

Friday, January 22, 2010

LOS ALAMOS
NATIONAL LABORATORY

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

These Samples are on:
LANL Request Number: 10-1392
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	RE15-10-7869	R	1/19/2010	
		1	RE15-10-7870	R	1/19/2010	
		1	RE15-10-7871	R	1/19/2010	
		1	RE15-10-7872	R	1/19/2010	
		1	RE15-10-7873	R	1/19/2010	
		1	RE15-10-7874	R	1/19/2010	
		1	RE15-10-7905	R	1/19/2010	
		1	RE15-10-7906	R	1/19/2010	
		1	RE15-10-7907	R	1/19/2010	

Friday, January 22, 2010

REQUEST NUMBER: 10-1392

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
SW-846:6020						
		1	RE15-10-7908	R	1/19/2010	
		1	RE15-10-7909	R	1/19/2010	
		1	RE15-10-7910	R	1/19/2010	
		1	RE15-10-7911	R	1/19/2010	
		1	RE15-10-7912	R	1/19/2010	
		1	RE15-10-7913	R	1/19/2010	
SW-846:6850						
		1	RE15-10-7869	R	1/19/2010	
		1	RE15-10-7870	R	1/19/2010	
		1	RE15-10-7871	R	1/19/2010	
		1	RE15-10-7872	R	1/19/2010	
		1	RE15-10-7873	R	1/19/2010	
		1	RE15-10-7874	R	1/19/2010	
		1	RE15-10-7905	R	1/19/2010	
		1	RE15-10-7906	R	1/19/2010	
		1	RE15-10-7907	R	1/19/2010	
		1	RE15-10-7908	R	1/19/2010	
		1	RE15-10-7909	R	1/19/2010	
		1	RE15-10-7910	R	1/19/2010	
		1	RE15-10-7911	R	1/19/2010	
		1	RE15-10-7912	R	1/19/2010	
		1	RE15-10-7913	R	1/19/2010	
SW-846:7471A						
		1	RE15-10-7869	R	1/19/2010	
		1	RE15-10-7870	R	1/19/2010	
		1	RE15-10-7871	R	1/19/2010	
		1	RE15-10-7872	R	1/19/2010	
		1	RE15-10-7873	R	1/19/2010	
		1	RE15-10-7874	R	1/19/2010	
		1	RE15-10-7905	R	1/19/2010	

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
SW-846:7471A						
		1	RE15-10-7906	R	1/19/2010	
		1	RE15-10-7907	R	1/19/2010	
		1	RE15-10-7908	R	1/19/2010	
		1	RE15-10-7909	R	1/19/2010	
		1	RE15-10-7910	R	1/19/2010	
		1	RE15-10-7911	R	1/19/2010	
		1	RE15-10-7912	R	1/19/2010	
		1	RE15-10-7913	R	1/19/2010	
SW-846:8082						
		1	RE15-10-7869	R	1/19/2010	
		1	RE15-10-7870	R	1/19/2010	
		1	RE15-10-7871	R	1/19/2010	
		1	RE15-10-7872	R	1/19/2010	
		1	RE15-10-7873	R	1/19/2010	
		1	RE15-10-7874	R	1/19/2010	
SW-846:8321A_MOD						
		1	RE15-10-7869	R	1/19/2010	
		1	RE15-10-7870	R	1/19/2010	
		1	RE15-10-7871	R	1/19/2010	
		1	RE15-10-7872	R	1/19/2010	
		1	RE15-10-7873	R	1/19/2010	
		1	RE15-10-7874	R	1/19/2010	
		1	RE15-10-7905	R	1/19/2010	
		1	RE15-10-7906	R	1/19/2010	
		1	RE15-10-7907	R	1/19/2010	
		1	RE15-10-7908	R	1/19/2010	
		1	RE15-10-7909	R	1/19/2010	
		1	RE15-10-7910	R	1/19/2010	
		1	RE15-10-7911	R	1/19/2010	
		1	RE15-10-7912	R	1/19/2010	

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REQUEST NUMBER: 10-1392

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
SW-846:8321A_MOD SW-846:9012A		1	RE15-10-7913	R	1/19/2010	
		1	RE15-10-7869	R	1/19/2010	
		1	RE15-10-7870	R	1/19/2010	
		1	RE15-10-7871	R	1/19/2010	
		1	RE15-10-7872	R	1/19/2010	
		1	RE15-10-7873	R	1/19/2010	
		1	RE15-10-7874	R	1/19/2010	
		1	RE15-10-7905	R	1/19/2010	
		1	RE15-10-7906	R	1/19/2010	
		1	RE15-10-7907	R	1/19/2010	
		1	RE15-10-7908	R	1/19/2010	
		1	RE15-10-7909	R	1/19/2010	
		1	RE15-10-7910	R	1/19/2010	
		1	RE15-10-7911	R	1/19/2010	
		1	RE15-10-7912	R	1/19/2010	
		1	RE15-10-7913	R	1/19/2010	

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Friday, January 22, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1392C

LOS ALAMOS

REQUEST NUMBER: 10-1392

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
RE15-10-7869	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE15-10-7869	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7874	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE15-10-7874	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7871	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE15-10-7871	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7872	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE15-10-7872	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7870	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE15-10-7870	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7873	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE15-10-7873	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7911	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7911	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7908	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7908	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7912	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7912	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7906	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7906	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7905	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7905	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7907	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7907	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7913	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7913	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7909	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7909	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7910	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7910	1	AMBER GLASS	NMED Explosives list	Ice	R

Relinquished By:


Date

Time

Received By:

Date

Time

 1/22/10 3:00

Printed Name	Signature	Printed Name	Signature
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Printed Name	Signature	Printed Name	Signature
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Printed Name	Signature	Printed Name	Signature
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Received for DISPOSAL By:	Date	Time	Remarks:
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Printed Name	Signature
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10-1392

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2499

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

SAMPLE ID: RE15-10-7869

WORK ORDER:

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		01/19/2010	MEDIA:	QBT3	A11h
TIME COLLECTED (HH:MM)		1042	SUB-MEDIA:	TUFF 1	NA
PRS ID:	15-008(b)	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	15-610704	↓	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	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 1L RS 01-11-10	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Dark brown silty sand, some clay, wood

FR RE15-10-8074

SAMPLE COMMENTS:

NA

LOCATION DESC:

8b-58, mesa top

FIELD SCREENING/MEASUREMENT RESULTS:

HE negative

Alpha \leq 16 dpm
Beta/Gamma \leq 3000 dpm

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

COLLECTED BY (PRINT)

TL McFarland

REVIEWED BY (PRINT)

Nikolas Gallegos

RELINQUISHED BY (Printed Name) MARIN (Signature) J. R. Marin	Date/Time 1/20/10 0942	RECEIVED BY (Printed Name) Sherri Sherwood (Signature) Sherri Sherwood	Date/Time 1/20/10 942
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: RE15-10-7870

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)		73m 1056 1111		SUB-MEDIA:	TUFF 1		↓
PRS ID:	15-008(b)	11/110	ok	SAMPLE TECH CODE:	HA		ok
LOCATION ID:	15-610704		↓	FIELD QC TYPE:	NA		↓
LOCATION TYPE:	GENERIC		↓	FIELD PREP:	NA		↓
TOP DEPTH:	0		1.0	SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0		2.5	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	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 12 ES 01-11-10	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-58 mesa top

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \pm 27 dpm
Beta/Gamma \pm 2250 dpm

PID Ambient 0.0
Reading 0.0 ppm

COLLECTED BY (PRINT)

T. M. McFarland

REVIEWED BY (PRINT)

Nikolas Galagos

RELINQUISHED BY (Printed Name) MARIN (Signature) <i>John R. Marin</i>	Date/Time 1/20/10 9:42	RECEIVED BY (Printed Name) (Signature) <i>[Signature]</i>	Date/Time 1/20/10 1028
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: RE15-10-7871

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/19/2010		MEDIA:		QBT3	
TIME COLLECTED (HH:MM)		1300		SUB-MEDIA:		TUFF 1	
PRS ID: 15-008(b)		OK		SAMPLE TECH CODE:		HA	
LOCATION ID: 15-610705		↓		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		NA	
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA		WATER FLOWING: YES/NO/NA		NA	
BOREHOLE: YES/NO/NA		BOREHOLE DECLINATION: NA		BOREHOLE DIRECTION: NA		NA	

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	normal	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 1L RS 01-11-10	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Brown sandy silt

SAMPLE COMMENTS:

NA

LOCATION DESC:

8b-75, mesa top

FIELD SCREENING/MEASUREMENT RESULTS:

14E negative

Alpha \leq 27 dpm
Beta/Gamma \leq 210 dpm

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

COLLECTED BY (PRINT)

TLMcFarlane

REVIEWED BY (PRINT)

R Saunders

RELINQUISHED BY (Printed Name) MARY (Signature) Jan R. Marin	Date/Time 1/20/10 9:42	RECEIVED BY (Printed Name) Sherrin Sherwood (Signature) Sherrin Sherwood	Date/Time 1/20/10 9:42
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: RE15-10-7872

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)		7:20 1320		SUB-MEDIA: TUFF 1		OK	
PRS ID: 15-008(b)		OK		SAMPLE TECH CODE: HA		OK	
LOCATION ID: 15-610705		↓		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	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 L POLY	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: greyish brown tuff

SAMPLE COMMENTS: NA

LOCATION DESC: 86-75 mesa top

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \leq 27 dpm
 Beta/Gamma \leq 250 dpm

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

COLLECTED BY (PRINT)
R Saunders

REVIEWED BY (PRINT) TLMcFarland

RELINQUISHED BY (Printed Name) MARIN (Signature) Jan R. Marin	Date/Time 1/20/10 09:42	RECEIVED BY (Printed Name) Sherri Sherwood (Signature) Sherri Sherwood	Date/Time 1/20/10 0942
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: RE15-10-7873

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)		1538		SUB-MEDIA:	TUFF 1		NA
PRS ID:	15-008(b)		OK	SAMPLE TECH CODE:	HA		OK
LOCATION ID:	15-610706		↓	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		
BOREHOLE: YES/NO/NA	NO			BOREHOLE DECLINATION:	NA		
				BOREHOLE DIRECTION:	NA		

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

SAMPLE DESC:

Brown silty sand, some rocks

SAMPLE COMMENTS:

NA

LOCATION DESC:

8b-45, mesa top

FIELD SCREENING/MEASUREMENT RESULTS:

HE negative

Alpha \leq 33 dpm
Beta/Gamma \leq 3520 dpm

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

COLLECTED BY (PRINT)

Th McFarland

REVIEWED BY (PRINT)

R Saunders

RELINQUISHED BY (Printed Name) MARIN (Signature) J. H. Marin	Date/Time 1/20/10 09:42	RECEIVED BY (Printed Name) (Signature) [Signature]	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: RE15-10-7874

WORK ORDER:

AS PLANNED		AS COLLECTED	AS PLANNED		AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		01/19/2010	MEDIA:		QBT3
TIME COLLECTED (HH:MM)		1515 1550	SUB-MEDIA:		TUFF 1
PRS ID:	15-008(b)	ok	SAMPLE TECH CODE:		HA
LOCATION ID:	15-610706	↓	FIELD QC TYPE:		NA
LOCATION TYPE:	GENERIC	↓	FIELD PREP:		NA
TOP DEPTH:	0	2.0	SAMPLE USAGE:		INV
BOTTOM DEPTH:	0	3.5	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	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 1L RS 01-11-10	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-45 mesa top

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \leq 33 dpm
Beta/Gamma \leq 2680 dpm

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

COLLECTED BY (PRINT)

TLMcFarland

REVIEWED BY (PRINT)

R Saunders

RELINQUISHED BY (Printed Name) MARIN (Signature) <i>John R. Marin</i>	Date/Time 1/20/10 09:42	RECEIVED BY (Printed Name) <i>John W. W. W.</i> (Signature) <i>John W. W. W.</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: RE15-10-7905

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/19/2010		MEDIA:		QBT3	
TIME COLLECTED (HH:MM)		0859		SUB-MEDIA:		TUFF 1	
PRS ID:	15-008(b)	ok		SAMPLE TECH CODE:		HA	
LOCATION ID:	15-610722	↓		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		NO	
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 L 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 sandy silt, rocks

SAMPLE COMMENTS:

NA

LOCATION DESC:

86-73, mesa top

FIELD SCREENING/MEASUREMENT RESULTS:

HE negative

Alpha $\frac{16}{16}$ dpm
Beta/Gamma $\frac{384}{384}$ dpmPID $\frac{\text{Ambient}}{\text{Reading}} = \frac{0.0}{0.0}$ ppm

COLLECTED BY (PRINT)

JL McFarlane

REVIEWED BY (PRINT)

Nicholas Gallegos

RELINQUISHED BY (Printed Name) MARIN (Signature) Jan R. Marin	Date/Time 01/20/10 09:42	RECEIVED BY (Printed Name) Jayulky (Signature) Jayulky	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: RE15-10-7906

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/19/2010		MEDIA:		QBT3	
TIME COLLECTED (HH:MM)		0923		SUB-MEDIA:		TUFF 1	
PRS ID: 15-008(b)		OK		SAMPLE TECH CODE:		HA	
LOCATION ID: 15-610722		↓		FIELD QC TYPE:		NA	
LOCATION TYPE: GENERIC		↓		FIELD PREP:		NA	
TOP DEPTH: 0		3.0		SAMPLE USAGE:		INV	
BOTTOM DEPTH: 0		3.8		SCREEN/PORT DESC:		NA	
FIELD MATRIX: R		R		EXCAVATED: YES/NO/NA		NA	
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA		WATER FLOWING: YES/NO/NA		NO	
BOREHOLE: YES/NO/NA		BOREHOLE DECLINATION: NA		BOREHOLE DIRECTION: NA		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:

Brownish gray tuff

SAMPLE COMMENTS:

NA

LOCATION DESC:

8b-73, mesa top

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 28 dpm
Beta/Gamma = 2590 dpm

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

COLLECTED BY (PRINT)

TL McFarlane

REVIEWED BY (PRINT)

Nicholas Gallegos

RELINQUISHED BY (Printed Name) MARIN (Signature) <i>Jan R. Marin</i>	Date/Time 1/20/10 09:42	RECEIVED BY (Printed Name) <i>Jay Williams</i> (Signature) <i>Jay Williams</i>	Date/Time 1/20/10 10:40
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: RE15-10-7907

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:	15-610723	↓		FIELD QC TYPE: NA		↓	
LOCATION TYPE:	GENERIC	↓		FIELD PREP: NA		↓	
TOP DEPTH:	0	0.0		SAMPLE USAGE: INV		↓	
BOTTOM DEPTH:	0	0.5		SCREEN/PORT DESC:		NA	
FIELD MATRIX:	B	S		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA		WATER FLOWING: YES/NO/NA			
BOREHOLE: YES/NO/NA		BOREHOLE DECLINATION: NA		BOREHOLE DIRECTION: NA			

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	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 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, some clay, rocks

FD RE15-10-8053

SAMPLE COMMENTS:

NA

LOCATION DESC:

8b-72, mesa top

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 44 dpm
Beta/Gamma = 370 dpmHE negative
PID $\frac{\text{Ambient}}{\text{Reading}} = \frac{0.0}{0.0} \text{ ppm}$

COLLECTED BY (PRINT)

REVIEWED BY (PRINT)

Nicholas Gallegos

RELINQUISHED BY (Printed Name) MARIN (Signature) Jan R. Marin	Date/Time 1/20/10 09:43	RECEIVED BY (Printed Name) (Signature)	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: RE15-10-7908

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)		0958		SUB-MEDIA:	TUFF 1		
PRS ID:	15-008(b)	ok		SAMPLE TECH CODE:	HA		
LOCATION ID:	15-610723			FIELD QC TYPE:	NA		
LOCATION TYPE:	GENERIC			FIELD PREP:	NA		
TOP DEPTH:	0			SAMPLE USAGE:	INV		
BOTTOM DEPTH:	0	11/10 2.9		SCREEN/PORT DESC:			NA
FIELD MATRIX:	R	3.5		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 1 Liter 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-72, mesa top

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha ≤ 16 dpm
Beta/Gamma ≤ 6710 dpm

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

COLLECTED BY (PRINT)

J. L. McFarlane

REVIEWED BY (PRINT)

Nikolas Gallegos

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
Printed Name) MARIN	1/20/10	(Printed Name) Sherrif Sherwood	1/20/10
Signature) Jan R. Marin	09:43	(Signature) Sherrif Sherwood	943
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(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: RE15-10-7909

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/19/2010		MEDIA:		QBT3	
TIME COLLECTED (HH:MM)		1020		SUB-MEDIA:		TUFF 1	
PRS ID:	15-008(b)	OK		SAMPLE TECH CODE:		HA	
LOCATION ID:	15-610724	↓		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		NA	
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA		WATER FLOWING: YES/NO/NA		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 1 Liter 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:

Dark brown wet silty sand, wood

SAMPLE COMMENTS:

NA

LOCATION DESC: 8b-71, mesa top

FIELD SCREENING/MEASUREMENT RESULTS:

HE negative

Alpha = 38 dpm
Beta/Gamma = 5730 dpm

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

COLLECTED BY (PRINT)

R Saunders

REVIEWED BY (PRINT) JLMcFarlane

RELINQUISHED BY (Printed Name) MARIN (Signature) <i>John R. Marin</i>	Date/Time 1/20/10 09:43	RECEIVED BY (Printed Name) Sherrif Sherwood (Signature) <i>Sherrif Sherwood</i>	Date/Time 1/20/10 942
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: RE15-10-7910

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)		1030		SUB-MEDIA:	TUFF.1		↓
PRS ID:	15-008(b)	ok		SAMPLE TECH CODE:	HA		ok
LOCATION ID:	15-610724	↓		FIELD QC TYPE:	NA		↓
LOCATION TYPE:	GENERIC	↓		FIELD PREP:	NA		↓
TOP DEPTH:	0	3.0		SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0	3.6		SCREEN/PORT DESC:			NA
FIELD MATRIX:	R	R		EXCAVATED: YES/NO/NA	NO		
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
BOREHOLE: YES/NO/NA	NO			WATER FLOWING: YES/NO/NA	NO		
BOREHOLE DECLINATION:	NA			BOREHOLE DIRECTION:	NA		

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

Dark gray tuff

SAMPLE COMMENTS:

NA

LOCATION DESC:

86-71, mesa top

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \leq 27 dpm
Beta/Gamma \leq 3730 dpm

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

COLLECTED BY (PRINT)

JL McFarland

REVIEWED BY (PRINT)

Nikolas Gallegos

RELINQUISHED BY (Printed Name) MARIN (Signature) Jan K. Marin	Date/Time 1/20/10 9:43	RECEIVED BY (Printed Name) Sherrill Sherwood (Signature) Sherrill Sherwood	Date/Time 1/20/10 9:43
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: RE15-10-7911

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/19/2010		MEDIA: OBT3		A. H.	
TIME COLLECTED (HH:MM)		1120		SUB-MEDIA: TUFF 1		NA	
PRS ID:	15-008(b)	OK		SAMPLE TECH CODE: HA		OK	
LOCATION ID:	15-610725	↓		FIELD QC TYPE: NA		↓	
LOCATION TYPE:	GENERIC	↓		FIELD PREP: NA		↓	
TOP DEPTH:	0	0.0		SAMPLE USAGE: INV		↓	
BOTTOM DEPTH:	0	0.3		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 16 Ltr 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 sand, some rocks, sticks

SAMPLE COMMENTS:

NA

LOCATION DESC:

8b-59 mesa top

FIELD SCREENING/MEASUREMENT RESULTS:

HE negative

Alpha = 55 dpm
Beta/Gamma = 8130 dpm

EID Reading = 0.0 ppm

COLLECTED BY (PRINT)

TLMcFarlane

REVIEWED BY (PRINT)

Nicholas Gallegos

RELINQUISHED BY (Printed Name) MARIN (Signature) J. R. Marin	Date/Time 1/20/10 9:43	RECEIVED BY (Printed Name) (Signature) [Signature]	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: RE15-10-7912

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)		1130		SUB-MEDIA: TUFF 1		↓	
PRS ID:	15-008(b)	OK		SAMPLE TECH CODE: HA		OK	
LOCATION ID:	15-610725	↓		FIELD QC TYPE: NA		↓	
LOCATION TYPE:	GENERIC	✓		FIELD PREP: NA		↓	
TOP DEPTH:	0	3.0		SAMPLE USAGE: INV		✓	
BOTTOM DEPTH:	0	4.0		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 LITER POLY 1 Liter 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

SAMPLE COMMENTS:

NA

LOCATION DESC: 8b-59

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 16 dpm
Beta/Gamma = 4810 dpm

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

COLLECTED BY (PRINT)

TLM c Forlano

REVIEWED BY (PRINT)

Nicholas Gallagos

RELINQUISHED BY (Printed Name) MARIN (Signature) <i>[Signature]</i>	Date/Time 1/20/10 9:43	RECEIVED BY (Printed Name) <i>[Signature]</i> (Signature) <i>[Signature]</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: RE15-10-7913

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/19/2010		MEDIA:		QBT3	
TIME COLLECTED (HH:MM)		1142		SUB-MEDIA:		TUFF 1	
PRS ID:	15-008(b)	OK		SAMPLE TECH CODE:		HA	
LOCATION ID:	15-610726	↓		FIELD QC TYPE:		NA	
LOCATION TYPE:	GENERIC	↓		FIELD PREP:		NA	
TOP DEPTH:	Q	0.0		SAMPLE USAGE:		INV	
BOTTOM DEPTH:	Q	0.3		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 1 Liter 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:

Orange clay, wood

SAMPLE COMMENTS:

NA

LOCATION DESC:

8b-60, mesa top

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \leq 27 dpmBeta/Gamma \leq 2030 dpm

HE negative

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

COLLECTED BY (PRINT)

TLMcfarlane

REVIEWED BY (PRINT)

N. Gallegos

RELINQUISHED BY (Printed Name) MARIN (Signature) J. R. Marin	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

Rad Screening Data Release Form

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

RE15-10-7869

7870

7871

7872

7873

7874

ARM
1/20/10 7875

7905

7906

7907

7908

RE15-10-7909

7910

7911

7912

7913

7914

7915

7916

7917

7918

RE15-10-7919

7920

7921

7922

8053

8054

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

.....

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

RE15-10-7693 FR

| 8074 FR

8075 FR

Reason:

.....


Print Last Name MARIN

Signature

Jan R. Marin


Date

1/20/10


DATA VALIDATION COVER SHEET	
5121-1 <p style="text-align: center;">Data Validation Cover Sheet</p>	Records Use only 

Section I.			
REQUEST NUMBER: <u>10-1392</u>	VALIDATION DATE: <u>3/4/10</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):			
<input type="checkbox"/> TPH-GRO	<input type="checkbox"/> HIGH EXPLOSIVES	<input type="checkbox"/> DIOXIN FURANS	<input checked="" type="checkbox"/> LCMSMS PERCHLORATES
<input type="checkbox"/> TPH-DRO	<input type="checkbox"/> METALS	<input type="checkbox"/> PCB CONGENERS	<input type="checkbox"/> ORGANOCHLORINE
<input type="checkbox"/> GENERAL CHEMISTRY	<input type="checkbox"/> RADIOCHEMISTRY	<input type="checkbox"/> LCMSMS HIGH EXPLOSIVES	<input type="checkbox"/> PESTICIDES/POLYCHLORINATED BIPHENYLS
<input type="checkbox"/> OTHER (DESCRIBE): _____			


Section II. Completeness Check							
YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1. CHAIN-OF-CUSTODY FORM(S)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6. RAW/BSS DATA
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2. CASE NARRATIVE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7. QUALITY CONTROL FORMS
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3. SAMPLE RESULT FORMS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8. QUANTITATION REPORTS
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4. SAMPLE CHROMATOGRAMS	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	9. TICS FORMS
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	5. STANDARD CHROMATOGRAMS	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	10. TICS MASS SPECTRA
Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact): None.							
Reviewed by: <u>Mary Donovan</u>				Level: <u>I</u>		Date: <u>03/05/10</u>	
VALIDATOR'S SIGNATURE: <u>Eric T. Mink</u>				DATE: <u>3/4/10</u>			
Form 5121-1, Revision 0.0				LOS ALAMOS Environmental Restoration Project			

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

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

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

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

Perchlorate Analysis Data Sheet

Client Sample No.
RE15-10-7869Lab Name: GEL Laboratories LLCLab Code: GELInstrument: LCMSMSDate Received: 23-JAN-10Method: SW846 6850 ModifiedGEL Job No (SDG): 10-1392Matrix: SOILGEL Sample ID: 245394001Extraction Batch ID: 947110Date Filtered: 08-FEB-10Extraction Type: Solid PrepInjection Volume (uL): 20Sample Volume/Weight: 2.00 g%Solids: 75Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.664	2.66	0.664	ug/kg	U	1	10-FEB-10 18:03	per0210015a
	Perchlorate Isotope Ratio						1	10-FEB-10 18:03	per0210015a
14797-73-0	Perchlorate-101	.664	2.66	0.664	ug/kg	U	1	10-FEB-10 18:03	per0210015a
	Perchlorate-O(18)			6.36	ug/kg		1	10-FEB-10 18:03	per0210015a

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

*Concentration =

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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLCLab Code: GELInstrument: LCMSMSMethod: SW846 6850 ModifiedMatrix: SOILExtraction Batch ID: 247110Extraction Type: Solid PrepSample Volume/Weight: 2.00 gConcentrated Extract Volume: 20.0

Client Sample No.

RE15-10-7874Date Received: 23-JAN-10GEL Job No (SDG): 10-1392GEL Sample ID: 245394002Date Filtered: 08-FEB-10Injection Volume (uL): 20%Solids: 95.9

CAS No.	Analyte [^]	MDL	RL	Conc [*]	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.521	2.09	0.521	ug/kg	U	1	10-FEB-10 18:27	per0210018a
	Perchlorate Isotope Ratio						1	10-FEB-10 18:27	per0210018a
14797-73-0	Perchlorate-101	.521	2.09	0.521	ug/kg	U	1	10-FEB-10 18:27	per0210018a
	Perchlorate-O(18)			5.20	ug/kg		1	10-FEB-10 18:27	per0210018a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The 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: 947110
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE15-10-7871
 Date Received: 23-JAN-10
 GEL Job No (SDG): 10-1392
 GEL Sample ID: 245394003
 Date Filtered: 08-FEB-10
 Injection Volume (uL): 20
 %Solids: 89

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.561	2.25	0.561	ug/kg	U	1	10-FEB-10 18:35	per0210019a
	Perchlorate Isotope Ratio						1	10-FEB-10 18:35	per0210019a
14797-73-0	Perchlorate-101	.561	2.25	0.561	ug/kg	U	1	10-FEB-10 18:35	per0210019a
	Perchlorate-O(18)			5.55	ug/kg		1	10-FEB-10 18:35	per0210019a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The 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 LLCLab Code: GELInstrument: LCMSMSMethod: SW846 6850 ModifiedMatrix: SOILExtraction Batch ID: 947110Extraction Type: Solid Prep

Client Sample No.

RE15-10-7872Date Received: 23-JAN-10GEL Job No (SDG): 10-1392GEL Sample ID: 245394004Date Filtered: 08-FEB-10Injection Volume (uL): 20%Solids: 82Sample Volume/Weight: 2.00 gConcentrated Extract Volume: 20.0

CAS No.	Analyte ^a	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.563	2.25	0.563	ug/kg	U	1	10-FEB-10 18:43	per0210020a
	Perchlorate Isotope Ratio						1	10-FEB-10 18:43	per0210020a
14797-73-0	Perchlorate-101	.563	2.25	0.563	ug/kg	U	1	10-FEB-10 18:43	per0210020a
	Perchlorate-O(18)			5.75	ug/kg		1	10-FEB-10 18:43	per0210020a

^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

Client Sample No.
RE15-10-7870

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Date Received: 23-JAN-10

Method: SW846 6850 Modified

GEL Job No (SDG): 10-1392

Matrix: SOIL

GEL Sample ID: 245394005

Extraction Batch ID: 947110

Date Filtered: 08-FEB-10

Extraction Type: Solid Prep

Injection Volume (uL): 20

Sample Volume/Weight: 2.00 g

%Solids: 87

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.575	2.3	0.575	ug/kg	U	1	10-FEB-10 18:51	per0210021a
	Perchlorate Isotope Ratio						1	10-FEB-10 18:51	per0210021a
14797-73-0	Perchlorate-101	.575	2.3	0.575	ug/kg	U	1	10-FEB-10 18:51	per0210021a
	Perchlorate-O(18)			5.78	ug/kg		1	10-FEB-10 18:51	per0210021a

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

Client Sample No.
RE15-10-7873Lab Name: GEL Laboratories LLCLab Code: GELDate Received: 23-JAN-10Instrument: LCMSMSGEL Job No (SDG): 10-1392Method: SW846 6850 ModifiedGEL Sample ID: 245394006Matrix: SOILDate Filtered: 08-FEB-10Extraction Batch ID: 947110Injection Volume (uL): 20Extraction Type: Solid Prep%Solids: 87Sample Volume/Weight: 2.00 gConcentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.572	2.29	0.572	ug/kg	U	1	10-FEB-10 19:23	per0210025a
	Perchlorate Isotope Ratio						1	10-FEB-10 19:23	per0210025a
14797-73-0	Perchlorate-101	.572	2.29	0.572	ug/kg	U	1	10-FEB-10 19:23	per0210025a
	Perchlorate-O(18)			5.88	ug/kg		1	10-FEB-10 19:23	per0210025a

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

*Concentration =

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

Perchlorate Analysis Data Sheet

Client Sample No.

RE15-10-7911

Lab Name: GEL Laboratories LLCLab Code: GELInstrument: LCMSMSMethod: SW846 6850 ModifiedMatrix: SOILExtraction Batch ID: 947110Extraction Type: Solid PrepDate Received: 23-JAN-10GEL Job No (SDG): 10-1392GEL Sample ID: 245394007Date Filtered: 08-FEB-10Injection Volume (uL): 20%Solids: 88Sample Volume/Weight: 2.00 gConcentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.568	2.27	0.568	ug/kg	U	1	10-FEB-10 19:31	per0210026a
	Perchlorate Isotope Ratio						1	10-FEB-10 19:31	per0210026a
14797-73-0	Perchlorate-101	.568	2.27	0.568	ug/kg	U	1	10-FEB-10 19:31	per0210026a
	Perchlorate-O(18)			5.75	ug/kg		1	10-FEB-10 19:31	per0210026a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The 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 =

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

Perchlorate Analysis Data Sheet

Client Sample No.

RE15-10-7908Lab Name: GEL Laboratories LLCLab Code: GELInstrument: LCMSMSDate Received: 23-JAN-10Method: SW846 6850 ModifiedGEL Job No (SDG): 10-1392Matrix: SOILGEL Sample ID: 245394008Extraction Batch ID: 247110Date Filtered: 08-FEB-10Extraction Type: Solid PrepInjection Volume (uL): 20Sample Volume/Weight: 2.00 g%Solids: 91.9Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.544	2.18	0.544	ug/kg	U	1	10-FEB-10 19:39	per0210027a
	Perchlorate Isotope Ratio						1	10-FEB-10 19:39	per0210027a
14797-73-0	Perchlorate-101	.544	2.18	0.544	ug/kg	U	1	10-FEB-10 19:39	per0210027a
	Perchlorate-O(18)			5.42	ug/kg		1	10-FEB-10 19:39	per0210027a

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

*Concentration =

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

Perchlorate Analysis Data Sheet

Client Sample No.

RE15-10-7912Lab Name: GEL Laboratories LLCLab Code: GELInstrument: LCMSMSMethod: SW846 6850 ModifiedMatrix: SOILExtraction Batch ID: 947110Extraction Type: Solid PrepDate Received: 23-JAN-10GEL Job No (SDG): 10-1392GEL Sample ID: 245394009Date Filtered: 08-FEB-10Injection Volume (uL): 20% Solids: 87Sample Volume/Weight: 2.00 gConcentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.578	2.31	0.578	ug/kg	U	1	10-FEB-10 19:47	per0210028a
	Perchlorate Isotope Ratio						1	10-FEB-10 19:47	per0210028a
14797-73-0	Perchlorate-101	.578	2.31	0.578	ug/kg	U	1	10-FEB-10 19:47	per0210028a
	Perchlorate-O(18)			5.99	ug/kg		1	10-FEB-10 19:47	per0210028a

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

*Concentration =

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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLCLab Code: GELInstrument: LCMSMSMethod: SW846 6850 ModifiedMatrix: SOILExtraction Batch ID: 947110Extraction Type: Solid PrepSample Volume/Weight: 2.00 gConcentrated Extract Volume: 20.0

Client Sample No.

RE15-10-7906Date Received: 23-JAN-10GEL Job No (SDG): 10-1392GEL Sample ID: 245394010Date Filtered: 08-FEB-10Injection Volume (uL): 20%Solids: 90

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.555	2.22	0.555	ug/kg	U	1	10-FEB-10 19:55	per0210029a
	Perchlorate Isotope Ratio						1	10-FEB-10 19:55	per0210029a
14797-73-0	Perchlorate-101	.555	2.22	0.555	ug/kg	U	1	10-FEB-10 19:55	per0210029a
	Perchlorate-O(18)			5.51	ug/kg		1	10-FEB-10 19:55	per0210029a

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

*Concentration =

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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 94711Q
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE15-10-7905
 Date Received: 23-JAN-10
 GEL Job No (SDG): 10-1392
 GEL Sample ID: 245394011
 Date Filtered: 08-FEB-10
 Injection Volume (uL): 20
 %Solids: 78

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.639	2.56	0.639	ug/kg	U	1	10-FEB-10 20:03	per0210030a
	Perchlorate Isotope Ratio						1	10-FEB-10 20:03	per0210030a
14797-73-0	Perchlorate-101	.639	2.56	0.639	ug/kg	U	1	10-FEB-10 20:03	per0210030a
	Perchlorate-O(18)			6.51	ug/kg		1	10-FEB-10 20:03	per0210030a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The 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: 247110
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE15-10-7907
 Date Received: 23-JAN-10
 GEL Job No (SDG): 10-1392
 GEL Sample ID: 245394012
 Date Filtered: 08-FEB-10
 Injection Volume (uL): 20
 %Solids: 81

CAS No.	Analyte ^A	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.618	2.47	0.618	ug/kg	U	1	10-FEB-10 20:11	per0210031a
	Perchlorate Isotope Ratio						1	10-FEB-10 20:11	per0210031a
14797-73-0	Perchlorate-101	.618	2.47	0.618	ug/kg	U	1	10-FEB-10 20:11	per0210031a
	Perchlorate-O(18)			6.44	ug/kg		1	10-FEB-10 20:11	per0210031a

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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLCLab Code: GELInstrument: LCMSMSMethod: SW846 6850 ModifiedMatrix: SOILExtraction Batch ID: 247110Extraction Type: Solid Prep

Client Sample No.

RE15-10-7913Date Received: 23-JAN-10GEL Job No (SDG): 10-1392GEL Sample ID: 245394013Date Filtered: 08-FEB-10Injection Volume (uL): 20%Solids: 79Sample Volume/Weight: 2.00 gConcentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.635	2.54	0.635	ug/kg	U	1	10-FEB-10 20:19	per0210032a
	Perchlorate Isotope Ratio						1	10-FEB-10 20:19	per0210032a
14797-73-0	Perchlorate-101	.635	2.54	0.635	ug/kg	U	1	10-FEB-10 20:19	per0210032a
	Perchlorate-O(18)			6.98	ug/kg		1	10-FEB-10 20:19	per0210032a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The 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 LLCLab Code: GELInstrument: LCMSMSMethod: SW846 6850 ModifiedMatrix: SOILExtraction Batch ID: 247110Extraction Type: Solid Prep

Client Sample No.

RE15-10-7909Date Received: 23-JAN-10GEL Job No (SDG): 10-1392GEL Sample ID: 245394014Date Filtered: 08-FEB-10Injection Volume (uL): 20%Solids: 84Sample Volume/Weight: 2.00 gConcentrated Extract Volume: 20.0

CAS No.	Analyte ^A	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.594	2.37	0.594	ug/kg	U	1	10-FEB-10 20:27	per0210033a
	Perchlorate Isotope Ratio						1	10-FEB-10 20:27	per0210033a
14797-73-0	Perchlorate-101	.594	2.37	0.594	ug/kg	U	1	10-FEB-10 20:27	per0210033a
	Perchlorate-Q(18)			5.97	ug/kg		1	10-FEB-10 20:27	per0210033a

^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 =

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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLCLab Code: GELInstrument: LCMSMSMethod: SW846 6850 ModifiedMatrix: SOILExtraction Batch ID: 947110Extraction Type: Solid Prep

Client Sample No.


RE15-10-7910Date Received: 23-JAN-10GEL Job No (SDG): 10-1392GEL Sample ID: 245394015Date Filtered: 08-FEB-10Injection Volume (uL): 20%Solids: 90.1Sample Volume/Weight: 2.00 gConcentrated 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	0.555	ug/kg	U	1	10-FEB-10 20:36	per0210034a
	Perchlorate Isotope Ratio						1	10-FEB-10 20:36	per0210034a
14797-73-0	Perchlorate-101	.555	2.22	0.555	ug/kg	U	1	10-FEB-10 20:36	per0210034a
	Perchlorate-O(18)			5.27	ug/kg		1	10-FEB-10 20:36	per0210034a

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

*Concentration =

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

DATA VALIDATION COVER SHEET	
5122-1 <div style="text-align: center;">Data Validation Cover Sheet</div>	Records Use only 

Section I.

REQUEST NUMBER: 10-1392 VALIDATION DATE: 3/4/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

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

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

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

Section II. Completeness Check


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


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

- In the CCVs associated with samples RE15-10-7872, -7912 and the HMX analysis for sample -7871, the %Ds were >20% with a positive bias for HMX, PETN and tetryl. In the CCVs associated with all the other samples, the %Ds were >20% with a positive bias for 2,4,6-trinitrotoluene; RDX; HMX and PETN. The associated sample results that were detects were qualified J,HE7c. The associated sample results that were NDs were not qualified. In the CCVs associated with all the samples, the %Ds were >20% but ≤40% with a negative bias for 2,4-diamino-6-nitrotoluene and 2,6-diamino-4-nitrotoluene. The associated sample results were NDs and, thus, were qualified UJ,HE7c.
- The LCS %R was < the laboratory's LAL but ≥10% for tetryl. The associated sample results were NDs and, thus, were qualified UJ,HE12a. The LCS %R was > the laboratory's UAL for 2,4-diamino-6-nitrotoluene. The associated sample results were NDs and, thus, were not qualified.
- It should be noted that the raw ICAL data from the instrument used for the secondary HE analysis 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 Donovan Level: I Date: 03/05/10

VALIDATOR'S SIGNATURE: Eric T. Mink DATE: 3/4/10

DATA VALIDATION COVER SHEET	
5122-1 Data Validation Cover Sheet	Records Use only  Los Alamos NATIONAL LABORATORY 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				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1. The IS retention time has shifted by more than 30 seconds.	R, UJ, HE0	J, HE0
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2. Required IS retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, HE0b	R, HE0b
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3. The quantitating IS area count is <25% of the expected value, which indicates increased potential for false negative results and other possible problems with sample quantitation. Follow the method-specific windows.	R, HE1a	J, HE1a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	4. The IS area count for the quantitating IS is <70% but >25% of the average of that obtained from the calibration standards.	UJ, HE1b	J+, HE1b
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	5. The IS area count for the quantitating IS is >130% of the average of that obtained from the calibration standards.	UJ, HE1c	J-, HE1c
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	6. Required IS Information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, HE1d	R, HE1d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7. The surrogate is <10%R. Follow the external laboratory limits.	R, HE3	J-, HE3
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8. The surrogate is < the Lower Acceptance Limit but ≥10% recovery. Follow the external laboratory limits.	UJ, HE3a	J-, HE3a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9. The surrogate %R value is > the Upper Acceptance Limit. Follow the external laboratory limits.	N/A	J+, HE3b
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	10. At least one surrogate is > the Upper Acceptance Limit and one surrogate is < the Lower Acceptance Limit. Follow the external laboratory limits.	UJ, HE3c	J, HE3c

LC/MS/MS HIGH EXPLOSIVE ANALYTICAL DATA VALIDATION CHECKLIST


5122-2

LC/MS/MS High Explosive Analytical Data Validation Checklist


Records Use only



Yes No N/A (Check One)				Assign Qualifier Listed Below If Criterion = Yes	
				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	11. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, HE3d	R, HE3d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	12. The sample result is ≤ 5 times the concentration of the related analyte in the method blank.	U, HE4	N/A
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	13. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was $> 5x$.	N/A	J, HE4a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	14. The sample result is ≤ 5 times the concentration of the related analyte in the trip blank, rinsate blank, and/or equipment blank.	U, HE4d	N/A
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	15. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, HE4e	R, HE4e
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	16. The absence of sample carry-over must be determined and verified.	N/A	R, N, HE4f
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	17. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, HE7	J, HE7
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	18. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is less < 0.99 .	UJ, R, HE7a	J, HE7a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	19. The affected analytes were analyzed with a RRF of < 0.05 in the initial calibration and/or CCV.	UJ, R, HE7b	J, HE7b
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	20. The ICV and/or CCV were recovered outside the method limits.	UJ, R, HE7c	J, HE7c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	21. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, R, HE7d	J, HE7d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	22. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, HE7f	R, HE7f

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

Yes No N/A				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	23. The mass spectral documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, HE8a	R, HE8a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	24. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, HE9	J-, HE9
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	25. The holding time was >2 times the applicable holding time requirement.	R, HE9a	J-, HE9a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	26. The LCS percent recovery was <10%. Follow the external laboratory limits.	R, HE12	J-, HE12
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	27. The LCS percent recovery was < the Lower Acceptance Limit but >10%. Follow the external laboratory limits.	UJ, HE12a	J-, HE12a
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	28. The LCS percent recovery was > the Upper Acceptance Limit. Follow the external laboratory limits.	N/A	J+, HE12b
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	29. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, HE12c	R, HE12c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	30. The MS/MSD percent recovery was <10%.	R, HE12d	R, HE12d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	31. The MS/MSD percent recovery was >10% but <70%.	UJ, HE12e	J, HE12e
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	32. The MS/MSD percent recover was >70%.	N/A	J+, HE12f
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	33. The MS/MSD relative percent difference was >30%.	UJ, HE12g	J, HE12g
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	34. The affected analytes are considered suspect because the sample was diluted without any target analytes identified due to matrix interference. (Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.)	UJ, R, HE15	R, HE15
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	35. The sample was diluted because target analytes were > the initial verification calibration.	UJ, HE15a	J, HE15a

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

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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7869

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394001

Sample Amount 2

Moisture: 24.7

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208277a

Date Analyzed: 14-FEB-10 06:32

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
3/4/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7869

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394001

Sample Amount 2

Moisture: 24.7

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140066.wiff

Date Analyzed: 15-FEB-10 07:18

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene UJ,HE7c	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene UJ,HE7c	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
3/4/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7874

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394002

Sample Amount 2

Moisture: 4.1

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208280a

Date Analyzed: 14-FEB-10 08:00

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7874

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394002

Sample Amount 2

Moisture: 4.1

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140072.wiff

Date Analyzed: 15-FEB-10 08:53

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene UJ,HE7c	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene UJ,HE7c	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
3/4/10

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7871

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394003

Sample Amount 2

Moisture: 10.9

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208281a

Date Analyzed: 14-FEB-10 08:30

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene J,HE7c	185	J
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX J,HE7c	7720	
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 Concentrated Extract Volume X Dilution Factor
Sample Amount

ETM
3/4/10

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7871

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394003

Sample Amount 2

Moisture: 10.9

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 10

Injection Volume (uL): 50

GEL data file: EXP0208302a

Date Analyzed: 14-FEB-10 18:52

Units: ug/kg

Cas No.	Compound	Concentration*	Q
2691-41-0	HMX J,HE7c	15400	

*Concentration =

Instrument Value	X	$\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$	X	Dilution Factor
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1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7871

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394003

Sample Amount 2

Moisture: 10.9

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140073.wiff

Date Analyzed: 15-FEB-10 09:09

Units: ug/kg

Cas No.	Compound	Concentration*	Q
59229-75-3	2,6-Diamino-4-nitrotoluene UJ,HE7c	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene UJ,HE7c	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

Instrument X Concentrated Extract Volume X Dilution
Value Sample Amount Factor

ETM
3/4/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7871

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394003

Sample Amount 2

Moisture: 10.9

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 10

Injection Volume (uL): 50

GEL data file: EXS02140116.wiff

Date Analyzed: 15-FEB-10 20:24

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	28600	

*Concentration =

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

ETM
3/4/10

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7872

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394004

Sample Amount 2

Moisture: 11.2

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208303a

Date Analyzed: 14-FEB-10 19:21

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX J,HE7c	182	J
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
3/4/10

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7872

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394004

Sample Amount 2

Moisture: 11.2

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140115.wiff

Date Analyzed: 15-FEB-10 20:08

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	4780	
59229-75-3	2,6-Diamino-4-nitrotoluene UJ,HE7c	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene UJ,HE7c	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
3/4/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7870

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394005

Sample Amount 2

Moisture: 13.1

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208283a

Date Analyzed: 14-FEB-10 09:29

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
3/4/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7870

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394005

Sample Amount 2

Moisture: 13.1

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140075.wiff

Date Analyzed: 15-FEB-10 09:40

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene UJ,HE7c	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene UJ,HE7c	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
3/4/10

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7873

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394006

Sample Amount 2

Moisture: 12.6

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208284a

Date Analyzed: 14-FEB-10 09:58

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7873

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394006

Sample Amount 2

Moisture: 12.6

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140076.wiff

Date Analyzed: 15-FEB-10 09:56

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene UJ,HE7c	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene UJ,HE7c	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
3/4/10

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7911

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394007

Sample Amount 2

Moisture: 12.0

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208288a

Date Analyzed: 14-FEB-10 11:56

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 J,HE7c	315	J
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
3/4/10

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7911

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394007

Sample Amount 2

Moisture: 12.0

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140077.wiff

Date Analyzed: 15-FEB-10 10:12

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene UJ,HE7c	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene UJ,HE7c	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

Instrument	X	Concentrated Extract Volume	X	Dilution
Value		Sample Amount		Factor

ETM
3/4/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7908

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394008

Sample Amount 2

Moisture: 8.1

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208289a

Date Analyzed: 14-FEB-10 12:26

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

ETM
3/4/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7908

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394008

Sample Amount 2

Moisture: 8.1

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140078.wiff

Date Analyzed: 15-FEB-10 10:27

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene UJ,HE7c	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene UJ,HE7c	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
3/4/10

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7912

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394009

Sample Amount 2

Moisture: 13.5

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208304a

Date Analyzed: 14-FEB-10 19:51

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX J,HE7c	198	J
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
3/4/10

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7912

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394009

Sample Amount 2

Moisture: 13.5

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140079.wiff

Date Analyzed: 15-FEB-10 10:43

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene UJ,HE7c	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene UJ,HE7c	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

Instrument Value	X	Concentrated Extract Volume	X	Dilution Factor
		Sample Amount		

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7906

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394010

Sample Amount 2

Moisture: 10

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208291a

Date Analyzed: 14-FEB-10 13:27

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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7906

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394010

Sample Amount 2

Moisture: 10

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140080.wiff

Date Analyzed: 15-FEB-10 10:59

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene UJ,HE7c	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene UJ,HE7c	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>		

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7905

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394011

Sample Amount 2

Moisture: 21.8

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208292a

Date Analyzed: 14-FEB-10 13:56

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 J,HE7c	1220	
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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7905

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394011

Sample Amount 2

Moisture: 21.8

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140081.wiff

Date Analyzed: 15-FEB-10 11:15

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	6060	
59229-75-3	2,6-Diamino-4-nitrotoluene UJ,HE7c	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene UJ,HE7c	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
3/4/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7907

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394012

Sample Amount 2

Moisture: 19.1

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208293a

Date Analyzed: 14-FEB-10 14:26

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
3/4/10

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7907

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394012

Sample Amount 2

Moisture: 19.1

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140085.wiff

Date Analyzed: 15-FEB-10 12:17

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene UJ,HE7c	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene UJ,HE7c	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

Instrument Value	X	Concentrated Extract Volume	X	Dilution Factor
		Sample Amount		

ETM
3/4/10

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7913

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394013

Sample Amount 2

Moisture: 21.3

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208294a

Date Analyzed: 14-FEB-10 14:55

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
3/4/10

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7913

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394013

Sample Amount 2

Moisture: 21.3

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140086.wiff

Date Analyzed: 15-FEB-10 12:33

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene UJ,HE7c	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene UJ,HE7c	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
3/4/10

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7909

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394014

Sample Amount 2

Moisture: 15.8

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208295a

Date Analyzed: 14-FEB-10 15:25

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	Concentrated Extract Volume	X	Dilution Factor
		Sample Amount		

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7909

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394014

Sample Amount 2

Moisture: 15.8

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140087.wiff

Date Analyzed: 15-FEB-10 12:49

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	12900	
59229-75-3	2,6-Diamino-4-nitrotoluene UJ,HE7c	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene UJ,HE7c	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
3/4/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7910

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394015

Sample Amount 2

Moisture: 9.9

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208296a

Date Analyzed: 14-FEB-10 15:54

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

Concentrated Extract Volume
Sample Amount

X

Dilution
Factor

ETM
3/4/10

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7910

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394015

Sample Amount 2

Moisture: 9.9

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140088.wiff

Date Analyzed: 15-FEB-10 13:04


Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene UJ,HE7c	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene UJ,HE7c	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
3/4/10

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

Section I.

REQUEST NUMBER: 10-1392 VALIDATION DATE: 3/4/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

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

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

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

Section II. Completeness Check


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

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

None.

Reviewed by: Mary Donovan Level: I Date: 03/05/10

VALIDATOR'S SIGNATURE: Eric T. Mink DATE: 3/4/10

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST	
5116-2 Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist	Records Use only 

Yes No N/A (Check One)				Assign Qualifier Listed Below If Criterion = Yes	
				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, P9	J-, P9
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2. The holding time was >2 times the applicable holding time requirement.	R, P9	J-, P9a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.	R, P9b	R, P9b
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, P7	J, P7
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	5. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, P7a	J, P7a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	6. The Initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, P7c	J, P7c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, P7d	J, P7d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8. The multicomponent standard was not analyzed within 72 hours of the initial analysis.	R, P7e	J, P7e
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, P7f	R, P7f
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	10. The breakdown criteria have been exceeded. This can cause low bias in reported results. If compound is detected, qualify J-. If compound is not present, but breakdown products are present, qualify R. If no compounds or breakdown products are present, qualify UJ (4,4' DDT and Endrin).	UJ, R, P13	J-, P13

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

5116-2

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

Records Use only



Yes No N/A				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	11. The breakdown criteria have been exceeded. This can cause high bias in the reported results and potential false positive results for the breakdown products Endrin ketone, Endrin aldehyde, DDD, and DDE.	UJ, P13a	J+, P13a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	12. The breakdown documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P13b	R, P13b
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	13. The sample result is $\leq 5X$ the concentration of the related analyte in the method blank.	U, P4	N/A
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	14. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was greater than 5X.	N/A	J, P4a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	15. The sample result is $\leq 5X$ the concentration of the related analyte in the instrument blank and continuing calibration blank.	UJ, P4b	N/A
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	16. The sample result is $\leq 5X$ the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	UJ, P4d	N/A
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	17. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P4e	R, P4e
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	18. The analyte RT shifted by more than 0.05 minutes from the mid-level standard of the initial calibration.	R, P0	J, P0
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	19. Required retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P0b	R, P0b
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	20. The surrogate is $<10\%R$. Follow the external laboratory limits located within the associated data package.	R, P3	J-, P3

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

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

Records Use only



Yes No N/A				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	21. The surrogate is < the Lower Acceptance Level (LAL) but $\geq 10\%R$. Follow the external laboratory limits located within the associated data package.	UJ, P3a	J-, P3a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	22. The surrogate %R value is > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, P3b
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	23. At least one surrogate is > the Upper Acceptance Limit (UAL) and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, P3c	J, P3c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	24. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P3d	R, P3d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	25. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, P12	J-, P12
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	26. The LCS percent recovery was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, P12a	J-, P12a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	27. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, P12b
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	28. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P12c	R, P12c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	29. The analyte was not confirmed on a second dissimilar column.	N/A	R, P8
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	30. The second dissimilar column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P8a	R, P8a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	31. Duplicate, Dilution, or reanalysis.	UJ, P88	J, P88

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

5116-2

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

Records Use only



Yes No N/A				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	32. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytes identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, P15	R, P15
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	33. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	34. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, P19	J, R, P19

PCB

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Certificate of Analysis
Sample SummarySDG Number: 10-1392
Lab Sample ID: 245394001Date Collected: 01/19/2010 12:00
Date Received: 01/23/2010 09:20Matrix: R
%Moisture: 24.7
Project: LANL01004
SOP Ref: GL-OA-E-040Client ID: RE15-10-7869
Batch ID: 945979
Run Date: 01/28/2010 10:41
Prep Date: 01/27/2010 20:26
Data File: 021f2101.d
021b2101.dMethod: SW846 8082
Inst: ECD2A.I
Analyst: JAOC
Aliquot: 30.01 g
Column: 1 CLP1
2 CLP2Dilution: 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	4.43	ug/kg	1.47	4.43	1
11104-28-2	Aroclor-1221	U	4.43	ug/kg	1.47	4.43	1
11141-16-5	Aroclor-1232	U	4.43	ug/kg	1.47	4.43	1
53469-21-9	Aroclor-1242	U	4.43	ug/kg	1.47	4.43	1
12672-29-6	Aroclor-1248	U	4.43	ug/kg	1.47	4.43	1
11097-69-1	Aroclor-1254		7.00	ug/kg	1.47	4.43	1
11096-82-5	Aroclor-1260	P	6.80	ug/kg	1.47	4.43	2

ETM
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PCB

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Certificate of Analysis
Sample SummarySDG Number: 10-1392
Lab Sample ID: 245394005Date Collected: 01/19/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8082
Inst: ECD2A.I
Analyst: JAOC
Aliquot: 30.02 g
Column: 1 CLP1
2 CLP2Matrix: R
%Moisture: 13.1
Project: LANL01004
SOP Ref: GL-OA-E-040
Dilution: 1
Inj. Vol: 1 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Paramname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.83	ug/kg	1.28	3.83	1
11104-28-2	Aroclor-1221	U	3.83	ug/kg	1.28	3.83	1
11141-16-5	Aroclor-1232	U	3.83	ug/kg	1.28	3.83	1
53469-21-9	Aroclor-1242	U	3.83	ug/kg	1.28	3.83	1
12672-29-6	Aroclor-1248	U	3.83	ug/kg	1.28	3.83	1
11097-69-1	Aroclor-1254	U	3.83	ug/kg	1.28	3.83	1
11096-82-5	Aroclor-1260	U	3.83	ug/kg	1.28	3.83	1

ETM
3/4/10

PCB

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Certificate of Analysis
Sample Summary

SDG Number: 10-1392	Date Collected: 01/19/2010 12:00	Matrix: R
Lab Sample ID: 245394003	Date Received: 01/23/2010 09:20	%Moisture: 10.9
Client ID: RE15-10-7871	Client: LANL010	Project: LANL01004
Batch ID: 945979	Method: SW846 8082	SOP Ref: GL-OA-E-040
Run Date: 01/28/2010 11:26	Inst: ECD2A.I	Dilution: 1
Prep Date: 01/27/2010 20:26	Analyst: JAOC	Inj. Vol: 1 uL
Data File: 025f2501.d	Aliquot: 30.07 g	Final Volume: 1 mL
025b2501.d	Column: 1 CLP1	Level: LOW
	2 CLP2	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.73	ug/kg	1.24	3.73	1
11104-28-2	Aroclor-1221	U	3.73	ug/kg	1.24	3.73	1
11141-16-5	Aroclor-1232	U	3.73	ug/kg	1.24	3.73	1
53469-21-9	Aroclor-1242	U	3.73	ug/kg	1.24	3.73	1
12672-29-6	Aroclor-1248	U	3.73	ug/kg	1.24	3.73	1
11097-69-1	Aroclor-1254		23.1	ug/kg	1.24	3.73	1
11096-82-5	Aroclor-1260	P	16.3	ug/kg	1.24	3.73	2

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PCB

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Certificate of Analysis
Sample SummarySDG Number: 10-1392
Lab Sample ID: 245394004Date Collected: 01/19/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8082
Inst: ECD2A.I
Analyst: JAOC
Aliquot: 30.05 g
Column: 1 CLP1
2 CLP2Matrix: R
%Moisture: 11.2
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	3.75	ug/kg	1.25	3.75	1
11104-28-2	Aroclor-1221	U	3.75	ug/kg	1.25	3.75	1
11141-16-5	Aroclor-1232	U	3.75	ug/kg	1.25	3.75	1
53469-21-9	Aroclor-1242	U	3.75	ug/kg	1.25	3.75	1
12672-29-6	Aroclor-1248	U	3.75	ug/kg	1.25	3.75	1
11097-69-1	Aroclor-1254		4.30	ug/kg	1.25	3.75	1
11096-82-5	Aroclor-1260	JP	2.40	ug/kg	1.25	3.75	2

PCB

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Certificate of Analysis
Sample SummarySDG Number: 10-1392
Lab Sample ID: 245394006Date Collected: 01/19/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8082
Inst: ECD2A.I
Analyst: JAOC
Aliquot: 30.19 g
Column: 1 CLP1
2 CLP2Matrix: R
%Moisture: 12.6
Project: LANL01004
SOP Ref: GL-OA-E-040
Dilution: 5
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	18.9	ug/kg	6.31	18.9	1
11104-28-2	Aroclor-1221	U	18.9	ug/kg	6.31	18.9	1
11141-16-5	Aroclor-1232	U	18.9	ug/kg	6.31	18.9	1
53469-21-9	Aroclor-1242		282	ug/kg	6.31	18.9	1
12672-29-6	Aroclor-1248	U	18.9	ug/kg	6.31	18.9	1
11097-69-1	Aroclor-1254		143	ug/kg	6.31	18.9	1
11096-82-5	Aroclor-1260		60.8	ug/kg	6.31	18.9	2

PCB
Certificate of Analysis
Sample Summary

SDG Number: 10-1392
Lab Sample ID: 245394002

Date Collected: 01/19/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8082
Inst: ECD2AJ
Analyst: JAOC
Aliquot: 30.08 g
Column: 1 CLP1
2 CLP2

Matrix: R
%Moisture: 4.1
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	3.47	ug/kg	1.15	3.47	1
11104-28-2	Aroclor-1221	U	3.47	ug/kg	1.15	3.47	1
11141-16-5	Aroclor-1232	U	3.47	ug/kg	1.15	3.47	1
53469-21-9	Aroclor-1242	U	3.47	ug/kg	1.15	3.47	1
12672-29-6	Aroclor-1248	U	3.47	ug/kg	1.15	3.47	1
11097-69-1	Aroclor-1254	J	2.90	ug/kg	1.15	3.47	1
11096-82-5	Aroclor-1260	J	3.20	ug/kg	1.15	3.47	2

ETM
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DATA VALIDATION COVER SHEET	
5118-1 <div style="text-align: center;">Data Validation Cover Sheet</div>	Records Use only


Section I.							
REQUEST NUMBER: <u>10-1392</u>		VALIDATION DATE: <u>3/4/10</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):							
<input type="checkbox"/> TPH-GRO	<input type="checkbox"/> HIGH EXPLOSIVES	<input type="checkbox"/> DIOXIN FURANS	<input type="checkbox"/> LCMSMS PERCHLORATES				
<input type="checkbox"/> TPH-DRO	<input checked="" type="checkbox"/> METALS	<input type="checkbox"/> PCB CONGENERS	<input type="checkbox"/> ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS				
<input type="checkbox"/> GENERAL CHEMISTRY	<input type="checkbox"/> RADIOCHEMISTRY	<input type="checkbox"/> LCMSMS HIGH EXPLOSIVES					
<input type="checkbox"/> OTHER (DESCRIBE): _____							

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


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

- The MS %R was <10% for Cu. Thus, all the associated sample results were qualified R,I6. The MS %Rs were > the laboratory's UAL for Be, Ca, Mg and K. The associated sample results were detects and, thus, were qualified J+,I6b. The MS %Rs were < the laboratory's LAL but ≥10% for Ni, Sb, Pb and Mn. The Sb results for samples -7913, -7906, -7870, -7874 and -7869 were NDs and, thus, were qualified UJ,I6a. All the other associated sample results were detects and, thus, were qualified J-,I6a. The MS %Rs were also > the laboratory's UAL for Al, U 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.
- In the MB, Na and Fe were detected. The Na sample results were detects >5X but ≤50X the blank concentration and, thus, were qualified J,I4a. All the other associated sample results were detects >50X the blank concentration and, thus, were not qualified, based on professional judgment.


DATA VALIDATION COVER SHEET	
5118-1	Records Use only
<p align="center">Data Validation Cover Sheet</p> 	
<p>3. In the ICB and/or CCB, U and Mg were detected. All the associated sample results were detects >5X the blank concentration and, thus, were not qualified.</p> <p>4. In the FR blanks, samples RE15-10-8074 and -8075 from RN 10-1390, associated with all the 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.</p> <p>5. The duplicate RPDs were >35% for Cu and U, and both the parent sample and duplicate results were $\geq 5X$ the PQL. The associated sample results were detects and, thus, were qualified J,I10a.</p> <p>6. It should be noted that all the CVAA QC analyses were performed on LANL samples from a different RN. No sample data were qualified.</p>	
<p>Reviewed by: <u>Mary Donovan</u> Level: <u>I</u> Date: <u>03/05/10</u></p>	
<p>VALIDATOR'S SIGNATURE: <u>Eli T. Mikh</u> DATE: <u>3/2/10</u></p>	
Form 5118-1, Revision 0.0	<p>LOS ALAMOS</p> <p>Environmental Restoration Project</p>

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


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

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

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

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

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

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

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

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1392

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245394001

BASIS: Dry Weight

DATE COLLECTED 19-JAN-10

CLIENT ID: RE15-10-7869

LEVEL: Low

DATE RECEIVED 23-JAN-10

MATRIX: SOIL

%SOLIDS: 75

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	7330000	ug/Kg	*	8890	26200	26200	1	P	HSC	02/11/10 19:10	021110-1	945421
7440-36-0	Antimony UJ,16a	1310	ug/Kg	UN	431	1310	1310	1	P	HSC	02/11/10 19:10	021110-1	945421
7440-38-2	Arsenic	3.12	mg/kg		0.263	1.32	1.32	2	MS	RMJ	02/14/10 09:56	100213-2	945425
7440-39-3	Barium	87200	ug/Kg		131	654	654	1	P	HSC	02/11/10 19:10	021110-1	945421
7440-41-7	Beryllium J+,16b	3.07	mg/kg	N	0.0263	0.132	0.132	2	MS	RMJ	02/14/10 09:56	100213-2	945425
7440-43-9	Cadmium	654	ug/Kg	U	131	654	654	1	P	HSC	02/11/10 19:10	021110-1	945421
7440-70-2	Calcium J+,16b	1800000	ug/Kg	N	10500	32700	32700	1	P	HSC	02/11/10 19:10	021110-1	945421
7440-47-3	Chromium	6770	ug/Kg		196	654	654	1	P	HSC	02/11/10 19:10	021110-1	945421
7440-48-4	Cobalt	2770	ug/Kg		196	654	654	1	P	HSC	02/11/10 19:10	021110-1	945421
7440-50-8	Copper R,16	148000	ug/Kg	*N	392	1310	1310	1	P	HSC	02/11/10 19:10	021110-1	945421
7439-89-6	Iron	10000000	ug/Kg		10500	32700	32700	1	P	HSC	02/11/10 19:10	021110-1	945421
7439-92-1	Lead J-,16a	64200	ug/Kg	*N	327	1310	1310	1	P	HSC	02/11/10 19:10	021110-1	945421
7439-95-4	Magnesium J+,16b	1300000	ug/Kg	N	11100	39200	39200	1	P	HSC	02/11/10 19:10	021110-1	945421
7439-96-5	Manganese J-,16a	174000	ug/Kg	N	262	1310	1310	1	P	HSC	02/11/10 19:10	021110-1	945421
7439-97-6	Mercury	12.7	ug/kg	J	4.59	13.5	13.5	1	AV	ETL	02/10/10 10:19	021010S1-4	945628
7440-02-0	Nickel J-,16a	9.64	mg/kg	N	0.132	0.526	0.526	2	MS	RMJ	02/14/10 09:56	100213-2	945425
7440-09-7	Potassium J+,16b	860000	ug/Kg	N	8370	32700	32700	1	P	HSC	02/11/10 19:10	021110-1	945421
7782-49-2	Selenium	1.32	mg/kg	U*N	0.658	1.32	1.32	2	MS	RMJ	02/14/10 09:56	100213-2	945425
7440-22-4	Silver	493	ug/Kg	J	131	654	654	1	P	HSC	02/11/10 19:10	021110-1	945421
7440-23-5	Sodium J,16a	62000	ug/Kg		9150	32700	32700	1	P	HSC	02/11/10 19:10	021110-1	945421
7440-28-0	Thallium	0.183	mg/kg	J	0.0789	0.263	0.263	2	MS	RMJ	02/14/10 09:56	100213-2	945425
7440-61-1	Uranium J,110a	69.6	mg/kg	*	0.0868	0.263	0.263	10	MS	RMJ	02/16/10 07:38	100215-3	945425
7440-62-2	Vanadium	17700	ug/Kg		131	654	654	1	P	HSC	02/11/10 19:10	021110-1	945421
7440-66-6	Zinc	32600	ug/Kg		431	1310	1310	1	P	HSC	02/11/10 19:10	021110-1	945421

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
945421	945420	SW846 3050B	0.508	g	50	mL	02/04/10	FGA
945425	945424	SW846 3050B	0.505	g	50	mL	02/04/10	FGA
945628	945627	SW846 7471A Prep	0.591	g	30	mL	02/09/10	TXB3

ETM
3/4/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1392

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245394002

BASIS: Dry Weight

DATE COLLECTED 19-JAN-10

CLIENT ID: RE15-10-7874

LEVEL: Low

DATE RECEIVED 23-JAN-10

MATRIX: SOIL

%SOLIDS: 95.9

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1320000	ug/Kg	*	6830	20100	20100	1	P	HSC	02/11/10 19:58	021110-1	945421
7440-36-0	Antimony UJ,16a	1000	ug/Kg	UN	332	1000	1000	1	P	HSC	02/11/10 19:58	021110-1	945421
7440-38-2	Arsenic	1.08	mg/kg		0.202	1.01	1.01	2	MS	RMJ	02/14/10 10:26	100213-2	945425
7440-39-3	Barium	30100	ug/Kg		100	502	502	1	P	HSC	02/11/10 19:58	021110-1	945421
7440-41-7	Beryllium J+,16b	0.848	mg/kg	N	0.0202	0.101	0.101	2	MS	RMJ	02/14/10 10:26	100213-2	945425
7440-43-9	Cadmium	502	ug/Kg	U	100	502	502	1	P	HSC	02/11/10 19:58	021110-1	945421
7440-70-2	Calcium J+,16b	448000	ug/Kg	N	8040	25100	25100	1	P	HSC	02/11/10 19:58	021110-1	945421
7440-47-3	Chromium	2890	ug/Kg		151	502	502	1	P	HSC	02/11/10 19:58	021110-1	945421
7440-48-4	Cobalt	4660	ug/Kg		151	502	502	1	P	HSC	02/11/10 19:58	021110-1	945421
7440-50-8	Copper R,16	45900	ug/Kg	*N	301	1000	1000	1	P	HSC	02/11/10 19:58	021110-1	945421
7439-89-6	Iron	9340000	ug/Kg		8040	25100	25100	1	P	HSC	02/11/10 19:58	021110-1	945421
7439-92-1	Lead J-,16a	17100	ug/Kg	*N	251	1000	1000	1	P	HSC	02/11/10 19:58	021110-1	945421
7439-95-4	Magnesium J+,16b	347000	ug/Kg	N	8540	30100	30100	1	P	HSC	02/11/10 19:58	021110-1	945421
7439-96-5	Manganese J-,16a	319000	ug/Kg	N	201	1000	1000	1	P	HSC	02/11/10 19:58	021110-1	945421
7439-97-6	Mercury	8.06	ug/kg	J	4.06	11.9	11.9	1	AV	ETL	02/10/10 10:21	021010S1-4	945628
7440-02-0	Nickel J-,16a	6.46	mg/kg	N	0.101	0.403	0.403	2	MS	RMJ	02/14/10 10:26	100213-2	945425
7440-09-7	Potassium J+,16b	404000	ug/Kg	N	6430	25100	25100	1	P	HSC	02/11/10 19:58	021110-1	945421
7782-49-2	Selenium	1.01	mg/kg	U*N	0.504	1.01	1.01	2	MS	RMJ	02/14/10 10:26	100213-2	945425
7440-22-4	Silver	552	ug/Kg		100	502	502	1	P	HSC	02/11/10 19:58	021110-1	945421
7440-23-5	Sodium J,14a	179000	ug/Kg		7030	25100	25100	1	P	HSC	02/11/10 19:58	021110-1	945421
7440-28-0	Thallium	0.202	mg/kg	U	0.0605	0.202	0.202	2	MS	RMJ	02/14/10 10:26	100213-2	945425
7440-61-1	Uranium J,110a	13.3	mg/kg	*	0.0133	0.0403	0.0403	2	MS	RMJ	02/16/10 07:56	100215-3	945425
7440-62-2	Vanadium	4290	ug/Kg		100	502	502	1	P	HSC	02/11/10 19:58	021110-1	945421
7440-66-6	Zinc	51800	ug/Kg		332	1000	1000	1	P	HSC	02/11/10 19:58	021110-1	945421

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
945421	945420	SW846 3050B	0.519	g	50	mL	02/04/10	FGA
945425	945424	SW846 3050B	0.517	g	50	mL	02/04/10	FGA
945628	945627	SW846 7471A Prep	0.524	g	30	mL	02/09/10	TXB3

ETM
3/4/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1392

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245394003

BASIS: Dry Weight

DATE COLLECTED 19-JAN-10

CLIENT ID: RE15-10-7871

LEVEL: Low

DATE RECEIVED 23-JAN-10

MATRIX: SOIL

%SOLIDS: 89

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	2520000	ug/Kg	*	7440	21900	21900	1	P	HSC	02/11/10 20:05	021110-1	945421
7440-36-0	Antimony J-,16a	2070	ug/Kg	N	361	1090	1090	1	P	HSC	02/11/10 20:05	021110-1	945421
7440-38-2	Arsenic	1.84	mg/kg		0.222	1.11	1.11	2	MS	RMJ	02/14/10 10:32	100213-2	945425
7440-39-3	Barium	91700	ug/Kg		109	547	547	1	P	HSC	02/11/10 20:05	021110-1	945421
7440-41-7	Beryllium J+,16b	4.12	mg/kg	N	0.0222	0.111	0.111	2	MS	RMJ	02/14/10 10:32	100213-2	945425
7440-43-9	Cadmium	547	ug/Kg	U	109	547	547	1	P	HSC	02/11/10 20:05	021110-1	945421
7440-70-2	Calcium J+,16b	1240000	ug/Kg	N	8750	27400	27400	1	P	HSC	02/11/10 20:05	021110-1	945421
7440-47-3	Chromium	6810	ug/Kg		164	547	547	1	P	HSC	02/11/10 20:05	021110-1	945421
7440-48-4	Cobalt	1370	ug/Kg		164	547	547	1	P	HSC	02/11/10 20:05	021110-1	945421
7440-50-8	Copper R,16	206000	ug/Kg	*N	328	1090	1090	1	P	HSC	02/11/10 20:05	021110-1	945421
7439-89-6	Iron	7380000	ug/Kg		8750	27400	27400	1	P	HSC	02/11/10 20:05	021110-1	945421
7439-92-1	Lead J-,16a	147000	ug/Kg	*N	274	1090	1090	1	P	HSC	02/11/10 20:05	021110-1	945421
7439-95-4	Magnesium J+,16b	658000	ug/Kg	N	9300	32800	32800	1	P	HSC	02/11/10 20:05	021110-1	945421
7439-96-5	Mangancsc J-,16a	196000	ug/Kg	N	219	1090	1090	1	P	HSC	02/11/10 20:05	021110-1	945421
7439-97-6	Mercury	13	ug/kg		4.37	12.9	12.9	1	AV	ETL	02/10/10 10:23	021010S1-4	945628
7440-02-0	Nickel J-,16a	21	mg/kg	N	0.111	0.444	0.444	2	MS	RMJ	02/14/10 10:32	100213-2	945425
7440-09-7	Potassium J+,16b	355000	ug/Kg	N	7000	27400	27400	1	P	HSC	02/11/10 20:05	021110-1	945421
7782-49-2	Selenium	1.11	mg/kg	U*N	0.555	1.11	1.11	2	MS	RMJ	02/14/10 10:32	100213-2	945425
7440-22-4	Silver	570	ug/Kg		109	547	547	1	P	HSC	02/11/10 20:05	021110-1	945421
7440-23-5	Sodium J,14a	56500	ug/Kg		7660	27400	27400	1	P	HSC	02/11/10 20:05	021110-1	945421
7440-28-0	Thallium	0.222	mg/kg	U	0.0666	0.222	0.222	2	MS	RMJ	02/14/10 10:32	100213-2	945425
7440-61-1	Uranium J,110a	66.9	mg/kg	*	0.0732	0.222	0.222	10	MS	RMJ	02/16/10 08:00	100215-3	945425
7440-62-2	Vanadium	8540	ug/Kg		109	547	547	1	P	HSC	02/11/10 20:05	021110-1	945421
7440-66-6	Zinc	47500	ug/Kg		361	1090	1090	1	P	HSC	02/11/10 20:05	021110-1	945421

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
945421	945420	SW846 3050B	0.513	g	50	mL	02/04/10	FGA
945425	945424	SW846 3050B	0.506	g	50	mL	02/04/10	FGA
945628	945627	SW846 7471A Prep	0.524	g	30	mL	02/09/10	TXB3

ETM
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METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1392

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245394004

BASIS: Dry Weight

DATE COLLECTED 19-JAN-10

CLIENT ID: RE15-10-7872

LEVEL: Low

DATE RECEIVED 23-JAN-10

MATRIX: SOIL

%SOLIDS: 89

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	2380000	ug/Kg	*	7580	22300	22300	1	P	HSC	02/11/10 20:12	021110-1	945421
7440-36-0	Antimony J-,16a	1660	ug/Kg	N	368	1110	1110	1	P	HSC	02/11/10 20:12	021110-1	945421
7440-38-2	Arsenic	1.82	mg/kg		0.215	1.07	1.07	2	MS	RMJ	02/14/10 10:38	100213-2	945425
7440-39-3	Barium	117000	ug/Kg		111	557	557	1	P	HSC	02/11/10 20:12	021110-1	945421
7440-41-7	Beryllium J+,16b	4.55	mg/kg	N	0.0215	0.107	0.107	2	MS	RMJ	02/14/10 10:38	100213-2	945425
7440-43-9	Cadmium	316	ug/Kg	J	111	557	557	1	P	HSC	02/11/10 20:12	021110-1	945421
7440-70-2	Calcium J+,16b	2150000	ug/Kg	N	8920	27900	27900	1	P	HSC	02/11/10 20:12	021110-1	945421
7440-47-3	Chromium	6550	ug/Kg		167	557	557	1	P	HSC	02/11/10 20:12	021110-1	945421
7440-48-4	Cobalt	1610	ug/Kg		167	557	557	1	P	HSC	02/11/10 20:12	021110-1	945421
7440-50-8	Copper R,16	317000	ug/Kg	*N	334	1110	1110	1	P	HSC	02/11/10 20:12	021110-1	945421
7439-89-6	Iron	7270000	ug/Kg		8920	27900	27900	1	P	HSC	02/11/10 20:12	021110-1	945421
7439-92-1	Lead J-,16a	157000	ug/Kg	*N	279	1110	1110	1	P	HSC	02/11/10 20:12	021110-1	945421
7439-95-4	Magnesium J+,16b	739000	ug/Kg	N	9480	33400	33400	1	P	HSC	02/11/10 20:12	021110-1	945421
7439-96-5	Manganese J-,16a	199000	ug/Kg	N	223	1110	1110	1	P	HSC	02/11/10 20:12	021110-1	945421
7439-97-6	Mercury	13	ug/kg	U	4.42	13	13	1	AV	ETL	02/10/10 10:25	021010S1-4	945628
7440-02-0	Nickel J-,16a	6.18	mg/kg	N	0.107	0.429	0.429	2	MS	RMJ	02/14/10 10:38	100213-2	945425
7440-09-7	Potassium J+,16b	308000	ug/Kg	N	7140	27900	27900	1	P	HSC	02/11/10 20:12	021110-1	945421
7782-49-2	Selenium	1.07	mg/kg	U*N	0.536	1.07	1.07	2	MS	RMJ	02/14/10 10:38	100213-2	945425
7440-22-4	Silver	536	ug/Kg	J	111	557	557	1	P	HSC	02/11/10 20:12	021110-1	945421
7440-23-5	Sodium J,14a	61300	ug/Kg		7800	27900	27900	1	P	HSC	02/11/10 20:12	021110-1	945421
7440-28-0	Thallium	0.0845	mg/kg	J	0.0644	0.215	0.215	2	MS	RMJ	02/14/10 10:38	100213-2	945425
7440-61-1	Uranium J,110a	82.3	mg/kg	*	0.0708	0.215	0.215	10	MS	RMJ	02/16/10 08:03	100215-3	945425
7440-62-2	Vanadium	10700	ug/Kg		111	557	557	1	P	HSC	02/11/10 20:12	021110-1	945421
7440-66-6	Zinc	50600	ug/Kg		368	1110	1110	1	P	HSC	02/11/10 20:12	021110-1	945421

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
945421	945420	SW846 3050B	0.505	g	50	mL	02/04/10	FGA
945425	945424	SW846 3050B	0.525	g	50	mL	02/04/10	FGA
945628	945627	SW846 7471A Prep	0.52	g	30	mL	02/09/10	TXB3

ETM
3/4/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1392

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245394005

BASIS: Dry Weight

DATE COLLECTED 19-JAN-10

CLIENT ID: RE15-10-7870

LEVEL: Low

DATE RECEIVED 23-JAN-10

MATRIX: SOIL

%SOLIDS: 87

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1230000	ug/Kg	*	7780	22900	22900	1	P	HSC	02/11/10 20:19	021110-1	945421
7440-36-0	Antimony UJ,16a	1140	ug/Kg	UN	377	1140	1140	1	P	HSC	02/11/10 20:19	021110-1	945421
7440-38-2	Arsenic	0.793	mg/kg	J	0.23	1.15	1.15	2	MS	RMJ	02/14/10 10:43	100213-2	945425
7440-39-3	Barium	27400	ug/Kg		114	572	572	1	P	HSC	02/11/10 20:19	021110-1	945421
7440-41-7	Beryllium J+,16b	0.395	mg/kg	N	0.023	0.115	0.115	2	MS	RMJ	02/14/10 10:43	100213-2	945425
7440-43-9	Cadmium	572	ug/Kg	U	114	572	572	1	P	HSC	02/11/10 20:19	021110-1	945421
7440-70-2	Calcium J+,16b	366000	ug/Kg	N	9150	28600	28600	1	P	HSC	02/11/10 20:19	021110-1	945421
7440-47-3	Chromium	5350	ug/Kg		172	572	572	1	P	HSC	02/11/10 20:19	021110-1	945421
7440-48-4	Cobalt	9380	ug/Kg		172	572	572	1	P	HSC	02/11/10 20:19	021110-1	945421
7440-50-8	Copper R,16	4560	ug/Kg	*N	343	1140	1140	1	P	HSC	02/11/10 20:19	021110-1	945421
7439-89-6	Iron	7600000	ug/Kg		9150	28600	28600	1	P	HSC	02/11/10 20:19	021110-1	945421
7439-92-1	Lead J-,16a	9930	ug/Kg	*N	286	1140	1140	1	P	HSC	02/11/10 20:19	021110-1	945421
7439-95-4	Magnesium J+,16b	268000	ug/Kg	N	9720	34300	34300	1	P	HSC	02/11/10 20:19	021110-1	945421
7439-96-5	Manganese J-,16a	220000	ug/Kg	N	229	1140	1140	1	P	HSC	02/11/10 20:19	021110-1	945421
7439-97-6	Mercury	6.02	ug/kg	J	4.01	11.8	11.8	1	AV	ETL	02/10/10 10:30	021010S1-4	945628
7440-02-0	Nickel J-,16a	3.69	mg/kg	N	0.115	0.46	0.46	2	MS	RMJ	02/14/10 10:43	100213-2	945425
7440-09-7	Potassium J+,16b	301000	ug/Kg	N	7320	28600	28600	1	P	HSC	02/11/10 20:19	021110-1	945421
7782-49-2	Selenium	1.15	mg/kg	U*N	0.575	1.15	1.15	2	MS	RMJ	02/14/10 10:43	100213-2	945425
7440-22-4	Silver	402	ug/Kg	J	114	572	572	1	P	HSC	02/11/10 20:19	021110-1	945421
7440-23-5	Sodium J,14a	181000	ug/Kg		8010	28600	28600	1	P	HSC	02/11/10 20:19	021110-1	945421
7440-28-0	Thallium	0.230	mg/kg	U	0.069	0.23	0.23	2	MS	RMJ	02/14/10 10:43	100213-2	945425
7440-61-1	Uranium J,110a	3.75	mg/kg	*	0.0152	0.046	0.046	2	MS	RMJ	02/16/10 08:13	100215-3	945425
7440-62-2	Vanadium	2800	ug/Kg		114	572	572	1	P	HSC	02/11/10 20:19	021110-1	945421
7440-66-6	Zinc	29900	ug/Kg		377	1140	1140	1	P	HSC	02/11/10 20:19	021110-1	945421

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
945421	945420	SW846 3050B	0.503	g	50	mL	02/04/10	FGA
945425	945424	SW846 3050B	0.5	g	50	mL	02/04/10	FGA
945628	945627	SW846 7471A Prep	0.585	g	30	mL	02/09/10	TXB3

ETM
3/4/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1392

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245394006

BASIS: Dry Weight

DATE COLLECTED 19-JAN-10

CLIENT ID: RE15-10-7873

LEVEL: Low

DATE RECEIVED 23-JAN-10

MATRIX: SOIL

%SOLIDS: 87

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	3280000	ug/Kg	*	7730	22700	22700	1	P	HSC	02/11/10 20:26	021110-1	945421
7440-36-0	Antimony J-,16a	1130	ug/Kg	JN	375	1140	1140	1	P	HSC	02/11/10 20:26	021110-1	945421
7440-38-2	Arsenic	2.27	mg/kg		0.221	1.11	1.11	2	MS	RMJ	02/14/10 11:01	100213-2	945425
7440-39-3	Barium	47600	ug/Kg		114	568	568	1	P	HSC	02/11/10 20:26	021110-1	945421
7440-41-7	Beryllium J+,16b	3.56	mg/kg	N	0.0221	0.111	0.111	2	MS	RMJ	02/14/10 11:01	100213-2	945425
7440-43-9	Cadmium	276	ug/Kg	J	114	568	568	1	P	HSC	02/11/10 20:26	021110-1	945421
7440-70-2	Calcium J+,16b	1040000	ug/Kg	N	9100	28400	28400	1	P	HSC	02/11/10 20:26	021110-1	945421
7440-47-3	Chromium	4030	ug/Kg		171	568	568	1	P	HSC	02/11/10 20:26	021110-1	945421
7440-48-4	Cobalt	2690	ug/Kg		171	568	568	1	P	HSC	02/11/10 20:26	021110-1	945421
7440-50-8	Copper R,16	177000	ug/Kg	*N	341	1140	1140	1	P	HSC	02/11/10 20:26	021110-1	945421
7439-89-6	Iron	8010000	ug/Kg		9100	28400	28400	1	P	HSC	02/11/10 20:26	021110-1	945421
7439-92-1	Lead J-,16a	95100	ug/Kg	*N	284	1140	1140	1	P	HSC	02/11/10 20:26	021110-1	945421
7439-95-4	Magnesium J+,16b	709000	ug/Kg	N	9660	34100	34100	1	P	HSC	02/11/10 20:26	021110-1	945421
7439-96-5	Manganese J-,16a	218000	ug/Kg	N	227	1140	1140	1	P	HSC	02/11/10 20:26	021110-1	945421
7439-97-6	Mercury	7.4	ug/kg	J	4.34	12.8	12.8	1	AV	ETL	02/10/10 10:31	021010S1-4	945628
7440-02-0	Nickel J-,16a	6.15	mg/kg	N	0.111	0.442	0.442	2	MS	RMJ	02/14/10 11:01	100213-2	945425
7440-09-7	Potassium J+,16b	625000	ug/Kg	N	7280	28400	28400	1	P	HSC	02/11/10 20:26	021110-1	945421
7782-49-2	Selenium	1.11	mg/kg	U*N	0.553	1.11	1.11	2	MS	RMJ	02/14/10 11:01	100213-2	945425
7440-22-4	Silver	656	ug/Kg		114	568	568	1	P	HSC	02/11/10 20:26	021110-1	945421
7440-23-5	Sodium J,14a	56400	ug/Kg		7960	28400	28400	1	P	HSC	02/11/10 20:26	021110-1	945421
7440-28-0	Thallium	0.0982	mg/kg	J	0.0664	0.221	0.221	2	MS	RMJ	02/14/10 11:01	100213-2	945425
7440-61-1	Uranium J,110a	71.1	mg/kg	*	0.073	0.221	0.221	10	MS	RMJ	02/16/10 08:17	100215-3	945425
7440-62-2	Vanadium	9730	ug/Kg		114	568	568	1	P	HSC	02/11/10 20:26	021110-1	945421
7440-66-6	Zinc	53300	ug/Kg		375	1140	1140	1	P	HSC	02/11/10 20:26	021110-1	945421

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
945421	945420	SW846 3050B	0.503	g	50	mL	02/04/10	FGA
945425	945424	SW846 3050B	0.517	g	50	mL	02/04/10	FGA
945628	945627	SW846 7471A Prep	0.538	g	30	mL	02/09/10	TXB3

ETM
3/4/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1392

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245394007

BASIS: Dry Weight

DATE COLLECTED 19-JAN-10

CLIENT ID: RE15-10-7911

LEVEL: Low

DATE RECEIVED 23-JAN-10

MATRIX: SOIL

%SOLIDS: 88

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	2420000	ug/Kg	*	7630	22500	22500	1	P	HSC	02/11/10 20:34	021110-1	945421
7440-36-0	Antimony J-,16a	5540	ug/Kg	N	371	1120	1120	1	P	HSC	02/11/10 20:34	021110-1	945421
7440-38-2	Arsenic	1.32	mg/kg		0.227	1.14	1.14	2	MS	RMJ	02/14/10 11:07	100213-2	945425
7440-39-3	Barium	122000	ug/Kg		112	561	561	1	P	HSC	02/11/10 20:34	021110-1	945421
7440-41-7	Beryllium J+,16b	16.5	mg/kg	N	0.0227	0.114	0.114	2	MS	RMJ	02/14/10 11:07	100213-2	945425
7440-43-9	Cadmium	569	ug/Kg		112	561	561	1	P	HSC	02/11/10 20:34	021110-1	945421
7440-70-2	Calcium J+,16b	1700000	ug/Kg	N	8980	28100	28100	1	P	HSC	02/11/10 20:34	021110-1	945421
7440-47-3	Chromium	13400	ug/Kg		168	561	561	1	P	HSC	02/11/10 20:34	021110-1	945421
7440-48-4	Cobalt	1880	ug/Kg		168	561	561	1	P	HSC	02/11/10 20:34	021110-1	945421
7440-50-8	Copper R,16	1270000	ug/Kg	*N	337	1120	1120	1	P	HSC	02/11/10 20:34	021110-1	945421
7439-89-6	Iron	6290000	ug/Kg		8980	28100	28100	1	P	HSC	02/11/10 20:34	021110-1	945421
7439-92-1	Lead J-,16a	274000	ug/Kg	*N	281	1120	1120	1	P	HSC	02/11/10 20:34	021110-1	945421
7439-95-5	Magnesium J+,16b	807000	ug/Kg	N	9540	33700	33700	1	P	HSC	02/11/10 20:34	021110-1	945421
7439-96-5	Manganese J-,16a	110000	ug/Kg	N	225	1120	1120	1	P	HSC	02/11/10 20:34	021110-1	945421
7439-97-6	Mercury	24.7	ug/kg		4.31	12.7	12.7	1	AV	ETL	02/10/10 10:33	021010S1-4	945628
7440-02-0	Nickel J-,16a	10.2	mg/kg	N	0.114	0.454	0.454	2	MS	RMJ	02/14/10 11:07	100213-2	945425
7440-09-7	Potassium J+,16b	336000	ug/Kg	N	7190	28100	28100	1	P	HSC	02/11/10 20:34	021110-1	945421
7782-49-2	Selenium	1.14	mg/kg	U*N	0.568	1.14	1.14	2	MS	RMJ	02/14/10 11:07	100213-2	945425
7440-22-4	Silver	2000	ug/Kg		112	561	561	1	P	HSC	02/11/10 20:34	021110-1	945421
7440-23-5	Sodium J-,16a	46500	ug/Kg		7860	28100	28100	1	P	HSC	02/11/10 20:34	021110-1	945421
7440-28-0	Thallium	0.227	mg/kg	U	0.0682	0.227	0.227	2	MS	RMJ	02/14/10 11:07	100213-2	945425
7440-61-1	Uranium J-,10a	348	mg/kg	*	0.3	0.909	0.909	40	MS	RMJ	02/16/10 08:20	100215-3	945425
7440-62-2	Vanadium	12700	ug/Kg		112	561	561	1	P	HSC	02/11/10 20:34	021110-1	945421
7440-66-6	Zinc	54800	ug/Kg		371	1120	1120	1	P	HSC	02/11/10 20:34	021110-1	945421

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
945421	945420	SW846 3050B	0.506	g	50	mL	02/04/10	FGA
945425	945424	SW846 3050B	0.5	g	50	mL	02/04/10	FGA
945628	945627	SW846 7471A Prep	0.538	g	30	mL	02/09/10	TXB3

ETM
3/4/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1392

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245394008

BASIS: Dry Weight

DATE COLLECTED 19-JAN-10

CLIENT ID: RE15-10-7908

LEVEL: Low

DATE RECEIVED 23-JAN-10

MATRIX: SOIL

%SOLIDS: 91.9

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1860000	ug/Kg	*	7140	21000	21000	1	P	HSC	02/11/10 20:41	021110-1	945421
7440-36-0	Antimony J-,16a	1960	ug/Kg	N	347	1050	1050	1	P	HSC	02/11/10 20:41	021110-1	945421
7440-38-2	Arsenic	5.91	mg/kg		0.214	1.07	1.07	2	MS	RMJ	02/14/10 11:13	100213-2	945425
7440-39-3	Barium	48200	ug/Kg		105	525	525	1	P	HSC	02/11/10 20:41	021110-1	945421
7440-41-7	Beryllium J+,16b	3.17	mg/kg	N	0.0214	0.107	0.107	2	MS	RMJ	02/14/10 11:13	100213-2	945425
7440-43-9	Cadmium	525	ug/Kg	U	105	525	525	1	P	HSC	02/11/10 20:41	021110-1	945421
7440-70-2	Calcium J+,16b	752000	ug/Kg	N	8400	26300	26300	1	P	HSC	02/11/10 20:41	021110-1	945421
7440-47-3	Chromium	5430	ug/Kg		158	525	525	1	P	HSC	02/11/10 20:41	021110-1	945421
7440-48-4	Cobalt	5930	ug/Kg		158	525	525	1	P	HSC	02/11/10 20:41	021110-1	945421
7440-50-8	Copper R,16	77100	ug/Kg	*N	315	1050	1050	1	P	HSC	02/11/10 20:41	021110-1	945421
7439-89-6	Iron	8600000	ug/Kg		8400	26300	26300	1	P	HSC	02/11/10 20:41	021110-1	945421
7439-92-1	Lead J-,16a	170000	ug/Kg	*N	263	1050	1050	1	P	HSC	02/11/10 20:41	021110-1	945421
7439-95-4	Magnesium J+,16b	383000	ug/Kg	N	8930	31500	31500	1	P	HSC	02/11/10 20:41	021110-1	945421
7439-96-5	Manganese J-,16a	239000	ug/Kg	N	210	1050	1050	1	P	HSC	02/11/10 20:41	021110-1	945421
7439-97-6	Mercury	7.32	ug/kg	J	4.22	12.4	12.4	1	AV	ETL	02/10/10 10:35	021010S1-4	945628
7440-02-0	Nickel J-,16a	3.88	mg/kg	N	0.107	0.428	0.428	2	MS	RMJ	02/14/10 11:13	100213-2	945425
7440-09-7	Potassium J+,16b	358000	ug/Kg	N	6720	26300	26300	1	P	HSC	02/11/10 20:41	021110-1	945421
7782-49-2	Selenium	1.07	mg/kg	U*N	0.534	1.07	1.07	2	MS	RMJ	02/14/10 11:13	100213-2	945425
7440-22-4	Silver	541	ug/Kg		105	525	525	1	P	HSC	02/11/10 20:41	021110-1	945421
7440-23-5	Sodium J,14a	132000	ug/Kg		7350	26300	26300	1	P	HSC	02/11/10 20:41	021110-1	945421
7440-28-0	Thallium	0.214	mg/kg	U	0.0641	0.214	0.214	2	MS	RMJ	02/14/10 11:13	100213-2	945425
7440-61-1	Uranium J,110a	403	mg/kg	*	0.282	0.855	0.855	40	MS	RMJ	02/16/10 08:24	100215-3	945425
7440-62-2	Vanadium	5300	ug/Kg		105	525	525	1	P	HSC	02/11/10 20:41	021110-1	945421
7440-66-6	Zinc	34300	ug/Kg		347	1050	1050	1	P	HSC	02/11/10 20:41	021110-1	945421

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
945421	945420	SW846 3050B	0.518	g	50	mL	02/04/10	FGA
945425	945424	SW846 3050B	0.509	g	50	mL	02/04/10	FGA
945628	945627	SW846 7471A Prep	0.526	g	30	mL	02/09/10	TXB3

ETM
3/4/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1392

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245394009

BASIS: Dry Weight

DATE COLLECTED 19-JAN-10

CLIENT ID: RE15-10-7912

LEVEL: Low

DATE RECEIVED 23-JAN-10

MATRIX: SOIL

%SOLIDS: 87

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	5170000	ug/Kg	*	7580	22300	22300	1	P	HSC	02/11/10 21:02	021110-1	945421
7440-36-0	Antimony J-,16a	2270	ug/Kg	N	368	1120	1120	1	P	HSC	02/11/10 21:02	021110-1	945421
7440-38-2	Arsenic	1.54	mg/kg		0.224	1.12	1.12	2	MS	RMJ	02/14/10 11:19	100213-2	945425
7440-39-3	Barium	85500	ug/Kg		112	558	558	1	P	HSC	02/11/10 21:02	021110-1	945421
7440-41-7	Beryllium J+,16b	2.15	mg/kg	N	0.0224	0.112	0.112	2	MS	RMJ	02/14/10 11:19	100213-2	945425
7440-43-9	Cadmium	184	ug/Kg	J	112	558	558	1	P	HSC	02/11/10 21:02	021110-1	945421
7440-70-2	Calcium J+,16b	8790000	ug/Kg	N	8920	27900	27900	1	P	HSC	02/11/10 21:02	021110-1	945421
7440-47-3	Chromium	5370	ug/Kg		167	558	558	1	P	HSC	02/11/10 21:02	021110-1	945421
7440-48-4	Cobalt	1310	ug/Kg		167	558	558	1	P	HSC	02/11/10 21:02	021110-1	945421
7440-50-8	Copper R,16	261000	ug/Kg	*N	335	1120	1120	1	P	HSC	02/11/10 21:02	021110-1	945421
7439-89-6	Iron	6760000	ug/Kg		8920	27900	27900	1	P	HSC	02/11/10 21:02	021110-1	945421
7439-92-1	Lead J-,16a	79100	ug/Kg	*N	279	1120	1120	1	P	HSC	02/11/10 21:02	021110-1	945421
7439-95-4	Magnesium J+,16b	1090000	ug/Kg	N	9480	33500	33500	1	P	HSC	02/11/10 21:02	021110-1	945421
7439-96-5	Manganese J-,16a	167000	ug/Kg	N	223	1120	1120	1	P	HSC	02/11/10 21:02	021110-1	945421
7439-97-6	Mercury	16.6	ug/kg		4.15	12.2	12.2	1	AV	ETL	02/10/10 10:36	021010S1-4	945628
7440-02-0	Nickel J-,16a	6.26	mg/kg	N	0.112	0.448	0.448	2	MS	RMJ	02/14/10 11:19	100213-2	945425
7440-09-7	Potassium J+,16b	592000	ug/Kg	N	7140	27900	27900	1	P	HSC	02/11/10 21:02	021110-1	945421
7782-49-2	Selenium	1.12	mg/kg	U*N	0.56	1.12	1.12	2	MS	RMJ	02/14/10 11:19	100213-2	945425
7440-22-4	Silver	880	ug/Kg		112	558	558	1	P	HSC	02/11/10 21:02	021110-1	945421
7440-23-5	Sodium J,14a	72500	ug/Kg		7810	27900	27900	1	P	HSC	02/11/10 21:02	021110-1	945421
7440-28-0	Thallium	0.224	mg/kg	U	0.0672	0.224	0.224	2	MS	RMJ	02/14/10 11:19	100213-2	945425
7440-61-1	Uranium J,110a	163	mg/kg	*	0.148	0.448	0.448	20	MS	RMJ	02/16/10 08:27	100215-3	945425
7440-62-2	Vanadium	9350	ug/Kg		112	558	558	1	P	HSC	02/11/10 21:02	021110-1	945421
7440-66-6	Zinc	33300	ug/Kg		368	1120	1120	1	P	HSC	02/11/10 21:02	021110-1	945421

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
945421	945420	SW846 3050B	0.518	g	50	mL	02/04/10	FGA
945425	945424	SW846 3050B	0.516	g	50	mL	02/04/10	FGA
945628	945627	SW846 7471A Prep	0.568	g	30	mL	02/09/10	TXB3

ETM
3/4/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1392

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245394010

BASIS: Dry Weight

DATE COLLECTED 19-JAN-10

CLIENT ID: RE15-10-7906

LEVEL: Low

DATE RECEIVED 23-JAN-10

MATRIX: SOIL

%SOLIDS: 90

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1290000	ug/Kg	*	7520	22100	22100	1	P	HSC	02/11/10 21:08	021110-1	945421
7440-36-0	Antimony UJ,16a	1110	ug/Kg	UN	365	1110	1110	1	P	HSC	02/11/10 21:08	021110-1	945421
7440-38-2	Arsenic	1.59	mg/kg		0.214	1.07	1.07	2	MS	RMJ	02/14/10 11:25	100213-2	945425
7440-39-3	Barium	20800	ug/Kg		111	553	553	1	P	HSC	02/11/10 21:08	021110-1	945421
7440-41-7	Beryllium J+,16b	0.849	mg/kg	N	0.0214	0.107	0.107	2	MS	RMJ	02/14/10 11:25	100213-2	945425
7440-43-9	Cadmium	553	ug/Kg	U	111	553	553	1	P	HSC	02/11/10 21:08	021110-1	945421
7440-70-2	Calcium J+,16b	607000	ug/Kg	N	8850	27700	27700	1	P	HSC	02/11/10 21:08	021110-1	945421
7440-47-3	Chromium	3560	ug/Kg		166	553	553	1	P	HSC	02/11/10 21:08	021110-1	945421
7440-48-4	Cobalt	1620	ug/Kg		166	553	553	1	P	HSC	02/11/10 21:08	021110-1	945421
7440-50-8	Copper R,16	7300	ug/Kg	*N	332	1110	1110	1	P	HSC	02/11/10 21:08	021110-1	945421
7439-89-6	Iron	6200000	ug/Kg		8850	27700	27700	1	P	HSC	02/11/10 21:08	021110-1	945421
7439-92-1	Lead J-,16a	15400	ug/Kg	*N	277	1110	1110	1	P	HSC	02/11/10 21:08	021110-1	945421
7439-95-4	Magnesium J+,16b	256000	ug/Kg	N	9400	33200	33200	1	P	HSC	02/11/10 21:08	021110-1	945421
7439-96-5	Manganese J-,16a	231000	ug/Kg	N	221	1110	1110	1	P	HSC	02/11/10 21:08	021110-1	945421
7439-97-6	Mercury	11.3	ug/kg	U	3.85	11.3	11.3	1	AV	ETL	02/10/10 10:38	021010S1-4	945628
7440-02-0	Nickel J-,16a	2.35	mg/kg	N	0.107	0.429	0.429	2	MS	RMJ	02/14/10 11:25	100213-2	945425
7440-09-7	Potassium J+,16b	215000	ug/Kg	N	7080	27700	27700	1	P	HSC	02/11/10 21:08	021110-1	945421
7782-49-2	Selenium	1.07	mg/kg	U*N	0.536	1.07	1.07	2	MS	RMJ	02/14/10 11:25	100213-2	945425
7440-22-4	Silver	435	ug/Kg	J	111	553	553	1	P	HSC	02/11/10 21:08	021110-1	945421
7440-23-5	Sodium J,14a	91600	ug/Kg		7750	27700	27700	1	P	HSC	02/11/10 21:08	021110-1	945421
7440-28-0	Thallium	0.214	mg/kg	U	0.0643	0.214	0.214	2	MS	RMJ	02/14/10 11:25	100213-2	945425
7440-61-1	Uranium J,110a	5.34	mg/kg	*	0.0142	0.0429	0.0429	2	MS	RMJ	02/16/10 08:31	100215-3	945425
7440-62-2	Vanadium	2990	ug/Kg		111	553	553	1	P	HSC	02/11/10 21:08	021110-1	945421
7440-66-6	Zinc	20000	ug/Kg		365	1110	1110	1	P	HSC	02/11/10 21:08	021110-1	945421

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
945421	945420	SW846 3050B	0.502	g	50	mL	02/04/10	FGA
945425	945424	SW846 3050B	0.518	g	50	mL	02/04/10	FGA
945628	945627	SW846 7471A Prep	0.588	g	30	mL	02/09/10	TXB3

ETM
3/4/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1392

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245394011

BASIS: Dry Weight

DATE COLLECTED 19-JAN-10

CLIENT ID: RE15-10-7905

LEVEL: Low

DATE RECEIVED 23-JAN-10

MATRIX: SOIL

%SOLIDS: 78

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	3450000	ug/Kg	*	8360	24600	24600	1	P	HSC	02/11/10 21:15	021110-1	945421
7440-36-0	Antimony J-,16a	5430	ug/Kg	N	406	1230	1230	1	P	HSC	02/11/10 21:15	021110-1	945421
7440-38-2	Arsenic	3.46	mg/kg		0.25	1.25	1.25	2	MS	RMJ	02/14/10 11:31	100213-2	945425
7440-39-3	Barium	66500	ug/Kg		123	615	615	1	P	HSC	02/11/10 21:15	021110-1	945421
7440-41-7	Beryllium J+,16b	2.75	mg/kg	N	0.025	0.125	0.125	2	MS	RMJ	02/14/10 11:31	100213-2	945425
7440-43-9	Cadmium	615	ug/Kg	U	123	615	615	1	P	HSC	02/11/10 21:15	021110-1	945421
7440-70-2	Calcium J+,16b	7200000	ug/Kg	N	9840	30700	30700	1	P	HSC	02/11/10 21:15	021110-1	945421
7440-47-3	Chromium	7700	ug/Kg		184	615	615	1	P	HSC	02/11/10 21:15	021110-1	945421
7440-48-4	Cobalt	3790	ug/Kg		184	615	615	1	P	HSC	02/11/10 21:15	021110-1	945421
7440-50-8	Copper R,16	196000	ug/Kg	*N	369	1230	1230	1	P	HSC	02/11/10 21:15	021110-1	945421
7439-89-6	Iron	9340000	ug/Kg		9840	30700	30700	1	P	HSC	02/11/10 21:15	021110-1	945421
7439-92-1	Lead J-,16a	644000	ug/Kg	*N	307	1230	1230	1	P	HSC	02/11/10 21:15	021110-1	945421
7439-95-4	Magnesium J+,16b	829000	ug/Kg	N	10500	36900	36900	1	P	HSC	02/11/10 21:15	021110-1	945421
7439-96-5	Manganese J-,16a	181000	ug/Kg	N	246	1230	1230	1	P	HSC	02/11/10 21:15	021110-1	945421
7439-97-6	Mercury	14.5	ug/kg	U	4.91	14.5	14.5	1	AV	ETL	02/10/10 10:40	021010S1-4	945628
7440-02-0	Nickel J-,16a	5.37	mg/kg	N	0.125	0.5	0.5	2	MS	RMJ	02/14/10 11:31	100213-2	945425
7440-09-7	Potassium J+,16b	570000	ug/Kg	N	7870	30700	30700	1	P	HSC	02/11/10 21:15	021110-1	945421
7782-49-2	Selenium	1.25	mg/kg	U*N	0.624	1.25	1.25	2	MS	RMJ	02/14/10 11:31	100213-2	945425
7440-22-4	Silver	767	ug/Kg		123	615	615	1	P	HSC	02/11/10 21:15	021110-1	945421
7440-23-5	Sodium J,14a	105000	ug/Kg		8610	30700	30700	1	P	HSC	02/11/10 21:15	021110-1	945421
7440-28-0	Thallium	0.250	mg/kg	U	0.0749	0.25	0.25	2	MS	RMJ	02/14/10 11:31	100213-2	945425
7440-61-1	Uranium J,110a	30.9	mg/kg	*	0.0824	0.25	0.25	10	MS	RMJ	02/16/10 08:35	100215-3	945425
7440-62-2	Vanadium	13200	ug/Kg		123	615	615	1	P	HSC	02/11/10 21:15	021110-1	945421
7440-66-6	Zinc	35000	ug/Kg		406	1230	1230	1	P	HSC	02/11/10 21:15	021110-1	945421

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
945421	945420	SW846 3050B	0.52	g	50	mL	02/04/10	FGA
945425	945424	SW846 3050B	0.512	g	50	mL	02/04/10	FGA
945628	945627	SW846 7471A Prep	0.531	g	30	mL	02/09/10	TXB3

ETM
3/4/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1392

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245394012

BASIS: Dry Weight

DATE COLLECTED 19-JAN-10

CLIENT ID: RE15-10-7907

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	5350000	ug/Kg	*	8410	24700	24700	1	P	HSC	02/11/10 21:22	021110-1	945421
7440-36-0	Antimony J-,16a	1160	ug/Kg	JN	408	1240	1240	1	P	HSC	02/11/10 21:22	021110-1	945421
7440-38-2	Arsenic	3.44	mg/kg		0.235	1.18	1.18	2	MS	RMJ	02/14/10 11:37	100213-2	945425
7440-39-3	Barium	101000	ug/Kg		124	618	618	1	P	HSC	02/11/10 21:22	021110-1	945421
7440-41-7	Beryllium J+,16b	4.84	mg/kg	N	0.0235	0.118	0.118	2	MS	RMJ	02/14/10 11:37	100213-2	945425
7440-43-9	Cadmium	618	ug/Kg	U	124	618	618	1	P	HSC	02/11/10 21:22	021110-1	945421
7440-70-2	Calcium J+,16b	2800000	ug/Kg	N	9890	30900	30900	1	P	HSC	02/11/10 21:22	021110-1	945421
7440-47-3	Chromium	6670	ug/Kg		185	618	618	1	P	HSC	02/11/10 21:22	021110-1	945421
7440-48-4	Cobalt	2300	ug/Kg		185	618	618	1	P	HSC	02/11/10 21:22	021110-1	945421
7440-50-8	Copper R,16	163000	ug/Kg	*N	371	1240	1240	1	P	HSC	02/11/10 21:22	021110-1	945421
7439-89-6	Iron	8430000	ug/Kg		9890	30900	30900	1	P	HSC	02/11/10 21:22	021110-1	945421
7439-92-1	Lead J-,16a	179000	ug/Kg	*N	309	1240	1240	1	P	HSC	02/11/10 21:22	021110-1	945421
7439-95-4	Magnesium J+,16b	1160000	ug/Kg	N	10500	37100	37100	1	P	HSC	02/11/10 21:22	021110-1	945421
7439-96-5	Manganese J-,16a	166000	ug/Kg	N	247	1240	1240	1	P	HSC	02/11/10 21:22	021110-1	945421
7439-97-6	Mercury	17.5	ug/kg		4.96	14.6	14.6	1	AV	ETL	02/10/10 10:41	021010S1-4	945628
7440-02-0	Nickel J-,16a	9.4	mg/kg	N	0.118	0.471	0.471	2	MS	RMJ	02/14/10 11:37	100213-2	945425
7440-09-7	Potassium J+,16b	775000	ug/Kg	N	7910	30900	30900	1	P	HSC	02/11/10 21:22	021110-1	945421
7782-49-2	Selenium	1.18	mg/kg	U*N	0.589	1.18	1.18	2	MS	RMJ	02/14/10 11:37	100213-2	945425
7440-22-4	Silver	615	ug/Kg	J	124	618	618	1	P	HSC	02/11/10 21:22	021110-1	945421
7440-23-5	Sodium J,14a	51000	ug/Kg		8650	30900	30900	1	P	HSC	02/11/10 21:22	021110-1	945421
7440-28-0	Thallium	0.169	mg/kg	J	0.0706	0.235	0.235	2	MS	RMJ	02/14/10 11:37	100213-2	945425
7440-61-1	Uranium J,110a	118	mg/kg	*	0.155	0.471	0.471	20	MS	RMJ	02/16/10 08:38	100215-3	945425
7440-62-2	Vanadium	13500	ug/Kg		124	618	618	1	P	HSC	02/11/10 21:22	021110-1	945421
7440-66-6	Zinc	32200	ug/Kg		408	1240	1240	1	P	HSC	02/11/10 21:22	021110-1	945421

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
945421	945420	SW846 3050B	0.5	g	50	mL	02/04/10	FGA
945425	945424	SW846 3050B	0.525	g	50	mL	02/04/10	FGA
945628	945627	SW846 7471A Prep	0.508	g	30	mL	02/09/10	TXB3

ETM
3/4/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1392

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245394013

BASIS: Dry Weight

DATE COLLECTED 19-JAN-10

CLIENT ID: RE15-10-7913

LEVEL: Low

DATE RECEIVED 23-JAN-10

MATRIX: SOIL

%SOLIDS: 79

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	12600000	ug/Kg	*	8230	24200	24200	1	P	HSC	02/11/10 21:29	021110-1	945421
7440-36-0	Antimony UJ,16a	1210	ug/Kg	UN	399	1210	1210	1	P	HSC	02/11/10 21:29	021110-1	945421
7440-38-2	Arsenic	3.63	mg/kg		0.245	1.22	1.22	2	MS	RMJ	02/14/10 11:43	100213-2	945425
7440-39-3	Barium	85100	ug/Kg		121	605	605	1	P	HSC	02/11/10 21:29	021110-1	945421
7440-41-7	Beryllium J+,16b	1.71	mg/kg	N	0.0245	0.122	0.122	2	MS	RMJ	02/14/10 11:43	100213-2	945425
7440-43-9	Cadmium	605	ug/Kg	U	121	605	605	1	P	HSC	02/11/10 21:29	021110-1	945421
7440-70-2	Calcium J+,16b	2930000	ug/Kg	N	9680	30300	30300	1	P	HSC	02/11/10 21:29	021110-1	945421
7440-47-3	Chromium	11600	ug/Kg		182	605	605	1	P	HSC	02/11/10 21:29	021110-1	945421
7440-48-4	Cobalt	4520	ug/Kg		182	605	605	1	P	HSC	02/11/10 21:29	021110-1	945421
7440-50-8	Copper R,16	63300	ug/Kg	*N	363	1210	1210	1	P	HSC	02/11/10 21:29	021110-1	945421
7439-89-6	Iron	15500000	ug/Kg		9680	30300	30300	1	P	HSC	02/11/10 21:29	021110-1	945421
7439-92-1	Lead J-,16a	14100	ug/Kg	*N	303	1210	1210	1	P	HSC	02/11/10 21:29	021110-1	945421
7439-95-4	Magnesium J+,16b	2650000	ug/Kg	N	10300	36300	36300	1	P	HSC	02/11/10 21:29	021110-1	945421
7439-96-5	Manganese J-,16a	232000	ug/Kg	N	242	1210	1210	1	P	HSC	02/11/10 21:29	021110-1	945421
7439-97-6	Mercury	24.6	ug/kg		4.69	13.8	13.8	1	AV	ETL	02/10/10 10:43	02101051-4	945628
7440-02-0	Nickel J-,16a	16.2	mg/kg	N	0.122	0.49	0.49	2	MS	RMJ	02/14/10 11:43	100213-2	945425
7440-09-7	Potassium J+,16b	1740000	ug/Kg	N	7750	30300	30300	1	P	HSC	02/11/10 21:29	021110-1	945421
7782-49-2	Selenium	1.22	mg/kg	U*N	0.612	1.22	1.22	2	MS	RMJ	02/14/10 11:43	100213-2	945425
7440-22-4	Silver	738	ug/Kg		121	605	605	1	P	HSC	02/11/10 21:29	021110-1	945421
7440-23-5	Sodium J,14a	92700	ug/Kg		8470	30300	30300	1	P	HSC	02/11/10 21:29	021110-1	945421
7440-28-0	Thallium	0.20	mg/kg	J	0.0735	0.245	0.245	2	MS	RMJ	02/14/10 11:43	100213-2	945425
7440-61-1	Uranium J,110a	27.2	mg/kg	*	0.0808	0.245	0.245	10	MS	RMJ	02/16/10 08:48	100215-3	945425
7440-62-2	Vanadium	29700	ug/Kg		121	605	605	1	P	HSC	02/11/10 21:29	021110-1	945421
7440-66-6	Zinc	32000	ug/Kg		399	1210	1210	1	P	HSC	02/11/10 21:29	021110-1	945421

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
945421	945420	SW846 3050B	0.525	g	50	mL	02/04/10	FGA
945425	945424	SW846 3050B	0.519	g	50	mL	02/04/10	FGA
945628	945627	SW846 7471A Prep	0.553	g	30	mL	02/09/10	TXB3

ETM
3/4/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1392

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245394014

BASIS: Dry Weight

DATE COLLECTED 19-JAN-10

CLIENT ID: RE15-10-7909

LEVEL: Low

DATE RECEIVED 23-JAN-10

MATRIX: SOIL

%SOLIDS: 84

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	4080000	ug/Kg	*	8060	23700	23700	1	P	HSC	02/11/10 21:36	021110-1	945421
7440-36-0	Antimony J-,16a	930	ug/Kg	JN	391	1180	1180	1	P	HSC	02/11/10 21:36	021110-1	945421
7440-38-2	Arsenic	1.91	mg/kg		0.226	1.13	1.13	2	MS	RMJ	02/14/10 11:49	100213-2	945425
7440-39-3	Barium	128000	ug/Kg		118	592	592	1	P	HSC	02/11/10 21:36	021110-1	945421
7440-41-7	Beryllium J+,16b	6.73	mg/kg	N	0.0226	0.113	0.113	2	MS	RMJ	02/14/10 11:49	100213-2	945425
7440-43-9	Cadmium	283	ug/Kg	J	118	592	592	1	P	HSC	02/11/10 21:36	021110-1	945421
7440-70-2	Calcium J+,16b	1440000	ug/Kg	N	9480	29600	29600	1	P	HSC	02/11/10 21:36	021110-1	945421
7440-47-3	Chromium	8010	ug/Kg		178	592	592	1	P	HSC	02/11/10 21:36	021110-1	945421
7440-48-4	Cobalt	2170	ug/Kg		178	592	592	1	P	HSC	02/11/10 21:36	021110-1	945421
7440-50-8	Copper R,16	339000	ug/Kg	*N	355	1180	1180	1	P	HSC	02/11/10 21:36	021110-1	945421
7439-89-6	Iron	8180000	ug/Kg		9480	29600	29600	1	P	HSC	02/11/10 21:36	021110-1	945421
7439-92-1	Lead J-,16a	266000	ug/Kg	*N	296	1180	1180	1	P	HSC	02/11/10 21:36	021110-1	945421
7439-95-4	Magnesium J+,16b	1060000	ug/Kg	N	10100	35500	35500	1	P	HSC	02/11/10 21:36	021110-1	945421
7439-96-5	Manganese J-,16a	128000	ug/Kg	N	237	1180	1180	1	P	HSC	02/11/10 21:36	021110-1	945421
7439-97-6	Mercury	4.87	ug/kg	J	4.04	11.9	11.9	1	AV	ETL	02/10/10 10:45	021010S1-4	945628
7440-02-0	Nickel J-,16a	7.91	mg/kg	N	0.113	0.452	0.452	2	MS	RMJ	02/14/10 11:49	100213-2	945425
7440-09-7	Potassium J+,16b	629000	ug/Kg	N	7580	29600	29600	1	P	HSC	02/11/10 21:36	021110-1	945421
7782-49-2	Selenium	1.13	mg/kg	U*N	0.565	1.13	1.13	2	MS	RMJ	02/14/10 11:49	100213-2	945425
7440-22-4	Silver	674	ug/Kg		118	592	592	1	P	HSC	02/11/10 21:36	021110-1	945421
7440-23-5	Sodium J,14a	61900	ug/Kg		8290	29600	29600	1	P	HSC	02/11/10 21:36	021110-1	945421
7440-28-0	Thallium	0.107	mg/kg	J	0.0678	0.226	0.226	2	MS	RMJ	02/14/10 11:49	100213-2	945425
7440-61-1	Uranium J,110a	132	mg/kg	*	0.149	0.452	0.452	20	MS	RMJ	02/16/10 08:52	100215-3	945425
7440-62-2	Vanadium	13300	ug/Kg		118	592	592	1	P	HSC	02/11/10 21:36	021110-1	945421
7440-66-6	Zinc	28100	ug/Kg		391	1180	1180	1	P	HSC	02/11/10 21:36	021110-1	945421

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
945421	945420	SW846 3050B	0.501	g	50	mL	02/04/10	FGA
945425	945424	SW846 3050B	0.525	g	50	mL	02/04/10	FGA
945628	945627	SW846 7471A Prep	0.6	g	30	mL	02/09/10	TXB3

ETM
3/4/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1392

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245394015

BASIS: Dry Weight

DATE COLLECTED 19-JAN-10

CLIENT ID: RE15-10-7910

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	1210000	ug/Kg	*	7300	21500	21500	1	P	HSC	02/11/10 21:43	021110-1	945421
7440-36-0	Antimony J-,16a	1190	ug/Kg	N	354	1070	1070	1	P	HSC	02/11/10 21:43	021110-1	945421
7440-38-2	Arsenic	1.58	mg/kg		0.221	1.1	1.1	2	MS	RMJ	02/14/10 11:54	100213-2	945425
7440-39-3	Barium	26800	ug/Kg		107	537	537	1	P	HSC	02/11/10 21:43	021110-1	945421
7440-41-7	Beryllium J+,16b	3.27	mg/kg	N	0.0221	0.11	0.11	2	MS	RMJ	02/14/10 11:54	100213-2	945425
7440-43-9	Cadmium	537	ug/Kg	U	107	537	537	1	P	HSC	02/11/10 21:43	021110-1	945421
7440-70-2	Calcium J+,16b	440000	ug/Kg	N	8590	26800	26800	1	P	HSC	02/11/10 21:43	021110-1	945421
7440-47-3	Chromium	3010	ug/Kg		161	537	537	1	P	HSC	02/11/10 21:43	021110-1	945421
7440-48-4	Cobalt	3170	ug/Kg		161	537	537	1	P	HSC	02/11/10 21:43	021110-1	945421
7440-50-8	Copper R,16	49100	ug/Kg	*N	322	1070	1070	1	P	HSC	02/11/10 21:43	021110-1	945421
7439-89-6	Iron	6500000	ug/Kg		8590	26800	26800	1	P	HSC	02/11/10 21:43	021110-1	945421
7439-92-1	Lead J-,16a	75400	ug/Kg	*N	268	1070	1070	1	P	HSC	02/11/10 21:43	021110-1	945421
7439-95-4	Magnesium J+,16b	215000	ug/Kg	N	9120	32200	32200	1	P	HSC	02/11/10 21:43	021110-1	945421
7439-96-5	Manganese J-,16a	165000	ug/Kg	N	215	1070	1070	1	P	HSC	02/11/10 21:43	021110-1	945421
7439-97-6	Mercury	6.33	ug/kg	J	4.18	12.3	12.3	1	AV	ETL	02/10/10 10:50	021010S1-4	945628
7440-02-0	Nickel J-,16a	4.31	mg/kg	N	0.11	0.441	0.441	2	MS	RMJ	02/14/10 11:54	100213-2	945425
7440-09-7	Potassium J+,16b	276000	ug/Kg	N	6870	26800	26800	1	P	HSC	02/11/10 21:43	021110-1	945421
7782-49-2	Selenium	1.1	mg/kg	U*N	0.552	1.1	1.1	2	MS	RMJ	02/14/10 11:54	100213-2	945425
7440-22-4	Silver	439	ug/Kg	J	107	537	537	1	P	HSC	02/11/10 21:43	021110-1	945421
7440-23-5	Sodium J,14a	146000	ug/Kg		7510	26800	26800	1	P	HSC	02/11/10 21:43	021110-1	945421
7440-28-0	Thallium	0.221	mg/kg	U	0.0662	0.221	0.221	2	MS	RMJ	02/14/10 11:54	100213-2	945425
7440-61-1	Uranium J,110a	62.6	mg/kg	*	0.0728	0.221	0.221	10	MS	RMJ	02/16/10 08:55	100215-3	945425
7440-62-2	Vanadium	3010	ug/Kg		107	537	537	1	P	HSC	02/11/10 21:43	021110-1	945421
7440-66-6	Zinc	21900	ug/Kg		354	1070	1070	1	P	HSC	02/11/10 21:43	021110-1	945421

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
945421	945420	SW846 3050B	0.517	g	50	mL	02/04/10	FGA
945425	945424	SW846 3050B	0.503	g	50	mL	02/04/10	FGA
945628	945627	SW846 7471A Prep	0.542	g	30	mL	02/09/10	TXB3

ETM
3/4/10

DATA VALIDATION COVER SHEET

5120-1

Data Validation Cover Sheet

Records Use only



Section I.

REQUEST NUMBER: 10-1392 VALIDATION DATE: 3/4/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

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

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

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

Section II. Completeness Check

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

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

1. In the MB associated, 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 were performed on LANL samples from different RNs. No sample data were qualified.


