(surr)	115.7
26-DNT	100.0
24-DNT	101.1
2-NT	110.9
4-NT	111.2
3-NT	99.7
PETN	104.6

*WAT
2/10/10*

Total 1659.7

Average 103.7

Handwritten: HMX or 111.6

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): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0208090a

Analysis Date: 10-FEB-10 10:30

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
3,4-Dinitrotoluene	20	21.64	108	
4-Amino-2,6-dinitrotoluene	40	37.109	93	
HMX	40	43.322	108	
Nitrobenzene	40	42.181	105	
PETN	40	34.532	86	
RDX	40	50.422	126	
Tetryl	40	35.418	89	
m-Dinitrobenzene	40	44.912	112	
m-Nitrotoluene	40	42.094	105	
o-Nitrotoluene	40	35.885	90	
p-Nitrotoluene	40	39.742	99	
1,3,5-Trinitrobenzene	40	39.025	98	
1,3-Dinitrobenzene-d4	500	604.965	121	
2,4,6-Trinitrotoluene	40	40.552	101	
2,4-Dinitrotoluene	40	36.402	91	
2,6-Dinitrotoluene	40	40.121	100	
2,6-Dinitrotoluene-d3	500	599.331	120	
2-Amino-4,6-dinitrotoluene	40	39.239	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
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208090a

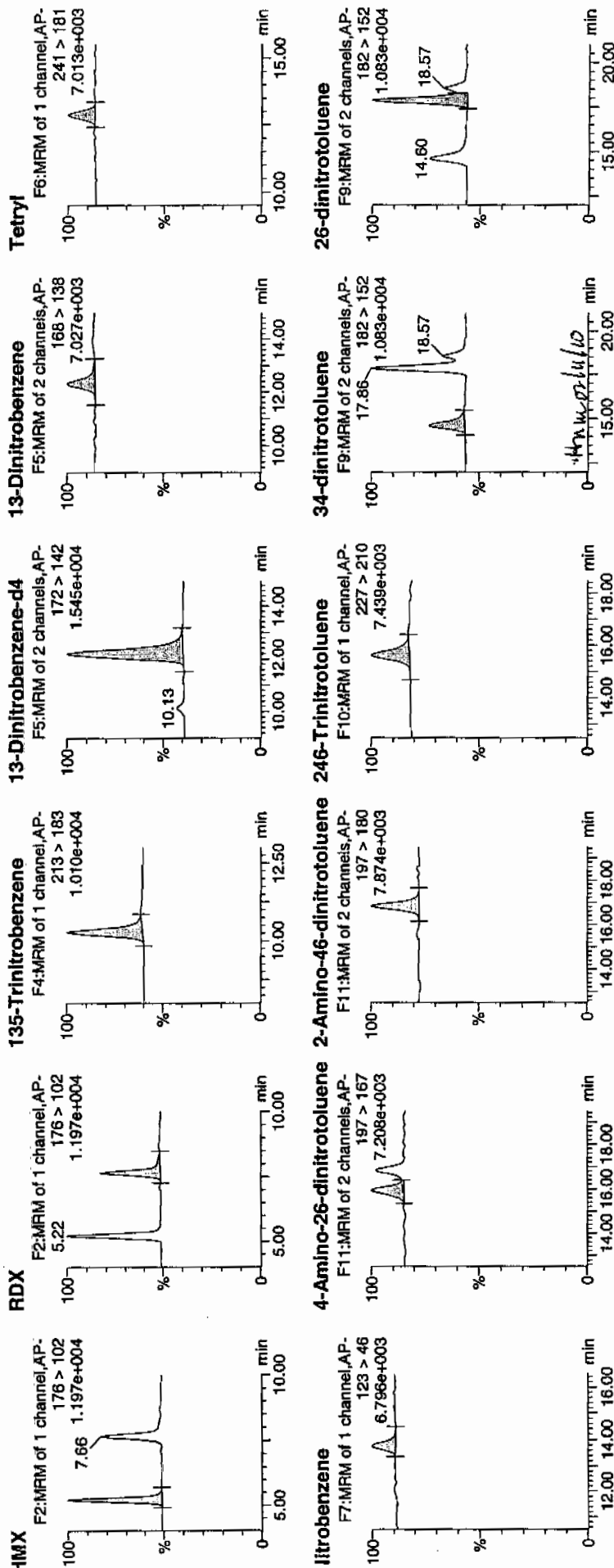
Date: 10-Feb-2010

Time: 10:30:41

D: WXX100208-08CRI

/ial: 1:1,C

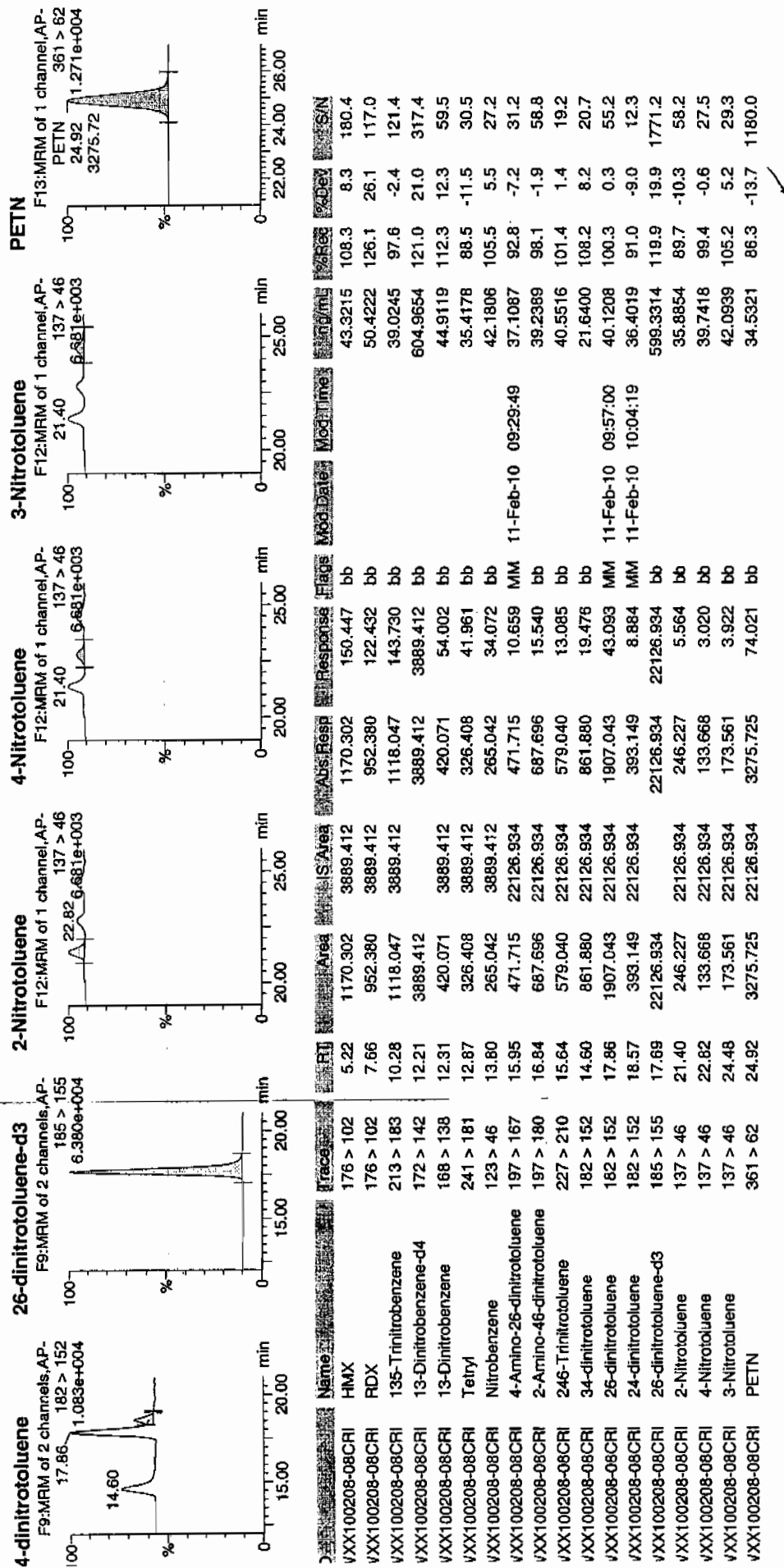
1/11/10
10:06



Printed: Thu Feb 11 10:09:12 2010, Page 26 of 117

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

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/10/10
 Time of Injection 1030
 Standard Number WXX100208-08CRI
 Data File EXP0208090a

HMX	108.3
RDX	126.1
135-TNB	97.6
13-DNB	112.3
Tetryl	88.5
Nitrobenzene	105.5
4A-26-DNT	92.8
2A-46-DNT	98.1
246-TNT	101.4
34-DNT(surr)	108.2
26-DNT	100.3
24-DNT	91.0
2-NT	89.7
4-NT	99.4
3-NT	105.2
PETN	86.3

Handwritten: 100.7
2/11/10

Total 1610.7

Average 100.7

Handwritten: 100.7

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): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0208100a

Analysis Date: 10-FEB-10 15:26

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	588.141	98	
1,3-Dinitrobenzene-d4	500	493.709	99	
2,4,6-Trinitrotoluene	600	720.831	120	*
2,4-Dinitrotoluene	600	626.987	104	
2,6-Dinitrotoluene	600	612.193	102	
2,6-Dinitrotoluene-d3	500	468.676	94	
2-Amino-4,6-dinitrotoluene	600	680.607	113	
3,4-Dinitrotoluene	300	353.233	118	
4-Amino-2,6-dinitrotoluene	600	676.006	113	
HMX	600	642.868	107	
Nitrobenzene	600	663.429	111	
PETN	600	712.886	119	
RDX	600	779.218	130	*
Tetryl	600	638.511	106	
m-Dinitrobenzene	600	612.801	102	
m-Nitrotoluene	600	608.261	101	
o-Nitrotoluene	600	723.623	121	*
p-Nitrotoluene	600	679.247	113	

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\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010

Sample Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208100a

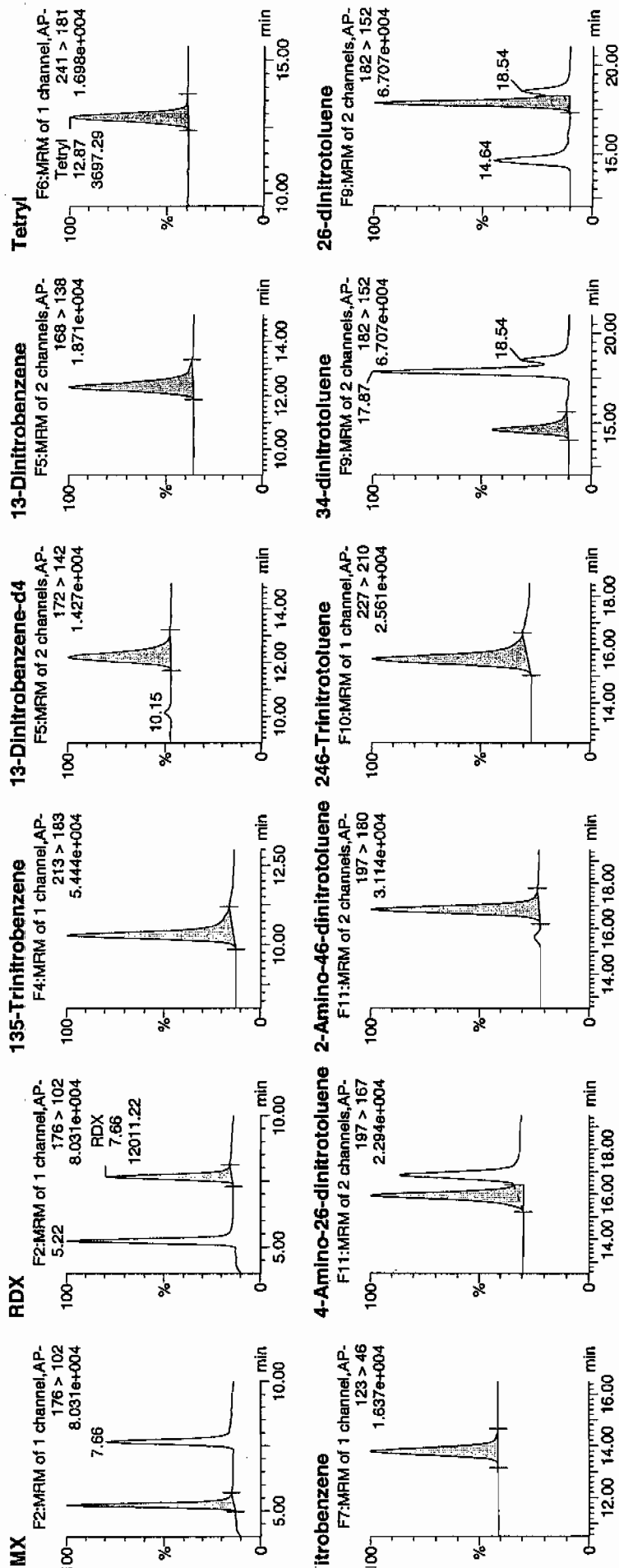
Date: 10-Feb-2010

Time: 15:26:15

File: WXX100208-07CCV

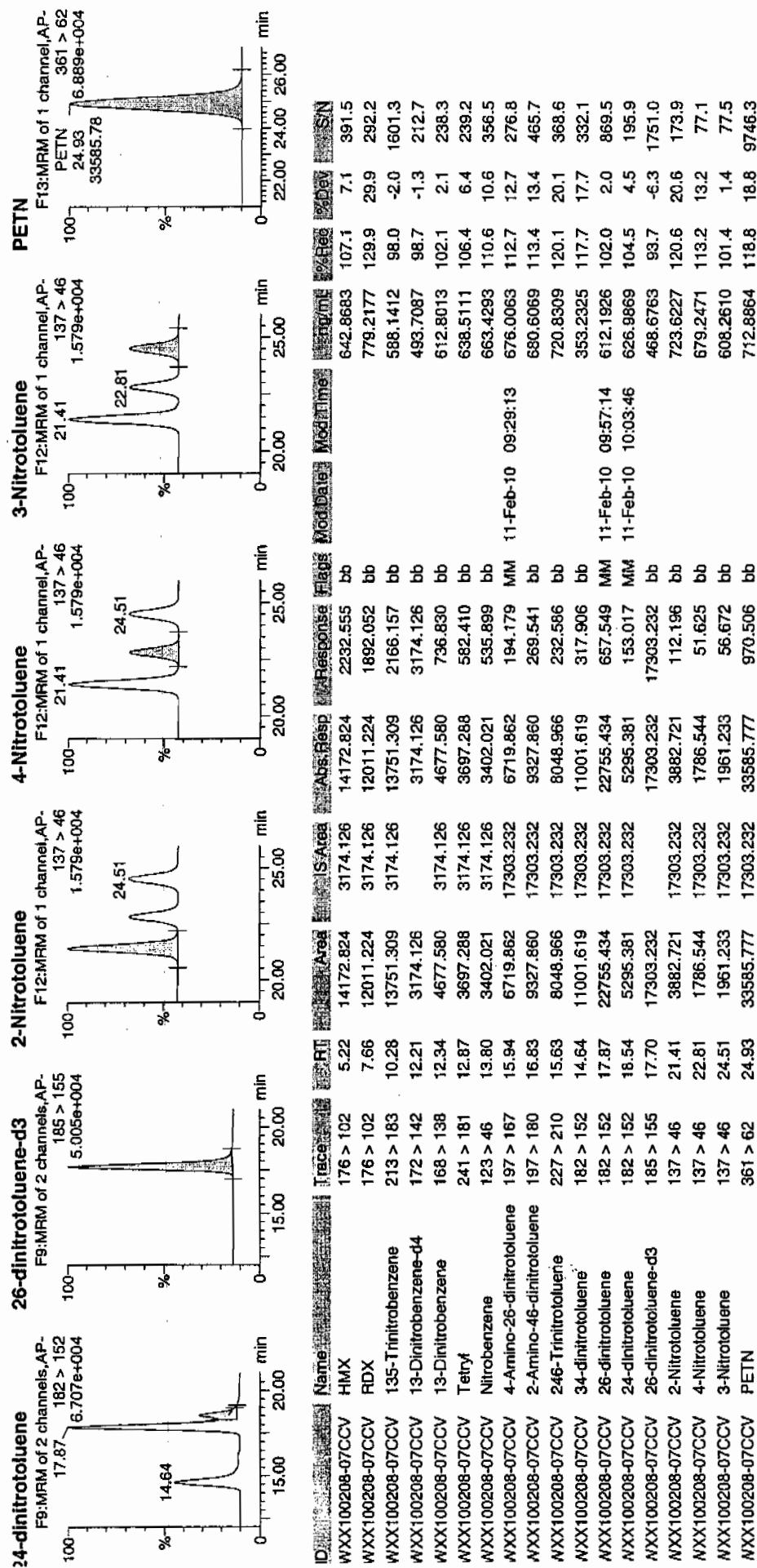
Ratio: 1:1,B

WXX
2/11/10



Handwritten signature

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/10/10
 Time of Injection: 1526
 Standard Number: WXX100208-07CCV
 Data File: EXP0208100a

HMX	107.1
RDX	129.9
135-TNB	98.0
13-DNB	102.1
Tetryl	106.4
Nitrobenzene	110.6
4A-26-DNT	112.7
2A-46-DNT	113.4
246-TNT	120.1
34-DNT(surr)	117.7
26-DNT	102.0
24-DNT	104.5
2-NT	120.6
4-NT	113.2
3-NT	101.4
PETN	118.8

Handwritten: 111.2
2/11/10

Total 1778.5

Average 111.2

Handwritten: 111.2 - 111.2

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0208102a

Analysis Date: 10-FEB-10 16:25

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	51.131	128	
1,3-Dinitrobenzene-d4	500	552.166	110	
2,4,6-Trinitrotoluene	40	40.399	101	
2,4-Dinitrotoluene	40	39.25	98	
2,6-Dinitrotoluene	40	40.673	102	
2,6-Dinitrotoluene-d3	500	556.942	111	
2-Amino-4,6-dinitrotoluene	40	39.187	98	
3,4-Dinitrotoluene	20	23.623	118	
4-Amino-2,6-dinitrotoluene	40	45.282	113	
HMX	40	50.098	125	
Nitrobenzene	40	41.549	104	
PETN	40	52.922	132	*
RDX	40	49.375	123	
Tetryl	40	43.062	108	
m-Dinitrobenzene	40	46.526	116	
m-Nitrotoluene	40	50.438	126	
o-Nitrotoluene	40	44.438	111	
p-Nitrotoluene	40	54.684	137	*

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
IEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010

Sample Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208102a

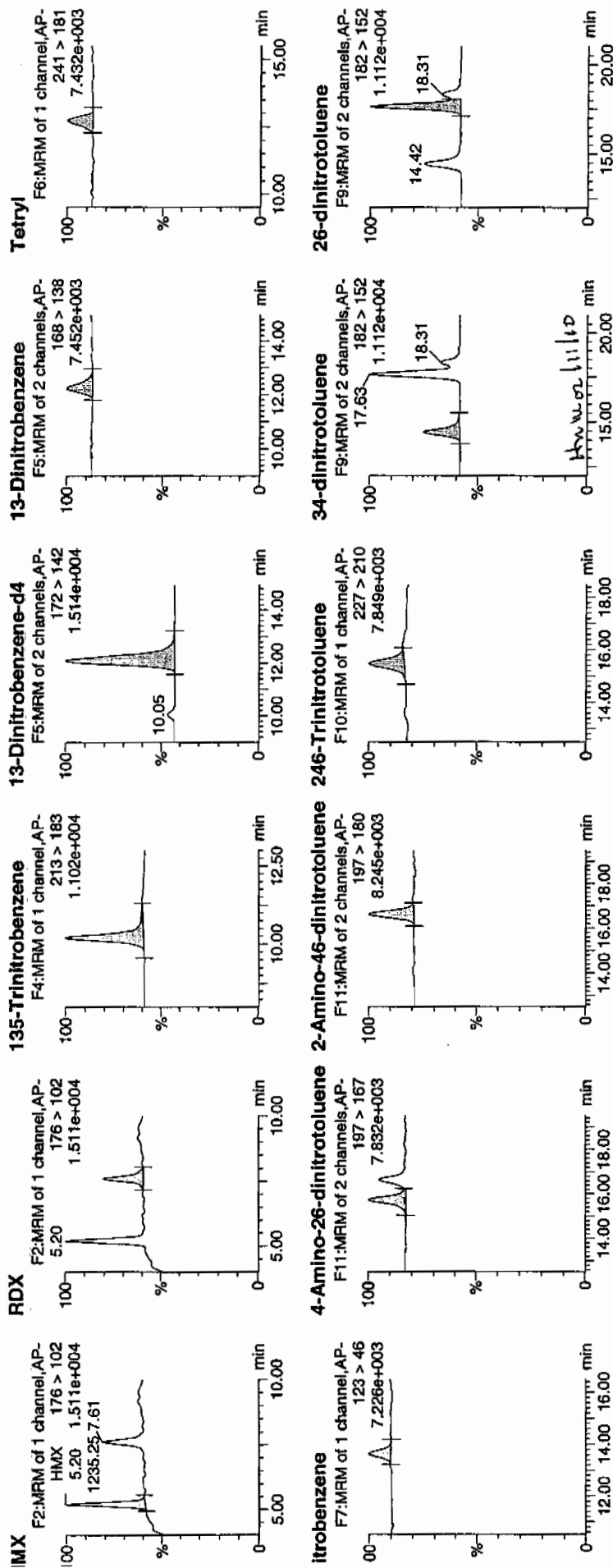
Date: 10-Feb-2010

Time: 16:25:24

File: WXX100208-08CRI

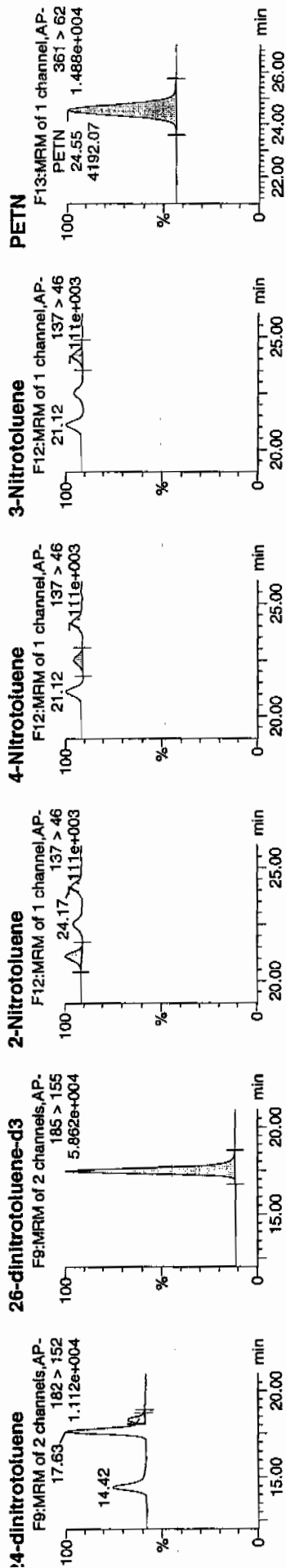
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10/11/10



Quantify Sample Report
3EL Laboratories, LLC / Analyst: Michael A. Pehny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010



Di	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Area	SN
VXX100208-08CRI	HMX	176 > 102	5.20	1235.246	3549.957	1235.246	173.980	bb			50.0980	125.2
VXX100208-08CRI	RDX	176 > 102	7.61	851.198	3549.957	851.198	119.888	bb			49.3746	23.4
VXX100208-08CRI	135-Trinitrobenzene	213 > 183	10.21	1337.041	3549.957	1337.041	188.318	bb			51.1309	27.8
VXX100208-08CRI	13-Dinitrobenzene-d4	172 > 142	12.10	3549.957	3549.957	3549.957	3549.957	bb			552.1661	110.4
VXX100208-08CRI	13-Dinitrobenzene	168 > 138	12.24	397.188	3549.957	397.188	55.943	bb			46.5260	116.3
VXX100208-08CRI	Tetryl	241 > 181	12.73	349.726	3549.957	349.726	49.258	bb			43.0620	107.7
VXX100208-08CRI	Nitrobenzene	123 > 46	13.62	238.288	3549.957	238.288	33.562	bb			41.5490	103.9
VXX100208-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.73	534.904	20561.957	534.904	13.007	MM	11-Feb-10	09:29:08	45.2824	113.2
VXX100208-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.62	638.216	20561.957	638.216	15.519	bb			39.1873	98.0
VXX100208-08CRI	246-Trinitrotoluene	227 > 210	15.48	536.058	20561.957	536.058	13.035	bb			40.3987	101.0
VXX100208-08CRI	34-dinitrotoluene	182 > 152	14.42	874.296	20561.957	874.296	21.260	bb			23.6225	118.1
VXX100208-08CRI	26-dinitrotoluene	182 > 152	17.63	1796.544	20561.957	1796.544	43.686	MM	11-Feb-10	09:37:21	40.6728	101.7
VXX100208-08CRI	24-dinitrotoluene	182 > 152	18.31	393.929	20561.957	393.929	9.579	MM	11-Feb-10	10:03:38	39.2502	98.1
VXX100208-08CRI	26-dinitrotoluene-d3	185 > 155	17.48	20561.957	20561.957	20561.957	20561.957	bb			556.9424	111.4
VXX100208-08CRI	2-Nitrotoluene	137 > 46	21.12	283.344	20561.957	283.344	6.890	bb			44.4378	111.1
VXX100208-08CRI	4-Nitrotoluene	137 > 46	22.52	170.915	20561.957	170.915	4.156	bb			54.6836	136.7
VXX100208-08CRI	3-Nitrotoluene	137 > 46	24.17	193.256	20561.957	193.256	4.699	bb			50.4379	126.1
VXX100208-08CRI	PETN	361 > 62	24.55	4192.072	20561.957	4192.072	101.938	bb			52.9217	132.3

✓

GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/10/10
 Time of Injection 1625
 Standard Number WXX100208-08CRI
 Data File EXP0208102a

HMX	125.2
RDX	123.4
135-TNB	127.8
13-DNB	116.3
Tetryl	107.7
Nitrobenzene	103.9
4A-26-DNT	113.2
2A-46-DNT	98.0
246-TNT	101.0
34-DNT(surr)	118.1
26-DNT	101.7
24-DNT	98.1
2-NT	111.1
4-NT	136.7
3-NT	126.1
PETN	132.3

Handwritten:
 11/11/10
 2/11/10

Total 1840.6

Average 115.0

Handwritten: 11/11/10

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): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0208113a

Analysis Date: 10-FEB-10 21:49

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
2,6-Dinitrotoluene-d3	500	509.3	102	
2-Amino-4,6-dinitrotoluene	600	677.413	113	
3,4-Dinitrotoluene	300	360.847	120	*
4-Amino-2,6-dinitrotoluene	600	606.515	101	
HMX	600	457.053	76	*
Nitrobenzene	600	682.529	114	
PETN	600	766.444	128	*
RDX	600	531.11	89	
Tetryl	600	667.741	111	
m-Dinitrobenzene	600	605.726	101	
m-Nitrotoluene	600	571.845	95	
o-Nitrotoluene	600	710.721	118	
p-Nitrotoluene	600	645.626	108	
1,3,5-Trinitrobenzene	600	530.336	88	
1,3-Dinitrobenzene-d4	500	544.446	109	
2,4,6-Trinitrotoluene	600	662.584	110	
2,4-Dinitrotoluene	600	622.26	104	
2,6-Dinitrotoluene	600	605.94	101	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

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

Dataset: C:\MASSLYNX\New_Exp\PRO\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010

Sample Name: C:\MASSLYNX\NEW_EXP\PRO\Data\EXP0208113a

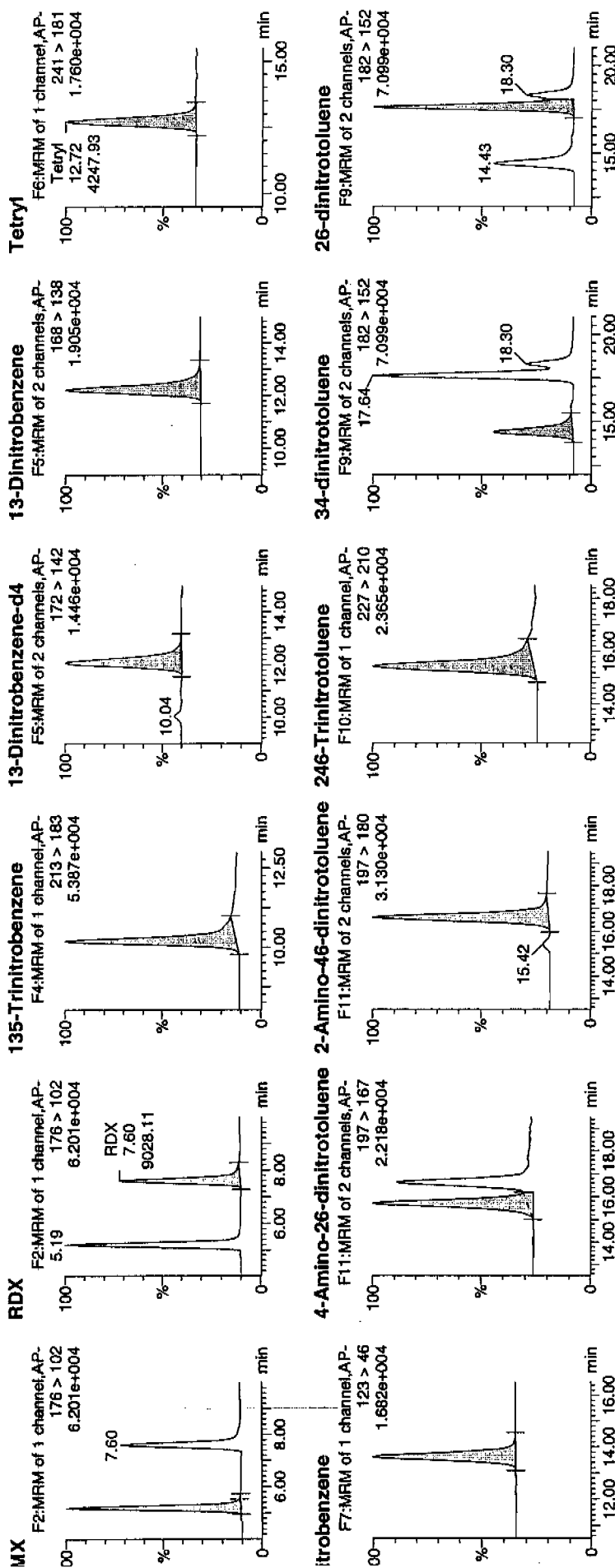
Date: 10-Feb-2010

Time: 21:49:41

File: WXX100208-07CCV

Alt: 1:1,B

MM
2/11/10



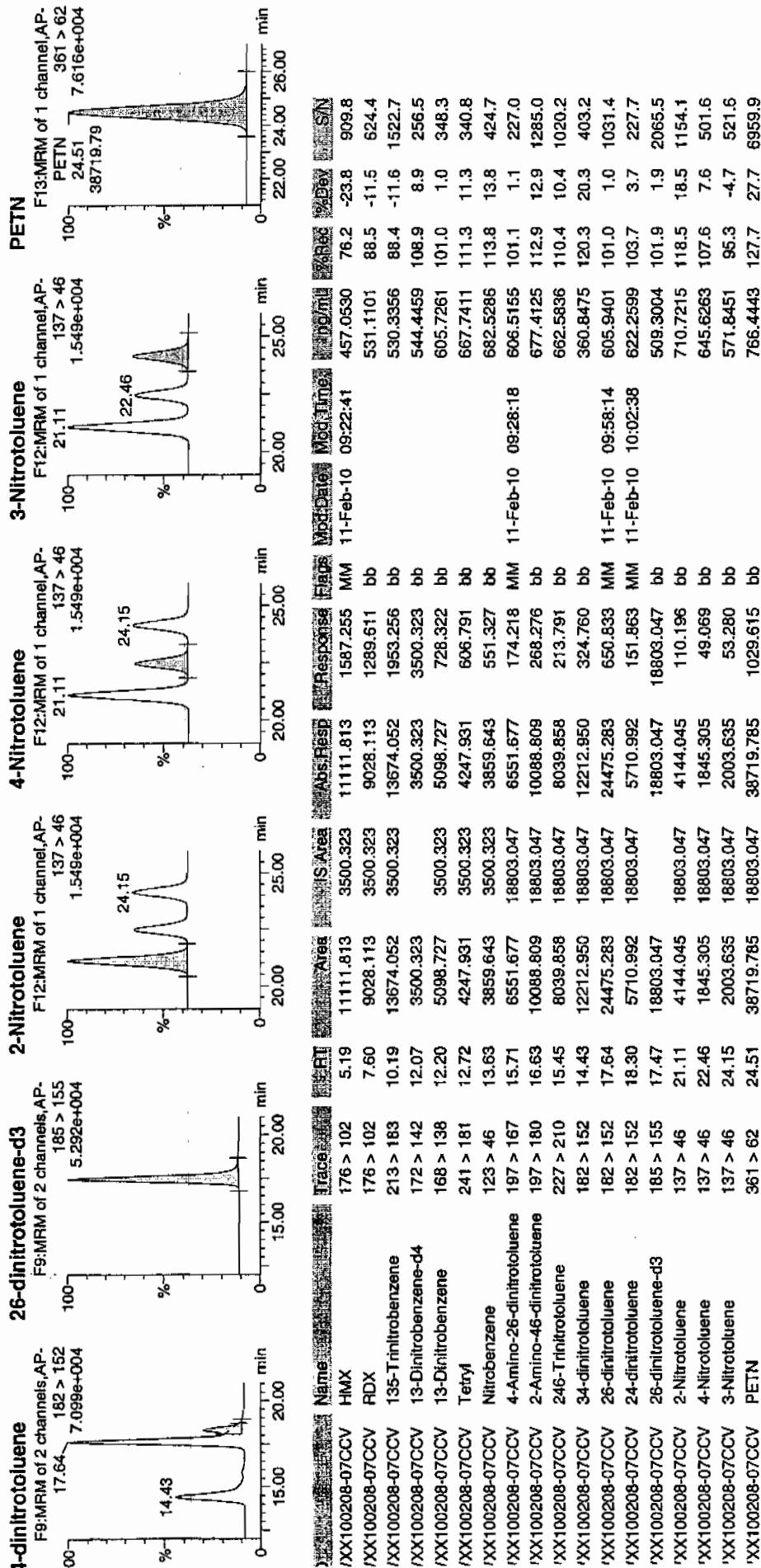
MM
2/11/10

Quantify Sample Report

EL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Thu Feb 11 10:09:12 2010, Page 72 of 117

atset: C:\MASSLYN\New_Exp.PRO\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010



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

GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/10/10
 Time of Injection: 2149
 Standard Number: WXX100208-07CCV
 Data File: EXP0208113a

HMX	76.2
RDX	88.5
135-TNB	88.4
13-DNB	101.0
Tetryl	111.3
Nitrobenzene	113.8
4A-26-DNT	101.1
2A-46-DNT	112.9
246-TNT	110.4
34-DNT(surr)	120.3
26-DNT	101.0
24-DNT	103.7
2-NT	118.5
4-NT	107.6
3-NT	95.3
PETN	127.7

1117
2/11/10

Total 1677.7

Average 104.9

1117 02/11/10

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): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0208115a

Analysis Date: 10-FEB-10 22:48

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	53.258	133	*
1,3-Dinitrobenzene-d4	500	607.853	122	
2,4,6-Trinitrotoluene	40	34.757	87	
2,4-Dinitrotoluene	40	40.974	102	
2,6-Dinitrotoluene	40	39.436	99	
2,6-Dinitrotoluene-d3	500	647.378	129	
2-Amino-4,6-dinitrotoluene	40	50.465	126	
3,4-Dinitrotoluene	20	21.441	107	
4-Amino-2,6-dinitrotoluene	40	44.161	110	
HMX	40	41.129	103	
Nitrobenzene	40	45.384	113	
PETN	40	35.443	89	
RDX	40	28.151	70	
Tetryl	40	44.571	111	
m-Dinitrobenzene	40	32.285	81	
m-Nitrotoluene	40	41.138	103	
o-Nitrotoluene	40	42.41	106	
p-Nitrotoluene	40	44.813	112	

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
iEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010

Sample Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208115a

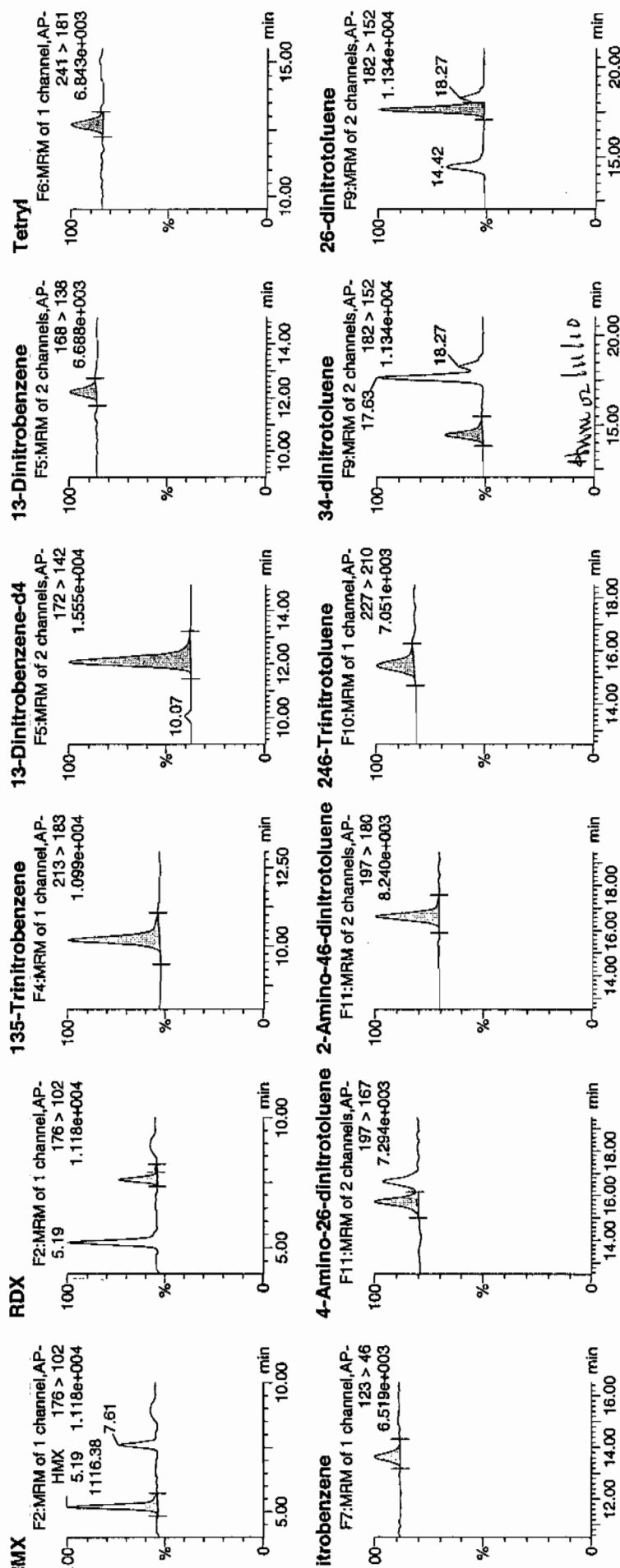
Date: 10-Feb-2010

Time: 22:48:43

Operator: WXX100208-08CRI

Injection: 1:1,C

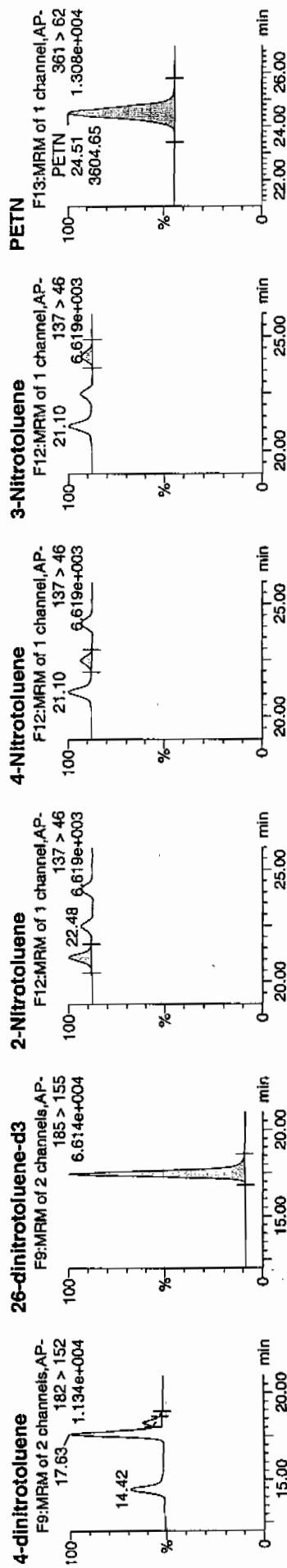
2/11/10



Printed: Thu Feb 11 10:09:12 2010, Page 76 of 117

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

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010



Name	Trace	RT	Area	IS Area	Abs. Resp	Response	Flags	Mod Date	Mod Time	Reg	SN		
VXX100208-08CRI	HMIX	176 > 102	5.19	1116.380	3907.975	1116.380	bb			41.1292	102.8	2.8	133.9
VXX100208-08CRI	RDX	176 > 102	7.61	534.263	3907.975	534.263	MM	11-Feb-10	09:23:36	28.1513	70.4	-29.6	58.7
VXX100208-08CRI	135-Trinitrobenzene	213 > 183	10.20	1533.123	3907.975	1533.123	bb			53.2583	133.1	33.1	211.6
VXX100208-08CRI	13-Dinitrobenzene-d4	172 > 142	12.07	3907.975	3907.975	3907.975	bb			607.8528	121.6	21.6	220.2
VXX100208-08CRI	13-Dinitrobenzene	168 > 138	12.21	303.410	3907.975	303.410	bb			32.2850	80.7	-19.3	49.5
VXX100208-08CRI	Tetryl	241 > 181	12.73	396.242	3907.975	396.242	bd			44.5708	111.4	11.4	33.5
VXX100208-08CRI	Nitrobenzene	123 > 46	13.62	286.530	3907.975	286.530	bb			45.3837	113.5	13.5	28.8
VXX100208-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.70	606.369	23900.779	606.369	MM	11-Feb-10	09:28:06	44.1614	110.4	10.4	46.6
VXX100208-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.62	955.349	23900.779	955.349	bb			50.4651	126.2	26.2	164.9
VXX100208-08CRI	246-Trinitrotoluene	227 > 210	15.44	536.077	23900.779	536.077	bb			34.7565	86.9	-13.1	34.5
VXX100208-08CRI	34-dinitrotoluene	182 > 152	14.42	922.433	23900.779	922.433	bb			21.4414	107.2	7.2	73.6
VXX100208-08CRI	26-dinitrotoluene	182 > 152	17.63	2024.771	23900.779	2024.771	MM	11-Feb-10	09:58:21	39.4361	98.6	-1.4	202.5
VXX100208-08CRI	24-dinitrotoluene	182 > 152	18.27	478.002	23900.779	478.002	MM	11-Feb-10	10:02:28	40.9738	102.4	2.4	43.1
VXX100208-08CRI	26-dinitrotoluene-d3	185 > 155	17.46	23900.779	23900.779	23900.779	bb			647.3779	129.5	29.5	4032.5
VXX100208-08CRI	2-Nitrotoluene	137 > 46	21.10	314.324	23900.779	314.324	bb			42.4100	106.0	6.0	34.3
VXX100208-08CRI	4-Nitrotoluene	137 > 46	22.48	162.806	23900.779	162.806	bb			44.8126	112.0	12.0	17.1
VXX100208-08CRI	3-Nitrotoluene	137 > 46	24.15	183.219	23900.779	183.219	bb			41.1383	102.8	2.8	16.7
VXX100208-08CRI	PETN	361 > 62	24.51	3604.646	23900.779	3604.646	bb			35.4428	88.6	-11.4	670.7

GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/10/10
 Time of Injection 2248
 Standard Number WXX100208-08CRI
 Data File EXP0208115a

HMX	102.8
RDX	70.4
135-TNB	133.1
13-DNB	80.7
Tetryl	111.4
Nitrobenzene	113.5
4A-26-DNT	110.4
2A-46-DNT	126.2
246-TNT	86.9
34-DNT(surr)	107.2
26-DNT	98.6
24-DNT	102.4
2-NT	106.0
4-NT	112.0
3-NT	102.8
PETN	88.6

*mtf
2/11/10*

Total 1653.0

Average 103.3

from 02/11/10

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): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0208120a

Analysis Date: 11-FEB-10 01:16

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
m-Nitrotoluene	600	443.701	74	*
o-Nitrotoluene	600	445.632	74	*
p-Nitrotoluene	600	466.419	78	*
1,3,5-Trinitrobenzene	600	597.957	100	
1,3-Dinitrobenzene-d4	500	521.607	104	
2,4,6-Trinitrotoluene	600	672.377	112	
2,4-Dinitrotoluene	600	600.43	100	
2,6-Dinitrotoluene	600	601.181	100	
2,6-Dinitrotoluene-d3	500	584.444	117	
2-Amino-4,6-dinitrotoluene	600	681.8	114	
3,4-Dinitrotoluene	300	325.104	108	
4-Amino-2,6-dinitrotoluene	600	602.251	100	
HMX	600	566.092	94	
Nitrobenzene	600	695.908	116	
PETN	600	664	111	
RDX	600	639.449	107	
Tetryl	600	673.554	112	
m-Dinitrobenzene	600	598.675	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

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

ataset: C:\MASSLYNX\New_Exp_PRO\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010

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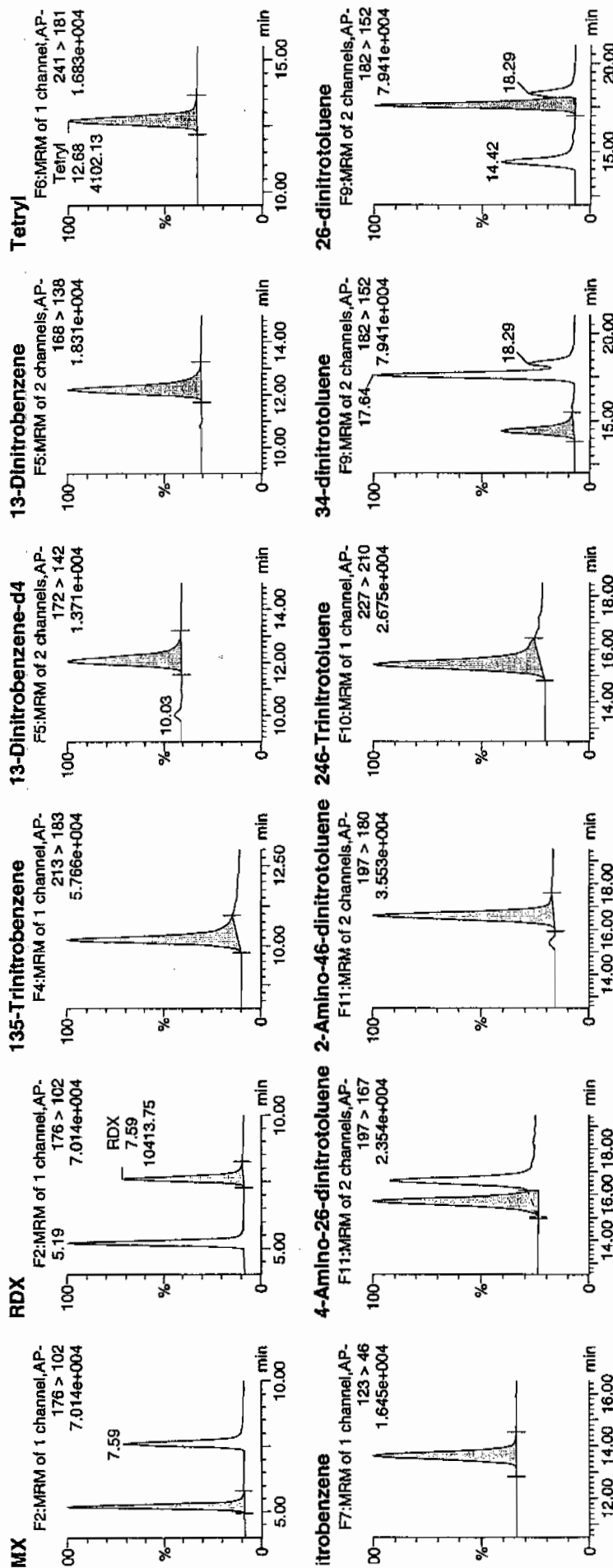
ate: 11-Feb-2010

ime: 01:16:10

I: WXX100208-07CCV

al: 1:1,B

11/10
11/10



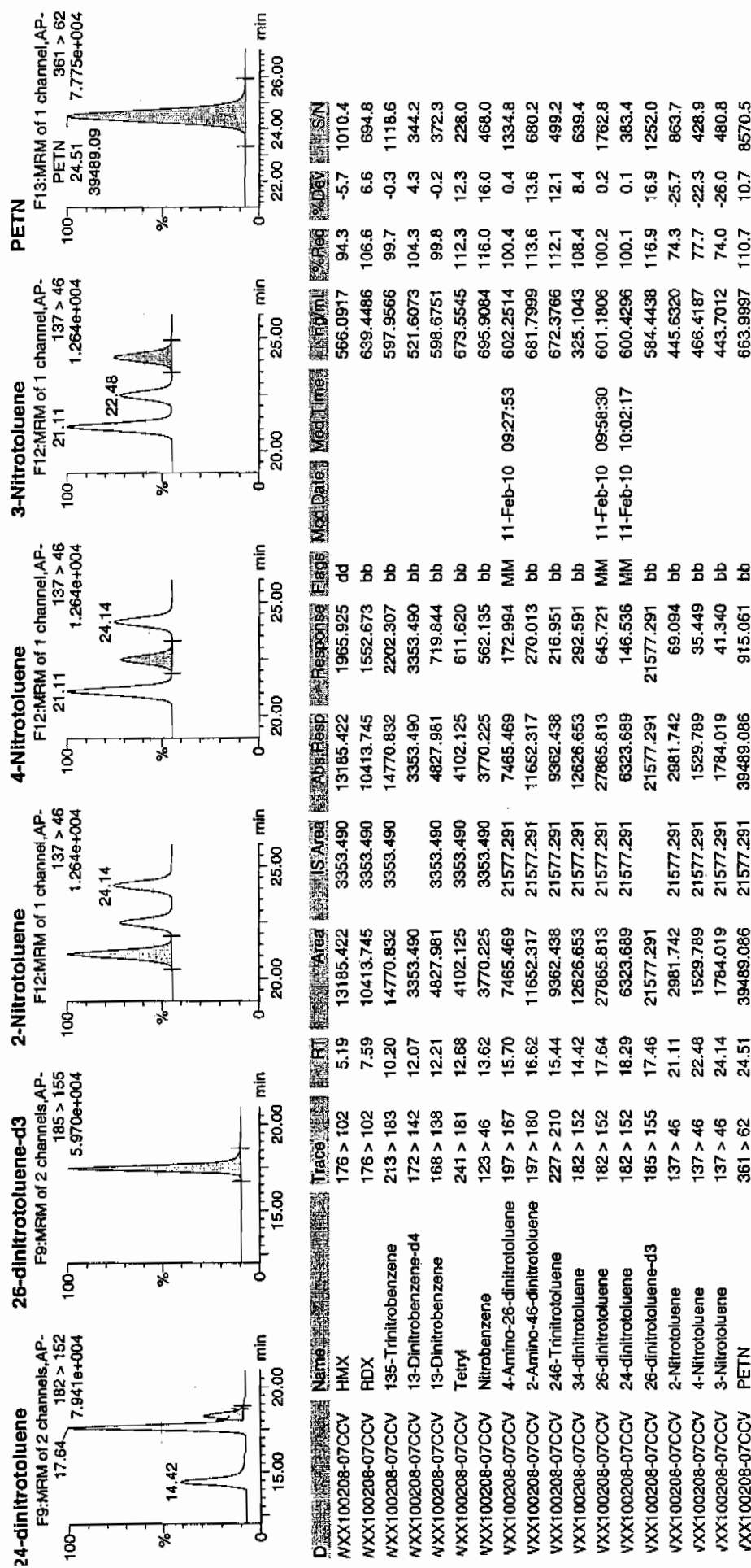
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Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Thu Feb 11 10:09:12 2010, Page 86 of 117

Dataset: C:\MASSLYNX\New_Exp_PRO\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/11/10
 Time of Injection: 0116
 Standard Number: WXX100208-07CCV
 Data File: EXP0208120a

HMX	94.3
RDX	106.6
135-TNB	99.7
13-DNB	99.8
Tetryl	112.3
Nitrobenzene	116.0
4A-26-DNT	100.4
2A-46-DNT	113.6
246-TNT	112.1
34-DNT(surr)	108.4
26-DNT	100.2
24-DNT	100.1
2-NT	74.3
4-NT	77.7
3-NT	74.0
PETN	110.7

*mtf
2/11/10*

Total 1600.2

Average 100.0

Hum 02/11/10

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): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0208122a

Analysis Date: 11-FEB-10 02:15

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
Nitrobenzene	40	45.235	113	
PETN	40	55.232	138	*
RDX	40	38.842	97	
Tetryl	40	46.548	116	
m-Dinitrobenzene	40	42.593	106	
m-Nitrotoluene	40	29.791	74	
o-Nitrotoluene	40	36.689	92	
p-Nitrotoluene	40	37.057	93	
1,3,5-Trinitrobenzene	40	54.242	136	*
1,3-Dinitrobenzene-d4	500	481.604	96	
2,4,6-Trinitrotoluene	40	39.518	99	
2,4-Dinitrotoluene	40	34.151	85	
2,6-Dinitrotoluene	40	39.253	98	
2,6-Dinitrotoluene-d3	500	559.761	112	
2-Amino-4,6-dinitrotoluene	40	40.238	101	
3,4-Dinitrotoluene	20	23.425	117	
4-Amino-2,6-dinitrotoluene	40	39.856	100	
HMX	40	45.073	113	

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
iEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010

Sample Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208122a

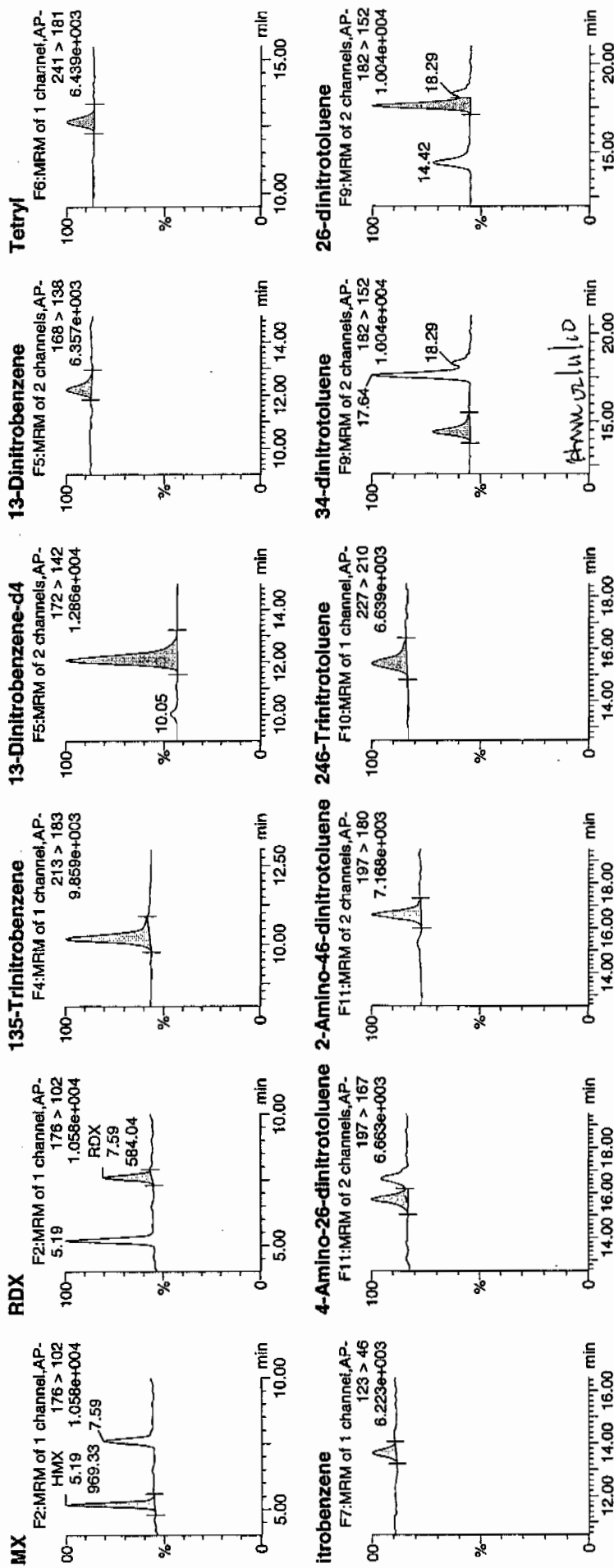
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Time: 02:15:12

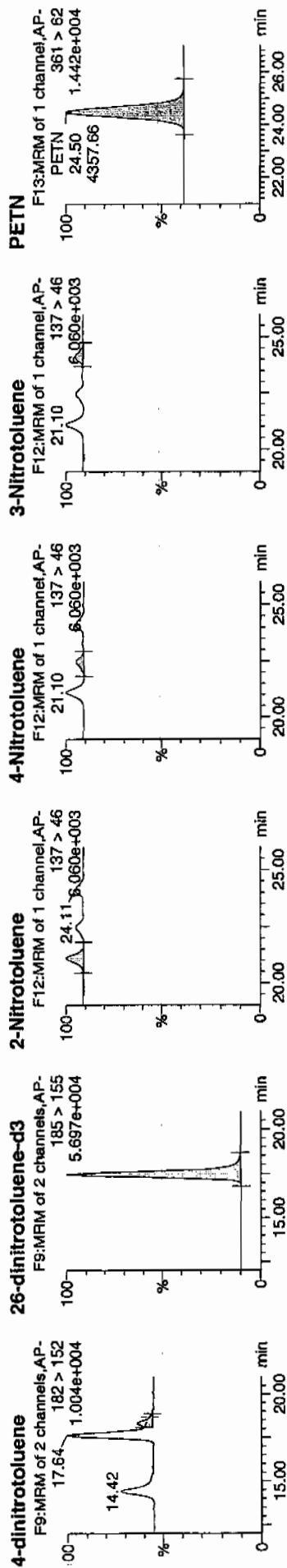
File: WXX100208-08CRI

Label: 1:1,C

2/11/10



Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010



Name	Trace	RT	Area	IS Area	Abn Resp	Response	Flags	Mod Date	Mod Time	Area	Mod	SN
/XX100208-08CRI	HMX	176 > 102	5.19	969.325	3096.302	969.325	156.529	bb	45.0729	112.7	12.7	123.6
/XX100208-08CRI	RDX	176 > 102	7.59	584.042	3096.302	584.042	94.313	bb	38.8415	97.1	-2.9	66.7
/XX100208-08CRI	135-Trinitrobenzene	213 > 183	10.18	1237.129	3096.302	1237.129	199.775	bb	54.2417	135.6	35.6	118.4
/XX100208-08CRI	13-Dinitrobenzene-d4	172 > 142	12.07	3096.302	3096.302	3096.302	3096.302	bb	481.6038	96.3	-3.7	264.7
/XX100208-08CRI	13-Dinitrobenzene	168 > 138	12.24	317.146	3096.302	317.146	51.214	bb	42.5930	106.5	6.5	61.6
/XX100208-08CRI	Tetryl	241 > 181	12.68	325.616	3096.302	325.616	52.581	bb	46.5480	116.4	16.4	51.6
/XX100208-08CRI	Nitrobenzene	123 > 46	13.62	226.274	3096.302	226.274	36.539	bb	45.2349	113.1	13.1	18.5
/XX100208-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.70	473.189	20666.025	473.189	11.448	MM	39.8561	99.6	-0.4	30.6
/XX100208-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.60	658.648	20666.025	658.648	15.936	bb	40.2381	100.6	0.6	63.8
/XX100208-08CRI	246-Trinitrotoluene	227 > 210	15.44	527.022	20666.025	527.022	12.751	bb	39.5178	98.8	-1.2	64.8
/XX100208-08CRI	34-dinitrotoluene	182 > 152	14.42	871.385	20666.025	871.385	21.083	bb	23.4253	117.1	17.1	39.2
/XX100208-08CRI	26-dinitrotoluene	182 > 152	17.64	1742.586	20666.025	1742.586	42.161	MM	39.2525	98.1	-1.9	102.8
/XX100208-08CRI	24-dinitrotoluene	182 > 152	18.29	344.484	20666.025	344.484	8.335	MM	34.1508	85.4	-14.6	18.6
/XX100208-08CRI	26-dinitrotoluene-d3	185 > 155	17.46	20666.025	20666.025	20666.025	20666.025	bb	559.7612	112.0	12.0	1670.7
/XX100208-08CRI	2-Nitrotoluene	137 > 46	21.10	235.119	20666.025	235.119	5.689	bb	36.6888	91.7	-8.3	23.5
/XX100208-08CRI	4-Nitrotoluene	137 > 46	22.46	116.410	20666.025	116.410	2.816	bb	37.0574	92.6	-7.4	10.4
/XX100208-08CRI	3-Nitrotoluene	137 > 46	24.11	114.724	20666.025	114.724	2.776	bb	29.7910	74.5	-25.5	10.6
/XX100208-08CRI	PETN	361 > 82	24.50	4357.663	20666.025	4357.663	105.431	bb	55.2320	138.1	38.1	1085.8

GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/11/10
 Time of Injection 0215
 Standard Number WXX100208-08CRI
 Data File EXP0208122a

HMX	112.7
RDX	97.1
135-TNB	135.6
13-DNB	106.5
Tetryl	116.4
Nitrobenzene	113.1
4A-26-DNT	99.6
2A-46-DNT	100.6
246-TNT	98.8
34-DNT(surr)	117.1
26-DNT	98.1
24-DNT	85.4
2-NT	91.7
4-NT	92.6
3-NT	74.5
PETN	138.1

Handwritten: 117.1
2/11/10

Total 1677.9

Average 104.9

Handwritten: Average 104.9

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): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0208133a

Analysis Date: 11-FEB-10 07:39

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	561.952	94	
1,3-Dinitrobenzene-d4	500	523.69	105	
2,4,6-Trinitrotoluene	600	625.562	104	
2,4-Dinitrotoluene	600	646.957	108	
2,6-Dinitrotoluene	600	613.147	102	
2,6-Dinitrotoluene-d3	500	492.682	99	
2-Amino-4,6-dinitrotoluene	600	615.832	103	
3,4-Dinitrotoluene	300	315.478	105	
4-Amino-2,6-dinitrotoluene	600	605.241	101	
HMX	600	599.884	100	
Nitrobenzene	600	602.444	100	
PETN	600	821.24	137	*
RDX	600	656.741	109	
Tetryl	600	623.813	104	
m-Dinitrobenzene	600	590.781	98	
m-Nitrotoluene	600	582.434	97	
o-Nitrotoluene	600	639.153	107	
p-Nitrotoluene	600	652.124	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\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208133a

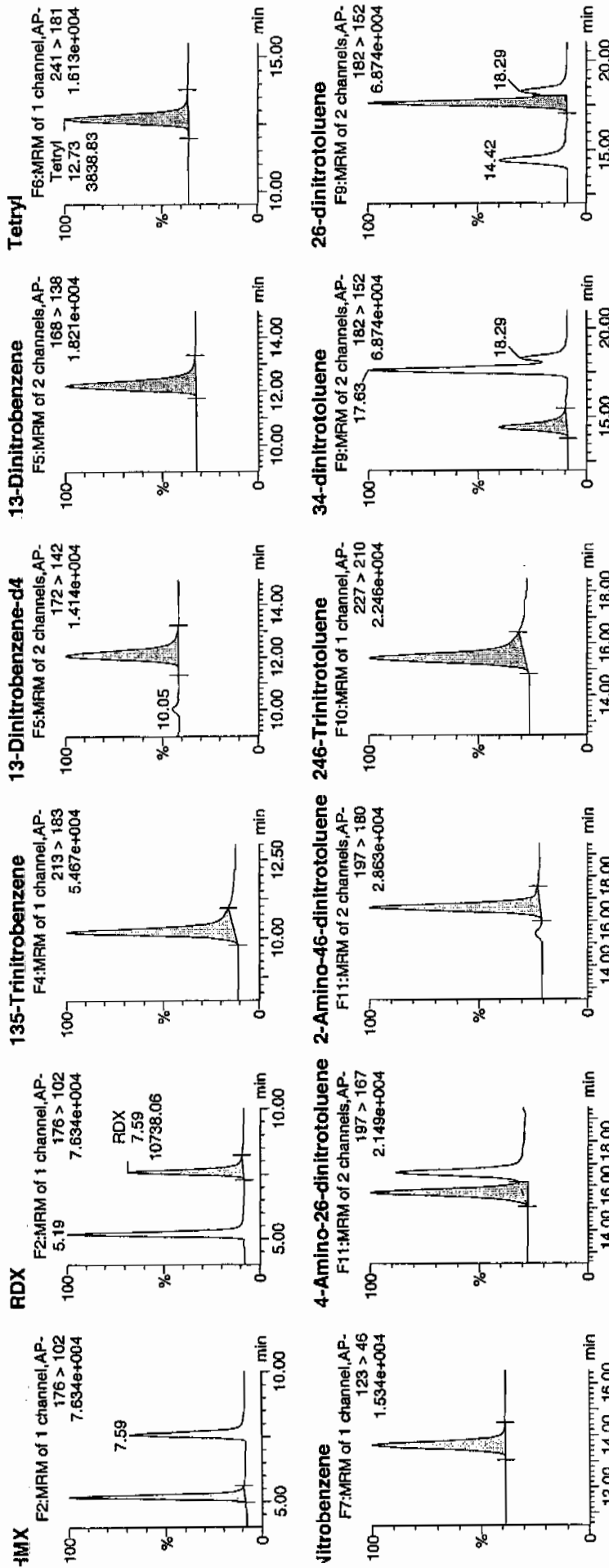
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Time: 07:39:41

D: WXX100208-07CCV

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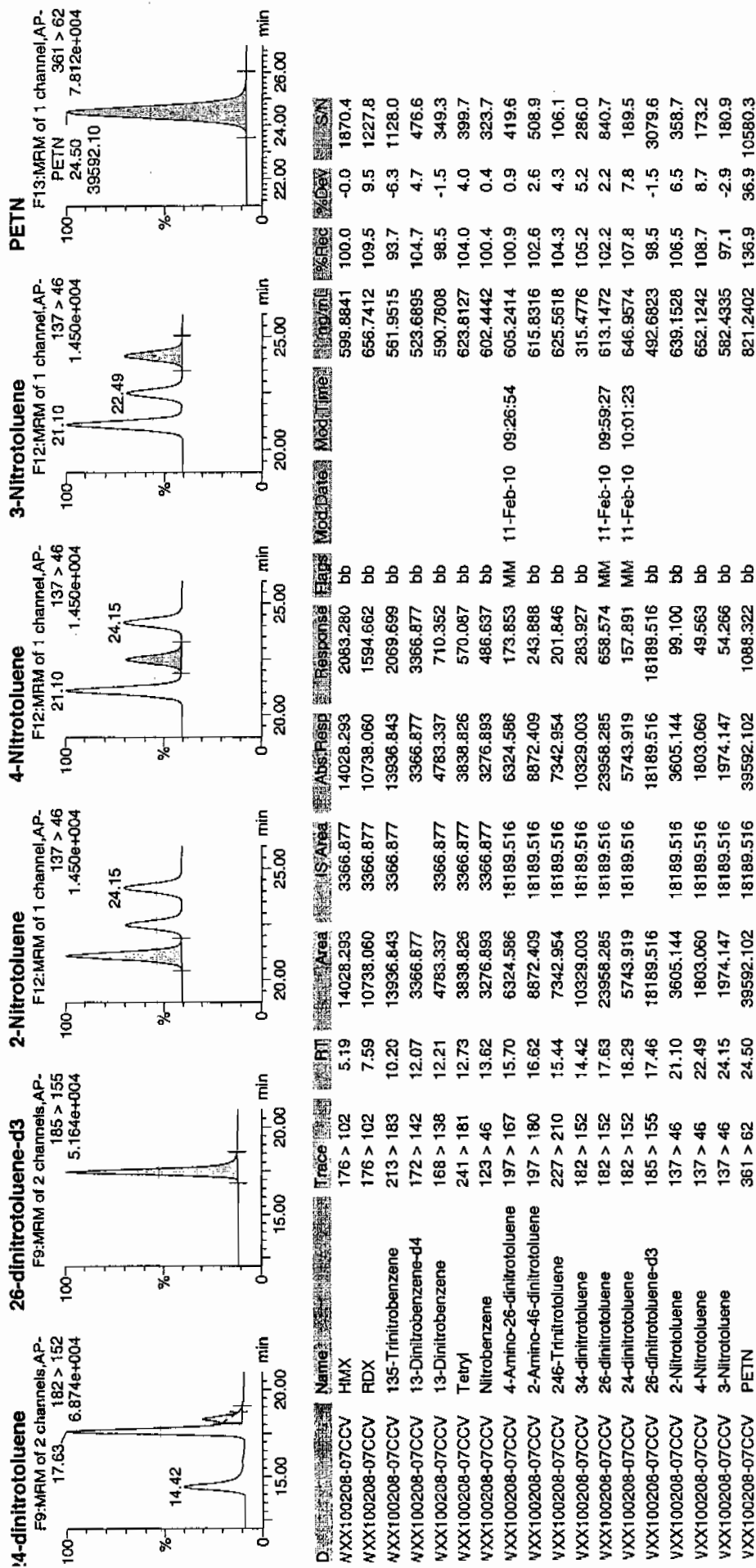
WAT
2/11/10



WAT
2/11/10

Quantify Sample Report
 3EL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYN\New_Exp\PRO\020810expA2.qtd, Time: Thu Feb 11 10:06:10 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/11/10
 Time of Injection: 0739
 Standard Number: WXX100208-07CCV
 Data File: EXP0208133a

HMX	100.0
RDX	109.5
135-TNB	93.7
13-DNB	98.5
Tetryl	104.0
Nitrobenzene	100.4
4A-26-DNT	100.9
2A-46-DNT	102.6
246-TNT	104.3
34-DNT(surr)	105.2
26-DNT	102.2
24-DNT	107.8
2-NT	106.5
4-NT	108.7
3-NT	97.1
PETN	136.9

*WTT
2/11/10*

Total 1678.3

Average 104.9

HMM-02 1/11/10

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): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0208135a

Analysis Date: 11-FEB-10 08:38

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	53.251	133	*
1,3-Dinitrobenzene-d4	500	496.238	99	
2,4,6-Trinitrotoluene	40	32.077	80	
2,4-Dinitrotoluene	40	41.206	103	
2,6-Dinitrotoluene	40	39.051	98	
2,6-Dinitrotoluene-d3	500	591.836	118	
2-Amino-4,6-dinitrotoluene	40	38.537	96	
3,4-Dinitrotoluene	20	20.304	102	
4-Amino-2,6-dinitrotoluene	40	41.968	105	
HMX	40	48.07	120	
Nitrobenzene	40	41.966	105	
PETN	40	55.176	138	*
RDX	40	47.02	118	
Tetryl	40	49.996	125	
m-Dinitrobenzene	40	42.077	105	
m-Nitrotoluene	40	34.831	87	
o-Nitrotoluene	40	41.028	103	
p-Nitrotoluene	40	39.414	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

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

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010

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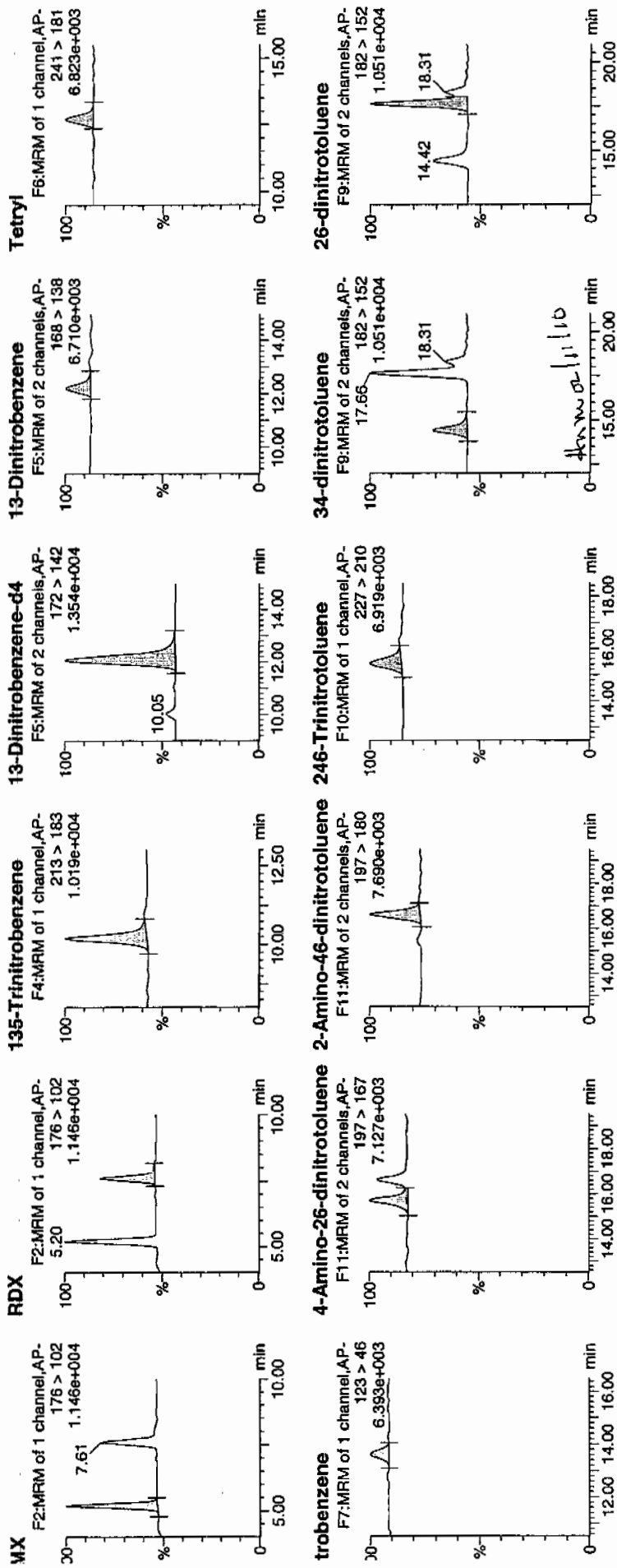
ate: 11-Feb-2010

me: 08:38:44

: WXX100208-08CRI

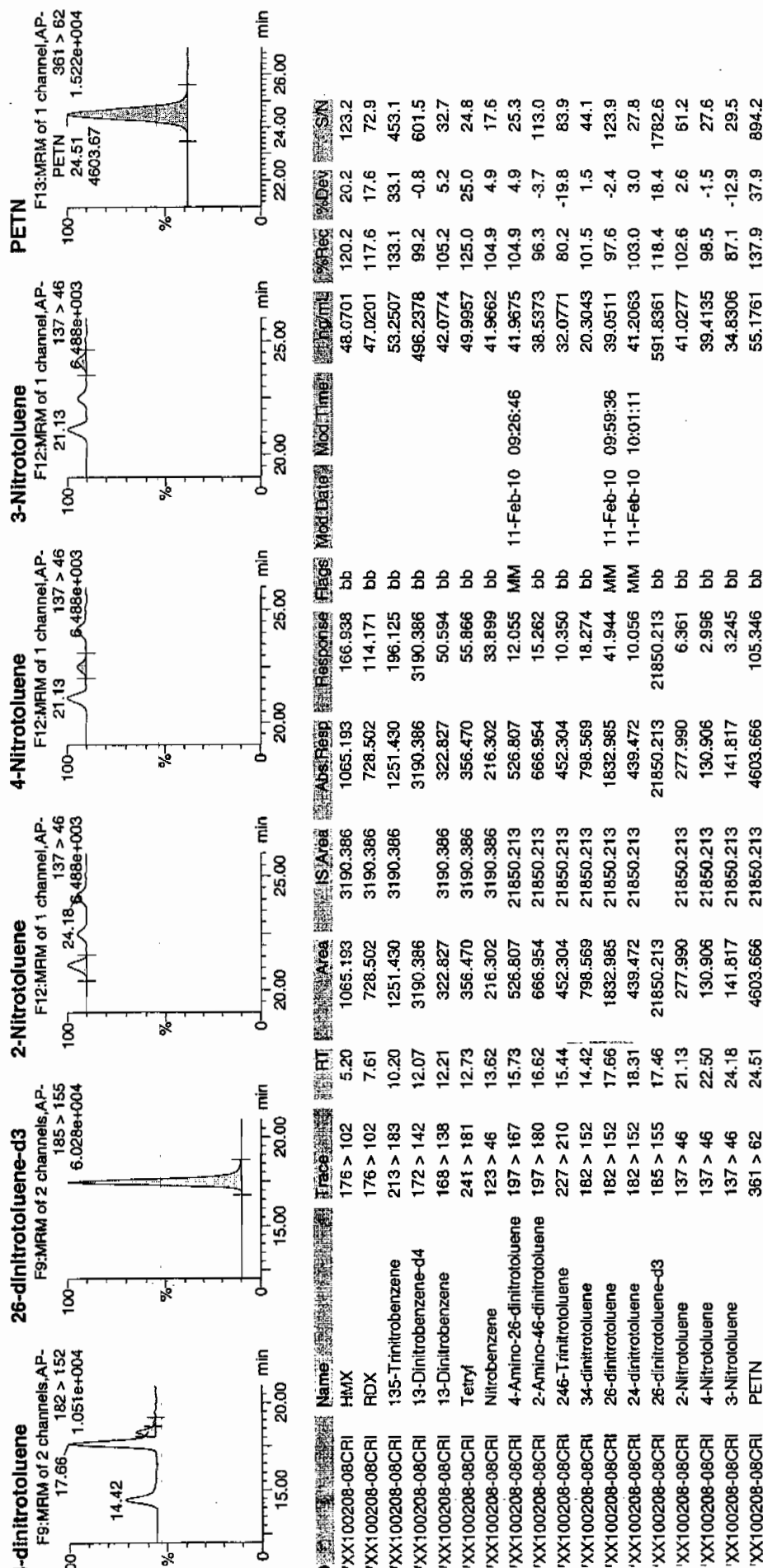
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2/11/10



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

atset: C:\MASSLYNX\New_Exp.PRO\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/11/10
 Time of Injection 0838
 Standard Number WXX100208-08CRI
 Data File EXP0208135a

HMX	120.2
RDX	117.6
135-TNB	133.1
13-DNB	105.2
Tetryl	125.0
Nitrobenzene	104.9
4A-26-DNT	104.9
2A-46-DNT	96.3
246-TNT	80.2
34-DNT(surr)	101.5
26-DNT	97.6
24-DNT	103.0
2-NT	102.6
4-NT	98.5
3-NT	87.1
PETN	137.9

*WPP
2/11/10*

Total 1715.6

Average 107.2

H711K 02/11/10

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): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0208145a

Analysis Date: 11-FEB-10 13:34

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
3,4-Dinitrotoluene	300	324.255	108	
4-Amino-2,6-dinitrotoluene	600	603.46	101	
HMX	600	583.237	97	
Nitrobenzene	600	623.611	104	
PETN	600	723.874	121	*
RDX	600	637.14	106	
Tetryl	600	617.261	103	
m-Dinitrobenzene	600	611.284	102	
m-Nitrotoluene	600	566.246	94	
o-Nitrotoluene	600	608.792	101	
p-Nitrotoluene	600	612.602	102	
1,3,5-Trinitrobenzene	600	559.95	93	
1,3-Dinitrobenzene-d4	500	507.071	101	
2,4,6-Trinitrotoluene	600	636.938	106	
2,4-Dinitrotoluene	600	643.853	107	
2,6-Dinitrotoluene	600	629.897	105	
2,6-Dinitrotoluene-d3	500	498.486	100	
2-Amino-4,6-dinitrotoluene	600	648.791	108	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Printed: Fri Feb 12 08:13:51 2010, Page 19 of 93

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

Dataset: C:\MASSLYNX\New_Exp_PRO\020810expA3.qld, Time: Fri Feb 12 08:08:48 2010

Filename: C:\MASSLYNX\NEW_EXP_PRO\Data\EXP0208145a

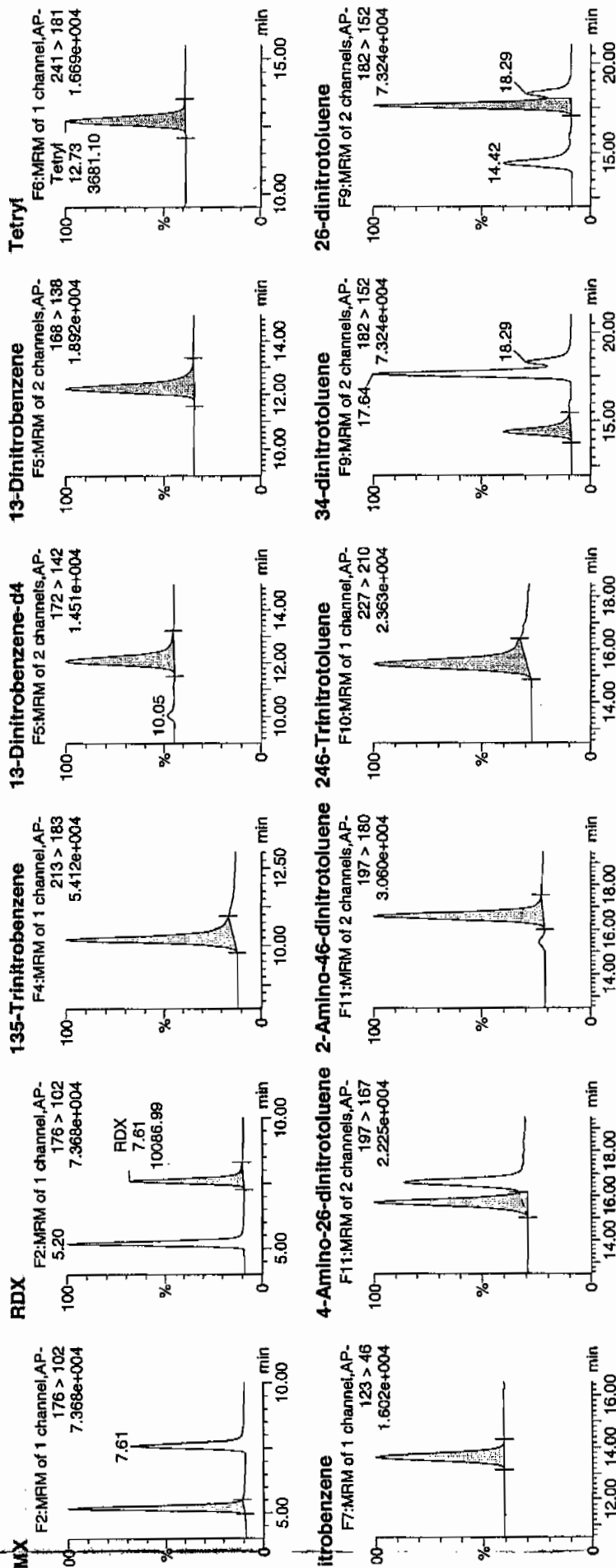
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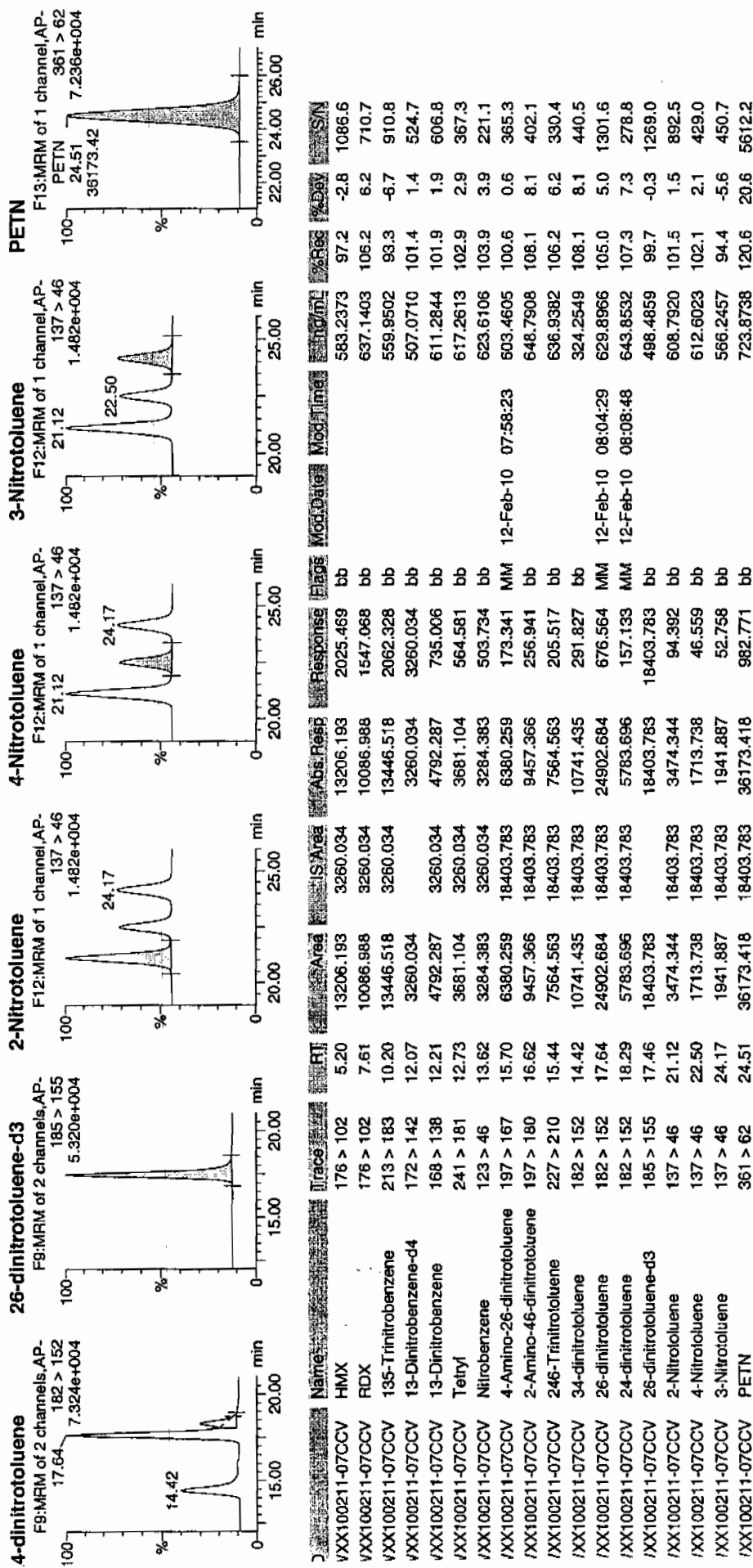
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Label: 1:1,B

2/12/10



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GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/11/10
 Time of Injection: 1334
 Standard Number: WXX100211-07CCV
 Data File: EXP0208145a

HMX	97.2
RDX	106.2
135-TNB	93.3
13-DNB	101.9
Tetryl	102.9
Nitrobenzene	103.9
4A-26-DNT	100.6
2A-46-DNT	108.1
246-TNT	106.2
34-DNT(surr)	108.1
26-DNT	105.0
24-DNT	107.3
2-NT	101.5
4-NT	102.1
3-NT	94.4
PETN	120.6

WTT
2/12/10

Total 1659.3

Average 103.7

Time 02/12/10

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): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0208147a

Analysis Date: 11-FEB-10 14:33

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
2,4-Dinitrotoluene	40	33.223	83	
2,6-Dinitrotoluene	40	40.948	102	
2,6-Dinitrotoluene-d3	500	573.135	115	
2-Amino-4,6-dinitrotoluene	40	40.905	102	
3,4-Dinitrotoluene	20	16.725	84	
4-Amino-2,6-dinitrotoluene	40	42.799	107	
HMX	40	40.54	101	
Nitrobenzene	40	39.412	99	
PETN	40	46.221	116	
RDX	40	36.181	90	
Tetryl	40	36.32	91	
m-Dinitrobenzene	40	41.498	104	
m-Nitrotoluene	40	36.824	92	
o-Nitrotoluene	40	43.119	108	
p-Nitrotoluene	40	43.135	108	
1,3,5-Trinitrobenzene	40	49.729	124	
1,3-Dinitrobenzene-d4	500	516.222	103	
2,4,6-Trinitrotoluene	40	38.92	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 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Printed: Fri Feb 12 08:13:51 2010, Page 23 of 93

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

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA3.qld, Time: Fri Feb 12 08:08:48 2010

Sample Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208147a

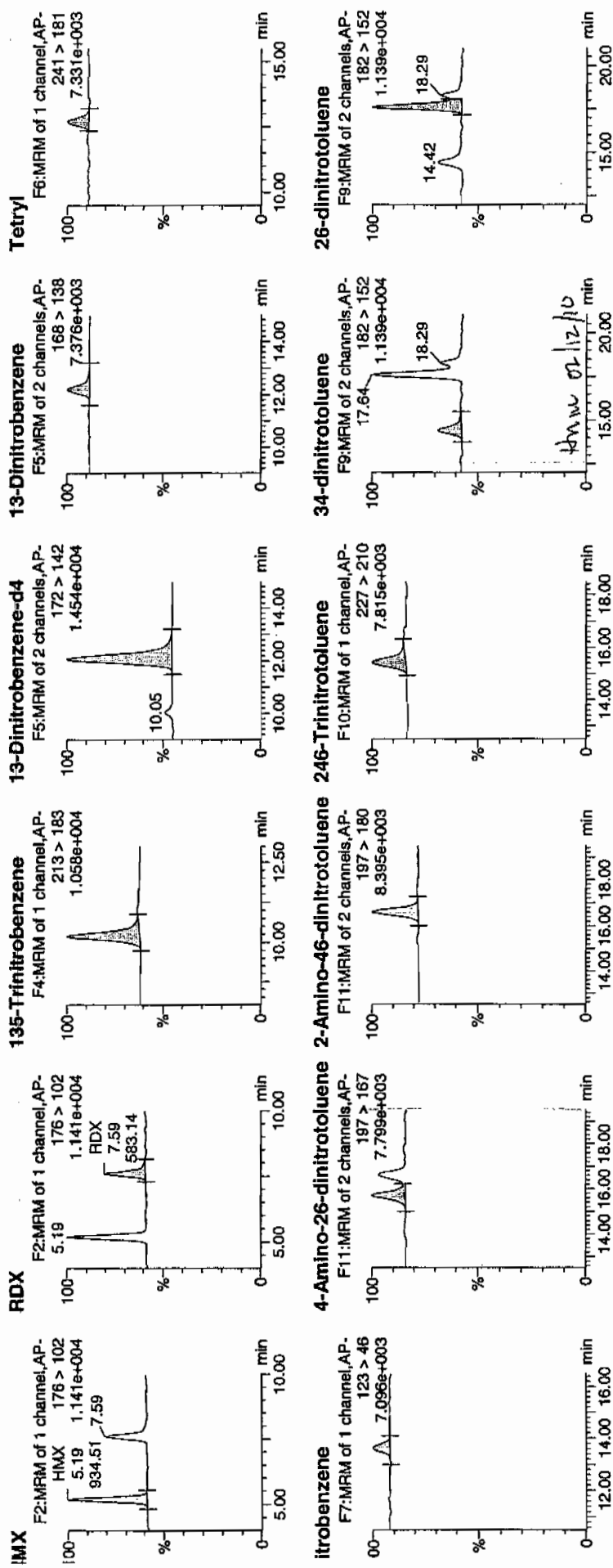
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Time: 14:33:07

Job: WXX100211-08CRI

Injection: 1:1,C

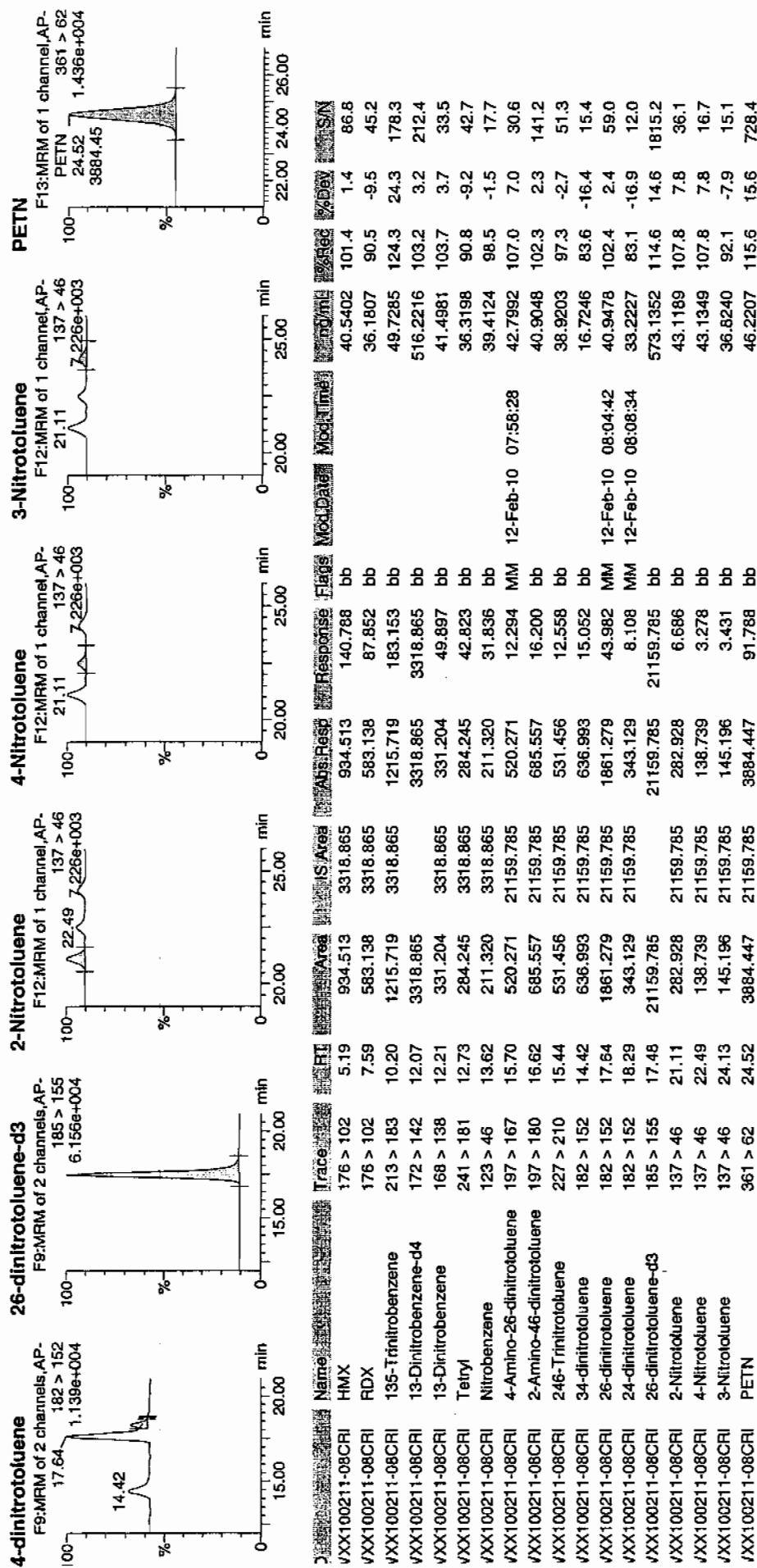
2/12/10



Printed: Fri Feb 12 08:13:51 2010, Page 24 of 93

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

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA3.qld, Time: Fri Feb 12 08:08:48 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/11/10
 Time of Injection 1433
 Standard Number WXX100211-08CRI
 Data File EXP0208147a

HMX	101.4
RDX	90.5
135-TNB	124.3
13-DNB	103.7
Tetryl	90.8
Nitrobenzene	98.5
4A-26-DNT	107.0
2A-46-DNT	102.3
246-TNT	97.3
34-DNT(surr)	83.6
26-DNT	102.4
24-DNT	83.1
2-NT	107.8
4-NT	107.8
3-NT	92.1
PETN	115.6
Total	1608.2

Handwritten: 100.5
2/11/10

Average

100.5

Handwritten: Hm on 11/10

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): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0208155a

Analysis Date: 11-FEB-10 18:29

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
p-Nitrotoluene	600	642.036	107	
1,3,5-Trinitrobenzene	600	584.955	97	
1,3-Dinitrobenzene-d4	500	537.834	108	
2,4,6-Trinitrotoluene	600	672.091	112	
2,4-Dinitrotoluene	600	651.546	109	
2,6-Dinitrotoluene	600	630.785	105	
2,6-Dinitrotoluene-d3	500	539.361	108	
2-Amino-4,6-dinitrotoluene	600	714.872	119	
3,4-Dinitrotoluene	300	341.269	114	
4-Amino-2,6-dinitrotoluene	600	641.093	107	
HMX	600	758.397	126	*
Nitrobenzene	600	633.981	106	
PETN	600	627.004	105	
RDX	600	775.743	129	*
Tetryl	600	659.589	110	
m-Dinitrobenzene	600	643.098	107	
m-Nitrotoluene	600	479.616	80	*
o-Nitrotoluene	600	649.003	108	

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\PRO1020810expA3.qld, Time: Fri Feb 12 08:08:48 2010

Sample Name: C:\MASSLYNX\NEW_EXP\PRO1020810expA3.qld

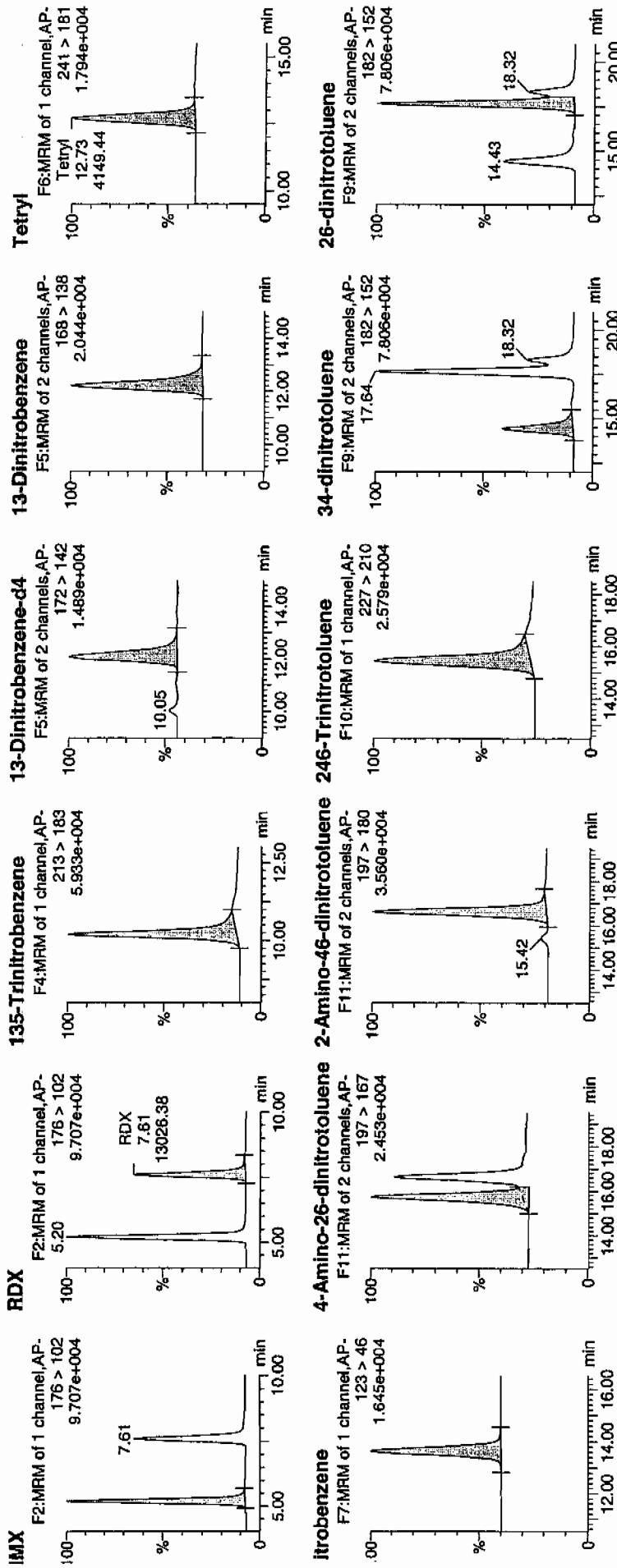
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Time: 18:29:30

Job: WXX100211-07CCV

File: 1:1.B

AP
2/12/10



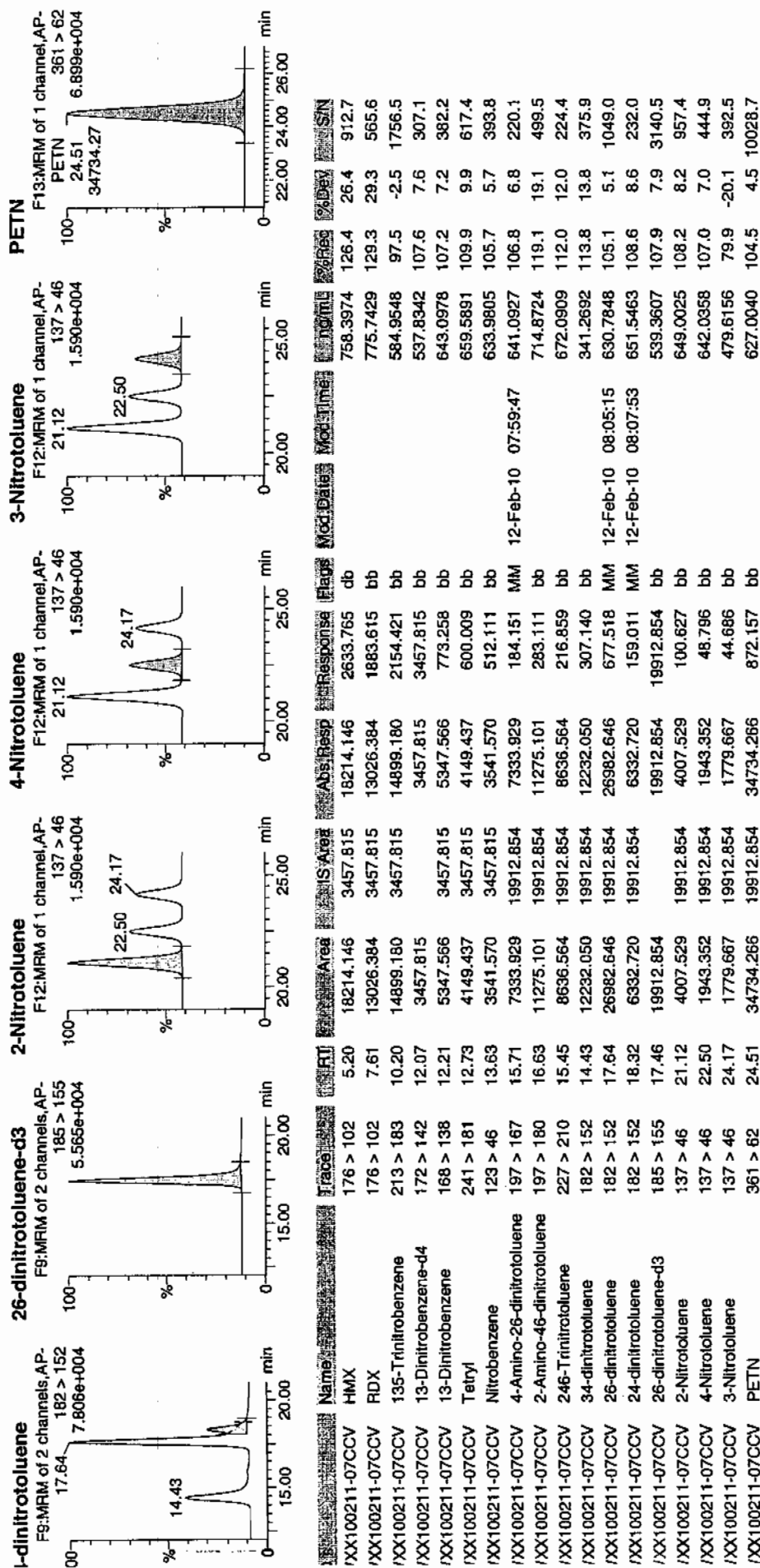
AP
2/12/10

Identify Sample Report

EL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Fri Feb 12 08:13:51 2010, Page 40 of 93

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA3.qld, Time: Fri Feb 12 08:08:48 2010



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

GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/11/10
 Time of Injection: 1829
 Standard Number: WXX100211-07CCV
 Data File: EXP0208155a

HMX	126.4
RDX	129.3
135-TNB	97.5
13-DNB	107.2
Tetryl	109.9
Nitrobenzene	105.7
4A-26-DNT	106.8
2A-46-DNT	119.1
246-TNT	112.0
34-DNT(surr)	113.8
26-DNT	105.1
24-DNT	108.6
2-NT	108.2
4-NT	107.0
3-NT	79.9
PETN	104.5

*not
2/11/10*

Total 1741.0

Average 108.8

from 02/12/10

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): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0208157a

Analysis Date: 11-FEB-10 19:28

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
m-Nitrotoluene	40	47.307	118	
o-Nitrotoluene	40	45.523	114	
p-Nitrotoluene	40	40.92	102	
m-Dinitrobenzene	40	35.416	89	
1,3,5-Trinitrobenzene	40	47.938	120	
1,3-Dinitrobenzene-d4	500	474.289	95	
2,4,6-Trinitrotoluene	40	45.464	114	
2,4-Dinitrotoluene	40	32.491	81	
2,6-Dinitrotoluene	40	37.857	95	
2,6-Dinitrotoluene-d3	500	465.184	93	
2-Amino-4,6-dinitrotoluene	40	40.427	101	
3,4-Dinitrotoluene	20	22.689	113	
4-Amino-2,6-dinitrotoluene	40	32.487	81	
HMX	40	40.09	100	
Nitrobenzene	40	44.282	111	
PETN	40	48.308	121	
RDX	40	38.585	96	
Tetryl	40	36.534	91	

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

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

Dataset: C:\MASSLYNX\New_Exp_PRO\020810expA3.qld, Time: Fri Feb 12 08:08:48 2010

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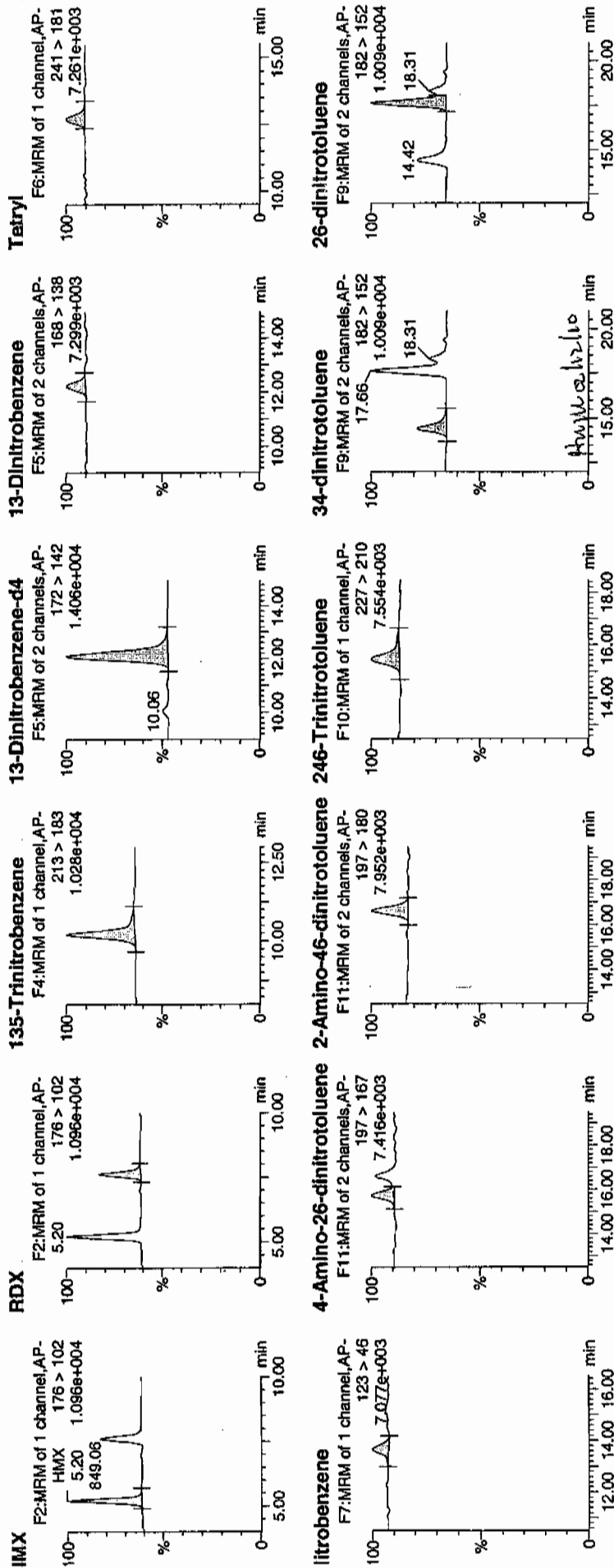
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ime: 19:28:28

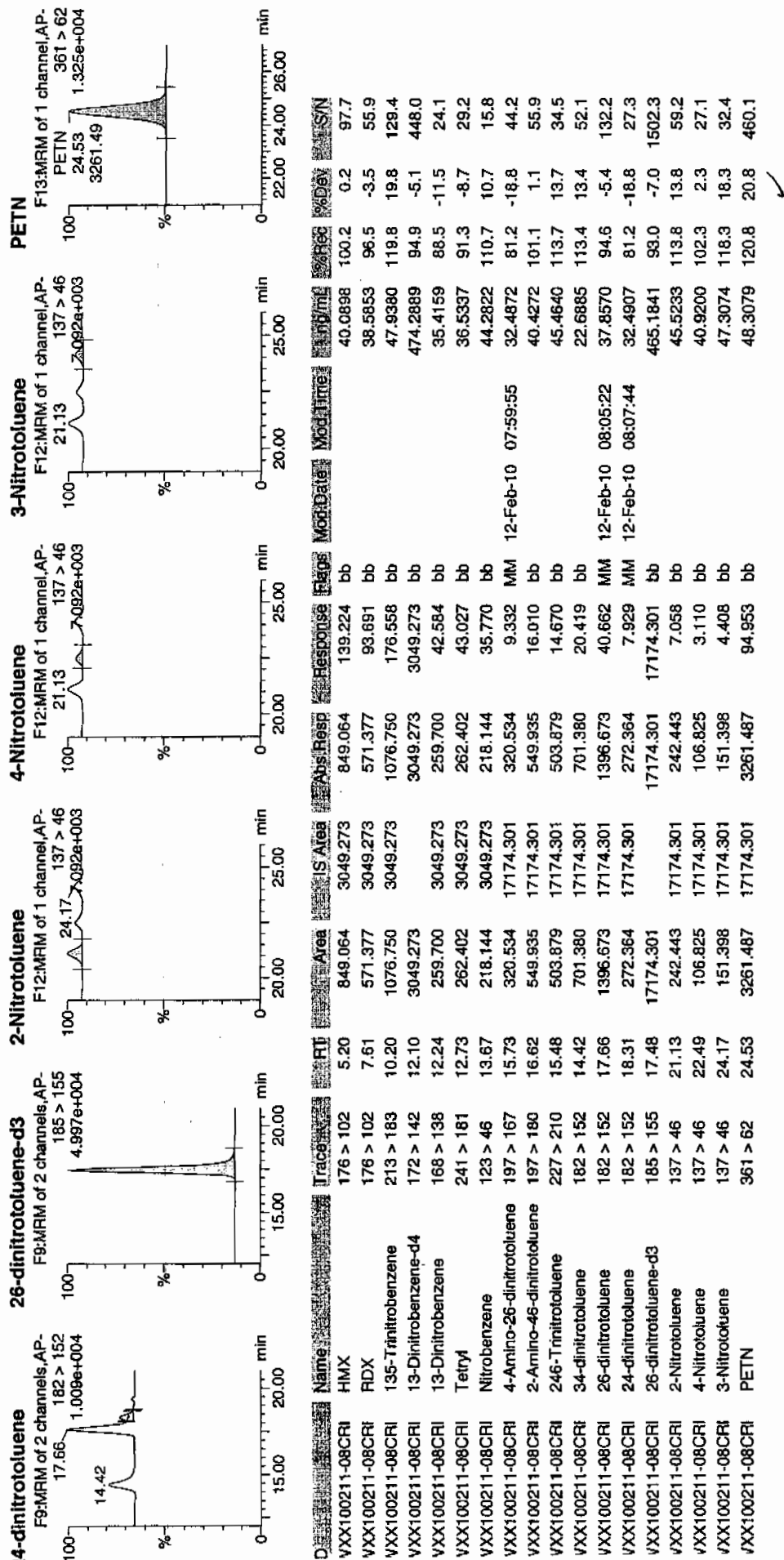
J: WXX100211-08CRI

ial: 1:1,C

WAT
2/12/10



Dataset: C:\MASSLYNX\New_Exp\PRO\020810expA3.qld, Time: Fri Feb 12 08:08:48 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/11/10
 Time of Injection 1928
 Standard Number WXX100211-08CRI
 Data File EXP0208157a

HMX	100.2
RDX	96.5
135-TNB	119.8
13-DNB	88.5
Tetryl	91.3
Nitrobenzene	110.7
4A-26-DNT	81.2
2A-46-DNT	101.1
246-TNT	113.7
34-DNT(surr)	113.4
26-DNT	94.6
24-DNT	81.2
2-NT	113.8
4-NT	102.3
3-NT	118.3
PETN	120.8

*MTT
2/12/10*

Total 1647.4
 Average 103.0

MTT 02/12/10

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): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0208168a

Analysis Date: 12-FEB-10 00:52

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	649.814	108	
1,3-Dinitrobenzene-d4	500	363.136	73	*
2,4,6-Trinitrotoluene	600	704.394	117	
2,4-Dinitrotoluene	600	605.971	101	
2,6-Dinitrotoluene	600	613.961	102	
2,6-Dinitrotoluene-d3	500	365.062	73	*
2-Amino-4,6-dinitrotoluene	600	635.413	106	
3,4-Dinitrotoluene	300	319.507	107	
4-Amino-2,6-dinitrotoluene	600	605.937	101	
HMX	600	616.353	103	
Nitrobenzene	600	690.95	115	
PETN	600	937.241	156	*
RDX	600	667.229	111	
Tetryl	600	719.32	120	
m-Dinitrobenzene	600	637.964	106	
m-Nitrotoluene	600	612.02	102	
o-Nitrotoluene	600	573.693	96	
p-Nitrotoluene	600	575.749	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 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Printed: Fri Feb 12 08:13:51 2010, Page 65 of 93

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

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA3.qld, Time: Fri Feb 12 08:08:48 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208168a

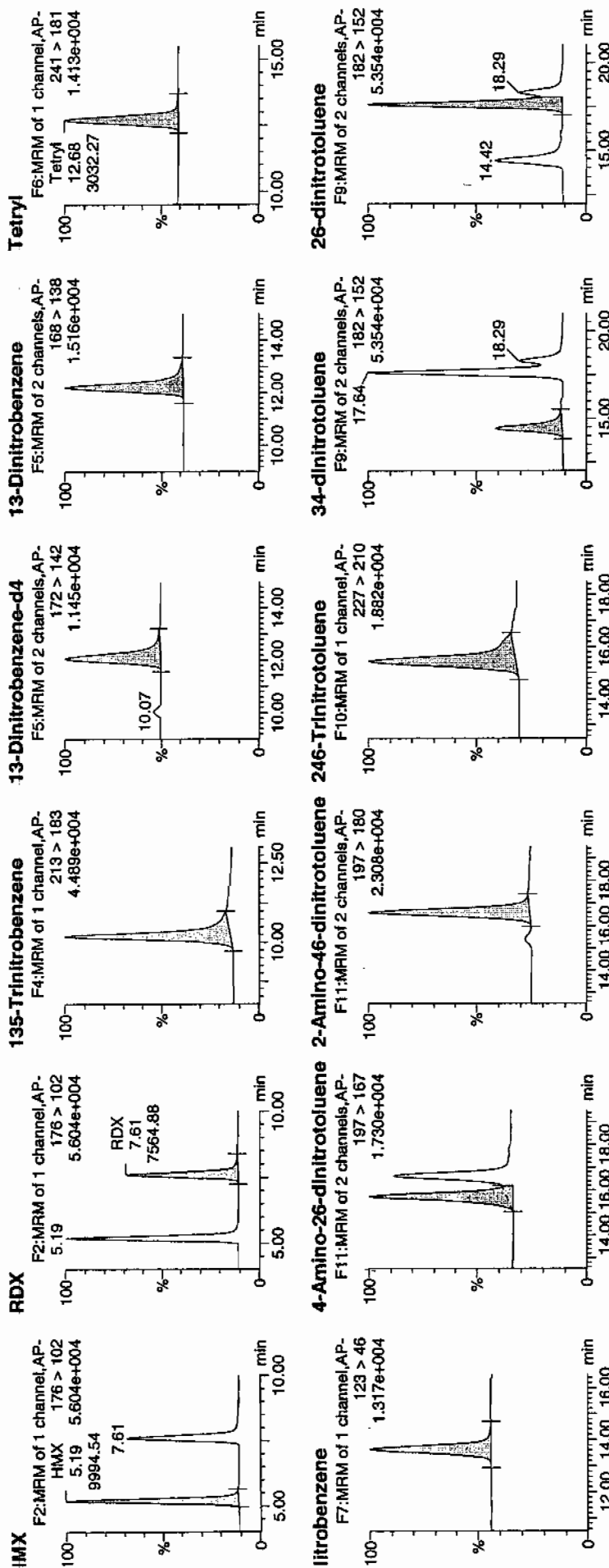
Date: 12-Feb-2010

Time: 00:52:53

Op: WXX100211-07CCV

Label: 1:1,B

WXX
2/12/10



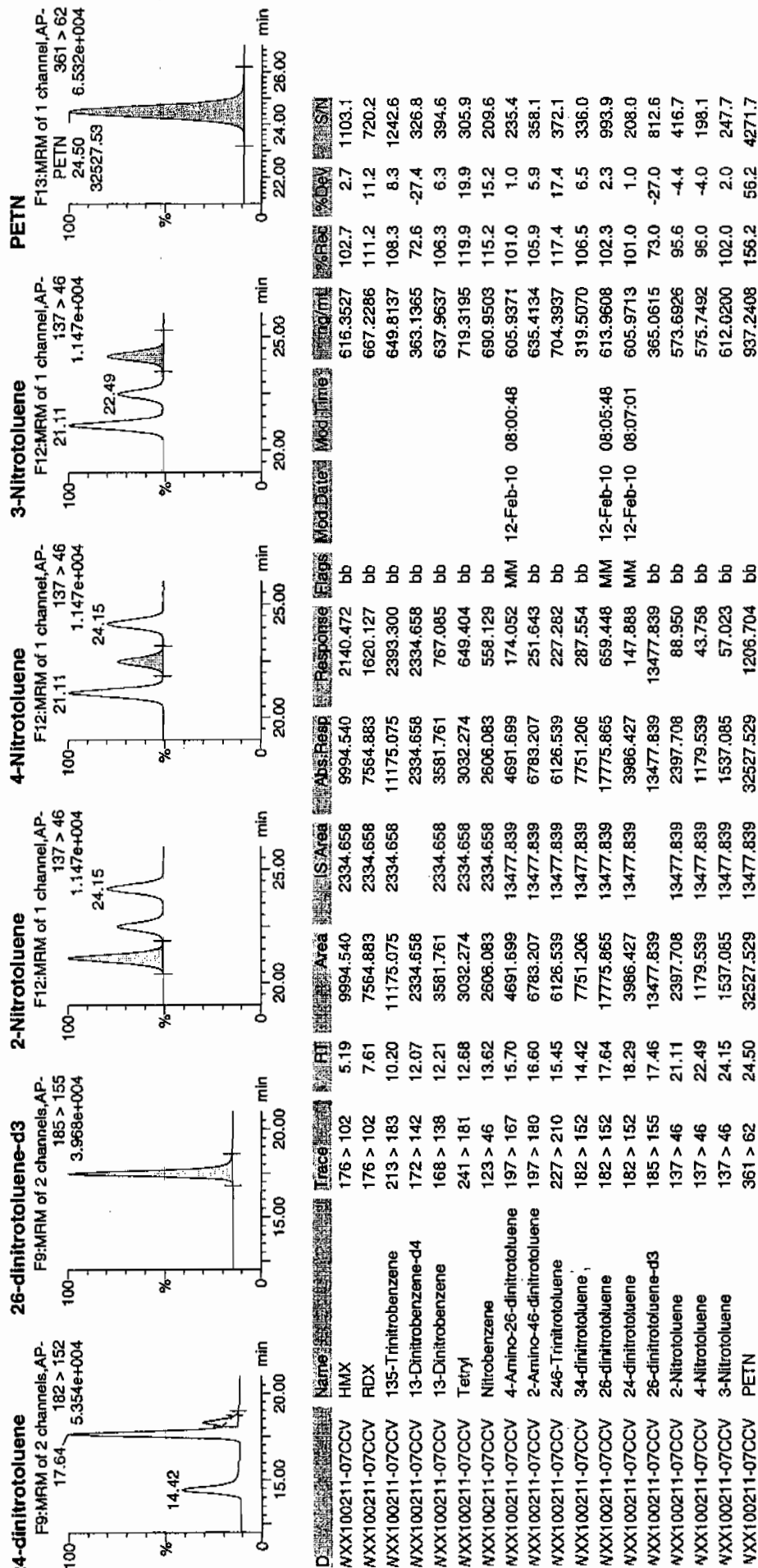
WXX
2/12/10

Quantify Sample Report

SEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Fri Feb 12 08:13:51 2010, Page 66 of 93

Dataset: C:\MASSLYNX\New_Exp\PRO020810expA3.qld, Time: Fri Feb 12 08:08:48 2010



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

GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/12/10
 Time of Injection: 0052
 Standard Number: WXX100211-07CCV
 Data File: EXP0208168a

HMX	102.7
RDX	111.2
135-TNB	108.3
13-DNB	106.3
Tetryl	119.9
Nitrobenzene	115.2
4A-26-DNT	101.0
2A-46-DNT	105.9
246-TNT	117.4
34-DNT(surr)	106.5
26-DNT	102.3
24-DNT	101.0
2-NT	95.6
4-NT	96.0
3-NT	102.0
PETN	156.2

Handwritten:
 HMT
 2/12/10

Total 1747.5

Average 109.2

Handwritten: HMT 02/12/10

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): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0208170a

Analysis Date: 12-FEB-10 01:51

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	54.58	136	*
1,3-Dinitrobenzene-d4	500	414.79	83	
2,4,6-Trinitrotoluene	40	31.941	80	
2,4-Dinitrotoluene	40	36.526	91	
2,6-Dinitrotoluene	40	39.901	100	
2,6-Dinitrotoluene-d3	500	419.808	84	
2-Amino-4,6-dinitrotoluene	40	41.208	103	
3,4-Dinitrotoluene	20	18.972	95	
4-Amino-2,6-dinitrotoluene	40	36.002	90	
HMX	40	41.297	103	
Nitrobenzene	40	42.737	107	
PETN	40	58.979	147	*
RDX	40	33.84	85	
Tetryl	40	41.479	104	
m-Dinitrobenzene	40	37.812	95	
m-Nitrotoluene	40	36.746	92	
o-Nitrotoluene	40	42.552	106	
p-Nitrotoluene	40	43.248	108	

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
iEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA3.qld, Time: Fri Feb 12 08:08:48 2010

Sample Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208170a

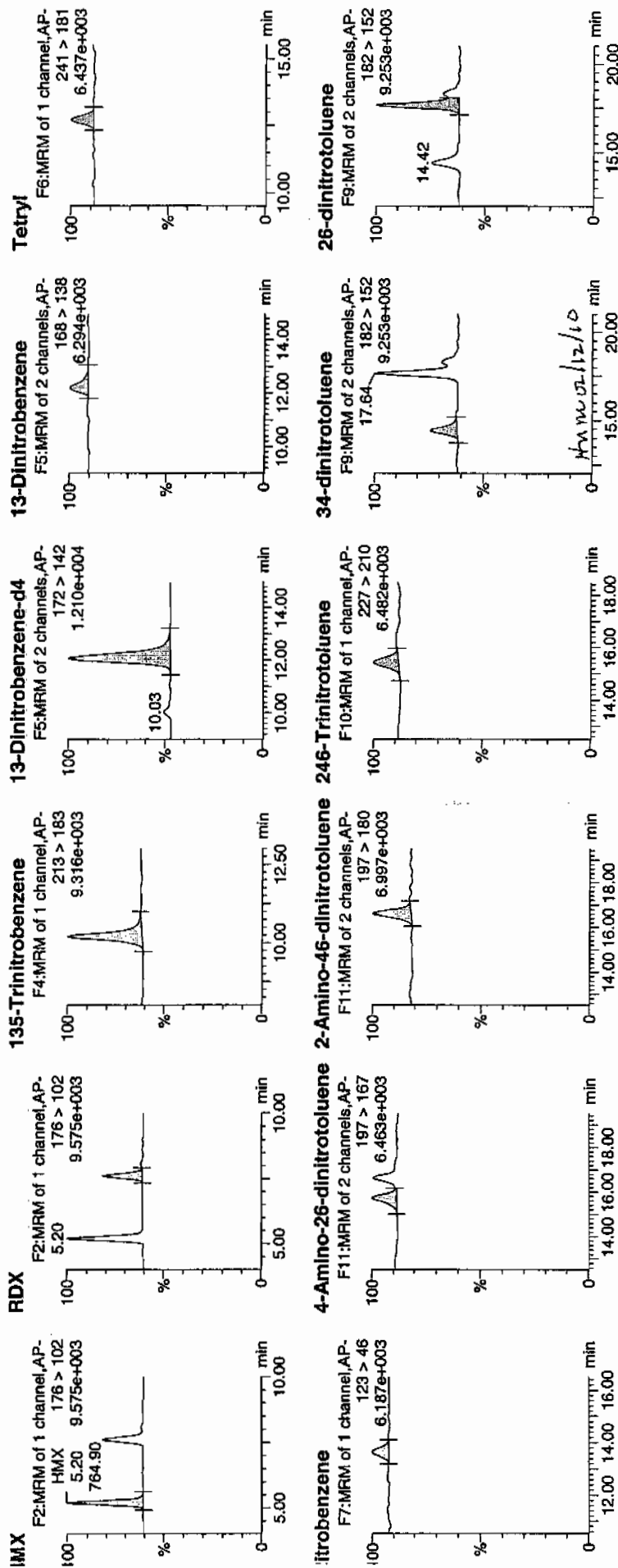
Date: 12-Feb-2010

Time: 01:51:53

Job: WXX100211-08CRI

File: 1:1,C

2/12/10

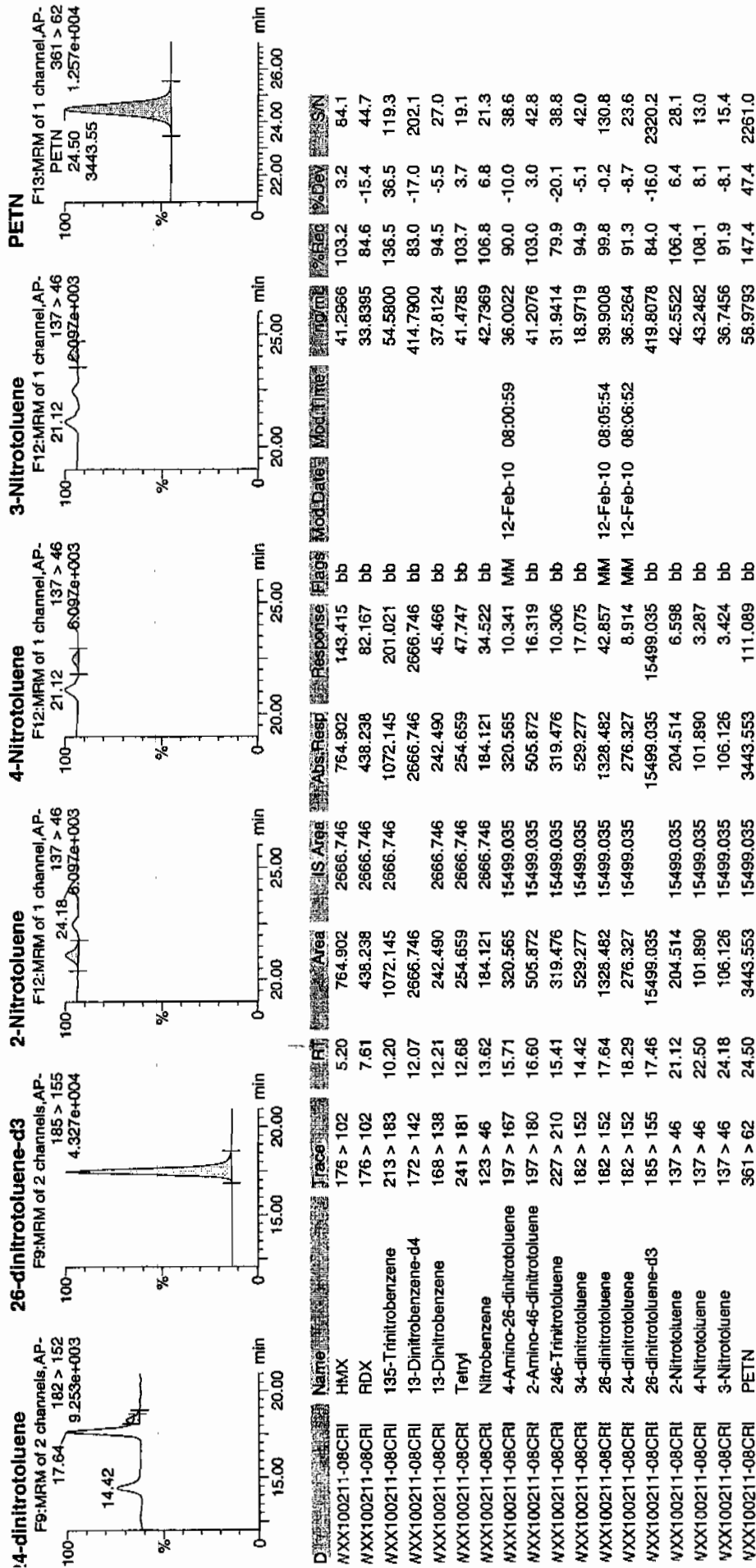


Quantify Sample Report

JEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Fri Feb 12 08:13:51 2010, Page 70 of 93

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA3.qld, Time: Fri Feb 12 08:08:48 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/12/10
 Time of Injection 0151
 Standard Number WXX100211-08CRI
 Data File EXP0208170a

HMX	103.2
RDX	84.6
135-TNB	136.5
13-DNB	94.5
Tetryl	103.7
Nitrobenzene	106.8
4A-26-DNT	90.0
2A-46-DNT	103.0
246-TNT	79.9
34-DNT(surr)	94.9
26-DNT	99.8
24-DNT	91.3
2-NT	106.4
4-NT	108.1
3-NT	91.9
PETN	147.4

*NOT
2/2/10*

Total 1642.0

Sum of 1x10

Average 102.6

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): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0208179a

Analysis Date: 12-FEB-10 06:17

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
HMX	600	534.328	89	
Nitrobenzene	600	626.915	104	
PETN	600	774.197	129	*
RDX	600	606.847	101	
Tetryl	600	700.204	117	
m-Dinitrobenzene	600	629.509	105	
m-Nitrotoluene	600	504.3	84	
o-Nitrotoluene	600	541.966	90	
p-Nitrotoluene	600	543.447	91	
1,3,5-Trinitrobenzene	600	587.089	98	
1,3-Dinitrobenzene-d4	500	399.529	80	*
2,4,6-Trinitrotoluene	600	750.342	125	*
2,4-Dinitrotoluene	600	599.438	100	
2,6-Dinitrotoluene	600	606.259	101	
2,6-Dinitrotoluene-d3	500	413.212	83	
2-Amino-4,6-dinitrotoluene	600	595.295	99	
3,4-Dinitrotoluene	300	330.75	110	
4-Amino-2,6-dinitrotoluene	600	578.418	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 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

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

Printed: Fri Feb 12 08:13:51 2010, Page 87 of 93

Dataset: C:\MASSLYNX\New_Exp\PRO\020810expA3.qld, Time: Fri Feb 12 08:08:48 2010

Sample Name: C:\MASSLYNX\NEW_EXP\PRO\Data\EXP0208179a

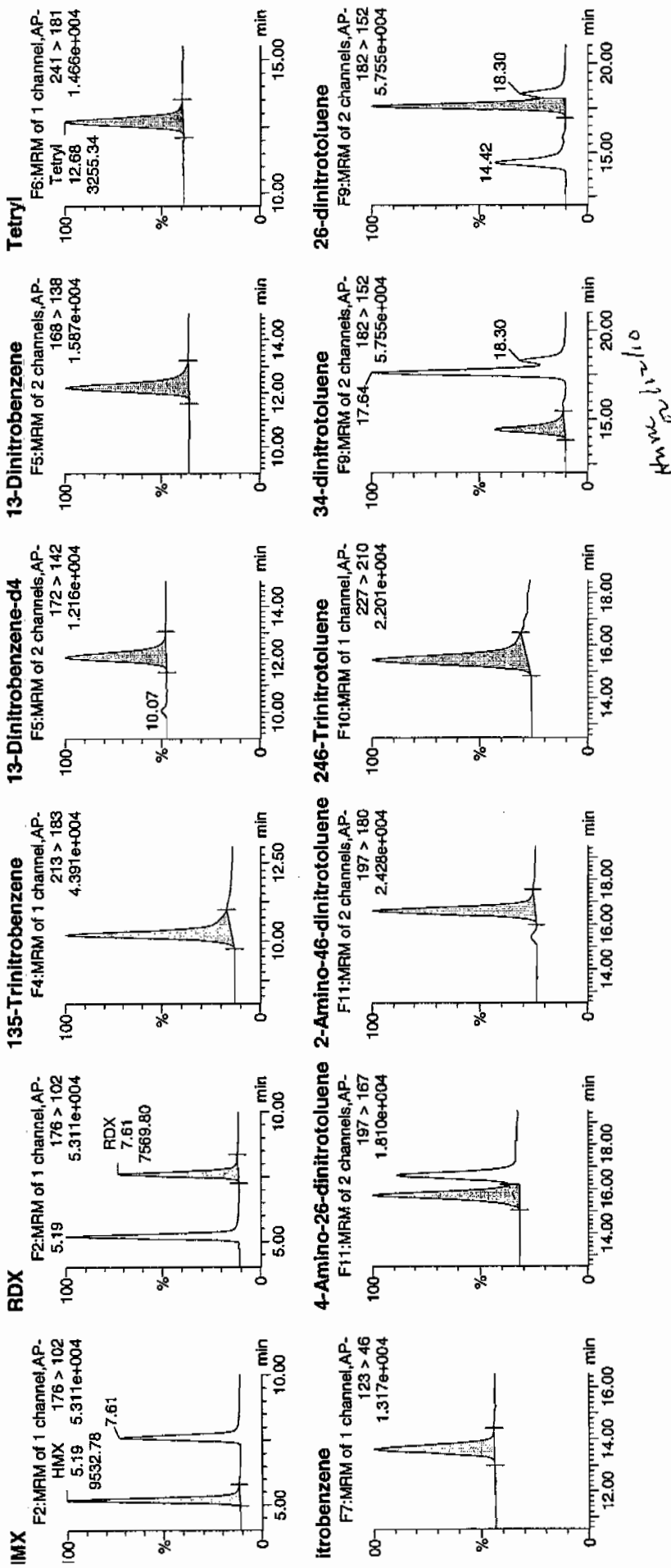
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Time: 06:17:31

ID: WXX100211-07CCV

Ratio: 1:1,B

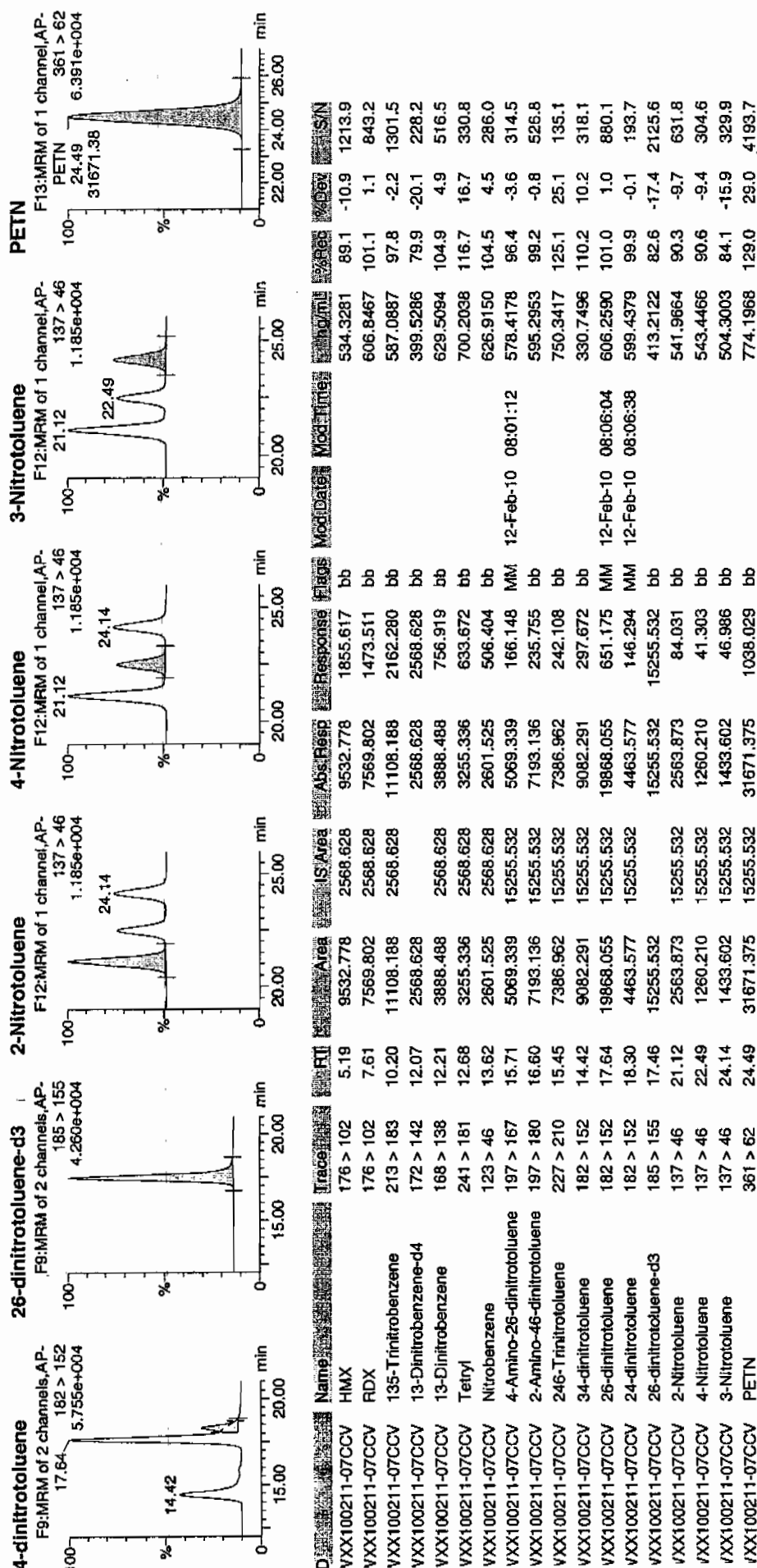
MP
 2/11/10



Printed: Fri Feb 12 08:13:51 2010, Page 88 of 93

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

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA3.qld, Time: Fri Feb 12 08:08:48 2010



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

GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/12/10
 Time of Injection: 0617
 Standard Number: WXX100211-07CCV
 Data File: EXP0208179a

HMX	89.1
RDX	101.1
135-TNB	97.8
13-DNB	104.9
Tetryl	116.7
Nitrobenzene	104.5
4A-26-DNT	96.4
2A-46-DNT	99.2
246-TNT	125.1
34-DNT(surr)	110.2
26-DNT	101.0
24-DNT	99.9
2-NT	90.3
4-NT	90.6
3-NT	84.1
PETN	129.0
Total	1639.9

*100%
2/12/10*

Average

102.5

100% 02/12/10

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): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0208181a

Analysis Date: 12-FEB-10 07:16

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
2-Amino-4,6-dinitrotoluene	40	36.972	92	
3,4-Dinitrotoluene	20	20.284	101	
4-Amino-2,6-dinitrotoluene	40	36.006	90	
HMX	40	39.857	100	
Nitrobenzene	40	38.793	97	
PETN	40	48.869	122	
RDX	40	40.155	100	
Tetryl	40	38.51	96	
m-Dinitrobenzene	40	38.974	97	
m-Nitrotoluene	40	31.524	79	
o-Nitrotoluene	40	36.982	92	
p-Nitrotoluene	40	35.364	88	
1,3,5-Trinitrobenzene	40	44.012	110	
1,3-Dinitrobenzene-d4	500	438.92	88	
2,4,6-Trinitrotoluene	40	42.728	107	
2,4-Dinitrotoluene	40	42.259	106	
2,6-Dinitrotoluene	40	37.113	93	
2,6-Dinitrotoluene-d3	500	442.662	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
iEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA3.qld, Time: Fri Feb 12 08:08:48 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208181a

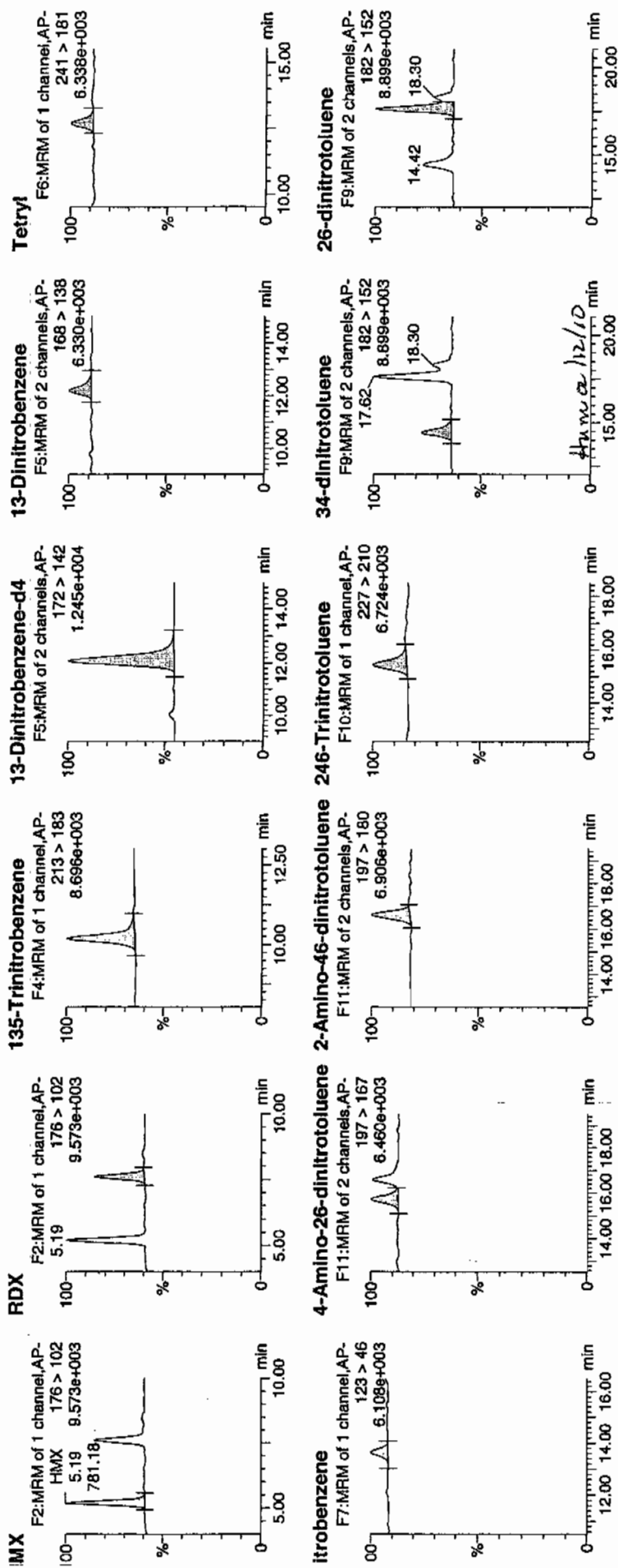
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Time: 07:16:32

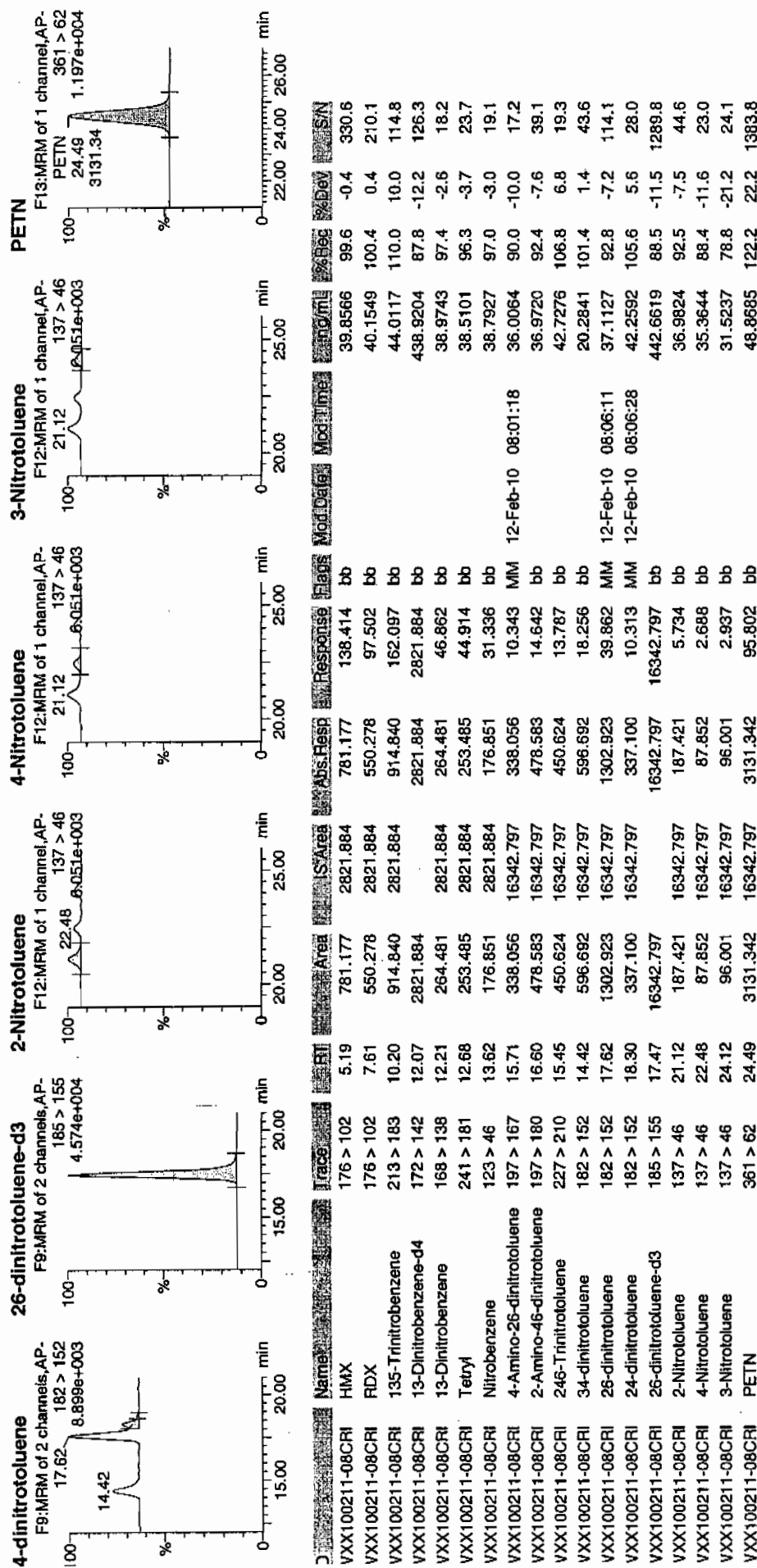
Job: WXX100211-08CRI

Label: 1:1,C

2/12/10
MMP



Dataset: C:\MASSLYNX\New_Exp_PRO\020810expA3.qld, Time: Fri Feb 12 08:08:48 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/12/10
 Time of Injection 0716
 Standard Number WXX100211-08CRI
 Data File EXP0208181a

HMX	99.6
RDX	100.4
135-TNB	110.0
13-DNB	97.4
Tetryl	96.3
Nitrobenzene	97.0
4A-26-DNT	90.0
2A-46-DNT	92.4
246-TNT	106.8
34-DNT(surr)	101.4
26-DNT	92.8
24-DNT	105.6
2-NT	92.5
4-NT	88.4
3-NT	78.8
PETN	122.2

*100%
2/12/10*

Total 1571.6

from 02/12/10

Average 98.2

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): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0208192a

Analysis Date: 12-FEB-10 12:41

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	579.335	97	
1,3-Dinitrobenzene-d4	500	455.62	91	
2,4,6-Trinitrotoluene	600	762.635	127	*
2,4-Dinitrotoluene	600	680.358	113	
2,6-Dinitrotoluene	600	624.359	104	
2,6-Dinitrotoluene-d3	500	419.676	84	
2-Amino-4,6-dinitrotoluene	600	687.213	115	
3,4-Dinitrotoluene	300	326.396	109	
4-Amino-2,6-dinitrotoluene	600	642.053	107	
HMX	600	564.023	94	
Nitrobenzene	600	588.695	98	
PETN	600	747.991	125	*
RDX	600	606.121	101	
Tetryl	600	602.12	100	
m-Dinitrobenzene	600	601.495	100	
m-Nitrotoluene	600	572.783	95	
o-Nitrotoluene	600	603.62	101	
p-Nitrotoluene	600	632.671	105	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

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

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA4.qld, Time: Sat Feb 13 09:30:34 2010

Sample Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208192a

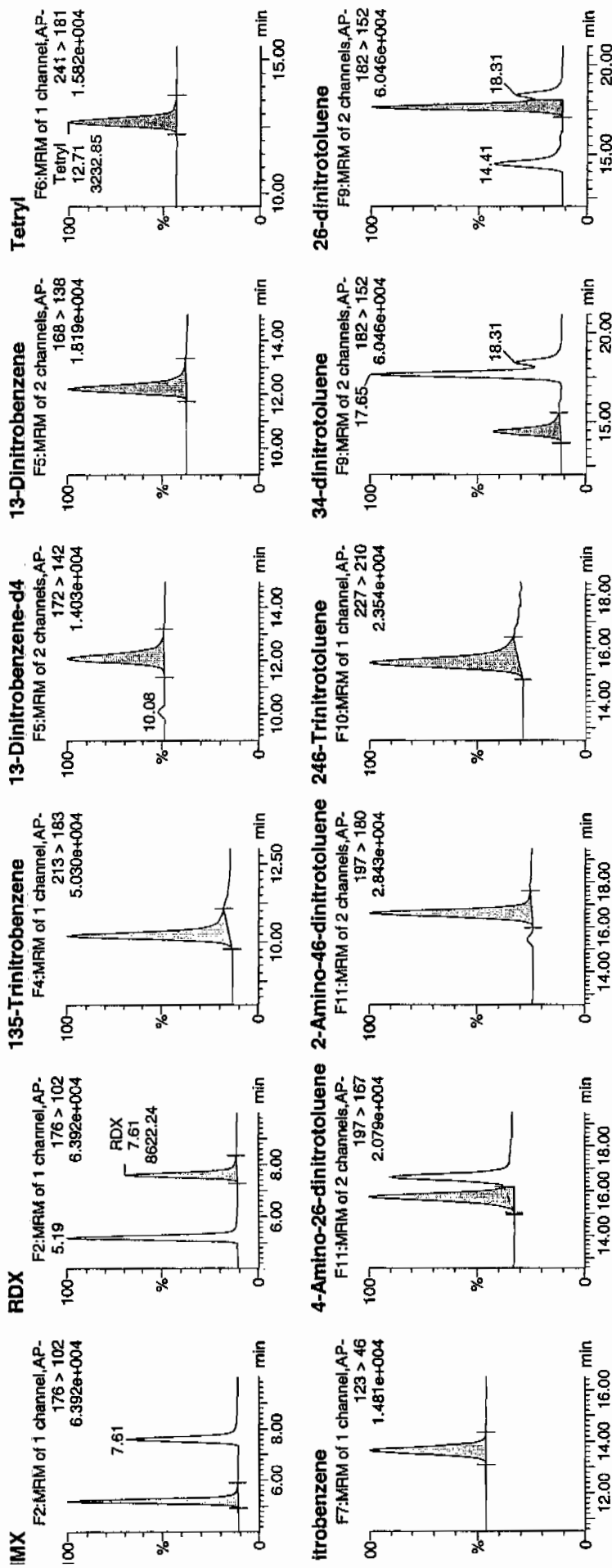
Date: 12-Feb-2010

Time: 12:41:56

ID: WXX100211-07CCV

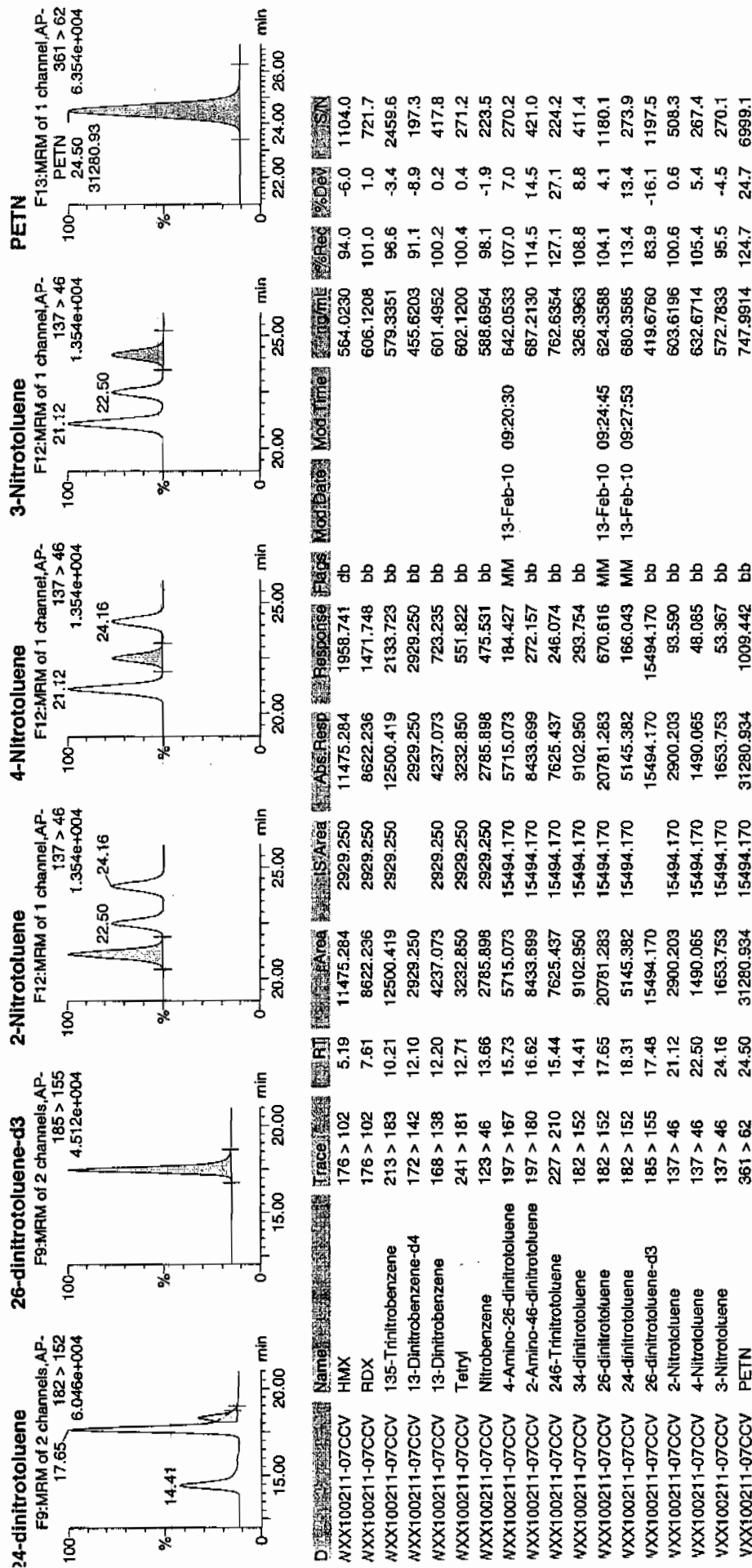
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2/13/10



Handwritten note: 02/13/10

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA4.qld, Time: Sat Feb 13 09:30:34 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/12/10
 Time of Injection: 1241
 Standard Number: WXX100211-07CCV
 Data File: EXP0208192a

HMX	94.0
RDX	101.0
135-TNB	96.6
13-DNB	100.2
Tetryl	100.4
Nitrobenzene	98.1
4A-26-DNT	107.0
2A-46-DNT	114.5
246-TNT	127.1
34-DNT(surr)	108.8
26-DNT	104.1
24-DNT	113.4
2-NT	100.6
4-NT	105.4
3-NT	95.5
PETN	124.7

*MTT
2/13/10*

Total 1691.4

Average 105.7

done 02/13/10

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): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0208194a

Analysis Date: 12-FEB-10 13:40

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
p-Nitrotoluene	40	40.053	100	
1,3,5-Trinitrobenzene	40	45.517	114	
1,3-Dinitrobenzene-d4	500	469.519	94	
2,4,6-Trinitrotoluene	40	55.709	139	*
2,4-Dinitrotoluene	40	40.988	102	
2,6-Dinitrotoluene	40	42.306	106	
2,6-Dinitrotoluene-d3	500	448.123	90	
2-Amino-4,6-dinitrotoluene	40	35.812	90	
3,4-Dinitrotoluene	20	22.544	113	
4-Amino-2,6-dinitrotoluene	40	35.549	89	
HMX	40	41.613	104	
Nitrobenzene	40	42.541	106	
PETN	40	46.553	116	
RDX	40	36.544	91	
Tetryl	40	28.746	72	
m-Dinitrobenzene	40	44.616	112	
m-Nitrotoluene	40	34.967	87	
o-Nitrotoluene	40	35.126	88	

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

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

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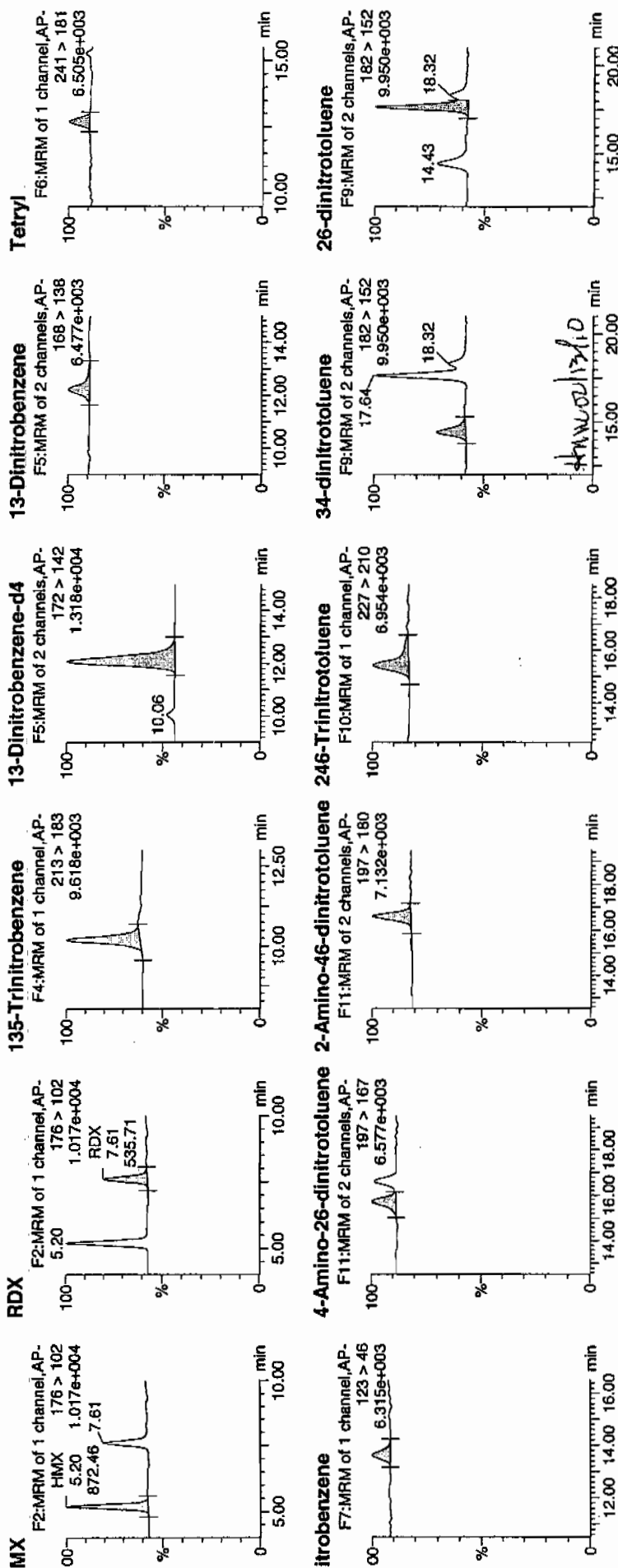
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ime: 13:40:57

y: WXX100211-08CRI

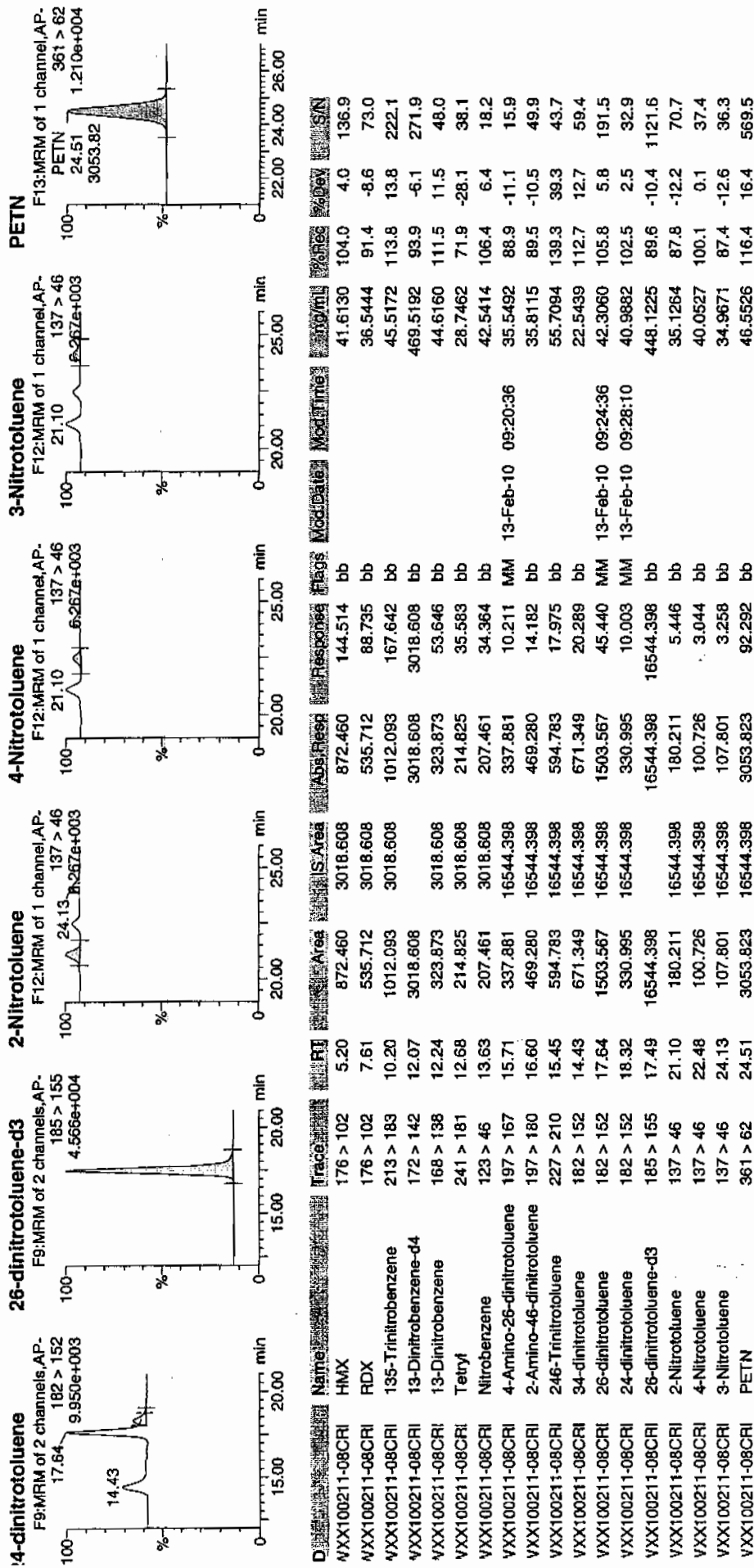
ial: 1:1,C

AF
1/13/10



Quantify Sample Report
 3EL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA4.qld, Time: Sat Feb 13 09:30:34 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/12/10
 Time of Injection 1340
 Standard Number WXX100211-08CRI
 Data File EXP0208194a

HMX	104.0
RDX	91.4
135-TNB	113.8
13-DNB	111.5
Tetryl	71.9
Nitrobenzene	106.4
4A-26-DNT	88.9
2A-46-DNT	89.5
246-TNT	139.3
34-DNT(surr)	112.7
26-DNT	105.8
24-DNT	102.5
2-NT	87.8
4-NT	100.1
3-NT	87.4
PETN	116.4

*WTF
2/13/10*

Total 1629.4

Average 101.8

Handwritten: 101.8
 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): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0208204a

Analysis Date: 12-FEB-10 18:36

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3-Dinitrobenzene-d4	500	406.534	81	
2,4,6-Trinitrotoluene	600	676.945	113	
2,4-Dinitrotoluene	600	732.781	122	*
2,6-Dinitrotoluene	600	616.675	103	
2,6-Dinitrotoluene-d3	500	391.437	78	*
2-Amino-4,6-dinitrotoluene	600	635.563	106	
3,4-Dinitrotoluene	300	328.615	110	
4-Amino-2,6-dinitrotoluene	600	609.488	102	
HMX	600	608.517	101	
Nitrobenzene	600	610.084	102	
PETN	600	833.891	139	*
RDX	600	650.563	108	
Tetryl	600	631.091	105	
m-Dinitrobenzene	600	614.184	102	
m-Nitrotoluene	600	625.894	104	
o-Nitrotoluene	600	613.904	102	
p-Nitrotoluene	600	627.116	105	
1,3,5-Trinitrobenzene	600	573.104	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 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

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

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA4.qld, Time: Sat Feb 13 09:30:34 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208204a

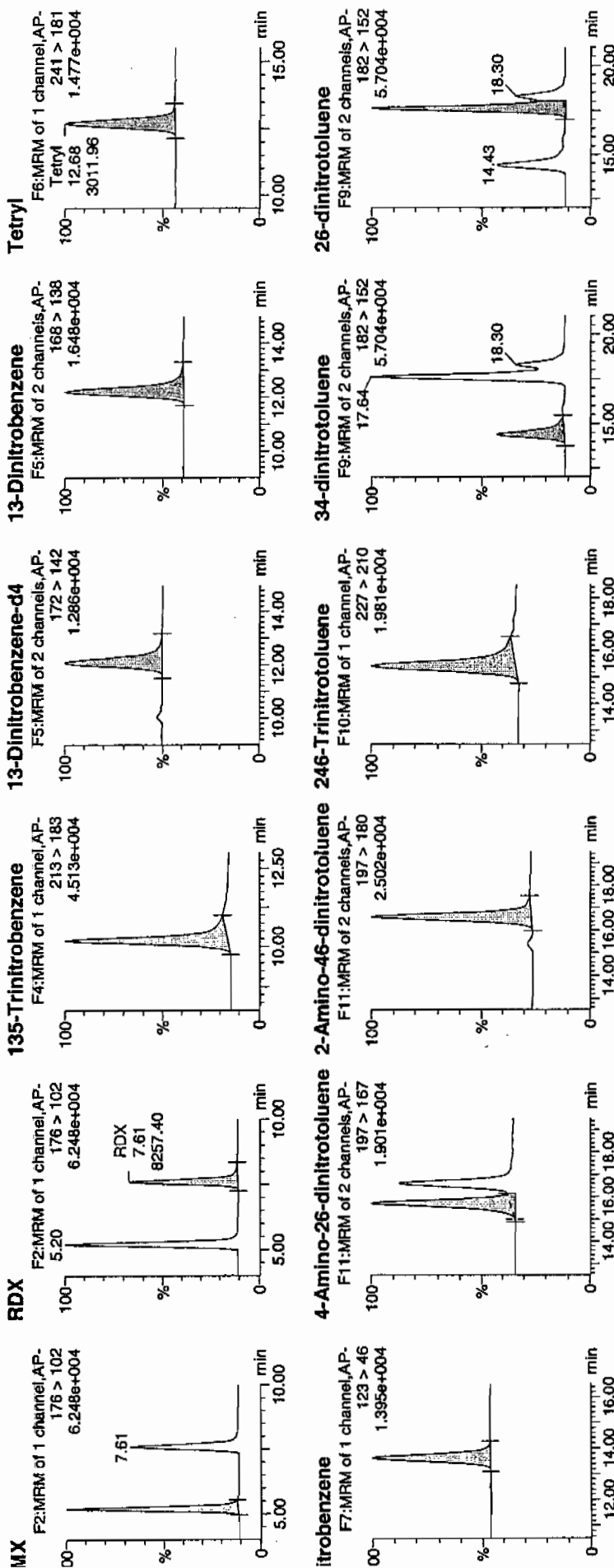
Date: 12-Feb-2010

Time: 18:36:13

File: WXX100211-07CCV

Ratio: 1:1,B

2/13/10

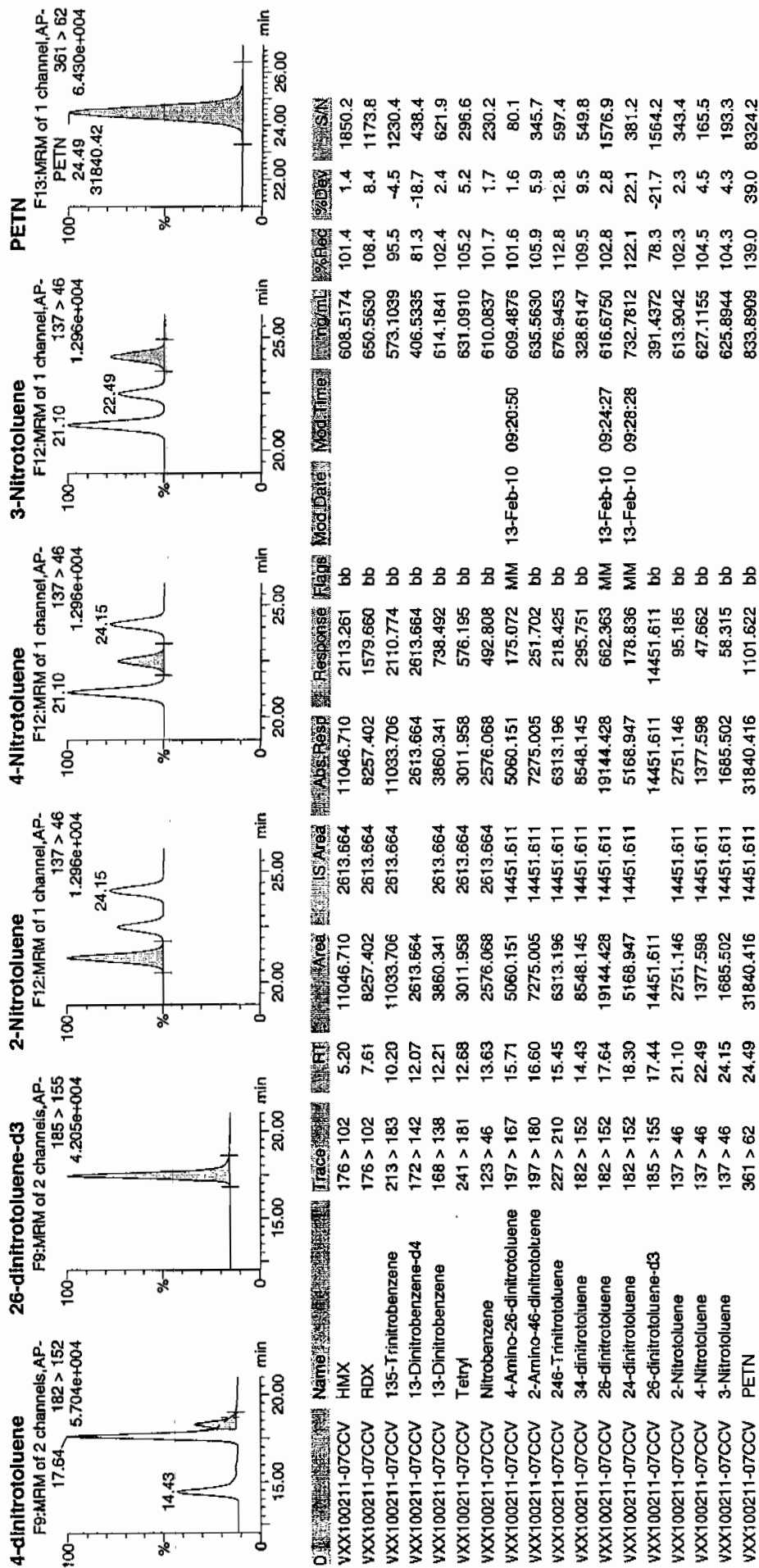


Amw 2/13/10

Printed: Sat Feb 13 09:33:08 2010, Page 46 of 93

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

Dataset: C:\MASSLYNX\New_Exp\PRO\020810expA4.qld, Time: Sat Feb 13 09:30:34 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/12/10
 Time of Injection: 1836
 Standard Number: WXX100211-07CCV
 Data File: EXP0208204a

HMX	101.4
RDX	108.4
135-TNB	95.5
13-DNB	102.4
Tetryl	105.2
Nitrobenzene	101.7
4A-26-DNT	101.6
2A-46-DNT	105.9
246-TNT	112.8
34-DNT(surr)	109.5
26-DNT	102.8
24-DNT	122.1
2-NT	102.3
4-NT	104.5
3-NT	104.3
PETN	139.0

2/13/10

Total 1719.4

Average 107.5

Handwritten signature

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): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0208206a

Analysis Date: 12-FEB-10 19:35

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	51.365	128	
1,3-Dinitrobenzene-d4	500	423.168	85	
2,4,6-Trinitrotoluene	40	44.639	112	
2,4-Dinitrotoluene	40	35.699	89	
2,6-Dinitrotoluene	40	39.836	100	
2,6-Dinitrotoluene-d3	500	422.416	84	
2-Amino-4,6-dinitrotoluene	40	41.793	104	
3,4-Dinitrotoluene	20	20.845	104	
4-Amino-2,6-dinitrotoluene	40	37.746	94	
HMX	40	44.962	112	
Nitrobenzene	40	30.167	75	
PETN	40	59.642	149	*
RDX	40	40.853	102	
Tetryl	40	43.184	108	
m-Dinitrobenzene	40	41.433	104	
m-Nitrotoluene	40	55.505	139	*
o-Nitrotoluene	40	44.859	112	
p-Nitrotoluene	40	50.729	127	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Printed: Sat Feb 13 09:33:08 2010, Page 49 of 93

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

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA4.qld, Time: Sat Feb 13 09:30:34 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208206a

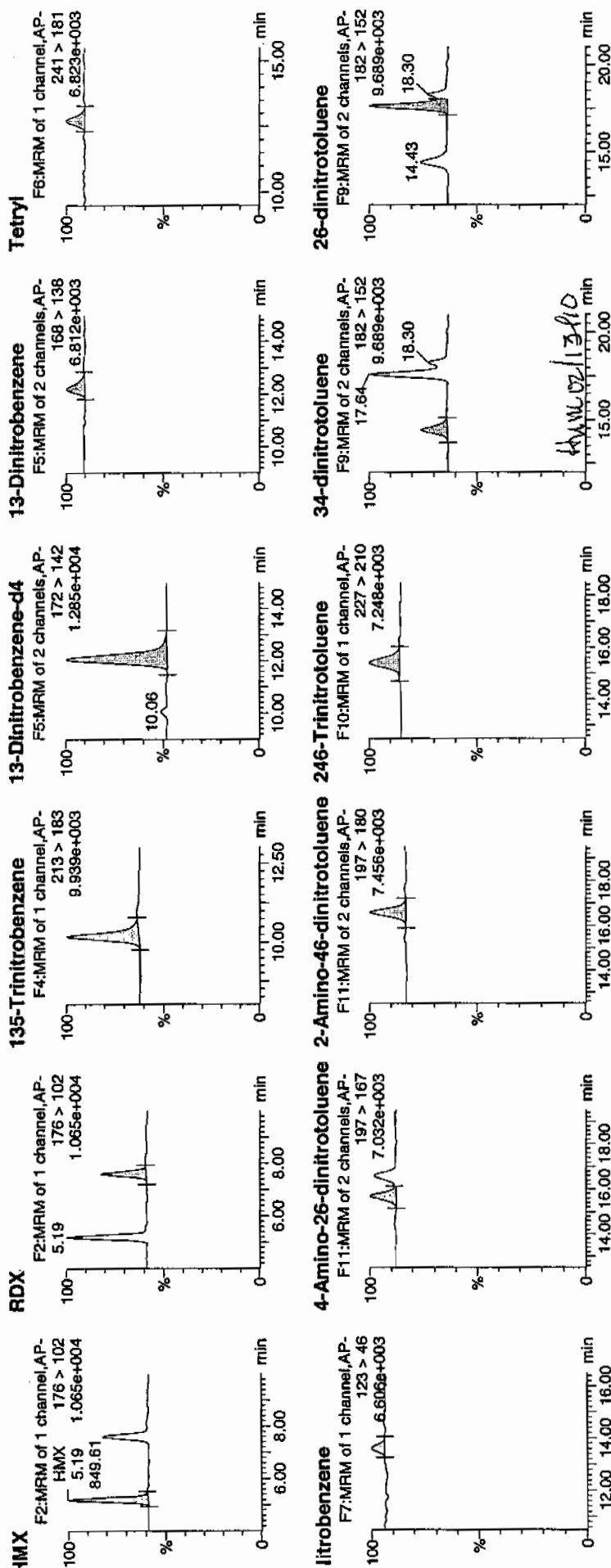
Date: 12-Feb-2010

Time: 19:35:13

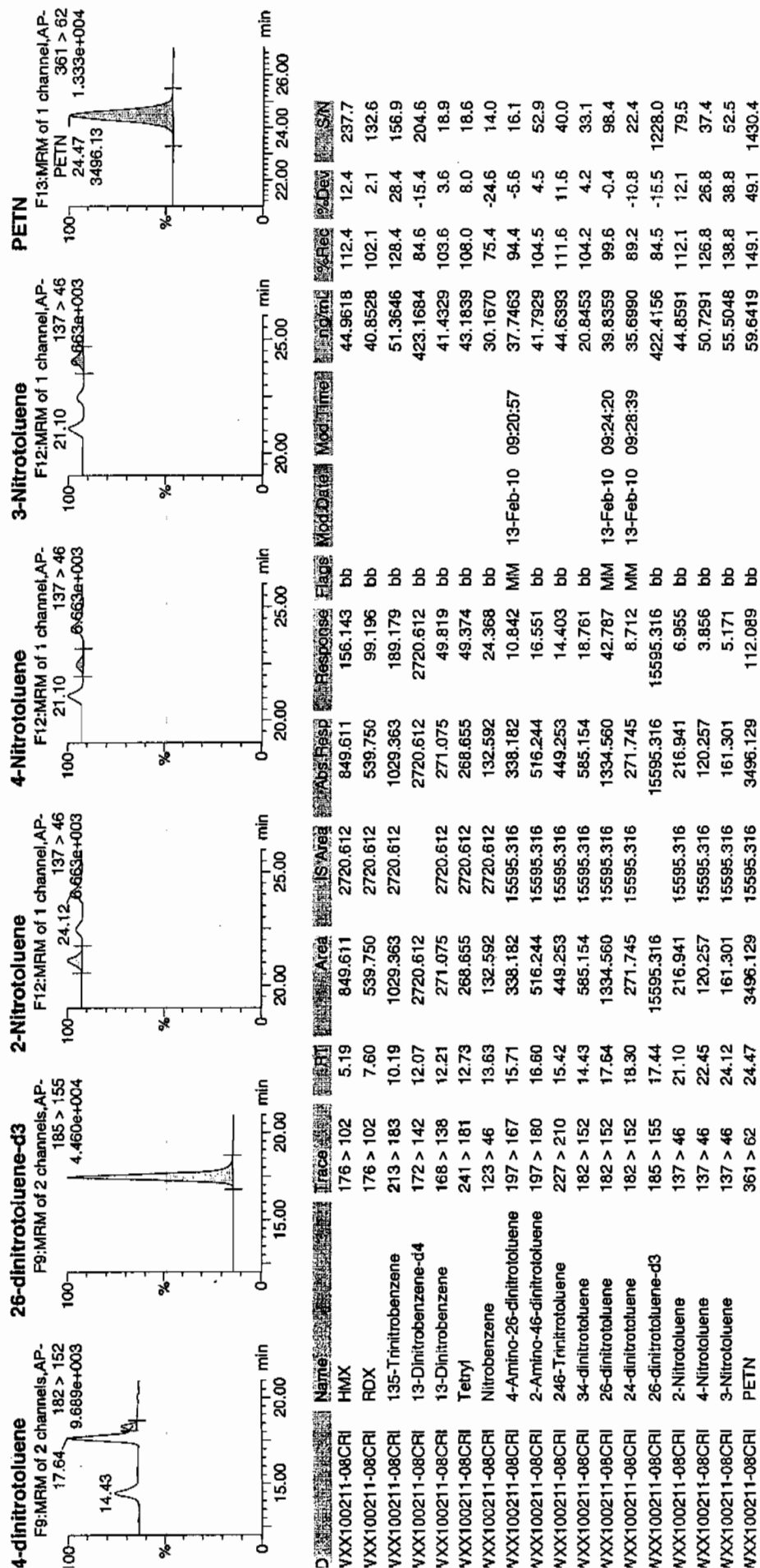
D: WXX100211-08CRI

/lat: 1:1,C

2/13/10



Dataset: C:\MASSLYN\New_Exp_PRO\020810expA4.qld, Time: Sat Feb 13 09:30:34 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/12/10
 Time of Injection 1935
 Standard Number WXX100211-08CRI
 Data File EXP0208206a

HMX	112.4
RDX	102.1
135-TNB	128.4
13-DNB	103.6
Tetryl	108.0
Nitrobenzene	75.4
4A-26-DNT	94.4
2A-46-DNT	104.5
246-TNT	111.6
34-DNT(surr)	104.2
26-DNT	99.6
24-DNT	89.2
2-NT	112.1
4-NT	126.8
3-NT	138.8
PETN	149.1

Handwritten: 149.1
2/13/10

Total 1760.2

Average 110.0

Handwritten: HMM 02/12/10

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): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0208217a

Analysis Date: 13-FEB-10 00:59

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
PETN	600	789.773	132	*
RDX	600	721.953	120	*
Tetryl	600	644.366	107	
m-Dinitrobenzene	600	637.879	106	
m-Nitrotoluene	600	544.687	91	
o-Nitrotoluene	600	588.727	98	
p-Nitrotoluene	600	578.177	96	
1,3,5-Trinitrobenzene	600	618.925	103	
1,3-Dinitrobenzene-d4	500	423.463	85	
2,4,6-Trinitrotoluene	600	662.843	110	
2,4-Dinitrotoluene	600	585.754	98	
2,6-Dinitrotoluene	600	607.888	101	
2,6-Dinitrotoluene-d3	500	434.474	87	
2-Amino-4,6-dinitrotoluene	600	653.817	109	
3,4-Dinitrotoluene	300	316.681	106	
4-Amino-2,6-dinitrotoluene	600	609.256	102	
HMX	600	660.612	110	
Nitrobenzene	600	632.389	105	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

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

Dataset: C:\MASSLYNX\New_Exp\PRO1020810expA4.qld, Time: Sat Feb 13 09:30:34 2010

Name: C:\MASSLYNX\NEW_EXP\PRO1Data\EXP0208217a

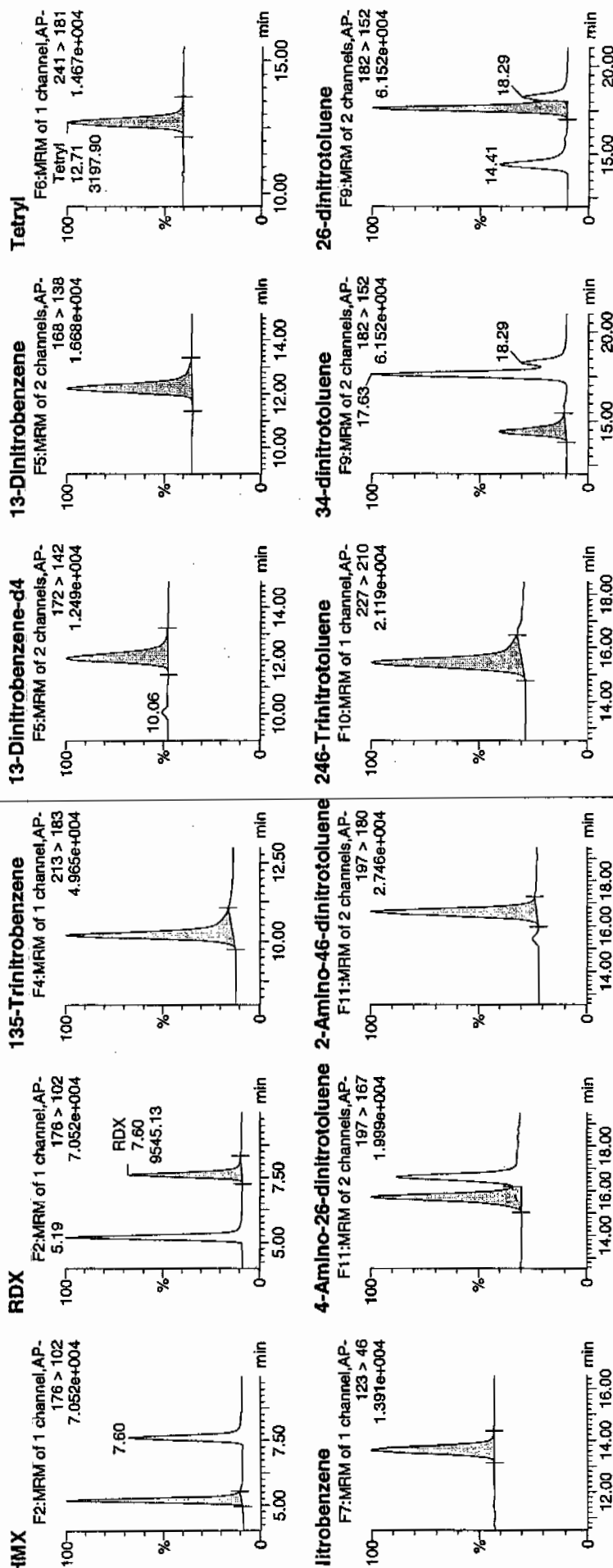
Date: 13-Feb-2010

Time: 00:59:51

D: WXX100211-07CCV

/Ial: 1:1,B

2/13/10
MMP

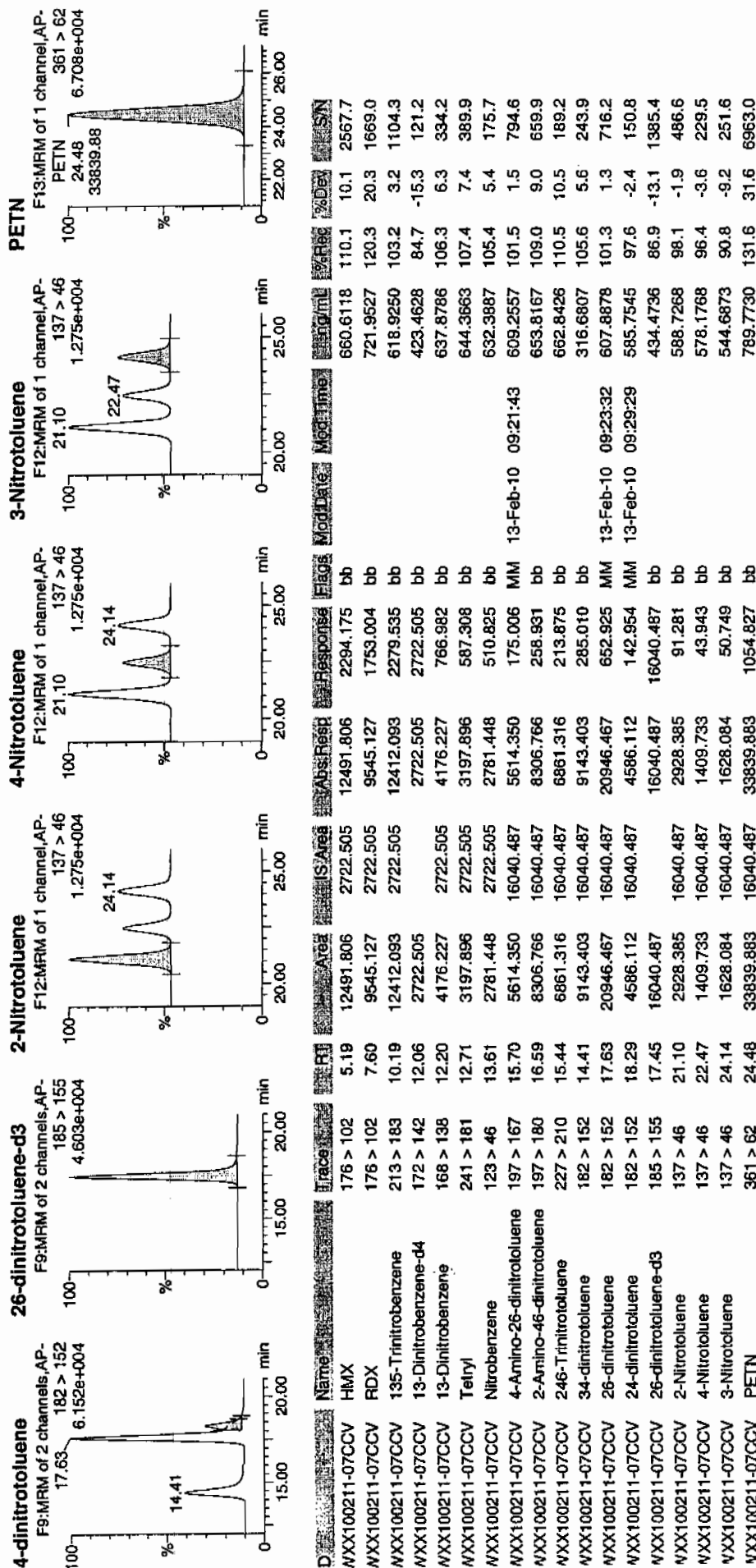


MMP 2/13/10

Printed: Sat Feb 13 09:33:08 2010, Page 72 of 93

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

Dataset: C:\MASSLYNX\New_Exp\PRO\020810expA4.qld, Time: Sat Feb 13 09:30:34 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/13/10
 Time of Injection: 0059
 Standard Number: WXX100211-07CCV
 Data File: EXP0208217a

HMX	110.1	✓
RDX	120.3	✓
135-TNB	103.2	✓
13-DNB	106.3	
Tetryl	107.4	
Nitrobenzene	105.4	
4A-26-DNT	101.5	
2A-46-DNT	109.0	
246-TNT	110.5	
34-DNT(surr)	105.6	
26-DNT	101.3	
24-DNT	97.6	
2-NT	98.1	
4-NT	96.4	
3-NT	90.8	
PETN	131.6	

*WFF
2/13/10*

Total 1695.1

Handwritten: 1695.1

Average 105.9

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): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0208219a

Analysis Date: 13-FEB-10 01:58

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
HMX	40	45.505	114	
Nitrobenzene	40	38.618	97	
PETN	40	55.392	138	*
RDX	40	40.435	101	
Tetryl	40	38.337	96	
m-Dinitrobenzene	40	43.096	108	
m-Nitrotoluene	40	37.415	94	
o-Nitrotoluene	40	46.269	116	
p-Nitrotoluene	40	37.938	95	
1,3,5-Trinitrobenzene	40	49.783	124	
1,3-Dinitrobenzene-d4	500	497.469	99	
2,4,6-Trinitrotoluene	40	36.557	91	
2,4-Dinitrotoluene	40	38.285	96	
2,6-Dinitrotoluene	40	39.341	98	
2,6-Dinitrotoluene-d3	500	474.038	95	
2-Amino-4,6-dinitrotoluene	40	40.798	102	
3,4-Dinitrotoluene	20	21.137	106	
4-Amino-2,6-dinitrotoluene	40	35.394	88	

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\020810expA4.qld, Time: Sat Feb 13 09:30:34 2010

Name: C:\MASSLYNX\NEW_EXP\PRO\data\EXP0208219a

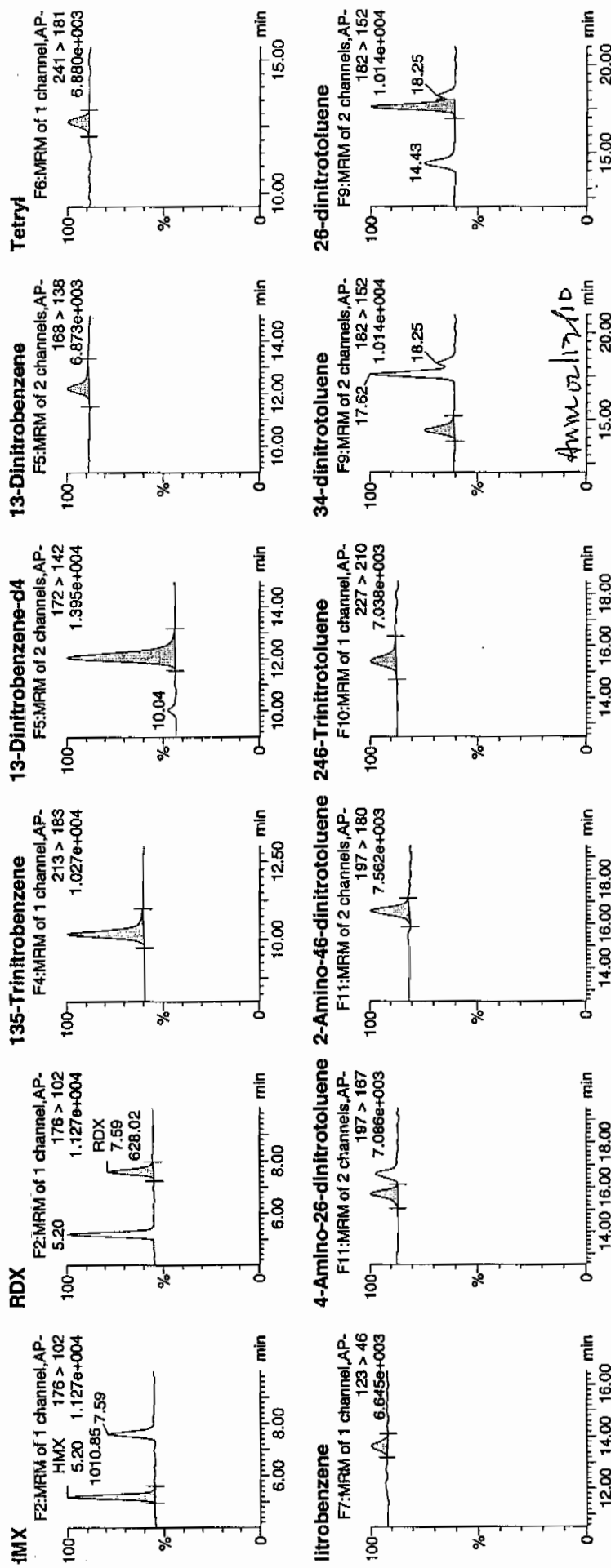
Date: 13-Feb-2010

Time: 01:58:49

D: WXX100211-08CRI

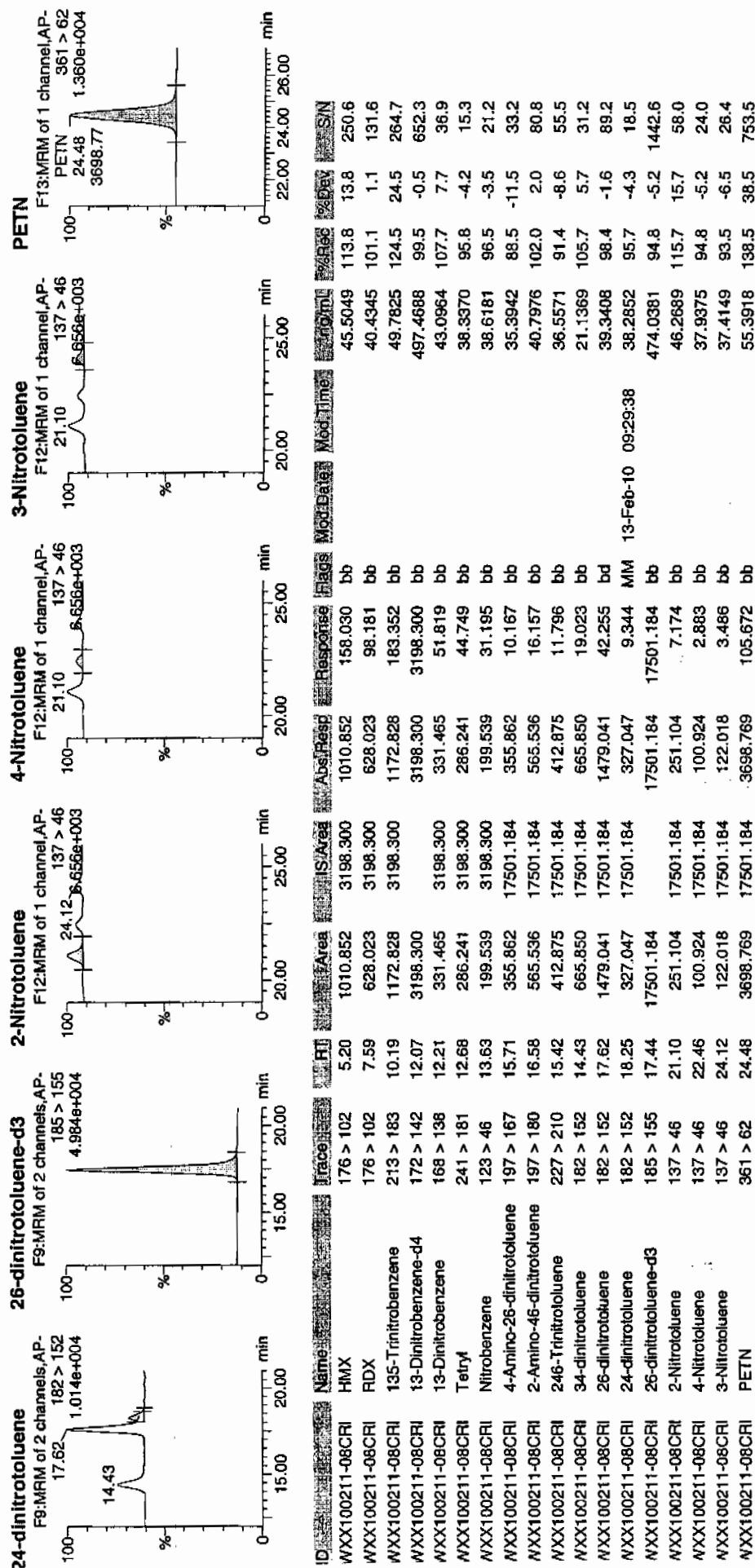
/Inl: 1:1,C

2/13/10



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

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA4.qld, Time: Sat Feb 13 09:30:34 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/13/10
 Time of Injection 0158
 Standard Number WXX100211-08CRI
 Data File EXP0208219a

HMX	113.8
RDX	101.1
135-TNB	124.5
13-DNB	107.7
Tetryl	95.8
Nitrobenzene	96.5
4A-26-DNT	88.5
2A-46-DNT	102.0
246-TNT	91.4
34-DNT(surr)	105.7
26-DNT	98.4
24-DNT	95.7
2-NT	115.7
4-NT	94.8
3-NT	93.5
PETN	138.5

2/13/10

Total 1663.6

Average 104.0

Hydromet/12/10

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): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0208225a

Analysis Date: 13-FEB-10 04:56

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	585.841	98	
1,3-Dinitrobenzene-d4	500	406.849	81	
2,4,6-Trinitrotoluene	600	647.736	108	
2,4-Dinitrotoluene	600	567.711	95	
2,6-Dinitrotoluene	600	619.377	103	
2,6-Dinitrotoluene-d3	500	401.252	80	
2-Amino-4,6-dinitrotoluene	600	636.493	106	
3,4-Dinitrotoluene	300	320.33	107	
4-Amino-2,6-dinitrotoluene	600	624.504	104	
HMX	600	676.316	113	
Nitrobenzene	600	626.935	104	
PETN	600	868.676	145	*
RDX	600	735.716	123	*
Tetryl	600	652.102	109	
m-Dinitrobenzene	600	601.342	100	
m-Nitrotoluene	600	595.488	99	
o-Nitrotoluene	600	642.065	107	
p-Nitrotoluene	600	641.012	107	

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\020810expA4.qld, Time: Sat Feb 13 09:30:34 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208225a

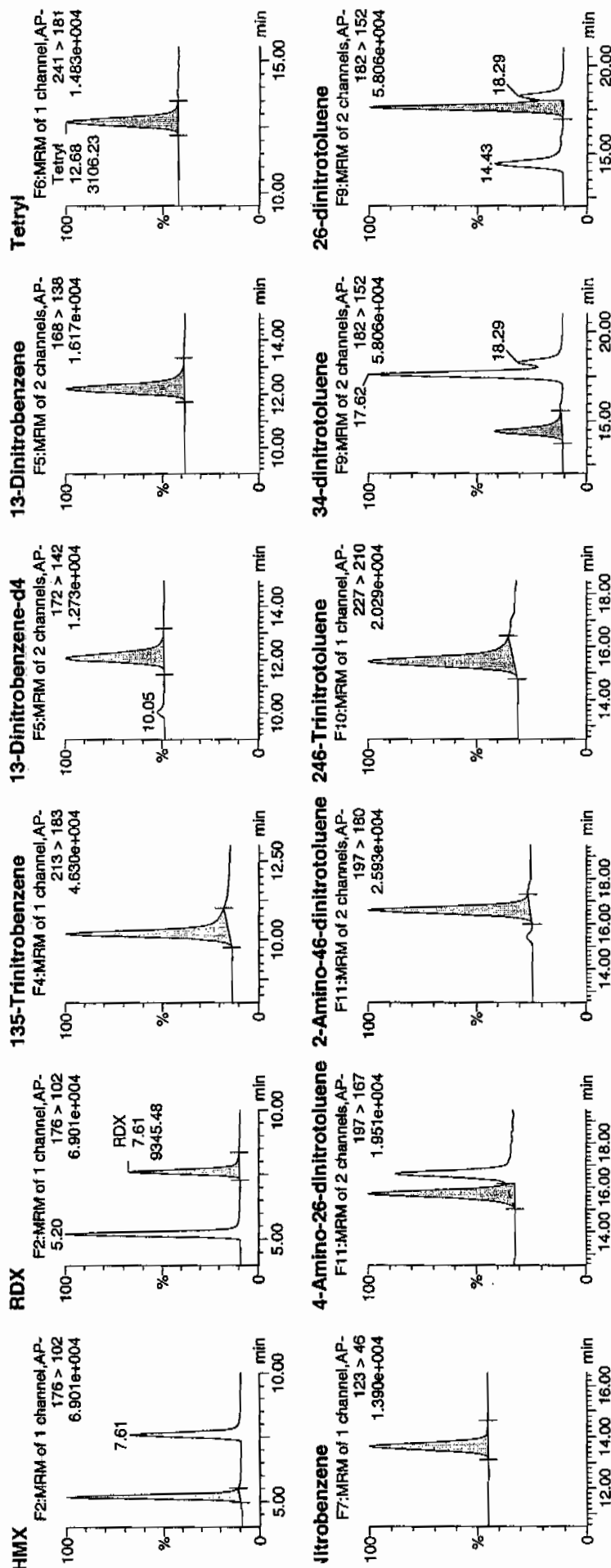
Date: 13-Feb-2010

Time: 04:56:12

ID: WXX100211-07CCV

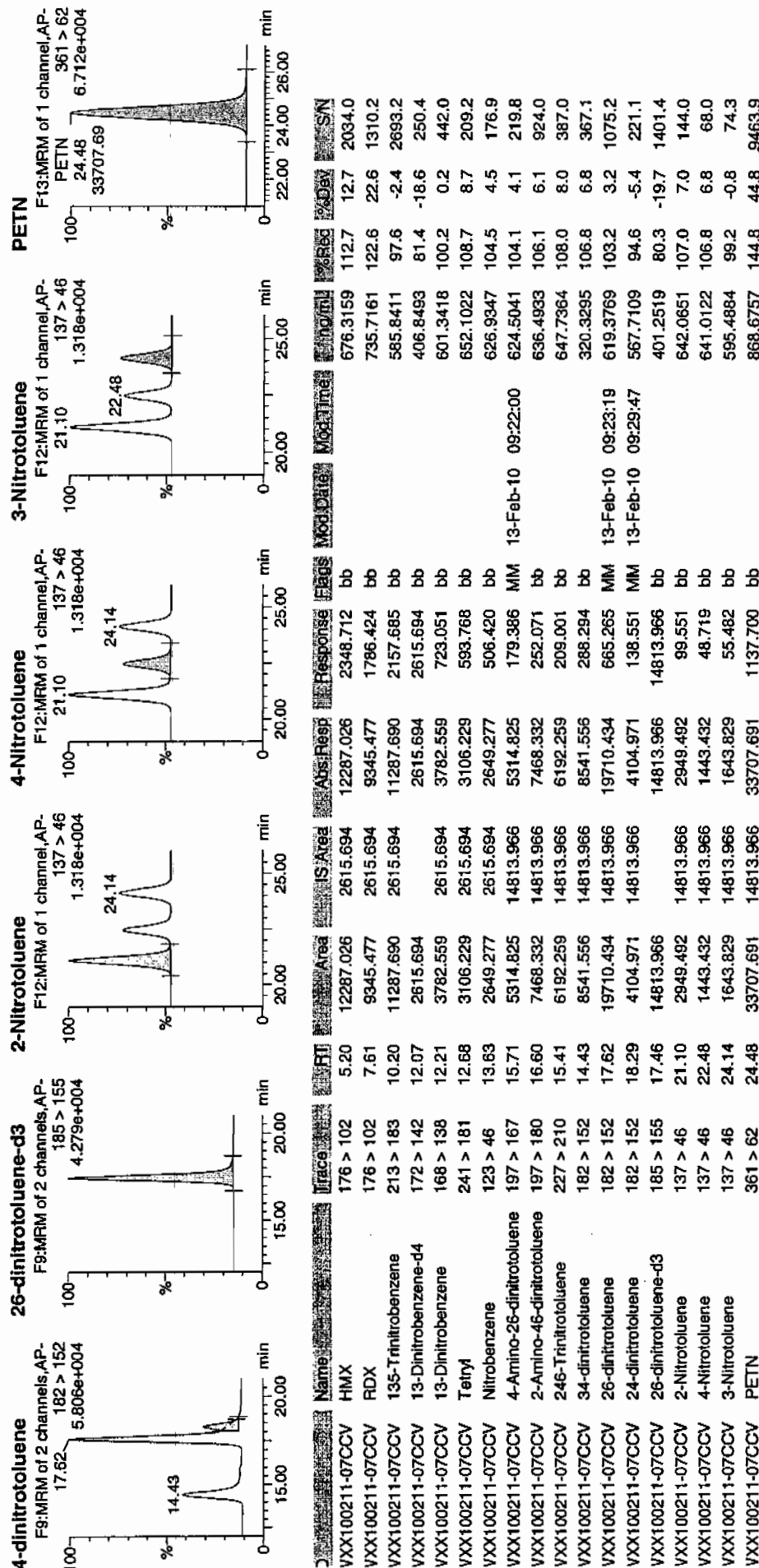
Vial: 1:1,B

Ref
2/13/10



Handwritten signature/initials

Dataset: C:\MASSLYNX\New_Exp_PRO\020810expA4.qld, Time: Sat Feb 13 09:30:34 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/13/10
 Time of Injection: 0456
 Standard Number: WXX100211-07CCV
 Data File: EXP0208225a

HMX	112.7
RDX	122.6
135-TNB	97.6
13-DNB	100.2
Tetryl	108.7
Nitrobenzene	104.5
4A-26-DNT	104.1
2A-46-DNT	106.1
246-TNT	108.0
34-DNT(surr)	106.8
26-DNT	103.2
24-DNT	94.6
2-NT	107.0
4-NT	106.8
3-NT	99.2
PETN	144.8

*WTP
2/13/10*

Total 1726.9

Average 107.9

WTP 02/13/10

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): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0208227a

Analysis Date: 13-FEB-10 05:55

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	50.736	127	
1,3-Dinitrobenzene-d4	500	393.764	79	
2,4,6-Trinitrotoluene	40	38.512	96	
2,4-Dinitrotoluene	40	37.289	93	
2,6-Dinitrotoluene	40	39.073	98	
2,6-Dinitrotoluene-d3	500	428.875	86	
2-Amino-4,6-dinitrotoluene	40	34.456	86	
3,4-Dinitrotoluene	20	19.355	97	
4-Amino-2,6-dinitrotoluene	40	37.83	95	
HMX	40	53.487	134	*
Nitrobenzene	40	42.448	106	
PETN	40	59.515	149	*
RDX	40	46.066	115	
Tetryl	40	45.434	114	
m-Dinitrobenzene	40	37.331	93	
m-Nitrotoluene	40	37.322	93	
o-Nitrotoluene	40	44.157	110	
p-Nitrotoluene	40	48.417	121	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Printed: Sat Feb 13 09:33:08 2010, Page 91 of 93

Quantify Sample Report
3EL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp_PRO\020810expA4.qld, Time: Sat Feb 13 09:30:34 2010

Name: C:\MASSLYNX\NEW_EXP_PRO\Data\EXP0208227a

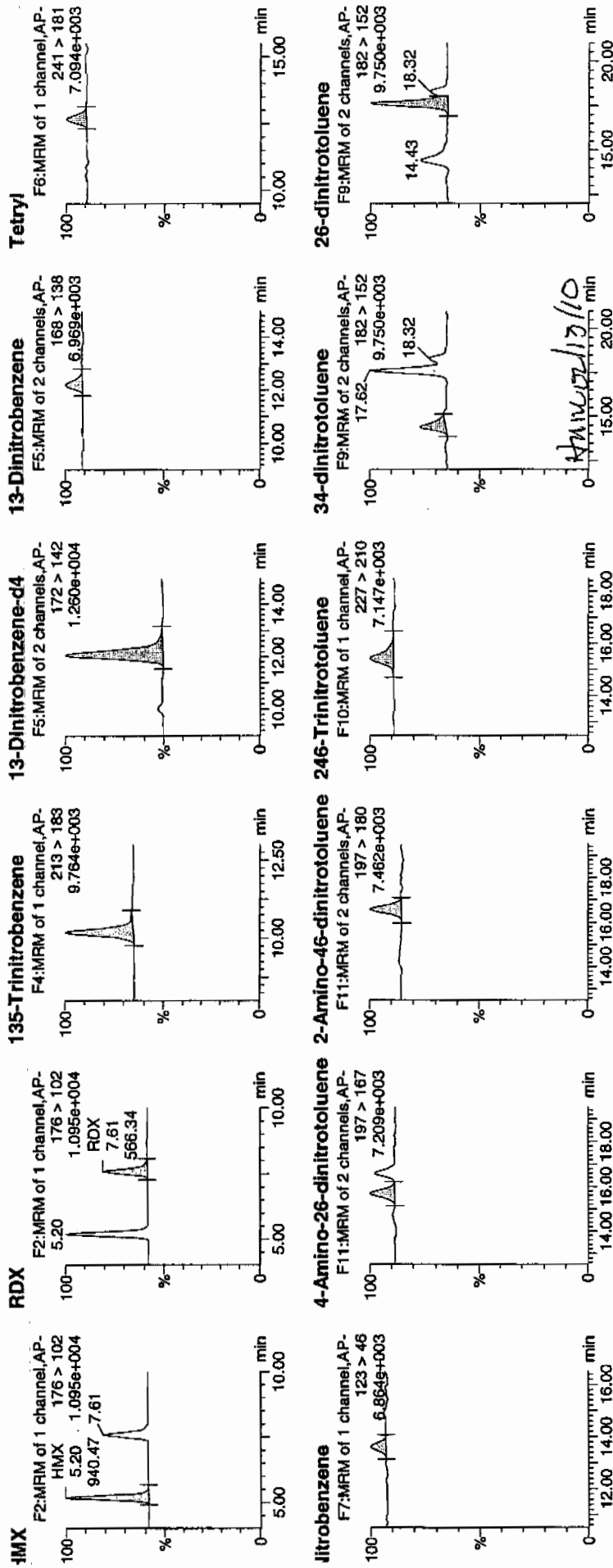
Date: 13-Feb-2010

Time: 05:55:10

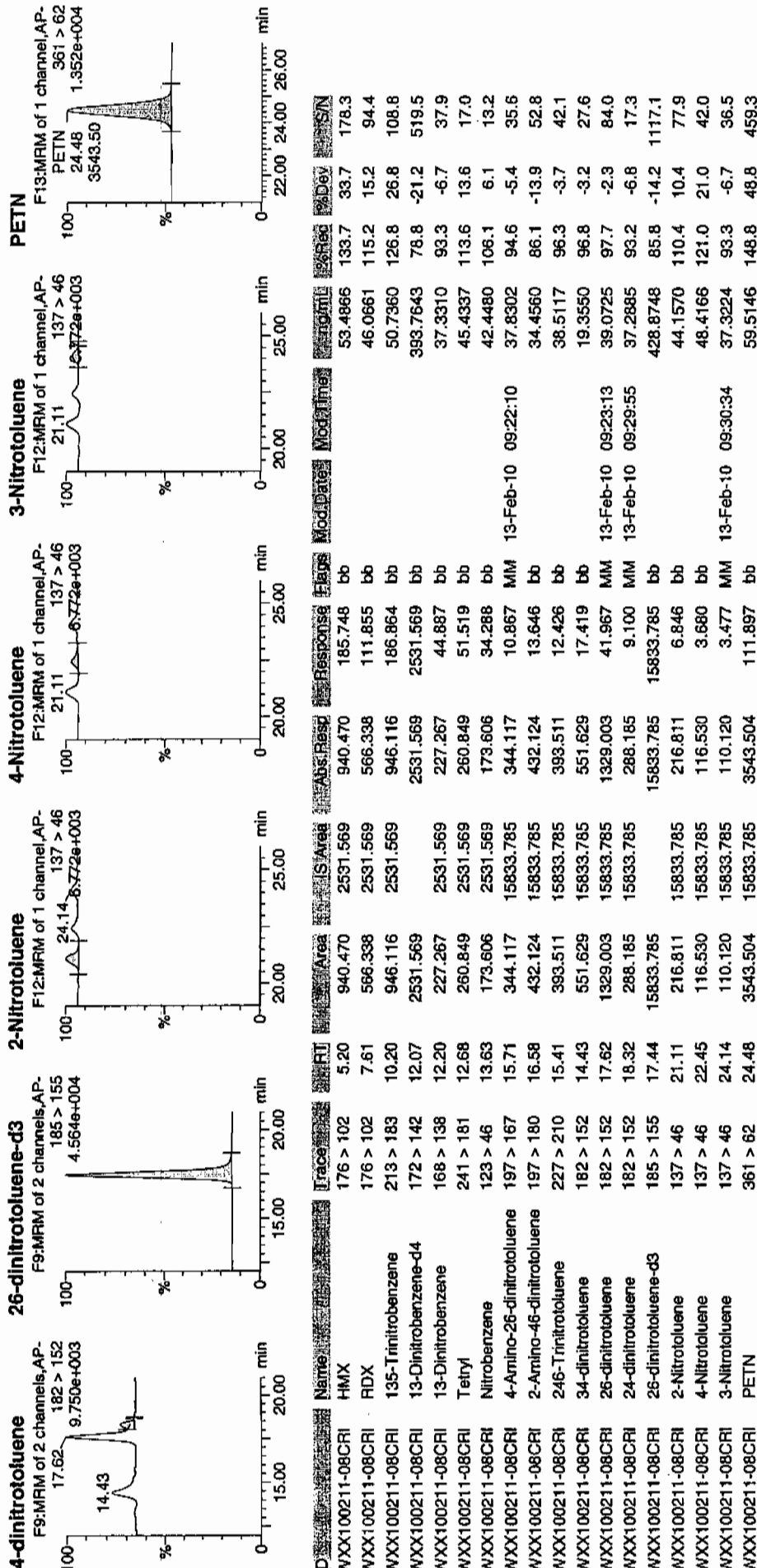
D: WXX100211-08CRI

/al: 1:1,C

MT
2/13/10



Dataset: C:\MASSLYN\New_Exp.PRO\020810expA4.qld, Time: Sat Feb 13 09:30:34 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/13/10
 Time of Injection 0555
 Standard Number WXX100211-08CRI
 Data File EXP0208227a

HMX	133.7
RDX	115.2
135-TNB	126.8
13-DNB	93.3
Tetryl	113.6
Nitrobenzene	106.1
4A-26-DNT	94.6
2A-46-DNT	86.1
246-TNT	96.3
34-DNT(surr)	96.8
26-DNT	97.7
24-DNT	93.2
2-NT	110.4
4-NT	121.0
3-NT	93.3
PETN	148.8

Total 1726.9

Average 107.9

Handwritten: 2/13/10
 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): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0208238a

Analysis Date: 13-FEB-10 11:20

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
2,4-Dinitrotoluene	600	644.511	107	
2,6-Dinitrotoluene	600	629.603	105	
2,6-Dinitrotoluene-d3	500	427.199	85	
2-Amino-4,6-dinitrotoluene	600	674.639	112	
3,4-Dinitrotoluene	300	334.925	112	
4-Amino-2,6-dinitrotoluene	600	627.214	105	
HMX	600	632.113	105	
Nitrobenzene	600	594.836	99	
PETN	600	710.083	118	
RDX	600	680.101	113	
Tetryl	600	597.235	100	
m-Dinitrobenzene	600	616.453	103	
m-Nitrotoluene	600	565.355	94	
o-Nitrotoluene	600	618.023	103	
p-Nitrotoluene	600	620.544	103	
1,3,5-Trinitrobenzene	600	568.559	95	
1,3-Dinitrobenzene-d4	500	448.251	90	
2,4,6-Trinitrotoluene	600	712.244	119	

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\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010

Name: C:\MASSLYNX\NEW_EXP_PRO\Data\EXP0208238a

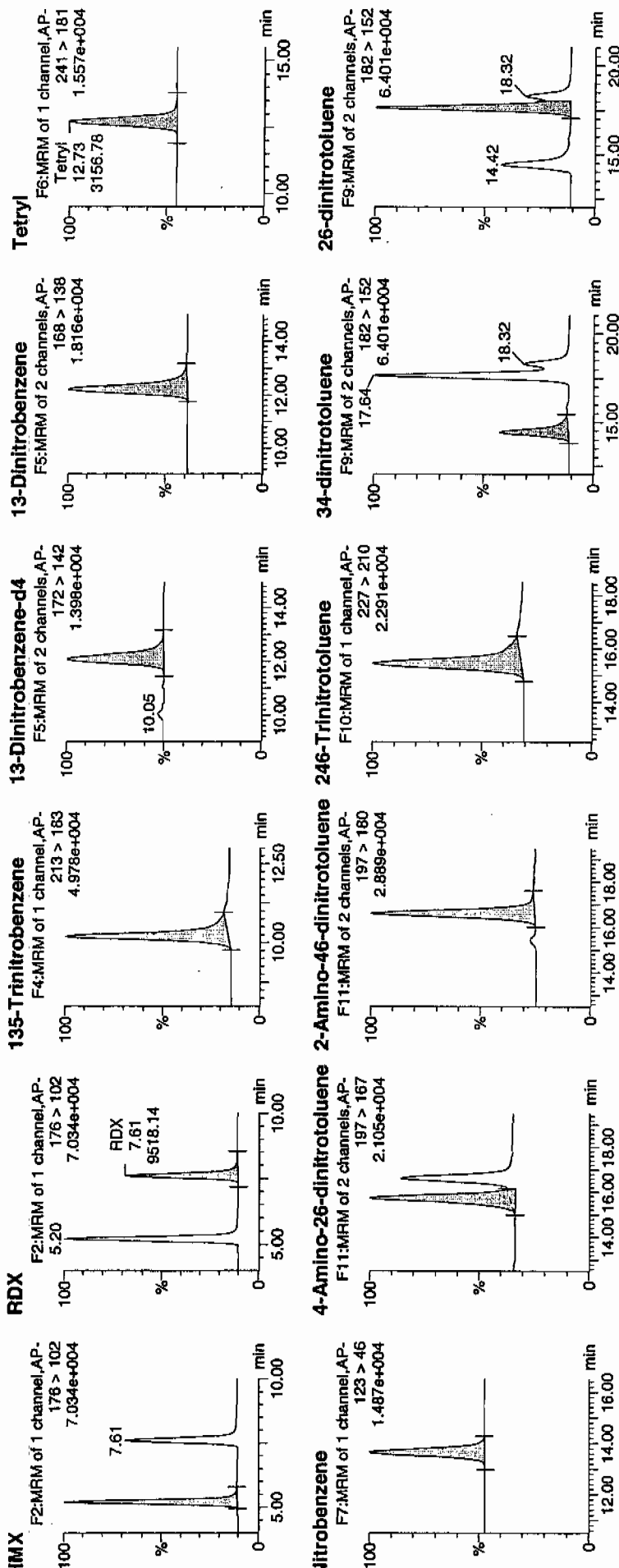
Date: 13-Feb-2010

Time: 11:20:41

D: WXX100211-07CCV

File: 1:1,B

WAT
2/11/10

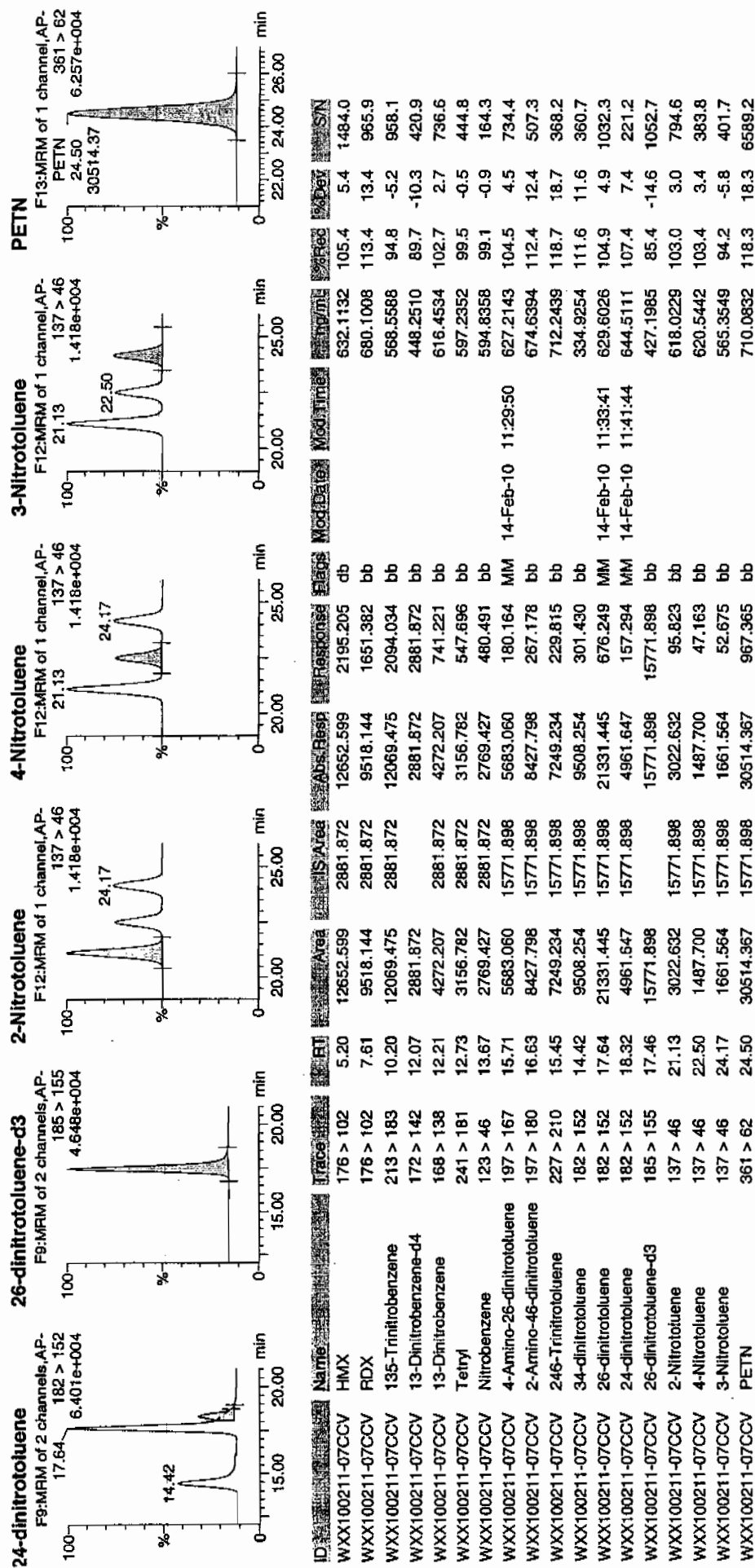


4/15/10

Printed: Sun Feb 14 11:45:22 2010, Page 22 of 95

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

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/13/10
 Time of Injection: 1120
 Standard Number: WXX100211-07CCV
 Data File: EXP0208238a

HMX	105.4
RDX	113.4
135-TNB	94.8
13-DNB	102.7
Tetryl	99.5
Nitrobenzene	99.1
4A-26-DNT	104.5
2A-46-DNT	112.4
246-TNT	118.7
34-DNT(surr)	111.6
26-DNT	104.9
24-DNT	107.4
2-NT	103.0
4-NT	103.4
3-NT	94.2
PETN	118.3

WAT
2/14/10

Total 1693.3

Average 105.8

WAT 02/15/10

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): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0208240a

Analysis Date: 13-FEB-10 12:19

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
2,4,6-Trinitrotoluene	40	42.66	107	
2,4-Dinitrotoluene	40	32.758	82	
2,6-Dinitrotoluene	40	40.254	101	
2,6-Dinitrotoluene-d3	500	550.38	110	
2-Amino-4,6-dinitrotoluene	40	41.952	105	
3,4-Dinitrotoluene	20	22.355	112	
4-Amino-2,6-dinitrotoluene	40	36.401	91	
HMX	40	40.768	102	
Nitrobenzene	40	40.374	101	
PETN	40	40.933	102	
RDX	40	38.778	97	
Tetryl	40	38.035	95	
m-Dinitrobenzene	40	37.092	93	
m-Nitrotoluene	40	32.836	82	
o-Nitrotoluene	40	37.907	95	
p-Nitrotoluene	40	42.318	106	
1,3,5-Trinitrobenzene	40	42.839	107	
1,3-Dinitrobenzene-d4	500	571.598	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 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Printed: Sun Feb 14 11:45:22 2010, Page 25 of 95

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

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010

Sample Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208240a

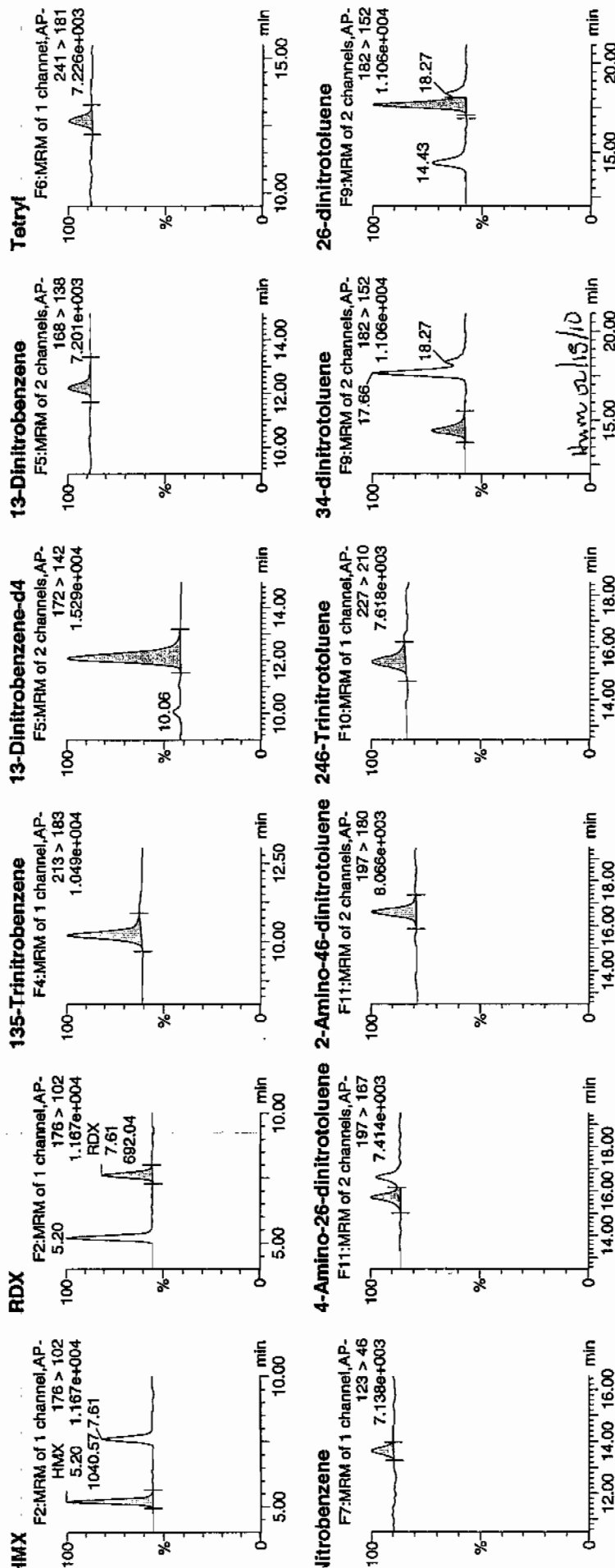
Date: 13-Feb-2010

Time: 12:19:45

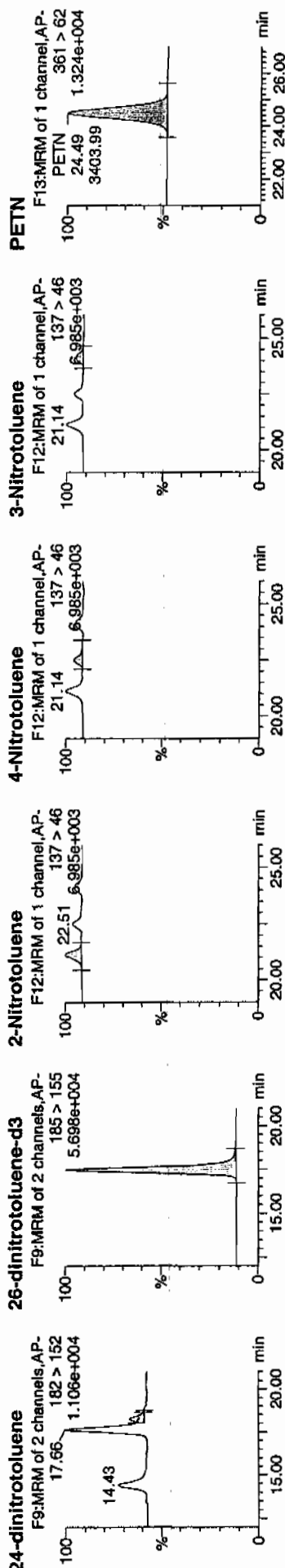
ID: WXX100211-08CRI

File: 1:1,C

10/10
 2/12/10



Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010



Name	ID	Trace	RT	Area	S Area	Abs. Resp	Response	Flags	Mod. Date	Mod. Time	mg/ml	% Rec	% Dev	S/N
HMX	WXX100211-08CRI	176 > 102	5.20	1040.571	3674.886	1040.571	141.579	bb			40.7678	101.9	1.9	124.2
RDX	WXX100211-08CRI	176 > 102	7.61	692.043	3674.886	692.043	94.158	bb			38.7780	96.9	-3.1	71.6
135-Trinitrobenzene	WXX100211-08CRI	213 > 183	10.20	1159.621	3674.886	1159.621	157.776	bb			42.8385	107.1	7.1	273.7
13-Dinitrobenzene-d4	WXX100211-08CRI	172 > 142	12.07	3674.886		3674.886	3674.886	bb			571.5977	114.3	14.3	413.9
13-Dinitrobenzene	WXX100211-08CRI	168 > 138	12.20	327.791	3674.886	327.791	44.599	bb			37.0916	92.7	-7.3	42.2
Tetryl	WXX100211-08CRI	241 > 181	12.68	326.773	3674.886	326.773	44.460	bb			38.0347	95.1	-4.9	19.0
Nitrobenzene	WXX100211-08CRI	123 > 46	13.63	239.695	3674.886	239.695	32.613	bb			40.3736	100.9	0.9	21.4
4-Amino-26-dinitrotoluene	WXX100211-08CRI	197 > 167	15.71	424.921	20319.664	424.921	10.456	MM	14-Feb-10	11:29:59	36.4007	91.0	-9.0	30.5
2-Amino-46-dinitrotoluene	WXX100211-08CRI	197 > 180	16.60	675.191	20319.664	675.191	16.614	bb			41.9519	104.9	4.9	45.8
246-Trinitrotoluene	WXX100211-08CRI	227 > 210	15.45	559.387	20319.664	559.387	13.765	bb			42.8596	106.6	6.6	45.2
34-dinitrotoluene	WXX100211-08CRI	182 > 152	14.43	817.637	20319.664	817.637	20.119	bb			22.3550	111.8	11.8	19.4
26-dinitrotoluene	WXX100211-08CRI	182 > 152	17.66	1757.096	20319.664	1757.096	43.236	MM	14-Feb-10	11:33:50	40.2540	100.6	0.6	54.3
24-dinitrotoluene	WXX100211-08CRI	182 > 152	18.27	324.897	20319.664	324.897	7.995	MM	14-Feb-10	11:41:34	32.7580	81.9	-18.1	10.2
26-dinitrotoluene-d3	WXX100211-08CRI	185 > 155	17.47	20319.664		20319.664	20319.664	bb			550.3796	110.1	10.1	3453.7
2-Nitrotoluene	WXX100211-08CRI	137 > 46	21.14	238.855	20319.664	238.855	5.877	bb			37.9071	94.8	-5.2	20.4
4-Nitrotoluene	WXX100211-08CRI	137 > 46	22.51	130.708	20319.664	130.708	3.216	bb			42.3182	105.8	5.8	11.0
3-Nitrotoluene	WXX100211-08CRI	137 > 46	24.12	124.330	20319.664	124.330	3.059	bb			32.8358	82.1	-17.9	9.4
PETN	WXX100211-08CRI	361 > 62	24.49	3403.986	20319.664	3403.986	83.761	bb			40.9329	102.3	2.3	1115.5

GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/13/10
 Time of Injection 1219
 Standard Number WXX100211-08CRI
 Data File EXP0208240a

HMX	101.9
RDX	96.9
135-TNB	107.1
13-DNB	92.7
Tetryl	95.1
Nitrobenzene	100.9
4A-26-DNT	91.0
2A-46-DNT	104.9
246-TNT	106.6
34-DNT(surr)	111.8
26-DNT	100.6
24-DNT	81.9
2-NT	94.8
4-NT	105.8
3-NT	82.1
PETN	102.3

*not
2/14/10*

Total 1576.4

Average 98.5

done 02/13/10

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): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0208251a

Analysis Date: 13-FEB-10 17:44

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
Tetryl	600	620.587	103	
m-Dinitrobenzene	600	616.754	103	
m-Nitrotoluene	600	551.441	92	
o-Nitrotoluene	600	587.066	98	
p-Nitrotoluene	600	599.481	100	
1,3,5-Trinitrobenzene	600	575.381	96	
1,3-Dinitrobenzene-d4	500	450.991	90	
2,4,6-Trinitrotoluene	600	677.663	113	
2,4-Dinitrotoluene	600	624.58	104	
2,6-Dinitrotoluene	600	643.343	107	
2,6-Dinitrotoluene-d3	500	440.81	88	
2-Amino-4,6-dinitrotoluene	600	655.3	109	
3,4-Dinitrotoluene	300	328.38	109	
4-Amino-2,6-dinitrotoluene	600	588.882	98	
HMX	600	641.405	107	
Nitrobenzene	600	622.212	104	
PETN	600	713.245	119	
RDX	600	688.19	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 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\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208251a

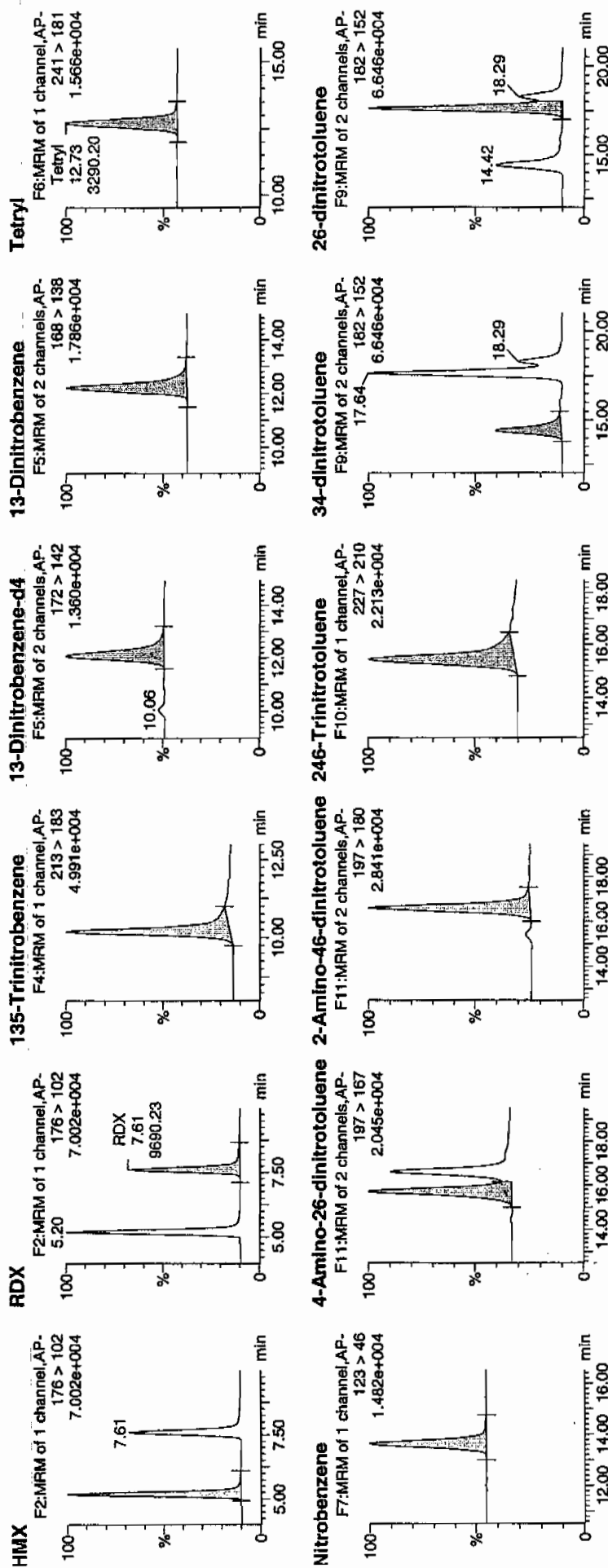
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Time: 17:44:16

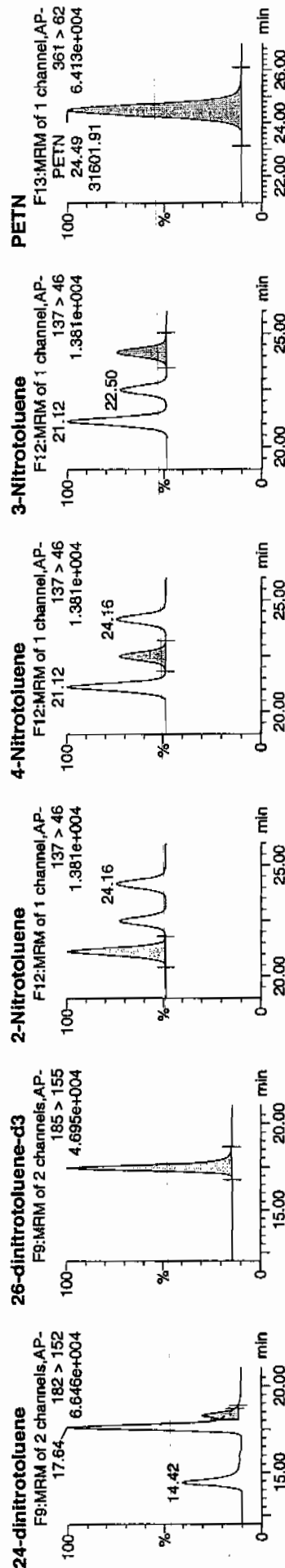
ID: WXX100211-07CCV

Vial: 1:1,B

μM
2/14/10



2/15/10



ID	Name	Trace	RT	Area	S Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	Amount	%Rec	%Dev	SIN
WXX100211-07CCV	HMX	176 > 102	5.20	12917.079	2899.489	12917.079	2227.475	db			641.4054	106.9	6.9	1703.5
WXX100211-07CCV	RDX	176 > 102	7.61	9690.228	2899.489	9690.228	1671.023	bb			688.1898	114.7	14.7	1100.2
WXX100211-07CCV	135-Trinitrobenzene	213 > 183	10.19	12288.985	2899.489	12288.985	2119.160	bb			575.3810	95.9	-4.1	849.5
WXX100211-07CCV	13-Dinitrobenzene-d4	172 > 142	12.07	2899.489		2899.489	2899.489	bb			450.9912	90.2	-9.8	476.0
WXX100211-07CCV	13-Dinitrobenzene	168 > 138	12.21	4300.418	2899.489	4300.418	741.582	bb			616.7538	102.8	2.8	417.2
WXX100211-07CCV	Tetryl	241 > 181	12.73	3290.205	2899.489	3290.205	567.377	bb			620.5868	103.4	3.4	357.2
WXX100211-07CCV	Nitrobenzene	123 > 46	13.62	2914.595	2899.489	2914.595	502.605	bb			622.2123	103.7	3.7	461.8
WXX100211-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.70	5505.746	16274.425	5505.746	169.153	MM	14-Feb-10	11:30:55	588.8818	98.1	-1.9	287.3
WXX100211-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.60	8447.031	16274.425	8447.031	259.519	bb			655.2598	109.2	9.2	602.4
WXX100211-07CCV	246-Trinitrotoluene	227 > 210	15.44	7117.034	16274.425	7117.034	218.657	bb			677.6833	112.9	12.9	150.8
WXX100211-07CCV	34-dinitrotoluene	182 > 152	14.42	9619.463	16274.425	9619.463	295.539	bb			328.3799	109.5	9.5	282.3
WXX100211-07CCV	26-dinitrotoluene	182 > 152	17.64	22491.467	16274.425	22491.467	591.007	MM	14-Feb-10	11:34:45	643.3426	107.2	7.2	845.3
WXX100211-07CCV	24-dinitrotoluene	182 > 152	18.29	4961.411	16274.425	4961.411	152.430	MM	14-Feb-10	11:40:34	624.5800	104.1	4.1	174.3
WXX100211-07CCV	26-dinitrotoluene-d3	185 > 155	17.46	16274.425		16274.425	16274.425	bb			440.8100	88.2	-11.8	2345.8
WXX100211-07CCV	2-Nitrotoluene	137 > 46	21.12	2962.713	16274.425	2962.713	91.024	bb			587.0663	97.8	-2.2	838.8
WXX100211-07CCV	4-Nitrotoluene	137 > 46	22.50	1482.995	16274.425	1482.995	45.562	bb			599.4809	99.9	-0.1	396.1
WXX100211-07CCV	3-Nitrotoluene	137 > 46	24.16	1672.311	16274.425	1672.311	51.378	bb			551.4415	91.9	-8.1	421.3
WXX100211-07CCV	PETN	361 > 62	24.49	31601.914	16274.425	31601.914	970.907	bb			713.2449	118.9	18.9	6922.7

GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/13/10
 Time of Injection: 1744
 Standard Number: WXX100211-07CCV
 Data File: EXP0208251a

HMX	106.9
RDX	114.7
135-TNB	95.9
13-DNB	102.8
Tetryl	103.4
Nitrobenzene	103.7
4A-26-DNT	98.1
2A-46-DNT	109.2
246-TNT	112.9
34-DNT(surr)	109.5
26-DNT	107.2
24-DNT	104.1
2-NT	97.8
4-NT	99.9
3-NT	91.9
PETN	118.9

Handwritten:
 1007
 2/14/10

Total 1676.9

Average 104.8

Handwritten: 1007-02/15/10

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): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0208253a

Analysis Date: 13-FEB-10 18:43

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
RDX	40	39.837	100	
Tetryl	40	32.346	81	
m-Dinitrobenzene	40	41.811	105	
m-Nitrotoluene	40	41.673	104	
o-Nitrotoluene	40	37.339	93	
p-Nitrotoluene	40	43.597	109	
1,3,5-Trinitrobenzene	40	41.844	105	
1,3-Dinitrobenzene-d4	500	515.203	103	
2,4,6-Trinitrotoluene	40	40.247	101	
2,4-Dinitrotoluene	40	40.422	101	
2,6-Dinitrotoluene	40	40.611	102	
2,6-Dinitrotoluene-d3	500	478.455	96	
2-Amino-4,6-dinitrotoluene	40	43.82	110	
3,4-Dinitrotoluene	20	21.899	109	
4-Amino-2,6-dinitrotoluene	40	41.727	104	
HMX	40	42.961	107	
Nitrobenzene	40	41.468	104	
PETN	40	46.097	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

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

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208253a

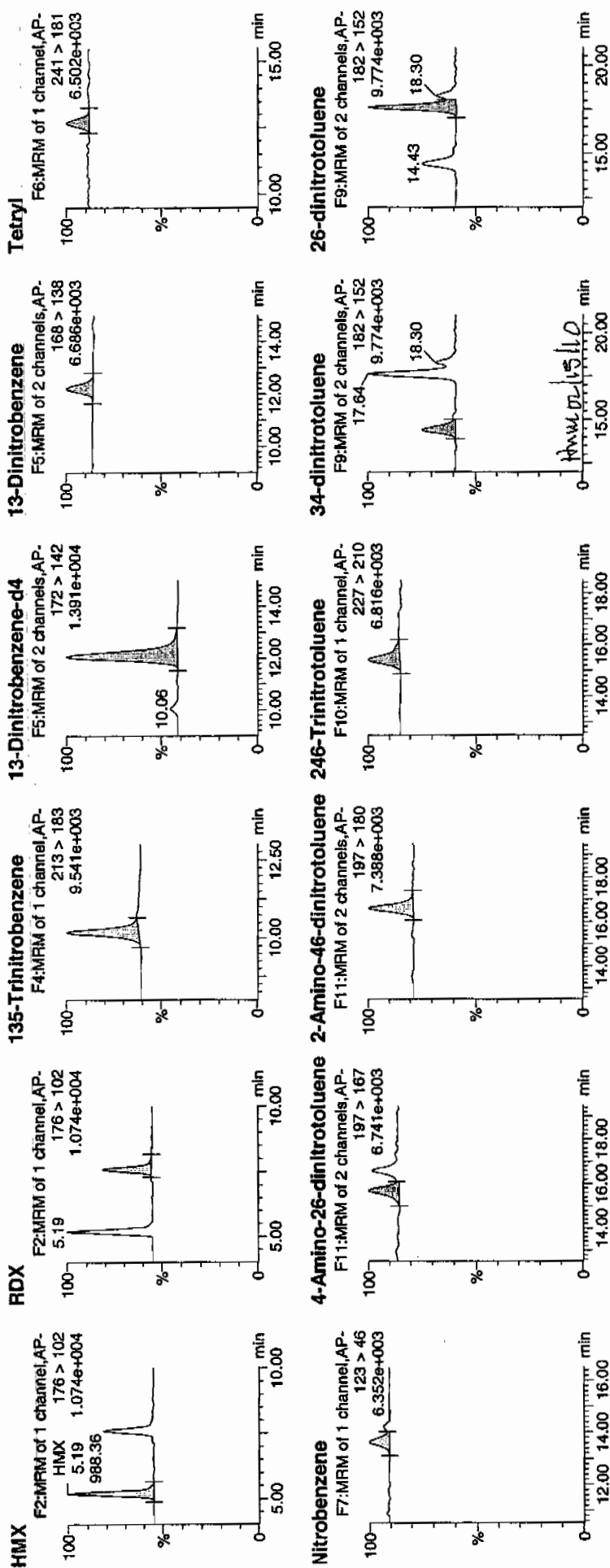
Date: 13-Feb-2010

Time: 18:43:13

ID: WXX100211-08CRI

Vial: 1:1,C

WAT
2/11/10



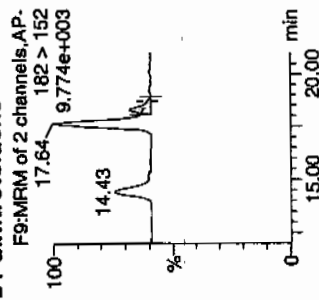
Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

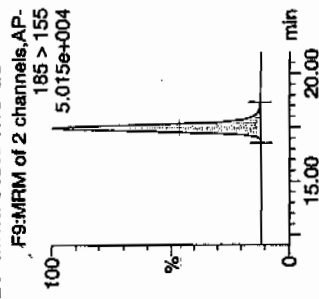
Printed: Sun Feb 14 11:45:22 2010, Page 52 of 95

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010

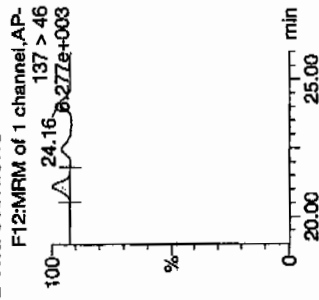
24-dinitrotoluene



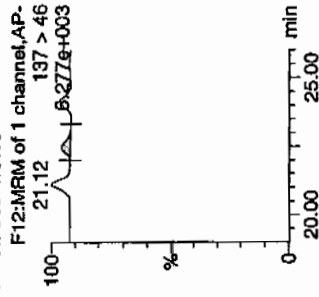
26-dinitrotoluene-d3



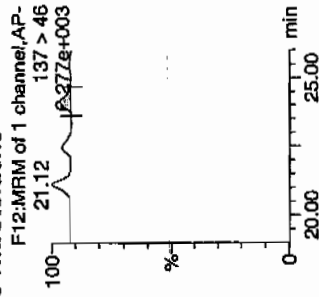
2-Nitrotoluene



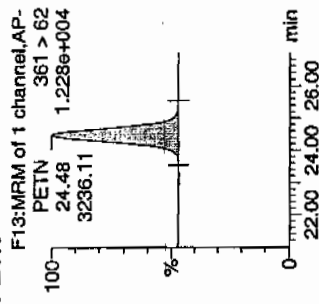
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Area	Ratio	SN
WXX100211-08CRI	HMX	176 > 102	5.19	988.362	3312.315	988.362	149.195	bb			42.9610	107.4	7.4
WXX100211-08CRI	RDX	176 > 102	7.61	640.799	3312.315	640.799	96.730	bb			39.8369	99.6	-0.4
WXX100211-08CRI	135-Trinitrobenzene	213 > 183	10.20	1020.954	3312.315	1020.954	154.115	bb			41.8443	104.6	4.6
WXX100211-08CRI	13-Dinitrobenzene-d4	172 > 142	12.07	3312.315		3312.315	3312.315	bb			515.2028	103.0	3.0
WXX100211-08CRI	13-Dinitrobenzene	168 > 138	12.20	333.045		333.045	50.274	bb			41.8113	104.5	4.5
WXX100211-08CRI	Tetryl	241 > 181	12.72	258.530		258.530	39.026	bb			32.3459	80.9	-19.1
WXX100211-08CRI	Nitrobenzene	123 > 46	13.63	221.905		221.905	33.497	bd			41.4684	103.7	3.7
WXX100211-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.71	423.446		423.446	11.986	MM	14-Feb-10	11:31:01	41.7273	104.3	4.3
WXX100211-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.60	613.098		613.098	17.354	bb			43.8204	109.6	9.6
WXX100211-08CRI	246-Trinitrotoluene	227 > 210	15.42	458.778		458.778	12.966	bb			40.2465	100.6	0.6
WXX100211-08CRI	34-dinitrotoluene	182 > 152	14.43	696.273		696.273	19.709	bd			21.8986	109.5	9.5
WXX100211-08CRI	26-dinitrotoluene	182 > 152	17.64	1541.032		1541.032	43.620	MM	14-Feb-10	11:34:51	40.6113	101.5	1.5
WXX100211-08CRI	24-dinitrotoluene	182 > 152	16.30	348.521		348.521	9.865	MM	14-Feb-10	11:40:22	40.4224	101.1	1.1
WXX100211-08CRI	26-dinitrotoluene-d3	185 > 155	17.47	17664.254		17664.254	17664.254	bb			478.4550	95.7	-4.3
WXX100211-08CRI	2-Nitrotoluene	137 > 46	21.12	204.531		204.531	5.789	bb			37.3394	93.3	-6.7
WXX100211-08CRI	4-Nitrotoluene	137 > 46	22.48	117.060		117.060	3.313	bb			43.5968	109.0	9.0
WXX100211-08CRI	3-Nitrotoluene	137 > 46	24.16	137.170		137.170	3.883	bb			41.6727	104.2	4.2
WXX100211-08CRI	PETN	361 > 62	24.48	3236.109		3236.109	91.601	bb			46.0968	115.2	15.2

GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/13/10
 Time of Injection 1843
 Standard Number WXX100211-08CRI
 Data File EXP0208253a

HMX	107.4
RDX	99.6
135-TNB	104.6
13-DNB	104.5
Tetryl	80.9
Nitrobenzene	103.7
4A-26-DNT	104.3
2A-46-DNT	109.6
246-TNT	100.6
34-DNT(surr)	109.5
26-DNT	101.5
24-DNT	101.1
2-NT	93.3
4-NT	109.0
3-NT	104.2
PETN	115.2

Handwritten:
 1007
 2/14/10

Total 1649.0

Average 103.1

Handwritten: 47111 02/15/10

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): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0208264a

Analysis Date: 14-FEB-10 00:08

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	617.608	103	
1,3-Dinitrobenzene-d4	500	431.134	86	
2,4,6-Trinitrotoluene	600	678.451	113	
2,4-Dinitrotoluene	600	663.978	111	
2,6-Dinitrotoluene	600	627.45	105	
2,6-Dinitrotoluene-d3	500	427.485	85	
2-Amino-4,6-dinitrotoluene	600	684.525	114	
3,4-Dinitrotoluene	300	342.385	114	
4-Amino-2,6-dinitrotoluene	600	607.883	101	
HMX	600	662.943	110	
Nitrobenzene	600	617.786	103	
PETN	600	758.714	126	*
RDX	600	682.472	114	
Tetryl	600	669.562	112	
m-Dinitrobenzene	600	637.764	106	
m-Nitrotoluene	600	550.307	92	
o-Nitrotoluene	600	582.152	97	
p-Nitrotoluene	600	582.241	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

Printed: Sun Feb 14 11:45:22 2010, Page 73 of 95

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

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208264a

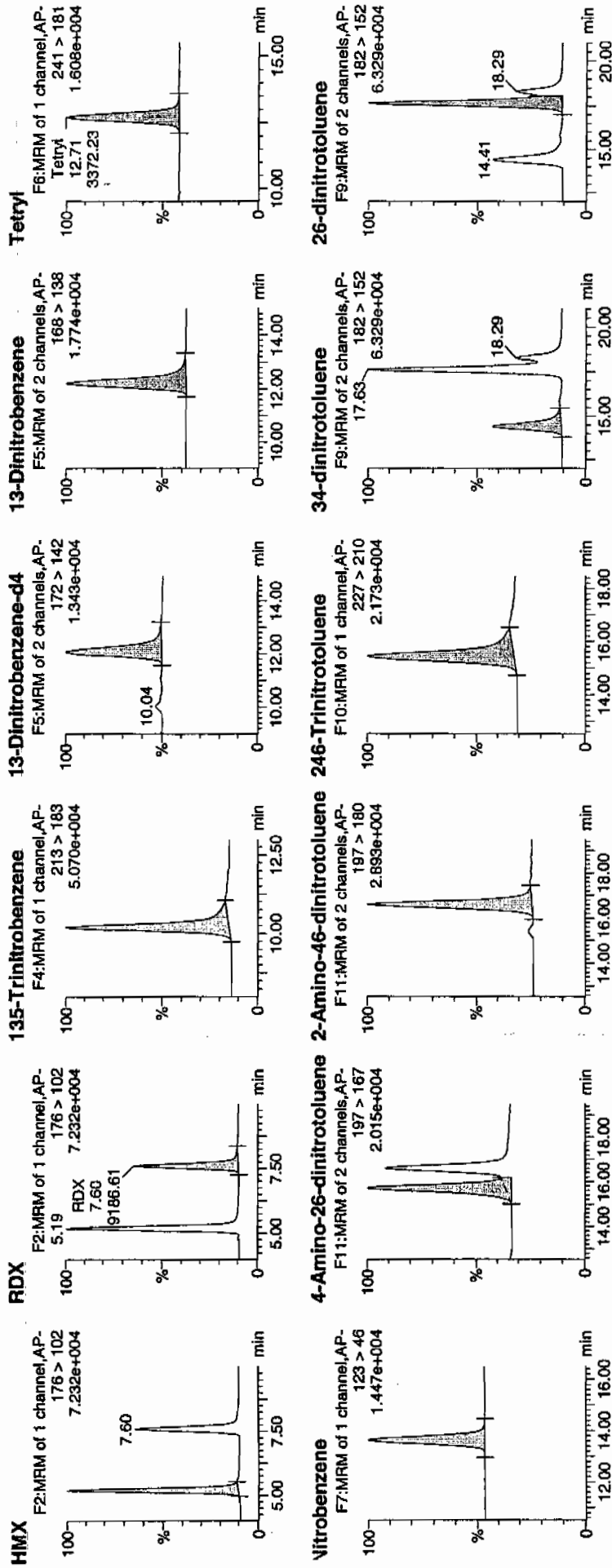
Date: 14-Feb-2010

Time: 00:08:09

ID: WXX100211-07CCV

Vial: 1:1,B

WXX
2/14/10



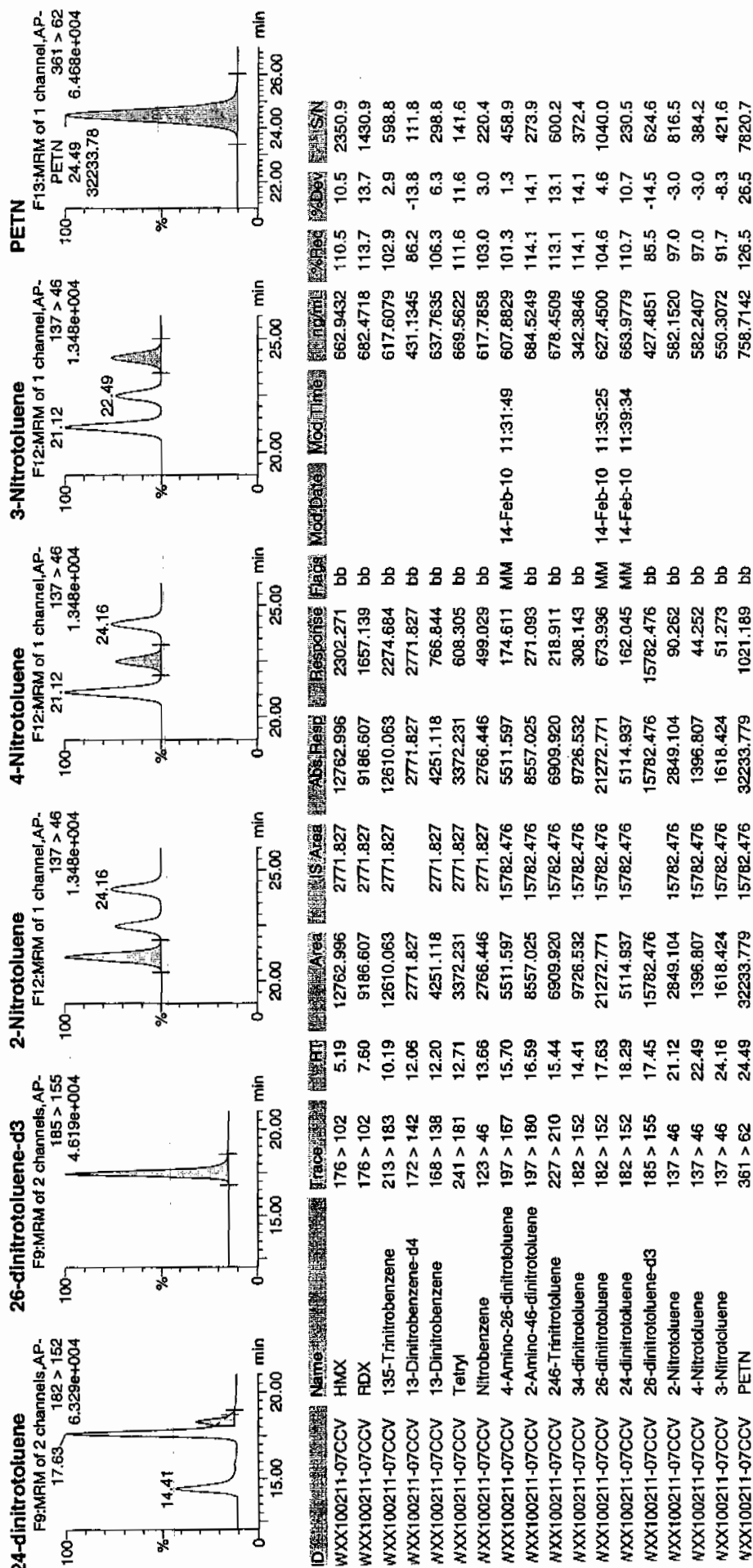
HW 02/15/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Sun Feb 14 11:45:22 2010, Page 74 of 95

Dataset: C:\MASSLYNX\New_Exp\PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010



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

GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/14/10
 Time of Injection: 0008
 Standard Number: WXX100211-07CCV
 Data File: EXP0208264a

HMX	110.5	✓
RDX	113.7	✓
135-TNB	102.9	✓
13-DNB	106.3	
Tetryl	111.6	
Nitrobenzene	103.0	
4A-26-DNT	101.3	
2A-46-DNT	114.1	
246-TNT	113.1	
34-DNT(surr)	114.1	
26-DNT	104.6	
24-DNT	110.7	
2-NT	97.0	
4-NT	97.0	
3-NT	91.7	
PETN	126.5	✓

*MTT
2/14/10*

Total 1718.1

Average 107.4

Ann 02/15/10

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): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0208266a

Analysis Date: 14-FEB-10 01:07

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	50.853	127	
1,3-Dinitrobenzene-d4	500	463.139	93	
2,4,6-Trinitrotoluene	40	37.889	95	
2,4-Dinitrotoluene	40	39.613	99	
2,6-Dinitrotoluene	40	40.814	102	
2,6-Dinitrotoluene-d3	500	454.507	91	
2-Amino-4,6-dinitrotoluene	40	42.094	105	
3,4-Dinitrotoluene	20	19.94	100	
4-Amino-2,6-dinitrotoluene	40	40.976	102	
HMX	40	44.989	112	
Nitrobenzene	40	45.482	114	
PETN	40	51.961	130	
RDX	40	42.203	106	
Tetryl	40	35.609	89	
m-Dinitrobenzene	40	39.649	99	
m-Nitrotoluene	40	35.745	89	
o-Nitrotoluene	40	37.112	93	
p-Nitrotoluene	40	46.081	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

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

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010

Sample Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208266a

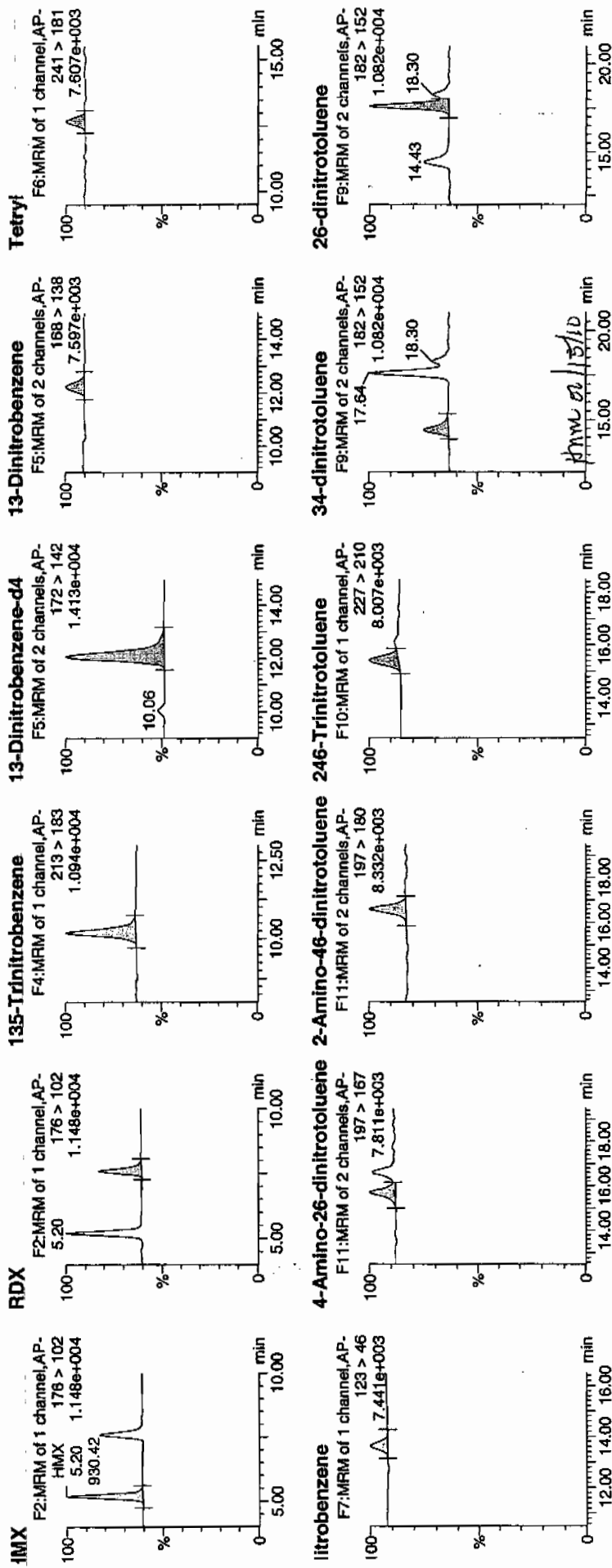
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Time: 01:07:13

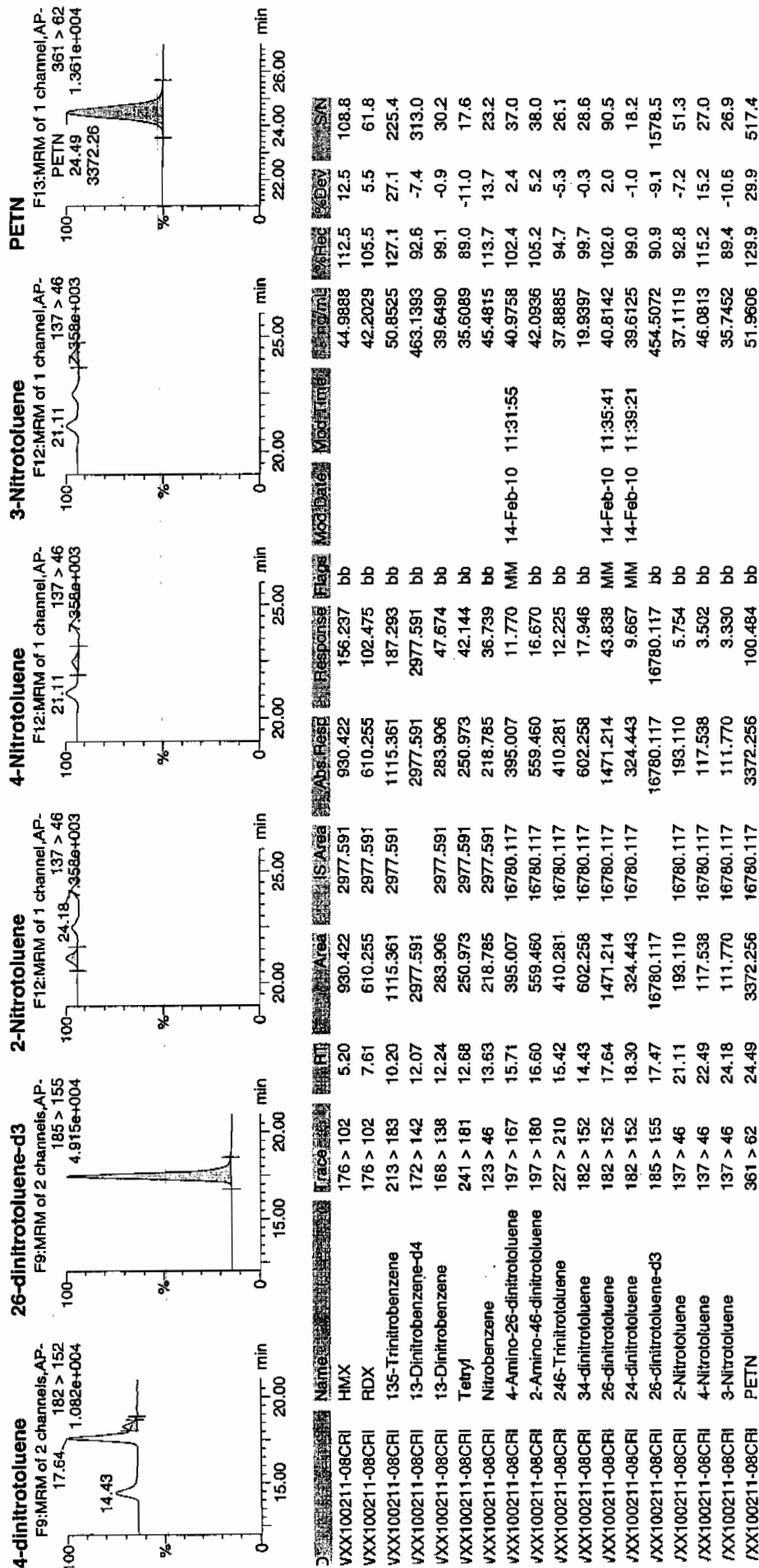
D: WXX100211-08CRI

File: 1:1,C

147
 2/14/10



Dataset: C:\MASSLYNX\New_Exp\PROV020810expA5.qld, Time: Sun Feb 14 11:43:22 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/14/10
 Time of Injection 0107
 Standard Number WXX100211-08CRI
 Data File EXP0208266a

HMX	112.5
RDX	105.5
135-TNB	127.1
13-DNB	99.1
Tetryl	89.0
Nitrobenzene	113.7
4A-26-DNT	102.4
2A-46-DNT	105.2
246-TNT	94.7
34-DNT(surr)	99.7
26-DNT	102.0
24-DNT	99.0
2-NT	92.8
4-NT	115.2
3-NT	89.4
PETN	129.9

Handwritten: 107 2/14/10

Total 1677.2

Handwritten: 107 02/13/10

Average 104.8

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): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0208272a

Analysis Date: 14-FEB-10 04:04

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
2,6-Dinitrotoluene-d3	500	403.953	81	
2-Amino-4,6-dinitrotoluene	600	702.495	117	
3,4-Dinitrotoluene	300	368	123	*
4-Amino-2,6-dinitrotoluene	600	652.276	109	
HMX	600	614.257	102	
Nitrobenzene	600	586.135	98	
PETN	600	796.867	133	*
RDX	600	690.94	115	
Tetryl	600	630.879	105	
m-Dinitrobenzene	600	629.111	105	
m-Nitrotoluene	600	601.85	100	
o-Nitrotoluene	600	619.833	103	
p-Nitrotoluene	600	664.176	111	
1,3,5-Trinitrobenzene	600	586.695	98	
1,3-Dinitrobenzene-d4	500	442.891	89	
2,4,6-Trinitrotoluene	600	736.053	123	*
2,4-Dinitrotoluene	600	655.415	109	
2,6-Dinitrotoluene	600	630.207	105	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

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

Dataset: C:\MASSLYNX\New_Exp\PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010

Sample: C:\MASSLYNX\NEW_EXP\PRO\Data\EXP0208272a

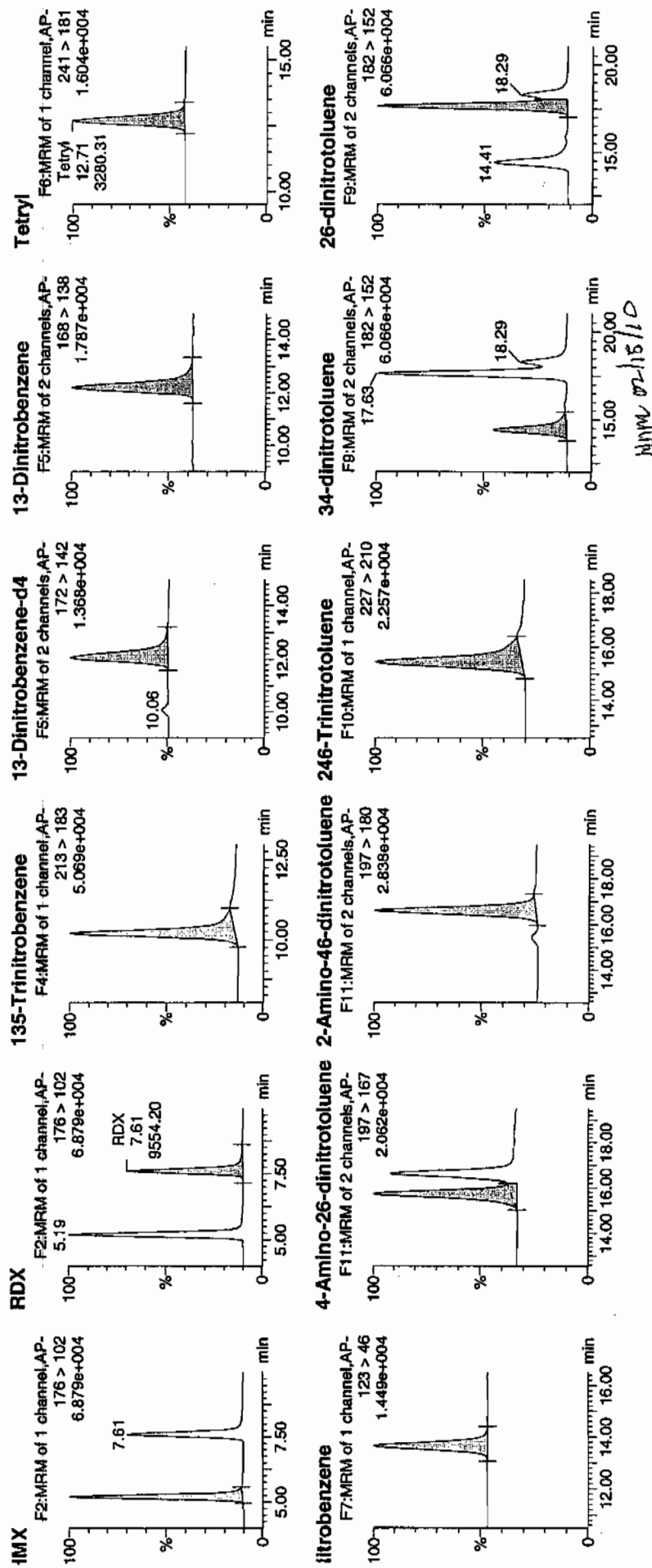
Date: 14-Feb-2010

Time: 04:04:28

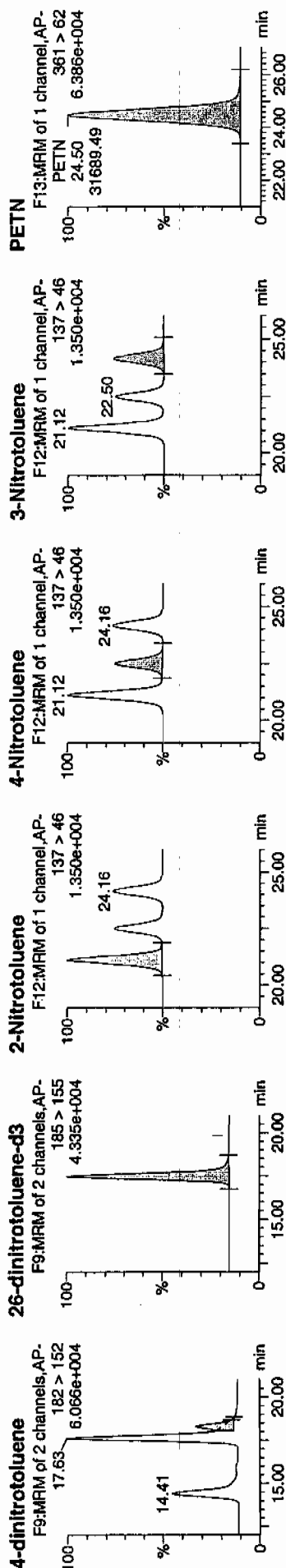
D: WXX100211-07CCV

Vial: 1:1,B

MM
2/14/10



MM 02-15-10



Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Wdwd Time	Int Time	%Resp	%Dev	SN
VXX100211-07CCV	176 > 102	5.19	12148.152	2847.410	12148.152	2193.193	bb			614.2568	102.4	2.4	1718.5
VXX100211-07CCV	176 > 102	7.61	9554.203	2847.410	9554.203	1677.701	bb			690.9397	115.2	15.2	1139.6
VXX100211-07CCV	213 > 183	10.19	12305.545	2847.410	12305.545	2160.831	bb			586.6952	97.8	-2.2	707.7
VXX100211-07CCV	172 > 142	12.06	2847.410		2847.410	2847.410	bb			442.8908	88.6	-11.4	314.9
VXX100211-07CCV	168 > 138	12.20	4307.789	2847.410	4307.789	756.440	bb			629.1107	104.9	4.9	347.8
VXX100211-07CCV	241 > 181	12.71	3280.312	2847.410	3280.312	576.017	bb			630.8790	105.1	5.1	275.1
VXX100211-07CCV	123 > 46	13.66	2696.283	2847.410	2696.283	473.462	bb			586.1345	97.7	-2.3	267.0
VXX100211-07CCV	197 > 167	15.73	5588.550	14913.694	5588.550	187.363	MM	14-Feb-10	11:32:06	652.2762	108.7	8.7	236.7
VXX100211-07CCV	2-Amino-26-dinitrotoluene	16.59	8298.254	14913.694	8298.254	278.209	bb			702.4947	117.1	17.1	507.1
VXX100211-07CCV	246-Trinitrotoluene	15.44	7083.925	14913.694	7083.925	237.497	bb			736.0533	122.7	22.7	472.6
VXX100211-07CCV	34-Dinitrotoluene	18.2 > 150	9878.756	14913.694	9878.756	331.197	bb			368.0005	122.7	22.7	308.6
VXX100211-07CCV	26-dinitrotoluene	17.63	20190.092	14913.694	20190.092	676.898	MM	14-Feb-10	11:35:51	630.2070	105.0	5.0	804.0
VXX100211-07CCV	24-dinitrotoluene	18.2 > 152	4771.042	14913.694	4771.042	159.955	MM	14-Feb-10	11:39:11	655.4152	109.2	9.2	179.9
VXX100211-07CCV	26-dinitrotoluene-d3	18.5 > 155	14913.694		14913.694	14913.694	bb			403.9532	80.8	-19.2	1623.5
VXX100211-07CCV	2-Nitrotoluene	21.12	2866.530	14913.694	2866.530	96.104	bb			619.8327	103.3	3.3	720.9
VXX100211-07CCV	4-Nitrotoluene	22.50	1505.661	14913.694	1505.661	50.479	bb			664.1762	110.7	10.7	364.4
VXX100211-07CCV	3-Nitrotoluene	24.16	1672.574	14913.694	1672.574	56.075	bb			601.8498	100.3	0.3	381.0
VXX100211-07CCV	361 > 62	24.50	31689.494	14913.694	31689.494	1062.429	bb			796.8657	132.8	32.8	5337.7

GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/14/10
 Time of Injection: 0404
 Standard Number: WXX100211-07CCV
 Data File: EXP0208272a

HMX	102.4
RDX	115.2
135-TNB	97.8
13-DNB	104.9
Tetryl	105.1
Nitrobenzene	97.7
4A-26-DNT	108.7
2A-46-DNT	117.1
246-TNT	122.7
34-DNT(surr)	122.7
26-DNT	105.0
24-DNT	109.2
2-NT	103.3
4-NT	110.7
3-NT	100.3
PETN	132.8

*not
2/14/10*

Total 1755.6

Attn 02/15/10

Average 109.7

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): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0208274a

Analysis Date: 14-FEB-10 05:03

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
2,6-Dinitrotoluene-d3	500	455.254	91	
2-Amino-4,6-dinitrotoluene	40	46.09	115	
3,4-Dinitrotoluene	20	22.495	112	
4-Amino-2,6-dinitrotoluene	40	47.795	119	
HMX	40	37.649	94	
Nitrobenzene	40	44.883	112	
PETN	40	50.961	127	
RDX	40	32.927	82	
Tetryl	40	37.817	95	
m-Dinitrobenzene	40	38.858	97	
m-Nitrotoluene	40	35.977	90	
o-Nitrotoluene	40	39.999	100	
p-Nitrotoluene	40	38.575	96	
1,3,5-Trinitrobenzene	40	41.143	103	
1,3-Dinitrobenzene-d4	500	521.14	104	
2,4,6-Trinitrotoluene	40	47.24	118	
2,4-Dinitrotoluene	40	41.344	103	
2,6-Dinitrotoluene	40	38.666	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 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\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208274a

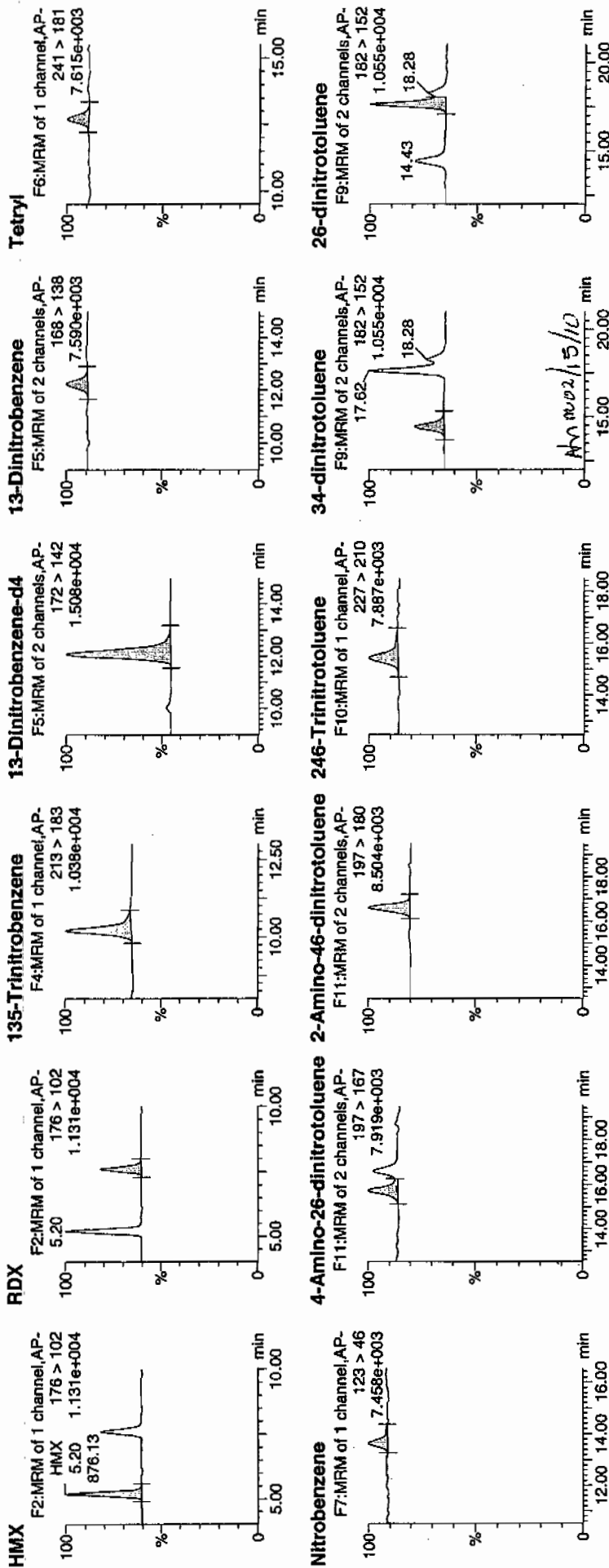
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Time: 05:03:48

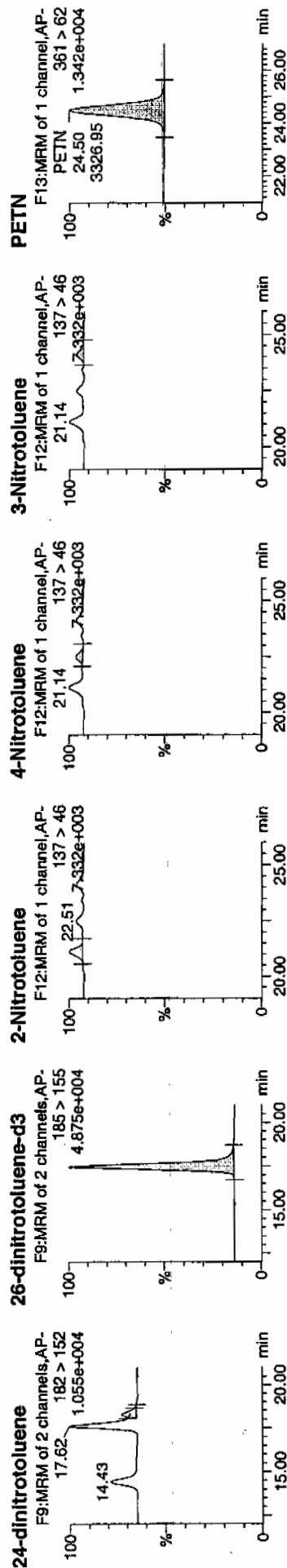
ID: WXX100211-08CRI

Vial: 1:1,C

11/15/10
11/15/10



Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010



ID	Name	Trace	RT	Area	SArea	Abs. Resp	Response	Flags	Mod.Date	Mod.Time	Intg.Mt	WtFctd	%Dev	S/N
WX100211-08C1	HMx	176 > 102	5.20	876.128	3350.488	876.128	130.746	bb			37.6486	94.1	-5.9	172.6
WX100211-08C1	RDX	176 > 102	7.61	535.752	3350.488	535.752	79.951	bb			32.9269	82.3	-17.7	93.3
WX100211-08C1	135-Trinitrobenzene	213 > 183	10.20	1015.399	3350.488	1015.399	151.530	bb			41.1425	102.9	2.9	145.3
WX100211-08C1	13-Dinitrobenzene-d4	172 > 142	12.07	3350.488		3350.488	3350.488	bb			521.1403	104.2	4.2	522.4
WX100211-08C1	13-Dinitrobenzene	168 > 138	12.24	313.087	3350.488	313.087	46.723	bb			38.8579	97.1	-2.9	24.8
WX100211-08C1	Tetryl	241 > 181	12.72	296.536	3350.488	296.536	44.253	bb			37.8172	94.5	-5.5	24.4
WX100211-08C1	Nitrobenzene	123 > 46	13.63	242.945	3350.488	242.945	36.255	bb			44.8830	112.2	12.2	17.5
WX100211-08C1	4-Amino-26-dinitrotoluene	197 > 167	15.74	461.499	16807.682	461.499	13.729	MM	14-Feb-10	11:32:14	47.7948	119.5	19.5	36.0
WX100211-08C1	2-Amino-46-dinitrotoluene	197 > 180	16.60	613.584	16807.682	613.584	18.253	bb			46.0301	115.2	15.2	90.4
WX100211-08C1	246-Trinitrotoluene	227 > 210	15.45	512.386	16807.682	512.386	15.243	bb			47.2400	118.1	18.1	77.6
WX100211-08C1	34-dinitrotoluene	182 > 152	14.43	680.554	16807.682	680.554	20.245	bb			22.4950	112.5	12.5	50.2
WX100211-08C1	26-dinitrotoluene	182 > 152	17.62	1396.071	16807.682	1396.071	41.531	bd			38.6861	96.7	-3.3	126.9
WX100211-08C1	24-dinitrotoluene	182 > 152	18.28	339.180	16807.682	339.180	10.090	MM	14-Feb-10	11:38:42	41.3439	103.4	3.4	28.7
WX100211-08C1	26-dinitrotoluene-d3	185 > 155	17.47	16807.682		16807.682	16807.682	bb			455.2539	91.1	-8.9	985.5
WX100211-08C1	2-Nitrotoluene	137 > 46	21.14	208.477	16807.682	208.477	6.202	bb			39.9994	100.0	-0.0	9.3
WX100211-08C1	4-Nitrotoluene	137 > 46	22.51	98.553	16807.682	98.553	2.932	bb			38.5748	96.4	-3.6	4.4
WX100211-08C1	3-Nitrotoluene	137 > 46	24.16	112.680	16807.682	112.680	3.352	bb			35.9772	89.9	-10.1	4.6
WX100211-08C1	PETN	361 > 62	24.50	3326.955	16807.682	3326.955	98.971	bb			50.9613	127.4	27.4	1180.4

GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/14/10
 Time of Injection 0503
 Standard Number WXX100211-08CRI
 Data File EXP0208274a

HMX	94.1
RDX	82.3
135-TNB	102.9
13-DNB	97.1
Tetryl	94.5
Nitrobenzene	112.2
4A-26-DNT	119.5
2A-46-DNT	115.2
246-TNT	118.1
34-DNT(surr)	112.5
26-DNT	96.7
24-DNT	103.4
2-NT	100.0
4-NT	96.4
3-NT	89.9
PETN	127.4

*WWT
2/14/10*

Total 1662.2

Average 103.9

Time 02/15/10

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): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0208285a

Analysis Date: 14-FEB-10 10:28

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
m-Nitrotoluene	600	533.896	89	
o-Nitrotoluene	600	566.154	94	
p-Nitrotoluene	600	574.044	96	
1,3,5-Trinitrobenzene	600	641.5	107	
1,3-Dinitrobenzene-d4	500	438.44	88	
2,4,6-Trinitrotoluene	600	701.706	117	
2,4-Dinitrotoluene	600	617.694	103	
2,6-Dinitrotoluene	600	609.252	102	
2,6-Dinitrotoluene-d3	500	463.69	93	
2-Amino-4,6-dinitrotoluene	600	670.595	112	
3,4-Dinitrotoluene	300	320.267	107	
4-Amino-2,6-dinitrotoluene	600	610.111	102	
HMX	600	735.663	123	*
Nitrobenzene	600	629.864	105	
PETN	600	767.405	128	*
RDX	600	729.574	122	*
Tetryl	600	719.144	120	
m-Dinitrobenzene	600	648.028	108	

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\020810expA6.qld, Time: Mon Feb 15 07:43:55 2010

Name: C:\MASSLYNX\NEW_EXP_PRO\Data\EXP0208285a

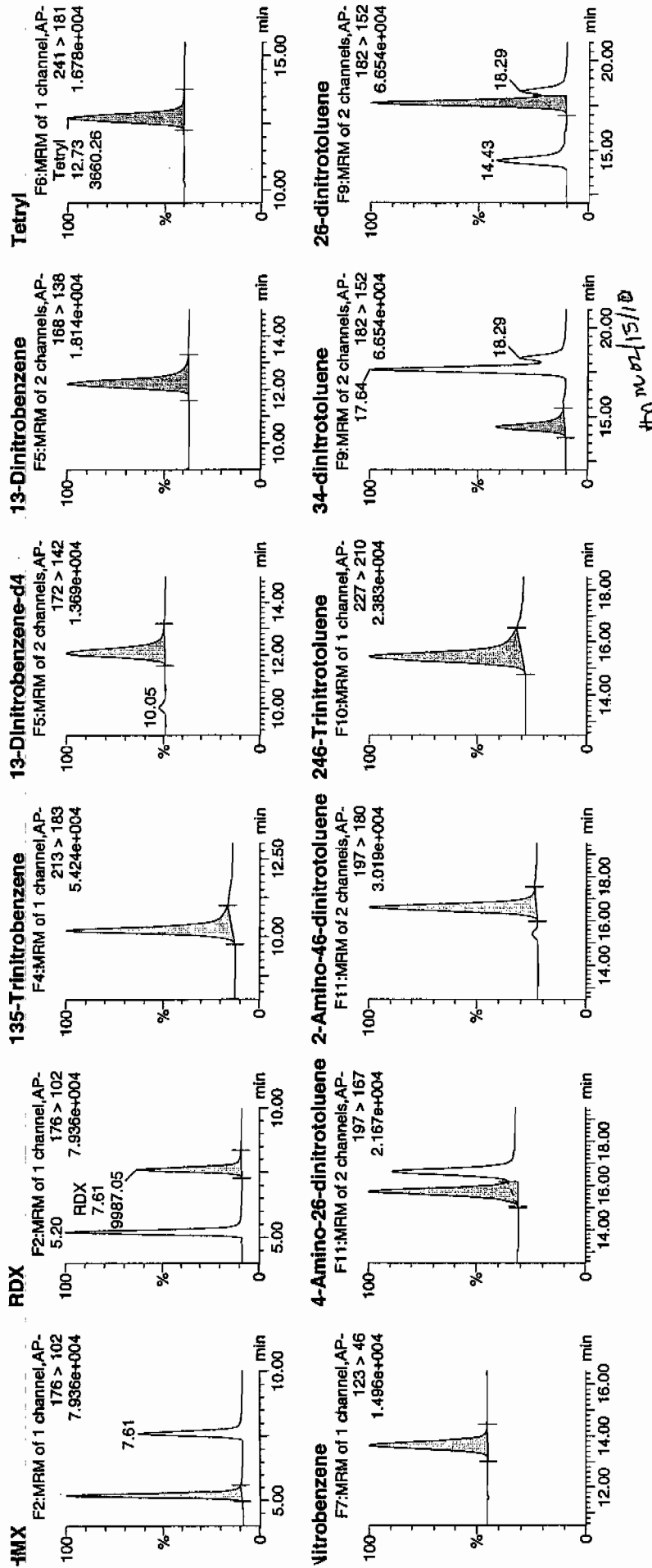
Date: 14-Feb-2010

Time: 10:28:06

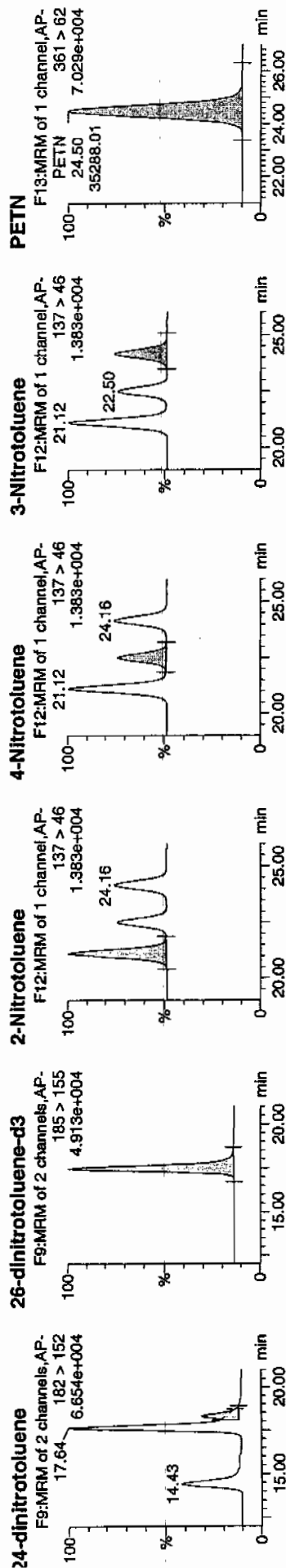
D: WXX100211-07CCV

Vial: 1:1,B

MR
1/15/10



Dataset: C:\MASSLYN\New_Exp.PRO\020810expA6.qld, Time: Mon Feb 15 07:43:55 2010



ID	Chemical Name	Trace	RT	Area	US Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Inc/Out	%Rec	%Dev	S/N
WXX100211-07CCV	HMX	176 > 102	5.20	14402.983	2818.793	14402.983	2554.814	bb			735.6632	122.6	22.6	2391.3
WXX100211-07CCV	RDX	176 > 102	7.61	9987.047	2818.793	9987.047	1771.511	bb			729.5745	121.6	21.6	1442.1
WXX100211-07CCV	135-Trinitrobenzene	213 > 183	10.20	13319.815	2818.793	13319.815	2362.681	bb			641.5001	106.9	6.9	1035.0
WXX100211-07CCV	13-Dinitrobenzene-d4	172 > 142	12.07	2818.793		2818.793	2818.793	bb			438.4396	87.7	-12.3	184.6
WXX100211-07CCV	13-Dinitrobenzene	168 > 138	12.21	4392.728	2818.793	4392.728	779.186	bb			648.0280	108.0	8.0	486.4
WXX100211-07CCV	Tetryl	241 > 181	12.73	3660.260	2818.793	3660.260	649.260	bb			719.1440	119.9	19.9	254.9
WXX100211-07CCV	Nitrobenzene	123 > 46	13.63	2868.323	2818.793	2868.323	508.786	bb			629.8639	105.0	5.0	176.5
WXX100211-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.71	6000.307	17119.146	6000.307	175.251	MM	15-Feb-10	07:39:18	610.1112	101.7	1.7	400.0
WXX100211-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.60	9092.866	17119.146	9092.866	265.576	bb			670.5949	111.8	11.8	361.5
WXX100211-07CCV	246-Trinitrotoluene	227 > 210	15.45	7752.049	17119.146	7752.049	226.415	bb			701.7056	117.0	17.0	688.5
WXX100211-07CCV	34-dinitrotoluene	182 > 152	14.43	9868.769	17119.146	9868.769	288.238	bb			320.2670	106.8	6.8	543.5
WXX100211-07CCV	26-dinitrotoluene	182 > 152	17.64	22405.191	17119.146	22405.191	654.390	MM	15-Feb-10	07:41:44	609.2517	101.5	1.5	1554.7
WXX100211-07CCV	24-dinitrotoluene	182 > 152	18.29	5161.395	17119.146	5161.395	150.749	MM	15-Feb-10	07:42:46	617.6942	102.9	2.9	341.1
WXX100211-07CCV	26-dinitrotoluene-d3	185 > 155	17.46	17119.146		17119.146	17119.146	bb			463.6902	92.7	-7.3	1605.7
WXX100211-07CCV	2-Nitrotoluene	137 > 46	21.12	3005.476	17119.146	3005.476	87.781	bb			566.1537	94.4	-5.6	306.9
WXX100211-07CCV	4-Nitrotoluene	137 > 46	22.50	1493.778	17119.146	1493.778	43.629	bb			574.0441	95.7	-4.3	149.6
WXX100211-07CCV	3-Nitrotoluene	137 > 46	24.16	1703.142	17119.146	1703.142	49.744	bb			533.8962	89.0	-11.0	160.3
WXX100211-07CCV	PETN	361 > 62	24.50	35288.008	17119.146	35288.008	1030.659	bb			767.4048	127.9	27.9	12877.6

GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/14/10
 Time of Injection: 1028
 Standard Number: WXX100211-07CCV
 Data File: EXP0208285a

HMX	122.6
RDX	121.6
135-TNB	106.9
13-DNB	108.0
Tetryl	119.9
Nitrobenzene	105.0
4A-26-DNT	101.7
2A-46-DNT	111.8
246-TNT	117.0
34-DNT(surr)	106.8
26-DNT	101.5
24-DNT	102.9
2-NT	94.4
4-NT	95.7
3-NT	89.0
PETN	127.9

Handwritten: 1007
2/15/10

Total 1732.7

Handwritten: 1007 02/15/10

Average 108.3

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%

No single analyte > +/- 60%

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0208287a

Analysis Date: 14-FEB-10 11:27

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
o-Nitrotoluene	40	42.91	107	
p-Nitrotoluene	40	42.087	105	
1,3,5-Trinitrobenzene	40	44.726	112	
1,3-Dinitrobenzene-d4	500	494.354	99	
2,4,6-Trinitrotoluene	40	33.094	83	
2,4-Dinitrotoluene	40	43.452	109	
2,6-Dinitrotoluene	40	40.693	102	
2,6-Dinitrotoluene-d3	500	513.556	103	
2-Amino-4,6-dinitrotoluene	40	45.49	114	
3,4-Dinitrotoluene	20	20.334	102	
4-Amino-2,6-dinitrotoluene	40	42.736	107	
HMX	40	45.173	113	
Nitrobenzene	40	35.245	88	
PETN	40	51.72	129	
RDX	40	41.89	105	
Tetryl	40	40.461	101	
m-Dinitrobenzene	40	39.902	100	
m-Nitrotoluene	40	46.894	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

Printed: Mon Feb 15 07:46:07 2010, Page 25 of 67

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

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA6.qld, Time: Mon Feb 15 07:43:55 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208287a

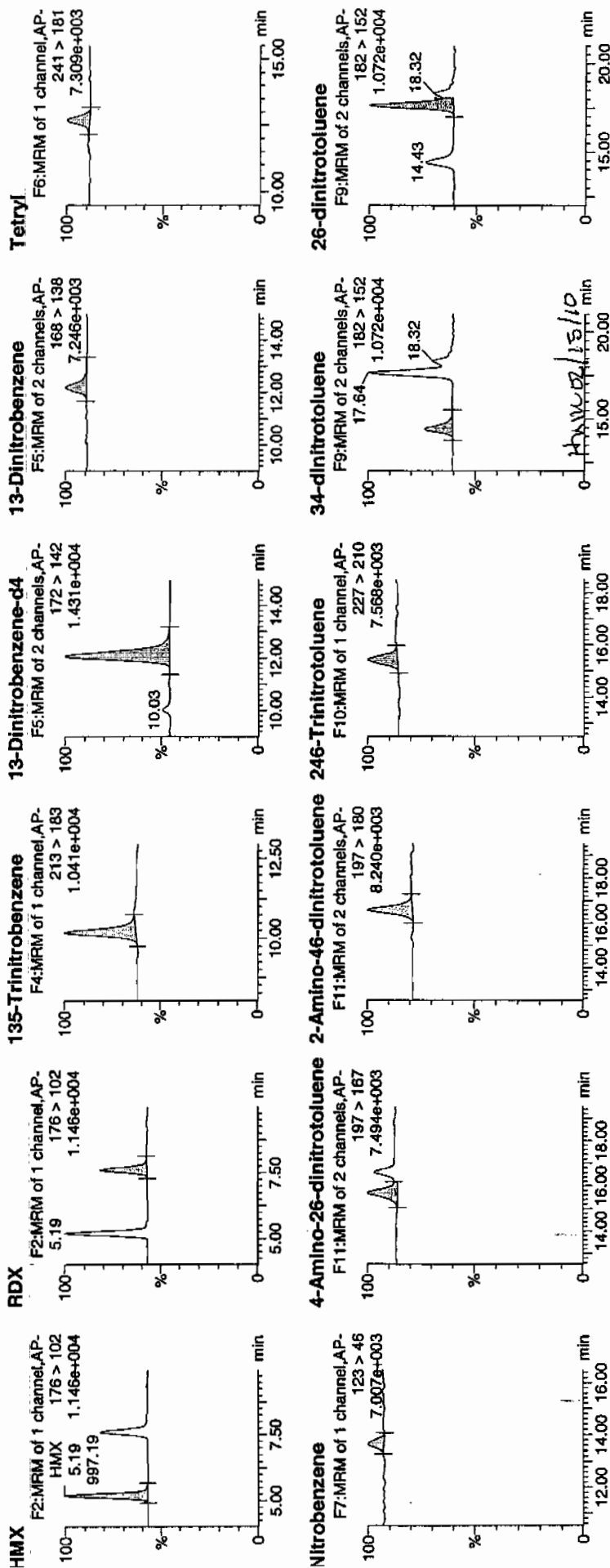
Date: 14-Feb-2010

Time: 11:27:09

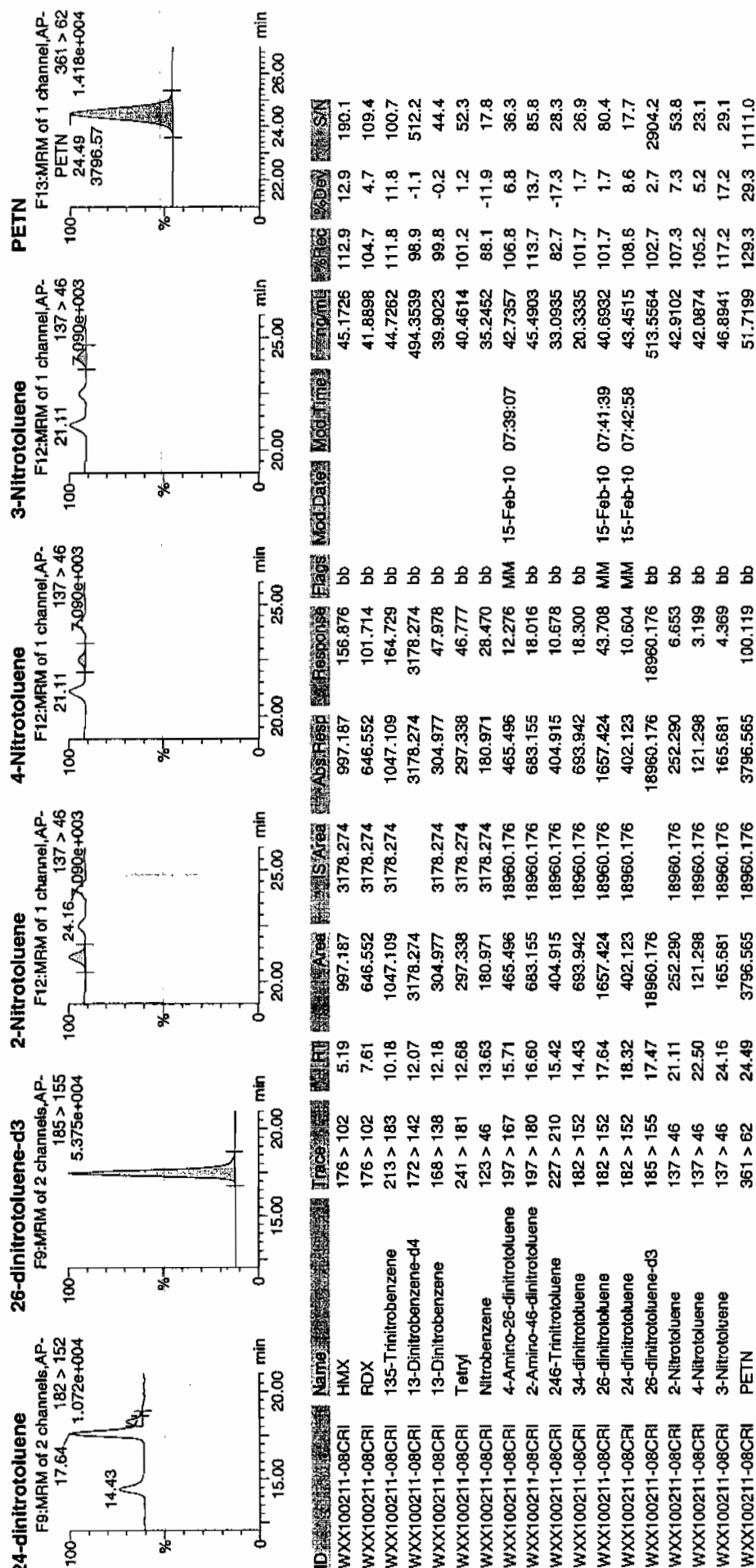
ID: WXX100211-08CRI

Vial: 1:1,C

AP-15/10



Dataset: C:\MASSLYN\New_Exp.PRO\020810expA6.qld, Time: Mon Feb 15 07:43:55 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/14/10
 Time of Injection 1127
 Standard Number WXX100211-08CRI
 Data File EXP0208287a

HMX	112.9	✓
RDX	104.7	✓
135-TNB	111.8	✓
13-DNB	99.8	
Tetryl	101.2	
Nitrobenzene	88.1	
4A-26-DNT	106.8	
2A-46-DNT	113.7	
246-TNT	82.7	
34-DNT(surr)	101.7	
26-DNT	101.7	
24-DNT	108.6	
2-NT	107.3	
4-NT	105.2	
3-NT	117.2	
PETN	129.3	

MMT
2/15/10

Total 1692.7

Average 105.8

4/11/10-02/15/10

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): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0208297a

Analysis Date: 14-FEB-10 16:24

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	587.59	98	
1,3-Dinitrobenzene-d4	500	483.759	97	
2,4,6-Trinitrotoluene	600	689.684	115	
2,4-Dinitrotoluene	600	635.684	106	
2,6-Dinitrotoluene	600	617.896	103	
2,6-Dinitrotoluene-d3	500	486.478	97	
2-Amino-4,6-dinitrotoluene	600	690.465	115	
3,4-Dinitrotoluene	300	359.868	120	
4-Amino-2,6-dinitrotoluene	600	616.947	103	
HMX	600	705.373	118	
Nitrobenzene	600	610.632	102	
PETN	600	699.599	117	
RDX	600	692.737	115	
Tetryl	600	627.532	105	
m-Dinitrobenzene	600	634.065	106	
m-Nitrotoluene	600	572.386	95	
o-Nitrotoluene	600	547.501	91	
p-Nitrotoluene	600	613.719	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 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\020810expA6.qld, Time: Mon Feb 15 07:43:55 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208297a

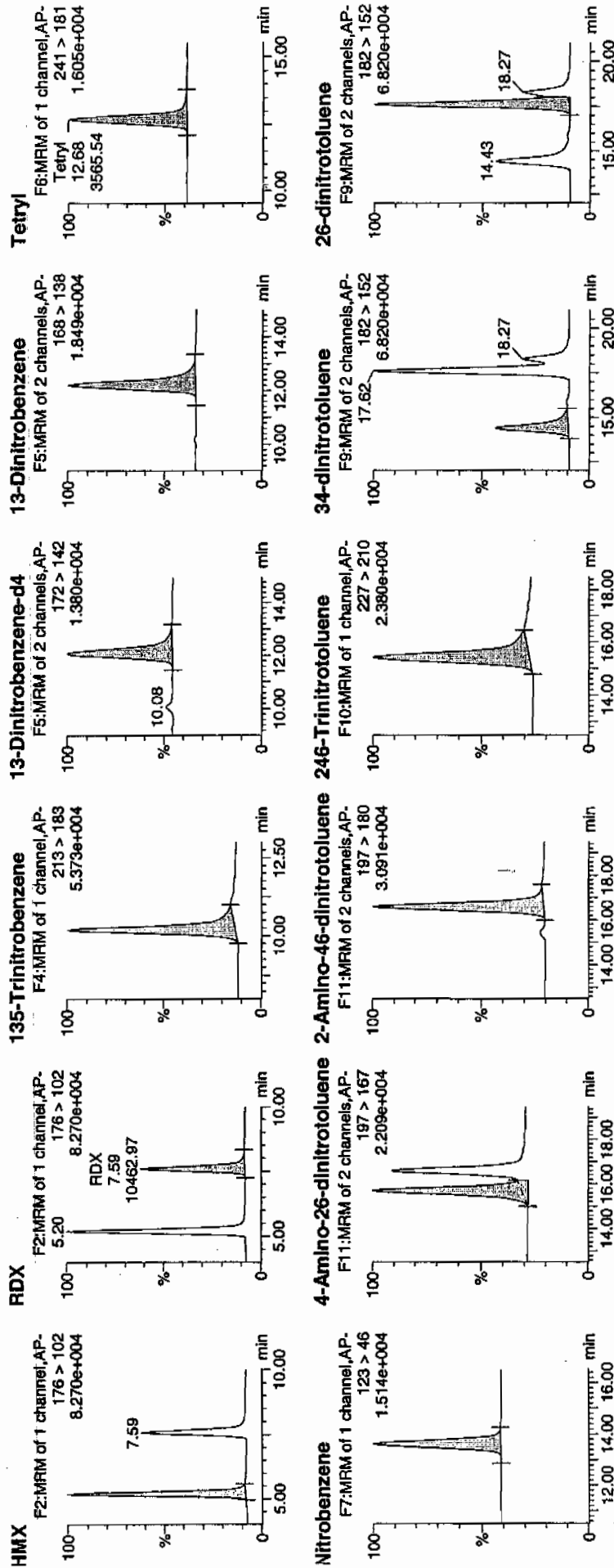
Date: 14-Feb-2010

Time: 16:24:28

ID: WXX100214-07CCV

Vial: 1:1,B

2/15/10

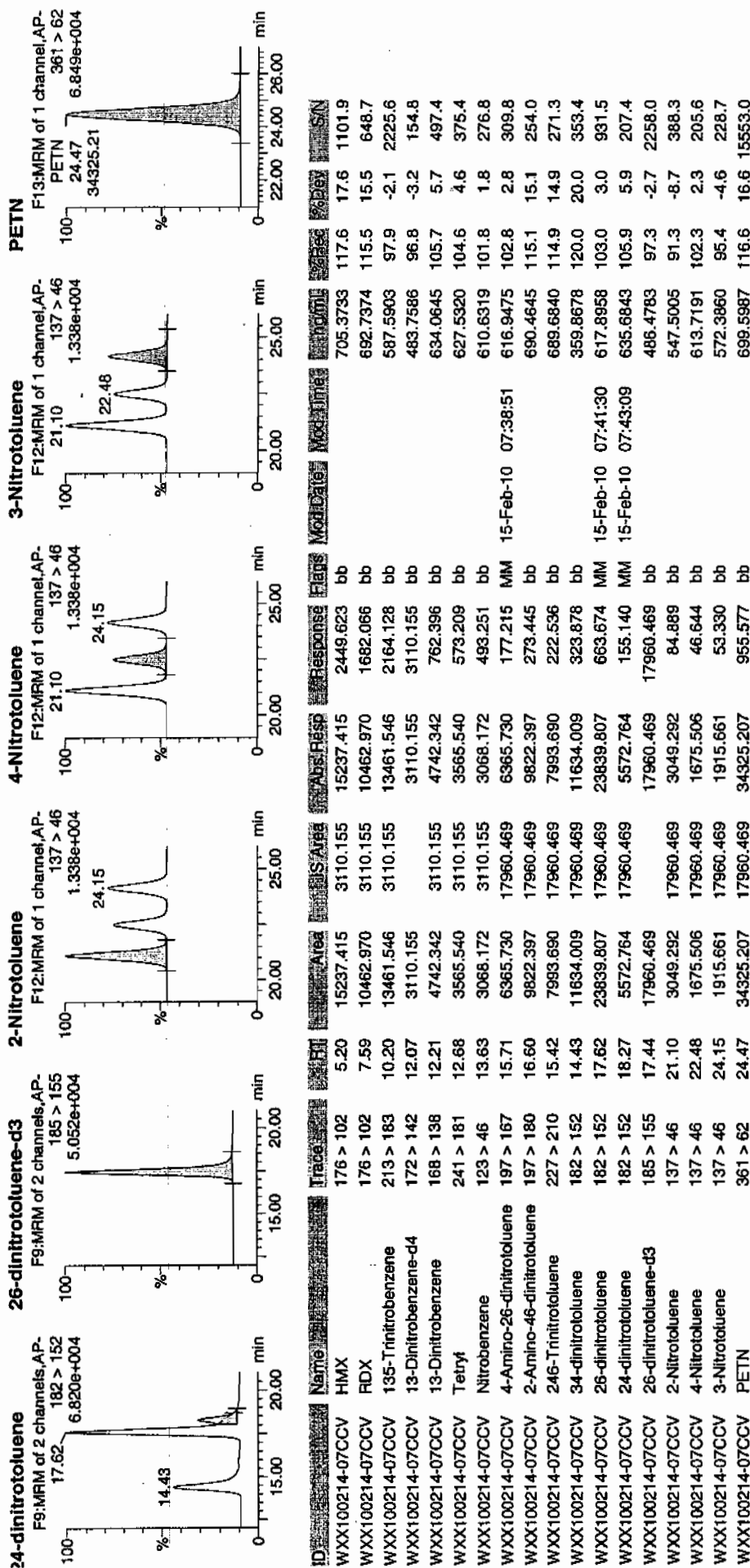


2/15/10

Printed: Mon Feb 15 07:46:07 2010, Page 46 of 67

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

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA6.qld, Time: Mon Feb 15 07:43:55 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/14/10
 Time of Injection: 1624
 Standard Number: WXX100214-07CCV
 Data File: EXP0208297a

HMX	117.6
RDX	115.5
135-TNB	97.9
13-DNB	105.7
Tetryl	104.6
Nitrobenzene	101.8
4A-26-DNT	102.8
2A-46-DNT	115.1
246-TNT	114.9
34-DNT(surr)	120.0
26-DNT	103.0
24-DNT	105.9
2-NT	91.3
4-NT	102.3
3-NT	95.4
PETN	116.6

*mtt
2/15/10*

Total 1710.4

mtt 02/15/10

Average 106.9

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): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0208299a

Analysis Date: 14-FEB-10 17:23

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	53.905	135	*
1,3-Dinitrobenzene-d4	500	516.4	103	
2,4,6-Trinitrotoluene	40	37.782	94	
2,4-Dinitrotoluene	40	39.985	100	
2,6-Dinitrotoluene	40	41.03	103	
2,6-Dinitrotoluene-d3	500	494.854	99	
2-Amino-4,6-dinitrotoluene	40	44.093	110	
3,4-Dinitrotoluene	20	22.562	113	
4-Amino-2,6-dinitrotoluene	40	47.743	119	
HMX	40	49.854	125	
Nitrobenzene	40	49.628	124	
PETN	40	51.863	130	
RDX	40	46.553	116	
Tetryl	40	33.885	85	
m-Dinitrobenzene	40	37.913	95	
m-Nitrotoluene	40	28.247	71	
o-Nitrotoluene	40	40.925	102	
p-Nitrotoluene	40	40.028	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\020810expA6.qtd, Time: Mon Feb 15 07:43:55 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208299a

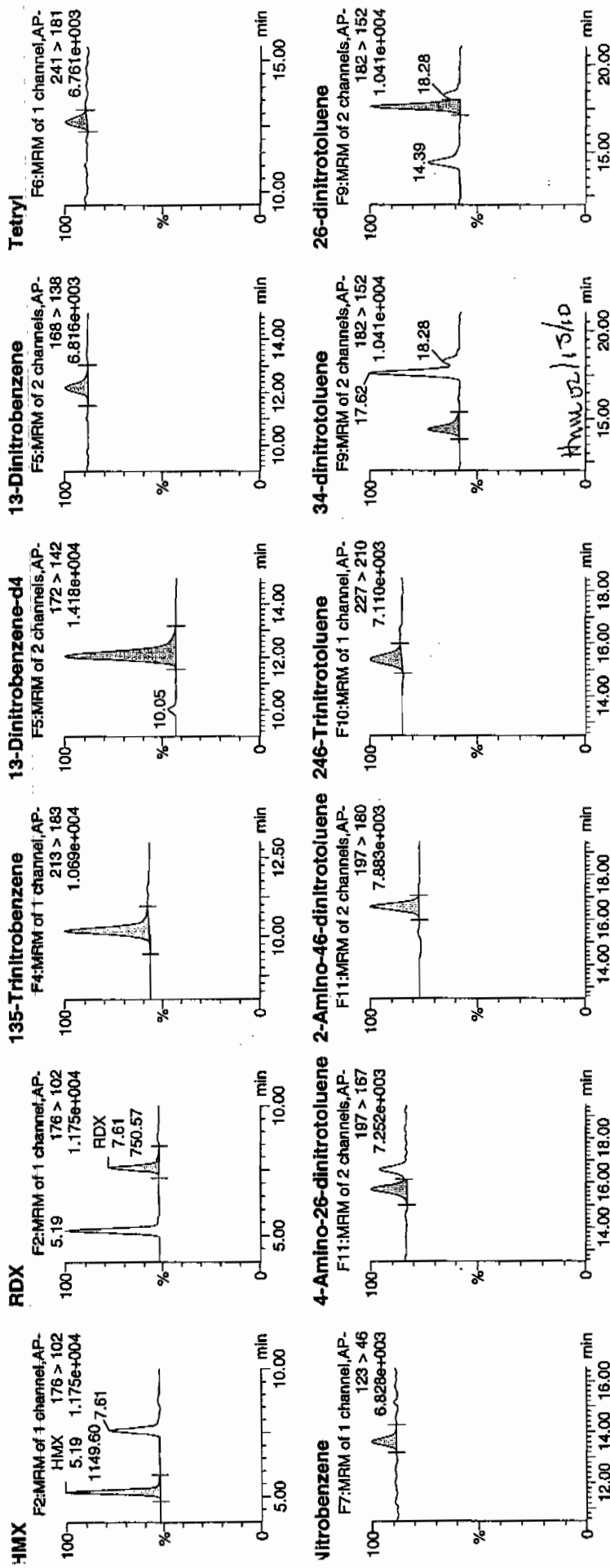
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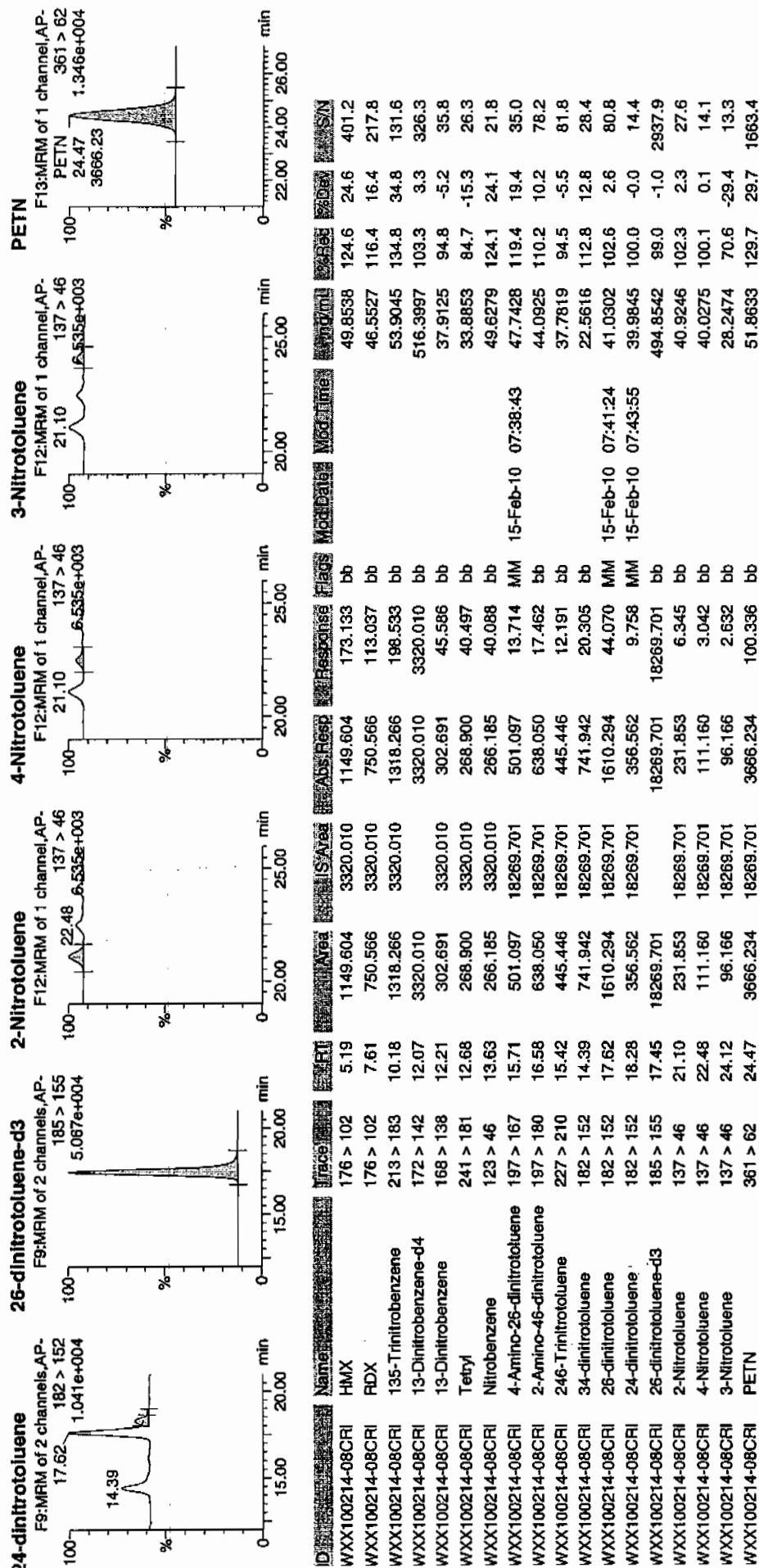
D: WXX100214-08CRI

Vial: 1:1,C

MMT
2/15/10



Dataset: C:\MASSLYNX\New_Exp_PRO\020810expA6.qld, Time: Mon Feb 15 07:43:55 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/14/10
 Time of Injection 1723
 Standard Number WXX100214-08CRI
 Data File EXP0208299a

HMX	124.6
RDX	116.4
135-TNB	134.8
13-DNB	94.8
Tetryl	84.7
Nitrobenzene	124.1
4A-26-DNT	119.4
2A-46-DNT	110.2
246-TNT	94.5
34-DNT(surr)	112.8
26-DNT	102.6
24-DNT	100.0
2-NT	102.3
4-NT	100.1
3-NT	70.6
PETN	129.7

*mtf
2/15/10*

Total 1721.6

Average 107.6

1721.6 02/15/10

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): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0208305a

Analysis Date: 14-FEB-10 20:20

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
3,4-Dinitrotoluene	300	317.36	106	
4-Amino-2,6-dinitrotoluene	600	589.068	98	
HMX	600	852.826	142	*
Nitrobenzene	600	552.363	92	
PETN	600	739.383	123	*
RDX	600	661.785	110	
Tetryl	600	763.486	127	*
m-Dinitrobenzene	600	665.57	111	
m-Nitrotoluene	600	549.598	92	
o-Nitrotoluene	600	506.888	84	
p-Nitrotoluene	600	598.213	100	
1,3,5-Trinitrobenzene	600	577.914	96	
1,3-Dinitrobenzene-d4	500	510.913	102	
2,4,6-Trinitrotoluene	600	666.39	111	
2,4-Dinitrotoluene	600	646.483	108	
2,6-Dinitrotoluene	600	600.78	100	
2,6-Dinitrotoluene-d3	500	500.583	100	
2-Amino-4,6-dinitrotoluene	600	643.871	107	

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\020810expA6.qld, Time: Mon Feb 15 07:43:55 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208305a

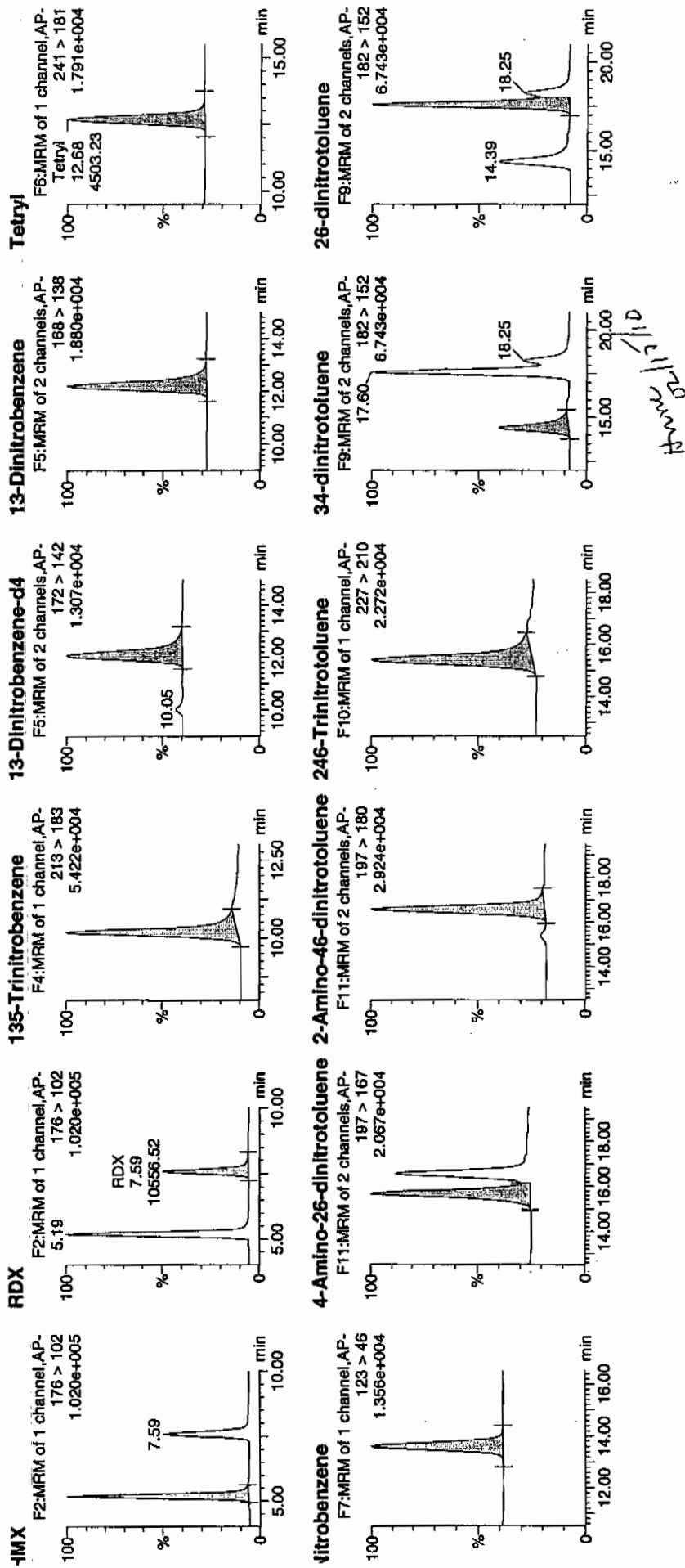
Date: 14-Feb-2010

Time: 20:20:50

D: WXX100214-07CCV

/ial: 1:1,B

WXX
 0/18/10

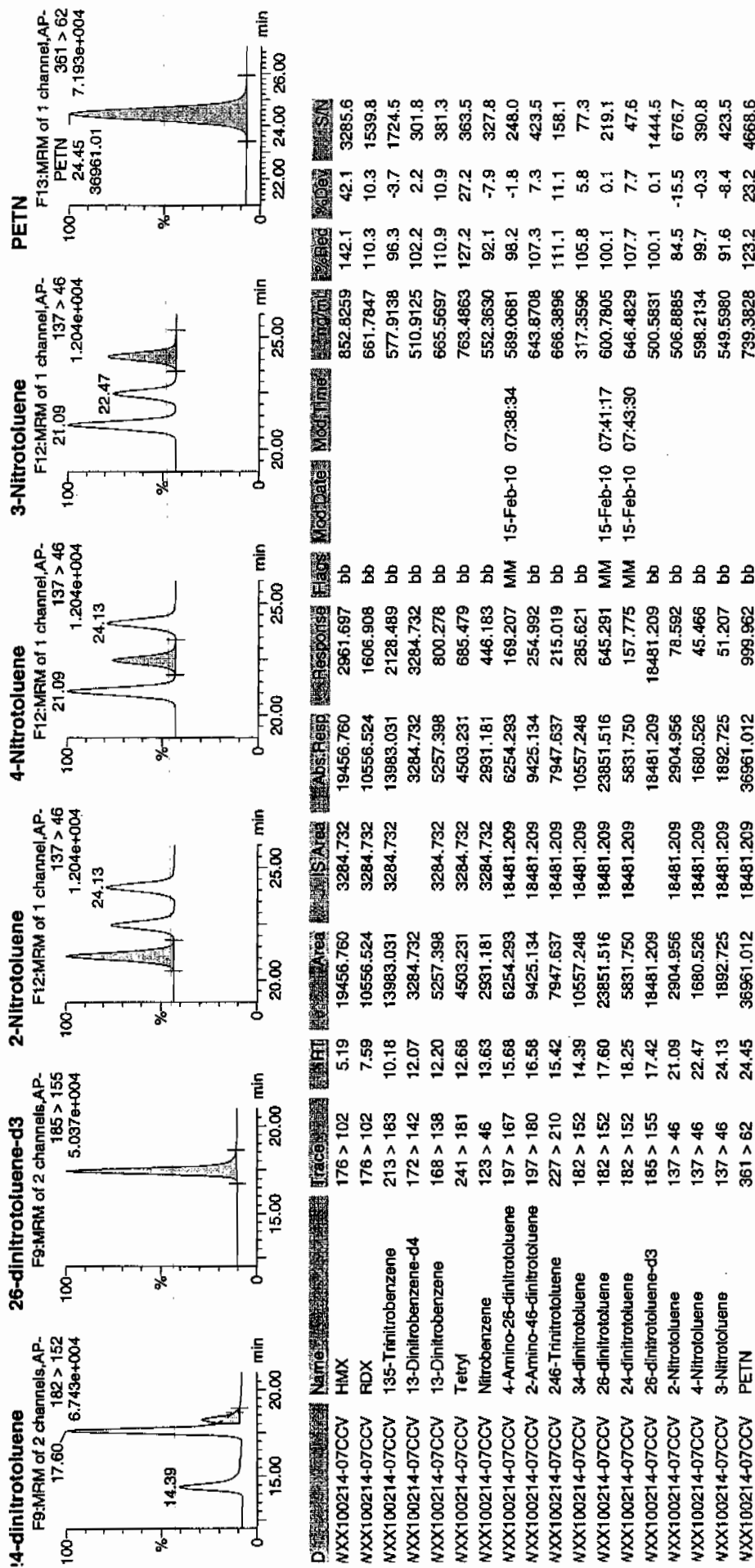


Quantify Sample Report

IEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Mon Feb 15 07:46:07 2010, Page 62 of 67

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA6.qld, Time: Mon Feb 15 07:43:55 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/14/10
 Time of Injection: 2020
 Standard Number: WXX100214-07CCV
 Data File: EXP0208305a

HMX	142.1
RDX	110.3
135-TNB	96.3
13-DNB	110.9
Tetryl	127.2
Nitrobenzene	92.1
4A-26-DNT	98.2
2A-46-DNT	107.3
246-TNT	111.1
34-DNT(surr)	105.8
26-DNT	100.1
24-DNT	107.7
2-NT	84.5
4-NT	99.7
3-NT	91.6
PETN	123.2

*MHT
2/15/10*

Total 1708.1

Average 106.8

HMM-02/14/10

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): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0208307a

Analysis Date: 14-FEB-10 21:19

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
4-Amino-2,6-dinitrotoluene	40	38.31	96	
HMX	40	44.879	112	
Nitrobenzene	40	48.938	122	
PETN	40	50.019	125	
RDX	40	41.098	103	
Tetryl	40	45.784	114	
m-Dinitrobenzene	40	47.838	120	
m-Nitrotoluene	40	33.499	84	
o-Nitrotoluene	40	32.13	80	
p-Nitrotoluene	40	29.382	73	
1,3,5-Trinitrobenzene	40	50.539	126	
1,3-Dinitrobenzene-d4	500	496.64	99	
2,4,6-Trinitrotoluene	40	39.48	99	
2,4-Dinitrotoluene	40	38.202	96	
2,6-Dinitrotoluene	40	41.491	104	
2,6-Dinitrotoluene-d3	500	589.942	118	
2-Amino-4,6-dinitrotoluene	40	37.113	93	
3,4-Dinitrotoluene	20	18.485	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 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\020810expA6.qld, Time: Mon Feb 15 07:43:55 2010

Sample Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208307a

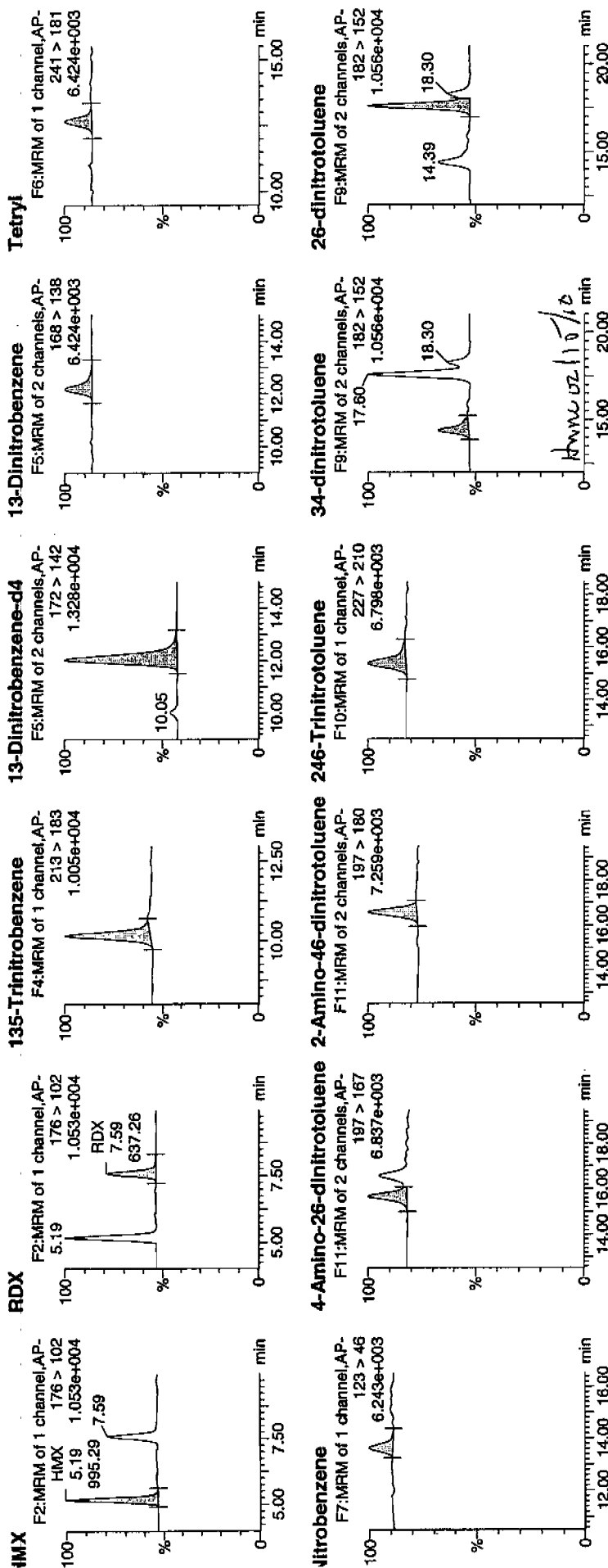
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Time: 21:19:53

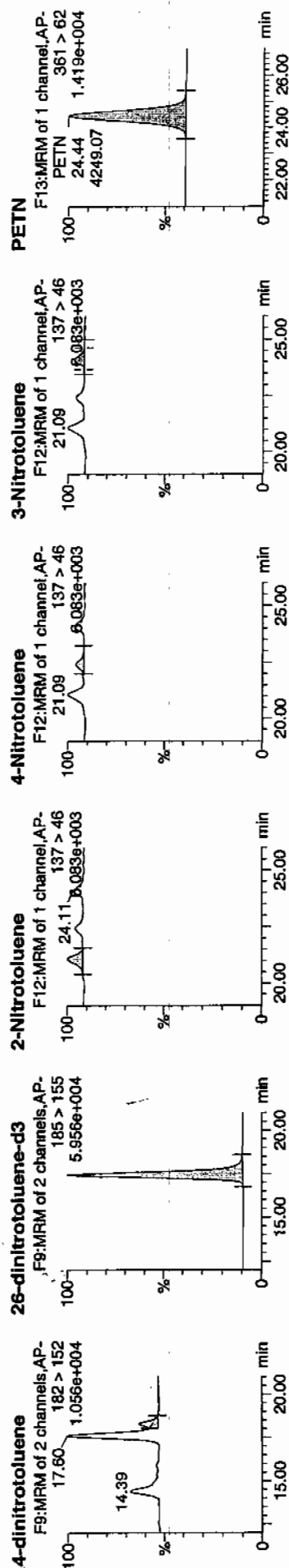
D: WXX100214-08CRI

/ial: 1:1,C

WFT
2/15/10



Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA6.qld, Time: Mon Feb 15 07:43:55 2010



ID	Name	Trace	RT	Area	S Area	Abs Resp	Response	Flags	Mod Date	Mod Time	From	% Rec	% Dev	SUN
NXX100214-08CRI	HMX	176 > 102	5.19	995.286	3192.969	985.286	155.856	bb			44.8790	112.2	12.2	154.7
NXX100214-08CRI	ROX	176 > 102	7.59	637.259	3192.969	637.259	99.791	bb			41.0977	102.7	2.7	83.4
NXX100214-08CRI	135-Trinitrobenzene	213 > 183	10.18	1188.670	3192.969	1188.670	186.139	bb			50.5392	126.3	26.3	169.7
NXX100214-08CRI	13-Dinitrobenzene-d4	172 > 142	12.04	3192.969		3192.969	3192.969	bb			496.6396	99.3	-0.7	328.1
NXX100214-08CRI	13-Dinitrobenzene	168 > 138	12.18	367.322	3192.969	367.322	57.520	bb			47.8382	119.6	19.6	28.9
NXX100214-08CRI	Tetryl	241 > 181	12.68	331.130	3192.969	331.130	51.853	bb			45.7838	114.5	14.5	24.7
NXX100214-08CRI	Nitrobenzene	123 > 46	13.63	252.440	3192.969	252.440	39.531	bb			48.9379	122.3	22.3	27.3
NXX100214-08CRI	4-Amino-28-dinitrotoluene	197 > 167	15.68	479.359	21780.287	479.359	11.004	MM	15-Feb-10	07:38:25	38.3102	95.8	-4.2	20.6
NXX100214-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.58	640.252	21780.287	640.252	14.898	bb			37.1132	92.8	-7.2	66.2
NXX100214-08CRI	246-Trinitrotoluene	227 > 210	15.39	554.911	21780.287	554.911	12.739	bb			39.4803	98.7	-1.3	56.9
NXX100214-08CRI	34-dinitrotoluene	182 > 152	14.39	724.676	21780.287	724.676	16.636	bb			18.4847	92.4	-7.6	59.0
NXX100214-08CRI	26-dinitrotoluene	182 > 152	17.60	1941.278	21780.287	1941.278	44.565	MM	15-Feb-10	07:41:08	41.4910	103.7	3.7	193.0
NXX100214-08CRI	24-dinitrotoluene	182 > 152	18.30	406.129	21780.287	406.129	9.323	MM	15-Feb-10	07:43:39	38.2022	95.5	-4.5	41.3
NXX100214-08CRI	26-dinitrotoluene-d3	185 > 155	17.42	21780.287		21780.287	21780.287	bb			589.9421	118.0	18.0	1847.0
NXX100214-08CRI	2-Nitrotoluene	137 > 46	21.09	217.005	21780.287	217.005	4.982	bb			32.1299	80.3	-19.7	52.2
NXX100214-08CRI	4-Nitrotoluene	137 > 46	22.44	97.276	21780.287	97.276	2.233	bb			29.3821	73.5	-26.5	24.8
NXX100214-08CRI	3-Nitrotoluene	137 > 46	24.11	135.957	21780.287	135.957	3.121	MM	15-Feb-10	07:37:21	33.4985	83.7	-16.3	31.6
NXX100214-08CRI	PETN	361 > 62	24.44	4249.068	21780.287	4249.068	97.544	bb			50.0186	125.0	25.0	1518.3

GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/14/10
 Time of Injection 2119
 Standard Number WXX100214-08CRI
 Data File EXP0208307a

HMX	112.2
RDX	102.7
135-TNB	126.3
13-DNB	119.6
Tetryl	114.5
Nitrobenzene	122.3
4A-26-DNT	95.8
2A-46-DNT	92.8
246-TNT	98.7
34-DNT(surr)	92.4
26-DNT	103.7
24-DNT	95.5
2-NT	80.3
4-NT	73.5
3-NT	83.7
PETN	125.0

*mtf
2/15/10*

Total 1639.0

Average 102.4

HNK 02/15/10

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): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS02130013.wiff

Analysis Date: 13-FEB-10 13:21

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	114	114	
2,6-Diamino-4-nitrotoluene	100	111	111	
3,4-Dinitrotoluene	50	54.6	109	
3,5-Dinitroaniline	100	118	118	
TATB	100	106	106	
tris(o-cresyl) phosphate	100	105	105	

Recovery Limits:

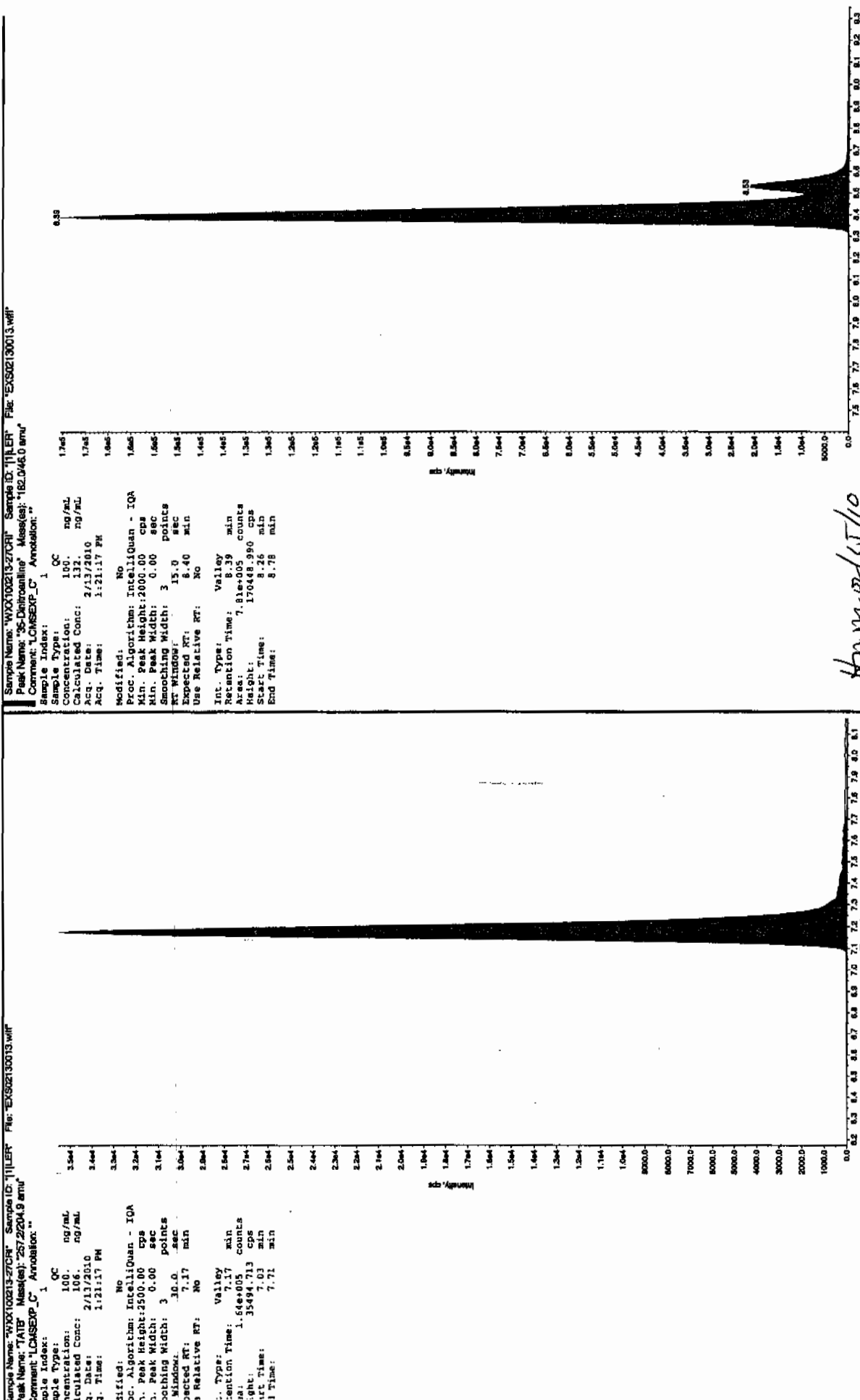
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

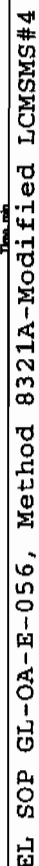
* Value outside of Recovery Limits

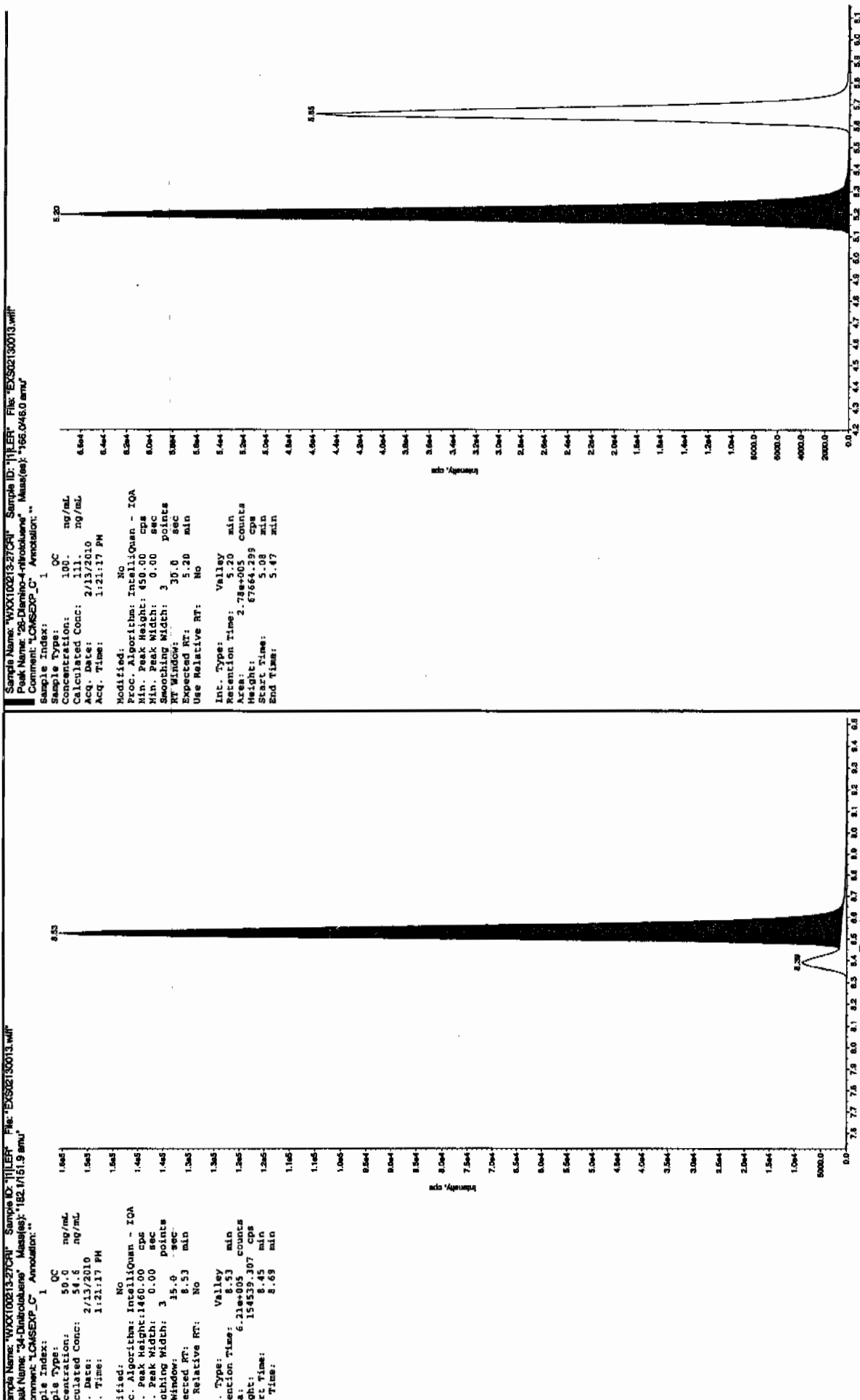
Before Jan 2/15/10



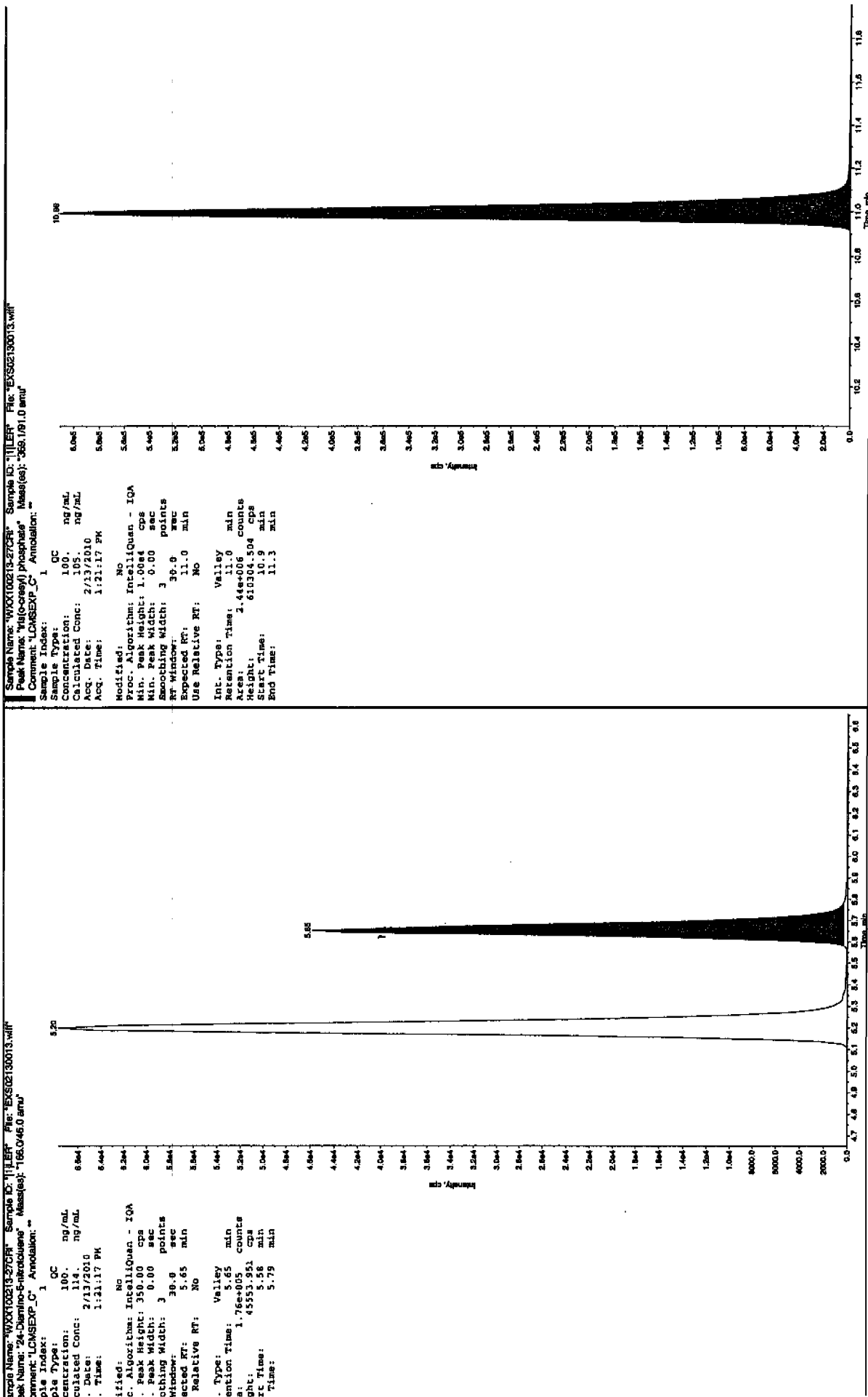
After Jan 2/15/10

3L SOP GL-OA-E-056, Method 8321A-Modified LCMSEXP#4





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): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS02130024.wiff

Analysis Date: 13-FEB-10 16:14

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	517	103	
3,4-Dinitrotoluene	250	268	107	
3,5-Dinitroaniline	500	576	115	
TATB	500	506	101	
tris(o-cresyl) phosphate	500	513	103	

Recovery Limits:

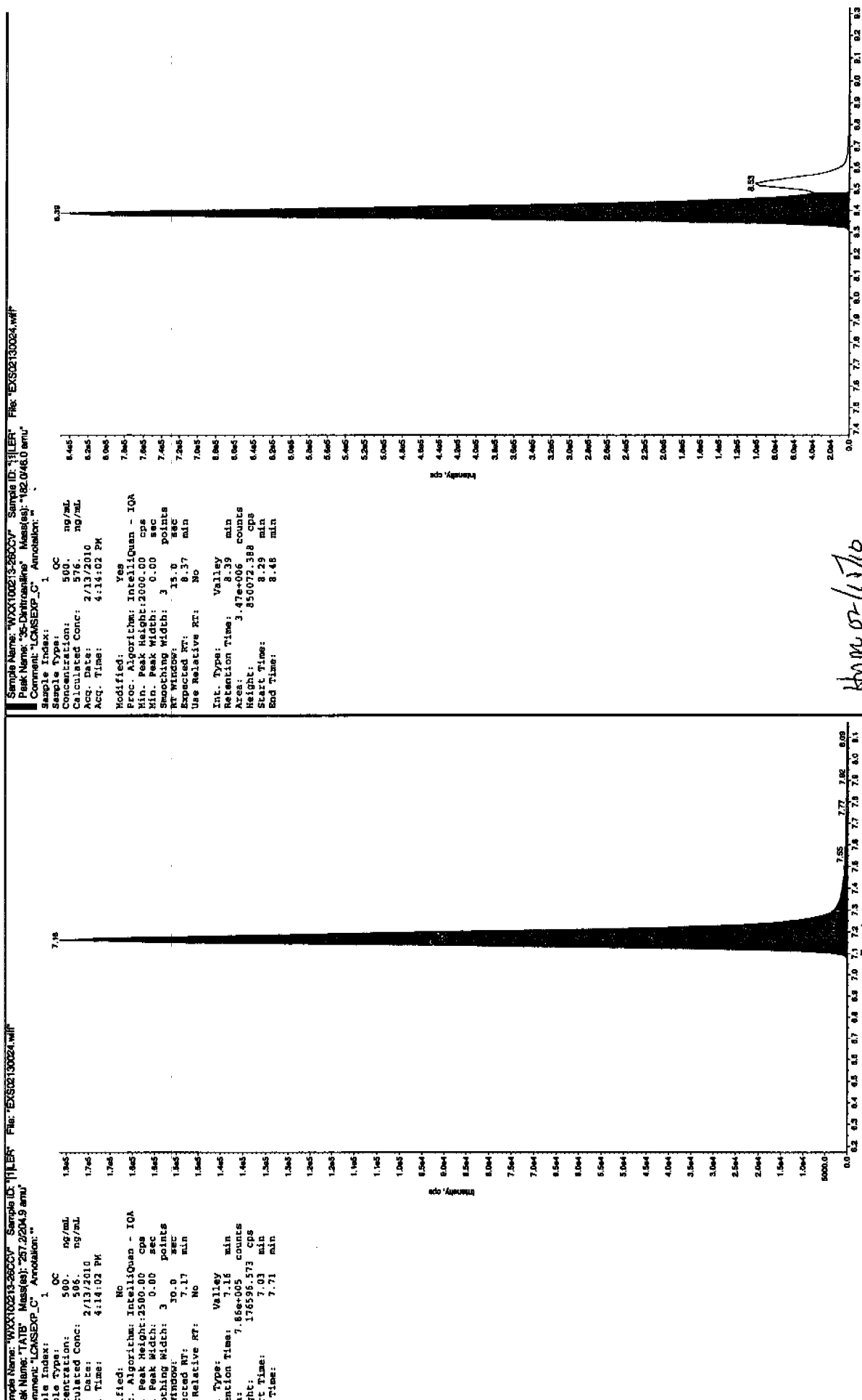
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

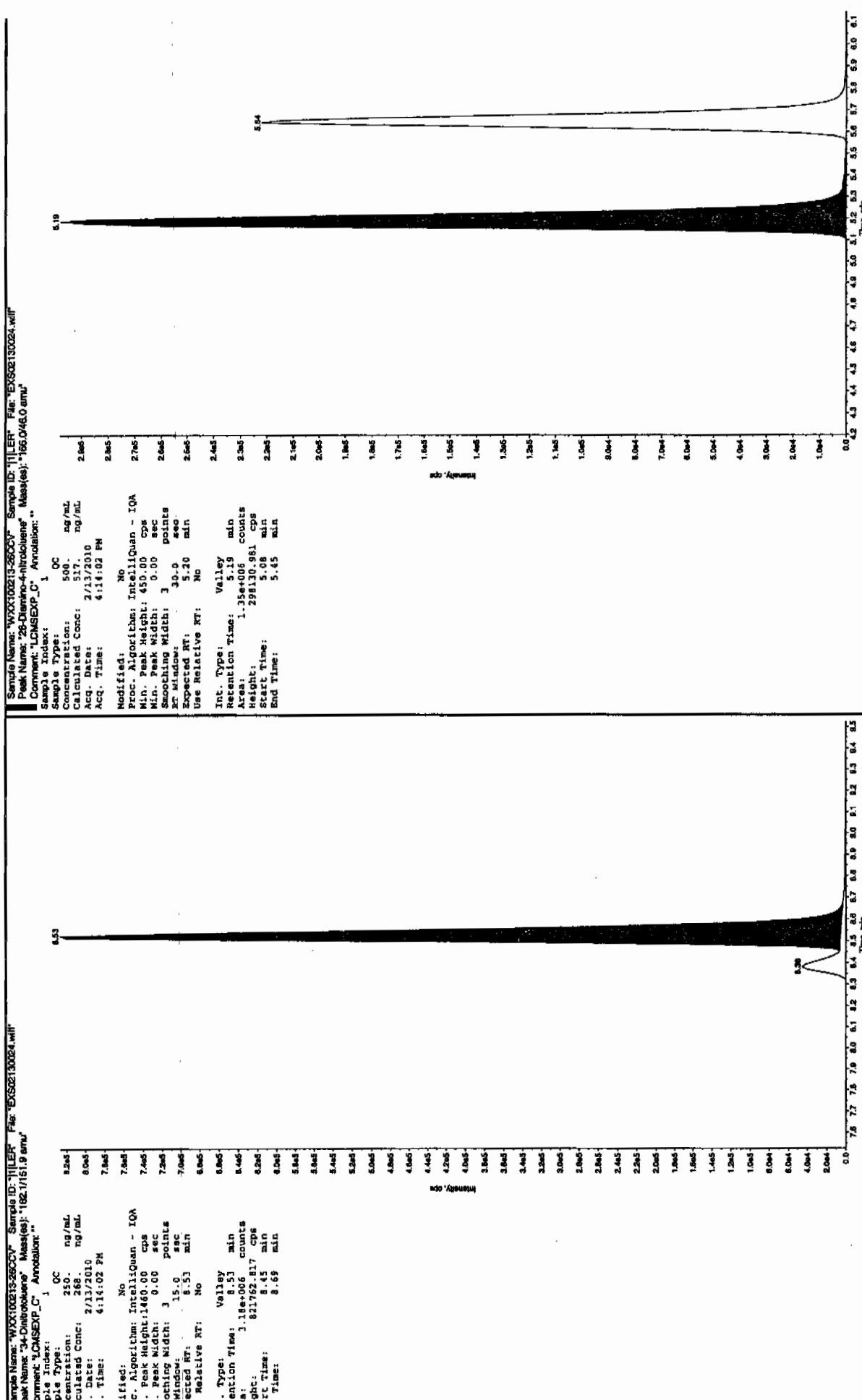
* Value outside of Recovery Limits

Jan 2/15/10

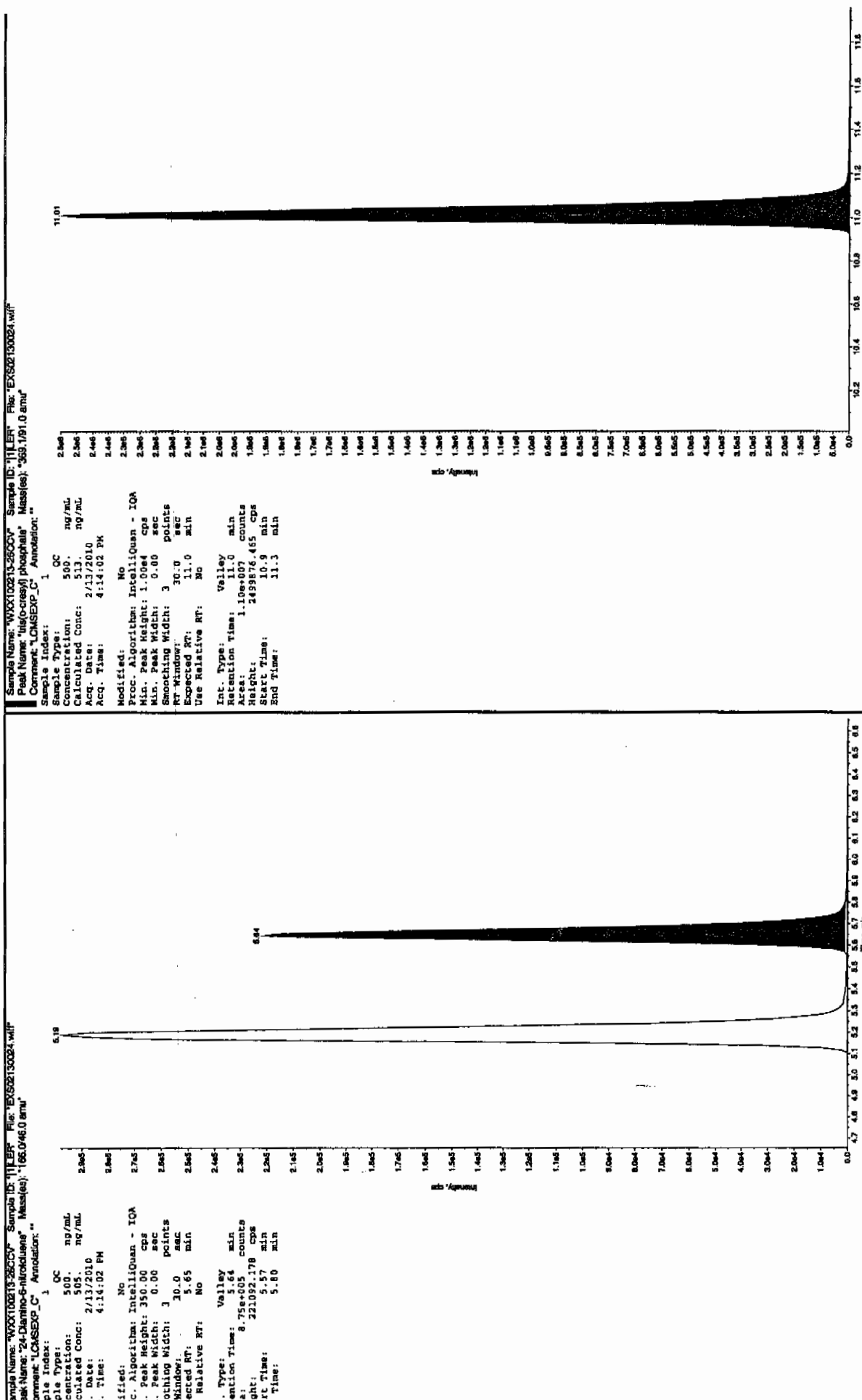


Jan 02-1/15/10

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



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



3L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS02130026.wiff

Analysis Date: 13-FEB-10 16:45

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	116	116	
2,6-Diamino-4-nitrotoluene	100	109	109	
3,4-Dinitrotoluene	50	56.6	113	
3,5-Dinitroaniline	100	115	115	
TATB	100	105	105	
tris(o-cresyl) phosphate	100	105	105	

Recovery Limits:

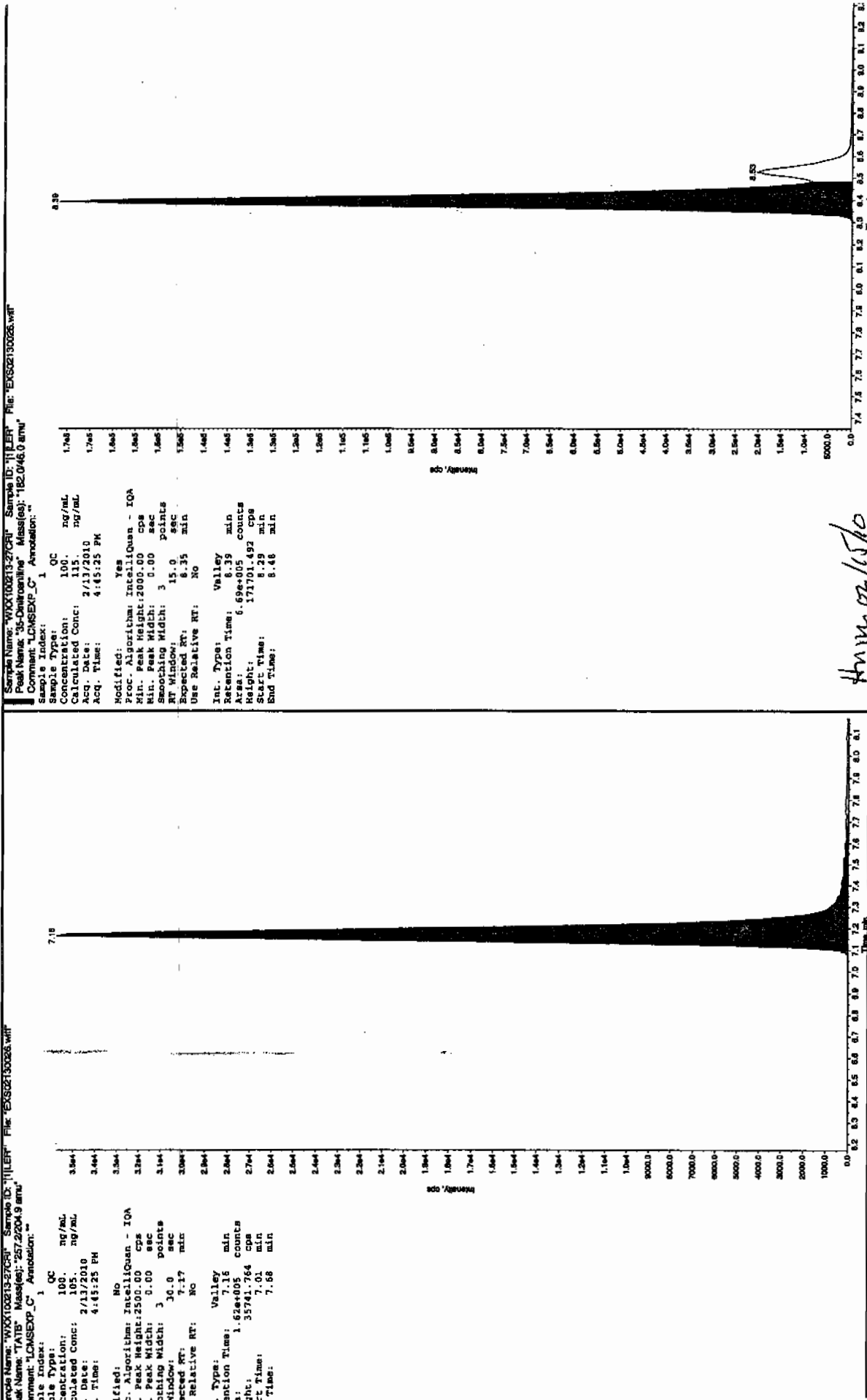
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

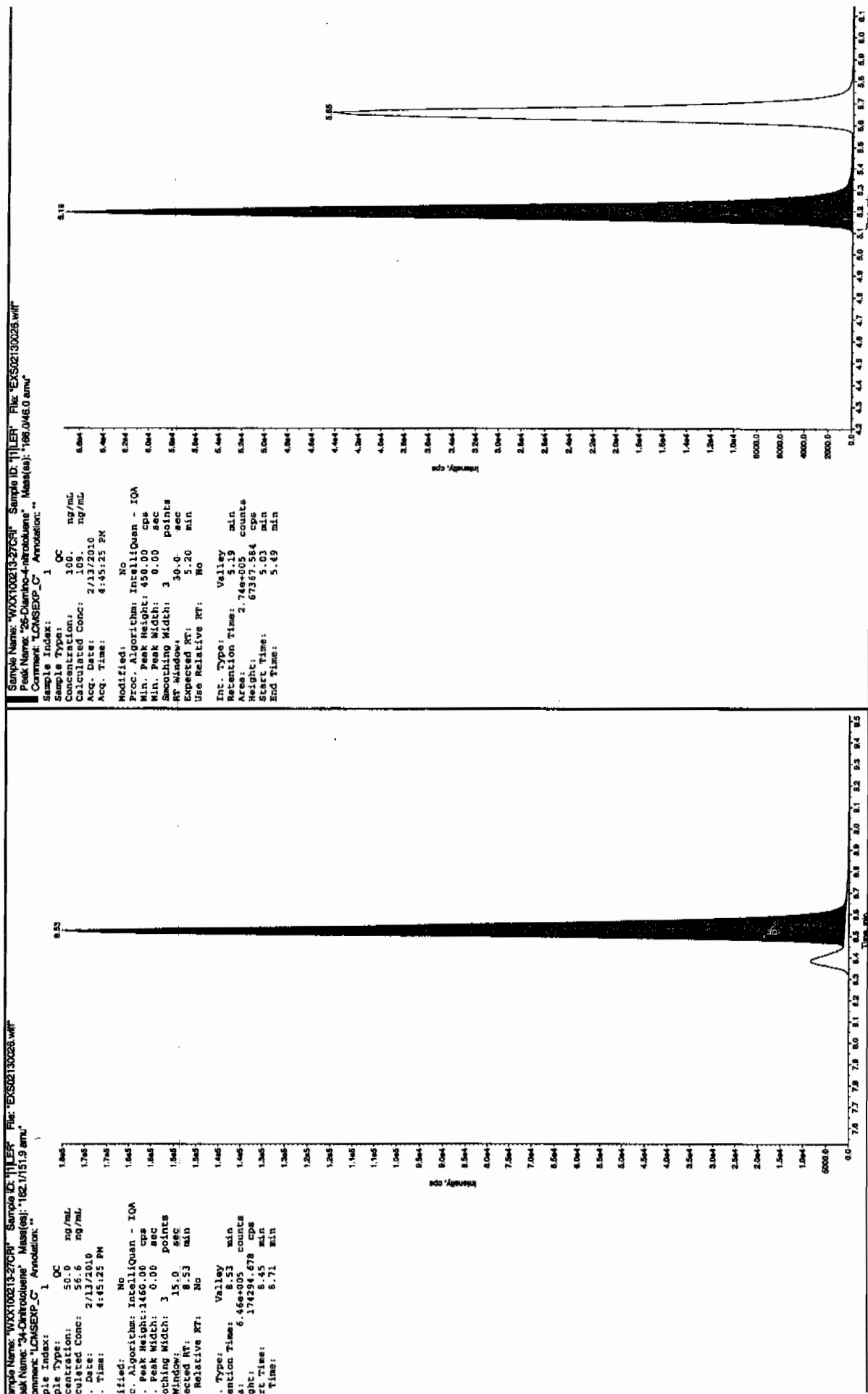
Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

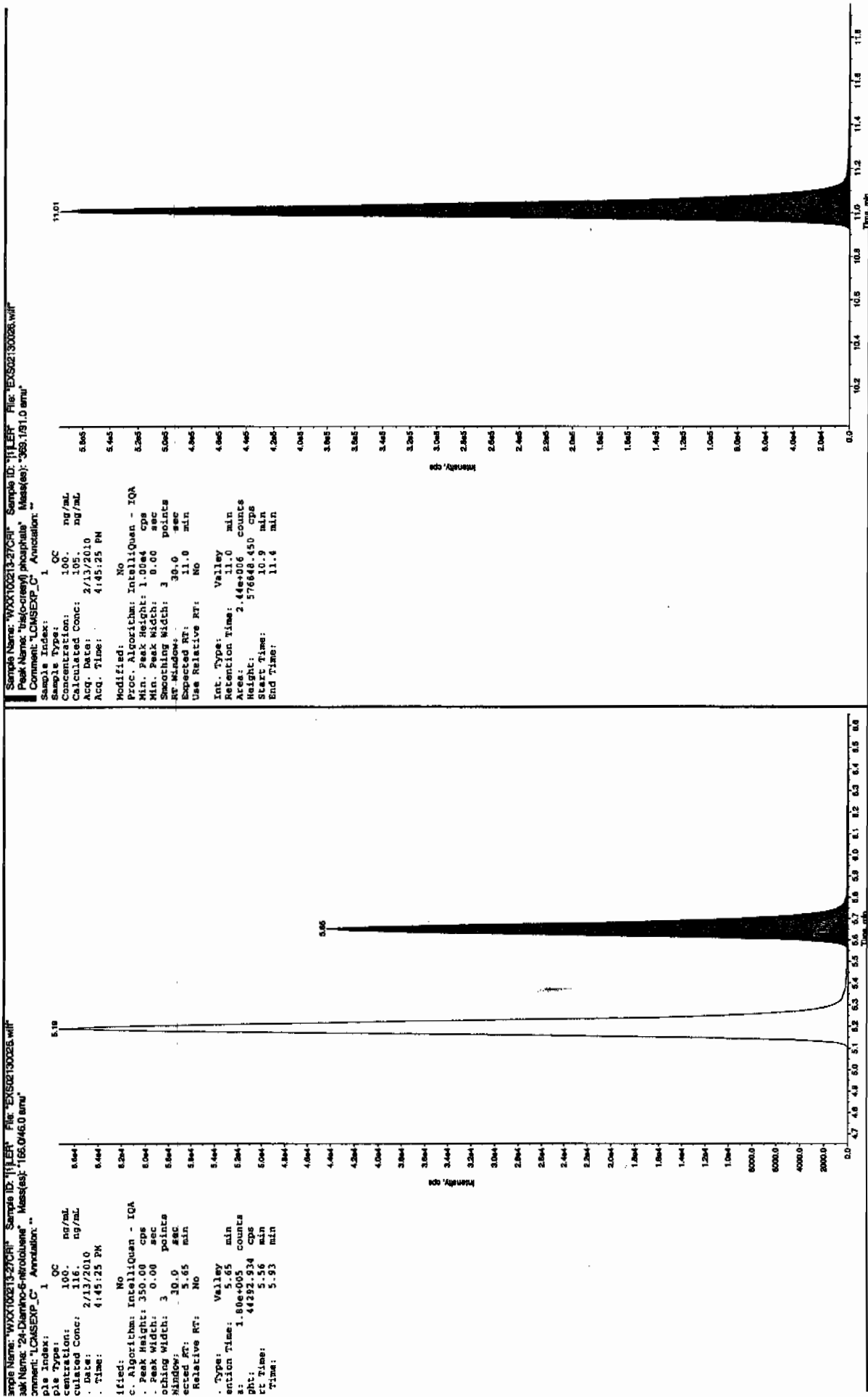
San 2/15/10



3L 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

7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS02130036.wiff

Analysis Date: 13-FEB-10 19:22

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	579	116	
2,6-Diamino-4-nitrotoluene	500	606	121	
3,4-Dinitrotoluene	250	251	101	
3,5-Dinitroaniline	500	609	122	
TATB	500	511	102	
tris(o-cresyl) phosphate	500	517	103	

Recovery Limits:

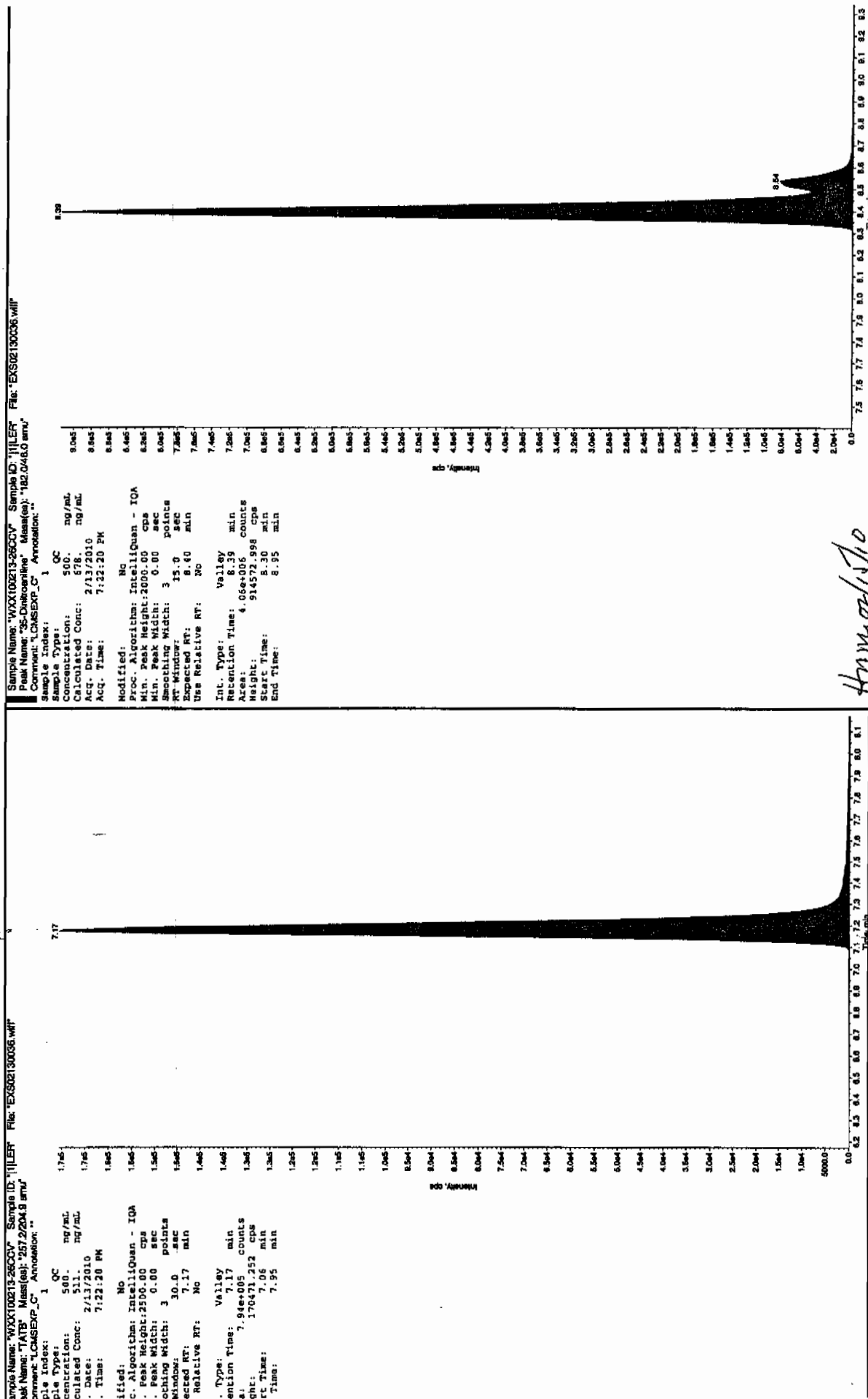
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

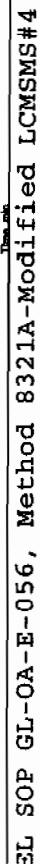
Column used to flag Recovery outside of Limits

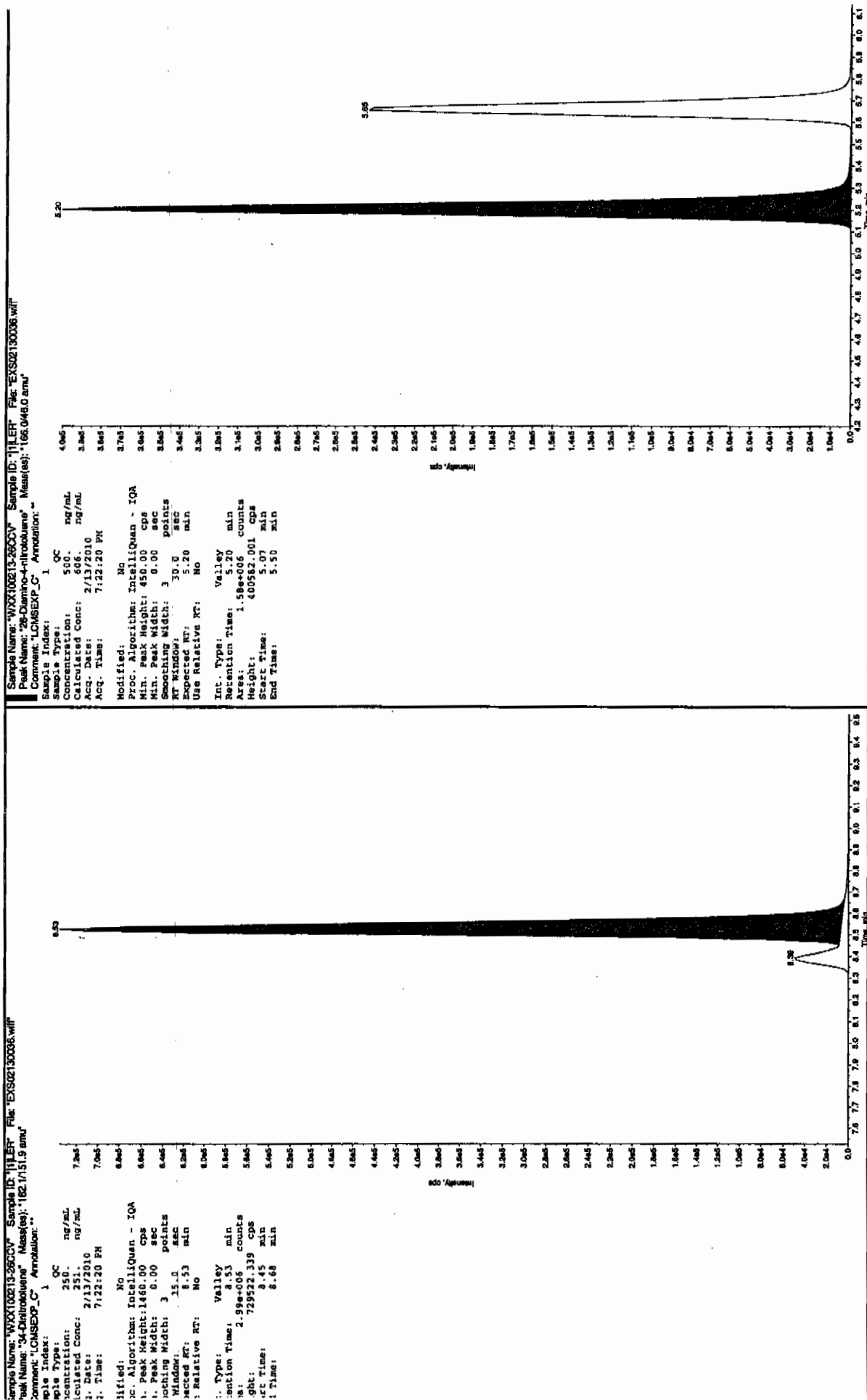
* Value outside of Recovery Limits

Before Jan 2/15/10

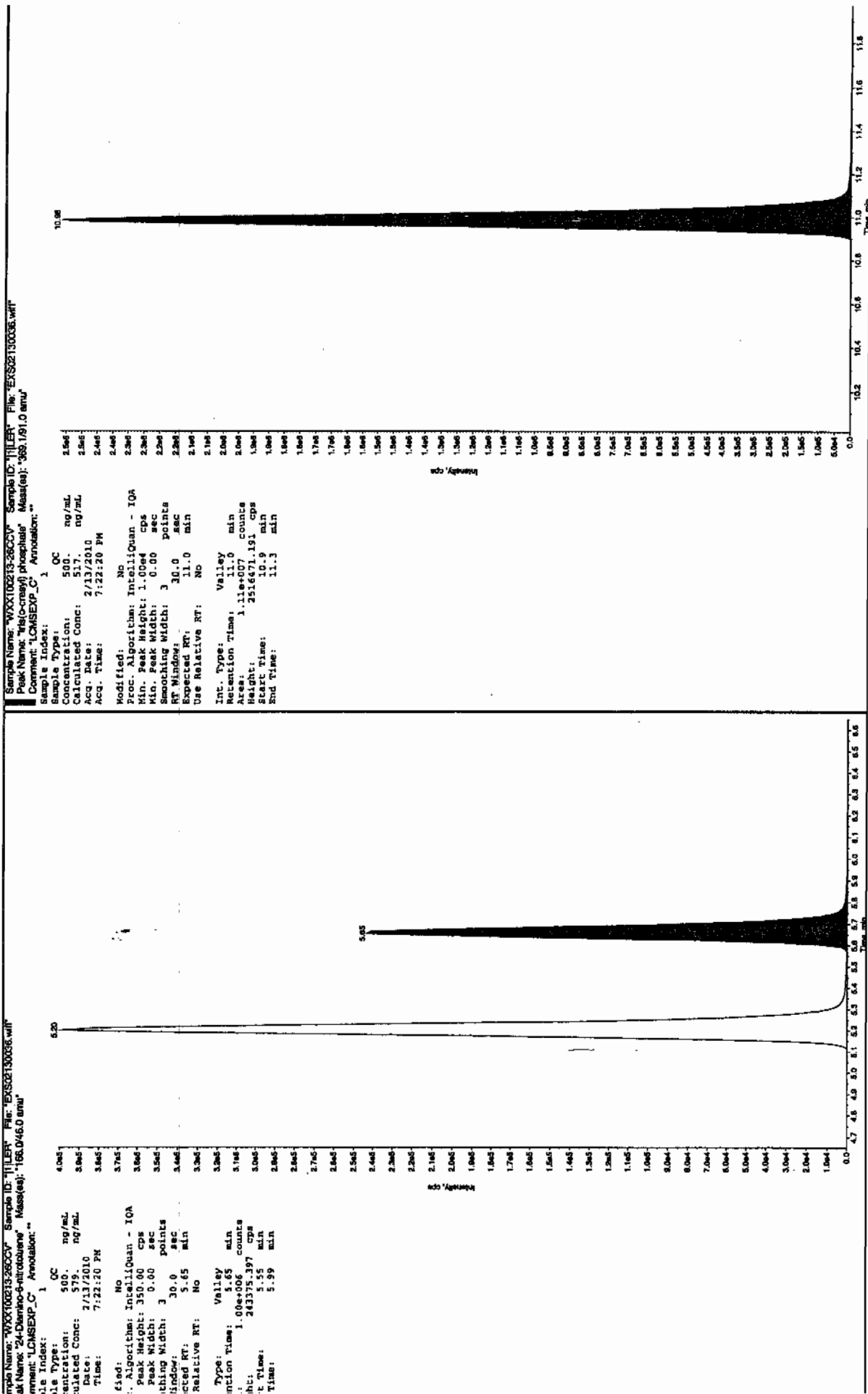


EL SOP GL-OA-E-056, Method 8321A-Modified LCMSEMS#4





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): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS02130038.wiff

Analysis Date: 13-FEB-10 19:53

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	130	130	
2,6-Diamino-4-nitrotoluene	100	123	123	
3,4-Dinitrotoluene	50	59.6	119	
3,5-Dinitroaniline	100	133	133	
TATB	100	104	104	
tris(o-cresyl) phosphate	100	107	107	

Recovery Limits:

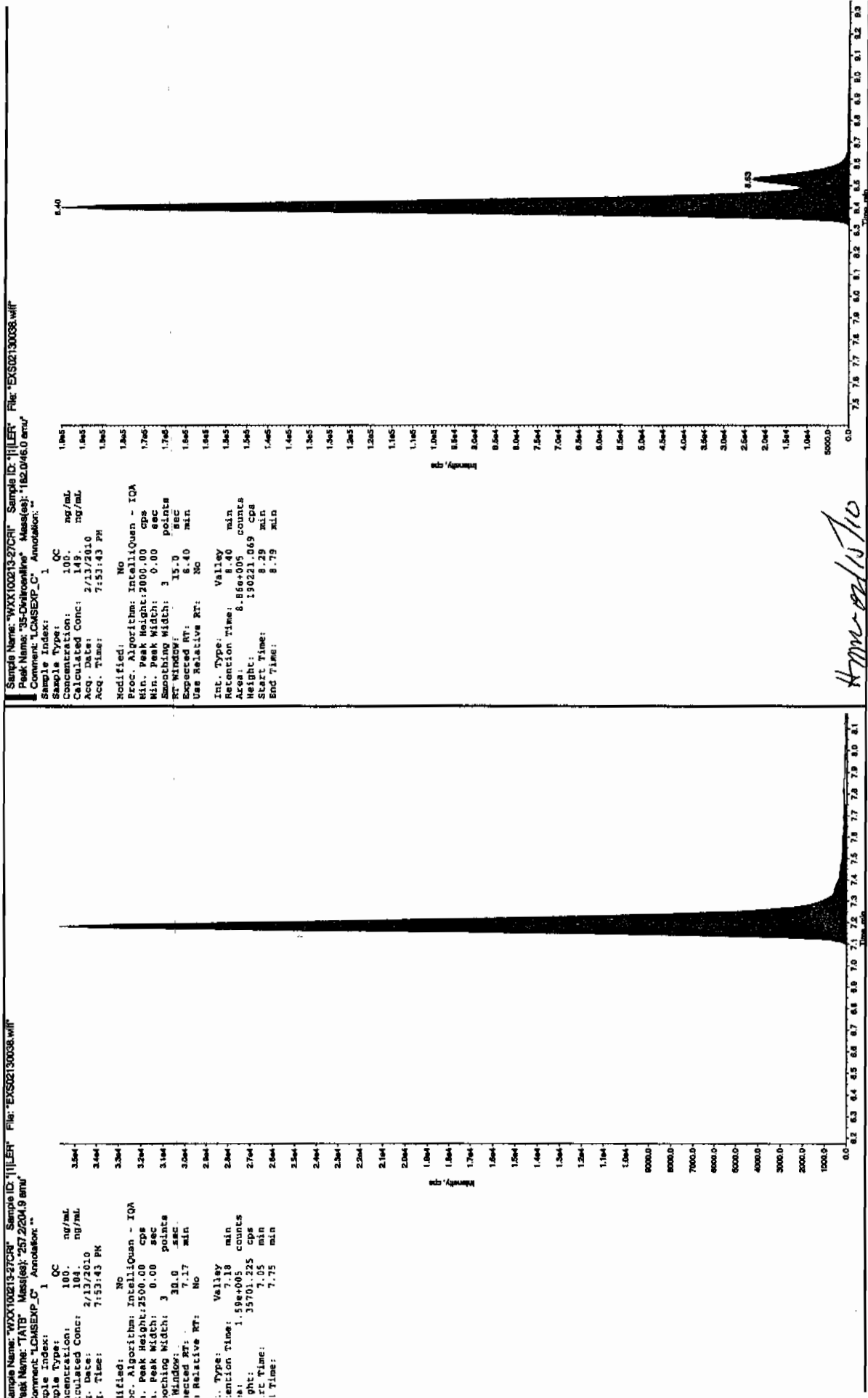
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

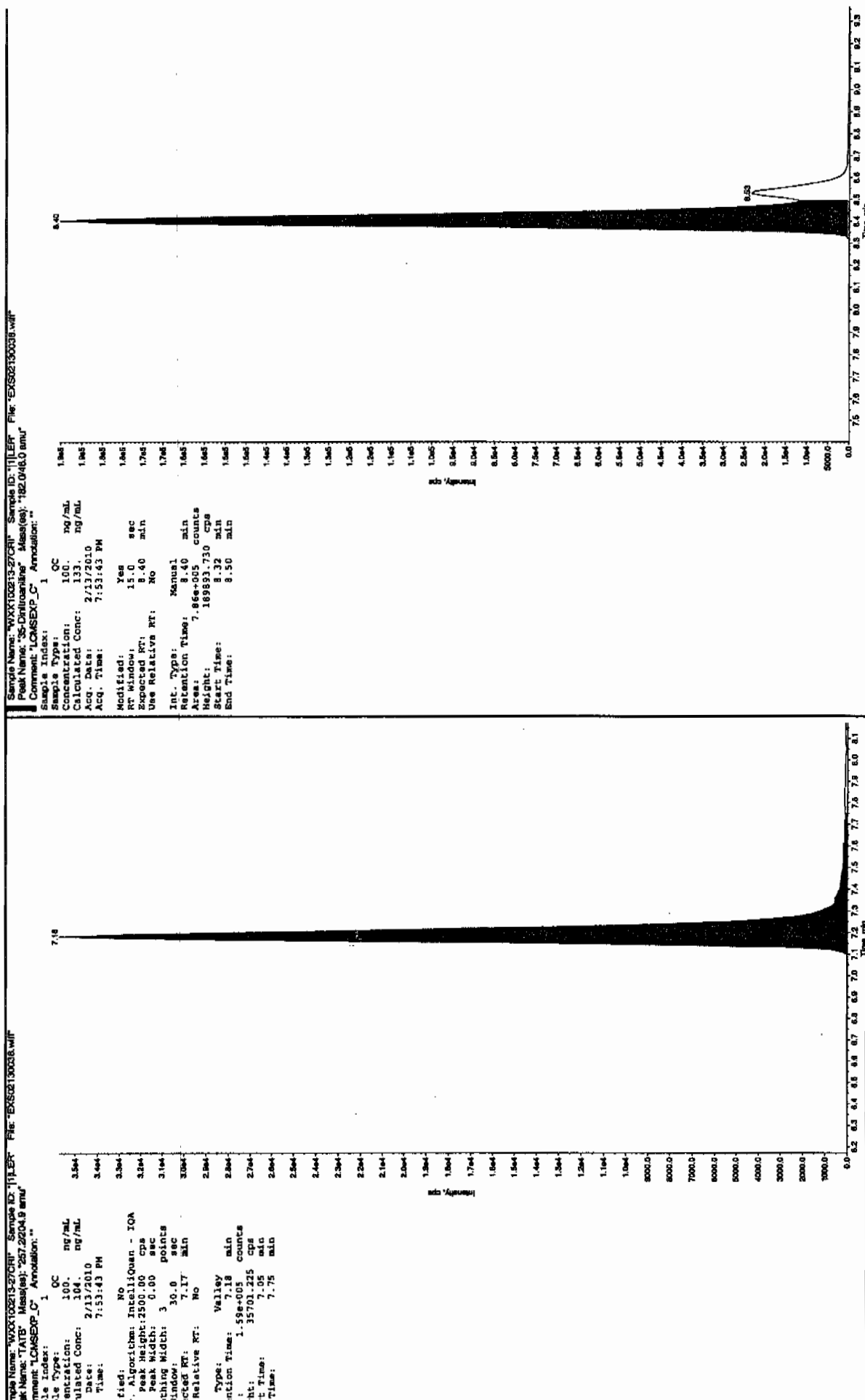
* Value outside of Recovery Limits

Before Jan 24/5/10

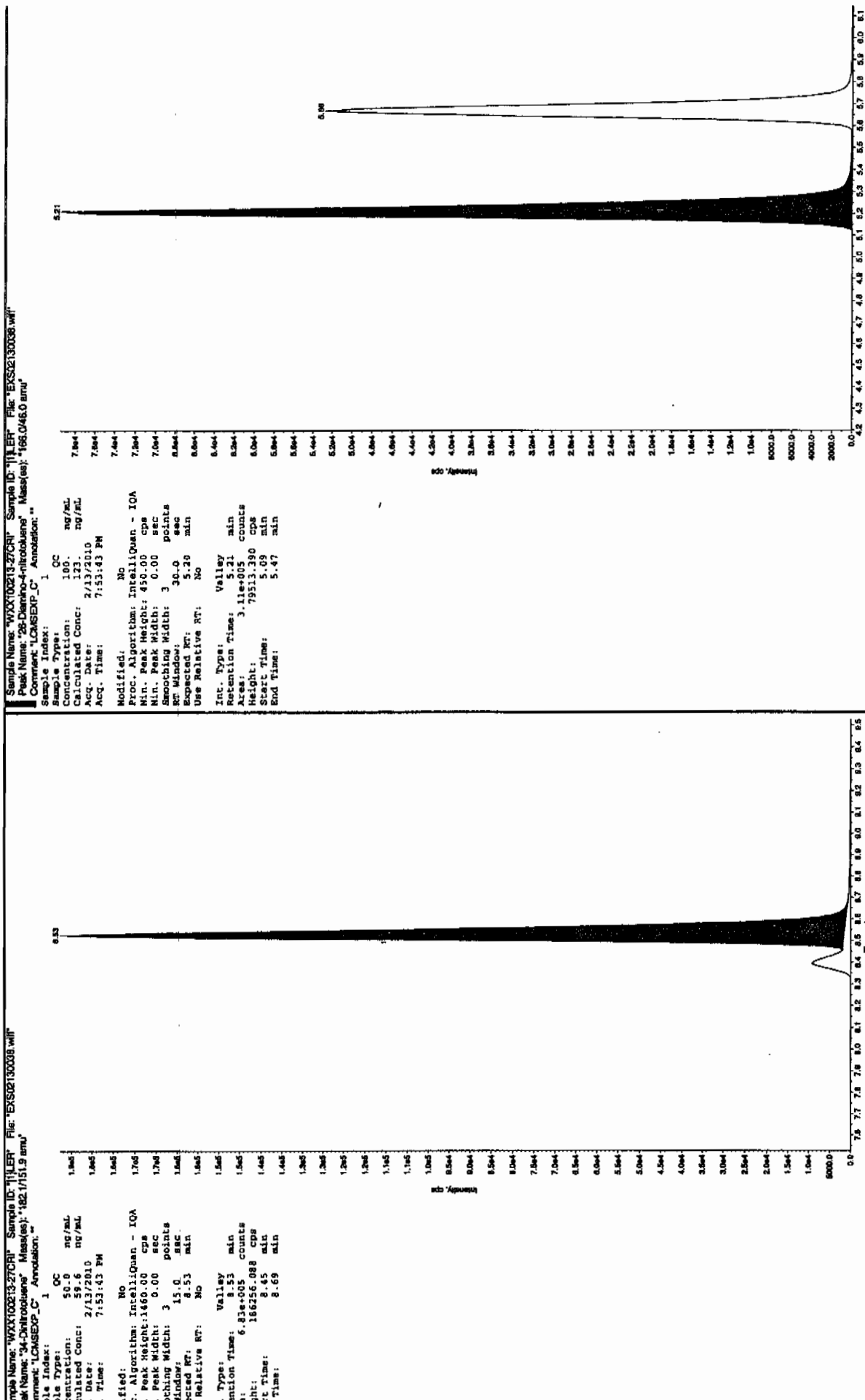


EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

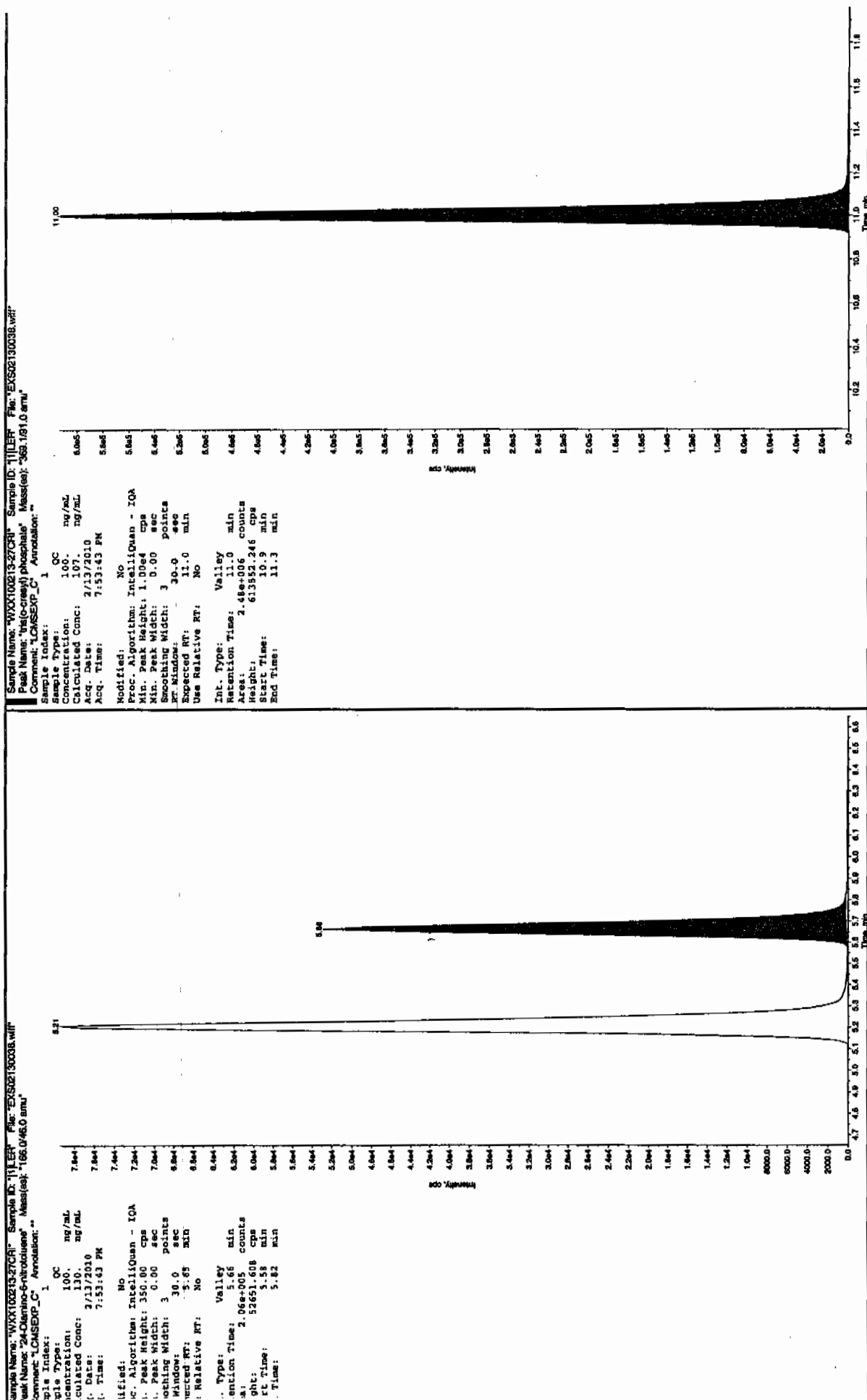
after Jan 2/15/10



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



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSEXP#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): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS02130049.wiff

Analysis Date: 13-FEB-10 22:46

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	527	105	
2,6-Diamino-4-nitrotoluene	500	575	115	
3,4-Dinitrotoluene	250	261	104	
3,5-Dinitroaniline	500	559	112	
TATB	500	478	96	
tris(o-cresyl) phosphate	500	525	105	

Recovery Limits:

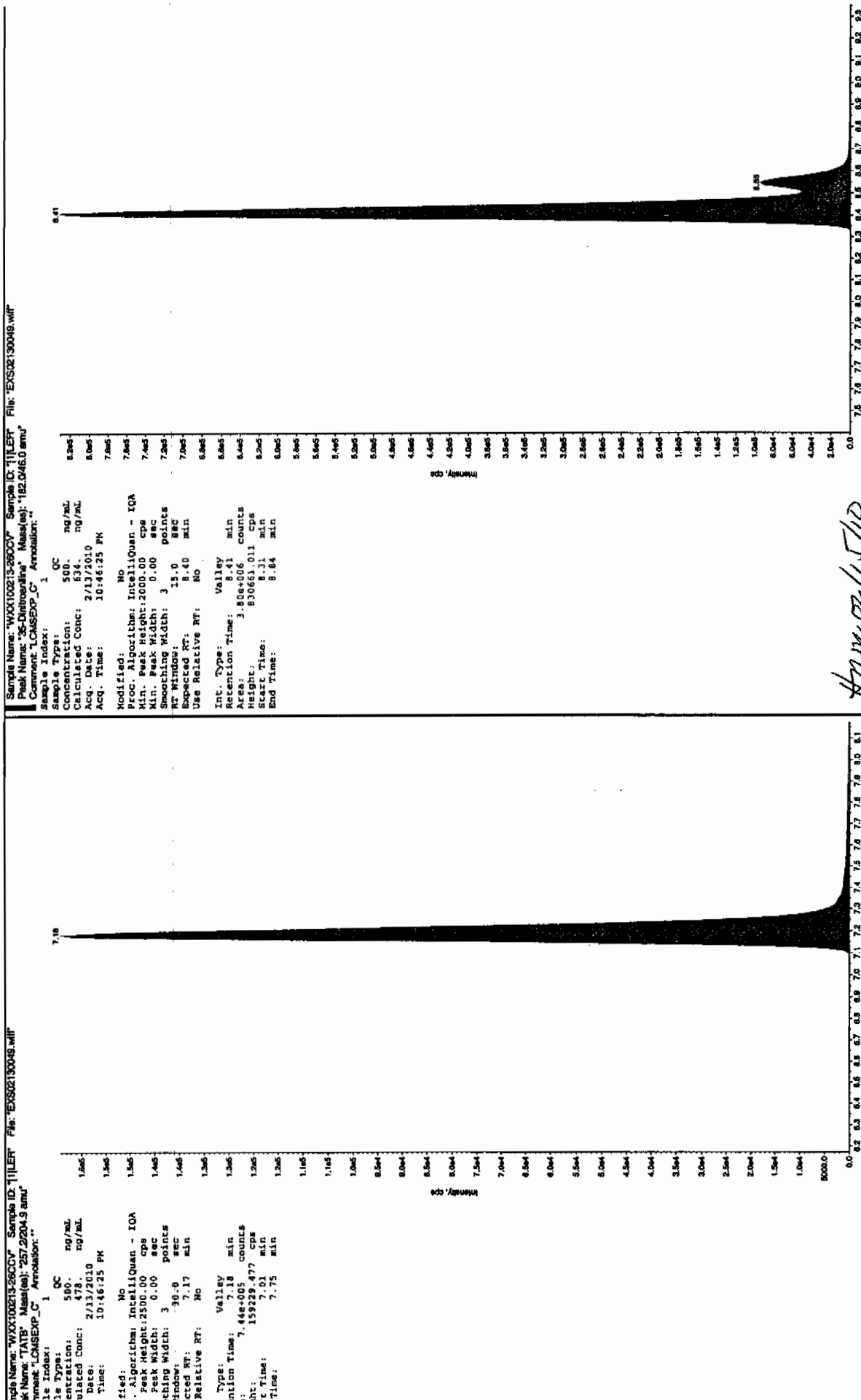
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

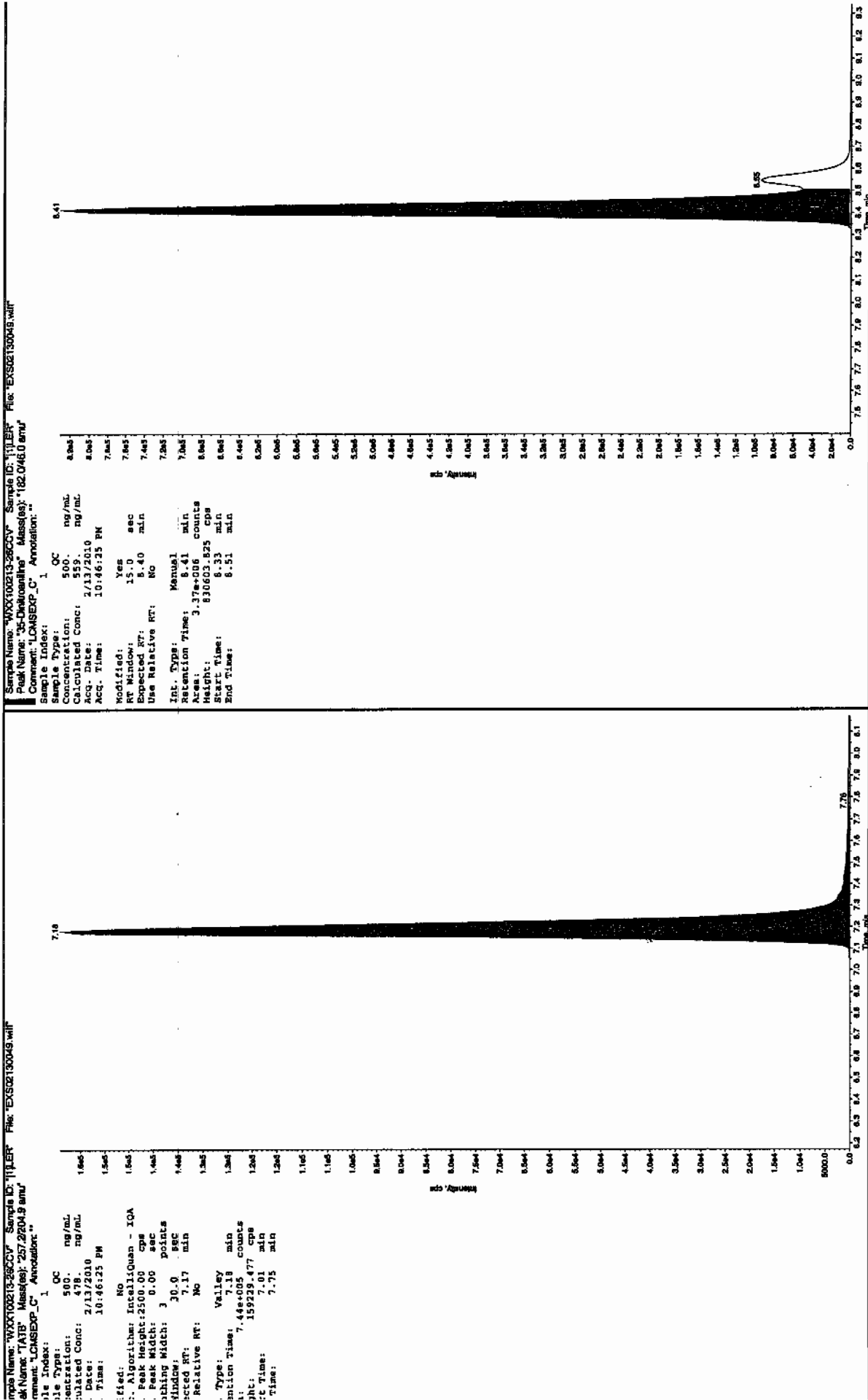
Before Jan 2/15/10



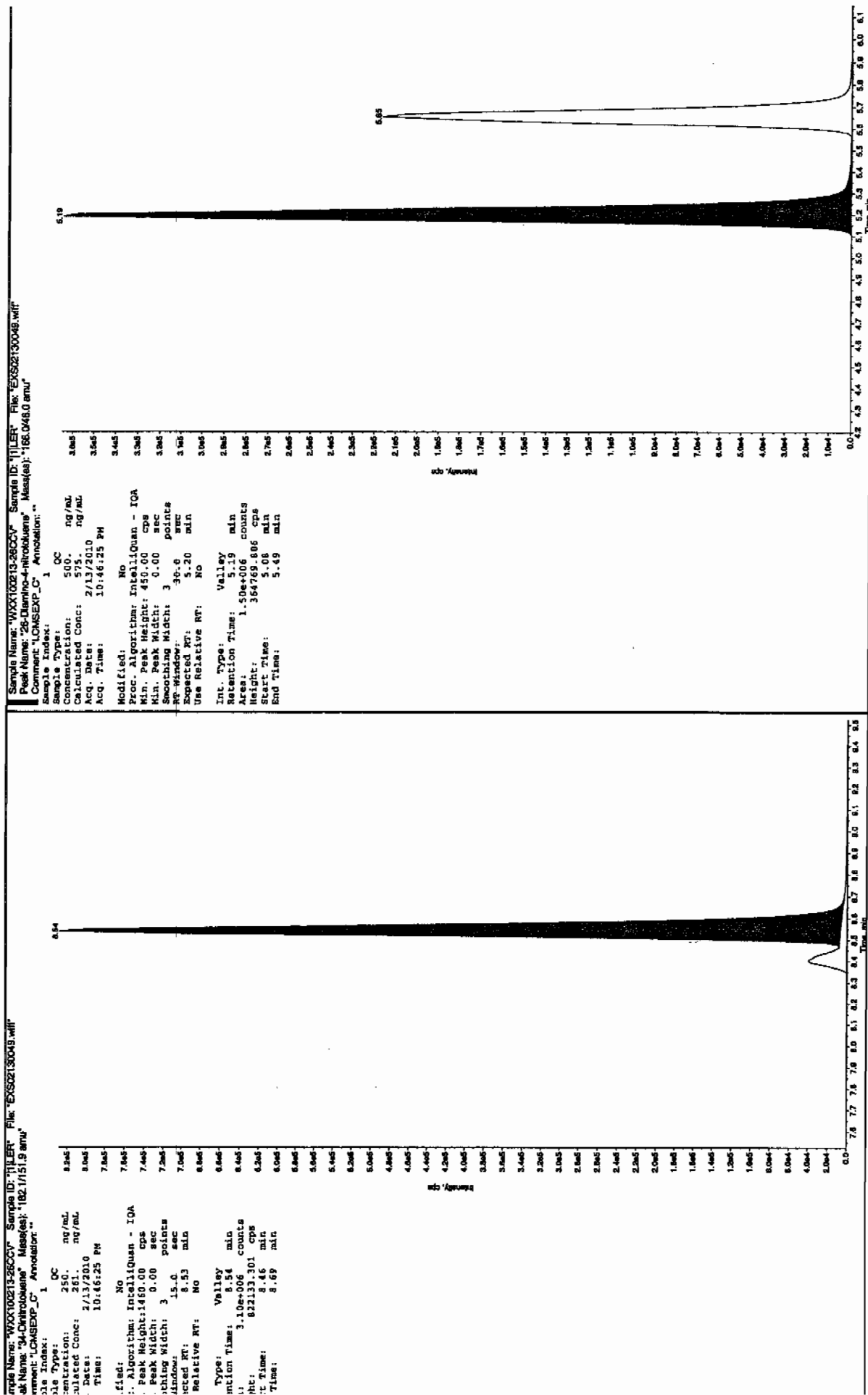
After Jan 2/15/10

3L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

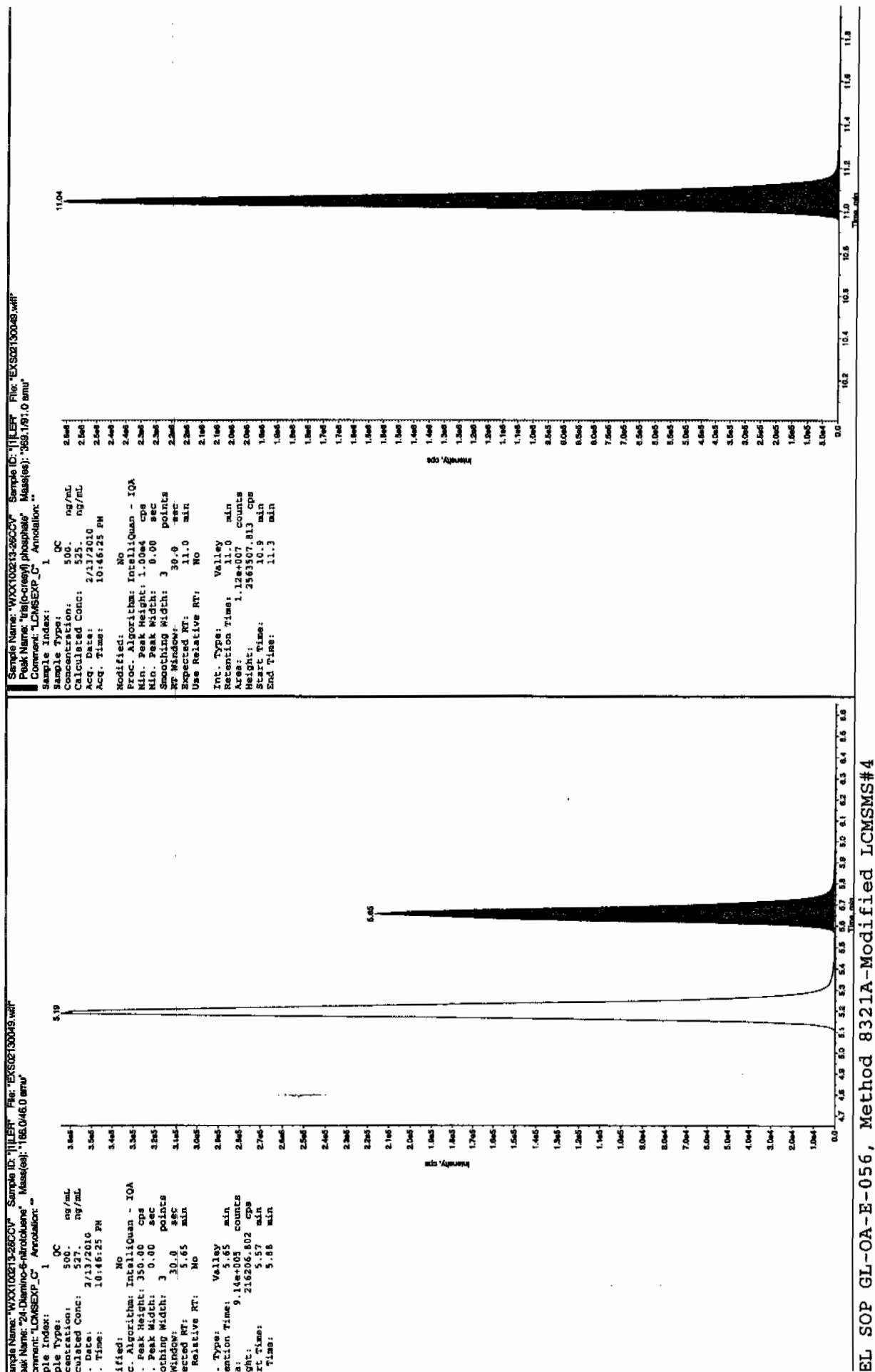
after Jan 21/15/10



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

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS02130051.wiff

Analysis Date: 13-FEB-10 23:17

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
3,4-Dinitrotoluene	50	56.7	113	
3,5-Dinitroaniline	100	120	120	
TATB	100	98.8	99	
tris(o-cresyl) phosphate	100	109	109	
2,4-Diamino-6-nitrotoluene	100	125	125	
2,6-Diamino-4-nitrotoluene	100	121	121	

Recovery Limits:

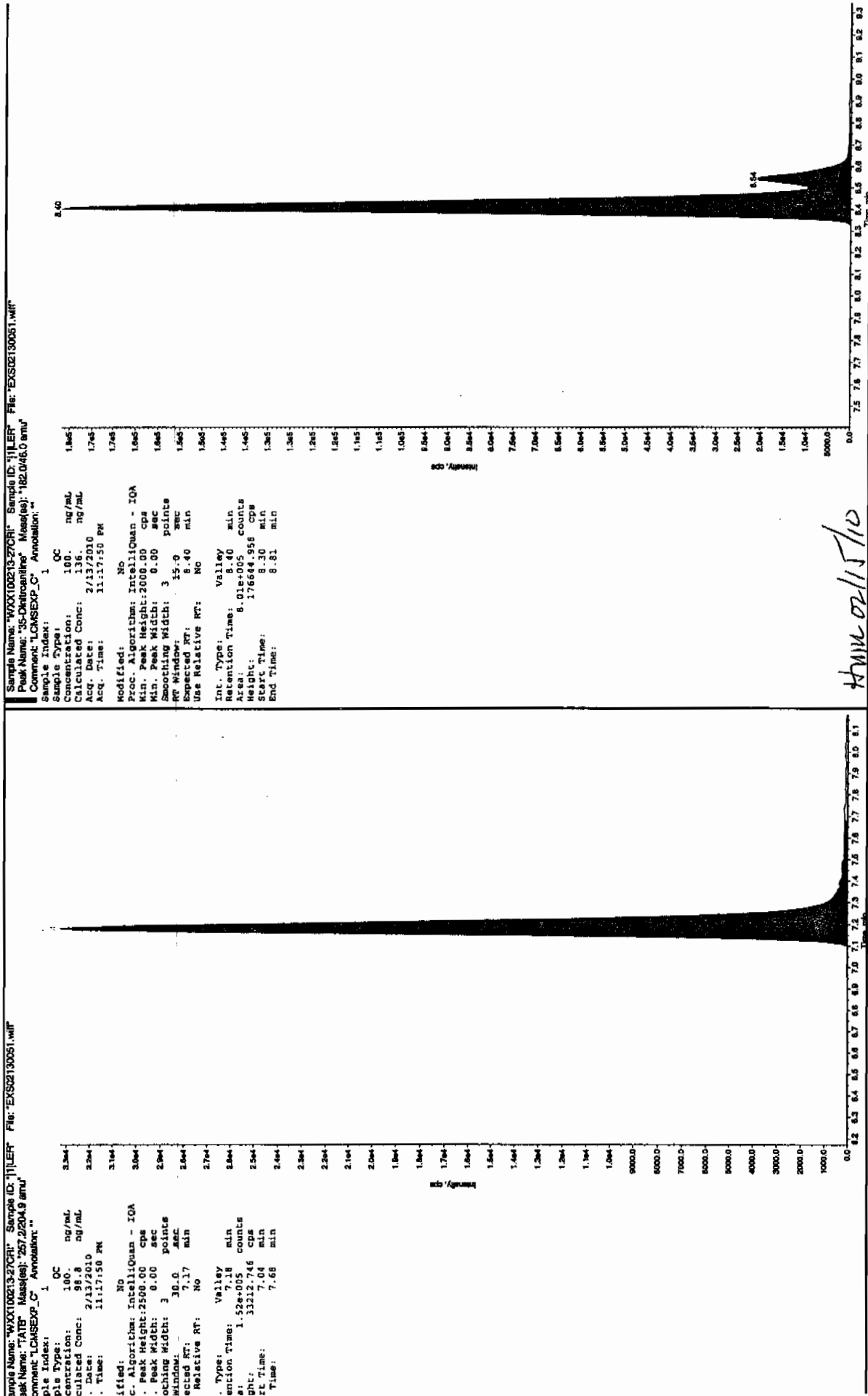
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

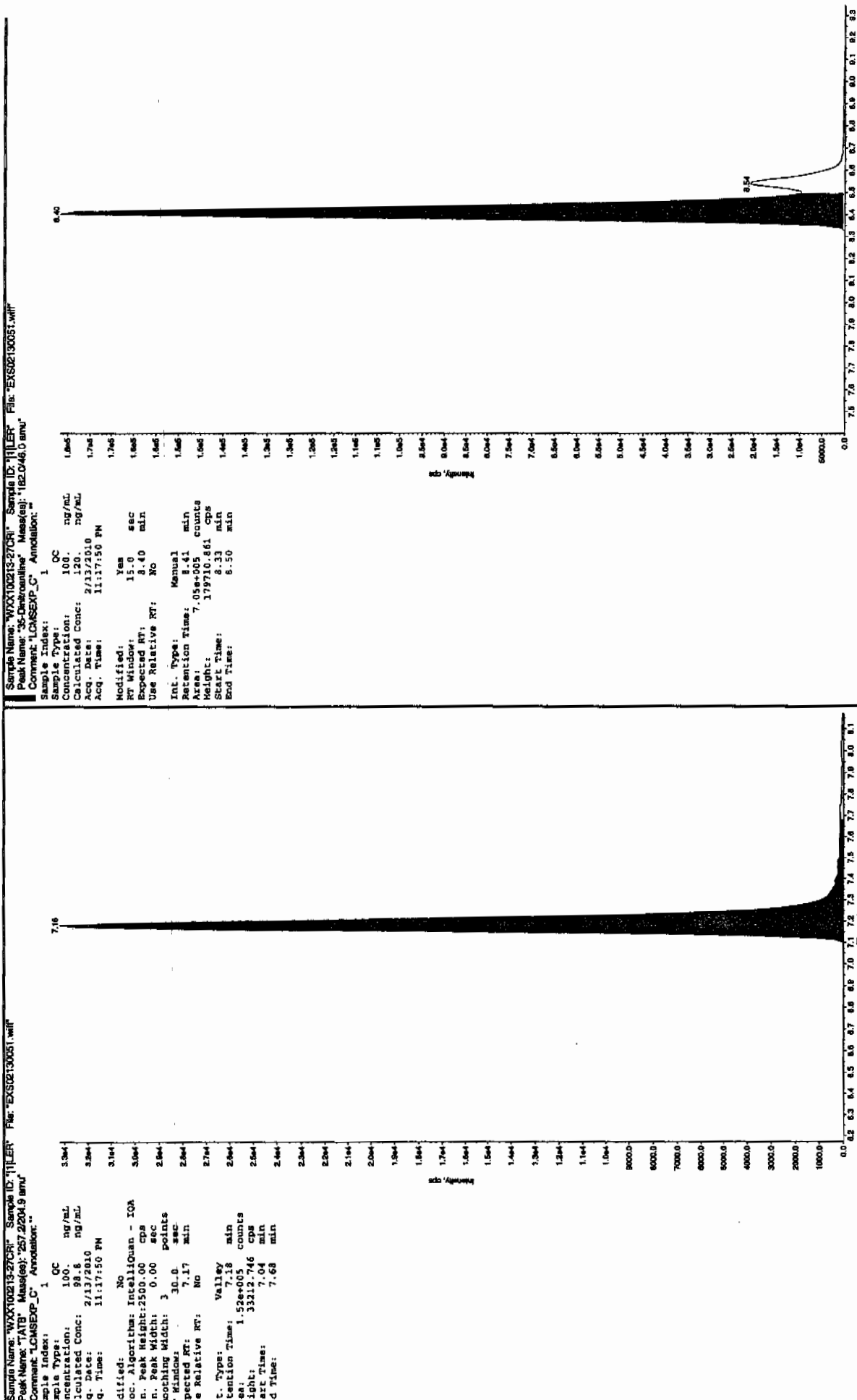
Before Jan 24/11



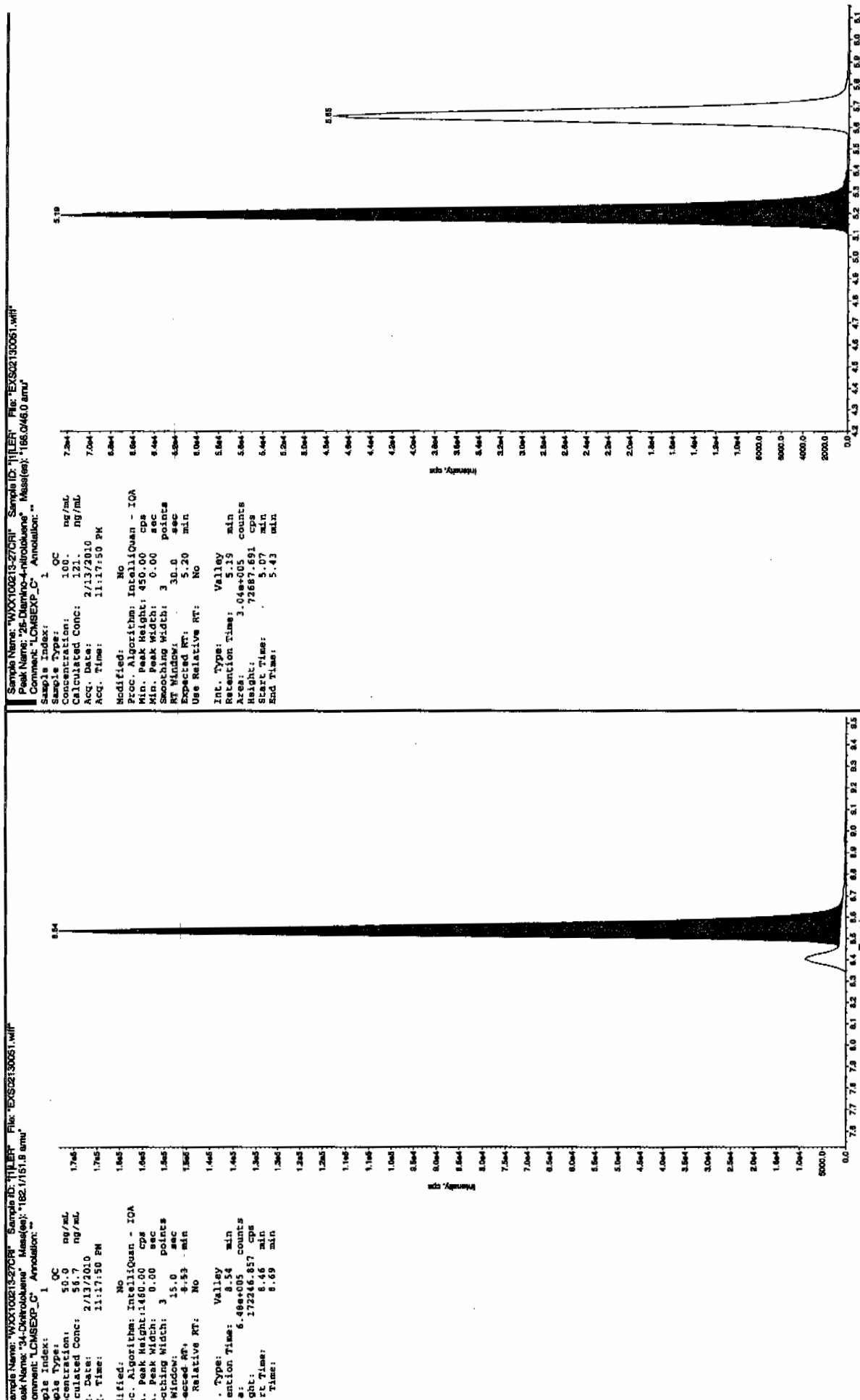
ANAL 02/15/10

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

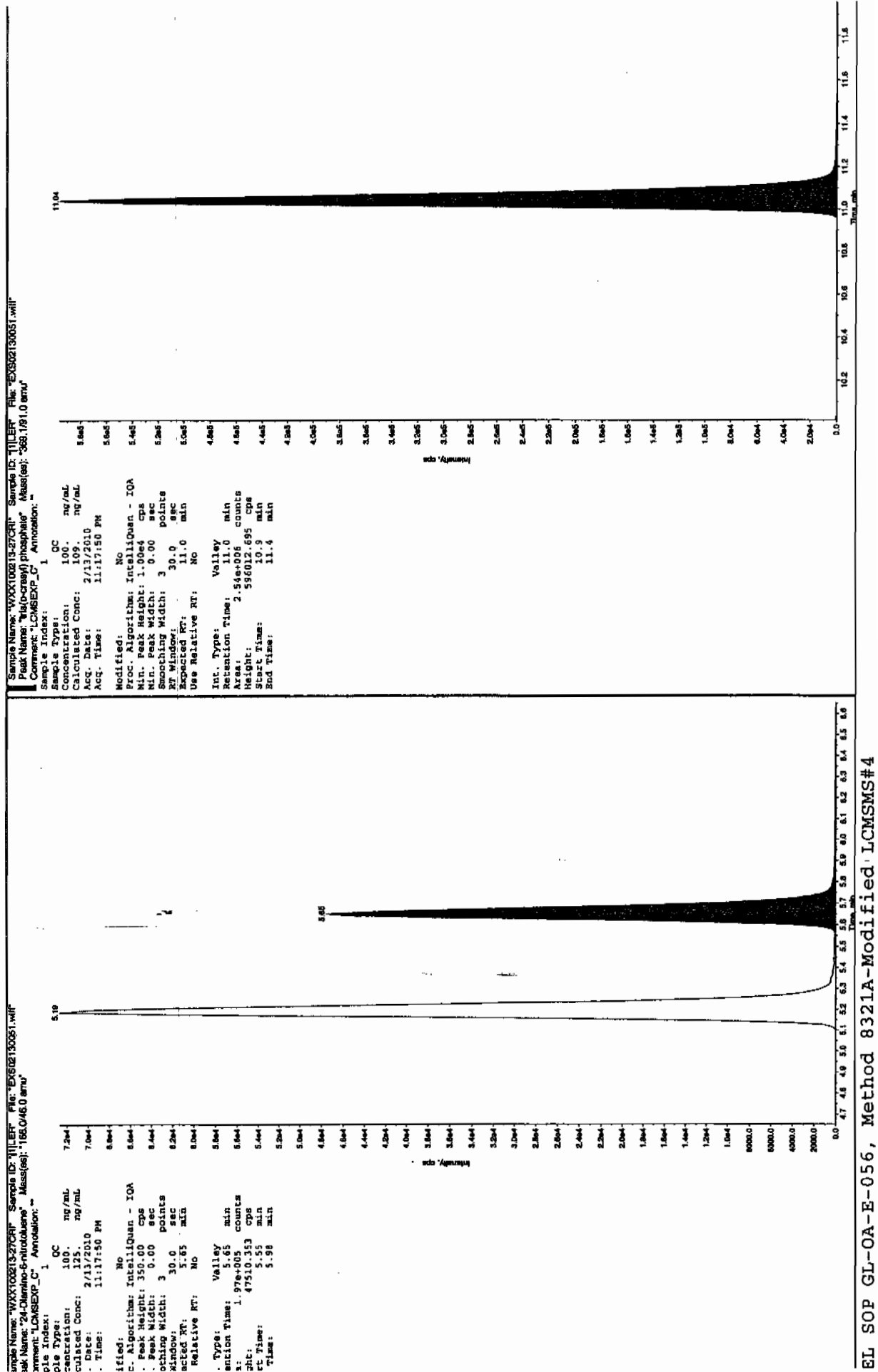
After Jan 2/15/10



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

7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS02130061.wiff

Analysis Date: 14-FEB-10 01:54

LCMSMS ID: 1358

Column ID: ISphere ODS-H80

Compound	True	Found	Recovery	Q
2,6-Diamino-4-nitrotoluene	500	598	120	
3,4-Dinitrotoluene	250	260	104	
3,5-Dinitroaniline	500	524	105	
TATB	500	508	102	
tris(o-cresyl) phosphate	500	520	104	
2,4-Diamino-6-nitrotoluene	500	557	111	

Recovery Limits:

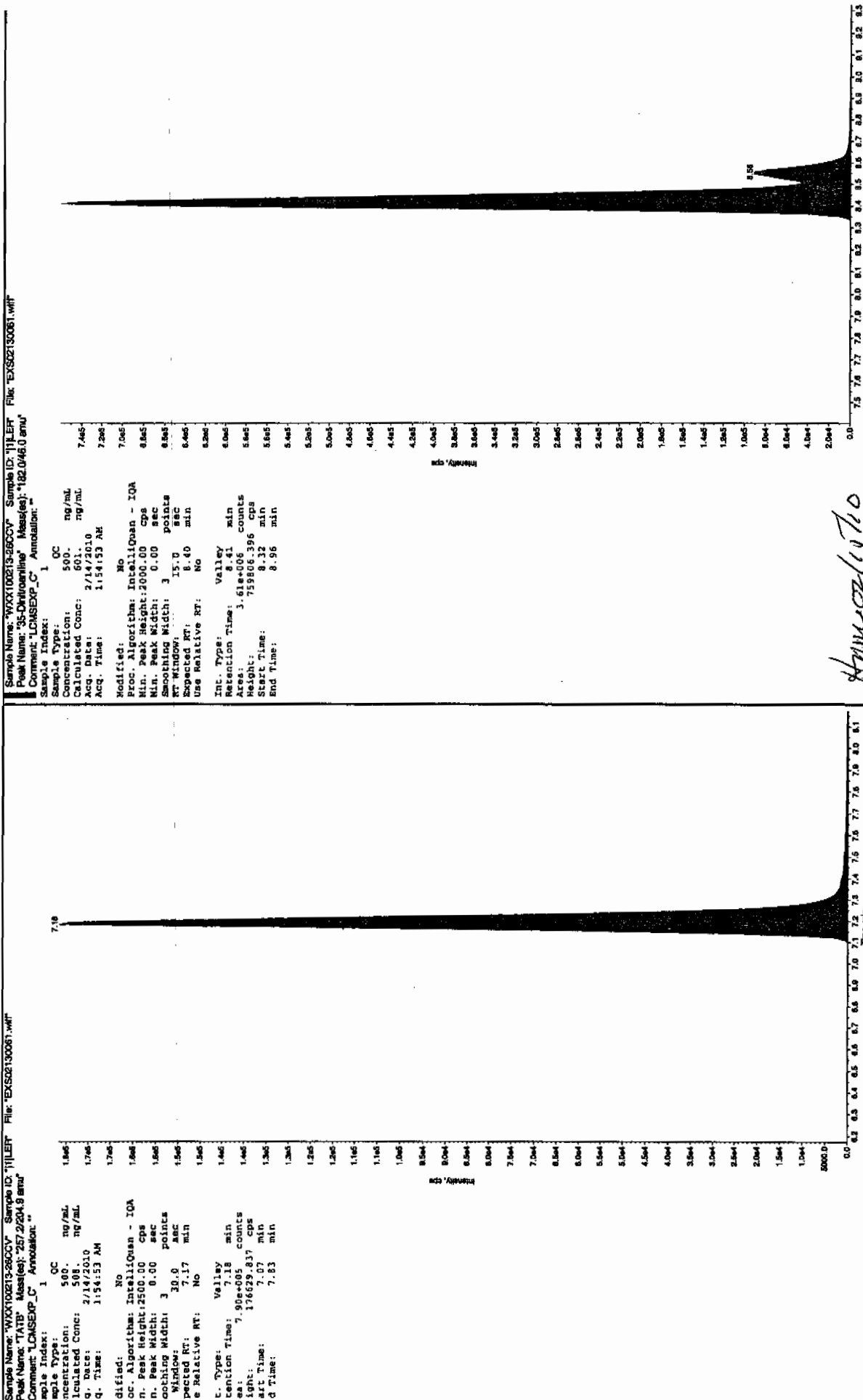
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

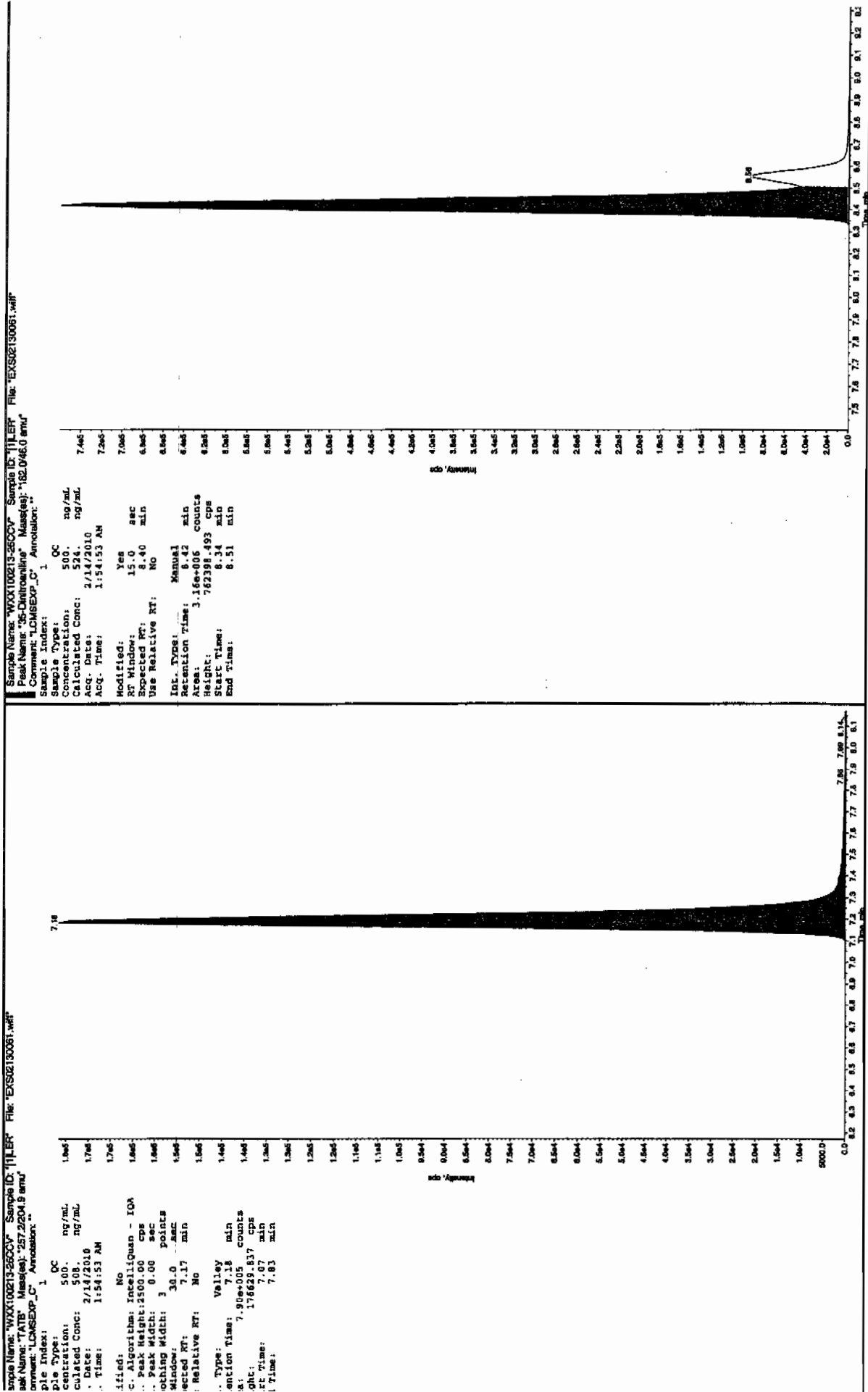
* Value outside of Recovery Limits

Before Jan 2/15/10

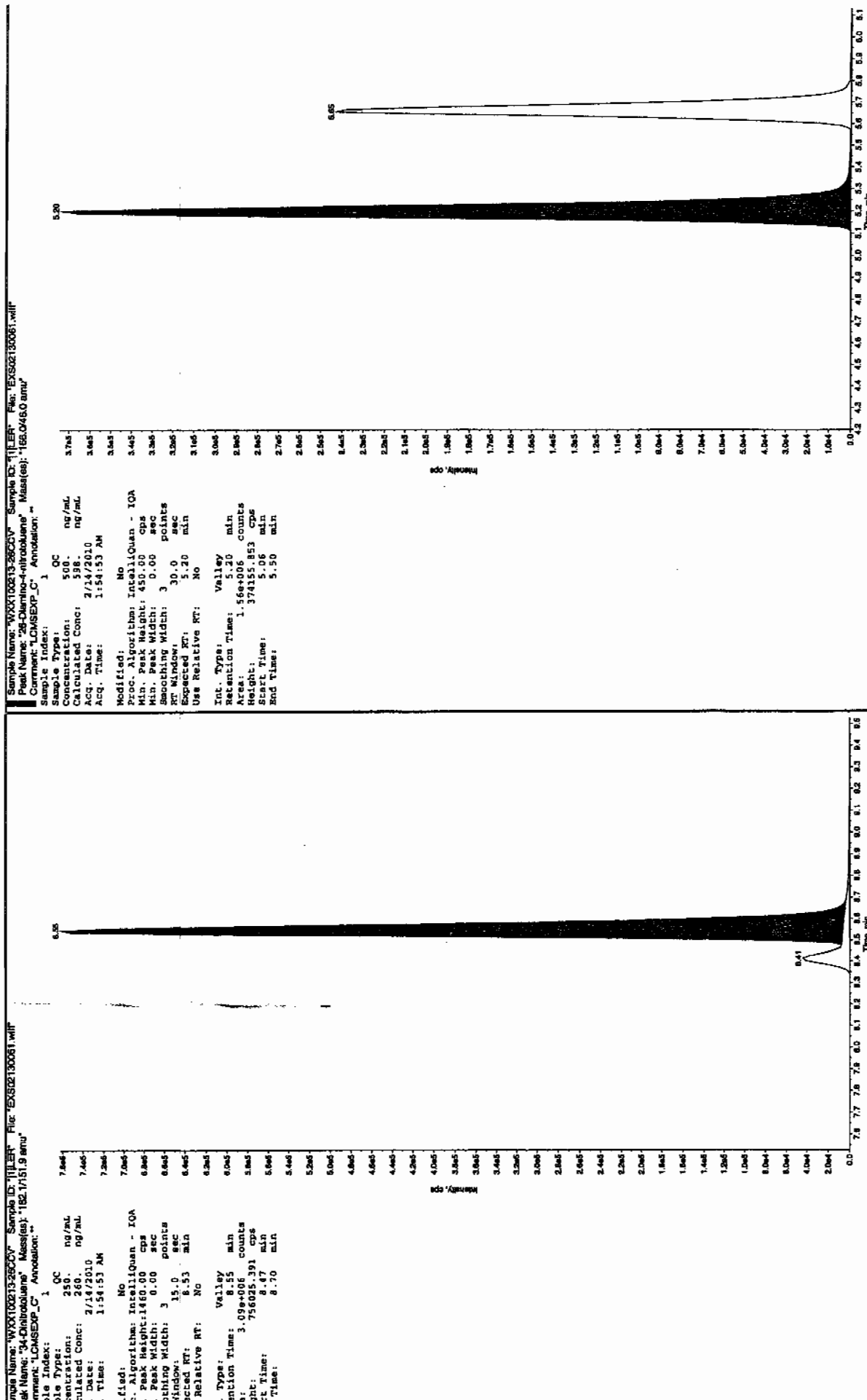


EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

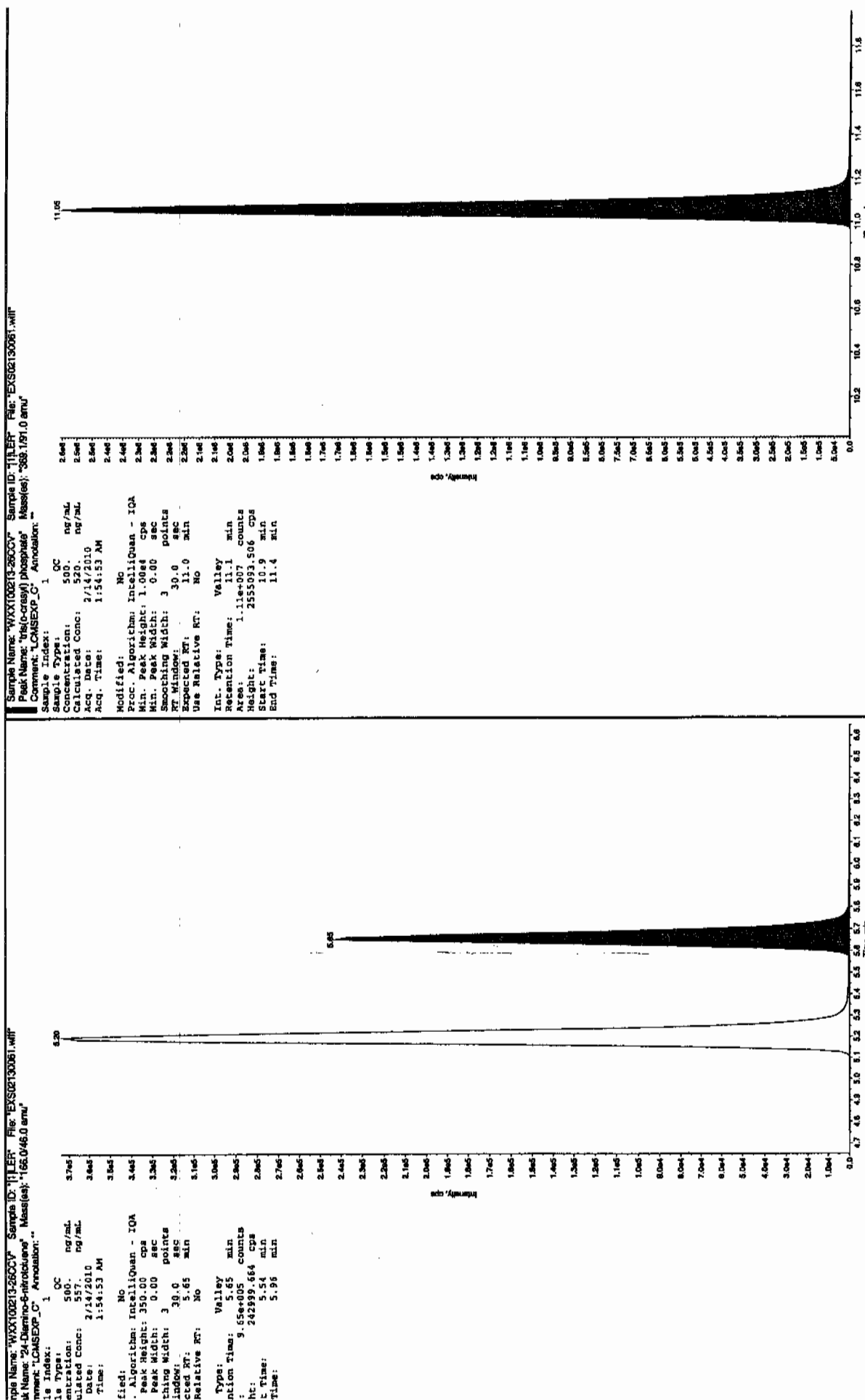
after Jan 21/15/10



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



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



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

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS02130063.wiff

Analysis Date: 14-FEB-10 02:26

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	125	125	
2,6-Diamino-4-nitrotoluene	100	122	122	
3,4-Dinitrotoluene	50	55.2	110	
3,5-Dinitroaniline	100	117	117	
TATB	100	103	103	
tris(o-cresyl) phosphate	100	108	108	

Recovery Limits:

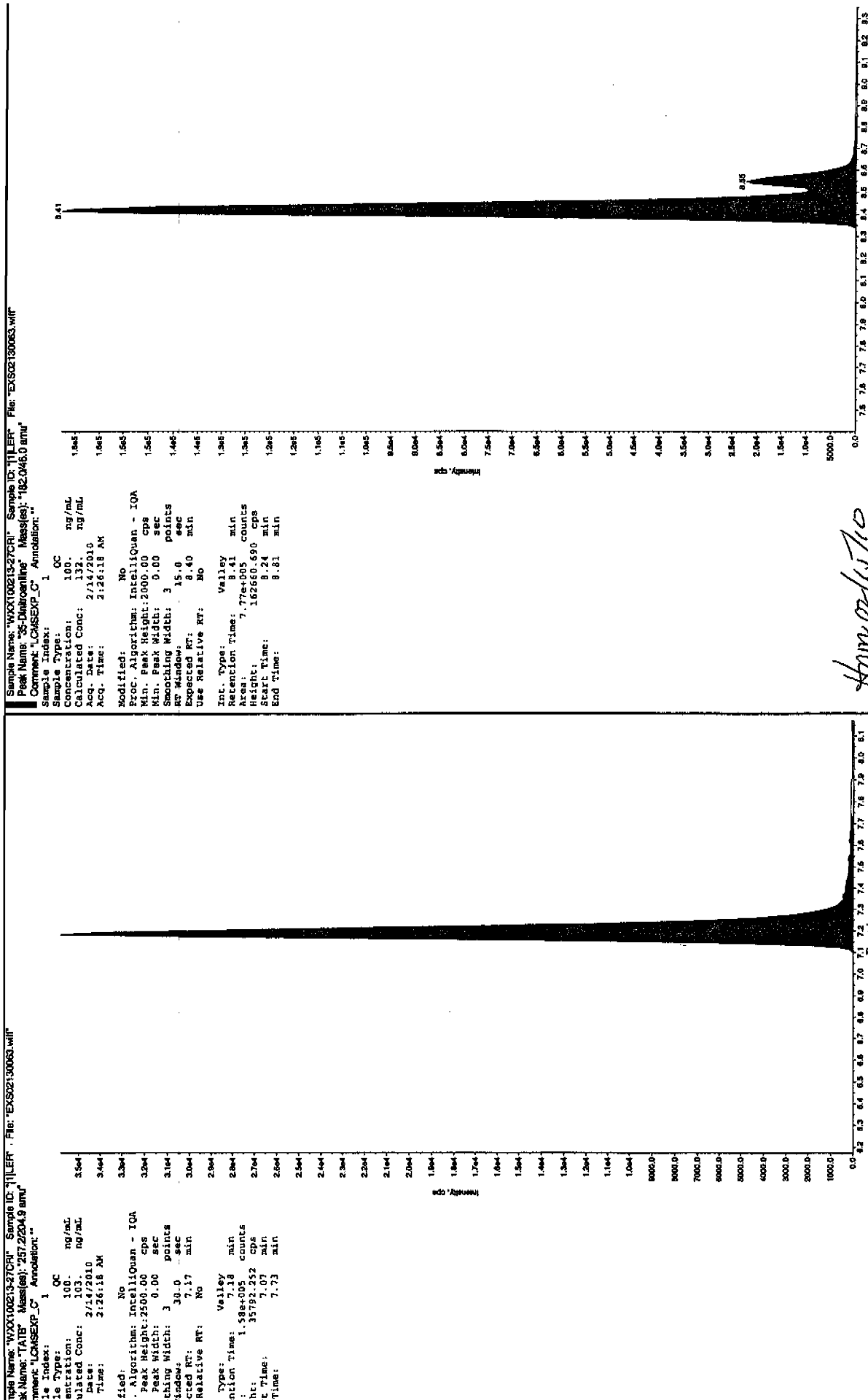
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

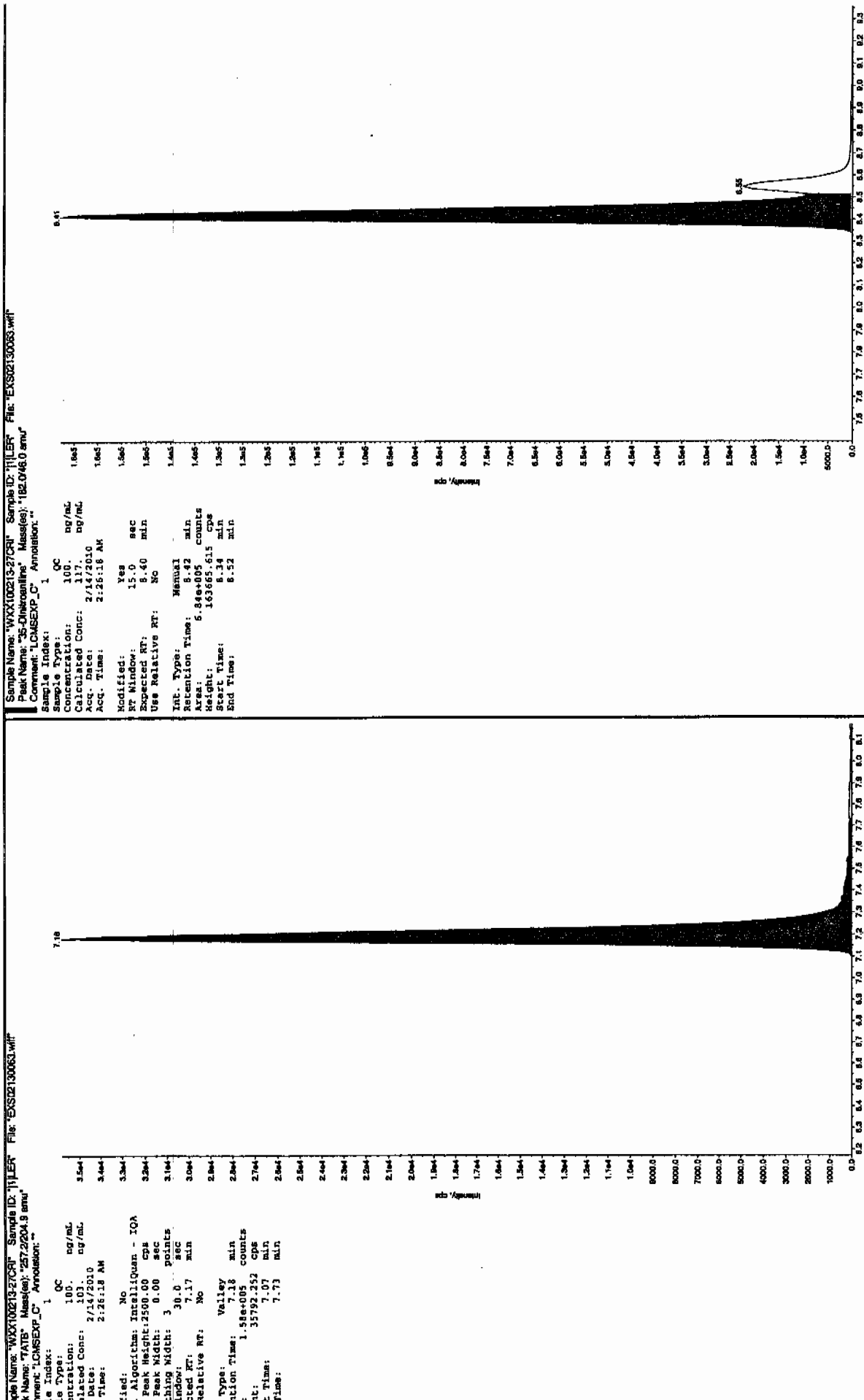
* Value outside of Recovery Limits

Before Jan 21 15 110

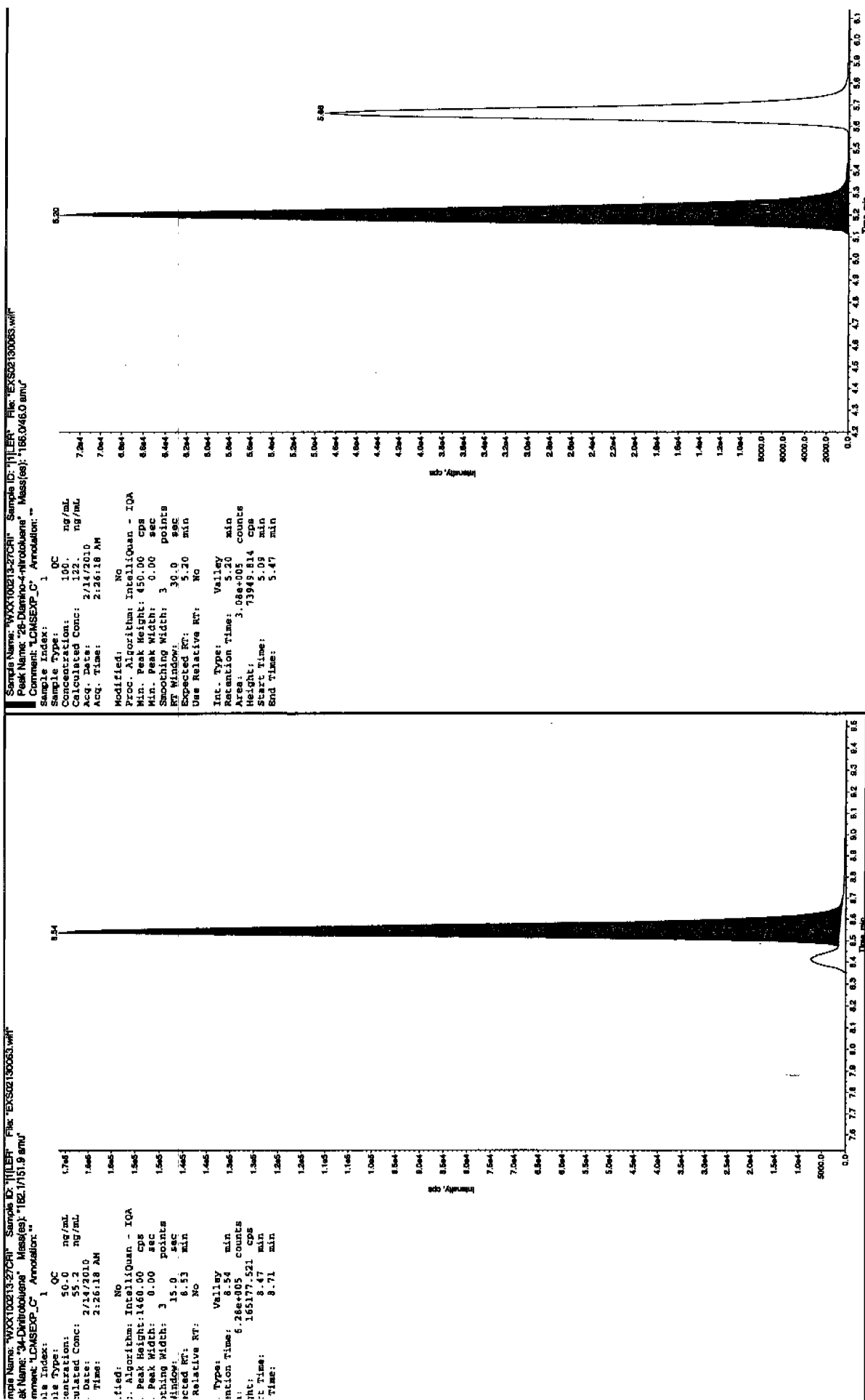


EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

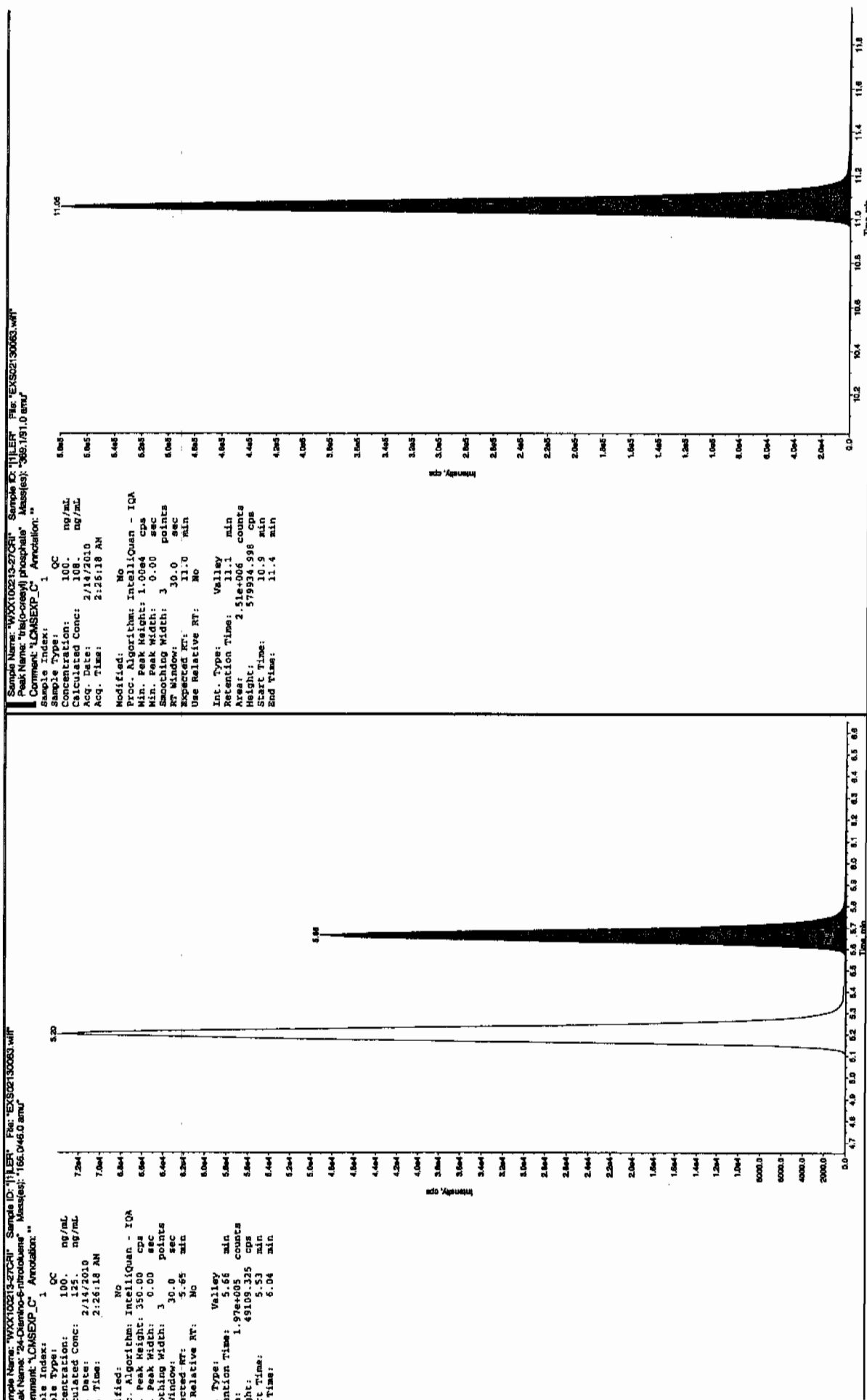
after Scan 2115/110



3L 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

7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS02130074.wiff

Analysis Date: 14-FEB-10 05:19

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	585	117	
2,6-Diamino-4-nitrotoluene	500	592	118	
3,4-Dinitrotoluene	250	268	107	
3,5-Dinitroaniline	500	576	115	
TATB	500	505	101	
tris(o-cresyl) phosphate	500	515	103	

Recovery Limits:

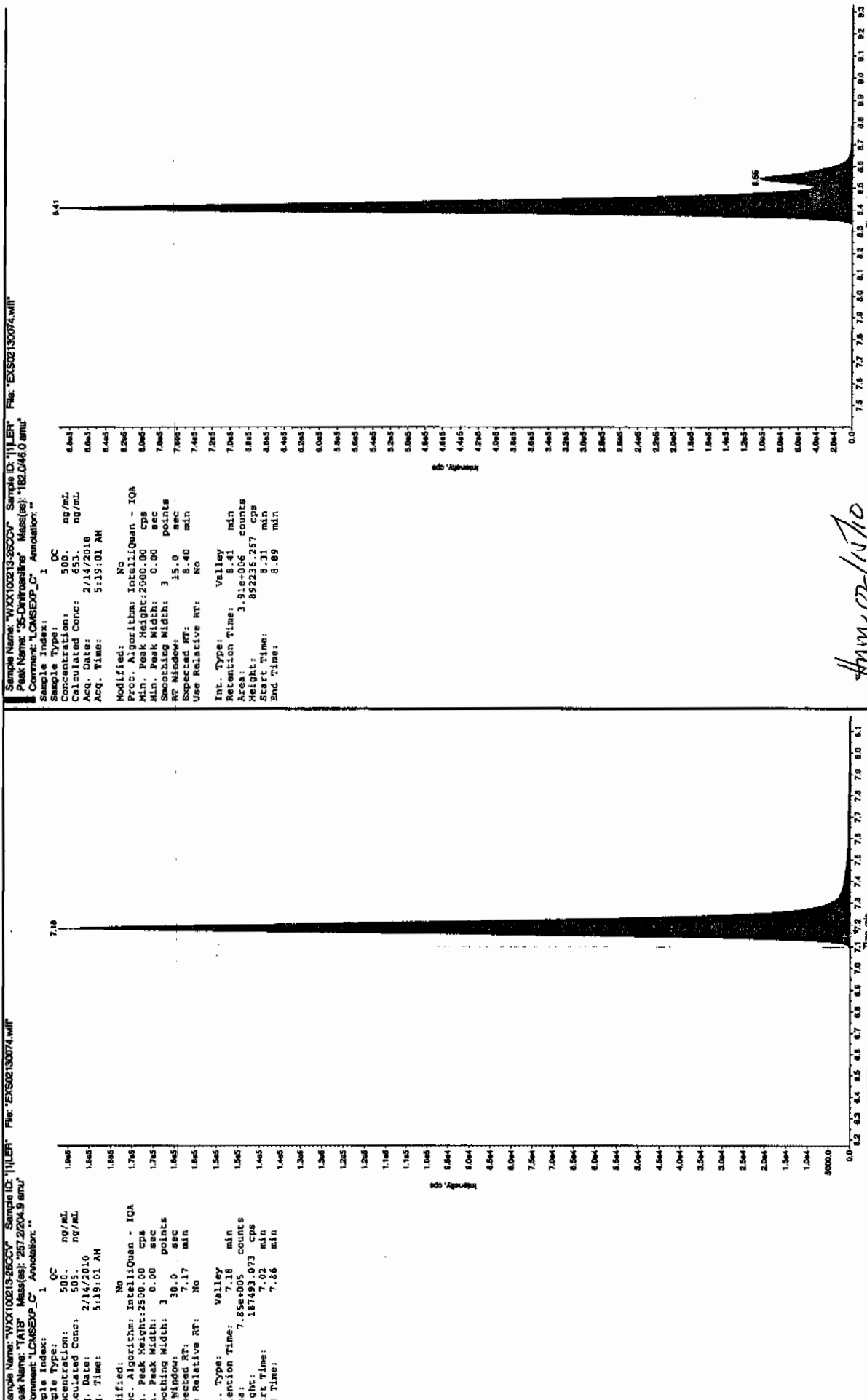
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

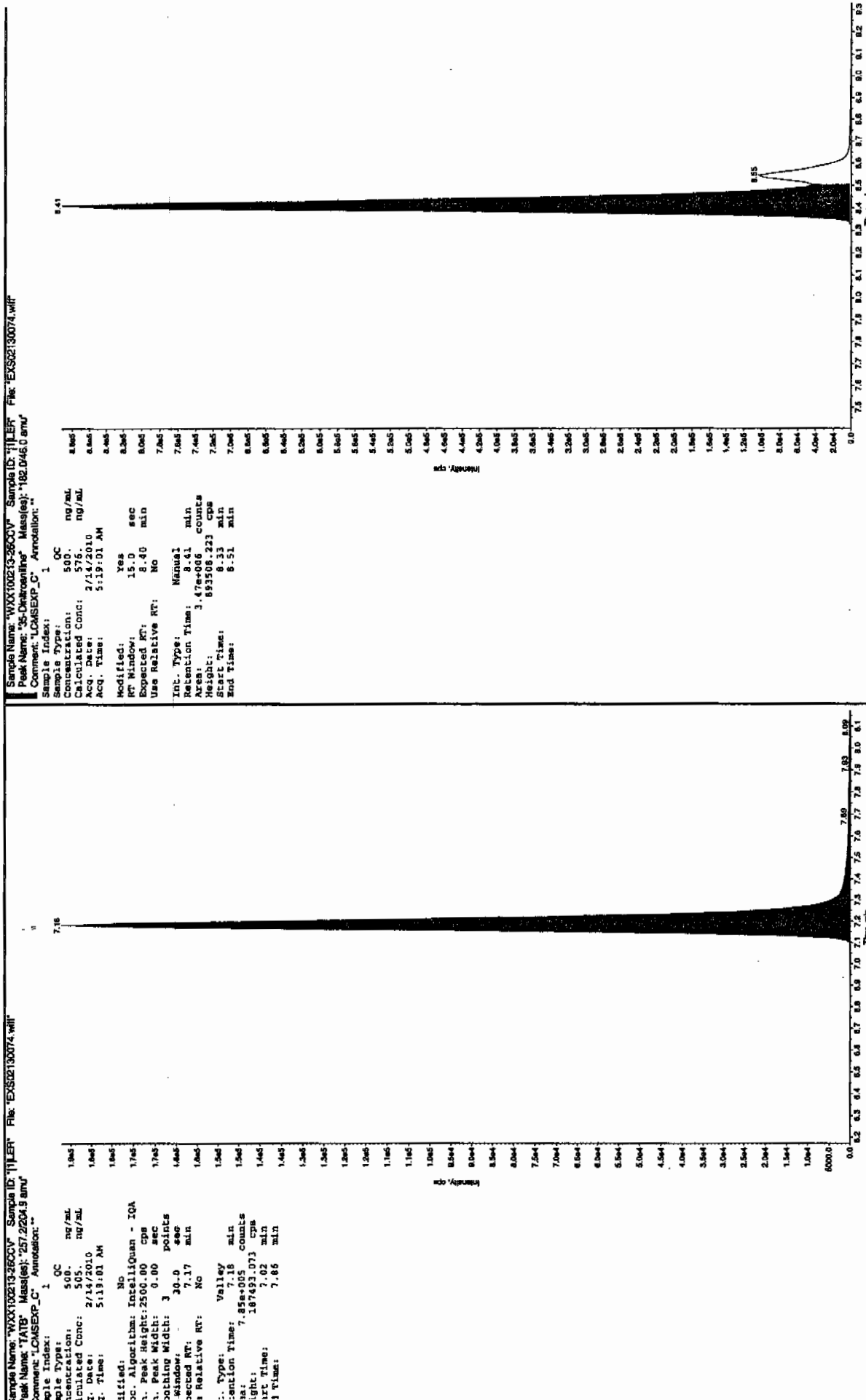
Before Scan 2/15/10



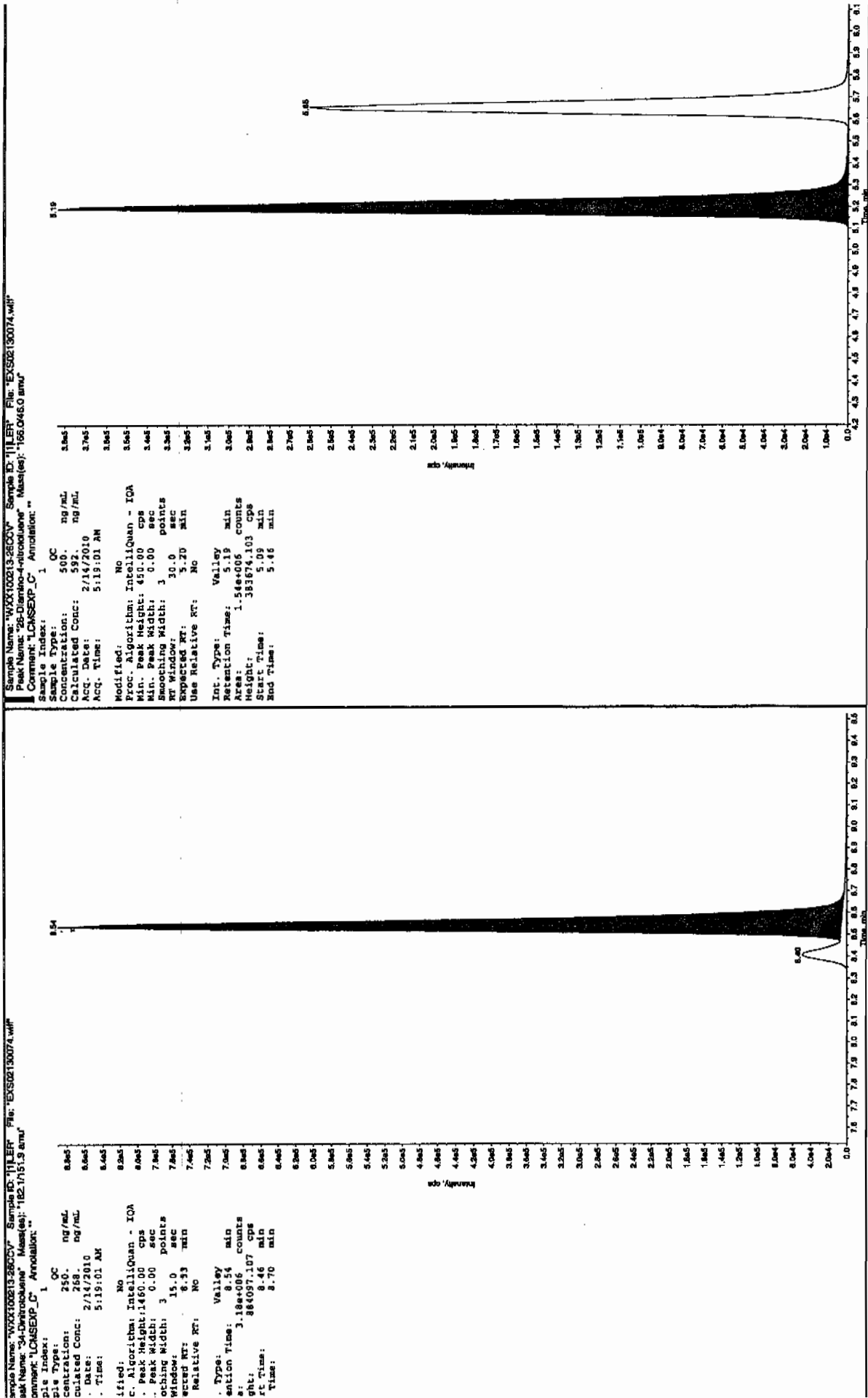
After Scan 2/15/10

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

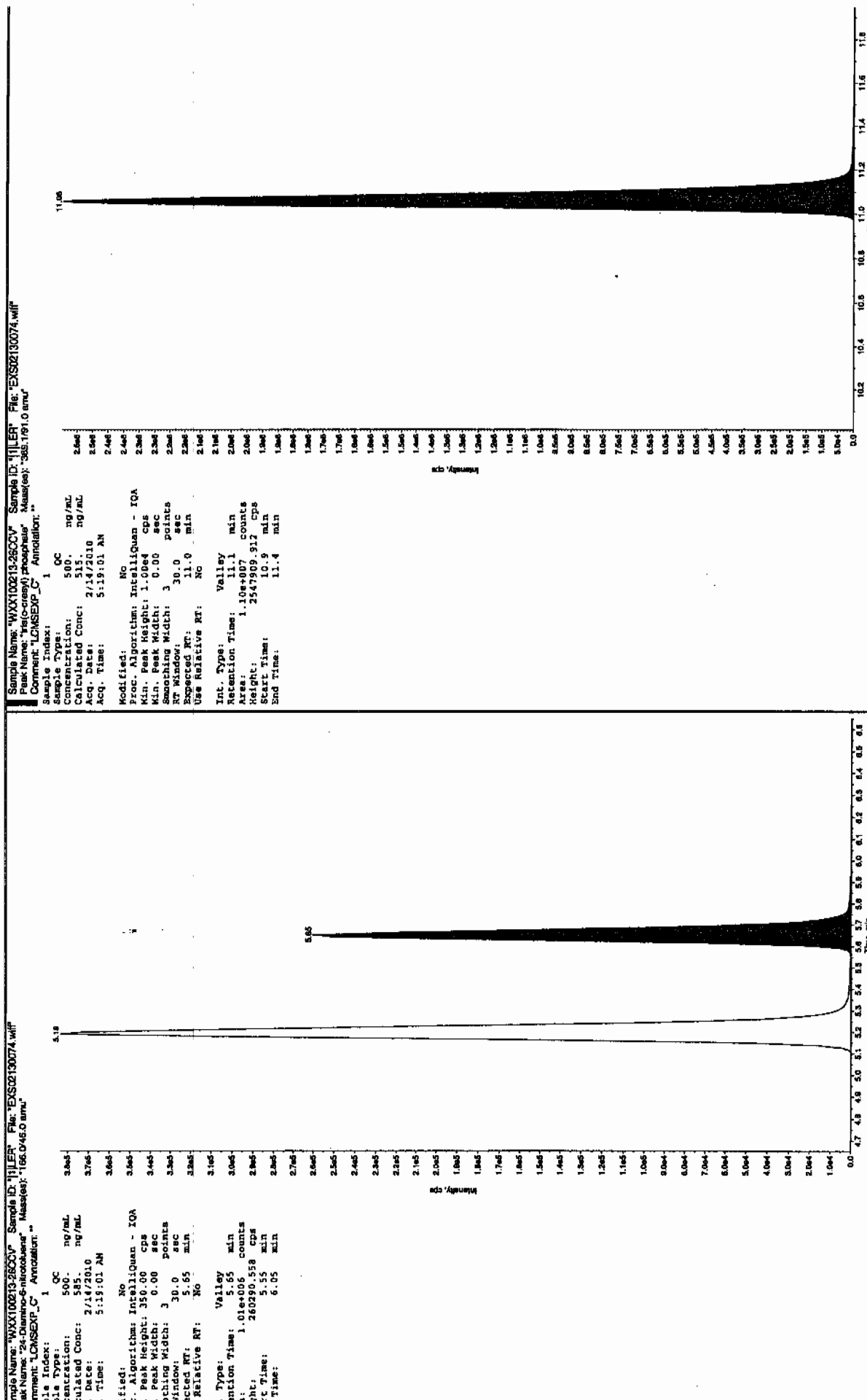
after Jan 2/15/10



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

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS02130076.wiff

Analysis Date: 14-FEB-10 05:50

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	120	120	
2,6-Diamino-4-nitrotoluene	100	121	121	
3,4-Dinitrotoluene	50	55.7	111	
3,5-Dinitroaniline	100	127	127	
TATB	100	105	105	
tris(o-cresyl) phosphate	100	108	108	

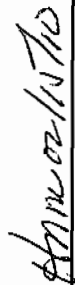
Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

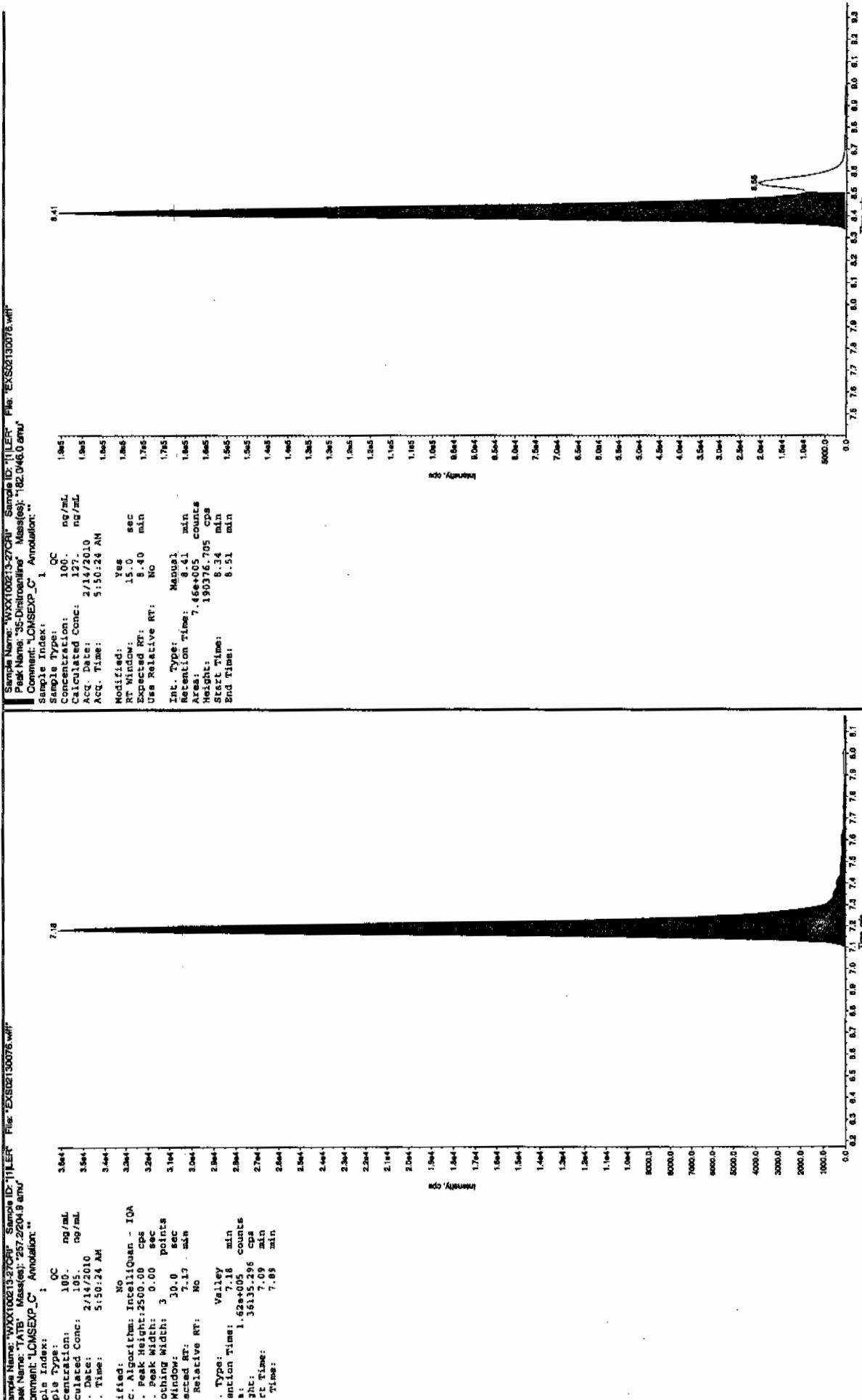
Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

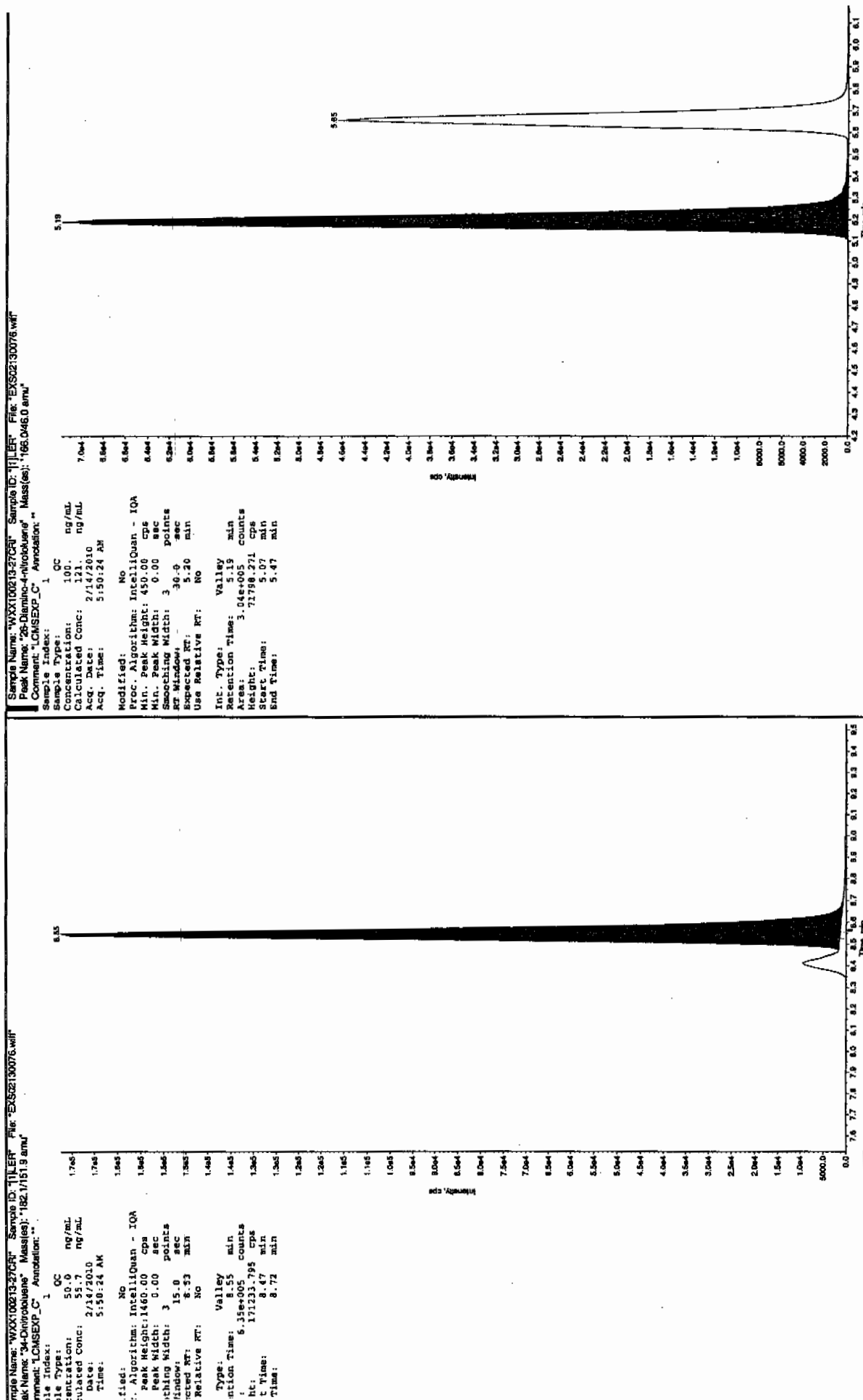
* Value outside of Recovery Limits



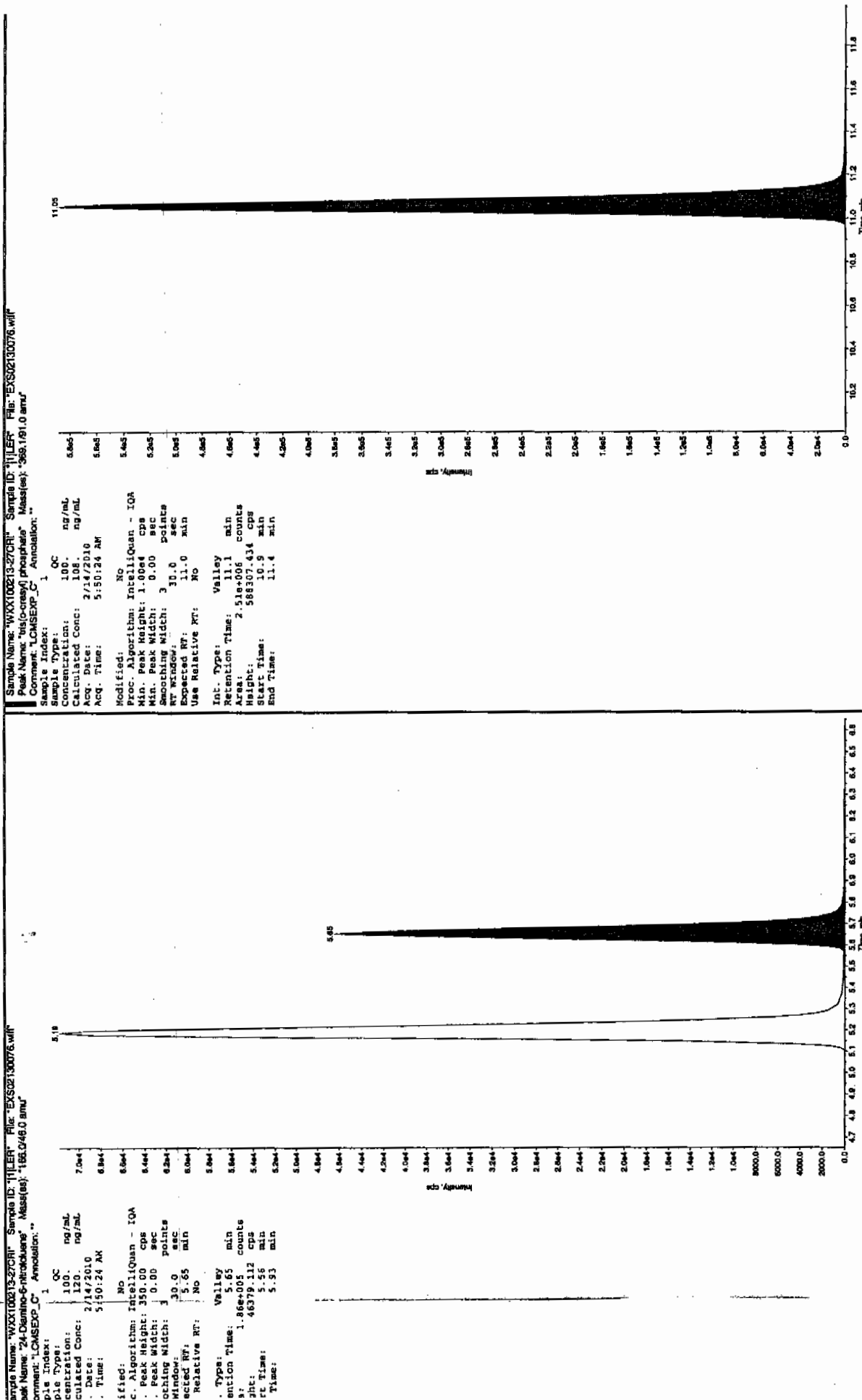
after Jan 21/5/10



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



IL 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): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS02130082.wiff

Analysis Date: 14-FEB-10 07:24

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	516	103	
2,6-Diamino-4-nitrotoluene	500	590	118	
3,4-Dinitrotoluene	250	285	114	
3,5-Dinitroaniline	500	605	121	
TATB	500	521	104	
tris(o-cresyl) phosphate	500	526	105	

Recovery Limits:

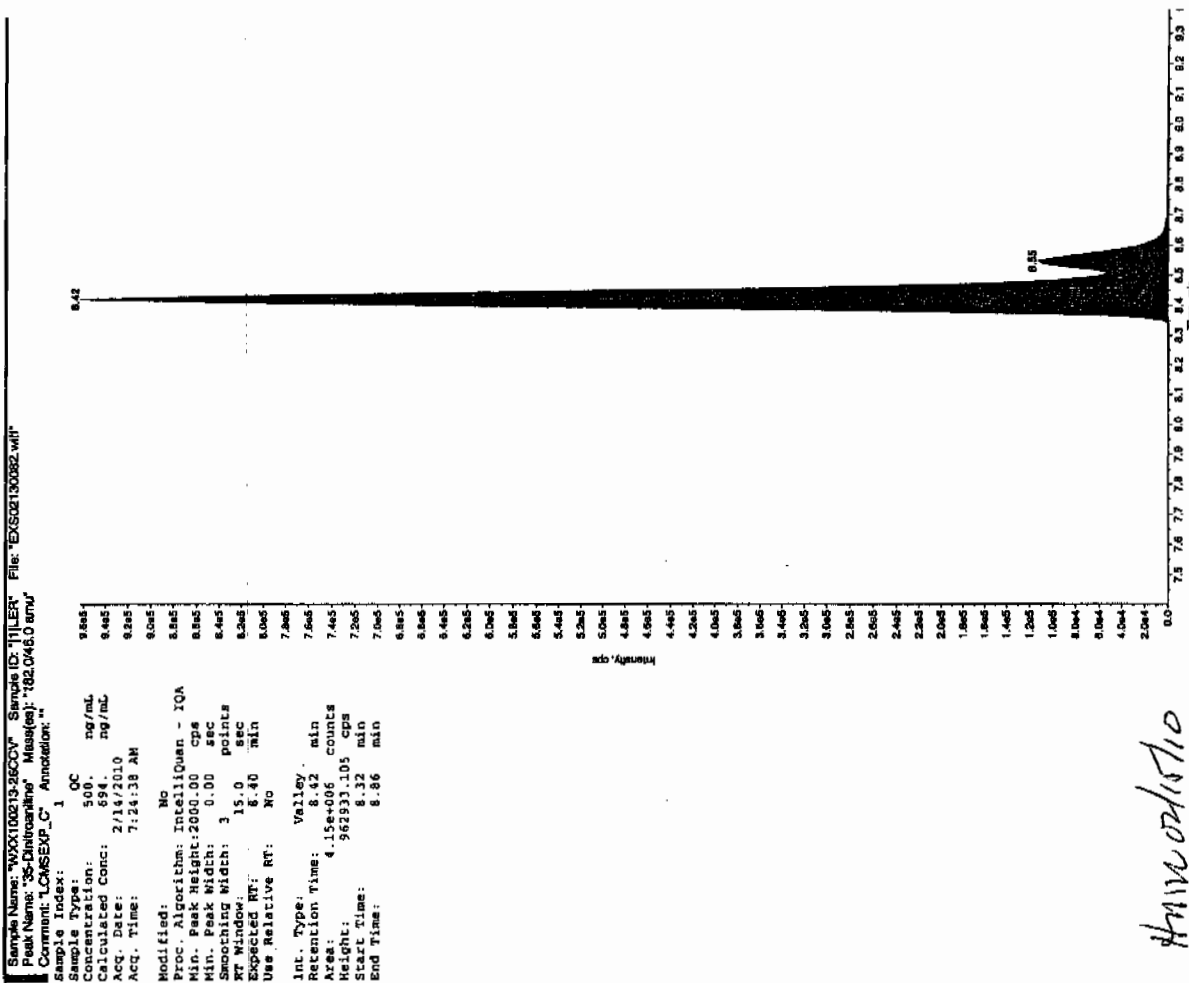
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

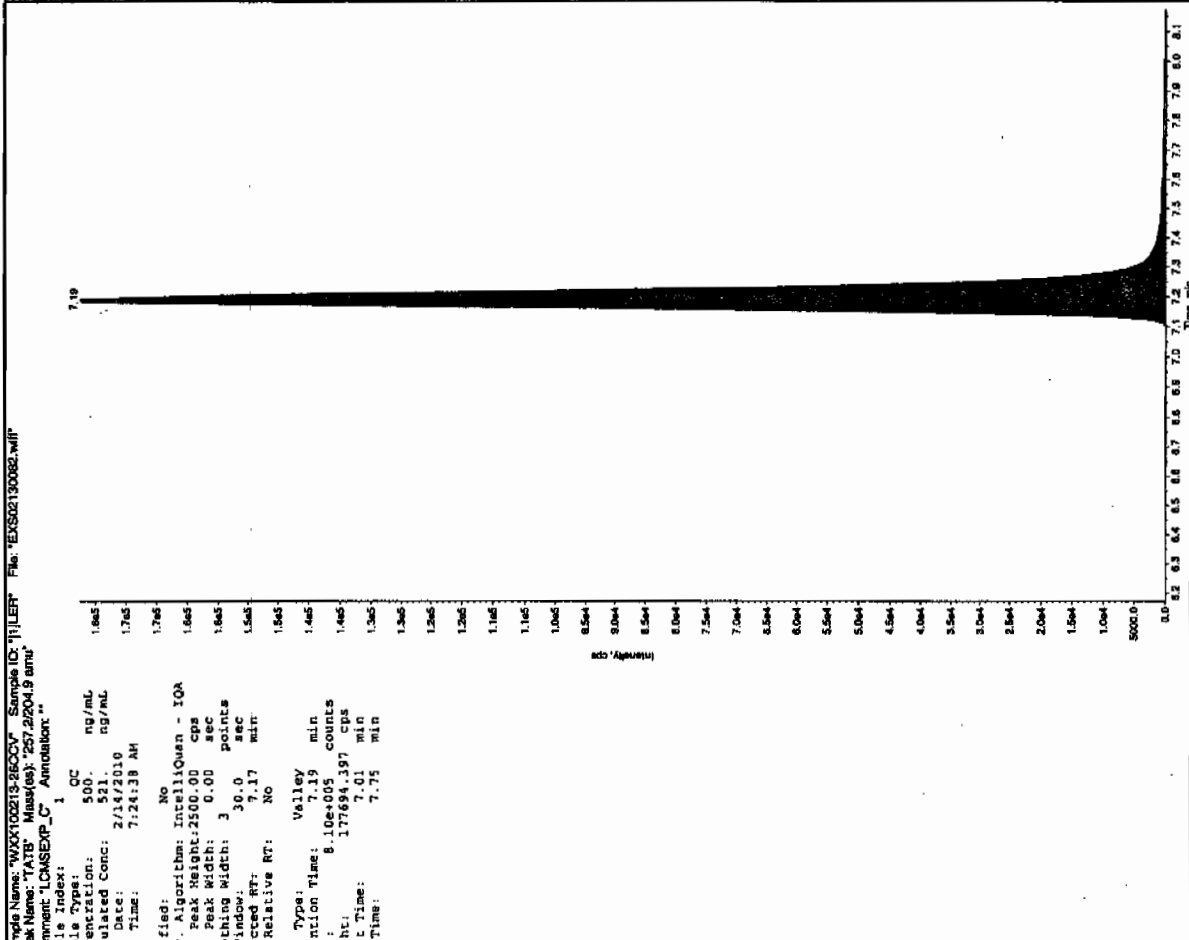
Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Before Scan 2/15/10

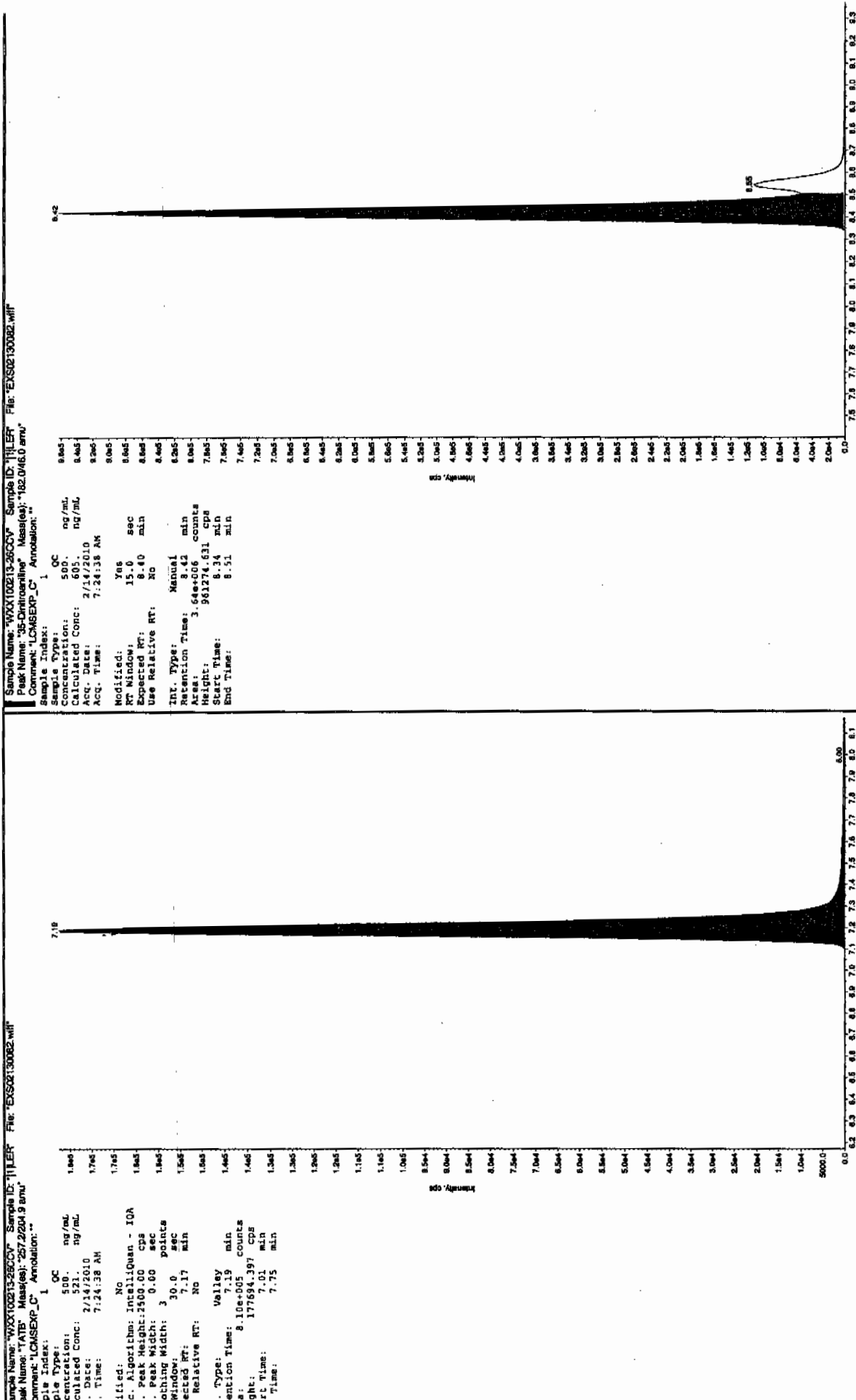


After Scan 2/15/10

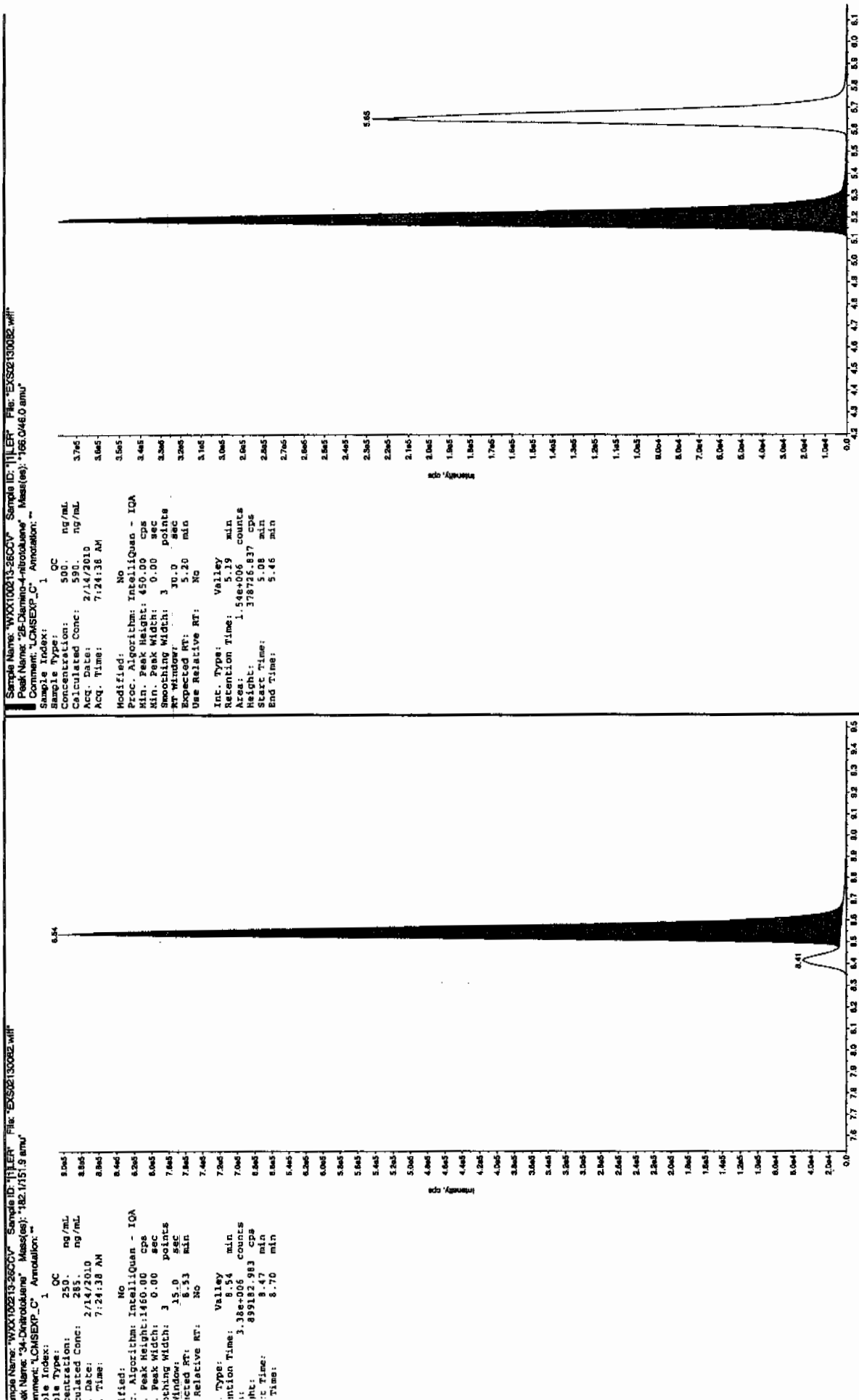


IL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

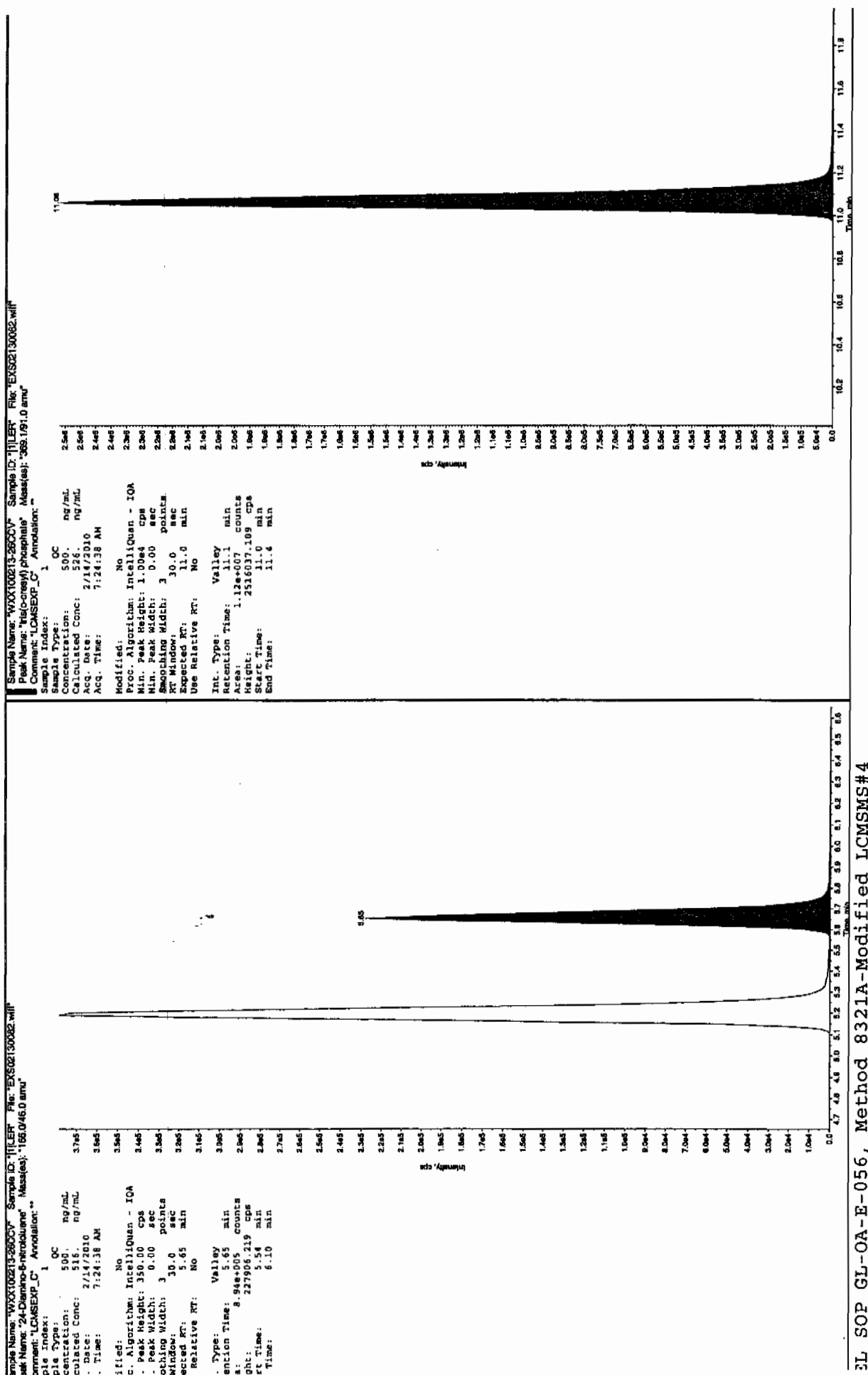
after Jan 21/5/10



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



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



3L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS02130084.wiff

Analysis Date: 14-FEB-10 07:56

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	125	125	
2,6-Diamino-4-nitrotoluene	100	128	128	
3,4-Dinitrotoluene	50	61.6	123	
3,5-Dinitroaniline	100	125	125	
TATB	100	111	111	
tris(o-cresyl) phosphate	100	108	108	

Recovery Limits:

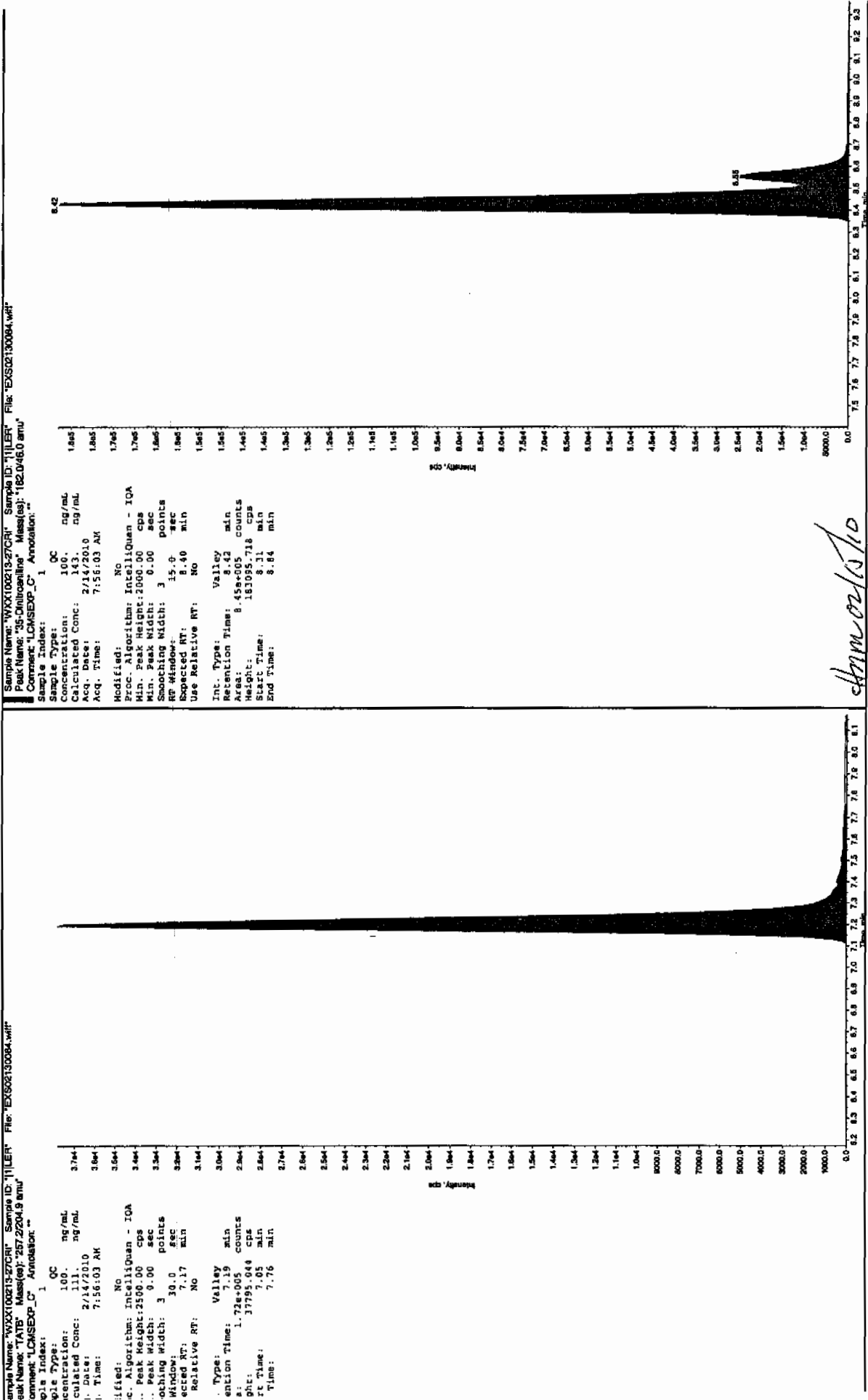
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

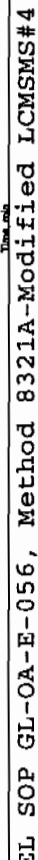
Column used to flag Recovery outside of Limits

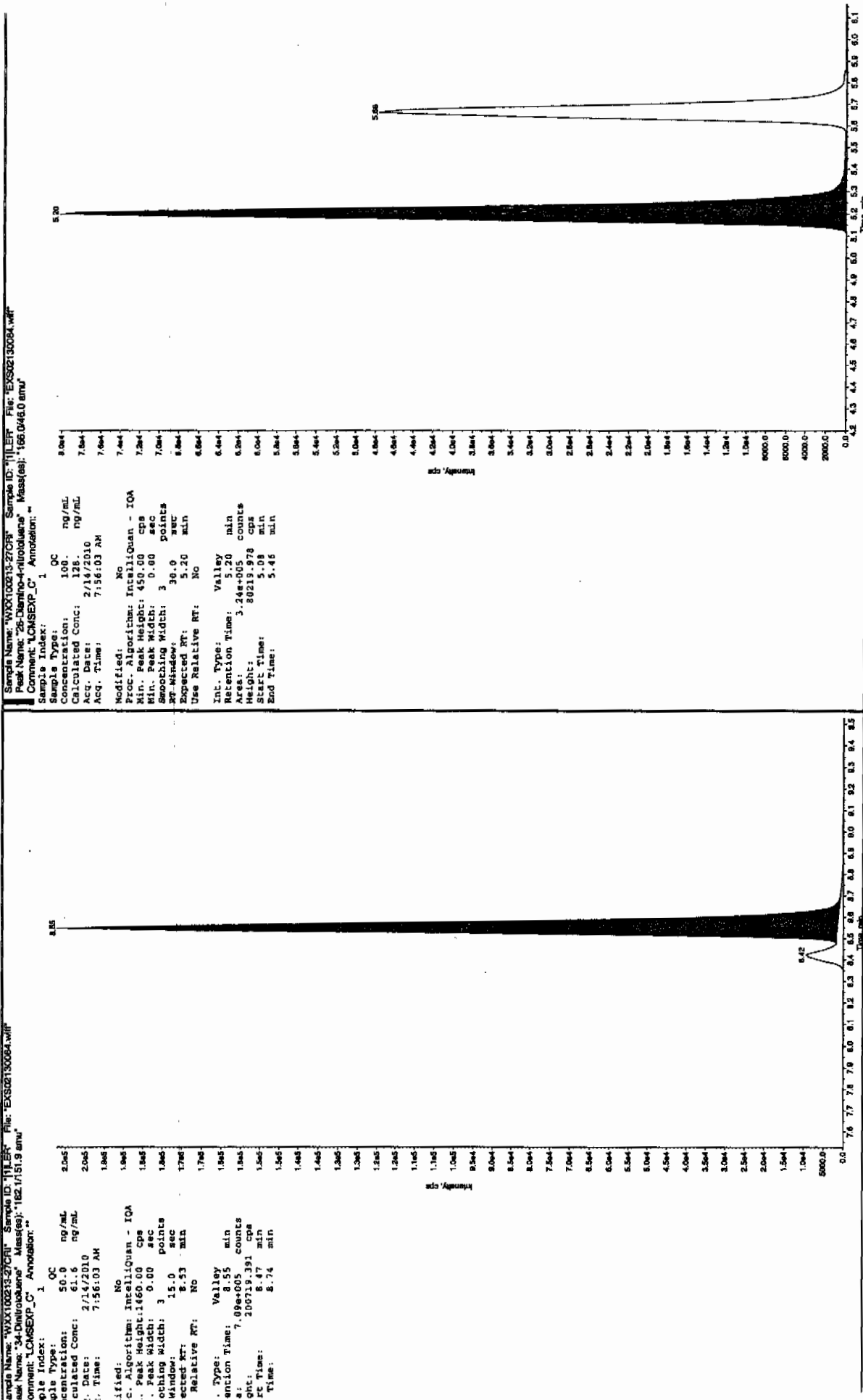
* Value outside of Recovery Limits

Before Jan 21/5/10

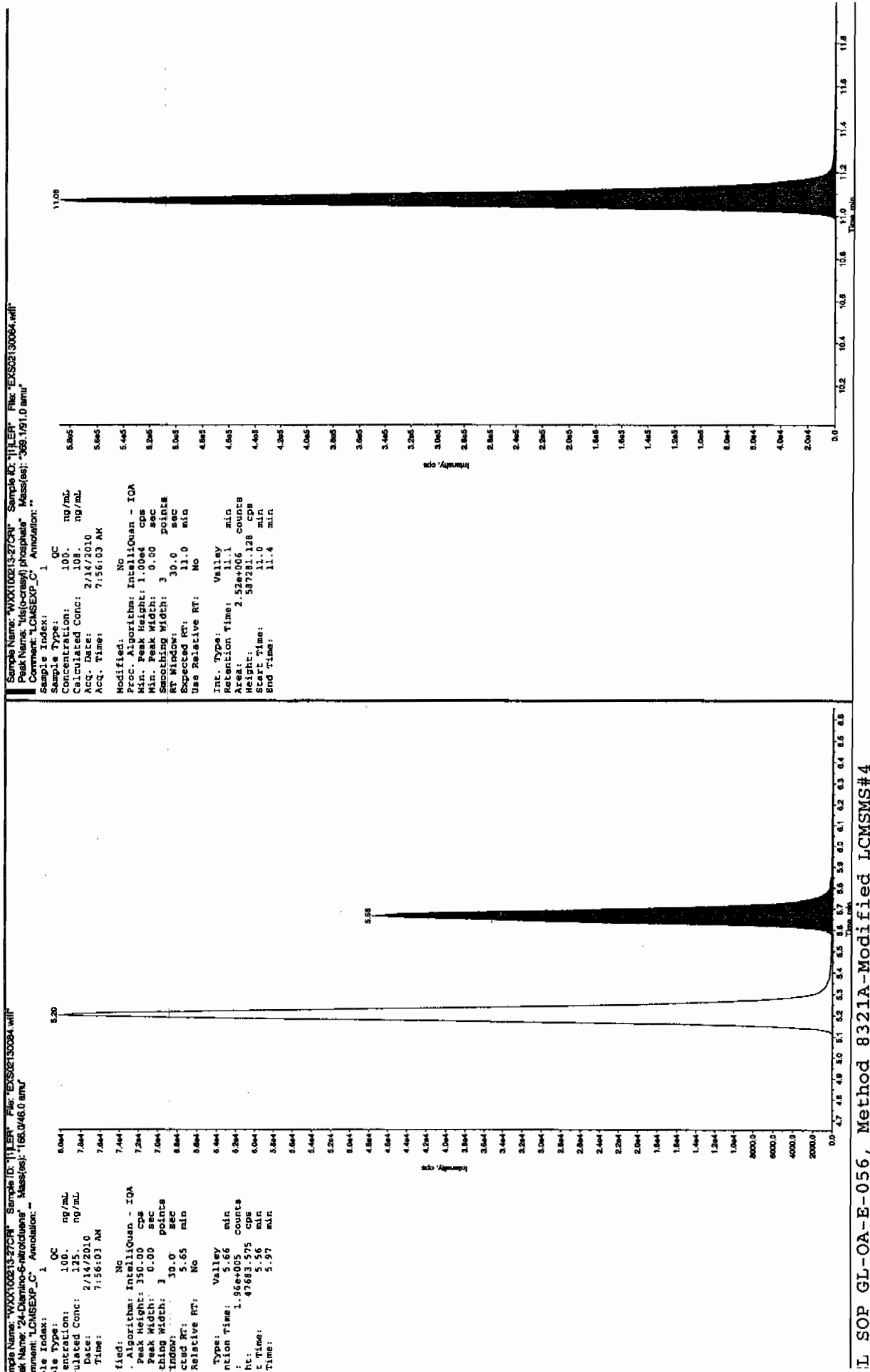


EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4





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



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

7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS02130095.wiff

Analysis Date: 14-FEB-10 10:48

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	499	100	
2,6-Diamino-4-nitrotoluene	500	551	110	
3,4-Dinitrotoluene	250	274	109	
3,5-Dinitroaniline	500	594	119	
TATB	500	478	96	
tris(o-cresyl) phosphate	500	518	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%

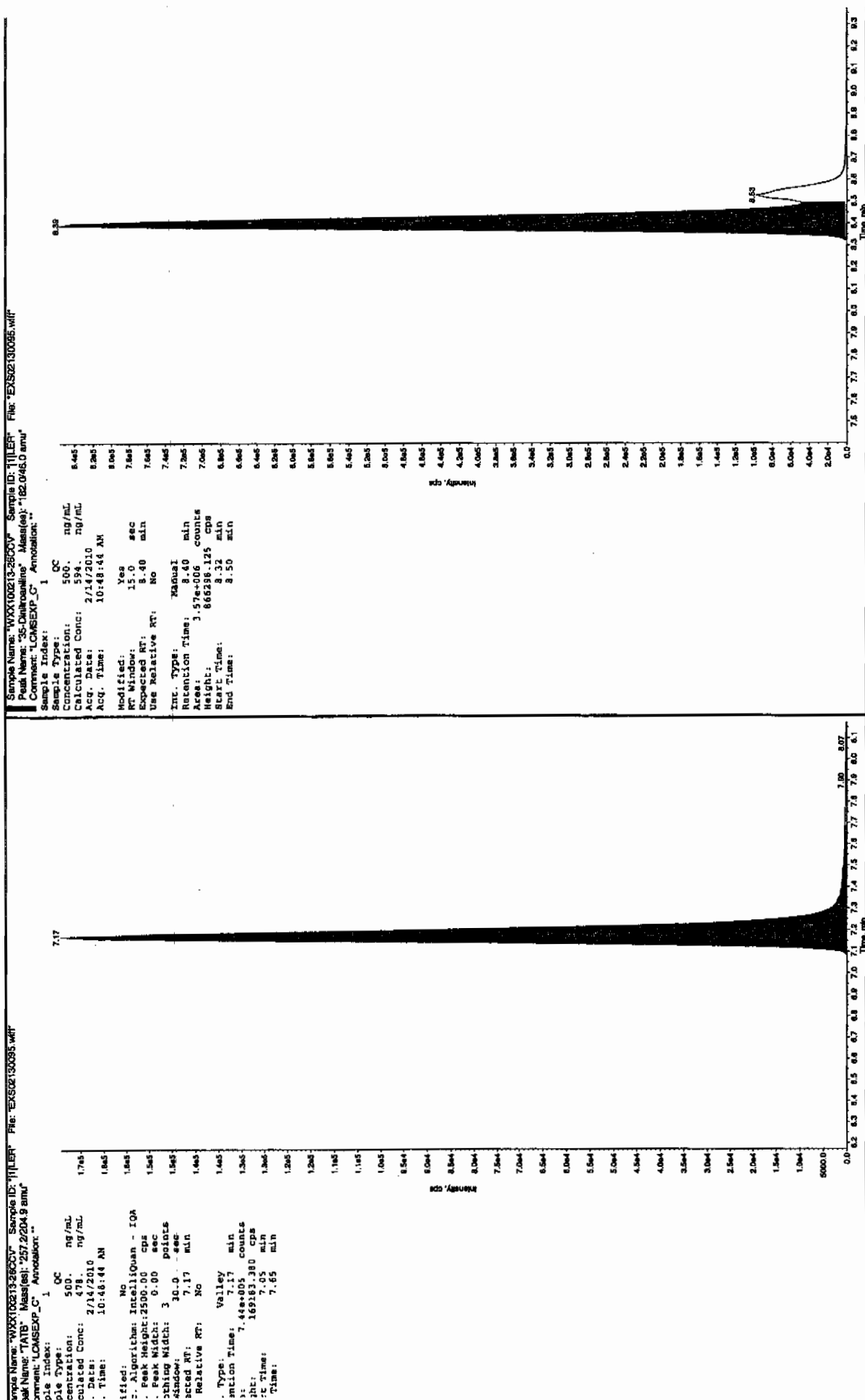
Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

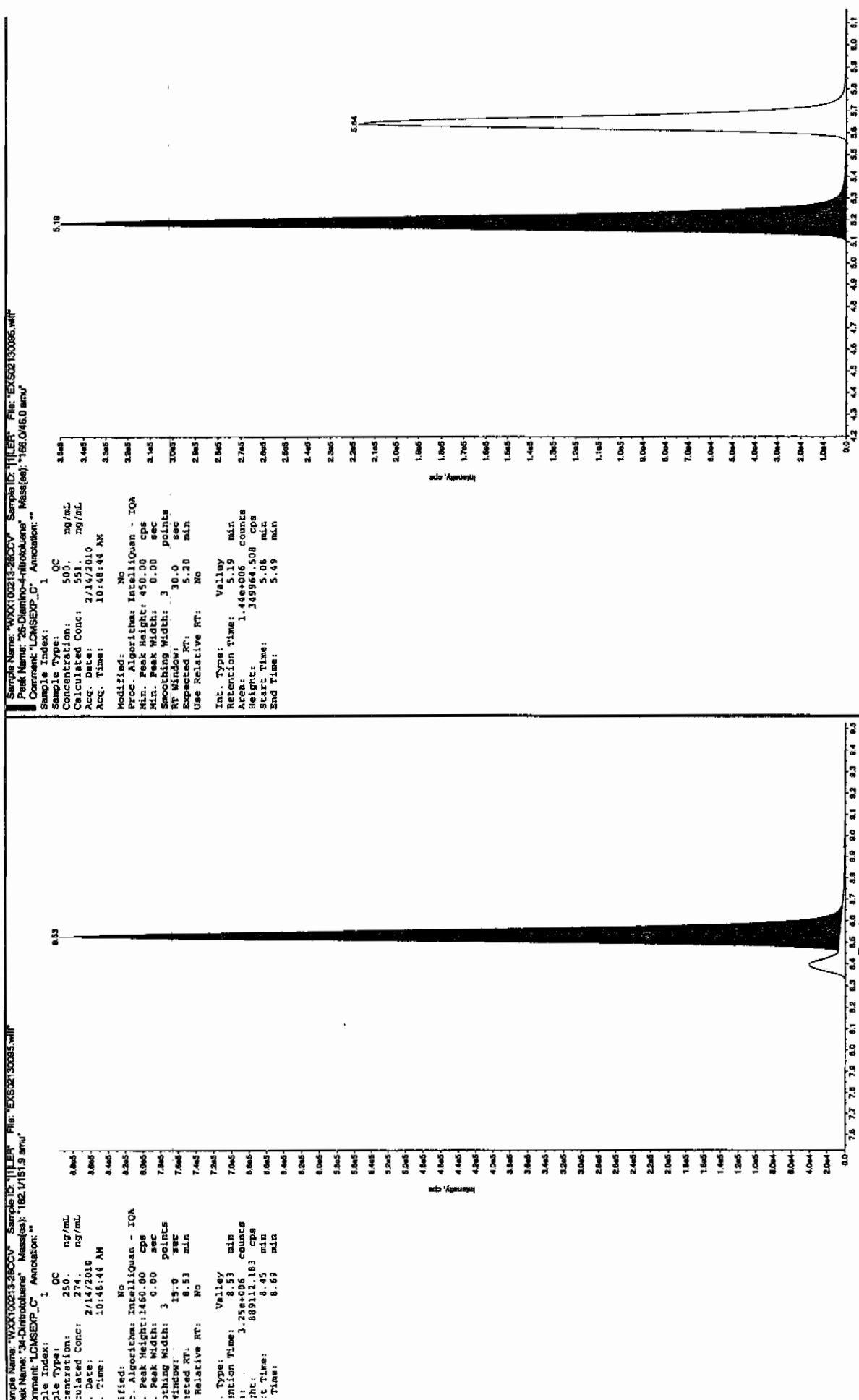


ELI SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

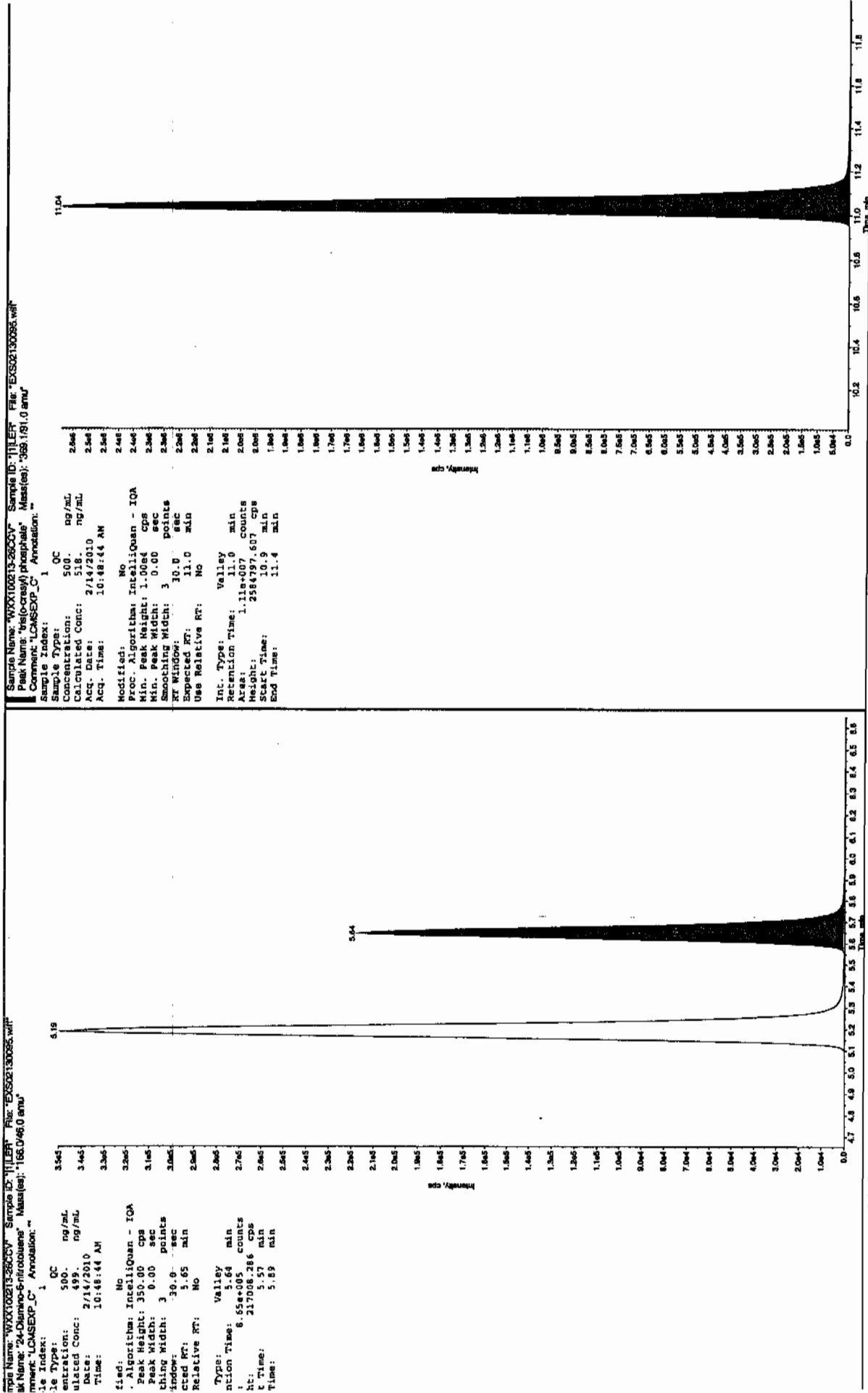
after Jan 21/5/10



IL 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

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS02130097.wiff

Analysis Date: 14-FEB-10 11:20

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	120	120	
3,4-Dinitrotoluene	50	56.3	113	
3,5-Dinitroaniline	100	122	122	
TATB	100	94.6	95	
tris(o-cresyl) phosphate	100	107	107	

Recovery Limits:

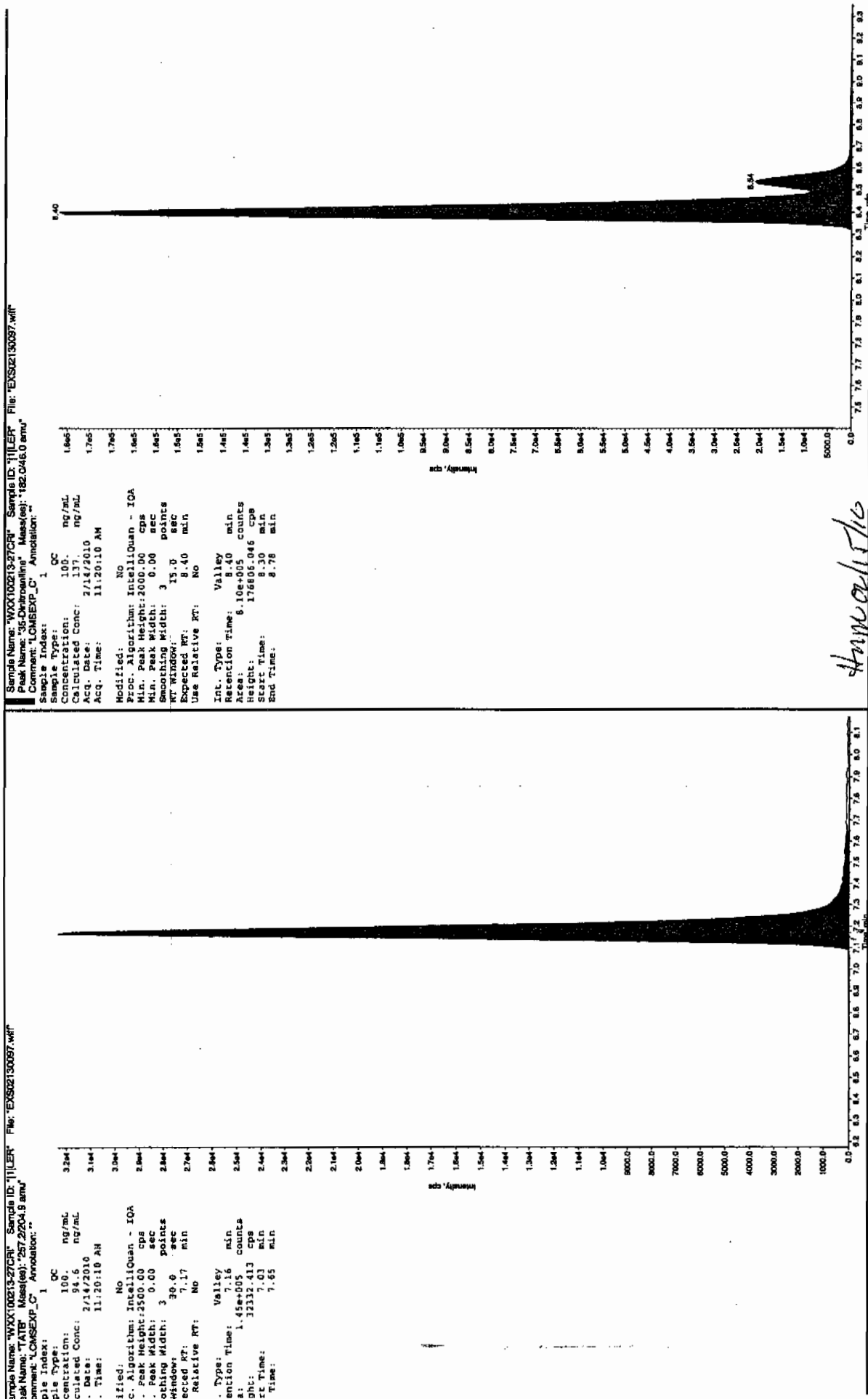
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

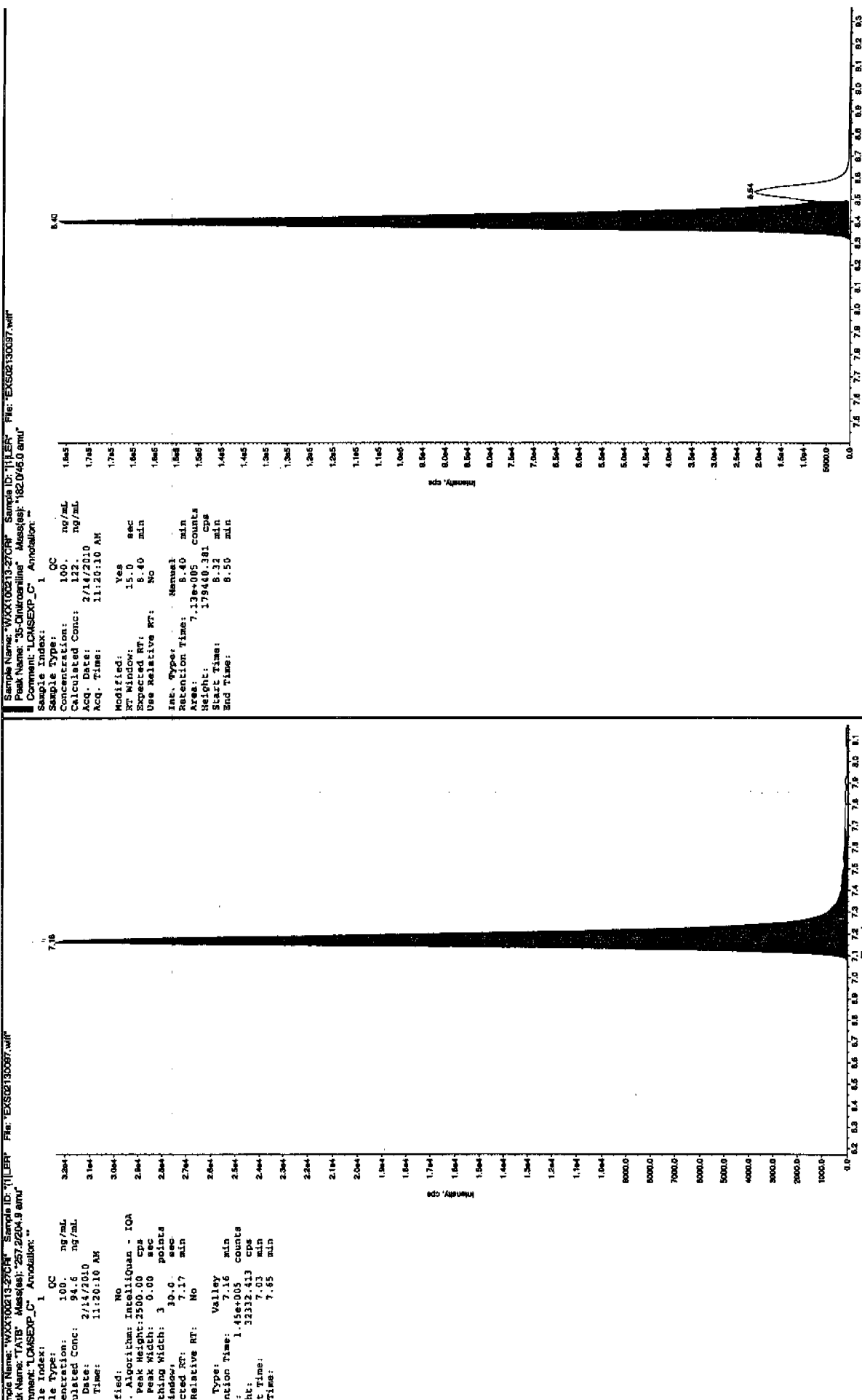
* Value outside of Recovery Limits

Before Jan 21, 2010

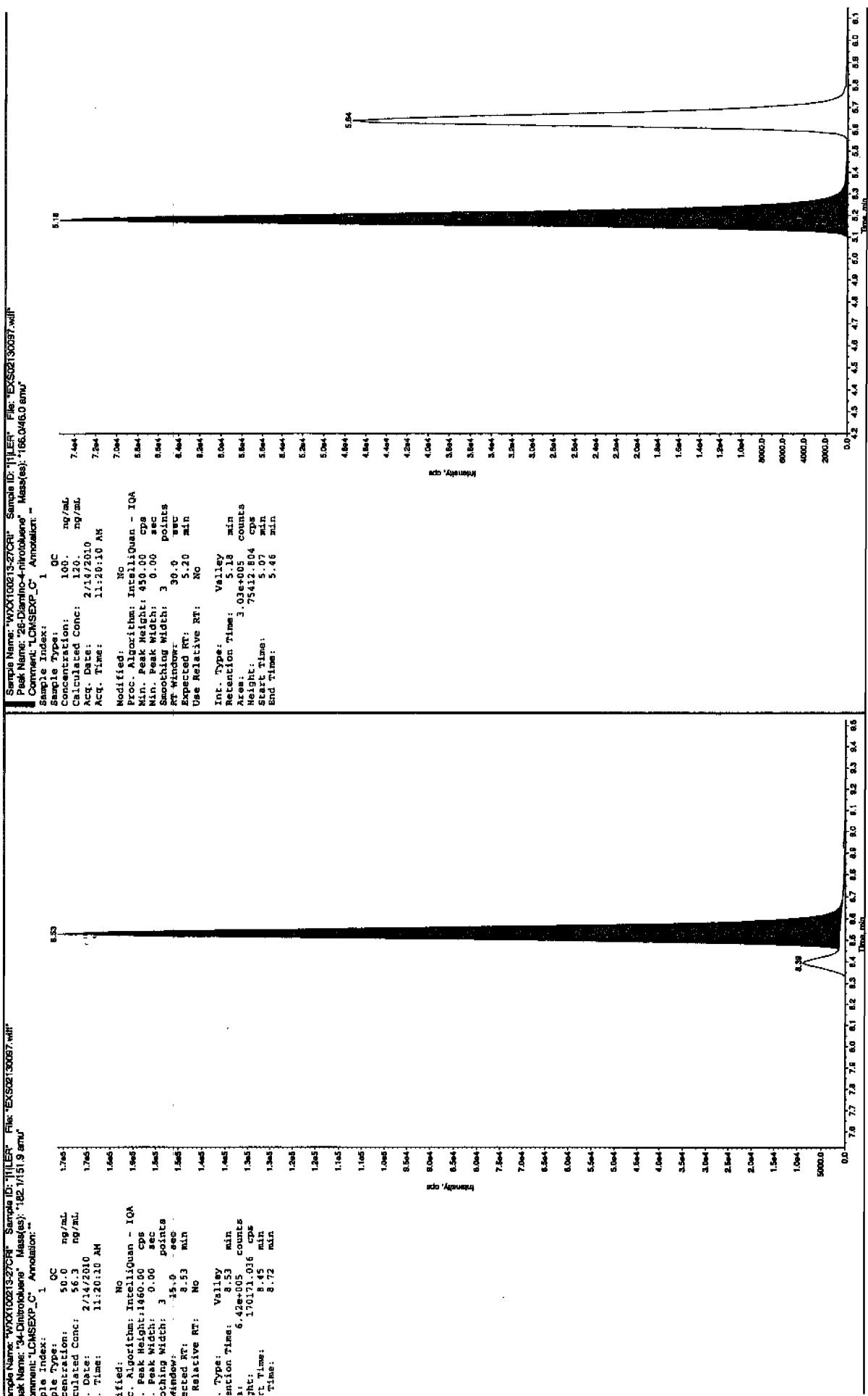


Amended

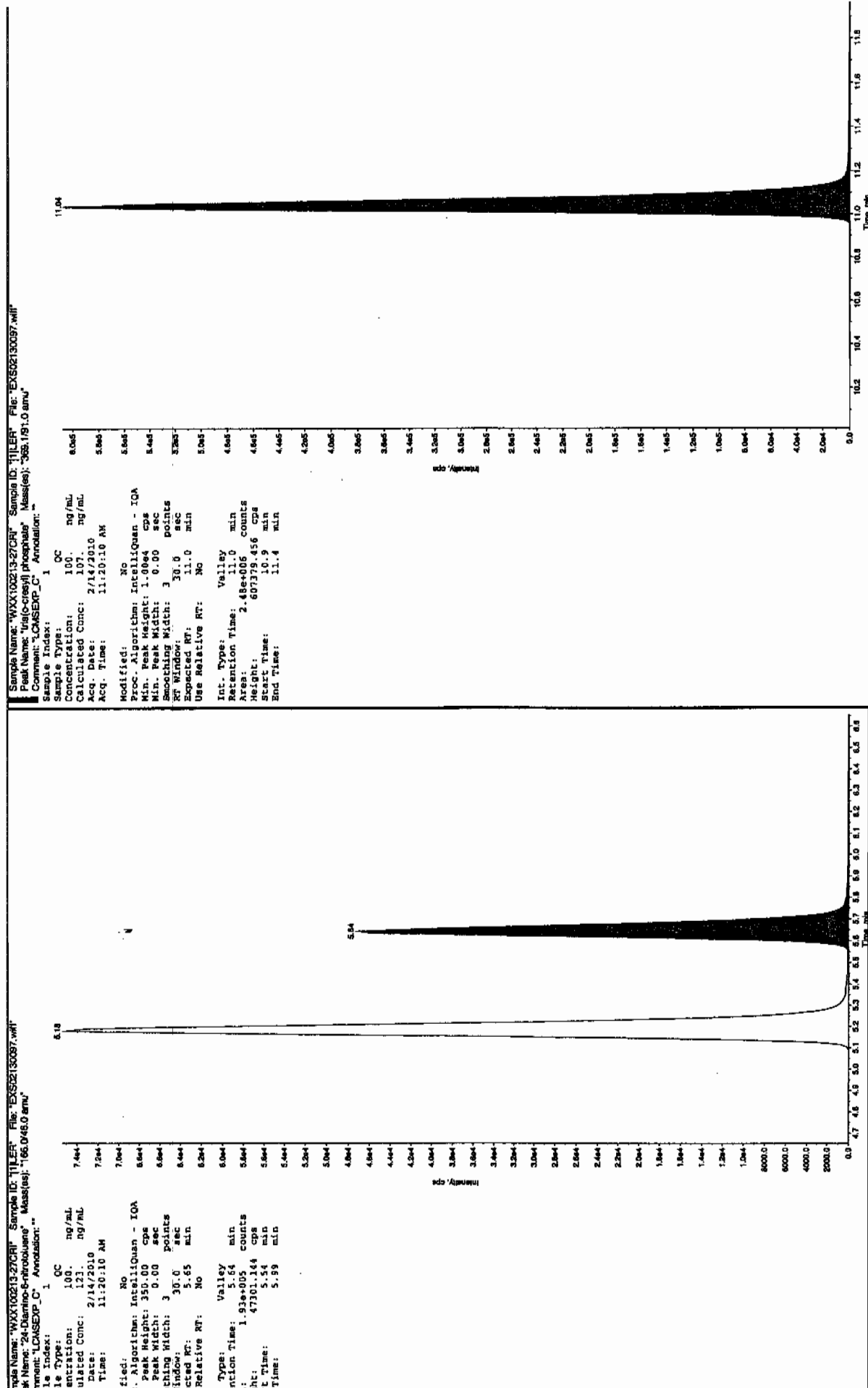
after Scan 211510



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

7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS02130103.wiff

Analysis Date: 14-FEB-10 12:54

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	516	103	
2,6-Diamino-4-nitrotoluene	500	576	115	
3,4-Dinitrotoluene	250	286	115	
3,5-Dinitroaniline	500	626	125	
TATB	500	484	97	
tris(o-cresyl) phosphate	500	519	104	

Recovery Limits:

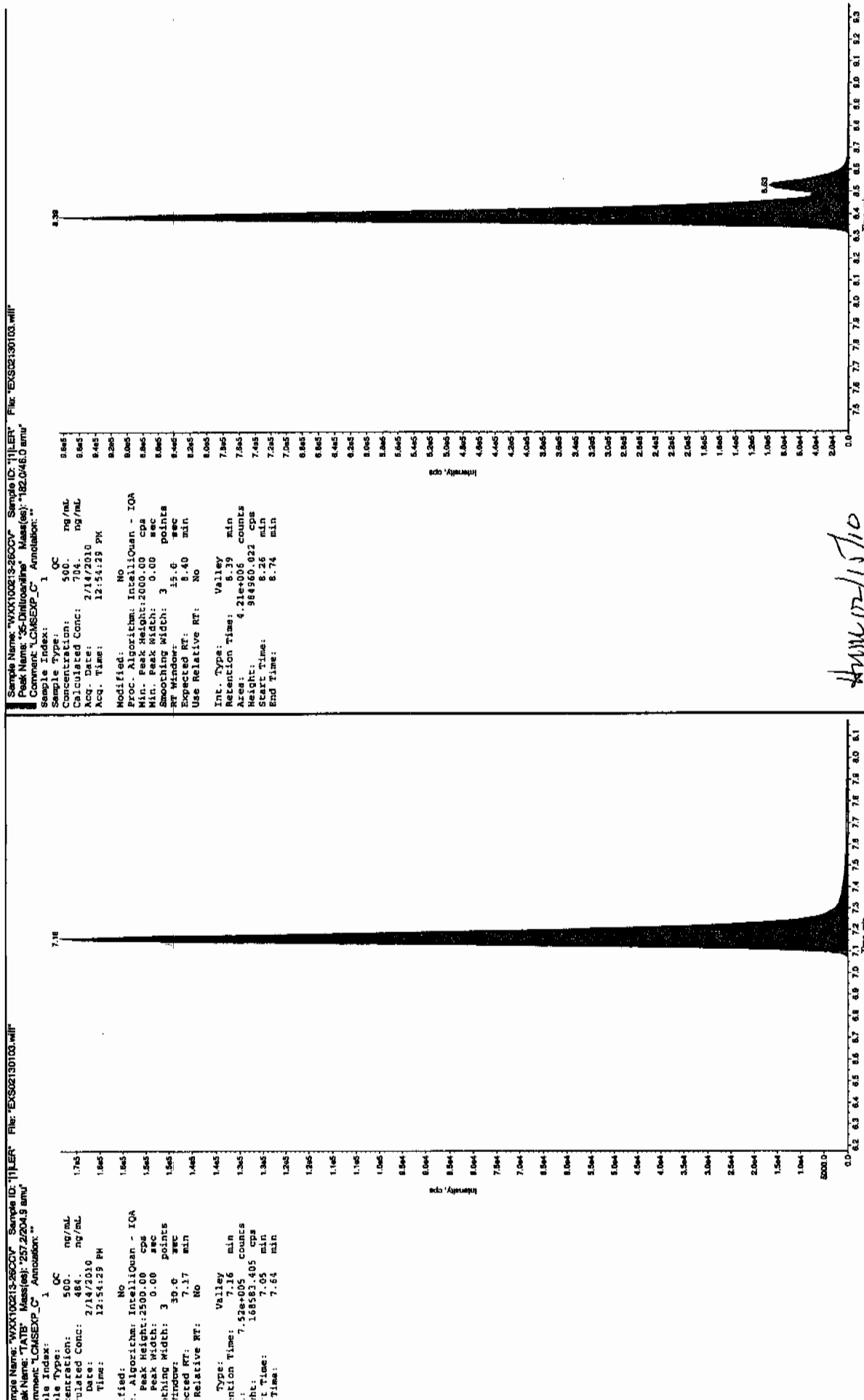
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

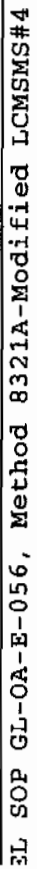
* Value outside of Recovery Limits

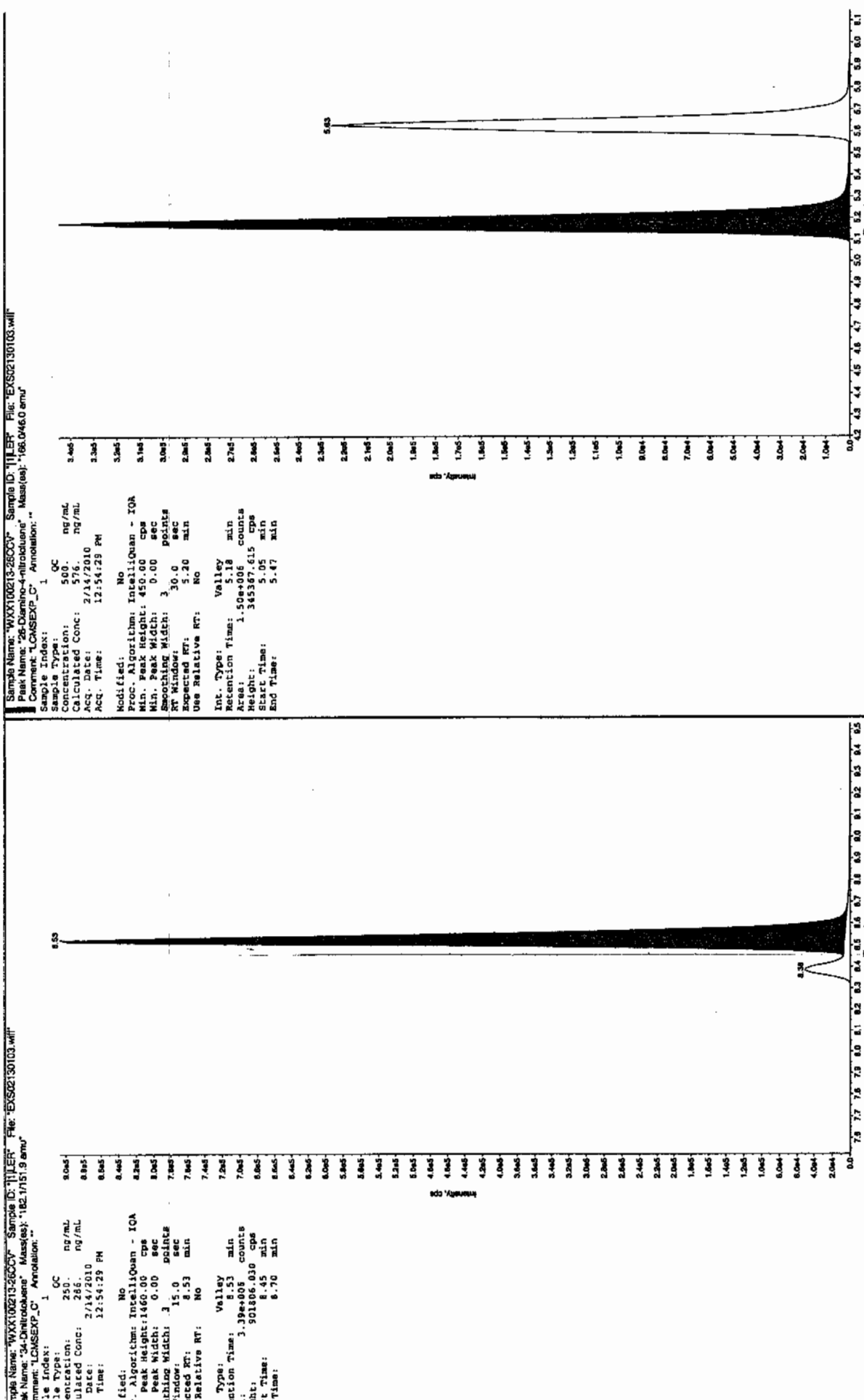
Before Jan 21/1710



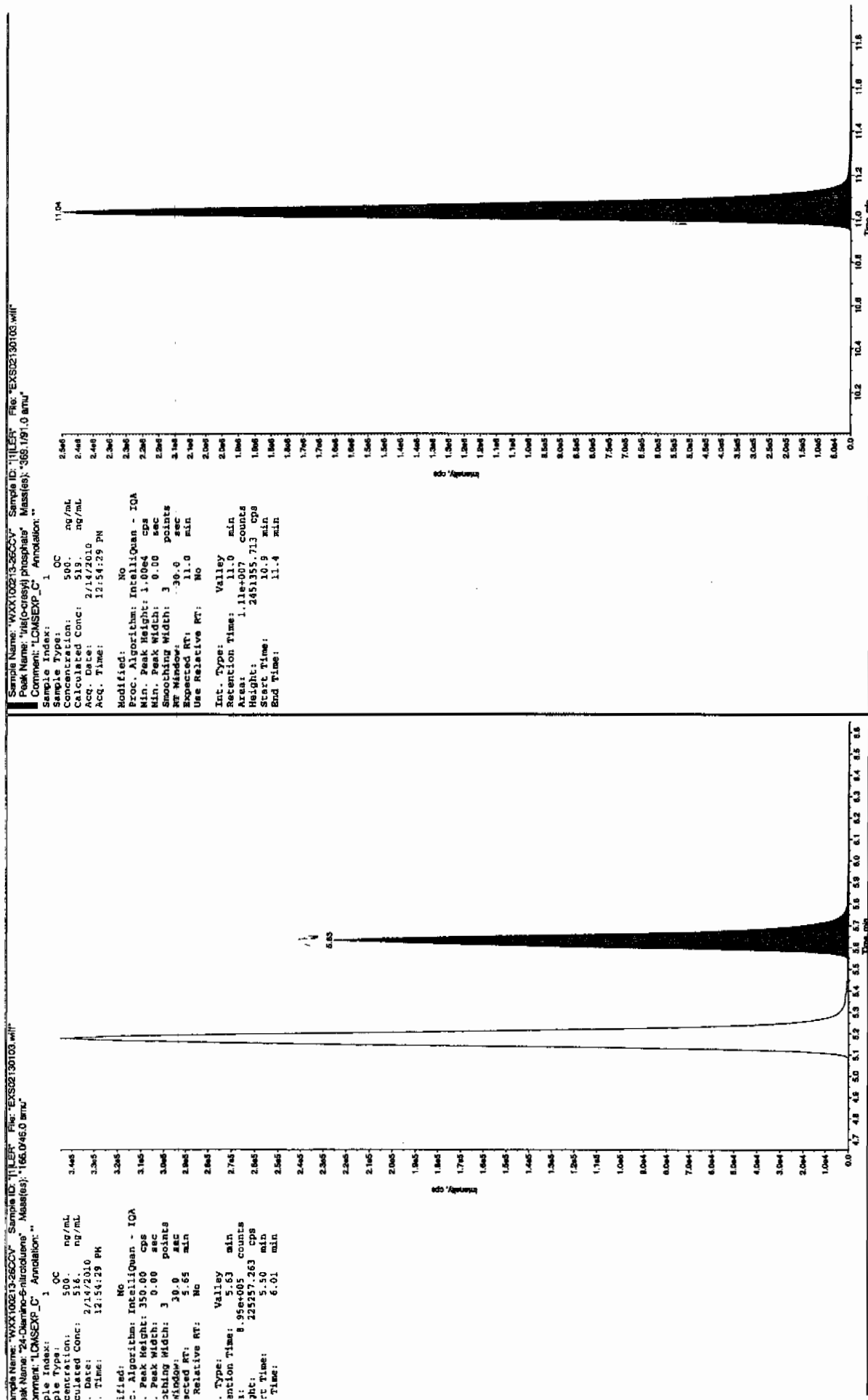
After Jan 21/1710

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





3L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



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

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1390

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS02130105.wiff

Analysis Date: 14-FEB-10 13:26

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
3,5-Dinitroaniline	100	130	130	
TATB	100	92.1	92	
tris(o-cresyl) phosphate	100	107	107	
2,4-Diamino-6-nitrotoluene	100	124	124	
2,6-Diamino-4-nitrotoluene	100	116	116	
3,4-Dinitrotoluene	50	56.9	114	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

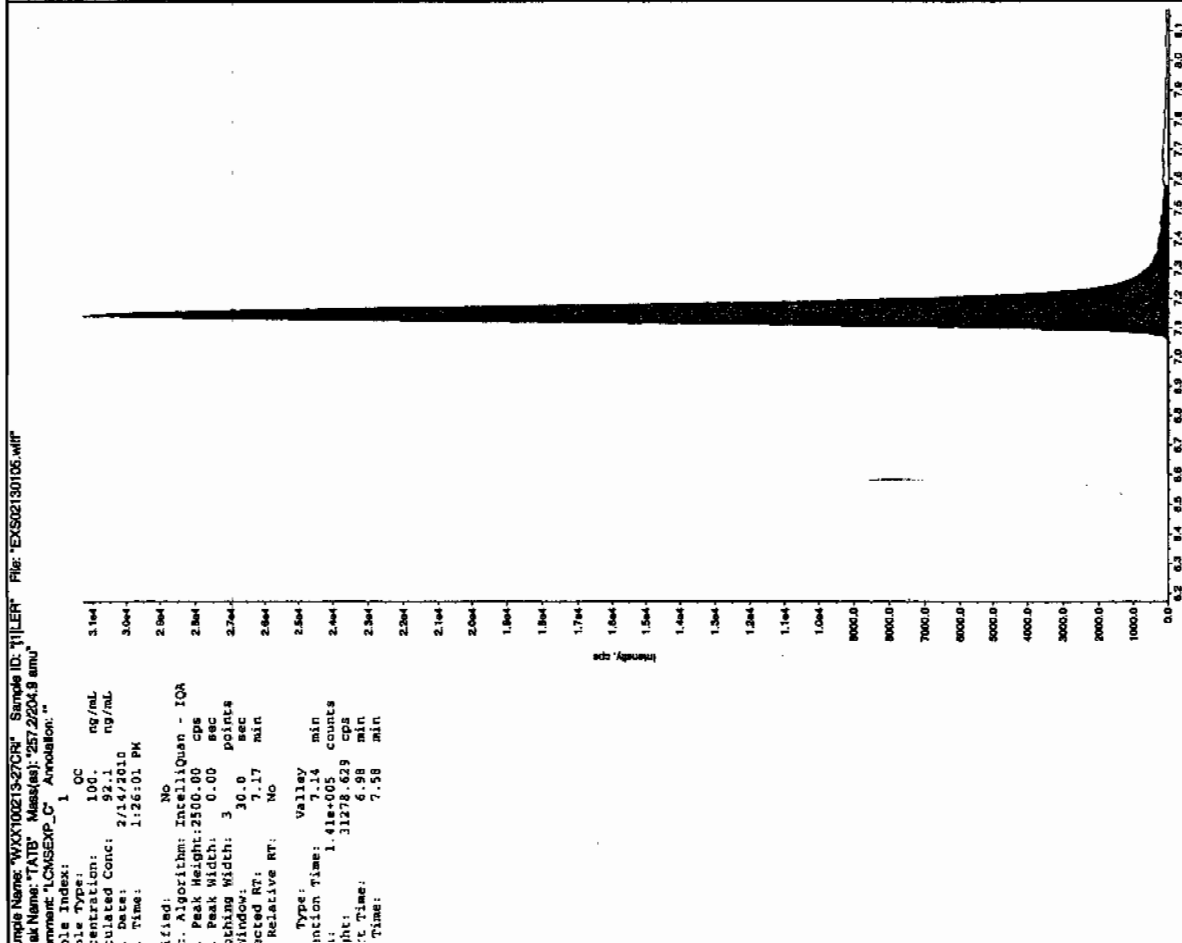
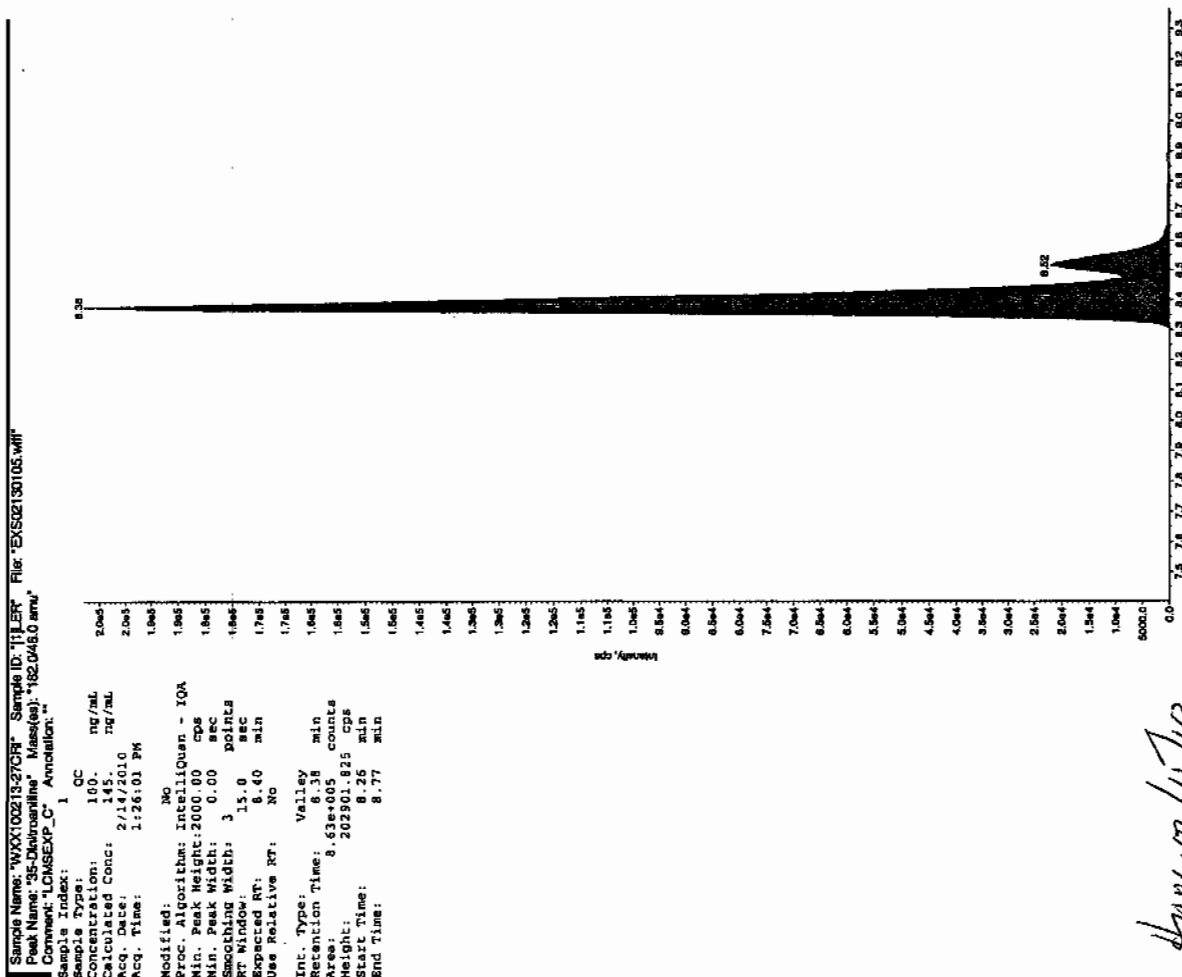
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

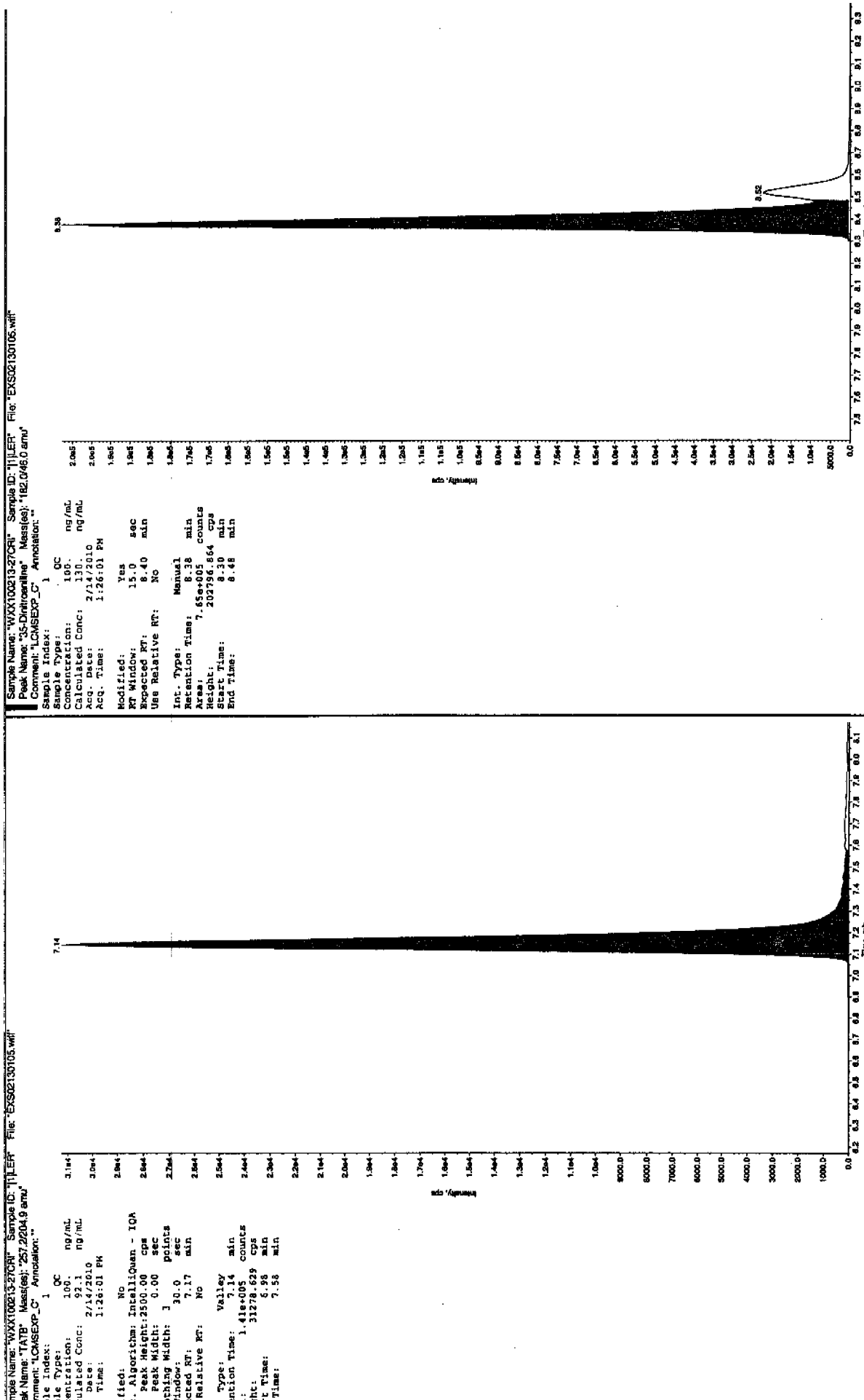
* Value outside of Recovery Limits

Before Scan 2/15/10

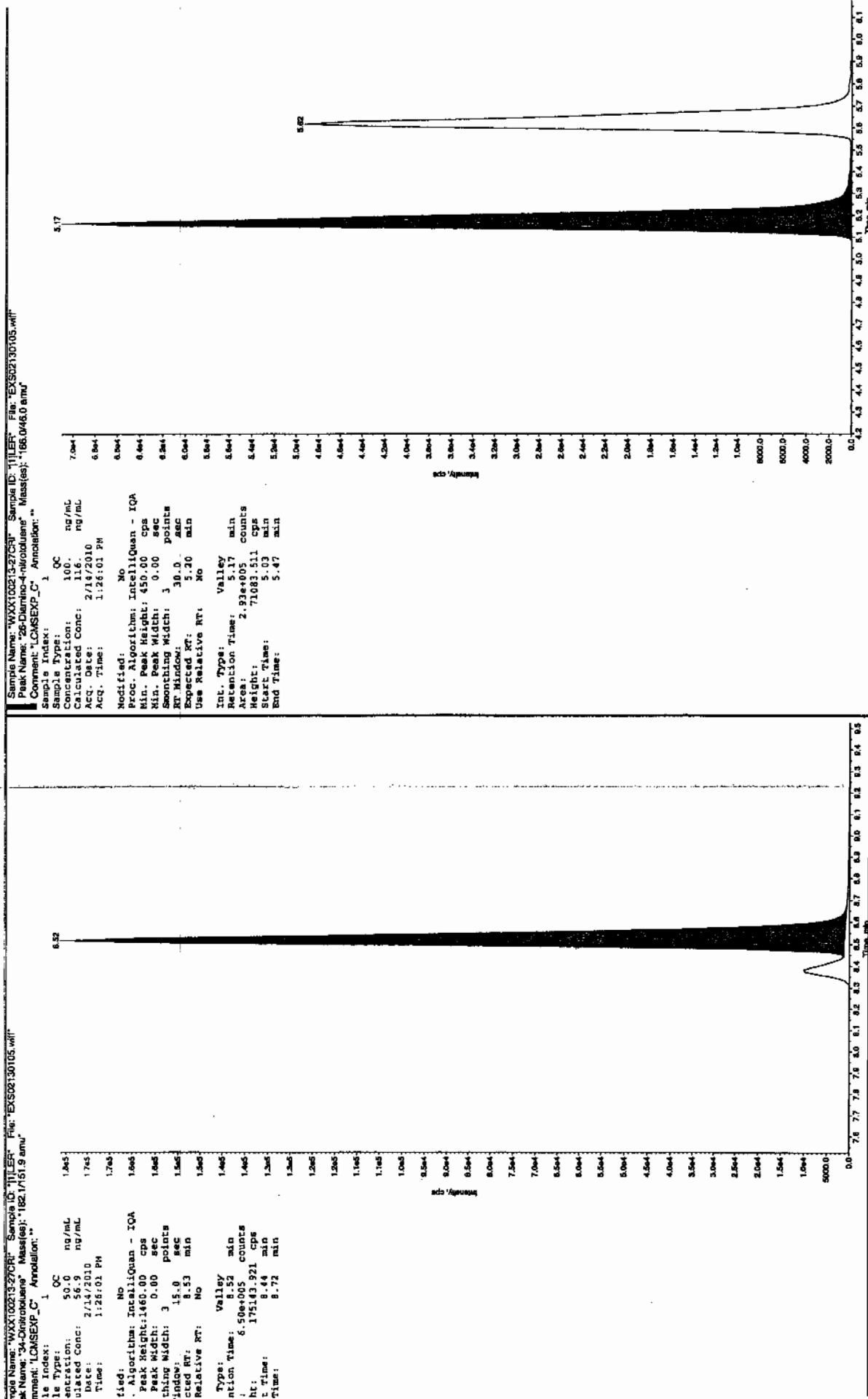


FL SOP GL-OA-E-056, Method 8321A-Modified LCMMSMS#4

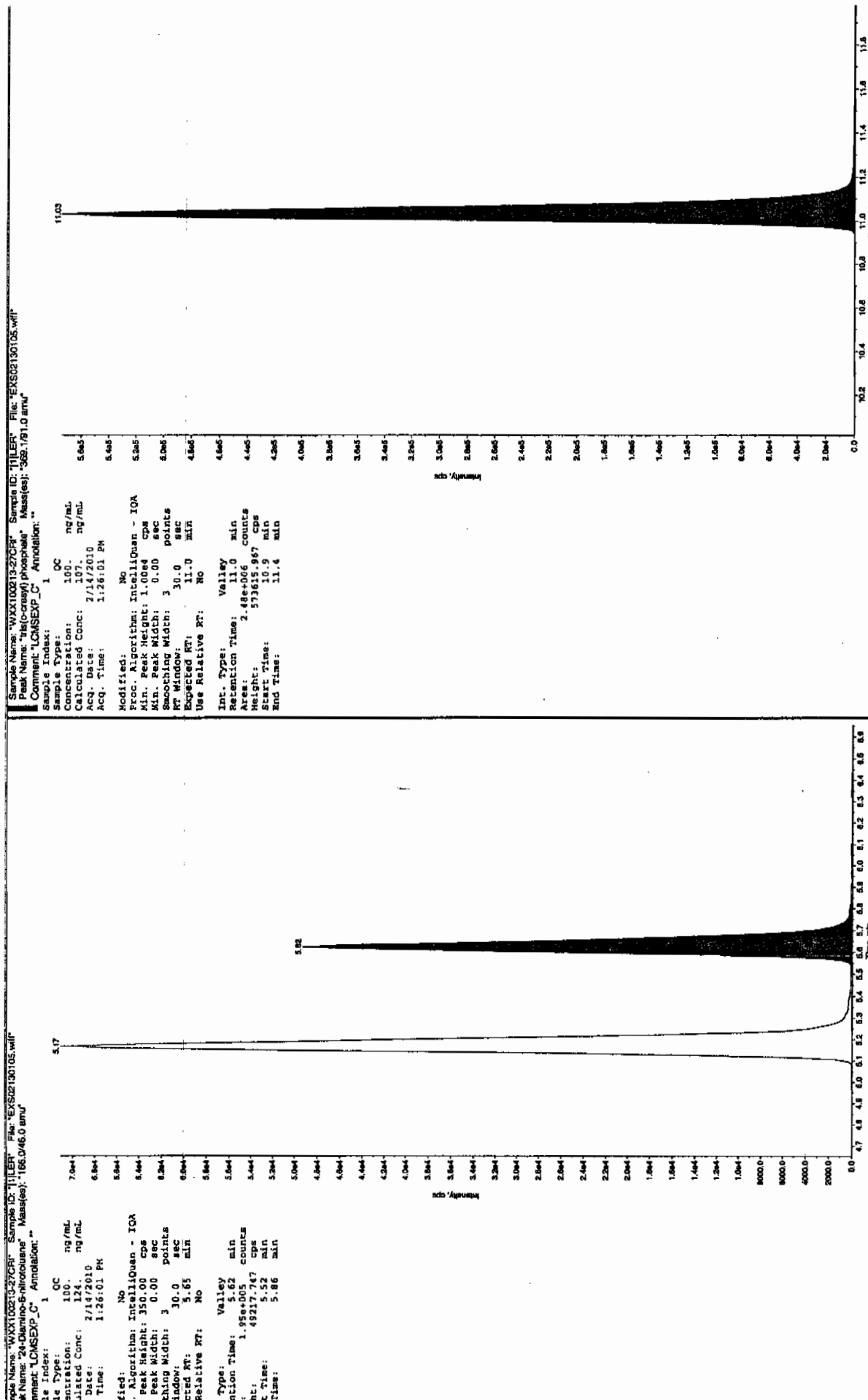
after
Dec 21/5/10



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

QUALITY CONTROL DATA

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: MB for batch 944927

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 1202023615

Sample Amount 2

Moisture:

Amount Units g

Date Received: 25-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208254a

Date Analyzed: 13-FEB-10 19:12

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\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208254a

Date: 13-Feb-2010

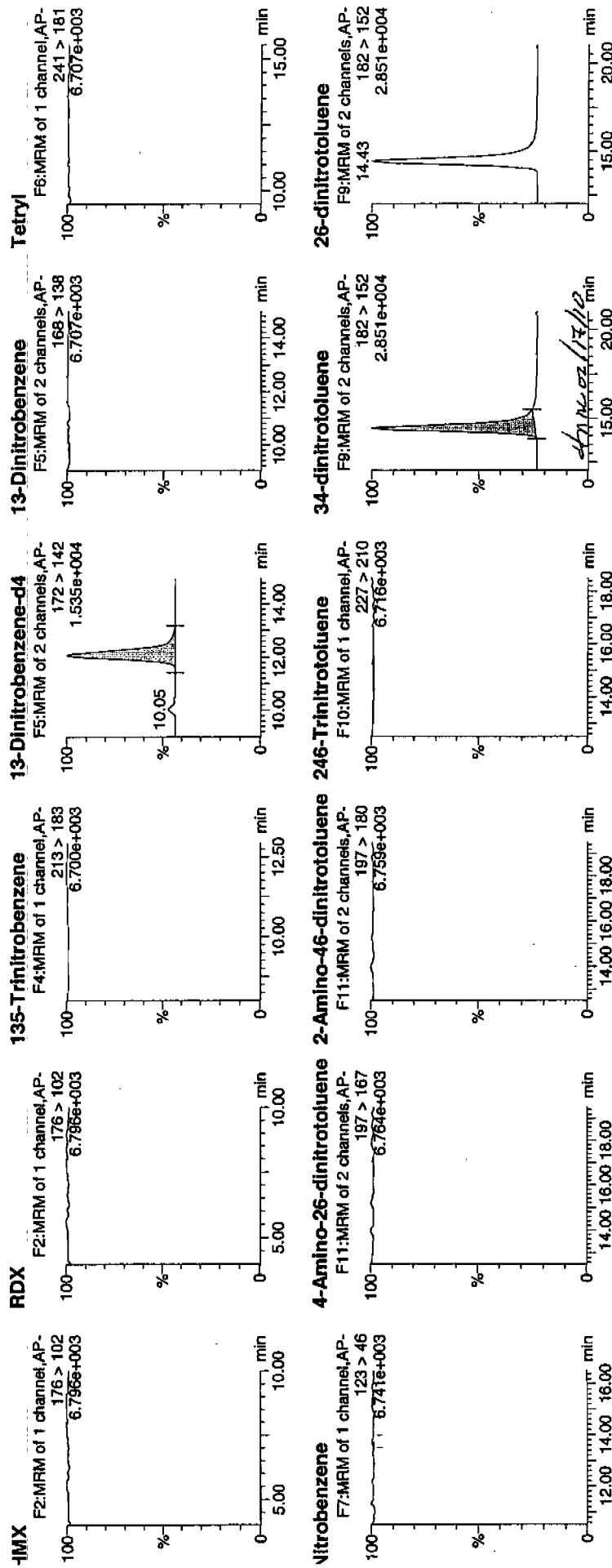
Time: 19:12:43

D: 1202023615

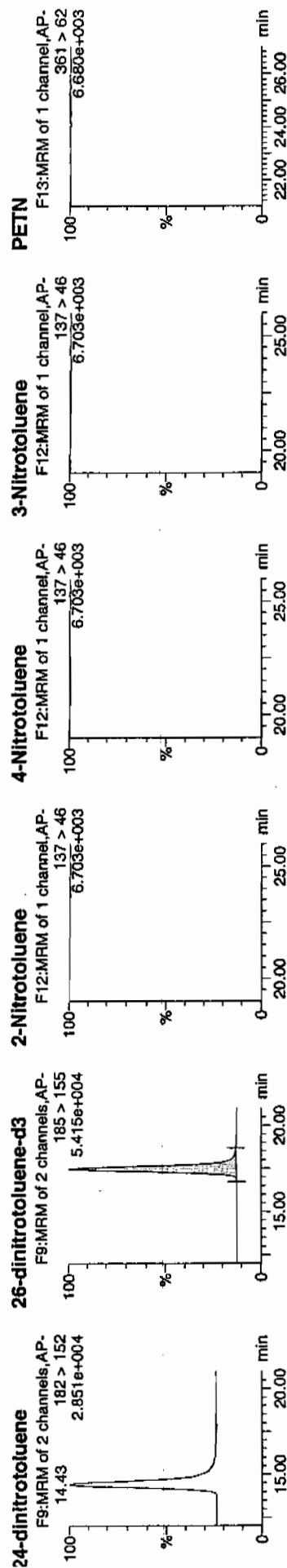
/lat: 2:4,A

μAP
 2/4/10

LAJW/944929 / 8022 / NB / 21



Dataset: C:\MASSLYN\New_Exp.PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010



ID	Name	Trace	RT	Area	Is Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Num	Reg	%Dev	SN
1202023615	HMx	176 > 102			3539.383									
1202023615	RDX	176 > 102			3539.383									
1202023615	135-Trinitrobenzene	213 > 183			3539.383									
1202023615	13-Dinitrobenzene-d4	172 > 142	12.07	3539.383		3539.383	3539.383	bb			550.5214	110.1	10.1	266.0
1202023615	13-Dinitrobenzene	168 > 138			3539.383									
1202023615	Tetryl	241 > 181			3539.383									
1202023615	Nitrobenzene	123 > 46			3539.383				MM-	14-Feb-10	11:29:07			
1202023615	4-Amino-26-dinitrotoluene	197 > 167			18942.781									
1202023615	2-Amino-46-dinitrotoluene	197 > 180			18942.781									
1202023615	246-Trinitrotoluene	227 > 210			18942.781									
1202023615	34-dinitrotoluene	182 > 152	14.43	10472.085	18942.781	10472.085	276.414	bb			307.1289	122.9	22.9	845.0
1202023615	26-dinitrotoluene	182 > 152			18942.781									
1202023615	24-dinitrotoluene	182 > 152			18942.781									
1202023615	26-dinitrotoluene-d3	185 > 155	17.46	18942.781		18942.781	18942.781	bb			513.0853	102.6	2.6	1843.1
1202023615	2-Nitrotoluene	137 > 46			18942.781									
1202023615	4-Nitrotoluene	137 > 46			18942.781									
1202023615	3-Nitrotoluene	137 > 46			18942.781									
1202023615	PETN	361 > 62			18942.781									

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: MB for batch 944927

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 1202023615

Sample Amount 2

Moisture:

Amount Units g

Date Received: 25-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02130085.wiff