Reviewed by: Mary Donovan

Level: I


Date: 03/05/10

VALIDATOR'S SIGNATURE: Eric T. Mink


DATE: 3/4/10

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

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

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

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

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

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

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Certificate of Analysis

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

Report Date: February 9, 2010

Client SDG: 10-1392

Client Sample ID: RE15-10-7912
Sample ID: 245394009
Matrix: R
Collect Date: 19-JAN-10 12:00
Receive Date: 23-JAN-10
Collector: Client
Moisture: 13.5%

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	77.0	283	ug/kg	1	AXC2	02/02/10	1709	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: 10-1392

Client Sample ID: RE15-10-7906
Sample ID: 245394010
Matrix: R
Collect Date: 19-JAN-10 12:00
Receive Date: 23-JAN-10
Collector: Client
Moisture: 9.98%

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	66.3	244	ug/kg	1	AXC2	02/02/10	1710	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: 10-1392

Client Sample ID: RE15-10-7905
Sample ID: 245394011
Matrix: R
Collect Date: 19-JAN-10 12:00
Receive Date: 23-JAN-10
Collector: Client
Moisture: 21.8%

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	82.0	302	ug/kg	1	AXC2	02/02/10	1713	944843	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/02/10	1537	944842

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: 10-1392

Client Sample ID: RE15-10-7907
Sample ID: 245394012
Matrix: R
Collect Date: 19-JAN-10 12:00
Receive Date: 23-JAN-10
Collector: Client
Moisture: 19.1%

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	84.1	309	ug/kg	1	AXC2	02/02/10	1720	944843	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	1537	944842

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: 10-1392

Client Sample ID: RE15-10-7913
Sample ID: 245394013
Matrix: R
Collect Date: 19-JAN-10 12:00
Receive Date: 23-JAN-10
Collector: Client
Moisture: 21.3%

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	81.5	300	ug/kg	1	AXC2	02/02/10	1724	944843	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	1537	944842

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: 10-1392

Client Sample ID: RE15-10-7909
Sample ID: 245394014
Matrix: R
Collect Date: 19-JAN-10 12:00
Receive Date: 23-JAN-10
Collector: Client
Moisture: 15.8%

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	72.1	265	ug/kg	1	AXC2	02/02/10	1725	944843	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	1537	944842

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: 10-1392

Client Sample ID: RE15-10-7910
Sample ID: 245394015
Matrix: R
Collect Date: 19-JAN-10 12:00
Receive Date: 23-JAN-10
Collector: Client
Moisture: 9.89%

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	68.6	252	ug/kg	1	AXC2	02/02/10	1725	944843	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	1537	944842

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: 10-1392

Client Sample ID: RE15-10-7869
Sample ID: 245394001
Matrix: R
Collect Date: 19-JAN-10 12:00
Receive Date: 23-JAN-10
Collector: Client
Moisture: 24.7%

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	86.9	319	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	

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Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: February 9, 2010

Client SDG: 10-1392

Client Sample ID: RE15-10-7874
Sample ID: 245394002
Matrix: R
Collect Date: 19-JAN-10 12:00
Receive Date: 23-JAN-10
Collector: Client
Moisture: 4.12%

Project: LANL01004
Client ID: LANL010

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

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	U	ND	63.3	233	ug/kg	1	AXC2	02/02/10	1659	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: 10-1392

Client Sample ID: RE15-10-7871
Sample ID: 245394003
Matrix: R
Collect Date: 19-JAN-10 12:00
Receive Date: 23-JAN-10
Collector: Client
Moisture: 10.9%

Project: LANL01004
Client ID: LANL010

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

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	U	ND	74.8	275	ug/kg	1	AXC2	02/02/10	1700	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: 10-1392

Client Sample ID: RE15-10-7872
Sample ID: 245394004
Matrix: R
Collect Date: 19-JAN-10 12:00
Receive Date: 23-JAN-10
Collector: Client
Moisture: 11.2%

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	70.9	261	ug/kg	1	AXC2	02/02/10	1701	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: 10-1392

Client Sample ID: RE15-10-7870
Sample ID: 245394005
Matrix: R
Collect Date: 19-JAN-10 12:00
Receive Date: 23-JAN-10
Collector: Client
Moisture: 13.1%

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	1702	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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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: February 9, 2010

Client SDG: 10-1392

Client Sample ID: RE15-10-7873
Sample ID: 245394006
Matrix: R
Collect Date: 19-JAN-10 12:00
Receive Date: 23-JAN-10
Collector: Client
Moisture: 12.6%

Project: LANL01004
Client ID: LANL010

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

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	U	ND	77.8	286	ug/kg	1	AXC2	02/02/10	1703	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
3/4/10

GEL LABORATORIES LLC

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

Certificate of Analysis

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

Report Date: February 9, 2010

Client SDG: 10-1392

Client Sample ID: RE15-10-7911
Sample ID: 245394007
Matrix: R
Collect Date: 19-JAN-10 12:00
Receive Date: 23-JAN-10
Collector: Client
Moisture: 12%

Project: LANL01004
Client ID: LANL010

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

Flow Injection Analysis

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	U	ND	72.9	268	ug/kg	1	AXC2	02/02/10	1707	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
3/4/10

GEL LABORATORIES LLC

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

Certificate of Analysis

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

Report Date: February 9, 2010

Client SDG: 10-1392

Client Sample ID: RE15-10-7908
Sample ID: 245394008
Matrix: R
Collect Date: 19-JAN-10 12:00
Receive Date: 23-JAN-10
Collector: Client
Moisture: 8.11%

Project: LANL01004
Client ID: LANL010

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

Flow Injection Analysis

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	U	ND	64.9	239	ug/kg	1	AXC2	02/02/10	1708	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
3/4/10

Friday, January 22, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1392C

LOS ALAMOS

REQUEST NUMBER: 10-1392

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:

245394.1

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE15-10-7869	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE15-10-7869	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7874	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE15-10-7874	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7871	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE15-10-7871	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7872	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE15-10-7872	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7870	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE15-10-7870	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7873	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE15-10-7873	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7911	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7911	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7908	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7908	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7912	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7912	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7906	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7906	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7905	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7905	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7907	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7907	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7913	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7913	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7909	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7909	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7910	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7910	1	AMBER GLASS	NMED Explosives list	Ice	R

Relinquished By:

Date Time

Received By:

Date Time

7/22/10 3:00 Patricia D. Davis, Det. P.O. 1-2310 89720 Page 2 of 2
Printed Name Signature Printed Name Signature

Printed Name Signature Printed Name Signature

Printed Name Signature Printed Name Signature

Received for DISPOSAL By: Date Time Remarks: _____

Printed Name Signature

10-1392

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: 

Page 1 of 4

REQUEST NUMBER: 10-1392

These Samples are on:

LANL Request Number: 10-1392

Per Agreement Number: 126310011

Project Cost Code: MR3A05529E00

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846-6020	1	RE15-10-7869	R	1/19/2010	
		1	RE15-10-7870	R	1/19/2010	
		1	RE15-10-7871	R	1/19/2010	
		1	RE15-10-7872	R	1/19/2010	
		1	RE15-10-7873	R	1/19/2010	
		1	RE15-10-7874	R	1/19/2010	
		1	RE15-10-7905	R	1/19/2010	
		1	RE15-10-7906	R	1/19/2010	
		1	RE15-10-7907	R	1/19/2010	

Friday, January 22, 2010

REQUEST NUMBER: 10-1392

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846.6020	1	RE15-10-7908	R	1/19/2010	
		1	RE15-10-7909	R	1/19/2010	
		1	RE15-10-7910	R	1/19/2010	
		1	RE15-10-7911	R	1/19/2010	
		1	RE15-10-7912	R	1/19/2010	
		1	RE15-10-7913	R	1/19/2010	
	SW-846.6850	1	RE15-10-7869	R	1/19/2010	
		1	RE15-10-7870	R	1/19/2010	
		1	RE15-10-7871	R	1/19/2010	
		1	RE15-10-7872	R	1/19/2010	
		1	RE15-10-7873	R	1/19/2010	
		1	RE15-10-7874	R	1/19/2010	
		1	RE15-10-7905	R	1/19/2010	
		1	RE15-10-7906	R	1/19/2010	
		1	RE15-10-7907	R	1/19/2010	
		1	RE15-10-7908	R	1/19/2010	
		1	RE15-10-7910	R	1/19/2010	
		1	RE15-10-7911	R	1/19/2010	
		1	RE15-10-7912	R	1/19/2010	
		1	RE15-10-7913	R	1/19/2010	
	SW-846.7471A	1	RE15-10-7869	R	1/19/2010	
		1	RE15-10-7870	R	1/19/2010	
		1	RE15-10-7871	R	1/19/2010	
		1	RE15-10-7872	R	1/19/2010	
		1	RE15-10-7873	R	1/19/2010	
		1	RE15-10-7874	R	1/19/2010	
		1	RE15-10-7905	R	1/19/2010	

Friday, January 22, 2010

REQUEST NUMBER: 10-1392

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846.7471A	1	RE15-10-7906	R	1/19/2010	
		1	RE15-10-7907	R	1/19/2010	
		1	RE15-10-7908	R	1/19/2010	
		1	RE15-10-7909	R	1/19/2010	
		1	RE15-10-7910	R	1/19/2010	
		1	RE15-10-7911	R	1/19/2010	
		1	RE15-10-7912	R	1/19/2010	
		1	RE15-10-7913	R	1/19/2010	
	SW-846.8082	1	RE15-10-7869	R	1/19/2010	
		1	RE15-10-7870	R	1/19/2010	
		1	RE15-10-7871	R	1/19/2010	
		1	RE15-10-7872	R	1/19/2010	
		1	RE15-10-7873	R	1/19/2010	
		1	RE15-10-7874	R	1/19/2010	
	SW-846.8321A_MOD	1	RE15-10-7869	R	1/19/2010	
		1	RE15-10-7870	R	1/19/2010	
		1	RE15-10-7871	R	1/19/2010	
		1	RE15-10-7872	R	1/19/2010	
		1	RE15-10-7873	R	1/19/2010	
		1	RE15-10-7874	R	1/19/2010	
		1	RE15-10-7905	R	1/19/2010	
		1	RE15-10-7906	R	1/19/2010	
		1	RE15-10-7907	R	1/19/2010	
		1	RE15-10-7908	R	1/19/2010	
		1	RE15-10-7909	R	1/19/2010	
		1	RE15-10-7910	R	1/19/2010	
		1	RE15-10-7911	R	1/19/2010	
		1	RE15-10-7912	R	1/19/2010	

REQUEST NUMBER 10-1392

Friday, January 22, 2010

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846-8321A_MOD	1	RE15-10-7913	R	1/19/2010	
	SW-846-9012A	1	RE15-10-7869	R	1/19/2010	
		1	RE15-10-7870	R	1/19/2010	
		1	RE15-10-7871	R	1/19/2010	
		1	RE15-10-7872	R	1/19/2010	
		1	RE15-10-7873	R	1/19/2010	
		1	RE15-10-7874	R	1/19/2010	
		1	RE15-10-7905	R	1/19/2010	
		1	RE15-10-7906	R	1/19/2010	
		1	RE15-10-7907	R	1/19/2010	
		1	RE15-10-7908	R	1/19/2010	
		1	RE15-10-7909	R	1/19/2010	
		1	RE15-10-7910	R	1/19/2010	
		1	RE15-10-7911	R	1/19/2010	
		1	RE15-10-7912	R	1/19/2010	
		1	RE15-10-7913	R	1/19/2010	

Final Page of REQUEST NUMBER 10-1392



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 Order: 245394
SDG: 10-1392

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: 10-1392
Enclosures

Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Work Order #: 245394
SDG: 10-1392

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Case Narrative

**Case Narrative for
Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Workorder #: 245394
SDG # : 10-1392**

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>
245394001	RE15-10-7869
245394002	RE15-10-7874
245394003	RE15-10-7871
245394004	RE15-10-7872
245394005	RE15-10-7870
245394006	RE15-10-7873
245394007	RE15-10-7911
245394008	RE15-10-7908
245394009	RE15-10-7912
245394010	RE15-10-7906
245394011	RE15-10-7905
245394012	RE15-10-7907
245394013	RE15-10-7913
245394014	RE15-10-7909
245394015	RE15-10-7910

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: 10-1392C

LOS ALAMOS

REQUEST NUMBER: 10-1392

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:

245394.1

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE15-10-7869	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE15-10-7869	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7874	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE15-10-7874	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7871	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE15-10-7871	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7872	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE15-10-7872	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7870	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE15-10-7870	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7873	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE15-10-7873	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7911	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7911	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7908	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7908	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7912	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7912	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7906	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7906	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7905	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7905	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7907	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7907	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7913	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7913	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7909	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7909	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7910	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7910	1	AMBER GLASS	NMED Explosives list	Ice	R

Relinquished By:

Date Time

Received By:

Date Time

7/22/10 3:00 Patricia Dover Dent P.A. - 1-23-10 89120 Page 2 of 2

Printed Name Signature Printed Name Signature

Printed Name Signature Printed Name Signature

Printed Name Signature Printed Name Signature

Received for DISPOSAL By: Date Time Remarks:

Printed Name Signature

10-1392

REQUEST NUMBER: 10-1392

Friday, January 22, 2010

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

These Samples are on:

LANL Request Number: 10-1392

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	RE15-10-7869	R	1/19/2010	
		1	RE15-10-7870	R	1/19/2010	
		1	RE15-10-7871	R	1/19/2010	
		1	RE15-10-7872	R	1/19/2010	
		1	RE15-10-7873	R	1/19/2010	
		1	RE15-10-7874	R	1/19/2010	
		1	RE15-10-7905	R	1/19/2010	
		1	RE15-10-7906	R	1/19/2010	
		1	RE15-10-7907	R	1/19/2010	

Friday, January 22, 2010

Page 2 of 4

REQUEST NUMBER: 10-1392

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6020	1	RE15-10-7908	R	1/19/2010	
		1	RE15-10-7909	R	1/19/2010	
		1	RE15-10-7910	R	1/19/2010	
		1	RE15-10-7911	R	1/19/2010	
		1	RE15-10-7912	R	1/19/2010	
		1	RE15-10-7913	R	1/19/2010	
	SW-846:6850	1	RE15-10-7869	R	1/19/2010	
		1	RE15-10-7870	R	1/19/2010	
		1	RE15-10-7871	R	1/19/2010	
		1	RE15-10-7872	R	1/19/2010	
		1	RE15-10-7873	R	1/19/2010	
		1	RE15-10-7874	R	1/19/2010	
		1	RE15-10-7905	R	1/19/2010	
		1	RE15-10-7906	R	1/19/2010	
		1	RE15-10-7907	R	1/19/2010	
		1	RE15-10-7908	R	1/19/2010	
		1	RE15-10-7909	R	1/19/2010	
		1	RE15-10-7910	R	1/19/2010	
		1	RE15-10-7911	R	1/19/2010	
		1	RE15-10-7912	R	1/19/2010	
		1	RE15-10-7913	R	1/19/2010	
	SW-846:7471A	1	RE15-10-7869	R	1/19/2010	
		1	RE15-10-7870	R	1/19/2010	
		1	RE15-10-7871	R	1/19/2010	
		1	RE15-10-7872	R	1/19/2010	
		1	RE15-10-7873	R	1/19/2010	
		1	RE15-10-7874	R	1/19/2010	
		1	RE15-10-7905	R	1/19/2010	

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
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		1	RE15-10-7907	R	1/19/2010	
		1	RE15-10-7908	R	1/19/2010	
		1	RE15-10-7909	R	1/19/2010	
		1	RE15-10-7910	R	1/19/2010	
		1	RE15-10-7911	R	1/19/2010	
		1	RE15-10-7912	R	1/19/2010	
		1	RE15-10-7913	R	1/19/2010	
	SW-846:8082	1	RE15-10-7869	R	1/19/2010	
		1	RE15-10-7870	R	1/19/2010	
		1	RE15-10-7871	R	1/19/2010	
		1	RE15-10-7872	R	1/19/2010	
		1	RE15-10-7873	R	1/19/2010	
		1	RE15-10-7874	R	1/19/2010	
	SW-846:8321A_MOD	1	RE15-10-7869	R	1/19/2010	
		1	RE15-10-7870	R	1/19/2010	
		1	RE15-10-7871	R	1/19/2010	
		1	RE15-10-7872	R	1/19/2010	
		1	RE15-10-7873	R	1/19/2010	
		1	RE15-10-7874	R	1/19/2010	
		1	RE15-10-7905	R	1/19/2010	
		1	RE15-10-7906	R	1/19/2010	
		1	RE15-10-7907	R	1/19/2010	
		1	RE15-10-7908	R	1/19/2010	
		1	RE15-10-7909	R	1/19/2010	
		1	RE15-10-7910	R	1/19/2010	
		1	RE15-10-7911	R	1/19/2010	
		1	RE15-10-7912	R	1/19/2010	

Friday, January 22, 2010

REQUEST NUMBER: 10-1392

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8321A_MOD	1	RE15-10-7913	R	1/19/2010	
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		1	RE15-10-7871	R	1/19/2010	
		1	RE15-10-7872	R	1/19/2010	
		1	RE15-10-7873	R	1/19/2010	
		1	RE15-10-7874	R	1/19/2010	
		1	RE15-10-7905	R	1/19/2010	
		1	RE15-10-7906	R	1/19/2010	
		1	RE15-10-7907	R	1/19/2010	
		1	RE15-10-7908	R	1/19/2010	
		1	RE15-10-7909	R	1/19/2010	
		1	RE15-10-7910	R	1/19/2010	
		1	RE15-10-7911	R	1/19/2010	
		1	RE15-10-7912	R	1/19/2010	
		1	RE15-10-7913	R	1/19/2010	

Final Page of REQUEST NUMBER 10-1392

SAMPLE RECEIPT & REVIEW FORM

Client: LANL		SDG/ARCO/Work Order: 10-1392
Received By: Patricia Dover-Dent		Date Received: January 23, 2009
Suspected Hazard Information	Yes	No
COC/Samples marked as radioactive?		X
Classified Radioactive II by RSO?		X
COC/Samples marked containing PCBs?		X
Shipped as a DOT Hazardous?		X
Samples identified as Foreign Soil?		X

*If Counts > x2 area background on samples not marked "radioactive", contact the Radiation Safety Group of further investigation.

Maximum Counts Observed*: 60 CPM

Hazard Class Shipped: UN#:

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 $0 \leq 6$ 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	

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

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 22JAN10
ACTWGT: 55.0 LB MAN
CAD: 0014176/CAFE2448

BILL SENDER

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

LOS ALAMOS, NM 87545
UNITED STATES US

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VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR2A0515BYD0

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PSN 7209 7849 6695
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ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
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UNITED STATES US

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4 of 4
PSN 7209 7849 6526
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SATURDAY ### A1
PRIORITY OVERNIGHT

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SATURDAY ### A1
PRIORITY OVERNIGHT

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JOYLENE VALDEZ
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TA00 BLDG 1237 DPU 03

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UNITED STATES US

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ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 83

SHIP DATE: 22JAN10
ACTWGT: 57.0 LB MAN
CRD: 8814176/CAFE2449

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UNITED STATES US

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Part 1 156148-434 NRT V3 04-09

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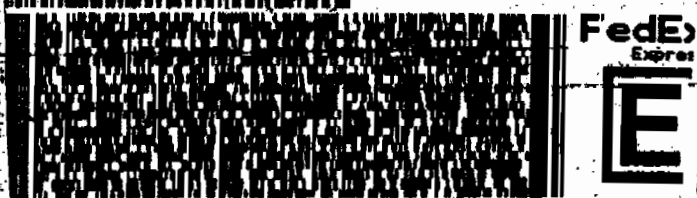
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TPSN 7209 7849 6537
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Part 1 156148-434 NRT V3 04-09

Part 1 156148-434 NRT V3 04-09

JOYLENE VALDEZ
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SHIP DATE: 22JAN10
ACTWGT: 58.0 LB MAN
CRD: 8814176/CAFE2449

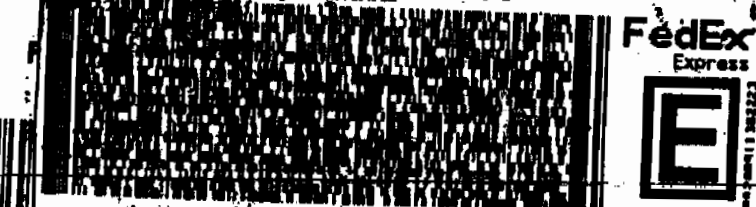
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SATURDAY ###
PRIORITY OVERNIGHT

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Part 1 156148-434 NRT V3 04-09

JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 83

SHIP DATE: 22JAN10
ACTWGT: 58.0 LB MAN
CRD: 8814176/CAFE2449

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SATURDAY ###
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Part 1 156148-434 NRT V3 04-09

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SATURDAY ### A1
PRIORITY OVERNIGHT

NPS# 7209 7849 6515

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ORIGIN ID: SAFA (505) 605-8968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAGS BLDG 1237 DPU 83

SHIP DATE: 22JAN10
ACTGNT: 4818 LB MAN
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PRIORITY OVERNIGHT

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1 of 2

SATURDAY ### A1
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JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03
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SHIP DATE: 22 JAN 10
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LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03
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SATURDAY ### A1
PRIORITY OVERNIGHT

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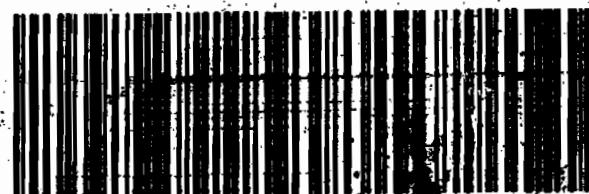
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ORIGIN ID: SAFA (505) 565-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03
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JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US

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HPSN 7209 7849 6765
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SATURDAY ### A1
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ORIGIN ID: SACA (585) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAGS BLDG 1227 OFU 83

SHIP DATE: 22JAN10
ACTWGT: 22.0 LB. MAN
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PAID 381 48-434 NEST 93 04 08

Data Review Qualifier Flag Definition Sheet

Data Review Qualifier Definitions

Qualifier	Explanation
-----------	-------------

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

LC/MS/MS PERCHLORATE ANALYSIS

**Perchlorate by LC/MSMS
Los Alamos National Laboratory (LANL)
SDG 10-1392**

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: 947112

Prep Batch Number: 947110

Sample Analysis

Sample ID	Client ID
245394001	RE15-10-7869
245394002	RE15-10-7874
245394003	RE15-10-7871
245394004	RE15-10-7872
245394005	RE15-10-7870
245394006	RE15-10-7873
245394007	RE15-10-7911
245394008	RE15-10-7908
245394009	RE15-10-7912
245394010	RE15-10-7906
245394011	RE15-10-7905
245394012	RE15-10-7907
245394013	RE15-10-7913
245394014	RE15-10-7909

10-1392-PERLCMS

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245394015	RE15-10-7910
1202028753	Interference Check Sample (ICS)
1202028749	Method Blank (MB)
1202028750	Laboratory Control Sample (LCS)
1202028751	245394001(RE15-10-7869) Matrix Spike (MS)
1202028752	245394001(RE15-10-7869) Matrix Spike Duplicate (MSD)

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

Preparation/Analytical Method Verification

SOP Reference

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

Calibration Information

Initial Calibration

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

CCV Requirements

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

CCB Requirements

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

CCV Requirements

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

Low Level Standard (CRI) Requirements

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

Quality Control (QC) Information

Method Blank (MB) Statement

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

Interference Check Sample (ICS)

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

Laboratory Control Sample (LCS) Recovery

The LCS spike recoveries met the acceptance limits.

10-1392-PERLCMS

Page 2 of 4

QC Sample Designation

Sample 245394001 (RE15-10-7869) was chosen for matrix spike and matrix spike duplicate analysis.

Matrix Spike (MS) Recovery Statement

The MS recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement

The MSD recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement

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

Retention Time Standard Area Acceptance

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

Retention Time

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

Technical Information**Holding Time Specifications**

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

Preparation/Analytical Method Verification

All procedures were performed as stated in the SOP.

Sample Dilutions

The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis

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

Miscellaneous Information**Data Exception (DER) Documentation**

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

Manual Integrations

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

Method Comments

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

Additional Comments

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

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

Perchlorate Isotope Ratio

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

System Configuration

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

Chromatographic Columns

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

Dionex: IonPac AG-16 2 x 50 mm.

Certification Statement

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

Review Validation:

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

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

Reviewer: Hester D. Mares Date: 02/16/10

10-1392-PERLCMS

Page 4 of 4

SAMPLE DATA SUMMARY

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLCLab Code: GELInstrument: LCMSMSMethod: SW846 6850 ModifiedMatrix: SOILExtraction Batch ID: 247110Extraction Type: Solid Prep

Client Sample No.

RE15-10-7869Date Received: 23-JAN-10GEL Job No (SDG): 10-1392GEL Sample ID: 245394001Date Filtered: 08-FEB-10Injection Volume (uL): 20%Solids: 75Sample Volume/Weight: 2.00 gConcentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.664	2.66	0.664	ug/kg	U	1	10-FEB-10 18:03	per0210015a
	Perchlorate Isotope Ratio						1	10-FEB-10 18:03	per0210015a
14797-73-0	Perchlorate-101	.664	2.66	0.664	ug/kg	U	1	10-FEB-10 18:03	per0210015a
	Perchlorate-O(18)			6.36	ug/kg		1	10-FEB-10 18:03	per0210015a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The 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 LLCLab Code: GELInstrument: LCMSMSMethod: SW846 6850 ModifiedMatrix: SOILExtraction Batch ID: 947110Extraction Type: Solid Prep

Client Sample No.

RE15-10-7874Date Received: 23-JAN-10GEL Job No (SDG): 10-1392GEL Sample ID: 245394002Date Filtered: 08-FEB-10Injection Volume (uL): 20%Solids: 95.9Sample Volume/Weight: 2.00 gConcentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.521	2.09	0.521	ug/kg	U	1	10-FEB-10 18:27	per0210018a
	Perchlorate Isotope Ratio						1	10-FEB-10 18:27	per0210018a
14797-73-0	Perchlorate-101	.521	2.09	0.521	ug/kg	U	1	10-FEB-10 18:27	per0210018a
	Perchlorate-O(18)			5.20	ug/kg		1	10-FEB-10 18:27	per0210018a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The 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: 247110

Extraction Type: Solid Prep

Client Sample No.

RE15-10-7871

Date Received: 23-JAN-10

GEL Job No (SDG): 10-1392

GEL Sample ID: 245394003

Date Filtered: 08-FEB-10

Injection Volume (uL): 20

%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	.561	2.25	0.561	ug/kg	U	1	10-FEB-10 18:35	per0210019a
	Perchlorate Isotope Ratio						1	10-FEB-10 18:35	per0210019a
14797-73-0	Perchlorate-101	.561	2.25	0.561	ug/kg	U	1	10-FEB-10 18:35	per0210019a
	Perchlorate-O(18)			5.55	ug/kg		1	10-FEB-10 18:35	per0210019a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The 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: 947110

Extraction Type: Solid Prep

Client Sample No.

RE15-10-7872

Date Received: 23-JAN-10

GEL Job No (SDG): 10-1392

GEL Sample ID: 245394004

Date Filtered: 08-FEB-10

Injection Volume (uL): 20

%Solids: 89

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.563	2.25	0.563	ug/kg	U	1	10-FEB-10 18:43	per0210020a
	Perchlorate Isotope Ratio						1	10-FEB-10 18:43	per0210020a
14797-73-0	Perchlorate-101	.563	2.25	0.563	ug/kg	U	1	10-FEB-10 18:43	per0210020a
	Perchlorate-O(18)			5.75	ug/kg		1	10-FEB-10 18:43	per0210020a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The 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 LLCLab Code: GELInstrument: LCMSMSMethod: SW846 6850 ModifiedMatrix: SOILExtraction Batch ID: 247110Extraction Type: Solid PrepSample Volume/Weight: 2.00 gConcentrated Extract Volume: 20.0

Client Sample No.

RE15-10-7870Date Received: 23-JAN-10GEL Job No (SDG): 10-1392GEL Sample ID: 245394005Date Filtered: 08-FEB-10Injection Volume (uL): 20%Solids: 87

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.575	2.3	0.575	ug/kg	U	1	10-FEB-10 18:51	per0210021a
	Perchlorate Isotope Ratio						1	10-FEB-10 18:51	per0210021a
14797-73-0	Perchlorate-101	.575	2.3	0.575	ug/kg	U	1	10-FEB-10 18:51	per0210021a
	Perchlorate-O(18)			5.78	ug/kg		1	10-FEB-10 18:51	per0210021a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The 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 LLCLab Code: GELInstrument: LCMSMSMethod: SW846 6850 ModifiedMatrix: SOILExtraction Batch ID: 947110Extraction Type: Solid PrepSample Volume/Weight: 2.00 gConcentrated Extract Volume: 20.0

Client Sample No.

RE15-10-7873Date Received: 23-JAN-10GEL Job No (SDG): 10-1392GEL Sample ID: 245394006Date Filtered: 08-FEB-10Injection Volume (uL): 20%Solids: 87

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.572	2.29	0.572	ug/kg	U	1	10-FEB-10 19:23	per0210025a
	Perchlorate Isotope Ratio						1	10-FEB-10 19:23	per0210025a
14797-73-0	Perchlorate-101	.572	2.29	0.572	ug/kg	U	1	10-FEB-10 19:23	per0210025a
	Perchlorate-O(18)			5.88	ug/kg		1	10-FEB-10 19:23	per0210025a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The 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: 947110

Extraction Type: Solid Prep

Client Sample No.

RE15-10-7911

Date Received: 23-JAN-10

GEL Job No (SDG): 10-1392

GEL Sample ID: 245394007

Date Filtered: 08-FEB-10

Injection Volume (uL): 20

%Solids: 88

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.568	2.27	0.568	ug/kg	U	1	10-FEB-10 19:31	per0210026a
	Perchlorate Isotope Ratio						1	10-FEB-10 19:31	per0210026a
14797-73-0	Perchlorate-101	.568	2.27	0.568	ug/kg	U	1	10-FEB-10 19:31	per0210026a
	Perchlorate-O(18)			5.75	ug/kg		1	10-FEB-10 19:31	per0210026a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The 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 LLCLab Code: GELInstrument: LCMSMSMethod: SW846 6850 ModifiedMatrix: SOILExtraction Batch ID: 947110Extraction Type: Solid PrepSample Volume/Weight: 2.00 gConcentrated Extract Volume: 20.0

Client Sample No.

RE15-10-7908Date Received: 23-JAN-10GEL Job No (SDG): 10-1392GEL Sample ID: 245394008Date Filtered: 08-FEB-10Injection Volume (uL): 20%Solids: 91.9

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.544	2.18	0.544	ug/kg	U	1	10-FEB-10 19:39	per0210027a
	Perchlorate Isotope Ratio						1	10-FEB-10 19:39	per0210027a
14797-73-0	Perchlorate-101	.544	2.18	0.544	ug/kg	U	1	10-FEB-10 19:39	per0210027a
	Perchlorate-O(18)			5.42	ug/kg		1	10-FEB-10 19:39	per0210027a

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

*Concentration =

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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLCLab Code: GELInstrument: LCMSMSMethod: SW846 6850 ModifiedMatrix: SOILExtraction Batch ID: 947110Extraction Type: Solid PrepSample Volume/Weight: 2.00 gConcentrated Extract Volume: 20.0

Client Sample No.

RE15-10-7912Date Received: 23-JAN-10GEL Job No (SDG): 10-1392GEL Sample ID: 245394009Date Filtered: 08-FEB-10Injection Volume (uL): 20%Solids: 87

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.578	2.31	0.578	ug/kg	U	1	10-FEB-10 19:47	per0210028a
	Perchlorate Isotope Ratio						1	10-FEB-10 19:47	per0210028a
14797-73-0	Perchlorate-101	.578	2.31	0.578	ug/kg	U	1	10-FEB-10 19:47	per0210028a
	Perchlorate-O(18)			5.99	ug/kg		1	10-FEB-10 19:47	per0210028a

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

Client Sample No.
RE15-10-7906

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Date Received: 23-JAN-10

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

GEL Sample ID: 245394010

Extraction Batch ID: 947110

Date Filtered: 08-FEB-10

Extraction Type: Solid Prep

Injection Volume (uL): 20

%Solids: 20

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	0.555	ug/kg	U	1	10-FEB-10 19:55	per0210029a
	Perchlorate Isotope Ratio						1	10-FEB-10 19:55	per0210029a
14797-73-0	Perchlorate-101	.555	2.22	0.555	ug/kg	U	1	10-FEB-10 19:55	per0210029a
	Perchlorate-O(18)			5.51	ug/kg		1	10-FEB-10 19:55	per0210029a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The 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: 247110
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0

Client Sample No.
RE15-10-7905
 Date Received: 23-JAN-10
 GEL Job No (SDG): 10-1392
 GEL Sample ID: 245394011
 Date Filtered: 08-FEB-10
 Injection Volume (uL): 20
 %Solids: 78

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.639	2.56	0.639	ug/kg	U	1	10-FEB-10 20:03	per0210030a
	Perchlorate Isotope Ratio						1	10-FEB-10 20:03	per0210030a
14797-73-0	Perchlorate-101	.639	2.56	0.639	ug/kg	U	1	10-FEB-10 20:03	per0210030a
	Perchlorate-O(18)			6.51	ug/kg		1	10-FEB-10 20:03	per0210030a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
 The 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: 247110
Extraction Type: Solid Prep
Sample Volume/Weight: 2.00 g
Concentrated Extract Volume: 20.0
Client Sample No. RE15-10-7907
Date Received: 23-JAN-10
GEL Job No (SDG): 10-1392
GEL Sample ID: 245394012
Date Filtered: 08-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	.618	2.47	0.618	ug/kg	U	1	10-FEB-10 20:11	per0210031a
	Perchlorate Isotope Ratio						1	10-FEB-10 20:11	per0210031a
14797-73-0	Perchlorate-101	.618	2.47	0.618	ug/kg	U	1	10-FEB-10 20:11	per0210031a
	Perchlorate-O(18)			6.44	ug/kg		1	10-FEB-10 20:11	per0210031a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The 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: 247110

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-7913

Date Received: 23-JAN-10

GEL Job No (SDG): 10-1392

GEL Sample ID: 245394013

Date Filtered: 08-FEB-10

Injection Volume (uL): 20

%Solids: 79

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.635	2.54	0.635	ug/kg	U	1	10-FEB-10 20:19	per0210032a
	Perchlorate Isotope Ratio						1	10-FEB-10 20:19	per0210032a
14797-73-0	Perchlorate-101	.635	2.54	0.635	ug/kg	U	1	10-FEB-10 20:19	per0210032a
	Perchlorate-O(18)			6.98	ug/kg		1	10-FEB-10 20:19	per0210032a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The 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: 247110

Extraction Type: Solid Prep

Client Sample No.

RE15-10-7909

Date Received: 23-JAN-10

GEL Job No (SDG): 10-1392

GEL Sample ID: 245394014

Date Filtered: 08-FEB-10

Injection Volume (uL): 20

%Solids: 84

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	.594	2.37	0.594	ug/kg	U	1	10-FEB-10 20:27	per0210033a
	Perchlorate Isotope Ratio						1	10-FEB-10 20:27	per0210033a
14797-73-0	Perchlorate-101	.594	2.37	0.594	ug/kg	U	1	10-FEB-10 20:27	per0210033a
	Perchlorate-O(18)			5.97	ug/kg		1	10-FEB-10 20:27	per0210033a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.

The 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: 247110

Extraction Type: Solid Prep

Client Sample No.

RE15-10-7910

Date Received: 23-JAN-10

GEL Job No (SDG): 10-1392

GEL Sample ID: 245394015

Date Filtered: 08-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	0.555	ug/kg	U	1	10-FEB-10 20:36	per0210034a
	Perchlorate Isotope Ratio						1	10-FEB-10 20:36	per0210034a
14797-73-0	Perchlorate-101	.555	2.22	0.555	ug/kg	U	1	10-FEB-10 20:36	per0210034a
	Perchlorate-O(18)			5.27	ug/kg		1	10-FEB-10 20:36	per0210034a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The 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):** 10-1392

Extract Batch Code: 947110 **Date Filtered:** 08-FEB-10

Matrix: SOIL **Sample ID:** 1202028750

Analyte [^]	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	2.00	2.06	ug/kg	103		70 - 130
Perchlorate Isotope Ratio		2.97				-
Perchlorate-101	2.00	2.14	ug/kg	107		70 - 130
Perchlorate-O(18)		4.77	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): 10-1392

Extract Batch Code: 947110 Date Filtered: 08-FEB-10

Matrix: SOIL Sample ID: 1202028753

Analyte [^]	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	2.00	2.14	ug/kg	107		70 - 130
Perchlorate Isotope Ratio		3.15				
Perchlorate-101	2.00	2.09	ug/kg	105		70 - 130
Perchlorate-O(18)		5.12	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\per021010a.qld

Last Altered: Tuesday, February 16, 2010 8:51:42 AM Eastern Standard Time
Printed: Tuesday, February 16, 2010 8:53:08 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per021010a.mdb 11 Feb 2010 11:00:00
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per021010a.cdb 11 Feb 2010 11:01:28

Name: per0210014a

Date: 10-Feb-2010

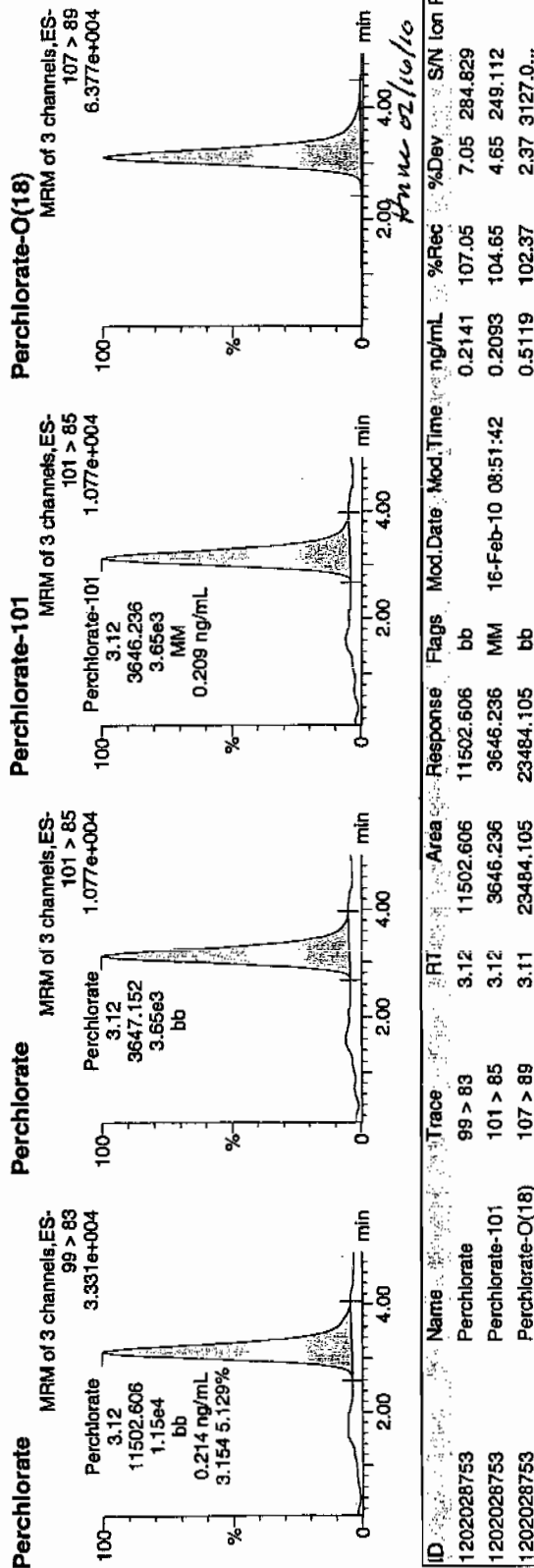
Time: 17:55:12

ID: 1202028753

Vial: 1:3.C

not
2/16/10

1202028753 / 947112 / 8022 / 11 / 108 / 11 /



Perchlorate Spike/Spike Duplicate Summary

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No (SDG): 10-1392

Extract Batch Code: 947110

Date Extracted: 08-FEB-10

GEL MS/PS ID: 1202028751

Client ID: RE15-10-7869

GEL MSD/PSD ID: 1202028752

QC Type: MS

Compound^	Spike Added	Sample Conc	Units	MS Conc	MS Rec	#	MSD Conc	MSD Rec	#	RPD	#	RPD Limit	Recovery Limit
Perchlorate	2.66	0.0491	ug/kg	2.99	111		2.86	106		4.43		30	75 - 125
Perchlorate Isotope Ratio	0	0.00		3.24			3.2			0			-
Perchlorate-101	2.66	0.00	ug/kg	2.84	107		2.75	104		3.35		30	75 - 125
Perchlorate-O(18)	0	6.36	ug/kg	6.62			6.65			.44			-

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

Comments:

Perchlorate Initial Calibration Blank

Lab Name: General Engineering LaboratoriesGEL Job No.(SDG): 10-1392Lab Code: GELReporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	10-FEB-10	per0210001a	IPB001
Perchlorate-101	0.00	0	NA	10-FEB-10	per0210001a	IPB001
Perchlorate	0.00	0	NA	10-FEB-10	per0210002a	IPB001
Perchlorate-101	0.00	0	NA	10-FEB-10	per0210002a	IPB001

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

Dataset: C:\MassLynx\Perchlorate.PRO\per021010a.qld

Last Altered: Thursday, February 11, 2010 11:01:30 AM Eastern Standard Time
Printed: Thursday, February 11, 2010 11:13:00 AM Eastern Standard Time

Page 1 of 1

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per021010a.mdb 11 Feb 2010 11:00:00
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per021010a.cdb 11 Feb 2010 11:01:28

Name: per0210001a

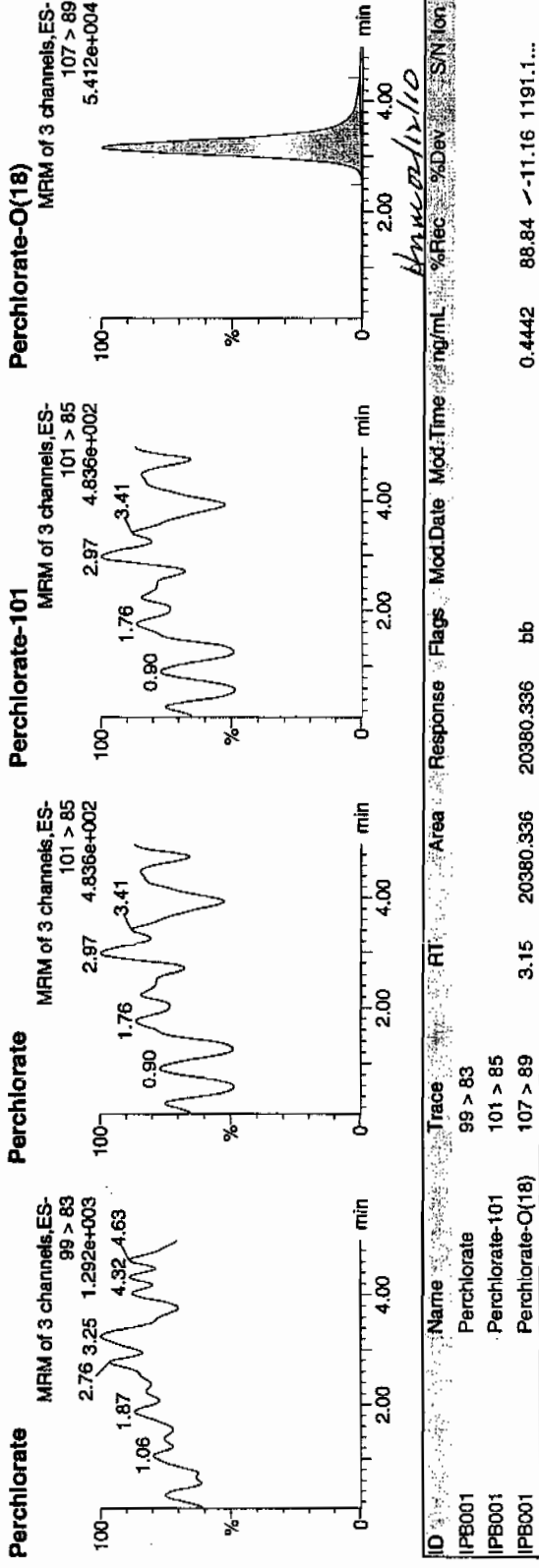
Date: 10-Feb-2010

Time: 16:10:34

ID: IPB001

Vial: 1:1,A

02-12-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB001	Perchlorate	99 > 83											0.00
IPB001	Perchlorate-101	101 > 85											
IPB001	Perchlorate-O(18)	107 > 89	3.15	20380.336	20380.336	bb			0.4442	88.84	-11.16	1191.1...	

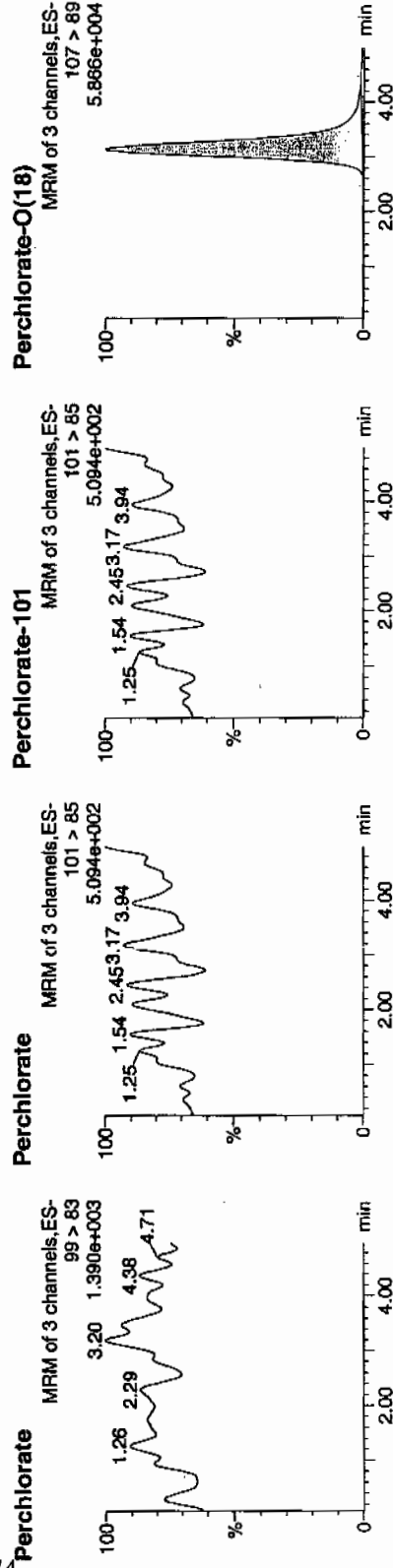
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021010a.qld

Last Altered: Thursday, February 11, 2010 11:01:30 AM Eastern Standard Time
Printed: Thursday, February 11, 2010 11:13:00 AM Eastern Standard Time

Page Name: per0210002a
Date: 10-Feb-2010
Time: 16:18:47
ID: IPB001
Vial: 1:1.A

02-12-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB001	Perchlorate	99 > 83											0.00
IPB001	Perchlorate-101	101 > 85											
IPB001	Perchlorate-O(18)	107 > 89	3.14	21752.732	21752.732	bb			0.4741	94.83	-5.17	4519.8...	

Perchlorate Continuing Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1392

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	10-FEB-10	per0210008a	IPB002
Perchlorate-101	0.00	0	NA	10-FEB-10	per0210008a	IPB002
Perchlorate	0.00	0	NA	10-FEB-10	per0210010a	IPB003
Perchlorate-101	0.00	0	NA	10-FEB-10	per0210010a	IPB003
Perchlorate	0.00	0	NA	10-FEB-10	per0210023a	IPB004
Perchlorate-101	0.00	0	NA	10-FEB-10	per0210023a	IPB004
Perchlorate	0.00	0	NA	10-FEB-10	per0210036a	IPB005
Perchlorate-101	0.00	0	NA	10-FEB-10	per0210036a	IPB005

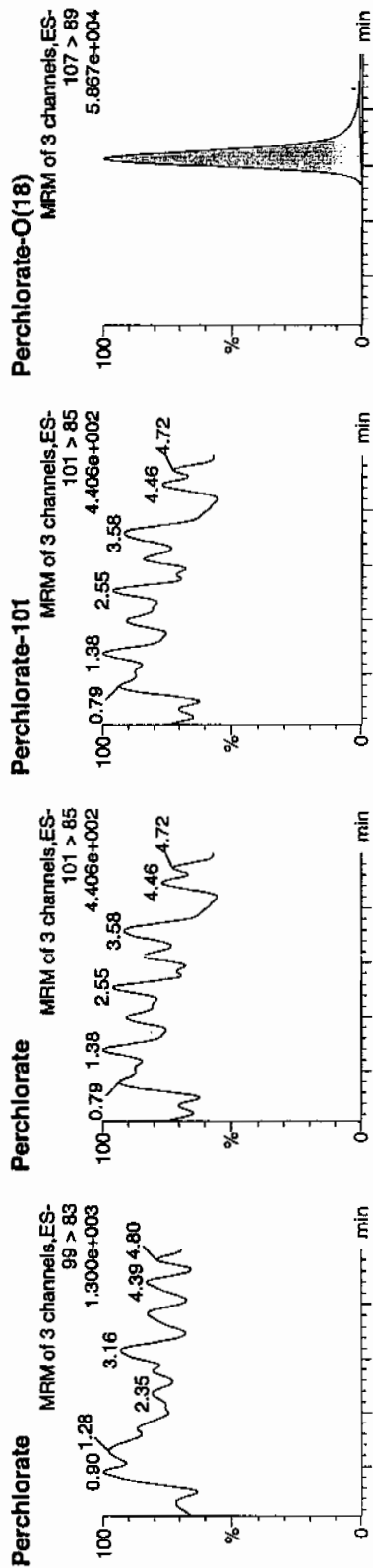
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021010a.qld

Last Altered: Thursday, February 11, 2010 11:01:30 AM Eastern Standard Time
Printed: Thursday, February 11, 2010 11:13:00 AM Eastern Standard Time

Name: per0210008a
Date: 10-Feb-2010
Time: 17:06:55
ID: IPB002
Vial: 1:1,A

02-12-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB002	Perchlorate	99 > 83											0.00
IPB002	Perchlorate-101	101 > 85											
IPB002	Perchlorate-O(18)	107 > 89	3.12	21790.453	21790.453	bb			0.4750	94.99	-5.01	2832.4...	

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

Dataset: C:\MassLynx\Perchlorate.PRO\per021010a.qld

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Printed: Thursday, February 11, 2010 11:13:00 AM Eastern Standard Time

Name: per0210010a

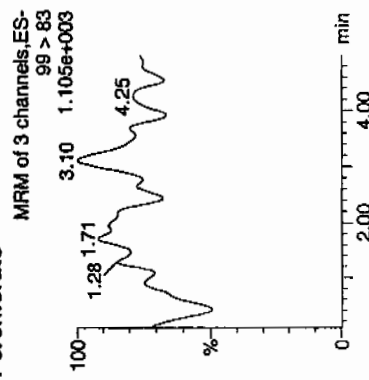
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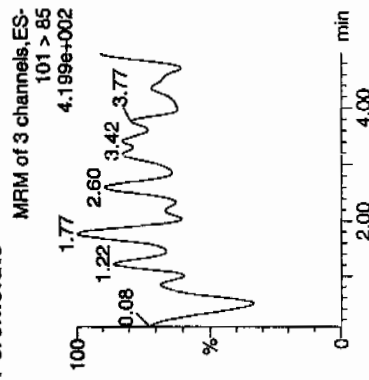
ID: IPB003

Vial: 1:1,A

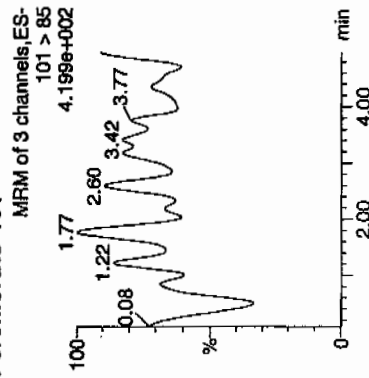
Perchlorate



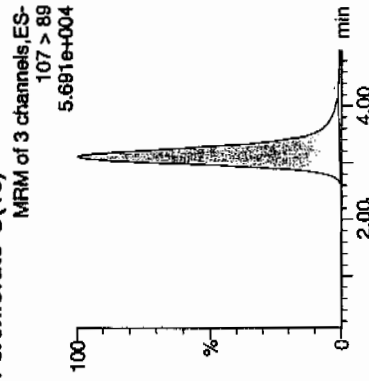
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
IPB003	Perchlorate	99 > 83											
IPB003	Perchlorate-101	101 > 85											
IPB003	Perchlorate-O(18)	107 > 89	3.11	21484.490	21484.490	bb			0.4683	93.66	-6.34	602.767	

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

Dataset: C:\MassLynx\Perchlorate.PRO\per021010a.qld

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Printed: Thursday, February 11, 2010 11:13:00 AM Eastern Standard Time

Sample Name: per0210023a

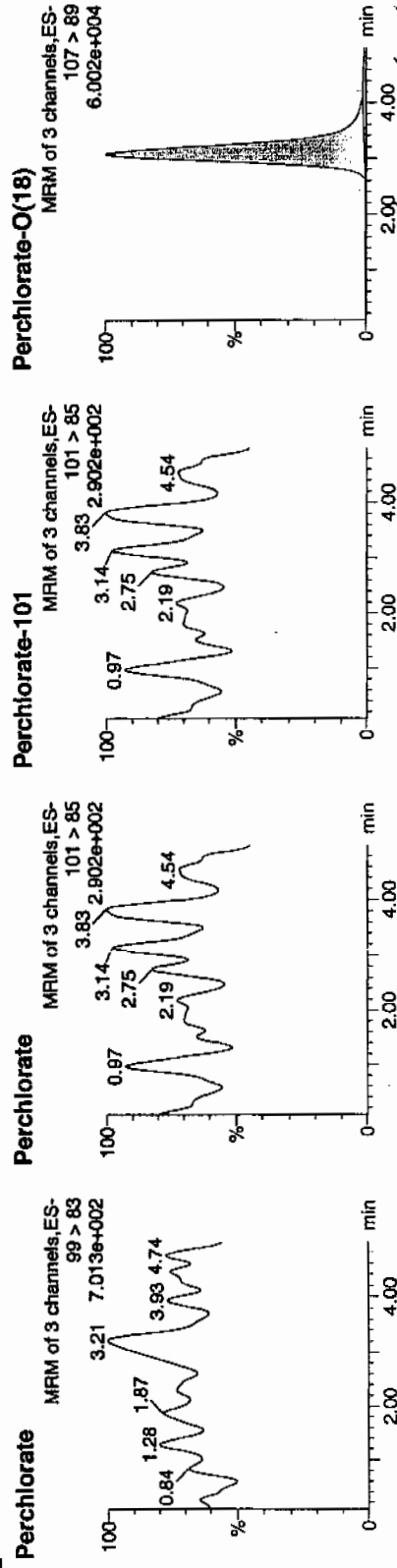
Date: 10-Feb-2010

Time: 19:07:33

ID: IPB004

Vial: 1:1,A

02-12-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB004	Perchlorate	99 > 83											0.00
IPB004	Perchlorate-101	101 > 85	3.09	21936.963	21936.963	bb			0.4781	95.63	-4.37	3298.1...	
IPB004	Perchlorate-O(18)	107 > 89											

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

Dataset: C:\MassLynx\Perchlorate.PRO\per021010a.qld

Last Altered: Thursday, February 11, 2010 11:01:30 AM Eastern Standard Time
Printed: Thursday, February 11, 2010 11:13:00 AM Eastern Standard Time

Sample Name: per0210036a

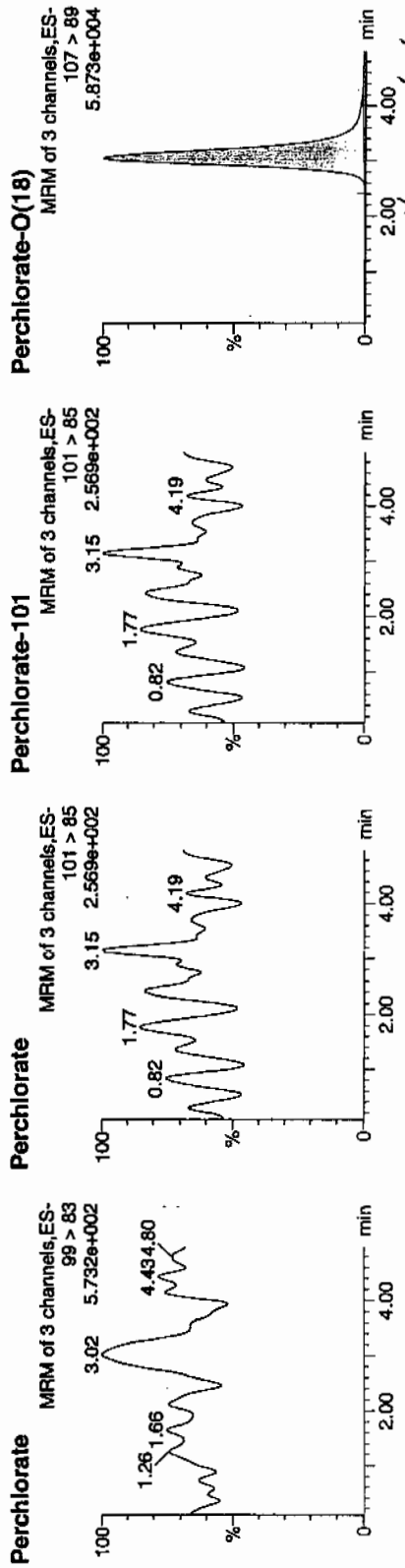
Date: 10-Feb-2010

Time: 20:52:09

ID: IPB005

Vial: 1:1,A

02-11-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ratio
IPB005	Perchlorate	99 > 83											
IPB005	Perchlorate-101	101 > 85	3.06	21389.258	21389.258	bb			0.4662	93.24	-6.76	1799.3...	0.00
IPB005	Perchlorate-O(18)	107 > 89											

Nairb.ref

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

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

QUANTO ULTIMA: nairb_01_08_08.cal

Calibration Report - MS1 Static

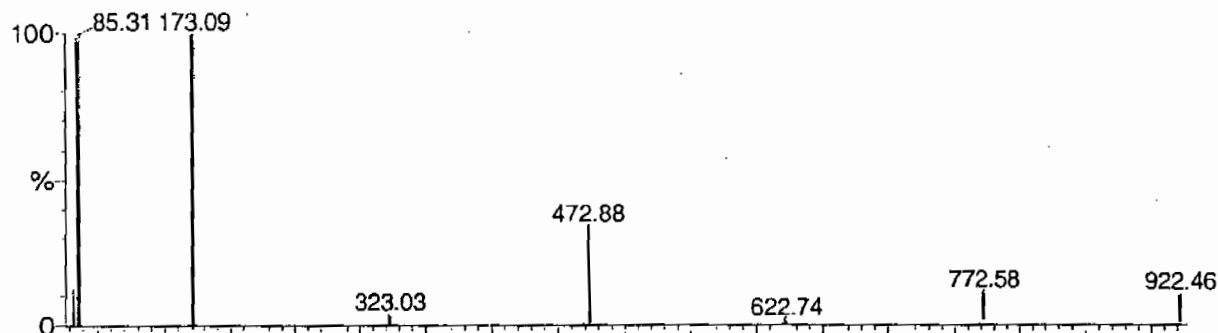
Page 1 of 1

Printed: Tue Jan 08 12:19:12 2008

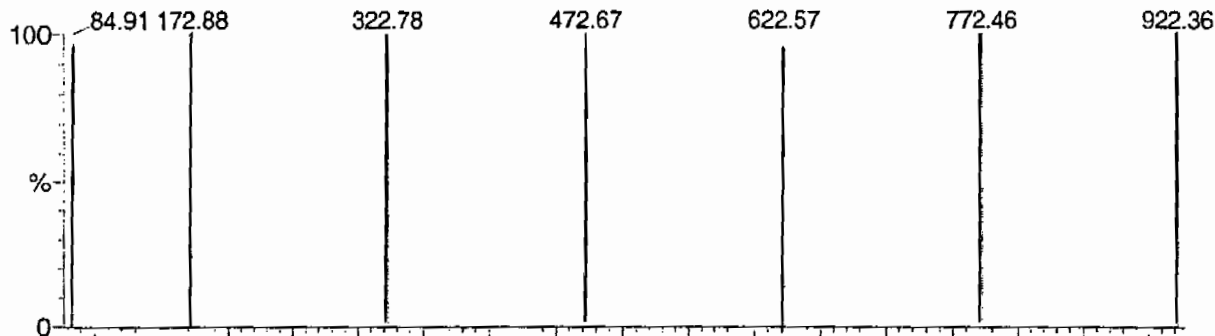
POINTS HIGHLIGHTED BY CURV 01-01-08

Data file: STATMS1 - Uncalibrated

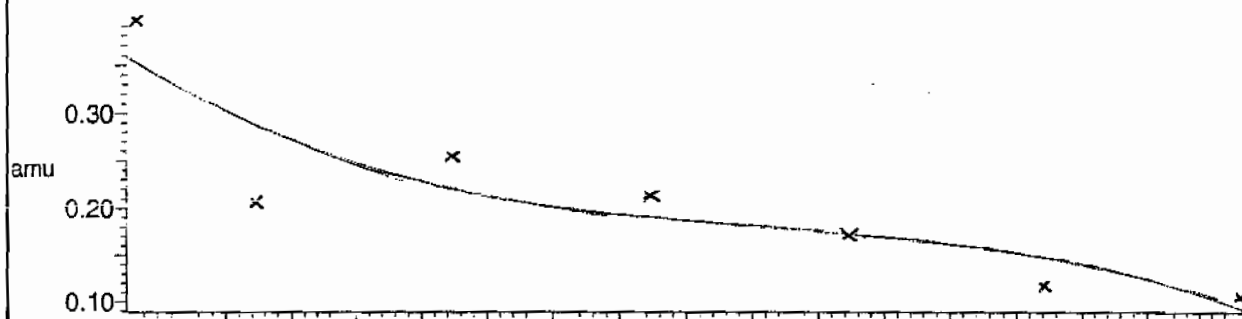
7 matches of 7 tested references



Reference file: Nairb

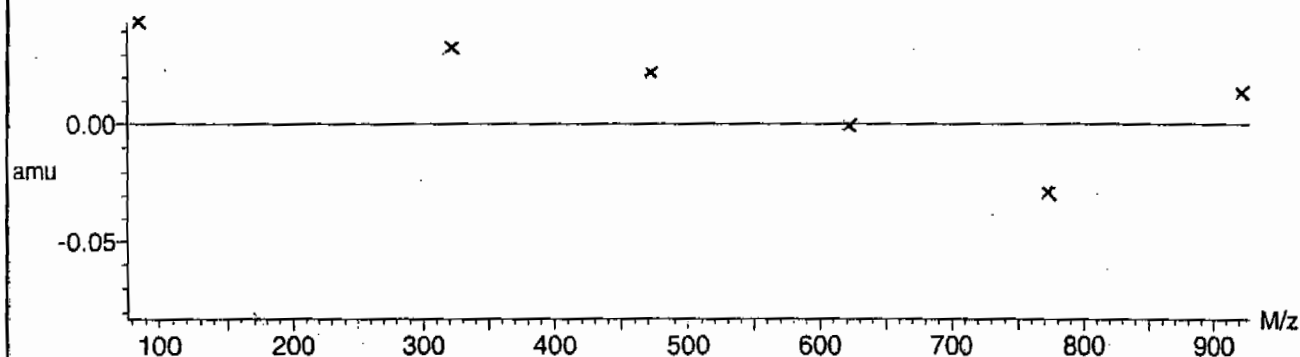


Mass difference (Raw - Ref mass)

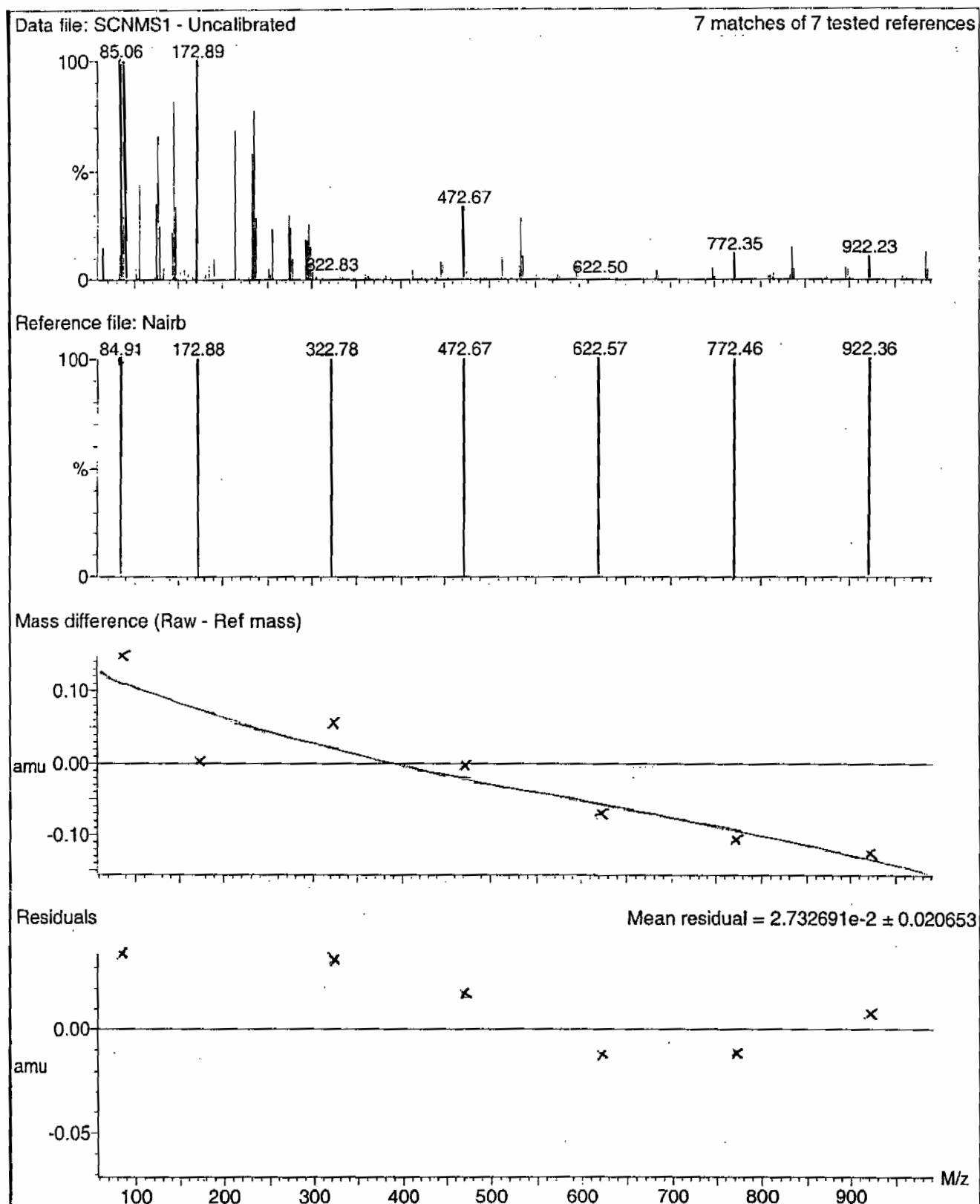


Residuals

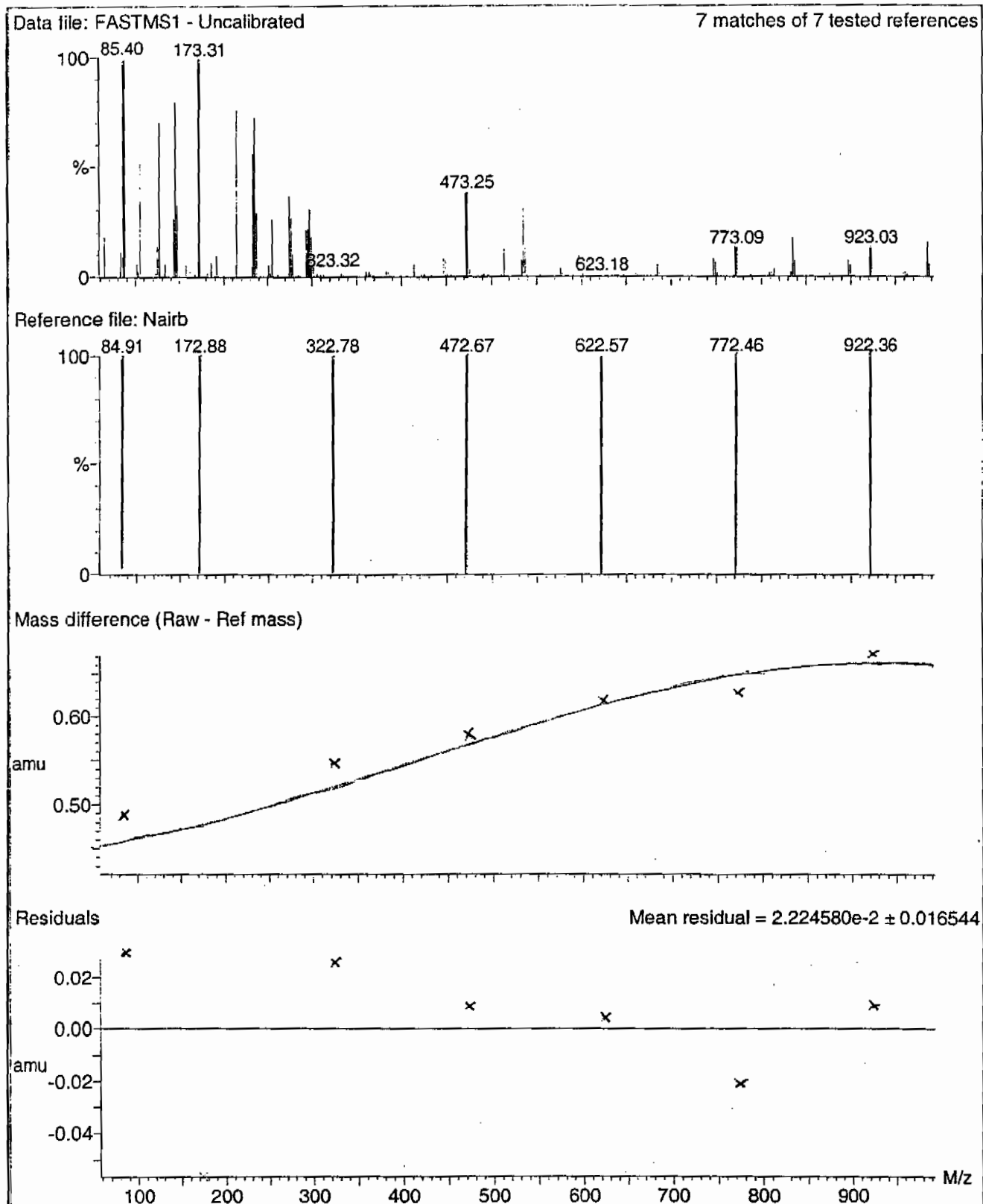
Mean residual = $3.212012 \times 10^{-2} \pm 0.024108$



Printed: Tue Jan 08 12:20:09 2008



Printed: Tue Jan 08 12:21:04 2008



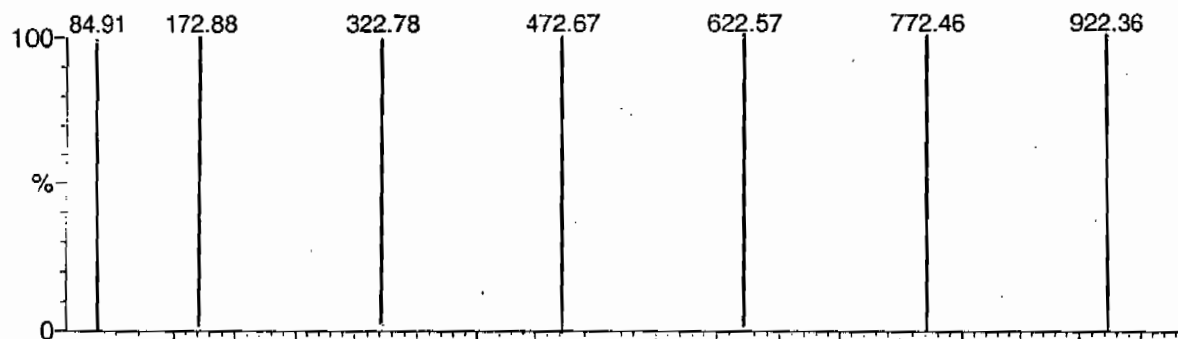
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Data file: FASTMS2 - Uncalibrated

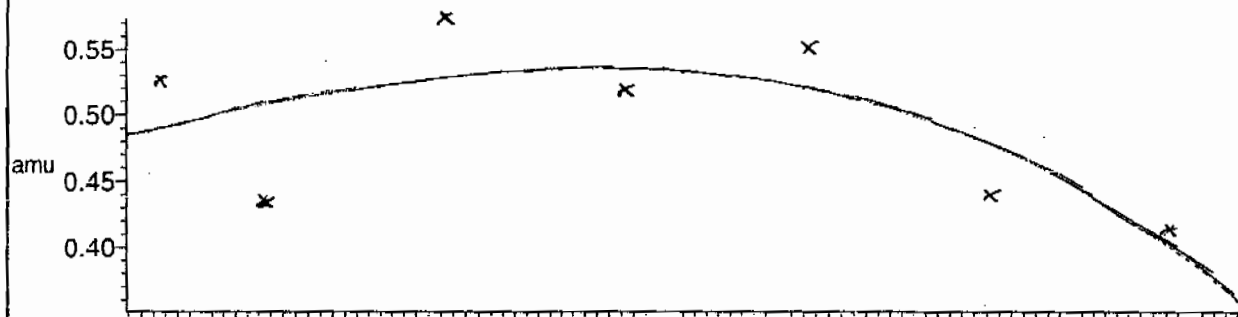
7 matches of 7 tested references



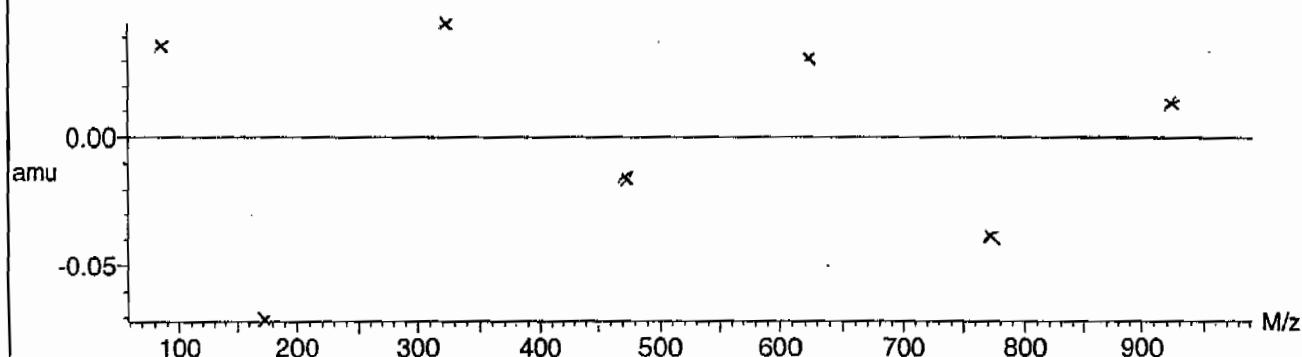
Reference file: Nairb



Mass difference (Raw - Ref mass)



Residuals

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

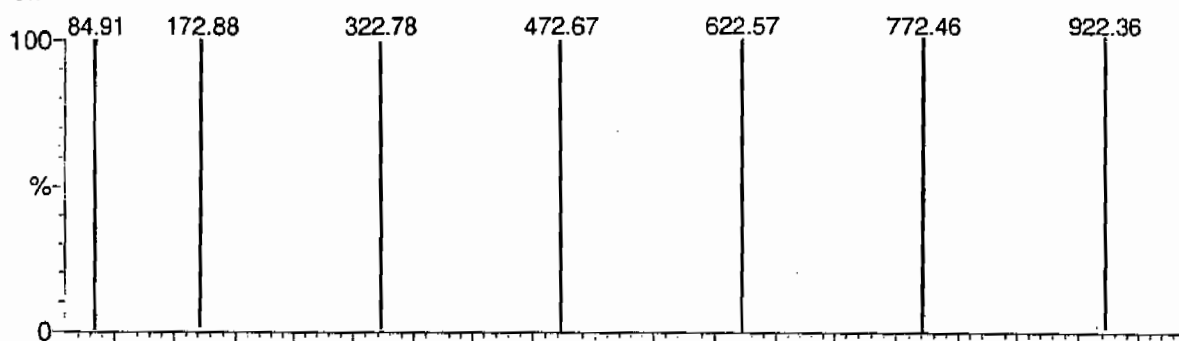
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Data file: SCNMS2 - Uncalibrated

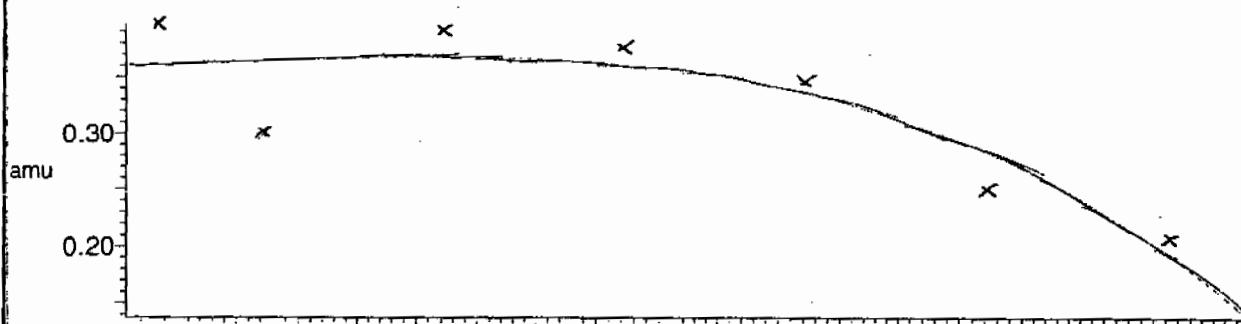
7 matches of 7 tested references



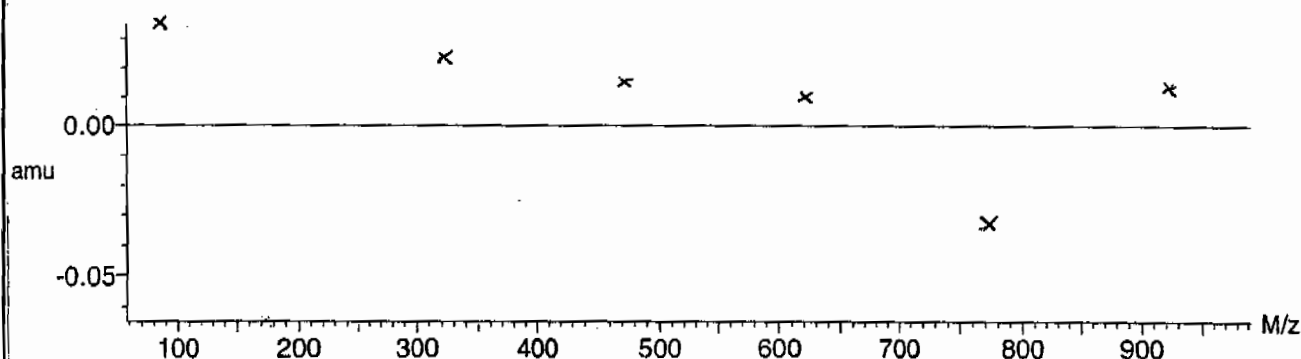
Reference file: Nairb



Mass difference (Raw - Ref mass)



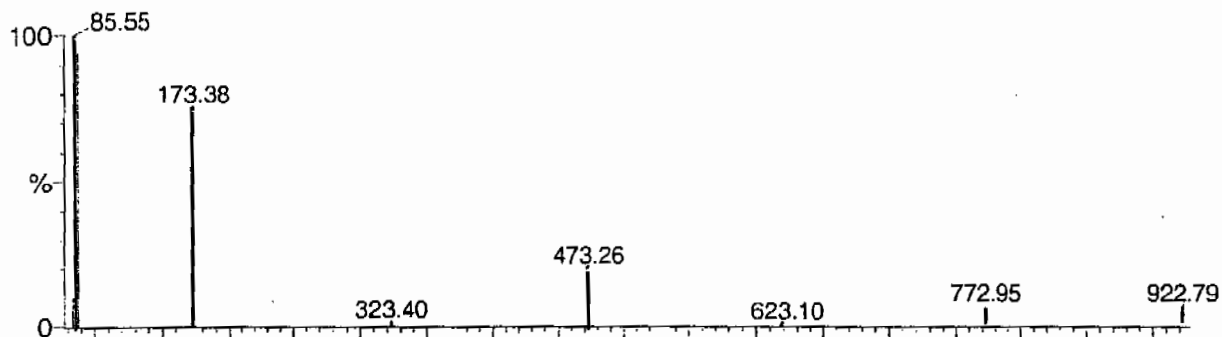
Residuals

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

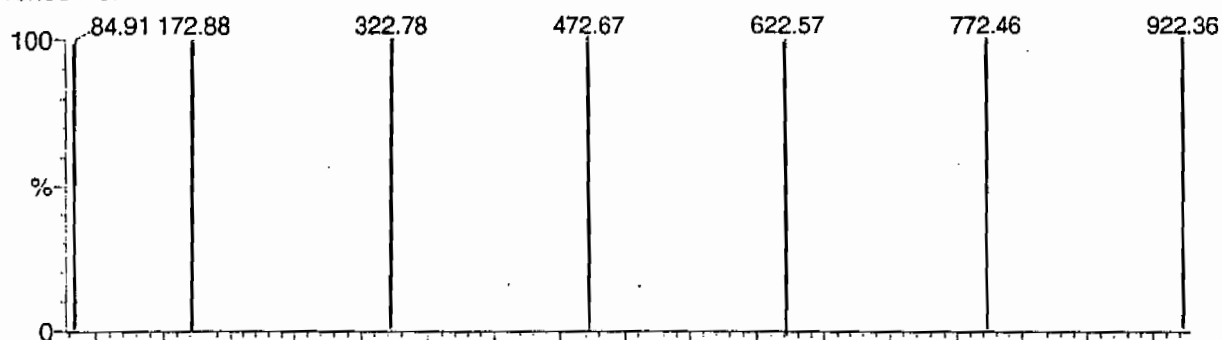
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Data file: STATMS2 - Uncalibrated

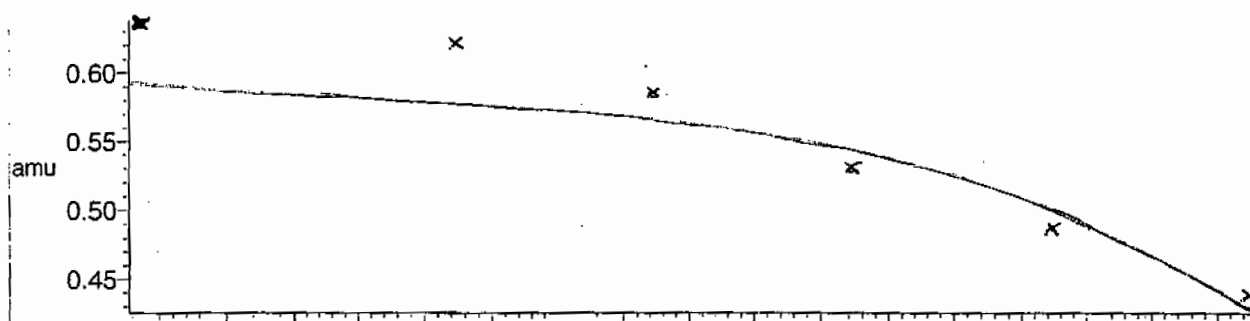
7 matches of 7 tested references



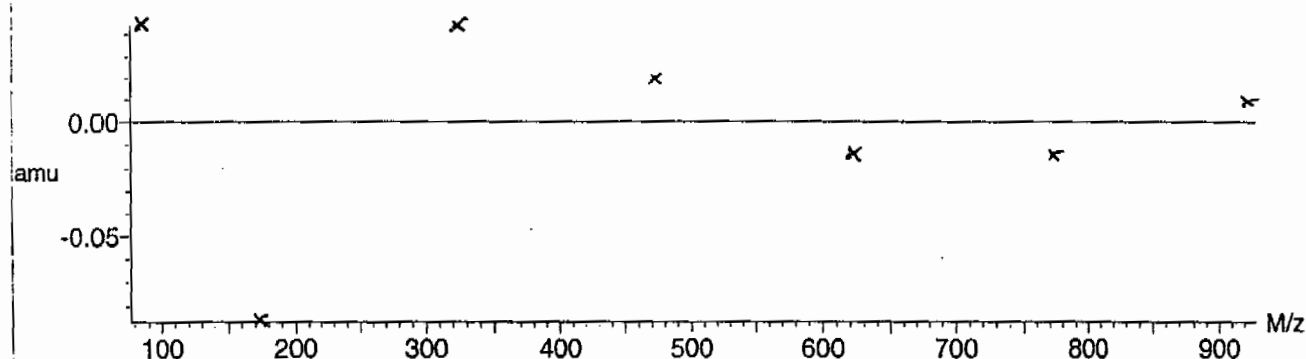
Reference file: Nairb



Mass difference (Raw - Ref mass)

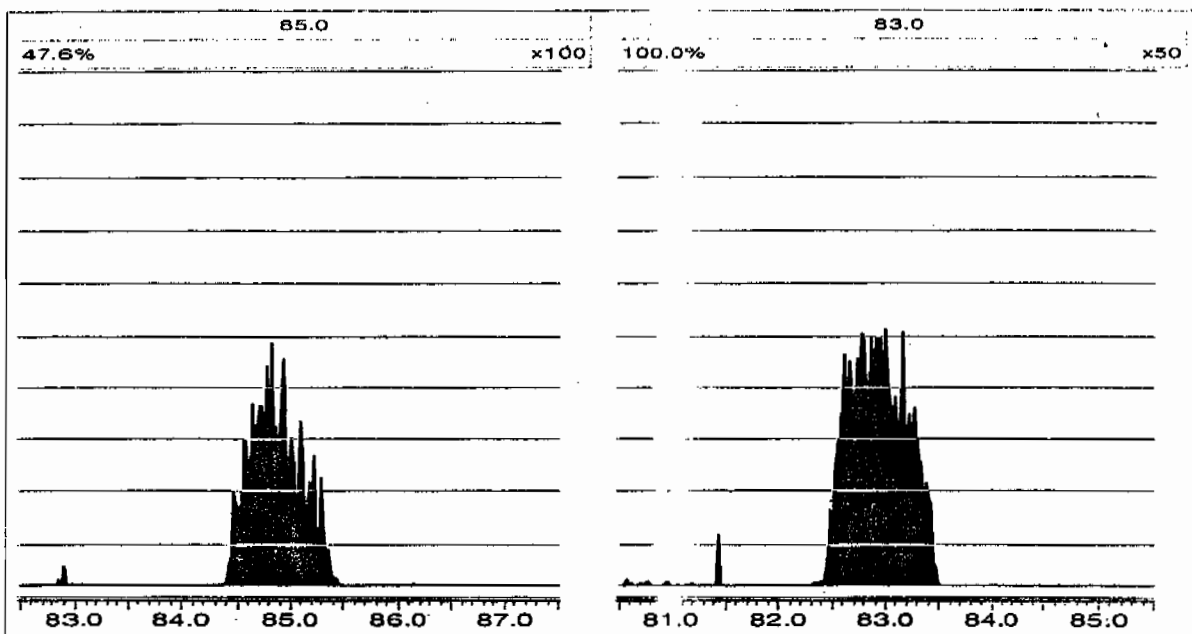


Residuals

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

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

Printed: Wednesday, February 10, 2010 14:19:34 Eastern Standard Time



Perchlorate RT And Area Summary

GEL Job No.(SDG): 10-1392

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument ID: LCMSMS

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

Sample ID	Datafile	Run Date	Area	RT	RT CLO4	RRT	Q 0.98-1.02
MidLevel Standard Area	per0210006a	10-FEB-10	22910.4				
Lower Area Limit			11455.2				
Upper Area Limit			45820.8				
1202028749	per0210012a	10-FEB-10 17:39	20922.4	3.1	3.09773	.999	
1202028750	per0210013a	10-FEB-10 17:47	21869.7	3.11	3.12253	1.004	
1202028753	per0210014a	10-FEB-10 17:55	23484.1	3.11	3.12253	1.004	
245394001	per0210015a	10-FEB-10 18:03	21961.4	3.09	3.07283	.994	
1202028751	per0210016a	10-FEB-10 18:11	22864.8	3.07	3.09775	1.009	
1202028752	per0210017a	10-FEB-10 18:19	22965.6	3.09	3.09775	1.003	
245394002	per0210018a	10-FEB-10 18:27	22876	3.09	3.09777	1.003	
245394003	per0210019a	10-FEB-10 18:35	22672.7	3.09	3.11012	1.007	

Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10-1392

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	per0210006a	10-FEB-10	22910.4				
Lower Area Limit			11455.2				
Upper Area Limit			45820.8				
245394004	per0210020a	10-FEB-10 18:43	23440.9	3.09	3.0853	.998	
245394005	per0210021a	10-FEB-10 18:51	23035	3.09	3.11008	1.006	
245394006	per0210025a	10-FEB-10 19:23	23573.5	3.09	3.09773	1.003	
245394007	per0210026a	10-FEB-10 19:31	23208.3	3.09	3.12253	1.011	
245394008	per0210027a	10-FEB-10 19:39	22843.6	3.07	3.09777	1.009	
245394009	per0210028a	10-FEB-10 19:47	23784.1	3.07	3.09775	1.009	
245394010	per0210029a	10-FEB-10 19:55	22771.9	3.09	3.09775	1.003	
245394011	per0210030a	10-FEB-10 20:03	23340.9	3.07	3.07282	1.001	

PAGE 2 of 3

Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-1392

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	per0210006a	10-FEB-10	22910.4				
Lower Area Limit			11455.2				
Upper Area Limit			45820.8				
245394012	per0210031a	10-FEB-10 20:11	23897.2	3.06	3.07283	1.004	
245394013	per0210032a	10-FEB-10 20:19	25200.1	3.07	3.0728	1.001	
245394014	per0210033a	10-FEB-10 20:27	23090.2	3.06	3.08528	1.008	
245394015	per0210034a	10-FEB-10 20:36	21767.5	3.06	3.0605	1	

SAMPLE DATA

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLCLab Code: GELInstrument: LCMSMSMethod: SW846 6850 ModifiedMatrix: SOILExtraction Batch ID: 247110Extraction Type: Solid Prep

Client Sample No.

RE15-10-7862Date Received: 23-JAN-10GEL Job No (SDG): 10-1392GEL Sample ID: 245394001Date Filtered: 08-FEB-10Injection Volume (uL): 20%Solids: 75Sample Volume/Weight: 2.00 gConcentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.664	2.66	0.664	ug/kg	U	1	10-FEB-10 18:03	per0210015a
	Perchlorate Isotope Ratio						1	10-FEB-10 18:03	per0210015a
14797-73-0	Perchlorate-101	.664	2.66	0.664	ug/kg	U	1	10-FEB-10 18:03	per0210015a
	Perchlorate-O(18)			6.36	ug/kg		1	10-FEB-10 18:03	per0210015a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The 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\per021010a.qld

Last Altered: Thursday, February 11, 2010 11:01:30 AM Eastern Standard Time
Printed: Thursday, February 11, 2010 11:13:00 AM Eastern Standard Time

Name: per0210015a

Date: 10-Feb-2010

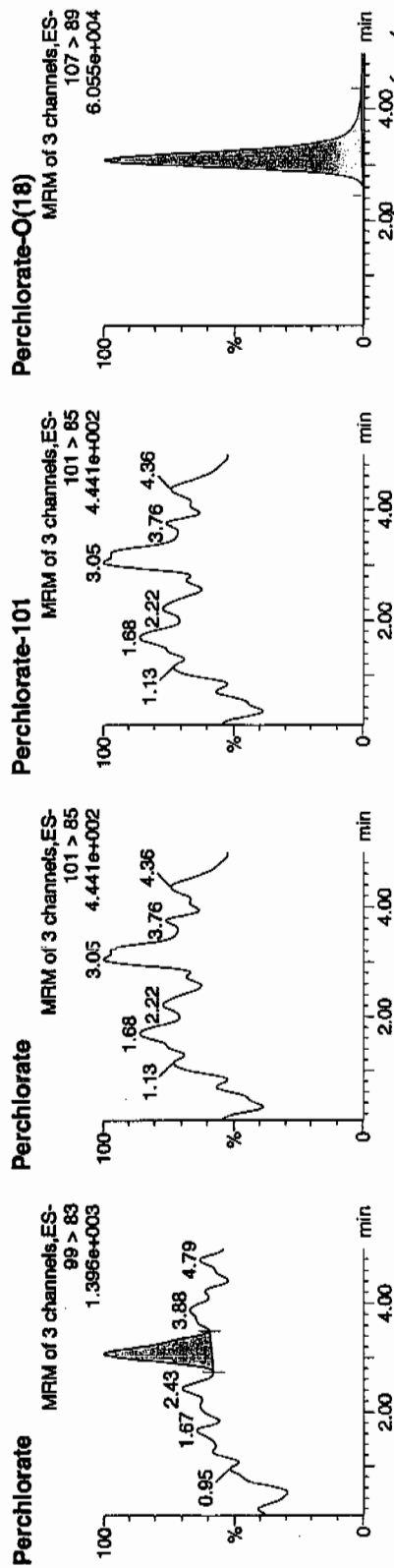
Time: 18:03:14

ID: 245394001

Vial: 1:3,D

02-12-10

LANL | 947112 | 5050 | 11



ID	Name	Trace	Area	RT	Response	Flags	Mod	Date	Mod	Time	ng/mL	%Rec	%Dev	S/N	Ion	Ratio
245394001	Perchlorate	99 > 83	3.07	198.608	198.608	bb					0.0037			11.751		0.00
245394001	Perchlorate-101	101 > 85														
245394001	Perchlorate-O(18)	107 > 89	3.09	21961.395	21961.395	bb					0.4787	95.74	-4.26	605.997		

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
Lab Code: GEL
Instrument: LCMSMS
Method: SW846 6850 Modified
Matrix: SOIL
Extraction Batch ID: 947110
Extraction Type: Solid Prep
Client Sample No. RE15-10-7874
Date Received: 23-JAN-10
GEL Job No (SDG): 10-1392
GEL Sample ID: 245394002
Date Filtered: 08-FEB-10
Injection Volume (uL): 20
%Solids: 95.9

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	.521	2.09	0.521	ug/kg	U	1	10-FEB-10 18:27	per0210018a
	Perchlorate Isotope Ratio						1	10-FEB-10 18:27	per0210018a
14797-73-0	Perchlorate-101	.521	2.09	0.521	ug/kg	U	1	10-FEB-10 18:27	per0210018a
	Perchlorate-O(18)			5.20	ug/kg		1	10-FEB-10 18:27	per0210018a

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

Dataset: C:\MassLynx\Perchlorate.PRO\per021010a.qld

Last Altered: Thursday, February 11, 2010 11:01:30 AM Eastern Standard Time
Printed: Thursday, February 11, 2010 11:13:00 AM Eastern Standard Time

Name: per0210018a

Date: 10-Feb-2010

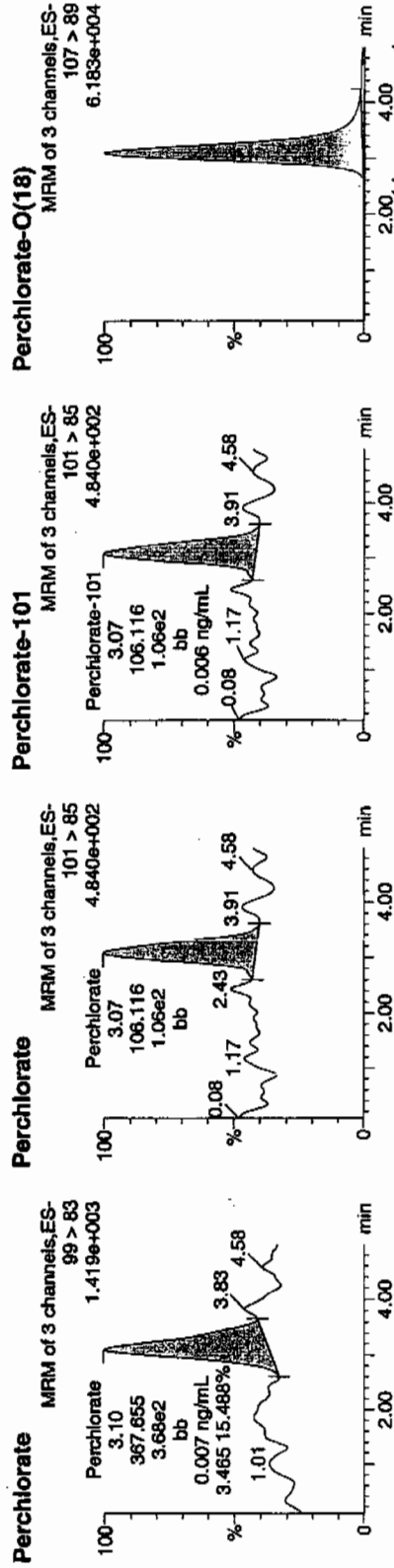
Time: 18:27:19

ID: 245394002

Trial: 1:4,A

02-12-10

LANC | 947112 | 50720 | 1 |



ID	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	Conc	% Rec	% Dev	SN	Ion Ratio
245394002	Perchlorate	99 > 83	3.10	367.655	367.655	bb			0.0068	31.977		3.46	
245394002	Perchlorate-101	101 > 85	3.07	106.116	106.116	bb			0.0061	8.721			
245394002	Perchlorate-O(18)	107 > 89	3.09	22875.986	22875.986	bb			0.4986	99.72	-0.28	2481.4...	

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLCLab Code: GELInstrument: LCMSMSMethod: SW846 6850 ModifiedMatrix: SOILExtraction Batch ID: 247110Extraction Type: Solid Prep

Client Sample No.

RE15-10-7871Date Received: 23-JAN-10GEL Job No (SDG): 10-1392GEL Sample ID: 245394003Date Filtered: 08-FEB-10Injection Volume (uL): 20%Solids: 89Sample Volume/Weight: 2.00 gConcentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.561	2.25	0.561	ug/kg	U	1	10-FEB-10 18:35	per0210019a
	Perchlorate Isotope Ratio						1	10-FEB-10 18:35	per0210019a
14797-73-0	Perchlorate-101	.561	2.25	0.561	ug/kg	U	1	10-FEB-10 18:35	per0210019a
	Perchlorate-O(18)			5.55	ug/kg		1	10-FEB-10 18:35	per0210019a

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

Dataset: C:\MassLynx\Perchlorate.PRO\per021010a.qld

Last Altered: Thursday, February 11, 2010 11:01:30 AM Eastern Standard Time
Printed: Thursday, February 11, 2010 11:13:00 AM Eastern Standard Time

Name: per0210019a

Date: 10-Feb-2010

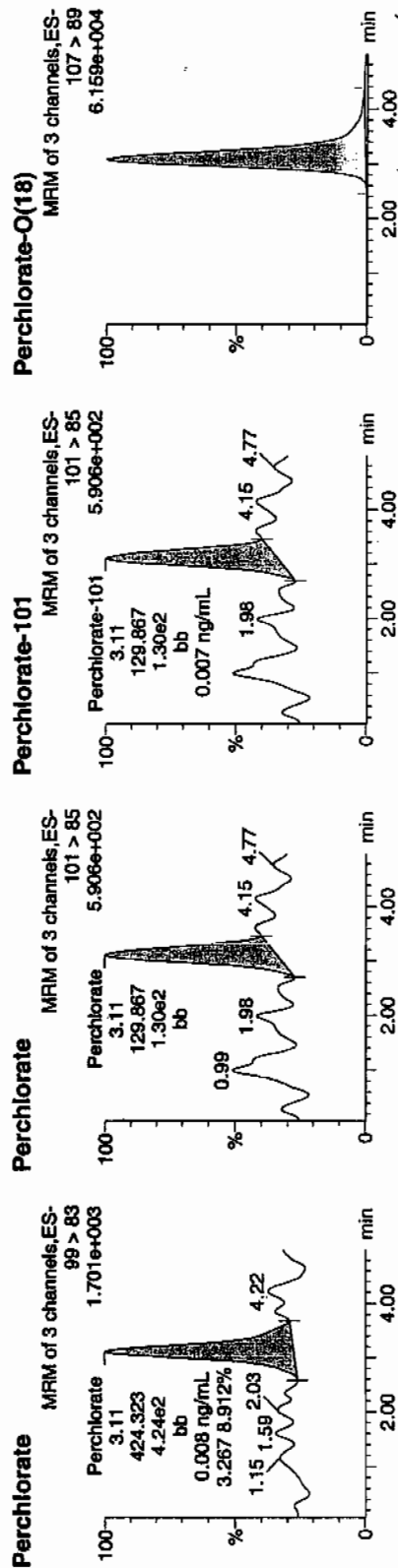
Time: 18:35:22

ID: 245394003

Vial: 1:4,B

02-12-10

LANC | 947112 | 5050 | 1 |



ID	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	File	% Day	S/N	Ion Ratio
245394003	Perchlorate	99 > 83	3.11	424.323	424.323	bb			0.0079	25.379	98.84	25.379	3.27
245394003	Perchlorate-101	101 > 85	3.11	129.867	129.867	bb			0.0075	30.373		30.373	
245394003	Perchlorate-O(18)	107 > 89	3.09	22672.691	22672.691	bb			0.4942	-1.16	1553.6...		

Lab Name: GEL Laboratories LLC

RE15-10-7872

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix:

Extraction Batch ID: 947110

Extraction Type: Solid Prep

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	.563	2.25	0.563	ug/kg	U	1	10-FEB-10 18:43	per0210020a
	Perchlorate Isotope Ratio						1	10-FEB-10 18:43	per0210020a
14797-73-0	Perchlorate-101	.563	2.25	0.563	ug/kg	U	1	10-FEB-10 18:43	per0210020a
	Perchlorate-O(18)			5.75	ug/kg		1	10-FEB-10 18:43	per0210020a

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

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

Dataset: C:\MassLynx\Perchlorate.PRO\per021010a.qld

Last Altered: Thursday, February 11, 2010 11:01:30 AM Eastern Standard Time
Printed: Thursday, February 11, 2010 11:13:00 AM Eastern Standard Time

Name: per0210020a

Date: 10-Feb-2010

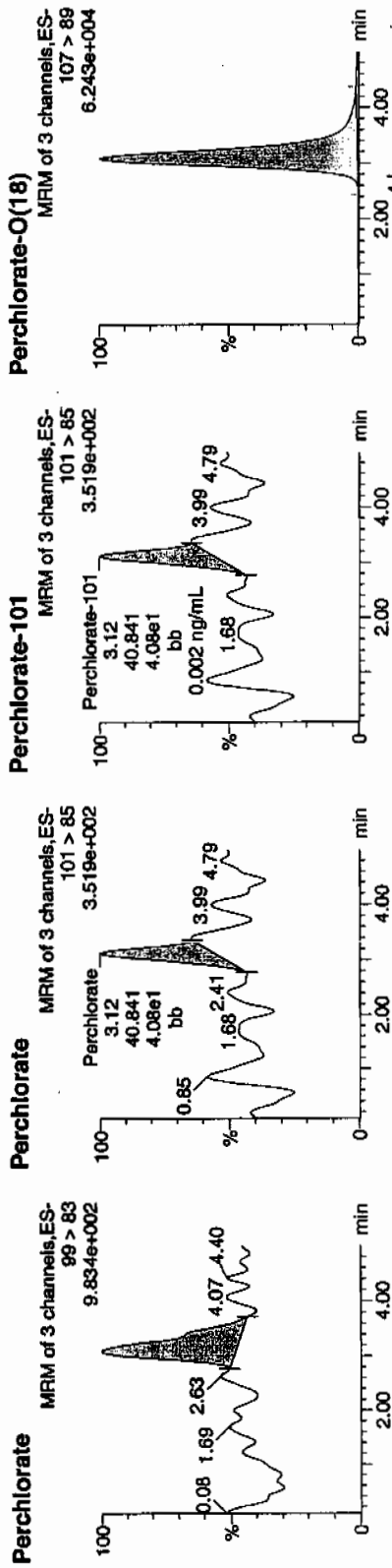
Time: 18:43:25

ID: 245394004

Vial: 1:4,C

02-12-10

12/20/10 11:12 | 5020 | 1



ID	Name	Trace	RT	Area	Response	Flags	Mod	Date	Time	Conc	Rec	%Dev	S/N	Off	Ratio
245394004	Perchlorate	99 > 83	3.09	219.278	219.278	bb				0.0041			10.733		5.37
245394004	Perchlorate-101	101 > 85	3.12	40.841	40.841	bb				0.0023			11.810		
245394004	Perchlorate-O(18)	107 > 89	3.09	23440.918	23440.918	bb				0.5109	102.19	✓	2.19	2617.6...	

0.0041
2.00500

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLCLab Code: GELInstrument: LCMSMSMethod: SW846 6850 ModifiedMatrix: SOILExtraction Batch ID: 247110Extraction Type: Solid Prep

Client Sample No.

RE15-10-7870Date Received: 23-JAN-10GEL Job No (SDG): 10-1392GEL Sample ID: 245394005Date Filtered: 08-FEB-10Injection Volume (uL): 20%Solids: 87Sample Volume/Weight: 2.00 gConcentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.575	2.3	0.575	ug/kg	U	1	10-FEB-10 18:51	per0210021a
	Perchlorate Isotope Ratio						1	10-FEB-10 18:51	per0210021a
14797-73-0	Perchlorate-101	.575	2.3	0.575	ug/kg	U	1	10-FEB-10 18:51	per0210021a
	Perchlorate-O(18)			5.78	ug/kg		1	10-FEB-10 18:51	per0210021a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1
Aliquot %Solids

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

Dataset: C:\MassLynx\Perchlorate.PRO\per021010a.qld

Last Altered: Thursday, February 11, 2010 11:01:30 AM Eastern Standard Time
Printed: Thursday, February 11, 2010 11:13:00 AM Eastern Standard Time

Name: per0210021a

Date: 10-Feb-2010

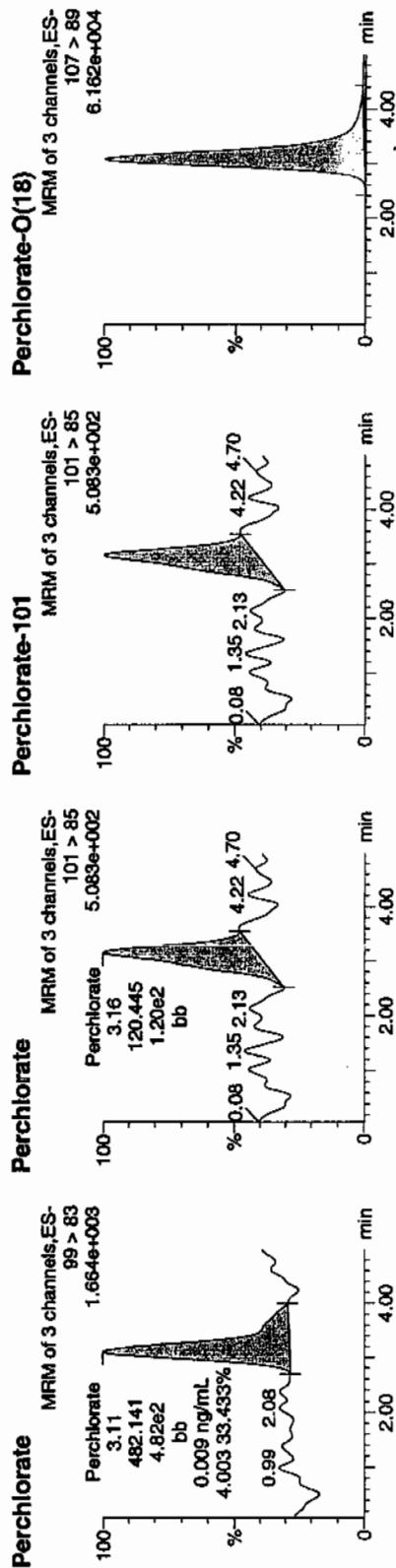
Time: 18:51:28

ID: 245394005

Yial: 1:4,D

02-12-10

1947112 | 5020 | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod	Date	Mod	Time	ng/mL	% Rec	% Dev	SN	Ion Ratio
245394005	Perchlorate	99 > 83	3.11	482.141	482.141	bb					0.0090	100.42		25.144	4.00
245394005	Perchlorate-101	101 > 85	3.16	120.445	120.445	bb					0.0069			12.324	
245394005	Perchlorate-O(18)	107 > 89	3.09	23034.951	23034.951	bb					0.5021			0.42	1410.1...

Perchlorate Analysis Data Sheet

Client Sample No.
RE15-10-7873

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Date Received: 23-JAN-10

Method: SW846 6850 Modified

GEL Job No (SDG): 10-1392

Matrix: SOIL

GEL Sample ID: 245394006

Extraction Batch ID: 247110

Date Filtered: 08-FEB-10

Extraction Type: Solid Prep

Injection Volume (uL): 20

Sample Volume/Weight: 2.00 g

%Solids: 87

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.572	2.29	0.572	ug/kg	U	1	10-FEB-10 19:23	per0210025a
	Perchlorate Isotope Ratio						1	10-FEB-10 19:23	per0210025a
14797-73-0	Perchlorate-101	.572	2.29	0.572	ug/kg	U	1	10-FEB-10 19:23	per0210025a
	Perchlorate-O(18)			5.88	ug/kg		1	10-FEB-10 19:23	per0210025a

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

Dataset: C:\MassLynx\Perchlorate.PRO\per021010a.qld

Last Altered: Thursday, February 11, 2010 11:01:30 AM Eastern Standard Time
Printed: Thursday, February 11, 2010 11:13:00 AM Eastern Standard Time

Name: per0210025a

Date: 10-Feb-2010

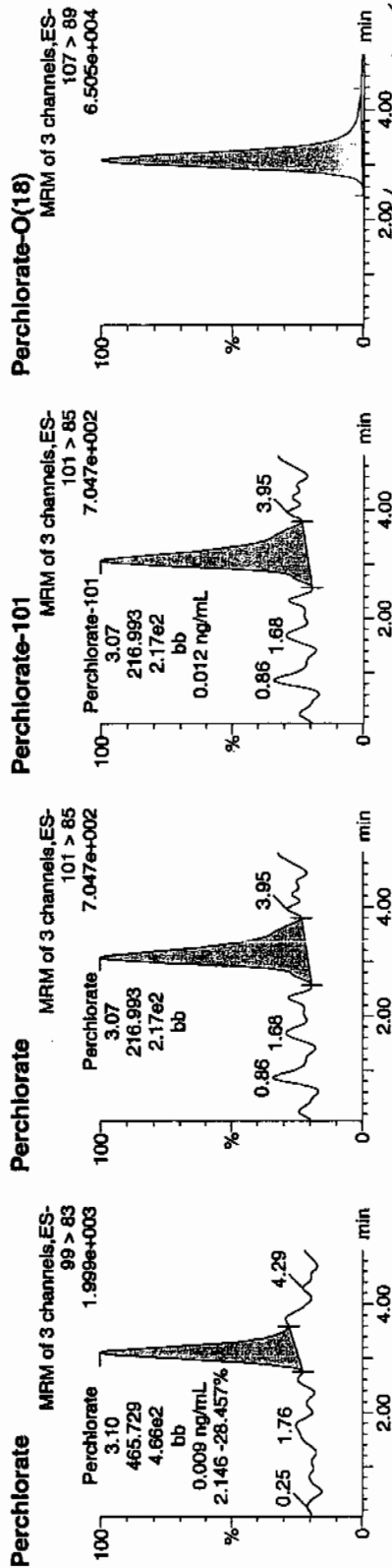
Time: 19:23:37

ID: 245394006

Vial: 1:4,E

02-12-02

19200947112 | 5000 | 1 |



ID	Name	Trace	RT	Area	Response	Flags	Mod Data	Mod Time	ng/mL	% Rec	% Dev	SN	Ion Ratio
245394006	Perchlorate	99 > 83	3.10	465.729	465.729	bb			0.0087				
245394006	Perchlorate-101	101 > 85	3.07	216.993	216.993	bb			0.0125				
245394006	Perchlorate-O(18)	107 > 89	3.09	23573.459	23573.459	bb			0.5138	102.76	2.76	3704.1...	

02-12-02
20.0500

Perchlorate Analysis Data Sheet

Client Sample No.

RE15-10-7911

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 247110

Extraction Type: Solid Prep

Date Received: 23-JAN-10

GEL Job No (SDG): 10-1392

GEL Sample ID: 245394007

Date Filtered: 08-FEB-10

Injection Volume (uL): 20

%Solids: 88

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.568	2.27	0.568	ug/kg	U	1	10-FEB-10 19:31	per0210026a
	Perchlorate Isotope Ratio						1	10-FEB-10 19:31	per0210026a
14797-73-0	Perchlorate-101	.568	2.27	0.568	ug/kg	U	1	10-FEB-10 19:31	per0210026a
	Perchlorate-O(18)			5.75	ug/kg		1	10-FEB-10 19:31	per0210026a

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

Dataset: C:\MassLynx\Perchlorate.PRO\per021010a.qld

Last Altered: Thursday, February 11, 2010 11:01:30 AM Eastern Standard Time
Printed: Thursday, February 11, 2010 11:13:00 AM Eastern Standard Time

Name: per0210026a

Date: 10-Feb-2010

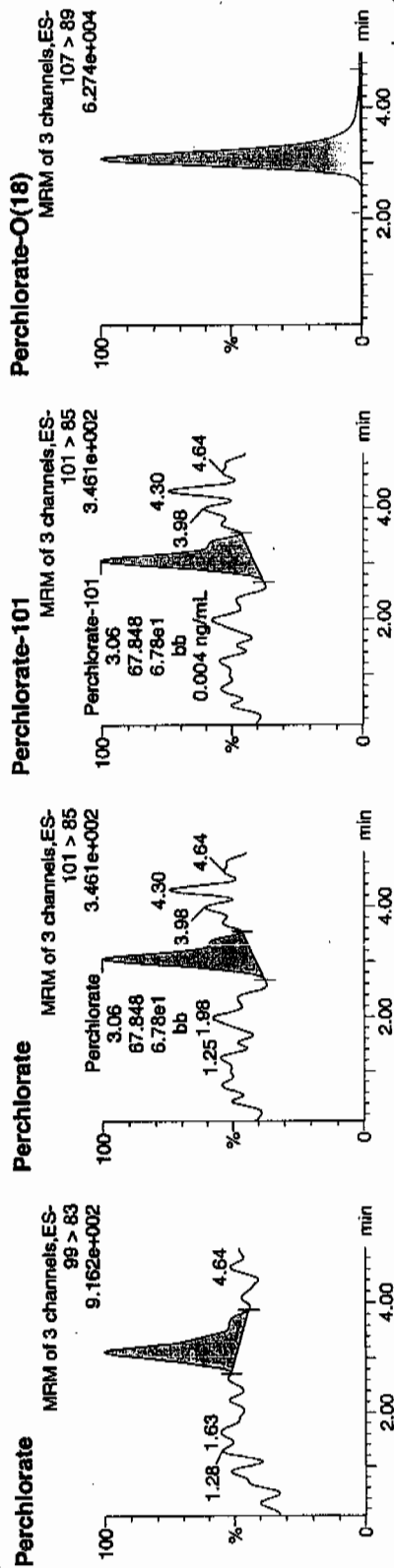
Time: 19:31:39

ID: 245394007

Vial: 1:4,F

02-12-10

12/20/10 5020/11



ID	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	REC	% Dev	SN	Ion Ratio
245394007	Perchlorate	99 > 83	3.12	188.736	188.736	bb			0.0035			22.255	2.78
245394007	Perchlorate-101	101 > 85	3.06	67.848	67.848	bb			0.0039			12.818	
245394007	Perchlorate-O(18)	107 > 89	3.09	23208.303	23208.303	bb			0.5059	101.17	1.17	1796.0...	

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLCLab Code: GELInstrument: LCMSMSMethod: SW846 6850 ModifiedMatrix: SOILExtraction Batch ID: 247110Extraction Type: Solid Prep

Client Sample No.

RE15-10-7908Date Received: 23-JAN-10GEL Job No (SDG): 10-1392GEL Sample ID: 245394008Date Filtered: 08-FEB-10Injection Volume (uL): 20%Solids: 91.9Sample Volume/Weight: 2.00 gConcentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.544	2.18	0.544	ug/kg	U	1	10-FEB-10 19:39	per0210027a
	Perchlorate Isotope Ratio						1	10-FEB-10 19:39	per0210027a
14797-73-0	Perchlorate-101	.544	2.18	0.544	ug/kg	U	1	10-FEB-10 19:39	per0210027a
	Perchlorate-O(18)			5.42	ug/kg		1	10-FEB-10 19:39	per0210027a

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

Dataset: C:\MassLynx\Perchlorate.PRO\per021010a.qld

Last Altered: Thursday, February 11, 2010 11:01:30 AM Eastern Standard Time
Printed: Thursday, February 11, 2010 11:13:00 AM Eastern Standard Time

Name: per0210027a

Date: 10-Feb-2010

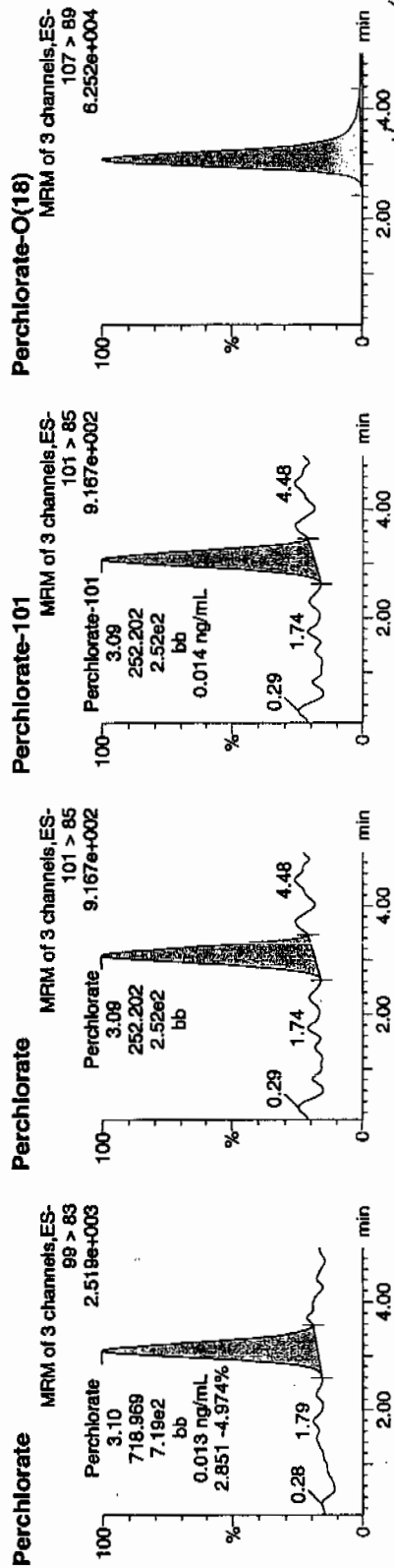
Time: 19:39:41

ID: 245394008

Vial: 1:5,A

02-12-10

12/11/2010



ID	Name	Trace	RT	Area	Response	Flags	Mod	Date	Mod	Time	ng/mL	% Rec	SN	Ion	Ratio
245394008	Perchlorate	99 > 83	3.10	718.969	718.969	bb					0.0134	99.749	2.85		
245394008	Perchlorate-101	101 > 85	3.09	252.202	252.202	bb					0.0145	63.264			
245394008	Perchlorate-O(18)	107 > 89	3.07	22843.598	22843.598	bb					0.4979	99.58	-0.42	2268.6...	

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLCLab Code: GELInstrument: LCMSMSMethod: SW846 6850 ModifiedMatrix: SOILExtraction Batch ID: 947110Extraction Type: Solid Prep

Client Sample No.

RE15-10-7912Date Received: 23-JAN-10GEL Job No (SDG): 10-1392GEL Sample ID: 245394009Date Filtered: 08-FEB-10Injection Volume (uL): 20%Solids: 87Sample Volume/Weight: 2.00 gConcentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.578	2.31	0.578	ug/kg	U	1	10-FEB-10 19:47	per0210028a
	Perchlorate Isotope Ratio						1	10-FEB-10 19:47	per0210028a
14797-73-0	Perchlorate-101	.578	2.31	0.578	ug/kg	U	1	10-FEB-10 19:47	per0210028a
	Perchlorate-O(18)			5.99	ug/kg		1	10-FEB-10 19:47	per0210028a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The 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\per021010a.qld

Last Altered: Thursday, February 11, 2010 11:01:30 AM Eastern Standard Time
Printed: Thursday, February 11, 2010 11:13:00 AM Eastern Standard Time

Name: per0210028a

Date: 10-Feb-2010

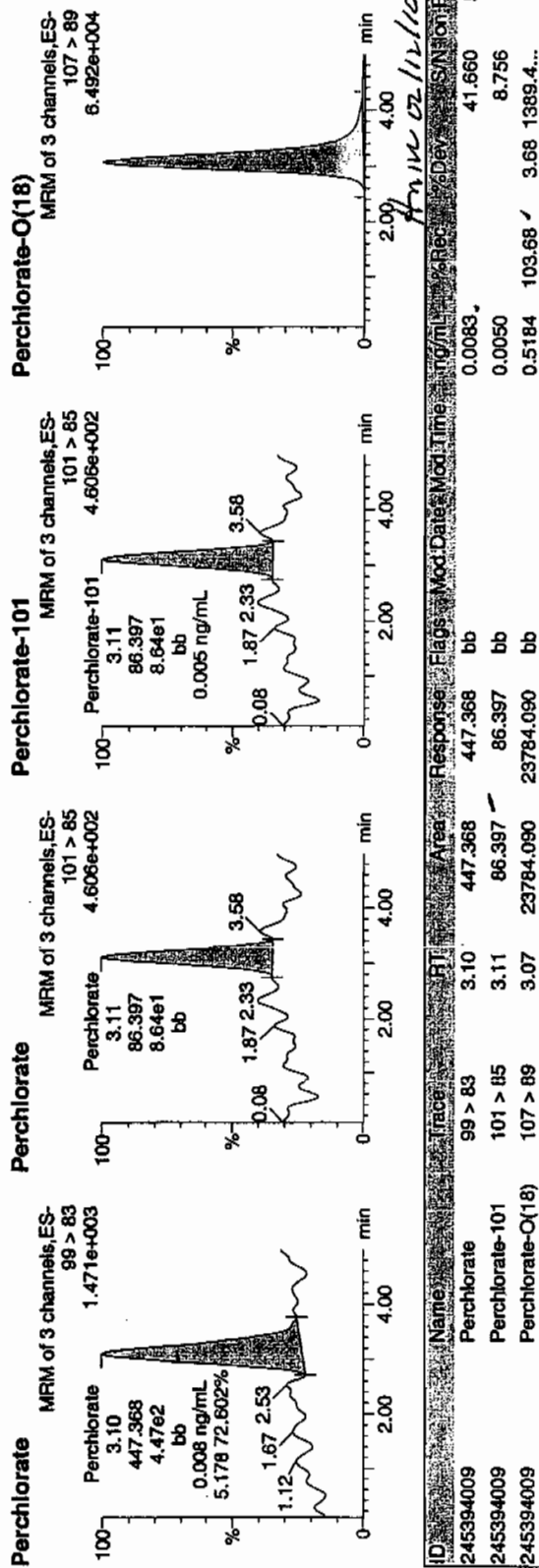
Time: 19:47:45

ID: 245394009

Vial: 1:5,B

02-12-10

12/12/10



Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLCLab Code: GELInstrument: LCMSMSMethod: SW846 6850 ModifiedMatrix: SOILExtraction Batch ID: 947110Extraction Type: Solid Prep

Client Sample No.

RE15-10-7906Date Received: 23-JAN-10GEL Job No (SDG): 10-1392GEL Sample ID: 245394010Date Filtered: 08-FEB-10Injection Volume (uL): 20%Solids: 90Sample Volume/Weight: 2.00 gConcentrated 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	0.555	ug/kg	U	1	10-FEB-10 19:55	per0210029a
	Perchlorate Isotope Ratio						1	10-FEB-10 19:55	per0210029a
14797-73-0	Perchlorate-101	.555	2.22	0.555	ug/kg	U	1	10-FEB-10 19:55	per0210029a
	Perchlorate-O(18)			5.51	ug/kg		1	10-FEB-10 19:55	per0210029a

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

*Concentration =

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

Dataset: C:\MassLynx\Perchlorate.PRO\per021010a.qld

Last Altered: Thursday, February 11, 2010 11:01:30 AM Eastern Standard Time
Printed: Thursday, February 11, 2010 11:13:00 AM Eastern Standard Time

Name: per0210029a

Date: 10-Feb-2010

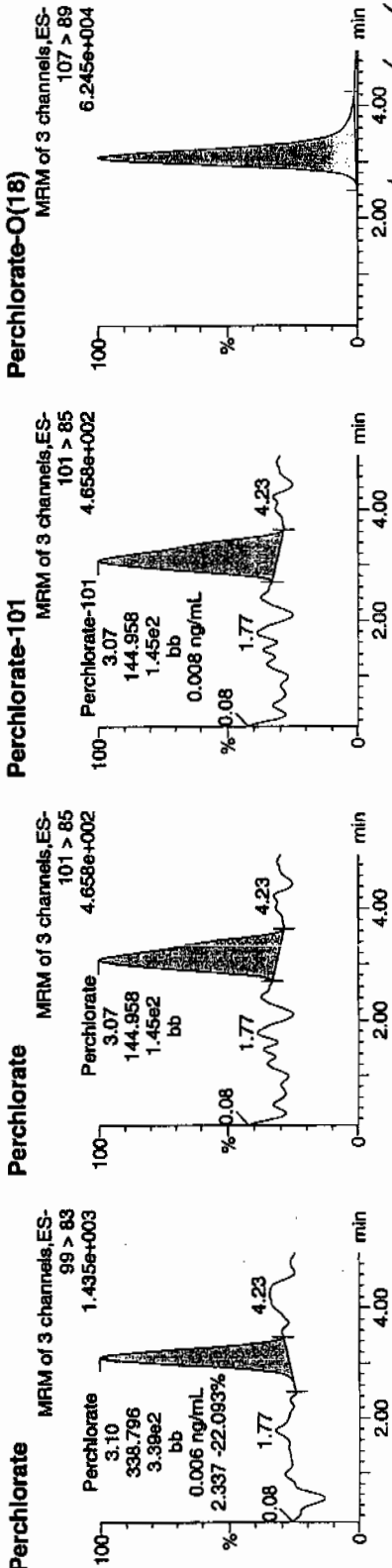
Time: 19:55:48

ID: 245394010

Vial: 1:5,C

02-12-10

1222 | 947112 | 5025 | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod	Date	Mod	Time	ng/mL	Rec	%Dev	SN	Ion	Ratio
245394010	Perchlorate	99 > 83	3.10	338.796	338.796	bb					0.0063			38.577	2.34	
245394010	Perchlorate-101	101 > 85	3.07	144.958	144.958	bb					0.0083			38.220		
245394010	Perchlorate-O(18)	107 > 89	3.09	22771.865	22771.865	bb					0.4963		99.27	-0.73	323.285	

Perchlorate Analysis Data Sheet

Client Sample No.
RE15-10-7905Lab Name: GEL Laboratories LLCLab Code: GELInstrument: LCMSMSDate Received: 23-JAN-10Method: SW846 6850 ModifiedGEL Job No (SDG): 10-1392Matrix: SOILGEL Sample ID: 245394011Extraction Batch ID: 247110Date Filtered: 08-FEB-10Extraction Type: Solid PrepInjection Volume (uL): 20Sample Volume/Weight: 2.00 g%Solids: 78Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.639	2.56	0.639	ug/kg	U	1	10-FEB-10 20:03	per0210030a
	Perchlorate Isotope Ratio						1	10-FEB-10 20:03	per0210030a
14797-73-0	Perchlorate-101	.639	2.56	0.639	ug/kg	U	1	10-FEB-10 20:03	per0210030a
	Perchlorate-O(18)			6.51	ug/kg		1	10-FEB-10 20:03	per0210030a

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

Dataset: C:\MassLynx\Perchlorate.PRO\per021010a.qld

Last Altered: Thursday, February 11, 2010 11:01:30 AM Eastern Standard Time
Printed: Thursday, February 11, 2010 11:13:00 AM Eastern Standard Time

Name: per0210030a

Date: 10-Feb-2010

Time: 20:03:51

ID: 245394011

Vial: 1:5,D

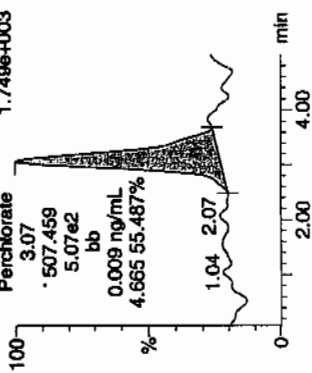
02-12-10

162001947112 / 5025 / 11

Perchlorate

MRM of 3 channels, ES-

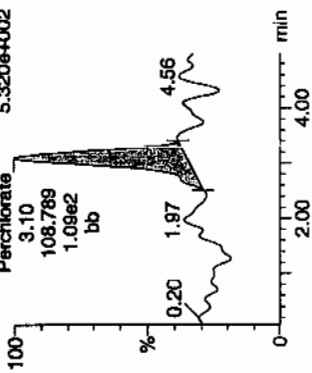
99 > 83



Perchlorate

MRM of 3 channels, ES-

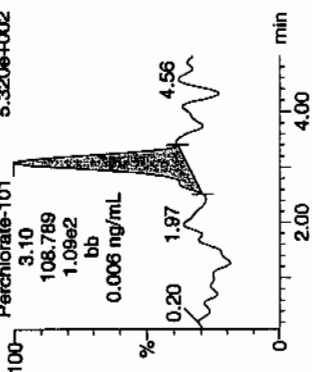
101 > 85



Perchlorate-101

MRM of 3 channels, ES-

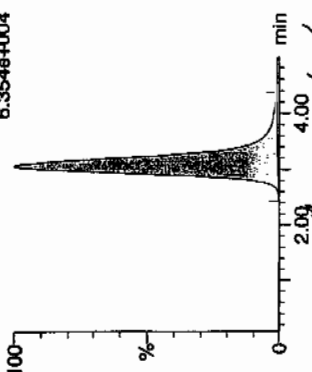
101 > 85



Perchlorate-O(18)

MRM of 3 channels, ES-

107 > 89



ID	Name	Trace	RI	Area	Response	Flags	Mod	Date	Mod	Time	ng/mL	%Dev	S/N	Ion Ratio
245394011	Perchlorate	99 > 83	3.07	507.459	507.459	bb					0.0094	0.0094	60.205	4.68
245394011	Perchlorate-101	101 > 85	3.10	108.789	108.789	bb					0.0062	0.0062	19.987	
245394011	Perchlorate-O(18)	107 > 89	3.07	23340.898	23340.898	bb					0.5087	101.75	1.75	1866.0...

0.594
20.0000

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 247110

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-7907

Date Received: 23-JAN-10

GEL Job No (SDG): 10-1392

GEL Sample ID: 245394012

Date Filtered: 08-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	.618	2.47	0.618	ug/kg	U	1	10-FEB-10 20:11	per0210031a
	Perchlorate Isotope Ratio						1	10-FEB-10 20:11	per0210031a
14797-73-0	Perchlorate-101	.618	2.47	0.618	ug/kg	U	1	10-FEB-10 20:11	per0210031a
	Perchlorate-O(18)			6.44	ug/kg		1	10-FEB-10 20:11	per0210031a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.

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

Dataset: C:\MassLynx\Perchlorate.PRO\per021010a.qld

Last Altered: Thursday, February 11, 2010 11:01:30 AM Eastern Standard Time
Printed: Thursday, February 11, 2010 11:13:00 AM Eastern Standard Time

Name: per0210031a

Date: 10-Feb-2010

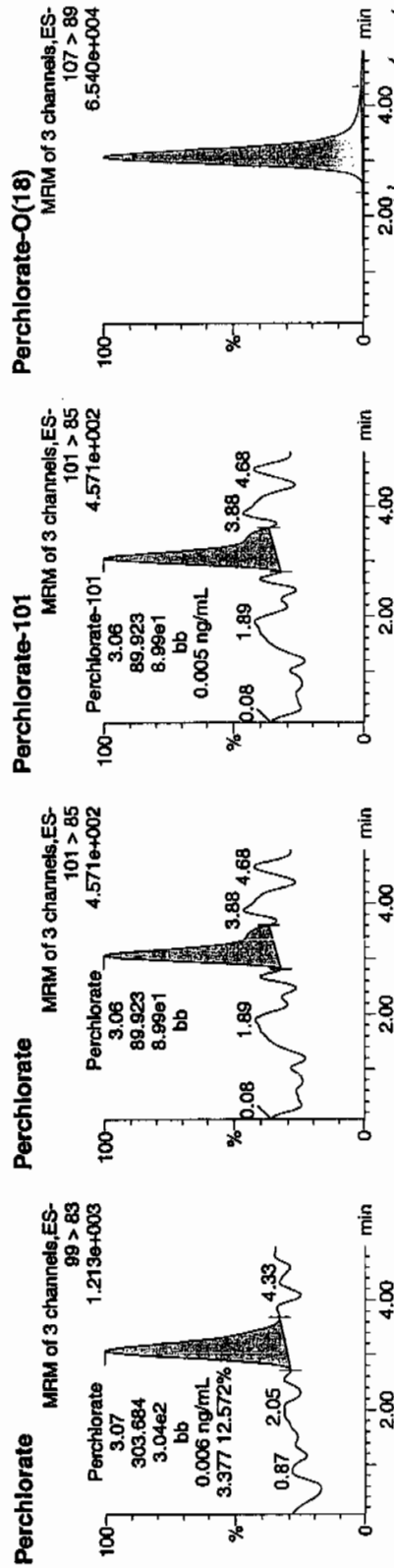
Time: 20:11:54

ID: 245394012

Vial: 1:5,E

1947112 | 5020 | 11

02-12-10



ID	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	%Effect	%Dev	SN	on Ratio
245394012	Perchlorate	99 > 83	3.07	303.684	303.684	bb			0.0057			46.416	3.38
245394012	Perchlorate-101	101 > 85	3.06	89.923	89.923	bb			0.0052			22.979	
245394012	Perchlorate-O(18)	107 > 89	3.06	23897.186	23897.186	bb			0.5209	104.17	4.17	1938.2...	

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLCLab Code: GELInstrument: LCMSMSMethod: SW846 6850 ModifiedMatrix: SOILExtraction Batch ID: 247110Extraction Type: Solid Prep

Client Sample No.

RE15-10-7913Date Received: 23-JAN-10GEL Job No (SDG): 10-1392GEL Sample ID: 245394013Date Filtered: 08-FEB-10Injection Volume (uL): 20%Solids: 79Sample Volume/Weight: 2.00 gConcentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.635	2.54	0.635	ug/kg	U	1	10-FEB-10 20:19	per0210032a
	Perchlorate Isotope Ratio						1	10-FEB-10 20:19	per0210032a
14797-73-0	Perchlorate-101	.635	2.54	0.635	ug/kg	U	1	10-FEB-10 20:19	per0210032a
	Perchlorate-O(18)			6.98	ug/kg		1	10-FEB-10 20:19	per0210032a

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

Dataset: C:\MassLynx\Perchlorate.PRO\per021010a.qld

Last Altered: Thursday, February 11, 2010 11:01:30 AM Eastern Standard Time
Printed: Thursday, February 11, 2010 11:13:00 AM Eastern Standard Time

Name: per0210032a

Date: 10-Feb-2010

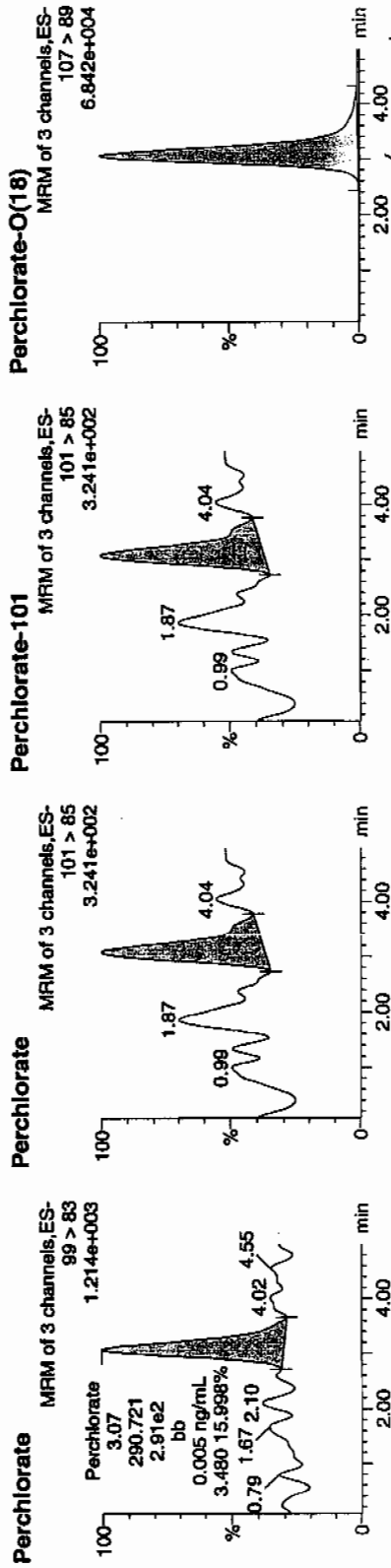
Time: 20:19:57

ID: 245394013

Val: 1:5,F

62-12-10

LANC | 947112 | 5020 | 11



ID	Name	Trace	RT	Area	Response	Flags	ModDate	ModTime	ng/mL	%	Day	IS	Ion Ratio
245394013	Perchlorate	99 > 83	3.07	290.721	290.721	bb			0.0054	18.349		3.48	
245394013	Perchlorate-101	101 > 85	3.09	83.542	83.542	bb			0.0048	15.662			
245394013	Perchlorate-O(18)	107 > 89	3.07	25200.072	25200.072	bb			0.5493	109.85		9.85	3459.2...

Perchlorate Analysis Data Sheet

Client Sample No.

RE15-10-7909

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Date Received: 23-JAN-10

Method: SW846 6850 Modified

GEL Job No (SDG): 10-1392

Matrix: SOIL

GEL Sample ID: 245394014

Extraction Batch ID: 247110

Date Filtered: 08-FEB-10

Extraction Type: Solid Prep

Injection Volume (uL): 20

%Solids: 84

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	.594	2.37	0.594	ug/kg	U	1	10-FEB-10 20:27	per0210033a
	Perchlorate Isotope Ratio						1	10-FEB-10 20:27	per0210033a
14797-73-0	Perchlorate-101	.594	2.37	0.594	ug/kg	U	1	10-FEB-10 20:27	per0210033a
	Perchlorate-O(18)			5.97	ug/kg		1	10-FEB-10 20:27	per0210033a

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

Dataset: C:\MassLynx\Perchlorate.PRO\per021010a.qld

Last Altered: Thursday, February 11, 2010 11:01:30 AM Eastern Standard Time
Printed: Thursday, February 11, 2010 11:13:00 AM Eastern Standard Time

Name: per0210033a

Date: 10-Feb-2010

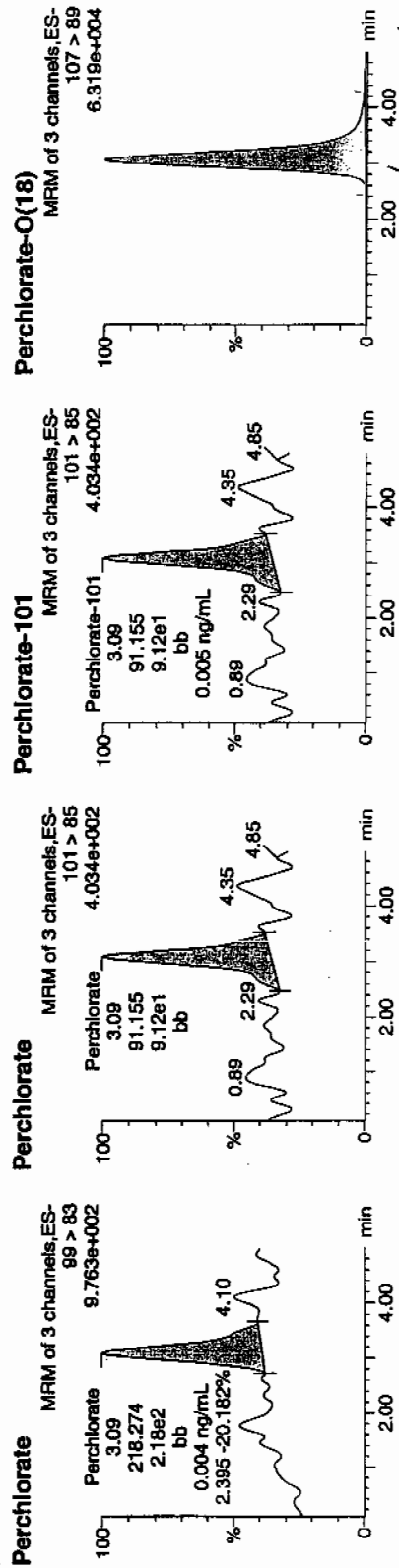
Time: 20:27:58

ID: 245394014

Vial: 1:6,A

02-12-10

LANC | 947112 | 3000 | 11



ID	Name	Area	RT	Response	Flags	Mod Date	Mod Time	ng/mL	% Rec	Day	SN	Ion Ratio
245394014	Perchlorate	99 > 83	3.09	218.274	bb			0.0041	0.0041	21.054	2.39	
245394014	Perchlorate-101	101 > 85	3.09	91.155	bb			0.0052	0.0052	20.549		
245394014	Perchlorate-O(18)	107 > 89	3.06	23090.160	bb			0.5033	100.66	0.66	1795.2...	

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLCLab Code: GELInstrument: LCMSMSMethod: SW846 6850 ModifiedMatrix: SOILExtraction Batch ID: 247110Extraction Type: Solid Prep

Client Sample No.

RE15-10-7910Date Received: 23-JAN-10GEL Job No (SDG): 10-1392GEL Sample ID: 245394015Date Filtered: 08-FEB-10Injection Volume (uL): 20%Solids: 90.1Sample Volume/Weight: 2.00 gConcentrated 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	0.555	ug/kg	U	1	10-FEB-10 20:36	per0210034a
	Perchlorate Isotope Ratio						1	10-FEB-10 20:36	per0210034a
14797-73-0	Perchlorate-101	.555	2.22	0.555	ug/kg	U	1	10-FEB-10 20:36	per0210034a
	Perchlorate-O(18)			5.27	ug/kg		1	10-FEB-10 20:36	per0210034a

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

Dataset: C:\MassLynx\Perchlorate.PRO\per021010a.qld

Last Altered: Thursday, February 11, 2010 11:01:30 AM Eastern Standard Time
 Printed: Thursday, February 11, 2010 11:13:00 AM Eastern Standard Time

Name: per0210034a

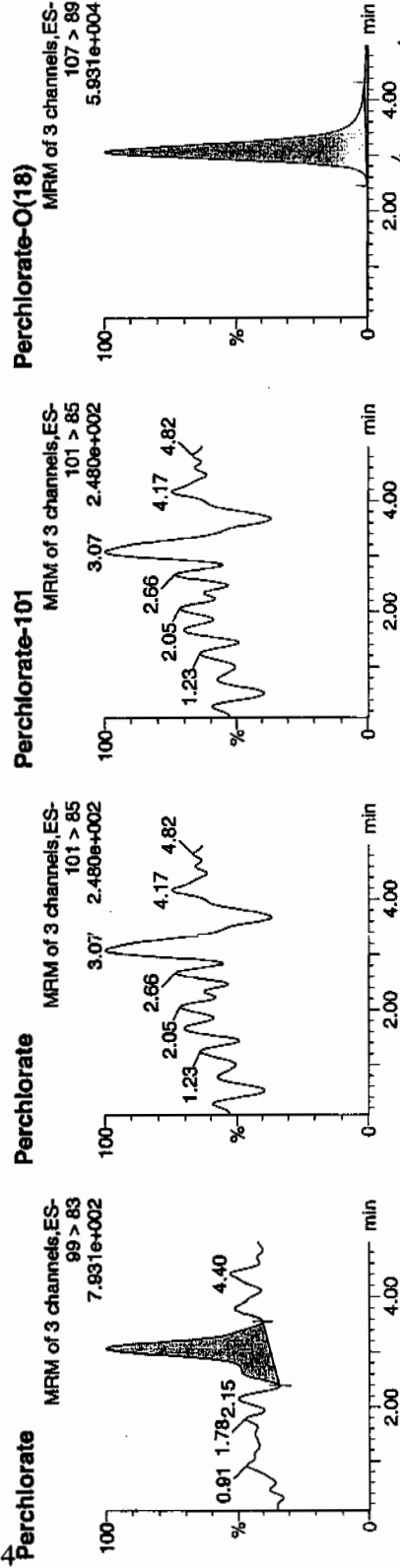
Date: 10-Feb-2010

Time: 20:36:02

ID: 245394015

Vial: 1:6,B

1122-12-10 12/12/10



ID	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	% Rec	% Dev	SN	Ratio
245394015	Perchlorate	99 > 83	3.06	206.048	206.048	bb			0.0038				
245394015	Perchlorate-101	101 > 85											
245394015	Perchlorate-O(18)	107 > 89	3.06	21767.479	21767.479	bb			0.4745	94.89	-5.11	2452.0...	

STANDARDS DATA

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-1392Lab Code: GELInstrument ID: LCMSMS Date Analyzed: 10-FEB-10HPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

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

Parmname Perchlorate

Coefficient of Determination:

Calibration Curve: 53724.06Response Type: External StandardCurve Type: RF

Perchlorate Initial Calibration

Lab Name: General Engineering LaboratoriesGEL Job No.(SDG): 10-1392Lab Code: GELInstrument ID: LCMSMS Date Analyzed: 10-FEB-10HPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

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

Parmname Perchlorate-101

Coefficient of Determination:

Calibration Curve: 17421.06External Standard

Response Type:

Curve Type: RF

Dataset: C:\MassLynx\Perchlorate.PRO\per021010a.qld

Last Altered: Thursday, February 11, 2010 11:01:30 AM Eastern Standard Time

Printed: Thursday, February 11, 2010 11:13:00 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per021010a.mdb 11 Feb 2010 11:00:00
 Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per021010a.cdb 11 Feb 2010 11:01:28

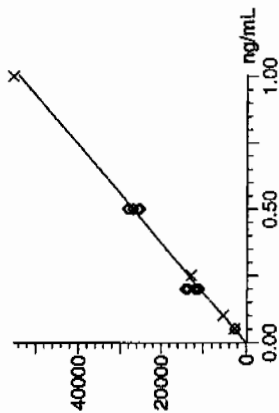
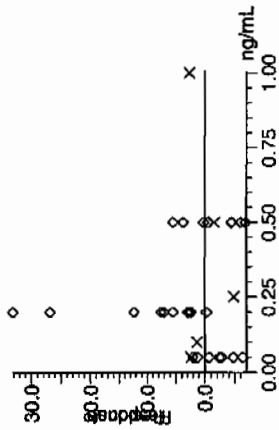
Compound name: Perchlorate

Response Factor: 53724.1

RRF SD: 1687.83, % Relative SD: 3.14166

Response type: External Std, Area

Curve type: RF



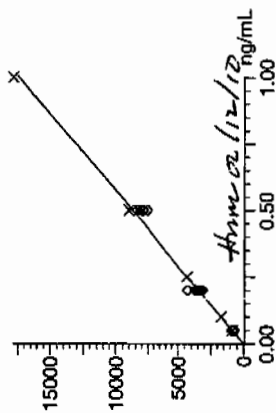
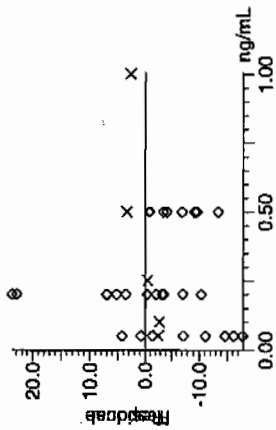
Compound name: Perchlorate-101

Response Factor: 17421.1

RRF SD: 498.485, % Relative SD: 2.86139

Response type: External Std, Area

Curve type: RF



Dataset: C:\MassLynx\Perchlorate.PRO\per021010a.qld

Last Altered: Thursday, February 11, 2010 11:01:30 AM Eastern Standard Time
Printed: Thursday, February 11, 2010 11:13:00 AM Eastern Standard Time

Compound name: Perchlorate-O(18)

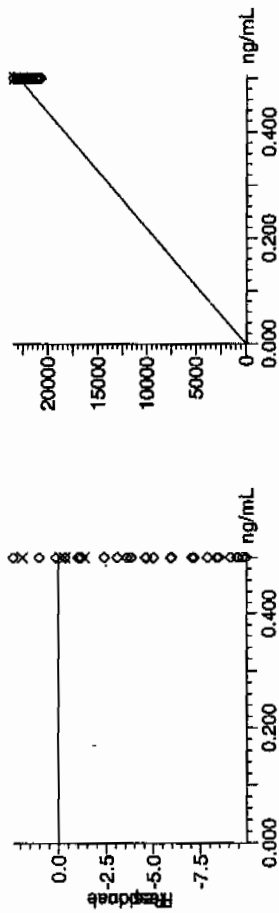
Response Factor: 45879.1

RRF SD: 538.911, % Relative SD: 1.17463

Response type: External Std, Area

Curve type: RF

1574



Perchlorate Initial Calibration Verification

Lab Name: General Engineering LaboratoriesGEL Job No.(SDG): 10-1392Lab Code: GELReporting Units: ug/kg

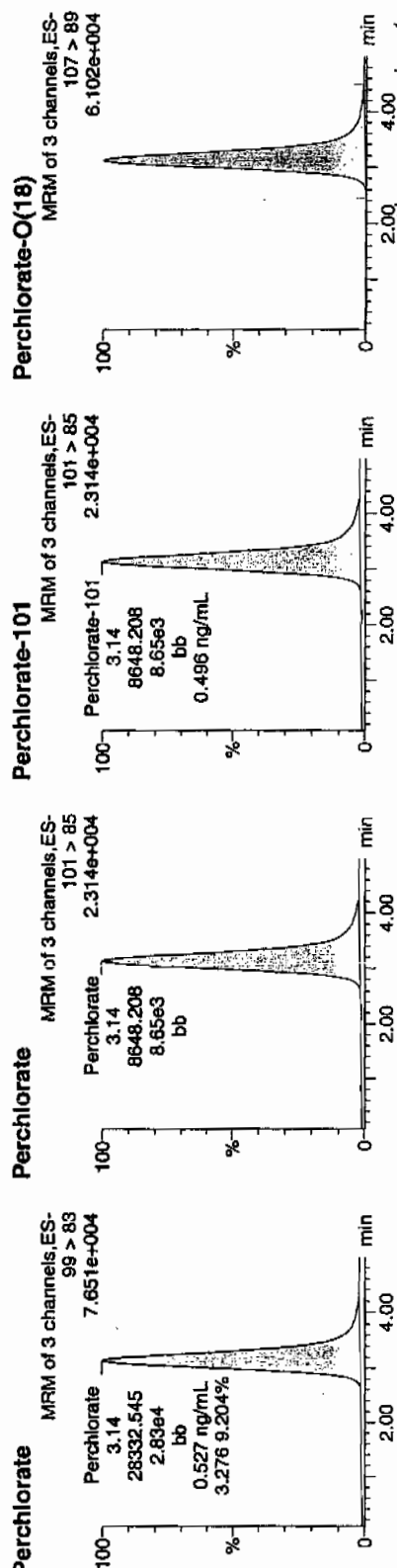
Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.53	105.47	10-FEB-10 17:14	per0210009a
Perchlorate Isotope Ratio		3.28		10-FEB-10 17:14	per0210009a
Perchlorate-101	.5	.5	99.28	10-FEB-10 17:14	per0210009a

Dataset: C:\MassLynx\Perchlorate.PRO\per021010a.qld

Last Altered: Thursday, February 11, 2010 11:01:30 AM Eastern Standard Time
Printed: Thursday, February 11, 2010 11:13:00 AM Eastern Standard Time

Name: per0210009a
Date: 10-Feb-2010
Time: 17:14:57
ID: WCL100128-06ICV
Vial: 1:2,A

Pass
WCL
02-12-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100128-06ICV	Perchlorate	99 > 83	3.14	28332.545	28332.545	bb			0.5274	105.47	5.47	2177.6...	3.28
WCL100128-06ICV	Perchlorate-101	101 > 85	3.14	8648.208	8648.208	bb			0.4964	99.28	-0.72	903.296	
WCL100128-06ICV	Perchlorate-O(18)	107 > 89	3.12	22706.332	22706.332	bb			0.4949	98.98	-1.02	2076.4...	

Perchlorate Continuing Calibration Verification

Lab Name: General Engineering LaboratoriesGEL Job No.(SDG): 10-1392Lab Code: GELReporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.5	99.49	10-FEB-10 18:59	per0210022a
Perchlorate Isotope Ratio		3.18		10-FEB-10 18:59	per0210022a
Perchlorate-101	.5	.48	96.44	10-FEB-10 18:59	per0210022a
Perchlorate	.5	.52	103.75	10-FEB-10 20:44	per0210035a
Perchlorate Isotope Ratio		3.23		10-FEB-10 20:44	per0210035a
Perchlorate-101	.5	.49	98.98	10-FEB-10 20:44	per0210035a

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021010a.qld

Last Altered: Thursday, February 11, 2010 11:01:30 AM Eastern Standard Time
 Printed: Thursday, February 11, 2010 11:13:00 AM Eastern Standard Time

Page Name: per0210022a

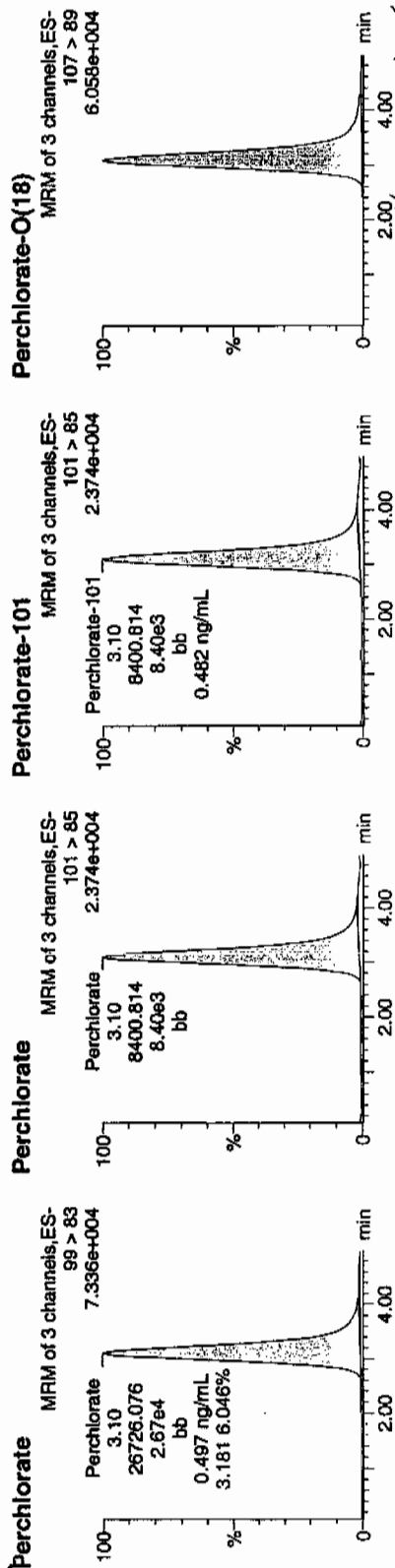
Date: 10-Feb-2010

Time: 18:59:30

ID: WCL100128-06CCV

Vial: 1:2,A

Pure
 CWS
 02-12-10



ID	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100128-06CCV	Perchlorate	99 > 83	3.10	26726.076	26726.076	bb			0.4975	99.49	-0.51	620.949	3.18
WCL100128-06CCV	Perchlorate-101	101 > 85	3.10	8400.814	8400.814	bb			0.4822	96.44	-3.56	194.969	
WCL100128-06CCV	Perchlorate-O(18)	107 > 89	3.09	22664.828	22664.828	bb			0.4940	98.80	-1.20	2047.2...	

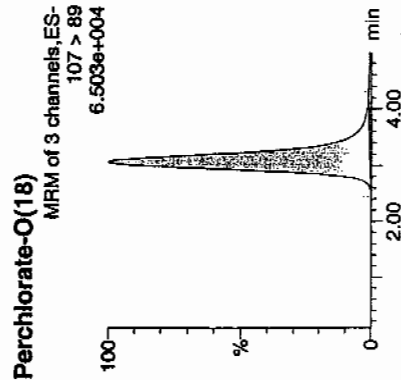
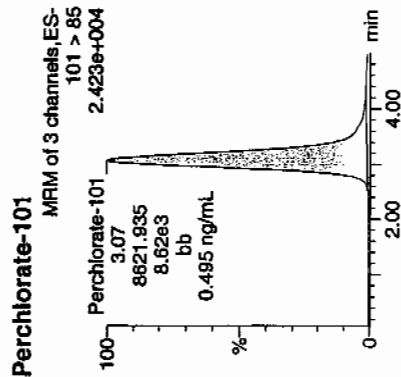
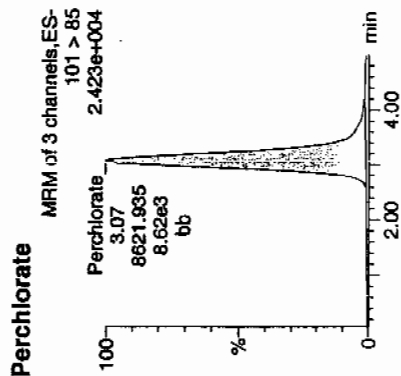
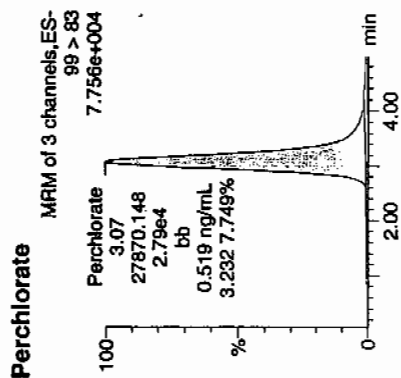
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021010a.qld

Last Altered: Thursday, February 11, 2010 11:01:30 AM Eastern Standard Time
Printed: Thursday, February 11, 2010 11:13:00 AM Eastern Standard Time

Name: per0210035a
Date: 10-Feb-2010
Time: 20:44:06
ID: WCL100128-06CCV
Vial: 1:2,A

Pass
WCL
02-12-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	IS/N	Ion Ratio
WCL100128-06CCV	Perchlorate	99 > 83	3.07	27870.148	27870.148	bb			0.5188	103.75	3.75	3243.6...	3.23
WCL100128-06CCV	Perchlorate-101	101 > 85	3.07	8621.935	8621.935	bb			0.4949	98.98	-1.02	1297.8...	
WCL100128-06CCV	Perchlorate-O(18)	107 > 89	3.06	23169.701	23169.701	bb			0.5050	101.00	1.00	2372.9...	

Perchlorate MDL Verification

Lab Name: General Engineering LaboratoriesGEL Job No.(SDG): 10-1392Lab Code: GELReporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.05	.05	97.23	10-FEB-10 17:31	per0210011a
Perchlorate Isotope Ratio		2.88		10-FEB-10 17:31	per0210011a
Perchlorate-101	.05	.05	104.27	10-FEB-10 17:31	per0210011a
Perchlorate	.05	.05	101.19	10-FEB-10 19:15	per0210024a
Perchlorate Isotope Ratio		3.1		10-FEB-10 19:15	per0210024a
Perchlorate-101	.05	.05	100.82	10-FEB-10 19:15	per0210024a
Perchlorate	.05	.05	99.29	10-FEB-10 21:00	per0210037a
Perchlorate Isotope Ratio		3.3		10-FEB-10 21:00	per0210037a
Perchlorate-101	.05	.05	92.76	10-FEB-10 21:00	per0210037a

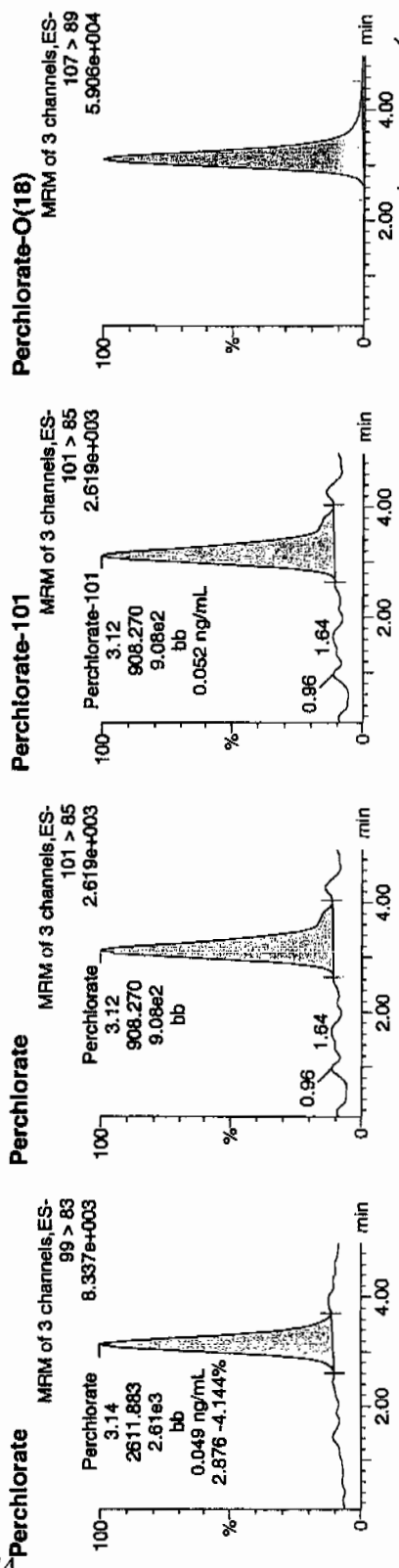
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021010a.qld

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Printed: Thursday, February 11, 2010 11:13:00 AM Eastern Standard Time

Name: per0210011a
Date: 10-Feb-2010
Time: 17:31:02
ID: WCL100128-07CRI
Vial: 1:2,B

02-11-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN	Ratio
WCL100128-07CRI	Perchlorate	99 > 83	3.14	2611.883	2611.883	bb			0.0486	97.23	-2.77	154.089	2.88
WCL100128-07CRI	Perchlorate-101	101 > 85	3.12	908.270	908.270	bb			0.0521	104.27	4.27	79.164	
WCL100128-07CRI	Perchlorate-O(18)	107 > 89	3.11	22062.371	22062.371	bb			0.4809	96.18	-3.82	3185.1...	

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

Dataset: C:\MassLynx\Perchlorate.PRO\per021010a.qld

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Printed: Thursday, February 11, 2010 11:13:00 AM Eastern Standard Time

Name: per0210024a

Date: 10-Feb-2010

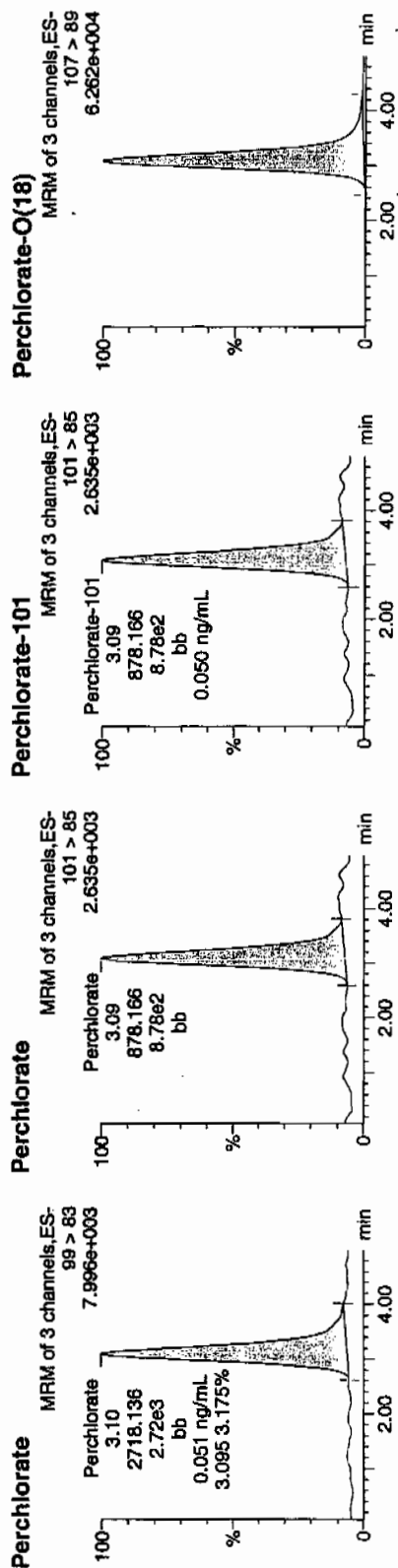
Time: 19:15:35

ID: WCL100128-07CRI

Vial: 1:2,B

Page 108 of 1574

Pure
0.050
02-12-10



ID	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
WCL100128-07CRI	Perchlorate	99 > 83	3.10	2718.136	2718.136	bb			0.0506	101.19	1.19	198.559	3.10
WCL100128-07CRI	Perchlorate-101	101 > 85	3.09	878.166	878.166	bb			0.0504	100.82	0.82	159.042	
WCL100128-07CRI	Perchlorate-O(18)	107 > 89	3.07	22697.199	22697.199	bb			0.4947	98.94	-1.06	1319.3...	

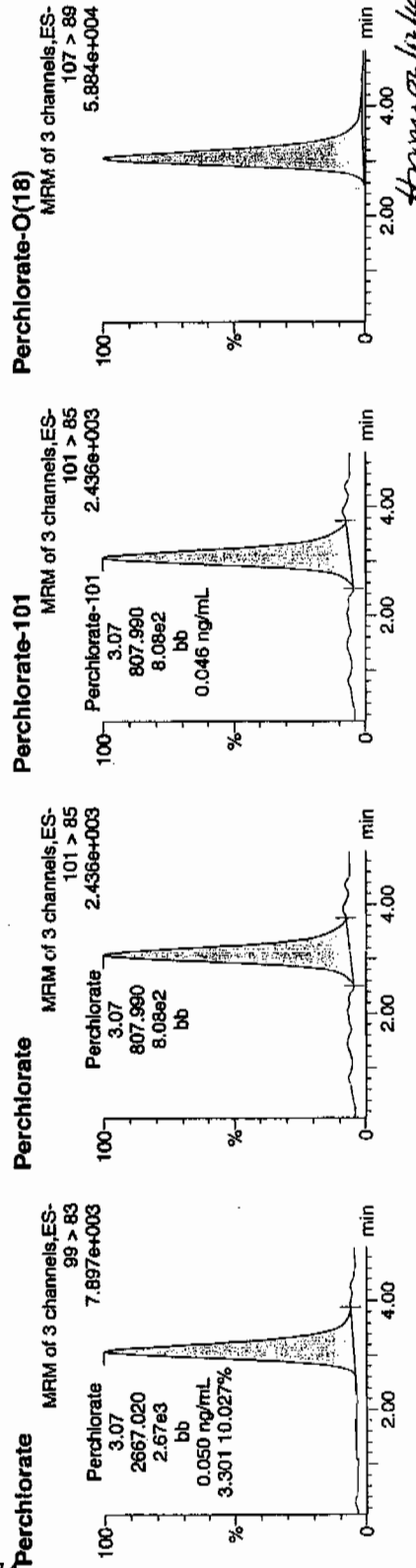
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021010a.qld

Last Altered: Thursday, February 11, 2010 11:01:30 AM Eastern Standard Time
Printed: Thursday, February 11, 2010 11:13:00 AM Eastern Standard Time

Name: per0210037a
Date: 10-Feb-2010
Time: 21:00:11
ID: WCL100128-07CRI
Vial: 1:2,B

Pass
and
02-n-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
WCL100128-07CRI	Perchlorate	99 > 83	3.07	2667.020	2667.020	bb			0.0496	99.29	-0.71	154.068	3.30
WCL100128-07CRI	Perchlorate-101	101 > 85	3.07	807.990	807.990	bb			0.0464	92.76	-7.24	86.733	
WCL100128-07CRI	Perchlorate-O(18)	107 > 89	3.06	21287.656	21287.656	bb			0.4640	92.80	-7.20	4311.4...	

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: 947110

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

MB

Date Received: 08-FEB-10

GEL Job No (SDG): 10-1392

GEL Sample ID: 1202028749

Date Filtered: 08-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	10-FEB-10 17:39	per0210012a
	Perchlorate Isotope Ratio						1	10-FEB-10 17:39	per0210012a
14797-73-0	Perchlorate-101	.5	2	0.500	ug/kg	U	1	10-FEB-10 17:39	per0210012a
	Perchlorate-O(18)			4.56	ug/kg		1	10-FEB-10 17:39	per0210012a

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

*Concentration =

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

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

Dataset: C:\MassLynx\Perchlorate.PRO\per021010a.qld

Last Altered: Thursday, February 11, 2010 11:01:30 AM Eastern Standard Time
Printed: Thursday, February 11, 2010 11:13:00 AM Eastern Standard Time

Name: per0210012a

Date: 10-Feb-2010

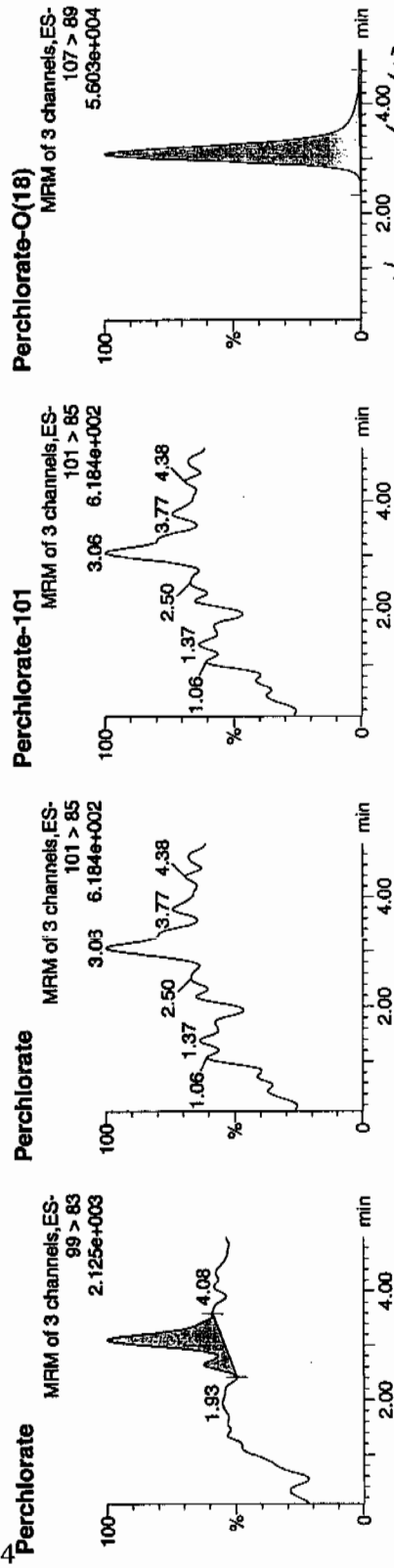
Time: 17:39:06

ID: 1202028749

Vial: 13.A

WJ
02-12-10

1420-1947112 | 5020 | MB | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	mg/mL	% Rec	% Dev	S/N	Ion Ratio
1202028749	Perchlorate	99 > 83	3.10	354.484	354.484	bb			0.0066			9.022	0.00
1202028749	Perchlorate-101	101 > 85											
1202028749	Perchlorate-O(18)	107 > 89	3.10	20922.369	20922.369	bb			0.4560	91.21	-8.79	708.682	

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLCLab Code: GELInstrument: LCMSMSMethod: EPA 6850 ModifiedMatrix: SOILExtraction Batch ID: 947110Extraction Type: Solid Prep

Client Sample No.

LCSDate Received: 08-FEB-10GEL Job No (SDG): 10-1392GEL Sample ID: 1202028750Date Filtered: 08-FEB-10Injection Volume (uL): 20%Solids: 100Sample Volume/Weight: 2.00 gConcentrated 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	2.06	ug/kg		1	10-FEB-10 17:47	per0210013a
	Perchlorate Isotope Ratio			2.97			1	10-FEB-10 17:47	per0210013a
14797-73-0	Perchlorate-101	.5	2	2.14	ug/kg		1	10-FEB-10 17:47	per0210013a
	Perchlorate-O(18)			4.77	ug/kg		1	10-FEB-10 17:47	per0210013a

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

*Concentration =

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

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

Dataset: C:\MassLynx\Perchlorate.PRO\per021010a.qld

Last Altered: Thursday, February 11, 2010 11:01:30 AM Eastern Standard Time
Printed: Thursday, February 11, 2010 11:13:00 AM Eastern Standard Time

Name: per0210013a

Date: 10-Feb-2010

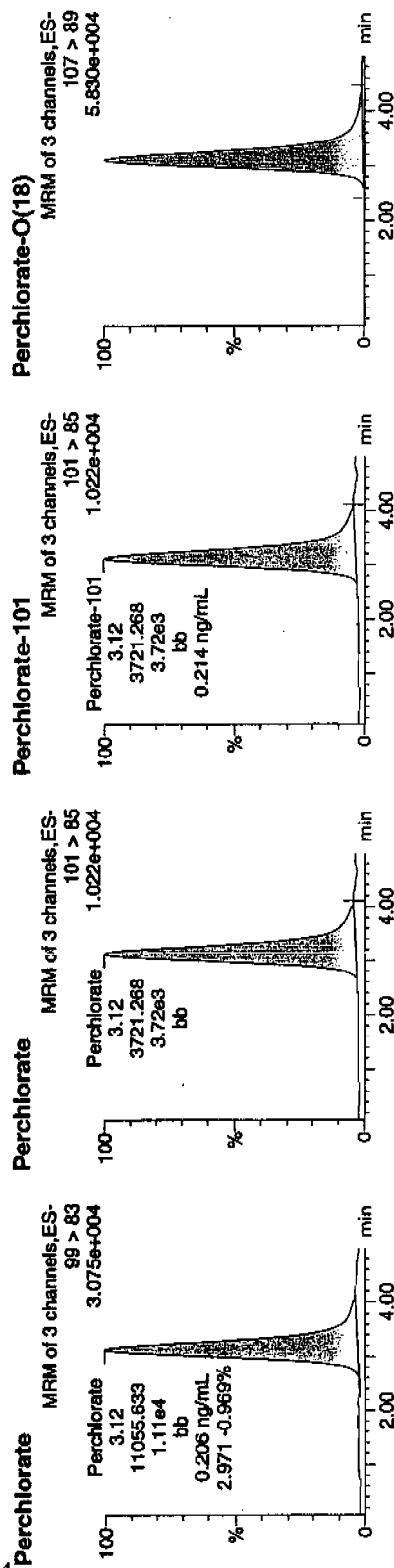
Time: 17:47:09

ID: 1202028750

Vial: 1:3.B

02-12-10

14700 | 947112 | 50025 | L05 | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	% Rec	% Dev	SN	Ion Ratio
1202028750	Perchlorate	99 > 83	3.12	11055.633	11055.633	bb			0.2058	102.89	2.89	649.539	2.97
1202028750	Perchlorate-101	101 > 85	3.12	3721.268	3721.268	bb			0.2138	106.80	6.80	396.012	
1202028750	Perchlorate-O(18)	107 > 89	3.11	21869.742	21869.742	bb			0.4767	95.34	-4.66	5457.7...	

$$\frac{11055.633}{53724.1} = 0.2058$$

411112/110

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLCLab Code: GELInstrument: LCMSMSMethod: SW846 6850 ModifiedMatrix: SOILExtraction Batch ID: 947110Extraction Type: Solid Prep

Client Sample No.

RE15-10-7869MSDate Received: 23-JAN-10GEL Job No (SDG): 10-1392GEL Sample ID: 1202028751Date Filtered: 08-FEB-10Injection Volume (uL): 20%Solids: 75Sample Volume/Weight: 2.00 gConcentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.664	2.66	2.99	ug/kg		1	10-FEB-10 18:11	per0210016a
	Perchlorate Isotope Ratio			3.24			1	10-FEB-10 18:11	per0210016a
14797-73-0	Perchlorate-101	.664	2.66	2.84	ug/kg		1	10-FEB-10 18:11	per0210016a
	Perchlorate-O(18)			6.62	ug/kg		1	10-FEB-10 18:11	per0210016a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The 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\per021010a.qld

Last Altered: Thursday, February 11, 2010 11:01:30 AM Eastern Standard Time
Printed: Thursday, February 11, 2010 11:13:00 AM Eastern Standard Time

Name: per0210016a

Date: 10-Feb-2010

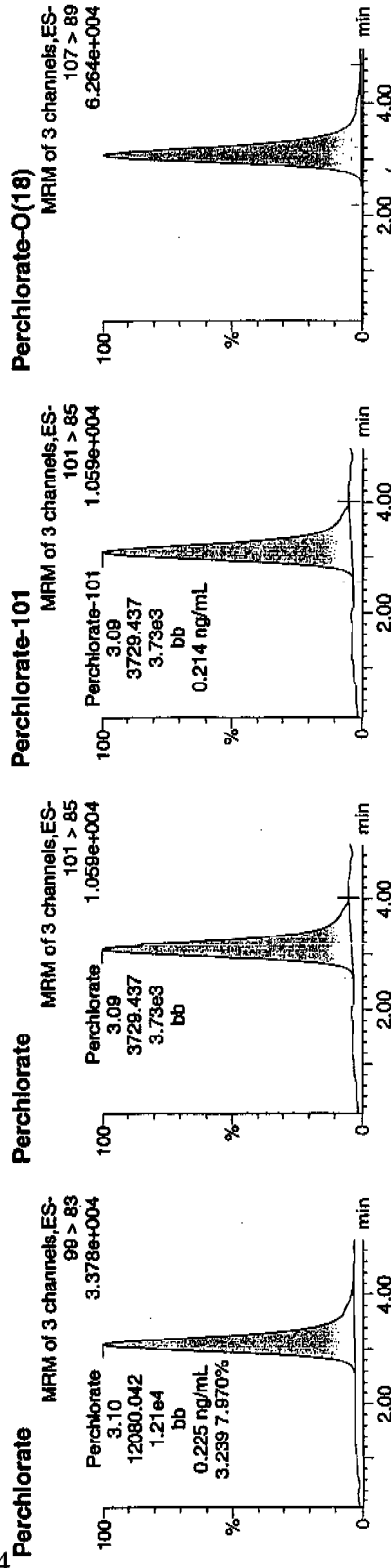
Time: 18:11:16

ID: 1202028751

Vial: 1:3E

02-12-10

1202028751 | 3020 | 15 | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod	Date	Mod	Time	%	Ratio	S/N	Ion	Ratio
1202028751	Perchlorate	99 > 83	3.10	12080.042	12080.042	bb					0.2249	112.43	12.43	304.846	3.24
1202028751	Perchlorate-101	101 > 85	3.09	3729.437	3729.437	bb					0.2141	107.04	7.04	165.259	
1202028751	Perchlorate-O(18)	107 > 89	3.07	22864.785	22864.785	bb					0.4984	99.67	-0.33	1879.2...	

$$\frac{12080.042}{53784.1} \times 100 = 2.24$$

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLCLab Code: GELInstrument: LCMSMSMethod: SW846 6850 ModifiedMatrix: SOILExtraction Batch ID: 947110Extraction Type: Solid Prep

Client Sample No.

RE15-10-7869MSDDate Received: 23-JAN-10GEL Job No (SDG): 10-1392GEL Sample ID: 1202028752Date Filtered: 08-FEB-10Injection Volume (uL): 20%Solids: 75Sample Volume/Weight: 2.00 gConcentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.664	2.66	2.86	ug/kg		1	10-FEB-10 18:19	per0210017a
	Perchlorate Isotope Ratio			3.2			1	10-FEB-10 18:19	per0210017a
14797-73-0	Perchlorate-101	.664	2.66	2.75	ug/kg		1	10-FEB-10 18:19	per0210017a
	Perchlorate-O(18)			6.65	ug/kg		1	10-FEB-10 18:19	per0210017a

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

Dataset: C:\MassLynx\Perchlorate.PRO\per021010a.qld

Last Altered: Thursday, February 11, 2010 11:01:30 AM Eastern Standard Time
Printed: Thursday, February 11, 2010 11:13:00 AM Eastern Standard Time

Name: per0210017a

Date: 10-Feb-2010

Time: 18:19:17

ID: 1202028752

Vial: 1:3,F

622
02-11-10

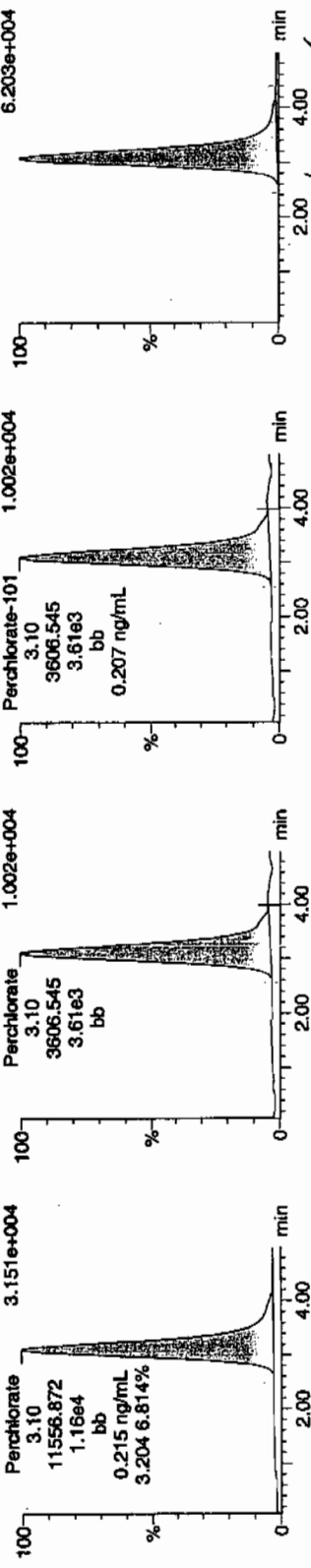
1202028752 | 1202028752 | MSO | 11

Perchlorate
MRM of 3 channels, ES-
99 > 83
3.151e+004

Perchlorate
MRM of 3 channels, ES-
101 > 85
1.002e+004

Perchlorate
MRM of 3 channels, ES-
101 > 85
1.002e+004

Perchlorate
MRM of 3 channels, ES-
101 > 85
1.002e+004



ID	Name	Trace	RT	Area	Response	Flags	Mod	Date	Mod	Time	ng/mL	Dev	S/N	Ratio
1202028752	Perchlorate	99 > 83	3.10	11556.872	11556.872	bb					0.2151	107.56	7.56	744.488
1202028752	Perchlorate-101	101 > 85	3.10	3606.545	3606.545	bb					0.2070	103.51	3.51	343.991
1202028752	Perchlorate-O(18)	107 > 89	3.09	22965.564	22965.564	bb					0.5006	100.11	0.11	2859.5...

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: 947110 Verified by: _____
 Analyst: Jareth Shirley Lab SOP: GL-OA-E-067 REV# 6
 Method: SW846 6850 Modified Instrument: MicroMass Quatro Ultima

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1202028749 MB	08-FEB-2010 14:39:00	2	20	10
1202028750 LCS	08-FEB-2010 14:39:00	2	20	10
245394001	08-FEB-2010 14:39:00	2	20	10
1202028751 MS (245394001)	08-FEB-2010 14:39:00	2	20	10
1202028752 MSD (245394001)	08-FEB-2010 14:39:00	2	20	10
245394002	08-FEB-2010 14:39:00	2	20	10
245394003	08-FEB-2010 14:39:00	2	20	10
245394004	08-FEB-2010 14:39:00	2	20	10
245394005	08-FEB-2010 14:39:00	2	20	10
245394006	08-FEB-2010 14:39:00	2	20	10
245394007	08-FEB-2010 14:39:00	2	20	10
245394008	08-FEB-2010 14:39:00	2	20	10
245394009	08-FEB-2010 14:39:00	2	20	10
245394010	08-FEB-2010 14:39:00	2	20	10
245394011	08-FEB-2010 14:39:00	2	20	10
245394012	08-FEB-2010 14:39:00	2	20	10
245394013	08-FEB-2010 14:39:00	2	20	10
245394014	08-FEB-2010 14:39:00	2	20	10
245394015	08-FEB-2010 14:39:00	2	20	10
1202028753 ICS	08-FEB-2010 14:39:00	2	20	10

Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:
ICS	1202028753	10 ug/L ICV/CCV Second Source	UCL100126-02.1	.4	mL	Desalting cartridges used: 091118-1-Ba & 100105-1-H
LCS	1202028750	10 ug/L ICV/CCV Second Source	UCL100126-02.1	.4	mL	
MS	1202028751	10 ug/L ICV/CCV Second Source	UCL100126-02.1	.4	mL	
MSD	1202028752	10 ug/L ICV/CCV Second Source	UCL100126-02.1	.4	mL	

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS#2

Date: 02/10/10

Extr. Injection Volume: 20uL

Sequence Number: per021010a

Initial Calibration Date: 02/10/10

Method: EPA 6850-Modified

Int. Std.: UCL100122-01

Mobile Phase Lot#: 1254342, 1261217

Standard-Samp Reagent Lot#: 1233976

Reviewed BY: *Ann K*

Date: 02/12/10

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
per0210001a	IPB001	CWW	2/10/2010 16:10			1		USE	B
per0210002a	IPB001	CWW	2/10/2010 16:18			1		USE	B
per0210003a	WCLICAL-01	CWW	2/10/2010 16:26			1		USE	I
per0210004a	WCLICAL-02	CWW	2/10/2010 16:34			1		USE	I
per0210005a	WCLICAL-03	CWW	2/10/2010 16:42			1		USE	I
per0210006a	WCLICAL-04	CWW	2/10/2010 16:50			1		USE	I
per0210007a	WCLICAL-05	CWW	2/10/2010 16:58			1		USE	I
per0210008a	IPB002	CWW	2/10/2010 17:06			1		USE	B
per0210009a	WCLICV	CWW	2/10/2010 17:14			1		USE	C
per0210010a	IPB003	CWW	2/10/2010 17:23			1		USE	B
per0210011a	WCLCRI	CWW	2/10/2010 17:31			1		USE	C
per0210012a	1202028749	CWW	2/10/2010 17:39	947112	10-1392	1	LANL	USE	S
per0210013a	1202028750	CWW	2/10/2010 17:47	947112	10-1392	1	LANL	USE	S
per0210014a	1202028753	CWW	2/10/2010 17:55	947112	10-1392	1	LANL	USE	S
per0210015a	245394001	CWW	2/10/2010 18:03	947112	10-1392	1	LANL	USE	S
per0210016a	1202028751	CWW	2/10/2010 18:11	947112	10-1392	1	LANL	USE	S
per0210017a	1202028752	CWW	2/10/2010 18:19	947112	10-1392	1	LANL	USE	S
per0210018a	245394002	CWW	2/10/2010 18:27	947112	10-1392	1	LANL	USE	S
per0210019a	245394003	CWW	2/10/2010 18:35	947112	10-1392	1	LANL	USE	S
per0210020a	245394004	CWW	2/10/2010 18:43	947112	10-1392	1	LANL	USE	S
per0210021a	245394005	CWW	2/10/2010 18:51	947112	10-1392	1	LANL	USE	S
per0210022a	WCLCCV	CWW	2/10/2010 18:59			1		USE	C
per0210023a	IPB004	CWW	2/10/2010 19:07			1		USE	B
per0210024a	WCLCRI	CWW	2/10/2010 19:15			1		USE	C
per0210025a	245394006	CWW	2/10/2010 19:23	947112	10-1392	1	LANL	USE	S
per0210026a	245394007	CWW	2/10/2010 19:31	947112	10-1392	1	LANL	USE	S
per0210027a	245394008	CWW	2/10/2010 19:39	947112	10-1392	1	LANL	USE	S
per0210028a	245394009	CWW	2/10/2010 19:47	947112	10-1392	1	LANL	USE	S
per0210029a	245394010	CWW	2/10/2010 19:55	947112	10-1392	1	LANL	USE	S

per0210030a	245394011	CWW	2/10/2010 20:03	947112	10-1392	1	LANL	USE	S
per0210031a	245394012	CWW	2/10/2010 20:11	947112	10-1392	1	LANL	USE	S
per0210032a	245394013	CWW	2/10/2010 20:19	947112	10-1392	1	LANL	USE	S
per0210033a	245394014	CWW	2/10/2010 20:27	947112	10-1392	1	LANL	USE	S
per0210034a	245394015	CWW	2/10/2010 20:36	947112	10-1392	1	LANL	USE	S
per0210035a	WCLCCV	CWW	2/10/2010 20:44			1		USE	C
per0210036a	IPB005	CWW	2/10/2010 20:52			1		USE	B
per0210037a	WCLCRI	CWW	2/10/2010 21:00			1		USE	C
per0210038a	1202028867	CWW	2/10/2010 21:08	947148	VARIOUS	1	LANL	USE	S
per0210039a	1202028868	CWW	2/10/2010 21:16	947148	VARIOUS	1	LANL	USE	S
per0210040a	1202028871	CWW	2/10/2010 21:24	947148	VARIOUS	1	LANL	USE	S
per0210041a	245661001	CWW	2/10/2010 21:32	947148	10-1435	1	LANL	USE	S
per0210042a	245688001	CWW	2/10/2010 21:40	947148	10-1433	1	LANL	USE	S
per0210043a	1202028869	CWW	2/10/2010 21:48	947148	10-1433	1	LANL	USE	S
per0210044a	1202028870	CWW	2/10/2010 21:56	947148	10-1433	1	LANL	USE	S
per0210045a	245688002	CWW	2/10/2010 22:04	947148	10-1433	1	LANL	USE	S
per0210046a	245688003	CWW	2/10/2010 22:12	947148	10-1433	1	LANL	USE	S
per0210047a	245688004	CWW	2/10/2010 22:20	947148	10-1433	1	LANL	USE	S
per0210048a	WCLCCV	CWW	2/10/2010 22:28			1		USE	C
per0210049a	IPB006	CWW	2/10/2010 22:37			1		USE	B
per0210050a	WCLCRI	CWW	2/10/2010 22:45			1		USE	C
per0210051a	245688005	CWW	2/10/2010 22:53	947148	10-1433	1	LANL	USE	S
per0210052a	245688006	CWW	2/10/2010 23:01	947148	10-1433	1	LANL	USE	S
per0210053a	245688007	CWW	2/10/2010 23:09	947148	10-1433	1	LANL	USE	S
per0210054a	245688008	CWW	2/10/2010 23:17	947148	10-1433	1	LANL	USE	S
per0210055a	245688009	CWW	2/10/2010 23:25	947148	10-1433	1	LANL	USE	S
per0210056a	245688010	CWW	2/10/2010 23:33	947148	10-1433	1	LANL	USE	S
per0210057a	245688011	CWW	2/10/2010 23:41	947148	10-1433	1	LANL	USE	S
per0210058a	245688012	CWW	2/10/2010 23:49	947148	10-1433	1	LANL	USE	S
per0210059a	245688013	CWW	2/10/2010 23:57	947148	10-1433	1	LANL	USE	S
per0210060a	245688014	CWW	2/11/2010 0:05	947148	10-1433	1	LANL	USE	S
per0210061a	WCLCCV	CWW	2/11/2010 0:13			1		USE	C
per0210062a	IPB007	CWW	2/11/2010 0:21			1		USE	B
per0210063a	WCLCRI	CWW	2/11/2010 0:29			1		USE	C
per0210064a	1202028862	CWW	2/11/2010 0:37	947145	10-1417	1	LANL	USE	S
per0210065a	1202028863	CWW	2/11/2010 0:46	947145	10-1417	1	LANL	USE	S
per0210066a	1202028866	CWW	2/11/2010 0:54	947145	10-1417	1	LANL	USE	S

per0210067a	245612001	CWW	2/11/2010 1:02	947145	10-1417	1	LANL	USE	S
per0210068a	1202028864	CWW	2/11/2010 1:10	947145	10-1417	1	LANL	USE	S
per0210069a	1202028865	CWW	2/11/2010 1:18	947145	10-1417	1	LANL	USE	S
per0210070a	245612002	CWW	2/11/2010 1:26	947145	10-1417	1	LANL	USE	S
per0210071a	WCLCCV	CWW	2/11/2010 1:34			1		USE	C
per0210072a	IPB008	CWW	2/11/2010 1:42			1		USE	B
per0210073a	WCLCRI	CWW	2/11/2010 1:50			1		USE	C
per0210074a	245612003	CWW	2/11/2010 1:58	947145	10-1417	1	LANL	USE	S
per0210075a	245612004	CWW	2/11/2010 2:07	947145	10-1417	1	LANL	USE	S
per0210076a	245612005	CWW	2/11/2010 2:15	947145	10-1417	1	LANL	USE	S
per0210077a	245612006	CWW	2/11/2010 2:23	947145	10-1417	1	LANL	USE	S
per0210078a	245612007	CWW	2/11/2010 2:31	947145	10-1417	1	LANL	USE	S
per0210079a	245612008	CWW	2/11/2010 2:39	947145	10-1417	1	LANL	USE	S
per0210080a	245612009	CWW	2/11/2010 2:47	947145	10-1417	1	LANL	USE	S
per0210081a	WCLCCV	CWW	2/11/2010 2:55			1		USE	C
per0210082a	IPB009	CWW	2/11/2010 3:03			1		USE	B
per0210083a	WCLCRI	CWW	2/11/2010 3:11			1		USE	C
per0210084a	245612010	CWW	2/11/2010 3:20	947145	10-1417	1	LANL	USE	S
per0210085a	245612011	CWW	2/11/2010 3:28	947145	10-1417	1	LANL	USE	S
per0210086a	245612012	CWW	2/11/2010 3:36	947145	10-1417	1	LANL	USE	S
per0210087a	245612013	CWW	2/11/2010 3:45	947145	10-1417	1	LANL	USE	S
per0210088a	245612014	CWW	2/11/2010 3:53	947145	10-1417	1	LANL	USE	S
per0210089a	245612015	CWW	2/11/2010 4:01	947145	10-1417	1	LANL	USE	S
per0210090a	245612016	CWW	2/11/2010 4:09	947145	10-1417	1	LANL	USE	S
per0210091a	WCLCCV	CWW	2/11/2010 4:17			1		USE	C
per0210092a	IPB010	CWW	2/11/2010 4:26			1		USE	B
per0210093a	WCLCRI	CWW	2/11/2010 4:34			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 EXPLOSIVES ANALYSIS

**LC/MS/MS Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1392**

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: 944935

Prep Batch Number: 944932

Sample Analysis

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

Sample ID	Client ID
245394001	RE15-10-7869
245394002	RE15-10-7874
245394003	RE15-10-7871
245394004	RE15-10-7872
245394005	RE15-10-7870
245394006	RE15-10-7873
245394007	RE15-10-7911
245394008	RE15-10-7908
245394009	RE15-10-7912
245394010	RE15-10-7906
245394011	RE15-10-7905
245394012	RE15-10-7907
245394013	RE15-10-7913

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245394014	RE15-10-7909
245394015	RE15-10-7910
1202023631	Method Blank (MB)
1202023632	Laboratory Control Sample (LCS)
1202023633	245394001(RE15-10-7869) Matrix Spike (MS)
1202023634	245394001(RE15-10-7869) Matrix Spike Duplicate (MSD)

Preparation/Analytical Method Verification

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-056 REV# 12.

Primary Analyte Analysis

Calibration Information

Initial Calibration

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

Calibration Verification Standard Requirements

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

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 Tetra at 43.3%. The limits are 51-112%. The MS and MSD had passing recoveries for all spiked analytes. The data are considered unaffected and are reported. Please see data exception report 792215.

QC Sample Designation

Sample 245394001 (RE15-10-7869) was chosen for matrix spike and matrix spike duplicate analysis.

Matrix Spike (MS) Recovery Statement

The MS spike recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement

The MSD spike recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement

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

Internal Standard (ISTD) Acceptance

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

Technical Information**Holding Time Specifications**

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

Preparation/Analytical Method Verification

All procedures were performed as stated in the SOP.

Sample Dilutions

According to the GEL SOP for Method 8321A, all sample and QC extracts are diluted 1:1 v/v with HPLC grade water. Sample 245394003 (RE15-10-7871) 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 245394004 (RE15-10-7872) was re-analyzed for potential carry-over from the previous sample. The re-analysis data are reported.

Sample 245394009 (RE15-10-7912) failed ISTD acceptance criteria. It was re-analyzed and passed acceptance criteria. The re-analysis data 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.

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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 118%. The limits are 52-114%. The MS and MSD had passing recoveries for all spiked analytes. The data are considered unaffected and are reported. Please see data exception report 792215.

QC Sample Designation

Sample 245394001 (RE15-10-7869) was chosen for matrix spike and matrix spike duplicate analysis.

Matrix Spike (MS) Recovery Statement

The MS spike recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement

The MSD spike recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement

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

Internal Standard (ISTD) Acceptance

The internal standards were not added to the secondary analyte extracts.

Technical Information**Holding Time Specifications**

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

Preparation/Analytical Method Verification

All procedures were performed as stated in the SOP.

Sample Dilutions

According to the GEL SOP for Method 8321A, all sample and QC extracts are diluted 1:1 v/v with HPLC grade water. Sample 245394003 (RE15-10-7871) 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 245394004 (RE15-10-7872) was re-analyzed for potential carry-over from the previous sample. The re-analysis data are reported.

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Miscellaneous Information

Data Exception (DER) Documentation

Data exception report(792215 was generated for this SDG.

The LCS recovered Tetryl at 43.3%. The limits are 51-112%. The LCS recovered 2,4-Diamino-6-nitrotoluene at 118%. The limits are 52-114%. The MS and MSD had passing recoveries for all spiked analytes. The data are considered unaffected and are reported.

Manual Integrations

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

Flagging Convention

The samples were not originally analyzed using SW-846 Method 8330.

Additional Comments

Due to software limitations, all initial calibration blanks must be designated as XIB001 in order for the forms to be correct.

Due to software limitations in the secondary analyte analysis, false positives and analytes detected below the MDL cannot be deleted from the raw data.

Due to software limitations, file extensions such as DL, RE, etc. may not appear on the generated forms and/or raw data.

System Configuration

The laboratory utilizes a Waters LC 2795 liquid chromatography instrument for primary analyte analysis. It is coupled with either a Micromass Quattro Micro Mass Spectrometer/ Mass Spectrometer, or a Micromass Quattro Ultima Mass Spectrometer/ Mass Spectrometer. Each being designated as LCMSMS #1, and LCMSMS #2, respectively. It is fitted with an APCI (Atmospheric Pressure chemical Ionization) probe that is operated in the negative ionization mode for the primary analyte analysis. The laboratory also utilizes an Agilent 1100 liquid chromatography instrument for either primary or secondary analyte analysis. It is coupled with a Applied Biosystems 4000 Mass Spectrometer/ Mass Spectrometer, designated as either LCMSMS #3 or LCMSMS #4. It is fitted with a APCI (Atmospheric Pressure chemical Ionization) probe that is operated in the negative ionization mode for both the primary and secondary analyte analysis.

Chromatographic Columns

The detection of the primary analyte nitroaromatic and nitramines is accomplished through analysis on the following reversed phase column:

Phenomenex: Ultracarb 5u ODS (20), 250 x 4.60 mm ID.

The detection of the secondary analytes is accomplished through analysis on the following reversed phase column:

YMC: J'sphere ODS-H80, 150 x 4.6mm I.D.

Certification Statement

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

Review Validation:

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

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

Reviewer: _____

Robert M. Moore Date: 02/18/10

SAMPLE DATA SUMMARY

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7869

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394001

Sample Amount 2

Moisture: 24.7

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208277a

Date Analyzed: 14-FEB-10 06:32

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: RE15-10-7869

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394001

Sample Amount 2

Moisture: 24.7

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140066.wiff

Date Analyzed: 15-FEB-10 07:18

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: RE15-10-7874

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394002

Sample Amount 2

Moisture: 4.1

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208280a

Date Analyzed: 14-FEB-10 08:00

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: RE15-10-7874

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394002

Sample Amount 2

Moisture: 4.1

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140072.wiff

Date Analyzed: 15-FEB-10 08:53

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: RE15-10-7871

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394003

Sample Amount 2

Moisture: 10.9

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208281a

Date Analyzed: 14-FEB-10 08:30

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	185	J
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	7720	
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: RE15-10-7871

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394003

Sample Amount 2

Moisture: 10.9

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 10

Injection Volume (uL): 50

GEL data file: EXP0208302a

Date Analyzed: 14-FEB-10 18:52

Units: ug/kg

Cas No.	Compound	Concentration*	Q
2691-41-0	HMX	15400	

*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: RE15-10-7871

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394003

Sample Amount 2

Moisture: 10.9

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140073.wiff

Date Analyzed: 15-FEB-10 09:09

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7871

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394003

Sample Amount 2

Moisture: 10.9

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 10

Injection Volume (uL): 50

GEL data file: EXS02140116.wiff

Date Analyzed: 15-FEB-10 20:24

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	28600	

*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: RE15-10-7872

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394004

Sample Amount 2

Moisture: 11.2

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208303a

Date Analyzed: 14-FEB-10 19:21

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	182	J
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: RE15-10-7872

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394004

Sample Amount 2

Moisture: 11.2

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140115.wiff

Date Analyzed: 15-FEB-10 20:08

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	4780	
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

Instrument Value	X	$\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$	X	Dilution Factor
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1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7870

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394005

Sample Amount 2

Moisture: 13.1

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208283a

Date Analyzed: 14-FEB-10 09:29

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: RE15-10-7870

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394005

Sample Amount 2

Moisture: 13.1

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140075.wiff

Date Analyzed: 15-FEB-10 09:40

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: RE15-10-7873

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394006

Sample Amount 2

Moisture: 12.6

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208284a

Date Analyzed: 14-FEB-10 09:58

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: RE15-10-7873

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394006

Sample Amount 2

Moisture: 12.6

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140076.wiff

Date Analyzed: 15-FEB-10 09:56

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
		<u>Sample Amount</u>		Factor

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7911

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394007

Sample Amount 2

Moisture: 12.0

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208288a

Date Analyzed: 14-FEB-10 11:56

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	315	J
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: RE15-10-7911

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394007

Sample Amount 2

Moisture: 12.0

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140077.wiff

Date Analyzed: 15-FEB-10 10:12

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: RE15-10-7908

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394008

Sample Amount 2

Moisture: 8.1

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208289a

Date Analyzed: 14-FEB-10 12:26

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: RE15-10-7908

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394008

Sample Amount 2

Moisture: 8.1

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140078.wiff

Date Analyzed: 15-FEB-10 10:27

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: RE15-10-7912

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394009

Sample Amount 2

Moisture: 13.5

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208304a

Date Analyzed: 14-FEB-10 19:51

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	198	J
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: RE15-10-7912

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394009

Sample Amount 2

Moisture: 13.5

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140079.wiff

Date Analyzed: 15-FEB-10 10:43

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: RE15-10-7906

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394010

Sample Amount 2

Moisture: 10

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208291a

Date Analyzed: 14-FEB-10 13:27

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: RE15-10-7906

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394010

Sample Amount 2

Moisture: 10

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140080.wiff

Date Analyzed: 15-FEB-10 10:59

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: RE15-10-7905

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394011

Sample Amount 2

Moisture: 21.8

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208292a

Date Analyzed: 14-FEB-10 13:56

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	1220	
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: RE15-10-7905

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394011

Sample Amount 2

Moisture: 21.8

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140081.wiff

Date Analyzed: 15-FEB-10 11:15

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	6060	
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: RE15-10-7907

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394012

Sample Amount 2

Moisture: 19.1

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208293a

Date Analyzed: 14-FEB-10 14:26

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: RE15-10-7907

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394012

Sample Amount 2

Moisture: 19.1

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140085.wiff

Date Analyzed: 15-FEB-10 12:17

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: RE15-10-7913

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394013

Sample Amount 2

Moisture: 21.3

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208294a

Date Analyzed: 14-FEB-10 14:55

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: RE15-10-7913

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394013

Sample Amount 2

Moisture: 21.3

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140086.wiff

Date Analyzed: 15-FEB-10 12:33

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: RE15-10-7909

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394014

Sample Amount 2

Moisture: 15.8

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208295a

Date Analyzed: 14-FEB-10 15:25

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: RE15-10-7909

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394014

Sample Amount 2

Moisture: 15.8

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140087.wiff

Date Analyzed: 15-FEB-10 12:49

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	12900	
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: RE15-10-7910

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394015

Sample Amount 2

Moisture: 9.9

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208296a

Date Analyzed: 14-FEB-10 15:54

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: RE15-10-7910

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394015

Sample Amount 2

Moisture: 9.9

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140088.wiff

Date Analyzed: 15-FEB-10 13:04

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
		<u>Sample Amount</u>		Factor

QUALITY CONTROL SUMMARY

High Explosives Surrogate Recovery Summary

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1392

Lab Code: GEL

HPLC Column: Phenomenex Ultracarb 5u ODS(20)

Lab Sample ID	Client Sample ID	DNT	QC Limits	Flg
245394001	RE15-10-7869	111	70 - 144	
245394001	RE15-10-7869	119	70 - 144	
245394002	RE15-10-7874	114	70 - 144	
245394002	RE15-10-7874	122	70 - 144	
245394003	RE15-10-7871	116	70 - 144	
245394003	RE15-10-7871	123	70 - 144	
245394003	RE15-10-7871	116	70 - 144	
245394003	RE15-10-7871	120	70 - 144	
245394004	RE15-10-7872	127	70 - 144	
245394004	RE15-10-7872	111	70 - 144	
245394005	RE15-10-7870	102	70 - 144	
245394005	RE15-10-7870	121	70 - 144	
245394006	RE15-10-7873	123	70 - 144	
245394006	RE15-10-7873	114	70 - 144	
245394007	RE15-10-7911	98.5	70 - 144	
245394007	RE15-10-7911	124	70 - 144	
245394008	RE15-10-7908	91.7	70 - 144	
245394008	RE15-10-7908	124	70 - 144	
245394009	RE15-10-7912	97.7	70 - 144	
245394009	RE15-10-7912	115	70 - 144	
245394010	RE15-10-7906	117	70 - 144	
245394010	RE15-10-7906	118	70 - 144	
245394011	RE15-10-7905	115	70 - 144	
245394011	RE15-10-7905	112	70 - 144	
245394012	RE15-10-7907	120	70 - 144	
245394012	RE15-10-7907	121	70 - 144	
245394013	RE15-10-7913	118	70 - 144	
245394013	RE15-10-7913	118	70 - 144	
245394014	RE15-10-7909	117	70 - 144	
245394014	RE15-10-7909	112	70 - 144	
245394015	RE15-10-7910	111	70 - 144	
245394015	RE15-10-7910	120	70 - 144	
1202023631	MB for batch 944932	107	70 - 144	
1202023631	MB for batch 944932	115	70 - 144	
1202023632	LCS for batch 944932	110	70 - 144	
1202023632	LCS for batch 944932	124	70 - 144	
1202023633	RE15-10-7869(245394001MS)	115	70 - 144	

High Explosives Surrogate Recovery Summary

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1392

Lab Code: GEL

HPLC Column: Phenomenex Ultracarb 5u ODS(20)

Lab Sample ID	Client Sample ID	DNT	QC Limits	Flg
1202023633	RE15-10-7869(245394001MS)	118	70 - 144	
1202023634	RE15-10-7869(245394001MSD)	113	70 - 144	
1202023634	RE15-10-7869(245394001MSD)	125	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) 10-1392

Extract Batch Code: 944932

Date Extracted: 28-JAN-10

GEL LCS ID: 1202023632

GEL LCSDUP ID:

Analysis Date/Time: 14-FEB-10 06:02

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	3950	79					69 – 126
2,4,6-Trinitrotoluene	5000	4840	96.8					73 – 149
2,4-Dinitrotoluene	5000	5120	102					87 – 137
2,6-Dinitrotoluene	5000	5020	100					89 – 120
2-Amino-4,6-dinitrotoluene	5000	5450	109					90 – 130
4-Amino-2,6-dinitrotoluene	5000	5210	104					84 – 130
HMX	5000	4350	87					58 – 138
Nitrobenzene	5000	4840	96.9					71 – 122
PETN	5000	5780	116					64 – 137
RDX	5000	4760	95.1					81 – 137
Tetryl	5000	2170	43.3 *					51 – 112
m-Dinitrobenzene	5000	4920	98.5					83 – 122
m-Nitrotoluene	5000	4350	86.9					73 – 118
o-Nitrotoluene	5000	4640	92.8					72 – 119
p-Nitrotoluene	5000	4640	92.8					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) 10-1392

Extract Batch Code: 944932

Date Extracted: 28-JAN-10

GEL LCS ID: 1202023632

GEL LCSDUP ID:

Analysis Date/Time: 15-FEB-10 07:02

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	5900	118 *					52 - 114
2,6-Diamino-4-nitrotoluene	5000	5580	112					64 - 122
3,5-Dinitroaniline	5000	5630	113					70 - 127
TATB	5000	7380	148					28 - 162
tris(o-cresyl) phosphate	5000	5110	102					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: RE15-10-7869

Lab Code: GEL

GEL Job No (SDG) 10-1392

Extract Batch Code: 944932

Date Extracted: 28-JAN-10

GEL Spike ID: 1202023633

GEL SpikeDup ID: 1202023634

Analysis Date/Time: 14-FEB-10 07:01

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
Nitrobenzene	5000	0	4980	99.5	4800	95.9	3.67	30	70 - 122
PETN	5000	0	5770	115	5370	107	7.22	30	60 - 140
RDX	5000	0	4550	90.9	4600	92.1	1.29	30	59 - 152
Tetryl	5000	0	4330	86.7	4560	91.3	5.2	30	36 - 124
m-Dinitrobenzene	5000	0	5280	106	5270	105	.239	30	85 - 118
m-Nitrotoluene	5000	0	4780	95.6	4280	85.5	11.1	30	70 - 120
o-Nitrotoluene	5000	0	4760	95.1	4450	89.1	6.59	30	69 - 123
1,3,5-Trinitrobenzene	5000	0	4870	97.3	4710	94.3	3.16	30	50 - 140
2,4-Dinitrotoluene	5000	0	5080	102	5030	101	.897	30	86 - 135
HMX	5000	20.9	4730	94.2	4790	95.4	1.27	30	51 - 144
4-Amino-2,6-dinitrotoluene	5000	0	5260	105	4900	97.9	7.23	30	72 - 143
2-Amino-4,6-dinitrotoluene	5000	0	5600	112	5360	107	4.46	30	85 - 137
2,6-Dinitrotoluene	5000	0	5160	103	4990	99.7	3.37	30	90 - 118
2,4,6-Trinitrotoluene	5000	0	5260	105	5230	105	.64	30	76 - 144
p-Nitrotoluene	5000	0	4990	99.9	4530	90.6	9.8	30	65 - 133

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

High Explosives MS/MSD Summary

Lab Name: GEL Laboratories LLC

Client ID: RE15-10-7869

Lab Code: GEL

GEL Job No (SDG) 10-1392

Extract Batch Code: 944932

Date Extracted:28-JAN-10

GEL Spike ID: 1202023633

GEL SpikeDup ID:1202023634

Analysis Date/Time: 15-FEB-10 07:33

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	5320	106	5020	100	5.8	26	34 - 135
2,6-Diamino-4-nitrotoluene	5000	0	5790	116	5470	109	5.68	30	55 - 130
3,5-Dinitroaniline	5000	0	5250	105	5530	111	5.2	30	73 - 129
TATB	5000	0	6620	132	5840	117	12.5	30	29 - 155
tris(o-cresyl) phosphate	5000	16.2	5190	103	5090	101	1.95	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): 10-1392

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)
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
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

Printed: Tue Feb 09 10:21:18 2010, Page 1 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

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

Sample: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP02080001a

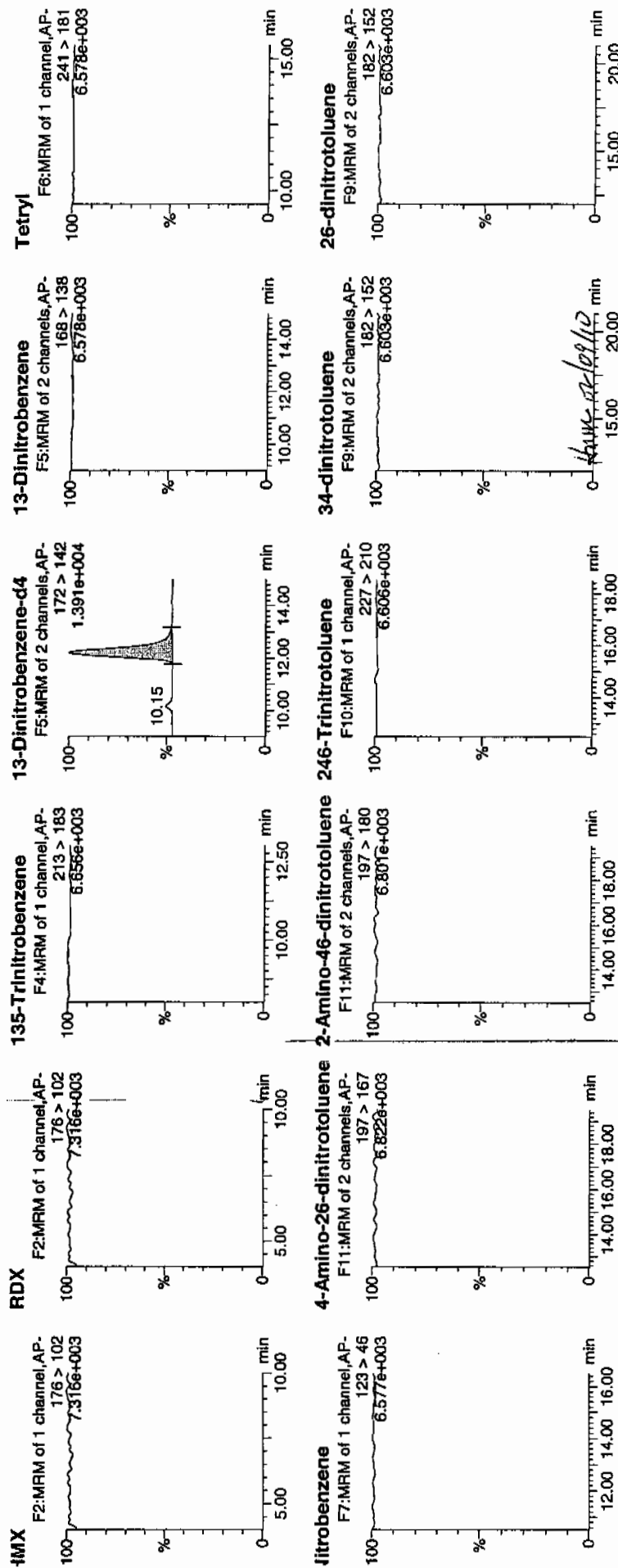
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Time: 14:44:17

D: XIBLK01

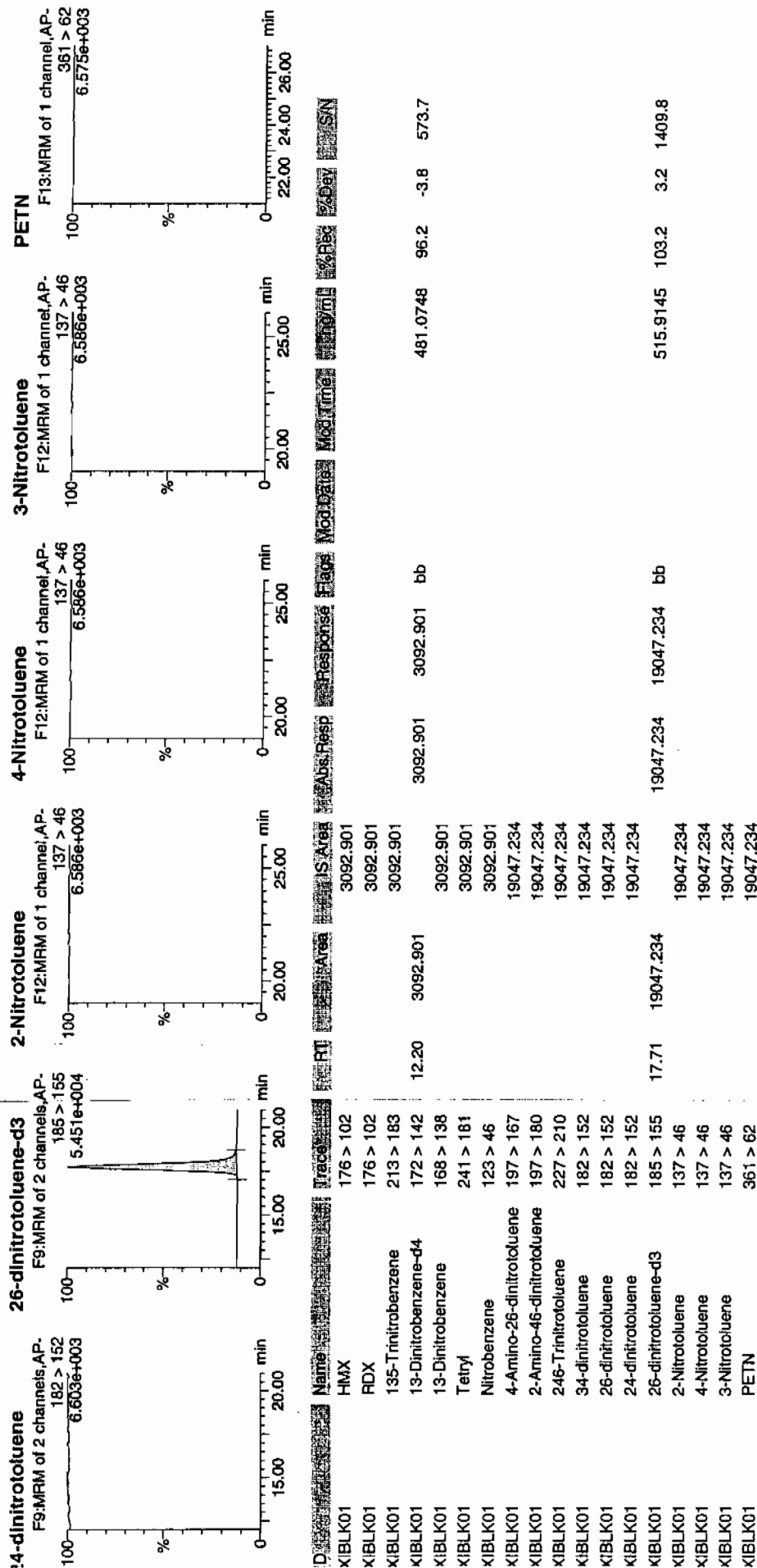
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1477
2/9/10



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

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): 10-1392

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

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

Dataset: C:\MASSLYNX\New_Exp_PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

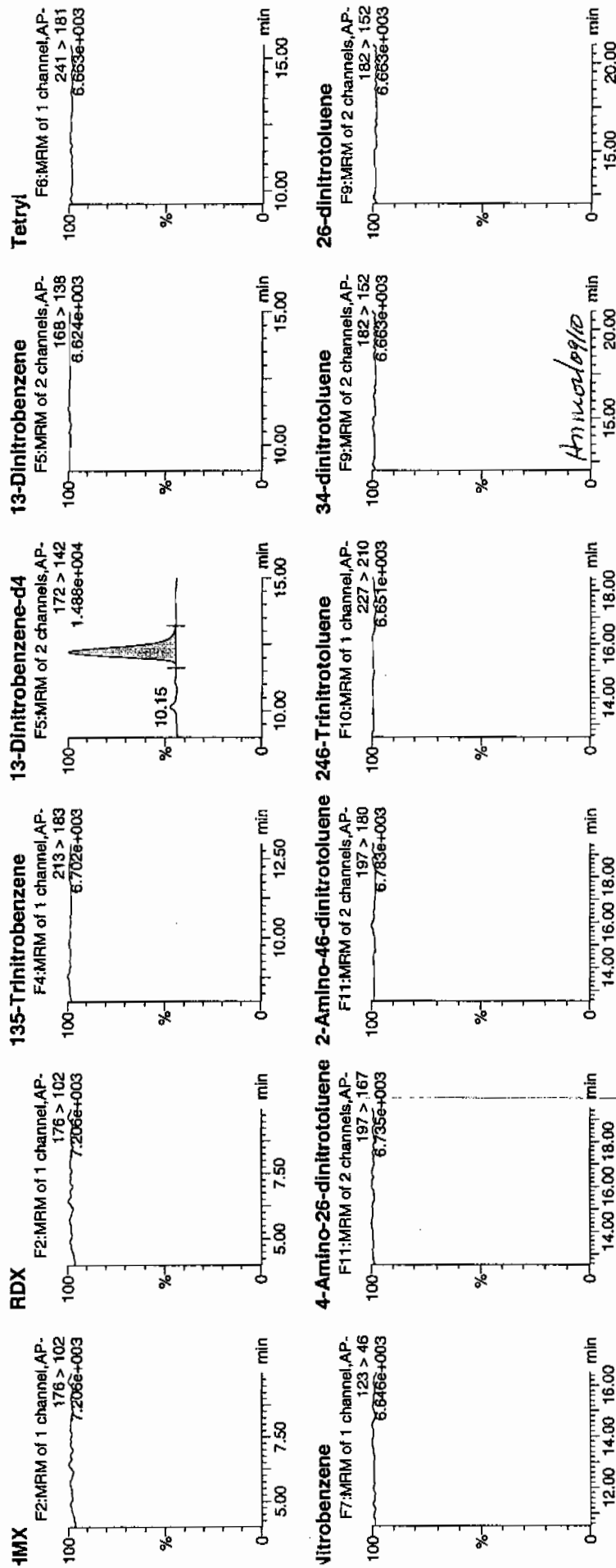
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Date: 08-Feb-2010

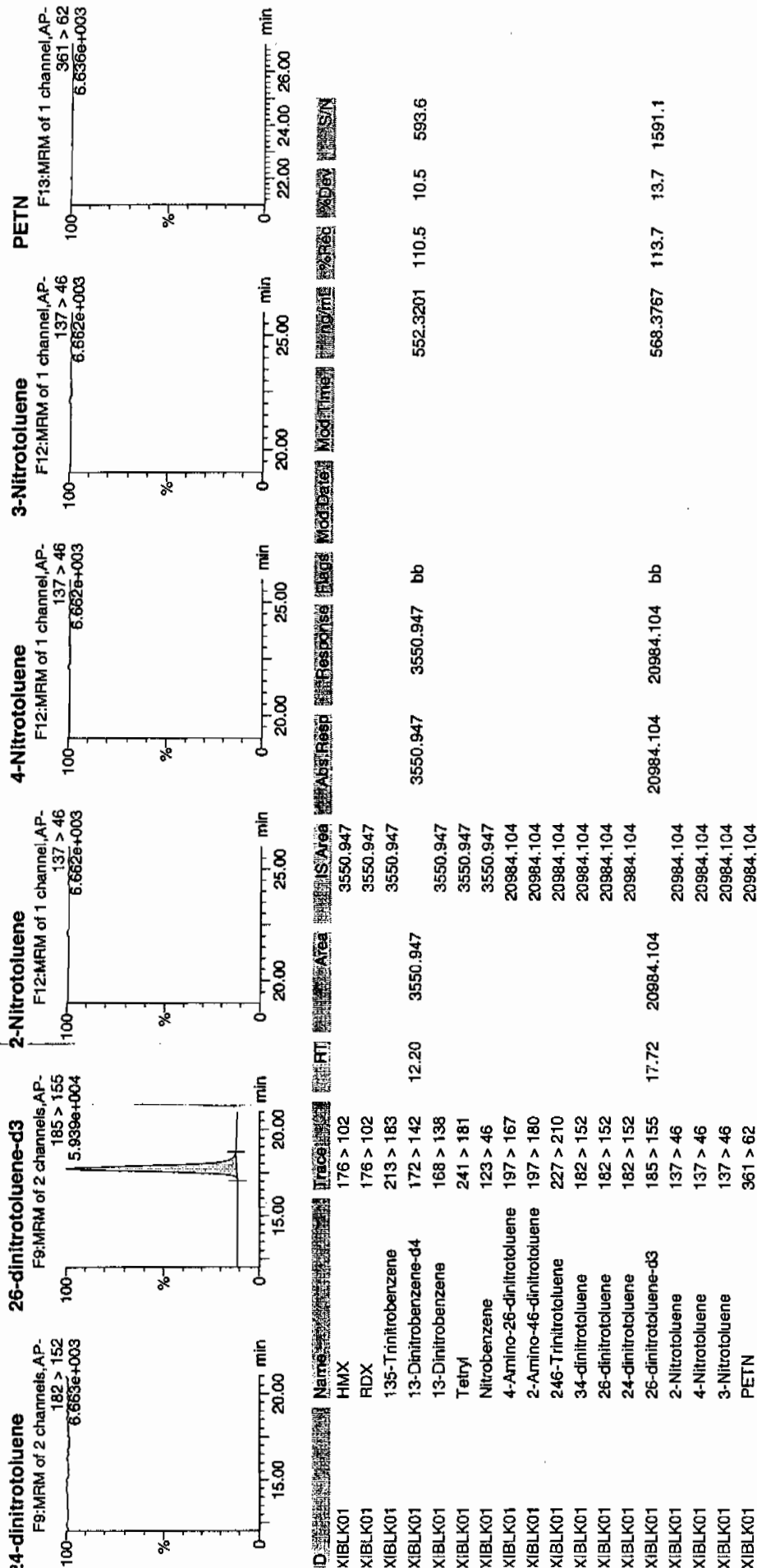
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D: XIBLK01

/lal: 1:1,A



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): 10-1392

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 14-FEB-10 14:17

GEL Data File: EXS02140001.wiff

Instrument ID: LCMSMS

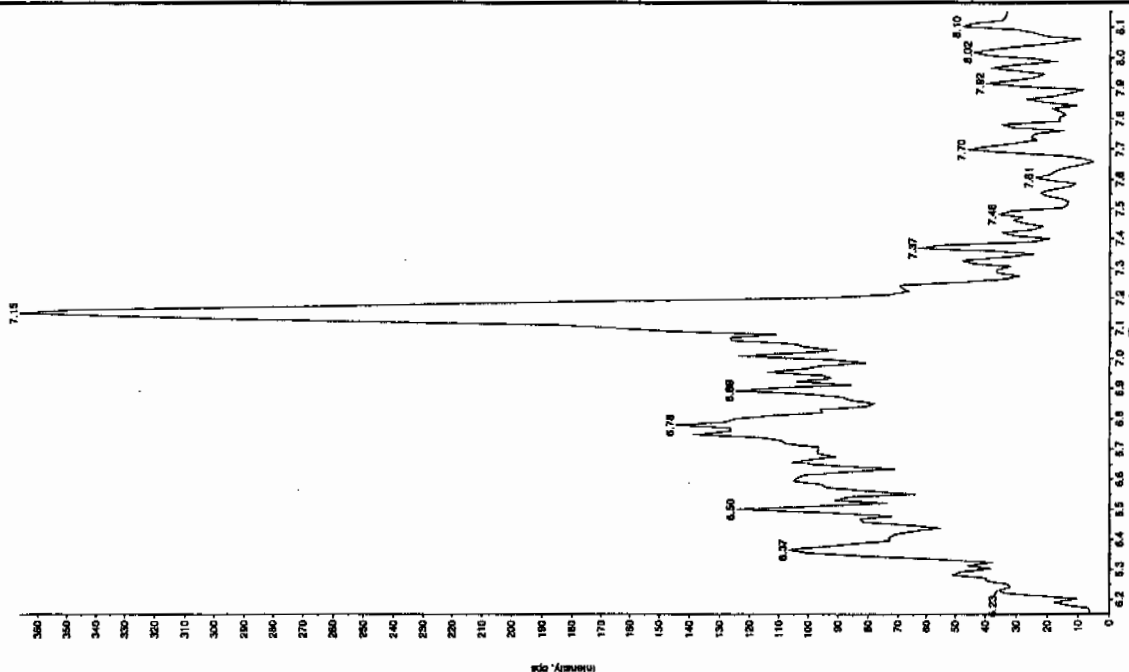
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	.28
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

See 2/16/10

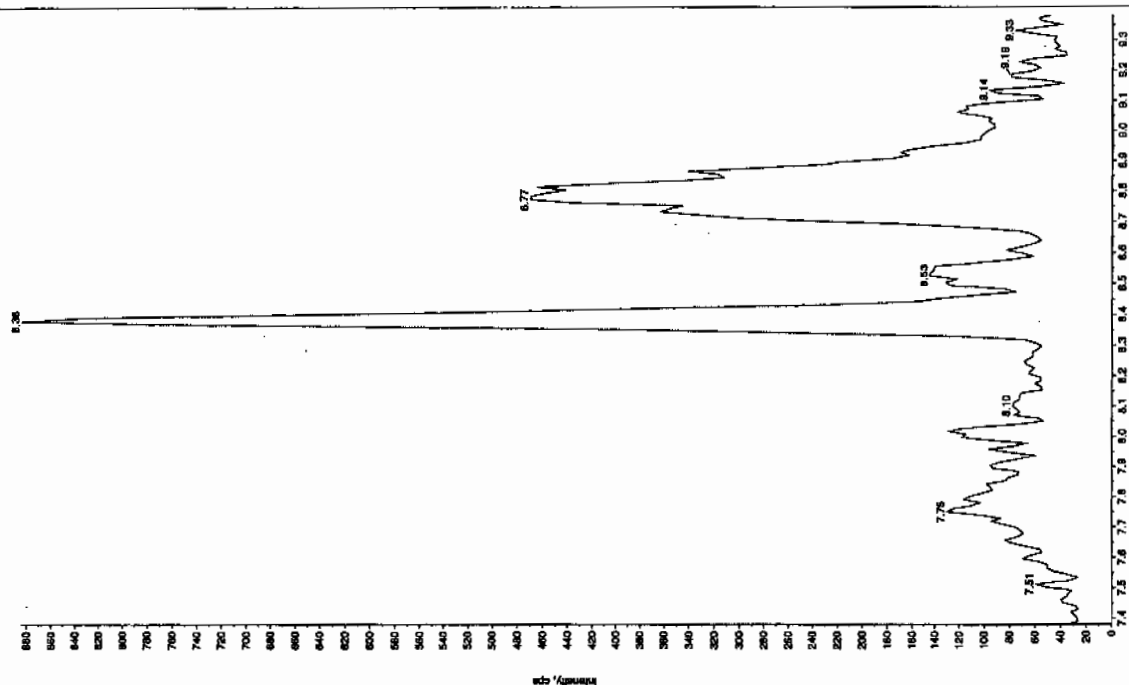
Sample Name: "XBLX01" Sample ID: "TILER" File: "EXS02140001.wif"
 Peak Name: "TATB" Mass(es): "257.2204.9 amu"
 Comment: "LONSEXP_B" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Time: 2/14/2010
 Acq. Time: 2:17:17 PM
 Modified: No



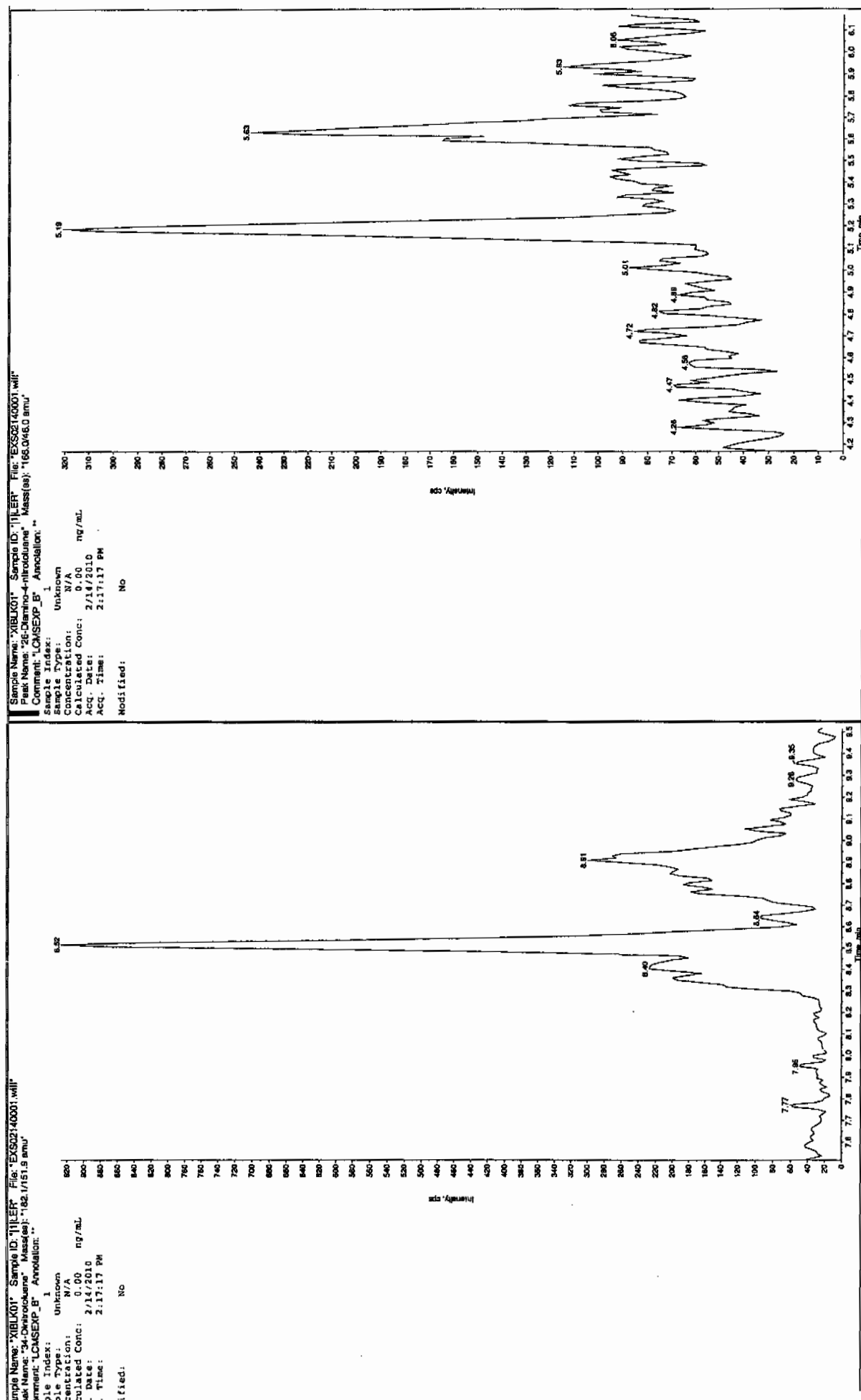
Sample Name: "XBLX01" Sample ID: "TILER" File: "EXS02140001.wif"
 Peak Name: "35-Dinitrobenzine" Mass(es): "182.0460 amu"
 Comment: "LONSEXP_B" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Time: 2/14/2010
 Acq. Time: 2:17:17 PM
 Modified: No

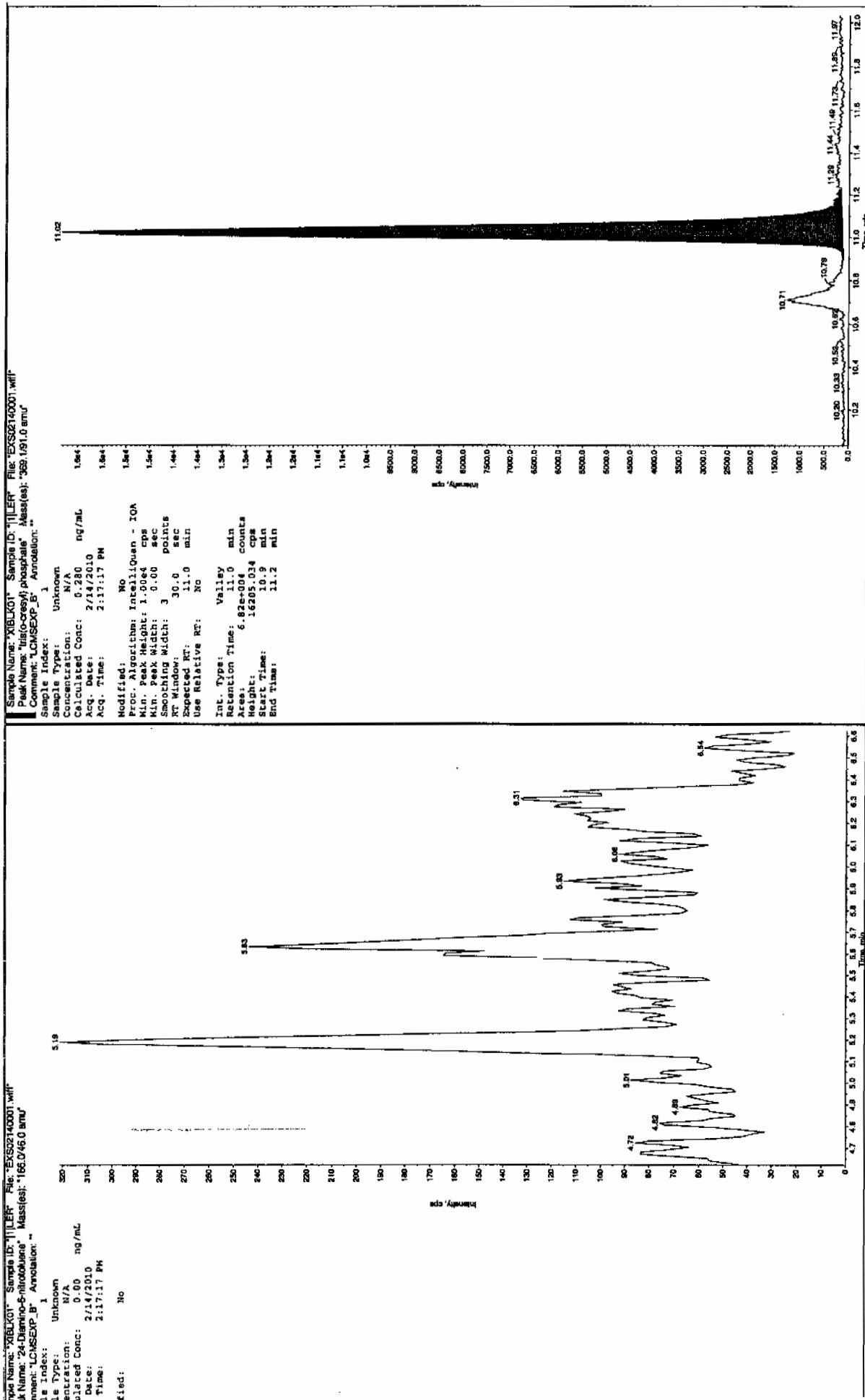


See 02/17/10

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



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



Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1392

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 14-FEB-10 14:33

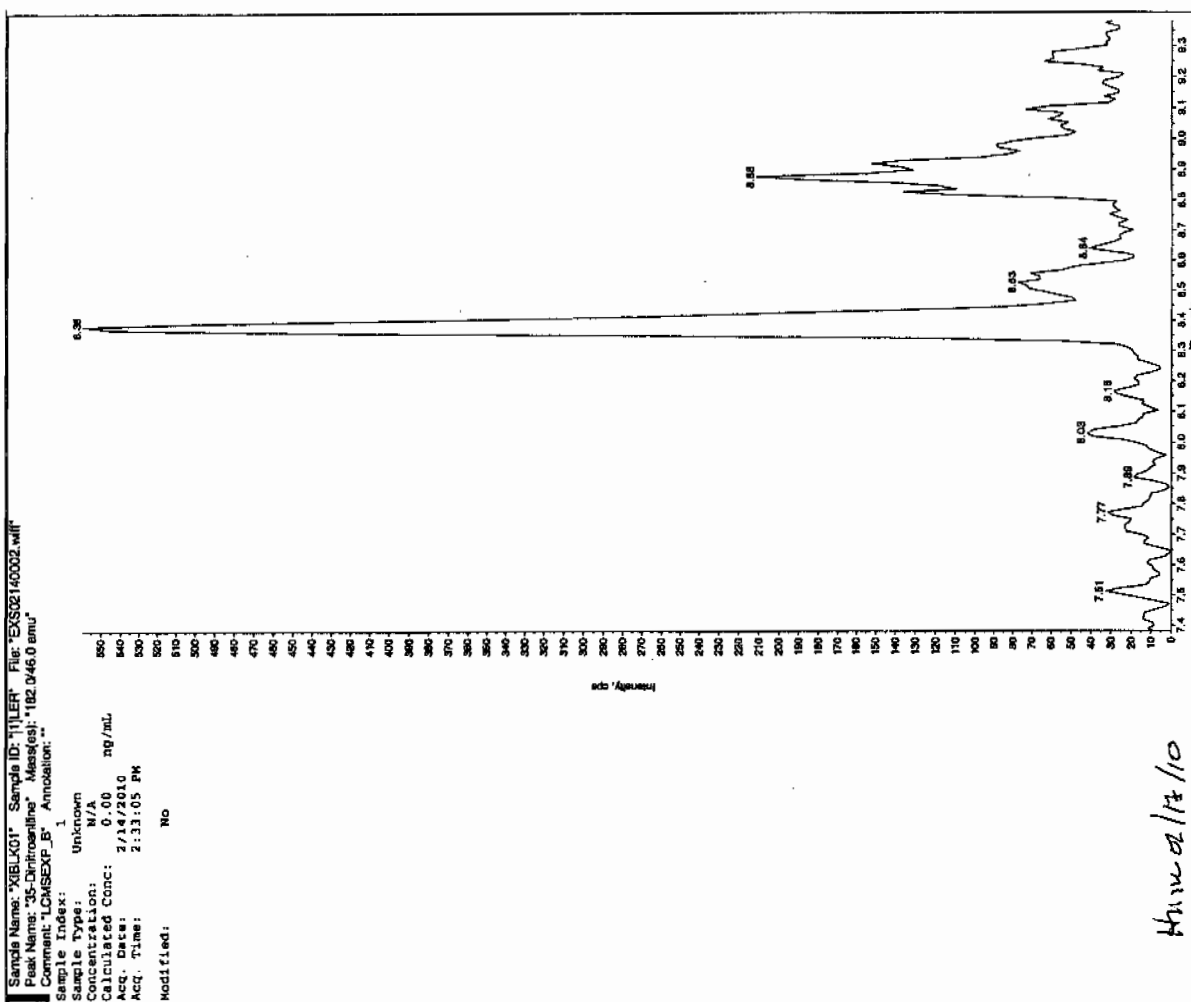
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Instrument ID: LCMSMS

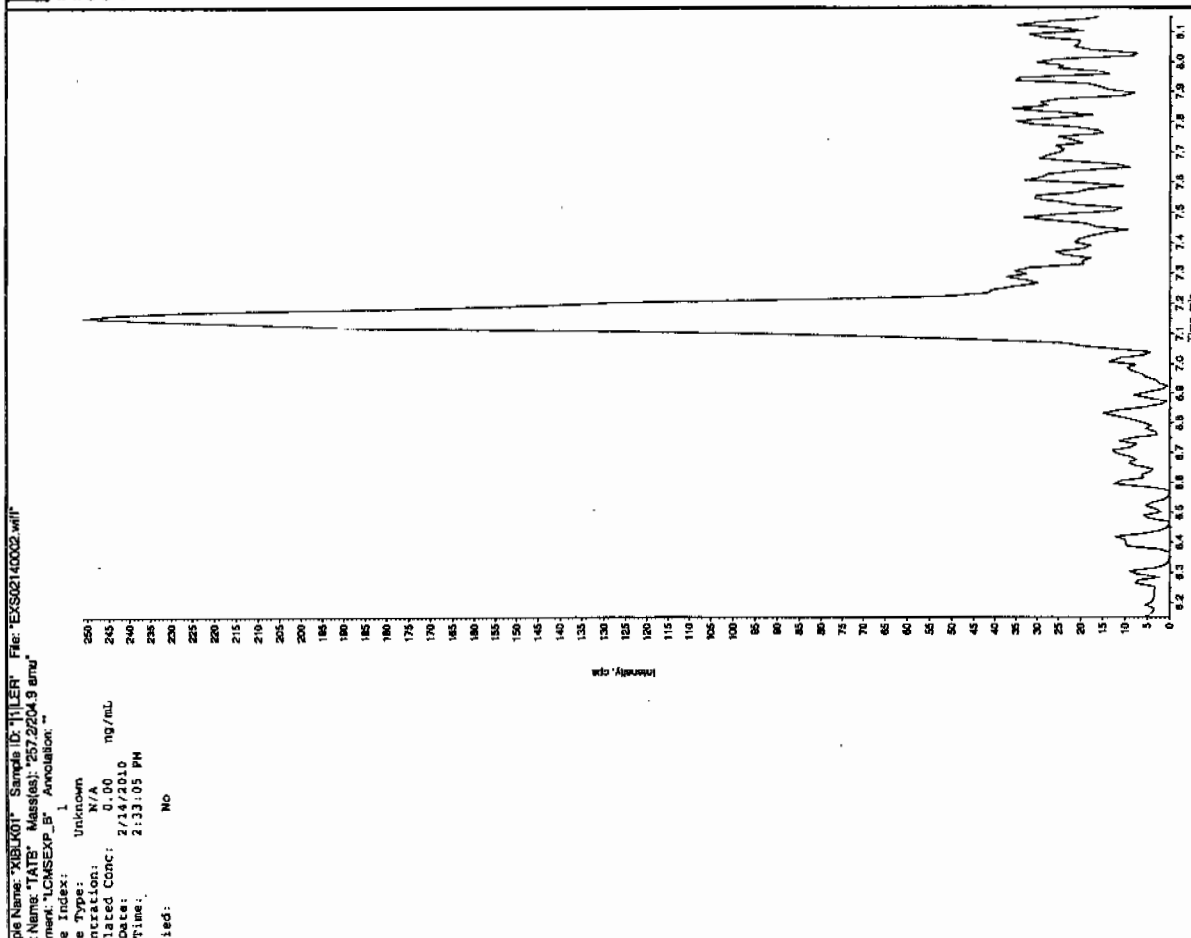
Column: Phenomenex Ultracarb 5u ODS(20)

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

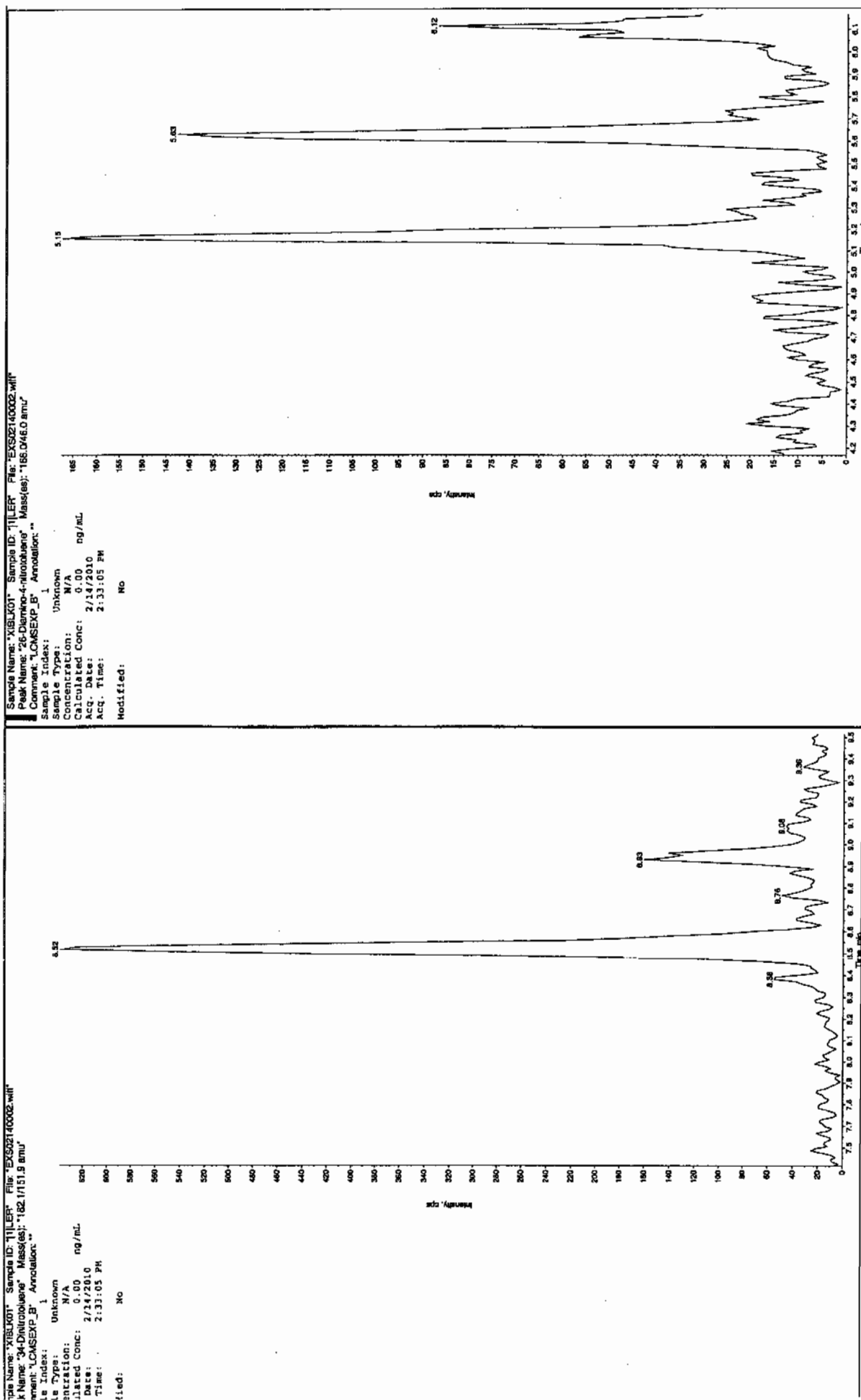
Jan 2/16/10



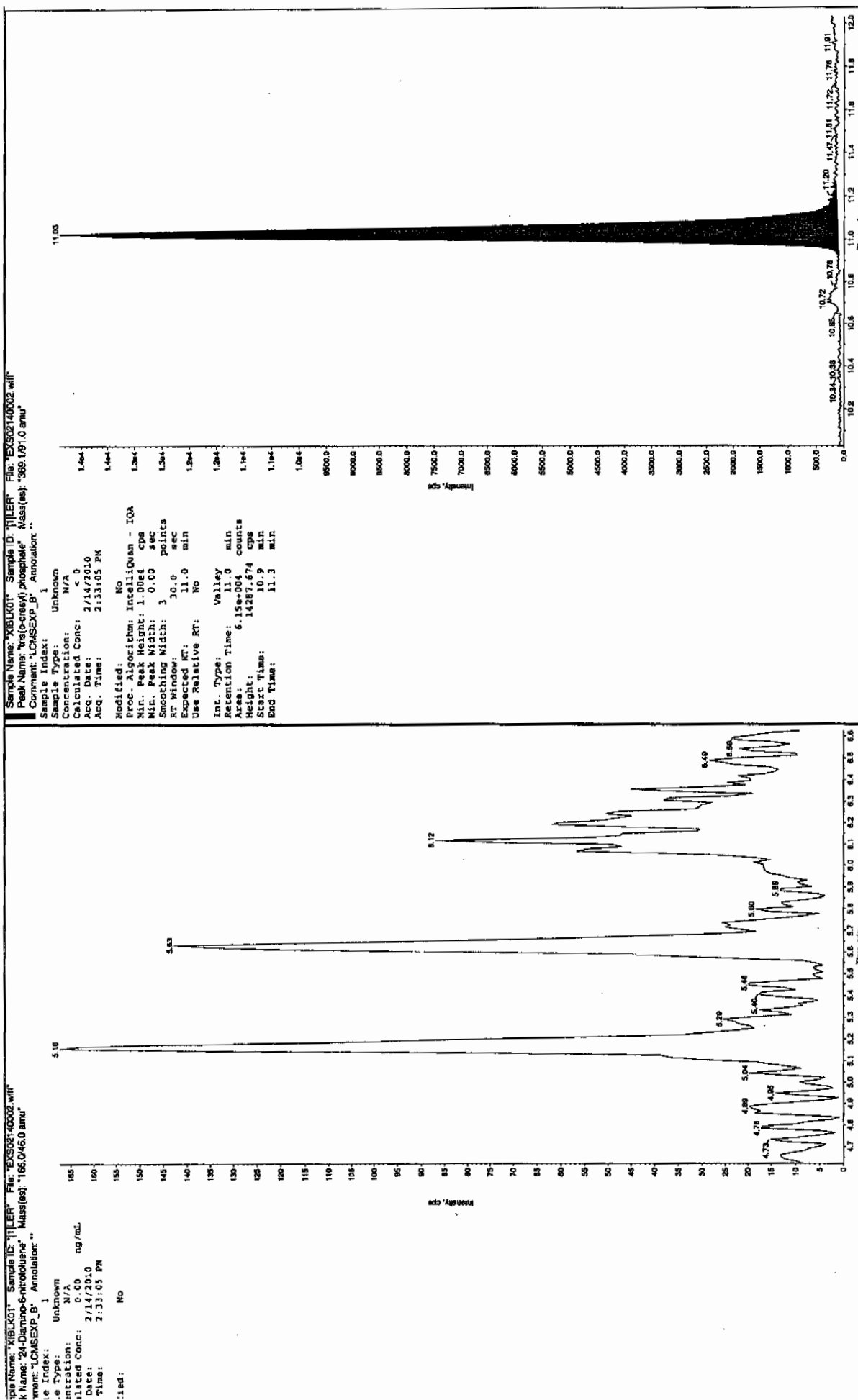
Humal 1/2/10



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



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



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1392

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)
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
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	519.67
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Tue Feb 09 10:21:18 2010, Page 17 of 77

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208009a

Date: 08-Feb-2010

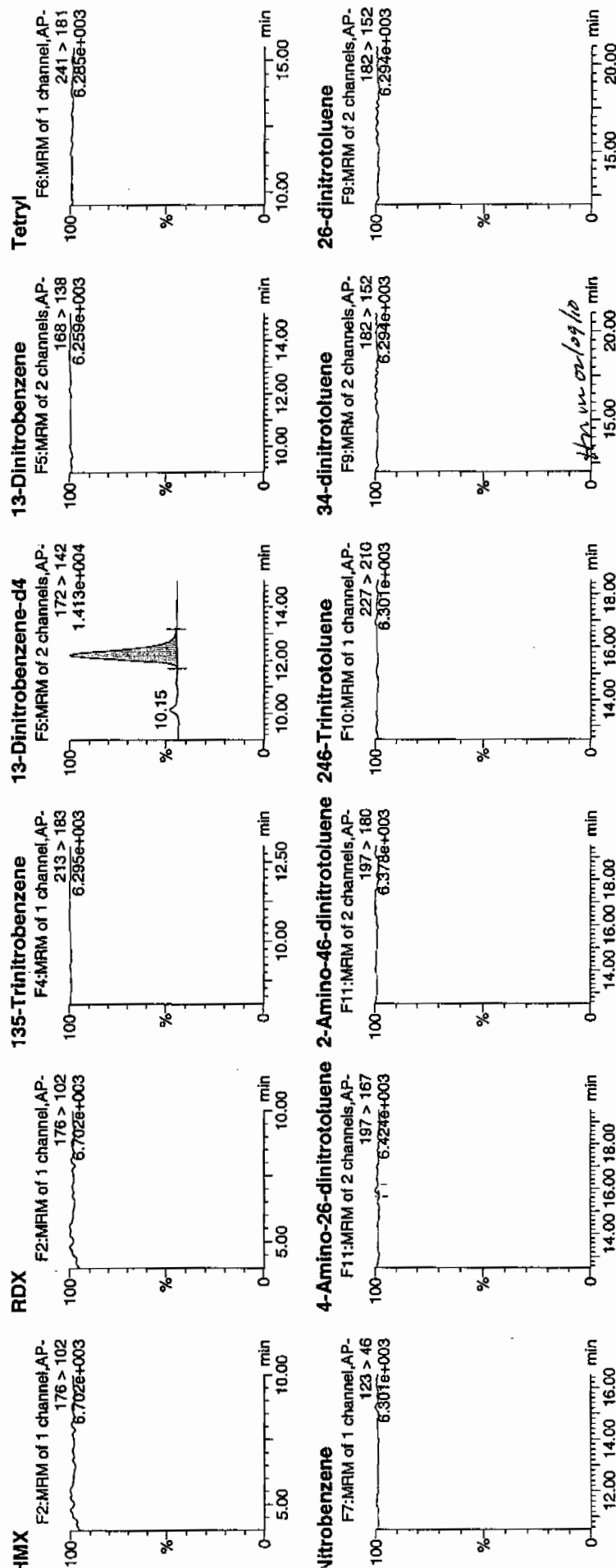
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ID: XIBLK02

Vial: 1:1,A

MA
2/9/10

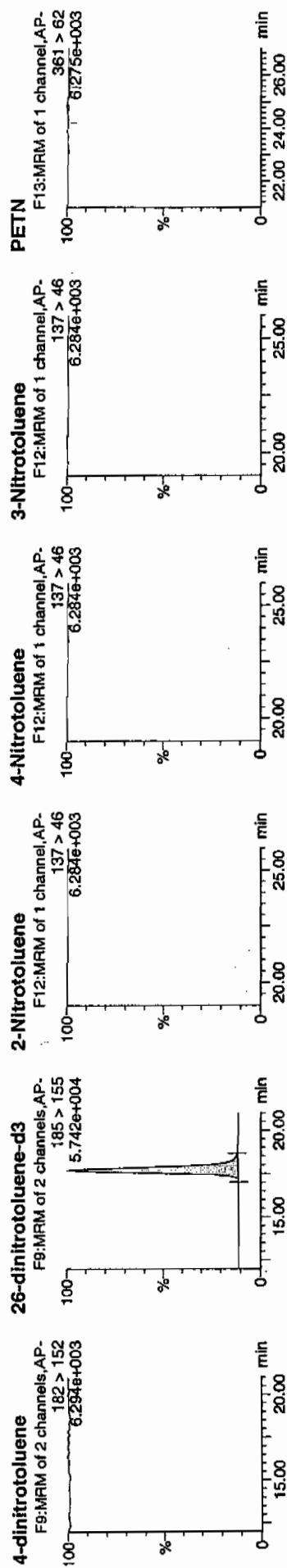
Page 187 of 1574



Printed: Tue Feb 09 10:21:18 2010, Page 18 of 77

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



DL	Name	Trace	RT	Area	SI/Area	Abs.Resp	Response	Flags	Mod	Date	Mod	Time	Conc	ml	%Rec	%Dev	S/N
IBLK02	HMX	176 > 102			3341.034												
IBLK02	RDX	176 > 102			3341.034												
IBLK02	135-Trinitrobenzene	213 > 183			3341.034												
IBLK02	13-Dinitrobenzene-d4	172 > 142	12.20	3341.034													
IBLK02	13-Dinitrobenzene	188 > 138			3341.034												
IBLK02	Tetryl	241 > 181			3341.034												
IBLK02	Nitrobenzene	123 > 46			3341.034												
IBLK02	4-Amino-26-dinitrotoluene	197 > 167			20186.990												
IBLK02	2-Amino-46-dinitrotoluene	197 > 180			20186.990												
IBLK02	246-Trinitrotoluene	227 > 210			20186.990												
IBLK02	34-dinitrotoluene	182 > 152			20186.990												
IBLK02	26-dinitrotoluene	182 > 152			20186.990												
IBLK02	24-dinitrotoluene	182 > 152			20186.990												
IBLK02	26-dinitrotoluene-d3	185 > 155	17.71	20186.990													
IBLK02	2-Nitrotoluene	137 > 46			20186.990												
IBLK02	4-Nitrotoluene	137 > 46			20186.990												
IBLK02	3-Nitrotoluene	137 > 46			20186.990												
IBLK02	PETN	361 > 62			20186.990												

MM- 09-Feb-10 10:07:01

MM- 09-Feb-10 10:12:32

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1392

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

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208011a

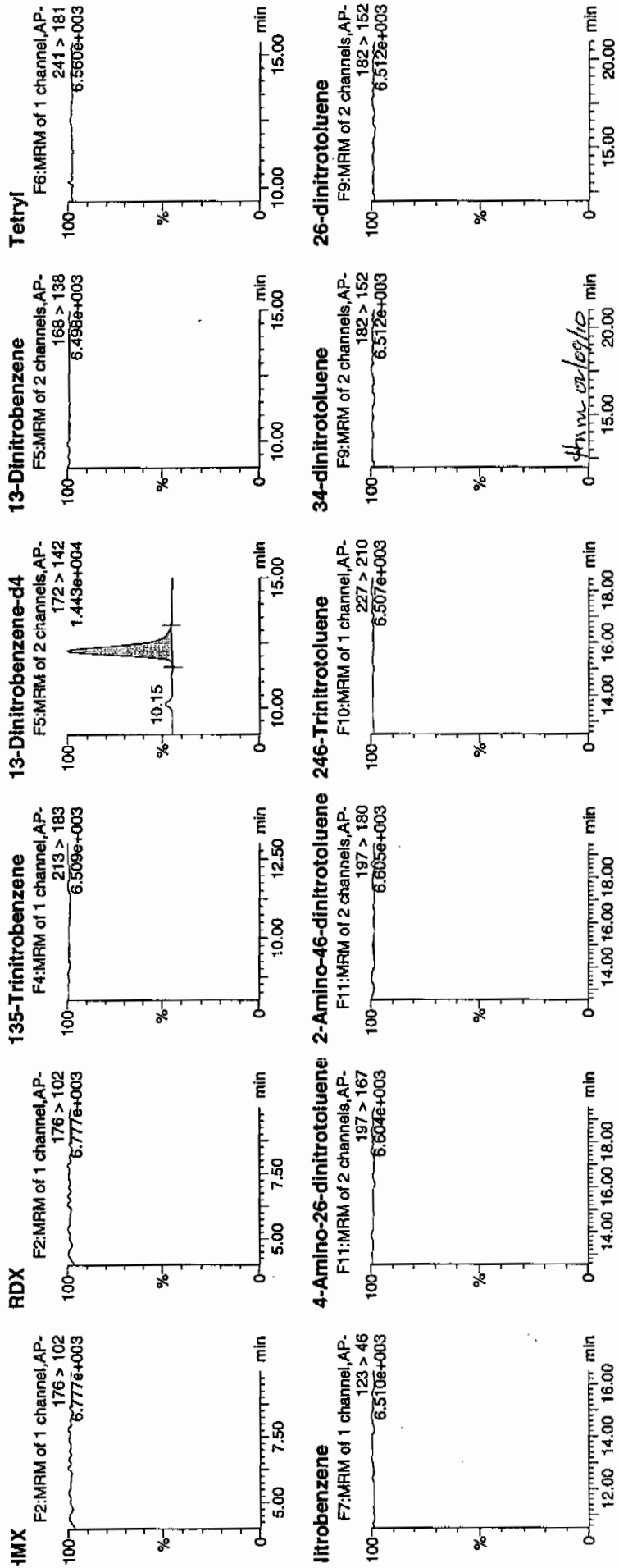
Date: 08-Feb-2010

Time: 19:39:33

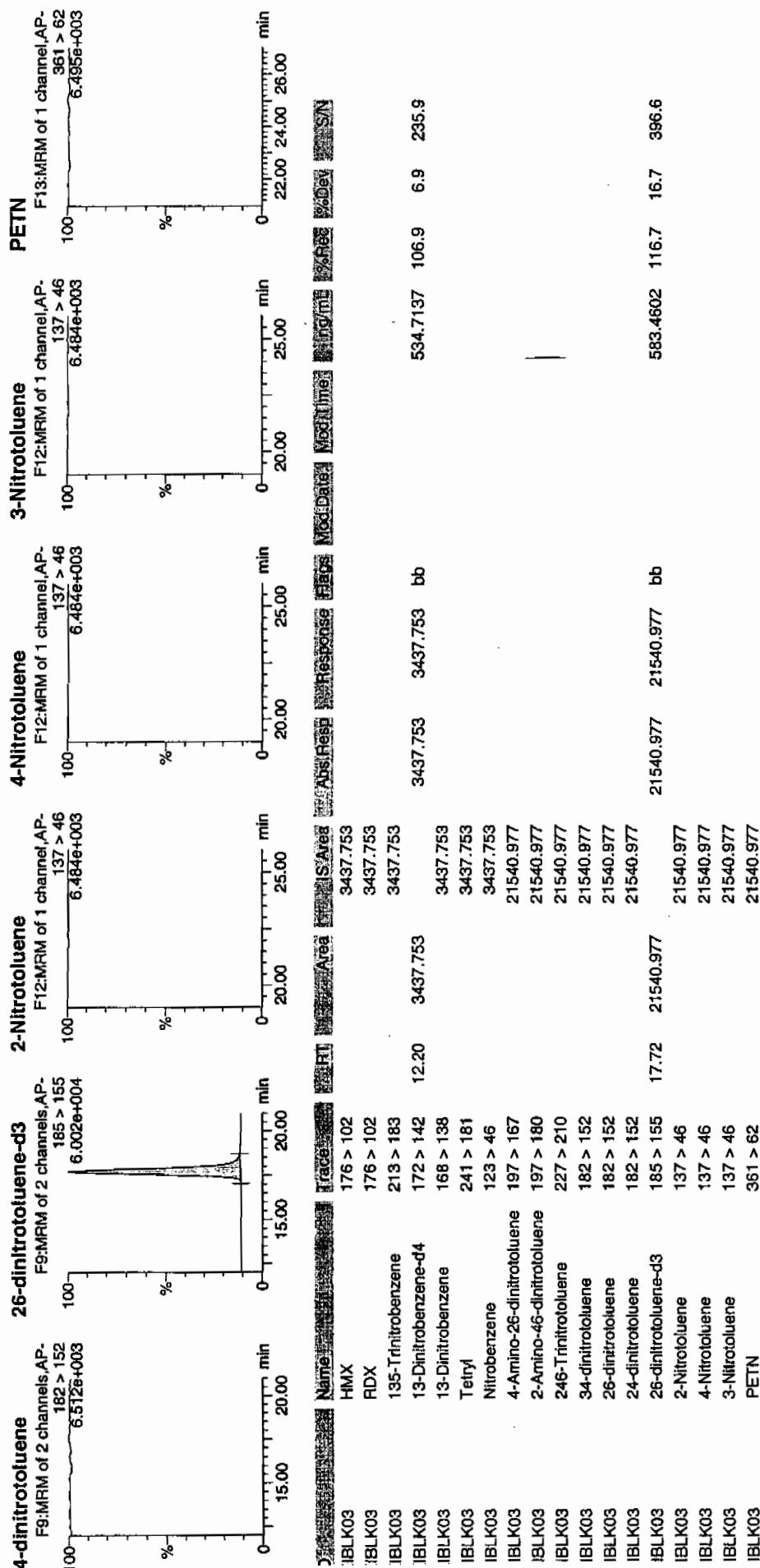
D: XIBLK03

fial: 1:1,A

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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): 10-1392

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)
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
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

Quantify Sample Report
3EL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\WASSLYN\New_Exp.PRO\020810expA.qtd, Time: Tue Feb 09 10:19:05 2010

Name: C:\WASSLYN\NEW_EXP.PRO\Data\EXP0208024a

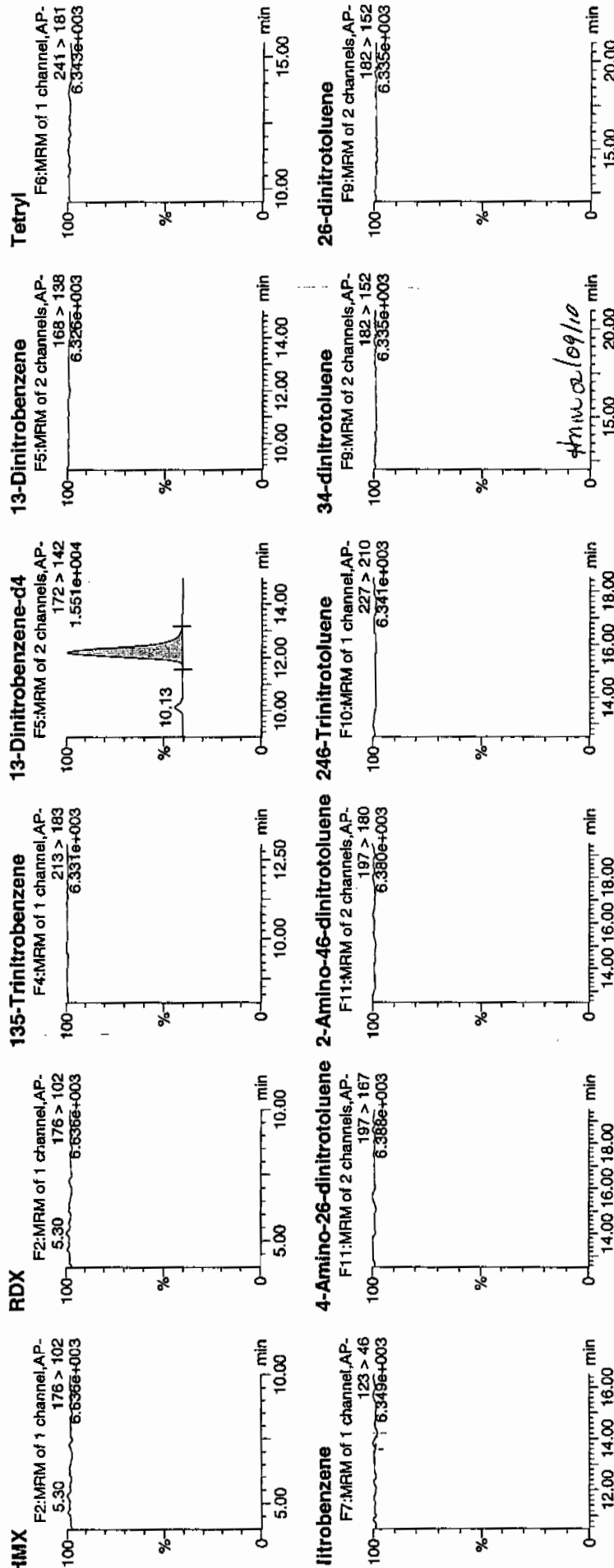
Date: 09-Feb-2010

Time: 02:02:53

D: XIBLK04

/ial: 1:1,A

10/10
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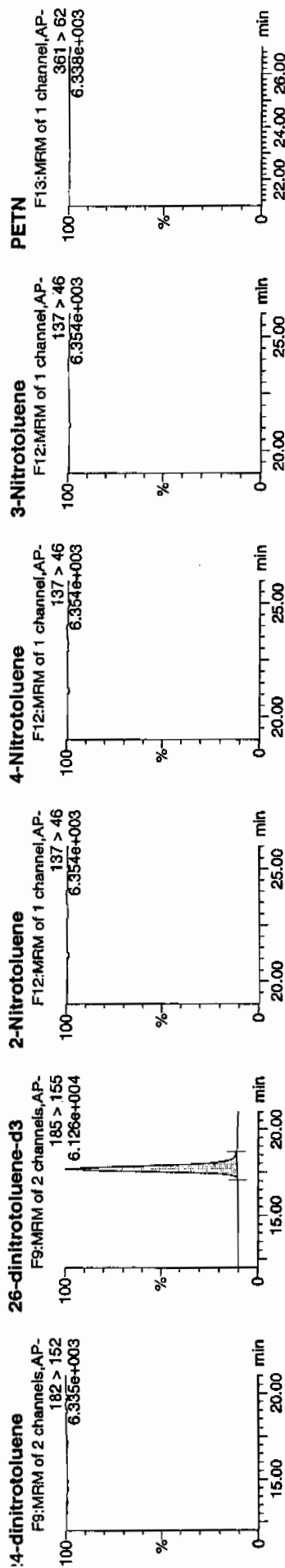