Date Analyzed: 14-FEB-10 08:11

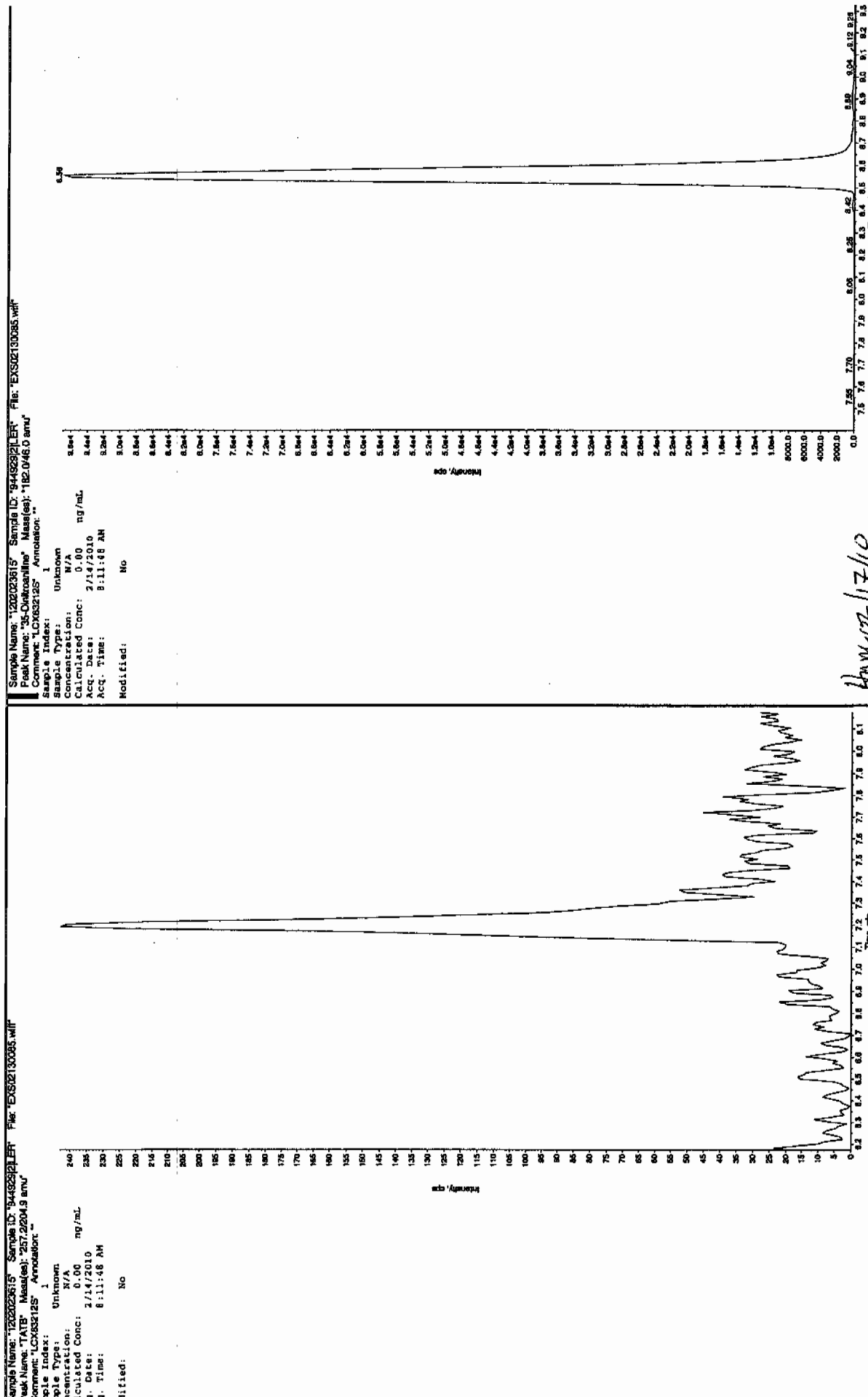
Units: ug/kg

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 =

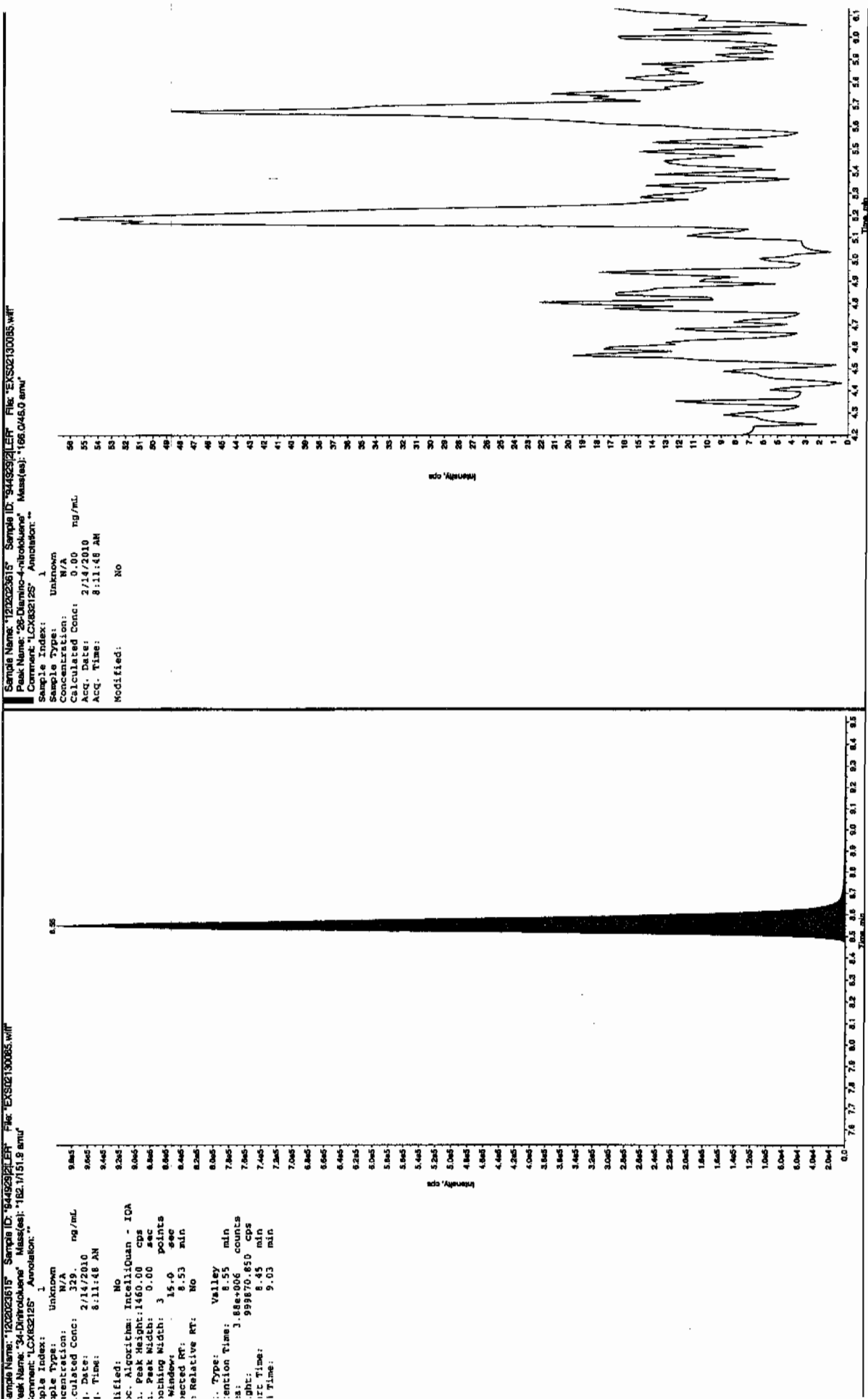
Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

See 2/15/10

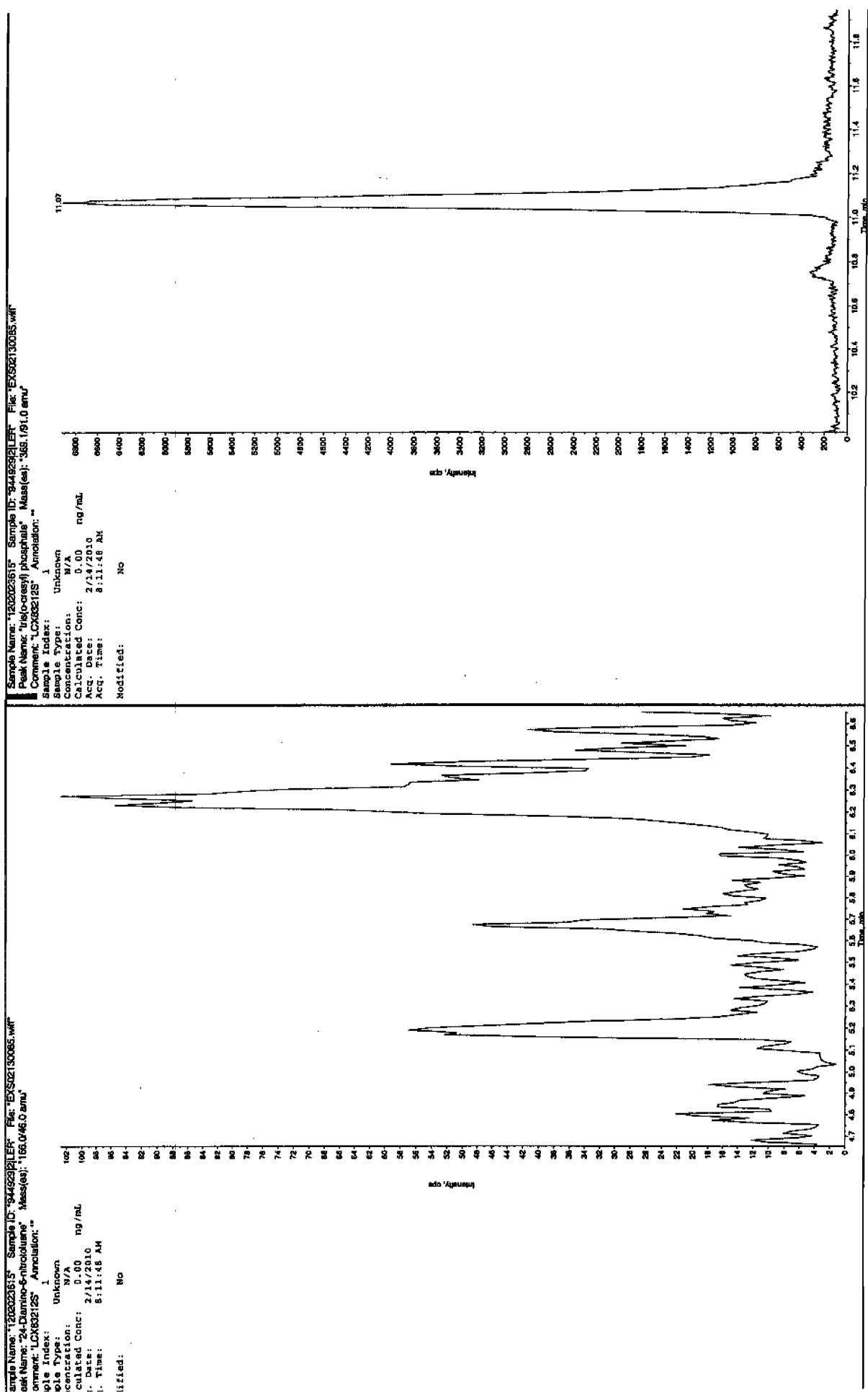


EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

2/17/10



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: LCS for batch 944927

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 1202023616

Sample Amount 2

Moisture:

Amount Units g

Date Received: 25-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208255a

Date Analyzed: 13-FEB-10 19:42

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	5000	
121-14-2	2,4-Dinitrotoluene	4950	
121-82-4	RDX	5650	
19406-51-0	4-Amino-2,6-dinitrotoluene	5230	
2691-41-0	HMX	5580	
35572-78-2	2-Amino-4,6-dinitrotoluene	5860	
479-45-8	Tetryl	1820	
606-20-2	2,6-Dinitrotoluene	5050	
78-11-5	PETN	4020	
88-72-2	o-Nitrotoluene	4760	
98-95-3	Nitrobenzene	4870	
99-08-1	m-Nitrotoluene	4410	
99-35-4	1,3,5-Trinitrobenzene	5620	
99-65-0	m-Dinitrobenzene	4950	
99-99-0	p-Nitrotoluene	4760	

*Concentration =

Instrument Value	X	Concentrated Extract Volume	X	Dilution Factor
		Sample Amount		

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

Dataset: C:\MASSLYNX\New_Exp\PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010

Name: C:\MASSLYNX\NEW_EXP\PRO\Data\EXP0208255a

Date: 13-Feb-2010

Time: 19:42:17

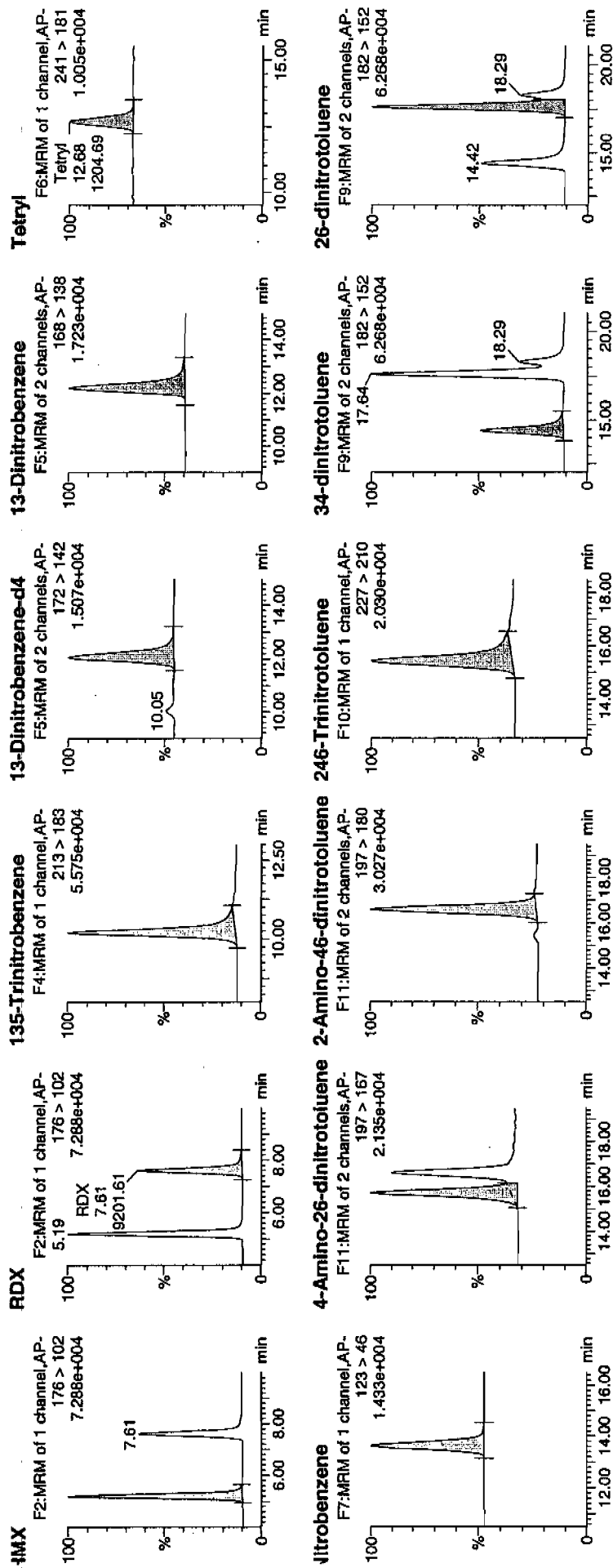
D: 1202023616

/ial: 2:4,B

↓ Tenyl

not
2/14/10

LAU 744929 / 8022 / 108 / 21



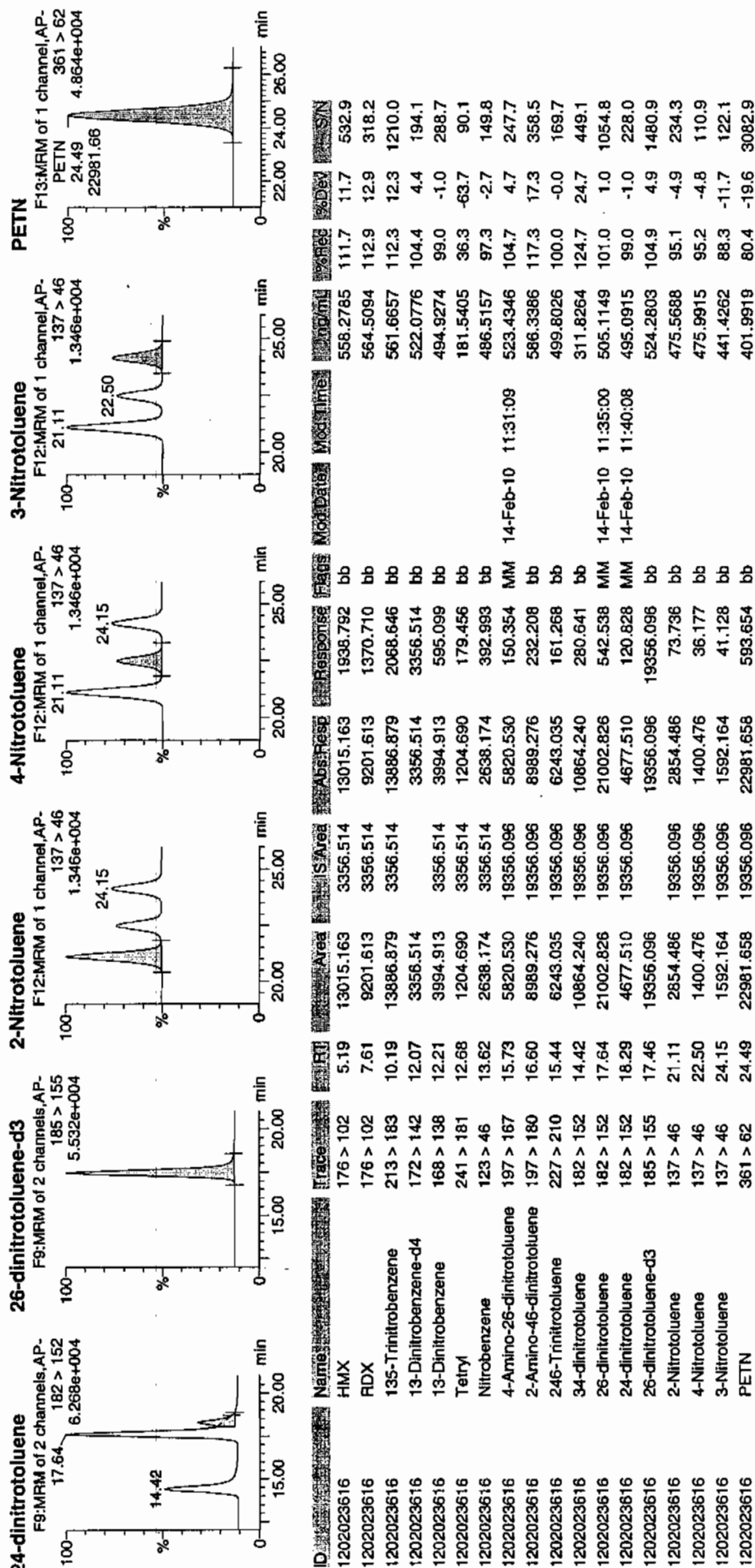
41106
2/12/10

Quantify Sample Report

JEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Sun Feb 14 11:45:22 2010, Page 56 of 95

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: LCS for batch 944927

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 1202023616

Sample Amount 2

Moisture:

Amount Units g

Date Received: 25-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02130086.wiff

Date Analyzed: 14-FEB-10 08:27

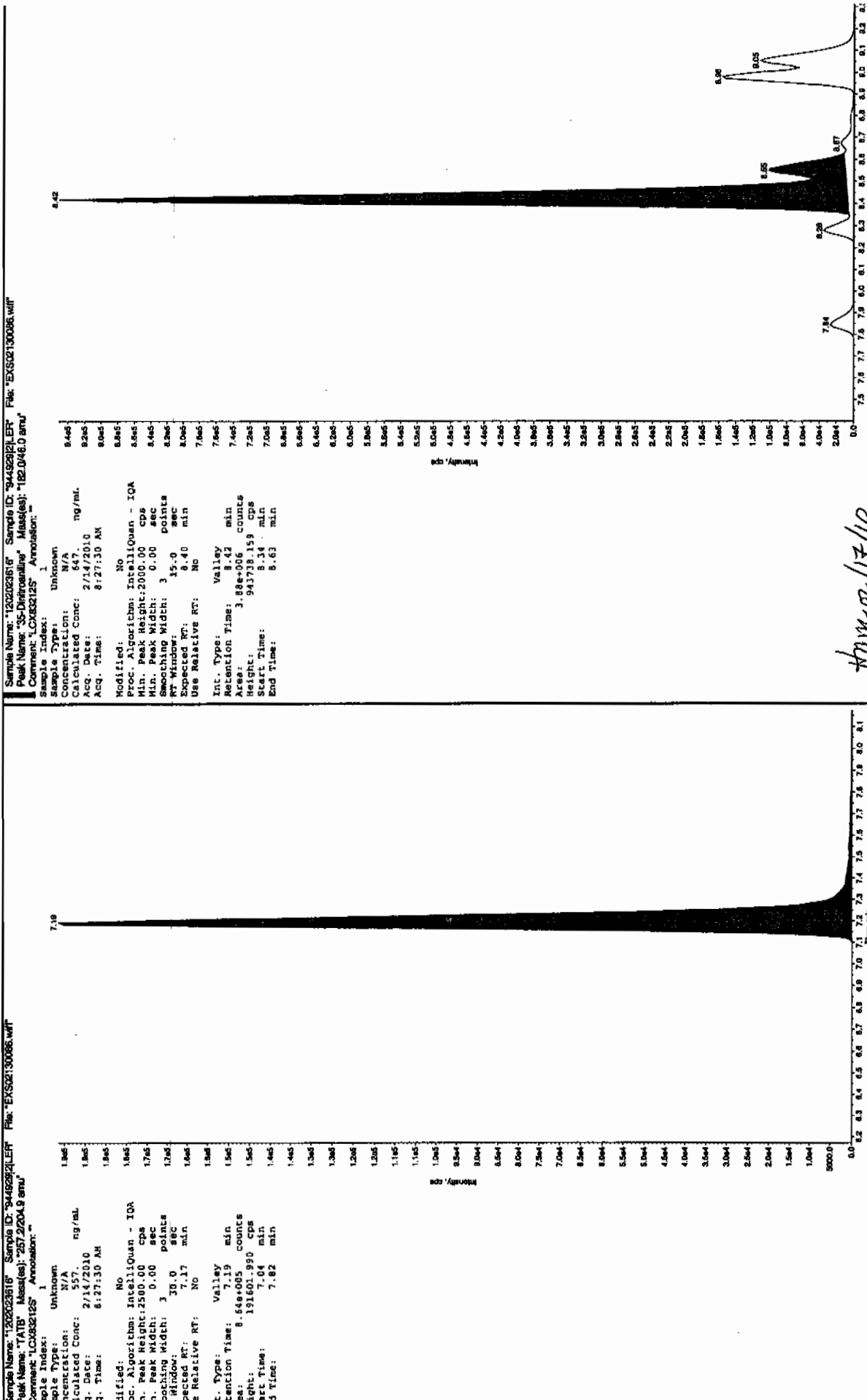
Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	5570	
59229-75-3	2,6-Diamino-4-nitrotoluene	5740	
618-87-1	3,5-Dinitroaniline	5940	
6629-29-4	2,4-Diamino-6-nitrotoluene	5710	
78-30-8	tris(o-cresyl) phosphate	5170	

*Concentration =

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

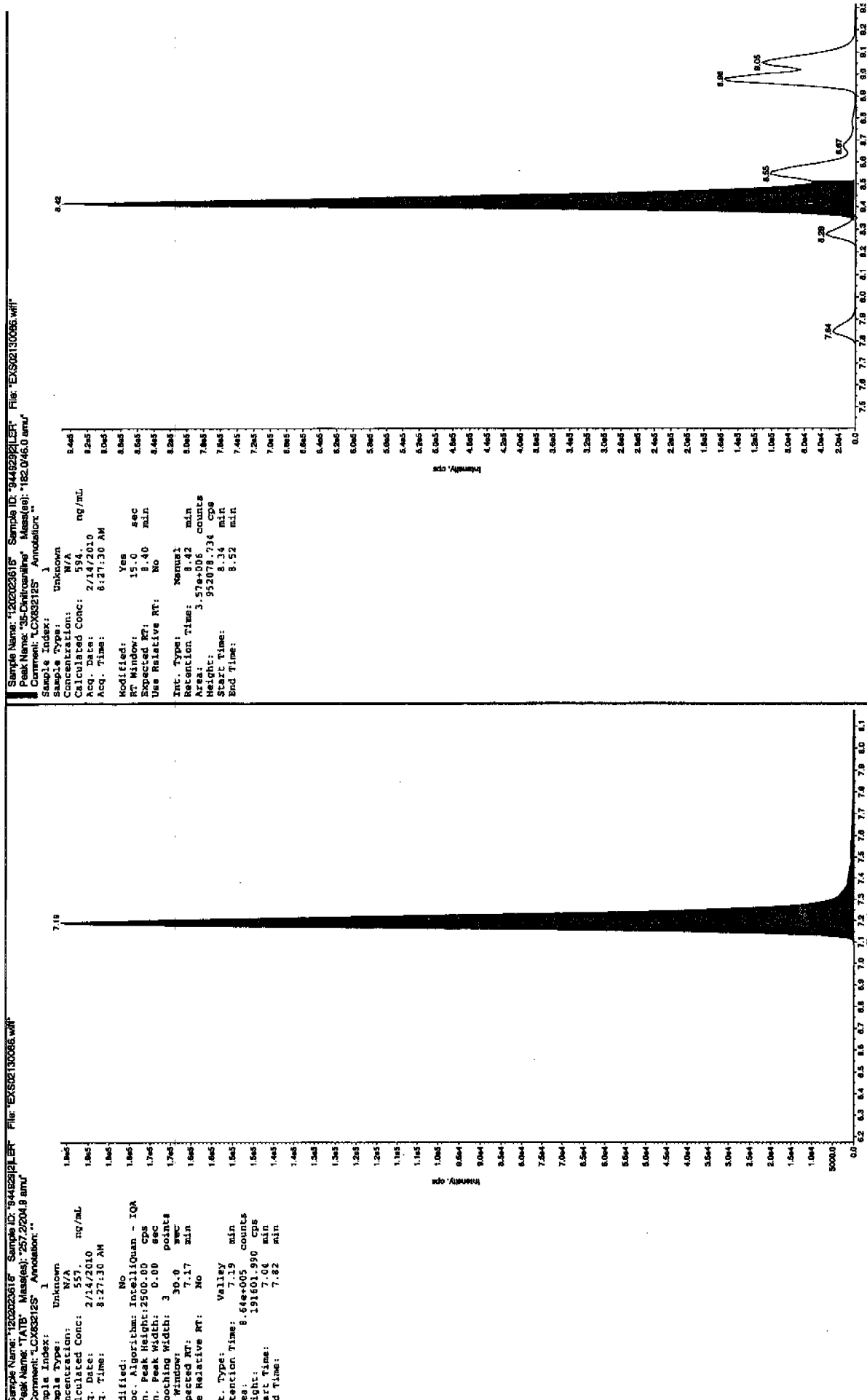
Before Jan 21/5/10



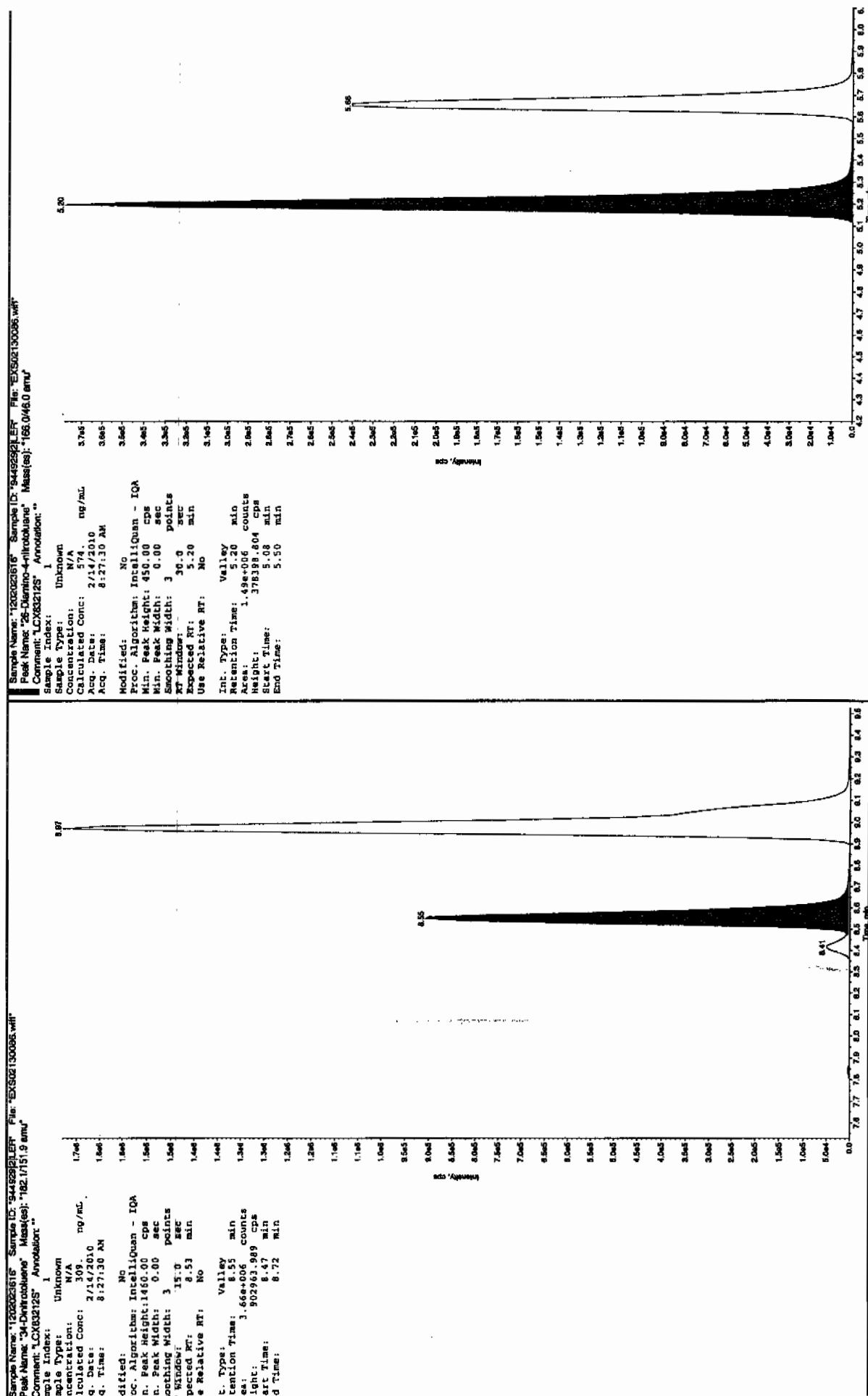
After 1/7/10

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

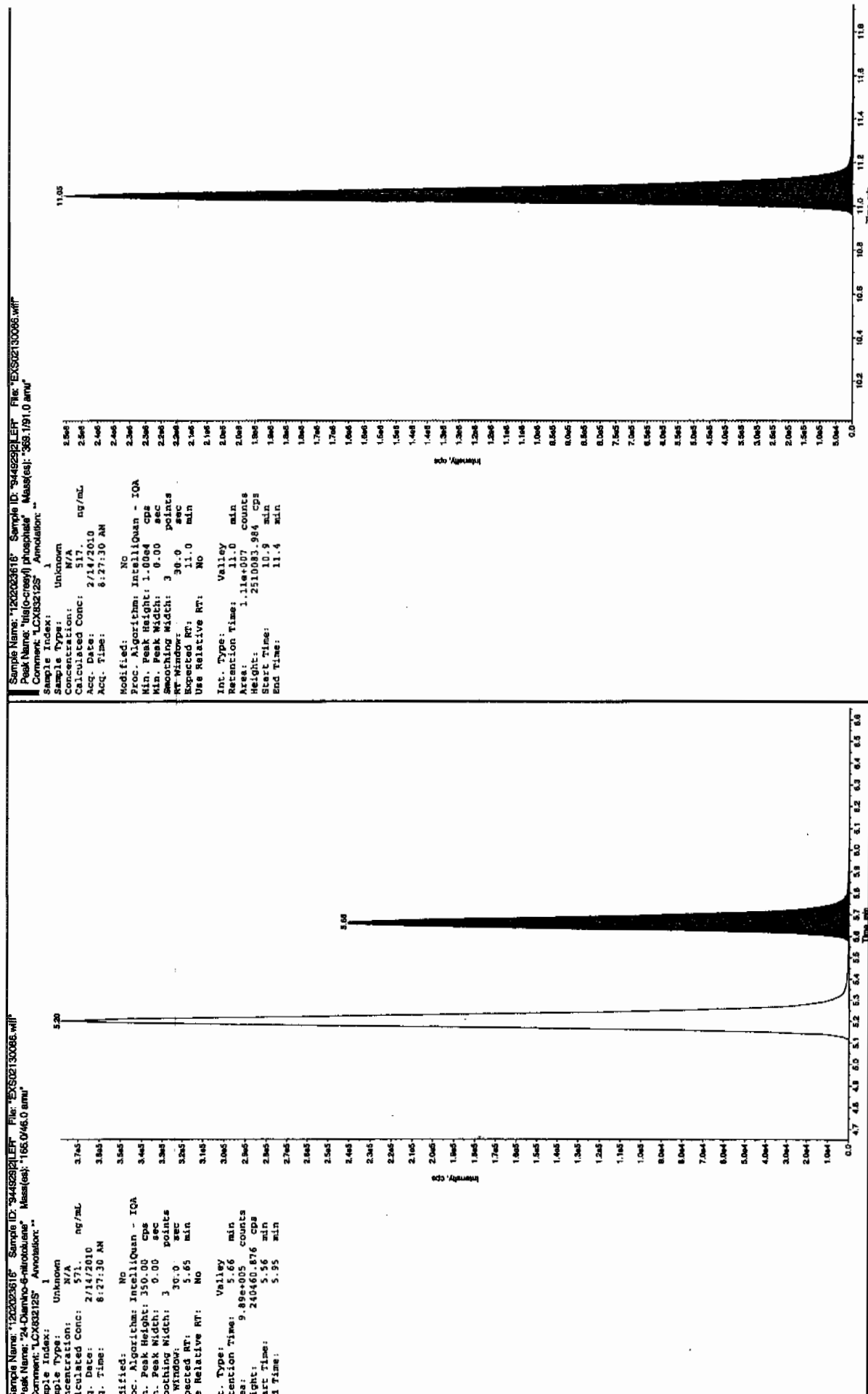
after Jan 21/5/10



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



REL 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: RE15-10-7918(245391001MS)

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 1202023617

Sample Amount 2

Moisture: 9.6

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208257a

Date Analyzed: 13-FEB-10 20:41

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	4860	
121-14-2	2,4-Dinitrotoluene	5320	
121-82-4	RDX	4670	
19406-51-0	4-Amino-2,6-dinitrotoluene	4720	
2691-41-0	HMX	5230	
35572-78-2	2-Amino-4,6-dinitrotoluene	5130	
479-45-8	Tetryl	4480	
606-20-2	2,6-Dinitrotoluene	5390	
78-11-5	PETN	4670	
88-72-2	o-Nitrotoluene	4710	
98-95-3	Nitrobenzene	4540	
99-08-1	m-Nitrotoluene	4040	
99-35-4	1,3,5-Trinitrobenzene	4780	
99-65-0	m-Dinitrobenzene	5120	
99-99-0	p-Nitrotoluene	4900	

*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\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208257a

Date: 13-Feb-2010

Time: 20:41:16

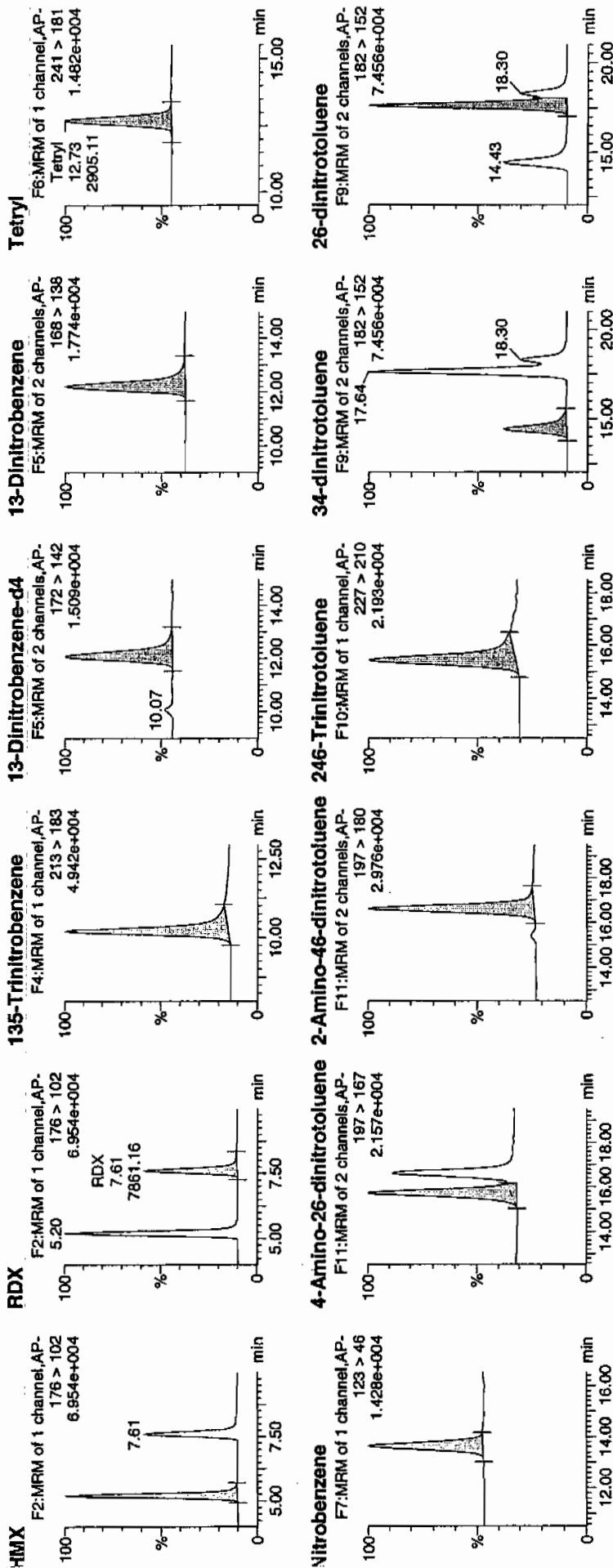
D: 1202023617

Vial: 2:4,D

not
 2/14/10

245391001ms / 21

WAL 944919 / 8000

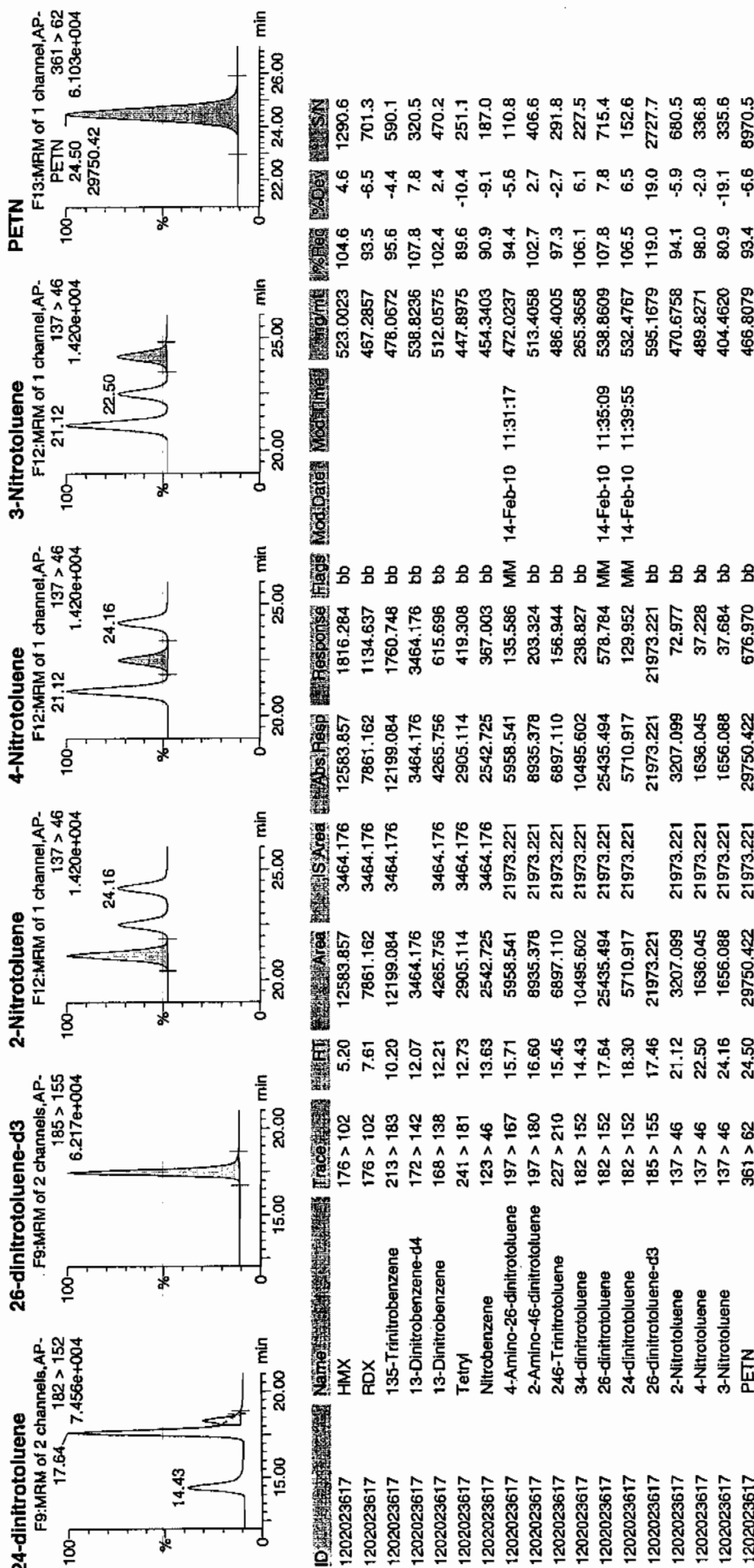


4mm
 02/14/10

Printed: Sun Feb 14 11:45:22 2010, Page 60 of 95

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

Dataset: C:\MASSLYNX\New_Exp\PROV020810expA5.qld, Time: Sun Feb 14 11:43:22 2010



3EL 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: RE15-10-7918(245391001MS)

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 1202023617

Sample Amount 2

Moisture: 9.6

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02130088.wiff

Date Analyzed: 14-FEB-10 08:58

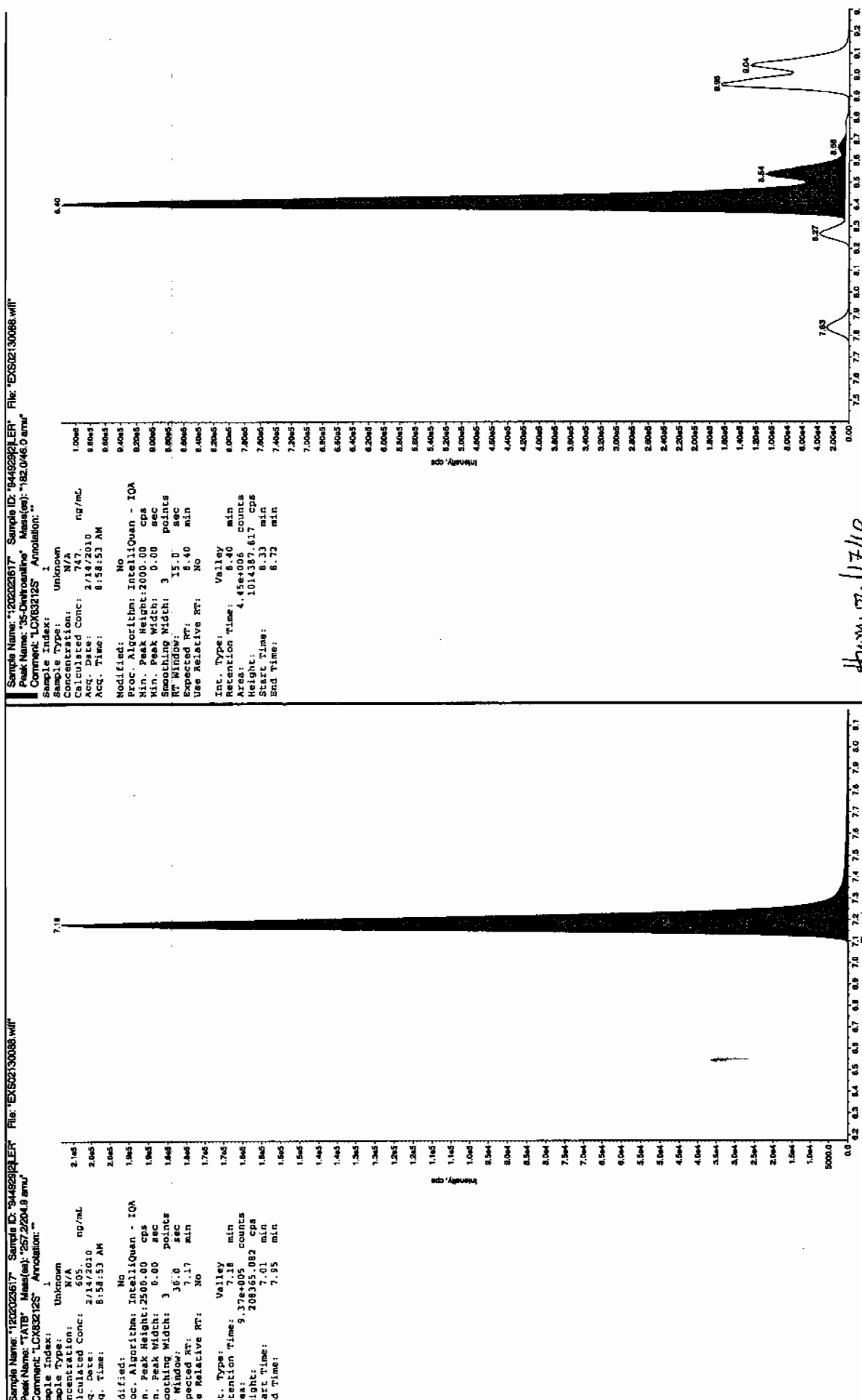
Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	6050	
59229-75-3	2,6-Diamino-4-nitrotoluene	6140	
618-87-1	3,5-Dinitroaniline	6760	
6629-29-4	2,4-Diamino-6-nitrotoluene	5650	
78-30-8	tris(o-cresyl) phosphate	5370	

*Concentration =

Instrument				
Value	X	<u>Concentrated Extract Volume</u>	X	Dilution
		Sample Amount		Factor

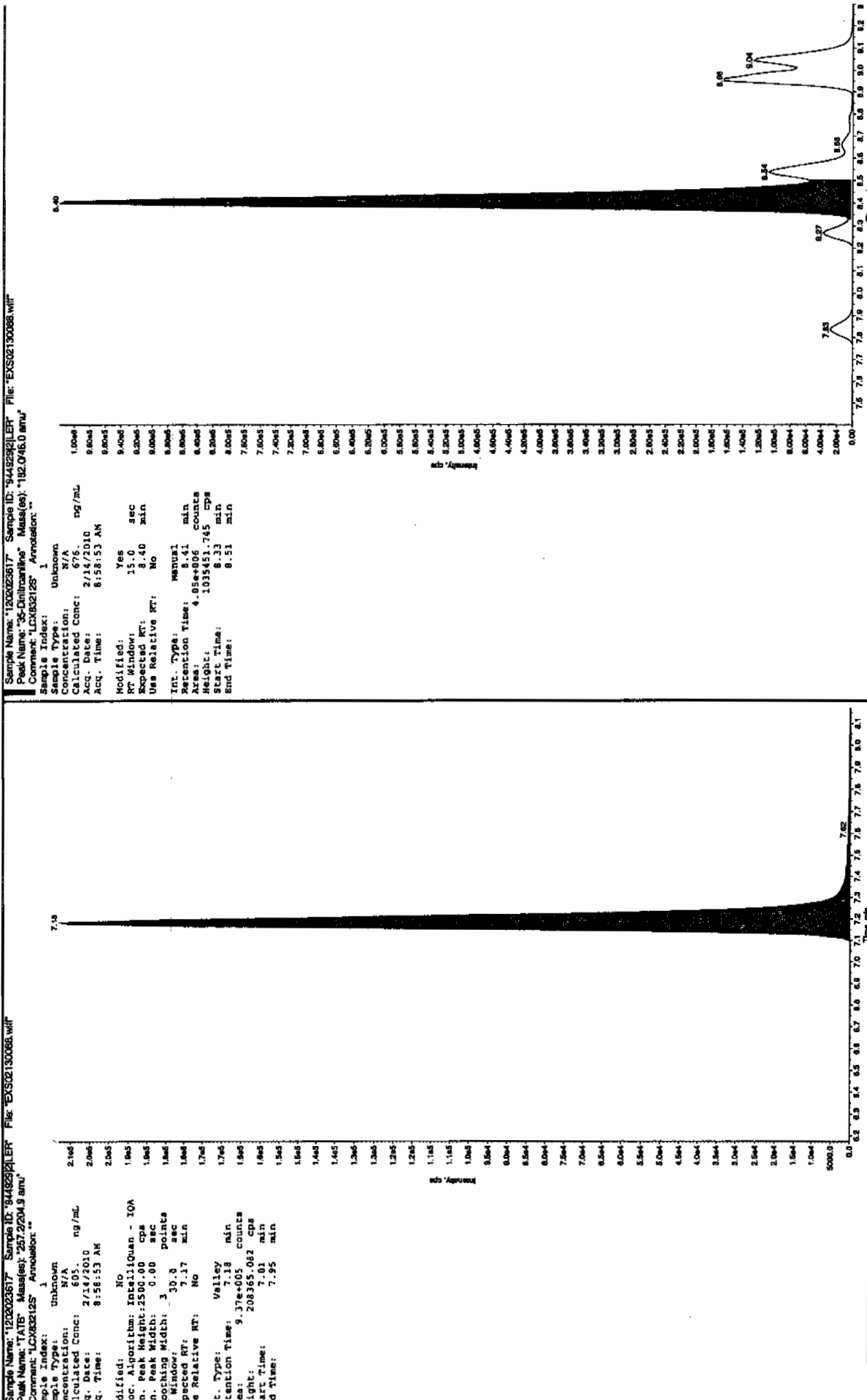
Before Jan 24/10



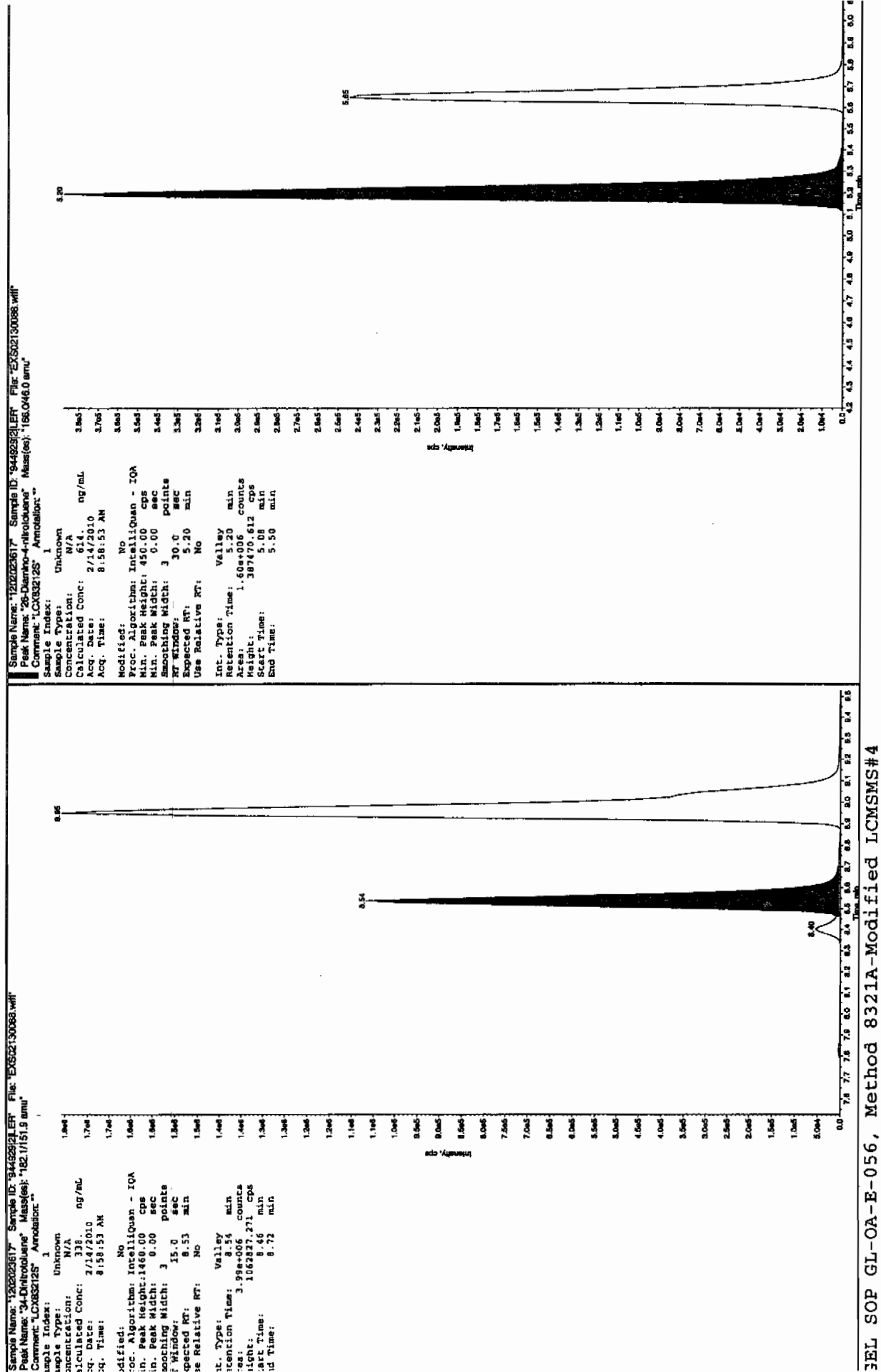
After Jan 17/10

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

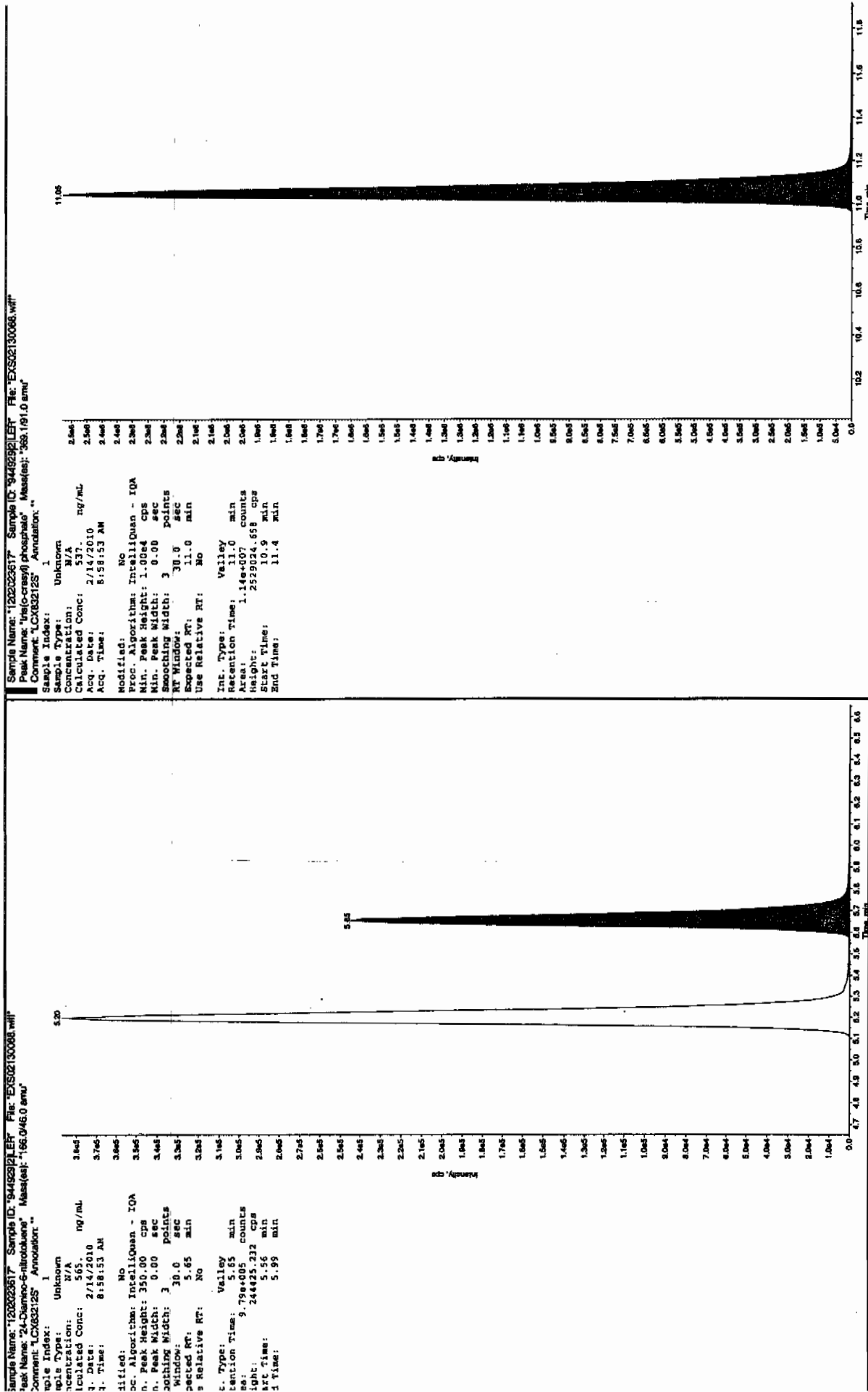
after Jan 2/15/10



3EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



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



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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7918(245391001MSD)

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 1202023618

Sample Amount 2

Moisture: 9.6

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208258a

Date Analyzed: 13-FEB-10 21:10

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	5430	
121-14-2	2,4-Dinitrotoluene	5080	
121-82-4	RDX	5000	
19406-51-0	4-Amino-2,6-dinitrotoluene	5450	
2691-41-0	HMX	5390	
35572-78-2	2-Amino-4,6-dinitrotoluene	5720	
479-45-8	Tetryl	4400	
606-20-2	2,6-Dinitrotoluene	5110	
78-11-5	PETN	5930	
88-72-2	o-Nitrotoluene	4920	
98-95-3	Nitrobenzene	4640	
99-08-1	m-Nitrotoluene	4570	
99-35-4	1,3,5-Trinitrobenzene	4690	
99-65-0	m-Dinitrobenzene	4920	
99-99-0	p-Nitrotoluene	4900	

*Concentration =

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

Printed: Sun Feb 14 11:45:22 2010, Page 61 of 95

Quantify Sample Report

3EL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208258a

Date: 13-Feb-2010

Time: 21:10:45

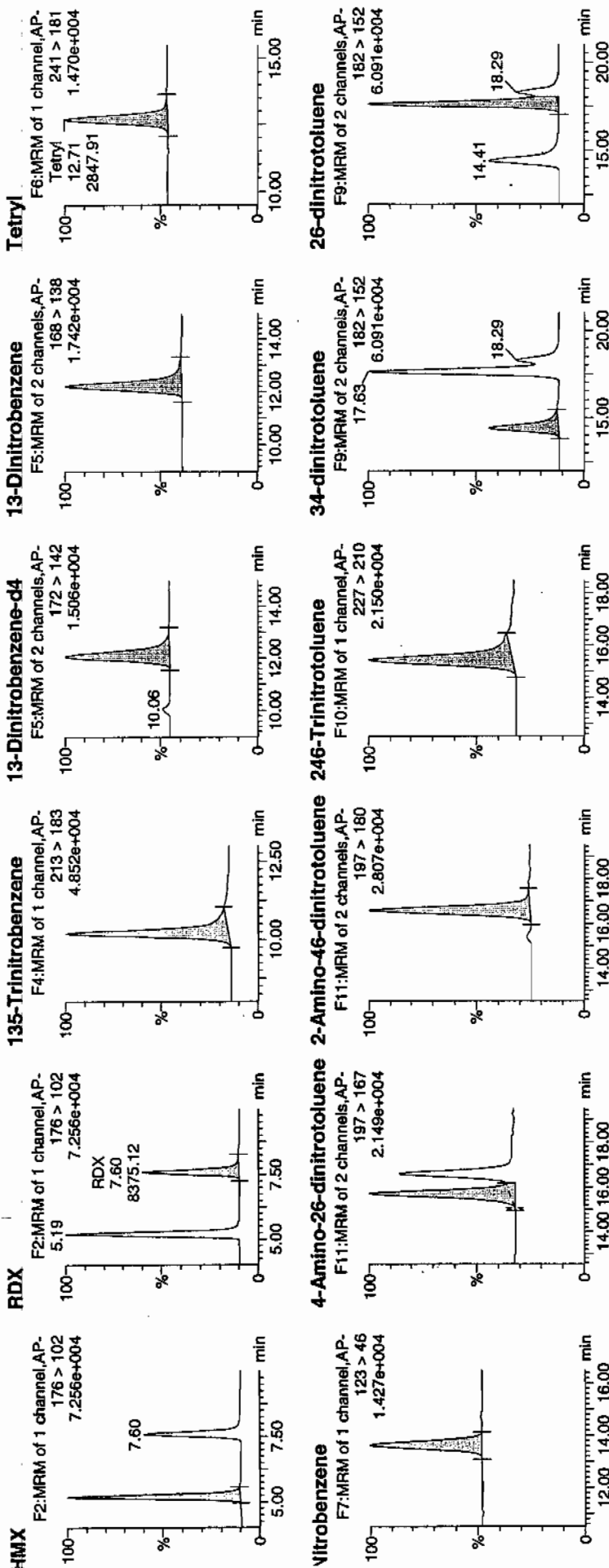
D: 1202023618

Vial: 2:4,E

WPP
2/14/10

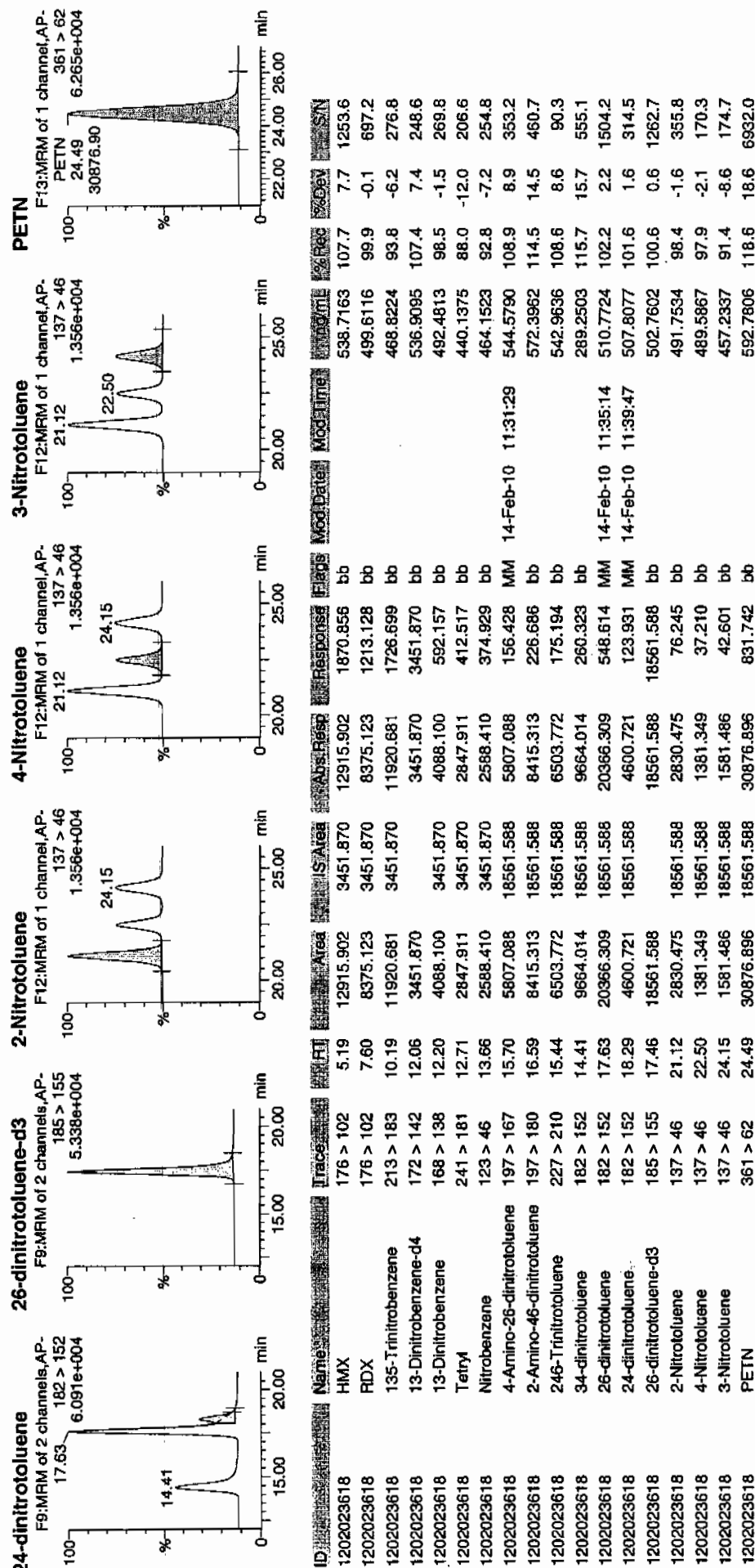
245391001 usd / 21

WAW 944919 / 8022



40 mV
02/14/10

Dataset: C:\MASSLYN\New_Exp.PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7918(245391001MSD)

Lab Code: GEL

GEL Job No (SDG) 10-1390

Matrix: SOIL

GEL Sample ID: 1202023618

Sample Amount 2

Moisture: 9.6

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944927

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02130089.wiff

Date Analyzed: 14-FEB-10 09:14

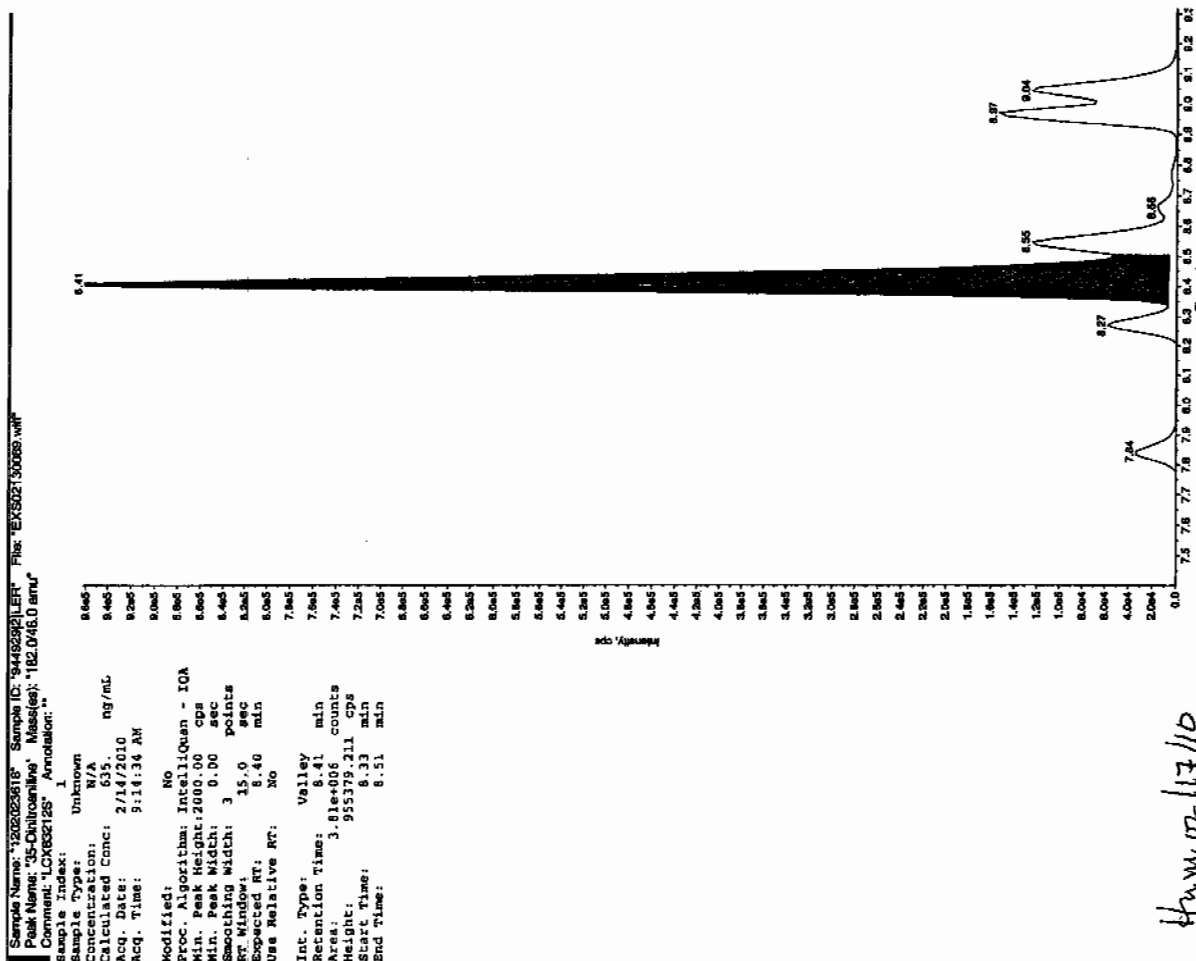
Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	5740	
59229-75-3	2,6-Diamino-4-nitrotoluene	6010	
618-87-1	3,5-Dinitroaniline	6350	
6629-29-4	2,4-Diamino-6-nitrotoluene	5490	
78-30-8	tris(o-cresyl) phosphate	5310	

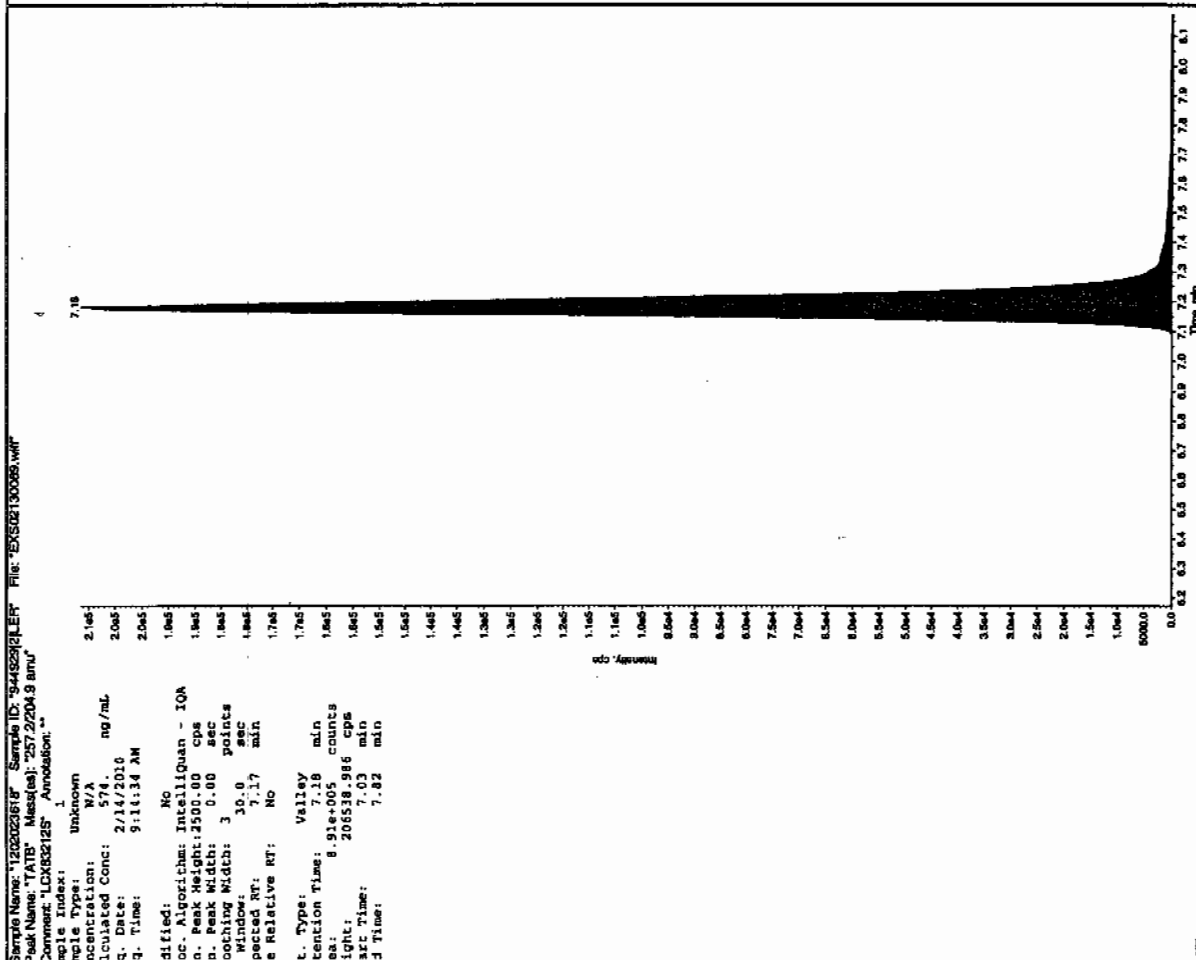
*Concentration =

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

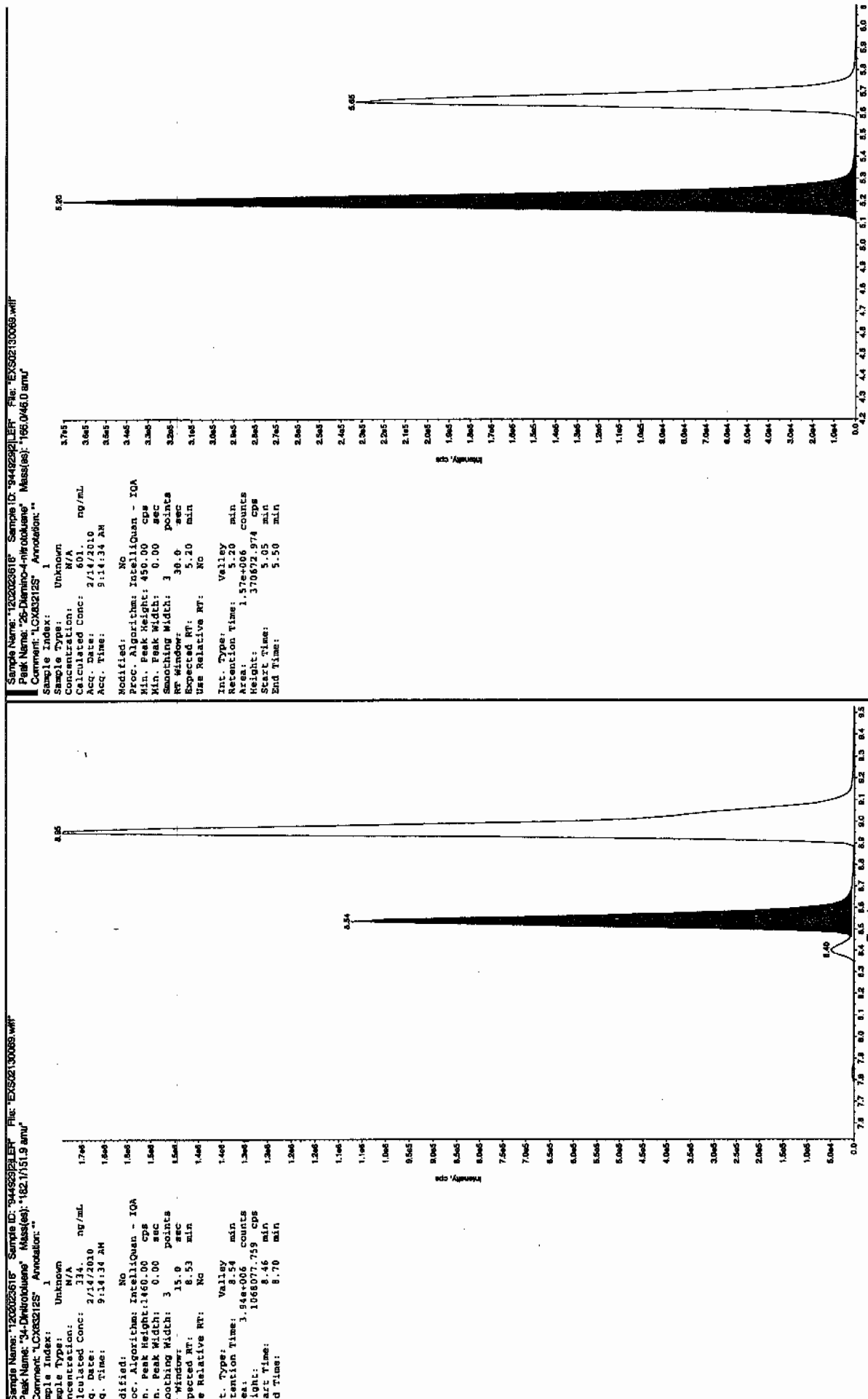
Jan 21/15/10



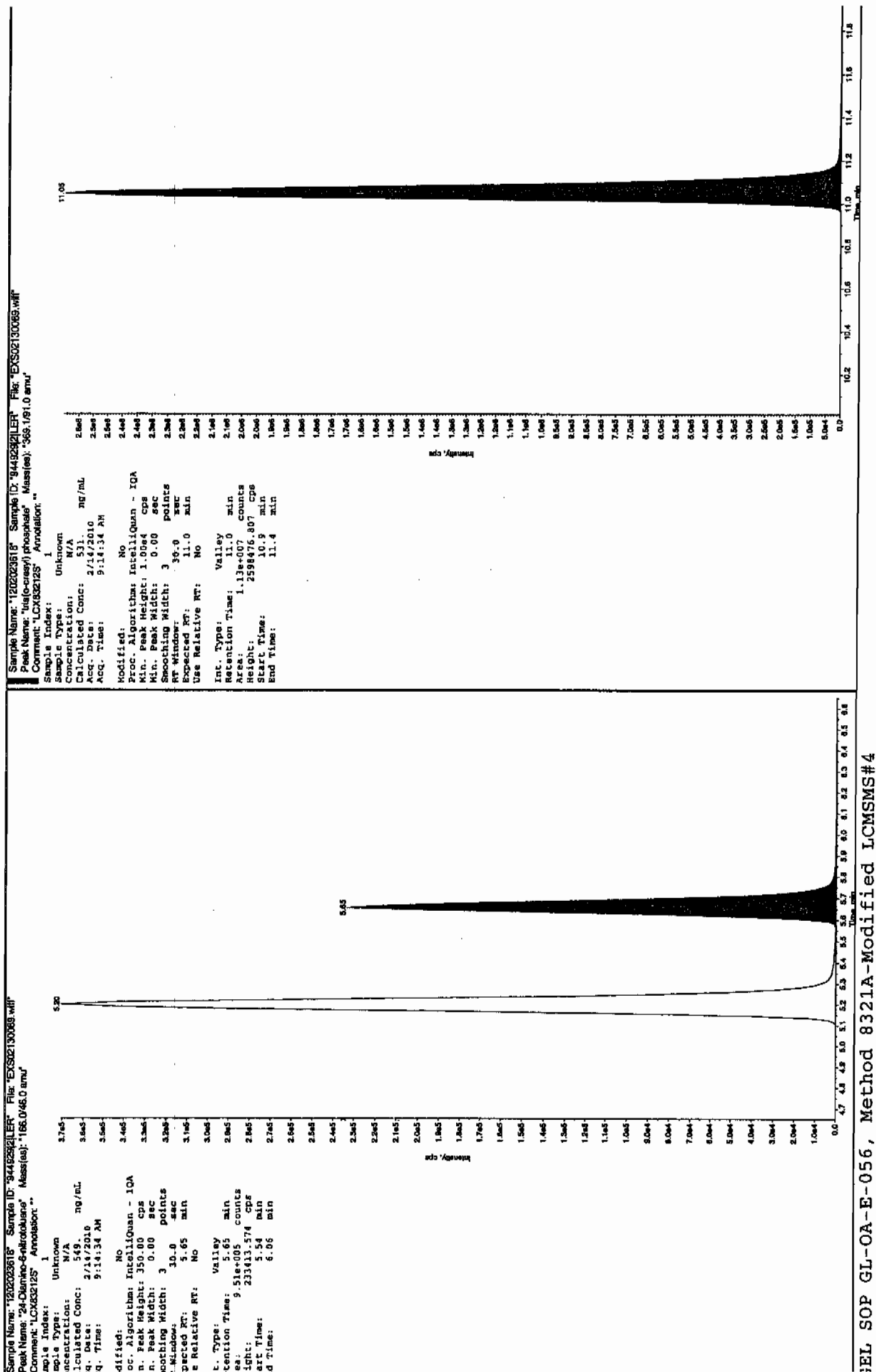
Hyw 02/17/10



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



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



EL 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: 944927 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)
1202023615 MB	28-JAN-2010 16:44:00	2	10	5
1202023616 LCS	28-JAN-2010 16:44:00	2	10	5
245391001	28-JAN-2010 16:44:00	2	10	5
1202023617 MS (245391001)	28-JAN-2010 16:44:00	2	10	5
1202023618 MSD (245391001)	28-JAN-2010 16:44:00	2	10	5
245391002	28-JAN-2010 16:44:00	2	10	5
245391003	28-JAN-2010 16:44:00	2	10	5
245391004	28-JAN-2010 16:44:00	2	10	5
245391005	28-JAN-2010 16:44:00	2	10	5
245391006	28-JAN-2010 16:44:00	2	10	5
245391007	28-JAN-2010 16:44:00	2	10	5
245391008	28-JAN-2010 16:44:00	2	10	5
245391009	28-JAN-2010 16:44:00	2	10	5
245391010	28-JAN-2010 16:44:00	2	10	5
245391011	28-JAN-2010 16:44:00	2	10	5

Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:
LCS	1202023616	8321 Explosives LCS	DXX100125-03	.1	mL	Final Solvent: ACN
LCS	1202023616	8321 LANL Explosives Mix 10mg/L	UXCX100122-01.1	1	mL	
MS	1202023617	8321 Explosives LCS	DXX100125-03	.1	mL	
MS	1202023617	8321 LANL Explosives Mix 10mg/L	UXCX100122-01.1	1	mL	
MSD	1202023618	8321 Explosives LCS	DXX100125-03	.1	mL	
MSD	1202023618	8321 LANL Explosives Mix 10mg/L	UXCX100122-01.1	1	mL	
SURR	All	3,4-Dinitrotoluene (8330 Surrogate) 100ppm	DXP100125-02	.05	mL	

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCM SMS #1

Date: 02/08/10
 Extr. Injection Volume: 50uL
 Sequence Number: 020810expA
 Initial Calibration Date: 02/08/10
 Method: SW846 8321A-Modified
 Int. Std.: UXX100128-01.2
 Mobile Phase Lot#: 1265885, 1250738
 Standard-Samp Reagent Lot#: 1260901, 1246195
 Reviewed BY: *HML*
 Date: 02/17/10
 SOP: GL-OA-E-056 Rev.12
 Alt Check Std. ID: WXX100208-07,
 WXX100211-07 & WXX100214-07

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
EXP0208001a	XIBLK01	MAP	2/8/10 14:44			1		USE	B
EXP0208002a	XIBLK01	MAP	2/8/10 15:13			1		USE	B
EXP0208003a	WXXICAL-01	MAP	2/8/10 15:43			1		USE	I
EXP0208004a	WXXICAL-02	MAP	2/8/10 16:12			1		USE	I
EXP0208005a	WXXICAL-03	MAP	2/8/10 16:42			1		USE	I
EXP0208006a	WXXICAL-04	MAP	2/8/10 17:11			1		USE	I
EXP0208007a	WXXICAL-05	MAP	2/8/10 17:41			1		USE	I
EXP0208008a	WXXICAL-06	MAP	2/8/10 18:11			1		USE	I
EXP0208009a	XIBLK02	MAP	2/8/10 18:40			1		USE	B
EXP0208010a	WXXICV	MAP	2/8/10 19:10			1		USE	C
EXP0208011a	XIBLK03	MAP	2/8/10 19:39			1		USE	B
EXP0208012a	WXXCRI	MAP	2/8/10 20:09			1		USE	C
EXP0208013a	1202021906	MAP	2/8/10 20:38	944246	10-1304	2	LANL	DUSE-RA	S
EXP0208014a	1202021907	MAP	2/8/10 21:08	944246	10-1304	2	LANL	DUSE-RA	S
EXP0208015a	245106001	MAP	2/8/10 21:37	944246	10-1304	2	LANL	USE	S
EXP0208016a	1202021908	MAP	2/8/10 22:07	944246	10-1304	2	LANL	USE	S
EXP0208017a	1202021909	MAP	2/8/10 22:36	944246	10-1304	2	LANL	USE	S
EXP0208018a	245106002	MAP	2/8/10 23:05	944246	10-1304	2	LANL	USE	S
EXP0208019a	245106003	MAP	2/8/10 23:35	944246	10-1304	2	LANL	USE	S
EXP0208020a	245106004	MAP	2/9/10 0:04	944246	10-1304	2	LANL	USE	S
EXP0208021a	245106005	MAP	2/9/10 0:34	944246	10-1304	2	LANL	USE	S
EXP0208022a	245106006	MAP	2/9/10 1:03	944246	10-1304	2	LANL	USE	S
EXP0208023a	WXXCCV	MAP	2/9/10 1:33			1		USE	C
EXP0208024a	XIBLK04	MAP	2/9/10 2:02			1		USE	B
EXP0208025a	WXXCRI	MAP	2/9/10 2:32			1		USE	C
EXP0208026a	245106007	MAP	2/9/10 3:01	944246	10-1304	2	LANL	USE	S
EXP0208027a	245106008	MAP	2/9/10 3:31	944246	10-1304	2	LANL	USE	S
EXP0208028a	245106009	MAP	2/9/10 4:00	944246	10-1304	2	LANL	USE	S
EXP0208029a	245106010	MAP	2/9/10 4:30	944246	10-1304	2	LANL	USE	S

EXP0208030a	245106011	MAP	2/9/10 4:59	944246	10-1304	2	LANL	USE	S
EXP0208031a	245106012	MAP	2/9/10 5:29	944246	10-1304	2	LANL	USE	S
EXP0208032a	245106013	MAP	2/9/10 5:58	944246	10-1304	2	LANL	USE	S
EXP0208033a	245106014	MAP	2/9/10 6:28	944246	10-1304	2	LANL	USE	S
EXP0208034a	245106015	MAP	2/9/10 6:58	944246	10-1304	2	LANL	USE	S
EXP0208035a	245106016	MAP	2/9/10 7:27	944246	10-1304	2	LANL	USE	S
EXP0208036a	WXCCV	MAP	2/9/10 7:57			1		USE	C
EXP0208037a	XIBLK05	MAP	2/9/10 8:26			1		USE	B
EXP0208038a	WXCCRI	MAP	2/9/10 8:56			1		USE	C
EXP0208039a	1202021914	MAP	2/9/10 9:25	944250	10-1324	2	LANL	USE	S
EXP0208040a	1202021915	MAP	2/9/10 9:55	944250	10-1324	2	LANL	USE	S
EXP0208041a	245114002	MAP	2/9/10 10:24	944250	10-1324	2	LANL	USE	S
EXP0208042a	1202021916	MAP	2/9/10 10:54	944250	10-1324	2	LANL	USE	S
EXP0208043a	1202021917	MAP	2/9/10 11:23	944250	10-1324	2	LANL	USE	S
EXP0208044a	245114003	MAP	2/9/10 11:53	944250	10-1324	2	LANL	USE	S
EXP0208045a	245114004	MAP	2/9/10 12:22	944250	10-1324	2	LANL	USE	S
EXP0208046a	245114005	MAP	2/9/10 12:52	944250	10-1324	2	LANL	USE	S
EXP0208047a	245114006	MAP	2/9/10 13:21	944250	10-1324	2	LANL	USE	S
EXP0208048a	245114007	MAP	2/9/10 13:51	944250	10-1324	2	LANL	USE	S
EXP0208049a	WXCCV	MAP	2/9/10 14:20			1		USE	C
EXP0208050a	XIBLK06	MAP	2/9/10 14:50			1		USE	B
EXP0208051a	WXCCRI	MAP	2/9/10 15:19			1		USE	C
EXP0208052a	245114008	MAP	2/9/10 15:49	944250	10-1324	2	LANL	USE	S
EXP0208053a	245114009	MAP	2/9/10 16:18	944250	10-1324	2	LANL	USE	S
EXP0208054a	245114010	MAP	2/9/10 16:48	944250	10-1324	2	LANL	USE	S
EXP0208055a	245114011	MAP	2/9/10 17:17	944250	10-1324	2	LANL	USE	S
EXP0208056a	245114012	MAP	2/9/10 17:47	944250	10-1324	2	LANL	USE	S
EXP0208057a	245114013	MAP	2/9/10 18:16	944250	10-1324	2	LANL	USE	S
EXP0208058a	245114014	MAP	2/9/10 18:46	944250	10-1324	2	LANL	USE	S
EXP0208059a	245114015	MAP	2/9/10 19:15	944250	10-1324	2	LANL	USE	S
EXP0208060a	1202021906	MAP	2/9/10 19:45	944246	10-1304	2	LANL	USE	S
EXP0208061a	1202021907	MAP	2/9/10 20:14	944246	10-1304	2	LANL	USE	S
EXP0208062a	WXCCV	MAP	2/9/10 20:44			1		USE	C
EXP0208063a	XIBLK07	MAP	2/9/10 21:13			1		USE	B
EXP0208064a	WXCCRI	MAP	2/9/10 21:43			1		USE	C
EXP0208065a	1202023096	MAP	2/9/10 22:12	944718	Various	2	LANL	USE	S
EXP0208066a	1202023097	MAP	2/9/10 22:42	944718	Various	2	LANL	USE	S

EXP0208067a	245116001	MAP	2/9/10 23:12	944718	10-1327	2	LANL	USE	S
EXP0208068a	1202023098	MAP	2/9/10 23:41	944718	10-1327	2	LANL	USE	S
EXP0208069a	1202023099	MAP	2/10/10 0:10	944718	10-1327	2	LANL	USE	S
EXP0208070a	245116002	MAP	2/10/10 0:40	944718	10-1327	2	LANL	DUSE-RA	S
EXP0208071a	245116003	MAP	2/10/10 1:09	944718	10-1327	2	LANL	USE	S
EXP0208072a	245116004	MAP	2/10/10 1:39	944718	10-1327	2	LANL	USE	S
EXP0208073a	245116005	MAP	2/10/10 2:08	944718	10-1327	2	LANL	DUSE-RA	S
EXP0208074a	245116006	MAP	2/10/10 2:38	944718	10-1327	2	LANL	USE	S
EXP0208075a	WXCCV	MAP	2/10/10 3:07			1		USE	C
EXP0208076a	XIBLK08	MAP	2/10/10 3:37			1		USE	B
EXP0208077a	WXXCRI	MAP	2/10/10 4:06			1		USE	C
EXP0208078a	245116007	MAP	2/10/10 4:36	944718	10-1327	2	LANL	USE	S
EXP0208079a	245116008	MAP	2/10/10 5:06	944718	10-1327	2	LANL	USE	S
EXP0208080a	245116009	MAP	2/10/10 5:35	944718	10-1327	2	LANL	USE	S
EXP0208081a	245116010	MAP	2/10/10 6:04	944718	10-1327	2	LANL	USE	S
EXP0208082a	245116011	MAP	2/10/10 6:34	944718	10-1327	2	LANL	USE	S
EXP0208083a	245116012	MAP	2/10/10 7:03	944718	10-1327	2	LANL	USE	S
EXP0208084a	245116013	MAP	2/10/10 7:33	944718	10-1327	2	LANL	USE	S
EXP0208085a	245116014	MAP	2/10/10 8:02	944718	10-1327	2	LANL	USE	S
EXP0208086a	245116015	MAP	2/10/10 8:32	944718	10-1327	2	LANL	USE	S
EXP0208087a	245116016	MAP	2/10/10 9:01	944718	10-1327	2	LANL	USE	S
EXP0208088a	WXCCV	MAP	2/10/10 9:31			1		USE	C
EXP0208089a	XIBLK09	MAP	2/10/10 10:01			1		USE	B
EXP0208090a	WXXCRI	MAP	2/10/10 10:30			1		USE	C
EXP0208091a	245226001	MAP	2/10/10 11:00	944718	10-1342	250	LANL	USE	S
EXP0208092a	245226001	MAP	2/10/10 11:29	944718	10-1342	2	LANL	USE	S
EXP0208093a	XIBLK10	MAP	2/10/10 11:59			1		USE	B
EXP0208094a	245226003	MAP	2/10/10 12:28	944718	10-1342	250	LANL	DUSE	S
EXP0208095a	245226003	MAP	2/10/10 12:58	944718	10-1342	2	LANL	USE	S
EXP0208096a	XIBLK11	MAP	2/10/10 13:28			1		USE	B
EXP0208097a	245116002	MAP	2/10/10 13:57	944718	10-1327	2	LANL	USE	S
EXP0208098a	245116005	MAP	2/10/10 14:27	944718	10-1327	2	LANL	USE	S
EXP0208099a	245226003	MAP	2/10/10 14:56	944718	10-1342	500	LANL	USE	S
EXP0208100a	WXCCV	MAP	2/10/10 15:26			1		USE	C
EXP0208101a	XIBLK12	MAP	2/10/10 15:55			1		USE	B
EXP0208102a	WXXCRI	MAP	2/10/10 16:25			1		USE	C
EXP0208103a	1202027262	MAP	2/10/10 16:54	946483	10-1408	2	LANL	USE	S

EXP0208104a	1202027263	MAP	2/10/10 17:24	946483	10-1408	2	LANL	USE	S
EXP0208105a	245597002	MAP	2/10/10 17:53	946483	10-1408	2	LANL	USE	S
EXP0208106a	1202027264	MAP	2/10/10 18:23	946483	10-1408	2	LANL	USE	S
EXP0208107a	1202027265	MAP	2/10/10 18:52	946483	10-1408	2	LANL	USE	S
EXP0208108a	245597003	MAP	2/10/10 19:22	946483	10-1408	2	LANL	USE	S
EXP0208109a	245597004	MAP	2/10/10 19:51	946483	10-1408	2	LANL	USE	S
EXP0208110a	245597005	MAP	2/10/10 20:21	946483	10-1408	2	LANL	USE	S
EXP0208111a	245597006	MAP	2/10/10 20:50	946483	10-1408	2	LANL	USE	S
EXP0208112a	245597007	MAP	2/10/10 21:20	946483	10-1408	2	LANL	USE	S
EXP0208113a	WXXCCV	MAP	2/10/10 21:49			1		USE	C
EXP0208114a	XIBLK13	MAP	2/10/10 22:19			1		USE	B
EXP0208115a	WXXCRI	MAP	2/10/10 22:48			1		USE	C
EXP0208116a	245597008	MAP	2/10/10 23:18	946483	10-1408	2	LANL	USE	S
EXP0208117a	245597009	MAP	2/10/10 23:47	946483	10-1408	2	LANL	USE	S
EXP0208118a	245597010	MAP	2/11/10 0:17	946483	10-1408	2	LANL	USE	S
EXP0208119a	245597011	MAP	2/11/10 0:46	946483	10-1408	2	LANL	USE	S
EXP0208120a	WXXCCV	MAP	2/11/10 1:16			1		USE	C
EXP0208121a	XIBLK14	MAP	2/11/10 1:45			1		USE	B
EXP0208122a	WXXCRI	MAP	2/11/10 2:15			1		USE	C
EXP0208123a	1202027274	MAP	2/11/10 2:44	946488	Various	2	LANL	USE	S
EXP0208124a	1202027275	MAP	2/11/10 3:14	946488	Various	2	LANL	DUSE-RA	S
EXP0208125a	245621002	MAP	2/11/10 3:43	946488	10-1424	2	LANL	DUSE-RA	S
EXP0208126a	1202027276	MAP	2/11/10 4:13	946488	10-1424	2	LANL	DUSE-RA	S
EXP0208127a	1202027277	MAP	2/11/10 4:42	946488	10-1424	2	LANL	USE	S
EXP0208128a	245621003	MAP	2/11/10 5:12	946488	10-1424	2	LANL	USE	S
EXP0208129a	245621004	MAP	2/11/10 5:41	946488	10-1424	2	LANL	USE	S
EXP0208130a	245621005	MAP	2/11/10 6:11	946488	10-1424	2	LANL	USE	S
EXP0208131a	245621006	MAP	2/11/10 6:40	946488	10-1424	2	LANL	USE	S
EXP0208132a	245621007	MAP	2/11/10 7:10	946488	10-1424	2	LANL	USE	S
EXP0208133a	WXXCCV	MAP	2/11/10 7:39			1		USE	C
EXP0208134a	XIBLK15	MAP	2/11/10 8:09			1		USE	B
EXP0208135a	WXXCRI	MAP	2/11/10 8:38			1		USE	C
EXP0208136a	245621008	MAP	2/11/10 9:08	946488	10-1424	2	LANL	USE	S
EXP0208137a	245621009	MAP	2/11/10 9:37	946488	10-1424	2	LANL	USE	S
EXP0208138a	245621010	MAP	2/11/10 10:07	946488	10-1424	2	LANL	USE	S
EXP0208139a	245621011	MAP	2/11/10 10:36	946488	10-1424	2	LANL	USE	S
EXP0208140a	245628002	MAP	2/11/10 11:06	946488	10-1427	2	LANL	USE	S

EXP0208141a	245628003	MAP	2/11/10 11:36	946488	10-1427	2	LANL	USE	S
EXP0208142a	245628004	MAP	2/11/10 12:05	946488	10-1427	2	LANL	USE	S
EXP0208143a	245631002	MAP	2/11/10 12:35	946488	10-1428	2	LANL	USE	S
EXP0208144a	245631003	MAP	2/11/10 13:04	946488	10-1428	2	LANL	USE	S
EXP0208145a	WXXCCV	MAP	2/11/10 13:34			1		USE	C
EXP0208146a	XIBLK16	MAP	2/11/10 14:03			1		USE	B
EXP0208147a	WXXCRI	MAP	2/11/10 14:33			1		USE	C
EXP0208148a	245597002	MAP	2/11/10 15:02	946483	10-1408	25	LANL	DUSE	S
EXP0208149a	245597002	MAP	2/11/10 15:32	946483	10-1408	25	LANL	USE	S
EXP0208150a	1202027275	MAP	2/11/10 16:01	946488	Various	2	LANL	USE	S
EXP0208151a	245621002	MAP	2/11/10 16:31	946488	10-1424	2	LANL	USE	S
EXP0208152a	1202027276	MAP	2/11/10 17:00	946488	10-1424	2	LANL	USE	S
EXP0208153a	IXP100210-02	MAP	2/11/10 17:30	SCREEN	NA	1	GEL	USE	S
EXP0208154a	IXX100208-03	MAP	2/11/10 18:00	SCREEN	NA	1	GEL	USE	S
EXP0208155a	WXXCCV	MAP	2/11/10 18:29			1		USE	C
EXP0208156a	XIBLK17	MAP	2/11/10 18:58			1		USE	B
EXP0208157a	WXXCRI	MAP	2/11/10 19:28			1		USE	C
EXP0208158a	1202028676	MAP	2/11/10 19:57	947084	Various	2	LANL	USE	S
EXP0208159a	1202028677	MAP	2/11/10 20:27	947084	Various	2	LANL	USE	S
EXP0208160a	245663001	MAP	2/11/10 20:57	947084	10-1436	2	LANL	USE	S
EXP0208161a	1202028678	MAP	2/11/10 21:26	947084	10-1436	2	LANL	USE	S
EXP0208162a	1202028679	MAP	2/11/10 21:55	947084	10-1436	2	LANL	USE	S
EXP0208163a	245663002	MAP	2/11/10 22:25	947084	10-1436	2	LANL	USE	S
EXP0208164a	245663003	MAP	2/11/10 22:54	947084	10-1436	2	LANL	USE	S
EXP0208165a	245663004	MAP	2/11/10 23:24	947084	10-1436	2	LANL	USE	S
EXP0208166a	245663005	MAP	2/11/10 23:53	947084	10-1436	2	LANL	USE	S
EXP0208167a	245663006	MAP	2/12/10 0:23	947084	10-1436	2	LANL	USE	S
EXP0208168a	WXXCCV	MAP	2/12/10 0:52			1		USE	C
EXP0208169a	XIBLK18	MAP	2/12/10 1:22			1		USE	B
EXP0208170a	WXXCRI	MAP	2/12/10 1:51			1		USE	C
EXP0208171a	245803001	MAP	2/12/10 2:21	947084	10-1473	2	LANL	USE	S
EXP0208172a	245803002	MAP	2/12/10 2:50	947084	10-1473	2	LANL	USE	S
EXP0208173a	245803003	MAP	2/12/10 3:20	947084	10-1473	2	LANL	USE	S
EXP0208174a	245803004	MAP	2/12/10 3:50	947084	10-1473	2	LANL	USE	S
EXP0208175a	245803005	MAP	2/12/10 4:19	947084	10-1473	2	LANL	USE	S
EXP0208176a	245803006	MAP	2/12/10 4:49	947084	10-1473	2	LANL	USE	S
EXP0208177a	245803007	MAP	2/12/10 5:18	947084	10-1473	2	LANL	USE	S

EXP0208178a	245803008	MAP	2/12/10 5:48	947084	10-1473	2	LANL	USE	S
EXP0208179a	WXXCCV	MAP	2/12/10 6:17			1		USE	C
EXP0208180a	XIBLK19	MAP	2/12/10 6:47			1		USE	B
EXP0208181a	WXXCRI	MAP	2/12/10 7:16			1		USE	C
EXP0208182a	1202028672	MAP	2/12/10 7:46	947078	Various	2	LANL	USE	S
EXP0208183a	1202028673	MAP	2/12/10 8:15	947078	Various	2	LANL	USE	S
EXP0208184a	245661001	MAP	2/12/10 8:45	947078	10-1435	2	LANL	USE	S
EXP0208185a	245686001	MAP	2/12/10 9:14	947078	10-1432	2	LANL	USE	S
EXP0208186a	1202028674	MAP	2/12/10 9:44	947078	10-1432	2	LANL	USE	S
EXP0208187a	1202028675	MAP	2/12/10 10:13	947078	10-1432	2	LANL	USE	S
EXP0208188a	245686002	MAP	2/12/10 10:43	947078	10-1432	2	LANL	USE	S
EXP0208189a	245686003	MAP	2/12/10 11:13	947078	10-1432	2	LANL	USE	S
EXP0208190a	245686004	MAP	2/12/10 11:42	947078	10-1432	2	LANL	USE	S
EXP0208191a	245686005	MAP	2/12/10 12:12	947078	10-1432	2	LANL	USE	S
EXP0208192a	WXXCCV	MAP	2/12/10 12:41			1		USE	C
EXP0208193a	XIBLK20	MAP	2/12/10 13:11			1		USE	B
EXP0208194a	WXXCRI	MAP	2/12/10 13:40			1		USE	C
EXP0208195a	245686006	MAP	2/12/10 14:10	947078	10-1432	2	LANL	USE	S
EXP0208196a	245686007	MAP	2/12/10 14:40	947078	10-1432	2	LANL	USE	S
EXP0208197a	245686008	MAP	2/12/10 15:09	947078	10-1432	2	LANL	USE	S
EXP0208198a	245686009	MAP	2/12/10 15:38	947078	10-1432	2	LANL	USE	S
EXP0208199a	245686010	MAP	2/12/10 16:08	947078	10-1432	2	LANL	USE	S
EXP0208200a	245686011	MAP	2/12/10 16:38	947078	10-1432	2	LANL	USE	S
EXP0208201a	245686012	MAP	2/12/10 17:07	947078	10-1432	2	LANL	USE	S
EXP0208202a	245686013	MAP	2/12/10 17:36	947078	10-1432	2	LANL	USE	S
EXP0208203a	245686014	MAP	2/12/10 18:06	947078	10-1432	2	LANL	USE	S
EXP0208204a	WXXCCV	MAP	2/12/10 18:36			1		USE	C
EXP0208205a	XIBLK21	MAP	2/12/10 19:05			1		USE	B
EXP0208206a	WXXCRI	MAP	2/12/10 19:35			1		USE	C
EXP0208207a	1202023542	MAP	2/12/10 20:04	944900	10-1382	2	LANL	USE	S
EXP0208208a	1202023543	MAP	2/12/10 20:34	944900	10-1382	2	LANL	USE	S
EXP0208209a	245384001	MAP	2/12/10 21:03	944900	10-1382	2	LANL	USE	S
EXP0208210a	1202023544	MAP	2/12/10 21:33	944900	10-1382	2	LANL	USE	S
EXP0208211a	1202023545	MAP	2/12/10 22:02	944900	10-1382	2	LANL	USE	S
EXP0208212a	245384002	MAP	2/12/10 22:32	944900	10-1382	2	LANL	USE	S
EXP0208213a	245384003	MAP	2/12/10 23:01	944900	10-1382	2	LANL	USE	S
EXP0208214a	245384004	MAP	2/12/10 23:31	944900	10-1382	2	LANL	USE	S

EXP0208215a	245384005	MAP	2/13/10 0:00	944900	10-1382	2	LANL	USE	S
EXP0208216a	245384006	MAP	2/13/10 0:30	944900	10-1382	2	LANL	USE	S
EXP0208217a	WXXCVC	MAP	2/13/10 0:59			1		USE	C
EXP0208218a	XIBLK22	MAP	2/13/10 1:29			1		USE	B
EXP0208219a	WXXCRI	MAP	2/13/10 1:58			1		USE	C
EXP0208220a	245384007	MAP	2/13/10 2:28	944900	10-1382	2	LANL	USE	S
EXP0208221a	245384008	MAP	2/13/10 2:57	944900	10-1382	2	LANL	USE	S
EXP0208222a	245384009	MAP	2/13/10 3:27	944900	10-1382	2	LANL	USE	S
EXP0208223a	245384010	MAP	2/13/10 3:56	944900	10-1382	2	LANL	USE	S
EXP0208224a	245384012	MAP	2/13/10 4:26	944900	10-1382	2	LANL	USE	S
EXP0208225a	WXXCVC	MAP	2/13/10 4:56			1		USE	C
EXP0208226a	XIBLK23	MAP	2/13/10 5:25			1		USE	B
EXP0208227a	WXXCRI	MAP	2/13/10 5:55			1		USE	C
EXP0208228a	1202023571	MAP	2/13/10 6:24	944907	10-1384	2	LANL	USE	S
EXP0208229a	1202023572	MAP	2/13/10 6:54	944907	10-1384	2	LANL	USE	S
EXP0208230a	245387001	MAP	2/13/10 7:23	944907	10-1384	2	LANL	USE	S
EXP0208231a	1202023573	MAP	2/13/10 7:53	944907	10-1384	2	LANL	USE	S
EXP0208232a	1202023574	MAP	2/13/10 8:22	944907	10-1384	2	LANL	USE	S
EXP0208233a	245387002	MAP	2/13/10 8:52	944907	10-1384	2	LANL	USE	S
EXP0208234a	245387003	MAP	2/13/10 9:21	944907	10-1384	2	LANL	USE	S
EXP0208235a	245387004	MAP	2/13/10 9:51	944907	10-1384	2	LANL	USE	S
EXP0208236a	245387005	MAP	2/13/10 10:20	944907	10-1384	2	LANL	USE	S
EXP0208237a	245387006	MAP	2/13/10 10:50	944907	10-1384	2	LANL	USE	S
EXP0208238a	WXXCVC	MAP	2/13/10 11:20			1		USE	C
EXP0208239a	XIBLK24	MAP	2/13/10 11:50			1		USE	B
EXP0208240a	WXXCRI	MAP	2/13/10 12:19			1		USE	C
EXP0208241a	245387007	MAP	2/13/10 12:49	944907	10-1384	2	LANL	USE	S
EXP0208242a	245387008	MAP	2/13/10 13:18	944907	10-1384	2	LANL	USE	S
EXP0208243a	245387009	MAP	2/13/10 13:48	944907	10-1384	2	LANL	USE	S
EXP0208244a	245387010	MAP	2/13/10 14:17	944907	10-1384	2	LANL	USE	S
EXP0208245a	245387011	MAP	2/13/10 14:47	944907	10-1384	2	LANL	USE	S
EXP0208246a	1202023572	MAP	2/13/10 15:16	944907	10-1384	2	LANL	USE	S
EXP0208247a	1202023573	MAP	2/13/10 15:46	944907	10-1384	2	LANL	USE	S
EXP0208248a	1202023574	MAP	2/13/10 16:15	944907	10-1384	2	LANL	USE	S
EXP0208249a	1202023543	MAP	2/13/10 16:45	944900	10-1382	2	LANL	USE	S
EXP0208250a	1202023545	MAP	2/13/10 17:14	944900	10-1382	2	LANL	USE	S
EXP0208251a	WXXCVC	MAP	2/13/10 17:44			1		USE	C

EXP0208252a	XIBLK25	MAP	2/13/10 18:13				1		USE	B
EXP0208253a	WXXCRI	MAP	2/13/10 18:43				1		USE	C
EXP0208254a	1202023615	MAP	2/13/10 19:12	944929	10-1390		2	LANL	USE	S
EXP0208255a	1202023616	MAP	2/13/10 19:42	944929	10-1390		2	LANL	USE	S
EXP0208256a	245391001	MAP	2/13/10 20:11	944929	10-1390		2	LANL	USE	S
EXP0208257a	1202023617	MAP	2/13/10 20:41	944929	10-1390		2	LANL	USE	S
EXP0208258a	1202023618	MAP	2/13/10 21:10	944929	10-1390		2	LANL	USE	S
EXP0208259a	245391002	MAP	2/13/10 21:40	944929	10-1390		2	LANL	USE	S
EXP0208260a	245391003	MAP	2/13/10 22:09	944929	10-1390		2	LANL	DUSE-RA	S
EXP0208261a	245391004	MAP	2/13/10 22:39	944929	10-1390		2	LANL	USE	S
EXP0208262a	245391005	MAP	2/13/10 23:09	944929	10-1390		2	LANL	USE	S
EXP0208263a	245391006	MAP	2/13/10 23:38	944929	10-1390		2	LANL	USE	S
EXP0208264a	WXXCCV	MAP	2/14/10 0:08				1		USE	C
EXP0208265a	XIBLK26	MAP	2/14/10 0:37				1		USE	B
EXP0208266a	WXXCRI	MAP	2/14/10 1:07				1		USE	C
EXP0208267a	245391007	MAP	2/14/10 1:36	944929	10-1390		2	LANL	USE	S
EXP0208268a	245391008	MAP	2/14/10 2:06	944929	10-1390		2	LANL	USE	S
EXP0208269a	245391009	MAP	2/14/10 2:35	944929	10-1390		2	LANL	USE	S
EXP0208270a	245391010	MAP	2/14/10 3:05	944929	10-1390		2	LANL	USE	S
EXP0208271a	245391011	MAP	2/14/10 3:34	944929	10-1390		2	LANL	USE	S
EXP0208272a	WXXCCV	MAP	2/14/10 4:04				1		USE	C
EXP0208273a	XIBLK27	MAP	2/14/10 4:34				1		USE	B
EXP0208274a	WXXCRI	MAP	2/14/10 5:03				1		USE	C
EXP0208275a	1202023631	MAP	2/14/10 5:33	944935	10-1392		2	LANL	USE	S
EXP0208276a	1202023632	MAP	2/14/10 6:02	944935	10-1392		2	LANL	USE	S
EXP0208277a	245394001	MAP	2/14/10 6:32	944935	10-1392		2	LANL	USE	S
EXP0208278a	1202023633	MAP	2/14/10 7:01	944935	10-1392		2	LANL	USE	S
EXP0208279a	1202023634	MAP	2/14/10 7:31	944935	10-1392		2	LANL	USE	S
EXP0208280a	245394002	MAP	2/14/10 8:00	944935	10-1392		2	LANL	USE	S
EXP0208281a	245394003	MAP	2/14/10 8:30	944935	10-1392		2	LANL	USE	S
EXP0208282a	245394004	MAP	2/14/10 8:59	944935	10-1392		2	LANL	DUSE-RA	S
EXP0208283a	245394005	MAP	2/14/10 9:29	944935	10-1392		2	LANL	USE	S
EXP0208284a	245394006	MAP	2/14/10 9:58	944935	10-1392		2	LANL	USE	S
EXP0208285a	WXXCCV	MAP	2/14/10 10:28				1		USE	C
EXP0208286a	XIBLK28	MAP	2/14/10 10:57				1		USE	B
EXP0208287a	WXXCRI	MAP	2/14/10 11:27				1		USE	C
EXP0208288a	245394007	MAP	2/14/10 11:56	944935	10-1392		2	LANL	USE	S

EXP0208289a	245394008	MAP	2/14/10 12:26	944935	10-1392	2	LANL	USE	S
EXP0208290a	245394009	MAP	2/14/10 12:57	944935	10-1392	2	LANL	DUSE-RA	S
EXP0208291a	245394010	MAP	2/14/10 13:27	944935	10-1392	2	LANL	USE	S
EXP0208292a	245394011	MAP	2/14/10 13:56	944935	10-1392	2	LANL	USE	S
EXP0208293a	245394012	MAP	2/14/10 14:26	944935	10-1392	2	LANL	USE	S
EXP0208294a	245394013	MAP	2/14/10 14:55	944935	10-1392	2	LANL	USE	S
EXP0208295a	245394014	MAP	2/14/10 15:25	944935	10-1392	2	LANL	USE	S
EXP0208296a	245394015	MAP	2/14/10 15:54	944935	10-1392	2	LANL	USE	S
EXP0208297a	WXXCCV	MAP	2/14/10 16:24			1		USE	C
EXP0208298a	XIBLK29	MAP	2/14/10 16:54			1		USE	B
EXP0208299a	WXXCRI	MAP	2/14/10 17:23			1		USE	C
EXP0208300a	245391002	MAP	2/14/10 17:53	944929	10-1390	10	LANL	USE	S
EXP0208301a	245391003	MAP	2/14/10 18:22	944929	10-1390	2	LANL	USE	S
EXP0208302a	245394003	MAP	2/14/10 18:52	944935	10-1392	10	LANL	USE	S
EXP0208303a	245394004	MAP	2/14/10 19:21	944935	10-1392	2	LANL	USE	S
EXP0208304a	245394009	MAP	2/14/10 19:51	944935	10-1392	2	LANL	USE	S
EXP0208305a	WXXCCV	MAP	2/14/10 20:20			1		USE	C
EXP0208306a	XIBLK30	MAP	2/14/10 20:50			1		USE	B
EXP0208307a	WXXCRI	MAP	2/14/10 21:19			1		USE	C

GEL ORGANIC RUN LOG INSTRUMENT ID: LCMSMS4

Date: 02/13/10
 Extr. Injection Volume: 10uL
 Sequence Number: 021310exs
 Initial Calibration Date: 021310
 Method: 8321A-Modified
 Int. Std.: N/A
 Mobile Phase Lot#: 1263794, 1258141
 Standard-Samp Reagent Lot#: 1246195, 1253092
 Reviewed By: *hxl*
 Date: *02/17/10*
 SOP: GL-OA-E-056 Rev.12
 Alt Check Std. ID: WXX100213-26

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC Flag
EXS02130001.wiff	XIBLK01	LER	2/13/2010 10:12			1		USE	B
EXS02130002.wiff	XIBLK01	LER	2/13/2010 10:28			1		USE	B
EXS02130003.wiff	WXXICAL-19	LER	2/13/2010 10:44			1		USE	I
EXS02130004.wiff	WXXICAL-20	LER	2/13/2010 11:00			1		USE	I
EXS02130005.wiff	WXXICAL-21	LER	2/13/2010 11:15			1		USE	I
EXS02130006.wiff	WXXICAL-22	LER	2/13/2010 11:31			1		USE	I
EXS02130007.wiff	WXXICAL-23	LER	2/13/2010 11:47			1		USE	I
EXS02130008.wiff	WXXICAL-24	LER	2/13/2010 12:02			1		USE	I
EXS02130009.wiff	WXXICAL-25	LER	2/13/2010 12:18			1		USE	I
EXS02130010.wiff	XIBLK02	LER	2/13/2010 12:34			1		USE	B
EXS02130011.wiff	WXXICV	LER	2/13/2010 12:49			1		USE	C
EXS02130012.wiff	XIBLK03	LER	2/13/2010 13:05			1		USE	B
EXS02130013.wiff	WXXCRI	LER	2/13/2010 13:21			1		USE	C
EXS02130014.wiff	1202028672	LER	2/13/2010 13:36	947078	VARIOUS	2	LANL	USE	S
EXS02130015.wiff	1202028673	LER	2/13/2010 13:52	947078	VARIOUS	2	LANL	USE	S
EXS02130016.wiff	245661001	LER	2/13/2010 14:08	947078	10-1435	2	LANL	USE	S
EXS02130017.wiff	245686001	LER	2/13/2010 14:24	947078	10-1432	2	LANL	USE	S
EXS02130018.wiff	1202028674	LER	2/13/2010 14:39	947078	10-1432	2	LANL	USE	S
EXS02130019.wiff	1202028675	LER	2/13/2010 14:55	947078	10-1432	2	LANL	USE	S
EXS02130020.wiff	245686002	LER	2/13/2010 15:11	947078	10-1432	2	LANL	USE	S
EXS02130021.wiff	245686003	LER	2/13/2010 15:26	947078	10-1432	2	LANL	USE	S
EXS02130022.wiff	245686004	LER	2/13/2010 15:42	947078	10-1432	2	LANL	USE	S
EXS02130023.wiff	245686005	LER	2/13/2010 15:58	947078	10-1432	2	LANL	USE	S
EXS02130024.wiff	WXXCCV	LER	2/13/2010 16:14			1		USE	C
EXS02130025.wiff	XIBLK04	LER	2/13/2010 16:29			1		USE	B
EXS02130026.wiff	WXXCRI	LER	2/13/2010 16:45			1		USE	C
EXS02130027.wiff	245686006	LER	2/13/2010 17:01	947078	10-1432	2	LANL	USE	S
EXS02130028.wiff	245686007	LER	2/13/2010 17:16	947078	10-1432	2	LANL	USE	S

EXS02130029.wiff	245686008	LER	2/13/2010 17:32	947078	10-1432	2	LANL	USE	S
EXS02130030.wiff	245686009	LER	2/13/2010 17:48	947078	10-1432	2	LANL	USE	S
EXS02130031.wiff	245686010	LER	2/13/2010 18:03	947078	10-1432	2	LANL	USE	S
EXS02130032.wiff	245686011	LER	2/13/2010 18:19	947078	10-1432	2	LANL	USE	S
EXS02130033.wiff	245686012	LER	2/13/2010 18:35	947078	10-1432	2	LANL	USE	S
EXS02130034.wiff	245686013	LER	2/13/2010 18:50	947078	10-1432	2	LANL	USE	S
EXS02130035.wiff	245686014	LER	2/13/2010 19:06	947078	10-1432	2	LANL	USE	S
EXS02130036.wiff	WXXCCV	LER	2/13/2010 19:22					USE	C
EXS02130037.wiff	XIBLK05	LER	2/13/2010 19:38			1		USE	B
EXS02130038.wiff	WXXCRI	LER	2/13/2010 19:53			1		USE	C
EXS02130039.wiff	UXX100122-01.2	LER	2/13/2010 20:09	SCREEN	LIQUID	2	O2SI	USE	S
EXS02130040.wiff	XIBLK06	LER	2/13/2010 20:25			1		USE	B
EXS02130041.wiff	1202023542	LER	2/13/2010 20:40	944900	10-1382	2	LANL	USE	S
EXS02130042.wiff	1202023543	LER	2/13/2010 20:56	944900	10-1382	2	LANL	USE	S
EXS02130043.wiff	245384001	LER	2/13/2010 21:12	944900	10-1382	2	LANL	USE	S
EXS02130044.wiff	1202023544	LER	2/13/2010 21:28	944900	10-1382	2	LANL	USE	S
EXS02130045.wiff	1202023545	LER	2/13/2010 21:43	944900	10-1382	2	LANL	USE	S
EXS02130046.wiff	245384002	LER	2/13/2010 21:59	944900	10-1382	2	LANL	USE	S
EXS02130047.wiff	245384003	LER	2/13/2010 22:15	944900	10-1382	2	LANL	USE	S
EXS02130048.wiff	245384004	LER	2/13/2010 22:30	944900	10-1382	2	LANL	USE	S
EXS02130049.wiff	WXXCCV	LER	2/13/2010 22:46			1		USE	C
EXS02130050.wiff	XIBLK07	LER	2/13/2010 23:02			1		USE	B
EXS02130051.wiff	WXXCRI	LER	2/13/2010 23:17			1		USE	C
EXS02130052.wiff	245384005	LER	2/13/2010 23:33	944900	10-1382	2	LANL	USE	S
EXS02130053.wiff	245384006	LER	2/13/2010 23:49	944900	10-1382	2	LANL	USE	S
EXS02130054.wiff	245384007	LER	2/14/2010 0:04	944900	10-1382	2	LANL	USE	S
EXS02130055.wiff	245384008	LER	2/14/2010 0:20	944900	10-1382	2	LANL	USE	S
EXS02130056.wiff	245384009	LER	2/14/2010 0:36	944900	10-1382	2	LANL	USE	S
EXS02130057.wiff	245384010	LER	2/14/2010 0:52	944900	10-1382	2	LANL	USE	S
EXS02130058.wiff	245384012	LER	2/14/2010 1:07	944900	10-1382	2	LANL	USE	S
EXS02130059.wiff	XIBLK08	LER	2/14/2010 1:23			1		USE	B
EXS02130060.wiff	245621005	LER	2/14/2010 1:39	946488	10-1424	2	LANL	USE	S
EXS02130061.wiff	WXXCCV	LER	2/14/2010 1:54			1		USE	C
EXS02130062.wiff	XIBLK09	LER	2/14/2010 2:10			1		USE	B
EXS02130063.wiff	WXXCRI	LER	2/14/2010 2:26			1		USE	C
EXS02130064.wiff	1202023571	LER	2/14/2010 2:42	944907	10-1384	2	LANL	USE	S
EXS02130065.wiff	1202023572	LER	2/14/2010 2:57	944907	10-1384	2	LANL	USE	S

EXS02130066.wiff	245387001	LER	2/14/2010 3:13	944907	10-1384	2	LANL	USE	S
EXS02130067.wiff	1202023573	LER	2/14/2010 3:29	944907	10-1384	2	LANL	USE	S
EXS02130068.wiff	1202023574	LER	2/14/2010 3:44	944907	10-1384	2	LANL	USE	S
EXS02130069.wiff	245387002	LER	2/14/2010 4:00	944907	10-1384	2	LANL	USE	S
EXS02130070.wiff	245387003	LER	2/14/2010 4:16	944907	10-1384	2	LANL	USE	S
EXS02130071.wiff	245387004	LER	2/14/2010 4:31	944907	10-1384	2	LANL	USE	S
EXS02130072.wiff	245387005	LER	2/14/2010 4:47	944907	10-1384	2	LANL	USE	S
EXS02130073.wiff	245387006	LER	2/14/2010 5:03	944907	10-1384	2	LANL	USE	S
EXS02130074.wiff	WXXCCV	LER	2/14/2010 5:19			1		USE	C
EXS02130075.wiff	XIBLK10	LER	2/14/2010 5:34			1		USE	B
EXS02130076.wiff	WXXCRI	LER	2/14/2010 5:50			1		USE	C
EXS02130077.wiff	245387007	LER	2/14/2010 6:06	944907	10-1384	2	LANL	USE	S
EXS02130078.wiff	245387008	LER	2/14/2010 6:21	944907	10-1384	2	LANL	DUSE-RA	S
EXS02130079.wiff	245387009	LER	2/14/2010 6:37	944907	10-1384	2	LANL	DUSE-RA	S
EXS02130080.wiff	245387010	LER	2/14/2010 6:53	944907	10-1384	2	LANL	DUSE-RA	S
EXS02130081.wiff	245387011	LER	2/14/2010 7:08	944907	10-1384	2	LANL	USE	S
EXS02130082.wiff	WXXCCV	LER	2/14/2010 7:24			1		USE	C
EXS02130083.wiff	XIBLK11	LER	2/14/2010 7:40			1		USE	B
EXS02130084.wiff	WXXCRI	LER	2/14/2010 7:56			1		USE	C
EXS02130085.wiff	1202023615	LER	2/14/2010 8:11	944929	10-1390	2	LANL	USE	S
EXS02130086.wiff	1202023616	LER	2/14/2010 8:27	944929	10-1390	2	LANL	USE	S
EXS02130087.wiff	245391001	LER	2/14/2010 8:43	944929	10-1390	2	LANL	USE	S
EXS02130088.wiff	1202023617	LER	2/14/2010 8:58	944929	10-1390	2	LANL	USE	S
EXS02130089.wiff	1202023618	LER	2/14/2010 9:14	944929	10-1390	2	LANL	USE	S
EXS02130090.wiff	245391002	LER	2/14/2010 9:30	944929	10-1390	2	LANL	USE	S
EXS02130091.wiff	245391003	LER	2/14/2010 9:45	944929	10-1390	2	LANL	USE	S
EXS02130092.wiff	245391004	LER	2/14/2010 10:01	944929	10-1390	2	LANL	USE	S
EXS02130093.wiff	245391005	LER	2/14/2010 10:17	944929	10-1390	2	LANL	USE	S
EXS02130094.wiff	245391006	LER	2/14/2010 10:33	944929	10-1390	2	LANL	USE	S
EXS02130095.wiff	WXXCCV	LER	2/14/2010 10:48			1		USE	C
EXS02130096.wiff	XIBLK12	LER	2/14/2010 11:04			1		USE	B
EXS02130097.wiff	WXXCRI	LER	2/14/2010 11:20			1		USE	C
EXS02130098.wiff	245391007	LER	2/14/2010 11:35	944929	10-1390	2	LANL	USE	S
EXS02130099.wiff	245391008	LER	2/14/2010 11:51	944929	10-1390	2	LANL	USE	S
EXS02130100.wiff	245391009	LER	2/14/2010 12:07	944929	10-1390	2	LANL	USE	S
EXS02130101.wiff	245391010	LER	2/14/2010 12:22	944929	10-1390	2	LANL	USE	S
EXS02130102.wiff	245391011	LER	2/14/2010 12:38	944929	10-1390	2	LANL	USE	S

C B C

USE
USE
USE

1
1
1

2/14/2010 12:54
2/14/2010 13:10
2/14/2010 13:26

LER
LER
LER

WXXCCV
XIBLK13
WXXCRI

EXS02130103.wiff
EXS02130104.wiff
EXS02130105.wiff

GEL Laboratories LLC
Form GEL-DER

DER Report No.: 792179

Revision No.: 2

DATA EXCEPTION REPORT

Mo.Day Yr. 17-FEB-10	Division: Federal	Quality Criteria: Specifications	Type: Process
Instrument Type: LC-MS/MS	Test / Method: SW846 8321A Modified	Matrix Type: Solid	Client Code: LANL
Batch ID: 944929	Sample Numbers: See Below		
Potentially affected work order(s)(SDG): 245391(10-1390)			
Application Issues: Failed Recovery for LCS/LCSD Failed Recovery for MS/PS			
Specification and Requirements Exception Description:		DER Disposition:	
1. The LCS(1202023616) did not meet acceptance criteria for the recovery of Tetryl at 36.3%. The limits are 51-112%. The LCS recovered 2,4-Diamino-6-nitrotoluene at 114.2%. The limits are 52-114%. 2. The MS(1202023617) did not meet acceptance criteria for the recovery of 3,5-Dinitroaniline at 135%. The limits are 73-129%.		1. Both the MS(1202023617) and MSD(1202023618) had passing recoveries for Tetryl at 89.6 % and 88% respectively and 2,4-Diamino-6-nitrotoluene at 113% and 110%, respectively. The data are reported. 2. Both the LCS(1202023616) and MSD(1202023618) had passing recoveries for 3,5-Dinitroaniline at 119% and 127% respectively. The parent sample did not contain a detect of this analyte. The data are reported.	

Originator's Name:
Lynne Russell 17-FEB-10

Data Validator/Group Leader:
Herbert Maier 18-FEB-10

Metals Analysis

Case Narrative

**Metals Fractional Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1390**

Sample Analysis

Sample ID	Client ID
245391001	RE15-10-7918
245391002	RE15-10-7915
245391003	RE15-10-7920
245391004	RE15-10-7914
245391005	RE15-10-7919
245391006	RE15-10-7921
245391007	RE15-10-7916
245391008	RE15-10-7917
245391009	RE15-10-7922
245391010	RE15-10-8053
245391011	RE15-10-8054
1202024806	Method Blank (MB) ICP
1202024807	Laboratory Control Sample (LCS)
1202024810	245391001(RE15-10-7918L) Serial Dilution (SD)
1202024808	245391001(RE15-10-7918D) Sample Duplicate (DUP)
1202024809	245391001(RE15-10-7918S) Matrix Spike (MS)
1202024812	245391001(RE15-10-7918SD) Matrix Spike Duplicate (MSD)
1202024796	Method Blank (MB) ICP-MS
1202024797	Laboratory Control Sample (LCS)
1202024800	245391001(RE15-10-7918L) Serial Dilution (SD)

1202024798	245391001(RE15-10-7918D) Sample Duplicate (DUP)
1202024799	245391001(RE15-10-7918S) Matrix Spike (MS)
1202024801	245391001(RE15-10-7918SD) Matrix Spike Duplicate (MSD)
1202025295	Method Blank (MB) CVAA
1202025296	Laboratory Control Sample (LCS)
1202025299	245391001(RE15-10-7918L) Serial Dilution (SD)
1202025297	245391001(RE15-10-7918D) Sample Duplicate (DUP)
1202025298	245391001(RE15-10-7918S) Matrix Spike (MS)
1202025300	245391001(RE15-10-7918SD) Matrix Spike Duplicate (MSD)

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

Method/Analysis Information

Analytical Batch:	945417, 945412 and 945625
Prep Batch :	945415, 945411 and 945624
Standard Operating Procedures:	GL-MA-E-013 REV# 20, GL-MA-E-009 REV# 19, GL-MA-E-014 REV# 21 and GL-MA-E-010 REV# 23
Analytical Method:	SW846 3050B/6010B, SW846 3050B/6020 and SW846 7471A
Prep Method :	SW846 3050B and SW846 7471A Prep

Preparation/Analytical Method Verification

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

System Configuration

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

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 9000 inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/- 7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

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

Calibration Information

Instrument Calibration

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

CRDL Requirements

All CRDL 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 method blank analyzed with this SDG did not contain analytes of interest above the CRDL, with the exception of aluminum, iron, manganese and zinc. The samples in this SDG contained aluminum, iron, manganese and zinc at concentrations more than ten times the amount present in the method blank (MB), therefore the data was not adversely affected.

Laboratory Control Sample (LCS) Recovery

The laboratory control sample (LCS) met the recommended acceptance criteria for percent recovery (%R) for all elements of interest, with the exception of antimony. Silver and/or antimony did not meet the recovery acceptance criteria for the LCS. Per the DOE-AL statement of work, page forty, silver and antimony are exempt from the re-digestion requirement for LCS failures.

Quality Control (QC) Sample Statement

The following sample was selected as the quality control (QC) sample for this SDG: 245391001.

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 exception of nickel, selenium, barium, magnesium, manganese and potassium, as indicated by the "N" qualifiers.

Matrix Spike Duplicate (MSD) Recovery Statement

The percent recovery (%R) obtained from the MSD analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. The MSD met the recommended quality control acceptance criteria for percent recoveries for all applicable analytes with the exception of nickel, selenium, barium, magnesium and potassium, as indicated by the "N" qualifiers.

MS/MSD Relative Percent Difference (RPD) Statement

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

Duplicate Relative Percent Difference (RPD) Statement

The relative percent difference (RPD) obtained from the designated sample duplicate (DUP) is evaluated based on acceptance criteria of 20% when the sample is 5X the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the contract required detection limit (RL), a control of +/-RL is used to evaluate the DUP results. All applicable analytes met these requirements with the exception of barium, cobalt and lead, 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 245391002, 245391003, 245391005, 245391006, 245391009 and 245391010 required dilutions for uranium in order to bring over range concentrations within the linear calibration range of the instrument. The samples in this SDG were diluted the standard 2x for solids on the ICPMS.

Preparation Information

The samples in this SDG were prepared exactly according to the cited SOP.

Miscellaneous Information**Electronic Packaging Comment**

This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Data Exception (DER) Documentation

Data exception reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. The following DERs were generated for this SDG: 792617 and 792667. 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: 2/19/10

Sample Data Summary

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1390

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245391001

BASIS: Dry Weight

DATE COLLECTED 19-JAN-10

CLIENT ID: RE15-10-7918

LEVEL: Low

DATE RECEIVED 23-JAN-10

MATRIX: SOIL

%SOLIDS: 90.4

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	7110000	ug/Kg		7340	21600	21600	1	P	HSC	02/16/10 20:08	021610-1	945417
7440-36-0	Antimony	1080	ug/Kg	U	356	1080	1080	1	P	HSC	02/16/10 20:08	021610-1	945417
7440-38-2	Arsenic	2.25	mg/kg		0.213	1.07	1.07	2	MS	BAJ	02/16/10 03:52	100215-2	945412
7440-39-3	Barium	88200	ug/Kg	*N	108	539	539	1	P	HSC	02/16/10 20:08	021610-1	945417
7440-41-7	Beryllium	0.908	mg/kg		0.0213	0.107	0.107	2	MS	BAJ	02/16/10 16:48	100216-8	945412
7440-43-9	Cadmium	539	ug/Kg	U	108	539	539	1	P	HSC	02/16/10 20:08	021610-1	945417
7440-70-2	Calcium	2480000	ug/Kg		8630	27000	27000	1	P	HSC	02/16/10 20:08	021610-1	945417
7440-47-3	Chromium	19600	ug/Kg		162	539	539	1	P	HSC	02/16/10 20:08	021610-1	945417
7440-48-4	Cobalt	2460	ug/Kg	*	162	539	539	1	P	HSC	02/16/10 20:08	021610-1	945417
7440-50-8	Copper	4570	ug/Kg		324	1080	1080	1	P	HSC	02/16/10 20:08	021610-1	945417
7439-89-6	Iron	10600000	ug/Kg		8630	27000	27000	1	P	HSC	02/16/10 20:08	021610-1	945417
7439-92-1	Lead	5380	ug/Kg	*	270	1080	1080	1	P	HSC	02/16/10 20:08	021610-1	945417
7439-95-4	Magnesium	1440000	ug/Kg	N	9170	32400	32400	1	P	HSC	02/16/10 20:08	021610-1	945417
7439-96-5	Manganese	202000	ug/Kg	N	216	1080	1080	1	P	HSC	02/16/10 20:08	021610-1	945417
7439-97-6	Mercury	25.6	ug/kg		4.15	12.2	12.2	1	AV	JXL1	02/04/10 11:20	020410S1-9	945625
7440-02-0	Nickel	7.97	mg/kg	N	0.107	0.426	0.426	2	MS	BAJ	02/16/10 16:48	100216-8	945412
7440-09-7	Potassium	888000	ug/Kg	N	6900	27000	27000	1	P	HSC	02/16/10 20:08	021610-1	945417
7782-49-2	Selenium	1.07	mg/kg	UN	0.533	1.07	1.07	2	MS	BAJ	02/16/10 03:52	100215-2	945412
7440-22-4	Silver	574	ug/Kg		108	539	539	1	P	HSC	02/16/10 20:08	021610-1	945417
7440-23-5	Sodium	352000	ug/Kg		7550	27000	27000	1	P	HSC	02/16/10 20:08	021610-1	945417
7440-28-0	Thallium	0.172	mg/kg	J	0.064	0.213	0.213	2	MS	BAJ	02/16/10 03:52	100215-2	945412
7440-61-1	Uranium	1.31	mg/kg		0.0141	0.0426	0.0426	2	MS	BAJ	02/16/10 10:28	100216-3	945412
7440-62-2	Vanadium	9930	ug/Kg		108	539	539	1	P	HSC	02/16/10 20:08	021610-1	945417
7440-66-6	Zinc	34000	ug/Kg		356	1080	1080	1	P	HSC	02/16/10 20:08	021610-1	945417

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
945412	945411	SW846 3050B	0.519	g	50	mL	02/04/10	BXA1
945417	945415	SW846 3050B	0.513	g	50	mL	02/04/10	BXA1
945625	945624	SW846 7471A Prep	0.544	g	30	mL	02/03/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1390

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245391002

BASIS: Dry Weight

DATE COLLECTED 19-JAN-10

CLIENT ID: RE15-10-7915

LEVEL: Low

DATE RECEIVED 23-JAN-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	7420000	ug/Kg		8240	24200	24200	1	P	HSC	02/16/10 20:43	021610-1	945417
7440-36-0	Antimony	2160	ug/Kg		400	1210	1210	1	P	HSC	02/16/10 20:43	021610-1	945417
7440-38-2	Arsenic	1.79	mg/kg		0.231	1.15	1.15	2	MS	BAJ	02/16/10 04:35	100215-2	945412
7440-39-3	Barium	125000	ug/Kg	*N	121	606	606	1	P	HSC	02/16/10 20:43	021610-1	945417
7440-41-7	Beryllium	5.87	mg/kg		0.0231	0.115	0.115	2	MS	BAJ	02/16/10 16:59	100216-8	945412
7440-43-9	Cadmium	164	ug/Kg	J	121	606	606	1	P	HSC	02/16/10 20:43	021610-1	945417
7440-70-2	Calcium	2150000	ug/Kg		9690	30300	30300	1	P	HSC	02/16/10 20:43	021610-1	945417
7440-47-3	Chromium	12600	ug/Kg		182	606	606	1	P	HSC	02/16/10 20:43	021610-1	945417
7440-48-4	Cobalt	3660	ug/Kg	*	182	606	606	1	P	HSC	02/16/10 20:43	021610-1	945417
7440-50-8	Copper	451000	ug/Kg		363	1210	1210	1	P	HSC	02/16/10 20:43	021610-1	945417
7439-89-6	Iron	12200000	ug/Kg		9690	30300	30300	1	P	HSC	02/16/10 20:43	021610-1	945417
7439-92-1	Lead	125000	ug/Kg	*	303	1210	1210	1	P	HSC	02/16/10 20:43	021610-1	945417
7439-95-4	Magnesium	1640000	ug/Kg	N	10300	36300	36300	1	P	HSC	02/16/10 20:43	021610-1	945417
7439-96-5	Manganese	220000	ug/Kg	N	242	1210	1210	1	P	HSC	02/16/10 20:43	021610-1	945417
7439-97-6	Mercury	6.39	ug/kg	J	4.43	13	13	1	AV	JXL1	02/04/10 11:34	020410S1-9	945625
7440-02-0	Nickel	7.02	mg/kg	N	0.115	0.462	0.462	2	MS	BAJ	02/16/10 16:59	100216-8	945412
7440-09-7	Potassium	1070000	ug/Kg	N	7750	30300	30300	1	P	HSC	02/16/10 20:43	021610-1	945417
7782-49-2	Selenium	1.15	mg/kg	UN	0.577	1.15	1.15	2	MS	BAJ	02/16/10 04:35	100215-2	945412
7440-22-4	Silver	1150	ug/Kg		121	606	606	1	P	HSC	02/16/10 20:43	021610-1	945417
7440-23-5	Sodium	94600	ug/Kg		8480	30300	30300	1	P	HSC	02/16/10 20:43	021610-1	945417
7440-28-0	Thallium	0.129	mg/kg	J	0.0692	0.231	0.231	2	MS	BAJ	02/16/10 04:35	100215-2	945412
7440-61-1	Uranium	73.1	mg/kg		0.762	2.31	2.31	100	MS	BAJ	02/16/10 10:36	100216-3	945412
7440-62-2	Vanadium	19900	ug/Kg		121	606	606	1	P	HSC	02/16/10 20:43	021610-1	945417
7440-66-6	Zinc	56100	ug/Kg		400	1210	1210	1	P	HSC	02/16/10 20:43	021610-1	945417

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
945412	945411	SW846 3050B	0.53	g	50	mL	02/04/10	BXA1
945417	945415	SW846 3050B	0.505	g	50	mL	02/04/10	BXA1
945625	945624	SW846 7471A Prep	0.563	g	30	mL	02/03/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1390

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245391003

BASIS: Dry Weight

DATE COLLECTED 19-JAN-10

CLIENT ID: RE15-10-7920

LEVEL: Low

DATE RECEIVED 23-JAN-10

MATRIX: SOIL

%SOLIDS: 96.3

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	3000000	ug/Kg		7020	20700	20700	1	P	HSC	02/16/10 20:50	021610-1	945417
7440-36-0	Antimony	464	ug/Kg	J	341	1030	1030	1	P	HSC	02/16/10 20:50	021610-1	945417
7440-38-2	Arsenic	1.37	mg/kg		0.208	1.04	1.04	2	MS	BAJ	02/16/10 04:41	100215-2	945412
7440-39-3	Barium	45900	ug/Kg	*N	103	516	516	1	P	HSC	02/16/10 20:50	021610-1	945417
7440-41-7	Beryllium	1.29	mg/kg		0.0208	0.104	0.104	2	MS	BAJ	02/16/10 17:01	100216-8	945412
7440-43-9	Cadmium	516	ug/Kg	U	103	516	516	1	P	HSC	02/16/10 20:50	021610-1	945417
7440-70-2	Calcium	773000	ug/Kg		8260	25800	25800	1	P	HSC	02/16/10 20:50	021610-1	945417
7440-47-3	Chromium	7830	ug/Kg		155	516	516	1	P	HSC	02/16/10 20:50	021610-1	945417
7440-48-4	Cobalt	2800	ug/Kg	*	155	516	516	1	P	HSC	02/16/10 20:50	021610-1	945417
7440-50-8	Copper	47600	ug/Kg		310	1030	1030	1	P	HSC	02/16/10 20:50	021610-1	945417
7439-89-6	Iron	12900000	ug/Kg		8260	25800	25800	1	P	HSC	02/16/10 20:50	021610-1	945417
7439-92-1	Lead	25800	ug/Kg	*	258	1030	1030	1	P	HSC	02/16/10 20:50	021610-1	945417
7439-95-4	Magnesium	489000	ug/Kg	N	8780	31000	31000	1	P	HSC	02/16/10 20:50	021610-1	945417
7439-96-5	Manganese	382000	ug/Kg	N	207	1030	1030	1	P	HSC	02/16/10 20:50	021610-1	945417
7439-97-6	Mercury	7.49	ug/kg	J	4.08	12	12	1	AV	JXL1	02/04/10 11:36	020410S1-9	945625
7440-02-0	Nickel	4.74	mg/kg	N	0.104	0.416	0.416	2	MS	BAJ	02/16/10 17:01	100216-8	945412
7440-09-7	Potassium	583000	ug/Kg	N	6610	25800	25800	1	P	HSC	02/16/10 20:50	021610-1	945417
7782-49-2	Selenium	1.04	mg/kg	UN	0.519	1.04	1.04	2	MS	BAJ	02/16/10 04:41	100215-2	945412
7440-22-4	Silver	1230	ug/Kg		103	516	516	1	P	HSC	02/16/10 20:50	021610-1	945417
7440-23-5	Sodium	229000	ug/Kg		7230	25800	25800	1	P	HSC	02/16/10 20:50	021610-1	945417
7440-28-0	Thallium	0.208	mg/kg	U	0.0623	0.208	0.208	2	MS	BAJ	02/16/10 04:41	100215-2	945412
7440-61-1	Uranium	26.1	mg/kg		0.686	2.08	2.08	100	MS	BAJ	02/16/10 10:38	100216-3	945412
7440-62-2	Vanadium	5400	ug/Kg		103	516	516	1	P	HSC	02/16/10 20:50	021610-1	945417
7440-66-6	Zinc	34600	ug/Kg		341	1030	1030	1	P	HSC	02/16/10 20:50	021610-1	945417

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
945412	945411	SW846 3050B	0.5	g	50	mL	02/04/10	BXA1
945417	945415	SW846 3050B	0.503	g	50	mL	02/04/10	BXA1
945625	945624	SW846 7471A Prep	0.52	g	30	mL	02/03/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1390

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245391004

BASIS: Dry Weight

DATE COLLECTED 19-JAN-10

CLIENT ID: RE15-10-7914

LEVEL: Low

DATE RECEIVED 23-JAN-10

MATRIX: SOIL

%SOLIDS: 90.4

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	6160000	ug/Kg		7260	21400	21400	1	P	HSC	02/16/10 21:10	021610-1	945417
7440-36-0	Antimony	1070	ug/Kg	U	352	1070	1070	1	P	HSC	02/16/10 21:10	021610-1	945417
7440-38-2	Arsenic	1.44	mg/kg		0.21	1.05	1.05	2	MS	BAJ	02/16/10 04:48	100215-2	945412
7440-39-3	Barium	93600	ug/Kg	*N	107	534	534	1	P	HSC	02/16/10 21:10	021610-1	945417
7440-41-7	Beryllium	0.529	mg/kg		0.021	0.105	0.105	2	MS	BAJ	02/16/10 17:10	100216-8	945412
7440-43-9	Cadmium	534	ug/Kg	U	107	534	534	1	P	HSC	02/16/10 21:10	021610-1	945417
7440-70-2	Calcium	2250000	ug/Kg		8540	26700	26700	1	P	HSC	02/16/10 21:10	021610-1	945417
7440-47-3	Chromium	7790	ug/Kg		160	534	534	1	P	HSC	02/16/10 21:10	021610-1	945417
7440-48-4	Cobalt	8490	ug/Kg	*	160	534	534	1	P	HSC	02/16/10 21:10	021610-1	945417
7440-50-8	Copper	6430	ug/Kg		320	1070	1070	1	P	HSC	02/16/10 21:10	021610-1	945417
7439-89-6	Iron	15000000	ug/Kg		8540	26700	26700	1	P	HSC	02/16/10 21:10	021610-1	945417
7439-92-1	Lead	5190	ug/Kg	*	267	1070	1070	1	P	HSC	02/16/10 21:10	021610-1	945417
7439-95-4	Magnesium	1350000	ug/Kg	N	9080	32000	32000	1	P	HSC	02/16/10 21:10	021610-1	945417
7439-96-5	Manganese	257000	ug/Kg	N	214	1070	1070	1	P	HSC	02/16/10 21:10	021610-1	945417
7439-97-6	Mercury	19.6	ug/kg		4.05	11.9	11.9	1	AV	JXL1	02/04/10 11:38	020410S1-9	945625
7440-02-0	Nickel	6.09	mg/kg	N	0.105	0.421	0.421	2	MS	BAJ	02/16/10 17:10	100216-8	945412
7440-09-7	Potassium	847000	ug/Kg	N	6840	26700	26700	1	P	HSC	02/16/10 21:10	021610-1	945417
7782-49-2	Selenium	1.05	mg/kg	UN	0.526	1.05	1.05	2	MS	BAJ	02/16/10 04:48	100215-2	945412
7440-22-4	Silver	976	ug/Kg		107	534	534	1	P	HSC	02/16/10 21:10	021610-1	945417
7440-23-5	Sodium	206000	ug/Kg		7480	26700	26700	1	P	HSC	02/16/10 21:10	021610-1	945417
7440-28-0	Thallium	0.0785	mg/kg	J	0.0631	0.21	0.21	2	MS	BAJ	02/16/10 04:48	100215-2	945412
7440-61-1	Uranium	5.45	mg/kg		0.0139	0.0421	0.0421	2	MS	BAJ	02/16/10 10:43	100216-3	945412
7440-62-2	Vanadium	10200	ug/Kg		107	534	534	1	P	HSC	02/16/10 21:10	021610-1	945417
7440-66-6	Zinc	47100	ug/Kg		352	1070	1070	1	P	HSC	02/16/10 21:10	021610-1	945417

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
945412	945411	SW846 3050B	0.526	g	50	mL	02/04/10	BXA1
945417	945415	SW846 3050B	0.518	g	50	mL	02/04/10	BXA1
945625	945624	SW846 7471A Prep	0.558	g	30	mL	02/03/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1390

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245391005

BASIS: Dry Weight

DATE COLLECTED 19-JAN-10

CLIENT ID: RE15-10-7919

LEVEL: Low

DATE RECEIVED 23-JAN-10

MATRIX: SOIL

%SOLIDS: 77

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	8030000	ug/Kg		7840	23100	23100	1	P	HSC	02/16/10 21:17	021610-1	945417
7440-36-0	Antimony	1150	ug/Kg	U	381	1150	1150	1	P	HSC	02/16/10 21:17	021610-1	945417
7440-38-2	Arsenic	2.13	mg/kg		0.258	1.29	1.29	2	MS	BAJ	02/16/10 04:54	100215-2	945412
7440-39-3	Barium	84600	ug/Kg	*N	115	577	577	1	P	HSC	02/16/10 21:17	021610-1	945417
7440-41-7	Beryllium	2.95	mg/kg		0.0258	0.129	0.129	2	MS	BAJ	02/16/10 17:12	100216-8	945412
7440-43-9	Cadmium	577	ug/Kg	U	115	577	577	1	P	HSC	02/16/10 21:17	021610-1	945417
7440-70-2	Calcium	1830000	ug/Kg		9230	28800	28800	1	P	HSC	02/16/10 21:17	021610-1	945417
7440-47-3	Chromium	8280	ug/Kg		173	577	577	1	P	HSC	02/16/10 21:17	021610-1	945417
7440-48-4	Cobalt	3450	ug/Kg	*	173	577	577	1	P	HSC	02/16/10 21:17	021610-1	945417
7440-50-8	Copper	156000	ug/Kg		346	1150	1150	1	P	HSC	02/16/10 21:17	021610-1	945417
7439-89-6	Iron	12900000	ug/Kg		9230	28800	28800	1	P	HSC	02/16/10 21:17	021610-1	945417
7439-92-1	Lead	36100	ug/Kg	*	288	1150	1150	1	P	HSC	02/16/10 21:17	021610-1	945417
7439-95-4	Magnesium	1550000	ug/Kg	N	9800	34600	34600	1	P	HSC	02/16/10 21:17	021610-1	945417
7439-96-5	Manganese	250000	ug/Kg	N	231	1150	1150	1	P	HSC	02/16/10 21:17	021610-1	945417
7439-97-6	Mercury	23	ug/kg		4.97	14.6	14.6	1	AV	JXL1	02/04/10 11:40	020410S1-9	945625
7440-02-0	Nickel	6.72	mg/kg	N	0.129	0.517	0.517	2	MS	BAJ	02/16/10 17:12	100216-8	945412
7440-09-7	Potassium	1240000	ug/Kg	N	7380	28800	28800	1	P	HSC	02/16/10 21:17	021610-1	945417
7782-49-2	Selenium	1.29	mg/kg	UN	0.646	1.29	1.29	2	MS	BAJ	02/16/10 04:54	100215-2	945412
7440-22-4	Silver	917	ug/Kg		115	577	577	1	P	HSC	02/16/10 21:17	021610-1	945417
7440-23-5	Sodium	69600	ug/Kg		8070	28800	28800	1	P	HSC	02/16/10 21:17	021610-1	945417
7440-28-0	Thallium	0.137	mg/kg	J	0.0775	0.258	0.258	2	MS	BAJ	02/16/10 04:54	100215-2	945412
7440-61-1	Uranium	38.2	mg/kg		0.853	2.58	2.58	100	MS	BAJ	02/16/10 10:45	100216-3	945412
7440-62-2	Vanadium	18400	ug/Kg		115	577	577	1	P	HSC	02/16/10 21:17	021610-1	945417
7440-66-6	Zinc	41000	ug/Kg		381	1150	1150	1	P	HSC	02/16/10 21:17	021610-1	945417

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
945412	945411	SW846 3050B	0.5	g	50	mL	02/04/10	BXA1
945417	945415	SW846 3050B	0.56	g	50	mL	02/04/10	BXA1
945625	945624	SW846 7471A Prep	0.53	g	30	mL	02/03/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1390

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245391006

BASIS: Dry Weight

DATE COLLECTED 19-JAN-10

CLIENT ID: RE15-10-7921

LEVEL: Low

DATE RECEIVED 23-JAN-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	5090000	ug/Kg		7710	22700	22700	1	P	HSC	02/16/10 21:25	021610-1	945417
7440-36-0	Antimony	2200	ug/Kg		374	1130	1130	1	P	HSC	02/16/10 21:25	021610-1	945417
7440-38-2	Arsenic	1.89	mg/kg		0.243	1.22	1.22	2	MS	BAJ	02/16/10 05:00	100215-2	945412
7440-39-3	Barium	64900	ug/Kg	*N	113	567	567	1	P	HSC	02/16/10 21:25	021610-1	945417
7440-41-7	Beryllium	2.32	mg/kg		0.0243	0.122	0.122	2	MS	BAJ	02/16/10 17:14	100216-8	945412
7440-43-9	Cadmium	143	ug/Kg	J	113	567	567	1	P	HSC	02/16/10 21:25	021610-1	945417
7440-70-2	Calcium	1200000	ug/Kg		9070	28300	28300	1	P	HSC	02/16/10 21:25	021610-1	945417
7440-47-3	Chromium	6380	ug/Kg		170	567	567	1	P	HSC	02/16/10 21:25	021610-1	945417
7440-48-4	Cobalt	3450	ug/Kg	*	170	567	567	1	P	HSC	02/16/10 21:25	021610-1	945417
7440-50-8	Copper	260000	ug/Kg		340	1130	1130	1	P	HSC	02/16/10 21:25	021610-1	945417
7439-89-6	Iron	9890000	ug/Kg		9070	28300	28300	1	P	HSC	02/16/10 21:25	021610-1	945417
7439-92-1	Lead	91800	ug/Kg	*	283	1130	1130	1	P	HSC	02/16/10 21:25	021610-1	945417
7439-95-4	Magnesium	945000	ug/Kg	N	9630	34000	34000	1	P	HSC	02/16/10 21:25	021610-1	945417
7439-96-5	Manganese	252000	ug/Kg	N	227	1130	1130	1	P	HSC	02/16/10 21:25	021610-1	945417
7439-97-6	Mercury	8.69	ug/kg	J	4.73	13.9	13.9	1	AV	JXL1	02/04/10 11:42	020410S1-9	945625
7440-02-0	Nickel	5.06	mg/kg	N	0.122	0.487	0.487	2	MS	BAJ	02/16/10 17:14	100216-8	945412
7440-09-7	Potassium	885000	ug/Kg	N	7250	28300	28300	1	P	HSC	02/16/10 21:25	021610-1	945417
7782-49-2	Selenium	1.22	mg/kg	UN	0.609	1.22	1.22	2	MS	BAJ	02/16/10 05:00	100215-2	945412
7440-22-4	Silver	697	ug/Kg		113	567	567	1	P	HSC	02/16/10 21:25	021610-1	945417
7440-23-5	Sodium	56800	ug/Kg		7930	28300	28300	1	P	HSC	02/16/10 21:25	021610-1	945417
7440-28-0	Thallium	0.0854	mg/kg	J	0.073	0.243	0.243	2	MS	BAJ	02/16/10 05:00	100215-2	945412
7440-61-1	Uranium	30.9	mg/kg		0.803	2.43	2.43	100	MS	BAJ	02/16/10 10:47	100216-3	945412
7440-62-2	Vanadium	13700	ug/Kg		113	567	567	1	P	HSC	02/16/10 21:25	021610-1	945417
7440-66-6	Zinc	44600	ug/Kg		374	1130	1130	1	P	HSC	02/16/10 21:25	021610-1	945417

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
945412	945411	SW846 3050B	0.5	g	50	mL	02/04/10	BXA1
945417	945415	SW846 3050B	0.537	g	50	mL	02/04/10	BXA1
945625	945624	SW846 7471A Prep	0.525	g	30	mL	02/03/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1390

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245391007

BASIS: Dry Weight

DATE COLLECTED 19-JAN-10

CLIENT ID: RE15-10-7916

LEVEL: Low

DATE RECEIVED 23-JAN-10

MATRIX: SOIL

%SOLIDS: 93.2

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1140000	ug/Kg		7000	20600	20600	1	P	HSC	02/16/10 21:32	021610-1	945417
7440-36-0	Antimony	1030	ug/Kg	U	340	1030	1030	1	P	HSC	02/16/10 21:32	021610-1	945417
7440-38-2	Arsenic	0.899	mg/kg	J	0.195	0.977	0.977	2	MS	BAJ	02/16/10 05:18	100215-2	945412
7440-39-3	Barium	22900	ug/Kg	*N	103	515	515	1	P	HSC	02/16/10 21:32	021610-1	945417
7440-41-7	Beryllium	0.609	mg/kg		0.0195	0.0977	0.0977	2	MS	BAJ	02/16/10 17:17	100216-8	945412
7440-43-9	Cadmium	515	ug/Kg	U	103	515	515	1	P	HSC	02/16/10 21:32	021610-1	945417
7440-70-2	Calcium	379000	ug/Kg		8240	25700	25700	1	P	HSC	02/16/10 21:32	021610-1	945417
7440-47-3	Chromium	1950	ug/Kg		154	515	515	1	P	HSC	02/16/10 21:32	021610-1	945417
7440-48-4	Cobalt	1920	ug/Kg	*	154	515	515	1	P	HSC	02/16/10 21:32	021610-1	945417
7440-50-8	Copper	7130	ug/Kg		309	1030	1030	1	P	HSC	02/16/10 21:32	021610-1	945417
7439-89-6	Iron	10900000	ug/Kg		8240	25700	25700	1	P	HSC	02/16/10 21:32	021610-1	945417
7439-92-1	Lead	6050	ug/Kg	*	257	1030	1030	1	P	HSC	02/16/10 21:32	021610-1	945417
7439-95-4	Magnesium	148000	ug/Kg	N	8750	30900	30900	1	P	HSC	02/16/10 21:32	021610-1	945417
7439-96-5	Manganese	252000	ug/Kg	N	206	1030	1030	1	P	HSC	02/16/10 21:32	021610-1	945417
7439-97-6	Mercury	10.1	ug/kg	J	4.24	12.5	12.5	1	AV	JXL1	02/04/10 11:44	020410S1-9	945625
7440-02-0	Nickel	3.6	mg/kg	N	0.0977	0.391	0.391	2	MS	BAJ	02/16/10 17:17	100216-8	945412
7440-09-7	Potassium	413000	ug/Kg	N	6590	25700	25700	1	P	HSC	02/16/10 21:32	021610-1	945417
7782-49-2	Selenium	0.977	mg/kg	UN	0.489	0.977	0.977	2	MS	BAJ	02/16/10 05:18	100215-2	945412
7440-22-4	Silver	738	ug/Kg		103	515	515	1	P	HSC	02/16/10 21:32	021610-1	945417
7440-23-5	Sodium	241000	ug/Kg		7210	25700	25700	1	P	HSC	02/16/10 21:32	021610-1	945417
7440-28-0	Thallium	0.195	mg/kg	U	0.0586	0.195	0.195	2	MS	BAJ	02/16/10 05:18	100215-2	945412
7440-61-1	Uranium	8.75	mg/kg		0.0129	0.0391	0.0391	2	MS	BAJ	02/16/10 10:49	100216-3	945412
7440-62-2	Vanadium	1990	ug/Kg		103	515	515	1	P	HSC	02/16/10 21:32	021610-1	945417
7440-66-6	Zinc	33800	ug/Kg		340	1030	1030	1	P	HSC	02/16/10 21:32	021610-1	945417

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
945412	945411	SW846 3050B	0.549	g	50	mL	02/04/10	BXA1
945417	945415	SW846 3050B	0.521	g	50	mL	02/04/10	BXA1
945625	945624	SW846 7471A Prep	0.516	g	30	mL	02/03/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1390

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245391008

BASIS: Dry Weight

DATE COLLECTED 19-JAN-10

CLIENT ID: RE15-10-7917

LEVEL: Low

DATE RECEIVED 23-JAN-10

MATRIX: SOIL

%SOLIDS: 80

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	5210000	ug/Kg		8160	24000	24000	1	P	HSC	02/16/10 21:39	021610-1	945417
7440-36-0	Antimony	1200	ug/Kg	U	396	1200	1200	1	P	HSC	02/16/10 21:39	021610-1	945417
7440-38-2	Arsenic	1.8	mg/kg		0.246	1.23	1.23	2	MS	BAJ	02/16/10 05:25	100215-2	945412
7440-39-3	Barium	34400	ug/Kg	*N	120	600	600	1	P	HSC	02/16/10 21:39	021610-1	945417
7440-41-7	Beryllium	0.565	mg/kg		0.0246	0.123	0.123	2	MS	BAJ	02/16/10 17:19	100216-8	945412
7440-43-9	Cadmium	600	ug/Kg	U	120	600	600	1	P	HSC	02/16/10 21:39	021610-1	945417
7440-70-2	Calcium	834000	ug/Kg		9600	30000	30000	1	P	HSC	02/16/10 21:39	021610-1	945417
7440-47-3	Chromium	6080	ug/Kg		180	600	600	1	P	HSC	02/16/10 21:39	021610-1	945417
7440-48-4	Cobalt	4180	ug/Kg	*	180	600	600	1	P	HSC	02/16/10 21:39	021610-1	945417
7440-50-8	Copper	5100	ug/Kg		360	1200	1200	1	P	HSC	02/16/10 21:39	021610-1	945417
7439-89-6	Iron	10300000	ug/Kg		9600	30000	30000	1	P	HSC	02/16/10 21:39	021610-1	945417
7439-92-1	Lead	9290	ug/Kg	*	300	1200	1200	1	P	HSC	02/16/10 21:39	021610-1	945417
7439-95-4	Magnesium	951000	ug/Kg	N	10200	36000	36000	1	P	HSC	02/16/10 21:39	021610-1	945417
7439-96-5	Manganese	189000	ug/Kg	N	240	1200	1200	1	P	HSC	02/16/10 21:39	021610-1	945417
7439-97-6	Mercury	14.6	ug/kg	J	5.02	14.8	14.8	1	AV	JXL1	02/04/10 11:49	020410S1-9	945625
7440-02-0	Nickel	5.62	mg/kg	N	0.123	0.492	0.492	2	MS	BAJ	02/16/10 17:19	100216-8	945412
7440-09-7	Potassium	854000	ug/Kg	N	7680	30000	30000	1	P	HSC	02/16/10 21:39	021610-1	945417
7782-49-2	Selenium	1.23	mg/kg	UN	0.614	1.23	1.23	2	MS	BAJ	02/16/10 05:25	100215-2	945412
7440-22-4	Silver	688	ug/Kg		120	600	600	1	P	HSC	02/16/10 21:39	021610-1	945417
7440-23-5	Sodium	96800	ug/Kg		8400	30000	30000	1	P	HSC	02/16/10 21:39	021610-1	945417
7440-28-0	Thallium	0.140	mg/kg	J	0.0737	0.246	0.246	2	MS	BAJ	02/16/10 05:25	100215-2	945412
7440-61-1	Uranium	2.5	mg/kg		0.0162	0.0492	0.0492	2	MS	BAJ	02/16/10 10:50	100216-3	945412
7440-62-2	Vanadium	16500	ug/Kg		120	600	600	1	P	HSC	02/16/10 21:39	021610-1	945417
7440-66-6	Zinc	18600	ug/Kg		396	1200	1200	1	P	HSC	02/16/10 21:39	021610-1	945417

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
945412	945411	SW846 3050B	0.51	g	50	mL	02/04/10	BXA1
945417	945415	SW846 3050B	0.522	g	50	mL	02/04/10	BXA1
945625	945624	SW846 7471A Prep	0.509	g	30	mL	02/03/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1390

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245391009

BASIS: Dry Weight

DATE COLLECTED 19-JAN-10

CLIENT ID: RE15-10-7922

LEVEL: Low

DATE RECEIVED 23-JAN-10

MATRIX: SOIL

%SOLIDS: 90.1

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	7490000	ug/Kg		7230	21300	21300	1	P	HSC	02/16/10 21:46	021610-1	945417
7440-36-0	Antimony	836	ug/Kg	J	351	1060	1060	1	P	HSC	02/16/10 21:46	021610-1	945417
7440-38-2	Arsenic	2.2	mg/kg		0.209	1.04	1.04	2	MS	BAJ	02/16/10 05:31	100215-2	945412
7440-39-3	Barium	71800	ug/Kg	*N	106	531	531	1	P	HSC	02/16/10 21:46	021610-1	945417
7440-41-7	Beryllium	1.6	mg/kg		0.0209	0.104	0.104	2	MS	BAJ	02/16/10 17:21	100216-8	945412
7440-43-9	Cadmium	531	ug/Kg	U	106	531	531	1	P	HSC	02/16/10 21:46	021610-1	945417
7440-70-2	Calcium	1750000	ug/Kg		8500	26600	26600	1	P	HSC	02/16/10 21:46	021610-1	945417
7440-47-3	Chromium	9580	ug/Kg		159	531	531	1	P	HSC	02/16/10 21:46	021610-1	945417
7440-48-4	Cobalt	5920	ug/Kg	*	159	531	531	1	P	HSC	02/16/10 21:46	021610-1	945417
7440-50-8	Copper	726000	ug/Kg		319	1060	1060	1	P	HSC	02/16/10 21:46	021610-1	945417
7439-89-6	Iron	19900000	ug/Kg		8500	26600	26600	1	P	HSC	02/16/10 21:46	021610-1	945417
7439-92-1	Lead	65800	ug/Kg	*	266	1060	1060	1	P	HSC	02/16/10 21:46	021610-1	945417
7439-95-4	Magnesium	1430000	ug/Kg	N	9030	31900	31900	1	P	HSC	02/16/10 21:46	021610-1	945417
7439-96-5	Manganese	246000	ug/Kg	N	213	1060	1060	1	P	HSC	02/16/10 21:46	021610-1	945417
7439-97-6	Mercury	26.4	ug/kg		4.21	12.4	12.4	1	AV	JXL1	02/04/10 11:51	020410S1-9	945625
7440-02-0	Nickel	7.35	mg/kg	N	0.104	0.418	0.418	2	MS	BAJ	02/16/10 17:21	100216-8	945412
7440-09-7	Potassium	1000000	ug/Kg	N	6800	26600	26600	1	P	HSC	02/16/10 21:46	021610-1	945417
7782-49-2	Selenium	1.04	mg/kg	UN	0.522	1.04	1.04	2	MS	BAJ	02/16/10 05:31	100215-2	945412
7440-22-4	Silver	1260	ug/Kg		106	531	531	1	P	HSC	02/16/10 21:46	021610-1	945417
7440-23-5	Sodium	152000	ug/Kg		7440	26600	26600	1	P	HSC	02/16/10 21:46	021610-1	945417
7440-28-0	Thallium	0.103	mg/kg	J	0.0627	0.209	0.209	2	MS	BAJ	02/16/10 05:31	100215-2	945412
7440-61-1	Uranium	23.5	mg/kg		0.689	2.09	2.09	100	MS	BAJ	02/16/10 10:52	100216-3	945412
7440-62-2	Vanadium	14700	ug/Kg		106	531	531	1	P	HSC	02/16/10 21:46	021610-1	945417
7440-66-6	Zinc	44200	ug/Kg		351	1060	1060	1	P	HSC	02/16/10 21:46	021610-1	945417

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
945412	945411	SW846 3050B	0.531	g	50	mL	02/04/10	BXA1
945417	945415	SW846 3050B	0.522	g	50	mL	02/04/10	BXA1
945625	945624	SW846 7471A Prep	0.537	g	30	mL	02/03/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1390

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245391010

BASIS: Dry Weight

DATE COLLECTED 19-JAN-10

CLIENT ID: RE15-10-8053

LEVEL: Low

DATE RECEIVED 23-JAN-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	6860000	ug/Kg		7450	21900	21900	1	P	HSC	02/16/10 21:53	021610-1	945417
7440-36-0	Antimony	1380	ug/Kg		361	1100	1100	1	P	HSC	02/16/10 21:53	021610-1	945417
7440-38-2	Arsenic	3.28	mg/kg		0.248	1.24	1.24	2	MS	BAJ	02/16/10 05:37	100215-2	945412
7440-39-3	Barium	111000	ug/Kg	*N	110	548	548	1	P	HSC	02/16/10 21:53	021610-1	945417
7440-41-7	Beryllium	5.2	mg/kg		0.0248	0.124	0.124	2	MS	BAJ	02/16/10 17:23	100216-8	945412
7440-43-9	Cadmium	548	ug/Kg	U	110	548	548	1	P	HSC	02/16/10 21:53	021610-1	945417
7440-70-2	Calcium	2040000	ug/Kg		8760	27400	27400	1	P	HSC	02/16/10 21:53	021610-1	945417
7440-47-3	Chromium	7330	ug/Kg		164	548	548	1	P	HSC	02/16/10 21:53	021610-1	945417
7440-48-4	Cobalt	2530	ug/Kg	*	164	548	548	1	P	HSC	02/16/10 21:53	021610-1	945417
7440-50-8	Copper	609000	ug/Kg		329	1100	1100	1	P	HSC	02/16/10 21:53	021610-1	945417
7439-89-6	Iron	10400000	ug/Kg		8760	27400	27400	1	P	HSC	02/16/10 21:53	021610-1	945417
7439-92-1	Lead	131000	ug/Kg	*	274	1100	1100	1	P	HSC	02/16/10 21:53	021610-1	945417
7439-95-4	Magnesium	1260000	ug/Kg	N	9310	32900	32900	1	P	HSC	02/16/10 21:53	021610-1	945417
7439-96-5	Manganese	285000	ug/Kg	N	219	1100	1100	1	P	HSC	02/16/10 21:53	021610-1	945417
7439-97-6	Mercury	28	ug/kg		4.75	14	14	1	AV	JXL1	02/04/10 11:53	020410S1-9	945625
7440-02-0	Nickel	7.85	mg/kg	N	0.124	0.495	0.495	2	MS	BAJ	02/16/10 17:23	100216-8	945412
7440-09-7	Potassium	935000	ug/Kg	N	7010	27400	27400	1	P	HSC	02/16/10 21:53	021610-1	945417
7782-49-2	Selenium	1.24	mg/kg	UN	0.619	1.24	1.24	2	MS	BAJ	02/16/10 05:37	100215-2	945412
7440-22-4	Silver	959	ug/Kg		110	548	548	1	P	HSC	02/16/10 21:53	021610-1	945417
7440-23-5	Sodium	55200	ug/Kg		7670	27400	27400	1	P	HSC	02/16/10 21:53	021610-1	945417
7440-28-0	Thallium	0.134	mg/kg	J	0.0743	0.248	0.248	2	MS	BAJ	02/16/10 05:37	100215-2	945412
7440-61-1	Uranium	87	mg/kg		0.817	2.48	2.48	100	MS	BAJ	02/16/10 10:54	100216-3	945412
7440-62-2	Vanadium	14000	ug/Kg		110	548	548	1	P	HSC	02/16/10 21:53	021610-1	945417
7440-66-6	Zinc	35100	ug/Kg		361	1100	1100	1	P	HSC	02/16/10 21:53	021610-1	945417

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt/vol.	Units	Final wt/vol.	Units	Date	Analyst
945412	945411	SW846 3050B	0.5	g	50	mL	02/04/10	BXA1
945417	945415	SW846 3050B	0.565	g	50	mL	02/04/10	BXA1
945625	945624	SW846 7471A Prep	0.532	g	30	mL	02/03/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1390

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245391011

BASIS: Dry Weight

DATE COLLECTED 19-JAN-10

CLIENT ID: RE15-10-8054

LEVEL: Low

DATE RECEIVED 23-JAN-10

MATRIX: SOIL

%SOLIDS: 90.5

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	5680000	ug/Kg		7090	20800	20800	1	P	HSC	02/16/10 22:00	021610-1	945417
7440-36-0	Antimony	1040	ug/Kg	U	344	1040	1040	1	P	HSC	02/16/10 22:00	021610-1	945417
7440-38-2	Arsenic	1.52	mg/kg		0.207	1.03	1.03	2	MS	BAJ	02/16/10 05:43	100215-2	945412
7440-39-3	Barium	52600	ug/Kg	*N	104	521	521	1	P	HSC	02/16/10 22:00	021610-1	945417
7440-41-7	Beryllium	0.598	mg/kg		0.0207	0.103	0.103	2	MS	BAJ	02/16/10 17:26	100216-8	945412
7440-43-9	Cadmium	521	ug/Kg	U	104	521	521	1	P	HSC	02/16/10 22:00	021610-1	945417
7440-70-2	Calcium	2060000	ug/Kg		8340	26100	26100	1	P	HSC	02/16/10 22:00	021610-1	945417
7440-47-3	Chromium	17400	ug/Kg		156	521	521	1	P	HSC	02/16/10 22:00	021610-1	945417
7440-48-4	Cobalt	2440	ug/Kg	*	156	521	521	1	P	HSC	02/16/10 22:00	021610-1	945417
7440-50-8	Copper	3960	ug/Kg		313	1040	1040	1	P	HSC	02/16/10 22:00	021610-1	945417
7439-89-6	Iron	9630000	ug/Kg		8340	26100	26100	1	P	HSC	02/16/10 22:00	021610-1	945417
7439-92-1	Lead	4800	ug/Kg	*	261	1040	1040	1	P	HSC	02/16/10 22:00	021610-1	945417
7439-95-4	Magnesium	1190000	ug/Kg	N	8860	31300	31300	1	P	HSC	02/16/10 22:00	021610-1	945417
7439-96-5	Manganese	178000	ug/Kg	N	208	1040	1040	1	P	HSC	02/16/10 22:00	021610-1	945417
7439-97-6	Mercury	24.2	ug/kg		4.43	13	13	1	AV	JXL1	02/04/10 11:55	020410S1-9	945625
7440-02-0	Nickel	5.5	mg/kg	N	0.103	0.413	0.413	2	MS	BAJ	02/16/10 17:26	100216-8	945412
7440-09-7	Potassium	720000	ug/Kg	N	6670	26100	26100	1	P	HSC	02/16/10 22:00	021610-1	945417
7782-49-2	Selenium	1.03	mg/kg	UN	0.516	1.03	1.03	2	MS	BAJ	02/16/10 05:43	100215-2	945412
7440-22-4	Silver	577	ug/Kg		104	521	521	1	P	HSC	02/16/10 22:00	021610-1	945417
7440-23-5	Sodium	280000	ug/Kg		7300	26100	26100	1	P	HSC	02/16/10 22:00	021610-1	945417
7440-28-0	Thallium	0.0795	mg/kg	J	0.062	0.207	0.207	2	MS	BAJ	02/16/10 05:43	100215-2	945412
7440-61-1	Uranium	1.24	mg/kg		0.0136	0.0413	0.0413	2	MS	BAJ	02/16/10 10:55	100216-3	945412
7440-62-2	Vanadium	8030	ug/Kg		104	521	521	1	P	HSC	02/16/10 22:00	021610-1	945417
7440-66-6	Zinc	31800	ug/Kg		344	1040	1040	1	P	HSC	02/16/10 22:00	021610-1	945417

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
945412	945411	SW846 3050B	0.535	g	50	mL	02/04/10	BXA1
945417	945415	SW846 3050B	0.53	g	50	mL	02/04/10	BXA1
945625	945624	SW846 7471A Prep	0.509	g	30	mL	02/03/10	TXB3

Quality Control Summary

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1390

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICV01										
	Mercury	5.13	ug/L	5	ug/L	102.6	90.0 – 110.0	AV	04-FEB-10 08:58	020410S1-9
	Arsenic	50.1	ug/L	50	ug/L	100.3	90.0 – 110.0	MS	16-FEB-10 01:49	100215-2
	Selenium	51.2	ug/L	50	ug/L	102.5	90.0 – 110.0	MS	16-FEB-10 01:49	100215-2
	Thallium	52	ug/L	50	ug/L	104	90.0 – 110.0	MS	16-FEB-10 01:49	100215-2
	Uranium	51.1	ug/L	50	ug/L	102.3	90.0 – 110.0	MS	16-FEB-10 10:12	100216-3
	Aluminum	4930	ug/L	5000	ug/L	98.7	90.0 – 110.0	P	16-FEB-10 12:18	021610-1
	Antimony	514	ug/L	500	ug/L	102.7	90.0 – 110.0	P	16-FEB-10 12:18	021610-1
	Barium	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	16-FEB-10 12:18	021610-1
	Cadmium	478	ug/L	500	ug/L	95.5	90.0 – 110.0	P	16-FEB-10 12:18	021610-1
	Calcium	4950	ug/L	5000	ug/L	99	90.0 – 110.0	P	16-FEB-10 12:18	021610-1
	Chromium	475	ug/L	500	ug/L	94.9	90.0 – 110.0	P	16-FEB-10 12:18	021610-1
	Cobalt	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	16-FEB-10 12:18	021610-1
	Copper	490	ug/L	500	ug/L	98	90.0 – 110.0	P	16-FEB-10 12:18	021610-1
	Iron	5080	ug/L	5000	ug/L	101.6	90.0 – 110.0	P	16-FEB-10 12:18	021610-1
	Lead	494	ug/L	500	ug/L	98.7	90.0 – 110.0	P	16-FEB-10 12:18	021610-1
	Magnesium	5320	ug/L	5000	ug/L	106.3	90.0 – 110.0	P	16-FEB-10 12:18	021610-1
	Manganese	506	ug/L	500	ug/L	101.1	90.0 – 110.0	P	16-FEB-10 12:18	021610-1
	Potassium	2410	ug/L	2500	ug/L	96.4	90.0 – 110.0	P	16-FEB-10 12:18	021610-1
	Silver	254	ug/L	250	ug/L	101.5	90.0 – 110.0	P	16-FEB-10 12:18	021610-1
	Sodium	2490	ug/L	2500	ug/L	99.5	90.0 – 110.0	P	16-FEB-10 12:18	021610-1
	Vanadium	502	ug/L	500	ug/L	100.3	90.0 – 110.0	P	16-FEB-10 12:18	021610-1
	Zinc	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	16-FEB-10 12:18	021610-1
	Beryllium	51.8	ug/L	50	ug/L	103.7	90.0 – 110.0	MS	16-FEB-10 16:21	100216-8
	Nickel	52.1	ug/L	50	ug/L	104.3	90.0 – 110.0	MS	16-FEB-10 16:21	100216-8
CCV01										
	Mercury	4.97	ug/L	5	ug/L	99.3	80.0 – 120.0	AV	04-FEB-10 09:03	020410S1-9
	Arsenic	49.8	ug/L	50	ug/L	99.5	90.0 – 110.0	MS	16-FEB-10 02:20	100215-2
	Selenium	50.4	ug/L	50	ug/L	100.8	90.0 – 110.0	MS	16-FEB-10 02:20	100215-2
	Thallium	49.4	ug/L	50	ug/L	98.7	90.0 – 110.0	MS	16-FEB-10 02:20	100215-2
	Uranium	51.9	ug/L	50	ug/L	103.7	90.0 – 110.0	MS	16-FEB-10 10:20	100216-3

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1390

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Aluminum	5130	ug/L	5000	ug/L	102.6	90.0 – 110.0	P	16-FEB-10 13:04	021610-1
	Antimony	520	ug/L	500	ug/L	104.1	90.0 – 110.0	P	16-FEB-10 13:04	021610-1
	Barium	497	ug/L	500	ug/L	99.5	90.0 – 110.0	P	16-FEB-10 13:04	021610-1
	Cadmium	486	ug/L	500	ug/L	97.2	90.0 – 110.0	P	16-FEB-10 13:04	021610-1
	Calcium	5070	ug/L	5000	ug/L	101.3	90.0 – 110.0	P	16-FEB-10 13:04	021610-1
	Chromium	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	16-FEB-10 13:04	021610-1
	Cobalt	493	ug/L	500	ug/L	98.5	90.0 – 110.0	P	16-FEB-10 13:04	021610-1
	Copper	491	ug/L	500	ug/L	98.3	90.0 – 110.0	P	16-FEB-10 13:04	021610-1
	Iron	5110	ug/L	5000	ug/L	102.3	90.0 – 110.0	P	16-FEB-10 13:04	021610-1
	Lead	502	ug/L	500	ug/L	100.3	90.0 – 110.0	P	16-FEB-10 13:04	021610-1
	Magnesium	5220	ug/L	5000	ug/L	104.4	90.0 – 110.0	P	16-FEB-10 13:04	021610-1
	Manganese	500	ug/L	500	ug/L	100	90.0 – 110.0	P	16-FEB-10 13:04	021610-1
	Potassium	5290	ug/L	5000	ug/L	105.8	90.0 – 110.0	P	16-FEB-10 13:04	021610-1
	Silver	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	16-FEB-10 13:04	021610-1
	Sodium	10200	ug/L	10000	ug/L	102.1	90.0 – 110.0	P	16-FEB-10 13:04	021610-1
	Vanadium	497	ug/L	500	ug/L	99.5	90.0 – 110.0	P	16-FEB-10 13:04	021610-1
	Zinc	492	ug/L	500	ug/L	98.3	90.0 – 110.0	P	16-FEB-10 13:04	021610-1
	Beryllium	52.6	ug/L	50	ug/L	105.2	90.0 – 110.0	MS	16-FEB-10 16:32	100216-8
	Nickel	52.8	ug/L	50	ug/L	105.6	90.0 – 110.0	MS	16-FEB-10 16:32	100216-8
CCV02										
	Mercury	4.92	ug/L	5	ug/L	98.5	80.0 – 120.0	AV	04-FEB-10 09:26	020410S1-9
	Arsenic	49.7	ug/L	50	ug/L	99.4	90.0 – 110.0	MS	16-FEB-10 02:38	100215-2
	Selenium	50.2	ug/L	50	ug/L	100.4	90.0 – 110.0	MS	16-FEB-10 02:38	100215-2
	Thallium	51.4	ug/L	50	ug/L	102.7	90.0 – 110.0	MS	16-FEB-10 02:38	100215-2
	Uranium	52.3	ug/L	50	ug/L	104.6	90.0 – 110.0	MS	16-FEB-10 10:40	100216-3
	Aluminum	5060	ug/L	5000	ug/L	101.2	90.0 – 110.0	P	16-FEB-10 13:26	021610-1
	Antimony	505	ug/L	500	ug/L	101	90.0 – 110.0	P	16-FEB-10 13:26	021610-1
	Barium	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	16-FEB-10 13:26	021610-1
	Cadmium	484	ug/L	500	ug/L	96.9	90.0 – 110.0	P	16-FEB-10 13:26	021610-1
	Calcium	5040	ug/L	5000	ug/L	100.8	90.0 – 110.0	P	16-FEB-10 13:26	021610-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1390

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Chromium	495	ug/L	500	ug/L	99.1	90.0 – 110.0	P	16-FEB-10 13:26	021610-1
	Cobalt	492	ug/L	500	ug/L	98.4	90.0 – 110.0	P	16-FEB-10 13:26	021610-1
	Copper	493	ug/L	500	ug/L	98.7	90.0 – 110.0	P	16-FEB-10 13:26	021610-1
	Iron	5090	ug/L	5000	ug/L	101.9	90.0 – 110.0	P	16-FEB-10 13:26	021610-1
	Lead	501	ug/L	500	ug/L	100.3	90.0 – 110.0	P	16-FEB-10 13:26	021610-1
	Magnesium	5160	ug/L	5000	ug/L	103.1	90.0 – 110.0	P	16-FEB-10 13:26	021610-1
	Manganese	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	16-FEB-10 13:26	021610-1
	Potassium	5040	ug/L	5000	ug/L	100.8	90.0 – 110.0	P	16-FEB-10 13:26	021610-1
	Silver	496	ug/L	500	ug/L	99.3	90.0 – 110.0	P	16-FEB-10 13:26	021610-1
	Sodium	10100	ug/L	10000	ug/L	101.4	90.0 – 110.0	P	16-FEB-10 13:26	021610-1
	Vanadium	499	ug/L	500	ug/L	99.7	90.0 – 110.0	P	16-FEB-10 13:26	021610-1
	Zinc	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	16-FEB-10 13:26	021610-1
	Beryllium	53.2	ug/L	50	ug/L	106.4	90.0 – 110.0	MS	16-FEB-10 16:39	100216-8
	Nickel	51.9	ug/L	50	ug/L	103.8	90.0 – 110.0	MS	16-FEB-10 16:39	100216-8
CCV03	Mercury	4.99	ug/L	5	ug/L	99.8	80.0 – 120.0	AV	04-FEB-10 09:50	020410S1-9
	Arsenic	49.3	ug/L	50	ug/L	98.7	90.0 – 110.0	MS	16-FEB-10 03:27	100215-2
	Selenium	49.8	ug/L	50	ug/L	99.5	90.0 – 110.0	MS	16-FEB-10 03:27	100215-2
	Thallium	50.2	ug/L	50	ug/L	100.4	90.0 – 110.0	MS	16-FEB-10 03:27	100215-2
	Uranium	53	ug/L	50	ug/L	106.1	90.0 – 110.0	MS	16-FEB-10 10:57	100216-3
	Aluminum	5150	ug/L	5000	ug/L	103.1	90.0 – 110.0	P	16-FEB-10 15:01	021610-1
	Antimony	513	ug/L	500	ug/L	102.6	90.0 – 110.0	P	16-FEB-10 15:01	021610-1
	Barium	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	16-FEB-10 15:01	021610-1
	Cadmium	479	ug/L	500	ug/L	95.9	90.0 – 110.0	P	16-FEB-10 15:01	021610-1
	Calcium	5170	ug/L	5000	ug/L	103.3	90.0 – 110.0	P	16-FEB-10 15:01	021610-1
	Chromium	487	ug/L	500	ug/L	97.3	90.0 – 110.0	P	16-FEB-10 15:01	021610-1
	Cobalt	495	ug/L	500	ug/L	99	90.0 – 110.0	P	16-FEB-10 15:01	021610-1
	Copper	510	ug/L	500	ug/L	102	90.0 – 110.0	P	16-FEB-10 15:01	021610-1
	Iron	5450	ug/L	5000	ug/L	108.9	90.0 – 110.0	P	16-FEB-10 15:01	021610-1
	Lead	496	ug/L	500	ug/L	99.1	90.0 – 110.0	P	16-FEB-10 15:01	021610-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1390

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Magnesium	5250	ug/L	5000	ug/L	104.9	90.0 – 110.0	P	16-FEB-10 15:01	021610-1
	Manganese	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	16-FEB-10 15:01	021610-1
	Potassium	5370	ug/L	5000	ug/L	107.5	90.0 – 110.0	P	16-FEB-10 15:01	021610-1
	Silver	503	ug/L	500	ug/L	100.5	90.0 – 110.0	P	16-FEB-10 15:01	021610-1
	Sodium	12300	ug/L	10000	ug/L	122.7	90.0 – 110.0	P	16-FEB-10 15:01	021610-1
	Vanadium	496	ug/L	500	ug/L	99.3	90.0 – 110.0	P	16-FEB-10 15:01	021610-1
	Zinc	495	ug/L	500	ug/L	98.9	90.0 – 110.0	P	16-FEB-10 15:01	021610-1
	Beryllium	52.2	ug/L	50	ug/L	104.3	90.0 – 110.0	MS	16-FEB-10 17:04	100216-8
	Nickel	51.4	ug/L	50	ug/L	102.7	90.0 – 110.0	MS	16-FEB-10 17:04	100216-8
CCV04										
	Mercury	5.02	ug/L	5	ug/L	100.4	80.0 – 120.0	AV	04-FEB-10 10:13	020410S1-9
	Arsenic	48.9	ug/L	50	ug/L	97.8	90.0 – 110.0	MS	16-FEB-10 04:23	100215-2
	Selenium	49.5	ug/L	50	ug/L	99	90.0 – 110.0	MS	16-FEB-10 04:23	100215-2
	Thallium	48.9	ug/L	50	ug/L	97.8	90.0 – 110.0	MS	16-FEB-10 04:23	100215-2
	Aluminum	5200	ug/L	5000	ug/L	104	90.0 – 110.0	P	16-FEB-10 15:21	021610-1
	Antimony	513	ug/L	500	ug/L	102.7	90.0 – 110.0	P	16-FEB-10 15:21	021610-1
	Barium	495	ug/L	500	ug/L	99.1	90.0 – 110.0	P	16-FEB-10 15:21	021610-1
	Cadmium	485	ug/L	500	ug/L	96.9	90.0 – 110.0	P	16-FEB-10 15:21	021610-1
	Calcium	5110	ug/L	5000	ug/L	102.1	90.0 – 110.0	P	16-FEB-10 15:21	021610-1
	Chromium	485	ug/L	500	ug/L	97.1	90.0 – 110.0	P	16-FEB-10 15:21	021610-1
	Cobalt	496	ug/L	500	ug/L	99.1	90.0 – 110.0	P	16-FEB-10 15:21	021610-1
	Copper	503	ug/L	500	ug/L	100.7	90.0 – 110.0	P	16-FEB-10 15:21	021610-1
	Iron	5310	ug/L	5000	ug/L	106.1	90.0 – 110.0	P	16-FEB-10 15:21	021610-1
	Lead	488	ug/L	500	ug/L	97.5	90.0 – 110.0	P	16-FEB-10 15:21	021610-1
	Magnesium	5160	ug/L	5000	ug/L	103.3	90.0 – 110.0	P	16-FEB-10 15:21	021610-1
	Manganese	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	16-FEB-10 15:21	021610-1
	Potassium	5320	ug/L	5000	ug/L	106.3	90.0 – 110.0	P	16-FEB-10 15:21	021610-1
	Silver	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	16-FEB-10 15:21	021610-1
	Sodium	11500	ug/L	10000	ug/L	114.7	90.0 – 110.0	P	16-FEB-10 15:21	021610-1
	Vanadium	495	ug/L	500	ug/L	99.1	90.0 – 110.0	P	16-FEB-10 15:21	021610-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1390

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
CCV05	Zinc	492	ug/L	500	ug/L	98.4	90.0 – 110.0	P	16-FEB-10 15:21	021610-1
	Beryllium	53.8	ug/L	50	ug/L	107.7	90.0 – 110.0	MS	16-FEB-10 17:28	100216-8
	Nickel	51.6	ug/L	50	ug/L	103.2	90.0 – 110.0	MS	16-FEB-10 17:28	100216-8
CCV05	Mercury	5.02	ug/L	5	ug/L	100.4	80.0 – 120.0	AV	04-FEB-10 10:36	020410S1-9
	Arsenic	49.6	ug/L	50	ug/L	99.1	90.0 – 110.0	MS	16-FEB-10 05:06	100215-2
	Selenium	49	ug/L	50	ug/L	98	90.0 – 110.0	MS	16-FEB-10 05:06	100215-2
	Thallium	49	ug/L	50	ug/L	98	90.0 – 110.0	MS	16-FEB-10 05:06	100215-2
	Aluminum	4900	ug/L	5000	ug/L	98.1	90.0 – 110.0	P	16-FEB-10 15:39	021610-1
	Antimony	504	ug/L	500	ug/L	100.7	90.0 – 110.0	P	16-FEB-10 15:39	021610-1
	Barium	489	ug/L	500	ug/L	97.7	90.0 – 110.0	P	16-FEB-10 15:39	021610-1
	Cadmium	477	ug/L	500	ug/L	95.4	90.0 – 110.0	P	16-FEB-10 15:39	021610-1
	Calcium	4860	ug/L	5000	ug/L	97.1	90.0 – 110.0	P	16-FEB-10 15:39	021610-1
	Chromium	477	ug/L	500	ug/L	95.3	90.0 – 110.0	P	16-FEB-10 15:39	021610-1
	Cobalt	487	ug/L	500	ug/L	97.3	90.0 – 110.0	P	16-FEB-10 15:39	021610-1
	Copper	495	ug/L	500	ug/L	99.1	90.0 – 110.0	P	16-FEB-10 15:39	021610-1
	Iron	5050	ug/L	5000	ug/L	101	90.0 – 110.0	P	16-FEB-10 15:39	021610-1
	Lead	479	ug/L	500	ug/L	95.8	90.0 – 110.0	P	16-FEB-10 15:39	021610-1
	Magnesium	4880	ug/L	5000	ug/L	97.7	90.0 – 110.0	P	16-FEB-10 15:39	021610-1
	Manganese	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	16-FEB-10 15:39	021610-1
	Potassium	5020	ug/L	5000	ug/L	100.4	90.0 – 110.0	P	16-FEB-10 15:39	021610-1
	Silver	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	16-FEB-10 15:39	021610-1
CCV06	Sodium	11100	ug/L	10000	ug/L	110.8	90.0 – 110.0	P	16-FEB-10 15:39	021610-1
	Vanadium	486	ug/L	500	ug/L	97.3	90.0 – 110.0	P	16-FEB-10 15:39	021610-1
	Zinc	485	ug/L	500	ug/L	96.9	90.0 – 110.0	P	16-FEB-10 15:39	021610-1
	Mercury	5.04	ug/L	5	ug/L	100.9	80.0 – 120.0	AV	04-FEB-10 10:59	020410S1-9
	Arsenic	49.7	ug/L	50	ug/L	99.4	90.0 – 110.0	MS	16-FEB-10 05:49	100215-2
CCV06	Selenium	49.5	ug/L	50	ug/L	99	90.0 – 110.0	MS	16-FEB-10 05:49	100215-2
	Thallium	50.1	ug/L	50	ug/L	100.2	90.0 – 110.0	MS	16-FEB-10 05:49	100215-2

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1390

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Aluminum	4960	ug/L	5000	ug/L	99.1	90.0 – 110.0	P	16-FEB-10 16:07	021610-1
	Antimony	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	16-FEB-10 16:07	021610-1
	Barium	490	ug/L	500	ug/L	98	90.0 – 110.0	P	16-FEB-10 16:07	021610-1
	Cadmium	478	ug/L	500	ug/L	95.5	90.0 – 110.0	P	16-FEB-10 16:07	021610-1
	Calcium	4960	ug/L	5000	ug/L	99.2	90.0 – 110.0	P	16-FEB-10 16:07	021610-1
	Chromium	479	ug/L	500	ug/L	95.7	90.0 – 110.0	P	16-FEB-10 16:07	021610-1
	Cobalt	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	16-FEB-10 16:07	021610-1
	Copper	495	ug/L	500	ug/L	99	90.0 – 110.0	P	16-FEB-10 16:07	021610-1
	Iron	5150	ug/L	5000	ug/L	102.9	90.0 – 110.0	P	16-FEB-10 16:07	021610-1
	Lead	480	ug/L	500	ug/L	96.1	90.0 – 110.0	P	16-FEB-10 16:07	021610-1
	Magnesium	4990	ug/L	5000	ug/L	99.8	90.0 – 110.0	P	16-FEB-10 16:07	021610-1
	Manganese	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	16-FEB-10 16:07	021610-1
	Potassium	5020	ug/L	5000	ug/L	100.4	90.0 – 110.0	P	16-FEB-10 16:07	021610-1
	Silver	494	ug/L	500	ug/L	98.7	90.0 – 110.0	P	16-FEB-10 16:07	021610-1
	Sodium	10800	ug/L	10000	ug/L	107.6	90.0 – 110.0	P	16-FEB-10 16:07	021610-1
	Vanadium	487	ug/L	500	ug/L	97.5	90.0 – 110.0	P	16-FEB-10 16:07	021610-1
	Zinc	485	ug/L	500	ug/L	97	90.0 – 110.0	P	16-FEB-10 16:07	021610-1
CCV07	Mercury	4.91	ug/L	5	ug/L	98.3	80.0 – 120.0	AV	04-FEB-10 11:22	020410S1-9
	Aluminum	4940	ug/L	5000	ug/L	98.8	90.0 – 110.0	P	16-FEB-10 16:40	021610-1
	Antimony	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	16-FEB-10 16:40	021610-1
	Barium	489	ug/L	500	ug/L	97.7	90.0 – 110.0	P	16-FEB-10 16:40	021610-1
	Cadmium	468	ug/L	500	ug/L	93.5	90.0 – 110.0	P	16-FEB-10 16:40	021610-1
	Calcium	4930	ug/L	5000	ug/L	98.6	90.0 – 110.0	P	16-FEB-10 16:40	021610-1
	Chromium	476	ug/L	500	ug/L	95.1	90.0 – 110.0	P	16-FEB-10 16:40	021610-1
	Cobalt	483	ug/L	500	ug/L	96.6	90.0 – 110.0	P	16-FEB-10 16:40	021610-1
	Copper	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	16-FEB-10 16:40	021610-1
	Iron	5100	ug/L	5000	ug/L	101.9	90.0 – 110.0	P	16-FEB-10 16:40	021610-1
	Lead	482	ug/L	500	ug/L	96.4	90.0 – 110.0	P	16-FEB-10 16:40	021610-1
	Magnesium	5030	ug/L	5000	ug/L	100.6	90.0 – 110.0	P	16-FEB-10 16:40	021610-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1390

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Manganese	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	16-FEB-10 16:40	021610-1
	Potassium	4970	ug/L	5000	ug/L	99.4	90.0 – 110.0	P	16-FEB-10 16:40	021610-1
	Silver	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	16-FEB-10 16:40	021610-1
	Sodium	10600	ug/L	10000	ug/L	106.3	90.0 – 110.0	P	16-FEB-10 16:40	021610-1
	Vanadium	485	ug/L	500	ug/L	97.1	90.0 – 110.0	P	16-FEB-10 16:40	021610-1
	Zinc	484	ug/L	500	ug/L	96.8	90.0 – 110.0	P	16-FEB-10 16:40	021610-1
CCV08										
	Mercury	4.85	ug/L	5	ug/L	96.9	80.0 – 120.0	AV	04-FEB-10 11:45	020410S1-9
	Aluminum	4910	ug/L	5000	ug/L	98.2	90.0 – 110.0	P	16-FEB-10 17:42	021610-1
	Antimony	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	16-FEB-10 17:42	021610-1
	Barium	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	16-FEB-10 17:42	021610-1
	Cadmium	478	ug/L	500	ug/L	95.5	90.0 – 110.0	P	16-FEB-10 17:42	021610-1
	Calcium	4850	ug/L	5000	ug/L	97	90.0 – 110.0	P	16-FEB-10 17:42	021610-1
	Chromium	475	ug/L	500	ug/L	95.1	90.0 – 110.0	P	16-FEB-10 17:42	021610-1
	Cobalt	490	ug/L	500	ug/L	98.1	90.0 – 110.0	P	16-FEB-10 17:42	021610-1
	Copper	499	ug/L	500	ug/L	99.9	90.0 – 110.0	P	16-FEB-10 17:42	021610-1
	Iron	5010	ug/L	5000	ug/L	100.3	90.0 – 110.0	P	16-FEB-10 17:42	021610-1
	Lead	478	ug/L	500	ug/L	95.6	90.0 – 110.0	P	16-FEB-10 17:42	021610-1
	Magnesium	4830	ug/L	5000	ug/L	96.6	90.0 – 110.0	P	16-FEB-10 17:42	021610-1
	Manganese	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	16-FEB-10 17:42	021610-1
	Potassium	4920	ug/L	5000	ug/L	98.3	90.0 – 110.0	P	16-FEB-10 17:42	021610-1
	Silver	496	ug/L	500	ug/L	99.1	90.0 – 110.0	P	16-FEB-10 17:42	021610-1
	Sodium	10300	ug/L	10000	ug/L	103.5	90.0 – 110.0	P	16-FEB-10 17:42	021610-1
	Vanadium	487	ug/L	500	ug/L	97.4	90.0 – 110.0	P	16-FEB-10 17:42	021610-1
	Zinc	487	ug/L	500	ug/L	97.4	90.0 – 110.0	P	16-FEB-10 17:42	021610-1
CCV09										
	Mercury	4.96	ug/L	5	ug/L	99.1	80.0 – 120.0	AV	04-FEB-10 12:09	020410S1-9
	Aluminum	4830	ug/L	5000	ug/L	96.7	90.0 – 110.0	P	16-FEB-10 18:44	021610-1
	Antimony	492	ug/L	500	ug/L	98.4	90.0 – 110.0	P	16-FEB-10 18:44	021610-1
	Barium	487	ug/L	500	ug/L	97.3	90.0 – 110.0	P	16-FEB-10 18:44	021610-1

METALS

-2a-

Initial and Continuing Calibration Verification

SDG No: 10-1390

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Cadmium	472	ug/L	500	ug/L	94.4	90.0 - 110.0	P	16-FEB-10 18:44	021610-1
	Calcium	4780	ug/L	5000	ug/L	95.7	90.0 - 110.0	P	16-FEB-10 18:44	021610-1
	Chromium	471	ug/L	500	ug/L	94.1	90.0 - 110.0	P	16-FEB-10 18:44	021610-1
	Cobalt	485	ug/L	500	ug/L	97	90.0 - 110.0	P	16-FEB-10 18:44	021610-1
	Copper	493	ug/L	500	ug/L	98.6	90.0 - 110.0	P	16-FEB-10 18:44	021610-1
	Iron	5030	ug/L	5000	ug/L	100.6	90.0 - 110.0	P	16-FEB-10 18:44	021610-1
	Lead	477	ug/L	500	ug/L	95.4	90.0 - 110.0	P	16-FEB-10 18:44	021610-1
	Magnesium	4800	ug/L	5000	ug/L	95.9	90.0 - 110.0	P	16-FEB-10 18:44	021610-1
	Manganese	493	ug/L	500	ug/L	98.6	90.0 - 110.0	P	16-FEB-10 18:44	021610-1
	Potassium	4810	ug/L	5000	ug/L	96.2	90.0 - 110.0	P	16-FEB-10 18:44	021610-1
	Silver	490	ug/L	500	ug/L	98.1	90.0 - 110.0	P	16-FEB-10 18:44	021610-1
	Sodium	10200	ug/L	10000	ug/L	101.9	90.0 - 110.0	P	16-FEB-10 18:44	021610-1
	Vanadium	482	ug/L	500	ug/L	96.4	90.0 - 110.0	P	16-FEB-10 18:44	021610-1
	Zinc	482	ug/L	500	ug/L	96.4	90.0 - 110.0	P	16-FEB-10 18:44	021610-1
CCV10	Aluminum	4900	ug/L	5000	ug/L	97.9	90.0 - 110.0	P	16-FEB-10 19:41	021610-1
	Antimony	496	ug/L	500	ug/L	99.3	90.0 - 110.0	P	16-FEB-10 19:41	021610-1
	Barium	493	ug/L	500	ug/L	98.6	90.0 - 110.0	P	16-FEB-10 19:41	021610-1
	Cadmium	478	ug/L	500	ug/L	95.5	90.0 - 110.0	P	16-FEB-10 19:41	021610-1
	Calcium	4900	ug/L	5000	ug/L	98.1	90.0 - 110.0	P	16-FEB-10 19:41	021610-1
	Chromium	477	ug/L	500	ug/L	95.4	90.0 - 110.0	P	16-FEB-10 19:41	021610-1
	Cobalt	491	ug/L	500	ug/L	98.2	90.0 - 110.0	P	16-FEB-10 19:41	021610-1
	Copper	500	ug/L	500	ug/L	100	90.0 - 110.0	P	16-FEB-10 19:41	021610-1
	Iron	5150	ug/L	5000	ug/L	103.1	90.0 - 110.0	P	16-FEB-10 19:41	021610-1
	Lead	484	ug/L	500	ug/L	96.7	90.0 - 110.0	P	16-FEB-10 19:41	021610-1
	Magnesium	4940	ug/L	5000	ug/L	98.9	90.0 - 110.0	P	16-FEB-10 19:41	021610-1
	Manganese	497	ug/L	500	ug/L	99.4	90.0 - 110.0	P	16-FEB-10 19:41	021610-1
	Potassium	4880	ug/L	5000	ug/L	97.6	90.0 - 110.0	P	16-FEB-10 19:41	021610-1
	Silver	496	ug/L	500	ug/L	99.2	90.0 - 110.0	P	16-FEB-10 19:41	021610-1
	Sodium	10300	ug/L	10000	ug/L	103.5	90.0 - 110.0	P	16-FEB-10 19:41	021610-1

METALS

-2a-

Initial and Continuing Calibration Verification

SDG No: 10-1390

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Vanadium	488	ug/L	500	ug/L	97.6	90.0 - 110.0	P	16-FEB-10 19:41	021610-1
	Zinc	489	ug/L	500	ug/L	97.8	90.0 - 110.0	P	16-FEB-10 19:41	021610-1
CCV11										
	Aluminum	5000	ug/L	5000	ug/L	100.1	90.0 - 110.0	P	16-FEB-10 20:57	021610-1
	Antimony	500	ug/L	500	ug/L	100.1	90.0 - 110.0	P	16-FEB-10 20:57	021610-1
	Barium	496	ug/L	500	ug/L	99.1	90.0 - 110.0	P	16-FEB-10 20:57	021610-1
	Cadmium	473	ug/L	500	ug/L	94.5	90.0 - 110.0	P	16-FEB-10 20:57	021610-1
	Calcium	5060	ug/L	5000	ug/L	101.3	90.0 - 110.0	P	16-FEB-10 20:57	021610-1
	Chromium	481	ug/L	500	ug/L	96.2	90.0 - 110.0	P	16-FEB-10 20:57	021610-1
	Cobalt	492	ug/L	500	ug/L	98.3	90.0 - 110.0	P	16-FEB-10 20:57	021610-1
	Copper	501	ug/L	500	ug/L	100.3	90.0 - 110.0	P	16-FEB-10 20:57	021610-1
	Iron	5440	ug/L	5000	ug/L	108.9	90.0 - 110.0	P	16-FEB-10 20:57	021610-1
	Lead	490	ug/L	500	ug/L	98	90.0 - 110.0	P	16-FEB-10 20:57	021610-1
	Magnesium	5260	ug/L	5000	ug/L	105.1	90.0 - 110.0	P	16-FEB-10 20:57	021610-1
	Manganese	502	ug/L	500	ug/L	100.5	90.0 - 110.0	P	16-FEB-10 20:57	021610-1
	Potassium	5020	ug/L	5000	ug/L	100.3	90.0 - 110.0	P	16-FEB-10 20:57	021610-1
	Silver	490	ug/L	500	ug/L	98	90.0 - 110.0	P	16-FEB-10 20:57	021610-1
	Sodium	10700	ug/L	10000	ug/L	107.1	90.0 - 110.0	P	16-FEB-10 20:57	021610-1
	Vanadium	487	ug/L	500	ug/L	97.5	90.0 - 110.0	P	16-FEB-10 20:57	021610-1
	Zinc	489	ug/L	500	ug/L	97.8	90.0 - 110.0	P	16-FEB-10 20:57	021610-1
CCV12										
	Aluminum	5050	ug/L	5000	ug/L	101.1	90.0 - 110.0	P	16-FEB-10 22:07	021610-1
	Antimony	500	ug/L	500	ug/L	100	90.0 - 110.0	P	16-FEB-10 22:07	021610-1
	Barium	498	ug/L	500	ug/L	99.5	90.0 - 110.0	P	16-FEB-10 22:07	021610-1
	Cadmium	484	ug/L	500	ug/L	96.8	90.0 - 110.0	P	16-FEB-10 22:07	021610-1
	Calcium	5070	ug/L	5000	ug/L	101.4	90.0 - 110.0	P	16-FEB-10 22:07	021610-1
	Chromium	484	ug/L	500	ug/L	96.7	90.0 - 110.0	P	16-FEB-10 22:07	021610-1
	Cobalt	498	ug/L	500	ug/L	99.7	90.0 - 110.0	P	16-FEB-10 22:07	021610-1
	Copper	501	ug/L	500	ug/L	100.3	90.0 - 110.0	P	16-FEB-10 22:07	021610-1
	Iron	5470	ug/L	5000	ug/L	109.3	90.0 - 110.0	P	16-FEB-10 22:07	021610-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1390

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Lead	483	ug/L	500	ug/L	96.6	90.0 - 110.0	P	16-FEB-10 22:07	021610-1
	Magnesium	5250	ug/L	5000	ug/L	105.1	90.0 - 110.0	P	16-FEB-10 22:07	021610-1
	Manganese	504	ug/L	500	ug/L	100.8	90.0 - 110.0	P	16-FEB-10 22:07	021610-1
	Potassium	5060	ug/L	5000	ug/L	101.2	90.0 - 110.0	P	16-FEB-10 22:07	021610-1
	Silver	494	ug/L	500	ug/L	98.7	90.0 - 110.0	P	16-FEB-10 22:07	021610-1
	Sodium	10900	ug/L	10000	ug/L	109.3	90.0 - 110.0	P	16-FEB-10 22:07	021610-1
	Vanadium	490	ug/L	500	ug/L	98.1	90.0 - 110.0	P	16-FEB-10 22:07	021610-1
	Zinc	491	ug/L	500	ug/L	98.3	90.0 - 110.0	P	16-FEB-10 22:07	021610-1

METALS
-2b-
CRDL Standard for AA & ICP

SDG No: 10-1390

Contract: LANL01004

Lab Code: GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: HG3,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Advisory Limits (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
CRDL01										
	Mercury	.194	ug/L	.2	ug/L	97	70.0 – 130.0	AV	04-FEB-10 09:01	020410S1-9
	Thallium	1.27	ug/L	1	ug/L	126.5	70.0 – 130.0	MS	16-FEB-10 02:01	100215-2
	Arsenic	5.45	ug/L	5	ug/L	108.9	70.0 – 130.0	MS	16-FEB-10 02:01	100215-2
	Selenium	5.36	ug/L	5	ug/L	107.3	70.0 – 130.0	MS	16-FEB-10 02:01	100215-2
	Uranium	.232	ug/L	.2	ug/L	116	70.0 – 130.0	MS	16-FEB-10 10:15	100216-3
	Nickel	2.32	ug/L	2	ug/L	116.1	70.0 – 130.0	MS	16-FEB-10 16:26	100216-8
	Beryllium	.535	ug/L	.5	ug/L	107	70.0 – 130.0	MS	16-FEB-10 16:26	100216-8
PQL01										
	Aluminum	216	ug/L	200	ug/L	107.9	70.0 – 130.0	P	16-FEB-10 12:32	021610-1
	Iron	98.8	ug/L	100	ug/L	98.8	70.0 – 130.0	P	16-FEB-10 12:32	021610-1
	Lead	10.5	ug/L	10	ug/L	105.3	70.0 – 130.0	P	16-FEB-10 12:32	021610-1
	Magnesium	306	ug/L	300	ug/L	101.9	70.0 – 130.0	P	16-FEB-10 12:32	021610-1
	Manganese	10.3	ug/L	10	ug/L	103	70.0 – 130.0	P	16-FEB-10 12:32	021610-1
	Potassium	141	ug/L	150	ug/L	94	70.0 – 130.0	P	16-FEB-10 12:32	021610-1
	Silver	4.92	ug/L	5	ug/L	98.3	70.0 – 130.0	P	16-FEB-10 12:32	021610-1
	Sodium	304	ug/L	300	ug/L	101.3	70.0 – 130.0	P	16-FEB-10 12:32	021610-1
	Antimony	9.77	ug/L	10	ug/L	97.7	70.0 – 130.0	P	16-FEB-10 12:32	021610-1
	Barium	5.07	ug/L	5	ug/L	101.4	70.0 – 130.0	P	16-FEB-10 12:32	021610-1
	Cadmium	4.77	ug/L	5	ug/L	95.4	70.0 – 130.0	P	16-FEB-10 12:32	021610-1
	Chromium	3.95	ug/L	5	ug/L	79.1	70.0 – 130.0	P	16-FEB-10 12:32	021610-1
	Cobalt	4.75	ug/L	5	ug/L	95	70.0 – 130.0	P	16-FEB-10 12:32	021610-1
	Copper	10	ug/L	10	ug/L	100.3	70.0 – 130.0	P	16-FEB-10 12:32	021610-1
	Vanadium	4.75	ug/L	5	ug/L	94.9	70.0 – 130.0	P	16-FEB-10 12:32	021610-1
	Zinc	10.2	ug/L	10	ug/L	101.9	70.0 – 130.0	P	16-FEB-10 12:32	021610-1
	Calcium	206	ug/L	200	ug/L	103.1	70.0 – 130.0	P	16-FEB-10 12:32	021610-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1390

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
ICB01	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	04-FEB-10 09:00	020410S1-9
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	16-FEB-10 01:55	100215-2
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	16-FEB-10 01:55	100215-2
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	16-FEB-10 01:55	100215-2
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	16-FEB-10 10:13	100216-3
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	16-FEB-10 12:25	021610-1
	Antimony	4.65	+/-10	J	3.3	10.0	SOL	P	16-FEB-10 12:25	021610-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 12:25	021610-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 12:25	021610-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	16-FEB-10 12:25	021610-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	16-FEB-10 12:25	021610-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	16-FEB-10 12:25	021610-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	16-FEB-10 12:25	021610-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	16-FEB-10 12:25	021610-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	16-FEB-10 12:25	021610-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	16-FEB-10 12:25	021610-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	16-FEB-10 12:25	021610-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	16-FEB-10 12:25	021610-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 12:25	021610-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	16-FEB-10 12:25	021610-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 12:25	021610-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	16-FEB-10 12:25	021610-1
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	16-FEB-10 16:24	100216-8
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	16-FEB-10 16:24	100216-8
CCB01	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	04-FEB-10 09:05	020410S1-9
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	16-FEB-10 02:26	100215-2
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	16-FEB-10 02:26	100215-2
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	16-FEB-10 02:26	100215-2
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	16-FEB-10 10:22	100216-3
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	16-FEB-10 13:11	021610-1

SW846

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1390

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>
	Antimony	4.45	+/-10	J	3.3	10.0	SOL	P	16-FEB-10 13:11	021610-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 13:11	021610-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 13:11	021610-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	16-FEB-10 13:11	021610-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	16-FEB-10 13:11	021610-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	16-FEB-10 13:11	021610-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	16-FEB-10 13:11	021610-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	16-FEB-10 13:11	021610-1
	Lead	2.61	+/-10	J	2.5	10.0	SOL	P	16-FEB-10 13:11	021610-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	16-FEB-10 13:11	021610-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	16-FEB-10 13:11	021610-1
	Potassium	90.9	+/-250	J	64.0	250	SOL	P	16-FEB-10 13:11	021610-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 13:11	021610-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	16-FEB-10 13:11	021610-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 13:11	021610-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	16-FEB-10 13:11	021610-1
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	16-FEB-10 16:35	100216-8
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	16-FEB-10 16:35	100216-8
CCB02										
	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	04-FEB-10 09:28	020410S1-9
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	16-FEB-10 02:44	100215-2
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	16-FEB-10 02:44	100215-2
	Thallium	0.485	+/-1	J	0.3	1.0	SOL	MS	16-FEB-10 02:44	100215-2
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	16-FEB-10 10:42	100216-3
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	16-FEB-10 13:33	021610-1
	Antimony	5.52	+/-10	J	3.3	10.0	SOL	P	16-FEB-10 13:33	021610-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 13:33	021610-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 13:33	021610-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	16-FEB-10 13:33	021610-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	16-FEB-10 13:33	021610-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	16-FEB-10 13:33	021610-1

SW846

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1390

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	SOL	P	16-FEB-10 13:33	021610-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	16-FEB-10 13:33	021610-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	16-FEB-10 13:33	021610-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	16-FEB-10 13:33	021610-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	16-FEB-10 13:33	021610-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	16-FEB-10 13:33	021610-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 13:33	021610-1
	Sodium	-74.7	+/-250	J	70.0	250	SOL	P	16-FEB-10 13:33	021610-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 13:33	021610-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	16-FEB-10 13:33	021610-1
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	16-FEB-10 16:41	100216-8
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	16-FEB-10 16:41	100216-8
CCB03	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	04-FEB-10 09:51	020410S1-9
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	16-FEB-10 03:33	100215-2
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	16-FEB-10 03:33	100215-2
	Thallium	0.421	+/-1	J	0.3	1.0	SOL	MS	16-FEB-10 03:33	100215-2
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	16-FEB-10 10:59	100216-3
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	16-FEB-10 15:08	021610-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	16-FEB-10 15:08	021610-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 15:08	021610-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 15:08	021610-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	16-FEB-10 15:08	021610-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	16-FEB-10 15:08	021610-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	16-FEB-10 15:08	021610-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	16-FEB-10 15:08	021610-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	16-FEB-10 15:08	021610-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	16-FEB-10 15:08	021610-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	16-FEB-10 15:08	021610-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	16-FEB-10 15:08	021610-1
	Potassium	280.55	+/-250		64.0	250	SOL	P	16-FEB-10 15:08	021610-1

SW846

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1390

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>
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 15:08	021610-1
	Sodium	1039.7	+/-250		70.0	250	SOL	P	16-FEB-10 15:08	021610-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 15:08	021610-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	16-FEB-10 15:08	021610-1
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	16-FEB-10 17:06	100216-8
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	16-FEB-10 17:06	100216-8
CCB04	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	04-FEB-10 10:15	020410S1-9
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	16-FEB-10 04:29	100215-2
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	16-FEB-10 04:29	100215-2
	Thallium	0.347	+/-1	J	0.3	1.0	SOL	MS	16-FEB-10 04:29	100215-2
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	16-FEB-10 15:28	021610-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	16-FEB-10 15:28	021610-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 15:28	021610-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 15:28	021610-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	16-FEB-10 15:28	021610-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	16-FEB-10 15:28	021610-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	16-FEB-10 15:28	021610-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	16-FEB-10 15:28	021610-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	16-FEB-10 15:28	021610-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	16-FEB-10 15:28	021610-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	16-FEB-10 15:28	021610-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	16-FEB-10 15:28	021610-1
	Potassium	179.55	+/-250	J	64.0	250	SOL	P	16-FEB-10 15:28	021610-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 15:28	021610-1
	Sodium	788.45	+/-250		70.0	250	SOL	P	16-FEB-10 15:28	021610-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 15:28	021610-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	16-FEB-10 15:28	021610-1
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	16-FEB-10 17:30	100216-8
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	16-FEB-10 17:30	100216-8

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Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1390

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
CCB05	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	04-FEB-10 10:38	020410S1-9
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	16-FEB-10 05:12	100215-2
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	16-FEB-10 05:12	100215-2
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	16-FEB-10 05:12	100215-2
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	16-FEB-10 15:46	021610-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	16-FEB-10 15:46	021610-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 15:46	021610-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 15:46	021610-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	16-FEB-10 15:46	021610-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	16-FEB-10 15:46	021610-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	16-FEB-10 15:46	021610-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	16-FEB-10 15:46	021610-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	16-FEB-10 15:46	021610-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	16-FEB-10 15:46	021610-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	16-FEB-10 15:46	021610-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	16-FEB-10 15:46	021610-1
	Potassium	145.12	+/-250	J	64.0	250	SOL	P	16-FEB-10 15:46	021610-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 15:46	021610-1
	Sodium	619.07	+/-250		70.0	250	SOL	P	16-FEB-10 15:46	021610-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 15:46	021610-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	16-FEB-10 15:46	021610-1
CCB06	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	04-FEB-10 11:01	020410S1-9
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	16-FEB-10 05:55	100215-2
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	16-FEB-10 05:55	100215-2
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	16-FEB-10 05:55	100215-2
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	16-FEB-10 16:14	021610-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	16-FEB-10 16:14	021610-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 16:14	021610-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 16:14	021610-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	16-FEB-10 16:14	021610-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-1390

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result ng/L</u>	<u>Acceptance</u>	<u>Conc Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run</u>
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	16-FEB-10 16:14	021610-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	16-FEB-10 16:14	021610-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	16-FEB-10 16:14	021610-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	16-FEB-10 16:14	021610-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	16-FEB-10 16:14	021610-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	16-FEB-10 16:14	021610-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	16-FEB-10 16:14	021610-1
	Potassium	93.45	+/-250	J	64.0	250	SOL	P	16-FEB-10 16:14	021610-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 16:14	021610-1
	Sodium	617.67	+/-250		70.0	250	SOL	P	16-FEB-10 16:14	021610-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 16:14	021610-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	16-FEB-10 16:14	021610-1
CCB07	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	04-FEB-10 11:24	020410S1-9
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	16-FEB-10 16:47	021610-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	16-FEB-10 16:47	021610-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 16:47	021610-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 16:47	021610-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	16-FEB-10 16:47	021610-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	16-FEB-10 16:47	021610-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	16-FEB-10 16:47	021610-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	16-FEB-10 16:47	021610-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	16-FEB-10 16:47	021610-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	16-FEB-10 16:47	021610-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	16-FEB-10 16:47	021610-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	16-FEB-10 16:47	021610-1
	Potassium	69.32	+/-250	J	64.0	250	SOL	P	16-FEB-10 16:47	021610-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 16:47	021610-1
	Sodium	431.15	+/-250		70.0	250	SOL	P	16-FEB-10 16:47	021610-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 16:47	021610-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	16-FEB-10 16:47	021610-1

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Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-1390

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>
CCB08	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	04-FEB-10 11:47	020410S1-9
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	16-FEB-10 17:49	021610-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	16-FEB-10 17:49	021610-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 17:49	021610-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 17:49	021610-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	16-FEB-10 17:49	021610-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	16-FEB-10 17:49	021610-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	16-FEB-10 17:49	021610-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	16-FEB-10 17:49	021610-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	16-FEB-10 17:49	021610-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	16-FEB-10 17:49	021610-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	16-FEB-10 17:49	021610-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	16-FEB-10 17:49	021610-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	16-FEB-10 17:49	021610-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 17:49	021610-1
	Sodium	370.72	+/-250		70.0	250	SOL	P	16-FEB-10 17:49	021610-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 17:49	021610-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	16-FEB-10 17:49	021610-1
CCB09	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	04-FEB-10 12:11	020410S1-9
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	16-FEB-10 18:51	021610-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	16-FEB-10 18:51	021610-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 18:51	021610-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 18:51	021610-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	16-FEB-10 18:51	021610-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	16-FEB-10 18:51	021610-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	16-FEB-10 18:51	021610-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	16-FEB-10 18:51	021610-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	16-FEB-10 18:51	021610-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	16-FEB-10 18:51	021610-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	16-FEB-10 18:51	021610-1

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Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-1390

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	16-FEB-10 18:51	021610-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	16-FEB-10 18:51	021610-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 18:51	021610-1
	Sodium	325.41	+/-250		70.0	250	SOL	P	16-FEB-10 18:51	021610-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 18:51	021610-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	16-FEB-10 18:51	021610-1
CCB10	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	16-FEB-10 19:48	021610-1
	Antimony	4.46	+/-10	J	3.3	10.0	SOL	P	16-FEB-10 19:48	021610-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 19:48	021610-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 19:48	021610-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	16-FEB-10 19:48	021610-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	16-FEB-10 19:48	021610-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	16-FEB-10 19:48	021610-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	16-FEB-10 19:48	021610-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	16-FEB-10 19:48	021610-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	16-FEB-10 19:48	021610-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	16-FEB-10 19:48	021610-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	16-FEB-10 19:48	021610-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	16-FEB-10 19:48	021610-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 19:48	021610-1
	Sodium	241.85	+/-250	J	70.0	250	SOL	P	16-FEB-10 19:48	021610-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 19:48	021610-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	16-FEB-10 19:48	021610-1
CCB11	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	16-FEB-10 21:04	021610-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	16-FEB-10 21:04	021610-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 21:04	021610-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 21:04	021610-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	16-FEB-10 21:04	021610-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	16-FEB-10 21:04	021610-1

SW846

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1390

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	16-FEB-10 21:04	021610-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	16-FEB-10 21:04	021610-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	16-FEB-10 21:04	021610-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	16-FEB-10 21:04	021610-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	16-FEB-10 21:04	021610-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	16-FEB-10 21:04	021610-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	16-FEB-10 21:04	021610-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 21:04	021610-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	16-FEB-10 21:04	021610-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 21:04	021610-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	16-FEB-10 21:04	021610-1
CCB12	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	16-FEB-10 22:14	021610-1
	Antimony	3.35	+/-10	J	3.3	10.0	SOL	P	16-FEB-10 22:14	021610-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 22:14	021610-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 22:14	021610-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	16-FEB-10 22:14	021610-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	16-FEB-10 22:14	021610-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	16-FEB-10 22:14	021610-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	16-FEB-10 22:14	021610-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	16-FEB-10 22:14	021610-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	16-FEB-10 22:14	021610-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	16-FEB-10 22:14	021610-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	16-FEB-10 22:14	021610-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	16-FEB-10 22:14	021610-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 22:14	021610-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	16-FEB-10 22:14	021610-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 22:14	021610-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	16-FEB-10 22:14	021610-1

METALS
-3b-
PREPARATION BLANK SUMMARY

SDG NO. 10-1390
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>
1202024796	Arsenic	0.195	mg/kg	+/-0.973	U	MS	0.195	0.973
	Beryllium	0.0195	mg/kg	+/-0.0973	U	MS	0.0195	0.0973
	Nickel	0.0973	mg/kg	+/-0.389	U	MS	0.0973	0.389
	Selenium	0.486	mg/kg	+/-0.973	U	MS	0.486	0.973
	Thallium	0.0584	mg/kg	+/-0.195	U	MS	0.0584	0.195
	Uranium	0.0128	mg/kg	+/-0.0389	U	MS	0.0128	0.0389
1202024806	Aluminum	20900	ug/Kg	+/-19800		P	6720	19800
	Antimony	713	ug/Kg	+/-988	J	P	326	988
	Barium	380	ug/Kg	+/-494	J	P	98.8	494
	Cadmium	98.8	ug/Kg	+/-494	U	P	98.8	494
	Calcium	20500	ug/Kg	+/-24700	J	P	7910	24700
	Chromium	488	ug/Kg	+/-494	J	P	148	494
	Copper	296	ug/Kg	+/-988	U	P	296	988
	Iron	42500	ug/Kg	+/-24700		P	7910	24700
	Lead	319	ug/Kg	+/-988	J	P	247	988
	Magnesium	8400	ug/Kg	+/-29600	U	P	8400	29600
	Manganese	1120	ug/Kg	+/-988		P	198	988
	Cobalt	205	ug/Kg	+/-494	J	P	148	494
	Potassium	9600	ug/Kg	+/-24700	J	P	6320	24700
	Silver	98.8	ug/Kg	+/-494	U	P	98.8	494
	Sodium	18400	ug/Kg	+/-24700	J	P	6920	24700
	Vanadium	302	ug/Kg	+/-494	J	P	98.8	494
	Zinc	1290	ug/Kg	+/-988		P	326	988
1202025295	Mercury	3.98	ug/kg	+/-11.7	U	AV	3.98	11.7

METALS
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Interference Check Sample

SDG No: 10-1390

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01									
	Aluminum	526000	ug/L	500000	ug/L	105	80.0 - 120.0	16-FEB-10 12:39	021610-1
	Antimony	0.835	ug/L					16-FEB-10 12:39	021610-1
	Barium	-0.258	ug/L					16-FEB-10 12:39	021610-1
	Cadmium	-1.61	ug/L					16-FEB-10 12:39	021610-1
	Calcium	489000	ug/L	500000	ug/L	97.8	80.0 - 120.0	16-FEB-10 12:39	021610-1
	Chromium	1.6	ug/L					16-FEB-10 12:39	021610-1
	Cobalt	-1.66	ug/L					16-FEB-10 12:39	021610-1
	Copper	3.48	ug/L					16-FEB-10 12:39	021610-1
	Iron	188000	ug/L	200000	ug/L	93.8	80.0 - 120.0	16-FEB-10 12:39	021610-1
	Lead	-4.5	ug/L					16-FEB-10 12:39	021610-1
	Magnesium	490000	ug/L	500000	ug/L	98	80.0 - 120.0	16-FEB-10 12:39	021610-1
	Manganese	-1.06	ug/L					16-FEB-10 12:39	021610-1
	Potassium	-146.0	ug/L					16-FEB-10 12:39	021610-1
	Silver	4.44	ug/L					16-FEB-10 12:39	021610-1
	Sodium	349	ug/L					16-FEB-10 12:39	021610-1
	Vanadium	-2.55	ug/L					16-FEB-10 12:39	021610-1
	Zinc	-0.46	ug/L					16-FEB-10 12:39	021610-1
ICSAB01									
	Aluminum	523000	ug/L	500000	ug/L	105	80.0 - 120.0	16-FEB-10 12:45	021610-1
	Antimony	549	ug/L	500	ug/L	110	80.0 - 120.0	16-FEB-10 12:45	021610-1
	Barium	493	ug/L	500	ug/L	98.6	80.0 - 120.0	16-FEB-10 12:45	021610-1
	Cadmium	457	ug/L	500	ug/L	91.4	80.0 - 120.0	16-FEB-10 12:45	021610-1
	Calcium	482000	ug/L	500000	ug/L	96.5	80.0 - 120.0	16-FEB-10 12:45	021610-1
	Chromium	480	ug/L	500	ug/L	96	80.0 - 120.0	16-FEB-10 12:45	021610-1
	Cobalt	445	ug/L	500	ug/L	89.1	80.0 - 120.0	16-FEB-10 12:45	021610-1
	Copper	566	ug/L	500	ug/L	113	80.0 - 120.0	16-FEB-10 12:45	021610-1
	Iron	189000	ug/L	200000	ug/L	94.4	80.0 - 120.0	16-FEB-10 12:45	021610-1
	Lead	459	ug/L	500	ug/L	91.8	80.0 - 120.0	16-FEB-10 12:45	021610-1
	Magnesium	491000	ug/L	500000	ug/L	98.2	80.0 - 120.0	16-FEB-10 12:45	021610-1

METALS
-4-
Interference Check Sample

SDG No: 10-1390

Contract: LANL01004

Lab Code: GEL

ICS:

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Manganese	485	ug/L	500	ug/L	97.1	80.0 – 120.0	16-FEB-10 12:45	021610-1
	Potassium	5460	ug/L	5000	ug/L	109	80.0 – 120.0	16-FEB-10 12:45	021610-1
	Silver	275	ug/L	250	ug/L	110	80.0 – 120.0	16-FEB-10 12:45	021610-1
	Sodium	5800	ug/L	5000	ug/L	116	80.0 – 120.0	16-FEB-10 12:45	021610-1
	Vanadium	498	ug/L	500	ug/L	99.7	80.0 – 120.0	16-FEB-10 12:45	021610-1
	Zinc	495	ug/L	500	ug/L	99	80.0 – 120.0	16-FEB-10 12:45	021610-1

METALS
-4-
Interference Check Sample

SDG No: 10-1390

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS5

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01									
	Arsenic	0.329	ug/L					16-FEB-10 02:07	100215-2
	Selenium	-1.61	ug/L					16-FEB-10 02:07	100215-2
	Thallium	0.016	ug/L					16-FEB-10 02:07	100215-2
ICSAB01									
	Arsenic	20.8	ug/L	20	ug/L	104	80.0 - 120.0	16-FEB-10 02:13	100215-2
	Selenium	18.1	ug/L	20	ug/L	90.6	80.0 - 120.0	16-FEB-10 02:13	100215-2
	Thallium	21.1	ug/L	20	ug/L	106	80.0 - 120.0	16-FEB-10 02:13	100215-2

METALS
-4-
Interference Check Sample

SDG No: 10-1390

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS5

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01	Uranium	0.003	ug/L					16-FEB-10 10:17	100216-3
ICSAB01	Uranium	22.3	ug/L	20	ug/L	111	80.0 - 120.0	16-FEB-10 10:18	100216-3

METALS
-4-
Interference Check Sample

SDG No: 10-1390

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS5

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01	Beryllium	0.099	ug/L					16-FEB-10 16:28	100216-8
	Nickel	3.75	ug/L					16-FEB-10 16:28	100216-8
ICSAB01	Beryllium	18.9	ug/L	20	ug/L	94.7	80.0 - 120.0	16-FEB-10 16:30	100216-8
	Nickel	24.0	ug/L	23.31	ug/L	103	80.0 - 120.0	16-FEB-10 16:30	100216-8

METALS

-5a-

Matrix Spike Summary

SDG NO. 10-1390 Client ID RE15-10-7918S

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 90.4

Sample ID: 245391001 Spike ID: 1202024799

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	mg/kg	75-125	9.56		2.25		8.24	88.7		MS
Beryllium	mg/kg	75-125	5.47		0.908		5.15	88.5		MS
Nickel	mg/kg	75-125	11.3		7.97		5.15	64.9	N	MS
Selenium	mg/kg	75-125	1.49		0.533	U	2.06	70.7	N	MS
Thallium	mg/kg	75-125	10.2		0.172	J	10.3	97.4		MS
Uranium	mg/kg	75-125	6.7		1.31		5.15	104		MS

METALS

-5a-

Matrix Spike Duplicate Summary

SDG NO. 10-1390 Client ID RE15-10-7918SD

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 90.4

Sample ID: 245391001 Spike ID: 1202024801

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	mg/kg	75-125	10.5		2.25		8.85	93.4		MS
Beryllium	mg/kg	75-125	5.98		0.908		5.53	91.6		MS
Nickel	mg/kg	75-125	12		7.97		5.53	72.6	N	MS
Selenium	mg/kg	75-125	1.6		0.533	U	2.21	70.7	N	MS
Thallium	mg/kg	75-125	11.6		0.172	J	11.1	103		MS
Uranium	mg/kg	75-125	7.29		1.31		5.53	108		MS

METALS

-5a-

Matrix Spike Summary

SDG NO. 10-1390 Client ID RE15-10-7918S

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 90.4

Sample ID: 245391001 Spike ID: 1202024809

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/Kg		13600000		7110000		535000	1210	N/A	P
Antimony	ug/Kg	75-125	44200		356	U	53500	82		P
Barium	ug/Kg	75-125	119000		88200		53500	56.7	N	P
Cadmium	ug/Kg	75-125	47800		108	U	53500	89.4		P
Calcium	ug/Kg		3200000		2480000		535000	135	N/A	P
Chromium	ug/Kg	75-125	65400		19600		53500	85.7		P
Cobalt	ug/Kg	75-125	51800		2460		53500	92.3		P
Copper	ug/Kg	75-125	62700		4570		53500	109		P
Iron	ug/Kg		12700000		10600000		535000	389	N/A	P
Lead	ug/Kg	75-125	56000		5380		53500	94.5		P
Magnesium	ug/Kg	75-125	2640000		1440000		535000	224	N	P
Manganese	ug/Kg	75-125	222000		202000		53500	37.7	N	P
Potassium	ug/Kg	75-125	1920000		888000		535000	193	N	P
Silver	ug/Kg	75-125	53900		574		53500	99.6		P
Sodium	ug/Kg	75-125	925000		352000		535000	107		P
Vanadium	ug/Kg	75-125	65000		9930		53500	103		P
Zinc	ug/Kg	75-125	86300		34000		53500	97.7		P

METALS

-5a-

Matrix Spike Duplicate Summary

SDG NO. 10-1390 Client ID RE15-10-7918SD

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 90.4

Sample ID: 245391001 Spike ID: 1202024812

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/Kg		11800000		7110000		507000	925	N/A	P
Antimony	ug/Kg	75-125	41800		356	U	50700	81.9		P
Barium	ug/Kg	75-125	116000		88200		50700	54.3	N	P
Cadmium	ug/Kg	75-125	44600		108	U	50700	88		P
Calcium	ug/Kg		2880000		2480000		507000	80.1	N/A	P
Chromium	ug/Kg	75-125	60200		19600		50700	80.1		P
Cobalt	ug/Kg	75-125	48500		2460		50700	90.9		P
Copper	ug/Kg	75-125	58300		4570		50700	106		P
Iron	ug/Kg		11700000		10600000		507000	230	N/A	P
Lead	ug/Kg	75-125	52600		5380		50700	93.3		P
Magnesium	ug/Kg	75-125	2260000		1440000		507000	162	N	P
Manganese	ug/Kg	75-125	247000		202000		50700	88.8		P
Potassium	ug/Kg	75-125	1720000		888000		507000	164	N	P
Silver	ug/Kg	75-125	50200		574		50700	97.9		P
Sodium	ug/Kg	75-125	830000		352000		507000	94.2		P
Vanadium	ug/Kg	75-125	60000		9930		50700	98.7		P
Zinc	ug/Kg	75-125	83500		34000		50700	97.7		P

METALS

-5a-

Matrix Spike Summary

SDG NO. 10-1390

Client ID: RE15-10-7918S

Contract: LANL01004

Level: Low

Matrix: SOIL

% Solids: 90.4

Sample ID: 245391001

Spike ID: 1202025298

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/kg	75-125	143		25.6		121	96.6		AV

METALS

-5a-

Matrix Spike Duplicate Summary

SDG NO. 10-1390 **Client ID** RE15-10-7918SD**Contract:** LANL01004 **Level:** Low**Matrix:** SOIL **% Solids:** 90.4**Sample ID:** 245391001 **Spike ID:** 1202025300

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/kg	75-125	157		25.6		127	103		AV

Metals

-6-

Duplicate Sample Summary

SDG No.: 10-1390

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-7918D

Sample ID: 245391001

Duplicate ID: 1202024798

Percent Solids for Dup: 90.4

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/-1.02	2.25		2.06		9.07		MS
Beryllium	mg/kg	+/-20%	0.908		0.873		3.87		MS
Nickel	mg/kg	+/-20%	7.97		7.29		8.86		MS
Selenium	mg/kg		0.533 U		0.511 U				MS
Thallium	mg/kg	+/-205	0.172 J		0.125 J		31.4		MS
Uranium	mg/kg	+/-20%	1.31		1.3		1.13		MS

Metals
-6-
Duplicate Sample Summary

SDG No.: 10-1390

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-7918SD

Sample ID: 1202024799

Duplicate ID: 1202024801

Percent Solids for Dup: 90.4

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/-20	9.56		10.5		9.54		MS
Beryllium	mg/kg	+/-20	5.47		5.98		8.89		MS
Nickel	mg/kg	+/-20	11.3		12		5.77		MS
Selenium	mg/kg	+/-20	1.49		1.6		6.98		MS
Thallium	mg/kg	+/-20	10.2		11.6		12.5		MS
Uranium	mg/kg	+/-20	6.7		7.29		8.49		MS

Metals

-6-

Duplicate Sample Summary

SDG No.: 10-1390

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-7918D

Sample ID: 245391001

Duplicate ID: 1202024808

Percent Solids for Dup: 90.4

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/Kg	+/-20%	7110000		7730000		8.37		P
Antimony	ug/Kg		356 U		359 U				P
Barium	ug/Kg	+/-20%	88200		66100		28.7	*	P
Cadmium	ug/Kg		108 U		109 U				P
Calcium	ug/Kg	+/-20%	2480000		2500000		1.08		P
Chromium	ug/Kg	+/-20%	19600		16600		16.5		P
Cobalt	ug/Kg	+/-545	2460		3640		38.8	*	P
Copper	ug/Kg	+/-1090	4570		4890		6.6		P
Iron	ug/Kg	+/-20%	10600000		11400000		7.24		P
Lead	ug/Kg	+/-1090	5380		6600		20.5	*	P
Magnesium	ug/Kg	+/-20%	1440000		1550000		6.97		P
Manganese	ug/Kg	+/-20%	202000		241000		17.6		P
Potassium	ug/Kg	+/-20%	888000		974000		9.26		P
Silver	ug/Kg	+/-545	574		713		21.6		P
Sodium	ug/Kg	+/-20%	352000		361000		2.33		P
Vanadium	ug/Kg	+/-20%	9930		10300		3.2		P
Zinc	ug/Kg	+/-20%	34000		36100		6.05		P

SW846

Metals

-6-

Duplicate Sample Summary

SDG No.: 10-1390

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-7918SD

Sample ID: 1202024809

Duplicate ID: 1202024812

Percent Solids for Dup: 90.4

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/Kg	+/-20	13600000		11800000		14.1		P
Antimony	ug/Kg	+/-20	44200		41800		5.56		P
Barium	ug/Kg	+/-20	119000		116000		2.41		P
Cadmium	ug/Kg	+/-20	47800		44600		6.99		P
Calcium	ug/Kg	+/-20	3200000		2880000		10.4		P
Chromium	ug/Kg	+/-20	65400		60200		8.4		P
Cobalt	ug/Kg	+/-20	51800		48500		6.65		P
Copper	ug/Kg	+/-20	62700		58300		7.2		P
Iron	ug/Kg	+/-20	12700000		11700000		7.5		P
Lead	ug/Kg	+/-20	56000		52600		6.11		P
Magnesium	ug/Kg	+/-20	2640000		2260000		15.4		P
Manganese	ug/Kg	+/-20	222000		247000		10.6		P
Potassium	ug/Kg	+/-20	1920000		1720000		11.1		P
Silver	ug/Kg	+/-20	53900		50200		7.11		P
Sodium	ug/Kg	+/-20	925000		830000		10.8		P
Vanadium	ug/Kg	+/-20	65000		60000		8.1		P
Zinc	ug/Kg	+/-20	86300		83500		3.3		P

Metals

-6-

Duplicate Sample Summary

SDG No.: 10-1390

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-7918D

Sample ID: 245391001

Duplicate ID: 1202025297

Percent Solids for Dup: 90.4

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg	+/-13.3	25.6		23.2		9.55		AV

Metals

-6-

Duplicate Sample Summary

SDG No.: 10-1390

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-7918SD

Sample ID: 1202025298

Duplicate ID: 1202025300

Percent Solids for Dup: 90.4

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg	+/-20	143		157		9.56		AV

METALS

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Laboratory Control Sample Summary

SDG NO. 10-1390

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>
1202024797	Nickel	mg/kg	134	132		98.3	78-123	MS
	Selenium	mg/kg	286	265		92.6	77-123	MS
	Thallium	mg/kg	121	123		102	78-122	MS
	Uranium	mg/kg	2.13	2.59		122	73-127	MS
	Arsenic	mg/kg	104	99.2		95.4	78-123	MS
	Beryllium	mg/kg	77.6	73		94.1	84-116	MS

METALS

-7-

Laboratory Control Sample Summary

SDG NO. 10-1390

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>
1202024807								
	Aluminum	ug/Kg	10500000	9120000		86.9	56-144	P
	Antimony	ug/Kg	173000	122000		70.7	71-130	P
	Barium	ug/Kg	198000	173000		87.3	80-120	P
	Cadmium	ug/Kg	60700	50900		83.8	81-120	P
	Calcium	ug/Kg	9870000	8970000		90.9	83-117	P
	Chromium	ug/Kg	236000	205000		87	80-120	P
	Cobalt	ug/Kg	91200	81500		89.4	81-120	P
	Copper	ug/Kg	174000	173000		99.6	81-118	P
	Iron	ug/Kg	18000000	18200000		101	51-149	P
	Lead	ug/Kg	86000	74300		86.4	79-121	P
	Magnesium	ug/Kg	4000000	3540000		88.5	79-122	P
	Manganese	ug/Kg	558000	503000		90.2	81-119	P
	Potassium	ug/Kg	4300000	3880000		90.2	74-127	P
	Silver	ug/Kg	30100	28600		94.9	66-134	P
	Sodium	ug/Kg	1020000	1010000		99	74-127	P
	Vanadium	ug/Kg	115000	109000		94.7	79-121	P
	Zinc	ug/Kg	594000	515000		86.7	80-121	P

METALS

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Laboratory Control Sample Summary

SDG NO. 10-1390

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>
1202025296	Mercury	ug/kg	5150	5350		104	71.6-128.3	AV

METALS

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Serial Dilution Sample Summary

SDG NO. 10-1390

Client ID RE15-10-7918L

Contract: LANL01004

Matrix: SOLID

Level: Low

Sample ID: 245391001

Serial Dilution ID: 1202024800

<u>Analyte</u>	<u>Initial Value ug/L</u>	<u>C</u>	<u>Serial Value ug/L</u>	<u>C</u>	<u>% Difference</u>	<u>Qual</u>	<u>Acceptance Limit</u>	<u>M</u>
Arsenic	10.6		9.3	J	12.3			MS
Beryllium	4.26		4.53		6.34			MS
Nickel	37.4		39.9		6.55			MS
Selenium	2.5	U	12.5	U				MS
Thallium	.806	J	1.5	U	100			MS
Uranium	6.16		6.25		1.46			MS

METALS

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Serial Dilution Sample Summary

SDG NO. 10-1390 Client ID RE15-10-7918L

Contract: LANL01004

Matrix: SOLID Level: Low

Sample ID: 245391001 Serial Dilution ID: 1202024810

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Aluminum	65900		69500		5.46		10	P
Antimony	3.3	U	18	J				P
Barium	818		860		5.13		10	P
Cadmium	1	U	5	U				P
Calcium	23000		24400		5.87		10	P
Chromium	181		185		2.21		10	P
Cobalt	22.8		25.1		9.87			P
Copper	42.4		37.5	J	11.6			P
Iron	98000		105000		7.14		10	P
Lead	49.8		55		10.4			P
Magnesium	13400		14400		7.09		10	P
Manganese	1870		2010		7.22		10	P
Potassium	8230		8850		7.53		10	P
Silver	5.32		7.8	J	46.6			P
Sodium	3270		4270		30.6			P
Vanadium	92.1		94.5		2.61		10	P
Zinc	315		334		5.87		10	P

METALS

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Serial Dilution Sample Summary

SDG NO. 10-1390

Client ID RE15-10-7918L

Contract: LANL01004

Matrix: SOLID

Level: Low

Sample ID: 245391001

Serial Dilution ID: 1202025299

<u>Analyte</u>	<u>Initial Value ug/L</u>	<u>C</u>	<u>Serial Value ug/L</u>	<u>C</u>	<u>% Difference</u>	<u>Qual</u>	<u>Acceptance Limit</u>	<u>M</u>
Mercury	.419		.34	U	100			AV

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1390

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	945415						
1202024806	MB for batch 945415	MB	S	04-FEB-10	.506g	50mL	
1202024807	LCS for batch 945415	LCS	S	04-FEB-10	.524g	50mL	
1202024809	RE15-10-7918S	MS	S	04-FEB-10	.517g	50mL	
1202024812	RE15-10-7918SD	MSD	S	04-FEB-10	.546g	50mL	
1202024808	RE15-10-7918D	DUP	S	04-FEB-10	.508g	50mL	
245391001	RE15-10-7918	SAMPLE	S	04-FEB-10	.513g	50mL	
245391002	RE15-10-7915	SAMPLE	S	04-FEB-10	.505g	50mL	
245391003	RE15-10-7920	SAMPLE	S	04-FEB-10	.503g	50mL	
245391004	RE15-10-7914	SAMPLE	S	04-FEB-10	.518g	50mL	
245391005	RE15-10-7919	SAMPLE	S	04-FEB-10	.56g	50mL	
245391006	RE15-10-7921	SAMPLE	S	04-FEB-10	.537g	50mL	
245391007	RE15-10-7916	SAMPLE	S	04-FEB-10	.521g	50mL	
245391008	RE15-10-7917	SAMPLE	S	04-FEB-10	.522g	50mL	
245391009	RE15-10-7922	SAMPLE	S	04-FEB-10	.522g	50mL	
245391010	RE15-10-8053	SAMPLE	S	04-FEB-10	.565g	50mL	
245391011	RE15-10-8054	SAMPLE	S	04-FEB-10	.53g	50mL	

SW846

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1390

Method Type: MS

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Client ID</u>	<u>Sample Type</u>	<u>Matrix</u>	<u>Prep Date</u>	<u>Initial Sample Size</u>	<u>Final Sample Volume</u>	<u>Percent Solids</u>
Batch Number 945411							
1202024796	MB for batch 945411	MB	S	04-FEB-10	.514g	50mL	
1202024797	LCS for batch 945411	LCS	S	04-FEB-10	.508g	50mL	
1202024799	RE15-10-7918S	MS	S	04-FEB-10	.537g	50mL	
1202024801	RE15-10-7918SD	MSD	S	04-FEB-10	.5g	50mL	
1202024798	RE15-10-7918D	DUP	S	04-FEB-10	.541g	50mL	
245391001	RE15-10-7918	SAMPLE	S	04-FEB-10	.519g	50mL	
245391002	RE15-10-7915	SAMPLE	S	04-FEB-10	.53g	50mL	
245391003	RE15-10-7920	SAMPLE	S	04-FEB-10	.5g	50mL	
245391004	RE15-10-7914	SAMPLE	S	04-FEB-10	.526g	50mL	
245391005	RE15-10-7919	SAMPLE	S	04-FEB-10	.5g	50mL	
245391006	RE15-10-7921	SAMPLE	S	04-FEB-10	.5g	50mL	
245391007	RE15-10-7916	SAMPLE	S	04-FEB-10	.549g	50mL	
245391008	RE15-10-7917	SAMPLE	S	04-FEB-10	.51g	50mL	
245391009	RE15-10-7922	SAMPLE	S	04-FEB-10	.531g	50mL	
245391010	RE15-10-8053	SAMPLE	S	04-FEB-10	.5g	50mL	
245391011	RE15-10-8054	SAMPLE	S	04-FEB-10	.535g	50mL	

SW846

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1390

Method Type: AV

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Client ID</u>	<u>Sample Type</u>	<u>Matrix</u>	<u>Prep Date</u>	<u>Initial Sample Size</u>	<u>Final Sample Volume</u>	<u>Percent Solids</u>
Batch Number 945624							
1202025295	MB for batch 945624	MB	S	03-FEB-10	.513g	30mL	
1202025296	LCS for batch 945624	LCS	S	03-FEB-10	.2g	30mL	
1202025298	RE15-10-7918S	MS	S	03-FEB-10	.547g	30mL	
1202025300	RE15-10-7918SD	MSD	S	03-FEB-10	.522g	30mL	
1202025297	RE15-10-7918D	DUP	S	03-FEB-10	.5g	30mL	
245391001	RE15-10-7918	SAMPLE	S	03-FEB-10	.544g	30mL	
245391002	RE15-10-7915	SAMPLE	S	03-FEB-10	.563g	30mL	
245391003	RE15-10-7920	SAMPLE	S	03-FEB-10	.52g	30mL	
245391004	RE15-10-7914	SAMPLE	S	03-FEB-10	.558g	30mL	
245391005	RE15-10-7919	SAMPLE	S	03-FEB-10	.53g	30mL	
245391006	RE15-10-7921	SAMPLE	S	03-FEB-10	.525g	30mL	
245391007	RE15-10-7916	SAMPLE	S	03-FEB-10	.516g	30mL	
245391008	RE15-10-7917	SAMPLE	S	03-FEB-10	.509g	30mL	
245391009	RE15-10-7922	SAMPLE	S	03-FEB-10	.537g	30mL	
245391010	RE15-10-8053	SAMPLE	S	03-FEB-10	.532g	30mL	
245391011	RE15-10-8054	SAMPLE	S	03-FEB-10	.509g	30mL	

SW846

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS5

Start Date: 16-FEB-10

End Date: 16-FEB-10

Client Sdg: 10-1390

Method MS

Data File: 100215-2

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	01:31			X															X			X			
S10	1	01:37			X															X			X			
S100	1	01:43			X															X			X			
ICV01	1	01:49			X															X			X			
ICB01	1	01:55			X															X			X			
CRDL01	1	02:01			X															X			X			
ICSA01	1	02:07			X															X			X			
ICSAB01	1	02:13			X															X			X			
CCV01	1	02:20			X															X			X			
CCB01	1	02:26			X															X			X			
LR01	1	02:32			X															X			X			
CCV02	1	02:38			X															X			X			
CCB02	1	02:44			X															X			X			
ZZZZZZ	1	02:50																								
ZZZZZZ	1	02:56																								
ZZZZZZ	1	03:03																								
ZZZZZZ	1	03:09																								
ZZZZZZ	5	03:15																								
ZZZZZZ	1	03:21																								
CCV03	1	03:27			X															X			X			
CCB03	1	03:33			X															X			X			
1202024796	2	03:40			X															X			X			
1202024797	40	03:46			X															X			X			
245391001	2	03:52			X															X			X			
1202024798	2	03:58			X															X			X			
1202024799	2	04:04			X															X			X			
1202024801	2	04:11			X															X			X			
1202024800	10	04:17			X															X			X			
CCV04	1	04:23			X															X			X			
CCB04	1	04:29			X															X			X			
245391002	2	04:35			X															X			X			
245391003	2	04:41			X															X			X			
245391004	2	04:48			X															X			X			
245391005	2	04:54			X															X			X			
245391006	2	05:00			X															X			X			
CCV05	1	05:06			X															X			X			
CCB05	1	05:12			X															X			X			
245391007	2	05:18			X															X			X			
245391008	2	05:25			X															X			X			
245391009	2	05:31			X															X			X			

Samp No.	D/F	Run Time			X										X		X				
245391010	2	05:37			X										X		X				
245391011	2	05:43			X										X		X				
CCV06	1	05:49			X										X		X				
CCB06	1	05:55			X										X		X				

Metals
-14-
Analysis Run Log

Contract: LANL01004**Lab Code:** GEL**Inst Name:** ICPMS5**Start Date:** 16-FEB-10**Client Sdg:** 10-1390**Method:** MS**Data File:** 100216-3**End Date:** 16-FEB-10

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	10:07																						X		
S10	1	10:08																						X		
S100	1	10:10																						X		
ICV01	1	10:12																						X		
ICB01	1	10:13																						X		
CRDL01	1	10:15																						X		
ICSA01	1	10:17																						X		
ICSAB01	1	10:18																						X		
CCV01	1	10:20																						X		
CCB01	1	10:22																						X		
1202024796	2	10:23																						X		
1202024797	40	10:26																						X		
245391001	2	10:28																						X		
1202024798	2	10:30																						X		
1202024799	2	10:31																						X		
1202024801	2	10:33																						X		
1202024800	10	10:35																						X		
245391002	100	10:36																						X		
245391003	100	10:38																						X		
CCV02	1	10:40																						X		
CCB02	1	10:42																						X		
245391004	2	10:43																						X		
245391005	100	10:45																						X		
245391006	100	10:47																						X		
245391007	2	10:49																						X		
245391008	2	10:50																						X		
245391009	100	10:52																						X		
245391010	100	10:54																						X		
245391011	2	10:55																						X		
CCV03	1	10:57																						X		
CCB03	1	10:59																						X		

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS5

Start Date: 16-FEB-10

End Date: 16-FEB-10

Client Sdg: 10-1390

Method MS

Data File: 100216-8

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	16:15					X											X								
S10	1	16:17					X											X								
S100	1	16:19					X											X								
ICV01	1	16:21					X											X								
ICB01	1	16:24					X											X								
CRDL01	1	16:26					X											X								
ICSA01	1	16:28					X											X								
ICSAB01	1	16:30					X											X								
CCV01	1	16:32					X											X								
CCB01	1	16:35					X											X								
LR01	1	16:37					X											X								
CCV02	1	16:39					X											X								
CCB02	1	16:41					X											X								
1202024796	2	16:44					X											X								
1202024797	40	16:46					X											X								
245391001	2	16:48					X											X								
1202024798	2	16:50					X											X								
1202024799	2	16:52					X											X								
1202024801	2	16:55					X											X								
1202024800	10	16:57					X											X								
245391002	2	16:59					X											X								
245391003	2	17:01					X											X								
CCV03	1	17:04					X											X								
CCB03	1	17:06					X											X								
245391004	2	17:10					X											X								
245391005	2	17:12					X											X								
245391006	2	17:14					X											X								
245391007	2	17:17					X											X								
245391008	2	17:19					X											X								
245391009	2	17:21					X											X								
245391010	2	17:23					X											X								
245391011	2	17:26					X											X								
CCV04	1	17:28					X											X								
CCB04	1	17:30					X											X								

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: OPTIMA3

Start Date: 16-FEB-10

End Date: 16-FEB-10

Client Sdg: 10-1390

Method P

Data File: 021610-1

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	11:46	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
S0.1	1	11:52		X		X		X		X	X	X		X		X			X		X				X	X
S0.5	1	11:58	X	X		X		X	X	X	X	X		X	X	X			X		X				X	X
SCAL	1	12:05	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
S10	1	12:13	X						X				X		X							X				
ICV01	1	12:18	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ICB01	1	12:25	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
PQL01	1	12:32	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ICSA01	1	12:39	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ICSAB01	1	12:45	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
LR01	1	12:51	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
LR02	1	12:57	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCV01	1	13:04	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB01	1	13:11	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
LR03	1	13:19	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCV02	1	13:26	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB02	1	13:33	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZ	1	13:49																								
ZZZZZ	1	13:55																								
ZZZZZ	1	14:02																								
ZZZZZ	1	14:10																								
ZZZZZ	1	14:17																								
ZZZZZ	5	14:25																								
ZZZZZ	10	14:32																								
ZZZZZ	10	14:39																								
ZZZZZ	10	14:47																								
ZZZZZ	50	14:54																								
CCV03	1	15:01	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB03	1	15:08	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZ	50	15:14																								
CCV04	1	15:21	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB04	1	15:28	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCV05	1	15:39	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB05	1	15:46	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZ	50	15:53																								
ZZZZZ	5	16:00																								
CCV06	1	16:07	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB06	1	16:14	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCV07	1	16:40	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB07	1	16:47	X	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	U	V	Zn
245391007	1	21:32	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
245391008	1	21:39	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
245391009	1	21:46	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
245391010	1	21:53	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
245391011	1	22:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCV12	1	22:07	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB12	1	22:14	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: HG3

Start Date: 04-FEB-10

Client Sdg: 10-1390

Method: AV

Data File: 020410S1-9

End Date: 04-FEB-10

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	08:46															X									
S0.2	1	08:48															X									
S0.5	1	08:50															X									
S2.0	1	08:52															X									
S5.0	1	08:54															X									
S10.0	1	08:56															X									
ICV01	1	08:58															X									
ICB01	1	09:00															X									
CRDL01	1	09:01															X									
CCV01	1	09:03															X									
CCB01	1	09:05															X									
ZZZZZZ	1	09:07																								
ZZZZZZ	10	09:09																								
ZZZZZZ	1	09:11																								
ZZZZZZ	1	09:13																								
ZZZZZZ	1	09:15																								
ZZZZZZ	1	09:17																								
ZZZZZZ	5	09:19																								
ZZZZZZ	1	09:21																								
ZZZZZZ	1	09:23																								
ZZZZZZ	1	09:25																								
CCV02	1	09:26															X									
CCB02	1	09:28															X									
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	1	09:42																								
ZZZZZZ	1	09:44																								
ZZZZZZ	1	09:46																								
ZZZZZZ	1	09:48																								
CCV03	1	09:50															X									
CCB03	1	09:51															X									
ZZZZZZ	1	09:53																								
ZZZZZZ	1	09:55																								
ZZZZZZ	1	09:57																								
ZZZZZZ	10	09:59																								
ZZZZZZ	1	10:01																								

Metals
-14-
Analysis Run Log

Samp No.	D/F	Run Time
ZZZZZZ	1	10:03
ZZZZZZ	1	10:05
ZZZZZZ	1	10:07
ZZZZZZ	5	10:09
ZZZZZZ	1	10:11
CCV04	1	10:13
CCB04	1	10:15
ZZZZZZ	1	10:17
ZZZZZZ	1	10:18
ZZZZZZ	1	10:20
ZZZZZZ	1	10:22
ZZZZZZ	1	10:24
ZZZZZZ	1	10:26
ZZZZZZ	1	10:28
ZZZZZZ	1	10:30
ZZZZZZ	1	10:32
ZZZZZZ	10	10:34
CCV05	1	10:36
CCB05	1	10:38
ZZZZZZ	1	10:40
ZZZZZZ	1	10:42
ZZZZZZ	1	10:44
ZZZZZZ	1	10:45
ZZZZZZ	5	10:47
ZZZZZZ	1	10:49
ZZZZZZ	1	10:51
ZZZZZZ	1	10:53
ZZZZZZ	1	10:55
ZZZZZZ	1	10:57
CCV06	1	10:59
CCB06	1	11:01
ZZZZZZ	1	11:03
ZZZZZZ	1	11:05
ZZZZZZ	1	11:07
ZZZZZZ	1	11:09
ZZZZZZ	1	11:11
ZZZZZZ	1	11:13
ZZZZZZ	1	11:14
I202025295	1	11:16
I202025296	10	11:18

Metals
-14-
Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
245391001	1	11:20															X									
CCV07	1	11:22															X									
CCB07	1	11:24															X									
1202025297	1	11:26															X									
1202025298	1	11:28															X									
1202025300	1	11:30															X									
1202025299	5	11:32															X									
245391002	1	11:34															X									
245391003	1	11:36															X									
245391004	1	11:38															X									
245391005	1	11:40															X									
245391006	1	11:42															X									
245391007	1	11:44															X									
CCV08	1	11:45															X									
CCB08	1	11:47															X									
245391008	1	11:49															X									
245391009	1	11:51															X									
245391010	1	11:53															X									
245391011	1	11:55															X									
ZZZZZZ	1	11:57																								
ZZZZZZ	10	11:59																								
ZZZZZZ	1	12:01																								
ZZZZZZ	1	12:03																								
ZZZZZZ	1	12:05																								
ZZZZZZ	1	12:07																								
CCV09	1	12:09															X									
CCB09	1	12:11															X									

Standards

METALS
-10-
Instrument Detection Limits

SDG NO. 10-1390

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
	Uranium		0.066	.2
	Vanadium		2.0	10
	Zinc		2.0	10

METALS
-10-
Instrument Detection Limits

SDG NO. 10-1390

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 15-JUN-09

		<u>Wavelength</u> <u>(nm)</u>	<u>MDL</u> <u>ug/L</u>	<u>RDL</u> <u>ug/L</u>
MERCURY	<u>Analyte</u>			
SOLID	Mercury		0.068	.2

METALS
-10-
Instrument Detection Limits

SDG NO. 10-1390

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 01-JUL-09

ICP	<u>Analyte</u>	<u>Wavelength</u> <u>(nm)</u>	<u>MDL</u>	<u>RDL</u>
			<u>ug/L</u>	<u>ug/L</u>
SOLID	Aluminum	396.153	68.0	200
	Antimony	206.836	3.3	10
	Arsenic	188.979	5.0	30
	Barium	233.527	1.0	5
	Beryllium	313.107	1.0	5
	Cadmium	226.502	1.0	5
	Calcium	317.933	80.0	250
	Chromium	267.716	1.5	5
	Cobalt	228.616	1.5	5
	Copper	324.752	3.0	10
	Iron	238.204	80.0	250
	Lead	220.353	2.5	10
	Magnesium	279.077	85.0	300
	Manganese	257.61	2.0	10
	Nickel	231.604	1.5	5
	Potassium	766.49	64.0	250
	Selenium	196.026	5.0	30
	Silver	328.068	1.0	5
	Sodium	589.592	70.0	250
	Thallium	190.801	5.0	20
	Uranium	409.014	10.0	50
	Vanadium	292.402	1.0	5
	Zinc	213.857	3.3	10

METALS
-11-
Interelement Correction Factors

Lab Code: GEL

GEL Job No: 10-1390

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: 01-FEB-10

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

		Aluminum	Antimony	Arsenic	Barium	Beryllium
Parmname	Wavelength					
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.02697	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	-0.48147	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	-0.21356	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	-0.05186	0.00000	0.00000	0.00000	0.00000
Silica	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.18741	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GELGEL Job No: **10-1390**

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
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.36147	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	2.23785	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.36818	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	1.35273

METALS
-11-
Interelement Correction Factors

Lab Code: GELGEL Job No: **10-1390**Contract: LANL01004Instrument: OPTIMA3Effective Dates: **01-FEB-10**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

		Iron	Lead	Magnesium	Manganese	Molybdenum
Parmname	Wavelength					
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	48.4946
Antimony	206.836	-0.02515	0.00000	0.00000	0.00000	-20.5057
Arsenic	188.979	-0.23424	0.00000	0.00000	0.00000	2.41902
Barium	233.527	-0.03042	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.16240	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.10329	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	-0.01944	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.01444	0.00000	0.00000	0.00000	-2.33100
Copper	324.752	-0.05293	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.09554	0.00000	0.00000	0.00000	-2.48774
Magnesium	279.077	1.04597	0.00000	0.00000	0.00000	-10.4683
Manganese	257.61	-0.09877	0.00000	0.04089	0.00000	0.00000
Molybdenum	202.031	-0.07763	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.80543	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.39429	1.18725
Selenium	196.026	-3.27508	0.00000	0.00000	0.00000	-3.07287
Silica	251.611	0.00000	0.00000	0.00000	0.00000	27.2377
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	12.3082
Silver	328.068	-0.32385	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	-4.77918	0.00000
Tin	189.927	-0.01682	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.08168	0.00000	0.00000
Uranium	409.014	0.11400	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.14564	0.00000	-0.01931	0.00000	-14.1293
Zinc	213.857	0.09701	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL

GEL Job No: 10-1390

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: **10-1390**

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: **01-FEB-10**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

		Silicon	Silver	Strontium	Sulfur	Thallium
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	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silica	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL

GEL Job No: 10-1390

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: 01-FEB-10

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Tin	Titanium	Uranium	Vanadium	Zinc
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	-15.4932	3.30431	0.00000	-2.81282	0.00000
Arsenic	188.979	0.00000	-8.66313	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	-2.20293	0.00000
Beryllium	313.107	0.00000	-2.27027	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	-0.19473	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.39645	-1.41250	0.00000
Cobalt	228.616	0.00000	2.09497	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.55360	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	-9.37529	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silica	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.81635	-4.04400	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	-8.29801	0.00000	1.88584	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.43915	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	1.05947	-1.91382	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-12-
Linear Ranges

SDG NO. 10-1390

Contract: LANL01004

Lab Code: GEL

Instrument ID ICPMS5

<u>Analyte</u>	<u>Integration Time (msec)</u>	<u>LDR</u>	<u>Units</u>	<u>Effective Date</u>
Aluminum	1	50000	ug/L	01-FEB-10
Antimony	1000	250	ug/L	01-FEB-10
Arsenic	1000	1000	ug/L	01-FEB-10
Barium	1000	1000	ug/L	01-FEB-10
Beryllium	1000	1000	ug/L	01-FEB-10
Cadmium	1000	1000	ug/L	01-FEB-10
Calcium	500	50000	ug/L	01-FEB-10
Chromium	1000	1000	ug/L	01-FEB-10
Cobalt	1000	1000	ug/L	01-FEB-10
Copper	1000	1000	ug/L	01-FEB-10
Iron	500	50000	ug/L	01-FEB-10
Lead	1000	5000	ug/L	01-FEB-10
Magnesium	1	50000	ug/L	01-FEB-10
Manganese	1000	1000	ug/L	01-FEB-10
Nickel	1000	1000	ug/L	01-FEB-10
Potassium	1	50000	ug/L	01-FEB-10
Selenium	1000	500	ug/L	01-FEB-10
Silver	1000	250	ug/L	01-FEB-10
Sodium	1	50000	ug/L	01-FEB-10
Thallium	1000	500	ug/L	01-FEB-10
Uranium	1000	5000	ug/L	01-FEB-10
Vanadium	1000	100	ug/L	01-FEB-10
Zinc	1000	2500	ug/L	01-FEB-10

METALS
-12-
Linear Ranges

SDG NO. 10-1390

Contract: LANL01004

Lab Code: GEL

Instrument ID OPTIMA3

<u>Analyte</u>	<u>Integration Time (sec)</u>	<u>LDR</u>	<u>Units</u>	<u>Effective Date</u>
Aluminum	20	500000	ug/L	01-FEB-10
Antimony	20	10000	ug/L	01-FEB-10
Arsenic	20	10000	ug/L	01-FEB-10
Barium	20	15000	ug/L	01-FEB-10
Beryllium	20	3000	ug/L	01-FEB-10
Cadmium	20	10000	ug/L	01-FEB-10
Calcium	20	500000	ug/L	01-FEB-10
Chromium	20	25000	ug/L	01-FEB-10
Cobalt	20	10000	ug/L	01-FEB-10
Copper	20	20000	ug/L	01-FEB-10
Iron	20	500000	ug/L	01-FEB-10
Lead	20	25000	ug/L	01-FEB-10
Magnesium	20	500000	ug/L	01-FEB-10
Manganese	20	10000	ug/L	01-FEB-10
Nickel	20	10000	ug/L	01-FEB-10
Potassium	20	300000	ug/L	01-FEB-10
Selenium	20	10000	ug/L	01-FEB-10
Silver	20	1000	ug/L	01-FEB-10
Sodium	20	500000	ug/L	01-FEB-10
Thallium	20	10000	ug/L	01-FEB-10
Uranium	20	15000	ug/L	01-FEB-10
Vanadium	20	10000	ug/L	01-FEB-10
Zinc	20	15000	ug/L	01-FEB-10

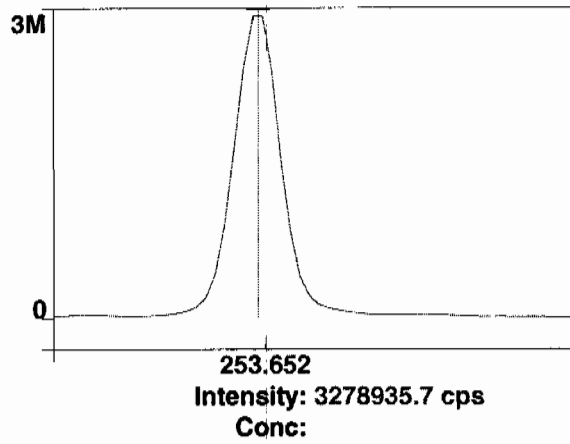
Raw Data

Method: Hg_ReAlign
Result: 021910A

Sample ID: Hg_ReAlign

Hg 253.652

Rep: 1



1

=====
Analysis Begun

Start Time: 2/16/2010 11:46:01

Plasma On Time: 2/15/2010 05:50:42

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\021610.sif

Batch ID:

Results Data Set: 021610

Results Library: C:\pe\Optima3\Results\Results.mdb
=====

Method Loaded

Method Name: General Eng.2AX

Method Last Saved: 2/16/2010 09:05:05

IEC File: 011110.iec

MSF File:

Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc Radial	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

Sequence No.: 1

Autosampler Location: 8

Sample ID: S0

Date Collected: 2/16/2010 11:46:03

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	4341.7	4341.7	0.000 %	11:47:55
1	Y RADIAL	4471.4	4471.4	0.000 %	11:47:55
1	Al 396.153Radial†	-175.8	-172.2	[0.00] ug/L	11:47:55

1	Ca 317.933Radial†	14.1	13.8	[0.00]	ug/L	11:48:15
1	Fe 238.204 Radial†	10.4	10.1	[0.00]	ug/L	11:48:15
1	K 766.490 Radial†	3248.0	3180.1	[0.00]	ug/L	11:47:55
1	Mg 279.077 IEC†	2.3	2.3	[0.00]	ug/L	11:48:15
1	Na 589.592 Radial†	227.6	222.9	[0.00]	ug/L	11:47:55
1	Sr 421.552†	86.7	84.9	[0.00]	ug/L	11:47:55
1	Sc 361.383	848751.5	848751.5	0.0000	%	11:49:12
1	Y 371.029	702201.4	702201.4	0.0000	%	11:49:12
1	Ag 328.068†	164.7	165.0	[0.00]	ug/L	11:49:12
1	As 188.979†	-27.6	-27.7	[0.00]	ug/L	11:49:32
1	B 249.677†	-476.2	-476.9	[0.00]	ug/L	11:49:32
1	Ba 233.527†	15.5	15.6	[0.00]	ug/L	11:49:32
1	Be 313.107†	-4361.6	-4368.1	[0.00]	ug/L	11:49:12
1	Cd 226.502†	-190.4	-190.6	[0.00]	ug/L	11:49:32
1	Co 228.616†	-82.2	-82.3	[0.00]	ug/L	11:49:32
1	Cr 267.716†	153.6	153.9	[0.00]	ug/L	11:49:32
1	Cu 324.752†	8084.8	8096.8	[0.00]	ug/L	11:49:12
1	Mn 257.610†	580.8	581.6	[0.00]	ug/L	11:49:32
1	Mo 202.031†	4.3	4.3	[0.00]	ug/L	11:49:32
1	Ni 231.604†	117.0	117.1	[0.00]	ug/L	11:49:32
1	P 214.914†	232.7	233.1	[0.00]	ug/L	11:49:32
1	Pb 220.353†	-75.2	-75.3	[0.00]	ug/L	11:49:32
1	S 181.975 Axial†	40.3	40.4	[0.00]	ug/L	11:49:32
1	Sb 206.836†	37.8	37.9	[0.00]	ug/L	11:49:32
1	Se 196.026†	-21.6	-21.6	[0.00]	ug/L	11:49:32
1	Si 251.611†	615.7	616.6	[0.00]	ug/L	11:49:32
1	Sn 189.927†	8.5	8.6	[0.00]	ug/L	11:49:32
1	Ti 334.940†	-1519.3	-1521.6	[0.00]	ug/L	11:49:12
1	Tl 190.801†	-32.6	-32.6	[0.00]	ug/L	11:49:32
1	U 409.014†	-3456.7	-3461.8	[0.00]	ug/L	11:49:12
1	V 292.402†	-1680.9	-1683.4	[0.00]	ug/L	11:49:12
1	Zn 213.857†	686.4	687.4	[0.00]	ug/L	11:49:32
1	SiO2†	600.5	601.4	[0.00]	ug/L	11:50:28
2	Sc Radial	4353.2	4353.2	0.000	%	11:48:21
2	Y RADIAL	4521.0	4521.0	0.000	%	11:48:21
2	Al 396.153Radial†	-171.5	-167.5	[0.00]	ug/L	11:48:21
2	Ca 317.933Radial†	22.1	21.6	[0.00]	ug/L	11:48:41
2	Fe 238.204 Radial†	11.0	10.7	[0.00]	ug/L	11:48:41
2	K 766.490 Radial†	3106.4	3033.4	[0.00]	ug/L	11:48:21
2	Mg 279.077 IEC†	2.0	1.9	[0.00]	ug/L	11:48:41
2	Na 589.592 Radial†	203.0	198.2	[0.00]	ug/L	11:48:21
2	Sr 421.552†	95.1	92.9	[0.00]	ug/L	11:48:21
2	Sc 361.383	851402.3	851402.3	0.0000	%	11:49:38
2	Y 371.029	703154.2	703154.2	0.0000	%	11:49:38
2	Ag 328.068†	216.7	216.3	[0.00]	ug/L	11:49:38
2	As 188.979†	-27.2	-27.1	[0.00]	ug/L	11:49:58
2	B 249.677†	-471.0	-470.2	[0.00]	ug/L	11:49:58
2	Ba 233.527†	17.0	17.0	[0.00]	ug/L	11:49:58
2	Be 313.107†	-4386.4	-4379.3	[0.00]	ug/L	11:49:38
2	Cd 226.502†	-197.4	-197.1	[0.00]	ug/L	11:49:58
2	Co 228.616†	-80.6	-80.5	[0.00]	ug/L	11:49:58
2	Cr 267.716†	148.4	148.2	[0.00]	ug/L	11:49:58
2	Cu 324.752†	8157.3	8143.9	[0.00]	ug/L	11:49:38
2	Mn 257.610†	571.2	570.3	[0.00]	ug/L	11:49:58
2	Mo 202.031†	12.0	12.0	[0.00]	ug/L	11:49:58
2	Ni 231.604†	118.8	118.6	[0.00]	ug/L	11:49:58
2	P 214.914†	248.5	248.1	[0.00]	ug/L	11:49:58
2	Pb 220.353†	-71.0	-70.9	[0.00]	ug/L	11:49:58
2	S 181.975 Axial†	38.5	38.4	[0.00]	ug/L	11:49:58
2	Sb 206.836†	44.0	43.9	[0.00]	ug/L	11:49:58
2	Se 196.026†	-27.3	-27.3	[0.00]	ug/L	11:49:58
2	Si 251.611†	610.7	609.7	[0.00]	ug/L	11:49:58
2	Sn 189.927†	9.0	9.0	[0.00]	ug/L	11:49:58
2	Ti 334.940†	-1445.2	-1442.8	[0.00]	ug/L	11:49:38
2	Tl 190.801†	-38.7	-38.6	[0.00]	ug/L	11:49:58
2	U 409.014†	-3487.1	-3481.4	[0.00]	ug/L	11:49:38
2	V 292.402†	-1613.1	-1610.4	[0.00]	ug/L	11:49:38
2	Zn 213.857†	685.3	684.2	[0.00]	ug/L	11:49:58
2	SiO2†	596.6	595.6	[0.00]	ug/L	11:50:33
3	Sc Radial	4057.8	4057.8	0.000	%	11:48:46
3	Y RADIAL	4214.3	4214.3	0.000	%	11:48:46

3	Al 396.153Radial†	-131.2	-137.4	[0.00]	ug/L	11:48:46
3	Ca 317.933Radial†	18.7	19.6	[0.00]	ug/L	11:49:06
3	Fe 238.204 Radial†	8.9	9.3	[0.00]	ug/L	11:49:06
3	K 766.490 Radial†	3151.4	3301.3	[0.00]	ug/L	11:48:46
3	Mg 279.077 IEC†	3.7	3.9	[0.00]	ug/L	11:49:06
3	Na 589.592 Radial†	191.0	200.1	[0.00]	ug/L	11:48:46
3	Sr 421.552†	87.5	91.6	[0.00]	ug/L	11:48:46
3	Sc 361.383	849872.6	849872.6	0.0000	%	11:50:03
3	Y 371.029	702829.5	702829.5	0.0000	%	11:50:03
3	Ag 328.068†	301.7	301.8	[0.00]	ug/L	11:50:03
3	As 188.979†	-30.1	-30.1	[0.00]	ug/L	11:50:23
3	B 249.677†	-498.5	-498.6	[0.00]	ug/L	11:50:23
3	Ba 233.527†	24.0	24.0	[0.00]	ug/L	11:50:23
3	Be 313.107†	-4269.3	-4270.0	[0.00]	ug/L	11:50:03
3	Cd 226.502†	-198.7	-198.7	[0.00]	ug/L	11:50:23
3	Co 228.616†	-73.8	-73.8	[0.00]	ug/L	11:50:23
3	Cr 267.716†	147.0	147.0	[0.00]	ug/L	11:50:23
3	Cu 324.752†	8040.3	8041.6	[0.00]	ug/L	11:50:03
3	Mn 257.610†	557.3	557.4	[0.00]	ug/L	11:50:23
3	Mo 202.031†	15.0	15.0	[0.00]	ug/L	11:50:23
3	Ni 231.604†	104.8	104.8	[0.00]	ug/L	11:50:23
3	P 214.914†	244.7	244.8	[0.00]	ug/L	11:50:23
3	Pb 220.353†	-74.4	-74.5	[0.00]	ug/L	11:50:23
3	S 181.975 Axial†	49.9	49.9	[0.00]	ug/L	11:50:23
3	Sb 206.836†	25.2	25.2	[0.00]	ug/L	11:50:23
3	Se 196.026†	-21.1	-21.1	[0.00]	ug/L	11:50:23
3	Si 251.611†	610.6	610.7	[0.00]	ug/L	11:50:23
3	Sn 189.927†	20.3	20.3	[0.00]	ug/L	11:50:23
3	Ti 334.940†	-1514.1	-1514.3	[0.00]	ug/L	11:50:03
3	Tl 190.801†	-46.1	-46.1	[0.00]	ug/L	11:50:23
3	U 409.014†	-3601.8	-3602.3	[0.00]	ug/L	11:50:03
3	V 292.402†	-1737.8	-1738.1	[0.00]	ug/L	11:50:03
3	Zn 213.857†	691.5	691.7	[0.00]	ug/L	11:50:23
3	SiO2†	661.5	661.6	[0.00]	ug/L	11:50:38

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	850008.8	1330.66	0.16%	0.0000	%
Sc Radial	4250.9	167.29	3.94%	0.000	%
Y 371.029	702728.4	484.42	0.07%	0.0000	%
Y RADIAL	4402.2	164.65	3.74%	0.000	%
Ag 328.068†	227.7	69.10	30.35%	[0.00]	ug/L
Al 396.153Radial†	-159.0	18.85	11.85%	[0.00]	ug/L
As 188.979†	-28.3	1.59	5.63%	[0.00]	ug/L
B 249.677†	-481.9	14.85	3.08%	[0.00]	ug/L
Ba 233.527†	18.8	4.53	24.06%	[0.00]	ug/L
Be 313.107†	-4339.1	60.13	1.39%	[0.00]	ug/L
Ca 317.933Radial†	18.3	4.03	22.00%	[0.00]	ug/L
Cd 226.502†	-195.5	4.27	2.19%	[0.00]	ug/L
Co 228.616†	-78.9	4.49	5.70%	[0.00]	ug/L
Cr 267.716†	149.7	3.66	2.45%	[0.00]	ug/L
Cu 324.752†	8094.1	51.19	0.63%	[0.00]	ug/L
Fe 238.204 Radial†	10.1	0.70	7.00%	[0.00]	ug/L
K 766.490 Radial†	3171.6	134.15	4.23%	[0.00]	ug/L
Mg 279.077 IEC†	2.7	1.06	38.89%	[0.00]	ug/L
Mn 257.610†	569.7	12.13	2.13%	[0.00]	ug/L
Mo 202.031†	10.5	5.52	52.76%	[0.00]	ug/L
Na 589.592 Radial†	207.1	13.71	6.62%	[0.00]	ug/L
Ni 231.604†	113.5	7.61	6.71%	[0.00]	ug/L
P 214.914†	242.0	7.90	3.27%	[0.00]	ug/L
Pb 220.353†	-73.6	2.33	3.17%	[0.00]	ug/L
S 181.975 Axial†	42.9	6.12	14.26%	[0.00]	ug/L
Sb 206.836†	35.7	9.55	26.76%	[0.00]	ug/L
Se 196.026†	-23.3	3.45	14.79%	[0.00]	ug/L
Si 251.611†	612.3	3.77	0.62%	[0.00]	ug/L
Sn 189.927†	12.6	6.63	52.56%	[0.00]	ug/L
Sr 421.552†	89.8	4.28	4.76%	[0.00]	ug/L
Ti 334.940†	-1492.9	43.54	2.92%	[0.00]	ug/L
Tl 190.801†	-39.1	6.75	17.25%	[0.00]	ug/L

U 409.014†	-3515.2	76.12	2.17%	[0.00] ug/L
V 292.402†	-1677.3	64.04	3.82%	[0.00] ug/L
Zn 213.857†	687.8	3.75	0.54%	[0.00] ug/L
SiO2†	619.5	36.53	5.90%	[0.00] ug/L

Sequence No.: 2
 Sample ID: S0.1
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 2
 Date Collected: 2/16/2010 11:52:49
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Analysis Time
1	Sc Radial	4326.7	4326.7	102 %	11:54:47
1	Y RADIAL	4475.5	4475.5	101.7 %	11:54:47
1	K 766.490 Radial†	8282.3	4965.6	[1000] ug/L	11:54:42
1	Sr 421.552†	13230.3	12908.7	[100] ug/L	11:54:47
1	Sc 361.383	857644.3	857644.3	100.90 %	11:55:14
1	Y 371.029	706605.2	706605.2	100.55 %	11:55:14
1	Ag 328.068†	21213.1	20796.6	[100] ug/L	11:55:14
1	As 188.979†	204.3	230.8	[100] ug/L	11:55:34
1	B 249.677†	3602.8	4052.6	[100] ug/L	11:55:14
1	Ba 233.527†	12531.5	12401.1	[100] ug/L	11:55:14
1	Be 313.107†	269412.1	271352.7	[100] ug/L	11:55:14
1	Cd 226.502†	8455.7	8575.9	[100] ug/L	11:55:14
1	Co 228.616†	4621.3	4659.0	[100] ug/L	11:55:34
1	Cr 267.716†	8768.1	8540.4	[100] ug/L	11:55:14
1	Cu 324.752†	40432.8	31978.7	[100] ug/L	11:55:14
1	Mn 257.610†	89563.0	88195.9	[100] ug/L	11:55:14
1	Mo 202.031†	1344.8	1322.4	[100] ug/L	11:55:34
1	Ni 231.604†	4108.5	3958.4	[100] ug/L	11:55:14
1	P 214.914†	1121.5	869.6	[500] ug/L	11:55:34
1	Pb 220.353†	730.7	797.8	[100] ug/L	11:55:34
1	S 181.975 Axial†	200.6	155.9	[200] ug/L	11:55:34
1	Sb 206.836†	322.2	283.6	[100] ug/L	11:55:34
1	Se 196.026†	145.8	167.9	[100] ug/L	11:55:34
1	Si 251.611†	16657.9	15897.3	[500] ug/L	11:55:14
1	Sn 189.927†	556.8	539.2	[100] ug/L	11:55:34
1	Ti 334.940†	61039.2	61988.6	[100] ug/L	11:55:14
1	Tl 190.801†	283.9	320.5	[100] ug/L	11:55:34
1	U 409.014†	229.5	3742.7	[100] ug/L	11:55:14
1	V 292.402†	12039.9	13610.0	[100] ug/L	11:55:14
1	Zn 213.857†	11119.5	10332.7	[100] ug/L	11:55:14
1	SiO2†	16613.6	15846.2	[1069.5] ug/L	11:56:30
2	Sc Radial	4389.6	4389.6	103 %	11:54:57
2	Y RADIAL	4530.3	4530.3	102.9 %	11:54:57
2	K 766.490 Radial†	8310.2	4876.1	[1000] ug/L	11:54:52
2	Sr 421.552†	13344.8	12833.4	[100] ug/L	11:54:57
2	Sc 361.383	851136.1	851136.1	100.13 %	11:55:39
2	Y 371.029	701838.8	701838.8	99.873 %	11:55:39
2	Ag 328.068†	20948.1	20692.7	[100] ug/L	11:55:39
2	As 188.979†	200.6	228.6	[100] ug/L	11:55:59
2	B 249.677†	3537.7	4014.9	[100] ug/L	11:55:39
2	Ba 233.527†	12459.9	12424.5	[100] ug/L	11:55:39
2	Be 313.107†	267429.2	271414.1	[100] ug/L	11:55:39
2	Cd 226.502†	8399.7	8584.0	[100] ug/L	11:55:39
2	Co 228.616†	4630.3	4703.0	[100] ug/L	11:55:59
2	Cr 267.716†	8692.9	8531.7	[100] ug/L	11:55:39
2	Cu 324.752†	40067.1	31919.9	[100] ug/L	11:55:39
2	Mn 257.610†	88973.7	88286.1	[100] ug/L	11:55:39
2	Mo 202.031†	1353.9	1341.7	[100] ug/L	11:55:59
2	Ni 231.604†	4090.4	3971.5	[100] ug/L	11:55:39
2	P 214.914†	1132.4	888.9	[500] ug/L	11:55:59
2	Pb 220.353†	735.4	808.0	[100] ug/L	11:55:59
2	S 181.975 Axial†	202.9	159.7	[200] ug/L	11:55:59
2	Sb 206.836†	330.1	294.0	[100] ug/L	11:55:59
2	Se 196.026†	149.0	172.1	[100] ug/L	11:55:59
2	Si 251.611†	16475.5	15841.3	[500] ug/L	11:55:39
2	Sn 189.927†	561.8	548.4	[100] ug/L	11:55:59
2	Ti 334.940†	60616.0	62028.6	[100] ug/L	11:55:39
2	Tl 190.801†	282.6	321.3	[100] ug/L	11:55:59
2	U 409.014†	-139.6	3375.8	[100] ug/L	11:55:39

2	V 292.402†	11905.3	13566.9	[100]	ug/L	11:55:39
2	Zn 213.857†	10978.5	10276.2	[100]	ug/L	11:55:39
2	SiO2†	16528.8	15887.4	[1069.5]	ug/L	11:56:35
3	Sc Radial	4340.9	4340.9	102	%	11:55:07
3	Y RADIAL	4482.8	4482.8	101.8	%	11:55:07
3	K 766.490 Radial†	8248.8	4906.1	[1000]	ug/L	11:55:02
3	Sr 421.552†	13137.1	12774.7	[100]	ug/L	11:55:07
3	Sc 361.383	857800.6	857800.6	100.92	%	11:56:05
3	Y 371.029	706558.2	706558.2	100.54	%	11:56:05
3	Ag 328.068†	21197.6	20777.4	[100]	ug/L	11:56:05
3	As 188.979†	215.2	241.5	[100]	ug/L	11:56:25
3	B 249.677†	3596.7	4045.9	[100]	ug/L	11:56:05
3	Ba 233.527†	12531.9	12399.2	[100]	ug/L	11:56:05
3	Be 313.107†	269021.5	270917.0	[100]	ug/L	11:56:05
3	Cd 226.502†	8433.2	8552.1	[100]	ug/L	11:56:05
3	Co 228.616†	4661.4	4697.9	[100]	ug/L	11:56:25
3	Cr 267.716†	8712.0	8483.2	[100]	ug/L	11:56:05
3	Cu 324.752†	40490.2	32028.3	[100]	ug/L	11:56:05
3	Mn 257.610†	89778.5	88393.3	[100]	ug/L	11:56:05
3	Mo 202.031†	1371.9	1349.0	[100]	ug/L	11:56:25
3	Ni 231.604†	4020.2	3870.2	[100]	ug/L	11:56:05
3	P 214.914†	1102.9	850.9	[500]	ug/L	11:56:25
3	Pb 220.353†	739.7	806.5	[100]	ug/L	11:56:25
3	S 181.975 Axial†	197.0	152.3	[200]	ug/L	11:56:25
3	Sb 206.836†	334.0	295.3	[100]	ug/L	11:56:25
3	Se 196.026†	143.8	165.8	[100]	ug/L	11:56:25
3	Si 251.611†	16592.5	15829.4	[500]	ug/L	11:56:05
3	Sn 189.927†	573.4	555.6	[100]	ug/L	11:56:25
3	Ti 334.940†	61178.7	62115.9	[100]	ug/L	11:56:05
3	Tl 190.801†	275.5	312.1	[100]	ug/L	11:56:25
3	U 409.014†	-76.2	3439.6	[100]	ug/L	11:56:05
3	V 292.402†	11980.2	13548.7	[100]	ug/L	11:56:05
3	Zn 213.857†	11104.4	10315.8	[100]	ug/L	11:56:05
3	SiO2†	16392.7	15624.3	[1069.5]	ug/L	11:56:40

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Units
Sc 361.383	855527.0	3803.40	0.44%	100.65	%
Sc Radial	4352.4	32.96	0.76%	102	%
Y 371.029	705000.7	2738.39	0.39%	100.32	%
Y RADIAL	4496.2	29.77	0.66%	102.1	%
Ag 328.068†	20755.6	55.29	0.27%	[100]	ug/L
As 188.979†	233.6	6.92	2.96%	[100]	ug/L
B 249.677†	4037.8	20.12	0.50%	[100]	ug/L
Ba 233.527†	12408.3	14.12	0.11%	[100]	ug/L
Be 313.107†	271227.9	271.05	0.10%	[100]	ug/L
Cd 226.502†	8570.7	16.60	0.19%	[100]	ug/L
Co 228.616†	4686.6	24.06	0.51%	[100]	ug/L
Cr 267.716†	8518.4	30.80	0.36%	[100]	ug/L
Cu 324.752†	31975.6	54.25	0.17%	[100]	ug/L
K 766.490 Radial†	4915.9	45.56	0.93%	[1000]	ug/L
Mn 257.610†	88291.7	98.84	0.11%	[100]	ug/L
Mo 202.031†	1337.7	13.74	1.03%	[100]	ug/L
Ni 231.604†	3933.3	55.08	1.40%	[100]	ug/L
P 214.914†	869.8	19.02	2.19%	[500]	ug/L
Pb 220.353†	804.1	5.53	0.69%	[100]	ug/L
S 181.975 Axial†	156.0	3.73	2.39%	[200]	ug/L
Sb 206.836†	291.0	6.37	2.19%	[100]	ug/L
Se 196.026†	168.6	3.20	1.90%	[100]	ug/L
Si 251.611†	15856.0	36.24	0.23%	[500]	ug/L
Sn 189.927†	547.7	8.19	1.50%	[100]	ug/L
Sr 421.552†	12838.9	67.16	0.52%	[100]	ug/L
Ti 334.940†	62044.4	65.06	0.10%	[100]	ug/L
Tl 190.801†	317.9	5.10	1.60%	[100]	ug/L
U 409.014†	3519.4	196.00	5.57%	[100]	ug/L
V 292.402†	13575.2	31.49	0.23%	[100]	ug/L
Zn 213.857†	10308.3	29.01	0.28%	[100]	ug/L
SiO2†	15786.0	141.51	0.90%	[1069.5]	ug/L

Sequence No.: 3

Sample ID: S0.5

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 2/16/2010 11:58:51

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	4330.2	4330.2	102 %		12:00:44
1	Y RADIAL	4422.8	4422.8	100.5 %		12:00:44
1	Al 396.153Radial†	4894.9	4964.3	[5000] ug/L		12:00:44
1	Ca 317.933Radial†	2794.1	2724.6	[5000] ug/L		12:01:04
1	K 766.490 Radial†	28169.5	24482.0	[5000] ug/L		12:00:44
1	Mg 279.077 IEC†	139.1	133.9	[5000] ug/L		12:01:04
1	Sr 421.552†	66095.4	64795.1	[500] ug/L		12:00:44
1	Sc 361.383	866347.8	866347.8	101.92 %		12:02:01
1	Y 371.029	705393.8	705393.8	100.38 %		12:02:01
1	Ag 328.068†	102655.0	100491.3	[500] ug/L		12:02:06
1	As 188.979†	1145.3	1152.0	[500] ug/L		12:02:26
1	B 249.677†	20124.2	20226.6	[500] ug/L		12:02:06
1	Ba 233.527†	60693.3	59529.8	[500] ug/L		12:02:06
1	Be 313.107†	1364703.3	1343304.7	[500] ug/L		12:02:01
1	Cd 226.502†	41966.3	41370.3	[500] ug/L		12:02:06
1	Co 228.616†	23476.8	23112.9	[500] ug/L		12:02:06
1	Cr 267.716†	42389.5	41440.4	[500] ug/L		12:02:06
1	Cu 324.752†	167280.7	156031.8	[500] ug/L		12:02:06
1	Mn 257.610†	437426.4	428607.0	[500] ug/L		12:02:01
1	Mo 202.031†	6700.2	6563.4	[500] ug/L		12:02:26
1	Ni 231.604†	19416.7	18937.0	[500] ug/L		12:02:06
1	P 214.914†	4699.9	4369.3	[2500] ug/L		12:02:26
1	Pb 220.353†	3937.6	3936.9	[500] ug/L		12:02:26
1	S 181.975 Axial†	799.5	741.5	[1000] ug/L		12:02:26
1	Sb 206.836†	1500.5	1436.5	[500] ug/L		12:02:26
1	Se 196.026†	836.3	843.8	[500] ug/L		12:02:26
1	Si 251.611†	79738.1	77621.9	[2500] ug/L		12:02:06
1	Sn 189.927†	2773.0	2708.1	[500] ug/L		12:02:26
1	Ti 334.940†	300130.6	295963.2	[500] ug/L		12:02:06
1	Tl 190.801†	1537.1	1547.3	[500] ug/L		12:02:26
1	U 409.014†	13780.7	17036.0	[500] ug/L		12:02:06
1	V 292.402†	66067.1	66498.4	[500] ug/L		12:02:06
1	Zn 213.857†	51280.8	49625.9	[500] ug/L		12:02:06
1	SiO2†	80660.6	78519.8	[5347.5] ug/L		12:03:34
2	Sc Radial	4344.3	4344.3	102 %		12:01:09
2	Y RADIAL	4468.3	4468.3	101.5 %		12:01:09
2	Al 396.153Radial†	4910.7	4964.2	[5000] ug/L		12:01:09
2	Ca 317.933Radial†	2793.7	2715.3	[5000] ug/L		12:01:29
2	K 766.490 Radial†	28558.1	24772.5	[5000] ug/L		12:01:09
2	Mg 279.077 IEC†	138.7	133.0	[5000] ug/L		12:01:29
2	Sr 421.552†	66419.5	64901.7	[500] ug/L		12:01:09
2	Sc 361.383	858388.4	858388.4	100.99 %		12:02:32
2	Y 371.029	699297.9	699297.9	99.512 %		12:02:32
2	Ag 328.068†	103582.4	102343.6	[500] ug/L		12:02:37
2	As 188.979†	1144.2	1161.4	[500] ug/L		12:02:57
2	B 249.677†	20485.5	20767.5	[500] ug/L		12:02:37
2	Ba 233.527†	61659.8	61039.1	[500] ug/L		12:02:37
2	Be 313.107†	1354883.7	1345996.4	[500] ug/L		12:02:32
2	Cd 226.502†	42779.6	42557.5	[500] ug/L		12:02:37
2	Co 228.616†	24005.1	23849.7	[500] ug/L		12:02:37
2	Cr 267.716†	43144.2	42573.3	[500] ug/L		12:02:37
2	Cu 324.752†	169031.7	159287.5	[500] ug/L		12:02:37
2	Mn 257.610†	434446.7	429635.9	[500] ug/L		12:02:32
2	Mo 202.031†	6686.9	6611.2	[500] ug/L		12:02:57
2	Ni 231.604†	19622.6	19317.5	[500] ug/L		12:02:37
2	P 214.914†	4705.0	4417.1	[2500] ug/L		12:02:57
2	Pb 220.353†	3930.3	3965.5	[500] ug/L		12:02:57
2	S 181.975 Axial†	798.8	748.1	[1000] ug/L		12:02:57
2	Sb 206.836†	1490.1	1439.8	[500] ug/L		12:02:57

2	Se 196.026†	835.2	850.4	[500]	ug/L	12:02:57
2	Si 251.611†	81067.4	79663.7	[2500]	ug/L	12:02:37
2	Sn 189.927†	2767.9	2728.3	[500]	ug/L	12:02:57
2	Ti 334.940†	303839.8	302366.6	[500]	ug/L	12:02:37
2	Tl 190.801†	1544.0	1568.0	[500]	ug/L	12:02:57
2	U 409.014†	13909.5	17288.9	[500]	ug/L	12:02:37
2	V 292.402†	66999.8	68023.0	[500]	ug/L	12:02:37
2	Zn 213.857†	52116.7	50920.2	[500]	ug/L	12:02:37
2	SiO2†	80314.9	78911.4	[5347.5]	ug/L	12:03:39
3	Sc Radial	4290.2	4290.2	101	%	12:01:34
3	Y RADIAL	4406.0	4406.0	100.1	%	12:01:34
3	Al 396.153Radial†	4861.9	4976.3	[5000]	ug/L	12:01:34
3	Ca 317.933Radial†	2745.8	2702.3	[5000]	ug/L	12:01:54
3	K 766.490 Radial†	28237.6	24807.1	[5000]	ug/L	12:01:34
3	Mg 279.077 IEC†	138.6	134.6	[5000]	ug/L	12:01:54
3	Sr 421.552†	65739.5	65046.9	[500]	ug/L	12:01:34
3	Sc 361.383	855708.1	855708.1	100.67	%	12:03:03
3	Y 371.029	697085.1	697085.1	99.197	%	12:03:03
3	Ag 328.068†	104159.6	103238.2	[500]	ug/L	12:03:08
3	As 188.979†	1163.1	1183.7	[500]	ug/L	12:03:28
3	B 249.677†	20548.9	20894.0	[500]	ug/L	12:03:08
3	Ba 233.527†	61705.2	61275.4	[500]	ug/L	12:03:08
3	Be 313.107†	1348590.3	1343947.4	[500]	ug/L	12:03:03
3	Cd 226.502†	42791.4	42701.9	[500]	ug/L	12:03:08
3	Co 228.616†	23992.5	23911.6	[500]	ug/L	12:03:08
3	Cr 267.716†	43136.0	42699.0	[500]	ug/L	12:03:08
3	Cu 324.752†	169705.8	160481.4	[500]	ug/L	12:03:08
3	Mn 257.610†	433059.5	429605.4	[500]	ug/L	12:03:03
3	Mo 202.031†	6673.9	6619.0	[500]	ug/L	12:03:28
3	Ni 231.604†	19755.0	19509.9	[500]	ug/L	12:03:08
3	P 214.914†	4719.4	4446.0	[2500]	ug/L	12:03:28
3	Pb 220.353†	3931.2	3978.6	[500]	ug/L	12:03:28
3	S 181.975 Axial†	808.5	760.2	[1000]	ug/L	12:03:28
3	Sb 206.836†	1510.6	1464.9	[500]	ug/L	12:03:28
3	Se 196.026†	838.7	856.4	[500]	ug/L	12:03:28
3	Si 251.611†	81093.2	79940.8	[2500]	ug/L	12:03:08
3	Sn 189.927†	2771.3	2740.2	[500]	ug/L	12:03:28
3	Ti 334.940†	304686.3	304149.8	[500]	ug/L	12:03:08
3	Tl 190.801†	1531.8	1560.7	[500]	ug/L	12:03:28
3	U 409.014†	13900.4	17323.0	[500]	ug/L	12:03:08
3	V 292.402†	67043.2	68274.0	[500]	ug/L	12:03:08
3	Zn 213.857†	52192.8	51157.4	[500]	ug/L	12:03:08
3	SiO2†	80944.3	79785.6	[5347.5]	ug/L	12:03:44

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	860148.1	5533.81	0.64%	101.19 %
Sc Radial	4321.6	28.05	0.65%	102 %
Y 371.029	700592.3	4302.94	0.61%	99.696 %
Y RADIAL	4432.4	32.23	0.73%	100.7 %
Ag 328.068†	102024.3	1400.99	1.37%	[500] ug/L
Al 396.153Radial†	4968.3	6.98	0.14%	[5000] ug/L
As 188.979†	1165.7	16.29	1.40%	[500] ug/L
B 249.677†	20629.3	354.49	1.72%	[500] ug/L
Ba 233.527†	60614.8	946.98	1.56%	[500] ug/L
Be 313.107†	1344416.1	1405.75	0.10%	[500] ug/L
Ca 317.933Radial†	2714.1	11.23	0.41%	[5000] ug/L
Cd 226.502†	42209.9	730.66	1.73%	[500] ug/L
Co 228.616†	23624.7	444.32	1.88%	[500] ug/L
Cr 267.716†	42237.6	693.23	1.64%	[500] ug/L
Cu 324.752†	158600.2	2303.05	1.45%	[500] ug/L
K 766.490 Radial†	24687.2	178.57	0.72%	[5000] ug/L
Mg 279.077 IEC†	133.8	0.80	0.60%	[5000] ug/L
Mn 257.610†	429282.8	585.44	0.14%	[500] ug/L
Mo 202.031†	6597.9	30.09	0.46%	[500] ug/L
Ni 231.604†	19254.8	291.54	1.51%	[500] ug/L
P 214.914†	4410.8	38.72	0.88%	[2500] ug/L
Pb 220.353†	3960.3	21.32	0.54%	[500] ug/L
S 181.975 Axial†	749.9	9.47	1.26%	[1000] ug/L

Sb 206.836†	1447.1	15.51	1.07%	[500]	ug/L
Se 196.026†	850.2	6.30	0.74%	[500]	ug/L
Si 251.611†	79075.5	1266.40	1.60%	[2500]	ug/L
Sn 189.927†	2725.5	16.25	0.60%	[500]	ug/L
Sr 421.552†	64914.6	126.38	0.19%	[500]	ug/L
Ti 334.940†	300826.5	4305.14	1.43%	[500]	ug/L
Tl 190.801†	1558.7	10.53	0.68%	[500]	ug/L
U 409.014†	17216.0	156.79	0.91%	[500]	ug/L
V 292.402†	67598.5	960.94	1.42%	[500]	ug/L
Zn 213.857†	50567.8	824.29	1.63%	[500]	ug/L
SiO2†	79072.3	648.05	0.82%	[5347.5]	ug/L

Sequence No.: 4

Sample ID: SCAL

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 2/16/2010 12:05:55

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Analysis Time
1	Sc Radial	4297.1	4297.1	101 %	12:07:48
1	Y RADIAL	4399.9	4399.9	99.95 %	12:07:48
1	Al 396.153Radial†	9882.9	9935.6	[10000] ug/L	12:07:48
1	Ca 317.933Radial†	5548.8	5470.8	[10000] ug/L	12:07:48
1	Fe 238.204 Radial†	998.4	977.6	[10000] ug/L	12:08:08
1	K 766.490 Radial†	53335.7	49590.4	[10000] ug/L	12:07:48
1	Mg 279.077 IEC†	272.0	266.4	[10000] ug/L	12:08:08
1	Na 589.592 Radial†	30738.5	30200.8	[10000] ug/L	12:07:48
1	Sr 421.552†	130742.1	129245.9	[1000] ug/L	12:07:48
1	Sc 361.383	850290.2	850290.2	100.03 %	12:09:11
1	Y 371.029	694357.4	694357.4	98.809 %	12:09:11
1	Ag 328.068†	209475.7	209178.7	[1000] ug/L	12:09:11
1	As 188.979†	2351.5	2379.0	[1000] ug/L	12:09:32
1	B 249.677†	42443.4	42911.3	[1000] ug/L	12:09:11
1	Ba 233.527†	123558.0	123498.3	[1000] ug/L	12:09:11
1	Be 313.107†	2720911.6	2724350.2	[1000] ug/L	12:09:06
1	Cd 226.502†	85522.6	85689.8	[1000] ug/L	12:09:11
1	Co 228.616†	47983.7	48046.7	[1000] ug/L	12:09:11
1	Cr 267.716†	86528.8	86350.5	[1000] ug/L	12:09:11
1	Cu 324.752†	337449.3	329243.5	[1000] ug/L	12:09:11
1	Mn 257.610†	866578.5	865721.9	[1000] ug/L	12:09:06
1	Mo 202.031†	13503.7	13488.7	[1000] ug/L	12:09:32
1	Ni 231.604†	39239.7	39113.2	[1000] ug/L	12:09:11
1	P 214.914†	9281.6	9036.6	[5000] ug/L	12:09:32
1	Pb 220.353†	8008.1	8079.0	[1000] ug/L	12:09:32
1	S 181.975 Axial†	1577.2	1533.8	[2000] ug/L	12:09:32
1	Sb 206.836†	2990.0	2953.4	[1000] ug/L	12:09:32
1	Se 196.026†	1692.7	1715.5	[1000] ug/L	12:09:32
1	Si 251.611†	161659.4	160993.6	[5000] ug/L	12:09:11
1	Sn 189.927†	5589.4	5575.0	[1000] ug/L	12:09:32
1	Ti 334.940†	617562.9	618851.4	[1000] ug/L	12:09:11
1	Tl 190.801†	3133.4	3171.5	[1000] ug/L	12:09:32
1	U 409.014†	31887.1	35391.7	[1000] ug/L	12:09:11
1	V 292.402†	137158.2	138790.1	[1000] ug/L	12:09:11
1	Zn 213.857†	103334.0	102612.0	[1000] ug/L	12:09:11
1	SiO2†	160870.9	160198.1	[10695] ug/L	12:10:40
2	Sc Radial	4352.3	4352.3	102 %	12:08:13
2	Y RADIAL	4460.9	4460.9	101.3 %	12:08:13
2	Al 396.153Radial†	10007.9	9933.7	[10000] ug/L	12:08:13
2	Ca 317.933Radial†	5646.2	5496.2	[10000] ug/L	12:08:13
2	Fe 238.204 Radial†	989.5	956.4	[10000] ug/L	12:08:33
2	K 766.490 Radial†	54007.2	49576.7	[10000] ug/L	12:08:13
2	Mg 279.077 IEC†	277.2	268.0	[10000] ug/L	12:08:33
2	Na 589.592 Radial†	31324.9	30387.7	[10000] ug/L	12:08:13
2	Sr 421.552†	132904.2	129716.6	[1000] ug/L	12:08:13
2	Sc 361.383	839445.4	839445.4	98.757 %	12:09:43
2	Y 371.029	685183.9	685183.9	97.503 %	12:09:43
2	Ag 328.068†	206897.9	209273.8	[1000] ug/L	12:09:43
2	As 188.979†	2347.8	2405.7	[1000] ug/L	12:10:03
2	B 249.677†	41812.0	42820.1	[1000] ug/L	12:09:43
2	Ba 233.527†	122310.8	123831.1	[1000] ug/L	12:09:43
2	Be 313.107†	2711028.7	2749482.7	[1000] ug/L	12:09:38
2	Cd 226.502†	84641.7	85902.3	[1000] ug/L	12:09:43
2	Co 228.616†	47590.9	48268.7	[1000] ug/L	12:09:43
2	Cr 267.716†	85401.1	86326.0	[1000] ug/L	12:09:43
2	Cu 324.752†	332443.3	328532.5	[1000] ug/L	12:09:43
2	Mn 257.610†	864434.1	874742.2	[1000] ug/L	12:09:38
2	Mo 202.031†	13411.3	13569.6	[1000] ug/L	12:10:03
2	Ni 231.604†	38909.4	39285.5	[1000] ug/L	12:09:43

2	P 214.914†	9237.6	9111.9	[5000]	ug/L	12:10:03
2	Pb 220.353†	7982.7	8156.7	[1000]	ug/L	12:10:03
2	S 181.975 Axial†	1563.7	1540.4	[2000]	ug/L	12:10:03
2	Sb 206.836†	2972.1	2973.8	[1000]	ug/L	12:10:03
2	Se 196.026†	1673.5	1717.9	[1000]	ug/L	12:10:03
2	Si 251.611†	159696.8	161094.1	[5000]	ug/L	12:09:43
2	Sn 189.927†	5579.8	5637.4	[1000]	ug/L	12:10:03
2	Ti 334.940†	608943.4	618099.1	[1000]	ug/L	12:09:43
2	Tl 190.801†	3119.6	3198.0	[1000]	ug/L	12:10:03
2	U 409.014†	31366.4	35276.3	[1000]	ug/L	12:09:43
2	V 292.402†	135527.3	138910.0	[1000]	ug/L	12:09:43
2	Zn 213.857†	102342.1	102942.2	[1000]	ug/L	12:09:43
2	SiO2†	160636.2	162038.1	[10695]	ug/L	12:10:45
3	Sc Radial	4297.5	4297.5	101	%	12:08:39
3	Y RADIAL	4423.8	4423.8	100.5	%	12:08:39
3	Al 396.153Radial†	9870.2	9922.2	[10000]	ug/L	12:08:39
3	Ca 317.933Radial†	5538.9	5460.5	[10000]	ug/L	12:08:39
3	Fe 238.204 Radial†	978.2	957.6	[10000]	ug/L	12:08:59
3	K 766.490 Radial†	53330.5	49580.4	[10000]	ug/L	12:08:39
3	Mg 279.077 IEC†	272.3	266.7	[10000]	ug/L	12:08:59
3	Na 589.592 Radial†	30764.4	30223.6	[10000]	ug/L	12:08:39
3	Sr 421.552†	130878.6	129369.2	[1000]	ug/L	12:08:39
3	Sc 361.383	841600.4	841600.4	99.011	%	12:10:15
3	Y 371.029	686704.9	686704.9	97.720	%	12:10:15
3	Ag 328.068†	207691.9	209539.3	[1000]	ug/L	12:10:15
3	As 188.979†	2328.7	2380.3	[1000]	ug/L	12:10:35
3	B 249.677†	41884.9	42785.3	[1000]	ug/L	12:10:15
3	Ba 233.527†	122357.9	123561.5	[1000]	ug/L	12:10:15
3	Be 313.107†	2688134.5	2719330.7	[1000]	ug/L	12:10:09
3	Cd 226.502†	84714.8	85756.7	[1000]	ug/L	12:10:15
3	Co 228.616†	47550.5	48104.5	[1000]	ug/L	12:10:15
3	Cr 267.716†	85613.9	86319.5	[1000]	ug/L	12:10:15
3	Cu 324.752†	334091.8	329335.6	[1000]	ug/L	12:10:15
3	Mn 257.610†	858428.4	866435.2	[1000]	ug/L	12:10:09
3	Mo 202.031†	13390.8	13514.2	[1000]	ug/L	12:10:35
3	Ni 231.604†	38839.2	39113.7	[1000]	ug/L	12:10:15
3	P 214.914†	9187.0	9036.8	[5000]	ug/L	12:10:35
3	Pb 220.353†	7943.8	8096.7	[1000]	ug/L	12:10:35
3	S 181.975 Axial†	1565.8	1538.6	[2000]	ug/L	12:10:35
3	Sb 206.836†	2989.0	2983.2	[1000]	ug/L	12:10:35
3	Se 196.026†	1680.3	1720.4	[1000]	ug/L	12:10:35
3	Si 251.611†	160054.4	161041.2	[5000]	ug/L	12:10:15
3	Sn 189.927†	5572.8	5615.9	[1000]	ug/L	12:10:35
3	Ti 334.940†	611283.7	618883.9	[1000]	ug/L	12:10:15
3	Tl 190.801†	3103.6	3173.7	[1000]	ug/L	12:10:35
3	U 409.014†	31685.8	35517.5	[1000]	ug/L	12:10:15
3	V 292.402†	135693.6	138726.6	[1000]	ug/L	12:10:15
3	Zn 213.857†	102467.5	102803.5	[1000]	ug/L	12:10:15
3	SiO2†	159790.3	160767.3	[10695]	ug/L	12:10:51

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc.	Units
Sc 361.383	843778.7	5741.17	0.68%	99.267	%
Sc Radial	4315.7	31.77	0.74%	102	%
Y 371.029	688748.7	4916.41	0.71%	98.011	%
Y RADIAL	4428.2	30.70	0.69%	100.6	%
Ag 328.068†	209330.6	186.88	0.09%	[1000]	ug/L
Al 396.153Radial†	9930.5	7.22	0.07%	[10000]	ug/L
As 188.979†	2388.3	15.03	0.63%	[1000]	ug/L
B 249.677†	42838.9	65.08	0.15%	[1000]	ug/L
Ba 233.527†	123630.3	176.75	0.14%	[1000]	ug/L
Be 313.107†	2731054.6	16155.39	0.59%	[1000]	ug/L
Ca 317.933Radial†	5475.8	18.41	0.34%	[10000]	ug/L
Cd 226.502†	85782.9	108.69	0.13%	[1000]	ug/L
Co 228.616†	48139.9	115.15	0.24%	[1000]	ug/L
Cr 267.716†	86332.0	16.33	0.02%	[1000]	ug/L
Cu 324.752†	329037.2	439.48	0.13%	[1000]	ug/L
Fe 238.204 Radial†	963.9	11.92	1.24%	[10000]	ug/L
K 766.490 Radial†	49582.5	7.08	0.01%	[10000]	ug/L

Mg 279.077 IEC†	267.0	0.89	0.33%	[10000]	ug/L
Mn 257.610†	868966.4	5014.62	0.58%	[1000]	ug/L
Mo 202.031†	13524.2	41.36	0.31%	[1000]	ug/L
Na 589.592 Radial†	30270.7	101.98	0.34%	[10000]	ug/L
Ni 231.604†	39170.8	99.35	0.25%	[1000]	ug/L
P 214.914†	9061.8	43.43	0.48%	[5000]	ug/L
Pb 220.353†	8110.8	40.74	0.50%	[1000]	ug/L
S 181.975 Axial†	1537.6	3.45	0.22%	[2000]	ug/L
Sb 206.836†	2970.1	15.24	0.51%	[1000]	ug/L
Se 196.026†	1717.9	2.46	0.14%	[1000]	ug/L
Si 251.611†	161043.0	50.23	0.03%	[5000]	ug/L
Sn 189.927†	5609.4	31.70	0.57%	[1000]	ug/L
Sr 421.552†	129443.9	244.03	0.19%	[1000]	ug/L
Ti 334.940†	618611.5	444.02	0.07%	[1000]	ug/L
Tl 190.801†	3181.0	14.69	0.46%	[1000]	ug/L
U 409.014†	35395.2	120.64	0.34%	[1000]	ug/L
V 292.402†	138808.9	93.16	0.07%	[1000]	ug/L
Zn 213.857†	102785.9	165.80	0.16%	[1000]	ug/L
SiO2†	161001.2	942.03	0.59%	[10695]	ug/L

Sequence No.: 5

Sample ID: S10

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 2/16/2010 12:13:01

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Analysis Time
1	Sc Radial	4283.2	4283.2	101 %	12:15:15
1	Y RADIAL	4369.2	4369.2	99.25 %	12:15:15
1	Al 396.153Radial†	49493.0	49278.7	[50000] ug/L	12:14:55
1	Ca 317.933Radial†	26610.3	26391.3	[50000] ug/L	12:14:55
1	Fe 238.204 Radial†	1891.8	1867.5	[20000] ug/L	12:15:15
1	Mg 279.077 IEC†	1308.9	1296.3	[50000] ug/L	12:15:15
1	Na 589.592 Radial†	59870.7	59212.1	[20000] ug/L	12:14:55
1	Sc 361.383	840869.2	840869.2	98.925 %	12:16:12
1	Y 371.029	681000.5	681000.5	96.908 %	12:16:12
2	Sc Radial	4263.4	4263.4	100 %	12:15:40
2	Y RADIAL	4348.3	4348.3	98.78 %	12:15:40
2	Al 396.153Radial†	50662.4	50672.3	[50000] ug/L	12:15:20
2	Ca 317.933Radial†	27188.2	27089.9	[50000] ug/L	12:15:20
2	Fe 238.204 Radial†	1890.5	1874.9	[20000] ug/L	12:15:40
2	Mg 279.077 IEC†	1301.2	1294.6	[50000] ug/L	12:15:40
2	Na 589.592 Radial†	61100.3	60713.4	[20000] ug/L	12:15:20
2	Sc 361.383	841226.2	841226.2	98.967 %	12:16:18
2	Y 371.029	682042.3	682042.3	97.056 %	12:16:18
3	Sc Radial	4282.5	4282.5	101 %	12:16:05
3	Y RADIAL	4375.8	4375.8	99.40 %	12:16:05
3	Al 396.153Radial†	50251.2	50038.9	[50000] ug/L	12:15:45
3	Ca 317.933Radial†	27070.7	26852.4	[50000] ug/L	12:15:45
3	Fe 238.204 Radial†	1893.0	1869.0	[20000] ug/L	12:16:05
3	Mg 279.077 IEC†	1298.9	1286.6	[50000] ug/L	12:16:05
3	Na 589.592 Radial†	60167.0	59515.4	[20000] ug/L	12:15:45
3	Sc 361.383	841005.8	841005.8	98.941 %	12:16:23
3	Y 371.029	680903.1	680903.1	96.894 %	12:16:23

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	841033.7	180.11	0.02%	98.944 %
Sc Radial	4276.4	11.22	0.26%	101 %
Y 371.029	681315.3	631.51	0.09%	96.953 %
Y RADIAL	4364.5	14.35	0.33%	99.14 %
Al 396.153Radial†	49996.6	697.75	1.40%	[50000] ug/L
Ca 317.933Radial†	26777.8	355.23	1.33%	[50000] ug/L
Fe 238.204 Radial†	1870.4	3.92	0.21%	[20000] ug/L
Mg 279.077 IEC†	1292.5	5.20	0.40%	[50000] ug/L
Na 589.592 Radial†	59813.6	793.85	1.33%	[20000] ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	208.3	0.00000	0.999949	
Al 396.153Radial	3	Lin Thru 0	0.0	0.9996	0.00000	0.999999	
As 188.979	3	Lin Thru 0	0.0	2.377	0.00000	0.999953	
B 249.677	3	Lin Thru 0	0.0	42.51	0.00000	0.999880	
Ba 233.527	3	Lin Thru 0	0.0	123.2	0.00000	0.999970	
Be 313.107	3	Lin Thru 0	0.0	2723	0.00000	0.999981	
Ca 317.933Radial	3	Lin Thru 0	0.0	0.5361	0.00000	0.999990	
Cd 226.502	3	Lin Thru 0	0.0	85.51	0.00000	0.999980	
Co 228.616	3	Lin Thru 0	0.0	47.95	0.00000	0.999971	
Cr 267.716	3	Lin Thru 0	0.0	85.95	0.00000	0.999963	
Cu 324.752	3	Lin Thru 0	0.0	326.6	0.00000	0.999894	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.0941	0.00000	0.999926	
K 766.490 Radial	3	Lin Thru 0	0.0	4.954	0.00000	0.999998	

Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0259	0.00000	0.999975
Mn 257.610	3	Lin Thru 0	0.0	867.0	0.00000	0.999987
Mo 202.031	3	Lin Thru 0	0.0	13.46	0.00000	0.999953
Na 589.592 Radia	2	Lin Thru 0	0.0	2.998	0.00000	0.999988
Ni 231.604	3	Lin Thru 0	0.0	39.04	0.00000	0.999977
P 214.914	3	Lin Thru 0	0.0	1.802	0.00000	0.999939
Pb 220.353	3	Lin Thru 0	0.0	8.073	0.00000	0.999956
S 181.975 Axial	3	Lin Thru 0	0.0	0.7651	0.00000	0.999950
Sb 206.836	3	Lin Thru 0	0.0	2.955	0.00000	0.999947
Se 196.026	3	Lin Thru 0	0.0	1.714	0.00000	0.999991
Si 251.611	3	Lin Thru 0	0.0	32.09	0.00000	0.999974
Sn 189.927	3	Lin Thru 0	0.0	5.577	0.00000	0.999935
Sr 421.552	3	Lin Thru 0	0.0	129.5	0.00000	0.999999
Ti 334.940	3	Lin Thru 0	0.0	615.3	0.00000	0.999939
Tl 190.801	3	Lin Thru 0	0.0	3.168	0.00000	0.999968
U 409.014	3	Lin Thru 0	0.0	35.20	0.00000	0.999941
V 292.402	3	Lin Thru 0	0.0	138.1	0.00000	0.999945
Zn 213.857	3	Lin Thru 0	0.0	102.5	0.00000	0.999979
SiO2	3	Lin Thru 0	0.0	15.00	0.00000	0.999974

Sequence No.: 6

Sample ID: ICV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 9

Date Collected: 2/16/2010 12:18:35

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4360.4	4360.4	103 %		12:20:27
1	Y RADIAL	4469.4	4469.4	101.5 %		12:20:27
1	Al 396.153Radial†	4929.7	4965.0	4941.6 ug/L	4941.6 ppb	12:20:27
1	Ca 317.933Radial†	2777.9	2689.8	5017.5 ug/L	5017.5 ppb	12:20:47
1	Fe 238.204 Radial†	508.3	485.4	5173.6 ug/L	5173.6 ppb	12:20:47
1	K 766.490 Radial†	15571.7	12009.2	2420.8 ug/L	2420.8 ppb	12:20:27
1	Mg 279.077 IEC†	143.2	136.9	5288.7 ug/L	5288.7 ppb	12:20:47
1	Na 589.592 Radial†	7893.9	7488.7	2497.9 ug/L	2497.9 ppb	12:20:27
1	Sr 421.552†	69074.7	67250.6	519.22 ug/L	519.22 ppb	12:20:27
1	Sc 361.383	868942.2	868942.2	102.23 %		12:21:45
1	Y 371.029	709496.3	709496.3	100.96 %		12:21:45
1	Ag 328.068†	53459.2	52066.7	253.28 ug/L	253.28 ppb	12:21:45
1	As 188.979†	1082.4	1087.1	461.66 ug/L	461.66 ppb	12:22:05
1	B 249.677†	21376.4	21392.6	501.06 ug/L	501.06 ppb	12:21:45
1	Ba 233.527†	62495.5	61115.0	497.48 ug/L	497.48 ppb	12:21:45
1	Be 313.107†	704444.7	693434.6	255.82 ug/L	255.82 ppb	12:21:45
1	Cd 226.502†	41203.6	40501.3	473.50 ug/L	473.50 ppb	12:22:05
1	Co 228.616†	23747.1	23308.5	486.20 ug/L	486.20 ppb	12:22:05
1	Cr 267.716†	41778.0	40718.0	474.32 ug/L	474.32 ppb	12:21:45
1	Cu 324.752†	172222.0	160375.4	491.03 ug/L	491.03 ppb	12:21:45
1	Mn 257.610†	449261.8	438903.1	506.52 ug/L	506.52 ppb	12:21:45
1	Mo 202.031†	7181.9	7015.0	521.72 ug/L	521.72 ppb	12:22:05
1	Ni 231.604†	19443.8	18906.6	483.98 ug/L	483.98 ppb	12:22:05
1	P 214.914†	4754.1	4408.5	2350.6 ug/L	2350.6 ppb	12:22:05
1	Pb 220.353†	3947.3	3934.9	489.12 ug/L	489.12 ppb	12:22:05
1	S 181.975 Axial†	1926.1	1841.2	2405.5 ug/L	2405.5 ppb	12:22:05
1	Sb 206.836†	1511.1	1442.5	506.98 ug/L	506.98 ppb	12:22:05
1	Se 196.026†	4383.0	4310.8	2533.2 ug/L	2533.2 ppb	12:22:05
1	Si 251.611†	157732.7	153683.6	4782.7 ug/L	4782.7 ppb	12:21:45
1	Sn 189.927†	2996.1	2918.2	524.11 ug/L	524.11 ppb	12:22:05
1	Ti 334.940†	309110.1	303867.8	493.74 ug/L	493.74 ppb	12:21:45
1	Tl 190.801†	1610.0	1614.0	512.87 ug/L	512.87 ppb	12:22:05
1	U 409.014†	13900.0	17112.3	484.46 ug/L	484.46 ppb	12:21:45
1	V 292.402†	68110.9	68304.1	501.66 ug/L	501.66 ppb	12:21:45
1	Zn 213.857†	53475.5	51622.6	499.31 ug/L	499.31 ppb	12:21:45
1	SiO2†	155745.2	151732.1	10102 ug/L	10102 ppb	12:23:03
2	Sc Radial	4411.6	4411.6	104 %		12:20:53
2	Y RADIAL	4512.2	4512.2	102.5 %		12:20:53
2	Al 396.153Radial†	4948.5	4927.3	4903.3 ug/L	4903.3 ppb	12:20:53
2	Ca 317.933Radial†	2749.9	2631.4	4908.5 ug/L	4908.5 ppb	12:21:13
2	Fe 238.204 Radial†	499.6	471.3	5023.6 ug/L	5023.6 ppb	12:21:13
2	K 766.490 Radial†	15645.9	11904.4	2399.6 ug/L	2399.6 ppb	12:20:53
2	Mg 279.077 IEC†	144.7	136.7	5279.5 ug/L	5279.5 ppb	12:21:13
2	Na 589.592 Radial†	8025.8	7526.4	2510.5 ug/L	2510.5 ppb	12:20:53
2	Sr 421.552†	69566.6	66942.6	516.85 ug/L	516.85 ppb	12:20:53
2	Sc 361.383	856794.2	856794.2	100.80 %		12:22:11
2	Y 371.029	699854.6	699854.6	99.591 %		12:22:11
2	Ag 328.068†	53010.6	52363.1	254.66 ug/L	254.66 ppb	12:22:11
2	As 188.979†	1087.6	1107.3	470.09 ug/L	470.09 ppb	12:22:31
2	B 249.677†	20918.9	21235.1	497.35 ug/L	497.35 ppb	12:22:11
2	Ba 233.527†	61691.2	61183.8	498.04 ug/L	498.04 ppb	12:22:11
2	Be 313.107†	694167.9	693009.6	255.67 ug/L	255.67 ppb	12:22:11
2	Cd 226.502†	41342.3	41210.4	481.81 ug/L	481.81 ppb	12:22:31
2	Co 228.616†	23881.3	23771.0	495.88 ug/L	495.88 ppb	12:22:31
2	Cr 267.716†	41313.9	40837.0	475.71 ug/L	475.71 ppb	12:22:11
2	Cu 324.752†	169360.3	159925.0	489.65 ug/L	489.65 ppb	12:22:11
2	Mn 257.610†	442690.7	438615.1	506.17 ug/L	506.17 ppb	12:22:11
2	Mo 202.031†	7247.3	7179.4	533.92 ug/L	533.92 ppb	12:22:31
2	Ni 231.604†	19570.2	19301.6	494.10 ug/L	494.10 ppb	12:22:31

2	P 214.914†	4762.4	4482.7	2392.2 ug/L	2392.2 ppb	12:22:31
2	Pb 220.353†	3959.9	4002.1	497.48 ug/L	497.48 ppb	12:22:31
2	S 181.975 Axial†	1953.1	1894.7	2475.3 ug/L	2475.3 ppb	12:22:31
2	Sb 206.836†	1526.7	1478.9	519.70 ug/L	519.70 ppb	12:22:31
2	Se 196.026†	4408.4	4396.9	2582.9 ug/L	2582.9 ppb	12:22:31
2	Si 251.611†	155299.4	153457.2	4775.5 ug/L	4775.5 ppb	12:22:11
2	Sn 189.927†	2993.1	2956.8	531.01 ug/L	531.01 ppb	12:22:31
2	Ti 334.940†	304709.0	303788.7	493.60 ug/L	493.60 ppb	12:22:11
2	Tl 190.801†	1632.9	1659.1	527.04 ug/L	527.04 ppb	12:22:31
2	U 409.014†	13328.9	16738.6	473.86 ug/L	473.86 ppb	12:22:11
2	V 292.402†	67295.7	68440.0	502.82 ug/L	502.82 ppb	12:22:11
2	Zn 213.857†	52681.3	51576.3	498.81 ug/L	498.81 ppb	12:22:11
2	SiO2†	157647.2	155779.2	10372 ug/L	10372 ppb	12:23:08
3	Sc Radial	4390.1	4390.1	103 %		12:21:18
3	Y RADIAL	4517.5	4517.5	102.6 %		12:21:18
3	Al 396.153Radial†	4976.6	4977.9	4954.2 ug/L	4954.2 ppb	12:21:18
3	Ca 317.933Radial†	2742.3	2637.1	4919.1 ug/L	4919.1 ppb	12:21:38
3	Fe 238.204 Radial†	498.6	472.7	5038.8 ug/L	5038.8 ppb	12:21:38
3	K 766.490 Radial†	15612.6	11946.0	2408.1 ug/L	2408.1 ppb	12:21:18
3	Mg 279.077 IEC†	146.7	139.4	5383.5 ug/L	5383.5 ppb	12:21:38
3	Na 589.592 Radial†	7813.8	7358.9	2454.6 ug/L	2454.6 ppb	12:21:18
3	Sr 421.552†	69255.7	66969.9	517.06 ug/L	517.06 ppb	12:21:18
3	Sc 361.383	858961.3	858961.3	101.05 %		12:22:37
3	Y 371.029	702178.7	702178.7	99.922 %		12:22:37
3	Ag 328.068†	52864.1	52085.4	253.32 ug/L	253.32 ppb	12:22:37
3	As 188.979†	1081.2	1098.2	466.26 ug/L	466.26 ppb	12:22:57
3	B 249.677†	20968.3	21231.6	497.28 ug/L	497.28 ppb	12:22:37
3	Ba 233.527†	61523.0	60863.0	495.43 ug/L	495.43 ppb	12:22:37
3	Be 313.107†	694240.8	691344.2	255.05 ug/L	255.05 ppb	12:22:37
3	Cd 226.502†	41092.7	40859.9	477.71 ug/L	477.71 ppb	12:22:57
3	Co 228.616†	23690.0	23522.0	490.68 ug/L	490.68 ppb	12:22:57
3	Cr 267.716†	41244.1	40664.6	473.70 ug/L	473.70 ppb	12:22:37
3	Cu 324.752†	169502.3	159641.5	488.78 ug/L	488.78 ppb	12:22:37
3	Mn 257.610†	441818.6	436644.0	503.89 ug/L	503.89 ppb	12:22:37
3	Mo 202.031†	7191.9	7106.5	528.50 ug/L	528.50 ppb	12:22:57
3	Ni 231.604†	19436.5	19120.4	489.46 ug/L	489.46 ppb	12:22:57
3	P 214.914†	4751.2	4459.8	2379.6 ug/L	2379.6 ppb	12:22:57
3	Pb 220.353†	3944.2	3976.6	494.32 ug/L	494.32 ppb	12:22:57
3	S 181.975 Axial†	1932.7	1869.6	2442.6 ug/L	2442.6 ppb	12:22:57
3	Sb 206.836†	1515.4	1463.9	514.48 ug/L	514.48 ppb	12:22:57
3	Se 196.026†	4365.2	4343.0	2551.5 ug/L	2551.5 ppb	12:22:57
3	Si 251.611†	155175.8	152946.2	4759.7 ug/L	4759.7 ppb	12:22:37
3	Sn 189.927†	2993.3	2949.5	529.70 ug/L	529.70 ppb	12:22:57
3	Ti 334.940†	304554.5	302873.1	492.11 ug/L	492.11 ppb	12:22:37
3	Tl 190.801†	1617.9	1640.2	521.08 ug/L	521.08 ppb	12:22:57
3	U 409.014†	13447.0	16822.1	476.23 ug/L	476.23 ppb	12:22:37
3	V 292.402†	67158.6	68135.9	500.55 ug/L	500.55 ppb	12:22:37
3	Zn 213.857†	52611.6	51375.5	496.88 ug/L	496.88 ppb	12:22:37
3	SiO2†	156707.7	154454.9	10284 ug/L	10284 ppb	12:23:13

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	861565.9	101.36 %	0.762			0.75%
Sc Radial	4387.4	103 %	0.6			0.59%
Y 371.029	703843.2	100.16 %	0.716			0.71%
Y RADIAL	4499.7	102.2 %	0.60			0.59%
Ag 328.068†	52171.7	253.75 ug/L	0.787	253.75 ppb	0.787	0.31%
QC value within limits for Ag 328.068 Recovery = 101.50%						
Al 396.153Radial†	4956.7	4933.0 ug/L	26.50	4933.0 ppb	26.50	0.54%
QC value within limits for Al 396.153Radial Recovery = 98.66%						
As 188.979†	1097.6	466.00 ug/L	4.219	466.00 ppb	4.219	0.91%
QC value within limits for As 188.979 Recovery = 93.20%						
B 249.677†	21286.4	498.57 ug/L	2.161	498.57 ppb	2.161	0.43%
QC value within limits for B 249.677 Recovery = 99.71%						
Ba 233.527†	61053.9	496.98 ug/L	1.374	496.98 ppb	1.374	0.28%
QC value within limits for Ba 233.527 Recovery = 99.40%						
Be 313.107†	692596.1	255.51 ug/L	0.408	255.51 ppb	0.408	0.16%
QC value within limits for Be 313.107 Recovery = 102.21%						
Ca 317.933Radial†	2652.7	4948.4 ug/L	60.08	4948.4 ppb	60.08	1.21%

QC value within limits for Ca 317.933 Radial Recovery = 98.97%							
Cd 226.502†	40857.2	477.68 ug/L	4.156	477.68 ppb	4.156	0.87%	
QC value within limits for Cd 226.502 Recovery = 95.54%							
Co 228.616†	23533.9	490.92 ug/L	4.842	490.92 ppb	4.842	0.99%	
QC value within limits for Co 228.616 Recovery = 98.18%							
Cr 267.716†	40739.9	474.58 ug/L	1.029	474.58 ppb	1.029	0.22%	
QC value within limits for Cr 267.716 Recovery = 94.92%							
Cu 324.752†	159980.6	489.82 ug/L	1.134	489.82 ppb	1.134	0.23%	
QC value within limits for Cu 324.752 Recovery = 97.96%							
Fe 238.204 Radial†	476.5	5078.7 ug/L	82.55	5078.7 ppb	82.55	1.63%	
QC value within limits for Fe 238.204 Radial Recovery = 101.57%							
K 766.490 Radial†	11953.2	2409.5 ug/L	10.64	2409.5 ppb	10.64	0.44%	
QC value within limits for K 766.490 Radial Recovery = 96.38%							
Mg 279.077 IEC†	137.7	5317.2 ug/L	57.60	5317.2 ppb	57.60	1.08%	
QC value within limits for Mg 279.077 IEC Recovery = 106.34%							
Mn 257.610†	438054.1	505.53 ug/L	1.425	505.53 ppb	1.425	0.28%	
QC value within limits for Mn 257.610 Recovery = 101.11%							
Mo 202.031†	7100.3	528.05 ug/L	6.116	528.05 ppb	6.116	1.16%	
QC value within limits for Mo 202.031 Recovery = 105.61%							
Na 589.592 Radial†	7458.0	2487.7 ug/L	29.30	2487.7 ppb	29.30	1.18%	
QC value within limits for Na 589.592 Radial Recovery = 99.51%							
Ni 231.604†	19109.6	489.18 ug/L	5.062	489.18 ppb	5.062	1.03%	
QC value within limits for Ni 231.604 Recovery = 97.84%							
P 214.914†	4450.3	2374.1 ug/L	21.35	2374.1 ppb	21.35	0.90%	
QC value within limits for P 214.914 Recovery = 94.97%							
Pb 220.353†	3971.2	493.64 ug/L	4.222	493.64 ppb	4.222	0.86%	
QC value within limits for Pb 220.353 Recovery = 98.73%							
S 181.975 Axial†	1868.5	2441.1 ug/L	34.96	2441.1 ppb	34.96	1.43%	
QC value within limits for S 181.975 Axial Recovery = 97.64%							
Sb 206.836†	1461.8	513.72 ug/L	6.393	513.72 ppb	6.393	1.24%	
QC value within limits for Sb 206.836 Recovery = 102.74%							
Se 196.026†	4350.2	2555.9 ug/L	25.16	2555.9 ppb	25.16	0.98%	
QC value within limits for Se 196.026 Recovery = 102.23%							
Si 251.611†	153362.3	4772.7 ug/L	11.80	4772.7 ppb	11.80	0.25%	
QC value within limits for Si 251.611 Recovery = 95.45%							
Sn 189.927†	2941.5	528.27 ug/L	3.663	528.27 ppb	3.663	0.69%	
QC value within limits for Sn 189.927 Recovery = 105.65%							
Sr 421.552†	67054.4	517.71 ug/L	1.316	517.71 ppb	1.316	0.25%	
QC value within limits for Sr 421.552 Recovery = 103.54%							
Ti 334.940†	303509.9	493.15 ug/L	0.906	493.15 ppb	0.906	0.18%	
QC value within limits for Ti 334.940 Recovery = 98.63%							
Tl 190.801†	1637.8	520.33 ug/L	7.117	520.33 ppb	7.117	1.37%	
QC value within limits for Tl 190.801 Recovery = 104.07%							
U 409.014†	16891.0	478.19 ug/L	5.565	478.19 ppb	5.565	1.16%	
QC value within limits for U 409.014 Recovery = 95.64%							
V 292.402†	68293.4	501.68 ug/L	1.136	501.68 ppb	1.136	0.23%	
QC value within limits for V 292.402 Recovery = 100.34%							
Zn 213.857†	51524.8	498.33 ug/L	1.281	498.33 ppb	1.281	0.26%	
QC value within limits for Zn 213.857 Recovery = 99.67%							
SiO2†	153988.7	10253 ug/L	137.4	10253 ppb	137.4	1.34%	
QC value within limits for SiO2 Recovery = 95.86%							
All analyte(s) passed QC.							

Sequence No.: 7

Sample ID: ICB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 10

Date Collected: 2/16/2010 12:25:24

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4455.3	4455.3	105 %		12:27:17
1	Y RADIAL	4561.8	4561.8	103.6 %		12:27:17
1	Al 396.153Radial†	-148.1	17.7	17.696 ug/L	17.696 ppb	12:27:17
1	Ca 317.933Radial†	20.8	1.5	2.8793 ug/L	2.8793 ppb	12:27:37
1	Fe 238.204 Radial†	11.5	0.9	9.5190 ug/L	9.5190 ppb	12:27:37
1	K 766.490 Radial†	3239.8	-80.5	-16.259 ug/L	-16.259 ppb	12:27:17
1	Mg 279.077 IEC†	3.4	0.5	20.058 ug/L	20.058 ppb	12:27:37
1	Na 589.592 Radial†	320.3	98.5	32.864 ug/L	32.864 ppb	12:27:17
1	Sr 421.552†	101.2	6.7	0.0520 ug/L	0.0520 ppb	12:27:17
1	Sc 361.383	850103.5	850103.5	100.01 %		12:28:34
1	Y 371.029	701164.2	701164.2	99.777 %		12:28:34
1	Ag 328.068†	351.9	124.2	0.6024 ug/L	0.6024 ppb	12:28:34
1	As 188.979†	-33.8	-5.5	-2.3138 ug/L	-2.3138 ppb	12:28:54
1	B 249.677†	-258.3	223.6	5.2598 ug/L	5.2598 ppb	12:28:54
1	Ba 233.527†	28.2	9.4	0.0763 ug/L	0.0763 ppb	12:28:54
1	Be 313.107†	-4315.7	23.9	0.0092 ug/L	0.0092 ppb	12:28:34
1	Cd 226.502†	-206.2	-10.7	-0.1266 ug/L	-0.1266 ppb	12:28:54
1	Co 228.616†	-79.3	-0.4	-0.0076 ug/L	-0.0076 ppb	12:28:54
1	Cr 267.716†	168.0	18.3	0.2141 ug/L	0.2141 ppb	12:28:54
1	Cu 324.752†	8192.7	97.7	0.3021 ug/L	0.3021 ppb	12:28:34
1	Mn 257.610†	656.9	87.1	0.1006 ug/L	0.1006 ppb	12:28:54
1	Mo 202.031†	21.2	10.8	0.8000 ug/L	0.8000 ppb	12:28:54
1	Ni 231.604†	106.4	-7.2	-0.1832 ug/L	-0.1832 ppb	12:28:54
1	P 214.914†	253.2	11.1	6.1445 ug/L	6.1445 ppb	12:28:54
1	Pb 220.353†	-77.9	-4.3	-0.5330 ug/L	-0.5330 ppb	12:28:54
1	S 181.975 Axial†	47.0	4.1	5.3073 ug/L	5.3073 ppb	12:28:54
1	Sb 206.836†	45.0	9.3	3.1996 ug/L	3.1996 ppb	12:28:54
1	Se 196.026†	-21.5	1.9	1.1248 ug/L	1.1248 ppb	12:28:54
1	Si 251.611†	630.4	18.1	0.5531 ug/L	0.5531 ppb	12:28:54
1	Sn 189.927†	26.6	13.9	2.5008 ug/L	2.5008 ppb	12:28:54
1	Ti 334.940†	-1382.2	110.9	0.1808 ug/L	0.1808 ppb	12:28:34
1	Tl 190.801†	-36.1	3.1	0.9666 ug/L	0.9666 ppb	12:28:54
1	U 409.014†	-3667.0	-151.4	-4.3038 ug/L	-4.3038 ppb	12:28:34
1	V 292.402†	-1691.7	-14.2	-0.1010 ug/L	-0.1010 ppb	12:28:34
1	Zn 213.857†	726.3	38.5	0.3747 ug/L	0.3747 ppb	12:28:54
1	SiO2†	620.9	1.3	0.0652 ug/L	0.0652 ppb	12:29:50
2	Sc Radial	4440.7	4440.7	104 %		12:27:42
2	Y RADIAL	4576.2	4576.2	104.0 %		12:27:42
2	Al 396.153Radial†	-148.2	17.2	17.157 ug/L	17.157 ppb	12:27:42
2	Ca 317.933Radial†	24.9	5.5	10.224 ug/L	10.224 ppb	12:28:02
2	Fe 238.204 Radial†	12.5	1.9	19.787 ug/L	19.787 ppb	12:28:02
2	K 766.490 Radial†	3182.1	-125.6	-25.354 ug/L	-25.354 ppb	12:27:42
2	Mg 279.077 IEC†	2.2	-0.6	-23.955 ug/L	-23.955 ppb	12:28:02
2	Na 589.592 Radial†	210.8	-5.3	-1.7514 ug/L	-1.7514 ppb	12:27:42
2	Sr 421.552†	78.4	-14.8	-0.1143 ug/L	-0.1143 ppb	12:27:42
2	Sc 361.383	850643.0	850643.0	100.07 %		12:29:00
2	Y 371.029	701080.0	701080.0	99.765 %		12:29:00
2	Ag 328.068†	215.2	-12.6	-0.0538 ug/L	-0.0538 ppb	12:29:00
2	As 188.979†	-32.2	-3.9	-1.6295 ug/L	-1.6295 ppb	12:29:20
2	B 249.677†	-253.7	228.4	5.3704 ug/L	5.3704 ppb	12:29:20
2	Ba 233.527†	1.4	-17.5	-0.1413 ug/L	-0.1413 ppb	12:29:20
2	Be 313.107†	-4312.8	29.6	0.0106 ug/L	0.0106 ppb	12:29:00
2	Cd 226.502†	-195.3	0.3	0.0017 ug/L	0.0017 ppb	12:29:20
2	Co 228.616†	-78.1	0.9	0.0198 ug/L	0.0198 ppb	12:29:20
2	Cr 267.716†	145.5	-4.3	-0.0489 ug/L	-0.0489 ppb	12:29:20
2	Cu 324.752†	8133.5	33.3	0.1034 ug/L	0.1034 ppb	12:29:00
2	Mn 257.610†	632.8	62.5	0.0751 ug/L	0.0751 ppb	12:29:20
2	Mo 202.031†	20.8	10.3	0.7687 ug/L	0.7687 ppb	12:29:20
2	Ni 231.604†	100.8	-12.8	-0.3269 ug/L	-0.3269 ppb	12:29:20

2	P 214.914†	228.4	-13.7	-7.6283 ug/L	-7.6283 ppb	12:29:20
2	Pb 220.353†	-60.9	12.7	1.5761 ug/L	1.5761 ppb	12:29:20
2	S 181.975 Axial†	46.3	3.3	4.3280 ug/L	4.3280 ppb	12:29:20
2	Sb 206.836†	52.7	17.0	5.7844 ug/L	5.7844 ppb	12:29:20
2	Se 196.026†	-17.8	5.6	3.3281 ug/L	3.3281 ppb	12:29:20
2	Si 251.611†	602.3	-10.5	-0.3364 ug/L	-0.3364 ppb	12:29:20
2	Sn 189.927†	18.9	6.2	1.1203 ug/L	1.1203 ppb	12:29:20
2	Ti 334.940†	-1553.1	-59.0	-0.0923 ug/L	-0.0923 ppb	12:29:00
2	Tl 190.801†	-33.4	5.7	1.8073 ug/L	1.8073 ppb	12:29:20
2	U 409.014†	-3539.5	-21.7	-0.6188 ug/L	-0.6188 ppb	12:29:00
2	V 292.402†	-1688.4	-9.8	-0.0648 ug/L	-0.0648 ppb	12:29:00
2	Zn 213.857†	725.2	36.9	0.3593 ug/L	0.3593 ppb	12:29:20
2	SiO2†	626.5	6.5	0.4151 ug/L	0.4151 ppb	12:29:55
3	Sc Radial	4363.6	4363.6	103 %		12:28:08
3	Y RADIAL	4483.5	4483.5	101.8 %		12:28:08
3	Al 396.153Radial†	-148.0	14.8	14.794 ug/L	14.794 ppb	12:28:08
3	Ca 317.933Radial†	22.9	3.9	7.3483 ug/L	7.3483 ppb	12:28:28
3	Fe 238.204 Radial†	10.6	0.2	2.5876 ug/L	2.5876 ppb	12:28:28
3	K 766.490 Radial†	3081.8	-169.4	-34.205 ug/L	-34.205 ppb	12:28:08
3	Mg 279.077 IEC†	0.3	-2.4	-92.996 ug/L	-92.996 ppb	12:28:28
3	Na 589.592 Radial†	217.7	5.0	1.6838 ug/L	1.6838 ppb	12:28:08
3	Sr 421.552†	105.7	13.1	0.1014 ug/L	0.1014 ppb	12:28:08
3	Sc 361.383	852757.2	852757.2	100.32 %		12:29:25
3	Y 371.029	704054.8	704054.8	100.19 %		12:29:25
3	Ag 328.068†	256.4	27.9	0.1341 ug/L	0.1341 ppb	12:29:25
3	As 188.979†	-31.2	-2.8	-1.1867 ug/L	-1.1867 ppb	12:29:45
3	B 249.677†	-279.9	202.9	4.7727 ug/L	4.7727 ppb	12:29:45
3	Ba 233.527†	18.0	-0.9	-0.0081 ug/L	-0.0081 ppb	12:29:45
3	Be 313.107†	-4269.7	83.2	0.0306 ug/L	0.0306 ppb	12:29:25
3	Cd 226.502†	-215.8	-19.6	-0.2295 ug/L	-0.2295 ppb	12:29:45
3	Co 228.616†	-68.1	11.0	0.2297 ug/L	0.2297 ppb	12:29:45
3	Cr 267.716†	144.7	-5.4	-0.0631 ug/L	-0.0631 ppb	12:29:45
3	Cu 324.752†	8096.3	-23.9	-0.0725 ug/L	-0.0725 ppb	12:29:25
3	Mn 257.610†	622.2	50.5	0.0623 ug/L	0.0623 ppb	12:29:45
3	Mo 202.031†	17.5	7.0	0.5216 ug/L	0.5216 ppb	12:29:45
3	Ni 231.604†	123.6	9.7	0.2485 ug/L	0.2485 ppb	12:29:45
3	P 214.914†	239.0	-3.7	-2.0195 ug/L	-2.0195 ppb	12:29:45
3	Pb 220.353†	-65.2	8.6	1.0665 ug/L	1.0665 ppb	12:29:45
3	S 181.975 Axial†	41.2	-1.8	-2.4200 ug/L	-2.4200 ppb	12:29:45
3	Sb 206.836†	50.4	14.6	4.9775 ug/L	4.9775 ppb	12:29:45
3	Se 196.026†	-25.0	-1.5	-0.8926 ug/L	-0.8926 ppb	12:29:45
3	Si 251.611†	616.0	1.7	0.0452 ug/L	0.0452 ppb	12:29:45
3	Sn 189.927†	24.5	11.8	2.1193 ug/L	2.1193 ppb	12:29:45
3	Ti 334.940†	-1476.3	21.4	0.0437 ug/L	0.0437 ppb	12:29:25
3	Tl 190.801†	-33.5	5.7	1.7946 ug/L	1.7946 ppb	12:29:45
3	U 409.014†	-3555.9	-29.3	-0.8315 ug/L	-0.8315 ppb	12:29:25
3	V 292.402†	-1727.4	-44.5	-0.3186 ug/L	-0.3186 ppb	12:29:25
3	Zn 213.857†	725.9	35.8	0.3475 ug/L	0.3475 ppb	12:29:45
3	SiO2†	632.0	10.5	0.6837 ug/L	0.6837 ppb	12:30:00

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	851167.9	100.14 %	0.165			0.16%
Sc Radial	4419.9	104 %	1.2			1.11%
Y 371.029	702099.6	99.911 %	0.2410			0.24%
Y RADIAL	4540.5	103.1 %	1.13			1.10%
Ag 328.068†	46.5	0.2275 ug/L	0.33795	0.2275 ppb	0.33795	148.52%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	16.6	16.549 ug/L	1.5440	16.549 ppb	1.5440	9.33%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-4.1	-1.7100 ug/L	0.56785	-1.7100 ppb	0.56785	33.21%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	218.3	5.1343 ug/L	0.31799	5.1343 ppb	0.31799	6.19%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	-3.0	-0.0244 ug/L	0.10969	-0.0244 ppb	0.10969	449.88%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	45.5	0.0168 ug/L	0.01199	0.0168 ppb	0.01199	71.29%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	3.7	6.8174 ug/L	3.70128	6.8174 ppb	3.70128	54.29%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd 226.502†	-10.0	-0.1181 ug/L	0.11582	-0.1181 ppb	0.11582	98.05%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	3.8	0.0807 ug/L	0.12984	0.0807 ppb	0.12984	160.98%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	2.9	0.0340 ug/L	0.15613	0.0340 ppb	0.15613	458.91%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	35.7	0.1110 ug/L	0.18742	0.1110 ppb	0.18742	168.85%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	1.0	10.631 ug/L	8.6537	10.631 ppb	8.6537	81.40%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	-125.2	-25.273 ug/L	8.9732	-25.273 ppb	8.9732	35.51%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	-0.8	-32.298 ug/L	56.9867	-32.298 ppb	56.9867	176.44%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	66.7	0.0793 ug/L	0.01951	0.0793 ppb	0.01951	24.60%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	9.4	0.6967 ug/L	0.15251	0.6967 ppb	0.15251	21.89%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	32.8	10.932 ug/L	19.0710	10.932 ppb	19.0710	174.45%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	-3.4	-0.0872 ug/L	0.29951	-0.0872 ppb	0.29951	343.43%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	-2.1	-1.1678 ug/L	6.92582	-1.1678 ppb	6.92582	593.08%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	5.6	0.7032 ug/L	1.10045	0.7032 ppb	1.10045	156.49%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	1.8	2.4051 ug/L	4.20725	2.4051 ppb	4.20725	174.93%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	13.6	4.6538 ug/L	1.32244	4.6538 ppb	1.32244	28.42%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	2.0	1.1868 ug/L	2.11107	1.1868 ppb	2.11107	177.88%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	3.1	0.0873 ug/L	0.44621	0.0873 ppb	0.44621	511.12%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	10.7	1.9134 ug/L	0.71290	1.9134 ppb	0.71290	37.26%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	1.7	0.0130 ug/L	0.11303	0.0130 ppb	0.11303	868.15%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	24.4	0.0441 ug/L	0.13656	0.0441 ppb	0.13656	309.95%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	4.8	1.5228 ug/L	0.48177	1.5228 ppb	0.48177	31.64%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	-67.5	-1.9180 ug/L	2.06884	-1.9180 ppb	2.06884	107.86%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	-22.8	-0.1615 ug/L	0.13730	-0.1615 ppb	0.13730	85.04%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	37.1	0.3605 ug/L	0.01362	0.3605 ppb	0.01362	3.78%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	6.1	0.3880 ug/L	0.31015	0.3880 ppb	0.31015	79.93%	
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: 2/16/2010 12:32:12

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	4365.0	4365.0	103 %		12:34:05
1	Y RADIAL	4513.2	4513.2	102.5 %		12:34:05
1	Al 396.153Radial†	71.4	228.6	228.13 ug/L	228.13 ppb	12:34:05
1	Ca 317.933Radial†	129.9	108.2	201.88 ug/L	201.88 ppb	12:34:25
1	Fe 238.204 Radial†	21.7	11.1	117.86 ug/L	117.86 ppb	12:34:25
1	K 766.490 Radial†	4017.9	741.3	149.43 ug/L	149.43 ppb	12:34:05
1	Mg 279.077 IEC†	12.9	9.9	380.54 ug/L	380.54 ppb	12:34:25
1	Na 589.592 Radial†	1204.1	965.6	322.08 ug/L	322.08 ppb	12:34:05
1	Sr 421.552†	754.3	644.8	4.9769 ug/L	4.9769 ppb	12:34:05
1	Sc 361.383	854077.8	854077.8	100.48 %		12:35:22
1	Y 371.029	703434.5	703434.5	100.10 %		12:35:22
1	Ag 328.068†	1253.1	1019.4	4.9056 ug/L	4.9056 ppb	12:35:22
1	As 188.979†	36.7	64.8	27.314 ug/L	27.314 ppb	12:35:42
1	B 249.677†	1666.4	2140.3	50.321 ug/L	50.321 ppb	12:35:22
1	Ba 233.527†	640.5	618.6	5.0367 ug/L	5.0367 ppb	12:35:42
1	Be 313.107†	9115.3	13411.0	4.9375 ug/L	4.9375 ppb	12:35:22
1	Cd 226.502†	225.8	420.2	4.9153 ug/L	4.9153 ppb	12:35:42
1	Co 228.616†	151.4	229.5	4.8013 ug/L	4.8013 ppb	12:35:42
1	Cr 267.716†	522.6	370.4	4.2961 ug/L	4.2961 ppb	12:35:42
1	Cu 324.752†	11466.5	3317.8	10.134 ug/L	10.134 ppb	12:35:22
1	Mn 257.610†	9572.7	8957.3	10.327 ug/L	10.327 ppb	12:35:22
1	Mo 202.031†	165.7	154.5	11.492 ug/L	11.492 ppb	12:35:42
1	Ni 231.604†	280.8	165.9	4.2477 ug/L	4.2477 ppb	12:35:42
1	P 214.914†	507.9	263.5	144.22 ug/L	144.22 ppb	12:35:42
1	Pb 220.353†	9.3	82.8	10.326 ug/L	10.326 ppb	12:35:42
1	S 181.975 Axial†	122.8	79.3	103.56 ug/L	103.56 ppb	12:35:42
1	Sb 206.836†	70.7	34.7	12.111 ug/L	12.111 ppb	12:35:42
1	Se 196.026†	30.6	53.7	31.774 ug/L	31.774 ppb	12:35:42
1	Si 251.611†	3825.5	3194.9	99.420 ug/L	99.420 ppb	12:35:22
1	Sn 189.927†	68.1	55.2	9.9301 ug/L	9.9301 ppb	12:35:42
1	Ti 334.940†	1649.5	3134.5	5.0651 ug/L	5.0651 ppb	12:35:22
1	Tl 190.801†	22.8	61.8	19.558 ug/L	19.558 ppb	12:35:42
1	U 409.014†	-1608.2	1914.6	54.365 ug/L	54.365 ppb	12:35:22
1	V 292.402†	-1059.7	622.6	4.7589 ug/L	4.7589 ppb	12:35:22
1	Zn 213.857†	1739.8	1043.7	10.128 ug/L	10.128 ppb	12:35:42
1	SiO2†	3848.1	3210.2	213.72 ug/L	213.72 ppb	12:36:38
2	Sc Radial	4445.0	4445.0	105 %		12:34:30
2	Y RADIAL	4541.6	4541.6	103.2 %		12:34:30
2	Al 396.153Radial†	49.4	206.3	205.86 ug/L	205.86 ppb	12:34:30
2	Ca 317.933Radial†	134.8	110.5	206.21 ug/L	206.21 ppb	12:34:50
2	Fe 238.204 Radial†	18.4	7.6	80.787 ug/L	80.787 ppb	12:34:50
2	K 766.490 Radial†	3952.6	608.5	122.63 ug/L	122.63 ppb	12:34:30
2	Mg 279.077 IEC†	9.8	6.6	256.54 ug/L	256.54 ppb	12:34:50
2	Na 589.592 Radial†	1135.2	878.5	293.04 ug/L	293.04 ppb	12:34:30
2	Sr 421.552†	732.4	610.6	4.7128 ug/L	4.7128 ppb	12:34:30
2	Sc 361.383	850654.7	850654.7	100.08 %		12:35:47
2	Y 371.029	699508.6	699508.6	99.542 %		12:35:47
2	Ag 328.068†	1229.8	1001.2	4.8132 ug/L	4.8132 ppb	12:35:47
2	As 188.979†	38.9	67.2	28.306 ug/L	28.306 ppb	12:36:07
2	B 249.677†	1726.7	2207.3	51.903 ug/L	51.903 ppb	12:35:47
2	Ba 233.527†	641.2	621.9	5.0638 ug/L	5.0638 ppb	12:36:07
2	Be 313.107†	8942.9	13275.3	4.8872 ug/L	4.8872 ppb	12:35:47
2	Cd 226.502†	193.0	388.3	4.5453 ug/L	4.5453 ppb	12:36:07
2	Co 228.616†	150.5	229.3	4.7939 ug/L	4.7939 ppb	12:36:07
2	Cr 267.716†	475.8	325.8	3.7796 ug/L	3.7796 ppb	12:36:07
2	Cu 324.752†	11448.2	3345.4	10.220 ug/L	10.220 ppb	12:35:47
2	Mn 257.610†	9603.7	9026.6	10.409 ug/L	10.409 ppb	12:35:47
2	Mo 202.031†	147.8	137.3	10.208 ug/L	10.208 ppb	12:36:07
2	Ni 231.604†	281.9	168.1	4.3034 ug/L	4.3034 ppb	12:36:07

2	P 214.914†	505.6	263.2	144.09 ug/L	144.09 ppb	12:36:07
2	Pb 220.353†	8.0	81.6	10.165 ug/L	10.165 ppb	12:36:07
2	S 181.975 Axial†	125.4	82.4	107.63 ug/L	107.63 ppb	12:36:07
2	Sb 206.836†	61.3	25.6	9.0337 ug/L	9.0337 ppb	12:36:07
2	Se 196.026†	28.3	51.6	30.385 ug/L	30.385 ppb	12:36:07
2	Si 251.611†	3830.4	3215.2	100.07 ug/L	100.07 ppb	12:35:47
2	Sn 189.927†	73.3	60.6	10.898 ug/L	10.898 ppb	12:36:07
2	Ti 334.940†	1526.1	3017.8	4.8886 ug/L	4.8886 ppb	12:35:47
2	Tl 190.801†	23.1	62.2	19.694 ug/L	19.694 ppb	12:36:07
2	U 409.014†	-1777.1	1739.4	49.393 ug/L	49.393 ppb	12:35:47
2	V 292.402†	-937.1	741.0	5.5919 ug/L	5.5919 ppb	12:35:47
2	Zn 213.857†	1712.1	1023.1	9.9316 ug/L	9.9316 ppb	12:36:07
2	SiO2†	3788.5	3166.1	210.82 ug/L	210.82 ppb	12:36:43
3	Sc Radial	4315.2	4315.2	102 %		12:34:55
3	Y RADIAL	4470.6	4470.6	101.6 %		12:34:55
3	Al 396.153Radial†	55.8	214.0	213.61 ug/L	213.61 ppb	12:34:55
3	Ca 317.933Radial†	133.2	112.9	210.58 ug/L	210.58 ppb	12:35:15
3	Fe 238.204 Radial†	19.5	9.2	97.608 ug/L	97.608 ppb	12:35:15
3	K 766.490 Radial†	3979.7	748.8	150.96 ug/L	150.96 ppb	12:34:55
3	Mg 279.077 IEC†	10.1	7.3	280.19 ug/L	280.19 ppb	12:35:15
3	Na 589.592 Radial†	1113.4	889.7	296.78 ug/L	296.78 ppb	12:34:55
3	Sr 421.552†	722.2	621.6	4.7982 ug/L	4.7982 ppb	12:34:55
3	Sc 361.383	840845.7	840845.7	98.922 %		12:36:13
3	Y 371.029	693189.2	693189.2	98.643 %		12:36:13
3	Ag 328.068†	1259.2	1045.3	5.0267 ug/L	5.0267 ppb	12:36:13
3	As 188.979†	45.0	73.8	31.112 ug/L	31.112 ppb	12:36:33
3	B 249.677†	1621.7	2121.2	49.876 ug/L	49.876 ppb	12:36:13
3	Ba 233.527†	640.5	628.7	5.1155 ug/L	5.1155 ppb	12:36:33
3	Be 313.107†	8768.4	13203.1	4.8610 ug/L	4.8610 ppb	12:36:13
3	Cd 226.502†	216.6	414.5	4.8481 ug/L	4.8481 ppb	12:36:33
3	Co 228.616†	142.5	222.9	4.6595 ug/L	4.6595 ppb	12:36:33
3	Cr 267.716†	470.8	326.3	3.7849 ug/L	3.7849 ppb	12:36:33
3	Cu 324.752†	11160.8	3188.3	9.7418 ug/L	9.7418 ppb	12:36:13
3	Mn 257.610†	9275.3	8806.6	10.156 ug/L	10.156 ppb	12:36:13
3	Mo 202.031†	140.7	131.8	9.8031 ug/L	9.8031 ppb	12:36:33
3	Ni 231.604†	272.0	161.5	4.1327 ug/L	4.1327 ppb	12:36:33
3	P 214.914†	495.3	258.8	141.73 ug/L	141.73 ppb	12:36:33
3	Pb 220.353†	15.3	89.0	11.083 ug/L	11.083 ppb	12:36:33
3	S 181.975 Axial†	119.9	78.3	102.33 ug/L	102.33 ppb	12:36:33
3	Sb 206.836†	58.0	23.0	8.1545 ug/L	8.1545 ppb	12:36:33
3	Se 196.026†	27.0	50.6	29.871 ug/L	29.871 ppb	12:36:33
3	Si 251.611†	3910.2	3340.5	103.98 ug/L	103.98 ppb	12:36:13
3	Sn 189.927†	79.7	67.9	12.212 ug/L	12.212 ppb	12:36:33
3	Ti 334.940†	1597.7	3108.0	5.0357 ug/L	5.0357 ppb	12:36:13
3	Tl 190.801†	28.9	68.3	21.631 ug/L	21.631 ppb	12:36:33
3	U 409.014†	-1899.5	1595.0	45.289 ug/L	45.289 ppb	12:36:13
3	V 292.402†	-1157.2	507.5	3.8854 ug/L	3.8854 ppb	12:36:13
3	Zn 213.857†	1750.8	1082.2	10.508 ug/L	10.508 ppb	12:36:33
3	SiO2†	3833.4	3255.7	216.80 ug/L	216.80 ppb	12:36:48

Mean Data: PQL

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	848526.1	99.826 %		0.8080				0.81%
Sc Radial	4375.0	103 %		1.5				1.50%
Y 371.029	698710.8	99.428 %		0.7356				0.74%
Y RADIAL	4508.5	102.4 %		0.81				0.79%
Ag 328.068†	1022.0	4.9152 ug/L		0.10710	4.9152 ppb		0.10710	2.18%
QC value within limits for Ag 328.068 Recovery = 98.30%								
Al 396.153Radial†	216.3	215.87 ug/L		11.308	215.87 ppb		11.308	5.24%
QC value within limits for Al 396.153Radial Recovery = 107.93%								
As 188.979†	68.6	28.911 ug/L		1.9701	28.911 ppb		1.9701	6.81%
QC value within limits for As 188.979 Recovery = 96.37%								
B 249.677†	2156.3	50.700 ug/L		1.0655	50.700 ppb		1.0655	2.10%
QC value within limits for B 249.677 Recovery = 101.40%								
Ba 233.527†	623.1	5.0720 ug/L		0.04003	5.0720 ppb		0.04003	0.79%
QC value within limits for Ba 233.527 Recovery = 101.44%								
Be 313.107†	13296.5	4.8953 ug/L		0.03885	4.8953 ppb		0.03885	0.79%
QC value within limits for Be 313.107 Recovery = 97.91%								
Ca 317.933Radial†	110.6	206.22 ug/L		4.353	206.22 ppb		4.353	2.11%

QC value within limits for Ca 317.933Radial Recovery = 103.11%							
Cd 226.502†	407.7	4.7696 ug/L	0.19713	4.7696 ppb	0.19713	4.13%	
QC value within limits for Cd 226.502 Recovery = 95.39%							
Co 228.616†	227.2	4.7515 ug/L	0.07982	4.7515 ppb	0.07982	1.68%	
QC value within limits for Co 228.616 Recovery = 95.03%							
Cr 267.716†	340.8	3.9536 ug/L	0.29669	3.9536 ppb	0.29669	7.50%	
QC value within limits for Cr 267.716 Recovery = 79.07%							
Cu 324.752†	3283.8	10.032 ug/L	0.2548	10.032 ppb	0.2548	2.54%	
QC value within limits for Cu 324.752 Recovery = 100.32%							
Fe 238.204 Radial†	9.3	98.753 ug/L	18.5648	98.753 ppb	18.5648	18.80%	
QC value within limits for Fe 238.204 Radial Recovery = 98.75%							
K 766.490 Radial†	699.5	141.01 ug/L	15.934	141.01 ppb	15.934	11.30%	
QC value within limits for K 766.490 Radial Recovery = 94.00%							
Mg 279.077 IEC†	7.9	305.76 ug/L	65.838	305.76 ppb	65.838	21.53%	
QC value within limits for Mg 279.077 IEC Recovery = 101.92%							
Mn 257.610†	8930.2	10.297 ug/L	0.1292	10.297 ppb	0.1292	1.25%	
QC value within limits for Mn 257.610 Recovery = 102.97%							
Mo 202.031†	141.2	10.501 ug/L	0.8815	10.501 ppb	0.8815	8.39%	
QC value within limits for Mo 202.031 Recovery = 105.01%							
Na 589.592 Radial†	911.3	303.97 ug/L	15.797	303.97 ppb	15.797	5.20%	
QC value within limits for Na 589.592 Radial Recovery = 101.32%							
Ni 231.604†	165.2	4.2280 ug/L	0.08709	4.2280 ppb	0.08709	2.06%	
QC value within limits for Ni 231.604 Recovery = 84.56%							
P 214.914†	261.8	143.35 ug/L	1.405	143.35 ppb	1.405	0.98%	
QC value within limits for P 214.914 Recovery = 95.56%							
Pb 220.353†	84.5	10.525 ug/L	0.4900	10.525 ppb	0.4900	4.66%	
QC value within limits for Pb 220.353 Recovery = 105.25%							
S 181.975 Axial†	80.0	104.51 ug/L	2.776	104.51 ppb	2.776	2.66%	
QC value within limits for S 181.975 Axial Recovery = 104.51%							
Sb 206.836†	27.7	9.7666 ug/L	2.07773	9.7666 ppb	2.07773	21.27%	
QC value within limits for Sb 206.836 Recovery = 97.67%							
Se 196.026†	52.0	30.677 ug/L	0.9844	30.677 ppb	0.9844	3.21%	
QC value within limits for Se 196.026 Recovery = 102.26%							
Si 251.611†	3250.2	101.15 ug/L	2.465	101.15 ppb	2.465	2.44%	
QC value within limits for Si 251.611 Recovery = 101.15%							
Sn 189.927†	61.2	11.013 ug/L	1.1453	11.013 ppb	1.1453	10.40%	
QC value within limits for Sn 189.927 Recovery = 110.13%							
Sr 421.552†	625.7	4.8293 ug/L	0.13477	4.8293 ppb	0.13477	2.79%	
QC value within limits for Sr 421.552 Recovery = 96.59%							
Ti 334.940†	3086.8	4.9964 ug/L	0.09458	4.9964 ppb	0.09458	1.89%	
QC value within limits for Ti 334.940 Recovery = 99.93%							
Tl 190.801†	64.1	20.294 ug/L	1.1597	20.294 ppb	1.1597	5.71%	
QC value within limits for Tl 190.801 Recovery = 101.47%							
U 409.014†	1749.6	49.682 ug/L	4.5451	49.682 ppb	4.5451	9.15%	
QC value within limits for U 409.014 Recovery = 99.36%							
V 292.402†	623.7	4.7454 ug/L	0.85329	4.7454 ppb	0.85329	17.98%	
QC value within limits for V 292.402 Recovery = 94.91%							
Zn 213.857†	1049.7	10.189 ug/L	0.2928	10.189 ppb	0.2928	2.87%	
QC value within limits for Zn 213.857 Recovery = 101.89%							
SiO2†	3210.7	213.78 ug/L	2.991	213.78 ppb	2.991	1.40%	
QC value within limits for SiO2 Recovery = 100.37%							
All analyte(s) passed QC.							

Sequence No.: 9

Sample ID: ICSA

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 13

Date Collected: 2/16/2010 12:39:00

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	3937.1	3937.1	92.6 %		12:40:58
1	Y RADIAL	4029.9	4029.9	91.54 %		12:40:58
1	Al 396.153Radial†	478456.5	516755.4	516960 ug/L	516960 ppb	12:40:53
1	Ca 317.933Radial†	238994.6	258027.6	481320 ug/L	481320 ppb	12:40:53
1	Fe 238.204 Radial†	16335.7	17627.8	187340 ug/L	187340 ppb	12:40:58
1	K 766.490 Radial†	3019.5	88.7	-143.22 ug/L	-143.22 ppb	12:40:53
1	Mg 279.077 IEC†	11718.1	12649.5	488360 ug/L	488360 ppb	12:40:58
1	Na 589.592 Radial†	1169.1	1055.2	351.97 ug/L	351.97 ppb	12:40:58
1	Sr 421.552†	547.3	501.1	0.2753 ug/L	0.2753 ppb	12:40:58
1	Sc 361.383	740276.7	740276.7	87.090 %		12:41:25
1	Y 371.029	594718.2	594718.2	84.630 %		12:41:25
1	Ag 328.068†	-9235.1	-10831.7	4.7208 ug/L	4.7208 ppb	12:41:25
1	As 188.979†	-107.5	-95.1	3.7336 ug/L	3.7336 ppb	12:41:46
1	B 249.677†	362.1	897.7	-9.3057 ug/L	-9.3057 ppb	12:41:25
1	Ba 233.527†	-647.4	-762.3	-0.4564 ug/L	-0.4564 ppb	12:41:46
1	Be 313.107†	-4701.6	-1059.4	-0.4395 ug/L	-0.4395 ppb	12:41:25
1	Cd 226.502†	1164.0	1532.0	-1.4262 ug/L	-1.4262 ppb	12:41:46
1	Co 228.616†	-32.6	41.4	-1.8478 ug/L	-1.8478 ppb	12:41:46
1	Cr 267.716†	-48.8	-205.7	1.2542 ug/L	1.2542 ppb	12:41:46
1	Cu 324.752†	5131.6	-2201.9	3.1539 ug/L	3.1539 ppb	12:41:25
1	Mn 257.610†	741.7	281.9	-1.1476 ug/L	-1.1476 ppb	12:41:25
1	Mo 202.031†	-242.0	-288.3	-1.1526 ug/L	-1.1526 ppb	12:41:46
1	Ni 231.604†	205.2	122.1	3.1281 ug/L	3.1281 ppb	12:41:46
1	P 214.914†	216.2	6.3	-17.890 ug/L	-17.890 ppb	12:41:46
1	Pb 220.353†	-814.3	-861.4	-5.1356 ug/L	-5.1356 ppb	12:41:46
1	S 181.975 Axial†	68.2	35.4	-50.587 ug/L	-50.587 ppb	12:41:46
1	Sb 206.836†	81.0	57.4	1.8960 ug/L	1.8960 ppb	12:41:46
1	Se 196.026†	-916.1	-1028.5	20.689 ug/L	20.689 ppb	12:41:46
1	Si 251.611†	562.2	33.2	1.2996 ug/L	1.2996 ppb	12:41:46
1	Sn 189.927†	-356.8	-422.3	0.5649 ug/L	0.5649 ppb	12:41:46
1	Ti 334.940†	-13188.7	-13650.8	2.4504 ug/L	2.4504 ppb	12:41:25
1	Tl 190.801†	-79.8	-52.6	-16.804 ug/L	-16.804 ppb	12:41:46
1	U 409.014†	-1918.8	1311.9	15.915 ug/L	15.915 ppb	12:41:25
1	V 292.402†	344.5	2072.8	-3.0434 ug/L	-3.0434 ppb	12:41:46
1	Zn 213.857†	3071.7	2839.3	-0.3354 ug/L	-0.3354 ppb	12:41:46
1	SiO2†	480.6	-67.7	-3.9304 ug/L	-3.9304 ppb	12:42:42
2	Sc Radial	3938.9	3938.9	92.7 %		12:41:08
2	Y RADIAL	4049.1	4049.1	91.98 %		12:41:08
2	Al 396.153Radial†	483505.5	521957.5	522160 ug/L	522160 ppb	12:41:03
2	Ca 317.933Radial†	240862.2	259919.8	484850 ug/L	484850 ppb	12:41:03
2	Fe 238.204 Radial†	16338.0	17621.9	187280 ug/L	187280 ppb	12:41:08
2	K 766.490 Radial†	3062.5	133.4	-135.37 ug/L	-135.37 ppb	12:41:03
2	Mg 279.077 IEC†	11742.6	12669.9	489150 ug/L	489150 ppb	12:41:08
2	Na 589.592 Radial†	1175.6	1061.6	354.12 ug/L	354.12 ppb	12:41:08
2	Sr 421.552†	545.1	498.4	0.2281 ug/L	0.2281 ppb	12:41:08
2	Sc 361.383	743346.1	743346.1	87.452 %		12:41:51
2	Y 371.029	597417.9	597417.9	85.014 %		12:41:51
2	Ag 328.068†	-9292.0	-10853.0	4.5531 ug/L	4.5531 ppb	12:41:51
2	As 188.979†	-98.8	-84.6	8.1206 ug/L	8.1206 ppb	12:42:11
2	B 249.677†	371.1	906.3	-9.0933 ug/L	-9.0933 ppb	12:41:51
2	Ba 233.527†	-609.3	-715.6	-0.0773 ug/L	-0.0773 ppb	12:42:11
2	Be 313.107†	-4579.3	-897.2	-0.3791 ug/L	-0.3791 ppb	12:41:51
2	Cd 226.502†	1152.3	1513.1	-1.6404 ug/L	-1.6404 ppb	12:42:11
2	Co 228.616†	-32.8	41.4	-1.8460 ug/L	-1.8460 ppb	12:42:11
2	Cr 267.716†	10.4	-137.8	2.0442 ug/L	2.0442 ppb	12:42:11
2	Cu 324.752†	5324.7	-2005.4	3.7522 ug/L	3.7522 ppb	12:41:51
2	Mn 257.610†	881.3	438.1	-1.0059 ug/L	-1.0059 ppb	12:41:51
2	Mo 202.031†	-230.5	-274.0	-0.0520 ug/L	-0.0520 ppb	12:42:11
2	Ni 231.604†	220.9	139.0	3.5611 ug/L	3.5611 ppb	12:42:11

2	P 214.914†	220.5	10.1	-14.542 ug/L	-14.542 ppb	12:42:11
2	Pb 220.353†	-829.6	-875.0	-5.6358 ug/L	-5.6358 ppb	12:42:11
2	S 181.975 Axial†	65.8	32.4	-55.569 ug/L	-55.569 ppb	12:42:11
2	Sb 206.836†	73.0	47.8	-1.4860 ug/L	-1.4860 ppb	12:42:11
2	Se 196.026†	-907.9	-1014.8	28.677 ug/L	28.677 ppb	12:42:11
2	Si 251.611†	560.8	28.9	1.1522 ug/L	1.1522 ppb	12:42:11
2	Sn 189.927†	-364.3	-429.2	-0.1275 ug/L	-0.1275 ppb	12:42:11
2	Ti 334.940†	-13038.7	-13416.8	3.2397 ug/L	3.2397 ppb	12:41:51
2	Tl 190.801†	-75.8	-47.5	-15.210 ug/L	-15.210 ppb	12:42:11
2	U 409.014†	-1933.5	1304.2	15.703 ug/L	15.703 ppb	12:41:51
2	V 292.402†	449.9	2191.8	-2.1436 ug/L	-2.1436 ppb	12:42:11
2	Zn 213.857†	3087.5	2842.7	-0.2961 ug/L	-0.2961 ppb	12:42:11
2	SiO2†	533.1	-9.9	-0.1044 ug/L	-0.1044 ppb	12:42:47
3	Sc Radial	3825.6	3825.6	90.0 %		12:41:19
3	Y RADIAL	3920.0	3920.0	89.05 %		12:41:19
3	Al 396.153Radial†	485514.9	539653.4	539860 ug/L	539860 ppb	12:41:14
3	Ca 317.933Radial†	241480.6	268310.1	500500 ug/L	500500 ppb	12:41:14
3	Fe 238.204 Radial†	15921.7	17681.9	187920 ug/L	187920 ppb	12:41:19
3	K 766.490 Radial†	2887.3	36.7	-160.12 ug/L	-160.12 ppb	12:41:14
3	Mg 279.077 IEC†	11480.6	12754.3	492410 ug/L	492410 ppb	12:41:19
3	Na 589.592 Radial†	1102.4	1017.9	339.53 ug/L	339.53 ppb	12:41:19
3	Sr 421.552†	520.4	488.5	0.0344 ug/L	0.0344 ppb	12:41:19
3	Sc 361.383	746684.9	746684.9	87.844 %		12:42:16
3	Y 371.029	599554.4	599554.4	85.318 %		12:42:16
3	Ag 328.068†	-9423.9	-10955.6	4.0545 ug/L	4.0545 ppb	12:42:16
3	As 188.979†	-112.6	-99.8	1.8698 ug/L	1.8698 ppb	12:42:36
3	B 249.677†	340.9	870.0	-10.052 ug/L	-10.052 ppb	12:42:16
3	Ba 233.527†	-631.6	-737.9	-0.2399 ug/L	-0.2399 ppb	12:42:36
3	Be 313.107†	-4776.7	-1098.6	-0.4525 ug/L	-0.4525 ppb	12:42:16
3	Cd 226.502†	1153.7	1508.9	-1.7538 ug/L	-1.7538 ppb	12:42:36
3	Co 228.616†	-8.5	69.1	-1.2730 ug/L	-1.2730 ppb	12:42:36
3	Cr 267.716†	-30.4	-184.4	1.5112 ug/L	1.5112 ppb	12:42:36
3	Cu 324.752†	5275.1	-2089.0	3.5250 ug/L	3.5250 ppb	12:42:16
3	Mn 257.610†	913.3	469.9	-1.0395 ug/L	-1.0395 ppb	12:42:16
3	Mo 202.031†	-214.7	-254.8	1.6069 ug/L	1.6069 ppb	12:42:36
3	Ni 231.604†	222.7	140.0	3.5858 ug/L	3.5858 ppb	12:42:36
3	P 214.914†	229.4	19.2	-5.5250 ug/L	-5.5250 ppb	12:42:36
3	Pb 220.353†	-841.3	-884.1	-2.7413 ug/L	-2.7413 ppb	12:42:36
3	S 181.975 Axial†	76.0	43.6	-44.200 ug/L	-44.200 ppb	12:42:36
3	Sb 206.836†	83.7	59.6	2.0945 ug/L	2.0945 ppb	12:42:36
3	Se 196.026†	-890.1	-989.9	45.831 ug/L	45.831 ppb	12:42:36
3	Si 251.611†	569.1	35.6	1.3412 ug/L	1.3412 ppb	12:42:36
3	Sn 189.927†	-353.5	-415.0	4.8101 ug/L	4.8101 ppb	12:42:36
3	Ti 334.940†	-12983.8	-13287.5	5.2790 ug/L	5.2790 ppb	12:42:16
3	Tl 190.801†	-69.2	-39.7	-12.727 ug/L	-12.727 ppb	12:42:36
3	U 409.014†	-1666.8	1617.7	24.537 ug/L	24.537 ppb	12:42:16
3	V 292.402†	413.0	2147.4	-2.4574 ug/L	-2.4574 ppb	12:42:36
3	Zn 213.857†	3069.1	2806.1	-0.7493 ug/L	-0.7493 ppb	12:42:36
3	SiO2†	536.1	-9.2	-0.1006 ug/L	-0.1006 ppb	12:42:52

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	743435.9	87.462 %	0.3771			0.43%
Sc Radial	3900.5	91.8 %	1.53			1.66%
Y 371.029	597230.2	84.987 %	0.3449			0.41%
Y RADIAL	3999.7	90.86 %	1.582			1.74%
Ag 328.068†	-10880.1	4.4428 ug/L	0.34656	4.4428 ppb	0.34656	7.80%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	526122.1	526330 ug/L	12008.3	526330 ppb	12008.3	2.28%
QC value within limits for Al 396.153Radial Recovery = 105.27%						
As 188.979†	-93.2	4.5747 ug/L	3.20913	4.5747 ppb	3.20913	70.15%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	891.4	-9.4838 ug/L	0.50378	-9.4838 ppb	0.50378	5.31%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	-738.6	-0.2579 ug/L	0.19016	-0.2579 ppb	0.19016	73.75%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-1018.4	-0.4237 ug/L	0.03920	-0.4237 ppb	0.03920	9.25%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	262085.8	488890 ug/L	10208.8	488890 ppb	10208.8	2.09%

QC value within limits for Ca 317.933 Radial Recovery = 97.78%

Cd	226.502†	1518.0	-1.6068 ug/L	0.16637	-1.6068 ppb	0.16637	10.35%
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co	228.616†	50.6	-1.6556 ug/L	0.33131	-1.6556 ppb	0.33131	20.01%
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr	267.716†	-176.0	1.6032 ug/L	0.40296	1.6032 ppb	0.40296	25.14%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu	324.752†	-2098.8	3.4771 ug/L	0.30202	3.4771 ppb	0.30202	8.69%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe	238.204 Radial†	17643.9	187510 ug/L	351.2	187510 ppb	351.2	0.19%
QC value within limits for Fe 238.204 Radial Recovery = 93.76%							
K	766.490 Radial†	86.3	-146.24 ug/L	12.648	-146.24 ppb	12.648	8.65%
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg	279.077 IEC†	12691.3	489970 ug/L	2145.0	489970 ppb	2145.0	0.44%
QC value within limits for Mg 279.077 IEC Recovery = 97.99%							
Mn	257.610†	396.6	-1.0643 ug/L	0.07402	-1.0643 ppb	0.07402	6.96%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo	202.031†	-272.4	0.1341 ug/L	1.38915	0.1341 ppb	1.38915	>999.9%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na	589.592 Radial†	1044.9	348.54 ug/L	7.878	348.54 ppb	7.878	2.26%
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni	231.604†	133.7	3.4250 ug/L	0.25741	3.4250 ppb	0.25741	7.52%
QC value within limits for Ni 231.604 Recovery = Not calculated							
P	214.914†	11.9	-12.652 ug/L	6.3956	-12.652 ppb	6.3956	50.55%
QC value within limits for P 214.914 Recovery = Not calculated							
Pb	220.353†	-873.5	-4.5042 ug/L	1.54712	-4.5042 ppb	1.54712	34.35%
QC value within limits for Pb 220.353 Recovery = Not calculated							
S	181.975 Axial†	37.1	-50.118 ug/L	5.6989	-50.118 ppb	5.6989	11.37%
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb	206.836†	54.9	0.8348 ug/L	2.01232	0.8348 ppb	2.01232	241.04%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se	196.026†	-1011.1	31.732 ug/L	12.8465	31.732 ppb	12.8465	40.48%
QC value within limits for Se 196.026 Recovery = Not calculated							
Si	251.611†	32.6	1.2643 ug/L	0.09934	1.2643 ppb	0.09934	7.86%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn	189.927†	-422.2	1.7492 ug/L	2.67336	1.7492 ppb	2.67336	152.83%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr	421.552†	496.0	0.1793 ug/L	0.12765	0.1793 ppb	0.12765	71.20%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti	334.940†	-13451.7	3.6563 ug/L	1.45964	3.6563 ppb	1.45964	39.92%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl	190.801†	-46.6	-14.914 ug/L	2.0544	-14.914 ppb	2.0544	13.78%
QC value within limits for Tl 190.801 Recovery = Not calculated							
U	409.014†	1411.3	18.719 ug/L	5.0401	18.719 ppb	5.0401	26.93%
QC value within limits for U 409.014 Recovery = Not calculated							
V	292.402†	2137.3	-2.5481 ug/L	0.45675	-2.5481 ppb	0.45675	17.93%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn	213.857†	2829.4	-0.4602 ug/L	0.25107	-0.4602 ppb	0.25107	54.55%
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†		-28.9	-1.3784 ug/L	2.21004	-1.3784 ppb	2.21004	160.33%
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: 2/16/2010 12:45:04

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	3916.0	3916.0	92.1 %		12:47:17
1	Y RADIAL	4032.1	4032.1	91.59 %		12:47:17
1	Al 396.153Radial†	487289.5	529119.2	529300 ug/L	529300 ppb	12:46:57
1	Ca 317.933Radial†	241486.9	262119.3	488950 ug/L	488950 ppb	12:46:57
1	Fe 238.204 Radial†	16392.0	17783.7	189010 ug/L	189010 ppb	12:47:17
1	K 766.490 Radial†	28852.9	28148.7	5515.7 ug/L	5515.7 ppb	12:46:57
1	Mg 279.077 IEC†	11740.0	12741.3	491910 ug/L	491910 ppb	12:47:17
1	Na 589.592 Radial†	16400.7	17596.1	5869.4 ug/L	5869.4 ppb	12:46:57
1	Sr 421.552†	61995.6	67207.4	515.28 ug/L	515.28 ppb	12:46:57
1	Sc 361.383	746963.1	746963.1	87.877 %		12:48:15
1	Y 371.029	598362.8	598362.8	85.149 %		12:48:15
1	Ag 328.068†	39835.7	45103.5	275.36 ug/L	275.36 ppb	12:48:15
1	As 188.979†	984.6	1148.7	530.73 ug/L	530.73 ppb	12:48:35
1	B 249.677†	19569.3	22750.9	503.26 ug/L	503.26 ppb	12:48:15
1	Ba 233.527†	52653.8	59898.7	493.23 ug/L	493.23 ppb	12:48:15
1	Be 313.107†	578185.8	662287.2	244.38 ug/L	244.38 ppb	12:48:15
1	Cd 226.502†	35945.2	41099.4	461.49 ug/L	461.49 ppb	12:48:35
1	Co 228.616†	18988.0	21686.3	449.60 ug/L	449.60 ppb	12:48:35
1	Cr 267.716†	36075.4	40902.4	480.05 ug/L	480.05 ppb	12:48:15
1	Cu 324.752†	166171.6	181001.3	563.89 ug/L	563.89 ppb	12:48:15
1	Mn 257.610†	370784.4	421365.5	484.54 ug/L	484.54 ppb	12:48:15
1	Mo 202.031†	5540.7	6294.6	488.22 ug/L	488.22 ppb	12:48:35
1	Ni 231.604†	15586.8	17623.5	451.14 ug/L	451.14 ppb	12:48:35
1	P 214.914†	4284.6	4633.7	2444.7 ug/L	2444.7 ppb	12:48:35
1	Pb 220.353†	2488.1	2904.9	464.95 ug/L	464.95 ppb	12:48:35
1	S 181.975 Axial†	1844.8	2056.4	2588.4 ug/L	2588.4 ppb	12:48:35
1	Sb 206.836†	1466.0	1632.6	552.42 ug/L	552.42 ppb	12:48:35
1	Se 196.026†	2986.6	3421.9	2624.2 ug/L	2624.2 ppb	12:48:35
1	Si 251.611†	146822.1	166464.3	5181.7 ug/L	5181.7 ppb	12:48:15
1	Sn 189.927†	2054.8	2325.6	494.49 ug/L	494.49 ppb	12:48:35
1	Ti 334.940†	263882.7	301778.9	515.48 ug/L	515.48 ppb	12:48:15
1	Tl 190.801†	1237.1	1446.9	460.12 ug/L	460.12 ppb	12:48:35
1	U 409.014†	12742.4	18015.5	489.16 ug/L	489.16 ppb	12:48:15
1	V 292.402†	60315.5	70313.5	498.14 ug/L	498.14 ppb	12:48:15
1	Zn 213.857†	47858.4	53772.9	492.91 ug/L	492.91 ppb	12:48:15
1	SiO2†	149139.1	169093.7	11261 ug/L	11261 ppb	12:49:33
2	Sc Radial	3927.2	3927.2	92.4 %		12:47:43
2	Y RADIAL	4027.8	4027.8	91.50 %		12:47:43
2	Al 396.153Radial†	479696.5	519389.1	519570 ug/L	519570 ppb	12:47:23
2	Ca 317.933Radial†	238039.5	257639.0	480590 ug/L	480590 ppb	12:47:23
2	Fe 238.204 Radial†	16460.8	17807.4	189260 ug/L	189260 ppb	12:47:43
2	K 766.490 Radial†	28609.9	27796.2	5447.3 ug/L	5447.3 ppb	12:47:23
2	Mg 279.077 IEC†	11755.2	12721.3	491140 ug/L	491140 ppb	12:47:43
2	Na 589.592 Radial†	16203.2	17331.6	5781.1 ug/L	5781.1 ppb	12:47:23
2	Sr 421.552†	61052.5	65994.3	505.97 ug/L	505.97 ppb	12:47:23
2	Sc 361.383	755718.9	755718.9	88.907 %		12:48:41
2	Y 371.029	604468.6	604468.6	86.017 %		12:48:41
2	Ag 328.068†	40156.0	44938.5	274.76 ug/L	274.76 ppb	12:48:41
2	As 188.979†	987.7	1139.3	526.84 ug/L	526.84 ppb	12:49:01
2	B 249.677†	19998.0	22975.1	508.51 ug/L	508.51 ppb	12:48:41
2	Ba 233.527†	53172.0	59787.4	492.33 ug/L	492.33 ppb	12:48:41
2	Be 313.107†	586311.4	663803.6	244.93 ug/L	244.93 ppb	12:48:41
2	Cd 226.502†	35859.1	40528.7	454.79 ug/L	454.79 ppb	12:49:01
2	Co 228.616†	18962.7	21407.5	443.76 ug/L	443.76 ppb	12:49:01
2	Cr 267.716†	36529.0	40937.0	480.46 ug/L	480.46 ppb	12:48:41
2	Cu 324.752†	168697.1	181651.1	565.89 ug/L	565.89 ppb	12:48:41
2	Mn 257.610†	375656.6	421956.9	485.28 ug/L	485.28 ppb	12:48:41
2	Mo 202.031†	5519.3	6197.5	480.92 ug/L	480.92 ppb	12:49:01
2	Ni 231.604†	15533.1	17357.7	444.33 ug/L	444.33 ppb	12:49:01

2	P 214.914†	4284.3	4576.8	2410.0 ug/L	2410.0 ppb	12:49:01
2	Pb 220.353†	2463.1	2844.0	455.12 ug/L	455.12 ppb	12:49:01
2	S 181.975 Axial†	1842.0	2028.9	2554.3 ug/L	2554.3 ppb	12:49:01
2	Sb 206.836†	1471.8	1619.7	548.02 ug/L	548.02 ppb	12:49:01
2	Se 196.026†	2997.9	3395.3	2609.1 ug/L	2609.1 ppb	12:49:01
2	Si 251.611†	148855.0	166815.1	5192.7 ug/L	5192.7 ppb	12:48:41
2	Sn 189.927†	2029.1	2269.7	483.19 ug/L	483.19 ppb	12:49:01
2	Ti 334.940†	267403.7	302260.1	515.20 ug/L	515.20 ppb	12:48:41
2	Tl 190.801†	1224.3	1416.1	450.44 ug/L	450.44 ppb	12:49:01
2	U 409.014†	13041.9	18184.3	493.92 ug/L	493.92 ppb	12:48:41
2	V 292.402†	60984.4	70270.6	497.68 ug/L	497.68 ppb	12:48:41
2	Zn 213.857†	48682.7	54069.1	495.80 ug/L	495.80 ppb	12:48:41
2	SiO2†	148164.3	166031.0	11057 ug/L	11057 ppb	12:49:38
3	Sc Radial	3943.1	3943.1	92.8 %		12:48:08
3	Y RADIAL	4062.9	4062.9	92.29 %		12:48:08
3	Al 396.153Radial†	481436.5	519174.1	519350 ug/L	519350 ppb	12:47:48
3	Ca 317.933Radial†	237606.2	256134.2	477790 ug/L	477790 ppb	12:47:48
3	Fe 238.204 Radial†	16447.3	17721.1	188350 ug/L	188350 ppb	12:48:08
3	K 766.490 Radial†	28583.9	27643.5	5417.5 ug/L	5417.5 ppb	12:47:48
3	Mg 279.077 IEC†	11765.3	12680.9	489580 ug/L	489580 ppb	12:48:08
3	Na 589.592 Radial†	16177.5	17233.2	5748.3 ug/L	5748.3 ppb	12:47:48
3	Sr 421.552†	61128.7	65810.3	504.57 ug/L	504.57 ppb	12:47:48
3	Sc 361.383	760720.8	760720.8	89.496 %		12:49:07
3	Y 371.029	608232.4	608232.4	86.553 %		12:49:07
3	Ag 328.068†	40543.2	45074.2	275.15 ug/L	275.15 ppb	12:49:07
3	As 188.979†	978.5	1121.6	519.21 ug/L	519.21 ppb	12:49:27
3	B 249.677†	20217.0	23071.8	510.94 ug/L	510.94 ppb	12:49:07
3	Ba 233.527†	53601.0	59873.5	493.01 ug/L	493.01 ppb	12:49:07
3	Be 313.107†	590205.8	663819.0	244.94 ug/L	244.94 ppb	12:49:07
3	Cd 226.502†	36034.9	40460.0	454.08 ug/L	454.08 ppb	12:49:27
3	Co 228.616†	19044.6	21358.8	442.75 ug/L	442.75 ppb	12:49:27
3	Cr 267.716†	36732.7	40894.4	479.95 ug/L	479.95 ppb	12:49:07
3	Cu 324.752†	170101.9	181973.2	566.83 ug/L	566.83 ppb	12:49:07
3	Mn 257.610†	378742.5	422626.9	486.03 ug/L	486.03 ppb	12:49:07
3	Mo 202.031†	5541.1	6181.0	479.59 ug/L	479.59 ppb	12:49:27
3	Ni 231.604†	15656.8	17380.9	444.93 ug/L	444.93 ppb	12:49:27
3	P 214.914†	4278.9	4539.1	2389.6 ug/L	2389.6 ppb	12:49:27
3	Pb 220.353†	2492.4	2858.5	456.90 ug/L	456.90 ppb	12:49:27
3	S 181.975 Axial†	1850.9	2025.2	2549.5 ug/L	2549.5 ppb	12:49:27
3	Sb 206.836†	1473.8	1611.1	545.12 ug/L	545.12 ppb	12:49:27
3	Se 196.026†	3010.5	3387.2	2601.4 ug/L	2601.4 ppb	12:49:27
3	Si 251.611†	150260.4	167284.6	5207.3 ug/L	5207.3 ppb	12:49:07
3	Sn 189.927†	2051.9	2280.1	484.62 ug/L	484.62 ppb	12:49:27
3	Ti 334.940†	269479.6	302602.0	515.51 ug/L	515.51 ppb	12:49:07
3	Tl 190.801†	1236.3	1420.5	451.85 ug/L	451.85 ppb	12:49:27
3	U 409.014†	13001.1	18042.2	489.99 ug/L	489.99 ppb	12:49:07
3	V 292.402†	61601.8	70509.5	499.49 ug/L	499.49 ppb	12:49:07
3	Zn 213.857†	49001.2	54064.9	495.89 ug/L	495.89 ppb	12:49:07
3	SiO2†	147415.4	164098.4	10928 ug/L	10928 ppb	12:49:43

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	754467.6	88.760 %	0.8192			0.92%
Sc Radial	3928.8	92.4 %	0.32			0.35%
Y 371.029	603687.9	85.906 %	0.7088			0.83%
Y RADIAL	4041.0	91.79 %	0.435			0.47%
Ag 328.068†	45038.7	275.09 ug/L	0.304	275.09 ppb	0.304	0.11%
QC value within limits for Ag 328.068 Recovery = 110.04%						
Al 396.153Radial†	522560.8	522740 ug/L	5682.8	522740 ppb	5682.8	1.09%
QC value within limits for Al 396.153Radial Recovery = 104.55%						
As 188.979†	1136.5	525.60 ug/L	5.858	525.60 ppb	5.858	1.11%
QC value within limits for As 188.979 Recovery = 105.12%						
B 249.677†	22932.6	507.57 ug/L	3.924	507.57 ppb	3.924	0.77%
QC value within limits for B 249.677 Recovery = 101.51%						
Ba 233.527†	59853.2	492.86 ug/L	0.467	492.86 ppb	0.467	0.09%
QC value within limits for Ba 233.527 Recovery = 98.57%						
Be 313.107†	663303.3	244.75 ug/L	0.325	244.75 ppb	0.325	0.13%
QC value within limits for Be 313.107 Recovery = 97.90%						
Ca 317.933Radial†	258630.8	482440 ug/L	5807.7	482440 ppb	5807.7	1.20%

QC value within limits for Ca 317.933 Radial Recovery = 96.49%

Cd 226.502†	40696.0	456.79 ug/L	4.090	456.79 ppb	4.090	0.90%
QC value within limits for Cd 226.502 Recovery = 91.36%						
Co 228.616†	21484.2	445.37 ug/L	3.695	445.37 ppb	3.695	0.83%
QC value within limits for Co 228.616 Recovery = 89.07%						
Cr 267.716†	40911.3	480.15 ug/L	0.269	480.15 ppb	0.269	0.06%
QC value within limits for Cr 267.716 Recovery = 96.03%						
Cu 324.752†	181541.9	565.54 ug/L	1.501	565.54 ppb	1.501	0.27%
QC value within limits for Cu 324.752 Recovery = 113.11%						
Fe 238.204 Radial†	17770.7	188870 ug/L	473.8	188870 ppb	473.8	0.25%
QC value within limits for Fe 238.204 Radial Recovery = 94.44%						
K 766.490 Radial†	27862.8	5460.2 ug/L	50.34	5460.2 ppb	50.34	0.92%
QC value within limits for K 766.490 Radial Recovery = 109.20%						
Mg 279.077 IEC†	12714.5	490870 ug/L	1186.8	490870 ppb	1186.8	0.24%
QC value within limits for Mg 279.077 IEC Recovery = 98.17%						
Mn 257.610†	421983.1	485.28 ug/L	0.742	485.28 ppb	0.742	0.15%
QC value within limits for Mn 257.610 Recovery = 97.06%						
Mo 202.031†	6224.4	482.91 ug/L	4.642	482.91 ppb	4.642	0.96%
QC value within limits for Mo 202.031 Recovery = 96.58%						
Na 589.592 Radial†	17386.9	5799.6 ug/L	62.62	5799.6 ppb	62.62	1.08%
QC value within limits for Na 589.592 Radial Recovery = 115.99%						
Ni 231.604†	17454.0	446.80 ug/L	3.769	446.80 ppb	3.769	0.84%
QC value within limits for Ni 231.604 Recovery = 89.36%						
P 214.914†	4583.2	2414.8 ug/L	27.86	2414.8 ppb	27.86	1.15%
QC value within limits for P 214.914 Recovery = 96.59%						
Pb 220.353†	2869.1	458.99 ug/L	5.234	458.99 ppb	5.234	1.14%
QC value within limits for Pb 220.353 Recovery = 91.80%						
S 181.975 Axial†	2036.8	2564.1 ug/L	21.18	2564.1 ppb	21.18	0.83%
QC value within limits for S 181.975 Axial Recovery = 102.56%						
Sb 206.836†	1621.1	548.52 ug/L	3.679	548.52 ppb	3.679	0.67%
QC value within limits for Sb 206.836 Recovery = 109.70%						
Se 196.026†	3401.5	2611.6 ug/L	11.57	2611.6 ppb	11.57	0.44%
QC value within limits for Se 196.026 Recovery = 104.46%						
Si 251.611†	166854.7	5193.9 ug/L	12.87	5193.9 ppb	12.87	0.25%
QC value within limits for Si 251.611 Recovery = 103.88%						
Sn 189.927†	2291.8	487.43 ug/L	6.152	487.43 ppb	6.152	1.26%
QC value within limits for Sn 189.927 Recovery = 97.49%						
Sr 421.552†	66337.3	508.61 ug/L	5.818	508.61 ppb	5.818	1.14%
QC value within limits for Sr 421.552 Recovery = 101.72%						
Ti 334.940†	302213.7	515.40 ug/L	0.170	515.40 ppb	0.170	0.03%
QC value within limits for Ti 334.940 Recovery = 103.08%						
Tl 190.801†	1427.9	454.14 ug/L	5.231	454.14 ppb	5.231	1.15%
QC value within limits for Tl 190.801 Recovery = 90.83%						
U 409.014†	18080.7	491.02 ug/L	2.545	491.02 ppb	2.545	0.52%
QC value within limits for U 409.014 Recovery = 98.20%						
V 292.402†	70364.6	498.44 ug/L	0.941	498.44 ppb	0.941	0.19%
QC value within limits for V 292.402 Recovery = 99.69%						
Zn 213.857†	53968.9	494.86 ug/L	1.698	494.86 ppb	1.698	0.34%
QC value within limits for Zn 213.857 Recovery = 98.97%						
SiO2†	166407.7	11082 ug/L	167.8	11082 ppb	167.8	1.51%
QC value within limits for SiO2 Recovery = 103.62%						

All analyte(s) passed QC.

Sequence No.: 11

Sample ID: LR1

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 15

Date Collected: 2/16/2010 12:51:54

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3836.6	3836.6	90.3 %		12:53:52
1	Y RADIAL	3980.0	3980.0	90.41 %		12:53:52
1	Al 396.153Radial†	469696.5	520578.6	520780 ug/L	520780 ppb	12:53:47
1	Ca 317.933Radial†	231182.0	256129.3	477780 ug/L	477780 ppb	12:53:47
1	Fe 238.204 Radial†	37815.0	41888.6	445180 ug/L	445180 ppb	12:53:52
1	K 766.490 Radial†	2794.4	-75.4	-378.53 ug/L	-378.53 ppb	12:53:47
1	Mg 279.077 IEC†	11166.5	12369.7	477280 ug/L	477280 ppb	12:53:52
1	Na 589.592 Radial†	1412072.0	1564356.4	521810 ug/L	521810 ppb	12:53:47
1	Sr 421.552†	714.3	701.6	1.8499 ug/L	1.8499 ppb	12:53:52
1	Sc 361.383	724699.9	724699.9	85.258 %		12:54:21
1	Y 371.029	581705.7	581705.7	82.778 %		12:54:21
1	Ag 328.068†	-21851.5	-25857.5	8.9483 ug/L	8.9483 ppb	12:54:21
1	As 188.979†	-193.6	-198.8	20.610 ug/L	20.610 ppb	12:54:41
1	B 249.677†	1394.1	2117.1	-22.512 ug/L	-22.512 ppb	12:54:21
1	Ba 233.527†	-1136.9	-1352.3	2.6304 ug/L	2.6304 ppb	12:54:41
1	Be 313.107†	-9927.8	-7305.3	-2.7176 ug/L	-2.7176 ppb	12:54:21
1	Cd 226.502†	3273.5	4035.0	3.7857 ug/L	3.7857 ppb	12:54:41
1	Co 228.616†	297.3	427.6	2.4153 ug/L	2.4153 ppb	12:54:41
1	Cr 267.716†	189.0	72.0	4.2850 ug/L	4.2850 ppb	12:54:41
1	Cu 324.752†	2279.8	-5420.1	-0.3589 ug/L	-0.3589 ppb	12:54:21
1	Mn 257.610†	-20496.1	-24609.9	-3.9503 ug/L	-3.9503 ppb	12:54:21
1	Mo 202.031†	-472.4	-564.5	-1.7055 ug/L	-1.7055 ppb	12:54:41
1	Ni 231.604†	345.5	291.7	7.4662 ug/L	7.4662 ppb	12:54:41
1	P 214.914†	622.1	487.7	44.432 ug/L	44.432 ppb	12:54:41
1	Pb 220.353†	-580.4	-607.2	2.4255 ug/L	2.4255 ppb	12:54:41
1	S 181.975 Axial†	115.8	92.9	23.862 ug/L	23.862 ppb	12:54:41
1	Sb 206.836†	100.6	82.3	6.8584 ug/L	6.8584 ppb	12:54:41
1	Se 196.026†	-2080.6	-2417.0	41.476 ug/L	41.476 ppb	12:54:41
1	Si 251.611†	-163.0	-803.5	-24.521 ug/L	-24.521 ppb	12:54:41
1	Sn 189.927†	-379.6	-457.9	-2.0082 ug/L	-2.0082 ppb	12:54:41
1	Ti 334.940†	-9212.4	-9312.4	4.1124 ug/L	4.1124 ppb	12:54:21
1	Tl 190.801†	-87.6	-63.6	-20.434 ug/L	-20.434 ppb	12:54:41
1	U 409.014†	394240.2	465923.9	13185 ug/L	13185 ppb	12:54:21
1	V 292.402†	2097.1	4137.0	-0.8928 ug/L	-0.8928 ppb	12:54:41
1	Zn 213.857†	5731.6	6034.9	-7.7457 ug/L	-7.7457 ppb	12:54:41
1	SiO2†	-374.1	-1058.3	-69.416 ug/L	-69.416 ppb	12:55:38
2	Sc Radial	3797.7	3797.7	89.3 %		12:54:03
2	Y RADIAL	3955.5	3955.5	89.85 %		12:54:03
2	Al 396.153Radial†	471940.9	528418.0	528630 ug/L	528630 ppb	12:53:58
2	Ca 317.933Radial†	232240.7	259936.3	484880 ug/L	484880 ppb	12:53:58
2	Fe 238.204 Radial†	37836.1	42341.2	449980 ug/L	449980 ppb	12:54:03
2	K 766.490 Radial†	2912.2	88.2	-350.87 ug/L	-350.87 ppb	12:53:58
2	Mg 279.077 IEC†	11113.7	12437.3	479890 ug/L	479890 ppb	12:54:03
2	Na 589.592 Radial†	1418206.5	1587238.3	529440 ug/L	529440 ppb	12:53:58
2	Sr 421.552†	685.9	678.0	1.6142 ug/L	1.6142 ppb	12:54:03
2	Sc 361.383	735668.9	735668.9	86.548 %		12:54:46
2	Y 371.029	590847.9	590847.9	84.079 %		12:54:46
2	Ag 328.068†	-21869.6	-25496.3	12.220 ug/L	12.220 ppb	12:54:46
2	As 188.979†	-213.8	-218.7	13.321 ug/L	13.321 ppb	12:55:06
2	B 249.677†	1485.7	2198.5	-21.372 ug/L	-21.372 ppb	12:54:46
2	Ba 233.527†	-1752.5	-2043.7	-2.8403 ug/L	-2.8403 ppb	12:55:06
2	Be 313.107†	-9849.9	-7041.6	-2.6235 ug/L	-2.6235 ppb	12:54:46
2	Cd 226.502†	3082.2	3756.8	0.0299 ug/L	0.0299 ppb	12:55:06
2	Co 228.616†	217.5	330.1	0.3170 ug/L	0.3170 ppb	12:55:06
2	Cr 267.716†	66.2	-73.2	2.6949 ug/L	2.6949 ppb	12:55:06
2	Cu 324.752†	2993.8	-4635.0	2.3095 ug/L	2.3095 ppb	12:54:46
2	Mn 257.610†	-21000.5	-24834.2	-3.8406 ug/L	-3.8406 ppb	12:54:46
2	Mo 202.031†	-464.0	-546.5	0.0900 ug/L	0.0900 ppb	12:55:06
2	Ni 231.604†	298.5	231.4	5.9235 ug/L	5.9235 ppb	12:55:06

2	P 214.914†	604.2	456.1	24.523 ug/L	24.523 ppb	12:55:06
2	Pb 220.353†	-581.4	-598.2	4.8898 ug/L	4.8898 ppb	12:55:06
2	S 181.975 Axial†	84.9	55.1	-27.020 ug/L	-27.020 ppb	12:55:06
2	Sb 206.836†	74.4	50.3	-4.2099 ug/L	-4.2099 ppb	12:55:06
2	Se 196.026†	-2105.5	-2409.4	61.721 ug/L	61.721 ppb	12:55:06
2	Si 251.611†	-431.3	-1110.7	-34.111 ug/L	-34.111 ppb	12:55:06
2	Sn 189.927†	-381.6	-453.5	-0.0677 ug/L	-0.0677 ppb	12:55:06
2	Ti 334.940†	-9991.4	-10051.4	3.6592 ug/L	3.6592 ppb	12:54:46
2	Tl 190.801†	-99.5	-75.9	-24.304 ug/L	-24.304 ppb	12:55:06
2	U 409.014†	399656.7	465287.8	13166 ug/L	13166 ppb	12:54:46
2	V 292.402†	1976.4	3960.9	-2.8323 ug/L	-2.8323 ppb	12:55:06
2	Zn 213.857†	5650.6	5841.1	-10.351 ug/L	-10.351 ppb	12:55:06
2	SiO2†	-419.8	-1104.6	-72.541 ug/L	-72.541 ppb	12:55:43
3	Sc Radial	3792.8	3792.8	89.2 %		12:54:13
3	Y RADIAL	3932.5	3932.5	89.33 %		12:54:13
3	Al 396.153Radial†	469630.3	526516.8	526720 ug/L	526720 ppb	12:54:08
3	Ca 317.933Radial†	230940.4	258817.7	482790 ug/L	482790 ppb	12:54:08
3	Fe 238.204 Radial†	37445.3	41958.4	445920 ug/L	445920 ppb	12:54:13
3	K 766.490 Radial†	2836.5	7.5	-366.44 ug/L	-366.44 ppb	12:54:08
3	Mg 279.077 IEC†	11077.1	12412.4	478930 ug/L	478930 ppb	12:54:13
3	Na 589.592 Radial†	1416277.7	1587145.2	529410 ug/L	529410 ppb	12:54:08
3	Sr 421.552†	673.9	665.4	1.5330 ug/L	1.5330 ppb	12:54:13
3	Sc 361.383	735730.7	735730.7	86.556 %		12:55:12
3	Y 371.029	591133.5	591133.5	84.120 %		12:55:12
3	Ag 328.068†	-22273.9	-25961.3	8.6600 ug/L	8.6600 ppb	12:55:12
3	As 188.979†	-211.4	-216.0	13.562 ug/L	13.562 ppb	12:55:32
3	B 249.677†	1446.1	2152.6	-21.792 ug/L	-21.792 ppb	12:55:12
3	Ba 233.527†	-1776.2	-2070.9	-3.1843 ug/L	-3.1843 ppb	12:55:32
3	Be 313.107†	-9980.3	-7191.4	-2.6721 ug/L	-2.6721 ppb	12:55:12
3	Cd 226.502†	3144.8	3828.8	1.2878 ug/L	1.2878 ppb	12:55:32
3	Co 228.616†	207.6	318.7	0.1279 ug/L	0.1279 ppb	12:55:32
3	Cr 267.716†	76.0	-61.9	2.7559 ug/L	2.7559 ppb	12:55:32
3	Cu 324.752†	2087.9	-5681.9	-1.0996 ug/L	-1.0996 ppb	12:55:12
3	Mn 257.610†	-21234.7	-25102.7	-4.5129 ug/L	-4.5129 ppb	12:55:12
3	Mo 202.031†	-479.6	-564.6	-1.5926 ug/L	-1.5926 ppb	12:55:32
3	Ni 231.604†	278.6	208.4	5.3341 ug/L	5.3341 ppb	12:55:32
3	P 214.914†	617.4	471.3	36.335 ug/L	36.335 ppb	12:55:32
3	Pb 220.353†	-615.0	-636.9	0.0387 ug/L	0.0387 ppb	12:55:32
3	S 181.975 Axial†	86.5	57.0	-24.246 ug/L	-24.246 ppb	12:55:32
3	Sb 206.836†	54.7	27.5	-11.901 ug/L	-11.901 ppb	12:55:32
3	Se 196.026†	-2103.9	-2407.4	49.688 ug/L	49.688 ppb	12:55:32
3	Si 251.611†	-405.0	-1080.3	-33.147 ug/L	-33.147 ppb	12:55:32
3	Sn 189.927†	-398.8	-473.4	-4.0165 ug/L	-4.0165 ppb	12:55:32
3	Ti 334.940†	-8491.7	-8317.7	6.2845 ug/L	6.2845 ppb	12:55:12
3	Tl 190.801†	-95.4	-71.1	-22.783 ug/L	-22.783 ppb	12:55:32
3	U 409.014†	399064.1	464564.3	13146 ug/L	13146 ppb	12:55:12
3	V 292.402†	2011.5	4001.3	-2.0272 ug/L	-2.0272 ppb	12:55:32
3	Zn 213.857†	5696.0	5893.0	-9.2270 ug/L	-9.2270 ppb	12:55:32
3	SiO2†	-471.7	-1164.5	-76.497 ug/L	-76.497 ppb	12:55:48

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	732033.2	86.121 %	0.7472			0.87%
Sc Radial	3809.0	89.6 %	0.56			0.63%
Y 371.029	587895.7	83.659 %	0.7631			0.91%
Y RADIAL	3956.0	89.86 %	0.539			0.60%
Ag 328.068†	-25771.7	9.9426 ug/L	1.97719	9.9426 ppb	1.97719	19.89%
Al 396.153Radial†	525171.1	525380 ug/L	4090.8	525380 ppb	4090.8	0.78%
QC value within limits for Al 396.153Radial Recovery = 105.08%						
As 188.979†	-211.2	15.831 ug/L	4.1408	15.831 ppb	4.1408	26.16%
B 249.677†	2156.1	-21.892 ug/L	0.5768	-21.892 ppb	0.5768	2.63%
Ba 233.527†	-1822.3	-1.1314 ug/L	3.26234	-1.1314 ppb	3.26234	288.35%
Be 313.107†	-7179.4	-2.6711 ug/L	0.04707	-2.6711 ppb	0.04707	1.76%
Ca 317.933Radial†	258294.4	481820 ug/L	3650.0	481820 ppb	3650.0	0.76%
QC value within limits for Ca 317.933Radial Recovery = 96.36%						
Cd 226.502†	3873.5	1.7012 ug/L	1.91170	1.7012 ppb	1.91170	112.38%
Co 228.616†	358.8	0.9534 ug/L	1.26959	0.9534 ppb	1.26959	133.16%
Cr 267.716†	-21.0	3.2453 ug/L	0.90098	3.2453 ppb	0.90098	27.76%
Cu 324.752†	-5245.7	0.2837 ug/L	1.79306	0.2837 ppb	1.79306	632.12%

Fe 238.204 Radial†	42062.7	447030 ug/L	2589.6	447030 ppb	2589.6	0.58%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 89.41%						
K 766.490 Radial†	6.7	-365.28 ug/L	13.871	-365.28 ppb	13.871	3.80%
Mg 279.077 IEC†	12406.5	478700 ug/L	1317.5	478700 ppb	1317.5	0.28%
QC value within limits for Mg 279.077 IEC Recovery = 95.74%						
Mn 257.610†	-24848.9	-4.1013 ug/L	0.36070	-4.1013 ppb	0.36070	8.79%
Mo 202.031†	-558.6	-1.0694 ug/L	1.00566	-1.0694 ppb	1.00566	94.04%
Na 589.592 Radial†	1579579.9	526890 ug/L	4397.7	526890 ppb	4397.7	0.83%
QC value within limits for Na 589.592 Radial Recovery = 105.38%						
Ni 231.604†	243.8	6.2413 ug/L	1.10101	6.2413 ppb	1.10101	17.64%
P 214.914†	471.7	35.097 ug/L	10.0119	35.097 ppb	10.0119	28.53%
Pb 220.353†	-614.1	2.4513 ug/L	2.42568	2.4513 ppb	2.42568	98.95%
S 181.975 Axial†	68.3	-9.1349 ug/L	28.60948	-9.1349 ppb	28.60948	313.19%
Sb 206.836†	53.4	-3.0842 ug/L	9.43026	-3.0842 ppb	9.43026	305.76%
Se 196.026†	-2411.3	50.962 ug/L	10.1825	50.962 ppb	10.1825	19.98%
Si 251.611†	-998.1	-30.593 ug/L	5.2804	-30.593 ppb	5.2804	17.26%
Sn 189.927†	-461.6	-2.0308 ug/L	1.97448	-2.0308 ppb	1.97448	97.23%
Sr 421.552†	681.7	1.6657 ug/L	0.16461	1.6657 ppb	0.16461	9.88%
Ti 334.940†	-9227.2	4.6854 ug/L	1.40327	4.6854 ppb	1.40327	29.95%
Tl 190.801†	-70.2	-22.507 ug/L	1.9496	-22.507 ppb	1.9496	8.66%
U 409.014†	465258.7	13166 ug/L	19.4	13166 ppb	19.4	0.15%
QC value less than the lower limit for U 409.014 Recovery = 87.77%						
V 292.402†	4033.0	-1.9174 ug/L	0.97437	-1.9174 ppb	0.97437	50.82%
Zn 213.857†	5923.0	-9.1078 ug/L	1.30655	-9.1078 ppb	1.30655	14.35%
SiO2†	-1109.1	-72.818 ug/L	3.5488	-72.818 ppb	3.5488	4.87%

QC Failed. Continue with analysis.

Sequence No.: 12

Sample ID: LR2

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 16

Date Collected: 2/16/2010 12:57:57

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	4043.8	4043.8	95.1 %		13:00:15
1	Y RADIAL	4406.9	4406.9	100.1 %		12:59:55
1	Al 396.153Radial†	335.3	511.5	53.469 ug/L	53.469 ppb	12:59:55
1	Ca 317.933Radial†	32.5	15.8	29.491 ug/L	29.491 ppb	13:00:15
1	Fe 238.204 Radial†	-12.6	-23.3	26.099 ug/L	26.099 ppb	13:00:15
1	K 766.490 Radial†	1473623.2	1545923.4	312050 ug/L	312050 ppb	12:59:50
1	Mg 279.077 IEC†	-0.8	-3.6	-38.405 ug/L	-38.405 ppb	13:00:15
1	Na 589.592 Radial†	317.3	126.5	42.182 ug/L	42.182 ppb	12:59:55
1	Sr 421.552†	1230116.8	1293027.5	9983.8 ug/L	9983.8 ppb	12:59:50
1	Sc 361.383	813914.2	813914.2	95.754 %		13:01:33
1	Y 371.029	653226.7	653226.7	92.956 %		13:01:33
1	Ag 328.068†	-7054.5	-7595.0	3.1080 ug/L	3.1080 ppb	13:01:38
1	As 188.979†	21370.4	22346.4	9466.5 ug/L	9466.5 ppb	13:01:38
1	B 249.677†	197564.0	206807.3	4839.3 ug/L	4839.3 ppb	13:01:33
1	Ba 233.527†	1590638.8	1661159.8	13510 ug/L	13510 ppb	13:01:33
1	Be 313.107†	7362987.9	7693852.4	2848.7 ug/L	2848.7 ppb	13:01:26
1	Cd 226.502†	774676.2	809226.2	9469.3 ug/L	9469.3 ppb	13:01:33
1	Co 228.616†	419606.5	438293.6	9137.1 ug/L	9137.1 ppb	13:01:38
1	Cr 267.716†	1929296.4	2014705.0	23453 ug/L	23453 ppb	13:01:33
1	Cu 324.752†	6350103.3	6623616.4	20280 ug/L	20280 ppb	13:01:26
1	Mn 257.610†	7853884.8	8201610.2	9459.6 ug/L	9459.6 ppb	13:01:26
1	Mo 202.031†	121770.7	127160.4	9448.8 ug/L	9448.8 ppb	13:01:38
1	Ni 231.604†	347364.8	362655.8	9283.6 ug/L	9283.6 ppb	13:01:38
1	P 214.914†	30691.2	31810.3	13716 ug/L	13716 ppb	13:01:38
1	Pb 220.353†	184431.9	192684.4	23881 ug/L	23881 ppb	13:01:38
1	S 181.975 Axial†	37197.7	38804.4	50716 ug/L	50716 ppb	13:01:38
1	Sb 206.836†	29846.2	31134.1	10888 ug/L	10888 ppb	13:01:38
1	Se 196.026†	16395.1	17145.5	10030 ug/L	10030 ppb	13:01:38
1	Si 251.611†	1441062.2	1504356.5	46763 ug/L	46763 ppb	13:01:33
1	Sn 189.927†	53366.0	55720.0	9991.2 ug/L	9991.2 ppb	13:01:38
1	Ti 334.940†	5900732.9	6163904.8	10010 ug/L	10010 ppb	13:01:26
1	Tl 190.801†	28768.7	30083.6	9564.7 ug/L	9564.7 ppb	13:01:38
1	U 409.014†	-2245.3	1170.2	-19.182 ug/L	-19.182 ppb	13:01:38
1	V 292.402†	1295811.7	1354954.1	9928.0 ug/L	9928.0 ppb	13:01:33
1	Zn 213.857†	1355698.6	1415131.8	13725 ug/L	13725 ppb	13:01:33
1	SiO2†	1463609.2	1527896.1	101610 ug/L	101610 ppb	13:02:24
2	Sc Radial	4008.7	4008.7	94.3 %		13:00:46
2	Y RADIAL	4438.8	4438.8	100.8 %		13:00:26
2	Al 396.153Radial†	375.3	557.0	100.00 ug/L	100.00 ppb	13:00:26
2	Ca 317.933Radial†	39.6	23.6	44.085 ug/L	44.085 ppb	13:00:46
2	Fe 238.204 Radial†	-9.1	-19.7	63.476 ug/L	63.476 ppb	13:00:46
2	K 766.490 Radial†	1438906.2	1522677.5	307360 ug/L	307360 ppb	13:00:21
2	Mg 279.077 IEC†	-1.1	-3.9	-51.414 ug/L	-51.414 ppb	13:00:46
2	Na 589.592 Radial†	489.8	312.3	104.17 ug/L	104.17 ppb	13:00:26
2	Sr 421.552†	1194313.0	1266387.1	9778.1 ug/L	9778.1 ppb	13:00:21
2	Sc 361.383	817881.6	817881.6	96.220 %		13:01:52
2	Y 371.029	657254.2	657254.2	93.529 %		13:01:52
2	Ag 328.068†	-7090.9	-7597.2	3.0124 ug/L	3.0124 ppb	13:01:58
2	As 188.979†	21452.5	22323.4	9454.9 ug/L	9454.9 ppb	13:01:58
2	B 249.677†	198314.1	206585.9	4834.2 ug/L	4834.2 ppb	13:01:52
2	Ba 233.527†	1591672.2	1654175.7	13453 ug/L	13453 ppb	13:01:52
2	Be 313.107†	7214029.2	7501741.9	2777.7 ug/L	2777.7 ppb	13:01:46
2	Cd 226.502†	774004.0	804603.1	9415.2 ug/L	9415.2 ppb	13:01:52
2	Co 228.616†	420007.4	436584.6	9102.0 ug/L	9102.0 ppb	13:01:58
2	Cr 267.716†	1930309.1	2005983.7	23352 ug/L	23352 ppb	13:01:52
2	Cu 324.752†	6227198.6	6463714.6	19790 ug/L	19790 ppb	13:01:46
2	Mn 257.610†	7704138.5	8006194.3	9234.2 ug/L	9234.2 ppb	13:01:46
2	Mo 202.031†	122093.3	126878.8	9427.9 ug/L	9427.9 ppb	13:01:58
2	Ni 231.604†	348181.3	361744.7	9260.3 ug/L	9260.3 ppb	13:01:58

2	P 214.914†	30684.7	31648.0	13723 ug/L	13723 ppb	13:01:58
2	Pb 220.353†	184604.3	191929.3	23788 ug/L	23788 ppb	13:01:58
2	S 181.975 Axial†	37393.6	38819.6	50735 ug/L	50735 ppb	13:01:58
2	Sb 206.836†	29820.1	30955.8	10828 ug/L	10828 ppb	13:01:58
2	Se 196.026†	16343.4	17008.7	9950.6 ug/L	9950.6 ppb	13:01:58
2	Si 251.611†	1445712.8	1501889.4	46687 ug/L	46687 ppb	13:01:52
2	Sn 189.927†	53403.3	55488.4	9949.6 ug/L	9949.6 ppb	13:01:58
2	Ti 334.940†	5792570.6	6021600.9	9778.6 ug/L	9778.6 ppb	13:01:46
2	Tl 190.801†	28856.5	30029.1	9544.7 ug/L	9544.7 ppb	13:01:58
2	U 409.014†	-2402.6	1018.2	-23.279 ug/L	-23.279 ppb	13:01:58
2	V 292.402†	1298788.8	1351483.7	9902.9 ug/L	9902.9 ppb	13:01:52
2	Zn 213.857†	1355926.1	1408500.3	13661 ug/L	13661 ppb	13:01:52
2	SiO2†	1471208.8	1528379.6	101650 ug/L	101650 ppb	13:02:30
3	Sc Radial	4019.5	4019.5	94.6 %		13:01:16
3	Y RADIAL	4196.1	4196.1	95.32 %		13:00:56
3	Al 396.153Radial†	295.0	471.0	7.4518 ug/L	7.4518 ppb	13:00:56
3	Ca 317.933Radial†	36.4	20.2	37.657 ug/L	37.657 ppb	13:01:16
3	Fe 238.204 Radial†	-13.3	-24.2	19.639 ug/L	19.639 ppb	13:01:16
3	K 766.490 Radial†	1447545.7	1527693.5	308370 ug/L	308370 ppb	13:00:51
3	Mg 279.077 IEC†	-3.4	-6.3	-144.01 ug/L	-144.01 ppb	13:01:16
3	Na 589.592 Radial†	264.3	72.4	24.148 ug/L	24.148 ppb	13:00:56
3	Sr 421.552†	1202398.1	1271517.2	9817.8 ug/L	9817.8 ppb	13:00:51
3	Sc 361.383	802890.7	802890.7	94.457 %		13:02:12
3	Y 371.029	646897.6	646897.6	92.055 %		13:02:12
3	Ag 328.068†	-7142.1	-7788.9	2.0126 ug/L	2.0126 ppb	13:02:17
3	As 188.979†	21323.7	22603.4	9575.0 ug/L	9575.0 ppb	13:02:17
3	B 249.677†	193145.1	204961.8	4795.6 ug/L	4795.6 ppb	13:02:12
3	Ba 233.527†	1559424.2	1650921.0	13426 ug/L	13426 ppb	13:02:12
3	Be 313.107†	7312694.9	7746183.8	2868.1 ug/L	2868.1 ppb	13:02:06
3	Cd 226.502†	757654.1	802312.9	9388.5 ug/L	9388.5 ppb	13:02:12
3	Co 228.616†	418639.4	443286.3	9241.4 ug/L	9241.4 ppb	13:02:17
3	Cr 267.716†	1894834.5	2005884.3	23350 ug/L	23350 ppb	13:02:12
3	Cu 324.752†	6309777.0	6671975.8	20428 ug/L	20428 ppb	13:02:06
3	Mn 257.610†	7785976.9	8242331.7	9506.6 ug/L	9506.6 ppb	13:02:06
3	Mo 202.031†	121562.1	128685.6	9562.1 ug/L	9562.1 ppb	13:02:17
3	Ni 231.604†	347180.8	367441.8	9406.1 ug/L	9406.1 ppb	13:02:17
3	P 214.914†	30616.6	32171.4	13889 ug/L	13889 ppb	13:02:17
3	Pb 220.353†	184110.0	194988.1	24167 ug/L	24167 ppb	13:02:17
3	S 181.975 Axial†	37114.8	39250.0	51298 ug/L	51298 ppb	13:02:17
3	Sb 206.836†	29665.5	31370.7	10973 ug/L	10973 ppb	13:02:17
3	Se 196.026†	16299.9	17279.8	10109 ug/L	10109 ppb	13:02:17
3	Si 251.611†	1409269.2	1491360.7	46357 ug/L	46357 ppb	13:02:12
3	Sn 189.927†	53317.8	56434.1	10119 ug/L	10119 ppb	13:02:17
3	Ti 334.940†	5863417.3	6209008.3	10083 ug/L	10083 ppb	13:02:06
3	Tl 190.801†	28780.9	30509.0	9699.5 ug/L	9699.5 ppb	13:02:17
3	U 409.014†	-2270.1	1111.9	-20.609 ug/L	-20.609 ppb	13:02:17
3	V 292.402†	1273023.0	1349408.4	9889.4 ug/L	9889.4 ppb	13:02:12
3	Zn 213.857†	1327845.6	1405083.2	13626 ug/L	13626 ppb	13:02:12
3	SiO2†	1468763.4	1554339.1	103370 ug/L	103370 ppb	13:02:35

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	811562.2	95.477 %	0.9138			0.96%
Sc Radial	4024.0	94.7 %	0.42			0.45%
Y 371.029	652459.5	92.847 %	0.7429			0.80%
Y RADIAL	4347.3	98.75 %	2.996			3.03%
Ag 328.068†	-7660.4	2.7110 ug/L	0.60675	2.7110 ppb	0.60675	22.38%
Al 396.153Radial†	513.2	53.641 ug/L	46.2750	53.641 ppb	46.2750	86.27%
As 188.979†	22424.4	9498.8 ug/L	66.23	9498.8 ppb	66.23	0.70%
QC value within limits for As 188.979 Recovery = 94.99%						
B 249.677†	206118.3	4823.1 ug/L	23.90	4823.1 ppb	23.90	0.50%
QC value within limits for B 249.677 Recovery = 96.46%						
Ba 233.527†	1655418.9	13463 ug/L	42.5	13463 ppb	42.5	0.32%
QC value less than the lower limit for Ba 233.527 Recovery = 89.75%						
Be 313.107†	7647259.4	2831.5 ug/L	47.64	2831.5 ppb	47.64	1.68%
QC value within limits for Be 313.107 Recovery = 94.38%						
Ca 317.933Radial†	19.9	37.078 ug/L	7.3141	37.078 ppb	7.3141	19.73%
Cd 226.502†	805380.7	9424.3 ug/L	41.15	9424.3 ppb	41.15	0.44%
QC value within limits for Cd 226.502 Recovery = 94.24%						

Co 228.616†	439388.2	9160.2 ug/L	72.50	9160.2 ppb	72.50	0.79%
QC value within limits for Co 228.616 Recovery = 91.60%						
Cr 267.716†	2008857.6	23385 ug/L	58.9	23385 ppb	58.9	0.25%
QC value within limits for Cr 267.716 Recovery = 93.54%						
Cu 324.752†	6586435.6	20166 ug/L	333.7	20166 ppb	333.7	1.65%
QC value within limits for Cu 324.752 Recovery = 100.83%						
Fe 238.204 Radial†	-22.4	36.405 ug/L	23.6659	36.405 ppb	23.6659	65.01%
K 766.490 Radial†	1532098.1	309260 ug/L	2469.4	309260 ppb	2469.4	0.80%
QC value within limits for K 766.490 Radial Recovery = 103.09%						
Mg 279.077 IEC†	-4.6	-77.942 ug/L	57.5819	-77.942 ppb	57.5819	73.88%
Mn 257.610†	8150045.4	9400.1 ug/L	145.59	9400.1 ppb	145.59	1.55%
QC value within limits for Mn 257.610 Recovery = 94.00%						
Mo 202.031†	127574.9	9479.6 ug/L	72.23	9479.6 ppb	72.23	0.76%
QC value within limits for Mo 202.031 Recovery = 94.80%						
Na 589.592 Radial†	170.4	56.834 ug/L	41.9759	56.834 ppb	41.9759	73.86%
Ni 231.604†	363947.4	9316.7 ug/L	78.34	9316.7 ppb	78.34	0.84%
QC value within limits for Ni 231.604 Recovery = 93.17%						
P 214.914†	31876.6	13776 ug/L	97.5	13776 ppb	97.5	0.71%
QC value within limits for P 214.914 Recovery = 91.84%						
Pb 220.353†	193200.6	23945 ug/L	197.4	23945 ppb	197.4	0.82%
QC value within limits for Pb 220.353 Recovery = 95.78%						
S 181.975 Axial†	38958.0	50916 ug/L	330.6	50916 ppb	330.6	0.65%
QC value within limits for S 181.975 Axial Recovery = 101.83%						
Sb 206.836†	31153.6	10896 ug/L	72.8	10896 ppb	72.8	0.67%
QC value within limits for Sb 206.836 Recovery = 108.96%						
Se 196.026†	17144.7	10030 ug/L	79.2	10030 ppb	79.2	0.79%
QC value within limits for Se 196.026 Recovery = 100.30%						
Si 251.611†	1499202.2	46602 ug/L	215.9	46602 ppb	215.9	0.46%
QC value within limits for Si 251.611 Recovery = 93.20%						
Sn 189.927†	55880.9	10020 ug/L	88.4	10020 ppb	88.4	0.88%
QC value within limits for Sn 189.927 Recovery = 100.20%						
Sr 421.552†	1276977.3	9859.9 ug/L	109.14	9859.9 ppb	109.14	1.11%
QC value within limits for Sr 421.552 Recovery = 98.60%						
Ti 334.940†	6131504.7	9957.3 ug/L	158.98	9957.3 ppb	158.98	1.60%
QC value within limits for Ti 334.940 Recovery = 99.57%						
Tl 190.801†	30207.3	9603.0 ug/L	84.15	9603.0 ppb	84.15	0.88%
QC value within limits for Tl 190.801 Recovery = 96.03%						
U 409.014†	1100.1	-21.023 ug/L	2.0797	-21.023 ppb	2.0797	9.89%
V 292.402†	1351948.7	9906.8 ug/L	19.60	9906.8 ppb	19.60	0.20%
QC value within limits for V 292.402 Recovery = 99.07%						
Zn 213.857†	1409571.8	13671 ug/L	50.2	13671 ppb	50.2	0.37%
QC value within limits for Zn 213.857 Recovery = 91.14%						
SiO2†	1536871.6	102210 ug/L	1006.8	102210 ppb	1006.8	0.99%
QC value within limits for SiO2 Recovery = 95.52%						

QC Failed. Continue with analysis.

Sequence No.: 13

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/16/2010 13:04:46

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4278.5	4278.5	101 %		13:06:38
1	Y RADIAL	4403.6	4403.6	100.0 %		13:06:38
1	Al 396.153Radial†	4944.4	5071.5	5049.1 ug/L	5049.1 ppb	13:06:38
1	Ca 317.933Radial†	2656.4	2620.9	4888.9 ug/L	4888.9 ppb	13:06:58
1	Fe 238.204 Radial†	479.4	466.3	4970.2 ug/L	4970.2 ppb	13:06:58
1	K 766.490 Radial†	29176.4	25816.3	5205.1 ug/L	5205.1 ppb	13:06:38
1	Mg 279.077 IEC†	134.8	131.2	5067.6 ug/L	5067.6 ppb	13:06:58
1	Na 589.592 Radial†	30434.4	30030.7	10017 ug/L	10017 ppb	13:06:38
1	Sr 421.552†	65572.1	65058.7	502.30 ug/L	502.30 ppb	13:06:38
1	Sc 361.383	847466.4	847466.4	99.701 %		13:07:57
1	Y 371.029	687946.7	687946.7	97.897 %		13:07:57
1	Ag 328.068†	102102.1	102180.7	493.82 ug/L	493.82 ppb	13:07:57
1	As 188.979†	1192.4	1224.3	519.47 ug/L	519.47 ppb	13:08:17
1	B 249.677†	21239.3	21784.9	510.29 ug/L	510.29 ppb	13:07:57
1	Ba 233.527†	60936.7	61100.7	497.35 ug/L	497.35 ppb	13:07:57
1	Be 313.107†	1333863.2	1342203.9	494.14 ug/L	494.14 ppb	13:07:57
1	Cd 226.502†	41617.2	41937.5	490.32 ug/L	490.32 ppb	13:08:17
1	Co 228.616†	23690.5	23840.4	497.22 ug/L	497.22 ppb	13:08:17
1	Cr 267.716†	42278.1	42255.3	492.20 ug/L	492.20 ppb	13:07:57
1	Cu 324.752†	167644.5	160053.4	490.04 ug/L	490.04 ppb	13:07:57
1	Mn 257.610†	432221.0	432947.9	499.64 ug/L	499.64 ppb	13:07:57
1	Mo 202.031†	6756.6	6766.4	503.23 ug/L	503.23 ppb	13:08:17
1	Ni 231.604†	19428.0	19372.8	495.92 ug/L	495.92 ppb	13:08:17
1	P 214.914†	4730.4	4502.6	2403.0 ug/L	2403.0 ppb	13:08:17
1	Pb 220.353†	3993.2	4078.7	506.93 ug/L	506.93 ppb	13:08:17
1	S 181.975 Axial†	815.2	774.7	1011.6 ppb	1011.6 ppb	13:08:17
1	Sb 206.836†	1533.6	1502.5	526.63 ug/L	526.63 ppb	13:08:17
1	Se 196.026†	836.6	862.4	520.78 ug/L	520.78 ppb	13:08:17
1	Si 251.611†	79978.3	79606.0	2474.5 ug/L	2474.5 ppb	13:07:57
1	Sn 189.927†	2829.2	2825.1	507.39 ug/L	507.39 ppb	13:08:17
1	Ti 334.940†	308044.0	310461.0	504.46 ug/L	504.46 ppb	13:07:57
1	Tl 190.801†	1554.0	1597.8	507.75 ug/L	507.75 ppb	13:08:17
1	U 409.014†	13087.9	16642.3	471.09 ug/L	471.09 ppb	13:07:57
1	V 292.402†	65731.9	67606.4	496.33 ug/L	496.33 ppb	13:07:57
1	Zn 213.857†	51328.9	50795.1	491.19 ug/L	491.19 ppb	13:07:57
1	SiO2†	81049.1	80672.8	5365.0 ug/L	5365.0 ppb	13:09:17
2	Sc Radial	4172.0	4172.0	98.1 %		13:07:03
2	Y RADIAL	4288.0	4288.0	97.41 %		13:07:03
2	Al 396.153Radial†	4910.2	5162.0	5140.0 ug/L	5140.0 ppb	13:07:03
2	Ca 317.933Radial†	2675.9	2708.1	5051.7 ug/L	5051.7 ppb	13:07:23
2	Fe 238.204 Radial†	476.6	475.6	5069.0 ug/L	5069.0 ppb	13:07:23
2	K 766.490 Radial†	28880.8	26255.0	5293.5 ug/L	5293.5 ppb	13:07:03
2	Mg 279.077 IEC†	134.2	134.0	5176.9 ug/L	5176.9 ppb	13:07:23
2	Na 589.592 Radial†	30366.0	30732.8	10251 ug/L	10251 ppb	13:07:03
2	Sr 421.552†	65263.4	66407.0	512.71 ug/L	512.71 ppb	13:07:03
2	Sc 361.383	853528.2	853528.2	100.41 %		13:08:25
2	Y 371.029	692463.8	692463.8	98.539 %		13:08:25
2	Ag 328.068†	102814.1	102162.5	493.77 ug/L	493.77 ppb	13:08:25
2	As 188.979†	1175.8	1199.3	508.97 ug/L	508.97 ppb	13:08:45
2	B 249.677†	21434.1	21827.6	511.30 ug/L	511.30 ppb	13:08:25
2	Ba 233.527†	61494.7	61222.3	498.34 ug/L	498.34 ppb	13:08:25
2	Be 313.107†	1346484.8	1345271.9	495.27 ug/L	495.27 ppb	13:08:25
2	Cd 226.502†	41320.4	41345.5	483.39 ug/L	483.39 ppb	13:08:45
2	Co 228.616†	23521.9	23503.8	490.19 ug/L	490.19 ppb	13:08:45
2	Cr 267.716†	42715.2	42389.3	493.76 ug/L	493.76 ppb	13:08:25
2	Cu 324.752†	169170.7	160379.0	491.04 ug/L	491.04 ppb	13:08:25
2	Mn 257.610†	436015.6	433648.0	500.45 ug/L	500.45 ppb	13:08:25
2	Mo 202.031†	6716.9	6678.8	496.73 ug/L	496.73 ppb	13:08:45
2	Ni 231.604†	19324.8	19131.6	489.74 ug/L	489.74 ppb	13:08:45

2	P 214.914†	4700.9	4439.6	2367.7 ug/L	2367.7 ppb	13:08:45
2	Pb 220.353†	3942.6	3999.9	497.16 ug/L	497.16 ppb	13:08:45
2	S 181.975 Axial†	810.2	764.0	997.51 ug/L	997.51 ppb	13:08:45
2	Sb 206.836†	1520.3	1478.3	518.18 ug/L	518.18 ppb	13:08:45
2	Se 196.026†	826.7	846.6	511.87 ug/L	511.87 ppb	13:08:45
2	Si 251.611†	80610.7	79666.0	2476.5 ug/L	2476.5 ppb	13:08:25
2	Sn 189.927†	2802.9	2778.7	499.11 ug/L	499.11 ppb	13:08:45
2	Ti 334.940†	310548.1	310760.5	504.95 ug/L	504.95 ppb	13:08:25
2	Tl 190.801†	1545.2	1577.9	501.54 ug/L	501.54 ppb	13:08:45
2	U 409.014†	13289.0	16749.3	474.12 ug/L	474.12 ppb	13:08:25
2	V 292.402†	66387.6	67791.1	497.57 ug/L	497.57 ppb	13:08:25
2	Zn 213.857†	51825.6	50924.1	492.47 ug/L	492.47 ppb	13:08:25
2	SiO2†	80362.2	79411.3	5281.1 ug/L	5281.1 ppb	13:09:23
3	Sc Radial	4058.3	4058.3	95.5 %		13:07:28
3	Y RADIAL	4207.4	4207.4	95.57 %		13:07:28
3	Al 396.153Radial†	4832.4	5220.8	5198.9 ug/L	5198.9 ppb	13:07:28
3	Ca 317.933Radial†	2709.9	2820.2	5260.8 ug/L	5260.8 ppb	13:07:49
3	Fe 238.204 Radial†	484.8	497.7	5304.1 ug/L	5304.1 ppb	13:07:49
3	K 766.490 Radial†	28434.4	26612.4	5365.6 ug/L	5365.6 ppb	13:07:28
3	Mg 279.077 IEC†	136.4	140.1	5412.1 ug/L	5412.1 ppb	13:07:49
3	Na 589.592 Radial†	29846.8	31056.4	10359 ug/L	10359 ppb	13:07:28
3	Sr 421.552†	64381.3	67347.2	519.97 ug/L	519.97 ppb	13:07:28
3	Sc 361.383	849872.7	849872.7	99.984 %		13:08:52
3	Y 371.029	690925.9	690925.9	98.320 %		13:08:52
3	Ag 328.068†	102508.9	102297.6	494.50 ug/L	494.50 ppb	13:08:52
3	As 188.979†	1168.5	1197.0	508.09 ug/L	508.09 ppb	13:09:12
3	B 249.677†	21244.0	21729.3	508.95 ug/L	508.95 ppb	13:08:52
3	Ba 233.527†	60983.3	60974.2	496.33 ug/L	496.33 ppb	13:08:52
3	Be 313.107†	1341511.2	1346065.0	495.56 ug/L	495.56 ppb	13:08:52
3	Cd 226.502†	41179.8	41381.9	483.79 ug/L	483.79 ppb	13:09:12
3	Co 228.616†	23446.3	23528.9	490.70 ug/L	490.70 ppb	13:09:12
3	Cr 267.716†	42438.6	42295.7	492.68 ug/L	492.68 ppb	13:08:52
3	Cu 324.752†	169050.4	160983.4	492.90 ug/L	492.90 ppb	13:08:52
3	Mn 257.610†	433713.9	433213.6	499.96 ug/L	499.96 ppb	13:08:52
3	Mo 202.031†	6662.8	6653.4	494.86 ug/L	494.86 ppb	13:09:12
3	Ni 231.604†	19253.3	19142.9	490.03 ug/L	490.03 ppb	13:09:12
3	P 214.914†	4692.3	4451.1	2373.6 ug/L	2373.6 ppb	13:09:12
3	Pb 220.353†	3952.2	4026.4	500.43 ug/L	500.43 ppb	13:09:12
3	S 181.975 Axial†	802.1	759.4	991.48 ug/L	991.48 ppb	13:09:12
3	Sb 206.836†	1508.4	1473.0	516.34 ug/L	516.34 ppb	13:09:12
3	Se 196.026†	824.6	848.0	513.45 ug/L	513.45 ppb	13:09:12
3	Si 251.611†	80336.4	79737.0	2478.7 ug/L	2478.7 ppb	13:08:52
3	Sn 189.927†	2794.8	2782.6	499.84 ug/L	499.84 ppb	13:09:12
3	Ti 334.940†	309406.4	310948.9	505.27 ug/L	505.27 ppb	13:08:52
3	Tl 190.801†	1540.1	1579.5	502.01 ug/L	502.01 ppb	13:09:12
3	U 409.014†	13146.7	16663.9	471.67 ug/L	471.67 ppb	13:08:52
3	V 292.402†	66141.4	67829.2	497.78 ug/L	497.78 ppb	13:08:52
3	Zn 213.857†	51485.5	50806.0	491.28 ug/L	491.28 ppb	13:08:52
3	SiO2†	79732.5	79125.8	5262.1 ug/L	5262.1 ppb	13:09:28

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	850289.1	100.03 %	0.359			0.36%
Sc Radial	4169.6	98.1 %	2.59			2.64%
Y 371.029	690445.4	98.252 %	0.3268			0.33%
Y RADIAL	4299.7	97.67 %	2.241			2.29%
Ag 328.068†	102213.6	494.03 ug/L	0.406	494.03 ppb	0.406	0.08%
QC value within limits for Ag 328.068 Recovery = 98.81%						
Al 396.153Radial†	5151.5	5129.3 ug/L	75.44	5129.3 ppb	75.44	1.47%
QC value within limits for Al 396.153Radial Recovery = 102.59%						
As 188.979†	1206.9	512.18 ug/L	6.330	512.18 ppb	6.330	1.24%
QC value within limits for As 188.979 Recovery = 102.44%						
B 249.677†	21780.6	510.18 ug/L	1.180	510.18 ppb	1.180	0.23%
QC value within limits for B 249.677 Recovery = 102.04%						
Ba 233.527†	61099.1	497.34 ug/L	1.003	497.34 ppb	1.003	0.20%
QC value within limits for Ba 233.527 Recovery = 99.47%						
Be 313.107†	1344513.6	494.99 ug/L	0.750	494.99 ppb	0.750	0.15%
QC value within limits for Be 313.107 Recovery = 99.00%						
Ca 317.933Radial†	2716.4	5067.1 ug/L	186.43	5067.1 ppb	186.43	3.68%

QC value within limits for Ca 317.933 Radial Recovery = 101.34%

Cd 226.502†	41555.0	485.83 ug/L	3.894	485.83 ppb	3.894	0.80%
QC value within limits for Cd 226.502 Recovery = 97.17%						
Co 228.616†	23624.4	492.70 ug/L	3.924	492.70 ppb	3.924	0.80%
QC value within limits for Co 228.616 Recovery = 98.54%						
Cr 267.716†	42313.4	492.88 ug/L	0.800	492.88 ppb	0.800	0.16%
QC value within limits for Cr 267.716 Recovery = 98.58%						
Cu 324.752†	160471.9	491.33 ug/L	1.454	491.33 ppb	1.454	0.30%
QC value within limits for Cu 324.752 Recovery = 98.27%						
Fe 238.204 Radial†	479.9	5114.4 ug/L	171.51	5114.4 ppb	171.51	3.35%
QC value within limits for Fe 238.204 Radial Recovery = 102.29%						
K 766.490 Radial†	26227.9	5288.1 ug/L	80.37	5288.1 ppb	80.37	1.52%
QC value within limits for K 766.490 Radial Recovery = 105.76%						
Mg 279.077 IEC†	135.1	5218.9 ug/L	176.09	5218.9 ppb	176.09	3.37%
QC value within limits for Mg 279.077 IEC Recovery = 104.38%						
Mn 257.610†	433269.8	500.02 ug/L	0.409	500.02 ppb	0.409	0.08%
QC value within limits for Mn 257.610 Recovery = 100.00%						
Mo 202.031†	6699.5	498.27 ug/L	4.393	498.27 ppb	4.393	0.88%
QC value within limits for Mo 202.031 Recovery = 99.65%						
Na 589.592 Radial†	30606.7	10209 ug/L	174.9	10209 ppb	174.9	1.71%
QC value within limits for Na 589.592 Radial Recovery = 102.09%						
Ni 231.604†	19215.8	491.90 ug/L	3.484	491.90 ppb	3.484	0.71%
QC value within limits for Ni 231.604 Recovery = 98.38%						
P 214.914†	4464.4	2381.4 ug/L	18.92	2381.4 ppb	18.92	0.79%
QC value within limits for P 214.914 Recovery = 95.26%						
Pb 220.353†	4035.0	501.51 ug/L	4.976	501.51 ppb	4.976	0.99%
QC value within limits for Pb 220.353 Recovery = 100.30%						
S 181.975 Axial†	766.0	1000.2 ug/L	10.31	1000.2 ppb	10.31	1.03%
QC value within limits for S 181.975 Axial Recovery = 100.02%						
Sb 206.836†	1484.6	520.38 ug/L	5.485	520.38 ppb	5.485	1.05%
QC value within limits for Sb 206.836 Recovery = 104.08%						
Se 196.026†	852.3	515.36 ug/L	4.753	515.36 ppb	4.753	0.92%
QC value within limits for Se 196.026 Recovery = 103.07%						
Si 251.611†	79669.7	2476.6 ug/L	2.09	2476.6 ppb	2.09	0.08%
QC value within limits for Si 251.611 Recovery = 99.06%						
Sn 189.927†	2795.5	502.11 ug/L	4.583	502.11 ppb	4.583	0.91%
QC value within limits for Sn 189.927 Recovery = 100.42%						
Sr 421.552†	66271.0	511.66 ug/L	8.880	511.66 ppb	8.880	1.74%
QC value within limits for Sr 421.552 Recovery = 102.33%						
Ti 334.940†	310723.4	504.89 ug/L	0.410	504.89 ppb	0.410	0.08%
QC value within limits for Ti 334.940 Recovery = 100.98%						
Tl 190.801†	1585.1	503.77 ug/L	3.459	503.77 ppb	3.459	0.69%
QC value within limits for Tl 190.801 Recovery = 100.75%						
U 409.014†	16685.2	472.29 ug/L	1.607	472.29 ppb	1.607	0.34%
QC value within limits for U 409.014 Recovery = 94.46%						
V 292.402†	67742.3	497.23 ug/L	0.784	497.23 ppb	0.784	0.16%
QC value within limits for V 292.402 Recovery = 99.45%						
Zn 213.857†	50841.8	491.64 ug/L	0.716	491.64 ppb	0.716	0.15%
QC value within limits for Zn 213.857 Recovery = 98.33%						
SiO2†	79736.6	5302.7 ug/L	54.77	5302.7 ppb	54.77	1.03%
QC value within limits for SiO2 Recovery = 99.16%						

All analyte(s) passed QC.

Sequence No.: 14

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/16/2010 13:11:37

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	4080.8	4080.8	96.0 %		13:13:50
1	Y RADIAL	4371.1	4371.1	99.29 %		13:13:30
1	Al 396.153Radial†	-122.3	31.7	31.598 ug/L	31.598 ppb	13:13:30
1	Ca 317.933Radial†	14.1	-3.7	-6.8414 ug/L	-6.8414 ppb	13:13:50
1	Fe 238.204 Radial†	10.3	0.7	7.4143 ug/L	7.4143 ppb	13:13:50
1	K 766.490 Radial†	3563.8	540.8	109.18 ug/L	109.18 ppb	13:13:30
1	Mg 279.077 IEC†	2.6	-0.0	-1.5512 ug/L	-1.5512 ppb	13:13:50
1	Na 589.592 Radial†	111.5	-90.9	-30.326 ug/L	-30.326 ppb	13:13:30
1	Sr 421.552†	61.6	-25.6	-0.1976 ug/L	-0.1976 ppb	13:13:30
1	Sc 361.383	834569.1	834569.1	98.184 %		13:14:47
1	Y 371.029	688647.9	688647.9	97.996 %		13:14:47
1	Ag 328.068†	256.0	33.0	0.1671 ug/L	0.1671 ppb	13:14:47
1	As 188.979†	-17.9	10.1	4.2506 ug/L	4.2506 ppb	13:15:07
1	B 249.677†	467.5	958.1	22.538 ug/L	22.538 ppb	13:14:47
1	Ba 233.527†	20.2	1.7	0.0143 ug/L	0.0143 ppb	13:15:07
1	Be 313.107†	-4283.1	-23.2	-0.0088 ug/L	-0.0088 ppb	13:14:47
1	Cd 226.502†	-182.2	9.9	0.1134 ug/L	0.1134 ppb	13:15:07
1	Co 228.616†	-66.0	11.6	0.2461 ug/L	0.2461 ppb	13:15:07
1	Cr 267.716†	149.3	2.4	0.0311 ug/L	0.0311 ppb	13:15:07
1	Cu 324.752†	7973.9	27.3	0.0881 ug/L	0.0881 ppb	13:14:47
1	Mn 257.610†	557.2	-2.2	-0.0018 ug/L	-0.0018 ppb	13:15:07
1	Mo 202.031†	28.9	19.0	1.4092 ug/L	1.4092 ppb	13:15:07
1	Ni 231.604†	106.2	-5.4	-0.1376 ug/L	-0.1376 ppb	13:15:07
1	P 214.914†	256.8	19.6	10.894 ug/L	10.894 ppb	13:15:07
1	Pb 220.353†	-46.8	25.9	3.2139 ug/L	3.2139 ppb	13:15:07
1	S 181.975 Axial†	43.7	1.6	2.0366 ug/L	2.0366 ppb	13:15:07
1	Sb 206.836†	40.5	5.6	1.9850 ug/L	1.9850 ppb	13:15:07
1	Se 196.026†	-17.3	5.7	3.3705 ug/L	3.3705 ppb	13:15:07
1	Si 251.611†	623.9	23.1	0.7028 ug/L	0.7028 ppb	13:15:07
1	Sn 189.927†	33.0	21.0	3.7587 ug/L	3.7587 ppb	13:15:07
1	Ti 334.940†	-1547.0	-82.7	-0.1320 ug/L	-0.1320 ppb	13:14:47
1	Tl 190.801†	-33.6	4.8	1.5285 ug/L	1.5285 ppb	13:15:07
1	U 409.014†	-3707.9	-261.3	-7.4240 ug/L	-7.4240 ppb	13:14:47
1	V 292.402†	-1652.7	-5.9	-0.0384 ug/L	-0.0384 ppb	13:14:47
1	Zn 213.857†	771.2	97.7	0.9530 ug/L	0.9530 ppb	13:15:07
1	SiO2†	667.1	59.9	3.9560 ug/L	3.9560 ppb	13:16:03
2	Sc Radial	4111.7	4111.7	96.7 %		13:14:15
2	Y RADIAL	4390.6	4390.6	99.74 %		13:13:55
2	Al 396.153Radial†	-131.4	23.2	23.175 ug/L	23.175 ppb	13:13:55
2	Ca 317.933Radial†	21.8	4.3	7.9428 ug/L	7.9428 ppb	13:14:15
2	Fe 238.204 Radial†	8.8	-0.9	-9.9532 ug/L	-9.9532 ppb	13:14:15
2	K 766.490 Radial†	3512.1	459.5	92.765 ug/L	92.765 ppb	13:13:55
2	Mg 279.077 IEC†	-1.2	-3.9	-152.00 ug/L	-152.00 ppb	13:14:15
2	Na 589.592 Radial†	96.9	-106.9	-35.655 ug/L	-35.655 ppb	13:13:55
2	Sr 421.552†	72.7	-14.7	-0.1135 ug/L	-0.1135 ppb	13:13:55
2	Sc 361.383	834436.3	834436.3	98.168 %		13:15:12
2	Y 371.029	688166.1	688166.1	97.928 %		13:15:12
2	Ag 328.068†	300.6	78.5	0.3757 ug/L	0.3757 ppb	13:15:12
2	As 188.979†	-10.9	17.3	7.2590 ug/L	7.2590 ppb	13:15:32
2	B 249.677†	398.8	888.2	20.897 ug/L	20.897 ppb	13:15:12
2	Ba 233.527†	2.9	-15.8	-0.1295 ug/L	-0.1295 ppb	13:15:32
2	Be 313.107†	-4328.8	-70.5	-0.0256 ug/L	-0.0256 ppb	13:15:12
2	Cd 226.502†	-196.7	-4.9	-0.0572 ug/L	-0.0572 ppb	13:15:32
2	Co 228.616†	-86.8	-9.6	-0.1982 ug/L	-0.1982 ppb	13:15:32
2	Cr 267.716†	156.9	10.1	0.1186 ug/L	0.1186 ppb	13:15:32
2	Cu 324.752†	8003.4	58.7	0.1814 ug/L	0.1814 ppb	13:15:12
2	Mn 257.610†	557.2	-2.1	0.0028 ug/L	0.0028 ppb	13:15:32
2	Mo 202.031†	18.1	8.0	0.5911 ug/L	0.5911 ppb	13:15:32
2	Ni 231.604†	109.6	-1.9	-0.0488 ug/L	-0.0488 ppb	13:15:32

2	P 214.914†	216.5	-21.5	-11.889 ug/L	-11.889 ppb	13:15:32
2	Pb 220.353†	-45.6	27.1	3.3643 ug/L	3.3643 ppb	13:15:32
2	S 181.975 Axial†	60.8	19.1	24.915 ug/L	24.915 ppb	13:15:32
2	Sb 206.836†	55.1	20.4	6.9965 ug/L	6.9965 ppb	13:15:32
2	Se 196.026†	-18.8	4.1	2.3827 ug/L	2.3827 ppb	13:15:32
2	Si 251.611†	646.2	46.0	1.4257 ug/L	1.4257 ppb	13:15:32
2	Sn 189.927†	40.3	28.4	5.1018 ug/L	5.1018 ppb	13:15:32
2	Ti 334.940†	-1387.0	80.1	0.1453 ug/L	0.1453 ppb	13:15:12
2	Tl 190.801†	-22.4	16.3	5.1363 ug/L	5.1363 ppb	13:15:32
2	U 409.014†	-3590.7	-142.6	-4.0492 ug/L	-4.0492 ppb	13:15:12
2	V 292.402†	-1680.2	-34.3	-0.2495 ug/L	-0.2495 ppb	13:15:12
2	Zn 213.857†	751.4	77.7	0.7595 ug/L	0.7595 ppb	13:15:32
2	SiO2†	638.1	30.5	2.0182 ug/L	2.0182 ppb	13:16:08
3	Sc Radial	4090.2	4090.2	96.2 %		13:14:40
3	Y RADIAL	4448.1	4448.1	101.0 %		13:14:20
3	Al 396.153Radial†	-130.8	23.0	23.037 ug/L	23.037 ppb	13:14:20
3	Ca 317.933Radial†	21.2	3.8	6.9966 ug/L	6.9966 ppb	13:14:40
3	Fe 238.204 Radial†	11.3	1.7	17.786 ug/L	17.786 ppb	13:14:40
3	K 766.490 Radial†	3388.9	350.5	70.764 ug/L	70.764 ppb	13:14:20
3	Mg 279.077 IEC†	0.1	-2.6	-101.31 ug/L	-101.31 ppb	13:14:40
3	Na 589.592 Radial†	87.9	-115.7	-38.591 ug/L	-38.591 ppb	13:14:20
3	Sr 421.552†	110.7	25.2	0.1947 ug/L	0.1947 ppb	13:14:20
3	Sc 361.383	843103.7	843103.7	99.188 %		13:15:37
3	Y 371.029	695321.1	695321.1	98.946 %		13:15:37
3	Ag 328.068†	198.2	-27.9	-0.1277 ug/L	-0.1277 ppb	13:15:37
3	As 188.979†	-17.9	10.3	4.3412 ug/L	4.3412 ppb	13:15:57
3	B 249.677†	341.4	826.1	19.433 ug/L	19.433 ppb	13:15:37
3	Ba 233.527†	5.9	-12.8	-0.1044 ug/L	-0.1044 ppb	13:15:57
3	Be 313.107†	-4374.5	-71.2	-0.0262 ug/L	-0.0262 ppb	13:15:37
3	Cd 226.502†	-180.4	13.6	0.1573 ug/L	0.1573 ppb	13:15:57
3	Co 228.616†	-78.9	-0.7	-0.0135 ug/L	-0.0135 ppb	13:15:57
3	Cr 267.716†	175.0	26.8	0.3120 ug/L	0.3120 ppb	13:15:57
3	Cu 324.752†	8094.8	66.9	0.2069 ug/L	0.2069 ppb	13:15:37
3	Mn 257.610†	585.0	20.1	0.0290 ug/L	0.0290 ppb	13:15:57
3	Mo 202.031†	16.4	6.0	0.4502 ug/L	0.4502 ppb	13:15:57
3	Ni 231.604†	110.5	-2.1	-0.0548 ug/L	-0.0548 ppb	13:15:57
3	P 214.914†	238.8	-1.2	-0.6621 ug/L	-0.6621 ppb	13:15:57
3	Pb 220.353†	-62.9	10.1	1.2617 ug/L	1.2617 ppb	13:15:57
3	S 181.975 Axial†	53.1	10.6	13.870 ug/L	13.870 ppb	13:15:57
3	Sb 206.836†	48.0	12.7	4.3833 ug/L	4.3833 ppb	13:15:57
3	Se 196.026†	-16.1	7.1	4.2001 ug/L	4.2001 ppb	13:15:57
3	Si 251.611†	619.3	12.1	0.3707 ug/L	0.3707 ppb	13:15:57
3	Sn 189.927†	36.5	24.2	4.3427 ug/L	4.3427 ppb	13:15:57
3	Ti 334.940†	-1508.4	-27.8	-0.0354 ug/L	-0.0354 ppb	13:15:37
3	Tl 190.801†	-28.9	9.9	3.1354 ug/L	3.1354 ppb	13:15:57
3	U 409.014†	-3545.6	-59.5	-1.6931 ug/L	-1.6931 ppb	13:15:37
3	V 292.402†	-1703.8	-40.4	-0.2944 ug/L	-0.2944 ppb	13:15:37
3	Zn 213.857†	765.4	83.9	0.8159 ug/L	0.8159 ppb	13:15:57
3	SiO2†	610.3	-4.3	-0.2962 ug/L	-0.2962 ppb	13:16:13

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	837369.7	98.513 %		0.5843			0.59%
Sc Radial	4094.2	96.3 %		0.37			0.39%
Y 371.029	690711.7	98.290 %		0.5691			0.58%
Y RADIAL	4403.3	100.0 %		0.91			0.91%
Ag 328.068†	27.9	0.1384 ug/L		0.25296	0.1384 ppb	0.25296	182.81%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	26.0	25.937 ug/L		4.9037	25.937 ppb	4.9037	18.91%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	12.6	5.2836 ug/L		1.71138	5.2836 ppb	1.71138	32.39%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	890.8	20.956 ug/L		1.5534	20.956 ppb	1.5534	7.41%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	-9.0	-0.0732 ug/L		0.07679	-0.0732 ppb	0.07679	104.88%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	-55.0	-0.0202 ug/L		0.00987	-0.0202 ppb	0.00987	48.79%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	1.4	2.6993 ug/L		8.27604	2.6993 ppb	8.27604	306.60%

QC value within limits for Ca 317.933Radial	Recovery = Not calculated		
Cd 226.502†	6.2 0.0712 ug/L	0.11331 0.0712 ppb	0.11331 159.17%
QC value within limits for Cd 226.502	Recovery = Not calculated		
Co 228.616†	0.5 0.0115 ug/L	0.22320 0.0115 ppb	0.22320 >999.9%
QC value within limits for Co 228.616	Recovery = Not calculated		
Cr 267.716†	13.1 0.1539 ug/L	0.14369 0.1539 ppb	0.14369 93.36%
QC value within limits for Cr 267.716	Recovery = Not calculated		
Cu 324.752†	51.0 0.1588 ug/L	0.06254 0.1588 ppb	0.06254 39.39%
QC value within limits for Cu 324.752	Recovery = Not calculated		
Fe 238.204 Radial†	0.5 5.0825 ug/L	14.01597 5.0825 ppb	14.01597 275.77%
QC value within limits for Fe 238.204 Radial	Recovery = Not calculated		
K 766.490 Radial†	450.3 90.903 ug/L	19.2756 90.903 ppb	19.2756 21.20%
QC value within limits for K 766.490 Radial	Recovery = Not calculated		
Mg 279.077 IEC†	-2.2 -84.956 ug/L	76.5476 -84.956 ppb	76.5476 90.10%
QC value within limits for Mg 279.077 IEC	Recovery = Not calculated		
Mn 257.610†	5.2 0.0100 ug/L	0.01662 0.0100 ppb	0.01662 165.85%
QC value within limits for Mn 257.610	Recovery = Not calculated		
Mo 202.031†	11.0 0.8168 ug/L	0.51781 0.8168 ppb	0.51781 63.39%
QC value within limits for Mo 202.031	Recovery = Not calculated		
Na 589.592 Radial†	-104.5 -34.857 ug/L	4.1899 -34.857 ppb	4.1899 12.02%
QC value within limits for Na 589.592 Radial	Recovery = Not calculated		
Ni 231.604†	-3.1 -0.0804 ug/L	0.04960 -0.0804 ppb	0.04960 61.71%
QC value within limits for Ni 231.604	Recovery = Not calculated		
P 214.914†	-1.0 -0.5524 ug/L	11.39186 -0.5524 ppb	11.39186 >999.9%
QC value within limits for P 214.914	Recovery = Not calculated		
Pb 220.353†	21.0 2.6133 ug/L	1.17296 2.6133 ppb	1.17296 44.88%
QC value within limits for Pb 220.353	Recovery = Not calculated		
S 181.975 Axial†	10.4 13.607 ug/L	11.4412 13.607 ppb	11.4412 84.08%
QC value within limits for S 181.975 Axial	Recovery = Not calculated		
Sb 206.836†	12.9 4.4549 ug/L	2.50656 4.4549 ppb	2.50656 56.26%
QC value within limits for Sb 206.836	Recovery = Not calculated		
Se 196.026†	5.7 3.3177 ug/L	0.90985 3.3177 ppb	0.90985 27.42%
QC value within limits for Se 196.026	Recovery = Not calculated		
Si 251.611†	27.1 0.8331 ug/L	0.53945 0.8331 ppb	0.53945 64.76%
QC value within limits for Si 251.611	Recovery = Not calculated		
Sn 189.927†	24.5 4.4011 ug/L	0.67343 4.4011 ppb	0.67343 15.30%
QC value within limits for Sn 189.927	Recovery = Not calculated		
Sr 421.552†	-5.0 -0.0388 ug/L	0.20657 -0.0388 ppb	0.20657 532.13%
QC value within limits for Sr 421.552	Recovery = Not calculated		
Ti 334.940†	-10.2 -0.0074 ug/L	0.14079 -0.0074 ppb	0.14079 >999.9%
QC value within limits for Ti 334.940	Recovery = Not calculated		
Tl 190.801†	10.3 3.2667 ug/L	1.80748 3.2667 ppb	1.80748 55.33%
QC value within limits for Tl 190.801	Recovery = Not calculated		
U 409.014†	-154.5 -4.3888 ug/L	2.88047 -4.3888 ppb	2.88047 65.63%
QC value within limits for U 409.014	Recovery = Not calculated		
V 292.402†	-26.9 -0.1941 ug/L	0.13673 -0.1941 ppb	0.13673 70.44%
QC value within limits for V 292.402	Recovery = Not calculated		
Zn 213.857†	86.4 0.8428 ug/L	0.09953 0.8428 ppb	0.09953 11.81%
QC value within limits for Zn 213.857	Recovery = Not calculated		
SiO2†	28.7 1.8926 ug/L	2.12891 1.8926 ppb	2.12891 112.48%
QC value within limits for SiO2	Recovery = Not calculated		

All analyte(s) passed QC.

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Analysis Begun

Start Time: 2/16/2010 13:19:34

Plasma On Time: 2/15/2010 05:50:42

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\021610.sif

Batch ID:

Results Data Set: 021610

Results Library: C:\pe\Optima3\Results\Results.mdb
=====

Method Loaded

Method Name: General Eng.2AX

Method Last Saved: 2/16/2010 11:50:40

IEC File: 011110.iec

MSF File:

Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc Radial	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

Sequence No.: 1

Autosampler Location: 37

Sample ID: LR1

Date Collected: 2/16/2010 13:19:36

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	3988.1	3988.1	93.8 %		13:21:50
1	Y RADIAL	4341.2	4341.2	98.61 %		13:21:30
1	Al 396.153Radial†	-160.7	-12.3	-10.938 ug/L	-10.938 ppb	13:21:30

1	Ca 317.933Radial†	7.1	-10.8	-20.119 ug/L	-20.119 ppb	13:21:50
1	Fe 238.204 Radial†	35531.6	37862.5	402390 ug/L	402390 ppb	13:21:30
1	K 766.490 Radial†	3101.0	133.7	27.081 ug/L	27.081 ppb	13:21:30
1	Mg 279.077 IEC†	11.7	9.7	-45.732 ug/L	-45.732 ppb	13:21:50
1	Na 589.592 Radial†	-113.9	-328.4	-109.55 ug/L	-109.55 ppb	13:21:30
1	Sr 421.552†	158.4	79.1	0.6107 ug/L	0.6107 ppb	13:21:30
1	Sc 361.383	832881.2	832881.2	97.985 %		13:22:47
1	Y 371.029	683100.4	683100.4	97.207 %		13:22:47
1	Ag 328.068†	-21957.5	-22636.7	19.075 ug/L	19.075 ppb	13:22:47
1	As 188.979†	-215.0	-191.1	13.937 ug/L	13.937 ppb	13:23:07
1	B 249.677†	2049.3	2573.4	-4.8538 ug/L	-4.8538 ppb	13:22:47
1	Ba 233.527†	-1848.4	-1905.2	-3.1479 ug/L	-3.1479 ppb	13:22:47
1	Be 313.107†	-8961.3	-4806.5	-1.7555 ug/L	-1.7555 ppb	13:22:47
1	Cd 226.502†	2735.8	2987.6	-4.6639 ug/L	-4.6639 ppb	13:22:47
1	Co 228.616†	752.1	846.4	11.760 ug/L	11.760 ppb	13:23:07
1	Cr 267.716†	-241.0	-395.6	-0.7230 ug/L	-0.7230 ppb	13:22:47
1	Cu 324.752†	2372.5	-5672.8	-1.6438 ug/L	-1.6438 ppb	13:22:47
1	Mn 257.610†	-31245.9	-32458.2	2.2901 ug/L	2.2901 ppb	13:22:47
1	Mo 202.031†	-355.9	-373.7	3.4668 ug/L	3.4668 ppb	13:22:47
1	Ni 231.604†	214.3	105.2	2.6850 ug/L	2.6850 ppb	13:23:07
1	P 214.914†	739.8	513.0	-36.053 ug/L	-36.053 ppb	13:23:07
1	Pb 220.353†	211.9	289.8	-2.6063 ug/L	-2.6063 ppb	13:23:07
1	S 181.975 Axial†	70.1	28.6	37.375 ug/L	37.375 ppb	13:23:07
1	Sb 206.836†	22.5	-12.7	-9.3722 ug/L	-9.3722 ppb	13:23:07
1	Se 196.026†	-1724.0	-1736.1	283.60 ug/L	283.60 ppb	13:23:07
1	Si 251.611†	-610.4	-1235.2	-38.151 ug/L	-38.151 ppb	13:22:47
1	Sn 189.927†	-28.4	-41.6	-0.6874 ug/L	-0.6874 ppb	13:23:07
1	Ti 334.940†	1182.7	2700.0	-0.0648 ug/L	-0.0648 ppb	13:22:47
1	Tl 190.801†	-53.3	-15.3	-5.1274 ug/L	-5.1274 ppb	13:23:07
1	U 409.014†	343838.2	354424.2	10022 ug/L	10022 ppb	13:22:47
1	V 292.402†	3226.3	4969.9	-3.7281 ug/L	-3.7281 ppb	13:22:47
1	Zn 213.857†	4209.5	3608.3	-24.994 ug/L	-24.994 ppb	13:23:07
1	SiO2†	-706.3	-1340.3	-88.607 ug/L	-88.607 ppb	13:24:05
2	Sc Radial	4025.1	4025.1	94.7 %		13:22:15
2	Y RADIAL	4252.0	4252.0	96.59 %		13:21:55
2	Al 396.153Radial†	-150.0	0.6	1.7932 ug/L	1.7932 ppb	13:21:55
2	Ca 317.933Radial†	7.9	-10.0	-18.603 ug/L	-18.603 ppb	13:22:15
2	Fe 238.204 Radial†	34648.7	36582.8	388790 ug/L	388790 ppb	13:21:55
2	K 766.490 Radial†	3001.9	-1.2	-0.1479 ug/L	-0.1479 ppb	13:21:55
2	Mg 279.077 IEC†	8.8	6.6	-150.99 ug/L	-150.99 ppb	13:22:15
2	Na 589.592 Radial†	-157.7	-373.7	-124.64 ug/L	-124.64 ppb	13:21:55
2	Sr 421.552†	185.6	106.2	0.8203 ug/L	0.8203 ppb	13:21:55
2	Sc 361.383	834868.4	834868.4	98.219 %		13:23:13
2	Y 371.029	683686.5	683686.5	97.290 %		13:23:13
2	Ag 328.068†	-22168.1	-22797.8	13.704 ug/L	13.704 ppb	13:23:13
2	As 188.979†	-202.1	-177.5	16.494 ug/L	16.494 ppb	13:23:33
2	B 249.677†	1949.1	2466.4	-5.1617 ug/L	-5.1617 ppb	13:23:13
2	Ba 233.527†	-1889.3	-1942.4	-3.8638 ug/L	-3.8638 ppb	13:23:13
2	Be 313.107†	-8885.9	-4708.0	-1.7194 ug/L	-1.7194 ppb	13:23:13
2	Cd 226.502†	2692.2	2936.5	-3.8550 ug/L	-3.8550 ppb	13:23:13
2	Co 228.616†	729.3	821.3	11.441 ug/L	11.441 ppb	13:23:33
2	Cr 267.716†	-247.1	-401.3	-1.0556 ug/L	-1.0556 ppb	13:23:13
2	Cu 324.752†	2323.9	-5728.1	-2.5363 ug/L	-2.5363 ppb	13:23:13
2	Mn 257.610†	-30959.5	-32090.7	1.3757 ug/L	1.3757 ppb	13:23:13
2	Mo 202.031†	-312.9	-329.1	5.7286 ug/L	5.7286 ppb	13:23:13
2	Ni 231.604†	224.0	114.6	2.9243 ug/L	2.9243 ppb	13:23:33
2	P 214.914†	742.1	513.6	-24.758 ug/L	-24.758 ppb	13:23:33
2	Pb 220.353†	218.8	296.3	-0.4934 ug/L	-0.4934 ppb	13:23:33
2	S 181.975 Axial†	70.9	29.2	38.215 ug/L	38.215 ppb	13:23:33
2	Sb 206.836†	38.1	3.2	-3.7933 ug/L	-3.7933 ppb	13:23:33
2	Se 196.026†	-1708.9	-1716.6	251.19 ug/L	251.19 ppb	13:23:33
2	Si 251.611†	-625.2	-1248.9	-38.617 ug/L	-38.617 ppb	13:23:13
2	Sn 189.927†	-30.1	-43.2	-1.2162 ug/L	-1.2162 ppb	13:23:33
2	Ti 334.940†	1170.0	2684.1	-0.0833 ug/L	-0.0833 ppb	13:23:13
2	Tl 190.801†	-53.8	-15.7	-5.2328 ug/L	-5.2328 ppb	13:23:33
2	U 409.014†	344875.5	354645.0	10030 ug/L	10030 ppb	13:23:13
2	V 292.402†	3208.6	4944.1	-1.8776 ug/L	-1.8776 ppb	13:23:13
2	Zn 213.857†	4230.1	3619.0	-22.856 ug/L	-22.856 ppb	13:23:33
2	SiO2†	-621.9	-1252.7	-82.855 ug/L	-82.855 ppb	13:24:10
3	Sc Radial	4040.8	4040.8	95.1 %		13:22:40
3	Y RADIAL	4411.2	4411.2	100.2 %		13:22:20

3	Al 396.153Radial†	-160.5	-9.8	-8.5480 ug/L	-8.5480 ppb	13:22:20
3	Ca 317.933Radial†	12.2	-5.5	-10.325 ug/L	-10.325 ppb	13:22:40
3	Fe 238.204 Radial†	35465.9	37299.6	396410 ug/L	396410 ppb	13:22:20
3	K 766.490 Radial†	3038.4	24.8	5.1041 ug/L	5.1041 ppb	13:22:20
3	Mg 279.077 IEC†	14.1	12.2	54.746 ug/L	54.746 ppb	13:22:40
3	Na 589.592 Radial†	-153.1	-368.2	-122.80 ug/L	-122.80 ppb	13:22:20
3	Sr 421.552†	164.5	83.2	0.6427 ug/L	0.6427 ppb	13:22:20
3	Sc 361.383	828455.3	828455.3	97.464 %		13:23:39
3	Y 371.029	678768.7	678768.7	96.590 %		13:23:39
3	Ag 328.068†	-22033.1	-22834.0	16.078 ug/L	16.078 ppb	13:23:39
3	As 188.979†	-208.4	-185.5	14.884 ug/L	14.884 ppb	13:23:59
3	B 249.677†	2007.3	2541.4	-4.6335 ug/L	-4.6335 ppb	13:23:39
3	Ba 233.527†	-2011.0	-2082.2	-4.7678 ug/L	-4.7678 ppb	13:23:39
3	Be 313.107†	-8887.9	-4780.0	-1.7456 ug/L	-1.7456 ppb	13:23:39
3	Cd 226.502†	2608.0	2871.3	-5.3988 ug/L	-5.3988 ppb	13:23:39
3	Co 228.616†	740.0	838.1	11.677 ug/L	11.677 ppb	13:23:59
3	Cr 267.716†	-349.8	-508.6	-2.1679 ug/L	-2.1679 ppb	13:23:39
3	Cu 324.752†	2410.3	-5621.1	-1.8205 ug/L	-1.8205 ppb	13:23:39
3	Mn 257.610†	-30964.8	-32340.2	1.8315 ug/L	1.8315 ppb	13:23:39
3	Mo 202.031†	-331.3	-350.4	4.7351 ug/L	4.7351 ppb	13:23:39
3	Ni 231.604†	222.2	114.4	2.9201 ug/L	2.9201 ppb	13:23:59
3	P 214.914†	757.8	535.5	-18.794 ug/L	-18.794 ppb	13:23:59
3	Pb 220.353†	192.9	271.5	-4.3021 ug/L	-4.3021 ppb	13:23:59
3	S 181.975 Axial†	69.8	28.8	37.581 ug/L	37.581 ppb	13:23:59
3	Sb 206.836†	20.7	-14.5	-9.8602 ug/L	-9.8602 ppb	13:23:59
3	Se 196.026†	-1722.7	-1744.2	259.62 ug/L	259.62 ppb	13:23:59
3	Si 251.611†	-636.8	-1265.7	-39.122 ug/L	-39.122 ppb	13:23:39
3	Sn 189.927†	-25.4	-38.7	-0.2718 ug/L	-0.2718 ppb	13:23:59
3	Ti 334.940†	1207.7	2732.0	-0.0333 ug/L	-0.0333 ppb	13:23:39
3	Tl 190.801†	-69.3	-32.0	-10.381 ug/L	-10.381 ppb	13:23:59
3	U 409.014†	343156.5	355599.4	10056 ug/L	10056 ppb	13:23:39
3	V 292.402†	3133.0	4891.8	-3.3319 ug/L	-3.3319 ppb	13:23:39
3	Zn 213.857†	4220.6	3642.7	-23.766 ug/L	-23.766 ppb	13:23:59
3	SiO2†	-667.6	-1304.5	-86.266 ug/L	-86.266 ppb	13:24:15

Mean Data: LR1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	832068.3	97.889 %	%	0.3862			0.39%
Sc Radial	4018.0	94.5 %	%	0.64			0.67%
Y 371.029	681851.9	97.029 %	%	0.3822			0.39%
Y RADIAL	4334.8	98.47 %	%	1.814			1.84%
Ag 328.068†	-22756.2	16.286 ug/L	ug/L	2.6911	16.286 ppb	2.6911	16.52%
Al 396.153Radial†	-7.2	-5.8975 ug/L	ug/L	6.76670	-5.8975 ppb	6.76670	114.74%
As 188.979†	-184.7	15.105 ug/L	ug/L	1.2926	15.105 ppb	1.2926	8.56%
B 249.677†	2527.1	-4.8830 ug/L	ug/L	0.26531	-4.8830 ppb	0.26531	5.43%
Ba 233.527†	-1976.6	-3.9265 ug/L	ug/L	0.81177	-3.9265 ppb	0.81177	20.67%
Be 313.107†	-4764.8	-1.7402 ug/L	ug/L	0.01868	-1.7402 ppb	0.01868	1.07%
Ca 317.933Radial†	-8.8	-16.349 ug/L	ug/L	5.2719	-16.349 ppb	5.2719	32.25%
Cd 226.502†	2931.8	-4.6392 ug/L	ug/L	0.77221	-4.6392 ppb	0.77221	16.65%
Co 228.616†	835.3	11.626 ug/L	ug/L	0.1654	11.626 ppb	0.1654	1.42%
Cr 267.716†	-435.2	-1.3155 ug/L	ug/L	0.75672	-1.3155 ppb	0.75672	57.52%
Cu 324.752†	-5674.0	-2.0002 ug/L	ug/L	0.47263	-2.0002 ppb	0.47263	23.63%
Fe 238.204 Radial†	37248.3	395860 ug/L	ug/L	6816.1	395860 ppb	6816.1	1.72%
K 766.490 Radial†	52.4	10.679 ug/L	ug/L	14.4449	10.679 ppb	14.4449	135.27%
Mg 279.077 IEC†	9.5	-47.325 ug/L	ug/L	102.8770	-47.325 ppb	102.8770	217.38%
Mn 257.610†	-32296.3	1.8325 ug/L	ug/L	0.45721	1.8325 ppb	0.45721	24.95%
Mo 202.031†	-351.1	4.6435 ug/L	ug/L	1.13369	4.6435 ppb	1.13369	24.41%
Na 589.592 Radial†	-356.8	-119.00 ug/L	ug/L	8.229	-119.00 ppb	8.229	6.92%
Ni 231.604†	111.4	2.8432 ug/L	ug/L	0.13696	2.8432 ppb	0.13696	4.82%
P 214.914†	520.7	-26.535 ug/L	ug/L	8.7655	-26.535 ppb	8.7655	33.03%
Pb 220.353†	285.9	-2.4673 ug/L	ug/L	1.90818	-2.4673 ppb	1.90818	77.34%
S 181.975 Axial†	28.9	37.724 ug/L	ug/L	0.4379	37.724 ppb	0.4379	1.16%
Sb 206.836†	-8.0	-7.6752 ug/L	ug/L	3.37070	-7.6752 ppb	3.37070	43.92%
Se 196.026†	-1732.3	264.80 ug/L	ug/L	16.814	264.80 ppb	16.814	6.35%
Si 251.611†	-1249.9	-38.630 ug/L	ug/L	0.4854	-38.630 ppb	0.4854	1.26%
Sn 189.927†	-41.2	-0.7251 ug/L	ug/L	0.47330	-0.7251 ppb	0.47330	65.27%
Sr 421.552†	89.5	0.6913 ug/L	ug/L	0.11293	0.6913 ppb	0.11293	16.34%
Ti 334.940†	2705.4	-0.0604 ug/L	ug/L	0.02526	-0.0604 ppb	0.02526	41.79%
Tl 190.801†	-21.0	-6.9138 ug/L	ug/L	3.00335	-6.9138 ppb	3.00335	43.44%

U 409.014†	354889.5	10036 ug/L	17.8	10036 ppb	17.8	0.18%
V 292.402†	4935.3	-2.9792 ug/L	0.97435	-2.9792 ppb	0.97435	32.71%
Zn 213.857†	3623.3	-23.872 ug/L	1.0730	-23.872 ppb	1.0730	4.49%
SiO2†	-1299.2	-85.909 ug/L	2.8924	-85.909 ppb	2.8924	3.37%

Sequence No.: 2
 Sample ID: CCV
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 7
 Date Collected: 2/16/2010 13:26:26
 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	4310.8	4310.8	101 %		13:28:18
1	Y RADIAL	4413.8	4413.8	100.3 %		13:28:18
1	Al 396.153Radial†	4928.8	5019.3	4997.1 ug/L	4997.1 ppb	13:28:18
1	Ca 317.933Radial†	2671.2	2615.8	4879.4 ug/L	4879.4 ppb	13:28:38
1	Fe 238.204 Radial†	482.3	465.5	4962.2 ug/L	4962.2 ppb	13:28:38
1	K 766.490 Radial†	28154.6	24591.9	4957.9 ug/L	4957.9 ppb	13:28:18
1	Mg 279.077 IEC†	134.8	130.2	5028.2 ug/L	5028.2 ppb	13:28:38
1	Na 589.592 Radial†	30766.8	30132.3	10051 ug/L	10051 ppb	13:28:18
1	Sr 421.552†	66158.3	65149.4	503.00 ug/L	503.00 ppb	13:28:18
1	Sc 361.383	847459.5	847459.5	99.700 %		13:29:37
1	Y 371.029	689364.5	689364.5	98.098 %		13:29:37
1	Ag 328.068†	103189.4	103272.2	499.07 ug/L	499.07 ppb	13:29:37
1	As 188.979†	1154.9	1186.7	503.69 ug/L	503.69 ppb	13:29:57
1	B 249.677†	20631.1	21175.1	495.95 ug/L	495.95 ppb	13:29:37
1	Ba 233.527†	61217.8	61383.1	499.65 ug/L	499.65 ppb	13:29:37
1	Be 313.107†	1347799.5	1356193.1	499.30 ug/L	499.30 ppb	13:29:37
1	Cd 226.502†	41450.0	41770.2	488.37 ug/L	488.37 ppb	13:29:57
1	Co 228.616†	23625.4	23775.3	495.85 ug/L	495.85 ppb	13:29:57
1	Cr 267.716†	42718.9	42697.7	497.35 ug/L	497.35 ppb	13:29:37
1	Cu 324.752†	169926.5	162343.6	497.04 ug/L	497.04 ppb	13:29:37
1	Mn 257.610†	435568.9	436309.5	503.52 ug/L	503.52 ppb	13:29:37
1	Mo 202.031†	6713.6	6723.4	500.03 ug/L	500.03 ppb	13:29:57
1	Ni 231.604†	19404.9	19349.8	495.33 ug/L	495.33 ppb	13:29:57
1	P 214.914†	4733.6	4505.8	2403.3 ug/L	2403.3 ppb	13:29:57
1	Pb 220.353†	3967.7	4053.2	503.75 ug/L	503.75 ppb	13:29:57
1	S 181.975 Axial†	799.1	758.6	990.57 ug/L	990.57 ppb	13:29:57
1	Sb 206.836†	1484.4	1453.2	509.70 ug/L	509.70 ppb	13:29:57
1	Se 196.026†	833.0	858.9	518.67 ug/L	518.67 ppb	13:29:57
1	Si 251.611†	80486.9	80116.7	2490.5 ug/L	2490.5 ppb	13:29:37
1	Sn 189.927†	2764.3	2760.0	495.72 ug/L	495.72 ppb	13:29:57
1	Ti 334.940†	311363.1	313792.6	509.87 ug/L	509.87 ppb	13:29:37
1	Tl 190.801†	1548.4	1592.1	506.04 ug/L	506.04 ppb	13:29:57
1	U 409.014†	13377.0	16932.4	479.33 ug/L	479.33 ppb	13:29:37
1	V 292.402†	66396.6	68273.6	501.13 ug/L	501.13 ppb	13:29:37
1	Zn 213.857†	51565.6	51032.9	493.50 ug/L	493.50 ppb	13:29:37
1	SiO2†	80953.8	80577.8	5358.8 ug/L	5358.8 ppb	13:30:57
2	Sc Radial	4095.8	4095.8	96.4 %		13:28:43
2	Y RADIAL	4225.8	4225.8	95.99 %		13:28:43
2	Al 396.153Radial†	4763.7	5103.1	5081.2 ug/L	5081.2 ppb	13:28:43
2	Ca 317.933Radial†	2700.1	2784.0	5193.2 ug/L	5193.2 ppb	13:29:03
2	Fe 238.204 Radial†	484.1	492.3	5246.9 ug/L	5246.9 ppb	13:29:03
2	K 766.490 Radial†	27409.2	25275.5	5095.8 ug/L	5095.8 ppb	13:28:43
2	Mg 279.077 IEC†	135.8	138.2	5337.1 ug/L	5337.1 ppb	13:29:03
2	Na 589.592 Radial†	29666.7	30583.0	10201 ug/L	10201 ppb	13:28:43
2	Sr 421.552†	63950.8	66282.5	511.75 ug/L	511.75 ppb	13:28:43
2	Sc 361.383	847465.7	847465.7	99.701 %		13:30:04
2	Y 371.029	689049.5	689049.5	98.053 %		13:30:04
2	Ag 328.068†	102828.9	102909.8	497.42 ug/L	497.42 ppb	13:30:04
2	As 188.979†	1128.7	1160.4	492.71 ug/L	492.71 ppb	13:30:24
2	B 249.677†	20622.5	21166.3	495.72 ug/L	495.72 ppb	13:30:04
2	Ba 233.527†	61314.6	61479.8	500.44 ug/L	500.44 ppb	13:30:04
2	Be 313.107†	1341780.8	1350146.4	497.07 ug/L	497.07 ppb	13:30:04
2	Cd 226.502†	40896.5	41214.7	481.84 ug/L	481.84 ppb	13:30:24
2	Co 228.616†	23324.2	23473.1	489.53 ug/L	489.53 ppb	13:30:24
2	Cr 267.716†	42677.6	42656.0	496.87 ug/L	496.87 ppb	13:30:04
2	Cu 324.752†	168900.4	161313.1	493.90 ug/L	493.90 ppb	13:30:04
2	Mn 257.610†	434688.4	435423.1	502.51 ug/L	502.51 ppb	13:30:04
2	Mo 202.031†	6635.9	6645.3	494.26 ug/L	494.26 ppb	13:30:24
2	Ni 231.604†	19111.2	19055.0	487.78 ug/L	487.78 ppb	13:30:24

2	P 214.914†	4658.6	4430.6	2361.9 ug/L	2361.9 ppb	13:30:24
2	Pb 220.353†	3932.1	4017.5	499.30 ug/L	499.30 ppb	13:30:24
2	S 181.975 Axial†	793.9	753.4	983.69 ug/L	983.69 ppb	13:30:24
2	Sb 206.836†	1461.1	1429.8	501.54 ug/L	501.54 ppb	13:30:24
2	Se 196.026†	813.1	838.9	507.90 ug/L	507.90 ppb	13:30:24
2	Si 251.611†	80375.8	80004.7	2487.1 ug/L	2487.1 ppb	13:30:04
2	Sn 189.927†	2732.6	2728.2	490.07 ug/L	490.07 ppb	13:30:24
2	Ti 334.940†	310445.9	312870.4	508.39 ug/L	508.39 ppb	13:30:04
2	Tl 190.801†	1519.9	1563.5	497.03 ug/L	497.03 ppb	13:30:24
2	U 409.014†	13374.0	16929.3	479.20 ug/L	479.20 ppb	13:30:04
2	V 292.402†	66305.8	68182.0	500.35 ug/L	500.35 ppb	13:30:04
2	Zn 213.857†	51371.3	50837.7	491.61 ug/L	491.61 ppb	13:30:04
2	SiO2†	79242.0	78860.2	5244.4 ug/L	5244.4 ppb	13:31:02
3	Sc Radial	4222.0	4222.0	99.3 %		13:29:08
3	Y RADIAL	4362.8	4362.8	99.11 %		13:29:08
3	Al 396.153Radial†	4924.0	5116.8	5094.7 ug/L	5094.7 ppb	13:29:08
3	Ca 317.933Radial†	2706.1	2706.4	5048.4 ug/L	5048.4 ppb	13:29:28
3	Fe 238.204 Radial†	482.6	475.9	5072.2 ug/L	5072.2 ppb	13:29:28
3	K 766.490 Radial†	28113.7	25134.8	5067.4 ug/L	5067.4 ppb	13:29:08
3	Mg 279.077 IEC†	133.9	132.1	5101.0 ug/L	5101.0 ppb	13:29:28
3	Na 589.592 Radial†	30432.2	30433.8	10151 ug/L	10151 ppb	13:29:08
3	Sr 421.552†	65789.5	66150.7	510.73 ug/L	510.73 ppb	13:29:08
3	Sc 361.383	853808.9	853808.9	100.45 %		13:30:32
3	Y 371.029	694630.8	694630.8	98.848 %		13:30:32
3	Ag 328.068†	102619.6	101935.2	492.67 ug/L	492.67 ppb	13:30:32
3	As 188.979†	1140.5	1163.8	494.02 ug/L	494.02 ppb	13:30:52
3	B 249.677†	20608.0	20998.2	491.78 ug/L	491.78 ppb	13:30:32
3	Ba 233.527†	61053.5	60762.9	494.60 ug/L	494.60 ppb	13:30:32
3	Be 313.107†	1339080.4	1337459.6	492.40 ug/L	492.40 ppb	13:30:32
3	Cd 226.502†	41318.9	41330.5	483.21 ug/L	483.21 ppb	13:30:52
3	Co 228.616†	23573.6	23547.5	491.10 ug/L	491.10 ppb	13:30:52
3	Cr 267.716†	42533.3	42194.3	491.49 ug/L	491.49 ppb	13:30:32
3	Cu 324.752†	168480.6	159636.6	488.77 ug/L	488.77 ppb	13:30:32
3	Mn 257.610†	433048.0	430550.8	496.88 ug/L	496.88 ppb	13:30:32
3	Mo 202.031†	6712.8	6672.4	496.26 ug/L	496.26 ppb	13:30:52
3	Ni 231.604†	19328.5	19129.0	489.68 ug/L	489.68 ppb	13:30:52
3	P 214.914†	4700.7	4437.8	2367.1 ug/L	2367.1 ppb	13:30:52
3	Pb 220.353†	3972.9	4028.8	500.73 ug/L	500.73 ppb	13:30:52
3	S 181.975 Axial†	804.1	757.6	989.23 ug/L	989.23 ppb	13:30:52
3	Sb 206.836†	1478.6	1436.4	503.89 ug/L	503.89 ppb	13:30:52
3	Se 196.026†	838.3	857.9	518.45 ug/L	518.45 ppb	13:30:52
3	Si 251.611†	79990.4	79022.1	2456.4 ug/L	2456.4 ppb	13:30:32
3	Sn 189.927†	2774.5	2749.6	493.88 ug/L	493.88 ppb	13:30:52
3	Ti 334.940†	309446.3	309561.9	503.02 ug/L	503.02 ppb	13:30:32
3	Tl 190.801†	1538.0	1570.2	499.07 ug/L	499.07 ppb	13:30:52
3	U 409.014†	13104.0	16560.9	468.77 ug/L	468.77 ppb	13:30:32
3	V 292.402†	66008.8	67392.3	494.66 ug/L	494.66 ppb	13:30:32
3	Zn 213.857†	51287.8	50371.8	487.08 ug/L	487.08 ppb	13:30:32
3	SiO2†	79210.2	78238.1	5202.9 ug/L	5202.9 ppb	13:31:07

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	849578.0	99.949 %	0.4311			0.43%
Sc Radial	4209.5	99.0 %	2.54			2.57%
Y 371.029	691014.9	98.333 %	0.4462			0.45%
Y RADIAL	4334.1	98.45 %	2.209			2.24%
Ag 328.068†	102705.7	496.39 ug/L	3.324	496.39 ppb	3.324	0.67%
QC value within limits for Ag 328.068 Recovery = 99.28%						
Al 396.153Radial†	5079.7	5057.6 ug/L	52.91	5057.6 ppb	52.91	1.05%
QC value within limits for Al 396.153Radial Recovery = 101.15%						
As 188.979†	1170.3	496.81 ug/L	5.998	496.81 ppb	5.998	1.21%
QC value within limits for As 188.979 Recovery = 99.36%						
B 249.677†	21113.2	494.48 ug/L	2.341	494.48 ppb	2.341	0.47%
QC value within limits for B 249.677 Recovery = 98.90%						
Ba 233.527†	61208.6	498.23 ug/L	3.167	498.23 ppb	3.167	0.64%
QC value within limits for Ba 233.527 Recovery = 99.65%						
Be 313.107†	1347933.0	496.25 ug/L	3.520	496.25 ppb	3.520	0.71%
QC value within limits for Be 313.107 Recovery = 99.25%						
Ca 317.933Radial†	2702.0	5040.3 ug/L	157.03	5040.3 ppb	157.03	3.12%

QC value within limits for Ca 317.933 Radial Recovery = 100.81%							
Cd 226.502†	41438.5	484.47 ug/L	3.444	484.47 ppb	3.444	0.71%	
QC value within limits for Cd 226.502 Recovery = 96.89%							
Co 228.616†	23598.6	492.16 ug/L	3.288	492.16 ppb	3.288	0.67%	
QC value within limits for Co 228.616 Recovery = 98.43%							
Cr 267.716†	42516.0	495.24 ug/L	3.253	495.24 ppb	3.253	0.66%	
QC value within limits for Cr 267.716 Recovery = 99.05%							
Cu 324.752†	161097.8	493.24 ug/L	4.178	493.24 ppb	4.178	0.85%	
QC value within limits for Cu 324.752 Recovery = 98.65%							
Fe 238.204 Radial†	477.9	5093.8 ug/L	143.56	5093.8 ppb	143.56	2.82%	
QC value within limits for Fe 238.204 Radial Recovery = 101.88%							
K 766.490 Radial†	25000.7	5040.4 ug/L	72.79	5040.4 ppb	72.79	1.44%	
QC value within limits for K 766.490 Radial Recovery = 100.81%							
Mg 279.077 IEC†	133.5	5155.4 ug/L	161.48	5155.4 ppb	161.48	3.13%	
QC value within limits for Mg 279.077 IEC Recovery = 103.11%							
Mn 257.610†	434094.5	500.97 ug/L	3.575	500.97 ppb	3.575	0.71%	
QC value within limits for Mn 257.610 Recovery = 100.19%							
Mo 202.031†	6680.4	496.85 ug/L	2.932	496.85 ppb	2.932	0.59%	
QC value within limits for Mo 202.031 Recovery = 99.37%							
Na 589.592 Radial†	30383.0	10135 ug/L	76.6	10135 ppb	76.6	0.76%	
QC value within limits for Na 589.592 Radial Recovery = 101.35%							
Ni 231.604†	19177.9	490.93 ug/L	3.926	490.93 ppb	3.926	0.80%	
QC value within limits for Ni 231.604 Recovery = 98.19%							
P 214.914†	4458.1	2377.5 ug/L	22.54	2377.5 ppb	22.54	0.95%	
QC value within limits for P 214.914 Recovery = 95.10%							
Pb 220.353†	4033.2	501.26 ug/L	2.270	501.26 ppb	2.270	0.45%	
QC value within limits for Pb 220.353 Recovery = 100.25%							
S 181.975 Axial†	756.6	987.83 ug/L	3.646	987.83 ppb	3.646	0.37%	
QC value within limits for S 181.975 Axial Recovery = 98.78%							
Sb 206.836†	1439.8	505.04 ug/L	4.200	505.04 ppb	4.200	0.83%	
QC value within limits for Sb 206.836 Recovery = 101.01%							
Se 196.026†	851.9	515.01 ug/L	6.156	515.01 ppb	6.156	1.20%	
QC value within limits for Se 196.026 Recovery = 103.00%							
Si 251.611†	79714.5	2478.0 ug/L	18.76	2478.0 ppb	18.76	0.76%	
QC value within limits for Si 251.611 Recovery = 99.12%							
Sn 189.927†	2745.9	493.22 ug/L	2.880	493.22 ppb	2.880	0.58%	
QC value within limits for Sn 189.927 Recovery = 98.64%							
Sr 421.552†	65860.9	508.49 ug/L	4.783	508.49 ppb	4.783	0.94%	
QC value within limits for Sr 421.552 Recovery = 101.70%							
Ti 334.940†	312075.0	507.09 ug/L	3.606	507.09 ppb	3.606	0.71%	
QC value within limits for Ti 334.940 Recovery = 101.42%							
Tl 190.801†	1575.3	500.71 ug/L	4.724	500.71 ppb	4.724	0.94%	
QC value within limits for Tl 190.801 Recovery = 100.14%							
U 409.014†	16807.5	475.77 ug/L	6.059	475.77 ppb	6.059	1.27%	
QC value within limits for U 409.014 Recovery = 95.15%							
V 292.402†	67949.3	498.71 ug/L	3.528	498.71 ppb	3.528	0.71%	
QC value within limits for V 292.402 Recovery = 99.74%							
Zn 213.857†	50747.5	490.73 ug/L	3.299	490.73 ppb	3.299	0.67%	
QC value within limits for Zn 213.857 Recovery = 98.15%							
SiO2†	79225.4	5268.7 ug/L	80.73	5268.7 ppb	80.73	1.53%	
QC value within limits for SiO2 Recovery = 98.53%							
All analyte(s) passed QC.							

Sequence No.: 3

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/16/2010 13:33:18

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	3927.6	3927.6	92.4 %		13:35:10
1	Y RADIAL	4071.0	4071.0	92.48 %		13:35:10
1	Al 396.153Radial†	-161.8	-16.1	-16.108 ug/L	-16.108 ppb	13:35:10
1	Ca 317.933Radial†	22.4	6.0	11.104 ug/L	11.104 ppb	13:35:30
1	Fe 238.204 Radial†	10.3	1.1	11.442 ug/L	11.442 ppb	13:35:30
1	K 766.490 Radial†	3230.5	324.8	65.577 ug/L	65.577 ppb	13:35:10
1	Mg 279.077 IEC†	2.7	0.2	9.5656 ug/L	9.5656 ppb	13:35:30
1	Na 589.592 Radial†	40.8	-162.9	-54.329 ug/L	-54.329 ppb	13:35:10
1	Sr 421.552†	92.6	10.4	0.0800 ug/L	0.0800 ppb	13:35:10
1	Sc 361.383	840669.4	840669.4	98.901 %		13:36:27
1	Y 371.029	694936.4	694936.4	98.891 %		13:36:27
1	Ag 328.068†	239.0	14.0	0.0695 ug/L	0.0695 ppb	13:36:27
1	As 188.979†	-27.6	0.4	0.1877 ug/L	0.1877 ppb	13:36:47
1	B 249.677†	116.2	599.4	14.099 ug/L	14.099 ppb	13:36:27
1	Ba 233.527†	8.3	-10.5	-0.0851 ug/L	-0.0851 ppb	13:36:47
1	Be 313.107†	-4317.2	-26.1	-0.0093 ug/L	-0.0093 ppb	13:36:27
1	Cd 226.502†	-201.4	-8.1	-0.0957 ug/L	-0.0957 ppb	13:36:47
1	Co 228.616†	-79.4	-1.4	-0.0289 ug/L	-0.0289 ppb	13:36:47
1	Cr 267.716†	155.6	7.6	0.0883 ug/L	0.0883 ppb	13:36:47
1	Cu 324.752†	8026.2	21.3	0.0651 ug/L	0.0651 ppb	13:36:27
1	Mn 257.610†	535.8	-28.0	-0.0316 ug/L	-0.0316 ppb	13:36:47
1	Mo 202.031†	17.1	6.9	0.5110 ug/L	0.5110 ppb	13:36:47
1	Ni 231.604†	117.0	4.8	0.1238 ug/L	0.1238 ppb	13:36:47
1	P 214.914†	246.0	6.8	3.7688 ug/L	3.7688 ppb	13:36:47
1	Pb 220.353†	-63.5	9.4	1.1581 ug/L	1.1581 ppb	13:36:47
1	S 181.975 Axial†	44.8	2.4	3.1757 ug/L	3.1757 ppb	13:36:47
1	Sb 206.836†	53.2	18.1	6.1746 ug/L	6.1746 ppb	13:36:47
1	Se 196.026†	-22.9	0.2	0.1571 ug/L	0.1571 ppb	13:36:47
1	Si 251.611†	565.3	-40.7	-1.2758 ug/L	-1.2758 ppb	13:36:47
1	Sn 189.927†	23.7	11.4	2.0410 ug/L	2.0410 ppb	13:36:47
1	Ti 334.940†	-1412.8	64.3	0.1048 ug/L	0.1048 ppb	13:36:27
1	Tl 190.801†	-29.8	9.0	2.8501 ug/L	2.8501 ppb	13:36:47
1	U 409.014†	-3440.6	36.3	1.0302 ug/L	1.0302 ppb	13:36:27
1	V 292.402†	-1677.6	-18.9	-0.1296 ug/L	-0.1296 ppb	13:36:27
1	Zn 213.857†	711.1	31.2	0.3020 ug/L	0.3020 ppb	13:36:47
1	SiO2†	616.3	3.6	0.2280 ug/L	0.2280 ppb	13:37:43
2	Sc Radial	4251.7	4251.7	100 %		13:35:35
2	Y RADIAL	4391.9	4391.9	99.77 %		13:35:35
2	Al 396.153Radial†	-154.1	5.0	4.9825 ug/L	4.9825 ppb	13:35:35
2	Ca 317.933Radial†	17.5	-0.8	-1.5118 ug/L	-1.5118 ppb	13:35:55
2	Fe 238.204 Radial†	10.3	0.2	2.1422 ug/L	2.1422 ppb	13:35:55
2	K 766.490 Radial†	3224.7	52.5	10.626 ug/L	10.626 ppb	13:35:35
2	Mg 279.077 IEC†	3.6	0.9	33.067 ug/L	33.067 ppb	13:35:55
2	Na 589.592 Radial†	-30.7	-237.8	-79.307 ug/L	-79.307 ppb	13:35:35
2	Sr 421.552†	14.5	-75.3	-0.5812 ug/L	-0.5812 ppb	13:35:35
2	Sc 361.383	840859.8	840859.8	98.924 %		13:36:53
2	Y 371.029	694632.2	694632.2	98.848 %		13:36:53
2	Ag 328.068†	155.0	-70.9	-0.3394 ug/L	-0.3394 ppb	13:36:53
2	As 188.979†	-36.6	-8.7	-3.6616 ug/L	-3.6616 ppb	13:37:13
2	B 249.677†	89.2	572.1	13.458 ug/L	13.458 ppb	13:36:53
2	Ba 233.527†	2.5	-16.3	-0.1310 ug/L	-0.1310 ppb	13:37:13
2	Be 313.107†	-4402.7	-111.5	-0.0409 ug/L	-0.0409 ppb	13:36:53
2	Cd 226.502†	-197.5	-4.2	-0.0488 ug/L	-0.0488 ppb	13:37:13
2	Co 228.616†	-74.7	3.3	0.0699 ug/L	0.0699 ppb	13:37:13
2	Cr 267.716†	169.0	21.2	0.2462 ug/L	0.2462 ppb	13:37:13
2	Cu 324.752†	8061.2	54.8	0.1665 ug/L	0.1665 ppb	13:36:53
2	Mn 257.610†	536.3	-27.6	-0.0330 ug/L	-0.0330 ppb	13:37:13
2	Mo 202.031†	13.6	3.3	0.2473 ug/L	0.2473 ppb	13:37:13
2	Ni 231.604†	103.6	-8.7	-0.2240 ug/L	-0.2240 ppb	13:37:13

2	P 214.914†	235.1	-4.3	-2.3864 ug/L	-2.3864 ppb	13:37:13
2	Pb 220.353†	-69.2	3.6	0.4419 ug/L	0.4419 ppb	13:37:13
2	S 181.975 Axial†	48.4	6.0	7.8773 ug/L	7.8773 ppb	13:37:13
2	Sb 206.836†	41.8	6.6	2.2769 ug/L	2.2769 ppb	13:37:13
2	Se 196.026†	-23.1	-0.0	-0.0205 ug/L	-0.0205 ppb	13:37:13
2	Si 251.611†	578.7	-27.3	-0.8552 ug/L	-0.8552 ppb	13:37:13
2	Sn 189.927†	27.2	14.9	2.6688 ug/L	2.6688 ppb	13:37:13
2	Ti 334.940†	-1472.1	4.8	0.0036 ug/L	0.0036 ppb	13:36:53
2	Tl 190.801†	-41.0	-2.3	-0.7335 ug/L	-0.7335 ppb	13:37:13
2	U 409.014†	-3388.1	90.2	2.5609 ug/L	2.5609 ppb	13:36:53
2	V 292.402†	-1572.0	88.2	0.6474 ug/L	0.6474 ppb	13:36:53
2	Zn 213.857†	697.8	17.6	0.1731 ug/L	0.1731 ppb	13:37:13
2	SiO2†	621.9	9.2	0.6045 ug/L	0.6045 ppb	13:37:48
3	Sc Radial	4219.0	4219.0	99.3 %		13:36:00
3	Y RADIAL	4390.6	4390.6	99.74 %		13:36:00
3	Al 396.153Radial†	-158.1	-0.3	-0.2996 ug/L	-0.2996 ppb	13:36:00
3	Ca 317.933Radial†	13.5	-4.7	-8.8094 ug/L	-8.8094 ppb	13:36:20
3	Fe 238.204 Radial†	10.0	-0.0	-0.0167 ug/L	-0.0167 ppb	13:36:20
3	K 766.490 Radial†	3161.9	14.2	2.9089 ug/L	2.9089 ppb	13:36:00
3	Mg 279.077 IEC†	0.9	-1.8	-68.962 ug/L	-68.962 ppb	13:36:20
3	Na 589.592 Radial†	-63.7	-271.2	-90.467 ug/L	-90.467 ppb	13:36:00
3	Sr 421.552†	57.1	-32.2	-0.2489 ug/L	-0.2489 ppb	13:36:00
3	Sc 361.383	843627.2	843627.2	99.249 %		13:37:18
3	Y 371.029	696156.6	696156.6	99.065 %		13:37:18
3	Ag 328.068†	118.0	-108.7	-0.5217 ug/L	-0.5217 ppb	13:37:18
3	As 188.979†	-31.0	-2.9	-1.2246 ug/L	-1.2246 ppb	13:37:38
3	B 249.677†	124.0	606.8	14.276 ug/L	14.276 ppb	13:37:18
3	Ba 233.527†	18.1	-0.6	-0.0046 ug/L	-0.0046 ppb	13:37:38
3	Be 313.107†	-4387.0	-81.0	-0.0298 ug/L	-0.0298 ppb	13:37:18
3	Cd 226.502†	-192.2	1.8	0.0212 ug/L	0.0212 ppb	13:37:38
3	Co 228.616†	-75.5	2.8	0.0603 ug/L	0.0603 ppb	13:37:38
3	Cr 267.716†	168.6	20.1	0.2345 ug/L	0.2345 ppb	13:37:38
3	Cu 324.752†	8073.9	40.9	0.1252 ug/L	0.1252 ppb	13:37:18
3	Mn 257.610†	537.4	-28.2	-0.0297 ug/L	-0.0297 ppb	13:37:38
3	Mo 202.031†	21.5	11.1	0.8284 ug/L	0.8284 ppb	13:37:38
3	Ni 231.604†	96.4	-16.4	-0.4200 ug/L	-0.4200 ppb	13:37:38
3	P 214.914†	242.1	1.9	1.0623 ug/L	1.0623 ppb	13:37:38
3	Pb 220.353†	-81.5	-8.6	-1.0587 ug/L	-1.0587 ppb	13:37:38
3	S 181.975 Axial†	49.0	6.5	8.4506 ug/L	8.4506 ppb	13:37:38
3	Sb 206.836†	59.0	23.8	8.1091 ug/L	8.1091 ppb	13:37:38
3	Se 196.026†	-11.7	11.6	6.7588 ug/L	6.7588 ppb	13:37:38
3	Si 251.611†	574.8	-33.2	-1.0437 ug/L	-1.0437 ppb	13:37:38
3	Sn 189.927†	27.7	15.3	2.7408 ug/L	2.7408 ppb	13:37:38
3	Ti 334.940†	-1491.0	-9.3	-0.0108 ug/L	-0.0108 ppb	13:37:18
3	Tl 190.801†	-44.1	-5.3	-1.6787 ug/L	-1.6787 ppb	13:37:38
3	U 409.014†	-3493.0	-4.2	-0.1210 ug/L	-0.1210 ppb	13:37:18
3	V 292.402†	-1657.4	7.3	0.0633 ug/L	0.0633 ppb	13:37:18
3	Zn 213.857†	694.8	12.3	0.1228 ug/L	0.1228 ppb	13:37:38
3	SiO2†	612.3	-2.6	-0.1956 ug/L	-0.1956 ppb	13:37:53

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	841718.8	99.025 %	0.1948			0.20%
Sc Radial	4132.8	97.2 %	4.20			4.32%
Y 371.029	695241.7	98.935 %	0.1148			0.12%
Y RADIAL	4284.5	97.33 %	4.200			4.32%
Ag 328.068†	-55.2	-0.2638 ug/L	0.30276	-0.2638 ppb	0.30276	114.75%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-3.8	-3.8082 ug/L	10.97404	-3.8082 ppb	10.97404	288.17%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-3.7	-1.5661 ug/L	1.94724	-1.5661 ppb	1.94724	124.33%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	592.8	13.944 ug/L	0.4301	13.944 ppb	0.4301	3.08%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	-9.1	-0.0736 ug/L	0.06395	-0.0736 ppb	0.06395	86.94%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-72.9	-0.0267 ug/L	0.01603	-0.0267 ppb	0.01603	60.04%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	0.1	0.2609 ug/L	10.07430	0.2609 ppb	10.07430	>999.9%

QC value within limits for Ca 317.933 Radial	Recovery = Not calculated		
Cd 226.502†	-3.5 -0.0411 ug/L	0.05885 -0.0411 ppb	0.05885 143.12%
QC value within limits for Cd 226.502	Recovery = Not calculated		
Co 228.616†	1.6 0.0338 ug/L	0.05447 0.0338 ppb	0.05447 161.35%
QC value within limits for Co 228.616	Recovery = Not calculated		
Cr 267.716†	16.3 0.1896 ug/L	0.08797 0.1896 ppb	0.08797 46.39%
QC value within limits for Cr 267.716	Recovery = Not calculated		
Cu 324.752†	39.0 0.1189 ug/L	0.05097 0.1189 ppb	0.05097 42.86%
QC value within limits for Cu 324.752	Recovery = Not calculated		
Fe 238.204 Radial†	0.4 4.5223 ug/L	6.08866 4.5223 ppb	6.08866 134.64%
QC value within limits for Fe 238.204 Radial	Recovery = Not calculated		
K 766.490 Radial†	130.5 26.371 ug/L	34.1725 26.371 ppb	34.1725 129.58%
QC value within limits for K 766.490 Radial	Recovery = Not calculated		
Mg 279.077 IEC†	-0.2 -8.7766 ug/L	53.43030 -8.7766 ppb	53.43030 608.78%
QC value within limits for Mg 279.077 IEC	Recovery = Not calculated		
Mn 257.610†	-27.9 -0.0314 ug/L	0.00162 -0.0314 ppb	0.00162 5.14%
QC value within limits for Mn 257.610	Recovery = Not calculated		
Mo 202.031†	7.1 0.5289 ug/L	0.29095 0.5289 ppb	0.29095 55.01%
QC value within limits for Mo 202.031	Recovery = Not calculated		
Na 589.592 Radial†	-224.0 -74.701 ug/L	18.5043 -74.701 ppb	18.5043 24.77%
QC value within limits for Na 589.592 Radial	Recovery = Not calculated		
Ni 231.604†	-6.8 -0.1734 ug/L	0.27539 -0.1734 ppb	0.27539 158.83%
QC value within limits for Ni 231.604	Recovery = Not calculated		
P 214.914†	1.5 0.8149 ug/L	3.08504 0.8149 ppb	3.08504 378.58%
QC value within limits for P 214.914	Recovery = Not calculated		
Pb 220.353†	1.5 0.1804 ug/L	1.13129 0.1804 ppb	1.13129 627.03%
QC value within limits for Pb 220.353	Recovery = Not calculated		
S 181.975 Axial†	5.0 6.5012 ug/L	2.89423 6.5012 ppb	2.89423 44.52%
QC value within limits for S 181.975 Axial	Recovery = Not calculated		
Sb 206.836†	16.2 5.5202 ug/L	2.97064 5.5202 ppb	2.97064 53.81%
QC value within limits for Sb 206.836	Recovery = Not calculated		
Se 196.026†	3.9 2.2985 ug/L	3.86374 2.2985 ppb	3.86374 168.10%
QC value within limits for Se 196.026	Recovery = Not calculated		
Si 251.611†	-33.7 -1.0582 ug/L	0.21070 -1.0582 ppb	0.21070 19.91%
QC value within limits for Si 251.611	Recovery = Not calculated		
Sn 189.927†	13.8 2.4835 ug/L	0.38495 2.4835 ppb	0.38495 15.50%
QC value within limits for Sn 189.927	Recovery = Not calculated		
Sr 421.552†	-32.4 -0.2500 ug/L	0.33062 -0.2500 ppb	0.33062 132.23%
QC value within limits for Sr 421.552	Recovery = Not calculated		
Ti 334.940†	19.9 0.0326 ug/L	0.06299 0.0326 ppb	0.06299 193.49%
QC value within limits for Ti 334.940	Recovery = Not calculated		
Tl 190.801†	0.5 0.1460 ug/L	2.38906 0.1460 ppb	2.38906 >999.9%
QC value within limits for Tl 190.801	Recovery = Not calculated		
U 409.014†	40.8 1.1567 ug/L	1.34540 1.1567 ppb	1.34540 116.31%
QC value within limits for U 409.014	Recovery = Not calculated		
V 292.402†	25.5 0.1937 ug/L	0.40461 0.1937 ppb	0.40461 208.88%
QC value within limits for V 292.402	Recovery = Not calculated		
Zn 213.857†	20.4 0.1993 ug/L	0.09244 0.1993 ppb	0.09244 46.38%
QC value within limits for Zn 213.857	Recovery = Not calculated		
SiO2†	3.4 0.2123 ug/L	0.40024 0.2123 ppb	0.40024 188.53%
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: 2/16/2010 15:01:36

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4080.2	4080.2	96.0 %		15:03:48
1	Y RADIAL	4285.5	4285.5	97.35 %		15:03:28
1	Al 396.153Radial†	4783.5	5142.6	5120.5 ug/L	5120.5 ppb	15:03:28
1	Ca 317.933Radial†	2644.9	2737.2	5106.0 ug/L	5106.0 ppb	15:03:48
1	Fe 238.204 Radial†	496.7	507.4	5407.7 ug/L	5407.7 ppb	15:03:48
1	K 766.490 Radial†	28390.1	26406.3	5323.2 ug/L	5323.2 ppb	15:03:28
1	Mg 279.077 IEC†	132.7	135.6	5235.1 ug/L	5235.1 ppb	15:03:48
1	Na 589.592 Radial†	35528.9	36808.2	12278 ug/L	12278 ppb	15:03:28
1	Sr 421.552†	66773.4	69477.1	536.42 ug/L	536.42 ppb	15:03:28
1	Sc 361.383	819156.6	819156.6	96.370 %		15:04:47
1	Y 371.029	661929.3	661929.3	94.194 %		15:04:47
1	Ag 328.068†	100495.8	104053.1	502.95 ug/L	502.95 ppb	15:04:47
1	As 188.979†	1103.3	1173.1	498.13 ug/L	498.13 ppb	15:05:07
1	B 249.677†	21328.1	22613.3	529.71 ug/L	529.71 ppb	15:04:47
1	Ba 233.527†	59092.6	61299.4	498.97 ug/L	498.97 ppb	15:04:47
1	Be 313.107†	1308525.1	1362147.6	501.49 ug/L	501.49 ppb	15:04:47
1	Cd 226.502†	39476.7	41159.1	481.17 ug/L	481.17 ppb	15:05:07
1	Co 228.616†	22888.1	23829.0	496.95 ug/L	496.95 ppb	15:05:07
1	Cr 267.716†	40435.4	41808.7	487.01 ug/L	487.01 ppb	15:04:47
1	Cu 324.752†	168397.9	166646.2	510.24 ug/L	510.24 ppb	15:04:47
1	Mn 257.610†	421122.8	436413.9	503.67 ug/L	503.67 ppb	15:04:47
1	Mo 202.031†	6473.2	6706.6	498.82 ug/L	498.82 ppb	15:05:07
1	Ni 231.604†	18503.6	19087.0	488.60 ug/L	488.60 ppb	15:05:07
1	P 214.914†	4488.7	4415.7	2350.3 ug/L	2350.3 ppb	15:05:07
1	Pb 220.353†	3783.4	3999.4	497.06 ug/L	497.06 ppb	15:05:07
1	S 181.975 Axial†	860.5	850.0	1109.9 ug/L	1109.9 ppb	15:05:07
1	Sb 206.836†	1449.8	1468.7	514.73 ug/L	514.73 ppb	15:05:07
1	Se 196.026†	789.1	842.1	510.34 ug/L	510.34 ppb	15:05:07
1	Si 251.611†	77647.3	79959.4	2485.6 ug/L	2485.6 ppb	15:04:47
1	Sn 189.927†	2625.5	2711.8	487.12 ug/L	487.12 ppb	15:05:07
1	Ti 334.940†	303184.0	316095.8	513.63 ug/L	513.63 ppb	15:04:47
1	Tl 190.801†	1506.1	1601.9	509.16 ug/L	509.16 ppb	15:05:07
1	U 409.014†	13079.8	17087.6	483.70 ug/L	483.70 ppb	15:04:47
1	V 292.402†	63536.0	67606.3	496.22 ug/L	496.22 ppb	15:04:47
1	Zn 213.857†	49869.6	51060.1	493.73 ug/L	493.73 ppb	15:04:47
1	SiO2†	77669.3	79975.0	5318.6 ug/L	5318.6 ppb	15:06:08
2	Sc Radial	4084.2	4084.2	96.1 %		15:04:14
2	Y RADIAL	4305.4	4305.4	97.80 %		15:03:54
2	Al 396.153Radial†	4809.5	5164.9	5142.6 ug/L	5142.6 ppb	15:03:54
2	Ca 317.933Radial†	2636.3	2725.6	5084.2 ug/L	5084.2 ppb	15:04:14
2	Fe 238.204 Radial†	491.9	502.0	5349.6 ug/L	5349.6 ppb	15:04:14
2	K 766.490 Radial†	28459.4	26449.4	5332.0 ug/L	5332.0 ppb	15:03:54
2	Mg 279.077 IEC†	130.3	133.0	5134.7 ug/L	5134.7 ppb	15:04:14
2	Na 589.592 Radial†	35522.4	36765.2	12263 ug/L	12263 ppb	15:03:54
2	Sr 421.552†	66527.8	69153.4	533.92 ug/L	533.92 ppb	15:03:54
2	Sc 361.383	819198.5	819198.5	96.375 %		15:05:15
2	Y 371.029	661013.3	661013.3	94.064 %		15:05:15
2	Ag 328.068†	100523.5	104076.6	503.04 ug/L	503.04 ppb	15:05:15
2	As 188.979†	1106.4	1176.3	499.47 ug/L	499.47 ppb	15:05:35
2	B 249.677†	21213.1	22492.8	526.88 ug/L	526.88 ppb	15:05:15
2	Ba 233.527†	59207.3	61415.3	499.92 ug/L	499.92 ppb	15:05:15
2	Be 313.107†	1309711.7	1363309.5	501.92 ug/L	501.92 ppb	15:05:15
2	Cd 226.502†	39584.1	41268.4	482.46 ug/L	482.46 ppb	15:05:35
2	Co 228.616†	22938.8	23880.5	498.03 ug/L	498.03 ppb	15:05:35
2	Cr 267.716†	40488.5	41861.6	487.62 ug/L	487.62 ppb	15:05:15
2	Cu 324.752†	168288.1	166523.4	509.86 ug/L	509.86 ppb	15:05:15
2	Mn 257.610†	422577.7	437901.2	505.39 ug/L	505.39 ppb	15:05:15
2	Mo 202.031†	6501.1	6735.2	500.94 ug/L	500.94 ppb	15:05:35
2	Ni 231.604†	18578.0	19163.2	490.55 ug/L	490.55 ppb	15:05:35

2	P 214.914†	4503.4	4430.8	2358.8 ug/L	2358.8 ppb	15:05:35
2	Pb 220.353†	3796.4	4012.8	498.73 ug/L	498.73 ppb	15:05:35
2	S 181.975 Axial†	860.5	849.9	1109.8 ug/L	1109.8 ppb	15:05:35
2	Sb 206.836†	1451.8	1470.7	515.47 ug/L	515.47 ppb	15:05:35
2	Se 196.026†	788.4	841.4	509.73 ug/L	509.73 ppb	15:05:35
2	Si 251.611†	77846.7	80162.2	2491.9 ug/L	2491.9 ppb	15:05:15
2	Sn 189.927†	2629.9	2716.2	487.91 ug/L	487.91 ppb	15:05:35
2	Ti 334.940†	303723.5	316639.6	514.52 ug/L	514.52 ppb	15:05:15
2	Tl 190.801†	1501.8	1597.4	507.75 ug/L	507.75 ppb	15:05:35
2	U 409.014†	13124.5	17133.2	485.01 ug/L	485.01 ppb	15:05:15
2	V 292.402†	63678.1	67750.3	497.30 ug/L	497.30 ppb	15:05:15
2	Zn 213.857†	50048.3	51242.9	495.51 ug/L	495.51 ppb	15:05:15
2	SiO2†	78162.3	80482.5	5352.4 ug/L	5352.4 ppb	15:06:13
3	Sc Radial	3909.5	3909.5	92.0 %		15:04:39
3	Y RADIAL	4212.4	4212.4	95.69 %		15:04:19
3	Al 396.153Radial†	4655.8	5221.4	5199.5 ug/L	5199.5 ppb	15:04:19
3	Ca 317.933Radial†	2635.0	2846.7	5310.2 ug/L	5310.2 ppb	15:04:39
3	Fe 238.204 Radial†	490.9	523.7	5580.3 ug/L	5580.3 ppb	15:04:39
3	K 766.490 Radial†	27867.2	27128.8	5469.0 ug/L	5469.0 ppb	15:04:19
3	Mg 279.077 IEC†	130.4	139.1	5370.7 ug/L	5370.7 ppb	15:04:39
3	Na 589.592 Radial†	34028.2	36792.3	12272 ug/L	12272 ppb	15:04:19
3	Sr 421.552†	64668.6	70225.4	542.19 ug/L	542.19 ppb	15:04:19
3	Sc 361.383	822426.5	822426.5	96.755 %		15:05:42
3	Y 371.029	663379.1	663379.1	94.400 %		15:05:42
3	Ag 328.068†	100677.5	103826.3	501.91 ug/L	501.91 ppb	15:05:42
3	As 188.979†	1081.6	1146.2	486.84 ug/L	486.84 ppb	15:06:02
3	B 249.677†	21369.9	22568.5	528.65 ug/L	528.65 ppb	15:05:42
3	Ba 233.527†	59199.0	61165.5	497.89 ug/L	497.89 ppb	15:05:42
3	Be 313.107†	1309185.8	1357432.0	499.76 ug/L	499.76 ppb	15:05:42
3	Cd 226.502†	39104.8	40611.8	474.75 ug/L	474.75 ppb	15:06:02
3	Co 228.616†	22684.3	23523.9	490.58 ug/L	490.58 ppb	15:06:02
3	Cr 267.716†	40464.0	41671.4	485.41 ug/L	485.41 ppb	15:05:42
3	Cu 324.752†	168755.9	166321.5	509.25 ug/L	509.25 ppb	15:05:42
3	Mn 257.610†	422577.2	436179.7	503.41 ug/L	503.41 ppb	15:05:42
3	Mo 202.031†	6435.8	6641.2	493.98 ug/L	493.98 ppb	15:06:02
3	Ni 231.604†	18352.1	18854.0	482.63 ug/L	482.63 ppb	15:06:02
3	P 214.914†	4440.6	4347.5	2312.5 ug/L	2312.5 ppb	15:06:02
3	Pb 220.353†	3752.5	3951.9	491.17 ug/L	491.17 ppb	15:06:02
3	S 181.975 Axial†	847.0	832.5	1087.1 ug/L	1087.1 ppb	15:06:02
3	Sb 206.836†	1439.7	1452.3	508.99 ug/L	508.99 ppb	15:06:02
3	Se 196.026†	789.3	839.1	509.12 ug/L	509.12 ppb	15:06:02
3	Si 251.611†	77939.9	79941.6	2485.1 ug/L	2485.1 ppb	15:05:42
3	Sn 189.927†	2611.7	2686.7	482.65 ug/L	482.65 ppb	15:06:02
3	Ti 334.940†	304304.4	316003.0	513.49 ug/L	513.49 ppb	15:05:42
3	Tl 190.801†	1476.3	1564.9	497.50 ug/L	497.50 ppb	15:06:02
3	U 409.014†	13078.8	17032.6	482.13 ug/L	482.13 ppb	15:05:42
3	V 292.402†	63704.2	67518.0	495.49 ug/L	495.49 ppb	15:05:42
3	Zn 213.857†	50142.4	51136.3	494.48 ug/L	494.48 ppb	15:05:42
3	SiO2†	77371.0	79346.3	5276.8 ug/L	5276.8 ppb	15:06:18

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	820260.5	96.500 %	0.2207			0.23%
Sc Radial	4024.6	94.7 %	2.35			2.48%
Y 371.029	662107.2	94.220 %	0.1698			0.18%
Y RADIAL	4267.7	96.95 %	1.113			1.15%
Ag 328.068†	103985.3	502.63 ug/L	0.627	502.63 ppb	0.627	0.12%
QC value within limits for Ag 328.068 Recovery = 100.53%						
Al 396.153Radial†	5176.3	5154.2 ug/L	40.75	5154.2 ppb	40.75	0.79%
QC value within limits for Al 396.153Radial Recovery = 103.08%						
As 188.979†	1165.2	494.81 ug/L	6.939	494.81 ppb	6.939	1.40%
QC value within limits for As 188.979 Recovery = 98.96%						
B 249.677†	22558.2	528.41 ug/L	1.428	528.41 ppb	1.428	0.27%
QC value within limits for B 249.677 Recovery = 105.68%						
Ba 233.527†	61293.4	498.93 ug/L	1.013	498.93 ppb	1.013	0.20%
QC value within limits for Ba 233.527 Recovery = 99.79%						
Be 313.107†	1360963.0	501.06 ug/L	1.144	501.06 ppb	1.144	0.23%
QC value within limits for Be 313.107 Recovery = 100.21%						
Ca 317.933Radial†	2769.8	5166.8 ug/L	124.65	5166.8 ppb	124.65	2.41%

QC value within limits for Ca 317.933 Radial Recovery = 103.34%

Cd	226.502†	41013.1	479.46 ug/L	4.130	479.46 ppb	4.130	0.86%
QC value within limits for Cd 226.502 Recovery = 95.89%							
Co	228.616†	23744.5	495.19 ug/L	4.028	495.19 ppb	4.028	0.81%
QC value within limits for Co 228.616 Recovery = 99.04%							
Cr	267.716†	41780.5	486.68 ug/L	1.140	486.68 ppb	1.140	0.23%
QC value within limits for Cr 267.716 Recovery = 97.34%							
Cu	324.752†	166497.0	509.78 ug/L	0.496	509.78 ppb	0.496	0.10%
QC value within limits for Cu 324.752 Recovery = 101.96%							
Fe	238.204 Radial†	511.0	5445.8 ug/L	120.01	5445.8 ppb	120.01	2.20%
QC value within limits for Fe 238.204 Radial Recovery = 108.92%							
K	766.490 Radial†	26661.5	5374.7 ug/L	81.77	5374.7 ppb	81.77	1.52%
QC value within limits for K 766.490 Radial Recovery = 107.49%							
Mg	279.077 IEC†	135.9	5246.9 ug/L	118.45	5246.9 ppb	118.45	2.26%
QC value within limits for Mg 279.077 IEC Recovery = 104.94%							
Mn	257.610†	436831.6	504.16 ug/L	1.072	504.16 ppb	1.072	0.21%
QC value within limits for Mn 257.610 Recovery = 100.83%							
Mo	202.031†	6694.3	497.91 ug/L	3.569	497.91 ppb	3.569	0.72%
QC value within limits for Mo 202.031 Recovery = 99.58%							
Na	589.592 Radial†	36788.6	12271 ug/L	7.2	12271 ppb	7.2	0.06%
QC value greater than the upper limit for Na 589.592 Radial Recovery = 122.71%							
Ni	231.604†	19034.8	487.26 ug/L	4.124	487.26 ppb	4.124	0.85%
QC value within limits for Ni 231.604 Recovery = 97.45%							
P	214.914†	4398.0	2340.5 ug/L	24.66	2340.5 ppb	24.66	1.05%
QC value within limits for P 214.914 Recovery = 93.62%							
Pb	220.353†	3988.0	495.65 ug/L	3.971	495.65 ppb	3.971	0.80%
QC value within limits for Pb 220.353 Recovery = 99.13%							
S	181.975 Axial†	844.1	1102.3 ug/L	13.16	1102.3 ppb	13.16	1.19%
QC value greater than the upper limit for S 181.975 Axial Recovery = 110.23%							
Sb	206.836†	1463.9	513.07 ug/L	3.546	513.07 ppb	3.546	0.69%
QC value within limits for Sb 206.836 Recovery = 102.61%							
Se	196.026†	840.9	509.73 ug/L	0.605	509.73 ppb	0.605	0.12%
QC value within limits for Se 196.026 Recovery = 101.95%							
Si	251.611†	80021.1	2487.5 ug/L	3.79	2487.5 ppb	3.79	0.15%
QC value within limits for Si 251.611 Recovery = 99.50%							
Sn	189.927†	2704.9	485.89 ug/L	2.833	485.89 ppb	2.833	0.58%
QC value within limits for Sn 189.927 Recovery = 97.18%							
Sr	421.552†	69618.7	537.51 ug/L	4.245	537.51 ppb	4.245	0.79%
QC value within limits for Sr 421.552 Recovery = 107.50%							
Ti	334.940†	316246.1	513.88 ug/L	0.555	513.88 ppb	0.555	0.11%
QC value within limits for Ti 334.940 Recovery = 102.78%							
Tl	190.801†	1588.1	504.80 ug/L	6.362	504.80 ppb	6.362	1.26%
QC value within limits for Tl 190.801 Recovery = 100.96%							
U	409.014†	17084.5	483.61 ug/L	1.443	483.61 ppb	1.443	0.30%
QC value within limits for U 409.014 Recovery = 96.72%							
V	292.402†	67624.9	496.34 ug/L	0.912	496.34 ppb	0.912	0.18%
QC value within limits for V 292.402 Recovery = 99.27%							
Zn	213.857†	51146.4	494.57 ug/L	0.894	494.57 ppb	0.894	0.18%
QC value within limits for Zn 213.857 Recovery = 98.91%							
SiO2†		79934.6	5315.9 ug/L	37.85	5315.9 ppb	37.85	0.71%
QC value within limits for SiO2 Recovery = 99.41%							

QC Failed. Continue with analysis.

Sequence No.: 12

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/16/2010 15:08:27

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	3994.6	3994.6	94.0 %		15:10:40
1	Y RADIAL	4277.5	4277.5	97.17 %		15:10:20
1	Al 396.153Radial†	-133.0	17.5	17.468 ug/L	17.468 ppb	15:10:20
1	Ca 317.933Radial†	17.8	0.7	1.2428 ug/L	1.2428 ppb	15:10:40
1	Fe 238.204 Radial†	7.8	-1.7	-18.094 ug/L	-18.094 ppb	15:10:40
1	K 766.490 Radial†	4316.4	1421.7	286.58 ug/L	286.58 ppb	15:10:20
1	Mg 279.077 IEC†	2.5	-0.1	-4.1074 ug/L	-4.1074 ppb	15:10:40
1	Na 589.592 Radial†	3182.1	3179.2	1060.5 ug/L	1060.5 ppb	15:10:20
1	Sr 421.552†	121.3	39.3	0.3035 ug/L	0.3035 ppb	15:10:20
1	Sc 361.383	812570.2	812570.2	95.596 %		15:11:37
1	Y 371.029	665154.7	665154.7	94.653 %		15:11:37
1	Ag 328.068†	107.8	-114.9	-0.5695 ug/L	-0.5695 ppb	15:11:37
1	As 188.979†	-34.4	-7.7	-3.2463 ug/L	-3.2463 ppb	15:11:57
1	B 249.677†	765.3	1282.5	30.174 ug/L	30.174 ppb	15:11:37
1	Ba 233.527†	11.4	-6.9	-0.0578 ug/L	-0.0578 ppb	15:11:57
1	Be 313.107†	-4311.6	-171.1	-0.0627 ug/L	-0.0627 ppb	15:11:37
1	Cd 226.502†	-198.7	-12.3	-0.1399 ug/L	-0.1399 ppb	15:11:57
1	Co 228.616†	-71.2	4.4	0.0922 ug/L	0.0922 ppb	15:11:57
1	Cr 267.716†	150.0	7.2	0.0776 ug/L	0.0776 ppb	15:11:57
1	Cu 324.752†	7871.3	139.9	0.4206 ug/L	0.4206 ppb	15:11:37
1	Mn 257.610†	536.6	-8.4	-0.0113 ug/L	-0.0113 ppb	15:11:57
1	Mo 202.031†	14.2	4.4	0.3273 ug/L	0.3273 ppb	15:11:57
1	Ni 231.604†	102.6	-6.2	-0.1583 ug/L	-0.1583 ppb	15:11:57
1	P 214.914†	242.6	11.8	6.4874 ug/L	6.4874 ppb	15:11:57
1	Pb 220.353†	-65.8	4.7	0.5903 ug/L	0.5903 ppb	15:11:57
1	S 181.975 Axial†	128.7	91.7	119.84 ug/L	119.84 ppb	15:11:57
1	Sb 206.836†	31.6	-2.6	-0.8658 ug/L	-0.8658 ppb	15:11:57
1	Se 196.026†	-15.1	7.5	4.3331 ug/L	4.3331 ppb	15:11:57
1	Si 251.611†	537.3	-50.3	-1.5702 ug/L	-1.5702 ppb	15:11:57
1	Sn 189.927†	16.3	4.4	0.7940 ug/L	0.7940 ppb	15:11:57
1	Ti 334.940†	-1381.2	48.0	0.0732 ug/L	0.0732 ppb	15:11:37
1	Tl 190.801†	-30.3	7.4	2.3483 ug/L	2.3483 ppb	15:11:57
1	U 409.014†	-2947.7	431.6	12.263 ug/L	12.263 ppb	15:11:37
1	V 292.402†	-1661.0	-60.2	-0.4055 ug/L	-0.4055 ppb	15:11:37
1	Zn 213.857†	675.1	18.5	0.1836 ug/L	0.1836 ppb	15:11:57
1	SiO2†	573.8	-19.3	-1.2964 ug/L	-1.2964 ppb	15:12:53
2	Sc Radial	4018.9	4018.9	94.5 %		15:11:05
2	Y RADIAL	4277.1	4277.1	97.16 %		15:10:45
2	Al 396.153Radial†	-138.5	12.5	12.410 ug/L	12.410 ppb	15:10:45
2	Ca 317.933Radial†	19.8	2.6	4.8968 ug/L	4.8968 ppb	15:11:05
2	Fe 238.204 Radial†	10.6	1.2	12.816 ug/L	12.816 ppb	15:11:05
2	K 766.490 Radial†	4354.7	1434.6	289.20 ug/L	289.20 ppb	15:10:45
2	Mg 279.077 IEC†	1.9	-0.7	-27.977 ug/L	-27.977 ppb	15:11:05
2	Na 589.592 Radial†	3056.1	3025.5	1009.2 ug/L	1009.2 ppb	15:10:45
2	Sr 421.552†	84.3	-0.7	-0.0052 ug/L	-0.0052 ppb	15:10:45
2	Sc 361.383	798526.3	798526.3	93.943 %		15:12:02
2	Y 371.029	653593.9	653593.9	93.008 %		15:12:02
2	Ag 328.068†	218.7	5.2	0.0283 ug/L	0.0283 ppb	15:12:02
2	As 188.979†	-33.0	-6.8	-2.8703 ug/L	-2.8703 ppb	15:12:22
2	B 249.677†	802.4	1336.1	31.431 ug/L	31.431 ppb	15:12:02
2	Ba 233.527†	13.6	-4.4	-0.0355 ug/L	-0.0355 ppb	15:12:22
2	Be 313.107†	-4331.6	-271.7	-0.0996 ug/L	-0.0996 ppb	15:12:02
2	Cd 226.502†	-201.9	-19.4	-0.2288 ug/L	-0.2288 ppb	15:12:22
2	Co 228.616†	-77.3	-3.4	-0.0675 ug/L	-0.0675 ppb	15:12:22
2	Cr 267.716†	148.5	8.4	0.0977 ug/L	0.0977 ppb	15:12:22
2	Cu 324.752†	7807.8	217.0	0.6648 ug/L	0.6648 ppb	15:12:02
2	Mn 257.610†	543.4	8.7	0.0125 ug/L	0.0125 ppb	15:12:22
2	Mo 202.031†	31.9	23.5	1.7453 ug/L	1.7453 ppb	15:12:22
2	Ni 231.604†	96.2	-11.2	-0.2858 ug/L	-0.2858 ppb	15:12:22

2	P 214.914†	239.8	13.3	7.2564 ug/L	7.2564 ppb	15:12:22
2	Pb 220.353†	-53.1	17.1	2.1215 ug/L	2.1215 ppb	15:12:22
2	S 181.975 Axial†	109.2	73.4	95.873 ug/L	95.873 ppb	15:12:22
2	Sb 206.836†	41.4	8.4	2.8955 ug/L	2.8955 ppb	15:12:22
2	Se 196.026†	-21.2	0.8	0.4863 ug/L	0.4863 ppb	15:12:22
2	Si 251.611†	552.6	-24.0	-0.7704 ug/L	-0.7704 ppb	15:12:22
2	Sn 189.927†	13.6	1.9	0.3344 ug/L	0.3344 ppb	15:12:22
2	Ti 334.940†	-1341.9	64.5	0.1075 ug/L	0.1075 ppb	15:12:22
2	Tl 190.801†	-27.1	10.3	3.2534 ug/L	3.2534 ppb	15:12:22
2	U 409.014†	-3279.8	23.9	0.6774 ug/L	0.6774 ppb	15:12:02
2	V 292.402†	-1582.1	-6.8	-0.0257 ug/L	-0.0257 ppb	15:12:02
2	Zn 213.857†	687.6	44.2	0.4303 ug/L	0.4303 ppb	15:12:22
2	SiO2†	592.2	10.9	0.6789 ug/L	0.6789 ppb	15:12:58
3	Sc Radial	4015.0	4015.0	94.5 %		15:11:30
3	Y RADIAL	4227.7	4227.7	96.03 %		15:11:10
3	Al 396.153Radial†	-142.5	8.2	8.1425 ug/L	8.1425 ppb	15:11:10
3	Ca 317.933Radial†	22.5	5.5	10.237 ug/L	10.237 ppb	15:11:30
3	Fe 238.204 Radial†	9.8	0.3	3.6350 ug/L	3.6350 ppb	15:11:30
3	K 766.490 Radial†	4241.5	1319.0	265.86 ug/L	265.86 ppb	15:11:10
3	Mg 279.077 IEC†	1.7	-0.9	-34.845 ug/L	-34.845 ppb	15:11:30
3	Na 589.592 Radial†	3167.5	3146.5	1049.6 ug/L	1049.6 ppb	15:11:10
3	Sr 421.552†	83.9	-1.0	-0.0075 ug/L	-0.0075 ppb	15:11:10
3	Sc 361.383	808530.9	808530.9	95.120 %		15:12:27
3	Y 371.029	661117.5	661117.5	94.079 %		15:12:27
3	Ag 328.068†	207.4	-9.7	-0.0484 ug/L	-0.0484 ppb	15:12:27
3	As 188.979†	-28.1	-1.3	-0.5262 ug/L	-0.5262 ppb	15:12:48
3	B 249.677†	751.7	1272.2	29.929 ug/L	29.929 ppb	15:12:27
3	Ba 233.527†	3.0	-15.7	-0.1275 ug/L	-0.1275 ppb	15:12:48
3	Be 313.107†	-4435.2	-323.6	-0.1187 ug/L	-0.1187 ppb	15:12:27
3	Cd 226.502†	-191.8	-6.1	-0.0713 ug/L	-0.0713 ppb	15:12:48
3	Co 228.616†	-66.8	8.6	0.1801 ug/L	0.1801 ppb	15:12:48
3	Cr 267.716†	149.6	7.6	0.0873 ug/L	0.0873 ppb	15:12:48
3	Cu 324.752†	7890.9	201.6	0.6154 ug/L	0.6154 ppb	15:12:27
3	Mn 257.610†	543.5	1.6	0.0036 ug/L	0.0036 ppb	15:12:48
3	Mo 202.031†	12.9	3.1	0.2339 ug/L	0.2339 ppb	15:12:48
3	Ni 231.604†	101.1	-7.2	-0.1846 ug/L	-0.1846 ppb	15:12:48
3	P 214.914†	236.4	6.5	3.5036 ug/L	3.5036 ppb	15:12:48
3	Pb 220.353†	-73.2	-3.4	-0.4179 ug/L	-0.4179 ppb	15:12:48
3	S 181.975 Axial†	103.5	65.9	86.167 ug/L	86.167 ppb	15:12:48
3	Sb 206.836†	46.2	12.9	4.3605 ug/L	4.3605 ppb	15:12:48
3	Se 196.026†	-25.0	-2.9	-1.7066 ug/L	-1.7066 ppb	15:12:48
3	Si 251.611†	562.9	-20.6	-0.6438 ug/L	-0.6438 ppb	15:12:48
3	Sn 189.927†	10.0	-2.1	-0.3839 ug/L	-0.3839 ppb	15:12:48
3	Ti 334.940†	-1375.5	46.8	0.0787 ug/L	0.0787 ppb	15:12:27
3	Tl 190.801†	-37.1	0.1	0.0444 ug/L	0.0444 ppb	15:12:48
3	U 409.014†	-3227.4	122.2	3.4704 ug/L	3.4704 ppb	15:12:27
3	V 292.402†	-1601.3	-6.2	-0.0363 ug/L	-0.0363 ppb	15:12:27
3	Zn 213.857†	673.2	20.0	0.1947 ug/L	0.1947 ppb	15:12:48
3	SiO2†	534.8	-57.3	-3.8266 ug/L	-3.8266 ppb	15:13:03

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	806542.5	94.886 %	0.8506			0.90%
Sc Radial	4009.5	94.3 %	0.31			0.33%
Y 371.029	659955.4	93.913 %	0.8349			0.89%
Y RADIAL	4260.8	96.79 %	0.651			0.67%
Ag 328.068†	-39.8	-0.1966 ug/L	0.32524	-0.1966 ppb	0.32524	165.47%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	12.7	12.674 ug/L	4.6686	12.674 ppb	4.6686	36.84%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-5.3	-2.2143 ug/L	1.47392	-2.2143 ppb	1.47392	66.57%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	1296.9	30.512 ug/L	0.8055	30.512 ppb	0.8055	2.64%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	-9.0	-0.0736 ug/L	0.04800	-0.0736 ppb	0.04800	65.21%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-255.5	-0.0936 ug/L	0.02847	-0.0936 ppb	0.02847	30.40%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	2.9	5.4590 ug/L	4.52355	5.4590 ppb	4.52355	82.86%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd	226.502†	-12.6	-0.1467 ug/L	0.07896	-0.1467 ppb	0.07896	53.83%
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co	228.616†	3.2	0.0683 ug/L	0.12550	0.0683 ppb	0.12550	183.86%
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr	267.716†	7.7	0.0875 ug/L	0.01005	0.0875 ppb	0.01005	11.49%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu	324.752†	186.2	0.5669 ug/L	0.12911	0.5669 ppb	0.12911	22.77%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe	238.204 Radial†	-0.1	-0.5477 ug/L	15.87374	-0.5477 ppb	15.87374	>999.9%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K	766.490 Radial†	1391.8	280.55 ug/L	12.787	280.55 ppb	12.787	4.56%
QC value greater than the upper limit for K 766.490 Radial Recovery = Not calculated							
Mg	279.077 IEC†	-0.6	-22.310 ug/L	16.1333	-22.310 ppb	16.1333	72.32%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn	257.610†	0.6	0.0016 ug/L	0.01200	0.0016 ppb	0.01200	746.36%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo	202.031†	10.3	0.7689 ug/L	0.84691	0.7689 ppb	0.84691	110.15%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na	589.592 Radial†	3117.1	1039.7 ug/L	27.01	1039.7 ppb	27.01	2.60%
QC value greater than the upper limit for Na 589.592 Radial Recovery = Not calculated							
Ni	231.604†	-8.2	-0.2095 ug/L	0.06733	-0.2095 ppb	0.06733	32.13%
QC value within limits for Ni 231.604 Recovery = Not calculated							
P	214.914†	10.6	5.7491 ug/L	1.98232	5.7491 ppb	1.98232	34.48%
QC value within limits for P 214.914 Recovery = Not calculated							
Pb	220.353†	6.1	0.7647 ug/L	1.27864	0.7647 ppb	1.27864	167.22%
QC value within limits for Pb 220.353 Recovery = Not calculated							
S	181.975 Axial†	77.0	100.63 ug/L	17.335	100.63 ppb	17.335	17.23%
QC value greater than the upper limit for S 181.975 Axial Recovery = Not calculated							
Sb	206.836†	6.2	2.1301 ug/L	2.69593	2.1301 ppb	2.69593	126.56%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se	196.026†	1.8	1.0376 ug/L	3.05737	1.0376 ppb	3.05737	294.66%
QC value within limits for Se 196.026 Recovery = Not calculated							
Si	251.611†	-31.6	-0.9948 ug/L	0.50230	-0.9948 ppb	0.50230	50.49%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn	189.927†	1.4	0.2482 ug/L	0.59366	0.2482 ppb	0.59366	239.20%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr	421.552†	12.6	0.0969 ug/L	0.17891	0.0969 ppb	0.17891	184.58%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti	334.940†	53.1	0.0864 ug/L	0.01842	0.0864 ppb	0.01842	21.31%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl	190.801†	6.0	1.8820 ug/L	1.65453	1.8820 ppb	1.65453	87.91%
QC value within limits for Tl 190.801 Recovery = Not calculated							
U	409.014†	192.6	5.4702 ug/L	6.04610	5.4702 ppb	6.04610	110.53%
QC value within limits for U 409.014 Recovery = Not calculated							
V	292.402†	-24.4	-0.1558 ug/L	0.21631	-0.1558 ppb	0.21631	138.83%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn	213.857†	27.6	0.2695 ug/L	0.13936	0.2695 ppb	0.13936	51.70%
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†		-21.9	-1.4814 ug/L	2.25843	-1.4814 ppb	2.25843	152.46%
QC value within limits for SiO2 Recovery = Not calculated							
QC Failed. Continue with analysis.							

Sequence No.: 2

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/16/2010 15:21:46

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	4021.8	4021.8	94.6 %		15:23:58
1	Y RADIAL	4359.5	4359.5	99.03 %		15:23:38
1	Al 396.153Radial†	4868.8	5305.2	5283.4 ug/L	5283.4 ppb	15:23:38
1	Ca 317.933Radial†	2611.7	2742.1	5115.1 ug/L	5115.1 ppb	15:23:58
1	Fe 238.204 Radial†	481.6	499.0	5318.0 ug/L	5318.0 ppb	15:23:58
1	K 766.490 Radial†	28347.3	26790.4	5401.0 ug/L	5401.0 ppb	15:23:38
1	Mg 279.077 IEC†	131.2	136.0	5251.3 ug/L	5251.3 ppb	15:23:58
1	Na 589.592 Radial†	33372.6	35066.4	11697 ug/L	11697 ppb	15:23:38
1	Sr 421.552†	66250.0	69933.7	539.94 ug/L	539.94 ppb	15:23:38
1	Sc 361.383	818520.9	818520.9	96.296 %		15:24:55
1	Y 371.029	661186.4	661186.4	94.088 %		15:24:55
1	Ag 328.068†	100535.2	104175.0	503.49 ug/L	503.49 ppb	15:25:00
1	As 188.979†	1093.7	1164.1	494.21 ug/L	494.21 ppb	15:25:20
1	B 249.677†	20988.7	22278.0	521.84 ug/L	521.84 ppb	15:25:00
1	Ba 233.527†	58799.6	61042.8	496.89 ug/L	496.89 ppb	15:25:00
1	Be 313.107†	1297864.2	1352131.1	497.78 ug/L	497.78 ppb	15:24:55
1	Cd 226.502†	39821.0	41548.4	485.74 ug/L	485.74 ppb	15:25:00
1	Co 228.616†	22874.8	23833.6	497.06 ug/L	497.06 ppb	15:25:00
1	Cr 267.716†	40450.7	41857.1	487.57 ug/L	487.57 ppb	15:25:00
1	Cu 324.752†	166993.2	165323.2	506.17 ug/L	506.17 ppb	15:25:00
1	Mn 257.610†	418653.2	434188.7	501.10 ug/L	501.10 ppb	15:24:55
1	Mo 202.031†	6384.1	6619.2	492.32 ug/L	492.32 ppb	15:25:20
1	Ni 231.604†	18463.1	19059.8	487.90 ug/L	487.90 ppb	15:25:00
1	P 214.914†	4428.3	4356.7	2318.4 ug/L	2318.4 ppb	15:25:20
1	Pb 220.353†	3720.9	3937.5	489.43 ug/L	489.43 ppb	15:25:20
1	S 181.975 Axial†	826.7	815.6	1065.0 ug/L	1065.0 ppb	15:25:20
1	Sb 206.836†	1454.2	1474.5	516.54 ug/L	516.54 ppb	15:25:20
1	Se 196.026†	791.0	844.8	511.60 ug/L	511.60 ppb	15:25:20
1	Si 251.611†	77390.5	79755.4	2479.3 ug/L	2479.3 ppb	15:25:00
1	Sn 189.927†	2605.0	2692.6	483.67 ug/L	483.67 ppb	15:25:20
1	Ti 334.940†	295793.9	308665.7	501.54 ug/L	501.54 ppb	15:25:00
1	Tl 190.801†	1498.5	1595.2	506.94 ug/L	506.94 ppb	15:25:20
1	U 409.014†	13593.6	17631.7	499.17 ug/L	499.17 ppb	15:25:00
1	V 292.402†	63658.0	67784.2	497.47 ug/L	497.47 ppb	15:25:00
1	Zn 213.857†	49816.8	51045.5	493.61 ug/L	493.61 ppb	15:25:00
1	SiO2†	79128.3	81552.8	5424.0 ug/L	5424.0 ppb	15:26:28
2	Sc Radial	4063.3	4063.3	95.6 %		15:24:23
2	Y RADIAL	4244.7	4244.7	96.42 %		15:24:03
2	Al 396.153Radial†	4756.1	5134.7	5113.0 ug/L	5113.0 ppb	15:24:03
2	Ca 317.933Radial†	2639.6	2743.2	5117.1 ug/L	5117.1 ppb	15:24:23
2	Fe 238.204 Radial†	484.7	497.0	5296.8 ug/L	5296.8 ppb	15:24:23
2	K 766.490 Radial†	27804.6	25917.0	5224.9 ug/L	5224.9 ppb	15:24:03
2	Mg 279.077 IEC†	129.8	133.1	5140.7 ug/L	5140.7 ppb	15:24:23
2	Na 589.592 Radial†	32404.4	33693.7	11239 ug/L	11239 ppb	15:24:03
2	Sr 421.552†	64552.6	67443.7	520.71 ug/L	520.71 ppb	15:24:03
2	Sc 361.383	831048.8	831048.8	97.769 %		15:25:26
2	Y 371.029	671777.8	671777.8	95.596 %		15:25:26
2	Ag 328.068†	102001.6	104101.0	503.13 ug/L	503.13 ppb	15:25:31
2	As 188.979†	1105.3	1158.8	491.98 ug/L	491.98 ppb	15:25:51
2	B 249.677†	21465.8	22437.4	525.59 ug/L	525.59 ppb	15:25:31
2	Ba 233.527†	59683.8	61026.6	496.76 ug/L	496.76 ppb	15:25:31
2	Be 313.107†	1322512.8	1357024.3	499.58 ug/L	499.58 ppb	15:25:26
2	Cd 226.502†	40464.3	41583.0	486.15 ug/L	486.15 ppb	15:25:31
2	Co 228.616†	23222.5	23831.1	497.01 ug/L	497.01 ppb	15:25:31
2	Cr 267.716†	40967.8	41752.7	486.35 ug/L	486.35 ppb	15:25:31
2	Cu 324.752†	169146.8	164911.7	504.92 ug/L	504.92 ppb	15:25:31
2	Mn 257.610†	425679.5	434821.4	501.83 ug/L	501.83 ppb	15:25:26
2	Mo 202.031†	6458.4	6595.3	490.54 ug/L	490.54 ppb	15:25:51
2	Ni 231.604†	18763.3	19077.9	488.36 ug/L	488.36 ppb	15:25:31

2	P 214.914†	4462.5	4322.4	2299.6 ug/L	2299.6 ppb	15:25:51
2	Pb 220.353†	3741.6	3900.5	484.80 ug/L	484.80 ppb	15:25:51
2	S 181.975 Axial†	808.1	783.7	1023.2 ug/L	1023.2 ppb	15:25:51
2	Sb 206.836†	1459.3	1456.9	510.52 ug/L	510.52 ppb	15:25:51
2	Se 196.026†	803.0	844.7	511.45 ug/L	511.45 ppb	15:25:51
2	Si 251.611†	78588.1	79768.7	2479.8 ug/L	2479.8 ppb	15:25:31
2	Sn 189.927†	2631.6	2679.0	481.24 ug/L	481.24 ppb	15:25:51
2	Ti 334.940†	299650.7	307979.9	500.44 ug/L	500.44 ppb	15:25:31
2	Tl 190.801†	1496.4	1569.6	498.85 ug/L	498.85 ppb	15:25:51
2	U 409.014†	13706.8	17534.7	496.42 ug/L	496.42 ppb	15:25:31
2	V 292.402†	64492.4	67641.0	496.41 ug/L	496.41 ppb	15:25:31
2	Zn 213.857†	50628.1	51095.4	494.10 ug/L	494.10 ppb	15:25:31
2	SiO2†	77270.0	78413.3	5214.7 ug/L	5214.7 ppb	15:26:33
3	Sc Radial	4033.3	4033.3	94.9 %		15:24:48
3	Y RADIAL	4307.5	4307.5	97.85 %		15:24:28
3	Al 396.153Radial†	4812.6	5231.4	5209.6 ug/L	5209.6 ppb	15:24:28
3	Ca 317.933Radial†	2603.5	2725.7	5084.4 ug/L	5084.4 ppb	15:24:48
3	Fe 238.204 Radial†	481.8	497.7	5304.5 ug/L	5304.5 ppb	15:24:48
3	K 766.490 Radial†	28051.9	26393.9	5321.1 ug/L	5321.1 ppb	15:24:28
3	Mg 279.077 IEC†	127.9	132.1	5100.8 ug/L	5100.8 ppb	15:24:48
3	Na 589.592 Radial†	32789.3	34351.5	11458 ug/L	11458 ppb	15:24:28
3	Sr 421.552†	65723.1	69179.5	534.12 ug/L	534.12 ppb	15:24:28
3	Sc 361.383	828655.1	828655.1	97.488 %		15:25:57
3	Y 371.029	668899.6	668899.6	95.186 %		15:25:57
3	Ag 328.068†	100844.8	103215.8	498.86 ug/L	498.86 ppb	15:26:02
3	As 188.979†	1109.2	1166.1	494.99 ug/L	494.99 ppb	15:26:22
3	B 249.677†	21258.5	22288.3	522.09 ug/L	522.09 ppb	15:26:02
3	Ba 233.527†	59022.4	60524.5	492.67 ug/L	492.67 ppb	15:26:02
3	Be 313.107†	1318848.3	1357172.9	499.62 ug/L	499.62 ppb	15:25:57
3	Cd 226.502†	40007.5	41234.0	482.06 ug/L	482.06 ppb	15:26:02
3	Co 228.616†	22954.6	23625.0	492.72 ug/L	492.72 ppb	15:26:02
3	Cr 267.716†	40488.3	41381.9	482.03 ug/L	482.03 ppb	15:26:02
3	Cu 324.752†	166762.7	162965.9	498.96 ug/L	498.96 ppb	15:26:02
3	Mn 257.610†	425584.2	435981.3	503.17 ug/L	503.17 ppb	15:25:57
3	Mo 202.031†	6437.8	6593.2	490.39 ug/L	490.39 ppb	15:26:22
3	Ni 231.604†	18620.6	18986.9	486.04 ug/L	486.04 ppb	15:26:02
3	P 214.914†	4452.8	4325.5	2302.5 ug/L	2302.5 ppb	15:26:22
3	Pb 220.353†	3761.6	3932.0	488.73 ug/L	488.73 ppb	15:26:22
3	S 181.975 Axial†	821.8	800.0	1044.6 ug/L	1044.6 ppb	15:26:22
3	Sb 206.836†	1462.7	1464.7	513.18 ug/L	513.18 ppb	15:26:22
3	Se 196.026†	785.2	828.7	502.18 ug/L	502.18 ppb	15:26:22
3	Si 251.611†	77604.2	78991.7	2455.5 ug/L	2455.5 ppb	15:26:02
3	Sn 189.927†	2627.5	2682.6	481.87 ug/L	481.87 ppb	15:26:22
3	Ti 334.940†	295523.0	304631.3	495.00 ug/L	495.00 ppb	15:26:02
3	Tl 190.801†	1496.6	1574.2	500.29 ug/L	500.29 ppb	15:26:22
3	U 409.014†	13607.1	17473.0	494.68 ug/L	494.68 ppb	15:26:02
3	V 292.402†	63704.0	67022.9	491.93 ug/L	491.93 ppb	15:26:02
3	Zn 213.857†	49920.6	50519.3	488.49 ug/L	488.49 ppb	15:26:02
3	SiO2†	77691.1	79073.6	5258.7 ug/L	5258.7 ppb	15:26:38

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	826075.0	97.184 %	0.7824			0.81%
Sc Radial	4039.5	95.0 %	0.750			0.53%
Y 371.029	667287.9	94.957 %	0.7793			0.82%
Y RADIAL	4303.9	97.77 %	1.306			1.34%
Ag 328.068†	103830.6	501.83 ug/L	2.573	501.83 ppb	2.573	0.51%
QC value within limits for Ag 328.068 Recovery = 100.37%						
Al 396.153Radial†	5223.7	5202.0 ug/L	85.47	5202.0 ppb	85.47	1.64%
QC value within limits for Al 396.153Radial Recovery = 104.04%						
As 188.979†	1163.0	493.73 ug/L	1.564	493.73 ppb	1.564	0.32%
QC value within limits for As 188.979 Recovery = 98.75%						
B 249.677†	22334.6	523.17 ug/L	2.097	523.17 ppb	2.097	0.40%
QC value within limits for B 249.677 Recovery = 104.63%						
Ba 233.527†	60864.7	495.44 ug/L	2.399	495.44 ppb	2.399	0.48%
QC value within limits for Ba 233.527 Recovery = 99.09%						
Be 313.107†	1355442.8	498.99 ug/L	1.049	498.99 ppb	1.049	0.21%
QC value within limits for Be 313.107 Recovery = 99.80%						
Ca 317.933Radial†	2737.0	5105.5 ug/L	18.31	5105.5 ppb	18.31	0.36%

QC value within limits for Ca 317.933 Radial Recovery = 102.11%

Cd	226.502†	41455.1	484.65 ug/L	2.250	484.65 ppb	2.250	0.46%
QC value within limits for Cd 226.502 Recovery = 96.93%							
Co	228.616†	23763.2	495.60 ug/L	2.491	495.60 ppb	2.491	0.50%
QC value within limits for Co 228.616 Recovery = 99.12%							
Cr	267.716†	41663.9	485.32 ug/L	2.909	485.32 ppb	2.909	0.60%
QC value within limits for Cr 267.716 Recovery = 97.06%							
Cu	324.752†	164400.2	503.35 ug/L	3.854	503.35 ppb	3.854	0.77%
QC value within limits for Cu 324.752 Recovery = 100.67%							
Fe	238.204 Radial†	497.9	5306.4 ug/L	10.72	5306.4 ppb	10.72	0.20%
QC value within limits for Fe 238.204 Radial Recovery = 106.13%							
K	766.490 Radial†	26367.1	5315.7 ug/L	88.18	5315.7 ppb	88.18	1.66%
QC value within limits for K 766.490 Radial Recovery = 106.31%							
Mg	279.077 IEC†	133.7	5164.2 ug/L	77.97	5164.2 ppb	77.97	1.51%
QC value within limits for Mg 279.077 IEC Recovery = 103.28%							
Mn	257.610†	434997.2	502.03 ug/L	1.051	502.03 ppb	1.051	0.21%
QC value within limits for Mn 257.610 Recovery = 100.41%							
Mo	202.031†	6602.6	491.08 ug/L	1.075	491.08 ppb	1.075	0.22%
QC value within limits for Mo 202.031 Recovery = 98.22%							
Na	589.592 Radial†	34370.5	11465 ug/L	229.0	11465 ppb	229.0	2.00%
QC value greater than the upper limit for Na 589.592 Radial Recovery = 114.65%							
Ni	231.604†	19041.5	487.43 ug/L	1.232	487.43 ppb	1.232	0.25%
QC value within limits for Ni 231.604 Recovery = 97.49%							
P	214.914†	4334.9	2306.8 ug/L	10.15	2306.8 ppb	10.15	0.44%
QC value within limits for P 214.914 Recovery = 92.27%							
Pb	220.353†	3923.4	487.65 ug/L	2.497	487.65 ppb	2.497	0.51%
QC value within limits for Pb 220.353 Recovery = 97.53%							
S	181.975 Axial†	799.8	1044.3 ug/L	20.88	1044.3 ppb	20.88	2.00%
QC value within limits for S 181.975 Axial Recovery = 104.43%							
Sb	206.836†	1465.3	513.41 ug/L	3.019	513.41 ppb	3.019	0.59%
QC value within limits for Sb 206.836 Recovery = 102.68%							
Se	196.026†	839.4	508.41 ug/L	5.393	508.41 ppb	5.393	1.06%
QC value within limits for Se 196.026 Recovery = 101.68%							
Si	251.611†	79505.3	2471.5 ug/L	13.85	2471.5 ppb	13.85	0.56%
QC value within limits for Si 251.611 Recovery = 98.86%							
Sn	189.927†	2684.7	482.26 ug/L	1.261	482.26 ppb	1.261	0.26%
QC value within limits for Sn 189.927 Recovery = 96.45%							
Sr	421.552†	68852.3	531.59 ug/L	9.859	531.59 ppb	9.859	1.85%
QC value within limits for Sr 421.552 Recovery = 106.32%							
Ti	334.940†	307092.3	498.99 ug/L	3.504	498.99 ppb	3.504	0.70%
QC value within limits for Ti 334.940 Recovery = 99.80%							
Tl	190.801†	1579.7	502.03 ug/L	4.313	502.03 ppb	4.313	0.86%
QC value within limits for Tl 190.801 Recovery = 100.41%							
U	409.014†	17546.5	496.76 ug/L	2.267	496.76 ppb	2.267	0.46%
QC value within limits for U 409.014 Recovery = 99.35%							
V	292.402†	67482.7	495.27 ug/L	2.941	495.27 ppb	2.941	0.59%
QC value within limits for V 292.402 Recovery = 99.05%							
Zn	213.857†	50886.7	492.07 ug/L	3.102	492.07 ppb	3.102	0.63%
QC value within limits for Zn 213.857 Recovery = 98.41%							
SiO2†		79679.9	5299.1 ug/L	110.33	5299.1 ppb	110.33	2.08%
QC value within limits for SiO2 Recovery = 99.10%							

QC Failed. Continue with analysis.

Sequence No.: 3
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 2/16/2010 15:28:50
 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	4164.1	4164.1	98.0 %		15:30:42
1	Y RADIAL	4321.3	4321.3	98.16 %		15:30:42
1	Al 396.153Radial†	-129.0	27.3	27.293 ug/L	27.293 ppb	15:31:02
1	Ca 317.933Radial†	29.5	11.8	21.995 ug/L	21.995 ppb	15:31:02
1	Fe 238.204 Radial†	10.7	0.9	9.5740 ug/L	9.5740 ppb	15:31:02
1	K 766.490 Radial†	4006.8	918.7	185.12 ug/L	185.12 ppb	15:30:42
1	Mg 279.077 IEC†	4.0	1.4	52.535 ug/L	52.535 ppb	15:31:02
1	Na 589.592 Radial†	2644.0	2492.0	831.23 ug/L	831.23 ppb	15:30:42
1	Sr 421.552†	156.7	70.2	0.5415 ug/L	0.5415 ppb	15:30:42
1	Sc 361.383	815455.4	815455.4	95.935 %		15:31:59
1	Y 371.029	668129.0	668129.0	95.076 %		15:31:59
1	Ag 328.068†	131.4	-90.7	-0.4343 ug/L	-0.4343 ppb	15:31:59
1	As 188.979†	-31.7	-4.7	-1.9781 ug/L	-1.9781 ppb	15:32:19
1	B 249.677†	569.4	1075.4	25.299 ug/L	25.299 ppb	15:31:59
1	Ba 233.527†	11.6	-6.8	-0.0532 ug/L	-0.0532 ppb	15:32:19
1	Be 313.107†	-4306.2	-149.6	-0.0549 ug/L	-0.0549 ppb	15:31:59
1	Cd 226.502†	-179.8	8.1	0.0950 ug/L	0.0950 ppb	15:32:19
1	Co 228.616†	-75.6	0.0	0.0016 ug/L	0.0016 ppb	15:32:19
1	Cr 267.716†	127.2	-17.2	-0.2006 ug/L	-0.2006 ppb	15:32:19
1	Cu 324.752†	8052.9	300.0	0.9159 ug/L	0.9159 ppb	15:31:59
1	Mn 257.610†	514.4	-33.6	-0.0399 ug/L	-0.0399 ppb	15:32:19
1	Mo 202.031†	17.8	8.1	0.5995 ug/L	0.5995 ppb	15:32:19
1	Ni 231.604†	111.4	2.6	0.0659 ug/L	0.0659 ppb	15:32:19
1	P 214.914†	240.9	9.1	4.8755 ug/L	4.8755 ppb	15:32:19
1	Pb 220.353†	-54.8	16.4	2.0386 ug/L	2.0386 ppb	15:32:19
1	S 181.975 Axial†	89.5	50.3	65.791 ug/L	65.791 ppb	15:32:19
1	Sb 206.836†	43.3	9.4	3.2009 ug/L	3.2009 ppb	15:32:19
1	Se 196.026†	-20.0	2.5	1.4963 ug/L	1.4963 ppb	15:32:19
1	Si 251.611†	597.7	10.7	0.3264 ug/L	0.3264 ppb	15:32:19
1	Sn 189.927†	12.7	0.6	0.1069 ug/L	0.1069 ppb	15:32:19
1	Ti 334.940†	-1412.2	20.8	0.0301 ug/L	0.0301 ppb	15:31:59
1	Tl 190.801†	-32.1	5.7	1.7949 ug/L	1.7949 ppb	15:32:19
1	U 409.014†	-3185.2	195.0	5.5399 ug/L	5.5399 ppb	15:31:59
1	V 292.402†	-1521.4	91.4	0.6810 ug/L	0.6810 ppb	15:31:59
1	Zn 213.857†	715.8	58.4	0.5670 ug/L	0.5670 ppb	15:32:19
1	SiO2†	539.7	-56.9	-3.8110 ug/L	-3.8110 ppb	15:33:15
2	Sc Radial	4122.0	4122.0	97.0 %		15:31:07
2	Y RADIAL	4243.9	4243.9	96.40 %		15:31:07
2	Al 396.153Radial†	-132.7	22.1	22.138 ug/L	22.138 ppb	15:31:27
2	Ca 317.933Radial†	26.5	9.0	16.852 ug/L	16.852 ppb	15:31:27
2	Fe 238.204 Radial†	8.5	-1.3	-14.223 ug/L	-14.223 ppb	15:31:27
2	K 766.490 Radial†	3964.9	917.3	184.86 ug/L	184.86 ppb	15:31:07
2	Mg 279.077 IEC†	1.7	-0.9	-36.558 ug/L	-36.558 ppb	15:31:27
2	Na 589.592 Radial†	2471.8	2342.0	781.20 ug/L	781.20 ppb	15:31:07
2	Sr 421.552†	70.8	-16.8	-0.1302 ug/L	-0.1302 ppb	15:31:07
2	Sc 361.383	807209.5	807209.5	94.965 %		15:32:24
2	Y 371.029	661387.1	661387.1	94.117 %		15:32:24
2	Ag 328.068†	251.0	36.6	0.1646 ug/L	0.1646 ppb	15:32:24
2	As 188.979†	-35.6	-9.1	-3.8521 ug/L	-3.8521 ppb	15:32:44
2	B 249.677†	586.5	1099.5	25.868 ug/L	25.868 ppb	15:32:24
2	Ba 233.527†	13.1	-5.0	-0.0428 ug/L	-0.0428 ppb	15:32:44
2	Be 313.107†	-4134.3	-14.4	-0.0051 ug/L	-0.0051 ppb	15:32:24
2	Cd 226.502†	-175.2	11.0	0.1305 ug/L	0.1305 ppb	15:32:44
2	Co 228.616†	-55.3	20.7	0.4317 ug/L	0.4317 ppb	15:32:44
2	Cr 267.716†	109.3	-34.6	-0.4050 ug/L	-0.4050 ppb	15:32:44
2	Cu 324.752†	7959.1	287.0	0.8760 ug/L	0.8760 ppb	15:32:24
2	Mn 257.610†	556.9	16.7	0.0194 ug/L	0.0194 ppb	15:32:44
2	Mo 202.031†	12.9	3.2	0.2334 ug/L	0.2334 ppb	15:32:44
2	Ni 231.604†	110.7	3.0	0.0771 ug/L	0.0771 ppb	15:32:44

2	P 214.914†	240.7	11.5	6.2463 ug/L	6.2463 ppb	15:32:44
2	Pb 220.353†	-56.9	13.6	1.6902 ug/L	1.6902 ppb	15:32:44
2	S 181.975 Axial†	137.0	101.3	132.43 ug/L	132.43 ppb	15:32:44
2	Sb 206.836†	46.7	13.5	4.5851 ug/L	4.5851 ppb	15:32:44
2	Se 196.026†	-14.5	8.1	4.6634 ug/L	4.6634 ppb	15:32:44
2	Si 251.611†	560.9	-21.6	-0.6773 ug/L	-0.6773 ppb	15:32:44
2	Sn 189.927†	17.5	5.8	1.0365 ug/L	1.0365 ppb	15:32:44
2	Ti 334.940†	-1362.4	58.3	0.0986 ug/L	0.0986 ppb	15:32:24
2	Tl 190.801†	-37.5	-0.4	-0.1170 ug/L	-0.1170 ppb	15:32:44
2	U 409.014†	-3218.0	126.6	3.5987 ug/L	3.5987 ppb	15:32:24
2	V 292.402†	-1693.3	-105.8	-0.7548 ug/L	-0.7548 ppb	15:32:24
2	Zn 213.857†	755.7	108.0	1.0542 ug/L	1.0542 ppb	15:32:44
2	SiO2†	601.7	14.0	0.9295 ug/L	0.9295 ppb	15:33:20
3	Sc Radial	4232.6	4232.6	99.6 %		15:31:32
3	Y RADIAL	4373.1	4373.1	99.34 %		15:31:32
3	Al 396.153Radial†	-129.1	29.4	29.357 ug/L	29.357 ppb	15:31:52
3	Ca 317.933Radial†	33.0	14.9	27.716 ug/L	27.716 ppb	15:31:52
3	Fe 238.204 Radial†	9.9	-0.1	-0.9543 ug/L	-0.9543 ppb	15:31:52
3	K 766.490 Radial†	3991.4	837.1	168.67 ug/L	168.67 ppb	15:31:32
3	Mg 279.077 IEC†	4.3	1.6	62.957 ug/L	62.957 ppb	15:31:52
3	Na 589.592 Radial†	2453.7	2257.3	752.93 ug/L	752.93 ppb	15:31:32
3	Sr 421.552†	109.2	19.8	0.1527 ug/L	0.1527 ppb	15:31:32
3	Sc 361.383	820055.9	820055.9	96.476 %		15:32:50
3	Y 371.029	670839.1	670839.1	95.462 %		15:32:50
3	Ag 328.068†	223.8	4.3	0.0147 ug/L	0.0147 ppb	15:32:50
3	As 188.979†	-29.0	-1.7	-0.7153 ug/L	-0.7153 ppb	15:33:10
3	B 249.677†	547.8	1049.7	24.695 ug/L	24.695 ppb	15:32:50
3	Ba 233.527†	6.6	-12.0	-0.0964 ug/L	-0.0964 ppb	15:33:10
3	Be 313.107†	-4441.3	-264.4	-0.0965 ug/L	-0.0965 ppb	15:32:50
3	Cd 226.502†	-197.9	-9.7	-0.1113 ug/L	-0.1113 ppb	15:33:10
3	Co 228.616†	-62.5	14.1	0.2954 ug/L	0.2954 ppb	15:33:10
3	Cr 267.716†	98.3	-47.8	-0.5594 ug/L	-0.5594 ppb	15:33:10
3	Cu 324.752†	8060.1	260.4	0.7928 ug/L	0.7928 ppb	15:32:50
3	Mn 257.610†	550.8	1.1	-0.0014 ug/L	-0.0014 ppb	15:33:10
3	Mo 202.031†	16.4	6.5	0.4839 ug/L	0.4839 ppb	15:33:10
3	Ni 231.604†	107.3	-2.3	-0.0598 ug/L	-0.0598 ppb	15:33:10
3	P 214.914†	234.2	0.8	0.2672 ug/L	0.2672 ppb	15:33:10
3	Pb 220.353†	-65.2	6.0	0.7450 ug/L	0.7450 ppb	15:33:10
3	S 181.975 Axial†	93.4	53.9	70.471 ug/L	70.471 ppb	15:33:10
3	Sb 206.836†	39.3	5.1	1.7180 ug/L	1.7180 ppb	15:33:10
3	Se 196.026†	-24.3	-1.9	-1.0934 ug/L	-1.0934 ppb	15:33:10
3	Si 251.611†	576.7	-14.6	-0.4601 ug/L	-0.4601 ppb	15:33:10
3	Sn 189.927†	11.1	-1.1	-0.1873 ug/L	-0.1873 ppb	15:33:10
3	Ti 334.940†	-1284.7	161.2	0.2573 ug/L	0.2573 ppb	15:32:50
3	Tl 190.801†	-33.3	4.6	1.4416 ug/L	1.4416 ppb	15:33:10
3	U 409.014†	-3120.2	281.0	7.9827 ug/L	7.9827 ppb	15:32:50
3	V 292.402†	-1574.5	45.3	0.3516 ug/L	0.3516 ppb	15:32:50
3	Zn 213.857†	714.1	52.4	0.5107 ug/L	0.5107 ppb	15:33:10
3	SiO2†	563.1	-35.9	-2.4065 ug/L	-2.4065 ppb	15:33:25

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	814240.3	95.792 %	0.7657			0.80%
Sc Radial	4172.9	98.2 %	1.31			1.34%
Y 371.029	666785.1	94.885 %	0.6926			0.73%
Y RADIAL	4312.8	97.97 %	1.478			1.51%
Ag 328.068†	-16.6	-0.0850 ug/L	0.31166	-0.0850 ppb	0.31166	366.67%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	26.3	26.262 ug/L	3.7181	26.262 ppb	3.7181	14.16%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-5.2	-2.1819 ug/L	1.57830	-2.1819 ppb	1.57830	72.34%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	1074.9	25.288 ug/L	0.5867	25.288 ppb	0.5867	2.32%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	-7.9	-0.0641 ug/L	0.02846	-0.0641 ppb	0.02846	44.38%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-142.8	-0.0521 ug/L	0.04578	-0.0521 ppb	0.04578	87.79%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	11.9	22.188 ug/L	5.4344	22.188 ppb	5.4344	24.49%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd	226.502†	3.1	0.0381 ug/L	0.13054	0.0381 ppb	0.13054	342.90%
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co	228.616†	11.6	0.2429 ug/L	0.21981	0.2429 ppb	0.21981	90.49%
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr	267.716†	-33.2	-0.3883 ug/L	0.17997	-0.3883 ppb	0.17997	46.34%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu	324.752†	282.5	0.8616 ug/L	0.06281	0.8616 ppb	0.06281	7.29%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe	238.204 Radial†	-0.2	-1.8676 ug/L	11.92453	-1.8676 ppb	11.92453	638.48%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K	766.490 Radial†	891.0	179.55 ug/L	9.425	179.55 ppb	9.425	5.25%
QC value greater than the upper limit for K 766.490 Radial Recovery = Not calculated							
Mg	279.077 IEC†	0.7	26.311 ug/L	54.6955	26.311 ppb	54.6955	207.88%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn	257.610†	-5.2	-0.0073 ug/L	0.03008	-0.0073 ppb	0.03008	411.44%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo	202.031†	5.9	0.4389 ug/L	0.18717	0.4389 ppb	0.18717	42.64%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na	589.592 Radial†	2363.8	788.45 ug/L	39.653	788.45 ppb	39.653	5.03%
QC value greater than the upper limit for Na 589.592 Radial Recovery = Not calculated							
Ni	231.604†	1.1	0.0277 ug/L	0.07600	0.0277 ppb	0.07600	274.19%
QC value within limits for Ni 231.604 Recovery = Not calculated							
P	214.914†	7.1	3.7963 ug/L	3.13220	3.7963 ppb	3.13220	82.51%
QC value within limits for P 214.914 Recovery = Not calculated							
Pb	220.353†	12.0	1.4913 ug/L	0.66935	1.4913 ppb	0.66935	44.88%
QC value within limits for Pb 220.353 Recovery = Not calculated							
S	181.975 Axial†	68.5	89.565 ug/L	37.1984	89.565 ppb	37.1984	41.53%
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb	206.836†	9.3	3.1680 ug/L	1.43382	3.1680 ppb	1.43382	45.26%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se	196.026†	2.9	1.6887 ug/L	2.88322	1.6887 ppb	2.88322	170.73%
QC value within limits for Se 196.026 Recovery = Not calculated							
Si	251.611†	-8.5	-0.2703 ug/L	0.52803	-0.2703 ppb	0.52803	195.34%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn	189.927†	1.8	0.3187 ug/L	0.63876	0.3187 ppb	0.63876	200.42%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr	421.552†	24.4	0.1880 ug/L	0.33722	0.1880 ppb	0.33722	179.35%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti	334.940†	80.1	0.1287 ug/L	0.11654	0.1287 ppb	0.11654	90.57%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl	190.801†	3.3	1.0398 ug/L	1.01731	1.0398 ppb	1.01731	97.84%
QC value within limits for Tl 190.801 Recovery = Not calculated							
U	409.014†	200.9	5.7071 ug/L	2.19675	5.7071 ppb	2.19675	38.49%
QC value within limits for U 409.014 Recovery = Not calculated							
V	292.402†	10.3	0.0926 ug/L	0.75210	0.0926 ppb	0.75210	812.29%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn	213.857†	72.9	0.7106 ug/L	0.29889	0.7106 ppb	0.29889	42.06%
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†		-26.3	-1.7627 ug/L	2.43497	-1.7627 ppb	2.43497	138.14%
QC value within limits for SiO2 Recovery = Not calculated							
QC Failed. Continue with analysis.							

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Analysis Begun

Start Time: 2/16/2010 15:39:35

Plasma On Time: 2/15/2010 05:50:42

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\021610.sif

Batch ID:

Results Data Set: 021610

Results Library: C:\pe\Optima3\Results\Results.mdb

Sequence No.: 1

Autosampler Location: 7

Sample ID: CCV

Date Collected: 2/16/2010 15:39:36

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	4259.9	4259.9	100 %		15:41:28
1	Y RADIAL	4343.3	4343.3	98.66 %		15:41:28
1	Al 396.153Radial†	4756.7	4905.8	4884.5 ug/L	4884.5 ppb	15:41:28
1	Ca 317.933Radial†	2607.8	2584.0	4820.1 ug/L	4820.1 ppb	15:41:48
1	Fe 238.204 Radial†	479.4	468.3	4991.7 ug/L	4991.7 ppb	15:41:48
1	K 766.490 Radial†	28010.6	24780.1	4995.6 ug/L	4995.6 ppb	15:41:28
1	Mg 279.077 IEC†	128.2	125.2	4834.6 ug/L	4834.6 ppb	15:41:48
1	Na 589.592 Radial†	33517.2	33239.7	11087 ug/L	11087 ppb	15:41:28
1	Sr 421.552†	66107.1	65878.2	508.63 ug/L	508.63 ppb	15:41:28
1	Sc 361.383	831107.2	831107.2	97.776 %		15:42:45
1	Y 371.029	672004.2	672004.2	95.628 %		15:42:45
1	Ag 328.068†	99548.6	101584.9	490.91 ug/L	490.91 ppb	15:42:51
1	As 188.979†	1079.4	1132.2	480.65 ug/L	480.65 ppb	15:43:11
1	B 249.677†	20839.6	21795.5	510.57 ug/L	510.57 ppb	15:42:51
1	Ba 233.527†	58431.5	59741.6	486.29 ug/L	486.29 ppb	15:42:51
1	Be 313.107†	1299727.6	1333626.0	490.96 ug/L	490.96 ppb	15:42:45
1	Cd 226.502†	39622.6	40719.2	476.07 ug/L	476.07 ppb	15:42:51
1	Co 228.616†	22656.4	23250.6	484.90 ug/L	484.90 ppb	15:42:51
1	Cr 267.716†	39927.1	40685.5	473.92 ug/L	473.92 ppb	15:42:51
1	Cu 324.752†	165158.8	160820.8	492.38 ug/L	492.38 ppb	15:42:51
1	Mn 257.610†	418776.2	427730.5	493.63 ug/L	493.63 ppb	15:42:45
1	Mo 202.031†	6308.8	6441.8	479.11 ug/L	479.11 ppb	15:43:11
1	Ni 231.604†	18314.6	18617.6	476.58 ug/L	476.58 ppb	15:42:51
1	P 214.914†	4390.5	4248.4	2261.1 ug/L	2261.1 ppb	15:43:11
1	Pb 220.353†	3676.1	3833.2	476.42 ug/L	476.42 ppb	15:43:11
1	S 181.975 Axial†	798.3	773.6	1010.1 ug/L	1010.1 ppb	15:43:11
1	Sb 206.836†	1439.1	1436.2	503.17 ug/L	503.17 ppb	15:43:11
1	Se 196.026†	779.1	820.2	496.12 ug/L	496.12 ppb	15:43:11
1	Si 251.611†	77027.3	78166.8	2430.0 ug/L	2430.0 ppb	15:42:51
1	Sn 189.927†	2587.5	2633.8	473.08 ug/L	473.08 ppb	15:43:11
1	Ti 334.940†	292656.4	300805.1	488.77 ug/L	488.77 ppb	15:42:51
1	Tl 190.801†	1474.4	1547.0	491.65 ug/L	491.65 ppb	15:43:11
1	U 409.014†	13465.6	17287.0	489.45 ug/L	489.45 ppb	15:42:51
1	V 292.402†	62942.6	66051.3	484.78 ug/L	484.78 ppb	15:42:51
1	Zn 213.857†	49524.1	49962.6	483.18 ug/L	483.18 ppb	15:42:51
1	SiO2†	77288.1	78426.3	5215.9 ug/L	5215.9 ppb	15:44:18
2	Sc Radial	4177.7	4177.7	98.3 %		15:41:53
2	Y RADIAL	4307.6	4307.6	97.85 %		15:41:53
2	Al 396.153Radial†	4722.2	4964.0	4942.6 ug/L	4942.6 ppb	15:41:53
2	Ca 317.933Radial†	2601.0	2628.2	4902.7 ug/L	4902.7 ppb	15:42:13
2	Fe 238.204 Radial†	484.2	482.6	5143.3 ug/L	5143.3 ppb	15:42:13
2	K 766.490 Radial†	27824.0	25140.2	5068.2 ug/L	5068.2 ppb	15:41:53
2	Mg 279.077 IEC†	128.3	127.8	4935.8 ug/L	4935.8 ppb	15:42:13
2	Na 589.592 Radial†	33063.0	33435.6	11153 ug/L	11153 ppb	15:41:53
2	Sr 421.552†	65494.9	66553.4	513.84 ug/L	513.84 ppb	15:41:53
2	Sc 361.383	825773.8	825773.8	97.149 %		15:43:16
2	Y 371.029	667205.7	667205.7	94.945 %		15:43:16

2	Ag 328.068†	99725.0	102424.0	494.99 ug/L	494.99 ppb	15:43:22
2	As 188.979†	1063.1	1122.6	476.64 ug/L	476.64 ppb	15:43:42
2	B 249.677†	20835.1	21928.5	513.67 ug/L	513.67 ppb	15:43:22
2	Ba 233.527†	58399.0	60094.1	489.16 ug/L	489.16 ppb	15:43:22
2	Be 313.107†	1287464.4	1329588.2	489.48 ug/L	489.48 ppb	15:43:16
2	Cd 226.502†	39480.4	40834.5	477.40 ug/L	477.40 ppb	15:43:22
2	Co 228.616†	22615.4	23357.9	487.14 ug/L	487.14 ppb	15:43:22
2	Cr 267.716†	39954.2	40977.1	477.31 ug/L	477.31 ppb	15:43:22
2	Cu 324.752†	165427.2	162188.1	496.57 ug/L	496.57 ppb	15:43:22
2	Mn 257.610†	415240.5	426857.3	492.64 ug/L	492.64 ppb	15:43:16
2	Mo 202.031†	6320.6	6495.6	483.12 ug/L	483.12 ppb	15:43:42
2	Ni 231.604†	18387.7	18813.8	481.61 ug/L	481.61 ppb	15:43:22
2	P 214.914†	4380.9	4267.5	2270.8 ug/L	2270.8 ppb	15:43:42
2	Pb 220.353†	3668.2	3849.4	478.43 ug/L	478.43 ppb	15:43:42
2	S 181.975 Axial†	798.0	778.5	1016.6 ug/L	1016.6 ppb	15:43:42
2	Sb 206.836†	1433.1	1439.5	504.38 ug/L	504.38 ppb	15:43:42
2	Se 196.026†	794.9	841.6	509.11 ug/L	509.11 ppb	15:43:42
2	Si 251.611†	77051.2	78700.2	2446.6 ug/L	2446.6 ppb	15:43:22
2	Sn 189.927†	2582.3	2645.4	475.18 ug/L	475.18 ppb	15:43:42
2	Ti 334.940†	292821.1	302907.8	492.19 ug/L	492.19 ppb	15:43:22
2	Tl 190.801†	1474.8	1557.2	494.88 ug/L	494.88 ppb	15:43:42
2	U 409.014†	13559.2	17472.3	494.69 ug/L	494.69 ppb	15:43:22
2	V 292.402†	62738.6	66257.2	486.31 ug/L	486.31 ppb	15:43:22
2	Zn 213.857†	49493.0	50257.8	486.00 ug/L	486.00 ppb	15:43:22
2	SiO2†	77182.6	78828.2	5242.6 ug/L	5242.6 ppb	15:44:23
3	Sc Radial	4225.0	4225.0	99.4 %		15:42:18
3	Y RADIAL	4350.5	4350.5	98.82 %		15:42:18
3	Al 396.153Radial†	4718.7	4906.6	4885.0 ug/L	4885.0 ppb	15:42:18
3	Ca 317.933Radial†	2598.2	2595.8	4842.2 ug/L	4842.2 ppb	15:42:38
3	Fe 238.204 Radial†	477.5	470.4	5013.8 ug/L	5013.8 ppb	15:42:38
3	K 766.490 Radial†	27778.7	24777.5	4995.1 ug/L	4995.1 ppb	15:42:18
3	Mg 279.077 IEC†	128.2	126.3	4878.0 ug/L	4878.0 ppb	15:42:38
3	Na 589.592 Radial†	32939.3	32934.4	10986 ug/L	10986 ppb	15:42:18
3	Sr 421.552†	65787.7	66101.6	510.35 ug/L	510.35 ppb	15:42:18
3	Sc 361.383	823496.6	823496.6	96.881 %		15:43:47
3	Y 371.029	665622.4	665622.4	94.720 %		15:43:47
3	Ag 328.068†	99636.2	102616.3	495.88 ug/L	495.88 ppb	15:43:53
3	As 188.979†	1079.7	1142.7	485.09 ug/L	485.09 ppb	15:44:13
3	B 249.677†	20975.5	22132.7	518.49 ug/L	518.49 ppb	15:43:53
3	Ba 233.527†	58343.9	60203.5	490.05 ug/L	490.05 ppb	15:43:53
3	Be 313.107†	1285062.9	1330774.2	489.92 ug/L	489.92 ppb	15:43:47
3	Cd 226.502†	39409.3	40873.6	477.87 ug/L	477.87 ppb	15:43:53
3	Co 228.616†	22595.0	23401.4	488.05 ug/L	488.05 ppb	15:43:53
3	Cr 267.716†	39938.7	41074.8	478.45 ug/L	478.45 ppb	15:43:53
3	Cu 324.752†	165205.7	162430.3	497.31 ug/L	497.31 ppb	15:43:53
3	Mn 257.610†	414057.1	426817.8	492.58 ug/L	492.58 ppb	15:43:47
3	Mo 202.031†	6337.0	6530.5	485.70 ug/L	485.70 ppb	15:44:13
3	Ni 231.604†	18296.5	18772.1	480.54 ug/L	480.54 ppb	15:43:53
3	P 214.914†	4391.0	4290.3	2283.4 ug/L	2283.4 ppb	15:44:13
3	Pb 220.353†	3690.3	3882.7	482.56 ug/L	482.56 ppb	15:44:13
3	S 181.975 Axial†	862.6	847.4	1106.6 ug/L	1106.6 ppb	15:44:13
3	Sb 206.836†	1426.6	1436.9	503.57 ug/L	503.57 ppb	15:44:13
3	Se 196.026†	799.5	848.6	512.81 ug/L	512.81 ppb	15:44:13
3	Si 251.611†	76819.5	78680.4	2445.9 ug/L	2445.9 ppb	15:43:53
3	Sn 189.927†	2579.9	2650.3	476.05 ug/L	476.05 ppb	15:44:13
3	Ti 334.940†	292485.1	303394.5	492.98 ug/L	492.98 ppb	15:43:53
3	Tl 190.801†	1485.2	1572.1	499.58 ug/L	499.58 ppb	15:44:13
3	U 409.014†	13313.7	17257.5	488.60 ug/L	488.60 ppb	15:43:53
3	V 292.402†	62782.6	66481.2	487.97 ug/L	487.97 ppb	15:43:53
3	Zn 213.857†	49244.7	50142.4	484.90 ug/L	484.90 ppb	15:43:53
3	SiO2†	77072.2	78934.0	5249.6 ug/L	5249.6 ppb	15:44:28

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	826792.6	97.269 %	0.4596			0.47%
Sc Radial	4220.8	99.3 %	0.97			0.98%
Y 371.029	668277.4	95.098 %	0.4729			0.50%
Y RADIAL	4333.8	98.45 %	0.521			0.53%
Ag 328.068†	102208.4	493.93 ug/L	2.651	493.93 ppb	2.651	0.54%

QC value within limits for Ag 328.068 Recovery = 98.79%							
Al 396.153Radial†	4925.5	4904.0 ug/L	33.38	4904.0 ppb	33.38	0.68%	
QC value within limits for Al 396.153Radial Recovery = 98.08%							
As 188.979†	1132.5	480.79 ug/L	4.227	480.79 ppb	4.227	0.88%	
QC value within limits for As 188.979 Recovery = 96.16%							
B 249.677†	21952.2	514.24 ug/L	3.992	514.24 ppb	3.992	0.78%	
QC value within limits for B 249.677 Recovery = 102.85%							
Ba 233.527†	60013.0	488.50 ug/L	1.964	488.50 ppb	1.964	0.40%	
QC value within limits for Ba 233.527 Recovery = 97.70%							
Be 313.107†	1331329.5	490.12 ug/L	0.758	490.12 ppb	0.758	0.15%	
QC value within limits for Be 313.107 Recovery = 98.02%							
Ca 317.933Radial†	2602.7	4855.0 ug/L	42.76	4855.0 ppb	42.76	0.88%	
QC value within limits for Ca 317.933Radial Recovery = 97.10%							
Cd 226.502†	40809.1	477.11 ug/L	0.937	477.11 ppb	0.937	0.20%	
QC value within limits for Cd 226.502 Recovery = 95.42%							
Co 228.616†	23336.6	486.70 ug/L	1.621	486.70 ppb	1.621	0.33%	
QC value within limits for Co 228.616 Recovery = 97.34%							
Cr 267.716†	40912.4	476.56 ug/L	2.359	476.56 ppb	2.359	0.50%	
QC value within limits for Cr 267.716 Recovery = 95.31%							
Cu 324.752†	161813.1	495.42 ug/L	2.659	495.42 ppb	2.659	0.54%	
QC value within limits for Cu 324.752 Recovery = 99.08%							
Fe 238.204 Radial†	473.8	5049.6 ug/L	81.90	5049.6 ppb	81.90	1.62%	
QC value within limits for Fe 238.204 Radial Recovery = 100.99%							
K 766.490 Radial†	24899.3	5019.6 ug/L	42.08	5019.6 ppb	42.08	0.84%	
QC value within limits for K 766.490 Radial Recovery = 100.39%							
Mg 279.077 IEC†	126.4	4882.8 ug/L	50.80	4882.8 ppb	50.80	1.04%	
QC value within limits for Mg 279.077 IEC Recovery = 97.66%							
Mn 257.610†	427135.2	492.95 ug/L	0.592	492.95 ppb	0.592	0.12%	
QC value within limits for Mn 257.610 Recovery = 98.59%							
Mo 202.031†	6489.3	482.64 ug/L	3.322	482.64 ppb	3.322	0.69%	
QC value within limits for Mo 202.031 Recovery = 96.53%							
Na 589.592 Radial†	33203.2	11075 ug/L	84.3	11075 ppb	84.3	0.76%	
QC value greater than the upper limit for Na 589.592 Radial Recovery = 110.75%							
Ni 231.604†	18734.5	479.57 ug/L	2.647	479.57 ppb	2.647	0.55%	
QC value within limits for Ni 231.604 Recovery = 95.91%							
P 214.914†	4268.7	2271.8 ug/L	11.18	2271.8 ppb	11.18	0.49%	
QC value within limits for P 214.914 Recovery = 90.87%							
Pb 220.353†	3855.1	479.14 ug/L	3.132	479.14 ppb	3.132	0.65%	
QC value within limits for Pb 220.353 Recovery = 95.83%							
S 181.975 Axial†	799.8	1044.4 ug/L	53.95	1044.4 ppb	53.95	5.17%	
QC value within limits for S 181.975 Axial Recovery = 104.44%							
Sb 206.836†	1437.5	503.71 ug/L	0.618	503.71 ppb	0.618	0.12%	
QC value within limits for Sb 206.836 Recovery = 100.74%							
Se 196.026†	836.8	506.01 ug/L	8.763	506.01 ppb	8.763	1.73%	
QC value within limits for Se 196.026 Recovery = 101.20%							
Si 251.611†	78515.8	2440.8 ug/L	9.39	2440.8 ppb	9.39	0.38%	
QC value within limits for Si 251.611 Recovery = 97.63%							
Sn 189.927†	2643.2	474.77 ug/L	1.529	474.77 ppb	1.529	0.32%	
QC value within limits for Sn 189.927 Recovery = 94.95%							
Sr 421.552†	66177.7	510.94 ug/L	2.655	510.94 ppb	2.655	0.52%	
QC value within limits for Sr 421.552 Recovery = 102.19%							
Ti 334.940†	302369.1	491.31 ug/L	2.236	491.31 ppb	2.236	0.46%	
QC value within limits for Ti 334.940 Recovery = 98.26%							
Tl 190.801†	1558.8	495.37 ug/L	3.986	495.37 ppb	3.986	0.80%	
QC value within limits for Tl 190.801 Recovery = 99.07%							
U 409.014†	17338.9	490.91 ug/L	3.298	490.91 ppb	3.298	0.67%	
QC value within limits for U 409.014 Recovery = 98.18%							
V 292.402†	66263.2	486.35 ug/L	1.599	486.35 ppb	1.599	0.33%	
QC value within limits for V 292.402 Recovery = 97.27%							
Zn 213.857†	50120.9	484.69 ug/L	1.422	484.69 ppb	1.422	0.29%	
QC value within limits for Zn 213.857 Recovery = 96.94%							
Sio2†	78729.5	5236.0 ug/L	17.77	5236.0 ppb	17.77	0.34%	
QC value within limits for Sio2 Recovery = 97.92%							
QC Failed. Continue with analysis.							