Quantify Sample Report

EL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Tue Feb 09 10:21:18 2010, Page 48 of 77

Dataset: C:\MASSLYNX\New_Exp_PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010



Name	Trace	RT	Area	ISArea	Abs Resp	Flags	Mod Date	Mod Time	% Rec	% Dev	SN
4-BLK04	176 > 102			3821.559							
4-BLK04	176 > 102			3821.559							
4-BLK04	213 > 183			3821.559							
4-BLK04	172 > 142	12.20	3821.559		3821.559	bb			594.4115	118.9	582.0
4-BLK04	168 > 138			3821.559							
4-BLK04	241 > 181			3821.559							
4-BLK04	123 > 46			3821.559							
4-BLK04	197 > 167			21861.324							
4-BLK04	197 > 180			21861.324							
4-BLK04	227 > 210			21861.324							
4-BLK04	182 > 152			21861.324							
4-BLK04	182 > 152			21861.324							
4-BLK04	182 > 152			21861.324							
4-BLK04	185 > 155	17.71	21861.324		21861.324	bb			592.1371	118.4	2394.8
4-BLK04	137 > 46			21861.324							
4-BLK04	137 > 46			21861.324							
4-BLK04	137 > 46			21861.324							
4-BLK04	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): 10-1392

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
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\EXP0208037a

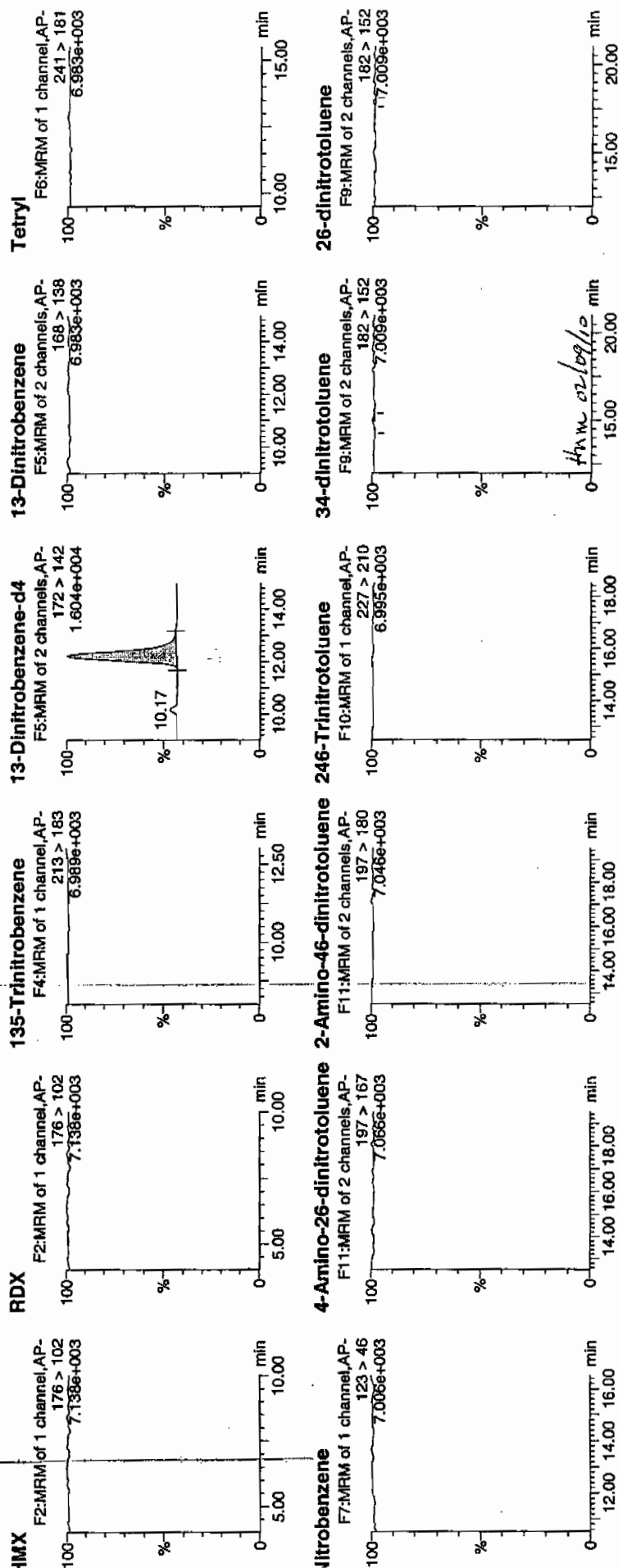
Date: 09-Feb-2010

Time: 08:26:48

D: XIBLK05

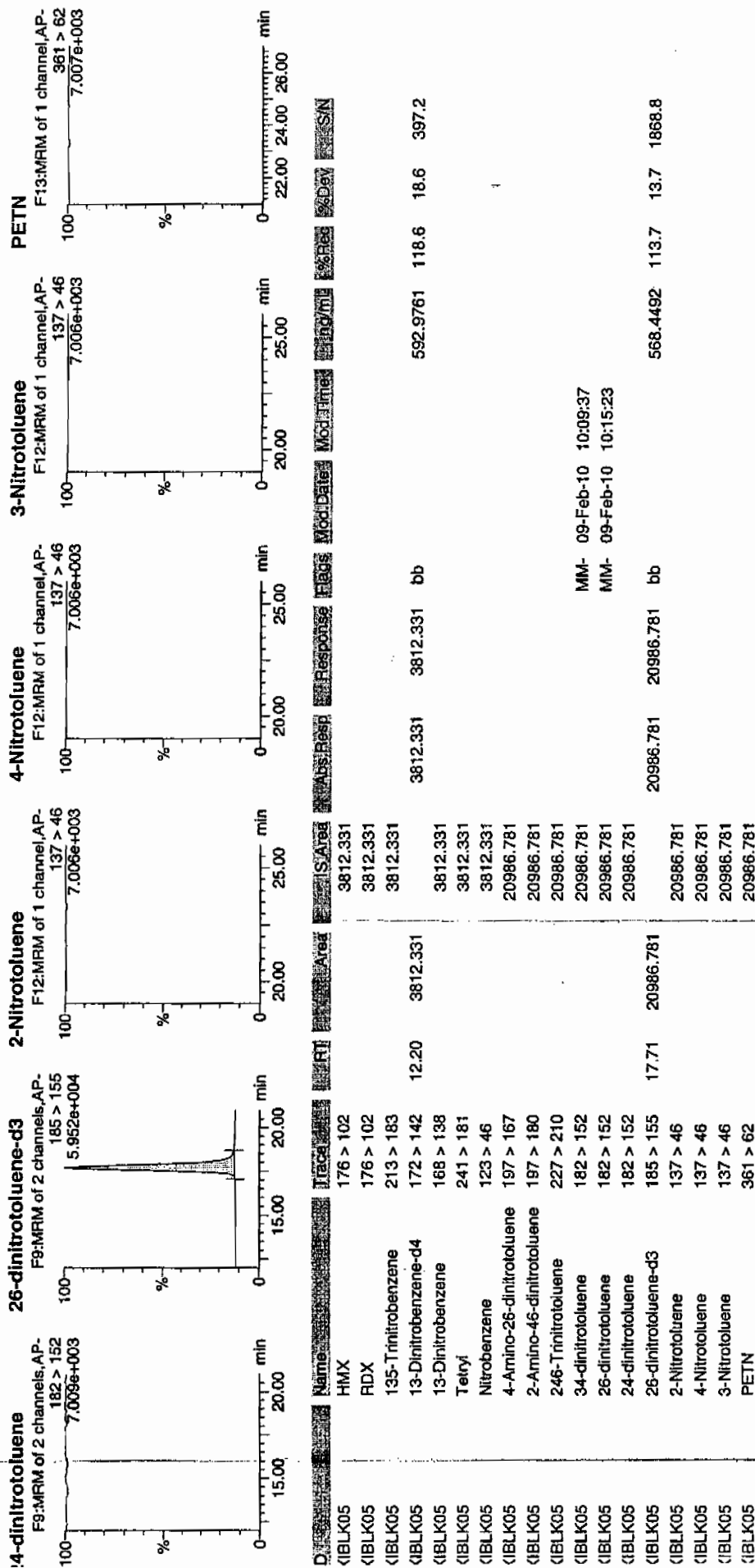
/ial: 1:1,A

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2/10/10



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



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1392

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)
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
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

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\EXP0208050a

Date: 09-Feb-2010

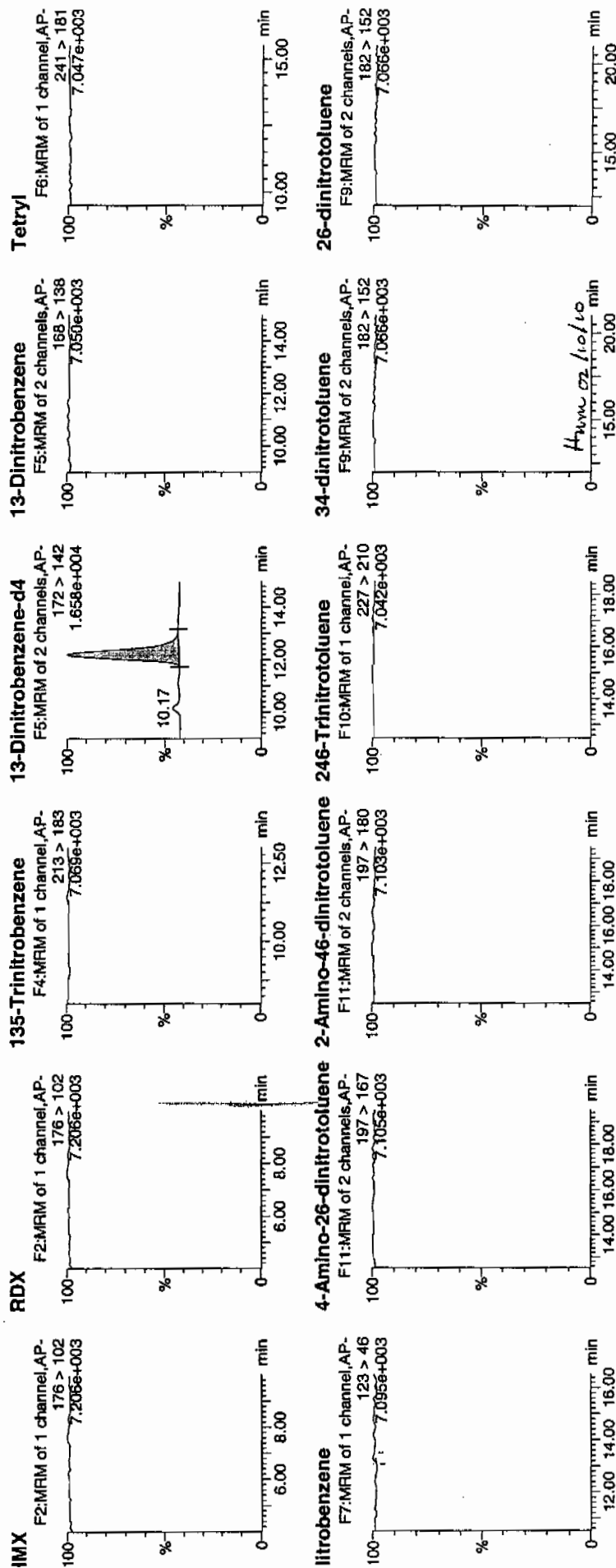
Time: 14:50:17

D: XIBLK06

Ratio: 1:1,A

2/10/10

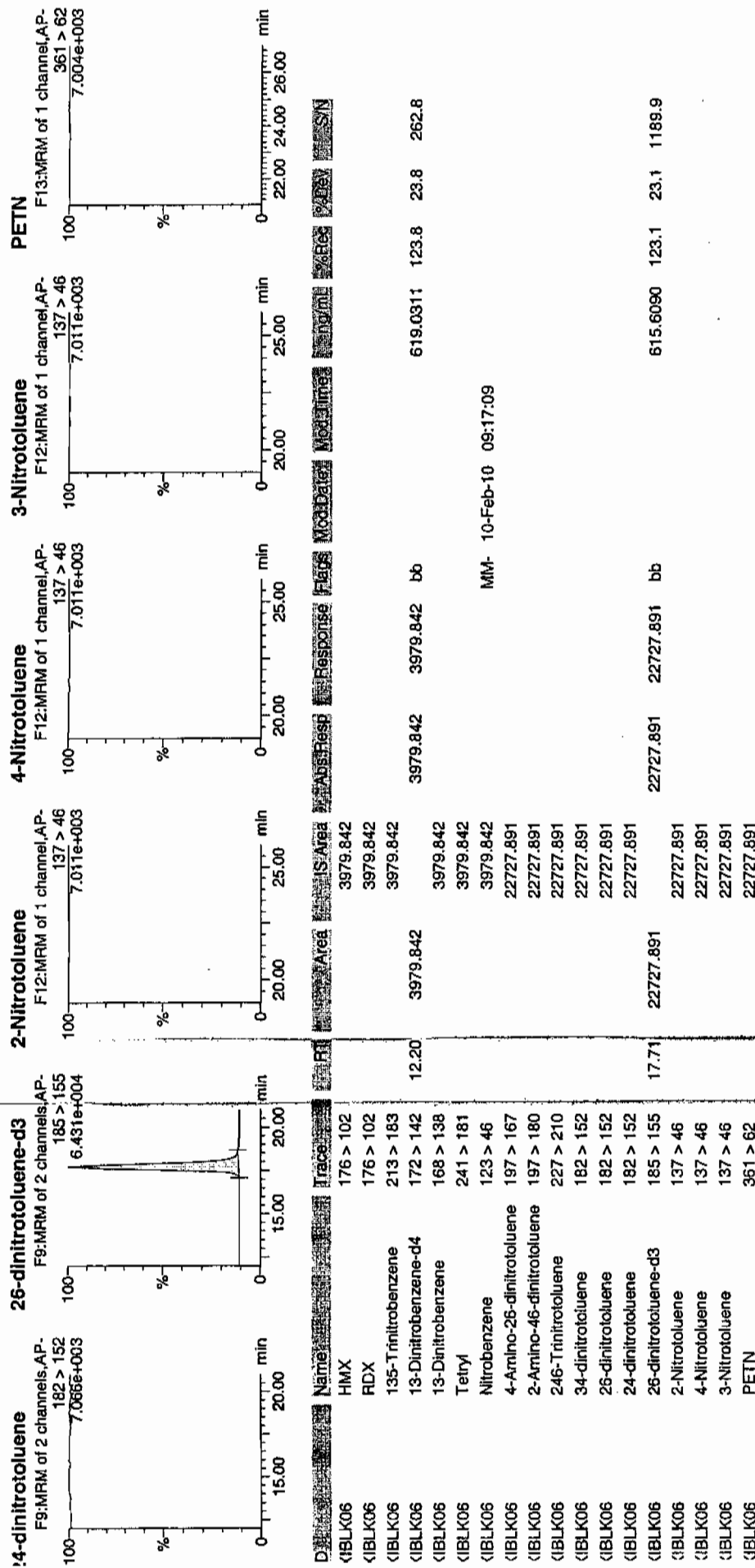
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Printed: Wed Feb 10 09:25:16 2010, Page 24 of 79

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



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1392

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\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010

Sample Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208063a

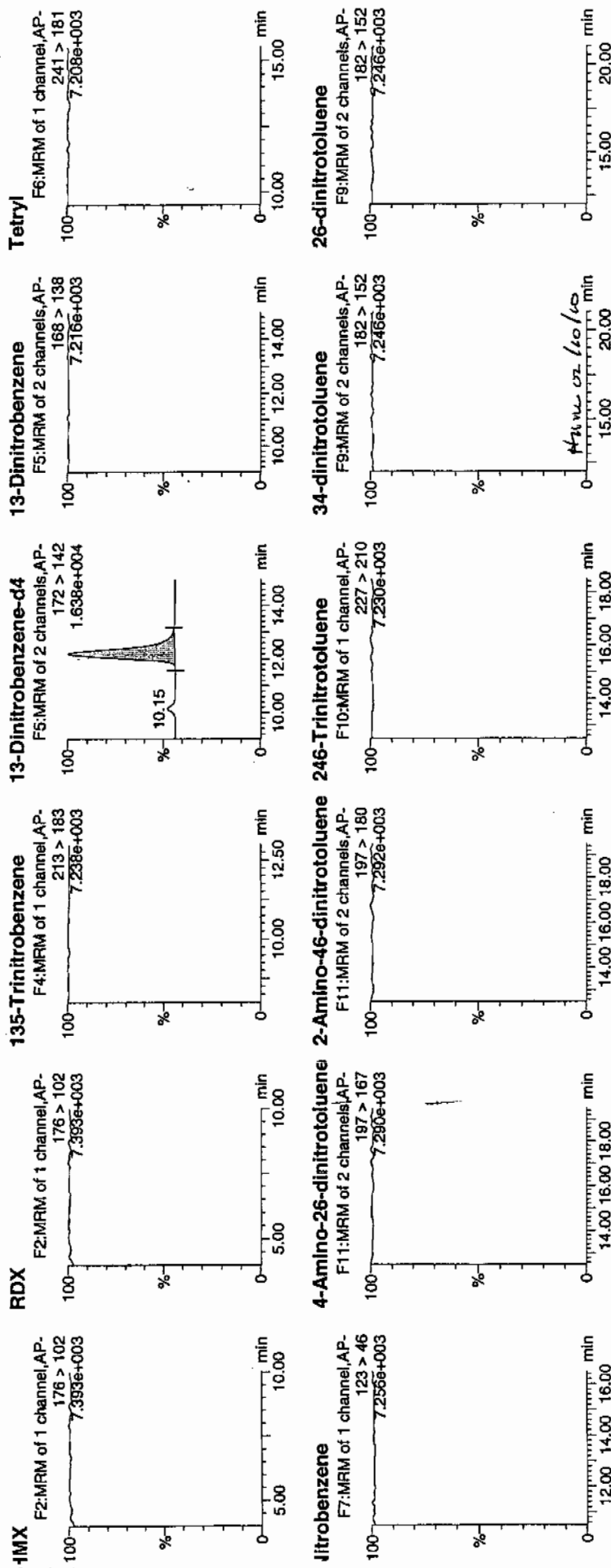
Date: 09-Feb-2010

Time: 21:13:58

D: XIBLK07

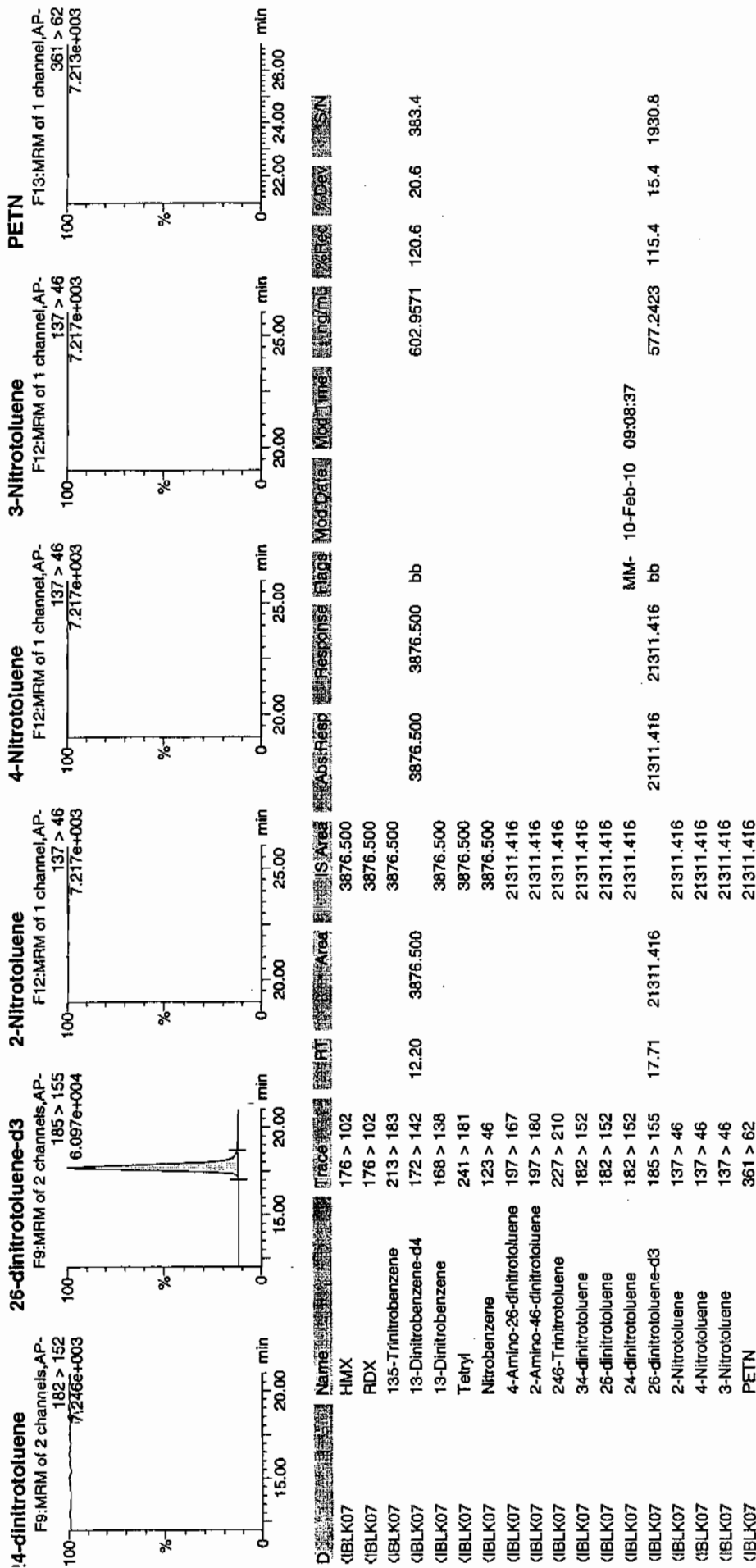
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2/10/10



Quantity 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



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1392

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)
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
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

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

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Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\data\EXP0208076a

Date: 10-Feb-2010

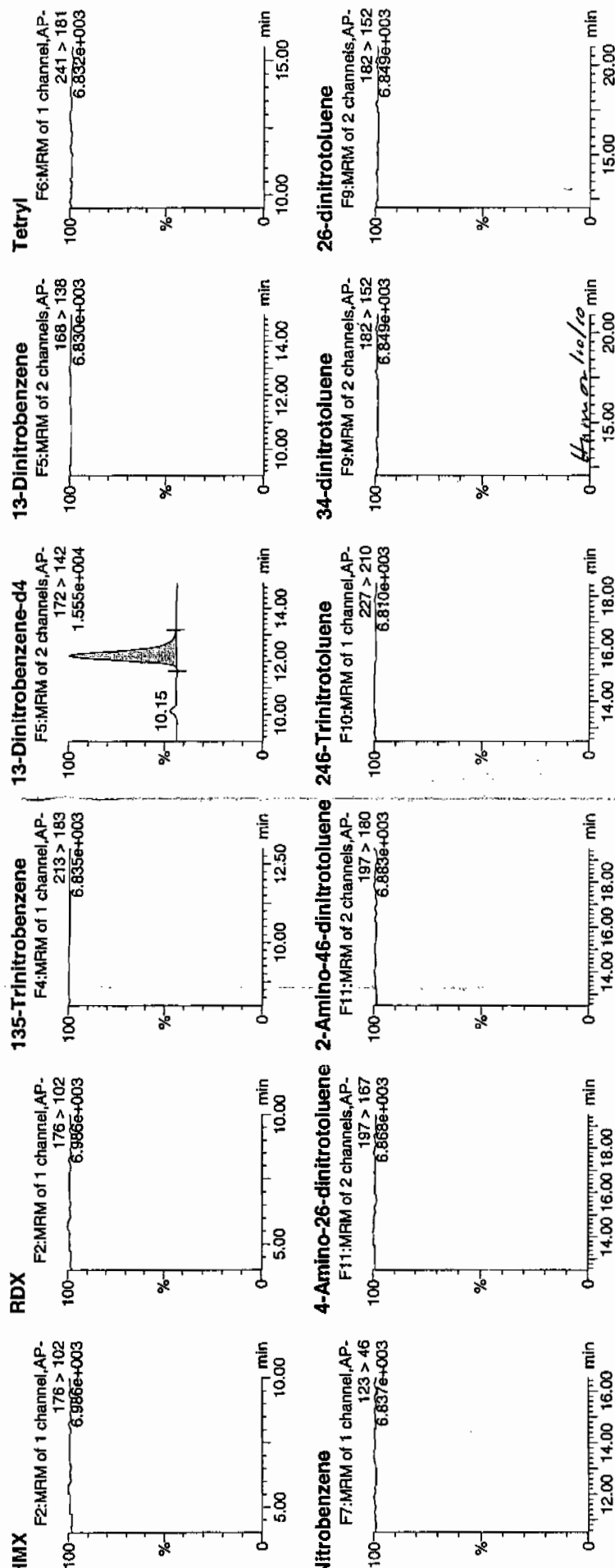
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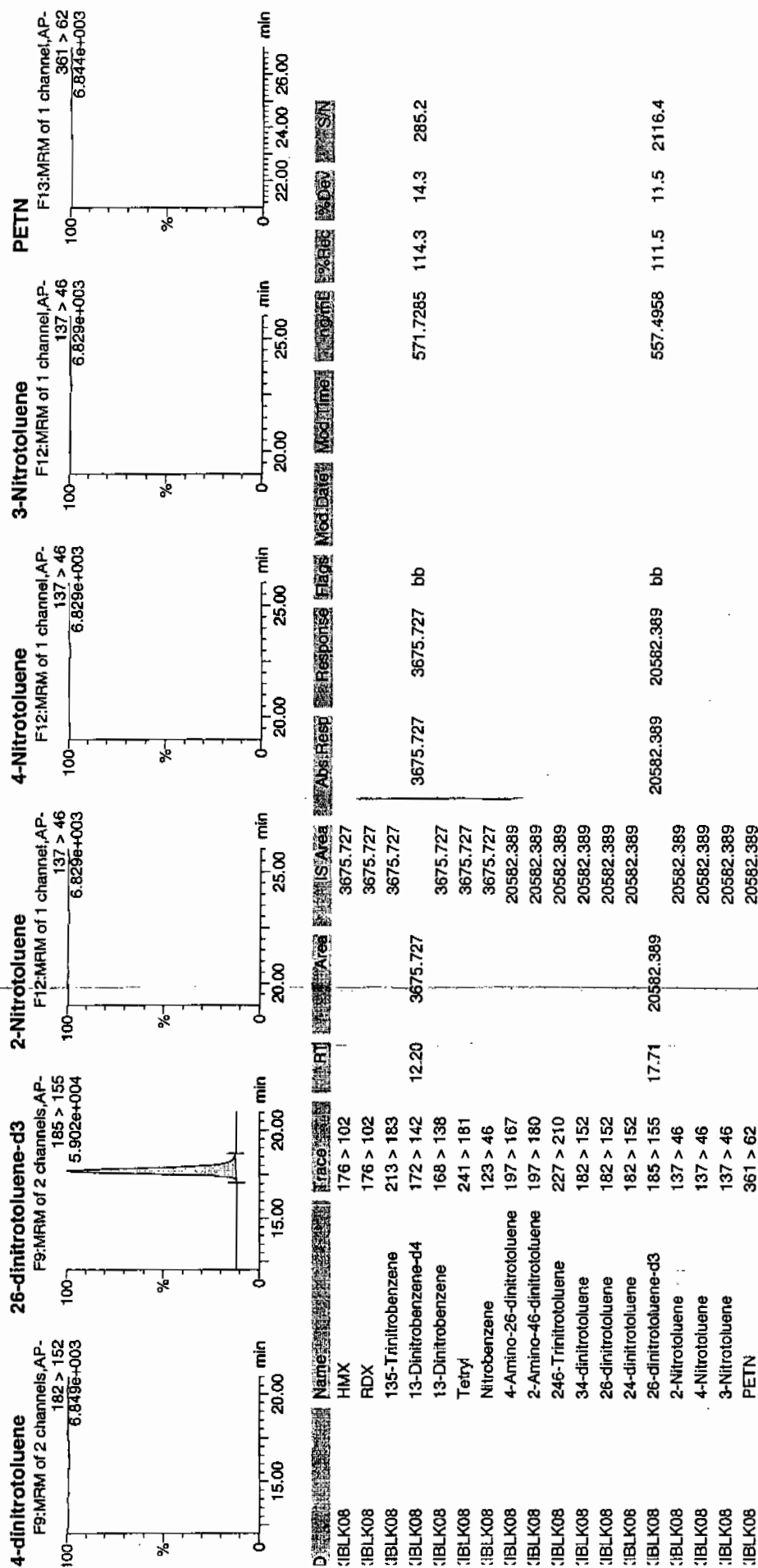
D: XIBLK08

/lat: 1:1,A

2/10/10

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4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1392

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

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

Sample Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208089a

Date: 10-Feb-2010

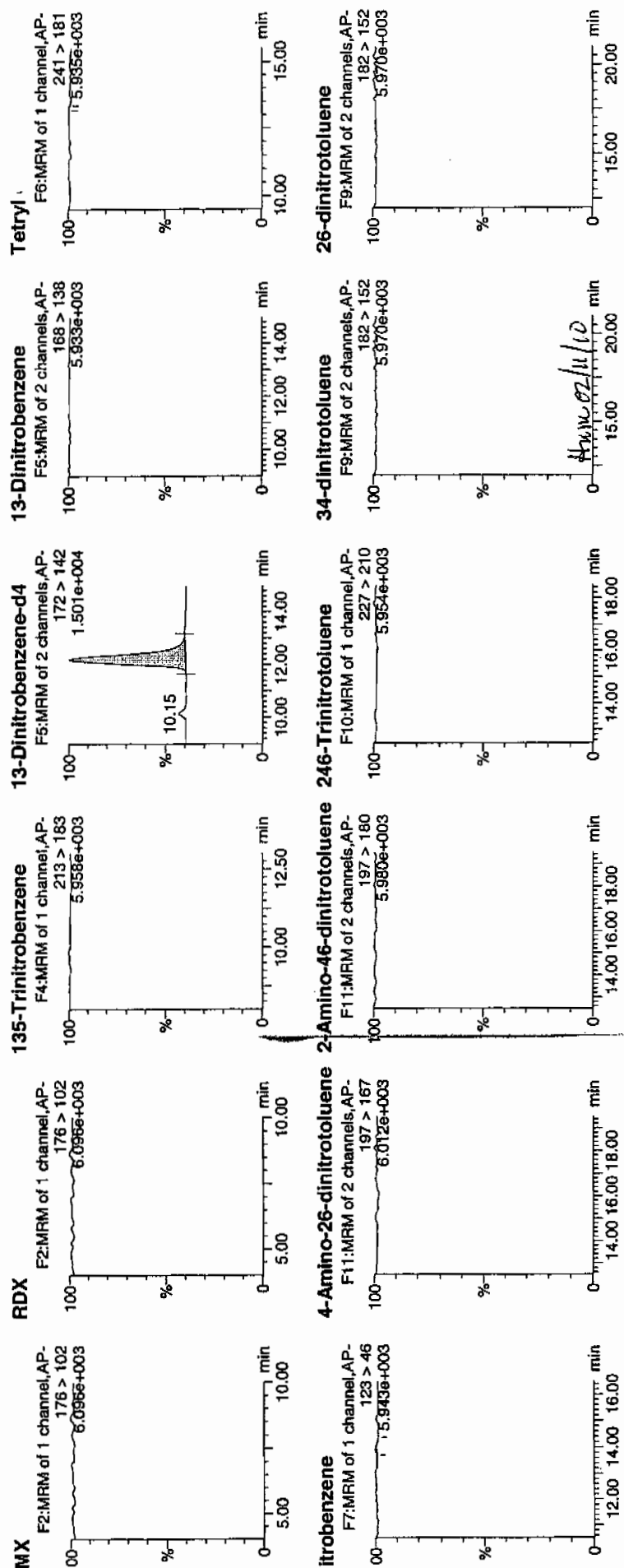
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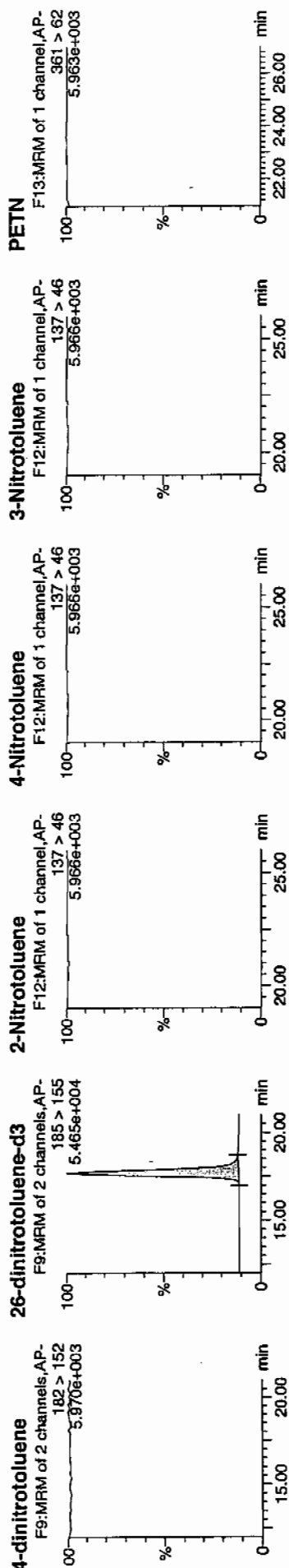
2/11/10

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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



Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Rec	Dev	S/N
IBLK09	176 > 102			3790.207								
IBLK09	176 > 102			3790.207								
IBLK09	135-Trinitrobenzene	213 > 183		3790.207								
IBLK09	13-Dinitrobenzene-d4	172 > 142	12.21	3790.207								
IBLK09	13-Dinitrobenzene	168 > 138		3790.207								
IBLK09	Tetryl	241 > 181		3790.207								
IBLK09	Nitrobenzene	123 > 46		3790.207								
IBLK09	4-Amino-26-dinitrotoluene	197 > 167		19726.857								
IBLK09	2-Amino-46-dinitrotoluene	197 > 180		19726.857								
IBLK09	246-Trinitrotoluene	227 > 210		19726.857								
IBLK09	34-dinitrotoluene	182 > 152		19726.857								
IBLK09	26-dinitrotoluene	182 > 152		19726.857								
IBLK09	24-dinitrotoluene	182 > 152		19726.857								
IBLK09	26-dinitrotoluene-d3	185 > 155	17.68	19726.857								
IBLK09	2-Nitrotoluene	137 > 46		19726.857								
IBLK09	4-Nitrotoluene	137 > 46		19726.857								
IBLK09	3-Nitrotoluene	137 > 46		19726.857								
IBLK09	PETN	361 > 62		19726.857								

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1392

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)
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
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

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\EXP0208093a

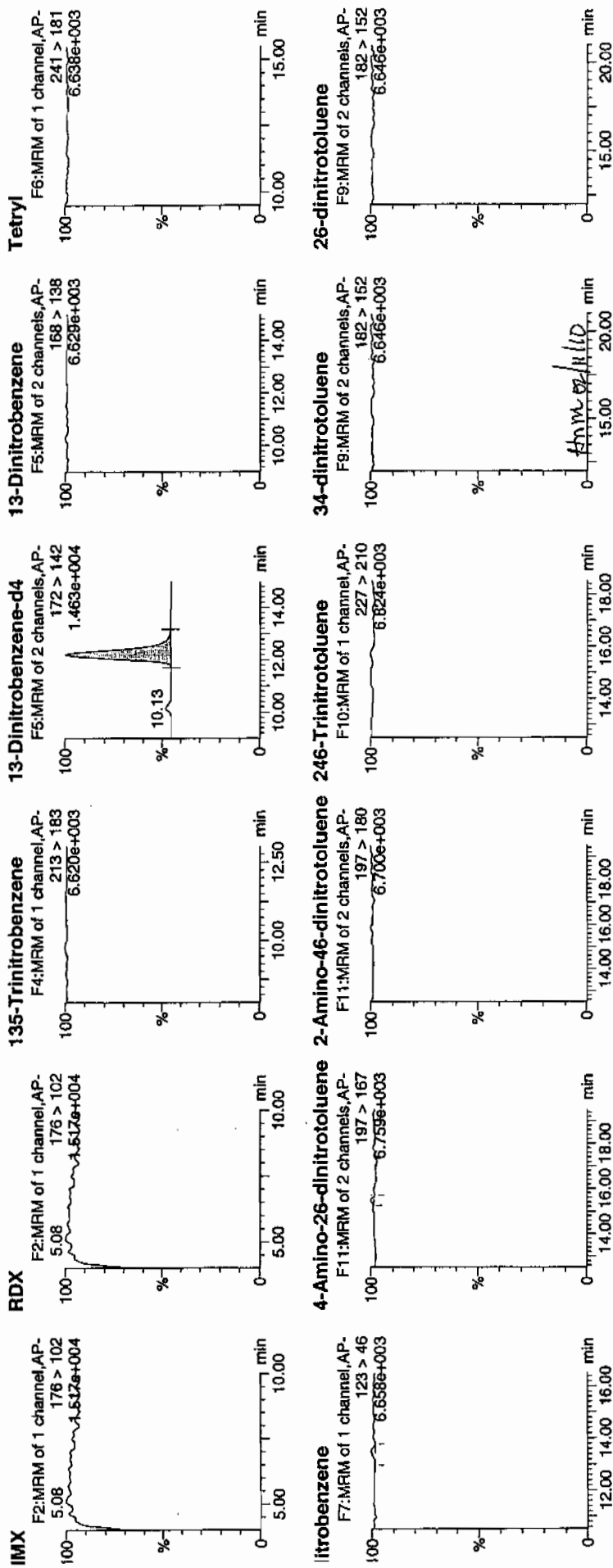
Date: 10-Feb-2010

Time: 11:59:19

Job: XIBLK10

Ratio: 1:1,F

2/11/10

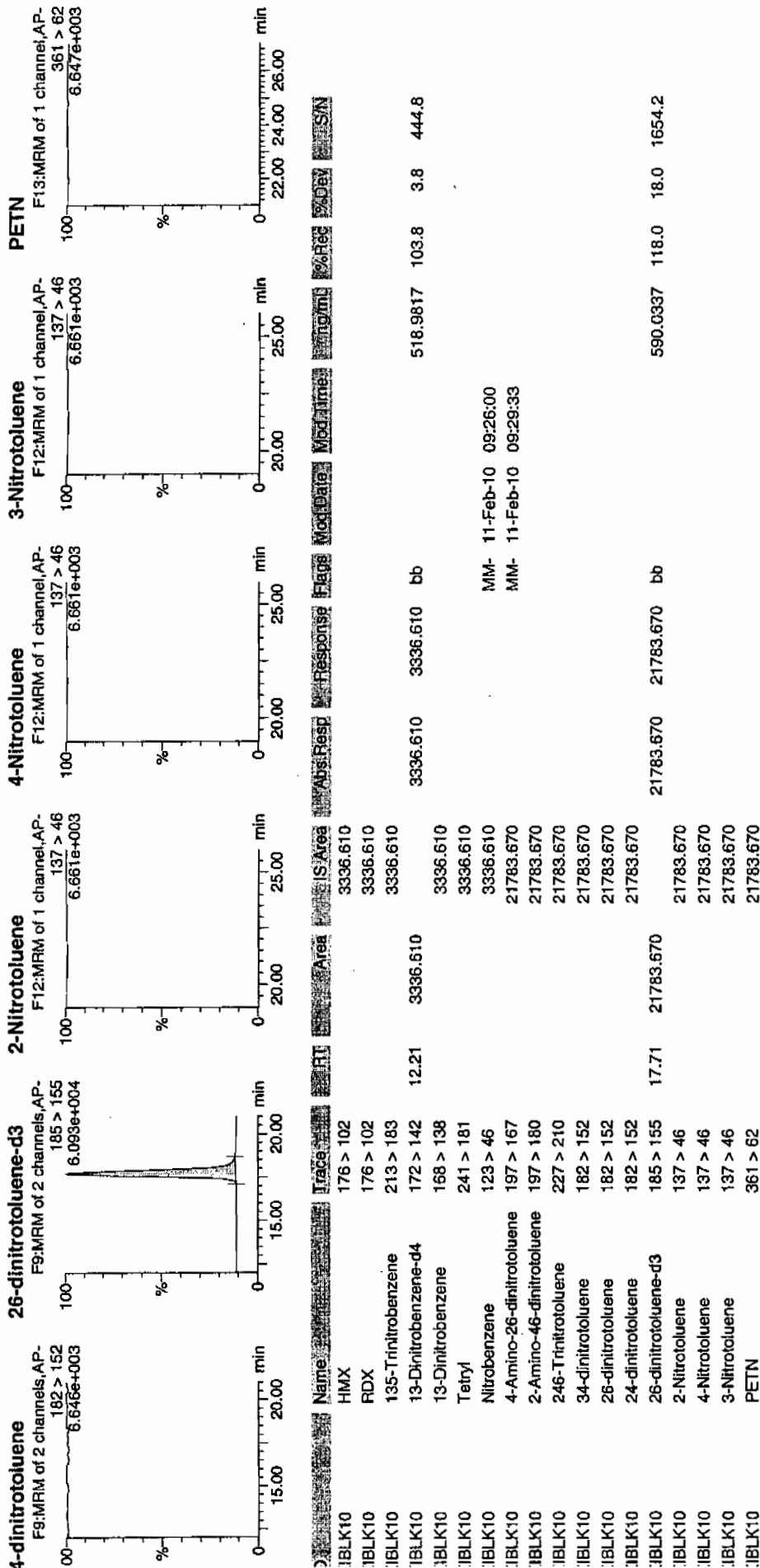


uantify Sample Report

EL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Thu Feb 11 10:09:12 2010, Page 32 of 117

atset: 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): 10-1392

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

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

Filename: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208096a

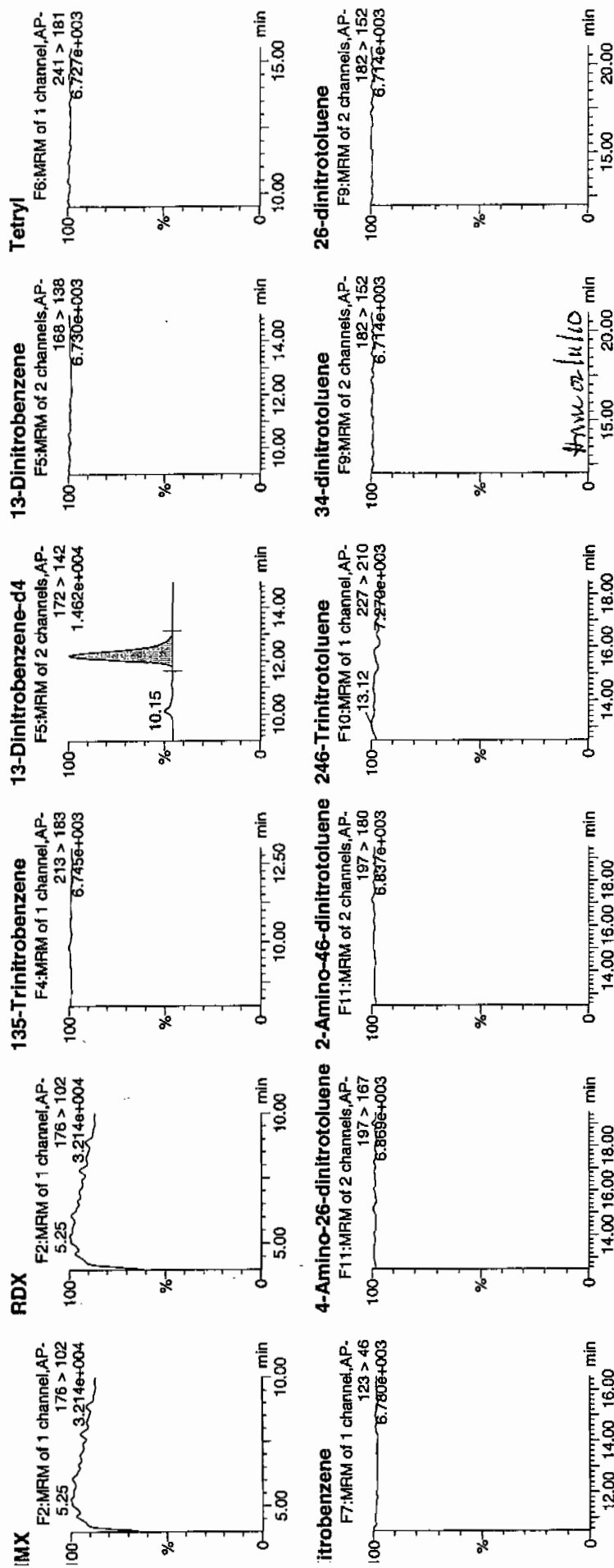
Date: 10-Feb-2010

Time: 13:28:03

Operator: XIBLK11

Sample: 1:1,F

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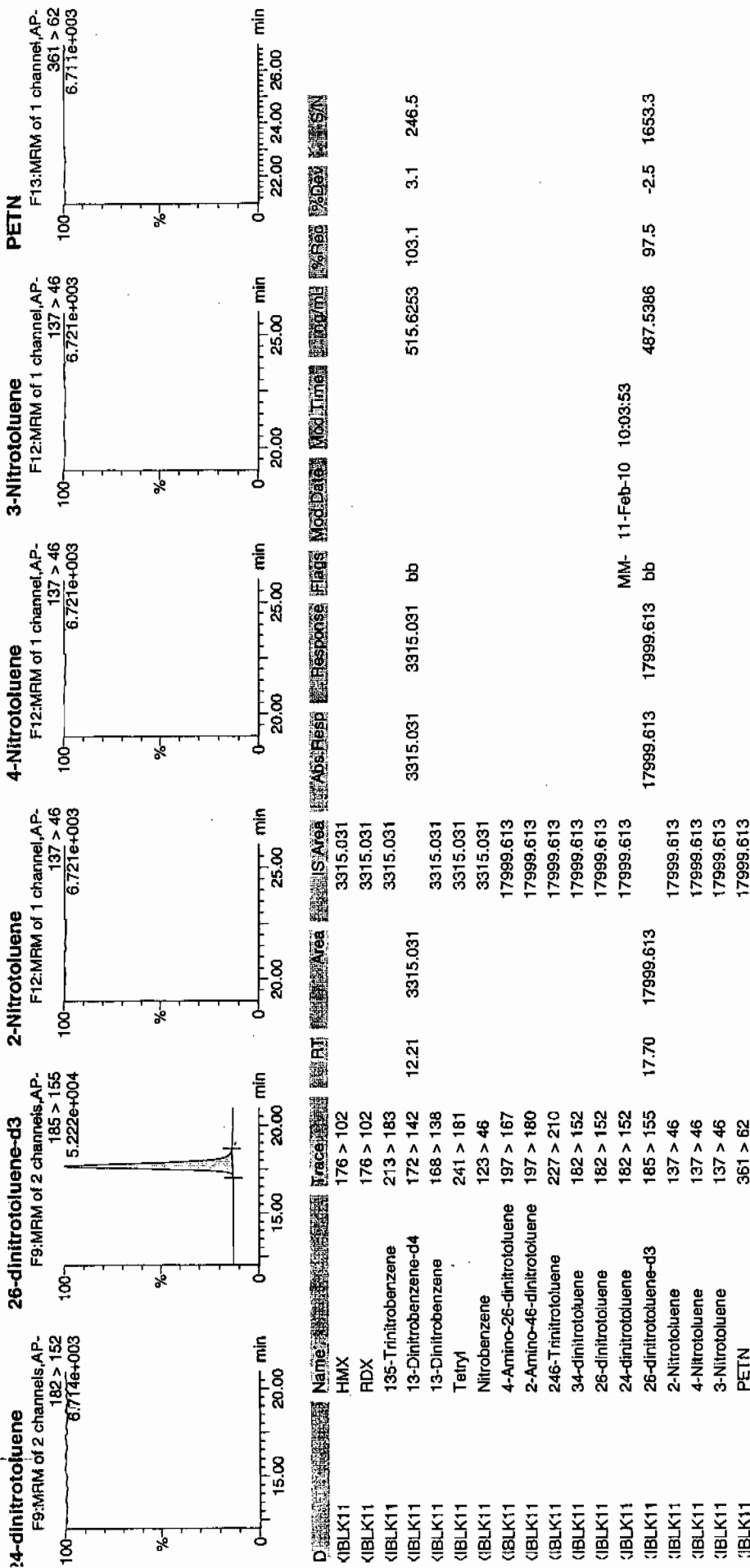


Quantify Sample Report

3EL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Thu Feb 11 10:09:12 2010, Page 38 of 117

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): 10-1392

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)
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
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

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

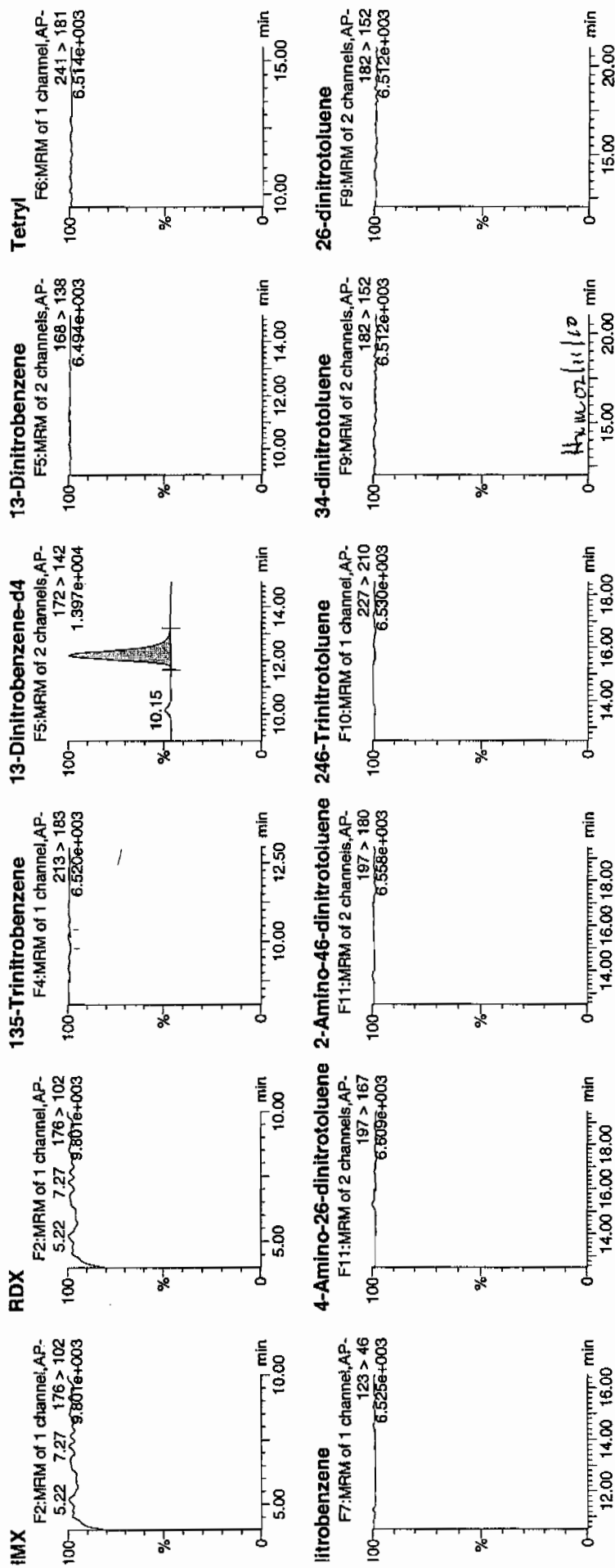
Date: 10-Feb-2010

Time: 15:55:49

Operator: XIBLK12

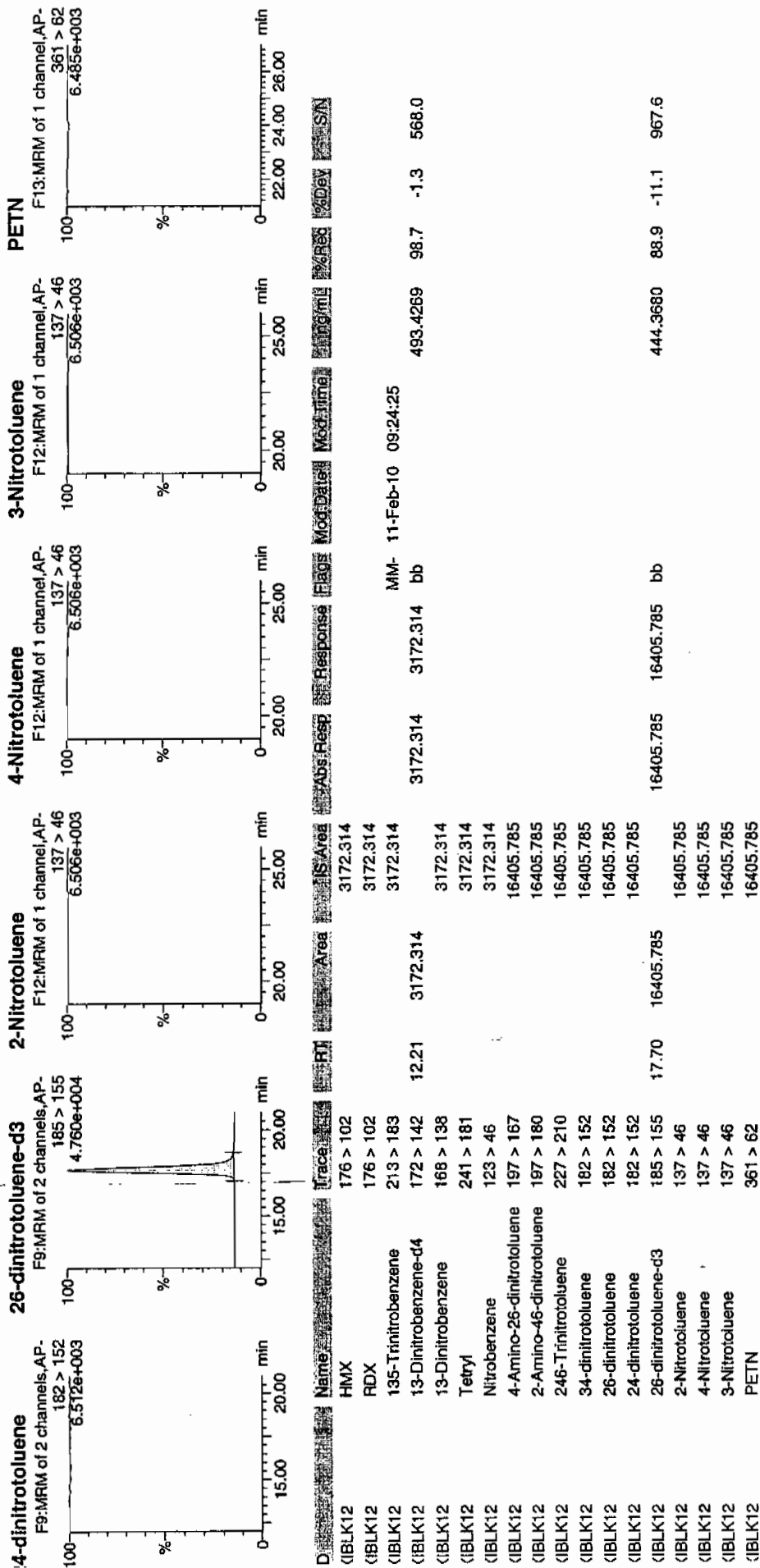
File: 1:1.A

Handwritten: 10.15



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): 10-1392

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
 iEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010

Filename: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208114a

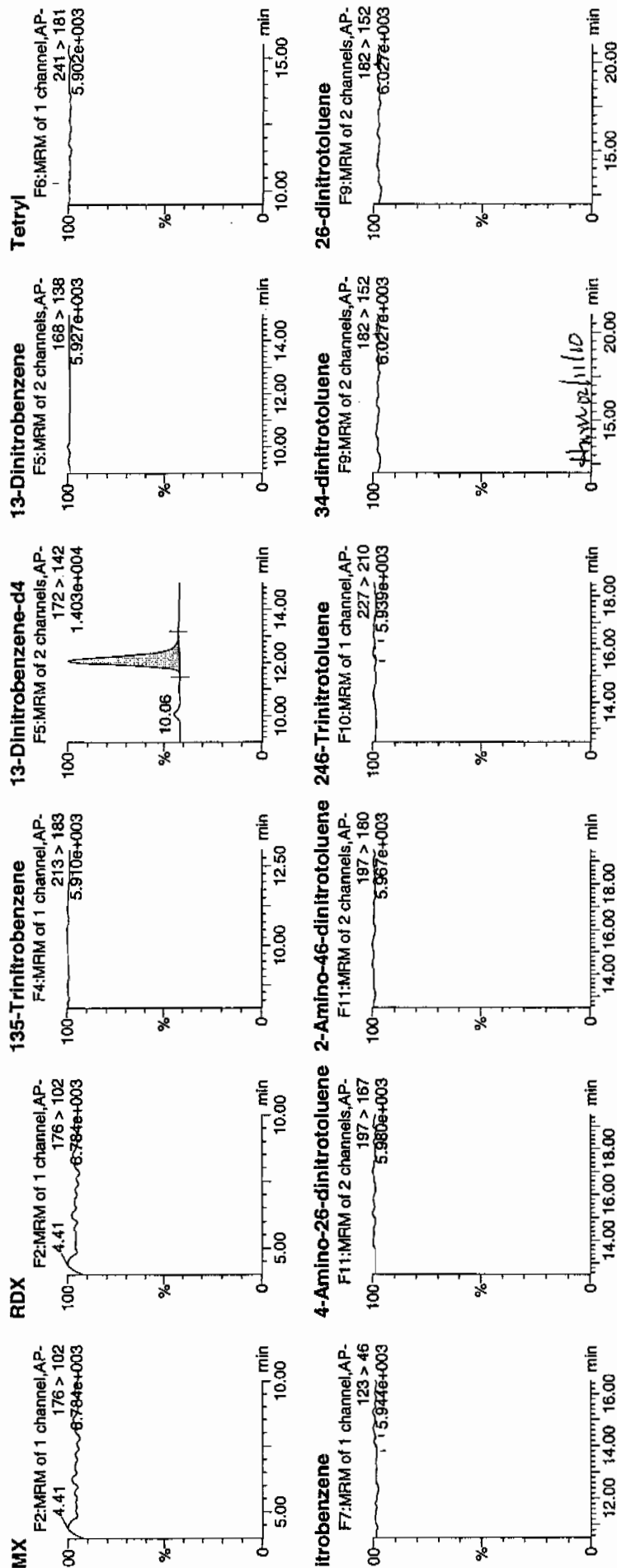
Date: 10-Feb-2010

Time: 22:19:14

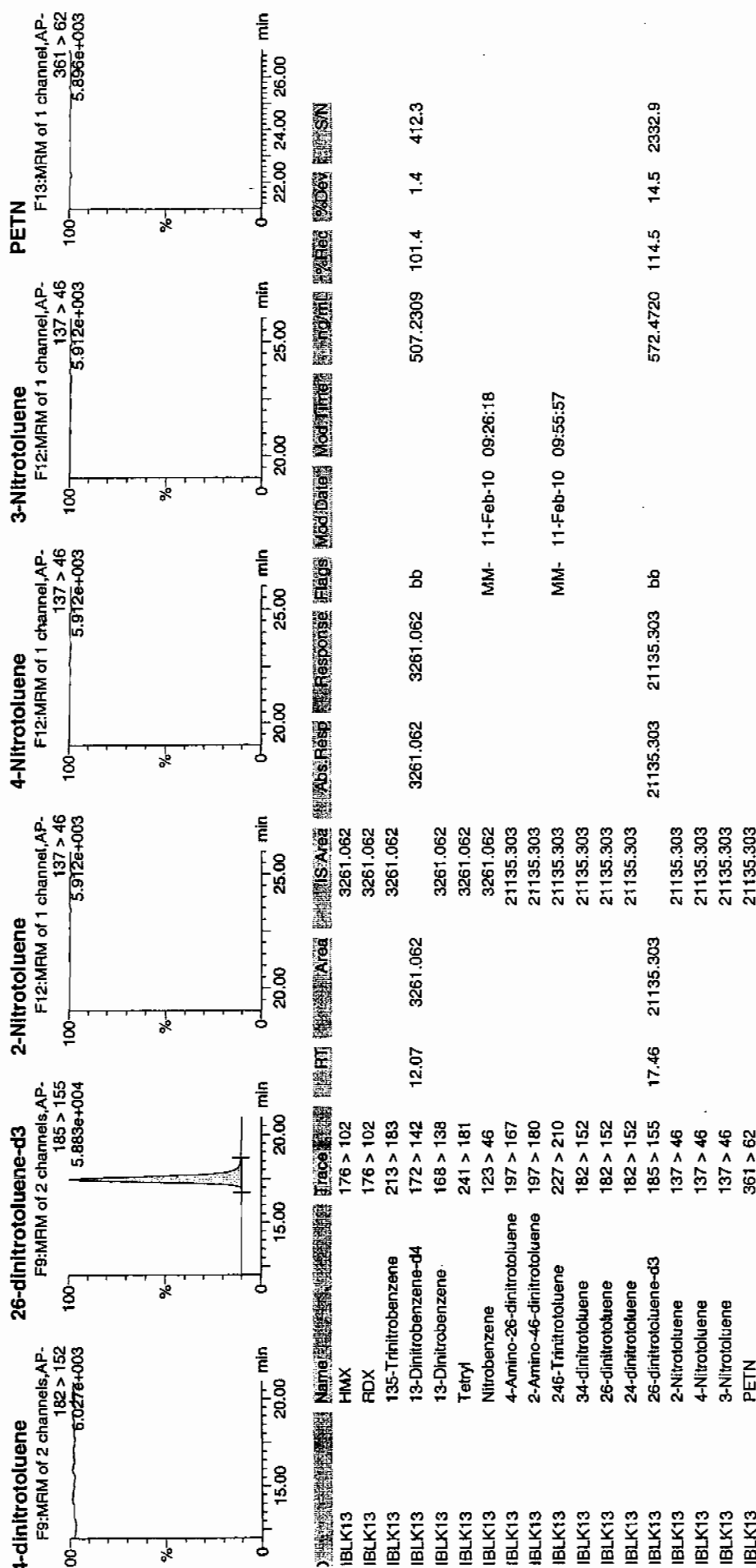
Operator: XIBLK13

Sample: 1:1,A

2/11/10



atset: 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): 10-1392

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)
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
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

SEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Thu Feb 11 10:09:12 2010, Page 87 of 117

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA2.qtd, Time: Thu Feb 11 10:06:10 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208121a

Date: 11-Feb-2010

Time: 01:45:43

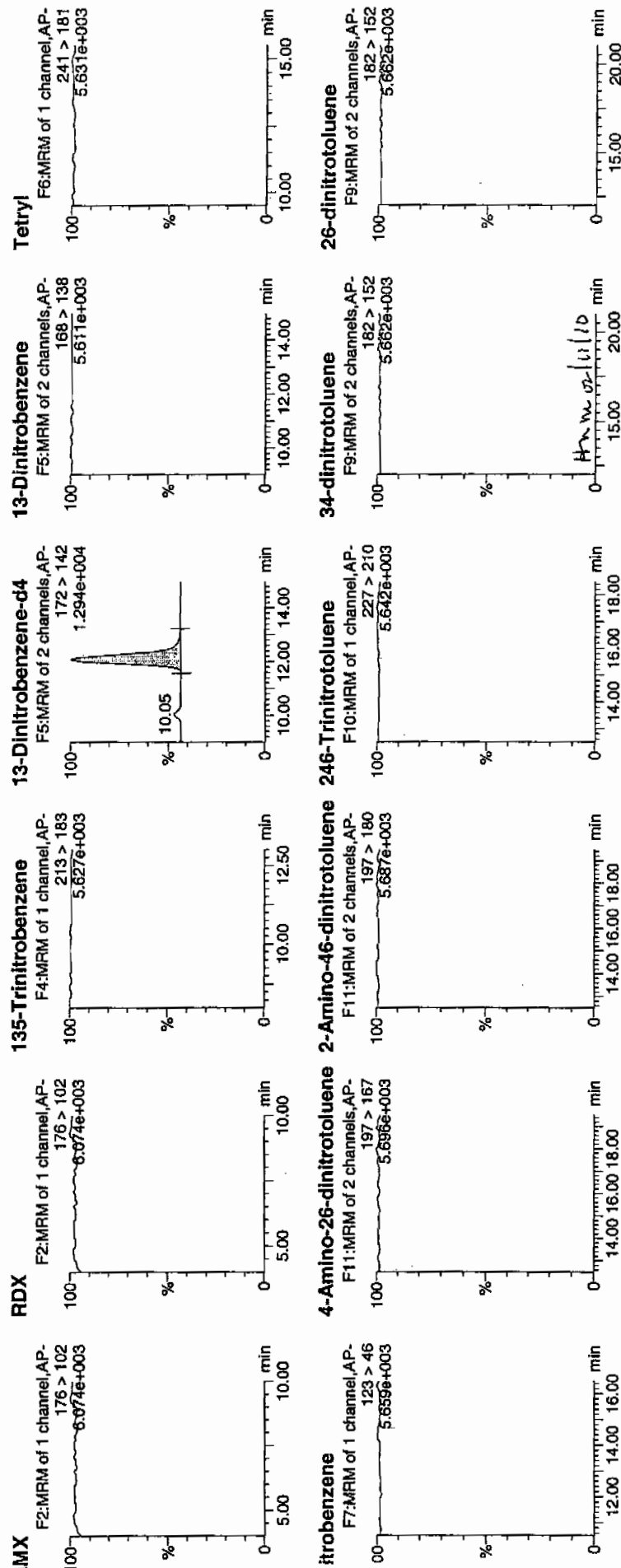
D: XIBLK14

Ratio: 1:1,A

11/2/10

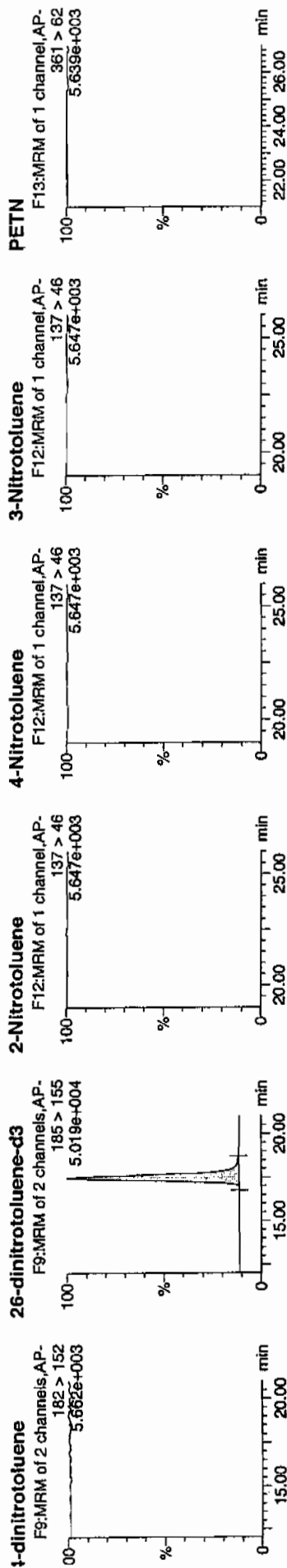
Page 223 of 1574

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Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010

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Name	Trace#	RT	Area	% Area	Abs Resp	Response	Flag	Mod Date	Mod Time	Conc mg/ml	Recovery %	Purity %
HMX	176 > 102			2962.838								
RDX	176 > 102			2962.838								
135-Trinitrobenzene	213 > 183			2962.838								
13-Dinitrobenzene-d4	172 > 142	12.07	2962.838		2962.838	2962.838	bb			460.8446	92.2	-7.8
13-Dinitrobenzene	168 > 138			2962.838								93.8
Tetryl	241 > 181			2962.838								
Nitrobenzene	123 > 46			2962.838								
4-Amino-26-dinitrotoluene	197 > 167			17873.645								
2-Amino-46-dinitrotoluene	197 > 180			17873.645								
246-Trinitrotoluene	227 > 210			17873.645								
34-dinitrotoluene	182 > 152			17873.645								
26-dinitrotoluene	182 > 152			17873.645								
24-dinitrotoluene	182 > 152			17873.645								
26-dinitrotoluene-d3	185 > 155	17.46	17873.645		17873.645	17873.645	bb			484.1266	96.8	-3.2
2-Nitrotoluene	137 > 46			17873.645								1654.2
4-Nitrotoluene	137 > 46			17873.645								
3-Nitrotoluene	137 > 46			17873.645								
PETN	361 > 62			17873.645								

4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1392

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

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208134a

Date: 11-Feb-2010

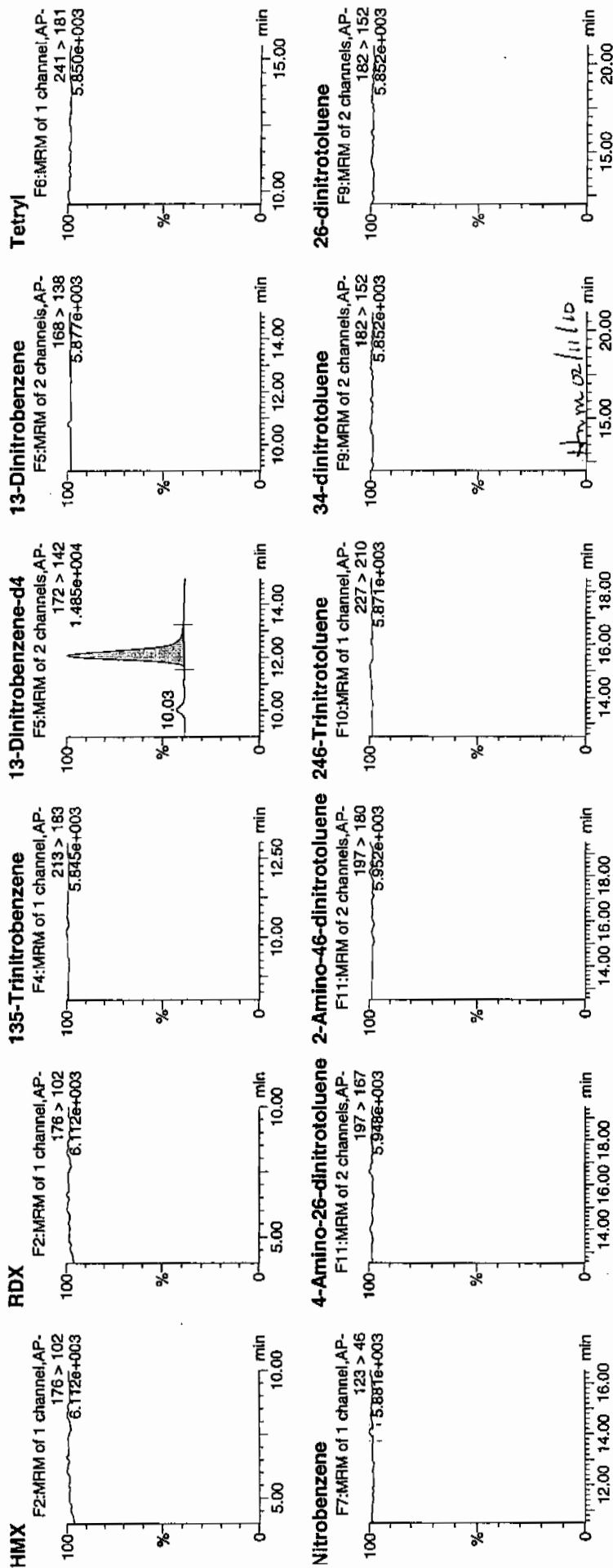
Time: 08:09:15

ID: XIBLK15

Vial: 1:1,A

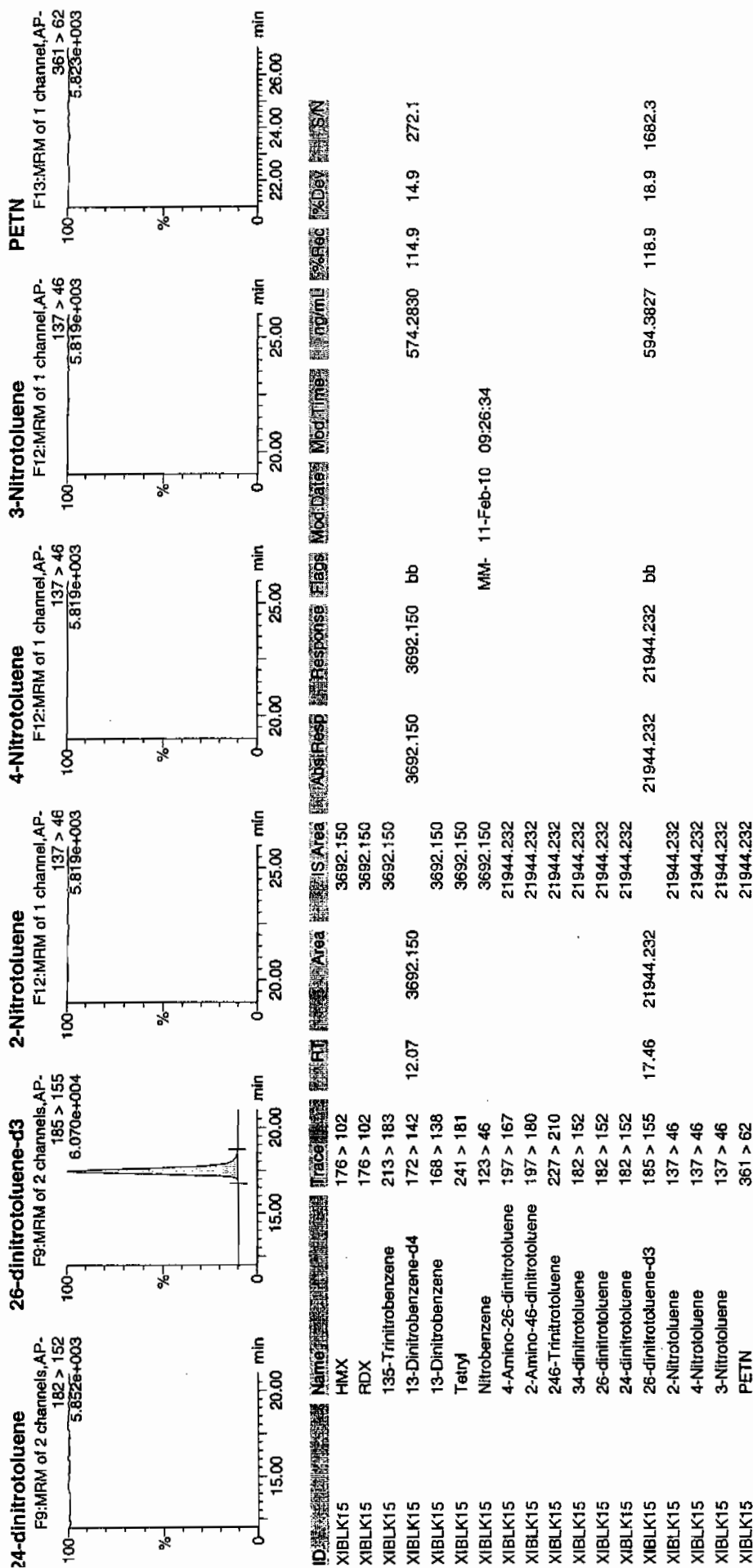
2/11/10

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Quantity 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



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1392

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

Quantify 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\EXP0208146a

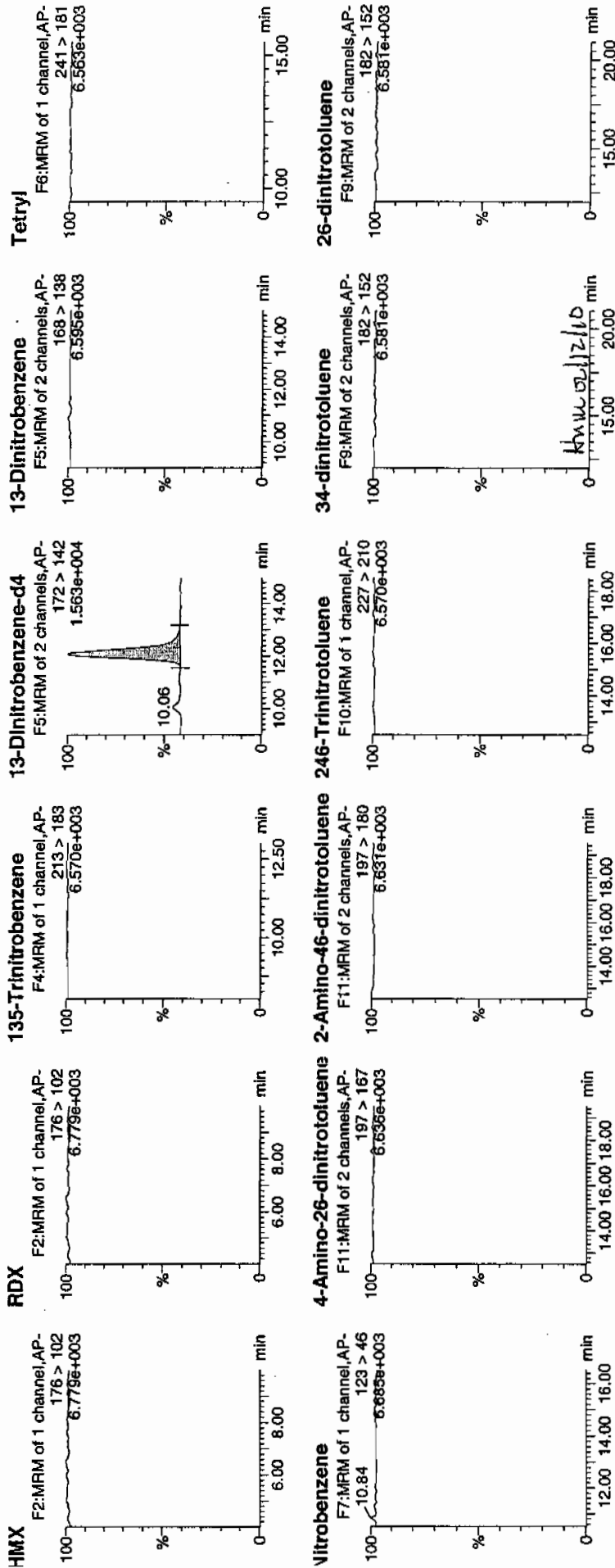
Date: 11-Feb-2010

Time: 14:03:38

D: XBLK16

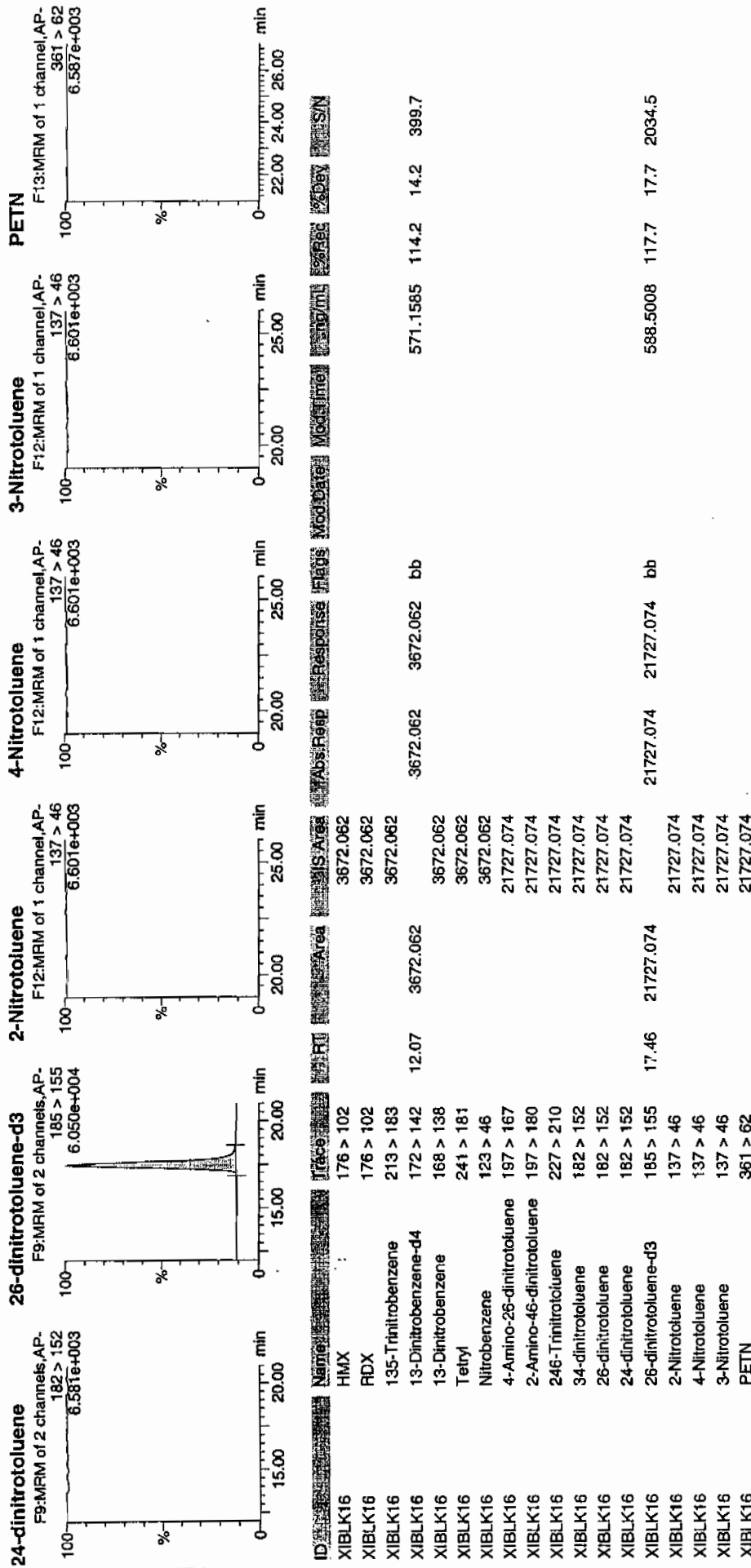
Vial: 1:1,A

2/12/10



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



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1392

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)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
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

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA3.qld, Time: Fri Feb 12 08:08:48 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\data\EXP0208156a

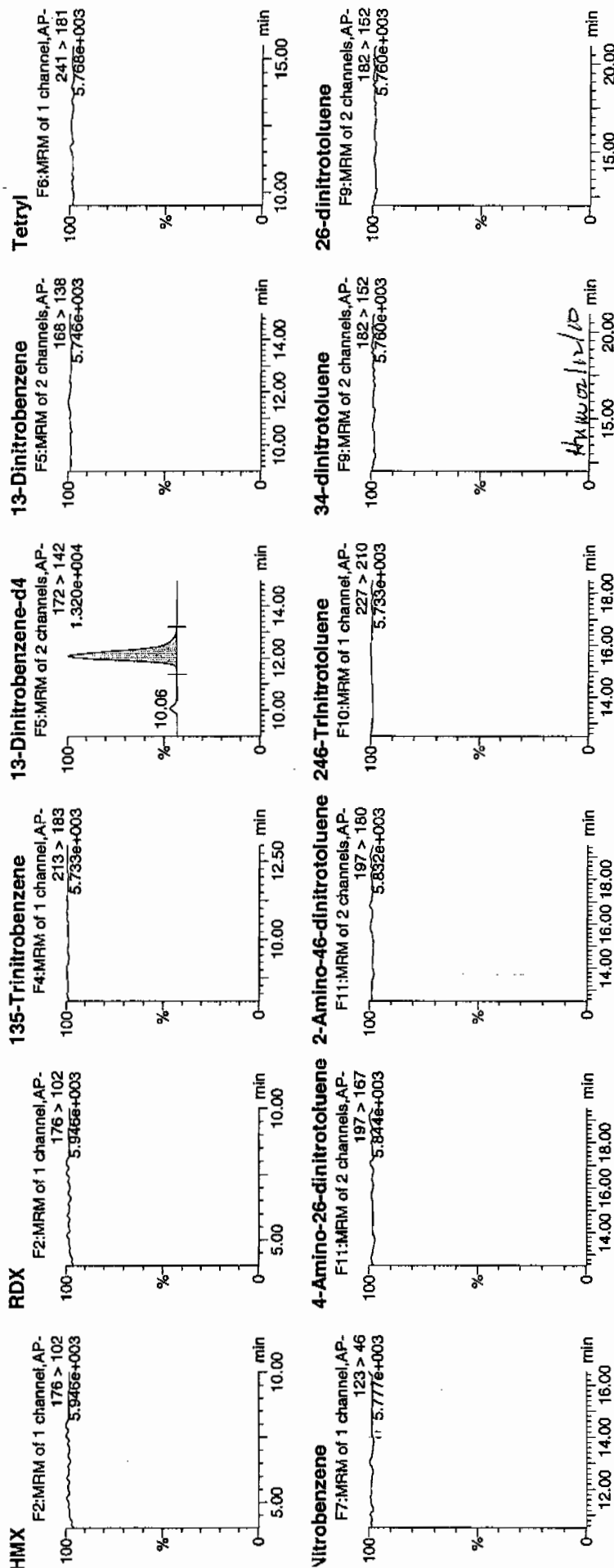
Date: 11-Feb-2010

Time: 18:58:59

ID: XIBLK17

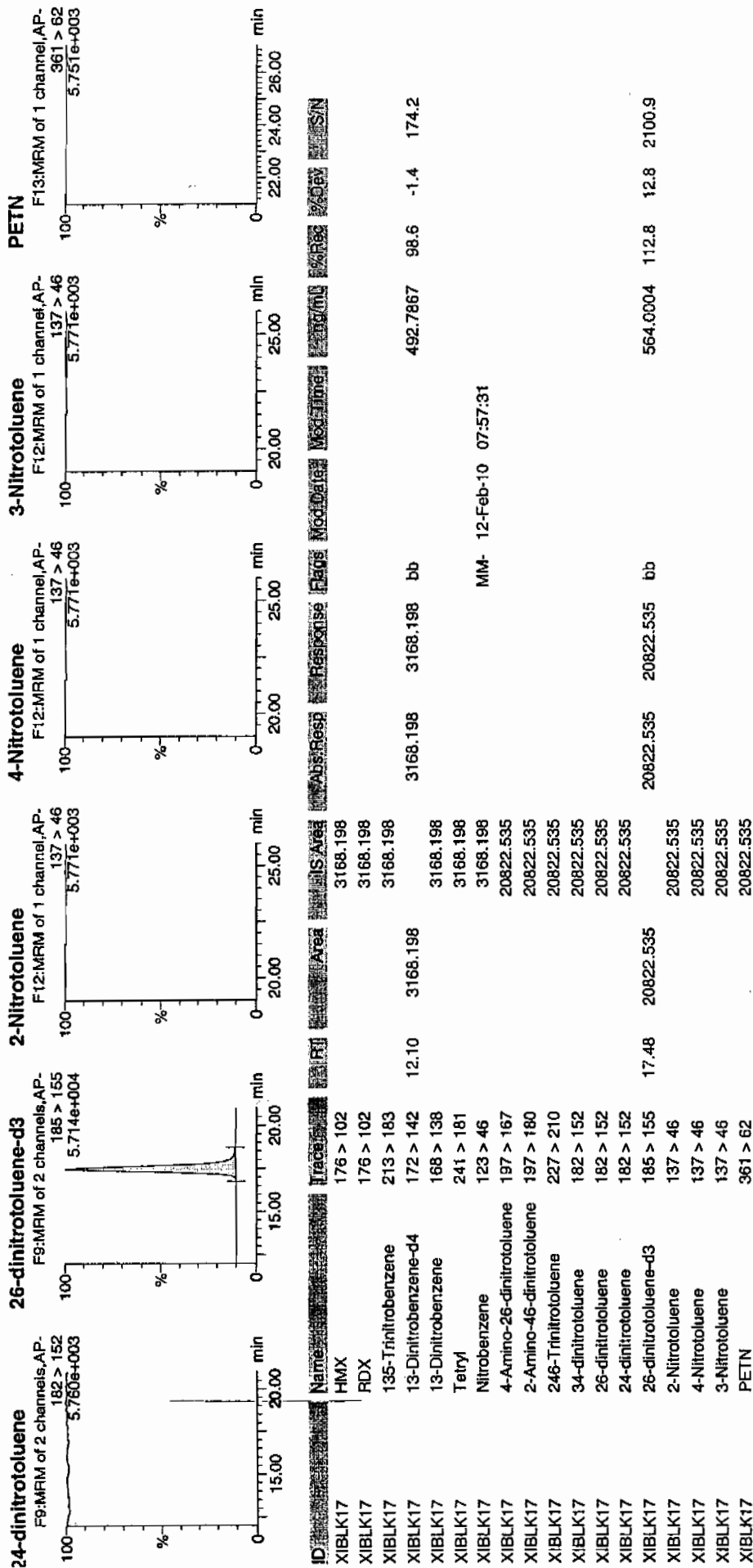
Vial: 1:1,A

MRP
2/12/10



Quantify 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



4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1392

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)
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
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	437.531

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208169a

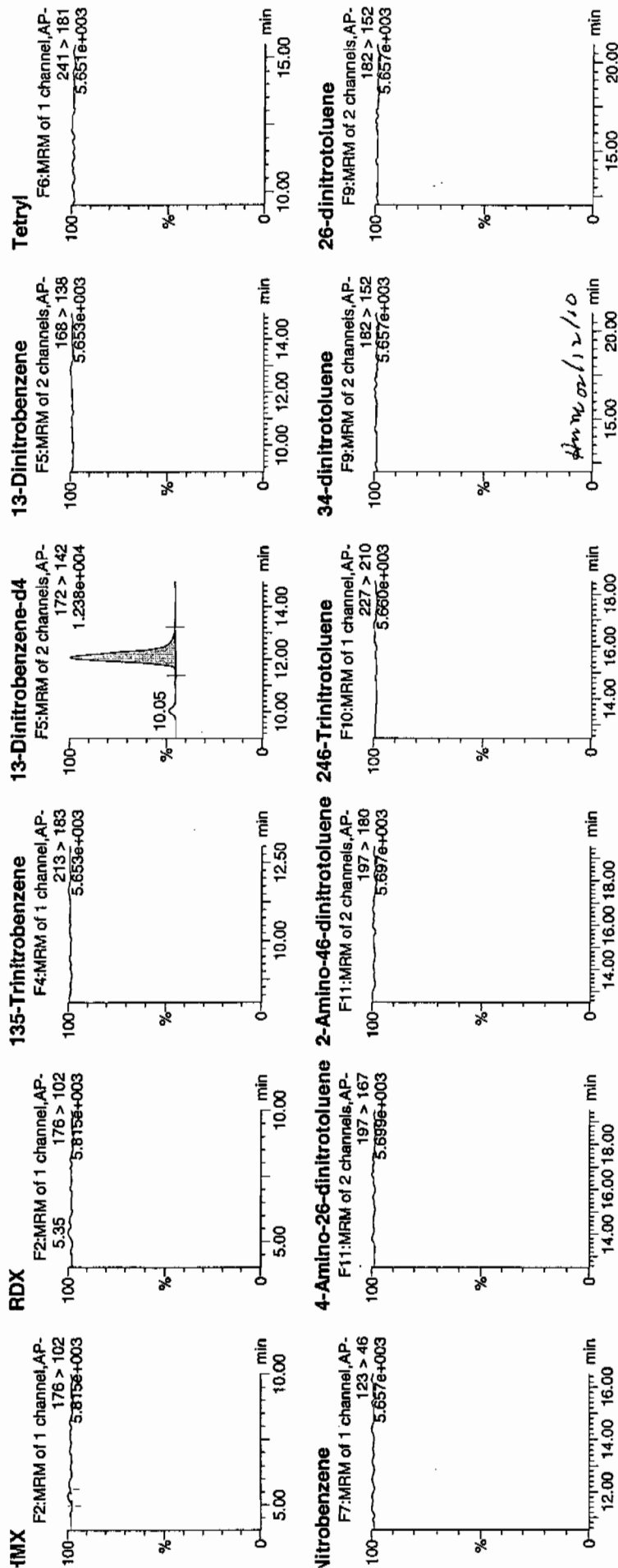
Date: 12-Feb-2010

Time: 01:22:24

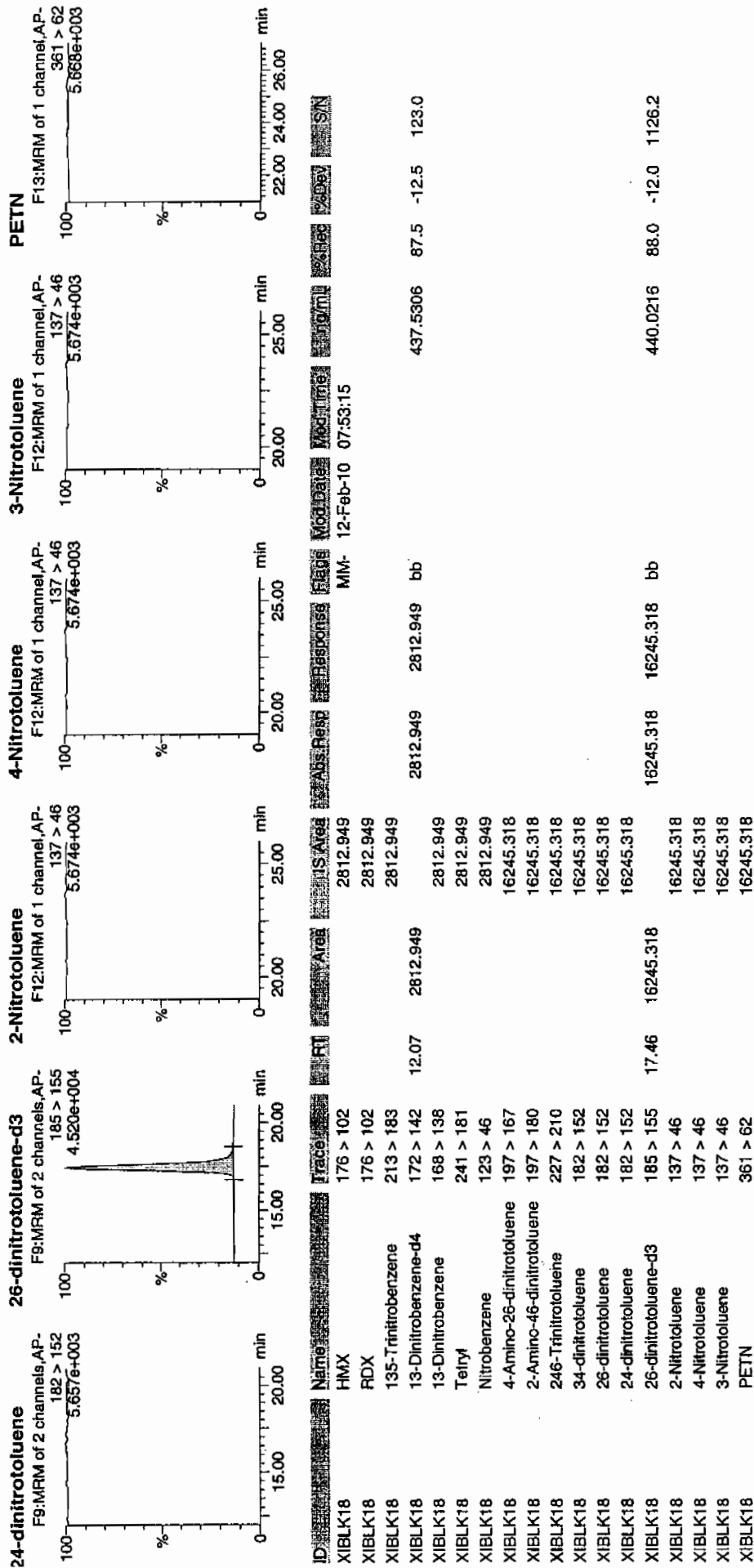
D: XIBLK18

/ial: 1:1,A

MAF
 2/10/10



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): 10-1392

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)
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
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Dataset: C:\MASSLYNX\New_Exp\PRO\020810expA3.qld, Time: Fri Feb 12 08:08:48 2010

Name: C:\MASSLYNX\NEW_EXP\PRO\Data\EXP0208180a

Date: 12-Feb-2010

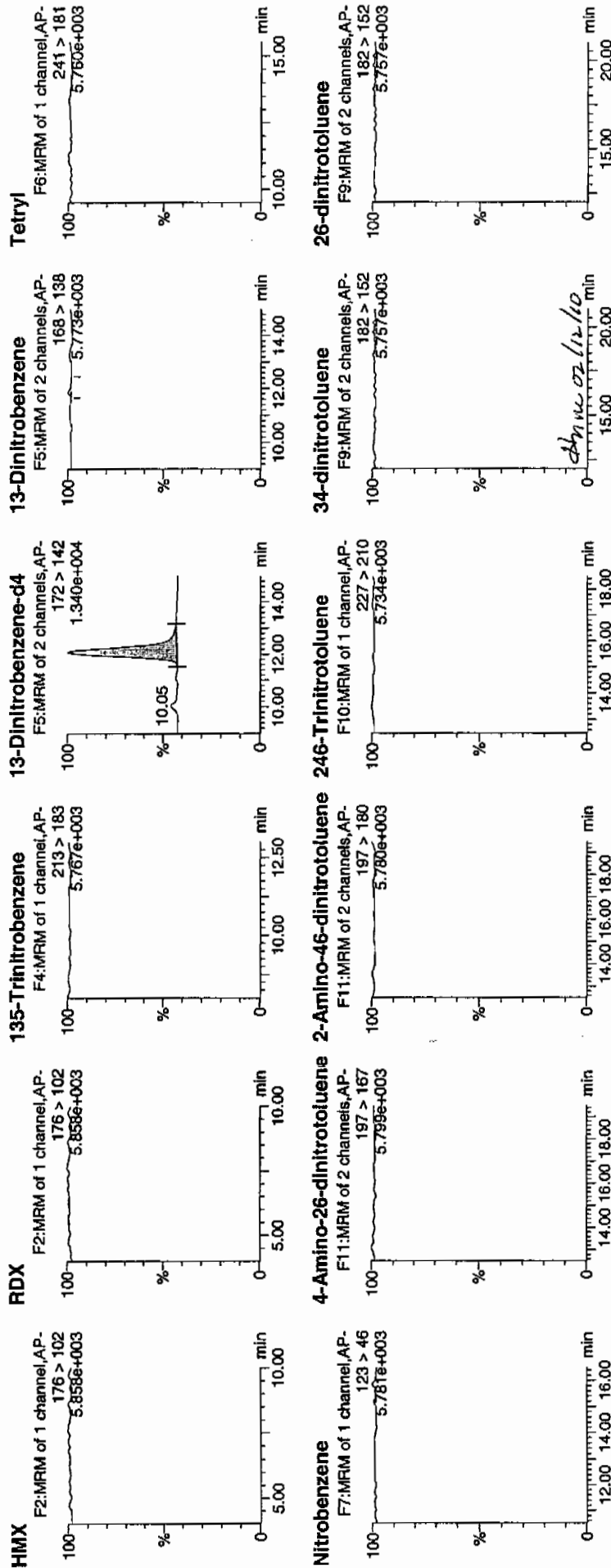
Time: 06:47:03

ID: XIBLK19

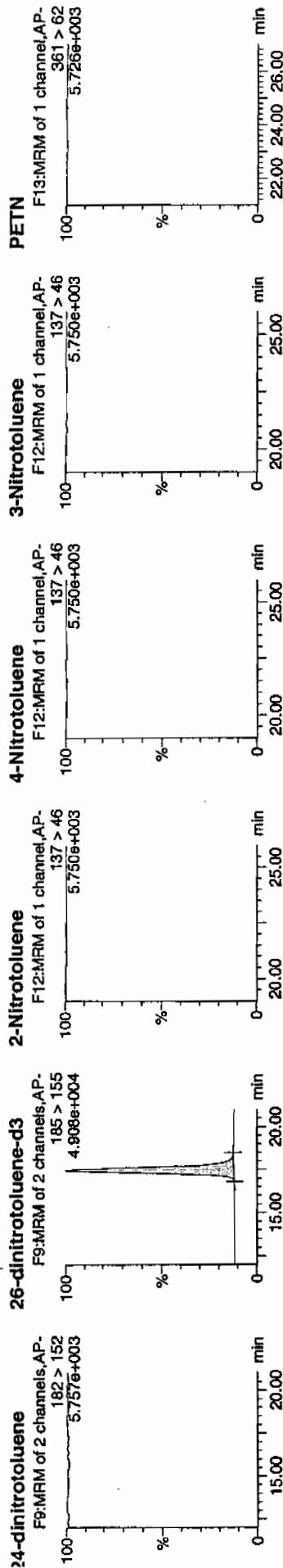
Vial: 1:1,A

2/12/10

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Dataset: C:\MASSLYNX\New_Exp_PRO\020810expA3.qld, Time: Fri Feb 12 08:08:48 2010



ID	Name	Trace	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	%Rec	%Dev	SN
XIBLK19	HMX	176 > 102		3134.045								
XIBLK19	RDX	176 > 102		3134.045								
XIBLK19	135-Trinitrobenzene	213 > 183		3134.045								
XIBLK19	13-Dinitrobenzene-d4	172 > 142	12.07	3134.045								
XIBLK19	13-Dinitrobenzene	168 > 138		3134.045								
XIBLK19	Tetryl	241 > 181		3134.045								
XIBLK19	Nitrobenzene	123 > 46		3134.045								
XIBLK19	4-Amino-26-dinitrotoluene	197 > 167		17551.871								
XIBLK19	2-Amino-46-dinitrotoluene	197 > 180		17551.871								
XIBLK19	246-Trinitrotoluene	227 > 210		17551.871								
XIBLK19	34-dinitrotoluene	182 > 152		17551.871								
XIBLK19	26-dinitrotoluene	182 > 152		17551.871								
XIBLK19	24-dinitrotoluene	182 > 152		17551.871								
XIBLK19	26-dinitrotoluene-d3	185 > 155	17.47	17551.871								
XIBLK19	2-Nitrotoluene	137 > 46		17551.871								
XIBLK19	4-Nitrotoluene	137 > 46		17551.871								
XIBLK19	3-Nitrotoluene	137 > 46		17551.871								
XIBLK19	PETN	361 > 62		17551.871								
					3134.045	3134.045	bb	MM-	12-Feb-10	07:55:22	487.4744	97.5 -2.5 275.0
					17551.871	17551.871	bb				475.4110	95.1 -4.9 1700.9

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1392

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)
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0
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

Printed: Sat Feb 13 09:33:08 2010, Page 23 of 93

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\EXP0208193a

Date: 12-Feb-2010

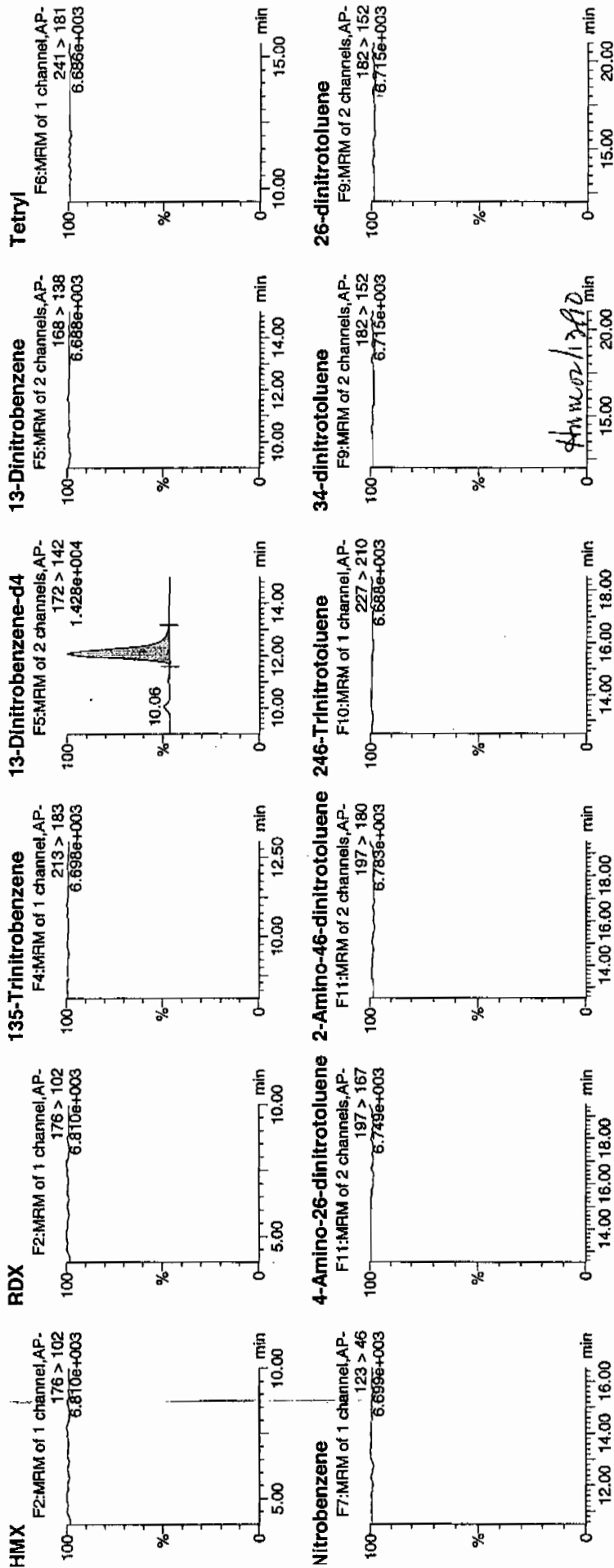
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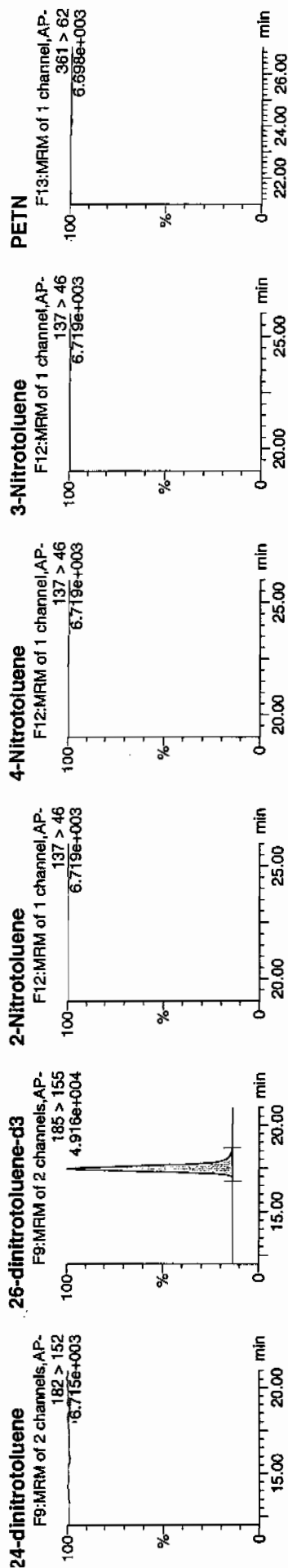
ID: XIBLK20

Vial: 1:1,A

WFI
2/13/10

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[illegible]

4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1392

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

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208205a

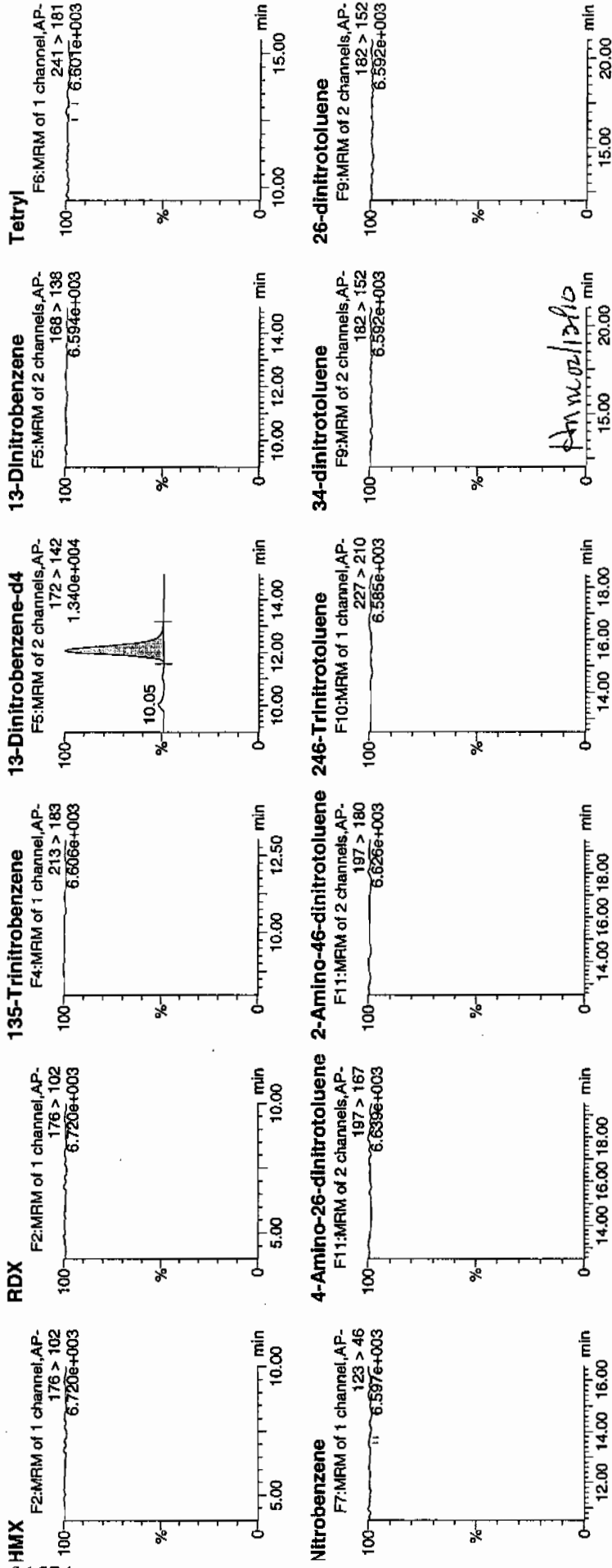
Date: 12-Feb-2010

Time: 19:05:45

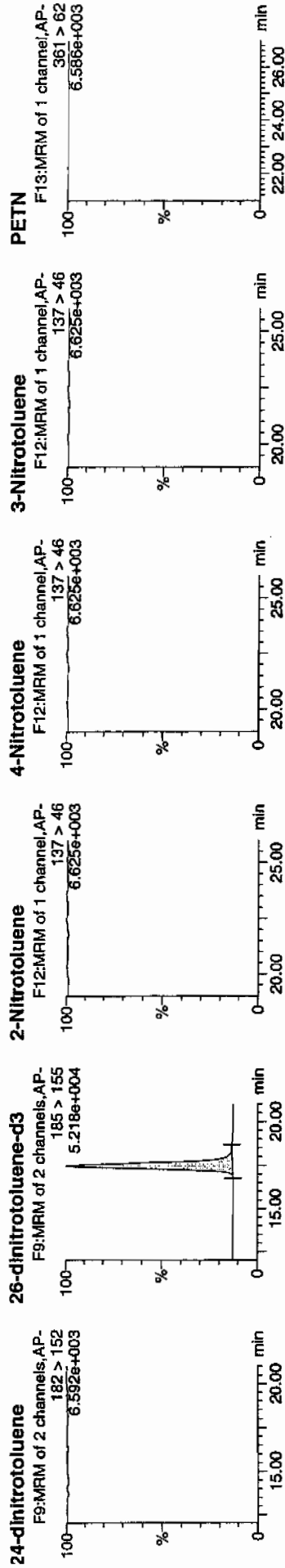
ID: XIBLK21

Vial: 1:1,A

2/13/10



Dataset: C:\MASSLYNX\New_Exp_PRO\020810expA4.qld, Time: Sat Feb 13 09:30:34 2010



ID	Name	RT	Area	S Area	Abs. Resp	Response	Flags	Mod Date	Mod Time	% Ret	% Dev	SN
XIBLK21	HMX	176 > 102		2813.650								
XIBLK21	RDX	176 > 102		2813.650								
XIBLK21	135-Trinitrobenzene	213 > 183		2813.650								
XIBLK21	13-Dinitrobenzene-d4	172 > 142	12.07	2813.650								
XIBLK21	13-Dinitrobenzene	168 > 138			2813.650							
XIBLK21	Tetryl	241 > 181			2813.650							
XIBLK21	Nitrobenzene	123 > 46			2813.650							
XIBLK21	4-Amino-26-dinitrotoluene	197 > 167			18096.025							
XIBLK21	2-Amino-46-dinitrotoluene	197 > 180			18096.025							
XIBLK21	246-Trinitrotoluene	227 > 210			18096.025							
XIBLK21	34-dinitrotoluene	182 > 152			18096.025							
XIBLK21	26-dinitrotoluene	182 > 152			18096.025							
XIBLK21	24-dinitrotoluene	182 > 152			18096.025							
XIBLK21	26-dinitrotoluene-d3	185 > 155	17.47	18096.025								
XIBLK21	2-Nitrotoluene	137 > 46			18096.025							
XIBLK21	4-Nitrotoluene	137 > 46			18096.025							
XIBLK21	3-Nitrotoluene	137 > 46			18096.025							
XIBLK21	PETN	361 > 62										
					2813.650	2813.650	bb			87.5	-12.5	264.4
					18096.025	18096.025	bb			98.0	-2.0	1864.4
								MM- 13-Feb-10 09:17:32				
								MM- 13-Feb-10 09:18:58				

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1392

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)
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
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Printed: Sat Feb 13 09:33:08 2010, Page 73 of 93

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\EXP0208218a

Date: 13-Feb-2010

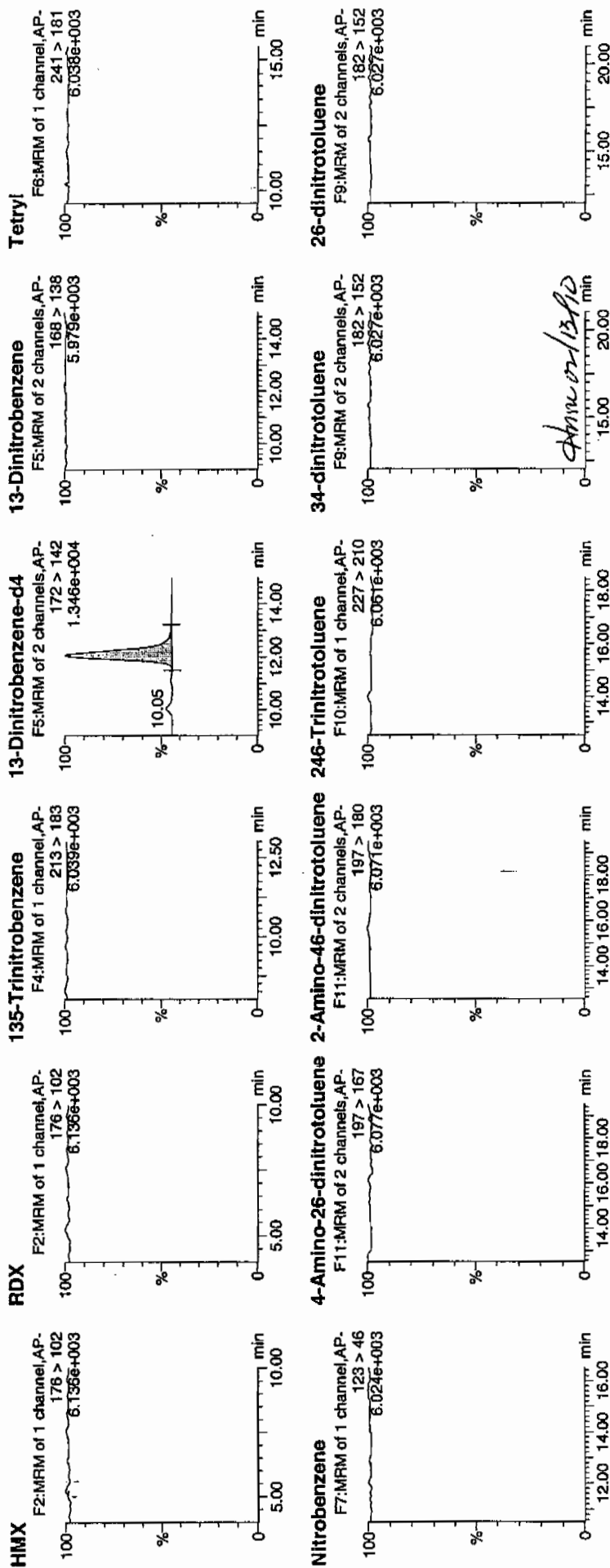
Time: 01:29:19

ID: XIBLK22

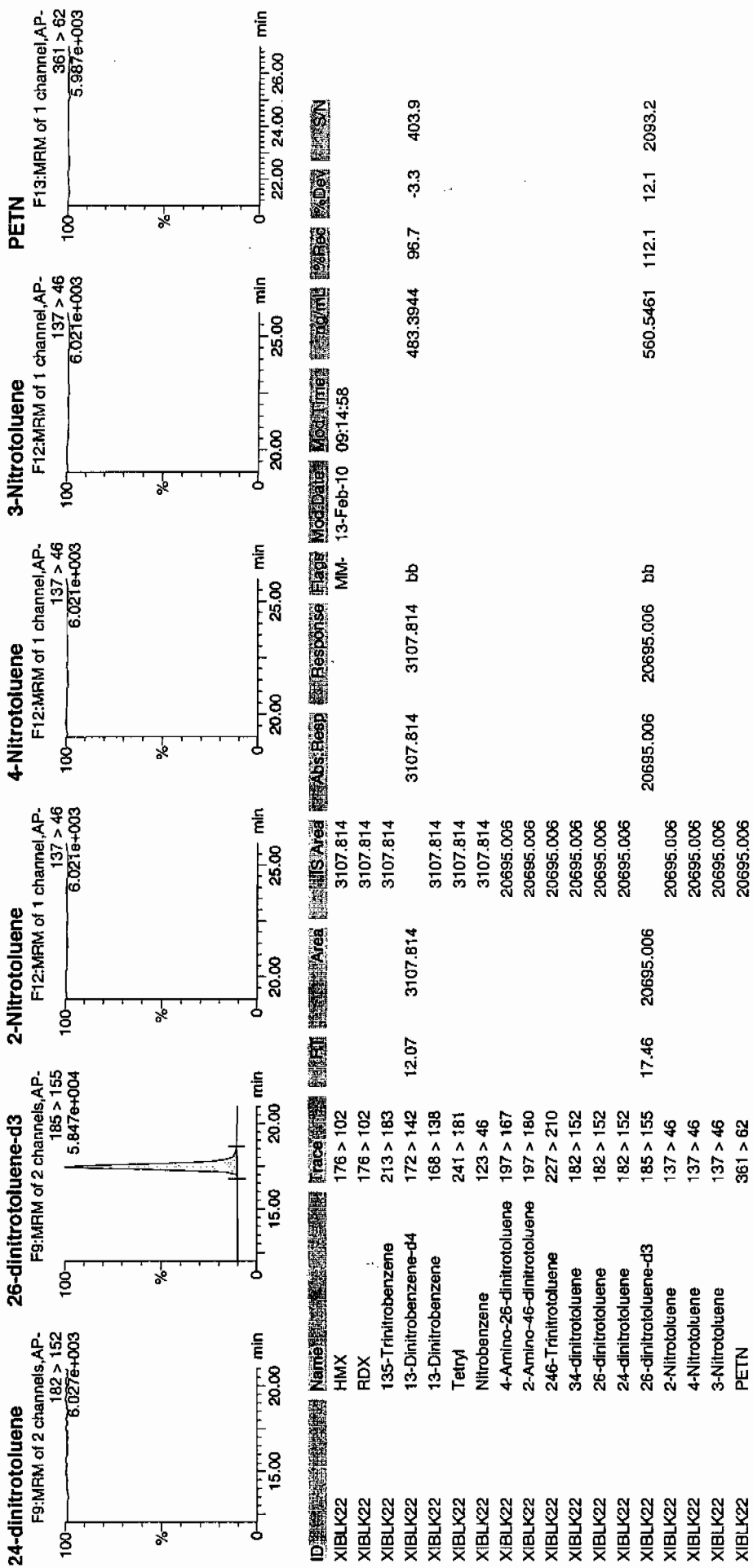
Vial: 1:1,A

AP-13/10

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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): 10-1392

Lab Code: GEL

Lab Sample ID: XIBLK23

Analysis Date: 13-FEB-10 05:25

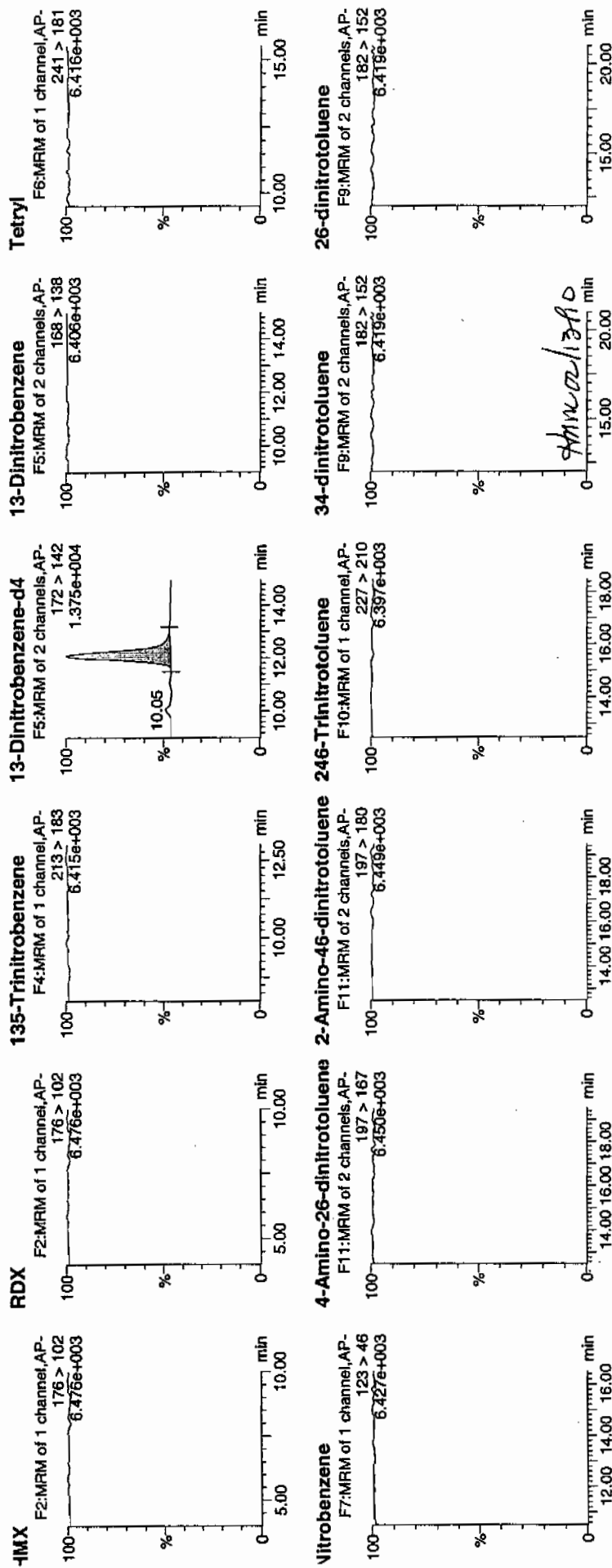
GEL Data File: EXP0208226a

Instrument ID: LCMSMS

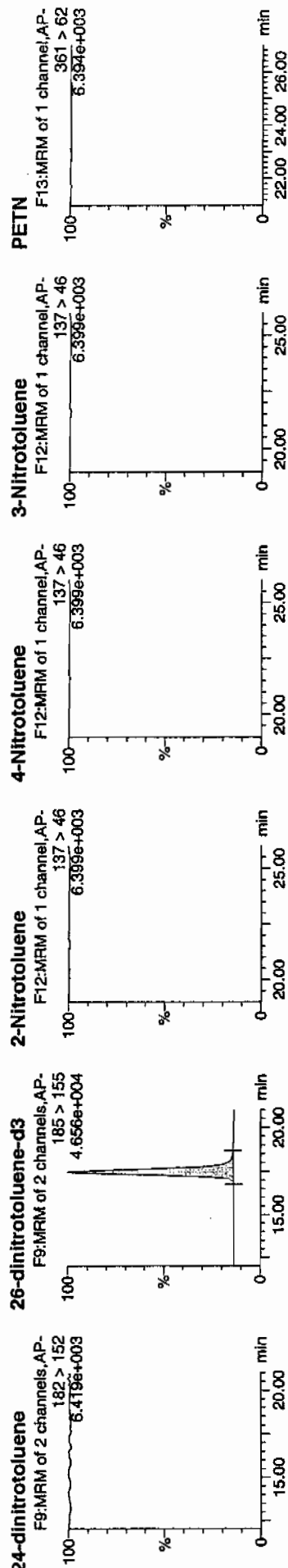
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
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	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

15/17
2/13/10



Dataset: C:\MASSLYN\New_Exp.PRO\020810expA4.qld, Time: Sat Feb 13 09:30:34 2010

[illegible]

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1392

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

Printed: Sun Feb 14 11:45:22 2010, Page 23 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\EXP0208239a

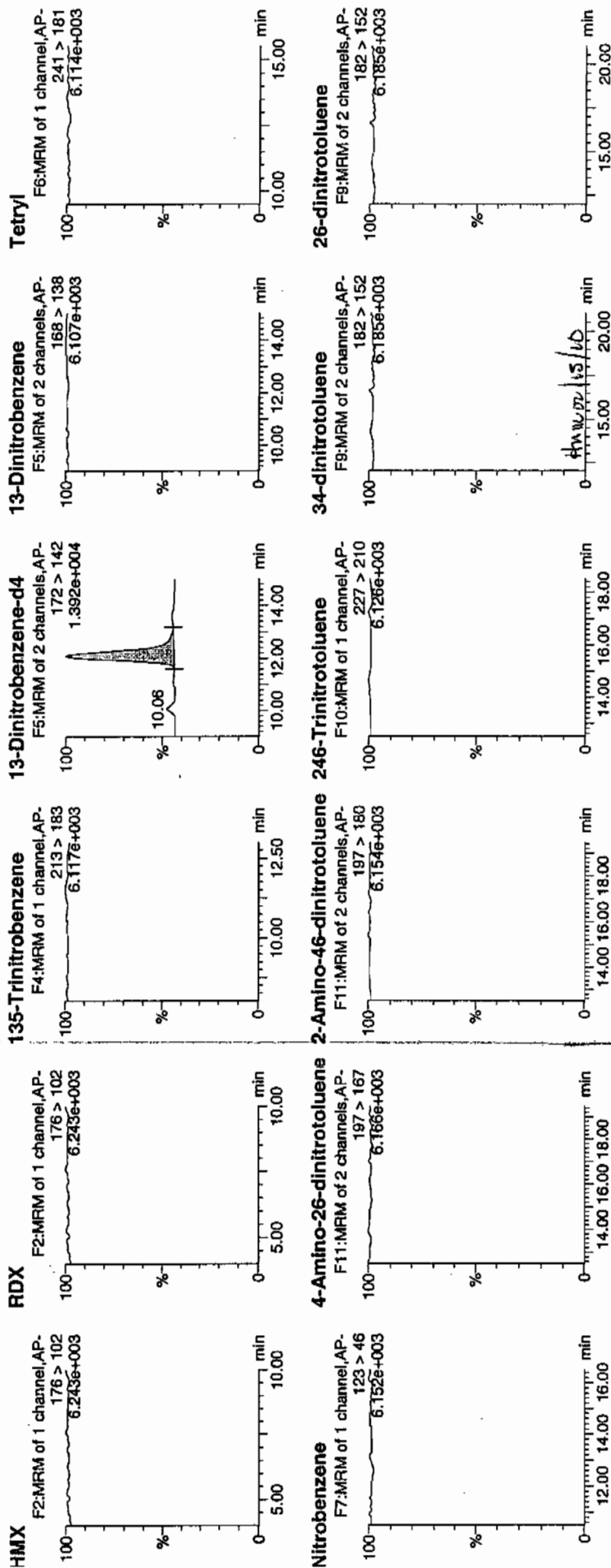
Date: 13-Feb-2010

Time: 11:50:16

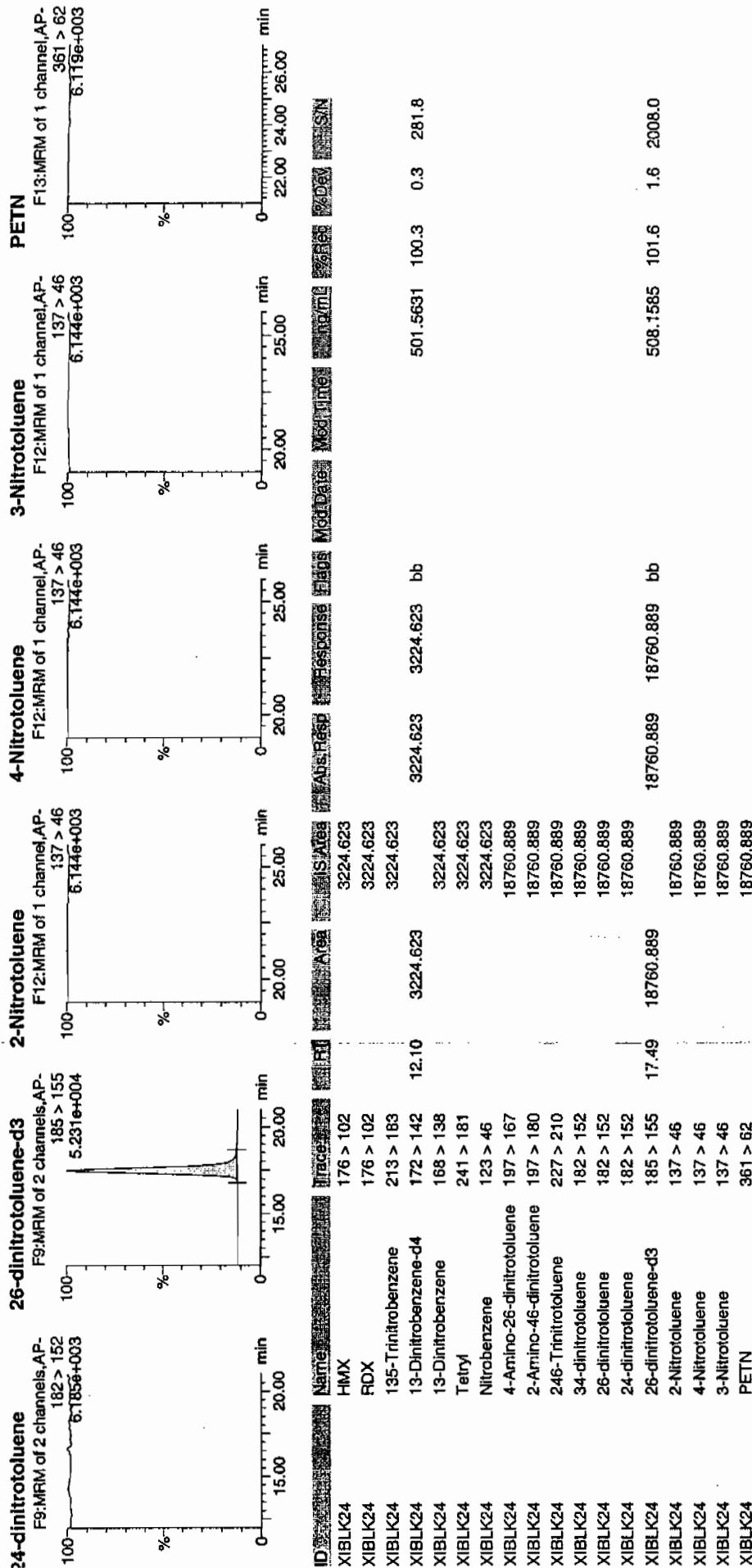
D: XIBLK24

Vial: 1:1,A

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): 10-1392

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)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	554.342
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
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

Name: C:\MASSLYNX\NEW_EXP_PRO\Data\EXP0208252a

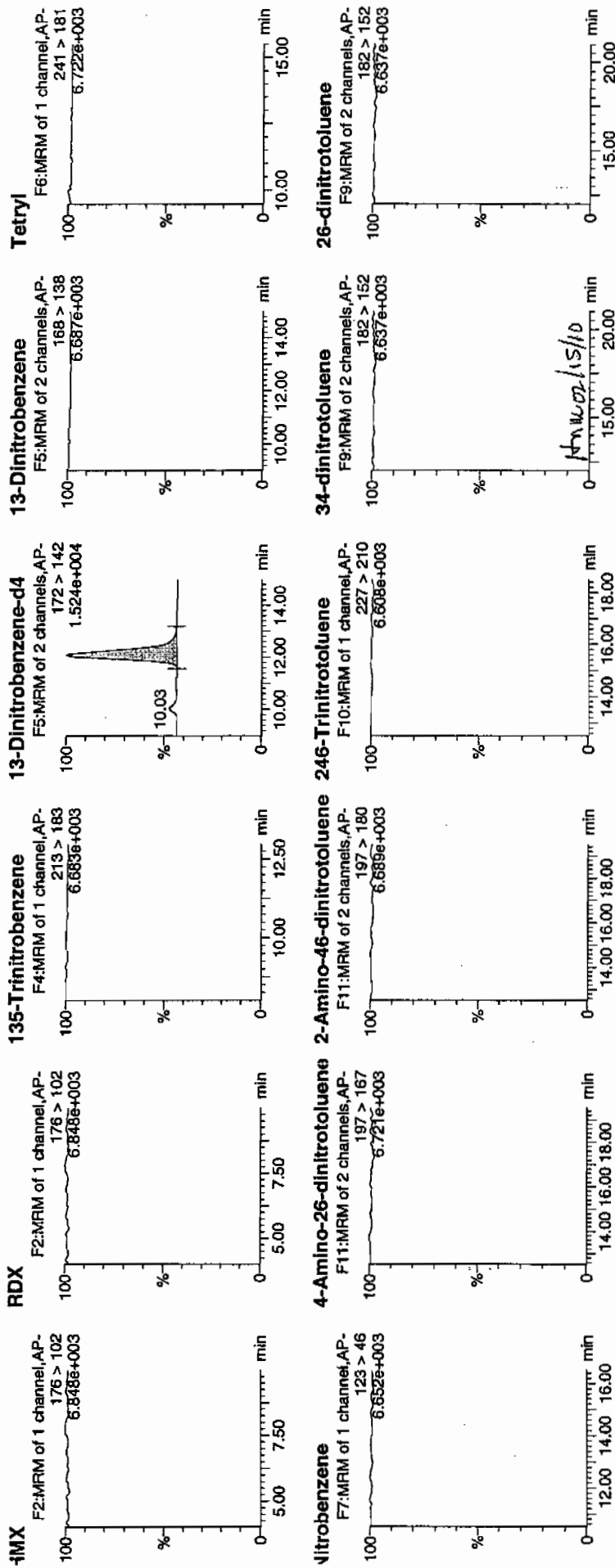
Date: 13-Feb-2010

Time: 18:13:44

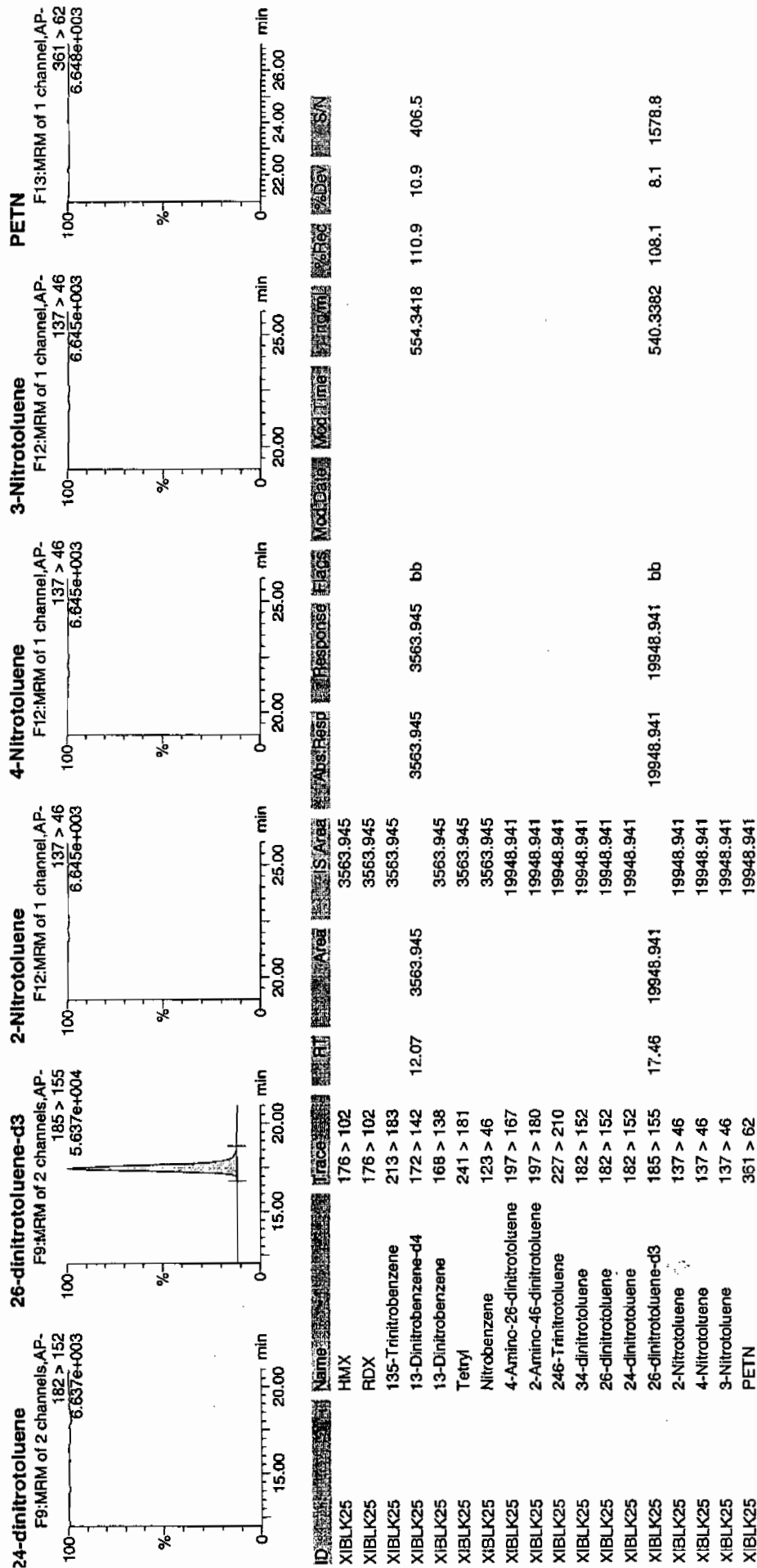
D: XIBLK25

/lal: 1:1,A

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): 10-1392

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)
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
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

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208265a

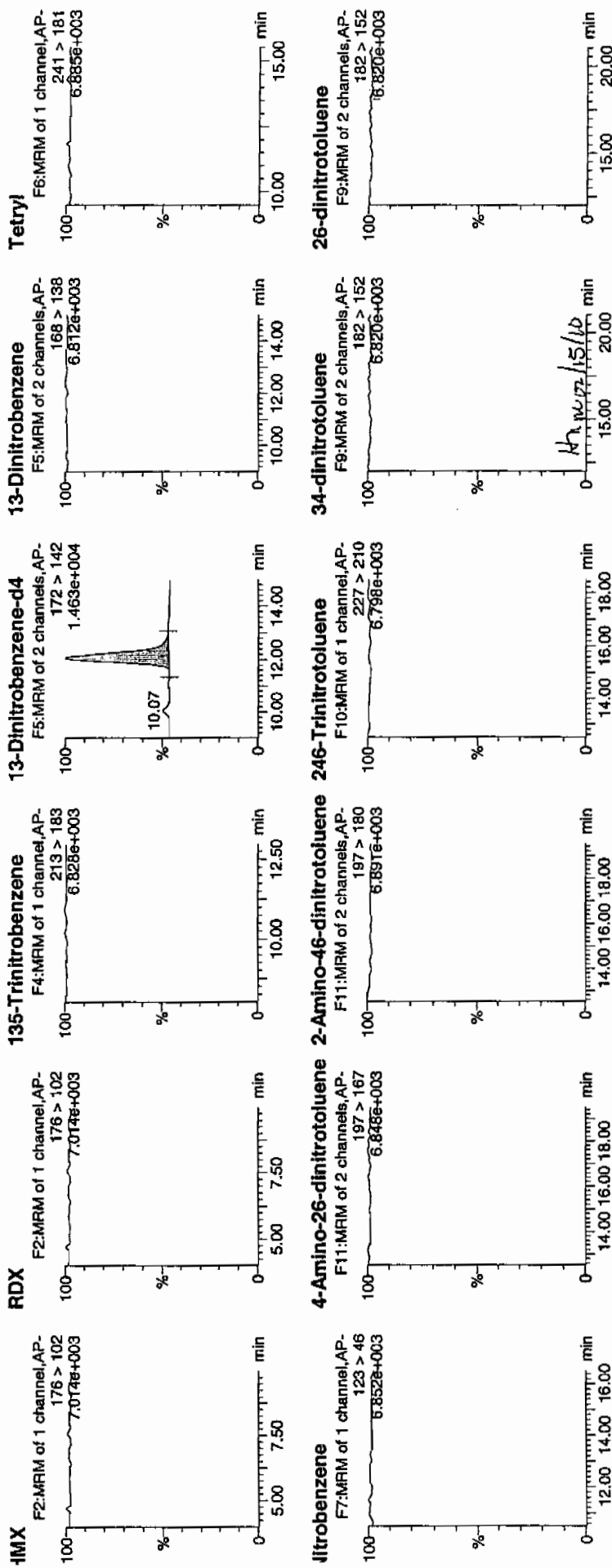
Date: 14-Feb-2010

Time: 00:37:44

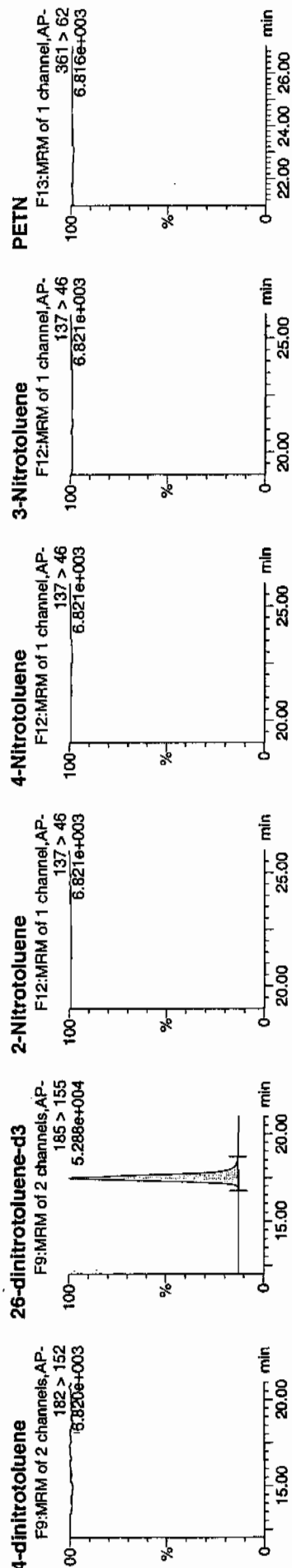
D: XIBLK26

/ial: 1:1,A

14/2/10
 2/4/10



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	Mod Time	Amount	% Rec	% Dev	SN
HMX	IBL K26 176 > 102			3201.109									
RDX	IBL K26 176 > 102			3201.109									
135-Trinitrobenzene	IBL K26 213 > 183			3201.109									
13-Dinitrobenzene-d4	IBL K26 172 > 142	12.07	3201.109		3201.109	3201.109	bb			497.9057	99.6	-0.4	252.5
13-Dinitrobenzene	IBL K26 168 > 138			3201.109									
Tetryl	IBL K26 241 > 181			3201.109									
Nitrobenzene	IBL K26 123 > 46			3201.109									
4-Amino-26-dinitrotoluene	IBL K26 197 > 167			18446.230									
2-Amino-46-dinitrotoluene	IBL K26 197 > 180			18446.230									
246-Trinitrotoluene	IBL K26 227 > 210			18446.230									
34-dinitrotoluene	IBL K26 182 > 152			18446.230									
26-dinitrotoluene	IBL K26 182 > 152			18446.230				MM-	14-Feb-10 11:35:29				
24-dinitrotoluene	IBL K26 182 > 152			18446.230				MM-	14-Feb-10 11:39:25				
26-dinitrotoluene-d3	IBL K26 185 > 155	17.46	18446.230		18446.230	18446.230	bb			499.6357	99.9	-0.1	1279.6
2-Nitrotoluene	IBL K26 137 > 46			18446.230									
4-Nitrotoluene	IBL K26 137 > 46			18446.230									
3-Nitrotoluene	IBL K26 137 > 46			18446.230									
PETN	IBL K26 361 > 62			18446.230									

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1392

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)
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
p-Nitrotoluene	0	0

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\EXP0208273a

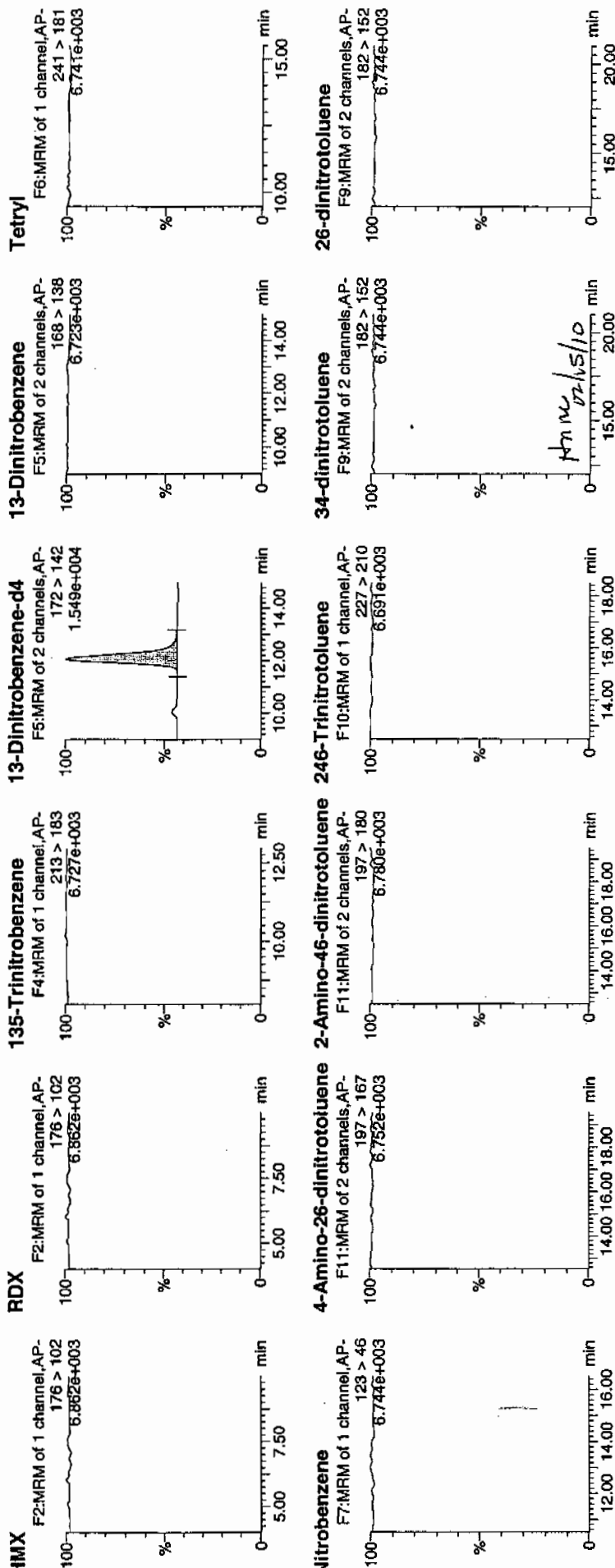
Date: 14-Feb-2010

Time: 04:34:04

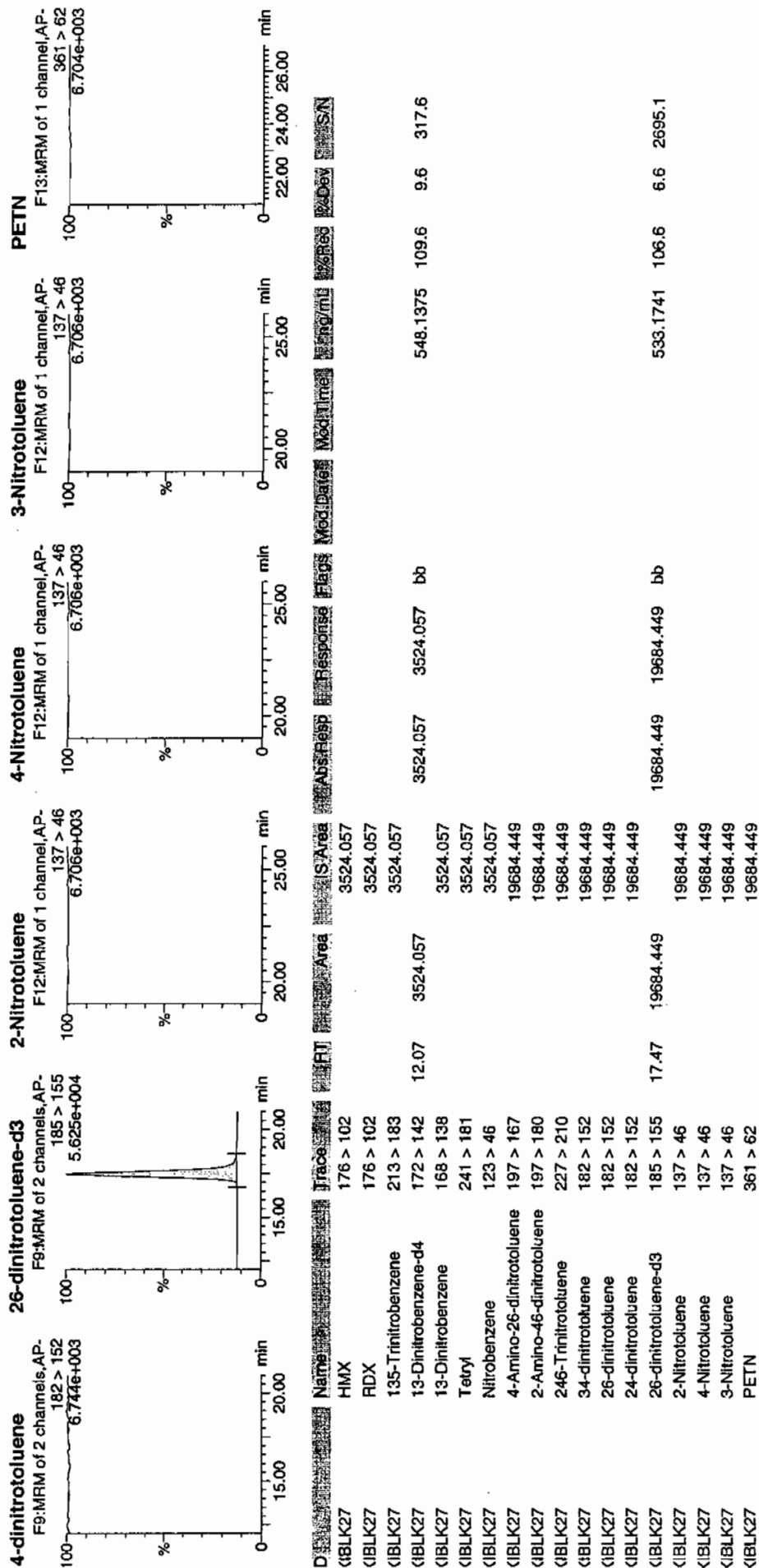
D: XJBLK27

File: 1:1,A

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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): 10-1392

Lab Code: GEL

Lab Sample ID: XIBLK28

Analysis Date: 14-FEB-10 10:57

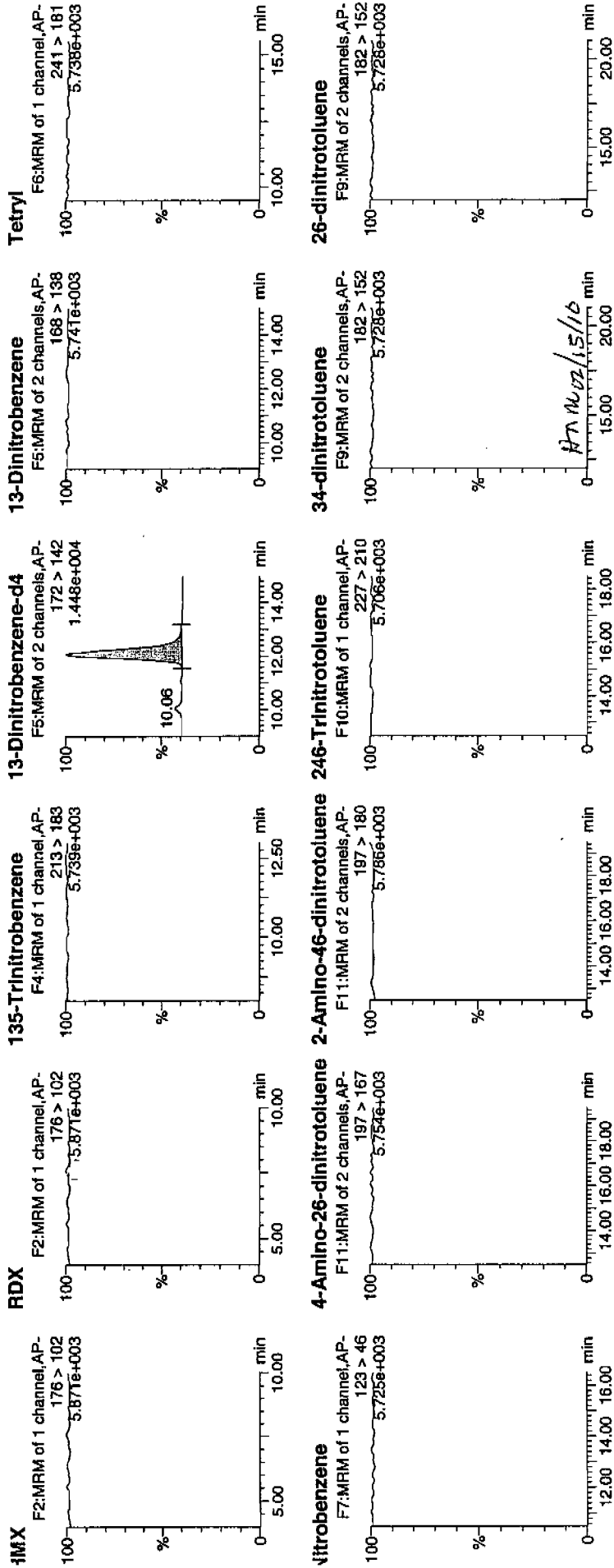
GEL Data File: EXP0208286a

Instrument ID: LCMSMS

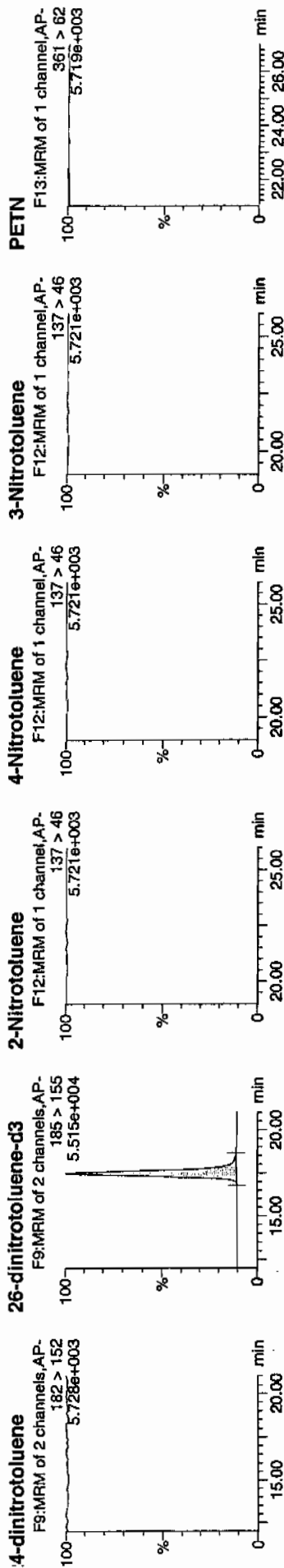
Column: Phenomenex Ultracarb 5u ODS(20)

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

10/15/10



Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA6.qld, Time: Mon Feb 15 07:43:55 2010



Di	Name	RT	Area	IS Area	Abs Resp	Response	Flag	Mod Date	Mod Time	%Ref	%Day	S/N
xIBLK28	HMX	176 > 102		3534.583								
xIBLK28	RDX	176 > 102		3534.583								
xIBLK28	135-Trinitrobenzene	213 > 183		3534.583								
xIBLK28	13-Dinitrobenzene-d4	172 > 142	12.07	3534.583								
xIBLK28	13-Dinitrobenzene	168 > 138										
xIBLK28	Tetryl	241 > 181										
xIBLK28	Nitrobenzene	123 > 46										
xIBLK28	4-Amino-26-dinitrotoluene	197 > 167										
xIBLK28	2-Amino-46-dinitrotoluene	197 > 180										
xIBLK28	246-Trinitrotoluene	227 > 210										
xIBLK28	34-dinitrotoluene	182 > 152										
xIBLK28	26-dinitrotoluene	182 > 152										
xIBLK28	24-dinitrotoluene	182 > 152										
xIBLK28	26-dinitrotoluene-d3	185 > 155	17.47	19855.836								
xIBLK28	2-Nitrotoluene	137 > 46		19855.836								
xIBLK28	4-Nitrotoluene	137 > 46		19855.836								
xIBLK28	3-Nitrotoluene	137 > 46		19855.836								
xIBLK28	PETN	361 > 62										
					3534.583	3534.583	bb			549.7748	110.0	221.3
					19855.836	19855.836	bb			537.8163	107.6	1346.5

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1392

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

Quantity 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\EXP0208298a

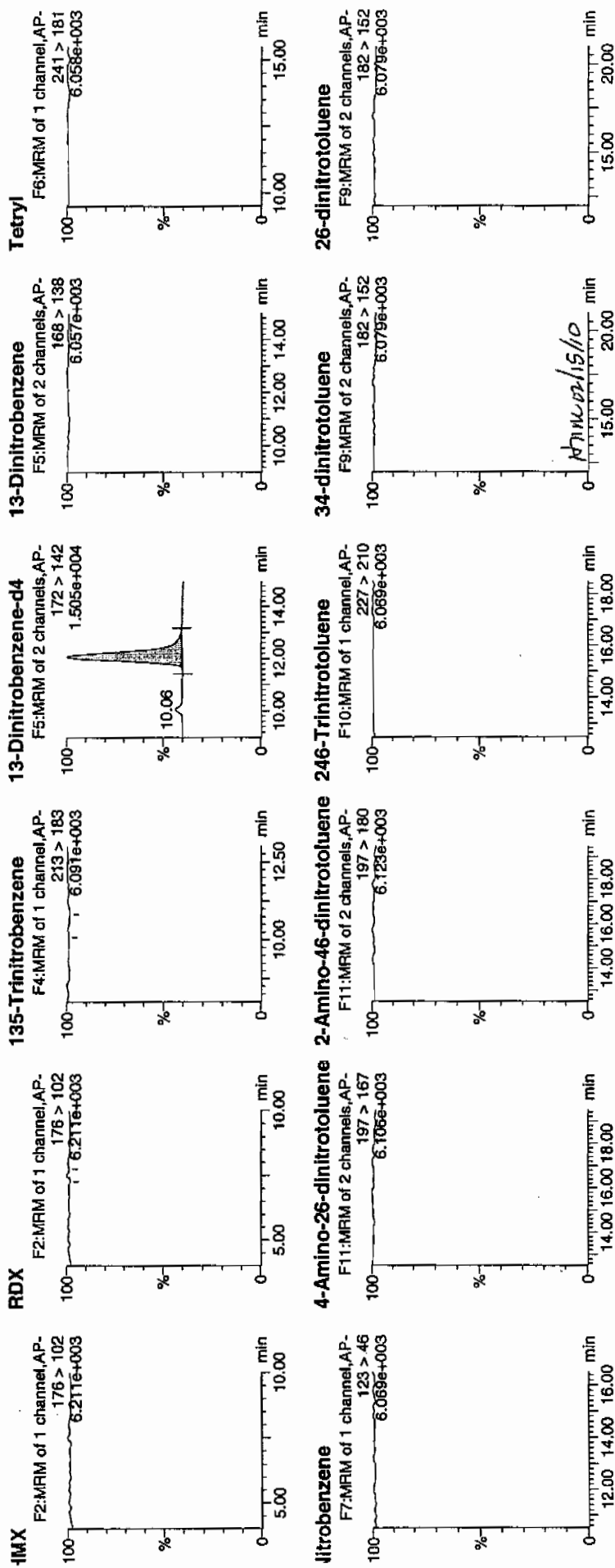
Date: 14-Feb-2010

Time: 16:54:03

D: XIBLK29

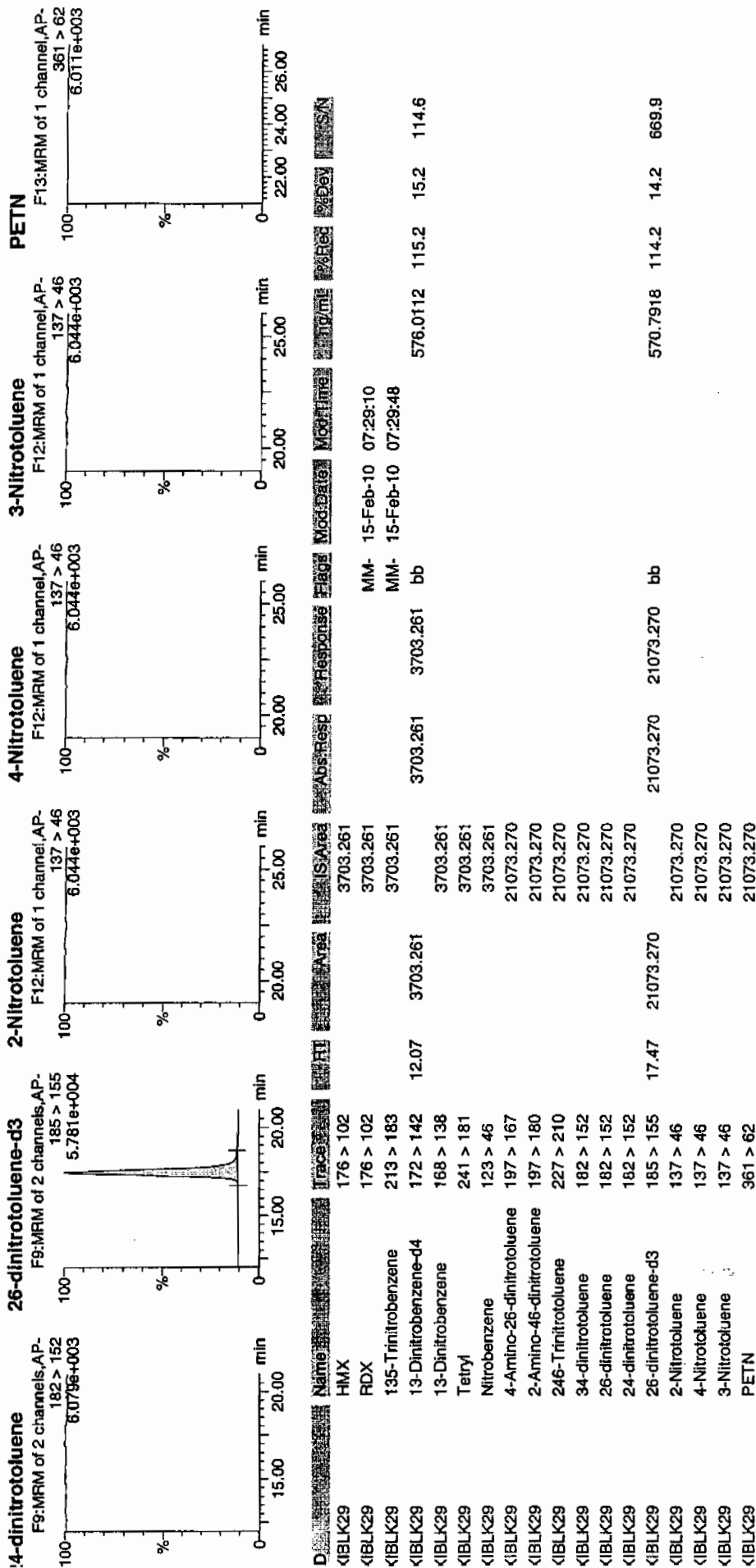
/Ial: 1:1,A

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USIP



Quantify Sample Report
 EL 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): 10-1392

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)
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
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\020810expA6.qld, Time: Mon Feb 15 07:43:55 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208306a

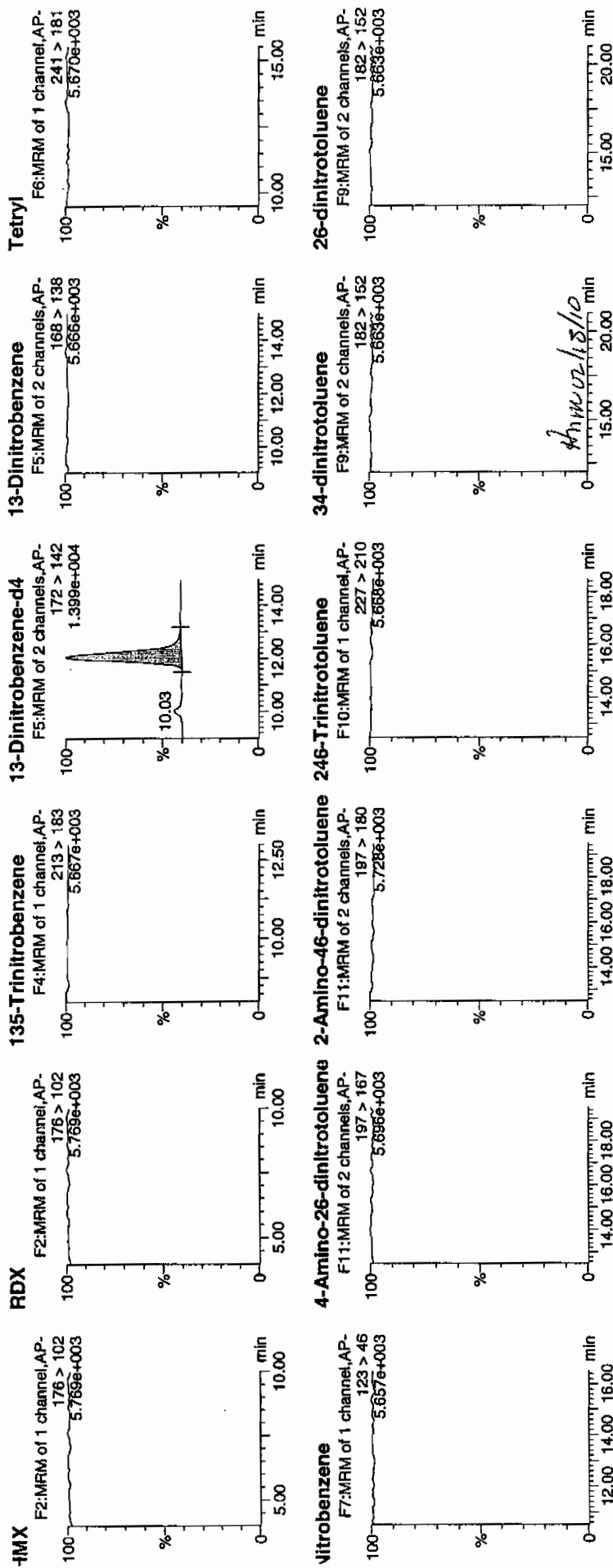
Date: 14-Feb-2010

Time: 20:50:24

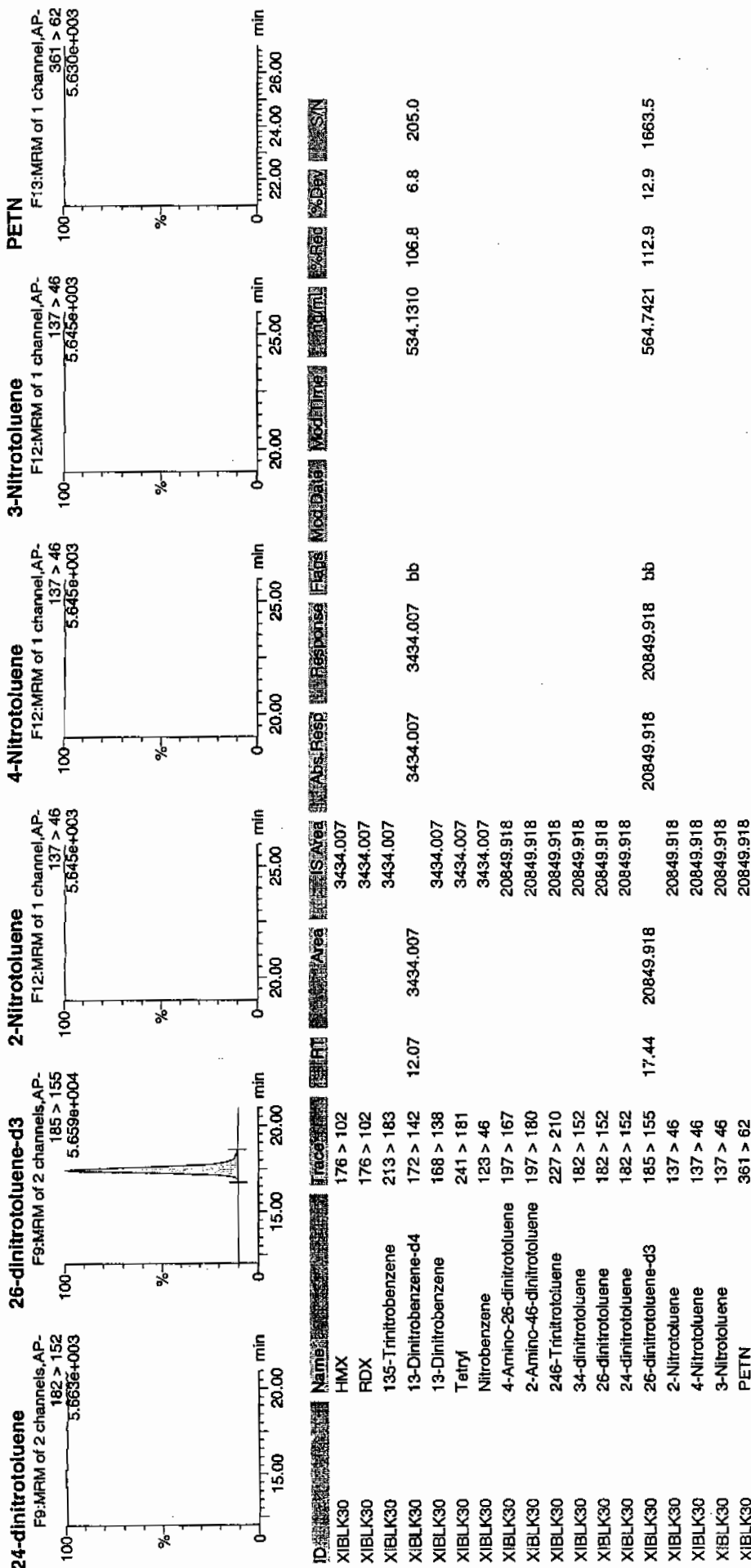
D: XIBLK30

File: 1:1,A

WAT
 2/15/10



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): 10-1392

Lab Code: GEL

Lab Sample ID: XIBLK02

Analysis Date: 14-FEB-10 16:38

GEL Data File: EXS02140010.wiff

Instrument ID: LCMSMS

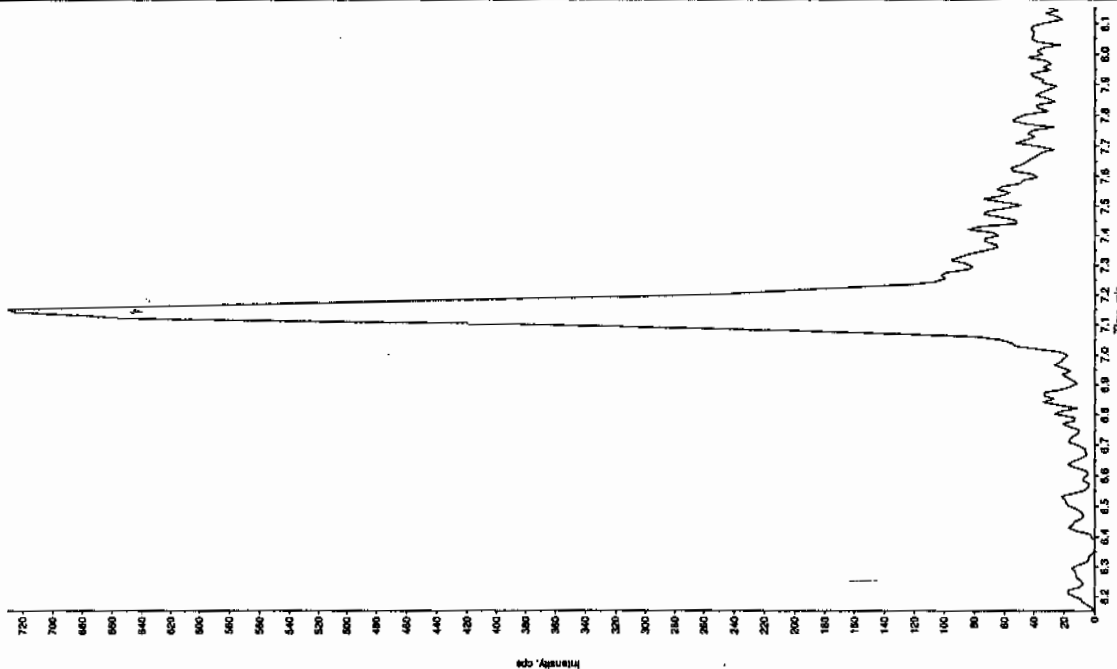
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	4.37
tris(o-cresyl) phosphate	0	8.68
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

San 01/06/10

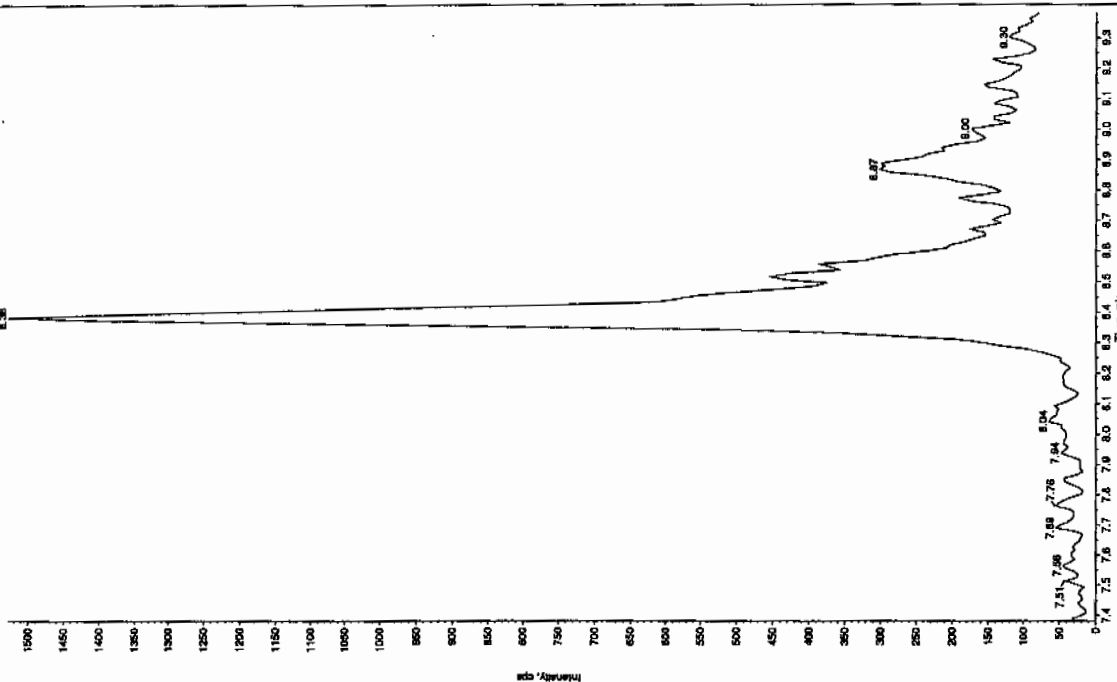
Sample Name: "XIBL002" Sample ID: "111ER" File: "EX02140010.wif"
 Peak Name: "TATB" Mass(es): "257.2204.9 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 2/14/2010
 Acq. Date: 4:38:38 PM
 Acq. Time:
 Modified: No

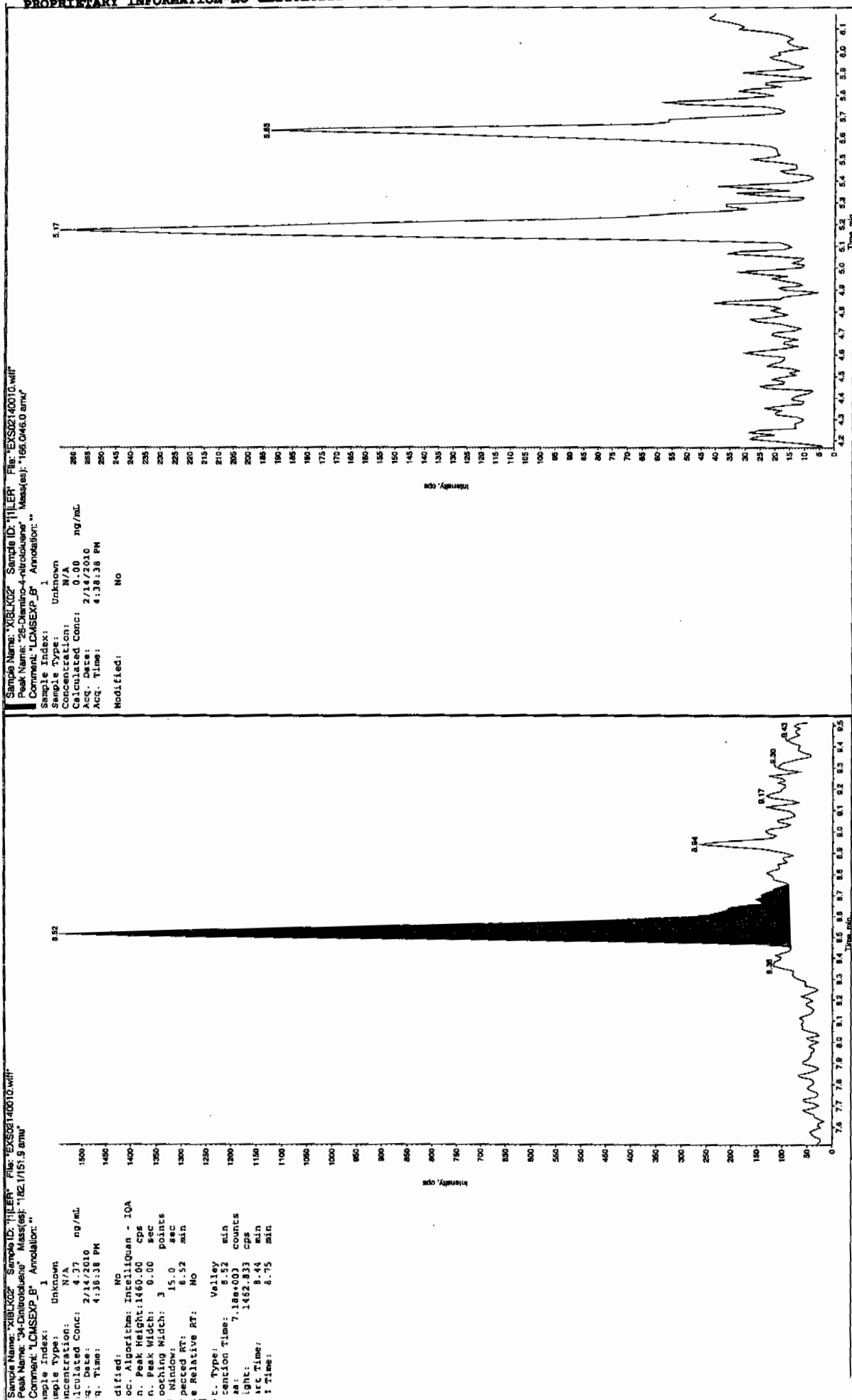


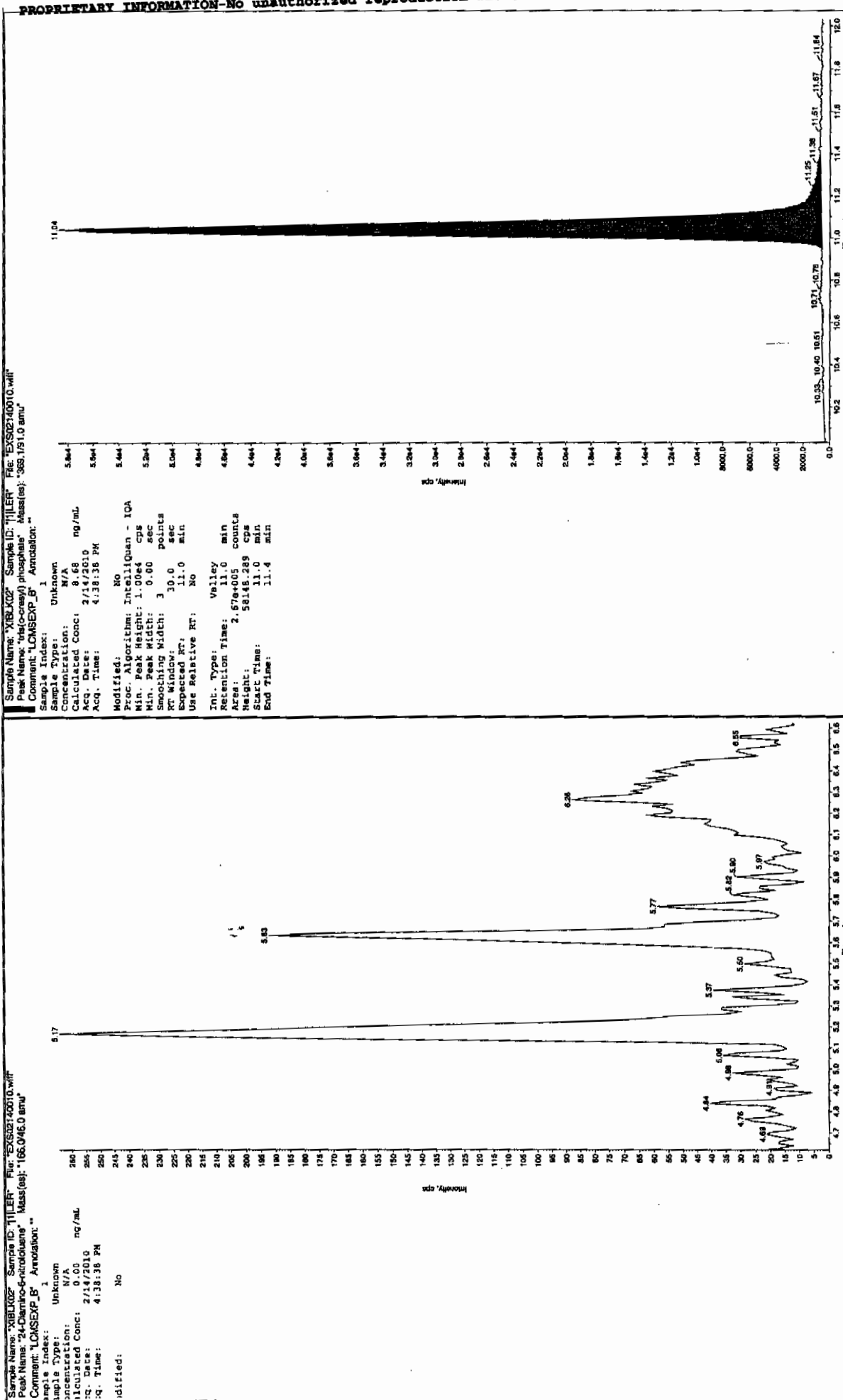
Sample Name: "XIBL002" Sample ID: "111ER" File: "EX02140010.wif"
 Peak Name: "3S-Dinitrobenzyl" Mass(es): "182.046.0 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 2/14/2010
 Acq. Date: 4:38:38 PM
 Acq. Time:
 Modified: No



San 01/17/10





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

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1392

Lab Code: GEL

Lab Sample ID: XIBLK03

Analysis Date: 14-FEB-10 17:10

GEL Data File: EXS02140012.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	3.62
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Ken 2/16/10

Sample Name: "XIBLK03" Sample ID: "TILLER" File: "EX502140012.wif"

Peak Name: "TA1B" Mass(es): "257.2204.9 amu"

Content: "LCMSEXP_B" Annotation: "

Sample Index: 1

Sample Type: Unknown

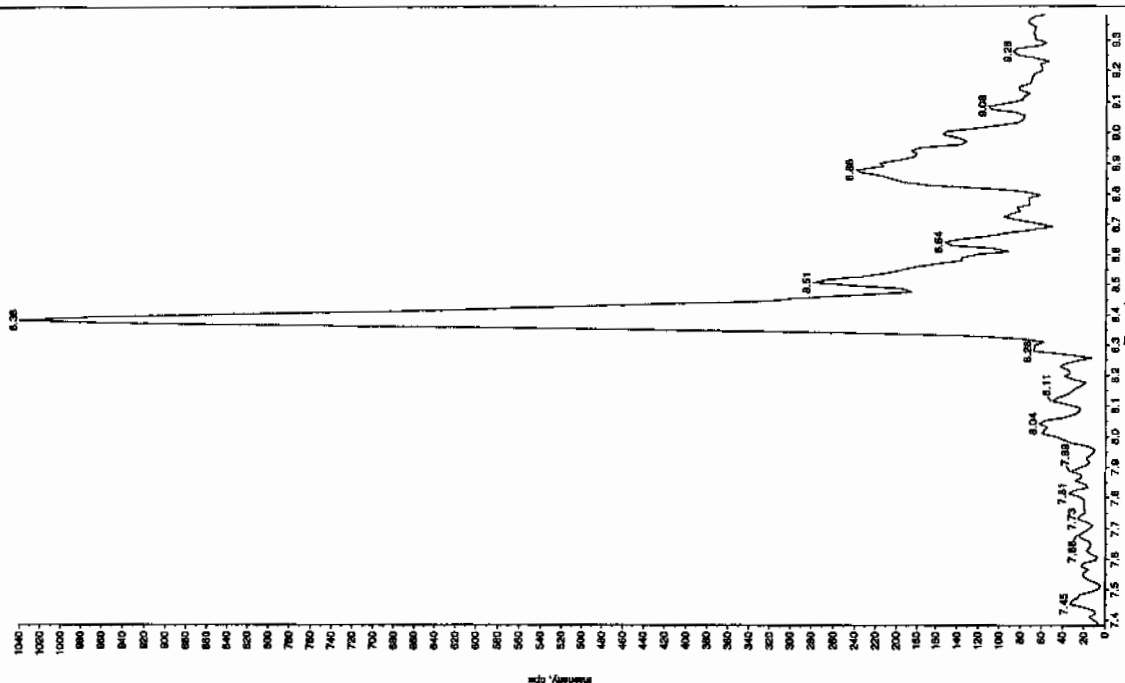
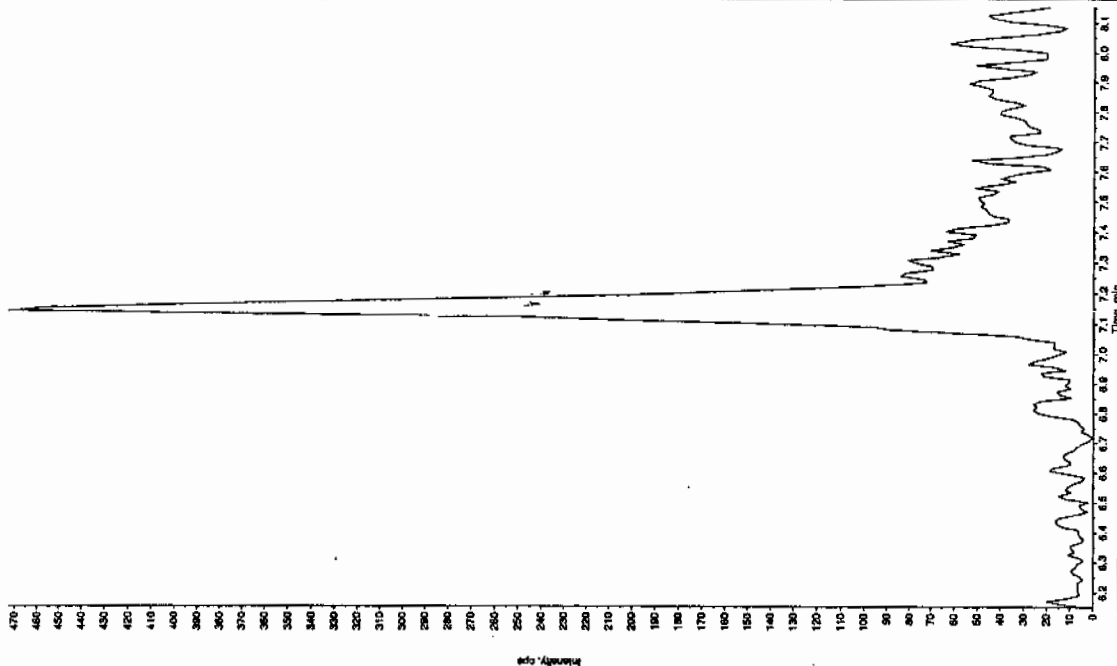
Concentration: N/A

Calculated Conc: 0.00 ng/mL

Acq. Date: 2/14/2010

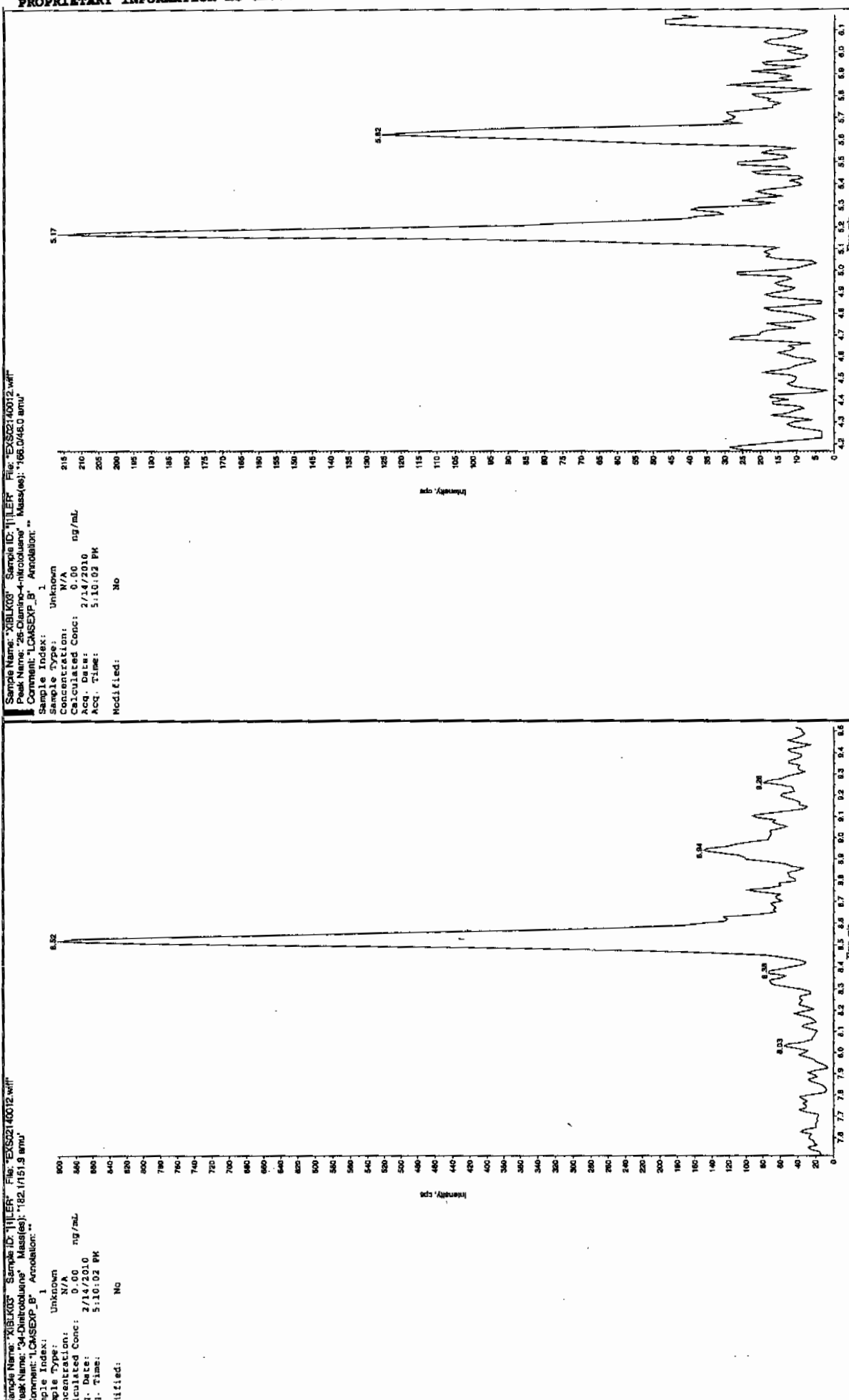
Acq. Time: 5:10:02 PM

Modified: No

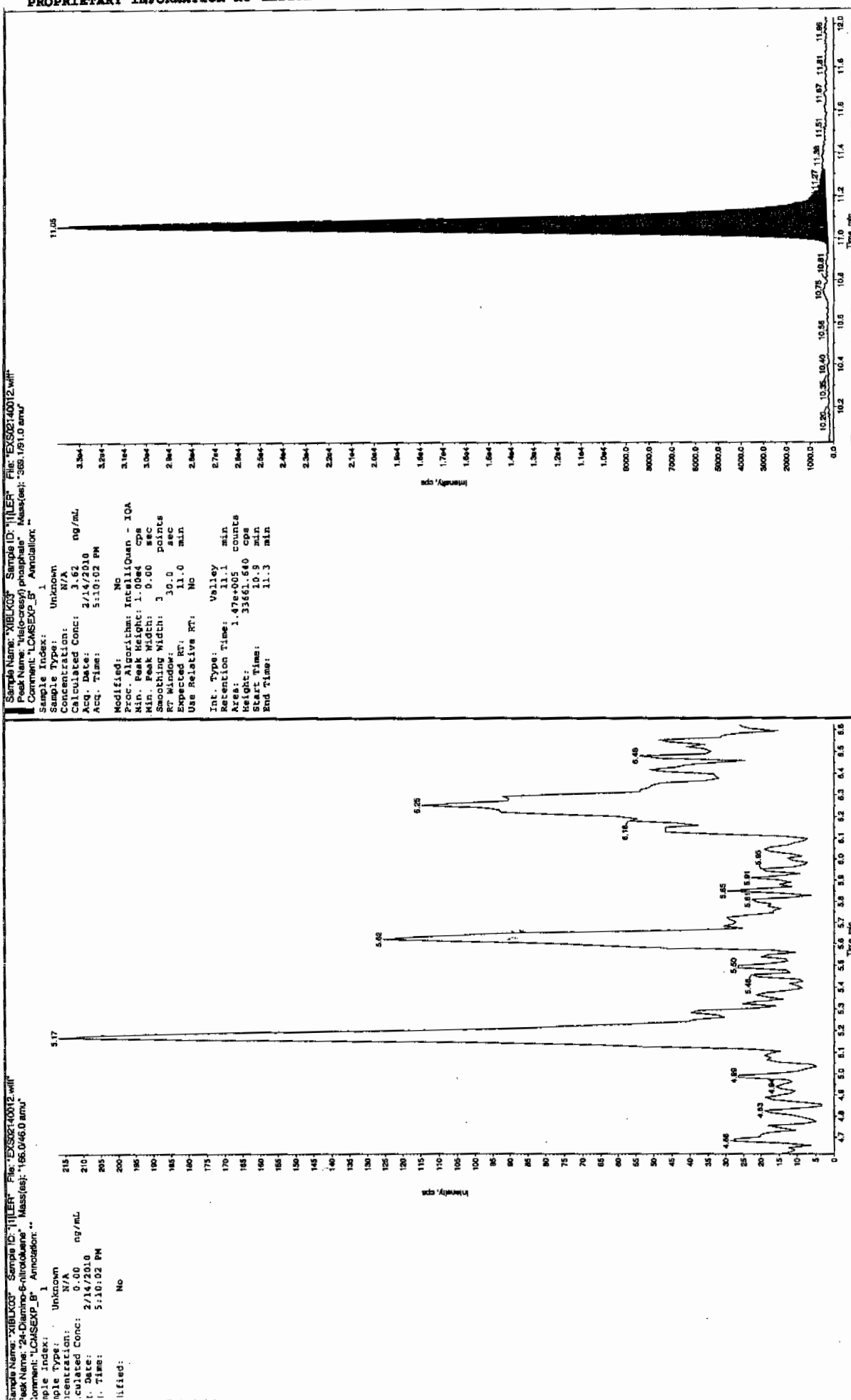


SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Ken 02/17/10



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



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

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1392

Lab Code: GEL

Lab Sample ID: XIBLK04

Analysis Date: 14-FEB-10 18:44

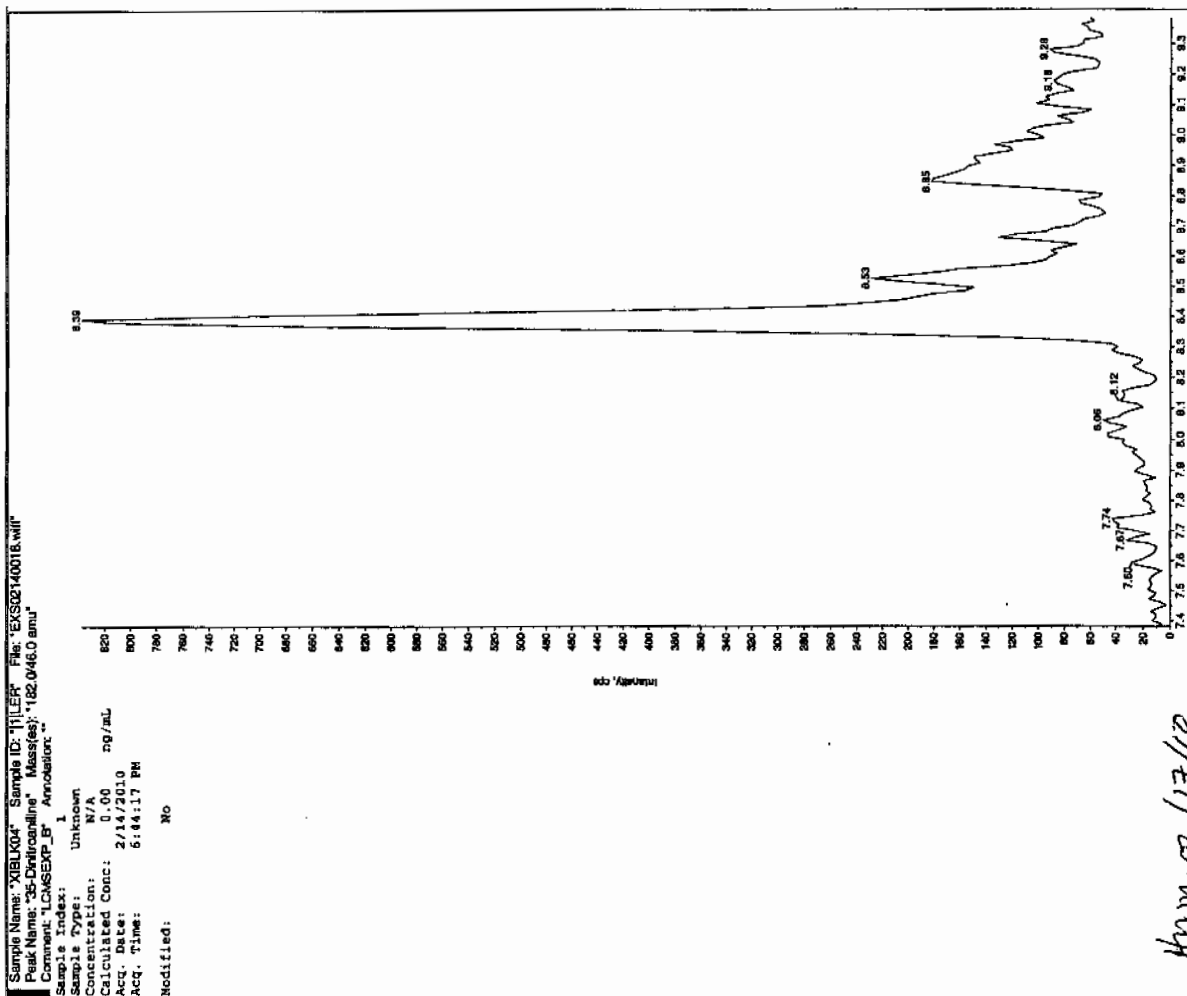
GEL Data File: EXS02140018.wiff

Instrument ID: LCMSMS

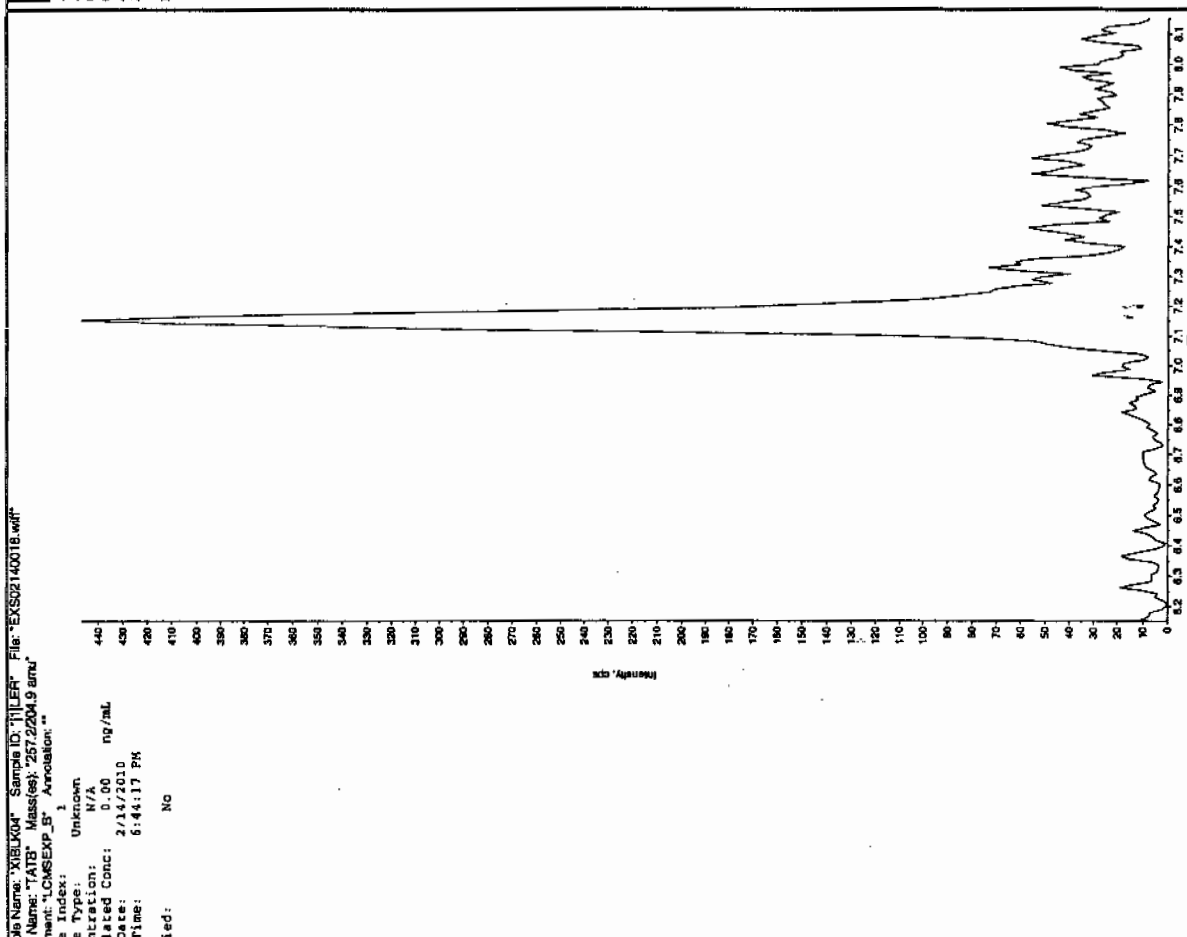
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	3.11
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

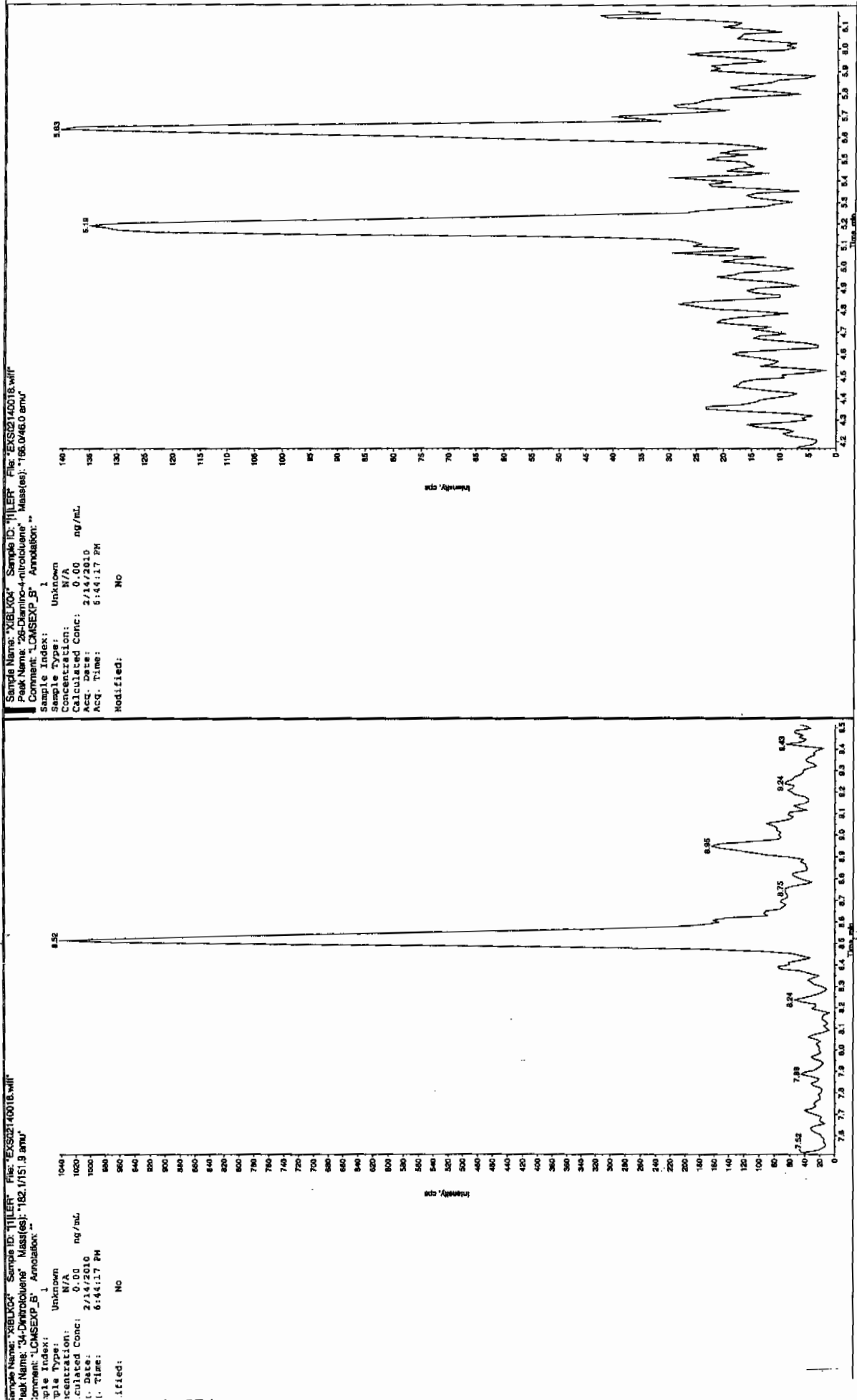
See 2/12/10

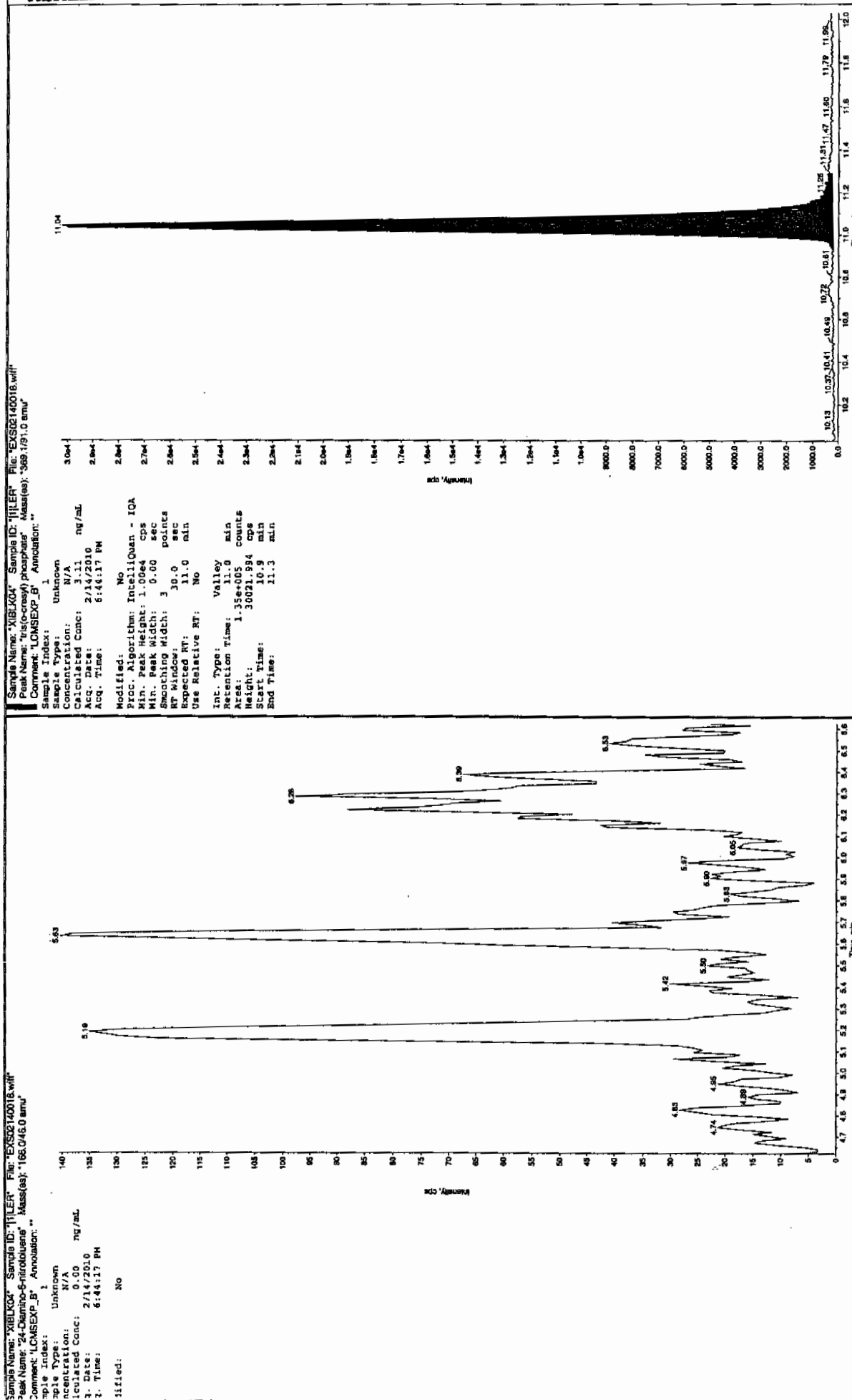


Am 02/17/10



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





4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1392

Lab Code: GEL

Lab Sample ID: XIBLK05

Analysis Date: 14-FEB-10 22:08

GEL Data File: EXS02140031.wiff

Instrument ID: LCMSMS

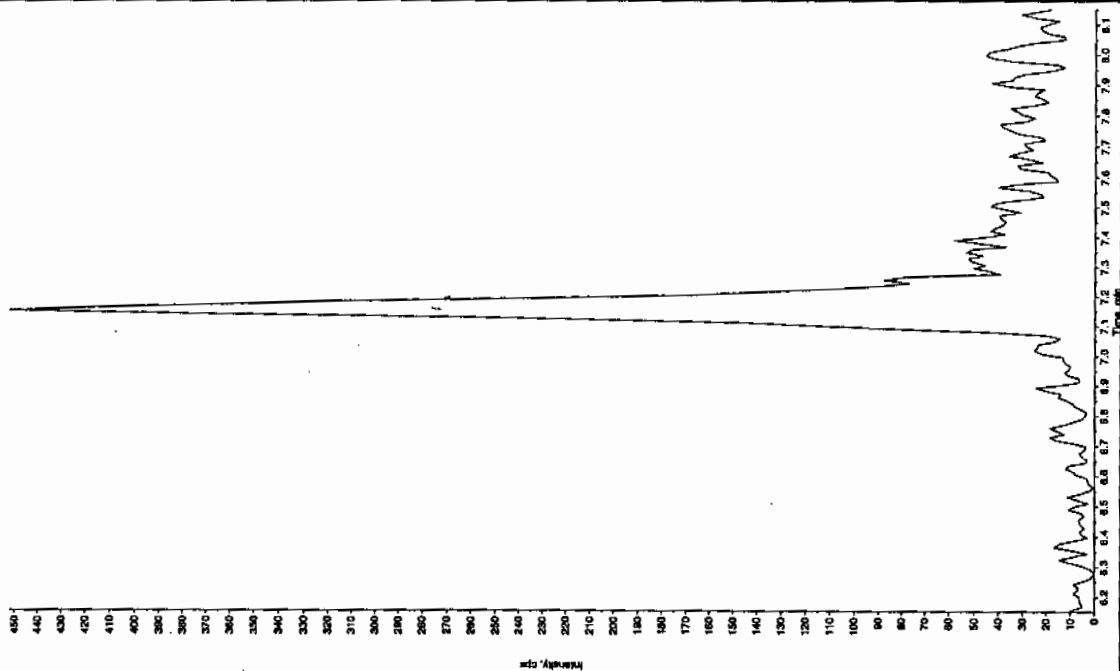
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	2.87
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Scan 21710

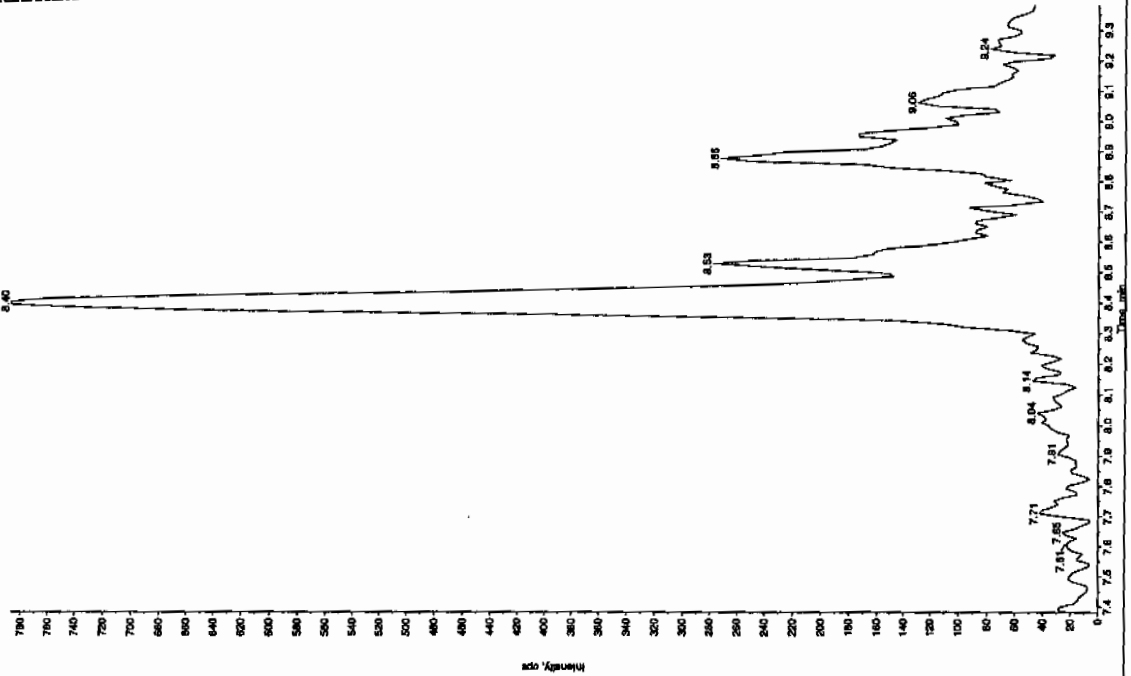
Sample Name: "YBLX05" Sample ID: "11LEP" File: "EXS02140031.wif"
 Peak Name: "TATB" Mass(es): "257.22019 amu"
 Concentration: "0.00" Method: "LC/MS/MS" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 0.00
 Acq. Date: 2/14/2010
 Acq. Time: 10:08:32 PM
 Modified: No



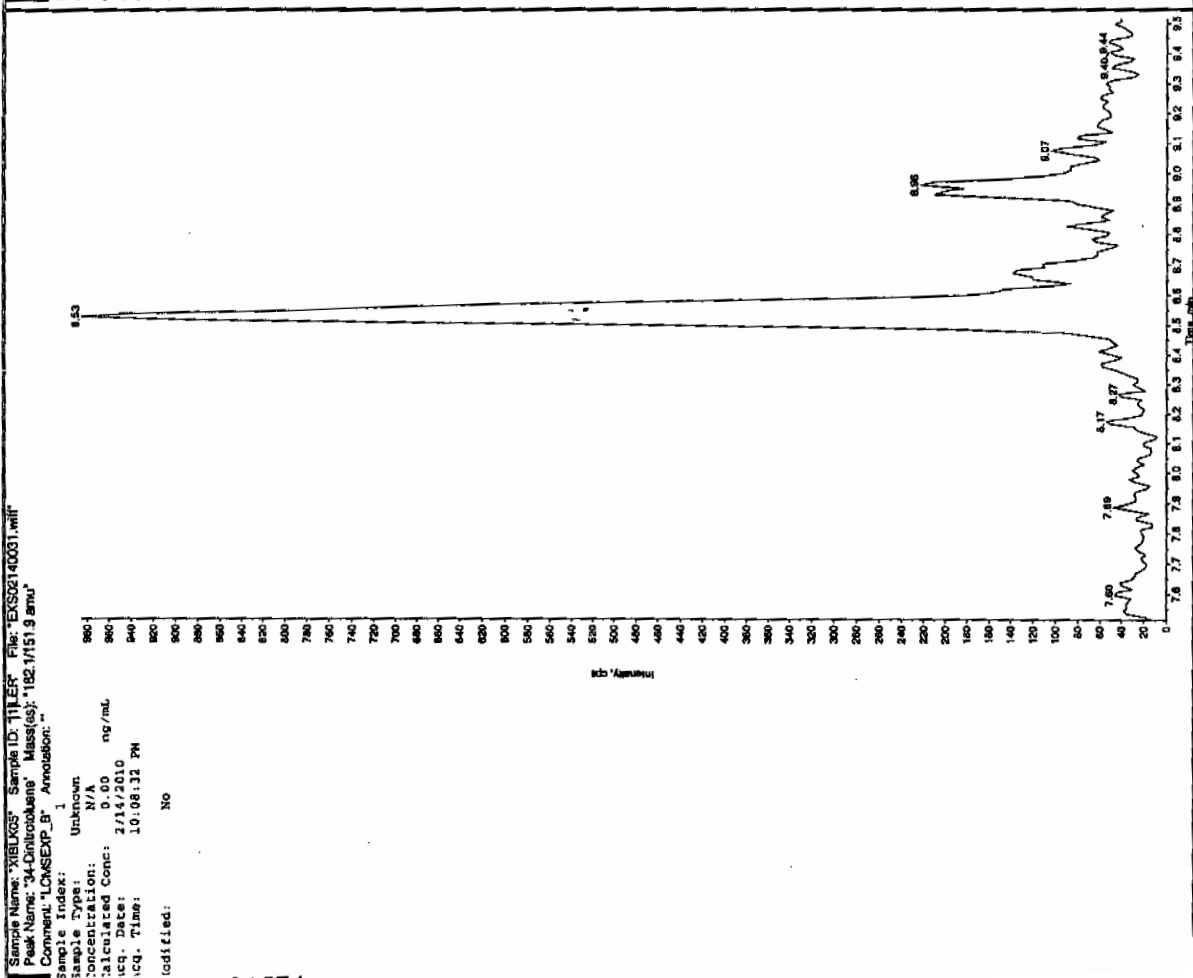
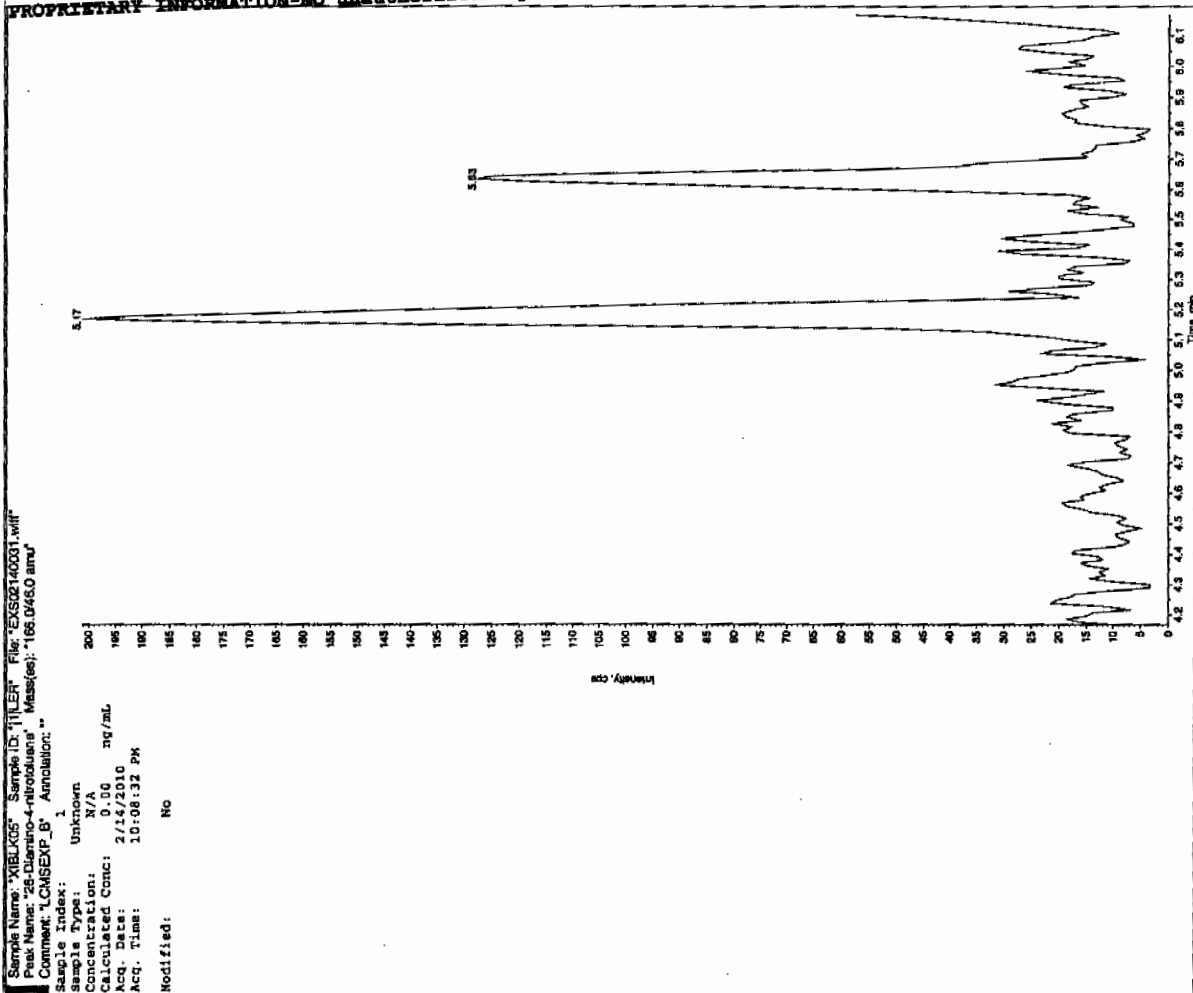
Sample Name: "YBLX05" Sample ID: "11LEP" File: "EXS02140031.wif"
 Peak Name: "TATB" Mass(es): "182.046.0 amu"
 Concentration: "0.00" Method: "LC/MS/MS" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 0.00
 Acq. Date: 2/14/2010
 Acq. Time: 10:08:32 PM
 Modified: No

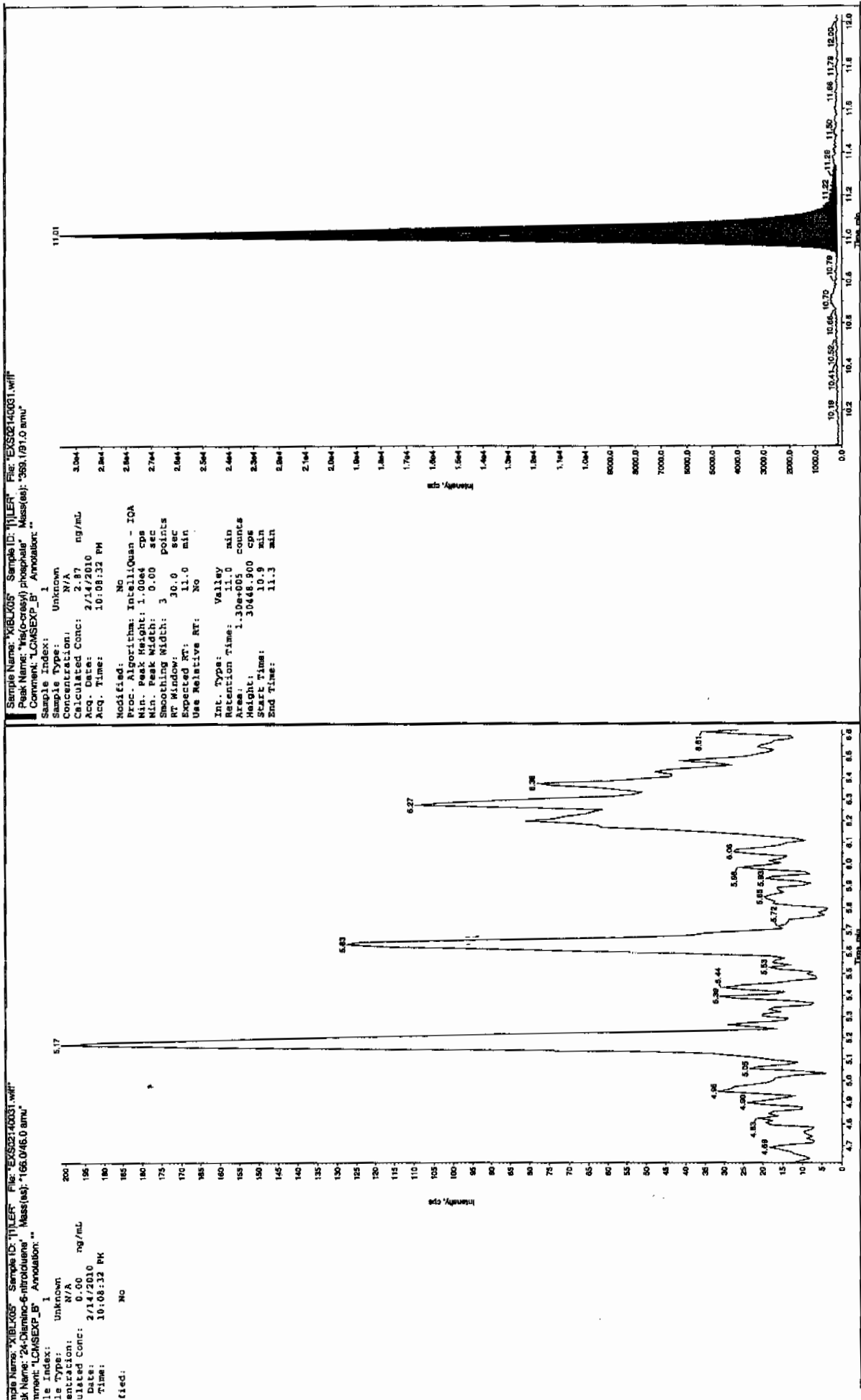


Scan 21710

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



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



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1392

Lab Code: GEL

Lab Sample ID: XIBLK06

Analysis Date: 15-FEB-10 01:32

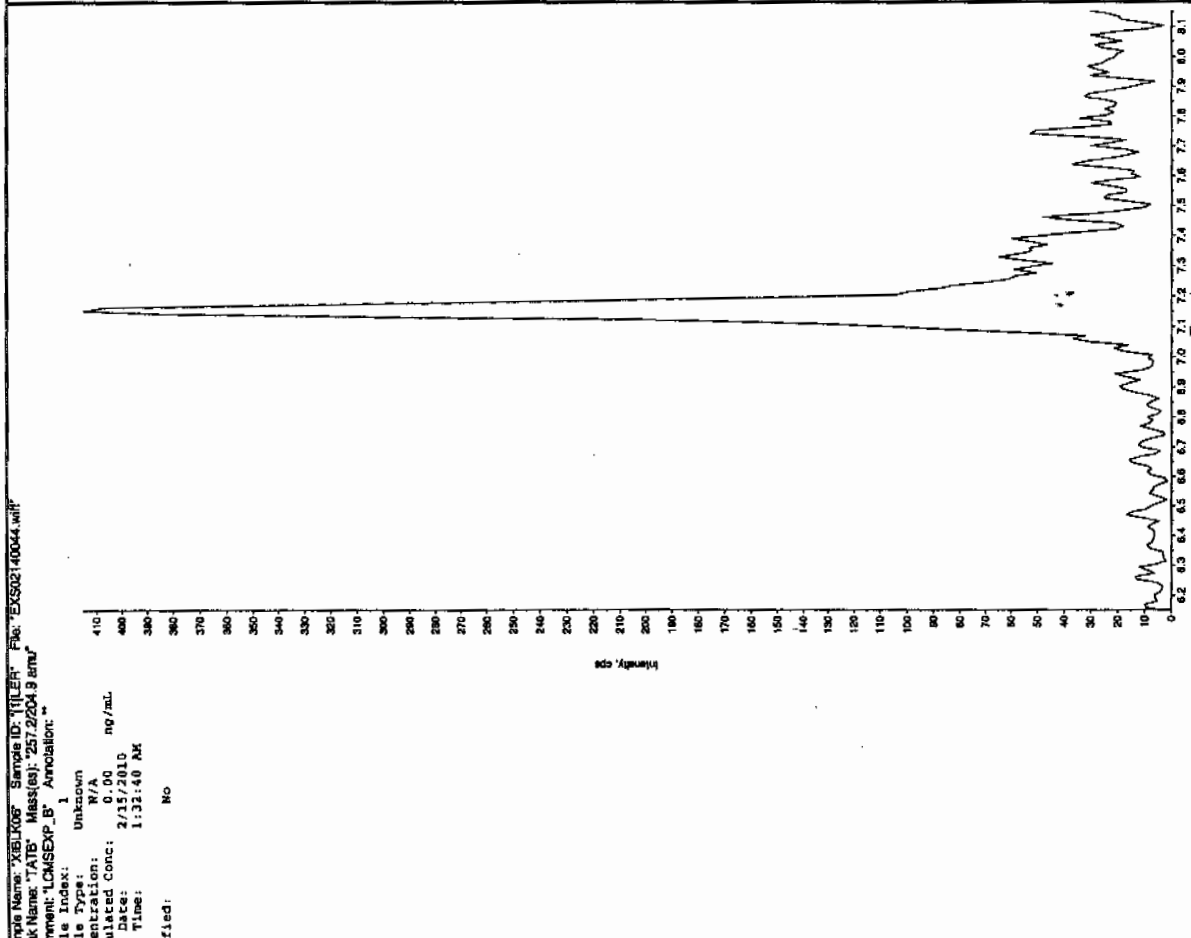
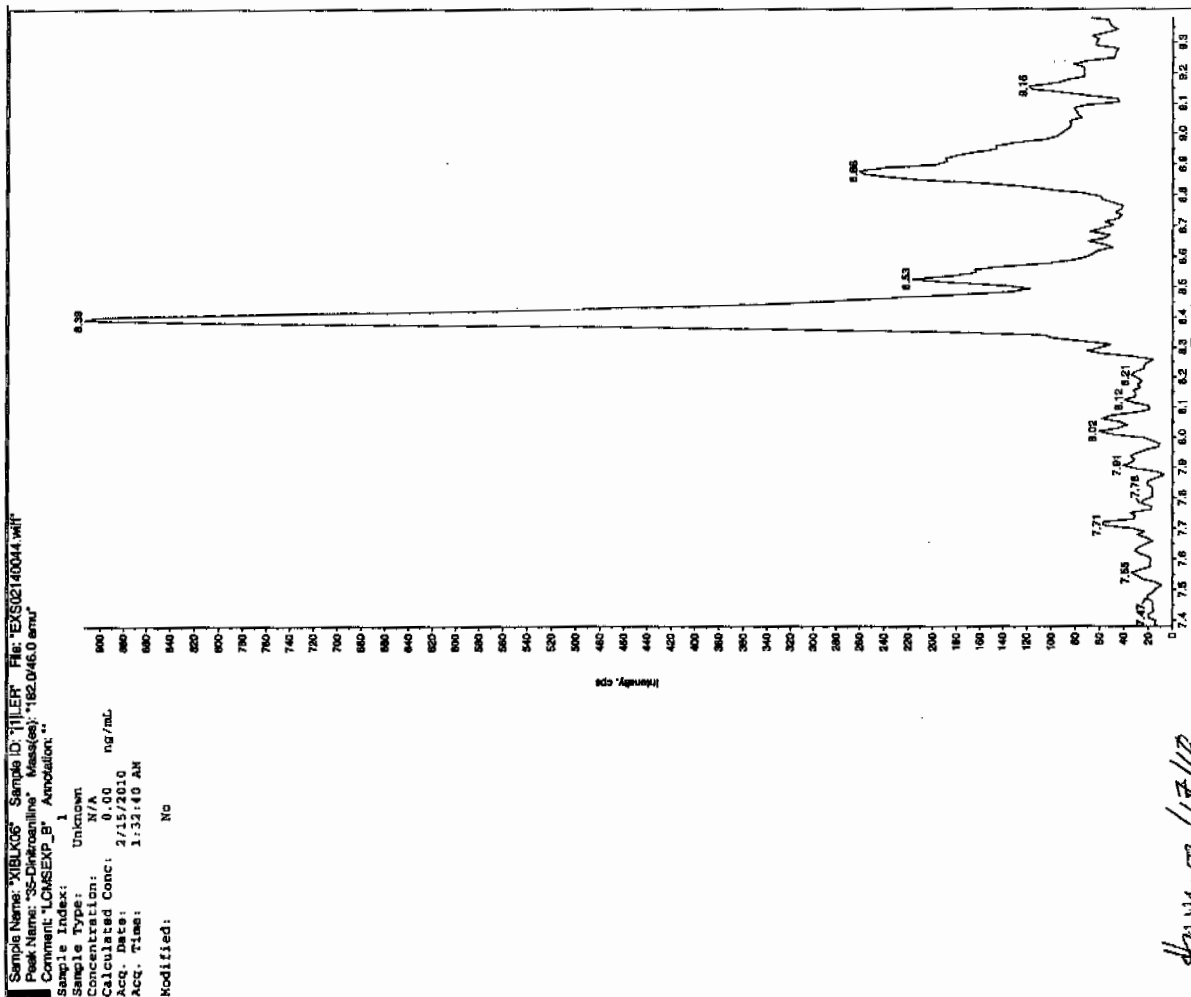
GEL Data File: EXS02140044.wiff

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

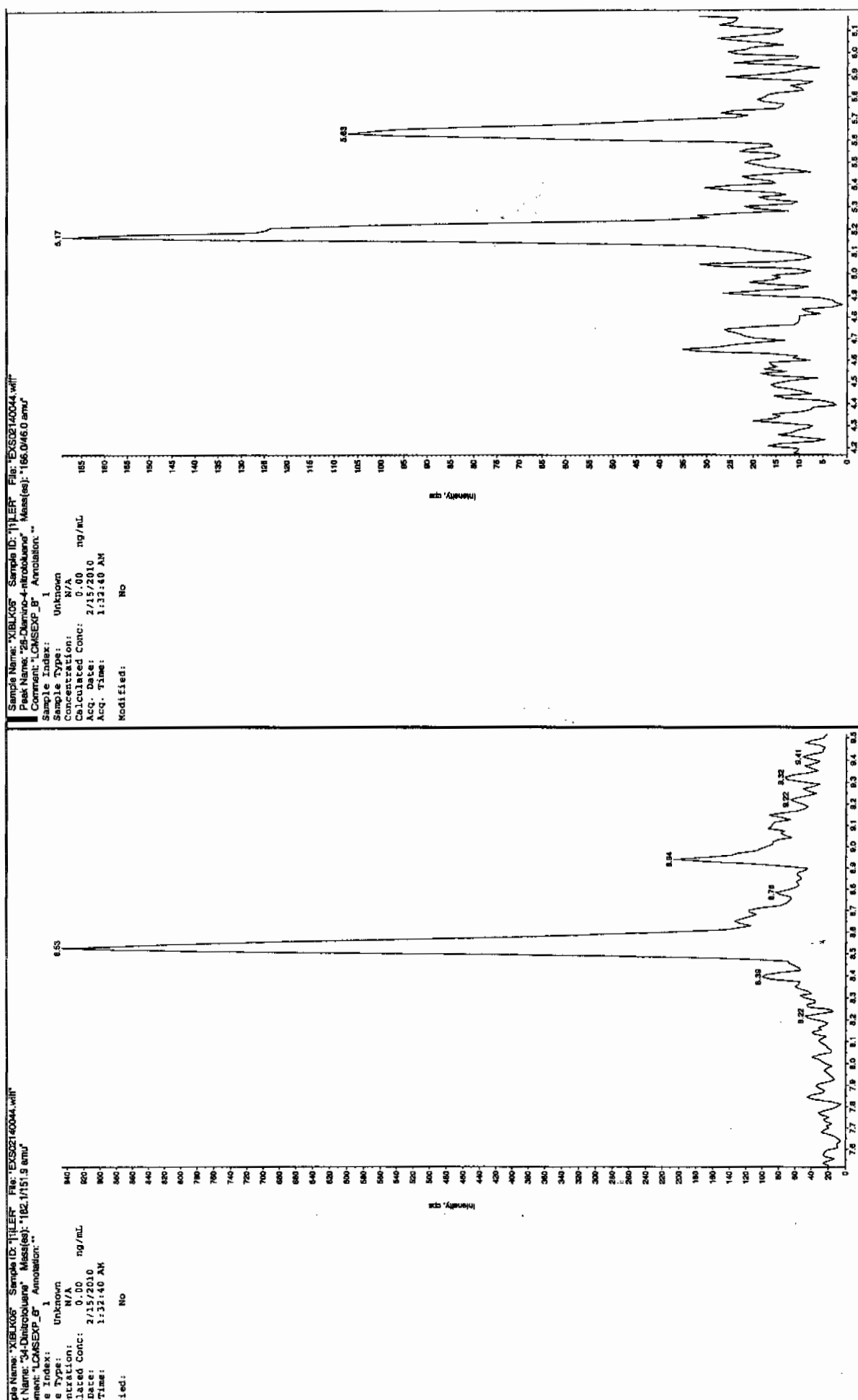
Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	2.4
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Dec 2/17/10

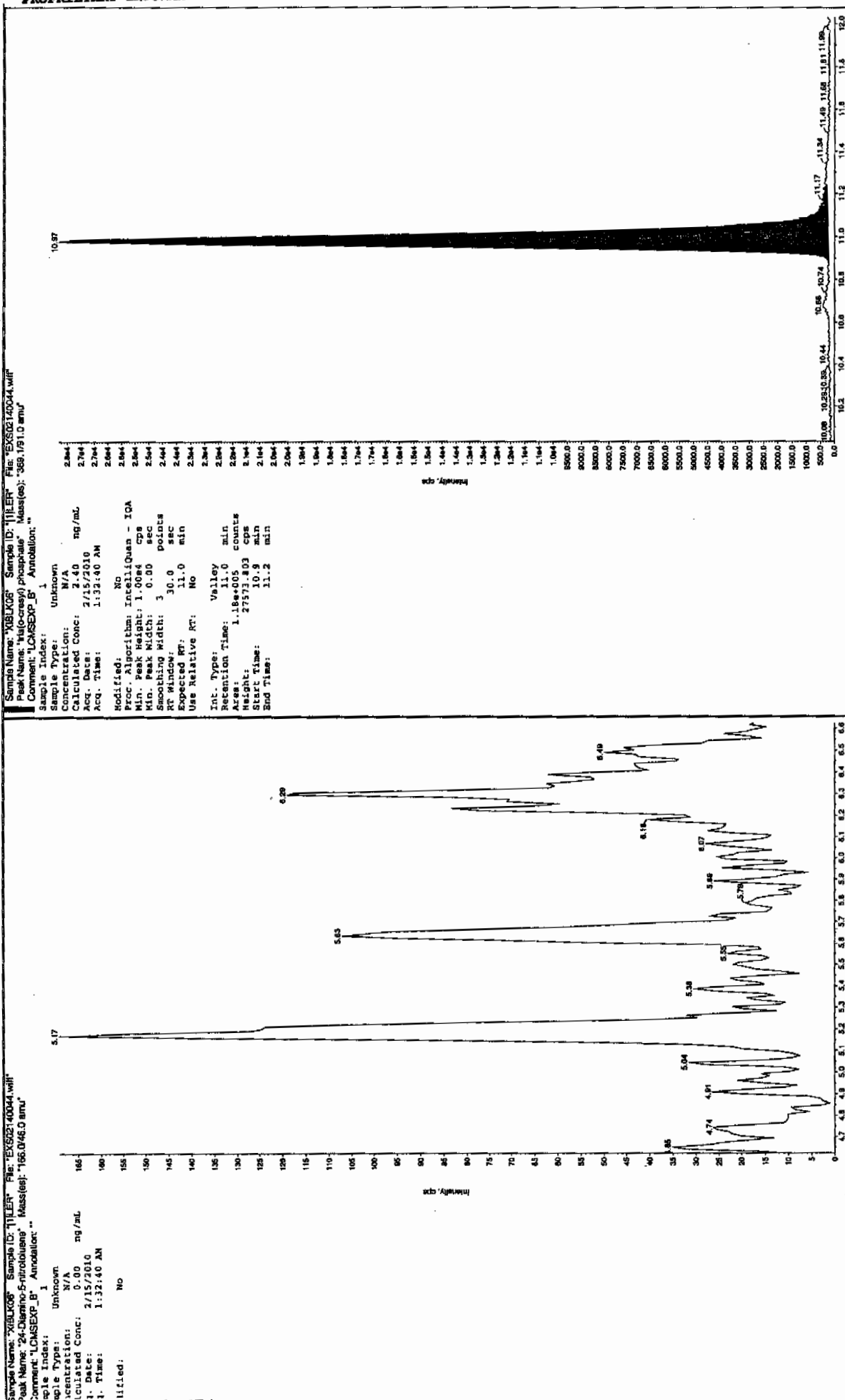


SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Dec 2/17/10



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



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

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1392

Lab Code: GEL

Lab Sample ID: XIBLK07

Analysis Date: 15-FEB-10 02:35

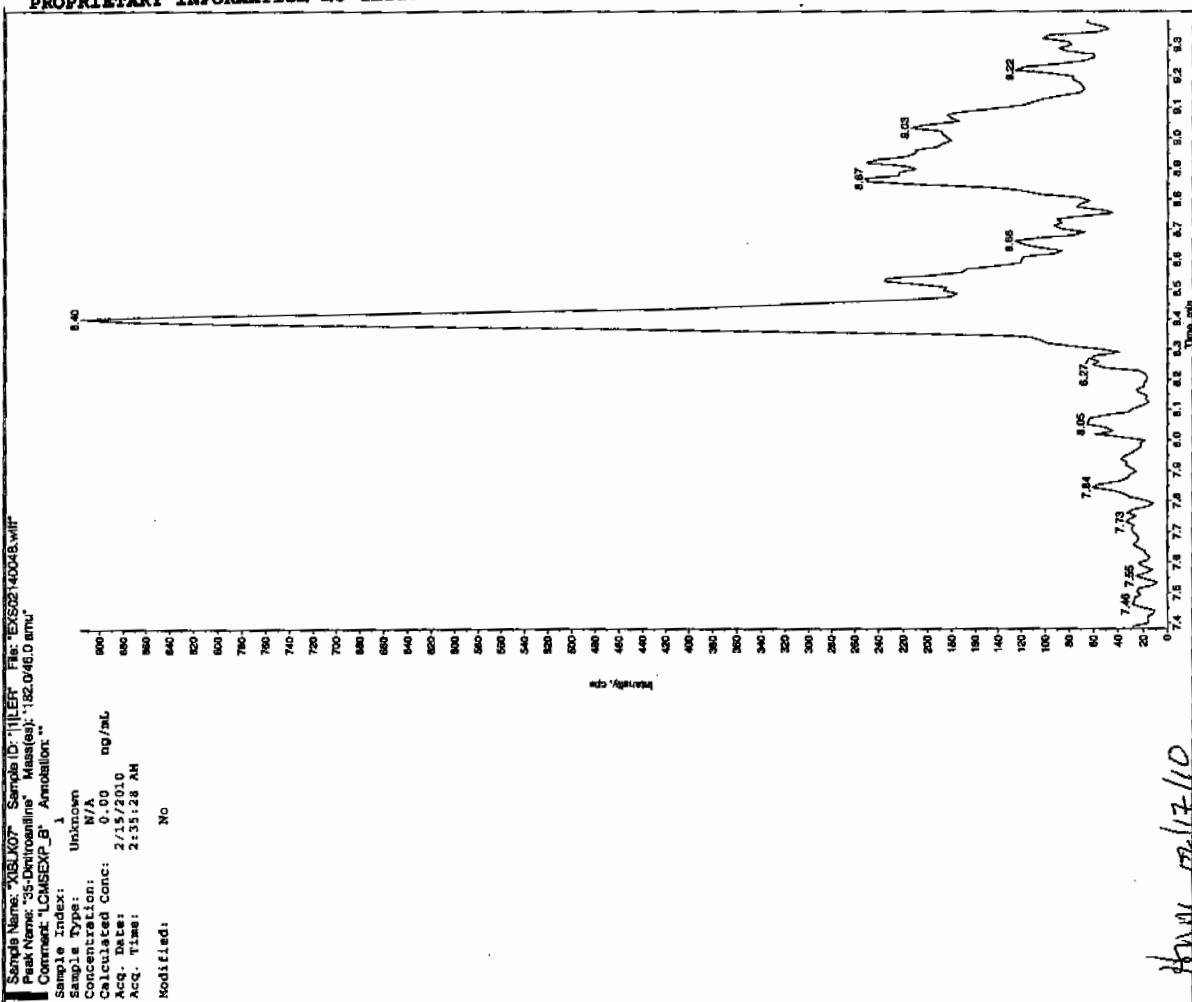
GEL Data File: EXS02140048.wiff

Instrument ID: LCMSMS

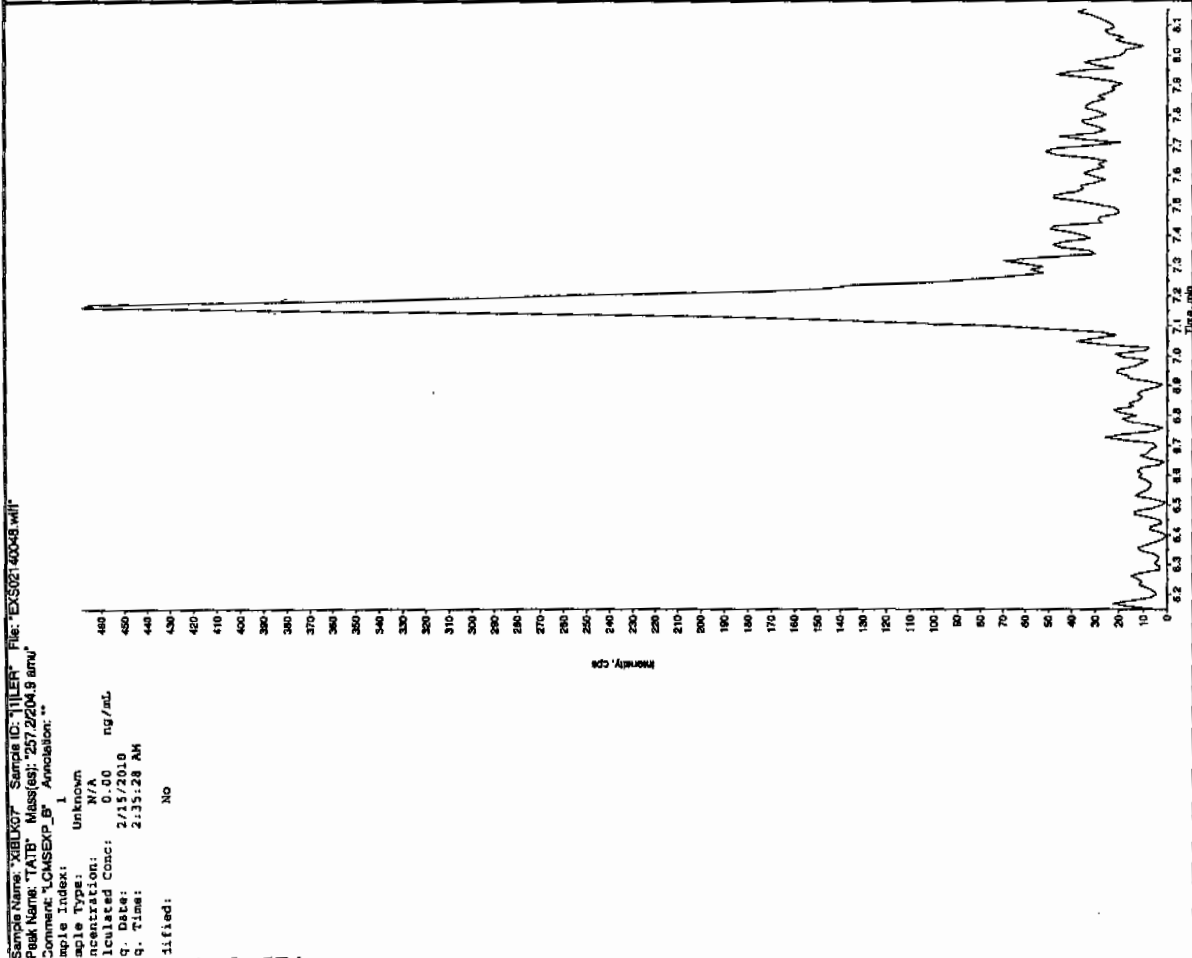
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	1.58
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

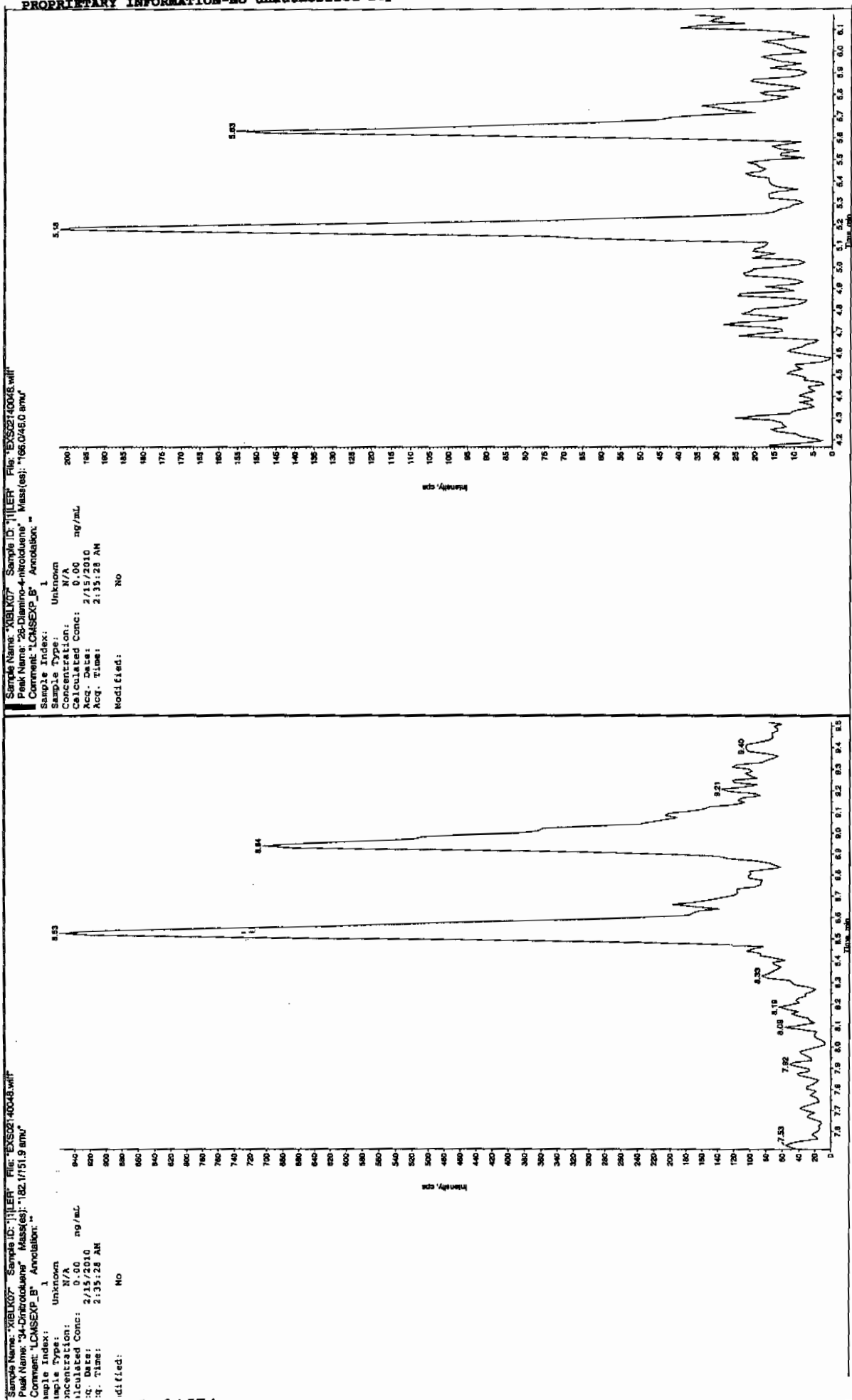
See 2/17/10



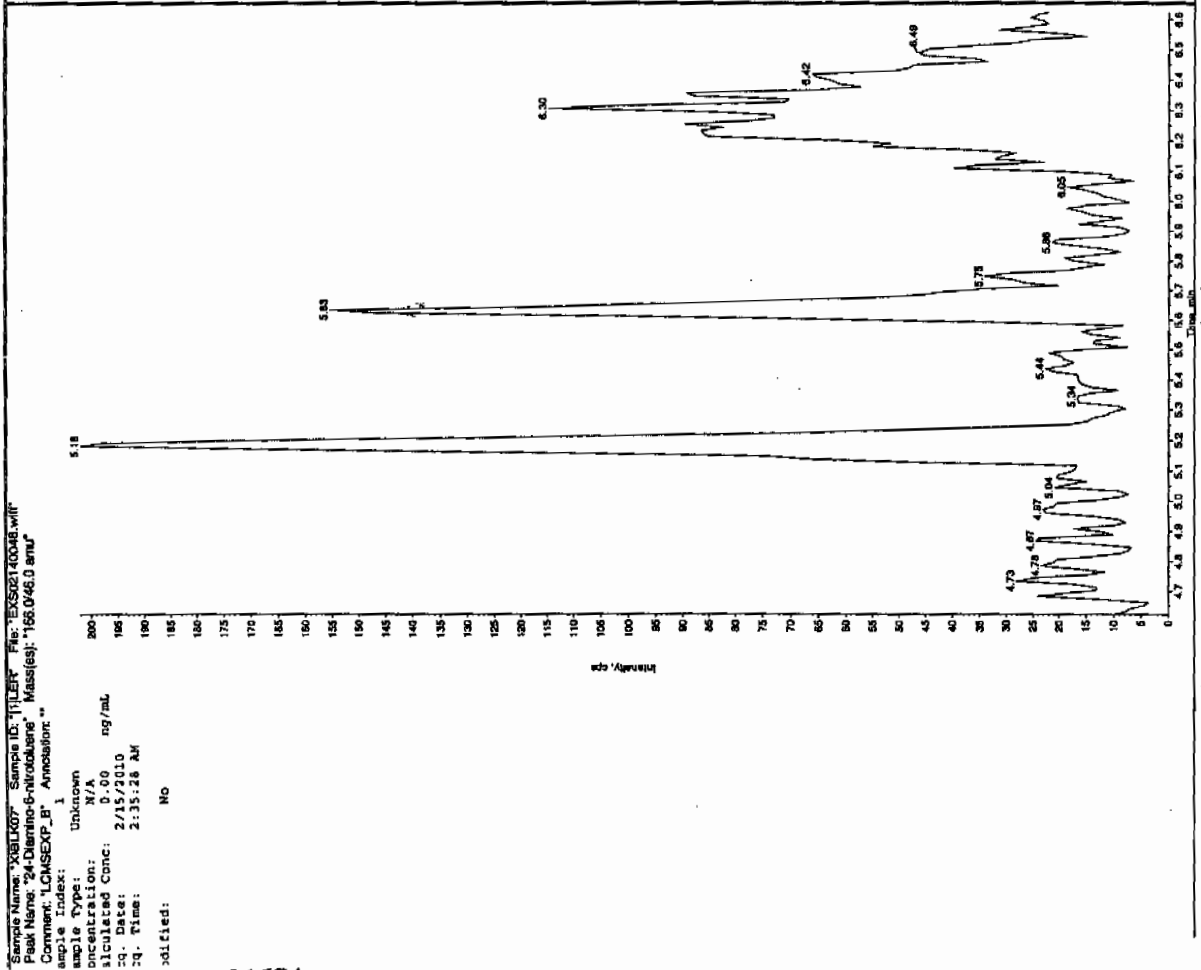
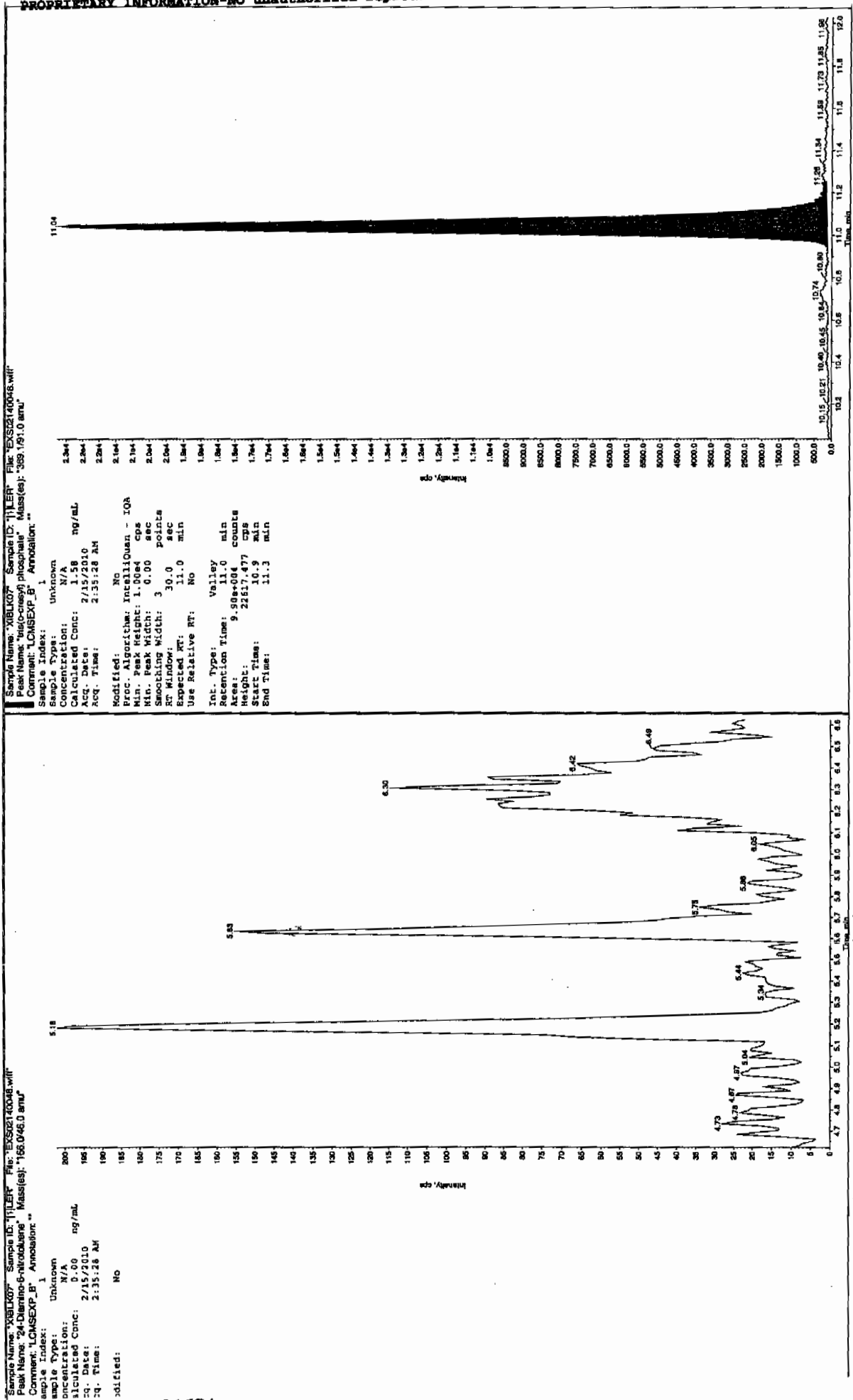
See 2/17/10