Sequence No.: 2

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/16/2010 15:46:39

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4241.1	4241.1	99.8 %		15:48:31
1	Y RADIAL	4368.1	4368.1	99.22 %		15:48:31
1	Al 396.153Radial†	-148.3	10.4	10.352 ug/L	10.352 ppb	15:48:31
1	Ca 317.933Radial†	32.6	14.3	26.714 ug/L	26.714 ppb	15:48:51
1	Fe 238.204 Radial†	11.4	1.3	14.240 ug/L	14.240 ppb	15:48:51
1	K 766.490 Radial†	3878.0	715.4	144.15 ug/L	144.15 ppb	15:48:31
1	Mg 279.077 IEC†	-0.3	-3.0	-116.41 ug/L	-116.41 ppb	15:48:51
1	Na 589.592 Radial†	2121.6	1919.4	640.23 ug/L	640.23 ppb	15:48:31
1	Sr 421.552†	43.9	-45.8	-0.3536 ug/L	-0.3536 ppb	15:48:31
1	Sc 361.383	818204.5	818204.5	96.258 %		15:49:48
1	Y 371.029	669456.0	669456.0	95.265 %		15:49:48
1	Ag 328.068†	314.7	99.3	0.4798 ug/L	0.4798 ppb	15:49:48
1	As 188.979†	-27.0	0.3	0.1177 ug/L	0.1177 ppb	15:50:08
1	B 249.677†	552.2	1055.6	24.832 ug/L	24.832 ppb	15:49:48
1	Ba 233.527†	-0.8	-19.7	-0.1599 ug/L	-0.1599 ppb	15:50:08
1	Be 313.107†	-4303.6	-131.8	-0.0485 ug/L	-0.0485 ppb	15:49:48
1	Cd 226.502†	-202.9	-15.3	-0.1806 ug/L	-0.1806 ppb	15:50:08
1	Co 228.616†	-81.4	-5.7	-0.1168 ug/L	-0.1168 ppb	15:50:08
1	Cr 267.716†	89.4	-56.8	-0.6613 ug/L	-0.6613 ppb	15:50:08
1	Cu 324.752†	7896.7	109.6	0.3357 ug/L	0.3357 ppb	15:49:48
1	Mn 257.610†	537.1	-11.7	-0.0074 ug/L	-0.0074 ppb	15:50:08
1	Mo 202.031†	16.7	6.9	0.5117 ug/L	0.5117 ppb	15:50:08
1	Ni 231.604†	110.5	1.3	0.0325 ug/L	0.0325 ppb	15:50:08
1	P 214.914†	245.3	12.8	7.0384 ug/L	7.0384 ppb	15:50:08
1	Pb 220.353†	-72.5	-1.8	-0.2199 ug/L	-0.2199 ppb	15:50:08
1	S 181.975 Axial†	81.8	42.1	54.963 ug/L	54.963 ppb	15:50:08
1	Sb 206.836†	29.8	-4.7	-1.5910 ug/L	-1.5910 ppb	15:50:08
1	Se 196.026†	-25.8	-3.5	-1.9780 ug/L	-1.9780 ppb	15:50:08
1	Si 251.611†	568.9	-21.3	-0.6706 ug/L	-0.6706 ppb	15:50:08
1	Sn 189.927†	7.0	-5.4	-0.9557 ug/L	-0.9557 ppb	15:50:08
1	Ti 334.940†	-1470.6	-34.8	-0.0437 ug/L	-0.0437 ppb	15:49:48
1	Tl 190.801†	-28.0	10.0	3.1653 ug/L	3.1653 ppb	15:50:08
1	U 409.014†	-3347.4	37.6	1.0689 ug/L	1.0689 ppb	15:49:48
1	V 292.402†	-1627.3	-13.2	-0.0905 ug/L	-0.0905 ppb	15:49:48
1	Zn 213.857†	727.3	67.8	0.6589 ug/L	0.6589 ppb	15:50:08
1	SiO2†	632.6	37.6	2.4958 ug/L	2.4958 ppb	15:51:04
2	Sc Radial	4201.1	4201.1	98.8 %		15:48:56
2	Y RADIAL	4334.1	4334.1	98.45 %		15:48:56
2	Al 396.153Radial†	-118.4	39.3	39.201 ug/L	39.201 ppb	15:48:56
2	Ca 317.933Radial†	30.0	12.1	22.516 ug/L	22.516 ppb	15:49:16
2	Fe 238.204 Radial†	6.8	-3.2	-34.259 ug/L	-34.259 ppb	15:49:16
2	K 766.490 Radial†	3886.1	760.5	153.27 ug/L	153.27 ppb	15:48:56
2	Mg 279.077 IEC†	0.2	-2.5	-95.994 ug/L	-95.994 ppb	15:49:16
2	Na 589.592 Radial†	2024.7	1841.6	614.29 ug/L	614.29 ppb	15:48:56
2	Sr 421.552†	93.1	4.4	0.0341 ug/L	0.0341 ppb	15:48:56
2	Sc 361.383	812430.6	812430.6	95.579 %		15:50:13
2	Y 371.029	665130.1	665130.1	94.650 %		15:50:13
2	Ag 328.068†	287.0	72.6	0.3371 ug/L	0.3371 ppb	15:50:13
2	As 188.979†	-16.8	10.7	4.4993 ug/L	4.4993 ppb	15:50:33
2	B 249.677†	508.0	1013.4	23.846 ug/L	23.846 ppb	15:50:13
2	Ba 233.527†	7.2	-11.4	-0.0930 ug/L	-0.0930 ppb	15:50:33
2	Be 313.107†	-4331.8	-193.1	-0.0707 ug/L	-0.0707 ppb	15:50:13
2	Cd 226.502†	-197.2	-10.8	-0.1229 ug/L	-0.1229 ppb	15:50:33
2	Co 228.616†	-58.9	17.2	0.3629 ug/L	0.3629 ppb	15:50:33
2	Cr 267.716†	99.7	-45.4	-0.5284 ug/L	-0.5284 ppb	15:50:33
2	Cu 324.752†	7836.8	105.2	0.3204 ug/L	0.3204 ppb	15:50:13
2	Mn 257.610†	503.4	-43.1	-0.0491 ug/L	-0.0491 ppb	15:50:33
2	Mo 202.031†	30.5	21.4	1.5881 ug/L	1.5881 ppb	15:50:33
2	Ni 231.604†	87.8	-21.7	-0.5555 ug/L	-0.5555 ppb	15:50:33

2	P 214.914†	225.7	-5.9	-3.2785 ug/L	-3.2785 ppb	15:50:33
2	Pb 220.353†	-37.7	34.1	4.2363 ug/L	4.2363 ppb	15:50:33
2	S 181.975 Axial†	77.6	38.2	49.955 ug/L	49.955 ppb	15:50:33
2	Sb 206.836†	40.8	7.0	2.3956 ug/L	2.3956 ppb	15:50:33
2	Se 196.026†	-26.8	-4.7	-2.8431 ug/L	-2.8431 ppb	15:50:33
2	Si 251.611†	583.8	-1.5	-0.0654 ug/L	-0.0654 ppb	15:50:33
2	Sn 189.927†	11.5	-0.6	-0.1037 ug/L	-0.1037 ppb	15:50:33
2	Ti 334.940†	-1380.4	48.6	0.0902 ug/L	0.0902 ppb	15:50:13
2	Tl 190.801†	-37.4	-0.0	-0.0153 ug/L	-0.0153 ppb	15:50:33
2	U 409.014†	-3366.7	-7.3	-0.2009 ug/L	-0.2009 ppb	15:50:13
2	V 292.402†	-1587.2	16.7	0.1465 ug/L	0.1465 ppb	15:50:13
2	Zn 213.857†	717.3	62.7	0.6206 ug/L	0.6206 ppb	15:50:33
2	SiO2†	563.3	-30.2	-2.0566 ug/L	-2.0566 ppb	15:51:09
3	Sc Radial	4228.8	4228.8	99.5 %		15:49:21
3	Y RADIAL	4357.9	4357.9	98.99 %		15:49:21
3	Al 396.153Radial†	-120.7	37.7	37.716 ug/L	37.716 ppb	15:49:21
3	Ca 317.933Radial†	29.2	11.0	20.574 ug/L	20.574 ppb	15:49:41
3	Fe 238.204 Radial†	9.2	-0.8	-8.2961 ug/L	-8.2961 ppb	15:49:41
3	K 766.490 Radial†	3836.1	684.6	137.95 ug/L	137.95 ppb	15:49:21
3	Mg 279.077 IEC†	2.0	-0.7	-28.707 ug/L	-28.707 ppb	15:49:41
3	Na 589.592 Radial†	2003.4	1806.8	602.69 ug/L	602.69 ppb	15:49:21
3	Sr 421.552†	29.4	-60.2	-0.4651 ug/L	-0.4651 ppb	15:49:21
3	Sc 361.383	824445.4	824445.4	96.993 %		15:50:39
3	Y 371.029	674868.4	674868.4	96.035 %		15:50:39
3	Ag 328.068†	174.8	-47.4	-0.2359 ug/L	-0.2359 ppb	15:50:39
3	As 188.979†	-32.3	-5.0	-2.1139 ug/L	-2.1139 ppb	15:50:59
3	B 249.677†	504.9	1002.5	23.586 ug/L	23.586 ppb	15:50:39
3	Ba 233.527†	10.6	-7.9	-0.0649 ug/L	-0.0649 ppb	15:50:59
3	Be 313.107†	-4398.7	-195.9	-0.0718 ug/L	-0.0718 ppb	15:50:39
3	Cd 226.502†	-208.7	-19.7	-0.2284 ug/L	-0.2284 ppb	15:50:59
3	Co 228.616†	-76.1	0.4	0.0084 ug/L	0.0084 ppb	15:50:59
3	Cr 267.716†	104.3	-42.2	-0.4933 ug/L	-0.4933 ppb	15:50:59
3	Cu 324.752†	7957.9	110.6	0.3348 ug/L	0.3348 ppb	15:50:39
3	Mn 257.610†	524.4	-29.1	-0.0332 ug/L	-0.0332 ppb	15:50:59
3	Mo 202.031†	11.2	1.1	0.0818 ug/L	0.0818 ppb	15:50:59
3	Ni 231.604†	89.6	-21.1	-0.5406 ug/L	-0.5406 ppb	15:50:59
3	P 214.914†	254.4	20.3	11.242 ug/L	11.242 ppb	15:50:59
3	Pb 220.353†	-70.3	1.0	0.1392 ug/L	0.1392 ppb	15:50:59
3	S 181.975 Axial†	71.0	30.3	39.560 ug/L	39.560 ppb	15:50:59
3	Sb 206.836†	38.4	4.0	1.3610 ug/L	1.3610 ppb	15:50:59
3	Se 196.026†	-21.7	1.0	0.5518 ug/L	0.5518 ppb	15:50:59
3	Si 251.611†	552.5	-42.6	-1.3301 ug/L	-1.3301 ppb	15:50:59
3	Sn 189.927†	20.6	8.6	1.5499 ug/L	1.5499 ppb	15:50:59
3	Ti 334.940†	-1397.0	52.6	0.0881 ug/L	0.0881 ppb	15:50:39
3	Tl 190.801†	-36.2	1.8	0.5608 ug/L	0.5608 ppb	15:50:59
3	U 409.014†	-3204.8	211.0	5.9947 ug/L	5.9947 ppb	15:50:39
3	V 292.402†	-1638.1	-11.6	-0.0704 ug/L	-0.0704 ppb	15:50:39
3	Zn 213.857†	720.8	55.4	0.5446 ug/L	0.5446 ppb	15:50:59
3	SiO2†	577.0	-24.7	-1.6475 ug/L	-1.6475 ppb	15:51:14

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	818360.2	96.277 %	0.7069			0.73%
Sc Radial	4223.7	99.4 %	0.48			0.48%
Y 371.029	669818.2	95.317 %	0.6943			0.73%
Y RADIAL	4353.4	98.89 %	0.397			0.40%
Ag 328.068†	41.5	0.1937 ug/L	0.37884	0.1937 ppb	0.37884	195.60%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	29.1	29.090 ug/L	16.2440	29.090 ppb	16.2440	55.84%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	2.0	0.8344 ug/L	3.36436	0.8344 ppb	3.36436	403.22%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	1023.8	24.088 ug/L	0.6573	24.088 ppb	0.6573	2.73%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	-13.0	-0.1059 ug/L	0.04878	-0.1059 ppb	0.04878	46.05%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-173.6	-0.0637 ug/L	0.01313	-0.0637 ppb	0.01313	20.62%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	12.5	23.268 ug/L	3.1381	23.268 ppb	3.1381	13.49%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd 226.502†	-15.3	-0.1773 ug/L	0.05285	-0.1773 ppb	0.05285	29.81%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	4.0	0.0848 ug/L	0.24877	0.0848 ppb	0.24877	293.22%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	-48.1	-0.5610 ug/L	0.08861	-0.5610 ppb	0.08861	15.80%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	108.5	0.3303 ug/L	0.00859	0.3303 ppb	0.00859	2.60%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	-0.9	-9.4386 ug/L	24.26959	-9.4386 ppb	24.26959	257.13%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	720.2	145.12 ug/L	7.710	145.12 ppb	7.710	5.31%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	-2.1	-80.369 ug/L	45.8906	-80.369 ppb	45.8906	57.10%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	-28.0	-0.0299 ug/L	0.02108	-0.0299 ppb	0.02108	70.46%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	9.8	0.7272 ug/L	0.77592	0.7272 ppb	0.77592	106.70%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	1855.9	619.07 ug/L	19.226	619.07 ppb	19.226	3.11%	
QC value greater than the upper limit for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	-13.8	-0.3546 ug/L	0.33528	-0.3546 ppb	0.33528	94.56%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	9.1	5.0007 ug/L	7.47168	5.0007 ppb	7.47168	149.41%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	11.1	1.3852 ug/L	2.47568	1.3852 ppb	2.47568	178.72%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	36.9	48.159 ug/L	7.8566	48.159 ppb	7.8566	16.31%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	2.1	0.7219 ug/L	2.06868	0.7219 ppb	2.06868	286.57%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	-2.4	-1.4231 ug/L	1.76417	-1.4231 ppb	1.76417	123.97%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	-21.8	-0.6887 ug/L	0.63252	-0.6887 ppb	0.63252	91.84%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	0.9	0.1635 ug/L	1.27398	0.1635 ppb	1.27398	779.11%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	-33.8	-0.2615 ug/L	0.26202	-0.2615 ppb	0.26202	100.18%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	22.1	0.0448 ug/L	0.07672	0.0448 ppb	0.07672	171.10%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	3.9	1.2369 ug/L	1.69468	1.2369 ppb	1.69468	137.01%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	80.4	2.2876 ug/L	3.27265	2.2876 ppb	3.27265	143.06%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	-2.7	-0.0048 ug/L	0.13144	-0.0048 ppb	0.13144	>999.9%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	62.0	0.6081 ug/L	0.05818	0.6081 ppb	0.05818	9.57%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	-5.7	-0.4027 ug/L	2.51856	-0.4027 ppb	2.51856	625.36%	
QC value within limits for SiO2 Recovery = Not calculated							
QC Failed. Continue with analysis.							

Sequence No.: 5

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/16/2010 16:07:22

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	4119.1	4119.1	96.9 %		16:09:15
1	Y RADIAL	4271.7	4271.7	97.03 %		16:09:15
1	Al 396.153Radial†	4686.0	4995.0	4973.3 ug/L	4973.3 ppb	16:09:15
1	Ca 317.933Radial†	2613.1	2678.4	4996.3 ug/L	4996.3 ppb	16:09:35
1	Fe 238.204 Radial†	479.7	485.0	5169.5 ug/L	5169.5 ppb	16:09:35
1	K 766.490 Radial†	27324.8	25027.6	5045.5 ug/L	5045.5 ppb	16:09:15
1	Mg 279.077 IEC†	127.5	128.9	4977.9 ug/L	4977.9 ppb	16:09:35
1	Na 589.592 Radial†	31698.4	32505.7	10843 ug/L	10843 ppb	16:09:15
1	Sr 421.552†	64050.8	66010.5	509.65 ug/L	509.65 ppb	16:09:15
1	Sc 361.383	827257.8	827257.8	97.323 %		16:10:32
1	Y 371.029	667757.4	667757.4	95.024 %		16:10:32
1	Ag 328.068†	100188.2	102715.9	496.42 ug/L	496.42 ppb	16:10:38
1	As 188.979†	1085.3	1143.4	485.44 ug/L	485.44 ppb	16:10:58
1	B 249.677†	20666.7	21717.0	508.67 ug/L	508.67 ppb	16:10:38
1	Ba 233.527†	59030.2	60634.8	493.56 ug/L	493.56 ppb	16:10:38
1	Be 313.107†	1296533.2	1336529.2	492.04 ug/L	492.04 ppb	16:10:32
1	Cd 226.502†	39917.3	41210.6	481.80 ug/L	481.80 ppb	16:10:38
1	Co 228.616†	22947.2	23657.2	493.39 ug/L	493.39 ppb	16:10:38
1	Cr 267.716†	40390.8	41351.9	481.68 ug/L	481.68 ppb	16:10:38
1	Cu 324.752†	165822.8	162289.1	496.88 ug/L	496.88 ppb	16:10:38
1	Mn 257.610†	419428.6	430393.8	496.72 ug/L	496.72 ppb	16:10:32
1	Mo 202.031†	6400.4	6566.0	488.35 ug/L	488.35 ppb	16:10:58
1	Ni 231.604†	18573.4	18970.7	485.62 ug/L	485.62 ppb	16:10:38
1	P 214.914†	4437.6	4317.7	2298.6 ug/L	2298.6 ppb	16:10:58
1	Pb 220.353†	3737.2	3913.6	486.40 ug/L	486.40 ppb	16:10:58
1	S 181.975 Axial†	800.7	779.8	1018.3 ug/L	1018.3 ppb	16:10:58
1	Sb 206.836†	1424.3	1427.8	500.64 ug/L	500.64 ppb	16:10:58
1	Se 196.026†	784.1	829.0	501.90 ug/L	501.90 ppb	16:10:58
1	Si 251.611†	77643.5	79166.5	2461.0 ug/L	2461.0 ppb	16:10:38
1	Sn 189.927†	2624.8	2684.4	482.19 ug/L	482.19 ppb	16:10:58
1	Ti 334.940†	295579.7	305201.6	495.92 ug/L	495.92 ppb	16:10:38
1	Tl 190.801†	1485.9	1565.8	497.62 ug/L	497.62 ppb	16:10:58
1	U 409.014†	13518.6	17405.5	492.78 ug/L	492.78 ppb	16:10:38
1	V 292.402†	63386.4	66806.9	490.35 ug/L	490.35 ppb	16:10:38
1	Zn 213.857†	49829.9	50512.5	488.45 ug/L	488.45 ppb	16:10:38
1	SiO2†	77818.7	79339.3	5276.5 ug/L	5276.5 ppb	16:12:05
2	Sc Radial	4154.1	4154.1	97.7 %		16:09:40
2	Y RADIAL	4247.3	4247.3	96.48 %		16:09:40
2	Al 396.153Radial†	4697.6	4966.0	4944.4 ug/L	4944.4 ppb	16:09:40
2	Ca 317.933Radial†	2631.6	2674.5	4989.0 ug/L	4989.0 ppb	16:10:00
2	Fe 238.204 Radial†	484.8	486.0	5179.8 ug/L	5179.8 ppb	16:10:00
2	K 766.490 Radial†	27449.9	24917.7	5023.4 ug/L	5023.4 ppb	16:09:40
2	Mg 279.077 IEC†	131.1	131.5	5078.0 ug/L	5078.0 ppb	16:10:00
2	Na 589.592 Radial†	31533.1	32060.5	10694 ug/L	10694 ppb	16:09:40
2	Sr 421.552†	64309.2	65717.4	507.39 ug/L	507.39 ppb	16:09:40
2	Sc 361.383	830990.2	830990.2	97.763 %		16:11:03
2	Y 371.029	670637.7	670637.7	95.433 %		16:11:03
2	Ag 328.068†	100018.5	102079.9	493.35 ug/L	493.35 ppb	16:11:09
2	As 188.979†	1086.0	1139.2	483.64 ug/L	483.64 ppb	16:11:29
2	B 249.677†	20552.9	21505.2	503.71 ug/L	503.71 ppb	16:11:09
2	Ba 233.527†	58819.8	60147.2	489.59 ug/L	489.59 ppb	16:11:09
2	Be 313.107†	1302367.4	1336513.5	492.03 ug/L	492.03 ppb	16:11:03
2	Cd 226.502†	39612.4	40714.5	475.99 ug/L	475.99 ppb	16:11:09
2	Co 228.616†	22759.5	23359.3	487.17 ug/L	487.17 ppb	16:11:09
2	Cr 267.716†	40208.3	40978.9	477.33 ug/L	477.33 ppb	16:11:09
2	Cu 324.752†	165946.7	161650.6	494.93 ug/L	494.93 ppb	16:11:09
2	Mn 257.610†	420638.5	429695.8	495.91 ug/L	495.91 ppb	16:11:03
2	Mo 202.031†	6392.2	6528.0	485.53 ug/L	485.53 ppb	16:11:29
2	Ni 231.604†	18431.6	18739.9	479.71 ug/L	479.71 ppb	16:11:09

2	P 214.914†	4408.9	4267.8	2271.3 ug/L	2271.3 ppb	16:11:29
2	Pb 220.353†	3691.6	3849.6	478.47 ug/L	478.47 ppb	16:11:29
2	S 181.975 Axial†	783.2	758.2	990.02 ug/L	990.02 ppb	16:11:29
2	Sb 206.836†	1430.5	1427.5	500.45 ug/L	500.45 ppb	16:11:29
2	Se 196.026†	793.3	834.8	505.29 ug/L	505.29 ppb	16:11:29
2	Si 251.611†	77587.8	78751.2	2448.1 ug/L	2448.1 ppb	16:11:09
2	Sn 189.927†	2617.3	2664.6	478.63 ug/L	478.63 ppb	16:11:29
2	Ti 334.940†	294884.9	303126.7	492.55 ug/L	492.55 ppb	16:11:09
2	Tl 190.801†	1483.7	1556.8	494.77 ug/L	494.77 ppb	16:11:29
2	U 409.014†	13409.9	17231.9	487.85 ug/L	487.85 ppb	16:11:09
2	V 292.402†	63123.6	66245.6	486.24 ug/L	486.24 ppb	16:11:09
2	Zn 213.857†	49546.1	49992.3	483.42 ug/L	483.42 ppb	16:11:09
2	SiO2†	78410.7	79585.7	5293.0 ug/L	5293.0 ppb	16:12:10
3	Sc Radial	4188.8	4188.8	98.5 %		16:10:05
3	Y RADIAL	4296.1	4296.1	97.59 %		16:10:05
3	Al 396.153Radial†	4745.1	4974.5	4953.2 ug/L	4953.2 ppb	16:10:05
3	Ca 317.933Radial†	2601.6	2621.8	4890.7 ug/L	4890.7 ppb	16:10:25
3	Fe 238.204 Radial†	480.7	477.8	5092.4 ug/L	5092.4 ppb	16:10:25
3	K 766.490 Radial†	27529.8	24766.3	4992.9 ug/L	4992.9 ppb	16:10:05
3	Mg 279.077 IEC†	128.0	127.2	4910.9 ug/L	4910.9 ppb	16:10:25
3	Na 589.592 Radial†	31899.3	32165.1	10729 ug/L	10729 ppb	16:10:05
3	Sr 421.552†	64585.6	65453.2	505.35 ug/L	505.35 ppb	16:10:05
3	Sc 361.383	841950.1	841950.1	99.052 %		16:11:34
3	Y 371.029	679956.6	679956.6	96.760 %		16:11:34
3	Ag 328.068†	100941.3	101679.8	491.40 ug/L	491.40 ppb	16:11:40
3	As 188.979†	1085.8	1124.5	477.45 ug/L	477.45 ppb	16:12:00
3	B 249.677†	20830.0	21511.3	503.86 ug/L	503.86 ppb	16:11:40
3	Ba 233.527†	59261.8	59810.2	486.85 ug/L	486.85 ppb	16:11:40
3	Be 313.107†	1319856.8	1336828.8	492.14 ug/L	492.14 ppb	16:11:34
3	Cd 226.502†	40065.8	40644.8	475.19 ug/L	475.19 ppb	16:11:40
3	Co 228.616†	23048.2	23347.7	486.92 ug/L	486.92 ppb	16:11:40
3	Cr 267.716†	40715.9	40955.9	477.06 ug/L	477.06 ppb	16:11:40
3	Cu 324.752†	167687.5	161198.4	493.54 ug/L	493.54 ppb	16:11:40
3	Mn 257.610†	425271.8	428772.5	494.84 ug/L	494.84 ppb	16:11:34
3	Mo 202.031†	6398.8	6449.6	479.69 ug/L	479.69 ppb	16:12:00
3	Ni 231.604†	18619.4	18684.1	478.28 ug/L	478.28 ppb	16:11:40
3	P 214.914†	4414.5	4214.7	2242.2 ug/L	2242.2 ppb	16:12:00
3	Pb 220.353†	3723.9	3833.1	476.41 ug/L	476.41 ppb	16:12:00
3	S 181.975 Axial†	795.1	759.8	992.08 ug/L	992.08 ppb	16:12:00
3	Sb 206.836†	1421.0	1399.0	490.58 ug/L	490.58 ppb	16:12:00
3	Se 196.026†	786.1	817.0	494.61 ug/L	494.61 ppb	16:12:00
3	Si 251.611†	78155.0	78290.7	2433.8 ug/L	2433.8 ppb	16:11:40
3	Sn 189.927†	2623.8	2636.3	473.55 ug/L	473.55 ppb	16:12:00
3	Ti 334.940†	297653.0	301994.8	490.71 ug/L	490.71 ppb	16:11:40
3	Tl 190.801†	1488.2	1541.5	489.93 ug/L	489.93 ppb	16:12:00
3	U 409.014†	13768.5	17415.4	493.08 ug/L	493.08 ppb	16:11:40
3	V 292.402†	63858.6	66147.1	485.47 ug/L	485.47 ppb	16:11:40
3	Zn 213.857†	50099.7	49891.4	482.46 ug/L	482.46 ppb	16:11:40
3	SiO2†	77306.5	77426.9	5149.2 ug/L	5149.2 ppb	16:12:15

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	833399.4	98.046 %	0.8984			0.92%
Sc Radial	4154.0	97.7 %	0.82			0.84%
Y 371.029	672783.9	95.739 %	0.9074			0.95%
Y RADIAL	4271.7	97.03 %	0.554			0.57%
Ag 328.068†	102158.5	493.72 ug/L	2.530	493.72 ppb	2.530	0.51%
QC value within limits for Ag 328.068 Recovery = 98.74%						
Al 396.153Radial†	4978.5	4957.0 ug/L	14.78	4957.0 ppb	14.78	0.30%
QC value within limits for Al 396.153Radial Recovery = 99.14%						
As 188.979†	1135.7	482.18 ug/L	4.189	482.18 ppb	4.189	0.87%
QC value within limits for As 188.979 Recovery = 96.44%						
B 249.677†	21577.8	505.41 ug/L	2.823	505.41 ppb	2.823	0.56%
QC value within limits for B 249.677 Recovery = 101.08%						
Ba 233.527†	60197.4	490.00 ug/L	3.373	490.00 ppb	3.373	0.69%
QC value within limits for Ba 233.527 Recovery = 98.00%						
Be 313.107†	1336623.8	492.07 ug/L	0.061	492.07 ppb	0.061	0.01%
QC value within limits for Be 313.107 Recovery = 98.41%						
Ca 317.933Radial†	2658.3	4958.7 ug/L	58.99	4958.7 ppb	58.99	1.19%

QC value within limits for Ca 317.933 Radial Recovery = 99.17%

Cd 226.502†	40856.6	477.66 ug/L	3.608	477.66 ppb	3.608	0.76%
QC value within limits for Cd 226.502 Recovery = 95.53%						
Co 228.616†	23454.7	489.16 ug/L	3.661	489.16 ppb	3.661	0.75%
QC value within limits for Co 228.616 Recovery = 97.83%						
Cr 267.716†	41095.6	478.69 ug/L	2.590	478.69 ppb	2.590	0.54%
QC value within limits for Cr 267.716 Recovery = 95.74%						
Cu 324.752†	161712.7	495.12 ug/L	1.680	495.12 ppb	1.680	0.34%
QC value within limits for Cu 324.752 Recovery = 99.02%						
Fe 238.204 Radial†	483.0	5147.2 ug/L	47.78	5147.2 ppb	47.78	0.93%
QC value within limits for Fe 238.204 Radial Recovery = 102.94%						
K 766.490 Radial†	24903.9	5020.6 ug/L	26.44	5020.6 ppb	26.44	0.53%
QC value within limits for K 766.490 Radial Recovery = 100.41%						
Mg 279.077 IEC†	129.2	4988.9 ug/L	84.10	4988.9 ppb	84.10	1.69%
QC value within limits for Mg 279.077 IEC Recovery = 99.78%						
Mn 257.610†	429620.7	495.82 ug/L	0.940	495.82 ppb	0.940	0.19%
QC value within limits for Mn 257.610 Recovery = 99.16%						
Mo 202.031†	6514.5	484.53 ug/L	4.417	484.53 ppb	4.417	0.91%
QC value within limits for Mo 202.031 Recovery = 96.91%						
Na 589.592 Radial†	32243.8	10755 ug/L	77.6	10755 ppb	77.6	0.72%
QC value within limits for Na 589.592 Radial Recovery = 107.55%						
Ni 231.604†	18798.2	481.21 ug/L	3.890	481.21 ppb	3.890	0.81%
QC value within limits for Ni 231.604 Recovery = 96.24%						
P 214.914†	4266.8	2270.7 ug/L	28.24	2270.7 ppb	28.24	1.24%
QC value within limits for P 214.914 Recovery = 90.83%						
Pb 220.353†	3865.4	480.43 ug/L	5.274	480.43 ppb	5.274	1.10%
QC value within limits for Pb 220.353 Recovery = 96.09%						
S 181.975 Axial†	765.9	1000.1 ug/L	15.75	1000.1 ppb	15.75	1.58%
QC value within limits for S 181.975 Axial Recovery = 100.01%						
Sb 206.836†	1418.1	497.22 ug/L	5.752	497.22 ppb	5.752	1.16%
QC value within limits for Sb 206.836 Recovery = 99.44%						
Se 196.026†	826.9	500.60 ug/L	5.460	500.60 ppb	5.460	1.09%
QC value within limits for Se 196.026 Recovery = 100.12%						
Si 251.611†	78736.1	2447.7 ug/L	13.60	2447.7 ppb	13.60	0.56%
QC value within limits for Si 251.611 Recovery = 97.91%						
Sn 189.927†	2661.8	478.12 ug/L	4.340	478.12 ppb	4.340	0.91%
QC value within limits for Sn 189.927 Recovery = 95.62%						
Sr 421.552†	65727.0	507.46 ug/L	2.152	507.46 ppb	2.152	0.42%
QC value within limits for Sr 421.552 Recovery = 101.49%						
Ti 334.940†	303441.0	493.06 ug/L	2.647	493.06 ppb	2.647	0.54%
QC value within limits for Ti 334.940 Recovery = 98.61%						
Tl 190.801†	1554.7	494.11 ug/L	3.887	494.11 ppb	3.887	0.79%
QC value within limits for Tl 190.801 Recovery = 98.82%						
U 409.014†	17351.0	491.24 ug/L	2.933	491.24 ppb	2.933	0.60%
QC value within limits for U 409.014 Recovery = 98.25%						
V 292.402†	66399.9	487.35 ug/L	2.625	487.35 ppb	2.625	0.54%
QC value within limits for V 292.402 Recovery = 97.47%						
Zn 213.857†	50132.1	484.78 ug/L	3.222	484.78 ppb	3.222	0.66%
QC value within limits for Zn 213.857 Recovery = 96.96%						
SiO2†	78784.0	5239.6 ug/L	78.68	5239.6 ppb	78.68	1.50%
QC value within limits for SiO2 Recovery = 97.98%						

All analyte(s) passed QC.

Sequence No.: 6
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 2/16/2010 16:14:25
 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	4281.6	4281.6	101 %		16:16:18
1	Y RADIAL	4415.3	4415.3	100.3 %		16:16:18
1	Al 396.153Radial†	-131.8	28.2	28.180 ug/L	28.180 ppb	16:16:38
1	Ca 317.933Radial†	39.0	20.4	38.028 ug/L	38.028 ppb	16:16:38
1	Fe 238.204 Radial†	8.6	-1.5	-16.347 ug/L	-16.347 ppb	16:16:38
1	K 766.490 Radial†	3656.8	458.9	92.379 ug/L	92.379 ppb	16:16:18
1	Mg 279.077 IEC†	1.7	-1.1	-41.081 ug/L	-41.081 ppb	16:16:38
1	Na 589.592 Radial†	2157.0	1934.5	645.26 ug/L	645.26 ppb	16:16:18
1	Sr 421.552†	145.3	54.4	0.4199 ug/L	0.4199 ppb	16:16:18
1	Sc 361.383	819219.6	819219.6	96.378 %		16:17:35
1	Y 371.029	669576.7	669576.7	95.282 %		16:17:35
1	Ag 328.068†	146.3	-75.9	-0.3718 ug/L	-0.3718 ppb	16:17:35
1	As 188.979†	-26.1	1.3	0.5213 ug/L	0.5213 ppb	16:17:55
1	B 249.677†	424.8	922.6	21.709 ug/L	21.709 ppb	16:17:35
1	Ba 233.527†	53.3	36.5	0.2968 ug/L	0.2968 ppb	16:17:55
1	Be 313.107†	-4379.1	-204.5	-0.0751 ug/L	-0.0751 ppb	16:17:35
1	Cd 226.502†	-185.1	3.5	0.0433 ug/L	0.0433 ppb	16:17:55
1	Co 228.616†	-80.3	-4.4	-0.0893 ug/L	-0.0893 ppb	16:17:55
1	Cr 267.716†	118.7	-26.6	-0.3104 ug/L	-0.3104 ppb	16:17:55
1	Cu 324.752†	7838.8	39.3	0.1174 ug/L	0.1174 ppb	16:17:35
1	Mn 257.610†	979.5	446.6	0.5151 ug/L	0.5151 ppb	16:17:55
1	Mo 202.031†	22.3	12.7	0.9420 ug/L	0.9420 ppb	16:17:55
1	Ni 231.604†	120.8	11.8	0.3031 ug/L	0.3031 ppb	16:17:55
1	P 214.914†	232.5	-0.7	-0.3697 ug/L	-0.3697 ppb	16:17:55
1	Pb 220.353†	-56.9	14.6	1.8144 ug/L	1.8144 ppb	16:17:55
1	S 181.975 Axial†	89.1	49.6	64.779 ug/L	64.779 ppb	16:17:55
1	Sb 206.836†	46.2	12.3	4.2061 ug/L	4.2061 ppb	16:17:55
1	Se 196.026†	-26.6	-4.3	-2.5324 ug/L	-2.5324 ppb	16:17:55
1	Si 251.611†	786.0	203.2	6.3202 ug/L	6.3202 ppb	16:17:55
1	Sn 189.927†	23.2	11.5	2.0610 ug/L	2.0610 ppb	16:17:55
1	Ti 334.940†	-1440.8	-2.1	0.0034 ug/L	0.0034 ppb	16:17:35
1	Tl 190.801†	-42.2	-4.7	-1.4798 ug/L	-1.4798 ppb	16:17:55
1	U 409.014†	-3253.5	139.4	3.9623 ug/L	3.9623 ppb	16:17:35
1	V 292.402†	-1552.1	66.9	0.5068 ug/L	0.5068 ppb	16:17:35
1	Zn 213.857†	764.8	105.8	1.0326 ug/L	1.0326 ppb	16:17:55
1	SiO2†	836.7	248.6	16.548 ug/L	16.548 ppb	16:18:51
2	Sc Radial	4278.2	4278.2	101 %		16:16:43
2	Y RADIAL	4418.0	4418.0	100.4 %		16:16:43
2	Al 396.153Radial†	-115.5	44.3	44.257 ug/L	44.257 ppb	16:17:03
2	Ca 317.933Radial†	42.9	24.3	45.297 ug/L	45.297 ppb	16:17:03
2	Fe 238.204 Radial†	12.2	2.1	22.178 ug/L	22.178 ppb	16:17:03
2	K 766.490 Radial†	3639.4	444.6	89.509 ug/L	89.509 ppb	16:16:43
2	Mg 279.077 IEC†	0.9	-1.8	-70.912 ug/L	-70.912 ppb	16:17:03
2	Na 589.592 Radial†	2003.1	1783.3	594.83 ug/L	594.83 ppb	16:16:43
2	Sr 421.552†	145.6	54.9	0.4235 ug/L	0.4235 ppb	16:16:43
2	Sc 361.383	824051.0	824051.0	96.946 %		16:18:00
2	Y 371.029	673225.9	673225.9	95.802 %		16:18:00
2	Ag 328.068†	214.2	-6.8	-0.0295 ug/L	-0.0295 ppb	16:18:00
2	As 188.979†	-30.5	-3.1	-1.3154 ug/L	-1.3154 ppb	16:18:21
2	B 249.677†	363.6	857.0	20.157 ug/L	20.157 ppb	16:18:00
2	Ba 233.527†	15.6	-2.7	-0.0206 ug/L	-0.0206 ppb	16:18:21
2	Be 313.107†	-4350.8	-148.7	-0.0542 ug/L	-0.0542 ppb	16:18:00
2	Cd 226.502†	-189.5	0.1	-0.0004 ug/L	-0.0004 ppb	16:18:21
2	Co 228.616†	-63.7	13.2	0.2763 ug/L	0.2763 ppb	16:18:21
2	Cr 267.716†	119.0	-27.0	-0.3156 ug/L	-0.3156 ppb	16:18:21
2	Cu 324.752†	8048.0	207.5	0.6328 ug/L	0.6328 ppb	16:18:00
2	Mn 257.610†	613.5	63.1	0.0779 ug/L	0.0779 ppb	16:18:21
2	Mo 202.031†	20.5	10.7	0.7997 ug/L	0.7997 ppb	16:18:21
2	Ni 231.604†	107.9	-2.2	-0.0576 ug/L	-0.0576 ppb	16:18:21

2	P 214.914†	240.0	5.6	2.9623 ug/L	2.9623 ppb	16:18:21
2	Pb 220.353†	-55.1	16.7	2.0762 ug/L	2.0762 ppb	16:18:21
2	S 181.975 Axial†	139.4	100.9	131.82 ug/L	131.82 ppb	16:18:21
2	Sb 206.836†	40.9	6.5	2.2058 ug/L	2.2058 ppb	16:18:21
2	Se 196.026†	-22.9	-0.3	-0.0877 ug/L	-0.0877 ppb	16:18:21
2	Si 251.611†	710.1	120.1	3.7342 ug/L	3.7342 ppb	16:18:21
2	Sn 189.927†	8.0	-4.3	-0.7719 ug/L	-0.7719 ppb	16:18:21
2	Ti 334.940†	-1334.5	116.3	0.1983 ug/L	0.1983 ppb	16:18:00
2	Tl 190.801†	-34.6	3.4	1.0828 ug/L	1.0828 ppb	16:18:21
2	U 409.014†	-3190.7	224.0	6.3613 ug/L	6.3613 ppb	16:18:00
2	V 292.402†	-1585.4	42.0	0.3228 ug/L	0.3228 ppb	16:18:00
2	Zn 213.857†	743.4	79.1	0.7682 ug/L	0.7682 ppb	16:18:21
2	SiO2†	719.6	122.7	8.1621 ug/L	8.1621 ppb	16:18:56
3	Sc Radial	4273.3	4273.3	101 %		16:17:08
3	Y RADIAL	4394.4	4394.4	99.82 %		16:17:08
3	Al 396.153Radial†	-125.8	33.9	33.906 ug/L	33.906 ppb	16:17:28
3	Ca 317.933Radial†	40.4	21.9	40.801 ug/L	40.801 ppb	16:17:28
3	Fe 238.204 Radial†	8.5	-1.6	-16.556 ug/L	-16.556 ppb	16:17:28
3	K 766.490 Radial†	3679.8	489.0	98.449 ug/L	98.449 ppb	16:17:08
3	Mg 279.077 IEC†	4.1	1.3	51.443 ug/L	51.443 ppb	16:17:28
3	Na 589.592 Radial†	2055.3	1837.5	612.92 ug/L	612.92 ppb	16:17:08
3	Sr 421.552†	59.6	-30.6	-0.2363 ug/L	-0.2363 ppb	16:17:08
3	Sc 361.383	816971.0	816971.0	96.113 %		16:18:26
3	Y 371.029	668534.0	668534.0	95.134 %		16:18:26
3	Ag 328.068†	309.5	94.4	0.4429 ug/L	0.4429 ppb	16:18:26
3	As 188.979†	-24.2	3.1	1.3085 ug/L	1.3085 ppb	16:18:46
3	B 249.677†	290.5	784.1	18.450 ug/L	18.450 ppb	16:18:26
3	Ba 233.527†	11.7	-6.7	-0.0550 ug/L	-0.0550 ppb	16:18:46
3	Be 313.107†	-4268.5	-102.0	-0.0375 ug/L	-0.0375 ppb	16:18:26
3	Cd 226.502†	-200.2	-12.8	-0.1467 ug/L	-0.1467 ppb	16:18:46
3	Co 228.616†	-64.5	11.8	0.2479 ug/L	0.2479 ppb	16:18:46
3	Cr 267.716†	101.8	-43.8	-0.5116 ug/L	-0.5116 ppb	16:18:46
3	Cu 324.752†	7931.5	158.1	0.4810 ug/L	0.4810 ppb	16:18:26
3	Mn 257.610†	557.0	9.7	0.0075 ug/L	0.0075 ppb	16:18:46
3	Mo 202.031†	17.1	7.4	0.5467 ug/L	0.5467 ppb	16:18:46
3	Ni 231.604†	121.3	12.7	0.3241 ug/L	0.3241 ppb	16:18:46
3	P 214.914†	224.5	-8.4	-4.7398 ug/L	-4.7398 ppb	16:18:46
3	Pb 220.353†	-52.8	18.7	2.3229 ug/L	2.3229 ppb	16:18:46
3	S 181.975 Axial†	72.8	32.8	42.877 ug/L	42.877 ppb	16:18:46
3	Sb 206.836†	35.6	1.4	0.4486 ug/L	0.4486 ppb	16:18:46
3	Se 196.026†	-22.5	-0.1	-0.0839 ug/L	-0.0839 ppb	16:18:46
3	Si 251.611†	713.6	130.1	4.0480 ug/L	4.0480 ppb	16:18:46
3	Sn 189.927†	4.4	-8.0	-1.4313 ug/L	-1.4313 ppb	16:18:46
3	Ti 334.940†	-1453.8	-19.7	-0.0323 ug/L	-0.0323 ppb	16:18:26
3	Tl 190.801†	-30.9	6.9	2.1858 ug/L	2.1858 ppb	16:18:46
3	U 409.014†	-3243.1	140.9	4.0053 ug/L	4.0053 ppb	16:18:26
3	V 292.402†	-1636.7	-25.6	-0.1666 ug/L	-0.1666 ppb	16:18:26
3	Zn 213.857†	710.9	51.9	0.5060 ug/L	0.5060 ppb	16:18:46
3	SiO2†	823.5	237.3	15.805 ug/L	15.805 ppb	16:19:01

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	820080.5	96.479 %	0.4256			0.44%
Sc Radial	4277.7	101 %	0.1			0.10%
Y 371.029	670445.5	95.406 %	0.3506			0.37%
Y RADIAL	4409.2	100.2 %	0.29			0.29%
Ag 328.068†	3.9	0.0138 ug/L	0.40908	0.0138 ppb	0.40908	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	35.5	35.448 ug/L	8.1490	35.448 ppb	8.1490	22.99%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	0.4	0.1715 ug/L	1.34650	0.1715 ppb	1.34650	785.31%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	854.6	20.105 ug/L	1.6301	20.105 ppb	1.6301	8.11%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	9.0	0.0737 ug/L	0.19395	0.0737 ppb	0.19395	263.14%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-151.7	-0.0556 ug/L	0.01884	-0.0556 ppb	0.01884	33.87%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	22.2	41.375 ug/L	3.6684	41.375 ppb	3.6684	8.87%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	-3.1	-0.0346 ug/L	0.09948	-0.0346 ppb	0.09948	287.34%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	6.9	0.1449 ug/L	0.20336	0.1449 ppb	0.20336	140.31%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-32.4	-0.3792 ug/L	0.11466	-0.3792 ppb	0.11466	30.24%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	135.0	0.4104 ug/L	0.26488	0.4104 ppb	0.26488	64.54%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	-0.3	-3.5748 ug/L	22.30274	-3.5748 ppb	22.30274	623.89%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	464.2	93.446 ug/L	4.5647	93.446 ppb	4.5647	4.88%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	-0.5	-20.183 ug/L	63.7983	-20.183 ppb	63.7983	316.09%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	173.1	0.2002 ug/L	0.27502	0.2002 ppb	0.27502	137.41%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	10.3	0.7628 ug/L	0.20022	0.7628 ppb	0.20022	26.25%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	1851.7	617.67 ug/L	25.550	617.67 ppb	25.550	4.14%
QC value greater than the upper limit for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	7.4	0.1899 ug/L	0.21454	0.1899 ppb	0.21454	112.99%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-1.2	-0.7157 ug/L	3.86270	-0.7157 ppb	3.86270	539.69%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	16.6	2.0712 ug/L	0.25427	2.0712 ppb	0.25427	12.28%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	61.1	79.827 ug/L	46.3438	79.827 ppb	46.3438	58.06%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	6.7	2.2868 ug/L	1.88008	2.2868 ppb	1.88008	82.21%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-1.5	-0.9013 ug/L	1.41258	-0.9013 ppb	1.41258	156.72%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	151.1	4.7008 ug/L	1.41120	4.7008 ppb	1.41120	30.02%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	-0.3	-0.0474 ug/L	1.85547	-0.0474 ppb	1.85547	>999.9%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	26.2	0.2024 ug/L	0.37990	0.2024 ppb	0.37990	187.74%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	31.5	0.0565 ug/L	0.12408	0.0565 ppb	0.12408	219.74%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	1.9	0.5963 ug/L	1.88065	0.5963 ppb	1.88065	315.40%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	168.1	4.7763 ug/L	1.37282	4.7763 ppb	1.37282	28.74%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	27.7	0.2210 ug/L	0.34804	0.2210 ppb	0.34804	157.49%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	78.9	0.7690 ug/L	0.26333	0.7690 ppb	0.26333	34.25%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	202.9	13.505 ug/L	4.6418	13.505 ppb	4.6418	34.37%
QC value within limits for SiO2 Recovery = Not calculated						
QC Failed. Continue with analysis.						

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Analysis Begun

Start Time: 2/16/2010 16:40:44

Plasma On Time: 2/15/2010 05:50:42

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\021610.sif

Batch ID:

Results Data Set: 021610

Results Library: C:\pe\Optima3\Results\Results.mdb
=====

Sequence No.: 1

Autosampler Location: 1

Sample ID: CCV

Date Collected: 2/16/2010 16:40:45

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:
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Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4180.9	4180.9	98.4 %		16:42:37
1	Y RADIAL	4302.4	4302.4	97.73 %		16:42:37
1	Al 396.153Radial†	4732.5	4970.8	4949.1 ug/L	4949.1 ppb	16:42:37
1	Ca 317.933Radial†	2588.5	2613.4	4875.1 ug/L	4875.1 ppb	16:42:57
1	Fe 238.204 Radial†	479.3	477.3	5086.8 ug/L	5086.8 ppb	16:42:57
1	K 766.490 Radial†	27320.8	24606.3	4960.6 ug/L	4960.6 ppb	16:42:37
1	Mg 279.077 IEC†	130.6	130.1	5022.7 ug/L	5022.7 ppb	16:42:57
1	Na 589.592 Radial†	31557.5	31878.4	10633 ug/L	10633 ppb	16:42:37
1	Sr 421.552†	64679.4	65671.7	507.03 ug/L	507.03 ppb	16:42:37
1	Sc 361.383	834359.6	834359.6	98.159 %		16:43:56
1	Y 371.029	673546.0	673546.0	95.847 %		16:43:56
1	Ag 328.068†	99853.4	101498.6	490.54 ug/L	490.54 ppb	16:43:56
1	As 188.979†	1092.7	1141.5	484.67 ug/L	484.67 ppb	16:44:16
1	B 249.677†	20446.2	21311.6	499.17 ug/L	499.17 ppb	16:43:56
1	Ba 233.527†	58930.1	60016.5	488.52 ug/L	488.52 ppb	16:43:56
1	Be 313.107†	1303541.7	1332329.9	490.51 ug/L	490.51 ppb	16:43:56
1	Cd 226.502†	39218.0	40149.0	469.39 ug/L	469.39 ppb	16:44:16
1	Co 228.616†	22717.1	23222.0	484.29 ug/L	484.29 ppb	16:44:16
1	Cr 267.716†	40255.2	40860.5	475.96 ug/L	475.96 ppb	16:43:56
1	Cu 324.752†	167151.4	162192.3	496.59 ug/L	496.59 ppb	16:43:56
1	Mn 257.610†	420299.5	427612.9	493.50 ug/L	493.50 ppb	16:43:56
1	Mo 202.031†	6434.3	6544.5	486.75 ug/L	486.75 ppb	16:44:16
1	Ni 231.604†	18435.2	18667.4	477.86 ug/L	477.86 ppb	16:44:16
1	P 214.914†	4443.0	4284.4	2280.2 ug/L	2280.2 ppb	16:44:16
1	Pb 220.353†	3736.4	3880.0	482.24 ug/L	482.24 ppb	16:44:16
1	S 181.975 Axial†	786.4	758.2	990.02 ug/L	990.02 ppb	16:44:16
1	Sb 206.836†	1428.8	1419.9	497.85 ug/L	497.85 ppb	16:44:16
1	Se 196.026†	791.9	830.0	502.22 ug/L	502.22 ppb	16:44:16
1	Si 251.611†	77647.3	78491.3	2440.0 ug/L	2440.0 ppb	16:43:56
1	Sn 189.927†	2627.7	2664.4	478.57 ug/L	478.57 ppb	16:44:16
1	Ti 334.940†	302298.3	309461.0	502.84 ug/L	502.84 ppb	16:43:56
1	Tl 190.801†	1497.5	1564.7	497.34 ug/L	497.34 ppb	16:44:16
1	U 409.014†	13003.2	16762.2	474.52 ug/L	474.52 ppb	16:43:56
1	V 292.402†	63221.0	66084.1	485.07 ug/L	485.07 ppb	16:43:56
1	Zn 213.857†	49792.0	50038.2	483.89 ug/L	483.89 ppb	16:43:56
1	SiO2†	76576.2	77392.9	5146.8 ug/L	5146.8 ppb	16:45:16
2	Sc Radial	4131.4	4131.4	97.2 %		16:43:02
2	Y RADIAL	4303.2	4303.2	97.75 %		16:43:02
2	Al 396.153Radial†	4669.6	4963.7	4942.2 ug/L	4942.2 ppb	16:43:02
2	Ca 317.933Radial†	2600.5	2657.4	4957.1 ug/L	4957.1 ppb	16:43:22
2	Fe 238.204 Radial†	476.8	480.5	5120.9 ug/L	5120.9 ppb	16:43:22
2	K 766.490 Radial†	27176.0	24790.6	4997.8 ug/L	4997.8 ppb	16:43:02
2	Mg 279.077 IEC†	129.6	130.7	5047.1 ug/L	5047.1 ppb	16:43:22
2	Na 589.592 Radial†	31311.3	32010.0	10677 ug/L	10677 ppb	16:43:02
2	Sr 421.552†	64163.4	65929.8	509.03 ug/L	509.03 ppb	16:43:02
2	Sc 361.383	837219.5	837219.5	98.495 %		16:44:23
2	Y 371.029	674828.3	674828.3	96.030 %		16:44:23

2	Ag 328.068†	100293.9	101598.3	491.03 ug/L	491.03 ppb	16:44:23
2	As 188.979†	1090.5	1135.5	482.16 ug/L	482.16 ppb	16:44:43
2	B 249.677†	20630.6	21427.7	501.91 ug/L	501.91 ppb	16:44:23
2	Ba 233.527†	59149.2	60033.9	488.67 ug/L	488.67 ppb	16:44:23
2	Be 313.107†	1307109.5	1331415.9	490.18 ug/L	490.18 ppb	16:44:23
2	Cd 226.502†	39076.9	39869.4	466.11 ug/L	466.11 ppb	16:44:43
2	Co 228.616†	22663.4	23088.4	481.50 ug/L	481.50 ppb	16:44:43
2	Cr 267.716†	40364.6	40831.6	475.63 ug/L	475.63 ppb	16:44:23
2	Cu 324.752†	168107.8	162581.7	497.79 ug/L	497.79 ppb	16:44:23
2	Mn 257.610†	422119.0	427997.5	493.94 ug/L	493.94 ppb	16:44:23
2	Mo 202.031†	6417.5	6505.1	483.82 ug/L	483.82 ppb	16:44:43
2	Ni 231.604†	18346.3	18513.0	473.91 ug/L	473.91 ppb	16:44:43
2	P 214.914†	4426.9	4252.5	2262.3 ug/L	2262.3 ppb	16:44:43
2	Pb 220.353†	3742.4	3873.2	481.38 ug/L	481.38 ppb	16:44:43
2	S 181.975 Axial†	793.5	762.7	995.88 ug/L	995.88 ppb	16:44:43
2	Sb 206.836†	1415.4	1401.3	491.46 ug/L	491.46 ppb	16:44:43
2	Se 196.026†	796.3	831.8	503.34 ug/L	503.34 ppb	16:44:43
2	Si 251.611†	77927.8	78505.9	2440.5 ug/L	2440.5 ppb	16:44:23
2	Sn 189.927†	2627.2	2654.7	476.85 ug/L	476.85 ppb	16:44:43
2	Ti 334.940†	303434.0	309562.2	503.01 ug/L	503.01 ppb	16:44:23
2	Tl 190.801†	1475.6	1537.2	488.69 ug/L	488.69 ppb	16:44:43
2	U 409.014†	12967.5	16680.7	472.21 ug/L	472.21 ppb	16:44:23
2	V 292.402†	63493.1	66140.3	485.42 ug/L	485.42 ppb	16:44:23
2	Zn 213.857†	49956.9	50032.3	483.85 ug/L	483.85 ppb	16:44:23
2	SiO2†	78033.2	78605.7	5227.7 ug/L	5227.7 ppb	16:45:21
3	Sc Radial	4145.8	4145.8	97.5 %		16:43:27
3	Y RADIAL	4268.6	4268.6	96.97 %		16:43:27
3	Al 396.153Radial†	4672.0	4949.5	4927.9 ug/L	4927.9 ppb	16:43:27
3	Ca 317.933Radial†	2607.2	2655.0	4952.5 ug/L	4952.5 ppb	16:43:47
3	Fe 238.204 Radial†	474.7	476.7	5080.5 ug/L	5080.5 ppb	16:43:47
3	K 766.490 Radial†	27047.5	24561.8	4951.6 ug/L	4951.6 ppb	16:43:27
3	Mg 279.077 IEC†	129.6	130.1	5025.6 ug/L	5025.6 ppb	16:43:47
3	Na 589.592 Radial†	31122.2	31704.4	10575 ug/L	10575 ppb	16:43:27
3	Sr 421.552†	63965.5	65497.8	505.69 ug/L	505.69 ppb	16:43:27
3	Sc 361.383	833075.2	833075.2	98.008 %		16:44:50
3	Y 371.029	670955.9	670955.9	95.479 %		16:44:50
3	Ag 328.068†	99748.4	101548.2	490.78 ug/L	490.78 ppb	16:44:50
3	As 188.979†	1079.4	1129.6	479.68 ug/L	479.68 ppb	16:45:11
3	B 249.677†	20437.1	21334.4	499.72 ug/L	499.72 ppb	16:44:50
3	Ba 233.527†	58855.1	60032.5	488.65 ug/L	488.65 ppb	16:44:50
3	Be 313.107†	1296919.3	1327620.3	488.78 ug/L	488.78 ppb	16:44:50
3	Cd 226.502†	39003.4	39991.7	467.55 ug/L	467.55 ppb	16:45:11
3	Co 228.616†	22636.4	23175.4	483.32 ug/L	483.32 ppb	16:45:11
3	Cr 267.716†	40152.2	40818.7	475.47 ug/L	475.47 ppb	16:44:50
3	Cu 324.752†	166968.5	162268.3	496.82 ug/L	496.82 ppb	16:44:50
3	Mn 257.610†	419920.4	427886.2	493.81 ug/L	493.81 ppb	16:44:50
3	Mo 202.031†	6402.6	6522.3	485.10 ug/L	485.10 ppb	16:45:11
3	Ni 231.604†	18360.6	18620.3	476.65 ug/L	476.65 ppb	16:45:11
3	P 214.914†	4426.6	4274.6	2274.8 ug/L	2274.8 ppb	16:45:11
3	Pb 220.353†	3727.5	3876.8	481.83 ug/L	481.83 ppb	16:45:11
3	S 181.975 Axial†	784.3	757.3	988.88 ug/L	988.88 ppb	16:45:11
3	Sb 206.836†	1412.1	1405.1	492.79 ug/L	492.79 ppb	16:45:11
3	Se 196.026†	789.2	828.6	501.37 ug/L	501.37 ppb	16:45:11
3	Si 251.611†	77417.2	78378.6	2436.5 ug/L	2436.5 ppb	16:44:50
3	Sn 189.927†	2616.7	2657.3	477.32 ug/L	477.32 ppb	16:45:11
3	Ti 334.940†	301814.6	309442.4	502.82 ug/L	502.82 ppb	16:44:50
3	Tl 190.801†	1489.7	1559.1	495.58 ug/L	495.58 ppb	16:45:11
3	U 409.014†	12931.0	16709.1	473.02 ug/L	473.02 ppb	16:44:50
3	V 292.402†	63209.7	66171.8	485.68 ug/L	485.68 ppb	16:44:50
3	Zn 213.857†	49673.7	49995.6	483.48 ug/L	483.48 ppb	16:44:50
3	SiO2†	77388.4	78341.9	5210.1 ug/L	5210.1 ppb	16:45:26

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	834884.8	98.221 %	0.2496			0.25%
Sc Radial	4152.7	97.7 %	0.60			0.61%
Y 371.029	673110.1	95.785 %	0.2807			0.29%
Y RADIAL	4291.4	97.48 %	0.448			0.46%
Ag 328.068†	101548.4	490.78 ug/L	0.246	490.78 ppb	0.246	0.05%

QC value within limits for Ag 328.068 Recovery = 98.16%						
Al 396.153Radial†	4961.3	4939.7 ug/L	10.82	4939.7 ppb	10.82	0.22%
QC value within limits for Al 396.153Radial Recovery = 98.79%						
As 188.979†	1135.5	482.17 ug/L	2.491	482.17 ppb	2.491	0.52%
QC value within limits for As 188.979 Recovery = 96.43%						
B 249.677†	21357.9	500.27 ug/L	1.447	500.27 ppb	1.447	0.29%
QC value within limits for B 249.677 Recovery = 100.05%						
Ba 233.527†	60027.6	488.62 ug/L	0.079	488.62 ppb	0.079	0.02%
QC value within limits for Ba 233.527 Recovery = 97.72%						
Be 313.107†	1330455.4	489.83 ug/L	0.917	489.83 ppb	0.917	0.19%
QC value within limits for Be 313.107 Recovery = 97.97%						
Ca 317.933Radial†	2641.9	4928.2 ug/L	46.10	4928.2 ppb	46.10	0.94%
QC value within limits for Ca 317.933Radial Recovery = 98.56%						
Cd 226.502†	40003.4	467.68 ug/L	1.643	467.68 ppb	1.643	0.35%
QC value within limits for Cd 226.502 Recovery = 93.54%						
Co 228.616†	23162.0	483.04 ug/L	1.418	483.04 ppb	1.418	0.29%
QC value within limits for Co 228.616 Recovery = 96.61%						
Cr 267.716†	40836.9	475.69 ug/L	0.248	475.69 ppb	0.248	0.05%
QC value within limits for Cr 267.716 Recovery = 95.14%						
Cu 324.752†	162347.5	497.07 ug/L	0.634	497.07 ppb	0.634	0.13%
QC value within limits for Cu 324.752 Recovery = 99.41%						
Fe 238.204 Radial†	478.2	5096.0 ug/L	21.72	5096.0 ppb	21.72	0.43%
QC value within limits for Fe 238.204 Radial Recovery = 101.92%						
K 766.490 Radial†	24652.9	4970.0 ug/L	24.46	4970.0 ppb	24.46	0.49%
QC value within limits for K 766.490 Radial Recovery = 99.40%						
Mg 279.077 IEC†	130.3	5031.8 ug/L	13.31	5031.8 ppb	13.31	0.26%
QC value within limits for Mg 279.077 IEC Recovery = 100.64%						
Mn 257.610†	427832.2	493.75 ug/L	0.229	493.75 ppb	0.229	0.05%
QC value within limits for Mn 257.610 Recovery = 98.75%						
Mo 202.031†	6523.9	485.22 ug/L	1.467	485.22 ppb	1.467	0.30%
QC value within limits for Mo 202.031 Recovery = 97.04%						
Na 589.592 Radial†	31864.3	10629 ug/L	51.1	10629 ppb	51.1	0.48%
QC value within limits for Na 589.592 Radial Recovery = 106.29%						
Ni 231.604†	18600.3	476.14 ug/L	2.026	476.14 ppb	2.026	0.43%
QC value within limits for Ni 231.604 Recovery = 95.23%						
P 214.914†	4270.5	2272.4 ug/L	9.21	2272.4 ppb	9.21	0.41%
QC value within limits for P 214.914 Recovery = 90.90%						
Pb 220.353†	3876.7	481.82 ug/L	0.431	481.82 ppb	0.431	0.09%
QC value within limits for Pb 220.353 Recovery = 96.36%						
S 181.975 Axial†	759.4	991.59 ug/L	3.755	991.59 ppb	3.755	0.38%
QC value within limits for S 181.975 Axial Recovery = 99.16%						
Sb 206.836†	1408.8	494.03 ug/L	3.370	494.03 ppb	3.370	0.68%
QC value within limits for Sb 206.836 Recovery = 98.81%						
Se 196.026†	830.1	502.31 ug/L	0.988	502.31 ppb	0.988	0.20%
QC value within limits for Se 196.026 Recovery = 100.46%						
Si 251.611†	78458.6	2439.0 ug/L	2.17	2439.0 ppb	2.17	0.09%
QC value within limits for Si 251.611 Recovery = 97.56%						
Sn 189.927†	2658.8	477.58 ug/L	0.891	477.58 ppb	0.891	0.19%
QC value within limits for Sn 189.927 Recovery = 95.52%						
Sr 421.552†	65699.8	507.25 ug/L	1.678	507.25 ppb	1.678	0.33%
QC value within limits for Sr 421.552 Recovery = 101.45%						
Ti 334.940†	309488.5	502.89 ug/L	0.107	502.89 ppb	0.107	0.02%
QC value within limits for Ti 334.940 Recovery = 100.58%						
Tl 190.801†	1553.6	493.87 ug/L	4.570	493.87 ppb	4.570	0.93%
QC value within limits for Tl 190.801 Recovery = 98.77%						
U 409.014†	16717.3	473.25 ug/L	1.176	473.25 ppb	1.176	0.25%
QC value within limits for U 409.014 Recovery = 94.65%						
V 292.402†	66132.1	485.39 ug/L	0.307	485.39 ppb	0.307	0.06%
QC value within limits for V 292.402 Recovery = 97.08%						
Zn 213.857†	50022.0	483.74 ug/L	0.224	483.74 ppb	0.224	0.05%
QC value within limits for Zn 213.857 Recovery = 96.75%						
SiO2†	78113.5	5194.9 ug/L	42.57	5194.9 ppb	42.57	0.82%
QC value within limits for SiO2 Recovery = 97.15%						
All analyte(s) passed QC.						

Sequence No.: 2

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Data Collected: 2/16/2010 16:47:36

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	4240.9	4240.9	99.8 %		16:49:28
1	Y RADIAL	4402.2	4402.2	100.00 %		16:49:28
1	Al 396.153Radial†	-119.2	39.5	39.495 ug/L	39.495 ppb	16:49:48
1	Ca 317.933Radial†	27.2	8.9	16.603 ug/L	16.603 ppb	16:49:48
1	Fe 238.204 Radial†	10.9	0.9	9.4012 ug/L	9.4012 ppb	16:49:48
1	K 766.490 Radial†	3573.8	410.7	82.722 ug/L	82.722 ppb	16:49:28
1	Mg 279.077 IEC†	3.0	0.3	12.598 ug/L	12.598 ppb	16:49:48
1	Na 589.592 Radial†	1540.3	1336.9	445.93 ug/L	445.93 ppb	16:49:28
1	Sr 421.552†	99.6	10.0	0.0775 ug/L	0.0775 ppb	16:49:28
1	Sc 361.383	820213.7	820213.7	96.495 %		16:50:45
1	Y 371.029	671016.5	671016.5	95.487 %		16:50:45
1	Ag 328.068†	192.3	-28.4	-0.1359 ug/L	-0.1359 ppb	16:50:45
1	As 188.979†	-28.2	-0.9	-0.3948 ug/L	-0.3948 ppb	16:51:05
1	B 249.677†	227.9	718.1	16.893 ug/L	16.893 ppb	16:50:45
1	Ba 233.527†	3.7	-15.0	-0.1213 ug/L	-0.1213 ppb	16:51:05
1	Be 313.107†	-4294.6	-111.5	-0.0407 ug/L	-0.0407 ppb	16:50:45
1	Cd 226.502†	-208.1	-20.1	-0.2360 ug/L	-0.2360 ppb	16:51:05
1	Co 228.616†	-80.6	-4.6	-0.0943 ug/L	-0.0943 ppb	16:51:05
1	Cr 267.716†	86.0	-60.5	-0.7052 ug/L	-0.7052 ppb	16:51:05
1	Cu 324.752†	7789.3	-21.9	-0.0684 ug/L	-0.0684 ppb	16:50:45
1	Mn 257.610†	509.3	-41.9	-0.0479 ug/L	-0.0479 ppb	16:51:05
1	Mo 202.031†	24.9	15.3	1.1402 ug/L	1.1402 ppb	16:51:05
1	Ni 231.604†	83.8	-26.7	-0.6827 ug/L	-0.6827 ppb	16:51:05
1	P 214.914†	236.5	3.1	1.7462 ug/L	1.7462 ppb	16:51:05
1	Pb 220.353†	-66.6	4.5	0.5720 ug/L	0.5720 ppb	16:51:05
1	S 181.975 Axial†	60.4	19.7	25.740 ug/L	25.740 ppb	16:51:05
1	Sb 206.836†	39.7	5.5	1.8956 ug/L	1.8956 ppb	16:51:05
1	Se 196.026†	-26.0	-3.7	-2.0951 ug/L	-2.0951 ppb	16:51:05
1	Si 251.611†	565.7	-26.0	-0.8254 ug/L	-0.8254 ppb	16:51:05
1	Sn 189.927†	20.8	8.9	1.6051 ug/L	1.6051 ppb	16:51:05
1	Ti 334.940†	-1374.3	68.7	0.1116 ug/L	0.1116 ppb	16:50:45
1	Tl 190.801†	-33.4	4.5	1.4059 ug/L	1.4059 ppb	16:51:05
1	U 409.014†	-3274.9	121.3	3.4454 ug/L	3.4454 ppb	16:50:45
1	V 292.402†	-1609.8	9.0	0.0870 ug/L	0.0870 ppb	16:50:45
1	Zn 213.857†	687.1	24.3	0.2404 ug/L	0.2404 ppb	16:51:05
1	SiO2†	572.9	-25.8	-1.7501 ug/L	-1.7501 ppb	16:52:01
2	Sc Radial	4240.1	4240.1	99.7 %		16:49:53
2	Y RADIAL	4345.3	4345.3	98.71 %		16:49:53
2	Al 396.153Radial†	-138.1	20.6	20.572 ug/L	20.572 ppb	16:50:13
2	Ca 317.933Radial†	18.9	0.7	1.2505 ug/L	1.2505 ppb	16:50:13
2	Fe 238.204 Radial†	11.0	1.0	10.551 ug/L	10.551 ppb	16:50:13
2	K 766.490 Radial†	3454.1	291.2	58.620 ug/L	58.620 ppb	16:49:53
2	Mg 279.077 IEC†	2.0	-0.7	-28.275 ug/L	-28.275 ppb	16:50:13
2	Na 589.592 Radial†	1518.4	1315.2	438.70 ug/L	438.70 ppb	16:49:53
2	Sr 421.552†	65.4	-24.3	-0.1873 ug/L	-0.1873 ppb	16:49:53
2	Sc 361.383	819718.1	819718.1	96.436 %		16:51:10
2	Y 371.029	670897.6	670897.6	95.470 %		16:51:10
2	Ag 328.068†	172.9	-48.4	-0.2305 ug/L	-0.2305 ppb	16:51:10
2	As 188.979†	-38.0	-11.1	-4.6790 ug/L	-4.6790 ppb	16:51:30
2	B 249.677†	216.4	706.3	16.615 ug/L	16.615 ppb	16:51:10
2	Ba 233.527†	2.4	-16.4	-0.1318 ug/L	-0.1318 ppb	16:51:30
2	Be 313.107†	-4270.7	-89.4	-0.0318 ug/L	-0.0318 ppb	16:51:10
2	Cd 226.502†	-197.7	-9.5	-0.1115 ug/L	-0.1115 ppb	16:51:30
2	Co 228.616†	-62.2	14.3	0.3003 ug/L	0.3003 ppb	16:51:30
2	Cr 267.716†	78.6	-68.2	-0.7939 ug/L	-0.7939 ppb	16:51:30
2	Cu 324.752†	7818.5	13.3	0.0390 ug/L	0.0390 ppb	16:51:10
2	Mn 257.610†	486.7	-65.1	-0.0729 ug/L	-0.0729 ppb	16:51:30
2	Mo 202.031†	23.9	14.3	1.0612 ug/L	1.0612 ppb	16:51:30
2	Ni 231.604†	77.7	-33.0	-0.8450 ug/L	-0.8450 ppb	16:51:30

2	P 214.914†	251.1	18.4	10.219 ug/L	10.219 ppb	16:51:30
2	Pb 220.353†	-71.8	-0.9	-0.1068 ug/L	-0.1068 ppb	16:51:30
2	S 181.975 Axial†	85.3	45.5	59.497 ug/L	59.497 ppb	16:51:30
2	Sb 206.836†	51.9	18.1	6.1815 ug/L	6.1815 ppb	16:51:30
2	Se 196.026†	-12.3	10.6	6.2363 ug/L	6.2363 ppb	16:51:30
2	Si 251.611†	590.3	-0.2	-0.0186 ug/L	-0.0186 ppb	16:51:30
2	Sn 189.927†	21.6	9.8	1.7618 ug/L	1.7618 ppb	16:51:30
2	Ti 334.940†	-1156.1	294.1	0.4788 ug/L	0.4788 ppb	16:51:10
2	Tl 190.801†	-24.4	13.8	4.3661 ug/L	4.3661 ppb	16:51:30
2	U 409.014†	-3242.4	152.9	4.3444 ug/L	4.3444 ppb	16:51:10
2	V 292.402†	-1561.9	57.6	0.4385 ug/L	0.4385 ppb	16:51:10
2	Zn 213.857†	671.5	8.6	0.0876 ug/L	0.0876 ppb	16:51:30
2	SiO2†	545.6	-53.7	-3.6106 ug/L	-3.6106 ppb	16:52:06
3	Sc Radial	4240.4	4240.4	99.8 %		16:50:18
3	Y RADIAL	4376.1	4376.1	99.41 %		16:50:18
3	Al 396.153Radial†	-142.7	16.0	15.960 ug/L	15.960 ppb	16:50:38
3	Ca 317.933Radial†	23.8	5.5	10.352 ug/L	10.352 ppb	16:50:38
3	Fe 238.204 Radial†	8.1	-1.9	-20.118 ug/L	-20.118 ppb	16:50:38
3	K 766.490 Radial†	3493.7	330.8	66.610 ug/L	66.610 ppb	16:50:18
3	Mg 279.077 IEC†	0.6	-2.1	-80.215 ug/L	-80.215 ppb	16:50:38
3	Na 589.592 Radial†	1429.2	1225.7	408.84 ug/L	408.84 ppb	16:50:18
3	Sr 421.552†	4.7	-85.1	-0.6571 ug/L	-0.6571 ppb	16:50:18
3	Sc 361.383	822405.2	822405.2	96.753 %		16:51:36
3	Y 371.029	671625.6	671625.6	95.574 %		16:51:36
3	Ag 328.068†	222.4	2.2	-0.0023 ug/L	-0.0023 ppb	16:51:36
3	As 188.979†	-32.8	-5.5	-2.3382 ug/L	-2.3382 ppb	16:51:56
3	B 249.677†	236.5	726.4	17.093 ug/L	17.093 ppb	16:51:36
3	Ba 233.527†	14.4	-3.9	-0.0328 ug/L	-0.0328 ppb	16:51:56
3	Be 313.107†	-4286.5	-91.2	-0.0335 ug/L	-0.0335 ppb	16:51:36
3	Cd 226.502†	-205.1	-16.5	-0.1901 ug/L	-0.1901 ppb	16:51:56
3	Co 228.616†	-84.9	-8.9	-0.1851 ug/L	-0.1851 ppb	16:51:56
3	Cr 267.716†	85.9	-60.9	-0.7118 ug/L	-0.7118 ppb	16:51:56
3	Cu 324.752†	7811.5	-20.5	-0.0673 ug/L	-0.0673 ppb	16:51:36
3	Mn 257.610†	486.9	-66.5	-0.0754 ug/L	-0.0754 ppb	16:51:56
3	Mo 202.031†	11.2	1.1	0.0805 ug/L	0.0805 ppb	16:51:56
3	Ni 231.604†	72.2	-38.9	-0.9951 ug/L	-0.9951 ppb	16:51:56
3	P 214.914†	238.9	5.0	2.7984 ug/L	2.7984 ppb	16:51:56
3	Pb 220.353†	-84.6	-13.9	-1.7179 ug/L	-1.7179 ppb	16:51:56
3	S 181.975 Axial†	70.1	29.5	38.541 ug/L	38.541 ppb	16:51:56
3	Sb 206.836†	39.1	4.8	1.6410 ug/L	1.6410 ppb	16:51:56
3	Se 196.026†	-18.2	4.5	2.5436 ug/L	2.5436 ppb	16:51:56
3	Si 251.611†	567.8	-25.4	-0.7933 ug/L	-0.7933 ppb	16:51:56
3	Sn 189.927†	20.2	8.3	1.4895 ug/L	1.4895 ppb	16:51:56
3	Ti 334.940†	-1431.6	13.2	0.0268 ug/L	0.0268 ppb	16:51:36
3	Tl 190.801†	-29.2	8.9	2.8219 ug/L	2.8219 ppb	16:51:56
3	U 409.014†	-3177.7	230.8	6.5593 ug/L	6.5593 ppb	16:51:36
3	V 292.402†	-1638.7	-16.4	-0.1036 ug/L	-0.1036 ppb	16:51:36
3	Zn 213.857†	682.5	17.7	0.1822 ug/L	0.1822 ppb	16:51:56
3	SiO2†	702.6	106.7	7.1093 ug/L	7.1093 ppb	16:52:11

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	820779.0	96.561 %	0.1682			0.17%
Sc Radial	4240.5	99.8 %	0.01			0.01%
Y 371.029	671179.9	95.511 %	0.0556			0.06%
Y RADIAL	4374.5	99.37 %	0.647			0.65%
Ag 328.068†	-24.9	-0.1229 ug/L	0.11464	-0.1229 ppb	0.11464	93.29%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	25.4	25.342 ug/L	12.4720	25.342 ppb	12.4720	49.21%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-5.9	-2.4707 ug/L	2.14519	-2.4707 ppb	2.14519	86.83%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	716.9	16.867 ug/L	0.2400	16.867 ppb	0.2400	1.42%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	-11.8	-0.0953 ug/L	0.05440	-0.0953 ppb	0.05440	57.06%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-97.4	-0.0353 ug/L	0.00475	-0.0353 ppb	0.00475	13.44%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	5.0	9.4020 ug/L	7.72045	9.4020 ppb	7.72045	82.11%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	-15.4	-0.1792 ug/L	0.06296	-0.1792 ppb	0.06296	35.13%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	0.3	0.0070 ug/L	0.25809	0.0070 ppb	0.25809	>999.9%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-63.2	-0.7370 ug/L	0.04941	-0.7370 ppb	0.04941	6.70%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-9.7	-0.0322 ug/L	0.06172	-0.0322 ppb	0.06172	191.44%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	-0.0	-0.0554 ug/L	17.38448	-0.0554 ppb	17.38448	>999.9%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	344.2	69.317 ug/L	12.2767	69.317 ppb	12.2767	17.71%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	-0.8	-31.964 ug/L	46.5163	-31.964 ppb	46.5163	145.53%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	-57.8	-0.0654 ug/L	0.01520	-0.0654 ppb	0.01520	23.25%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	10.2	0.7607 ug/L	0.59033	0.7607 ppb	0.59033	77.61%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	1292.6	431.15 ug/L	19.662	431.15 ppb	19.662	4.56%
QC value greater than the upper limit for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-32.8	-0.8409 ug/L	0.15622	-0.8409 ppb	0.15622	18.58%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	8.8	4.9212 ug/L	4.61812	4.9212 ppb	4.61812	93.84%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-3.4	-0.4176 ug/L	1.17619	-0.4176 ppb	1.17619	281.68%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	31.6	41.259 ug/L	17.0419	41.259 ppb	17.0419	41.30%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	9.5	3.2394 ug/L	2.55115	3.2394 ppb	2.55115	78.75%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	3.8	2.2283 ug/L	4.17463	2.2283 ppb	4.17463	187.35%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	-17.2	-0.5458 ug/L	0.45682	-0.5458 ppb	0.45682	83.70%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	9.0	1.6188 ug/L	0.13667	1.6188 ppb	0.13667	8.44%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	-33.1	-0.2556 ug/L	0.37200	-0.2556 ppb	0.37200	145.52%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	125.3	0.2057 ug/L	0.24026	0.2057 ppb	0.24026	116.79%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	9.1	2.8646 ug/L	1.48054	2.8646 ppb	1.48054	51.68%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	168.3	4.7830 ug/L	1.60264	4.7830 ppb	1.60264	33.51%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	16.7	0.1406 ug/L	0.27500	0.1406 ppb	0.27500	195.53%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	16.9	0.1701 ug/L	0.07716	0.1701 ppb	0.07716	45.37%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	9.1	0.5829 ug/L	5.72808	0.5829 ppb	5.72808	982.69%
QC value within limits for SiO2 Recovery = Not calculated						
QC Failed. Continue with analysis.						

Sequence No.: 10

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 2/16/2010 17:42:05

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4291.2	4291.2	101 %		17:43:57
1	Y RADIAL	4423.9	4423.9	100.5 %		17:43:57
1	Al 396.153Radial†	4851.5	4965.0	4943.5 ug/L	4943.5 ppb	17:43:57
1	Ca 317.933Radial†	2638.3	2595.2	4841.0 ug/L	4841.0 ppb	17:44:17
1	Fe 238.204 Radial†	481.0	466.4	4972.0 ug/L	4972.0 ppb	17:44:17
1	K 766.490 Radial†	27833.3	24400.2	4919.1 ug/L	4919.1 ppb	17:43:57
1	Mg 279.077 IEC†	124.6	120.7	4661.6 ug/L	4661.6 ppb	17:44:17
1	Na 589.592 Radial†	31665.3	31160.7	10394 ug/L	10394 ppb	17:43:57
1	Sr 421.552†	65763.6	65055.9	502.28 ug/L	502.28 ppb	17:43:57
1	Sc 361.383	827279.9	827279.9	97.326 %		17:45:14
1	Y 371.029	665724.3	665724.3	94.734 %		17:45:14
1	Ag 328.068†	100688.5	103227.1	498.79 ug/L	498.79 ppb	17:45:20
1	As 188.979†	1068.8	1126.5	478.32 ug/L	478.32 ppb	17:45:40
1	B 249.677†	20618.6	21667.0	507.53 ug/L	507.53 ppb	17:45:20
1	Ba 233.527†	59085.3	60689.8	494.00 ug/L	494.00 ppb	17:45:20
1	Be 313.107†	1289047.9	1328802.5	489.21 ug/L	489.21 ppb	17:45:14
1	Cd 226.502†	39765.1	41053.1	479.98 ug/L	479.98 ppb	17:45:20
1	Co 228.616†	22929.2	23638.0	492.97 ug/L	492.97 ppb	17:45:20
1	Cr 267.716†	39984.4	40933.3	476.80 ug/L	476.80 ppb	17:45:20
1	Cu 324.752†	167829.2	164346.1	503.16 ug/L	503.16 ppb	17:45:20
1	Mn 257.610†	418135.5	429053.7	495.16 ug/L	495.16 ppb	17:45:14
1	Mo 202.031†	6333.8	6497.3	483.23 ug/L	483.23 ppb	17:45:40
1	Ni 231.604†	18495.3	18889.9	483.55 ug/L	483.55 ppb	17:45:20
1	P 214.914†	4356.9	4234.6	2251.4 ug/L	2251.4 ppb	17:45:40
1	Pb 220.353†	3651.7	3825.6	475.49 ug/L	475.49 ppb	17:45:40
1	S 181.975 Axial†	786.9	765.6	999.70 ug/L	999.70 ppb	17:45:40
1	Sb 206.836†	1412.1	1415.2	496.17 ug/L	496.17 ppb	17:45:40
1	Se 196.026†	774.8	819.4	495.64 ug/L	495.64 ppb	17:45:40
1	Si 251.611†	78232.2	79769.3	2479.9 ug/L	2479.9 ppb	17:45:20
1	Sn 189.927†	2587.0	2645.4	475.17 ug/L	475.17 ppb	17:45:40
1	Ti 334.940†	297348.4	307010.6	498.87 ug/L	498.87 ppb	17:45:20
1	Tl 190.801†	1474.4	1554.0	493.92 ug/L	493.92 ppb	17:45:40
1	U 409.014†	13831.8	17727.0	501.94 ug/L	501.94 ppb	17:45:20
1	V 292.402†	63201.8	66615.6	488.93 ug/L	488.93 ppb	17:45:20
1	Zn 213.857†	49924.1	50608.0	489.42 ug/L	489.42 ppb	17:45:20
1	SiO2†	77529.0	79039.5	5256.7 ug/L	5256.7 ppb	17:46:47
2	Sc Radial	4245.0	4245.0	99.9 %		17:44:22
2	Y RADIAL	4317.4	4317.4	98.07 %		17:44:22
2	Al 396.153Radial†	4736.1	4901.8	4880.2 ug/L	4880.2 ppb	17:44:22
2	Ca 317.933Radial†	2628.9	2614.2	4876.5 ug/L	4876.5 ppb	17:44:42
2	Fe 238.204 Radial†	486.3	476.9	5082.8 ug/L	5082.8 ppb	17:44:42
2	K 766.490 Radial†	27442.5	24309.1	4900.8 ug/L	4900.8 ppb	17:44:22
2	Mg 279.077 IEC†	131.7	129.1	4987.1 ug/L	4987.1 ppb	17:44:42
2	Na 589.592 Radial†	30980.6	30816.7	10279 ug/L	10279 ppb	17:44:22
2	Sr 421.552†	64409.3	64409.3	497.29 ug/L	497.29 ppb	17:44:22
2	Sc 361.383	826741.1	826741.1	97.263 %		17:45:46
2	Y 371.029	665697.4	665697.4	94.730 %		17:45:46
2	Ag 328.068†	98514.3	101059.2	488.39 ug/L	488.39 ppb	17:45:51
2	As 188.979†	1072.1	1130.5	479.95 ug/L	479.95 ppb	17:46:11
2	B 249.677†	20275.1	21327.6	499.56 ug/L	499.56 ppb	17:45:51
2	Ba 233.527†	57837.7	59446.7	483.89 ug/L	483.89 ppb	17:45:51
2	Be 313.107†	1293013.1	1333742.6	491.00 ug/L	491.00 ppb	17:45:46
2	Cd 226.502†	38944.7	40236.3	470.41 ug/L	470.41 ppb	17:45:51
2	Co 228.616†	22435.9	23146.2	482.74 ug/L	482.74 ppb	17:45:51
2	Cr 267.716†	39373.7	40332.1	469.80 ug/L	469.80 ppb	17:45:51
2	Cu 324.752†	163796.3	160312.0	490.82 ug/L	490.82 ppb	17:45:51
2	Mn 257.610†	418678.9	429892.4	496.13 ug/L	496.13 ppb	17:45:46
2	Mo 202.031†	6353.9	6522.3	485.10 ug/L	485.10 ppb	17:46:11
2	Ni 231.604†	18066.6	18461.5	472.59 ug/L	472.59 ppb	17:45:51

2	P 214.914†	4395.7	4277.4	2277.5 ug/L	2277.5 ppb	17:46:11
2	Pb 220.353†	3689.2	3866.5	480.55 ug/L	480.55 ppb	17:46:11
2	S 181.975 Axial†	787.5	766.7	1001.2 ug/L	1001.2 ppb	17:46:11
2	Sb 206.836†	1423.1	1427.5	500.40 ug/L	500.40 ppb	17:46:11
2	Se 196.026†	781.1	826.4	500.06 ug/L	500.06 ppb	17:46:11
2	Si 251.611†	76403.4	77941.4	2422.9 ug/L	2422.9 ppb	17:45:51
2	Sn 189.927†	2600.7	2661.3	478.03 ug/L	478.03 ppb	17:46:11
2	Ti 334.940†	290915.8	300596.2	488.43 ug/L	488.43 ppb	17:45:51
2	Tl 190.801†	1475.3	1555.9	494.50 ug/L	494.50 ppb	17:46:11
2	U 409.014†	13508.2	17403.5	492.76 ug/L	492.76 ppb	17:45:51
2	V 292.402†	61990.0	65411.9	480.23 ug/L	480.23 ppb	17:45:51
2	Zn 213.857†	48937.4	49626.9	479.92 ug/L	479.92 ppb	17:45:51
2	SiO2†	76681.9	78220.5	5202.0 ug/L	5202.0 ppb	17:46:52
3	Sc Radial	4245.6	4245.6	99.9 %		17:44:47
3	Y RADIAL	4367.2	4367.2	99.20 %		17:44:47
3	Al 396.153Radial†	4766.4	4931.4	4909.9 ug/L	4909.9 ppb	17:44:47
3	Ca 317.933Radial†	2603.4	2588.4	4828.3 ug/L	4828.3 ppb	17:45:07
3	Fe 238.204 Radial†	477.3	467.8	4986.9 ug/L	4986.9 ppb	17:45:07
3	K 766.490 Radial†	27587.9	24450.9	4929.4 ug/L	4929.4 ppb	17:44:47
3	Mg 279.077 IEC†	128.0	125.4	4843.5 ug/L	4843.5 ppb	17:45:07
3	Na 589.592 Radial†	31252.7	31084.8	10369 ug/L	10369 ppb	17:44:47
3	Sr 421.552†	64767.1	64758.4	499.98 ug/L	499.98 ppb	17:44:47
3	Sc 361.383	827186.1	827186.1	97.315 %		17:46:17
3	Y 371.029	664886.4	664886.4	94.615 %		17:46:17
3	Ag 328.068†	100893.6	103449.6	499.88 ug/L	499.88 ppb	17:46:22
3	As 188.979†	1081.6	1139.7	483.88 ug/L	483.88 ppb	17:46:42
3	B 249.677†	20801.3	21857.2	511.99 ug/L	511.99 ppb	17:46:22
3	Ba 233.527†	59243.4	60859.1	495.38 ug/L	495.38 ppb	17:46:22
3	Be 313.107†	1293600.7	1333631.2	490.99 ug/L	490.99 ppb	17:46:17
3	Cd 226.502†	39945.8	41243.4	482.20 ug/L	482.20 ppb	17:46:22
3	Co 228.616†	23038.8	23753.4	495.38 ug/L	495.38 ppb	17:46:22
3	Cr 267.716†	40181.7	41140.7	479.22 ug/L	479.22 ppb	17:46:22
3	Cu 324.752†	168061.8	164604.7	503.96 ug/L	503.96 ppb	17:46:22
3	Mn 257.610†	419779.7	430792.0	497.16 ug/L	497.16 ppb	17:46:17
3	Mo 202.031†	6352.1	6516.9	484.69 ug/L	484.69 ppb	17:46:42
3	Ni 231.604†	18546.3	18944.5	484.95 ug/L	484.95 ppb	17:46:22
3	P 214.914†	4388.7	4267.8	2269.6 ug/L	2269.6 ppb	17:46:42
3	Pb 220.353†	3673.2	3848.1	478.28 ug/L	478.28 ppb	17:46:42
3	S 181.975 Axial†	779.5	758.1	989.88 ug/L	989.88 ppb	17:46:42
3	Sb 206.836†	1405.9	1409.0	494.12 ug/L	494.12 ppb	17:46:42
3	Se 196.026†	779.9	824.8	498.82 ug/L	498.82 ppb	17:46:42
3	Si 251.611†	78366.1	79916.0	2484.4 ug/L	2484.4 ppb	17:46:22
3	Sn 189.927†	2591.6	2650.5	476.08 ug/L	476.08 ppb	17:46:42
3	Ti 334.940†	298045.7	307761.9	500.07 ug/L	500.07 ppb	17:46:22
3	Tl 190.801†	1466.5	1546.1	491.41 ug/L	491.41 ppb	17:46:42
3	U 409.014†	13687.1	17579.9	497.76 ug/L	497.76 ppb	17:46:22
3	V 292.402†	63487.7	66916.7	491.13 ug/L	491.13 ppb	17:46:22
3	Zn 213.857†	50156.6	50852.7	491.80 ug/L	491.80 ppb	17:46:22
3	SiO2†	77006.3	78511.5	5221.4 ug/L	5221.4 ppb	17:46:57

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	827069.1	97.301 %	0.0339			0.03%
Sc Radial	4260.6	100 %	0.6			0.62%
Y 371.029	665436.0	94.693 %	0.0678			0.07%
Y RADIAL	4369.5	99.26 %	1.210			1.22%
Ag 328.068†	102578.7	495.69 ug/L	6.341	495.69 ppb	6.341	1.28%
QC value within limits for Ag 328.068 Recovery = 99.14%						
Al 396.153Radial†	4932.7	4911.2 ug/L	31.68	4911.2 ppb	31.68	0.65%
QC value within limits for Al 396.153Radial Recovery = 98.22%						
As 188.979†	1132.3	480.72 ug/L	2.860	480.72 ppb	2.860	0.59%
QC value within limits for As 188.979 Recovery = 96.14%						
B 249.677†	21617.3	506.36 ug/L	6.300	506.36 ppb	6.300	1.24%
QC value within limits for B 249.677 Recovery = 101.27%						
Ba 233.527†	60331.8	491.09 ug/L	6.273	491.09 ppb	6.273	1.28%
QC value within limits for Ba 233.527 Recovery = 98.22%						
Be 313.107†	1332058.8	490.40 ug/L	1.030	490.40 ppb	1.030	0.21%
QC value within limits for Be 313.107 Recovery = 98.08%						
Ca 317.933Radial†	2599.3	4848.6 ug/L	24.99	4848.6 ppb	24.99	0.52%

QC value within limits for Ca 317.933 Radial Recovery = 96.97%							
Cd 226.502†	40844.3	477.53 ug/L	6.268	477.53 ppb	6.268	1.31%	
QC value within limits for Cd 226.502 Recovery = 95.51%							
Co 228.616†	23512.5	490.36 ug/L	6.711	490.36 ppb	6.711	1.37%	
QC value within limits for Co 228.616 Recovery = 98.07%							
Cr 267.716†	40802.0	475.27 ug/L	4.891	475.27 ppb	4.891	1.03%	
QC value within limits for Cr 267.716 Recovery = 95.05%							
Cu 324.752†	163087.6	499.31 ug/L	7.365	499.31 ppb	7.365	1.47%	
QC value within limits for Cu 324.752 Recovery = 99.86%							
Fe 238.204 Radial†	470.4	5013.9 ug/L	60.12	5013.9 ppb	60.12	1.20%	
QC value within limits for Fe 238.204 Radial Recovery = 100.28%							
K 766.490 Radial†	24386.7	4916.4 ug/L	14.49	4916.4 ppb	14.49	0.29%	
QC value within limits for K 766.490 Radial Recovery = 98.33%							
Mg 279.077 IEC†	125.1	4830.7 ug/L	163.10	4830.7 ppb	163.10	3.38%	
QC value within limits for Mg 279.077 IEC Recovery = 96.61%							
Mn 257.610†	429912.7	496.15 ug/L	1.000	496.15 ppb	1.000	0.20%	
QC value within limits for Mn 257.610 Recovery = 99.23%							
Mo 202.031†	6512.2	484.34 ug/L	0.981	484.34 ppb	0.981	0.20%	
QC value within limits for Mo 202.031 Recovery = 96.87%							
Na 589.592 Radial†	31020.7	10347 ug/L	60.3	10347 ppb	60.3	0.58%	
QC value within limits for Na 589.592 Radial Recovery = 103.47%							
Ni 231.604†	18765.3	480.36 ug/L	6.771	480.36 ppb	6.771	1.41%	
QC value within limits for Ni 231.604 Recovery = 96.07%							
P 214.914†	4260.0	2266.2 ug/L	13.39	2266.2 ppb	13.39	0.59%	
QC value within limits for P 214.914 Recovery = 90.65%							
Pb 220.353†	3846.7	478.11 ug/L	2.537	478.11 ppb	2.537	0.53%	
QC value within limits for Pb 220.353 Recovery = 95.62%							
S 181.975 Axial†	763.5	996.91 ug/L	6.137	996.91 ppb	6.137	0.62%	
QC value within limits for S 181.975 Axial Recovery = 99.69%							
Sb 206.836†	1417.2	496.89 ug/L	3.204	496.89 ppb	3.204	0.64%	
QC value within limits for Sb 206.836 Recovery = 99.38%							
Se 196.026†	823.5	498.17 ug/L	2.279	498.17 ppb	2.279	0.46%	
QC value within limits for Se 196.026 Recovery = 99.63%							
Si 251.611†	79208.9	2462.4 ug/L	34.29	2462.4 ppb	34.29	1.39%	
QC value within limits for Si 251.611 Recovery = 98.50%							
Sn 189.927†	2652.4	476.43 ug/L	1.459	476.43 ppb	1.459	0.31%	
QC value within limits for Sn 189.927 Recovery = 95.29%							
Sr 421.552†	64741.2	499.85 ug/L	2.499	499.85 ppb	2.499	0.50%	
QC value within limits for Sr 421.552 Recovery = 99.97%							
Ti 334.940†	305122.9	495.79 ug/L	6.404	495.79 ppb	6.404	1.29%	
QC value within limits for Ti 334.940 Recovery = 99.16%							
Tl 190.801†	1552.0	493.28 ug/L	1.644	493.28 ppb	1.644	0.33%	
QC value within limits for Tl 190.801 Recovery = 98.66%							
U 409.014†	17570.1	497.48 ug/L	4.598	497.48 ppb	4.598	0.92%	
QC value within limits for U 409.014 Recovery = 99.50%							
V 292.402†	66314.7	486.76 ug/L	5.764	486.76 ppb	5.764	1.18%	
QC value within limits for V 292.402 Recovery = 97.35%							
Zn 213.857†	50362.5	487.04 ug/L	6.287	487.04 ppb	6.287	1.29%	
QC value within limits for Zn 213.857 Recovery = 97.41%							
SiO2†	78590.5	5226.7 ug/L	27.71	5226.7 ppb	27.71	0.53%	
QC value within limits for SiO2 Recovery = 97.74%							
All analyte(s) passed QC.							

Sequence No.: 11

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 2/16/2010 17:49:07

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	4186.7	4186.7	98.5 %		17:50:59
1	Y RADIAL	4336.4	4336.4	98.50 %		17:50:59
1	Al 396.153Radial†	-123.0	34.1	34.021 ug/L	34.021 ppb	17:51:19
1	Ca 317.933Radial†	22.6	4.6	8.6430 ug/L	8.6430 ppb	17:51:19
1	Fe 238.204 Radial†	10.4	0.5	5.4827 ug/L	5.4827 ppb	17:51:19
1	K 766.490 Radial†	3424.7	305.5	61.539 ug/L	61.539 ppb	17:50:59
1	Mg 279.077 IEC†	2.1	-0.6	-22.787 ug/L	-22.787 ppb	17:51:19
1	Na 589.592 Radial†	1212.0	1023.5	341.40 ug/L	341.40 ppb	17:50:59
1	Sr 421.552†	97.7	9.4	0.0723 ug/L	0.0723 ppb	17:50:59
1	Sc 361.383	811380.9	811380.9	95.456 %		17:52:16
1	Y 371.029	660963.2	660963.2	94.057 %		17:52:16
1	Ag 328.068†	168.5	-51.2	-0.2444 ug/L	-0.2444 ppb	17:52:16
1	As 188.979†	-32.0	-5.2	-2.1728 ug/L	-2.1728 ppb	17:52:36
1	B 249.677†	211.3	703.3	16.544 ug/L	16.544 ppb	17:52:36
1	Ba 233.527†	34.0	16.8	0.1363 ug/L	0.1363 ppb	17:52:36
1	Be 313.107†	-4234.3	-96.8	-0.0347 ug/L	-0.0347 ppb	17:52:16
1	Cd 226.502†	-192.3	-5.9	-0.0701 ug/L	-0.0701 ppb	17:52:36
1	Co 228.616†	-67.6	8.0	0.1722 ug/L	0.1722 ppb	17:52:36
1	Cr 267.716†	82.4	-63.3	-0.7367 ug/L	-0.7367 ppb	17:52:36
1	Cu 324.752†	7736.3	10.5	0.0321 ug/L	0.0321 ppb	17:52:16
1	Mn 257.610†	681.0	143.7	0.1672 ug/L	0.1672 ppb	17:52:36
1	Mo 202.031†	39.7	31.1	2.3139 ug/L	2.3139 ppb	17:52:36
1	Ni 231.604†	105.0	-3.6	-0.0914 ug/L	-0.0914 ppb	17:52:36
1	P 214.914†	247.8	17.6	9.8001 ug/L	9.8001 ppb	17:52:36
1	Pb 220.353†	-73.0	-2.9	-0.3458 ug/L	-0.3458 ppb	17:52:36
1	S 181.975 Axial†	66.7	26.9	35.180 ug/L	35.180 ppb	17:52:36
1	Sb 206.836†	42.7	9.0	3.1439 ug/L	3.1439 ppb	17:52:36
1	Se 196.026†	-20.0	2.4	1.4004 ug/L	1.4004 ppb	17:52:36
1	Si 251.611†	703.8	125.0	3.8663 ug/L	3.8663 ppb	17:52:36
1	Sn 189.927†	26.4	15.0	2.6975 ug/L	2.6975 ppb	17:52:36
1	Ti 334.940†	-1208.0	227.4	0.3728 ug/L	0.3728 ppb	17:52:16
1	Tl 190.801†	-30.1	7.6	2.3946 ug/L	2.3946 ppb	17:52:36
1	U 409.014†	-3341.8	14.3	0.4071 ug/L	0.4071 ppb	17:52:16
1	V 292.402†	-1601.9	-0.9	0.0256 ug/L	0.0256 ppb	17:52:16
1	Zn 213.857†	690.0	35.1	0.3423 ug/L	0.3423 ppb	17:52:36
1	SiO2†	720.3	135.1	8.9438 ug/L	8.9438 ppb	17:53:32
2	Sc Radial	4192.9	4192.9	98.6 %		17:51:24
2	Y RADIAL	4318.4	4318.4	98.10 %		17:51:24
2	Al 396.153Radial†	-129.0	28.3	28.183 ug/L	28.183 ppb	17:51:44
2	Ca 317.933Radial†	21.5	3.5	6.5283 ug/L	6.5283 ppb	17:51:44
2	Fe 238.204 Radial†	9.6	-0.3	-3.0504 ug/L	-3.0504 ppb	17:51:44
2	K 766.490 Radial†	3425.1	300.9	60.590 ug/L	60.590 ppb	17:51:24
2	Mg 279.077 IEC†	-0.2	-2.9	-111.06 ug/L	-111.06 ppb	17:51:44
2	Na 589.592 Radial†	1318.2	1129.4	376.71 ug/L	376.71 ppb	17:51:24
2	Sr 421.552†	54.2	-34.8	-0.2691 ug/L	-0.2691 ppb	17:51:24
2	Sc 361.383	821459.4	821459.4	96.641 %		17:52:41
2	Y 371.029	670037.3	670037.3	95.348 %		17:52:41
2	Ag 328.068†	254.9	36.1	0.1655 ug/L	0.1655 ppb	17:52:41
2	As 188.979†	-24.5	3.0	1.2475 ug/L	1.2475 ppb	17:53:01
2	B 249.677†	190.0	678.5	15.961 ug/L	15.961 ppb	17:53:01
2	Ba 233.527†	29.4	11.6	0.0953 ug/L	0.0953 ppb	17:53:01
2	Be 313.107†	-4304.6	-115.1	-0.0416 ug/L	-0.0416 ppb	17:52:41
2	Cd 226.502†	-184.6	4.5	0.0544 ug/L	0.0544 ppb	17:53:01
2	Co 228.616†	-50.0	27.1	0.5698 ug/L	0.5698 ppb	17:53:01
2	Cr 267.716†	73.5	-73.7	-0.8607 ug/L	-0.8607 ppb	17:53:01
2	Cu 324.752†	7709.6	-116.6	-0.3630 ug/L	-0.3630 ppb	17:52:41
2	Mn 257.610†	645.2	97.9	0.1171 ug/L	0.1171 ppb	17:53:01
2	Mo 202.031†	32.3	23.0	1.7087 ug/L	1.7087 ppb	17:53:01
2	Ni 231.604†	92.9	-17.4	-0.4455 ug/L	-0.4455 ppb	17:53:01

2	P 214.914†	246.5	13.1	7.3672 ug/L	7.3672 ppb	17:53:01
2	Pb 220.353†	-63.9	7.4	0.9327 ug/L	0.9327 ppb	17:53:01
2	S 181.975 Axial†	66.2	25.6	33.433 ug/L	33.433 ppb	17:53:01
2	Sb 206.836†	42.5	8.3	2.8841 ug/L	2.8841 ppb	17:53:01
2	Se 196.026†	-25.6	-3.2	-1.8631 ug/L	-1.8631 ppb	17:53:01
2	Si 251.611†	692.4	104.2	3.2258 ug/L	3.2258 ppb	17:53:01
2	Sn 189.927†	29.6	18.0	3.2271 ug/L	3.2271 ppb	17:53:01
2	Ti 334.940†	-1255.4	193.9	0.3206 ug/L	0.3206 ppb	17:52:41
2	Tl 190.801†	-38.0	-0.2	-0.0617 ug/L	-0.0617 ppb	17:53:01
2	U 409.014†	-3028.7	381.2	10.832 ug/L	10.832 ppb	17:52:41
2	V 292.402†	-1549.9	73.5	0.5757 ug/L	0.5757 ppb	17:52:41
2	Zn 213.857†	700.5	37.1	0.3661 ug/L	0.3661 ppb	17:53:01
2	SiO2†	725.8	131.5	8.7219 ug/L	8.7219 ppb	17:53:37
3	Sc Radial	4258.0	4258.0	100 %		17:51:49
3	Y RADIAL	4401.6	4401.6	99.99 %		17:51:49
3	Al 396.153Radial†	-113.0	46.3	46.224 ug/L	46.224 ppb	17:52:09
3	Ca 317.933Radial†	22.1	3.8	7.0412 ug/L	7.0412 ppb	17:52:09
3	Fe 238.204 Radial†	10.6	0.5	5.8398 ug/L	5.8398 ppb	17:52:09
3	K 766.490 Radial†	3285.1	108.0	21.651 ug/L	21.651 ppb	17:51:49
3	Mg 279.077 IBC†	2.3	-0.4	-14.351 ug/L	-14.351 ppb	17:52:09
3	Na 589.592 Radial†	1390.8	1181.4	394.06 ug/L	394.06 ppb	17:51:49
3	Sr 421.552†	76.0	-13.9	-0.1075 ug/L	-0.1075 ppb	17:51:49
3	Sc 361.383	820983.8	820983.8	96.585 %		17:53:06
3	Y 371.029	668675.9	668675.9	95.154 %		17:53:06
3	Ag 328.068†	258.8	40.3	0.1956 ug/L	0.1956 ppb	17:53:06
3	As 188.979†	-35.2	-8.1	-3.4017 ug/L	-3.4017 ppb	17:53:26
3	B 249.677†	164.0	651.7	15.330 ug/L	15.330 ppb	17:53:26
3	Ba 233.527†	68.8	52.4	0.4271 ug/L	0.4271 ppb	17:53:26
3	Be 313.107†	-4378.9	-194.6	-0.0710 ug/L	-0.0710 ppb	17:53:06
3	Cd 226.502†	-202.3	-13.9	-0.1630 ug/L	-0.1630 ppb	17:53:26
3	Co 228.616†	-70.4	5.9	0.1262 ug/L	0.1262 ppb	17:53:26
3	Cr 267.716†	103.8	-42.3	-0.4918 ug/L	-0.4918 ppb	17:53:26
3	Cu 324.752†	7665.1	-158.0	-0.4847 ug/L	-0.4847 ppb	17:53:06
3	Mn 257.610†	769.9	227.3	0.2634 ug/L	0.2634 ppb	17:53:26
3	Mo 202.031†	23.5	13.8	1.0284 ug/L	1.0284 ppb	17:53:26
3	Ni 231.604†	104.6	-5.2	-0.1335 ug/L	-0.1335 ppb	17:53:26
3	P 214.914†	247.7	14.5	8.1556 ug/L	8.1556 ppb	17:53:26
3	Pb 220.353†	-68.8	2.4	0.3051 ug/L	0.3051 ppb	17:53:26
3	S 181.975 Axial†	67.5	27.0	35.230 ug/L	35.230 ppb	17:53:26
3	Sb 206.836†	41.6	7.4	2.5564 ug/L	2.5564 ppb	17:53:26
3	Se 196.026†	-19.9	2.8	1.6401 ug/L	1.6401 ppb	17:53:26
3	Si 251.611†	797.5	213.4	6.6377 ug/L	6.6377 ppb	17:53:26
3	Sn 189.927†	21.7	9.9	1.7705 ug/L	1.7705 ppb	17:53:26
3	Ti 334.940†	-1328.1	117.8	0.1927 ug/L	0.1927 ppb	17:53:06
3	Tl 190.801†	-31.5	6.4	2.0368 ug/L	2.0368 ppb	17:53:26
3	U 409.014†	-3310.2	87.9	2.4983 ug/L	2.4983 ppb	17:53:06
3	V 292.402†	-1542.9	79.9	0.5968 ug/L	0.5968 ppb	17:53:06
3	Zn 213.857†	696.0	32.9	0.3216 ug/L	0.3216 ppb	17:53:26
3	SiO2†	737.1	143.7	9.5514 ug/L	9.5514 ppb	17:53:42

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	817941.4	96.227 %		0.6690			0.70%
Sc Radial	4212.5	99.1 %		0.93			0.94%
Y 371.029	666558.8	94.853 %		0.6964			0.73%
Y RADIAL	4352.1	98.86 %		0.994			1.01%
Ag 328.068†	8.4	0.0389 ug/L		0.24582	0.0389 ppb	0.24582	632.22%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	36.2	36.143 ug/L		9.2056	36.143 ppb	9.2056	25.47%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	-3.4	-1.4423 ug/L		2.40912	-1.4423 ppb	2.40912	167.03%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	677.8	15.945 ug/L		0.6070	15.945 ppb	0.6070	3.81%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	26.9	0.2195 ug/L		0.18089	0.2195 ppb	0.18089	82.39%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	-135.5	-0.0491 ug/L		0.01930	-0.0491 ppb	0.01930	39.31%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	4.0	7.4042 ug/L		1.10309	7.4042 ppb	1.10309	14.90%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	-5.1	-0.0596 ug/L	0.10906	-0.0596 ppb	0.10906	183.09%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	13.7	0.2894 ug/L	0.24396	0.2894 ppb	0.24396	84.30%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-59.8	-0.6964 ug/L	0.18772	-0.6964 ppb	0.18772	26.96%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-88.0	-0.2719 ug/L	0.27023	-0.2719 ppb	0.27023	99.40%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	0.3	2.7573 ug/L	5.03282	2.7573 ppb	5.03282	182.52%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	238.2	47.927 ug/L	22.7603	47.927 ppb	22.7603	47.49%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	-1.3	-49.401 ug/L	53.5682	-49.401 ppb	53.5682	108.44%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	156.3	0.1826 ug/L	0.07432	0.1826 ppb	0.07432	40.71%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	22.7	1.6837 ug/L	0.64311	1.6837 ppb	0.64311	38.20%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	1111.4	370.72 ug/L	26.836	370.72 ppb	26.836	7.24%
QC value greater than the upper limit for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-8.7	-0.2235 ug/L	0.19343	-0.2235 ppb	0.19343	86.55%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	15.1	8.4409 ug/L	1.24132	8.4409 ppb	1.24132	14.71%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	2.3	0.2973 ug/L	0.63925	0.2973 ppb	0.63925	215.00%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	26.5	34.614 ug/L	1.0232	34.614 ppb	1.0232	2.96%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	8.2	2.8615 ug/L	0.29438	2.8615 ppb	0.29438	10.29%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	0.6	0.3925 ug/L	1.95704	0.3925 ppb	1.95704	498.64%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	147.5	4.5766 ug/L	1.81347	4.5766 ppb	1.81347	39.62%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	14.3	2.5650 ug/L	0.73726	2.5650 ppb	0.73726	28.74%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	-13.1	-0.1015 ug/L	0.17075	-0.1015 ppb	0.17075	168.31%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	179.7	0.2954 ug/L	0.09265	0.2954 ppb	0.09265	31.37%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	4.6	1.4566 ug/L	1.32694	1.4566 ppb	1.32694	91.10%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	161.2	4.5792 ug/L	5.51537	4.5792 ppb	5.51537	120.44%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	50.8	0.3994 ug/L	0.32387	0.3994 ppb	0.32387	81.09%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	35.0	0.3433 ug/L	0.02226	0.3433 ppb	0.02226	6.49%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	136.8	9.0724 ug/L	0.42939	9.0724 ppb	0.42939	4.73%
QC value within limits for SiO2 Recovery = Not calculated						
QC Failed. Continue with analysis.						

Sequence No.: 19

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 2/16/2010 18:44:43

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	4423.7	4423.7	104 %		18:46:35
1	Y RADIAL	4513.0	4513.0	102.5 %		18:46:35
1	Al 396.153Radial†	4727.0	4701.3	4680.0 ug/L	4680.0 ppb	18:46:35
1	Ca 317.933Radial†	2634.5	2513.3	4688.2 ug/L	4688.2 ppb	18:46:55
1	Fe 238.204 Radial†	492.4	463.1	4935.9 ug/L	4935.9 ppb	18:46:55
1	K 766.490 Radial†	27446.5	23202.6	4677.6 ug/L	4677.6 ppb	18:46:35
1	Mg 279.077 IEC†	127.9	120.2	4643.1 ug/L	4643.1 ppb	18:46:55
1	Na 589.592 Radial†	31156.4	29732.1	9917.4 ug/L	9917.4 ppb	18:46:35
1	Sr 421.552†	64585.8	61972.8	478.47 ug/L	478.47 ppb	18:46:35
1	Sc 361.383	840521.3	840521.3	98.884 %		18:47:52
1	Y 371.029	675506.7	675506.7	96.126 %		18:47:52
1	Ag 328.068†	100445.9	101352.0	489.77 ug/L	489.77 ppb	18:47:58
1	As 188.979†	1085.8	1126.4	478.20 ug/L	478.20 ppb	18:48:18
1	B 249.677†	20236.8	20947.2	490.62 ug/L	490.62 ppb	18:47:58
1	Ba 233.527†	59244.5	59894.4	487.52 ug/L	487.52 ppb	18:47:58
1	Be 313.107†	1307828.8	1326930.1	488.50 ug/L	488.50 ppb	18:47:52
1	Cd 226.502†	39865.2	40510.6	473.63 ug/L	473.63 ppb	18:47:58
1	Co 228.616†	22938.6	23276.4	485.44 ug/L	485.44 ppb	18:47:58
1	Cr 267.716†	40172.0	40475.8	471.47 ug/L	471.47 ppb	18:47:58
1	Cu 324.752†	166882.5	160672.1	491.92 ug/L	491.92 ppb	18:47:58
1	Mn 257.610†	423367.2	427576.2	493.46 ug/L	493.46 ppb	18:47:52
1	Mo 202.031†	6375.1	6436.6	478.72 ug/L	478.72 ppb	18:48:18
1	Ni 231.604†	18538.2	18633.9	477.00 ug/L	477.00 ppb	18:47:58
1	P 214.914†	4413.6	4221.4	2246.2 ug/L	2246.2 ppb	18:48:18
1	Pb 220.353†	3709.8	3825.2	475.39 ug/L	475.39 ppb	18:48:18
1	S 181.975 Axial†	784.3	750.2	979.60 ug/L	979.60 ppb	18:48:18
1	Sb 206.836†	1416.0	1396.3	489.61 ug/L	489.61 ppb	18:48:18
1	Se 196.026†	780.4	812.6	491.51 ug/L	491.51 ppb	18:48:18
1	Si 251.611†	77739.8	78005.0	2424.9 ug/L	2424.9 ppb	18:47:58
1	Sn 189.927†	2601.2	2618.0	470.22 ug/L	470.22 ppb	18:48:18
1	Ti 334.940†	297176.5	302023.8	490.75 ug/L	490.75 ppb	18:47:58
1	Tl 190.801†	1485.9	1541.8	490.03 ug/L	490.03 ppb	18:48:18
1	U 409.014†	13544.9	17212.9	487.35 ug/L	487.35 ppb	18:47:58
1	V 292.402†	63437.4	65830.7	483.17 ug/L	483.17 ppb	18:47:58
1	Zn 213.857†	50043.4	49920.5	482.77 ug/L	482.77 ppb	18:47:58
1	SiO2†	77280.2	77533.0	5156.3 ug/L	5156.3 ppb	18:49:25
2	Sc Radial	4311.3	4311.3	101 %		18:47:00
2	Y RADIAL	4408.3	4408.3	100.1 %		18:47:00
2	Al 396.153Radial†	4858.5	4949.5	4928.2 ug/L	4928.2 ppb	18:47:00
2	Ca 317.933Radial†	2637.7	2582.5	4817.3 ug/L	4817.3 ppb	18:47:20
2	Fe 238.204 Radial†	488.8	471.9	5029.5 ug/L	5029.5 ppb	18:47:20
2	K 766.490 Radial†	27776.7	24216.2	4882.0 ug/L	4882.0 ppb	18:47:00
2	Mg 279.077 IEC†	131.7	127.1	4909.4 ug/L	4909.4 ppb	18:47:20
2	Na 589.592 Radial†	31395.1	30748.4	10256 ug/L	10256 ppb	18:47:00
2	Sr 421.552†	66222.7	65205.6	503.44 ug/L	503.44 ppb	18:47:00
2	Sc 361.383	839711.8	839711.8	98.789 %		18:48:23
2	Y 371.029	674614.5	674614.5	95.999 %		18:48:23
2	Ag 328.068†	100390.7	101394.0	489.99 ug/L	489.99 ppb	18:48:29
2	As 188.979†	1093.6	1135.4	481.98 ug/L	481.98 ppb	18:48:49
2	B 249.677†	20299.3	21030.1	492.56 ug/L	492.56 ppb	18:48:29
2	Ba 233.527†	58826.5	59529.0	484.55 ug/L	484.55 ppb	18:48:29
2	Be 313.107†	1303952.9	1324281.7	487.53 ug/L	487.53 ppb	18:48:23
2	Cd 226.502†	39591.9	40272.9	470.84 ug/L	470.84 ppb	18:48:29
2	Co 228.616†	22844.4	23203.4	483.92 ug/L	483.92 ppb	18:48:29
2	Cr 267.716†	39933.1	40273.1	469.11 ug/L	469.11 ppb	18:48:29
2	Cu 324.752†	166992.8	160946.5	492.77 ug/L	492.77 ppb	18:48:29
2	Mn 257.610†	422025.1	426630.5	492.36 ug/L	492.36 ppb	18:48:23
2	Mo 202.031†	6372.3	6440.0	478.98 ug/L	478.98 ppb	18:48:49
2	Ni 231.604†	18364.8	18476.5	472.97 ug/L	472.97 ppb	18:48:29

2	P 214.914†	4413.1	4225.3	2248.2 ug/L	2248.2 ppb	18:48:49
2	Pb 220.353†	3723.3	3842.5	477.57 ug/L	477.57 ppb	18:48:49
2	S 181.975 Axial†	781.2	747.8	976.48 ug/L	976.48 ppb	18:48:49
2	Sb 206.836†	1411.2	1392.8	488.42 ug/L	488.42 ppb	18:48:49
2	Se 196.026†	790.2	823.2	498.04 ug/L	498.04 ppb	18:48:49
2	Si 251.611†	77687.9	78028.2	2425.7 ug/L	2425.7 ppb	18:48:29
2	Sn 189.927†	2598.8	2618.1	470.26 ug/L	470.26 ppb	18:48:49
2	Ti 334.940†	296136.0	301260.2	489.51 ug/L	489.51 ppb	18:48:29
2	Tl 190.801†	1499.3	1556.8	494.74 ug/L	494.74 ppb	18:48:49
2	U 409.014†	13476.0	17156.4	485.74 ug/L	485.74 ppb	18:48:29
2	V 292.402†	63050.1	65500.6	480.78 ug/L	480.78 ppb	18:48:29
2	Zn 213.857†	49729.4	49651.4	480.16 ug/L	480.16 ppb	18:48:29
2	SiO2†	77417.6	77747.4	5170.6 ug/L	5170.6 ppb	18:49:30
3	Sc Radial	4291.4	4291.4	101 %		18:47:25
3	Y RADIAL	4371.3	4371.3	99.30 %		18:47:25
3	Al 396.153Radial†	4797.9	4911.7	4890.2 ug/L	4890.2 ppb	18:47:25
3	Ca 317.933Radial†	2641.8	2598.5	4847.2 ug/L	4847.2 ppb	18:47:45
3	Fe 238.204 Radial†	496.0	481.3	5129.2 ug/L	5129.2 ppb	18:47:45
3	K 766.490 Radial†	27551.8	24119.9	4862.5 ug/L	4862.5 ppb	18:47:25
3	Mg 279.077 IBC†	129.2	125.3	4839.0 ug/L	4839.0 ppb	18:47:45
3	Na 589.592 Radial†	31649.0	31142.9	10388 ug/L	10388 ppb	18:47:25
3	Sr 421.552†	65026.2	64322.0	496.61 ug/L	496.61 ppb	18:47:25
3	Sc 361.383	834625.9	834625.9	98.190 %		18:48:55
3	Y 371.029	671402.6	671402.6	95.542 %		18:48:55
3	Ag 328.068†	100021.7	101637.5	491.19 ug/L	491.19 ppb	18:49:00
3	As 188.979†	1090.7	1139.1	483.57 ug/L	483.57 ppb	18:49:20
3	B 249.677†	20285.8	21141.6	495.16 ug/L	495.16 ppb	18:49:00
3	Ba 233.527†	58838.5	59904.2	487.61 ug/L	487.61 ppb	18:49:00
3	Be 313.107†	1300745.2	1329058.3	489.29 ug/L	489.29 ppb	18:48:55
3	Cd 226.502†	39448.5	40371.0	471.98 ug/L	471.98 ppb	18:49:00
3	Co 228.616†	22794.8	23293.8	485.81 ug/L	485.81 ppb	18:49:00
3	Cr 267.716†	39887.7	40473.2	471.44 ug/L	471.44 ppb	18:49:00
3	Cu 324.752†	166532.4	161507.7	494.49 ug/L	494.49 ppb	18:49:00
3	Mn 257.610†	420682.4	427866.2	493.80 ug/L	493.80 ppb	18:48:55
3	Mo 202.031†	6379.6	6486.7	482.46 ug/L	482.46 ppb	18:49:20
3	Ni 231.604†	18351.2	18575.9	475.51 ug/L	475.51 ppb	18:49:00
3	P 214.914†	4419.2	4258.7	2266.3 ug/L	2266.3 ppb	18:49:20
3	Pb 220.353†	3705.0	3846.9	478.11 ug/L	478.11 ppb	18:49:20
3	S 181.975 Axial†	772.4	743.8	971.14 ug/L	971.14 ppb	18:49:20
3	Sb 206.836†	1428.0	1418.6	497.29 ug/L	497.29 ppb	18:49:20
3	Se 196.026†	790.1	828.0	501.12 ug/L	501.12 ppb	18:49:20
3	Si 251.611†	77443.1	78258.2	2432.8 ug/L	2432.8 ppb	18:49:00
3	Sn 189.927†	2608.9	2644.4	474.99 ug/L	474.99 ppb	18:49:20
3	Ti 334.940†	295445.4	302383.7	491.34 ug/L	491.34 ppb	18:49:00
3	Tl 190.801†	1495.0	1561.7	496.32 ug/L	496.32 ppb	18:49:20
3	U 409.014†	13600.7	17366.5	491.70 ug/L	491.70 ppb	18:49:00
3	V 292.402†	62855.0	65690.8	482.19 ug/L	482.19 ppb	18:49:00
3	Zn 213.857†	49706.3	49934.7	482.89 ug/L	482.89 ppb	18:49:00
3	SiO2†	78140.6	78961.3	5251.5 ug/L	5251.5 ppb	18:49:35

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	838286.3	98.621 %	0.3760			0.38%
Sc Radial	4342.1	102 %	1.7			1.64%
Y 371.029	673841.3	95.889 %	0.3072			0.32%
Y RADIAL	4430.9	100.7 %	1.67			1.66%
Ag 328.068†	101461.2	490.32 ug/L	0.767	490.32 ppb	0.767	0.16%
QC value within limits for Ag 328.068 Recovery = 98.06%						
Al 396.153Radial†	4854.2	4832.8 ug/L	133.73	4832.8 ppb	133.73	2.77%
QC value within limits for Al 396.153Radial Recovery = 96.66%						
As 188.979†	1133.6	481.25 ug/L	2.759	481.25 ppb	2.759	0.57%
QC value within limits for As 188.979 Recovery = 96.25%						
B 249.677†	21039.6	492.78 ug/L	2.279	492.78 ppb	2.279	0.46%
QC value within limits for B 249.677 Recovery = 98.56%						
Ba 233.527†	59775.9	486.56 ug/L	1.739	486.56 ppb	1.739	0.36%
QC value within limits for Ba 233.527 Recovery = 97.31%						
Be 313.107†	1326756.7	488.44 ug/L	0.881	488.44 ppb	0.881	0.18%
QC value within limits for Be 313.107 Recovery = 97.69%						
Ca 317.933Radial†	2564.8	4784.2 ug/L	84.51	4784.2 ppb	84.51	1.77%

QC value within limits for Ca 317.933 Radial Recovery = 95.68%

Cd	226.502†	40384.8	472.15 ug/L	1.404	472.15 ppb	1.404	0.30%
QC value within limits for Cd 226.502 Recovery = 94.43%							
Co	228.616†	23257.9	485.05 ug/L	1.001	485.05 ppb	1.001	0.21%
QC value within limits for Co 228.616 Recovery = 97.01%							
Cr	267.716†	40407.3	470.68 ug/L	1.354	470.68 ppb	1.354	0.29%
QC value within limits for Cr 267.716 Recovery = 94.14%							
Cu	324.752†	161042.1	493.06 ug/L	1.308	493.06 ppb	1.308	0.27%
QC value within limits for Cu 324.752 Recovery = 98.61%							
Fe	238.204 Radial†	472.1	5031.5 ug/L	96.66	5031.5 ppb	96.66	1.92%
QC value within limits for Fe 238.204 Radial Recovery = 100.63%							
K	766.490 Radial†	23846.2	4807.4 ug/L	112.82	4807.4 ppb	112.82	2.35%
QC value within limits for K 766.490 Radial Recovery = 96.15%							
Mg	279.077 IEC†	124.2	4797.2 ug/L	138.02	4797.2 ppb	138.02	2.88%
QC value within limits for Mg 279.077 IEC Recovery = 95.94%							
Mn	257.610†	427357.6	493.21 ug/L	0.751	493.21 ppb	0.751	0.15%
QC value within limits for Mn 257.610 Recovery = 98.64%							
Mo	202.031†	6454.4	480.05 ug/L	2.090	480.05 ppb	2.090	0.44%
QC value within limits for Mo 202.031 Recovery = 96.01%							
Na	589.592 Radial†	30541.1	10187 ug/L	242.8	10187 ppb	242.8	2.38%
QC value within limits for Na 589.592 Radial Recovery = 101.87%							
Ni	231.604†	18562.1	475.16 ug/L	2.039	475.16 ppb	2.039	0.43%
QC value within limits for Ni 231.604 Recovery = 95.03%							
P	214.914†	4235.1	2253.6 ug/L	11.08	2253.6 ppb	11.08	0.49%
QC value within limits for P 214.914 Recovery = 90.14%							
Pb	220.353†	3838.2	477.02 ug/L	1.441	477.02 ppb	1.441	0.30%
QC value within limits for Pb 220.353 Recovery = 95.40%							
S	181.975 Axial†	747.3	975.74 ug/L	4.276	975.74 ppb	4.276	0.44%
QC value within limits for S 181.975 Axial Recovery = 97.57%							
Sb	206.836†	1402.6	491.77 ug/L	4.816	491.77 ppb	4.816	0.98%
QC value within limits for Sb 206.836 Recovery = 98.35%							
Se	196.026†	821.3	496.89 ug/L	4.906	496.89 ppb	4.906	0.99%
QC value within limits for Se 196.026 Recovery = 99.38%							
Si	251.611†	78097.1	2427.8 ug/L	4.34	2427.8 ppb	4.34	0.18%
QC value within limits for Si 251.611 Recovery = 97.11%							
Sn	189.927†	2626.8	471.83 ug/L	2.739	471.83 ppb	2.739	0.58%
QC value within limits for Sn 189.927 Recovery = 94.37%							
Sr	421.552†	63833.5	492.84 ug/L	12.901	492.84 ppb	12.901	2.62%
QC value within limits for Sr 421.552 Recovery = 98.57%							
Ti	334.940†	301889.2	490.53 ug/L	0.935	490.53 ppb	0.935	0.19%
QC value within limits for Ti 334.940 Recovery = 98.11%							
Tl	190.801†	1553.4	493.70 ug/L	3.269	493.70 ppb	3.269	0.66%
QC value within limits for Tl 190.801 Recovery = 98.74%							
U	409.014†	17245.3	488.26 ug/L	3.079	488.26 ppb	3.079	0.63%
QC value within limits for U 409.014 Recovery = 97.65%							
V	292.402†	65674.0	482.05 ug/L	1.205	482.05 ppb	1.205	0.25%
QC value within limits for V 292.402 Recovery = 96.41%							
Zn	213.857†	49835.6	481.94 ug/L	1.545	481.94 ppb	1.545	0.32%
QC value within limits for Zn 213.857 Recovery = 96.39%							
SiO2†		78080.6	5192.8 ug/L	51.30	5192.8 ppb	51.30	0.99%
QC value within limits for SiO2 Recovery = 97.11%							

All analyte(s) passed QC.

Sequence No.: 20

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 2/16/2010 18:51:45

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	4404.2	4404.2	104 %		18:53:37
1	Y RADIAL	4505.0	4505.0	102.3 %		18:53:37
1	Al 396.153Radial†	-129.6	33.9	33.937 ug/L	33.937 ppb	18:53:57
1	Ca 317.933Radial†	25.2	6.0	11.266 ug/L	11.266 ppb	18:53:57
1	Fe 238.204 Radial†	7.5	-2.8	-30.036 ug/L	-30.036 ppb	18:53:57
1	K 766.490 Radial†	3285.1	-0.8	-0.3042 ug/L	-0.3042 ppb	18:53:37
1	Mg 279.077 IEC†	4.2	1.4	53.368 ug/L	53.368 ppb	18:53:57
1	Na 589.592 Radial†	1262.3	1011.3	337.32 ug/L	337.32 ppb	18:53:37
1	Sr 421.552†	145.0	50.1	0.3871 ug/L	0.3871 ppb	18:53:37
1	Sc 361.383	819612.9	819612.9	96.424 %		18:54:54
1	Y 371.029	667058.4	667058.4	94.924 %		18:54:54
1	Ag 328.068†	139.6	-82.9	-0.4117 ug/L	-0.4117 ppb	18:54:54
1	As 188.979†	-25.1	2.3	0.9633 ug/L	0.9633 ppb	18:55:14
1	B 249.677†	-59.7	420.0	9.8855 ug/L	9.8855 ppb	18:55:14
1	Ba 233.527†	19.7	1.6	0.0132 ug/L	0.0132 ppb	18:55:14
1	Be 313.107†	-4266.3	-85.4	-0.0305 ug/L	-0.0305 ppb	18:54:54
1	Cd 226.502†	-208.0	-20.2	-0.2317 ug/L	-0.2317 ppb	18:55:14
1	Co 228.616†	-71.1	5.1	0.1073 ug/L	0.1073 ppb	18:55:14
1	Cr 267.716†	89.7	-56.7	-0.6616 ug/L	-0.6616 ppb	18:55:14
1	Cu 324.752†	7652.6	-157.7	-0.4882 ug/L	-0.4882 ppb	18:54:54
1	Mn 257.610†	713.1	169.8	0.1907 ug/L	0.1907 ppb	18:55:14
1	Mo 202.031†	14.0	4.1	0.2992 ug/L	0.2992 ppb	18:55:14
1	Ni 231.604†	101.2	-8.5	-0.2187 ug/L	-0.2187 ppb	18:55:14
1	P 214.914†	223.7	-10.0	-5.4118 ug/L	-5.4118 ppb	18:55:14
1	Pb 220.353†	-62.7	8.5	1.0653 ug/L	1.0653 ppb	18:55:14
1	S 181.975 Axial†	64.7	24.2	31.673 ug/L	31.673 ppb	18:55:14
1	Sb 206.836†	42.8	8.7	2.9975 ug/L	2.9975 ppb	18:55:14
1	Se 196.026†	-15.3	7.4	4.2439 ug/L	4.2439 ppb	18:55:14
1	Si 251.611†	623.9	34.7	1.0774 ug/L	1.0774 ppb	18:55:14
1	Sn 189.927†	27.7	16.1	2.8833 ug/L	2.8833 ppb	18:55:14
1	Ti 334.940†	-1204.6	243.6	0.3903 ug/L	0.3903 ppb	18:54:54
1	Tl 190.801†	-27.5	10.6	3.3517 ug/L	3.3517 ppb	18:55:14
1	U 409.014†	-3151.7	246.6	7.0089 ug/L	7.0089 ppb	18:54:54
1	V 292.402†	-1536.4	83.9	0.6306 ug/L	0.6306 ppb	18:54:54
1	Zn 213.857†	703.2	41.5	0.4120 ug/L	0.4120 ppb	18:55:14
1	SiO2†	613.7	16.9	1.1196 ug/L	1.1196 ppb	18:56:10
2	Sc Radial	4352.1	4352.1	102 %		18:54:02
2	Y RADIAL	4491.6	4491.6	102.0 %		18:54:02
2	Al 396.153Radial†	-126.5	35.5	35.486 ug/L	35.486 ppb	18:54:22
2	Ca 317.933Radial†	20.4	1.6	3.0645 ug/L	3.0645 ppb	18:54:22
2	Fe 238.204 Radial†	12.1	1.8	18.919 ug/L	18.919 ppb	18:54:22
2	K 766.490 Radial†	3343.2	93.9	18.830 ug/L	18.830 ppb	18:54:02
2	Mg 279.077 IEC†	-0.3	-3.1	-118.05 ug/L	-118.05 ppb	18:54:22
2	Na 589.592 Radial†	1133.2	899.8	300.14 ug/L	300.14 ppb	18:54:02
2	Sr 421.552†	75.2	-16.3	-0.1261 ug/L	-0.1261 ppb	18:54:02
2	Sc 361.383	824141.6	824141.6	96.957 %		18:55:19
2	Y 371.029	670121.5	670121.5	95.360 %		18:55:19
2	Ag 328.068†	259.0	39.4	0.1829 ug/L	0.1829 ppb	18:55:19
2	As 188.979†	-28.2	-0.7	-0.3009 ug/L	-0.3009 ppb	18:55:39
2	B 249.677†	-78.7	400.7	9.4234 ug/L	9.4234 ppb	18:55:39
2	Ba 233.527†	16.5	-1.8	-0.0150 ug/L	-0.0150 ppb	18:55:39
2	Be 313.107†	-4403.2	-202.2	-0.0740 ug/L	-0.0740 ppb	18:55:19
2	Cd 226.502†	-203.4	-14.3	-0.1670 ug/L	-0.1670 ppb	18:55:39
2	Co 228.616†	-70.2	6.4	0.1350 ug/L	0.1350 ppb	18:55:39
2	Cr 267.716†	64.6	-83.0	-0.9714 ug/L	-0.9714 ppb	18:55:39
2	Cu 324.752†	7741.9	-109.2	-0.3406 ug/L	-0.3406 ppb	18:55:19
2	Mn 257.610†	818.5	274.4	0.3232 ug/L	0.3232 ppb	18:55:39
2	Mo 202.031†	15.5	5.5	0.4139 ug/L	0.4139 ppb	18:55:39
2	Ni 231.604†	97.8	-12.6	-0.3236 ug/L	-0.3236 ppb	18:55:39

2	P 214.914†	235.6	1.0	0.6399 ug/L	0.6399 ppb	18:55:39
2	Pb 220.353†	-65.9	5.6	0.7015 ug/L	0.7015 ppb	18:55:39
2	S 181.975 Axial†	66.6	25.8	33.722 ug/L	33.722 ppb	18:55:39
2	Sb 206.836†	35.8	1.3	0.4681 ug/L	0.4681 ppb	18:55:39
2	Se 196.026†	-27.9	-5.4	-3.1043 ug/L	-3.1043 ppb	18:55:39
2	Si 251.611†	682.3	91.4	2.8419 ug/L	2.8419 ppb	18:55:39
2	Sn 189.927†	23.1	11.2	2.0075 ug/L	2.0075 ppb	18:55:39
2	Ti 334.940†	-1370.5	79.3	0.1336 ug/L	0.1336 ppb	18:55:19
2	Tl 190.801†	-35.9	2.1	0.6585 ug/L	0.6585 ppb	18:55:39
2	U 409.014†	-2956.4	466.0	13.238 ug/L	13.238 ppb	18:55:19
2	V 292.402†	-1688.1	-63.8	-0.4357 ug/L	-0.4357 ppb	18:55:19
2	Zn 213.857†	709.4	43.9	0.4280 ug/L	0.4280 ppb	18:55:39
2	SiO2†	664.1	65.4	4.3492 ug/L	4.3492 ppb	18:56:15
3	Sc Radial	4247.1	4247.1	99.9 %		18:54:27
3	Y RADIAL	4366.6	4366.6	99.19 %		18:54:27
3	Al 396.153Radial†	-130.6	28.3	28.230 ug/L	28.230 ppb	18:54:47
3	Ca 317.933Radial†	20.7	2.4	4.4279 ug/L	4.4279 ppb	18:54:47
3	Fe 238.204 Radial†	10.0	-0.0	-0.4951 ug/L	-0.4951 ppb	18:54:47
3	K 766.490 Radial†	3309.1	140.4	28.216 ug/L	28.216 ppb	18:54:27
3	Mg 279.077 IEC†	4.1	1.4	52.175 ug/L	52.175 ppb	18:54:47
3	Na 589.592 Radial†	1221.6	1015.6	338.76 ug/L	338.76 ppb	18:54:27
3	Sr 421.552†	92.8	3.1	0.0236 ug/L	0.0236 ppb	18:54:27
3	Sc 361.383	820645.3	820645.3	96.546 %		18:55:44
3	Y 371.029	669123.9	669123.9	95.218 %		18:55:44
3	Ag 328.068†	150.3	-72.0	-0.3496 ug/L	-0.3496 ppb	18:55:44
3	As 188.979†	-30.8	-3.6	-1.5028 ug/L	-1.5028 ppb	18:56:04
3	B 249.677†	-117.1	360.6	8.4842 ug/L	8.4842 ppb	18:56:04
3	Ba 233.527†	5.0	-13.6	-0.1094 ug/L	-0.1094 ppb	18:56:04
3	Be 313.107†	-4275.8	-89.7	-0.0324 ug/L	-0.0324 ppb	18:55:44
3	Cd 226.502†	-196.7	-8.2	-0.0951 ug/L	-0.0951 ppb	18:56:04
3	Co 228.616†	-68.4	8.0	0.1695 ug/L	0.1695 ppb	18:56:04
3	Cr 267.716†	62.0	-85.4	-0.9960 ug/L	-0.9960 ppb	18:56:04
3	Cu 324.752†	7611.0	-210.8	-0.6495 ug/L	-0.6495 ppb	18:55:44
3	Mn 257.610†	648.2	101.6	0.1150 ug/L	0.1150 ppb	18:56:04
3	Mo 202.031†	25.5	15.9	1.1832 ug/L	1.1832 ppb	18:56:04
3	Ni 231.604†	91.0	-19.2	-0.4925 ug/L	-0.4925 ppb	18:56:04
3	P 214.914†	242.7	9.4	5.3734 ug/L	5.3734 ppb	18:56:04
3	Pb 220.353†	-74.0	-3.1	-0.3778 ug/L	-0.3778 ppb	18:56:04
3	S 181.975 Axial†	53.4	12.4	16.232 ug/L	16.232 ppb	18:56:04
3	Sb 206.836†	40.5	6.3	2.1687 ug/L	2.1687 ppb	18:56:04
3	Se 196.026†	-21.5	1.1	0.6376 ug/L	0.6376 ppb	18:56:04
3	Si 251.611†	612.5	22.1	0.6753 ug/L	0.6753 ppb	18:56:04
3	Sn 189.927†	16.4	4.4	0.7898 ug/L	0.7898 ppb	18:56:04
3	Ti 334.940†	-1310.2	135.9	0.2143 ug/L	0.2143 ppb	18:55:44
3	Tl 190.801†	-32.1	5.9	1.8662 ug/L	1.8662 ppb	18:56:04
3	U 409.014†	-3143.1	259.6	7.3781 ug/L	7.3781 ppb	18:55:44
3	V 292.402†	-1539.0	83.3	0.6351 ug/L	0.6351 ppb	18:55:44
3	Zn 213.857†	705.5	43.0	0.4237 ug/L	0.4237 ppb	18:56:04
3	SiO2†	634.5	37.7	2.4814 ug/L	2.4814 ppb	18:56:20

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	821466.6	96.642 %	0.2792			0.29%
Sc Radial	4334.5	102 %	1.9			1.85%
Y 371.029	668767.9	95.167 %	0.2223			0.23%
Y RADIAL	4454.4	101.2 %	1.73			1.71%
Ag 328.068†	-38.5	-0.1928 ug/L	0.32687	-0.1928 ppb	0.32687	169.55%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	32.6	32.551 ug/L	3.8214	32.551 ppb	3.8214	11.74%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-0.7	-0.2801 ug/L	1.23321	-0.2801 ppb	1.23321	440.20%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	393.8	9.2644 ug/L	0.71407	9.2644 ppb	0.71407	7.71%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	-4.6	-0.0371 ug/L	0.06424	-0.0371 ppb	0.06424	173.35%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-125.8	-0.0456 ug/L	0.02458	-0.0456 ppb	0.02458	53.87%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	3.4	6.2529 ug/L	4.39488	6.2529 ppb	4.39488	70.29%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd 226.502†	-14.2	-0.1646 ug/L	0.06832	-0.1646 ppb	0.06832	41.51%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	6.5	0.1373 ug/L	0.03116	0.1373 ppb	0.03116	22.70%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	-75.0	-0.8763 ug/L	0.18637	-0.8763 ppb	0.18637	21.27%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	-159.2	-0.4927 ug/L	0.15449	-0.4927 ppb	0.15449	31.35%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	-0.4	-3.8707 ug/L	24.65148	-3.8707 ppb	24.65148	636.88%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	77.8	15.581 ug/L	14.5353	15.581 ppb	14.5353	93.29%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	-0.1	-4.1676 ug/L	98.62266	-4.1676 ppb	98.62266	>999.9%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	181.9	0.2096 ug/L	0.10537	0.2096 ppb	0.10537	50.27%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	8.5	0.6321 ug/L	0.48068	0.6321 ppb	0.48068	76.05%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	975.6	325.41 ug/L	21.895	325.41 ppb	21.895	6.73%	
QC value greater than the upper limit for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	-13.5	-0.3449 ug/L	0.13814	-0.3449 ppb	0.13814	40.05%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	0.1	0.2005 ug/L	5.40605	0.2005 ppb	5.40605	>999.9%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	3.7	0.4630 ug/L	0.75053	0.4630 ppb	0.75053	162.10%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	20.8	27.209 ug/L	9.5613	27.209 ppb	9.5613	35.14%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	5.4	1.8781 ug/L	1.28949	1.8781 ppb	1.28949	68.66%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	1.0	0.5924 ug/L	3.67432	0.5924 ppb	3.67432	620.24%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	49.4	1.5315 ug/L	1.15250	1.5315 ppb	1.15250	75.25%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	10.6	1.8935 ug/L	1.05141	1.8935 ppb	1.05141	55.53%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	12.3	0.0949 ug/L	0.26392	0.0949 ppb	0.26392	278.20%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	152.9	0.2460 ug/L	0.13128	0.2460 ppb	0.13128	53.36%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	6.2	1.9588 ug/L	1.34898	1.9588 ppb	1.34898	68.87%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	324.1	9.2084 ug/L	3.49477	9.2084 ppb	3.49477	37.95%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	34.5	0.2767 ug/L	0.61692	0.2767 ppb	0.61692	223.00%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	42.8	0.4212 ug/L	0.00829	0.4212 ppb	0.00829	1.97%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	40.0	2.6501 ug/L	1.62142	2.6501 ppb	1.62142	61.18%	
QC value within limits for SiO2 Recovery = Not calculated							
QC Failed. Continue with analysis.							

Sequence No.: 27

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 2/16/2010 19:41:12

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4179.5	4179.5	98.3 %		19:43:03
1	Y RADIAL	4288.6	4288.6	97.42 %		19:43:03
1	Al 396.153Radial†	4687.7	4926.8	4905.1 ug/L	4905.1 ppb	19:43:03
1	Ca 317.933Radial†	2655.1	2682.1	5003.1 ug/L	5003.1 ppb	19:43:23
1	Fe 238.204 Radial†	496.7	495.2	5277.2 ug/L	5277.2 ppb	19:43:23
1	K 766.490 Radial†	27083.0	24373.9	4913.7 ug/L	4913.7 ppb	19:43:03
1	Mg 279.077 IEC†	133.2	132.8	5127.7 ug/L	5127.7 ppb	19:43:23
1	Na 589.592 Radial†	30987.2	31309.3	10444 ug/L	10444 ppb	19:43:03
1	Sr 421.552†	64335.8	65344.6	504.51 ug/L	504.51 ppb	19:43:03
1	Sc 361.383	816487.5	816487.5	96.056 %		19:44:21
1	Y 371.029	656358.4	656358.4	93.401 %		19:44:21
1	Ag 328.068†	99919.2	103793.8	501.63 ug/L	501.63 ppb	19:44:26
1	As 188.979†	1073.3	1145.7	486.48 ug/L	486.48 ppb	19:44:46
1	B 249.677†	20138.8	21447.5	502.30 ug/L	502.30 ppb	19:44:26
1	Ba 233.527†	58941.8	61342.9	499.32 ug/L	499.32 ppb	19:44:26
1	Be 313.107†	1280907.8	1337835.2	492.54 ug/L	492.54 ppb	19:44:21
1	Cd 226.502†	39512.5	41330.2	483.19 ug/L	483.19 ppb	19:44:26
1	Co 228.616†	22844.8	23861.5	497.63 ug/L	497.63 ppb	19:44:26
1	Cr 267.716†	39915.6	41404.7	482.30 ug/L	482.30 ppb	19:44:26
1	Cu 324.752†	166450.4	165190.0	505.77 ug/L	505.77 ppb	19:44:26
1	Mn 257.610†	414714.8	431171.4	497.62 ug/L	497.62 ppb	19:44:21
1	Mo 202.031†	6312.9	6561.6	488.03 ug/L	488.03 ppb	19:44:46
1	Ni 231.604†	18414.5	19057.0	487.83 ug/L	487.83 ppb	19:44:26
1	P 214.914†	4384.8	4322.9	2299.6 ug/L	2299.6 ppb	19:44:46
1	Pb 220.353†	3674.4	3898.8	484.53 ug/L	484.53 ppb	19:44:46
1	S 181.975 Axial†	776.4	765.4	999.36 ug/L	999.36 ppb	19:44:46
1	Sb 206.836†	1408.2	1430.3	501.44 ug/L	501.44 ppb	19:44:46
1	Se 196.026†	767.4	822.2	498.28 ug/L	498.28 ppb	19:44:46
1	Si 251.611†	77317.5	79879.5	2483.2 ug/L	2483.2 ppb	19:44:26
1	Sn 189.927†	2574.4	2667.5	479.16 ug/L	479.16 ppb	19:44:46
1	Ti 334.940†	295940.7	309583.5	503.03 ug/L	503.03 ppb	19:44:26
1	Tl 190.801†	1484.8	1584.9	503.66 ug/L	503.66 ppb	19:44:46
1	U 409.014†	13535.8	17606.7	498.48 ug/L	498.48 ppb	19:44:26
1	V 292.402†	62951.6	67213.4	493.28 ug/L	493.28 ppb	19:44:26
1	Zn 213.857†	49794.7	51151.3	494.65 ug/L	494.65 ppb	19:44:26
1	SiO2†	76911.0	79449.1	5283.8 ug/L	5283.8 ppb	19:45:54
2	Sc Radial	4275.0	4275.0	101 %		19:43:28
2	Y RADIAL	4376.7	4376.7	99.42 %		19:43:28
2	Al 396.153Radial†	4814.8	4946.7	4924.9 ug/L	4924.9 ppb	19:43:28
2	Ca 317.933Radial†	2624.0	2590.9	4833.1 ug/L	4833.1 ppb	19:43:48
2	Fe 238.204 Radial†	490.3	477.4	5088.8 ug/L	5088.8 ppb	19:43:48
2	K 766.490 Radial†	27406.8	24080.9	4854.7 ug/L	4854.7 ppb	19:43:28
2	Mg 279.077 IEC†	129.7	126.3	4877.2 ug/L	4877.2 ppb	19:43:48
2	Na 589.592 Radial†	31213.9	30831.1	10284 ug/L	10284 ppb	19:43:28
2	Sr 421.552†	65603.3	65144.1	502.96 ug/L	502.96 ppb	19:43:28
2	Sc 361.383	815668.6	815668.6	95.960 %		19:44:52
2	Y 371.029	656284.8	656284.8	93.391 %		19:44:52
2	Ag 328.068†	99209.0	103158.1	498.51 ug/L	498.51 ppb	19:44:57
2	As 188.979†	1075.8	1149.5	487.98 ug/L	487.98 ppb	19:45:17
2	B 249.677†	19971.0	21293.7	498.73 ug/L	498.73 ppb	19:44:57
2	Ba 233.527†	58438.2	60879.6	495.54 ug/L	495.54 ppb	19:44:57
2	Be 313.107†	1278947.1	1337130.7	492.27 ug/L	492.27 ppb	19:44:52
2	Cd 226.502†	39176.2	41021.0	479.59 ug/L	479.59 ppb	19:44:57
2	Co 228.616†	22562.7	23591.5	492.02 ug/L	492.02 ppb	19:44:57
2	Cr 267.716†	39582.4	41099.1	478.73 ug/L	478.73 ppb	19:44:57
2	Cu 324.752†	165098.3	163955.0	501.98 ug/L	501.98 ppb	19:44:57
2	Mn 257.610†	413683.5	430530.1	496.87 ug/L	496.87 ppb	19:44:52
2	Mo 202.031†	6334.5	6590.7	490.18 ug/L	490.18 ppb	19:45:17
2	Ni 231.604†	18210.4	18863.5	482.88 ug/L	482.88 ppb	19:44:57

2	P 214.914†	4362.2	4303.9	2290.0 ug/L	2290.0 ppb	19:45:17
2	Pb 220.353†	3680.6	3909.1	485.84 ug/L	485.84 ppb	19:45:17
2	S 181.975 Axial†	772.3	761.9	994.90 ug/L	994.90 ppb	19:45:17
2	Sb 206.836†	1398.9	1422.1	498.74 ug/L	498.74 ppb	19:45:17
2	Se 196.026†	772.3	828.1	501.13 ug/L	501.13 ppb	19:45:17
2	Si 251.611†	76726.5	79344.4	2466.5 ug/L	2466.5 ppb	19:44:57
2	Sn 189.927†	2586.5	2682.8	481.88 ug/L	481.88 ppb	19:45:17
2	Ti 334.940†	293328.6	307170.9	499.11 ug/L	499.11 ppb	19:44:57
2	Tl 190.801†	1468.0	1569.0	498.64 ug/L	498.64 ppb	19:45:17
2	U 409.014†	13356.6	17434.1	493.60 ug/L	493.60 ppb	19:44:57
2	V 292.402†	62380.0	66683.6	489.49 ug/L	489.49 ppb	19:44:57
2	Zn 213.857†	49339.8	50729.3	490.59 ug/L	490.59 ppb	19:44:57
2	SiO2†	77165.6	79794.8	5306.8 ug/L	5306.8 ppb	19:45:59
3	Sc Radial	4256.7	4256.7	100 %		19:43:54
3	Y RADIAL	4349.1	4349.1	98.79 %		19:43:54
3	Al 396.153Radial†	4727.8	4880.4	4858.9 ug/L	4858.9 ppb	19:43:54
3	Ca 317.933Radial†	2633.7	2611.8	4872.1 ug/L	4872.1 ppb	19:44:14
3	Fe 238.204 Radial†	489.1	478.4	5098.2 ug/L	5098.2 ppb	19:44:14
3	K 766.490 Radial†	27371.5	24162.7	4871.2 ug/L	4871.2 ppb	19:43:54
3	Mg 279.077 IEC†	127.8	124.9	4824.0 ug/L	4824.0 ppb	19:44:14
3	Na 589.592 Radial†	31166.5	30917.0	10313 ug/L	10313 ppb	19:43:54
3	Sr 421.552†	65058.8	64880.4	500.92 ug/L	500.92 ppb	19:43:54
3	Sc 361.383	829424.6	829424.6	97.578 %		19:45:23
3	Y 371.029	666366.8	666366.8	94.826 %		19:45:23
3	Ag 328.068†	98856.1	101081.8	488.51 ug/L	488.51 ppb	19:45:28
3	As 188.979†	1081.6	1136.8	482.58 ug/L	482.58 ppb	19:45:48
3	B 249.677†	19982.8	20960.7	490.92 ug/L	490.92 ppb	19:45:28
3	Ba 233.527†	58135.4	59559.3	484.80 ug/L	484.80 ppb	19:45:28
3	Be 313.107†	1302246.1	1338903.7	492.90 ug/L	492.90 ppb	19:45:23
3	Cd 226.502†	39048.2	40212.8	470.13 ug/L	470.13 ppb	19:45:28
3	Co 228.616†	22545.7	23184.1	483.52 ug/L	483.52 ppb	19:45:28
3	Cr 267.716†	39506.5	40337.3	469.86 ug/L	469.86 ppb	19:45:28
3	Cu 324.752†	164768.1	160763.1	492.20 ug/L	492.20 ppb	19:45:28
3	Mn 257.610†	420108.2	429964.4	496.22 ug/L	496.22 ppb	19:45:23
3	Mo 202.031†	6340.7	6487.6	482.52 ug/L	482.52 ppb	19:45:48
3	Ni 231.604†	18150.5	18487.5	473.25 ug/L	473.25 ppb	19:45:28
3	P 214.914†	4353.1	4219.1	2244.8 ug/L	2244.8 ppb	19:45:48
3	Pb 220.353†	3700.5	3865.9	480.46 ug/L	480.46 ppb	19:45:48
3	S 181.975 Axial†	771.2	747.4	975.90 ug/L	975.90 ppb	19:45:48
3	Sb 206.836†	1395.6	1394.6	489.17 ug/L	489.17 ppb	19:45:48
3	Se 196.026†	774.6	817.1	494.71 ug/L	494.71 ppb	19:45:48
3	Si 251.611†	76510.2	77796.7	2418.4 ug/L	2418.4 ppb	19:45:28
3	Sn 189.927†	2594.3	2646.1	475.29 ug/L	475.29 ppb	19:45:48
3	Ti 334.940†	292566.0	301319.7	489.61 ug/L	489.61 ppb	19:45:28
3	Tl 190.801†	1477.4	1553.2	493.64 ug/L	493.64 ppb	19:45:48
3	U 409.014†	13600.6	17453.3	494.17 ug/L	494.17 ppb	19:45:28
3	V 292.402†	62278.3	65501.2	480.83 ug/L	480.83 ppb	19:45:28
3	Zn 213.857†	49214.4	49748.1	481.09 ug/L	481.09 ppb	19:45:28
3	SiO2†	77803.7	79115.1	5261.7 ug/L	5261.7 ppb	19:46:04

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	820526.9	96.532 %	0.9078			0.94%
Sc Radial	4237.1	99.7 %	1.19			1.20%
Y 371.029	659670.0	93.873 %	0.8253			0.88%
Y RADIAL	4338.2	98.55 %	1.023			1.04%
Ag 328.068†	102677.9	496.22 ug/L	6.857	496.22 ppb	6.857	1.38%
QC value within limits for Ag 328.068 Recovery = 99.24%						
Al 396.153Radial†	4918.0	4896.3 ug/L	33.85	4896.3 ppb	33.85	0.69%
QC value within limits for Al 396.153Radial Recovery = 97.93%						
As 188.979†	1144.0	485.68 ug/L	2.787	485.68 ppb	2.787	0.57%
QC value within limits for As 188.979 Recovery = 97.14%						
B 249.677†	21233.9	497.32 ug/L	5.822	497.32 ppb	5.822	1.17%
QC value within limits for B 249.677 Recovery = 99.46%						
Ba 233.527†	60593.9	493.22 ug/L	7.530	493.22 ppb	7.530	1.53%
QC value within limits for Ba 233.527 Recovery = 98.64%						
Be 313.107†	1337956.6	492.57 ug/L	0.316	492.57 ppb	0.316	0.06%
QC value within limits for Be 313.107 Recovery = 98.51%						
Ca 317.933Radial†	2628.3	4902.7 ug/L	89.09	4902.7 ppb	89.09	1.82%

QC value within limits for Ca 317.933 Radial Recovery = 98.05%							
Cd 226.502†	40854.7	477.64 ug/L	6.745	477.64 ppb	6.745	1.41%	
QC value within limits for Cd 226.502 Recovery = 95.53%							
Co 228.616†	23545.7	491.06 ug/L	7.104	491.06 ppb	7.104	1.45%	
QC value within limits for Co 228.616 Recovery = 98.21%							
Cr 267.716†	40947.0	476.96 ug/L	6.405	476.96 ppb	6.405	1.34%	
QC value within limits for Cr 267.716 Recovery = 95.39%							
Cu 324.752†	163302.7	499.98 ug/L	6.997	499.98 ppb	6.997	1.40%	
QC value within limits for Cu 324.752 Recovery = 100.00%							
Fe 238.204 Radial†	483.7	5154.7 ug/L	106.13	5154.7 ppb	106.13	2.06%	
QC value within limits for Fe 238.204 Radial Recovery = 103.09%							
K 766.490 Radial†	24205.8	4879.9 ug/L	30.45	4879.9 ppb	30.45	0.62%	
QC value within limits for K 766.490 Radial Recovery = 97.60%							
Mg 279.077 IEC†	128.0	4943.0 ug/L	162.16	4943.0 ppb	162.16	3.28%	
QC value within limits for Mg 279.077 IEC Recovery = 98.86%							
Mn 257.610†	430555.3	496.90 ug/L	0.699	496.90 ppb	0.699	0.14%	
QC value within limits for Mn 257.610 Recovery = 99.38%							
Mo 202.031†	6546.6	486.91 ug/L	3.951	486.91 ppb	3.951	0.81%	
QC value within limits for Mo 202.031 Recovery = 97.38%							
Na 589.592 Radial†	31019.1	10347 ug/L	85.0	10347 ppb	85.0	0.82%	
QC value within limits for Na 589.592 Radial Recovery = 103.47%							
Ni 231.604†	18802.7	481.32 ug/L	7.414	481.32 ppb	7.414	1.54%	
QC value within limits for Ni 231.604 Recovery = 96.26%							
P 214.914†	4282.0	2278.2 ug/L	29.26	2278.2 ppb	29.26	1.28%	
QC value within limits for P 214.914 Recovery = 91.13%							
Pb 220.353†	3891.3	483.61 ug/L	2.806	483.61 ppb	2.806	0.58%	
QC value within limits for Pb 220.353 Recovery = 96.72%							
S 181.975 Axial†	758.2	990.05 ug/L	12.459	990.05 ppb	12.459	1.26%	
QC value within limits for S 181.975 Axial Recovery = 99.01%							
Sb 206.836†	1415.7	496.45 ug/L	6.445	496.45 ppb	6.445	1.30%	
QC value within limits for Sb 206.836 Recovery = 99.29%							
Se 196.026†	822.5	498.04 ug/L	3.215	498.04 ppb	3.215	0.65%	
QC value within limits for Se 196.026 Recovery = 99.61%							
Si 251.611†	79006.9	2456.1 ug/L	33.66	2456.1 ppb	33.66	1.37%	
QC value within limits for Si 251.611 Recovery = 98.24%							
Sn 189.927†	2665.5	478.78 ug/L	3.308	478.78 ppb	3.308	0.69%	
QC value within limits for Sn 189.927 Recovery = 95.76%							
Sr 421.552†	65123.0	502.80 ug/L	1.797	502.80 ppb	1.797	0.36%	
QC value within limits for Sr 421.552 Recovery = 100.56%							
Ti 334.940†	306024.7	497.25 ug/L	6.899	497.25 ppb	6.899	1.39%	
QC value within limits for Ti 334.940 Recovery = 99.45%							
Tl 190.801†	1569.0	498.65 ug/L	5.009	498.65 ppb	5.009	1.00%	
QC value within limits for Tl 190.801 Recovery = 99.73%							
U 409.014†	17498.1	495.42 ug/L	2.666	495.42 ppb	2.666	0.54%	
QC value within limits for U 409.014 Recovery = 99.08%							
V 292.402†	66466.1	487.87 ug/L	6.381	487.87 ppb	6.381	1.31%	
QC value within limits for V 292.402 Recovery = 97.57%							
Zn 213.857†	50542.9	488.78 ug/L	6.959	488.78 ppb	6.959	1.42%	
QC value within limits for Zn 213.857 Recovery = 97.76%							
SiO2†	79453.0	5284.1 ug/L	22.55	5284.1 ppb	22.55	0.43%	
QC value within limits for SiO2 Recovery = 98.81%							
All analyte(s) passed QC.							

Sequence No.: 28

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 2/16/2010 19:48:13

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	4279.8	4279.8	101 %		19:50:05
1	Y RADIAL	4394.1	4394.1	99.82 %		19:50:05
1	Al 396.153Radial†	-137.5	22.5	22.436 ug/L	22.436 ppb	19:50:25
1	Ca 317.933Radial†	25.1	6.6	12.333 ug/L	12.333 ppb	19:50:25
1	Fe 238.204 Radial†	9.2	-0.9	-10.033 ug/L	-10.033 ppb	19:50:25
1	K 766.490 Radial†	3148.9	-43.9	-8.9717 ug/L	-8.9717 ppb	19:50:05
1	Mg 279.077 IEC†	3.4	0.7	25.156 ug/L	25.156 ppb	19:50:25
1	Na 589.592 Radial†	968.9	755.3	251.94 ug/L	251.94 ppb	19:50:05
1	Sr 421.552†	144.4	53.6	0.4139 ug/L	0.4139 ppb	19:50:05
1	Sc 361.383	813397.8	813397.8	95.693 %		19:51:22
1	Y 371.029	662201.9	662201.9	94.233 %		19:51:22
1	Ag 328.068†	285.6	70.8	0.3333 ug/L	0.3333 ppb	19:51:22
1	As 188.979†	-31.0	-4.1	-1.7321 ug/L	-1.7321 ppb	19:51:42
1	B 249.677†	-218.6	253.5	5.9664 ug/L	5.9664 ppb	19:51:42
1	Ba 233.527†	35.0	17.8	0.1446 ug/L	0.1446 ppb	19:51:42
1	Be 313.107†	-4237.9	-89.6	-0.0324 ug/L	-0.0324 ppb	19:51:22
1	Cd 226.502†	-208.3	-22.2	-0.2580 ug/L	-0.2580 ppb	19:51:42
1	Co 228.616†	-80.6	-5.3	-0.1079 ug/L	-0.1079 ppb	19:51:42
1	Cr 267.716†	79.1	-67.0	-0.7815 ug/L	-0.7815 ppb	19:51:42
1	Cu 324.752†	7574.6	-178.6	-0.5501 ug/L	-0.5501 ppb	19:51:22
1	Mn 257.610†	1009.2	484.8	0.5572 ug/L	0.5572 ppb	19:51:22
1	Mo 202.031†	25.0	15.7	1.1643 ug/L	1.1643 ppb	19:51:42
1	Ni 231.604†	105.3	-3.5	-0.0897 ug/L	-0.0897 ppb	19:51:42
1	P 214.914†	245.9	15.0	8.4741 ug/L	8.4741 ppb	19:51:42
1	Pb 220.353†	-67.1	3.4	0.4334 ug/L	0.4334 ppb	19:51:42
1	S 181.975 Axial†	63.3	23.3	30.383 ug/L	30.383 ppb	19:51:42
1	Sb 206.836†	51.1	17.8	6.0699 ug/L	6.0699 ppb	19:51:42
1	Se 196.026†	-21.2	1.2	0.6617 ug/L	0.6617 ppb	19:51:42
1	Si 251.611†	642.2	58.8	1.8179 ug/L	1.8179 ppb	19:51:42
1	Sn 189.927†	23.5	12.0	2.1507 ug/L	2.1507 ppb	19:51:42
1	Ti 334.940†	-1295.8	138.8	0.2232 ug/L	0.2232 ppb	19:51:22
1	Tl 190.801†	-27.9	9.9	3.1295 ug/L	3.1295 ppb	19:51:42
1	U 409.014†	-3192.3	179.2	5.0937 ug/L	5.0937 ppb	19:51:22
1	V 292.402†	-1573.7	32.8	0.2656 ug/L	0.2656 ppb	19:51:22
1	Zn 213.857†	722.5	67.3	0.6593 ug/L	0.6593 ppb	19:51:42
1	SiO2†	635.7	44.8	2.9576 ug/L	2.9576 ppb	19:52:38
2	Sc Radial	4293.4	4293.4	101 %		19:50:30
2	Y RADIAL	4413.7	4413.7	100.3 %		19:50:30
2	Al 396.153Radial†	-119.1	41.1	41.099 ug/L	41.099 ppb	19:50:50
2	Ca 317.933Radial†	26.9	8.3	15.511 ug/L	15.511 ppb	19:50:50
2	Fe 238.204 Radial†	10.2	0.0	0.2538 ug/L	0.2538 ppb	19:50:50
2	K 766.490 Radial†	3206.5	3.2	0.5470 ug/L	0.5470 ppb	19:50:30
2	Mg 279.077 IEC†	1.3	-1.5	-56.951 ug/L	-56.951 ppb	19:50:50
2	Na 589.592 Radial†	908.1	692.1	230.84 ug/L	230.84 ppb	19:50:30
2	Sr 421.552†	134.6	43.4	0.3354 ug/L	0.3354 ppb	19:50:30
2	Sc 361.383	814897.1	814897.1	95.869 %		19:51:47
2	Y 371.029	664062.0	664062.0	94.498 %		19:51:47
2	Ag 328.068†	296.5	81.6	0.3881 ug/L	0.3881 ppb	19:51:47
2	As 188.979†	-25.8	1.4	0.5951 ug/L	0.5951 ppb	19:52:07
2	B 249.677†	-227.2	244.9	5.7608 ug/L	5.7608 ppb	19:52:07
2	Ba 233.527†	40.1	23.0	0.1863 ug/L	0.1863 ppb	19:52:07
2	Be 313.107†	-4326.2	-173.4	-0.0631 ug/L	-0.0631 ppb	19:51:47
2	Cd 226.502†	-190.6	-3.3	-0.0383 ug/L	-0.0383 ppb	19:52:07
2	Co 228.616†	-72.0	3.8	0.0816 ug/L	0.0816 ppb	19:52:07
2	Cr 267.716†	77.2	-69.1	-0.8058 ug/L	-0.8058 ppb	19:52:07
2	Cu 324.752†	7549.9	-218.9	-0.6722 ug/L	-0.6722 ppb	19:51:47
2	Mn 257.610†	692.1	152.2	0.1779 ug/L	0.1779 ppb	19:51:47
2	Mo 202.031†	26.8	17.5	1.3023 ug/L	1.3023 ppb	19:52:07
2	Ni 231.604†	115.3	6.7	0.1723 ug/L	0.1723 ppb	19:52:07

2	P 214.914†	235.5	3.7	2.2154 ug/L	2.2154 ppb	19:52:07
2	Pb 220.353†	-64.8	5.9	0.7464 ug/L	0.7464 ppb	19:52:07
2	S 181.975 Axial†	61.2	20.9	27.353 ug/L	27.353 ppb	19:52:07
2	Sb 206.836†	43.2	9.4	3.2418 ug/L	3.2418 ppb	19:52:07
2	Se 196.026†	-21.5	0.9	0.5475 ug/L	0.5475 ppb	19:52:07
2	Si 251.611†	634.4	49.4	1.5231 ug/L	1.5231 ppb	19:52:07
2	Sn 189.927†	27.2	15.8	2.8370 ug/L	2.8370 ppb	19:52:07
2	Ti 334.940†	-1283.8	153.8	0.2554 ug/L	0.2554 ppb	19:51:47
2	Tl 190.801†	-32.4	5.3	1.6852 ug/L	1.6852 ppb	19:52:07
2	U 409.014†	-3254.4	120.6	3.4273 ug/L	3.4273 ppb	19:51:47
2	V 292.402†	-1626.5	-19.2	-0.1155 ug/L	-0.1155 ppb	19:51:47
2	Zn 213.857†	719.3	62.6	0.6106 ug/L	0.6106 ppb	19:52:07
2	SiO2†	640.8	48.9	3.2247 ug/L	3.2247 ppb	19:52:43
3	Sc Radial	4264.8	4264.8	100 %		19:50:55
3	Y RADIAL	4387.4	4387.4	99.66 %		19:50:55
3	Al 396.153Radial†	-122.1	37.3	37.275 ug/L	37.275 ppb	19:51:15
3	Ca 317.933Radial†	20.9	2.5	4.6948 ug/L	4.6948 ppb	19:51:15
3	Fe 238.204 Radial†	11.0	1.0	10.132 ug/L	10.132 ppb	19:51:15
3	K 766.490 Radial†	3217.8	35.7	7.1149 ug/L	7.1149 ppb	19:50:55
3	Mg 279.077 IEC†	3.0	0.2	9.4282 ug/L	9.4282 ppb	19:51:15
3	Na 589.592 Radial†	937.9	727.8	242.75 ug/L	242.75 ppb	19:50:55
3	Sr 421.552†	67.0	-23.0	-0.1780 ug/L	-0.1780 ppb	19:50:55
3	Sc 361.383	818748.2	818748.2	96.322 %		19:52:13
3	Y 371.029	667754.1	667754.1	95.023 %		19:52:13
3	Ag 328.068†	161.7	-59.8	-0.2867 ug/L	-0.2867 ppb	19:52:13
3	As 188.979†	-31.4	-4.3	-1.8046 ug/L	-1.8046 ppb	19:52:33
3	B 249.677†	-200.2	274.0	6.4445 ug/L	6.4445 ppb	19:52:33
3	Ba 233.527†	15.1	-3.2	-0.0262 ug/L	-0.0262 ppb	19:52:33
3	Be 313.107†	-4255.4	-78.7	-0.0286 ug/L	-0.0286 ppb	19:52:13
3	Cd 226.502†	-208.5	-21.0	-0.2463 ug/L	-0.2463 ppb	19:52:33
3	Co 228.616†	-62.7	13.7	0.2893 ug/L	0.2893 ppb	19:52:33
3	Cr 267.716†	85.1	-61.3	-0.7146 ug/L	-0.7146 ppb	19:52:33
3	Cu 324.752†	7570.3	-234.8	-0.7191 ug/L	-0.7191 ppb	19:52:13
3	Mn 257.610†	765.4	224.9	0.2600 ug/L	0.2600 ppb	19:52:13
3	Mo 202.031†	26.2	16.7	1.2407 ug/L	1.2407 ppb	19:52:33
3	Ni 231.604†	87.9	-22.3	-0.5714 ug/L	-0.5714 ppb	19:52:33
3	P 214.914†	248.5	16.0	9.0492 ug/L	9.0492 ppb	19:52:33
3	Pb 220.353†	-68.1	2.8	0.3632 ug/L	0.3632 ppb	19:52:33
3	S 181.975 Axial†	57.0	16.2	21.214 ug/L	21.214 ppb	19:52:33
3	Sb 206.836†	45.8	11.9	4.0653 ug/L	4.0653 ppb	19:52:33
3	Se 196.026†	-16.9	5.8	3.4243 ug/L	3.4243 ppb	19:52:33
3	Si 251.611†	624.7	36.2	1.1128 ug/L	1.1128 ppb	19:52:33
3	Sn 189.927†	16.1	4.1	0.7375 ug/L	0.7375 ppb	19:52:33
3	Ti 334.940†	-1348.4	93.0	0.1506 ug/L	0.1506 ppb	19:52:13
3	Tl 190.801†	-32.4	5.5	1.7449 ug/L	1.7449 ppb	19:52:33
3	U 409.014†	-3336.9	50.8	1.4449 ug/L	1.4449 ppb	19:52:13
3	V 292.402†	-1669.8	-56.2	-0.3881 ug/L	-0.3881 ppb	19:52:13
3	Zn 213.857†	695.3	34.1	0.3363 ug/L	0.3363 ppb	19:52:33
3	SiO2†	703.6	111.0	7.3646 ug/L	7.3646 ppb	19:52:48

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	815681.0	95.961 %	0.3247			0.34%
Sc Radial	4279.3	101 %	0.63			0.33%
Y 371.029	664672.7	94.585 %	0.4022			0.43%
Y RADIAL	4398.4	99.91 %	0.310			0.31%
Ag 328.068†	30.9	0.1449 ug/L	0.37478	0.1449 ppb	0.37478	258.63%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	33.7	33.603 ug/L	9.8586	33.603 ppb	9.8586	29.34%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-2.3	-0.9805 ug/L	1.36499	-0.9805 ppb	1.36499	139.21%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	257.5	6.0572 ug/L	0.35077	6.0572 ppb	0.35077	5.79%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	12.5	0.1015 ug/L	0.11257	0.1015 ppb	0.11257	110.85%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-113.9	-0.0414 ug/L	0.01896	-0.0414 ppb	0.01896	45.82%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	5.8	10.846 ug/L	5.5594	10.846 ppb	5.5594	51.26%

QC value within limits for Ca 317.933Radial Recovery = Not calculated							
Cd 226.502†	-15.5	-0.1809 ug/L	0.12363	-0.1809 ppb	0.12363	68.35%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	4.1	0.0877 ug/L	0.19865	0.0877 ppb	0.19865	226.62%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	-65.8	-0.7673 ug/L	0.04725	-0.7673 ppb	0.04725	6.16%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	-210.8	-0.6471 ug/L	0.08725	-0.6471 ppb	0.08725	13.48%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	0.0	0.1176 ug/L	10.08321	0.1176 ppb	10.08321	>999.9%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	-1.7	-0.4366 ug/L	8.08827	-0.4366 ppb	8.08827	>999.9%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	-0.2	-7.4557 ug/L	43.57992	-7.4557 ppb	43.57992	584.51%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	287.3	0.3317 ug/L	0.19954	0.3317 ppb	0.19954	60.15%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	16.6	1.2358 ug/L	0.06910	1.2358 ppb	0.06910	5.59%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	725.0	241.85 ug/L	10.581	241.85 ppb	10.581	4.37%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	-6.4	-0.1629 ug/L	0.37722	-0.1629 ppb	0.37722	231.56%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	11.6	6.5796 ug/L	3.79043	6.5796 ppb	3.79043	57.61%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	4.1	0.5143 ug/L	0.20400	0.5143 ppb	0.20400	39.66%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	20.1	26.317 ug/L	4.6714	26.317 ppb	4.6714	17.75%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	13.0	4.4590 ug/L	1.45458	4.4590 ppb	1.45458	32.62%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	2.6	1.5445 ug/L	1.62898	1.5445 ppb	1.62898	105.47%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	48.1	1.4846 ug/L	0.35411	1.4846 ppb	0.35411	23.85%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	10.6	1.9084 ug/L	1.07048	1.9084 ppb	1.07048	56.09%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	24.7	0.1904 ug/L	0.32149	0.1904 ppb	0.32149	168.82%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	128.5	0.2097 ug/L	0.05370	0.2097 ppb	0.05370	25.61%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	6.9	2.1865 ug/L	0.81718	2.1865 ppb	0.81718	37.37%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	116.9	3.3220 ug/L	1.82669	3.3220 ppb	1.82669	54.99%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	-14.2	-0.0793 ug/L	0.32833	-0.0793 ppb	0.32833	413.93%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	54.7	0.5354 ug/L	0.17416	0.5354 ppb	0.17416	32.53%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	68.2	4.5156 ug/L	2.47087	4.5156 ppb	2.47087	54.72%	
QC value within limits for SiO2 Recovery = Not calculated							
All analyte(s) passed QC.							

Sequence No.: 29

Sample ID: 1202024806|945417|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 58

Date Collected: 2/16/2010 19:54:58

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202024806|945417|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4136.8	4136.8	97.3 %		19:57:11
1	Y RADIAL	4385.0	4385.0	99.61 %		19:56:51
1	Al 396.153Radial†	51.7	212.2	212.00 ug/L	212.00 ppb	19:57:11
1	Ca 317.933Radial†	126.3	111.5	207.92 ug/L	207.92 ppb	19:57:11
1	Fe 238.204 Radial†	49.5	40.8	433.89 ug/L	433.89 ppb	19:57:11
1	K 766.490 Radial†	3503.3	428.3	86.305 ug/L	86.305 ppb	19:56:51
1	Mg 279.077 IEC†	-0.4	-3.1	-120.42 ug/L	-120.42 ppb	19:57:11
1	Na 589.592 Radial†	786.5	601.2	200.52 ug/L	200.52 ppb	19:56:51
1	Sr 421.552†	873.0	807.3	6.2317 ug/L	6.2317 ppb	19:56:51
1	Sc 361.383	809955.8	809955.8	95.288 %		19:58:08
1	Y 371.029	658303.5	658303.5	93.678 %		19:58:08
1	Ag 328.068†	231.6	15.4	0.2249 ug/L	0.2249 ppb	19:58:08
1	As 188.979†	-28.9	-2.1	-0.6645 ug/L	-0.6645 ppb	19:58:28
1	B 249.677†	-122.6	353.2	8.2335 ug/L	8.2335 ppb	19:58:28
1	Ba 233.527†	466.7	470.9	3.8435 ug/L	3.8435 ppb	19:58:28
1	Be 313.107†	-712.7	3591.2	1.3494 ug/L	1.3494 ppb	19:58:08
1	Cd 226.502†	-98.6	92.0	1.0342 ug/L	1.0342 ppb	19:58:28
1	Co 228.616†	16.0	95.6	1.9723 ug/L	1.9723 ppb	19:58:28
1	Cr 267.716†	558.7	436.7	5.0904 ug/L	5.0904 ppb	19:58:28
1	Cu 324.752†	8668.0	1002.5	3.0891 ug/L	3.0891 ppb	19:58:08
1	Mn 257.610†	9897.2	9816.9	11.370 ug/L	11.370 ppb	19:58:08
1	Mo 202.031†	80.3	73.8	5.5188 ug/L	5.5188 ppb	19:58:28
1	Ni 231.604†	241.3	139.8	3.5785 ug/L	3.5785 ppb	19:58:28
1	P 214.914†	281.6	53.6	28.868 ug/L	28.868 ppb	19:58:28
1	Pb 220.353†	-34.4	37.5	4.6617 ug/L	4.6617 ppb	19:58:28
1	S 181.975 Axial†	82.3	43.5	56.787 ug/L	56.787 ppb	19:58:28
1	Sb 206.836†	50.4	17.3	5.9991 ug/L	5.9991 ppb	19:58:28
1	Se 196.026†	-12.8	9.9	7.1791 ug/L	7.1791 ppb	19:58:28
1	Si 251.611†	10580.9	10491.8	326.88 ug/L	326.88 ppb	19:58:08
1	Sn 189.927†	41.7	31.2	5.6295 ug/L	5.6295 ppb	19:58:28
1	Ti 334.940†	6406.2	8215.8	13.387 ug/L	13.387 ppb	19:58:08
1	Tl 190.801†	-21.5	16.6	5.3881 ug/L	5.3881 ppb	19:58:28
1	U 409.014†	-3151.6	207.8	5.8411 ug/L	5.8411 ppb	19:58:08
1	V 292.402†	-1205.4	412.3	2.9934 ug/L	2.9934 ppb	19:58:08
1	Zn 213.857†	1931.0	1338.7	12.974 ug/L	12.974 ppb	19:58:28
1	SiO2†	10598.8	10503.4	700.15 ug/L	700.15 ppb	19:59:24
2	Sc Radial	4127.5	4127.5	97.1 %		19:57:36
2	Y RADIAL	4418.3	4418.3	100.4 %		19:57:16
2	Al 396.153Radial†	51.6	212.2	212.14 ug/L	212.14 ppb	19:57:36
2	Ca 317.933Radial†	122.9	108.3	201.95 ug/L	201.95 ppb	19:57:36
2	Fe 238.204 Radial†	47.5	38.9	413.06 ug/L	413.06 ppb	19:57:36
2	K 766.490 Radial†	3590.5	526.2	106.09 ug/L	106.09 ppb	19:57:16
2	Mg 279.077 IEC†	4.7	2.1	80.182 ug/L	80.182 ppb	19:57:36
2	Na 589.592 Radial†	668.2	481.2	160.49 ug/L	160.49 ppb	19:57:16
2	Sr 421.552†	769.9	703.1	5.4272 ug/L	5.4272 ppb	19:57:16
2	Sc 361.383	812845.7	812845.7	95.628 %		19:58:34
2	Y 371.029	661554.5	661554.5	94.141 %		19:58:34
2	Ag 328.068†	268.8	53.4	0.3968 ug/L	0.3968 ppb	19:58:34
2	As 188.979†	-27.8	-0.7	-0.1011 ug/L	-0.1011 ppb	19:58:54
2	B 249.677†	-92.6	385.0	8.9852 ug/L	8.9852 ppb	19:58:54
2	Ba 233.527†	455.8	457.8	3.7368 ug/L	3.7368 ppb	19:58:54
2	Be 313.107†	-646.7	3662.9	1.3761 ug/L	1.3761 ppb	19:58:34
2	Cd 226.502†	-99.6	91.3	1.0296 ug/L	1.0296 ppb	19:58:54
2	Co 228.616†	21.7	101.6	2.0923 ug/L	2.0923 ppb	19:58:54
2	Cr 267.716†	531.2	405.8	4.7293 ug/L	4.7293 ppb	19:58:54
2	Cu 324.752†	8665.7	967.8	2.9785 ug/L	2.9785 ppb	19:58:34
2	Mn 257.610†	9903.6	9786.6	11.325 ug/L	11.325 ppb	19:58:34
2	Mo 202.031†	54.9	46.9	3.5217 ug/L	3.5217 ppb	19:58:54
2	Ni 231.604†	221.8	118.5	3.0330 ug/L	3.0330 ppb	19:58:54

2	P 214.914†	268.3	38.6	20.608 ug/L	20.608 ppb	19:58:54
2	Pb 220.353†	-51.4	19.8	2.4693 ug/L	2.4693 ppb	19:58:54
2	S 181.975 Axial†	88.1	49.2	64.327 ug/L	64.327 ppb	19:58:54
2	Sb 206.836†	58.1	25.1	8.5939 ug/L	8.5939 ppb	19:58:54
2	Se 196.026†	-8.2	14.7	9.9488 ug/L	9.9488 ppb	19:58:54
2	Si 251.611†	10616.3	10489.3	326.83 ug/L	326.83 ppb	19:58:34
2	Sn 189.927†	40.1	29.3	5.2856 ug/L	5.2856 ppb	19:58:54
2	Ti 334.940†	6530.1	8321.5	13.539 ug/L	13.539 ppb	19:58:34
2	Tl 190.801†	-29.0	8.7	2.9097 ug/L	2.9097 ppb	19:58:54
2	U 409.014†	-2968.3	411.1	11.621 ug/L	11.621 ppb	19:58:34
2	V 292.402†	-1169.6	454.2	3.2866 ug/L	3.2866 ppb	19:58:34
2	Zn 213.857†	1928.0	1328.4	12.880 ug/L	12.880 ppb	19:58:54
2	SiO2†	10599.7	10464.8	697.63 ug/L	697.63 ppb	19:59:29
3	Sc Radial	4149.2	4149.2	97.6 %		19:58:02
3	Y RADIAL	4390.7	4390.7	99.74 %		19:57:42
3	Al 396.153Radial†	49.9	210.1	209.95 ug/L	209.95 ppb	19:58:02
3	Ca 317.933Radial†	129.3	114.2	213.01 ug/L	213.01 ppb	19:58:02
3	Fe 238.204 Radial†	50.6	41.8	443.91 ug/L	443.91 ppb	19:58:02
3	K 766.490 Radial†	3575.6	491.7	99.096 ug/L	99.096 ppb	19:57:42
3	Mg 279.077 IEC†	4.2	1.5	59.178 ug/L	59.178 ppb	19:58:02
3	Na 589.592 Radial†	777.7	589.7	196.71 ug/L	196.71 ppb	19:57:42
3	Sr 421.552†	807.0	737.0	5.6888 ug/L	5.6888 ppb	19:57:42
3	Sc 361.383	803452.7	803452.7	94.523 %		19:58:59
3	Y 371.029	654907.2	654907.2	93.195 %		19:58:59
3	Ag 328.068†	294.6	84.0	0.5565 ug/L	0.5565 ppb	19:58:59
3	As 188.979†	-26.2	0.6	0.4467 ug/L	0.4467 ppb	19:59:19
3	B 249.677†	-116.1	359.1	8.3693 ug/L	8.3693 ppb	19:59:19
3	Ba 233.527†	475.5	484.2	3.9516 ug/L	3.9516 ppb	19:59:19
3	Be 313.107†	-584.2	3721.1	1.3969 ug/L	1.3969 ppb	19:58:59
3	Cd 226.502†	-115.3	73.6	0.8181 ug/L	0.8181 ppb	19:59:19
3	Co 228.616†	24.5	104.8	2.1626 ug/L	2.1626 ppb	19:59:19
3	Cr 267.716†	545.5	427.4	4.9821 ug/L	4.9821 ppb	19:59:19
3	Cu 324.752†	8496.4	894.6	2.7588 ug/L	2.7588 ppb	19:58:59
3	Mn 257.610†	9877.9	9880.6	11.437 ug/L	11.437 ppb	19:58:59
3	Mo 202.031†	72.5	66.2	4.9597 ug/L	4.9597 ppb	19:59:19
3	Ni 231.604†	245.4	146.1	3.7422 ug/L	3.7422 ppb	19:59:19
3	P 214.914†	262.7	36.0	19.154 ug/L	19.154 ppb	19:59:19
3	Pb 220.353†	-50.1	20.6	2.5681 ug/L	2.5681 ppb	19:59:19
3	S 181.975 Axial†	83.6	45.6	59.498 ug/L	59.498 ppb	19:59:19
3	Sb 206.836†	53.0	20.4	7.0406 ug/L	7.0406 ppb	19:59:19
3	Se 196.026†	-11.4	11.2	8.0059 ug/L	8.0059 ppb	19:59:19
3	Si 251.611†	10563.8	10563.6	329.13 ug/L	329.13 ppb	19:58:59
3	Sn 189.927†	34.6	24.0	4.3437 ug/L	4.3437 ppb	19:59:19
3	Ti 334.940†	6319.4	8178.5	13.312 ug/L	13.312 ppb	19:58:59
3	Tl 190.801†	-19.5	18.5	5.9983 ug/L	5.9983 ppb	19:59:19
3	U 409.014†	-3102.2	233.2	6.5629 ug/L	6.5629 ppb	19:58:59
3	V 292.402†	-1208.2	399.1	2.8937 ug/L	2.8937 ppb	19:58:59
3	Zn 213.857†	1947.6	1372.7	13.303 ug/L	13.303 ppb	19:59:19
3	SiO2†	10820.8	10828.3	721.82 ug/L	721.82 ppb	19:59:34

Mean Data: 1202024806|945417|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	808751.4	95.146 %	%	0.5660			0.59%
Sc Radial	4137.8	97.3 %	%	0.26			0.26%
Y 371.029	658255.1	93.671 %	%	0.4730			0.50%
Y RADIAL	4398.0	99.90 %	%	0.405			0.40%
Ag 328.068†	50.9	0.3927 ug/L	ug/L	0.16582	0.3927 ppb	0.16582	42.23%
Al 396.153Radial†	211.5	211.36 ug/L	ug/L	1.224	211.36 ppb	1.224	0.58%
As 188.979†	-0.7	-0.1063 ug/L	ug/L	0.55563	-0.1063 ppb	0.55563	522.69%
B 249.677†	365.8	8.5294 ug/L	ug/L	0.40055	8.5294 ppb	0.40055	4.70%
Ba 233.527†	471.0	3.8440 ug/L	ug/L	0.10741	3.8440 ppb	0.10741	2.79%
Be 313.107†	3658.4	1.3741 ug/L	ug/L	0.02384	1.3741 ppb	0.02384	1.74%
Ca 317.933Radial†	111.3	207.63 ug/L	ug/L	5.539	207.63 ppb	5.539	2.67%
Cd 226.502†	85.6	0.9606 ug/L	ug/L	0.12344	0.9606 ppb	0.12344	12.85%
Co 228.616†	100.7	2.0757 ug/L	ug/L	0.09627	2.0757 ppb	0.09627	4.64%
Cr 267.716†	423.3	4.9339 ug/L	ug/L	0.18529	4.9339 ppb	0.18529	3.76%
Cu 324.752†	955.0	2.9421 ug/L	ug/L	0.16809	2.9421 ppb	0.16809	5.71%
Fe 238.204 Radial†	40.5	430.29 ug/L	ug/L	15.735	430.29 ppb	15.735	3.66%
K 766.490 Radial†	482.1	97.164 ug/L	ug/L	10.0334	97.164 ppb	10.0334	10.33%

Mg 279.077 IEC†	0.2	6.3130 ug/L	110.25651	6.3130 ppb	110.25651	>999.9%
Mn 257.610†	9828.0	11.378 ug/L	0.0565	11.378 ppb	0.0565	0.50%
Mo 202.031†	62.3	4.6667 ug/L	1.03025	4.6667 ppb	1.03025	22.08%
Na 589.592 Radial†	557.3	185.91 ug/L	22.093	185.91 ppb	22.093	11.88%
Ni 231.604†	134.8	3.4512 ug/L	0.37135	3.4512 ppb	0.37135	10.76%
P 214.914†	42.7	22.877 ug/L	5.2391	22.877 ppb	5.2391	22.90%
Pb 220.353†	26.0	3.2330 ug/L	1.23829	3.2330 ppb	1.23829	38.30%
S 181.975 Axial†	46.1	60.204 ug/L	3.8194	60.204 ppb	3.8194	6.34%
Sb 206.836†	20.9	7.2112 ug/L	1.30579	7.2112 ppb	1.30579	18.11%
Se 196.026†	11.9	8.3779 ug/L	1.42187	8.3779 ppb	1.42187	16.97%
Si 251.611†	10514.9	327.61 ug/L	1.311	327.61 ppb	1.311	0.40%
Sn 189.927†	28.1	5.0863 ug/L	0.66570	5.0863 ppb	0.66570	13.09%
Sr 421.552†	749.1	5.7826 ug/L	0.41036	5.7826 ppb	0.41036	7.10%
Ti 334.940†	8238.6	13.412 ug/L	0.1157	13.412 ppb	0.1157	0.86%
Tl 190.801†	14.6	4.7654 ug/L	1.63576	4.7654 ppb	1.63576	34.33%
U 409.014†	284.0	8.0082 ug/L	3.14927	8.0082 ppb	3.14927	39.33%
V 292.402†	421.9	3.0579 ug/L	0.20421	3.0579 ppb	0.20421	6.68%
Zn 213.857†	1346.6	13.052 ug/L	0.2225	13.052 ppb	0.2225	1.70%
SiO2†	10598.8	706.53 ug/L	13.302	706.53 ppb	13.302	1.88%

Sequence No.: 30

Sample ID: 1202024807|945417|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 59

Date Collected: 2/16/2010 20:01:45

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202024807|945417|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4402.9	4402.9	104 %		20:03:59
1	Y RADIAL	5011.3	5011.3	113.8 %		20:03:59
1	Al 396.153Radial†	99814.7	96528.5	96543 ug/L	96543 ppb	20:03:39
1	Ca 317.933Radial†	52713.7	50875.9	94903 ug/L	94903 ppb	20:03:39
1	Fe 238.204 Radial†	18807.3	18148.1	192900 ug/L	192900 ppb	20:03:39
1	K 766.490 Radial†	213987.2	203429.5	41027 ug/L	41027 ppb	20:03:39
1	Mg 279.077 IEC†	996.5	959.4	36856 ug/L	36856 ppb	20:03:59
1	Na 589.592 Radial†	33583.5	32217.3	10746 ug/L	10746 ppb	20:03:39
1	Sr 421.552†	311235.4	300402.8	2318.8 ug/L	2318.8 ppb	20:03:39
1	Sc 361.383	838770.5	838770.5	98.678 %		20:05:00
1	Y 371.029	743206.9	743206.9	105.76 %		20:05:00
1	Ag 328.068†	47802.8	48215.6	300.20 ug/L	300.20 ppb	20:05:00
1	As 188.979†	2097.0	2153.4	1003.2 ug/L	1003.2 ppb	20:05:05
1	B 249.677†	60850.0	62147.2	1428.3 ug/L	1428.3 ppb	20:05:00
1	Ba 233.527†	219401.7	222322.6	1813.6 ug/L	1813.6 ppb	20:05:00
1	Be 313.107†	1962973.1	1993613.3	746.19 ug/L	746.19 ppb	20:05:00
1	Cd 226.502†	46404.1	47221.3	533.04 ug/L	533.04 ppb	20:05:05
1	Co 228.616†	41103.9	41733.5	855.67 ug/L	855.67 ppb	20:05:05
1	Cr 267.716†	182319.6	184612.7	2153.3 ug/L	2153.3 ppb	20:05:00
1	Cu 324.752†	590736.5	590557.4	1818.4 ug/L	1818.4 ppb	20:05:00
1	Mn 257.610†	4504306.1	4564087.5	5281.7 ug/L	5281.7 ppb	20:05:00
1	Mo 202.031†	6228.7	6301.7	484.35 ug/L	484.35 ppb	20:05:05
1	Ni 231.604†	47356.2	47877.2	1225.8 ug/L	1225.8 ppb	20:05:05
1	P 214.914†	13996.7	13942.2	7254.3 ug/L	7254.3 ppb	20:05:05
1	Pb 220.353†	6073.9	6228.8	775.72 ug/L	775.72 ppb	20:05:05
1	S 181.975 Axial†	3072.9	3071.2	3995.8 ug/L	3995.8 ppb	20:05:05
1	Sb 206.836†	3783.7	3798.7	1289.0 ug/L	1289.0 ppb	20:05:05
1	Se 196.026†	3613.5	3685.3	2775.9 ug/L	2775.9 ppb	20:05:05
1	Si 251.611†	1101579.2	1115726.5	34763 ug/L	34763 ppb	20:05:00
1	Sn 189.927†	5107.2	5163.0	943.45 ug/L	943.45 ppb	20:05:05
1	Ti 334.940†	3722059.4	3773422.6	6142.0 ug/L	6142.0 ppb	20:05:00
1	Tl 190.801†	3335.9	3419.7	1149.3 ug/L	1149.3 ppb	20:05:05
1	U 409.014†	-9240.1	-5848.7	-192.94 ug/L	-192.94 ppb	20:05:00
1	V 292.402†	157844.2	161636.3	1142.3 ug/L	1142.3 ppb	20:05:00
1	Zn 213.857†	551119.0	557815.5	5405.1 ug/L	5405.1 ppb	20:05:00
1	SiO2†	1092614.7	1106634.6	73770 ug/L	73770 ppb	20:05:40
2	Sc Radial	4410.8	4410.8	104 %		20:04:24
2	Y RADIAL	5007.5	5007.5	113.7 %		20:04:24
2	Al 396.153Radial†	98427.8	95017.8	95032 ug/L	95032 ppb	20:04:04
2	Ca 317.933Radial†	52009.5	50105.3	93465 ug/L	93465 ppb	20:04:04
2	Fe 238.204 Radial†	18497.9	17817.1	189380 ug/L	189380 ppb	20:04:04
2	K 766.490 Radial†	211185.8	200356.6	40407 ug/L	40407 ppb	20:04:04
2	Mg 279.077 IEC†	1005.1	965.9	37114 ug/L	37114 ppb	20:04:24
2	Na 589.592 Radial†	32801.3	31404.9	10475 ug/L	10475 ppb	20:04:04
2	Sr 421.552†	305425.2	294260.6	2271.4 ug/L	2271.4 ppb	20:04:04
2	Sc 361.383	836932.0	836932.0	98.462 %		20:05:14
2	Y 371.029	741120.0	741120.0	105.46 %		20:05:14
2	Ag 328.068†	47553.3	48068.7	298.32 ug/L	298.32 ppb	20:05:14
2	As 188.979†	2088.1	2149.0	1000.5 ug/L	1000.5 ppb	20:05:19
2	B 249.677†	60645.9	62075.3	1427.2 ug/L	1427.2 ppb	20:05:14
2	Ba 233.527†	218759.5	222158.7	1812.2 ug/L	1812.2 ppb	20:05:14
2	Be 313.107†	1956682.3	1991593.9	745.43 ug/L	745.43 ppb	20:05:14
2	Cd 226.502†	45982.6	46896.6	529.60 ug/L	529.60 ppb	20:05:19
2	Co 228.616†	40690.8	41405.5	848.89 ug/L	848.89 ppb	20:05:19
2	Cr 267.716†	181619.7	184307.8	2149.6 ug/L	2149.6 ppb	20:05:14
2	Cu 324.752†	588288.8	589386.5	1814.6 ug/L	1814.6 ppb	20:05:14
2	Mn 257.610†	4489325.3	4558899.7	5275.3 ug/L	5275.3 ppb	20:05:14
2	Mo 202.031†	6168.5	6254.4	480.55 ug/L	480.55 ppb	20:05:19
2	Ni 231.604†	46829.1	47447.3	1214.8 ug/L	1214.8 ppb	20:05:19

2	P 214.914†	13857.6	13832.1	7196.3 ug/L	7196.3 ppb	20:05:19
2	Pb 220.353†	6066.6	6234.9	776.46 ug/L	776.46 ppb	20:05:19
2	S 181.975 Axial†	3072.6	3077.7	4004.6 ug/L	4004.6 ppb	20:05:19
2	Sb 206.836†	3720.2	3742.6	1269.9 ug/L	1269.9 ppb	20:05:19
2	Se 196.026†	3563.7	3642.7	2739.7 ug/L	2739.7 ppb	20:05:19
2	Si 251.611†	1097881.5	1114423.2	34722 ug/L	34722 ppb	20:05:14
2	Sn 189.927†	5066.1	5132.6	937.72 ug/L	937.72 ppb	20:05:19
2	Ti 334.940†	3708571.7	3768009.7	6133.0 ug/L	6133.0 ppb	20:05:14
2	Tl 190.801†	3354.5	3446.0	1157.6 ug/L	1157.6 ppb	20:05:19
2	U 409.014†	-9293.3	-5923.4	-194.65 ug/L	-194.65 ppb	20:05:14
2	V 292.402†	157310.5	161445.8	1141.4 ug/L	1141.4 ppb	20:05:14
2	Zn 213.857†	548996.5	556886.6	5396.6 ug/L	5396.6 ppb	20:05:14
2	SiO2†	1093716.0	1110185.4	74007 ug/L	74007 ppb	20:05:46
3	Sc Radial	4397.4	4397.4	103 %		20:04:49
3	Y RADIAL	4989.1	4989.1	113.3 %		20:04:49
3	Al 396.153Radial†	98309.8	95194.2	95208 ug/L	95208 ppb	20:04:29
3	Ca 317.933Radial†	51961.4	50212.3	93665 ug/L	93665 ppb	20:04:29
3	Fe 238.204 Radial†	18508.6	17882.0	190070 ug/L	190070 ppb	20:04:29
3	K 766.490 Radial†	210823.7	200629.6	40462 ug/L	40462 ppb	20:04:29
3	Mg 279.077 IEC†	1006.4	970.2	37277 ug/L	37277 ppb	20:04:49
3	Na 589.592 Radial†	32859.0	31557.4	10526 ug/L	10526 ppb	20:04:29
3	Sr 421.552†	304568.2	294333.2	2271.9 ug/L	2271.9 ppb	20:04:29
3	Sc 361.383	833663.6	833663.6	98.077 %		20:05:29
3	Y 371.029	739315.3	739315.3	105.21 %		20:05:29
3	Ag 328.068†	47541.8	48246.3	299.40 ug/L	299.40 ppb	20:05:29
3	As 188.979†	2102.4	2171.9	1010.3 ug/L	1010.3 ppb	20:05:34
3	B 249.677†	60381.3	62047.1	1426.4 ug/L	1426.4 ppb	20:05:29
3	Ba 233.527†	217593.9	221841.3	1809.6 ug/L	1809.6 ppb	20:05:29
3	Be 313.107†	1947853.8	1990383.4	744.98 ug/L	744.98 ppb	20:05:29
3	Cd 226.502†	46421.5	47527.2	536.92 ug/L	536.92 ppb	20:05:34
3	Co 228.616†	41020.0	41903.1	859.28 ug/L	859.28 ppb	20:05:34
3	Cr 267.716†	180959.4	184357.7	2150.2 ug/L	2150.2 ppb	20:05:29
3	Cu 324.752†	586894.6	590307.4	1817.5 ug/L	1817.5 ppb	20:05:29
3	Mn 257.610†	4464268.8	4551227.7	5266.6 ug/L	5266.6 ppb	20:05:29
3	Mo 202.031†	6247.2	6359.2	488.40 ug/L	488.40 ppb	20:05:34
3	Ni 231.604†	47338.3	48152.9	1232.9 ug/L	1232.9 ppb	20:05:34
3	P 214.914†	13995.7	14028.1	7304.1 ug/L	7304.1 ppb	20:05:34
3	Pb 220.353†	6102.9	6296.1	784.03 ug/L	784.03 ppb	20:05:34
3	S 181.975 Axial†	3107.3	3125.4	4066.9 ug/L	4066.9 ppb	20:05:34
3	Sb 206.836†	3752.7	3790.6	1286.5 ug/L	1286.5 ppb	20:05:34
3	Se 196.026†	3554.7	3647.8	2744.9 ug/L	2744.9 ppb	20:05:34
3	Si 251.611†	1092609.9	1113419.8	34691 ug/L	34691 ppb	20:05:29
3	Sn 189.927†	5116.3	5204.0	950.56 ug/L	950.56 ppb	20:05:34
3	Ti 334.940†	3693706.3	3767619.8	6132.4 ug/L	6132.4 ppb	20:05:29
3	Tl 190.801†	3339.4	3444.0	1156.9 ug/L	1156.9 ppb	20:05:34
3	U 409.014†	-9347.7	-6015.8	-197.36 ug/L	-197.36 ppb	20:05:29
3	V 292.402†	156635.2	161383.5	1141.0 ug/L	1141.0 ppb	20:05:29
3	Zn 213.857†	545988.5	556005.7	5387.8 ug/L	5387.8 ppb	20:05:29
3	SiO2†	1089634.2	1110378.6	74020 ug/L	74020 ppb	20:05:52

Mean Data: 1202024807|945417|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	836455.4	98.405 %		0.3043			0.31%
Sc Radial	4403.7	104 %		0.2			0.15%
Y 371.029	741214.1	105.48 %		0.277			0.26%
Y RADIAL	5002.6	113.6 %		0.27			0.24%
Ag 328.068†	48176.8	299.31 ug/L		0.942	299.31 ppb	0.942	0.31%
Al 396.153Radial†	95580.2	95595 ug/L		826.3	95595 ppb	826.3	0.86%
As 188.979†	2158.1	1004.7 ug/L		5.04	1004.7 ppb	5.04	0.50%
B 249.677†	62089.9	1427.3 ug/L		0.96	1427.3 ppb	0.96	0.07%
Ba 233.527†	222107.5	1811.8 ug/L		2.02	1811.8 ppb	2.02	0.11%
Be 313.107†	1991863.6	745.53 ug/L		0.611	745.53 ppb	0.611	0.08%
Ca 317.933Radial†	50397.8	94011 ug/L		778.7	94011 ppb	778.7	0.83%
Cd 226.502†	47215.0	533.19 ug/L		3.659	533.19 ppb	3.659	0.69%
Co 228.616†	41680.7	854.61 ug/L		5.273	854.61 ppb	5.273	0.62%
Cr 267.716†	184426.0	2151.1 ug/L		1.94	2151.1 ppb	1.94	0.09%
Cu 324.752†	590083.8	1816.9 ug/L		1.97	1816.9 ppb	1.97	0.11%
Fe 238.204 Radial†	17949.1	190780 ug/L		1864.0	190780 ppb	1864.0	0.98%
K 766.490 Radial†	201471.9	40632 ug/L		343.0	40632 ppb	343.0	0.84%

Mg 279.077 IEC†	965.2	37082 ug/L	212.4	37082 ppb	212.4	0.57%
Mn 257.610†	4558071.6	5274.5 ug/L	7.60	5274.5 ppb	7.60	0.14%
Mo 202.031†	6305.1	484.43 ug/L	3.923	484.43 ppb	3.923	0.81%
Na 589.592 Radial†	31726.5	10583 ug/L	144.0	10583 ppb	144.0	1.36%
Ni 231.604†	47825.8	1224.5 ug/L	9.11	1224.5 ppb	9.11	0.74%
P 214.914†	13934.2	7251.6 ug/L	53.95	7251.6 ppb	53.95	0.74%
Pb 220.353†	6253.3	778.74 ug/L	4.598	778.74 ppb	4.598	0.59%
S 181.975 Axial†	3091.4	4022.4 ug/L	38.74	4022.4 ppb	38.74	0.96%
Sb 206.836†	3777.3	1281.8 ug/L	10.36	1281.8 ppb	10.36	0.81%
Se 196.026†	3658.6	2753.5 ug/L	19.58	2753.5 ppb	19.58	0.71%
Si 251.611†	1114523.1	34726 ug/L	36.1	34726 ppb	36.1	0.10%
Sn 189.927†	5166.5	943.91 ug/L	6.430	943.91 ppb	6.430	0.68%
Sr 421.552†	296332.2	2287.4 ug/L	27.22	2287.4 ppb	27.22	1.19%
Ti 334.940†	3769684.0	6135.8 ug/L	5.39	6135.8 ppb	5.39	0.09%
Tl 190.801†	3436.6	1154.6 ug/L	4.56	1154.6 ppb	4.56	0.40%
U 409.014†	-5929.3	-194.98 ug/L	2.227	-194.98 ppb	2.227	1.14%
V 292.402†	161488.5	1141.6 ug/L	0.69	1141.6 ppb	0.69	0.06%
Zn 213.857†	556902.6	5396.5 ug/L	8.64	5396.5 ppb	8.64	0.16%
SiO2†	1109066.2	73932 ug/L	140.5	73932 ppb	140.5	0.19%

Sequence No.: 31

Sample ID: 245391001|945417|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 60

Date Collected: 2/16/2010 20:08:03

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245391001|945417|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4350.9	4350.9	102 %		20:10:16
1	Y RADIAL	5052.5	5052.5	114.8 %		20:10:16
1	Al 396.153Radial†	67743.7	66345.5	66371 ug/L	66371 ppb	20:09:56
1	Ca 317.933Radial†	12683.2	12373.3	23081 ug/L	23081 ppb	20:09:56
1	Fe 238.204 Radial†	9545.7	9316.2	99010 ug/L	99010 ppb	20:09:56
1	K 766.490 Radial†	45417.9	41202.3	8307.6 ug/L	8307.6 ppb	20:09:56
1	Mg 279.077 IEC†	360.8	349.8	13405 ug/L	13405 ppb	20:10:16
1	Na 589.592 Radial†	10424.2	9977.5	3328.1 ug/L	3328.1 ppb	20:09:56
1	Sr 421.552†	24509.5	23856.3	184.03 ug/L	184.03 ppb	20:09:56
1	Sc 361.383	843270.5	843270.5	99.207 %		20:11:13
1	Y 371.029	771233.5	771233.5	109.75 %		20:11:13
1	Ag 328.068†	-5506.5	-5778.2	6.0041 ug/L	6.0041 ppb	20:11:19
1	As 188.979†	-26.4	1.7	36.702 ug/L	36.702 ppb	20:11:39
1	B 249.677†	1143.7	1634.7	22.304 ug/L	22.304 ppb	20:11:19
1	Ba 233.527†	99734.0	100512.1	819.38 ug/L	819.38 ppb	20:11:19
1	Be 313.107†	4079.8	8451.5	6.4638 ug/L	6.4638 ppb	20:11:19
1	Cd 226.502†	556.6	756.5	-1.3607 ug/L	-1.3607 ppb	20:11:39
1	Co 228.616†	1192.0	1280.4	22.490 ug/L	22.490 ppb	20:11:39
1	Cr 267.716†	15466.4	15440.3	181.81 ug/L	181.81 ppb	20:11:19
1	Cu 324.752†	20027.0	12092.9	42.400 ug/L	42.400 ppb	20:11:19
1	Mn 257.610†	1605413.2	1617671.8	1875.0 ug/L	1875.0 ppb	20:11:13
1	Mo 202.031†	45.0	34.9	10.557 ug/L	10.557 ppb	20:11:39
1	Ni 231.604†	4180.9	4100.8	105.02 ug/L	105.02 ppb	20:11:39
1	P 214.914†	805.2	569.6	245.34 ug/L	245.34 ppb	20:11:39
1	Pb 220.353†	281.9	357.7	49.453 ug/L	49.453 ppb	20:11:39
1	S 181.975 Axial†	553.0	514.5	660.01 ug/L	660.01 ppb	20:11:39
1	Sb 206.836†	68.2	33.0	3.5399 ug/L	3.5399 ppb	20:11:39
1	Se 196.026†	-440.3	-420.5	75.934 ug/L	75.934 ppb	20:11:39
1	Si 251.611†	1072837.2	1080797.5	33680 ug/L	33680 ppb	20:11:13
1	Sn 189.927†	-95.9	-109.2	-14.414 ug/L	-14.414 ppb	20:11:39
1	Ti 334.940†	901764.5	910463.1	1481.8 ug/L	1481.8 ppb	20:11:13
1	Tl 190.801†	-117.3	-79.1	-4.0957 ug/L	-4.0957 ppb	20:11:39
1	U 409.014†	-11956.6	-8536.9	-254.20 ug/L	-254.20 ppb	20:11:13
1	V 292.402†	13243.5	15026.7	92.615 ug/L	92.615 ppb	20:11:19
1	Zn 213.857†	34373.7	33960.6	315.91 ug/L	315.91 ppb	20:11:19
1	SiO2†	1074296.1	1082260.9	72158 ug/L	72158 ppb	20:12:47
2	Sc Radial	4370.2	4370.2	103 %		20:10:41
2	Y RADIAL	5070.3	5070.3	115.2 %		20:10:41
2	Al 396.153Radial†	66505.9	64849.2	64874 ug/L	64874 ppb	20:10:21
2	Ca 317.933Radial†	12502.0	12142.4	22650 ug/L	22650 ppb	20:10:21
2	Fe 238.204 Radial†	9325.2	9060.6	96293 ug/L	96293 ppb	20:10:21
2	K 766.490 Radial†	44547.1	40159.3	8097.2 ug/L	8097.2 ppb	20:10:21
2	Mg 279.077 IEC†	361.8	349.2	13387 ug/L	13387 ppb	20:10:41
2	Na 589.592 Radial†	10093.9	9611.3	3205.9 ug/L	3205.9 ppb	20:10:21
2	Sr 421.552†	24032.0	23286.0	179.63 ug/L	179.63 ppb	20:10:21
2	Sc 361.383	841331.8	841331.8	98.979 %		20:11:45
2	Y 371.029	769422.5	769422.5	109.49 %		20:11:45
2	Ag 328.068†	-5649.4	-5935.3	4.3313 ug/L	4.3313 ppb	20:11:50
2	As 188.979†	-23.0	5.1	37.502 ug/L	37.502 ppb	20:12:10
2	B 249.677†	1090.3	1583.4	21.537 ug/L	21.537 ppb	20:11:50
2	Ba 233.527†	99711.6	100721.1	820.99 ug/L	820.99 ppb	20:11:50
2	Be 313.107†	4007.1	8387.5	6.4366 ug/L	6.4366 ppb	20:11:50
2	Cd 226.502†	555.3	756.6	-1.0781 ug/L	-1.0781 ppb	20:12:10
2	Co 228.616†	1216.0	1307.4	23.099 ug/L	23.099 ppb	20:12:10
2	Cr 267.716†	15436.8	15446.3	181.82 ug/L	181.82 ppb	20:11:50
2	Cu 324.752†	20101.0	12214.2	42.625 ug/L	42.625 ppb	20:11:50
2	Mn 257.610†	1601564.7	1617512.5	1874.6 ug/L	1874.6 ppb	20:11:45
2	Mo 202.031†	61.5	51.6	11.581 ug/L	11.581 ppb	20:12:10
2	Ni 231.604†	4201.0	4130.8	105.79 ug/L	105.79 ppb	20:12:10

2	P 214.914†	813.1	579.5	252.56 ug/L	252.56 ppb	20:12:10
2	Pb 220.353†	297.0	373.6	51.356 ug/L	51.356 ppb	20:12:10
2	S 181.975 Axial†	559.3	522.2	670.32 ug/L	670.32 ppb	20:12:10
2	Sb 206.836†	58.6	23.6	0.4344 ug/L	0.4344 ppb	20:12:10
2	Se 196.026†	-442.7	-423.9	65.132 ug/L	65.132 ppb	20:12:10
2	Si 251.611†	1069644.6	1080063.9	33657 ug/L	33657 ppb	20:11:45
2	Sn 189.927†	-98.1	-111.7	-14.964 ug/L	-14.964 ppb	20:12:10
2	Ti 334.940†	898698.9	909460.4	1480.1 ug/L	1480.1 ppb	20:11:45
2	Tl 190.801†	-117.4	-79.5	-4.2379 ug/L	-4.2379 ppb	20:12:10
2	U 409.014†	-11793.7	-8400.2	-250.00 ug/L	-250.00 ppb	20:11:45
2	V 292.402†	13087.6	14899.9	92.118 ug/L	92.118 ppb	20:11:50
2	Zn 213.857†	34297.2	33963.2	316.34 ug/L	316.34 ppb	20:11:50
2	SiO2†	1068081.2	1078477.2	71905 ug/L	71905 ppb	20:12:53
3	Sc Radial	4355.1	4355.1	102 %		20:11:06
3	Y RADIAL	5048.9	5048.9	114.7 %		20:11:06
3	Al 396.153Radial†	68020.8	66552.7	66578 ug/L	66578 ppb	20:10:46
3	Ca 317.933Radial†	12737.0	12414.0	23157 ug/L	23157 ppb	20:10:46
3	Fe 238.204 Radial†	9535.8	9297.6	98812 ug/L	98812 ppb	20:10:46
3	K 766.490 Radial†	45343.6	41087.3	8284.4 ug/L	8284.4 ppb	20:10:46
3	Mg 279.077 IEC†	358.1	346.8	13291 ug/L	13291 ppb	20:11:06
3	Na 589.592 Radial†	10238.9	9786.9	3264.5 ug/L	3264.5 ppb	20:10:46
3	Sr 421.552†	24480.8	23805.3	183.64 ug/L	183.64 ppb	20:10:46
3	Sc 361.383	845051.8	845051.8	99.417 %		20:12:16
3	Y 371.029	773404.7	773404.7	110.06 %		20:12:16
3	Ag 328.068†	-5581.3	-5841.8	5.6219 ug/L	5.6219 ppb	20:12:21
3	As 188.979†	-34.1	-6.0	33.412 ug/L	33.412 ppb	20:12:41
3	B 249.677†	1094.0	1582.3	21.103 ug/L	21.103 ppb	20:12:21
3	Ba 233.527†	99092.5	99654.9	812.41 ug/L	812.41 ppb	20:12:21
3	Be 313.107†	3947.8	8310.1	6.4051 ug/L	6.4051 ppb	20:12:21
3	Cd 226.502†	552.9	751.6	-1.3965 ug/L	-1.3965 ppb	20:12:41
3	Co 228.616†	1205.3	1291.2	22.726 ug/L	22.726 ppb	20:12:41
3	Cr 267.716†	15358.9	15299.3	180.16 ug/L	180.16 ppb	20:12:21
3	Cu 324.752†	20005.6	12028.8	42.190 ug/L	42.190 ppb	20:12:21
3	Mn 257.610†	1605527.0	1614375.1	1871.2 ug/L	1871.2 ppb	20:12:16
3	Mo 202.031†	65.5	55.4	12.062 ug/L	12.062 ppb	20:12:41
3	Ni 231.604†	4186.3	4097.4	104.93 ug/L	104.93 ppb	20:12:41
3	P 214.914†	806.5	569.2	245.34 ug/L	245.34 ppb	20:12:41
3	Pb 220.353†	275.9	351.1	48.699 ug/L	48.699 ppb	20:12:41
3	S 181.975 Axial†	567.2	527.7	677.16 ug/L	677.16 ppb	20:12:41
3	Sb 206.836†	72.8	37.5	5.0659 ug/L	5.0659 ppb	20:12:41
3	Se 196.026†	-455.0	-434.3	67.207 ug/L	67.207 ppb	20:12:41
3	Si 251.611†	1072962.3	1078643.8	33613 ug/L	33613 ppb	20:12:16
3	Sn 189.927†	-105.8	-119.0	-16.163 ug/L	-16.163 ppb	20:12:41
3	Ti 334.940†	901829.5	908612.4	1478.8 ug/L	1478.8 ppb	20:12:16
3	Tl 190.801†	-109.6	-71.2	-1.6245 ug/L	-1.6245 ppb	20:12:41
3	U 409.014†	-11798.0	-8352.0	-248.92 ug/L	-248.92 ppb	20:12:16
3	V 292.402†	13109.0	14863.2	91.493 ug/L	91.493 ppb	20:12:21
3	Zn 213.857†	34117.5	33629.9	312.72 ug/L	312.72 ppb	20:12:21
3	SiO2†	1068640.0	1074289.0	71626 ug/L	71626 ppb	20:12:59

Mean Data: 245391001|945417|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	843218.1	99.201 %		0.2189			0.22%
Sc Radial	4358.7	103 %		0.2			0.23%
Y 371.029	771353.6	109.77 %		0.284			0.26%
Y RADIAL	5057.3	114.9 %		0.26			0.23%
Ag 328.068†	-5851.7	5.3191 ug/L		0.87653	5.3191 ppb	0.87653	16.48%
Al 396.153Radial†	65915.8	65941 ug/L		929.8	65941 ppb	929.8	1.41%
As 188.979†	0.3	35.872 ug/L		2.1680	35.872 ppb	2.1680	6.04%
B 249.677†	1600.2	21.648 ug/L		0.6084	21.648 ppb	0.6084	2.81%
Ba 233.527†	100296.0	817.59 ug/L		4.561	817.59 ppb	4.561	0.56%
Be 313.107†	8383.1	6.4352 ug/L		0.02940	6.4352 ppb	0.02940	0.46%
Ca 317.933Radial†	12309.9	22963 ug/L		273.2	22963 ppb	273.2	1.19%
Cd 226.502†	754.9	-1.2784 ug/L		0.17442	-1.2784 ppb	0.17442	13.64%
Co 228.616†	1293.0	22.772 ug/L		0.3071	22.772 ppb	0.3071	1.35%
Cr 267.716†	15395.3	181.26 ug/L		0.956	181.26 ppb	0.956	0.53%
Cu 324.752†	12112.0	42.405 ug/L		0.2176	42.405 ppb	0.2176	0.51%
Fe 238.204 Radial†	9224.8	98038 ug/L		1514.6	98038 ppb	1514.6	1.54%
K 766.490 Radial†	40816.3	8229.7 ug/L		115.33	8229.7 ppb	115.33	1.40%

Mg 279.077 IEC†	348.6	13361 ug/L	61.5	13361 ppb	61.5	0.46%
Mn 257.610†	1616519.8	1873.6 ug/L	2.09	1873.6 ppb	2.09	0.11%
Mo 202.031†	47.3	11.400 ug/L	0.7689	11.400 ppb	0.7689	6.74%
Na 589.592 Radial†	9791.9	3266.2 ug/L	61.11	3266.2 ppb	61.11	1.87%
Ni 231.604†	4109.6	105.25 ug/L	0.470	105.25 ppb	0.470	0.45%
P 214.914†	572.8	247.75 ug/L	4.166	247.75 ppb	4.166	1.68%
Pb 220.353†	360.8	49.836 ug/L	1.3694	49.836 ppb	1.3694	2.75%
S 181.975 Axial†	521.5	669.16 ug/L	8.632	669.16 ppb	8.632	1.29%
Sb 206.836†	31.4	3.0134 ug/L	2.36022	3.0134 ppb	2.36022	78.32%
Se 196.026†	-426.2	69.424 ug/L	5.7319	69.424 ppb	5.7319	8.26%
Si 251.611†	1079835.1	33650 ug/L	34.1	33650 ppb	34.1	0.10%
Sn 189.927†	-113.3	-15.180 ug/L	0.8941	-15.180 ppb	0.8941	5.89%
Sr 421.552†	23649.2	182.43 ug/L	2.434	182.43 ppb	2.434	1.33%
Ti 334.940†	909512.0	1480.3 ug/L	1.50	1480.3 ppb	1.50	0.10%
Tl 190.801†	-76.6	-3.3194 ug/L	1.46951	-3.3194 ppb	1.46951	44.27%
U 409.014†	-8429.7	-251.04 ug/L	2.788	-251.04 ppb	2.788	1.11%
V 292.402†	14929.9	92.075 ug/L	0.5624	92.075 ppb	0.5624	0.61%
Zn 213.857†	33851.2	314.99 ug/L	1.980	314.99 ppb	1.980	0.63%
SiO2†	1078342.3	71896 ug/L	265.9	71896 ppb	265.9	0.37%

Sequence No.: 32

Sample ID: 1202024808|945417|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 61

Date Collected: 2/16/2010 20:15:11

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202024808|945417|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4322.6	4322.6	102 %		20:17:25
1	Y RADIAL	5009.3	5009.3	113.8 %		20:17:25
1	Al 396.153Radial†	72161.3	71122.8	71150 ug/L	71150 ppb	20:17:05
1	Ca 317.933Radial†	12562.4	12335.6	23011 ug/L	23011 ppb	20:17:05
1	Fe 238.204 Radial†	10037.1	9860.5	104790 ug/L	104790 ppb	20:17:05
1	K 766.490 Radial†	48421.1	44446.0	8962.2 ug/L	8962.2 ppb	20:17:05
1	Mg 279.077 IEC†	377.2	368.2	14113 ug/L	14113 ppb	20:17:25
1	Na 589.592 Radial†	10401.4	10021.7	3342.9 ug/L	3342.9 ppb	20:17:05
1	Sr 421.552†	23756.5	23272.4	179.52 ug/L	179.52 ppb	20:17:05
1	Sc 361.383	839751.1	839751.1	98.793 %		20:18:22
1	Y 371.029	768979.6	768979.6	109.43 %		20:18:22
1	Ag 328.068†	-5714.0	-6011.5	6.8626 ug/L	6.8626 ppb	20:18:28
1	As 188.979†	-20.3	7.8	41.776 ug/L	41.776 ppb	20:18:48
1	B 249.677†	920.5	1413.7	16.130 ug/L	16.130 ppb	20:18:28
1	Ba 233.527†	74061.8	74947.6	611.99 ug/L	611.99 ppb	20:18:28
1	Be 313.107†	3512.3	7894.4	6.5590 ug/L	6.5590 ppb	20:18:28
1	Cd 226.502†	612.5	815.5	-1.2745 ug/L	-1.2745 ppb	20:18:48
1	Co 228.616†	1745.8	1846.0	33.842 ug/L	33.842 ppb	20:18:48
1	Cr 267.716†	13002.0	13011.2	153.67 ug/L	153.67 ppb	20:18:28
1	Cu 324.752†	20808.3	12968.4	45.394 ug/L	45.394 ppb	20:18:28
1	Mn 257.610†	1893615.9	1916176.9	2219.9 ug/L	2219.9 ppb	20:18:22
1	Mo 202.031†	73.1	63.6	13.133 ug/L	13.133 ppb	20:18:48
1	Ni 231.604†	3941.1	3875.8	99.251 ug/L	99.251 ppb	20:18:48
1	P 214.914†	829.3	597.5	256.78 ug/L	256.78 ppb	20:18:48
1	Pb 220.353†	365.7	443.7	60.575 ug/L	60.575 ppb	20:18:48
1	S 181.975 Axial†	524.9	488.4	624.99 ug/L	624.99 ppb	20:18:48
1	Sb 206.836†	55.7	20.7	-1.2148 ug/L	-1.2148 ppb	20:18:48
1	Se 196.026†	-484.0	-466.6	67.823 ug/L	67.823 ppb	20:18:48
1	Si 251.611†	1080653.1	1093241.1	34068 ug/L	34068 ppb	20:18:22
1	Sn 189.927†	-98.3	-112.1	-14.837 ug/L	-14.837 ppb	20:18:48
1	Ti 334.940†	978260.6	991703.1	1613.8 ug/L	1613.8 ppb	20:18:22
1	Tl 190.801†	-127.6	-90.0	-4.8605 ug/L	-4.8605 ppb	20:18:48
1	U 409.014†	-12371.0	-9006.9	-268.15 ug/L	-268.15 ppb	20:18:22
1	V 292.402†	13673.9	15518.2	95.221 ug/L	95.221 ppb	20:18:28
1	Zn 213.857†	36283.4	36038.9	335.36 ug/L	335.36 ppb	20:18:28
1	SiO2†	1079164.6	1091727.1	72789 ug/L	72789 ppb	20:19:56
2	Sc Radial	4342.6	4342.6	102 %		20:17:50
2	Y RADIAL	5062.7	5062.7	115.0 %		20:17:50
2	Al 396.153Radial†	70802.0	69466.6	69493 ug/L	69493 ppb	20:17:30
2	Ca 317.933Radial†	12352.0	12073.0	22521 ug/L	22521 ppb	20:17:30
2	Fe 238.204 Radial†	9825.5	9608.1	102110 ug/L	102110 ppb	20:17:30
2	K 766.490 Radial†	47609.3	43432.8	8757.9 ug/L	8757.9 ppb	20:17:30
2	Mg 279.077 IEC†	382.0	371.2	14230 ug/L	14230 ppb	20:17:50
2	Na 589.592 Radial†	10139.1	9718.0	3241.5 ug/L	3241.5 ppb	20:17:30
2	Sr 421.552†	23222.3	22642.3	174.66 ug/L	174.66 ppb	20:17:30
2	Sc 361.383	846349.3	846349.3	99.569 %		20:18:54
2	Y 371.029	776175.4	776175.4	110.45 %		20:18:54
2	Ag 328.068†	-5837.1	-6090.1	5.5788 ug/L	5.5788 ppb	20:18:59
2	As 188.979†	-23.9	4.3	39.659 ug/L	39.659 ppb	20:19:19
2	B 249.677†	1003.5	1489.8	18.357 ug/L	18.357 ppb	20:18:59
2	Ba 233.527†	74533.5	74836.9	611.01 ug/L	611.01 ppb	20:18:59
2	Be 313.107†	3512.1	7866.4	6.5419 ug/L	6.5419 ppb	20:18:59
2	Cd 226.502†	595.1	793.2	-1.2581 ug/L	-1.2581 ppb	20:19:19
2	Co 228.616†	1746.1	1832.5	33.601 ug/L	33.601 ppb	20:19:19
2	Cr 267.716†	13073.6	12980.4	153.26 ug/L	153.26 ppb	20:18:59
2	Cu 324.752†	20983.7	12980.4	45.285 ug/L	45.285 ppb	20:18:59
2	Mn 257.610†	1900842.5	1908491.7	2210.7 ug/L	2210.7 ppb	20:18:54
2	Mo 202.031†	50.6	40.3	11.191 ug/L	11.191 ppb	20:19:19
2	Ni 231.604†	3900.0	3803.4	97.397 ug/L	97.397 ppb	20:19:19

2	P 214.914†	829.7	591.3	255.08 ug/L	255.08 ppb	20:19:19
2	Pb 220.353†	374.8	450.0	61.243 ug/L	61.243 ppb	20:19:19
2	S 181.975 Axial†	514.7	474.0	606.45 ug/L	606.45 ppb	20:19:19
2	Sb 206.836†	59.3	23.8	-0.1276 ug/L	-0.1276 ppb	20:19:19
2	Se 196.026†	-474.4	-453.1	67.009 ug/L	67.009 ppb	20:19:19
2	Si 251.611†	1085867.1	1089949.9	33965 ug/L	33965 ppb	20:18:54
2	Sn 189.927†	-104.6	-117.7	-15.962 ug/L	-15.962 ppb	20:19:19
2	Ti 334.940†	984117.6	989865.7	1610.8 ug/L	1610.8 ppb	20:18:54
2	Tl 190.801†	-119.2	-80.6	-1.9470 ug/L	-1.9470 ppb	20:19:19
2	U 409.014†	-12219.2	-8756.8	-260.73 ug/L	-260.73 ppb	20:18:54
2	V 292.402†	13719.0	15455.6	95.153 ug/L	95.153 ppb	20:18:59
2	Zn 213.857†	36403.7	35873.3	334.16 ug/L	334.16 ppb	20:18:59
2	SiO2†	1076332.7	1080367.0	72031 ug/L	72031 ppb	20:20:02
3	Sc Radial	4311.7	4311.7	101 %		20:18:15
3	Y RADIAL	5044.2	5044.2	114.6 %		20:18:15
3	Al 396.153Radial†	73202.6	72328.8	72357 ug/L	72357 ppb	20:17:55
3	Ca 317.933Radial†	12757.6	12559.3	23428 ug/L	23428 ppb	20:17:55
3	Fe 238.204 Radial†	10148.6	9995.4	106230 ug/L	106230 ppb	20:17:55
3	K 766.490 Radial†	48999.7	45136.8	9101.5 ug/L	9101.5 ppb	20:17:55
3	Mg 279.077 IEC†	379.0	371.0	14217 ug/L	14217 ppb	20:18:15
3	Na 589.592 Radial†	10389.0	10035.3	3347.4 ug/L	3347.4 ppb	20:17:55
3	Sr 421.552†	24016.2	23587.5	181.95 ug/L	181.95 ppb	20:17:55
3	Sc 361.383	851239.9	851239.9	100.14 %		20:19:25
3	Y 371.029	779778.0	779778.0	110.96 %		20:19:25
3	Ag 328.068†	-5819.6	-6038.9	7.1905 ug/L	7.1905 ppb	20:19:30
3	As 188.979†	-26.4	2.0	39.652 ug/L	39.652 ppb	20:19:50
3	B 249.677†	1027.1	1507.5	18.109 ug/L	18.109 ppb	20:19:30
3	Ba 233.527†	73107.7	72983.2	596.07 ug/L	596.07 ppb	20:19:30
3	Be 313.107†	3442.2	7776.4	6.5090 ug/L	6.5090 ppb	20:19:30
3	Cd 226.502†	592.8	787.5	-1.7501 ug/L	-1.7501 ppb	20:19:50
3	Co 228.616†	1718.0	1794.3	32.739 ug/L	32.739 ppb	20:19:50
3	Cr 267.716†	12810.7	12642.4	149.40 ug/L	149.40 ppb	20:19:30
3	Cu 324.752†	20580.3	12456.4	43.897 ug/L	43.897 ppb	20:19:30
3	Mn 257.610†	1911858.9	1908524.2	2211.2 ug/L	2211.2 ppb	20:19:25
3	Mo 202.031†	43.8	33.3	11.001 ug/L	11.001 ppb	20:19:50
3	Ni 231.604†	3911.7	3792.5	97.119 ug/L	97.119 ppb	20:19:50
3	P 214.914†	820.2	577.0	244.87 ug/L	244.87 ppb	20:19:50
3	Pb 220.353†	365.2	438.2	60.015 ug/L	60.015 ppb	20:19:50
3	S 181.975 Axial†	516.0	472.3	603.76 ug/L	603.76 ppb	20:19:50
3	Sb 206.836†	61.0	25.3	0.2085 ug/L	0.2085 ppb	20:19:50
3	Se 196.026†	-473.8	-449.8	82.268 ug/L	82.268 ppb	20:19:50
3	Si 251.611†	1092159.1	1089967.3	33966 ug/L	33966 ppb	20:19:25
3	Sn 189.927†	-106.5	-118.9	-15.980 ug/L	-15.980 ppb	20:19:50
3	Ti 334.940†	989838.2	989899.6	1610.9 ug/L	1610.9 ppb	20:19:25
3	Tl 190.801†	-121.6	-82.4	-2.4940 ug/L	-2.4940 ppb	20:19:50
3	U 409.014†	-12237.4	-8704.5	-259.71 ug/L	-259.71 ppb	20:19:25
3	V 292.402†	13452.7	15110.6	92.051 ug/L	92.051 ppb	20:19:30
3	Zn 213.857†	35700.6	34961.2	324.65 ug/L	324.65 ppb	20:19:30
3	SiO2†	1092323.2	1090124.0	72682 ug/L	72682 ppb	20:20:08

Mean Data: 1202024808|945417|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	845780.1	99.503 %	0.6783			0.68%
Sc Radial	4325.6	102 %	0.4			0.36%
Y 371.029	774977.7	110.28 %	0.782			0.71%
Y RADIAL	5038.7	114.5 %	0.62			0.54%
Ag 328.068†	-6046.8	6.5440 ug/L	0.85177	6.5440 ppb	0.85177	13.02%
Al 396.153Radial†	70972.7	71000 ug/L	1437.6	71000 ppb	1437.6	2.02%
As 188.979†	4.7	40.362 ug/L	1.2242	40.362 ppb	1.2242	3.03%
B 249.677†	1470.3	17.532 ug/L	1.2204	17.532 ppb	1.2204	6.96%
Ba 233.527†	74255.9	606.36 ug/L	8.918	606.36 ppb	8.918	1.47%
Be 313.107†	7845.7	6.5366 ug/L	0.02541	6.5366 ppb	0.02541	0.39%
Ca 317.933Radial†	12322.6	22986 ug/L	454.0	22986 ppb	454.0	1.98%
Cd 226.502†	798.7	-1.4276 ug/L	0.27947	-1.4276 ppb	0.27947	19.58%
Co 228.616†	1824.3	33.394 ug/L	0.5798	33.394 ppb	0.5798	1.74%
Cr 267.716†	12878.0	152.11 ug/L	2.355	152.11 ppb	2.355	1.55%
Cu 324.752†	12801.7	44.859 ug/L	0.8342	44.859 ppb	0.8342	1.86%
Fe 238.204 Radial†	9821.3	104380 ug/L	2089.4	104380 ppb	2089.4	2.00%
K 766.490 Radial†	44338.5	8940.6 ug/L	172.84	8940.6 ppb	172.84	1.93%

Mg 279.077 IEC†	370.1	14186 ug/L	64.1	14186 ppb	64.1	0.45%
Mn 257.610†	1911064.3	2213.9 ug/L	5.15	2213.9 ppb	5.15	0.23%
Mo 202.031†	45.7	11.775 ug/L	1.1796	11.775 ppb	1.1796	10.02%
Na 589.592 Radial†	9925.0	3310.6 ug/L	59.85	3310.6 ppb	59.85	1.81%
Ni 231.604†	3823.9	97.923 ug/L	1.1588	97.923 ppb	1.1588	1.18%
P 214.914†	588.6	252.24 ug/L	6.445	252.24 ppb	6.445	2.56%
Pb 220.353†	444.0	60.611 ug/L	0.6147	60.611 ppb	0.6147	1.01%
S 181.975 Axial†	478.2	611.73 ug/L	11.556	611.73 ppb	11.556	1.89%
Sb 206.836†	23.3	-0.3780 ug/L	0.74398	-0.3780 ppb	0.74398	196.83%
Se 196.026†	-456.5	72.367 ug/L	8.5846	72.367 ppb	8.5846	11.86%
Si 251.611†	1091052.7	34000 ug/L	59.0	34000 ppb	59.0	0.17%
Sn 189.927†	-116.2	-15.593 ug/L	0.6549	-15.593 ppb	0.6549	4.20%
Sr 421.552†	23167.4	178.71 ug/L	3.713	178.71 ppb	3.713	2.08%
Ti 334.940†	990489.4	1611.8 ug/L	1.72	1611.8 ppb	1.72	0.11%
Tl 190.801†	-84.3	-3.1005 ug/L	1.54854	-3.1005 ppb	1.54854	49.95%
U 409.014†	-8822.8	-262.86 ug/L	4.604	-262.86 ppb	4.604	1.75%
V 292.402†	15361.4	94.142 ug/L	1.8107	94.142 ppb	1.8107	1.92%
Zn 213.857†	35624.5	331.39 ug/L	5.871	331.39 ppb	5.871	1.77%
SiO2†	1087406.0	72501 ug/L	409.9	72501 ppb	409.9	0.57%

Sequence No.: 33

Sample ID: 1202024809|945417|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 62

Date Collected: 2/16/2010 20:22:20

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202024809|945417|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4330.2	4330.2	102 %		20:24:33
1	Y RADIAL	5066.7	5066.7	115.1 %		20:24:33
1	Al 396.153Radial†	129785.6	127567.9	127590 ug/L	127590 ppb	20:24:13
1	Ca 317.933Radial†	16434.5	16115.2	30061 ug/L	30061 ppb	20:24:13
1	Fe 238.204 Radial†	11370.1	11151.8	118530 ug/L	118530 ppb	20:24:13
1	K 766.490 Radial†	94166.6	89270.6	18006 ug/L	18006 ppb	20:24:13
1	Mg 279.077 IEC†	663.1	648.2	24917 ug/L	24917 ppb	20:24:33
1	Na 589.592 Radial†	26832.0	26133.6	8717.1 ug/L	8717.1 ppb	20:24:13
1	Sr 421.552†	93078.8	91284.4	704.61 ug/L	704.61 ppb	20:24:13
1	Sc 361.383	834957.5	834957.5	98.229 %		20:25:32
1	Y 371.029	762515.5	762515.5	108.51 %		20:25:32
1	Ag 328.068†	94481.1	95956.6	502.64 ug/L	502.64 ppb	20:25:32
1	As 188.979†	1078.5	1126.3	523.35 ug/L	523.35 ppb	20:25:52
1	B 249.677†	21711.3	22584.6	510.69 ug/L	510.69 ppb	20:25:32
1	Ba 233.527†	133438.5	135825.1	1107.8 ug/L	1107.8 ppb	20:25:32
1	Be 313.107†	1332046.6	1360397.8	505.66 ug/L	505.66 ppb	20:25:32
1	Cd 226.502†	38294.7	39180.5	446.34 ug/L	446.34 ppb	20:25:52
1	Co 228.616†	22966.9	23459.8	483.35 ug/L	483.35 ppb	20:25:52
1	Cr 267.716†	51513.3	52292.2	611.45 ug/L	611.45 ppb	20:25:32
1	Cu 324.752†	193307.6	188698.2	583.88 ug/L	583.88 ppb	20:25:32
1	Mn 257.610†	1760147.2	1791306.6	2076.7 ug/L	2076.7 ppb	20:25:32
1	Mo 202.031†	6245.1	6347.2	481.19 ug/L	481.19 ppb	20:25:52
1	Ni 231.604†	21279.1	21549.2	551.67 ug/L	551.67 ppb	20:25:52
1	P 214.914†	1829.7	1620.7	725.31 ug/L	725.31 ppb	20:25:52
1	Pb 220.353†	3932.2	4076.7	522.35 ug/L	522.35 ppb	20:25:52
1	S 181.975 Axial†	4135.1	4166.7	5421.8 ug/L	5421.8 ppb	20:25:52
1	Sb 206.836†	1212.6	1198.8	411.45 ug/L	411.45 ppb	20:25:52
1	Se 196.026†	226.2	253.6	535.49 ug/L	535.49 ppb	20:25:52
1	Si 251.611†	1113050.2	1132502.3	35286 ug/L	35286 ppb	20:25:32
1	Sn 189.927†	2595.7	2629.8	478.12 ug/L	478.12 ppb	20:25:52
1	Ti 334.940†	1590190.7	1620349.0	2635.3 ug/L	2635.3 ppb	20:25:32
1	Tl 190.801†	1367.6	1431.3	480.18 ug/L	480.18 ppb	20:25:52
1	U 409.014†	4991.6	8596.7	229.34 ug/L	229.34 ppb	20:25:32
1	V 292.402†	82261.0	85421.1	606.03 ug/L	606.03 ppb	20:25:32
1	Zn 213.857†	83963.9	84789.8	805.50 ug/L	805.50 ppb	20:25:32
1	SiO2†	1119671.6	1139235.7	75944 ug/L	75944 ppb	20:26:53
2	Sc Radial	4376.7	4376.7	103 %		20:24:58
2	Y RADIAL	5089.8	5089.8	115.6 %		20:24:58
2	Al 396.153Radial†	132033.2	128396.5	128420 ug/L	128420 ppb	20:24:38
2	Ca 317.933Radial†	16683.0	16185.0	30191 ug/L	30191 ppb	20:24:38
2	Fe 238.204 Radial†	11599.7	11256.2	119640 ug/L	119640 ppb	20:24:38
2	K 766.490 Radial†	95773.1	89848.2	18122 ug/L	18122 ppb	20:24:38
2	Mg 279.077 IEC†	653.7	632.2	24296 ug/L	24296 ppb	20:24:58
2	Na 589.592 Radial†	27045.9	26061.3	8693.0 ug/L	8693.0 ppb	20:24:38
2	Sr 421.552†	94492.2	91685.9	707.71 ug/L	707.71 ppb	20:24:38
2	Sc 361.383	838100.2	838100.2	98.599 %		20:25:59
2	Y 371.029	765677.7	765677.7	108.96 %		20:25:59
2	Ag 328.068†	95080.3	96203.6	504.20 ug/L	504.20 ppb	20:25:59
2	As 188.979†	1074.9	1118.5	520.35 ug/L	520.35 ppb	20:26:19
2	B 249.677†	21999.0	22793.5	515.42 ug/L	515.42 ppb	20:25:59
2	Ba 233.527†	133742.5	135624.0	1106.2 ug/L	1106.2 ppb	20:25:59
2	Be 313.107†	1339617.6	1362991.3	506.62 ug/L	506.62 ppb	20:25:59
2	Cd 226.502†	38293.9	39033.5	444.51 ug/L	444.51 ppb	20:26:19
2	Co 228.616†	22972.6	23377.9	481.62 ug/L	481.62 ppb	20:26:19
2	Cr 267.716†	51642.1	52226.2	610.71 ug/L	610.71 ppb	20:25:59
2	Cu 324.752†	194745.6	189418.6	586.14 ug/L	586.14 ppb	20:25:59
2	Mn 257.610†	1765850.2	1790371.3	2075.8 ug/L	2075.8 ppb	20:25:59
2	Mo 202.031†	6234.3	6312.4	478.70 ug/L	478.70 ppb	20:26:19
2	Ni 231.604†	21264.9	21453.6	549.22 ug/L	549.22 ppb	20:26:19

2	P 214.914†	1826.1	1610.1	718.28 ug/L	718.28 ppb	20:26:19
2	Pb 220.353†	3928.5	4057.8	520.08 ug/L	520.08 ppb	20:26:19
2	S 181.975 Axial†	4140.7	4156.7	5408.5 ug/L	5408.5 ppb	20:26:19
2	Sb 206.836†	1227.1	1208.8	414.73 ug/L	414.73 ppb	20:26:19
2	Se 196.026†	232.4	259.0	542.25 ug/L	542.25 ppb	20:26:19
2	Si 251.611†	1118037.6	1133311.4	35311 ug/L	35311 ppb	20:25:59
2	Sn 189.927†	2591.3	2615.5	475.58 ug/L	475.58 ppb	20:26:19
2	Ti 334.940†	1597321.7	1621510.9	2637.2 ug/L	2637.2 ppb	20:25:59
2	Tl 190.801†	1379.2	1437.9	482.27 ug/L	482.27 ppb	20:26:19
2	U 409.014†	5151.3	8739.7	233.27 ug/L	233.27 ppb	20:25:59
2	V 292.402†	82748.3	85601.4	607.13 ug/L	607.13 ppb	20:25:59
2	Zn 213.857†	84345.6	84856.3	806.00 ug/L	806.00 ppb	20:25:59
2	SiO2†	1117517.7	1132776.9	75513 ug/L	75513 ppb	20:26:59
3	Sc Radial	4345.8	4345.8	102 %		20:25:23
3	Y RADIAL	5074.4	5074.4	115.3 %		20:25:23
3	Al 396.153Radial†	127642.6	125012.9	125040 ug/L	125040 ppb	20:25:03
3	Ca 317.933Radial†	16157.7	15786.4	29448 ug/L	29448 ppb	20:25:03
3	Fe 238.204 Radial†	11218.4	10963.3	116530 ug/L	116530 ppb	20:25:03
3	K 766.490 Radial†	93088.9	87883.5	17726 ug/L	17726 ppb	20:25:03
3	Mg 279.077 IBC†	662.9	645.7	24822 ug/L	24822 ppb	20:25:23
3	Na 589.592 Radial†	26271.2	25490.1	8502.5 ug/L	8502.5 ppb	20:25:03
3	Sr 421.552†	91340.7	89255.3	688.95 ug/L	688.95 ppb	20:25:03
3	Sc 361.383	833436.0	833436.0	98.050 %		20:26:27
3	Y 371.029	762860.8	762860.8	108.56 %		20:26:27
3	Ag 328.068†	94720.0	96375.8	503.99 ug/L	503.99 ppb	20:26:27
3	As 188.979†	1059.6	1109.0	515.64 ug/L	515.64 ppb	20:26:47
3	B 249.677†	21968.3	22887.0	518.11 ug/L	518.11 ppb	20:26:27
3	Ba 233.527†	133238.7	135869.3	1108.1 ug/L	1108.1 ppb	20:26:27
3	Be 313.107†	1335353.9	1366246.5	507.82 ug/L	507.82 ppb	20:26:27
3	Cd 226.502†	38519.9	39481.4	450.07 ug/L	450.07 ppb	20:26:47
3	Co 228.616†	23135.6	23674.6	487.86 ug/L	487.86 ppb	20:26:47
3	Cr 267.716†	51428.5	52301.5	611.52 ug/L	611.52 ppb	20:26:27
3	Cu 324.752†	193955.5	189718.2	586.89 ug/L	586.89 ppb	20:26:27
3	Mn 257.610†	1757755.3	1792138.4	2077.5 ug/L	2077.5 ppb	20:26:27
3	Mo 202.031†	6260.3	6374.3	483.05 ug/L	483.05 ppb	20:26:47
3	Ni 231.604†	21377.6	21689.2	555.25 ug/L	555.25 ppb	20:26:47
3	P 214.914†	1850.1	1645.0	739.12 ug/L	739.12 ppb	20:26:47
3	Pb 220.353†	3958.4	4110.7	526.20 ug/L	526.20 ppb	20:26:47
3	S 181.975 Axial†	4169.9	4210.0	5478.8 ug/L	5478.8 ppb	20:26:47
3	Sb 206.836†	1213.2	1201.6	412.56 ug/L	412.56 ppb	20:26:47
3	Se 196.026†	246.7	274.9	541.41 ug/L	541.41 ppb	20:26:47
3	Si 251.611†	1113435.1	1134963.4	35362 ug/L	35362 ppb	20:26:27
3	Sn 189.927†	2595.3	2634.3	478.79 ug/L	478.79 ppb	20:26:47
3	Ti 334.940†	1589964.0	1623073.2	2639.6 ug/L	2639.6 ppb	20:26:27
3	Tl 190.801†	1381.8	1448.4	485.57 ug/L	485.57 ppb	20:26:47
3	U 409.014†	5001.3	8615.9	230.11 ug/L	230.11 ppb	20:26:27
3	V 292.402†	82485.9	85803.4	609.11 ug/L	609.11 ppb	20:26:27
3	Zn 213.857†	83876.7	84856.8	806.43 ug/L	806.43 ppb	20:26:27
3	SiO2†	1114868.2	1136417.8	75756 ug/L	75756 ppb	20:27:05

Mean Data: 1202024809|945417|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	835497.9	98.293 %	0.2798			0.28%
Sc Radial	4350.9	102 %	0.6			0.54%
Y 371.029	763684.7	108.67 %	0.247			0.23%
Y RADIAL	5077.0	115.3 %	0.27			0.23%
Ag 328.068†	96178.7	503.61 ug/L	0.848	503.61 ppb	0.848	0.17%
Al 396.153Radial†	126992.4	127020 ug/L	1764.5	127020 ppb	1764.5	1.39%
As 188.979†	1117.9	519.78 ug/L	3.885	519.78 ppb	3.885	0.75%
B 249.677†	22755.0	514.74 ug/L	3.761	514.74 ppb	3.761	0.73%
Ba 233.527†	135772.8	1107.4 ug/L	1.02	1107.4 ppb	1.02	0.09%
Be 313.107†	1363211.8	506.70 ug/L	1.081	506.70 ppb	1.081	0.21%
Ca 317.933Radial†	16028.9	29900 ug/L	397.1	29900 ppb	397.1	1.33%
Cd 226.502†	39231.8	446.98 ug/L	2.834	446.98 ppb	2.834	0.63%
Co 228.616†	23504.1	484.28 ug/L	3.220	484.28 ppb	3.220	0.66%
Cr 267.716†	52273.3	611.23 ug/L	0.453	611.23 ppb	0.453	0.07%
Cu 324.752†	189278.3	585.64 ug/L	1.570	585.64 ppb	1.570	0.27%
Fe 238.204 Radial†	11123.8	118230 ug/L	1577.7	118230 ppb	1577.7	1.33%
K 766.490 Radial†	89000.8	17951 ug/L	203.7	17951 ppb	203.7	1.13%

Mg 279.077 IEC†	642.0	24678 ug/L	334.4	24678 ppb	334.4	1.35%
Mn 257.610†	1791272.1	2076.7 ug/L	0.86	2076.7 ppb	0.86	0.04%
Mo 202.031†	6344.7	480.98 ug/L	2.182	480.98 ppb	2.182	0.45%
Na 589.592 Radial†	25895.0	8637.5 ug/L	117.57	8637.5 ppb	117.57	1.36%
Ni 231.604†	21564.0	552.05 ug/L	3.034	552.05 ppb	3.034	0.55%
P 214.914†	1625.3	727.57 ug/L	10.603	727.57 ppb	10.603	1.46%
Pb 220.353†	4081.7	522.87 ug/L	3.092	522.87 ppb	3.092	0.59%
S 181.975 Axial†	4177.8	5436.4 ug/L	37.34	5436.4 ppb	37.34	0.69%
Sb 206.836†	1203.1	412.91 ug/L	1.666	412.91 ppb	1.666	0.40%
Se 196.026†	262.5	539.72 ug/L	3.679	539.72 ppb	3.679	0.68%
Si 251.611†	1133592.4	35320 ug/L	39.1	35320 ppb	39.1	0.11%
Sn 189.927†	2626.5	477.50 ug/L	1.691	477.50 ppb	1.691	0.35%
Sr 421.552†	90741.9	700.42 ug/L	10.058	700.42 ppb	10.058	1.44%
Ti 334.940†	1621644.4	2637.4 ug/L	2.18	2637.4 ppb	2.18	0.08%
Tl 190.801†	1439.2	482.67 ug/L	2.720	482.67 ppb	2.720	0.56%
U 409.014†	8650.8	230.91 ug/L	2.086	230.91 ppb	2.086	0.90%
V 292.402†	85608.6	607.42 ug/L	1.563	607.42 ppb	1.563	0.26%
Zn 213.857†	84834.3	805.97 ug/L	0.464	805.97 ppb	0.464	0.06%
SiO2†	1136143.5	75737 ug/L	215.9	75737 ppb	215.9	0.29%

Sequence No.: 34
 Sample ID: 1202024812|945417|1
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 63
 Date Collected: 2/16/2010 20:29:17
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 1202024812|945417|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4323.9	4323.9	102 %		20:31:29
1	Y RADIAL	5117.0	5117.0	116.2 %		20:31:29
1	Al 396.153Radial†	117263.6	115442.7	115470 ug/L	115470 ppb	20:31:09
1	Ca 317.933Radial†	15429.3	15150.5	28261 ug/L	28261 ppb	20:31:09
1	Fe 238.204 Radial†	11011.3	10815.3	114960 ug/L	114960 ppb	20:31:09
1	K 766.490 Radial†	88124.1	83464.6	16835 ug/L	16835 ppb	20:31:09
1	Mg 279.077 IEC†	595.2	582.5	22381 ug/L	22381 ppb	20:31:29
1	Na 589.592 Radial†	24933.0	24305.0	8107.2 ug/L	8107.2 ppb	20:31:09
1	Sr 421.552†	88591.4	87005.7	671.59 ug/L	671.59 ppb	20:31:09
1	Sc 361.383	840067.2	840067.2	98.830 %		20:32:28
1	Y 371.029	776118.0	776118.0	110.44 %		20:32:28
1	Ag 328.068†	93703.1	94584.4	494.82 ug/L	494.82 ppb	20:32:28
1	As 188.979†	1055.7	1096.5	510.41 ug/L	510.41 ppb	20:32:49
1	B 249.677†	21687.3	22425.9	507.55 ug/L	507.55 ppb	20:32:28
1	Ba 233.527†	138635.3	140257.1	1143.7 ug/L	1143.7 ppb	20:32:28
1	Be 313.107†	1318954.0	1338902.0	497.87 ug/L	497.87 ppb	20:32:28
1	Cd 226.502†	37876.1	38519.8	438.97 ug/L	438.97 ppb	20:32:49
1	Co 228.616†	22811.9	23160.7	477.07 ug/L	477.07 ppb	20:32:49
1	Cr 267.716†	50260.6	50705.7	592.91 ug/L	592.91 ppb	20:32:28
1	Cu 324.752†	191567.3	185740.3	574.64 ug/L	574.64 ppb	20:32:28
1	Mn 257.610†	2081188.5	2105248.1	2438.6 ug/L	2438.6 ppb	20:32:28
1	Mo 202.031†	6143.7	6206.0	470.40 ug/L	470.40 ppb	20:32:49
1	Ni 231.604†	20869.4	21002.9	537.68 ug/L	537.68 ppb	20:32:49
1	P 214.914†	1823.7	1603.3	717.17 ug/L	717.17 ppb	20:32:49
1	Pb 220.353†	3948.2	4068.5	519.03 ug/L	519.03 ppb	20:32:49
1	S 181.975 Axial†	4122.4	4128.3	5373.9 ug/L	5373.9 ppb	20:32:49
1	Sb 206.836†	1220.2	1198.9	411.26 ug/L	411.26 ppb	20:32:49
1	Se 196.026†	211.6	237.4	514.09 ug/L	514.09 ppb	20:32:49
1	Si 251.611†	1160603.3	1173725.9	36571 ug/L	36571 ppb	20:32:28
1	Sn 189.927†	2541.3	2558.8	465.04 ug/L	465.04 ppb	20:32:49
1	Ti 334.940†	1627994.0	1648753.0	2681.4 ug/L	2681.4 ppb	20:32:28
1	Tl 190.801†	1319.4	1374.1	464.29 ug/L	464.29 ppb	20:32:49
1	U 409.014†	4220.1	7785.2	206.73 ug/L	206.73 ppb	20:32:28
1	V 292.402†	80720.7	83353.3	591.29 ug/L	591.29 ppb	20:32:28
1	Zn 213.857†	86306.1	86639.7	824.19 ug/L	824.19 ppb	20:32:28
1	SiO2†	1138947.0	1151806.0	76782 ug/L	76782 ppb	20:33:49
2	Sc Radial	4341.8	4341.8	102 %		20:31:55
2	Y RADIAL	5108.7	5108.7	116.0 %		20:31:55
2	Al 396.153Radial†	118962.8	116631.4	116650 ug/L	116650 ppb	20:31:35
2	Ca 317.933Radial†	15590.8	15246.1	28440 ug/L	28440 ppb	20:31:35
2	Fe 238.204 Radial†	11168.2	10924.4	116110 ug/L	116110 ppb	20:31:35
2	K 766.490 Radial†	89172.4	84133.9	16970 ug/L	16970 ppb	20:31:35
2	Mg 279.077 IEC†	593.4	578.3	22219 ug/L	22219 ppb	20:31:55
2	Na 589.592 Radial†	25316.8	24579.8	8198.8 ug/L	8198.8 ppb	20:31:35
2	Sr 421.552†	89959.9	87986.8	679.16 ug/L	679.16 ppb	20:31:35
2	Sc 361.383	832646.0	832646.0	97.957 %		20:32:56
2	Y 371.029	770425.9	770425.9	109.63 %		20:32:56
2	Ag 328.068†	92990.1	94701.6	495.78 ug/L	495.78 ppb	20:32:56
2	As 188.979†	1051.1	1101.4	512.72 ug/L	512.72 ppb	20:33:16
2	B 249.677†	21632.6	22565.6	510.64 ug/L	510.64 ppb	20:32:56
2	Ba 233.527†	137110.8	139951.1	1141.2 ug/L	1141.2 ppb	20:32:56
2	Be 313.107†	1309957.8	1341612.9	498.87 ug/L	498.87 ppb	20:32:56
2	Cd 226.502†	37830.0	38814.3	442.30 ug/L	442.30 ppb	20:33:16
2	Co 228.616†	22789.7	23343.8	480.88 ug/L	480.88 ppb	20:33:16
2	Cr 267.716†	49917.9	50809.1	594.14 ug/L	594.14 ppb	20:32:56
2	Cu 324.752†	190221.8	186094.3	575.79 ug/L	575.79 ppb	20:32:56
2	Mn 257.610†	2062610.2	2105051.2	2438.5 ug/L	2438.5 ppb	20:32:56
2	Mo 202.031†	6138.1	6255.6	474.18 ug/L	474.18 ppb	20:33:16
2	Ni 231.604†	20814.6	21135.1	541.07 ug/L	541.07 ppb	20:33:16

2	P 214.914†	1807.0	1602.7	716.05 ug/L	716.05 ppb	20:33:16
2	Pb 220.353†	3924.4	4079.7	520.58 ug/L	520.58 ppb	20:33:16
2	S 181.975 Axial†	4120.0	4163.0	5419.0 ug/L	5419.0 ppb	20:33:16
2	Sb 206.836†	1226.2	1216.1	417.17 ug/L	417.17 ppb	20:33:16
2	Se 196.026†	220.0	247.9	524.00 ug/L	524.00 ppb	20:33:16
2	Si 251.611†	1150314.1	1173688.8	36569 ug/L	36569 ppb	20:32:56
2	Sn 189.927†	2549.5	2590.1	470.71 ug/L	470.71 ppb	20:33:16
2	Ti 334.940†	1614345.2	1649501.3	2682.7 ug/L	2682.7 ppb	20:32:56
2	Tl 190.801†	1337.1	1404.1	473.73 ug/L	473.73 ppb	20:33:16
2	U 409.014†	3999.4	7597.9	201.28 ug/L	201.28 ppb	20:32:56
2	V 292.402†	80007.8	83353.4	591.16 ug/L	591.16 ppb	20:32:56
2	Zn 213.857†	85498.0	86593.1	823.54 ug/L	823.54 ppb	20:32:56
2	SiO2†	1147441.6	1170749.2	78045 ug/L	78045 ppb	20:33:55
3	Sc Radial	4295.6	4295.6	101 %		20:32:20
3	Y RADIAL	5081.0	5081.0	115.4 %		20:32:20
3	Al 396.153Radial†	118284.9	117214.2	117240 ug/L	117240 ppb	20:32:00
3	Ca 317.933Radial†	15526.9	15347.2	28628 ug/L	28628 ppb	20:32:00
3	Fe 238.204 Radial†	11081.1	10955.9	116450 ug/L	116450 ppb	20:32:00
3	K 766.490 Radial†	88731.2	84637.1	17071 ug/L	17071 ppb	20:32:00
3	Mg 279.077 IEC†	591.8	583.0	22399 ug/L	22399 ppb	20:32:20
3	Na 589.592 Radial†	25216.0	24746.7	8254.5 ug/L	8254.5 ppb	20:32:00
3	Sr 421.552†	89340.8	88322.1	681.75 ug/L	681.75 ppb	20:32:00
3	Sc 361.383	834059.3	834059.3	98.124 %		20:33:23
3	Y 371.029	771696.7	771696.7	109.81 %		20:33:23
3	Ag 328.068†	93062.3	94614.2	495.47 ug/L	495.47 ppb	20:33:23
3	As 188.979†	1049.3	1097.7	511.26 ug/L	511.26 ppb	20:33:43
3	B 249.677†	21653.7	22549.6	510.22 ug/L	510.22 ppb	20:33:23
3	Ba 233.527†	137218.7	139823.9	1140.2 ug/L	1140.2 ppb	20:33:23
3	Be 313.107†	1312995.9	1342443.1	499.17 ug/L	499.17 ppb	20:33:23
3	Cd 226.502†	37645.3	38560.7	439.30 ug/L	439.30 ppb	20:33:43
3	Co 228.616†	22675.0	23187.4	477.61 ug/L	477.61 ppb	20:33:43
3	Cr 267.716†	49940.1	50745.4	593.41 ug/L	593.41 ppb	20:33:23
3	Cu 324.752†	190623.7	186174.8	576.05 ug/L	576.05 ppb	20:33:23
3	Mn 257.610†	2065581.0	2104510.7	2437.9 ug/L	2437.9 ppb	20:33:23
3	Mo 202.031†	6136.3	6243.2	473.29 ug/L	473.29 ppb	20:33:43
3	Ni 231.604†	20707.9	20990.4	537.36 ug/L	537.36 ppb	20:33:43
3	P 214.914†	1795.9	1588.3	707.86 ug/L	707.86 ppb	20:33:43
3	Pb 220.353†	3916.0	4064.4	518.78 ug/L	518.78 ppb	20:33:43
3	S 181.975 Axial†	4071.5	4106.5	5345.0 ug/L	5345.0 ppb	20:33:43
3	Sb 206.836†	1204.9	1192.3	409.03 ug/L	409.03 ppb	20:33:43
3	Se 196.026†	219.1	246.7	524.37 ug/L	524.37 ppb	20:33:43
3	Si 251.611†	1151785.6	1173198.5	36554 ug/L	36554 ppb	20:33:23
3	Sn 189.927†	2536.0	2571.9	467.47 ug/L	467.47 ppb	20:33:43
3	Ti 334.940†	1617442.3	1649865.0	2683.3 ug/L	2683.3 ppb	20:33:23
3	Tl 190.801†	1329.5	1394.0	470.58 ug/L	470.58 ppb	20:33:43
3	U 409.014†	4151.2	7745.7	205.44 ug/L	205.44 ppb	20:33:23
3	V 292.402†	80297.2	83510.0	592.24 ug/L	592.24 ppb	20:33:23
3	Zn 213.857†	85585.7	86534.6	822.94 ug/L	822.94 ppb	20:33:23
3	SiO2†	1144134.6	1165394.0	77688 ug/L	77688 ppb	20:34:01

Mean Data: 1202024812|945417|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	835590.8	98.304 %	0.4636			0.47%
Sc Radial	4320.4	102 %	0.5			0.54%
Y 371.029	772746.9	109.96 %	0.425			0.39%
Y RADIAL	5102.2	115.9 %	0.43			0.37%
Ag 328.068†	94633.4	495.36 ug/L	0.488	495.36 ppb	0.488	0.10%
Al 396.153Radial†	116429.4	116450 ug/L	903.1	116450 ppb	903.1	0.78%
As 188.979†	1098.5	511.46 ug/L	1.169	511.46 ppb	1.169	0.23%
B 249.677†	22513.7	509.47 ug/L	1.675	509.47 ppb	1.675	0.33%
Ba 233.527†	140010.7	1141.7 ug/L	1.78	1141.7 ppb	1.78	0.16%
Be 313.107†	1340986.0	498.64 ug/L	0.682	498.64 ppb	0.682	0.14%
Ca 317.933Radial†	15247.9	28443 ug/L	183.5	28443 ppb	183.5	0.65%
Cd 226.502†	38631.6	440.19 ug/L	1.834	440.19 ppb	1.834	0.42%
Co 228.616†	23230.7	478.52 ug/L	2.060	478.52 ppb	2.060	0.43%
Cr 267.716†	50753.4	593.49 ug/L	0.618	593.49 ppb	0.618	0.10%
Cu 324.752†	186003.1	575.50 ug/L	0.750	575.50 ppb	0.750	0.13%
Fe 238.204 Radial†	10898.5	115840 ug/L	783.9	115840 ppb	783.9	0.68%
K 766.490 Radial†	84078.5	16958 ug/L	118.6	16958 ppb	118.6	0.70%

Mg 279.077 IEC†	581.2	22333 ug/L	99.4	22333 ppb	99.4	0.45%
Mn 257.610†	2104936.7	2438.3 ug/L	0.38	2438.3 ppb	0.38	0.02%
Mo 202.031†	6234.9	472.62 ug/L	1.975	472.62 ppb	1.975	0.42%
Na 589.592 Radial†	24543.8	8186.8 ug/L	74.41	8186.8 ppb	74.41	0.91%
Ni 231.604†	21042.8	538.70 ug/L	2.054	538.70 ppb	2.054	0.38%
P 214.914†	1598.1	713.69 ug/L	5.086	713.69 ppb	5.086	0.71%
Pb 220.353†	4070.9	519.46 ug/L	0.975	519.46 ppb	0.975	0.19%
S 181.975 Axial†	4132.6	5379.3 ug/L	37.28	5379.3 ppb	37.28	0.69%
Sb 206.836†	1202.4	412.49 ug/L	4.206	412.49 ppb	4.206	1.02%
Se 196.026†	244.0	520.82 ug/L	5.829	520.82 ppb	5.829	1.12%
Si 251.611†	1173537.7	36565 ug/L	9.2	36565 ppb	9.2	0.03%
Sn 189.927†	2573.6	467.74 ug/L	2.841	467.74 ppb	2.841	0.61%
Sr 421.552†	87771.5	677.50 ug/L	5.281	677.50 ppb	5.281	0.78%
Ti 334.940†	1649373.1	2682.4 ug/L	0.95	2682.4 ppb	0.95	0.04%
Tl 190.801†	1390.7	469.53 ug/L	4.803	469.53 ppb	4.803	1.02%
U 409.014†	7709.6	204.48 ug/L	2.850	204.48 ppb	2.850	1.39%
V 292.402†	83405.6	591.56 ug/L	0.591	591.56 ppb	0.591	0.10%
Zn 213.857†	86589.2	823.56 ug/L	0.625	823.56 ppb	0.625	0.08%
SiO2†	1162649.8	77505 ug/L	651.0	77505 ppb	651.0	0.84%

Sequence No.: 35

Sample ID: 1202024810|945417|5

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 64

Date Collected: 2/16/2010 20:36:12

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202024810|945417|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4197.6	4197.6	98.7 %		20:38:25
1	Y RADIAL	4463.6	4463.6	101.4 %		20:38:05
1	Al 396.153Radial†	13242.0	13569.3	13574 ug/L	13574 ppb	20:38:05
1	Ca 317.933Radial†	2577.3	2591.7	4834.5 ug/L	4834.5 ppb	20:38:25
1	Fe 238.204 Radial†	1946.4	1961.0	20841 ug/L	20841 ppb	20:38:25
1	K 766.490 Radial†	11638.8	8615.1	1737.0 ug/L	1737.0 ppb	20:38:05
1	Mg 279.077 IEC†	74.6	72.8	2791.5 ug/L	2791.5 ppb	20:38:25
1	Na 589.592 Radial†	2710.7	2538.0	846.59 ug/L	846.59 ppb	20:38:05
1	Sr 421.552†	4877.0	4849.1	37.405 ug/L	37.405 ppb	20:38:05
1	Sc 361.383	803562.6	803562.6	94.536 %		20:39:23
1	Y 371.029	666558.2	666558.2	94.853 %		20:39:23
1	Ag 328.068†	-873.2	-1151.3	1.5658 ug/L	1.5658 ppb	20:39:23
1	As 188.979†	-23.1	3.8	9.1685 ug/L	9.1685 ppb	20:39:43
1	B 249.677†	107.4	595.6	10.610 ug/L	10.610 ppb	20:39:23
1	Ba 233.527†	19959.7	21094.5	171.96 ug/L	171.96 ppb	20:39:23
1	Be 313.107†	-2573.9	1616.5	1.2947 ug/L	1.2947 ppb	20:39:23
1	Cd 226.502†	-41.1	152.0	-0.3690 ug/L	-0.3690 ppb	20:39:43
1	Co 228.616†	196.0	286.2	5.0902 ug/L	5.0902 ppb	20:39:43
1	Cr 267.716†	3141.0	3172.8	37.366 ug/L	37.366 ppb	20:39:23
1	Cu 324.752†	9676.6	2141.8	7.6838 ug/L	7.6838 ppb	20:39:23
1	Mn 257.610†	327497.0	345856.7	400.85 ug/L	400.85 ppb	20:39:23
1	Mo 202.031†	34.7	26.2	3.6231 ug/L	3.6231 ppb	20:39:43
1	Ni 231.604†	947.8	889.0	22.769 ug/L	22.769 ppb	20:39:43
1	P 214.914†	352.9	131.3	58.087 ug/L	58.087 ppb	20:39:43
1	Pb 220.353†	-3.9	69.5	9.6069 ug/L	9.6069 ppb	20:39:43
1	S 181.975 Axial†	161.4	127.8	164.52 ug/L	164.52 ppb	20:39:43
1	Sb 206.836†	40.0	6.7	0.6776 ug/L	0.6776 ppb	20:39:43
1	Se 196.026†	-111.1	-94.1	12.689 ug/L	12.689 ppb	20:39:43
1	Si 251.611†	216012.3	227885.6	7101.5 ug/L	7101.5 ppb	20:39:23
1	Sn 189.927†	-14.6	-28.1	-3.9450 ug/L	-3.9450 ppb	20:39:43
1	Ti 334.940†	178170.6	189961.8	309.17 ug/L	309.17 ppb	20:39:23
1	Tl 190.801†	-50.2	-14.0	-0.0271 ug/L	-0.0271 ppb	20:39:43
1	U 409.014†	-4722.0	-1479.7	-44.493 ug/L	-44.493 ppb	20:39:23
1	V 292.402†	1312.1	3065.3	18.826 ug/L	18.826 ppb	20:39:23
1	Zn 213.857†	7408.9	7149.4	66.504 ug/L	66.504 ppb	20:39:23
1	SiO2†	219470.0	231535.9	15437 ug/L	15437 ppb	20:40:39
2	Sc Radial	4114.9	4114.9	96.8 %		20:38:51
2	Y RADIAL	4118.1	4118.1	93.55 %		20:38:31
2	Al 396.153Radial†	13717.3	14329.7	14335 ug/L	14335 ppb	20:38:31
2	Ca 317.933Radial†	2567.1	2633.6	4912.7 ug/L	4912.7 ppb	20:38:51
2	Fe 238.204 Radial†	1946.1	2000.3	21259 ug/L	21259 ppb	20:38:51
2	K 766.490 Radial†	11822.0	9041.1	1822.9 ug/L	1822.9 ppb	20:38:31
2	Mg 279.077 IEC†	76.5	76.4	2926.9 ug/L	2926.9 ppb	20:38:51
2	Na 589.592 Radial†	2695.5	2577.5	859.74 ug/L	859.74 ppb	20:38:31
2	Sr 421.552†	5026.0	5102.3	39.360 ug/L	39.360 ppb	20:38:31
2	Sc 361.383	811577.2	811577.2	95.479 %		20:39:48
2	Y 371.029	673556.3	673556.3	95.849 %		20:39:48
2	Ag 328.068†	-967.2	-1240.7	1.2807 ug/L	1.2807 ppb	20:39:48
2	As 188.979†	-20.6	6.7	10.483 ug/L	10.483 ppb	20:40:08
2	B 249.677†	92.2	578.5	10.142 ug/L	10.142 ppb	20:39:48
2	Ba 233.527†	20094.4	21027.1	171.43 ug/L	171.43 ppb	20:39:48
2	Be 313.107†	-2540.9	1677.9	1.3173 ug/L	1.3173 ppb	20:39:48
2	Cd 226.502†	-43.5	149.9	-0.4375 ug/L	-0.4375 ppb	20:40:08
2	Co 228.616†	176.7	263.9	4.6183 ug/L	4.6183 ppb	20:40:08
2	Cr 267.716†	3168.0	3168.3	37.323 ug/L	37.323 ppb	20:39:48
2	Cu 324.752†	9676.4	2040.5	7.3980 ug/L	7.3980 ppb	20:39:48
2	Mn 257.610†	330719.3	345810.4	400.83 ug/L	400.83 ppb	20:39:48
2	Mo 202.031†	23.0	13.6	2.7192 ug/L	2.7192 ppb	20:40:08
2	Ni 231.604†	936.6	867.4	22.215 ug/L	22.215 ppb	20:40:08

2	P 214.914†	356.6	131.5	58.130 ug/L	58.130 ppb	20:40:08
2	Pb 220.353†	20.2	94.8	12.861 ug/L	12.861 ppb	20:40:08
2	S 181.975 Axial†	162.3	127.1	163.45 ug/L	163.45 ppb	20:40:08
2	Sb 206.836†	63.9	31.2	8.9531 ug/L	8.9531 ppb	20:40:08
2	Se 196.026†	-118.6	-100.9	10.115 ug/L	10.115 ppb	20:40:08
2	Si 251.611†	217804.4	227506.1	7089.6 ug/L	7089.6 ppb	20:39:48
2	Sn 189.927†	-11.1	-24.3	-3.2473 ug/L	-3.2473 ppb	20:40:08
2	Ti 334.940†	179962.9	189977.8	309.20 ug/L	309.20 ppb	20:39:48
2	Tl 190.801†	-45.0	-8.1	1.8584 ug/L	1.8584 ppb	20:40:08
2	U 409.014†	-4893.6	-1610.2	-48.247 ug/L	-48.247 ppb	20:39:48
2	V 292.402†	1356.8	3098.4	18.988 ug/L	18.988 ppb	20:39:48
2	Zn 213.857†	7502.3	7169.8	66.645 ug/L	66.645 ppb	20:39:48
2	SiO2†	217466.3	227144.7	15144 ug/L	15144 ppb	20:40:44
3	Sc Radial	4181.1	4181.1	98.4 %		20:39:16
3	Y RADIAL	4509.7	4509.7	102.4 %		20:38:56
3	Al 396.153Radial†	13441.5	13824.8	13830 ug/L	13830 ppb	20:38:56
3	Ca 317.933Radial†	2575.7	2600.4	4850.7 ug/L	4850.7 ppb	20:39:16
3	Fe 238.204 Radial†	1951.1	1973.6	20975 ug/L	20975 ppb	20:39:16
3	K 766.490 Radial†	11630.5	8653.0	1744.6 ug/L	1744.6 ppb	20:38:56
3	Mg 279.077 IEC†	77.2	75.8	2906.4 ug/L	2906.4 ppb	20:39:16
3	Na 589.592 Radial†	2726.8	2565.2	855.65 ug/L	855.65 ppb	20:38:56
3	Sr 421.552†	4913.9	4906.0	37.845 ug/L	37.845 ppb	20:38:56
3	Sc 361.383	818212.7	818212.7	96.259 %		20:40:14
3	Y 371.029	679306.3	679306.3	96.667 %		20:40:14
3	Ag 328.068†	-845.2	-1105.8	1.8328 ug/L	1.8328 ppb	20:40:14
3	As 188.979†	-29.1	-1.9	6.7906 ug/L	6.7906 ppb	20:40:34
3	B 249.677†	14.1	496.6	8.2590 ug/L	8.2590 ppb	20:40:14
3	Ba 233.527†	20324.5	21095.5	171.98 ug/L	171.98 ppb	20:40:14
3	Be 313.107†	-2665.6	1569.9	1.2780 ug/L	1.2780 ppb	20:40:14
3	Cd 226.502†	-37.4	156.6	-0.3304 ug/L	-0.3304 ppb	20:40:34
3	Co 228.616†	210.6	297.6	5.3262 ug/L	5.3262 ppb	20:40:34
3	Cr 267.716†	3109.2	3080.3	36.294 ug/L	36.294 ppb	20:40:14
3	Cu 324.752†	9766.6	2052.0	7.4183 ug/L	7.4183 ppb	20:40:14
3	Mn 257.610†	333491.3	345881.1	400.89 ug/L	400.89 ppb	20:40:14
3	Mo 202.031†	30.3	21.0	3.2443 ug/L	3.2443 ppb	20:40:34
3	Ni 231.604†	916.5	838.6	21.476 ug/L	21.476 ppb	20:40:34
3	P 214.914†	354.3	126.1	55.226 ug/L	55.226 ppb	20:40:34
3	Pb 220.353†	3.6	77.3	10.619 ug/L	10.619 ppb	20:40:34
3	S 181.975 Axial†	161.0	124.4	159.95 ug/L	159.95 ppb	20:40:34
3	Sb 206.836†	42.0	8.0	1.1300 ug/L	1.1300 ppb	20:40:34
3	Se 196.026†	-101.5	-82.1	20.130 ug/L	20.130 ppb	20:40:34
3	Si 251.611†	220043.9	227982.6	7104.5 ug/L	7104.5 ppb	20:40:14
3	Sn 189.927†	-6.7	-19.6	-2.4263 ug/L	-2.4263 ppb	20:40:34
3	Ti 334.940†	181540.7	190088.3	309.37 ug/L	309.37 ppb	20:40:14
3	Tl 190.801†	-45.7	-8.4	1.7501 ug/L	1.7501 ppb	20:40:34
3	U 409.014†	-4942.2	-1619.1	-48.465 ug/L	-48.465 ppb	20:40:14
3	V 292.402†	1342.5	3072.0	18.845 ug/L	18.845 ppb	20:40:14
3	Zn 213.857†	7584.6	7191.6	66.904 ug/L	66.904 ppb	20:40:14
3	SiO2†	219791.6	227713.3	15182 ug/L	15182 ppb	20:40:50

Mean Data: 1202024810|945417|5

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	811117.5	95.425 %	0.8630			0.90%
Sc Radial	4164.5	98.0 %	1.03			1.05%
Y 371.029	673140.2	95.790 %	0.9085			0.95%
Y RADIAL	4363.8	99.13 %	4.862			4.90%
Ag 328.068†	-1165.9	1.5598 ug/L	0.27610	1.5598 ppb	0.27610	17.70%
Al 396.153Radial†	13907.9	13913 ug/L	387.1	13913 ppb	387.1	2.78%
As 188.979†	2.9	8.8141 ug/L	1.87166	8.8141 ppb	1.87166	21.23%
B 249.677†	556.9	9.6704 ug/L	1.24446	9.6704 ppb	1.24446	12.87%
Ba 233.527†	21072.4	171.79 ug/L	0.312	171.79 ppb	0.312	0.18%
Be 313.107†	1621.4	1.2967 ug/L	0.01971	1.2967 ppb	0.01971	1.52%
Ca 317.933Radial†	2608.6	4866.0 ug/L	41.28	4866.0 ppb	41.28	0.85%
Cd 226.502†	152.8	-0.3790 ug/L	0.05425	-0.3790 ppb	0.05425	14.32%
Co 228.616†	282.6	5.0116 ug/L	0.36046	5.0116 ppb	0.36046	7.19%
Cr 267.716†	3140.5	36.994 ug/L	0.6071	36.994 ppb	0.6071	1.64%
Cu 324.752†	2078.1	7.5001 ug/L	0.15948	7.5001 ppb	0.15948	2.13%
Fe 238.204 Radial†	1978.3	21025 ug/L	213.4	21025 ppb	213.4	1.01%
K 766.490 Radial†	8769.7	1768.2 ug/L	47.57	1768.2 ppb	47.57	2.69%

Mg 279.077 IEC†	75.0	2874.9 ug/L	72.98	2874.9 ppb	72.98	2.54%
Mn 257.610†	345849.4	400.86 ug/L	0.028	400.86 ppb	0.028	0.01%
Mo 202.031†	20.3	3.1956 ug/L	0.45393	3.1956 ppb	0.45393	14.21%
Na 589.592 Radial†	2560.2	853.99 ug/L	6.731	853.99 ppb	6.731	0.79%
Ni 231.604†	865.0	22.153 ug/L	0.6487	22.153 ppb	0.6487	2.93%
P 214.914†	129.6	57.148 ug/L	1.6642	57.148 ppb	1.6642	2.91%
Pb 220.353†	80.5	11.029 ug/L	1.6651	11.029 ppb	1.6651	15.10%
S 181.975 Axial†	126.4	162.64 ug/L	2.388	162.64 ppb	2.388	1.47%
Sb 206.836†	15.3	3.5869 ug/L	4.65275	3.5869 ppb	4.65275	129.72%
Se 196.026†	-92.4	14.311 ug/L	5.2007	14.311 ppb	5.2007	36.34%
Si 251.611†	227791.4	7098.5 ug/L	7.84	7098.5 ppb	7.84	0.11%
Sn 189.927†	-24.0	-3.2062 ug/L	0.76021	-3.2062 ppb	0.76021	23.71%
Sr 421.552†	4952.5	38.203 ug/L	1.0254	38.203 ppb	1.0254	2.68%
Ti 334.940†	190009.3	309.25 ug/L	0.109	309.25 ppb	0.109	0.04%
Tl 190.801†	-10.2	1.1938 ug/L	1.05870	1.1938 ppb	1.05870	88.68%
U 409.014†	-1569.7	-47.068 ug/L	2.2328	-47.068 ppb	2.2328	4.74%
V 292.402†	3078.6	18.887 ug/L	0.0883	18.887 ppb	0.0883	0.47%
Zn 213.857†	7170.3	66.684 ug/L	0.2029	66.684 ppb	0.2029	0.30%
SiO2†	228798.0	15255 ug/L	159.2	15255 ppb	159.2	1.04%

Sequence No.: 36

Sample ID: 245391002|945417|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 65

Date Collected: 2/16/2010 20:43:00

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245391002|945417|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4153.4	4153.4	97.7 %		20:45:13
1	Y RADIAL	4793.8	4793.8	108.9 %		20:45:13
1	Al 396.153Radial†	59414.8	60967.8	60992 ug/L	60992 ppb	20:44:53
1	Ca 317.933Radial†	9302.5	9502.4	17726 ug/L	17726 ppb	20:44:53
1	Fe 238.204 Radial†	9250.9	9457.9	100520 ug/L	100520 ppb	20:44:53
1	K 766.490 Radial†	45974.9	43882.0	8851.3 ug/L	8851.3 ppb	20:44:53
1	Mg 279.077 IEC†	348.1	353.5	13548 ug/L	13548 ppb	20:45:13
1	Na 589.592 Radial†	2482.7	2333.9	778.49 ug/L	778.49 ppb	20:44:53
1	Sr 421.552†	18007.5	18340.2	141.48 ug/L	141.48 ppb	20:44:53
1	Sc 361.383	853636.8	853636.8	100.43 %		20:46:11
1	Y 371.029	771809.8	771809.8	109.83 %		20:46:11
1	Ag 328.068†	-4824.4	-5031.5	9.3364 ug/L	9.3364 ppb	20:46:16
1	As 188.979†	-43.8	-15.3	40.847 ug/L	40.847 ppb	20:46:36
1	B 249.677†	1020.6	1498.2	18.819 ug/L	18.819 ppb	20:46:16
1	Ba 233.527†	126331.6	125775.8	1024.7 ug/L	1024.7 ppb	20:46:16
1	Be 313.107†	131933.2	135711.6	56.075 ug/L	56.075 ppb	20:46:16
1	Cd 226.502†	784.3	976.5	1.3011 ug/L	1.3011 ppb	20:46:36
1	Co 228.616†	1690.6	1762.3	30.001 ug/L	30.001 ppb	20:46:36
1	Cr 267.716†	8927.3	8739.7	103.44 ug/L	103.44 ppb	20:46:16
1	Cu 324.752†	1228118.8	1214805.2	3724.1 ug/L	3724.1 ppb	20:46:11
1	Mn 257.610†	1573634.4	1566376.7	1816.0 ug/L	1816.0 ppb	20:46:11
1	Mo 202.031†	22.4	11.9	8.8952 ug/L	8.8952 ppb	20:46:36
1	Ni 231.604†	2958.3	2832.2	72.523 ug/L	72.523 ppb	20:46:36
1	P 214.914†	4986.1	4722.9	1816.1 ug/L	1816.1 ppb	20:46:36
1	Pb 220.353†	8246.9	8285.4	1028.0 ug/L	1028.0 ppb	20:46:36
1	S 181.975 Axial†	367.2	322.8	410.43 ug/L	410.43 ppb	20:46:36
1	Sb 206.836†	117.6	81.4	16.425 ug/L	16.425 ppb	20:46:36
1	Se 196.026†	-464.7	-439.4	69.571 ug/L	69.571 ppb	20:46:36
1	Si 251.611†	1031547.4	1026551.0	31990 ug/L	31990 ppb	20:46:11
1	Sn 189.927†	53.4	40.6	11.662 ug/L	11.662 ppb	20:46:36
1	Ti 334.940†	1693250.4	1687547.0	2743.5 ug/L	2743.5 ppb	20:46:11
1	Tl 190.801†	-143.0	-103.3	-1.6900 ug/L	-1.6900 ppb	20:46:36
1	U 409.014†	36099.2	39460.9	1109.3 ug/L	1109.3 ppb	20:46:11
1	V 292.402†	22987.3	24566.9	162.77 ug/L	162.77 ppb	20:46:16
1	Zn 213.857†	50019.7	49119.4	458.86 ug/L	458.86 ppb	20:46:16
1	SiO2†	1003694.4	998809.2	66594 ug/L	66594 ppb	20:47:45
2	Sc Radial	4165.4	4165.4	98.0 %		20:45:38
2	Y RADIAL	4790.8	4790.8	108.8 %		20:45:38
2	Al 396.153Radial†	60832.9	62240.5	62265 ug/L	62265 ppb	20:45:18
2	Ca 317.933Radial†	9497.0	9673.6	18045 ug/L	18045 ppb	20:45:18
2	Fe 238.204 Radial†	9499.0	9683.9	102920 ug/L	102920 ppb	20:45:18
2	K 766.490 Radial†	47020.7	44814.2	9039.4 ug/L	9039.4 ppb	20:45:18
2	Mg 279.077 IEC†	346.6	351.0	13447 ug/L	13447 ppb	20:45:38
2	Na 589.592 Radial†	2524.6	2369.3	790.31 ug/L	790.31 ppb	20:45:18
2	Sr 421.552†	18317.4	18603.6	143.51 ug/L	143.51 ppb	20:45:18
2	Sc 361.383	846835.1	846835.1	99.627 %		20:46:42
2	Y 371.029	767020.4	767020.4	109.15 %		20:46:42
2	Ag 328.068†	-4785.1	-5030.7	10.151 ug/L	10.151 ppb	20:46:47
2	As 188.979†	-47.6	-19.5	39.652 ug/L	39.652 ppb	20:47:07
2	B 249.677†	1055.0	1540.9	19.432 ug/L	19.432 ppb	20:46:47
2	Ba 233.527†	127090.2	127547.6	1039.2 ug/L	1039.2 ppb	20:46:47
2	Be 313.107†	133127.0	137965.0	56.900 ug/L	56.900 ppb	20:46:47
2	Cd 226.502†	794.6	993.1	1.2487 ug/L	1.2487 ppb	20:47:07
2	Co 228.616†	1688.0	1773.2	30.203 ug/L	30.203 ppb	20:47:07
2	Cr 267.716†	8983.3	8867.2	104.97 ug/L	104.97 ppb	20:46:47
2	Cu 324.752†	1216250.2	1212714.2	3717.8 ug/L	3717.8 ppb	20:46:42
2	Mn 257.610†	1557373.0	1562639.8	1811.9 ug/L	1811.9 ppb	20:46:42
2	Mo 202.031†	29.7	19.3	9.6402 ug/L	9.6402 ppb	20:47:07
2	Ni 231.604†	2970.8	2868.5	73.451 ug/L	73.451 ppb	20:47:07

2	P 214.914†	4967.0	4743.6	1827.3 ug/L	1827.3 ppb	20:47:07
2	Pb 220.353†	8272.8	8377.4	1039.4 ug/L	1039.4 ppb	20:47:07
2	S 181.975 Axial†	364.5	322.9	410.40 ug/L	410.40 ppb	20:47:07
2	Sb 206.836†	118.5	83.2	17.066 ug/L	17.066 ppb	20:47:07
2	Se 196.026†	-467.9	-446.3	73.303 ug/L	73.303 ppb	20:47:07
2	Si 251.611†	1020354.9	1023566.5	31897 ug/L	31897 ppb	20:46:42
2	Sn 189.927†	76.0	63.7	15.896 ug/L	15.896 ppb	20:47:07
2	Ti 334.940†	1679051.4	1686836.8	2742.4 ug/L	2742.4 ppb	20:46:42
2	Tl 190.801†	-151.4	-112.8	-4.7512 ug/L	-4.7512 ppb	20:47:07
2	U 409.014†	35959.0	39608.9	1113.2 ug/L	1113.2 ppb	20:46:42
2	V 292.402†	23063.4	24827.1	164.32 ug/L	164.32 ppb	20:46:47
2	Zn 213.857†	50295.9	49796.6	465.11 ug/L	465.11 ppb	20:46:47
2	SiO2†	1025297.2	1028520.1	68575 ug/L	68575 ppb	20:47:51
3	Sc Radial	4224.0	4224.0	99.4 %		20:46:03
3	Y RADIAL	4840.6	4840.6	110.0 %		20:46:03
3	Al 396.153Radial†	59861.7	60401.2	60425 ug/L	60425 ppb	20:45:43
3	Ca 317.933Radial†	9334.4	9375.5	17489 ug/L	17489 ppb	20:45:43
3	Fe 238.204 Radial†	9335.4	9384.6	99737 ug/L	99737 ppb	20:45:43
3	K 766.490 Radial†	46016.3	43137.2	8701.1 ug/L	8701.1 ppb	20:45:43
3	Mg 279.077 IEC†	354.0	353.6	13552 ug/L	13552 ppb	20:46:03
3	Na 589.592 Radial†	2513.5	2322.4	774.66 ug/L	774.66 ppb	20:45:43
3	Sr 421.552†	18088.6	18113.8	139.73 ug/L	139.73 ppb	20:45:43
3	Sc 361.383	847357.0	847357.0	99.688 %		20:47:13
3	Y 371.029	766884.0	766884.0	109.13 %		20:47:13
3	Ag 328.068†	-4802.2	-5044.9	9.0252 ug/L	9.0252 ppb	20:47:19
3	As 188.979†	-53.6	-25.5	36.418 ug/L	36.418 ppb	20:47:39
3	B 249.677†	1119.8	1605.3	21.463 ug/L	21.463 ppb	20:47:19
3	Ba 233.527†	127394.1	127774.0	1040.9 ug/L	1040.9 ppb	20:47:19
3	Be 313.107†	133015.0	137770.3	56.838 ug/L	56.838 ppb	20:47:19
3	Cd 226.502†	790.7	988.7	1.5242 ug/L	1.5242 ppb	20:47:39
3	Co 228.616†	1697.3	1781.5	30.413 ug/L	30.413 ppb	20:47:39
3	Cr 267.716†	8979.2	8857.6	104.80 ug/L	104.80 ppb	20:47:19
3	Cu 324.752†	1219245.4	1214966.9	3724.5 ug/L	3724.5 ppb	20:47:13
3	Mn 257.610†	1564259.5	1568585.1	1818.5 ug/L	1818.5 ppb	20:47:13
3	Mo 202.031†	25.5	15.1	9.0754 ug/L	9.0754 ppb	20:47:39
3	Ni 231.604†	2950.4	2846.1	72.879 ug/L	72.879 ppb	20:47:39
3	P 214.914†	4991.6	4765.2	1840.0 ug/L	1840.0 ppb	20:47:39
3	Pb 220.353†	8291.4	8390.9	1041.0 ug/L	1041.0 ppb	20:47:39
3	S 181.975 Axial†	369.2	327.4	416.61 ug/L	416.61 ppb	20:47:39
3	Sb 206.836†	127.4	92.1	20.121 ug/L	20.121 ppb	20:47:39
3	Se 196.026†	-456.0	-434.1	70.127 ug/L	70.127 ppb	20:47:39
3	Si 251.611†	1025082.2	1027677.9	32025 ug/L	32025 ppb	20:47:13
3	Sn 189.927†	70.2	57.8	14.696 ug/L	14.696 ppb	20:47:39
3	Ti 334.940†	1682695.4	1689454.3	2746.6 ug/L	2746.6 ppb	20:47:13
3	Tl 190.801†	-134.0	-95.3	0.8578 ug/L	0.8578 ppb	20:47:39
3	U 409.014†	35746.9	39373.9	1106.9 ug/L	1106.9 ppb	20:47:13
3	V 292.402†	23175.3	24925.1	165.48 ug/L	165.48 ppb	20:47:19
3	Zn 213.857†	50371.5	49841.4	466.02 ug/L	466.02 ppb	20:47:19
3	SiO2†	1022641.8	1025222.7	68355 ug/L	68355 ppb	20:47:57

Mean Data: 245391002|945417|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	849276.3	99.914 %		0.4453			0.45%
Sc Radial	4181.0	98.4 %		0.89			0.90%
Y 371.029	768571.4	109.37 %		0.399			0.37%
Y RADIAL	4808.4	109.2 %		0.64			0.58%
Ag 328.068†	-5035.7	9.5042 ug/L		0.58133	9.5042 ppb	0.58133	6.12%
Al 396.153Radial†	61203.2	61227 ug/L		942.3	61227 ppb	942.3	1.54%
As 188.979†	-20.1	38.973 ug/L		2.2914	38.973 ppb	2.2914	5.88%
B 249.677†	1548.1	19.904 ug/L		1.3839	19.904 ppb	1.3839	6.95%
Ba 233.527†	127032.5	1034.9 ug/L		8.90	1034.9 ppb	8.90	0.86%
Be 313.107†	137149.0	56.604 ug/L		0.4595	56.604 ppb	0.4595	0.81%
Ca 317.933Radial†	9517.1	17753 ug/L		279.1	17753 ppb	279.1	1.57%
Cd 226.502†	986.1	1.3580 ug/L		0.14631	1.3580 ppb	0.14631	10.77%
Co 228.616†	1772.3	30.206 ug/L		0.2060	30.206 ppb	0.2060	0.68%
Cr 267.716†	8821.5	104.40 ug/L		0.839	104.40 ppb	0.839	0.80%
Cu 324.752†	1214162.1	3722.1 ug/L		3.76	3722.1 ppb	3.76	0.10%
Fe 238.204 Radial†	9508.8	101060 ug/L		1657.9	101060 ppb	1657.9	1.64%
K 766.490 Radial†	43944.5	8863.9 ug/L		169.52	8863.9 ppb	169.52	1.91%

Mg 279.077 IEC†	352.7	13516 ug/L	59.5	13516 ppb	59.5	0.44%
Mn 257.610†	1565867.2	1815.5 ug/L	3.30	1815.5 ppb	3.30	0.18%
Mo 202.031†	15.4	9.2036 ug/L	0.38873	9.2036 ppb	0.38873	4.22%
Na 589.592 Radial†	2341.9	781.16 ug/L	8.161	781.16 ppb	8.161	1.04%
Ni 231.604†	2848.9	72.951 ug/L	0.4681	72.951 ppb	0.4681	0.64%
P 214.914†	4743.9	1827.8 ug/L	11.95	1827.8 ppb	11.95	0.65%
Pb 220.353†	8351.2	1036.1 ug/L	7.10	1036.1 ppb	7.10	0.69%
S 181.975 Axial†	324.4	412.48 ug/L	3.578	412.48 ppb	3.578	0.87%
Sb 206.836†	85.6	17.871 ug/L	1.9753	17.871 ppb	1.9753	11.05%
Se 196.026†	-439.9	71.000 ug/L	2.0138	71.000 ppb	2.0138	2.84%
Si 251.611†	1025931.8	31971 ug/L	66.2	31971 ppb	66.2	0.21%
Sn 189.927†	54.0	14.085 ug/L	2.1820	14.085 ppb	2.1820	15.49%
Sr 421.552†	18352.5	141.57 ug/L	1.890	141.57 ppb	1.890	1.34%
Ti 334.940†	1687946.0	2744.2 ug/L	2.16	2744.2 ppb	2.16	0.08%
Tl 190.801†	-103.8	-1.8611 ug/L	2.80837	-1.8611 ppb	2.80837	150.90%
U 409.014†	39481.3	1109.8 ug/L	3.19	1109.8 ppb	3.19	0.29%
V 292.402†	24773.0	164.19 ug/L	1.356	164.19 ppb	1.356	0.83%
Zn 213.857†	49585.8	463.33 ug/L	3.899	463.33 ppb	3.899	0.84%
SiO2†	1017517.3	67841 ug/L	1085.8	67841 ppb	1085.8	1.60%

Sequence No.: 37

Sample ID: 245391003|945417|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 66

Date Collected: 2/16/2010 20:50:07

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245391003|945417|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3917.4	3917.4	92.2 %		20:52:20
1	Y RADIAL	6080.4	6080.4	138.1 %		20:52:00
1	Al 396.153Radial†	26590.8	29013.9	29025 ug/L	29025 ppb	20:52:00
1	Ca 317.933Radial†	3713.0	4010.8	7481.7 ug/L	7481.7 ppb	20:52:20
1	Fe 238.204 Radial†	10796.7	11705.9	124410 ug/L	124410 ppb	20:52:00
1	K 766.490 Radial†	28662.6	27931.5	5633.6 ug/L	5633.6 ppb	20:52:00
1	Mg 279.077 IEC†	118.7	126.1	4740.1 ug/L	4740.1 ppb	20:52:20
1	Na 589.592 Radial†	6351.5	6685.3	2229.9 ug/L	2229.9 ppb	20:52:00
1	Sr 421.552†	7088.7	7602.4	58.645 ug/L	58.645 ppb	20:52:00
1	Sc 361.383	850626.8	850626.8	100.07 %		20:53:18
1	Y 371.029	939115.4	939115.4	133.64 %		20:53:18
1	Ag 328.068†	-6131.2	-6354.5	11.770 ug/L	11.770 ppb	20:53:23
1	As 188.979†	-36.9	-8.5	43.791 ug/L	43.791 ppb	20:53:43
1	B 249.677†	702.4	1183.9	7.5540 ug/L	7.5540 ppb	20:53:23
1	Ba 233.527†	54393.1	54334.8	445.13 ug/L	445.13 ppb	20:53:23
1	Be 313.107†	5755.7	10090.6	8.4908 ug/L	8.4908 ppb	20:53:23
1	Cd 226.502†	709.8	904.8	-2.2508 ug/L	-2.2508 ppb	20:53:43
1	Co 228.616†	1511.7	1589.5	27.127 ug/L	27.127 ppb	20:53:43
1	Cr 267.716†	6435.0	6280.6	75.634 ug/L	75.634 ppb	20:53:23
1	Cu 324.752†	157727.8	149519.1	464.43 ug/L	464.43 ppb	20:53:23
1	Mn 257.610†	3205837.8	3202938.8	3706.3 ug/L	3706.3 ppb	20:53:18
1	Mo 202.031†	79.7	69.2	14.889 ug/L	14.889 ppb	20:53:43
1	Ni 231.604†	2582.2	2466.9	63.166 ug/L	63.166 ppb	20:53:43
1	P 214.914†	1614.3	1371.1	576.89 ug/L	576.89 ppb	20:53:43
1	Pb 220.353†	1975.7	2047.9	247.89 ug/L	247.89 ppb	20:53:43
1	S 181.975 Axial†	170.3	127.3	160.90 ug/L	160.90 ppb	20:53:43
1	Sb 206.836†	74.3	38.6	4.3014 ug/L	4.3014 ppb	20:53:43
1	Se 196.026†	-522.5	-498.7	110.86 ug/L	110.86 ppb	20:53:43
1	Si 251.611†	686613.4	685502.2	21362 ug/L	21362 ppb	20:53:18
1	Sn 189.927†	12.6	-0.1	3.2208 ug/L	3.2208 ppb	20:53:43
1	Ti 334.940†	1296066.5	1296617.8	2108.1 ug/L	2108.1 ppb	20:53:18
1	Tl 190.801†	-162.0	-122.7	-3.8806 ug/L	-3.8806 ppb	20:53:43
1	U 409.014†	-7424.9	-3904.3	-125.26 ug/L	-125.26 ppb	20:53:18
1	V 292.402†	8415.4	10086.6	52.631 ug/L	52.631 ppb	20:53:23
1	Zn 213.857†	37126.6	36411.9	335.73 ug/L	335.73 ppb	20:53:23
1	SiO2†	676237.5	675126.6	45013 ug/L	45013 ppb	20:54:51
2	Sc Radial	3883.9	3883.9	91.4 %		20:52:45
2	Y RADIAL	6034.5	6034.5	137.1 %		20:52:25
2	Al 396.153Radial†	26480.9	29142.5	29154 ug/L	29154 ppb	20:52:25
2	Ca 317.933Radial†	3686.2	4016.2	7491.8 ug/L	7491.8 ppb	20:52:45
2	Fe 238.204 Radial†	10744.0	11749.3	124870 ug/L	124870 ppb	20:52:25
2	K 766.490 Radial†	28393.7	27905.4	5628.3 ug/L	5628.3 ppb	20:52:25
2	Mg 279.077 IEC†	118.9	127.4	4790.5 ug/L	4790.5 ppb	20:52:45
2	Na 589.592 Radial†	6306.3	6695.2	2233.3 ug/L	2233.3 ppb	20:52:25
2	Sr 421.552†	6980.2	7550.0	58.240 ug/L	58.240 ppb	20:52:25
2	Sc 361.383	839705.5	839705.5	98.788 %		20:53:49
2	Y 371.029	929295.9	929295.9	132.24 %		20:53:49
2	Ag 328.068†	-6115.9	-6418.7	11.610 ug/L	11.610 ppb	20:53:54
2	As 188.979†	-50.4	-22.7	37.885 ug/L	37.885 ppb	20:54:14
2	B 249.677†	746.9	1237.9	8.7507 ug/L	8.7507 ppb	20:53:54
2	Ba 233.527†	53791.5	54432.7	445.94 ug/L	445.94 ppb	20:53:54
2	Be 313.107†	5719.4	10128.7	8.4949 ug/L	8.4949 ppb	20:53:54
2	Cd 226.502†	705.0	909.2	-2.2452 ug/L	-2.2452 ppb	20:54:14
2	Co 228.616†	1505.1	1602.4	27.400 ug/L	27.400 ppb	20:54:14
2	Cr 267.716†	6414.9	6343.9	76.376 ug/L	76.376 ppb	20:53:54
2	Cu 324.752†	154563.9	148366.3	460.92 ug/L	460.92 ppb	20:53:54
2	Mn 257.610†	3161186.9	3199405.4	3702.3 ug/L	3702.3 ppb	20:53:49
2	Mo 202.031†	90.5	81.1	15.810 ug/L	15.810 ppb	20:54:14
2	Ni 231.604†	2586.8	2505.0	64.144 ug/L	64.144 ppb	20:54:14

2	P 214.914†	1597.5	1375.1	579.46 ug/L	579.46 ppb	20:54:14
2	Pb 220.353†	1989.0	2087.0	252.72 ug/L	252.72 ppb	20:54:14
2	S 181.975 Axial†	208.7	168.3	214.55 ug/L	214.55 ppb	20:54:14
2	Sb 206.836†	78.6	43.9	6.1305 ug/L	6.1305 ppb	20:54:14
2	Se 196.026†	-520.8	-503.8	109.39 ug/L	109.39 ppb	20:54:14
2	Si 251.611†	676798.3	684490.3	21330 ug/L	21330 ppb	20:53:49
2	Sn 189.927†	16.5	4.1	3.9774 ug/L	3.9774 ppb	20:54:14
2	Ti 334.940†	1276800.4	1293959.8	2103.7 ug/L	2103.7 ppb	20:53:49
2	Tl 190.801†	-158.6	-121.4	-3.5241 ug/L	-3.5241 ppb	20:54:14
2	U 409.014†	-7071.1	-3642.7	-117.88 ug/L	-117.88 ppb	20:53:49
2	V 292.402†	8255.8	10034.4	52.218 ug/L	52.218 ppb	20:53:54
2	Zn 213.857†	36694.6	36457.1	336.11 ug/L	336.11 ppb	20:53:54
2	SiO2†	691938.0	699808.6	46658 ug/L	46658 ppb	20:54:56
3	Sc Radial	3894.3	3894.3	91.6 %		20:53:10
3	Y RADIAL	5939.3	5939.3	134.9 %		20:52:50
3	Al 396.153Radial†	26424.6	29003.1	29014 ug/L	29014 ppb	20:52:50
3	Ca 317.933Radial†	3689.7	4009.2	7478.7 ug/L	7478.7 ppb	20:53:10
3	Fe 238.204 Radial†	10776.2	11752.9	124910 ug/L	124910 ppb	20:52:50
3	K 766.490 Radial†	28707.6	28164.5	5680.6 ug/L	5680.6 ppb	20:52:50
3	Mg 279.077 IEC†	116.5	124.4	4675.6 ug/L	4675.6 ppb	20:53:10
3	Na 589.592 Radial†	6229.2	6592.5	2199.0 ug/L	2199.0 ppb	20:52:50
3	Sr 421.552†	7016.8	7569.4	58.390 ug/L	58.390 ppb	20:52:50
3	Sc 361.383	853806.7	853806.7	100.45 %		20:54:20
3	Y 371.029	943228.6	943228.6	134.22 %		20:54:20
3	Ag 328.068†	-6040.7	-6241.5	12.475 ug/L	12.475 ppb	20:54:25
3	As 188.979†	-41.0	-12.5	42.200 ug/L	42.200 ppb	20:54:45
3	B 249.677†	731.0	1209.6	8.0804 ug/L	8.0804 ppb	20:54:25
3	Ba 233.527†	54180.6	53920.8	441.78 ug/L	441.78 ppb	20:54:25
3	Be 313.107†	5769.7	10083.1	8.4808 ug/L	8.4808 ppb	20:54:25
3	Cd 226.502†	698.8	891.2	-2.4611 ug/L	-2.4611 ppb	20:54:45
3	Co 228.616†	1502.5	1574.7	26.817 ug/L	26.817 ppb	20:54:45
3	Cr 267.716†	6448.3	6270.0	75.517 ug/L	75.517 ppb	20:54:25
3	Cu 324.752†	155947.7	147159.9	457.23 ug/L	457.23 ppb	20:54:25
3	Mn 257.610†	3212125.2	3197267.1	3699.8 ug/L	3699.8 ppb	20:54:20
3	Mo 202.031†	82.2	71.4	15.089 ug/L	15.089 ppb	20:54:45
3	Ni 231.604†	2566.7	2441.7	62.523 ug/L	62.523 ppb	20:54:45
3	P 214.914†	1618.9	1369.7	577.13 ug/L	577.13 ppb	20:54:45
3	Pb 220.353†	1985.1	2049.8	248.08 ug/L	248.08 ppb	20:54:45
3	S 181.975 Axial†	170.1	126.4	159.80 ug/L	159.80 ppb	20:54:45
3	Sb 206.836†	71.0	35.0	3.0506 ug/L	3.0506 ppb	20:54:45
3	Se 196.026†	-525.7	-500.0	111.72 ug/L	111.72 ppb	20:54:45
3	Si 251.611†	688366.7	684692.3	21337 ug/L	21337 ppb	20:54:20
3	Sn 189.927†	4.3	-8.4	1.7362 ug/L	1.7362 ppb	20:54:45
3	Ti 334.940†	1298959.8	1294674.6	2104.9 ug/L	2104.9 ppb	20:54:20
3	Tl 190.801†	-157.4	-117.6	-2.3174 ug/L	-2.3174 ppb	20:54:45
3	U 409.014†	-7299.1	-3751.5	-120.97 ug/L	-120.97 ppb	20:54:20
3	V 292.402†	8351.8	9992.0	51.886 ug/L	51.886 ppb	20:54:25
3	Zn 213.857†	37000.9	36148.5	333.10 ug/L	333.10 ppb	20:54:25
3	SiO2†	678337.3	674700.4	44984 ug/L	44984 ppb	20:55:02

Mean Data: 245391003|945417|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	848046.3	99.769 %	0.8701			0.87%
Sc Radial	3898.5	91.7 %	0.40			0.44%
Y 371.029	937213.3	133.37 %	1.019			0.76%
Y RADIAL	6018.1	136.7 %	1.63			1.20%
Ag 328.068†	-6338.2	11.952 ug/L	0.4601	11.952 ppb	0.4601	3.85%
Al 396.153Radial†	29053.2	29064 ug/L	77.6	29064 ppb	77.6	0.27%
As 188.979†	-14.6	41.292 ug/L	3.0561	41.292 ppb	3.0561	7.40%
B 249.677†	1210.5	8.1284 ug/L	0.59977	8.1284 ppb	0.59977	7.38%
Ba 233.527†	54229.4	444.28 ug/L	2.204	444.28 ppb	2.204	0.50%
Be 313.107†	10100.8	8.4888 ug/L	0.00725	8.4888 ppb	0.00725	0.09%
Ca 317.933Radial†	4012.1	7484.0 ug/L	6.84	7484.0 ppb	6.84	0.09%
Cd 226.502†	901.7	-2.3191 ug/L	0.12305	-2.3191 ppb	0.12305	5.31%
Co 228.616†	1588.9	27.115 ug/L	0.2920	27.115 ppb	0.2920	1.08%
Cr 267.716†	6298.2	75.842 ug/L	0.4656	75.842 ppb	0.4656	0.61%
Cu 324.752†	148348.4	460.86 ug/L	3.600	460.86 ppb	3.600	0.78%
Fe 238.204 Radial†	11736.0	124730 ug/L	277.8	124730 ppb	277.8	0.22%
K 766.490 Radial†	28000.5	5647.5 ug/L	28.81	5647.5 ppb	28.81	0.51%

Mg 279.077 IEC†	126.0	4735.4 ug/L	57.57	4735.4 ppb	57.57	1.22%
Mn 257.610†	3199870.4	3702.8 ug/L	3.28	3702.8 ppb	3.28	0.09%
Mo 202.031†	73.9	15.262 ug/L	0.4847	15.262 ppb	0.4847	3.18%
Na 589.592 Radial†	6657.7	2220.7 ug/L	18.91	2220.7 ppb	18.91	0.85%
Ni 231.604†	2471.2	63.278 ug/L	0.8164	63.278 ppb	0.8164	1.29%
P 214.914†	1372.0	577.83 ug/L	1.422	577.83 ppb	1.422	0.25%
Pb 220.353†	2061.5	249.56 ug/L	2.735	249.56 ppb	2.735	1.10%
S 181.975 Axial†	140.7	178.42 ug/L	31.298	178.42 ppb	31.298	17.54%
Sb 206.836†	39.2	4.4942 ug/L	1.54900	4.4942 ppb	1.54900	34.47%
Se 196.026†	-500.9	110.65 ug/L	1.179	110.65 ppb	1.179	1.07%
Si 251.611†	684895.0	21343 ug/L	16.7	21343 ppb	16.7	0.08%
Sn 189.927†	-1.4	2.9781 ug/L	1.14017	2.9781 ppb	1.14017	38.28%
Sr 421.552†	7573.9	58.425 ug/L	0.2048	58.425 ppb	0.2048	0.35%
Ti 334.940†	1295084.1	2105.6 ug/L	2.24	2105.6 ppb	2.24	0.11%
Tl 190.801†	-120.6	-3.2407 ug/L	0.81922	-3.2407 ppb	0.81922	25.28%
U 409.014†	-3766.2	-121.37 ug/L	3.706	-121.37 ppb	3.706	3.05%
V 292.402†	10037.6	52.245 ug/L	0.3732	52.245 ppb	0.3732	0.71%
Zn 213.857†	36339.2	334.98 ug/L	1.636	334.98 ppb	1.636	0.49%
SiO2†	683211.9	45552 ug/L	958.4	45552 ppb	958.4	2.10%

Sequence No.: 38

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 2/16/2010 20:57:12

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4080.6	4080.6	96.0 %		20:59:24
1	Y RADIAL	4224.3	4224.3	95.96 %		20:59:04
1	Al 396.153Radial†	4643.1	4995.9	4974.1 ug/L	4974.1 ppb	20:59:04
1	Ca 317.933Radial†	2617.0	2707.9	5051.3 ug/L	5051.3 ppb	20:59:24
1	Fe 238.204 Radial†	501.3	512.2	5458.2 ug/L	5458.2 ppb	20:59:24
1	K 766.490 Radial†	26808.3	24755.6	4990.7 ug/L	4990.7 ppb	20:59:04
1	Mg 279.077 IEC†	133.2	136.1	5255.4 ug/L	5255.4 ppb	20:59:24
1	Na 589.592 Radial†	30882.0	31963.8	10662 ug/L	10662 ppb	20:59:04
1	Sr 421.552†	63836.2	66410.7	512.74 ug/L	512.74 ppb	20:59:04
1	Sc 361.383	834330.2	834330.2	98.155 %		21:00:23
1	Y 371.029	668805.9	668805.9	95.173 %		21:00:23
1	Ag 328.068†	99625.6	101270.1	489.58 ug/L	489.58 ppb	21:00:23
1	As 188.979†	1110.2	1159.4	492.32 ug/L	492.32 ppb	21:00:43
1	B 249.677†	20143.7	21004.1	491.86 ug/L	491.86 ppb	21:00:23
1	Ba 233.527†	59657.8	60760.1	494.57 ug/L	494.57 ppb	21:00:23
1	Be 313.107†	1322163.7	1351348.6	497.51 ug/L	497.51 ppb	21:00:23
1	Cd 226.502†	39430.6	40367.0	471.90 ug/L	471.90 ppb	21:00:43
1	Co 228.616†	23056.3	23568.4	491.52 ug/L	491.52 ppb	21:00:43
1	Cr 267.716†	40560.2	41172.7	479.61 ug/L	479.61 ppb	21:00:23
1	Cu 324.752†	168349.4	163418.9	500.38 ug/L	500.38 ppb	21:00:23
1	Mn 257.610†	426429.5	433873.1	500.75 ug/L	500.75 ppb	21:00:23
1	Mo 202.031†	6495.4	6607.0	491.42 ug/L	491.42 ppb	21:00:43
1	Ni 231.604†	18594.9	18830.8	482.04 ug/L	482.04 ppb	21:00:43
1	P 214.914†	4555.1	4398.7	2342.7 ug/L	2342.7 ppb	21:00:43
1	Pb 220.353†	3792.9	3937.7	489.37 ug/L	489.37 ppb	21:00:43
1	S 181.975 Axial†	788.4	760.3	992.75 ug/L	992.75 ppb	21:00:43
1	Sb 206.836†	1429.0	1420.2	498.15 ug/L	498.15 ppb	21:00:43
1	Se 196.026†	802.3	840.7	509.67 ug/L	509.67 ppb	21:00:43
1	Si 251.611†	79165.2	80040.6	2488.2 ug/L	2488.2 ppb	21:00:23
1	Sn 189.927†	2670.1	2707.6	486.36 ug/L	486.36 ppb	21:00:43
1	Ti 334.940†	304517.9	311733.3	506.54 ug/L	506.54 ppb	21:00:23
1	Tl 190.801†	1496.2	1563.5	497.00 ug/L	497.00 ppb	21:00:43
1	U 409.014†	12403.3	16151.6	457.13 ug/L	457.13 ppb	21:00:23
1	V 292.402†	63344.4	66212.0	485.97 ug/L	485.97 ppb	21:00:23
1	Zn 213.857†	50074.1	50327.3	486.62 ug/L	486.62 ppb	21:00:23
1	SiO2†	79109.4	79976.4	5318.9 ug/L	5318.9 ppb	21:01:43
2	Sc Radial	4071.5	4071.5	95.8 %		20:59:49
2	Y RADIAL	4228.3	4228.3	96.05 %		20:59:29
2	Al 396.153Radial†	4682.7	5048.1	5026.2 ug/L	5026.2 ppb	20:59:29
2	Ca 317.933Radial†	2622.6	2719.8	5073.5 ug/L	5073.5 ppb	20:59:49
2	Fe 238.204 Radial†	496.4	508.2	5416.1 ug/L	5416.1 ppb	20:59:49
2	K 766.490 Radial†	26877.2	24890.0	5017.8 ug/L	5017.8 ppb	20:59:29
2	Mg 279.077 IEC†	130.7	133.7	5163.4 ug/L	5163.4 ppb	20:59:49
2	Na 589.592 Radial†	30969.6	32127.2	10716 ug/L	10716 ppb	20:59:29
2	Sr 421.552†	64023.8	66755.3	515.40 ug/L	515.40 ppb	20:59:29
2	Sc 361.383	836755.2	836755.2	98.441 %		21:00:50
2	Y 371.029	670519.8	670519.8	95.417 %		21:00:50
2	Ag 328.068†	100018.9	101375.5	490.07 ug/L	490.07 ppb	21:00:50
2	As 188.979†	1131.4	1177.7	500.00 ug/L	500.00 ppb	21:01:10
2	B 249.677†	20276.3	21079.4	493.63 ug/L	493.63 ppb	21:00:50
2	Ba 233.527†	59866.9	60796.3	494.87 ug/L	494.87 ppb	21:00:50
2	Be 313.107†	1327964.9	1353338.0	498.24 ug/L	498.24 ppb	21:00:50
2	Cd 226.502†	39806.5	40632.5	475.01 ug/L	475.01 ppb	21:01:10
2	Co 228.616†	23267.0	23714.4	494.56 ug/L	494.56 ppb	21:01:10
2	Cr 267.716†	40831.9	41328.9	481.42 ug/L	481.42 ppb	21:00:50
2	Cu 324.752†	169178.3	163763.9	501.42 ug/L	501.42 ppb	21:00:50
2	Mn 257.610†	429077.4	435303.9	502.40 ug/L	502.40 ppb	21:00:50
2	Mo 202.031†	6533.2	6626.3	492.85 ug/L	492.85 ppb	21:01:10
2	Ni 231.604†	18777.8	18961.8	485.39 ug/L	485.39 ppb	21:01:10

2	P 214.914†	4605.8	4436.8	2363.7 ug/L	2363.7 ppb	21:01:10
2	Pb 220.353†	3816.4	3950.4	490.96 ug/L	490.96 ppb	21:01:10
2	S 181.975 Axial†	803.1	772.9	1009.2 ug/L	1009.2 ppb	21:01:10
2	Sb 206.836†	1460.2	1447.6	507.55 ug/L	507.55 ppb	21:01:10
2	Se 196.026†	814.5	850.8	515.40 ug/L	515.40 ppb	21:01:10
2	Si 251.611†	79614.6	80263.3	2495.1 ug/L	2495.1 ppb	21:00:50
2	Sn 189.927†	2705.2	2735.5	491.36 ug/L	491.36 ppb	21:01:10
2	Ti 334.940†	306143.2	312485.2	507.77 ug/L	507.77 ppb	21:00:50
2	Tl 190.801†	1520.1	1583.3	503.25 ug/L	503.25 ppb	21:01:10
2	U 409.014†	12814.1	16532.2	467.94 ug/L	467.94 ppb	21:00:50
2	V 292.402†	63707.1	66393.5	487.33 ug/L	487.33 ppb	21:00:50
2	Zn 213.857†	50505.5	50617.7	489.44 ug/L	489.44 ppb	21:00:50
2	SiO2†	79042.4	79674.9	5298.8 ug/L	5298.8 ppb	21:01:48
3	Sc Radial	4107.4	4107.4	96.6 %		21:00:14
3	Y RADIAL	4303.1	4303.1	97.75 %		20:59:54
3	Al 396.153Radial†	4706.9	5030.4	5008.7 ug/L	5008.7 ppb	20:59:54
3	Ca 317.933Radial†	2643.4	2717.5	5069.1 ug/L	5069.1 ppb	21:00:14
3	Fe 238.204 Radial†	504.4	512.0	5455.6 ug/L	5455.6 ppb	21:00:14
3	K 766.490 Radial†	27217.2	24996.5	5039.3 ug/L	5039.3 ppb	20:59:54
3	Mg 279.077 IEC†	136.5	138.5	5349.9 ug/L	5349.9 ppb	21:00:14
3	Na 589.592 Radial†	31365.0	32253.8	10759 ug/L	10759 ppb	20:59:54
3	Sr 421.552†	64856.3	67032.4	517.54 ug/L	517.54 ppb	20:59:54
3	Sc 361.383	836740.7	836740.7	98.439 %		21:01:18
3	Y 371.029	669708.0	669708.0	95.301 %		21:01:18
3	Ag 328.068†	100101.7	101461.4	490.51 ug/L	490.51 ppb	21:01:18
3	As 188.979†	1120.6	1166.7	495.39 ug/L	495.39 ppb	21:01:38
3	B 249.677†	20399.6	21205.0	496.59 ug/L	496.59 ppb	21:01:18
3	Ba 233.527†	60201.4	61137.1	497.64 ug/L	497.64 ppb	21:01:18
3	Be 313.107†	1328638.2	1354045.4	498.50 ug/L	498.50 ppb	21:01:18
3	Cd 226.502†	39435.1	40255.9	470.60 ug/L	470.60 ppb	21:01:38
3	Co 228.616†	23005.5	23449.1	489.02 ug/L	489.02 ppb	21:01:38
3	Cr 267.716†	40889.3	41388.0	482.11 ug/L	482.11 ppb	21:01:18
3	Cu 324.752†	169544.8	164139.1	502.58 ug/L	502.58 ppb	21:01:18
3	Mn 257.610†	430061.8	436311.5	503.55 ug/L	503.55 ppb	21:01:18
3	Mo 202.031†	6480.8	6573.1	488.90 ug/L	488.90 ppb	21:01:38
3	Ni 231.604†	18601.5	18783.0	480.81 ug/L	480.81 ppb	21:01:38
3	P 214.914†	4564.0	4394.4	2339.9 ug/L	2339.9 ppb	21:01:38
3	Pb 220.353†	3800.0	3933.8	488.89 ug/L	488.89 ppb	21:01:38
3	S 181.975 Axial†	789.4	759.0	991.06 ug/L	991.06 ppb	21:01:38
3	Sb 206.836†	1424.2	1411.1	494.98 ug/L	494.98 ppb	21:01:38
3	Se 196.026†	803.3	839.3	508.84 ug/L	508.84 ppb	21:01:38
3	Si 251.611†	79704.8	80356.3	2498.1 ug/L	2498.1 ppb	21:01:18
3	Sn 189.927†	2666.3	2696.0	484.28 ug/L	484.28 ppb	21:01:38
3	Ti 334.940†	306644.0	312999.3	508.59 ug/L	508.59 ppb	21:01:18
3	Tl 190.801†	1506.0	1569.0	498.79 ug/L	498.79 ppb	21:01:38
3	U 409.014†	12624.5	16339.8	462.47 ug/L	462.47 ppb	21:01:18
3	V 292.402†	63917.0	66607.8	488.81 ug/L	488.81 ppb	21:01:18
3	Zn 213.857†	50604.5	50719.2	490.45 ug/L	490.45 ppb	21:01:18
3	SiO2†	78528.4	79154.1	5264.1 ug/L	5264.1 ppb	21:01:53

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	835942.0	98.345 %	0.1642			0.17%
Sc Radial	4086.5	96.1 %	0.44			0.46%
Y 371.029	669677.9	95.297 %	0.1220			0.13%
Y RADIAL	4251.9	96.59 %	1.008			1.04%
Ag 328.068†	101369.0	490.05 ug/L	0.463	490.05 ppb	0.463	0.09%
QC value within limits for Ag 328.068 Recovery = 98.01%						
Al 396.153Radial†	5024.8	5003.0 ug/L	26.53	5003.0 ppb	26.53	0.53%
QC value within limits for Al 396.153Radial Recovery = 100.06%						
As 188.979†	1167.9	495.90 ug/L	3.867	495.90 ppb	3.867	0.78%
QC value within limits for As 188.979 Recovery = 99.18%						
B 249.677†	21096.2	494.03 ug/L	2.392	494.03 ppb	2.392	0.48%
QC value within limits for B 249.677 Recovery = 98.81%						
Ba 233.527†	60897.8	495.70 ug/L	1.692	495.70 ppb	1.692	0.34%
QC value within limits for Ba 233.527 Recovery = 99.14%						
Be 313.107†	1352910.7	498.08 ug/L	0.516	498.08 ppb	0.516	0.10%
QC value within limits for Be 313.107 Recovery = 99.62%						
Ca 317.933Radial†	2715.1	5064.6 ug/L	11.77	5064.6 ppb	11.77	0.23%

QC value within limits for Ca 317.933 Radial Recovery = 101.29%

Cd 226.502†	40418.5	472.50 ug/L	2.267	472.50 ppb	2.267	0.48%
QC value within limits for Cd 226.502 Recovery = 94.50%						
Co 228.616†	23577.3	491.70 ug/L	2.776	491.70 ppb	2.776	0.56%
QC value within limits for Co 228.616 Recovery = 98.34%						
Cr 267.716†	41296.5	481.05 ug/L	1.294	481.05 ppb	1.294	0.27%
QC value within limits for Cr 267.716 Recovery = 96.21%						
Cu 324.752†	163774.0	501.46 ug/L	1.101	501.46 ppb	1.101	0.22%
QC value within limits for Cu 324.752 Recovery = 100.29%						
Fe 238.204 Radial†	510.8	5443.3 ug/L	23.58	5443.3 ppb	23.58	0.43%
QC value within limits for Fe 238.204 Radial Recovery = 108.87%						
K 766.490 Radial†	24880.7	5015.9 ug/L	24.35	5015.9 ppb	24.35	0.49%
QC value within limits for K 766.490 Radial Recovery = 100.32%						
Mg 279.077 IEC†	136.1	5256.2 ug/L	93.29	5256.2 ppb	93.29	1.77%
QC value within limits for Mg 279.077 IEC Recovery = 105.12%						
Mn 257.610†	435162.9	502.23 ug/L	1.411	502.23 ppb	1.411	0.28%
QC value within limits for Mn 257.610 Recovery = 100.45%						
Mo 202.031†	6602.1	491.06 ug/L	1.999	491.06 ppb	1.999	0.41%
QC value within limits for Mo 202.031 Recovery = 98.21%						
Na 589.592 Radial†	32114.9	10712 ug/L	48.5	10712 ppb	48.5	0.45%
QC value within limits for Na 589.592 Radial Recovery = 107.12%						
Ni 231.604†	18858.5	482.75 ug/L	2.369	482.75 ppb	2.369	0.49%
QC value within limits for Ni 231.604 Recovery = 96.55%						
P 214.914†	4410.0	2348.8 ug/L	13.05	2348.8 ppb	13.05	0.56%
QC value within limits for P 214.914 Recovery = 93.95%						
Pb 220.353†	3940.7	489.74 ug/L	1.086	489.74 ppb	1.086	0.22%
QC value within limits for Pb 220.353 Recovery = 97.95%						
S 181.975 Axial†	764.1	997.68 ug/L	10.033	997.68 ppb	10.033	1.01%
QC value within limits for S 181.975 Axial Recovery = 99.77%						
Sb 206.836†	1426.3	500.23 ug/L	6.533	500.23 ppb	6.533	1.31%
QC value within limits for Sb 206.836 Recovery = 100.05%						
Se 196.026†	843.6	511.30 ug/L	3.572	511.30 ppb	3.572	0.70%
QC value within limits for Se 196.026 Recovery = 102.26%						
Si 251.611†	80220.1	2493.8 ug/L	5.07	2493.8 ppb	5.07	0.20%
QC value within limits for Si 251.611 Recovery = 99.75%						
Sn 189.927†	2713.0	487.33 ug/L	3.636	487.33 ppb	3.636	0.75%
QC value within limits for Sn 189.927 Recovery = 97.47%						
Sr 421.552†	66732.8	515.23 ug/L	2.405	515.23 ppb	2.405	0.47%
QC value within limits for Sr 421.552 Recovery = 103.05%						
Ti 334.940†	312405.9	507.63 ug/L	1.031	507.63 ppb	1.031	0.20%
QC value within limits for Ti 334.940 Recovery = 101.53%						
Tl 190.801†	1571.9	499.68 ug/L	3.219	499.68 ppb	3.219	0.64%
QC value within limits for Tl 190.801 Recovery = 99.94%						
U 409.014†	16341.2	462.51 ug/L	5.407	462.51 ppb	5.407	1.17%
QC value within limits for U 409.014 Recovery = 92.50%						
V 292.402†	66404.5	487.37 ug/L	1.421	487.37 ppb	1.421	0.29%
QC value within limits for V 292.402 Recovery = 97.47%						
Zn 213.857†	50554.7	488.84 ug/L	1.985	488.84 ppb	1.985	0.41%
QC value within limits for Zn 213.857 Recovery = 97.77%						
SiO2†	79601.8	5293.9 ug/L	27.70	5293.9 ppb	27.70	0.52%
QC value within limits for SiO2 Recovery = 99.00%						

All analyte(s) passed QC.