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



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



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1392

Lab Code: GEL

Lab Sample ID: XIBLK08

Analysis Date: 15-FEB-10 04:56

GEL Data File: EXS02140057.wiff

Instrument ID: LCMSMS

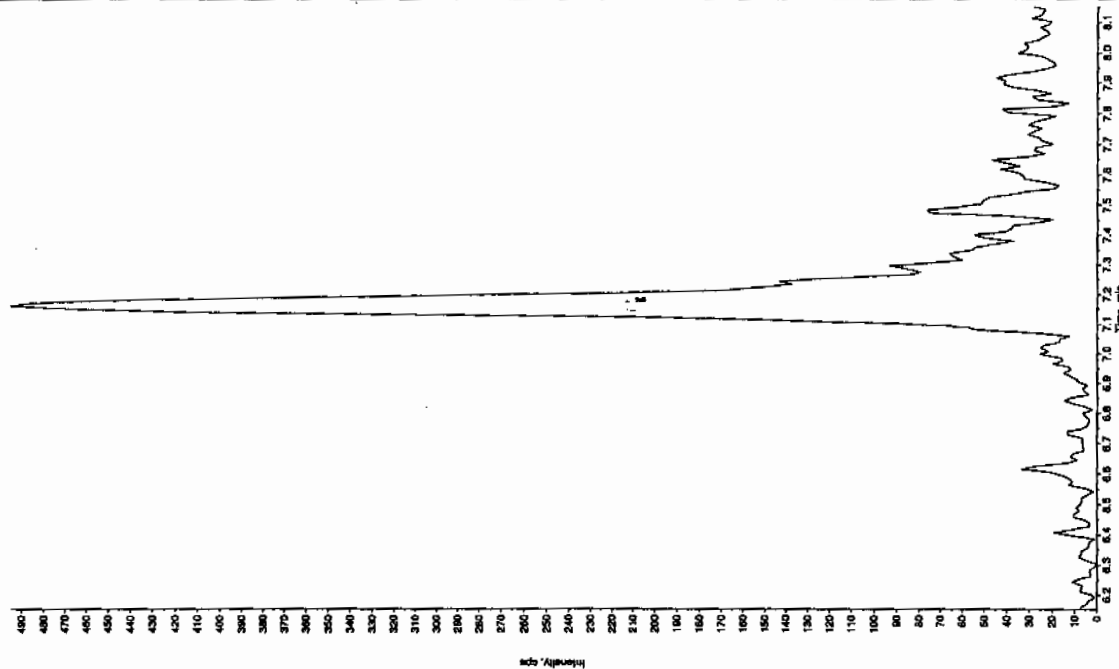
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	3.01
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Len 2/17/10

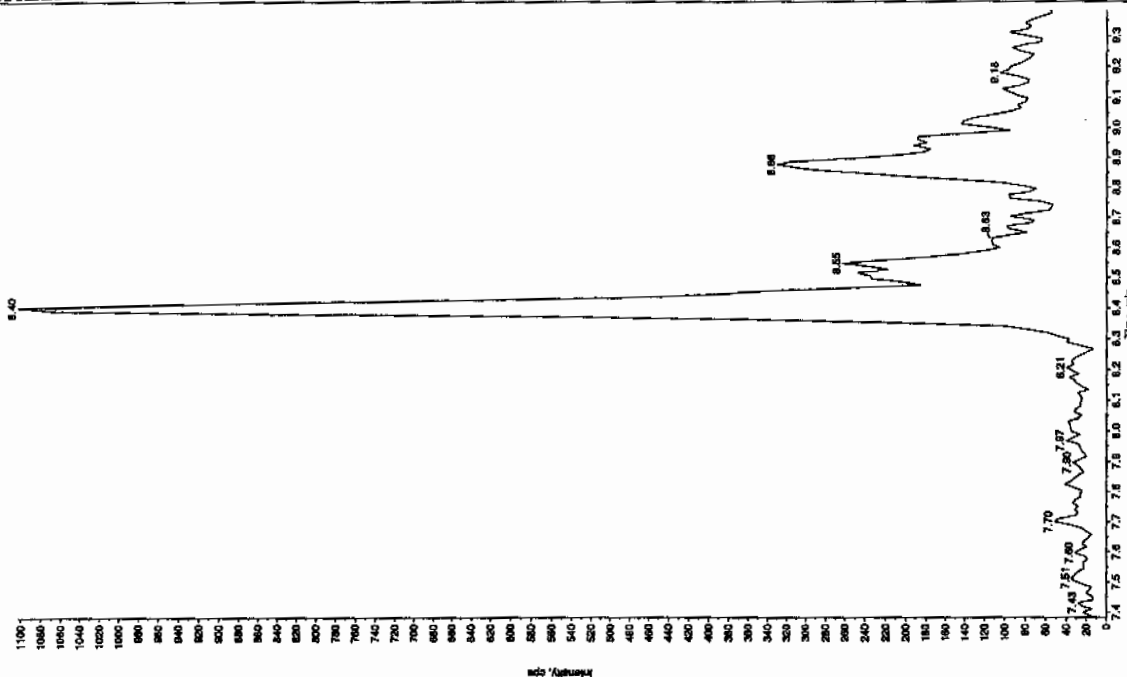
Sample Name: "XIBUX08" Sample ID: "JILER" File: "EXS02140057.wif"
 Peak Name: "TATB" Mass(es): "257.2204.9 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 2/15/2010
 Acq. Date: 4:56:50 AM
 Acq. Time: 4:56:50 AM
 Modified: No

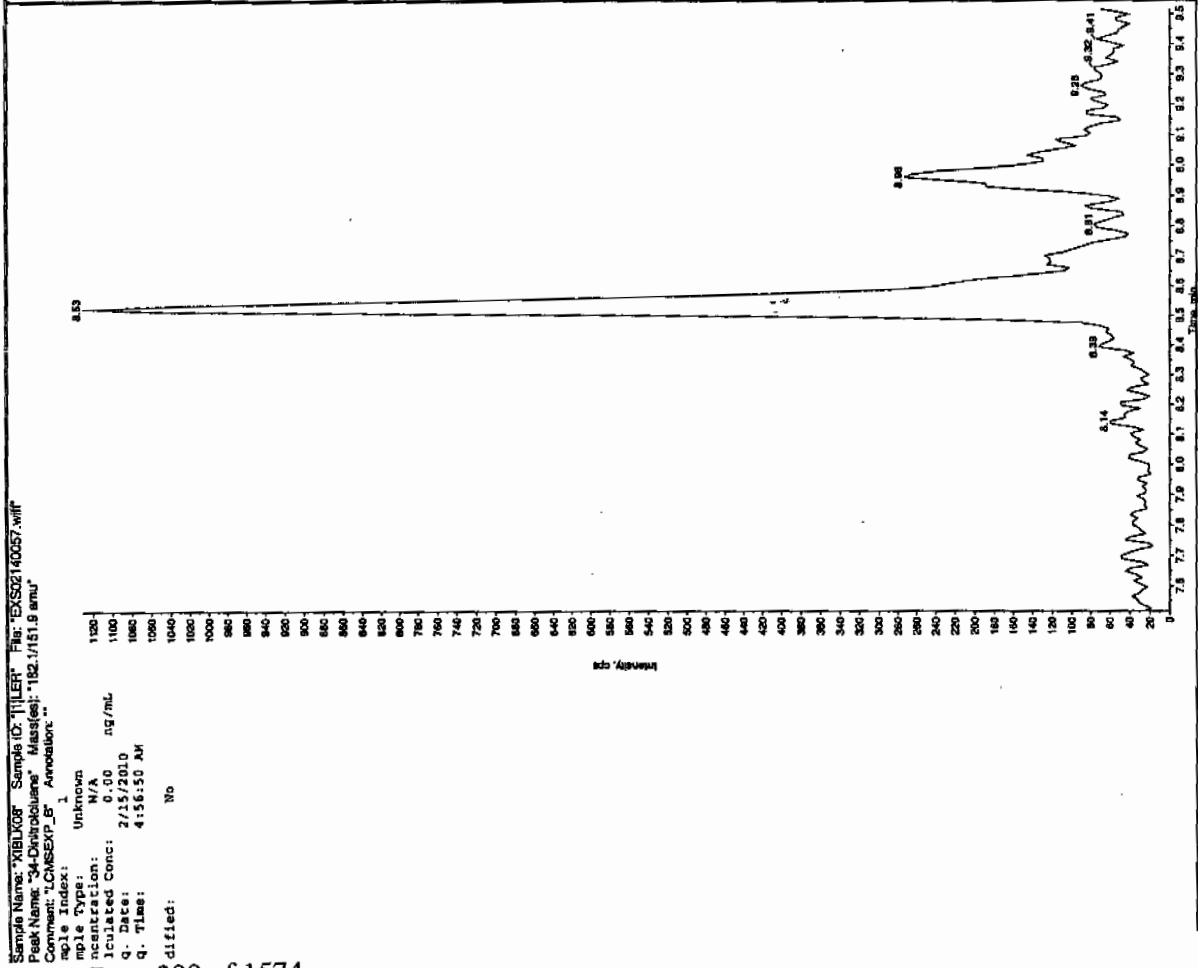
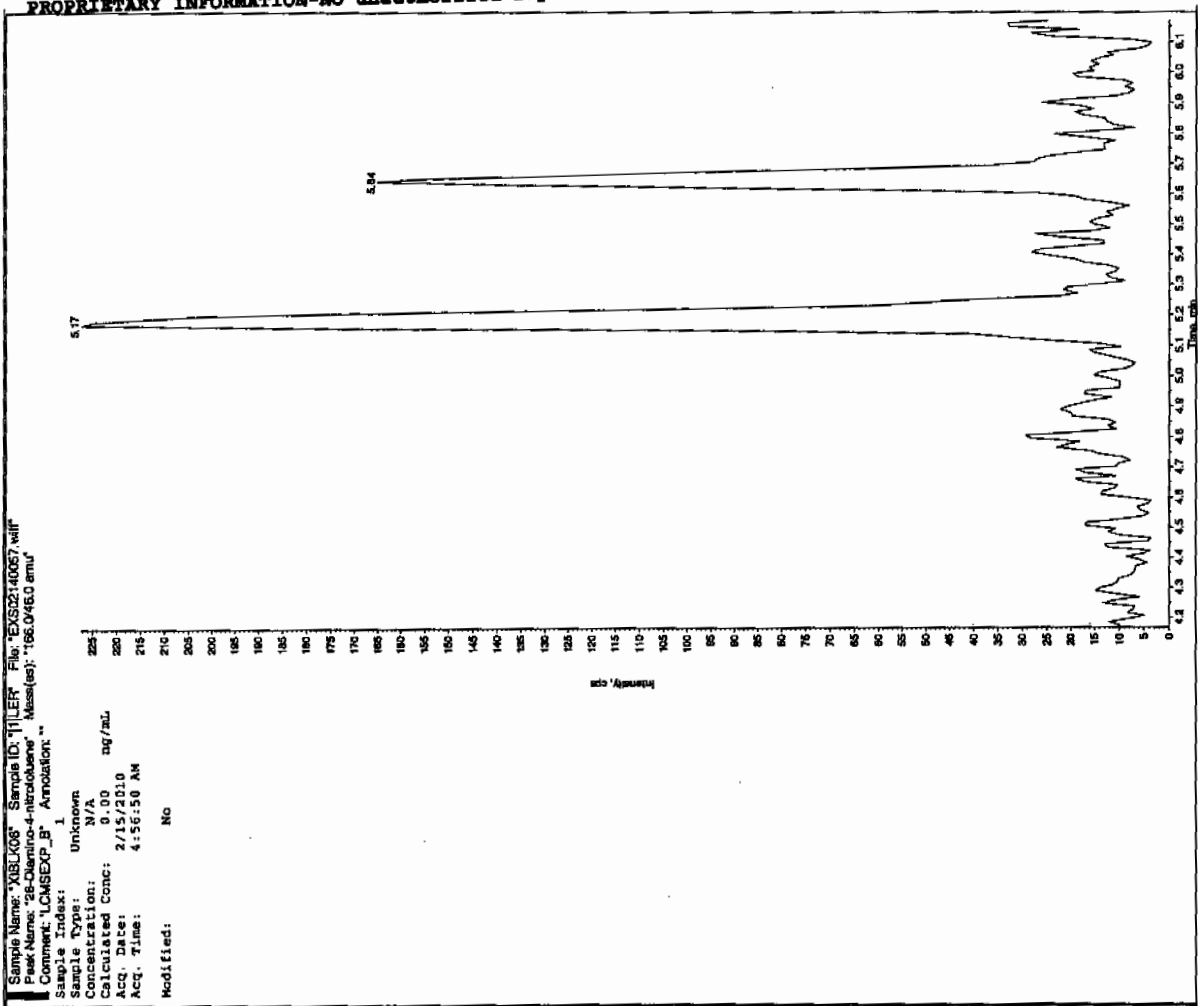


Sample Name: "XIBUX08" Sample ID: "JILER" File: "EXS02140057.wif"
 Peak Name: "35-Dikroaniline" Mass(es): "162.045.0 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 2/15/2010
 Acq. Date: 4:56:50 AM
 Acq. Time: 4:56:50 AM
 Modified: No



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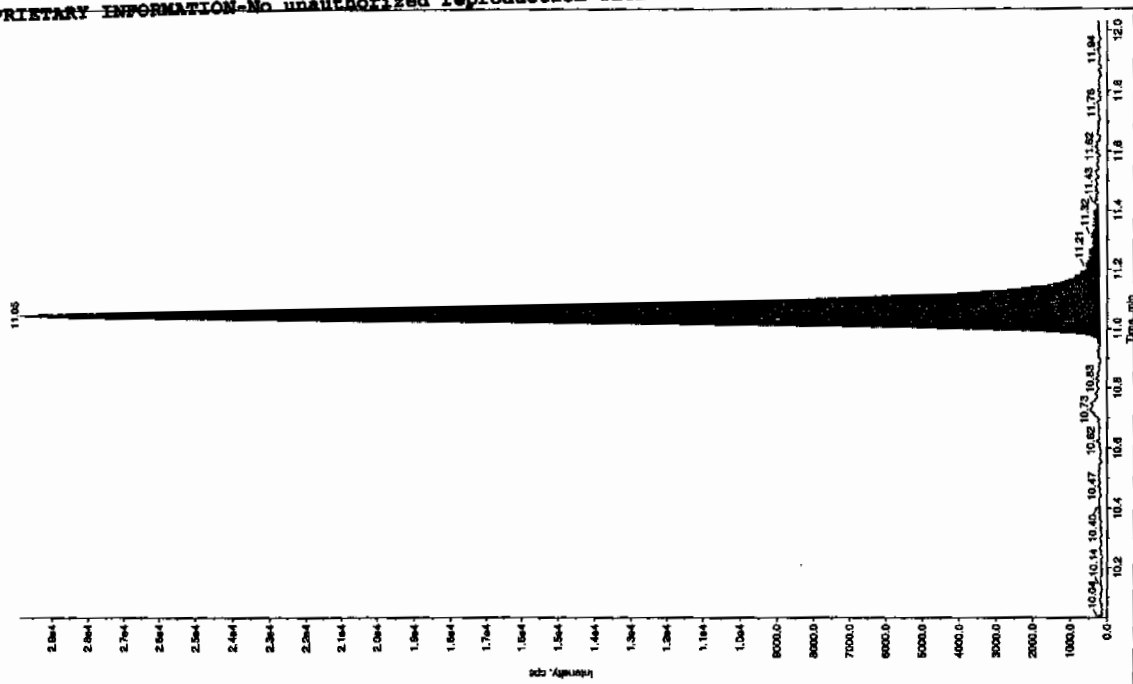
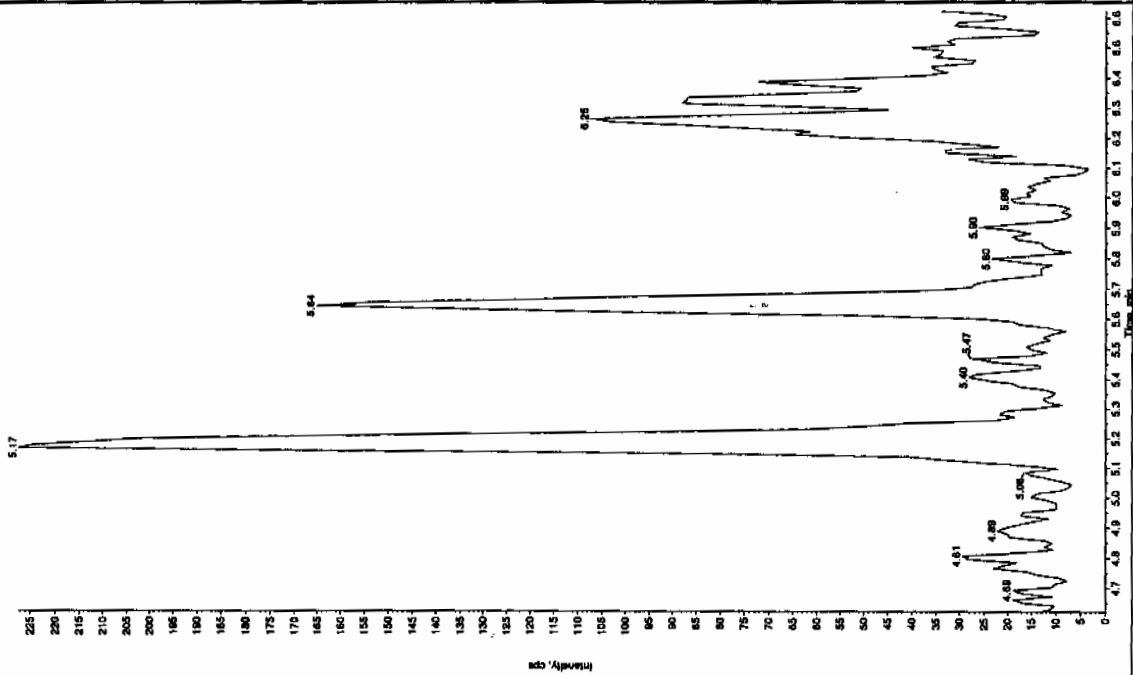


L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "XIBLK03" Sample ID: "HILLER" File: "EXS02140057.will"
 Peak Name: "24-Diisobutylphosphine" Mass(es): "165.045.0 amu"
 Comment: "LCMSEXP_B" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Acq. Date: 2/15/2010
 Acq. Time: 4:56:50 AM
 Modified: No

Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 1.00e4 cps
 Min. Peak Width: 0.00 sec
 Smoothing: 30.0 points
 RT Window: 30.0 sec
 Expected RT: 11.0 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 11.0 min
 Area: 1.33e+005 counts
 Height: 29665.075 cps
 Start time: 10.9 min
 End time: 11.4 min



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1392

Lab Code: GEL

Lab Sample ID: XIBLK09

Analysis Date: 15-FEB-10 06:31

GEL Data File: EXS02140063.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	2.25
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Pen 2/17/10

Sample Name: "XBLK09" Sample ID: "JILER" File: "EXS02140063.wif"

Peak Name: "TATB" Mass(es): "257.2204.9 amu"

Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1

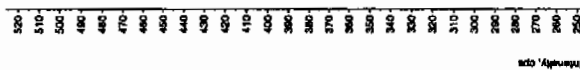
Sample Type: Unknown

Concentration: 0.00 ng/mL

Acq. Date: 2/15/2010

Acq. Time: 6:31:02 AM

Modified: No



Sample Name: "XBLK09" Sample ID: "JILER" File: "EXS02140063.wif"

Peak Name: "35-Dihydroquinone" Mass(es): "182.046.0 amu"

Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1

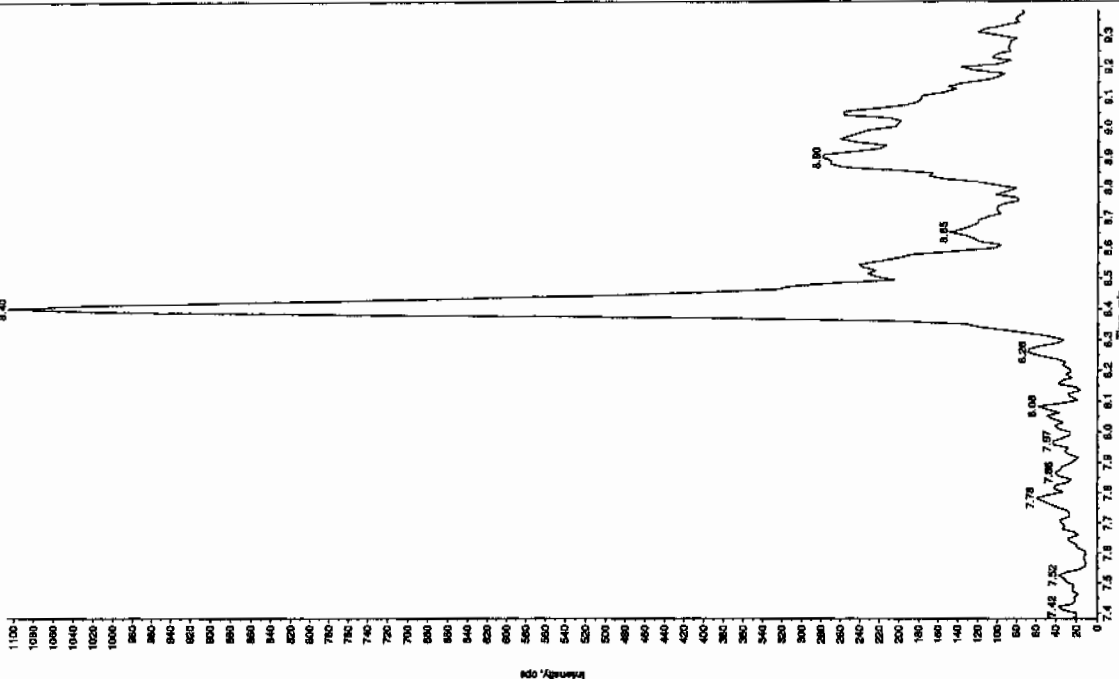
Sample Type: Unknown

Concentration: 0.00 ng/mL

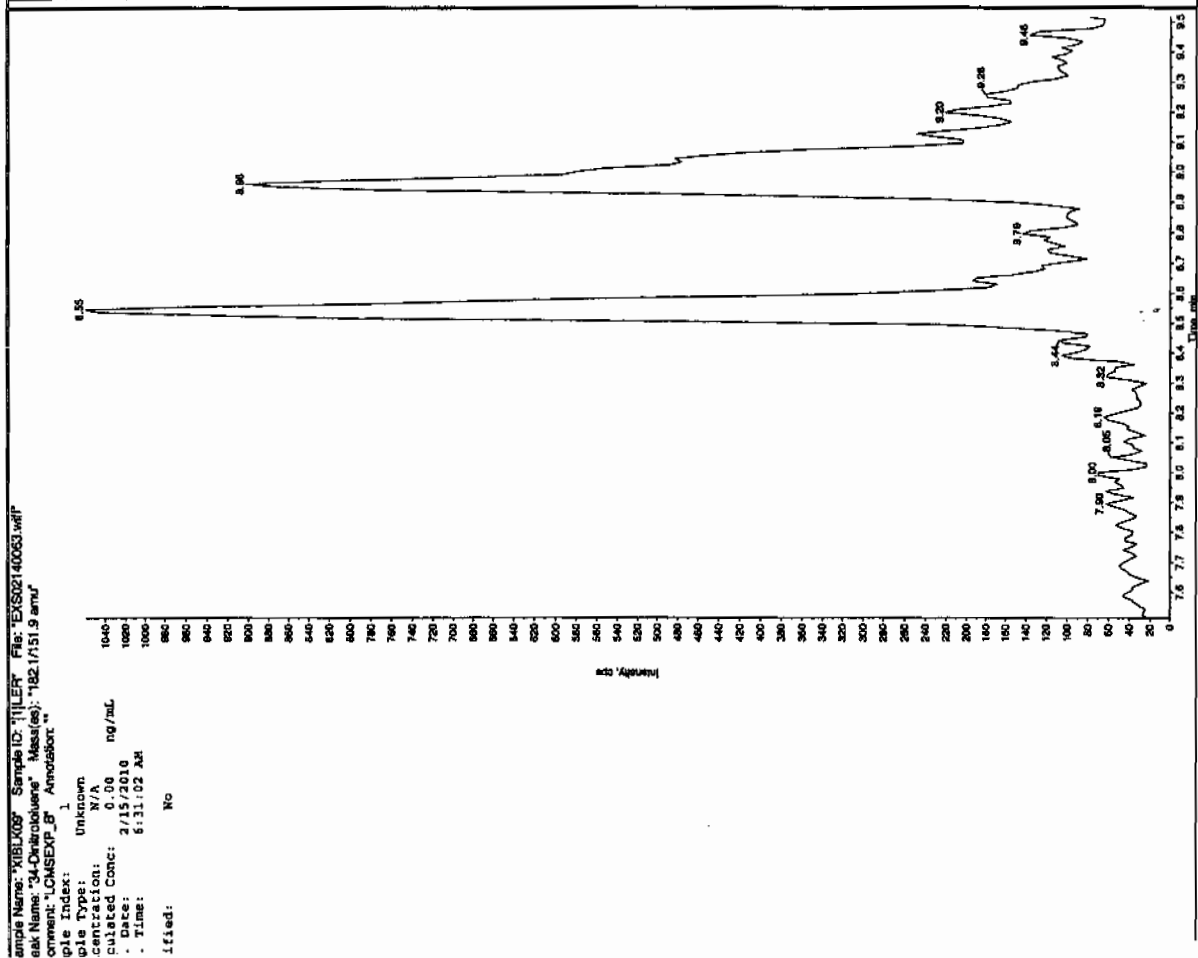
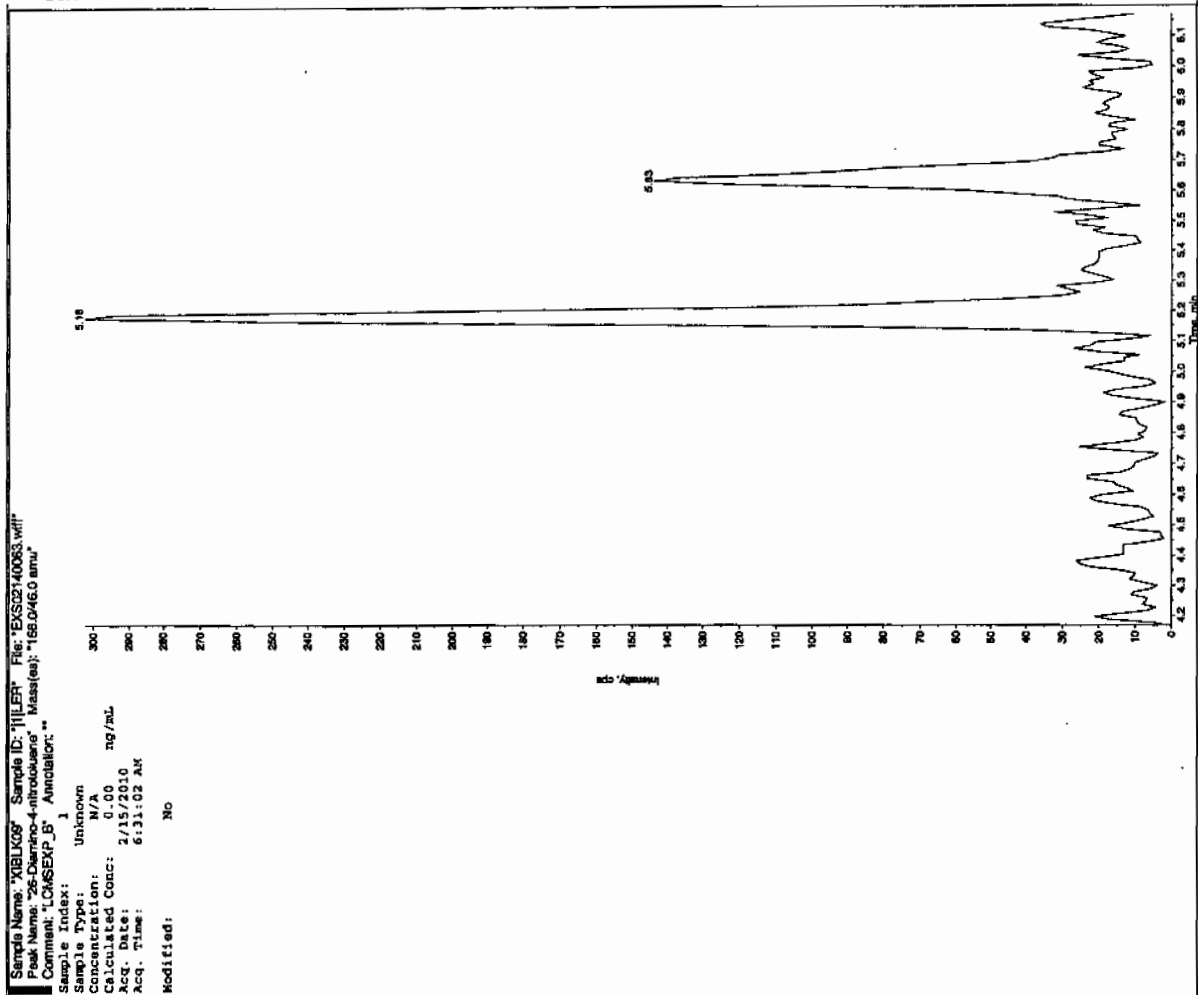
Acq. Date: 2/15/2010

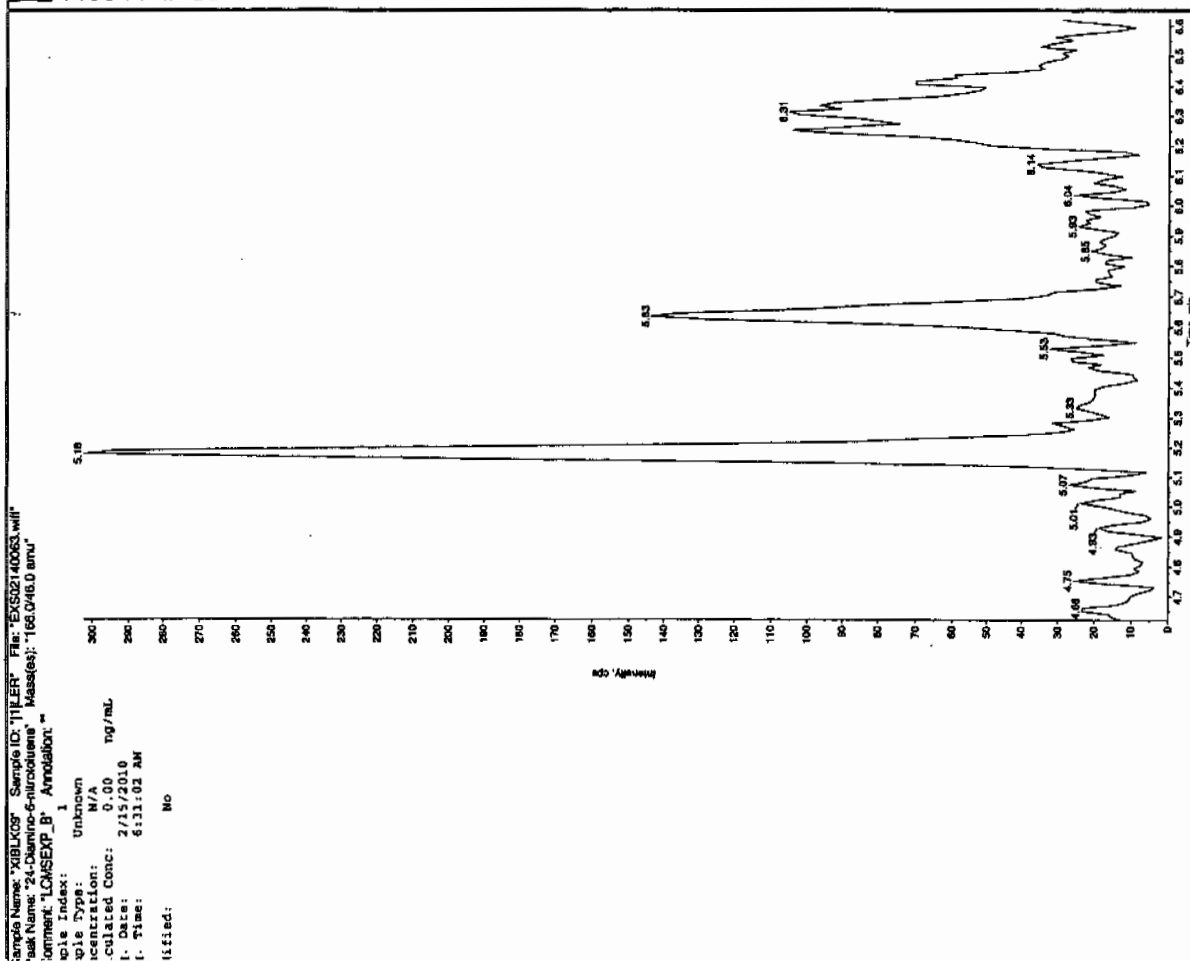
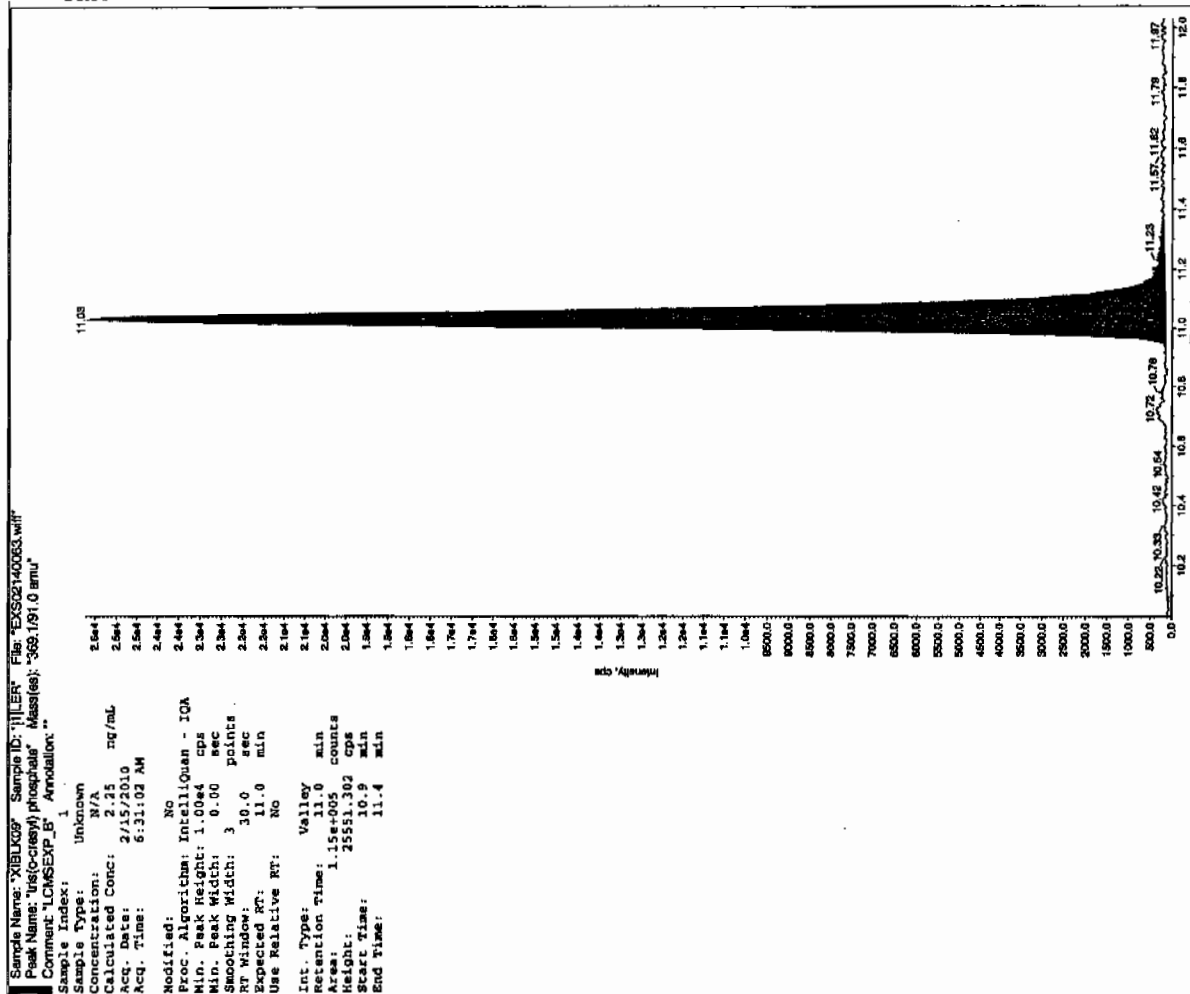
Acq. Time: 6:31:02 AM

Modified: No



Hum 02-17-10





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): 10-1392

Lab Code: GEL

Lab Sample ID: XIBLK10

Analysis Date: 15-FEB-10 08:21

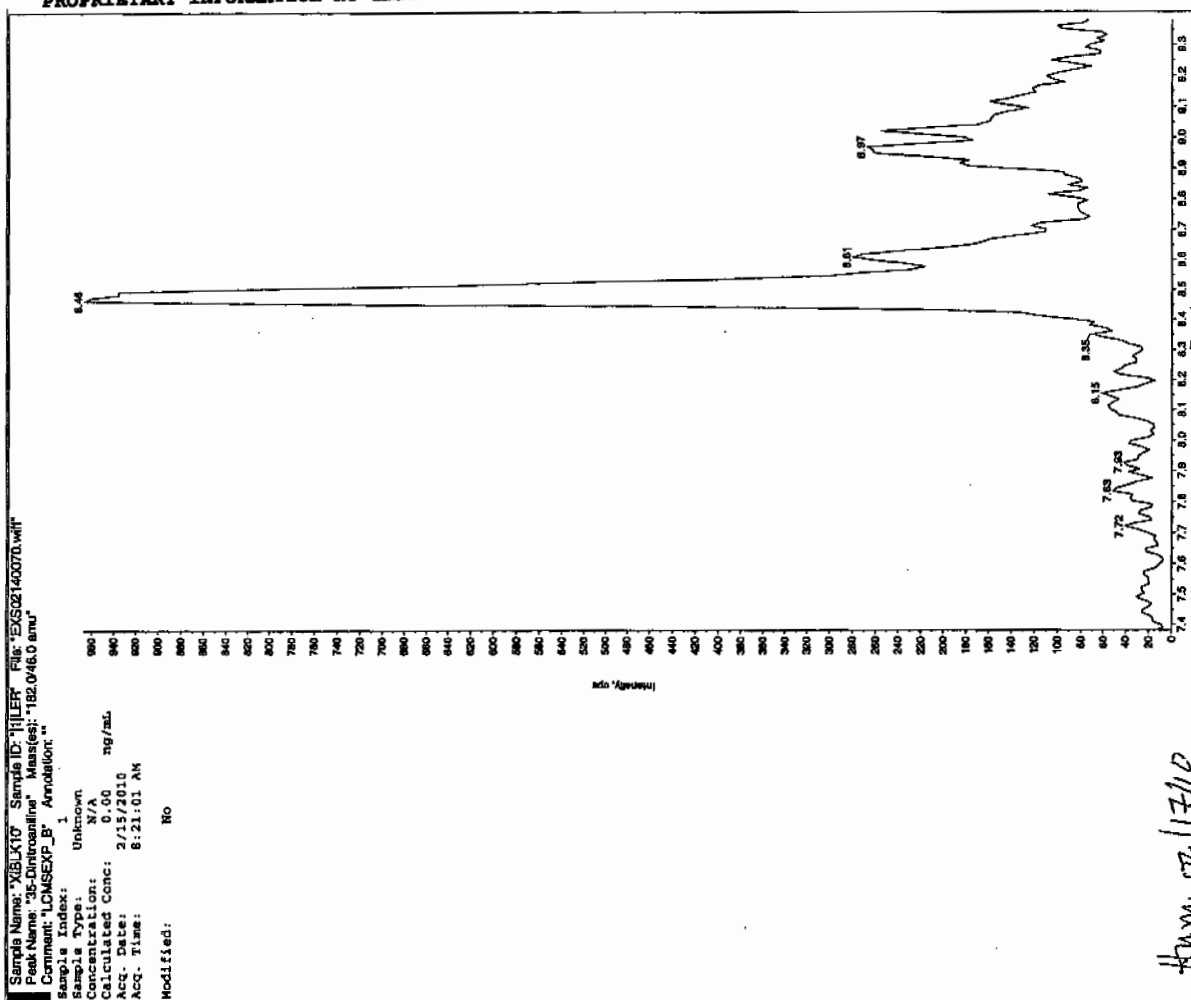
GEL Data File: EXS02140070.wiff

Instrument ID: LCMSMS

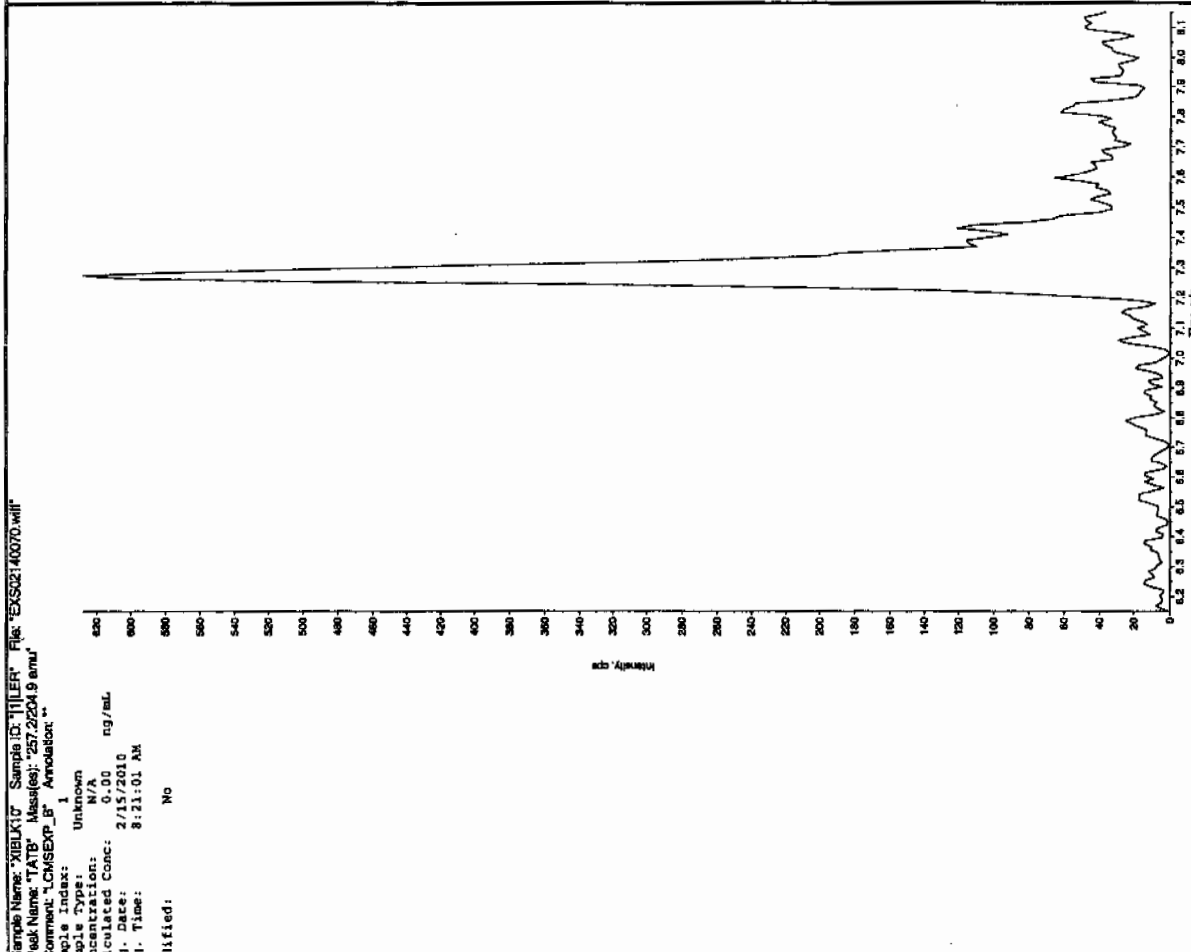
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	4.13
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

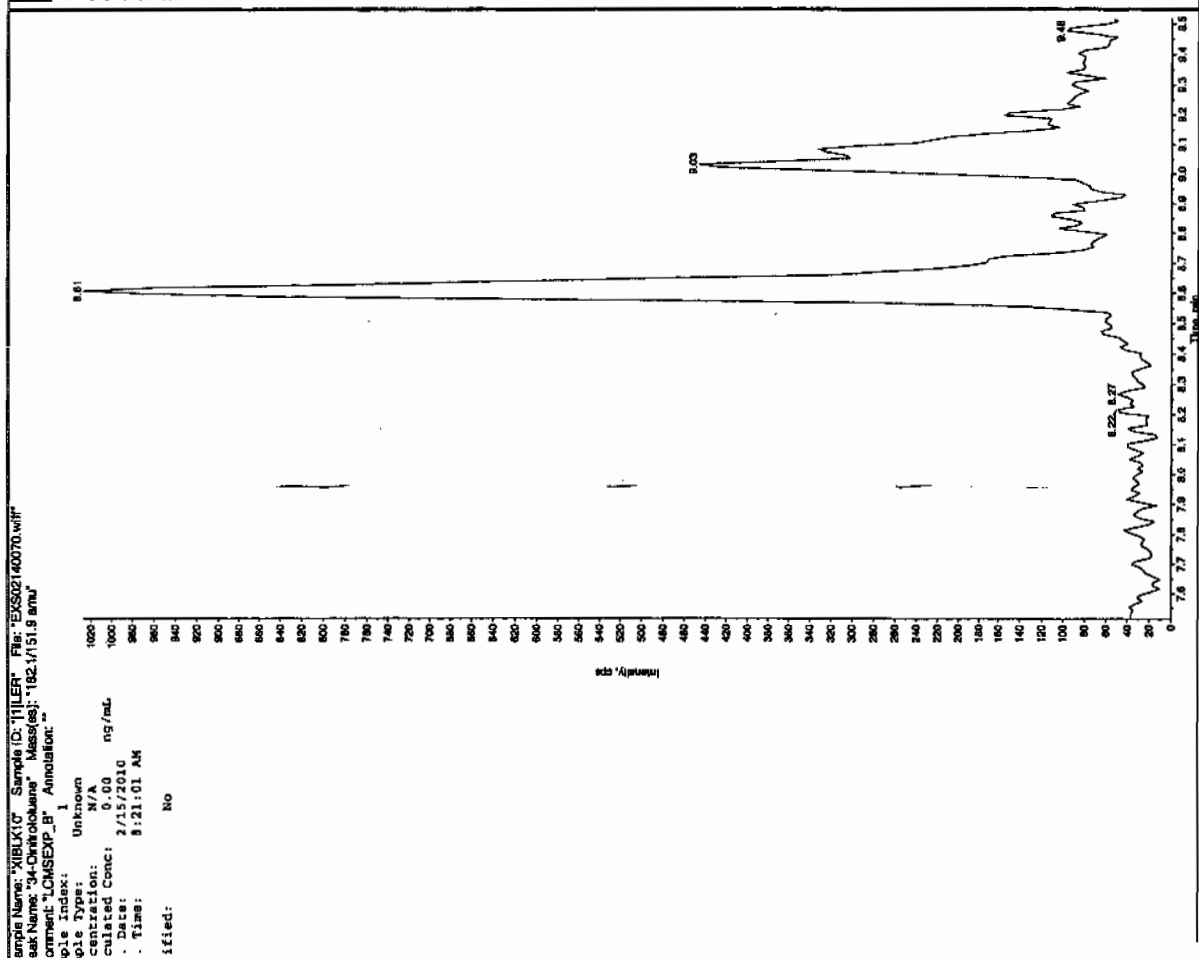
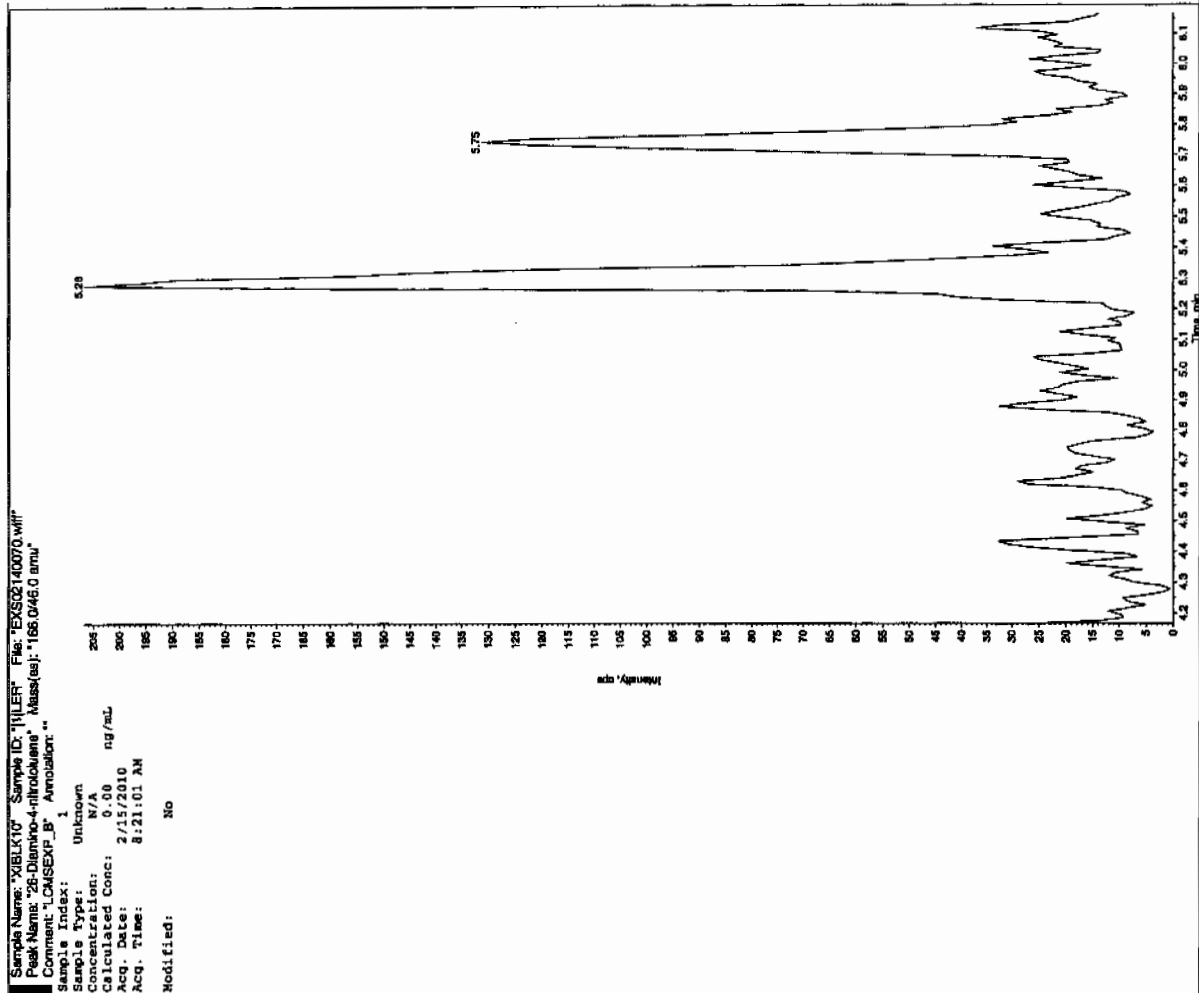
See 2/17/10



See 2/17/10



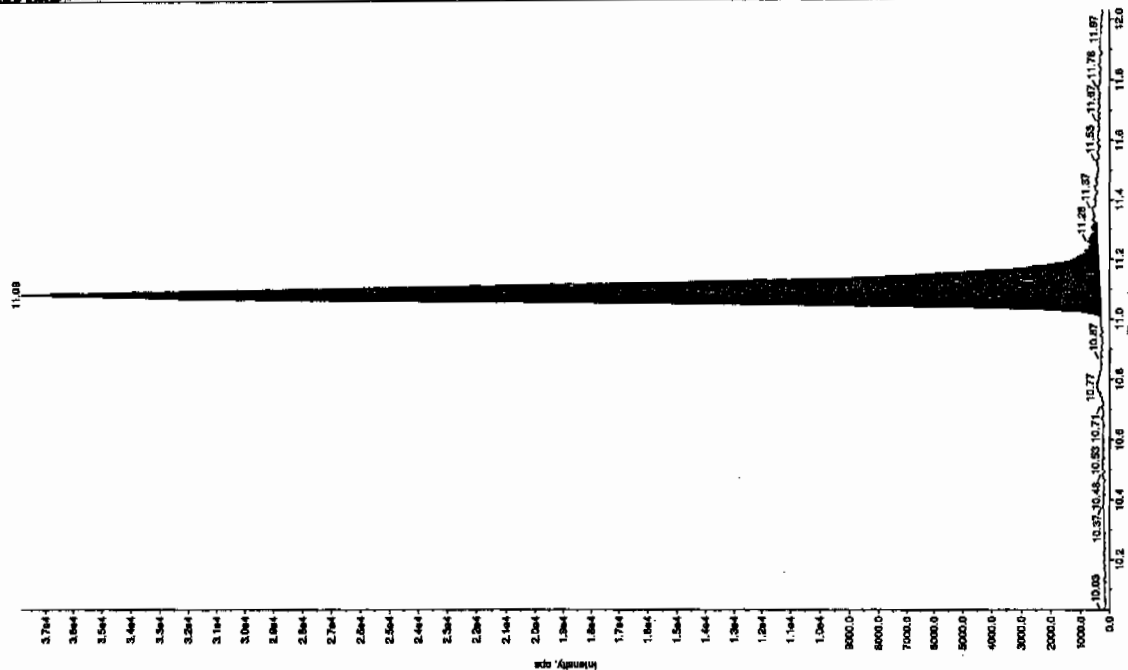
L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



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

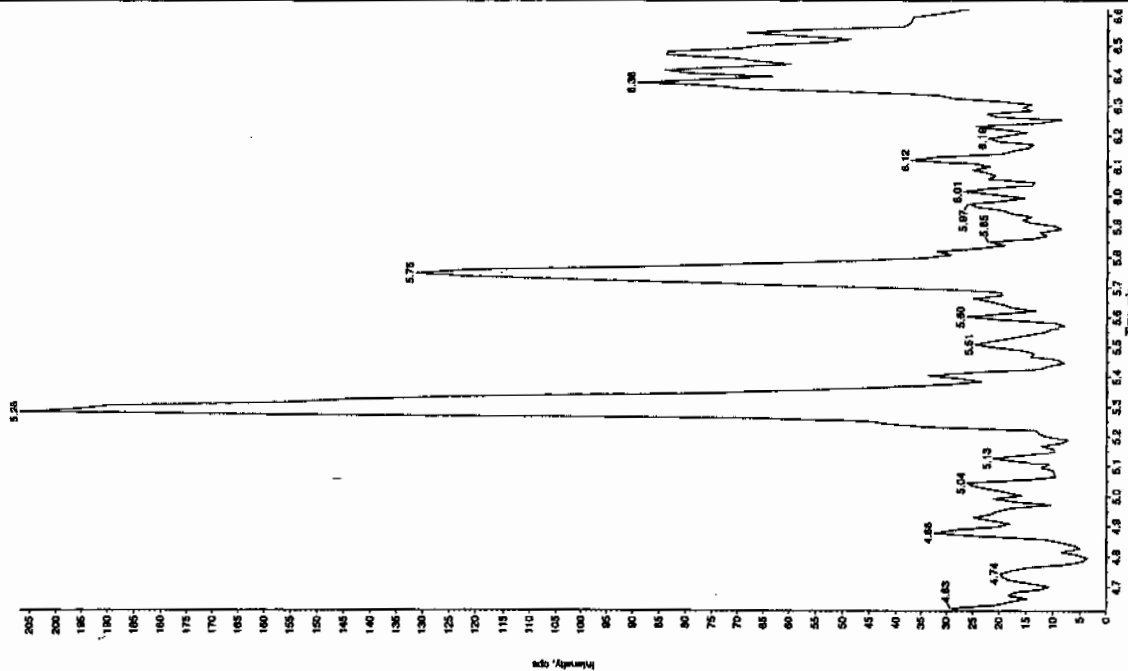
Sample Name: XBLK107 Sample ID: TILER File: EXS02140070.wif
 Peak Name: 10-(p-cresyl) phosphatase Mass(es): 359.151.0 amu
 Comment: LCMSEXP_B Annotation

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 2/15/2010 ng/mL
 Acq. Date: 8:21:01 AM
 Acq. Time: 8:21:01 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 1.00e4 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 11.0 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 11.1 min
 Area: 1.59e+005 counts
 Height: 37511.536 cps
 Start Time: 11.0 min
 End Time: 11.3 min



Sample Name: XBLK107 Sample ID: TILER File: EXS02140070.wif
 Peak Name: 24-Diamino-6-methylphenol Mass(es): 166.046.0 amu
 Comment: LCMSEXP_B Annotation

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 2/15/2010 ng/mL
 Acq. Date: 8:21:01 AM
 Acq. Time: 8:21:01 AM
 Modified: No



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): 10-1392

Lab Code: GEL

Lab Sample ID: XIBLK11

Analysis Date: 15-FEB-10 11:46

GEL Data File: EXS02140083.wiff

Instrument ID: LCMSMS

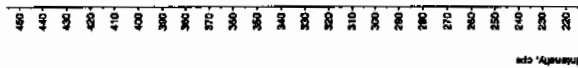
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	3.17
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

See 2/17/10

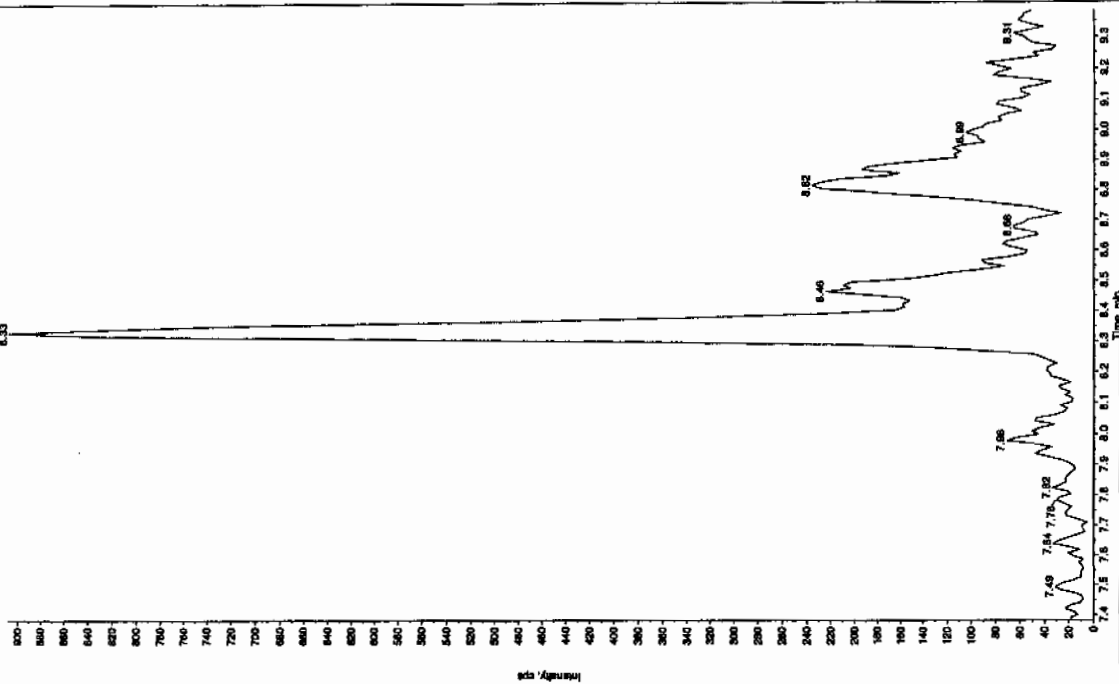
File Name: "XBLK11" Sample ID: "JILER" File: "EXS02140083.will"
 Peak Name: "TATB" Mass(es): 257.2204.9 amu
 Comment: "LCMSEXP_B" Annotation: "1"

Sample Index: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Date: 2/15/2010
 Time: 11:46:26 AM
 Modified: No

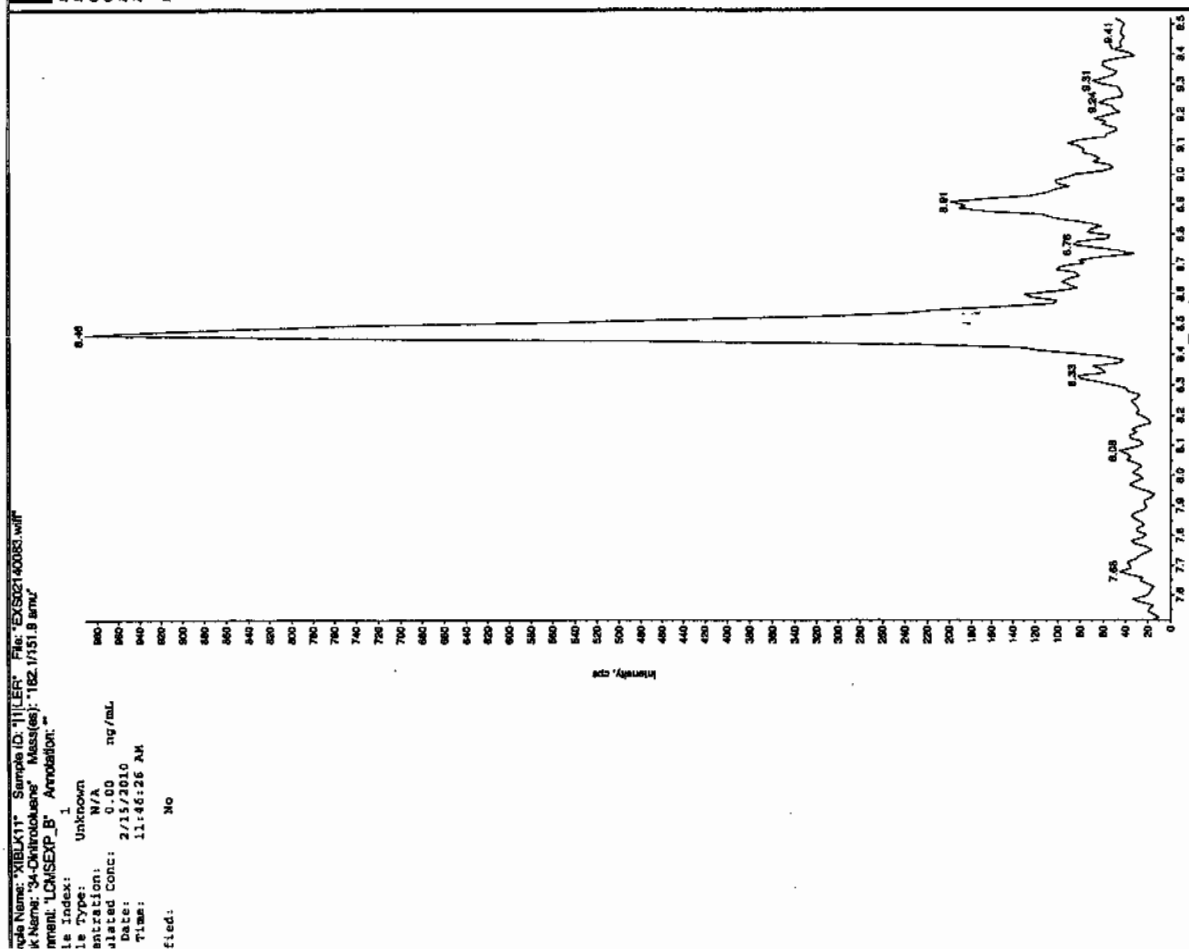
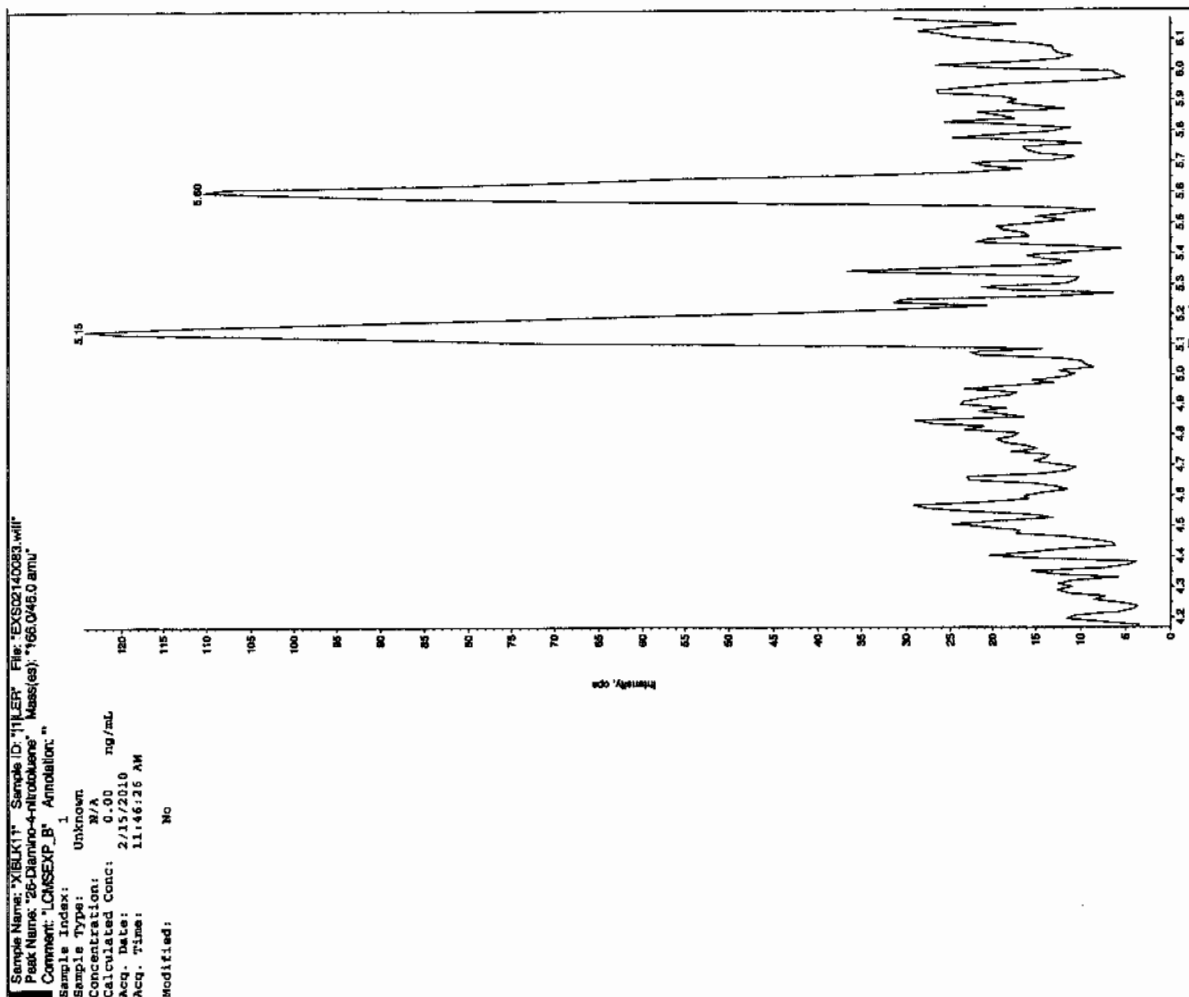


File Name: "XBLK11" Sample ID: "JILER" File: "EXS02140083.will"
 Peak Name: "35-Dinitrophenol" Mass(es): "182.0480 amu"
 Comment: "LCMSEXP_B" Annotation: "1"

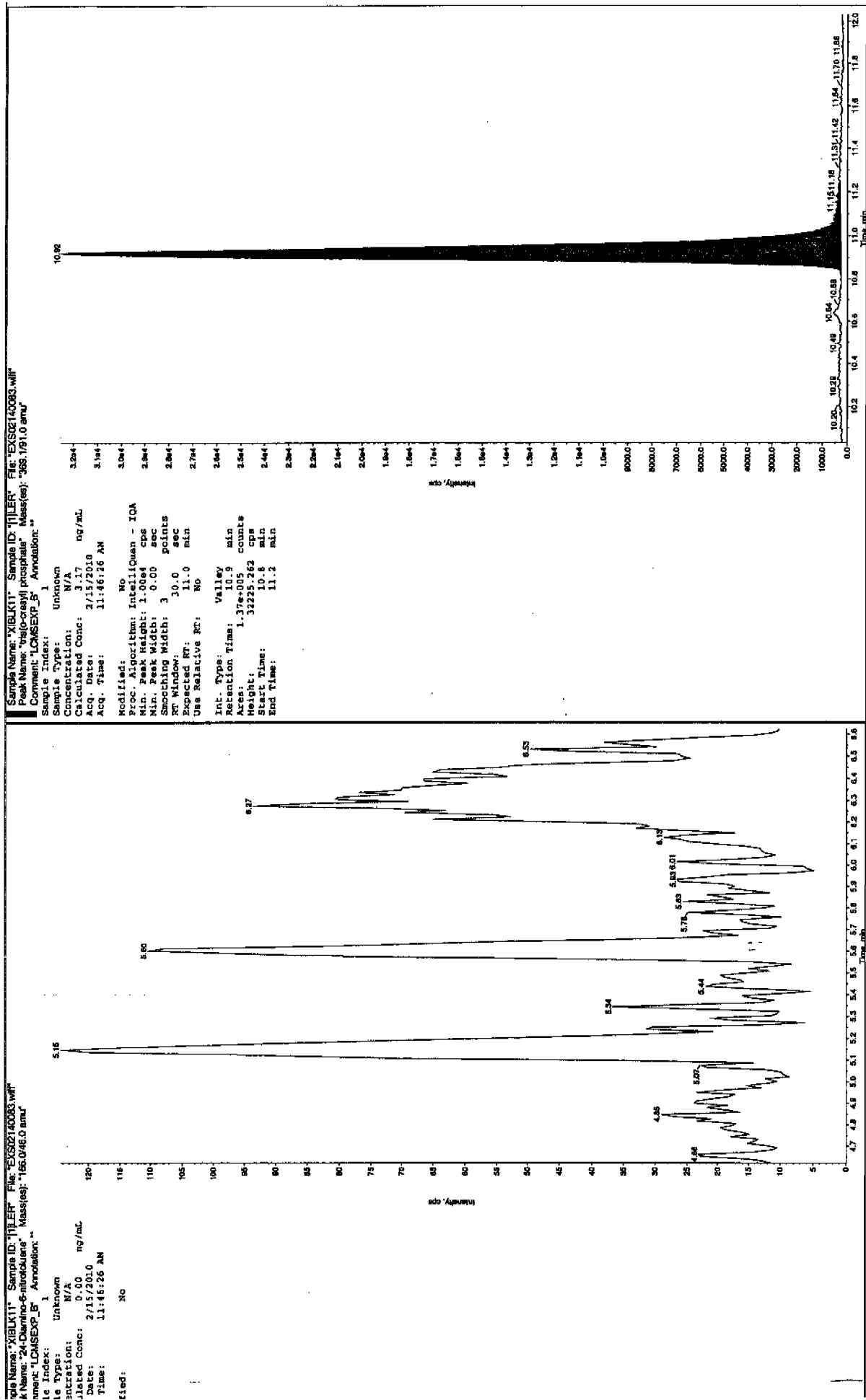
Sample Index: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Date: 2/15/2010
 Time: 11:46:26 AM
 Modified: No



See 2/17/10



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



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

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1392

Lab Code: GEL

Lab Sample ID: XIBLK12

Analysis Date: 15-FEB-10 13:20

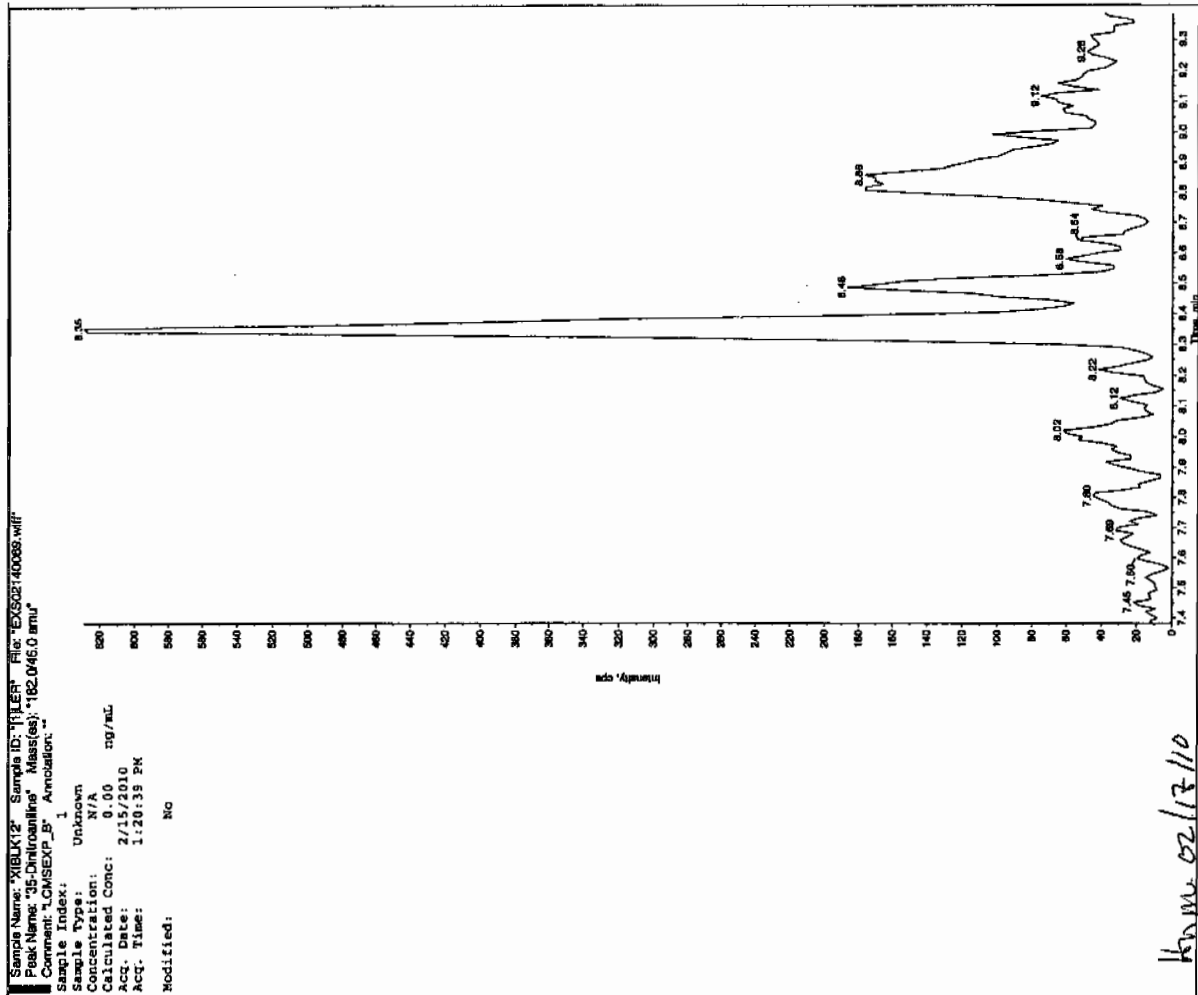
GEL Data File: EXS02140089.wiff

Instrument ID: LCMSMS

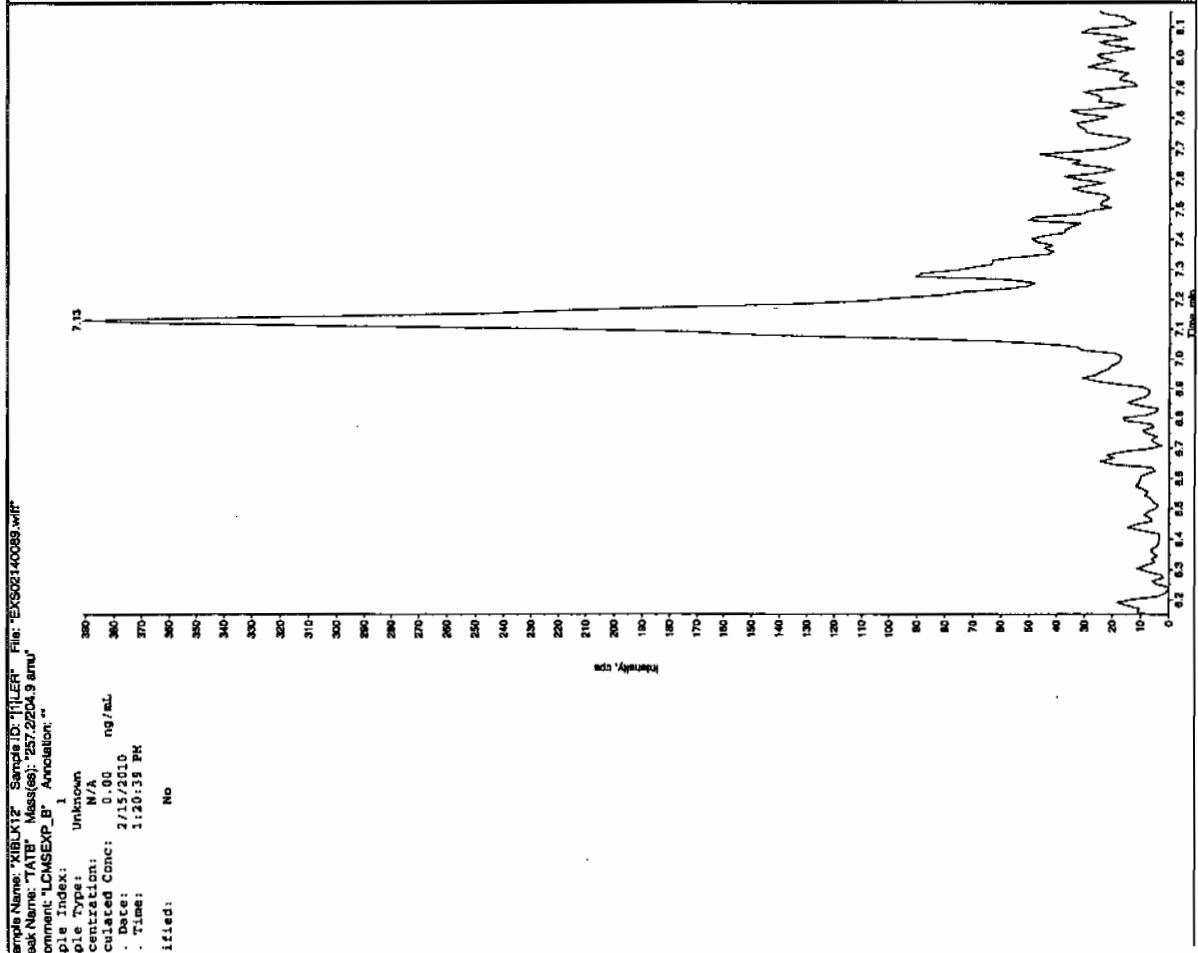
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	1.15
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

See 2/13/10



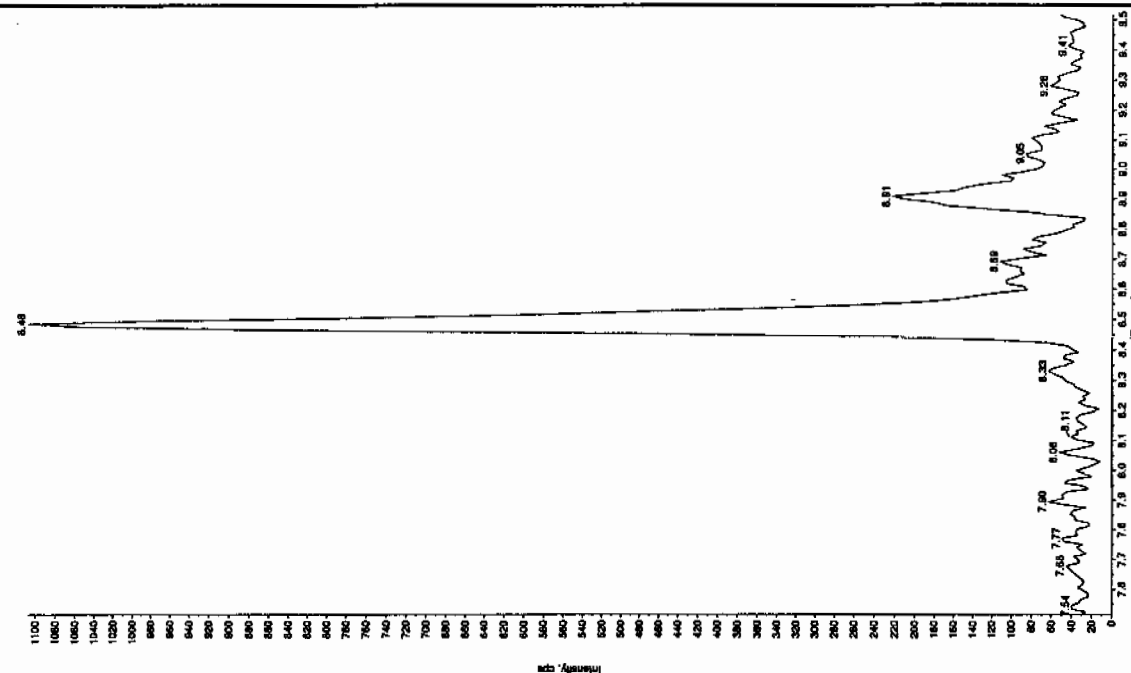
Run 02/13/10



3L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

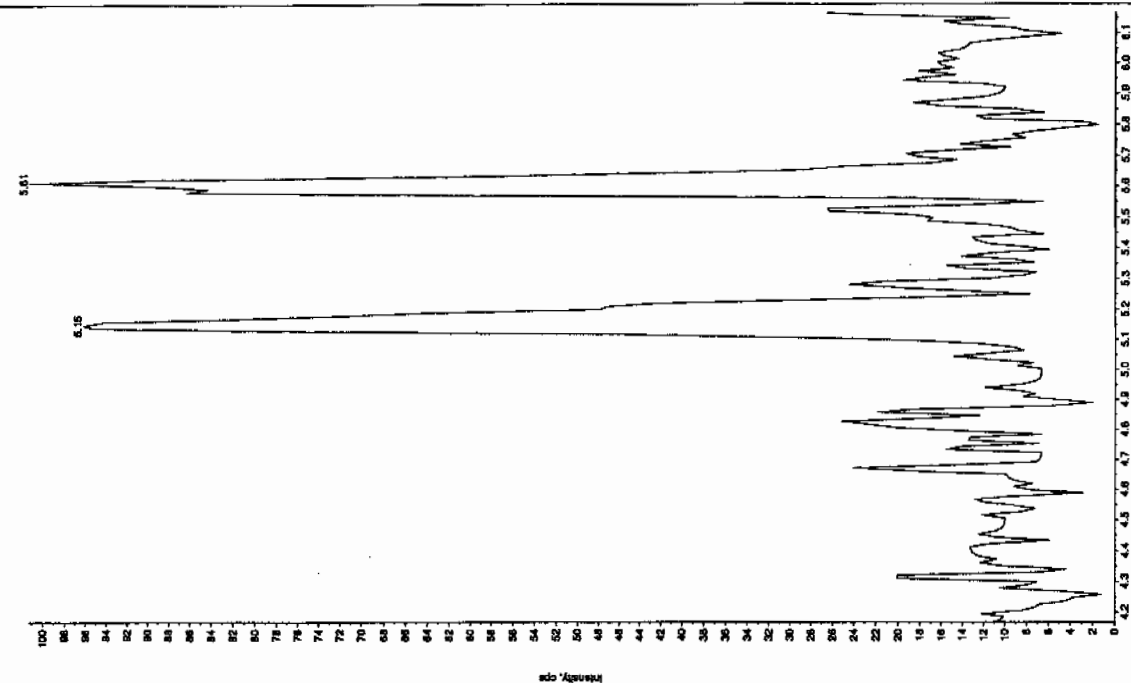
Sample Name: XBLK12 Sample ID: 11111111 File: EXS02140088.will
 Peak Name: 34-Chlorobenzene Mass(es): 182.1151.9 amu
 Comment: LCMSXP_B Annotation: 1

Sample Matrix: Unknown
 Sample Type: N/A
 Concentration: 0.00 ng/mL
 Date: 2/15/2010
 Time: 1:20:39 PM
 Modified: No

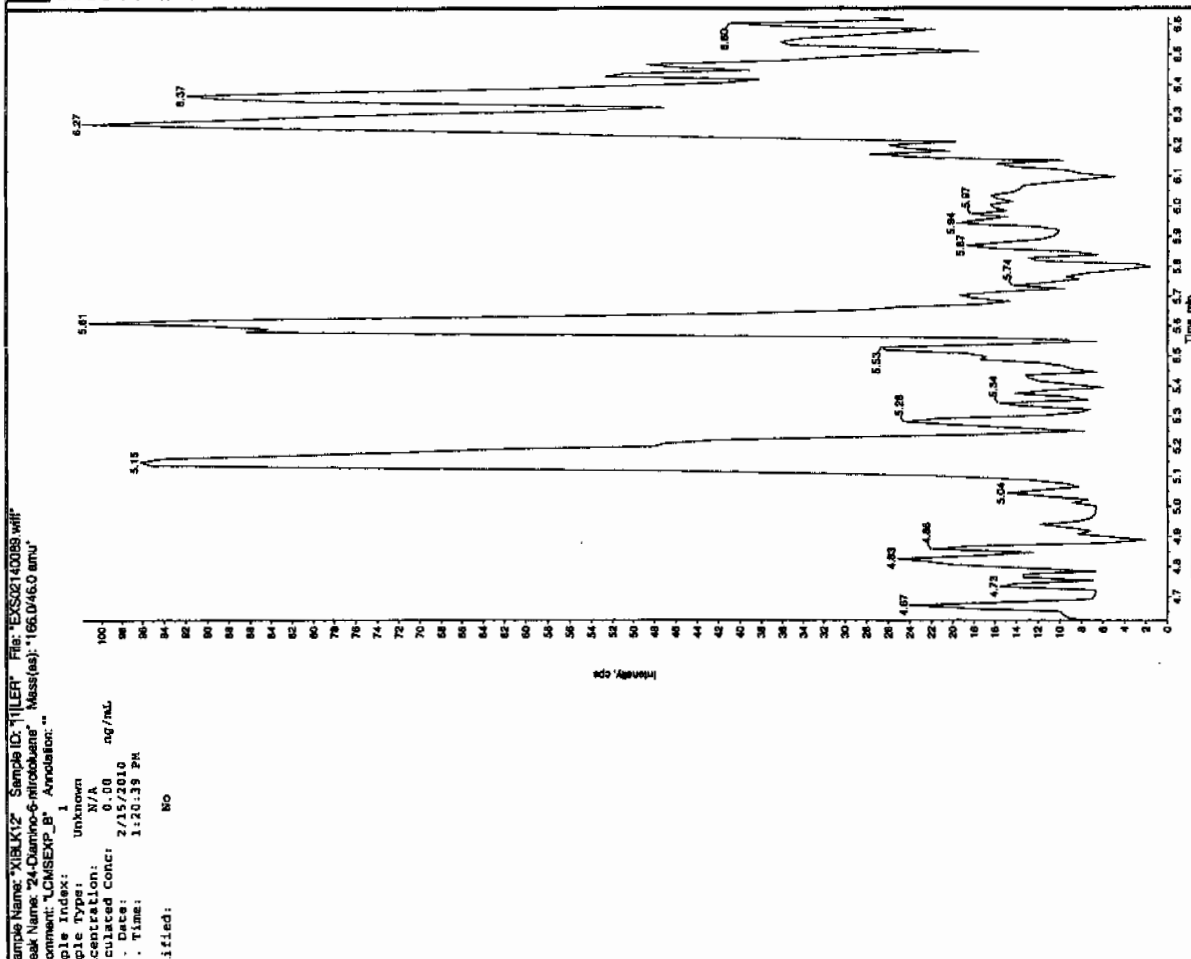
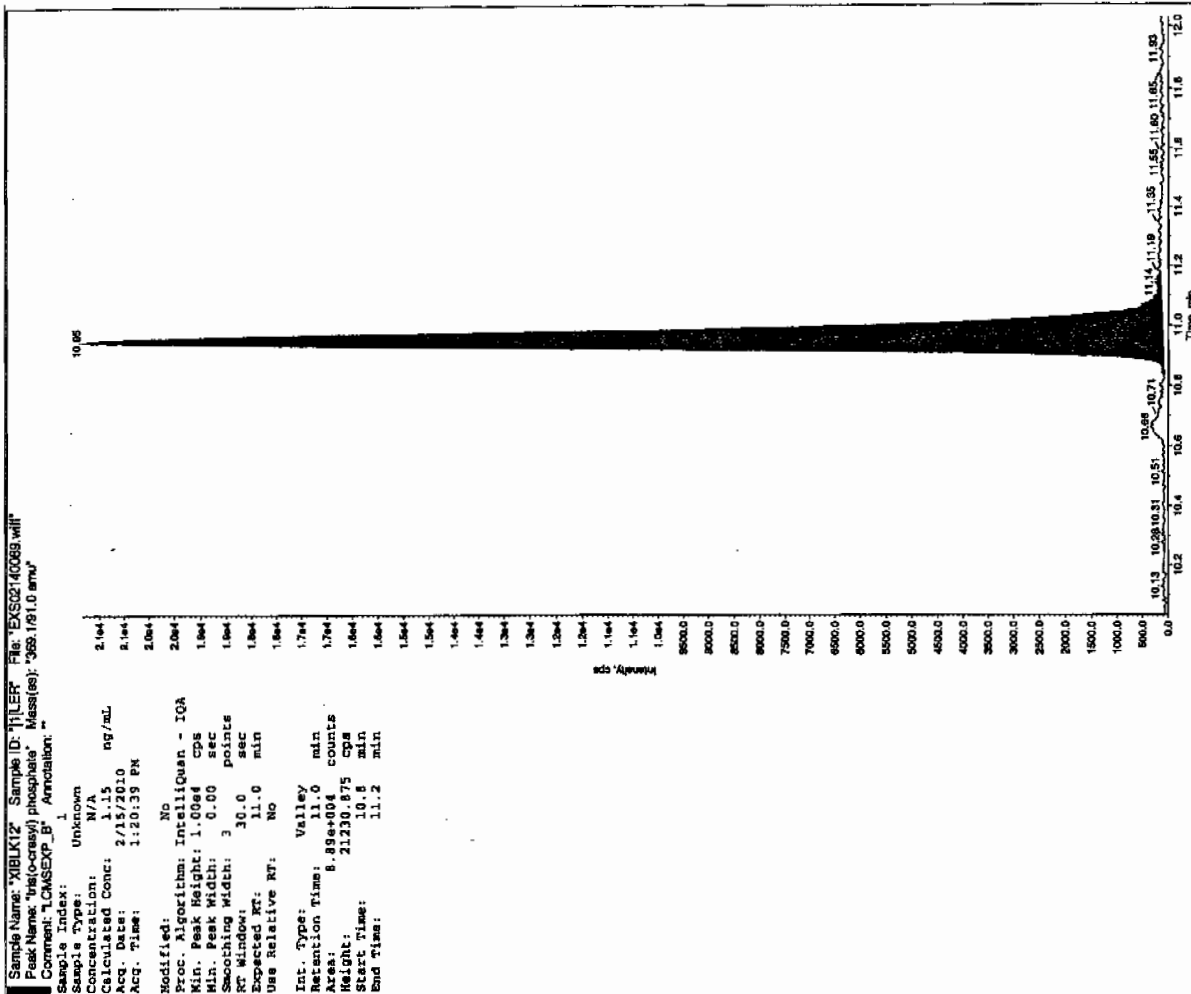


Sample Name: XBLK12 Sample ID: 11111111 File: EXS02140088.will
 Peak Name: 28-Diamino-4-nitrobenzene Mass(es): 186.0460 amu
 Comment: LCMSXP_B Annotation: 1

Sample Matrix: Unknown
 Sample Type: N/A
 Concentration: 0.00 ng/mL
 Date: 2/15/2010
 Time: 1:20:39 PM
 Modified: No



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): 10-1392

Lab Code: GEL

Lab Sample ID: XIBLK13

Analysis Date: 15-FEB-10 15:10

GEL Data File: EXS02140096.wiff

Instrument ID: LCMSMS

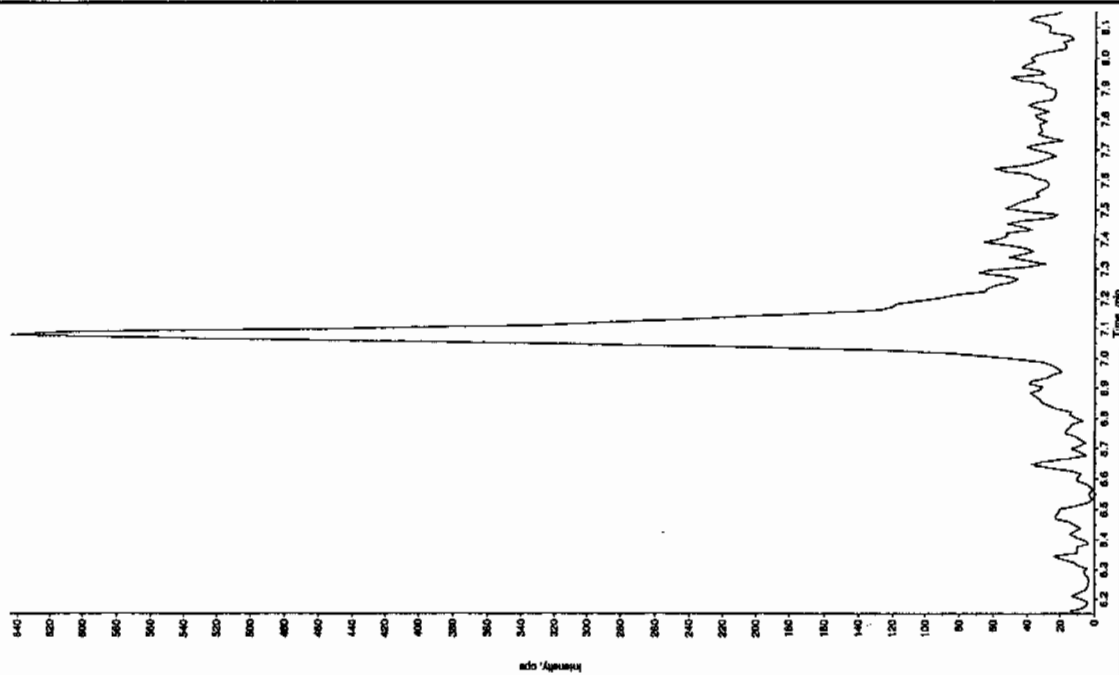
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
2,6-Diamino-4-nitrotoluene	0	0
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	3.82
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0

for 2/12/10

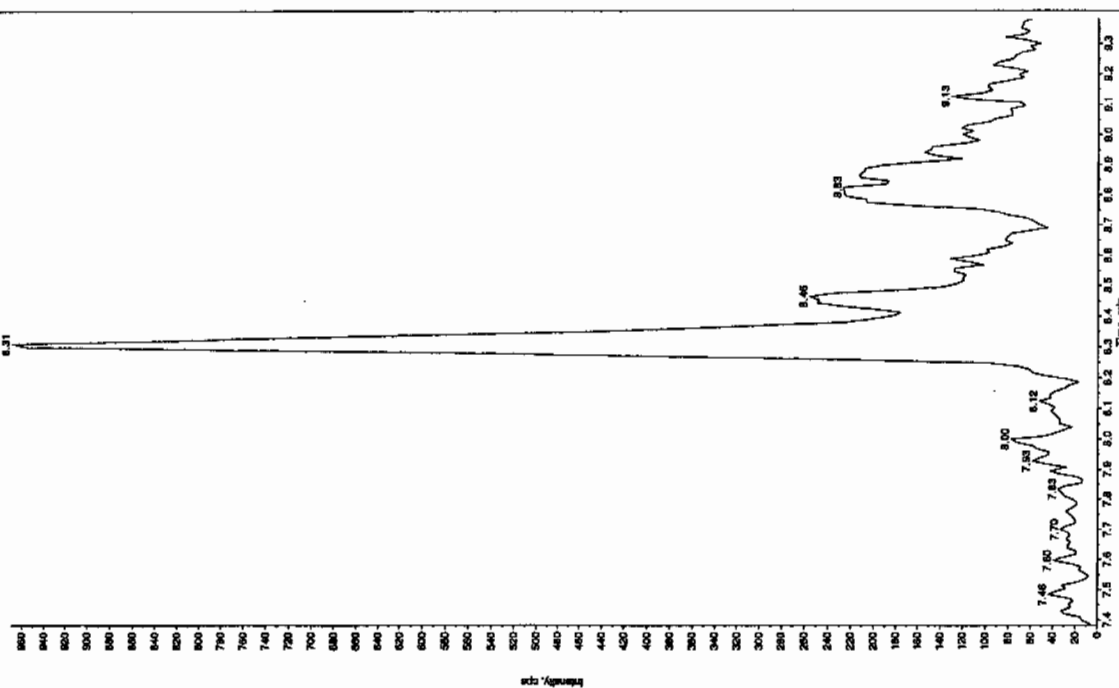
Sample Name: XBLK13 Sample ID: 11111111 File: EXS02140096.wiff
 Peak Name: 35-Dinitroanthra Mass(es): 182.046.0 amu
 Comment: LCMSEXP_B Annotation:

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 2/15/2010
 Acq. Date: 3:10:32 PM
 Acq. Time: 3:10:32 PM
 Modified: No

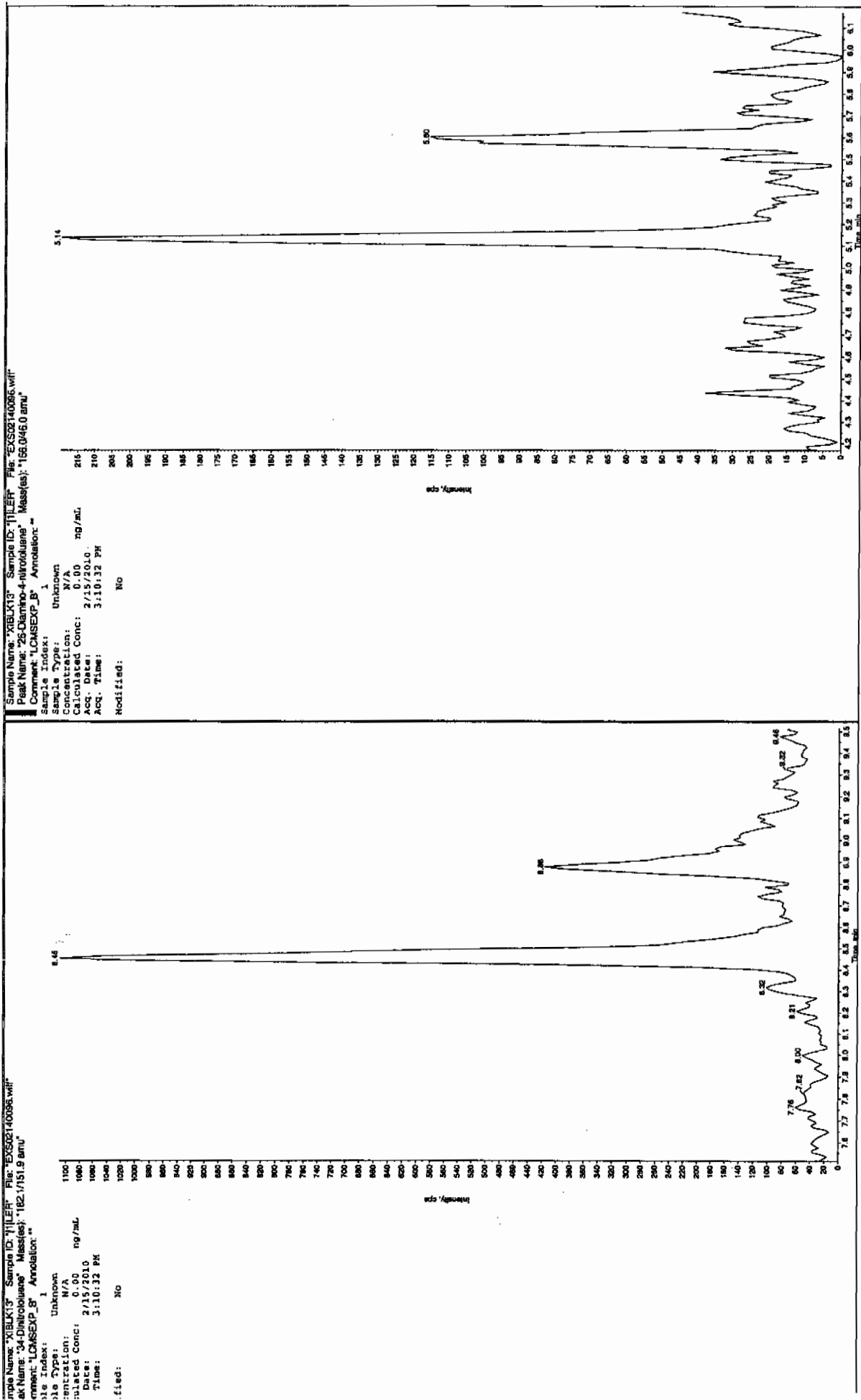


Sample Name: XBLK13 Sample ID: 11111111 File: EXS02140096.wiff
 Peak Name: 35-Dinitroanthra Mass(es): 182.046.0 amu
 Comment: LCMSEXP_B Annotation:

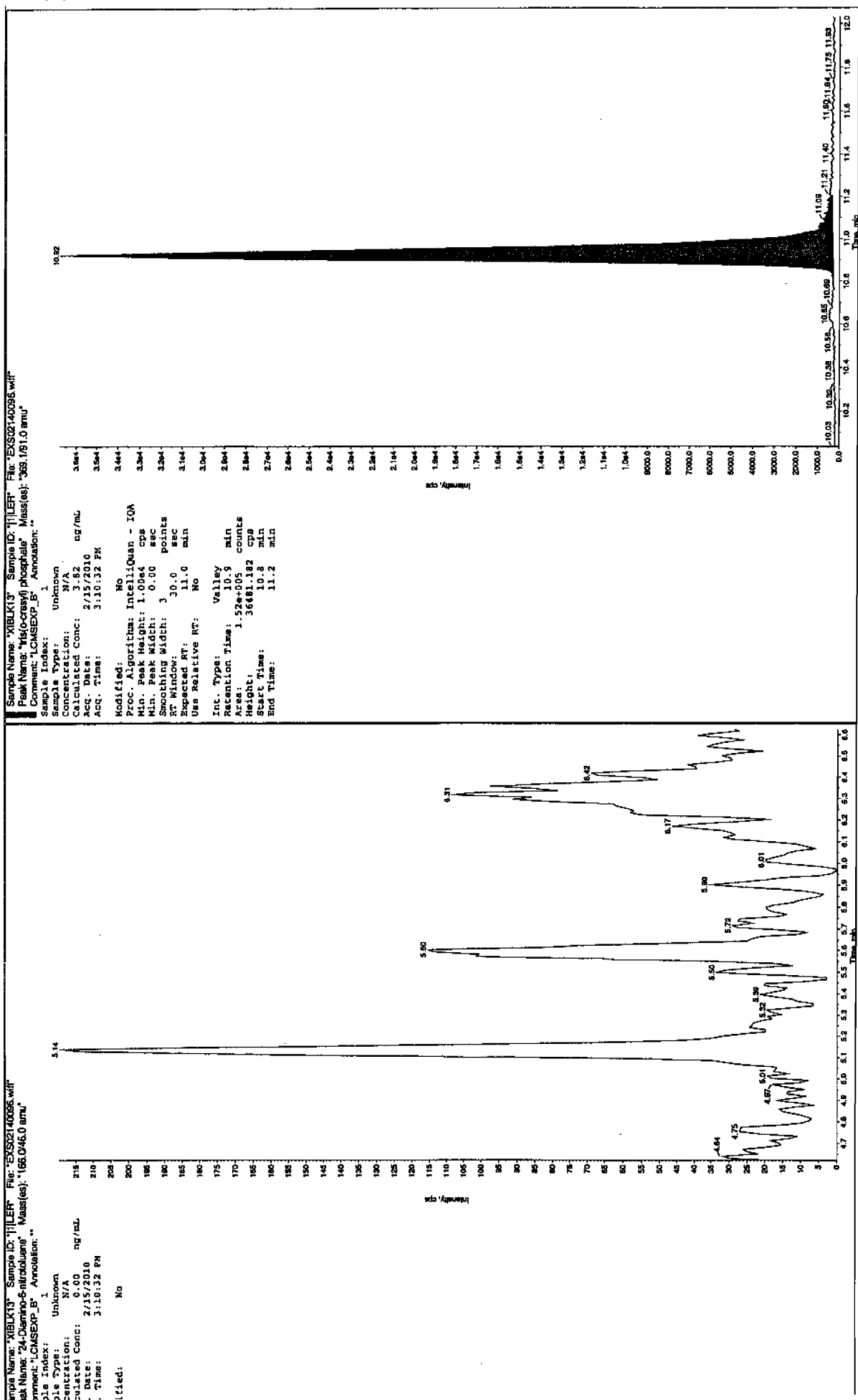
Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 2/15/2010
 Acq. Date: 3:10:32 PM
 Acq. Time: 3:10:32 PM
 Modified: No



for 2/12/10



L 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): 10-1392

Lab Code: GEL

Lab Sample ID: XIBLK14

Analysis Date: 15-FEB-10 18:34

GEL Data File: EXS02140109.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	3.48
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

See 2/17/10

Sample Name: "XIBLK14" Sample ID: "1111ER" File: "EX502140109.wif"

Peak Name: "TATB" Mass(es): "257.2204.9 amu"

Comment: "LCMSEXP_B" Annotation: "

Sample Index: 1

Sample Type: Unknown

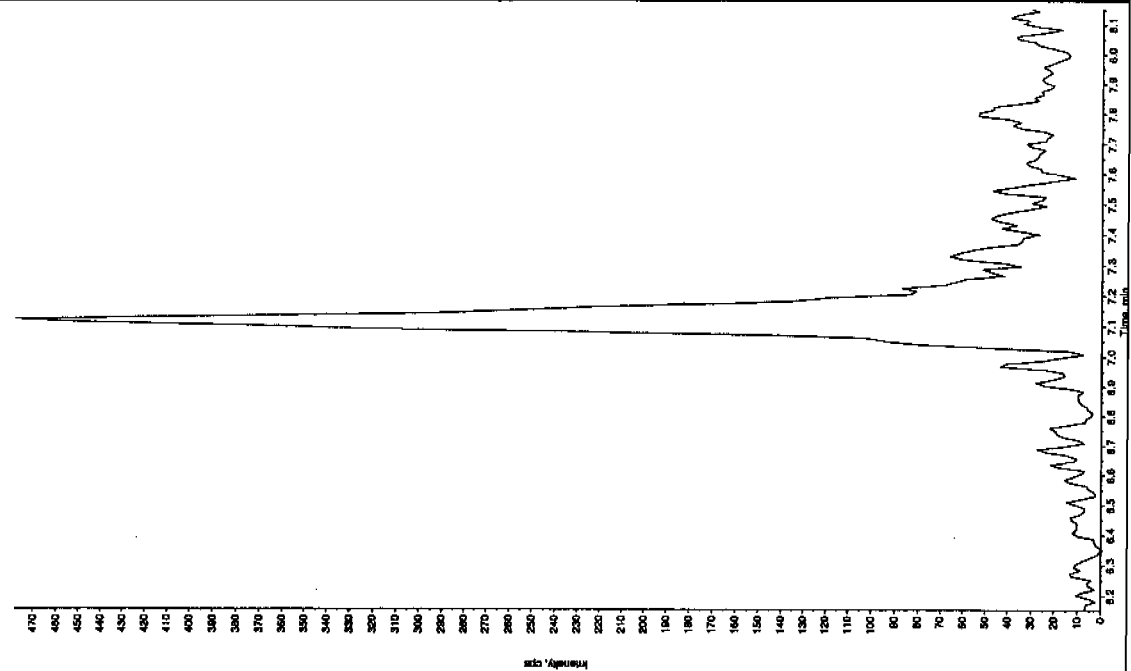
Concentration: N/A ng/mL

Calculated Conc: 0.00

Acq. Date: 2/13/2010

Acq. Time: 6:34:38 PM

Modified: No



Sample Name: "XIBLK14" Sample ID: "1111ER" File: "EX502140109.wif"

Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"

Comment: "LCMSEXP_B" Annotation: "

Sample Index: 1

Sample Type: Unknown

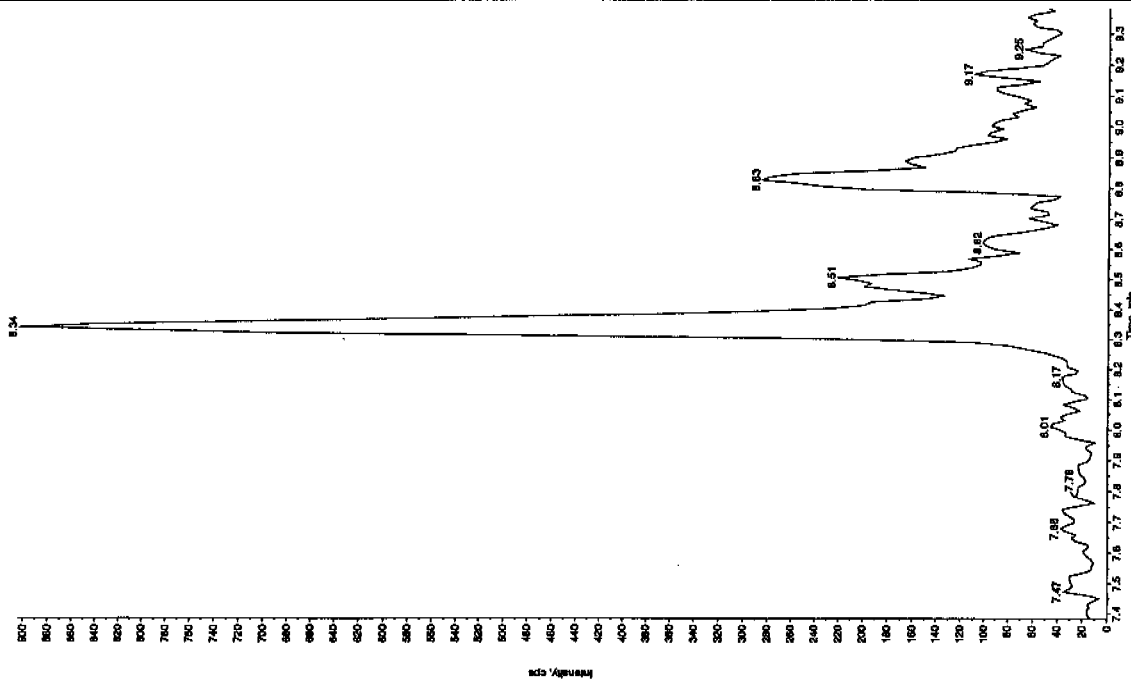
Concentration: N/A ng/mL

Calculated Conc: 0.00

Acq. Date: 2/13/2010

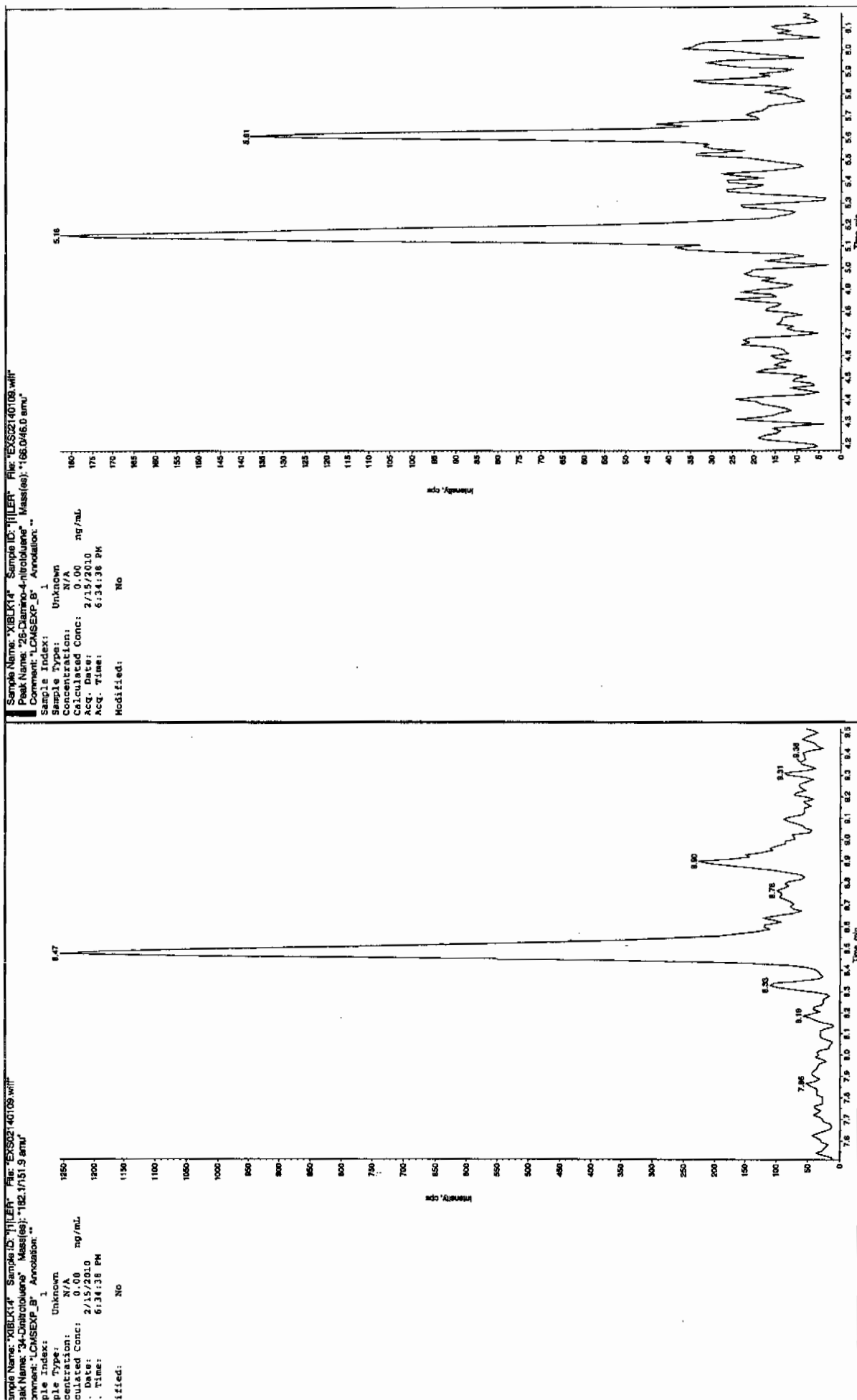
Acq. Time: 6:34:38 PM

Modified: No

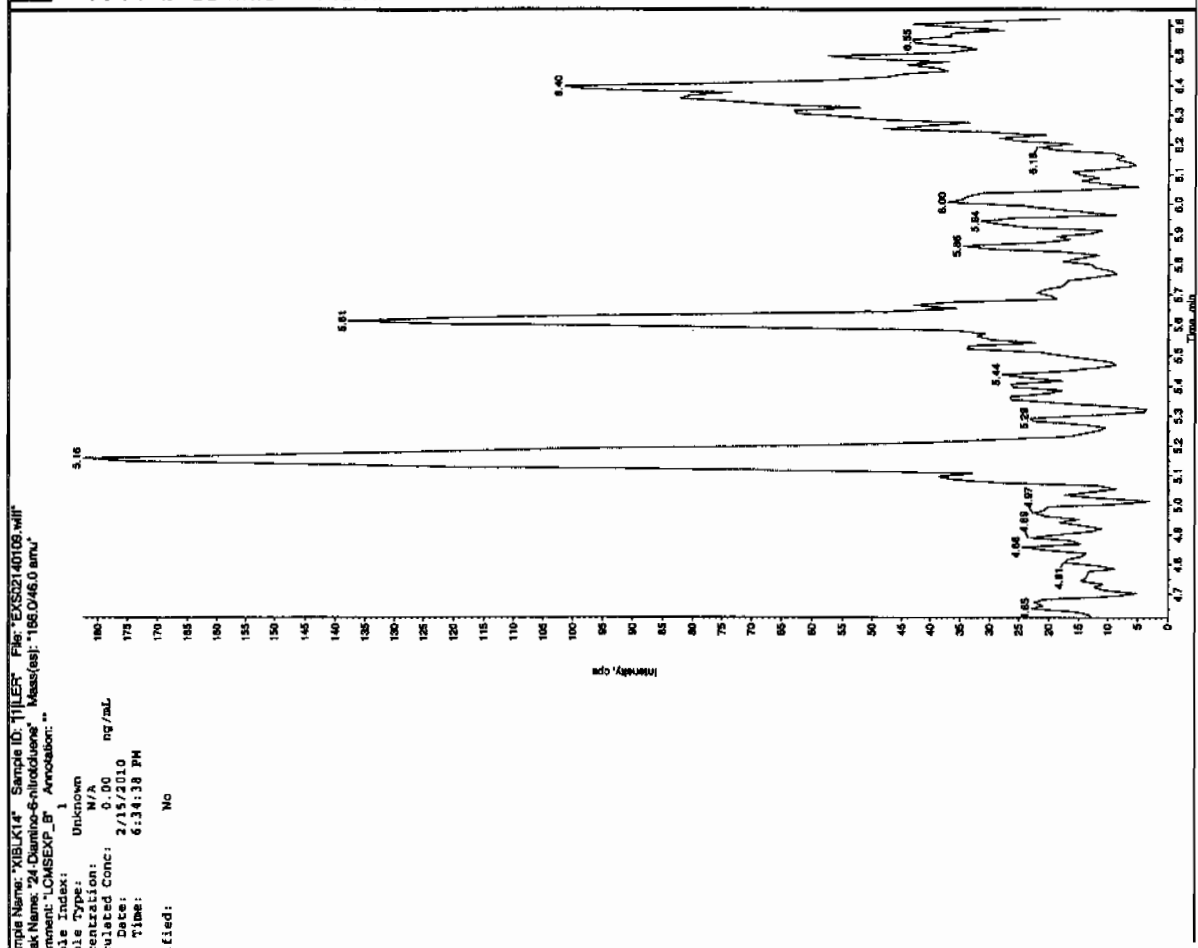
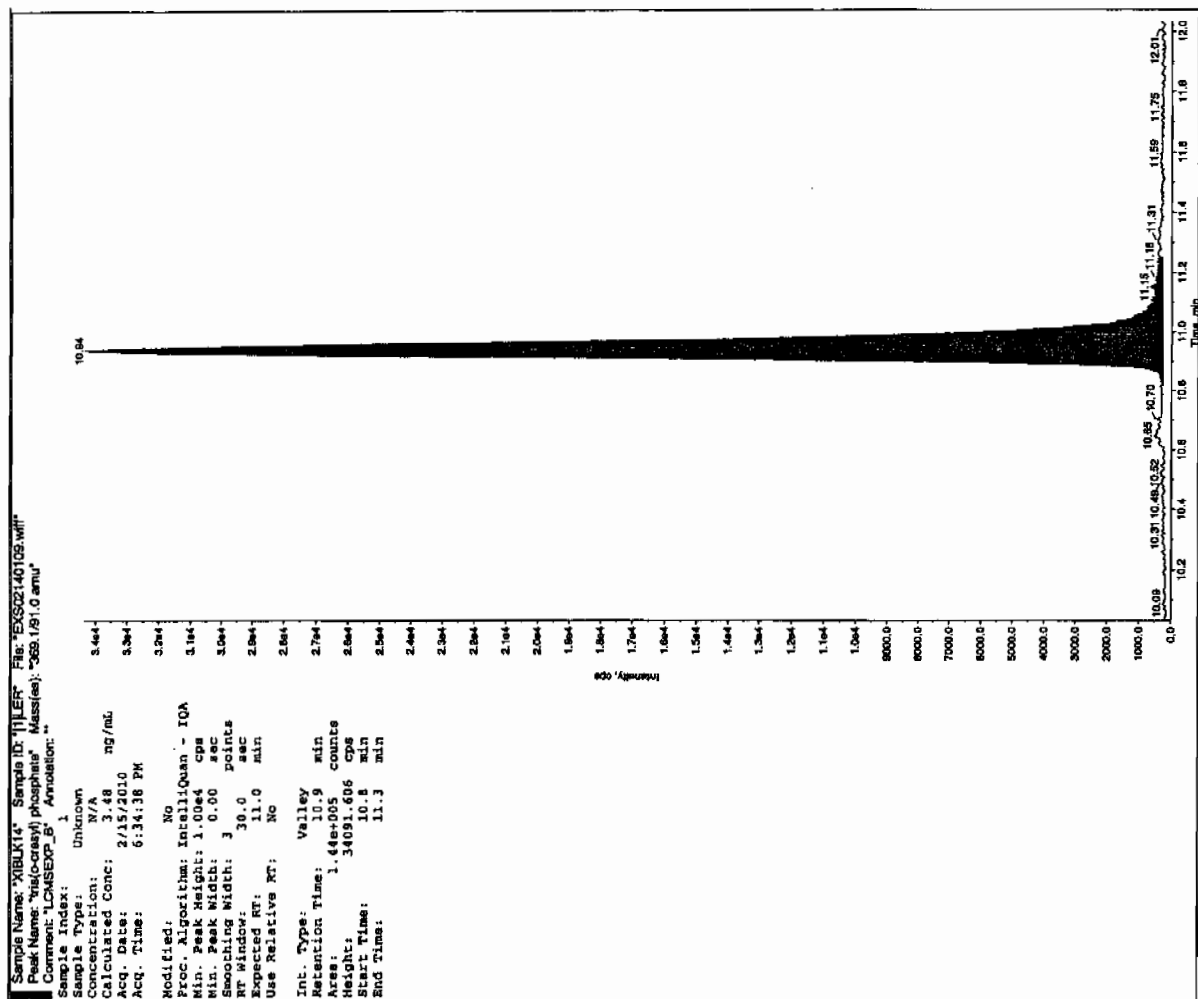


IL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

See 02/13/10



3L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



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

4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1392

Lab Code: GEL

Lab Sample ID: XIBLK15

Analysis Date: 15-FEB-10 19:53

GEL Data File: EXS02140114.wiff

Instrument ID: LCMSMS

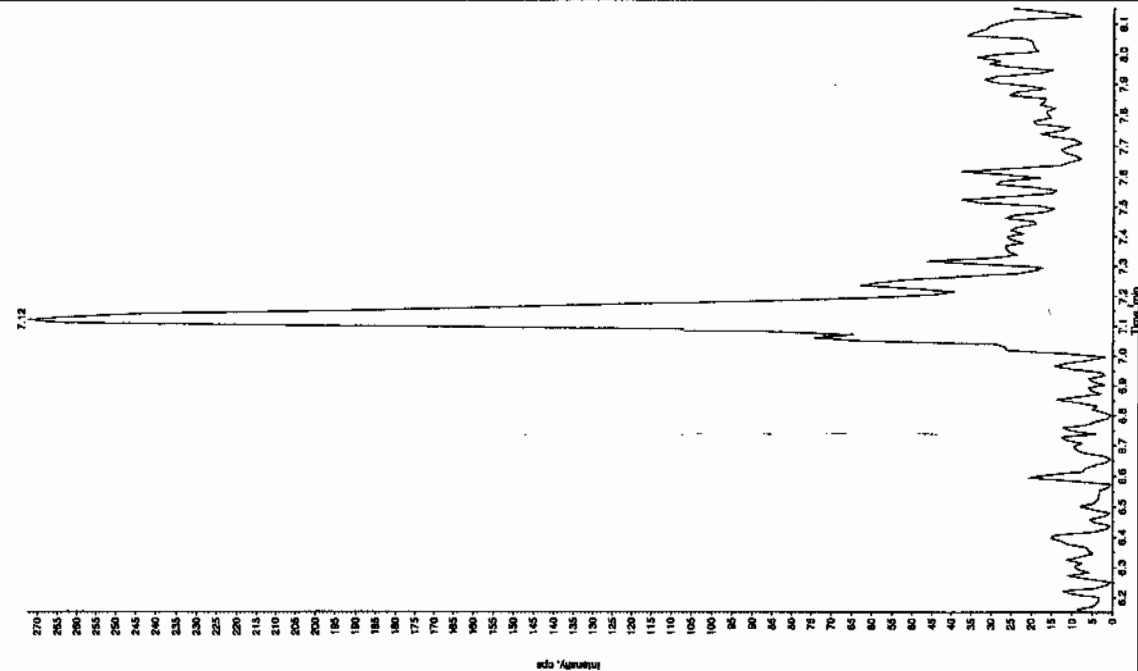
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	1.72
TATB	0	0
3,5-Dinitroaniline	0	0

See 2/17/10

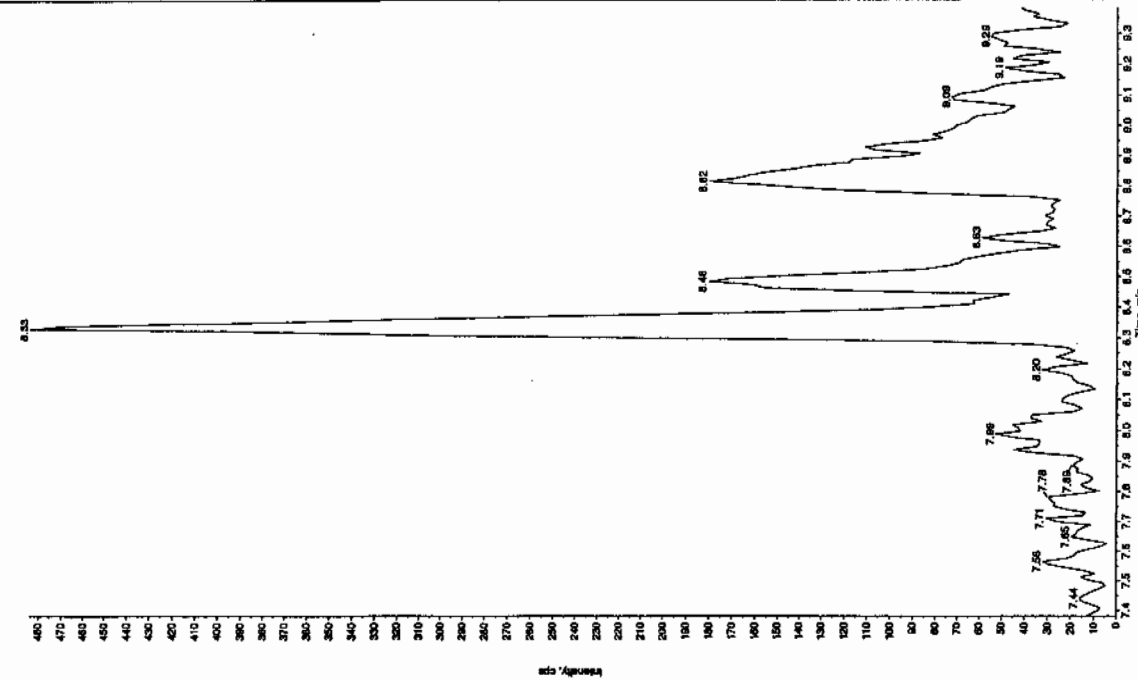
Sample Name: "XBLK15" Sample ID: "T1LER" File: "EXS2140114.wif"
 Peak Name: "TATB" Mass(es): "257.2204.9 amu"
 Comment: "LCMSEXP_B" Annotation: "

File Index: 1
 File Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Date: 2/15/2010
 Time: 7:53:07 PM
 Modified: No