Sequence No.: 39

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 2/16/2010 21:04:03

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	4061.0	4061.0	95.5 %		21:06:15
1	Y RADIAL	4228.7	4228.7	96.06 %		21:05:55
1	Al 396.153Radial†	-129.6	23.4	23.329 ug/L	23.329 ppb	21:05:55
1	Ca 317.933Radial†	17.6	0.1	0.2711 ug/L	0.2711 ppb	21:06:15
1	Fe 238.204 Radial†	11.8	2.2	23.859 ug/L	23.859 ppb	21:06:15
1	K 766.490 Radial†	3097.0	70.2	14.165 ug/L	14.165 ppb	21:05:55
1	Mg 279.077 IEC†	2.6	0.0	0.9769 ug/L	0.9769 ppb	21:06:15
1	Na 589.592 Radial†	243.0	47.3	15.777 ug/L	15.777 ppb	21:05:55
1	Sr 421.552†	38.5	-49.5	-0.3821 ug/L	-0.3821 ppb	21:05:55
1	Sc 361.383	826132.3	826132.3	97.191 %		21:07:12
1	Y 371.029	670161.6	670161.6	95.366 %		21:07:12
1	Ag 328.068†	315.3	96.8	0.4698 ug/L	0.4698 ppb	21:07:12
1	As 188.979†	-28.9	-1.4	-0.5999 ug/L	-0.5999 ppb	21:07:32
1	B 249.677†	-223.8	251.7	5.9171 ug/L	5.9171 ppb	21:07:32
1	Ba 233.527†	8.8	-9.8	-0.0786 ug/L	-0.0786 ppb	21:07:32
1	Be 313.107†	-4178.5	39.8	0.0150 ug/L	0.0150 ppb	21:07:12
1	Cd 226.502†	-208.6	-19.1	-0.2254 ug/L	-0.2254 ppb	21:07:32
1	Co 228.616†	-80.0	-3.4	-0.0704 ug/L	-0.0704 ppb	21:07:32
1	Cr 267.716†	72.0	-75.6	-0.8804 ug/L	-0.8804 ppb	21:07:32
1	Cu 324.752†	8199.6	342.5	1.0479 ug/L	1.0479 ppb	21:07:12
1	Mn 257.610†	815.9	269.8	0.3135 ug/L	0.3135 ppb	21:07:32
1	Mo 202.031†	19.7	9.9	0.7341 ug/L	0.7341 ppb	21:07:32
1	Ni 231.604†	103.9	-6.6	-0.1693 ug/L	-0.1693 ppb	21:07:32
1	P 214.914†	233.2	-2.0	-1.3216 ug/L	-1.3216 ppb	21:07:32
1	Pb 220.353†	-78.7	-7.4	-0.9161 ug/L	-0.9161 ppb	21:07:32
1	S 181.975 Axial†	58.3	17.0	22.253 ug/L	22.253 ppb	21:07:32
1	Sb 206.836†	43.0	8.6	2.9312 ug/L	2.9312 ppb	21:07:32
1	Se 196.026†	-23.4	-0.7	-0.3359 ug/L	-0.3359 ppb	21:07:32
1	Si 251.611†	688.2	95.8	2.9751 ug/L	2.9751 ppb	21:07:32
1	Sn 189.927†	20.2	8.1	1.4568 ug/L	1.4568 ppb	21:07:32
1	Ti 334.940†	-1359.9	93.7	0.1509 ug/L	0.1509 ppb	21:07:12
1	Tl 190.801†	-39.7	-1.8	-0.5494 ug/L	-0.5494 ppb	21:07:32
1	U 409.014†	-3289.4	130.7	3.7117 ug/L	3.7117 ppb	21:07:12
1	V 292.402†	-1623.3	7.1	0.0655 ug/L	0.0655 ppb	21:07:12
1	Zn 213.857†	704.3	36.9	0.3558 ug/L	0.3558 ppb	21:07:32
1	SiO2†	653.9	53.2	3.5284 ug/L	3.5284 ppb	21:08:28
2	Sc Radial	4040.2	4040.2	95.0 %		21:06:40
2	Y RADIAL	4190.2	4190.2	95.18 %		21:06:20
2	Al 396.153Radial†	-145.2	6.3	6.2022 ug/L	6.2022 ppb	21:06:20
2	Ca 317.933Radial†	19.7	2.4	4.4430 ug/L	4.4430 ppb	21:06:40
2	Fe 238.204 Radial†	10.6	1.1	11.971 ug/L	11.971 ppb	21:06:40
2	K 766.490 Radial†	3146.7	139.3	28.112 ug/L	28.112 ppb	21:06:20
2	Mg 279.077 IEC†	4.7	2.3	87.332 ug/L	87.332 ppb	21:06:40
2	Na 589.592 Radial†	206.3	10.0	3.3238 ug/L	3.3238 ppb	21:06:20
2	Sr 421.552†	-3.1	-93.1	-0.7186 ug/L	-0.7186 ppb	21:06:20
2	Sc 361.383	826159.0	826159.0	97.194 %		21:07:37
2	Y 371.029	670488.1	670488.1	95.412 %		21:07:37
2	Ag 328.068†	168.6	-54.2	-0.2575 ug/L	-0.2575 ppb	21:07:37
2	As 188.979†	-31.5	-4.1	-1.7338 ug/L	-1.7338 ppb	21:07:57
2	B 249.677†	-249.7	225.0	5.2917 ug/L	5.2917 ppb	21:07:57
2	Ba 233.527†	28.5	10.5	0.0862 ug/L	0.0862 ppb	21:07:57
2	Be 313.107†	-4170.2	48.6	0.0197 ug/L	0.0197 ppb	21:07:37
2	Cd 226.502†	-208.6	-19.1	-0.2249 ug/L	-0.2249 ppb	21:07:57
2	Co 228.616†	-78.1	-1.5	-0.0285 ug/L	-0.0285 ppb	21:07:57
2	Cr 267.716†	98.5	-48.3	-0.5623 ug/L	-0.5623 ppb	21:07:57
2	Cu 324.752†	8231.9	375.4	1.1490 ug/L	1.1490 ppb	21:07:37
2	Mn 257.610†	770.9	223.4	0.2553 ug/L	0.2553 ppb	21:07:57
2	Mo 202.031†	29.1	19.5	1.4469 ug/L	1.4469 ppb	21:07:57
2	Ni 231.604†	92.2	-18.6	-0.4768 ug/L	-0.4768 ppb	21:07:57

2	P 214.914†	244.7	9.8	5.2128 ug/L	5.2128 ppb	21:07:57
2	Pb 220.353†	-75.5	-4.2	-0.5109 ug/L	-0.5109 ppb	21:07:57
2	S 181.975 Axial†	56.8	15.5	20.280 ug/L	20.280 ppb	21:07:57
2	Sb 206.836†	37.1	2.5	0.8999 ug/L	0.8999 ppb	21:07:57
2	Se 196.026†	-18.1	4.7	2.8084 ug/L	2.8084 ppb	21:07:57
2	Si 251.611†	682.7	90.1	2.7908 ug/L	2.7908 ppb	21:07:57
2	Sn 189.927†	22.5	10.6	1.8974 ug/L	1.8974 ppb	21:07:57
2	Ti 334.940†	-964.4	500.7	0.8065 ug/L	0.8065 ppb	21:07:37
2	Tl 190.801†	-47.1	-9.4	-2.9504 ug/L	-2.9504 ppb	21:07:57
2	U 409.014†	-3346.3	72.2	2.0515 ug/L	2.0515 ppb	21:07:37
2	V 292.402†	-1609.3	21.5	0.1793 ug/L	0.1793 ppb	21:07:37
2	Zn 213.857†	698.0	30.4	0.2960 ug/L	0.2960 ppb	21:07:57
2	SiO2†	633.8	32.6	2.1349 ug/L	2.1349 ppb	21:08:33
3	Sc Radial	4010.6	4010.6	94.3 %		21:07:05
3	Y RADIAL	4315.9	4315.9	98.04 %		21:06:45
3	Al 396.153Radial†	-119.2	32.7	32.672 ug/L	32.672 ppb	21:06:45
3	Ca 317.933Radial†	15.9	-1.4	-2.6988 ug/L	-2.6988 ppb	21:07:05
3	Fe 238.204 Radial†	11.3	1.9	20.147 ug/L	20.147 ppb	21:07:05
3	K 766.490 Radial†	3048.7	59.7	12.048 ug/L	12.048 ppb	21:06:45
3	Mg 279.077 IEC†	2.3	-0.3	-11.327 ug/L	-11.327 ppb	21:07:05
3	Na 589.592 Radial†	254.0	62.2	20.733 ug/L	20.733 ppb	21:06:45
3	Sr 421.552†	23.3	-65.1	-0.5029 ug/L	-0.5029 ppb	21:06:45
3	Sc 361.383	823909.0	823909.0	96.929 %		21:08:02
3	Y 371.029	668640.1	668640.1	95.149 %		21:08:02
3	Ag 328.068†	216.9	-4.0	-0.0175 ug/L	-0.0175 ppb	21:08:02
3	As 188.979†	-33.1	-5.8	-2.4351 ug/L	-2.4351 ppb	21:08:22
3	B 249.677†	-249.3	224.7	5.2819 ug/L	5.2819 ppb	21:08:22
3	Ba 233.527†	-0.8	-19.6	-0.1601 ug/L	-0.1601 ppb	21:08:22
3	Be 313.107†	-4143.3	64.6	0.0238 ug/L	0.0238 ppb	21:08:02
3	Cd 226.502†	-191.1	-1.7	-0.0215 ug/L	-0.0215 ppb	21:08:22
3	Co 228.616†	-64.9	12.0	0.2509 ug/L	0.2509 ppb	21:08:22
3	Cr 267.716†	63.0	-84.7	-0.9873 ug/L	-0.9873 ppb	21:08:22
3	Cu 324.752†	8047.1	207.9	0.6358 ug/L	0.6358 ppb	21:08:02
3	Mn 257.610†	696.8	149.1	0.1744 ug/L	0.1744 ppb	21:08:22
3	Mo 202.031†	18.3	8.4	0.6253 ug/L	0.6253 ppb	21:08:22
3	Ni 231.604†	83.9	-27.0	-0.6912 ug/L	-0.6912 ppb	21:08:22
3	P 214.914†	240.8	6.4	3.4326 ug/L	3.4326 ppb	21:08:22
3	Pb 220.353†	-96.0	-25.4	-3.1456 ug/L	-3.1456 ppb	21:08:22
3	S 181.975 Axial†	65.6	24.8	32.402 ug/L	32.402 ppb	21:08:22
3	Sb 206.836†	33.5	-1.1	-0.3375 ug/L	-0.3375 ppb	21:08:22
3	Se 196.026†	-29.5	-7.1	-4.0741 ug/L	-4.0741 ppb	21:08:22
3	Si 251.611†	702.4	112.3	3.4916 ug/L	3.4916 ppb	21:08:22
3	Sn 189.927†	20.8	8.9	1.5922 ug/L	1.5922 ppb	21:08:22
3	Ti 334.940†	-1428.1	19.5	0.0312 ug/L	0.0312 ppb	21:08:02
3	Tl 190.801†	-28.2	10.0	3.1518 ug/L	3.1518 ppb	21:08:22
3	U 409.014†	-3290.4	120.6	3.4250 ug/L	3.4250 ppb	21:08:02
3	V 292.402†	-1711.3	-88.2	-0.6262 ug/L	-0.6262 ppb	21:08:02
3	Zn 213.857†	701.8	36.3	0.3546 ug/L	0.3546 ppb	21:08:22
3	SiO2†	704.0	106.8	7.1035 ug/L	7.1035 ppb	21:08:38

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	825400.1	97.105 %	0.1519			0.16%
Sc Radial	4037.3	95.0 %	0.60			0.63%
Y 371.029	669763.3	95.309 %	0.1404			0.15%
Y RADIAL	4245.0	96.43 %	1.463			1.52%
Ag 328.068†	12.9	0.0649 ug/L	0.37062	0.0649 ppb	0.37062	570.86%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	20.8	20.735 ug/L	13.4244	20.735 ppb	13.4244	64.74%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-3.8	-1.5896 ug/L	0.92606	-1.5896 ppb	0.92606	58.26%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	233.8	5.4969 ug/L	0.36396	5.4969 ppb	0.36396	6.62%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	-6.3	-0.0508 ug/L	0.12548	-0.0508 ppb	0.12548	246.78%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	51.0	0.0195 ug/L	0.00441	0.0195 ppb	0.00441	22.63%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	0.4	0.6718 ug/L	3.58772	0.6718 ppb	3.58772	534.07%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd 226.502†	-13.3	-0.1572 ug/L	0.11756	-0.1572 ppb	0.11756	74.76%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	2.4	0.0507 ug/L	0.17464	0.0507 ppb	0.17464	344.61%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	-69.5	-0.8100 ug/L	0.22110	-0.8100 ppb	0.22110	27.30%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	308.6	0.9442 ug/L	0.27185	0.9442 ppb	0.27185	28.79%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	1.8	18.659 ug/L	6.0821	18.659 ppb	6.0821	32.60%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	89.7	18.108 ug/L	8.7276	18.108 ppb	8.7276	48.20%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	0.7	25.660 ug/L	53.7619	25.660 ppb	53.7619	209.51%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	214.1	0.2477 ug/L	0.06984	0.2477 ppb	0.06984	28.19%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	12.6	0.9354 ug/L	0.44626	0.9354 ppb	0.44626	47.71%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	39.8	13.278 ug/L	8.9697	13.278 ppb	8.9697	67.55%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	-17.4	-0.4457 ug/L	0.26233	-0.4457 ppb	0.26233	58.85%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	4.7	2.4413 ug/L	3.37808	2.4413 ppb	3.37808	138.37%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	-12.3	-1.5242 ug/L	1.41873	-1.5242 ppb	1.41873	93.08%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	19.1	24.978 ug/L	6.5040	24.978 ppb	6.5040	26.04%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	3.3	1.1645 ug/L	1.65033	1.1645 ppb	1.65033	141.72%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	-1.0	-0.5338 ug/L	3.44550	-0.5338 ppb	3.44550	645.42%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	99.4	3.0858 ug/L	0.36326	3.0858 ppb	0.36326	11.77%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	9.2	1.6488 ug/L	0.22571	1.6488 ppb	0.22571	13.69%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	-69.2	-0.5345 ug/L	0.17044	-0.5345 ppb	0.17044	31.89%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	204.6	0.3295 ug/L	0.41741	0.3295 ppb	0.41741	126.67%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	-0.4	-0.1160 ug/L	3.07411	-0.1160 ppb	3.07411	>999.9%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	107.8	3.0627 ug/L	0.88743	3.0627 ppb	0.88743	28.98%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	-19.9	-0.1271 ug/L	0.43594	-0.1271 ppb	0.43594	342.93%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	34.5	0.3354 ug/L	0.03420	0.3354 ppb	0.03420	10.19%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	64.2	4.2556 ug/L	2.56287	4.2556 ppb	2.56287	60.22%	
QC value within limits for SiO2 Recovery = Not calculated							
All analyte(s) passed QC.							

Sequence No.: 40

Sample ID: 245391004|945417|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 67

Date Collected: 2/16/2010 21:10:48

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245391004|945417|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4259.0	4259.0	100 %		21:13:01
1	Y RADIAL	5250.6	5250.6	119.3 %		21:13:01
1	Al 396.153Radial†	57899.2	57948.0	57970 ug/L	57970 ppb	21:12:41
1	Ca 317.933Radial†	11406.1	11366.0	21202 ug/L	21202 ppb	21:12:41
1	Fe 238.204 Radial†	13298.3	13263.0	140960 ug/L	140960 ppb	21:12:41
1	K 766.490 Radial†	42801.5	39548.5	7974.7 ug/L	7974.7 ppb	21:12:41
1	Mg 279.077 IEC†	335.1	331.7	12664 ug/L	12664 ppb	21:13:01
1	Na 589.592 Radial†	6084.6	5865.9	1956.6 ug/L	1956.6 ppb	21:12:41
1	Sr 421.552†	19713.3	19585.9	151.07 ug/L	151.07 ppb	21:12:41
1	Sc 361.383	841102.7	841102.7	98.952 %		21:13:59
1	Y 371.029	822842.8	822842.8	117.09 %		21:13:59
1	Ag 328.068†	-7638.3	-7946.8	9.8129 ug/L	9.8129 ppb	21:14:04
1	As 188.979†	-46.8	-19.0	47.131 ug/L	47.131 ppb	21:14:24
1	B 249.677†	2129.1	2633.6	38.820 ug/L	38.820 ppb	21:14:04
1	Ba 233.527†	104781.3	105872.0	864.19 ug/L	864.19 ppb	21:14:04
1	Be 313.107†	-5364.5	-1082.1	5.4026 ug/L	5.4026 ppb	21:14:04
1	Cd 226.502†	849.9	1054.4	-2.2343 ug/L	-2.2343 ppb	21:14:24
1	Co 228.616†	4039.6	4161.2	79.783 ug/L	79.783 ppb	21:14:24
1	Cr 267.716†	6043.4	5957.7	72.315 ug/L	72.315 ppb	21:14:04
1	Cu 324.752†	24592.9	16759.2	58.908 ug/L	58.908 ppb	21:14:04
1	Mn 257.610†	2052255.5	2073416.2	2404.8 ug/L	2404.8 ppb	21:13:59
1	Mo 202.031†	77.8	68.2	16.260 ug/L	16.260 ppb	21:14:24
1	Ni 231.604†	2671.2	2586.0	66.185 ug/L	66.185 ppb	21:14:24
1	P 214.914†	1033.9	802.9	336.11 ug/L	336.11 ppb	21:14:24
1	Pb 220.353†	325.3	402.3	49.133 ug/L	49.133 ppb	21:14:24
1	S 181.975 Axial†	326.4	286.9	364.13 ug/L	364.13 ppb	21:14:24
1	Sb 206.836†	60.9	25.9	-2.5542 ug/L	-2.5542 ppb	21:14:24
1	Se 196.026†	-639.0	-622.4	92.996 ug/L	92.996 ppb	21:14:24
1	Si 251.611†	954370.7	963863.9	30036 ug/L	30036 ppb	21:13:59
1	Sn 189.927†	-65.4	-78.7	-8.5221 ug/L	-8.5221 ppb	21:14:24
1	Ti 334.940†	1553925.4	1571872.1	2556.7 ug/L	2556.7 ppb	21:13:59
1	Tl 190.801†	-152.4	-114.9	-4.2447 ug/L	-4.2447 ppb	21:14:24
1	U 409.014†	-11984.5	-8596.2	-260.42 ug/L	-260.42 ppb	21:13:59
1	V 292.402†	14399.9	16229.6	94.139 ug/L	94.139 ppb	21:14:04
1	Zn 213.857†	46749.4	46556.6	432.80 ug/L	432.80 ppb	21:14:04
1	SiO2†	963941.8	973529.1	64908 ug/L	64908 ppb	21:15:32
2	Sc Radial	4211.6	4211.6	99.1 %		21:13:26
2	Y RADIAL	5199.5	5199.5	118.1 %		21:13:26
2	Al 396.153Radial†	56932.3	57622.5	57645 ug/L	57645 ppb	21:13:06
2	Ca 317.933Radial†	11232.2	11318.7	21114 ug/L	21114 ppb	21:13:06
2	Fe 238.204 Radial†	13090.7	13202.8	140320 ug/L	140320 ppb	21:13:06
2	K 766.490 Radial†	42191.4	39413.4	7947.5 ug/L	7947.5 ppb	21:13:06
2	Mg 279.077 IEC†	333.3	333.7	12743 ug/L	12743 ppb	21:13:26
2	Na 589.592 Radial†	5940.7	5789.0	1931.0 ug/L	1931.0 ppb	21:13:06
2	Sr 421.552†	19336.3	19426.9	149.84 ug/L	149.84 ppb	21:13:06
2	Sc 361.383	843344.6	843344.6	99.216 %		21:14:30
2	Y 371.029	824973.3	824973.3	117.40 %		21:14:30
2	Ag 328.068†	-7717.5	-8006.2	9.3278 ug/L	9.3278 ppb	21:14:35
2	As 188.979†	-68.3	-40.5	37.988 ug/L	37.988 ppb	21:14:55
2	B 249.677†	2248.1	2747.7	41.609 ug/L	41.609 ppb	21:14:35
2	Ba 233.527†	107830.3	108663.5	886.85 ug/L	886.85 ppb	21:14:35
2	Be 313.107†	-5457.7	-1161.7	5.3815 ug/L	5.3815 ppb	21:14:35
2	Cd 226.502†	857.1	1059.4	-2.1106 ug/L	-2.1106 ppb	21:14:55
2	Co 228.616†	4064.0	4175.0	80.081 ug/L	80.081 ppb	21:14:55
2	Cr 267.716†	6189.8	6089.1	73.836 ug/L	73.836 ppb	21:14:35
2	Cu 324.752†	25450.9	17557.9	61.321 ug/L	61.321 ppb	21:14:35
2	Mn 257.610†	2058886.9	2074586.7	2406.1 ug/L	2406.1 ppb	21:14:30
2	Mo 202.031†	62.2	52.2	15.023 ug/L	15.023 ppb	21:14:55
2	Ni 231.604†	2711.4	2619.3	67.039 ug/L	67.039 ppb	21:14:55

2	P 214.914†	1040.6	806.8	338.24 ug/L	338.24 ppb	21:14:55
2	Pb 220.353†	311.6	387.6	47.295 ug/L	47.295 ppb	21:14:55
2	S 181.975 Axial†	317.9	277.5	351.92 ug/L	351.92 ppb	21:14:55
2	Sb 206.836†	72.3	37.2	1.2741 ug/L	1.2741 ppb	21:14:55
2	Se 196.026†	-620.1	-601.7	103.02 ug/L	103.02 ppb	21:14:55
2	Si 251.611†	958598.7	965561.3	30089 ug/L	30089 ppb	21:14:30
2	Sn 189.927†	-66.5	-79.6	-8.7070 ug/L	-8.7070 ppb	21:14:55
2	Ti 334.940†	1560250.3	1574072.4	2560.2 ug/L	2560.2 ppb	21:14:30
2	Tl 190.801†	-142.9	-104.9	-1.0613 ug/L	-1.0613 ppb	21:14:55
2	U 409.014†	-12127.0	-8707.7	-263.51 ug/L	-263.51 ppb	21:14:30
2	V 292.402†	14841.0	16635.6	97.147 ug/L	97.147 ppb	21:14:35
2	Zn 213.857†	48301.9	47995.9	446.93 ug/L	446.93 ppb	21:14:35
2	SiO2†	952694.3	959603.1	63980 ug/L	63980 ppb	21:15:38
3	Sc Radial	4228.7	4228.7	99.5 %		21:13:51
3	Y RADIAL	5232.0	5232.0	118.8 %		21:13:51
3	Al 396.153Radial†	56840.0	57297.2	57319 ug/L	57319 ppb	21:13:31
3	Ca 317.933Radial†	11212.6	11253.1	20991 ug/L	20991 ppb	21:13:31
3	Fe 238.204 Radial†	12996.2	13054.3	138740 ug/L	138740 ppb	21:13:31
3	K 766.490 Radial†	41951.2	38999.7	7864.0 ug/L	7864.0 ppb	21:13:31
3	Mg 279.077 IEC†	330.6	329.6	12585 ug/L	12585 ppb	21:13:51
3	Na 589.592 Radial†	5895.7	5719.5	1907.8 ug/L	1907.8 ppb	21:13:31
3	Sr 421.552†	19317.6	19329.1	149.09 ug/L	149.09 ppb	21:13:31
3	Sc 361.383	849026.9	849026.9	99.884 %		21:15:01
3	Y 371.029	829691.0	829691.0	118.07 %		21:15:01
3	Ag 328.068†	-7877.4	-8114.1	8.2702 ug/L	8.2702 ppb	21:15:06
3	As 188.979†	-62.9	-34.7	40.060 ug/L	40.060 ppb	21:15:26
3	B 249.677†	2260.9	2745.5	41.816 ug/L	41.816 ppb	21:15:06
3	Ba 233.527†	107369.6	107475.0	877.14 ug/L	877.14 ppb	21:15:06
3	Be 313.107†	-5450.5	-1117.7	5.3955 ug/L	5.3955 ppb	21:15:06
3	Cd 226.502†	852.5	1049.0	-2.0695 ug/L	-2.0695 ppb	21:15:26
3	Co 228.616†	4024.7	4108.2	78.708 ug/L	78.708 ppb	21:15:26
3	Cr 267.716†	6126.1	5983.5	72.574 ug/L	72.574 ppb	21:15:06
3	Cu 324.752†	25303.3	17238.4	60.259 ug/L	60.259 ppb	21:15:06
3	Mn 257.610†	2071903.9	2073730.3	2405.0 ug/L	2405.0 ppb	21:15:01
3	Mo 202.031†	55.7	45.3	14.389 ug/L	14.389 ppb	21:15:26
3	Ni 231.604†	2674.1	2563.7	65.616 ug/L	65.616 ppb	21:15:26
3	P 214.914†	1050.7	809.9	341.32 ug/L	341.32 ppb	21:15:26
3	Pb 220.353†	329.3	403.3	49.317 ug/L	49.317 ppb	21:15:26
3	S 181.975 Axial†	325.6	283.0	359.19 ug/L	359.19 ppb	21:15:26
3	Sb 206.836†	52.9	17.3	-5.4708 ug/L	-5.4708 ppb	21:15:26
3	Se 196.026†	-627.8	-605.2	95.857 ug/L	95.857 ppb	21:15:26
3	Si 251.611†	964382.0	964884.9	30068 ug/L	30068 ppb	21:15:01
3	Sn 189.927†	-78.7	-91.4	-10.858 ug/L	-10.858 ppb	21:15:26
3	Ti 334.940†	1570176.8	1573485.6	2559.3 ug/L	2559.3 ppb	21:15:01
3	Tl 190.801†	-150.4	-111.5	-3.1314 ug/L	-3.1314 ppb	21:15:26
3	U 409.014†	-12170.3	-8669.2	-262.24 ug/L	-262.24 ppb	21:15:01
3	V 292.402†	14692.8	16387.1	95.569 ug/L	95.569 ppb	21:15:06
3	Zn 213.857†	48191.1	47559.0	442.92 ug/L	442.92 ppb	21:15:06
3	SiO2†	958683.2	959172.4	63951 ug/L	63951 ppb	21:15:44

Mean Data: 245391004|945417|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	844491.4	99.351 %	0.4805			0.48%
Sc Radial	4233.1	99.6 %	0.56			0.57%
Y 371.029	825835.7	117.52 %	0.499			0.42%
Y RADIAL	5227.3	118.7 %	0.59			0.49%
Ag 328.068†	-8022.4	9.1370 ug/L	0.78884	9.1370 ppb	0.78884	8.63%
Al 396.153Radial†	57622.6	57645 ug/L	325.5	57645 ppb	325.5	0.56%
As 188.979†	-31.4	41.726 ug/L	4.7939	41.726 ppb	4.7939	11.49%
B 249.677†	2708.9	40.748 ug/L	1.6731	40.748 ppb	1.6731	4.11%
Ba 233.527†	107336.8	876.06 ug/L	11.366	876.06 ppb	11.366	1.30%
Be 313.107†	-1120.5	5.3932 ug/L	0.01073	5.3932 ppb	0.01073	0.20%
Ca 317.933Radial†	11312.6	21102 ug/L	105.7	21102 ppb	105.7	0.50%
Cd 226.502†	1054.3	-2.1381 ug/L	0.08580	-2.1381 ppb	0.08580	4.01%
Co 228.616†	4148.2	79.524 ug/L	0.7224	79.524 ppb	0.7224	0.91%
Cr 267.716†	6010.1	72.908 ug/L	0.8136	72.908 ppb	0.8136	1.12%
Cu 324.752†	17185.2	60.162 ug/L	1.2096	60.162 ppb	1.2096	2.01%
Fe 238.204 Radial†	13173.4	140000 ug/L	1141.3	140000 ppb	1141.3	0.82%
K 766.490 Radial†	39320.5	7928.7 ug/L	57.67	7928.7 ppb	57.67	0.73%

Mg 279.077 IEC†	331.7	12664 ug/L	79.0	12664 ppb	79.0	0.62%
Mn 257.610†	2073911.1	2405.3 ug/L	0.70	2405.3 ppb	0.70	0.03%
Mo 202.031†	55.2	15.224 ug/L	0.9517	15.224 ppb	0.9517	6.25%
Na 589.592 Radial†	5791.5	1931.8 ug/L	24.43	1931.8 ppb	24.43	1.26%
Ni 231.604†	2589.7	66.280 ug/L	0.7163	66.280 ppb	0.7163	1.08%
P 214.914†	806.6	338.56 ug/L	2.623	338.56 ppb	2.623	0.77%
Pb 220.353†	397.7	48.582 ug/L	1.1180	48.582 ppb	1.1180	2.30%
S 181.975 Axial†	282.5	358.41 ug/L	6.145	358.41 ppb	6.145	1.71%
Sb 206.836†	26.8	-2.2503 ug/L	3.38271	-2.2503 ppb	3.38271	150.32%
Se 196.026†	-609.8	97.291 ug/L	5.1629	97.291 ppb	5.1629	5.31%
Si 251.611†	964770.0	30065 ug/L	26.6	30065 ppb	26.6	0.09%
Sn 189.927†	-83.2	-9.3624 ug/L	1.29861	-9.3624 ppb	1.29861	13.87%
Sr 421.552†	19447.3	150.00 ug/L	1.000	150.00 ppb	1.000	0.67%
Ti 334.940†	1573143.4	2558.7 ug/L	1.84	2558.7 ppb	1.84	0.07%
Tl 190.801†	-110.4	-2.8125 ug/L	1.61548	-2.8125 ppb	1.61548	57.44%
U 409.014†	-8657.7	-262.06 ug/L	1.557	-262.06 ppb	1.557	0.59%
V 292.402†	16417.4	95.618 ug/L	1.5045	95.618 ppb	1.5045	1.57%
Zn 213.857†	47370.5	440.88 ug/L	7.283	440.88 ppb	7.283	1.65%
SiO2†	964101.5	64280 ug/L	544.5	64280 ppb	544.5	0.85%

Sequence No.: 41

Sample ID: 245391005|945417|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 68

Date Collected: 2/16/2010 21:17:56

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245391005|945417|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4255.3	4255.3	100 %		21:20:08
1	Y RADIAL	4902.8	4902.8	111.4 %		21:20:08
1	Al 396.153Radial†	69559.9	69646.7	69674 ug/L	69674 ppb	21:19:48
1	Ca 317.933Radial†	8540.9	8513.7	15881 ug/L	15881 ppb	21:19:48
1	Fe 238.204 Radial†	10522.3	10501.3	111600 ug/L	111600 ppb	21:19:48
1	K 766.490 Radial†	56338.4	53108.3	10714 ug/L	10714 ppb	21:19:48
1	Mg 279.077 IEC†	353.4	350.4	13415 ug/L	13415 ppb	21:20:08
1	Na 589.592 Radial†	2013.8	1804.7	601.96 ug/L	601.96 ppb	21:19:48
1	Sr 421.552†	17766.2	17657.9	136.22 ug/L	136.22 ppb	21:19:48
1	Sc 361.383	846121.4	846121.4	99.543 %		21:21:06
1	Y 371.029	770325.9	770325.9	109.62 %		21:21:06
1	Ag 328.068†	-6083.9	-6339.5	7.5097 ug/L	7.5097 ppb	21:21:11
1	As 188.979†	-34.0	-5.8	48.608 ug/L	48.608 ppb	21:21:31
1	B 249.677†	1079.9	1566.8	18.631 ug/L	18.631 ppb	21:21:11
1	Ba 233.527†	90330.8	90727.0	740.46 ug/L	740.46 ppb	21:21:11
1	Be 313.107†	37182.8	41692.8	21.845 ug/L	21.845 ppb	21:21:11
1	Cd 226.502†	737.8	936.7	-0.4752 ug/L	-0.4752 ppb	21:21:31
1	Co 228.616†	1706.3	1793.0	30.074 ug/L	30.074 ppb	21:21:31
1	Cr 267.716†	6174.7	6053.3	72.733 ug/L	72.733 ppb	21:21:11
1	Cu 324.752†	446257.0	440213.2	1353.6 ug/L	1353.6 ppb	21:21:06
1	Mn 257.610†	1862712.2	1870700.5	2168.1 ug/L	2168.1 ppb	21:21:06
1	Mo 202.031†	4.9	-5.6	8.4398 ug/L	8.4398 ppb	21:21:31
1	Ni 231.604†	2699.8	2598.7	66.541 ug/L	66.541 ppb	21:21:31
1	P 214.914†	2056.2	1823.6	671.68 ug/L	671.68 ppb	21:21:31
1	Pb 220.353†	2405.3	2489.9	312.18 ug/L	312.18 ppb	21:21:31
1	S 181.975 Axial†	381.2	340.1	431.39 ug/L	431.39 ppb	21:21:31
1	Sb 206.836†	85.4	50.1	4.9469 ug/L	4.9469 ppb	21:21:31
1	Se 196.026†	-508.2	-487.3	77.650 ug/L	77.650 ppb	21:21:31
1	Si 251.611†	1089890.9	1094285.9	34101 ug/L	34101 ppb	21:21:06
1	Sn 189.927†	31.9	19.4	7.7670 ug/L	7.7670 ppb	21:21:31
1	Ti 334.940†	1760281.8	1769862.1	2877.5 ug/L	2877.5 ppb	21:21:06
1	Tl 190.801†	-138.0	-99.6	2.2550 ug/L	2.2550 ppb	21:21:31
1	U 409.014†	6608.4	10154.0	275.56 ug/L	275.56 ppb	21:21:06
1	V 292.402†	22977.9	24760.8	160.82 ug/L	160.82 ppb	21:21:11
1	Zn 213.857†	39301.0	38793.8	359.67 ug/L	359.67 ppb	21:21:11
1	SiO2†	1106034.6	1110496.7	74040 ug/L	74040 ppb	21:22:40
2	Sc Radial	4203.7	4203.7	98.9 %		21:20:34
2	Y RADIAL	4867.1	4867.1	110.6 %		21:20:34
2	Al 396.153Radial†	68909.2	69842.1	69869 ug/L	69869 ppb	21:20:14
2	Ca 317.933Radial†	8501.3	8578.5	16002 ug/L	16002 ppb	21:20:14
2	Fe 238.204 Radial†	10413.0	10519.9	111800 ug/L	111800 ppb	21:20:14
2	K 766.490 Radial†	55936.3	53392.9	10772 ug/L	10772 ppb	21:20:14
2	Mg 279.077 IEC†	351.4	352.6	13502 ug/L	13502 ppb	21:20:34
2	Na 589.592 Radial†	1963.2	1778.2	593.12 ug/L	593.12 ppb	21:20:14
2	Sr 421.552†	17497.4	17604.0	135.81 ug/L	135.81 ppb	21:20:14
2	Sc 361.383	849011.5	849011.5	99.883 %		21:21:37
2	Y 371.029	771562.9	771562.9	109.80 %		21:21:37
2	Ag 328.068†	-5967.7	-6202.4	8.2188 ug/L	8.2188 ppb	21:21:43
2	As 188.979†	-42.8	-14.5	44.935 ug/L	44.935 ppb	21:22:03
2	B 249.677†	1066.0	1549.2	18.185 ug/L	18.185 ppb	21:21:43
2	Ba 233.527†	89261.5	89347.5	729.26 ug/L	729.26 ppb	21:21:43
2	Be 313.107†	36674.5	41056.7	21.595 ug/L	21.595 ppb	21:21:43
2	Cd 226.502†	745.7	942.1	-0.4324 ug/L	-0.4324 ppb	21:22:03
2	Co 228.616†	1699.3	1780.2	29.816 ug/L	29.816 ppb	21:22:03
2	Cr 267.716†	6124.1	5981.6	71.897 ug/L	71.897 ppb	21:21:43
2	Cu 324.752†	446835.6	439266.3	1350.7 ug/L	1350.7 ppb	21:21:37
2	Mn 257.610†	1865774.6	1867396.5	2164.3 ug/L	2164.3 ppb	21:21:37
2	Mo 202.031†	9.8	-0.7	8.8207 ug/L	8.8207 ppb	21:22:03
2	Ni 231.604†	2700.6	2590.3	66.326 ug/L	66.326 ppb	21:22:03

2	P 214.914†	2077.1	1837.6	679.89 ug/L	679.89 ppb	21:22:03
2	Pb 220.353†	2434.9	2511.3	314.86 ug/L	314.86 ppb	21:22:03
2	S 181.975 Axial†	395.4	352.9	448.17 ug/L	448.17 ppb	21:22:03
2	Sb 206.836†	75.9	40.3	1.6259 ug/L	1.6259 ppb	21:22:03
2	Se 196.026†	-503.8	-481.1	81.886 ug/L	81.886 ppb	21:22:03
2	Si 251.611†	1091314.1	1091983.7	34029 ug/L	34029 ppb	21:21:37
2	Sn 189.927†	25.9	13.3	6.6967 ug/L	6.6967 ppb	21:22:03
2	Ti 334.940†	1761914.2	1765476.7	2870.4 ug/L	2870.4 ppb	21:21:37
2	Tl 190.801†	-147.9	-109.0	-0.7893 ug/L	-0.7893 ppb	21:22:03
2	U 409.014†	6729.1	10252.2	278.33 ug/L	278.33 ppb	21:21:37
2	V 292.402†	22633.4	24337.3	157.74 ug/L	157.74 ppb	21:21:43
2	Zn 213.857†	38797.2	38155.1	353.41 ug/L	353.41 ppb	21:21:43
2	SiO2†	1097136.1	1097805.3	73194 ug/L	73194 ppb	21:22:46
3	Sc Radial	4222.8	4222.8	99.3 %		21:20:59
3	Y RADIAL	4895.6	4895.6	111.2 %		21:20:59
3	Al 396.153Radial†	68786.9	69403.3	69430 ug/L	69430 ppb	21:20:39
3	Ca 317.933Radial†	8442.9	8480.7	15820 ug/L	15820 ppb	21:20:39
3	Fe 238.204 Radial†	10387.1	10446.1	111020 ug/L	111020 ppb	21:20:39
3	K 766.490 Radial†	55747.4	52946.4	10682 ug/L	10682 ppb	21:20:39
3	Mg 279.077 IEC†	352.2	351.9	13474 ug/L	13474 ppb	21:20:59
3	Na 589.592 Radial†	2034.9	1841.4	614.20 ug/L	614.20 ppb	21:20:39
3	Sr 421.552†	17480.8	17507.2	135.06 ug/L	135.06 ppb	21:20:39
3	Sc 361.383	849474.6	849474.6	99.937 %		21:22:09
3	Y 371.029	772618.3	772618.3	109.95 %		21:22:09
3	Ag 328.068†	-5935.8	-6167.2	8.1329 ug/L	8.1329 ppb	21:22:14
3	As 188.979†	-40.5	-12.2	45.763 ug/L	45.763 ppb	21:22:34
3	B 249.677†	1153.3	1636.0	20.353 ug/L	20.353 ppb	21:22:14
3	Ba 233.527†	89421.6	89459.0	730.15 ug/L	730.15 ppb	21:22:14
3	Be 313.107†	36694.7	41056.9	21.603 ug/L	21.603 ppb	21:22:14
3	Cd 226.502†	726.0	921.9	-0.5882 ug/L	-0.5882 ppb	21:22:34
3	Co 228.616†	1704.4	1784.4	29.904 ug/L	29.904 ppb	21:22:34
3	Cr 267.716†	6038.9	5893.0	70.854 ug/L	70.854 ppb	21:22:14
3	Cu 324.752†	447440.2	439627.4	1351.7 ug/L	1351.7 ppb	21:22:09
3	Mn 257.610†	1868993.6	1869599.1	2166.8 ug/L	2166.8 ppb	21:22:09
3	Mo 202.031†	-10.6	-21.1	7.2387 ug/L	7.2387 ppb	21:22:34
3	Ni 231.604†	2688.8	2577.0	65.985 ug/L	65.985 ppb	21:22:34
3	P 214.914†	2055.6	1814.9	667.61 ug/L	667.61 ppb	21:22:34
3	Pb 220.353†	2411.8	2486.8	311.80 ug/L	311.80 ppb	21:22:34
3	S 181.975 Axial†	380.3	337.6	428.22 ug/L	428.22 ppb	21:22:34
3	Sb 206.836†	69.8	34.1	-0.4632 ug/L	-0.4632 ppb	21:22:34
3	Se 196.026†	-518.0	-495.0	71.203 ug/L	71.203 ppb	21:22:34
3	Si 251.611†	1093209.8	1093284.9	34069 ug/L	34069 ppb	21:22:09
3	Sn 189.927†	36.0	23.4	8.4756 ug/L	8.4756 ppb	21:22:34
3	Ti 334.940†	1765000.3	1767603.0	2873.8 ug/L	2873.8 ppb	21:22:09
3	Tl 190.801†	-142.2	-103.2	1.0851 ug/L	1.0851 ppb	21:22:34
3	U 409.014†	6581.6	10100.9	274.13 ug/L	274.13 ppb	21:22:09
3	V 292.402†	22781.4	24473.0	158.80 ug/L	158.80 ppb	21:22:14
3	Zn 213.857†	38827.4	38164.1	353.62 ug/L	353.62 ppb	21:22:14
3	SiO2†	1085084.2	1085146.9	72350 ug/L	72350 ppb	21:22:52

Mean Data: 245391005|945417|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	848202.5	99.787 %		0.2138			0.21%
Sc Radial	4227.3	99.4 %		0.61			0.62%
Y 371.029	771502.3	109.79 %		0.163			0.15%
Y RADIAL	4888.5	111.0 %		0.43			0.39%
Ag 328.068†	-6236.4	7.9538 ug/L		0.38698	7.9538 ppb	0.38698	4.87%
Al 396.153Radial†	69630.7	69658 ug/L		219.9	69658 ppb	219.9	0.32%
As 188.979†	-10.9	46.435 ug/L		1.9264	46.435 ppb	1.9264	4.15%
B 249.677†	1584.0	19.056 ug/L		1.1451	19.056 ppb	1.1451	6.01%
Ba 233.527†	89844.5	733.29 ug/L		6.228	733.29 ppb	6.228	0.85%
Be 313.107†	41268.8	21.681 ug/L		0.1420	21.681 ppb	0.1420	0.65%
Ca 317.933Radial†	8524.3	15901 ug/L		92.7	15901 ppb	92.7	0.58%
Cd 226.502†	933.6	-0.4986 ug/L		0.08049	-0.4986 ppb	0.08049	16.14%
Co 228.616†	1785.8	29.931 ug/L		0.1313	29.931 ppb	0.1313	0.44%
Cr 267.716†	5976.0	71.828 ug/L		0.9416	71.828 ppb	0.9416	1.31%
Cu 324.752†	439702.3	1352.0 ug/L		1.46	1352.0 ppb	1.46	0.11%
Fe 238.204 Radial†	10489.1	111470 ug/L		408.1	111470 ppb	408.1	0.37%
K 766.490 Radial†	53149.2	10723 ug/L		45.6	10723 ppb	45.6	0.43%

Mg 279.077 IEC†	351.6	13464 ug/L	44.3	13464 ppb	44.3	0.33%
Mn 257.610†	1869232.0	2166.4 ug/L	1.93	2166.4 ppb	1.93	0.09%
Mo 202.031†	-9.1	8.1664 ug/L	0.82565	8.1664 ppb	0.82565	10.11%
Na 589.592 Radial†	1808.1	603.09 ug/L	10.585	603.09 ppb	10.585	1.76%
Ni 231.604†	2588.7	66.284 ug/L	0.2803	66.284 ppb	0.2803	0.42%
P 214.914†	1825.4	673.06 ug/L	6.252	673.06 ppb	6.252	0.93%
Pb 220.353†	2496.0	312.95 ug/L	1.667	312.95 ppb	1.667	0.53%
S 181.975 Axial†	343.5	435.93 ug/L	10.719	435.93 ppb	10.719	2.46%
Sb 206.836†	41.5	2.0365 ug/L	2.72833	2.0365 ppb	2.72833	133.97%
Se 196.026†	-487.8	76.913 ug/L	5.3796	76.913 ppb	5.3796	6.99%
Si 251.611†	1093184.9	34066 ug/L	36.0	34066 ppb	36.0	0.11%
Sn 189.927†	18.7	7.6464 ug/L	0.89554	7.6464 ppb	0.89554	11.71%
Sr 421.552†	17589.7	135.70 ug/L	0.590	135.70 ppb	0.590	0.43%
Ti 334.940†	1767647.3	2873.9 ug/L	3.56	2873.9 ppb	3.56	0.12%
Tl 190.801†	-103.9	0.8503 ug/L	1.53571	0.8503 ppb	1.53571	180.61%
U 409.014†	10169.0	276.01 ug/L	2.138	276.01 ppb	2.138	0.77%
V 292.402†	24523.7	159.12 ug/L	1.562	159.12 ppb	1.562	0.98%
Zn 213.857†	38371.0	355.57 ug/L	3.555	355.57 ppb	3.555	1.00%
SiO2†	1097816.3	73195 ug/L	845.1	73195 ppb	845.1	1.15%

Sequence No.: 42

Sample ID: 245391006|945417|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 69

Date Collected: 2/16/2010 21:25:03

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245391006|945417|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4296.6	4296.6	101 %		21:26:56
1	Y RADIAL	4992.9	4992.9	113.4 %		21:26:56
1	Al 396.153Radial†	45312.4	44989.7	45007 ug/L	45007 ppb	21:26:56
1	Ca 317.933Radial†	5788.7	5708.8	10649 ug/L	10649 ppb	21:26:56
1	Fe 238.204 Radial†	8307.5	8209.1	87244 ug/L	87244 ppb	21:26:56
1	K 766.490 Radial†	42373.3	38751.2	7817.9 ug/L	7817.9 ppb	21:26:56
1	Mg 279.077 IEC†	220.9	215.8	8243.7 ug/L	8243.7 ppb	21:27:16
1	Na 589.592 Radial†	1811.9	1585.6	528.90 ug/L	528.90 ppb	21:26:56
1	Sr 421.552†	11621.4	11408.1	88.005 ug/L	88.005 ppb	21:26:56
1	Sc 361.383	842807.6	842807.6	99.153 %		21:28:14
1	Y 371.029	764291.8	764291.8	108.76 %		21:28:14
1	Ag 328.068†	-4639.5	-4906.8	6.0656 ug/L	6.0656 ppb	21:28:19
1	As 188.979†	-44.6	-16.7	35.121 ug/L	35.121 ppb	21:28:39
1	B 249.677†	627.2	1114.5	11.946 ug/L	11.946 ppb	21:28:19
1	Ba 233.527†	69787.6	70365.0	574.30 ug/L	574.30 ppb	21:28:19
1	Be 313.107†	35733.4	40377.8	20.522 ug/L	20.522 ppb	21:28:19
1	Cd 226.502†	657.7	858.9	1.1197 ug/L	1.1197 ppb	21:28:39
1	Co 228.616†	1674.8	1768.0	30.611 ug/L	30.611 ppb	21:28:39
1	Cr 267.716†	4786.7	4677.9	56.198 ug/L	56.198 ppb	21:28:39
1	Cu 324.752†	749048.6	747354.5	2292.6 ug/L	2292.6 ppb	21:28:14
1	Mn 257.610†	1904317.0	1920018.2	2222.8 ug/L	2222.8 ppb	21:28:14
1	Mo 202.031†	26.0	15.7	8.0696 ug/L	8.0696 ppb	21:28:39
1	Ni 231.604†	2051.7	1955.7	50.072 ug/L	50.072 ppb	21:28:39
1	P 214.914†	2551.6	2331.5	780.34 ug/L	780.34 ppb	21:28:39
1	Pb 220.353†	6431.8	6560.3	812.84 ug/L	812.84 ppb	21:28:39
1	S 181.975 Axial†	449.3	410.3	527.77 ug/L	527.77 ppb	21:28:39
1	Sb 206.836†	116.5	81.8	18.045 ug/L	18.045 ppb	21:28:39
1	Se 196.026†	-408.2	-388.3	56.052 ug/L	56.052 ppb	21:28:39
1	Si 251.611†	938626.1	946033.7	29481 ug/L	29481 ppb	21:28:14
1	Sn 189.927†	143.9	132.5	26.847 ug/L	26.847 ppb	21:28:39
1	Ti 334.940†	1527670.1	1542215.8	2507.2 ug/L	2507.2 ppb	21:28:14
1	Tl 190.801†	-141.7	-103.8	-1.7891 ug/L	-1.7891 ppb	21:28:39
1	U 409.014†	6504.2	10074.9	276.13 ug/L	276.13 ppb	21:28:14
1	V 292.402†	17035.7	18858.5	121.93 ug/L	121.93 ppb	21:28:19
1	Zn 213.857†	42604.4	42280.7	396.18 ug/L	396.18 ppb	21:28:19
1	SiO2†	946660.7	954129.6	63615 ug/L	63615 ppb	21:29:48
2	Sc Radial	4280.3	4280.3	101 %		21:27:21
2	Y RADIAL	4905.1	4905.1	111.4 %		21:27:21
2	Al 396.153Radial†	44762.3	44613.9	44631 ug/L	44631 ppb	21:27:21
2	Ca 317.933Radial†	5691.9	5634.5	10510 ug/L	10510 ppb	21:27:21
2	Fe 238.204 Radial†	8235.3	8168.7	86815 ug/L	86815 ppb	21:27:21
2	K 766.490 Radial†	41907.8	38448.4	7756.8 ug/L	7756.8 ppb	21:27:21
2	Mg 279.077 IEC†	223.0	218.7	8357.6 ug/L	8357.6 ppb	21:27:41
2	Na 589.592 Radial†	1640.8	1422.5	474.48 ug/L	474.48 ppb	21:27:21
2	Sr 421.552†	11450.6	11282.2	87.034 ug/L	87.034 ppb	21:27:21
2	Sc 361.383	840596.2	840596.2	98.893 %		21:28:45
2	Y 371.029	761360.7	761360.7	108.34 %		21:28:45
2	Ag 328.068†	-4666.6	-4946.5	5.7369 ug/L	5.7369 ppb	21:28:50
2	As 188.979†	-40.0	-12.2	36.893 ug/L	36.893 ppb	21:29:10
2	B 249.677†	610.0	1098.7	11.646 ug/L	11.646 ppb	21:28:50
2	Ba 233.527†	69806.4	70569.2	575.94 ug/L	575.94 ppb	21:28:50
2	Be 313.107†	35577.0	40314.5	20.490 ug/L	20.490 ppb	21:28:50
2	Cd 226.502†	676.7	879.8	1.4071 ug/L	1.4071 ppb	21:29:10
2	Co 228.616†	1651.9	1749.2	30.235 ug/L	30.235 ppb	21:29:10
2	Cr 267.716†	4776.3	4680.0	56.217 ug/L	56.217 ppb	21:29:10
2	Cu 324.752†	746099.3	746359.6	2289.6 ug/L	2289.6 ppb	21:28:45
2	Mn 257.610†	1896922.4	1917593.5	2220.0 ug/L	2220.0 ppb	21:28:45
2	Mo 202.031†	25.9	15.8	8.0362 ug/L	8.0362 ppb	21:29:10
2	Ni 231.604†	2033.1	1942.3	49.729 ug/L	49.729 ppb	21:29:10

2	P 214.914†	2536.2	2322.7	776.33 ug/L	776.33 ppb	21:29:10
2	Pb 220.353†	6397.3	6542.5	810.58 ug/L	810.58 ppb	21:29:10
2	S 181.975 Axial†	432.7	394.6	507.40 ug/L	507.40 ppb	21:29:10
2	Sb 206.836†	122.3	88.0	20.195 ug/L	20.195 ppb	21:29:10
2	Se 196.026†	-400.4	-381.5	58.615 ug/L	58.615 ppb	21:29:10
2	Si 251.611†	935137.8	944996.6	29448 ug/L	29448 ppb	21:28:45
2	Sn 189.927†	154.3	143.4	28.778 ug/L	28.778 ppb	21:29:10
2	Ti 334.940†	1521305.7	1539833.4	2503.3 ug/L	2503.3 ppb	21:28:45
2	Tl 190.801†	-147.0	-109.5	-3.6529 ug/L	-3.6529 ppb	21:29:10
2	U 409.014†	6274.1	9859.6	270.06 ug/L	270.06 ppb	21:28:45
2	V 292.402†	16994.5	18862.1	122.01 ug/L	122.01 ppb	21:28:50
2	Zn 213.857†	42447.4	42235.0	395.81 ug/L	395.81 ppb	21:28:50
2	SiO2†	950956.9	960985.7	64072 ug/L	64072 ppb	21:29:54
3	Sc Radial	4261.8	4261.8	100 %		21:27:46
3	Y RADIAL	4953.6	4953.6	112.5 %		21:27:46
3	Al 396.153Radial†	45104.8	45148.7	45166 ug/L	45166 ppb	21:27:46
3	Ca 317.933Radial†	5758.5	5725.4	10680 ug/L	10680 ppb	21:27:46
3	Fe 238.204 Radial†	8296.9	8265.6	87845 ug/L	87845 ppb	21:27:46
3	K 766.490 Radial†	42215.4	38936.0	7855.2 ug/L	7855.2 ppb	21:27:46
3	Mg 279.077 IEC†	223.4	220.2	8411.4 ug/L	8411.4 ppb	21:28:06
3	Na 589.592 Radial†	1713.4	1501.9	500.98 ug/L	500.98 ppb	21:27:46
3	Sr 421.552†	11514.8	11395.5	87.909 ug/L	87.909 ppb	21:27:46
3	Sc 361.383	841642.7	841642.7	99.016 %		21:29:16
3	Y 371.029	762964.1	762964.1	108.57 %		21:29:16
3	Ag 328.068†	-4554.4	-4827.3	6.6424 ug/L	6.6424 ppb	21:29:21
3	As 188.979†	-37.7	-9.8	38.131 ug/L	38.131 ppb	21:29:41
3	B 249.677†	587.3	1075.1	10.923 ug/L	10.923 ppb	21:29:21
3	Ba 233.527†	68853.1	69518.7	567.44 ug/L	567.44 ppb	21:29:21
3	Be 313.107†	35076.8	39764.5	20.285 ug/L	20.285 ppb	21:29:21
3	Cd 226.502†	674.8	877.0	1.2689 ug/L	1.2689 ppb	21:29:41
3	Co 228.616†	1669.8	1765.3	30.556 ug/L	30.556 ppb	21:29:41
3	Cr 267.716†	4799.4	4697.4	56.434 ug/L	56.434 ppb	21:29:41
3	Cu 324.752†	746402.7	745728.0	2287.7 ug/L	2287.7 ppb	21:29:16
3	Mn 257.610†	1897887.2	1916182.8	2218.4 ug/L	2218.4 ppb	21:29:16
3	Mo 202.031†	39.1	29.1	9.1065 ug/L	9.1065 ppb	21:29:41
3	Ni 231.604†	2035.4	1942.1	49.724 ug/L	49.724 ppb	21:29:41
3	P 214.914†	2541.5	2324.8	777.15 ug/L	777.15 ppb	21:29:41
3	Pb 220.353†	6383.3	6520.3	807.86 ug/L	807.86 ppb	21:29:41
3	S 181.975 Axial†	445.5	407.0	523.43 ug/L	523.43 ppb	21:29:41
3	Sb 206.836†	122.0	87.5	19.963 ug/L	19.963 ppb	21:29:41
3	Se 196.026†	-411.2	-392.0	55.883 ug/L	55.883 ppb	21:29:41
3	Si 251.611†	934884.6	943565.2	29404 ug/L	29404 ppb	21:29:16
3	Sn 189.927†	134.3	123.0	25.164 ug/L	25.164 ppb	21:29:41
3	Ti 334.940†	1522569.8	1539197.3	2502.3 ug/L	2502.3 ppb	21:29:16
3	Tl 190.801†	-141.4	-103.7	-1.8356 ug/L	-1.8356 ppb	21:29:41
3	U 409.014†	6438.8	10017.9	274.44 ug/L	274.44 ppb	21:29:16
3	V 292.402†	16723.2	18566.7	119.75 ug/L	119.75 ppb	21:29:21
3	Zn 213.857†	41905.8	41634.6	389.80 ug/L	389.80 ppb	21:29:21
3	SiO2†	937702.3	946403.7	63100 ug/L	63100 ppb	21:30:00

Mean Data: 245391006|945417|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	841682.2	99.020 %	%	0.1301			0.13%
Sc Radial	4279.5	101 %	%	0.4			0.41%
Y 371.029	762872.2	108.56 %	%	0.209			0.19%
Y RADIAL	4950.5	112.5 %	%	1.00			0.89%
Ag 328.068†	-4893.5	6.1483 ug/L	ug/L	0.45835	6.1483 ppb	0.45835	7.45%
Al 396.153Radial†	44917.4	44935 ug/L	ug/L	274.7	44935 ppb	274.7	0.61%
As 188.979†	-12.9	36.715 ug/L	ug/L	1.5131	36.715 ppb	1.5131	4.12%
B 249.677†	1096.1	11.505 ug/L	ug/L	0.5261	11.505 ppb	0.5261	4.57%
Ba 233.527†	70151.0	572.56 ug/L	ug/L	4.510	572.56 ppb	4.510	0.79%
Be 313.107†	40152.3	20.432 ug/L	ug/L	0.1282	20.432 ppb	0.1282	0.63%
Ca 317.933Radial†	5689.6	10613 ug/L	ug/L	90.3	10613 ppb	90.3	0.85%
Cd 226.502†	871.9	1.2653 ug/L	ug/L	0.14373	1.2653 ppb	0.14373	11.36%
Co 228.616†	1760.8	30.467 ug/L	ug/L	0.2028	30.467 ppb	0.2028	0.67%
Cr 267.716†	4685.1	56.283 ug/L	ug/L	0.1310	56.283 ppb	0.1310	0.23%
Cu 324.752†	746480.7	2290.0 ug/L	ug/L	2.50	2290.0 ppb	2.50	0.11%
Fe 238.204 Radial†	8214.5	87301 ug/L	ug/L	517.3	87301 ppb	517.3	0.59%
K 766.490 Radial†	38711.9	7810.0 ug/L	ug/L	49.66	7810.0 ppb	49.66	0.64%

Mg 279.077 IEC†	218.2	8337.6 ug/L	85.66	8337.6 ppb	85.66	1.03%
Mn 257.610†	1917931.5	2220.4 ug/L	2.22	2220.4 ppb	2.22	0.10%
Mo 202.031†	20.2	8.4041 ug/L	0.60854	8.4041 ppb	0.60854	7.24%
Na 589.592 Radial†	1503.3	501.45 ug/L	27.212	501.45 ppb	27.212	5.43%
Ni 231.604†	1946.7	49.842 ug/L	0.1996	49.842 ppb	0.1996	0.40%
P 214.914†	2326.3	777.94 ug/L	2.120	777.94 ppb	2.120	0.27%
Pb 220.353†	6541.0	810.43 ug/L	2.491	810.43 ppb	2.491	0.31%
S 181.975 Axial†	404.0	519.53 ug/L	10.732	519.53 ppb	10.732	2.07%
Sb 206.836†	85.8	19.401 ug/L	1.1800	19.401 ppb	1.1800	6.08%
Se 196.026†	-387.3	56.850 ug/L	1.5312	56.850 ppb	1.5312	2.69%
Si 251.611†	944865.2	29444 ug/L	38.6	29444 ppb	38.6	0.13%
Sn 189.927†	133.0	26.929 ug/L	1.8086	26.929 ppb	1.8086	6.72%
Sr 421.552†	11361.9	87.649 ug/L	0.5349	87.649 ppb	0.5349	0.61%
Ti 334.940†	1540415.5	2504.3 ug/L	2.59	2504.3 ppb	2.59	0.10%
Tl 190.801†	-105.7	-2.4259 ug/L	1.06286	-2.4259 ppb	1.06286	43.81%
U 409.014†	9984.1	273.55 ug/L	3.132	273.55 ppb	3.132	1.14%
V 292.402†	18762.5	121.23 ug/L	1.284	121.23 ppb	1.284	1.06%
Zn 213.857†	42050.1	393.93 ug/L	3.584	393.93 ppb	3.584	0.91%
SiO2†	953839.7	63595 ug/L	486.4	63595 ppb	486.4	0.76%

Sequence No.: 43

Sample ID: 245391007|945417|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 70

Date Collected: 2/16/2010 21:32:11

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245391007|945417|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4155.9	4155.9	97.8 %		21:34:03
1	Y RADIAL	5591.6	5591.6	127.0 %		21:34:03
1	Al 396.153Radial†	10604.6	11006.2	11010 ug/L	11010 ppb	21:34:03
1	Ca 317.933Radial†	1965.6	1992.2	3716.2 ug/L	3716.2 ppb	21:34:23
1	Fe 238.204 Radial†	9708.2	9920.1	105430 ug/L	105430 ppb	21:34:03
1	K 766.490 Radial†	22634.4	19980.4	4030.2 ug/L	4030.2 ppb	21:34:03
1	Mg 279.077 IEC†	42.2	40.5	1452.3 ug/L	1452.3 ppb	21:34:23
1	Na 589.592 Radial†	7114.1	7069.7	2358.2 ug/L	2358.2 ppb	21:34:03
1	Sr 421.552†	2576.1	2545.2	19.624 ug/L	19.624 ppb	21:34:03
1	Sc 361.383	836829.9	836829.9	98.450 %		21:35:21
1	Y 371.029	885315.5	885315.5	125.98 %		21:35:21
1	Ag 328.068†	-5753.0	-6071.3	6.7417 ug/L	6.7417 ppb	21:35:26
1	As 188.979†	-50.2	-22.7	28.759 ug/L	28.759 ppb	21:35:46
1	B 249.677†	354.4	841.9	2.6186 ug/L	2.6186 ppb	21:35:26
1	Ba 233.527†	26865.1	27269.3	224.71 ug/L	224.71 ppb	21:35:26
1	Be 313.107†	-1058.5	3264.0	4.7694 ug/L	4.7694 ppb	21:35:26
1	Cd 226.502†	606.8	811.8	-1.4227 ug/L	-1.4227 ppb	21:35:46
1	Co 228.616†	1025.5	1120.5	18.661 ug/L	18.661 ppb	21:35:46
1	Cr 267.716†	1577.8	1453.0	19.104 ug/L	19.104 ppb	21:35:46
1	Cu 324.752†	28595.8	20952.1	69.867 ug/L	69.867 ppb	21:35:26
1	Mn 257.610†	2083172.4	2115409.7	2450.2 ug/L	2450.2 ppb	21:35:21
1	Mo 202.031†	80.5	71.3	13.526 ug/L	13.526 ppb	21:35:46
1	Ni 231.604†	1427.5	1336.5	34.219 ug/L	34.219 ppb	21:35:46
1	P 214.914†	1459.3	1240.3	593.38 ug/L	593.38 ppb	21:35:46
1	Pb 220.353†	460.0	540.8	59.324 ug/L	59.324 ppb	21:35:46
1	S 181.975 Axial†	86.8	45.2	57.075 ug/L	57.075 ppb	21:35:46
1	Sb 206.836†	51.4	16.5	-0.6980 ug/L	-0.6980 ppb	21:35:46
1	Se 196.026†	-481.9	-466.2	68.103 ug/L	68.103 ppb	21:35:46
1	Si 251.611†	488540.0	495621.5	15445 ug/L	15445 ppb	21:35:21
1	Sn 189.927†	63.4	51.8	11.623 ug/L	11.623 ppb	21:35:46
1	Ti 334.940†	951162.7	967635.0	1573.2 ug/L	1573.2 ppb	21:35:21
1	Tl 190.801†	-122.1	-85.0	-2.2757 ug/L	-2.2757 ppb	21:35:46
1	U 409.014†	-12086.6	-8761.8	-260.95 ug/L	-260.95 ppb	21:35:21
1	V 292.402†	3395.5	5126.3	19.730 ug/L	19.730 ppb	21:35:46
1	Zn 213.857†	35816.5	35692.9	332.27 ug/L	332.27 ppb	21:35:26
1	SiO2†	493182.2	500329.6	33358 ug/L	33358 ppb	21:36:54
2	Sc Radial	4300.4	4300.4	101 %		21:34:28
2	Y RADIAL	5757.9	5757.9	130.8 %		21:34:28
2	Al 396.153Radial†	10967.8	11000.6	11005 ug/L	11005 ppb	21:34:28
2	Ca 317.933Radial†	1976.9	1935.8	3611.0 ug/L	3611.0 ppb	21:34:49
2	Fe 238.204 Radial†	10010.1	9884.8	105050 ug/L	105050 ppb	21:34:28
2	K 766.490 Radial†	23115.3	19677.6	3969.2 ug/L	3969.2 ppb	21:34:28
2	Mg 279.077 IEC†	40.4	37.3	1329.2 ug/L	1329.2 ppb	21:34:49
2	Na 589.592 Radial†	7268.5	6977.8	2327.5 ug/L	2327.5 ppb	21:34:28
2	Sr 421.552†	2643.9	2523.6	19.459 ug/L	19.459 ppb	21:34:28
2	Sc 361.383	843904.0	843904.0	99.282 %		21:35:52
2	Y 371.029	891127.5	891127.5	126.81 %		21:35:52
2	Ag 328.068†	-5748.9	-6018.1	6.8714 ug/L	6.8714 ppb	21:35:57
2	As 188.979†	-42.3	-14.3	32.220 ug/L	32.220 ppb	21:36:17
2	B 249.677†	358.2	842.7	2.6978 ug/L	2.6978 ppb	21:35:57
2	Ba 233.527†	26805.9	26980.9	222.35 ug/L	222.35 ppb	21:35:57
2	Be 313.107†	-1197.5	3133.0	4.7225 ug/L	4.7225 ppb	21:35:57
2	Cd 226.502†	582.1	781.8	-1.7358 ug/L	-1.7358 ppb	21:36:17
2	Co 228.616†	1043.8	1130.2	18.865 ug/L	18.865 ppb	21:36:17
2	Cr 267.716†	1580.4	1442.2	18.971 ug/L	18.971 ppb	21:36:17
2	Cu 324.752†	28577.3	20690.0	69.047 ug/L	69.047 ppb	21:35:57
2	Mn 257.610†	2099820.2	2114440.5	2449.1 ug/L	2449.1 ppb	21:35:52
2	Mo 202.031†	73.8	63.9	12.946 ug/L	12.946 ppb	21:36:17
2	Ni 231.604†	1411.7	1308.4	33.498 ug/L	33.498 ppb	21:36:17

2	P 214.914†	1456.5	1225.0	585.37 ug/L	585.37 ppb	21:36:17
2	Pb 220.353†	453.1	529.9	58.000 ug/L	58.000 ppb	21:36:17
2	S 181.975 Axial†	93.2	50.9	64.498 ug/L	64.498 ppb	21:36:17
2	Sb 206.836†	60.9	25.6	2.3980 ug/L	2.3980 ppb	21:36:17
2	Se 196.026†	-491.1	-471.3	63.910 ug/L	63.910 ppb	21:36:17
2	Si 251.611†	492062.6	495009.8	15426 ug/L	15426 ppb	21:35:52
2	Sn 189.927†	69.1	57.0	12.542 ug/L	12.542 ppb	21:36:17
2	Ti 334.940†	959529.8	967963.9	1573.7 ug/L	1573.7 ppb	21:35:52
2	Tl 190.801†	-139.2	-101.1	-7.3752 ug/L	-7.3752 ppb	21:36:17
2	U 409.014†	-12294.8	-8868.6	-263.94 ug/L	-263.94 ppb	21:35:52
2	V 292.402†	3325.6	5026.9	19.049 ug/L	19.049 ppb	21:36:17
2	Zn 213.857†	35655.5	35225.7	327.78 ug/L	327.78 ppb	21:35:57
2	SiO2†	495032.6	497994.2	33203 ug/L	33203 ppb	21:37:00
3	Sc Radial	4212.0	4212.0	99.1 %		21:34:54
3	Y RADIAL	5674.9	5674.9	128.9 %		21:34:54
3	Al 396.153Radial†	10836.4	11095.5	11100 ug/L	11100 ppb	21:34:54
3	Ca 317.933Radial†	1987.9	1987.9	3708.2 ug/L	3708.2 ppb	21:35:14
3	Fe 238.204 Radial†	9900.9	9982.3	106090 ug/L	106090 ppb	21:34:54
3	K 766.490 Radial†	22898.4	19938.2	4021.7 ug/L	4021.7 ppb	21:34:54
3	Mg 279.077 IEC†	44.4	42.1	1516.3 ug/L	1516.3 ppb	21:35:14
3	Na 589.592 Radial†	7180.0	7039.2	2348.0 ug/L	2348.0 ppb	21:34:54
3	Sr 421.552†	2560.8	2494.6	19.234 ug/L	19.234 ppb	21:34:54
3	Sc 361.383	850869.8	850869.8	100.10 %		21:36:23
3	Y 371.029	898847.1	898847.1	127.91 %		21:36:23
3	Ag 328.068†	-5654.5	-5876.5	7.8983 ug/L	7.8983 ppb	21:36:28
3	As 188.979†	-42.6	-14.3	32.413 ug/L	32.413 ppb	21:36:48
3	B 249.677†	266.6	748.2	0.3083 ug/L	0.3083 ppb	21:36:28
3	Ba 233.527†	26836.0	26790.0	220.83 ug/L	220.83 ppb	21:36:28
3	Be 313.107†	-1053.3	3286.9	4.7678 ug/L	4.7678 ppb	21:36:28
3	Cd 226.502†	610.4	805.3	-1.5682 ug/L	-1.5682 ppb	21:36:48
3	Co 228.616†	1032.0	1109.8	18.434 ug/L	18.434 ppb	21:36:48
3	Cr 267.716†	1565.3	1414.0	18.663 ug/L	18.663 ppb	21:36:48
3	Cu 324.752†	28687.5	20564.4	68.715 ug/L	68.715 ppb	21:36:28
3	Mn 257.610†	2108624.9	2105921.3	2439.3 ug/L	2439.3 ppb	21:36:23
3	Mo 202.031†	70.8	60.3	12.757 ug/L	12.757 ppb	21:36:48
3	Ni 231.604†	1401.2	1286.2	32.932 ug/L	32.932 ppb	21:36:48
3	P 214.914†	1476.7	1233.2	589.18 ug/L	589.18 ppb	21:36:48
3	Pb 220.353†	465.0	538.1	58.933 ug/L	58.933 ppb	21:36:48
3	S 181.975 Axial†	83.3	40.3	50.562 ug/L	50.562 ppb	21:36:48
3	Sb 206.836†	47.6	11.9	-2.2733 ug/L	-2.2733 ppb	21:36:48
3	Se 196.026†	-482.4	-458.6	74.693 ug/L	74.693 ppb	21:36:48
3	Si 251.611†	494225.2	493112.7	15367 ug/L	15367 ppb	21:36:23
3	Sn 189.927†	64.0	51.3	11.555 ug/L	11.555 ppb	21:36:48
3	Ti 334.940†	964398.4	964915.3	1568.8 ug/L	1568.8 ppb	21:36:23
3	Tl 190.801†	-122.9	-83.7	-1.9652 ug/L	-1.9652 ppb	21:36:48
3	U 409.014†	-12305.3	-8777.7	-261.48 ug/L	-261.48 ppb	21:36:23
3	V 292.402†	3377.6	5051.5	19.086 ug/L	19.086 ppb	21:36:48
3	Zn 213.857†	35766.3	35042.4	325.84 ug/L	325.84 ppb	21:36:28
3	SiO2†	494697.4	493577.2	32908 ug/L	32908 ppb	21:37:05

Mean Data: 245391007|945417|1

Analyte	Mean Corrected	Calib.	Std.Dev.	Sample	Std.Dev.	RSD
	Intensity	Conc. Units		Conc. Units		
Sc 361.383	843867.9	99.278 %	0.8259			0.83%
Sc Radial	4222.8	99.3 %	1.71			1.73%
Y 371.029	891763.4	126.90 %	0.966			0.76%
Y RADIAL	5674.8	128.9 %	1.89			1.46%
Ag 328.068†	-5988.6	7.1705 ug/L	0.63365	7.1705 ppb	0.63365	8.84%
Al 396.153Radial†	11034.1	11038 ug/L	53.3	11038 ppb	53.3	0.48%
As 188.979†	-17.1	31.131 ug/L	2.0565	31.131 ppb	2.0565	6.61%
B 249.677†	810.9	1.8749 ug/L	1.35732	1.8749 ppb	1.35732	72.39%
Ba 233.527†	27013.4	222.63 ug/L	1.952	222.63 ppb	1.952	0.88%
Be 313.107†	3228.0	4.7532 ug/L	0.02662	4.7532 ppb	0.02662	0.56%
Ca 317.933Radial†	1972.0	3678.5 ug/L	58.55	3678.5 ppb	58.55	1.59%
Cd 226.502†	799.7	-1.5756 ug/L	0.15666	-1.5756 ppb	0.15666	9.94%
Co 228.616†	1120.2	18.654 ug/L	0.2157	18.654 ppb	0.2157	1.16%
Cr 267.716†	1436.4	18.913 ug/L	0.2263	18.913 ppb	0.2263	1.20%
Cu 324.752†	20735.5	69.210 ug/L	0.5930	69.210 ppb	0.5930	0.86%
Fe 238.204 Radial†	9929.1	105520 ug/L	524.4	105520 ppb	524.4	0.50%
K 766.490 Radial†	19865.4	4007.0 ug/L	33.08	4007.0 ppb	33.08	0.83%

Mg 279.077 IEC†	39.9	1432.6 ug/L	95.07	1432.6 ppb	95.07	6.64%
Mn 257.610†	2111923.8	2446.2 ug/L	5.98	2446.2 ppb	5.98	0.24%
Mo 202.031†	65.2	13.077 ug/L	0.4007	13.077 ppb	0.4007	3.06%
Na 589.592 Radial†	7028.9	2344.6 ug/L	15.62	2344.6 ppb	15.62	0.67%
Ni 231.604†	1310.4	33.550 ug/L	0.6447	33.550 ppb	0.6447	1.92%
P 214.914†	1232.9	589.31 ug/L	4.003	589.31 ppb	4.003	0.68%
Pb 220.353†	536.3	58.752 ug/L	0.6803	58.752 ppb	0.6803	1.16%
S 181.975 Axial†	45.5	57.378 ug/L	6.9726	57.378 ppb	6.9726	12.15%
Sb 206.836†	18.0	-0.1911 ug/L	2.37652	-0.1911 ppb	2.37652	>999.9%
Se 196.026†	-465.4	68.902 ug/L	5.4357	68.902 ppb	5.4357	7.89%
Si 251.611†	494581.4	15412 ug/L	40.8	15412 ppb	40.8	0.26%
Sn 189.927†	53.4	11.907 ug/L	0.5513	11.907 ppb	0.5513	4.63%
Sr 421.552†	2521.1	19.439 ug/L	0.1958	19.439 ppb	0.1958	1.01%
Ti 334.940†	966838.1	1571.9 ug/L	2.72	1571.9 ppb	2.72	0.17%
Tl 190.801†	-89.9	-3.8720 ug/L	3.03781	-3.8720 ppb	3.03781	78.46%
U 409.014†	-8802.7	-262.13 ug/L	1.596	-262.13 ppb	1.596	0.61%
V 292.402†	5068.2	19.288 ug/L	0.3831	19.288 ppb	0.3831	1.99%
Zn 213.857†	35320.3	328.63 ug/L	3.302	328.63 ppb	3.302	1.00%
SiO2†	497300.3	33156 ug/L	228.6	33156 ppb	228.6	0.69%

Sequence No.: 44

Sample ID: 245391008|945417|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 71

Date Collected: 2/16/2010 21:39:16

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245391008|945417|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4080.6	4080.6	96.0 %		21:41:29
1	Y RADIAL	4660.7	4660.7	105.9 %		21:41:09
1	Al 396.153Radial†	41750.6	43652.0	43669 ug/L	43669 ppb	21:41:09
1	Ca 317.933Radial†	3582.9	3714.1	6928.2 ug/L	6928.2 ppb	21:41:29
1	Fe 238.204 Radial†	7761.5	8075.4	85823 ug/L	85823 ppb	21:41:09
1	K 766.490 Radial†	37031.6	35405.4	7143.9 ug/L	7143.9 ppb	21:41:09
1	Mg 279.077 IEC†	200.1	205.7	7854.8 ug/L	7854.8 ppb	21:41:29
1	Na 589.592 Radial†	2540.8	2439.8	813.80 ug/L	813.80 ppb	21:41:09
1	Sr 421.552†	11518.7	11909.6	91.906 ug/L	91.906 ppb	21:41:09
1	Sc 361.383	834614.1	834614.1	98.189 %		21:42:27
1	Y 371.029	714273.7	714273.7	101.64 %		21:42:27
1	Ag 328.068†	-4667.8	-4981.6	5.6928 ug/L	5.6928 ppb	21:42:32
1	As 188.979†	-56.8	-29.5	31.761 ug/L	31.761 ppb	21:42:52
1	B 249.677†	452.3	942.6	8.1181 ug/L	8.1181 ppb	21:42:32
1	Ba 233.527†	34531.7	35149.8	288.36 ug/L	288.36 ppb	21:42:32
1	Be 313.107†	-10564.5	-6420.3	3.9511 ug/L	3.9511 ppb	21:42:32
1	Cd 226.502†	469.2	673.3	-0.9957 ug/L	-0.9957 ppb	21:42:52
1	Co 228.616†	1900.0	2013.9	35.052 ug/L	35.052 ppb	21:42:52
1	Cr 267.716†	4276.6	4205.8	50.871 ug/L	50.871 ppb	21:42:52
1	Cu 324.752†	20328.3	12609.2	43.224 ug/L	43.224 ppb	21:42:32
1	Mn 257.610†	1336734.8	1360821.5	1577.7 ug/L	1577.7 ppb	21:42:27
1	Mo 202.031†	12.0	1.7	6.8719 ug/L	6.8719 ppb	21:42:52
1	Ni 231.604†	1425.6	1338.4	34.257 ug/L	34.257 ppb	21:42:52
1	P 214.914†	728.2	499.6	211.23 ug/L	211.23 ppb	21:42:52
1	Pb 220.353†	552.1	635.9	80.006 ug/L	80.006 ppb	21:42:52
1	S 181.975 Axial†	183.5	143.9	179.92 ug/L	179.92 ppb	21:42:52
1	Sb 206.836†	55.0	20.4	-4.1234 ug/L	-4.1234 ppb	21:42:52
1	Se 196.026†	-377.4	-361.1	67.333 ug/L	67.333 ppb	21:42:52
1	Si 251.611†	876592.2	892149.0	27802 ug/L	27802 ppb	21:42:27
1	Sn 189.927†	-44.5	-57.9	-7.8853 ug/L	-7.8853 ppb	21:42:52
1	Ti 334.940†	1677450.0	1709883.9	2779.4 ug/L	2779.4 ppb	21:42:27
1	Tl 190.801†	-129.7	-93.0	0.7288 ug/L	0.7288 ppb	21:42:52
1	U 409.014†	-8189.8	-4825.7	-146.98 ug/L	-146.98 ppb	21:42:32
1	V 292.402†	19219.4	21251.3	138.35 ug/L	138.35 ppb	21:42:32
1	Zn 213.857†	17685.2	17323.7	155.96 ug/L	155.96 ppb	21:42:32
1	SiO2†	884856.2	900558.1	60043 ug/L	60043 ppb	21:44:01
2	Sc Radial	4056.2	4056.2	95.4 %		21:41:54
2	Y RADIAL	4499.7	4499.7	102.2 %		21:41:34
2	Al 396.153Radial†	40905.8	43028.0	43045 ug/L	43045 ppb	21:41:34
2	Ca 317.933Radial†	3575.4	3728.7	6955.4 ug/L	6955.4 ppb	21:41:54
2	Fe 238.204 Radial†	7603.6	7958.5	84581 ug/L	84581 ppb	21:41:34
2	K 766.490 Radial†	36472.0	35050.7	7072.3 ug/L	7072.3 ppb	21:41:34
2	Mg 279.077 IEC†	202.0	209.0	7982.6 ug/L	7982.6 ppb	21:41:54
2	Na 589.592 Radial†	2469.1	2380.6	794.06 ug/L	794.06 ppb	21:41:34
2	Sr 421.552†	11175.7	11622.2	89.687 ug/L	89.687 ppb	21:41:34
2	Sc 361.383	845271.6	845271.6	99.443 %		21:42:58
2	Y 371.029	723060.9	723060.9	102.89 %		21:42:58
2	Ag 328.068†	-4629.0	-4882.6	5.7367 ug/L	5.7367 ppb	21:43:03
2	As 188.979†	-58.5	-30.5	31.051 ug/L	31.051 ppb	21:43:23
2	B 249.677†	454.5	939.0	8.2363 ug/L	8.2363 ppb	21:43:03
2	Ba 233.527†	34570.2	34745.1	285.03 ug/L	285.03 ppb	21:43:03
2	Be 313.107†	-10792.3	-6513.7	3.9152 ug/L	3.9152 ppb	21:43:03
2	Cd 226.502†	456.8	654.9	-1.0820 ug/L	-1.0820 ppb	21:43:23
2	Co 228.616†	1900.4	1989.9	34.567 ug/L	34.567 ppb	21:43:23
2	Cr 267.716†	4299.6	4174.0	50.472 ug/L	50.472 ppb	21:43:23
2	Cu 324.752†	20226.0	12245.2	42.040 ug/L	42.040 ppb	21:43:03
2	Mn 257.610†	1351624.5	1358629.8	1575.0 ug/L	1575.0 ppb	21:42:58
2	Mo 202.031†	-0.0	-10.5	5.8707 ug/L	5.8707 ppb	21:43:23
2	Ni 231.604†	1443.5	1338.0	34.248 ug/L	34.248 ppb	21:43:23

2	P 214.914†	730.8	493.0	208.63 ug/L	208.63 ppb	21:43:23
2	Pb 220.353†	533.0	609.6	76.733 ug/L	76.733 ppb	21:43:23
2	S 181.975 Axial†	192.0	150.1	188.13 ug/L	188.13 ppb	21:43:23
2	Sb 206.836†	70.0	34.7	0.8068 ug/L	0.8068 ppb	21:43:23
2	Se 196.026†	-386.6	-365.4	60.774 ug/L	60.774 ppb	21:43:23
2	Si 251.611†	888178.3	892543.6	27814 ug/L	27814 ppb	21:42:58
2	Sn 189.927†	-24.5	-37.2	-4.1908 ug/L	-4.1908 ppb	21:43:23
2	Ti 334.940†	1698438.3	1709449.9	2778.7 ug/L	2778.7 ppb	21:42:58
2	Tl 190.801†	-131.9	-93.5	0.5645 ug/L	0.5645 ppb	21:43:23
2	U 409.014†	-8059.7	-4589.7	-140.13 ug/L	-140.13 ppb	21:43:03
2	V 292.402†	19244.2	21029.4	136.93 ug/L	136.93 ppb	21:43:03
2	Zn 213.857†	17684.5	17095.9	153.93 ug/L	153.93 ppb	21:43:03
2	SiO2†	891213.7	895588.9	59712 ug/L	59712 ppb	21:44:07
3	Sc Radial	4069.3	4069.3	95.7 %		21:42:20
3	Y RADIAL	4583.6	4583.6	104.1 %		21:42:00
3	Al 396.153Radial†	41405.2	43412.1	43429 ug/L	43429 ppb	21:42:00
3	Ca 317.933Radial†	3584.3	3725.9	6950.2 ug/L	6950.2 ppb	21:42:20
3	Fe 238.204 Radial†	7733.3	8068.4	85749 ug/L	85749 ppb	21:42:00
3	K 766.490 Radial†	36820.8	35292.5	7121.1 ug/L	7121.1 ppb	21:42:00
3	Mg 279.077 IEC†	201.5	207.8	7936.6 ug/L	7936.6 ppb	21:42:20
3	Na 589.592 Radial†	2528.6	2434.4	812.00 ug/L	812.00 ppb	21:42:00
3	Sr 421.552†	11315.6	11730.8	90.525 ug/L	90.525 ppb	21:42:00
3	Sc 361.383	847380.1	847380.1	99.691 %		21:43:29
3	Y 371.029	725502.3	725502.3	103.24 %		21:43:29
3	Ag 328.068†	-4719.7	-4962.0	5.7524 ug/L	5.7524 ppb	21:43:34
3	As 188.979†	-56.3	-28.1	32.340 ug/L	32.340 ppb	21:43:54
3	B 249.677†	385.7	868.8	6.3960 ug/L	6.3960 ppb	21:43:34
3	Ba 233.527†	34826.9	34916.1	286.45 ug/L	286.45 ppb	21:43:34
3	Be 313.107†	-10703.3	-6397.4	3.9623 ug/L	3.9623 ppb	21:43:34
3	Cd 226.502†	466.0	662.9	-1.1083 ug/L	-1.1083 ppb	21:43:54
3	Co 228.616†	1914.1	1998.9	34.737 ug/L	34.737 ppb	21:43:54
3	Cr 267.716†	4322.2	4185.9	50.633 ug/L	50.633 ppb	21:43:54
3	Cu 324.752†	20320.8	12289.7	42.239 ug/L	42.239 ppb	21:43:34
3	Mn 257.610†	1357488.4	1361129.7	1578.0 ug/L	1578.0 ppb	21:43:29
3	Mo 202.031†	6.7	-3.8	6.4603 ug/L	6.4603 ppb	21:43:54
3	Ni 231.604†	1483.3	1374.4	35.179 ug/L	35.179 ppb	21:43:54
3	P 214.914†	752.9	513.2	219.00 ug/L	219.00 ppb	21:43:54
3	Pb 220.353†	523.2	598.4	75.318 ug/L	75.318 ppb	21:43:54
3	S 181.975 Axial†	189.9	147.5	184.68 ug/L	184.68 ppb	21:43:54
3	Sb 206.836†	83.8	48.4	5.3896 ug/L	5.3896 ppb	21:43:54
3	Se 196.026†	-387.2	-365.0	64.769 ug/L	64.769 ppb	21:43:54
3	Si 251.611†	891181.2	893333.4	27838 ug/L	27838 ppb	21:43:29
3	Sn 189.927†	-32.6	-45.3	-5.6273 ug/L	-5.6273 ppb	21:43:54
3	Ti 334.940†	1703848.1	1710626.5	2780.6 ug/L	2780.6 ppb	21:43:29
3	Tl 190.801†	-128.2	-89.4	1.8731 ug/L	1.8731 ppb	21:43:54
3	U 409.014†	-8147.0	-4657.1	-142.18 ug/L	-142.18 ppb	21:43:34
3	V 292.402†	19340.8	21078.1	137.11 ug/L	137.11 ppb	21:43:34
3	Zn 213.857†	17885.4	17253.1	155.28 ug/L	155.28 ppb	21:43:34
3	SiO2†	883851.4	885973.6	59071 ug/L	59071 ppb	21:44:12

Mean Data: 245391008|945417|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	842421.9	99.107 %		0.8051			0.81%
Sc Radial	4068.7	95.7 %		0.29			0.30%
Y 371.029	720945.6	102.59 %		0.840			0.82%
Y RADIAL	4581.3	104.1 %		1.83			1.76%
Ag 328.068†	-4942.1	5.7273 ug/L		0.03088	5.7273 ppb	0.03088	0.54%
Al 396.153Radial†	43364.0	43381 ug/L		314.8	43381 ppb	314.8	0.73%
As 188.979†	-29.4	31.717 ug/L		0.6458	31.717 ppb	0.6458	2.04%
B 249.677†	916.8	7.5835 ug/L		1.03002	7.5835 ppb	1.03002	13.58%
Ba 233.527†	34937.0	286.61 ug/L		1.669	286.61 ppb	1.669	0.58%
Be 313.107†	-6443.8	3.9429 ug/L		0.02459	3.9429 ppb	0.02459	0.62%
Ca 317.933Radial†	3722.9	6944.6 ug/L		14.45	6944.6 ppb	14.45	0.21%
Cd 226.502†	663.7	-1.0620 ug/L		0.05887	-1.0620 ppb	0.05887	5.54%
Co 228.616†	2000.9	34.785 ug/L		0.2458	34.785 ppb	0.2458	0.71%
Cr 267.716†	4188.6	50.659 ug/L		0.2006	50.659 ppb	0.2006	0.40%
Cu 324.752†	12381.4	42.501 ug/L		0.6338	42.501 ppb	0.6338	1.49%
Fe 238.204 Radial†	8034.1	85384 ug/L		696.7	85384 ppb	696.7	0.82%
K 766.490 Radial†	35249.5	7112.4 ug/L		36.57	7112.4 ppb	36.57	0.51%

Mg 279.077 IEC†	207.5	7924.7 ug/L	64.77	7924.7 ppb	64.77	0.82%
Mn 257.610†	1360193.7	1576.9 ug/L	1.64	1576.9 ppb	1.64	0.10%
Mo 202.031†	-4.2	6.4010 ug/L	0.50327	6.4010 ppb	0.50327	7.86%
Na 589.592 Radial†	2418.2	806.62 ug/L	10.916	806.62 ppb	10.916	1.35%
Ni 231.604†	1350.3	34.561 ug/L	0.5349	34.561 ppb	0.5349	1.55%
P 214.914†	501.9	212.95 ug/L	5.395	212.95 ppb	5.395	2.53%
Pb 220.353†	614.6	77.352 ug/L	2.4046	77.352 ppb	2.4046	3.11%
S 181.975 Axial†	147.2	184.24 ug/L	4.123	184.24 ppb	4.123	2.24%
Sb 206.836†	34.5	0.6910 ug/L	4.75753	0.6910 ppb	4.75753	688.52%
Se 196.026†	-363.8	64.292 ug/L	3.3052	64.292 ppb	3.3052	5.14%
Si 251.611†	892675.3	27818 ug/L	18.8	27818 ppb	18.8	0.07%
Sn 189.927†	-46.8	-5.9011 ug/L	1.86242	-5.9011 ppb	1.86242	31.56%
Sr 421.552†	11754.2	90.706 ug/L	1.1206	90.706 ppb	1.1206	1.24%
Ti 334.940†	1709986.8	2779.6 ug/L	0.97	2779.6 ppb	0.97	0.03%
Tl 190.801†	-92.0	1.0555 ug/L	0.71283	1.0555 ppb	0.71283	67.54%
U 409.014†	-4690.8	-143.10 ug/L	3.513	-143.10 ppb	3.513	2.46%
V 292.402†	21119.6	137.46 ug/L	0.774	137.46 ppb	0.774	0.56%
Zn 213.857†	17224.2	155.06 ug/L	1.036	155.06 ppb	1.036	0.67%
SiO2†	894040.2	59608 ug/L	494.3	59608 ppb	494.3	0.83%

Sequence No.: 45
 Sample ID: 245391009|945417|1
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 72
 Date Collected: 2/16/2010 21:46:24
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 245391009|945417|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4258.7	4258.7	100 %		21:48:37
1	Y RADIAL	4957.4	4957.4	112.6 %		21:48:37
1	Al 396.153Radial†	69607.0	69639.1	69666 ug/L	69666 ppb	21:48:17
1	Ca 317.933Radial†	8777.5	8743.2	16309 ug/L	16309 ppb	21:48:17
1	Fe 238.204 Radial†	17494.7	17452.8	185480 ug/L	185480 ppb	21:48:17
1	K 766.490 Radial†	49556.4	46294.5	9338.4 ug/L	9338.4 ppb	21:48:17
1	Mg 279.077 IEC†	355.0	351.6	13387 ug/L	13387 ppb	21:48:37
1	Na 589.592 Radial†	4421.8	4206.6	1403.2 ug/L	1403.2 ppb	21:48:17
1	Sr 421.552†	18548.7	18425.0	142.14 ug/L	142.14 ppb	21:48:17
1	Sc 361.383	848538.9	848538.9	99.827 %		21:49:35
1	Y 371.029	779736.2	779736.2	110.96 %		21:49:35
1	Ag 328.068†	-10484.1	-10730.0	11.465 ug/L	11.465 ppb	21:49:40
1	As 188.979†	-75.6	-47.4	46.080 ug/L	46.080 ppb	21:50:00
1	B 249.677†	1310.2	1794.4	11.914 ug/L	11.914 ppb	21:49:40
1	Ba 233.527†	81935.7	82058.8	672.30 ug/L	672.30 ppb	21:49:40
1	Be 313.107†	18355.2	22726.1	14.264 ug/L	14.264 ppb	21:49:40
1	Cd 226.502†	1273.5	1471.2	-1.8883 ug/L	-1.8883 ppb	21:50:00
1	Co 228.616†	2941.7	3025.7	55.244 ug/L	55.244 ppb	21:50:00
1	Cr 267.716†	7570.0	7433.4	90.280 ug/L	90.280 ppb	21:49:40
1	Cu 324.752†	2235528.4	2231306.7	6841.4 ug/L	6841.4 ppb	21:49:35
1	Mn 257.610†	1990053.1	1992930.6	2316.4 ug/L	2316.4 ppb	21:49:35
1	Mo 202.031†	31.0	20.6	16.123 ug/L	16.123 ppb	21:50:00
1	Ni 231.604†	2938.3	2829.8	72.446 ug/L	72.446 ppb	21:50:00
1	P 214.914†	3220.2	2983.8	166.93 ug/L	166.93 ppb	21:49:40
1	Pb 220.353†	4951.1	5033.2	617.03 ug/L	617.03 ppb	21:50:00
1	S 181.975 Axial†	349.4	307.1	388.34 ug/L	388.34 ppb	21:50:00
1	Sb 206.836†	91.1	55.6	7.2504 ug/L	7.2504 ppb	21:50:00
1	Se 196.026†	-871.7	-849.8	104.17 ug/L	104.17 ppb	21:50:00
1	Si 251.611†	1058210.3	1059431.0	33014 ug/L	33014 ppb	21:49:35
1	Sn 189.927†	166.9	154.6	33.324 ug/L	33.324 ppb	21:50:00
1	Ti 334.940†	1599067.2	1603330.0	2606.9 ug/L	2606.9 ppb	21:49:35
1	Tl 190.801†	-159.8	-120.9	-6.1554 ug/L	-6.1554 ppb	21:50:00
1	U 409.014†	150.6	3666.1	82.803 ug/L	82.803 ppb	21:49:35
1	V 292.402†	21395.5	23109.8	138.06 ug/L	138.06 ppb	21:49:40
1	Zn 213.857†	46892.9	46286.4	414.29 ug/L	414.29 ppb	21:49:40
1	SiO2†	1054522.8	1055730.0	70389 ug/L	70389 ppb	21:51:09
2	Sc Radial	4259.8	4259.8	100 %		21:49:02
2	Y RADIAL	4958.8	4958.8	112.6 %		21:49:02
2	Al 396.153Radial†	70971.1	70982.1	71010 ug/L	71010 ppb	21:48:42
2	Ca 317.933Radial†	8945.1	8908.1	16617 ug/L	16617 ppb	21:48:42
2	Fe 238.204 Radial†	17801.5	17754.3	188690 ug/L	188690 ppb	21:48:42
2	K 766.490 Radial†	50382.2	47105.5	9502.0 ug/L	9502.0 ppb	21:48:42
2	Mg 279.077 IEC†	354.8	351.4	13373 ug/L	13373 ppb	21:49:02
2	Na 589.592 Radial†	4525.6	4309.1	1437.3 ug/L	1437.3 ppb	21:48:42
2	Sr 421.552†	18911.5	18782.2	144.90 ug/L	144.90 ppb	21:48:42
2	Sc 361.383	846003.3	846003.3	99.529 %		21:50:06
2	Y 371.029	778460.0	778460.0	110.78 %		21:50:06
2	Ag 328.068†	-10685.4	-10963.6	11.427 ug/L	11.427 ppb	21:50:11
2	As 188.979†	-76.7	-48.7	46.224 ug/L	46.224 ppb	21:50:31
2	B 249.677†	1347.1	1835.4	12.356 ug/L	12.356 ppb	21:50:11
2	Ba 233.527†	82775.6	83148.7	681.26 ug/L	681.26 ppb	21:50:11
2	Be 313.107†	18526.8	22953.7	14.338 ug/L	14.338 ppb	21:50:11
2	Cd 226.502†	1299.6	1501.3	-1.8659 ug/L	-1.8659 ppb	21:50:31
2	Co 228.616†	2958.9	3051.7	55.753 ug/L	55.753 ppb	21:50:31
2	Cr 267.716†	7571.4	7457.5	90.625 ug/L	90.625 ppb	21:50:11
2	Cu 324.752†	2225062.6	2227503.3	6829.9 ug/L	6829.9 ppb	21:50:06
2	Mn 257.610†	1979063.0	1987863.4	2310.9 ug/L	2310.9 ppb	21:50:06
2	Mo 202.031†	25.1	14.7	15.941 ug/L	15.941 ppb	21:50:31
2	Ni 231.604†	2945.7	2846.2	72.863 ug/L	72.863 ppb	21:50:31

2	P 214.914†	3272.5	3046.0	201.50 ug/L	201.50 ppb	21:50:11
2	Pb 220.353†	4975.3	5072.4	621.87 ug/L	621.87 ppb	21:50:31
2	S 181.975 Axial†	363.1	321.9	407.40 ug/L	407.40 ppb	21:50:31
2	Sb 206.836†	92.1	56.8	7.5775 ug/L	7.5775 ppb	21:50:31
2	Se 196.026†	-879.7	-860.5	108.32 ug/L	108.32 ppb	21:50:31
2	Si 251.611†	1051848.9	1056216.6	32914 ug/L	32914 ppb	21:50:06
2	Sn 189.927†	151.7	139.8	30.763 ug/L	30.763 ppb	21:50:31
2	Ti 334.940†	1591796.1	1600825.5	2602.9 ug/L	2602.9 ppb	21:50:06
2	Tl 190.801†	-149.4	-111.0	-3.0875 ug/L	-3.0875 ppb	21:50:31
2	U 409.014†	332.6	3849.3	87.644 ug/L	87.644 ppb	21:50:06
2	V 292.402†	21688.1	23468.1	140.19 ug/L	140.19 ppb	21:50:11
2	Zn 213.857†	47388.2	46924.8	420.05 ug/L	420.05 ppb	21:50:11
2	SiO2†	1055902.3	1060282.1	70692 ug/L	70692 ppb	21:51:15
3	Sc Radial	4264.0	4264.0	100 %		21:49:27
3	Y RADIAL	4960.4	4960.4	112.7 %		21:49:27
3	Al 396.153Radial†	70891.2	70832.3	70860 ug/L	70860 ppb	21:49:07
3	Ca 317.933Radial†	8940.8	8895.0	16593 ug/L	16593 ppb	21:49:07
3	Fe 238.204 Radial†	17772.2	17707.6	188190 ug/L	188190 ppb	21:49:07
3	K 766.490 Radial†	50452.5	47125.9	9506.1 ug/L	9506.1 ppb	21:49:07
3	Mg 279.077 IEC†	357.7	353.9	13473 ug/L	13473 ppb	21:49:27
3	Na 589.592 Radial†	4560.4	4339.3	1447.4 ug/L	1447.4 ppb	21:49:07
3	Sr 421.552†	18956.6	18808.5	145.10 ug/L	145.10 ppb	21:49:07
3	Sc 361.383	847235.1	847235.1	99.674 %		21:50:37
3	Y 371.029	778950.3	778950.3	110.85 %		21:50:37
3	Ag 328.068†	-10422.7	-10684.5	12.589 ug/L	12.589 ppb	21:50:42
3	As 188.979†	-72.0	-43.9	48.172 ug/L	48.172 ppb	21:51:03
3	B 249.677†	1303.4	1789.5	11.358 ug/L	11.358 ppb	21:50:42
3	Ba 233.527†	82028.7	82278.4	674.17 ug/L	674.17 ppb	21:50:42
3	Be 313.107†	18482.3	22881.9	14.316 ug/L	14.316 ppb	21:50:42
3	Cd 226.502†	1277.6	1477.3	-2.0956 ug/L	-2.0956 ppb	21:51:03
3	Co 228.616†	2980.2	3068.8	56.111 ug/L	56.111 ppb	21:51:03
3	Cr 267.716†	7498.2	7373.1	89.629 ug/L	89.629 ppb	21:50:42
3	Cu 324.752†	2227700.7	2226899.7	6828.0 ug/L	6828.0 ppb	21:50:37
3	Mn 257.610†	1986027.4	1991959.6	2315.5 ug/L	2315.5 ppb	21:50:37
3	Mo 202.031†	31.0	20.7	16.341 ug/L	16.341 ppb	21:51:03
3	Ni 231.604†	2913.6	2809.6	71.927 ug/L	71.927 ppb	21:51:03
3	P 214.914†	3251.1	3019.8	187.68 ug/L	187.68 ppb	21:50:42
3	Pb 220.353†	4968.1	5057.9	620.10 ug/L	620.10 ppb	21:51:03
3	S 181.975 Axial†	356.5	314.8	398.14 ug/L	398.14 ppb	21:51:03
3	Sb 206.836†	95.6	60.3	8.7826 ug/L	8.7826 ppb	21:51:03
3	Se 196.026†	-868.2	-847.7	114.16 ug/L	114.16 ppb	21:51:03
3	Si 251.611†	1055257.1	1058099.5	32973 ug/L	32973 ppb	21:50:37
3	Sn 189.927†	165.8	153.7	33.255 ug/L	33.255 ppb	21:51:03
3	Ti 334.940†	1595220.8	1601936.1	2604.7 ug/L	2604.7 ppb	21:50:37
3	Tl 190.801†	-160.8	-122.3	-6.5978 ug/L	-6.5978 ppb	21:51:03
3	U 409.014†	308.4	3824.6	87.000 ug/L	87.000 ppb	21:50:37
3	V 292.402†	21339.7	23086.9	137.51 ug/L	137.51 ppb	21:50:42
3	Zn 213.857†	46874.3	46340.0	414.43 ug/L	414.43 ppb	21:50:42
3	SiO2†	1064851.2	1067717.8	71188 ug/L	71188 ppb	21:51:21

Mean Data: 245391009|945417|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	847259.1	99.677 %	%	0.1492			0.15%
Sc Radial	4260.8	100 %	%	0.1			0.07%
Y 371.029	779048.8	110.86 %	%	0.092			0.08%
Y RADIAL	4958.9	112.6 %	%	0.03			0.03%
Ag 328.068†	-10792.7	11.827 ug/L	ug/L	0.6602	11.827 ppb	0.6602	5.58%
Al 396.153Radial†	70484.5	70512 ug/L	ug/L	736.3	70512 ppb	736.3	1.04%
As 188.979†	-46.7	46.826 ug/L	ug/L	1.1684	46.826 ppb	1.1684	2.50%
B 249.677†	1806.4	11.876 ug/L	ug/L	0.5002	11.876 ppb	0.5002	4.21%
Ba 233.527†	82495.3	675.91 ug/L	ug/L	4.724	675.91 ppb	4.724	0.70%
Be 313.107†	22853.9	14.306 ug/L	ug/L	0.0382	14.306 ppb	0.0382	0.27%
Ca 317.933Radial†	8848.8	16506 ug/L	ug/L	171.0	16506 ppb	171.0	1.04%
Cd 226.502†	1483.2	-1.9499 ug/L	ug/L	0.12665	-1.9499 ppb	0.12665	6.49%
Co 228.616†	3048.7	55.702 ug/L	ug/L	0.4357	55.702 ppb	0.4357	0.78%
Cr 267.716†	7421.3	90.178 ug/L	ug/L	0.5056	90.178 ppb	0.5056	0.56%
Cu 324.752†	2228569.9	6833.1 ug/L	ug/L	7.23	6833.1 ppb	7.23	0.11%
Fe 238.204 Radial†	17638.2	187450 ug/L	ug/L	1724.8	187450 ppb	1724.8	0.92%
K 766.490 Radial†	46842.0	9448.8 ug/L	ug/L	95.67	9448.8 ppb	95.67	1.01%

Mg 279.077 IEC†	352.3	13411 ug/L	53.8	13411 ppb	53.8	0.40%
Mn 257.610†	1990917.8	2314.3 ug/L	2.98	2314.3 ppb	2.98	0.13%
Mo 202.031†	18.7	16.135 ug/L	0.2003	16.135 ppb	0.2003	1.24%
Na 589.592 Radial†	4285.0	1429.3 ug/L	23.20	1429.3 ppb	23.20	1.62%
Ni 231.604†	2828.5	72.412 ug/L	0.4689	72.412 ppb	0.4689	0.65%
P 214.914†	3016.5	185.37 ug/L	17.399	185.37 ppb	17.399	9.39%
Pb 220.353†	5054.5	619.67 ug/L	2.448	619.67 ppb	2.448	0.40%
S 181.975 Axial†	314.6	397.96 ug/L	9.533	397.96 ppb	9.533	2.40%
Sb 206.836†	57.6	7.8702 ug/L	0.80689	7.8702 ppb	0.80689	10.25%
Se 196.026†	-852.7	108.88 ug/L	5.018	108.88 ppb	5.018	4.61%
Si 251.611†	1057915.7	32967 ug/L	50.3	32967 ppb	50.3	0.15%
Sn 189.927†	149.4	32.447 ug/L	1.4593	32.447 ppb	1.4593	4.50%
Sr 421.552†	18671.9	144.05 ug/L	1.653	144.05 ppb	1.653	1.15%
Ti 334.940†	1602030.5	2604.8 ug/L	2.02	2604.8 ppb	2.02	0.08%
Tl 190.801†	-118.1	-5.2802 ug/L	1.91180	-5.2802 ppb	1.91180	36.21%
U 409.014†	3780.0	85.816 ug/L	2.6288	85.816 ppb	2.6288	3.06%
V 292.402†	23221.6	138.59 ug/L	1.418	138.59 ppb	1.418	1.02%
Zn 213.857†	46517.1	416.25 ug/L	3.289	416.25 ppb	3.289	0.79%
SiO2†	1061243.3	70756 ug/L	403.5	70756 ppb	403.5	0.57%

Sequence No.: 46

Sample ID: 245391010|945417|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 73

Date Collected: 2/16/2010 21:53:32

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245391010|945417|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4256.6	4256.6	100 %		21:55:26
1	Y RADIAL	4900.2	4900.2	111.3 %		21:55:26
1	Al 396.153Radial†	62335.9	62411.3	62436 ug/L	62436 ppb	21:55:26
1	Ca 317.933Radial†	9998.4	9966.6	18592 ug/L	18592 ppb	21:55:26
1	Fe 238.204 Radial†	8917.4	8895.4	94537 ug/L	94537 ppb	21:55:26
1	K 766.490 Radial†	45354.8	42122.3	8495.6 ug/L	8495.6 ppb	21:55:26
1	Mg 279.077 IEC†	304.5	301.3	11539 ug/L	11539 ppb	21:55:46
1	Na 589.592 Radial†	1726.0	1516.6	505.88 ug/L	505.88 ppb	21:55:26
1	Sr 421.552†	16708.5	16596.3	128.01 ug/L	128.01 ppb	21:55:26
1	Sc 361.383	846053.0	846053.0	99.535 %		21:56:44
1	Y 371.029	762665.8	762665.8	108.53 %		21:56:44
1	Ag 328.068†	-4581.2	-4830.3	8.3507 ug/L	8.3507 ppb	21:56:49
1	As 188.979†	-31.7	-3.6	39.831 ug/L	39.831 ppb	21:57:09
1	B 249.677†	739.1	1224.4	13.373 ug/L	13.373 ppb	21:56:49
1	Ba 233.527†	125365.1	125932.5	1025.7 ug/L	1025.7 ppb	21:56:49
1	Be 313.107†	82747.5	87473.5	37.157 ug/L	37.157 ppb	21:56:49
1	Cd 226.502†	627.5	826.0	0.0988 ug/L	0.0988 ppb	21:57:09
1	Co 228.616†	1280.4	1365.2	22.923 ug/L	22.923 ppb	21:57:09
1	Cr 267.716†	5745.4	5622.6	67.115 ug/L	67.115 ppb	21:56:49
1	Cu 324.752†	1811885.7	1812263.2	5553.2 ug/L	5553.2 ppb	21:56:44
1	Mn 257.610†	2231316.1	2241179.1	2593.8 ug/L	2593.8 ppb	21:56:44
1	Mo 202.031†	-16.7	-27.3	5.5345 ug/L	5.5345 ppb	21:57:09
1	Ni 231.604†	2440.9	2338.8	59.889 ug/L	59.889 ppb	21:57:09
1	P 214.914†	3085.0	2857.4	422.83 ug/L	422.83 ppb	21:57:09
1	Pb 220.353†	9552.9	9671.1	1199.5 ug/L	1199.5 ppb	21:57:09
1	S 181.975 Axial†	302.0	260.5	328.81 ug/L	328.81 ppb	21:57:09
1	Sb 206.836†	105.2	70.1	14.063 ug/L	14.063 ppb	21:57:09
1	Se 196.026†	-459.1	-437.9	51.205 ug/L	51.205 ppb	21:57:09
1	Si 251.611†	1001158.4	1005227.1	31325 ug/L	31325 ppb	21:56:44
1	Sn 189.927†	10.9	-1.7	4.1186 ug/L	4.1186 ppb	21:57:09
1	Ti 334.940†	1354689.1	1362516.0	2215.7 ug/L	2215.7 ppb	21:56:44
1	Tl 190.801†	-155.2	-116.8	-6.5317 ug/L	-6.5317 ppb	21:57:09
1	U 409.014†	26455.4	30094.3	843.97 ug/L	843.97 ppb	21:56:44
1	V 292.402†	18047.0	19808.6	129.16 ug/L	129.16 ppb	21:56:49
1	Zn 213.857†	36005.4	35486.0	324.30 ug/L	324.30 ppb	21:56:49
1	SiO2†	999407.9	1003461.2	66904 ug/L	66904 ppb	21:58:18
2	Sc Radial	4255.6	4255.6	100 %		21:55:51
2	Y RADIAL	4863.1	4863.1	110.5 %		21:55:51
2	Al 396.153Radial†	62708.8	62799.0	62824 ug/L	62824 ppb	21:55:51
2	Ca 317.933Radial†	10058.5	10029.1	18708 ug/L	18708 ppb	21:55:51
2	Fe 238.204 Radial†	8978.8	8958.9	95212 ug/L	95212 ppb	21:55:51
2	K 766.490 Radial†	45811.6	42589.7	8589.9 ug/L	8589.9 ppb	21:55:51
2	Mg 279.077 IEC†	302.6	299.6	11470 ug/L	11470 ppb	21:56:11
2	Na 589.592 Radial†	1694.3	1485.4	495.46 ug/L	495.46 ppb	21:55:51
2	Sr 421.552†	16768.1	16659.9	128.50 ug/L	128.50 ppb	21:55:51
2	Sc 361.383	852125.1	852125.1	100.25 %		21:57:15
2	Y 371.029	766744.5	766744.5	109.11 %		21:57:15
2	Ag 328.068†	-4517.8	-4734.3	9.0224 ug/L	9.0224 ppb	21:57:20
2	As 188.979†	-24.3	4.1	43.261 ug/L	43.261 ppb	21:57:40
2	B 249.677†	742.9	1222.9	13.227 ug/L	13.227 ppb	21:57:20
2	Ba 233.527†	123662.2	123336.2	1004.7 ug/L	1004.7 ppb	21:57:20
2	Be 313.107†	81459.4	85596.3	36.481 ug/L	36.481 ppb	21:57:20
2	Cd 226.502†	651.1	844.9	0.2521 ug/L	0.2521 ppb	21:57:40
2	Co 228.616†	1301.7	1377.4	23.147 ug/L	23.147 ppb	21:57:40
2	Cr 267.716†	5701.5	5537.7	66.134 ug/L	66.134 ppb	21:57:20
2	Cu 324.752†	1828479.8	1815844.5	5564.1 ug/L	5564.1 ppb	21:57:15
2	Mn 257.610†	2252355.0	2246191.4	2599.7 ug/L	2599.7 ppb	21:57:15
2	Mo 202.031†	-6.6	-17.1	6.3446 ug/L	6.3446 ppb	21:57:40
2	Ni 231.604†	2435.0	2315.4	59.289 ug/L	59.289 ppb	21:57:40

2	P 214.914†	3135.7	2885.9	436.01 ug/L	436.01 ppb	21:57:40
2	Pb 220.353†	9529.4	9579.2	1188.1 ug/L	1188.1 ppb	21:57:40
2	S 181.975 Axial†	285.9	242.3	304.94 ug/L	304.94 ppb	21:57:40
2	Sb 206.836†	88.5	52.6	8.1318 ug/L	8.1318 ppb	21:57:40
2	Se 196.026†	-462.8	-438.3	53.148 ug/L	53.148 ppb	21:57:40
2	Si 251.611†	1011435.5	1008311.2	31421 ug/L	31421 ppb	21:57:15
2	Sn 189.927†	9.3	-3.4	3.8419 ug/L	3.8419 ppb	21:57:40
2	Ti 334.940†	1367931.4	1366027.0	2221.4 ug/L	2221.4 ppb	21:57:15
2	Tl 190.801†	-138.7	-99.3	-0.9124 ug/L	-0.9124 ppb	21:57:40
2	U 409.014†	26911.3	30359.6	851.43 ug/L	851.43 ppb	21:57:15
2	V 292.402†	17860.9	19493.9	126.80 ug/L	126.80 ppb	21:57:20
2	Zn 213.857†	35484.2	34708.3	316.60 ug/L	316.60 ppb	21:57:20
2	SiO2†	1001657.5	998550.3	66577 ug/L	66577 ppb	21:58:24
3	Sc Radial	4233.5	4233.5	99.6 %		21:56:16
3	Y RADIAL	4845.7	4845.7	110.1 %		21:56:16
3	Al 396.153Radial†	62243.8	62657.9	62682 ug/L	62682 ppb	21:56:16
3	Ca 317.933Radial†	9941.3	9963.8	18586 ug/L	18586 ppb	21:56:16
3	Fe 238.204 Radial†	8885.2	8911.6	94709 ug/L	94709 ppb	21:56:16
3	K 766.490 Radial†	45285.4	42299.4	8531.4 ug/L	8531.4 ppb	21:56:16
3	Mg 279.077 IEC†	304.8	303.3	11616 ug/L	11616 ppb	21:56:36
3	Na 589.592 Radial†	1732.6	1532.6	511.22 ug/L	511.22 ppb	21:56:16
3	Sr 421.552†	16646.4	16624.9	128.23 ug/L	128.23 ppb	21:56:16
3	Sc 361.383	843026.3	843026.3	99.179 %		21:57:46
3	Y 371.029	758700.5	758700.5	107.96 %		21:57:46
3	Ag 328.068†	-4462.7	-4727.3	8.8974 ug/L	8.8974 ppb	21:57:51
3	As 188.979†	-21.4	6.8	44.275 ug/L	44.275 ppb	21:58:11
3	B 249.677†	798.7	1287.3	14.822 ug/L	14.822 ppb	21:57:51
3	Ba 233.527†	123793.6	124800.1	1016.5 ug/L	1016.5 ppb	21:57:51
3	Be 313.107†	81611.6	86626.7	36.861 ug/L	36.861 ppb	21:57:51
3	Cd 226.502†	636.9	837.7	0.2188 ug/L	0.2188 ppb	21:58:11
3	Co 228.616†	1293.5	1383.1	23.278 ug/L	23.278 ppb	21:58:11
3	Cr 267.716†	5759.3	5657.3	67.519 ug/L	67.519 ppb	21:57:51
3	Cu 324.752†	1810381.3	1817282.0	5568.5 ug/L	5568.5 ppb	21:57:46
3	Mn 257.610†	2230270.2	2248173.1	2601.9 ug/L	2601.9 ppb	21:57:46
3	Mo 202.031†	-5.6	-16.1	6.3751 ug/L	6.3751 ppb	21:58:11
3	Ni 231.604†	2412.5	2319.0	59.381 ug/L	59.381 ppb	21:58:11
3	P 214.914†	3082.4	2866.0	424.41 ug/L	424.41 ppb	21:58:11
3	Pb 220.353†	9462.4	9614.3	1192.5 ug/L	1192.5 ppb	21:58:11
3	S 181.975 Axial†	301.2	260.8	329.07 ug/L	329.07 ppb	21:58:11
3	Sb 206.836†	109.8	75.0	15.706 ug/L	15.706 ppb	21:58:11
3	Se 196.026†	-461.3	-441.8	49.487 ug/L	49.487 ppb	21:58:11
3	Si 251.611†	1001323.2	1009004.5	31443 ug/L	31443 ppb	21:57:46
3	Sn 189.927†	0.6	-12.0	2.2603 ug/L	2.2603 ppb	21:58:11
3	Ti 334.940†	1353909.0	1366615.9	2222.3 ug/L	2222.3 ppb	21:57:46
3	Tl 190.801†	-149.8	-111.9	-4.9006 ug/L	-4.9006 ppb	21:58:11
3	U 409.014†	26499.7	30234.4	847.93 ug/L	847.93 ppb	21:57:46
3	V 292.402†	17891.1	19716.6	128.49 ug/L	128.49 ppb	21:57:51
3	Zn 213.857†	35446.8	35052.6	320.03 ug/L	320.03 ppb	21:57:51
3	SiO2†	1001054.3	1008726.2	67255 ug/L	67255 ppb	21:58:30

Mean Data: 245391010|945417|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	847068.1	99.654 %	0.5451			0.55%
Sc Radial	4248.6	99.9 %	0.31			0.31%
Y 371.029	762703.6	108.53 %	0.572			0.53%
Y RADIAL	4869.7	110.6 %	0.63			0.57%
Ag 328.068†	-4763.9	8.7568 ug/L	0.35723	8.7568 ppb	0.35723	4.08%
Al 396.153Radial†	62622.7	62647 ug/L	196.3	62647 ppb	196.3	0.31%
As 188.979†	2.4	42.456 ug/L	2.3289	42.456 ppb	2.3289	5.49%
B 249.677†	1244.9	13.807 ug/L	0.8817	13.807 ppb	0.8817	6.39%
Ba 233.527†	124689.6	1015.6 ug/L	10.56	1015.6 ppb	10.56	1.04%
Be 313.107†	86565.5	36.833 ug/L	0.3392	36.833 ppb	0.3392	0.92%
Ca 317.933Radial†	9986.5	18629 ug/L	68.9	18629 ppb	68.9	0.37%
Cd 226.502†	836.2	0.1899 ug/L	0.08064	0.1899 ppb	0.08064	42.47%
Co 228.616†	1375.2	23.116 ug/L	0.1791	23.116 ppb	0.1791	0.77%
Cr 267.716†	5605.9	66.923 ug/L	0.7126	66.923 ppb	0.7126	1.06%
Cu 324.752†	1815129.9	5561.9 ug/L	7.92	5561.9 ppb	7.92	0.14%
Fe 238.204 Radial†	8921.9	94819 ug/L	350.6	94819 ppb	350.6	0.37%
K 766.490 Radial†	42337.1	8539.0 ug/L	47.61	8539.0 ppb	47.61	0.56%

Mg 279.077 IEC†	301.4	11542 ug/L	72.8	11542 ppb	72.8	0.63%
Mn 257.610†	2245181.2	2598.4 ug/L	4.17	2598.4 ppb	4.17	0.16%
Mo 202.031†	-20.2	6.0847 ug/L	0.47674	6.0847 ppb	0.47674	7.84%
Na 589.592 Radial†	1511.5	504.19 ug/L	8.019	504.19 ppb	8.019	1.59%
Ni 231.604†	2324.4	59.520 ug/L	0.3229	59.520 ppb	0.3229	0.54%
P 214.914†	2869.8	427.75 ug/L	7.199	427.75 ppb	7.199	1.68%
Pb 220.353†	9621.6	1193.4 ug/L	5.74	1193.4 ppb	5.74	0.48%
S 181.975 Axial†	254.5	320.94 ug/L	13.857	320.94 ppb	13.857	4.32%
Sb 206.836†	65.9	12.634 ug/L	3.9843	12.634 ppb	3.9843	31.54%
Se 196.026†	-439.3	51.280 ug/L	1.8318	51.280 ppb	1.8318	3.57%
Si 251.611†	1007514.3	31397 ug/L	62.7	31397 ppb	62.7	0.20%
Sn 189.927†	-5.7	3.4069 ug/L	1.00265	3.4069 ppb	1.00265	29.43%
Sr 421.552†	16627.0	128.24 ug/L	0.246	128.24 ppb	0.246	0.19%
Ti 334.940†	1365053.0	2219.8 ug/L	3.60	2219.8 ppb	3.60	0.16%
Tl 190.801†	-109.3	-4.1149 ug/L	2.89087	-4.1149 ppb	2.89087	70.25%
U 409.014†	30229.4	847.77 ug/L	3.733	847.77 ppb	3.733	0.44%
V 292.402†	19673.0	128.15 ug/L	1.215	128.15 ppb	1.215	0.95%
Zn 213.857†	35082.3	320.31 ug/L	3.859	320.31 ppb	3.859	1.20%
SiO2†	1003579.2	66912 ug/L	339.3	66912 ppb	339.3	0.51%

Sequence No.: 47

Sample ID: 245391011|945417|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 74

Date Collected: 2/16/2010 22:00:41

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245391011|945417|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4299.6	4299.6	101 %		22:02:34
1	Y RADIAL	4976.6	4976.6	113.0 %		22:02:34
1	Al 396.153Radial†	54490.7	54031.8	54053 ug/L	54053 ppb	22:02:34
1	Ca 317.933Radial†	10676.4	10537.0	19656 ug/L	19656 ppb	22:02:34
1	Fe 238.204 Radial†	8763.1	8653.7	91969 ug/L	91969 ppb	22:02:34
1	K 766.490 Radial†	37481.9	33885.4	6832.0 ug/L	6832.0 ppb	22:02:34
1	Mg 279.077 IEC†	300.7	294.6	11281 ug/L	11281 ppb	22:02:54
1	Na 589.592 Radial†	8359.1	8057.2	2687.6 ug/L	2687.6 ppb	22:02:34
1	Sr 421.552†	18705.0	18403.1	141.95 ug/L	141.95 ppb	22:02:34
1	Sc 361.383	832942.9	832942.9	97.992 %		22:03:51
1	Y 371.029	764428.5	764428.5	108.78 %		22:03:51
1	Ag 328.068†	-5048.7	-5379.8	5.5055 ug/L	5.5055 ppb	22:03:51
1	As 188.979†	-26.9	0.9	34.732 ug/L	34.732 ppb	22:04:11
1	B 249.677†	328.9	817.6	4.2201 ug/L	4.2201 ppb	22:03:51
1	Ba 233.527†	60627.3	61850.7	505.21 ug/L	505.21 ppb	22:03:51
1	Be 313.107†	1116.7	5478.7	5.3714 ug/L	5.3714 ppb	22:03:51
1	Cd 226.502†	490.8	696.3	-1.3390 ug/L	-1.3390 ppb	22:04:11
1	Co 228.616†	1219.5	1323.3	23.342 ug/L	23.342 ppb	22:04:11
1	Cr 267.716†	14050.5	14188.7	167.08 ug/L	167.08 ppb	22:03:51
1	Cu 324.752†	18385.4	10668.0	37.655 ug/L	37.655 ppb	22:03:51
1	Mn 257.610†	1443816.1	1472828.2	1707.4 ug/L	1707.4 ppb	22:03:51
1	Mo 202.031†	42.4	32.8	9.8105 ug/L	9.8105 ppb	22:04:11
1	Ni 231.604†	3806.6	3771.0	96.575 ug/L	96.575 ppb	22:04:11
1	P 214.914†	768.6	542.4	233.69 ug/L	233.69 ppb	22:04:11
1	Pb 220.353†	261.6	340.5	45.299 ug/L	45.299 ppb	22:04:11
1	S 181.975 Axial†	464.0	430.6	552.70 ug/L	552.70 ppb	22:04:11
1	Sb 206.836†	59.8	25.3	1.2757 ug/L	1.2757 ppb	22:04:11
1	Se 196.026†	-443.8	-429.6	47.502 ug/L	47.502 ppb	22:04:11
1	Si 251.611†	990716.8	1010402.9	31487 ug/L	31487 ppb	22:03:51
1	Sn 189.927†	-98.2	-112.8	-15.691 ug/L	-15.691 ppb	22:04:11
1	Ti 334.940†	890589.2	910329.1	1481.3 ug/L	1481.3 ppb	22:03:51
1	Tl 190.801†	-106.6	-69.7	-1.8961 ug/L	-1.8961 ppb	22:04:11
1	U 409.014†	-11202.7	-7917.0	-235.75 ug/L	-235.75 ppb	22:03:51
1	V 292.402†	10859.0	12758.8	77.210 ug/L	77.210 ppb	22:03:51
1	Zn 213.857†	32806.8	32791.2	305.61 ug/L	305.61 ppb	22:03:51
1	SiO2†	1017442.1	1037668.6	69185 ug/L	69185 ppb	22:05:10
2	Sc Radial	4266.0	4266.0	100 %		22:02:59
2	Y RADIAL	4961.3	4961.3	112.7 %		22:02:59
2	Al 396.153Radial†	54639.4	54605.4	54627 ug/L	54627 ppb	22:02:59
2	Ca 317.933Radial†	10713.4	10657.2	19880 ug/L	19880 ppb	22:02:59
2	Fe 238.204 Radial†	8759.0	8718.0	92652 ug/L	92652 ppb	22:02:59
2	K 766.490 Radial†	37696.4	34391.6	6934.1 ug/L	6934.1 ppb	22:02:59
2	Mg 279.077 IEC†	303.7	299.9	11486 ug/L	11486 ppb	22:03:19
2	Na 589.592 Radial†	8281.8	8045.5	2683.6 ug/L	2683.6 ppb	22:02:59
2	Sr 421.552†	18745.9	18589.9	143.39 ug/L	143.39 ppb	22:02:59
2	Sc 361.383	839997.1	839997.1	98.822 %		22:04:17
2	Y 371.029	769988.9	769988.9	109.57 %		22:04:17
2	Ag 328.068†	-5228.6	-5518.5	5.0574 ug/L	5.0574 ppb	22:04:17
2	As 188.979†	-24.0	4.0	36.236 ug/L	36.236 ppb	22:04:37
2	B 249.677†	357.1	843.2	4.7127 ug/L	4.7127 ppb	22:04:17
2	Ba 233.527†	61088.2	61797.5	504.80 ug/L	504.80 ppb	22:04:17
2	Be 313.107†	1136.9	5489.6	5.3794 ug/L	5.3794 ppb	22:04:17
2	Cd 226.502†	492.8	694.2	-1.4335 ug/L	-1.4335 ppb	22:04:37
2	Co 228.616†	1232.2	1325.7	23.377 ug/L	23.377 ppb	22:04:37
2	Cr 267.716†	14176.0	14195.3	167.16 ug/L	167.16 ppb	22:04:17
2	Cu 324.752†	18724.3	10853.4	38.252 ug/L	38.252 ppb	22:04:17
2	Mn 257.610†	1455448.6	1472225.9	1706.7 ug/L	1706.7 ppb	22:04:17
2	Mo 202.031†	34.5	24.5	9.2478 ug/L	9.2478 ppb	22:04:37
2	Ni 231.604†	3764.6	3695.9	94.652 ug/L	94.652 ppb	22:04:37

2	P 214.914†	770.7	537.9	230.68 ug/L	230.68 ppb	22:04:37
2	Pb 220.353†	284.7	361.7	47.981 ug/L	47.981 ppb	22:04:37
2	S 181.975 Axial†	453.3	415.8	533.17 ug/L	533.17 ppb	22:04:37
2	Sb 206.836†	71.0	36.2	4.8869 ug/L	4.8869 ppb	22:04:37
2	Se 196.026†	-442.8	-424.8	52.545 ug/L	52.545 ppb	22:04:37
2	Si 251.611†	998875.8	1010168.7	31479 ug/L	31479 ppb	22:04:17
2	Sn 189.927†	-104.8	-118.6	-16.689 ug/L	-16.689 ppb	22:04:37
2	Ti 334.940†	899201.5	911411.7	1483.1 ug/L	1483.1 ppb	22:04:17
2	Tl 190.801†	-126.5	-88.9	-7.9560 ug/L	-7.9560 ppb	22:04:37
2	U 409.014†	-10899.5	-7514.3	-224.39 ug/L	-224.39 ppb	22:04:17
2	V 292.402†	10937.2	12744.8	77.025 ug/L	77.025 ppb	22:04:17
2	Zn 213.857†	33020.7	32726.5	304.89 ug/L	304.89 ppb	22:04:17
2	SiO2†	1005369.9	1016733.1	67789 ug/L	67789 ppb	22:05:16
3	Sc Radial	4230.2	4230.2	99.5 %		22:03:24
3	Y RADIAL	4954.9	4954.9	112.6 %		22:03:24
3	Al 396.153Radial†	54245.8	54670.2	54691 ug/L	54691 ppb	22:03:24
3	Ca 317.933Radial†	10629.6	10663.2	19891 ug/L	19891 ppb	22:03:24
3	Fe 238.204 Radial†	8676.7	8709.1	92557 ug/L	92557 ppb	22:03:24
3	K 766.490 Radial†	37517.5	34529.5	6961.9 ug/L	6961.9 ppb	22:03:24
3	Mg 279.077 IEC†	300.8	299.5	11472 ug/L	11472 ppb	22:03:44
3	Na 589.592 Radial†	8237.8	8071.1	2692.2 ug/L	2692.2 ppb	22:03:24
3	Sr 421.552†	18529.9	18530.7	142.93 ug/L	142.93 ppb	22:03:24
3	Sc 361.383	841837.8	841837.8	99.039 %		22:04:43
3	Y 371.029	771255.3	771255.3	109.75 %		22:04:43
3	Ag 328.068†	-5032.5	-5309.0	6.0381 ug/L	6.0381 ppb	22:04:43
3	As 188.979†	-36.8	-8.8	30.794 ug/L	30.794 ppb	22:05:03
3	B 249.677†	511.1	998.0	8.3680 ug/L	8.3680 ppb	22:04:43
3	Ba 233.527†	61249.3	61824.9	505.02 ug/L	505.02 ppb	22:04:43
3	Be 313.107†	1146.7	5497.0	5.3820 ug/L	5.3820 ppb	22:04:43
3	Cd 226.502†	481.2	681.4	-1.5744 ug/L	-1.5744 ppb	22:05:03
3	Co 228.616†	1241.0	1331.9	23.512 ug/L	23.512 ppb	22:05:03
3	Cr 267.716†	14178.9	14166.8	166.83 ug/L	166.83 ppb	22:04:43
3	Cu 324.752†	18708.6	10796.1	38.076 ug/L	38.076 ppb	22:04:43
3	Mn 257.610†	1458825.2	1472414.9	1706.9 ug/L	1706.9 ppb	22:04:43
3	Mo 202.031†	57.4	47.5	10.950 ug/L	10.950 ppb	22:05:03
3	Ni 231.604†	3817.4	3740.9	95.804 ug/L	95.804 ppb	22:05:03
3	P 214.914†	757.6	523.0	222.50 ug/L	222.50 ppb	22:05:03
3	Pb 220.353†	260.8	336.9	44.934 ug/L	44.934 ppb	22:05:03
3	S 181.975 Axial†	463.9	425.5	545.83 ug/L	545.83 ppb	22:05:03
3	Sb 206.836†	63.9	28.8	2.4530 ug/L	2.4530 ppb	22:05:03
3	Se 196.026†	-455.2	-436.3	45.534 ug/L	45.534 ppb	22:05:03
3	Si 251.611†	1001337.7	1010444.4	31488 ug/L	31488 ppb	22:04:43
3	Sn 189.927†	-102.2	-115.8	-16.178 ug/L	-16.178 ppb	22:05:03
3	Ti 334.940†	901148.5	911388.0	1483.1 ug/L	1483.1 ppb	22:04:43
3	Tl 190.801†	-129.2	-91.4	-8.7312 ug/L	-8.7312 ppb	22:05:03
3	U 409.014†	-11231.3	-7825.1	-233.21 ug/L	-233.21 ppb	22:04:43
3	V 292.402†	10949.5	12733.1	76.961 ug/L	76.961 ppb	22:04:43
3	Zn 213.857†	33151.0	32785.0	305.47 ug/L	305.47 ppb	22:04:43
3	SiO2†	1008736.7	1017908.0	67867 ug/L	67867 ppb	22:05:22

Mean Data: 245391011|945417|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	838259.3	98.618 %	0.5524			0.56%
Sc Radial	4265.3	100 %	0.8			0.81%
Y 371.029	768557.6	109.37 %	0.517			0.47%
Y RADIAL	4964.3	112.8 %	0.25			0.22%
Ag 328.068†	-5402.5	5.5337 ug/L	0.49097	5.5337 ppb	0.49097	8.87%
Al 396.153Radial†	54435.8	54457 ug/L	351.5	54457 ppb	351.5	0.65%
As 188.979†	-1.3	33.921 ug/L	2.8102	33.921 ppb	2.8102	8.28%
B 249.677†	886.2	5.7669 ug/L	2.26602	5.7669 ppb	2.26602	39.29%
Ba 233.527†	61824.4	505.01 ug/L	0.206	505.01 ppb	0.206	0.04%
Be 313.107†	5488.4	5.3776 ug/L	0.00554	5.3776 ppb	0.00554	0.10%
Ca 317.933Radial†	10619.2	19809 ug/L	132.8	19809 ppb	132.8	0.67%
Cd 226.502†	690.6	-1.4490 ug/L	0.11842	-1.4490 ppb	0.11842	8.17%
Co 228.616†	1327.0	23.411 ug/L	0.0899	23.411 ppb	0.0899	0.38%
Cr 267.716†	14183.6	167.03 ug/L	0.171	167.03 ppb	0.171	0.10%
Cu 324.752†	10772.5	37.994 ug/L	0.3071	37.994 ppb	0.3071	0.81%
Fe 238.204 Radial†	8693.6	92393 ug/L	370.3	92393 ppb	370.3	0.40%
K 766.490 Radial†	34268.8	6909.4 ug/L	68.42	6909.4 ppb	68.42	0.99%

Mg 279.077 IEC†	298.0	11413 ug/L	114.3	11413 ppb	114.3	1.00%
Mn 257.610†	1472489.7	1707.0 ug/L	0.32	1707.0 ppb	0.32	0.02%
Mo 202.031†	34.9	10.003 ug/L	0.8672	10.003 ppb	0.8672	8.67%
Na 589.592 Radial†	8057.9	2687.8 ug/L	4.28	2687.8 ppb	4.28	0.16%
Ni 231.604†	3736.0	95.677 ug/L	0.9680	95.677 ppb	0.9680	1.01%
P 214.914†	534.4	228.96 ug/L	5.792	228.96 ppb	5.792	2.53%
Pb 220.353†	346.4	46.072 ug/L	1.6639	46.072 ppb	1.6639	3.61%
S 181.975 Axial†	424.0	543.90 ug/L	9.905	543.90 ppb	9.905	1.82%
Sb 206.836†	30.1	2.8718 ug/L	1.84166	2.8718 ppb	1.84166	64.13%
Se 196.026†	-430.2	48.527 ug/L	3.6159	48.527 ppb	3.6159	7.45%
Si 251.611†	1010338.7	31485 ug/L	4.6	31485 ppb	4.6	0.01%
Sn 189.927†	-115.7	-16.186 ug/L	0.4993	-16.186 ppb	0.4993	3.08%
Sr 421.552†	18507.9	142.76 ug/L	0.736	142.76 ppb	0.736	0.52%
Ti 334.940†	911042.9	1482.5 ug/L	1.01	1482.5 ppb	1.01	0.07%
Tl 190.801†	-83.3	-6.1944 ug/L	3.74256	-6.1944 ppb	3.74256	60.42%
U 409.014†	-7752.1	-231.12 ug/L	5.963	-231.12 ppb	5.963	2.58%
V 292.402†	12745.6	77.065 ug/L	0.1296	77.065 ppb	0.1296	0.17%
Zn 213.857†	32767.6	305.33 ug/L	0.382	305.33 ppb	0.382	0.13%
SiO2†	1024103.3	68280 ug/L	784.3	68280 ppb	784.3	1.15%

Sequence No.: 48

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 2/16/2010 22:07:32

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	4059.7	4059.7	95.5 %		22:09:44
1	Y RADIAL	4222.0	4222.0	95.91 %		22:09:24
1	Al 396.153Radial†	4686.3	5066.0	5044.6 ug/L	5044.6 ppb	22:09:24
1	Ca 317.933Radial†	2617.3	2722.2	5077.9 ug/L	5077.9 ppb	22:09:44
1	Fe 238.204 Radial†	499.5	513.0	5466.8 ug/L	5466.8 ppb	22:09:44
1	K 766.490 Radial†	26902.4	24997.9	5039.5 ug/L	5039.5 ppb	22:09:24
1	Mg 279.077 IEC†	135.1	138.8	5358.3 ug/L	5358.3 ppb	22:09:44
1	Na 589.592 Radial†	31490.7	32766.8	10930 ug/L	10930 ppb	22:09:24
1	Sr 421.552†	64578.4	67530.2	521.38 ug/L	521.38 ppb	22:09:24
1	Sc 361.383	841574.7	841574.7	99.008 %		22:10:42
1	Y 371.029	673588.0	673588.0	95.853 %		22:10:42
1	Ag 328.068†	100691.4	101472.8	490.55 ug/L	490.55 ppb	22:10:47
1	As 188.979†	1109.6	1149.0	487.87 ug/L	487.87 ppb	22:11:07
1	B 249.677†	20235.3	20920.0	489.87 ug/L	489.87 ppb	22:10:47
1	Ba 233.527†	60104.0	60687.5	493.99 ug/L	493.99 ppb	22:10:47
1	Be 313.107†	1339020.5	1356779.1	499.48 ug/L	499.48 ppb	22:10:42
1	Cd 226.502†	40580.7	41182.9	481.44 ug/L	481.44 ppb	22:10:47
1	Co 228.616†	23425.8	23739.4	495.08 ug/L	495.08 ppb	22:10:47
1	Cr 267.716†	40979.3	41240.3	480.39 ug/L	480.39 ppb	22:10:47
1	Cu 324.752†	168824.5	162422.3	497.31 ug/L	497.31 ppb	22:10:47
1	Mn 257.610†	433726.3	437503.3	504.93 ug/L	504.93 ppb	22:10:42
1	Mo 202.031†	6424.5	6478.4	481.87 ug/L	481.87 ppb	22:11:07
1	Ni 231.604†	18941.1	19017.4	486.82 ug/L	486.82 ppb	22:10:47
1	P 214.914†	4531.7	4335.1	2308.0 ug/L	2308.0 ppb	22:11:07
1	Pb 220.353†	3749.9	3861.0	479.86 ug/L	479.86 ppb	22:11:07
1	S 181.975 Axial†	790.0	755.0	985.84 ug/L	985.84 ppb	22:11:07
1	Sb 206.836†	1422.5	1401.0	491.46 ug/L	491.46 ppb	22:11:07
1	Se 196.026†	804.3	835.7	506.72 ug/L	506.72 ppb	22:11:07
1	Si 251.611†	79900.4	80088.8	2489.8 ug/L	2489.8 ppb	22:10:47
1	Sn 189.927†	2671.2	2685.3	482.37 ug/L	482.37 ppb	22:11:07
1	Ti 334.940†	300096.0	304596.5	494.93 ug/L	494.93 ppb	22:10:47
1	Tl 190.801†	1509.7	1564.0	497.06 ug/L	497.06 ppb	22:11:07
1	U 409.014†	13096.9	16743.3	473.93 ug/L	473.93 ppb	22:10:47
1	V 292.402†	64118.4	66438.3	487.52 ug/L	487.52 ppb	22:10:47
1	Zn 213.857†	50696.6	50516.9	488.44 ug/L	488.44 ppb	22:10:47
1	SiO2†	78904.0	79075.2	5259.1 ug/L	5259.1 ppb	22:12:14
2	Sc Radial	4061.7	4061.7	95.5 %		22:10:09
2	Y RADIAL	4303.1	4303.1	97.75 %		22:09:49
2	Al 396.153Radial†	4734.9	5114.5	5093.0 ug/L	5093.0 ppb	22:09:49
2	Ca 317.933Radial†	2612.1	2715.5	5065.4 ug/L	5065.4 ppb	22:10:09
2	Fe 238.204 Radial†	501.0	514.3	5480.4 ug/L	5480.4 ppb	22:10:09
2	K 766.490 Radial†	27203.8	25299.3	5100.3 ug/L	5100.3 ppb	22:09:49
2	Mg 279.077 IEC†	127.9	131.2	5065.7 ug/L	5065.7 ppb	22:10:09
2	Na 589.592 Radial†	31654.7	32922.1	10981 ug/L	10981 ppb	22:09:49
2	Sr 421.552†	65173.3	68119.2	525.93 ug/L	525.93 ppb	22:09:49
2	Sc 361.383	835912.7	835912.7	98.342 %		22:11:13
2	Y 371.029	668417.9	668417.9	95.118 %		22:11:13
2	Ag 328.068†	101090.5	102567.5	495.82 ug/L	495.82 ppb	22:11:18
2	As 188.979†	1118.2	1165.4	494.81 ug/L	494.81 ppb	22:11:38
2	B 249.677†	20459.3	21286.2	498.46 ug/L	498.46 ppb	22:11:18
2	Ba 233.527†	60400.0	61399.7	499.78 ug/L	499.78 ppb	22:11:18
2	Be 313.107†	1326028.9	1352729.0	498.00 ug/L	498.00 ppb	22:11:13
2	Cd 226.502†	40703.1	41585.0	486.15 ug/L	486.15 ppb	22:11:18
2	Co 228.616†	23577.3	24053.8	501.64 ug/L	501.64 ppb	22:11:18
2	Cr 267.716†	41102.8	41646.2	485.11 ug/L	485.11 ppb	22:11:18
2	Cu 324.752†	170139.8	164914.8	504.94 ug/L	504.94 ppb	22:11:18
2	Mn 257.610†	429961.3	436642.0	503.95 ug/L	503.95 ppb	22:11:13
2	Mo 202.031†	6424.5	6522.3	485.13 ug/L	485.13 ppb	22:11:38
2	Ni 231.604†	18922.5	19128.1	489.65 ug/L	489.65 ppb	22:11:18

2	P 214.914†	4531.7	4366.2	2323.8 ug/L	2323.8 ppb	22:11:38
2	Pb 220.353†	3730.0	3866.4	480.54 ug/L	480.54 ppb	22:11:38
2	S 181.975 Axial†	793.1	763.6	997.00 ug/L	997.00 ppb	22:11:38
2	Sb 206.836†	1433.4	1421.9	498.59 ug/L	498.59 ppb	22:11:38
2	Se 196.026†	808.0	845.0	512.19 ug/L	512.19 ppb	22:11:38
2	Si 251.611†	80559.1	81305.3	2527.7 ug/L	2527.7 ppb	22:11:18
2	Sn 189.927†	2662.5	2694.8	484.06 ug/L	484.06 ppb	22:11:38
2	Ti 334.940†	301881.3	308464.9	501.23 ug/L	501.23 ppb	22:11:18
2	Tl 190.801†	1511.3	1575.8	500.82 ug/L	500.82 ppb	22:11:38
2	U 409.014†	13490.6	17233.3	487.84 ug/L	487.84 ppb	22:11:18
2	V 292.402†	64351.2	67113.6	492.47 ug/L	492.47 ppb	22:11:18
2	Zn 213.857†	50842.5	51012.1	493.25 ug/L	493.25 ppb	22:11:18
2	SiO2†	78744.5	79452.9	5284.2 ug/L	5284.2 ppb	22:12:19
3	Sc Radial	4067.0	4067.0	95.7 %		22:10:34
3	Y RADIAL	4274.5	4274.5	97.10 %		22:10:14
3	Al 396.153Radial†	4674.6	5045.0	5023.2 ug/L	5023.2 ppb	22:10:14
3	Ca 317.933Radial†	2618.7	2718.8	5071.6 ug/L	5071.6 ppb	22:10:34
3	Fe 238.204 Radial†	498.8	511.3	5448.6 ug/L	5448.6 ppb	22:10:34
3	K 766.490 Radial†	26943.8	24990.4	5038.0 ug/L	5038.0 ppb	22:10:14
3	Mg 279.077 IEC†	134.7	138.1	5333.9 ug/L	5333.9 ppb	22:10:34
3	Na 589.592 Radial†	31428.1	32642.0	10888 ug/L	10888 ppb	22:10:14
3	Sr 421.552†	64729.8	67566.5	521.66 ug/L	521.66 ppb	22:10:14
3	Sc 361.383	829364.8	829364.8	97.571 %		22:11:44
3	Y 371.029	664180.7	664180.7	94.515 %		22:11:44
3	Ag 328.068†	100021.3	102283.3	494.45 ug/L	494.45 ppb	22:11:49
3	As 188.979†	1119.5	1175.7	499.11 ug/L	499.11 ppb	22:12:09
3	B 249.677†	20131.5	21114.5	494.44 ug/L	494.44 ppb	22:11:49
3	Ba 233.527†	59826.0	61296.3	498.94 ug/L	498.94 ppb	22:11:49
3	Be 313.107†	1316532.6	1353641.9	498.33 ug/L	498.33 ppb	22:11:44
3	Cd 226.502†	40192.0	41387.9	483.85 ug/L	483.85 ppb	22:11:49
3	Co 228.616†	23250.1	23907.7	498.61 ug/L	498.61 ppb	22:11:49
3	Cr 267.716†	40800.5	41666.4	485.35 ug/L	485.35 ppb	22:11:49
3	Cu 324.752†	167825.6	163908.9	501.86 ug/L	501.86 ppb	22:11:49
3	Mn 257.610†	425531.3	435553.6	502.68 ug/L	502.68 ppb	22:11:44
3	Mo 202.031†	6444.4	6594.4	490.49 ug/L	490.49 ppb	22:12:09
3	Ni 231.604†	18785.9	19140.0	489.95 ug/L	489.95 ppb	22:11:49
3	P 214.914†	4548.3	4419.6	2354.1 ug/L	2354.1 ppb	22:12:09
3	Pb 220.353†	3763.2	3930.4	488.47 ug/L	488.47 ppb	22:12:09
3	S 181.975 Axial†	789.0	765.7	999.78 ug/L	999.78 ppb	22:12:09
3	Sb 206.836†	1452.7	1453.2	509.41 ug/L	509.41 ppb	22:12:09
3	Se 196.026†	813.4	857.0	519.11 ug/L	519.11 ppb	22:12:09
3	Si 251.611†	79370.6	80734.0	2509.8 ug/L	2509.8 ppb	22:11:49
3	Sn 189.927†	2676.7	2730.7	490.51 ug/L	490.51 ppb	22:12:09
3	Ti 334.940†	298555.0	307479.4	499.61 ug/L	499.61 ppb	22:11:49
3	Tl 190.801†	1497.4	1573.8	500.17 ug/L	500.17 ppb	22:12:09
3	U 409.014†	13134.7	16976.8	480.56 ug/L	480.56 ppb	22:11:49
3	V 292.402†	63703.0	66966.0	491.47 ug/L	491.47 ppb	22:11:49
3	Zn 213.857†	50326.8	50891.8	492.08 ug/L	492.08 ppb	22:11:49
3	SiO2†	78944.4	80289.9	5339.8 ug/L	5339.8 ppb	22:12:24

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	835617.4	98.307 %	0.7189			0.73%
Sc Radial	4062.8	95.6 %	0.09			0.09%
Y 371.029	668728.9	95.162 %	0.6704			0.70%
Y RADIAL	4266.5	96.92 %	0.934			0.96%
Ag 328.068†	102107.9	493.61 ug/L	2.733	493.61 ppb	2.733	0.55%
QC value within limits for Ag 328.068 Recovery = 98.72%						
Al 396.153Radial†	5075.2	5053.6 ug/L	35.74	5053.6 ppb	35.74	0.71%
QC value within limits for Al 396.153Radial Recovery = 101.07%						
As 188.979†	1163.4	493.93 ug/L	5.673	493.93 ppb	5.673	1.15%
QC value within limits for As 188.979 Recovery = 98.79%						
B 249.677†	21106.9	494.26 ug/L	4.300	494.26 ppb	4.300	0.87%
QC value within limits for B 249.677 Recovery = 98.85%						
Ba 233.527†	61127.8	497.57 ug/L	3.130	497.57 ppb	3.130	0.63%
QC value within limits for Ba 233.527 Recovery = 99.51%						
Be 313.107†	1354383.3	498.60 ug/L	0.773	498.60 ppb	0.773	0.16%
QC value within limits for Be 313.107 Recovery = 99.72%						
Ca 317.933Radial†	2718.8	5071.6 ug/L	6.29	5071.6 ppb	6.29	0.12%

QC value within limits for Ca 317.933 Radial Recovery = 101.43%

Cd	226.502†	41385.3	483.81 ug/L	2.353	483.81 ppb	2.353	0.49%
QC value within limits for Cd 226.502 Recovery = 96.76%							
Co	228.616†	23900.3	498.44 ug/L	3.278	498.44 ppb	3.278	0.66%
QC value within limits for Co 228.616 Recovery = 99.69%							
Cr	267.716†	41517.6	483.62 ug/L	2.798	483.62 ppb	2.798	0.58%
QC value within limits for Cr 267.716 Recovery = 96.72%							
Cu	324.752†	163748.6	501.37 ug/L	3.836	501.37 ppb	3.836	0.77%
QC value within limits for Cu 324.752 Recovery = 100.27%							
Fe	238.204 Radial†	512.9	5465.3 ug/L	15.98	5465.3 ppb	15.98	0.29%
QC value within limits for Fe 238.204 Radial Recovery = 109.31%							
K	766.490 Radial†	25095.9	5059.3 ug/L	35.56	5059.3 ppb	35.56	0.70%
QC value within limits for K 766.490 Radial Recovery = 101.19%							
Mg	279.077 IEC†	136.0	5252.6 ug/L	162.35	5252.6 ppb	162.35	3.09%
QC value within limits for Mg 279.077 IEC Recovery = 105.05%							
Mn	257.610†	436566.3	503.85 ug/L	1.128	503.85 ppb	1.128	0.22%
QC value within limits for Mn 257.610 Recovery = 100.77%							
Mo	202.031†	6531.7	485.83 ug/L	4.350	485.83 ppb	4.350	0.90%
QC value within limits for Mo 202.031 Recovery = 97.17%							
Na	589.592 Radial†	32776.9	10933 ug/L	46.8	10933 ppb	46.8	0.43%
QC value within limits for Na 589.592 Radial Recovery = 109.33%							
Ni	231.604†	19095.2	488.81 ug/L	1.729	488.81 ppb	1.729	0.35%
QC value within limits for Ni 231.604 Recovery = 97.76%							
P	214.914†	4373.6	2328.6 ug/L	23.40	2328.6 ppb	23.40	1.00%
QC value within limits for P 214.914 Recovery = 93.14%							
Pb	220.353†	3886.0	482.96 ug/L	4.787	482.96 ppb	4.787	0.99%
QC value within limits for Pb 220.353 Recovery = 96.59%							
S	181.975 Axial†	761.4	994.21 ug/L	7.376	994.21 ppb	7.376	0.74%
QC value within limits for S 181.975 Axial Recovery = 99.42%							
Sb	206.836†	1425.4	499.82 ug/L	9.038	499.82 ppb	9.038	1.81%
QC value within limits for Sb 206.836 Recovery = 99.96%							
Se	196.026†	845.9	512.67 ug/L	6.212	512.67 ppb	6.212	1.21%
QC value within limits for Se 196.026 Recovery = 102.53%							
Si	251.611†	80709.4	2509.1 ug/L	18.94	2509.1 ppb	18.94	0.75%
QC value within limits for Si 251.611 Recovery = 100.37%							
Sn	189.927†	2703.6	485.65 ug/L	4.297	485.65 ppb	4.297	0.88%
QC value within limits for Sn 189.927 Recovery = 97.13%							
Sr	421.552†	67738.6	522.99 ug/L	2.549	522.99 ppb	2.549	0.49%
QC value within limits for Sr 421.552 Recovery = 104.60%							
Ti	334.940†	306846.9	498.59 ug/L	3.273	498.59 ppb	3.273	0.66%
QC value within limits for Ti 334.940 Recovery = 99.72%							
Tl	190.801†	1571.2	499.35 ug/L	2.011	499.35 ppb	2.011	0.40%
QC value within limits for Tl 190.801 Recovery = 99.87%							
U	409.014†	16984.5	480.78 ug/L	6.956	480.78 ppb	6.956	1.45%
QC value within limits for U 409.014 Recovery = 96.16%							
V	292.402†	66839.3	490.49 ug/L	2.617	490.49 ppb	2.617	0.53%
QC value within limits for V 292.402 Recovery = 98.10%							
Zn	213.857†	50806.9	491.26 ug/L	2.505	491.26 ppb	2.505	0.51%
QC value within limits for Zn 213.857 Recovery = 98.25%							
SiO2†		79606.0	5294.4 ug/L	41.33	5294.4 ppb	41.33	0.78%
QC value within limits for SiO2 Recovery = 99.01%							

All analyte(s) passed QC.

Sequence No.: 49

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 2/16/2010 22:14:34

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	3999.0	3999.0	94.1 %		22:16:46
1	Y RADIAL	4234.9	4234.9	96.20 %		22:16:26
1	Al 396.153Radial†	-104.6	47.9	47.844 ug/L	47.844 ppb	22:16:26
1	Ca 317.933Radial†	18.1	0.9	1.6951 ug/L	1.6951 ppb	22:16:46
1	Fe 238.204 Radial†	12.5	3.2	34.027 ug/L	34.027 ppb	22:16:46
1	K 766.490 Radial†	3086.0	108.9	21.998 ug/L	21.998 ppb	22:16:26
1	Mg 279.077 IEC†	-0.3	-3.1	-119.03 ug/L	-119.03 ppb	22:16:46
1	Na 589.592 Radial†	28.6	-176.7	-58.924 ug/L	-58.924 ppb	22:16:26
1	Sr 421.552†	95.2	11.4	0.0878 ug/L	0.0878 ppb	22:16:26
1	Sc 361.383	818463.0	818463.0	96.289 %		22:17:43
1	Y 371.029	664260.0	664260.0	94.526 %		22:17:43
1	Ag 328.068†	327.6	112.6	0.5502 ug/L	0.5502 ppb	22:17:43
1	As 188.979†	-33.3	-6.3	-2.6331 ug/L	-2.6331 ppb	22:18:03
1	B 249.677†	-360.2	107.8	2.5312 ug/L	2.5312 ppb	22:18:03
1	Ba 233.527†	2.5	-16.3	-0.1313 ug/L	-0.1313 ppb	22:18:03
1	Be 313.107†	-4095.7	85.6	0.0321 ug/L	0.0321 ppb	22:17:43
1	Cd 226.502†	-210.4	-23.0	-0.2723 ug/L	-0.2723 ppb	22:18:03
1	Co 228.616†	-71.6	4.5	0.0959 ug/L	0.0959 ppb	22:18:03
1	Cr 267.716†	51.4	-96.3	-1.1202 ug/L	-1.1202 ppb	22:18:03
1	Cu 324.752†	8177.9	399.0	1.2226 ug/L	1.2226 ppb	22:17:43
1	Mn 257.610†	737.7	196.4	0.2347 ug/L	0.2347 ppb	22:18:03
1	Mo 202.031†	29.7	20.4	1.5160 ug/L	1.5160 ppb	22:18:03
1	Ni 231.604†	107.6	-1.7	-0.0446 ug/L	-0.0446 ppb	22:18:03
1	P 214.914†	235.3	2.4	1.0896 ug/L	1.0896 ppb	22:18:03
1	Pb 220.353†	-48.7	23.0	2.8556 ug/L	2.8556 ppb	22:18:03
1	S 181.975 Axial†	57.8	17.1	22.373 ug/L	22.373 ppb	22:18:03
1	Sb 206.836†	45.4	11.5	3.9275 ug/L	3.9275 ppb	22:18:03
1	Se 196.026†	-22.9	-0.4	-0.1238 ug/L	-0.1238 ppb	22:18:03
1	Si 251.611†	688.2	102.4	3.1723 ug/L	3.1723 ppb	22:18:03
1	Sn 189.927†	16.5	4.6	0.8195 ug/L	0.8195 ppb	22:18:03
1	Ti 334.940†	-1263.5	180.7	0.3033 ug/L	0.3033 ppb	22:17:43
1	Tl 190.801†	-42.5	-5.0	-1.5840 ug/L	-1.5840 ppb	22:18:03
1	U 409.014†	-3326.1	60.8	1.7265 ug/L	1.7265 ppb	22:17:43
1	V 292.402†	-1631.4	-17.0	-0.1053 ug/L	-0.1053 ppb	22:17:43
1	Zn 213.857†	697.7	36.8	0.3527 ug/L	0.3527 ppb	22:18:03
1	SiO2†	657.9	63.7	4.2058 ug/L	4.2058 ppb	22:18:59
2	Sc Radial	4045.1	4045.1	95.2 %		22:17:11
2	Y RADIAL	4195.1	4195.1	95.29 %		22:16:51
2	Al 396.153Radial†	-118.5	34.5	34.493 ug/L	34.493 ppb	22:16:51
2	Ca 317.933Radial†	13.7	-3.9	-7.2610 ug/L	-7.2610 ppb	22:17:11
2	Fe 238.204 Radial†	9.0	-0.6	-6.9044 ug/L	-6.9044 ppb	22:17:11
2	K 766.490 Radial†	3123.4	110.7	22.366 ug/L	22.366 ppb	22:16:51
2	Mg 279.077 IEC†	5.3	2.9	110.50 ug/L	110.50 ppb	22:17:11
2	Na 589.592 Radial†	47.3	-157.4	-52.492 ug/L	-52.492 ppb	22:16:51
2	Sr 421.552†	33.7	-54.4	-0.4198 ug/L	-0.4198 ppb	22:16:51
2	Sc 361.383	824608.2	824608.2	97.012 %		22:18:08
2	Y 371.029	668157.7	668157.7	95.081 %		22:18:08
2	Ag 328.068†	145.8	-77.4	-0.3764 ug/L	-0.3764 ppb	22:18:08
2	As 188.979†	-31.3	-3.9	-1.6480 ug/L	-1.6480 ppb	22:18:28
2	B 249.677†	-365.0	105.6	2.4859 ug/L	2.4859 ppb	22:18:28
2	Ba 233.527†	38.6	21.0	0.1695 ug/L	0.1695 ppb	22:18:28
2	Be 313.107†	-4233.3	-24.6	-0.0085 ug/L	-0.0085 ppb	22:18:08
2	Cd 226.502†	-206.4	-17.2	-0.2009 ug/L	-0.2009 ppb	22:18:28
2	Co 228.616†	-75.3	1.3	0.0273 ug/L	0.0273 ppb	22:18:28
2	Cr 267.716†	65.2	-82.5	-0.9614 ug/L	-0.9614 ppb	22:18:28
2	Cu 324.752†	8212.1	371.0	1.1347 ug/L	1.1347 ppb	22:18:08
2	Mn 257.610†	682.2	133.5	0.1488 ug/L	0.1488 ppb	22:18:28
2	Mo 202.031†	12.0	1.9	0.1406 ug/L	0.1406 ppb	22:18:28
2	Ni 231.604†	94.1	-16.5	-0.4226 ug/L	-0.4226 ppb	22:18:28

2	P 214.914†	241.5	6.9	3.6271 ug/L	3.6271 ppb	22:18:28
2	Pb 220.353†	-73.9	-2.6	-0.3176 ug/L	-0.3176 ppb	22:18:28
2	S 181.975 Axial†	53.1	11.8	15.434 ug/L	15.434 ppb	22:18:28
2	Sb 206.836†	47.7	13.5	4.5779 ug/L	4.5779 ppb	22:18:28
2	Se 196.026†	-20.8	1.9	1.0644 ug/L	1.0644 ppb	22:18:28
2	Si 251.611†	651.0	58.7	1.8274 ug/L	1.8274 ppb	22:18:28
2	Sn 189.927†	15.0	2.8	0.5012 ug/L	0.5012 ppb	22:18:28
2	Ti 334.940†	-1314.2	138.2	0.2144 ug/L	0.2144 ppb	22:18:08
2	Tl 190.801†	-35.4	2.6	0.8305 ug/L	0.8305 ppb	22:18:28
2	U 409.014†	-3360.4	51.2	1.4576 ug/L	1.4576 ppb	22:18:08
2	V 292.402†	-1673.5	-47.8	-0.3382 ug/L	-0.3382 ppb	22:18:08
2	Zn 213.857†	676.6	9.7	0.0965 ug/L	0.0965 ppb	22:18:28
2	SiO2†	602.9	1.9	0.1257 ug/L	0.1257 ppb	22:19:04
3	Sc Radial	4013.9	4013.9	94.4 %		22:17:36
3	Y RADIAL	4275.9	4275.9	97.13 %		22:17:16
3	Al 396.153Radial†	-120.8	31.1	31.097 ug/L	31.097 ppb	22:17:16
3	Ca 317.933Radial†	18.6	1.4	2.6490 ug/L	2.6490 ppb	22:17:36
3	Fe 238.204 Radial†	10.7	1.3	13.695 ug/L	13.695 ppb	22:17:36
3	K 766.490 Radial†	3031.0	38.4	7.7754 ug/L	7.7754 ppb	22:17:16
3	Mg 279.077 IEC†	1.4	-1.2	-48.020 ug/L	-48.020 ppb	22:17:36
3	Na 589.592 Radial†	81.9	-120.3	-40.139 ug/L	-40.139 ppb	22:17:16
3	Sr 421.552†	69.5	-16.2	-0.1252 ug/L	-0.1252 ppb	22:17:16
3	Sc 361.383	828879.5	828879.5	97.514 %		22:18:34
3	Y 371.029	672730.1	672730.1	95.731 %		22:18:34
3	Ag 328.068†	289.9	69.6	0.3388 ug/L	0.3388 ppb	22:18:34
3	As 188.979†	-35.2	-7.8	-3.2609 ug/L	-3.2609 ppb	22:18:54
3	B 249.677†	-395.3	76.6	1.7979 ug/L	1.7979 ppb	22:18:54
3	Ba 233.527†	-12.9	-32.0	-0.2602 ug/L	-0.2602 ppb	22:18:54
3	Be 313.107†	-4152.2	81.1	0.0300 ug/L	0.0300 ppb	22:18:34
3	Cd 226.502†	-194.2	-3.7	-0.0445 ug/L	-0.0445 ppb	22:18:54
3	Co 228.616†	-61.6	15.6	0.3273 ug/L	0.3273 ppb	22:18:54
3	Cr 267.716†	81.9	-65.7	-0.7642 ug/L	-0.7642 ppb	22:18:54
3	Cu 324.752†	8219.7	335.2	1.0276 ug/L	1.0276 ppb	22:18:34
3	Mn 257.610†	689.7	137.5	0.1619 ug/L	0.1619 ppb	22:18:54
3	Mo 202.031†	16.8	6.8	0.5060 ug/L	0.5060 ppb	22:18:54
3	Ni 231.604†	115.9	5.3	0.1354 ug/L	0.1354 ppb	22:18:54
3	P 214.914†	230.2	-6.0	-3.5129 ug/L	-3.5129 ppb	22:18:54
3	Pb 220.353†	-85.5	-14.1	-1.7383 ug/L	-1.7383 ppb	22:18:54
3	S 181.975 Axial†	61.1	19.7	25.800 ug/L	25.800 ppb	22:18:54
3	Sb 206.836†	39.2	4.5	1.5367 ug/L	1.5367 ppb	22:18:54
3	Se 196.026†	-22.7	0.1	0.0812 ug/L	0.0812 ppb	22:18:54
3	Si 251.611†	664.5	69.1	2.1475 ug/L	2.1475 ppb	22:18:54
3	Sn 189.927†	13.2	1.0	0.1752 ug/L	0.1752 ppb	22:18:54
3	Ti 334.940†	-1389.1	68.4	0.1162 ug/L	0.1162 ppb	22:18:34
3	Tl 190.801†	-39.6	-1.5	-0.4881 ug/L	-0.4881 ppb	22:18:54
3	U 409.014†	-3468.8	-42.0	-1.1932 ug/L	-1.1932 ppb	22:18:34
3	V 292.402†	-1672.7	-38.0	-0.2732 ug/L	-0.2732 ppb	22:18:34
3	Zn 213.857†	700.2	30.3	0.2912 ug/L	0.2912 ppb	22:18:54
3	SiO2†	658.1	55.3	3.6732 ug/L	3.6732 ppb	22:19:09

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	823983.6	96.938 %	0.6160			0.64%
Sc Radial	4019.3	94.6 %	0.155			0.59%
Y 371.029	668382.6	95.113 %	0.6033			0.63%
Y RADIAL	4235.3	96.21 %	0.918			0.95%
Ag 328.068†	35.0	0.1709 ug/L	0.48559	0.1709 ppb	0.48559	284.15%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	37.8	37.811 ug/L	8.8527	37.811 ppb	8.8527	23.41%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-6.0	-2.5140 ug/L	0.81299	-2.5140 ppb	0.81299	32.34%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	96.7	2.2716 ug/L	0.41093	2.2716 ppb	0.41093	18.09%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	-9.1	-0.0740 ug/L	0.22049	-0.0740 ppb	0.22049	297.90%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	47.3	0.0179 ug/L	0.02289	0.0179 ppb	0.02289	128.11%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-0.5	-0.9723 ug/L	5.46702	-0.9723 ppb	5.46702	562.29%

Mg 279.077 IEC†	5530.0	213580 ug/L	1104.3	213580 ppb	1104.3	0.52%
Mn 257.610†	57222.5	57.324 ug/L	0.1473	57.324 ppb	0.1473	0.26%
Mo 202.031†	664.6	50.225 ug/L	0.5434	50.225 ppb	0.5434	1.08%
Na 589.592 Radial†	5665978.2	1889900 ug/L	31664.3	1889900 ppb	31664.3	1.68%
Ni 231.604†	1950.2	49.923 ug/L	0.5290	49.923 ppb	0.5290	1.06%
P 214.914†	421.7	220.91 ug/L	6.703	220.91 ppb	6.703	3.03%
Pb 220.353†	381.9	48.729 ug/L	1.0166	48.729 ppb	1.0166	2.09%
S 181.975 Axial†	154821.7	202350 ug/L	262.5	202350 ppb	262.5	0.13%
Sb 206.836†	193.2	66.440 ug/L	2.3586	66.440 ppb	2.3586	3.55%
Se 196.026†	88.0	53.349 ug/L	3.2224	53.349 ppb	3.2224	6.04%
Si 251.611†	51955.9	1618.5 ug/L	4.86	1618.5 ppb	4.86	0.30%
Sn 189.927†	17.9	13.373 ug/L	0.8893	13.373 ppb	0.8893	6.65%
Sr 421.552†	178837.6	1380.4 ug/L	8.88	1380.4 ppb	8.88	0.64%
Ti 334.940†	27270.9	35.801 ug/L	0.1514	35.801 ppb	0.1514	0.42%
Tl 190.801†	135.2	43.035 ug/L	3.3217	43.035 ppb	3.3217	7.72%
U 409.014†	1373.1	38.820 ug/L	1.1788	38.820 ppb	1.1788	3.04%
V 292.402†	6167.0	49.413 ug/L	0.6763	49.413 ppb	0.6763	1.37%
Zn 213.857†	5965.5	57.731 ug/L	0.1379	57.731 ppb	0.1379	0.24%
SiO2†	52133.6	3474.6 ug/L	12.76	3474.6 ppb	12.76	0.37%

ICPMS #5 Daily Performance Report

Sample ID: Sample

Sample Date/Time: Monday, February 15, 2010 09:29:40

Sample Description:

Method File: c:\elandata\Method\Daily2.mth

Dataset File: c:\elandata\Dataset\default\Sample.498

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	7663.5	7663.456	183.201	2.4
Mg	24.0	80446.5	80446.526	1406.481	1.7
Co	58.9	185881.8	185881.796	1828.731	1.0
Rh	102.9	331984.9	331984.897	3412.916	1.0
In	114.9	442302.5	442302.526	2761.177	0.6
Pb	208.0	335915.3	335915.332	1439.959	0.4
[> Ba	137.9	393831.4	393831.438	2895.607	0.7
[Ba++	69.0	8399.0	0.021	0.000	1.7
[> Ce	139.9	473929.9	473929.938	1678.067	0.4
[CeO	155.9	12978.9	0.027	0.001	2.0
Bkgd	220.0	20.2	20.200	2.992	14.8

Current Optimization File Data

Current Value	Description
0.89	Nebulizer Gas Flow
5.75	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	9	5.5	7681.7
Co	59	9	5.8	182033.1
In	115	9	6.0	440620.6

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	581	2072	0.640
Be	9.0	9.0	2051	2088	0.627
Mg	24.0	24.0	5681	2100	0.580
Mg	25.0	25.0	5945	2100	0.590
Mg	26.0	25.9	6152	2100	0.605
Co	58.9	58.9	14186	2125	0.605
Rh	102.9	102.9	24871	2180	0.603
In	114.9	114.9	27785	2200	0.593
Ce	139.9	139.9	33857	2220	0.602
Pb	206.0	206.0	49948	2305	0.624
Pb	207.0	207.0	50147	2240	0.640
Pb	208.0	208.0	50451	2265	0.719
U	238.1	238.0	57719	2275	0.748

ICPMS#5 - Summary Report

Sample ID: Blank

Sample Date/Time: Tuesday, February 16, 2010 01:31:13

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100215\Blank.316

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7		ug/L		89	
Be	9		ug/L		18	
B	11		ug/L		451	
Na	23		ug/L		16343	
Mg	24		ug/L		3000	
Al	27		ug/L		8669	
P	31		ug/L		6261	
K	39		ug/L		493052	
Ca	43		ug/L		289	
> Sc	45		ug/L		685402	
Ti	47		ug/L		390	
V	51		ug/L		276	
Cr	52		ug/L		2720	
Cr	53		ug/L		91418	
Mn	55		ug/L		1712	
Fe	57		ug/L		5980	
Co	59		ug/L		136	
Ni	60		ug/L		157	
Cu	63		ug/L		377	
Cu	65		ug/L		195	
Zn	66		ug/L		383	
Zn	67		ug/L		12375	
Zn	68		ug/L		1335	
> Ge	74		ug/L		546208	
As	75		ug/L		-671	
Se	77		ug/L		5964	
Se	82		ug/L		51	
Kr	83		ug/L		123	
Sr	88		ug/L		361	
Y	89		ug/L		99	
Mo	98		ug/L		159	
Ag	107		ug/L		89	
Cd	111		ug/L		33	
Cd	114		ug/L		78	
> In	115		ug/L		380905	
Sn	120		ug/L		301	
Sb	121		ug/L		441	
Sb	123		ug/L		344	
Ba	135		ug/L		64	
Ba	137		ug/L		95	
Ho	165		ug/L		25	
> Lu	175		ug/L		671508	
Tl	205		ug/L		3164	
Pb	208		ug/L		1175	
Bi	209		ug/L		66	
Th	232		ug/L		1447	
U	238		ug/L		1268	

Sample ID: Blank

Report Date/Time: Tuesday, February 16, 2010 01:33:57

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	0.9999
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	0.9999
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	0.9999
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, February 16, 2010 01:33:57

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QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	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, February 16, 2010 01:37:19

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100215\Standard 1.317

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Li	7	10.000	ug/L	1.676	17969	0.026
	Be	9	10.000	ug/L	2.805	3818	0.005
	B	11	20.000	ug/L	5.295	7702	0.010
	Na	23	1000.000	ug/L	6.211	3321082	4.734
	Mg	24	1000.000	ug/L	15.346	2480831	3.551
	Al	27	1000.000	ug/L	9.532	3201885	4.575
	P	31	1000.000	ug/L	0.616	206879	0.287
	K	39	1000.000	ug/L	2.902	5383121	6.990
	Ca	43	1000.000	ug/L	1.604	13821	0.019
>	Sc	45		ug/L		698266	698266.129
	Ti	47	10.000	ug/L	1.371	6910	0.009
	V	51	10.000	ug/L	5.475	77699	0.111
	Cr	52	10.000	ug/L	1.680	63974	0.088
	Cr	53		ug/L		94526	0.002
	Mn	55	10.000	ug/L	0.440	108285	0.153
	Fe	57	1000.000	ug/L	1.543	230398	0.321
	Co	59	10.000	ug/L	2.409	86542	0.124
	Ni	60	10.000	ug/L	2.782	19262	0.027
	Cu	63		ug/L		47044	0.067
	Cu	65	10.000	ug/L	1.491	22876	0.032
[	Zn	66	10.000	ug/L	3.848	15494	0.027
	Zn	67		ug/L		13663	0.002
	Zn	68		ug/L		12054	0.019
>	Ge	74		ug/L		564190	564190.371
	As	75	10.000	ug/L	3.409	14335	0.027
	Se	77		ug/L		7066	0.002
	Se	82	10.000	ug/L	3.299	1737	0.003
	Kr	83		ug/L		132	0.000
[	Sr	88	10.000	ug/L	2.355	205885	0.520
	Y	89		ug/L		134	0.000
	Mo	98	10.000	ug/L	3.176	46590	0.117
	Ag	107	10.000	ug/L	2.626	86603	0.219
	Cd	111	10.000	ug/L	1.311	21085	0.053
	Cd	114		ug/L		50022	0.126
>	In	115		ug/L		395507	395507.444
	Sn	120	10.000	ug/L	2.032	87996	0.222
	Sb	121	10.000	ug/L	2.707	69922	0.176
	Sb	123		ug/L		55052	0.138
[	Ba	135		ug/L		22466	0.032
	Ba	137	10.000	ug/L	0.793	39754	0.056
	Ho	165		ug/L		24	-0.000
>	Lu	175		ug/L		707569	707569.350
	Tl	205	10.000	ug/L	1.516	292273	0.408
	Pb	208	10.000	ug/L	0.720	513541	0.724
	Bi	209		ug/L		151	0.000
	Th	232	10.000	ug/L	1.021	633452	0.893
	U	238	10.000	ug/L	0.673	655851	0.925

Sample ID: Standard 1

Report Date/Time: Tuesday, February 16, 2010 01:40:01

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, February 16, 2010 01:40:01

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QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	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

ICPMS#5 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Tuesday, February 16, 2010 01:43:24

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100215\Standard 2.318

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	99.968	ug/L	1.901	183761	0.248
Be	9	99.961	ug/L	0.900	38808	0.052
B	11	199.999	ug/L	3.461	77355	0.104
Na	23	10009.842	ug/L	6.918	38899932	52.555
Mg	24	9996.744	ug/L	7.533	25462679	34.378
Al	27	10005.993	ug/L	4.429	36067466	48.696
P	31	9997.289	ug/L	6.124	2079026	2.795
K	39	10004.901	ug/L	4.249	55031444	73.536
Ca	43	10000.320	ug/L	1.543	144309	0.194
> Sc	45		ug/L		740759	740759.323
Ti	47	100.023	ug/L	1.458	71184	0.096
V	51	99.988	ug/L	2.886	811881	1.096
Cr	52	99.962	ug/L	2.528	627760	0.844
Cr	53		ug/L		169739	0.096
Mn	55	99.936	ug/L	2.382	1063733	1.434
Fe	57	9999.501	ug/L	1.831	2373516	3.196
Co	59	99.932	ug/L	2.618	857869	1.158
Ni	60	99.960	ug/L	1.617	194856	0.263
Cu	63		ug/L		467976	0.631
Cu	65	99.974	ug/L	2.497	234587	0.317
Zn	66	99.983	ug/L	0.897	157062	0.263
Zn	67		ug/L		36959	0.039
Zn	68		ug/L		113842	0.189
> Ge	74		ug/L		595251	595251.140
As	75	99.988	ug/L	1.628	155902	0.263
Se	77		ug/L		19304	0.022
Se	82	99.993	ug/L	1.366	17693	0.030
Kr	83		ug/L		224	0.000
Sr	88	99.894	ug/L	1.402	1869870	4.696
Y	89		ug/L		334	0.001
Mo	98	100.003	ug/L	0.395	469044	1.178
Ag	107	99.941	ug/L	1.929	822141	2.065
Cd	111	99.991	ug/L	0.350	210122	0.528
Cd	114		ug/L		489872	1.230
> In	115		ug/L		398068	398068.353
Sn	120	99.958	ug/L	1.004	846891	2.127
Sb	121	99.991	ug/L	0.831	693691	1.741
Sb	123		ug/L		546636	1.372
Ba	135		ug/L		223046	0.327
Ba	137	100.015	ug/L	0.235	387941	0.569
Ho	165		ug/L		32	0.000
> Lu	175		ug/L		681295	681294.752
Tl	205	99.853	ug/L	2.392	2425514	3.556
Pb	208	99.876	ug/L	0.764	4386106	6.436
Bi	209		ug/L		475	0.001
Th	232	99.858	ug/L	2.558	5318833	7.806
U	238	99.854	ug/L	3.356	5493266	8.063

Sample ID: Standard 2

Report Date/Time: Tuesday, February 16, 2010 01:46:05

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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

Sample ID: Standard 2

Report Date/Time: Tuesday, February 16, 2010 01:46:05

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					
L Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74					
As	75					
Se	77					
Se	82					
L Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115					
Sn	120					
Sb	121					
L Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175					
Tl	205					
Pb	208					
Bi	209					
Th	232					
L U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: Standard 2

Report Date/Time: Tuesday, February 16, 2010 01:46:05

Page 3

ICPMS#5 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Tuesday, February 16, 2010 01:49:28

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100215\QC Std 1.319

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	52.898	ug/L	1.623	97727	0.131
Be	9	53.207	ug/L	2.584	20755	0.028
B	11	110.198	ug/L	1.205	43003	0.057
Na	23	4576.599	ug/L	9.317	17910987	24.029
Mg	24	5186.113	ug/L	12.737	13255625	17.835
Al	27	5304.842	ug/L	17.252	19197290	25.817
P	31	5089.287	ug/L	3.790	1065013	1.423
K	39	5211.709	ug/L	3.887	29044373	38.306
Ca	43	4926.592	ug/L	2.095	71538	0.096
> Sc	45		ug/L		744066	744065.825
Ti	47	50.730	ug/L	1.417	36473	0.048
V	51	51.455	ug/L	3.243	419856	0.564
Cr	52	53.711	ug/L	3.437	340202	0.453
Cr	53		ug/L		135829	0.049
Mn	55	53.301	ug/L	1.726	570754	0.765
Fe	57	4736.750	ug/L	2.102	1132869	1.514
Co	59	52.859	ug/L	3.208	455917	0.613
Ni	60	52.198	ug/L	2.582	102276	0.137
Cu	63		ug/L		246326	0.331
Cu	65	51.562	ug/L	0.461	121676	0.163
Zn	66	53.811	ug/L	3.513	83772	0.142
Zn	67		ug/L		25544	0.021
Zn	68		ug/L		61241	0.102
> Ge	74		ug/L		588910	588910.309
As	75	50.144	ug/L	2.244	76958	0.132
Se	77		ug/L		13353	0.012
Se	82	51.234	ug/L	1.564	8994	0.015
Kr	83		ug/L		177	0.000
Sr	88	56.497	ug/L	1.523	1036709	2.656
Y	89		ug/L		180	0.000
Mo	98	52.526	ug/L	2.971	241577	0.619
Ag	107	53.927	ug/L	1.765	434864	1.114
Cd	111	51.909	ug/L	1.541	106937	0.274
Cd	114		ug/L		252654	0.647
> In	115		ug/L		390213	390212.616
Sn	120	53.874	ug/L	1.390	447547	1.146
Sb	121	53.869	ug/L	1.732	366539	0.938
Sb	123		ug/L		286025	0.732
Ba	135		ug/L		113546	0.170
Ba	137	52.498	ug/L	2.579	199467	0.299
Ho	165		ug/L		56	0.000
> Lu	175		ug/L		667401	667401.333
Tl	205	52.019	ug/L	2.364	1239260	1.853
Pb	208	54.088	ug/L	1.728	2327093	3.486
Bi	209		ug/L		551	0.001
Th	232	53.077	ug/L	0.733	2770571	4.149
U	238	54.600	ug/L	3.160	2944396	4.409

Sample ID: QC Std 1

Report Date/Time: Tuesday, February 16, 2010 01:52:10

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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

Sample ID: QC Std 1

Report Date/Time: Tuesday, February 16, 2010 01:52:10

Page 2

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Li	7	105.796				
Be	9	106.414				
B	11	110.198				
Na	23	91.532				
Mg	24	103.722				
Al	27	105.046				
P	31	101.786				
K	39	104.234				
Ca	43	98.532				
> Sc	45		108.6			
Ti	47	101.460				
V	51	102.910				
Cr	52	107.422				
Cr	53					
Mn	55	106.601				
Fe	57	94.735				
Co	59	105.718				
Ni	60	104.397				
Cu	63					
Cu	65	103.123				
Zn	66	107.622				
Zn	67					
Zn	68					
> Ge	74		107.8			
As	75	100.288				
Se	77					
Se	82	102.468				
Kr	83					
Sr	88	112.995				
Y	89					
Mo	98	105.051				
Ag	107	107.854				
Cd	111	103.817				
Cd	114					
> In	115		102.4			
Sn	120	107.747				
Sb	121	107.738				
Sb	123					
Ba	135					
Ba	137	104.995				
Ho	165					
> Lu	175		99.4			
Tl	205	104.039				
Pb	208	108.177				
Bi	209					
Th	232	106.154				
U	238	109.201				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 1	B	11	11ICV is out of limits (+/- 10%)
QC Std 1	Sr	88	88ICV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Tuesday, February 16, 2010 01:55:35

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100215\QC Std 2.320

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.019	ug/L	12.154	136	0.000
Be	9	0.000	ug/L	3657.241	20	0.000
B	11	4.940	ug/L	15.639	2471	0.003
Na	23	0.193	ug/L	593.819	19013	0.001
Mg	24	1.887	ug/L	41.145	8336	0.006
Al	27	0.623	ug/L	82.160	12005	0.003
P	31	-2.413	ug/L	32.339	6487	-0.001
K	39	-2.271	ug/L	138.330	538639	-0.017
Ca	43	0.947	ug/L	249.253	337	0.000
> Sc	45		ug/L		766686	766685.816
Ti	47	-0.040	ug/L	96.459	407	-0.000
V	51	-0.003	ug/L	11251.556	311	-0.000
Cr	52	0.232	ug/L	34.686	4536	0.002
Cr	53		ug/L		101277	-0.001
Mn	55	-0.015	ug/L	32.312	1750	-0.000
Fe	57	0.846	ug/L	89.313	6896	0.000
Co	59	0.003	ug/L	12.717	179	0.000
Ni	60	-0.001	ug/L	154.897	173	-0.000
Cu	63		ug/L		464	0.000
Cu	65	0.002	ug/L	608.507	222	0.000
Zn	66	-0.066	ug/L	14.357	321	-0.000
Zn	67		ug/L		12641	-0.002
Zn	68		ug/L		1328	-0.000
> Ge	74		ug/L		606092	606092.053
As	75	0.055	ug/L	521.174	-657	0.000
Se	77		ug/L		7352	0.001
Se	82	-0.213	ug/L	25.090	18	-0.000
Kr	83		ug/L		151	0.000
Sr	88	0.005	ug/L	17.101	478	0.000
Y	89		ug/L		92	-0.000
Mo	98	0.050	ug/L	18.435	412	0.001
Ag	107	0.005	ug/L	39.659	135	0.000
Cd	111	0.006	ug/L	37.911	50	0.000
Cd	114		ug/L		105	0.000
> In	115		ug/L		408911	408910.887
Sn	120	0.020	ug/L	25.343	494	0.000
Sb	121	0.295	ug/L	17.202	2577	0.005
Sb	123		ug/L		2035	0.004
Ba	135		ug/L		74	0.000
Ba	137	0.003	ug/L	21.106	113	0.000
Ho	165		ug/L		23	-0.000
> Lu	175		ug/L		700919	700919.314
Tl	205	0.230	ug/L	19.073	9061	0.008
Pb	208	0.003	ug/L	15.006	1374	0.000
Bi	209		ug/L		71	0.000
Th	232	0.028	ug/L	7.621	3067	0.002
U	238	0.005	ug/L	24.250	1627	0.000

Sample ID: QC Std 2

Report Date/Time: Tuesday, February 16, 2010 01:58:19

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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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
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		111.9			
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		111.0			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		107.4			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		104.4			
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

ICPMS#5 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Tuesday, February 16, 2010 02:01:43

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100215\QC Std 3.321

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	11.367	ug/L	2.459	21016	0.028
Be	9	0.538	ug/L	6.055	228	0.000
B	11	17.484	ug/L	3.239	7211	0.009
Na	23	234.434	ug/L	6.426	929644	1.231
Mg	24	16.730	ug/L	22.720	45741	0.058
Al	27	32.684	ug/L	31.107	127261	0.159
P	31	54.501	ug/L	7.425	18064	0.015
K	39	307.605	ug/L	5.870	2212364	2.261
Ca	43	209.050	ug/L	3.150	3325	0.004
> Sc	45		ug/L		742005	742005.058
Ti	47	9.181	ug/L	4.430	6923	0.009
V	51	11.115	ug/L	8.846	90527	0.122
Cr	52	11.488	ug/L	2.478	74870	0.097
Cr	53		ug/L		104357	0.007
Mn	55	6.066	ug/L	3.991	66366	0.087
Fe	57	109.682	ug/L	3.572	32472	0.035
Co	59	1.163	ug/L	0.870	10149	0.013
Ni	60	2.238	ug/L	4.433	4532	0.006
Cu	63		ug/L		5966	0.007
Cu	65	1.176	ug/L	7.509	2969	0.004
Zn	66	11.358	ug/L	1.446	18405	0.030
Zn	67		ug/L		15019	0.002
Zn	68		ug/L		13988	0.021
> Ge	74		ug/L		601663	601662.829
As	75	5.445	ug/L	5.527	7890	0.014
Se	77		ug/L		7528	0.002
Se	82	5.364	ug/L	2.081	1012	0.002
Kr	83		ug/L		149	0.000
Sr	88	12.436	ug/L	1.874	238971	0.585
Y	89		ug/L		95	-0.000
Mo	98	0.563	ug/L	3.011	2877	0.007
Ag	107	1.086	ug/L	3.253	9249	0.022
Cd	111	1.114	ug/L	4.512	2434	0.006
Cd	114		ug/L		5617	0.014
> In	115		ug/L		408153	408152.880
Sn	120	5.649	ug/L	2.810	49354	0.120
Sb	121	3.310	ug/L	3.878	23987	0.058
Sb	123		ug/L		18712	0.045
Ba	135		ug/L		4956	0.007
Ba	137	2.200	ug/L	1.492	8796	0.013
Ho	165		ug/L		25	-0.000
> Lu	175		ug/L		694795	694795.152
Tl	205	1.265	ug/L	0.621	34578	0.045
Pb	208	2.434	ug/L	1.535	110187	0.157
Bi	209		ug/L		91	0.000
Th	232	1.272	ug/L	3.605	70567	0.099
U	238	0.256	ug/L	2.825	15681	0.021

Sample ID: QC Std 3

Report Date/Time: Tuesday, February 16, 2010 02:04:25

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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
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	113.673				
Be	9	107.575				
B	11	116.561				
Na	23	93.773				
Mg	24	111.532				
Al	27	108.945				
P	31	109.001				
K	39	102.535				
Ca	43	104.525				
> Sc	45		108.3			
Ti	47	91.808				
V	51	111.146				
Cr	52	114.877				
Cr	53					
Mn	55	121.316				
Fe	57	109.682				
Co	59	116.277				
Ni	60	111.908				
Cu	63					
Cu	65	117.620				
Zn	66	113.581				
Zn	67					
Zn	68					
> Ge	74		110.2			
As	75	108.893				
Se	77					
Se	82	107.283				
Kr	83					
Sr	88	124.358				
Y	89					
Mo	98	112.634				
Ag	107	108.552				
Cd	111	111.402				
Cd	114					
> In	115		107.2			
Sn	120	112.971				
Sb	121	110.318				
Sb	123					
Ba	135					
Ba	137	109.987				
Ho	165					
> Lu	175		103.5			
Tl	205	126.522				
Pb	208	121.700				
Bi	209					
Th	232	127.213				
U	238	128.098				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Tuesday, February 16, 2010 02:07:49

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100215\QC Std 4.322

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.061	ug/L	3.301	214	0.000
Be	9	0.068	ug/L	17.312	47	0.000
B	11	1.755	ug/L	6.465	1197	0.001
Na	23	92539.407	ug/L	3.090	370949750	485.866
Mg	24	90377.389	ug/L	7.005	237318792	310.804
Al	27	90966.732	ug/L	5.278	338065206	442.705
P	31	98858.050	ug/L	3.575	21108439	27.636
K	39	99109.425	ug/L	6.589	556620129	728.453
Ca	43	89514.019	ug/L	2.067	1328616	1.740
> Sc	45		ug/L		763492	763491.886
Ti	47	1724.617	ug/L	0.906	1258181	1.647
V	51	0.275	ug/L	281.625	2603	0.003
Cr	52	2.779	ug/L	2.854	20941	0.023
Cr	53		ug/L		88080	-0.018
Mn	55	5.963	ug/L	0.638	67220	0.086
Fe	57	95554.974	ug/L	1.730	23326659	30.545
Co	59	0.327	ug/L	3.406	3044	0.004
Ni	60	3.113	ug/L	7.089	6426	0.008
Cu	63		ug/L		12675	0.016
Cu	65	3.079	ug/L	2.404	7658	0.010
Zn	66	4.021	ug/L	3.655	6612	0.011
Zn	67		ug/L		12612	-0.001
Zn	68		ug/L		2531	0.002
> Ge	74		ug/L		585935	585935.299
As	75	0.329	ug/L	49.617	-212	0.001
Se	77		ug/L		9721	0.006
Se	82	-1.611	ug/L	10.754	-225	-0.000
Kr	83		ug/L		460	0.001
Sr	88	3.305	ug/L	1.125	61159	0.155
Y	89		ug/L		761	0.002
Mo	98	1904.970	ug/L	2.185	8778316	22.437
Ag	107	0.110	ug/L	4.845	978	0.002
Cd	111	0.501	ug/L	8.895	1069	0.003
Cd	114		ug/L		13108	0.033
> In	115		ug/L		391324	391324.335
Sn	120	0.283	ug/L	5.770	2664	0.006
Sb	121	0.076	ug/L	26.678	970	0.001
Sb	123		ug/L		727	0.001
Ba	135		ug/L		1640	0.003
Ba	137	0.766	ug/L	1.643	2838	0.004
Ho	165		ug/L		12067	0.019
> Lu	175		ug/L		630439	630438.531
Tl	205	0.016	ug/L	16.811	3341	0.001
Pb	208	0.220	ug/L	2.118	10045	0.014
Bi	209		ug/L		7277	0.011
Th	232	0.019	ug/L	55.177	2268	0.001
U	238	-0.017	ug/L	0.672	350	-0.001

Sample ID: QC Std 4

Report Date/Time: Tuesday, February 16, 2010 02:10:31

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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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23	92.539				
Mg	24	90.377				
Al	27	90.967				
P	31	98.858				
K	39	99.109				
Ca	43	89.514				
> Sc	45		111.4			
Ti	47	86.231				
V	51					
Cr	52	84.218				
Cr	53					
Mn	55	102.804				
Fe	57	95.555				
Co	59	139.096				
Ni	60	94.045				
Cu	63					
Cu	65	92.183				
Zn	66	106.949				
Zn	67					
Zn	68					
> Ge	74		107.3			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88	111.643				
Y	89					
Mo	98	95.248				
Ag	107					
Cd	111	112.856				
Cd	114					
> In	115		102.7			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137	95.998				
Ho	165					
> Lu	175		93.9			
Tl	205					
Pb	208	116.478				
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 4

Report Date/Time: Tuesday, February 16, 2010 02:10:31

Page 3

ICPMS#5 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Tuesday, February 16, 2010 02:13:55

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100215\QC Std 5.323

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	18.125	ug/L	1.628	33228	0.045
Be	9	18.069	ug/L	2.308	6995	0.009
B	11	18.990	ug/L	2.049	7742	0.010
Na	23	85656.798	ug/L	14.706	331271820	449.729
Mg	24	91310.667	ug/L	0.847	231432075	314.013
Al	27	97448.392	ug/L	4.184	349369934	474.250
P	31	102333.472	ug/L	3.271	21078873	28.608
K	39	98946.338	ug/L	3.744	536365500	727.255
Ca	43	91171.149	ug/L	2.036	1305765	1.772
> Sc	45		ug/L		737021	737020.601
Ti	47	1776.140	ug/L	2.493	1250314	1.697
V	51	21.671	ug/L	3.690	175292	0.238
Cr	52	23.738	ug/L	2.730	150544	0.200
Cr	53		ug/L		100557	0.003
Mn	55	27.527	ug/L	3.340	292742	0.395
Fe	57	98930.136	ug/L	1.443	23308153	31.624
Co	59	20.380	ug/L	2.302	174209	0.236
Ni	60	22.153	ug/L	2.195	43089	0.058
Cu	63		ug/L		99351	0.134
Cu	65	21.904	ug/L	3.800	51286	0.069
Zn	66	23.225	ug/L	1.728	35570	0.061
Zn	67		ug/L		17101	0.007
Zn	68		ug/L		23660	0.039
> Ge	74		ug/L		575432	575431.819
As	75	20.815	ug/L	2.667	30806	0.055
Se	77		ug/L		11662	0.009
Se	82	18.111	ug/L	1.681	3142	0.005
Kr	83		ug/L		434	0.001
Sr	88	27.034	ug/L	0.672	488337	1.271
Y	89		ug/L		756	0.002
Mo	98	1971.087	ug/L	2.230	8913623	23.216
Ag	107	19.591	ug/L	1.640	155519	0.405
Cd	111	19.388	ug/L	0.977	39323	0.102
Cd	114		ug/L		105096	0.274
> In	115		ug/L		383940	383940.028
Sn	120	21.464	ug/L	0.521	175633	0.457
Sb	121	21.131	ug/L	0.771	141742	0.368
Sb	123		ug/L		110997	0.288
Ba	135		ug/L		43697	0.070
Ba	137	21.839	ug/L	1.846	77108	0.124
Ho	165		ug/L		12110	0.020
> Lu	175		ug/L		619715	619714.638
Tl	205	21.123	ug/L	2.942	468962	0.752
Pb	208	21.742	ug/L	1.129	869292	1.401
Bi	209		ug/L		7920	0.013
Th	232	21.959	ug/L	2.815	1064847	1.717
U	238	22.414	ug/L	1.868	1122492	1.810

Sample ID: QC Std 5

Report Date/Time: Tuesday, February 16, 2010 02:16:38

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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
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	90.627				
Be	9	90.346				
B	11	94.948				
Na	23	85.657				
Mg	24	91.311				
Al	27	97.448				
P	31	102.333				
K	39	98.946				
Ca	43	91.171				
> Sc	45		107.5			
Ti	47	88.807				
V	51	108.353				
Cr	52	101.878				
Cr	53					
Mn	55	106.692				
Fe	57	98.930				
Co	59	100.717				
Ni	60	95.037				
Cu	63					
Cu	65	93.849				
Zn	66	97.749				
Zn	67					
Zn	68					
> Ge	74		105.4			
As	75	104.073				
Se	77					
Se	82	90.556				
Kr	83					
Sr	88	117.746				
Y	89					
Mo	98	98.554				
Ag	107	97.956				
Cd	111	94.835				
Cd	114					
> In	115		100.8			
Sn	120	107.320				
Sb	121	105.656				
Sb	123					
Ba	135					
Ba	137	105.006				
Ho	165					
> Lu	175		92.3			
Tl	205	105.617				
Pb	208	107.692				
Bi	209					
Th	232	109.796				
U	238	112.068				

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Tuesday, February 16, 2010 02:20:02

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100215\QC Std 6.324

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	48.852	ug/L	0.874	92878	0.121
Be	9	49.053	ug/L	1.883	19690	0.026
B	11	99.673	ug/L	3.736	40063	0.052
Na	23	4021.019	ug/L	10.972	16184803	21.112
Mg	24	4493.982	ug/L	8.096	11828622	15.455
Al	27	4704.795	ug/L	13.903	17520646	22.897
P	31	4929.426	ug/L	3.451	1061743	1.378
K	39	4932.170	ug/L	4.100	28303933	36.251
Ca	43	4735.096	ug/L	0.847	70766	0.092
> Sc	45		ug/L		765476	765475.585
Ti	47	51.138	ug/L	2.328	37826	0.049
V	51	49.471	ug/L	2.717	415375	0.542
Cr	52	50.659	ug/L	2.148	330384	0.428
Cr	53		ug/L		134790	0.043
Mn	55	52.630	ug/L	1.663	579833	0.755
Fe	57	4570.889	ug/L	2.122	1124997	1.461
Co	59	50.042	ug/L	2.123	444176	0.580
Ni	60	51.137	ug/L	2.717	103118	0.134
Cu	63		ug/L		248662	0.324
Cu	65	50.534	ug/L	0.345	122677	0.160
Zn	66	52.657	ug/L	2.598	84228	0.139
Zn	67		ug/L		24794	0.018
Zn	68		ug/L		60679	0.098
> Ge	74		ug/L		604791	604790.956
As	75	49.753	ug/L	1.739	78432	0.131
Se	77		ug/L		13993	0.012
Se	82	50.411	ug/L	0.513	9091	0.015
Kr	83		ug/L		136	-0.000
Sr	88	54.540	ug/L	0.509	1039890	2.564
Y	89		ug/L		271	0.000
Mo	98	50.790	ug/L	2.011	242704	0.598
Ag	107	52.356	ug/L	1.119	438705	1.082
Cd	111	50.493	ug/L	0.830	108085	0.267
Cd	114		ug/L		253980	0.626
> In	115		ug/L		405421	405421.214
Sn	120	51.590	ug/L	1.273	445325	1.098
Sb	121	52.846	ug/L	0.223	373604	0.920
Sb	123		ug/L		293588	0.723
Ba	135		ug/L		115575	0.166
Ba	137	51.142	ug/L	1.653	202518	0.291
Ho	165		ug/L		74	0.000
> Lu	175		ug/L		695461	695461.030
Tl	205	49.351	ug/L	0.650	1225502	1.757
Pb	208	52.477	ug/L	2.138	2352825	3.382
Bi	209		ug/L		552	0.001
Th	232	51.180	ug/L	1.700	2783638	4.001
U	238	52.756	ug/L	1.886	2963447	4.260

Sample ID: QC Std 6

Report Date/Time: Tuesday, February 16, 2010 02:22:45

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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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
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	97.703				
Be	9	98.106				
B	11	99.673				
Na	23	80.420				
Mg	24	89.880				
Al	27	93.164				
P	31	98.589				
K	39	98.643				
Ca	43	94.702				
> Sc	45		111.7			
Ti	47	102.276				
V	51	98.942				
Cr	52	101.318				
Cr	53					
Mn	55	105.260				
Fe	57	91.418				
Co	59	100.083				
Ni	60	102.275				
Cu	63					
Cu	65	101.067				
Zn	66	105.314				
Zn	67					
Zn	68					
> Ge	74		110.7			
As	75	99.505				
Se	77					
Se	82	100.821				
Kr	83					
Sr	88	109.079				
Y	89					
Mo	98	101.580				
Ag	107	104.711				
Cd	111	100.986				
Cd	114					
> In	115		106.4			
Sn	120	103.180				
Sb	121	105.692				
Sb	123					
Ba	135					
Ba	137	102.284				
Ho	165					
> Lu	175		103.6			
Tl	205	98.702				
Pb	208	104.955				
Bi	209					
Th	232	102.360				
U	238	105.512				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Na	23	CCV is out of limits (+/- 10%)
QC Std 6	Mg	24	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, February 16, 2010 02:26:11

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100215\QC Std 7.325

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.015	ug/L	17.336	124	0.000
Be	9	-0.002	ug/L	462.989	19	-0.000
B	11	3.041	ug/L	20.911	1669	0.002
Na	23	0.654	ug/L	223.425	20349	0.003
Mg	24	-0.364	ug/L	64.513	2334	-0.001
Al	27	1.245	ug/L	121.596	14008	0.006
P	31	-2.602	ug/L	69.771	6281	-0.001
K	39	-2.589	ug/L	517.296	523904	-0.019
Ca	43	0.831	ug/L	243.144	327	0.000
> Sc	45		ug/L		747396	747395.911
Ti	47	0.037	ug/L	86.120	452	0.000
V	51	-0.090	ug/L	598.146	-466	-0.001
Cr	52	-0.007	ug/L	960.131	2922	-0.000
Cr	53		ug/L		103231	0.005
Mn	55	-0.019	ug/L	23.598	1660	-0.000
Fe	57	2.354	ug/L	57.555	7081	0.001
Co	59	0.002	ug/L	91.192	166	0.000
Ni	60	0.002	ug/L	251.816	175	0.000
Cu	63		ug/L		456	0.000
Cu	65	0.011	ug/L	57.226	238	0.000
Zn	66	-0.081	ug/L	13.815	294	-0.000
Zn	67		ug/L		12426	-0.002
Zn	68		ug/L		1344	-0.000
> Ge	74		ug/L		601125	601124.530
As	75	-0.050	ug/L	967.012	-817	-0.000
Se	77		ug/L		8084	0.003
Se	82	-0.193	ug/L	66.906	22	-0.000
Kr	83		ug/L		141	0.000
Sr	88	0.002	ug/L	29.085	422	0.000
Y	89		ug/L		79	-0.000
Mo	98	0.080	ug/L	10.426	552	0.001
Ag	107	0.002	ug/L	52.077	112	0.000
Cd	111	0.008	ug/L	45.454	53	0.000
Cd	114		ug/L		92	0.000
> In	115		ug/L		405175	405175.345
Sn	120	0.015	ug/L	37.011	452	0.000
Sb	121	0.097	ug/L	8.767	1154	0.002
Sb	123		ug/L		891	0.001
Ba	135		ug/L		57	-0.000
Ba	137	0.001	ug/L	689.466	101	0.000
Ho	165		ug/L		21	-0.000
> Lu	175		ug/L		697362	697362.356
Tl	205	0.296	ug/L	17.678	10651	0.011
Pb	208	0.001	ug/L	228.340	1246	0.000
Bi	209		ug/L		71	0.000
Th	232	0.030	ug/L	11.973	3132	0.002
U	238	0.002	ug/L	84.949	1433	0.000

Sample ID: QC Std 7

Report Date/Time: Tuesday, February 16, 2010 02:28:55

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	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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

Sample ID: QC Std 7

Report Date/Time: Tuesday, February 16, 2010 02:28:55

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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		109.0			
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		110.1			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		106.4			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		103.9			
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: QC Std 7

Report Date/Time: Tuesday, February 16, 2010 02:28:55

Page 3

ICPMS#5 - Summary Report

Sample ID: QC Std 10

Sample Date/Time: Tuesday, February 16, 2010 02:32:17

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100215\QC Std 10.326

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	895.650	ug/L	0.568	1539294	2.222
Be	9	950.220	ug/L	1.420	344838	0.498
B	11	1.720	ug/L	7.720	1072	0.001
Na	23	44012.417	ug/L	1.338	160112120	231.081
Mg	24	47502.333	ug/L	1.012	113193159	163.358
Al	27	51454.973	ug/L	0.970	173518606	250.415
P	31	25883.475	ug/L	0.954	5018792	7.236
K	39	52365.469	ug/L	2.866	267131802	384.886
Ca	43	47595.103	ug/L	3.256	640712	0.925
Sc	45		ug/L		692766	692766.162
Ti	47	42.703	ug/L	1.380	28650	0.041
V	51	956.851	ug/L	2.346	7265070	10.490
Cr	52	939.969	ug/L	1.997	5498915	7.935
Cr	53		ug/L		778567	0.991
Mn	55	995.124	ug/L	0.728	9891377	14.277
Fe	57	50007.774	ug/L	1.746	11077779	15.986
Co	59	936.294	ug/L	2.552	7517600	10.853
Ni	60	844.515	ug/L	2.752	1537932	2.221
Cu	63		ug/L		3800734	5.489
Cu	65	817.482	ug/L	1.371	1792899	2.588
Zn	66	2388.210	ug/L	1.252	3543503	6.286
Zn	67		ug/L		539382	0.934
Zn	68		ug/L		2518304	4.465
Ge	74		ug/L		563751	563750.878
As	75	842.658	ug/L	1.245	1249467	2.217
Se	77		ug/L		63248	0.101
Se	82	463.284	ug/L	2.284	77430	0.137
Kr	83		ug/L		299	0.000
Sr	88	1074.382	ug/L	0.651	18919517	50.509
Y	89		ug/L		746	0.002
Mo	98	999.492	ug/L	0.893	4410434	11.772
Ag	107	220.832	ug/L	1.686	1709032	4.563
Cd	111	855.218	ug/L	3.079	1690190	4.514
Cd	114		ug/L		4218159	11.264
In	115		ug/L		374602	374602.218
Sn	120	996.102	ug/L	1.618	7937585	21.193
Sb	121	232.875	ug/L	2.541	1519138	4.056
Sb	123		ug/L		1210315	3.232
Ba	135		ug/L		1762371	2.775
Ba	137	947.018	ug/L	2.620	3423028	5.390
Ho	165		ug/L		503	0.001
Lu	175		ug/L		635033	635032.904
Tl	205	483.159	ug/L	2.966	10928544	17.206
Pb	208	4827.997	ug/L	0.640	197582565	311.135
Bi	209		ug/L		5722	0.009
Th	232	2493.208	ug/L	1.923	123763501	194.902
U	238	5121.177	ug/L	2.060	262599364	413.503

Sample ID: QC Std 10

Report Date/Time: Tuesday, February 16, 2010 02:34:59

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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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
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	89.565				
Be	9	95.022				
B	11					
Na	23	88.025				
Mg	24	95.005				
Al	27	102.910				
P	31	103.534				
K	39	104.731				
Ca	43	95.190				
> Sc	45		101.1			
Ti	47					
V	51	95.685				
Cr	52	93.997				
Cr	53					
Mn	55	99.512				
Fe	57	100.016				
Co	59	93.629				
Ni	60	84.451				
Cu	63					
Cu	65	81.748				
Zn	66	95.528				
Zn	67					
Zn	68					
> Ge	74		103.2			
As	75	84.266				
Se	77					
Se	82	92.657				
Kr	83					
Sr	88	107.438				
Y	89					
Mo	98	99.949				
Ag	107	88.333				
Cd	111	85.522				
Cd	114					
> In	115		98.3			
Sn	120	99.610				
Sb	121	93.150				
Sb	123					
Ba	135					
Ba	137	94.702				
Ho	165					
> Lu	175		94.6			
Tl	205	96.632				
Pb	208	96.560				
Bi	209					
Th	232	99.728				
U	238	102.424				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 10	Li	7	LRS is out of limits (+/- 10%)
QC Std 10	Na	23	LRS is out of limits (+/- 10%)
QC Std 10	Ni	60	LRS is out of limits (+/- 10%)
QC Std 10	Cu	65	LRS is out of limits (+/- 10%)
QC Std 10	As	75	LRS is out of limits (+/- 10%)
QC Std 10	Ag	107	LRS is out of limits (+/- 10%)
QC Std 10	Cd	111	LRS is out of limits (+/- 10%)

Sample ID: QC Std 10

Report Date/Time: Tuesday, February 16, 2010 02:34:59

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QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 11

Sample Date/Time: Tuesday, February 16, 2010 02:38:22

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100215\QC Std 11.327

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	51.300	ug/L	0.915	99216	0.127
Be	9	51.230	ug/L	1.958	20920	0.027
B	11	104.056	ug/L	0.811	42534	0.054
Na	23	4751.433	ug/L	5.100	19449966	24.947
Mg	24	5444.303	ug/L	1.093	14582765	18.723
Al	27	5692.283	ug/L	3.221	21583283	27.702
P	31	5105.907	ug/L	1.910	1118616	1.427
K	39	4910.790	ug/L	11.668	28662211	36.094
Ca	43	4881.934	ug/L	3.089	74205	0.095
> Sc	45		ug/L		778743	778742.625
Ti	47	51.219	ug/L	2.978	38541	0.049
V	51	50.686	ug/L	1.616	433054	0.556
Cr	52	51.588	ug/L	0.493	342240	0.435
Cr	53		ug/L		135374	0.040
Mn	55	52.954	ug/L	1.713	593518	0.760
Fe	57	4568.948	ug/L	0.781	1144165	1.461
Co	59	50.661	ug/L	0.440	457470	0.587
Ni	60	51.369	ug/L	1.978	105369	0.135
Cu	63		ug/L		251149	0.322
Cu	65	51.096	ug/L	1.924	126183	0.162
Zn	66	53.257	ug/L	1.605	86085	0.140
Zn	67		ug/L		25996	0.020
Zn	68		ug/L		62815	0.100
> Ge	74		ug/L		611232	611232.048
As	75	49.704	ug/L	1.723	79177	0.131
Se	77		ug/L		13197	0.011
Se	82	50.195	ug/L	4.771	9144	0.015
Kr	83		ug/L		187	0.000
Sr	88	54.523	ug/L	1.776	1052829	2.563
Y	89		ug/L		155	0.000
Mo	98	50.686	ug/L	1.476	245282	0.597
Ag	107	51.402	ug/L	2.242	436127	1.062
Cd	111	50.642	ug/L	2.209	109766	0.267
Cd	114		ug/L		256519	0.625
> In	115		ug/L		410605	410604.714
Sn	120	52.433	ug/L	1.678	458297	1.116
Sb	121	53.213	ug/L	2.511	380917	0.927
Sb	123		ug/L		297038	0.723
Ba	135		ug/L		115633	0.168
Ba	137	51.862	ug/L	0.884	203023	0.295
Ho	165		ug/L		58	0.000
> Lu	175		ug/L		687448	687448.156
Tl	205	51.371	ug/L	1.326	1260796	1.829
Pb	208	54.167	ug/L	1.051	2400756	3.491
Bi	209		ug/L		562	0.001
Th	232	52.943	ug/L	1.348	2846545	4.139
U	238	54.577	ug/L	0.580	3030812	4.407

Sample ID: QC Std 11

Report Date/Time: Tuesday, February 16, 2010 02:41:04

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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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
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	102.600				
Be	9	102.461				
B	11	104.056				
Na	23	95.029				
Mg	24	108.886				
Al	27	112.718				
P	31	102.118				
K	39	98.216				
Ca	43	97.639				
> Sc	45		113.6			
Ti	47	102.438				
V	51	101.371				
Cr	52	103.176				
Cr	53					
Mn	55	105.908				
Fe	57	91.379				
Co	59	101.322				
Ni	60	102.738				
Cu	63					
Cu	65	102.191				
Zn	66	106.514				
Zn	67					
Zn	68					
> Ge	74		111.9			
As	75	99.408				
Se	77					
Se	82	100.390				
Kr	83					
Sr	88	109.046				
Y	89					
Mo	98	101.372				
Ag	107	102.804				
Cd	111	101.283				
Cd	114					
> In	115		107.8			
Sn	120	104.866				
Sb	121	106.426				
Sb	123					
Ba	135					
Ba	137	103.723				
Ho	165					
> Lu	175		102.4			
Tl	205	102.742				
Pb	208	108.333				
Bi	209					
Th	232	105.887				
U	238	109.155				

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message
 QC Std 11 Al 27CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 12

Sample Date/Time: Tuesday, February 16, 2010 02:44:29

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100215\QC Std 12.328

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.075	ug/L	11.303	243	0.000
Be	9	0.019	ug/L	40.769	28	0.000
B	11	3.138	ug/L	22.597	1768	0.002
Na	23	1.040	ug/L	85.213	22685	0.005
Mg	24	1.738	ug/L	20.277	8002	0.006
Al	27	0.934	ug/L	120.899	13340	0.005
P	31	1.482	ug/L	137.623	7382	0.000
K	39	2.492	ug/L	47.660	569811	0.018
Ca	43	-0.532	ug/L	195.203	317	-0.000
> Sc	45		ug/L		772500	772499.714
Ti	47	-0.018	ug/L	277.006	427	-0.000
V	51	0.039	ug/L	1011.485	596	0.000
Cr	52	-0.004	ug/L	2097.278	3038	-0.000
Cr	53		ug/L		102294	-0.001
Mn	55	-0.007	ug/L	35.045	1849	-0.000
Fe	57	0.281	ug/L	215.862	6811	0.000
Co	59	0.028	ug/L	13.502	406	0.000
Ni	60	0.025	ug/L	34.671	227	0.000
Cu	63		ug/L		681	0.000
Cu	65	0.037	ug/L	8.424	310	0.000
Zn	66	-0.022	ug/L	39.318	390	-0.000
Zn	67		ug/L		13258	-0.001
Zn	68		ug/L		1609	0.000
> Ge	74		ug/L		607020	607019.929
As	75	-0.110	ug/L	291.662	-916	-0.000
Se	77		ug/L		7392	0.001
Se	82	-0.139	ug/L	87.642	31	-0.000
Kr	83		ug/L		151	0.000
Sr	88	0.020	ug/L	1.592	774	0.001
Y	89		ug/L		88	-0.000
Mo	98	0.145	ug/L	7.490	876	0.002
Ag	107	0.008	ug/L	22.998	166	0.000
Cd	111	0.016	ug/L	30.193	71	0.000
Cd	114		ug/L		181	0.000
> In	115		ug/L		412072	412072.230
Sn	120	0.095	ug/L	8.992	1160	0.002
Sb	121	0.739	ug/L	9.690	5782	0.013
Sb	123		ug/L		4382	0.010
Ba	135		ug/L		108	0.000
Ba	137	0.017	ug/L	10.364	164	0.000
Ho	165		ug/L		22	-0.000
> Lu	175		ug/L		689821	689821.037
Tl	205	0.485	ug/L	17.750	15186	0.017
Pb	208	0.082	ug/L	13.418	4848	0.005
Bi	209		ug/L		71	0.000
Th	232	0.107	ug/L	6.857	7260	0.008
U	238	0.114	ug/L	4.822	7650	0.009

Sample ID: QC Std 12

Report Date/Time: Tuesday, February 16, 2010 02:47:13

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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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
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		112.7			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		111.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		108.2			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		102.7			
	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 12

Report Date/Time: Tuesday, February 16, 2010 02:47:13

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ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Tuesday, February 16, 2010 03:27:50

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100215\QC Std 8.335

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	50.985	ug/L	1.532	94882	0.126
Be	9	51.592	ug/L	3.710	20269	0.027
B	11	104.818	ug/L	3.814	41218	0.054
Na	23	4470.591	ug/L	10.158	17590063	23.472
Mg	24	4954.472	ug/L	13.979	12753678	17.038
Al	27	5485.232	ug/L	10.625	20018790	26.695
P	31	4996.750	ug/L	2.685	1053445	1.397
K	39	4759.453	ug/L	9.620	26775282	34.982
Ca	43	4844.956	ug/L	0.915	70885	0.094
> Sc	45		ug/L		749468	749467.591
Ti	47	51.379	ug/L	2.989	37196	0.049
V	51	49.743	ug/L	1.691	408923	0.545
Cr	52	50.791	ug/L	2.544	324258	0.429
Cr	53		ug/L		147774	0.064
Mn	55	52.053	ug/L	3.286	561371	0.747
Fe	57	4556.819	ug/L	2.516	1097990	1.457
Co	59	50.695	ug/L	2.883	440450	0.588
Ni	60	51.129	ug/L	3.436	100903	0.134
Cu	63		ug/L		239776	0.319
Cu	65	50.741	ug/L	3.226	120565	0.161
Zn	66	52.438	ug/L	1.999	82901	0.138
Zn	67		ug/L		28078	0.024
Zn	68		ug/L		60017	0.098
> Ge	74		ug/L		597650	597650.425
As	75	49.324	ug/L	0.271	76841	0.130
Se	77		ug/L		14057	0.013
Se	82	49.753	ug/L	1.462	8867	0.015
Kr	83		ug/L		150	0.000
Sr	88	53.697	ug/L	1.562	1017407	2.524
Y	89		ug/L		225	0.000
Mo	98	50.358	ug/L	3.337	239062	0.593
Ag	107	51.209	ug/L	0.671	426411	1.058
Cd	111	50.438	ug/L	2.102	107269	0.266
Cd	114		ug/L		251379	0.624
> In	115		ug/L		402864	402864.236
Sn	120	52.418	ug/L	1.715	449549	1.115
Sb	121	52.874	ug/L	2.518	371376	0.921
Sb	123		ug/L		290482	0.720
Ba	135		ug/L		114865	0.166
Ba	137	51.446	ug/L	1.849	202972	0.293
Ho	165		ug/L		65	0.000
> Lu	175		ug/L		692951	692951.455
Tl	205	50.191	ug/L	1.205	1241783	1.787
Pb	208	52.460	ug/L	1.982	2343382	3.381
Bi	209		ug/L		547	0.001
Th	232	51.772	ug/L	1.698	2805491	4.047
U	238	53.712	ug/L	2.310	3005863	4.337

Sample ID: QC Std 8

Report Date/Time: Tuesday, February 16, 2010 03:30:33

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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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

Sample ID: QC Std 8

Report Date/Time: Tuesday, February 16, 2010 03:30:33

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QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Li	7	101.970				
Be	9	103.183				
B	11	104.818				
Na	23	89.412				
Mg	24	99.089				
Al	27	108.618				
P	31	99.935				
K	39	95.189				
Ca	43	96.899				
> Sc	45		109.3			
Ti	47	102.757				
V	51	99.486				
Cr	52	101.581				
Cr	53					
Mn	55	104.106				
Fe	57	91.136				
Co	59	101.391				
Ni	60	102.257				
Cu	63					
Cu	65	101.482				
Zn	66	104.877				
Zn	67					
Zn	68					
> Ge	74		109.4			
As	75	98.648				
Se	77					
Se	82	99.506				
Kr	83					
Sr	88	107.393				
Y	89					
Mo	98	100.715				
Ag	107	102.418				
Cd	111	100.875				
Cd	114					
> In	115		105.8			
Sn	120	104.837				
Sb	121	105.748				
Sb	123					
Ba	135					
Ba	137	102.892				
Ho	165					
> Lu	175		103.2			
Tl	205	100.382				
Pb	208	104.920				
Bi	209					
Th	232	103.545				
U	238	107.423				

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message
 QC Std 8 Na 23CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Tuesday, February 16, 2010 03:33:58

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100215\QC Std 9.336

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.003	ug/L	115.819	100	0.000
Be	9	0.004	ug/L	49.076	21	0.000
B	11	3.177	ug/L	22.176	1678	0.002
Na	23	1.287	ug/L	127.728	22352	0.007
Mg	24	0.998	ug/L	182.807	5668	0.003
Al	27	0.038	ug/L	1938.760	9337	0.000
P	31	-1.371	ug/L	48.666	6380	-0.000
K	39	-0.731	ug/L	1484.854	520022	-0.005
Ca	43	1.622	ug/L	87.980	330	0.000
> Sc	45		ug/L		728938	728938.158
Ti	47	0.016	ug/L	421.150	426	0.000
V	51	-0.001	ug/L	61848.595	269	-0.000
Cr	52	0.033	ug/L	385.887	3091	0.000
Cr	53		ug/L		108183	0.015
Mn	55	-0.012	ug/L	32.320	1692	-0.000
Fe	57	0.455	ug/L	127.889	6465	0.000
Co	59	0.008	ug/L	43.951	208	0.000
Ni	60	0.007	ug/L	64.351	180	0.000
Cu	63		ug/L		465	0.000
Cu	65	0.003	ug/L	56.108	215	0.000
Zn	66	0.158	ug/L	79.984	641	0.000
Zn	67		ug/L		14227	0.002
Zn	68		ug/L		1823	0.001
> Ge	74		ug/L		572753	572753.264
As	75	-0.202	ug/L	142.454	-1008	-0.001
Se	77		ug/L		7691	0.003
Se	82	-0.181	ug/L	96.740	23	-0.000
Kr	83		ug/L		146	0.000
Sr	88	0.005	ug/L	34.084	453	0.000
Y	89		ug/L		80	-0.000
Mo	98	0.051	ug/L	14.506	397	0.001
Ag	107	0.006	ug/L	20.785	140	0.000
Cd	111	0.012	ug/L	8.872	58	0.000
Cd	114		ug/L		96	0.000
> In	115		ug/L		389522	389522.358
Sn	120	0.021	ug/L	19.317	479	0.000
Sb	121	0.109	ug/L	22.389	1190	0.002
Sb	123		ug/L		922	0.001
Ba	135		ug/L		72	0.000
Ba	137	0.000	ug/L	382.947	99	0.000
Ho	165		ug/L		19	-0.000
> Lu	175		ug/L		685329	685328.664
Tl	205	0.421	ug/L	27.827	13473	0.015
Pb	208	0.004	ug/L	17.820	1376	0.000
Bi	209		ug/L		87	0.000
Th	232	0.028	ug/L	21.076	2982	0.002
U	238	0.006	ug/L	21.948	1649	0.001

Sample ID: QC Std 9

Report Date/Time: Tuesday, February 16, 2010 03:36:42

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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
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		106.4			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		104.9			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		102.3			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		102.1			
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: 1202024796

Sample Date/Time: Tuesday, February 16, 2010 03:40:08

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 945412|2|ba|

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100215\1202024796.337

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	-0.012	ug/L	39.904	74	-0.000
	Be	9	0.034	ug/L	64.748	32	0.000
	B	11	0.950	ug/L	24.707	846	0.000
	Na	23	3.414	ug/L	38.601	30700	0.018
	Mg	24	2.419	ug/L	42.103	9337	0.008
	Al	27	7.556	ug/L	4.039	36380	0.037
	P	31	29.942	ug/L	18.110	12876	0.008
	K	39	3.088	ug/L	675.879	545120	0.023
	Ca	43	52.366	ug/L	3.744	1059	0.001
>	Sc	45		ug/L		735957	735956.654
	Ti	47	0.589	ug/L	9.432	833	0.001
	V	51	0.196	ug/L	295.238	1847	0.002
	Cr	52	0.404	ug/L	10.737	5427	0.003
	Cr	53		ug/L		86759	-0.015
	Mn	55	0.415	ug/L	3.350	6218	0.006
	Fe	57	31.024	ug/L	2.699	13718	0.010
	Co	59	0.046	ug/L	1.503	536	0.001
	Ni	60	0.122	ug/L	7.465	405	0.000
	Cu	63		ug/L		1792	0.002
	Cu	65	0.268	ug/L	4.927	833	0.001
	Zn	66	3.280	ug/L	2.834	5265	0.009
	Zn	67		ug/L		11834	-0.002
	Zn	68		ug/L		4826	0.006
>	Ge	74		ug/L		564165	564165.163
	As	75	0.388	ug/L	38.542	-115	0.001
	Se	77		ug/L		5990	-0.000
	Se	82	0.061	ug/L	71.893	63	0.000
	Kr	83		ug/L		139	0.000
	Sr	88	0.156	ug/L	4.694	3313	0.007
	Y	89		ug/L		203	0.000
	Mo	98	0.076	ug/L	6.317	525	0.001
	Ag	107	0.014	ug/L	23.600	209	0.000
	Cd	111	0.034	ug/L	45.333	108	0.000
	Cd	114		ug/L		229	0.000
>	In	115		ug/L		401245	401244.786
	Sn	120	0.111	ug/L	5.686	1266	0.002
	Sb	121	0.081	ug/L	8.535	1031	0.001
	Sb	123		ug/L		794	0.001
	Ba	135		ug/L		327	0.000
	Ba	137	0.108	ug/L	3.773	535	0.001
	Ho	165		ug/L		28	0.000
>	Lu	175		ug/L		705013	705013.301
	Tl	205	0.238	ug/L	8.824	9303	0.008
	Pb	208	0.037	ug/L	3.571	2915	0.002
	Bi	209		ug/L		155	0.000
	Th	232	0.019	ug/L	46.338	2540	0.001
	U	238	-0.017	ug/L	2.875	365	-0.001

Sample ID: 1202024796

Report Date/Time: Tuesday, February 16, 2010 03:42:52

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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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

Sample ID: 1202024796

Report Date/Time: Tuesday, February 16, 2010 03:42:52

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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		107.4			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		103.3			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		105.3			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		105.0			
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: 1202024796

Report Date/Time: Tuesday, February 16, 2010 03:42:52

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ICPMS#5 - Summary Report

Sample ID: 1202024797

Sample Date/Time: Tuesday, February 16, 2010 03:46:18

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 945412|40|ba|

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100215\1202024797.338

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	2.379	ug/L	3.587	4476	0.006
Be	9	17.952	ug/L	0.775	7000	0.009
B	11	34.111	ug/L	2.249	13617	0.018
Na	23	231.215	ug/L	14.562	919021	1.214
Mg	24	920.240	ug/L	3.389	2352059	3.165
Al	27	2878.729	ug/L	2.004	10407528	14.010
P	31	188.896	ug/L	0.404	45976	0.053
K	39	1072.109	ug/L	5.284	6383313	7.880
Ca	43	2349.411	ug/L	1.589	34205	0.046
> Sc	45		ug/L		742247	742246.781
Ti	47	112.304	ug/L	1.136	80041	0.107
V	51	29.656	ug/L	4.355	241602	0.325
Cr	52	55.715	ug/L	1.528	352047	0.470
Cr	53		ug/L		147019	0.065
Mn	55	128.113	ug/L	1.326	1366083	1.838
Fe	57	3745.420	ug/L	0.859	895168	1.197
Co	59	23.186	ug/L	2.153	199635	0.269
Ni	60	32.862	ug/L	0.149	64314	0.086
Cu	63		ug/L		193143	0.260
Cu	65	40.100	ug/L	2.168	94442	0.127
Zn	66	138.087	ug/L	0.522	212800	0.363
Zn	67		ug/L		46167	0.056
Zn	68		ug/L		151643	0.257
> Ge	74		ug/L		584421	584420.939
As	75	25.189	ug/L	0.873	38022	0.066
Se	77		ug/L		15912	0.016
Se	82	67.237	ug/L	1.725	11698	0.020
Kr	83		ug/L		159	0.000
Sr	88	55.603	ug/L	0.264	1051881	2.614
Y	89		ug/L		61794	0.153
Mo	98	12.068	ug/L	0.598	57343	0.142
Ag	107	5.211	ug/L	0.946	43409	0.108
Cd	111	13.883	ug/L	1.077	29509	0.073
Cd	114		ug/L		70682	0.176
> In	115		ug/L		402247	402247.157
Sn	120	8.616	ug/L	2.273	74044	0.183
Sb	121	13.823	ug/L	1.801	97298	0.241
Sb	123		ug/L		75719	0.187
Ba	135		ug/L		103141	0.146
Ba	137	45.034	ug/L	2.129	181532	0.256
Ho	165		ug/L		4608	0.006
> Lu	175		ug/L		707952	707952.293
Tl	205	31.256	ug/L	3.411	790954	1.113
Pb	208	21.192	ug/L	0.933	967930	1.366
Bi	209		ug/L		8795	0.012
Th	232	4.585	ug/L	4.212	255116	0.358
U	238	0.648	ug/L	0.852	38398	0.052

Sample ID: 1202024797

Report Date/Time: Tuesday, February 16, 2010 03:49:03

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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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
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		108.3			
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		107.0			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		105.6			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		105.4			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 245391001

Sample Date/Time: Tuesday, February 16, 2010 03:52:29

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945412|2|ba|

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100215\245391001.339

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	43.605	ug/L	1.517	90938	0.108
Be	9	3.678	ug/L	3.765	1639	0.002
B	11	14.896	ug/L	1.436	7038	0.008
Na	23	1668.063	ug/L	5.595	7369106	8.758
Mg	24	9752.876	ug/L	7.749	28135354	33.540
Al	27	63332.413	ug/L	2.123	258752668	308.218
P	31	171.419	ug/L	1.579	47903	0.048
K	39	7054.252	ug/L	1.277	44139804	51.849
Ca	43	11804.946	ug/L	1.867	192959	0.229
> Sc	45		ug/L		839753	839753.055
Ti	47	648.288	ug/L	3.356	520191	0.619
V	51	60.033	ug/L	3.667	552659	0.658
Cr	52	40.024	ug/L	3.392	286904	0.338
Cr	53		ug/L		103085	-0.011
Mn	55	699.128	ug/L	2.297	8422061	10.030
Fe	57	43349.024	ug/L	1.377	11641378	13.857
Co	59	17.426	ug/L	1.586	169748	0.202
Ni	60	32.395	ug/L	3.019	71695	0.085
Cu	63		ug/L		125394	0.149
Cu	65	23.488	ug/L	1.769	62668	0.074
Zn	66	151.512	ug/L	2.032	212815	0.399
Zn	67		ug/L		44854	0.062
Zn	68		ug/L		158498	0.295
> Ge	74		ug/L		532829	532829.431
As	75	10.573	ug/L	3.269	14170	0.028
Se	77		ug/L		4715	-0.002
Se	82	0.171	ug/L	261.165	77	0.000
Kr	83		ug/L		461	0.001
Sr	88	118.423	ug/L	1.230	2126056	5.567
Y	89		ug/L		1368406	3.585
Mo	98	3.491	ug/L	0.368	15856	0.041
Ag	107	0.471	ug/L	2.017	3808	0.010
Cd	111	1.636	ug/L	4.814	3331	0.009
Cd	114		ug/L		502	0.001
> In	115		ug/L		381775	381774.807
Sn	120	1.184	ug/L	0.203	9922	0.025
Sb	121	0.232	ug/L	2.313	1987	0.004
Sb	123		ug/L		1659	0.003
Ba	135		ug/L		812510	1.152
Ba	137	344.438	ug/L	1.642	1382233	1.960
Ho	165		ug/L		112443	0.159
> Lu	175		ug/L		705061	705060.941
Tl	205	0.806	ug/L	3.197	23567	0.029
Pb	208	33.949	ug/L	1.799	1543636	2.188
Bi	209		ug/L		20776	0.029
Th	232	35.670	ug/L	1.017	1967471	2.788
U	238	6.233	ug/L	2.319	356131	0.503

Sample ID: 245391001

Report Date/Time: Tuesday, February 16, 2010 03:55:14

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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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
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		122.5			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		97.6			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		100.2			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		105.0			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)
Lu 175 Int Std for sa	Sc	45	
	Ti	47	Sample is out of limits (over linear range)

QC Action

Sample ID: 245391001
 Report Date/Time: Tuesday, February 16, 2010 03:55:14
 Page 3

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 1202024798

Sample Date/Time: Tuesday, February 16, 2010 03:58:40

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 945412|2|baj

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100215\1202024798.340

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	41.255	ug/L	1.479	86975	0.102
Be	9	3.787	ug/L	1.033	1706	0.002
B	11	14.686	ug/L	1.543	7023	0.008
Na	23	1616.828	ug/L	6.107	7220800	8.489
Mg	24	10148.827	ug/L	1.483	29625429	34.901
Al	27	60854.473	ug/L	1.134	251395623	296.159
P	31	168.227	ug/L	5.297	47640	0.047
K	39	6855.193	ug/L	10.248	43375479	50.386
Ca	43	18129.194	ug/L	0.742	299400	0.352
> Sc	45		ug/L		848845	848844.990
Ti	47	619.613	ug/L	1.155	502800	0.592
V	51	57.428	ug/L	1.015	534654	0.630
Cr	52	39.013	ug/L	3.592	282779	0.329
Cr	53		ug/L		100270	-0.015
Mn	55	549.935	ug/L	1.785	6698000	7.890
Fe	57	42121.640	ug/L	1.517	11434899	13.465
Co	59	13.359	ug/L	2.760	131559	0.155
Ni	60	31.306	ug/L	2.692	70047	0.082
Cu	63		ug/L		125686	0.148
Cu	65	23.254	ug/L	2.639	62709	0.074
Zn	66	145.070	ug/L	4.235	207541	0.382
Zn	67		ug/L		43881	0.058
Zn	68		ug/L		155730	0.285
> Ge	74		ug/L		543028	543027.601
As	75	10.065	ug/L	2.600	13707	0.026
Se	77		ug/L		4900	-0.002
Se	82	-0.773	ug/L	29.844	-73	-0.000
Kr	83		ug/L		450	0.001
Sr	88	126.613	ug/L	1.862	2318946	5.952
Y	89		ug/L		1422195	3.651
Mo	98	3.422	ug/L	1.890	15862	0.040
Ag	107	0.468	ug/L	4.310	3856	0.010
Cd	111	1.446	ug/L	5.419	3009	0.008
Cd	114		ug/L		437	0.001
> In	115		ug/L		389509	389509.298
Sn	120	1.315	ug/L	2.309	11202	0.028
Sb	121	0.171	ug/L	4.532	1608	0.003
Sb	123		ug/L		1243	0.002
Ba	135		ug/L		929964	1.328
Ba	137	388.821	ug/L	2.026	1549960	2.213
Ho	165		ug/L		112950	0.161
> Lu	175		ug/L		700488	700487.792
Tl	205	0.612	ug/L	3.748	18566	0.022
Pb	208	30.926	ug/L	1.407	1397056	1.993
Bi	209		ug/L		19671	0.028
Th	232	35.165	ug/L	1.643	1926749	2.749
U	238	6.388	ug/L	1.946	362601	0.516

Sample ID: 1202024798

Report Date/Time: Tuesday, February 16, 2010 04:01:26

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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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

Sample ID: 1202024798

Report Date/Time: Tuesday, February 16, 2010 04:01:26

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QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		123.8			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		99.4			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		102.3			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		104.3			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)
Lu 175 Int Std for saSc		45	
	Ti	47	Sample is out of limits (over linear range)

QC Action

Sample ID: 1202024798
 Report Date/Time: Tuesday, February 16, 2010 04:01:26
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QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 1202024799

Sample Date/Time: Tuesday, February 16, 2010 04:04:52

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 945412|2|baj

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100215\1202024799.341

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	61.666	ug/L	0.442	127505	0.153
Be	9	24.880	ug/L	2.629	10874	0.013
B	11	57.815	ug/L	1.060	25516	0.030
Na	23	2167.383	ug/L	5.217	9494015	11.380
Mg	24	9694.128	ug/L	8.060	27751666	33.338
Al	27	59116.214	ug/L	5.885	239552574	287.699
P	31	970.642	ug/L	1.957	233530	0.271
K	39	8208.557	ug/L	7.713	50827653	60.333
Ca	43	12239.284	ug/L	0.407	198426	0.238
> Sc	45		ug/L		832749	832749.205
Ti	47	693.270	ug/L	1.658	551842	0.662
V	51	76.917	ug/L	2.058	702431	0.843
Cr	52	58.742	ug/L	2.406	416168	0.496
Cr	53		ug/L		117851	0.008
Mn	55	672.389	ug/L	1.860	8033842	9.647
Fe	57	39003.523	ug/L	1.642	10389498	12.468
Co	59	36.968	ug/L	1.930	356953	0.429
Ni	60	50.451	ug/L	3.007	110642	0.133
Cu	63		ug/L		223996	0.268
Cu	65	41.971	ug/L	1.685	110875	0.133
Zn	66	153.930	ug/L	1.402	223573	0.405
Zn	67		ug/L		46560	0.062
Zn	68		ug/L		168199	0.303
> Ge	74		ug/L		550929	550928.921
As	75	46.401	ug/L	1.922	66588	0.122
Se	77		ug/L		5665	-0.001
Se	82	7.243	ug/L	2.967	1234	0.002
Kr	83		ug/L		445	0.001
Sr	88	135.330	ug/L	2.497	2435902	6.362
Y	89		ug/L		1262282	3.297
Mo	98	28.067	ug/L	0.589	126720	0.331
Ag	107	25.866	ug/L	0.918	204708	0.534
Cd	111	6.658	ug/L	0.417	13487	0.035
Cd	114		ug/L		23918	0.062
> In	115		ug/L		382837	382837.491
Sn	120	13.897	ug/L	1.350	113490	0.296
Sb	121	32.870	ug/L	1.280	219594	0.572
Sb	123		ug/L		171924	0.448
Ba	135		ug/L		903855	1.310
Ba	137	384.607	ug/L	1.425	1510361	2.189
Ho	165		ug/L		100270	0.145
> Lu	175		ug/L		689936	689935.506
Tl	205	49.526	ug/L	1.212	1220020	1.764
Pb	208	127.607	ug/L	2.185	5674141	8.224
Bi	209		ug/L		18266	0.026
Th	232	57.210	ug/L	1.692	3086817	4.472
U	238	32.382	ug/L	1.201	1805230	2.615

Sample ID: 1202024799

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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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

Sample ID: 1202024799

Report Date/Time: Tuesday, February 16, 2010 04:07:38

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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		121.5			
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		100.9			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		100.5			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		102.7			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)
Lu 175 Int Std for sa	Sc	45	
	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 1202024801

Sample Date/Time: Tuesday, February 16, 2010 04:11:03

Sample Type:

Sample Description: LANL 6020 MSD

Number of Replicates: 3

Batch ID: 945412[2]ba

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100215\1202024801.342

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	62.578	ug/L	1.038	125827	0.155
Be	9	25.327	ug/L	1.716	10764	0.013
B	11	61.525	ug/L	2.043	26364	0.032
Na	23	2379.876	ug/L	5.149	10135864	12.495
Mg	24	10389.947	ug/L	4.454	28929009	35.731
Al	27	61028.327	ug/L	3.228	240449775	297.005
P	31	970.525	ug/L	3.903	227029	0.271
K	39	8089.540	ug/L	1.571	48725758	59.458
Ca	43	12016.804	ug/L	2.113	189423	0.234
> Sc	45		ug/L		809779	809778.841
Ti	47	727.384	ug/L	1.369	563050	0.695
V	51	78.218	ug/L	1.324	694608	0.857
Cr	52	60.201	ug/L	0.811	414739	0.508
Cr	53		ug/L		112519	0.006
Mn	55	523.945	ug/L	2.131	6087884	7.517
Fe	57	38545.426	ug/L	2.126	9983670	12.322
Co	59	33.597	ug/L	1.234	315525	0.389
Ni	60	49.384	ug/L	3.135	105319	0.130
Cu	63		ug/L		211983	0.261
Cu	65	41.454	ug/L	0.528	106497	0.131
Zn	66	152.339	ug/L	1.014	209644	0.401
Zn	67		ug/L		43017	0.060
Zn	68		ug/L		155311	0.295
> Ge	74		ug/L		521952	521952.161
As	75	47.533	ug/L	1.006	64643	0.125
Se	77		ug/L		5262	-0.001
Se	82	7.232	ug/L	4.544	1167	0.002
Kr	83		ug/L		464	0.001
Sr	88	133.714	ug/L	0.830	2342528	6.286
Y	89		ug/L		1216192	3.264
Mo	98	28.842	ug/L	1.381	126724	0.340
Ag	107	26.802	ug/L	0.634	206433	0.554
Cd	111	7.017	ug/L	1.249	13832	0.037
Cd	114		ug/L		24133	0.065
> In	115		ug/L		372592	372592.392
Sn	120	14.304	ug/L	1.015	113687	0.304
Sb	121	41.142	ug/L	1.871	267388	0.717
Sb	123		ug/L		208815	0.560
Ba	135		ug/L		834934	1.202
Ba	137	359.785	ug/L	1.028	1422645	2.048
Ho	165		ug/L		99330	0.143
> Lu	175		ug/L		694641	694640.583
Tl	205	52.254	ug/L	1.483	1295866	1.861
Pb	208	127.943	ug/L	0.485	5728582	8.245
Bi	209		ug/L		17904	0.026
Th	232	58.072	ug/L	1.589	3154778	4.540
U	238	32.830	ug/L	0.291	1842659	2.651

Sample ID: 1202024801

Report Date/Time: Tuesday, February 16, 2010 04:13:47

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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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
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		118.1			
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		95.6			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		97.8			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		103.4			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)
	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 1202024800

Sample Date/Time: Tuesday, February 16, 2010 04:17:13

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 945412|10|baj

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100215\1202024800.343

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	10.296	ug/L	1.607	18096	0.026
Be	9	0.894	ug/L	2.375	349	0.000
B	11	5.504	ug/L	2.761	2477	0.003
Na	23	376.074	ug/L	6.332	1408679	1.975
Mg	24	2331.685	ug/L	7.684	5652825	8.019
Al	27	14025.821	ug/L	5.738	48089955	68.259
P	31	41.240	ug/L	3.896	14571	0.012
K	39	1605.237	ug/L	5.315	8825572	11.798
Ca	43	2632.920	ug/L	1.540	36373	0.051
> Sc	45		ug/L		705086	705085.586
Ti	47	144.539	ug/L	3.861	97682	0.138
V	51	13.031	ug/L	4.242	100934	0.143
Cr	52	8.977	ug/L	2.855	56205	0.076
Cr	53		ug/L		86966	-0.010
Mn	55	151.868	ug/L	2.197	1537548	2.179
Fe	57	8367.302	ug/L	0.898	1891784	2.675
Co	59	4.006	ug/L	3.505	32865	0.046
Ni	60	7.550	ug/L	1.213	14157	0.020
Cu	63		ug/L		25244	0.035
Cu	65	5.544	ug/L	3.905	12568	0.018
Zn	66	31.473	ug/L	3.581	44076	0.083
Zn	67		ug/L		17913	0.011
Zn	68		ug/L		32880	0.060
> Ge	74		ug/L		528105	528104.736
As	75	1.855	ug/L	10.131	1922	0.005
Se	77		ug/L		5294	-0.001
Se	82	-0.258	ug/L	27.012	9	-0.000
Kr	83		ug/L		182	0.000
Sr	88	24.097	ug/L	2.895	428274	1.133
Y	89		ug/L		278914	0.738
Mo	98	0.645	ug/L	3.748	3027	0.008
Ag	107	0.083	ug/L	1.951	737	0.002
Cd	111	0.311	ug/L	2.898	652	0.002
Cd	114		ug/L		139	0.000
> In	115		ug/L		377859	377858.548
Sn	120	0.221	ug/L	7.947	2076	0.005
Sb	121	0.023	ug/L	3.073	586	0.000
Sb	123		ug/L		449	0.000
Ba	135		ug/L		163433	0.233
Ba	137	72.580	ug/L	2.743	290205	0.413
Ho	165		ug/L		21994	0.031
> Lu	175		ug/L		702443	702442.729
Tl	205	0.247	ug/L	9.727	9503	0.009
Pb	208	6.986	ug/L	3.100	317329	0.450
Bi	209		ug/L		4252	0.006
Th	232	8.038	ug/L	3.667	442868	0.628
U	238	1.226	ug/L	2.844	70805	0.099

Sample ID: 1202024800

Report Date/Time: Tuesday, February 16, 2010 04:19:58

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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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
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		102.9			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		96.7			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		99.2			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		104.6			
Ti	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Tuesday, February 16, 2010 04:23:22

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100215\QC Std 8.344

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	50.410	ug/L	2.345	86896	0.125
Be	9	51.409	ug/L	2.306	18710	0.027
B	11	103.278	ug/L	5.231	37616	0.054
Na	23	4280.510	ug/L	4.622	15623185	22.474
Mg	24	4729.716	ug/L	7.189	11289882	16.265
Al	27	5273.046	ug/L	16.345	17798218	25.662
P	31	4847.967	ug/L	2.269	947095	1.355
K	39	4670.911	ug/L	4.645	24318094	34.331
Ca	43	4790.931	ug/L	2.529	64942	0.093
> Sc	45		ug/L		694215	694215.160
Ti	47	48.944	ug/L	1.506	32845	0.047
V	51	49.657	ug/L	2.905	378110	0.544
Cr	52	49.451	ug/L	3.435	292484	0.417
Cr	53		ug/L		115942	0.034
Mn	55	51.749	ug/L	3.275	516918	0.742
Fe	57	4597.978	ug/L	3.614	1025949	1.470
Co	59	50.318	ug/L	2.084	404975	0.583
Ni	60	50.176	ug/L	1.455	91758	0.132
Cu	63		ug/L		222873	0.321
Cu	65	49.415	ug/L	1.553	108780	0.156
Zn	66	51.793	ug/L	2.887	76065	0.136
Zn	67		ug/L		22067	0.017
Zn	68		ug/L		54667	0.096
> Ge	74		ug/L		555381	555380.502
As	75	48.910	ug/L	1.608	70781	0.129
Se	77		ug/L		11364	0.010
Se	82	49.486	ug/L	0.812	8197	0.015
Kr	83		ug/L		162	0.000
Sr	88	53.195	ug/L	1.459	952622	2.501
Y	89		ug/L		285	0.000
Mo	98	49.636	ug/L	0.947	222793	0.585
Ag	107	51.145	ug/L	2.303	402475	1.057
Cd	111	49.879	ug/L	1.808	100290	0.263
Cd	114		ug/L		238290	0.626
> In	115		ug/L		380824	380823.728
Sn	120	51.708	ug/L	1.809	419312	1.100
Sb	121	52.385	ug/L	0.898	347899	0.912
Sb	123		ug/L		277496	0.728
Ba	135		ug/L		108192	0.155
Ba	137	48.701	ug/L	1.510	193351	0.277
Ho	165		ug/L		73	0.000
> Lu	175		ug/L		697207	697207.307
Tl	205	48.916	ug/L	1.287	1217784	1.742
Pb	208	51.759	ug/L	1.168	2326704	3.336
Bi	209		ug/L		565	0.001
Th	232	51.309	ug/L	1.754	2797841	4.011
U	238	53.019	ug/L	1.976	2985873	4.281

Sample ID: QC Std 8

Report Date/Time: Tuesday, February 16, 2010 04:26:05

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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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
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	100.820				
Be	9	102.817				
B	11	103.278				
Na	23	85.610				
Mg	24	94.594				
Al	27	104.417				
P	31	96.959				
K	39	93.418				
Ca	43	95.819				
> Sc	45		101.3			
Ti	47	97.887				
V	51	99.314				
Cr	52	98.901				
Cr	53					
Mn	55	103.499				
Fe	57	91.960				
Co	59	100.636				
Ni	60	100.351				
Cu	63					
Cu	65	98.831				
Zn	66	103.586				
Zn	67					
Zn	68					
> Ge	74		101.7			
As	75	97.820				
Se	77					
Se	82	98.973				
Kr	83					
Sr	88	106.390				
Y	89					
Mo	98	99.273				
Ag	107	102.291				
Cd	111	99.758				
Cd	114					
> In	115		100.0			
Sn	120	103.416				
Sb	121	104.769				
Sb	123					
Ba	135					
Ba	137	97.401				
Ho	165					
> Lu	175		103.8			
Tl	205	97.832				
Pb	208	103.517				
Bi	209					
Th	232	102.619				
U	238	106.039				

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message
 QC Std 8 Na 23CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Tuesday, February 16, 2010 04:29:30

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100215\QC Std 9.345

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.020	ug/L	53.101	118	0.000
Be	9	0.018	ug/L	64.415	24	0.000
B	11	3.562	ug/L	17.751	1655	0.002
Na	23	1.532	ug/L	72.033	21016	0.008
Mg	24	-0.239	ug/L	217.526	2334	-0.001
Al	27	1.362	ug/L	163.378	12673	0.007
P	31	-0.035	ug/L	4002.718	6025	-0.000
K	39	7.533	ug/L	83.110	510987	0.055
Ca	43	1.299	ug/L	83.103	295	0.000
> Sc	45		ug/L		660104	660103.845
Ti	47	-0.030	ug/L	72.181	357	-0.000
V	51	0.199	ug/L	383.336	1714	0.002
Cr	52	0.140	ug/L	22.622	3395	0.001
Cr	53		ug/L		88113	0.000
Mn	55	-0.004	ug/L	79.501	1615	-0.000
Fe	57	0.599	ug/L	285.019	5885	0.000
Co	59	0.007	ug/L	10.397	185	0.000
Ni	60	0.009	ug/L	58.503	167	0.000
Cu	63		ug/L		419	0.000
Cu	65	-0.001	ug/L	592.136	186	-0.000
Zn	66	-0.033	ug/L	80.057	328	-0.000
Zn	67		ug/L		11388	-0.001
Zn	68		ug/L		1276	-0.000
> Ge	74		ug/L		533277	533277.421
As	75	-0.304	ug/L	48.586	-1084	-0.001
Se	77		ug/L		6175	0.001
Se	82	-0.127	ug/L	96.170	30	-0.000
Kr	83		ug/L		129	0.000
Sr	88	0.004	ug/L	30.146	424	0.000
Y	89		ug/L		100	0.000
Mo	98	0.039	ug/L	29.686	324	0.000
Ag	107	0.005	ug/L	11.727	125	0.000
Cd	111	0.007	ug/L	32.267	45	0.000
Cd	114		ug/L		83	0.000
> In	115		ug/L		369539	369538.802
Sn	120	0.016	ug/L	23.551	420	0.000
Sb	121	0.095	ug/L	29.910	1037	0.002
Sb	123		ug/L		821	0.001
Ba	135		ug/L		65	0.000
Ba	137	0.002	ug/L	185.321	102	0.000
Ho	165		ug/L		23	-0.000
> Lu	175		ug/L		678076	678075.914
Tl	205	0.347	ug/L	26.981	11586	0.012
Pb	208	0.004	ug/L	8.306	1376	0.000
Bi	209		ug/L		64	-0.000
Th	232	0.023	ug/L	18.077	2700	0.002
U	238	0.005	ug/L	26.458	1544	0.000

Sample ID: QC Std 9

Report Date/Time: Tuesday, February 16, 2010 04:32:14

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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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
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		96.3			
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		97.6			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		97.0			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		101.0			
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: 245391002

Sample Date/Time: Tuesday, February 16, 2010 04:35:40

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945412|2|ba|

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100215\245391002.346

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	36.531	ug/L	2.022	62608	0.091
Be	9	25.150	ug/L	2.538	9107	0.013
B	11	11.458	ug/L	5.227	4551	0.006
Na	23	465.926	ug/L	7.846	1703032	2.446
Mg	24	6670.965	ug/L	6.135	15833692	22.941
Al	27	38493.360	ug/L	6.402	129196894	187.335
P	31	754.175	ug/L	3.139	151719	0.211
K	39	5139.455	ug/L	1.603	26560315	37.775
Ca	43	6819.333	ug/L	2.447	91718	0.133
> Sc	45		ug/L		689947	689947.301
Ti	47	789.525	ug/L	2.371	520589	0.754
V	51	54.781	ug/L	4.045	414503	0.601
Cr	52	41.447	ug/L	2.274	244086	0.350
Cr	53		ug/L		88597	-0.005
Mn	55	596.423	ug/L	2.115	5904153	8.557
Fe	57	30936.338	ug/L	3.682	6826757	9.889
Co	59	13.052	ug/L	2.393	104503	0.151
Ni	60	29.317	ug/L	1.971	53342	0.077
Cu	63		ug/L		11096903	16.083
Cu	65	2654.180	ug/L	0.272	5797443	8.403
Zn	66	185.405	ug/L	2.171	237860	0.488
Zn	67		ug/L		46758	0.073
Zn	68		ug/L		176469	0.360
> Ge	74		ug/L		486756	486755.676
As	75	7.757	ug/L	3.816	9338	0.020
Se	77		ug/L		3981	-0.003
Se	82	-0.834	ug/L	10.737	-75	-0.000
Kr	83		ug/L		329	0.000
Sr	88	66.493	ug/L	0.860	1107693	3.126
Y	89		ug/L		803190	2.267
Mo	98	1.606	ug/L	1.231	6849	0.019
Ag	107	1.755	ug/L	3.324	12927	0.036
Cd	111	1.971	ug/L	0.798	3717	0.010
Cd	114		ug/L		5221	0.015
> In	115		ug/L		354242	354242.092
Sn	120	8.302	ug/L	2.050	62846	0.177
Sb	121	4.812	ug/L	2.065	30096	0.084
Sb	123		ug/L		23845	0.066
Ba	135		ug/L		873352	1.266
Ba	137	374.303	ug/L	1.580	1469593	2.130
Ho	165		ug/L		63590	0.092
> Lu	175		ug/L		689817	689817.307
Tl	205	0.559	ug/L	2.127	16972	0.020
Pb	208	475.330	ug/L	1.409	21130951	30.632
Bi	209		ug/L		27158	0.039
Th	232	22.034	ug/L	0.964	1189727	1.722
U	238	577.863	ug/L	1.031	32185440	46.659

Sample ID: 245391002

Report Date/Time: Tuesday, February 16, 2010 04:38:25

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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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
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		100.7			
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		89.1			
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		102.7			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Ti	47	Sample is out of limits (over linear range)
	Cu	65	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 245391003

Sample Date/Time: Tuesday, February 16, 2010 04:41:51

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945412|2|baj

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100215\245391003.347

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	26.682	ug/L	0.434	45174	0.066
Be	9	5.968	ug/L	1.892	2147	0.003
B	11	6.828	ug/L	5.118	2859	0.004
Na	23	1317.394	ug/L	9.314	4726342	6.917
Mg	24	2503.052	ug/L	2.406	5865693	8.608
Al	27	18893.899	ug/L	6.872	62624606	91.950
P	31	266.068	ug/L	1.209	56881	0.074
K	39	3382.591	ug/L	4.135	17421250	24.862
Ca	43	3829.919	ug/L	2.433	50985	0.074
> Sc	45		ug/L		681088	681087.644
Ti	47	657.429	ug/L	0.863	428090	0.628
V	51	22.792	ug/L	2.521	170436	0.250
Cr	52	15.587	ug/L	2.812	92313	0.132
Cr	53		ug/L		68987	-0.032
Mn	55	1198.052	ug/L	1.140	11708251	17.188
Fe	57	22636.571	ug/L	1.994	4934124	7.236
Co	59	19.173	ug/L	1.153	151499	0.222
Ni	60	21.953	ug/L	1.879	39478	0.058
Cu	63		ug/L		646937	0.949
Cu	65	148.657	ug/L	2.241	320731	0.471
Zn	66	116.625	ug/L	1.481	149886	0.307
Zn	67		ug/L		30862	0.041
Zn	68		ug/L		109285	0.222
> Ge	74		ug/L		487250	487250.449
As	75	6.598	ug/L	1.502	7861	0.017
Se	77		ug/L		3992	-0.003
Se	82	0.304	ug/L	63.928	89	0.000
Kr	83		ug/L		326	0.000
Sr	88	31.365	ug/L	0.495	545358	1.475
Y	89		ug/L		2383643	6.452
Mo	98	2.690	ug/L	2.279	11863	0.032
Ag	107	0.722	ug/L	2.937	5596	0.015
Cd	111	2.206	ug/L	5.346	4337	0.012
Cd	114		ug/L		1676	0.004
> In	115		ug/L		369583	369582.548
Sn	120	4.995	ug/L	3.523	39551	0.106
Sb	121	2.112	ug/L	3.440	14014	0.037
Sb	123		ug/L		10828	0.028
Ba	135		ug/L		474878	0.632
Ba	137	192.519	ug/L	1.896	822749	1.096
Ho	165		ug/L		201663	0.269
> Lu	175		ug/L		750838	750838.449
Tl	205	0.266	ug/L	1.672	10640	0.009
Pb	208	99.808	ug/L	0.522	4830458	6.432
Bi	209		ug/L		9818	0.013
Th	232	34.041	ug/L	4.383	1998553	2.661
U	238	211.423	ug/L	2.551	12815348	17.071

Sample ID: 245391003

Report Date/Time: Tuesday, February 16, 2010 04:44:36

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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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
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			99.4		
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74			89.2		
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115			97.0		
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175			111.8		
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Ti	47	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 245391004

Sample Date/Time: Tuesday, February 16, 2010 04:48:03

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945412|2|baj

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100215\245391004.348

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	40.894	ug/L	1.205	72452	0.101
Be	9	2.307	ug/L	4.631	881	0.001
B	11	20.432	ug/L	1.854	8026	0.011
Na	23	967.086	ug/L	10.946	3639575	5.078
Mg	24	6025.388	ug/L	2.598	14782493	20.721
Al	27	36030.487	ug/L	2.491	125069771	175.349
P	31	164.812	ug/L	3.073	39379	0.046
K	39	4540.644	ug/L	1.652	24315109	33.374
Ca	43	8916.674	ug/L	1.360	123898	0.173
> Sc	45		ug/L		713231	713230.982
Ti	47	660.826	ug/L	2.381	450616	0.631
V	51	41.236	ug/L	2.602	322733	0.452
Cr	52	28.973	ug/L	2.651	177291	0.245
Cr	53		ug/L		77272	-0.025
Mn	55	797.156	ug/L	1.749	8158735	11.437
Fe	57	47444.820	ug/L	2.286	10823915	15.166
Co	59	30.815	ug/L	1.599	254921	0.357
Ni	60	27.019	ug/L	1.118	50842	0.071
Cu	63		ug/L		119936	0.168
Cu	65	26.343	ug/L	3.135	59688	0.083
Zn	66	130.665	ug/L	1.027	171749	0.344
Zn	67		ug/L		35777	0.049
Zn	68		ug/L		129113	0.257
> Ge	74		ug/L		498374	498374.328
As	75	6.858	ug/L	5.058	8383	0.018
Se	77		ug/L		3835	-0.003
Se	82	-0.230	ug/L	58.696	12	-0.000
Kr	83		ug/L		334	0.000
Sr	88	72.708	ug/L	2.605	1270681	3.418
Y	89		ug/L		1441143	3.878
Mo	98	4.039	ug/L	2.748	17833	0.048
Ag	107	0.413	ug/L	3.097	3261	0.009
Cd	111	1.378	ug/L	11.100	2737	0.007
Cd	114		ug/L		552	0.001
> In	115		ug/L		371591	371591.344
Sn	120	2.703	ug/L	2.432	21664	0.058
Sb	121	0.245	ug/L	3.853	2015	0.004
Sb	123		ug/L		1606	0.003
Ba	135		ug/L		893331	1.255
Ba	137	367.259	ug/L	1.681	1488137	2.090
Ho	165		ug/L		118163	0.166
> Lu	175		ug/L		711891	711891.210
Tl	205	0.373	ug/L	2.466	12817	0.013
Pb	208	24.443	ug/L	1.266	1122595	1.575
Bi	209		ug/L		16817	0.024
Th	232	27.931	ug/L	0.709	1555880	2.183
U	238	26.223	ug/L	1.832	1508683	2.117

Sample ID: 245391004

Report Date/Time: Tuesday, February 16, 2010 04:50:48

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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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
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		104.1			
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		91.2			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		97.6			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		106.0			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message
Ti 47 Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 245391005
 Sample Date/Time: Tuesday, February 16, 2010 04:54:15
 Sample Type:
 Sample Description: LANL 6020
 Number of Replicates: 3
 Batch ID: 945412[2]baj
 Method File: c:\elandata\Method\6020 2.mth
 Dataset File: c:\elandata\Dataset\100215\245391005.349

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	39.045	ug/L	0.105	68231	0.097
Be	9	10.344	ug/L	1.336	3830	0.005
B	11	13.302	ug/L	2.326	5314	0.007
Na	23	314.534	ug/L	4.708	1178407	1.651
Mg	24	6205.805	ug/L	6.134	15016384	21.341
Al	27	42771.393	ug/L	8.575	146423146	208.154
P	31	258.446	ug/L	2.594	57242	0.072
K	39	5854.318	ug/L	6.260	30764106	43.029
Ca	43	5657.043	ug/L	1.205	77629	0.110
> Sc	45		ug/L		703421	703421.455
Ti	47	700.503	ug/L	0.984	471048	0.669
V	51	51.851	ug/L	3.698	400121	0.568
Cr	52	29.259	ug/L	2.433	176520	0.247
Cr	53		ug/L		75528	-0.026
Mn	55	601.623	ug/L	1.365	6072772	8.631
Fe	57	31649.134	ug/L	3.006	7122440	10.117
Co	59	11.551	ug/L	2.530	94316	0.134
Ni	60	24.526	ug/L	2.452	45524	0.064
Cu	63		ug/L		1273716	1.810
Cu	65	296.395	ug/L	0.103	660248	0.938
Zn	66	125.597	ug/L	2.997	162985	0.331
Zn	67		ug/L		33797	0.046
Zn	68		ug/L		120632	0.243
> Ge	74		ug/L		492207	492206.743
As	75	8.239	ug/L	2.743	10064	0.022
Se	77		ug/L		3573	-0.004
Se	82	-0.993	ug/L	9.355	-99	-0.000
Kr	83		ug/L		366	0.001
Sr	88	60.635	ug/L	1.515	1019790	2.851
Y	89		ug/L		897901	2.511
Mo	98	1.526	ug/L	1.698	6578	0.018
Ag	107	0.837	ug/L	1.883	6269	0.017
Cd	111	1.525	ug/L	6.188	2913	0.008
Cd	114		ug/L		2210	0.006
> In	115		ug/L		357651	357651.160
Sn	120	2.141	ug/L	1.521	16573	0.046
Sb	121	1.895	ug/L	2.674	12213	0.033
Sb	123		ug/L		9521	0.026
Ba	135		ug/L		614300	0.887
Ba	137	269.227	ug/L	0.419	1060791	1.532
Ho	165		ug/L		73165	0.106
> Lu	175		ug/L		692172	692171.943
Tl	205	0.532	ug/L	1.523	16367	0.019
Pb	208	159.402	ug/L	1.032	7111555	10.273
Bi	209		ug/L		21955	0.032
Th	232	26.150	ug/L	0.856	1416425	2.044
U	238	257.796	ug/L	1.434	14409578	20.815

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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
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		102.6			
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		90.1			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		93.9			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		103.1			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 245391006

Sample Date/Time: Tuesday, February 16, 2010 05:00:27

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945412|2|baj

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100215\245391006.350

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	27.928	ug/L	1.893	46862	0.069
Be	9	8.766	ug/L	2.692	3118	0.005
B	11	8.403	ug/L	4.554	3385	0.004
Na	23	361.251	ug/L	12.191	1297223	1.897
Mg	24	4083.695	ug/L	4.058	9481819	14.044
Al	27	26978.992	ug/L	1.804	88643424	131.298
P	31	285.458	ug/L	8.087	60029	0.080
K	39	4198.115	ug/L	5.289	21311548	30.856
Ca	43	4006.076	ug/L	0.962	52843	0.078
> Sc	45		ug/L		675103	675102.766
Ti	47	594.065	ug/L	1.361	383468	0.567
V	51	36.882	ug/L	2.673	273189	0.404
Cr	52	21.894	ug/L	1.561	127445	0.185
Cr	53		ug/L		69503	-0.030
Mn	55	627.396	ug/L	1.679	6077877	9.001
Fe	57	24201.891	ug/L	2.888	5227975	7.736
Co	59	10.921	ug/L	1.697	85587	0.127
Ni	60	19.287	ug/L	1.280	34392	0.051
Cu	63		ug/L		3771608	5.586
Cu	65	843.271	ug/L	0.761	1802425	2.670
Zn	66	130.712	ug/L	3.104	167410	0.344
Zn	67		ug/L		33784	0.047
Zn	68		ug/L		122839	0.250
> Ge	74		ug/L		485763	485763.173
As	75	7.770	ug/L	1.233	9336	0.020
Se	77		ug/L		3491	-0.004
Se	82	-0.455	ug/L	23.688	-20	-0.000
Kr	83		ug/L		266	0.000
Sr	88	42.149	ug/L	2.303	716908	1.982
Y	89		ug/L		868980	2.403
Mo	98	1.874	ug/L	2.905	8131	0.022
Ag	107	2.171	ug/L	3.190	16307	0.045
Cd	111	1.680	ug/L	2.811	3239	0.009
Cd	114		ug/L		3804	0.010
> In	115		ug/L		361754	361753.657
Sn	120	6.246	ug/L	2.722	48342	0.133
Sb	121	2.296	ug/L	1.540	14881	0.040
Sb	123		ug/L		11682	0.031
Ba	135		ug/L		476466	0.668
Ba	137	203.260	ug/L	2.457	825199	1.157
Ho	165		ug/L		72046	0.101
> Lu	175		ug/L		713356	713356.143
Tl	205	0.351	ug/L	2.212	12285	0.013
Pb	208	296.354	ug/L	0.969	13625151	19.098
Bi	209		ug/L		26223	0.037
Th	232	21.849	ug/L	2.455	1219668	1.708
U	238	221.384	ug/L	1.158	12751263	17.875