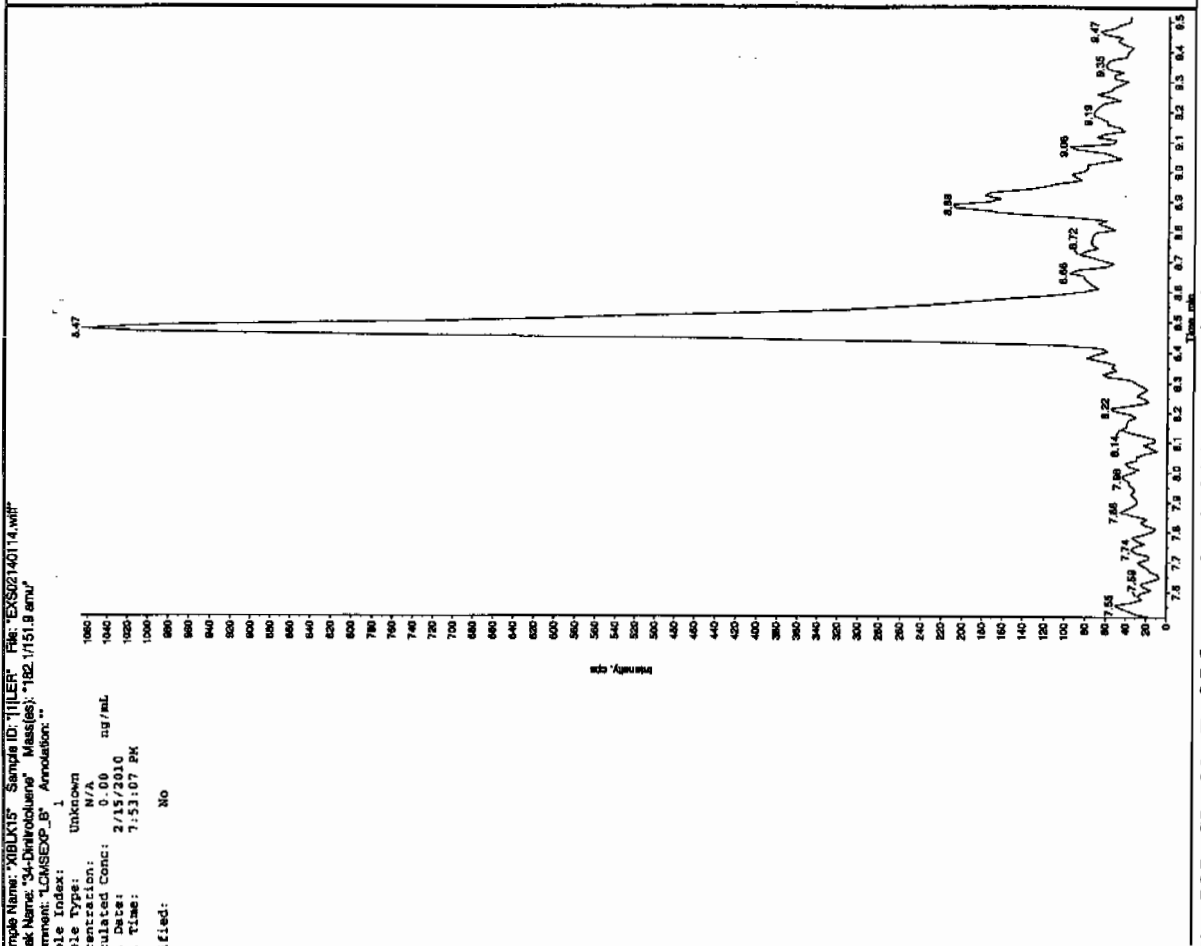
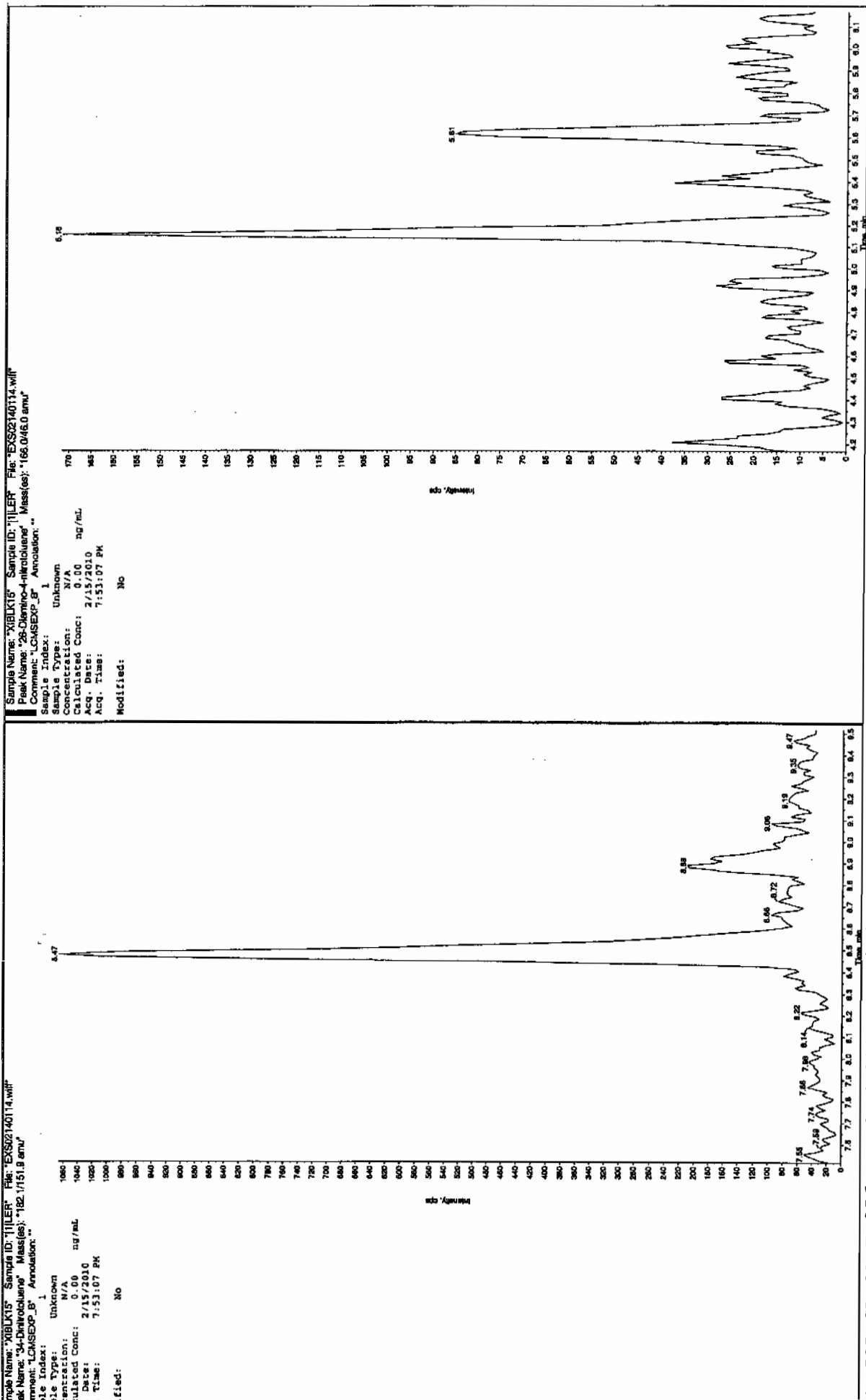


Sample Name: "XBLK15" Sample ID: "T1LER" File: "EXS2140114.wif"
 Peak Name: "S5-Detoxified" Mass(es): "152.046.0 amu"
 Comment: "LCMSEXP_B" Annotation: "

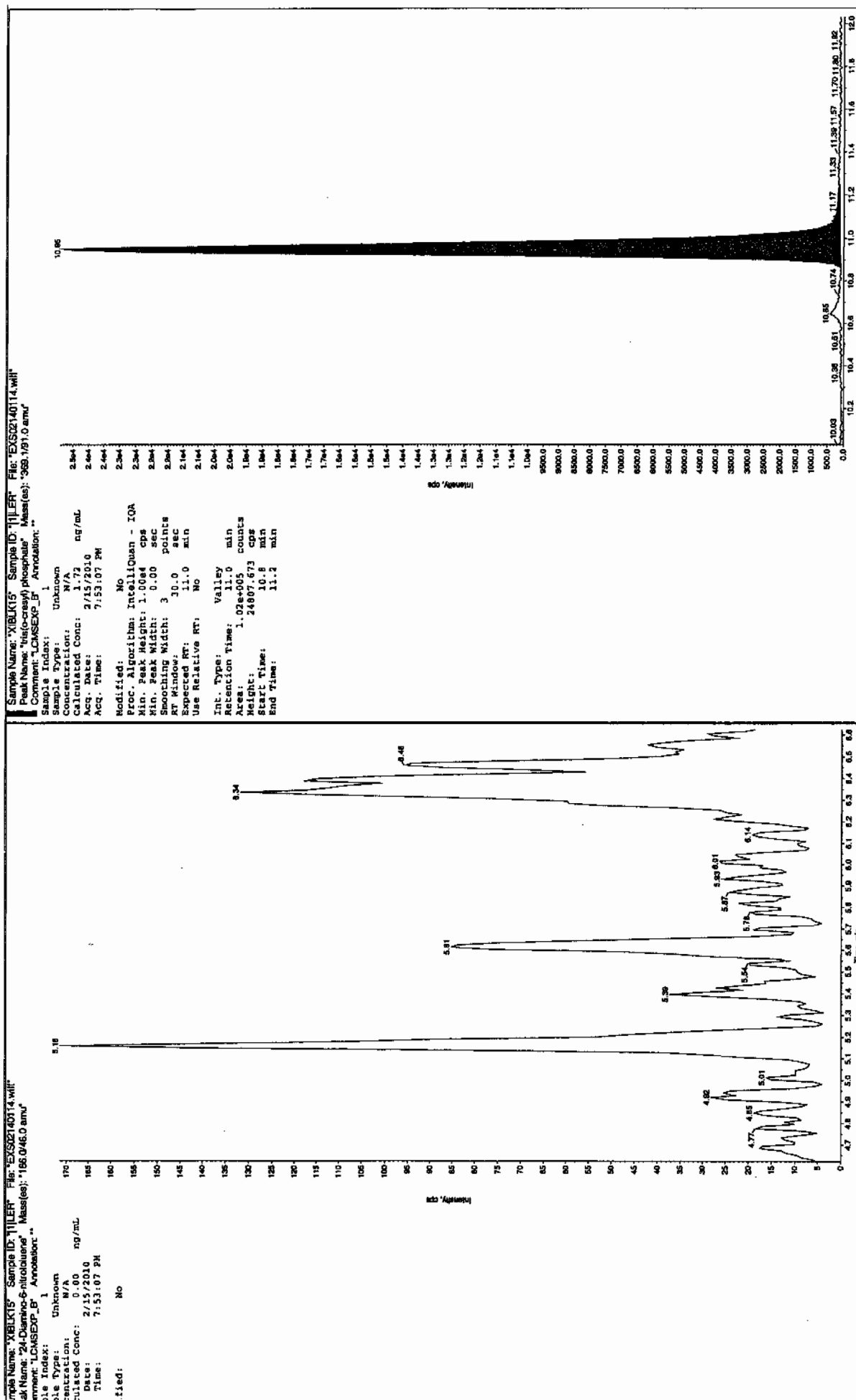
File Index: 1
 File Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Date: 2/15/2010
 Time: 7:53:07 PM
 Modified: No



hm 02/12/10



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): 10-1392

Lab Code: GEL

Lab Sample ID: XIBLK16

Analysis Date: 15-FEB-10 20:55

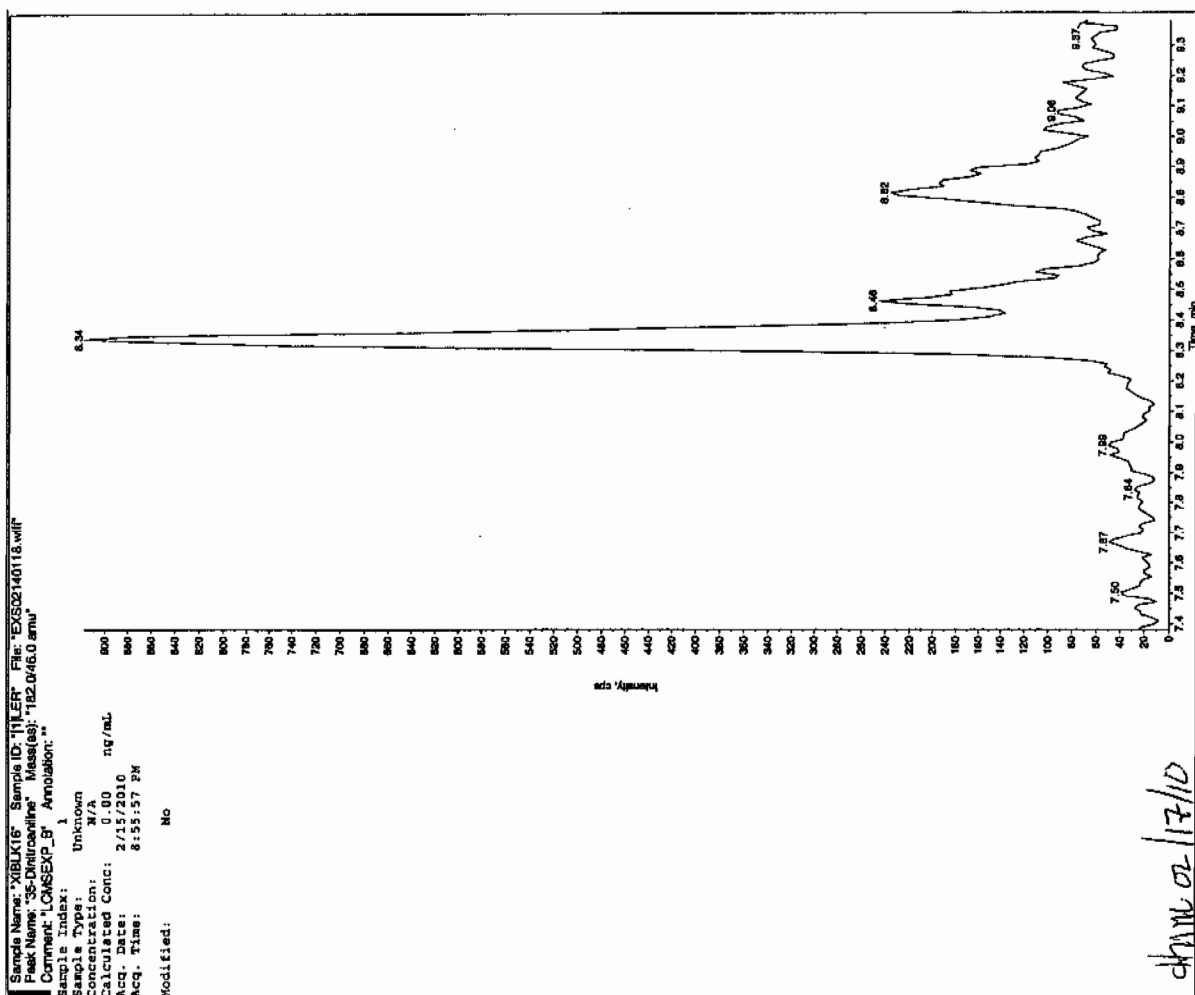
GEL Data File: EXS02140118.wiff

Instrument ID: LCMSMS

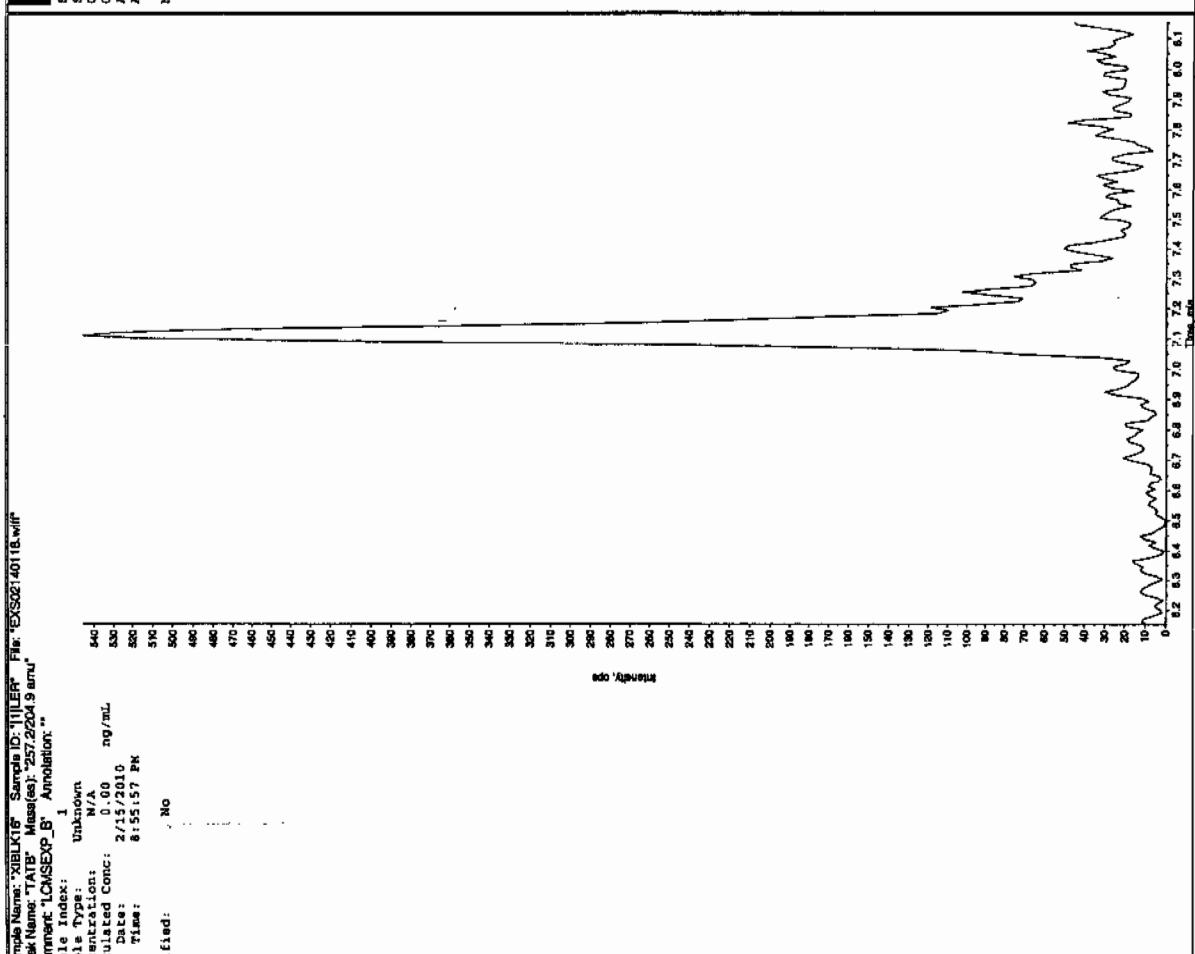
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	3.66
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

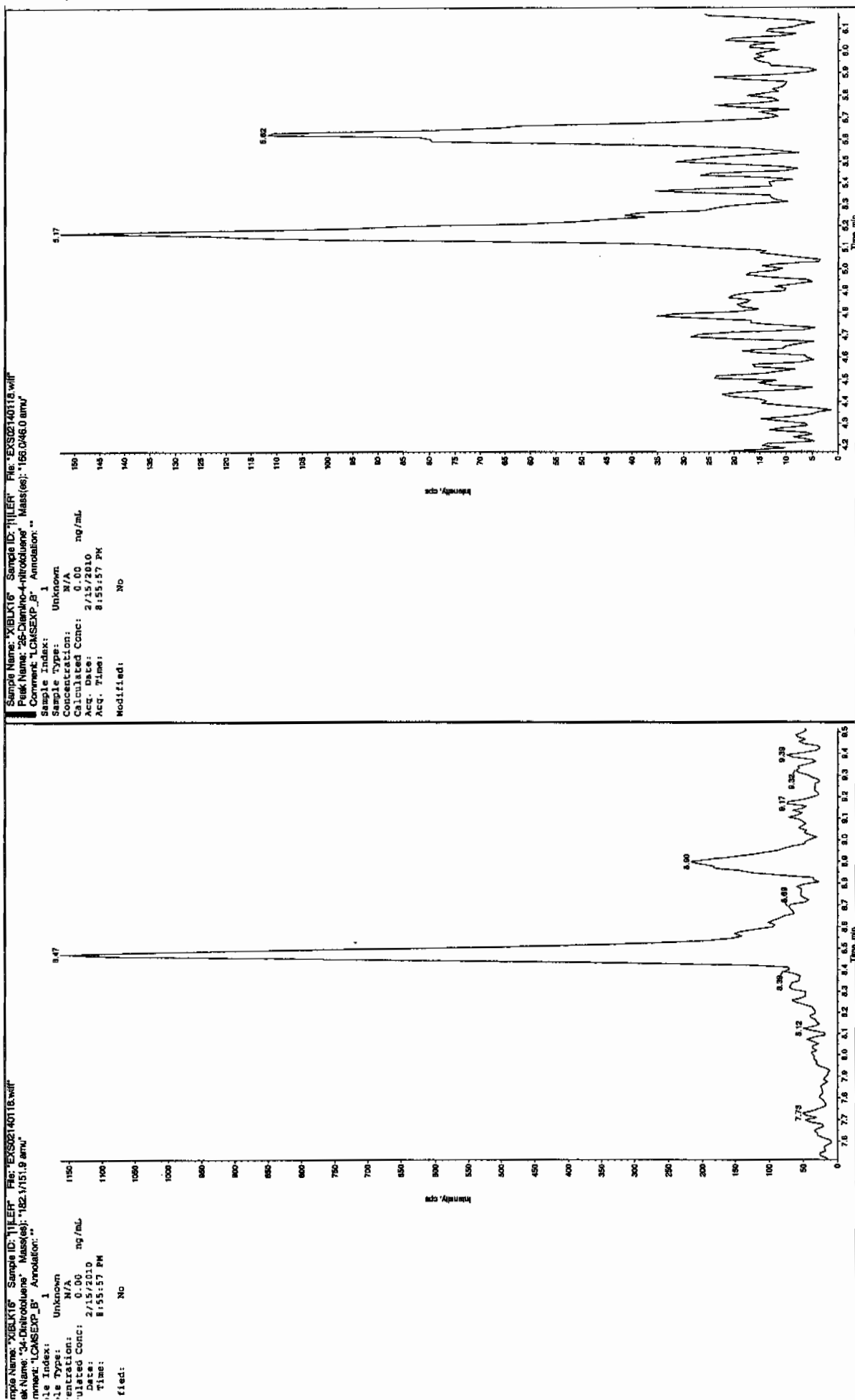
den 2/17/10



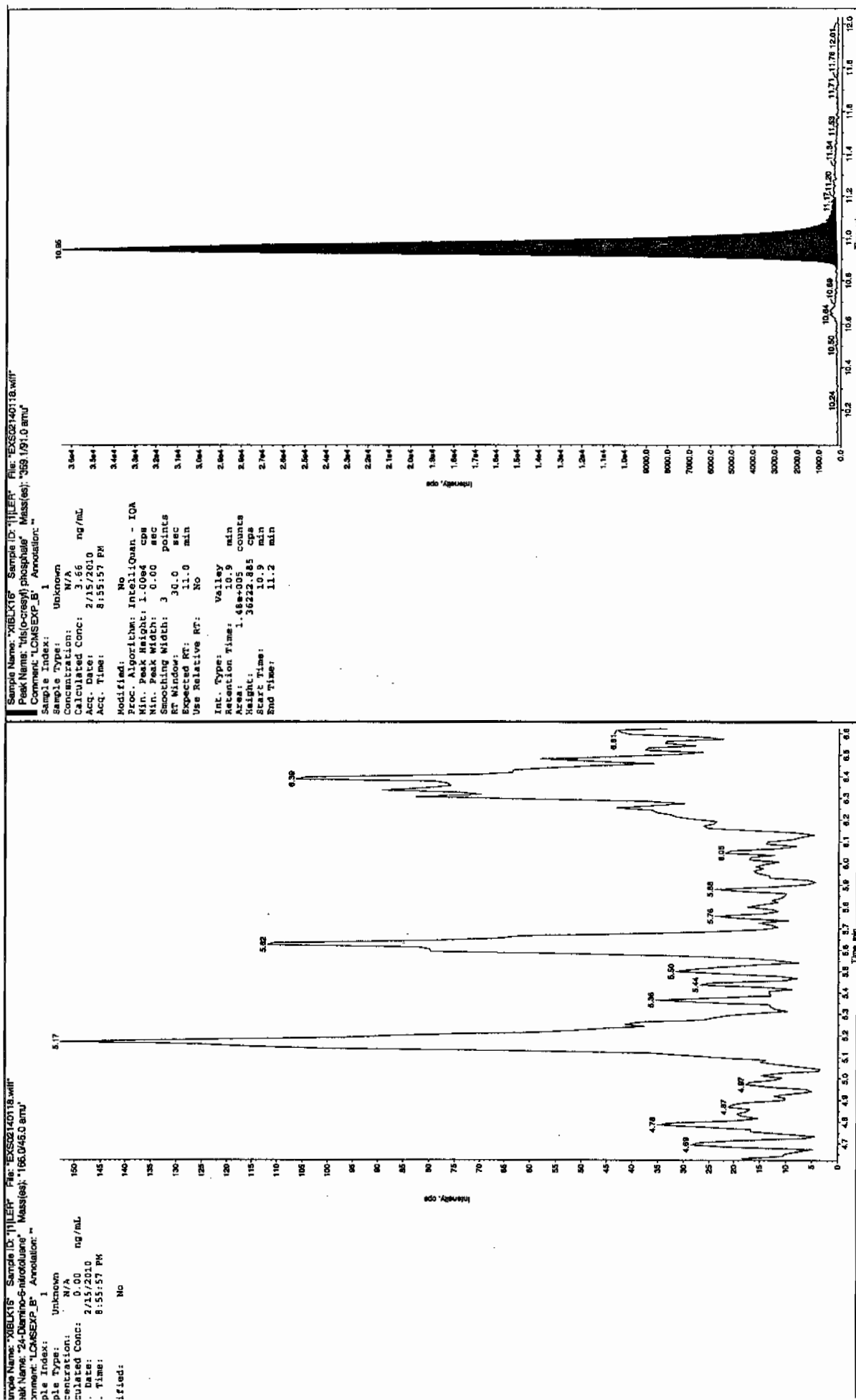
den 02/17/10



3L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



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



Nairb.ref

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

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

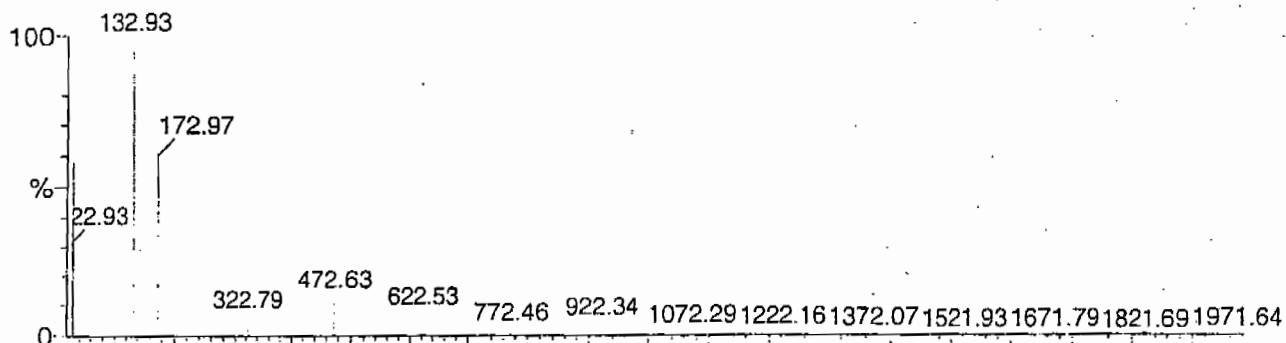
Calibration Report - MS1 Static

Page 1 of 1

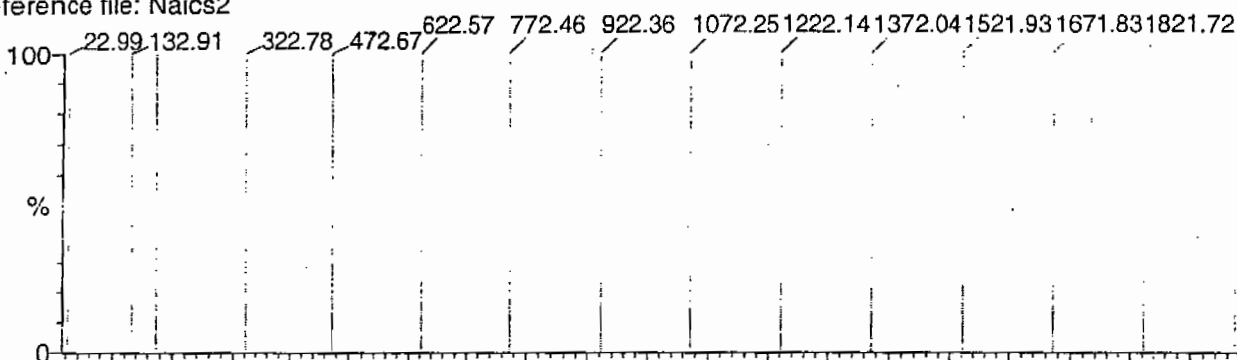
Printed: Fri Aug 25 10:50:01 2006

Data file: STATMS1 - Calibrated

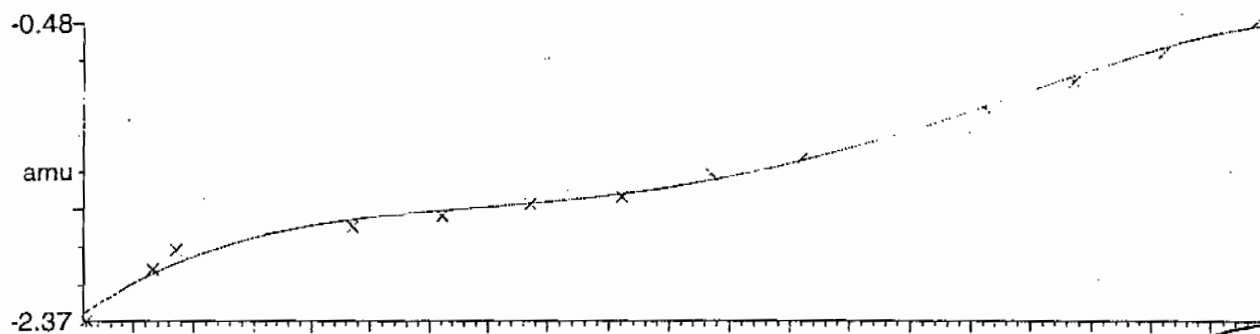
15 matches of 15 tested references



Reference file: Naics2

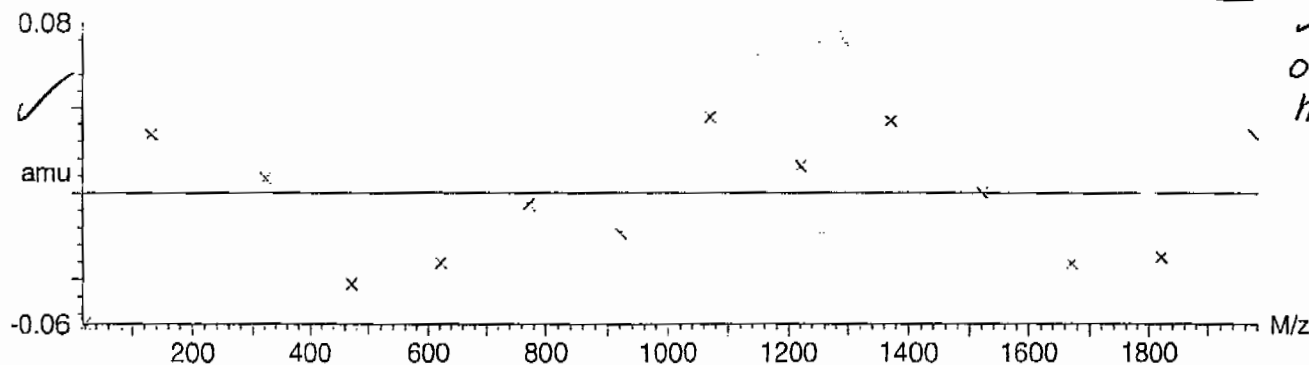


Mass difference (Raw - Ref mass)



Residuals

Mean residual = $-1.673470 \times 10^{-9} \pm 0.036953$

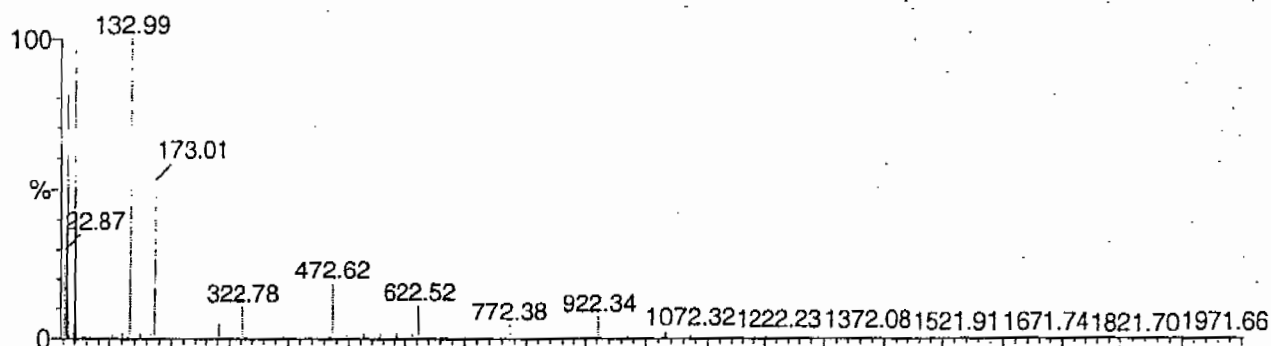


Calibration Report - MS1 Scanning

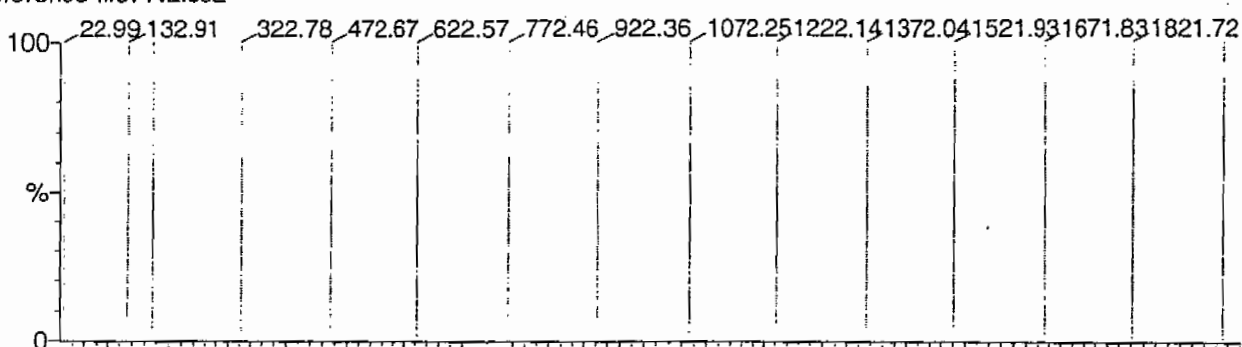
Page 1 of 1

Printed: Fri Aug 25 10:51:06 2006

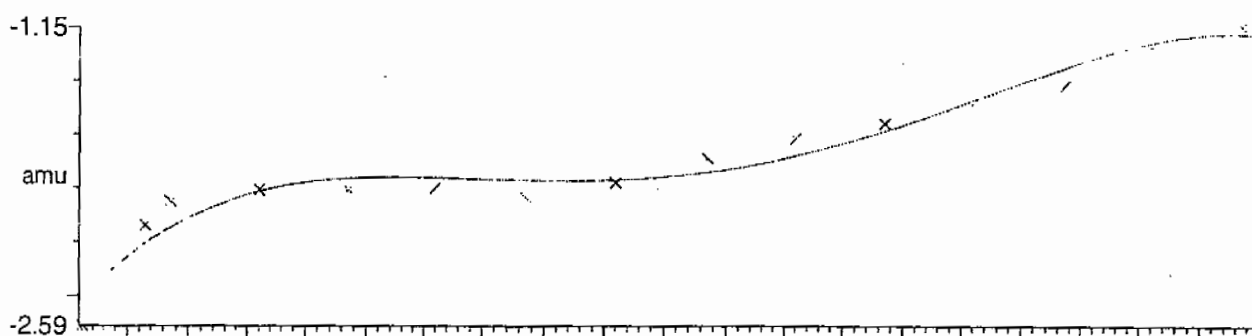
Data file: SCNMS1 - Calibrated 15 matches of 15 tested references



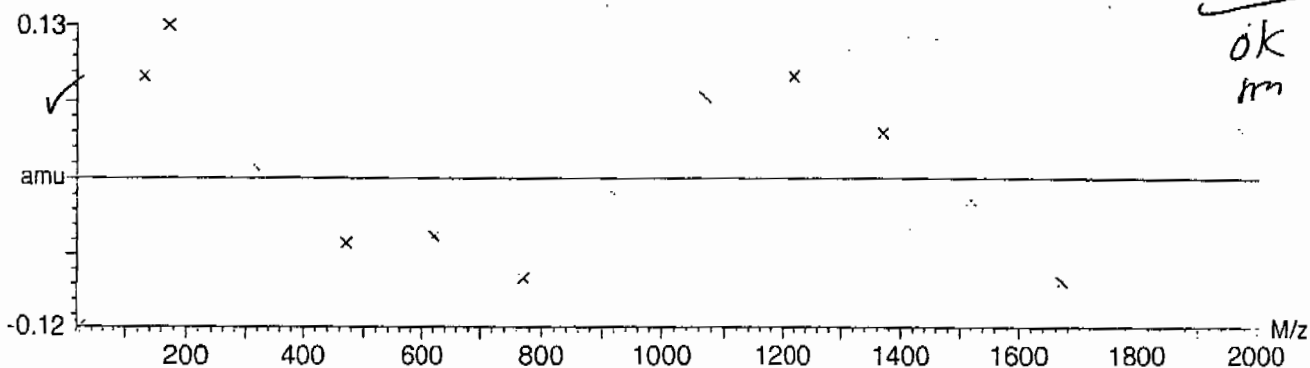
Reference file: Naics2



Mass difference (Raw - Ref mass)



Residuals



Mean residual = $-5.432715 \times 10^{-9} \pm 0.069858$

ok
m

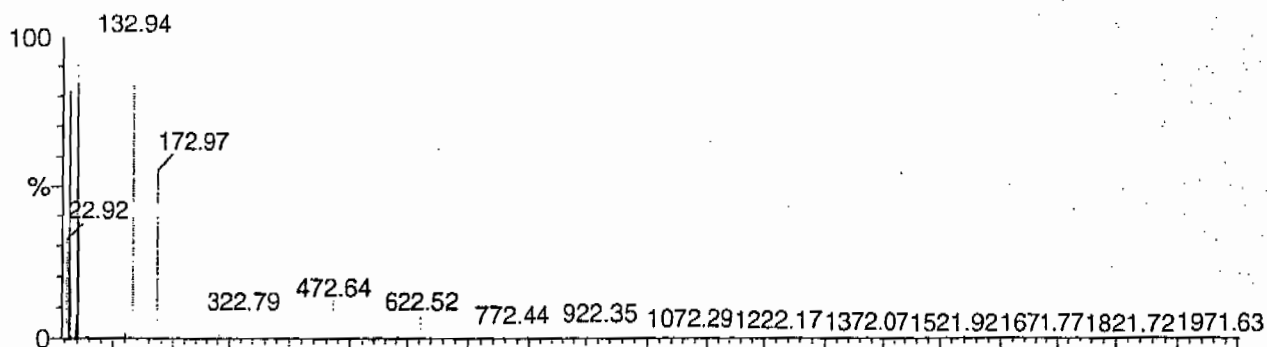
Calibration Report - MS1 Scan Speed Compensation

Page 1 of 1

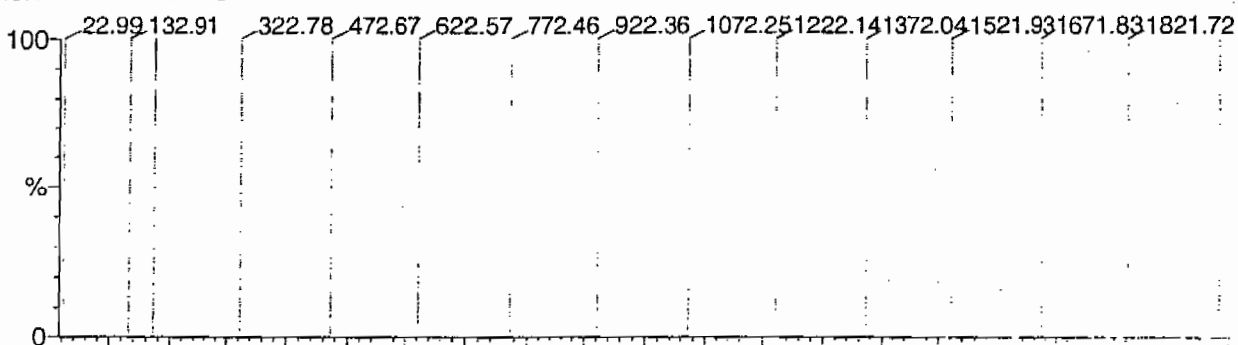
Printed: Fri Aug 25 10:52:01 2006

Data file: FASTMS1 - Calibrated

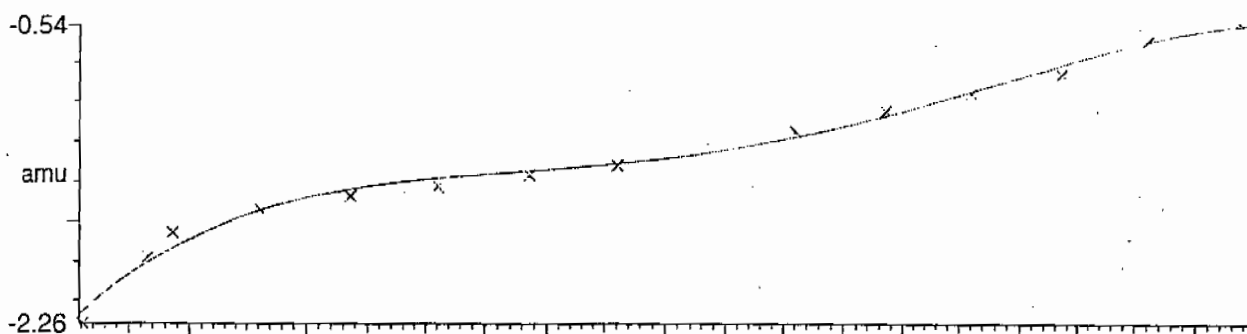
15 matches of 15 tested references



Reference file: Naics2

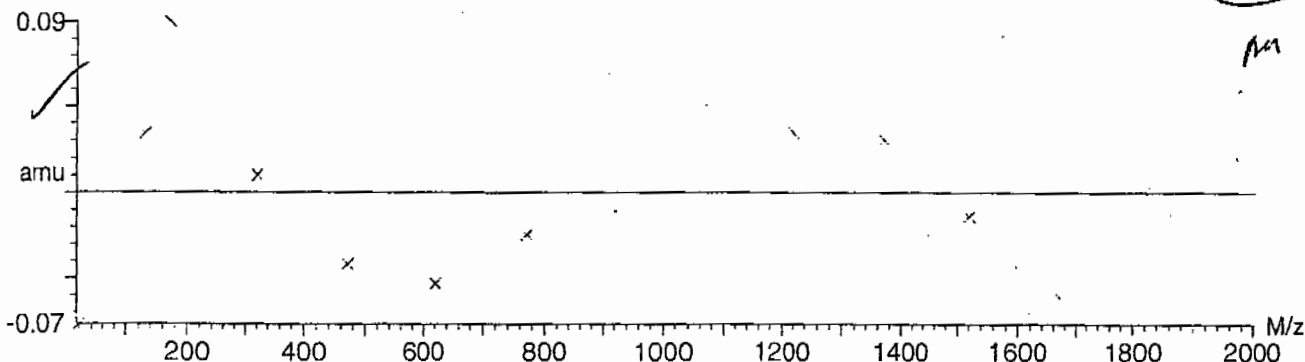


Mass difference (Raw - Ref mass)



Residuals

Mean residual = $3.486639 \times 10^{-9} \pm 0.040487$



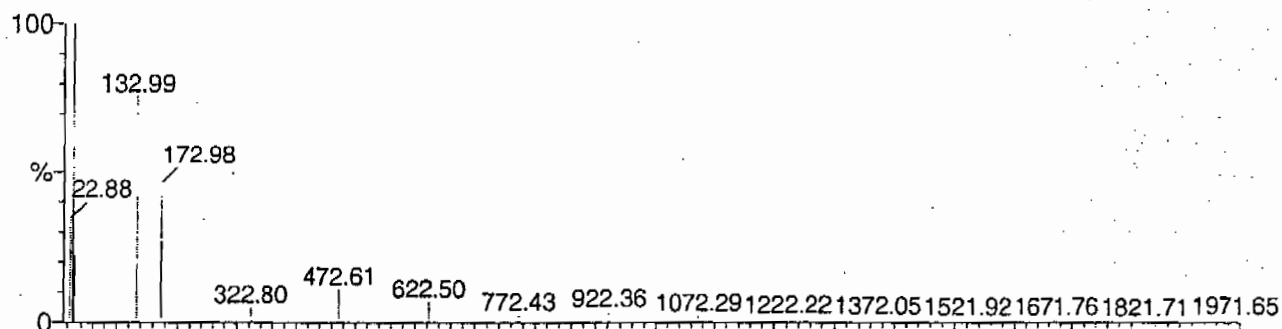
Calibration Report - MS2 Static

Page 1 of 1

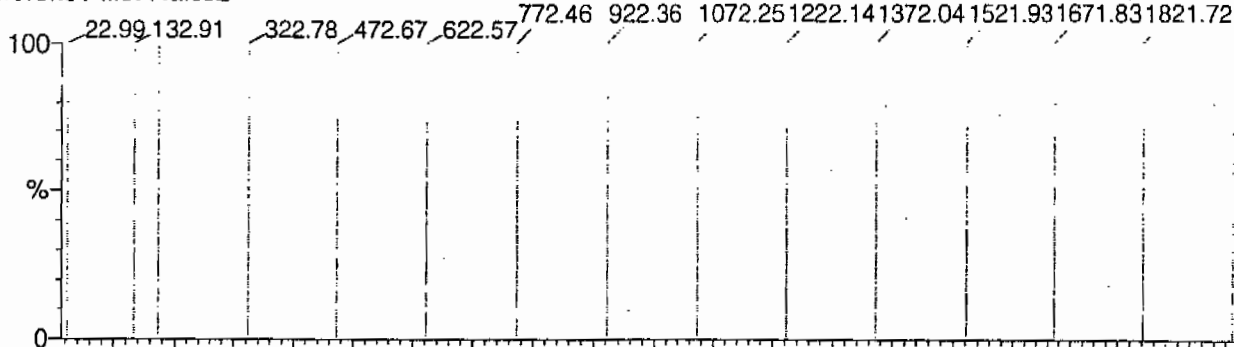
Printed: Fri Aug 25 10:52:54 2006

Data file: STATMS2 - Calibrated

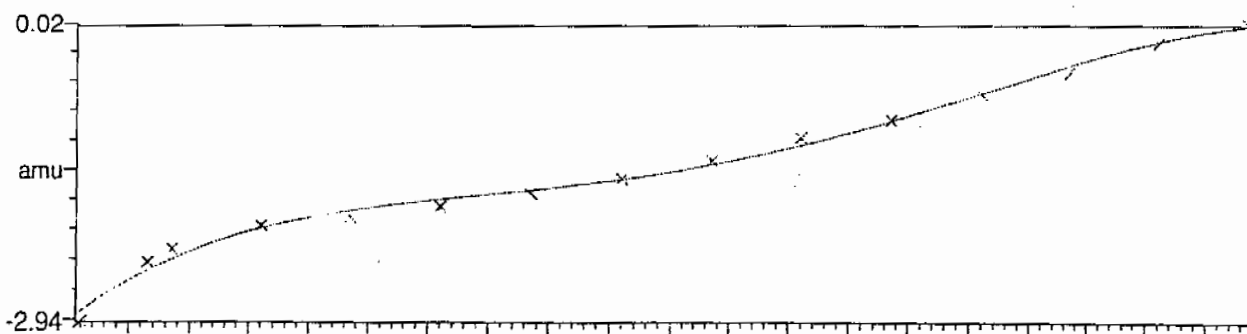
15 matches of 15 tested references



Reference file: Naics2

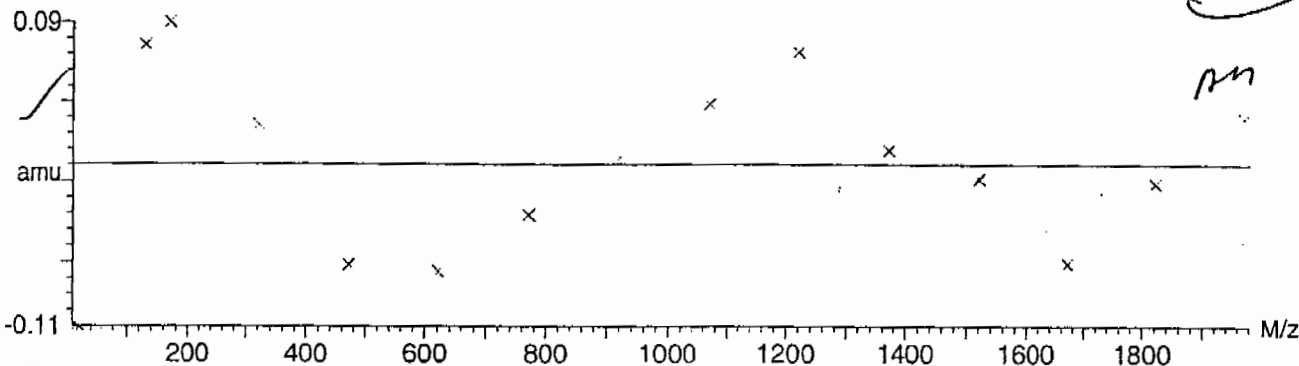


Mass difference (Raw - Ref mass)



Residuals

Mean residual = $2.048910 \times 10^{-9} \pm 0.057803$



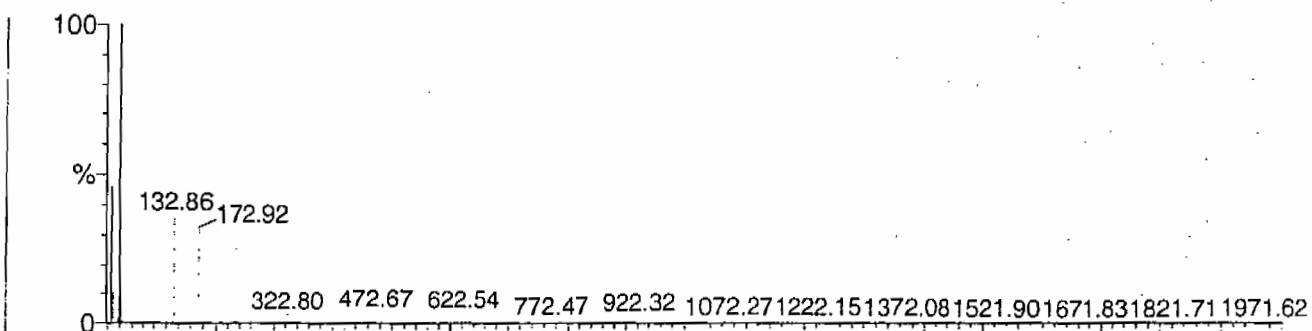
Calibration Report - MS2 Scanning

Page 1 of 1

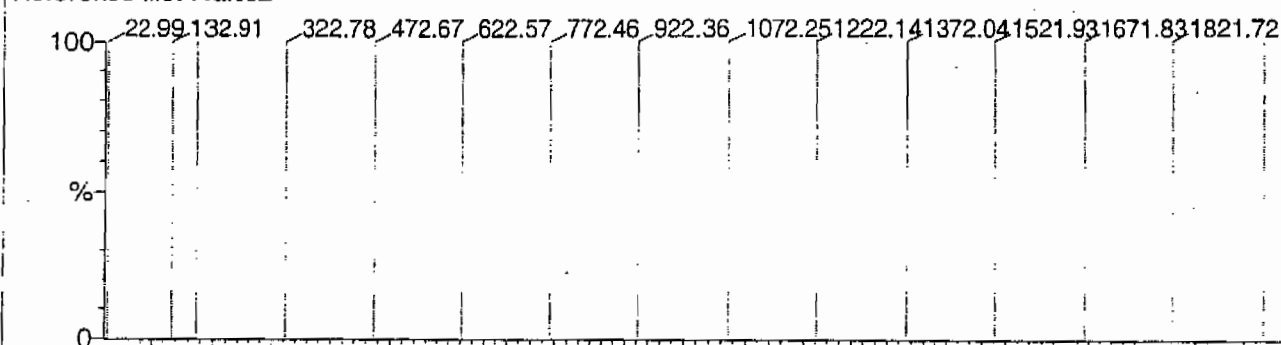
Printed: Fri Aug 25 10:54:00 2006

Data file: SCNMS2 - Calibrated

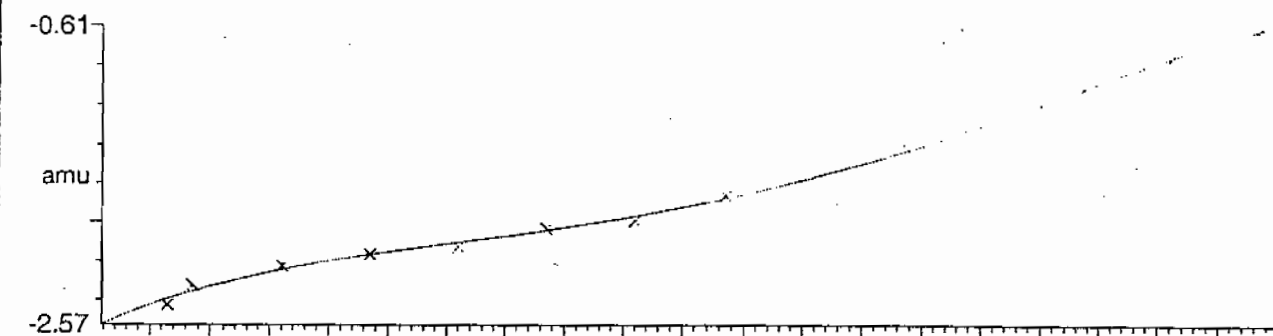
14 matches of 15 tested references



Reference file: Naics2

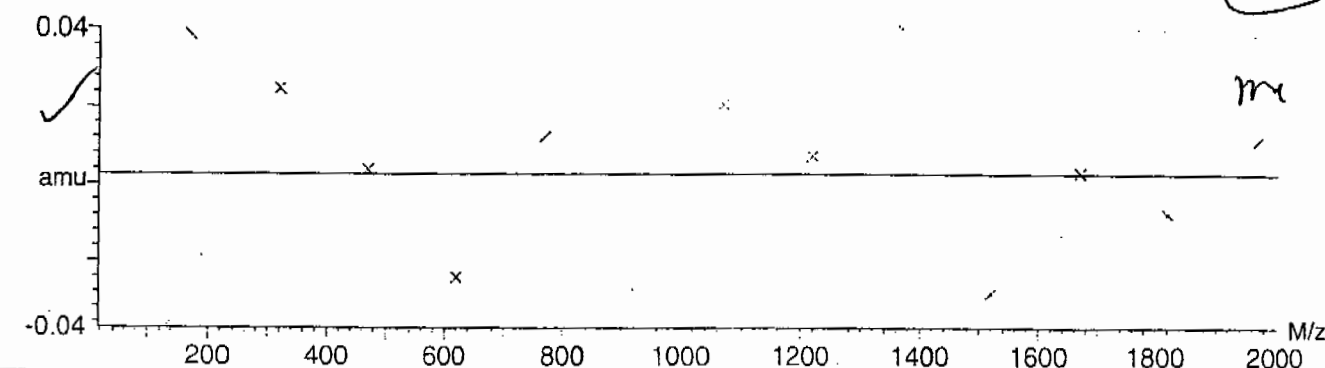


Mass difference (Raw - Ref mass)



Residuals

Mean residual = $-2.623502 \times 10^{-9} \pm 0.025622$



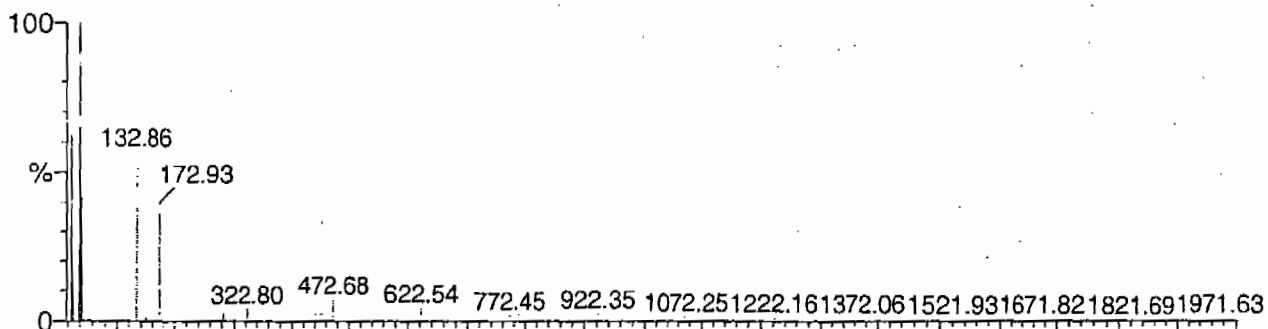
Calibration Report - MS2 Scan Speed Compensation

Page 1 of 1

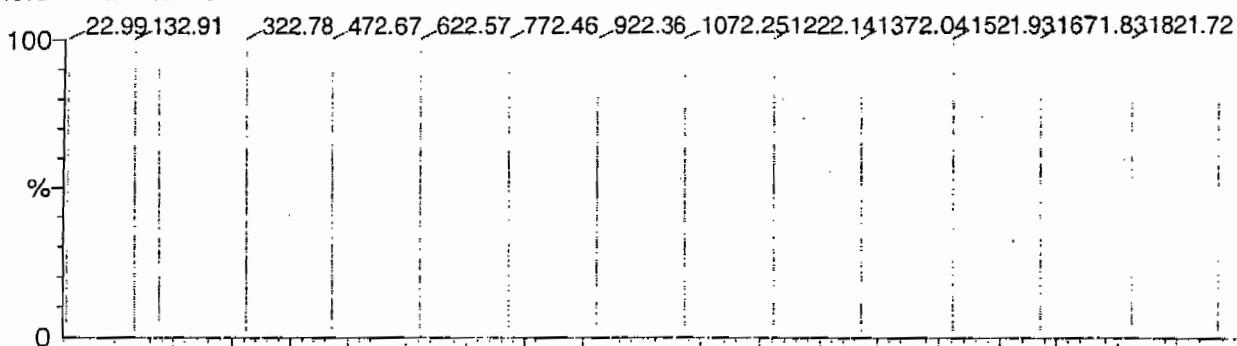
Printed: Fri Aug 25 10:54:54 2006

Data file: FASTMS2 - Calibrated

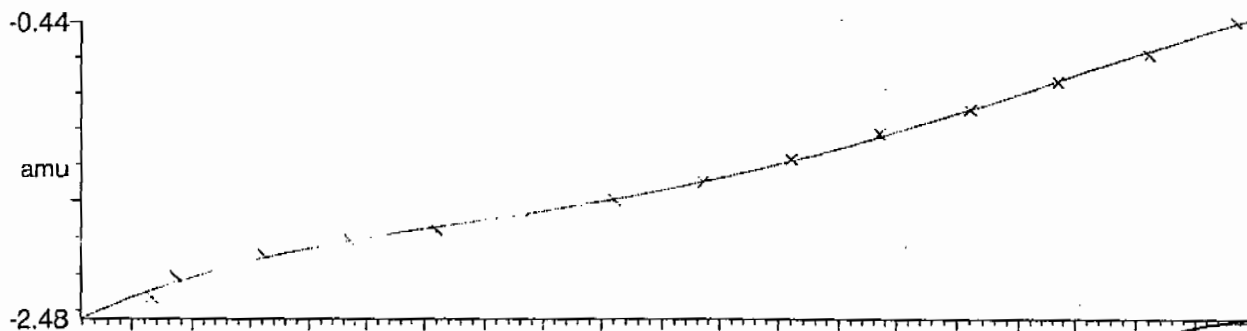
14 matches of 15 tested references



Reference file: Naics2

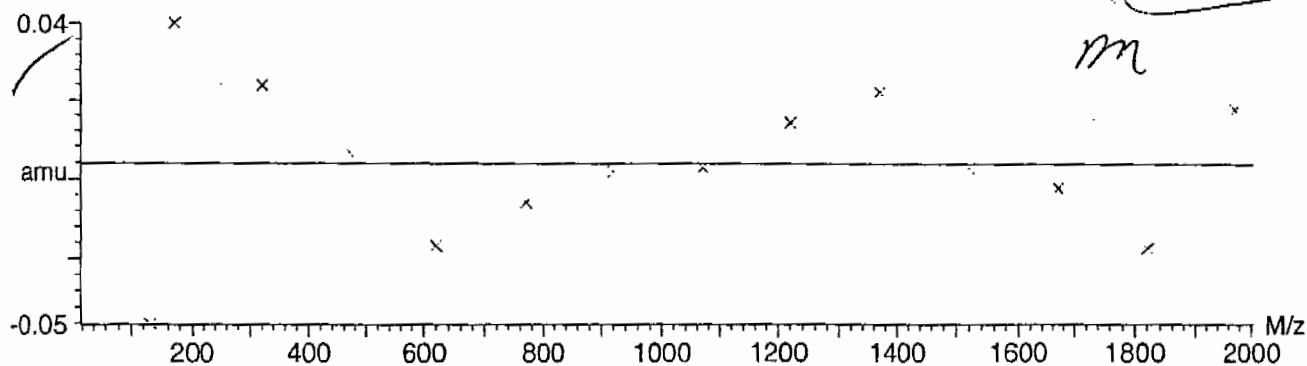


Mass difference (Raw - Ref mass)



Residuals

Mean residual = $-6.785350 \times 10^{-9} \pm 0.023134$

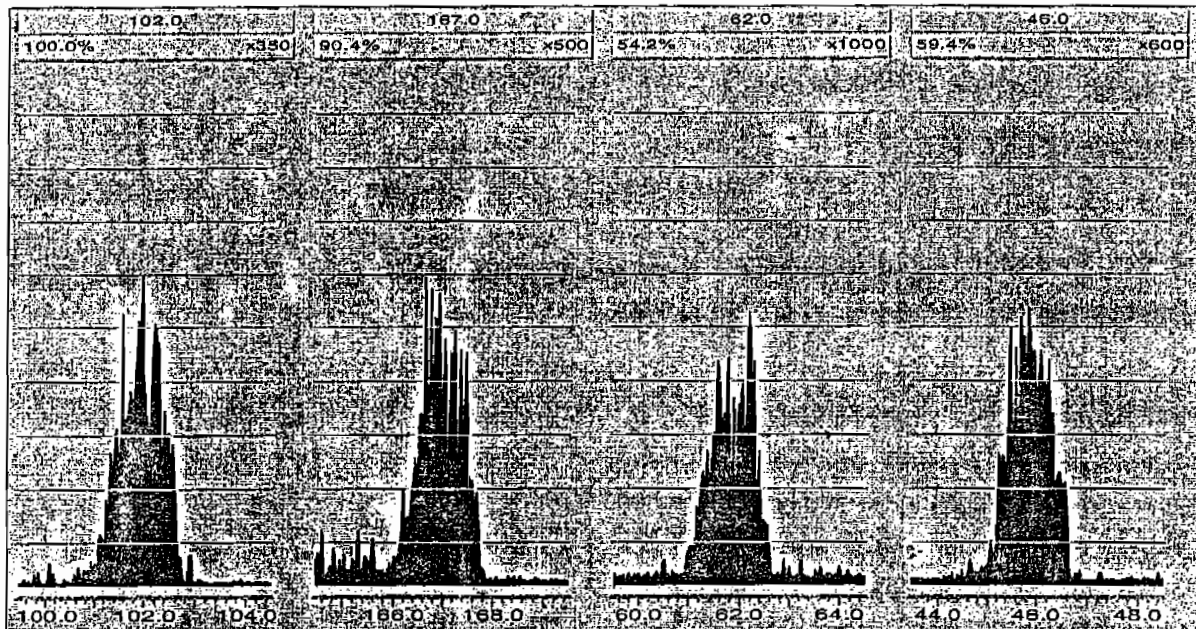


Quattro Micro Tune Parameters

Page 1

Parameter File: C:\MASSLYNX\NEW_EXP.PROVACQ\UDB\explosives04.ipr

Printed : Mon Feb 08 14:05:58 2010



High Explosives Internal Standard Summary

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1392

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 944932	14-feb-10 05:33	EXP0208275a	2922.6	12.065	16542.9	17.456
LCS for batch 944932	14-feb-10 06:02	EXP0208276a	3205.88	12.069	18016	17.463
RE15-10-7869	14-feb-10 06:32	EXP0208277a	2916.42	12.073	16772.2	17.465
RE15-10-7869(245394001MS)	14-feb-10 07:01	EXP0208278a	3151.9	12.069	18502.1	17.464
RE15-10-7869(245394001MSD)	14-feb-10 07:31	EXP0208279a	3286.78	12.072	19433.2	17.464
RE15-10-7874	14-feb-10 08:00	EXP0208280a	3213.26	12.099	17389.1	17.477
RE15-10-7871	14-feb-10 08:30	EXP0208281a	3082.79	12.071	17407.6	17.466
RE15-10-7870	14-feb-10 09:29	EXP0208283a	2774.59	12.067	20321.8	17.467
RE15-10-7873	14-feb-10 09:58	EXP0208284a	3554.48	12.073	18468	17.464
RE15-10-7911	14-feb-10 11:56	EXP0208288a	3178.01	12.068	19443.6	17.446
RE15-10-7908	14-feb-10 12:26	EXP0208289a	3089.76	12.067	20613.7	17.466
RE15-10-7906	14-feb-10 13:27	EXP0208291a	3042.97	12.101	16864.6	17.444
RE15-10-7905	14-feb-10 13:56	EXP0208292a	2988.01	12.067	17242.9	17.466
RE15-10-7907	14-feb-10 14:26	EXP0208293a	3527.79	12.067	21370.1	17.445
RE15-10-7913	14-feb-10 14:55	EXP0208294a	3750.43	12.067	20497.2	17.467
RE15-10-7909	14-feb-10 15:25	EXP0208295a	3439.65	12.073	19482.7	17.465
RE15-10-7910	14-feb-10 15:54	EXP0208296a	3460.63	12.074	19483.6	17.465
RE15-10-7871	14-feb-10 18:52	EXP0208302a	2530.75	12.069	14791.5	17.443
RE15-10-7872	14-feb-10 19:21	EXP0208303a	3432.99	12.034	18797.9	17.441
RE15-10-7912	14-feb-10 19:51	EXP0208304a	3160.13	12.067	20235.3	17.423

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: RE15-10-7869

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394001

Sample Amount 2

Moisture: 24.7

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208277a

Date Analyzed: 14-FEB-10 06:32

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_PRO\020810expA6.qld, Time: Mon Feb 15 07:43:55 2010

Sample Name: C:\MASSLYNX\NEW_EXP_PRO\Data\EXP0208277a

Date: 14-Feb-2010

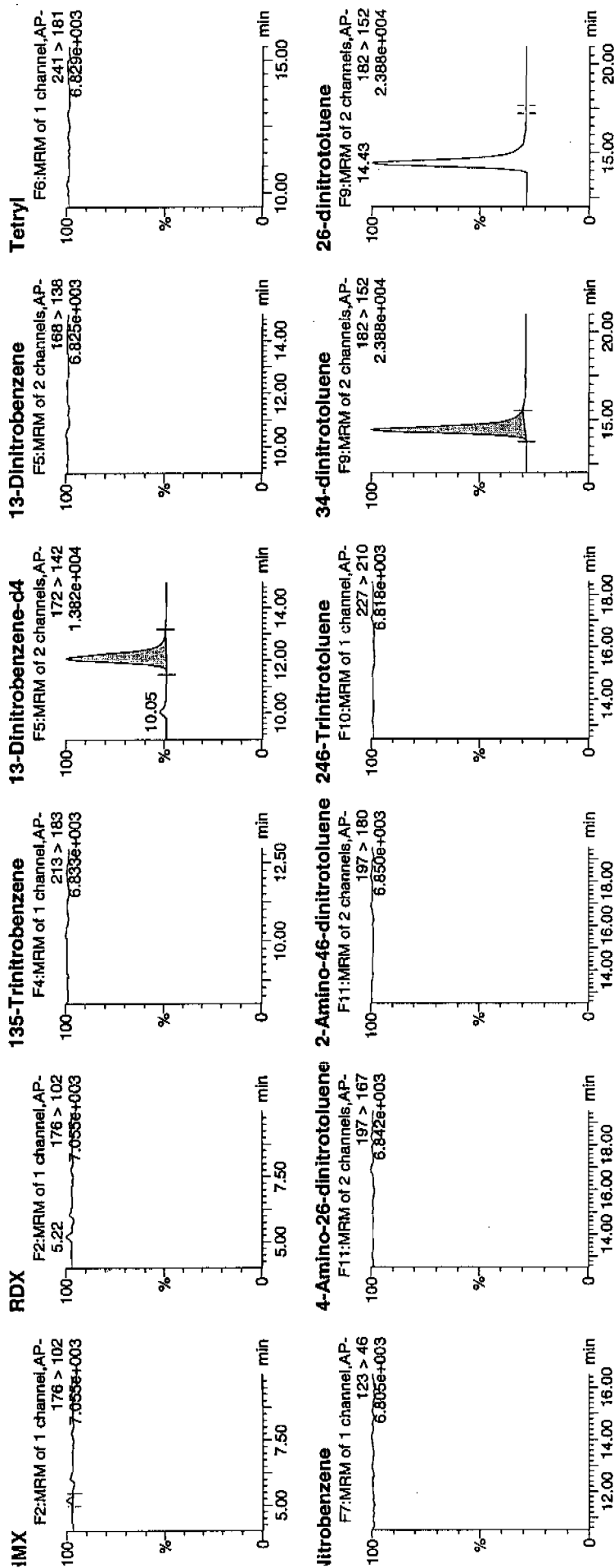
Time: 06:32:20

D: 245394001

File: 3:1,C

not
2/15/10

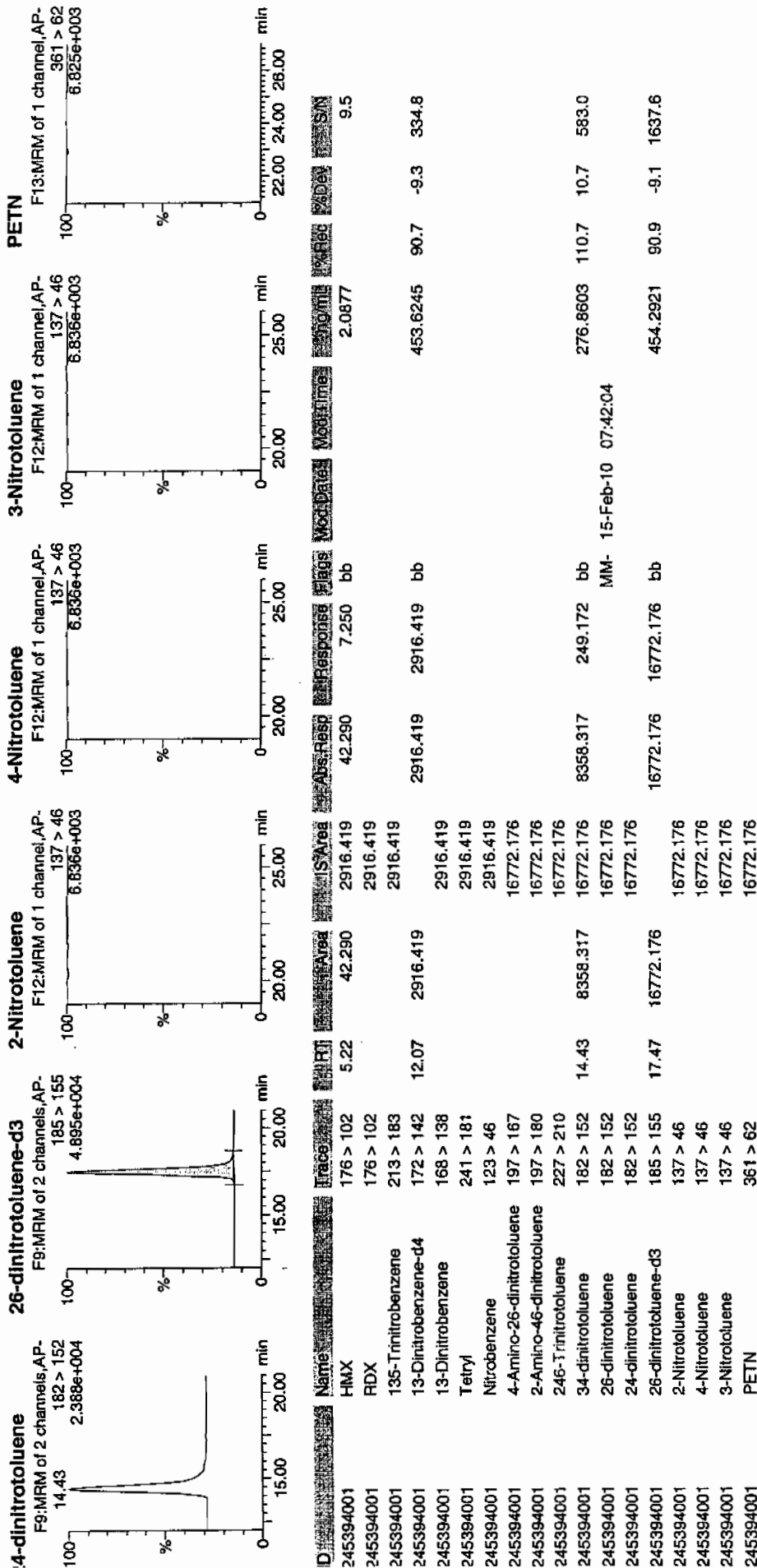
WAW 944935 | 21



Handwritten signature

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



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7869

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394001

Sample Amount 2

Moisture: 24.7

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140066.wiff

Date Analyzed: 15-FEB-10 07:18

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

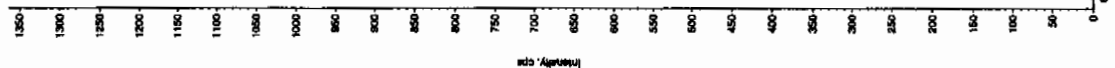
*Concentration =

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

See 2/17/10

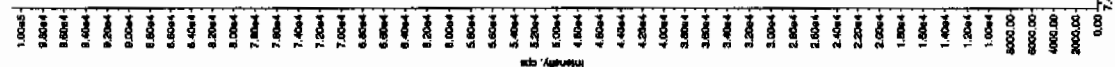
Sample Name: "245394001" Sample ID: "94493521ER" File: "EXS02140066.wif"
 Peak Name: "TATB" Mass(es): "237.2204.9 amu"
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/15/2010
 Acq. Time: 7:18:09 AM
 Modified: No



Sample Name: "245394001" Sample ID: "94493521ER" File: "EXS02140066.wif"
 Peak Name: "3S-Dinitroaniline" Mass(es): "182.046.0 amu"
 Comment: "LCX83212S" Annotation: ""

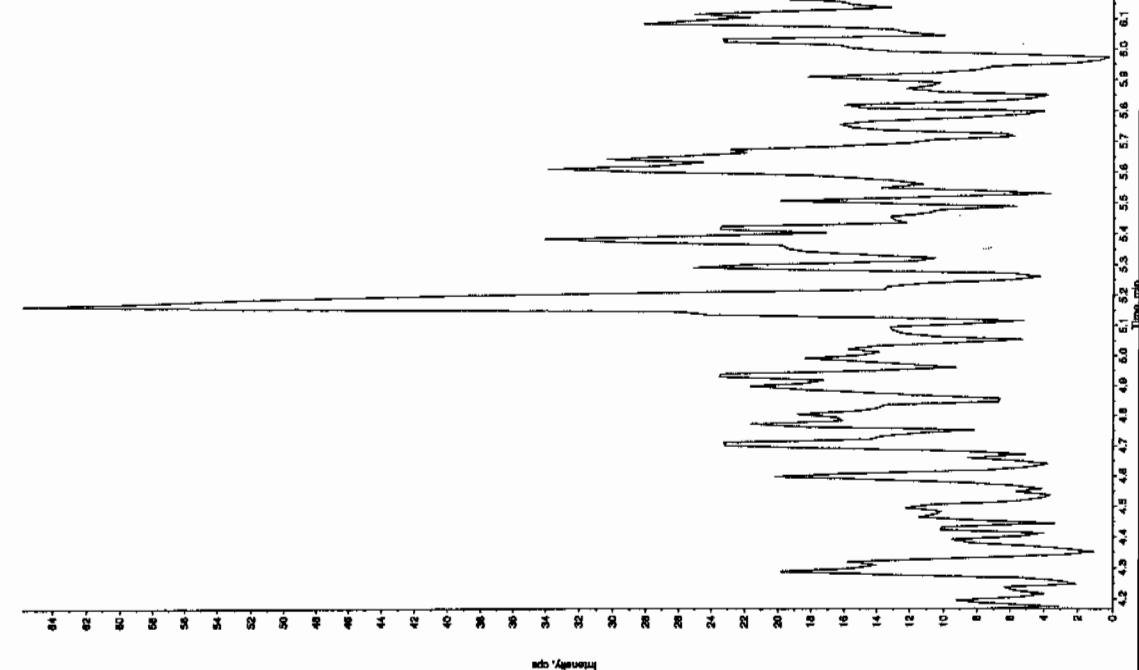
Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/15/2010
 Acq. Time: 7:18:09 AM
 Modified: No



See 2/17/10

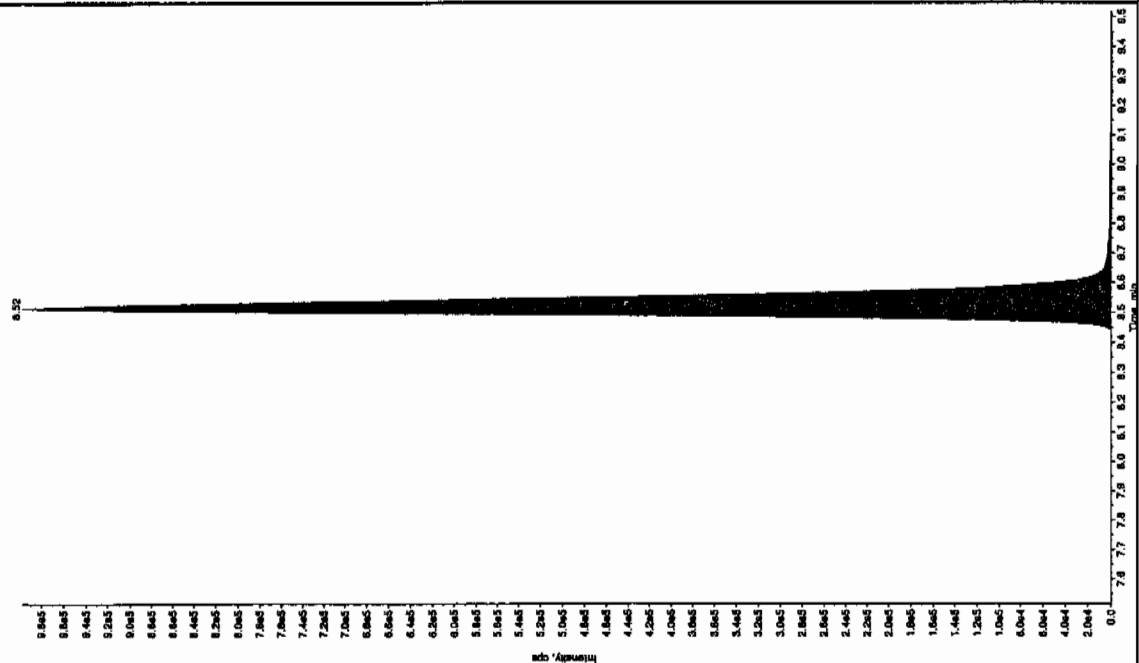
Sample Name: "245394001" Sample ID: "9449352125" File: "EX502140056.wif"
 Peak Name: "28-Diamino-4-nitroketene" Mass(es): "166.046.0 amu"
 Comment: "LCX502125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A ng/mL
 Calculated Conc: 2/13/2010
 Acq. Date: 7/18/09 AM
 Acq. Time: 7:18:09 AM
 Modified: NO



Sample Name: "245394001" Sample ID: "9448392125" File: "EX502140056.wif"
 Peak Name: "34-Dinitroketene" Mass(es): "182.1715.9 amu"
 Comment: "LCX502125" Annotation: ""

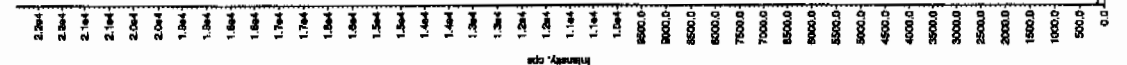
Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A ng/mL
 Calculated Conc: 2/13/2010
 Acq. Date: 7/18/09 AM
 Acq. Time: 7:18:09 AM
 Modified: NO
 Acquisition: IntelliQuan - IQA
 n. Peak Height: 1460.00 cps
 n. Peak Width: 0.00 sec
 n. Peak Area: 15.0 points
 n. Peak Window: 15.0 sec
 Expected RT: 8.52 min
 n. Relative RT: NO
 Peak Type: Valley
 Retention Time: 8.52 min
 Area: 3.86e+006 counts
 Height: 997613.464 cps
 Start Time: 8.41 min
 End Time: 8.58 min



Sample Name: "245394001" Sample ID: "94493521ER" File: "EVS02140066.wif"
 Peak Name: "bis(o-cresyl) phosphate" Mass(es): 369.101.0 amu
 Comment: "CX832125" Association: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: 1.62 ng/mL
 Acq. Date: 2/15/2010
 Acq. Time: 7:18:09 AM

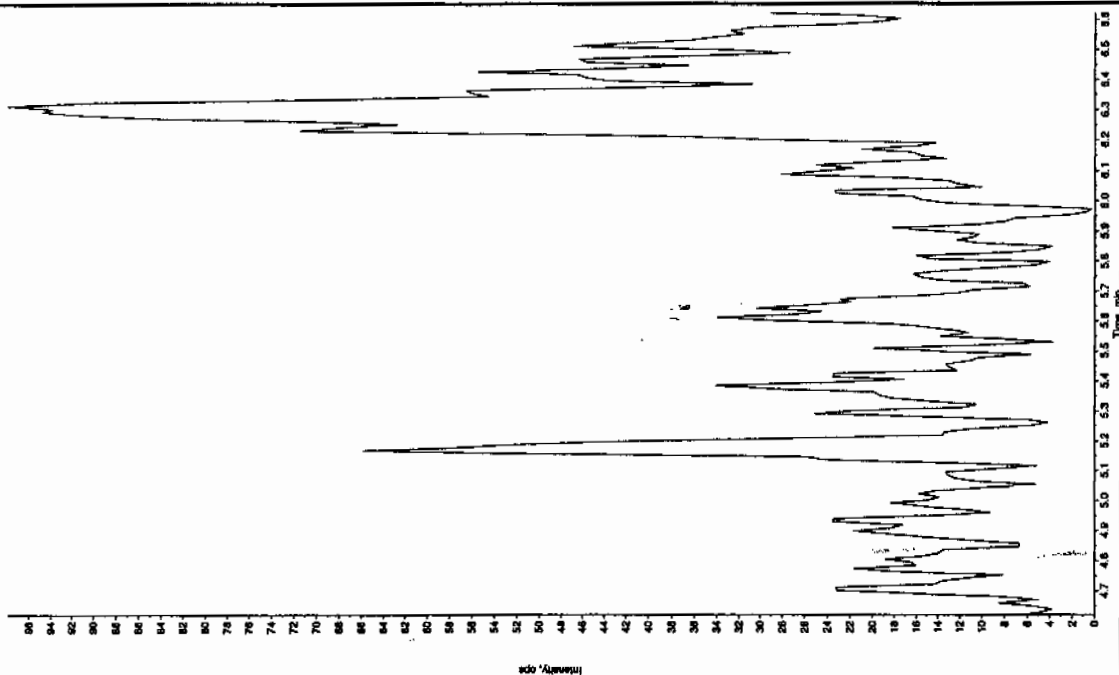
Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 1.00e4 cps
 Min. Peak Width: 3.00 sec
 Smoothing Width: 30.0 points
 RT Window: 30.0 sec
 Expected RT: 11.0 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 11.0 min
 Area: 9.99e+004 counts
 Height: 22254.295 cps
 Start Time: 10.9 min
 End Time: 11.3 min



Sample Name: "245394001" Sample ID: "94493521ER" File: "EVS02140066.wif"
 Peak Name: "24-Diamino-5-norbornene" Mass(es): 166.046.0 amu
 Comment: "CX832125" Association: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Acq. Date: 2/15/2010
 Acq. Time: 7:18:09 AM

Modified: No



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: RE15-10-7874

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394002

Sample Amount 2

Moisture: 4.1

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208280a

Date Analyzed: 14-FEB-10 08:00

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\EXP0208280a

Date: 14-Feb-2010

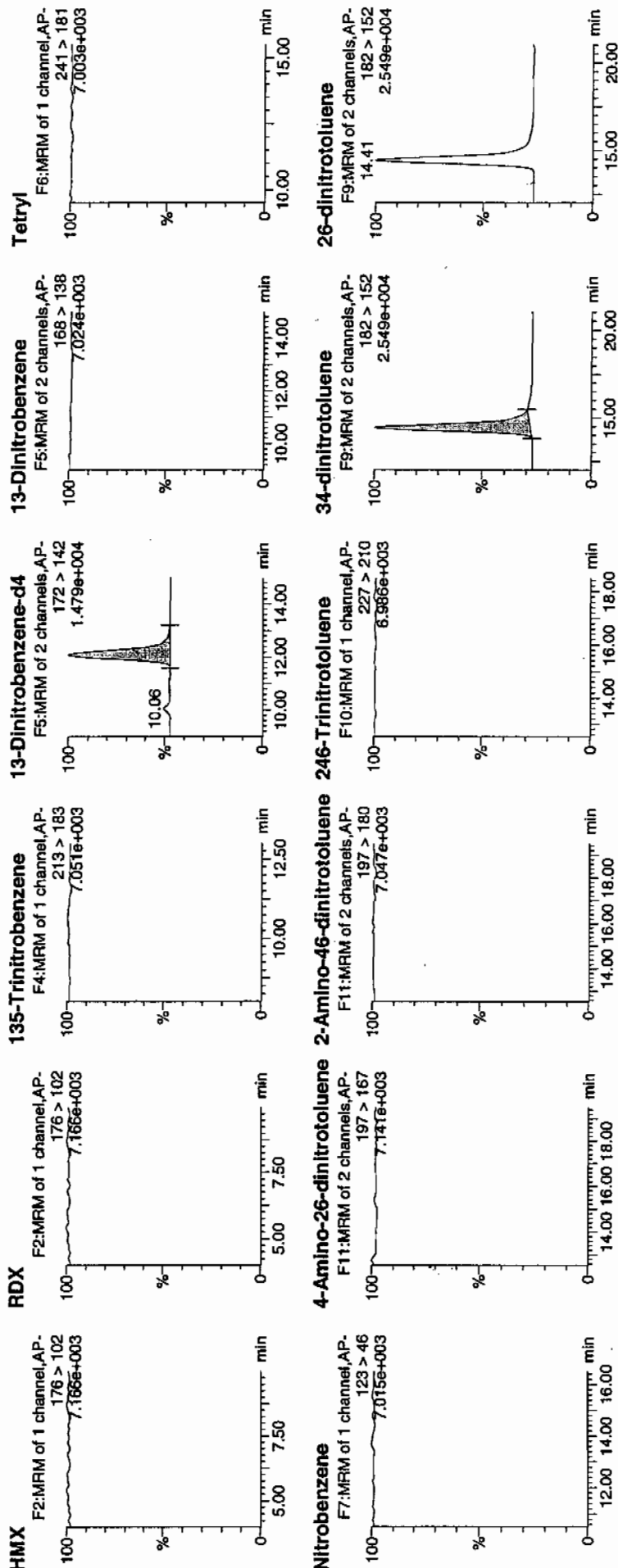
Time: 08:00:43

ID: 245394002

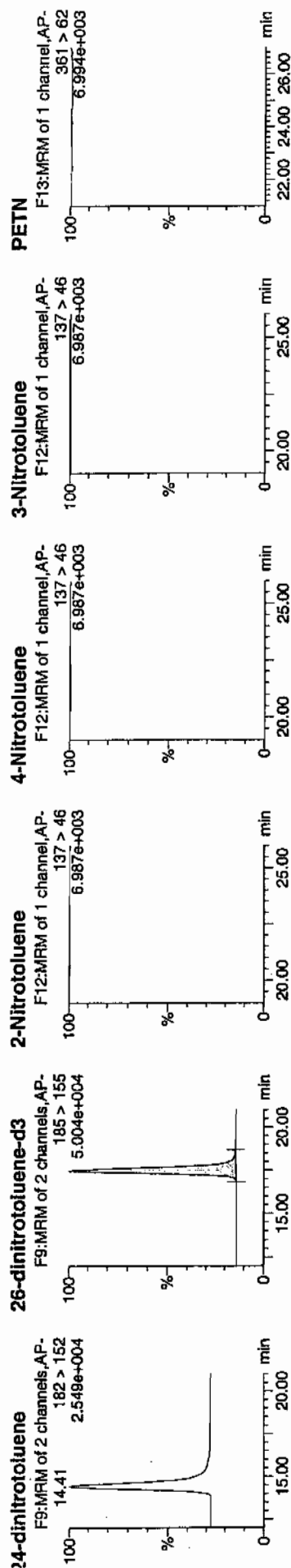
Vial: 3:1,F

4477
2/5/10

WAV 1944935 (8022) 21



Amu 115/10

[illegible]

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7874

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394002

Sample Amount 2

Moisture: 4.1

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140072.wiff

Date Analyzed: 15-FEB-10 08:53

Units: ug/kg

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

*Concentration =

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

for 2/17/10

Sample Name: 246364002 Sample ID: 940362125 File: EXS02140072.wif

Peak Name: 35-Dinitroaniline Mass(es): 182.046.0 amu

Comment: LCMS02125 Acquisition:

Sample Index: 1.1265

Sample Type: Unknown

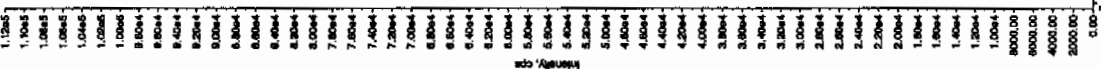
Concentration: 0.00 ng/mL

Calculated Conc: 2/15/2010

Acq. Date: 8:53:26 AM

Acq. Time: 8:53:26 AM

Modified: No



for 2/17/10

Sample Name: 246364002 Sample ID: 940362125 File: EXS02140072.wif

Peak Name: 7.117 Mass(es): 257.2204.9 amu

Comment: LCMS02125 Acquisition:

Sample Index: 1.1265

Sample Type: Unknown

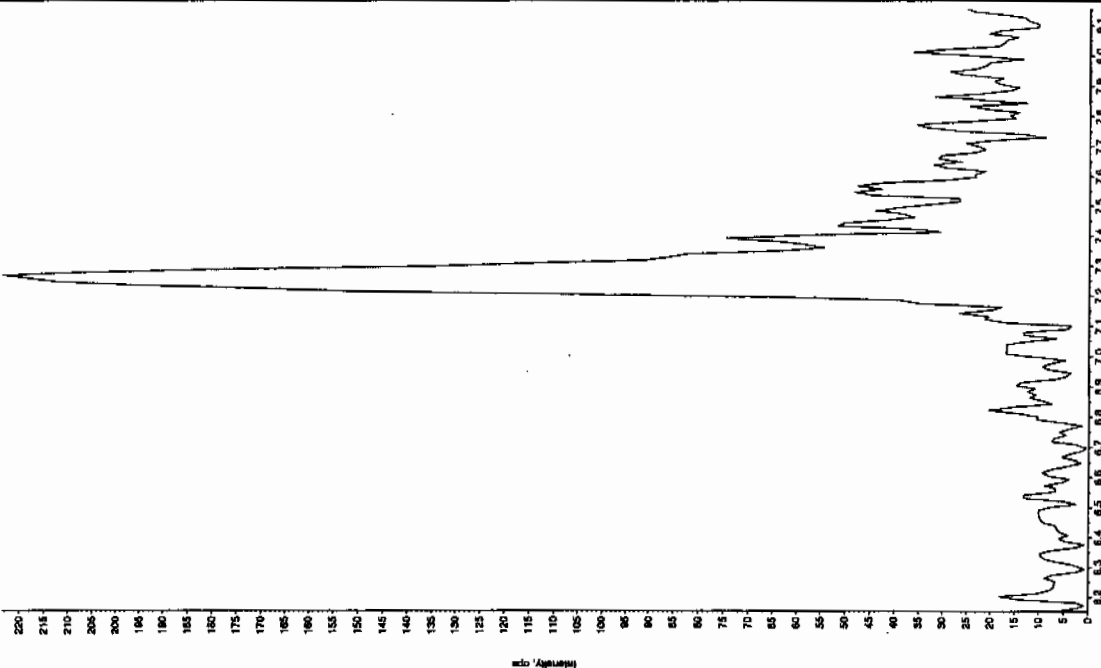
Concentration: 0.00 ng/mL

Calculated Conc: 2/15/2010

Acq. Date: 8:53:26 AM

Acq. Time: 8:53:26 AM

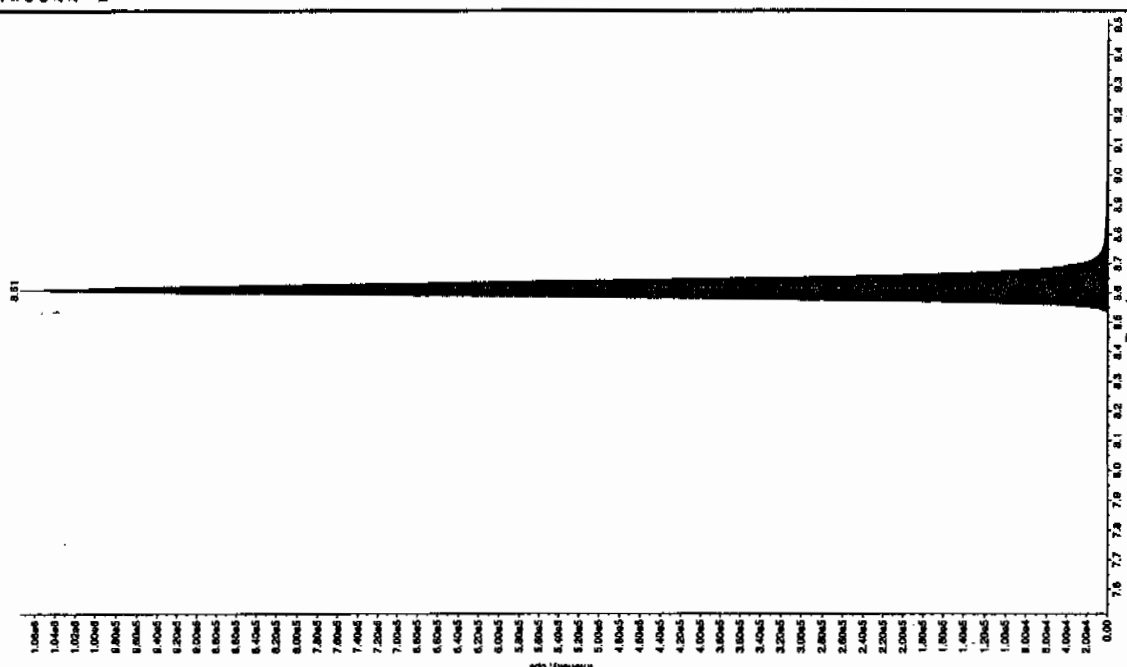
Modified: No



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

Sample Name: "245394002" Sample ID: "944935121" File: "EXS02140072.mpl"
 Peak Name: "26-Diethylamine" Mass(es): "182.17151 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/15/2010
 Acq. Time: 8:53:25 AM
 Modified: No

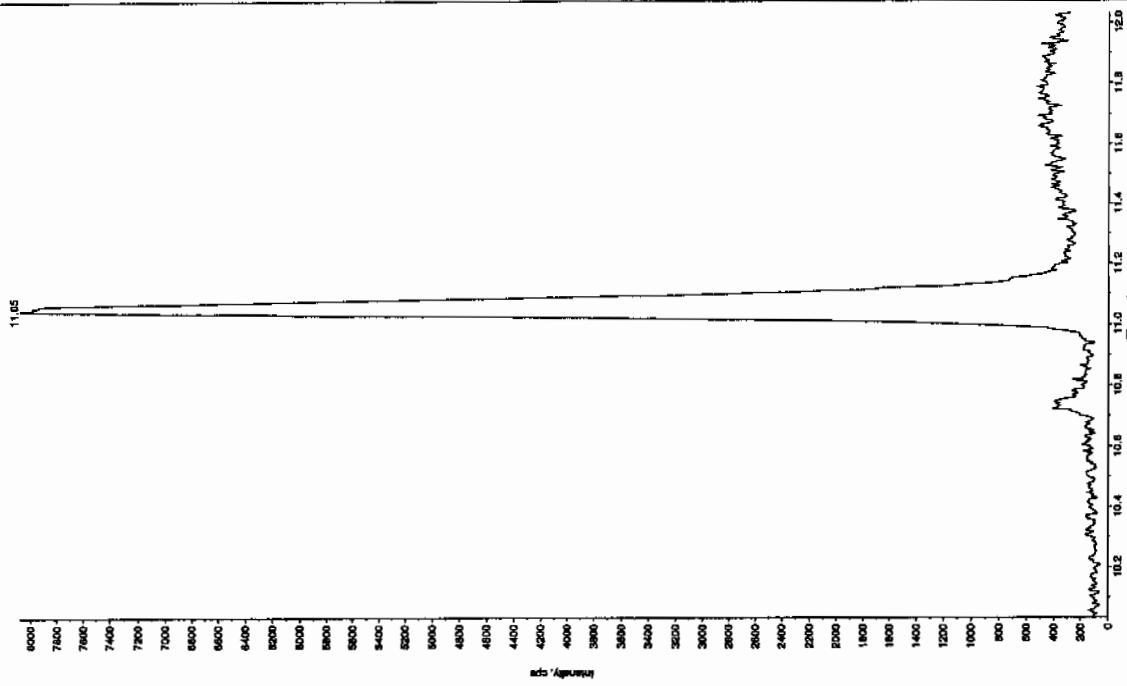


File Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 305.
 Acq. Date: 2/15/2010
 Acq. Time: 8:53:25 AM
 Method: No
 5. Algorithm: IntelliQuan - IQA
 Peak Height: 1460.00 cps
 Peak Width: 0.00 sec
 Retention Time: 8.51 min
 Relative RT: No
 Type: Valley
 Retention Time: 8.51 min
 Counts: 3.96e+006
 RT: 1075714.478 cps
 RT Time: 8.51 min
 Time: 8.96 min

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

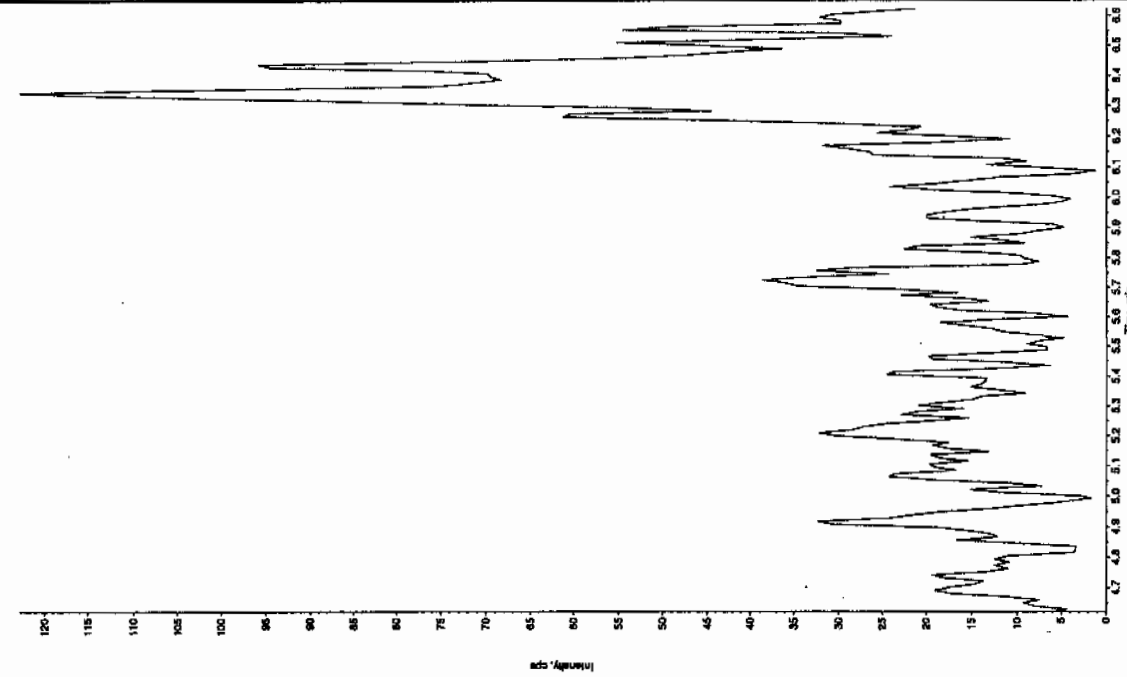
Sample Name: "245394002" Sample ID: "944835[2]LFR" File: "EX502140072.will"
 Peak Name: "Tri(p-cresyl) phosphate" Mass(es): "353.1/91.0 amu"
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/15/2010
 Acq. Time: 8:53:26 AM
 Modified: No



Sample Name: "245394002" Sample ID: "944835[2]LFR" File: "EX502140072.will"
 Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/15/2010
 Acq. Time: 8:53:26 AM
 Modified: No



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: RE15-10-7871

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394003

Sample Amount 2

Moisture: 10.9

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208281a

Date Analyzed: 14-FEB-10 08:30

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	185	J
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	7720	
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

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

James: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208281a

Date: 14-Feb-2010

Time: 08:30:11

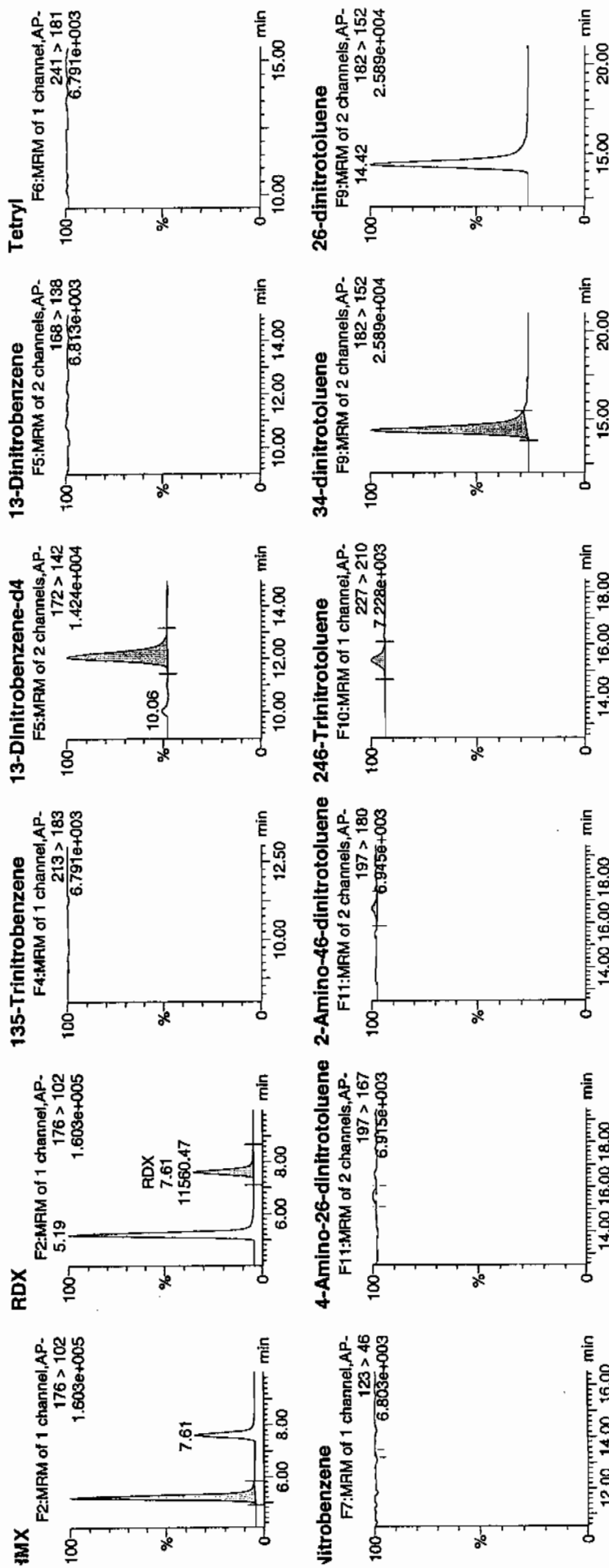
ID: 245394003

File: 3:2,A

MC 102 For HMK
SEE EXP0208302a

1-107
2/15/10

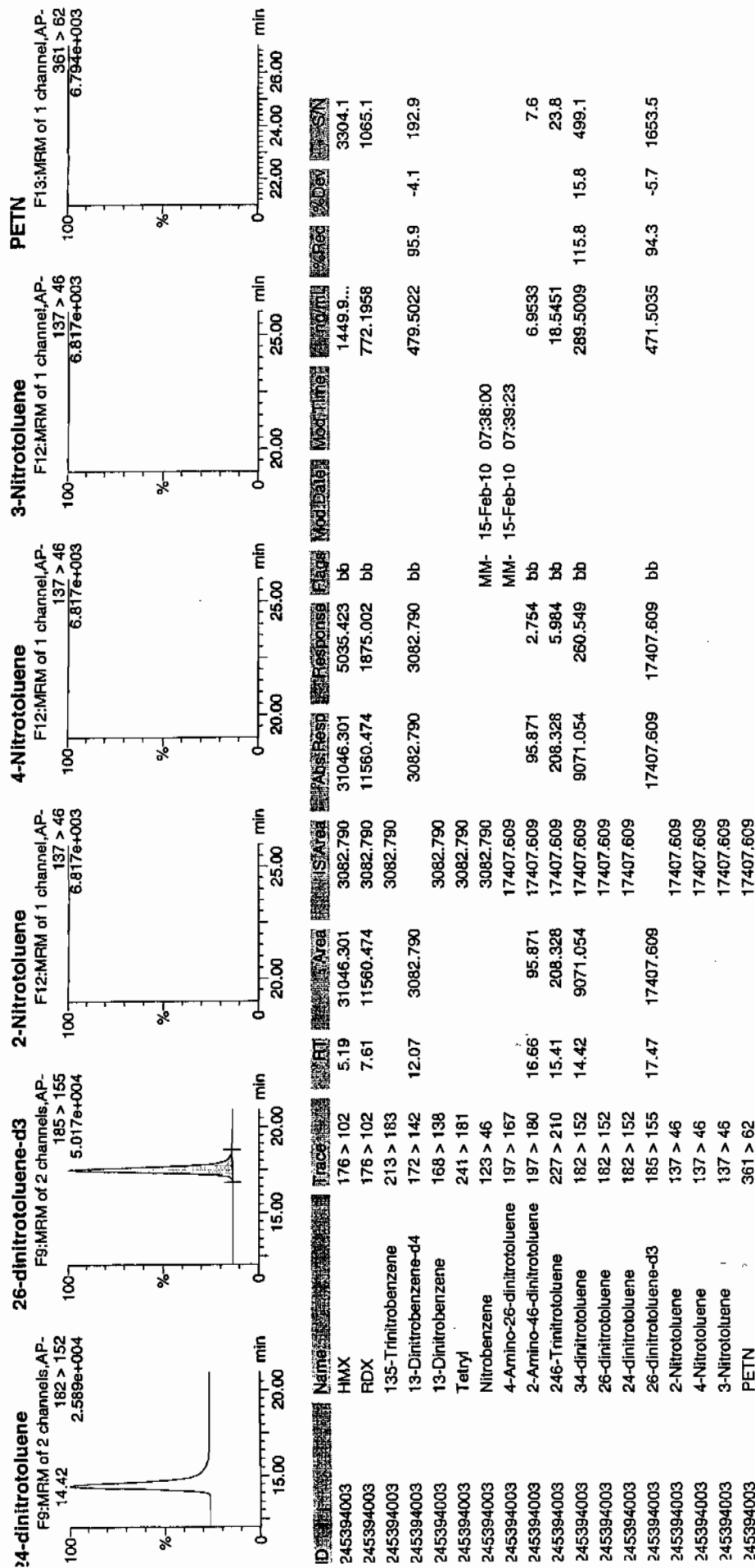
LAB 944935 / 8022 / 2 /



470 MC
02/15/10

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



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7871

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394003

Sample Amount 2

Moisture: 10.9

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 10

Injection Volume (uL): 50

GEL data file: EXP0208302a

Date Analyzed: 14-FEB-10 18:52

Units: ug/kg

Cas No.	Compound	Concentration*	Q
2691-41-0	HMX	15400	

*Concentration =

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

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA6.qld, Time: Mon Feb 15 07:43:55 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\DATA\EXP0208302a

Date: 14-Feb-2010

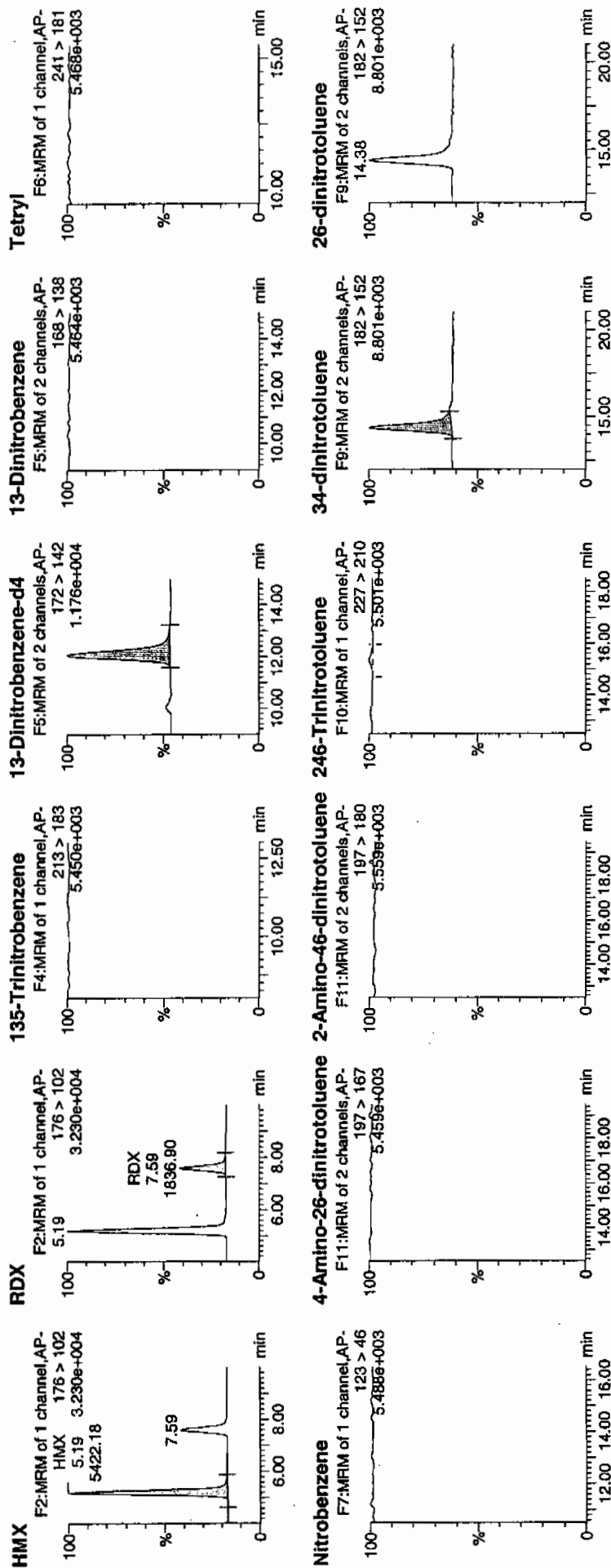
Time: 18:52:04

ID: 245394003

Vial: 3:4,B

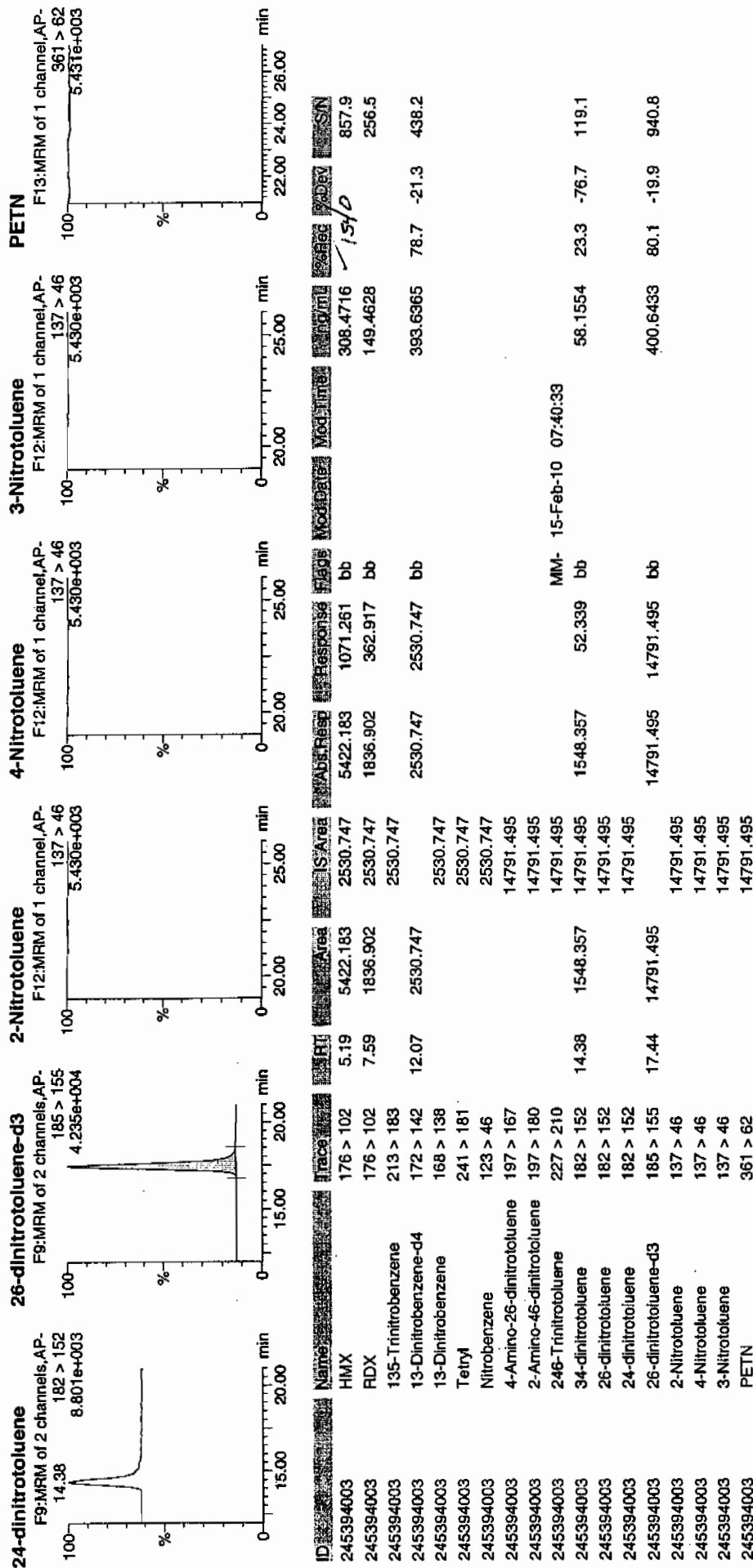
Report HULX 3 / EXT 02082819

2/5/10
4/4/17



02/05/10

Dataset: C:\MASSLYNX\New_Exp\PROV020810expA6.qld, Time: Mon Feb 15 07:43:55 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7871

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394003

Sample Amount 2

Moisture: 10.9

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140073.wiff

Date Analyzed: 15-FEB-10 09:09

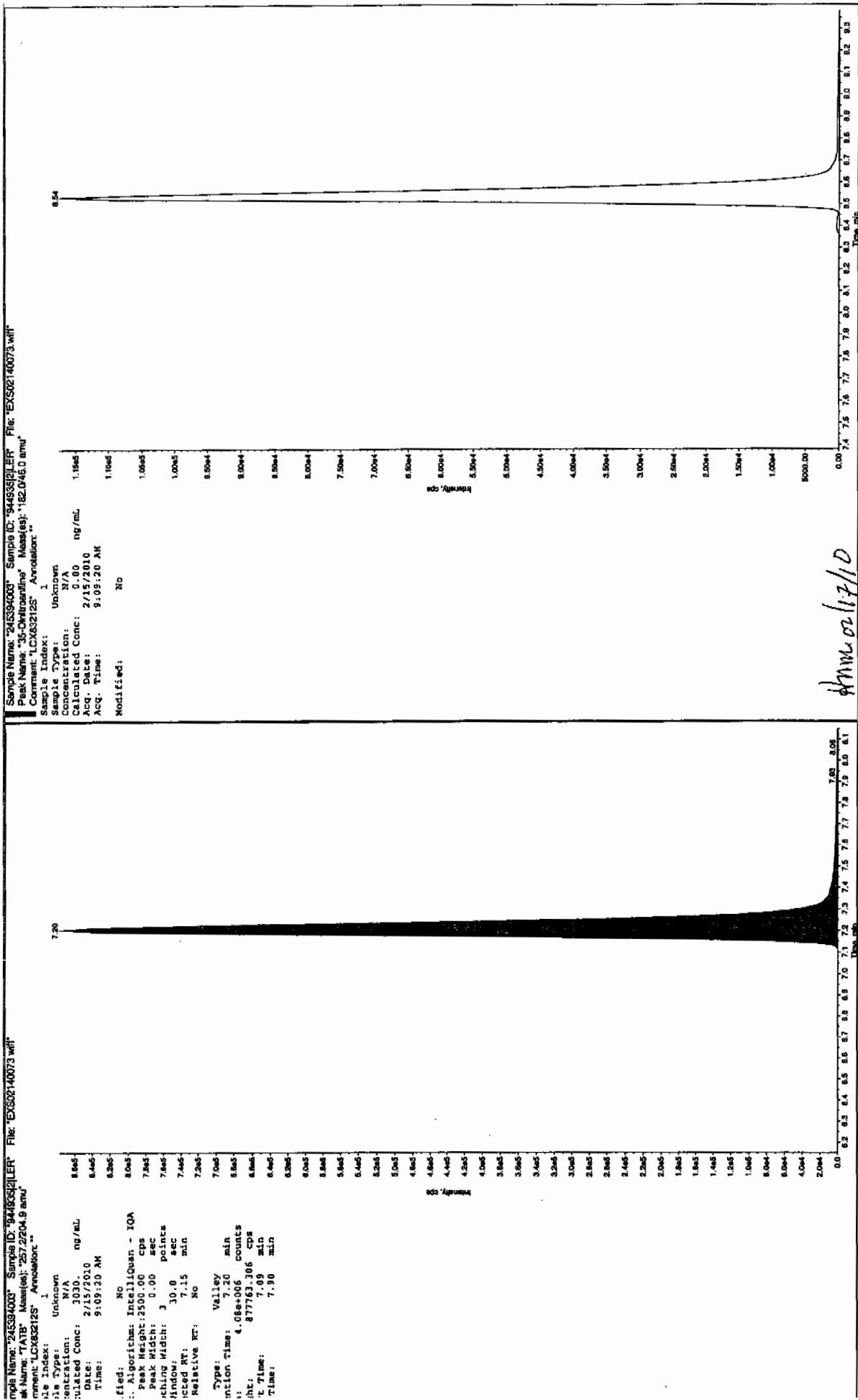
Units: ug/kg

Cas No.	Compound	Concentration*	Q
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

RA 104 TAB for TATB
 2/17/10

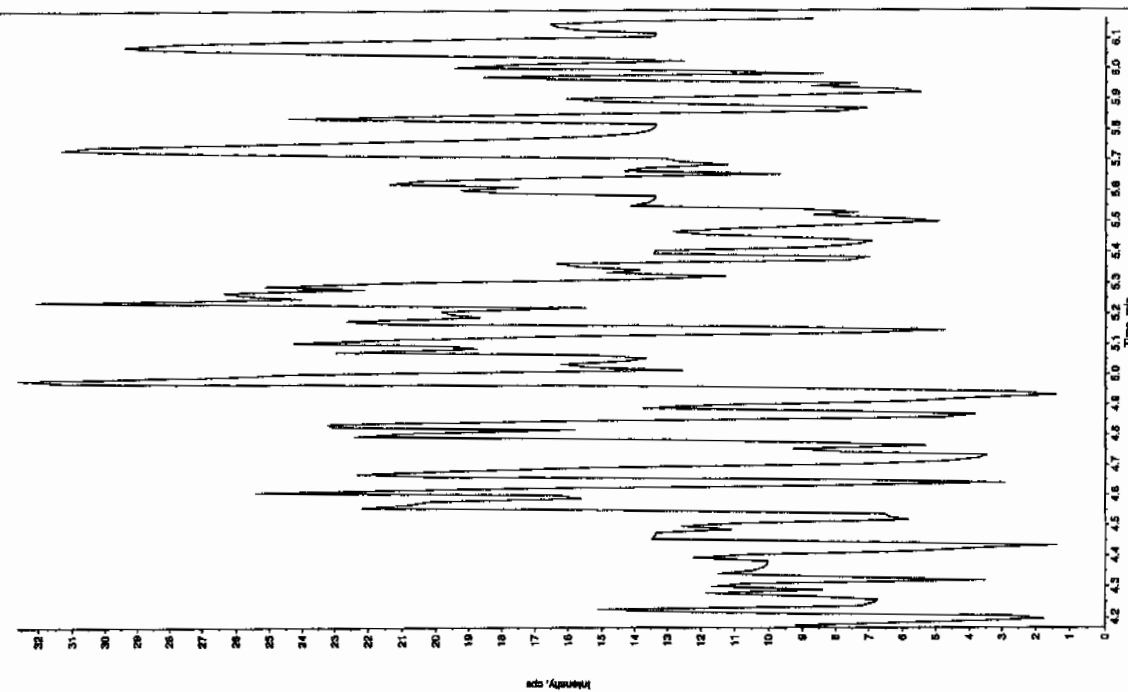
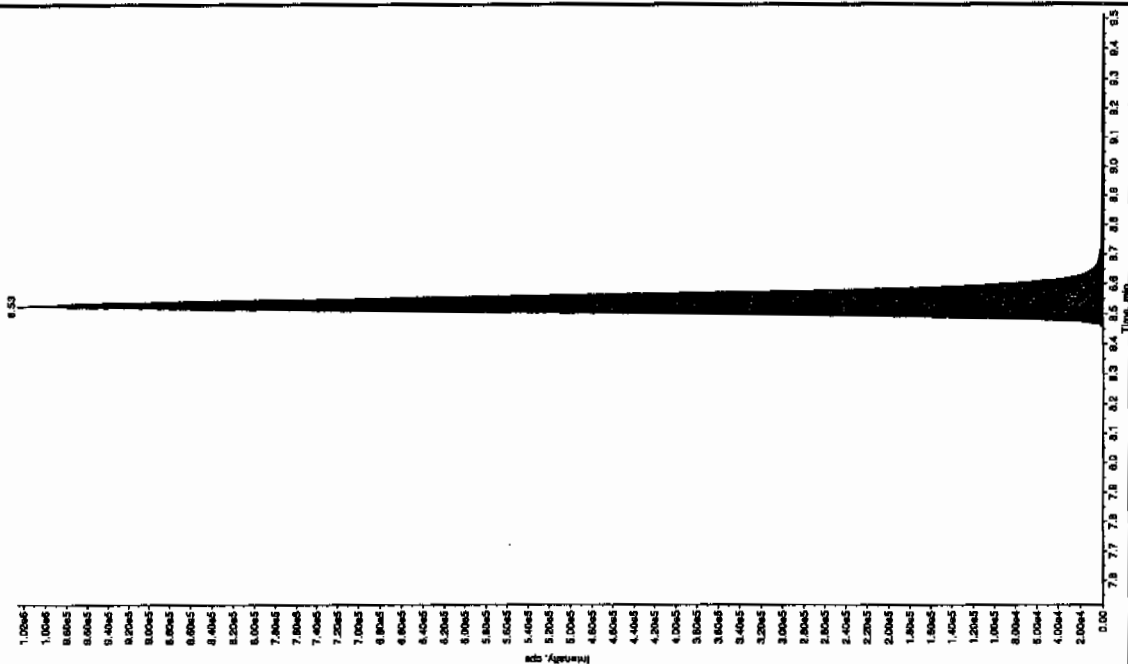


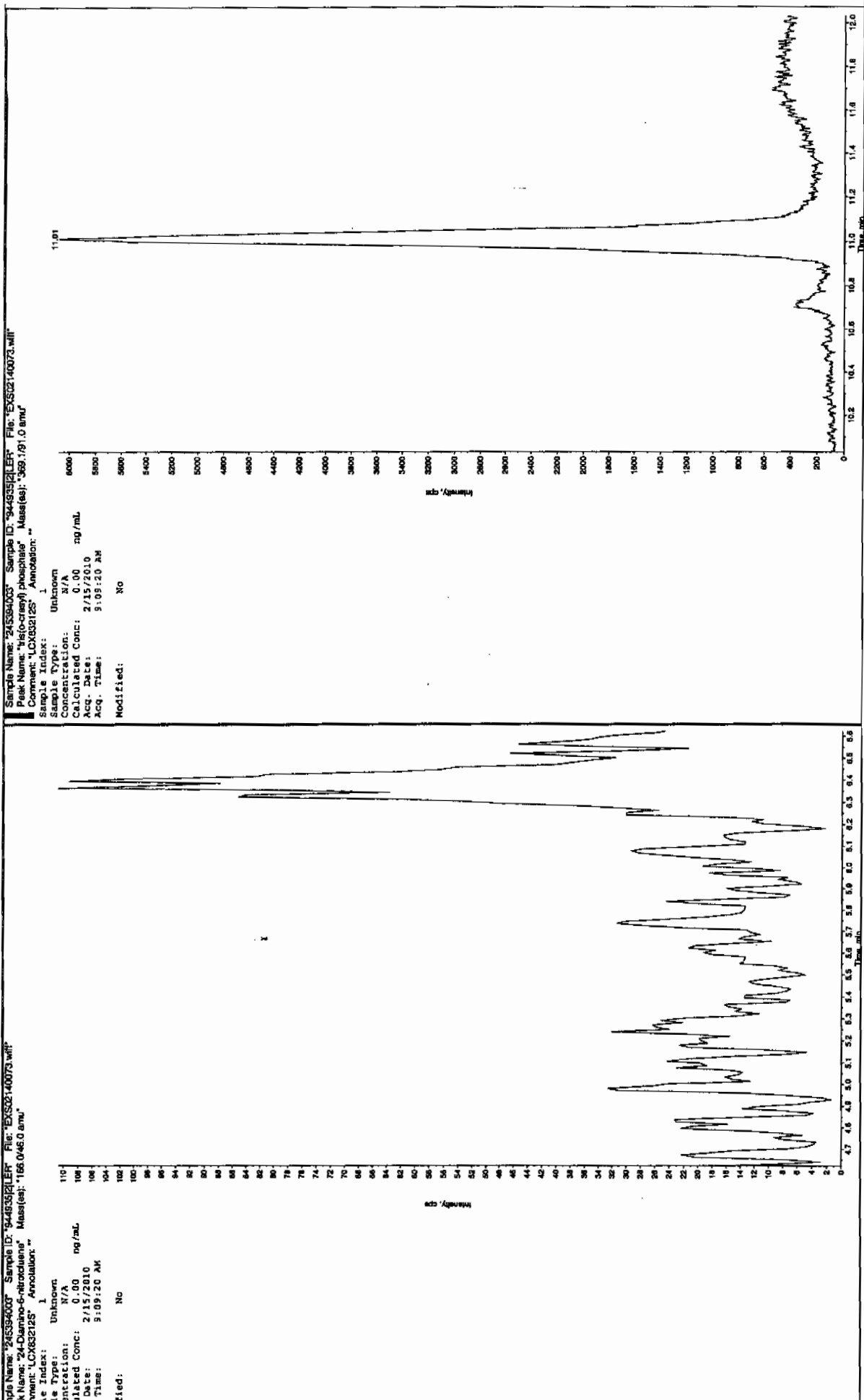
Sample Name: "245394003" Sample ID: "94493521ER" File: "EX502140073.wif"
 Peak Name: "26-Diamino-4-nitrobenzene" Mass(es): "166.046.0 amu"
 Comment: "LCX632125" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/15/2010
 Acq. Time: 9:09:20 AM
 Modified: No

Sample Name: "245394003" Sample ID: "94493521ER" File: "EX502140073.wif"
 Peak Name: "34-Dinitrobenzene" Mass(es): "182.07151.9 amu"
 Comment: "LCX632125" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 307. ng/mL
 Acq. Date: 2/15/2010
 Acq. Time: 9:09:20 AM
 Modified: No
 Algorithm: IntelliQuan - ICA
 Peak Height: 1460.00 cps
 Peak Width: 0.00 sec
 Peak Width: 3 points
 Window: 15.0 sec
 Retention Time: 8.52 min
 Relative RT: No
 Type: Valley
 Retention Time: 8.53 min
 Height: 3.99e+05 counts
 RT: 10.6227.539 cps
 RT: 8.41 min
 Time: 8.32 min