Sample ID: 245391006

Report Date/Time: Tuesday, February 16, 2010 05:03:13

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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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
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		98.5			
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		88.9			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		95.0			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		106.2			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message
Ti 47 Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Tuesday, February 16, 2010 05:06:38

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100215\QC Std 8.351

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	52.921	ug/L	1.302	81450	0.131
Be	9	54.152	ug/L	1.792	17592	0.028
B	11	102.580	ug/L	0.388	33371	0.053
Na	23	4198.115	ug/L	5.756	13663601	22.042
Mg	24	4722.721	ug/L	7.105	10065235	16.241
Al	27	4877.431	ug/L	3.608	14708483	23.737
P	31	4820.797	ug/L	1.612	840555	1.348
K	39	5082.255	ug/L	7.377	23580639	37.355
Ca	43	4797.419	ug/L	2.475	58054	0.093
> Sc	45		ug/L		619648	619648.436
Ti	47	49.513	ug/L	1.375	29656	0.047
V	51	49.588	ug/L	1.979	337019	0.544
Cr	52	50.593	ug/L	2.429	267019	0.427
Cr	53		ug/L		101177	0.030
Mn	55	53.565	ug/L	1.992	477605	0.768
Fe	57	4711.836	ug/L	0.889	938653	1.506
Co	59	51.512	ug/L	2.021	370025	0.597
Ni	60	52.119	ug/L	2.410	85041	0.137
Cu	63		ug/L		204062	0.329
Cu	65	51.453	ug/L	0.215	101114	0.163
Zn	66	51.516	ug/L	1.149	68896	0.136
Zn	67		ug/L		19760	0.016
Zn	68		ug/L		50066	0.097
> Ge	74		ug/L		505595	505594.669
As	75	49.552	ug/L	1.887	65291	0.130
Se	77		ug/L		10112	0.009
Se	82	49.012	ug/L	0.186	7390	0.015
Kr	83		ug/L		183	0.000
Sr	88	52.181	ug/L	2.908	891168	2.453
Y	89		ug/L		317	0.001
Mo	98	48.539	ug/L	1.146	207800	0.572
Ag	107	50.574	ug/L	2.468	379576	1.045
Cd	111	49.717	ug/L	1.910	95332	0.262
Cd	114		ug/L		224860	0.619
> In	115		ug/L		363207	363207.420
Sn	120	51.964	ug/L	1.842	401788	1.106
Sb	121	52.682	ug/L	1.407	333625	0.918
Sb	123		ug/L		264100	0.726
Ba	135		ug/L		105176	0.152
Ba	137	46.500	ug/L	1.656	183424	0.265
Ho	165		ug/L		60	0.000
> Lu	175		ug/L		692720	692720.317
Tl	205	49.021	ug/L	1.077	1212526	1.746
Pb	208	52.075	ug/L	0.789	2325826	3.356
Bi	209		ug/L		559	0.001
Th	232	51.901	ug/L	2.977	2811668	4.057
U	238	53.930	ug/L	1.454	3017572	4.355

Sample ID: QC Std 8

Report Date/Time: Tuesday, February 16, 2010 05:09:21

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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Li	7	105.843				
Be	9	108.304				
B	11	102.580				
Na	23	83.962				
Mg	24	94.454				
Al	27	96.583				
P	31	96.416				
K	39	101.645				
Ca	43	95.948				
> Sc	45		90.4			
Ti	47	99.026				
V	51	99.177				
Cr	52	101.186				
Cr	53					
Mn	55	107.129				
Fe	57	94.237				
Co	59	103.024				
Ni	60	104.237				
Cu	63					
Cu	65	102.905				
Zn	66	103.031				
Zn	67					
Zn	68					
> Ge	74		92.6			
As	75	99.104				
Se	77					
Se	82	98.024				
Kr	83					
Sr	88	104.362				
Y	89					
Mo	98	97.077				
Ag	107	101.148				
Cd	111	99.434				
Cd	114					
> In	115		95.4			
Sn	120	103.928				
Sb	121	105.363				
Sb	123					
Ba	135					
Ba	137	93.000				
Ho	165					
> Lu	175		103.2			
Tl	205	98.042				
Pb	208	104.149				
Bi	209					
Th	232	103.802				
U	238	107.860				

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message
 QC Std 8 Na 23CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Tuesday, February 16, 2010 05:12:46

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100215\QC Std 9.352

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.027	ug/L	5.322	114	0.000
Be	9	0.001	ug/L	2403.905	16	0.000
B	11	3.495	ug/L	17.921	1445	0.002
Na	23	0.789	ug/L	150.745	16343	0.004
Mg	24	-0.278	ug/L	360.546	2000	-0.001
Al	27	1.151	ug/L	46.585	10671	0.006
P	31	0.966	ug/L	98.379	5499	0.000
K	39	2.665	ug/L	353.987	431792	0.020
Ca	43	-0.791	ug/L	121.564	237	-0.000
> Sc	45		ug/L		584678	584678.302
Ti	47	0.081	ug/L	67.682	378	0.000
V	51	-0.711	ug/L	137.159	-4347	-0.008
Cr	52	0.045	ug/L	184.284	2545	0.000
Cr	53		ug/L		77321	-0.001
Mn	55	0.020	ug/L	48.750	1624	0.000
Fe	57	1.037	ug/L	47.696	5294	0.000
Co	59	0.006	ug/L	50.788	159	0.000
Ni	60	0.007	ug/L	13.124	144	0.000
Cu	63		ug/L		624	0.001
Cu	65	0.042	ug/L	13.418	243	0.000
Zn	66	-0.056	ug/L	49.273	263	-0.000
Zn	67		ug/L		10135	-0.001
Zn	68		ug/L		1142	-0.000
> Ge	74		ug/L		475061	475060.855
As	75	-0.335	ug/L	84.355	-1003	-0.001
Se	77		ug/L		5103	-0.000
Se	82	-0.183	ug/L	86.572	18	-0.000
Kr	83		ug/L		129	0.000
Sr	88	0.004	ug/L	38.683	378	0.000
Y	89		ug/L		107	0.000
Mo	98	0.043	ug/L	35.667	315	0.001
Ag	107	0.004	ug/L	0.973	109	0.000
Cd	111	0.006	ug/L	86.409	41	0.000
Cd	114		ug/L		100	0.000
> In	115		ug/L		339234	339234.492
Sn	120	0.018	ug/L	23.931	398	0.000
Sb	121	0.098	ug/L	24.091	971	0.002
Sb	123		ug/L		761	0.001
Ba	135		ug/L		61	-0.000
Ba	137	0.003	ug/L	129.170	103	0.000
Ho	165		ug/L		24	-0.000
> Lu	175		ug/L		644880	644880.100
Tl	205	0.281	ug/L	24.620	9489	0.010
Pb	208	0.006	ug/L	18.488	1386	0.000
Bi	209		ug/L		63	-0.000
Th	232	0.026	ug/L	17.405	2724	0.002
U	238	0.010	ug/L	4.254	1733	0.001

Sample ID: QC Std 9

Report Date/Time: Tuesday, February 16, 2010 05:15:30

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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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

Sample ID: QC Std 9

Report Date/Time: Tuesday, February 16, 2010 05:15:30

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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		85.3			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
L Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		87.0			
As	75					
Se	77					
Se	82					
L Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		89.1			
Sn	120					
Sb	121					
L Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		96.0			
Tl	205					
Pb	208					
Bi	209					
Th	232					
L U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 245391007

Sample Date/Time: Tuesday, February 16, 2010 05:18:56

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945412[2]ba]

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100215\245391007.353

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	14.829	ug/L	1.483	23482	0.037
Be	9	2.845	ug/L	6.162	964	0.001
B	11	2.436	ug/L	12.929	1222	0.001
Na	23	1569.148	ug/L	4.768	5256353	8.239
Mg	24	958.014	ug/L	8.244	2097455	3.295
Al	27	7166.047	ug/L	6.735	22186090	34.875
P	31	267.028	ug/L	3.463	53281	0.075
K	39	2891.289	ug/L	2.750	13978799	21.251
Ca	43	2085.120	ug/L	1.214	26044	0.041
> Sc	45		ug/L		636134	636133.714
Ti	47	532.467	ug/L	1.947	323846	0.509
V	51	6.570	ug/L	2.547	46082	0.072
Cr	52	5.486	ug/L	1.713	31983	0.046
Cr	53		ug/L		60664	-0.038
Mn	55	1173.032	ug/L	1.443	10706339	16.829
Fe	57	20046.411	ug/L	0.689	4081652	6.408
Co	59	13.979	ug/L	1.203	103193	0.162
Ni	60	17.521	ug/L	2.961	29447	0.046
Cu	63		ug/L		160065	0.251
Cu	65	38.943	ug/L	1.919	78596	0.123
Zn	66	126.281	ug/L	2.866	159023	0.332
Zn	67		ug/L		31846	0.044
Zn	68		ug/L		115277	0.239
> Ge	74		ug/L		477481	477480.974
As	75	4.599	ug/L	3.093	5193	0.012
Se	77		ug/L		3752	-0.003
Se	82	0.366	ug/L	37.996	96	0.000
Kr	83		ug/L		270	0.000
Sr	88	12.252	ug/L	3.421	205139	0.576
Y	89		ug/L		1951526	5.489
Mo	98	3.160	ug/L	3.494	13385	0.037
Ag	107	0.566	ug/L	2.049	4243	0.012
Cd	111	1.901	ug/L	3.840	3603	0.010
Cd	114		ug/L		636	0.002
> In	115		ug/L		355740	355739.819
Sn	120	9.648	ug/L	3.170	73271	0.205
Sb	121	1.778	ug/L	3.258	11421	0.031
Sb	123		ug/L		9082	0.025
Ba	135		ug/L		261760	0.351
Ba	137	108.195	ug/L	1.190	459496	0.616
Ho	165		ug/L		179503	0.241
> Lu	175		ug/L		746054	746054.235
Tl	205	0.272	ug/L	5.208	10746	0.010
Pb	208	31.878	ug/L	1.348	1533821	2.054
Bi	209		ug/L		2503	0.003
Th	232	26.265	ug/L	1.047	1533293	2.053
U	238	45.489	ug/L	2.826	2741027	3.673

Sample ID: 245391007

Report Date/Time: Tuesday, February 16, 2010 05:21:40

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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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
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		92.8			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		87.4			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		93.4			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		111.1			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Ti	47	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

Sample ID: 245391007
 Report Date/Time: Tuesday, February 16, 2010 05:21:40
 Page 3

ICPMS#5 - Summary Report

Sample ID: 245391008

Sample Date/Time: Tuesday, February 16, 2010 05:25:06

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945412|2|baj

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100215\245391008.354

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	26.703	ug/L	0.208	43628	0.066
Be	9	2.238	ug/L	5.723	788	0.001
B	11	9.657	ug/L	1.728	3724	0.005
Na	23	631.636	ug/L	4.888	2195415	3.316
Mg	24	5037.607	ug/L	4.807	11387118	17.324
Al	27	37413.111	ug/L	1.297	119686567	182.077
P	31	147.861	ug/L	0.842	33172	0.041
K	39	5360.247	ug/L	1.612	26369234	39.398
Ca	43	4017.874	ug/L	2.219	51598	0.078
> Sc	45		ug/L		657267	657266.813
Ti	47	797.802	ug/L	2.029	501286	0.762
V	51	54.589	ug/L	0.612	393592	0.598
Cr	52	26.821	ug/L	1.303	151421	0.226
Cr	53		ug/L		68150	-0.030
Mn	55	879.243	ug/L	1.272	8292934	12.614
Fe	57	30315.081	ug/L	1.295	6374680	9.691
Co	59	24.186	ug/L	2.784	184386	0.280
Ni	60	22.173	ug/L	1.982	38476	0.058
Cu	63		ug/L		88507	0.134
Cu	65	21.180	ug/L	2.002	44259	0.067
Zn	66	79.108	ug/L	1.828	96576	0.208
Zn	67		ug/L		22669	0.026
Zn	68		ug/L		69926	0.149
> Ge	74		ug/L		462345	462344.590
As	75	7.335	ug/L	6.494	8362	0.019
Se	77		ug/L		3202	-0.004
Se	82	-0.854	ug/L	8.063	-74	-0.000
Kr	83		ug/L		334	0.000
Sr	88	57.810	ug/L	0.520	955112	2.718
Y	89		ug/L		807452	2.299
Mo	98	1.593	ug/L	3.077	6738	0.019
Ag	107	0.349	ug/L	2.639	2615	0.007
Cd	111	1.287	ug/L	5.313	2416	0.007
Cd	114		ug/L		727	0.002
> In	115		ug/L		351324	351324.100
Sn	120	1.259	ug/L	4.081	9687	0.027
Sb	121	0.323	ug/L	1.638	2382	0.006
Sb	123		ug/L		1900	0.005
Ba	135		ug/L		370537	0.522
Ba	137	158.564	ug/L	2.709	640487	0.903
Ho	165		ug/L		72695	0.102
> Lu	175		ug/L		709671	709670.570
Tl	205	0.570	ug/L	0.838	17745	0.020
Pb	208	50.001	ug/L	0.347	2287959	3.222
Bi	209		ug/L		18946	0.027
Th	232	30.653	ug/L	0.930	1701992	2.396
U	238	10.431	ug/L	0.975	598990	0.842

Sample ID: 245391008

Report Date/Time: Tuesday, February 16, 2010 05:27:51

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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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
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		95.9			
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		84.6			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		92.2			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		105.7			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message
Ti 47 Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 245391009

Sample Date/Time: Tuesday, February 16, 2010 05:31:17

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945412|2|baj

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100215\245391009.355

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	40.193	ug/L	0.719	72699	0.100
Be	9	7.277	ug/L	2.895	2795	0.004
B	11	14.096	ug/L	2.753	5802	0.007
Na	23	748.546	ug/L	3.449	2878595	3.930
Mg	24	7050.226	ug/L	6.258	17657523	24.245
Al	27	49266.943	ug/L	3.018	174595247	239.766
P	31	238.057	ug/L	2.421	55113	0.067
K	39	6112.894	ug/L	7.055	33248164	44.930
Ca	43	7215.209	ug/L	2.116	102422	0.140
> Sc	45		ug/L		728145	728144.784
Ti	47	742.200	ug/L	1.427	516637	0.709
V	51	57.944	ug/L	3.234	462839	0.635
Cr	52	39.129	ug/L	1.499	243431	0.330
Cr	53		ug/L		82423	-0.020
Mn	55	734.663	ug/L	2.503	7676815	10.540
Fe	57	64566.042	ug/L	3.089	15034457	20.639
Co	59	22.855	ug/L	1.049	193053	0.265
Ni	60	32.956	ug/L	1.126	63275	0.087
Cu	63		ug/L		1545493	2.122
Cu	65	352.370	ug/L	1.735	812469	1.116
Zn	66	162.555	ug/L	3.311	210761	0.428
Zn	67		ug/L		41414	0.062
Zn	68		ug/L		154925	0.313
> Ge	74		ug/L		491988	491988.293
As	75	10.539	ug/L	2.329	13038	0.028
Se	77		ug/L		3494	-0.004
Se	82	-0.765	ug/L	45.636	-66	-0.000
Kr	83		ug/L		407	0.001
Sr	88	77.207	ug/L	1.793	1320087	3.630
Y	89		ug/L		1263363	3.475
Mo	98	4.857	ug/L	3.656	20951	0.057
Ag	107	0.688	ug/L	3.966	5254	0.014
Cd	111	1.818	ug/L	7.688	3521	0.010
Cd	114		ug/L		2280	0.006
> In	115		ug/L		363613	363612.741
Sn	120	5.279	ug/L	1.361	41127	0.112
Sb	121	2.476	ug/L	2.634	16098	0.043
Sb	123		ug/L		12655	0.034
Ba	135		ug/L		662923	0.953
Ba	137	284.391	ug/L	1.520	1126581	1.619
Ho	165		ug/L		106170	0.153
> Lu	175		ug/L		695978	695977.718
Tl	205	0.494	ug/L	1.509	15515	0.018
Pb	208	299.209	ug/L	0.931	13420430	19.282
Bi	209		ug/L		21047	0.030
Th	232	32.154	ug/L	0.157	1750878	2.514
U	238	197.046	ug/L	2.224	11073018	15.910

Sample ID: 245391009

Report Date/Time: Tuesday, February 16, 2010 05:34:02

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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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		106.2			
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		90.1			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		95.5			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		103.6			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Ti	47	Sample is out of limits (over linear range)
	Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 245391010

Sample Date/Time: Tuesday, February 16, 2010 05:37:28

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945412|2|baj

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100215\245391010.356

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	59.198	ug/L	0.263	103129	0.147
Be	9	19.674	ug/L	2.460	7248	0.010
B	11	16.478	ug/L	2.687	6459	0.009
Na	23	419.378	ug/L	3.575	1561286	2.202
Mg	24	7171.325	ug/L	2.734	17305371	24.662
Al	27	50900.701	ug/L	3.631	173877486	247.717
P	31	420.310	ug/L	0.956	88834	0.117
K	39	6165.766	ug/L	7.672	32292757	45.318
Ca	43	10418.992	ug/L	2.057	142358	0.202
> Sc	45		ug/L		701583	701583.390
Ti	47	778.002	ug/L	2.142	521628	0.743
V	51	56.037	ug/L	1.005	431331	0.614
Cr	52	35.727	ug/L	0.432	214396	0.302
Cr	53		ug/L		79361	-0.020
Mn	55	607.382	ug/L	2.603	6113322	8.714
Fe	57	34229.059	ug/L	1.852	7682794	10.942
Co	59	12.751	ug/L	1.629	103849	0.148
Ni	60	30.239	ug/L	1.793	55939	0.080
Cu	63		ug/L		2276017	3.243
Cu	65	514.738	ug/L	2.570	1143083	1.630
Zn	66	165.445	ug/L	1.846	213394	0.435
Zn	67		ug/L		41678	0.063
Zn	68		ug/L		155664	0.316
> Ge	74		ug/L		489365	489364.989
As	75	13.262	ug/L	3.188	16469	0.035
Se	77		ug/L		3543	-0.004
Se	82	-0.863	ug/L	28.236	-80	-0.000
Kr	83		ug/L		371	0.001
Sr	88	78.382	ug/L	2.649	1335647	3.685
Y	89		ug/L		1011775	2.791
Mo	98	1.898	ug/L	1.517	8255	0.022
Ag	107	1.592	ug/L	2.236	12008	0.033
Cd	111	1.986	ug/L	7.454	3830	0.010
Cd	114		ug/L		3694	0.010
> In	115		ug/L		362494	362494.034
Sn	120	4.019	ug/L	1.589	31284	0.086
Sb	121	4.101	ug/L	1.091	26314	0.071
Sb	123		ug/L		20764	0.056
Ba	135		ug/L		902044	1.309
Ba	137	386.404	ug/L	1.338	1515536	2.199
Ho	165		ug/L		81572	0.118
> Lu	175		ug/L		689065	689065.276
Tl	205	0.542	ug/L	0.813	16539	0.019
Pb	208	4452.689	ug/L	1.251	197703445	286.949
Bi	209		ug/L		32814	0.048
Th	232	26.890	ug/L	1.796	1449684	2.102
U	238	633.231	ug/L	2.092	35228835	51.129

Sample ID: 245391010

Report Date/Time: Tuesday, February 16, 2010 05:40:14

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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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
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		102.4			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		89.6			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		95.2			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		102.6			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)
	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

Sample ID: 245391010

Report Date/Time: Tuesday, February 16, 2010 05:40:14

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ICPMS#5 - Summary Report

Sample ID: 245391011

Sample Date/Time: Tuesday, February 16, 2010 05:43:41

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945412|2|baj

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100215\245391011.357

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	37.794	ug/L	0.033	68448	0.094
Be	9	2.753	ug/L	2.644	1070	0.001
B	11	10.825	ug/L	3.632	4571	0.006
Na	23	1375.138	ug/L	0.260	5280666	7.220
Mg	24	6446.812	ug/L	0.799	16164820	22.170
Al	27	41478.867	ug/L	3.390	147140907	201.864
P	31	150.651	ug/L	5.347	37356	0.042
K	39	5143.566	ug/L	3.343	28088966	37.805
Ca	43	9598.653	ug/L	2.380	136286	0.187
> Sc	45		ug/L		728992	728992.138
Ti	47	646.100	ug/L	1.105	450296	0.617
V	51	41.821	ug/L	2.979	334463	0.458
Cr	52	28.444	ug/L	2.131	177917	0.240
Cr	53		ug/L		74999	-0.030
Mn	55	720.574	ug/L	0.968	7537761	10.338
Fe	57	31743.450	ug/L	2.501	7402576	10.147
Co	59	10.576	ug/L	0.668	89511	0.123
Ni	60	24.971	ug/L	1.518	48035	0.066
Cu	63		ug/L		79749	0.109
Cu	65	17.268	ug/L	0.875	40061	0.055
Zn	66	132.952	ug/L	1.515	173278	0.350
Zn	67		ug/L		34825	0.048
Zn	68		ug/L		126602	0.254
> Ge	74		ug/L		494208	494208.323
As	75	7.376	ug/L	1.171	8985	0.019
Se	77		ug/L		3535	-0.004
Se	82	-0.369	ug/L	98.350	-8	-0.000
Kr	83		ug/L		349	0.000
Sr	88	81.376	ug/L	2.623	1403504	3.826
Y	89		ug/L		1437971	3.921
Mo	98	3.684	ug/L	1.621	16072	0.043
Ag	107	0.378	ug/L	2.125	2953	0.008
Cd	111	1.321	ug/L	13.134	2592	0.007
Cd	114		ug/L		356	0.001
> In	115		ug/L		366915	366915.180
Sn	120	1.988	ug/L	0.277	15811	0.042
Sb	121	0.194	ug/L	1.548	1667	0.003
Sb	123		ug/L		1339	0.003
Ba	135		ug/L		635761	0.871
Ba	137	261.471	ug/L	1.104	1085999	1.488
Ho	165		ug/L		124624	0.171
> Lu	175		ug/L		729701	729700.509
Tl	205	0.385	ug/L	0.834	13441	0.014
Pb	208	26.659	ug/L	1.705	1254732	1.718
Bi	209		ug/L		14820	0.020
Th	232	32.674	ug/L	1.623	1865128	2.554
U	238	6.065	ug/L	1.722	358687	0.490

Sample ID: 245391011

Report Date/Time: Tuesday, February 16, 2010 05:46:26

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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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
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		106.4			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		90.5			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		96.3			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		108.7			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message
Ti 47 Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Tuesday, February 16, 2010 05:49:50

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100215\QC Std 6.358

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	53.019	ug/L	0.972	85971	0.132
Be	9	54.242	ug/L	1.960	18573	0.028
B	11	106.174	ug/L	5.557	36379	0.055
Na	23	4295.794	ug/L	3.974	14743074	22.554
Mg	24	4971.542	ug/L	1.467	11166366	17.097
Al	27	4891.935	ug/L	4.873	15552413	23.807
P	31	4958.290	ug/L	2.374	911017	1.386
K	39	5018.913	ug/L	7.145	24553960	36.889
Ca	43	4918.967	ug/L	1.877	62694	0.096
> Sc	45		ug/L		652945	652944.822
Ti	47	50.345	ug/L	3.189	31772	0.048
V	51	49.866	ug/L	1.848	357193	0.547
Cr	52	51.244	ug/L	2.742	285050	0.433
Cr	53		ug/L		106452	0.030
Mn	55	53.289	ug/L	1.402	500824	0.765
Fe	57	4659.259	ug/L	1.274	978178	1.489
Co	59	51.841	ug/L	1.942	392498	0.601
Ni	60	51.939	ug/L	0.916	89331	0.137
Cu	63		ug/L		215133	0.329
Cu	65	50.874	ug/L	2.407	105349	0.161
Zn	66	52.487	ug/L	1.577	73071	0.138
Zn	67		ug/L		20717	0.017
Zn	68		ug/L		52977	0.098
> Ge	74		ug/L		526278	526278.476
As	75	49.691	ug/L	2.412	68173	0.131
Se	77		ug/L		10399	0.009
Se	82	49.517	ug/L	1.585	7771	0.015
Kr	83		ug/L		172	0.000
Sr	88	54.104	ug/L	2.102	933947	2.544
Y	89		ug/L		337	0.001
Mo	98	50.301	ug/L	2.794	217591	0.592
Ag	107	51.590	ug/L	1.749	391370	1.066
Cd	111	51.095	ug/L	1.149	99022	0.270
Cd	114		ug/L		232037	0.632
> In	115		ug/L		367050	367049.722
Sn	120	52.471	ug/L	1.303	410028	1.116
Sb	121	54.040	ug/L	1.278	345859	0.941
Sb	123		ug/L		273040	0.743
Ba	135		ug/L		106857	0.156
Ba	137	48.361	ug/L	3.362	188814	0.275
Ho	165		ug/L		70	0.000
> Lu	175		ug/L		685831	685830.904
Tl	205	50.113	ug/L	3.068	1226775	1.785
Pb	208	53.064	ug/L	1.066	2346221	3.420
Bi	209		ug/L		576	0.001
Th	232	53.728	ug/L	0.617	2881862	4.200
U	238	55.405	ug/L	1.212	3068987	4.474

Sample ID: QC Std 6

Report Date/Time: Tuesday, February 16, 2010 05:52:34

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	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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Li	7	106.038				
Be	9	108.484				
B	11	106.174				
Na	23	85.916				
Mg	24	99.431				
Al	27	96.870				
P	31	99.166				
K	39	100.378				
Ca	43	98.379				
> Sc	45		95.3			
Ti	47	100.691				
V	51	99.731				
Cr	52	102.489				
Cr	53					
Mn	55	106.578				
Fe	57	93.185				
Co	59	103.681				
Ni	60	103.877				
Cu	63					
Cu	65	101.747				
Zn	66	104.973				
Zn	67					
Zn	68					
> Ge	74		96.4			
As	75	99.382				
Se	77					
Se	82	99.035				
Kr	83					
Sr	88	108.209				
Y	89					
Mo	98	100.602				
Ag	107	103.180				
Cd	111	102.189				
Cd	114					
> In	115		96.4			
Sn	120	104.943				
Sb	121	108.080				
Sb	123					
Ba	135					
Ba	137	96.723				
Ho	165					
> Lu	175		102.1			
Tl	205	100.226				
Pb	208	106.129				
Bi	209					
Th	232	107.455				
U	238	110.810				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Na	23	CCV is out of limits (+/- 10%)
QC Std 6	U	238	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, February 16, 2010 05:55:59

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100215\QC Std 7.359

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.017	ug/L	62.045	110	0.000
Be	9	0.024	ug/L	51.091	25	0.000
B	11	3.072	ug/L	17.027	1457	0.002
Na	23	-0.188	ug/L	951.929	14675	-0.001
Mg	24	0.681	ug/L	154.061	4334	0.002
Al	27	1.003	ug/L	30.480	11338	0.005
P	31	-0.712	ug/L	424.015	5766	-0.000
K	39	-2.850	ug/L	179.820	451018	-0.021
Ca	43	-2.751	ug/L	75.570	238	-0.000
> Sc	45		ug/L		646093	646093.225
Ti	47	-0.017	ug/L	87.021	357	-0.000
V	51	-0.407	ug/L	30.195	-2622	-0.004
Cr	52	0.018	ug/L	185.984	2663	0.000
Cr	53		ug/L		77780	-0.013
Mn	55	0.018	ug/L	39.094	1784	0.000
Fe	57	-0.684	ug/L	152.010	5493	-0.000
Co	59	0.007	ug/L	33.651	181	0.000
Ni	60	0.005	ug/L	158.965	156	0.000
Cu	63		ug/L		486	0.000
Cu	65	0.007	ug/L	47.655	199	0.000
Zn	66	-0.085	ug/L	15.948	247	-0.000
Zn	67		ug/L		10367	-0.003
Zn	68		ug/L		1149	-0.000
> Ge	74		ug/L		517266	517265.745
As	75	0.083	ug/L	425.897	-529	0.000
Se	77		ug/L		5108	-0.001
Se	82	-0.168	ug/L	47.148	22	-0.000
Kr	83		ug/L		125	0.000
Sr	88	0.007	ug/L	32.699	464	0.000
Y	89		ug/L		120	0.000
Mo	98	0.039	ug/L	25.834	325	0.000
Ag	107	0.004	ug/L	40.644	115	0.000
Cd	111	0.009	ug/L	67.219	50	0.000
Cd	114		ug/L		99	0.000
> In	115		ug/L		368126	368126.050
Sn	120	0.015	ug/L	14.652	411	0.000
Sb	121	0.084	ug/L	10.870	964	0.001
Sb	123		ug/L		756	0.001
Ba	135		ug/L		73	0.000
Ba	137	0.009	ug/L	31.028	134	0.000
Ho	165		ug/L		21	-0.000
> Lu	175		ug/L		691217	691216.956
Tl	205	0.267	ug/L	25.698	9847	0.010
Pb	208	0.016	ug/L	17.872	1911	0.001
Bi	209		ug/L		68	0.000
Th	232	0.024	ug/L	11.995	2764	0.002
U	238	0.011	ug/L	17.228	1908	0.001

Sample ID: QC Std 7

Report Date/Time: Tuesday, February 16, 2010 05:58:43

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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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

Sample ID: QC Std 7

Report Date/Time: Tuesday, February 16, 2010 05:58:43

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		94.3			
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		94.7			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		96.6			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		102.9			
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 7

Report Date/Time: Tuesday, February 16, 2010 05:58:43

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ICPMS #5 Daily Performance Report

Sample ID: Sample

Sample Date/Time: Tuesday, February 16, 2010 09:56:53

Sample Description:

Method File: c:\elandata\Method\Daily2.mth

Dataset File: c:\elandata\Dataset\default\Sample.508

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	5824.6	5824.587	64.472	1.1
Mg	24.0	52397.9	52397.926	530.155	1.0
Co	58.9	134585.5	134585.498	1964.389	1.5
Rh	102.9	275204.4	275204.428	1970.292	0.7
In	114.9	356296.0	356295.987	2535.045	0.7
Pb	208.0	294149.8	294149.815	2195.918	0.7
[> Ba	137.9	332978.1	332978.115	1837.484	0.6
[Ba++	69.0	6438.4	0.019	0.000	1.3
[> Ce	139.9	400965.9	400965.863	1522.954	0.4
[CeO	155.9	10970.0	0.027	0.000	1.5
Bkgd	220.0	20.3	20.300	1.987	9.8

Current Optimization File Data

Current Value	Description
0.88	Nebulizer Gas Flow
5.75	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	9	5.5	5921.9
Co	59	9	5.8	140865.1
In	115	9	6.0	365896.9

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	594	2072	0.632
Be	9.0	9.0	2046	2088	0.623
Mg	24.0	24.0	5689	2100	0.582
Mg	25.0	25.0	5941	2100	0.611
Mg	26.0	26.0	6150	2100	0.606
Co	58.9	58.9	14170	2125	0.608
Rh	102.9	102.9	24881	2180	0.593
In	114.9	114.9	27783	2200	0.584
Ce	139.9	139.9	33867	2220	0.601
Pb	206.0	206.0	49948	2305	0.598
Pb	207.0	207.0	50159	2240	0.638
Pb	208.0	208.0	50451	2265	0.715
U	238.1	238.0	57719	2275	0.751

ICPMS#5 - Summary Report

Sample ID: Blank

Sample Date/Time: Tuesday, February 16, 2010 10:07:16

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100216\Blank.001

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		640426	
[U	238		ug/L		137	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Simple Linear	
U	238	Simple Linear	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[> Lu	175					
[U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: Blank

Report Date/Time: Tuesday, February 16, 2010 10:07:27

Page 1

ICPMS#5 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Tuesday, February 16, 2010 10:08:55

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100216\Standard 1.002

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		653333	653333.455
[	U	238	10.000	ug/L	0.563	537803	0.823

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[>	Lu	175						
[	U	238						

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: Standard 1

Report Date/Time: Tuesday, February 16, 2010 10:09:05

Page 1

ICPMS#5 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Tuesday, February 16, 2010 10:10:33

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: C:\elandata\Dataset\100216\Standard 2.003

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		639731	639731.283
[U	238	99.891	ug/L	1.021	4742234	7.413

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[> Lu	175					
[U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: Standard 2

Report Date/Time: Tuesday, February 16, 2010 10:10:44

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ICPMS#5 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Tuesday, February 16, 2010 10:12:12

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100216\QC Std 1.004

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		648522	648521.553
[	U	238	51.128	ug/L	1.000	2460690	3.794

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175		101.3				
[	U	238	102.256					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 1

Report Date/Time: Tuesday, February 16, 2010 10:12:23

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Tuesday, February 16, 2010 10:13:53

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\du only.mth

Dataset File: C:\elandata\Dataset\100216\QC Std 2.005

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		651770	651769.900
[	U	238	0.016	ug/L	3.737	913	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175		101.8				
[	U	238						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 2

Report Date/Time: Tuesday, February 16, 2010 10:14:05

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Tuesday, February 16, 2010 10:15:33

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100216\QC Std 3.006

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		651463	651462.559
[	U	238	0.232	ug/L	0.721	11373	0.017

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175		101.7				
[	U	238	116.182					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 3

Report Date/Time: Tuesday, February 16, 2010 10:15:44

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Tuesday, February 16, 2010 10:17:12

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100216\QC Std 4.007

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		608490	608489.504
[	U	238	0.003	ug/L	11.492	276	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175		95.0				
[	U	238						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 4

Report Date/Time: Tuesday, February 16, 2010 10:17:23

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Tuesday, February 16, 2010 10:18:52

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100216\QC Std 5.008

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		609023	609023.255
[	U	238	22.260	ug/L	0.148	1006178	1.652

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175			95.1		
[	U	238	111.302				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 5

Report Date/Time: Tuesday, February 16, 2010 10:19:02

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Tuesday, February 16, 2010 10:20:31

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100216\QC Std 6.009

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		663252	663252.239
[	U	238	51.862	ug/L	0.422	2552665	3.849

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[>	Lu	175			103.6		
[	U	238	103.723				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 6

Report Date/Time: Tuesday, February 16, 2010 10:20:41

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Tuesday, February 16, 2010 10:22:11

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100216\QC Std 7.010

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		656870	656869.594
[	U	238	0.015	ug/L	5.972	882	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175			102.6			
[	U	238						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202024796

Sample Date/Time: Tuesday, February 16, 2010 10:23:54

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 945412|2|baj

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100216\1202024796.011

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		656186	656186.479
[	U	238	0.010	ug/L	2.365	631	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Duplicate Rel. % Difference
[>	Lu	175			102.5		
[	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202024796

Report Date/Time: Tuesday, February 16, 2010 10:24:06

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202024797

Sample Date/Time: Tuesday, February 16, 2010 10:26:37

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 945412|40|baj

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100216\1202024797.012

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		667142	667141.879
[	U	238	0.659	ug/L	0.916	32755	0.049

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[>	Lu	175		104.2			
[	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202024797

Report Date/Time: Tuesday, February 16, 2010 10:26:49

Page 1

ICPMS#5 - Summary Report

Sample ID: 245391001

Sample Date/Time: Tuesday, February 16, 2010 10:28:20

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945412|2|baj

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100216\245391001.013

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		667117	667116.978
U	238	6.157	ug/L	0.496	304943	0.457	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Lu	175		104.2			
U	238						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 245391001

Report Date/Time: Tuesday, February 16, 2010 10:28:33

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202024798

Sample Date/Time: Tuesday, February 16, 2010 10:30:04

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 945412|2|baj

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100216\1202024798.014

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		659373	659373.012
[	U	238	6.346	ug/L	0.733	310652	0.471

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[>	Lu	175		103.0			
[	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202024798

Report Date/Time: Tuesday, February 16, 2010 10:30:18

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202024799

Sample Date/Time: Tuesday, February 16, 2010 10:31:49

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 945412|2|ba|

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100216\1202024799.015

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		656094	656093.655
[	U	238	32.491	ug/L	0.954	1581990	2.411

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution %	Duplicate Rel. % Difference
[>	Lu	175			102.4		
[	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202024799

Report Date/Time: Tuesday, February 16, 2010 10:32:02

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202024801

Sample Date/Time: Tuesday, February 16, 2010 10:33:33

Sample Type:

Sample Description: LANL 6020 MSD

Number of Replicates: 3

Batch ID: 945412[2]ba]

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100216\1202024801.016

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		662667	662667.314
[	U	238	32.934	ug/L	0.257	1619699	2.444

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175			103.5		
[	U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202024801

Report Date/Time: Tuesday, February 16, 2010 10:33:45

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202024800

Sample Date/Time: Tuesday, February 16, 2010 10:35:15

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 945412|10|bej

Method File: c:\elandata\Method\du only.mth

Dataset File: C:\elandata\Dataset\100216\1202024800.017

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		661660	661660.201
[	U	238	1.251	ug/L	1.292	61560	0.093

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175		103.3			
[	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202024800

Report Date/Time: Tuesday, February 16, 2010 10:35:28

Page 1

ICPMS#5 - Summary Report

Sample ID: 245391002

Sample Date/Time: Tuesday, February 16, 2010 10:36:58

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945412|100|ba|

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100216\245391002.018

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		664706	664705.613
[	U	238	6.331	ug/L	0.680	312436	0.470

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[>	Lu	175		103.8			
[	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 245391002

Report Date/Time: Tuesday, February 16, 2010 10:37:11

Page 1

ICPMS#5 - Summary Report

Sample ID: 245391003

Sample Date/Time: Tuesday, February 16, 2010 10:38:42

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945412|100|baj

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100216\245391003.019

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		661542	661541.533
[U	238	2.513	ug/L	0.350	123498	0.186

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[> Lu	175		103.3			
[U	238					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 245391003

Report Date/Time: Tuesday, February 16, 2010 10:38:55

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Tuesday, February 16, 2010 10:40:23

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100216\QC Std 8.020

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		655719	655718.852
[	U	238	52.286	ug/L	0.809	2544240	3.880

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[>	Lu	175			102.4			
[	U	238	104.571					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 8

Report Date/Time: Tuesday, February 16, 2010 10:40:34

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Tuesday, February 16, 2010 10:42:04

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100216\QC Std 9.021

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		655541	655540.761
[	U	238	0.013	ug/L	4.799	756	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[>	Lu	175		102.4				
[	U	238						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 9

Report Date/Time: Tuesday, February 16, 2010 10:42:16

Page 1

ICPMS#5 - Summary Report

Sample ID: 245391004

Sample Date/Time: Tuesday, February 16, 2010 10:43:47

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945412|2|ba|

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100216\245391004.022

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		674754	674753.802
[	U	238	25.891 ug/L	0.434	1296572	1.921

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[>	Lu	175		105.4		
[	U	238				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 245391004

Report Date/Time: Tuesday, February 16, 2010 10:44:00

Page 1

ICPMS#5 - Summary Report

Sample ID: 245391005

Sample Date/Time: Tuesday, February 16, 2010 10:45:32

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945412|100|baj

Method File: c:\elandata\Method\du only.mth

Dataset File: C:\elandata\Dataset\100216\245391005.023

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		666577	666576.635
[	U	238	2.955	ug/L	0.797	146316	0.219

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175			104.1		
[	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 245391006

Sample Date/Time: Tuesday, February 16, 2010 10:47:17

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945412|100|baj

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100216\245391006.024

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		661024	661024.140
[	U	238	2.540	ug/L	0.906	124757	0.189

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175		103.2			
[	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 245391006

Report Date/Time: Tuesday, February 16, 2010 10:47:31

Page 1

ICPMS#5 - Summary Report

Sample ID: 245391007

Sample Date/Time: Tuesday, February 16, 2010 10:49:02

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945412|2|baj

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100216\245391007.025

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		715706	715706.077
[	U	238	44.793	ug/L	0.863	2379211	3.324

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175			111.8		
[	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 245391007

Report Date/Time: Tuesday, February 16, 2010 10:49:14

Page 1

ICPMS#5 - Summary Report

Sample ID: 245391008

Sample Date/Time: Tuesday, February 16, 2010 10:50:45

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945412|2|ba|

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100216\245391008.026

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		671413	671413.295
[	U	238	10.180	ug/L	0.721	507389	0.755

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
[>	Lu	175		104.8			
[	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 245391008

Report Date/Time: Tuesday, February 16, 2010 10:50:57

Page 1

ICPMS#5 - Summary Report

Sample ID: 245391009

Sample Date/Time: Tuesday, February 16, 2010 10:52:28

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945412|100|baj

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100216\245391009.027

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		654312	654311.660
[	U	238	2.249	ug/L	0.936	109360	0.167

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175		102.2			
[	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 245391009

Report Date/Time: Tuesday, February 16, 2010 10:52:41

Page 1

ICPMS#5 - Summary Report

Sample ID: 245391010

Sample Date/Time: Tuesday, February 16, 2010 10:54:13

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945412|100|baj

Method File: c:\elandata\Method\w only.mth

Dataset File: C:\elandata\Dataset\100216\245391010.028

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		659061	659061.031
[	U	238	7.032	ug/L	1.778	344078	0.522

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175		102.9			
[	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 245391010

Report Date/Time: Tuesday, February 16, 2010 10:54:26

Page 1

ICPMS#5 - Summary Report

Sample ID: 245391011

Sample Date/Time: Tuesday, February 16, 2010 10:55:57

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945412|2|ba|

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100216\245391011.029

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		684295	684295.289
[	U	238	5.989	ug/L	0.988	304279	0.444

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175		106.8			
[	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 245391011

Report Date/Time: Tuesday, February 16, 2010 10:56:11

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Tuesday, February 16, 2010 10:57:39

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100216\QC Std 6.030

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		658134	658133.746
[	U	238	53.038	ug/L	0.383	2590397	3.936

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[>	Lu	175			102.8			
[	U	238	106.076					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 6

Report Date/Time: Tuesday, February 16, 2010 10:57:50

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Tuesday, February 16, 2010 10:59:20

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: C:\elandata\Dataset\100216\QC Std 7.031

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		667092	667091.889
[	U	238	0.012	ug/L	4.337	749	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[>	Lu	175		104.2				
[	U	238						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Tuesday, February 16, 2010 10:59:32

Page 1

ICPMS#5 - Summary Report

Sample ID: Blank

Sample Date/Time: Tuesday, February 16, 2010 16:15:23

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and ni.mth

Dataset File: c:\elandata\Dataset\100216\Blank.163

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9		ug/L		18	
>	Sc	45		ug/L		1732508	
[	Ni	60		ug/L		134	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	
Sc	45	Linear Thru Zero	
Ni	60	Simple Linear	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
>	Sc	45					
[	Ni	60					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: Blank

Report Date/Time: Tuesday, February 16, 2010 16:15:38

Page 1

ICPMS#5 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Tuesday, February 16, 2010 16:17:35

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and ni.mth

Dataset File: c:\elandata\Dataset\100216\Standard 1.164

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	10.000	ug/L	2.333	5318	0.003
>	Sc	45		ug/L		1756937	1756937.333
[	Ni	60	10.000	ug/L	3.076	29051	0.016

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

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
>	Sc	45					
[	Ni	60					

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, February 16, 2010 16:17:48

Page 1

ICPMS#5 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Tuesday, February 16, 2010 16:19:45

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and ni.mth

Dataset File: c:\elandata\Dataset\100216\Standard 2.165

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	100.014	ug/L	4.323	51968	0.031
>	Sc	45		ug/L		1700126	1700125.814
[	Ni	60	99.971	ug/L	3.248	271752	0.160

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

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[	Be	9						
>	Sc	45						
[	Ni	60						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: Standard 2

Report Date/Time: Tuesday, February 16, 2010 16:19:58

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Tuesday, February 16, 2010 16:21:56

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and ni.mth

Dataset File: c:\elandata\Dataset\100216\QC Std 1.166

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	51.836	ug/L	1.788	27066	0.016
>	Sc	45		ug/L		1705918	1705918.238
]	Ni	60	52.125	ug/L	1.996	142356	0.083

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

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9	103.672				
>	Sc	45		98.5			
]	Ni	60	104.251				

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 1

Report Date/Time: Tuesday, February 16, 2010 16:22:09

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Tuesday, February 16, 2010 16:24:09

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and ni.mth

Dataset File: c:\elandata\Dataset\100216\QC Std 2.167

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.002	ug/L	279.786	19	0.000
>	Sc	45		ug/L		1719874	1719873.955
[	Ni	60	-0.000	ug/L	598.237	132	-0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear 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		99.3				
[	Ni	60						

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, February 16, 2010 16:24:24

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Tuesday, February 16, 2010 16:26:22

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and ni.mth

Dataset File: c:\elandata\Dataset\100216\QC Std 3.168

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.535	ug/L	5.616	304	0.000
>	Sc	45		ug/L		1749513	1749512.662
L	Ni	60	2.322	ug/L	0.292	6633	0.004

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

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9	106.914				
>	Sc	45		101.0			
L	Ni	60	116.108				

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 3

Report Date/Time: Tuesday, February 16, 2010 16:26:35

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Tuesday, February 16, 2010 16:28:33

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and ni.mth

Dataset File: c:\elandata\Dataset\100216\QC Std 4.169

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.099	ug/L	14.952	57	0.000
>	Sc	45		ug/L		1407056	1407055.544
]	Ni	60	3.748	ug/L	1.399	8544	0.006

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

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[	Be	9						
>	Sc	45		81.2				
]	Ni	60	113.237					

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, February 16, 2010 16:28:47

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Tuesday, February 16, 2010 16:30:46

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and ni.mth

Dataset File: c:\elandata\Dataset\100216\QC Std 5.170

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	18.944	ug/L	1.280	7975	0.006
>	Sc	45		ug/L		1374195	1374195.277
[	Ni	60	23.959	ug/L	4.659	52728	0.038

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

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9	94.719				
>	Sc	45		79.3			
[	Ni	60	102.783				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for QC Sc		45	

QC Action

QC Action Line: Continue

Sample ID: QC Std 5

Report Date/Time: Tuesday, February 16, 2010 16:31:00

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Tuesday, February 16, 2010 16:32:59

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and ni.mth

Dataset File: c:\elandata\Dataset\100216\QC Std 6.171

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	52.606	ug/L	2.796	24834	0.016
>	Sc	45		ug/L		1542992	1542991.958
[	Ni	60	52.773	ug/L	1.658	130338	0.084

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

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[	Be	9	105.212					
>	Sc	45		89.1				
[	Ni	60	105.545					

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

Report Date/Time: Tuesday, February 16, 2010 16:33:13

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Tuesday, February 16, 2010 16:35:13

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and ni.mth

Dataset File: c:\elandata\Dataset\100216\QC Std 7.172

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	-0.005	ug/L	157.286	14	-0.000
>	Sc	45		ug/L		1576091	1576090.716
[	Ni	60	0.011	ug/L	43.594	149	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

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9					
>	Sc	45		91.0			
[	Ni	60					

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

Report Date/Time: Tuesday, February 16, 2010 16:35:28

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 10

Sample Date/Time: Tuesday, February 16, 2010 16:37:25

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and ni.mth

Dataset File: c:\elandata\Dataset\100216\QC Std 10.173

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	981.505	ug/L	1.562	417559	0.300
>	Sc	45		ug/L		1391161	1391161.461
[	Ni	60	840.992	ug/L	2.495	1870944	1.345

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

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[	Be	9	98.151					
>	Sc	45		80.3				
[	Ni	60	84.099					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 10	Ni	60	LRS is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

Sample ID: QC Std 10

Report Date/Time: Tuesday, February 16, 2010 16:37:38

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 11

Sample Date/Time: Tuesday, February 16, 2010 16:39:36

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and ni.mth

Dataset File: c:\elandata\Dataset\100216\QC Std 11.174

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	53.174	ug/L	1.055	25709	0.016
>	Sc	45		ug/L		1579804	1579804.257
[	Ni	60	51.884	ug/L	1.652	131230	0.083

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

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9	106.347				
>	Sc	45		91.2			
[	Ni	60	103.769				

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 11

Report Date/Time: Tuesday, February 16, 2010 16:39:49

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 12

Sample Date/Time: Tuesday, February 16, 2010 16:41:49

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and ni.mth

Dataset File: c:\elandata\Dataset\100216\QC Std 12.175

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.014	ug/L	100.670	24	0.000
>	Sc	45		ug/L		1609713	1609713.471
[	Ni	60	0.013	ug/L	23.749	158	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

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9					
>	Sc	45		92.9			
[	Ni	60					

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, February 16, 2010 16:42:04

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202024796

Sample Date/Time: Tuesday, February 16, 2010 16:44:02

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 945412|2|baj

Method File: c:\elandata\Method\be and ni.mth

Dataset File: c:\elandata\Dataset\100216\1202024796.176

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.045	ug/L	38.572	40	0.000
>	Sc	45		ug/L		1662486	1662486.116
[	Ni	60	0.161	ug/L	2.606	555	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

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9					
>	Sc	45		96.0			
[	Ni	60					

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: 1202024796

Report Date/Time: Tuesday, February 16, 2010 16:44:15

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202024797

Sample Date/Time: Tuesday, February 16, 2010 16:46:14

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 945412|40|be|

Method File: c:\elandata\Method\be and ni.mth

Dataset File: c:\elandata\Dataset\100216\1202024797.177

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	18.543	ug/L	1.445	9526	0.006
>	Sc	45		ug/L		1676787	1676786.855
[	Ni	60	33.464	ug/L	1.559	89863	0.054

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

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
>	Sc	45		96.8			
[	Ni	60					

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: 1202024797

Report Date/Time: Tuesday, February 16, 2010 16:46:28

Page 1

ICPMS#5 - Summary Report

Sample ID: 245391001

Sample Date/Time: Tuesday, February 16, 2010 16:48:27

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945412|2|baj

Method File: c:\elandata\Method\be and ni.mth

Dataset File: c:\elandata\Dataset\100216\245391001.178

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	4.257	ug/L	2.590	2377	0.001
>	Sc	45		ug/L		1810440	1810439.567
[	Ni	60	37.352	ug/L	0.218	108304	0.060

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear 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		104.5			
[	Ni	60					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 245391001

Report Date/Time: Tuesday, February 16, 2010 16:48:40

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202024798

Sample Date/Time: Tuesday, February 16, 2010 16:50:40

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 945412|2|baj

Method File: c:\elandata\Method\be and ni.mth

Dataset File: c:\elandata\Dataset\100216\1202024798.179

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	4.269	ug/L	5.673	2319	0.001
>	Sc	45		ug/L		1763073	1763073.359
[	Ni	60	35.633	ug/L	3.309	100578	0.057

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

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
>	Sc	45		101.8			
[	Ni	60					

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: 1202024798

Report Date/Time: Tuesday, February 16, 2010 16:50:54

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202024799

Sample Date/Time: Tuesday, February 16, 2010 16:52:53

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 945412|2|ba|

Method File: c:\elandata\Method\be and ni.mth

Dataset File: c:\elandata\Dataset\100216\1202024799.180

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	26.539	ug/L	1.487	14347	0.008
>	Sc	45		ug/L		1765548	1765547.564
[	Ni	60	54.875	ug/L	2.569	155069	0.088

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

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9					
>	Sc	45		101.9			
[	Ni	60					

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: 1202024799

Report Date/Time: Tuesday, February 16, 2010 16:53:08

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202024801

Sample Date/Time: Tuesday, February 16, 2010 16:55:08

Sample Type:

Sample Description: LANL 6020 MSD

Number of Replicates: 3

Batch ID: 945412|2|baj

Method File: c:\elandata\Method\be and ni.mth

Dataset File: c:\elandata\Dataset\100216\1202024801.181

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	27.009	ug/L	2.101	14373	0.008
>	Sc	45		ug/L		1737864	1737864.306
[	Ni	60	54.132	ug/L	1.936	150605	0.087

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

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dilution	Duplicate Rel. % Difference
[	Be	9					
>	Sc	45		100.3			
[	Ni	60					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202024801

Report Date/Time: Tuesday, February 16, 2010 16:55:22

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202024800

Sample Date/Time: Tuesday, February 16, 2010 16:57:22

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 945412|10|baj

Method File: c:\elandata\Method\be and ni.mth

Dataset File: c:\elandata\Dataset\100216\1202024800.182

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.906	ug/L	0.256	469	0.000
>	Sc	45		ug/L		1631466	1631465.819
[	Ni	60	7.966	ug/L	1.333	20915	0.013

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
>	Sc	45		94.2			
[	Ni	60					

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: 1202024800

Report Date/Time: Tuesday, February 16, 2010 16:57:37

Page 1

ICPMS#5 - Summary Report

Sample ID: 245391002

Sample Date/Time: Tuesday, February 16, 2010 16:59:36

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945412|2|baj

Method File: c:\elandata\Method\be and ni.mth

Dataset File: c:\elandata\Dataset\100216\245391002.183

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	25.423	ug/L	1.186	13058	0.008
>	Sc	45		ug/L		1677218	1677218.261
[	Ni	60	30.411	ug/L	1.771	81717	0.049

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

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[	Be	9						
>	Sc	45		96.8				
[	Ni	60						

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: 245391002

Report Date/Time: Tuesday, February 16, 2010 16:59:50

Page 1

ICPMS#5 - Summary Report

Sample ID: 245391003

Sample Date/Time: Tuesday, February 16, 2010 17:01:48

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945412[2]ba]

Method File: c:\elandata\Method\be and ni.mth

Dataset File: c:\elandata\Dataset\100216\245391003.184

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	6.210	ug/L	3.468	3196	0.002
Sc	45		ug/L		1674092	1674091.528
Ni	60	22.832	ug/L	2.105	61257	0.037

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

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Be	9					
Sc	45		96.6			
Ni	60					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Tuesday, February 16, 2010 17:04:01

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and ni.mth

Dataset File: c:\elandata\Dataset\100216\QC Std 6.185

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	52.172	ug/L	0.743	25083	0.016
>	Sc	45		ug/L		1570944	1570944.206
[	Ni	60	51.356	ug/L	3.154	129144	0.082

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

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9	104.344				
>	Sc	45		90.7			
[	Ni	60	102.712				

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

Report Date/Time: Tuesday, February 16, 2010 17:04:16

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Tuesday, February 16, 2010 17:06:16

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and ni.mth

Dataset File: c:\elandata\Dataset\100216\QC Std 7.186

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	-0.001	ug/L	866.497	16	-0.000
>	Sc	45		ug/L		1634904	1634904.262
[	Ni	60	0.009	ug/L	76.950	149	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

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
>	Sc	45		94.4			
[	Ni	60					

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

Report Date/Time: Tuesday, February 16, 2010 17:06:31

Page 1

ICPMS#5 - Summary Report

Sample ID: 245391004

Sample Date/Time: Tuesday, February 16, 2010 17:10:26

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945412|2|baj

Method File: c:\elandata\Method\be and ni.mth

Dataset File: c:\elandata\Dataset\100216\245391004.187

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	2.515 ug/L	4.825	1302	0.001
>	Sc	45	ug/L		1669824	1669823.957
[	Ni	60	28.941 ug/L	1.373	77418	0.046

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9				
>	Sc	45		96.4		
[	Ni	60				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 245391004

Report Date/Time: Tuesday, February 16, 2010 17:10:40

Page 1

ICPMS#5 - Summary Report

Sample ID: 245391005

Sample Date/Time: Tuesday, February 16, 2010 17:12:40

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945412|2|baj

Method File: c:\elandata\Method\be and ni.mth

Dataset File: c:\elandata\Dataset\100216\245391005.188

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	11.438	ug/L	1.207	5761	0.003
>	Sc	45		ug/L		1641890	1641889.686
[	Ni	60	26.029	ug/L	1.431	68479	0.042

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

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution %	Duplicate Rel. % Difference
[	Be	9					
>	Sc	45		94.8			
[	Ni	60					

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: 245391005

Report Date/Time: Tuesday, February 16, 2010 17:12:54

Page 1

ICPMS#5 - Summary Report

Sample ID: 245391006

Sample Date/Time: Tuesday, February 16, 2010 17:14:54

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945412|2|baj

Method File: c:\elandata\Method\be and nl.mth

Dataset File: c:\elandata\Dataset\100216\245391006.189

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	9.517	ug/L	4.288	4793	0.003
>	Sc	45		ug/L		1642175	1642174.842
[	Ni	60	20.767	ug/L	2.307	54651	0.033

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

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9					
>	Sc	45		94.8			
[	Ni	60					

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: 245391007

Sample Date/Time: Tuesday, February 16, 2010 17:17:09

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945412|2|baj

Method File: c:\elandata\Method\be and ni.mth

Dataset File: c:\elandata\Dataset\100216\245391007.190

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	3.114	ug/L	6.550	1517	0.001
>	Sc	45		ug/L		1577021	1577021.047
[	Ni	60	18.417	ug/L	3.167	46556	0.029

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
>	Sc	45		91.0			
[	Ni	60					

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: 245391007

Report Date/Time: Tuesday, February 16, 2010 17:17:24

Page 1

ICPMS#5 - Summary Report

Sample ID: 245391008

Sample Date/Time: Tuesday, February 16, 2010 17:19:24

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945412|2|baj

Method File: c:\elandata\Method\be and ni.mth

Dataset File: c:\elandata\Dataset\100216\245391008.191

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	2.299	ug/L	3.418	1191	0.001
>	Sc	45		ug/L		1669327	1669326.961
[	Ni	60	22.857	ug/L	1.497	61149	0.037

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

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[	Be	9						
>	Sc	45		96.4				
[	Ni	60						

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: 245391008

Report Date/Time: Tuesday, February 16, 2010 17:19:39

Page 1

ICPMS#5 - Summary Report

Sample ID: 245391009

Sample Date/Time: Tuesday, February 16, 2010 17:21:38

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945412|2|ba|

Method File: c:\elandata\Method\be and ni.mth

Dataset File: c:\elandata\Dataset\100216\245391009.192

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	7.645	ug/L	1.898	4004	0.002
>	Sc	45		ug/L		1705618	1705617.913
[	Ni	60	35.185	ug/L	2.941	96075	0.056

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear 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		98.4			
[	Ni	60					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 245391009

Report Date/Time: Tuesday, February 16, 2010 17:21:52

Page 1

ICPMS#5 - Summary Report

Sample ID: 245391010

Sample Date/Time: Tuesday, February 16, 2010 17:23:51

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945412|2|baj

Method File: c:\elandata\Method\be and ni.mth

Dataset File: c:\elandata\Dataset\100216\245391010.193

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	20.997	ug/L	0.924	10487	0.006
>	Sc	45		ug/L		1630350	1630349.771
L	Ni	60	31.735	ug/L	0.439	82885	0.051

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

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
>	Sc	45		94.1			
L	Ni	60					

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: 245391010

Report Date/Time: Tuesday, February 16, 2010 17:24:05

Page 1

ICPMS#5 - Summary Report

Sample ID: 245391011

Sample Date/Time: Tuesday, February 16, 2010 17:26:05

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945412|2|ba|

Method File: c:\elandata\Method\be and ni.mth

Dataset File: c:\elandata\Dataset\100216\245391011.194

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	2.896	ug/L	1.696	1512	0.001
>	Sc	45		ug/L		1687203	1687203.049
[	Ni	60	26.652	ug/L	0.851	72052	0.043

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

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
>	Sc	45		97.4			
[	Ni	60					

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: 245391011

Report Date/Time: Tuesday, February 16, 2010 17:26:19

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Tuesday, February 16, 2010 17:28:18

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and ni.mth

Dataset File: c:\elandata\Dataset\100216\QC Std 6.195

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	53.832	ug/L	1.861	25284	0.016
>	Sc	45		ug/L		1534934	1534933.611
[	Ni	60	51.608	ug/L	2.057	126803	0.083

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

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9	107.663				
>	Sc	45		88.6			
[	Ni	60	103.217				

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

Report Date/Time: Tuesday, February 16, 2010 17:28:32

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Tuesday, February 16, 2010 17:30:32

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and ni.mth

Dataset File: c:\elandata\Dataset\100216\QC Std 7.196

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.009	ug/L	114.676	21	0.000
>	Sc	45		ug/L		1583872	1583871.751
[	Ni	60	0.005	ug/L	33.574	135	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

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						

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

Report Date/Time: Tuesday, February 16, 2010 17:30:47

Page 1

=====
Analysis BegunLogged In Analyst: Administrator
Spectrometer Model: FIMS-100, S/N B050-9550Technique: AA FIMS-MHS
Autosampler Model: S10

Sample Information File: C:\data-AA\Administrator\Sample Information\020410S1.SIF

Batch ID:

Results Data Set: 020410S1

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

Sample ID: Calib Blank

Analyst:

Autosampler Location: 1

Date Collected: 2/4/2010 08:44:57

Data Type: Original

Replicate Data: Calib Blank

Repl #	SampleConc ug/L	StndConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	0.0002	0.0007	0.0002	08:46:00	Yes
2		[0.00]	0.0002	0.0004	0.0002	08:46:34	Yes
Mean:		[0.00]	0.0002				
SD:		0.00	0.0000				
%RSD:		0.00	13.47				

Auto-zero performed.

Sequence No.: 2

Sample ID: S0.2

Analyst:

Autosampler Location: 2

Date Collected: 2/4/2010 08:46:53

Data Type: Original

Replicate Data: S0.2

Repl #	SampleConc ug/L	StndConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.2]	0.0023	0.0090	0.0024	08:47:54	Yes
2		[0.2]	0.0023	0.0086	0.0025	08:48:29	Yes
Mean:		[0.2]	0.0023				
SD:		0.0	0.0000				
%RSD:		0.0	0.06				

Standard number 1 applied. [0.2]

Correlation Coef.: 1.000000 Slope: 0.01131 Intercept: 0.00000

Sequence No.: 3

Sample ID: S0.5

Analyst:

Autosampler Location: 3

Date Collected: 2/4/2010 08:48:48

Data Type: Original

Replicate Data: S0.5

Repl #	SampleConc ug/L	StndConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.5]	0.0058	0.0233	0.0060	08:49:49	Yes
2		[0.5]	0.0057	0.0222	0.0059	08:50:23	Yes
Mean:		[0.5]	0.0058				
SD:		0.0	0.0001				
%RSD:		0.0	1.14				

Standard number 2 applied. [0.5]

Correlation Coef.: 0.999971 Slope: 0.01152 Intercept: -0.00002

Sequence No.: 4

Sample ID: S2.0

Analyst:

Autosampler Location: 4

Date Collected: 2/4/2010 08:50:43

Data Type: Original

Replicate Data: S2.0

Repl #	SampleConc ug/L	StdndConc ug/L	BlndCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	[2.0]	[2.0]	0.0237	0.0959	0.0239	08:51:45	Yes
2	[2.0]	[2.0]	0.0236	0.0952	0.0238	08:52:19	Yes
Mean:	[2.0]	[2.0]	0.0237				
SD:	0.0	0.0	0.0001				
%RSD:	0.0	0.0	0.39				

Standard number 3 applied. [2.0]
Correlation Coef.: 0.999974 Slope: 0.01187 Intercept: -0.00009

Sequence No.: 5
Sample ID: S5.0
Analyst:

Autosampler Location: 5
Date Collected: 2/4/2010 08:52:39
Data Type: Original

Replicate Data: S5.0

Repl #	SampleConc ug/L	StdndConc ug/L	BlndCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	[5.0]	[5.0]	0.0583	0.2349	0.0585	08:53:41	Yes
2	[5.0]	[5.0]	0.0579	0.2323	0.0581	08:54:16	Yes
Mean:	[5.0]	[5.0]	0.0581				
SD:	0.0	0.0	0.0002				
%RSD:	0.0	0.0	0.41				

Standard number 4 applied. [5.0]
Correlation Coef.: 0.999963 Slope: 0.01164 Intercept: 0.00003

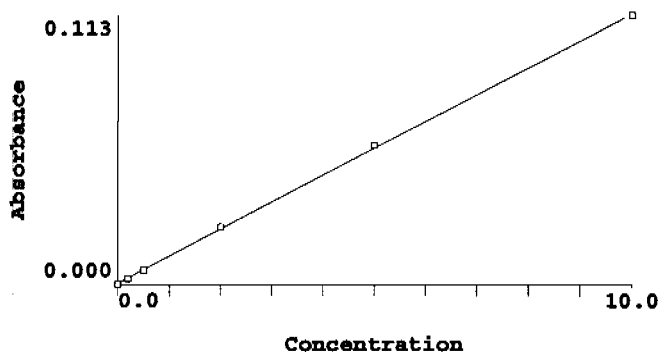
Sequence No.: 6
Sample ID: S10.0
Analyst:

Autosampler Location: 6
Date Collected: 2/4/2010 08:54:36
Data Type: Original

Replicate Data: S10.0

Repl #	SampleConc ug/L	StdndConc ug/L	BlndCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	[10.0]	[10.0]	0.1133	0.4583	0.1135	08:55:36	Yes
2	[10.0]	[10.0]	0.1124	0.4529	0.1126	08:56:11	Yes
Mean:	[10.0]	[10.0]	0.1128				
SD:	0.0	0.0	0.0006				
%RSD:	0.0	0.0	0.55				

Standard number 5 applied. [10.0]
Correlation Coef.: 0.999867 Slope: 0.01131 Intercept: 0.00041

-----
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	-0.036	0.00	13.5
S0.2	0.0023	0.2	0.164	0.00	0.1
S0.5	0.0058	0.5	0.473	0.00	1.1
S2.0	0.0237	2.0	2.058	0.00	0.4

S5.0 0.0581 5.0 5.101 0.00 0.4
S10.0 0.1128 10.0 9.940 0.00 0.5
Correlation Coef.: 0.999867 Slope: 0.01131 Intercept: 0.00041

Sequence No.: 7

Sample ID: ICV

Analyst:

Autosampler Location: 9

Date Collected: 2/4/2010 08:56:30

Data Type: Original

Replicate Data: ICV

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.169	5.169	0.0589	0.2377	0.0591	08:57:31	Yes
2	5.095	5.095	0.0580	0.2345	0.0582	08:58:06	Yes
Mean:	5.132	5.132	0.0585				
SD:	0.053	0.053	0.0006				
%RSD:	1.028	1.028	1.02				

QC value within limits for Hg 253.7 Recovery = 102.64%

All analyte(s) passed QC.

Sequence No.: 8

Sample ID: ICB

Analyst:

Autosampler Location: 10

Date Collected: 2/4/2010 08:58:26

Data Type: Original

Replicate Data: ICB

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.037	-0.037	-0.0000	-0.0008	0.0002	08:59:27	Yes
2	-0.034	-0.034	0.0000	-0.0005	0.0002	09:00:02	Yes
Mean:	-0.036	-0.036	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	6.056	6.056	>999.9%				

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: 2/4/2010 09:00:22

Data Type: Original

Replicate Data: CRDL

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.194	0.194	0.0026	0.0100	0.0028	09:01:24	Yes
2	0.194	0.194	0.0026	0.0103	0.0028	09:01:58	Yes
Mean:	0.194	0.194	0.0026				
SD:	0.000	0.000	0.0000				
%RSD:	0.174	0.174	0.15				

QC value within limits for Hg 253.7 Recovery = 96.89%

All analyte(s) passed QC.

Sequence No.: 10

Sample ID: CCV

Analyst:

Autosampler Location: 7

Date Collected: 2/4/2010 09:02:18

Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.979	4.979	0.0567	0.2298	0.0569	09:03:19	Yes
2	4.952	4.952	0.0564	0.2282	0.0566	09:03:54	Yes
Mean:	4.965	4.965	0.0566				
SD:	0.020	0.020	0.0002				
%RSD:	0.393	0.393	0.39				

QC value within limits for Hg 253.7 Recovery = 99.31%

All analyte(s) passed QC.

Sequence No.: 11

Sample ID: CCB

Analyst:

Autosampler Location: 8

Date Collected: 2/4/2010 09:04:13

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.043	-0.043	-0.0001	-0.0013	0.0001	09:05:14	Yes
2	-0.045	-0.045	-0.0001	-0.0011	0.0001	09:05:48	Yes
Mean:	-0.044	-0.044	-0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	2.761	2.761	14.72				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 12

Sample ID: 1202025230|945591|1

Analyst: JXL

Autosampler Location: 12

Date Collected: 2/4/2010 09:06:08

Data Type: Original

Replicate Data: 1202025230|945591|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.036	-0.036	0.0000	-0.0003	0.0002	09:07:09	Yes
2	-0.039	-0.039	-0.0000	-0.0003	0.0002	09:07:44	Yes
Mean:	-0.037	-0.037	-0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	5.900	5.900	177.27				

Sequence No.: 13

Sample ID: 1202025231|945591|10

Analyst: JXL

Autosampler Location: 13

Date Collected: 2/4/2010 09:08:04

Data Type: Original

Replicate Data: 1202025231|945591|10

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	3.814	3.814	0.0435	0.1759	0.0437	09:09:06	Yes
2	3.790	3.790	0.0433	0.1735	0.0435	09:09:41	Yes
Mean:	3.802	3.802	0.0434				
SD:	0.017	0.017	0.0002				
%RSD:	0.442	0.442	0.44				

Sequence No.: 14

Sample ID: 245119001|945591|1

Analyst: JXL

Autosampler Location: 14

Date Collected: 2/4/2010 09:10:02

Data Type: Original

Replicate Data: 245119001|945591|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.188	0.188	0.0025	0.0102	0.0027	09:11:03	Yes
2	0.188	0.188	0.0025	0.0099	0.0027	09:11:37	Yes
Mean:	0.188	0.188	0.0025				
SD:	0.000	0.000	0.0000				
%RSD:	0.213	0.213	0.18				

Sequence No.: 15

Sample ID: 1202025232|945591|1

Analyst: JXL

Autosampler Location: 15

Date Collected: 2/4/2010 09:11:56

Data Type: Original

Replicate Data: 1202025232|945591|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
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Replicate Data: 245119003|945591|1

Repl	SampleConc	StdndConc	BlndCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.137	0.137	0.0020	0.0082	0.0021	09:22:30	Yes
2	0.141	0.141	0.0020	0.0083	0.0022	09:23:05	Yes
Mean:	0.139	0.139	0.0020				
SD:	0.003	0.003	0.0000				
%RSD:	2.025	2.025	1.61				

Sequence No.: 21

Autosampler Location: 21

Sample ID: 245119004|945591|1

Date Collected: 2/4/2010 09:23:25

Analyst: JXL

Data Type: Original

Replicate Data: 245119004|945591|1

Repl	SampleConc	StdndConc	BlndCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.293	0.293	0.0037	0.0153	0.0039	09:24:26	Yes
2	0.300	0.300	0.0038	0.0159	0.0040	09:25:01	Yes
Mean:	0.296	0.296	0.0038				
SD:	0.005	0.005	0.0001				
%RSD:	1.625	1.625	1.45				

Sequence No.: 22

Autosampler Location: 7

Sample ID: CCV

Date Collected: 2/4/2010 09:25:20

Analyst:

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdndConc	BlndCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	4.929	4.929	0.0562	0.2308	0.0563	09:26:21	Yes
2	4.919	4.919	0.0560	0.2293	0.0562	09:26:55	Yes
Mean:	4.924	4.924	0.0561				
SD:	0.007	0.007	0.0001				
%RSD:	0.139	0.139	0.14				

QC value within limits for Hg 253.7 Recovery = 98.48%

All analyte(s) passed QC.

Sequence No.: 23

Autosampler Location: 8

Sample ID: CCB

Date Collected: 2/4/2010 09:27:14

Analyst:

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdndConc	BlndCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.038	-0.038	-0.0000	0.0004	0.0002	09:28:15	Yes
2	-0.042	-0.042	-0.0001	-0.0002	0.0001	09:28:50	Yes
Mean:	-0.040	-0.040	-0.0000				
SD:	0.003	0.003	0.0000				
%RSD:	7.595	7.595	78.30				

QC value within limits for Hg 253.7 Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 24

Autosampler Location: 22

Sample ID: 245119005|945591|1

Date Collected: 2/4/2010 09:29:10

Analyst: JXL

Data Type: Original

Replicate Data: 245119005|945591|1

Repl	SampleConc	StdndConc	BlndCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.261	0.261	0.0034	0.0142	0.0035	09:30:11	Yes
2	0.267	0.267	0.0034	0.0145	0.0036	09:30:46	Yes

Sequence No.: 34

Sample ID: CCV

Analyst:

Autosampler Location: 7

Date Collected: 2/4/2010 09:48:25

Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.993	4.993	0.0569	0.2365	0.0571	09:49:26	Yes
2	4.991	4.991	0.0569	0.2343	0.0571	09:50:00	Yes
Mean:	4.992	4.992	0.0569				
SD:	0.001	0.001	0.0000				
%RSD:	0.027	0.027	0.03				

QC value within limits for Hg 253.7 Recovery = 99.84%
All analyte(s) passed QC.

Sequence No.: 35

Sample ID: CCB

Analyst:

Autosampler Location: 8

Date Collected: 2/4/2010 09:50:19

Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.030	-0.030	0.0001	0.0009	0.0003	09:51:20	Yes
2	-0.031	-0.031	0.0001	0.0006	0.0002	09:51:55	Yes
Mean:	-0.031	-0.031	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	3.440	3.440	20.12				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 36

Sample ID: 245119015|945591|1

Analyst: JXL

Autosampler Location: 32

Date Collected: 2/4/2010 09:52:14

Data Type: Original

Replicate Data: 245119015|945591|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.154	0.154	0.0021	0.0095	0.0023	09:53:15	Yes
2	0.151	0.151	0.0021	0.0087	0.0023	09:53:51	Yes
Mean:	0.152	0.152	0.0021				
SD:	0.002	0.002	0.0000				
%RSD:	1.590	1.590	1.29				

Sequence No.: 37

Sample ID: 245119016|945591|1

Analyst: JXL

Autosampler Location: 33

Date Collected: 2/4/2010 09:54:10

Data Type: Original

Replicate Data: 245119016|945591|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.354	0.354	0.0044	0.0186	0.0046	09:55:11	Yes
2	0.357	0.357	0.0044	0.0191	0.0046	09:55:46	Yes
Mean:	0.356	0.356	0.0044				
SD:	0.002	0.002	0.0000				
%RSD:	0.550	0.550	0.50				

Sequence No.: 38

Sample ID: 1202024847|945440|1

Analyst: JXL

Autosampler Location: 34

Date Collected: 2/4/2010 09:56:06

Data Type: Original

Replicate Data: 1202024847|945440|1

Analyst: JXL

Data Type: Original

Replicate Data: 1202024852|945440|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.245	2.245	0.0258	0.1063	0.0260	10:06:50	Yes
2	2.228	2.228	0.0256	0.1064	0.0258	10:07:25	Yes
Mean:	2.237	2.237	0.0257				
SD:	0.012	0.012	0.0001				
%RSD:	0.531	0.531	0.52				

Sequence No.: 44

Autosampler Location: 40

Sample ID: 1202024851|945440|5

Date Collected: 2/4/2010 10:07:44

Analyst: JXL

Data Type: Original

Replicate Data: 1202024851|945440|5

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.000	0.000	0.0004	0.0025	0.0006	10:08:45	Yes
2	-0.003	-0.003	0.0004	0.0024	0.0006	10:09:20	Yes
Mean:	-0.002	-0.002	0.0004				
SD:	0.001	0.001	0.0000				
%RSD:	96.34	96.34	4.26				

Sequence No.: 45

Autosampler Location: 41

Sample ID: 245134002|945440|1

Date Collected: 2/4/2010 10:09:39

Analyst: JXL

Data Type: Original

Replicate Data: 245134002|945440|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.039	0.039	0.0008	0.0038	0.0010	10:10:40	Yes
2	0.047	0.047	0.0009	0.0046	0.0011	10:11:15	Yes
Mean:	0.043	0.043	0.0009				
SD:	0.006	0.006	0.0001				
%RSD:	13.44	13.44	7.31				

Sequence No.: 46

Autosampler Location: 7

Sample ID: CCV

Date Collected: 2/4/2010 10:11:35

Analyst:

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.020	5.020	0.0572	0.2369	0.0574	10:12:35	Yes
2	5.017	5.017	0.0572	0.2359	0.0573	10:13:10	Yes
Mean:	5.018	5.018	0.0572				
SD:	0.002	0.002	0.0000				
%RSD:	0.050	0.050	0.05				

QC value within limits for Hg 253.7 Recovery = 100.37%

All analyte(s) passed QC.

Sequence No.: 47

Autosampler Location: 8

Sample ID: CCB

Date Collected: 2/4/2010 10:13:29

Analyst:

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.033	-0.033	0.0000	0.0004	0.0002	10:14:30	Yes
2	-0.027	-0.027	0.0001	0.0014	0.0003	10:15:05	Yes
Mean:	-0.030	-0.030	0.0001				

SD: 0.004 0.004 0.0000

%RSD: 13.87 13.87 74.32

QC value within limits for Hg 253.7 Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 48

Sample ID: 245134003|945440|1

Analyst: JXL

Autosampler Location: 42

Date Collected: 2/4/2010 10:15:24

Data Type: Original

Replicate Data: 245134003|945440|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.696	0.696	0.0083	0.0347	0.0085	10:16:26	Yes
2	0.692	0.692	0.0082	0.0342	0.0084	10:17:01	Yes
Mean:	0.694	0.694	0.0083				
SD:	0.003	0.003	0.0000				
%RSD:	0.386	0.386	0.37				

Sequence No.: 49

Sample ID: 245134004|945440|1

Analyst: JXL

Autosampler Location: 43

Date Collected: 2/4/2010 10:17:20

Data Type: Original

Replicate Data: 245134004|945440|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.671	0.671	0.0080	0.0335	0.0082	10:18:21	Yes
2	0.669	0.669	0.0080	0.0335	0.0082	10:18:56	Yes
Mean:	0.670	0.670	0.0080				
SD:	0.002	0.002	0.0000				
%RSD:	0.293	0.293	0.28				

Sequence No.: 50

Sample ID: 245134005|945440|1

Analyst: JXL

Autosampler Location: 44

Date Collected: 2/4/2010 10:19:15

Data Type: Original

Replicate Data: 245134005|945440|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.225	0.225	0.0030	0.0127	0.0031	10:20:17	Yes
2	0.226	0.226	0.0030	0.0128	0.0032	10:20:52	Yes
Mean:	0.226	0.226	0.0030				
SD:	0.001	0.001	0.0000				
%RSD:	0.362	0.362	0.31				

Sequence No.: 51

Sample ID: 245134006|945440|1

Analyst: JXL

Autosampler Location: 45

Date Collected: 2/4/2010 10:21:11

Data Type: Original

Replicate Data: 245134006|945440|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.261	0.261	0.0034	0.0147	0.0035	10:22:12	Yes
2	0.262	0.262	0.0034	0.0144	0.0036	10:22:47	Yes
Mean:	0.262	0.262	0.0034				
SD:	0.000	0.000	0.0000				
%RSD:	0.159	0.159	0.14				

Sequence No.: 52

Sample ID: 245134007|945440|1

Analyst: JXL

Autosampler Location: 46

Date Collected: 2/4/2010 10:23:07

Data Type: Original

Sample ID: 1202024864|945445|10

Date Collected: 2/4/2010 10:32:48

Analyst: JXL

Data Type: Original

Replicate Data: 1202024864|945445|10

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	3.675	3.675	0.0420	0.1728	0.0422	10:33:50	Yes
2	3.651	3.651	0.0417	0.1712	0.0419	10:34:25	Yes
Mean:	3.663	3.663	0.0418				
SD:	0.018	0.018	0.0002				
%RSD:	0.480	0.480	0.47				

Sequence No.: 58

Autosampler Location: 7

Sample ID: CCV

Date Collected: 2/4/2010 10:34:45

Analyst:

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.017	5.017	0.0572	0.2360	0.0573	10:35:45	Yes
2	5.021	5.021	0.0572	0.2356	0.0574	10:36:20	Yes
Mean:	5.019	5.019	0.0572				
SD:	0.003	0.003	0.0000				
%RSD:	0.060	0.060	0.06				

QC value within limits for Hg 253.7 Recovery = 100.38%
All analyte(s) passed QC.

Sequence No.: 59

Autosampler Location: 8

Sample ID: CCB

Date Collected: 2/4/2010 10:36:39

Analyst:

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.027	-0.027	0.0001	0.0011	0.0003	10:37:39	Yes
2	-0.024	-0.024	0.0001	0.0011	0.0003	10:38:14	Yes
Mean:	-0.026	-0.026	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	8.319	8.319	21.42				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 60

Autosampler Location: 52

Sample ID: 245136001|945445|1

Date Collected: 2/4/2010 10:38:34

Analyst: JXL

Data Type: Original

Replicate Data: 245136001|945445|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.231	0.231	0.0030	0.0125	0.0032	10:39:35	Yes
2	0.229	0.229	0.0030	0.0129	0.0032	10:40:10	Yes
Mean:	0.230	0.230	0.0030				
SD:	0.001	0.001	0.0000				
%RSD:	0.612	0.612	0.53				

Sequence No.: 61

Autosampler Location: 53

Sample ID: 1202024865|945445|1

Date Collected: 2/4/2010 10:40:30

Analyst: JXL

Data Type: Original

Replicate Data: 1202024865|945445|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored

Replicate Data: 245136003|945445|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.265	0.265	0.0034	0.0145	0.0036	10:51:10	Yes
2	0.268	0.268	0.0034	0.0154	0.0036	10:51:45	Yes
Mean:	0.267	0.267	0.0034				
SD:	0.002	0.002	0.0000				
%RSD:	0.893	0.893	0.79				

Sequence No.: 67

Autosampler Location: 59

Sample ID: 245136004|945445|1

Date Collected: 2/4/2010 10:52:05

Analyst: JXL

Data Type: Original

Replicate Data: 245136004|945445|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.216	0.216	0.0029	0.0119	0.0030	10:53:07	Yes
2	0.219	0.219	0.0029	0.0115	0.0031	10:53:41	Yes
Mean:	0.218	0.218	0.0029				
SD:	0.002	0.002	0.0000				
%RSD:	0.961	0.961	0.82				

Sequence No.: 68

Autosampler Location: 60

Sample ID: 245136005|945445|1

Date Collected: 2/4/2010 10:54:01

Analyst: JXL

Data Type: Original

Replicate Data: 245136005|945445|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.392	0.392	0.0048	0.0208	0.0050	10:55:03	Yes
2	0.375	0.375	0.0046	0.0193	0.0048	10:55:38	Yes
Mean:	0.383	0.383	0.0047				
SD:	0.012	0.012	0.0001				
%RSD:	3.111	3.111	2.84				

Sequence No.: 69

Autosampler Location: 61

Sample ID: 245136006|945445|1

Date Collected: 2/4/2010 10:55:58

Analyst: JXL

Data Type: Original

Replicate Data: 245136006|945445|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.138	0.138	0.0020	0.0081	0.0022	10:57:00	Yes
2	0.143	0.143	0.0020	0.0087	0.0022	10:57:35	Yes
Mean:	0.141	0.141	0.0020				
SD:	0.003	0.003	0.0000				
%RSD:	2.183	2.183	1.74				

Sequence No.: 70

Autosampler Location: 7

Sample ID: CCV

Date Collected: 2/4/2010 10:57:56

Analyst:

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.065	5.065	0.0577	0.2375	0.0579	10:58:57	Yes
2	5.022	5.022	0.0572	0.2346	0.0574	10:59:31	Yes
Mean:	5.043	5.043	0.0575				
SD:	0.030	0.030	0.0003				
%RSD:	0.602	0.602	0.60				

QC value within limits for Hg 253.7 Recovery = 100.87%
All analyte(s) passed QC.

Sequence No.: 71
Sample ID: CCB
Analyst:

Autosampler Location: 8
Date Collected: 2/4/2010 10:59:51
Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.029	-0.029	0.0001	0.0011	0.0003	11:00:52	Yes
2	-0.033	-0.033	0.0000	-0.0000	0.0002	11:01:27	Yes
Mean:	-0.031	-0.031	0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	9.316	9.316	54.21				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 72
Sample ID: 245136007|945445|1
Analyst: JXL

Autosampler Location: 62
Date Collected: 2/4/2010 11:01:46
Data Type: Original

Replicate Data: 245136007|945445|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.214	0.214	0.0028	0.0126	0.0030	11:02:47	Yes
2	0.218	0.218	0.0029	0.0120	0.0031	11:03:22	Yes
Mean:	0.216	0.216	0.0028				
SD:	0.003	0.003	0.0000				
%RSD:	1.299	1.299	1.11				

Sequence No.: 73
Sample ID: 245136008|945445|1
Analyst: JXL

Autosampler Location: 63
Date Collected: 2/4/2010 11:03:42
Data Type: Original

Replicate Data: 245136008|945445|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.601	0.601	0.0072	0.0298	0.0074	11:04:43	Yes
2	0.596	0.596	0.0071	0.0302	0.0073	11:05:18	Yes
Mean:	0.598	0.598	0.0072				
SD:	0.003	0.003	0.0000				
%RSD:	0.540	0.540	0.51				

Sequence No.: 74
Sample ID: 245136009|945445|1
Analyst: JXL

Autosampler Location: 64
Date Collected: 2/4/2010 11:05:38
Data Type: Original

Replicate Data: 245136009|945445|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.498	0.498	0.0060	0.0251	0.0062	11:06:39	Yes
2	0.496	0.496	0.0060	0.0250	0.0062	11:07:14	Yes
Mean:	0.497	0.497	0.0060				
SD:	0.001	0.001	0.0000				
%RSD:	0.230	0.230	0.21				

Sequence No.: 75
Sample ID: 245136010|945445|1
Analyst: JXL

Autosampler Location: 65
Date Collected: 2/4/2010 11:07:34
Data Type: Original

Replicate Data: 245136010|945445|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
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#	ug/L	ug/L	Signal	Area	Height		Stored
1	10.47	10.47	0.1189	0.4897	0.1191	11:08:35	Yes
2	10.42	10.42	0.1183	0.4913	0.1184	11:09:10	Yes
Mean:	10.45	10.45	0.1186				
SD:	0.040	0.040	0.0004				
%RSD:	0.379	0.379	0.38				

Sequence No.: 76

Autosampler Location: 66

Sample ID: 245136011|945445|1

Date Collected: 2/4/2010 11:09:30

Analyst: JXL

Data Type: Original

Replicate Data: 245136011|945445|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.379	0.379	0.0047	0.0199	0.0049	11:10:31	Yes
2	0.368	0.368	0.0046	0.0187	0.0048	11:11:06	Yes
Mean:	0.373	0.373	0.0046				
SD:	0.008	0.008	0.0001				
%RSD:	2.109	2.109	1.92				

Sequence No.: 77

Autosampler Location: 67

Sample ID: 245136012|945445|1

Date Collected: 2/4/2010 11:11:26

Analyst: JXL

Data Type: Original

Replicate Data: 245136012|945445|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.304	0.304	0.0038	0.0164	0.0040	11:12:27	Yes
2	0.300	0.300	0.0038	0.0164	0.0040	11:13:02	Yes
Mean:	0.302	0.302	0.0038				
SD:	0.003	0.003	0.0000				
%RSD:	0.842	0.842	0.75				

Sequence No.: 78

Autosampler Location: 68

Sample ID: 245136013|945445|1

Date Collected: 2/4/2010 11:13:22

Analyst: JXL

Data Type: Original

Replicate Data: 245136013|945445|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.585	0.585	0.0070	0.0296	0.0072	11:14:23	Yes
2	0.570	0.570	0.0069	0.0295	0.0070	11:14:58	Yes
Mean:	0.578	0.578	0.0069				
SD:	0.011	0.011	0.0001				
%RSD:	1.909	1.909	1.80				

Sequence No.: 79

Autosampler Location: 69

Sample ID: 1202025295|945625|1

Date Collected: 2/4/2010 11:15:18

Analyst: JXL

Data Type: Original

Replicate Data: 1202025295|945625|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.027	-0.027	0.0001	0.0012	0.0003	11:16:19	Yes
2	-0.030	-0.030	0.0001	0.0006	0.0002	11:16:54	Yes
Mean:	-0.029	-0.029	0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	9.517	9.517	36.84				

Sequence No.: 80

Autosampler Location: 70

Sample ID: 1202025296|945625|10

Date Collected: 2/4/2010 11:17:14

Analyst: JXL

Data Type: Original

Replicate Data: 1202025296|945625|10

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	3.572	3.572	0.0408	0.1678	0.0410	11:18:15	Yes
2	3.566	3.566	0.0407	0.1662	0.0409	11:18:51	Yes
Mean:	3.569	3.569	0.0408				
SD:	0.004	0.004	0.0000				
%RSD:	0.112	0.112	0.11				

Sequence No.: 81

Autosampler Location: 71

Sample ID: 245391001|945625|1

Date Collected: 2/4/2010 11:19:10

Analyst: JXL

Data Type: Original

Replicate Data: 245391001|945625|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.417	0.417	0.0051	0.0211	0.0053	11:20:12	Yes
2	0.421	0.421	0.0052	0.0220	0.0054	11:20:47	Yes
Mean:	0.419	0.419	0.0051				
SD:	0.003	0.003	0.0000				
%RSD:	0.618	0.618	0.57				

Sequence No.: 82

Autosampler Location: 7

Sample ID: CCV

Date Collected: 2/4/2010 11:21:07

Analyst:

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	4.906	4.906	0.0559	0.2297	0.0561	11:22:07	Yes
2	4.923	4.923	0.0561	0.2302	0.0563	11:22:42	Yes
Mean:	4.914	4.914	0.0560				
SD:	0.012	0.012	0.0001				
%RSD:	0.240	0.240	0.24				

QC value within limits for Hg 253.7 Recovery = 98.29%

All analyte(s) passed QC.

Sequence No.: 83

Autosampler Location: 8

Sample ID: CCB

Date Collected: 2/4/2010 11:23:01

Analyst:

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.027	-0.027	0.0001	0.0006	0.0003	11:24:02	Yes
2	-0.024	-0.024	0.0001	0.0013	0.0003	11:24:37	Yes
Mean:	-0.026	-0.026	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	8.817	8.817	22.47				

QC value within limits for Hg 253.7 Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 84

Autosampler Location: 72

Sample ID: 1202025297|945625|1

Date Collected: 2/4/2010 11:24:56

Analyst: JXL

Data Type: Original

Replicate Data: 1202025297|945625|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.355	0.355	0.0044	0.0192	0.0046	11:25:58	Yes
2	0.344	0.344	0.0043	0.0182	0.0045	11:26:33	Yes

Mean: 0.350 0.350 0.0044
SD: 0.008 0.008 0.0001
%RSD: 2.280 2.280 2.07

Sequence No.: 85

Sample ID: 1202025298|945625|1

Analyst: JXL

Autosampler Location: 73

Date Collected: 2/4/2010 11:26:53

Data Type: Original

Replicate Data: 1202025298|945625|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.357	2.357	0.0271	0.1115	0.0272	11:27:55	Yes
2	2.349	2.349	0.0270	0.1110	0.0272	11:28:29	Yes
Mean:	2.353	2.353	0.0270				
SD:	0.005	0.005	0.0001				
%RSD:	0.221	0.221	0.22				

Sequence No.: 86

Sample ID: 1202025300|945625|1

Analyst: JXL

Autosampler Location: 74

Date Collected: 2/4/2010 11:28:50

Data Type: Original

Replicate Data: 1202025300|945625|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.481	2.481	0.0285	0.1179	0.0287	11:29:51	Yes
2	2.462	2.462	0.0282	0.1173	0.0284	11:30:26	Yes
Mean:	2.471	2.471	0.0284				
SD:	0.014	0.014	0.0002				
%RSD:	0.567	0.567	0.56				

Sequence No.: 87

Sample ID: 1202025299|945625|5

Analyst: JXL

Autosampler Location: 75

Date Collected: 2/4/2010 11:30:46

Data Type: Original

Replicate Data: 1202025299|945625|5

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.062	0.062	0.0011	0.0050	0.0013	11:31:47	Yes
2	0.058	0.058	0.0011	0.0043	0.0013	11:32:22	Yes
Mean:	0.060	0.060	0.0011				
SD:	0.003	0.003	0.0000				
%RSD:	4.435	4.435	2.78				

Sequence No.: 88

Sample ID: 245391002|945625|1

Analyst: JXL

Autosampler Location: 76

Date Collected: 2/4/2010 11:32:42

Data Type: Original

Replicate Data: 245391002|945625|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.104	0.104	0.0016	0.0067	0.0018	11:33:44	Yes
2	0.092	0.092	0.0014	0.0058	0.0016	11:34:19	Yes
Mean:	0.098	0.098	0.0015				
SD:	0.009	0.009	0.0001				
%RSD:	9.093	9.093	6.66				

Sequence No.: 89

Sample ID: 245391003|945625|1

Analyst: JXL

Autosampler Location: 77

Date Collected: 2/4/2010 11:34:39

Data Type: Original

Replicate Data: 245391003|945625|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.128	0.128	0.0019	0.0079	0.0020	11:35:40	Yes
2	0.123	0.123	0.0018	0.0076	0.0020	11:36:15	Yes
Mean:	0.125	0.125	0.0018				
SD:	0.004	0.004	0.0000				
%RSD:	2.902	2.902	2.26				

Sequence No.: 90

Sample ID: 245391004|945625|1

Analyst: JXL

Autosampler Location: 78

Date Collected: 2/4/2010 11:36:35

Data Type: Original

Replicate Data: 245391004|945625|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.330	0.330	0.0041	0.0178	0.0043	11:37:37	Yes
2	0.327	0.327	0.0041	0.0171	0.0043	11:38:11	Yes
Mean:	0.329	0.329	0.0041				
SD:	0.002	0.002	0.0000				
%RSD:	0.492	0.492	0.44				

Sequence No.: 91

Sample ID: 245391005|945625|1

Analyst: JXL

Autosampler Location: 79

Date Collected: 2/4/2010 11:38:31

Data Type: Original

Replicate Data: 245391005|945625|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.309	0.309	0.0039	0.0162	0.0041	11:39:33	Yes
2	0.320	0.320	0.0040	0.0180	0.0042	11:40:08	Yes
Mean:	0.315	0.315	0.0040				
SD:	0.008	0.008	0.0001				
%RSD:	2.464	2.464	2.21				

Sequence No.: 92

Sample ID: 245391006|945625|1

Analyst: JXL

Autosampler Location: 80

Date Collected: 2/4/2010 11:40:28

Data Type: Original

Replicate Data: 245391006|945625|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.122	0.122	0.0018	0.0076	0.0020	11:41:29	Yes
2	0.128	0.128	0.0019	0.0087	0.0020	11:42:04	Yes
Mean:	0.125	0.125	0.0018				
SD:	0.004	0.004	0.0000				
%RSD:	3.081	3.081	2.39				

Sequence No.: 93

Sample ID: 245391007|945625|1

Analyst: JXL

Autosampler Location: 81

Date Collected: 2/4/2010 11:42:24

Data Type: Original

Replicate Data: 245391007|945625|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.158	0.158	0.0022	0.0091	0.0024	11:43:26	Yes
2	0.166	0.166	0.0023	0.0103	0.0025	11:44:01	Yes
Mean:	0.162	0.162	0.0022				
SD:	0.005	0.005	0.0001				
%RSD:	3.166	3.166	2.59				

Sequence No.: 94

Sample ID: CCV

Autosampler Location: 7

Date Collected: 2/4/2010 11:44:21

Analyst:

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	4.865	4.865	0.0554	0.2292	0.0556	11:45:21	Yes
2	4.828	4.828	0.0550	0.2289	0.0552	11:45:57	Yes
Mean:	4.847	4.847	0.0552				
SD:	0.027	0.027	0.0003				
%RSD:	0.550	0.550	0.55				

QC value within limits for Hg 253.7 Recovery = 96.93%
All analyte(s) passed QC.

=====

Sequence No.: 95

Autosampler Location: 8

Sample ID: CCB

Date Collected: 2/4/2010 11:46:16

Analyst:

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.023	-0.023	0.0001	0.0012	0.0003	11:47:16	Yes
2	-0.016	-0.016	0.0002	0.0013	0.0004	11:47:51	Yes
Mean:	-0.019	-0.019	0.0002				
SD:	0.005	0.005	0.0001				
%RSD:	26.27	26.27	30.26				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

=====

Sequence No.: 96

Autosampler Location: 82

Sample ID: 245391008|945625|1

Date Collected: 2/4/2010 11:48:10

Analyst: JXL

Data Type: Original

Replicate Data: 245391008|945625|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.195	0.195	0.0026	0.0109	0.0028	11:49:12	Yes
2	0.201	0.201	0.0027	0.0114	0.0029	11:49:47	Yes
Mean:	0.198	0.198	0.0026				
SD:	0.004	0.004	0.0000				
%RSD:	2.137	2.137	1.81				

=====

Sequence No.: 97

Autosampler Location: 83

Sample ID: 245391009|945625|1

Date Collected: 2/4/2010 11:50:07

Analyst: JXL

Data Type: Original

Replicate Data: 245391009|945625|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.426	0.426	0.0052	0.0214	0.0054	11:51:08	Yes
2	0.426	0.426	0.0052	0.0228	0.0054	11:51:43	Yes
Mean:	0.426	0.426	0.0052				
SD:	0.000	0.000	0.0000				
%RSD:	0.002	0.002	0.00				

=====

Sequence No.: 98

Autosampler Location: 84

Sample ID: 245391010|945625|1

Date Collected: 2/4/2010 11:52:03

Analyst: JXL

Data Type: Original

Replicate Data: 245391010|945625|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.398	0.398	0.0049	0.0205	0.0051	11:53:05	Yes

2	0.403	0.403	0.0050	0.0211	0.0052	11:53:40	Yes
Mean:	0.401	0.401	0.0049				
SD:	0.003	0.003	0.0000				
%RSD:	0.820	0.820	0.75				

Sequence No.: 99

Autosampler Location: 85

Sample ID: 245391011|945625|1

Date Collected: 2/4/2010 11:54:00

Analyst: JXL

Data Type: Original

Replicate Data: 245391011|945625|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.377	0.377	0.0047	0.0198	0.0049	11:55:02	Yes
2	0.368	0.368	0.0046	0.0197	0.0048	11:55:37	Yes
Mean:	0.372	0.372	0.0046				
SD:	0.007	0.007	0.0001				
%RSD:	1.762	1.762	1.61				

Sequence No.: 100

Autosampler Location: 86

Sample ID: 1202025283|945619|1

Date Collected: 2/4/2010 11:55:57

Analyst: JXL

Data Type: Original

Replicate Data: 1202025283|945619|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.017	0.017	0.0006	0.0044	0.0008	11:56:59	Yes
2	0.011	0.011	0.0005	0.0027	0.0007	11:57:33	Yes
Mean:	0.014	0.014	0.0006				
SD:	0.004	0.004	0.0000				
%RSD:	29.04	29.04	8.06				

Sequence No.: 101

Autosampler Location: 87

Sample ID: 1202025284|945619|10

Date Collected: 2/4/2010 11:57:54

Analyst: JXL

Data Type: Original

Replicate Data: 1202025284|945619|10

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	3.721	3.721	0.0425	0.1765	0.0427	11:58:55	Yes
2	3.741	3.741	0.0427	0.1765	0.0429	11:59:30	Yes
Mean:	3.731	3.731	0.0426				
SD:	0.014	0.014	0.0002				
%RSD:	0.372	0.372	0.37				

Sequence No.: 102

Autosampler Location: 88

Sample ID: 245383001|945619|1

Date Collected: 2/4/2010 11:59:50

Analyst: JXL

Data Type: Original

Replicate Data: 245383001|945619|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.295	0.295	0.0037	0.0153	0.0039	12:00:52	Yes
2	0.298	0.298	0.0038	0.0165	0.0040	12:01:27	Yes
Mean:	0.297	0.297	0.0038				
SD:	0.002	0.002	0.0000				
%RSD:	0.785	0.785	0.70				

Sequence No.: 103

Autosampler Location: 89

Sample ID: 245383002|945619|1

Date Collected: 2/4/2010 12:01:47

Analyst: JXL

Data Type: Original

Replicate Data: 245383002|945619|1

Repl #	SampleConc ug/L	StdndConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.747	0.747	0.0089	0.0372	0.0090	12:02:48	Yes
2	0.736	0.736	0.0087	0.0368	0.0089	12:03:23	Yes
Mean:	0.742	0.742	0.0088				
SD:	0.008	0.008	0.0001				
%RSD:	1.075	1.075	1.03				

Sequence No.: 104

Autosampler Location: 90

Sample ID: 245383003|945619|1

Date Collected: 2/4/2010 12:03:43

Analyst: JXL

Data Type: Original

Replicate Data: 245383003|945619|1

Repl #	SampleConc ug/L	StdndConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.354	0.354	0.0044	0.0183	0.0046	12:04:45	Yes
2	0.351	0.351	0.0044	0.0180	0.0046	12:05:20	Yes
Mean:	0.352	0.352	0.0044				
SD:	0.002	0.002	0.0000				
%RSD:	0.436	0.436	0.40				

Sequence No.: 105

Autosampler Location: 91

Sample ID: 245383004|945619|1

Date Collected: 2/4/2010 12:05:40

Analyst: JXL

Data Type: Original

Replicate Data: 245383004|945619|1

Repl #	SampleConc ug/L	StdndConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.323	0.323	0.0041	0.0171	0.0042	12:06:42	Yes
2	0.322	0.322	0.0040	0.0174	0.0042	12:07:17	Yes
Mean:	0.322	0.322	0.0041				
SD:	0.001	0.001	0.0000				
%RSD:	0.301	0.301	0.27				

Sequence No.: 106

Autosampler Location: 7

Sample ID: CCV

Date Collected: 2/4/2010 12:07:37

Analyst:

Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StdndConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.951	4.951	0.0564	0.2351	0.0566	12:08:38	Yes
2	4.963	4.963	0.0565	0.2359	0.0567	12:09:12	Yes
Mean:	4.957	4.957	0.0565				
SD:	0.009	0.009	0.0001				
%RSD:	0.172	0.172	0.17				

QC value within limits for Hg 253.7 Recovery = 99.13%

All analyte(s) passed QC.

Sequence No.: 107

Autosampler Location: 8

Sample ID: CCB

Date Collected: 2/4/2010 12:09:31

Analyst:

Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StdndConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.021	-0.021	0.0002	0.0010	0.0004	12:10:32	Yes
2	-0.024	-0.024	0.0001	0.0009	0.0003	12:11:07	Yes
Mean:	-0.023	-0.023	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	9.013	9.013	15.41				

QC value within limits for Hg 253.7 Recovery = Not calculated

Miscellaneous

Prep LogBook

Analyst: BXA1
 Batch: 945411
 Lab SOP: GL-MA-E-009 REV# 19

Verified by: _____

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Spike Amount	Spike Units
MB	1202024796		SW846 3050B	04-FEB-2010 17:23	0.514 g	50 mL	97.27626	.508	g
LCS	1202024797		SW846 3050B	04-FEB-2010 17:23	0.508 g	50 mL	98.4252	.5	mL
SAMPLE	245391001		SW846 3050B	04-FEB-2010 17:23	0.519 g	50 mL	96.33911	.5	mL
DUP	1202024798	245391001	SW846 3050B	04-FEB-2010 17:23	0.541 g	50 mL	92.42144	.5	mL
MS	1202024799	245391001	SW846 3050B	04-FEB-2010 17:23	0.537 g	50 mL	93.10987	.5	mL
MSD	1202024801	245391001	SW846 3050B	04-FEB-2010 17:23	0.5 g	50 mL	100	.5	mL
SDILT	1202024800	245391001	SW846 3050B	04-FEB-2010 17:23	0.519 g	50 mL	96.33911	.5	mL
SAMPLE	245391002		SW846 3050B	04-FEB-2010 17:23	0.53 g	50 mL	94.33962	.5	mL
SAMPLE	245391003		SW846 3050B	04-FEB-2010 17:23	0.5 g	50 mL	100	.5	mL
SAMPLE	245391004		SW846 3050B	04-FEB-2010 17:23	0.526 g	50 mL	95.05703	.5	mL
SAMPLE	245391005		SW846 3050B	04-FEB-2010 17:23	0.5 g	50 mL	100	.5	mL
SAMPLE	245391006		SW846 3050B	04-FEB-2010 17:23	0.5 g	50 mL	100	.5	mL
SAMPLE	245391007		SW846 3050B	04-FEB-2010 17:23	0.549 g	50 mL	91.07468	.5	mL
SAMPLE	245391008		SW846 3050B	04-FEB-2010 17:23	0.51 g	50 mL	98.03922	.5	mL
SAMPLE	245391009		SW846 3050B	04-FEB-2010 17:23	0.531 g	50 mL	94.16196	.5	mL
SAMPLE	245391010		SW846 3050B	04-FEB-2010 17:23	0.5 g	50 mL	100	.5	mL
SAMPLE	245391011		SW846 3050B	04-FEB-2010 17:23	0.535 g	50 mL	93.45794	.5	mL

Comments

Reagent/Solvent Lot ID	Amount	Description
1203655-02	1.5 mL	Hydrogen Peroxide 30%
1264396	5 mL	Nitric Acid CONC.

Prep LogBook

Analyst: BXA1
 Batch: 945415
 Lab SOP: GL-MA-E-009 REV# 19

Verified by: _____

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1202024807	UI062540-1	.524	g
MS	1202024809	UI100120-01	.25	mL
MS	1202024809	UI100120-06	.25	mL
MSD	1202024812	UI100120-01	.25	mL
MSD	1202024812	UI100120-06	.25	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1202024806		SW846 3050B	04-FEB-2010 17:30	0.506 g	50 mL	98.81423	SOIL
LCS	1202024807		SW846 3050B	04-FEB-2010 17:30	0.524 g	50 mL	95.41985	SOIL
SAMPLE	245391001		SW846 3050B	04-FEB-2010 17:30	0.513 g	50 mL	97.46589	SOIL
DUP	1202024808	245391001	SW846 3050B	04-FEB-2010 17:30	0.508 g	50 mL	98.4252	SOIL
MS	1202024809	245391001	SW846 3050B	04-FEB-2010 17:30	0.517 g	50 mL	96.7118	SOIL
MSD	1202024812	245391001	SW846 3050B	04-FEB-2010 17:30	0.546 g	50 mL	91.57509	SOIL
SDILT	1202024810	245391001	SW846 3050B	04-FEB-2010 17:30	0.513 g	50 mL	97.46589	SOIL
SAMPLE	245391002		SW846 3050B	04-FEB-2010 17:30	0.505 g	50 mL	99.0099	SOIL
SAMPLE	245391003		SW846 3050B	04-FEB-2010 17:30	0.503 g	50 mL	99.40358	SOIL
SAMPLE	245391004		SW846 3050B	04-FEB-2010 17:30	0.518 g	50 mL	96.5251	SOIL
SAMPLE	245391005		SW846 3050B	04-FEB-2010 17:30	0.56 g	50 mL	89.28571	SOIL
SAMPLE	245391006		SW846 3050B	04-FEB-2010 17:30	0.537 g	50 mL	93.10987	SOIL
SAMPLE	245391007		SW846 3050B	04-FEB-2010 17:30	0.521 g	50 mL	95.96929	SOIL
SAMPLE	245391008		SW846 3050B	04-FEB-2010 17:30	0.522 g	50 mL	95.78544	SOIL
SAMPLE	245391009		SW846 3050B	04-FEB-2010 17:30	0.522 g	50 mL	95.78544	SOIL
SAMPLE	245391010		SW846 3050B	04-FEB-2010 17:30	0.565 g	50 mL	88.49558	SOIL
SAMPLE	245391011		SW846 3050B	04-FEB-2010 17:30	0.53 g	50 mL	94.33962	SOIL

Comments: sample#245391001 is a brown medium soil.

Reagent/Solvent Lot ID	Amount	Description
100202	10 mL	HYDROCHLORIC ACID
1264396	1.25 mL	Nitric Acid CONC.

Prep LogBook

Analyst: TXB3
 Batch: 945624
 Lab SOP: GL-MA-E-010 REV# 23

Type Sample Id Lot Id Spike Amount Spike Units
 LCS 1202025296 UJ031809A 2 g
 MS 1202025298 WHG100203-14 3 mL
 MSD 1202025300 WHG100203-14 3 mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1202025295		SW846 7471A Prep	03-FEB-2010 14:00	0.513 g	30 mL	58.47953	SOIL
LCS	1202025296		SW846 7471A Prep	03-FEB-2010 14:00	0.2 g	30 mL	150	SOIL
SAMPLE	245391001		SW846 7471A Prep	03-FEB-2010 14:00	0.544 g	30 mL	55.14706	SOIL
DUP	1202025297	245391001	SW846 7471A Prep	03-FEB-2010 14:00	0.5 g	30 mL	60	SOIL
MS	1202025298	245391001	SW846 7471A Prep	03-FEB-2010 14:00	0.547 g	30 mL	54.84461	SOIL
MSD	1202025300	245391001	SW846 7471A Prep	03-FEB-2010 14:00	0.522 g	30 mL	57.47126	SOIL
SDILT	1202025299	245391001	SW846 7471A Prep	03-FEB-2010 14:00	0.544 g	30 mL	55.14706	SOIL
SAMPLE	245391002		SW846 7471A Prep	03-FEB-2010 14:00	0.563 g	30 mL	53.28597	SOIL
SAMPLE	245391003		SW846 7471A Prep	03-FEB-2010 14:00	0.52 g	30 mL	57.69231	SOIL
SAMPLE	245391004		SW846 7471A Prep	03-FEB-2010 14:00	0.558 g	30 mL	53.76344	SOIL
SAMPLE	245391005		SW846 7471A Prep	03-FEB-2010 14:00	0.53 g	30 mL	56.60377	SOIL
SAMPLE	245391006		SW846 7471A Prep	03-FEB-2010 14:00	0.525 g	30 mL	57.14286	SOIL
SAMPLE	245391007		SW846 7471A Prep	03-FEB-2010 14:00	0.516 g	30 mL	58.13953	SOIL
SAMPLE	245391008		SW846 7471A Prep	03-FEB-2010 14:00	0.509 g	30 mL	58.9391	SOIL
SAMPLE	245391009		SW846 7471A Prep	03-FEB-2010 14:00	0.537 g	30 mL	55.86592	SOIL
SAMPLE	245391010		SW846 7471A Prep	03-FEB-2010 14:00	0.532 g	30 mL	56.39098	SOIL
SAMPLE	245391011		SW846 7471A Prep	03-FEB-2010 14:00	0.509 g	30 mL	58.9391	SOIL

Comments: Sample 245391001 is a rocky light brown soil.
 Digestion Start Date: 03-FEB-10 14:00
 Digestion End Date: 03-FEB-10 14:30

Reagent/Solvent Lot ID	Amount	Description
1236355-A	1.125 mL	Hydrochloric Acid Conc.
1257474-1	.375 mL	NITRIC ACID
1255535-C	7.5 mL	5% KMnO4 solution
1255532-C	2 mL	Hg reducing agent
WHG100203-07	30 uL	Mercury Working Standard 1st Source CAL S 0.2/CRA
WHG100203-08	75 uL	Mercury Working Standard 1st Source CAL S 0.5
WHG100203-11	1.5 mL	Mercury Working 1st Source CAL S 10.0
WHG100203-09	300 uL	Mercury Working 1st Source CAL S 2.0
WHG100203-10	750 uL	Mercury Working 1st Source CAL S 5.0/CCV
WHG100203-12	750 uL	Mercury Working 2nd Source S 5.0/CCV

DATA EXCEPTION REPORT

Mo.Day Yr. 18-FEB-10	Division: Industrial	Quality Criteria: Specifications	Type: Process
Instrument Type: ICP	Test / Method: SW846 3050B/6010B	Matrix Type: Solid	Client Code: LANL
Batch ID: 945417	Sample Numbers: See Below		
Potentially affected work order(s)(SDG): 245391(10-1390) Application Issues: Failed Recovery for MS/PS Method Blank contamination Failed RPD for DUP Failed Recovery for LCS/LCSD Failed Recovery for MSD/PSD			
Specification and Requirements		DER Disposition:	
Exception Description:			
1. Failed Recovery for MS/PS: QC 1202024809MS 2. Failed RPD for DUP: QC 1202024808DUP 3. Failed Recovery for LCS/LCSD: QC 1202024807LCS 4. Failed Recovery for MSD/PSD: QC 1202024812MSD 5. Method Blank Contamination: QC 1202024806MB		1. The matrix spike recovery failed outside of the control limits for barium,magnesium,manganese and potassium due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported. 2. The sample and sample duplicate % RPD failed outside the control limits for barium,cobalt 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. Silver and/or antimony did not meet the recovery acceptance criteria for the LCS. Per the DOE-AL statement of work, page forty, silver and antimony are exempt from the re-digestion requirement for LCS failures. 4. The matrix spike duplicate recovery failed outside of the control limits for barium,magnesium and potassium due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported. 5. The samples in this SDG contained the above noted analytes at concentrations more than ten times the amount present in the method blank (MB), therefore the data was not adversely affected.	

Originator's Name:

Helen Camello 18-FEB-10

Data Validator/Group Leader:

Eric Lawson 18-FEB-10

DATA EXCEPTION REPORT

Mo. Day Yr. 18-FEB-10	Division: Industrial	Quality Criteria: Specifications	Type: Process
Instrument Type: ICP/MS	Test / Method: SW846 3050B/6020	Matrix Type: Solid	Client Code: LANL
Batch ID: 945412	Sample Numbers: See Below		
Potentially affected work order(s)(SDG): 245391(10-1390) Application Issues: Failed Recovery for MS/PS Failed Recovery for MSD/PSD			
Specification and Requirements Exception Description:		DER Disposition:	
1. Failed Recovery for MS/PS: QC 1202024799MS 2. Failed Recovery for MSD/PSD: QC 1202024801MSD		The matrix spike and matrix spike duplicate recoveries failed outside of the control limits for Ni and Se 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:

Elizabeth Janssen 19-FEB-10

Data Validator/Group Leader:

Paul Boyd 19-FEB-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 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% HNO_3
Supplier: o2si
Description: TRACE ICP ICSA SOLN A mg/L +/- 0.5% IN 5% HNO_3
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% HNO_3
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% HNO_3
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:** 16-SEP-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

Analyte	Concentration	Analyte	Concentration
Tin	200 mg/L	Titanium	200 mg/L

Serial ID: UI091102-42 **Opened:** 17-NOV-09 **Amount :** 200 mL
Name: SILICON **Received:** 02-NOV-09 **Catalog Number :** HP100050-4F
Type: Source Material **Expires:** 17-NOV-10 **Lot Number :** 0921924
Employee: Helen Camello **Solvent :** H2O/tr HF
Supplier: ENVIRONMENTAL EXPRESS
Description: SILICON 1000mg/L H2O/tr HF
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091212-60 **Opened:** 12-DEC-09 **Amount :** .5 mL
Name: ICPMS High Range Standard **Received:** 12-DEC-09 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 12-DEC-10 **Lot Number :** 1018064
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: UI091212-61 **Opened:** 12-DEC-09 **Amount :** .5 mL
Name: ICPMS High Range Standard **Received:** 12-DEC-09 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 12-DEC-10 **Lot Number :** 1018064
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2SI
Description: Linear Range Standard B
Comments: None

Standard Logbook

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: 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

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

Standard Logbook

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

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

Standard Logbook

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

Serial ID: UI100126-11 **Opened:** 26-JAN-10 **Amount :** 1000 mL

Name: ICP-MS ICSA Master A **Received:** 26-JAN-10 **Catalog Number :** 160013-01-01L

Type: Source Material **Expires:** 26-JAN-11 **Lot Number :** 1018321

Employee: Elizabeth Janssen **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: 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
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

Analyte	Concentration	Analyte	Concentration
Sodium	500000 ug/L	Uranium	15000 ug/L

Serial ID: UMS090303-01 **Opened:** 03-MAR-09 **Amount :** 250 mL
Name: ICPMSCalSPIKEB **Received:** 03-MAR-09 **Catalog Number :** ZGEL-100-250
Type: Source Material **Expires:** 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: ICPMSCalSPIKEA **Received:** 03-MAR-09 **Lot Number :** 14-83JB
Type: Source Material **Expires:** 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		

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

Standard Logbook

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: IHG100203-01 **Opened:** 03-FEB-10 **Instrument Id :** Mercury
Name: MHGINTER1 **Received:** 03-FEB-10 **Pipet Id :** Minou1
Type: Intermediate **Expires:** 04-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: IHG100203-02 **Opened:** 03-FEB-10 **Pipet Id :** Minou1
Name: MHGINTER2 **Received:** 03-FEB-10 **Solvent :** 2% HNO3-1257474
Type: Intermediate **Expires:** 04-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: WHG100203-07 **Opened:** 03-FEB-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS0.2CRA **Received:** 03-FEB-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 10-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.
IHG100203-01	Mercury	200 ug/L	30 uL	30 mL	.2 ug/L

Serial ID: WHG100203-08 **Opened:** 03-FEB-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS0.5 **Received:** 03-FEB-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 10-FEB-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working Standard 1st Source CAL S 0.5
Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100203-01	Mercury	200 ug/L	75 uL	30 mL	.5 ug/L

Serial ID: WHG100203-09 **Opened:** 03-FEB-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS2.0 **Received:** 03-FEB-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 10-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.
IHG100203-01	Mercury	200 ug/L	300 uL	30 mL	2 ug/L

Serial ID: WHG100203-10 **Opened:** 03-FEB-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS5.0CCV **Received:** 03-FEB-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 10-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.
IHG100203-01	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Serial ID: WHG100203-11 **Opened:** 03-FEB-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS10.0 **Received:** 03-FEB-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 10-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.
IHG100203-01	Mercury	200 ug/L	1.5 mL	30 mL	10 ug/L

Serial ID: WHG100203-12 **Opened:** 03-FEB-10 **Pipet Id :** Hg1289245
Name: MHGWORKS5.0ICV **Received:** 03-FEB-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 10-FEB-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 2nd Source S 5.0/ICV
Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100203-02	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Serial ID: WHG100203-14 **Opened:** 03-FEB-10 **Pipet Id :** Hg1289245
Name: MHGSOILMSSPIKE **Received:** 03-FEB-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 10-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: WI100216-42 **Opened:** 16-FEB-10 **Balance Id :** 216
Name: TRACE ICP 0.1 PPM STD. **Received:** 02-NOV-09 **Pipet Id :** 3581809
Type: Working **Expires:** 17-FEB-10 **Solvent :** 3%HCL and 1%HNO3 -1270010
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.
WI100216-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100216-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI100216-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI100216-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100216-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100216-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI100216-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100216-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100216-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100216-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI100216-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI100216-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100216-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI100216-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100216-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI100216-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI100216-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI100216-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI100216-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100216-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100216-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI100216-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI100216-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI100216-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100216-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100216-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI100216-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100216-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI100216-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100216-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100216-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100216-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Serial ID: WI100216-43 **Opened:** 16-FEB-10 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 3581809
Type: Working **Expires:** 17-FEB-10 **Solvent :** 3%HCL and 1%HNO3 -1270010
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Serial ID: WI100216-44 **Opened:** 16-FEB-10 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 3581809
Type: Working **Expires:** 17-FEB-10 **Solvent :** 3%HCL and 1 %HNO3-1270010
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
UI091102-41	Silver	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	500 mL	2000 ug/L
UI091102-41	Tin	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Titanium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Serial ID: WI100216-45 **Opened:** 16-FEB-10 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 3581809
Type: Working **Expires:** 17-FEB-10 **Solvent :** 3%HCL and 1%HNO3 -1270010
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP S-10 CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Allquot	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: WI100216-46 **Opened:** 16-FEB-10 **Balance Id :** 216
Name: ICP TRACE ICPV **Received:** 25-SEP-09 **Pipet Id :** 3581809
Type: Working **Expires:** 17-FEB-10 **Solvent :** 3%HCL AND 1%HNO3-1270010
Employee: Helen Camello
Supplier: GEL
Description: Initial Calibration Verification ICP Trace Metals
Comments: None

Parent Material	Analyte	Parent Conc.	Allquot	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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
UI090925-41	Antimony	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Beryllium	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Magnesium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-41	Manganese	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Molybdenum	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Nickel	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Silver	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Sulfur	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-41	Thallium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Tin	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Titanium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Uranium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Vanadium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Zinc	100 mg/L	2.5 mL	500 mL	500 ug/L
UI091102-42	Silica	2139 mg/L	2.5 mL	500 mL	10695 ug/L
UI091102-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L

Serial ID: WI100216-47 **Opened:** 16-FEB-10 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id :** 3581809
Type: Working **Expires:** 17-FEB-10 **Solvent :** 3%HCL & 1%HNO3-1270010
Employee: Helen Camello
Supplier: 02si
Description: PQL Working Standard
Comments: None

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
UI090701-40	Aluminum	100 mg/L	2 mL	1000 mL	200 ug/L
UI090701-40	Antimony	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Arsenic	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Barium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Beryllium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Boron	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Cadmium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Calcium	100 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Chromium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Cobalt	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Copper	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Iron	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Lead	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Magnesium	150 mg/L	2 mL	1000 mL	300 ug/L
UI090701-40	Manganese	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Molybdenum	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Nickel	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Phosphorous	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Potassium	75 mg/L	2 mL	1000 mL	150 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Selenium	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Silicon	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Silver	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sodium	150 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Strontium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sulfur	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Thallium	10 mg/L	2 mL	1000 mL	20 ug/L
UI090701-40	Tin	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Titanium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Uranium	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Vanadium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Zinc	5 mg/L	2 mL	1000 mL	10 ug/L

Serial ID: WMS100215-04 **Opened:** 15-FEB-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 15-FEB-10 **Balance Id :** 4025216
Type: Working **Expires:** 16-FEB-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1269792
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090303-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS100215-04A **Opened:** 15-FEB-10 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 15-FEB-10 **Pipet Id :** 3541598
Type: Working **Expires:** 16-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1269792
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100215-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100215-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100215-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100215-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100215-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100215-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100215-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100215-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100215-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100215-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100215-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100215-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100215-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100215-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100215-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100215-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100215-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100215-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100215-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100215-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100215-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100215-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100215-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100215-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100215-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100215-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100215-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100215-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100215-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100215-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100215-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100215-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100215-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS100215-05 **Opened:** 15-FEB-10 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 15-FEB-10 **Pipet Id :** 3541598
Type: Working **Expires:** 16-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1269792
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
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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: WMS100215-06 **Opened:** 15-FEB-10 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 15-FEB-10 **Pipet Id :** 3820544
Type: Working **Expires:** 16-FEB-10 **Solvent :** 2% HNO_3 /1% HCl - 1269792
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: WMS100215-07 **Opened:** 15-FEB-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 15-FEB-10 **Lot Number :** 1010773
Type: Working **Expires:** 16-FEB-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1269792
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100126-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100126-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100126-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS100215-08 **Opened:** 15-FEB-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 15-FEB-10 **Pipet Id :** 1758088
Type: Working **Expires:** 16-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1269792
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI091217-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI091217-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI091217-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI091217-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100126-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100126-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100126-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS100215-70 **Opened:** 15-FEB-10 **Balance Id :** 40245216
Name: ICPMS LINEAR RANGE ST **Received:** 15-FEB-10 **Pipet Id :** 1758088
Type: Working **Expires:** 16-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1269792
Employee: Paul Boyd
Supplier: 02SI
Description: ICPMS LINEAR RANGE STANDARD
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091212-60	Aluminum	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Arsenic	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Barium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091212-60	Beryllium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Cadmium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Calcium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Chromium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Cobalt	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Copper	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Iron	5000 mg/L	.5 mL	50 mL	50000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091212-60	Lead	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091212-60	Lithium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Magnesium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Manganese	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Nickel	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Phosphorous	2500 mg/L	.5 mL	50 mL	25000 ug/L
UI091212-60	Potassium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Selenium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091212-60	Sodium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Strontium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Thallium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091212-60	Thorium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091212-60	Uranium	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091212-60	Vanadium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Zinc	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091212-61	Antimony	25 mg/L	.5 mL	50 mL	250 ug/L
UI091212-61	Molybdenum	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-61	Silver	25 mg/L	.5 mL	50 mL	250 ug/L
UI091212-61	Tin	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-61	Tungsten	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-61	Zirconium	50 mg/L	.5 mL	50 mL	500 ug/L

Serial ID: WMS100216-04 **Opened:** 16-FEB-10 **Amount:** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 16-FEB-10 **Balance Id:** 4025216
Type: Working **Expires:** 17-FEB-10 **Pipet Id:** 3541598
Employee: Paul Boyd **Solvent:** 2%HNO3/1%HCl-1269792
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090303-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS100216-04A **Opened:** 16-FEB-10 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 16-FEB-10 **Pipet Id :** 3541598
Type: Working **Expres:** 17-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1269792
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100216-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100216-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100216-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100216-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100216-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100216-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100216-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100216-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100216-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100216-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100216-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100216-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100216-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100216-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100216-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100216-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100216-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100216-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100216-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100216-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100216-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100216-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100216-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100216-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100216-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100216-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100216-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100216-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100216-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100216-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100216-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100216-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100216-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS100216-05 **Opened:** 16-FEB-10 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 16-FEB-10 **Pipet Id :** 3541598
Type: Working **Expires:** 17-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1269792
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS100216-06 **Opened:** 16-FEB-10 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 16-FEB-10 **Pipet Id :** 3820544
Type: Working **Expires:** 17-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1269792
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: WMS100216-07 **Opened:** 16-FEB-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 16-FEB-10 **Lot Number :** 1010773
Type: Working **Expires:** 17-FEB-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1269792
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100126-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100126-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100126-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS100216-08 **Opened:** 16-FEB-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 16-FEB-10 **Pipet Id :** 1758088
Type: Working **Expires:** 17-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1269792
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI091217-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI091217-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI091217-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI091217-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI091217-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI091217-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI091217-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI091217-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100126-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100126-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100126-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS100216-70 **Opened:** 16-FEB-10 **Balance Id :** 40245216
Name: ICPMS LINEAR RANGE ST **Received:** 16-FEB-10 **Pipet Id :** 1758088
Type: Working **Expires:** 17-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1269792
Employee: Paul Boyd
Supplier: 02SI
Description: ICPMS LINEAR RANGE STANDARD
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091212-60	Aluminum	5000 mg/L	.5 mL	50 mL	50000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091212-60	Arsenic	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Barium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091212-60	Beryllium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Cadmium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Calcium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Chromium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Cobalt	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Copper	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Iron	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Lead	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091212-60	Lithium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Magnesium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Manganese	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Nickel	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Phosphorous	2500 mg/L	.5 mL	50 mL	25000 ug/L
UI091212-60	Potassium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Selenium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091212-60	Sodium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Strontium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Thallium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091212-60	Thorium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091212-60	Uranium	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091212-60	Vanadium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Zinc	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091212-61	Antimony	25 mg/L	.5 mL	50 mL	250 ug/L
UI091212-61	Molybdenum	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-61	Silver	25 mg/L	.5 mL	50 mL	250 ug/L
UI091212-61	Tin	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-61	Tungsten	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-61	Zirconium	50 mg/L	.5 mL	50 mL	500 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

Standard Logbook

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: 1203655-02 Opened: 15-OCT-09 Lot Number : ZU74081198 mL
Name: B-H2O2 Received: 15-OCT-09
Type: Reagent/Solvent Expires: 15-OCT-10
Employee: Francena Armstrong
Supplier: EM SCIENCE

Description: Hydrogen Peroxide 30%

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: 1236355-A Opened: 01-DEC-09 Lot Number : 200930201
Name: B-HCl-MER Received: 01-DEC-09
Type: Reagent/Solvent Expires: 01-DEC-10
Employee: Tara Griffin
Supplier: Aristar

Description: Hydrochloric Acid Conc.

Comments: None

Serial ID: 125532-C Opened: 15-JAN-10 Balance Id : BAL-002
Name: B-NaCl.NH2OH.HCl-MER Received: 15-JAN-10
Type: Reagent/Solvent Expires: 15-JUL-10
Employee: Tara Griffin
Supplier: GEL

Description: Hg reducing agent

Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1228372-A	B-NH2OH.HCl-MER	N/A	120 g	1000 mL	N/A

Serial ID: 1255535-C Opened: 15-JAN-10 Balance Id : BAL-002
 Name: B-KMnO4-MER Received: 15-JAN-10
 Type: Reagent/Solvent Expires: 15-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: 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: 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: 1269792 Opened: 15-FEB-10 Solvent : Type I Water
 Name: B-2%HNO3/1%HCl-ICPMS Received: 15-FEB-10
 Type: Reagent/Solvent Expires: 22-FEB-10
 Employee: Paul Boyd
 Supplier: GEL
 Description: 2%HNO3/1%HCl Solution (Type I Water)
 Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
100202	I-HCL	36.5-38.0	90 mL	9 l	N/A
1100721TCLP	I-HNO3	69.0-70.0	180 mL	9 l	N/A

Standard Logbook

Serial ID: 1270010 Opened: 15-FEB-10 Amount : 20 L
Name: B-ICP-RINSE SOLN Received: 05-FEB-10 Lot Number : H04040+G34050
Type: Reagent/Solvent Expires: 21-FEB-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 10-1390-1**

Sample Analysis

Sample ID	Client ID
245392001	RE15-10-8074
245392002	RE15-10-8075
1202024735	Method Blank (MB) ICP
1202024736	Laboratory Control Sample (LCS)
1202024739	245392001(RE15-10-8074L) Serial Dilution (SD)
1202024737	245392001(RE15-10-8074D) Sample Duplicate (DUP)
1202024738	245392001(RE15-10-8074S) Matrix Spike (MS)
1202024740	Method Blank (MB) ICP-MS
1202024741	Laboratory Control Sample (LCS)
1202024744	245392001(RE15-10-8074L) Serial Dilution (SD)
1202024742	245382001(RE15-10-8444D) Sample Duplicate (DUP)
1202024743	245382001(RE15-10-8444S) Matrix Spike (MS)
1202024802	Method Blank (MB) CVAA
1202024803	Laboratory Control Sample (LCS)
1202024811	245392001(RE15-10-8074L) Serial Dilution (SD)
1202024804	245392001(RE15-10-8074D) Sample Duplicate (DUP)
1202024805	245392001(RE15-10-8074S) Matrix Spike (MS)

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

Method/Analysis Information

Analytical Batch:	945379, 945381 and 945416
Prep Batch :	945378, 945380 and 945413
Standard Operating Procedures:	GL-MA-E-013 REV# 20, GL-MA-E-006 REV# 9, GL-MA-E-014 REV# 21 and GL-MA-E-010 REV# 23
Analytical Method:	SW846 3005/6010B, SW846 3005/6020 and SW846 7470A
Prep Method :	SW846 3005A and SW846 7470A Prep

Preparation/Analytical Method Verification

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

System Configuration

The Metals analysis-ICP was performed on a P E 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 samples were selected as the quality control (QC) samples for this SDG: 245392001 (RE15-10-8074)-ICP, ICP-MS and CVAA and 245382001 (RE15-10-8444)-ICP-MS.

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 Comme

This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Data Exception (DER) Documentation

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

Additional Comments

Due to random laboratory error the DUP and MS were performed on 245382001. The SDILT was performed on 245392001. The paperwork was not corrected in prep to reflect the correct QC sample.

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: Nikola A. Elmer Date: 2-19-10

Sample Data Summary

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1390-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245392001

BASIS: As Received

DATE COLLECTED 19-JAN-10

CLIENT ID: RE15-10-8074

LEVEL: Low

DATE RECEIVED 23-JAN-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 17:13	021110B-1	945379
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	02/13/10 03:50	100212-3	945381
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	02/11/10 17:13	021110B-1	945379
7440-39-3	Barium	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 17:13	021110B-1	945379
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	02/13/10 03:50	100212-3	945381
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BAJ	02/13/10 03:50	100212-3	945381
7440-70-2	Calcium	200	ug/L	U	50	200	200	1	P	HSC	02/11/10 17:13	021110B-1	945379
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 17:13	021110B-1	945379
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 17:13	021110B-1	945379
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	02/11/10 17:13	021110B-1	945379
7439-89-6	Iron	100	ug/L	U	30	100	100	1	P	HSC	02/11/10 17:13	021110B-1	945379
7439-92-1	Lead	1.75	ug/L	J	0.5	2	2	1	MS	BAJ	02/13/10 20:45	100213-5	945381
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	02/11/10 17:13	021110B-1	945379
7439-96-5	Manganese	1.87	ug/L	J	1	5	5	1	MS	BAJ	02/13/10 20:45	100213-5	945381
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	02/04/10 10:15	020410W1-6	945416
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	02/11/10 17:13	021110B-1	945379
7440-09-7	Potassium	197	ug/L		50	150	150	1	P	HSC	02/11/10 17:13	021110B-1	945379
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	02/11/10 17:13	021110B-1	945379
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 17:13	021110B-1	945379
7440-23-5	Sodium	162	ug/L	J	100	300	300	1	P	HSC	02/11/10 17:13	021110B-1	945379
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	BAJ	02/13/10 17:37	100213-4	945381
7440-61-1	Uranium	0.688	ug/L		0.05	0.2	0.2	1	MS	SKJ	02/13/10 19:45	100213-2	945381
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 17:13	021110B-1	945379
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	02/11/10 17:13	021110B-1	945379

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
945379	945378	SW846 3005A	50	mL	50	mL	02/03/10	FGA
945381	945380	SW846 3005A	50	mL	50	mL	02/03/10	FGA
945416	945413	SW846 7470A Prep	20	mL	20	mL	02/03/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1390-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245392002

BASIS: As Received

DATE COLLECTED 19-JAN-10

CLIENT ID: RE15-10-8075

LEVEL: Low

DATE RECEIVED 23-JAN-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	83.1	ug/L	J	68	200	200	1	P	HSC	02/11/10 18:00	021110B-1	945379
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	02/13/10 04:15	100212-3	945381
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	02/11/10 18:00	021110B-1	945379
7440-39-3	Barium	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 18:00	021110B-1	945379
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	02/13/10 04:15	100212-3	945381
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BAJ	02/13/10 04:15	100212-3	945381
7440-70-2	Calcium	65.3	ug/L	J	50	200	200	1	P	HSC	02/11/10 18:00	021110B-1	945379
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 18:00	021110B-1	945379
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 18:00	021110B-1	945379
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	02/11/10 18:00	021110B-1	945379
7439-89-6	Iron	57.3	ug/L	J	30	100	100	1	P	HSC	02/11/10 18:00	021110B-1	945379
7439-92-1	Lead	1.21	ug/L	J	0.5	2	2	1	MS	BAJ	02/13/10 20:57	100213-5	945381
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	02/11/10 18:00	021110B-1	945379
7439-96-5	Manganese	2.3	ug/L	J	1	5	5	1	MS	BAJ	02/13/10 20:57	100213-5	945381
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	02/04/10 10:27	020410W1-6	945416
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	02/11/10 18:00	021110B-1	945379
7440-09-7	Potassium	118	ug/L	J	50	150	150	1	P	HSC	02/11/10 18:00	021110B-1	945379
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	02/11/10 18:00	021110B-1	945379
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 18:00	021110B-1	945379
7440-23-5	Sodium	200	ug/L	J	100	300	300	1	P	HSC	02/11/10 18:00	021110B-1	945379
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	BAJ	02/13/10 17:55	100213-4	945381
7440-61-1	Uranium	0.435	ug/L		0.05	0.2	0.2	1	MS	SKJ	02/13/10 19:52	100213-2	945381
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 18:00	021110B-1	945379
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	02/11/10 18:00	021110B-1	945379

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
945379	945378	SW846 3005A	50	mL	50	mL	02/03/10	FGA
945381	945380	SW846 3005A	50	mL	50	mL	02/03/10	FGA
945416	945413	SW846 7470A Prep	20	mL	20	mL	02/03/10	TXB3

Quality Control Summary

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1390-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS4,ICPMS5,MER536,OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICV01										
	Mercury	4.92	ug/L	5	ug/L	98.4	90.0 - 110.0	AV	04-FEB-10 09:27	020410W1-6
	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	52.9	ug/L	50	ug/L	105.8	90.0 - 110.0	MS	13-FEB-10 00:21	100212-3
	Beryllium	49.7	ug/L	50	ug/L	99.4	90.0 - 110.0	MS	13-FEB-10 00:21	100212-3
	Cadmium	51.2	ug/L	50	ug/L	102.4	90.0 - 110.0	MS	13-FEB-10 00:21	100212-3
	Thallium	54.5	ug/L	50	ug/L	109	90.0 - 110.0	MS	13-FEB-10 13:00	100213-4
	Uranium	52.7	ug/L	50	ug/L	105.4	90.0 - 110.0	MS	13-FEB-10 17:59	100213-2
	Lead	53.6	ug/L	50	ug/L	107.1	90.0 - 110.0	MS	13-FEB-10 19:54	100213-5
	Manganese	53	ug/L	50	ug/L	106	90.0 - 110.0	MS	13-FEB-10 19:54	100213-5
CCV01										
	Mercury	4.95	ug/L	5	ug/L	99	80.0 - 120.0	AV	04-FEB-10 09:33	020410W1-6
	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

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1390-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS4,ICPMS5,MER536,OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Chromium	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	11-FEB-10 14:49	021110B-1
	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	53.1	ug/L	50	ug/L	106.3	90.0 – 110.0	MS	13-FEB-10 00:52	100212-3
	Beryllium	49.2	ug/L	50	ug/L	98.5	90.0 – 110.0	MS	13-FEB-10 00:52	100212-3
	Cadmium	51.4	ug/L	50	ug/L	102.9	90.0 – 110.0	MS	13-FEB-10 00:52	100212-3
	Thallium	54.2	ug/L	50	ug/L	108.4	90.0 – 110.0	MS	13-FEB-10 13:23	100213-4
	Uranium	53.2	ug/L	50	ug/L	106.3	90.0 – 110.0	MS	13-FEB-10 18:08	100213-2
	Lead	53.7	ug/L	50	ug/L	107.5	90.0 – 110.0	MS	13-FEB-10 20:03	100213-5
	Manganese	53.5	ug/L	50	ug/L	107	90.0 – 110.0	MS	13-FEB-10 20:03	100213-5
CCV02										
	Mercury	4.99	ug/L	5	ug/L	99.9	80.0 – 120.0	AV	04-FEB-10 09:57	020410W1-6
	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

METALS

-2a-

Initial and Continuing Calibration Verification

SDG No: 10-1390-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS4,ICPMS5,MER536,OPTIMA1

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	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
	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	53.4	ug/L	50	ug/L	106.7	90.0 - 110.0	MS	13-FEB-10 01:47	100212-3
	Beryllium	50.5	ug/L	50	ug/L	101	90.0 - 110.0	MS	13-FEB-10 01:47	100212-3
	Cadmium	51.1	ug/L	50	ug/L	102.3	90.0 - 110.0	MS	13-FEB-10 01:47	100212-3
	Thallium	54.2	ug/L	50	ug/L	108.5	90.0 - 110.0	MS	13-FEB-10 14:04	100213-4
	Uranium	54.4	ug/L	50	ug/L	108.7	90.0 - 110.0	MS	13-FEB-10 18:21	100213-2
	Lead	53.5	ug/L	50	ug/L	107	90.0 - 110.0	MS	13-FEB-10 20:24	100213-5
	Manganese	53.7	ug/L	50	ug/L	107.4	90.0 - 110.0	MS	13-FEB-10 20:24	100213-5
CCV03										
	Mercury	5.08	ug/L	5	ug/L	101.7	80.0 - 120.0	AV	04-FEB-10 10:21	020410W1-6
	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

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1390-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS4,ICPMS5,MER536,OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	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	53.7	ug/L	50	ug/L	107.3	90.0 – 110.0	MS	13-FEB-10 02:30	100212-3
	Beryllium	51.3	ug/L	50	ug/L	102.5	90.0 – 110.0	MS	13-FEB-10 02:30	100212-3
	Cadmium	51.6	ug/L	50	ug/L	103.2	90.0 – 110.0	MS	13-FEB-10 02:30	100212-3
	Thallium	53.7	ug/L	50	ug/L	107.4	90.0 – 110.0	MS	13-FEB-10 14:40	100213-4
	Uranium	55.1	ug/L	50	ug/L	110.1	90.0 – 110.0	MS	13-FEB-10 18:37	100213-2
	Lead	52.9	ug/L	50	ug/L	105.7	90.0 – 110.0	MS	13-FEB-10 20:34	100213-5
	Manganese	53.7	ug/L	50	ug/L	107.3	90.0 – 110.0	MS	13-FEB-10 20:34	100213-5
CCV04	Mercury	5.18	ug/L	5	ug/L	103.5	80.0 – 120.0	AV	04-FEB-10 10:45	020410W1-6
	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
	Antimony	53.8	ug/L	50	ug/L	107.6	90.0 – 110.0	MS	13-FEB-10 03:25	100212-3
	Beryllium	50.6	ug/L	50	ug/L	101.1	90.0 – 110.0	MS	13-FEB-10 03:25	100212-3
	Cadmium	51.7	ug/L	50	ug/L	103.5	90.0 – 110.0	MS	13-FEB-10 03:25	100212-3

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1390-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS4,ICPMS5,MER536,OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Thallium	54.1	ug/L	50	ug/L	108.1	90.0 - 110.0	MS	13-FEB-10 15:20	100213-4
	Uranium	54.2	ug/L	50	ug/L	108.4	90.0 - 110.0	MS	13-FEB-10 18:52	100213-2
	Lead	53	ug/L	50	ug/L	106	90.0 - 110.0	MS	13-FEB-10 20:51	100213-5
	Manganese	52.7	ug/L	50	ug/L	105.5	90.0 - 110.0	MS	13-FEB-10 20:51	100213-5
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
	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
	Antimony	53.5	ug/L	50	ug/L	106.9	90.0 - 110.0	MS	13-FEB-10 04:21	100212-3
	Beryllium	50.8	ug/L	50	ug/L	101.6	90.0 - 110.0	MS	13-FEB-10 04:21	100212-3
	Cadmium	51.1	ug/L	50	ug/L	102.1	90.0 - 110.0	MS	13-FEB-10 04:21	100212-3
	Thallium	54.5	ug/L	50	ug/L	108.9	90.0 - 110.0	MS	13-FEB-10 16:01	100213-4
	Uranium	53.7	ug/L	50	ug/L	107.4	90.0 - 110.0	MS	13-FEB-10 19:06	100213-2
	Lead	54.7	ug/L	50	ug/L	109.5	90.0 - 110.0	MS	13-FEB-10 20:58	100213-5
	Manganese	53.9	ug/L	50	ug/L	107.9	90.0 - 110.0	MS	13-FEB-10 20:58	100213-5
CCV06										
	Aluminum	4740	ug/L	5000	ug/L	94.8	90.0 - 110.0	P	11-FEB-10 17:27	021110B-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1390-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS4,ICPMS5,MER536,OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	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
	Thallium	53.7	ug/L	50	ug/L	107.4	90.0 - 110.0	MS	13-FEB-10 16:38	100213-4
	Uranium	54.3	ug/L	50	ug/L	108.6	90.0 - 110.0	MS	13-FEB-10 19:22	100213-2
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
	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

METALS

-2a-

Initial and Continuing Calibration Verification

SDG No: 10-1390-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS4,ICPMS5,MER536,OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
CCV08	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
	Thallium	52.5	ug/L	50	ug/L	105.1	90.0 – 110.0	MS	13-FEB-10 17:19	100213-4
	Uranium	54.6	ug/L	50	ug/L	109.2	90.0 – 110.0	MS	13-FEB-10 19:38	100213-2
	Thallium	52.3	ug/L	50	ug/L	104.5	90.0 – 110.0	MS	13-FEB-10 18:00	100213-4
	Uranium	54.6	ug/L	50	ug/L	109.2	90.0 – 110.0	MS	13-FEB-10 19:53	100213-2

METALS
-2b-
CRDL Standard for AA & ICP

SDG No: 10-1390-1

Contract: LANL01004

Lab Code: GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: ICPMS4,ICPMS5,MER536,OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Advisory Limits (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
CRDL01										
	Mercury	.228	ug/L	.2	ug/L	113.9	70.0 – 130.0	AV	04-FEB-10 09:31	020410W1-6
	Antimony	3.58	ug/L	3	ug/L	119.5	70.0 – 130.0	MS	13-FEB-10 00:33	100212-3
	Beryllium	.477	ug/L	.5	ug/L	95.4	70.0 – 130.0	MS	13-FEB-10 00:33	100212-3
	Cadmium	1.09	ug/L	1	ug/L	109.3	70.0 – 130.0	MS	13-FEB-10 00:33	100212-3
	Thallium	1.24	ug/L	1	ug/L	123.5	70.0 – 130.0	MS	13-FEB-10 13:09	100213-4
	Uranium	.247	ug/L	.2	ug/L	123.5	70.0 – 130.0	MS	13-FEB-10 18:03	100213-2
	Manganese	6.1	ug/L	5	ug/L	121.9	70.0 – 130.0	MS	13-FEB-10 19:58	100213-5
	Lead	2.59	ug/L	2	ug/L	129.3	70.0 – 130.0	MS	13-FEB-10 19:58	100213-5
PQL01										
	Nickel	4.56	ug/L	5	ug/L	91.2	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
	Arsenic	28.6	ug/L	30	ug/L	95.5	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
	Magnesium	304	ug/L	300	ug/L	101.5	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
	Aluminum	201	ug/L	200	ug/L	100.5	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
	Cobalt	4.65	ug/L	5	ug/L	93.1	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
	Vanadium	5.04	ug/L	5	ug/L	100.9	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
	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

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1390-1

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	04-FEB-10 09:29	020410W1-6
	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	13-FEB-10 00:27	100212-3
	Beryllium	0.1	+/-5	U	0.1	0.5	LIQ	MS	13-FEB-10 00:27	100212-3
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	13-FEB-10 00:27	100212-3
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	13-FEB-10 13:05	100213-4
	Uranium	0.05	+/-2	U	0.05	0.2	LIQ	MS	13-FEB-10 18:01	100213-2
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	13-FEB-10 19:56	100213-5
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	13-FEB-10 19:56	100213-5
CCB01										
	Mercury	0.09	+/-2	J	0.066	0.2	LIQ	AV	04-FEB-10 09:35	020410W1-6
	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

SW846

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-1390-1

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 14:53	021110B-1
	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	13-FEB-10 00:58	100212-3
	Beryllium	0.1	+/-5	U	0.1	0.5	LIQ	MS	13-FEB-10 00:58	100212-3
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	13-FEB-10 00:58	100212-3
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	13-FEB-10 13:27	100213-4
	Uranium	0.05	+/-2	U	0.05	0.2	LIQ	MS	13-FEB-10 18:09	100213-2
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	13-FEB-10 20:05	100213-5
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	13-FEB-10 20:05	100213-5
CCB02	Mercury	0.066	+/-2	U	0.066	0.2	LIQ	AV	04-FEB-10 09:59	020410W1-6
	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

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1390-1

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>
	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
	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	13-FEB-10 01:53	100212-3
	Beryllium	0.1	+/-5	U	0.1	0.5	LIQ	MS	13-FEB-10 01:53	100212-3
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	13-FEB-10 01:53	100212-3
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	13-FEB-10 14:08	100213-4
	Uranium	0.05	+/-2	U	0.05	0.2	LIQ	MS	13-FEB-10 18:23	100213-2
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	13-FEB-10 20:26	100213-5
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	13-FEB-10 20:26	100213-5
CCB03										
	Mercury	0.066	+/-2	U	0.066	0.2	LIQ	AV	04-FEB-10 10:23	020410W1-6
	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	13-FEB-10 02:36	100212-3

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1390-1

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>
	Beryllium	0.1	+/-5	U	0.1	0.5	LIQ	MS	13-FEB-10 02:36	100212-3
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	13-FEB-10 02:36	100212-3
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	13-FEB-10 14:44	100213-4
	Uranium	0.05	+/-2	U	0.05	0.2	LIQ	MS	13-FEB-10 18:38	100213-2
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	13-FEB-10 20:35	100213-5
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	13-FEB-10 20:35	100213-5
CCB04	Mercury	0.066	+/-2	U	0.066	0.2	LIQ	AV	04-FEB-10 10:47	020410W1-6
	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
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	13-FEB-10 03:31	100212-3
	Beryllium	0.1	+/-5	U	0.1	0.5	LIQ	MS	13-FEB-10 03:31	100212-3
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	13-FEB-10 03:31	100212-3
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	13-FEB-10 15:25	100213-4
	Uranium	0.05	+/-2	U	0.05	0.2	LIQ	MS	13-FEB-10 18:54	100213-2
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	13-FEB-10 20:53	100213-5
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	13-FEB-10 20:53	100213-5

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Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1390-1

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>
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
	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
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	13-FEB-10 04:27	100212-3
	Beryllium	0.1	+/-5	U	0.1	0.5	LIQ	MS	13-FEB-10 04:27	100212-3
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	13-FEB-10 04:27	100212-3
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	13-FEB-10 16:06	100213-4
	Uranium	0.05	+/-2	U	0.05	0.2	LIQ	MS	13-FEB-10 19:08	100213-2
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	13-FEB-10 21:00	100213-5
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	13-FEB-10 21:00	100213-5
CCB06	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

SW846

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1390-1

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>
	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
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	13-FEB-10 16:42	100213-4
	Uranium	0.05	+/-2	U	0.05	0.2	LIQ	MS	13-FEB-10 19:23	100213-2
CCB07	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
	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
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	13-FEB-10 17:23	100213-4
	Uranium	0.05	+/-2	U	0.05	0.2	LIQ	MS	13-FEB-10 19:39	100213-2

Metals

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Initial and Continuing Calibration Blank Summary

SDG No.: 10-1390-1

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>
CCB08	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	13-FEB-10 18:04	100213-4
	Uranium	0.05	+/-2	U	0.05	0.2	LIQ	MS	13-FEB-10 19:55	100213-2

METALS
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PREPARATION BLANK SUMMARY

SDG NO. 10-1390-1
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>
1202024735	Aluminum	68	ug/L	+/-200	U	P	68	200
	Arsenic	-5.09	ug/L	+/-30	J	P	5	30
	Barium	1	ug/L	+/-5	U	P	1	5
	Calcium	50	ug/L	+/-200	U	P	50	200
	Chromium	1	ug/L	+/-5	U	P	1	5
	Cobalt	1	ug/L	+/-5	U	P	1	5
	Copper	3	ug/L	+/-10	U	P	3	10
	Iron	30	ug/L	+/-100	U	P	30	100
	Magnesium	85	ug/L	+/-300	U	P	85	300
	Nickel	1.5	ug/L	+/-5	U	P	1.5	5
	Potassium	50	ug/L	+/-150	U	P	50	150
	Selenium	-5.55	ug/L	+/-30	J	P	5	30
	Silver	1	ug/L	+/-5	U	P	1	5
	Sodium	100	ug/L	+/-300	U	P	100	300
	Vanadium	1	ug/L	+/-5	U	P	1	5
	Zinc	3.3	ug/L	+/-10	U	P	3.3	10
1202024740	Antimony	1	ug/L	+/-3	U	MS	1	3
	Beryllium	0.1	ug/L	+/-0.5	U	MS	0.1	0.5
	Cadmium	0.11	ug/L	+/-1	U	MS	0.11	1
	Lead	0.5	ug/L	+/-2	U	MS	0.5	2
	Manganese	1	ug/L	+/-5	U	MS	1	5
	Thallium	0.3	ug/L	+/-1	U	MS	0.3	1
	Uranium	0.05	ug/L	+/-0.2	U	MS	0.05	0.2
1202024802	Mercury	-0.0714	ug/L	+/-0.2	J	AV	0.066	0.2

METALS
-4-
Interference Check Sample

SDG No: 10-1390-1

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>
ICSA01									
	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
ICSAB01									
	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: 10-1390-1

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: 10-1390-1

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS4

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01	Uranium	-0.001	ug/L					13-FEB-10 18:04	100213-2
ICSAB01	Uranium	19.7	ug/L	20	ug/L	98.5	80.0 - 120.0	13-FEB-10 18:06	100213-2

METALS
-4-
Interference Check Sample

SDG No: 10-1390-1

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS5

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01									
	Antimony	0.155	ug/L					13-FEB-10 00:40	100212-3
	Beryllium	0.081	ug/L					13-FEB-10 00:40	100212-3
	Cadmium	0.624	ug/L					13-FEB-10 00:40	100212-3
ICSAB01									
	Antimony	22.0	ug/L	20	ug/L	110	80.0 - 120.0	13-FEB-10 00:46	100212-3
	Beryllium	17.5	ug/L	20	ug/L	87.3	80.0 - 120.0	13-FEB-10 00:46	100212-3
	Cadmium	19.8	ug/L	20.44	ug/L	97.1	80.0 - 120.0	13-FEB-10 00:46	100212-3

METALS
-4-
Interference Check Sample

SDG No: 10-1390-1

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS5

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01	Thallium	-0.031	ug/L					13-FEB-10 13:14	100213-4
ICSAB01	Thallium	21.9	ug/L	20	ug/L	110	80.0 - 120.0	13-FEB-10 13:18	100213-4

METALS
-4-
Interference Check Sample

SDG No: 10-1390-1

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS5

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01	Lead	0.242	ug/L					13-FEB-10 20:00	100213-5
	Manganese	6.11	ug/L					13-FEB-10 20:00	100213-5
ICSAB01	Lead	22.3	ug/L	20.19	ug/L	110	80.0 - 120.0	13-FEB-10 20:02	100213-5
	Manganese	27.7	ug/L	25.8	ug/L	107	80.0 - 120.0	13-FEB-10 20:02	100213-5

METALS

-5a-

Matrix Spike Summary

SDG NO. 10-1390-1 Client ID RE15-10-8074S

Contract: LANL01004 Level: Low

Matrix: WATER % Solids:

Sample ID: 245392001 Spike ID: 1202024738

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/L	75-125	4730		68	U	5000	94.4		P
Arsenic	ug/L	75-125	483		5	U	500	96.6		P
Barium	ug/L	75-125	479		1	U	500	95.6		P
Calcium	ug/L	75-125	4710		50	U	5000	93.3		P
Chromium	ug/L	75-125	475		1	U	500	94.9		P
Cobalt	ug/L	75-125	468		1	U	500	93.6		P
Copper	ug/L	75-125	475		3	U	500	95.1		P
Iron	ug/L	75-125	4750		30	U	5000	94.7		P
Magnesium	ug/L	75-125	4810		85	U	5000	95.7		P
Nickel	ug/L	75-125	477		1.5	U	500	95.4		P
Potassium	ug/L	75-125	4880		197		5000	93.6		P
Selenium	ug/L	75-125	467		5	U	500	93.5		P
Silver	ug/L	75-125	472		1	U	500	94.2		P
Sodium	ug/L	75-125	4840		162	J	5000	93.6		P
Vanadium	ug/L	75-125	480		1	U	500	95.9		P
Zinc	ug/L	75-125	464		3.3	U	500	92.5		P

METALS

-5a-

Matrix Spike Summary

SDG NO. 10-1390-1 Client ID RE15-10-8444S

Contract: LANL01004 Level: Low

Matrix: WATER % Solids:

Sample ID: 245382001 Spike ID: 1202024743

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Antimony	ug/L	75-125	195		1	U	200	97.5		MS
Beryllium	ug/L	75-125	42		0.1	U	50	83.9		MS
Cadmium	ug/L	75-125	10.3		0.11	U	10	103		MS
Lead	ug/L	75-125	44.7		0.5	U	40	112		MS
Manganese	ug/L	75-125	50.5		1	U	50	99.9		MS
Thallium	ug/L	75-125	80.6		0.3	U	100	80.6		MS
Uranium	ug/L	75-125	56.2		0.05	U	50	112		MS

METALS										
-5a-										
Matrix Spike Summary										
SDG NO.	10-1390-1	Client ID	RE15-10-8074S							
Contract:	LANL01004	Level:	Low							
Matrix:	WATER	% Solids:								
Sample ID:	245392001	Spike ID:	1202024805							
Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/L	75-125	2.16		0.066	U	2	108		AV

Metals

-6-

Duplicate Sample Summary

SDG No.: 10-1390-1

Contract: LANL01004

Lab Code: GEL

Matrix: LIQUID

Level: Low

Client ID: RE15-10-8074D

Sample ID: 245392001

Duplicate ID: 1202024737

Percent Solids for Dup: N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/L		68 U		68 U				P
Arsenic	ug/L		5 U		5 U				P
Barium	ug/L		1 U		1 U				P
Calcium	ug/L		50 U		50 U				P
Chromium	ug/L		1 U		1.31 J		200		P
Cobalt	ug/L		1 U		1 U				P
Copper	ug/L		3 U		3 U				P
Iron	ug/L		30 U		30.3 J		200		P
Magnesium	ug/L		85 U		85 U				P
Nickel	ug/L		1.5 U		1.5 U				P
Potassium	ug/L	+/-150	197		195		1.01		P
Selenium	ug/L		5 U		5 U				P
Silver	ug/L		1 U		1 U				P
Sodium	ug/L	+/-300	162 J		167 J		3.3		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.: 10-1390-1

Contract: LANL01004

Lab Code: GEL

Matrix: LIQUID

Level: Low

Client ID: RE15-10-8444D

Sample ID: 245382001

Duplicate ID: 1202024742

Percent Solids for Dup: N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Antimony	ug/L		1 U		1 U				MS
Beryllium	ug/L		0.1 U		0.1 U				MS
Cadmium	ug/L		0.11 U		0.11 U				MS
Lead	ug/L		0.5 U		0.5 U				MS
Manganese	ug/L		1 U		1 U				MS
Thallium	ug/L		0.3 U		0.3 U				MS
Uranium	ug/L		0.05 U		0.05 U				MS

Metals

-6-

Duplicate Sample Summary

SDG No.: 10-1390-1

Contract: LANL01004

Lab Code: GEL

Matrix: LIQUID

Level: Low

Client ID: RE15-10-8074D

Sample ID: 245392001

Duplicate ID: 1202024804

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

-7-

Laboratory Control Sample Summary

SDG NO. 10-1390-1

Contract: LANL01004

Aqueous LCS Source: OS21

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>
1202024736	Aluminum	ug/L	5000	4810		96.2	80-120	P
	Arsenic	ug/L	500	490		98	80-120	P
	Barium	ug/L	500	485		97	80-120	P
	Calcium	ug/L	5000	4780		95.5	80-120	P
	Chromium	ug/L	500	480		96.1	80-120	P
	Cobalt	ug/L	500	475		95.1	80-120	P
	Copper	ug/L	500	479		95.8	80-120	P
	Iron	ug/L	5000	4830		96.5	80-120	P
	Magnesium	ug/L	5000	4870		97.4	80-120	P
	Nickel	ug/L	500	485		97	80-120	P
	Potassium	ug/L	5000	4770		95.4	80-120	P
	Selenium	ug/L	500	467		93.5	80-120	P
	Silver	ug/L	500	476		95.3	80-120	P
	Sodium	ug/L	5000	4840		96.7	80-120	P
	Vanadium	ug/L	500	485		97	80-120	P
	Zinc	ug/L	500	472		94.4	80-120	P

METALS

-7-

Laboratory Control Sample Summary

SDG NO. 10-1390-1

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>
1202024741								
	Antimony	ug/L	50	53.4		107	80-120	MS
	Beryllium	ug/L	50	41.8		83.5	80-120	MS
	Cadmium	ug/L	50	50.1		100	80-120	MS
	Lead	ug/L	50	55.2		110	80-120	MS
	Manganese	ug/L	50	53.4		107	80-120	MS
	Thallium	ug/L	50	49.8		99.5	80-120	MS
	Uranium	ug/L	50	53.9		108	80-120	MS

METALS

-7-

Laboratory Control Sample Summary

SDG NO. 10-1390-1

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>
1202024803	Mercury	ug/L	2	2.09		104	80-120	AV

METALS

-9-

Serial Dilution Sample Summary

SDG NO. 10-1390-1

Client ID RE15-10-8074L

Contract: LANL01004

Matrix: LIQUID

Level: Low

Sample ID: 245392001

Serial Dilution ID: 1202024739

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Aluminum	68	U	340	U				P
Arsenic	5	U	25	U				P
Barium	1	U	5	U				P
Calcium	50	U	250	U				P
Chromium	1	U	5	U				P
Cobalt	1	U	5	U				P
Copper	3	U	15	U				P
Iron	30	U	150	U				P
Magnesium	85	U	425	U				P
Nickel	1.5	U	7.5	U				P
Potassium	197		250	U	100			P
Selenium	5	U	25	U				P
Silver	1	U	5	U				P
Sodium	162	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. 10-1390-1 Client ID RE15-10-8074L

Contract: LANL01004

Matrix: LIQUID Level: Low

Sample ID: 245392001 Serial Dilution ID: 1202024744

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Antimony	1	U	5	U				MS
Beryllium	.1	U	.5	U				MS
Cadmium	.11	U	.55	U				MS
Lead	1.75	J	2.5	U	100			MS
Manganese	1.87	J	5	U	100			MS
Thallium	.3	U	5.25					MS
Uranium	.688		.735	J	6.83			MS

METALS

-9-

Serial Dilution Sample Summary

SDG NO. 10-1390-1 Client ID RE15-10-8074L

Contract: LANL01004

Matrix: LIQUID Level: Low

Sample ID: 245392001 Serial Dilution ID: 1202024811

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Mercury	.066	U	.33	U				AV

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1390-1

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	945378						
1202024735	MB for batch 945378	MB	W	03-FEB-10	50mL	50mL	
1202024736	LCS for batch 945378	LCS	W	03-FEB-10	50mL	50mL	
1202024738	RE15-10-8074S	MS	W	03-FEB-10	50mL	50mL	
1202024737	RE15-10-8074D	DUP	W	03-FEB-10	50mL	50mL	
245392001	RE15-10-8074	SAMPLE	W	03-FEB-10	50mL	50mL	
245392002	RE15-10-8075	SAMPLE	W	03-FEB-10	50mL	50mL	

SW846

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1390-1

Method Type: MS

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Client ID</u>	<u>Sample Type</u>	<u>Matrix</u>	<u>Prep Date</u>	<u>Initial Sample Size</u>	<u>Final Sample Volume</u>	<u>Percent Solids</u>
Batch Number 945380							
1202024740	MB for batch 945380	MB	W	03-FEB-10	50mL	50mL	
1202024741	LCS for batch 945380	LCS	W	03-FEB-10	50mL	50mL	
1202024743	RE15-10-8444S	MS	W	03-FEB-10	50mL	50mL	
1202024742	RE15-10-8444D	DUP	W	03-FEB-10	50mL	50mL	
245392001	RE15-10-8074	SAMPLE	W	03-FEB-10	50mL	50mL	
245392002	RE15-10-8075	SAMPLE	W	03-FEB-10	50mL	50mL	

SW846

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1390-1

Method Type: AV

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Client ID</u>	<u>Sample Type</u>	<u>Matrix</u>	<u>Prep Date</u>	<u>Initial Sample Size</u>	<u>Final Sample Volume</u>	<u>Percent Solids</u>
Batch Number 945413							
1202024802	MB for batch 945413	MB	W	03-FEB-10	20mL	20mL	
1202024803	LCS for batch 945413	LCS	W	03-FEB-10	20mL	20mL	
1202024805	RE15-10-8074S	MS	W	03-FEB-10	20mL	20mL	
1202024804	RE15-10-8074D	DUP	W	03-FEB-10	20mL	20mL	
245392001	RE15-10-8074	SAMPLE	W	03-FEB-10	20mL	20mL	
245392002	RE15-10-8075	SAMPLE	W	03-FEB-10	20mL	20mL	

SW846

Metals
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Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS5

Start Date: 13-FEB-10

End Date: 13-FEB-10

Client Sdg: 10-1390-1

Method MS

Data File: 100212-3

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	00:03		X			X	X																		
S10	1	00:09		X			X	X																		
S100	1	00:15		X			X	X																		
ICV01	1	00:21		X			X	X																		
ICB01	1	00:27		X			X	X																		
CRDL01	1	00:33		X			X	X																		
ICSA01	1	00:40		X			X	X																		
ICSAB01	1	00:46		X			X	X																		
CCV01	1	00:52		X			X	X																		
CCB01	1	00:58		X			X	X																		
ZZZZZZ	2	01:04																								
ZZZZZZ	40	01:10																								
ZZZZZZ	2	01:16																								
ZZZZZZ	2	01:22																								
ZZZZZZ	2	01:28																								
ZZZZZZ	2	01:35																								
ZZZZZZ	10	01:41																								
CCV02	1	01:47		X			X	X																		
CCB02	1	01:53		X			X	X																		
ZZZZZZ	1	01:59																								
ZZZZZZ	1	02:05																								
ZZZZZZ	1	02:11																								
ZZZZZZ	1	02:18																								
ZZZZZZ	5	02:24																								
CCV03	1	02:30		X			X	X																		
CCB03	1	02:36		X			X	X																		
1202024740	1	02:42		X			X	X																		
1202024741	1	02:48		X			X	X																		
ZZZZZZ	1	02:54																								
ZZZZZZ	1	03:01																								
ZZZZZZ	1	03:07																								
ZZZZZZ	1	03:13																								
ZZZZZZ	1	03:19																								
CCV04	1	03:25		X			X	X																		
CCB04	1	03:31		X			X	X																		
ZZZZZZ	1	03:38																								
ZZZZZZ	1	03:44																								
245392001	1	03:50		X			X	X																		
1202024742	1	03:56		X			X	X																		
1202024743	1	04:02		X			X	X																		

[illegible]

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS5

Start Date: 13-FEB-10

End Date: 13-FEB-10

Client Sdg: 10-1390-1

Method MS

Data File: 100213-4

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	12:47																					X			
S10	1	12:52																					X			
S100	1	12:56																					X			
ICV01	1	13:00																					X			
ICB01	1	13:05																					X			
CRDL01	1	13:09																					X			
ICSA01	1	13:14																					X			
ICSAB01	1	13:18																					X			
CCV01	1	13:23																					X			
CCB01	1	13:27																					X			
ZZZZZZ	2	13:32																								
ZZZZZZ	40	13:37																								
ZZZZZZ	2	13:41																								
ZZZZZZ	2	13:46																								
ZZZZZZ	2	13:50																								
ZZZZZZ	2	13:55																								
ZZZZZZ	10	13:59																								
CCV02	1	14:04																					X			
CCB02	1	14:08																					X			
ZZZZZZ	2	14:13																								
ZZZZZZ	2	14:17																								
ZZZZZZ	2	14:22																								
ZZZZZZ	2	14:26																								
ZZZZZZ	2	14:31																								
ZZZZZZ	2	14:35																								
CCV03	1	14:40																					X			
CCB03	1	14:44																					X			
ZZZZZZ	2	14:49																								
ZZZZZZ	2	14:53																								
ZZZZZZ	2	14:58																								
ZZZZZZ	2	15:02																								
ZZZZZZ	2	15:07																								
ZZZZZZ	2	15:11																								
ZZZZZZ	2	15:16																								
CCV04	1	15:20																					X			
CCB04	1	15:25																					X			
ZZZZZZ	2	15:29																								
ZZZZZZ	40	15:34																								
ZZZZZZ	2	15:39																								
ZZZZZZ	2	15:43																								

Metals
-14-
Analysis Run Log

Samp No.	D/F	Run Time
ZZZZZZ	2	15:48
ZZZZZZ	2	15:52
ZZZZZZ	2	15:57
CCV05	1	16:01
CCB05	1	16:06
ZZZZZZ	2	16:10
ZZZZZZ	2	16:15
ZZZZZZ	2	16:20
ZZZZZZ	2	16:24
ZZZZZZ	10	16:29
ZZZZZZ	2	16:33
CCV06	1	16:38
CCB06	1	16:42
1202024740	1	16:47
1202024741	1	16:52
ZZZZZZ	1	16:56
ZZZZZZ	1	17:01
ZZZZZZ	1	17:05
ZZZZZZ	1	17:10
ZZZZZZ	1	17:14
CCV07	1	17:19
CCB07	1	17:23
ZZZZZZ	1	17:28
ZZZZZZ	1	17:32
245392001	1	17:37
1202024742	1	17:42
1202024743	1	17:46
1202024744	5	17:51
245392002	1	17:55
CCV08	1	18:00
CCB08	1	18:04

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS5

Start Date: 13-FEB-10

End Date: 13-FEB-10

Client Sdg: 10-1390-1

Method MS

Data File: 100213-5

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	19:49												X	X											
S10	1	19:50												X	X											
S100	1	19:52												X	X											
ICV01	1	19:54												X	X											
ICB01	1	19:56												X	X											
CRDL01	1	19:58												X	X											
ICSA01	1	20:00												X	X											
ICSAB01	1	20:02												X	X											
CCV01	1	20:03												X	X											
CCB01	1	20:05												X	X											
ZZZZZZ	1	20:07																								
ZZZZZZ	1	20:09																								
ZZZZZZ	1	20:15																								
ZZZZZZ	1	20:17																								
1202024740	1	20:20												X	X											
1202024741	1	20:22												X	X											
CCV02	1	20:24												X	X											
CCB02	1	20:26												X	X											
ZZZZZZ	1	20:28																								
ZZZZZZ	1	20:30																								
ZZZZZZ	1	20:32																								
CCV03	1	20:34												X	X											
CCB03	1	20:35												X	X											
ZZZZZZ	1	20:37																								
ZZZZZZ	1	20:39																								
ZZZZZZ	1	20:41																								
ZZZZZZ	1	20:43																								
245392001	1	20:45												X	X											
1202024742	1	20:47												X	X											
1202024743	1	20:49												X	X											
CCV04	1	20:51												X	X											
CCB04	1	20:53												X	X											
1202024744	5	20:55												X	X											
245392002	1	20:57												X	X											
CCV05	1	20:58												X	X											
CCB05	1	21:00												X	X											

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: MER536

Start Date: 04-FEB-10

End Date: 04-FEB-10

Client Sdg: 10-1390-1

Method AV

Data File: 020410W1-6

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	09:15															X									
S0.2	1	09:17															X									
S0.5	1	09:19															X									
S2.0	1	09:21															X									
S5.0	1	09:23															X									
S10	1	09:25															X									
ICV01	1	09:27															X									
ICB01	1	09:29															X									
CRDL01	1	09:31															X									
CCV01	1	09:33															X									
CCB01	1	09:35															X									
ZZZZZZ	1	09:37																								
ZZZZZZ	1	09:39																								
ZZZZZZ	1	09:41																								
ZZZZZZ	1	09:43																								
ZZZZZZ	1	09:45																								
ZZZZZZ	5	09:47																								
ZZZZZZ	1	09:49																								
ZZZZZZ	1	09:51																								
ZZZZZZ	1	09:53																								
ZZZZZZ	1	09:55																								
CCV02	1	09:57															X									
CCB02	1	09:59															X									
ZZZZZZ	1	10:01																								
ZZZZZZ	5	10:03																								
1202024802	1	10:05															X									
1202024803	1	10:07															X									
ZZZZZZ	1	10:09																								
ZZZZZZ	1	10:11																								
ZZZZZZ	1	10:13																								
245392001	1	10:15															X									
1202024804	1	10:17															X									
1202024805	1	10:19															X									
CCV03	1	10:21															X									
CCB03	1	10:23															X									
1202024811	5	10:25															X									
245392002	1	10:27															X									
ZZZZZZ	1	10:29																								
ZZZZZZ	1	10:31																								
ZZZZZZ	1	10:33																								

Samp No.	D/F	Run Time
ZZZZZZ	1	10:35
ZZZZZZ	1	10:37
ZZZZZZ	1	10:39
ZZZZZZ	5	10:41
ZZZZZZ	1	10:43
CCV04	1	10:45
CCB04	1	10:47

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS4

Start Date: 13-FEB-10

End Date: 13-FEB-10

Client Sdg: 10-1390-1

Method MS

Data File: 100213-2

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	17:54																						X		
S10	1	17:56																						X		
S100	1	17:57																						X		
ICV01	1	17:59																						X		
ICB01	1	18:01																						X		
CRDL01	1	18:03																						X		
ICSA01	1	18:04																						X		
ICSAB01	1	18:06																						X		
CCV01	1	18:08																						X		
CCB01	1	18:09																						X		
ZZZZZZ	2	18:11																								
ZZZZZZ	40	18:13																								
ZZZZZZ	2	18:14																								
ZZZZZZ	2	18:16																								
ZZZZZZ	2	18:18																								
ZZZZZZ	2	18:20																								
CCV02	1	18:21																						X		
CCB02	1	18:23																						X		
ZZZZZZ	2	18:25																								
ZZZZZZ	2	18:26																								
ZZZZZZ	2	18:28																								
ZZZZZZ	2	18:30																								
ZZZZZZ	2	18:32																								
ZZZZZZ	10	18:33																								
ZZZZZZ	2	18:35																								
CCV03	1	18:37																						X		
CCB03	1	18:38																						X		
ZZZZZZ	2	18:40																								
ZZZZZZ	40	18:42																								
ZZZZZZ	2	18:44																								
ZZZZZZ	2	18:45																								
ZZZZZZ	2	18:47																								
ZZZZZZ	2	18:49																								
ZZZZZZ	10	18:51																								
CCV04	1	18:52																						X		
CCB04	1	18:54																						X		
ZZZZZZ	2	18:56																								
ZZZZZZ	2	18:57																								
ZZZZZZ	2	18:59																								
ZZZZZZ	2	19:01																								

Samp No.	D/F	Run Time
ZZZZZZ	2	19:03
ZZZZZZ	2	19:04
CCV05	1	19:06
CCB05	1	19:08
ZZZZZZ	2	19:10
ZZZZZZ	2	19:11
ZZZZZZ	2	19:13
ZZZZZZ	2	19:15
ZZZZZZ	2	19:17
ZZZZZZ	2	19:18
ZZZZZZ	2	19:20
CCV06	1	19:22
CCB06	1	19:23
I202024740	1	19:25
I202024741	1	19:27
ZZZZZZ	1	19:29
ZZZZZZ	1	19:31
ZZZZZZ	1	19:32
ZZZZZZ	1	19:34
ZZZZZZ	1	19:36
CCV07	1	19:38
CCB07	1	19:39
ZZZZZZ	1	19:41
ZZZZZZ	1	19:43
245392001	1	19:45
I202024742	1	19:46
I202024743	1	19:48
I202024744	5	19:50
245392002	1	19:52
CCV08	1	19:53
CCB08	1	19:55

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: 10-1390-1

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	U	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
ICSAB01	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

[illegible]

Standards

METALS
-10-
Instrument Detection Limits

SDG NO. 10-1390-1

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>
LIQUID	Aluminum		15.0	30
	Antimony		1.0	3
	Arsenic		1.6	5
	Barium		0.6	2
	Beryllium		0.1	.5
	Cadmium		0.11	1
	Calcium		65.0	200
	Chromium		2.0	10
	Cobalt		0.1	1
	Copper		0.33	1
	Iron		33.0	100
	Lead		0.5	2
	Magnesium		5.2	15
	Manganese		1.0	5
	Nickel		0.5	2
	Potassium		80.0	300
	Selenium		1.0	5
	Silver		0.2	1
	Sodium		80.0	250
	Thallium		0.3	1
	Uranium		0.05	.2
	Vanadium		3.0	10
	Zinc		3.0	10

METALS
-10-
Instrument Detection Limits

SDG NO. 10-1390-1

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 01-JUL-09

		<u>Wavelength</u> <u>(nm)</u>	<u>MDL</u> <u>ug/L</u>	<u>RDL</u> <u>ug/L</u>
MERCURY	<u>Analyte</u>			
LIQUID	Mercury		0.066	.2

METALS
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Instrument Detection Limits

SDG NO. 10-1390-1

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 01-JUL-09

ICP	<u>Analyte</u>	<u>Wavelength (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
	Uranium	409.014	10.0	50
	Vanadium	292.402	1.0	5
	Zinc	213.857	3.3	10

METALS
-11-
Interelement Correction Factors

Lab Code: GELGEL Job No: **10-1390-1**

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
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Interelement Correction Factors

Lab Code: GELGEL Job No: **10-1390-1**

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: GEL

GEL Job No: 10-1390-1

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: 10-1390-1

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: GEL

GEL Job No: 10-1390-1

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: 10-1390-1

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. 10-1390-1

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>
Antimony	1000	250	ug/L	01-FEB-10
Arsenic	1000	1000	ug/L	01-FEB-10
Barium	1000	1000	ug/L	01-FEB-10
Beryllium	1000	1000	ug/L	01-FEB-10
Cadmium	1000	1000	ug/L	01-FEB-10
Calcium	500	50000	ug/L	01-FEB-10
Chromium	1000	1000	ug/L	01-FEB-10
Cobalt	1000	1000	ug/L	01-FEB-10
Copper	1000	1000	ug/L	01-FEB-10
Iron	500	50000	ug/L	01-FEB-10
Lead	1000	5000	ug/L	01-FEB-10
Magnesium	1	50000	ug/L	01-FEB-10
Manganese	1000	1000	ug/L	01-FEB-10
Nickel	1000	1000	ug/L	01-FEB-10
Potassium	1	50000	ug/L	01-FEB-10
Selenium	1000	500	ug/L	01-FEB-10
Silver	1000	250	ug/L	01-FEB-10
Sodium	1	50000	ug/L	01-FEB-10
Thallium	1000	500	ug/L	01-FEB-10
Uranium	1000	5000	ug/L	01-FEB-10
Vanadium	1000	100	ug/L	01-FEB-10
Zinc	1000	2500	ug/L	01-FEB-10
Aluminum	1	50000	ug/L	01-FEB-10

METALS
-12-
Linear Ranges

SDG NO. 10-1390-1

Contract: LANL01004

Lab Code: GEL

Instrument ID ICPMS4

<u>Analyte</u>	<u>Integration Time (msec)</u>	<u>LDR</u>	<u>Units</u>	<u>Effective Date</u>
Aluminum	1	50000	ug/L	01-FEB-10
Antimony	1000	250	ug/L	01-FEB-10
Arsenic	1000	1000	ug/L	01-FEB-10
Barium	1000	1000	ug/L	01-FEB-10
Beryllium	1000	1000	ug/L	01-FEB-10
Cadmium	1000	1000	ug/L	01-FEB-10
Calcium	500	50000	ug/L	01-FEB-10
Chromium	1000	1000	ug/L	01-FEB-10
Cobalt	1000	1000	ug/L	01-FEB-10
Copper	1000	1000	ug/L	01-FEB-10
Iron	500	50000	ug/L	01-FEB-10
Lead	1000	5000	ug/L	01-FEB-10
Magnesium	1	50000	ug/L	01-FEB-10
Manganese	1000	1000	ug/L	01-FEB-10
Nickel	1000	1000	ug/L	01-FEB-10
Potassium	1	50000	ug/L	01-FEB-10
Selenium	1000	500	ug/L	01-FEB-10
Silver	1000	250	ug/L	01-FEB-10
Sodium	1	50000	ug/L	01-FEB-10
Thallium	1000	500	ug/L	01-FEB-10
Uranium	1000	5000	ug/L	01-FEB-10
Vanadium	1000	100	ug/L	01-FEB-10
Zinc	1000	2500	ug/L	01-FEB-10

METALS
-12-
Linear Ranges

SDG NO. 10-1390-1

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
Uranium	20	15000	ug/L	01-FEB-10
Vanadium	20	10000	ug/L	01-FEB-10
Zinc	20	15000	ug/L	01-FEB-10

Raw Data

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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 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: 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:

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

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. Units	Calib.	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	Calib Conc. 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	Calib. Conc. Units	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

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. 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	Calib. Conc. Units	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

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. 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	Calib. Conc. 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	Calib Conc. 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	Calib. Conc. Units	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%

Cr	267.716†	226.9	4.9931 µg/L	0.20751	4.9931 ppb	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	9.8638 ppb	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	118.87 ppb	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	184.62 ppb	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	304.34 ppb	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	9.9880 ppb	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	9.9904 ppb	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	293.90 ppb	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	4.5606 ppb	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	163.52 ppb	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	10.004 ppb	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	92.677 ppb	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	5.5403 ppb	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	28.694 ppb	12.4212	43.29%
QC value within limits for Se 196.026 Recovery = 95.65%							
SiO2†		938.5	202.10 µg/L	10.205	202.10 ppb	10.205	5.05%
QC value within limits for SiO2 Recovery = 94.88%							
Si	251.611†	1120.6	92.115 µg/L	6.6423	92.115 ppb	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	10.598 ppb	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	4.8266 ppb	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	4.7961 ppb	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	23.984 ppb	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	53.480 ppb	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	5.0431 ppb	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	9.3810 ppb	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: ICSEA

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%

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

Mean Data: LR1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. 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%

Cr	267.716†	56.0	1.2317 µg/L	0.03444	1.2317 ppb	0.03444	2.80%
Cu	324.752†	130.7	0.9184 µg/L	0.23134	0.9184 ppb	0.23134	25.19%
Fe	238.204 Radial†	4.6	39.296 µg/L	26.5417	39.296 ppb	26.5417	67.54%
K	766.490 Radial†	109.3	77.713 µg/L	6.6157	77.713 ppb	6.6157	8.51%
Mg	279.077 IEC†	4.3	40.297 µg/L	30.8602	40.297 ppb	30.8602	76.58%
Mn	257.610†	137.6	0.4800 µg/L	0.08402	0.4800 ppb	0.08402	17.50%
Mo	202.031†	9.7	1.0367 µg/L	0.32615	1.0367 ppb	0.32615	31.46%
Na	589.592 Radial†	197.5	65.022 µg/L	6.2628	65.022 ppb	6.2628	9.63%
Ni	231.604†	-4.6	-0.2531 µg/L	0.26755	-0.2531 ppb	0.26755	105.70%
P	214.914†	-2.5	-5.4063 µg/L	13.25932	-5.4063 ppb	13.25932	245.25%
Pb	220.353†	15.9	4.2482 µg/L	2.04263	4.2482 ppb	2.04263	48.08%
S	181.975 Axial†	-1.5	-6.4715 µg/L	13.04721	-6.4715 ppb	13.04721	201.61%
Sb	206.836†	0.8	0.8057 µg/L	3.21418	0.8057 ppb	3.21418	398.93%
Se	196.026†	-1.5	-2.2926 µg/L	7.04698	-2.2926 ppb	7.04698	307.37%
SiO2†		-26.4	-5.6898 µg/L	8.00142	-5.6898 ppb	8.00142	140.63%
Si	251.611†	43.0	3.5375 µg/L	0.75475	3.5375 ppb	0.75475	21.34%
Sn	189.927†	5.0	2.3190 µg/L	2.42737	2.3190 ppb	2.42737	104.67%
Sr	421.552†	46.3	0.4804 µg/L	0.17278	0.4804 ppb	0.17278	35.96%
Ti	334.940†	146.3	0.3492 µg/L	0.09310	0.3492 ppb	0.09310	26.66%
Tl	190.801†	2.3	3.2523 µg/L	3.48319	3.2523 ppb	3.48319	107.10%
U	409.014†	8.7	0.7773 µg/L	4.64898	0.7773 ppb	4.64898	598.06%
V	292.402†	34.6	0.3845 µg/L	0.24848	0.3845 ppb	0.24848	64.62%
Zn	213.857†	39.7	0.9871 µg/L	0.11756	0.9871 ppb	0.11756	11.91%

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.

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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\optima1\Sample Information\021110.sif

Batch ID:

Results Data Set: 021110B

Results Library: c:\pe\optima1\Results\Results.mdb
=====

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:
=====

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		0.15443	0.7671 ppb	0.15443	20.13%
Al 396.153Radial†	-9.4	-6.9743 µg/L		5.64801	-6.9743 ppb	5.64801	80.98%
As 188.979†	1.7	3.3856 µg/L		1.47930	3.3856 ppb	1.47930	43.69%
B 249.677†	-86.4	-3.7680 µg/L		1.00792	-3.7680 ppb	1.00792	26.75%
Ba 233.527†	-2.4	-0.0762 µg/L		0.35392	-0.0762 ppb	0.35392	464.36%
Be 313.107†	-5036.8	-3.2914 µg/L		0.32768	-3.2914 ppb	0.32768	9.96%
Ca 317.933Radial†	-70.7	-66.567 µg/L		2.6618	-66.567 ppb	2.6618	4.00%
Cd 226.502†	-138.4	-3.8180 µg/L		0.65352	-3.8180 ppb	0.65352	17.12%
Co 228.616†	20.5	0.9983 µg/L		0.42901	0.9983 ppb	0.42901	42.97%
Cr 267.716†	260.0	5.7139 µg/L		0.59254	5.7139 ppb	0.59254	10.37%
Cu 324.752†	-1146.4	-8.0081 µg/L		0.60007	-8.0081 ppb	0.60007	7.49%
Fe 238.204 Radial†	-0.2	-1.5922 µg/L		16.86410	-1.5922 ppb	16.86410	>999.9%
K 766.490 Radial†	26.2	18.643 µg/L		4.5435	18.643 ppb	4.5435	24.37%
Mg 279.077 IEC†	8.7	80.775 µg/L		17.8566	80.775 ppb	17.8566	22.11%
Mn 257.610†	310.8	1.0728 µg/L		0.21196	1.0728 ppb	0.21196	19.76%
Mo 202.031†	-0.6	-0.0649 µg/L		0.56388	-0.0649 ppb	0.56388	868.32%
Na 589.592 Radial†	-1.3	-0.4181 µg/L		3.40391	-0.4181 ppb	3.40391	814.20%
Ni 231.604†	17.5	0.9555 µg/L		0.32641	0.9555 ppb	0.32641	34.16%
P 214.914†	15.8	34.793 µg/L		10.1611	34.793 ppb	10.1611	29.20%
Pb 220.353†	34.6	-1.1824 µg/L		1.01895	-1.1824 ppb	1.01895	86.18%
S 181.975 Axial†	1.0	4.3627 µg/L		2.94264	4.3627 ppb	2.94264	67.45%
Sb 206.836†	-6.5	-6.4875 µg/L		2.88435	-6.4875 ppb	2.88435	44.46%
Se 196.026†	-4.1	-6.3268 µg/L		1.23447	-6.3268 ppb	1.23447	19.51%
SiO2†	-19.4	-4.1826 µg/L		3.88938	-4.1826 ppb	3.88938	92.99%
Si 251.611†	-111.4	-9.1588 µg/L		3.90936	-9.1588 ppb	3.90936	42.68%
Sn 189.927†	6.0	2.7611 µg/L		0.50522	2.7611 ppb	0.50522	18.30%
Sr 421.552†	21.3	0.2204 µg/L		0.03458	0.2204 ppb	0.03458	15.69%
Ti 334.940†	2264.8	5.4403 µg/L		0.11049	5.4403 ppb	0.11049	2.03%
Tl 190.801†	-3.0	8.0675 µg/L		3.69388	8.0675 ppb	3.69388	45.79%
U 409.014†	110725.5	10025 µg/L		324.0	10025 ppb	324.0	3.23%
V 292.402†	-773.6	2.1841 µg/L		0.49139	2.1841 ppb	0.49139	22.50%
Zn 213.857†	15.2	0.3834 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

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

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†	QC value within limits for Co 228.616	Recovery = Not calculated				
	26.7	0.5884 µg/L	0.24227	0.5884 ppb	0.24227	41.18%
Cu 324.752†	QC value within limits for Cr 267.716	Recovery = Not calculated				
	107.2	0.7496 µg/L	0.39354	0.7496 ppb	0.39354	52.50%
Fe 238.204 Radial†	QC value within limits for Cu 324.752	Recovery = Not calculated				
	0.9	7.9581 µg/L	8.21418	7.9581 ppb	8.21418	103.22%
K 766.490 Radial†	QC value within limits for Fe 238.204 Radial	Recovery = Not calculated				
	79.3	56.332 µg/L	29.7823	56.332 ppb	29.7823	52.87%
Mg 279.077 IEC†	QC value within limits for K 766.490 Radial	Recovery = Not calculated				
	1.3	12.084 µg/L	32.3776	12.084 ppb	32.3776	267.93%
Mn 257.610†	QC value within limits for Mg 279.077 IEC	Recovery = Not calculated				
	65.9	0.2289 µg/L	0.11938	0.2289 ppb	0.11938	52.15%
Mo 202.031†	QC value within limits for Mn 257.610	Recovery = Not calculated				
	3.3	0.3563 µg/L	0.69086	0.3563 ppb	0.69086	193.88%
Na 589.592 Radial†	QC value within limits for Mo 202.031	Recovery = Not calculated				
	78.7	25.918 µg/L	12.6205	25.918 ppb	12.6205	48.69%
Ni 231.604†	QC value within limits for Na 589.592 Radial	Recovery = Not calculated				
	7.6	0.4162 µg/L	0.06037	0.4162 ppb	0.06037	14.50%
P 214.914†	QC value within limits for Ni 231.604	Recovery = Not calculated				
	2.5	5.2393 µg/L	3.71831	5.2393 ppb	3.71831	70.97%
Pb 220.353†	QC value within limits for P 214.914	Recovery = Not calculated				
	8.0	2.1408 µg/L	0.39934	2.1408 ppb	0.39934	18.65%
S 181.975 Axial†	QC value within limits for Pb 220.353	Recovery = Not calculated				
	2.7	11.879 µg/L	4.9829	11.879 ppb	4.9829	41.95%
Sb 206.836†	QC value within limits for S 181.975 Axial	Recovery = Not calculated				
	1.3	1.2466 µg/L	2.04884	1.2466 ppb	2.04884	164.36%
Se 196.026†	QC value within limits for Sb 206.836	Recovery = Not calculated				
	1.4	2.0707 µg/L	8.51747	2.0707 ppb	8.51747	411.33%
SiO2†	QC value within limits for Se 196.026	Recovery = Not calculated				
	36.7	7.8950 µg/L	6.23447	7.8950 ppb	6.23447	78.97%
Si 251.611†	QC value within limits for SiO2	Recovery = Not calculated				
	51.5	4.2323 µg/L	1.08494	4.2323 ppb	1.08494	25.63%
Sn 189.927†	QC value within limits for Si 251.611	Recovery = Not calculated				
	2.2	1.0152 µg/L	1.52977	1.0152 ppb	1.52977	150.68%
Sr 421.552†	QC value within limits for Sn 189.927	Recovery = Not calculated				
	-11.3	-0.1174 µg/L	0.36313	-0.1174 ppb	0.36313	309.29%
Ti 334.940†	QC value within limits for Sr 421.552	Recovery = Not calculated				
	73.9	0.1769 µg/L	0.10323	0.1769 ppb	0.10323	58.35%
Tl 190.801†	QC value within limits for Ti 334.940	Recovery = Not calculated				
	0.6	0.8799 µg/L	2.25661	0.8799 ppb	2.25661	256.47%
U 409.014†	QC value within limits for Tl 190.801	Recovery = Not calculated				
	-70.6	-6.3965 µg/L	4.72449	-6.3965 ppb	4.72449	73.86%
V 292.402†	QC value within limits for U 409.014	Recovery = Not calculated				
	31.2	0.3310 µg/L	0.22659	0.3310 ppb	0.22659	68.45%
Zn 213.857†	QC value within limits for V 292.402	Recovery = Not calculated				
	29.8	0.7397 µg/L	0.31916	0.7397 ppb	0.31916	43.15%
	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%

Cr	267.716†	21218.6	467.02 µg/L	34.571	467.02 ppb	34.571	7.40%
Cu	324.752†	66644.2	466.19 µg/L	27.494	466.19 ppb	27.494	5.90%
Fe	238.204 Radial†	559.7	4753.9 µg/L	37.39	4753.9 ppb	37.39	0.79%
K	766.490 Radial†	6767.2	4810.1 µg/L	19.19	4810.1 ppb	19.19	0.40%
Mg	279.077 IEC†	525.7	4895.3 µg/L	11.18	4895.3 ppb	11.18	0.23%
Mn	257.610†	137159.3	475.40 µg/L	15.982	475.40 ppb	15.982	3.36%
Mo	202.031†	4422.4	472.14 µg/L	51.737	472.14 ppb	51.737	10.96%
Na	589.592 Radial†	29752.8	9794.7 µg/L	13.02	9794.7 ppb	13.02	0.13%
Ni	231.604†	8555.5	467.27 µg/L	29.194	467.27 ppb	29.194	6.25%
P	214.914†	1089.3	2294.2 µg/L	233.77	2294.2 ppb	233.77	10.19%
Pb	220.353†	1748.4	466.67 µg/L	42.900	466.67 ppb	42.900	9.19%
S	181.975 Axial†	216.9	950.14 µg/L	75.264	950.14 ppb	75.264	7.92%
Sb	206.836†	478.3	472.81 µg/L	44.937	472.81 ppb	44.937	9.50%
Se	196.026†	306.5	474.50 µg/L	38.486	474.50 ppb	38.486	8.11%
SiO2†		23203.8	4997.1 µg/L	250.58	4997.1 ppb	250.58	5.01%
Si	251.611†	28508.4	2343.5 µg/L	113.86	2343.5 ppb	113.86	4.86%
Sn	189.927†	1024.3	471.14 µg/L	55.734	471.14 ppb	55.734	11.83%
Sr	421.552†	45546.1	472.14 µg/L	1.114	472.14 ppb	1.114	0.24%
Ti	334.940†	195036.5	468.84 µg/L	17.764	468.84 ppb	17.764	3.79%
Tl	190.801†	336.9	475.88 µg/L	30.390	475.88 ppb	30.390	6.39%
U	409.014†	5184.4	468.43 µg/L	35.417	468.43 ppb	35.417	7.56%
V	292.402†	43614.3	470.57 µg/L	30.297	470.57 ppb	30.297	6.44%
Zn	213.857†	18799.0	466.11 µg/L	28.010	466.11 ppb	28.010	6.01%

QC value within limits for Co 228.616 Recovery = 94.04%
 QC value within limits for Cr 267.716 Recovery = 93.40%
 QC value within limits for Cu 324.752 Recovery = 93.24%
 QC value within limits for Fe 238.204 Radial Recovery = 95.08%
 QC value within limits for K 766.490 Radial Recovery = 96.20%
 QC value within limits for Mg 279.077 IEC Recovery = 97.91%
 QC value within limits for Mn 257.610 Recovery = 95.08%
 QC value within limits for Mo 202.031 Recovery = 94.43%
 QC value within limits for Na 589.592 Radial Recovery = 97.95%
 QC value within limits for Ni 231.604 Recovery = 93.45%
 QC value within limits for P 214.914 Recovery = 91.77%
 QC value within limits for Pb 220.353 Recovery = 93.33%
 QC value within limits for S 181.975 Axial Recovery = 95.01%
 QC value within limits for Sb 206.836 Recovery = 94.56%
 QC value within limits for Se 196.026 Recovery = 94.90%
 QC value within limits for SiO2 Recovery = 93.45%
 QC value within limits for Si 251.611 Recovery = 93.74%
 QC value within limits for Sn 189.927 Recovery = 94.23%
 QC value within limits for Sr 421.552 Recovery = 94.43%
 QC value within limits for Ti 334.940 Recovery = 93.77%
 QC value within limits for Tl 190.801 Recovery = 95.18%
 QC value within limits for U 409.014 Recovery = 93.69%
 QC value within limits for V 292.402 Recovery = 94.11%
 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. Conc. 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

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%

QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	23.4	0.5146 µg/L	0.29767	0.5146 ppb	0.29767	57.84%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	-155.3	-1.0843 µg/L	0.06563	-1.0843 ppb	0.06563	6.05%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	0.6	4.8317 µg/L	1.10403	4.8317 ppb	1.10403	22.85%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	42.1	29.926 µg/L	19.1758	29.926 ppb	19.1758	64.08%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	-1.6	-15.284 µg/L	5.9121	-15.284 ppb	5.9121	38.68%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	54.8	0.1909 µg/L	0.07866	0.1909 ppb	0.07866	41.20%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	1.7	0.1816 µg/L	0.46249	0.1816 ppb	0.46249	254.69%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	565.9	186.28 µg/L	57.047	186.28 ppb	57.047	30.62%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	-13.2	-0.7220 µg/L	0.03109	-0.7220 ppb	0.03109	4.31%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	2.5	5.4583 µg/L	21.89861	5.4583 ppb	21.89861	401.20%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	-4.1	-1.0822 µg/L	0.95750	-1.0822 ppb	0.95750	88.48%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	2.8	12.362 µg/L	3.2727	12.362 ppb	3.2727	26.48%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	-1.0	-0.9437 µg/L	4.42784	-0.9437 ppb	4.42784	469.19%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	-3.5	-5.2914 µg/L	3.28586	-5.2914 ppb	3.28586	62.10%	
QC value within limits for Se 196.026 Recovery = Not calculated							
SiO2†	-55.5	-11.958 µg/L	6.2126	-11.958 ppb	6.2126	51.95%	
QC value within limits for SiO2 Recovery = Not calculated							
Si 251.611†	-5.1	-0.4151 µg/L	0.20723	-0.4151 ppb	0.20723	49.92%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	2.1	0.9538 µg/L	0.28585	0.9538 ppb	0.28585	29.97%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	6.6	0.0679 µg/L	0.08784	0.0679 ppb	0.08784	129.36%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	46.4	0.1133 µg/L	0.08046	0.1133 ppb	0.08046	71.03%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	0.4	0.6030 µg/L	1.07067	0.6030 ppb	1.07067	177.57%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	7.9	0.7140 µg/L	2.67833	0.7140 ppb	2.67833	375.09%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	19.0	0.2062 µg/L	0.19224	0.2062 ppb	0.19224	93.23%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	-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
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
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
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
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
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
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
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
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
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
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
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
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
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
QC value within limits for Se 196.026	Recovery = Not calculated			
SiO2†	-75.3	-16.206 µg/L	3.0998	-16.206 ppb
QC value within limits for SiO2	Recovery = Not calculated			
Si 251.611†	-22.2	-1.8290 µg/L	0.92279	-1.8290 ppb
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
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
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
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
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
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
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
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 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 077M1030502Autosampler Model: AS-93plus

Sample Information File: C:\pe\optima1\Sample Information\021110.sif

Batch ID:

Results Data Set: 021110B

Results Library: c:\pe\optima1\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						
Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis 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.: 3

Sample ID: 1202024735|945379|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 301

Date Collected: 2/11/2010 17:06:03

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202024735|945379|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57024.0	57024.0	104 %		17:06:39
1	Al 396.153Radial†	3.8	13.7	10.234 µg/L	10.234 ppb	17:06:39
1	Ca 317.933Radial†	231.7	42.6	40.088 µg/L	40.088 ppb	17:07:00
1	Fe 238.204 Radial†	16.3	1.1	9.4579 µg/L	9.4579 ppb	17:07:00
1	K 766.490 Radial†	191.5	54.9	39.009 µg/L	39.009 ppb	17:06:39
1	Mg 279.077 IEC†	11.8	0.0	0.0368 µg/L	0.0368 ppb	17:07:00
1	Na 589.592 Radial†	804.7	228.3	75.149 µg/L	75.149 ppb	17:06:39
1	Sr 421.552†	53.1	11.3	0.1171 µg/L	0.1171 ppb	17:06:39
1	Sc 361.383	2016505.5	2016505.5	105.59 %		17:08:01
1	Y 371.029	1376693.0	1376693.0	105.10 %		17:08:01
1	Ag 328.068†	-529.5	63.0	0.4982 µg/L	0.4982 ppb	17:08:07
1	As 188.979†	-1.4	-2.4	-4.7484 µg/L	-4.7484 ppb	17:08:27
1	B 249.677†	331.9	-17.2	-0.7554 µg/L	-0.7554 ppb	17:08:27
1	Ba 233.527†	-7.9	18.6	0.4826 µg/L	0.4826 ppb	17:08:27
1	Be 313.107†	-3565.6	63.5	0.0414 µg/L	0.0414 ppb	17:08:07
1	Cd 226.502†	-142.4	7.3	0.1987 µg/L	0.1987 ppb	17:08:27
1	Co 228.616†	-16.9	-7.2	-0.3523 µg/L	-0.3523 ppb	17:08:27
1	Cr 267.716†	-63.1	-7.4	-0.1630 µg/L	-0.1630 ppb	17:08:07
1	Cu 324.752†	2534.8	-85.3	-0.5947 µg/L	-0.5947 ppb	17:08:07
1	Mn 257.610†	-199.3	55.4	0.1930 µg/L	0.1930 ppb	17:08:27
1	Mo 202.031†	-6.9	1.0	0.1054 µg/L	0.1054 ppb	17:08:27
1	Ni 231.604†	306.2	-12.2	-0.6678 µg/L	-0.6678 ppb	17:08:27
1	P 214.914†	36.0	6.5	13.971 µg/L	13.971 ppb	17:08:27
1	Pb 220.353†	100.7	-1.8	-0.4813 µg/L	-0.4813 ppb	17:08:27
1	S 181.975 Axial†	19.7	3.9	16.927 µg/L	16.927 ppb	17:08:27
1	Sb 206.836†	23.9	-4.4	-4.2868 µg/L	-4.2868 ppb	17:08:27
1	Se 196.026†	16.5	-0.2	-0.3267 µg/L	-0.3267 ppb	17:08:27
1	SiO2†	1312.5	-6.9	-1.4898 µg/L	-1.4898 ppb	17:08:07
1	Si 251.611†	379.8	46.8	3.8473 µg/L	3.8473 ppb	17:08:27
1	Sn 189.927†	-3.5	-2.4	-1.1060 µg/L	-1.1060 ppb	17:08:27
1	Ti 334.940†	129.2	6.3	0.0157 µg/L	0.0157 ppb	17:08:07
1	Tl 190.801†	-23.2	2.3	3.2562 µg/L	3.2562 ppb	17:08:27
1	U 409.014†	-29.5	25.7	2.3222 µg/L	2.3222 ppb	17:08:07
1	V 292.402†	-79.6	-31.2	-0.3286 µg/L	-0.3286 ppb	17:08:07
1	Zn 213.857†	527.6	24.2	0.6074 µg/L	0.6074 ppb	17:08:27
2	Sc RADIAL	57156.6	57156.6	105 %		17:07:05
2	Al 396.153Radial†	15.7	25.1	18.694 µg/L	18.694 ppb	17:07:05
2	Ca 317.933Radial†	227.4	38.0	35.784 µg/L	35.784 ppb	17:07:26
2	Fe 238.204 Radial†	16.0	0.8	6.4625 µg/L	6.4625 ppb	17:07:26
2	K 766.490 Radial†	136.3	1.7	1.2106 µg/L	1.2106 ppb	17:07:05
2	Mg 279.077 IEC†	16.8	4.8	44.525 µg/L	44.525 ppb	17:07:26
2	Na 589.592 Radial†	753.3	177.4	58.390 µg/L	58.390 ppb	17:07:05
2	Sr 421.552†	46.8	5.1	0.0533 µg/L	0.0533 ppb	17:07:05
2	Sc 361.383	2023064.5	2023064.5	105.93 %		17:08:33
2	Y 371.029	1380814.8	1380814.8	105.41 %		17:08:33
2	Ag 328.068†	-602.0	-3.8	-0.0290 µg/L	-0.0290 ppb	17:08:39
2	As 188.979†	-4.2	-5.1	-10.045 µg/L	-10.045 ppb	17:09:00
2	B 249.677†	323.7	-25.9	-1.1362 µg/L	-1.1362 ppb	17:09:00
2	Ba 233.527†	-5.6	20.7	0.5402 µg/L	0.5402 ppb	17:09:00
2	Be 313.107†	-3636.2	7.8	0.0051 µg/L	0.0051 ppb	17:08:39
2	Cd 226.502†	-146.3	4.0	0.1083 µg/L	0.1083 ppb	17:09:00
2	Co 228.616†	-17.1	-7.3	-0.3581 µg/L	-0.3581 ppb	17:09:00
2	Cr 267.716†	-53.2	2.1	0.0465 µg/L	0.0465 ppb	17:08:39
2	Cu 324.752†	2469.5	-154.8	-1.0807 µg/L	-1.0807 ppb	17:08:39
2	Mn 257.610†	-202.3	53.1	0.1830 µg/L	0.1830 ppb	17:09:00
2	Mo 202.031†	-6.2	1.7	0.1782 µg/L	0.1782 ppb	17:09:00
2	Ni 231.604†	302.8	-16.4	-0.8939 µg/L	-0.8939 ppb	17:09:00
2	P 214.914†	31.3	1.9	4.3058 µg/L	4.3058 ppb	17:09:00
2	Pb 220.353†	107.7	4.4	1.1869 µg/L	1.1869 ppb	17:09:00

2	S 181.975 Axial†	15.3	-0.3	-1.4851 µg/L	-1.4851 ppb	17:09:00
2	Sb 206.836†	20.0	-8.0	-7.9229 µg/L	-7.9229 ppb	17:09:00
2	Se 196.026†	5.0	-11.1	-16.997 µg/L	-16.997 ppb	17:09:00
2	SiO2†	1337.6	12.7	2.7330 µg/L	2.7330 ppb	17:08:39
2	Si 251.611†	399.7	64.4	5.2966 µg/L	5.2966 ppb	17:09:00
2	Sn 189.927†	0.3	1.1	0.5153 µg/L	0.5153 ppb	17:09:00
2	Ti 334.940†	116.3	-6.3	-0.0181 µg/L	-0.0181 ppb	17:08:39
2	Tl 190.801†	-26.5	-0.8	-1.0523 µg/L	-1.0523 ppb	17:09:00
2	U 409.014†	-22.0	32.9	2.9751 µg/L	2.9751 ppb	17:08:39
2	V 292.402†	-32.5	13.6	0.1498 µg/L	0.1498 ppb	17:08:39
2	Zn 213.857†	530.5	25.2	0.6333 µg/L	0.6333 ppb	17:09:00
3	Sc RADIAL	57148.5	57148.5	105 %		17:07:31
3	Al 396.153Radial†	4.6	14.5	10.823 µg/L	10.823 ppb	17:07:31
3	Ca 317.933Radial†	225.9	36.6	34.423 µg/L	34.423 ppb	17:07:51
3	Fe 238.204 Radial†	16.3	1.1	9.3507 µg/L	9.3507 ppb	17:07:51
3	K 766.490 Radial†	173.6	37.4	26.551 µg/L	26.551 ppb	17:07:31
3	Mg 279.077 IEC†	12.2	0.3	3.2182 µg/L	3.2182 ppb	17:07:51
3	Na 589.592 Radial†	735.7	160.6	52.882 µg/L	52.882 ppb	17:07:31
3	Sr 421.552†	100.3	56.2	0.5828 µg/L	0.5828 ppb	17:07:31
3	Sc 361.383	2009574.4	2009574.4	105.22 %		17:09:06
3	Y 371.029	1372837.5	1372837.5	104.80 %		17:09:06
3	Ag 328.068†	-540.6	50.8	0.4041 µg/L	0.4041 ppb	17:09:11
3	As 188.979†	1.0	-0.2	-0.4677 µg/L	-0.4677 ppb	17:09:32
3	B 249.677†	312.0	-35.0	-1.5332 µg/L	-1.5332 ppb	17:09:32
3	Ba 233.527†	-5.8	20.5	0.5350 µg/L	0.5350 ppb	17:09:32
3	Be 313.107†	-3685.4	-62.1	-0.0405 µg/L	-0.0405 ppb	17:09:11
3	Cd 226.502†	-146.3	3.1	0.0830 µg/L	0.0830 ppb	17:09:32
3	Co 228.616†	-20.5	-10.6	-0.5225 µg/L	-0.5225 ppb	17:09:32
3	Cr 267.716†	-50.5	4.4	0.0966 µg/L	0.0966 ppb	17:09:11
3	Cu 324.752†	2459.5	-148.7	-1.0373 µg/L	-1.0373 ppb	17:09:11
3	Mn 257.610†	-206.3	48.1	0.1675 µg/L	0.1675 ppb	17:09:32
3	Mo 202.031†	-11.3	-3.2	-0.3406 µg/L	-0.3406 ppb	17:09:32
3	Ni 231.604†	312.5	-5.2	-0.2859 µg/L	-0.2859 ppb	17:09:32
3	P 214.914†	27.5	-1.4	-2.9545 µg/L	-2.9545 ppb	17:09:32
3	Pb 220.353†	87.0	-14.5	-3.8647 µg/L	-3.8647 ppb	17:09:32
3	S 181.975 Axial†	18.4	2.6	11.510 µg/L	11.510 ppb	17:09:32
3	Sb 206.836†	21.8	-6.2	-6.1298 µg/L	-6.1298 ppb	17:09:32
3	Se 196.026†	17.1	0.4	0.6716 µg/L	0.6716 ppb	17:09:32
3	SiO2†	1317.4	2.0	0.4359 µg/L	0.4359 ppb	17:09:11
3	Si 251.611†	380.4	48.7	4.0004 µg/L	4.0004 ppb	17:09:32
3	Sn 189.927†	6.0	6.5	3.0096 µg/L	3.0096 ppb	17:09:32
3	Ti 334.940†	145.4	22.0	0.0533 µg/L	0.0533 ppb	17:09:11
3	Tl 190.801†	-24.0	1.4	2.0056 µg/L	2.0056 ppb	17:09:32
3	U 409.014†	-88.7	-30.7	-2.7818 µg/L	-2.7818 ppb	17:09:11
3	V 292.402†	-39.0	7.1	0.0718 µg/L	0.0718 ppb	17:09:11
3	Zn 213.857†	518.1	16.9	0.4238 µg/L	0.4238 ppb	17:09:32

Mean Data: 1202024735|945379|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2016381.5	105.58 %		0.353			0.33%
Sc RADIAL	57109.7	105 %		0.1			0.13%
Y 371.029	1376781.8	105.10 %		0.305			0.29%
Ag 328.068†	36.7	0.2911 µg/L		0.28118	0.2911 ppb	0.28118	96.59%
Al 396.153Radial†	17.8	13.250 µg/L		4.7240	13.250 ppb	4.7240	35.65%
As 188.979†	-2.6	-5.0871 µg/L		4.79772	-5.0871 ppb	4.79772	94.31%
B 249.677†	-26.0	-1.1416 µg/L		0.38896	-1.1416 ppb	0.38896	34.07%
Ba 233.527†	19.9	0.5192 µg/L		0.03187	0.5192 ppb	0.03187	6.14%
Be 313.107†	3.1	0.0020 µg/L		0.04108	0.0020 ppb	0.04108	>999.9%
Ca 317.933Radial†	39.0	36.765 µg/L		2.9574	36.765 ppb	2.9574	8.04%
Cd 226.502†	4.8	0.1300 µg/L		0.06080	0.1300 ppb	0.06080	46.77%
Co 228.616†	-8.3	-0.4110 µg/L		0.09661	-0.4110 ppb	0.09661	23.51%
Cr 267.716†	-0.3	-0.0066 µg/L		0.13775	-0.0066 ppb	0.13775	>999.9%
Cu 324.752†	-129.6	-0.9042 µg/L		0.26891	-0.9042 ppb	0.26891	29.74%
Fe 238.204 Radial†	1.0	8.4237 µg/L		1.69930	8.4237 ppb	1.69930	20.17%
K 766.490 Radial†	31.3	22.257 µg/L		19.2616	22.257 ppb	19.2616	86.54%
Mg 279.077 IEC†	1.7	15.927 µg/L		24.8178	15.927 ppb	24.8178	155.83%
Mn 257.610†	52.2	0.1812 µg/L		0.01284	0.1812 ppb	0.01284	7.09%
Mo 202.031†	-0.2	-0.0190 µg/L		0.28085	-0.0190 ppb	0.28085	>999.9%
Na 589.592 Radial†	188.8	62.140 µg/L		11.5979	62.140 ppb	11.5979	18.66%

Ni 231.604†	-11.3	-0.6158 µg/L	0.30733	-0.6158 ppb	0.30733	49.90%
P 214.914†	2.3	5.1075 µg/L	8.49121	5.1075 ppb	8.49121	166.25%
Pb 220.353†	-4.0	-1.0530 µg/L	2.57386	-1.0530 ppb	2.57386	244.43%
S 181.975 Axial†	2.1	8.9838 µg/L	9.46231	8.9838 ppb	9.46231	105.33%
Sb 206.836†	-6.2	-6.1132 µg/L	1.81812	-6.1132 ppb	1.81812	29.74%
Se 196.026†	-3.6	-5.5505 µg/L	9.92511	-5.5505 ppb	9.92511	178.81%
SiO2†	2.6	0.5597 µg/L	2.11408	0.5597 ppb	2.11408	377.73%
Si 251.611†	53.3	4.3814 µg/L	0.79628	4.3814 ppb	0.79628	18.17%
Sn 189.927†	1.8	0.8063 µg/L	2.07318	0.8063 ppb	2.07318	257.13%
Sr 421.552†	24.2	0.2510 µg/L	0.28905	0.2510 ppb	0.28905	115.14%
Ti 334.940†	7.3	0.0170 µg/L	0.03573	0.0170 ppb	0.03573	210.77%
Tl 190.801†	1.0	1.4032 µg/L	2.21656	1.4032 ppb	2.21656	157.97%
U 409.014†	9.3	0.8385 µg/L	3.15220	0.8385 ppb	3.15220	375.93%
V 292.402†	-3.5	-0.0357 µg/L	0.25669	-0.0357 ppb	0.25669	719.63%
Zn 213.857†	22.1	0.5548 µg/L	0.11420	0.5548 ppb	0.11420	20.58%

Sequence No.: 4
 Sample ID: 1202024736|945379|1
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 302
 Date Collected: 2/11/2010 17:09:42
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 1202024736|945379|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57887.6	57887.6	106 %			17:10:14
1	Al 396.153Radial†	6755.7	6379.1	4744.3 µg/L		4744.3 ppb	17:10:14
1	Ca 317.933Radial†	5537.2	5041.1	4746.5 µg/L		4746.5 ppb	17:10:34
1	Fe 238.204 Radial†	613.6	564.0	4790.4 µg/L		4790.4 ppb	17:10:34
1	K 766.490 Radial†	7189.1	6649.2	4726.2 µg/L		4726.2 ppb	17:10:14
1	Mg 279.077 IEC†	562.8	519.3	4835.8 µg/L		4835.8 ppb	17:10:34
1	Na 589.592 Radial†	15965.1	14509.5	4776.6 µg/L		4776.6 ppb	17:10:14
1	Sr 421.552†	47796.4	45021.2	466.70 µg/L		466.70 ppb	17:10:14
1	Sc 361.383	2008098.9	2008098.9	105.14 %			17:11:38
1	Y 371.029	1368971.5	1368971.5	104.51 %			17:11:38
1	Ag 328.068†	63300.1	60767.3	485.74 µg/L		485.74 ppb	17:11:43
1	As 188.979†	276.5	261.8	510.80 µg/L		510.80 ppb	17:12:04
1	B 249.677†	12000.3	11081.6	482.59 µg/L		482.59 ppb	17:11:43
1	Ba 233.527†	20104.6	19146.9	499.45 µg/L		499.45 ppb	17:11:43
1	Be 313.107†	775167.6	740678.1	483.52 µg/L		483.52 ppb	17:11:38
1	Cd 226.502†	18594.4	17826.7	491.77 µg/L		491.77 ppb	17:11:43
1	Co 228.616†	10452.2	9949.6	489.09 µg/L		489.09 ppb	17:11:43
1	Cr 267.716†	23710.5	22602.7	497.48 µg/L		497.48 ppb	17:11:43
1	Cu 324.752†	76600.4	70366.1	492.19 µg/L		492.19 ppb	17:11:43
1	Mn 257.610†	149583.9	142508.7	493.93 µg/L		493.93 ppb	17:11:38
1	Mo 202.031†	4913.5	4680.6	499.70 µg/L		499.70 ppb	17:12:04
1	Ni 231.604†	9931.0	9142.9	499.37 µg/L		499.37 ppb	17:11:43
1	P 214.914†	278.4	237.2	462.73 µg/L		462.73 ppb	17:12:04
1	Pb 220.353†	2084.8	1885.6	503.27 µg/L		503.27 ppb	17:12:04
1	S 181.975 Axial†	1222.6	1148.0	5029.8 µg/L		5029.8 ppb	17:12:04
1	Sb 206.836†	571.0	516.1	510.14 µg/L		510.14 ppb	17:12:04
1	Se 196.026†	347.5	314.7	487.14 µg/L		487.14 ppb	17:12:04
1	SiO2†	51427.5	47661.1	10264 µg/L		10264 ppb	17:11:43
1	Si 251.611†	61457.9	58137.8	4779.2 µg/L		4779.2 ppb	17:11:43
1	Sn 189.927†	1221.1	1162.2	534.55 µg/L		534.55 ppb	17:12:04
1	Ti 334.940†	211480.2	201016.1	483.22 µg/L		483.22 ppb	17:11:38
1	Tl 190.801†	349.1	356.3	503.16 µg/L		503.16 ppb	17:12:04
1	U 409.014†	5894.6	5659.8	511.46 µg/L		511.46 ppb	17:11:43
1	V 292.402†	48631.6	46296.2	499.49 µg/L		499.49 ppb	17:11:43
1	Zn 213.857†	21047.8	19542.3	484.49 µg/L		484.49 ppb	17:11:43
2	Sc RADIAL	58112.3	58112.3	106 %			17:10:40
2	Al 396.153Radial†	6827.4	6421.9	4776.4 µg/L		4776.4 ppb	17:10:40
2	Ca 317.933Radial†	5516.8	5001.8	4709.5 µg/L		4709.5 ppb	17:11:00
2	Fe 238.204 Radial†	610.8	559.1	4748.8 µg/L		4748.8 ppb	17:11:00
2	K 766.490 Radial†	7246.3	6676.7	4745.8 µg/L		4745.8 ppb	17:10:40
2	Mg 279.077 IEC†	562.3	516.8	4812.9 µg/L		4812.9 ppb	17:11:00
2	Na 589.592 Radial†	16166.4	14640.3	4819.6 µg/L		4819.6 ppb	17:10:40
2	Sr 421.552†	48335.2	45353.0	470.14 µg/L		470.14 ppb	17:10:40
2	Sc 361.383	2026791.0	2026791.0	106.12 %			17:12:11
2	Y 371.029	1381380.2	1381380.2	105.46 %			17:12:11
2	Ag 328.068†	62218.1	59192.5	473.15 µg/L		473.15 ppb	17:12:17
2	As 188.979†	271.2	254.4	496.31 µg/L		496.31 ppb	17:12:37
2	B 249.677†	11801.4	10788.9	469.80 µg/L		469.80 ppb	17:12:17
2	Ba 233.527†	19630.6	18523.9	483.20 µg/L		483.20 ppb	17:12:17
2	Be 313.107†	767352.9	726515.2	474.28 µg/L		474.28 ppb	17:12:11
2	Cd 226.502†	18203.3	17295.1	477.09 µg/L		477.09 ppb	17:12:17
2	Co 228.616†	10256.0	9673.0	475.49 µg/L		475.49 ppb	17:12:17
2	Cr 267.716†	23175.5	21890.6	481.81 µg/L		481.81 ppb	17:12:17
2	Cu 324.752†	75278.1	68448.3	478.79 µg/L		478.79 ppb	17:12:17
2	Mn 257.610†	148043.7	139745.4	484.36 µg/L		484.36 ppb	17:12:11
2	Mo 202.031†	4866.0	4592.8	490.32 µg/L		490.32 ppb	17:12:37
2	Ni 231.604†	9768.2	8902.4	486.23 µg/L		486.23 ppb	17:12:17
2	P 214.914†	282.1	238.2	466.16 µg/L		466.16 ppb	17:12:37
2	Pb 220.353†	2073.0	1856.2	495.44 µg/L		495.44 ppb	17:12:37

2	S 181.975 Axial†	1217.9	1132.8	4963.1 µg/L	4963.1 ppb	17:12:37
2	Sb 206.836†	566.8	507.2	501.36 µg/L	501.36 ppb	17:12:37
2	Se 196.026†	337.0	301.8	467.42 µg/L	467.42 ppb	17:12:37
2	SiO2†	50486.8	46323.6	9976.0 µg/L	9976.0 ppb	17:12:17
2	Si 251.611†	60271.7	56481.0	4643.0 µg/L	4643.0 ppb	17:12:17
2	Sn 189.927†	1197.5	1129.3	519.44 µg/L	519.44 ppb	17:12:37
2	Ti 334.940†	209453.2	197251.1	474.17 µg/L	474.17 ppb	17:12:11
2	Tl 190.801†	350.7	354.7	500.89 µg/L	500.89 ppb	17:12:37
2	U 409.014†	5779.6	5499.7	496.98 µg/L	496.98 ppb	17:12:17
2	V 292.402†	47686.7	44979.3	485.32 µg/L	485.32 ppb	17:12:17
2	Zn 213.857†	20718.3	19047.2	472.21 µg/L	472.21 ppb	17:12:17
3	Sc RADIAL	57093.4	57093.4	105 %		17:11:06
3	Al 396.153Radial†	6891.4	6597.5	4908.1 µg/L	4908.1 ppb	17:11:06
3	Ca 317.933Radial†	5599.8	5173.5	4871.2 µg/L	4871.2 ppb	17:11:26
3	Fe 238.204 Radial†	623.4	581.4	4937.6 µg/L	4937.6 ppb	17:11:26
3	K 766.490 Radial†	7255.8	6807.3	4838.6 µg/L	4838.6 ppb	17:11:06
3	Mg 279.077 IEC†	569.9	533.4	4966.6 µg/L	4966.6 ppb	17:11:26
3	Na 589.592 Radial†	16183.5	14927.6	4914.2 µg/L	4914.2 ppb	17:11:06
3	Sr 421.552†	48646.4	46460.6	481.62 µg/L	481.62 ppb	17:11:06
3	Sc 361.383	2012096.1	2012096.1	105.35 %		17:12:44
3	Y 371.029	1370726.0	1370726.0	104.64 %		17:12:44
3	Ag 328.068†	61395.3	58839.7	470.27 µg/L	470.27 ppb	17:12:50
3	As 188.979†	251.1	237.2	462.73 µg/L	462.73 ppb	17:13:11
3	B 249.677†	11570.8	10651.3	463.65 µg/L	463.65 ppb	17:12:50
3	Ba 233.527†	19049.7	18107.6	472.33 µg/L	472.33 ppb	17:12:50
3	Be 313.107†	748659.8	714052.9	466.14 µg/L	466.14 ppb	17:12:44
3	Cd 226.502†	17710.5	16952.6	467.61 µg/L	467.61 ppb	17:12:50
3	Co 228.616†	9886.7	9393.1	461.70 µg/L	461.70 ppb	17:12:50
3	Cr 267.716†	22049.0	20980.9	461.79 µg/L	461.79 ppb	17:12:50
3	Cu 324.752†	72887.9	66697.6	466.58 µg/L	466.58 ppb	17:12:50
3	Mn 257.610†	144566.3	137463.4	476.47 µg/L	476.47 ppb	17:12:44
3	Mo 202.031†	4423.3	4206.0	449.06 µg/L	449.06 ppb	17:13:11
3	Ni 231.604†	9376.0	8597.4	469.57 µg/L	469.57 ppb	17:12:50
3	P 214.914†	259.0	218.2	423.88 µg/L	423.88 ppb	17:13:11
3	Pb 220.353†	1923.0	1728.1	461.18 µg/L	461.18 ppb	17:13:11
3	S 181.975 Axial†	1138.4	1065.7	4669.1 µg/L	4669.1 ppb	17:13:11
3	Sb 206.836†	516.2	463.0	457.46 µg/L	457.46 ppb	17:13:11
3	Se 196.026†	320.5	288.4	447.38 µg/L	447.38 ppb	17:13:11
3	SiO2†	49425.4	45663.6	9833.9 µg/L	9833.9 ppb	17:12:50
3	Si 251.611†	58980.3	55670.0	4576.4 µg/L	4576.4 ppb	17:12:50
3	Sn 189.927†	1089.0	1034.6	475.86 µg/L	475.86 ppb	17:13:11
3	Ti 334.940†	203660.8	193194.5	464.40 µg/L	464.40 ppb	17:12:44
3	Tl 190.801†	315.8	324.0	457.95 µg/L	457.95 ppb	17:13:11
3	U 409.014†	5487.0	5261.8	475.40 µg/L	475.40 ppb	17:12:50
3	V 292.402†	45865.1	43578.4	470.03 µg/L	470.03 ppb	17:12:50
3	Zn 213.857†	20001.8	18509.8	458.86 µg/L	458.86 ppb	17:12:50

Mean Data: 1202024736|945379|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2015662.0	105.54 %	%	0.515			0.49%
Sc RADIAL	57697.7	106 %	%	1.0			0.93%
Y 371.029	1373692.6	104.87 %	%	0.513			0.49%
Ag 328.068†	59599.8	476.39 µg/L	µg/L	8.230	476.39 ppb	8.230	1.73%
Al 396.153Radial†	6466.2	4809.6 µg/L	µg/L	86.79	4809.6 ppb	86.79	1.80%
As 188.979†	251.1	489.95 µg/L	µg/L	24.662	489.95 ppb	24.662	5.03%
B 249.677†	10840.6	472.01 µg/L	µg/L	9.662	472.01 ppb	9.662	2.05%
Ba 233.527†	18592.8	484.99 µg/L	µg/L	13.645	484.99 ppb	13.645	2.81%
Be 313.107†	727082.1	474.65 µg/L	µg/L	8.696	474.65 ppb	8.696	1.83%
Ca 317.933Radial†	5072.1	4775.7 µg/L	µg/L	84.73	4775.7 ppb	84.73	1.77%
Cd 226.502†	17358.1	478.82 µg/L	µg/L	12.174	478.82 ppb	12.174	2.54%
Co 228.616†	9671.9	475.43 µg/L	µg/L	13.698	475.43 ppb	13.698	2.88%
Cr 267.716†	21824.7	480.36 µg/L	µg/L	17.890	480.36 ppb	17.890	3.72%
Cu 324.752†	68504.0	479.19 µg/L	µg/L	12.807	479.19 ppb	12.807	2.67%
Fe 238.204 Radial†	568.2	4825.6 µg/L	µg/L	99.18	4825.6 ppb	99.18	2.06%
K 766.490 Radial†	6711.1	4770.2 µg/L	µg/L	60.03	4770.2 ppb	60.03	1.26%
Mg 279.077 IEC†	523.2	4871.8 µg/L	µg/L	82.94	4871.8 ppb	82.94	1.70%
Mn 257.610†	139905.8	484.92 µg/L	µg/L	8.742	484.92 ppb	8.742	1.80%
Mo 202.031†	4493.1	479.70 µg/L	µg/L	26.943	479.70 ppb	26.943	5.62%
Na 589.592 Radial†	14692.5	4836.8 µg/L	µg/L	70.42	4836.8 ppb	70.42	1.46%

Ni 231.604†	8880.9	485.06 µg/L	14.931	485.06 ppb	14.931	3.08%
P 214.914†	231.2	450.92 µg/L	23.486	450.92 ppb	23.486	5.21%
Pb 220.353†	1823.3	486.63 µg/L	22.384	486.63 ppb	22.384	4.60%
S 181.975 Axial†	1115.5	4887.3 µg/L	191.88	4887.3 ppb	191.88	3.93%
Sb 206.836†	495.4	489.65 µg/L	28.225	489.65 ppb	28.225	5.76%
Se 196.026†	301.6	467.31 µg/L	19.884	467.31 ppb	19.884	4.25%
SiO2†	46549.4	10025 µg/L	219.2	10025 ppb	219.2	2.19%
Si 251.611†	56762.9	4666.2 µg/L	103.40	4666.2 ppb	103.40	2.22%
Sn 189.927†	1108.7	509.95 µg/L	30.475	509.95 ppb	30.475	5.98%
Sr 421.552†	45611.6	472.82 µg/L	7.814	472.82 ppb	7.814	1.65%
Ti 334.940†	197153.9	473.93 µg/L	9.414	473.93 ppb	9.414	1.99%
Tl 190.801†	345.0	487.33 µg/L	25.470	487.33 ppb	25.470	5.23%
U 409.014†	5473.8	494.62 µg/L	18.147	494.62 ppb	18.147	3.67%
V 292.402†	44951.3	484.95 µg/L	14.732	484.95 ppb	14.732	3.04%
Zn 213.857†	19033.1	471.85 µg/L	12.817	471.85 ppb	12.817	2.72%

Sequence No.: 5

Sample ID: 245392001|945379|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 303

Date Collected: 2/11/2010 17:13:20

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245392001|945379|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57332.9	57332.9	105 %		17:13:53
1	Al 396.153Radial†	24.1	33.1	24.638 µg/L	24.638 ppb	17:13:53
1	Ca 317.933Radial†	238.1	47.5	44.681 µg/L	44.681 ppb	17:14:13
1	Fe 238.204 Radial†	16.7	1.4	12.146 µg/L	12.146 ppb	17:14:13
1	K 766.490 Radial†	405.2	257.2	182.85 µg/L	182.85 ppb	17:13:53
1	Mg 279.077 IEC†	13.6	1.6	15.252 µg/L	15.252 ppb	17:14:13
1	Na 589.592 Radial†	1094.1	499.5	164.45 µg/L	164.45 ppb	17:13:53
1	Sr 421.552†	67.0	24.3	0.2515 µg/L	0.2515 ppb	17:13:53
1	Sc 361.383	2041711.1	2041711.1	106.90 %		17:15:15
1	Y 371.029	1394400.7	1394400.7	106.45 %		17:15:15
1	Ag 328.068†	-514.5	83.2	0.6613 µg/L	0.6613 ppb	17:15:21
1	As 188.979†	-0.9	-2.0	-3.8159 µg/L	-3.8159 ppb	17:15:41
1	B 249.677†	759.5	379.0	16.559 µg/L	16.559 ppb	17:15:21
1	Ba 233.527†	11.9	37.1	0.9666 µg/L	0.9666 ppb	17:15:41
1	Be 313.107†	-3479.6	185.6	0.1211 µg/L	0.1211 ppb	17:15:21
1	Cd 226.502†	-133.9	16.9	0.4634 µg/L	0.4634 ppb	17:15:41
1	Co 228.616†	-14.7	-4.9	-0.2418 µg/L	-0.2418 ppb	17:15:41
1	Cr 267.716†	-15.8	37.6	0.8279 µg/L	0.8279 ppb	17:15:21
1	Cu 324.752†	2519.7	-129.1	-0.9002 µg/L	-0.9002 ppb	17:15:21
1	Mn 257.610†	-109.1	142.1	0.4930 µg/L	0.4930 ppb	17:15:41
1	Mo 202.031†	-4.5	3.3	0.3543 µg/L	0.3543 ppb	17:15:41
1	Ni 231.604†	316.5	-6.1	-0.3340 µg/L	-0.3340 ppb	17:15:41
1	P 214.914†	28.0	-1.4	-2.9507 µg/L	-2.9507 ppb	17:15:41
1	Pb 220.353†	102.9	-0.9	-0.2464 µg/L	-0.2464 ppb	17:15:41
1	S 181.975 Axial†	29.5	12.8	56.052 µg/L	56.052 ppb	17:15:41
1	Sb 206.836†	24.6	-3.9	-3.8576 µg/L	-3.8576 ppb	17:15:41
1	Se 196.026†	9.0	-7.4	-11.346 µg/L	-11.346 ppb	17:15:41
1	SiO2†	14889.3	12677.6	2730.2 µg/L	2730.2 ppb	17:15:21
1	Si 251.611†	16959.4	15551.2	1278.4 µg/L	1278.4 ppb	17:15:21
1	Sn 189.927†	4.3	4.9	2.2518 µg/L	2.2518 ppb	17:15:41
1	Ti 334.940†	288.2	153.4	0.3686 µg/L	0.3686 ppb	17:15:21
1	Tl 190.801†	-25.3	0.6	0.9030 µg/L	0.9030 ppb	17:15:41
1	U 409.014†	-51.5	5.4	0.4889 µg/L	0.4889 ppb	17:15:21
1	V 292.402†	-45.9	1.3	0.0206 µg/L	0.0206 ppb	17:15:21
1	Zn 213.857†	545.4	34.7	0.8668 µg/L	0.8668 ppb	17:15:41
2	Sc RADIAL	57989.3	57989.3	106 %		17:14:19
2	Al 396.153Radial†	-5.1	5.3	3.9644 µg/L	3.9644 ppb	17:14:19
2	Ca 317.933Radial†	243.3	49.9	46.938 µg/L	46.938 ppb	17:14:39
2	Fe 238.204 Radial†	18.0	2.4	20.383 µg/L	20.383 ppb	17:14:39
2	K 766.490 Radial†	466.8	310.9	221.01 µg/L	221.01 ppb	17:14:19
2	Mg 279.077 IEC†	14.7	2.6	24.068 µg/L	24.068 ppb	17:14:39
2	Na 589.592 Radial†	1103.8	497.0	163.60 µg/L	163.60 ppb	17:14:19
2	Sr 421.552†	60.7	17.6	0.1822 µg/L	0.1822 ppb	17:14:19
2	Sc 361.383	2028440.4	2028440.4	106.21 %		17:15:47
2	Y 371.029	1384982.1	1384982.1	105.73 %		17:15:47
2	Ag 328.068†	-530.9	64.6	0.5154 µg/L	0.5154 ppb	17:15:53
2	As 188.979†	-1.2	-2.3	-4.5365 µg/L	-4.5365 ppb	17:16:13
2	B 249.677†	763.4	387.3	16.916 µg/L	16.916 ppb	17:15:53
2	Ba 233.527†	7.6	33.2	0.8645 µg/L	0.8645 ppb	17:16:13
2	Be 313.107†	-3432.3	208.8	0.1362 µg/L	0.1362 ppb	17:15:53
2	Cd 226.502†	-134.9	15.1	0.4140 µg/L	0.4140 ppb	17:16:13
2	Co 228.616†	-5.3	3.8	0.1879 µg/L	0.1879 ppb	17:16:13
2	Cr 267.716†	-48.9	6.3	0.1391 µg/L	0.1391 ppb	17:15:53
2	Cu 324.752†	2510.5	-122.4	-0.8523 µg/L	-0.8523 ppb	17:15:53
2	Mn 257.610†	-103.1	147.1	0.5110 µg/L	0.5110 ppb	17:16:13
2	Mo 202.031†	2.2	9.6	1.0293 µg/L	1.0293 ppb	17:16:13
2	Ni 231.604†	312.3	-8.1	-0.4442 µg/L	-0.4442 ppb	17:16:13
2	P 214.914†	25.4	-3.8	-7.9494 µg/L	-7.9494 ppb	17:16:13
2	Pb 220.353†	93.3	-9.3	-2.4834 µg/L	-2.4834 ppb	17:16:13

2	S 181.975 Axial†	29.3	12.8	55.975 µg/L	55.975 ppb	17:16:13
2	Sb 206.836†	27.4	-1.2	-1.1578 µg/L	-1.1578 ppb	17:16:13
2	Se 196.026†	10.7	-5.8	-8.7977 µg/L	-8.7977 ppb	17:16:13
2	SiO2†	14842.5	12724.7	2740.3 µg/L	2740.3 ppb	17:15:53
2	Si 251.611†	16832.6	15535.5	1277.1 µg/L	1277.1 ppb	17:15:53
2	Sn 189.927†	4.0	4.7	2.1495 µg/L	2.1495 ppb	17:16:13
2	Ti 334.940†	291.9	158.8	0.3807 µg/L	0.3807 ppb	17:15:53
2	Tl 190.801†	-23.8	1.9	2.6480 µg/L	2.6480 ppb	17:16:13
2	U 409.014†	-44.5	11.7	1.0579 µg/L	1.0579 ppb	17:15:53
2	V 292.402†	-29.4	16.6	0.1883 µg/L	0.1883 ppb	17:15:53
2	Zn 213.857†	554.1	46.1	1.1527 µg/L	1.1527 ppb	17:16:13
3	Sc RADIAL	57913.6	57913.6	106 %		17:14:44
3	Al 396.153Radial†	2.9	12.9	9.6150 µg/L	9.6150 ppb	17:14:44
3	Ca 317.933Radial†	235.3	42.6	40.138 µg/L	40.138 ppb	17:15:05
3	Fe 238.204 Radial†	16.7	1.2	10.168 µg/L	10.168 ppb	17:15:05
3	K 766.490 Radial†	414.7	262.4	186.50 µg/L	186.50 ppb	17:14:44
3	Mg 279.077 IEC†	16.3	4.1	38.133 µg/L	38.133 ppb	17:15:05
3	Na 589.592 Radial†	1081.4	477.2	157.09 µg/L	157.09 ppb	17:14:44
3	Sr 421.552†	72.2	28.5	0.2953 µg/L	0.2953 ppb	17:14:44
3	Sc 361.383	2037496.5	2037496.5	106.68 %		17:16:19
3	Y 371.029	1390441.6	1390441.6	106.15 %		17:16:19
3	Ag 328.068†	-575.8	24.8	0.2004 µg/L	0.2004 ppb	17:16:25
3	As 188.979†	0.1	-1.0	-1.9709 µg/L	-1.9709 ppb	17:16:45
3	B 249.677†	786.3	405.6	17.721 µg/L	17.721 ppb	17:16:25
3	Ba 233.527†	-0.4	25.7	0.6690 µg/L	0.6690 ppb	17:16:45
3	Be 313.107†	-3250.3	393.8	0.2570 µg/L	0.2570 ppb	17:16:25
3	Cd 226.502†	-132.3	18.1	0.4980 µg/L	0.4980 ppb	17:16:45
3	Co 228.616†	-5.6	3.6	0.1782 µg/L	0.1782 ppb	17:16:45
3	Cr 267.716†	-35.1	19.5	0.4289 µg/L	0.4289 ppb	17:16:25
3	Cu 324.752†	2501.7	-141.1	-0.9843 µg/L	-0.9843 ppb	17:16:25
3	Mn 257.610†	-96.4	153.7	0.5321 µg/L	0.5321 ppb	17:16:45
3	Mo 202.031†	-3.4	4.3	0.4608 µg/L	0.4608 ppb	17:16:45
3	Ni 231.604†	304.8	-16.4	-0.8992 µg/L	-0.8992 ppb	17:16:45
3	P 214.914†	28.1	-1.2	-2.5477 µg/L	-2.5477 ppb	17:16:45
3	Pb 220.353†	107.2	3.3	0.8746 µg/L	0.8746 ppb	17:16:45
3	S 181.975 Axial†	26.2	9.8	42.829 µg/L	42.829 ppb	17:16:45
3	Sb 206.836†	29.1	0.3	0.3020 µg/L	0.3020 ppb	17:16:45
3	Se 196.026†	9.9	-6.5	-9.9857 µg/L	-9.9857 ppb	17:16:45
3	SiO2†	14524.6	12364.6	2662.8 µg/L	2662.8 ppb	17:16:25
3	Si 251.611†	16524.7	15176.5	1247.6 µg/L	1247.6 ppb	17:16:25
3	Sn 189.927†	4.4	5.0	2.2867 µg/L	2.2867 ppb	17:16:45
3	Ti 334.940†	311.2	175.5	0.4199 µg/L	0.4199 ppb	17:16:25
3	Tl 190.801†	-26.1	-0.2	-0.2120 µg/L	-0.2120 ppb	17:16:45
3	U 409.014†	-51.3	5.5	0.4937 µg/L	0.4937 ppb	17:16:25
3	V 292.402†	-4.8	39.7	0.4294 µg/L	0.4294 ppb	17:16:25
3	Zn 213.857†	546.9	37.1	0.9296 µg/L	0.9296 ppb	17:16:45

Mean Data: 245392001|945379|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2035882.7	106.60 %		0.355			0.33%
Sc RADIAL	57745.3	106 %		0.7			0.62%
Y 371.029	1389941.5	106.11 %		0.361			0.34%
Ag 328.068†	57.6	0.4590 µg/L		0.23558	0.4590 ppb	0.23558	51.32%
Al 396.153Radial†	17.1	12.739 µg/L		10.6853	12.739 ppb	10.6853	83.88%
As 188.979†	-1.8	-3.4411 µg/L		1.32321	-3.4411 ppb	1.32321	38.45%
B 249.677†	390.6	17.065 µg/L		0.5952	17.065 ppb	0.5952	3.49%
Ba 233.527†	32.0	0.8334 µg/L		0.15121	0.8334 ppb	0.15121	18.14%
Be 313.107†	262.7	0.1714 µg/L		0.07450	0.1714 ppb	0.07450	43.46%
Ca 317.933Radial†	46.6	43.919 µg/L		3.4637	43.919 ppb	3.4637	7.89%
Cd 226.502†	16.7	0.4585 µg/L		0.04220	0.4585 ppb	0.04220	9.20%
Co 228.616†	0.8	0.0415 µg/L		0.24532	0.0415 ppb	0.24532	591.77%
Cr 267.716†	21.1	0.4653 µg/L		0.34582	0.4653 ppb	0.34582	74.32%
Cu 324.752†	-130.9	-0.9122 µg/L		0.06682	-0.9122 ppb	0.06682	7.32%
Fe 238.204 Radial†	1.7	14.232 µg/L		5.4179	14.232 ppb	5.4179	38.07%
K 766.490 Radial†	276.9	196.78 µg/L		21.058	196.78 ppb	21.058	10.70%
Mg 279.077 IEC†	2.8	25.818 µg/L		11.5403	25.818 ppb	11.5403	44.70%
Mn 257.610†	147.6	0.5120 µg/L		0.01958	0.5120 ppb	0.01958	3.82%
Mo 202.031†	5.8	0.6148 µg/L		0.36289	0.6148 ppb	0.36289	59.03%
Na 589.592 Radial†	491.2	161.71 µg/L		4.027	161.71 ppb	4.027	2.49%

Ni 231.604†	-10.2	-0.5591 µg/L	0.29965	-0.5591 ppb	0.29965	53.59%
P 214.914†	-2.1	-4.4826 µg/L	3.00908	-4.4826 ppb	3.00908	67.13%
Pb 220.353†	-2.3	-0.6184 µg/L	1.70964	-0.6184 ppb	1.70964	276.45%
S 181.975 Axial†	11.8	51.619 µg/L	7.6121	51.619 ppb	7.6121	14.75%
Sb 206.836†	-1.6	-1.5711 µg/L	2.11037	-1.5711 ppb	2.11037	134.32%
Se 196.026†	-6.6	-10.043 µg/L	1.2749	-10.043 ppb	1.2749	12.69%
SiO2†	12589.0	2711.1 µg/L	42.15	2711.1 ppb	42.15	1.55%
Si 251.611†	15421.0	1267.7 µg/L	17.42	1267.7 ppb	17.42	1.37%
Sn 189.927†	4.8	2.2293 µg/L	0.07129	2.2293 ppb	0.07129	3.20%
Sr 421.552†	23.4	0.2430 µg/L	0.05700	0.2430 ppb	0.05700	23.46%
Ti 334.940†	162.6	0.3897 µg/L	0.02681	0.3897 ppb	0.02681	6.88%
Tl 190.801†	0.8	1.1130 µg/L	1.44151	1.1130 ppb	1.44151	129.52%
U 409.014†	7.6	0.6802 µg/L	0.32715	0.6802 ppb	0.32715	48.10%
V 292.402†	19.2	0.2128 µg/L	0.20550	0.2128 ppb	0.20550	96.59%
Zn 213.857†	39.3	0.9830 µg/L	0.15028	0.9830 ppb	0.15028	15.29%

Sequence No.: 6

Sample ID: 1202024737|945379|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 304

Date Collected: 2/11/2010 17:16:54

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202024737|945379|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	55946.2	55946.2	103 %		17:17:27
1	Al 396.153Radial†	-1.5	8.6	6.4413 µg/L	6.4413 ppb	17:17:27
1	Ca 317.933Radial†	240.2	55.1	51.901 µg/L	51.901 ppb	17:17:47
1	Fe 238.204 Radial†	17.1	2.2	18.775 µg/L	18.775 ppb	17:17:47
1	K 766.490 Radial†	444.7	305.4	217.06 µg/L	217.06 ppb	17:17:27
1	Mg 279.077 IEC†	10.6	-0.9	-8.3534 µg/L	-8.3534 ppb	17:17:47
1	Na 589.592 Radial†	1089.8	521.2	171.59 µg/L	171.59 ppb	17:17:27
1	Sr 421.552†	90.7	48.9	0.5071 µg/L	0.5071 ppb	17:17:27
1	Sc 361.383	2018796.6	2018796.6	105.71 %		17:18:49
1	Y 371.029	1378423.8	1378423.8	105.23 %		17:18:49
1	Ag 328.068†	-562.6	32.2	0.2572 µg/L	0.2572 ppb	17:18:55
1	As 188.979†	3.2	1.8	3.6119 µg/L	3.6119 ppb	17:19:15
1	B 249.677†	756.4	384.1	16.778 µg/L	16.778 ppb	17:18:55
1	Ba 233.527†	-15.9	11.0	0.2862 µg/L	0.2862 ppb	17:19:15
1	Be 313.107†	-3464.6	162.8	0.1063 µg/L	0.1063 ppb	17:18:55
1	Cd 226.502†	-140.3	9.4	0.2573 µg/L	0.2573 ppb	17:19:15
1	Co 228.616†	-19.3	-9.4	-0.4627 µg/L	-0.4627 ppb	17:19:15
1	Cr 267.716†	9.1	61.0	1.3411 µg/L	1.3411 ppb	17:18:55
1	Cu 324.752†	2463.5	-155.5	-1.0839 µg/L	-1.0839 ppb	17:18:55
1	Mn 257.610†	-4.9	239.5	0.8321 µg/L	0.8321 ppb	17:19:15
1	Mo 202.031†	-12.8	-4.6	-0.4881 µg/L	-0.4881 ppb	17:19:15
1	Ni 231.604†	315.6	-3.6	-0.1948 µg/L	-0.1948 ppb	17:19:15
1	P 214.914†	33.2	3.7	8.1714 µg/L	8.1714 ppb	17:19:15
1	Pb 220.353†	98.4	-4.1	-1.0819 µg/L	-1.0819 ppb	17:19:15
1	S 181.975 Axial†	26.4	10.2	44.677 µg/L	44.677 ppb	17:19:15
1	Sb 206.836†	26.5	-1.9	-1.9144 µg/L	-1.9144 ppb	17:19:15
1	Se 196.026†	24.2	7.1	10.869 µg/L	10.869 ppb	17:19:15
1	SiO2†	14936.4	12880.2	2773.8 µg/L	2773.8 ppb	17:18:55
1	Si 251.611†	17009.2	15778.3	1297.1 µg/L	1297.1 ppb	17:18:55
1	Sn 189.927†	6.0	6.6	3.0194 µg/L	3.0194 ppb	17:19:15
1	Ti 334.940†	175.0	49.4	0.1204 µg/L	0.1204 ppb	17:18:55
1	Tl 190.801†	-25.9	-0.2	-0.2619 µg/L	-0.2619 ppb	17:19:15
1	U 409.014†	-76.5	-18.7	-1.7027 µg/L	-1.7027 ppb	17:18:55
1	V 292.402†	-44.6	2.0	0.0212 µg/L	0.0212 ppb	17:18:55
1	Zn 213.857†	542.3	37.4	0.9371 µg/L	0.9371 ppb	17:19:15
2	Sc RADIAL	57853.4	57853.4	106 %		17:17:53
2	Al 396.153Radial†	3.4	13.4	9.9700 µg/L	9.9700 ppb	17:17:53
2	Ca 317.933Radial†	230.0	37.9	35.644 µg/L	35.644 ppb	17:18:13
2	Fe 238.204 Radial†	19.7	4.1	34.991 µg/L	34.991 ppb	17:18:13
2	K 766.490 Radial†	444.7	291.1	206.90 µg/L	206.90 ppb	17:17:53
2	Mg 279.077 IEC†	9.1	-2.7	-25.052 µg/L	-25.052 ppb	17:18:13
2	Na 589.592 Radial†	1092.8	488.9	160.96 µg/L	160.96 ppb	17:17:53
2	Sr 421.552†	27.7	-13.4	-0.1389 µg/L	-0.1389 ppb	17:17:53
2	Sc 361.383	2016082.5	2016082.5	105.56 %		17:19:21
2	Y 371.029	1377323.6	1377323.6	105.15 %		17:19:21
2	Ag 328.068†	-575.2	19.7	0.1589 µg/L	0.1589 ppb	17:19:27
2	As 188.979†	-2.3	-3.3	-6.5009 µg/L	-6.5009 ppb	17:19:47
2	B 249.677†	782.2	409.5	17.881 µg/L	17.881 ppb	17:19:27
2	Ba 233.527†	-5.7	20.6	0.5363 µg/L	0.5363 ppb	17:19:47
2	Be 313.107†	-3485.5	138.6	0.0904 µg/L	0.0904 ppb	17:19:27
2	Cd 226.502†	-133.6	15.6	0.4262 µg/L	0.4262 ppb	17:19:47
2	Co 228.616†	-12.8	-3.3	-0.1623 µg/L	-0.1623 ppb	17:19:47
2	Cr 267.716†	-1.5	51.0	1.1211 µg/L	1.1211 ppb	17:19:27
2	Cu 324.752†	2454.0	-161.4	-1.1225 µg/L	-1.1225 ppb	17:19:27
2	Mn 257.610†	-8.9	235.7	0.8218 µg/L	0.8218 ppb	17:19:47
2	Mo 202.031†	-4.4	3.4	0.3653 µg/L	0.3653 ppb	17:19:47
2	Ni 231.604†	330.8	11.1	0.6100 µg/L	0.6100 ppb	17:19:47
2	P 214.914†	34.8	5.3	11.544 µg/L	11.544 ppb	17:19:47
2	Pb 220.353†	91.8	-10.2	-2.7164 µg/L	-2.7164 ppb	17:19:47

2	S 181.975 Axial†	29.9	13.5	59.125 µg/L	59.125 ppb	17:19:47
2	Sb 206.836†	21.0	-7.0	-6.9379 µg/L	-6.9379 ppb	17:19:47
2	Se 196.026†	17.6	0.8	1.3964 µg/L	1.3964 ppb	17:19:47
2	SiO2†	15041.0	12998.3	2799.3 µg/L	2799.3 ppb	17:19:27
2	Si 251.611†	17116.1	15901.3	1307.2 µg/L	1307.2 ppb	17:19:27
2	Sn 189.927†	2.0	2.8	1.2644 µg/L	1.2644 ppb	17:19:47
2	Ti 334.940†	225.1	97.2	0.2362 µg/L	0.2362 ppb	17:19:27
2	Tl 190.801†	-24.0	1.6	2.2016 µg/L	2.2016 ppb	17:19:47
2	U 409.014†	-103.7	-44.6	-4.0483 µg/L	-4.0483 ppb	17:19:27
2	V 292.402†	-38.0	8.2	0.0928 µg/L	0.0928 ppb	17:19:27
2	Zn 213.857†	548.0	43.5	1.0860 µg/L	1.0860 ppb	17:19:47
3	Sc RADIAL	57038.8	57038.8	105 %		17:18:19
3	Al 396.153Radial†	6.6	16.4	12.252 µg/L	12.252 ppb	17:18:19
3	Ca 317.933Radial†	240.6	51.0	48.064 µg/L	48.064 ppb	17:18:39
3	Fe 238.204 Radial†	19.7	4.4	36.984 µg/L	36.984 ppb	17:18:39
3	K 766.490 Radial†	370.2	225.7	160.46 µg/L	160.46 ppb	17:18:19
3	Mg 279.077 IEC†	9.1	-2.6	-24.277 µg/L	-24.277 ppb	17:18:39
3	Na 589.592 Radial†	1102.3	512.8	168.83 µg/L	168.83 ppb	17:18:19
3	Sr 421.552†	57.0	15.0	0.1558 µg/L	0.1558 ppb	17:18:19
3	Sc 361.383	2021677.4	2021677.4	105.86 %		17:19:53
3	Y 371.029	1380612.8	1380612.8	105.40 %		17:19:53
3	Ag 328.068†	-605.0	-7.0	-0.0512 µg/L	-0.0512 ppb	17:19:59
3	As 188.979†	-0.6	-1.7	-3.3026 µg/L	-3.3026 ppb	17:20:19
3	B 249.677†	741.3	368.9	16.103 µg/L	16.103 ppb	17:19:59
3	Ba 233.527†	-8.6	17.9	0.4669 µg/L	0.4669 ppb	17:20:19
3	Be 313.107†	-3536.7	99.4	0.0648 µg/L	0.0648 ppb	17:19:59
3	Cd 226.502†	-149.2	1.2	0.0301 µg/L	0.0301 ppb	17:20:19
3	Co 228.616†	-15.8	-6.1	-0.3005 µg/L	-0.3005 ppb	17:20:19
3	Cr 267.716†	15.9	67.4	1.4825 µg/L	1.4825 ppb	17:19:59
3	Cu 324.752†	2439.0	-182.0	-1.2663 µg/L	-1.2663 ppb	17:19:59
3	Mn 257.610†	-27.9	217.8	0.7601 µg/L	0.7601 ppb	17:20:19
3	Mo 202.031†	-4.5	3.3	0.3498 µg/L	0.3498 ppb	17:20:19
3	Ni 231.604†	325.7	5.5	0.3019 µg/L	0.3019 ppb	17:20:19
3	P 214.914†	32.2	2.8	6.0543 µg/L	6.0543 ppb	17:20:19
3	Pb 220.353†	97.9	-4.7	-1.2723 µg/L	-1.2723 ppb	17:20:19
3	S 181.975 Axial†	29.3	12.9	56.513 µg/L	56.513 ppb	17:20:19
3	Sb 206.836†	20.9	-7.2	-7.1488 µg/L	-7.1488 ppb	17:20:19
3	Se 196.026†	13.2	-3.4	-5.0190 µg/L	-5.0190 ppb	17:20:19
3	SiO2†	14562.5	12506.9	2693.4 µg/L	2693.4 ppb	17:19:59
3	Si 251.611†	16541.0	15313.1	1258.8 µg/L	1258.8 ppb	17:19:59
3	Sn 189.927†	0.8	1.6	0.7280 µg/L	0.7280 ppb	17:20:19
3	Ti 334.940†	233.0	104.0	0.2529 µg/L	0.2529 ppb	17:19:59
3	Tl 190.801†	-26.6	-0.8	-1.1488 µg/L	-1.1488 ppb	17:20:19
3	U 409.014†	49.1	100.0	9.0425 µg/L	9.0425 ppb	17:19:59
3	V 292.402†	-13.2	31.7	0.3580 µg/L	0.3580 ppb	17:19:59
3	Zn 213.857†	544.7	39.0	0.9745 µg/L	0.9745 ppb	17:20:19

Mean Data: 1202024737|945379|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2018852.2	105.71 %	0.146			0.14%
Sc RADIAL	56946.1	104 %	1.8			1.68%
Y 371.029	1378786.7	105.26 %	0.128			0.12%
Ag 328.068†	15.0	0.1216 µg/L	0.15755	0.1216 ppb	0.15755	129.52%
Al 396.153Radial†	12.8	9.5545 µg/L	2.92758	9.5545 ppb	2.92758	30.64%
As 188.979†	-1.1	-2.0639 µg/L	5.16896	-2.0639 ppb	5.16896	250.45%
B 249.677†	387.5	16.921 µg/L	0.8975	16.921 ppb	0.8975	5.30%
Ba 233.527†	16.5	0.4298 µg/L	0.12911	0.4298 ppb	0.12911	30.04%
Be 313.107†	133.6	0.0872 µg/L	0.02094	0.0872 ppb	0.02094	24.03%
Ca 317.933Radial†	48.0	45.203 µg/L	8.4978	45.203 ppb	8.4978	18.80%
Cd 226.502†	8.7	0.2379 µg/L	0.19879	0.2379 ppb	0.19879	83.57%
Co 228.616†	-6.3	-0.3085 µg/L	0.15038	-0.3085 ppb	0.15038	48.74%
Cr 267.716†	59.8	1.3149 µg/L	0.18211	1.3149 ppb	0.18211	13.85%
Cu 324.752†	-166.3	-1.1576 µg/L	0.09612	-1.1576 ppb	0.09612	8.30%
Fe 238.204 Radial†	3.6	30.250 µg/L	9.9874	30.250 ppb	9.9874	33.02%
K 766.490 Radial†	274.1	194.81 µg/L	30.178	194.81 ppb	30.178	15.49%
Mg 279.077 IEC†	-2.1	-19.227 µg/L	9.4252	-19.227 ppb	9.4252	49.02%
Mn 257.610†	231.0	0.8047 µg/L	0.03897	0.8047 ppb	0.03897	4.84%
Mo 202.031†	0.7	0.0757 µg/L	0.48832	0.0757 ppb	0.48832	645.36%
Na 589.592 Radial†	507.7	167.13 µg/L	5.512	167.13 ppb	5.512	3.30%

Ni 231.604†	4.4	0.2390 µg/L	0.40608	0.2390 ppb	0.40608	169.90%
P 214.914†	3.9	8.5899 µg/L	2.76865	8.5899 ppb	2.76865	32.23%
Pb 220.353†	-6.3	-1.6902 µg/L	0.89379	-1.6902 ppb	0.89379	52.88%
S 181.975 Axial†	12.2	53.438 µg/L	7.6994	53.438 ppb	7.6994	14.41%
Sb 206.836†	-5.4	-5.3337 µg/L	2.96308	-5.3337 ppb	2.96308	55.55%
Se 196.026†	1.5	2.4156 µg/L	7.99307	2.4156 ppb	7.99307	330.89%
SiO2†	12795.1	2755.5 µg/L	55.24	2755.5 ppb	55.24	2.00%
Si 251.611†	15664.2	1287.7 µg/L	25.50	1287.7 ppb	25.50	1.98%
Sn 189.927†	3.6	1.6706 µg/L	1.19847	1.6706 ppb	1.19847	71.74%
Sr 421.552†	16.8	0.1746 µg/L	0.32342	0.1746 ppb	0.32342	185.20%
Ti 334.940†	83.5	0.2032 µg/L	0.07216	0.2032 ppb	0.07216	35.51%
Tl 190.801†	0.2	0.2636 µg/L	1.73594	0.2636 ppb	1.73594	658.51%
U 409.014†	12.2	1.0972 µg/L	6.98008	1.0972 ppb	6.98008	636.19%
V 292.402†	14.0	0.1574 µg/L	0.17744	0.1574 ppb	0.17744	112.76%
Zn 213.857†	40.0	0.9992 µg/L	0.07747	0.9992 ppb	0.07747	7.75%

Sequence No.: 7
 Sample ID: 1202024738|945379|1
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 305
 Date Collected: 2/11/2010 17:20:28
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 1202024738|945379|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57909.6	57909.6	106 %		17:21:01
1	Al 396.153Radial†	6777.3	6397.1	4757.8 µg/L	4757.8 ppb	17:21:01
1	Ca 317.933Radial†	5523.2	5026.0	4732.3 µg/L	4732.3 ppb	17:21:21
1	Fe 238.204 Radial†	606.9	557.5	4735.0 µg/L	4735.0 ppb	17:21:21
1	K 766.490 Radial†	7460.7	6902.6	4906.3 µg/L	4906.3 ppb	17:21:01
1	Mg 279.077 IEC†	565.6	521.8	4859.2 µg/L	4859.2 ppb	17:21:21
1	Na 589.592 Radial†	16265.5	14786.8	4867.9 µg/L	4867.9 ppb	17:21:01
1	Sr 421.552†	47793.6	45001.4	466.49 µg/L	466.49 ppb	17:21:01
1	Sc 361.383	2022907.7	2022907.7	105.92 %		17:22:25
1	Y 371.029	1379571.8	1379571.8	105.32 %		17:22:25
1	Ag 328.068†	62546.9	59615.4	476.54 µg/L	476.54 ppb	17:22:31
1	As 188.979†	271.5	255.2	497.80 µg/L	497.80 ppb	17:22:51
1	B 249.677†	12231.4	11216.3	488.49 µg/L	488.49 ppb	17:22:31
1	Ba 233.527†	19758.2	18679.9	487.27 µg/L	487.27 ppb	17:22:31
1	Be 313.107†	775245.3	735354.4	480.05 µg/L	480.05 ppb	17:22:25
1	Cd 226.502†	18210.0	17334.3	478.18 µg/L	478.18 ppb	17:22:31
1	Co 228.616†	10287.6	9721.4	477.86 µg/L	477.86 ppb	17:22:31
1	Cr 267.716†	23341.4	22089.2	486.18 µg/L	486.18 ppb	17:22:31
1	Cu 324.752†	75937.9	69207.3	484.09 µg/L	484.09 ppb	17:22:31
1	Mn 257.610†	149980.9	141842.0	491.61 µg/L	491.61 ppb	17:22:25
1	Mo 202.031†	4883.9	4618.4	493.07 µg/L	493.07 ppb	17:22:51
1	Ni 231.604†	9756.9	8909.4	486.61 µg/L	486.61 ppb	17:22:31
1	P 214.914†	289.5	245.7	481.75 µg/L	481.75 ppb	17:22:51
1	Pb 220.353†	2073.3	1860.2	496.51 µg/L	496.51 ppb	17:22:51
1	S 181.975 Axial†	1237.0	1153.1	5051.9 µg/L	5051.9 ppb	17:22:51
1	Sb 206.836†	572.9	513.9	508.02 µg/L	508.02 ppb	17:22:51
1	Se 196.026†	347.4	312.2	483.19 µg/L	483.19 ppb	17:22:51
1	SiO2†	64070.0	59238.9	12757 µg/L	12757 ppb	17:22:31
1	Si 251.611†	76890.4	72279.8	5941.8 µg/L	5941.8 ppb	17:22:31
1	Sn 189.927†	1213.1	1146.1	527.18 µg/L	527.18 ppb	17:22:51
1	Ti 334.940†	212027.4	200060.3	480.92 µg/L	480.92 ppb	17:22:25
1	Tl 190.801†	345.7	350.7	495.26 µg/L	495.26 ppb	17:22:51
1	U 409.014†	5774.0	5504.9	497.45 µg/L	497.45 ppb	17:22:31
1	V 292.402†	48057.8	45415.9	490.01 µg/L	490.01 ppb	17:22:31
1	Zn 213.857†	20645.9	19016.4	471.43 µg/L	471.43 ppb	17:22:31
2	Sc RADIAL	58549.3	58549.3	107 %		17:21:27
2	Al 396.153Radial†	6751.8	6303.6	4688.4 µg/L	4688.4 ppb	17:21:27
2	Ca 317.933Radial†	5519.6	4965.7	4675.5 µg/L	4675.5 ppb	17:21:47
2	Fe 238.204 Radial†	613.8	557.6	4736.1 µg/L	4736.1 ppb	17:21:47
2	K 766.490 Radial†	7437.3	6804.0	4836.2 µg/L	4836.2 ppb	17:21:27
2	Mg 279.077 IEC†	561.9	512.4	4771.9 µg/L	4771.9 ppb	17:21:47
2	Na 589.592 Radial†	16309.2	14660.1	4826.1 µg/L	4826.1 ppb	17:21:27
2	Sr 421.552†	47894.3	44603.2	462.36 µg/L	462.36 ppb	17:21:27
2	Sc 361.383	2049195.7	2049195.7	107.30 %		17:22:58
2	Y 371.029	1397084.2	1397084.2	106.65 %		17:22:58
2	Ag 328.068†	62768.7	59064.7	472.13 µg/L	472.13 ppb	17:23:04
2	As 188.979†	275.0	255.2	497.82 µg/L	497.82 ppb	17:23:24
2	B 249.677†	12320.5	11151.2	485.63 µg/L	485.63 ppb	17:23:04
2	Ba 233.527†	19771.4	18452.8	481.35 µg/L	481.35 ppb	17:23:04
2	Be 313.107†	767359.0	718615.2	469.12 µg/L	469.12 ppb	17:22:58
2	Cd 226.502†	18220.2	17123.3	472.35 µg/L	472.35 ppb	17:23:04
2	Co 228.616†	10270.9	9581.3	470.98 µg/L	470.98 ppb	17:23:04
2	Cr 267.716†	23306.3	21773.7	479.24 µg/L	479.24 ppb	17:23:04
2	Cu 324.752†	76058.6	68400.2	478.45 µg/L	478.45 ppb	17:23:04
2	Mn 257.610†	148529.0	138672.4	480.64 µg/L	480.64 ppb	17:22:58
2	Mo 202.031†	4833.7	4512.5	481.76 µg/L	481.76 ppb	17:23:24
2	Ni 231.604†	9765.2	8798.9	480.58 µg/L	480.58 ppb	17:23:04
2	P 214.914†	282.4	235.6	460.59 µg/L	460.59 ppb	17:23:24
2	Pb 220.353†	2053.9	1817.1	484.98 µg/L	484.98 ppb	17:23:24

2	S 181.975 Axial†	1215.7	1118.2	4899.3 µg/L	4899.3 ppb	17:23:24
2	Sb 206.836†	563.3	498.0	492.22 µg/L	492.22 ppb	17:23:24
2	Se 196.026†	343.7	304.5	471.64 µg/L	471.64 ppb	17:23:24
2	SiO2†	64274.4	58653.4	12631 µg/L	12631 ppb	17:23:04
2	Si 251.611†	77074.7	71520.4	5879.3 µg/L	5879.3 ppb	17:23:04
2	Sn 189.927†	1204.0	1123.0	516.52 µg/L	516.52 ppb	17:23:24
2	Ti 334.940†	209679.4	195304.0	469.49 µg/L	469.49 ppb	17:22:58
2	Tl 190.801†	342.6	343.6	485.26 µg/L	485.26 ppb	17:23:24
2	U 409.014†	5798.2	5457.5	493.16 µg/L	493.16 ppb	17:23:04
2	V 292.402†	48019.9	44798.5	483.32 µg/L	483.32 ppb	17:23:04
2	Zn 213.857†	20735.8	18850.1	467.32 µg/L	467.32 ppb	17:23:04
3	Sc RADIAL	58354.0	58354.0	107 %		17:21:53
3	Al 396.153Radial†	6812.3	6381.2	4746.9 µg/L	4746.9 ppb	17:21:53
3	Ca 317.933Radial†	5544.4	5006.2	4713.6 µg/L	4713.6 ppb	17:22:13
3	Fe 238.204 Radial†	616.0	561.6	4769.7 µg/L	4769.7 ppb	17:22:13
3	K 766.490 Radial†	7488.0	6874.6	4886.4 µg/L	4886.4 ppb	17:21:53
3	Mg 279.077 IEC†	563.5	515.7	4801.8 µg/L	4801.8 ppb	17:22:13
3	Na 589.592 Radial†	16294.8	14697.5	4838.5 µg/L	4838.5 ppb	17:21:53
3	Sr 421.552†	48119.3	44963.0	466.09 µg/L	466.09 ppb	17:21:53
3	Sc 361.383	2036106.0	2036106.0	106.61 %		17:23:31
3	Y 371.029	1387849.7	1387849.7	105.95 %		17:23:31
3	Ag 328.068†	61576.4	58322.4	466.13 µg/L	466.13 ppb	17:23:37
3	As 188.979†	249.2	232.6	453.70 µg/L	453.70 ppb	17:23:57
3	B 249.677†	12034.6	10956.8	477.09 µg/L	477.09 ppb	17:23:37
3	Ba 233.527†	19123.2	17963.3	468.57 µg/L	468.57 ppb	17:23:37
3	Be 313.107†	751753.5	708575.1	462.56 µg/L	462.56 ppb	17:23:31
3	Cd 226.502†	17639.3	16687.5	460.31 µg/L	460.31 ppb	17:23:37
3	Co 228.616†	9856.8	9254.4	454.88 µg/L	454.88 ppb	17:23:37
3	Cr 267.716†	22230.4	20904.2	460.10 µg/L	460.10 ppb	17:23:37
3	Cu 324.752†	73343.6	66309.2	463.85 µg/L	463.85 ppb	17:23:37
3	Mn 257.610†	145916.4	137111.7	475.24 µg/L	475.24 ppb	17:23:31
3	Mo 202.031†	4492.1	4221.1	450.66 µg/L	450.66 ppb	17:23:57
3	Ni 231.604†	9375.4	8491.8	463.81 µg/L	463.81 ppb	17:23:37
3	P 214.914†	263.1	219.2	426.30 µg/L	426.30 ppb	17:23:57
3	Pb 220.353†	1949.7	1731.6	462.12 µg/L	462.12 ppb	17:23:57
3	S 181.975 Axial†	1168.1	1080.9	4735.8 µg/L	4735.8 ppb	17:23:57
3	Sb 206.836†	527.4	467.8	462.15 µg/L	462.15 ppb	17:23:57
3	Se 196.026†	324.6	288.6	447.45 µg/L	447.45 ppb	17:23:57
3	SiO2†	62546.9	57418.1	12365 µg/L	12365 ppb	17:23:37
3	Si 251.611†	74972.1	70010.0	5755.2 µg/L	5755.2 ppb	17:23:37
3	Sn 189.927†	1108.7	1040.8	478.74 µg/L	478.74 ppb	17:23:57
3	Ti 334.940†	205241.5	192397.6	462.49 µg/L	462.49 ppb	17:23:31
3	Tl 190.801†	321.4	325.8	460.36 µg/L	460.36 ppb	17:23:57
3	U 409.014†	5539.3	5249.4	474.32 µg/L	474.32 ppb	17:23:37
3	V 292.402†	46067.4	43254.8	466.57 µg/L	466.57 ppb	17:23:37
3	Zn 213.857†	19941.2	18229.0	451.90 µg/L	451.90 ppb	17:23:37

Mean Data: 1202024738|945379|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2036069.8	106.61 %	0.688			0.65%
Sc RADIAL	58271.0	107 %	0.6			0.56%
Y 371.029	1388168.6	105.97 %	0.669			0.63%
Ag 328.068†	59000.8	471.60 µg/L	5.225	471.60 ppb	5.225	1.11%
Al 396.153Radial†	6360.6	4731.0 µg/L	37.34	4731.0 ppb	37.34	0.79%
As 188.979†	247.6	483.11 µg/L	25.468	483.11 ppb	25.468	5.27%
B 249.677†	11108.1	483.73 µg/L	5.932	483.73 ppb	5.932	1.23%
Ba 233.527†	18365.3	479.06 µg/L	9.557	479.06 ppb	9.557	1.99%
Be 313.107†	720848.2	470.58 µg/L	8.831	470.58 ppb	8.831	1.88%
Ca 317.933Radial†	4999.3	4707.1 µg/L	28.94	4707.1 ppb	28.94	0.61%
Cd 226.502†	17048.4	470.28 µg/L	9.113	470.28 ppb	9.113	1.94%
Co 228.616†	9519.0	467.91 µg/L	11.797	467.91 ppb	11.797	2.52%
Cr 267.716†	21589.0	475.17 µg/L	13.506	475.17 ppb	13.506	2.84%
Cu 324.752†	67972.2	475.46 µg/L	10.445	475.46 ppb	10.445	2.20%
Fe 238.204 Radial†	558.9	4747.0 µg/L	19.72	4747.0 ppb	19.72	0.42%
K 766.490 Radial†	6860.4	4876.3 µg/L	36.12	4876.3 ppb	36.12	0.74%
Mg 279.077 IEC†	516.6	4811.0 µg/L	44.36	4811.0 ppb	44.36	0.92%
Mn 257.610†	139208.7	482.50 µg/L	8.343	482.50 ppb	8.343	1.73%
Mo 202.031†	4450.7	475.16 µg/L	21.958	475.16 ppb	21.958	4.62%
Na 589.592 Radial†	14714.8	4844.2 µg/L	21.44	4844.2 ppb	21.44	0.44%

Ni 231.604†	8733.4	477.00 µg/L	11.815	477.00 ppb	11.815	2.48%
P 214.914†	233.5	456.21 µg/L	27.982	456.21 ppb	27.982	6.13%
Pb 220.353†	1802.9	481.20 µg/L	17.504	481.20 ppb	17.504	3.64%
S 181.975 Axial†	1117.4	4895.7 µg/L	158.12	4895.7 ppb	158.12	3.23%
Sb 206.836†	493.2	487.46 µg/L	23.297	487.46 ppb	23.297	4.78%
Se 196.026†	301.8	467.43 µg/L	18.236	467.43 ppb	18.236	3.90%
SiO2†	58436.8	12585 µg/L	200.2	12585 ppb	200.2	1.59%
Si 251.611†	71270.0	5858.8 µg/L	94.98	5858.8 ppb	94.98	1.62%
Sn 189.927†	1103.3	507.48 µg/L	25.456	507.48 ppb	25.456	5.02%
Sr 421.552†	44855.9	464.98 µg/L	2.277	464.98 ppb	2.277	0.49%
Ti 334.940†	195920.6	470.97 µg/L	9.303	470.97 ppb	9.303	1.98%
Tl 190.801†	340.0	480.29 µg/L	17.970	480.29 ppb	17.970	3.74%
U 409.014†	5404.0	488.31 µg/L	12.306	488.31 ppb	12.306	2.52%
V 292.402†	44489.8	479.96 µg/L	12.074	479.96 ppb	12.074	2.52%
Zn 213.857†	18698.5	463.55 µg/L	10.294	463.55 ppb	10.294	2.22%

Sequence No.: 8
 Sample ID: 1202024739|945379|5
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 306
 Date Collected: 2/11/2010 17:24:07
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 1202024739|945379|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57386.6	57386.6	105 %		17:24:40
1	Al 396.153Radial†	-7.9	2.7	1.9954 µg/L	1.9954 ppb	17:24:40
1	Ca 317.933Radial†	205.1	15.9	14.983 µg/L	14.983 ppb	17:25:00
1	Fe 238.204 Radial†	16.3	1.0	8.8159 µg/L	8.8159 ppb	17:25:00
1	K 766.490 Radial†	217.8	78.7	55.916 µg/L	55.916 ppb	17:24:40
1	Mg 279.077 IEC†	10.5	-1.3	-11.750 µg/L	-11.750 ppb	17:25:00
1	Na 589.592 Radial†	815.3	233.5	76.862 µg/L	76.862 ppb	17:24:40
1	Sr 421.552†	15.8	-24.5	-0.2539 µg/L	-0.2539 ppb	17:24:40
1	Sc 361.383	2030912.5	2030912.5	106.34 %		17:26:03
1	Y 371.029	1389777.5	1389777.5	106.10 %		17:26:03
1	Ag 328.068†	-536.6	59.9	0.4788 µg/L	0.4788 ppb	17:26:08
1	As 188.979†	-2.0	-3.0	-5.8427 µg/L	-5.8427 ppb	17:26:29
1	B 249.677†	405.5	49.9	2.1751 µg/L	2.1751 ppb	17:26:29
1	Ba 233.527†	-18.3	8.8	0.2302 µg/L	0.2302 ppb	17:26:29
1	Be 313.107†	-3495.9	152.9	0.0999 µg/L	0.0999 ppb	17:26:08
1	Cd 226.502†	-145.1	5.7	0.1552 µg/L	0.1552 ppb	17:26:29
1	Co 228.616†	-11.5	-2.0	-0.0986 µg/L	-0.0986 ppb	17:26:29
1	Cr 267.716†	-25.3	28.6	0.6291 µg/L	0.6291 ppb	17:26:08
1	Cu 324.752†	2448.9	-183.1	-1.2781 µg/L	-1.2781 ppb	17:26:08
1	Mn 257.610†	-228.7	29.0	0.1022 µg/L	0.1022 ppb	17:26:29
1	Mo 202.031†	-12.6	-4.3	-0.4579 µg/L	-0.4579 ppb	17:26:29
1	Ni 231.604†	309.0	-11.6	-0.6331 µg/L	-0.6331 ppb	17:26:29
1	P 214.914†	30.1	0.7	1.6207 µg/L	1.6207 ppb	17:26:29
1	Pb 220.353†	99.4	-3.7	-0.9954 µg/L	-0.9954 ppb	17:26:29
1	S 181.975 Axial†	22.1	5.9	25.929 µg/L	25.929 ppb	17:26:29
1	Sb 206.836†	25.5	-2.9	-2.9120 µg/L	-2.9120 ppb	17:26:29
1	Se 196.026†	14.3	-2.4	-3.6570 µg/L	-3.6570 ppb	17:26:29
1	SiO2†	4021.3	2531.5	545.17 µg/L	545.17 ppb	17:26:08
1	Si 251.611†	3738.4	3202.6	263.27 µg/L	263.27 ppb	17:26:08
1	Sn 189.927†	-2.3	-1.3	-0.6146 µg/L	-0.6146 ppb	17:26:29
1	Ti 334.940†	92.2	-29.5	-0.0697 µg/L	-0.0697 ppb	17:26:08
1	Tl 190.801†	-23.6	2.1	2.9500 µg/L	2.9500 ppb	17:26:29
1	U 409.014†	-33.5	22.2	2.0035 µg/L	2.0035 ppb	17:26:08
1	V 292.402†	-6.3	38.3	0.4095 µg/L	0.4095 ppb	17:26:08
1	Zn 213.857†	509.8	3.9	0.1014 µg/L	0.1014 ppb	17:26:29
2	Sc RADIAL	56946.1	56946.1	104 %		17:25:06
2	Al 396.153Radial†	-1.1	9.1	6.7568 µg/L	6.7568 ppb	17:25:06
2	Ca 317.933Radial†	202.6	15.0	14.141 µg/L	14.141 ppb	17:25:26
2	Fe 238.204 Radial†	16.8	1.6	13.754 µg/L	13.754 ppb	17:25:26
2	K 766.490 Radial†	228.2	90.3	64.201 µg/L	64.201 ppb	17:25:06
2	Mg 279.077 IEC†	11.5	-0.2	-2.2308 µg/L	-2.2308 ppb	17:25:26
2	Na 589.592 Radial†	773.8	199.7	65.752 µg/L	65.752 ppb	17:25:06
2	Sr 421.552†	28.9	-11.9	-0.1230 µg/L	-0.1230 ppb	17:25:06
2	Sc 361.383	2023260.0	2023260.0	105.94 %		17:26:35
2	Y 371.029	1385561.3	1385561.3	105.77 %		17:26:35
2	Ag 328.068†	-492.1	100.0	0.7943 µg/L	0.7943 ppb	17:26:41
2	As 188.979†	2.5	1.2	2.3405 µg/L	2.3405 ppb	17:27:01
2	B 249.677†	412.1	57.5	2.5084 µg/L	2.5084 ppb	17:27:01
2	Ba 233.527†	-17.0	10.0	0.2591 µg/L	0.2591 ppb	17:27:01
2	Be 313.107†	-3508.3	128.9	0.0841 µg/L	0.0841 ppb	17:26:41
2	Cd 226.502†	-147.3	3.1	0.0820 µg/L	0.0820 ppb	17:27:01
2	Co 228.616†	-13.8	-4.1	-0.2039 µg/L	-0.2039 ppb	17:27:01
2	Cr 267.716†	-28.2	25.8	0.5665 µg/L	0.5665 ppb	17:26:41
2	Cu 324.752†	2443.3	-179.8	-1.2539 µg/L	-1.2539 ppb	17:26:41
2	Mn 257.610†	-197.5	57.7	0.2017 µg/L	0.2017 ppb	17:27:01
2	Mo 202.031†	-3.9	3.8	0.4107 µg/L	0.4107 ppb	17:27:01
2	Ni 231.604†	307.4	-12.1	-0.6591 µg/L	-0.6591 ppb	17:27:01
2	P 214.914†	24.8	-4.2	-8.8396 µg/L	-8.8396 ppb	17:27:01
2	Pb 220.353†	104.9	1.8	0.4925 µg/L	0.4925 ppb	17:27:01

2	S 181.975 Axial†	22.8	6.7	29.574 µg/L	29.574 ppb	17:27:01
2	Sb 206.836†	23.1	-5.2	-5.1000 µg/L	-5.1000 ppb	17:27:01
2	Se 196.026†	19.6	2.7	4.1485 µg/L	4.1485 ppb	17:27:01
2	SiO2†	4102.3	2622.3	564.73 µg/L	564.73 ppb	17:26:41
2	Si 251.611†	3801.2	3275.3	269.24 µg/L	269.24 ppb	17:26:41
2	Sn 189.927†	4.9	5.5	2.5070 µg/L	2.5070 ppb	17:27:01
2	Ti 334.940†	181.2	54.9	0.1325 µg/L	0.1325 ppb	17:26:41
2	Tl 190.801†	-23.2	2.4	3.3176 µg/L	3.3176 ppb	17:27:01
2	U 409.014†	-46.3	9.9	0.8945 µg/L	0.8945 ppb	17:26:41
2	V 292.402†	-51.8	-4.7	-0.0430 µg/L	-0.0430 ppb	17:26:41
2	Zn 213.857†	504.7	0.9	0.0263 µg/L	0.0263 ppb	17:27:01
3	Sc RADIAL	58468.5	58468.5	107 %		17:25:32
3	Al 396.153Radial†	-18.5	-7.1	-5.2957 µg/L	-5.2957 ppb	17:25:32
3	Ca 317.933Radial†	203.1	10.4	9.8290 µg/L	9.8290 ppb	17:25:52
3	Fe 238.204 Radial†	15.5	-0.0	-0.3821 µg/L	-0.3821 ppb	17:25:52
3	K 766.490 Radial†	182.1	41.6	29.551 µg/L	29.551 ppb	17:25:32
3	Mg 279.077 IEC†	15.1	2.8	25.817 µg/L	25.817 ppb	17:25:52
3	Na 589.592 Radial†	805.9	210.4	69.248 µg/L	69.248 ppb	17:25:32
3	Sr 421.552†	37.0	-5.1	-0.0524 µg/L	-0.0524 ppb	17:25:32
3	Sc 361.383	2073122.0	2073122.0	108.55 %		17:27:07
3	Y 371.029	1418512.2	1418512.2	108.29 %		17:27:07
3	Ag 328.068†	-552.6	55.4	0.4394 µg/L	0.4394 ppb	17:27:13
3	As 188.979†	5.6	4.0	7.9097 µg/L	7.9097 ppb	17:27:33
3	B 249.677†	397.4	34.6	1.5129 µg/L	1.5129 ppb	17:27:33
3	Ba 233.527†	-12.7	14.3	0.3722 µg/L	0.3722 ppb	17:27:33
3	Be 313.107†	-3332.3	370.6	0.2420 µg/L	0.2420 ppb	17:27:13
3	Cd 226.502†	-127.4	24.8	0.6830 µg/L	0.6830 ppb	17:27:33
3	Co 228.616†	-4.3	4.9	0.2423 µg/L	0.2423 ppb	17:27:33
3	Cr 267.716†	-32.4	22.5	0.4955 µg/L	0.4955 ppb	17:27:13
3	Cu 324.752†	2446.7	-232.1	-1.6212 µg/L	-1.6212 ppb	17:27:13
3	Mn 257.610†	-173.1	84.6	0.2919 µg/L	0.2919 ppb	17:27:33
3	Mo 202.031†	-3.6	4.2	0.4523 µg/L	0.4523 ppb	17:27:33
3	Ni 231.604†	314.8	-12.2	-0.6678 µg/L	-0.6678 ppb	17:27:33
3	P 214.914†	24.2	-5.3	-11.334 µg/L	-11.334 ppb	17:27:33
3	Pb 220.353†	104.9	-0.6	-0.1430 µg/L	-0.1430 ppb	17:27:33
3	S 181.975 Axial†	13.4	-2.5	-10.740 µg/L	-10.740 ppb	17:27:33
3	Sb 206.836†	20.3	-8.3	-8.1630 µg/L	-8.1630 ppb	17:27:33
3	Se 196.026†	23.8	6.1	9.2401 µg/L	9.2401 ppb	17:27:33
3	SiO2†	3907.5	2349.7	506.02 µg/L	506.02 ppb	17:27:13
3	Si 251.611†	3582.5	2987.5	245.59 µg/L	245.59 ppb	17:27:13
3	Sn 189.927†	-5.5	-4.2	-1.9149 µg/L	-1.9149 ppb	17:27:33
3	Ti 334.940†	119.8	-5.8	-0.0158 µg/L	-0.0158 ppb	17:27:13
3	Tl 190.801†	-23.4	2.7	3.7578 µg/L	3.7578 ppb	17:27:33
3	U 409.014†	-64.5	-5.8	-0.5290 µg/L	-0.5290 ppb	17:27:13
3	V 292.402†	-56.8	-8.1	-0.0824 µg/L	-0.0824 ppb	17:27:13
3	Zn 213.857†	503.9	-11.4	-0.2797 µg/L	-0.2797 ppb	17:27:33

Mean Data: 1202024739|945379|5

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2042431.5	106.94 %		1.406			1.31%
Sc RADIAL	57600.4	106 %		1.4			1.36%
Y 371.029	1397950.3	106.72 %		1.369			1.28%
Ag 328.068†	71.8	0.5708 µg/L		0.19455	0.5708 ppb	0.19455	34.08%
Al 396.153Radial†	1.5	1.1521 µg/L		6.07033	1.1521 ppb	6.07033	526.87%
As 188.979†	0.8	1.4692 µg/L		6.91747	1.4692 ppb	6.91747	470.84%
B 249.677†	47.3	2.0655 µg/L		0.50675	2.0655 ppb	0.50675	24.53%
Ba 233.527†	11.0	0.2872 µg/L		0.07505	0.2872 ppb	0.07505	26.14%
Be 313.107†	217.5	0.1420 µg/L		0.08698	0.1420 ppb	0.08698	61.25%
Ca 317.933Radial†	13.8	12.984 µg/L		2.7649	12.984 ppb	2.7649	21.29%
Cd 226.502†	11.2	0.3067 µg/L		0.32789	0.3067 ppb	0.32789	106.90%
Co 228.616†	-0.4	-0.0201 µg/L		0.23322	-0.0201 ppb	0.23322	>999.9%
Cr 267.716†	25.6	0.5637 µg/L		0.06684	0.5637 ppb	0.06684	11.86%
Cu 324.752†	-198.3	-1.3844 µg/L		0.20542	-1.3844 ppb	0.20542	14.84%
Fe 238.204 Radial†	0.9	7.3958 µg/L		7.17410	7.3958 ppb	7.17410	97.00%
K 766.490 Radial†	70.2	49.889 µg/L		18.0946	49.889 ppb	18.0946	36.27%
Mg 279.077 IEC†	0.4	3.9453 µg/L		19.53041	3.9453 ppb	19.53041	495.03%
Mn 257.610†	57.1	0.1986 µg/L		0.09490	0.1986 ppb	0.09490	47.79%
Mo 202.031†	1.3	0.1350 µg/L		0.51389	0.1350 ppb	0.51389	380.55%
Na 589.592 Radial†	214.5	70.621 µg/L		5.6807	70.621 ppb	5.6807	8.04%

Ni 231.604†	-12.0	-0.6533 µg/L	0.01801	-0.6533 ppb	0.01801	2.76%
P 214.914†	-2.9	-6.1842 µg/L	6.87330	-6.1842 ppb	6.87330	111.14%
Pb 220.353†	-0.8	-0.2153 µg/L	0.74660	-0.2153 ppb	0.74660	346.79%
S 181.975 Axial†	3.4	14.921 µg/L	22.2976	14.921 ppb	22.2976	149.44%
Sb 206.836†	-5.5	-5.3917 µg/L	2.63767	-5.3917 ppb	2.63767	48.92%
Se 196.026†	2.1	3.2439 µg/L	6.49598	3.2439 ppb	6.49598	200.25%
SiO2†	2501.2	538.64 µg/L	29.894	538.64 ppb	29.894	5.55%
Si 251.611†	3155.1	259.37 µg/L	12.302	259.37 ppb	12.302	4.74%
Sn 189.927†	-0.0	-0.0075 µg/L	2.27258	-0.0075 ppb	2.27258	>999.9%
Sr 421.552†	-13.8	-0.1431 µg/L	0.10223	-0.1431 ppb	0.10223	71.45%
Ti 334.940†	6.6	0.0157 µg/L	0.10468	0.0157 ppb	0.10468	668.33%
Tl 190.801†	2.4	3.3418 µg/L	0.40442	3.3418 ppb	0.40442	12.10%
U 409.014†	8.7	0.7896 µg/L	1.26948	0.7896 ppb	1.26948	160.77%
V 292.402†	8.5	0.0947 µg/L	0.27335	0.0947 ppb	0.27335	288.71%
Zn 213.857†	-2.2	-0.0506 µg/L	0.20189	-0.0506 ppb	0.20189	398.61%

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

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	5.59%
QC value within limits for Cr 267.716	Recovery = 93.65%			
Cu 324.752†	66699.9	466.58 µg/L	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	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	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	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	1.37%
QC value within limits for Mn 257.610	Recovery = 95.27%			
Mo 202.031†	4373.4	466.91 µg/L	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	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	4.40%
QC value within limits for Ni 231.604	Recovery = 94.21%			
P 214.914†	1096.3	2309.2 µg/L	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	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	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	8.32%
QC value within limits for Sb 206.836	Recovery = 93.34%			
Se 196.026†	307.5	476.15 µg/L	37.872	7.95%
QC value within limits for Se 196.026	Recovery = 95.23%			
SiO2†	23079.8	4970.4 µg/L	154.36	3.11%
QC value within limits for SiO2	Recovery = 92.95%			
Si 251.611†	28372.7	2332.4 µg/L	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	10.58%
QC value within limits for Sn 189.927	Recovery = 93.52%			
Sr 421.552†	45099.0	467.50 µg/L	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	1.73%
QC value within limits for Ti 334.940	Recovery = 91.84%			
Tl 190.801†	340.9	481.40 µg/L	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	5.75%
QC value within limits for U 409.014	Recovery = 94.87%			
V 292.402†	43801.9	472.54 µg/L	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	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.: 18

Sample ID: 245392002|945379|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 314

Date Collected: 2/11/2010 18:00:10

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245392002|945379|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57264.9	57264.9	105 %		18:00:43
1	Al 396.153Radial†	116.9	121.5	90.543 µg/L	90.543 ppb	18:00:43
1	Ca 317.933Radial†	261.2	69.7	65.669 µg/L	65.669 ppb	18:01:03
1	Fe 238.204 Radial†	22.0	6.4	54.658 µg/L	54.658 ppb	18:01:03
1	K 766.490 Radial†	347.4	202.7	144.06 µg/L	144.06 ppb	18:00:43
1	Mg 279.077 IEC†	8.3	-3.3	-31.025 µg/L	-31.025 ppb	18:01:03
1	Na 589.592 Radial†	1197.8	599.6	197.39 µg/L	197.39 ppb	18:00:43
1	Sr 421.552†	88.5	44.8	0.4643 µg/L	0.4643 ppb	18:00:43
1	Sc 361.383	2039189.5	2039189.5	106.77 %		18:02:05
1	Y 371.029	1393399.4	1393399.4	106.37 %		18:02:05
1	Ag 328.068†	-632.5	-27.8	-0.2150 µg/L	-0.2150 ppb	18:02:11
1	As 188.979†	-1.0	-2.1	-4.0795 µg/L	-4.0795 ppb	18:02:32
1	B 249.677†	637.3	265.4	11.573 µg/L	11.573 ppb	18:02:11
1	Ba 233.527†	3.2	29.0	0.7555 µg/L	0.7555 ppb	18:02:32
1	Be 313.107†	-3640.9	30.5	0.0194 µg/L	0.0194 ppb	18:02:11
1	Cd 226.502†	-139.4	11.5	0.3112 µg/L	0.3112 ppb	18:02:32
1	Co 228.616†	-17.3	-7.3	-0.3635 µg/L	-0.3635 ppb	18:02:32
1	Cr 267.716†	-0.4	52.0	1.1439 µg/L	1.1439 ppb	18:02:11
1	Cu 324.752†	2562.1	-86.5	-0.5965 µg/L	-0.5965 ppb	18:02:11
1	Mn 257.610†	325.7	549.2	1.9102 µg/L	1.9102 ppb	18:02:32
1	Mo 202.031†	-2.1	5.6	0.6008 µg/L	0.6008 ppb	18:02:32
1	Ni 231.604†	307.4	-14.3	-0.7798 µg/L	-0.7798 ppb	18:02:32
1	P 214.914†	30.8	1.2	2.6593 µg/L	2.6593 ppb	18:02:32
1	Pb 220.353†	103.1	-0.6	-0.1550 µg/L	-0.1550 ppb	18:02:32
1	S 181.975 Axial†	29.7	13.0	57.111 µg/L	57.111 ppb	18:02:32
1	Sb 206.836†	30.0	1.1	1.0707 µg/L	1.0707 ppb	18:02:32
1	Se 196.026†	16.6	-0.2	-0.2157 µg/L	-0.2157 ppb	18:02:32
1	SiO2†	13769.0	11645.6	2507.9 µg/L	2507.9 ppb	18:02:11
1	Si 251.611†	15576.8	14275.9	1173.6 µg/L	1173.6 ppb	18:02:11
1	Sn 189.927†	0.2	1.1	0.4811 µg/L	0.4811 ppb	18:02:32
1	Ti 334.940†	791.3	625.0	1.5070 µg/L	1.5070 ppb	18:02:11
1	Tl 190.801†	-24.0	1.8	2.4935 µg/L	2.4935 ppb	18:02:32
1	U 409.014†	-125.3	-63.7	-5.7819 µg/L	-5.7819 ppb	18:02:11
1	V 292.402†	-9.6	35.2	0.3831 µg/L	0.3831 ppb	18:02:11
1	Zn 213.857†	580.6	68.2	1.7063 µg/L	1.7063 ppb	18:02:32
2	Sc RADIAL	56796.8	56796.8	104 %		18:01:09
2	Al 396.153Radial†	107.1	113.0	84.230 µg/L	84.230 ppb	18:01:09
2	Ca 317.933Radial†	255.8	66.7	62.755 µg/L	62.755 ppb	18:01:29
2	Fe 238.204 Radial†	24.1	8.6	73.198 µg/L	73.198 ppb	18:01:29
2	K 766.490 Radial†	278.2	138.9	98.749 µg/L	98.749 ppb	18:01:09
2	Mg 279.077 IEC†	13.7	1.8	17.139 µg/L	17.139 ppb	18:01:29
2	Na 589.592 Radial†	1218.7	629.1	207.10 µg/L	207.10 ppb	18:01:09
2	Sr 421.552†	59.8	17.9	0.1854 µg/L	0.1854 ppb	18:01:09
2	Sc 361.383	1987845.6	1987845.6	104.08 %		18:02:38
2	Y 371.029	1359122.9	1359122.9	103.76 %		18:02:38
2	Ag 328.068†	-574.8	12.3	0.1024 µg/L	0.1024 ppb	18:02:43
2	As 188.979†	-4.7	-5.7	-11.107 µg/L	-11.107 ppb	18:03:04
2	B 249.677†	643.4	286.7	12.494 µg/L	12.494 ppb	18:02:43
2	Ba 233.527†	13.1	38.6	1.0059 µg/L	1.0059 ppb	18:03:04
2	Be 313.107†	-3652.6	-68.8	-0.0456 µg/L	-0.0456 ppb	18:02:43
2	Cd 226.502†	-135.9	11.6	0.3104 µg/L	0.3104 ppb	18:03:04
2	Co 228.616†	-12.0	-2.7	-0.1379 µg/L	-0.1379 ppb	18:03:04
2	Cr 267.716†	-15.7	37.3	0.8210 µg/L	0.8210 ppb	18:02:43
2	Cu 324.752†	2565.4	-21.4	-0.1391 µg/L	-0.1391 ppb	18:02:43
2	Mn 257.610†	335.0	566.0	1.9691 µg/L	1.9691 ppb	18:03:04
2	Mo 202.031†	-7.0	0.9	0.0950 µg/L	0.0950 ppb	18:03:04
2	Ni 231.604†	311.4	-3.0	-0.1648 µg/L	-0.1648 ppb	18:03:04
2	P 214.914†	31.9	3.0	6.4973 µg/L	6.4973 ppb	18:03:04
2	Pb 220.353†	103.6	2.4	0.6315 µg/L	0.6315 ppb	18:03:04

2	S 181.975 Axial†	24.2	8.4	36.866 µg/L	36.866 ppb	18:03:04
2	Sb 206.836†	25.1	-2.8	-2.8055 µg/L	-2.8055 ppb	18:03:04
2	Se 196.026†	11.9	-4.4	-6.5578 µg/L	-6.5578 ppb	18:03:04
2	SiO2†	14297.1	12486.0	2688.9 µg/L	2688.9 ppb	18:02:43
2	Si 251.611†	16125.9	15180.2	1247.9 µg/L	1247.9 ppb	18:02:43
2	Sn 189.927†	-0.7	0.2	0.0877 µg/L	0.0877 ppb	18:03:04
2	Ti 334.940†	828.2	679.5	1.6342 µg/L	1.6342 ppb	18:02:43
2	Tl 190.801†	-27.0	-1.7	-2.3399 µg/L	-2.3399 ppb	18:03:04
2	U 409.014†	-75.9	-19.3	-1.7587 µg/L	-1.7587 ppb	18:02:43
2	V 292.402†	-43.8	2.2	0.0324 µg/L	0.0324 ppb	18:02:43
2	Zn 213.857†	588.5	89.8	2.2397 µg/L	2.2397 ppb	18:03:04
3	Sc RADIAL	57252.3	57252.3	105 %		18:01:35
3	Al 396.153Radial†	94.3	100.0	74.535 µg/L	74.535 ppb	18:01:35
3	Ca 317.933Radial†	263.1	71.6	67.452 µg/L	67.452 ppb	18:01:55
3	Fe 238.204 Radial†	20.7	5.2	44.103 µg/L	44.103 ppb	18:01:55
3	K 766.490 Radial†	297.7	155.3	110.41 µg/L	110.41 ppb	18:01:35
3	Mg 279.077 IEC†	15.2	3.2	29.462 µg/L	29.462 ppb	18:01:55
3	Na 589.592 Radial†	1194.3	596.6	196.39 µg/L	196.39 ppb	18:01:35
3	Sr 421.552†	48.7	6.8	0.0710 µg/L	0.0710 ppb	18:01:35
3	Sc 361.383	2035552.0	2035552.0	106.58 %		18:03:10
3	Y 371.029	1390584.7	1390584.7	106.16 %		18:03:10
3	Ag 328.068†	-588.0	12.8	0.1044 µg/L	0.1044 ppb	18:03:16
3	As 188.979†	-0.7	-1.8	-3.4921 µg/L	-3.4921 ppb	18:03:36
3	B 249.677†	587.7	219.9	9.5901 µg/L	9.5901 ppb	18:03:16
3	Ba 233.527†	4.5	30.3	0.7877 µg/L	0.7877 ppb	18:03:36
3	Be 313.107†	-3522.0	136.0	0.0882 µg/L	0.0882 ppb	18:03:16
3	Cd 226.502†	-145.7	5.4	0.1430 µg/L	0.1430 ppb	18:03:36
3	Co 228.616†	-14.4	-4.7	-0.2323 µg/L	-0.2323 ppb	18:03:36
3	Cr 267.716†	-17.1	36.3	0.7987 µg/L	0.7987 ppb	18:03:16
3	Cu 324.752†	2580.1	-65.3	-0.4503 µg/L	-0.4503 ppb	18:03:16
3	Mn 257.610†	303.7	529.1	1.8368 µg/L	1.8368 ppb	18:03:36
3	Mo 202.031†	-8.9	-0.8	-0.0873 µg/L	-0.0873 ppb	18:03:36
3	Ni 231.604†	305.9	-15.1	-0.8274 µg/L	-0.8274 ppb	18:03:36
3	P 214.914†	37.1	7.2	15.388 µg/L	15.388 ppb	18:03:36
3	Pb 220.353†	107.0	3.2	0.8524 µg/L	0.8524 ppb	18:03:36
3	S 181.975 Axial†	23.4	7.2	31.370 µg/L	31.370 ppb	18:03:36
3	Sb 206.836†	27.3	-1.3	-1.3052 µg/L	-1.3052 ppb	18:03:36
3	Se 196.026†	9.3	-7.1	-10.736 µg/L	-10.736 ppb	18:03:36
3	SiO2†	13520.4	11435.3	2462.7 µg/L	2462.7 ppb	18:03:16
3	Si 251.611†	15305.6	14047.5	1154.8 µg/L	1154.8 ppb	18:03:16
3	Sn 189.927†	-1.1	-0.2	-0.0748 µg/L	-0.0748 ppb	18:03:36
3	Ti 334.940†	793.2	628.1	1.5096 µg/L	1.5096 ppb	18:03:16
3	Tl 190.801†	-25.4	0.4	0.6132 µg/L	0.6132 ppb	18:03:36
3	U 409.014†	-56.7	0.5	0.0307 µg/L	0.0307 ppb	18:03:16
3	V 292.402†	-44.8	2.2	0.0298 µg/L	0.0298 ppb	18:03:16
3	Zn 213.857†	569.6	58.8	1.4701 µg/L	1.4701 ppb	18:03:36

Mean Data: 245392002|945379|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2020862.4	105.81 %	%	1.500			1.42%
Sc RADIAL	57104.7	105 %	%	0.5			0.47%
Y 371.029	1381035.7	105.43 %	%	1.453			1.38%
Ag 328.068†	-0.9	-0.0027 µg/L	µg/L	0.18382	-0.0027 ppb	0.18382	>999.9%
Al 396.153Radial†	111.5	83.103 µg/L	µg/L	8.0632	83.103 ppb	8.0632	9.70%
As 188.979†	-3.2	-6.2264 µg/L	µg/L	4.23738	-6.2264 ppb	4.23738	68.06%
B 249.677†	257.4	11.219 µg/L	µg/L	1.4839	11.219 ppb	1.4839	13.23%
Ba 233.527†	32.6	0.8497 µg/L	µg/L	0.13622	0.8497 ppb	0.13622	16.03%
Be 313.107†	32.6	0.0207 µg/L	µg/L	0.06690	0.0207 ppb	0.06690	323.54%
Ca 317.933Radial†	69.3	65.292 µg/L	µg/L	2.3709	65.292 ppb	2.3709	3.63%
Cd 226.502†	9.5	0.2549 µg/L	µg/L	0.09689	0.2549 ppb	0.09689	38.01%
Co 228.616†	-4.9	-0.2446 µg/L	µg/L	0.11331	-0.2446 ppb	0.11331	46.33%
Cr 267.716†	41.9	0.9212 µg/L	µg/L	0.19320	0.9212 ppb	0.19320	20.97%
Cu 324.752†	-57.7	-0.3953 µg/L	µg/L	0.23361	-0.3953 ppb	0.23361	59.10%
Fe 238.204 Radial†	6.8	57.320 µg/L	µg/L	14.7294	57.320 ppb	14.7294	25.70%
K 766.490 Radial†	165.6	117.74 µg/L	µg/L	23.527	117.74 ppb	23.527	19.98%
Mg 279.077 IEC†	0.6	5.1917 µg/L	µg/L	31.96437	5.1917 ppb	31.96437	615.68%
Mn 257.610†	548.1	1.9054 µg/L	µg/L	0.06626	1.9054 ppb	0.06626	3.48%
Mo 202.031†	1.9	0.2029 µg/L	µg/L	0.35651	0.2029 ppb	0.35651	175.74%
Na 589.592 Radial†	608.4	200.29 µg/L	µg/L	5.916	200.29 ppb	5.916	2.95%

Ni 231.604†	-10.8	-0.5907 µg/L	0.36958	-0.5907 ppb	0.36958	62.57%
P 214.914†	3.8	8.1815 µg/L	6.52926	8.1815 ppb	6.52926	79.81%
Pb 220.353†	1.6	0.4429 µg/L	0.52950	0.4429 ppb	0.52950	119.54%
S 181.975 Axial†	9.5	41.782 µg/L	13.5564	41.782 ppb	13.5564	32.45%
Sb 206.836†	-1.0	-1.0133 µg/L	1.95452	-1.0133 ppb	1.95452	192.88%
Se 196.026†	-3.9	-5.8366 µg/L	5.29721	-5.8366 ppb	5.29721	90.76%
SiO2†	11855.7	2553.2 µg/L	119.72	2553.2 ppb	119.72	4.69%
Si 251.611†	14501.2	1192.1 µg/L	49.24	1192.1 ppb	49.24	4.13%
Sn 189.927†	0.4	0.1647 µg/L	0.28579	0.1647 ppb	0.28579	173.55%
Sr 421.552†	23.2	0.2402 µg/L	0.20232	0.2402 ppb	0.20232	84.23%
Ti 334.940†	644.2	1.5503 µg/L	0.07272	1.5503 ppb	0.07272	4.69%
Tl 190.801†	0.2	0.2556 µg/L	2.43646	0.2556 ppb	2.43646	953.18%
U 409.014†	-27.5	-2.5033 µg/L	2.97697	-2.5033 ppb	2.97697	118.92%
V 292.402†	13.2	0.1484 µg/L	0.20324	0.1484 ppb	0.20324	136.95%
Zn 213.857†	72.3	1.8054 µg/L	0.39423	1.8054 ppb	0.39423	21.84%

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.

Daily Performance Report

Sample ID: Sample

Sample Date/Time: Saturday, February 13, 2010 14:53:47

Sample Description:

Method File: c:\elandata\Method\daily2.mth

Dataset File: c:\elandata\Dataset\100125\Sample.320

Tuning File: c:\elandata\Tuning\default2.tun

Optimization File: c:\elandata\Optimize\default.dac

Dual Detector Mode: Pulse

Acq. Dead Time(ns): 35

Current Dead Time (ns): 35

Summary

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
Be	9.0	1166.8	1166.848	36.468	3.1
Mg	24.0	14132.2	14132.187	94.630	0.7
Co	58.9	44494.4	44494.392	551.949	1.2
Rh	102.9	86899.9	86899.920	746.363	0.9
In	114.9	120318.0	120317.952	320.860	0.3
Pb	208.0	48341.3	48341.261	540.347	1.1
[> Ba	137.9	96325.0	96324.966	554.527	0.6
[Ba++	69.0	1075.7	0.011	0.000	3.4
[> Ce	139.9	112930.2	112930.212	483.271	0.4
[CeO	155.9	2573.6	0.023	0.000	1.7
Bkgd	220.0	2.2	2.200	0.570	25.9

Current Optimization File Data

Current Value	Description
0.91	Nebulizer Gas Flow
4.50	Lens Voltage
1000.00	ICP RF Power
-2000.00	Analog Stage Voltage
1100.00	Pulse Stage Voltage
50.00	Discriminator Threshold
-2.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	17	4.3	920.7
Co	59	17	4.8	30244.0
In	115	17	5.5	86185.9

ICPMS #4 TUNING REPORT

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas Peak W
He	3.0	3.0	603	2060	0.705
Be	9.0	9.0	2045	2045	0.720
Mg	24.0	24.0	5678	2065	0.711
Mg	25.0	25.0	5941	2080	0.701
Mg	26.0	26.0	6157	2085	0.699
Co	58.9	59.0	14186	2140	0.662
Rh	102.9	102.9	24867	2230	0.676
In	114.9	114.9	27777	2255	0.695
Ce	139.9	139.9	33853	2310	0.661
Pb	206.0	205.9	49924	2500	0.612
Pb	207.0	206.9	50101	2375	0.618
Pb	208.0	208.0	50436	2570	0.602
U	238.1	238.1	57689	2510	0.645

ICPMS#4 - Summary Report

Sample ID: Blank

Sample Date/Time: Saturday, February 13, 2010 17:54:05

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only no lrs.mth

Dataset File: C:\elandata\Dataset\100213\Blank.067

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu 175		ug/L		133245	
[U 238		ug/L		108	

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Simple Linear	
U	238Simple Linear	

QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[> Lu 175					
[U 238					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: Blank

Report Date/Time: Saturday, February 13, 2010 17:54:18

Page 1

ICPMS#4 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Saturday, February 13, 2010 17:56:17

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only no lrs.mth

Dataset File: C:\elandata\Dataset\100213\Standard 1.068

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		133045	133045.347
[	U	238	10.000 ug/L	0.899	113896	0.855

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu	175				
[	U	238				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: Standard 1

Report Date/Time: Saturday, February 13, 2010 17:56:27

Page 1

ICPMS#4 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Saturday, February 13, 2010 17:57:56

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only no lrs.mth

Dataset File: C:\elandata\Dataset\100213\Standard 2.069

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu 175		ug/L		132397	132397.025
[U 238	99.978	ug/L	1.656	1108159	8.370

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[> Lu 175					
[U 238					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Saturday, February 13, 2010 17:59:35

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only no lrs.mth

Dataset File: C:\elandata\Dataset\100213\QC Std 1.070

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu 175		ug/L		132454	132453.536
[	U 238	52.696	ug/L	0.359	584429	4.412

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu 175			99.4		
[	U 238	105.393				

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: Saturday, February 13, 2010 17:59:46

Page 1

ICPMS#4 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Saturday, February 13, 2010 18:01:18

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only no lrs.mth

Dataset File: C:\elandata\Dataset\100213\QC Std 2.071

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		133000	132999.689
[	U	238	ug/L	2.638	467	0.003

Calibration

Analyte	Mass Curve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu	175		99.8		
[	U	238				

QC Out Of Limits

Measurement Type	Analyte	Mass Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 2

Report Date/Time: Saturday, February 13, 2010 18:01:30

Page 1

ICPMS#4 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Saturday, February 13, 2010 18:03:00

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\u only no lrs.mth

Dataset File: C:\elandata\Dataset\100213\QC Std 3.072

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu 175		ug/L		134508	134508.356
[	U 238	0.247	ug/L	0.076	2885	0.021

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu 175			100.9		
[	U 238	123.260				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Saturday, February 13, 2010 18:04:41

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only no lrs.mth

Dataset File: C:\elandata\Dataset\100213\QC Std 4.073

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu 175		ug/L		125043	125043.467
[	U 238	-0.001	ug/L	92.634	89	-0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu 175			93.8		
[	U 238					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 4

Report Date/Time: Saturday, February 13, 2010 18:04:52

Page 1

ICPMS#4 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Saturday, February 13, 2010 18:06:22

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only no lrs.mth

Dataset File: C:\elandata\Dataset\100213\QC Std 5.074

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu 175		ug/L		125216	125215.619
[	U 238	19.703	ug/L	0.737	206640	1.649

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu 175			94.0		
[	U 238	98.513				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 5

Report Date/Time: Saturday, February 13, 2010 18:06:34

Page 1

ICPMS#4 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Saturday, February 13, 2010 18:08:04

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w only no lrs.mth

Dataset File: C:\elandata\Dataset\100213\QC Std 6.075

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		130951	130950.758
[	U	238	ug/L	0.111	582989	4.451

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu	175		98.3		
[	U	238	106.339			

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 6

Report Date/Time: Saturday, February 13, 2010 18:08:16

Page 1

ICPMS#4 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Saturday, February 13, 2010 18:09:47

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only no lrs.mth

Dataset File: C:\elandata\Dataset\100213\QC Std 7.076

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu 175		ug/L		124780	124779.841
[	U 238	0.027	ug/L	4.215	383	0.002

Calibration

Analyte	Mass Curve Type	Correlation Coefficient
Lu	175 Linear Thru Zero	
U	238 Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu 175			93.6		
[	U 238					

QC Out Of Limits

Measurement Type	Analyte	Mass Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Saturday, February 13, 2010 18:21:45

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only no lrs.mth

Dataset File: C:\elandata\Dataset\100213\QC Std 6.083

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		127120	127120.012
[	U	238	54.345 ug/L	0.583	578437	4.550

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu	175		95.4		
[	U	238	108.689			

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: Saturday, February 13, 2010 18:21:57

Page 1

ICPMS#4 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Saturday, February 13, 2010 18:23:29

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w only no lrs.mth

Dataset File: C:\elandata\Dataset\100213\QC Std 7.084

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu 175		ug/L		124686	124686.072
[	U 238	0.027	ug/L	4.586	384	0.002

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu 175			93.6		
[	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: Saturday, February 13, 2010 18:23:42

Page 1

ICPMS#4 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Saturday, February 13, 2010 18:37:13

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w only no lrs.mth

Dataset File: C:\elandata\Dataset\100213\QC Std 6.092

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		126412	126412.105
[	U	238	55.068 ug/L	0.873	582853	4.610

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu	175		94.9		
[	U	238	110.135			

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 6	U	238CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

Sample ID: QC Std 6

Report Date/Time: Saturday, February 13, 2010 18:37:25

Page 1

ICPMS#4 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Saturday, February 13, 2010 18:38:56

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only no lrs.mth

Dataset File: C:\elandata\Dataset\100213\QC Std 7.093

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		126115	126114.858
[U	238	0.030	ug/L	3.033	420	0.003

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[> Lu	175			94.6		
[U	238					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Saturday, February 13, 2010 18:39:09

Page 1

ICPMS#4 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Saturday, February 13, 2010 18:52:45

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only no lrs.mth

Dataset File: C:\elandata\Dataset\100213\QC Std 6.101

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		123789	123788.635
[	U	238	54.195 ug/L	0.733	561707	4.537

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu	175		92.9		
[	U	238	108.389			

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 6

Report Date/Time: Saturday, February 13, 2010 18:52:56

Page 1

ICPMS#4 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Saturday, February 13, 2010 18:54:28

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only no lrs.mth

Dataset File: C:\elandata\Dataset\100213\QC Std 7.102

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		123745	123744.892
[	U	238	ug/L	4.217	447	0.003

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu	175		92.9		
[	U	238				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Saturday, February 13, 2010 18:54:41

Page 1

ICPMS#4 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Saturday, February 13, 2010 19:06:35

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only no lrs.mth

Dataset File: C:\elandata\Dataset\100213\QC Std 6.109

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu 175		ug/L		125201	125201.183
[	U 238	53.677	ug/L	0.871	562691	4.494

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu 175			94.0		
[	U 238	107.355				

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: Saturday, February 13, 2010 19:06:47

Page 1

ICPMS#4 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Saturday, February 13, 2010 19:08:19

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w only no lrs.mth

Dataset File: C:\elandata\Dataset\100213\QC Std 7.110

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		124477	124476.638
[	U	238	ug/L	3.003	403	0.002

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu	175		93.4		
[	U	238				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Saturday, February 13, 2010 19:08:32

Page 1

ICPMS#4 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Saturday, February 13, 2010 19:22:16

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only no lrs.mth

Dataset File: C:\elandata\Dataset\100213\QC Std 6.118

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu 175		ug/L		127443	127442.892
[	U 238	54.298	ug/L	0.522	579423	4.546

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu 175			95.6		
[	U 238	108.595				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 6

Report Date/Time: Saturday, February 13, 2010 19:22:28

Page 1

ICPMS#4 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Saturday, February 13, 2010 19:23:59

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only no lrs.mth

Dataset File: C:\elandata\Dataset\100213\QC Std 7.119

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu 175		ug/L		126455	126454.859
[U 238	0.026	ug/L	3.052	376	0.002

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[> Lu 175			94.9		
[U 238					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Saturday, February 13, 2010 19:24:12

Page 1

ICPMS#4 - Summary Report

Sample ID: 1202024740

Sample Date/Time: Saturday, February 13, 2010 19:25:44

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 945381|1|skj

Method File: c:\elandata\Method\lu only no lrs.mth

Dataset File: C:\elandata\Dataset\100213\1202024740.120

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu 175		ug/L		119263	119263.384
[	U 238	0.000	ug/L	305.114	98	0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu 175			89.5		
[	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: 1202024740

Report Date/Time: Saturday, February 13, 2010 19:25:58

Page 1

ICPMS#4 - Summary Report

Sample ID: 1202024741

Sample Date/Time: Saturday, February 13, 2010 19:27:31

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 945381|1|skj

Method File: c:\elandata\Method\only no lrs.mth

Dataset File: C:\elandata\Dataset\100213\1202024741.121

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu 175		ug/L		120138	120137.921
[U 238	53.936	ug/L	1.334	542528	4.515

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[> Lu 175		90.2			
[U 238					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202024741

Report Date/Time: Saturday, February 13, 2010 19:27:45

Page 1

ICPMS#4 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Saturday, February 13, 2010 19:38:00

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only no lrs.mth

Dataset File: C:\elandata\Dataset\100213\QC Std 6.127

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu 175		ug/L		124704	124703.830
[	U 238	54.592	ug/L	0.515	570022	4.570

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu 175			93.6		
[	U 238	109.183				

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: Saturday, February 13, 2010 19:38:12

Page 1

ICPMS#4 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Saturday, February 13, 2010 19:39:43

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only no lrs.mth

Dataset File: C:\elandata\Dataset\100213\QC Std 7.128

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu 175		ug/L		128124	128123.610
[	U 238	0.029	ug/L	8.719	413	0.002

Calibration

Analyte	Mass Curve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu 175		96.2			
[	U 238					

QC Out Of Limits

Measurement Type	Analyte	Mass Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Saturday, February 13, 2010 19:39:56

Page 1

ICPMS#4 - Summary Report

Sample ID: 245392001

Sample Date/Time: Saturday, February 13, 2010 19:45:01

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 94538111skj

Method File: c:\elandata\Method\only no lrs.mth

Dataset File: C:\elandata\Dataset\100213\245392001.131

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu 175		ug/L		121020	121020.056
[	U 238	0.688	ug/L	1.055	7064	0.058

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu 175			90.8		
[	U 238					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 245392001

Report Date/Time: Saturday, February 13, 2010 19:45:14

Page 1

ICPMS#4 - Summary Report

Sample ID: 1202024742

Sample Date/Time: Saturday, February 13, 2010 19:46:46

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 945381|1|skj

Method File: c:\elandata\Method\only no lrs.mth

Dataset File: C:\elandata\Dataset\100213\1202024742.132

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		121798	121798.306
[U	238	-0.003	ug/L	49.409	63	-0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[> Lu	175			91.4		
[U	238					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202024742

Report Date/Time: Saturday, February 13, 2010 19:46:59

Page 1

ICPMS#4 - Summary Report

Sample ID: 1202024743

Sample Date/Time: Saturday, February 13, 2010 19:48:31

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 945381|1|skj

Method File: c:\elandata\Method\only no lrs.mth

Dataset File: C:\elandata\Dataset\100213\1202024743.133

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		119222	119221.615
[	U	238	56.178 ug/L	0.797	560814	4.703

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu	175		89.5		
[	U	238				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1202024744

Sample Date/Time: Saturday, February 13, 2010 19:50:17

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 945381|5|skj

Method File: c:\elandata\Method\lu only no lrs.mth

Dataset File: C:\elandata\Dataset\100213\1202024744.134

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu 175		ug/L		126368	126368.047
[	U 238	0.147	ug/L	3.653	1653	0.012

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu 175			94.8		
[	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: 1202024744

Report Date/Time: Saturday, February 13, 2010 19:50:31

Page 1

ICPMS#4 - Summary Report

Sample ID: 245392002

Sample Date/Time: Saturday, February 13, 2010 19:52:04

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945381|1|skj

Method File: c:\elandata\Method\w only no lrs.mth

Dataset File: C:\elandata\Dataset\100213\245392002.135

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu 175		ug/L		123043	123042.506
[	U 238	0.435	ug/L	1.692	4580	0.036

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu 175			92.3		
[	U 238					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Saturday, February 13, 2010 19:53:48

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only no lrs.mth

Dataset File: C:\elandata\Dataset\100213\QC Std 6.136

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		128511	128511.083
[	U	238	ug/L	1.494	587178	4.569

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu	175		96.4		
[	U	238	109.146			

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 6

Report Date/Time: Saturday, February 13, 2010 19:54:00

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ICPMS#4 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Saturday, February 13, 2010 19:55:32

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only no lrs.mth

Dataset File: C:\elandata\Dataset\100213\QC Std 7.137

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu 175		ug/L		127744	127744.302
[U 238	0.030	ug/L	6.903	423	0.003

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[> Lu 175		95.9			
[U 238					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Saturday, February 13, 2010 19:55:45

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ICPMS #5 Daily Performance Report

Sample ID: Sample

Sample Date/Time: Friday, February 12, 2010 16:34:26

Sample Description:

Method File: c:\elandata\Method\Daily2.mth

Dataset File: c:\elandata\Dataset\default\Sample.468

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		5725.3		5725.347		70.069		1.2
Mg	24.0		40057.1		40057.139		1440.505		3.6
Co	58.9		141268.4		141268.438		2608.093		1.8
Rh	102.9		297559.6		297559.571		3605.845		1.2
In	114.9		412099.4		412099.418		3972.947		1.0
Pb	208.0		282668.3		282668.274		2129.456		0.8
[> Ba	137.9		362870.6		362870.568		2499.190		0.7
[Ba++	69.0		6433.6		0.018		0.000		1.6
[> Ce	139.9		442104.1		442104.143		2880.727		0.7
[CeO	155.9		11803.5		0.027		0.000		1.4
Bkgd	220.0		13.0		13.000		3.021		23.2

Current Optimization File Data

Current Value	Description
0.87	Nebulizer Gas Flow
5.25	Lens Voltage
1450.00	ICP RF Power
-1718.75	Analog Stage Voltage
1200.00	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	9	5.0	5694.5
Co	59	9	5.5	145061.8
In	115	9	5.8	400812.0

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	571	2060	0.650
Be	9.0	9.0	2043	2080	0.622
Mg	24.0	24.0	5681	2090	0.632
Mg	25.0	24.9	5921	2085	0.665
Mg	26.0	26.0	6162	2085	0.652
Co	58.9	58.9	14186	2115	0.634
Rh	102.9	102.9	24865	2175	0.617
In	114.9	114.9	27791	2190	0.633
Ce	139.9	139.9	33863	2210	0.632
Pb	206.0	206.0	49948	2300	0.632
Pb	207.0	207.0	50159	2245	0.653
Pb	208.0	208.0	50439	2280	0.704
U	238.1	238.0	57720	2300	0.679

ICPMS#5 - Summary Report

Sample ID: Blank

Sample Date/Time: Saturday, February 13, 2010 00:03:26

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2 no lrs.mth

Dataset File: c:\elandata\Dataset\100211\Blank.527

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7		ug/L		46	
Be	9		ug/L		23	
B	11		ug/L		300	
Na	23		ug/L		12672	
Mg	24		ug/L		1333	
Al	27		ug/L		8002	
P	31		ug/L		9843	
K	39		ug/L		626810	
Ca	43		ug/L		665	
> Sc	45		ug/L		684248	
Ti	47		ug/L		711	
V	51		ug/L		-19055	
Cr	52		ug/L		13357	
Cr	53		ug/L		239673	
Mn	55		ug/L		3004	
Fe	57		ug/L		10869	
Co	59		ug/L		148	
Ni	60		ug/L		350	
Cu	63		ug/L		506	
Cu	65		ug/L		464	
Zn	66		ug/L		1482	
Zn	67		ug/L		22303	
Zn	68		ug/L		2708	
> Ge	74		ug/L		687039	
As	75		ug/L		-2213	
Se	77		ug/L		21776	
Se	82		ug/L		64	
Kr	83		ug/L		145	
Sr	88		ug/L		398	
Y	89		ug/L		79	
Mo	98		ug/L		200	
Ag	107		ug/L		106	
Cd	111		ug/L		32	
Cd	114		ug/L		86	
> In	115		ug/L		476899	
Sn	120		ug/L		485	
Sb	121		ug/L		633	
Sb	123		ug/L		461	
Ba	135		ug/L		55	
Ba	137		ug/L		85	
Ho	165		ug/L		22	
> Lu	175		ug/L		705705	
Tl	205		ug/L		4215	
Pb	208		ug/L		650	
Bi	209		ug/L		381	
Th	232		ug/L		1074	
U	238		ug/L		572	

Sample ID: Blank

Report Date/Time: Saturday, February 13, 2010 00:06:10

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Simple Linear	
Be	9Simple Linear	
B	11Simple Linear	
Na	23Simple Linear	
Mg	24Simple Linear	
Al	27Simple Linear	
P	31Simple Linear	
K	39Simple Linear	
Ca	43Simple Linear	
Sc	45Simple Linear	
Ti	47Simple Linear	
V	51Simple Linear	
Cr	52Simple Linear	
Cr	53Simple Linear	
Mn	55Simple Linear	
Fe	57Simple Linear	
Co	59Simple Linear	
Ni	60Simple Linear	
Cu	63Simple Linear	
Cu	65Simple Linear	
Zn	66Simple Linear	
Zn	67Simple Linear	
Zn	68Simple Linear	
Ge	74Simple Linear	
As	75Simple Linear	
Se	77Simple Linear	
Se	82Simple Linear	
Kr	83Simple Linear	
Sr	88Simple Linear	
Y	89Simple Linear	
Mo	98Simple Linear	
Ag	107Simple Linear	
Cd	111Simple Linear	
Cd	114Simple Linear	
In	115Simple Linear	
Sn	120Simple Linear	
Sb	121Simple Linear	
Sb	123Simple Linear	
Ba	135Simple Linear	
Ba	137Simple Linear	
Ho	165Simple Linear	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9995
Pb	208Simple Linear	
Bi	209Simple Linear	
Th	232Simple Linear	
U	238Simple Linear	

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					
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: Blank

Report Date/Time: Saturday, February 13, 2010 00:06:10

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ICPMS#5 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Saturday, February 13, 2010 00:09:32

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2 no lrs.mth

Dataset File: c:\elandata\Dataset\100211\Standard 1.528

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	10.000	ug/L	1.139	20771	0.030
Be	9	10.000	ug/L	1.069	4846	0.007
B	11	20.000	ug/L	2.744	9110	0.013
Na	23	1000.000	ug/L	8.284	3206646	4.641
Mg	24	1000.000	ug/L	13.239	2139462	3.108
Al	27	1000.000	ug/L	13.946	3383813	4.908
P	31	1000.000	ug/L	1.887	249186	0.348
K	39	1000.000	ug/L	8.207	7310812	9.706
Ca	43	1000.000	ug/L	3.238	17465	0.024
> Sc	45		ug/L		688166	688165.625
Ti	47	10.000	ug/L	2.856	9466	0.013
V	51	10.000	ug/L	14.842	85354	0.152
Cr	52	10.000	ug/L	4.736	93095	0.116
Cr	53		ug/L		238567	-0.004
Mn	55	10.000	ug/L	0.601	145409	0.207
Fe	57	1000.000	ug/L	2.784	308510	0.432
Co	59	10.000	ug/L	2.528	119230	0.173
Ni	60	10.000	ug/L	2.727	26021	0.037
Cu	63		ug/L		63905	0.092
Cu	65	10.000	ug/L	0.950	31353	0.045
Zn	66	10.000	ug/L	0.945	20384	0.027
Zn	67		ug/L		24333	0.003
Zn	68		ug/L		16073	0.019
> Ge	74		ug/L		690593	690593.134
As	75	10.000	ug/L	10.549	20118	0.032
Se	77		ug/L		21629	-0.000
Se	82	10.000	ug/L	0.448	2295	0.003
Kr	83		ug/L		138	-0.000
Sr	88	10.000	ug/L	1.004	268544	0.559
Y	89		ug/L		120	0.000
Mo	98	10.000	ug/L	2.458	64109	0.133
Ag	107	10.000	ug/L	1.855	113205	0.236
Cd	111	10.000	ug/L	1.352	27745	0.058
Cd	114		ug/L		66513	0.139
> In	115		ug/L		479334	479334.354
Sn	120	10.000	ug/L	2.200	116967	0.243
Sb	121	10.000	ug/L	2.418	96993	0.201
Sb	123		ug/L		74138	0.154
Ba	135		ug/L		27727	0.039
Ba	137	10.000	ug/L	2.141	48446	0.069
Ho	165		ug/L		23	0.000
> Lu	175		ug/L		705210	705209.542
Tl	205	10.000	ug/L	1.956	313582	0.439
Pb	208	10.000	ug/L	1.076	517016	0.732
Bi	209		ug/L		401	0.000
Th	232	10.000	ug/L	2.641	581089	0.823
U	238	10.000	ug/L	0.881	581846	0.824

Sample ID: Standard 1

Report Date/Time: Saturday, February 13, 2010 00:12:13

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	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: Saturday, February 13, 2010 00:12:13

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					
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

ICPMS#5 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Saturday, February 13, 2010 00:15:36

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2 no lrs.mth

Dataset File: c:\elandata\Dataset\100211\Standard 2.529

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	100.036	ug/L	2.854	202625	0.312
Be	9	100.050	ug/L	4.598	47882	0.074
B	11	200.071	ug/L	6.613	86292	0.133
Na	23	10004.327	ug/L	6.620	31451491	48.525
Mg	24	10000.447	ug/L	8.543	20251515	31.219
Al	27	10000.205	ug/L	5.242	31906254	49.179
P	31	10000.449	ug/L	5.373	2273146	3.493
K	39	9992.432	ug/L	9.911	59002249	90.165
Ca	43	10001.474	ug/L	3.737	161248	0.248
Sc	45		ug/L		648784	648784.118
Ti	47	100.023	ug/L	4.915	85045	0.130
V	51	99.943	ug/L	8.139	912328	1.436
Cr	52	100.008	ug/L	2.033	769557	1.167
Cr	53		ug/L		262565	0.055
Mn	55	99.933	ug/L	4.477	1259273	1.938
Fe	57	10001.175	ug/L	6.549	2845801	4.376
Co	59	99.945	ug/L	3.459	1063525	1.640
Ni	60	100.007	ug/L	4.491	243830	0.376
Cu	63		ug/L		575581	0.887
Cu	65	99.992	ug/L	3.434	289148	0.445
Zn	66	100.035	ug/L	2.420	191121	0.284
Zn	67		ug/L		48331	0.040
Zn	68		ug/L		142163	0.209
Ge	74		ug/L		668835	668834.899
As	75	99.951	ug/L	0.794	204034	0.308
Se	77		ug/L		30536	0.014
Se	82	100.040	ug/L	2.570	22571	0.034
Kr	83		ug/L		195	0.000
Sr	88	99.782	ug/L	0.974	2158600	4.582
Y	89		ug/L		302	0.000
Mo	98	99.955	ug/L	0.756	601211	1.276
Ag	107	99.915	ug/L	1.709	1023886	2.173
Cd	111	99.990	ug/L	1.770	269667	0.572
Cd	114		ug/L		633900	1.346
In	115		ug/L		471059	471058.992
Sn	120	99.900	ug/L	1.705	1040124	2.207
Sb	121	99.939	ug/L	1.761	892505	1.894
Sb	123		ug/L		693082	1.471
Ba	135		ug/L		266693	0.393
Ba	137	99.979	ug/L	0.937	455518	0.672
Ho	165		ug/L		33	0.000
Lu	175		ug/L		678142	678142.328
Tl	205	99.702	ug/L	0.501	2289454	3.370
Pb	208	99.794	ug/L	2.041	4110459	6.061
Bi	209		ug/L		816	0.001
Th	232	99.670	ug/L	0.740	4180514	6.163
U	238	99.668	ug/L	3.535	4181563	6.166

Sample ID: Standard 2

Report Date/Time: Saturday, February 13, 2010 00:18:18

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	0.9998
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	0.9996
Pb	208Linear Thru Zero	0.9998
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9995
U	238Linear Thru Zero	0.9994

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: Saturday, February 13, 2010 00:18:18

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ICPMS#5 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Saturday, February 13, 2010 00:21:41

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2 no lrs.mth

Dataset File: c:\elandata\Dataset\100211\QC Std 1.530

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	50.258	ug/L	0.533	109070	0.157
Be	9	49.688	ug/L	0.686	25494	0.037
B	11	105.694	ug/L	4.183	49011	0.070
Na	23	5323.045	ug/L	4.360	17946788	25.819
Mg	24	5822.211	ug/L	7.318	12623561	18.175
Al	27	5429.502	ug/L	10.587	18550218	26.701
P	31	4901.486	ug/L	3.292	1199174	1.712
K	39	5558.700	ug/L	13.006	35483870	50.158
Ca	43	5127.324	ug/L	3.488	88899	0.127
> Sc	45		ug/L		694561	694560.683
Ti	47	50.086	ug/L	2.876	45992	0.065
V	51	50.516	ug/L	3.252	484844	0.726
Cr	52	49.836	ug/L	2.480	417486	0.582
Cr	53		ug/L		236755	-0.009
Mn	55	53.485	ug/L	0.926	723606	1.037
Fe	57	4558.433	ug/L	2.789	1396521	1.995
Co	59	50.366	ug/L	1.820	574242	0.827
Ni	60	50.499	ug/L	1.709	132098	0.190
Cu	63		ug/L		312841	0.450
Cu	65	49.599	ug/L	2.328	153859	0.221
Zn	66	52.109	ug/L	1.389	101880	0.148
Zn	67		ug/L		35758	0.020
Zn	68		ug/L		74363	0.105
> Ge	74		ug/L		679672	679671.623
As	75	49.528	ug/L	0.688	101638	0.153
Se	77		ug/L		23661	0.003
Se	82	49.966	ug/L	0.676	11489	0.017
Kr	83		ug/L		156	0.000
Sr	88	57.743	ug/L	0.607	1256787	2.652
Y	89		ug/L		149	0.000
Mo	98	51.257	ug/L	1.487	310220	0.654
Ag	107	53.281	ug/L	0.630	549266	1.159
Cd	111	51.184	ug/L	0.516	138876	0.293
Cd	114		ug/L		330815	0.698
> In	115		ug/L		473820	473819.801
Sn	120	54.266	ug/L	1.999	568593	1.199
Sb	121	52.914	ug/L	0.414	475695	1.003
Sb	123		ug/L		372798	0.786
Ba	135		ug/L		137734	0.201
Ba	137	52.095	ug/L	1.331	239612	0.350
Ho	165		ug/L		64	0.000
> Lu	175		ug/L		684422	684422.311
Tl	205	56.723	ug/L	3.356	1316094	1.917
Pb	208	56.457	ug/L	0.495	2347587	3.429
Bi	209		ug/L		816	0.001
Th	232	52.697	ug/L	3.598	2230895	3.259
U	238	54.212	ug/L	0.135	2295962	3.354

Sample ID: QC Std 1

Report Date/Time: Saturday, February 13, 2010 00:24:23

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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	0.9998
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	0.9996
Pb	208Linear Thru Zero	0.9998
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9995
U	238Linear Thru Zero	0.9994

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Li	7	100.517				
Be	9	99.376				
B	11	105.694				
Na	23	106.461				
Mg	24	116.444				
Al	27	107.515				
P	31	98.030				
K	39	111.174				
Ca	43	102.546				
> Sc	45		101.5			
Ti	47	100.173				
V	51	101.031				
Cr	52	99.672				
Cr	53					
Mn	55	106.970				
Fe	57	91.169				
Co	59	100.732				
Ni	60	100.998				
Cu	63					
Cu	65	99.197				
Zn	66	104.218				
Zn	67					
Zn	68					
> Ge	74		98.9			
As	75	99.056				
Se	77					
Se	82	99.932				
Kr	83					
Sr	88	115.486				
Y	89					
Mo	98	102.514				
Ag	107	106.563				
Cd	111	102.367				
Cd	114					
> In	115		99.4			
Sn	120	108.531				
Sb	121	105.827				
Sb	123					
Ba	135					
Ba	137	104.190				
Ho	165					
> Lu	175		97.0			
Tl	205	113.446				
Pb	208	112.914				
Bi	209					
Th	232	105.394				
U	238	108.424				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 1	Mg	24	ICV is out of limits (+/- 10%)
QC Std 1	K	39	ICV is out of limits (+/- 10%)
QC Std 1	Sr	88	ICV is out of limits (+/- 10%)
QC Std 1	Tl	205	ICV is out of limits (+/- 10%)
QC Std 1	Pb	208	ICV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Saturday, February 13, 2010 00:27:48

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2 no lrs.mth

Dataset File: c:\elandata\Dataset\100211\QC Std 2.531

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.018	ug/L	51.133	87	0.000
Be	9	-0.008	ug/L	27.740	20	-0.000
B	11	4.783	ug/L	16.244	2550	0.003
Na	23	0.853	ug/L	60.334	16009	0.004
Mg	24	1.023	ug/L	108.528	3667	0.003
Al	27	0.591	ug/L	115.202	10337	0.003
P	31	-0.855	ug/L	253.188	9950	-0.000
K	39	3.345	ug/L	261.470	667964	0.030
Ca	43	-5.729	ug/L	25.127	586	-0.000
> Sc	45		ug/L		706715	706715.272
Ti	47	-0.022	ug/L	265.688	713	-0.000
V	51	1.328	ug/L	48.465	-6281	0.019
Cr	52	-0.139	ug/L	25.675	12654	-0.002
Cr	53		ug/L		215694	-0.045
Mn	55	-0.006	ug/L	103.987	3022	-0.000
Fe	57	-1.262	ug/L	50.509	10833	-0.001
Co	59	0.004	ug/L	27.976	196	0.000
Ni	60	0.003	ug/L	200.759	369	0.000
Cu	63		ug/L		558	0.000
Cu	65	0.006	ug/L	82.091	498	0.000
Zn	66	-0.019	ug/L	349.292	1454	-0.000
Zn	67		ug/L		22082	-0.001
Zn	68		ug/L		2779	0.000
> Ge	74		ug/L		691967	691966.507
As	75	0.099	ug/L	443.993	-2020	0.000
Se	77		ug/L		18220	-0.005
Se	82	-0.070	ug/L	134.598	48	-0.000
Kr	83		ug/L		150	0.000
Sr	88	0.003	ug/L	66.078	460	0.000
Y	89		ug/L		92	0.000
Mo	98	0.048	ug/L	29.539	490	0.001
Ag	107	0.004	ug/L	51.483	143	0.000
Cd	111	0.011	ug/L	2.339	61	0.000
Cd	114		ug/L		104	0.000
> In	115		ug/L		475551	475551.328
Sn	120	0.067	ug/L	22.512	1189	0.001
Sb	121	0.506	ug/L	17.849	5183	0.010
Sb	123		ug/L		3992	0.007
Ba	135		ug/L		62	0.000
Ba	137	0.003	ug/L	38.865	100	0.000
Ho	165		ug/L		23	0.000
> Lu	175		ug/L		700429	700428.985
Tl	205	0.439	ug/L	22.981	14565	0.015
Pb	208	0.003	ug/L	67.508	788	0.000
Bi	209		ug/L		310	-0.000
Th	232	0.052	ug/L	36.224	3312	0.003
U	238	0.008	ug/L	35.554	898	0.000

Sample ID: QC Std 2

Report Date/Time: Saturday, February 13, 2010 00:30:32

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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	0.9998
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	0.9996
Pb	208Linear Thru Zero	0.9998
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9995
U	238Linear Thru Zero	0.9994

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		103.3			
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		100.7			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		99.7			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		99.3			
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 2

Report Date/Time: Saturday, February 13, 2010 00:30:32

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ICPMS#5 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Saturday, February 13, 2010 00:33:56

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2 no lrs.mth

Dataset File: c:\elandata\Dataset\100211\QC Std 3.532

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	11.166	ug/L	1.604	24819	0.035
Be	9	0.477	ug/L	3.764	274	0.000
B	11	17.337	ug/L	1.195	8483	0.012
Na	23	287.492	ug/L	4.132	1003781	1.394
Mg	24	18.790	ug/L	9.810	43065	0.059
Al	27	38.482	ug/L	22.509	142731	0.189
P	31	60.007	ug/L	5.852	25102	0.021
K	39	365.878	ug/L	11.913	2994596	3.301
Ca	43	231.564	ug/L	4.748	4763	0.006
> Sc	45		ug/L		710284	710283.761
Ti	47	9.162	ug/L	3.981	9205	0.012
V	51	11.590	ug/L	2.520	98526	0.167
Cr	52	11.173	ug/L	2.538	106468	0.130
Cr	53		ug/L		258454	0.014
Mn	55	6.267	ug/L	1.799	89454	0.122
Fe	57	110.319	ug/L	3.456	45566	0.048
Co	59	1.162	ug/L	3.780	13699	0.019
Ni	60	2.164	ug/L	2.269	6136	0.008
Cu	63		ug/L		7591	0.010
Cu	65	1.077	ug/L	5.339	3888	0.005
Zn	66	10.702	ug/L	3.305	22587	0.030
Zn	67		ug/L		29605	0.010
Zn	68		ug/L		17957	0.022
> Ge	74		ug/L		695158	695158.159
As	75	5.282	ug/L	5.590	9077	0.016
Se	77		ug/L		22046	0.000
Se	82	5.182	ug/L	3.326	1276	0.002
Kr	83		ug/L		151	0.000
Sr	88	13.892	ug/L	2.455	300057	0.638
Y	89		ug/L		88	0.000
Mo	98	0.577	ug/L	5.355	3654	0.007
Ag	107	1.142	ug/L	3.253	11775	0.025
Cd	111	1.093	ug/L	2.150	2972	0.006
Cd	114		ug/L		7234	0.015
> In	115		ug/L		469744	469743.561
Sn	120	6.072	ug/L	0.490	63495	0.134
Sb	121	3.584	ug/L	0.213	32523	0.068
Sb	123		ug/L		25154	0.053
Ba	135		ug/L		5937	0.008
Ba	137	2.223	ug/L	2.447	10431	0.015
Ho	165		ug/L		20	-0.000
> Lu	175		ug/L		693153	693152.525
Tl	205	1.526	ug/L	1.245	39895	0.052
Pb	208	2.684	ug/L	1.410	113623	0.163
Bi	209		ug/L		310	-0.000
Th	232	1.533	ug/L	2.325	66756	0.095
U	238	0.323	ug/L	1.054	14408	0.020

Sample ID: QC Std 3

Report Date/Time: Saturday, February 13, 2010 00:36:38

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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	0.9998
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	0.9996
Pb	208Linear Thru Zero	0.9998
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9995
U	238Linear Thru Zero	0.9994

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Li	7	111.661				
Be	9	95.443				
B	11	115.583				
Na	23	114.997				
Mg	24	125.264				
Al	27	128.275				
P	31	120.014				
K	39	121.959				
Ca	43	115.782				
> Sc	45		103.8			
Ti	47	91.618				
V	51	115.900				
Cr	52	111.729				
Cr	53					
Mn	55	125.336				
Fe	57	110.319				
Co	59	116.221				
Ni	60	108.200				
Cu	63					
Cu	65	107.689				
Zn	66	107.024				
Zn	67					
Zn	68					
> Ge	74		101.2			
As	75	105.636				
Se	77					
Se	82	103.645				
Kr	83					
Sr	88	138.920				
Y	89					
Mo	98	115.320				
Ag	107	114.209				
Cd	111	109.349				
Cd	114					
> In	115		98.5			
Sn	120	121.433				
Sb	121	119.463				
Sb	123					
Ba	135					
Ba	137	111.129				
Ho	165					
> Lu	175		98.2			
Tl	205	152.619				
Pb	208	134.199				
Bi	209					
Th	232	153.311				
U	238	161.460				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 3	Sr	88	CRDL is out of limits
QC Std 3	Tl	205	CRDL is out of limits
QC Std 3	Pb	208	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

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Saturday, February 13, 2010 00:40:01

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2 no lrs.mth

Dataset File: c:\elandata\Dataset\100211\QC Std 4.533

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.059	ug/L	23.277	156	0.000
Be	9	0.081	ug/L	4.603	59	0.000
B	11	1.906	ug/L	4.161	1061	0.001
Na	23	98511.438	ug/L	3.085	297471367	477.823
Mg	24	107304.827	ug/L	3.753	208341408	334.975
Al	27	104957.267	ug/L	11.538	321346768	516.163
P	31	92144.608	ug/L	4.308	20027378	32.187
K	39	98532.915	ug/L	5.558	553507110	889.099
Ca	43	91805.251	ug/L	3.408	1415162	2.274
> Sc	45		ug/L		622348	622348.276
Ti	47	1717.838	ug/L	2.169	1391459	2.236
V	51	1.341	ug/L	29.470	-5384	0.019
Cr	52	1.407	ug/L	6.040	22355	0.016
Cr	53		ug/L		152979	-0.104
Mn	55	6.421	ug/L	5.037	80208	0.125
Fe	57	99117.073	ug/L	3.616	26991909	43.373
Co	59	0.386	ug/L	0.751	4078	0.006
Ni	60	3.518	ug/L	2.707	8538	0.013
Cu	63		ug/L		14670	0.023
Cu	65	3.682	ug/L	2.710	10622	0.016
Zn	66	4.486	ug/L	5.028	9118	0.013
Zn	67		ug/L		19278	-0.001
Zn	68		ug/L		3500	0.002
> Ge	74		ug/L		612803	612802.891
As	75	0.768	ug/L	14.002	-524	0.002
Se	77		ug/L		16213	-0.005
Se	82	-1.720	ug/L	3.944	-298	-0.001
Kr	83		ug/L		611	0.001
Sr	88	3.607	ug/L	1.349	72472	0.166
Y	89		ug/L		1020	0.002
Mo	98	1869.881	ug/L	0.816	10392084	23.870
Ag	107	0.131	ug/L	2.845	1342	0.003
Cd	111	0.624	ug/L	23.901	1584	0.004
Cd	114		ug/L		20444	0.047
> In	115		ug/L		435348	435348.084
Sn	120	0.327	ug/L	2.223	3587	0.007
Sb	121	0.155	ug/L	17.575	1858	0.003
Sb	123		ug/L		1430	0.002
Ba	135		ug/L		1868	0.003
Ba	137	0.764	ug/L	1.484	3252	0.005
Ho	165		ug/L		13908	0.022
> Lu	175		ug/L		619085	619084.546
Tl	205	0.033	ug/L	12.807	4388	0.001
Pb	208	0.254	ug/L	1.876	10108	0.015
Bi	209		ug/L		7334	0.011
Th	232	0.035	ug/L	30.986	2301	0.002
U	238	-0.004	ug/L	15.488	353	-0.000

Sample ID: QC Std 4

Report Date/Time: Saturday, February 13, 2010 00:42:44

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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	0.9998
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	0.9996
Pb	208Linear Thru Zero	0.9998
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9995
U	238Linear Thru Zero	0.9994

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23	98.511				
Mg	24	107.305				
Al	27	104.957				
P	31	92.145				
K	39	98.533				
Ca	43	91.805				
> Sc	45		91.0			
Ti	47	85.892				
V	51					
Cr	52	42.627				
Cr	53					
Mn	55	110.702				
Fe	57	99.117				
Co	59	164.328				
Ni	60	106.291				
Cu	63					
Cu	65	110.242				
Zn	66	119.320				
Zn	67					
Zn	68					
> Ge	74		89.2			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88	121.855				
Y	89					
Mo	98	93.494				
Ag	107					
Cd	111	140.552				
Cd	114					
> In	115		91.3			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137	95.732				
Ho	165					
> Lu	175		87.7			
Tl	205					
Pb	208	134.217				
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: Saturday, February 13, 2010 00:46:08

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2 no lrs.mth

Dataset File: c:\elandata\Dataset\100211\QC Std 5.534

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	18.167	ug/L	1.217	34947	0.057
Be	9	17.460	ug/L	2.096	7948	0.013
B	11	18.583	ug/L	0.945	7858	0.012
Na	23	88945.288	ug/L	7.433	265317049	431.423
Mg	24	100245.257	ug/L	5.763	192617528	312.937
Al	27	102250.749	ug/L	2.995	309293835	502.852
P	31	96720.981	ug/L	2.018	20791814	33.786
K	39	103132.998	ug/L	6.711	572693156	930.608
Ca	43	90726.979	ug/L	4.292	1383063	2.247
> Sc	45		ug/L		615299	615298.880
Ti	47	1727.753	ug/L	3.325	1383542	2.248
V	51	24.295	ug/L	6.501	197675	0.349
Cr	52	22.402	ug/L	0.424	172859	0.261
Cr	53		ug/L		154710	-0.099
Mn	55	28.210	ug/L	2.778	339280	0.547
Fe	57	100555.281	ug/L	0.905	27081501	44.003
Co	59	20.677	ug/L	0.778	208925	0.339
Ni	60	22.973	ug/L	3.837	53379	0.086
Cu	63		ug/L		118884	0.193
Cu	65	22.045	ug/L	4.389	60784	0.098
Zn	66	23.260	ug/L	1.117	42229	0.066
Zn	67		ug/L		22632	0.004
Zn	68		ug/L		27229	0.040
> Ge	74		ug/L		620077	620077.433
As	75	21.300	ug/L	3.394	38734	0.066
Se	77		ug/L		16747	-0.005
Se	82	18.408	ug/L	2.013	3898	0.006
Kr	83		ug/L		591	0.001
Sr	88	28.197	ug/L	1.791	576174	1.295
Y	89		ug/L		929	0.002
Mo	98	1867.655	ug/L	1.238	10601584	23.841
Ag	107	20.215	ug/L	1.596	195626	0.440
Cd	111	19.842	ug/L	1.182	50542	0.114
Cd	114		ug/L		139246	0.313
> In	115		ug/L		444706	444706.424
Sn	120	22.357	ug/L	0.254	220134	0.494
Sb	121	21.958	ug/L	1.065	185605	0.416
Sb	123		ug/L		142823	0.320
Ba	135		ug/L		52715	0.085
Ba	137	21.835	ug/L	1.957	91482	0.147
Ho	165		ug/L		13985	0.022
> Lu	175		ug/L		623160	623159.693
Tl	205	23.506	ug/L	0.719	498854	0.795
Pb	208	22.920	ug/L	0.819	868083	1.392
Bi	209		ug/L		8021	0.012
Th	232	24.888	ug/L	3.406	959851	1.539
U	238	26.062	ug/L	1.603	1005163	1.612

Sample ID: QC Std 5

Report Date/Time: Saturday, February 13, 2010 00:48:51

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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	0.9998
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	0.9996
Pb	208Linear Thru Zero	0.9998
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9995
U	238Linear Thru Zero	0.9994

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Li	7	90.833				
Be	9	87.301				
B	11	92.913				
Na	23	88.945				
Mg	24	100.245				
Al	27	102.251				
P	31	96.721				
K	39	103.133				
Ca	43	90.727				
> Sc	45		89.9			
Ti	47	86.388				
V	51	121.474				
Cr	52	96.145				
Cr	53					
Mn	55	109.341				
Fe	57	100.555				
Co	59	102.184				
Ni	60	98.555				
Cu	63					
Cu	65	94.452				
Zn	66	97.894				
Zn	67					
Zn	68					
> Ge	74		90.3			
As	75	106.501				
Se	77					
Se	82	92.041				
Kr	83					
Sr	88	122.808				
Y	89					
Mo	98	93.383				
Ag	107	101.077				
Cd	111	97.054				
Cd	114					
> In	115		93.2			
Sn	120	111.785				
Sb	121	109.791				
Sb	123					
Ba	135					
Ba	137	104.985				
Ho	165					
> Lu	175		88.3			
Tl	205	117.531				
Pb	208	113.529				
Bi	209					
Th	232	124.440				
U	238	130.312				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 5	V	51	ICSAB is out of limits
QC Std 5	Sr	88	ICSAB is out of limits
QC Std 5	Th	232	ICSAB is out of limits
QC Std 5	U	238	ICSAB is out of limits

Sample ID: QC Std 5

Report Date/Time: Saturday, February 13, 2010 00:48:51

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QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Saturday, February 13, 2010 00:52:15

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2 no lrs.mth

Dataset File: c:\elandata\Dataset\100211\QC Std 6.535

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	49.979	ug/L	0.643	103898	0.156
Be	9	49.229	ug/L	2.338	24191	0.036
B	11	99.724	ug/L	4.414	44300	0.066
Na	23	4795.887	ug/L	9.655	15497876	23.262
Mg	24	5772.649	ug/L	14.174	11991798	18.021
Al	27	5264.675	ug/L	4.309	17238004	25.891
P	31	4864.302	ug/L	1.924	1139946	1.699
K	39	5227.462	ug/L	12.069	31976743	47.169
Ca	43	4962.294	ug/L	0.385	82433	0.123
> Sc	45		ug/L		665321	665321.163
Ti	47	51.494	ug/L	2.177	45275	0.067
V	51	52.036	ug/L	4.293	478821	0.748
Cr	52	51.349	ug/L	4.212	411595	0.599
Cr	53		ug/L		222399	-0.016
Mn	55	54.901	ug/L	1.682	711331	1.065
Fe	57	4632.427	ug/L	2.198	1359030	2.027
Co	59	51.974	ug/L	0.956	567597	0.853
Ni	60	52.057	ug/L	1.683	130424	0.196
Cu	63		ug/L		310003	0.465
Cu	65	50.854	ug/L	1.844	151087	0.226
Zn	66	50.782	ug/L	2.944	100372	0.144
Zn	67		ug/L		34929	0.018
Zn	68		ug/L		74204	0.104
> Ge	74		ug/L		687033	687033.225
As	75	48.340	ug/L	2.489	100192	0.149
Se	77		ug/L		22052	0.000
Se	82	48.079	ug/L	1.424	11177	0.016
Kr	83		ug/L		150	0.000
Sr	88	57.471	ug/L	1.352	1257766	2.639
Y	89		ug/L		265	0.000
Mo	98	50.431	ug/L	2.096	306903	0.644
Ag	107	52.764	ug/L	0.881	546933	1.148
Cd	111	51.438	ug/L	1.292	140334	0.294
Cd	114		ug/L		331450	0.695
> In	115		ug/L		476451	476450.610
Sn	120	54.205	ug/L	1.105	571092	1.198
Sb	121	53.129	ug/L	1.297	480253	1.007
Sb	123		ug/L		370446	0.777
Ba	135		ug/L		138794	0.203
Ba	137	52.677	ug/L	0.393	241592	0.354
Ho	165		ug/L		70	0.000
> Lu	175		ug/L		682457	682456.746
Tl	205	56.108	ug/L	3.265	1298158	1.897
Pb	208	56.335	ug/L	1.444	2335773	3.422
Bi	209		ug/L		878	0.001
Th	232	52.368	ug/L	2.317	2210775	3.238
U	238	53.402	ug/L	2.604	2254866	3.304

Sample ID: QC Std 6

Report Date/Time: Saturday, February 13, 2010 00:54:58

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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	0.9998
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	0.9996
Pb	208Linear Thru Zero	0.9998
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9995
U	238Linear Thru Zero	0.9994

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Li	7	99.957				
Be	9	98.458				
B	11	99.724				
Na	23	95.918				
Mg	24	115.453				
Al	27	104.251				
P	31	97.286				
K	39	104.549				
Ca	43	99.246				
> Sc	45		97.2			
Ti	47	102.988				
V	51	104.071				
Cr	52	102.698				
Cr	53					
Mn	55	109.803				
Fe	57	92.649				
Co	59	103.948				
Ni	60	104.114				
Cu	63					
Cu	65	101.709				
Zn	66	101.563				
Zn	67					
Zn	68					
> Ge	74		100.0			
As	75	96.681				
Se	77					
Se	82	96.158				
Kr	83					
Sr	88	114.942				
Y	89					
Mo	98	100.863				
Ag	107	105.529				
Cd	111	102.876				
Cd	114					
> In	115		99.9			
Sn	120	108.410				
Sb	121	106.258				
Sb	123					
Ba	135					
Ba	137	105.353				
Ho	165					
> Lu	175		96.7			
Tl	205	112.217				
Pb	208	112.670				
Bi	209					
Th	232	104.735				
U	238	106.803				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Mg	24	CCV is out of limits (+/- 10%)
QC Std 6	Sr	88	CCV is out of limits (+/- 10%)
QC Std 6	Tl	205	CCV is out of limits (+/- 10%)
QC Std 6	Pb	208	CCV is out of limits (+/- 10%)

Sample ID: QC Std 6

Report Date/Time: Saturday, February 13, 2010 00:54:58

Page 3

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Saturday, February 13, 2010 00:58:23

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2 no lrs.mth

Dataset File: c:\elandata\Dataset\100211\QC Std 7.536

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.026	ug/L	7.875	103	0.000
Be	9	-0.001	ug/L	982.141	23	-0.000
B	11	2.962	ug/L	16.666	1655	0.002
Na	23	-0.020	ug/L	2037.197	12672	-0.000
Mg	24	1.416	ug/L	192.905	4335	0.004
Al	27	1.169	ug/L	64.122	12005	0.006
P	31	-1.105	ug/L	209.260	9616	-0.000
K	39	1.979	ug/L	457.389	642199	0.018
Ca	43	-2.777	ug/L	47.802	621	-0.000
> Sc	45		ug/L		687379	687378.601
Ti	47	0.064	ug/L	44.283	771	0.000
V	51	0.719	ug/L	158.289	-12005	0.010
Cr	52	-0.748	ug/L	8.408	7417	-0.009
Cr	53		ug/L		198248	-0.062
Mn	55	-0.011	ug/L	54.942	2865	-0.000
Fe	57	-1.150	ug/L	27.683	10574	-0.001
Co	59	0.001	ug/L	130.192	165	0.000
Ni	60	0.009	ug/L	123.706	374	0.000
Cu	63		ug/L		538	0.000
Cu	65	0.006	ug/L	30.634	486	0.000
Zn	66	-0.040	ug/L	27.833	1405	-0.000
Zn	67		ug/L		21523	-0.001
Zn	68		ug/L		2677	-0.000
> Ge	74		ug/L		686934	686933.951
As	75	0.262	ug/L	199.995	-1644	0.001
Se	77		ug/L		17076	-0.007
Se	82	0.059	ug/L	236.442	78	0.000
Kr	83		ug/L		144	-0.000
Sr	88	0.002	ug/L	42.750	449	0.000
Y	89		ug/L		78	-0.000
Mo	98	0.074	ug/L	7.928	652	0.001
Ag	107	0.003	ug/L	94.034	139	0.000
Cd	111	0.004	ug/L	92.639	44	0.000
Cd	114		ug/L		98	0.000
> In	115		ug/L		479827	479826.893
Sn	120	0.047	ug/L	19.479	983	0.001
Sb	121	0.233	ug/L	26.756	2759	0.004
Sb	123		ug/L		2095	0.003
Ba	135		ug/L		65	0.000
Ba	137	0.002	ug/L	98.959	94	0.000
Ho	165		ug/L		23	0.000
> Lu	175		ug/L		689718	689717.748
Tl	205	0.384	ug/L	25.224	13059	0.013
Pb	208	0.002	ug/L	45.023	729	0.000
Bi	209		ug/L		350	-0.000
Th	232	0.052	ug/L	32.360	3260	0.003
U	238	0.006	ug/L	37.236	818	0.000

Sample ID: QC Std 7

Report Date/Time: Saturday, February 13, 2010 01:01:07

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	0.9998
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	0.9996
Pb	208Linear Thru Zero	0.9998
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9995
U	238Linear Thru Zero	0.9994

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		100.5			
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		100.0			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		100.6			
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 MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Saturday, February 13, 2010 01:01:07

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ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Saturday, February 13, 2010 01:47:16

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2 no lrs.mth

Dataset File: c:\elandata\Dataset\100211\QC Std 8.544

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	51.229	ug/L	0.288	97041	0.160
Be	9	50.507	ug/L	2.536	22612	0.037
B	11	101.533	ug/L	5.535	41102	0.067
Na	23	4615.194	ug/L	5.796	13589812	22.386
Mg	24	5150.953	ug/L	2.529	9751379	16.080
Al	27	5457.724	ug/L	1.636	16281181	26.840
P	31	4758.221	ug/L	1.711	1016187	1.662
K	39	5191.962	ug/L	13.938	28988594	46.849
Ca	43	5085.185	ug/L	2.271	76940	0.126
> Sc	45		ug/L		606231	606231.317
Ti	47	49.589	ug/L	3.598	39757	0.065
V	51	53.440	ug/L	4.886	448497	0.768
Cr	52	51.853	ug/L	2.117	378712	0.605
Cr	53		ug/L		201213	-0.018
Mn	55	55.007	ug/L	1.237	649467	1.067
Fe	57	4773.640	ug/L	1.145	1275987	2.089
Co	59	52.472	ug/L	2.717	522089	0.861
Ni	60	52.686	ug/L	2.228	120247	0.198
Cu	63		ug/L		280675	0.462
Cu	65	51.140	ug/L	0.386	138465	0.228
Zn	66	51.224	ug/L	1.625	92933	0.145
Zn	67		ug/L		31355	0.017
Zn	68		ug/L		67336	0.103
> Ge	74		ug/L		630474	630473.921
As	75	49.003	ug/L	0.356	93263	0.151
Se	77		ug/L		20340	0.001
Se	82	48.491	ug/L	1.149	10345	0.016
Kr	83		ug/L		138	0.000
Sr	88	57.075	ug/L	1.630	1150686	2.621
Y	89		ug/L		283	0.000
Mo	98	50.753	ug/L	2.728	284577	0.648
Ag	107	52.774	ug/L	2.230	503879	1.148
Cd	111	51.140	ug/L	2.030	128520	0.293
Cd	114		ug/L		309715	0.706
> In	115		ug/L		439016	439016.309
Sn	120	54.452	ug/L	2.341	528583	1.203
Sb	121	53.360	ug/L	1.258	444426	1.011
Sb	123		ug/L		349407	0.795
Ba	135		ug/L		130411	0.192
Ba	137	49.381	ug/L	3.013	225840	0.332
Ho	165		ug/L		71	0.000
> Lu	175		ug/L		680579	680579.192
Tl	205	56.835	ug/L	2.152	1311616	1.921
Pb	208	56.946	ug/L	0.729	2354615	3.459
Bi	209		ug/L		891	0.001
Th	232	53.425	ug/L	2.322	2249619	3.304
U	238	55.579	ug/L	0.693	2340629	3.438

Sample ID: QC Std 8

Report Date/Time: Saturday, February 13, 2010 01:49:59

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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	0.9998
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	0.9996
Pb	208Linear Thru Zero	0.9998
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9995
U	238Linear Thru Zero	0.9994

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Li	7	102.458				
Be	9	101.014				
B	11	101.533				
Na	23	92.304				
Mg	24	103.019				
Al	27	108.074				
P	31	95.164				
K	39	103.839				
Ca	43	101.704				
> Sc	45		88.6			
Ti	47	99.178				
V	51	106.881				
Cr	52	103.706				
Cr	53					
Mn	55	110.014				
Fe	57	95.473				
Co	59	104.945				
Ni	60	105.372				
Cu	63					
Cu	65	102.280				
Zn	66	102.447				
Zn	67					
Zn	68					
> Ge	74		91.8			
As	75	98.007				
Se	77					
Se	82	96.983				
Kr	83					
Sr	88	114.150				
Y	89					
Mo	98	101.505				
Ag	107	105.547				
Cd	111	102.280				
Cd	114					
> In	115		92.1			
Sn	120	108.905				
Sb	121	106.720				
Sb	123					
Ba	135					
Ba	137	98.762				
Ho	165					
> Lu	175		96.4			
Tl	205	113.669				
Pb	208	113.891				
Bi	209					
Th	232	106.850				
U	238	111.158				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	Mn	55	CCV is out of limits (+/- 10%)
QC Std 8	Sr	88	CCV is out of limits (+/- 10%)
QC Std 8	Tl	205	CCV is out of limits (+/- 10%)
QC Std 8	Pb	208	CCV is out of limits (+/- 10%)
QC Std 8	U	238	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Saturday, February 13, 2010 01:53:24

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2 no lrs.mth

Dataset File: c:\elandata\Dataset\100211\QC Std 9.545

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.033	ug/L	26.068	105	0.000
Be	9	-0.008	ug/L	112.554	17	-0.000
B	11	3.113	ug/L	17.893	1536	0.002
Na	23	1.014	ug/L	94.056	14341	0.005
Mg	24	1.108	ug/L	51.707	3334	0.003
Al	27	-0.394	ug/L	216.303	6001	-0.002
P	31	-1.060	ug/L	214.364	8591	-0.000
K	39	9.319	ug/L	246.510	611768	0.084
Ca	43	-3.450	ug/L	36.352	543	-0.000
> Sc	45		ug/L		613501	613500.981
Ti	47	-0.014	ug/L	333.369	626	-0.000
V	51	1.430	ug/L	147.700	-4738	0.021
Cr	52	-0.268	ug/L	40.508	10053	-0.003
Cr	53		ug/L		173114	-0.068
Mn	55	-0.005	ug/L	191.616	2637	-0.000
Fe	57	0.272	ug/L	452.251	9813	0.000
Co	59	0.005	ug/L	49.329	181	0.000
Ni	60	0.001	ug/L	1228.422	315	0.000
Cu	63		ug/L		509	0.000
Cu	65	-0.007	ug/L	90.311	398	-0.000
Zn	66	0.015	ug/L	229.658	1367	0.000
Zn	67		ug/L		18816	-0.002
Zn	68		ug/L		2427	-0.000
> Ge	74		ug/L		621408	621407.941
As	75	0.568	ug/L	74.091	-905	0.002
Se	77		ug/L		14468	-0.008
Se	82	-0.021	ug/L	381.894	53	-0.000
Kr	83		ug/L		135	0.000
Sr	88	0.004	ug/L	72.916	440	0.000
Y	89		ug/L		80	0.000
Mo	98	0.034	ug/L	29.991	376	0.000
Ag	107	0.004	ug/L	51.405	137	0.000
Cd	111	0.009	ug/L	73.037	51	0.000
Cd	114		ug/L		94	0.000
> In	115		ug/L		441525	441524.644
Sn	120	0.047	ug/L	26.991	906	0.001
Sb	121	0.188	ug/L	38.315	2158	0.004
Sb	123		ug/L		1614	0.003
Ba	135		ug/L		59	0.000
Ba	137	0.003	ug/L	43.996	97	0.000
Ho	165		ug/L		22	0.000
> Lu	175		ug/L		684341	684341.230
Tl	205	0.473	ug/L	22.285	15002	0.016
Pb	208	0.004	ug/L	43.176	800	0.000
Bi	209		ug/L		331	-0.000
Th	232	0.046	ug/L	37.139	2998	0.003
U	238	0.007	ug/L	42.856	869	0.000

Sample ID: QC Std 9

Report Date/Time: Saturday, February 13, 2010 01:56:08

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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	0.9998
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	0.9996
Pb	208Linear Thru Zero	0.9998
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9995
U	238Linear Thru Zero	0.9994

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		89.7			
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		90.4			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		92.6			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		97.0			
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 8

Sample Date/Time: Saturday, February 13, 2010 02:30:19

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2 no lrs.mth

Dataset File: c:\elandata\Dataset\100211\QC Std 8.551

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	51.641	ug/L	2.037	98174	0.161
Be	9	51.272	ug/L	3.277	23041	0.038
B	11	101.353	ug/L	2.097	41187	0.067
Na	23	5155.663	ug/L	15.588	15209607	25.007
Mg	24	5815.069	ug/L	10.993	11041229	18.153
Al	27	5479.626	ug/L	5.622	16411795	26.948
P	31	4776.734	ug/L	1.047	1024090	1.669
K	39	4975.496	ug/L	7.682	27879723	44.896
Ca	43	5083.228	ug/L	3.083	77224	0.126
> Sc	45		ug/L		608508	608508.109
Ti	47	51.640	ug/L	3.404	41515	0.067
V	51	52.828	ug/L	1.274	445069	0.759
Cr	52	52.290	ug/L	1.906	383211	0.610
Cr	53		ug/L		228567	0.025
Mn	55	55.346	ug/L	3.544	655801	1.074
Fe	57	4736.275	ug/L	1.544	1270824	2.073
Co	59	52.651	ug/L	2.326	525841	0.864
Ni	60	52.947	ug/L	0.959	121316	0.199
Cu	63		ug/L		285196	0.468
Cu	65	51.888	ug/L	2.935	140974	0.231
Zn	66	51.320	ug/L	0.932	93399	0.146
Zn	67		ug/L		35008	0.023
Zn	68		ug/L		69087	0.105
> Ge	74		ug/L		632496	632495.881
As	75	48.946	ug/L	1.523	93451	0.151
Se	77		ug/L		22623	0.004
Se	82	49.003	ug/L	1.798	10488	0.016
Kr	83		ug/L		132	-0.000
Sr	88	57.087	ug/L	1.775	1157791	2.621
Y	89		ug/L		264	0.000
Mo	98	50.843	ug/L	0.257	286733	0.649
Ag	107	53.053	ug/L	1.294	509612	1.154
Cd	111	51.614	ug/L	0.798	130488	0.295
Cd	114		ug/L		312635	0.708
> In	115		ug/L		441498	441497.839
Sn	120	54.868	ug/L	1.824	535663	1.212
Sb	121	53.647	ug/L	0.843	449375	1.017
Sb	123		ug/L		347006	0.785
Ba	135		ug/L		132082	0.195
Ba	137	50.280	ug/L	1.261	228981	0.338
Ho	165		ug/L		76	0.000
> Lu	175		ug/L		677647	677646.807
Tl	205	57.866	ug/L	1.880	1329411	1.956
Pb	208	57.181	ug/L	1.352	2354009	3.473
Bi	209		ug/L		717	0.001
Th	232	53.964	ug/L	3.472	2261964	3.337
U	238	55.761	ug/L	1.581	2337953	3.450

Sample ID: QC Std 8

Report Date/Time: Saturday, February 13, 2010 02:33:02

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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	0.9998
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	0.9996
Pb	208Linear Thru Zero	0.9998
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9995
U	238Linear Thru Zero	0.9994

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Li	7	103.281				
Be	9	102.544				
B	11	101.353				
Na	23	103.113				
Mg	24	116.301				
Al	27	108.507				
P	31	95.535				
K	39	99.510				
Ca	43	101.665				
> Sc	45		88.9			
Ti	47	103.280				
V	51	105.657				
Cr	52	104.580				
Cr	53					
Mn	55	110.691				
Fe	57	94.725				
Co	59	105.303				
Ni	60	105.895				
Cu	63					
Cu	65	103.776				
Zn	66	102.640				
Zn	67					
Zn	68					
> Ge	74		92.1			
As	75	97.891				
Se	77					
Se	82	98.006				
Kr	83					
Sr	88	114.174				
Y	89					
Mo	98	101.687				
Ag	107	106.107				
Cd	111	103.228				
Cd	114					
> In	115		92.6			
Sn	120	109.735				
Sb	121	107.293				
Sb	123					
Ba	135					
Ba	137	100.561				
Ho	165					
> Lu	175		96.0			
Tl	205	115.731				
Pb	208	114.362				
Bi	209					
Th	232	107.928				
U	238	111.522				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	Mg	24	CCV is out of limits (+/- 10%)
QC Std 8	Mn	55	CCV is out of limits (+/- 10%)
QC Std 8	Sr	88	CCV is out of limits (+/- 10%)
QC Std 8	Tl	205	CCV is out of limits (+/- 10%)
QC Std 8	Pb	208	CCV is out of limits (+/- 10%)
QC Std 8	U	238	CCV is out of limits (+/- 10%)

Sample ID: QC Std 8

Report Date/Time: Saturday, February 13, 2010 02:33:02

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QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Saturday, February 13, 2010 02:36:28

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2 no lrs.mth

Dataset File: c:\elandata\Dataset\100211\QC Std 9.552

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.014	ug/L	25.546	70	0.000
Be	9	-0.004	ug/L	115.381	20	-0.000
B	11	3.055	ug/L	16.843	1561	0.002
Na	23	1.287	ug/L	127.173	15676	0.006
Mg	24	0.548	ug/L	190.193	2334	0.002
Al	27	-0.347	ug/L	131.859	6335	-0.002
P	31	-0.321	ug/L	908.011	9035	-0.000
K	39	3.218	ug/L	11.450	597924	0.029
Ca	43	-3.172	ug/L	63.637	565	-0.000
> Sc	45		ug/L		632680	632680.079
Ti	47	-0.040	ug/L	76.002	624	-0.000
V	51	0.320	ug/L	397.764	-14689	0.005
Cr	52	-0.003	ug/L	6842.710	12341	-0.000
Cr	53		ug/L		198914	-0.036
Mn	55	0.006	ug/L	75.655	2857	0.000
Fe	57	0.535	ug/L	138.907	10198	0.000
Co	59	0.003	ug/L	98.855	165	0.000
Ni	60	0.014	ug/L	54.833	357	0.000
Cu	63		ug/L		479	0.000
Cu	65	-0.003	ug/L	240.844	421	-0.000
Zn	66	0.018	ug/L	167.342	1409	0.000
Zn	67		ug/L		21182	0.001
Zn	68		ug/L		2668	0.000
> Ge	74		ug/L		638418	638418.068
As	75	0.376	ug/L	73.715	-1316	0.001
Se	77		ug/L		16770	-0.005
Se	82	-0.080	ug/L	75.128	42	-0.000
Kr	83		ug/L		149	0.000
Sr	88	0.001	ug/L	75.595	397	0.000
Y	89		ug/L		72	-0.000
Mo	98	0.032	ug/L	16.611	368	0.000
Ag	107	0.003	ug/L	55.299	130	0.000
Cd	111	0.006	ug/L	123.983	44	0.000
Cd	114		ug/L		98	0.000
> In	115		ug/L		446680	446679.715
Sn	120	0.047	ug/L	24.389	920	0.001
Sb	121	0.201	ug/L	28.532	2300	0.004
Sb	123		ug/L		1743	0.003
Ba	135		ug/L		64	0.000
Ba	137	0.003	ug/L	45.778	95	0.000
Ho	165		ug/L		23	0.000
> Lu	175		ug/L		680442	680442.048
Tl	205	0.528	ug/L	19.424	16168	0.018
Pb	208	0.002	ug/L	46.678	709	0.000
Bi	209		ug/L		253	-0.000
Th	232	0.048	ug/L	40.121	3026	0.003
U	238	0.006	ug/L	47.889	803	0.000

Sample ID: QC Std 9

Report Date/Time: Saturday, February 13, 2010 02:39:12

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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	0.9998
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	0.9996
Pb	208Linear Thru Zero	0.9998
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9995
U	238Linear Thru Zero	0.9994

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		92.5			
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		92.9			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		93.7			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		96.4			
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

ICPMS#5 - Summary Report

Sample ID: 1202024740

Sample Date/Time: Saturday, February 13, 2010 02:42:38

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 945381|1|ba|

Method File: c:\elandata\Method\6020 2 no lrs.mth

Dataset File: c:\elandata\Dataset\100211\1202024740.553

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.019	ug/L	35.694	97	0.000
Be	9	-0.022	ug/L	38.806	14	-0.000
B	11	1.439	ug/L	9.097	1065	0.001
Na	23	2.246	ug/L	132.673	22354	0.011
Mg	24	1.608	ug/L	53.633	5334	0.005
Al	27	10.954	ug/L	29.607	50091	0.054
P	31	-6.149	ug/L	7.435	9348	-0.002
K	39	7.903	ug/L	24.451	754057	0.071
Ca	43	36.541	ug/L	9.135	1433	0.001
> Sc	45		ug/L		763834	763834.053
Ti	47	0.303	ug/L	19.175	1094	0.000
V	51	-5.406	ug/L	10.575	-80611	-0.078
Cr	52	3.937	ug/L	6.949	49978	0.046
Cr	53		ug/L		529405	0.343
Mn	55	0.325	ug/L	10.334	8168	0.006
Fe	57	7.260	ug/L	0.916	14559	0.003
Co	59	-0.004	ug/L	40.953	112	-0.000
Ni	60	0.007	ug/L	97.684	410	0.000
Cu	63		ug/L		791	0.000
Cu	65	0.030	ug/L	24.151	620	0.000
Zn	66	0.892	ug/L	3.534	3110	0.003
Zn	67		ug/L		81554	0.091
Zn	68		ug/L		6852	0.006
> Ge	74		ug/L		663524	663524.485
As	75	-1.464	ug/L	90.789	-5124	-0.005
Se	77		ug/L		47452	0.040
Se	82	0.452	ug/L	21.312	163	0.000
Kr	83		ug/L		153	0.000
Sr	88	0.246	ug/L	3.541	5457	0.011
Y	89		ug/L		104	0.000
Mo	98	0.008	ug/L	42.334	232	0.000
Ag	107	-0.004	ug/L	26.130	64	-0.000
Cd	111	0.001	ug/L	456.145	34	0.000
Cd	114		ug/L		40	-0.000
> In	115		ug/L		450541	450540.576
Sn	120	0.137	ug/L	10.088	1818	0.003
Sb	121	0.034	ug/L	47.528	887	0.001
Sb	123		ug/L		701	0.001
Ba	135		ug/L		225	0.000
Ba	137	0.063	ug/L	7.227	384	0.000
Ho	165		ug/L		30	0.000
> Lu	175		ug/L		706121	706121.491
Tl	205	0.191	ug/L	1.046	8783	0.006
Pb	208	0.022	ug/L	5.323	1605	0.001
Bi	209		ug/L		551	0.000
Th	232	0.005	ug/L	61.702	1289	0.000
U	238	-0.008	ug/L	3.189	239	-0.000

Sample ID: 1202024740

Report Date/Time: Saturday, February 13, 2010 02:45:23

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	0.9998
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	0.9996
Pb	208Linear Thru Zero	0.9998
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9995
U	238Linear Thru Zero	0.9994

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		111.6			
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		96.6			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		94.5			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		100.1			
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: 1202024740

Report Date/Time: Saturday, February 13, 2010 02:45:23

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ICPMS#5 - Summary Report

Sample ID: 1202024741

Sample Date/Time: Saturday, February 13, 2010 02:48:49

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 945381|1|baj

Method File: c:\elandata\Method\6020 2 no lrs.mth

Dataset File: c:\elandata\Dataset\100211\1202024741.554

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	41.846	ug/L	1.793	101077	0.131
Be	9	41.755	ug/L	3.111	23842	0.031
B	11	87.746	ug/L	2.476	45358	0.058
Na	23	2393.939	ug/L	2.875	8988494	11.612
Mg	24	2543.968	ug/L	14.798	6127516	7.942
Al	27	2165.648	ug/L	13.442	8237791	10.650
P	31	2084.827	ug/L	2.963	573981	0.728
K	39	2334.501	ug/L	0.629	16994092	21.065
Ca	43	2077.455	ug/L	2.245	40533	0.051
> Sc	45		ug/L		773194	773193.793
Ti	47	42.939	ug/L	2.847	43990	0.056
V	51	36.200	ug/L	5.164	380388	0.520
Cr	52	48.381	ug/L	4.507	451353	0.565
Cr	53		ug/L		573663	0.392
Mn	55	48.585	ug/L	4.067	731608	0.942
Fe	57	1798.148	ug/L	2.940	620429	0.787
Co	59	45.143	ug/L	2.246	572829	0.741
Ni	60	45.273	ug/L	3.042	131809	0.170
Cu	63		ug/L		309393	0.399
Cu	65	43.831	ug/L	2.346	151372	0.195
Zn	66	52.141	ug/L	2.674	100791	0.148
Zn	67		ug/L		103146	0.121
Zn	68		ug/L		76731	0.110
> Ge	74		ug/L		672320	672320.231
As	75	46.090	ug/L	4.793	93379	0.142
Se	77		ug/L		53816	0.048
Se	82	48.481	ug/L	3.126	11022	0.016
Kr	83		ug/L		174	0.000
Sr	88	56.903	ug/L	1.979	1168201	2.613
Y	89		ug/L		180	0.000
Mo	98	49.724	ug/L	2.161	283858	0.635
Ag	107	52.156	ug/L	1.391	507187	1.135
Cd	111	50.094	ug/L	2.956	128189	0.287
Cd	114		ug/L		306794	0.686
> In	115		ug/L		446995	446994.924
Sn	120	52.950	ug/L	3.279	523263	1.170
Sb	121	53.361	ug/L	2.110	452455	1.011
Sb	123		ug/L		356902	0.797
Ba	135		ug/L		127104	0.183
Ba	137	47.228	ug/L	3.209	220107	0.317
Ho	165		ug/L		66	0.000
> Lu	175		ug/L		693661	693661.025
Tl	205	53.054	ug/L	2.177	1247918	1.793
Pb	208	55.632	ug/L	1.663	2344230	3.379
Bi	209		ug/L		1800538	2.595
Th	232	51.430	ug/L	1.153	2206926	3.180
U	238	53.716	ug/L	1.833	2305410	3.323

Sample ID: 1202024741

Report Date/Time: Saturday, February 13, 2010 02:51:34

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	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	0.9998
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	0.9996
Pb	208Linear Thru Zero	0.9998
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9995
U	238Linear Thru Zero	0.9994

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		113.0			
	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		97.9			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		93.7			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		98.3			
	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: 1202024741

Report Date/Time: Saturday, February 13, 2010 02:51:34

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ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Saturday, February 13, 2010 03:25:48

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2 no lrs.mth

Dataset File: c:\elandata\Dataset\100211\QC Std 8.560

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	50.210	ug/L	2.089	93428	0.157
Be	9	50.584	ug/L	3.838	22240	0.037
B	11	98.835	ug/L	4.103	39329	0.066
Na	23	4719.008	ug/L	6.110	13639229	22.889
Mg	24	5318.190	ug/L	11.414	9894696	16.602
Al	27	5213.173	ug/L	14.206	15281832	25.638
P	31	4798.087	ug/L	2.811	1006568	1.676
K	39	5897.001	ug/L	20.437	32237844	53.211
Ca	43	5084.446	ug/L	0.769	75602	0.126
> Sc	45		ug/L		595665	595665.211
Ti	47	51.056	ug/L	3.086	40183	0.066
V	51	52.683	ug/L	2.102	434300	0.757
Cr	52	53.436	ug/L	3.039	382938	0.624
Cr	53		ug/L		238587	0.050
Mn	55	55.453	ug/L	3.197	643188	1.076
Fe	57	4752.011	ug/L	2.992	1247977	2.079
Co	59	52.965	ug/L	2.739	517715	0.869
Ni	60	53.251	ug/L	3.324	119400	0.200
Cu	63		ug/L		277517	0.465
Cu	65	51.632	ug/L	3.144	137313	0.230
Zn	66	51.947	ug/L	1.555	92626	0.147
Zn	67		ug/L		35751	0.025
Zn	68		ug/L		68009	0.106
> Ge	74		ug/L		619828	619827.816
As	75	48.059	ug/L	1.431	89895	0.148
Se	77		ug/L		24047	0.007
Se	82	49.125	ug/L	1.819	10300	0.017
Kr	83		ug/L		157	0.000
Sr	88	57.742	ug/L	1.428	1140245	2.652
Y	89		ug/L		249	0.000
Mo	98	51.082	ug/L	1.682	280504	0.652
Ag	107	53.509	ug/L	1.018	500470	1.164
Cd	111	51.727	ug/L	0.606	127341	0.296
Cd	114		ug/L		305533	0.711
> In	115		ug/L		429904	429903.583
Sn	120	54.278	ug/L	1.558	516025	1.199
Sb	121	53.822	ug/L	0.963	439003	1.020
Sb	123		ug/L		341624	0.794
Ba	135		ug/L		128636	0.192
Ba	137	49.570	ug/L	0.978	222971	0.333
Ho	165		ug/L		66	0.000
> Lu	175		ug/L		669317	669317.430
Tl	205	50.706	ug/L	3.433	1151309	1.714
Pb	208	57.417	ug/L	1.606	2334775	3.488
Bi	209		ug/L		709	0.001
Th	232	54.232	ug/L	0.936	2245603	3.354
U	238	56.473	ug/L	1.189	2338970	3.494

Sample ID: QC Std 8

Report Date/Time: Saturday, February 13, 2010 03:28:31

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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	0.9998
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	0.9996
Pb	208Linear Thru Zero	0.9998
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9995
U	238Linear Thru Zero	0.9994

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Li	7	100.420				
Be	9	101.128				
B	11	98.835				
Na	23	94.380				
Mg	24	106.364				
Al	27	103.231				
P	31	95.962				
K	39	117.940				
Ca	43	101.689				
> Sc	45		87.1			
Ti	47	102.112				
V	51	105.365				
Cr	52	106.872				
Cr	53					
Mn	55	110.907				
Fe	57	95.040				
Co	59	105.929				
Ni	60	106.502				
Cu	63					
Cu	65	103.264				
Zn	66	103.895				
Zn	67					
Zn	68					
> Ge	74		90.2			
As	75	96.117				
Se	77					
Se	82	98.250				
Kr	83					
Sr	88	115.483				
Y	89					
Mo	98	102.163				
Ag	107	107.017				
Cd	111	103.454				
Cd	114					
> In	115		90.1			
Sn	120	108.556				
Sb	121	107.643				
Sb	123					
Ba	135					
Ba	137	99.140				
Ho	165					
> Lu	175		94.8			
Tl	205	101.413				
Pb	208	114.835				
Bi	209					
Th	232	108.463				
U	238	112.946				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	K	39	CCV is out of limits (+/- 10%)
QC Std 8	Mn	55	CCV is out of limits (+/- 10%)
QC Std 8	Sr	88	CCV is out of limits (+/- 10%)
QC Std 8	Pb	208	CCV is out of limits (+/- 10%)
QC Std 8	U	238	CCV is out of limits (+/- 10%)

Sample ID: QC Std 8

Report Date/Time: Saturday, February 13, 2010 03:28:31

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QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Saturday, February 13, 2010 03:31:57

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2 no lrs.mth

Dataset File: c:\elandata\Dataset\100211\QC Std 9.561

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.014	ug/L	25.919	68	0.000
Be	9	-0.011	ug/L	59.391	16	-0.000
B	11	3.000	ug/L	17.289	1502	0.002
Na	23	-0.373	ug/L	360.542	10337	-0.002
Mg	24	1.449	ug/L	71.815	4001	0.005
Al	27	0.140	ug/L	879.068	7669	0.001
P	31	-0.820	ug/L	183.212	8719	-0.000
K	39	1.030	ug/L	418.876	572248	0.009
Ca	43	-5.268	ug/L	29.751	520	-0.000
> Sc	45		ug/L		618452	618452.457
Ti	47	0.012	ug/L	184.614	652	0.000
V	51	0.665	ug/L	97.168	-11314	0.010
Cr	52	0.054	ug/L	108.666	12463	0.001
Cr	53		ug/L		203181	-0.022
Mn	55	0.009	ug/L	139.034	2826	0.000
Fe	57	-0.764	ug/L	116.111	9617	-0.000
Co	59	0.001	ug/L	77.698	148	0.000
Ni	60	0.009	ug/L	34.541	338	0.000
Cu	63		ug/L		469	0.000
Cu	65	-0.002	ug/L	741.831	414	-0.000
Zn	66	-0.005	ug/L	439.335	1355	-0.000
Zn	67		ug/L		21241	0.001
Zn	68		ug/L		2634	0.000
> Ge	74		ug/L		632073	632072.858
As	75	-0.047	ug/L	1398.817	-2121	-0.000
Se	77		ug/L		17349	-0.004
Se	82	-0.045	ug/L	182.348	49	-0.000
Kr	83		ug/L		137	0.000
Sr	88	0.001	ug/L	109.940	388	0.000
Y	89		ug/L		70	-0.000
Mo	98	0.035	ug/L	10.821	374	0.000
Ag	107	0.004	ug/L	29.674	133	0.000
Cd	111	0.008	ug/L	111.670	48	0.000
Cd	114		ug/L		79	0.000
> In	115		ug/L		434758	434758.378
Sn	120	0.051	ug/L	26.469	932	0.001
Sb	121	0.217	ug/L	29.498	2358	0.004
Sb	123		ug/L		1796	0.003
Ba	135		ug/L		63	0.000
Ba	137	0.000	ug/L	286.910	83	0.000
Ho	165		ug/L		26	0.000
> Lu	175		ug/L		677400	677399.720
Tl	205	1.838	ug/L	15.898	46228	0.062
Pb	208	0.002	ug/L	9.972	712	0.000
Bi	209		ug/L		199	-0.000
Th	232	0.048	ug/L	31.260	3039	0.003
U	238	0.005	ug/L	32.378	779	0.000

Sample ID: QC Std 9

Report Date/Time: Saturday, February 13, 2010 03:34:41

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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	0.9998
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	0.9996
Pb	208Linear Thru Zero	0.9998
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9995
U	238Linear Thru Zero	0.9994

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		90.4			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		92.0			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		91.2			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		96.0			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 9	TI	205	CCB is out of limits (+/- PQL)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 245392001

Sample Date/Time: Saturday, February 13, 2010 03:50:30

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945381|1|baj

Method File: c:\elandata\Method\6020 2 no lrs.mth

Dataset File: c:\elandata\Dataset\100211\245392001.564

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.093	ug/L	12.378	259	0.000
Be	9	-0.003	ug/L	203.439	23	-0.000
B	11	8.827	ug/L	1.185	4561	0.006
Na	23	165.748	ug/L	19.637	593257	0.804
Mg	24	18.328	ug/L	16.857	42731	0.057
Al	27	85.160	ug/L	12.618	312078	0.419
P	31	0.824	ug/L	263.437	10627	0.000
K	39	126.602	ug/L	3.697	1490585	1.142
Ca	43	72.258	ug/L	10.255	1997	0.002
> Sc	45		ug/L		724480	724480.486
Ti	47	1.610	ug/L	9.764	2268	0.002
V	51	-9.975	ug/L	23.810	-124578	-0.143
Cr	52	4.458	ug/L	4.959	51799	0.052
Cr	53		ug/L		601941	0.481
Mn	55	1.889	ug/L	5.131	29690	0.037
Fe	57	64.724	ug/L	6.653	32000	0.028
Co	59	0.015	ug/L	14.794	333	0.000
Ni	60	0.235	ug/L	12.168	1008	0.001
Cu	63		ug/L		11562	0.015
Cu	65	1.643	ug/L	2.725	5787	0.007
Zn	66	1.404	ug/L	5.562	3925	0.004
Zn	67		ug/L		83803	0.099
Zn	68		ug/L		7543	0.008
> Ge	74		ug/L		639500	639500.419
As	75	-3.525	ug/L	44.661	-9043	-0.011
Se	77		ug/L		56825	0.057
Se	82	0.176	ug/L	50.097	97	0.000
Kr	83		ug/L		137	0.000
Sr	88	0.463	ug/L	3.053	9380	0.021
Y	89		ug/L		1471	0.003
Mo	98	0.022	ug/L	6.287	296	0.000
Ag	107	0.002	ug/L	64.515	112	0.000
Cd	111	0.004	ug/L	157.465	38	0.000
Cd	114		ug/L		50	-0.000
> In	115		ug/L		425055	425055.250
Sn	120	1.039	ug/L	2.432	10185	0.023
Sb	121	-0.013	ug/L	4.152	462	-0.000
Sb	123		ug/L		364	-0.000
Ba	135		ug/L		2302	0.003
Ba	137	0.847	ug/L	3.625	4031	0.006
Ho	165		ug/L		117	0.000
> Lu	175		ug/L		694356	694355.591
Tl	205	0.313	ug/L	2.082	11486	0.011
Pb	208	1.814	ug/L	3.981	77112	0.110
Bi	209		ug/L		355	-0.000
Th	232	0.011	ug/L	3.067	1528	0.001
U	238	0.908	ug/L	4.174	39557	0.056

Sample ID: 245392001

Report Date/Time: Saturday, February 13, 2010 03:53:14

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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	0.9998
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	0.9996
Pb	208Linear Thru Zero	0.9998
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9995
U	238Linear Thru Zero	0.9994

Sample ID: 245392001

Report Date/Time: Saturday, February 13, 2010 03:53:14

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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		105.9			
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		93.1			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		89.1			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		98.4			
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: 245392001

Report Date/Time: Saturday, February 13, 2010 03:53:14

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ICPMS#5 - Summary Report

Sample ID: 1202024742

Sample Date/Time: Saturday, February 13, 2010 03:56:40

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 945381[1]ba]

Method File: c:\elandata\Method\6020 2 no lrs.mth

Dataset File: c:\elandata\Dataset\100211\1202024742.565

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.096	ug/L	3.417	271	0.000
Be	9	-0.016	ug/L	32.361	16	-0.000
B	11	16.316	ug/L	2.831	8270	0.011
Na	23	159.435	ug/L	1.308	581256	0.773
Mg	24	7.575	ug/L	55.848	18681	0.024
Al	27	15.384	ug/L	4.170	64144	0.076
P	31	-3.662	ug/L	39.843	9621	-0.001
K	39	192.686	ug/L	9.776	1948096	1.739
Ca	43	61.971	ug/L	0.580	1840	0.002
> Sc	45		ug/L		734157	734157.155
Ti	47	0.507	ug/L	6.223	1247	0.001
V	51	-8.022	ug/L	21.038	-105181	-0.115
Cr	52	3.305	ug/L	15.254	42612	0.039
Cr	53		ug/L		620951	0.496
Mn	55	0.609	ug/L	2.375	11896	0.012
Fe	57	8.942	ug/L	20.236	14528	0.004
Co	59	-0.001	ug/L	394.514	151	-0.000
Ni	60	0.039	ug/L	7.265	484	0.000
Cu	63		ug/L		2414	0.003
Cu	65	0.239	ug/L	12.279	1279	0.001
Zn	66	1.695	ug/L	5.374	4418	0.005
Zn	67		ug/L		89059	0.108
Zn	68		ug/L		8092	0.009
> Ge	74		ug/L		634688	634688.217
As	75	-2.737	ug/L	43.764	-7418	-0.008
Se	77		ug/L		58916	0.061
Se	82	0.044	ug/L	149.432	68	0.000
Kr	83		ug/L		150	0.000
Sr	88	0.316	ug/L	2.670	6612	0.015
Y	89		ug/L		335	0.001
Mo	98	-0.004	ug/L	39.131	159	-0.000
Ag	107	-0.001	ug/L	49.582	85	-0.000
Cd	111	0.004	ug/L	107.361	38	0.000
Cd	114		ug/L		34	-0.000
> In	115		ug/L		430692	430692.184
Sn	120	1.848	ug/L	1.895	18020	0.041
Sb	121	-0.024	ug/L	10.349	379	-0.000
Sb	123		ug/L		313	-0.000
Ba	135		ug/L		525	0.001
Ba	137	0.169	ug/L	4.764	889	0.001
Ho	165		ug/L		40	0.000
> Lu	175		ug/L		706801	706801.431
Tl	205	0.189	ug/L	8.713	8726	0.006
Pb	208	0.049	ug/L	5.032	2759	0.003
Bi	209		ug/L		336	-0.000
Th	232	-0.010	ug/L	12.921	622	-0.001
U	238	-0.006	ug/L	6.425	295	-0.000

Sample ID: 1202024742

Report Date/Time: Saturday, February 13, 2010 03:59:24

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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	0.9998
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	0.9996
Pb	208Linear Thru Zero	0.9998
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9995
U	238Linear Thru Zero	0.9994

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		107.3			
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		92.4			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		90.3			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		100.2			
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

ICPMS#5 - Summary Report

Sample ID: 1202024743

Sample Date/Time: Saturday, February 13, 2010 04:02:50

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 945381|1|baj

Method File: c:\elandata\Method\6020 2 no lrs.mth

Dataset File: c:\elandata\Dataset\100211\1202024743.566

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	40.531	ug/L	1.335	92081	0.127
Be	9	41.950	ug/L	3.929	22529	0.031
B	11	103.830	ug/L	1.526	50405	0.069
Na	23	2458.942	ug/L	2.620	8683752	11.927
Mg	24	2432.104	ug/L	3.983	5522077	7.592
Al	27	2443.526	ug/L	7.680	8745060	12.017
P	31	2087.296	ug/L	0.844	540568	0.729
K	39	2448.064	ug/L	1.154	16726544	22.090
Ca	43	2128.843	ug/L	1.425	39046	0.053
> Sc	45		ug/L		727096	727096.313
Ti	47	43.312	ug/L	2.151	41733	0.056
V	51	47.085	ug/L	0.770	471710	0.677
Cr	52	51.616	ug/L	1.298	452157	0.602
Cr	53		ug/L		699670	0.612
Mn	55	48.426	ug/L	2.320	686062	0.939
Fe	57	1783.492	ug/L	1.005	578965	0.780
Co	59	44.578	ug/L	1.215	532105	0.732
Ni	60	44.067	ug/L	0.969	120711	0.166
Cu	63		ug/L		283906	0.390
Cu	65	42.601	ug/L	1.361	138412	0.190
Zn	66	52.163	ug/L	1.344	94795	0.148
Zn	67		ug/L		140131	0.189
Zn	68		ug/L		73808	0.113
> Ge	74		ug/L		631743	631743.344
As	75	69.381	ug/L	2.230	133141	0.214
Se	77		ug/L		62246	0.067
Se	82	18.807	ug/L	2.248	4057	0.006
Kr	83		ug/L		186	0.000
Sr	88	57.033	ug/L	1.110	1102627	2.619
Y	89		ug/L		419	0.001
Mo	98	48.848	ug/L	1.689	262590	0.624
Ag	107	51.106	ug/L	0.178	467962	1.112
Cd	111	10.287	ug/L	2.132	24811	0.059
Cd	114		ug/L		58998	0.140
> In	115		ug/L		420872	420871.917
Sn	120	55.527	ug/L	1.320	516751	1.227
Sb	121	195.062	ug/L	1.320	1556002	3.696
Sb	123		ug/L		1243374	2.954
Ba	135		ug/L		121857	0.172
Ba	137	44.730	ug/L	0.943	212932	0.300
Ho	165		ug/L		434	0.001
> Lu	175		ug/L		708354	708353.959
Tl	205	80.449	ug/L	7.275	1928520	2.719
Pb	208	45.731	ug/L	2.651	1967521	2.778
Bi	209		ug/L		935	0.001
Th	232	53.932	ug/L	3.726	2362577	3.335
U	238	55.849	ug/L	3.058	2446953	3.455

Sample ID: 1202024743

Report Date/Time: Saturday, February 13, 2010 04:05:35

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	0.9998
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	0.9996
Pb	208Linear Thru Zero	0.9998
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9995
U	238Linear Thru Zero	0.9994

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		106.3			
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		92.0			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		88.3			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		100.4			
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

ICPMS#5 - Summary Report

Sample ID: 1202024744

Sample Date/Time: Saturday, February 13, 2010 04:09:01

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 945381|5|baj

Method File: c:\elandata\Method\6020 2 no lrs.mth

Dataset File: c:\elandata\Dataset\100211\1202024744.567

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.025	ug/L	20.706	90	0.000
Be	9	-0.008	ug/L	107.184	17	-0.000
B	11	4.736	ug/L	8.772	2210	0.003
Na	23	27.837	ug/L	25.942	94319	0.135
Mg	24	4.240	ug/L	10.424	9336	0.013
Al	27	12.961	ug/L	12.147	46409	0.064
P	31	2.606	ug/L	125.946	9418	0.001
K	39	26.413	ug/L	16.338	710578	0.238
Ca	43	13.204	ug/L	20.088	799	0.000
> Sc	45		ug/L		615964	615964.035
Ti	47	0.365	ug/L	17.493	931	0.000
V	51	-0.840	ug/L	141.062	-24812	-0.012
Cr	52	1.185	ug/L	18.465	20532	0.014
Cr	53		ug/L		305007	0.145
Mn	55	0.412	ug/L	9.344	7622	0.008
Fe	57	10.443	ug/L	12.602	12592	0.005
Co	59	0.004	ug/L	20.010	178	0.000
Ni	60	0.034	ug/L	11.634	394	0.000
Cu	63		ug/L		2234	0.003
Cu	65	0.317	ug/L	6.998	1285	0.001
Zn	66	0.149	ug/L	22.072	1512	0.000
Zn	67		ug/L		35850	0.029
Zn	68		ug/L		3559	0.002
> Ge	74		ug/L		586181	586181.204
As	75	-0.471	ug/L	129.040	-2736	-0.001
Se	77		ug/L		26872	0.014
Se	82	0.066	ug/L	119.962	67	0.000
Kr	83		ug/L		123	-0.000
Sr	88	0.084	ug/L	3.592	1937	0.004
Y	89		ug/L		329	0.001
Mo	98	0.020	ug/L	18.402	277	0.000
Ag	107	-0.004	ug/L	4.223	59	-0.000
Cd	111	0.000	ug/L	1090.304	28	0.000
Cd	114		ug/L		41	-0.000
> In	115		ug/L		412767	412767.030
Sn	120	0.207	ug/L	4.427	2308	0.005
Sb	121	0.030	ug/L	55.184	781	0.001
Sb	123		ug/L		583	0.000
Ba	135		ug/L		471	0.001
Ba	137	0.156	ug/L	2.840	792	0.001
Ho	165		ug/L		44	0.000
> Lu	175		ug/L		677243	677243.062
Tl	205	5.145	ug/L	16.702	122067	0.174
Pb	208	0.344	ug/L	3.626	14756	0.021
Bi	209		ug/L		210	-0.000
Th	232	0.012	ug/L	88.714	1559	0.001
U	238	0.168	ug/L	4.138	7565	0.010

Sample ID: 1202024744

Report Date/Time: Saturday, February 13, 2010 04:11:46

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	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	0.9998
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	0.9996
Pb	208Linear Thru Zero	0.9998
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9995
U	238Linear Thru Zero	0.9994

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		90.0			
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		85.3			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		86.6			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		96.0			
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: 1202024744

Report Date/Time: Saturday, February 13, 2010 04:11:46

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ICPMS#5 - Summary Report

Sample ID: 245392002

Sample Date/Time: Saturday, February 13, 2010 04:15:13

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945381|1|ba|

Method File: c:\elandata\Method\6020 2 no lrs.mth

Dataset File: c:\elandata\Dataset\100211\245392002.568

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.101	ug/L	8.568	273	0.000
Be	9	-0.001	ug/L	949.539	24	-0.000
B	11	13.549	ug/L	5.692	6711	0.009
Na	23	201.901	ug/L	6.570	710989	0.979
Mg	24	12.751	ug/L	10.138	29698	0.040
Al	27	125.191	ug/L	9.715	446216	0.616
P	31	-3.468	ug/L	46.224	9380	-0.001
K	39	124.408	ug/L	13.490	1450509	1.123
Ca	43	70.413	ug/L	5.844	1933	0.002
> Sc	45		ug/L		712425	712425.086
Ti	47	1.667	ug/L	1.482	2285	0.002
V	51	-5.889	ug/L	69.996	-80844	-0.085
Cr	52	3.935	ug/L	5.850	46589	0.046
Cr	53		ug/L		542183	0.411
Mn	55	2.230	ug/L	3.292	33932	0.043
Fe	57	56.360	ug/L	8.536	28861	0.025
Co	59	0.026	ug/L	11.359	459	0.000
Ni	60	0.327	ug/L	0.373	1239	0.001
Cu	63		ug/L		7632	0.010
Cu	65	1.095	ug/L	2.318	3958	0.005
Zn	66	1.611	ug/L	3.891	4160	0.005
Zn	67		ug/L		82113	0.100
Zn	68		ug/L		7661	0.008
> Ge	74		ug/L		618585	618585.157
As	75	-2.325	ug/L	38.816	-6420	-0.007
Se	77		ug/L		50003	0.049
Se	82	-0.031	ug/L	159.025	51	-0.000
Kr	83		ug/L		157	0.000
Sr	88	0.482	ug/L	1.520	9790	0.022
Y	89		ug/L		2964	0.007
Mo	98	0.043	ug/L	7.356	411	0.001
Ag	107	0.002	ug/L	74.754	113	0.000
Cd	111	0.003	ug/L	570.146	35	0.000
Cd	114		ug/L		51	-0.000
> In	115		ug/L		426144	426144.014
Sn	120	0.171	ug/L	3.752	2045	0.004
Sb	121	0.009	ug/L	58.144	642	0.000
Sb	123		ug/L		523	0.000
Ba	135		ug/L		2130	0.003
Ba	137	0.783	ug/L	0.252	3737	0.005
Ho	165		ug/L		222	0.000
> Lu	175		ug/L		694441	694440.687
Tl	205	1.635	ug/L	9.795	42533	0.055
Pb	208	1.237	ug/L	0.796	52817	0.075
Bi	209		ug/L		299	-0.000
Th	232	0.041	ug/L	7.569	2827	0.003
U	238	0.577	ug/L	2.406	25360	0.036

Sample ID: 245392002

Report Date/Time: Saturday, February 13, 2010 04:17:58

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	0.9998
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	0.9996
Pb	208Linear Thru Zero	0.9998
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9995
U	238Linear Thru Zero	0.9994

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		104.1			
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		90.0			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		89.4			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		98.4			
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: 245392002

Report Date/Time: Saturday, February 13, 2010 04:17:58

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ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Saturday, February 13, 2010 04:21:22

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2 no lrs.mth

Dataset File: c:\elandata\Dataset\100211\QC Std 6.569

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	49.845	ug/L	3.432	91039	0.156
Be	9	50.775	ug/L	3.608	21915	0.037
B	11	99.719	ug/L	2.830	38951	0.066
Na	23	4779.679	ug/L	5.693	13584321	23.184
Mg	24	5728.714	ug/L	9.750	10479662	17.883
Al	27	4960.635	ug/L	5.261	14285521	24.396
P	31	4703.041	ug/L	1.740	968748	1.643
K	39	5471.384	ug/L	12.772	29385080	49.370
Ca	43	5032.559	ug/L	5.459	73400	0.125
> Sc	45		ug/L		584765	584765.241
Ti	47	50.052	ug/L	1.788	38686	0.065
V	51	52.487	ug/L	6.936	424440	0.754
Cr	52	51.473	ug/L	3.561	362399	0.601
Cr	53		ug/L		230139	0.044
Mn	55	54.445	ug/L	1.331	619938	1.056
Fe	57	4660.896	ug/L	1.780	1201580	2.040
Co	59	51.074	ug/L	1.303	490204	0.838
Ni	60	51.956	ug/L	3.251	114334	0.195
Cu	63		ug/L		269761	0.461
Cu	65	49.583	ug/L	0.816	129492	0.221
Zn	66	51.322	ug/L	1.821	88099	0.146
Zn	67		ug/L		34250	0.025
Zn	68		ug/L		65286	0.106
> Ge	74		ug/L		596591	596590.871
As	75	47.803	ug/L	1.357	86051	0.147
Se	77		ug/L		22747	0.006
Se	82	47.880	ug/L	2.630	9662	0.016
Kr	83		ug/L		147	0.000
Sr	88	56.723	ug/L	4.032	1083831	2.605
Y	89		ug/L		256	0.000
Mo	98	50.041	ug/L	3.952	265880	0.639
Ag	107	52.475	ug/L	4.416	474851	1.141
Cd	111	51.051	ug/L	3.106	121619	0.292
Cd	114		ug/L		297263	0.714
> In	115		ug/L		416305	416304.804
Sn	120	53.650	ug/L	3.120	493635	1.185
Sb	121	53.452	ug/L	3.098	421923	1.013
Sb	123		ug/L		330963	0.794
Ba	135		ug/L		124191	0.186
Ba	137	48.531	ug/L	1.898	217540	0.326
Ho	165		ug/L		70	0.000
> Lu	175		ug/L		667038	667037.623
Tl	205	50.103	ug/L	3.121	1133642	1.694
Pb	208	56.977	ug/L	0.776	2308976	3.461
Bi	209		ug/L		698	0.001
Th	232	54.250	ug/L	2.075	2238962	3.355
U	238	56.188	ug/L	1.394	2319045	3.476

Sample ID: QC Std 6

Report Date/Time: Saturday, February 13, 2010 04:24:05

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	0.9998
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	0.9996
Pb	208Linear Thru Zero	0.9998
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9995
U	238Linear Thru Zero	0.9994

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Li	7	99.691				
Be	9	101.549				
B	11	99.719				
Na	23	95.594				
Mg	24	114.574				
Al	27	98.230				
P	31	94.061				
K	39	109.428				
Ca	43	100.651				
> Sc	45		85.5			
Ti	47	100.103				
V	51	104.975				
Cr	52	102.946				
Cr	53					
Mn	55	108.891				
Fe	57	93.218				
Co	59	102.148				
Ni	60	103.912				
Cu	63					
Cu	65	99.167				
Zn	66	102.643				
Zn	67					
Zn	68					
> Ge	74		86.8			
As	75	95.606				
Se	77					
Se	82	95.760				
Kr	83					
Sr	88	113.446				
Y	89					
Mo	98	100.081				
Ag	107	104.949				
Cd	111	102.102				
Cd	114					
> In	115		87.3			
Sn	120	107.301				
Sb	121	106.905				
Sb	123					
Ba	135					
Ba	137	97.061				
Ho	165					
> Lu	175		94.5			
Tl	205	100.205				
Pb	208	113.953				
Bi	209					
Th	232	108.501				
U	238	112.376				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Mg	24	CCV is out of limits (+/- 10%)
QC Std 6	Sr	88	CCV is out of limits (+/- 10%)
QC Std 6	Pb	208	CCV is out of limits (+/- 10%)
QC Std 6	U	238	CCV is out of limits (+/- 10%)

Sample ID: QC Std 6

Report Date/Time: Saturday, February 13, 2010 04:24:05

Page 3

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Saturday, February 13, 2010 04:27:30

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2 no lrs.mth

Dataset File: c:\elandata\Dataset\100211\QC Std 7.570

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.011	ug/L	53.864	59	0.000
Be	9	-0.001	ug/L	1255.386	20	-0.000
B	11	3.188	ug/L	16.765	1499	0.002
Na	23	1.689	ug/L	32.462	15675	0.008
Mg	24	1.742	ug/L	65.510	4334	0.005
Al	27	-0.177	ug/L	893.103	6335	-0.001
P	31	-2.460	ug/L	87.321	7936	-0.001
K	39	7.578	ug/L	64.131	577803	0.068
Ca	43	-2.072	ug/L	13.725	540	-0.000
> Sc	45		ug/L		586902	586901.947
Ti	47	-0.011	ug/L	368.736	601	-0.000
V	51	0.448	ug/L	148.192	-12547	0.006
Cr	52	-0.099	ug/L	155.656	10781	-0.001
Cr	53		ug/L		193305	-0.021
Mn	55	0.012	ug/L	23.558	2716	0.000
Fe	57	-1.003	ug/L	26.093	9065	-0.000
Co	59	0.003	ug/L	59.844	159	0.000
Ni	60	0.008	ug/L	94.381	318	0.000
Cu	63		ug/L		703	0.000
Cu	65	-0.002	ug/L	330.128	394	-0.000
Zn	66	-0.035	ug/L	65.357	1229	-0.000
Zn	67		ug/L		20792	0.002
Zn	68		ug/L		2470	0.000
> Ge	74		ug/L		596900	596900.325
As	75	0.248	ug/L	211.892	-1475	0.001
Se	77		ug/L		15928	-0.005
Se	82	-0.009	ug/L	692.929	54	-0.000
Kr	83		ug/L		131	0.000
Sr	88	0.002	ug/L	82.406	388	0.000
Y	89		ug/L		79	0.000
Mo	98	0.038	ug/L	11.480	375	0.000
Ag	107	0.003	ug/L	8.140	124	0.000
Cd	111	0.010	ug/L	45.519	51	0.000
Cd	114		ug/L		91	0.000
> In	115		ug/L		416825	416824.936
Sn	120	0.054	ug/L	17.925	918	0.001
Sb	121	0.229	ug/L	26.955	2364	0.004
Sb	123		ug/L		1809	0.003
Ba	135		ug/L		55	0.000
Ba	137	0.003	ug/L	88.935	93	0.000
Ho	165		ug/L		23	0.000
> Lu	175		ug/L		670980	670980.155
Tl	205	2.753	ug/L	9.528	66491	0.093
Pb	208	0.003	ug/L	36.481	735	0.000
Bi	209		ug/L		185	-0.000
Th	232	0.056	ug/L	34.312	3333	0.003
U	238	0.006	ug/L	33.310	803	0.000

Sample ID: QC Std 7

Report Date/Time: Saturday, February 13, 2010 04:30:15

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	0.9998
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	0.9996
Pb	208Linear Thru Zero	0.9998
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9995
U	238Linear Thru Zero	0.9994

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		85.8			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		86.9			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		87.4			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		95.1			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message
 QC Std 7 Tl 205CCB is out of limits (+/- PQL)

QC Action

QC Action Line: Continue

ICPMS #5 Daily Performance Report

Sample ID: Sample

Sample Date/Time: Saturday, February 13, 2010 10:14:49

Sample Description:

Method File: c:\elandata\Method\Daily2.mth

Dataset File: c:\elandata\Dataset\default\Sample.480

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	5702.1	5702.138	98.108	1.7
Mg	24.0	53382.2	53382.156	369.934	0.7
Co	58.9	126956.1	126956.090	1481.192	1.2
Rh	102.9	234012.5	234012.506	651.114	0.3
In	114.9	304048.2	304048.187	1620.031	0.5
Pb	208.0	236889.8	236889.778	1242.706	0.5
[> Ba	137.9	270555.9	270555.908	489.635	0.2
[Ba++	69.0	5659.3	0.021	0.000	1.5
[> Ce	139.9	338733.5	338733.542	1728.021	0.5
[CeO	155.9	7831.6	0.023	0.000	1.3
Bkgd	220.0	13.8	13.800	1.304	9.4

Current Optimization File Data

Current Value	Description
0.87	Nebulizer Gas Flow
5.25	Lens Voltage
1450.00	ICP RF Power
-1718.75	Analog Stage Voltage
1200.00	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	9	5.5	5355.3
Co	59	9	5.8	129010.6
In	115	9	6.0	301212.4

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	585	2072	0.621
Be	9.0	9.0	2053	2088	0.617
Mg	24.0	24.0	5687	2100	0.581
Mg	25.0	25.0	5939	2100	0.585
Mg	26.0	25.9	6157	2100	0.592
Co	58.9	58.9	14168	2125	0.589
Rh	102.9	102.9	24868	2180	0.582
In	114.9	114.9	27782	2200	0.579
Ce	139.9	139.9	33866	2220	0.587
Pb	206.0	206.0	49948	2305	0.611
Pb	207.0	207.0	50159	2240	0.650
Pb	208.0	208.0	50451	2265	0.716
U	238.1	238.1	57726	2275	0.762

ICPMS#5 - Summary Report

Sample ID: Blank

Sample Date/Time: Saturday, February 13, 2010 12:47:35

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\dl only.mth

Dataset File: C:\elandata\Dataset\100213\Blank.053

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		584144	
[	Tl	205		ug/L		1850	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Simple Linear	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175						
[	Tl	205						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: Blank

Report Date/Time: Saturday, February 13, 2010 12:47:47

Page 1

ICPMS#5 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Saturday, February 13, 2010 12:52:04

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\l only.mth

Dataset File: C:\elandata\Dataset\100213\Standard 1.054

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		559965	559964.697
[TI	205	10.000	ug/L	0.320	238938	0.424

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
TI	205	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[> Lu	175					
[TI	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: Standard 1

Report Date/Time: Saturday, February 13, 2010 12:52:13

Page 1

ICPMS#5 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Saturday, February 13, 2010 12:56:31

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\l only.mth

Dataset File: C:\elandata\Dataset\100213\Standard 2.055

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		554052	554051.604
[	Tl	205	99.765	ug/L	0.503	1896992	3.421

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[>	Lu	175					
[	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: Standard 2

Report Date/Time: Saturday, February 13, 2010 12:56:40

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Saturday, February 13, 2010 13:00:58

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\l only.mth

Dataset File: C:\elandata\Dataset\100213\QC Std 1.056

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		550788	550787.866
[	TI	205	54.500	ug/L	1.302	1031011	1.869

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
TI	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175			94.3		
[	TI	205	109.000				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 1

Report Date/Time: Saturday, February 13, 2010 13:01:08

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Saturday, February 13, 2010 13:05:28

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\I only.mth

Dataset File: C:\elandata\Dataset\100213\QC Std 2.057

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		584684	584684.196
[	Tl	205	-0.020	ug/L	10.931	1458	-0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[>	Lu	175			100.1		
[	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 2

Report Date/Time: Saturday, February 13, 2010 13:05:40

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Saturday, February 13, 2010 13:09:58

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\dl only.mth

Dataset File: C:\elandata\Dataset\100213\QC Std 3.058

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		571927	571927.291
[	Tl	205	1.235	ug/L	1.416	26027	0.042

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175		97.9				
[	Tl	205	123.498					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 3

Report Date/Time: Saturday, February 13, 2010 13:10:08

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Saturday, February 13, 2010 13:14:27

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\tl only.mth

Dataset File: C:\elandata\Dataset\100213\QC Std 4.059

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		530602	530602.221
[	Tl	205	-0.031	ug/L	1.635	1120	-0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175			90.8			
[	Tl	205						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 4

Report Date/Time: Saturday, February 13, 2010 13:14:37

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Saturday, February 13, 2010 13:18:56

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\TI only.mth

Dataset File: C:\elandata\Dataset\100213\QC Std 5.060

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		523376	523376.020
[	TI	205	21.918	ug/L	0.853	395001	0.752

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
TI	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[>	Lu	175			89.6			
[	TI	205	109.592					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 5

Report Date/Time: Saturday, February 13, 2010 13:19:07

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Saturday, February 13, 2010 13:23:26

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\tl only.mth

Dataset File: C:\elandata\Dataset\100213\QC Std 6.061

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		562682	562682.271
[	TI	205	54.213	ug/L	0.391	1047744	1.859

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
TI	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175			96.3		
[	TI	205	108.425				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 6

Report Date/Time: Saturday, February 13, 2010 13:23:37

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Saturday, February 13, 2010 13:27:57

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\atl only.mth

Dataset File: C:\elandata\Dataset\100213\QC Std 7.062

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		583578	583578.315
[	TI	205	-0.033	ug/L	9.529	1194	-0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
TI	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Duplicate Rel. % Difference
[>	Lu	175			99.9		
[	TI	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Saturday, February 13, 2010 14:04:04

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\I only.mth

Dataset File: C:\elandata\Dataset\100213\QC Std 8.070

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		548816	548816.323
[	Tl	205	54.226	ug/L	0.758	1022122	1.859

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175		94.0				
[	Tl	205	108.452					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 8

Report Date/Time: Saturday, February 13, 2010 14:04:15

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Saturday, February 13, 2010 14:08:35

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\l only.mth

Dataset File: C:\elandata\Dataset\100213\QC Std 9.071

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		567137	567136.767
[	Tl	205	-0.031	ug/L	9.440	1187	-0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175			97.1		
[	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Saturday, February 13, 2010 14:40:10

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\I only.mth

Dataset File: C:\elandata\Dataset\100213\QC Std 8.078

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		549171	549170.862
[	Tl	205	53.714	ug/L	1.207	1013119	1.842

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175		94.0			
[	Tl	205	107.429				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 8

Report Date/Time: Saturday, February 13, 2010 14:40:21

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Saturday, February 13, 2010 14:44:41

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\l only.mth

Dataset File: C:\elandata\Dataset\100213\QC Std 9.079

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		564802	564801.521
[	Tl	205	-0.052	ug/L	1.475	784	-0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution %	Duplicate Rel. % Difference
[>	Lu	175		96.7			
[	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 9

Report Date/Time: Saturday, February 13, 2010 14:44:53

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Saturday, February 13, 2010 15:20:49

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\tl only.mth

Dataset File: C:\elandata\Dataset\100213\QC Std 8.087

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		546752	546751.652
[	Tl	205	54.066	ug/L	0.814	1015311	1.854

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175			93.6			
[	Tl	205	108.133					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 8

Report Date/Time: Saturday, February 13, 2010 15:21:00

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Saturday, February 13, 2010 15:25:20

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\tl only.mth

Dataset File: C:\elandata\Dataset\100213\QC Std 9.088

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		571668	571668.446
[	TI	205	-0.057	ug/L	2.797	686	-0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
TI	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175			97.9			
[	TI	205						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 9

Report Date/Time: Saturday, February 13, 2010 15:25:32

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Saturday, February 13, 2010 16:01:52

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Tl only.mth

Dataset File: C:\elandata\Dataset\100213\QC Std 8.096

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		551605	551605.265
[	Tl	205	54.455	ug/L	0.567	1031705	1.867

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[>	Lu	175			94.4			
[	Tl	205	108.911					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 8

Report Date/Time: Saturday, February 13, 2010 16:02:03

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Saturday, February 13, 2010 16:06:23

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\tl only.mth

Dataset File: C:\elandata\Dataset\100213\QC Std 9.097

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		559224	559223.595
[	Tl	205	-0.056	ug/L	4.151	703	-0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175		95.7				
[	Tl	205						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 9

Report Date/Time: Saturday, February 13, 2010 16:06:35

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Saturday, February 13, 2010 16:38:23

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\dl only.mth

Dataset File: C:\elandata\Dataset\100213\QC Std 8.104

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		558018	558017.702
[	Tl	205	53.683	ug/L	0.276	1028921	1.841

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175		95.5				
[	Tl	205	107.365					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 8

Report Date/Time: Saturday, February 13, 2010 16:38:34

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Saturday, February 13, 2010 16:42:54

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\tl only.mth

Dataset File: C:\elandata\Dataset\100213\QC Std 9.105

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		557455	557455.053
[	Tl	205	-0.050 ug/L	5.729	810	-0.002

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9997

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[>	Lu	175		95.4			
[	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 9

Report Date/Time: Saturday, February 13, 2010 16:43:06

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202024740

Sample Date/Time: Saturday, February 13, 2010 16:47:27

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 945381|1|baj

Method File: c:\elandata\Method\ti only.mth

Dataset File: C:\elandata\Dataset\100213\1202024740.106

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		542477	542476.980
[	Tl	205	-0.070	ug/L	1.085	418	-0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175		92.9			
[	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202024740

Report Date/Time: Saturday, February 13, 2010 16:47:39

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202024741

Sample Date/Time: Saturday, February 13, 2010 16:52:01

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 945381|1|ba|

Method File: c:\elandata\Method\tl only.mth

Dataset File: C:\elandata\Dataset\100213\1202024741.107

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		556350	556350.047
[	Tl	205	49.763	ug/L	2.240	950963	1.706

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175			95.2			
[	Tl	205						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202024741

Report Date/Time: Saturday, February 13, 2010 16:52:14

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Saturday, February 13, 2010 17:19:16

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\I only.mth

Dataset File: C:\elandata\Dataset\100213\QC Std 8.113

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		558689	558688.998
[	Tl	205	52.540	ug/L	0.852	1008241	1.802

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175			95.6		
[	Tl	205	105.080				

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 8

Report Date/Time: Saturday, February 13, 2010 17:19:27

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Saturday, February 13, 2010 17:23:47

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\tl only.mth

Dataset File: C:\elandata\Dataset\100213\QC Std 9.114

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		562402	562401.936
[TI	205	0.007	ug/L	18.295	1915	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
TI	205	Linear Thru Zero	0.9997

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[> Lu	175		96.3			
[TI	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 9

Report Date/Time: Saturday, February 13, 2010 17:23:59

Page 1

ICPMS#5 - Summary Report

Sample ID: 245392001

Sample Date/Time: Saturday, February 13, 2010 17:37:29

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945381|1|baj

Method File: c:\elandata\Method\l only.mth

Dataset File: C:\elandata\Dataset\100213\245392001.117

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		552793	552793.474
[	Tl	205	-0.063	ug/L	2.091	563	-0.002

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175		94.6			
[	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 245392001

Report Date/Time: Saturday, February 13, 2010 17:37:41

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202024742

Sample Date/Time: Saturday, February 13, 2010 17:42:01

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 945381|1|baj

Method File: c:\elandata\Method\tl only.mth

Dataset File: C:\elandata\Dataset\100213\1202024742.118

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		553348	553347.788
[TI	205	-0.067	ug/L	1.617	486	-0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
TI	205	Linear Thru Zero	0.9997

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[> Lu	175		94.7			
[TI	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202024742

Report Date/Time: Saturday, February 13, 2010 17:42:13

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202024743

Sample Date/Time: Saturday, February 13, 2010 17:46:34

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 945381|1|ba|

Method File: c:\elandata\Method\Ti only.mth

Dataset File: C:\elandata\Dataset\100213\1202024743.119

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		546835	546834.946
[	Ti	205	80.603	ug/L	1.046	1513111	2.764

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Ti	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175		93.6				
[	Ti	205						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202024743

Report Date/Time: Saturday, February 13, 2010 17:46:47

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202024744

Sample Date/Time: Saturday, February 13, 2010 17:51:08

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 945381|5|ba|

Method File: c:\elandata\Method\tl only.mth

Dataset File: C:\elandata\Dataset\100213\1202024744.120

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		559294	559293.900
[	Tl	205	1.051	ug/L	1.677	21917	0.036

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution %	Duplicate Rel. % Difference
[>	Lu	175		95.7			
[	Tl	205					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202024744

Report Date/Time: Saturday, February 13, 2010 17:51:21

Page 1

ICPMS#5 - Summary Report

Sample ID: 245392002

Sample Date/Time: Saturday, February 13, 2010 17:55:42

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945381|1|baj

Method File: c:\elandata\Method\l only.mth

Dataset File: C:\elandata\Dataset\100213\245392002.121

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		559587	559586.879
[	Tl	205	0.194	ug/L	1.175	5487	0.007

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
[>	Lu	175		95.8			
[	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 245392002

Report Date/Time: Saturday, February 13, 2010 17:55:55

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Saturday, February 13, 2010 18:00:14

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\l only.mth

Dataset File: C:\elandata\Dataset\100213\QC Std 6.122

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		559472	559472.446
[	TI	205	52.261	ug/L	1.442	1004312	1.792

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
TI	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175			95.8		
[	TI	205	104.522				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 6

Report Date/Time: Saturday, February 13, 2010 18:00:25

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Saturday, February 13, 2010 18:04:46

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\tl only.mth

Dataset File: C:\elandata\Dataset\100213\QC Std 7.123

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		560652	560651.681
[	Tl	205	0.227	ug/L	3.659	6130	0.008

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175			96.0			
[	Tl	205						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Saturday, February 13, 2010 18:04:57

Page 1

ICPMS#5 - Summary Report

Sample ID: Blank

Sample Date/Time: Saturday, February 13, 2010 19:49:05

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\pb and mn.mth

Dataset File: c:\elandata\Dataset\100211\Blank.633

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		789491	
[	Mn	55		ug/L		2179	
[>	Lu	175		ug/L		556941	
[	Pb	208		ug/L		784	

Sample ID: Blank

Report Date/Time: Saturday, February 13, 2010 19:49:29

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Sc	45Simple Linear	
Mn	55Simple Linear	
Lu	175Simple Linear	
Pb	208Simple Linear	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[>	Sc	45					
[	Mn	55					
[>	Lu	175					
[	Pb	208					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Saturday, February 13, 2010 19:50:56

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\pb and mn.mth

Dataset File: c:\elandata\Dataset\100211\Standard 1.634

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		788902	788901.551
[	Mn	55	10.000	ug/L	1.091	118614	0.148
[>	Lu	175		ug/L		563794	563794.378
[	Pb	208	10.000	ug/L	1.888	416089	0.737

Sample ID: Standard 1

Report Date/Time: Saturday, February 13, 2010 19:51:18

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Lu	175Linear Thru Zero	
Pb	208Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	Sc	45					
[	Mn	55					
[>	Lu	175					
[	Pb	208					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Saturday, February 13, 2010 19:52:45

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\pb and mn.mth

Dataset File: c:\elandata\Dataset\100211\Standard 2.635

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		812022	812022.489
[	Mn	55	99.928	ug/L	3.068	1118692	1.375
[>	Lu	175		ug/L		553247	553247.144
[	Pb	208	99.844	ug/L	0.660	3522003	6.365

Sample ID: Standard 2

Report Date/Time: Saturday, February 13, 2010 19:53:07

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Lu	175Linear Thru Zero	
Pb	208Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	Sc	45					
[	Mn	55					
[>	Lu	175					
[	Pb	208					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Saturday, February 13, 2010 19:54:35

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\pb and mn.mth

Dataset File: c:\elandata\Dataset\100211\QC Std 1.636

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		802659	802658.606
[	Mn	55	53.008	ug/L	2.401	587712	0.730
[>	Lu	175		ug/L		558589	558589.299
[	Pb	208	53.552	ug/L	1.910	1907404	3.414

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Pb	208	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Sc	45			101.7			
[	Mn	55	106.016					
[>	Lu	175			100.3			
[	Pb	208	107.105					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 1

Report Date/Time: Saturday, February 13, 2010 19:54:57

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ICPMS#5 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Saturday, February 13, 2010 19:56:27

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\pb and mn.mth

Dataset File: c:\elandata\Dataset\100211\QC Std 2.637

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		834372	834371.527
[	Mn	55	0.022	ug/L	17.543	2556	0.000
[>	Lu	175		ug/L		556823	556822.656
[	Pb	208	0.005	ug/L	13.284	961	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Pb	208	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel.	% Difference
[>	Sc	45			105.7			
[	Mn	55						
[>	Lu	175			100.0			
[	Pb	208						

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 2

Report Date/Time: Saturday, February 13, 2010 19:56:52

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ICPMS#5 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Saturday, February 13, 2010 19:58:20

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\pb and mn.mth

Dataset File: c:\elandata\Dataset\100211\QC Std 3.638

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		829559	829559.016
[	Mn	55	6.096	ug/L	1.652	71889	0.084
[>	Lu	175		ug/L		560373	560373.172
[	Pb	208	2.585	ug/L	1.592	93110	0.165

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Pb	208	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Sc	45		105.1				
[	Mn	55	121.921					
[>	Lu	175		100.6				
[	Pb	208	129.231					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Saturday, February 13, 2010 20:00:11

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\pb and mn.mth

Dataset File: c:\elandata\Dataset\100211\QC Std 4.639

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		691953	691953.489
[	Mn	55	6.110	ug/L	3.119	60064	0.084
[>	Lu	175		ug/L		517489	517489.439
[	Pb	208	0.242	ug/L	2.755	8701	0.015

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Pb	208	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	Sc	45		87.6			
[	Mn	55	105.346				
[>	Lu	175		92.9			
[	Pb	208	127.895				

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: Saturday, February 13, 2010 20:00:34

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ICPMS#5 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Saturday, February 13, 2010 20:02:02

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\pb and mn.mth

Dataset File: c:\elandata\Dataset\100211\QC Std 5.640

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		655555	655555.008
[	Mn	55	27.729	ug/L	1.538	251963	0.382
[>	Lu	175		ug/L		514883	514882.508
[	Pb	208	22.269	ug/L	1.221	731581	1.420

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Pb	208	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Sc	45			83.0			
[	Mn	55	107.477					
[>	Lu	175			92.4			
[	Pb	208	110.300					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 5

Report Date/Time: Saturday, February 13, 2010 20:02:25

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Saturday, February 13, 2010 20:03:55

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\pb and mn.mth

Dataset File: c:\elandata\Dataset\100211\QC Std 6.641

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		712075	712074.956
[	Mn	55	53.491	ug/L	1.389	526208	0.736
[>	Lu	175		ug/L		566323	566323.079
[	Pb	208	53.726	ug/L	2.866	1939590	3.425

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Pb	208	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[>	Sc	45		90.2			
[	Mn	55	106.983				
[>	Lu	175		101.7			
[	Pb	208	107.452				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 6

Report Date/Time: Saturday, February 13, 2010 20:04:18

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Saturday, February 13, 2010 20:05:48

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\pb and mn.mth

Dataset File: c:\elandata\Dataset\100211\QC Std 7.642

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		751821	751821.171
[	Mn	55	0.021	ug/L	33.271	2288	0.000
[>	Lu	175		ug/L		564773	564773.467
[	Pb	208	-0.001	ug/L	204.497	764	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Pb	208	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[>	Sc	45			95.2		
[	Mn	55					
[>	Lu	175		101.4			
[	Pb	208					

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

Report Date/Time: Saturday, February 13, 2010 20:06:12

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ICPMS#5 - Summary Report

Sample ID: 1202024740

Sample Date/Time: Saturday, February 13, 2010 20:20:43

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 945381|1|baj

Method File: c:\elandata\Method\pb and mn.mth

Dataset File: c:\elandata\Dataset\100211\1202024740.647

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		827182	827181.960
[	Mn	55	0.335	ug/L	5.758	6099	0.005
[>	Lu	175		ug/L		571745	571745.073
[	Pb	208	0.017	ug/L	5.774	1410	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Lu	175Linear Thru Zero	
Pb	208Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Sc	45						
[	Mn	55		104.8				
[>	Lu	175		102.7				
[	Pb	208						

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202024740

Report Date/Time: Saturday, February 13, 2010 20:21:07

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ICPMS#5 - Summary Report

Sample ID: 1202024741

Sample Date/Time: Saturday, February 13, 2010 20:22:37

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 945381|1|baj

Method File: c:\elandata\Method\pb and mn.mth

Dataset File: c:\elandata\Dataset\100211\1202024741.648

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		804815	804815.458
[	Mn	55	53.395	ug/L	2.811	593514	0.735
[>	Lu	175		ug/L		561511	561511.312
[	Pb	208	55.230	ug/L	1.367	1977589	3.521

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Pb	208	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[>	Sc	45			101.9		
[	Mn	55					
[>	Lu	175			100.8		
[	Pb	208					

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: 1202024741

Report Date/Time: Saturday, February 13, 2010 20:23:01

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Saturday, February 13, 2010 20:24:30

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\pb and mn.mth

Dataset File: c:\elandata\Dataset\100211\QC Std 6.649

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		744481	744480.634
[	Mn	55	53.690	ug/L	0.914	552140	0.739
[>	Lu	175		ug/L		563876	563876.475
[	Pb	208	53.486	ug/L	3.162	1922364	3.410

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Pb	208	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Sc	45			94.3			
[	Mn	55	107.380					
[>	Lu	175		101.2				
[	Pb	208	106.972					

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

Report Date/Time: Saturday, February 13, 2010 20:24:53

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ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Saturday, February 13, 2010 20:26:23

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\pb and mn.mth

Dataset File: c:\elandata\Dataset\100211\QC Std 7.650

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		782623	782623.016
[	Mn	55	0.040	ug/L	24.132	2592	0.001
[>	Lu	175		ug/L		562476	562476.269
[	Pb	208	-0.004	ug/L	33.191	656	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Pb	208	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	Sc	45		99.1			
[	Mn	55					
[>	Lu	175		101.0			
[	Pb	208					

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

Report Date/Time: Saturday, February 13, 2010 20:26:48

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Saturday, February 13, 2010 20:34:02

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\pb and mn.mth

Dataset File: c:\elandata\Dataset\100211\QC Std 8.654

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		750379	750378.636
[	Mn	55	53.651	ug/L	2.669	555996	0.738
[>	Lu	175		ug/L		575399	575398.939
[	Pb	208	52.853	ug/L	2.182	1938944	3.369

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Lu	175Linear Thru Zero	
Pb	208Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	Sc	45		95.0			
[	Mn	55	107.302				
[>	Lu	175		103.3			
[	Pb	208	105.705				

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 8

Report Date/Time: Saturday, February 13, 2010 20:34:25

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Saturday, February 13, 2010 20:35:55

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\pb and mn.mth

Dataset File: c:\elandata\Dataset\100211\QC Std 9.655

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		778672	778671.562
[	Mn	55	0.039	ug/L	18.253	2564	0.001
[>	Lu	175		ug/L		562808	562807.693
[	Pb	208	-0.005	ug/L	28.468	621	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Pb	208	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
[>	Sc	45		98.6			
[	Mn	55					
[>	Lu	175		101.1			
[	Pb	208					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 9

Report Date/Time: Saturday, February 13, 2010 20:36:19

Page 1

ICPMS#5 - Summary Report

Sample ID: 245392001

Sample Date/Time: Saturday, February 13, 2010 20:45:31

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945381|1|baj

Method File: c:\elandata\Method\pb and mn.mth

Dataset File: c:\elandata\Dataset\100211\245392001.660

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		826804	826803.950
[	Mn	55	1.868	ug/L	1.071	23541	0.026
[>	Lu	175		ug/L		572923	572923.384
[	Pb	208	1.753	ug/L	2.928	64801	0.112

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Lu	175Linear Thru Zero	
Pb	208Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Sc	45						
[	Mn	55		104.7				
[>	Lu	175		102.9				
[	Pb	208						

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 245392001

Report Date/Time: Saturday, February 13, 2010 20:45:55

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ICPMS#5 - Summary Report

Sample ID: 1202024742

Sample Date/Time: Saturday, February 13, 2010 20:47:26

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 945381|1|ba|

Method File: c:\elandata\Method\pb and mn.mth

Dataset File: c:\elandata\Dataset\100211\1202024742.661

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		835056	835056.012
[	Mn	55	0.615	ug/L	1.022	9369	0.008
[>	Lu	175		ug/L		572782	572781.990
[	Pb	208	0.042	ug/L	5.637	2347	0.003

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Pb	208	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Sc	45		105.8				
[	Mn	55						
[>	Lu	175		102.8				
[	Pb	208						

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: 1202024742

Report Date/Time: Saturday, February 13, 2010 20:47:51

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202024743

Sample Date/Time: Saturday, February 13, 2010 20:49:22

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 945381|1|baj

Method File: c:\elandata\Method\pb and mn.mth

Dataset File: c:\elandata\Dataset\100211\1202024743.662

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		819820	819820.243
[	Mn	55	50.536	ug/L	1.701	572330	0.696
[>	Lu	175		ug/L		572284	572284.360
[	Pb	208	44.669	ug/L	3.928	1629145	2.848

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Pb	208	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[>	Sc	45			103.8		
[	Mn	55					
[>	Lu	175			102.8		
[	Pb	208					

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: 1202024743

Report Date/Time: Saturday, February 13, 2010 20:49:47

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ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Saturday, February 13, 2010 20:51:16

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\pb and mn.mth

Dataset File: c:\elandata\Dataset\100211\QC Std 8.663

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		750171	750170.620
[	Mn	55	52.739	ug/L	1.084	546511	0.726
[>	Lu	175		ug/L		575698	575698.197
[	Pb	208	53.010	ug/L	2.561	1945658	3.379

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Pb	208	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	Sc	45		95.0			
[	Mn	55	105.477				
[>	Lu	175		103.4			
[	Pb	208	106.020				

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 8

Report Date/Time: Saturday, February 13, 2010 20:51:39

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Saturday, February 13, 2010 20:53:09

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\pb and mn.mth

Dataset File: c:\elandata\Dataset\100211\QC Std 9.664

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		770470	770470.021
[	Mn	55	0.050	ug/L	9.386	2652	0.001
[>	Lu	175		ug/L		570695	570694.835
[	Pb	208	-0.005	ug/L	5.828	613	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Pb	208	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	Sc	45		97.6			
[	Mn	55					
[>	Lu	175		102.5			
[	Pb	208					

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: Saturday, February 13, 2010 20:53:34

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202024744

Sample Date/Time: Saturday, February 13, 2010 20:55:05

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 945381|5|baj

Method File: c:\elandata\Method\pb and mn.mth

Dataset File: c:\elandata\Dataset\100211\1202024744.665

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		752792	752791.842
[	Mn	55	0.404	ug/L	4.532	6264	0.006
[>	Lu	175		ug/L		563975	563975.433
[	Pb	208	0.332	ug/L	1.858	12740	0.021

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Pb	208	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Sc	45			95.4		
[	Mn	55					
[>	Lu	175		101.3			
[	Pb	208					

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: 1202024744

Report Date/Time: Saturday, February 13, 2010 20:55:31

Page 1

ICPMS#5 - Summary Report

Sample ID: 245392002

Sample Date/Time: Saturday, February 13, 2010 20:57:02

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945381|1|baj

Method File: c:\elandata\Method\pb and mn.mth

Dataset File: c:\elandata\Dataset\100211\245392002.666

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		822392	822391.722
[	Mn	55	2.295	ug/L	1.479	28242	0.032
[>	Lu	175		ug/L		565645	565644.533
[	Pb	208	1.206	ug/L	0.654	44270	0.077

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Pb	208	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[>	Sc	45			104.2		
[	Mn	55					
[>	Lu	175			101.6		
[	Pb	208					

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: 245392002

Report Date/Time: Saturday, February 13, 2010 20:57:28

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Saturday, February 13, 2010 20:58:57

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\pb and mn.mth

Dataset File: c:\elandata\Dataset\100211\QC Std 6.667

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		728918	728917.523
[	Mn	55	53.933	ug/L	3.756	542778	0.742
[>	Lu	175		ug/L		562587	562586.653
[	Pb	208	54.729	ug/L	2.568	1962854	3.489

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Pb	208	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	Sc	45			92.3		
[	Mn	55	107.866				
[>	Lu	175		101.0			
[	Pb	208	109.458				

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

Report Date/Time: Saturday, February 13, 2010 20:59:20

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Saturday, February 13, 2010 21:00:50

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\pb and mn.mth

Dataset File: c:\elandata\Dataset\100211\QC Std 7.668

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		756813	756813.256
[	Mn	55	0.049	ug/L	26.876	2600	0.001
[>	Lu	175		ug/L		566974	566973.553
[	Pb	208	-0.004	ug/L	19.395	657	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Pb	208	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel.	% Difference
[>	Sc	45			95.9			
[	Mn	55						
[>	Lu	175		101.8				
[	Pb	208						

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Method Name: WATER

Method Description: 7470A, 245.2, ILM04 ANALYST JXL

Element: Hg

Date: 02/04/2010

Technique: FI-MHS

Calibration Type:

Hg, Calc. Intercept : Linear

Wavelength: 253.7 nm

Sample Info Name: 020410W1.SIF

Results Data Set Name: 020410W1

Element: Hg Seq. No.: 1 AS Loc.: 1 Date: 02/04/2010
Sample ID: Calib Blank

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1			0.0035	0.0035	09:15:09	No
2			0.0035	0.0035	09:15:44	No
Mean:			0.0035			
SD :			0.0000			
%RSD:			1.1819			

Auto-zero performed.

Element: Hg Seq. No.: 2 AS Loc.: 2 Date: 02/04/2010
Sample ID: S0.2

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1			0.0012	0.0047	09:17:07	No
2			0.0011	0.0046	09:17:42	No
Mean:			0.0011			
SD :			0.0001			
%RSD:			10.4951			

[Hg] Standard number 1 applied. [0.200]

Correlation Coefficient: 1.00000

Slope: 0.00574

Intercept : 0.00000

Element: Hg Seq. No.: 3 AS Loc.: 3 Date: 02/04/2010
Sample ID: S0.5

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1			0.0033	0.0068	09:19:05	No
2			0.0034	0.0069	09:19:40	No
Mean:			0.0033			
SD :			0.0000			
%RSD:			1.0729			

[Hg] Standard number 2 applied. [0.500]

Correlation Coefficient: 0.99800

Slope: 0.00672

Intercept : -0.00007

Element: Hg Seq. No.: 4 AS Loc.: 4 Date: 02/04/2010
Sample ID: S2.0

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1			0.0161	0.0196	09:21:04	No
2			0.0159	0.0194	09:21:39	No
Mean:			0.0160			
SD :			0.0001			
%RSD:			0.8026			

[Hg] Standard number 3 applied. [2.000]

Correlation Coefficient: 0.99912
Intercept : -0.00037

Slope: 0.00813

=====

Element: Hg Seq. No.: 5 AS Loc.: 5 Date: 02/04/2010
Sample ID: S5.0

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1			0.0411	0.0446	09:23:04	No
2			0.0407	0.0442	09:23:39	No
Mean:			0.0409			
SD :			0.0002			
%RSD:			0.5544			

[Hg] Standard number 4 applied. [5.000]
Correlation Coefficient: 0.99986 Slope: 0.00825
Intercept : -0.00044

=====

Element: Hg Seq. No.: 6 AS Loc.: 6 Date: 02/04/2010
Sample ID: S10

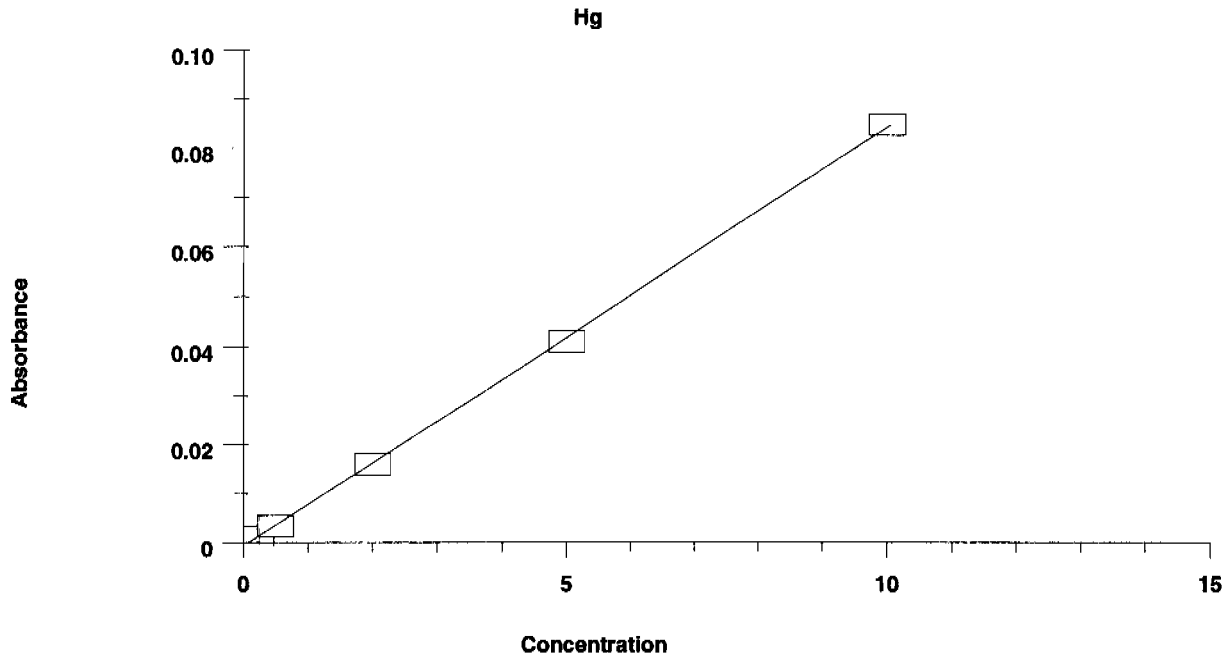
Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1			0.0855	0.0890	09:25:05	No
2			0.0837	0.0872	09:25:40	No
Mean:			0.0846			
SD :			0.0012			
%RSD:			1.4768			

[Hg] Standard number 5 applied. [10.00]
Correlation Coefficient: 0.99986 Slope: 0.00848
Intercept : -0.00070

Calibration data for Hg

Standard ID	Mean Signal (Pk Height)	Entered Concentration (µg/L)	Calculated Concentration (µg/L)	Standard Deviation	%RSD
Calib Blank	0.0035	---	---	---	---
S0.2	0.0011	0.200	0.217	0.0001	10.5
S0.5	0.0033	0.500	0.475	0.0000	1.1
S2.0	0.0160	2.000	1.966	0.0001	0.8
S5.0	0.0409	5.000	4.904	0.0002	0.6
S10	0.0846	10.000	10.06	0.0012	1.5
Calib Blank	0.0035	---	---	---	---

Correlation Coefficient: 0.99986 Slope: 0.00848 Intercept: -0.0007



=====
 Element: Hg Seq. No.: 7 AS Loc.: 9 Date: 02/04/2010
 Sample ID: ICV
 =====

Repl #	SampleConc µg/L	StndConc µg/L	BlncCorr Signal	Peak Height	Time	Peak Stored
1	4.944	4.944	0.0412	0.0447	09:27:10	No
2	4.897	4.897	0.0409	0.0443	09:27:45	No
Mean:	4.920	4.920	0.0410			
SD :	0.0327	0.0327	0.0003			
%RSD:	0.7	0.7	0.6752			

QC value within specified limits.

=====
 Element: Hg Seq. No.: 8 AS Loc.: 10 Date: 02/04/2010
 Sample ID: ICB
 =====

Repl #	SampleConc µg/L	StndConc µg/L	BlncCorr Signal	Peak Height	Time	Peak Stored
1	-0.019	-0.019	-0.0009	0.0026	09:29:07	No
2	-0.021	-0.021	-0.0009	0.0026	09:29:42	No
Mean:	-0.020	-0.020	-0.0009			
SD :	0.0019	0.0019	0.0000			
%RSD:	9.5	9.5	1.8634			

QC value within specified limits.

=====
 Element: Hg Seq. No.: 9 AS Loc.: 11 Date: 02/04/2010
 Sample ID: CRDL
 =====

Repl #	SampleConc µg/L	StndConc µg/L	BlncCorr Signal	Peak Height	Time	Peak Stored
1	0.235	0.235	0.0013	0.0048	09:31:04	No
2	0.221	0.221	0.0012	0.0047	09:31:39	No
Mean:	0.228	0.228	0.0012			
SD :	0.0099	0.0099	0.0001			
%RSD:	4.3	4.3	6.7636			

QC value within specified limits.

=====

Element: Hg Seq. No.: 10 AS Loc.: 7 Date: 02/04/2010

Sample ID: CCV

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	4.977	4.977	0.0415	0.0450	09:33:04	No
2	4.925	4.925	0.0411	0.0446	09:33:38	No
Mean:	4.951	4.951	0.0413			
SD :	0.0374	0.0374	0.0003			
%RSD:	0.8	0.8	0.7684			

QC value within specified limits.

=====

Element: Hg Seq. No.: 11 AS Loc.: 8 Date: 02/04/2010

Sample ID: CCB

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	0.098	0.098	0.0001	0.0036	09:35:06	No
2	0.081	0.081	0.0000	0.0035	09:35:40	No
Mean:	0.090	0.090	0.0001			
SD :	0.0121	0.0121	0.0001			
%RSD:	13.5	13.5	157.5596			

QC value within specified limits.

=====

Element: Hg Seq. No.: 12 AS Loc.: 12 Date: 02/04/2010

Sample ID: 1202029503|i||947435|MB

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.087	-0.087	-0.0014	0.0021	09:37:07	No
2	-0.092	-0.092	-0.0015	0.0020	09:37:42	No
Mean:	-0.090	-0.090	-0.0015			
SD :	0.0035	0.0035	0.0000			
%RSD:	3.9	3.9	2.0220			

=====

Element: Hg Seq. No.: 13 AS Loc.: 13 Date: 02/04/2010

Sample ID: 1202029504|i||LCS

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	2.162	2.162	0.0176	0.0211	09:39:06	No
2	2.118	2.118	0.0173	0.0208	09:39:41	No
Mean:	2.140	2.140	0.0175			
SD :	0.0311	0.0311	0.0003			
%RSD:	1.5	1.5	1.5118			

=====

Element: Hg Seq. No.: 14 AS Loc.: 14 Date: 02/04/2010

Sample ID: 245818013|i|||

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.041	-0.041	-0.0010	0.0024	09:41:07	No
2	-0.053	-0.053	-0.0011	0.0023	09:41:42	No
Mean:	-0.047	-0.047	-0.0011			
SD :	0.0082	0.0082	0.0001			
%RSD:	17.3	17.3	6.3408			

=====

Element: Hg Seq. No.: 15 AS Loc.: 15 Date: 02/04/2010

Sample ID: 1202029505|i|||DUP

%RSD: 1.9 1.9 2.2421

=====
 Element: Hg Seq. No.: 21 AS Loc.: 21 Date: 02/04/2010
 Sample ID: 1202030522|i|||DUP

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.100	-0.100	-0.0015	0.0019	09:54:55	No
2	-0.117	-0.117	-0.0017	0.0018	09:55:30	No
Mean:	-0.108	-0.108	-0.0016			
SD :	0.0120	0.0120	0.0001			
%RSD:	11.1	11.1	6.3143			

=====
 Element: Hg Seq. No.: 22 AS Loc.: 7 Date: 02/04/2010
 Sample ID: CCV

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	5.008	5.008	0.0418	0.0453	09:56:54	No
2	4.980	4.980	0.0416	0.0450	09:57:29	No
Mean:	4.994	4.994	0.0417			
SD :	0.0198	0.0198	0.0002			
%RSD:	0.4	0.4	0.4036			

QC value within specified limits.

=====
 Element: Hg Seq. No.: 23 AS Loc.: 8 Date: 02/04/2010
 Sample ID: CCB

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	0.066	0.066	-0.0001	0.0034	09:58:57	No
2	0.062	0.062	-0.0002	0.0033	09:59:32	No
Mean:	0.064	0.064	-0.0002			
SD :	0.0031	0.0031	0.0000			
%RSD:	4.8	4.8	17.0761			

QC value within specified limits.

=====
 Element: Hg Seq. No.: 24 AS Loc.: 22 Date: 02/04/2010
 Sample ID: 1202030523|i|||MS

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	2.013	2.013	0.0164	0.0199	10:00:58	No
2	1.976	1.976	0.0161	0.0196	10:01:33	No
Mean:	1.995	1.995	0.0162			
SD :	0.0262	0.0262	0.0002			
%RSD:	1.3	1.3	1.3680			

=====
 Element: Hg Seq. No.: 25 AS Loc.: 23 Date: 02/04/2010
 Sample ID: 1202030524|i|5||SDILT

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	0.053	0.053	-0.0002	0.0032	10:02:57	No
2	0.034	0.034	-0.0004	0.0031	10:03:32	No
Mean:	0.043	0.043	-0.0003			
SD :	0.0134	0.0134	0.0001			
%RSD:	30.8	30.8	34.6693			

=====
 Element: Hg Seq. No.: 26 AS Loc.: 24 Date: 02/04/2010
 Sample ID: 1202024802|i||945416|MB


```

-----
Repl  SampleConc  StndConc  BlnkCorr  Peak      Time      Peak
#      µg/L       µg/L       Signal    Height    Stored
1      -0.047     -0.047     -0.0011   0.0024    10:04:56  No
2      -0.096     -0.096     -0.0015   0.0020    10:05:31  No
Mean:   -0.071     -0.071     -0.0013
SD :    0.0344     0.0344     0.0003
%RSD:   48.1       48.1       22.4170
-----

```

```

=====
Element: Hg      Seq. No.: 27      AS Loc.: 25      Date: 02/04/2010
Sample ID: 1202024803|i||LCS
-----

```

```

Repl  SampleConc  StndConc  BlnkCorr  Peak      Time      Peak
#      µg/L       µg/L       Signal    Height    Stored
1      2.062      2.062     0.0168    0.0203    10:06:55  No
2      2.111      2.111     0.0172    0.0207    10:07:30  No
Mean:   2.087      2.087     0.0170
SD :    0.0347     0.0347     0.0003
%RSD:   1.7        1.7        1.7308
-----

```

```

=====
Element: Hg      Seq. No.: 28      AS Loc.: 26      Date: 02/04/2010
Sample ID: 245382001|i||
-----

```

```

Repl  SampleConc  StndConc  BlnkCorr  Peak      Time      Peak
#      µg/L       µg/L       Signal    Height    Stored
1      -0.112     -0.112     -0.0016    0.0018    10:08:55  No
2      -0.127     -0.127     -0.0018    0.0017    10:09:29  No
Mean:   -0.119     -0.119     -0.0017
SD :    0.0104     0.0104     0.0001
%RSD:   8.7        8.7        5.1630
-----

```

```

=====
Element: Hg      Seq. No.: 29      AS Loc.: 27      Date: 02/04/2010
Sample ID: 245386001|i||
-----

```

```

Repl  SampleConc  StndConc  BlnkCorr  Peak      Time      Peak
#      µg/L       µg/L       Signal    Height    Stored
1      -0.110     -0.110     -0.0016    0.0019    10:10:55  No
2      -0.118     -0.118     -0.0017    0.0018    10:11:30  No
Mean:   -0.114     -0.114     -0.0017
SD :    0.0058     0.0058     0.0000
%RSD:   5.1        5.1        2.9432
-----

```

```

=====
Element: Hg      Seq. No.: 30      AS Loc.: 28      Date: 02/04/2010
Sample ID: 245390001|i||
-----

```

```

Repl  SampleConc  StndConc  BlnkCorr  Peak      Time      Peak
#      µg/L       µg/L       Signal    Height    Stored
1      -0.122     -0.122     -0.0017    0.0018    10:12:56  No
2      -0.117     -0.117     -0.0017    0.0018    10:13:31  No
Mean:   -0.120     -0.120     -0.0017
SD :    0.0030     0.0030     0.0000
%RSD:   2.5        2.5        1.4709
-----

```

```

=====
Element: Hg      Seq. No.: 31      AS Loc.: 29      Date: 02/04/2010
Sample ID: 245392001|i||
-----

```

```

Repl  SampleConc  StndConc  BlnkCorr  Peak      Time      Peak
#      µg/L       µg/L       Signal    Height    Stored
1      -0.146     -0.146     -0.0019    0.0016    10:14:57  No
2      -0.104     -0.104     -0.0016    0.0019    10:15:32  No
Mean:   -0.125     -0.125     -0.0018
SD :    0.0298     0.0298     0.0003
-----

```

%RSD: 23.9 23.9 14.4140

=====
 Element: Hg Seq. No.: 32 AS Loc.: 30 Date: 02/04/2010
 Sample ID: 1202024804|i|||DUP
 =====

Repl #	SampleConc µg/L	StndConc µg/L	BlncCorr Signal	Peak Height	Time	Peak Stored
1	-0.125	-0.125	-0.0018	0.0017	10:16:59	No
2	-0.105	-0.105	-0.0016	0.0019	10:17:34	No
Mean:	-0.115	-0.115	-0.0017			
SD :	0.0142	0.0142	0.0001			
%RSD:	12.3	12.3	7.2130			

=====
 Element: Hg Seq. No.: 33 AS Loc.: 31 Date: 02/04/2010
 Sample ID: 1202024805|i|||MS
 =====

Repl #	SampleConc µg/L	StndConc µg/L	BlncCorr Signal	Peak Height	Time	Peak Stored
1	2.135	2.135	0.0174	0.0209	10:19:00	No
2	2.177	2.177	0.0178	0.0213	10:19:35	No
Mean:	2.156	2.156	0.0176			
SD :	0.0298	0.0298	0.0003			
%RSD:	1.4	1.4	1.4360			

=====
 Element: Hg Seq. No.: 34 AS Loc.: 7 Date: 02/04/2010
 Sample ID: CCV
 =====

Repl #	SampleConc µg/L	StndConc µg/L	BlncCorr Signal	Peak Height	Time	Peak Stored
1	5.151	5.151	0.0430	0.0465	10:21:02	No
2	5.014	5.014	0.0418	0.0453	10:21:38	No
Mean:	5.082	5.082	0.0424			
SD :	0.0971	0.0971	0.0008			
%RSD:	1.9	1.9	1.9409			

QC value within specified limits.

=====
 Element: Hg Seq. No.: 35 AS Loc.: 8 Date: 02/04/2010
 Sample ID: CCB
 =====

Repl #	SampleConc µg/L	StndConc µg/L	BlncCorr Signal	Peak Height	Time	Peak Stored
1	0.051	0.051	-0.0003	0.0032	10:23:06	No
2	0.046	0.046	-0.0003	0.0032	10:23:41	No
Mean:	0.049	0.049	-0.0003			
SD :	0.0039	0.0039	0.0000			
%RSD:	8.0	8.0	11.7331			

QC value within specified limits.

=====
 Element: Hg Seq. No.: 36 AS Loc.: 32 Date: 02/04/2010
 Sample ID: 1202024811|i|5||SDILT
 =====

Repl #	SampleConc µg/L	StndConc µg/L	BlncCorr Signal	Peak Height	Time	Peak Stored
1	-0.080	-0.080	-0.0014	0.0021	10:25:05	No
2	-0.097	-0.097	-0.0015	0.0020	10:25:40	No
Mean:	-0.089	-0.089	-0.0014			
SD :	0.0120	0.0120	0.0001			
%RSD:	13.5	13.5	7.0108			

=====
 Element: Hg Seq. No.: 37 AS Loc.: 33 Date: 02/04/2010
 Sample ID: 245392002|i|||
 =====

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.103	-0.103	-0.0016	0.0019	10:27:00	No
2	-0.116	-0.116	-0.0017	0.0018	10:27:35	No
Mean:	-0.110	-0.110	-0.0016			
SD :	0.0095	0.0095	0.0001			
%RSD:	8.7	8.7	4.9647			

=====
 Element: Hg Seq. No.: 38 AS Loc.: 34 Date: 02/04/2010
 Sample ID: 1202031607|i||948361|MB
 =====

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.127	-0.127	-0.0018	0.0017	10:28:55	No
2	-0.134	-0.134	-0.0018	0.0017	10:29:30	No
Mean:	-0.130	-0.130	-0.0018			
SD :	0.0053	0.0053	0.0000			
%RSD:	4.1	4.1	2.5165			

=====
 Element: Hg Seq. No.: 39 AS Loc.: 35 Date: 02/04/2010
 Sample ID: 1202031608|i||LCS
 =====

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	2.161	2.161	0.0176	0.0211	10:30:51	No
2	2.146	2.146	0.0175	0.0210	10:31:26	No
Mean:	2.154	2.154	0.0176			
SD :	0.0105	0.0105	0.0001			
%RSD:	0.5	0.5	0.5072			

=====
 Element: Hg Seq. No.: 40 AS Loc.: 36 Date: 02/04/2010
 Sample ID: 245831015|i|||
 =====

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.001	-0.001	-0.0007	0.0028	10:32:48	No
2	-0.007	-0.007	-0.0008	0.0027	10:33:22	No
Mean:	-0.004	-0.004	-0.0007			
SD :	0.0040	0.0040	0.0000			
%RSD:	93.1	93.1	4.5916			

=====
 Element: Hg Seq. No.: 41 AS Loc.: 37 Date: 02/04/2010
 Sample ID: 245831017|i|||
 =====

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.135	-0.135	-0.0018	0.0017	10:34:45	No
2	-0.129	-0.129	-0.0018	0.0017	10:35:19	No
Mean:	-0.132	-0.132	-0.0018			
SD :	0.0043	0.0043	0.0000			
%RSD:	3.2	3.2	1.9941			

=====
 Element: Hg Seq. No.: 42 AS Loc.: 38 Date: 02/04/2010
 Sample ID: 1202031609|i|||DUP
 =====

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.105	-0.105	-0.0016	0.0019	10:36:42	No
2	-0.089	-0.089	-0.0015	0.0020	10:37:16	No
Mean:	-0.097	-0.097	-0.0015			
SD :	0.0108	0.0108	0.0001			

%RSD: 11.2 11.2 6.0606

=====
Element: Hg Seq. No.: 43 AS Loc.: 39 Date: 02/04/2010
Sample ID: 1202031610|i||MS
=====

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Height	Time	Peak Stored
1	2.184	2.184	0.0178	0.0213	10:38:39	No
2	2.225	2.225	0.0182	0.0217	10:39:13	No
Mean:	2.205	2.205	0.0180			
SD :	0.0293	0.0293	0.0002			
%RSD:	1.3	1.3	1.3812			

=====
Element: Hg Seq. No.: 44 AS Loc.: 40 Date: 02/04/2010
Sample ID: 1202031611|i|5|SDILT
=====

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Height	Time	Peak Stored
1	-0.101	-0.101	-0.0015	0.0019	10:40:37	No
2	-0.090	-0.090	-0.0015	0.0020	10:41:12	No
Mean:	-0.096	-0.096	-0.0015			
SD :	0.0073	0.0073	0.0001			
%RSD:	7.6	7.6	4.0841			

=====
Element: Hg Seq. No.: 45 AS Loc.: 41 Date: 02/04/2010
Sample ID: 1202031617|i||948363|MB
=====

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Height	Time	Peak Stored
1	-0.075	-0.075	-0.0013	0.0022	10:42:36	No
2	-0.096	-0.096	-0.0015	0.0020	10:43:11	No
Mean:	-0.085	-0.085	-0.0014			
SD :	0.0154	0.0154	0.0001			
%RSD:	18.1	18.1	9.2159			

=====
Element: Hg Seq. No.: 46 AS Loc.: 7 Date: 02/04/2010
Sample ID: CCV
=====

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Height	Time	Peak Stored
1	5.152	5.152	0.0430	0.0465	10:44:36	No
2	5.201	5.201	0.0434	0.0469	10:45:12	No
Mean:	5.177	5.177	0.0432			
SD :	0.0347	0.0347	0.0003			
%RSD:	0.7	0.7	0.6804			

QC value within specified limits.

=====
Element: Hg Seq. No.: 47 AS Loc.: 8 Date: 02/04/2010
Sample ID: CCB
=====

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Height	Time	Peak Stored
1	0.054	0.054	-0.0002	0.0033	10:46:40	No
2	0.039	0.039	-0.0004	0.0031	10:47:15	No
Mean:	0.046	0.046	-0.0003			
SD :	0.0104	0.0104	0.0001			
%RSD:	22.5	22.5	29.0878			

QC value within specified limits.

=====
Element: Hg Seq. No.: 48 AS Loc.: 42 Date: 02/04/2010
Sample ID: 1202031619|i||LCS
=====

Miscellaneous

Prep LogBook

Analyst: FGA
 Batch: 945378
 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	1202024735		SW846 3005A	03-FEB-2010 13:30	<2	50 mL	50 mL	1	.25	mL
LCS	1202024736		SW846 3005A	03-FEB-2010 13:30	<2	50 mL	50 mL	1	.25	mL
SAMPLE	245375001		SW846 3005A	03-FEB-2010 13:30	<2	50 mL	50 mL	1	.25	mL
SAMPLE	245375002		SW846 3005A	03-FEB-2010 13:30	<2	50 mL	50 mL	1	.25	mL
SAMPLE	245378001		SW846 3005A	03-FEB-2010 13:30	<2	50 mL	50 mL	1	.25	mL
SAMPLE	245378002		SW846 3005A	03-FEB-2010 13:30	<2	50 mL	50 mL	1	.25	mL
SAMPLE	245382001		SW846 3005A	03-FEB-2010 13:30	<2	50 mL	50 mL	1	.25	mL
SAMPLE	245386001		SW846 3005A	03-FEB-2010 13:30	<2	50 mL	50 mL	1	.25	mL
SAMPLE	245390001		SW846 3005A	03-FEB-2010 13:30	<2	50 mL	50 mL	1	.25	mL
SAMPLE	245392001		SW846 3005A	03-FEB-2010 13:30	<2	50 mL	50 mL	1	.25	mL
DUP	1202024737	245392001	SW846 3005A	03-FEB-2010 13:30	<2	50 mL	50 mL	1	.25	mL
MS	1202024738	245392001	SW846 3005A	03-FEB-2010 13:30	<2	50 mL	50 mL	1	.25	mL
SDILT	1202024739	245392001	SW846 3005A	03-FEB-2010 13:30	<2	50 mL	50 mL	1	.25	mL
SAMPLE	245392002		SW846 3005A	03-FEB-2010 13:30	<2	50 mL	50 mL	1	.25	mL

Reagent/Solvent Lot ID	Amount	Description	Comments
100202	2.5 mL	HYDROCHLORIC ACID	
1264396	1 mL	Nitric Acid CONC.	

Prep LogBook

Analyst: FGA Verified by: _____

Batch: 945380

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	1202024740		SW846 3005A	03-FEB-2010 13:30	<2	50 mL	50 mL	1		
LCS	1202024741		SW846 3005A	03-FEB-2010 13:30	<2	50 mL	50 mL	1		
SAMPLE	245375001		SW846 3005A	03-FEB-2010 13:30	<2	50 mL	50 mL	1		
SAMPLE	245375002		SW846 3005A	03-FEB-2010 13:30	<2	50 mL	50 mL	1		
SAMPLE	245378001		SW846 3005A	03-FEB-2010 13:30	<2	50 mL	50 mL	1		
SAMPLE	245378002		SW846 3005A	03-FEB-2010 13:30	<2	50 mL	50 mL	1		
SAMPLE	245382001		SW846 3005A	03-FEB-2010 13:30	<2	50 mL	50 mL	1		
DUP	1202024742	245382001	SW846 3005A	03-FEB-2010 13:30	<2	50 mL	50 mL	1		
MS	1202024743	245382001	SW846 3005A	03-FEB-2010 13:30	<2	50 mL	50 mL	1		
SAMPLE	245386001		SW846 3005A	03-FEB-2010 13:30	<2	50 mL	50 mL	1		
SAMPLE	245390001		SW846 3005A	03-FEB-2010 13:30	<2	50 mL	50 mL	1		
SAMPLE	245392001		SW846 3005A	03-FEB-2010 13:30	<2	50 mL	50 mL	1		
SDILT	1202024744	245392001	SW846 3005A	03-FEB-2010 13:30	<2	50 mL	50 mL	1		
SAMPLE	245392002		SW846 3005A	03-FEB-2010 13:30	<2	50 mL	50 mL	1		

Comments

Reagent/Solvent Lot ID	Amount	Description
100202	2.5 mL	HYDROCHLORIC ACID
1264396	1 mL	Nitric Acid CONC.

Prep LogBook

Analyst: TXB3
 Batch: 945413
 Lab SOP: GL-MA-E-010 REV# 23

Verified by: _____

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Spike Amount	Spike Units
MB	1202024802		SW846 7470A Prep	03-FEB-2010 11:45	<2	20 mL	20 mL	1		mL
LCS	1202024803		SW846 7470A Prep	03-FEB-2010 11:45	<2	20 mL	20 mL	1		mL
SAMPLE	245382001		SW846 7470A Prep	03-FEB-2010 11:45	<2	20 mL	20 mL	1		mL
SAMPLE	245386001		SW846 7470A Prep	03-FEB-2010 11:45	<2	20 mL	20 mL	1		mL
SAMPLE	245390001		SW846 7470A Prep	03-FEB-2010 11:45	<2	20 mL	20 mL	1		mL
SAMPLE	245392001		SW846 7470A Prep	03-FEB-2010 11:45	<2	20 mL	20 mL	1		mL
DUP	1202024804	245392001	SW846 7470A Prep	03-FEB-2010 11:45	<2	20 mL	20 mL	1		mL
MS	1202024805	245392001	SW846 7470A Prep	03-FEB-2010 11:45	<2	20 mL	20 mL	1		mL
SDILT	1202024811	245392001	SW846 7470A Prep	03-FEB-2010 11:45	<2	20 mL	20 mL	1		mL
SAMPLE	245392002		SW846 7470A Prep	03-FEB-2010 11:45	<2	20 mL	20 mL	1		mL

Comments Digestion Start Date: 03-FEB-10 11:45
 Digestion End Date: 03-FEB-10 13:45

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
1255535-C	3 mL	5% KMnO4 solution
1255532-C	1 mL	Hg reducing agent
WHG100203-06	500 uL	Mercury Working 2nd Source 5.0/CCV
WHG100203-01a	20 uL	Mercury Working 1st Source CAL 0.2/CRA
WHG100203-02	50 uL	Mercury Working 1st Source CAL 0.5
WHG100203-05	1 mL	Mercury Working 1st Source CAL 10.0
WHG100203-03	200 uL	Mercury Working 1st Source CAL 2.0
WHG100203-04	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% 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		

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:** 16-SEP-10 **Lot Number :** 1017098
Employee: Helen Camello **Solvent :** 1%HNO3
Supplier: 02SI
Description: Sodium 1000 +/- 3 ug/mL in 1% HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Sodium	1000 ug/mL		

Serial ID: UI090925-40 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX38-500N
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909129
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1A 5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Arsenic	100 mg/L
Barium	100 mg/L	Boron	100 mg/L
Cadmium	100 mg/L	Calcium	1000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	1000 mg/L
Lead	100 mg/L	Phosphorous	500 mg/L
Potassium	500 mg/L	Selenium	500 mg/L
Sodium	500 mg/L	Strontium	100 mg/L

Standard Logbook

Serial ID: UI090925-41 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX39-500B
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909130
Employee: Helen Carnello **Solvent :** 5%HNO3,TR.HF
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 mg/L	Beryllium	50 mg/L
Magnesium	1000 mg/L	Manganese	100 mg/L
Molybdenum	100 mg/L	Nickel	100 mg/L
Silver	50 mg/L	Sulfur	500 mg/L
Thallium	100 mg/L	Tin	100 mg/L
Titanium	100 mg/L	Uranium	100 mg/L
Vanadium	100 mg/L	Zinc	100 mg/L

Serial ID: UI090930-A **Opened:** 30-SEP-09 **Catalog Number :** 160067-02
Name: ICP-MS DOE Liquid SPIKE **Received:** 28-SEP-09 **Lot Number :** 1017141
Type: Source Material **Expires:** 30-SEP-10
Employee: Francena Armstrong **Verified:** 21-NOV-08
Supplier: O2Si
Description: ICP-MS DOE liquid Spike Solution A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	8 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Boron	10 mg/L	Cadmium	1 mg/L
Calcium	200 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	4 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorus, Total as P	200 mg/L	Potassium	200 mg/L
Selenium	2 mg/L	Silicon	200 mg/L
Sodium	200 mg/L	Strontium	5 mg/L
Thallium	10 mg/L	Thorium	5 mg/L
Total Uranium	5 mg/L	Uranium	5 mg/L
Uranium-235	.0364 mg/L	Uranium-238	4.96 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

Standard Logbook

Serial ID: UI090930-B **Opened:** 30-SEP-09 **Catalog Number :** 160067-02
Name: ICP-MS DOE Liquid SPIKE **Received:** 28-SEP-09 **Lot Number :** 1017141
Type: Source Material **Expires:** 30-SEP-10
Employee: Francena Armstrong **Verified:** 21-NOV-08
Supplier: O2Si
Description: ICP-MS DOE Liquid Spike Solution B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	5 mg/L
Silver	5 mg/L	Tin	5 mg/L
Titanium	5 mg/L	Zirconium	5 mg/L

Serial ID: UI091015-42 **Opened:** 28-OCT-09 **Amount :** 500 mL
Name: SI 1000mg/L **Received:** 15-OCT-09 **Catalog Number :** 060014-02-03
Type: Source Material **Expires:** 28-OCT-10 **Lot Number :** 1017581
Employee: Helen Camello **Solvent :** 0.3%H2O(NH4)2SiF6
Supplier: o2si
Description: Silicon 1000mg/L+/-0.3%in H2O(NH4)2SiF6
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091102-40 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1A SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-1-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930215
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Std #1A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2000 mg/L	Arsenic	200 mg/L
Barium	200 mg/L	Beryllium	200 mg/L
Boron	200 mg/L	Cadmium	200 mg/L
Calcium	2000 mg/L	Chromium	200 mg/L
Cobalt	200 mg/L	Copper	200 mg/L
Iron	2000 mg/L	Lead	200 mg/L
Magnesium	2000 mg/L	Manganese	200 mg/L
Nickel	200 mg/L	Phosphorous	1000 mg/L
Potassium	2000 mg/L	Selenium	200 mg/L
Sodium	2000 mg/L	Strontium	200 mg/L
Thallium	200 mg/L	Uranium	200 mg/L
Vanadium	200 mg/L	Zinc	200 mg/L

Standard Logbook

Serial ID: UI091102-41 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1B SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-2-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930216
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Standard #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	200 mg/L	Molybdenum	200 mg/L
Silver	200 mg/L	Sulfur	400 mg/L
Tin	200 mg/L	Titanium	200 mg/L

Serial ID: UI091102-42 **Opened:** 17-NOV-09 **Amount :** 200 mL
Name: SILICON **Received:** 02-NOV-09 **Catalog Number :** HP100050-4F
Type: Source Material **Expires:** 17-NOV-10 **Lot Number :** 0921924
Employee: Helen Camello **Solvent :** H2O/tr HF
Supplier: ENVIRONMENTAL EXPRESS
Description: SILICON 1000mg/L H2O/tr HF
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091217-06 **Opened:** 17-DEC-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master A **Received:** 17-DEC-09 **Catalog Number :** 160055-01
Type: Source Material **Expires:** 17-DEC-10 **Lot Number :** 1018209
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: Q2SI
Description: ICPMS ICV/CCV SOLN A - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2020 mg/L	Calcium	2000 mg/L
Iron	2000 mg/L	Magnesium	2000 mg/L
Phosphorous	2000 mg/L	Potassium	2000 mg/L
Sodium	2000 mg/L		

Serial ID: UI091217-07 **Opened:** 17-DEC-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master B **Received:** 17-DEC-09 **Catalog Number :** 160054-02
Type: Source Material **Expires:** 17-DEC-10 **Lot Number :** 1018210
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: Q2SI
Description: ICPMS ICV/CCV Soln B - 10ppm
Comments: None

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Arsenic	20 mg/L	Barium	20 mg/L
Beryllium	20 mg/L	Boron	40 mg/L
Cadmium	20 mg/L	Chromium	20 mg/L
Cobalt	20 mg/L	Copper	20 mg/L
Lead	20 mg/L	Lithium	20 mg/L
Manganese	20 mg/L	Nickel	20 mg/L
Selenium	20 mg/L	Strontium	20 mg/L
Thallium	20 mg/L	Thorium	20 mg/L
Uranium	20 mg/L	Vanadium	20 mg/L
Zinc	20 mg/L		

Serial ID: UI091217-08 **Opened:** 17-DEC-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master C **Received:** 17-DEC-09 **Catalog Number :** 160054-03
Type: Source Material **Expires:** 17-DEC-10 **Lot Number :** 1018211
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln C - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	20 mg/L
Silver	20 mg/L	Tin	20 mg/L
Titanium	20 mg/L	Tungsten	20 mg/L
Zirconium	20 mg/L		

Serial ID: UI091217-12 **Opened:** 17-DEC-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master B **Received:** 17-DEC-09 **Catalog Number :** 160033-02
Type: Source Material **Expires:** 17-DEC-10 **Lot Number :** 1018212
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	2 mg/L	Barium	2 mg/L
Beryllium	2 mg/L	Boron	2 mg/L
Cadmium	2 mg/L	Chromium	2 mg/L
Cobalt	2 mg/L	Copper	2 mg/L
Lead	2 mg/L	Lithium	2 mg/L
Manganese	2 mg/L	Nickel	2 mg/L
Selenium	2 mg/L	Strontium	2 mg/L
Thallium	2 mg/L	Thorium	2 mg/L
Uranium	2 mg/L	Vanadium	2 mg/L
Zinc	2 mg/L		

Standard Logbook

Serial ID: UI091217-13 **Opened:** 17-DEC-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master C **Received:** 17-DEC-09 **Catalog Number :** 160033-03
Type: Source Material **Expires:** 17-DEC-10 **Lot Number :** 1016926
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 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 ICSA **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: O2si
Description: ICP-MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution A).
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	5 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Bismuth	5 mg/L	Boron	10 mg/L
Cadmium	5 mg/L	Calcium	200 mg/L
Cesium	5 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	5 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorous	200 mg/L	Potassium	200 mg/L
Selenium	5 mg/L	Sodium	200 mg/L
Strontium	5 mg/L	Thallium	5 mg/L
Thorium	5 mg/L	Uranium	5 mg/L
Uranium-235	.036 mg/L	Uranium-238	4.964 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

Serial ID: 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: O2si
Description: MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution B).
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	5 mg/L	Molybdenum	5 mg/L
Silver	5 mg/L	Tin	5 mg/L
Titanium	5 mg/L	Zirconium	5 mg/L

Serial ID: UI100126-11 **Opened:** 26-JAN-10 **Amount :** 1000 mL
Name: ICP-MS ICSA Master A **Received:** 26-JAN-10 **Catalog Number :** 160013-01-01L
Type: Source Material **Expires:** 26-JAN-11 **Lot Number :** 1018321
Employee: Elizabeth Janssen **Solvent :** 2% HNO3
Supplier: O2SI
Description: ICP-MS ICSA Master A
Comments: None

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Carbon	2000 mg/L	Chloride	10000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Molybdenum	20 mg/L	Phosphorous	1000 mg/L
Potassium	1000 mg/L	Sodium	1000 mg/L
Sulfur	1000 mg/L	Titanium	20 mg/L

Serial ID: 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%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: 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

Standard Logbook

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
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

Analyte	Concentration	Analyte	Concentration
Sodium	500000 ug/L	Uranium	15000 ug/L

Serial ID: UMS090303-01 **Opened:** 03-MAR-09 **Amount :** 250 mL
Name: ICPMSCalSPIKEB **Received:** 03-MAR-09 **Catalog Number :** ZGEL-100-250
Type: Source Material **Expires:** 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: ICPMSCalSPIKEA **Received:** 03-MAR-09 **Lot Number :** 14-83JB
Type: Source Material **Expires:** 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		

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

Standard Logbook

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: IHG100203-01 **Opened:** 03-FEB-10 **Instrument Id :** Mercury
Name: MHGINTER1 **Received:** 03-FEB-10 **Pipet Id :** Minou1
Type: Intermediate **Expires:** 04-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: IHG100203-02 **Opened:** 03-FEB-10 **Pipet Id :** Minou1
Name: MHGINTER2 **Received:** 03-FEB-10 **Solvent :** 2% HNO3-1257474
Type: Intermediate **Expires:** 04-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: WHG100203-01a **Opened:** 03-FEB-10 **Pipet Id :** Hg1289245
Name: MHGWORKCAL0.2CRA **Received:** 03-FEB-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 10-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.
IHG100203-01	Mercury	200 ug/L	20 uL	20 mL	.2 ug/L

Serial ID: WHG100203-02 **Opened:** 03-FEB-10 **Pipet Id :** Hg1289245
Name: MHGWORKCAL0.5 **Received:** 03-FEB-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 10-FEB-10
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 1st Source CAL 0.5
Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100203-01	Mercury	200 ug/L	50 uL	20 mL	.5 ug/L

Serial ID: WHG100203-03 **Opened:** 03-FEB-10 **Pipet Id :** Hg1289245
Name: MHGWORKCAL2.0 **Received:** 03-FEB-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 10-FEB-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL 2.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100203-01	Mercury	200 ug/L	200 uL	20 mL	2 ug/L

Serial ID: WHG100203-04 **Opened:** 03-FEB-10 **Pipet Id :** Hg1289245
Name: MHGWORKCAL5.0CCV **Received:** 03-FEB-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 10-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.
IHG100203-01	Mercury	200 ug/L	500 uL	20 mL	5 ug/L

Serial ID: WHG100203-05 **Opened:** 03-FEB-10 **Pipet Id :** Hg1289245
Name: MHGWORKCAL10.0 **Received:** 03-FEB-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 10-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.
IHG100203-01	Mercury	200 ug/L	1 mL	20 mL	10 ug/L

Serial ID: WHG100203-06 **Opened:** 03-FEB-10 **Pipet Id :** Hg1289245
Name: MHGWORK5.0ICV **Received:** 03-FEB-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 10-FEB-10
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 2nd Source 5.0/ICV
Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100203-02	Mercury	200 ug/L	500 uL	20 mL	5 ug/L

Serial ID: WHG100203-13 **Opened:** 03-FEB-10 **Pipet Id :** Hg1289245
Name: MHGLIQLCSMSSPIKE **Received:** 03-FEB-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 10-FEB-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury working intermediate standard for LCS/MS
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: 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 **Expires:** 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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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

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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Serial ID: 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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-41	Silver	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	500 mL	2000 ug/L
UI091102-41	Tin	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Titanium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Serial ID: 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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-41	Antimony	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Beryllium	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Magnesium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-41	Manganese	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Molybdenum	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Nickel	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Silver	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Sulfur	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-41	Thallium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Tin	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Titanium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Uranium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Vanadium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Zinc	100 mg/L	2.5 mL	500 mL	500 ug/L
UI091102-42	Silica	2139 mg/L	2.5 mL	500 mL	10695 ug/L
UI091102-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L

Serial ID: WI100211-47 **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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Selenium	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Silicon	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Silver	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sodium	150 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Strontium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sulfur	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Thallium	10 mg/L	2 mL	1000 mL	20 ug/L
UI090701-40	Tin	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Titanium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Uranium	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Vanadium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Zinc	5 mg/L	2 mL	1000 mL	10 ug/L

Serial ID: WMS100212-04 **Opened:** 12-FEB-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 12-FEB-10 **Balance Id :** 4025216
Type: Working **Expires:** 13-FEB-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1266278
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090303-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS100212-04A **Opened:** 12-FEB-10 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 12-FEB-10 **Pipet Id :** 3541598
Type: Working **Expires:** 13-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1266278
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100212-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100212-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100212-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100212-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100212-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100212-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100212-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100212-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100212-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100212-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100212-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100212-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100212-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100212-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100212-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100212-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100212-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100212-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100212-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100212-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100212-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100212-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100212-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100212-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100212-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
WMS100212-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100212-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100212-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100212-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100212-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100212-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100212-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100212-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS100212-05 **Opened:** 12-FEB-10 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 12-FEB-10 **Pipet Id :** 3541598
Type: Working **Expires:** 13-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1266278
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Allquot	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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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: WMS100212-06 **Opened:** 12-FEB-10 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 12-FEB-10 **Pipet Id :** 3820544
Type: Working **Expires:** 13-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1266278
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: WMS100212-07 **Opened:** 12-FEB-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 12-FEB-10 **Lot Number :** 1010773
Type: Working **Expires:** 13-FEB-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1266278
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100126-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100126-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100126-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS100212-08 **Opened:** 12-FEB-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 12-FEB-10 **Pipet Id :** 1758088
Type: Working **Expires:** 13-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1266278
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI091217-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI091217-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI091217-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI091217-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100126-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100126-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100126-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS100213-04 **Opened:** 13-FEB-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 13-FEB-10 **Balance Id :** 4025216
Type: Working **Expires:** 14-FEB-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1266278
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090303-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS100213-04A **Opened:** 13-FEB-10 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 13-FEB-10 **Pipet Id :** 3541598
Type: Working **Expires:** 14-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1266278
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100213-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100213-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100213-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100213-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100213-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100213-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100213-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100213-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100213-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100213-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100213-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100213-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100213-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100213-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100213-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100213-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100213-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100213-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100213-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100213-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100213-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100213-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100213-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100213-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100213-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100213-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100213-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100213-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100213-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100213-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100213-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100213-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100213-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS100213-05 **Opened:** 13-FEB-10 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 13-FEB-10 **Pipet Id :** 3541598
Type: Working **Expires:** 14-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1266278
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS100213-06 **Opened:** 13-FEB-10 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 13-FEB-10 **Pipet Id :** 3820544
Type: Working **Expires:** 14-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1266278
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: WMS100213-07 **Opened:** 13-FEB-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 13-FEB-10 **Lot Number :** 1010773
Type: Working **Expires:** 14-FEB-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1266278
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100126-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100126-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100126-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS100213-08 **Opened:** 13-FEB-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 13-FEB-10 **Pipet Id :** 1758088
Type: Working **Expires:** 14-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1266278
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB

Standard Logbook

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI091217-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI091217-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI091217-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI091217-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI091217-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI091217-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI091217-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI091217-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100126-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100126-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100126-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	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: 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: 1252836 Opened: 08-JAN-10 Lot Number : H20053 L
Name: I-HNO3 Received: 08-JAN-10
Type: Reagent/Solvent Expires: 08-JAN-11
Employee: Francena Armstrong
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Standard Logbook

Serial ID: 1252838 **Opened:** 08-JAN-10 **Lot Number :** H41032
Name: I-HCL **Received:** 08-JAN-10 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 08-JAN-11
Employee: Francena Armstrong
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 125532-C **Opened:** 15-JAN-10 **Balance Id :** BAL-002
Name: B-NaCl.NH2OH.HCl-MER **Received:** 15-JAN-10
Type: Reagent/Solvent **Expires:** 15-JUL-10
Employee: Tara Griffin
Supplier: GEL
Description: Hg reducing agent
Comments: None

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
1228372-A	B-NH2OH.HCl-MER	N/A	120 g	1000 mL	N/A

Serial ID: 125535-C **Opened:** 15-JAN-10 **Balance Id :** BAL-002
Name: B-KMnO4-MER **Received:** 15-JAN-10
Type: Reagent/Solvent **Expires:** 15-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: 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

Standard Logbook

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1215906	B-K2S2O8S-MER	N/A	50 g	1000 mL	N/A

Serial ID: 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: 1266278 Opened: 08-FEB-10 Solvent : Type I Water
 Name: B-2%HNO3/1%HCL-CPMS Received: 08-FEB-10
 Type: Reagent/Solvent Expires: 15-FEB-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.
1252836	I-HNO3	69.0-70.0	180 mL	9 l	N/A
1252838	I-HCL	36.5-38.0	90 mL	9 l	N/A

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

General Chemistry Analysis

Case Narrative

**General Chemistry Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1390**

Method/Analysis Information

Product: Cyanide, Total
Analytical Batch: 944836 and 944841 **Method:** SW9012A Cyanide and Total
Prep Batch : 944835 and 944840 **Method:** SSW846 9010B Prep

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9012A:

Sample ID	Client ID
245391001	RE15-10-7918
245391002	RE15-10-7915
245391003	RE15-10-7920
245391004	RE15-10-7914
245391005	RE15-10-7919
245391006	RE15-10-7921
245391007	RE15-10-7916
245391008	RE15-10-7917
245391009	RE15-10-7922
245391010	RE15-10-8053
245391011	RE15-10-8054
1202023383	Method Blank (MB)
1202023384	245243002(RE46-10-11561) Sample Duplicate (DUP)
1202023385	245243003(RE46-10-11563) Sample Duplicate (DUP)
1202023386	245243002(RE46-10-11561) Matrix Spike (MS)
1202023387	245243003(RE46-10-11563) Matrix Spike (MS)
1202023388	245243002(RE46-10-11561) Matrix Spike Duplicate (MSD)
1202023389	245243003(RE46-10-11563) Matrix Spike Duplicate (MSD)
1202023390	Laboratory Control Sample (LCS)
1202023402	Method Blank (MB)
1202023403	245391002(RE15-10-7915) Sample Duplicate (DUP)
1202023404	245391003(RE15-10-7920) Sample Duplicate (DUP)
1202023405	245391002(RE15-10-7915) Matrix Spike (MS)
1202023406	245391003(RE15-10-7920) Matrix Spike (MS)
1202023407	245391002(RE15-10-7915) Matrix Spike Duplicate (MSD)
1202023408	245391003(RE15-10-7920) Matrix Spike Duplicate (MSD)
1202023409	Laboratory Control Sample (LCS)

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

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-095 REV# 12.

Preparation/Analytical Method Verification

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

Calibration Information

The Flow Injection analysis was performed on a Lachat QuickChem FIA+ 8000 Series.

Initial Calibration

All initial calibration requirements have been met for this SDG.

Continuing Calibration Blanks

All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)

All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Y Intercept Rule

The absolute value of the intercept is less than 3 times the MDL.

Quality Control (QC) Information

Method Blank (MB) Statement

The MBs analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery

The LCS spike recoveries met the acceptance limits.

Quality Control (QC) Designation

The following samples were selected for QC analysis: 245243002 (RE46-10-11561), 245243003 (RE46-10-11563)- Batch 944836, 245391002 (RE15-10-7915) and 245391003 (RE15-10-7920)- Batch 944841.

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 spike duplicate recovery falls outside of the client specified acceptance limits. Since both the spike recovery and the RPD between the spike and spike duplicate fall within acceptance limits, the data is reported. 1202023388 (RE46-10-11561)- Batch 944836. The spike duplicate recovery falls outside of the client specified acceptance limits. Since both the spike recovery and the RPD between the spike and spike duplicate fall within acceptance limits, the data is reported. 1202023407 (RE15-10-7915)- Batch 944841.

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. 1202023384 (RE46-10-11561), 1202023385 (RE46-10-11563)- Batch 944836, 1202023403 (RE15-10-7915), 1202023404 (RE15-10-7920), 245391002 (RE15-10-7915) and 245391003 (RE15-10-7920)- Batch 944841.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times

All samples in this SDG met the specified holding time.

Sample Preservation/Integrity

All the samples from this sample group met the preservation and integrity requirements of the method.

Sample Dilutions

The following samples in this sample group were diluted due to high concentration: 1202023390 (LCS)- Batch 944836 and 1202023409 (LCS)- Batch 944841.

Sample Re-analysis

The samples in this SDG did not require re-analysis.

Miscellaneous Information

Data Exception (DER) Documentation

The following DER was generated for this SDG: 786550 245391001 (RE15-10-7918)- Batch 944836. The following DERs were generated for this SDG: 786558 786559 1202023407 (RE15-10-7915)- Batch 944841.

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.

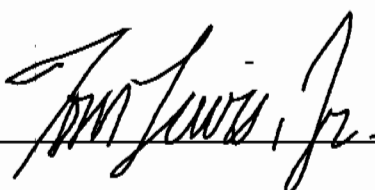
Certification Statement

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: 17Feb10

Sample Data Summary

GEL LABORATORIES LLC

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Certificate of Analysis Report for

LANL010 Los Alamos National Laboratory (72733-001-09)

Client SDG: 10-1390 GEL Work Order: 245391

The Qualifiers in this report are defined as follows:

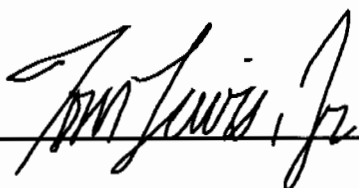
- * Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
- ** Indicates the analyte is a surrogate compound.

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 Lewis, Jr.", is written over a horizontal line.

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 9, 2010

Client SDG: 10-1390

Client Sample ID: RE15-10-7918
Sample ID: 245391001
Matrix: R
Collect Date: 19-JAN-10 12:00
Receive Date: 23-JAN-10
Collector: Client
Moisture: 9.65%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	73.8	271	ug/kg	1	AXC2	02/02/10	1634	944836	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/01/10	1455	944835

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Project: LANL ER Project

Report Date: February 9, 2010

Client SDG: 10-1390

Client Sample ID: RE15-10-7915
Sample ID: 245391002
Matrix: R
Collect Date: 19-JAN-10 12:00
Receive Date: 23-JAN-10
Collector: Client
Moisture: 18.3%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	80.0	294	ug/kg	1	AXC2	02/02/10	1637	944841	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/02/10	1539	944840

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Project: LANL ER Project

Report Date: February 9, 2010

Client SDG: 10-1390

Client Sample ID: RE15-10-7920
Sample ID: 245391003
Matrix: R
Collect Date: 19-JAN-10 12:00
Receive Date: 23-JAN-10
Collector: Client
Moisture: 3.74%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	69.3	255	ug/kg	1	AXC2	02/02/10	1644	944841	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/02/10	1539	944840

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Client SDG: 10-1390

Client Sample ID: RE15-10-7914
Sample ID: 245391004
Matrix: R
Collect Date: 19-JAN-10 12:00
Receive Date: 23-JAN-10
Collector: Client
Moisture: 9.63%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	71.0	261	ug/kg	1	AXC2	02/02/10	1648	944841	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/02/10	1539	944840

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Project: LANL ER Project

Report Date: February 9, 2010

Client SDG: 10-1390

Client Sample ID: RE15-10-7919
Sample ID: 245391005
Matrix: R
Collect Date: 19-JAN-10 12:00
Receive Date: 23-JAN-10
Collector: Client
Moisture: 22.6%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	87.8	323	ug/kg	1	AXC2	02/02/10	1649	944841	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/02/10	1539	944840

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Project: LANL ER Project

Report Date: February 9, 2010

Client SDG: 10-1390

Client Sample ID: RE15-10-7921
Sample ID: 245391006
Matrix: R
Collect Date: 19-JAN-10 12:00
Receive Date: 23-JAN-10
Collector: Client
Moisture: 17.8%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	81.1	298	ug/kg	1	AXC2	02/02/10	1650	944841	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/02/10	1539	944840

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 9, 2010

Client SDG: 10-1390

Client Sample ID: RE15-10-7916
Sample ID: 245391007
Matrix: R
Collect Date: 19-JAN-10 12:00
Receive Date: 23-JAN-10
Collector: Client
Moisture: 6.8%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	67.6	248	ug/kg	1	AXC2	02/02/10	1650	944841	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/02/10	1539	944840

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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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 9, 2010

Client SDG: 10-1390

Client Sample ID: RE15-10-7917
Sample ID: 245391008
Matrix: R
Collect Date: 19-JAN-10 12:00
Receive Date: 23-JAN-10
Collector: Client
Moisture: 20.2%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	83.6	307	ug/kg	1	AXC2	02/02/10	1655	944841	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/02/10	1539	944840

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 9, 2010

Client SDG: 10-1390

Client Sample ID: RE15-10-7922
Sample ID: 245391009
Matrix: R
Collect Date: 19-JAN-10 12:00
Receive Date: 23-JAN-10
Collector: Client
Moisture: 9.86%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	74.0	272	ug/kg	1	AXC2	02/02/10	1656	944841	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/02/10	1539	944840

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 9, 2010

Client SDG: 10-1390

Client Sample ID: RE15-10-8053
Sample ID: 245391010
Matrix: R
Collect Date: 19-JAN-10 12:00
Receive Date: 23-JAN-10
Collector: Client
Moisture: 19.2%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	84.2	309	ug/kg	1	AXC2	02/02/10	1657	944841	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/02/10	1539	944840

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

Report Date: February 9, 2010

Client SDG: 10-1390

Client Sample ID: RE15-10-8054
Sample ID: 245391011
Matrix: R
Collect Date: 19-JAN-10 12:00
Receive Date: 23-JAN-10
Collector: Client
Moisture: 9.5%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	73.7	271	ug/kg	1	AXC2	02/02/10	1658	944841	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/02/10	1539	944840

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 9, 2010

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

Workorder: 245391

Paramname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Flow Injection Analysis											
Batch	944836										
QC1202023384	245243002	DUP									
Cyanide, Total		U	ND	U	ND	ug/kg	N/A		AXC2	02/02/10	16:06
QC1202023385	245243003	DUP									
Cyanide, Total		U	ND	U	ND	ug/kg	N/A			02/02/10	16:09
QC1202023390	LCS										
Cyanide, Total	67900				79800	ug/kg	117	(32%-157%)		02/02/10	16:00
QC1202023383	MB										
Cyanide, Total			U		250	ug/kg				02/02/10	15:59
QC1202023386	245243002	MS									
Cyanide, Total	5610	U	ND		5170	ug/kg	92.1	(26%-158%)		02/02/10	16:07
QC1202023387	245243003	MS									
Cyanide, Total	5450	U	ND		4860	ug/kg	88.4	(26%-158%)		02/02/10	16:10
QC1202023388	245243002	MSD									
Cyanide, Total	6060	U	ND		4240	ug/kg	19.8	69.9	(0%-30%)	02/02/10	16:08
QC1202023389	245243003	MSD									
Cyanide, Total	5770	U	ND		5630	ug/kg	14.7	96.9	(0%-30%)	02/02/10	16:11
Batch	944841										
QC1202023403	245391002	DUP									
Cyanide, Total		U	ND	J	129	ug/kg	200	(+/-289)	AXC2	02/02/10	16:38
QC1202023404	245391003	DUP									
Cyanide, Total		U	ND	U	ND	ug/kg	N/A			02/02/10	16:45
QC1202023409	LCS										
Cyanide, Total	67900				96500	ug/kg	142	(32%-157%)		02/02/10	16:36
QC1202023402	MB										
Cyanide, Total			J		140	ug/kg				02/02/10	16:35
QC1202023405	245391002	MS									
Cyanide, Total	5370	U	ND		4160	ug/kg	77.4	(26%-158%)		02/02/10	16:42
QC1202023406	245391003	MS									
Cyanide, Total	5190	U	ND		4290	ug/kg	82.4	(26%-158%)		02/02/10	16:46
QC1202023407	245391002	MSD									
Cyanide, Total	6120	U	ND		4500	ug/kg	7.67	73.3	(0%-30%)	02/02/10	16:43
QC1202023408	245391003	MSD									
Cyanide, Total	4720	U	ND		3750	ug/kg	13.5	79.2	(0%-30%)	02/02/10	16:47

Notes:

RER is calculated at the 95% confidence level (2-sigma).

The Qualifiers in this report are defined as follows:

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product

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QC Summary

Workorder: 245391

Page 2 of 2

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
B	For General Chemistry and Organic analysis the target analyte was detected in the associated blank.										
BD	Results are either below the MDC or tracer recovery is low										
C	Analyte has been confirmed by GC/MS analysis										
D	Results are reported from a diluted aliquot of the sample										
E	General Chemistry--Concentration of the target analyte exceeds the instrument calibration range										
E	Metals--%difference of sample and SD is >10%. Sample concentration must meet flagging criteria										
E	Organics--Concentration of the target analyte exceeds the instrument calibration range										
F	Estimated Value										
H	Analytical holding time was exceeded										
J	Value is estimated										
M	M if above MDC and less than LLD										
M	Matrix Related Failure										
N	Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor										
N/A	RPD or %Recovery limits do not apply.										
ND	Analyte concentration is not detected above the detection limit										
NJ	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier										
P	Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%										
R	Sample results are rejected										
U	Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.										
UI	Gamma Spectroscopy--Uncertain identification										
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier										
Y	QC Samples were not spiked with this compound										
Z	Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.										
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.										
d	5-day BOD--The 2:1 depletion requirement was not met for this sample										
h	Preparation or preservation holding time was exceeded										

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.

^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

* Indicates that a Quality Control parameter was not within specifications.

For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

Instrument QC Data Summary

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 09-FEB-2010 14:34

GEL Laboratories LLC

Contract: LANL01004

SDG #: 10-1390

Flow Injection Analysis

Method: SW846 9012A

Concentration Units:ug/L

Instrument: Lachat QuickChem FIA+ 8000 Series

Parmname: Cyanide, Total

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	02-FEB-2010 15:22:37	OM_2-2-2010_15-12-07	158	150	105	(90%-110%)	Yes
CCV	02-FEB-2010 15:49:20	OM_2-2-2010_15-12-07	109	100	109	(90%-110%)	Yes
CCV	02-FEB-2010 16:01:43	OM_2-2-2010_15-12-07	108	100	108	(90%-110%)	Yes
CCV	02-FEB-2010 16:14:15	OM_2-2-2010_15-12-07	109	100	109	(90%-110%)	Yes
CCV	02-FEB-2010 16:26:45	OM_2-2-2010_15-12-07	101	100	101	(90%-110%)	Yes
CCV	02-FEB-2010 16:39:11	OM_2-2-2010_15-12-07	102	100	102	(90%-110%)	Yes
CCV	02-FEB-2010 16:51:46	OM_2-2-2010_15-12-07	102	100	102	(90%-110%)	Yes
CCV	02-FEB-2010 17:04:18	OM_2-2-2010_15-12-07	102	100	102	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	02-FEB-2010 15:24:28	OM_2-2-2010_15-12-07	-1.54	10	Yes
CCB	02-FEB-2010 15:51:11	OM_2-2-2010_15-12-07	-1.54	10	Yes
CCB	02-FEB-2010 16:03:33	OM_2-2-2010_15-12-07	-1.21	10	Yes
CCB	02-FEB-2010 16:16:05	OM_2-2-2010_15-12-07	-1.09	10	Yes
CCB	02-FEB-2010 16:28:35	OM_2-2-2010_15-12-07	-1.73	10	Yes
CCB	02-FEB-2010 16:41:03	OM_2-2-2010_15-12-07	-1.57	10	Yes
CCB	02-FEB-2010 16:53:36	OM_2-2-2010_15-12-07	-1.79	10	Yes
CCB	02-FEB-2010 17:06:08	OM_2-2-2010_15-12-07	-0.829	10	Yes

Cyanide, Total

Prep LogBook

Analyst: AXS5 Verified by: _____

Batch: 944835

Lab SOP: GL-GC-E-067 REV# 13

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Spike Amount	Spike Units
MB	1202023383		SW846 9010B Prep	01-FEB-2010 14:55	>12	0.5 g	25 mL	50	.25	g
LCS	1202023390		SW846 9010B Prep	01-FEB-2010 14:55	>12	0.25 g	25 mL	100	.025	mL
SAMPLE	245243002		SW846 9010B Prep	01-FEB-2010 14:55	>12	0.54 g	25 mL	46.2963	.025	mL
DUP	1202023384	245243002	SW846 9010B Prep	01-FEB-2010 14:55	>12	0.52 g	25 mL	48.07692	.025	mL
MS	1202023386	245243002	SW846 9010B Prep	01-FEB-2010 14:55	>12	0.54 g	25 mL	46.2963	.025	mL
MSD	1202023388	245243002	SW846 9010B Prep	01-FEB-2010 14:55	>12	0.5 g	25 mL	50	.025	mL
SAMPLE	245243003		SW846 9010B Prep	01-FEB-2010 14:55	>12	0.53 g	25 mL	47.16981	.025	mL
DUP	1202023385	245243003	SW846 9010B Prep	01-FEB-2010 14:55	>12	0.54 g	25 mL	46.2963	.025	mL
MS	1202023387	245243003	SW846 9010B Prep	01-FEB-2010 14:55	>12	0.55 g	25 mL	45.45455	.025	mL
MSD	1202023389	245243003	SW846 9010B Prep	01-FEB-2010 14:55	>12	0.52 g	25 mL	48.07692	.025	mL
SAMPLE	245243004		SW846 9010B Prep	01-FEB-2010 14:55	>12	0.58 g	25 mL	43.10345	.025	mL
SAMPLE	245243005		SW846 9010B Prep	01-FEB-2010 14:55	>12	0.53 g	25 mL	47.16981	.025	mL
SAMPLE	245243006		SW846 9010B Prep	01-FEB-2010 14:55	>12	0.54 g	25 mL	46.2963	.025	mL
SAMPLE	245243007		SW846 9010B Prep	01-FEB-2010 14:55	>12	0.51 g	25 mL	49.01961	.025	mL
SAMPLE	245243008		SW846 9010B Prep	01-FEB-2010 14:55	>12	0.53 g	25 mL	47.16981	.025	mL
SAMPLE	245243009		SW846 9010B Prep	01-FEB-2010 14:55	>12	0.5 g	25 mL	50	.025	mL
SAMPLE	245243010		SW846 9010B Prep	01-FEB-2010 14:55	>12	0.54 g	25 mL	46.2963	.025	mL
SAMPLE	245243011		SW846 9010B Prep	01-FEB-2010 14:55	>12	0.5 g	25 mL	50	.025	mL
SAMPLE	245243012		SW846 9010B Prep	01-FEB-2010 14:55	>12	0.51 g	25 mL	49.01961	.025	mL
SAMPLE	245249001		SW846 9010B Prep	01-FEB-2010 14:55	>12	0.57 g	25 mL	43.85965	.025	mL
SAMPLE	245249002		SW846 9010B Prep	01-FEB-2010 14:55	>12	0.52 g	25 mL	48.07692	.025	mL
SAMPLE	245249003		SW846 9010B Prep	01-FEB-2010 14:55	>12	0.5 g	25 mL	50	.025	mL
SAMPLE	245249004		SW846 9010B Prep	01-FEB-2010 14:55	>12	0.5 g	25 mL	50	.025	mL
SAMPLE	245249005		SW846 9010B Prep	01-FEB-2010 14:55	>12	0.51 g	25 mL	49.01961	.025	mL
SAMPLE	245249006		SW846 9010B Prep	01-FEB-2010 14:55	>12	0.52 g	25 mL	48.07692	.025	mL
SAMPLE	245249007		SW846 9010B Prep	01-FEB-2010 14:55	>12	0.52 g	25 mL	48.07692	.025	mL
SAMPLE	245249008		SW846 9010B Prep	01-FEB-2010 14:55	>12	0.58 g	25 mL	43.10345	.025	mL
SAMPLE	245391001		SW846 9010B Prep	01-FEB-2010 14:55	>12	0.51 g	25 mL	49.01961	.025	mL

Prep Data Logbook Version 1:1

GEL Laboratories LLC

Page#

Prep LogBook

Reagent/Solvent Lot ID	Amount	Description	Comments
091211-C	25 mL	0.25N Sodium Hydroxide Solution	
WCN100201-07	.0375 mL	150 ppb CN Distilled ICV Standard	
1176724-C	1.25 mL	0.8N H3NO3S	
1260189-C	2.5 mL	50% H2SO4 CN Prep	
1176778-C	1 mL	51% MgCl2 Soln	
1238142-C	1.25 mL	Bismuth Nitrate Solution	

Prep LogBook

Analyst: AXS5
 Batch: 944840
 Lab SOP: GL-GC-E-067 REV# 13

Verified by: _____

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1202023409	URF1200957-01	.25	g
MS	1202023405	URF1184831-02	.025	mL
MS	1202023406	URF1184831-02	.025	mL
MSD	1202023407	URF1184831-02	.025	mL
MSD	1202023408	URF1184831-02	.025	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1202023402		SW846 9010B Prep	02-FEB-2010 15:39	>12	0.5 g	25 mL	50	SOIL
LCS	1202023409		SW846 9010B Prep	02-FEB-2010 15:39	>12	0.25 g	25 mL	100	SOIL
SAMPLE	245391002		SW846 9010B Prep	02-FEB-2010 15:39	>12	0.52 g	25 mL	48.07692	SOIL
DUP	1202023403	245391002	SW846 9010B Prep	02-FEB-2010 15:39	>12	0.53 g	25 mL	47.16981	SOIL
MS	1202023405	245391002	SW846 9010B Prep	02-FEB-2010 15:39	>12	0.57 g	25 mL	43.85965	SOIL
MSD	1202023407	245391002	SW846 9010B Prep	02-FEB-2010 15:39	>12	0.5 g	25 mL	50	SOIL
SAMPLE	245391003		SW846 9010B Prep	02-FEB-2010 15:39	>12	0.51 g	25 mL	49.01961	SOIL
DUP	1202023404	245391003	SW846 9010B Prep	02-FEB-2010 15:39	>12	0.52 g	25 mL	48.07692	SOIL
MS	1202023406	245391003	SW846 9010B Prep	02-FEB-2010 15:39	>12	0.5 g	25 mL	50	SOIL
MSD	1202023408	245391003	SW846 9010B Prep	02-FEB-2010 15:39	>12	0.55 g	25 mL	45.45455	SOIL
SAMPLE	245391004		SW846 9010B Prep	02-FEB-2010 15:39	>12	0.53 g	25 mL	47.16981	SOIL
SAMPLE	245391005		SW846 9010B Prep	02-FEB-2010 15:39	>12	0.5 g	25 mL	50	SOIL
SAMPLE	245391006		SW846 9010B Prep	02-FEB-2010 15:39	>12	0.51 g	25 mL	49.01961	SOIL
SAMPLE	245391007		SW846 9010B Prep	02-FEB-2010 15:39	>12	0.54 g	25 mL	46.2963	SOIL
SAMPLE	245391008		SW846 9010B Prep	02-FEB-2010 15:39	>12	0.51 g	25 mL	49.01961	SOIL
SAMPLE	245391009		SW846 9010B Prep	02-FEB-2010 15:39	>12	0.51 g	25 mL	49.01961	SOIL
SAMPLE	245391010		SW846 9010B Prep	02-FEB-2010 15:39	>12	0.5 g	25 mL	50	SOIL
SAMPLE	245391011		SW846 9010B Prep	02-FEB-2010 15:39	>12	0.51 g	25 mL	49.01961	SOIL
SAMPLE	245394001		SW846 9010B Prep	02-FEB-2010 15:39	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	245394002		SW846 9010B Prep	02-FEB-2010 15:39	>12	0.56 g	25 mL	44.64286	SOIL
SAMPLE	245394003		SW846 9010B Prep	02-FEB-2010 15:39	>12	0.51 g	25 mL	49.01961	SOIL
SAMPLE	245394004		SW846 9010B Prep	02-FEB-2010 15:39	>12	0.54 g	25 mL	46.2963	SOIL
SAMPLE	245394005		SW846 9010B Prep	02-FEB-2010 15:39	>12	0.53 g	25 mL	47.16981	SOIL
SAMPLE	245394006		SW846 9010B Prep	02-FEB-2010 15:39	>12	0.5 g	25 mL	50	SOIL
SAMPLE	245394007		SW846 9010B Prep	02-FEB-2010 15:39	>12	0.53 g	25 mL	47.16981	SOIL
SAMPLE	245394008		SW846 9010B Prep	02-FEB-2010 15:39	>12	0.57 g	25 mL	43.85965	SOIL
SAMPLE	245394009		SW846 9010B Prep	02-FEB-2010 15:39	>12	0.51 g	25 mL	49.01961	SOIL
SAMPLE	245394010		SW846 9010B Prep	02-FEB-2010 15:39	>12	0.57 g	25 mL	43.85965	SOIL

Prep LogBook

Reagent/Solvent Lot ID	Amount	Description	Comments
091211-C	25 mL	0.25N Sodium Hydroxide Solution	
W/CN100202-07	.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	2/2/2010 15:15:28	OM_2-2-2010_15-12-07
150 ppb		1	axc2	2/2/2010 15:16:20	OM_2-2-2010_15-12-07
100 ppb		1	axc2	2/2/2010 15:17:13	OM_2-2-2010_15-12-07
50 ppb		1	axc2	2/2/2010 15:18:06	OM_2-2-2010_15-12-07
10 ppb		1	axc2	2/2/2010 15:18:59	OM_2-2-2010_15-12-07
CRDL 5.0 ppb		1	axc2	2/2/2010 15:19:53	OM_2-2-2010_15-12-07
ICAL-00		1	axc2	2/2/2010 15:20:47	OM_2-2-2010_15-12-07
ICV		1	axc2	2/2/2010 15:22:37	OM_2-2-2010_15-12-07
ICB		1	axc2	2/2/2010 15:24:28	OM_2-2-2010_15-12-07
CRDL		1	axc2	2/2/2010 15:26:17	OM_2-2-2010_15-12-07
1202025742	945814	1	axc2	2/2/2010 15:28:07	OM_2-2-2010_15-12-07
1202025749	945814	25	axc2	2/2/2010 15:29:01	OM_2-2-2010_15-12-07
245144001	945814	1	axc2	2/2/2010 15:29:54	OM_2-2-2010_15-12-07
1202025743	945814	1	axc2	2/2/2010 15:30:47	OM_2-2-2010_15-12-07
1202025745	945814	1	axc2	2/2/2010 15:31:40	OM_2-2-2010_15-12-07
1202025747	945814	1	axc2	2/2/2010 15:32:33	OM_2-2-2010_15-12-07
245514001	945814	1	axc2	2/2/2010 15:33:25	OM_2-2-2010_15-12-07
245514002	945814	1	axc2	2/2/2010 15:34:18	OM_2-2-2010_15-12-07
245514003	945814	1	axc2	2/2/2010 15:35:11	OM_2-2-2010_15-12-07
245514004	945814	1	axc2	2/2/2010 15:36:03	OM_2-2-2010_15-12-07
CCV		1	axc2	2/2/2010 15:36:55	OM_2-2-2010_15-12-07
CCB		1	axc2	2/2/2010 15:38:46	OM_2-2-2010_15-12-07
245514005	945814	1	axc2	2/2/2010 15:40:34	OM_2-2-2010_15-12-07
245514006	945814	1	axc2	2/2/2010 15:41:25	OM_2-2-2010_15-12-07
245514007	945814	1	axc2	2/2/2010 15:42:18	OM_2-2-2010_15-12-07
245514008	945814	1	axc2	2/2/2010 15:43:09	OM_2-2-2010_15-12-07
245514009	945814	1	axc2	2/2/2010 15:44:01	OM_2-2-2010_15-12-07
245514010	945814	1	axc2	2/2/2010 15:44:55	OM_2-2-2010_15-12-07
245514011	945814	1	axc2	2/2/2010 15:45:48	OM_2-2-2010_15-12-07
245514012	945814	1	axc2	2/2/2010 15:46:42	OM_2-2-2010_15-12-07
245515003	945814	1	axc2	2/2/2010 15:47:34	OM_2-2-2010_15-12-07
1202025744	945814	1	axc2	2/2/2010 15:48:28	OM_2-2-2010_15-12-07
CCV		1	axc2	2/2/2010 15:49:20	OM_2-2-2010_15-12-07
CCB		1	axc2	2/2/2010 15:51:11	OM_2-2-2010_15-12-07
1202025746	945814	1	axc2	2/2/2010 15:52:59	OM_2-2-2010_15-12-07
1202025748	945814	1	axc2	2/2/2010 15:53:52	OM_2-2-2010_15-12-07
245515004	945814	1	axc2	2/2/2010 15:54:45	OM_2-2-2010_15-12-07
245515005	945814	1	axc2	2/2/2010 15:55:37	OM_2-2-2010_15-12-07
245515006	945814	1	axc2	2/2/2010 15:56:30	OM_2-2-2010_15-12-07
245515007	945814	1	axc2	2/2/2010 15:57:22	OM_2-2-2010_15-12-07
245515008	945814	1	axc2	2/2/2010 15:58:15	OM_2-2-2010_15-12-07
245515009	945814	1	axc2	2/2/2010 15:59:07	OM_2-2-2010_15-12-07
1202023383	944836	1	axc2	2/2/2010 15:59:59	OM_2-2-2010_15-12-07
1202023390	944836	25	axc2	2/2/2010 16:00:51	OM_2-2-2010_15-12-07
CCV		1	axc2	2/2/2010 16:01:43	OM_2-2-2010_15-12-07
CCB		1	axc2	2/2/2010 16:03:33	OM_2-2-2010_15-12-07
245243002	944836	1	axc2	2/2/2010 16:05:23	OM_2-2-2010_15-12-07
1202023384	944836	1	axc2	2/2/2010 16:06:17	OM_2-2-2010_15-12-07
1202023386	944836	1	axc2	2/2/2010 16:07:11	OM_2-2-2010_15-12-07
1202023388	944836	1	axc2	2/2/2010 16:08:04	OM_2-2-2010_15-12-07
245243003	944836	1	axc2	2/2/2010 16:08:58	OM_2-2-2010_15-12-07
1202023385	944836	1	axc2	2/2/2010 16:09:51	OM_2-2-2010_15-12-07
1202023387	944836	1	axc2	2/2/2010 16:10:44	OM_2-2-2010_15-12-07
1202023389	944836	1	axc2	2/2/2010 16:11:37	OM_2-2-2010_15-12-07
245243004	944836	1	axc2	2/2/2010 16:12:30	OM_2-2-2010_15-12-07
245243005	944836	1	axc2	2/2/2010 16:13:22	OM_2-2-2010_15-12-07
CCV		1	axc2	2/2/2010 16:14:15	OM_2-2-2010_15-12-07
CCB		1	axc2	2/2/2010 16:16:05	OM_2-2-2010_15-12-07

245243006	944836	1	axc2	2/2/2010	16:17:54	OM_2-2-2010_15-12-07
245243007	944836	1	axc2	2/2/2010	16:18:47	OM_2-2-2010_15-12-07
245243008	944836	1	axc2	2/2/2010	16:19:39	OM_2-2-2010_15-12-07
245243009	944836	1	axc2	2/2/2010	16:20:32	OM_2-2-2010_15-12-07
245243010	944836	1	axc2	2/2/2010	16:21:23	OM_2-2-2010_15-12-07
245243011	944836	1	axc2	2/2/2010	16:22:17	OM_2-2-2010_15-12-07
245243012	944836	1	axc2	2/2/2010	16:23:12	OM_2-2-2010_15-12-07
245249001	944836	1	axc2	2/2/2010	16:24:05	OM_2-2-2010_15-12-07
245249002	944836	1	axc2	2/2/2010	16:24:59	OM_2-2-2010_15-12-07
245249003	944836	1	axc2	2/2/2010	16:25:53	OM_2-2-2010_15-12-07
CCV		1	axc2	2/2/2010	16:26:45	OM_2-2-2010_15-12-07
CCB		1	axc2	2/2/2010	16:28:35	OM_2-2-2010_15-12-07
245249004	944836	1	axc2	2/2/2010	16:30:26	OM_2-2-2010_15-12-07
245249005	944836	1	axc2	2/2/2010	16:31:19	OM_2-2-2010_15-12-07
245249006	944836	1	axc2	2/2/2010	16:32:12	OM_2-2-2010_15-12-07
245249007	944836	1	axc2	2/2/2010	16:33:04	OM_2-2-2010_15-12-07
245249008	944836	1	axc2	2/2/2010	16:33:57	OM_2-2-2010_15-12-07
245391001	944836	1	axc2	2/2/2010	16:34:49	OM_2-2-2010_15-12-07
1202023402	944841	1	axc2	2/2/2010	16:35:42	OM_2-2-2010_15-12-07
1202023409	944841	25	axc2	2/2/2010	16:36:35	OM_2-2-2010_15-12-07
245391002	944841	1	axc2	2/2/2010	16:37:28	OM_2-2-2010_15-12-07
1202023403	944841	1	axc2	2/2/2010	16:38:19	OM_2-2-2010_15-12-07
CCV		1	axc2	2/2/2010	16:39:11	OM_2-2-2010_15-12-07
CCB		1	axc2	2/2/2010	16:41:03	OM_2-2-2010_15-12-07
1202023405	944841	1	axc2	2/2/2010	16:42:52	OM_2-2-2010_15-12-07
1202023407	944841	1	axc2	2/2/2010	16:43:46	OM_2-2-2010_15-12-07
245391003	944841	1	axc2	2/2/2010	16:44:41	OM_2-2-2010_15-12-07
1202023404	944841	1	axc2	2/2/2010	16:45:35	OM_2-2-2010_15-12-07
1202023406	944841	1	axc2	2/2/2010	16:46:29	OM_2-2-2010_15-12-07
1202023408	944841	1	axc2	2/2/2010	16:47:21	OM_2-2-2010_15-12-07
245391004	944841	1	axc2	2/2/2010	16:48:15	OM_2-2-2010_15-12-07
245391005	944841	1	axc2	2/2/2010	16:49:08	OM_2-2-2010_15-12-07
245391006	944841	1	axc2	2/2/2010	16:50:01	OM_2-2-2010_15-12-07
245391007	944841	1	axc2	2/2/2010	16:50:54	OM_2-2-2010_15-12-07
CCV		1	axc2	2/2/2010	16:51:46	OM_2-2-2010_15-12-07
CCB		1	axc2	2/2/2010	16:53:36	OM_2-2-2010_15-12-07
245391008	944841	1	axc2	2/2/2010	16:55:25	OM_2-2-2010_15-12-07
245391009	944841	1	axc2	2/2/2010	16:56:17	OM_2-2-2010_15-12-07
245391010	944841	1	axc2	2/2/2010	16:57:10	OM_2-2-2010_15-12-07
245391011	944841	1	axc2	2/2/2010	16:58:03	OM_2-2-2010_15-12-07
245394001	944841	1	axc2	2/2/2010	16:58:55	OM_2-2-2010_15-12-07
245394002	944841	1	axc2	2/2/2010	16:59:49	OM_2-2-2010_15-12-07
245394003	944841	1	axc2	2/2/2010	17:00:44	OM_2-2-2010_15-12-07
245394004	944841	1	axc2	2/2/2010	17:01:39	OM_2-2-2010_15-12-07
245394005	944841	1	axc2	2/2/2010	17:02:32	OM_2-2-2010_15-12-07
245394006	944841	1	axc2	2/2/2010	17:03:26	OM_2-2-2010_15-12-07
CCV		1	axc2	2/2/2010	17:04:18	OM_2-2-2010_15-12-07
CCB		1	axc2	2/2/2010	17:06:08	OM_2-2-2010_15-12-07
245394007	944841	1	axc2	2/2/2010	17:07:58	OM_2-2-2010_15-12-07
245394008	944841	1	axc2	2/2/2010	17:08:52	OM_2-2-2010_15-12-07
245394009	944841	1	axc2	2/2/2010	17:09:45	OM_2-2-2010_15-12-07
245394010	944841	1	axc2	2/2/2010	17:10:38	OM_2-2-2010_15-12-07
1202023410	944843	1	axc2	2/2/2010	17:11:32	OM_2-2-2010_15-12-07
1202023417	944843	25	axc2	2/2/2010	17:12:25	OM_2-2-2010_15-12-07
245394011	944843	1	axc2	2/2/2010	17:13:18	OM_2-2-2010_15-12-07
1202023411	944843	1	axc2	2/2/2010	17:14:11	OM_2-2-2010_15-12-07
1202023413	944843	1	axc2	2/2/2010	17:15:04	OM_2-2-2010_15-12-07
1202023415	944843	1	axc2	2/2/2010	17:15:56	OM_2-2-2010_15-12-07
CCV		1	axc2	2/2/2010	17:16:49	OM_2-2-2010_15-12-07
CCB		1	axc2	2/2/2010	17:18:39	OM_2-2-2010_15-12-07

245394012	944843	1	axc2	2/2/2010	17:20:30	OM_2-2-2010_15-12-07
1202023412	944843	1	axc2	2/2/2010	17:21:24	OM_2-2-2010_15-12-07
1202023414	944843	1	axc2	2/2/2010	17:22:19	OM_2-2-2010_15-12-07
1202023416	944843	1	axc2	2/2/2010	17:23:13	OM_2-2-2010_15-12-07
245394013	944843	1	axc2	2/2/2010	17:24:07	OM_2-2-2010_15-12-07
245394014	944843	1	axc2	2/2/2010	17:25:02	OM_2-2-2010_15-12-07
245394015	944843	1	axc2	2/2/2010	17:25:56	OM_2-2-2010_15-12-07
245313001	944843	1	axc2	2/2/2010	17:26:49	OM_2-2-2010_15-12-07
245313002	944843	1	axc2	2/2/2010	17:27:41	OM_2-2-2010_15-12-07
245313003	944843	1	axc2	2/2/2010	17:28:34	OM_2-2-2010_15-12-07
CCV		1	axc2	2/2/2010	17:29:26	OM_2-2-2010_15-12-07
CCB		1	axc2	2/2/2010	17:31:17	OM_2-2-2010_15-12-07
245313004*	944843	1	axc2	2/2/2010	17:33:06	OM_2-2-2010_15-12-07
245313005*	944843	1	axc2	2/2/2010	17:34:00	OM_2-2-2010_15-12-07
245313006*	944843	1	axc2	2/2/2010	17:34:55	OM_2-2-2010_15-12-07
245313007*	944843	1	axc2	2/2/2010	17:35:49	OM_2-2-2010_15-12-07
245313008*	944843	1	axc2	2/2/2010	17:36:43	OM_2-2-2010_15-12-07
245313009*	944843	1	axc2	2/2/2010	17:37:38	OM_2-2-2010_15-12-07
245313010*	944843	1	axc2	2/2/2010	17:38:32	OM_2-2-2010_15-12-07
245313011*	944843	1	axc2	2/2/2010	17:39:25	OM_2-2-2010_15-12-07
245313012*	944843	1	axc2	2/2/2010	17:40:19	OM_2-2-2010_15-12-07
245313013*	944843	1	axc2	2/2/2010	17:41:13	OM_2-2-2010_15-12-07
CCV		1	axc2	2/2/2010	17:42:05	OM_2-2-2010_15-12-07
CCB		1	axc2	2/2/2010	17:43:56	OM_2-2-2010_15-12-07

Original Run Filename: OM_2-2-2010_15-12-07.OMN created 2/2/2010 15:12:07
 Original Run Author's Signature: [axc2]
 Current Run Filename: OM_2-2-2010_15-12-07.OMN last modified 2/2/2010 17:45:01
 Current Run Author's Signature: [axc2]
 Description: GL-GC-E-102 EPA 420.4, 9066
 LCS nominal 50 ug/L

Sample	Rep.	Cup No.	Channel 1 TCYANIDE		Detection Time	ADF	MDF	Description
			Conc. (ug/L)	Area (Vs)				
WCN100202-01	1	S1	200	7.10	2/2/2010@15:15:28			200 ppb
WCN100202-02	1	S2	150	5.34	2/2/2010@15:16:20			150 ppb
WCN100202-03	1	S3	100	3.56	2/2/2010@15:17:13			100 ppb
WCN100202-04	1	S4	50.0	1.78	2/2/2010@15:18:06			50 ppb
WCN100202-05	1	S5	10.0	0.439	2/2/2010@15:18:59			10 ppb
WCN100202-06	1	S6	5.00	0.254	2/2/2010@15:19:53			CRDL 5.0 ppb
WCN100202-08	1	S7	0.00	0.0256	2/2/2010@15:20:47			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
Result:			0.99996 > 0.99500					
Message			Pass					
Action			Continue					
WCN100202-07	1	S8	158	5.62	2/2/2010@15:22:37			ICV
Known Conc:			150					
DQM Test: > + Percent Relative Difference								
Result:			5.4 < 10.0					
Message			ICV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			5.4 < 10.0					
Message			ICV Passed					
Action			Continue					
Calibration:			Table/Fig. 1					
WCN100202-08	1	S7	-1.54	-4.06e-4	2/2/2010@15:24:28			ICB/CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.54 < 5.01					
Message			ICB/CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.54 > -5.01					
Message			ICB/CCB Passed					
Action			Continue					
WCN100202-06	1	S6	5.84	0.259	2/2/2010@15:26:17			CRDL
Known Conc:			5.00					
DQM Test: > + Concentration Limit								
Result:			5.84 < 7.50					
Message			CRDL Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			5.84 > 2.50					
Message			Pass					
Action			None					
1202025742 945814 MB	1	1	-0.190	0.0472	2/2/2010@15:28:07			
1202025749 LCS	1	2	30.5	1.13	2/2/2010@15:29:01		25.00	
245144001	1	3	0.131	0.0585	2/2/2010@15:29:54			
1202025743 DUP	1	4	-0.543	0.0348	2/2/2010@15:30:47			
1202025745 MS	1	5	111	3.95	2/2/2010@15:31:40			
1202025747 MSD	1	6	103	3.68	2/2/2010@15:32:33			
245514001	1	7	4.49	0.212	2/2/2010@15:33:25			
245514002	1	8	48.6	1.76	2/2/2010@15:34:18			
245514003	1	9	5.43	0.245	2/2/2010@15:35:11			
245514004	1	10	2.53	0.143	2/2/2010@15:36:03			
WCN100202-03	1	S3	107	3.83	2/2/2010@15:36:55			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			7.2 < 10.0					
Message			CCV Passed					

		Action	Continue						
DQM Test: < - Percent Relative Difference									
		Result:	7.2 < 10.0						
		Message	CCV Passed						
		Action	Continue						
WCN100202-08	1	S7	-1.64	-0.00382	2/2/2010@15:38:46				CCB
		Known Conc:	0.00						
DQM Test: > + Concentration Limit									
		Result:	-1.64 < 5.00						
		Message	CCB Passed						
		Action	Continue						
DQM Test: < - Concentration Limit									
		Result:	-1.64 > -5.00						
		Message	CCB Passed						
		Action	Continue						
245514005	1	11	1.94	0.122	2/2/2010@15:40:34				
245514006	1	12	3.93	0.192	2/2/2010@15:41:25				
245514007	1	13	0.509	0.0718	2/2/2010@15:42:18				
245514008	1	14	3.84	0.189	2/2/2010@15:43:09				
245514009	1	15	59.1	2.13	2/2/2010@15:44:01				
245514010	1	16	32.2	1.19	2/2/2010@15:44:55				
245514011	1	17	6.90	0.297	2/2/2010@15:45:48				
245514012	1	18	7.65	0.323	2/2/2010@15:46:42				
245515003	1	19	-0.322	0.0425	2/2/2010@15:47:34				
1202025744 DUP	1	20	-0.246	0.0452	2/2/2010@15:48:28				
WCN100202-03	1	S3	109	3.89	2/2/2010@15:49:20				CCV
		Known Conc:	100						
DQM Test: > + Percent Relative Difference									
		Result:	9.1 < 10.0						
		Message	CCV Passed						
		Action	Continue						
DQM Test: < - Percent Relative Difference									
		Result:	9.1 < 10.0						
		Message	CCV Passed						
		Action	Continue						
WCN100202-08	1	S7	-1.54	-1.52e-4	2/2/2010@15:51:11				CCB
		Known Conc:	0.00						
DQM Test: > + Concentration Limit									
		Result:	-1.54 < 5.00						
		Message	CCB Passed						
		Action	Continue						
DQM Test: < - Concentration Limit									
		Result:	-1.54 > -5.00						
		Message	CCB Passed						
		Action	Continue						
1202025746 MS	1	21	109	3.89	2/2/2010@15:52:59				
1202025748 MSD	1	22	112	3.99	2/2/2010@15:53:52				
245515004	1	23	1.82	0.118	2/2/2010@15:54:45				
245515005	1	24	-0.639	0.0314	2/2/2010@15:55:37				
245515006	1	25	0.162	0.0596	2/2/2010@15:56:30				
245515007	1	26	0.221	0.0617	2/2/2010@15:57:22				
245515008	1	27	0.987	0.0886	2/2/2010@15:58:15				
245515009	1	28	1.96	0.123	2/2/2010@15:59:07				
1202023383 944836 MB	1	29	-0.203	0.0468	2/2/2010@15:59:59				
1202023390 LCS	1	30	31.9	1.18	2/2/2010@16:00:51			25.00	
WCN100202-03	1	S3	108	3.87	2/2/2010@16:01:43				CCV
		Known Conc:	100						
DQM Test: > + Percent Relative Difference									
		Result:	8.5 < 10.0						
		Message	CCV Passed						
		Action	Continue						
DQM Test: < - Percent Relative Difference									
		Result:	8.5 < 10.0						
		Message	CCV Passed						
		Action	Continue						
WCN100202-08	1	S7	-1.21	0.0114	2/2/2010@16:03:33				CCB
		Known Conc:	0.00						
DQM Test: > + Concentration Limit									

			Result:	-1.21 < 5.00				
			Message	CCB Passed				
			Action	Continue				
DQM Test: < - Concentration Limit								
			Result:	-1.21 > -5.00				
			Message	CCB Passed				
			Action	Continue				
245243002	1	31		-0.0604	0.0518	2/2/2010@16:05:23		
1202023384	DUP	32		0.335	0.0657	2/2/2010@16:06:17		
1202023386	MS	33		92.1	3.30	2/2/2010@16:07:11		
1202023388	MSD	34		69.9	2.51	2/2/2010@16:08:04		
245243003		35		0.697	0.0784	2/2/2010@16:08:58		
1202023385	DUP	36		0.374	0.0670	2/2/2010@16:09:51		
1202023387	MS	37		89.1	3.19	2/2/2010@16:10:44		
1202023389	MSD	38		97.6	3.49	2/2/2010@16:11:37		
245243004		39		7.98	0.335	2/2/2010@16:12:30		
245243005		40		-0.0613	0.0517	2/2/2010@16:13:22		
WCN100202-03		S3		109	3.88	2/2/2010@16:14:15		CCV
Known Conc:				100				
DQM Test: > + Percent Relative Difference								
			Result:	8.9 < 10.0				
			Message	CCV Passed				
			Action	Continue				
DQM Test: < - Percent Relative Difference								
			Result:	8.9 < 10.0				
			Message	CCV Passed				
			Action	Continue				
WCN100202-08	1	S7		-1.09	0.0154	2/2/2010@16:16:05		CCB
Known Conc:				0.00				
DQM Test: > + Concentration Limit								
			Result:	-1.09 < 5.00				
			Message	CCB Passed				
			Action	Continue				
DQM Test: < - Concentration Limit								
			Result:	-1.09 > -5.00				
			Message	CCB Passed				
			Action	Continue				
245243006	1	41		1.55	0.108	2/2/2010@16:17:54		
245243007	1	42		4.68	0.219	2/2/2010@16:18:47		
245243008	1	43		1.23	0.0972	2/2/2010@16:19:39		
245243009	1	44		3.62	0.181	2/2/2010@16:20:32		
245243010	1	45		1.54	0.108	2/2/2010@16:21:23		
245243011	1	46		1.01	0.0896	2/2/2010@16:22:17		
245243012	1	47		0.458	0.0700	2/2/2010@16:23:12		
245249001	1	48		1.19	0.0958	2/2/2010@16:24:05		
245249002	1	49		1.12	0.0934	2/2/2010@16:24:59		
245249003	1	50		2.80	0.152	2/2/2010@16:25:53		
WCN100202-03	1	S3		101	3.59	2/2/2010@16:26:45		CCV
Known Conc:				100				
DQM Test: > + Percent Relative Difference								
			Result:	0.6 < 10.0				
			Message	CCV Passed				
			Action	Continue				
DQM Test: < - Percent Relative Difference								
			Result:	0.6 < 10.0				
			Message	CCV Passed				
			Action	Continue				
WCN100202-08	1	S7		-1.73	-0.00710	2/2/2010@16:28:35		CCB
Known Conc:				0.00				
DQM Test: > + Concentration Limit								
			Result:	-1.73 < 5.00				
			Message	CCB Passed				
			Action	Continue				
DQM Test: < - Concentration Limit								
			Result:	-1.73 > -5.00				
			Message	CCB Passed				
			Action	Continue				
245249004	1	51		-0.117	0.0498	2/2/2010@16:30:26		

245249005	1	52	1.62	0.111	2/2/2010@16:31:19			
245249006	1	53	0.218	0.0616	2/2/2010@16:32:12			
245249007	1	54	1.79	0.117	2/2/2010@16:33:04			
245249008	1	55	1.03	0.0902	2/2/2010@16:33:57			
245391001	1	56	0.124	0.0582	2/2/2010@16:34:49			
1202023402 944841 MB	1	57	2.80	0.152	2/2/2010@16:35:42			
1202023409 LCS	1	58	38.6	1.41	2/2/2010@16:36:35			
245391002	1	59	0.227	0.0619	2/2/2010@16:37:28			
1202023403 DUP	1	60	2.24	0.133	2/2/2010@16:38:19			
WCN100202-03	1	S3	102	3.64	2/2/2010@16:39:11			CCV
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					
WCN100202-08	1	S7	-1.57	-0.00153	2/2/2010@16:41:03			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					
1202023405 MS	1	61	77.6	2.79	2/2/2010@16:42:52			
1202023407 MSD	1	62	73.5	2.64	2/2/2010@16:43:46			
245391003	1	63	0.224	0.0618	2/2/2010@16:44:41			
1202023404 DUP	1	64	-0.468	0.0374	2/2/2010@16:45:35			
1202023406 MS	1	65	82.6	2.96	2/2/2010@16:46:29			
1202023408 MSD	1	66	79.4	2.85	2/2/2010@16:47:21			
245391004	1	67	0.487	0.0710	2/2/2010@16:48:15			
245391005	1	68	-0.896	0.0224	2/2/2010@16:49:08			
245391006	1	69	-0.193	0.0471	2/2/2010@16:50:01			
245391007	1	70	0.261	0.0631	2/2/2010@16:50:54			
WCN100202-03	1	S3	102	3.64	2/2/2010@16:51:46			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					
WCN100202-08	1	S7	-1.79	-0.00922	2/2/2010@16:53:36			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.79 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.79 > -5.00					
Message			CCB Passed					
Action			Continue					
245391008	1	71	-0.160	0.0483	2/2/2010@16:55:25			
245391009	1	72	0.520	0.0722	2/2/2010@16:56:17			
245391010	1	73	-0.518	0.0357	2/2/2010@16:57:10			
245391011	1	74	0.0206	0.0546	2/2/2010@16:58:03			
245394001	1	75	-0.0652	0.0516	2/2/2010@16:58:55			
245394002	1	76	0.00871	0.0542	2/2/2010@16:59:49			
245394003	1	77	0.469	0.0704	2/2/2010@17:00:44			
245394004	1	78	-0.537	0.0350	2/2/2010@17:01:39			
245394005	1	79	0.0309	0.0550	2/2/2010@17:02:32			

245394006	1	80	0.573	0.0741	2/2/2010@17:03:26		
WCN100202-03	1	S3	102	3.65	2/2/2010@17:04:18		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				
WCN100202-08	1	S7	-0.829	0.0247	2/2/2010@17:06:08		CCB
Known Conc:			0.00				
DQM Test: > + Concentration Limit							
Result:			-0.829 < 5.00				
Message			CCB Passed				
Action			Continue				
DQM Test: < - Concentration Limit							
Result:			-0.829 > -5.00				
Message			CCB Passed				
Action			Continue				
245394007	1	81	0.565	0.0738	2/2/2010@17:07:58		
245394008	1	82	0.0556	0.0558	2/2/2010@17:08:52		
245394009	1	83	0.682	0.0779	2/2/2010@17:09:45		
245394010	1	84	-0.136	0.0491	2/2/2010@17:10:38		
1202023410 944843 MB	1	85	-0.00696	0.0536	2/2/2010@17:11:32		
1202023417 LCS	1	86	38.8	1.42	2/2/2010@17:12:25		
245394011	1	102	0.139	0.0588	2/2/2010@17:13:18		
1202023411 DUP	1	103	-0.152	0.0486	2/2/2010@17:14:11		
1202023413 MS	1	104	105	3.75	2/2/2010@17:15:04		
1202023415 MSD	1	105	103	3.69	2/2/2010@17:15:56		
WCN100202-03	1	S3	103	3.66	2/2/2010@17:16:49		CCV
Known Conc:			100				
DQM Test: > + Percent Relative Difference							
Result:			2.6 < 10.0				
Message			CCV Passed				
Action			Continue				
DQM Test: < - Percent Relative Difference							
Result:			2.6 < 10.0				
Message			CCV Passed				
Action			Continue				
WCN100202-08	1	S7	-1.08	0.0158	2/2/2010@17:18:39		CCB
Known Conc:			0.00				
DQM Test: > + Concentration Limit							
Result:			-1.08 < 5.00				
Message			CCB Passed				
Action			Continue				
DQM Test: < - Concentration Limit							
Result:			-1.08 > -5.00				
Message			CCB Passed				
Action			Continue				
245394012	1	106	0.0396	0.0553	2/2/2010@17:20:30		
1202023412 DUP	1	107	-0.313	0.0429	2/2/2010@17:21:24		
1202023414 MS	1	108	107	3.80	2/2/2010@17:22:19		
1202023416 MSD	1	109	113	4.02	2/2/2010@17:23:13		
245394013	1	110	0.604	0.0752	2/2/2010@17:24:07		
245394014	1	111	-0.325	0.0424	2/2/2010@17:25:02		
245394015	1	112	0.259	0.0630	2/2/2010@17:25:56		
245313001	1	87	0.0999	0.0574	2/2/2010@17:26:49		
245313002	1	88	3.34	0.171	2/2/2010@17:27:41		
245313003	1	89	0.0187	0.0545	2/2/2010@17:28:34		
WCN100202-03	1	S3	102	3.63	2/2/2010@17:29:26		CCV
Known Conc:			100				
DQM Test: > + Percent Relative Difference							
Result:			1.7 < 10.0				
Message			CCV Passed				
Action			Continue				
DQM Test: < - Percent Relative Difference							

			Result:	1.7 < 10.0				
			Message	CCV Passed				
			Action	Continue				
WCN100202-08	1	S7		-1.64	-0.00389	2/2/2010@17:31:17		CCB
			Known Conc:	0.00				
DQM Test: > + Concentration Limit								
			Result:	-1.64 < 5.00				
			Message	CCB Passed				
			Action	Continue				
DQM Test: < - Concentration Limit								
			Result:	-1.64 > -5.00				
			Message	CCB Passed				
			Action	Continue				
245313004	1	90		1.82	0.118	2/2/2010@17:33:06		
245313005	1	91		0.522	0.0723	2/2/2010@17:34:00		
245313006	1	92		0.421	0.0687	2/2/2010@17:34:55		
245313007	1	93		19.4	0.737	2/2/2010@17:35:49		
245313008	1	94		6.78	0.293	2/2/2010@17:36:43		
245313009	1	95		1.20	0.0961	2/2/2010@17:37:38		
245313010	1	96		7.32	0.312	2/2/2010@17:38:32		
245313011	1	97		3.81	0.188	2/2/2010@17:39:25		
245313012	1	98		0.366	0.0668	2/2/2010@17:40:19		
245313013	1	99		5.30	0.241	2/2/2010@17:41:13		
WCN100202-03	1	S3		102	3.64	2/2/2010@17:42:05		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				
WCN100202-08	1	S7		10.6	0.426	2/2/2010@17:43:56		CCB
			Known Conc:	0.00				
DQM Test: > + Concentration Limit								
			Result:	10.6 > 5.00				
			Message	CCB Failed				
			Action	Stop Run				
DQM Test: < - Concentration Limit								
			Result:	10.6 > -5.00				
			Message	CCB Passed				
			Action	Continue				

Analyte Properties Table for OM_2-2-2010_15-12-07.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

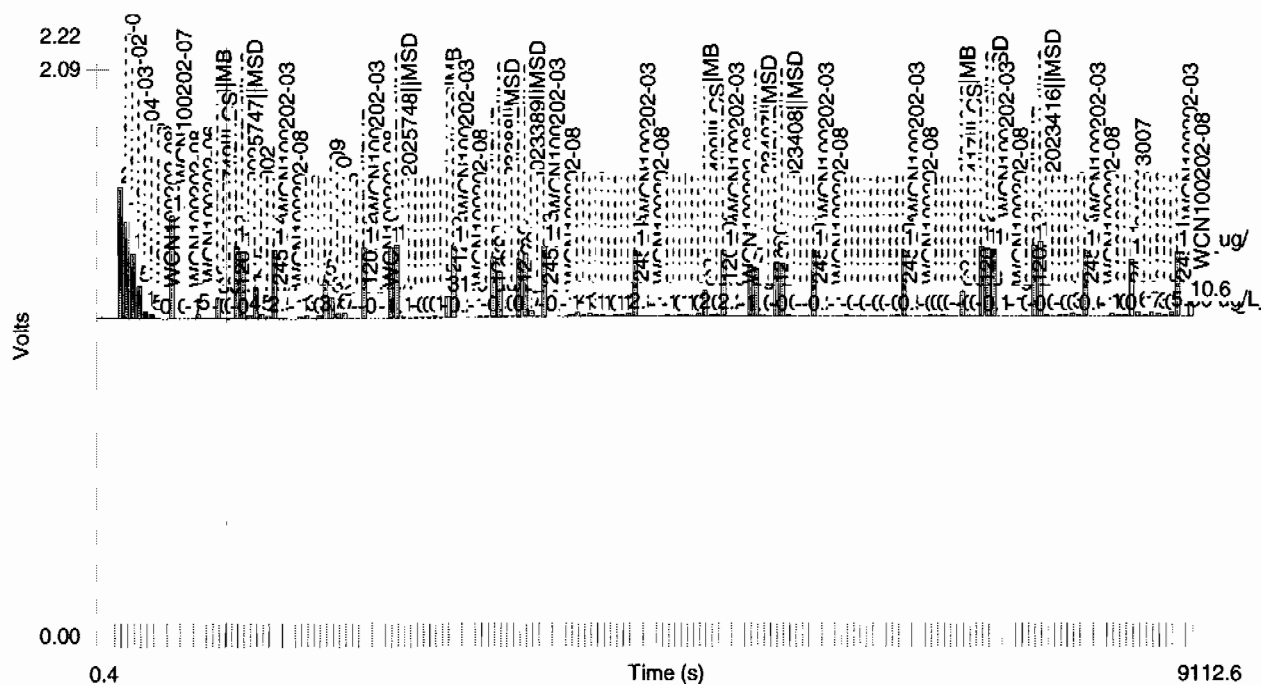
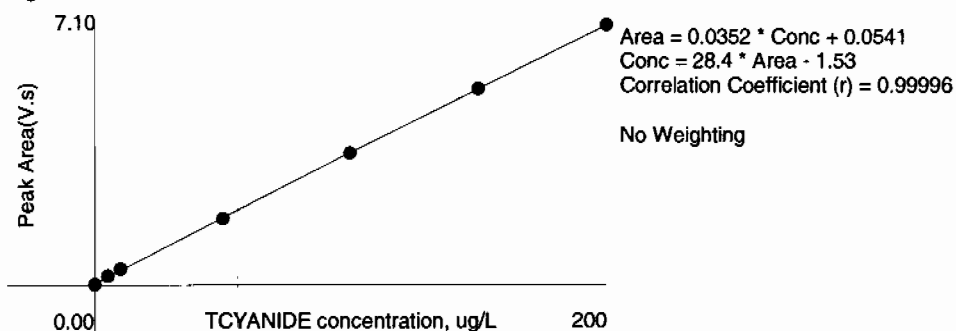


Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	7.10	0.477	-0.1	2/2/2010	15:16:31
2	150	1	5.34	0.356	-0.1	2/2/2010	15:17:23
3	100	1	3.56	0.238	0.3	2/2/2010	15:18:16
4	50.0	1	1.78	0.119	1.7	2/2/2010	15:19:09
5	10.0	1	0.439	0.0284	-8.2	2/2/2010	15:20:02
6	5.00	1	0.254	0.0152	-10.3	2/2/2010	15:20:56
7	0.00	1	0.0256	5.67e-4		2/2/2010	15:21:50

Figure 1: TCYANIDE



Miscellaneous

DATA EXCEPTION REPORT

Mo.Day Yr. 03-FEB-10	Division: Industrial	Quality Criteria: Specifications	Type: Process
Instrument Type: LACHAT Flow Injection Analyzer	Test / Method: SW846 9012A	Matrix Type: Solid	Client Code: LANL
Batch ID: 944836	Sample Numbers: See Below		
Potentially affected work order(s)(SDG): 245243(10-1348-1),245249(10-1351),245391(10-1390) Application Issues: Container scanning event for custody missed			
Specification and Requirements		DER Disposition:	
Exception Description: 1. Container scanning event for custody missed: 245243 002,003,004,005,006,007,008,009,010,011,012 245249 001,002,003,004,005,006,007,008 245391 001 2. Failed Recovery for MSD: QC 1202023388MSD		1. Due to analyst oversight, samples were not scanned prior to analysis. However; samples were in custody of the analyst during time of analysis. 2. The spike duplicate recovery falls outside of the client specified acceptance limits. Since both the spike recovery and the RPD between the spike and spike duplicate fall within acceptance limits, the data is reported.	

08-FEB-10

DATA EXCEPTION REPORT

Mo. Day Yr. 03-FEB-10	Division: Industrial	Quality Criteria: Specifications	Type: Process			
Instrument Type: LACHAT Flow Injection Analyzer	Test / Method: SW846 9012A	Matrix Type: Solid	Client Code: LANL			
Batch ID: 944841	Sample Numbers: See Below					
Potentially affected work order(s) (SDG): 245391(10-1390), 245394(10-1392)						
Application Issues: Failed Recovery for MSD/PSD						
Specification and Requirements Exception Description:		DER Disposition:				
1. Failed Recovery for MSD: QC 1202023407MSD		1. The spike duplicate recovery falls outside of the client specified acceptance limits. Since both the spike recovery and the RPD between the spike and spike duplicate fall within acceptance limits, the data is reported.				

Originator's Name:

Ashley Earl

03-FEB-10

Data Validator/Group Leader:

Elzbieta Szulc

08-FEB-10

General Chemistry Analysis

Case Narrative

**General Chemistry Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1390-1**

Method/Analysis Information

Product: Cyanide, Total

Analytical Batch: 943824 **Method:** SW9012A Cyanide and Total

Prep Batch : 943821 **Method:** SSW846 9010B Prep

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9012A:

Sample ID	Client ID
245392001	RE15-10-8074
245392002	RE15-10-8075
1202020944	Method Blank (MB)
1202020948	Laboratory Control Sample (LCS)
1202023391	245378002(RE15-10-8078) Sample Duplicate (DUP)
1202023392	245378002(RE15-10-8078) Matrix Spike (MS)
1202023393	245378002(RE15-10-8078) Matrix Spike Duplicate (MSD)

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

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-095 REV# 12.

Preparation/Analytical Method Verification

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

Calibration Information

The Flow Injection analysis was performed on a Lachat QuickChem FIA+ 8000 Series.

Initial Calibration

All initial calibration requirements have been met for this SDG.

Continuing Calibration Blanks

All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)

All continuing calibration verification standards (CCVs) associated with reported data from this batch were within

acceptance limits.

Y Intercept Rule

The absolute value of the intercept is less than 3 times the MDL.

Quality Control (QC) Information

Method Blank (MB) Statement

The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery

The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation

The following sample was selected for QC analysis: 245378002 (RE15-10-8078).

Matrix Spike (MS)/Post Spike (PS) Recovery Statement

The MS/PS recovery for this sample set was within the required acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement

The MSD recovery for this sample set was within the required acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement

The RPD 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. 1202023391 (RE15-10-8078).

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.

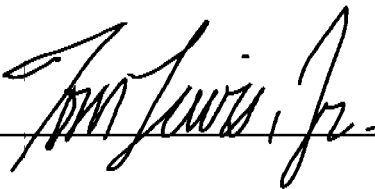
Certification Statement

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: 17Feb10

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: 10-1390-1 GEL Work Order: 245392

The Qualifiers in this report are defined as follows:

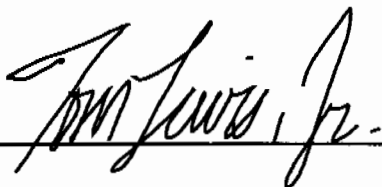
- * Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
- ** Indicates the analyte is a surrogate compound.

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, reading "Tom Lewis, 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 4, 2010

Client SDG: 10-1390-1

Client Sample ID: RE15-10-8074
Sample ID: 245392001
Matrix: W
Collect Date: 19-JAN-10 12:00
Receive Date: 23-JAN-10
Collector: Client

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "As Received"</i>											
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2	01/26/10	1125	943824	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/25/10	1448	943821

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

GEL LABORATORIES LLC

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

Certificate of Analysis

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

Report Date: February 4, 2010

Client SDG: 10-1390-1

Client Sample ID: RE15-10-8075
Sample ID: 245392002
Matrix: W
Collect Date: 19-JAN-10 12:00
Receive Date: 23-JAN-10
Collector: Client

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "As Received"</i>											
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2	01/26/10	1125	943824	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/25/10	1448	943821

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 4, 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: 245392

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Flow Injection Analysis											
Batch	943824										
QC1202023391	245378002	DUP									
Cyanide, Total		U	ND	U	ND	ug/L	N/A		AXC2	01/26/10	11:18
QC1202020948	LCS										
Cyanide, Total	50.0				50.5	ug/L	101	(90%-110%)		01/26/10	10:54
QC1202020944	MB										
Cyanide, Total			U		5.00	ug/L				01/26/10	10:53
QC1202023392	245378002	MS									
Cyanide, Total	100	U	ND		104	ug/L	104	(60%-127%)		01/26/10	11:19
QC1202023393	245378002	MSD									
Cyanide, Total	100	U	ND		104	ug/L	0.00	104	(0%-20%)	01/26/10	11:20

Notes:

RER is calculated at the 95% confidence level (2-sigma).

The Qualifiers in this report are defined as follows:

** Analyte is a surrogate compound

< Result is less than value reported

> Result is greater than value reported

A The TIC is a suspected aldol-condensation product

B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.

C Analyte has been confirmed by GC/MS analysis

D Results are reported from a diluted aliquot of the sample

E General Chemistry--Concentration of the target analyte exceeds the instrument calibration range

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

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

F Estimated Value

H Analytical holding time was exceeded

J Value is estimated

M Matrix Related Failure

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

N/A RPD or %Recovery limits do not apply.

ND Analyte concentration is not detected above the detection limit

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

P Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%

R Sample results are rejected

U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

GEL LABORATORIES LLC

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

QC Summary

Workorder: 245392

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier										
Y	QC Samples were not spiked with this compound										
Z	Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.										
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.										
d	5-day BOD--The 2:1 depletion requirement was not met for this sample										
h	Preparation or preservation holding time was exceeded										

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.

^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

* Indicates that a Quality Control parameter was not within specifications.

For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

Instrument QC Data Summary

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 04-FEB-2010 14:37

GEL Laboratories LLC

Contract: LANL01004

SDG #: 10-1390-1

Flow Injection Analysis

Method: SW846 9012A

Concentration Units:ug/L

Instrument: Lachat QuickChem FIA+ 8000 Series

Parmname: Cyanide, Total

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	26-JAN-2010 09:01:56	OM_1-26-2010_08-51-25	147	150	98	(90%-110%)	Yes
CCV	26-JAN-2010 10:50:05	OM_1-26-2010_09-58-45	102	100	102	(90%-110%)	Yes
CCV	26-JAN-2010 11:02:38	OM_1-26-2010_09-58-45	101	100	101	(90%-110%)	Yes
CCV	26-JAN-2010 11:15:08	OM_1-26-2010_09-58-45	102	100	102	(90%-110%)	Yes
CCV	26-JAN-2010 11:26:48	OM_1-26-2010_09-58-45	101	100	101	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	26-JAN-2010 09:03:46	OM_1-26-2010_08-51-25	-1.27	5	Yes
CCB	26-JAN-2010 10:51:54	OM_1-26-2010_09-58-45	-1.71	5	Yes
CCB	26-JAN-2010 11:04:28	OM_1-26-2010_09-58-45	-1.27	5	Yes
CCB	26-JAN-2010 11:16:58	OM_1-26-2010_09-58-45	-1.4	5	Yes
CCB	26-JAN-2010 11:28:38	OM_1-26-2010_09-58-45	-1.17	5	Yes

Cyanide, Total

Prep LogBook

Analyst: AXS5
 Batch: 943821
 Lab SOP: GL-CC-E-067 REV# 13

Verified by: _____

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1202020948	URF1184831-02	.0125	mL
MS	1202020946	URF1184831-02	.025	mL
MS	1202023392	URF1184831-02	.025	mL
MSD	1202020947	URF1184831-02	.025	mL
MSD	1202023393	URF1184831-02	.025	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1202020944		EPA 335.4	25-JAN-2010 14:48	>12	25 mL	25 mL	1	WASTE WATER
LCS	1202020948		EPA 335.4	25-JAN-2010 14:48	>12	25 mL	25 mL	1	WASTE WATER
SAMPLE	245032001		EPA 335.4	25-JAN-2010 14:48	>12	25 mL	25 mL	1	WASTE WATER
SAMPLE	245127001		SW846 9010B Prep	25-JAN-2010 14:48	>12	25 mL	25 mL	1	WASTE WATER
SAMPLE	245130001		SW846 9010B Prep	25-JAN-2010 14:48	>12	25 mL	25 mL	1	WASTE WATER
SAMPLE	245323003		SW846 9010B Prep	25-JAN-2010 14:48	>12	25 mL	25 mL	1	WASTE WATER
DUP	1202020945	245323003	SW846 9010B Prep	25-JAN-2010 14:48	>12	25 mL	25 mL	1	WATER
MS	1202020946	245323003	SW846 9010B Prep	25-JAN-2010 14:48	>12	25 mL	25 mL	1	WATER
MSD	1202020947	245323003	SW846 9010B Prep	25-JAN-2010 14:48	>12	25 mL	25 mL	1	WATER
SAMPLE	245323014		SW846 9010B Prep	25-JAN-2010 14:48	>12	25 mL	25 mL	1	WATER
SAMPLE	245323025		SW846 9010B Prep	25-JAN-2010 14:48	>12	25 mL	25 mL	1	WATER
SAMPLE	245341001		EPA 335.4	25-JAN-2010 14:48	>12	25 mL	25 mL	1	STORM WATER
SAMPLE	245341003		EPA 335.4	25-JAN-2010 14:48	>12	25 mL	25 mL	1	STORM WATER
SAMPLE	245341005		EPA 335.4	25-JAN-2010 14:48	>12	25 mL	25 mL	1	STORM WATER
SAMPLE	245341007		EPA 335.4	25-JAN-2010 14:48	>12	25 mL	25 mL	1	STORM WATER
SAMPLE	245341009		EPA 335.4	25-JAN-2010 14:48	>12	25 mL	25 mL	1	STORM WATER
SAMPLE	245341010		EPA 335.4	25-JAN-2010 14:48	>12	25 mL	25 mL	1	STORM WATER
SAMPLE	245355007		EPA 335.4	25-JAN-2010 14:48	>12	25 mL	25 mL	1	STORM WATER
SAMPLE	245362002		EPA 335.4	25-JAN-2010 14:48	>12	25 mL	25 mL	1	WATER
SAMPLE	245378002		SW846 9010B Prep	25-JAN-2010 14:48	>12	25 mL	25 mL	1	WATER
DUP	1202023391	245378002	SW846 9010B Prep	25-JAN-2010 14:48	>12	25 mL	25 mL	1	WATER
MS	1202023392	245378002	SW846 9010B Prep	25-JAN-2010 14:48	>12	25 mL	25 mL	1	WATER
MSD	1202023393	245378002	SW846 9010B Prep	25-JAN-2010 14:48	>12	25 mL	25 mL	1	WATER
SAMPLE	245382001		SW846 9010B Prep	25-JAN-2010 14:48	>12	25 mL	25 mL	1	WATER
SAMPLE	245386001		SW846 9010B Prep	25-JAN-2010 14:48	>12	25 mL	25 mL	1	WATER
SAMPLE	245390001		SW846 9010B Prep	25-JAN-2010 14:48	>12	25 mL	25 mL	1	WATER
SAMPLE	245392001		SW846 9010B Prep	25-JAN-2010 14:48	>12	25 mL	25 mL	1	WATER
SAMPLE	245392002		SW846 9010B Prep	25-JAN-2010 14:48	>12	25 mL	25 mL	1	WATER

Prep LogBook

Reagent/Solvent Lot ID	Amount	Description	Comments
091211-C	25 mL	0.25N Sodium Hydroxide Solution	Samples 245323003, 1202020945, 1202020946, 1202020947, 245323014, and 245323025 were received with improper preservation. These samples were preserved with 50% NAOH which has an expiration date of 6/23/10 and a reference number that is 1246596-C.
WCN100125-07	.0375 mL	150 ppb CN Distilled ICV Standard	
1176724-C	1.25 mL	0.8N H3NO3S	
1238146-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	1/26/2010 8:54:47	OM_1-26-2010_08-51-25
150 ppb		1	axc2	1/26/2010 8:55:39	OM_1-26-2010_08-51-25
100 ppb		1	axc2	1/26/2010 8:56:31	OM_1-26-2010_08-51-25
50 ppb		1	axc2	1/26/2010 8:57:24	OM_1-26-2010_08-51-25
10 ppb		1	axc2	1/26/2010 8:58:18	OM_1-26-2010_08-51-25
CRDL 5.0 ppb		1	axc2	1/26/2010 8:59:11	OM_1-26-2010_08-51-25
ICAL-00		1	axc2	1/26/2010 9:00:05	OM_1-26-2010_08-51-25
ICV		1	axc2	1/26/2010 9:01:56	OM_1-26-2010_08-51-25
ICB		1	axc2	1/26/2010 9:03:46	OM_1-26-2010_08-51-25
CRDL		1	axc2	1/26/2010 9:05:36	OM_1-26-2010_08-51-25
1202022282	944401	1	axc2	1/26/2010 9:07:26	OM_1-26-2010_08-51-25
1202022289	944401	25	axc2	1/26/2010 9:08:19	OM_1-26-2010_08-51-25
245113001	944401	1	axc2	1/26/2010 9:09:13	OM_1-26-2010_08-51-25
245113002	944401	1	axc2	1/26/2010 9:10:06	OM_1-26-2010_08-51-25
245113003	944401	1	axc2	1/26/2010 9:10:59	OM_1-26-2010_08-51-25
245113004	944401	1	axc2	1/26/2010 9:11:51	OM_1-26-2010_08-51-25
245113005	944401	1	axc2	1/26/2010 9:12:44	OM_1-26-2010_08-51-25
245113006	944401	1	axc2	1/26/2010 9:13:37	OM_1-26-2010_08-51-25
245113007	944401	1	axc2	1/26/2010 9:14:29	OM_1-26-2010_08-51-25
245113009	944401	1	axc2	1/26/2010 9:15:22	OM_1-26-2010_08-51-25
CCV		1	axc2	1/26/2010 9:16:14	OM_1-26-2010_08-51-25
CCB		1	axc2	1/26/2010 9:18:04	OM_1-26-2010_08-51-25
245113010	944401	1	axc2	1/26/2010 9:19:52	OM_1-26-2010_08-51-25
245147008	944401	1	axc2	1/26/2010 9:20:45	OM_1-26-2010_08-51-25
1202022283	944401	1	axc2	1/26/2010 9:21:36	OM_1-26-2010_08-51-25
1202022285	944401	1	axc2	1/26/2010 9:22:28	OM_1-26-2010_08-51-25
1202022287	944401	1	axc2	1/26/2010 9:23:20	OM_1-26-2010_08-51-25
245147009	944401	1	axc2	1/26/2010 9:24:13	OM_1-26-2010_08-51-25
1202022284	944401	1	axc2	1/26/2010 9:25:07	OM_1-26-2010_08-51-25
1202022286	944401	1	axc2	1/26/2010 9:26:00	OM_1-26-2010_08-51-25
1202022288	944401	1	axc2	1/26/2010 9:26:53	OM_1-26-2010_08-51-25
245147010	944401	1	axc2	1/26/2010 9:27:47	OM_1-26-2010_08-51-25
CCV		1	axc2	1/26/2010 9:28:40	OM_1-26-2010_08-51-25
CCB		1	axc2	1/26/2010 9:30:29	OM_1-26-2010_08-51-25
245147011*	944401	1	axc2	1/26/2010 9:32:18	OM_1-26-2010_08-51-25
245147012*	944401	1	axc2	1/26/2010 9:33:11	OM_1-26-2010_08-51-25
245147013*	944401	1	axc2	1/26/2010 9:34:04	OM_1-26-2010_08-51-25
245147014*	944401	1	axc2	1/26/2010 9:34:56	OM_1-26-2010_08-51-25
245147015*	944401	1	axc2	1/26/2010 9:35:49	OM_1-26-2010_08-51-25
245147016*	944401	1	axc2	1/26/2010 9:36:41	OM_1-26-2010_08-51-25
245147017*	944401	1	axc2	1/26/2010 9:37:33	OM_1-26-2010_08-51-25
245147018*	944401	1	axc2	1/26/2010 9:38:26	OM_1-26-2010_08-51-25
1202022256*	944394	1	axc2	1/26/2010 9:39:18	OM_1-26-2010_08-51-25
1202022263*	944394	1	axc2	1/26/2010 9:40:09	OM_1-26-2010_08-51-25
CCV		1	axc2	1/26/2010 9:41:02	OM_1-26-2010_08-51-25
CCB		1	axc2	1/26/2010 9:42:53	OM_1-26-2010_08-51-25

Author: axc2

Date : 1/26/2010

Original Run Filename: OM_1-26-2010_08-51-25.OMN created 1/26/2010 08:51:25
 Original Run Author's Signature: [axc2]
 Current Run Filename: OM_1-26-2010_08-51-25.OMN last modified 1/26/2010 09:43:57
 Current Run Author's Signature: [axc2]
 Description: GL-GC-E-102 EPA 420.4, 9066
 LCS nominal 50 ug/L

Sample	Rep.	Cup No.	Channel 1 TCYANIDE		Detection Time	ADF	MDF	Description
			Conc. (ug/L)	Area (Vs)				
WCN100126-01	1	S1	200	8.68	1/26/2010@08:54:47			200 ppb
WCN100126-02	1	S2	150	6.65	1/26/2010@08:55:39			150 ppb
WCN100126-03	1	S3	100	4.23	1/26/2010@08:56:31			100 ppb
WCN100126-04	1	S4	50.0	2.33	1/26/2010@08:57:24			50 ppb
WCN100126-05	1	S5	10.0	0.535	1/26/2010@08:58:18			10 ppb
WCN100126-06	1	S6	5.00	0.332	1/26/2010@08:59:11			CRDL 5.0 ppb
WCN100126-08	1	S7	0.00	0.0443	1/26/2010@09:00:05			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
Result:			0.99965 > 0.99500					
Message			Pass					
Action			Continue					
WCN100126-07	1	S8	147	6.42	1/26/2010@09:01:56			ICV
Known Conc:			150					
DQM Test: > + Percent Relative Difference								
Result:			-1.9 < 10.0					
Message			ICV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			-1.9 < 10.0					
Message			ICV Passed					
Action			Continue					
Calibration:			Table/Fig. 1					
WCN100126-08	1	S7	-1.27	0.0330	1/26/2010@09:03:46			ICB/CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.27 < 5.01					
Message			ICB/CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.27 > -5.01					
Message			ICB/CCB Passed					
Action			Continue					
WCN100126-06	1	S6	5.62	0.330	1/26/2010@09:05:36			CRDL
Known Conc:			5.00					
DQM Test: > + Concentration Limit								
Result:			5.62 < 7.50					
Message			CRDL Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			5.62 > 2.50					
Message			Pass					
Action			None					
1202022282 944401 MB	1	1	-1.64	0.0171	1/26/2010@09:07:26			
1202022289 LCS	1	2	24.2	1.13	1/26/2010@09:08:19		25.00	
245113001	1	3	12.9	0.642	1/26/2010@09:09:13			
245113002	1	4	0.109	0.0924	1/26/2010@09:10:06			
245113003	1	5	-0.503	0.0660	1/26/2010@09:10:59			
245113004	1	6	-0.778	0.0541	1/26/2010@09:11:51			
245113005	1	7	0.853	0.124	1/26/2010@09:12:44			
245113006	1	8	-0.727	0.0563	1/26/2010@09:13:37			
245113007	1	9	0.715	0.118	1/26/2010@09:14:29			
245113009	1	10	0.323	0.102	1/26/2010@09:15:22			
WCN100126-03	1	S3	101	4.46	1/26/2010@09:16:14			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			1.5 < 10.0					
Message			CCV Passed					

		Action	Continue			
DQM Test: < - Percent Relative Difference						
		Result:	1.5 < 10.0			
		Message	CCV Passed			
		Action	Continue			
WCN100126-08	1	S7	-1.21	0.0353	1/26/2010@09:18:04	CCB
		Known Conc:	0.00			
DQM Test: > + Concentration Limit						
		Result:	-1.21 < 5.00			
		Message	CCB Passed			
		Action	Continue			
DQM Test: < - Concentration Limit						
		Result:	-1.21 > -5.00			
		Message	CCB Passed			
		Action	Continue			
245113010	1	11	0.237	0.0979	1/26/2010@09:19:52	
245147008	1	12	2.01	0.174	1/26/2010@09:20:45	
1202022283 DUP	1	13	0.898	0.126	1/26/2010@09:21:36	
1202022285 MS	1	14	99.9	4.39	1/26/2010@09:22:28	
1202022287 MSD	1	15	99.4	4.37	1/26/2010@09:23:20	
245147009	1	16	1.79	0.165	1/26/2010@09:24:13	
1202022284 DUP	1	17	0.819	0.123	1/26/2010@09:25:07	
1202022286 MS	1	18	97.2	4.28	1/26/2010@09:26:00	
1202022288 MSD	1	19	98.9	4.35	1/26/2010@09:26:53	
245147010	1	20	-0.567	0.0633	1/26/2010@09:27:47	
WCN100126-03	1	S3	103	4.50	1/26/2010@09:28:40	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			
WCN100126-08	1	S7	-1.63	0.0175	1/26/2010@09:30:29	CCB
		Known Conc:	0.00			
DQM Test: > + Concentration Limit						
		Result:	-1.63 < 5.00			
		Message	CCB Passed			
		Action	Continue			
DQM Test: < - Concentration Limit						
		Result:	-1.63 > -5.00			
		Message	CCB Passed			
		Action	Continue			
245147011	1	21	2.89	0.212	1/26/2010@09:32:18	
245147012	1	22	11.2	0.572	1/26/2010@09:33:11	
245147013	1	23	3.03	0.218	1/26/2010@09:34:04	
245147014	1	24	0.384	0.104	1/26/2010@09:34:56	
245147015	1	25	-0.655	0.0595	1/26/2010@09:35:49	
245147016	1	26	7.81	0.424	1/26/2010@09:36:41	
245147017	1	27	-0.657	0.0594	1/26/2010@09:37:33	
245147018	1	28	0.543	0.111	1/26/2010@09:38:26	
1202022256 944394 MB	1	29	-1.01	0.0440	1/26/2010@09:39:18	
1202022263 LCS	1	30	49.2	2.21	1/26/2010@09:40:09	
WCN100126-03	1	S3	103	4.54	1/26/2010@09:41:02	CCV
		Known Conc:	100			
DQM Test: > + Percent Relative Difference						
		Result:	3.4 < 10.0			
		Message	CCV Passed			
		Action	Continue			
DQM Test: < - Percent Relative Difference						
		Result:	3.4 < 10.0			
		Message	CCV Passed			
		Action	Continue			
WCN100126-08	1	S7	5.78	0.337	1/26/2010@09:42:53	CCB
		Known Conc:	0.00			
DQM Test: > + Concentration Limit						

Result:	5.78 > 5.00				
Message	CCB Failed				
Action	Stop Run				
DQM Test: < - Concentration Limit					
Result:	5.78 > -5.00				
Message	CCB Passed				
Action	Continue				

Analyte Properties Table for OM_1-26-2010_08-51-25.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

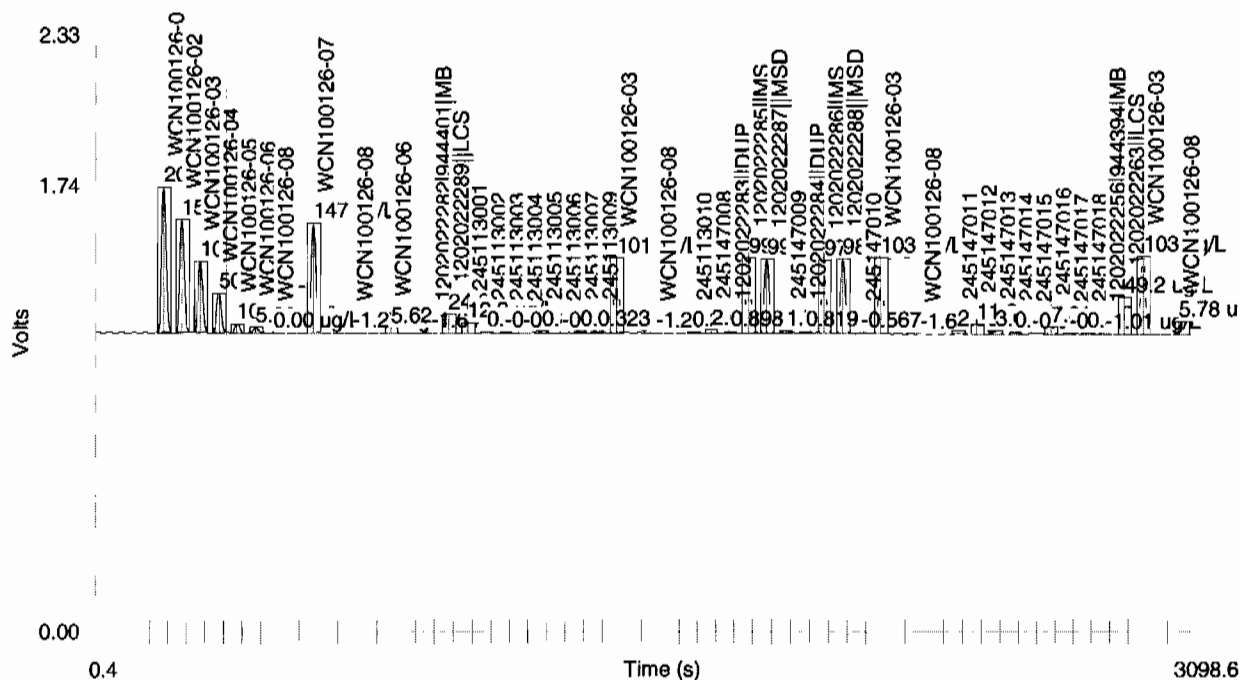
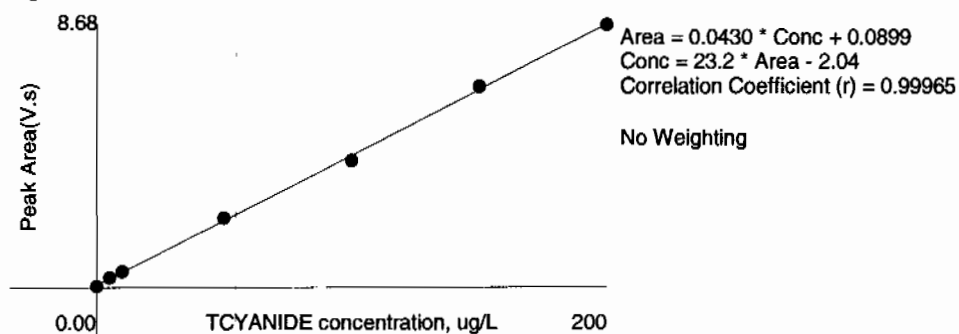


Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	8.68	0.566	0.2	1/26/2010	08:55:50
2	150	1	6.65	0.437	-1.5	1/26/2010	08:56:42
3	100	1	4.23	0.275	3.8	1/26/2010	08:57:34
4	50.0	1	2.33	0.152	-3.8	1/26/2010	08:58:27
5	10.0	1	0.535	0.0337	-2.9	1/26/2010	08:59:21
6	5.00	1	0.332	0.0213	-8.8	1/26/2010	09:00:14
7	0.00	1	0.0443	8.65e-4		1/26/2010	09:01:08

Figure 1: TCYANIDE



This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
CCV		1	axc2	1/26/2010 10:00:18	OM_1-26-2010_09-58-45
CCB		1	axc2	1/26/2010 10:02:07	OM_1-26-2010_09-58-45
245147011	944401	1	axc2	1/26/2010 10:03:57	OM_1-26-2010_09-58-45
245147012	944401	1	axc2	1/26/2010 10:04:50	OM_1-26-2010_09-58-45
245147013	944401	1	axc2	1/26/2010 10:05:43	OM_1-26-2010_09-58-45
245147014	944401	1	axc2	1/26/2010 10:06:35	OM_1-26-2010_09-58-45
245147015	944401	1	axc2	1/26/2010 10:07:28	OM_1-26-2010_09-58-45
245147016	944401	1	axc2	1/26/2010 10:08:20	OM_1-26-2010_09-58-45
245147017	944401	1	axc2	1/26/2010 10:09:12	OM_1-26-2010_09-58-45
245147018	944401	1	axc2	1/26/2010 10:10:04	OM_1-26-2010_09-58-45
245147015	944401	1	axc2	1/26/2010 10:10:57	OM_1-26-2010_09-58-45
1202022256	944394	1	axc2	1/26/2010 10:11:49	OM_1-26-2010_09-58-45
CCV		1	axc2	1/26/2010 10:12:41	OM_1-26-2010_09-58-45
CCB		1	axc2	1/26/2010 10:14:31	OM_1-26-2010_09-58-45
245147017	944401	1	axc2	1/26/2010 10:16:19	OM_1-26-2010_09-58-45
1202022263	944394	1	axc2	1/26/2010 10:17:10	OM_1-26-2010_09-58-45
244447003	944394	1	axc2	1/26/2010 10:18:05	OM_1-26-2010_09-58-45
1202024087	944394	1	axc2	1/26/2010 10:18:58	OM_1-26-2010_09-58-45
1202024088	944394	1	axc2	1/26/2010 10:19:52	OM_1-26-2010_09-58-45
1202024089	944394	1	axc2	1/26/2010 10:20:45	OM_1-26-2010_09-58-45
245089001	944394	1	axc2	1/26/2010 10:21:39	OM_1-26-2010_09-58-45
245089002	944394	1	axc2	1/26/2010 10:22:32	OM_1-26-2010_09-58-45
245089003	944394	1	axc2	1/26/2010 10:23:25	OM_1-26-2010_09-58-45
245089004	944394	1	axc2	1/26/2010 10:24:18	OM_1-26-2010_09-58-45
CCV		1	axc2	1/26/2010 10:25:10	OM_1-26-2010_09-58-45
CCB		1	axc2	1/26/2010 10:27:00	OM_1-26-2010_09-58-45
245112001	944394	1	axc2	1/26/2010 10:28:48	OM_1-26-2010_09-58-45
245120001	944394	1	axc2	1/26/2010 10:29:41	OM_1-26-2010_09-58-45
245135001	944394	1	axc2	1/26/2010 10:30:34	OM_1-26-2010_09-58-45
245135002	944394	1	axc2	1/26/2010 10:31:26	OM_1-26-2010_09-58-45
245137001	944394	1	axc2	1/26/2010 10:32:18	OM_1-26-2010_09-58-45
1202022257	944394	1	axc2	1/26/2010 10:33:11	OM_1-26-2010_09-58-45
1202022259	944394	1	axc2	1/26/2010 10:34:02	OM_1-26-2010_09-58-45
1202022261	944394	1	axc2	1/26/2010 10:34:57	OM_1-26-2010_09-58-45
245137002	944394	1	axc2	1/26/2010 10:35:50	OM_1-26-2010_09-58-45
245137003	944394	1	axc2	1/26/2010 10:36:44	OM_1-26-2010_09-58-45
CCV		1	axc2	1/26/2010 10:37:37	OM_1-26-2010_09-58-45
CCB		1	axc2	1/26/2010 10:39:27	OM_1-26-2010_09-58-45
245142005	944394	1	axc2	1/26/2010 10:41:16	OM_1-26-2010_09-58-45
245175001	944394	1	axc2	1/26/2010 10:42:10	OM_1-26-2010_09-58-45
245175002	944394	1	axc2	1/26/2010 10:43:03	OM_1-26-2010_09-58-45
245175003	944394	1	axc2	1/26/2010 10:43:56	OM_1-26-2010_09-58-45
245185003	944394	1	axc2	1/26/2010 10:44:49	OM_1-26-2010_09-58-45
1202022258	944394	1	axc2	1/26/2010 10:45:43	OM_1-26-2010_09-58-45
1202022260	944394	1	axc2	1/26/2010 10:46:35	OM_1-26-2010_09-58-45
1202022262	944394	1	axc2	1/26/2010 10:47:27	OM_1-26-2010_09-58-45
245185014	944394	1	axc2	1/26/2010 10:48:20	OM_1-26-2010_09-58-45
245270001	944394	1	axc2	1/26/2010 10:49:12	OM_1-26-2010_09-58-45
CCV		1	axc2	1/26/2010 10:50:05	OM_1-26-2010_09-58-45
CCB		1	axc2	1/26/2010 10:51:54	OM_1-26-2010_09-58-45
1202020944	943824	1	axc2	1/26/2010 10:53:44	OM_1-26-2010_09-58-45
1202020948	943824	1	axc2	1/26/2010 10:54:36	OM_1-26-2010_09-58-45
245032001	943824	1	axc2	1/26/2010 10:55:30	OM_1-26-2010_09-58-45
245127001*	943824	1	axc2	1/26/2010 10:56:24	OM_1-26-2010_09-58-45
245130001	943824	1	axc2	1/26/2010 10:57:18	OM_1-26-2010_09-58-45
245323003	943824	1	axc2	1/26/2010 10:58:12	OM_1-26-2010_09-58-45
1202020945	943824	1	axc2	1/26/2010 10:59:06	OM_1-26-2010_09-58-45
1202020946	943824	1	axc2	1/26/2010 11:00:00	OM_1-26-2010_09-58-45

1202020947	943824	1	axc2	1/26/2010	11:00:53	OM_1-26-2010_09-58-45
245323014	943824	1	axc2	1/26/2010	11:01:46	OM_1-26-2010_09-58-45
CCV		1	axc2	1/26/2010	11:02:38	OM_1-26-2010_09-58-45
CCB		1	axc2	1/26/2010	11:04:28	OM_1-26-2010_09-58-45
245323025	943824	1	axc2	1/26/2010	11:06:17	OM_1-26-2010_09-58-45
245341001	943824	1	axc2	1/26/2010	11:07:10	OM_1-26-2010_09-58-45
245341003	943824	1	axc2	1/26/2010	11:08:03	OM_1-26-2010_09-58-45
245341005	943824	1	axc2	1/26/2010	11:08:55	OM_1-26-2010_09-58-45
245341007	943824	1	axc2	1/26/2010	11:09:48	OM_1-26-2010_09-58-45
245341009	943824	1	axc2	1/26/2010	11:10:40	OM_1-26-2010_09-58-45
245341010	943824	1	axc2	1/26/2010	11:11:32	OM_1-26-2010_09-58-45
245355007	943824	1	axc2	1/26/2010	11:12:27	OM_1-26-2010_09-58-45
245362002	943824	1	axc2	1/26/2010	11:13:21	OM_1-26-2010_09-58-45
245378002	943824	1	axc2	1/26/2010	11:14:16	OM_1-26-2010_09-58-45
CCV		1	axc2	1/26/2010	11:15:08	OM_1-26-2010_09-58-45
CCB		1	axc2	1/26/2010	11:16:58	OM_1-26-2010_09-58-45
1202023391	943824	1	axc2	1/26/2010	11:18:48	OM_1-26-2010_09-58-45
1202023392	943824	1	axc2	1/26/2010	11:19:41	OM_1-26-2010_09-58-45
1202023393	943824	1	axc2	1/26/2010	11:20:35	OM_1-26-2010_09-58-45
245382001	943824	1	axc2	1/26/2010	11:21:28	OM_1-26-2010_09-58-45
245386001	943824	1	axc2	1/26/2010	11:22:22	OM_1-26-2010_09-58-45
245127001	943824	1	axc2	1/26/2010	11:23:16	OM_1-26-2010_09-58-45
245390001	943824	1	axc2	1/26/2010	11:24:09	OM_1-26-2010_09-58-45
245392001	943824	1	axc2	1/26/2010	11:25:03	OM_1-26-2010_09-58-45
245392002	943824	1	axc2	1/26/2010	11:25:55	OM_1-26-2010_09-58-45
CCV		1	axc2	1/26/2010	11:26:48	OM_1-26-2010_09-58-45
CCB		1	axc2	1/26/2010	11:28:38	OM_1-26-2010_09-58-45

Original Run Filename: OM_1-26-2010_09-58-45.OMN created 1/26/2010 09:58:45
 Original Run Author's Signature: [axc2]
 Current Run Filename: OM_1-26-2010_09-58-45.OMN last modified 1/26/2010 11:29:43
 Current Run Author's Signature: [axc2]
 Description: GL-GC-E-102 EPA 420.4, 9066
 LCS nominal 50 ug/L

Sample	Rep.	Cup No.	Channel 1		Detection Time	ADF	MDF	Description
			TCYANIDE	Area (Vs)				
WCN100126-03	1	S3	102	4.46	1/26/2010@10:00:18			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			1.6 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			1.6 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100126-08	1	S7	2.83	0.210	1/26/2010@10:02:07			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			2.83 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			2.83 > -5.00					
Message			CCB Passed					
Action			Continue					
Calibration:			Table/Fig. 1					
245147011 944401	1	21	2.95	0.215	1/26/2010@10:03:57			
245147012	1	22	11.6	0.586	1/26/2010@10:04:50			
245147013	1	23	3.64	0.245	1/26/2010@10:05:43			
245147014	1	24	0.385	0.104	1/26/2010@10:06:35			
245147015	1	25	2.58	0.199	1/26/2010@10:07:28			
245147016	1	26	8.00	0.432	1/26/2010@10:08:20			
245147017	1	27	3.47	0.237	1/26/2010@10:09:12			
245147018	1	28	1.87	0.168	1/26/2010@10:10:04			
245147015	1	25	0.130	0.0933	1/26/2010@10:10:57			
1202022256 944394 MB	1	29	-0.422	0.0695	1/26/2010@10:11:49			
WCN100126-03	1	S3	101	4.45	1/26/2010@10:12:41			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					
WCN100126-08	1	S7	-1.42	0.0263	1/26/2010@10:14:31			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.42 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.42 > -5.00					
Message			CCB Passed					
Action			Continue					
245147017 944401	1	27	-0.706	0.0572	1/26/2010@10:16:19			
1202022263 944394 LCS	1	30	49.7	2.23	1/26/2010@10:17:10			
244447003	1	31	-1.57	0.0199	1/26/2010@10:18:05			
1202024087 DUP	1	32	-1.41	0.0270	1/26/2010@10:18:58			
1202024088 MS	1	33	107	4.68	1/26/2010@10:19:52			
1202024089 MSD	1	34	104	4.55	1/26/2010@10:20:45			

245089001	1	35	-1.51	0.0226	1/26/2010@10:21:39		
245089002	1	36	-1.45	0.0252	1/26/2010@10:22:32		
245089003	1	37	-1.32	0.0307	1/26/2010@10:23:25		
245089004	1	38	-1.41	0.0271	1/26/2010@10:24:18		
WCN100126-03	1	S3	102	4.48	1/26/2010@10:25:10		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				
WCN100126-08	1	S7	-1.45	0.0252	1/26/2010@10:27:00		CCB
Known Conc:			0.00				
DQM Test: > + Concentration Limit							
Result:			-1.45 < 5.00				
Message			CCB Passed				
Action			Continue				
DQM Test: < - Concentration Limit							
Result:			-1.45 > -5.00				
Message			CCB Passed				
Action			Continue				
245112001	1	39	-1.32	0.0309	1/26/2010@10:28:48		
245120001	1	40	-1.68	0.0151	1/26/2010@10:29:41		
245135001	1	41	-1.58	0.0196	1/26/2010@10:30:34		
245135002	1	42	-1.93	0.00472	1/26/2010@10:31:26		
245137001	1	43	-1.47	0.0245	1/26/2010@10:32:18		
1202022257	DUP	1	44	-1.40	0.0273	1/26/2010@10:33:11	
1202022259	MS	1	45	105	4.60	1/26/2010@10:34:02	
1202022261	MSD	1	46	102	4.48	1/26/2010@10:34:57	
245137002	1	47	-0.835	0.0517	1/26/2010@10:35:50		
245137003	1	48	-1.51	0.0224	1/26/2010@10:36:44		
WCN100126-03	1	S3	101	4.45	1/26/2010@10:37:37		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				
WCN100126-08	1	S7	-1.77	0.0114	1/26/2010@10:39:27		CCB
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				
245142005	1	49	-0.822	0.0523	1/26/2010@10:41:16		
245175001	1	50	1.04	0.132	1/26/2010@10:42:10		
245175002	1	51	16.2	0.787	1/26/2010@10:43:03		
245175003	1	52	2.88	0.212	1/26/2010@10:43:56		
245185003	1	53	-7.41e-4	0.0876	1/26/2010@10:44:49		
1202022258	DUP	1	54	-1.09	0.0406	1/26/2010@10:45:43	
1202022260	MS	1	55	106	4.67	1/26/2010@10:46:35	
1202022262	MSD	1	56	105	4.62	1/26/2010@10:47:27	
245185014	1	57	-0.743	0.0557	1/26/2010@10:48:20		
245270001	1	58	8.01	0.433	1/26/2010@10:49:12		
WCN100126-03	1	S3	102	4.46	1/26/2010@10:50:05		CCV
Known Conc:			100				
DQM Test: > + Percent Relative Difference							
Result:			1.6 < 10.0				

			Message	CCV Passed				
			Action	Continue				
DQM Test: < - Percent Relative Difference								
			Result:	1.6 < 10.0				
			Message	CCV Passed				
			Action	Continue				
WCN100126-08	1	S7		-1.71	0.0141	1/26/2010@10:51:54		CCB
			Known Conc:	0.00				
DQM Test: > + Concentration Limit								
			Result:	-1.71 < 5.00				
			Message	CCB Passed				
			Action	Continue				
DQM Test: < - Concentration Limit								
			Result:	-1.71 > -5.00				
			Message	CCB Passed				
			Action	Continue				
1202020944 943824 MB	1	59		-1.90	0.00597	1/26/2010@10:53:44		
1202020948 LCS	1	60		50.5	2.26	1/26/2010@10:54:36		
245032001	1	61		-0.813	0.0526	1/26/2010@10:55:30		
245127001	1	62		5.79	0.337	1/26/2010@10:56:24		
245130001	1	63		-1.19	0.0366	1/26/2010@10:57:18		
245323003	1	64		-1.30	0.0316	1/26/2010@10:58:12		
1202020945 DUP	1	65		-1.49	0.0236	1/26/2010@10:59:06		
1202020946 MS	1	66		107	4.70	1/26/2010@11:00:00		
1202020947 MSD	1	67		107	4.69	1/26/2010@11:00:53		
245323014	1	68		-1.45	0.0252	1/26/2010@11:01:46		
WCN100126-03	1	S3		101	4.46	1/26/2010@11:02:38		CCV
			Known Conc:	100				
DQM Test: > + Percent Relative Difference								
			Result:	1.5 < 10.0				
			Message	CCV Passed				
			Action	Continue				
DQM Test: < - Percent Relative Difference								
			Result:	1.5 < 10.0				
			Message	CCV Passed				
			Action	Continue				
WCN100126-08	1	S7		-1.27	0.0331	1/26/2010@11:04:28		CCB
			Known Conc:	0.00				
DQM Test: > + Concentration Limit								
			Result:	-1.27 < 5.00				
			Message	CCB Passed				
			Action	Continue				
DQM Test: < - Concentration Limit								
			Result:	-1.27 > -5.00				
			Message	CCB Passed				
			Action	Continue				
245323025	1	69		-1.07	0.0417	1/26/2010@11:06:17		
245341001	1	70		-0.612	0.0613	1/26/2010@11:07:10		
245341003	1	71		-1.34	0.0299	1/26/2010@11:08:03		
245341005	1	72		-1.33	0.0302	1/26/2010@11:08:55		
245341007	1	73		-1.74	0.0128	1/26/2010@11:09:48		
245341009	1	74		-1.57	0.0201	1/26/2010@11:10:40		
245341010	1	75		-1.09	0.0408	1/26/2010@11:11:32		
245355007	1	76		-0.933	0.0475	1/26/2010@11:12:27		
245362002	1	77		0.794	0.122	1/26/2010@11:13:21		
245378002	1	78		-0.745	0.0556	1/26/2010@11:14:16		
WCN100126-03	1	S3		102	4.47	1/26/2010@11:15:08		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				
WCN100126-08	1	S7		-1.40	0.0274	1/26/2010@11:16:58		CCB
			Known Conc:	0.00				

DQM Test: > + Concentration Limit						
Result:		-1.40 < 5.00				
Message		CCB Passed				
Action		Continue				
DQM Test: < - Concentration Limit						
Result:		-1.40 > -5.00				
Message		CCB Passed				
Action		Continue				
1202023391	DUP	1	79	-1.50	0.0229	1/26/2010@11:18:48
1202023392	MS	1	80	104	4.57	1/26/2010@11:19:41
1202023393	MSD	1	81	104	4.57	1/26/2010@11:20:35
245382001		1	82	-1.27	0.0331	1/26/2010@11:21:28
245386001		1	83	-2.03	2.70e-4	1/26/2010@11:22:22
245127001		1	62	-0.758	0.0550	1/26/2010@11:23:16
245390001		1	84	-1.68	0.0154	1/26/2010@11:24:09
245392001		1	85	-1.33	0.0306	1/26/2010@11:25:03
245392002		1	86	-1.86	0.00771	1/26/2010@11:25:55
WCN100126-03		1	S3	101	4.44	1/26/2010@11:26:48
Known Conc:			100			CCV
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				
WCN100126-08		1	S7	-1.17	0.0373	1/26/2010@11:28:38
Known Conc:			0.00			CCB
DQM Test: > + Concentration Limit						
Result:		-1.17 < 5.00				
Message		CCB Passed				
Action		Continue				
DQM Test: < - Concentration Limit						
Result:		-1.17 > -5.00				
Message		CCB Passed				
Action		Continue				

Analyte Properties Table for OM_1-26-2010_09-58-45.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

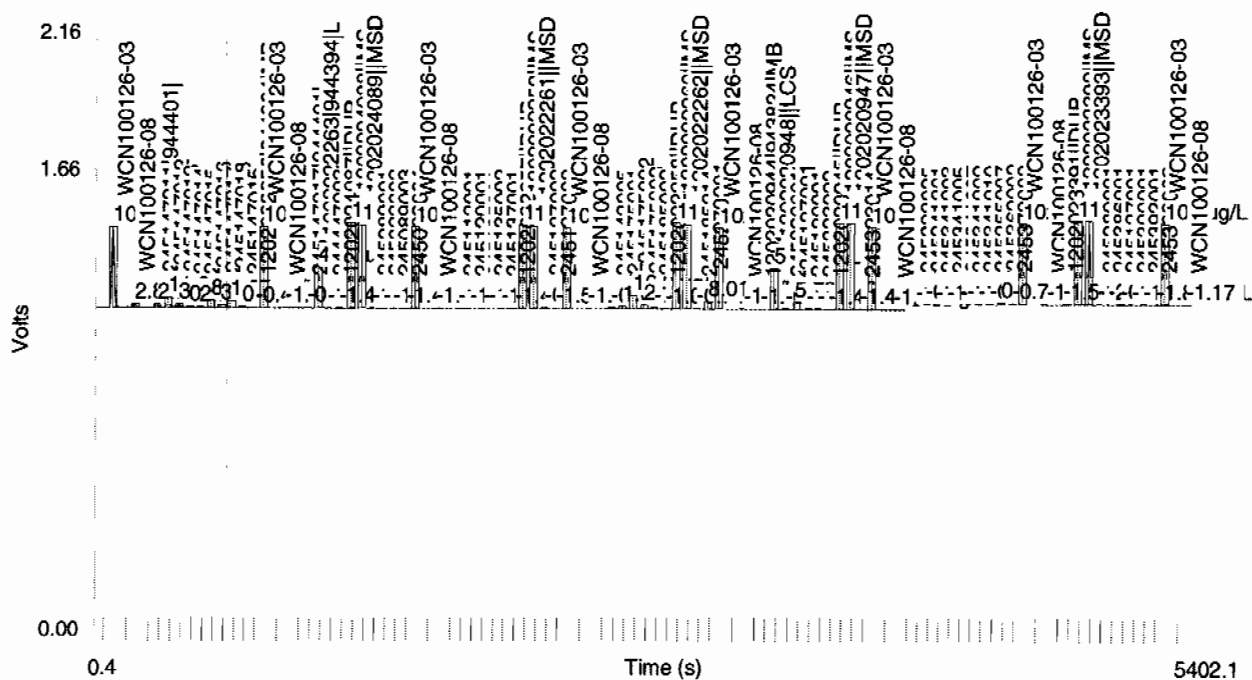


Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	8.68	0.566	0.2	1/26/2010	08:55:50
2	150	1	6.65	0.437	-1.5	1/26/2010	08:56:42
3	100	1	4.23	0.275	3.8	1/26/2010	08:57:34
4	50.0	1	2.33	0.152	-3.8	1/26/2010	08:58:27
5	10.0	1	0.535	0.0337	-2.9	1/26/2010	08:59:21
6	5.00	1	0.332	0.0213	-8.8	1/26/2010	09:00:14
7	0.00	1	0.0443	8.65e-4		1/26/2010	09:01:08

Figure 1: TCYANIDE