3L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7871

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394003

Sample Amount 2

Moisture: 10.9

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 10

Injection Volume (uL): 50

GEL data file: EXS02140116.wiff

Date Analyzed: 15-FEB-10 20:24

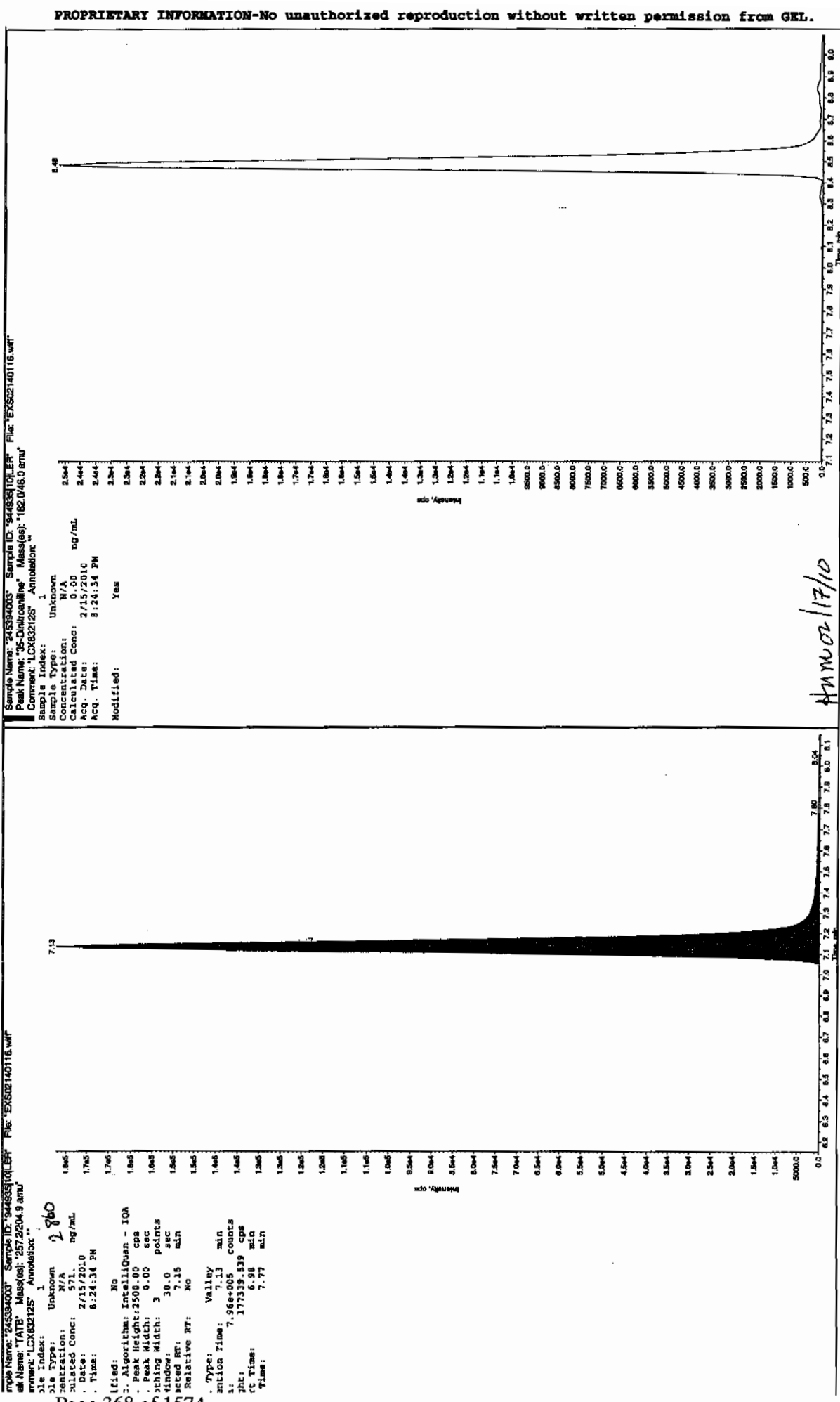
Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	28600	

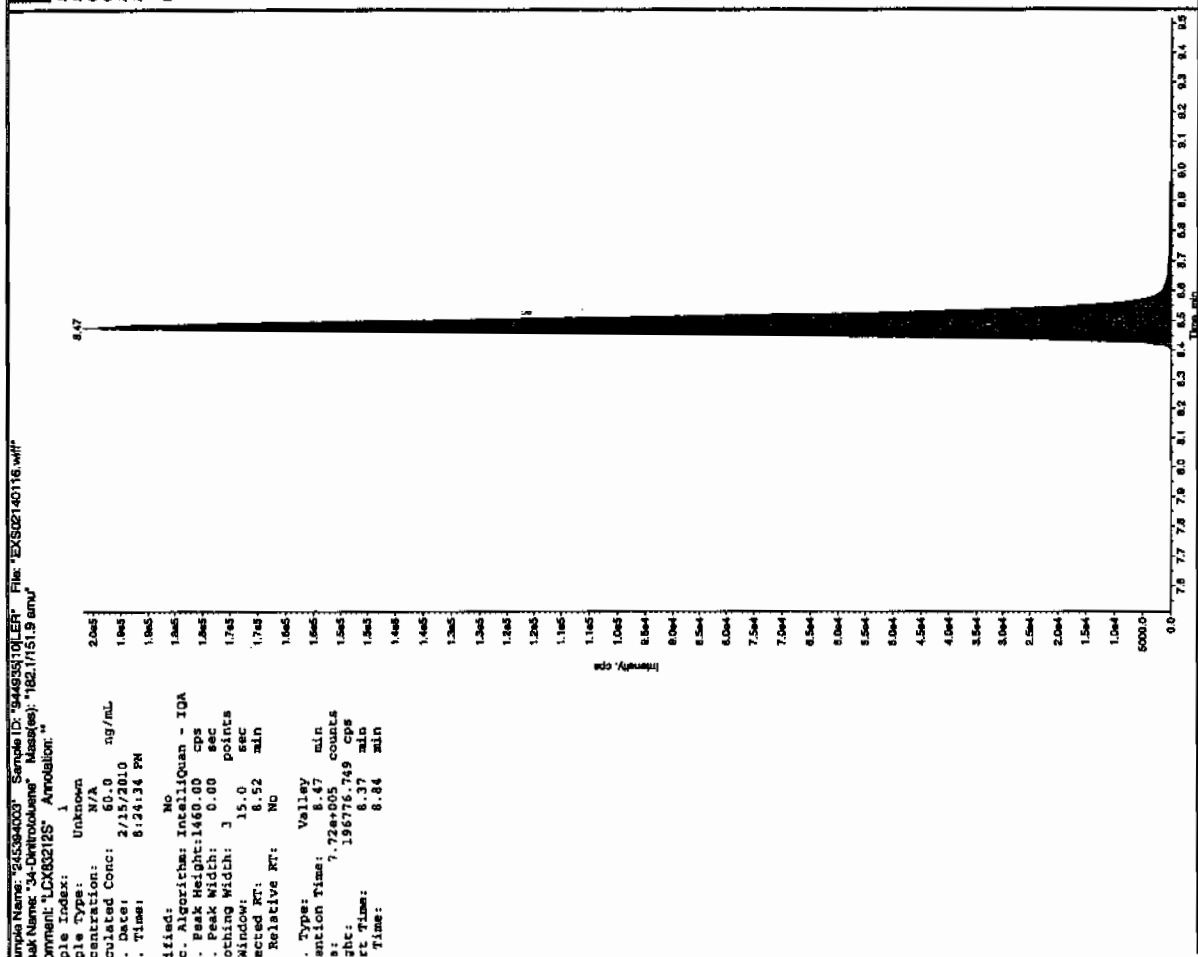
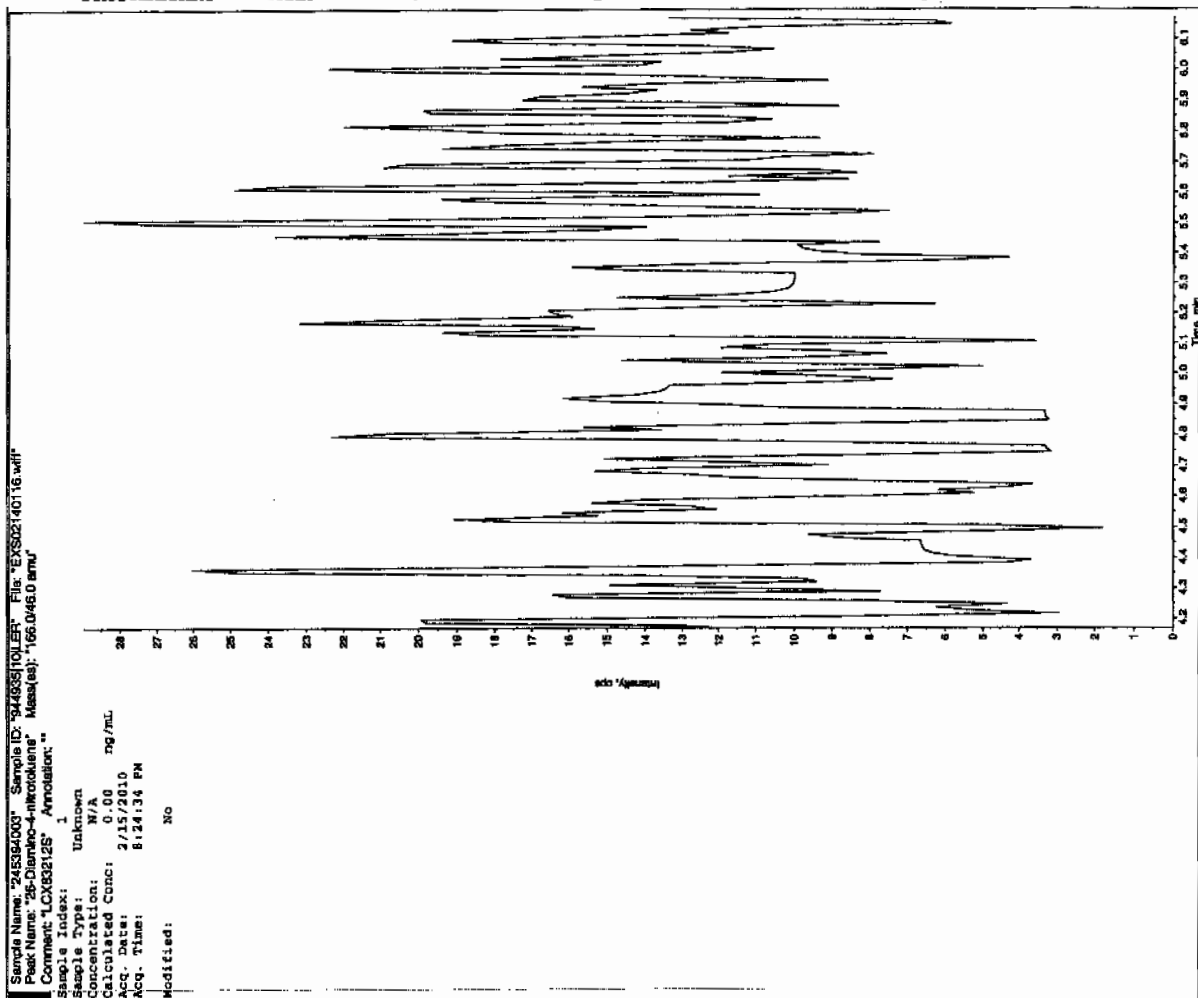
*Concentration =

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

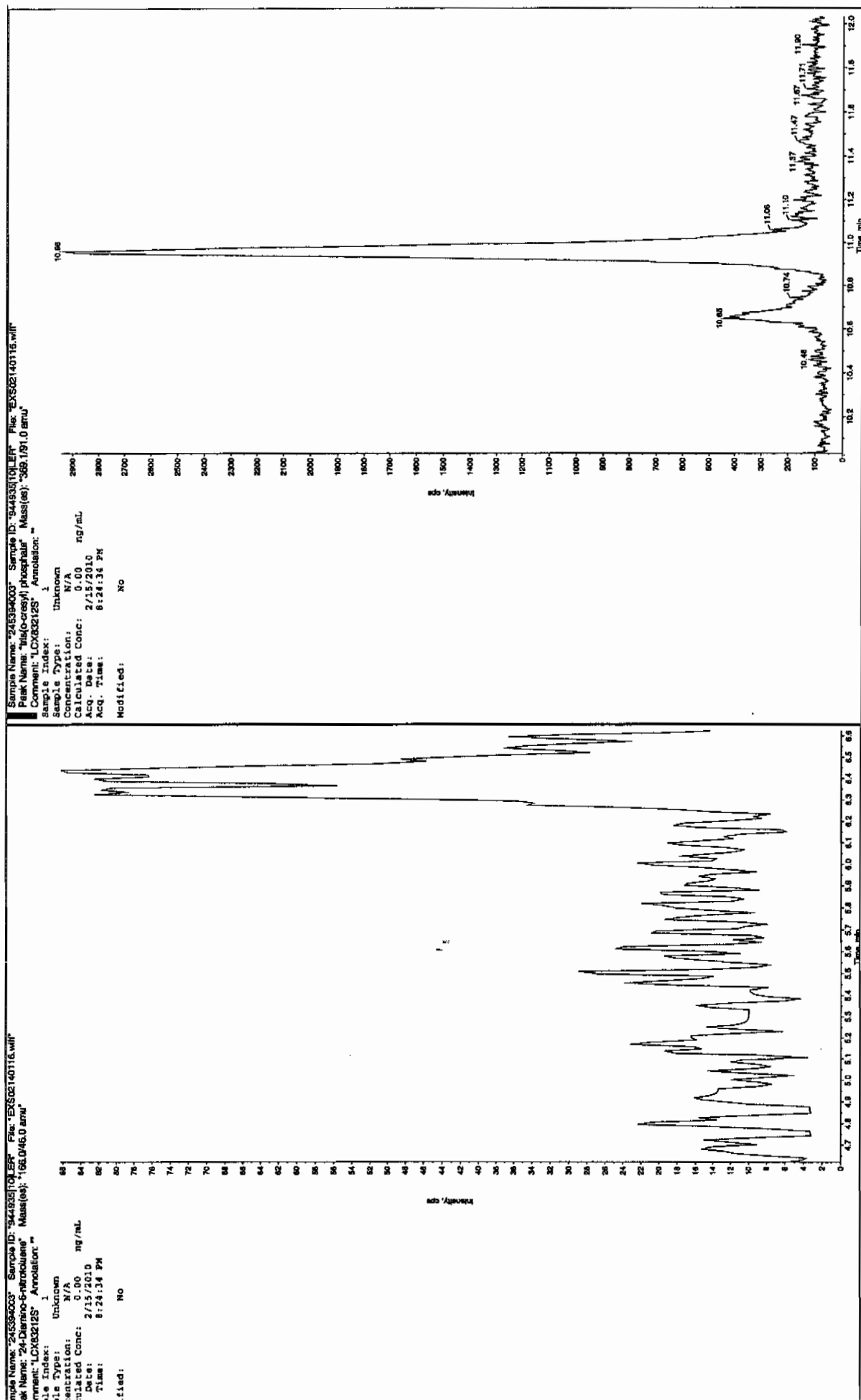
trap only Jan 2/12/10



Jan 2/17/10



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



3L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7872

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394004

Sample Amount 2

Moisture: 11.2

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208303a

Date Analyzed: 14-FEB-10 19:21

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	182	J
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

*Concentration =

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

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA6.qld, Time: Mon Feb 15 07:43:55 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208303a

Date: 14-Feb-2010

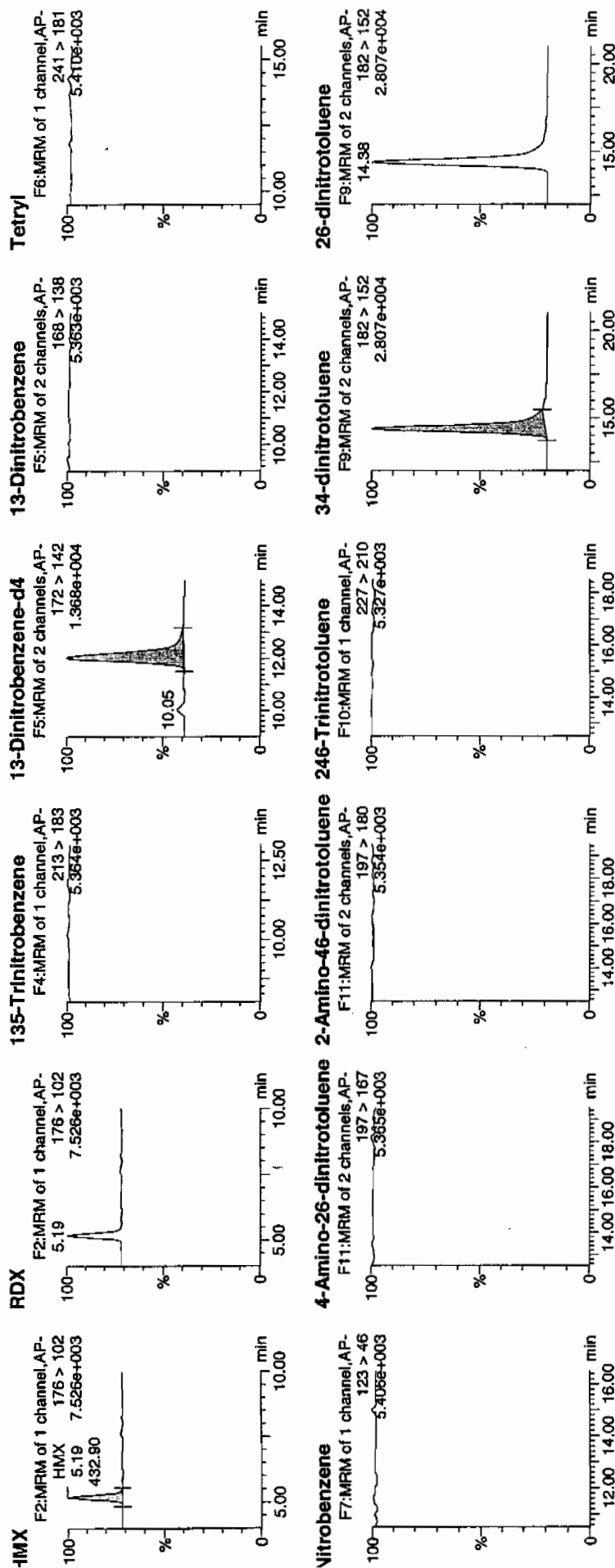
Time: 19:21:37

ID: 245394004

Label: 3:2,B

not
2/15/10

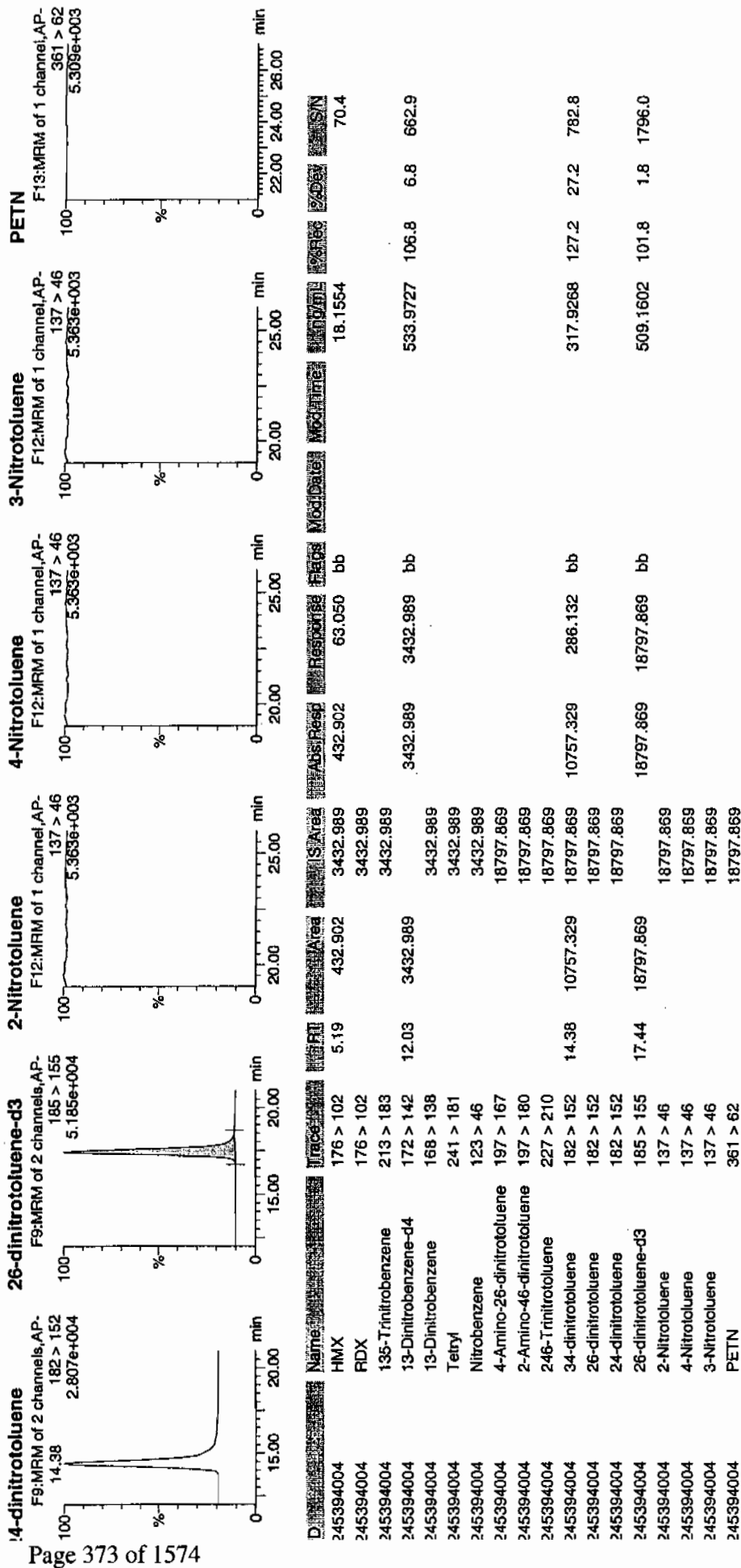
944935 / 8033 / 2 /



4/11/10 2/15/10

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



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7872

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394004

Sample Amount 2

Moisture: 11.2

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140115.wiff

Date Analyzed: 15-FEB-10 20:08

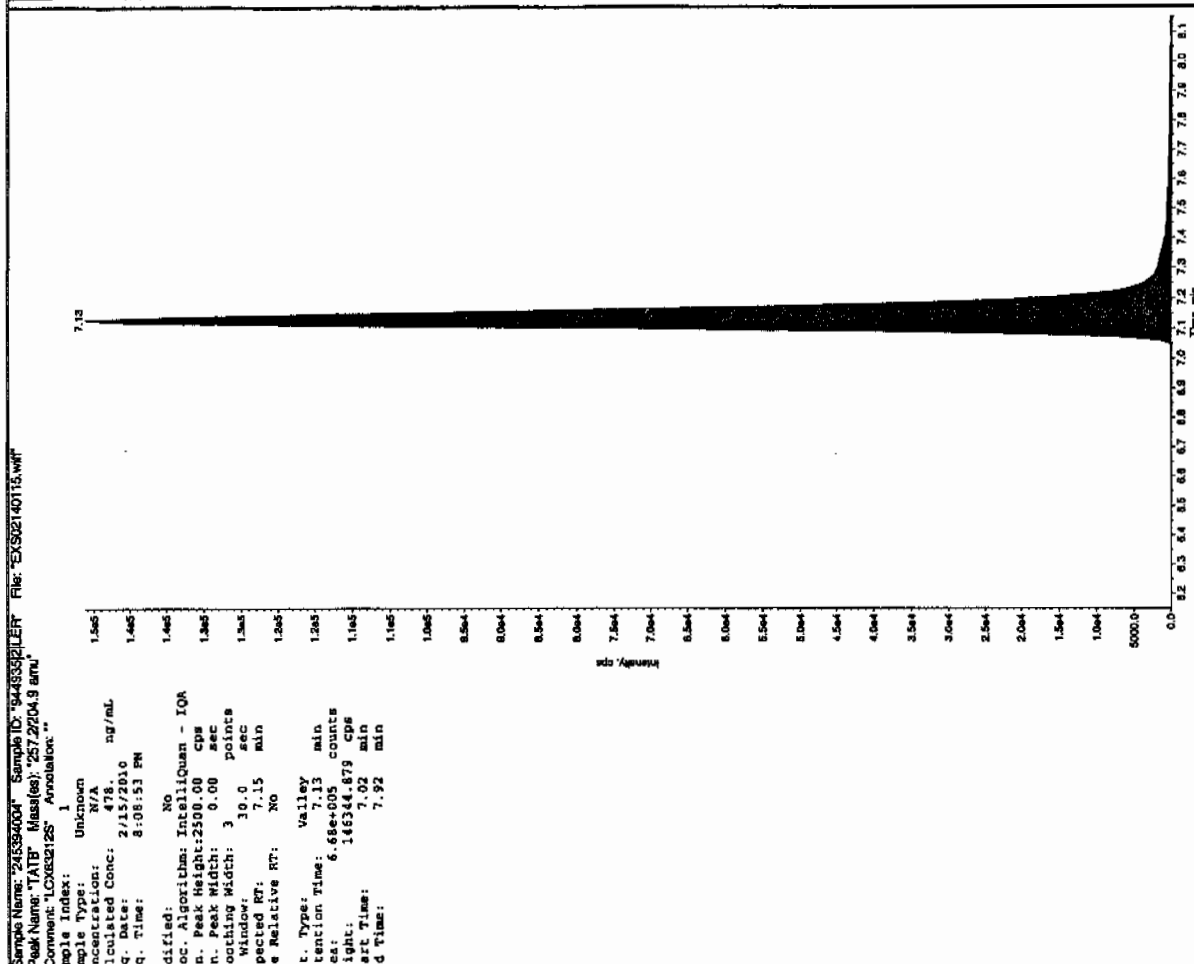
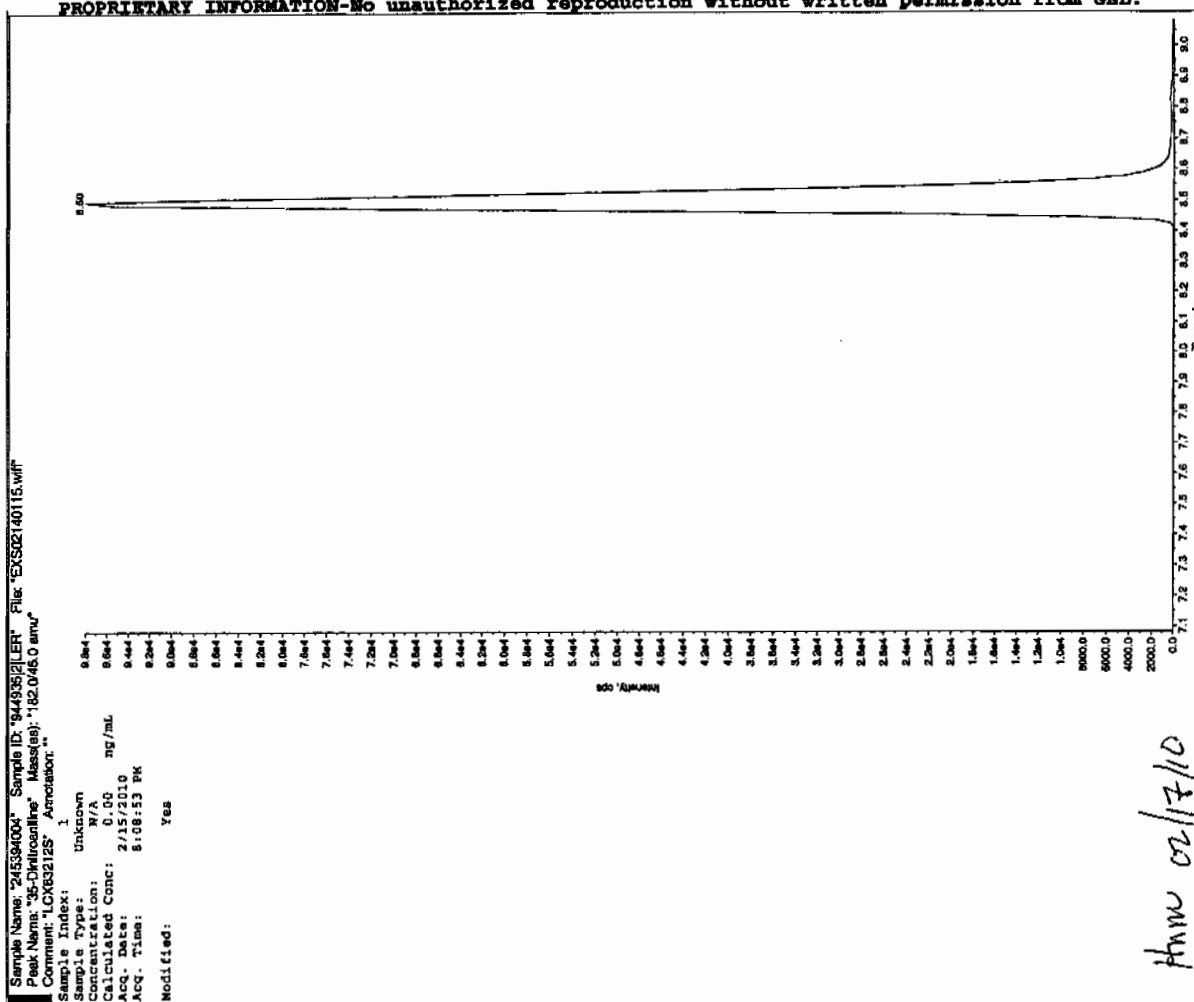
Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	4780	
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

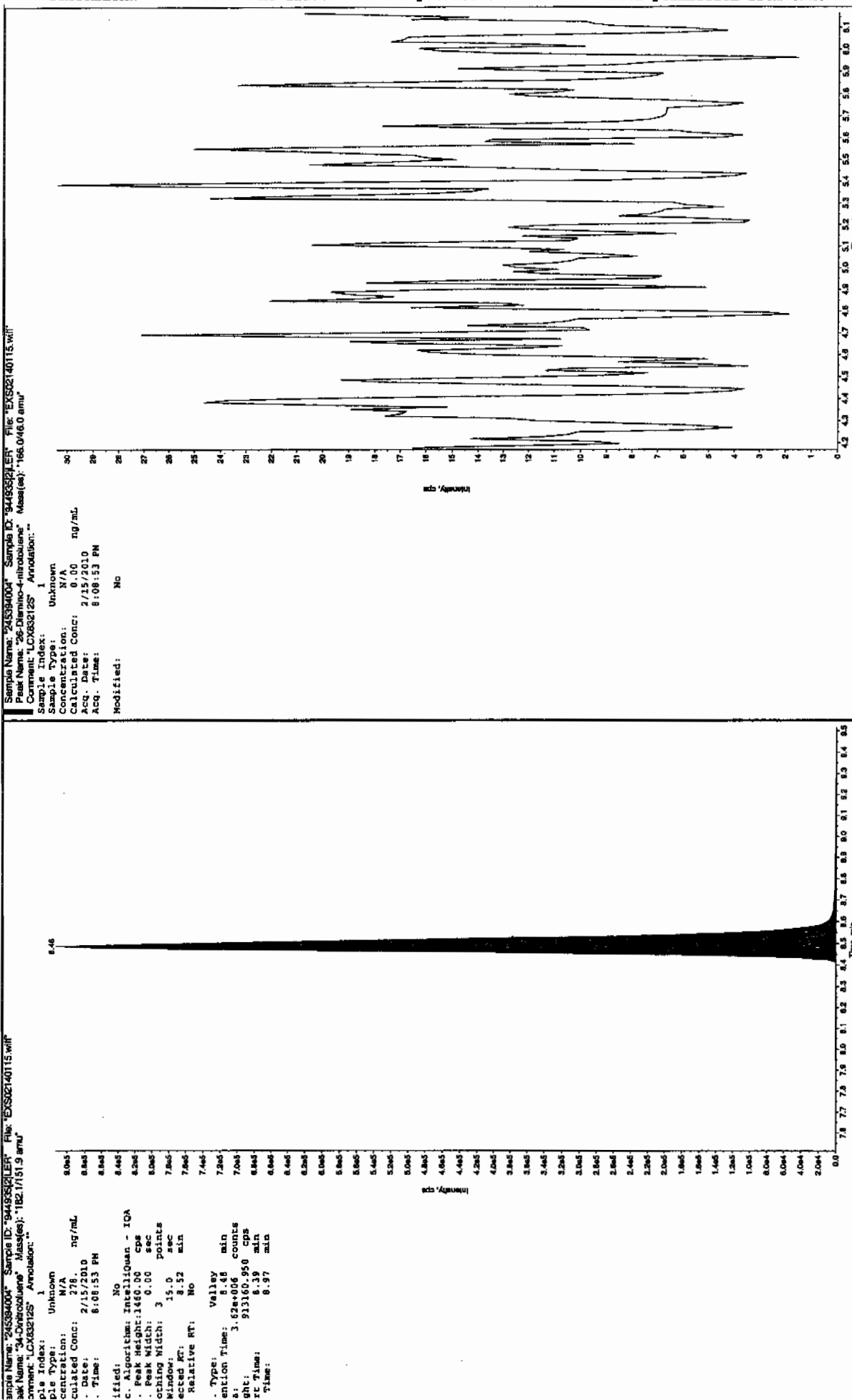
*Concentration =

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

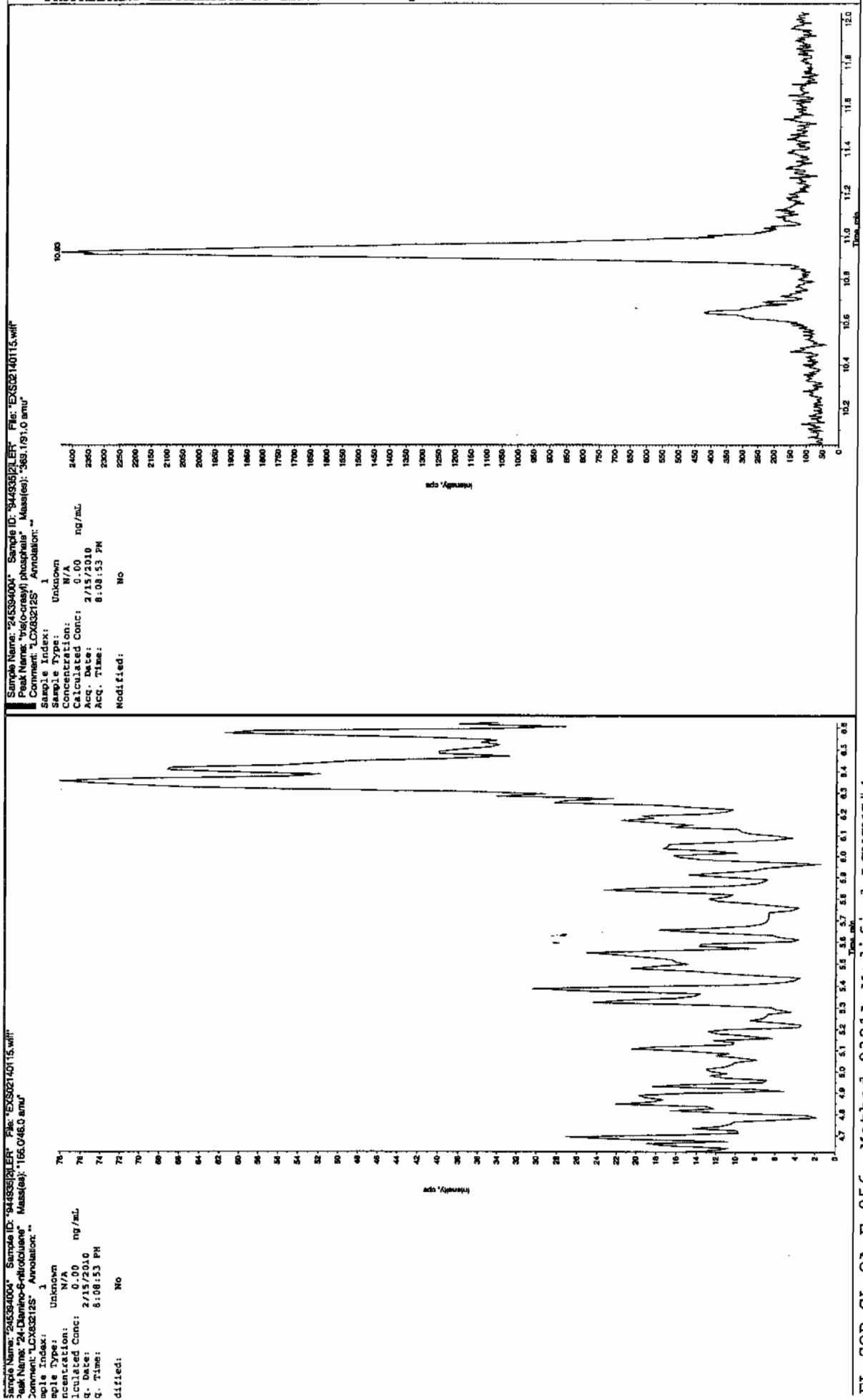
See 2/17/10



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



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



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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7870

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394005

Sample Amount 2

Moisture: 13.1

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208283a

Date Analyzed: 14-FEB-10 09:29

Units: ug/kg

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

*Concentration =

Instrument Value	X	Concentrated Extract Volume	X	Dilution Factor
		Sample Amount		

Printed: Mon Feb 15 07:46:07 2010, Page 17 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\EXP0208283a

Date: 14-Feb-2010

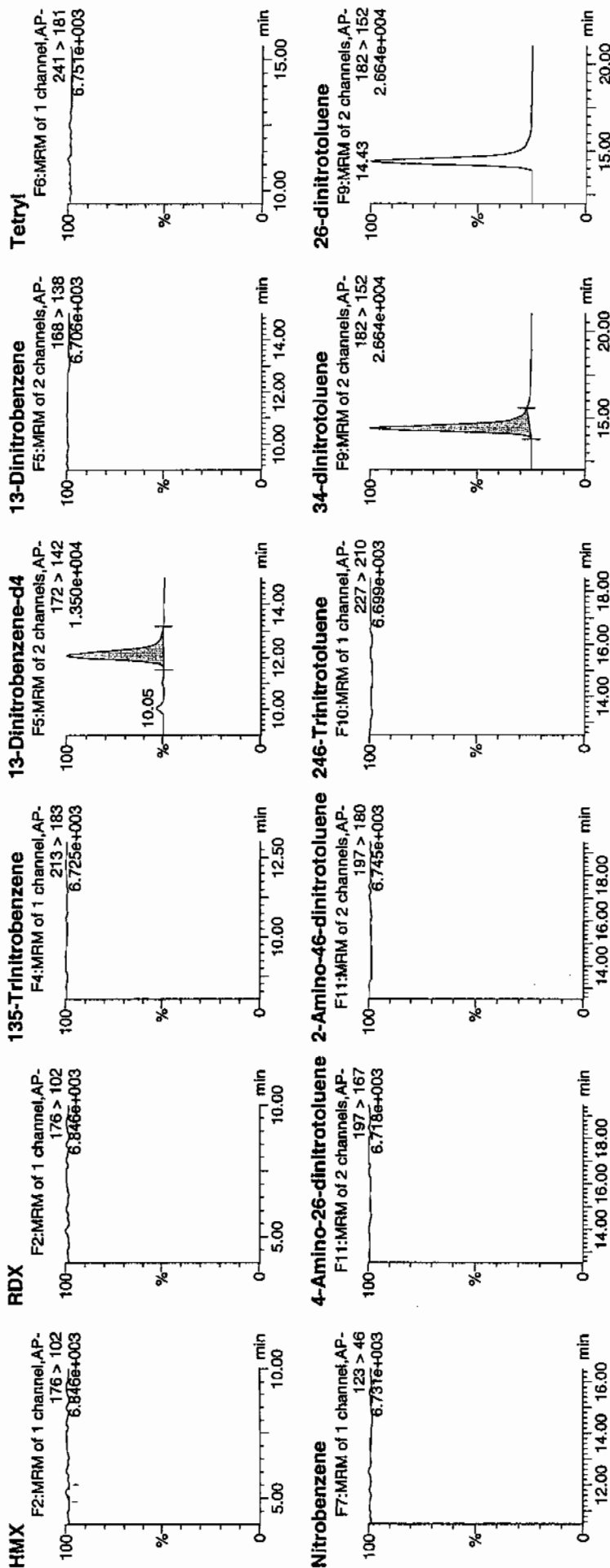
Time: 09:29:10

ID: 245394005

Vial: 3:2,C

2/15/10

944935 / 8022 / 2

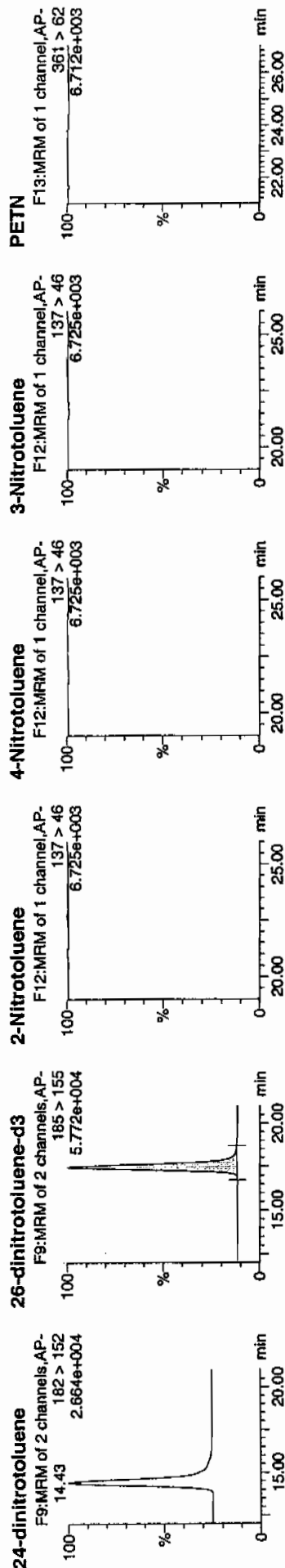


Amu 2/15/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYN\New_Exp.PRO\020810expA6.qld, Time: Mon Feb 15 07:43:55 2010

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7870

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394005

Sample Amount 2

Moisture: 13.1

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140075.wiff

Date Analyzed: 15-FEB-10 09:40

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

San 2/17/10

Sample Name: "245394005" Sample ID: "94493521LRF" File: "EX502140075.wif"

Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"

Comment: "LCX832125" Annotation: ""

Sample Index: 1

Sample Type: Unknown

Concentration: 0.00 ng/mL

Calculated Conc: 2/15/2010

Acq. Date: 9:40:45 AM

Acq. Time: 9:40:45 AM

Modified: Yes

Sample Name: "245394005" Sample ID: "94493521LRF" File: "EX502140075.wif"

Peak Name: "TATB" Mass(es): "257.2204.8 amu"

Comment: "LCX832125" Annotation: ""

Sample Index: 1

Sample Type: Unknown

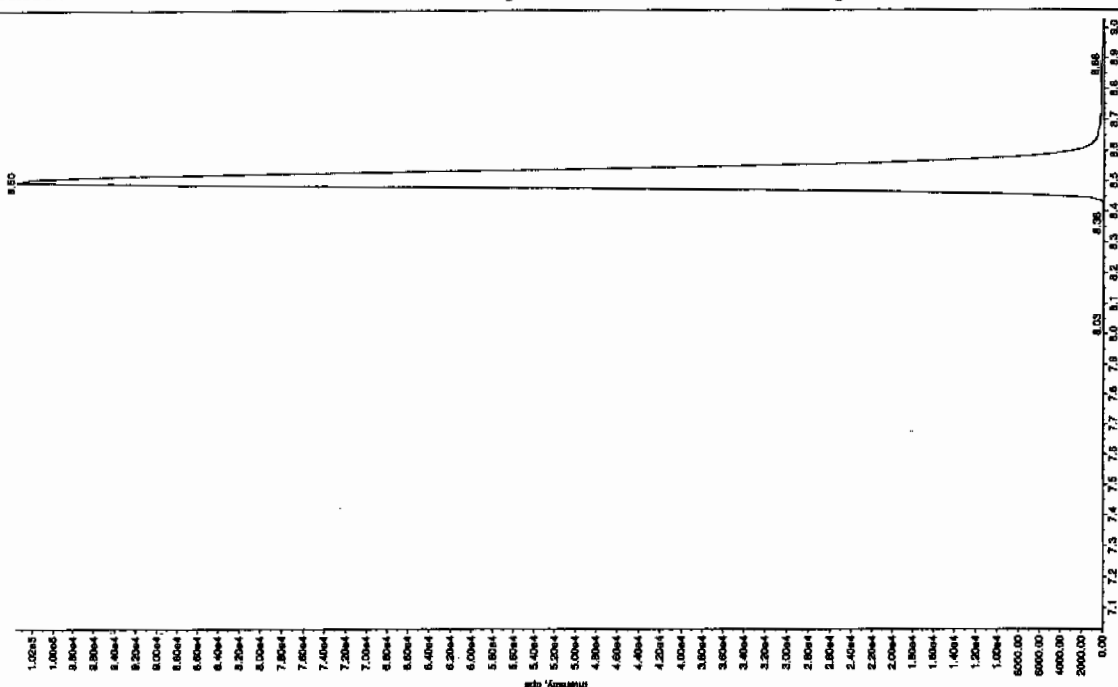
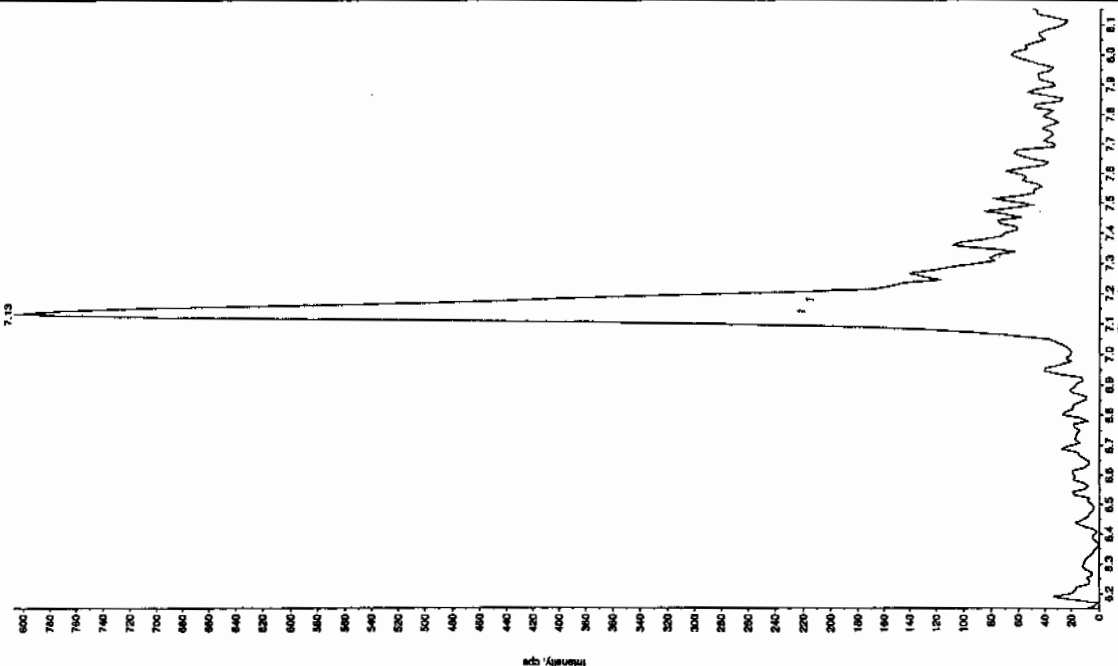
Concentration: 0.00 ng/mL

Calculated Conc: 2/15/2010

Acq. Date: 9:40:45 AM

Acq. Time: 9:40:45 AM

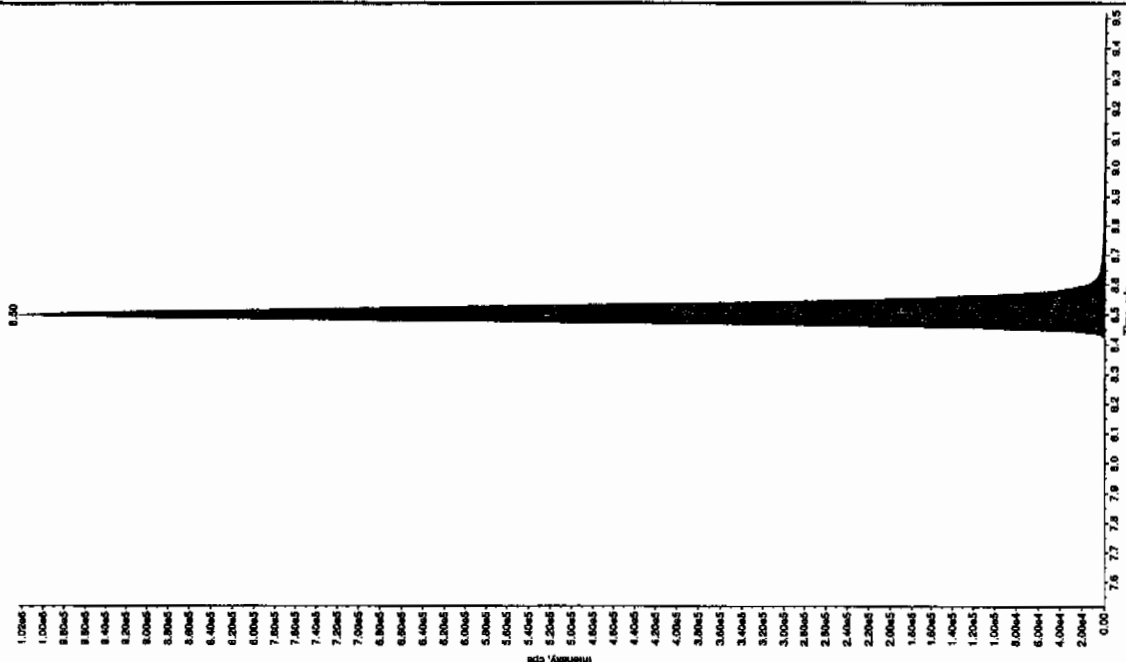
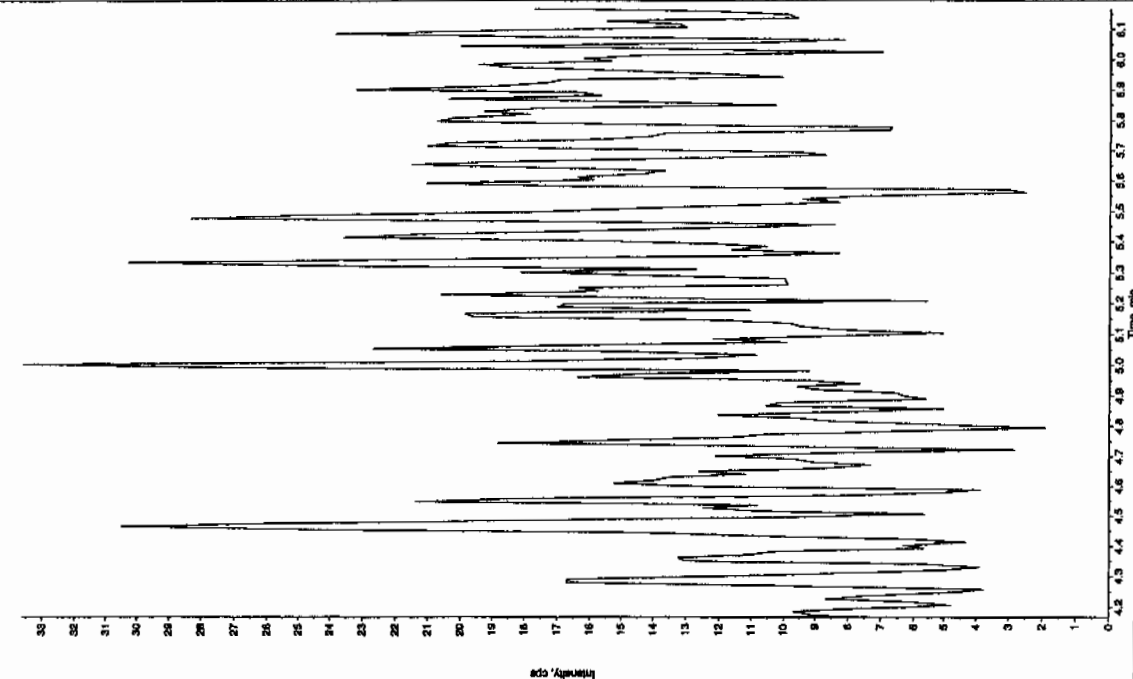
Modified: No



San 2/17/10

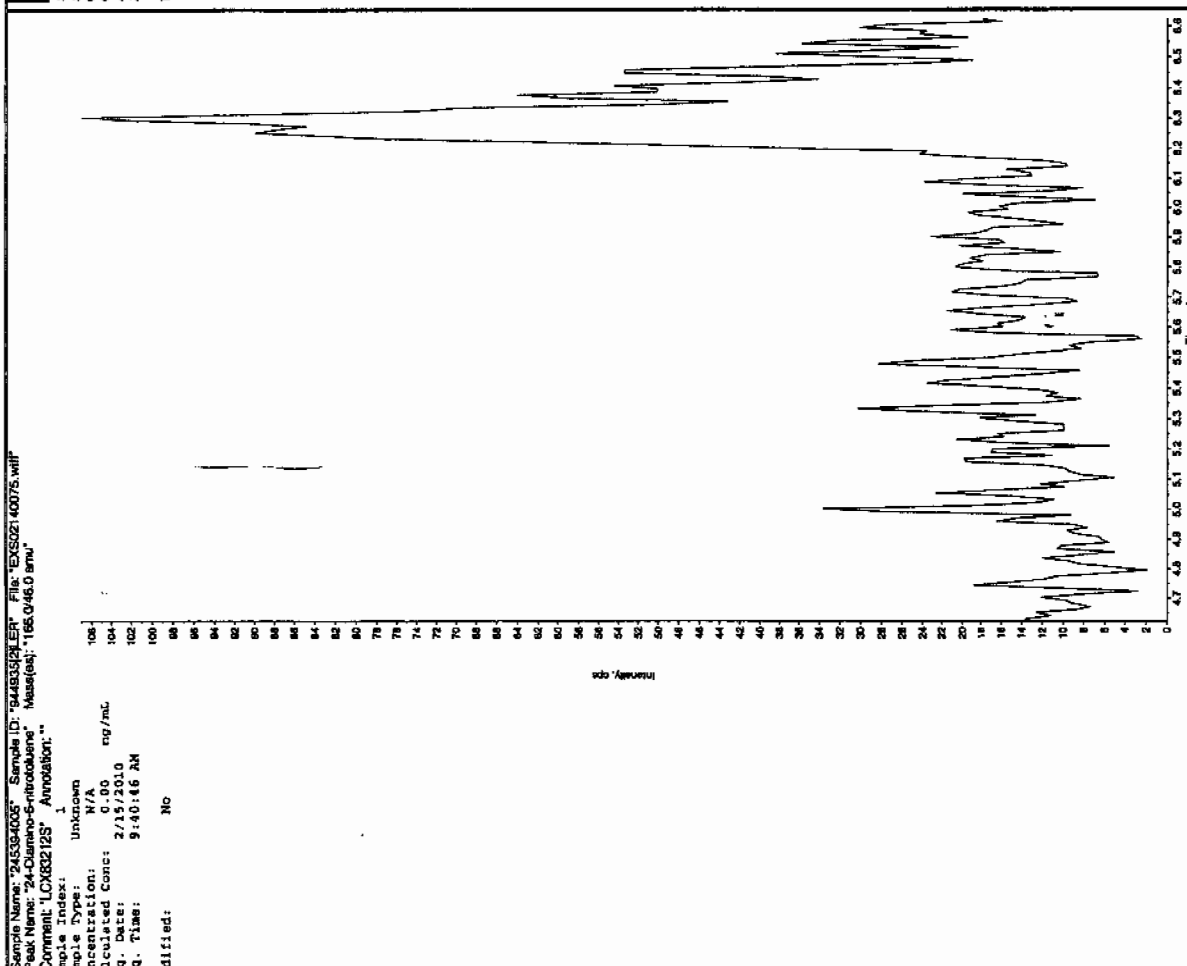
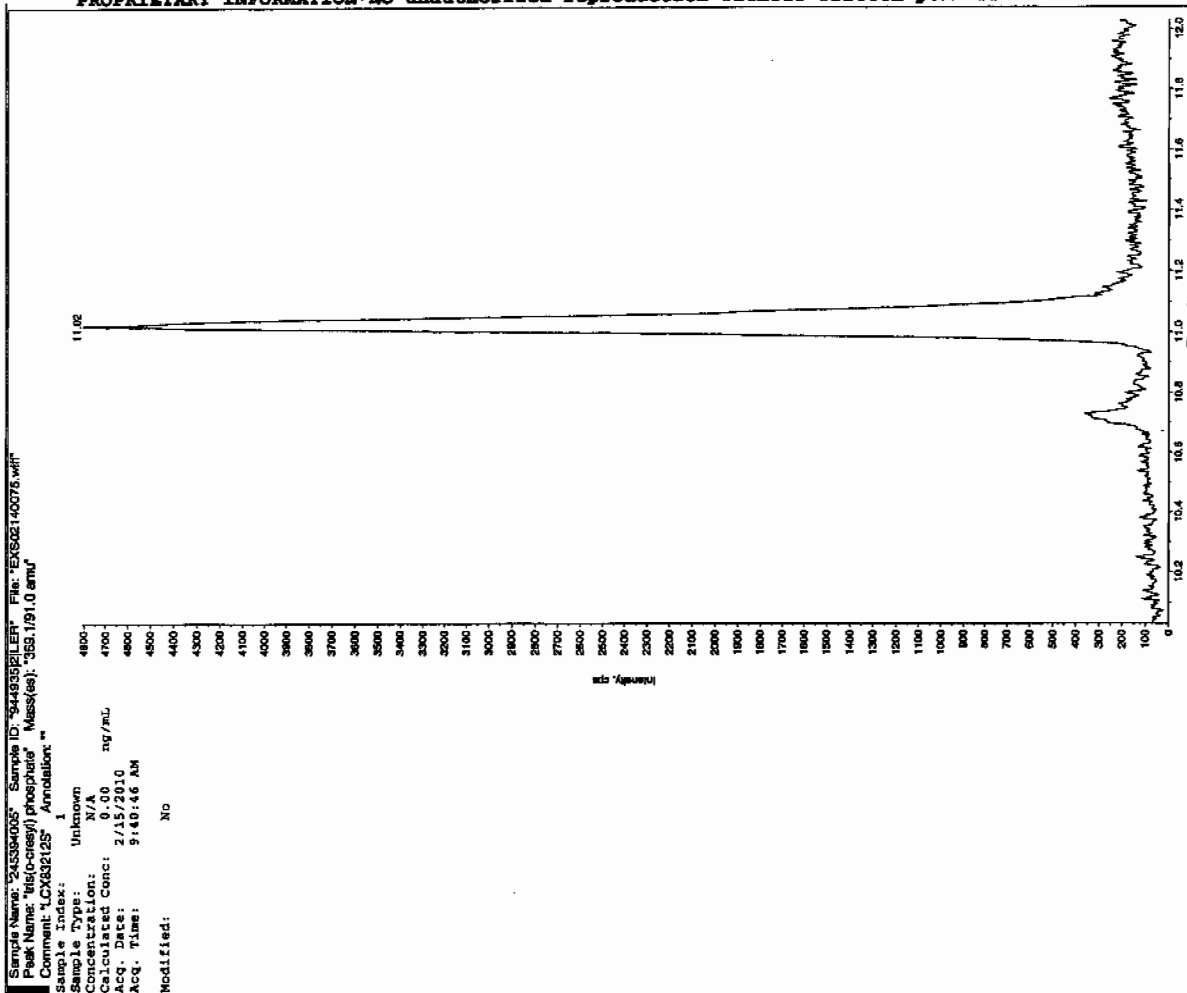
Sample Name: "245394005" Sample ID: "94493521ER" File: "EXS02140075.wif"
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.17519 amu"
 Comment: "LCX832125" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/15/2010
 Acq. Time: 9:40:46 AM
 Modified: No



Sample Name: "245394005" Sample ID: "94493521ER" File: "EXS02140075.wif"
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.17519 amu"
 Comment: "LCX832125" Annotation: "
 Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 303. ng/mL
 Acq. Date: 2/15/2010
 Acq. Time: 9:40:46 AM
 Modified: No
 GC-MS: 34-Dinitrofluorene - IOA
 n. Peak Weight: 1460.00 cps
 n. Peak Width: 0.00 sec
 n. Peak Width: 3 points
 Window: 15.0 sec
 Picked RT: 8.52 min
 e Relative RT: No
 t. Type: Valley
 Retention Time: 8.50 min
 ea: 3.94e+006 counts
 Light: 1022927.307 cps
 Art Time: 8.39 min
 d Time: 8.86 min

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: RE15-10-7873

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394006

Sample Amount 2

Moisture: 12.6

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208284a

Date Analyzed: 14-FEB-10 09:58

Units: ug/kg

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

*Concentration =

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

Printed: Mon Feb 15 07:46:07 2010, Page 19 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\020810expA6.qld

Date: 14-Feb-2010

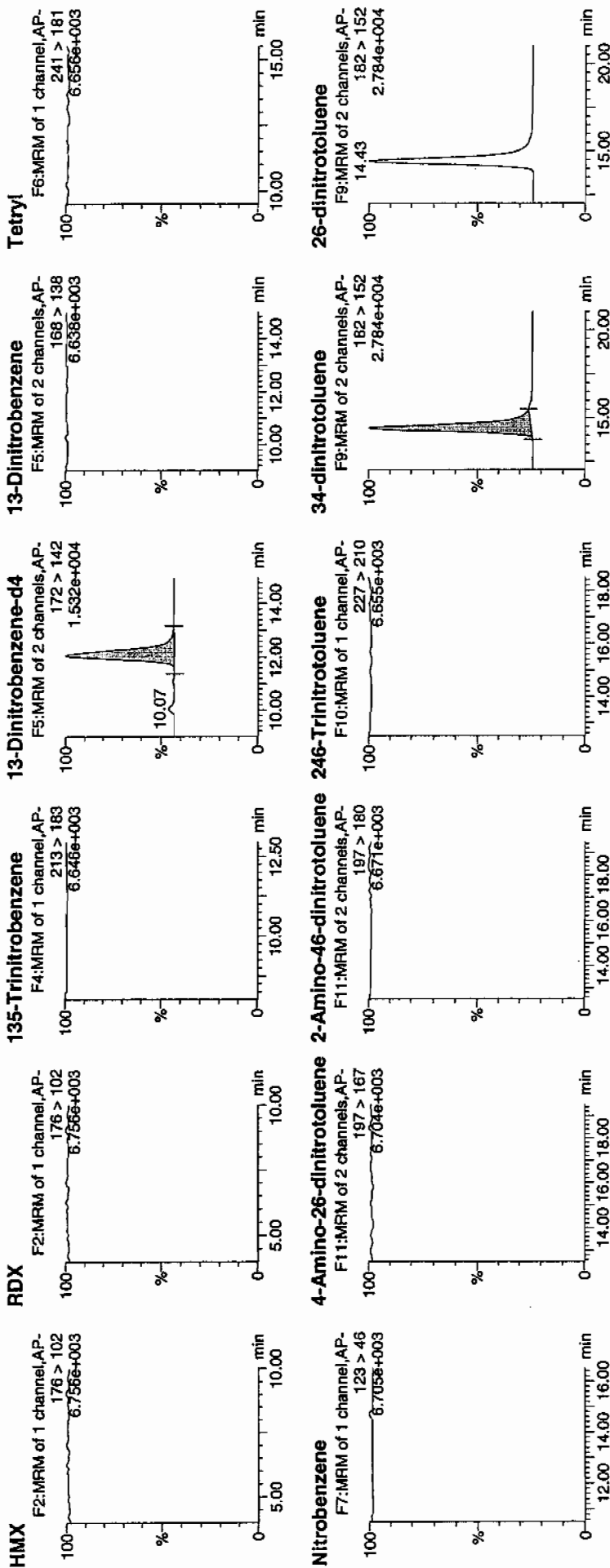
Time: 09:58:38

ID: 245394006

Vial: 3:2,D

10/17
2/5/10

1944935 / 8022 / 21

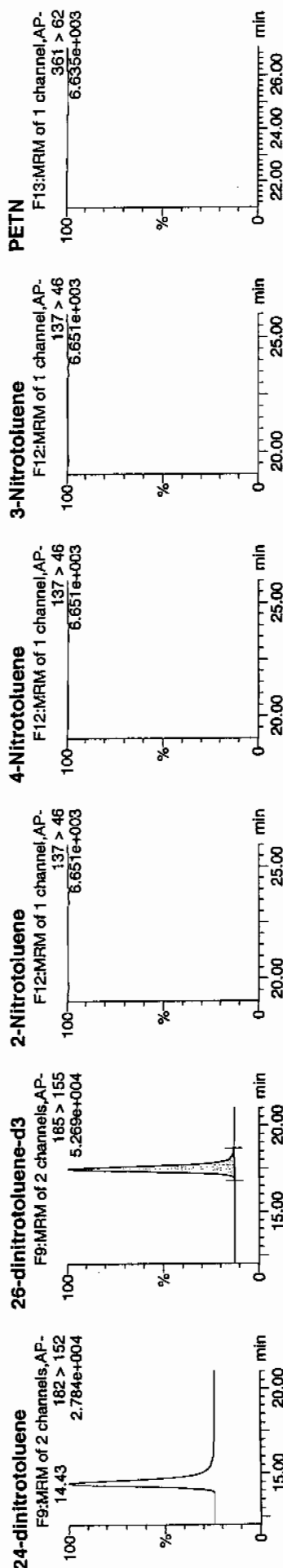


4/10/10

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	SArea	Abs Resp	Response	Flags	Mod Date	Mod Time	Amount	% Rec	% Dev	SSN
245394006	HMIX	176 > 102			3554.484									
245394006	RDX	176 > 102			3554.484									
245394006	135-Trinitrobenzene	213 > 183			3554.484									
245394006	13-Dinitrobenzene-d4	172 > 142	12.07	3554.484		3554.484	3554.484	bb			552.8702	110.6	10.6	82.4
245394006	13-Dinitrobenzene	168 > 138			3554.484									
245394006	Tetryl	241 > 181			3554.484									
245394006	Nitrobenzene	123 > 46			3554.484									
245394006	4-Amino-26-dinitrotoluene	197 > 167			18467.996									
245394006	2-Amino-46-dinitrotoluene	197 > 180			18467.996									
245394006	246-Trinitrotoluene	227 > 210			18467.996									
245394006	34-dinitrotoluene	182 > 152	14.43	10195.110	18467.996	10195.110	276.021	bb			306.6927	122.7	22.7	820.1
245394006	26-dinitrotoluene	182 > 152			18467.996									
245394006	24-dinitrotoluene	182 > 152			18467.996									
245394006	26-dinitrotoluene-d3	185 > 155	17.46	18467.996		18467.996	18467.996	bb			500.2252	100.0	0.0	1383.8
245394006	2-Nitrotoluene	137 > 46			18467.996									
245394006	4-Nitrotoluene	137 > 46			18467.996									
245394006	3-Nitrotoluene	137 > 46			18467.996									
245394006	PETN	361 > 62			18467.996									

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7873

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394006

Sample Amount 2

Moisture: 12.6

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140076.wiff

Date Analyzed: 15-FEB-10 09:56

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

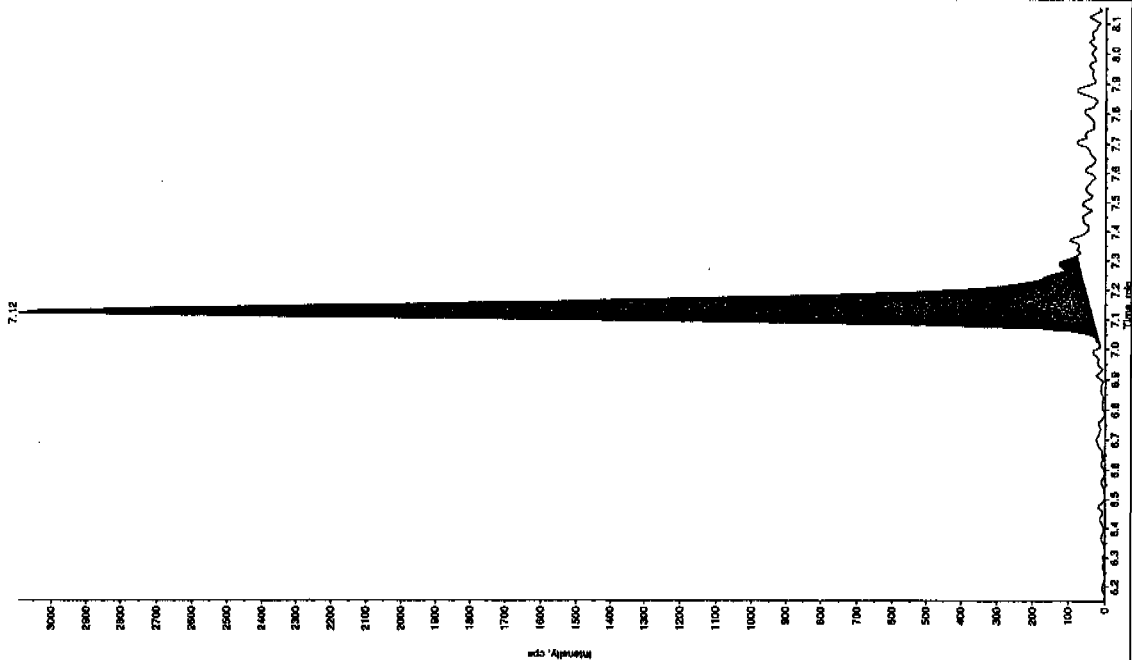
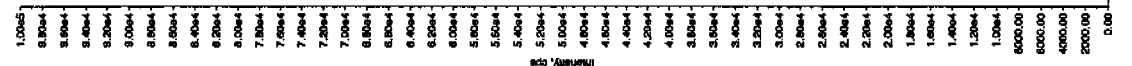
Sen 2/17/10

Sample Name: "245394006" Sample ID: "94483521ER" File: "EX502140076.wif"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 2/15/2010
Acq. Time: 9:56:29 AM
Modified: Yes

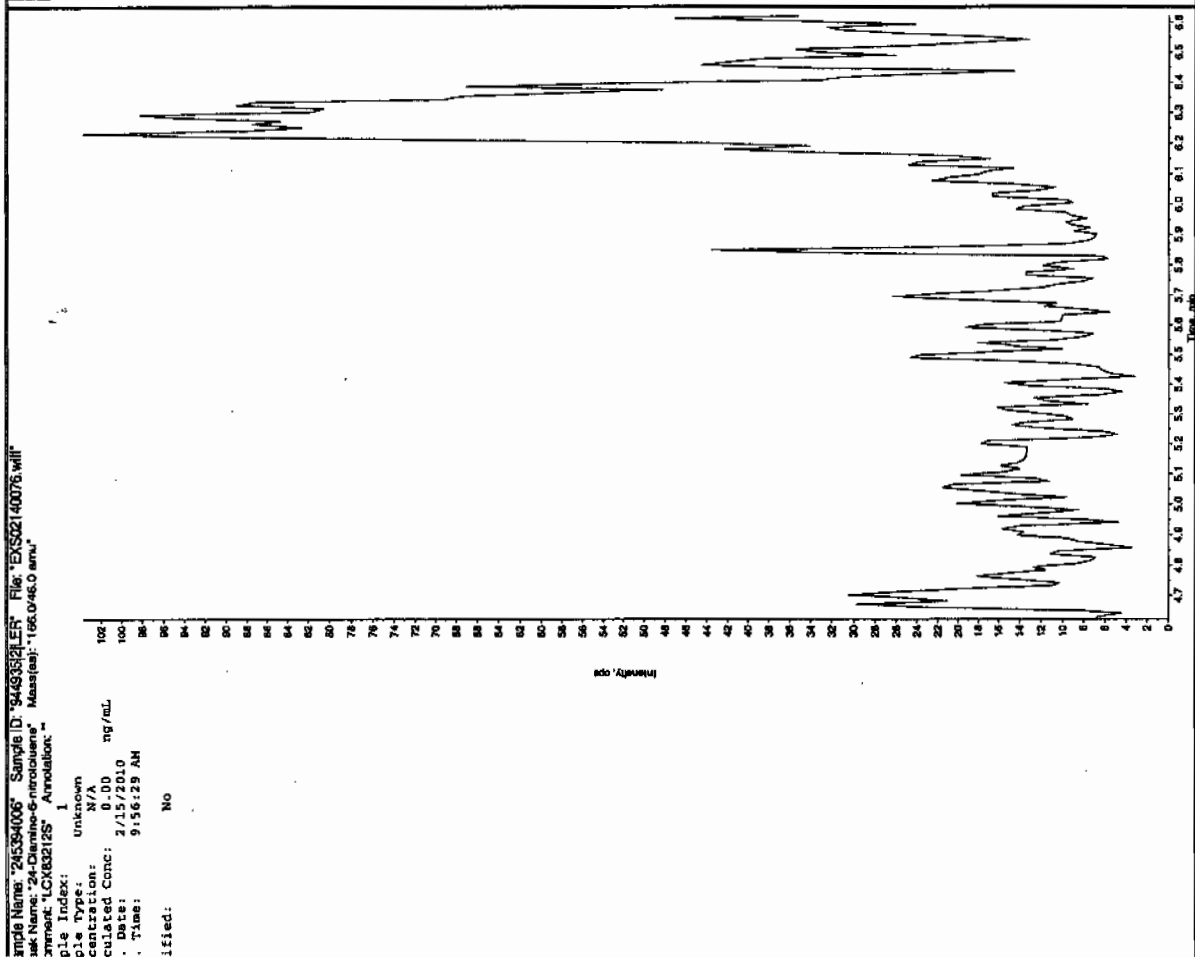
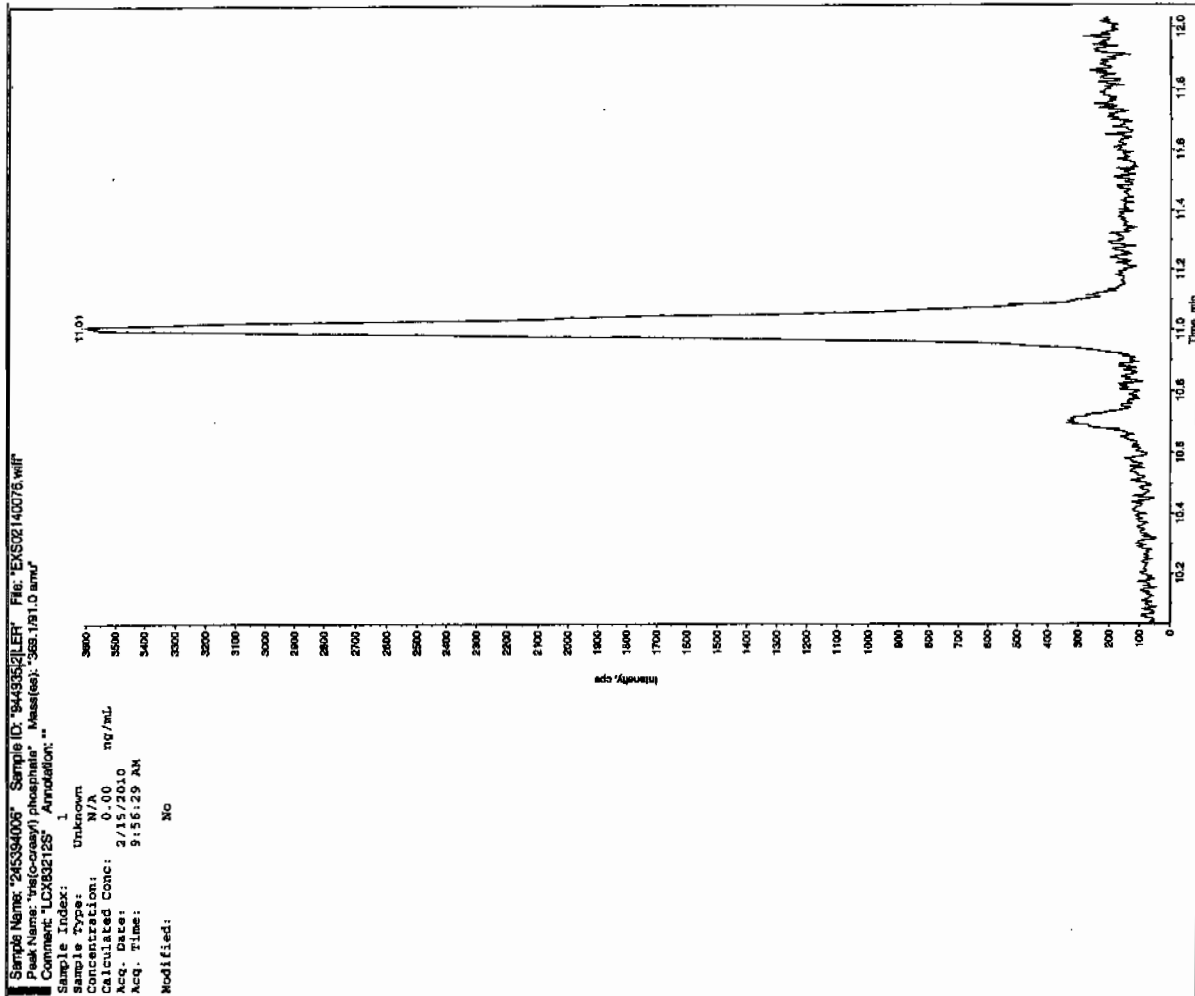
Sample Name: "245394006" Sample ID: "94483521ER" File: "EX502140076.wif"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 12.0 ng/mL
Acq. Date: 2/15/2010
Acq. Time: 9:56:29 AM
Modified: No
Proc. Algorithm: IntelliQuan - IQA
Int. Peak Height: 2500.00 cps
Int. Peak Width: 8.00 points
Acquiring Width: 30.0 points
Acquiring Rate: 300.00 cps
Acquiring Time: 7.15 min
Is Relative RT: No
Retention Time: 7.12 min
Height: 1.34e+004 counts
Start Time: 3054.533 cps
End Time: 7.01 min
End Time: 7.22 min





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: RE15-10-7911

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394007

Sample Amount 2

Moisture: 12.0

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208288a

Date Analyzed: 14-FEB-10 11:56

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	315	J
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

*Concentration =

Instrument Value X Concentrated Extract Volume X Dilution Factor
Sample Amount

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

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA6.qld, Time: Mon Feb 15 07:43:55 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208288a

Date: 14-Feb-2010

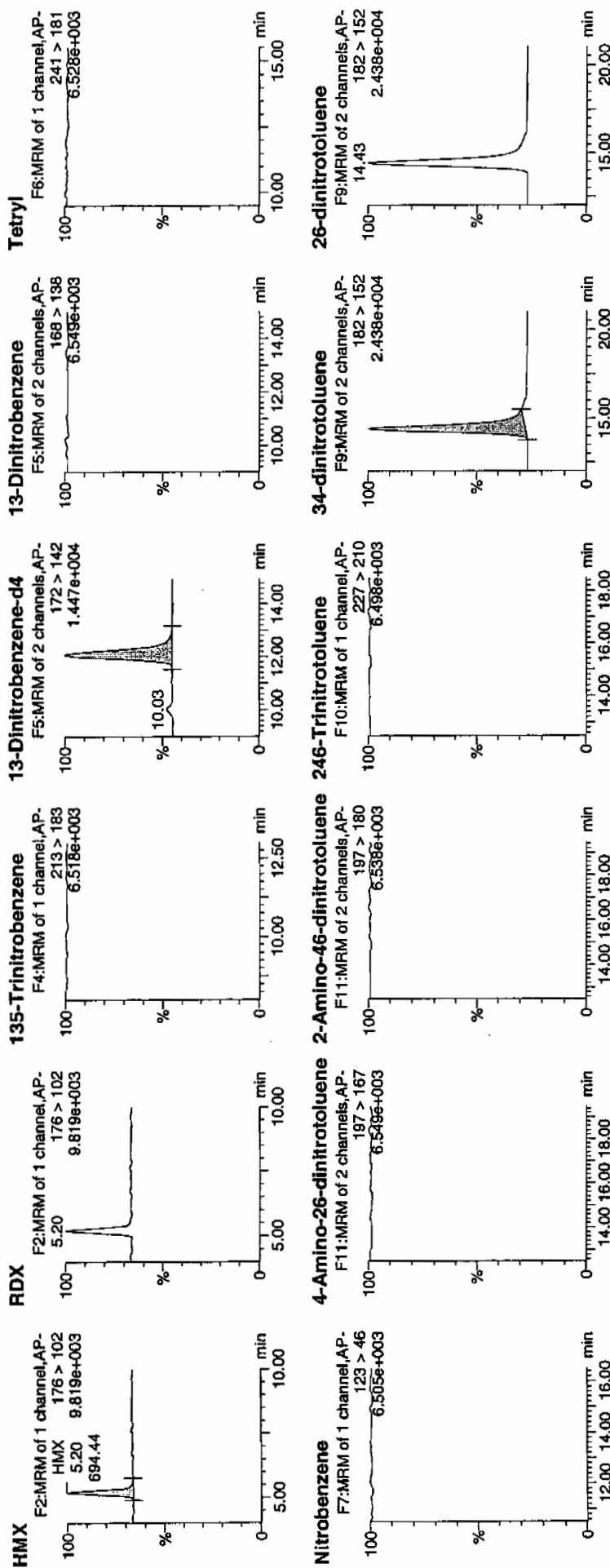
Time: 11:56:37

ID: 245394007

Vial: 3:2,E

uA
2/15/10

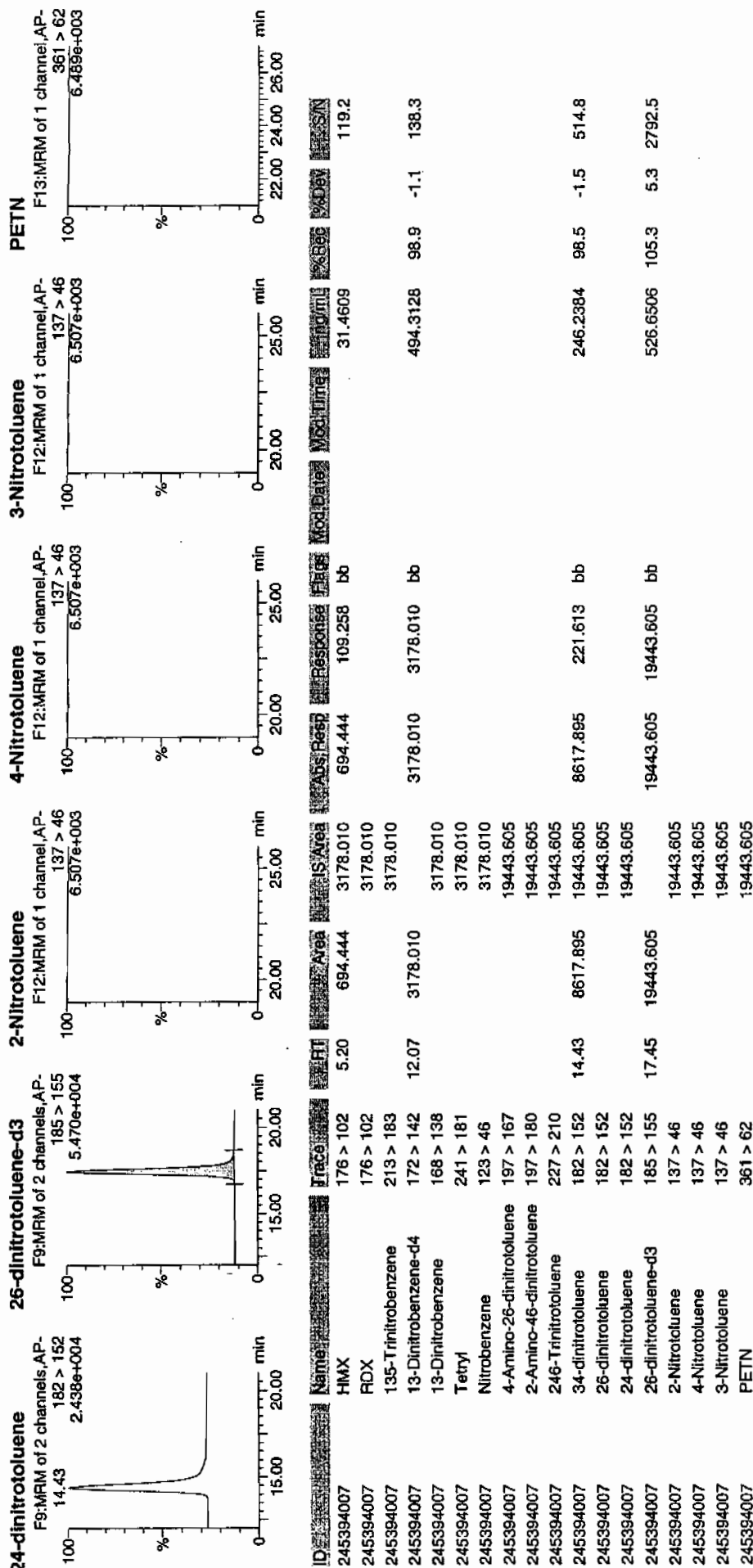
uA
944935 / 21



HNW 1/5/10

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



1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7911

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394007

Sample Amount 2

Moisture: 12.0

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140077.wiff

Date Analyzed: 15-FEB-10 10:12

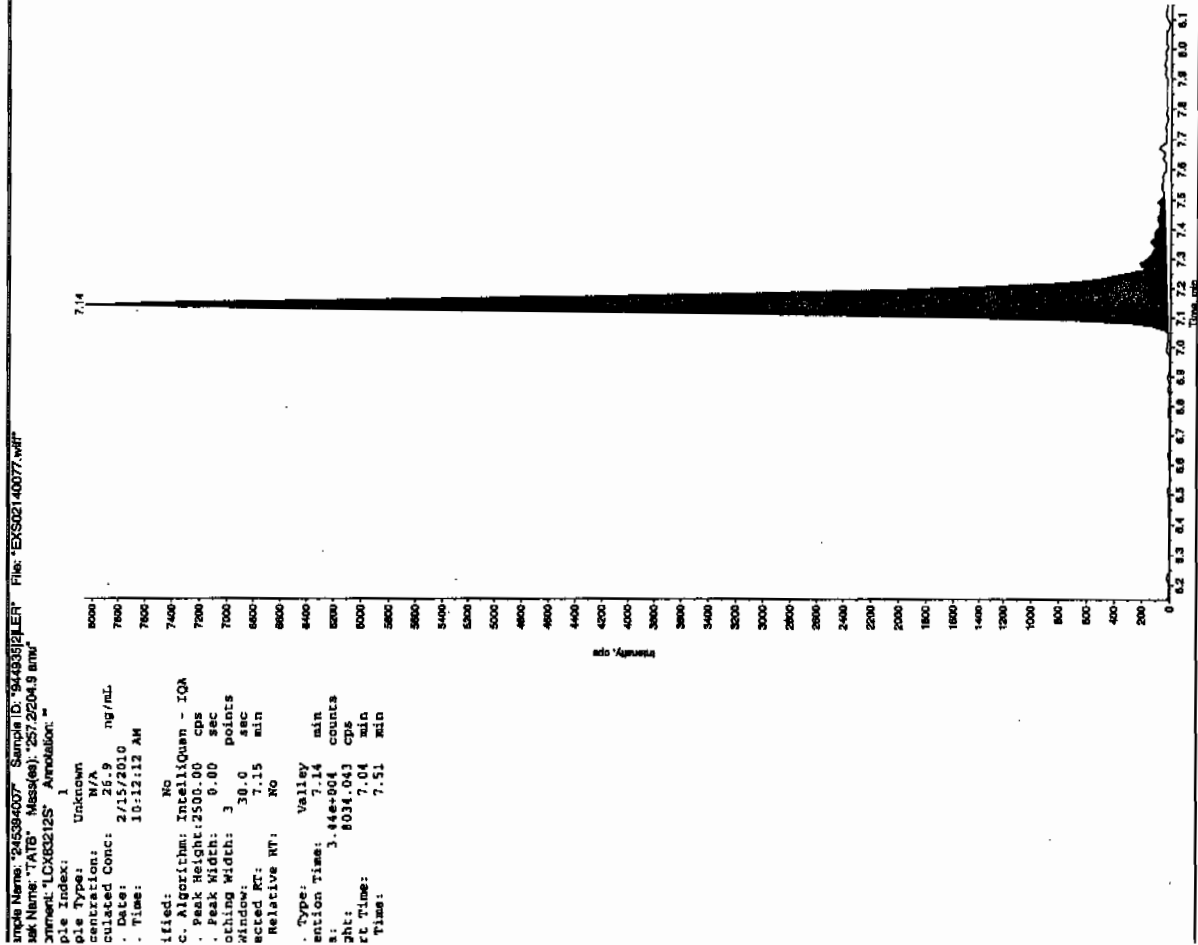
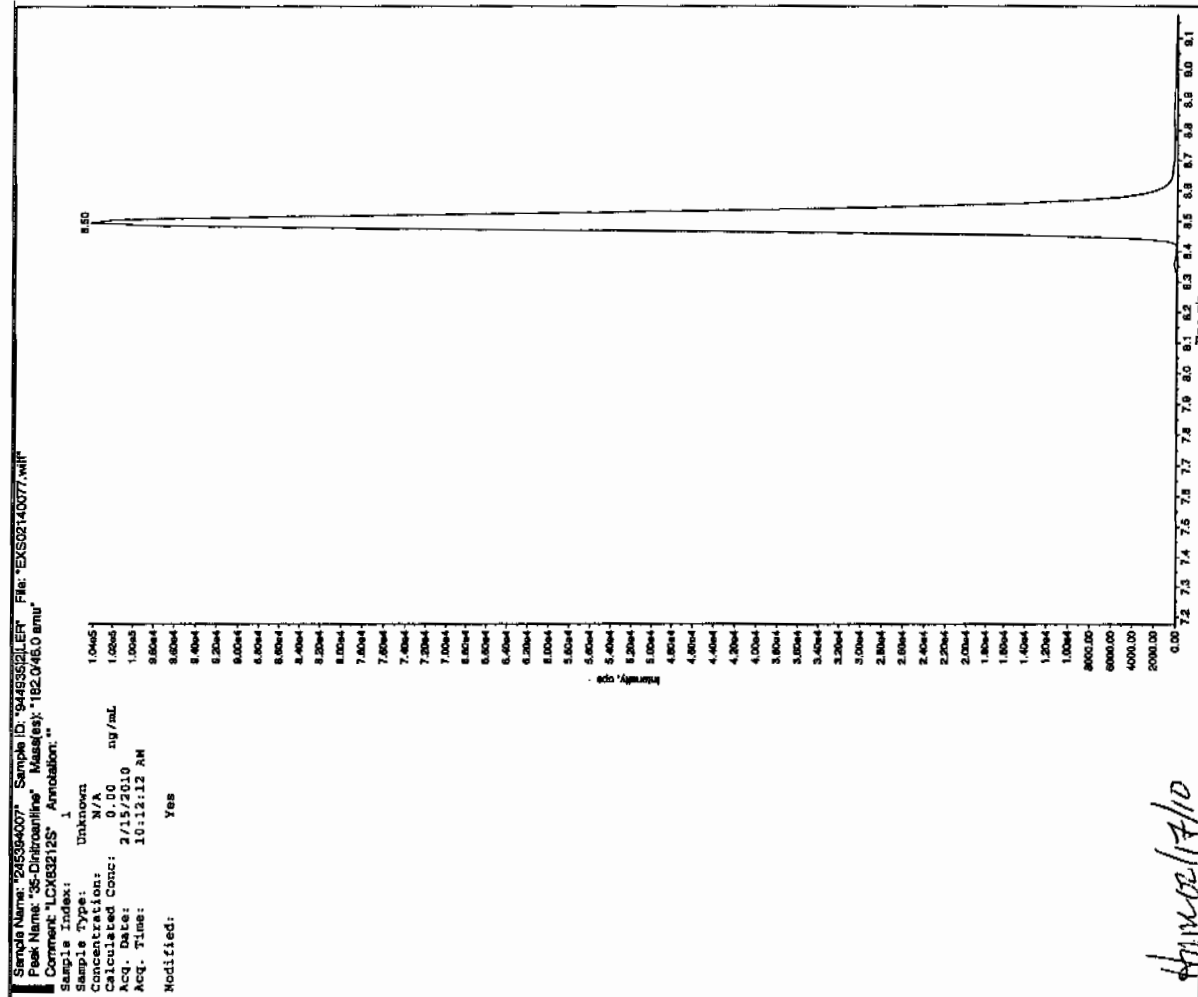
Units: ug/kg

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 2/17/10



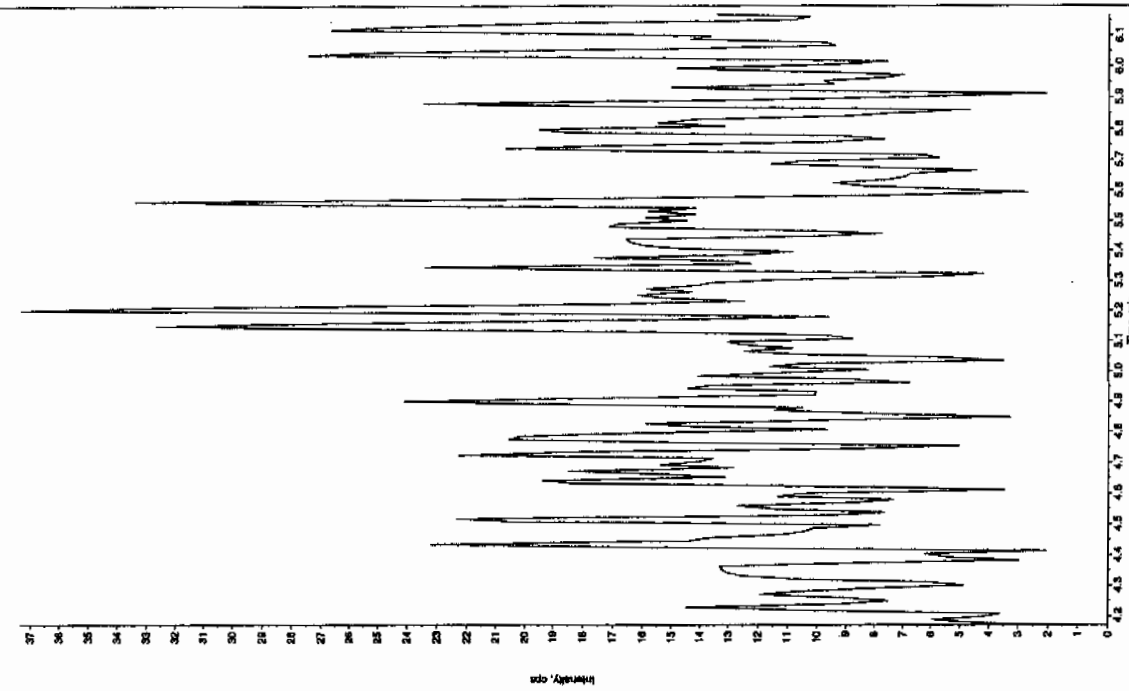
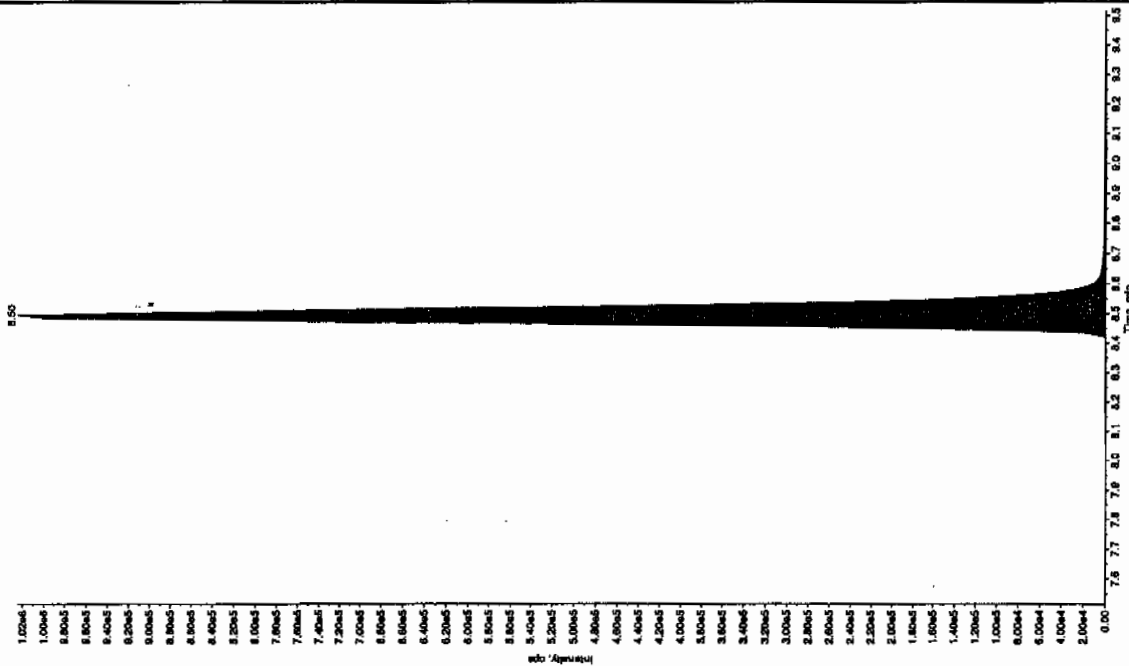
Sample Name: "245394007" Sample ID: "94493521ER" File: "EXS02140077.wif"
 Peak Name: "24-Dinitrobenzene" Mass(es): "182.17151.9 amu"
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A ng/mL
 Calculated Conc: 2/15/2010
 Acq. Date: 10-12-12 AM
 Acq. Time: 10-12-12 AM
 Modified: No

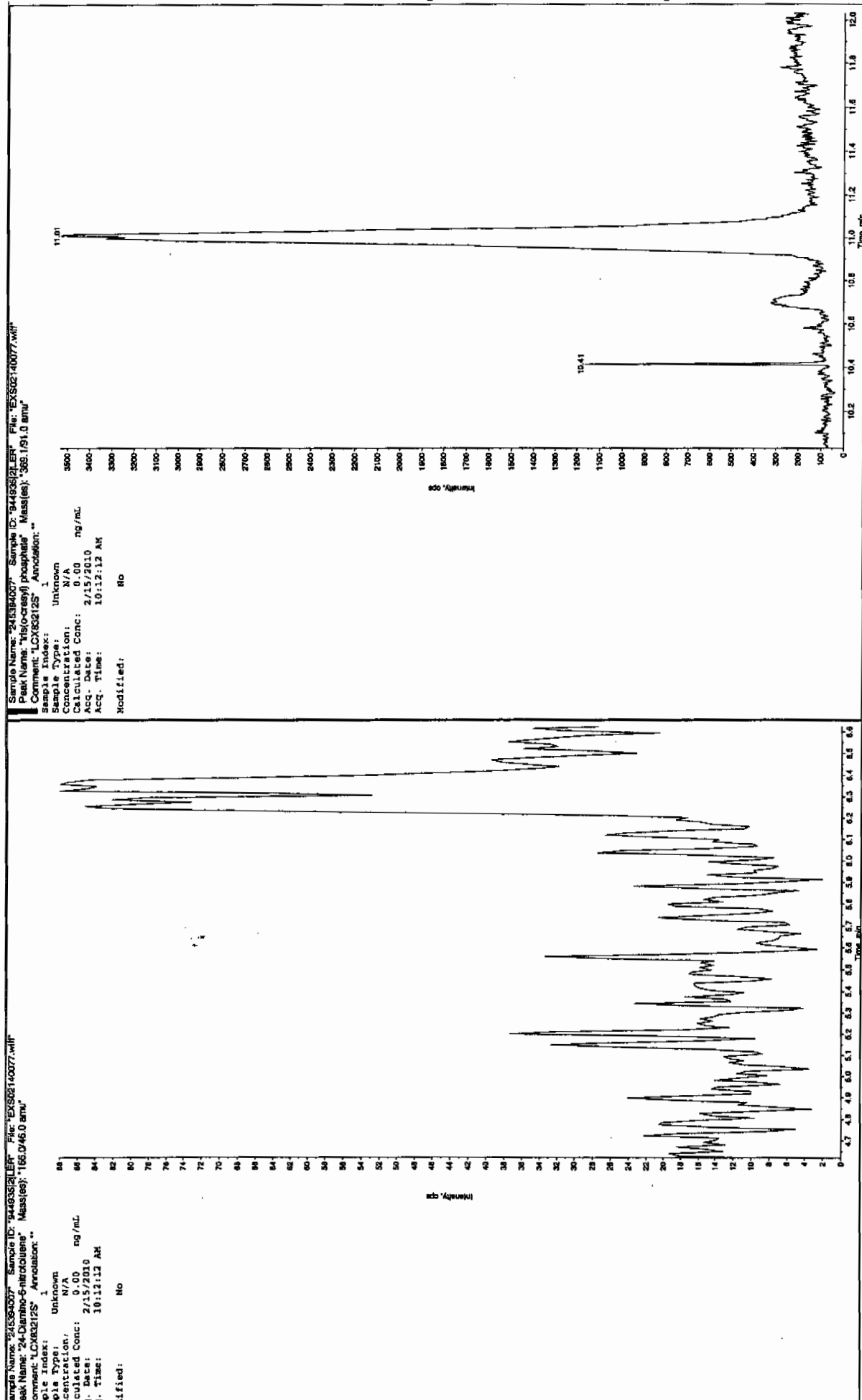
File Index: 1
 File Type: Unknown
 Concentration: N/A ng/mL
 Calculated Conc: 2/15/2010
 Acq. Date: 10-12-12 AM
 Acq. Time: 10-12-12 AM
 Modified: No

Method: Algorithm: IntelliQuan - IQA
 Peak Height: 1460.00 cps
 Peak Width: 0.00 sec
 Peak Area: 15.0 points
 Window: 15.0 sec
 Ret. Time: 8.52 min
 Relative RT: No

Type: Valley
 Retention Time: 8.50 min
 Counts: 4.03e+006 counts
 RT: 1024893.199 cps
 RT Time: 8.39 min
 Time: 8.89 min



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: RE15-10-7908

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394008

Sample Amount 2

Moisture: 8.1

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208289a

Date Analyzed: 14-FEB-10 12:26

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\020810expA6.qld, Time: Mon Feb 15 07:43:55 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208289a

Date: 14-Feb-2010

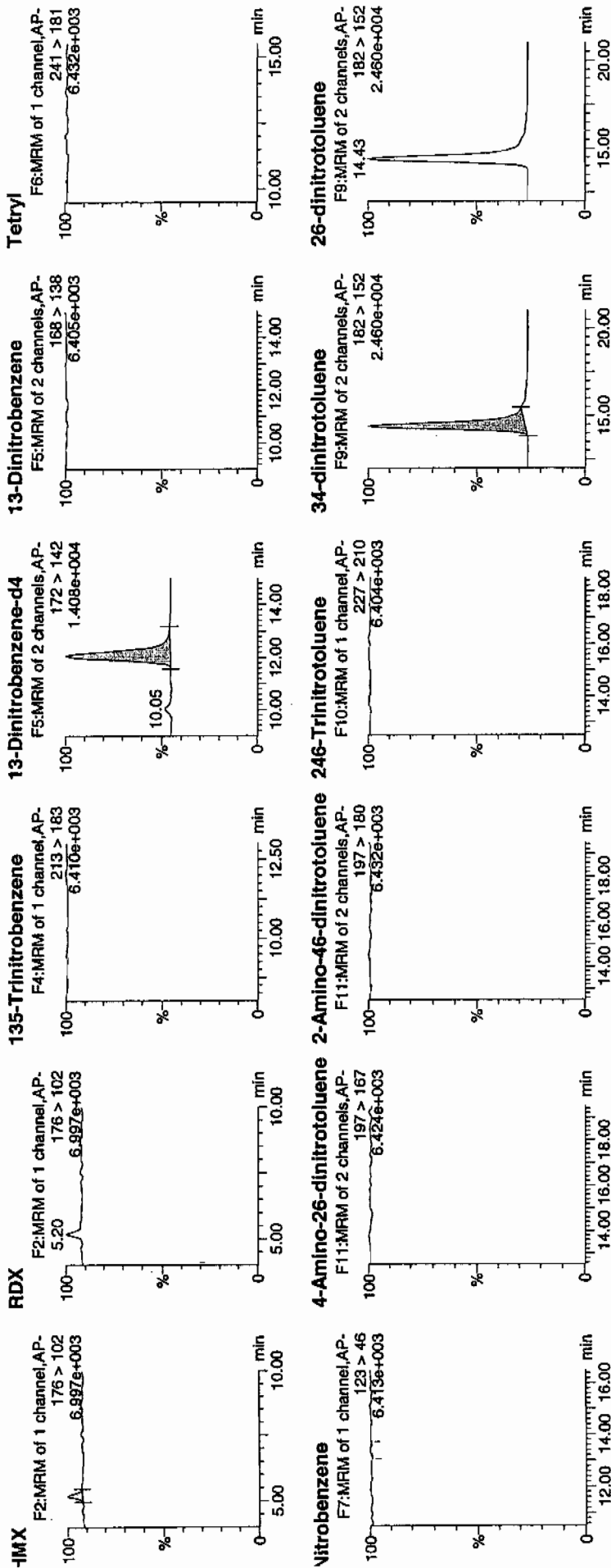
Time: 12:26:09

D: 245394008

Vial: 3:2,F

*not
2/15/10*

LAU 944935 / 80121

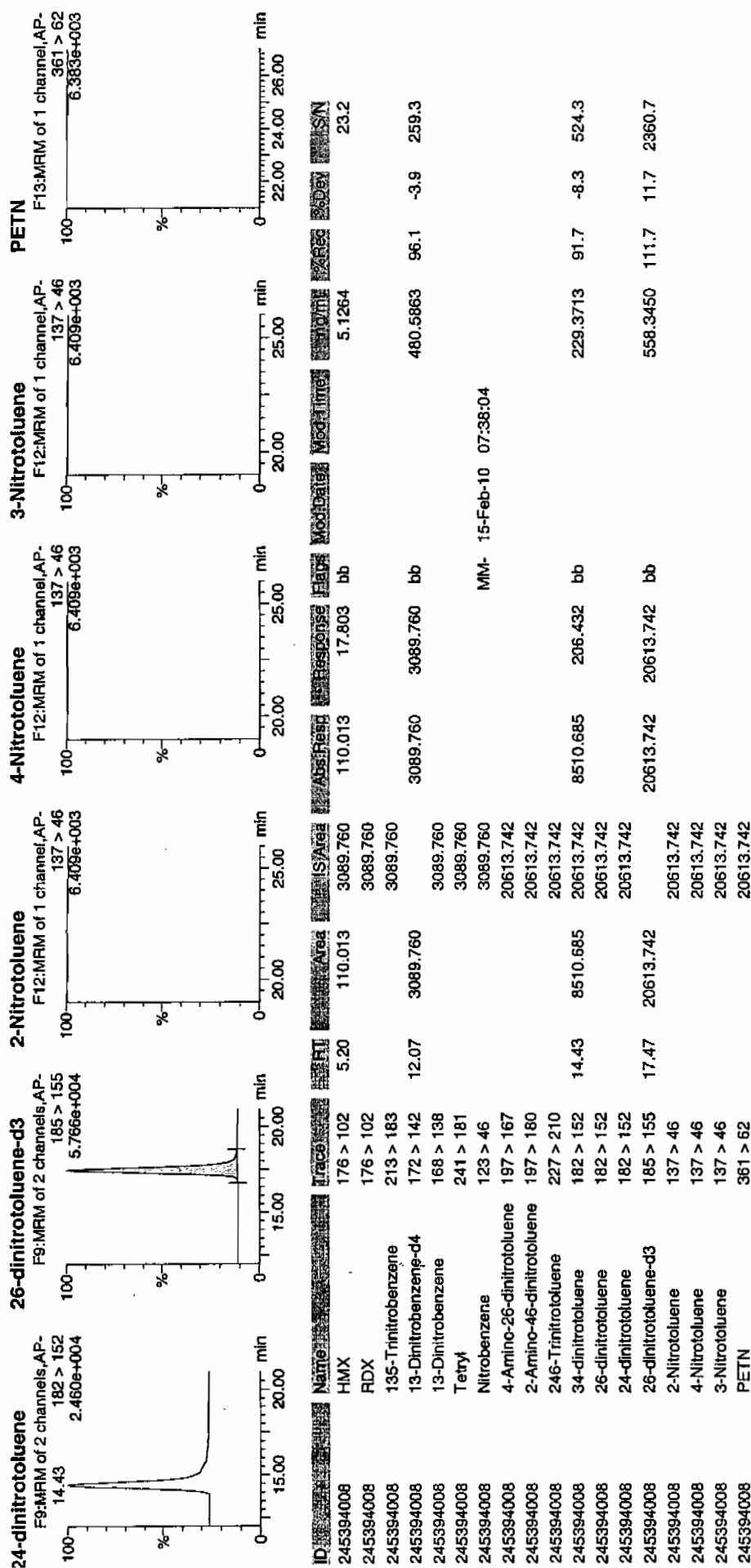


401115/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYN\New_Exp.PRO\020810expA6.qld, Time: Mon Feb 15 07:43:55 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7908

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394008

Sample Amount 2

Moisture: 8.1

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140078.wiff

Date Analyzed: 15-FEB-10 10:27

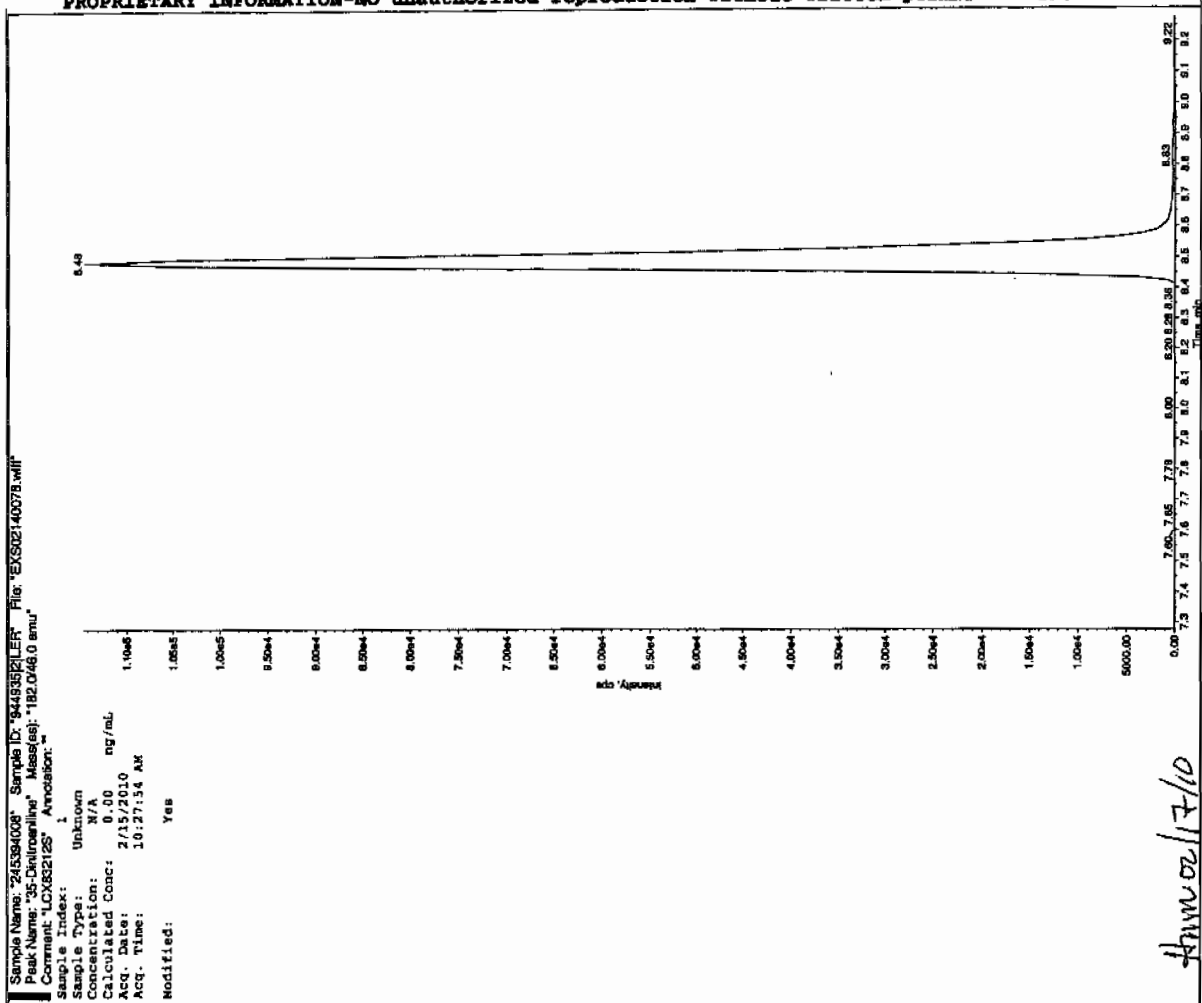
Units: ug/kg

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

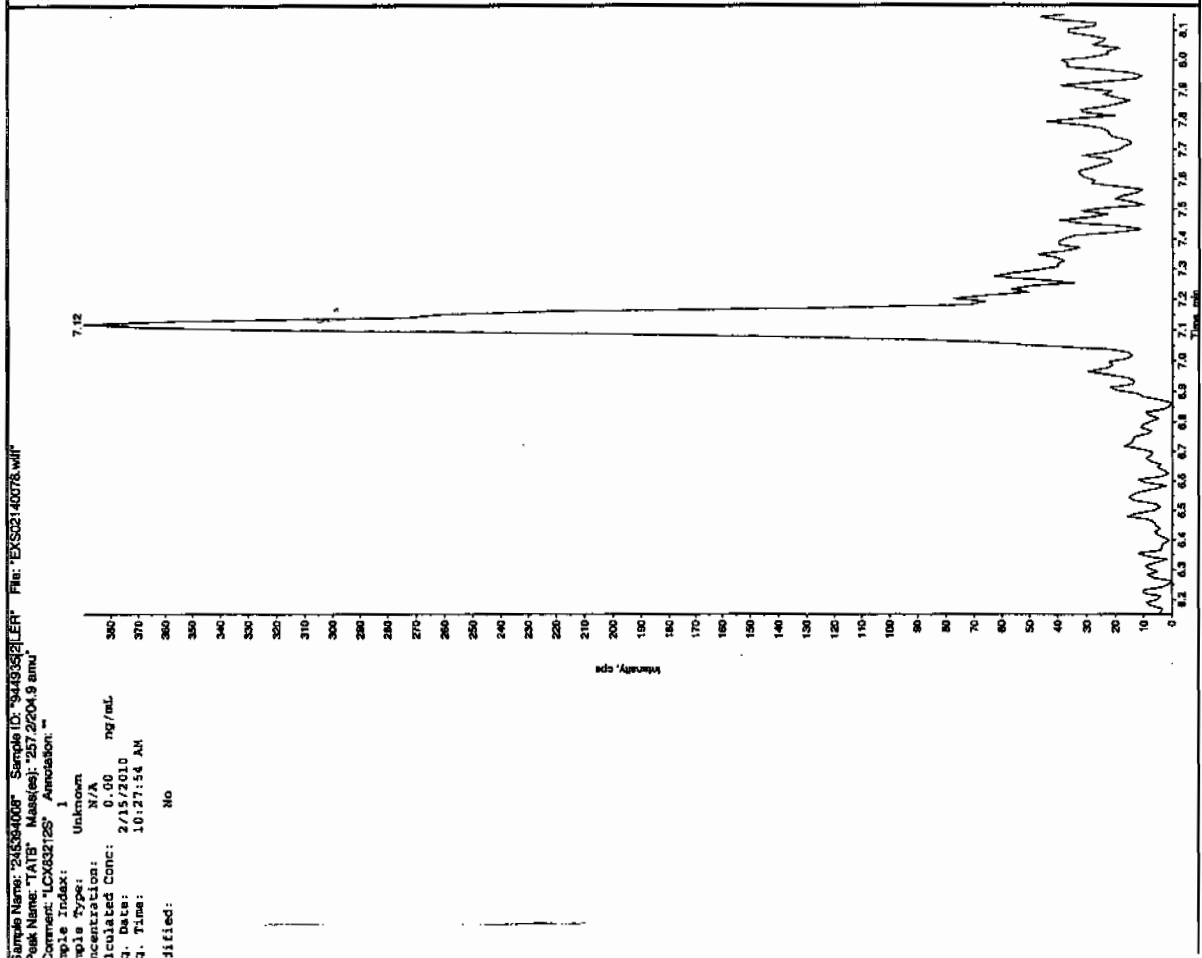
*Concentration =

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

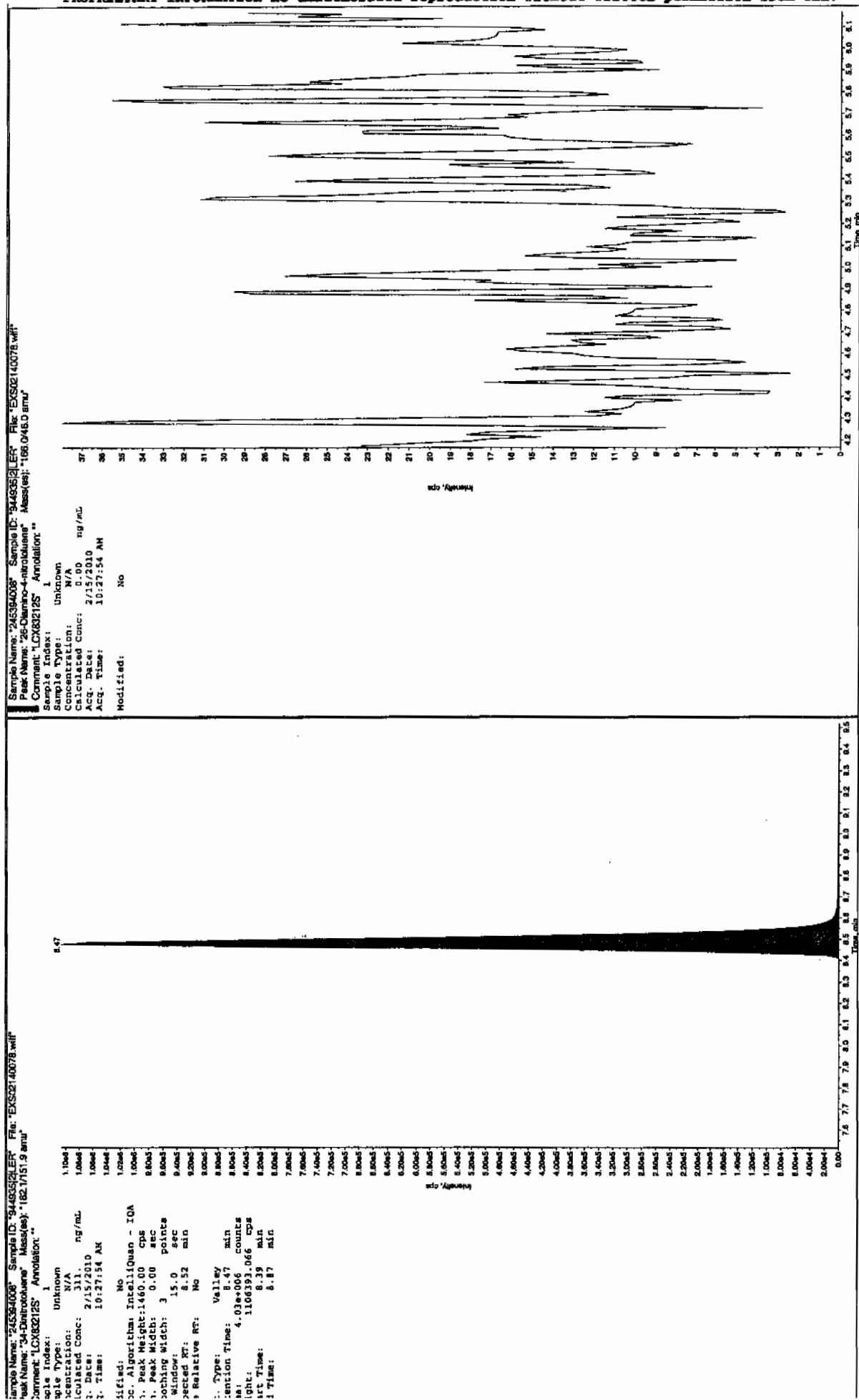
for 2/17/10



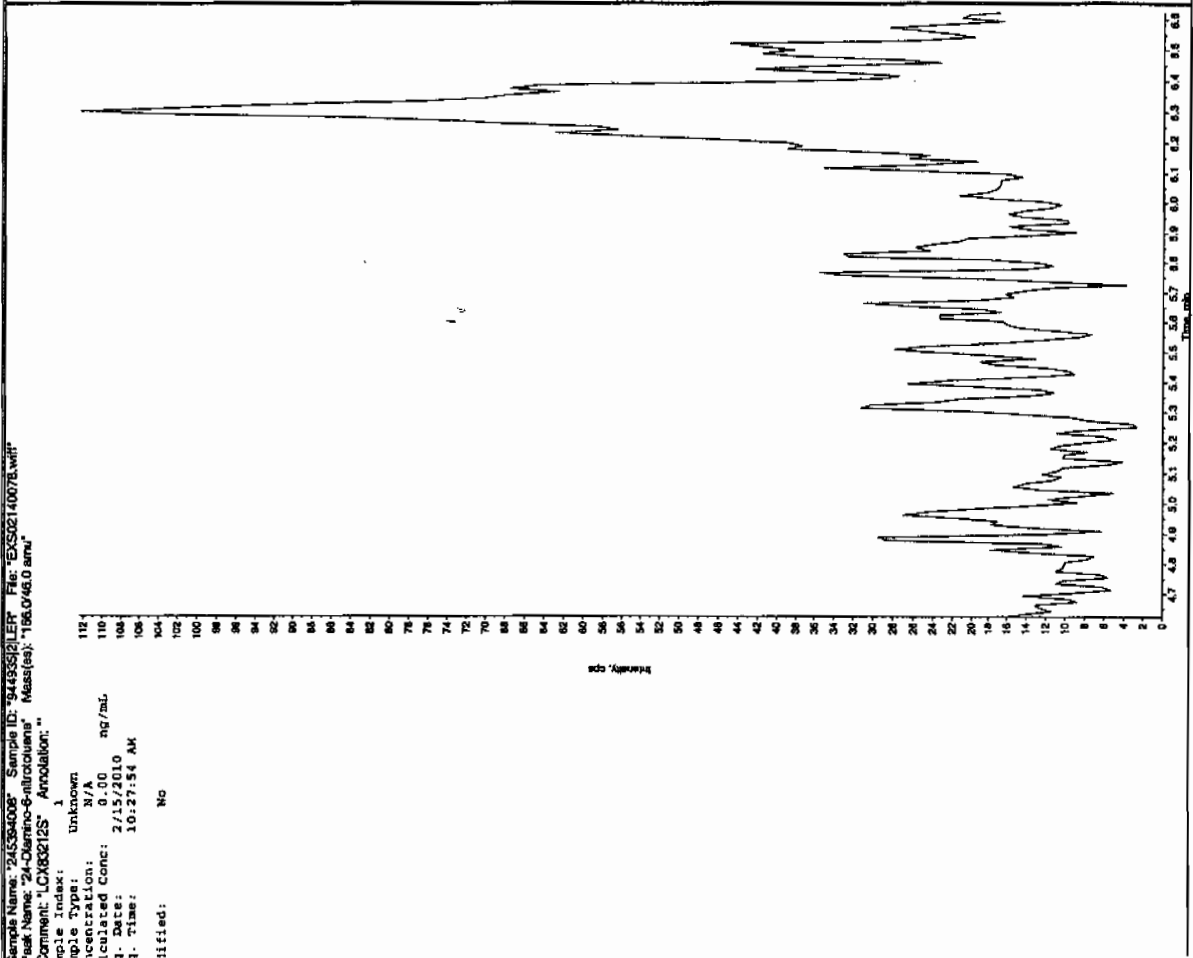
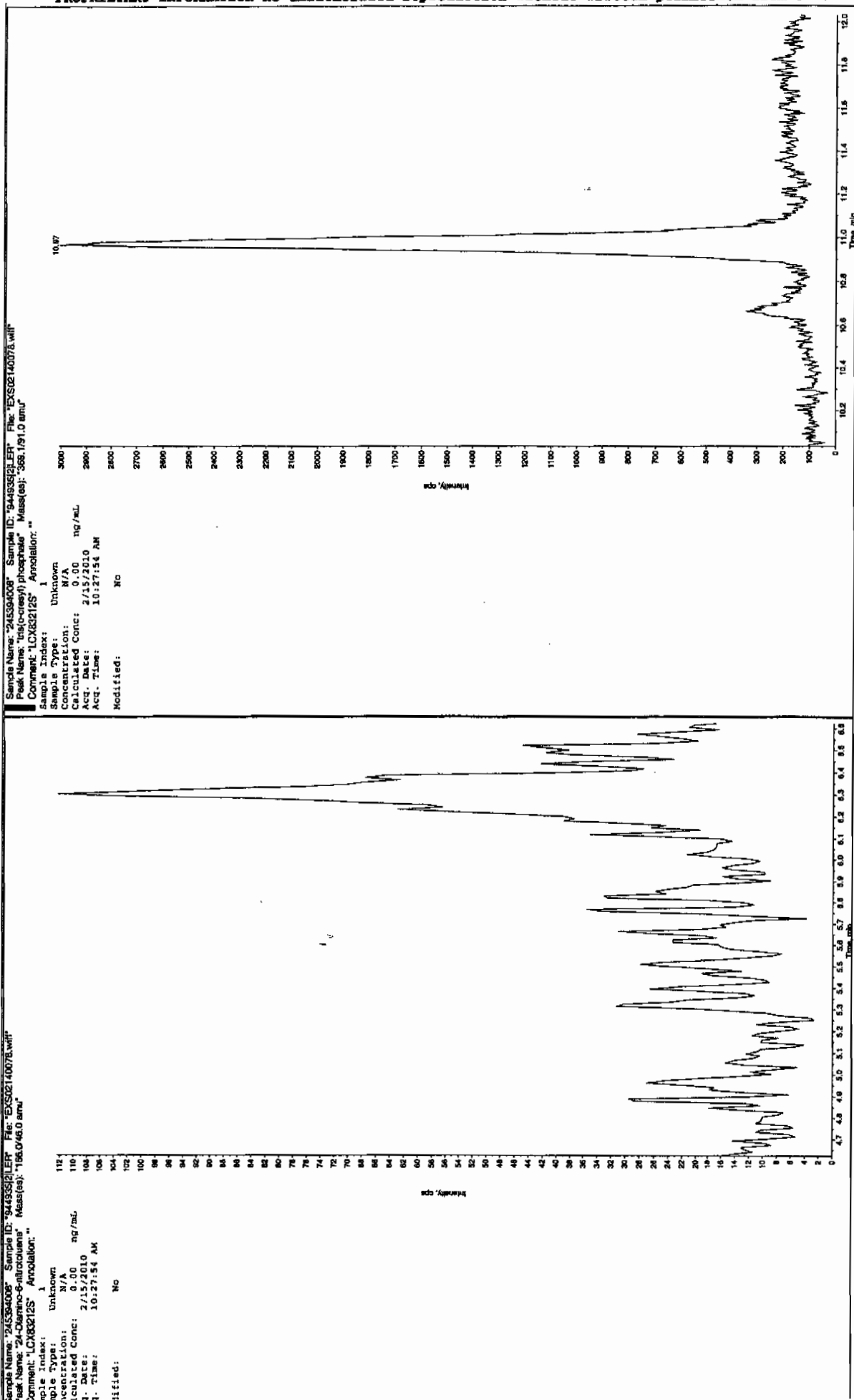
Amu 02/17/10



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



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



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: RE15-10-7912

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394009

Sample Amount 2

Moisture: 13.5

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208304a

Date Analyzed: 14-FEB-10 19:51

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	198	J
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\020810expA6.qld, Time: Mon Feb 15 07:43:55 2010

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Date: 14-Feb-2010

Time: 19:51:21

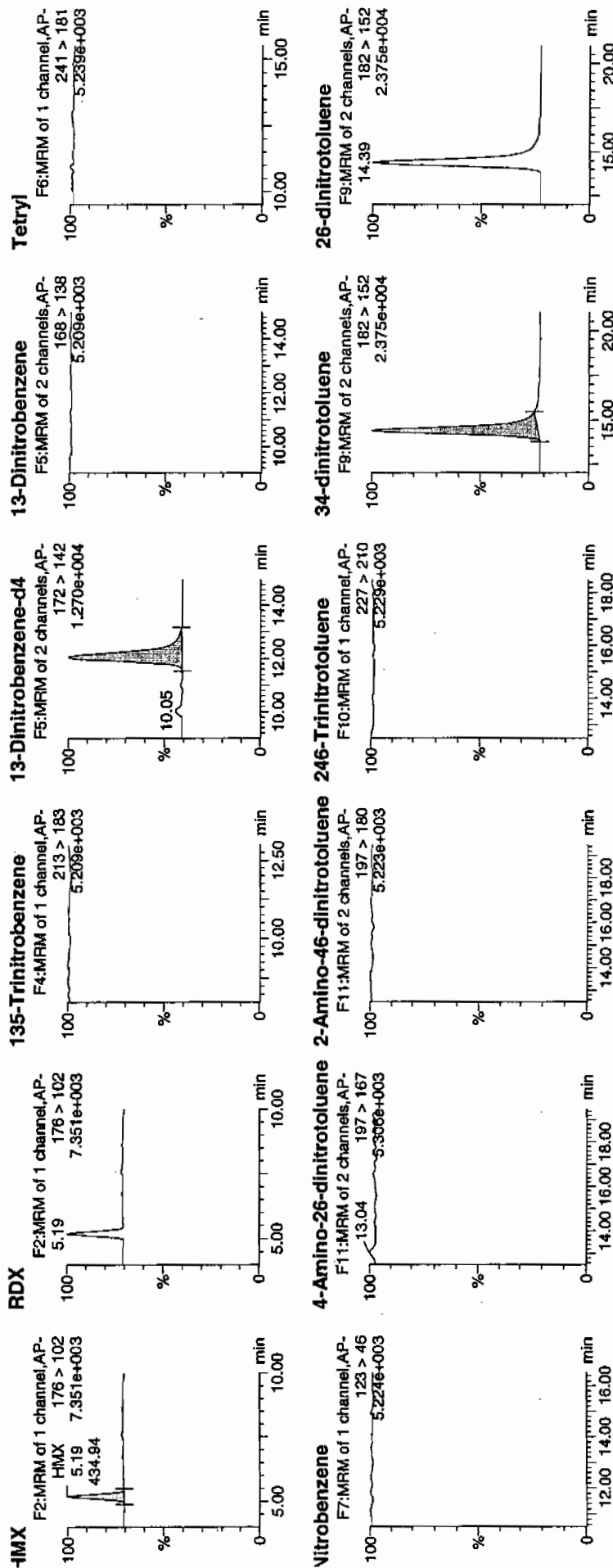
D: 245394009

Vial: 3:3,A

100%
 2/15/10

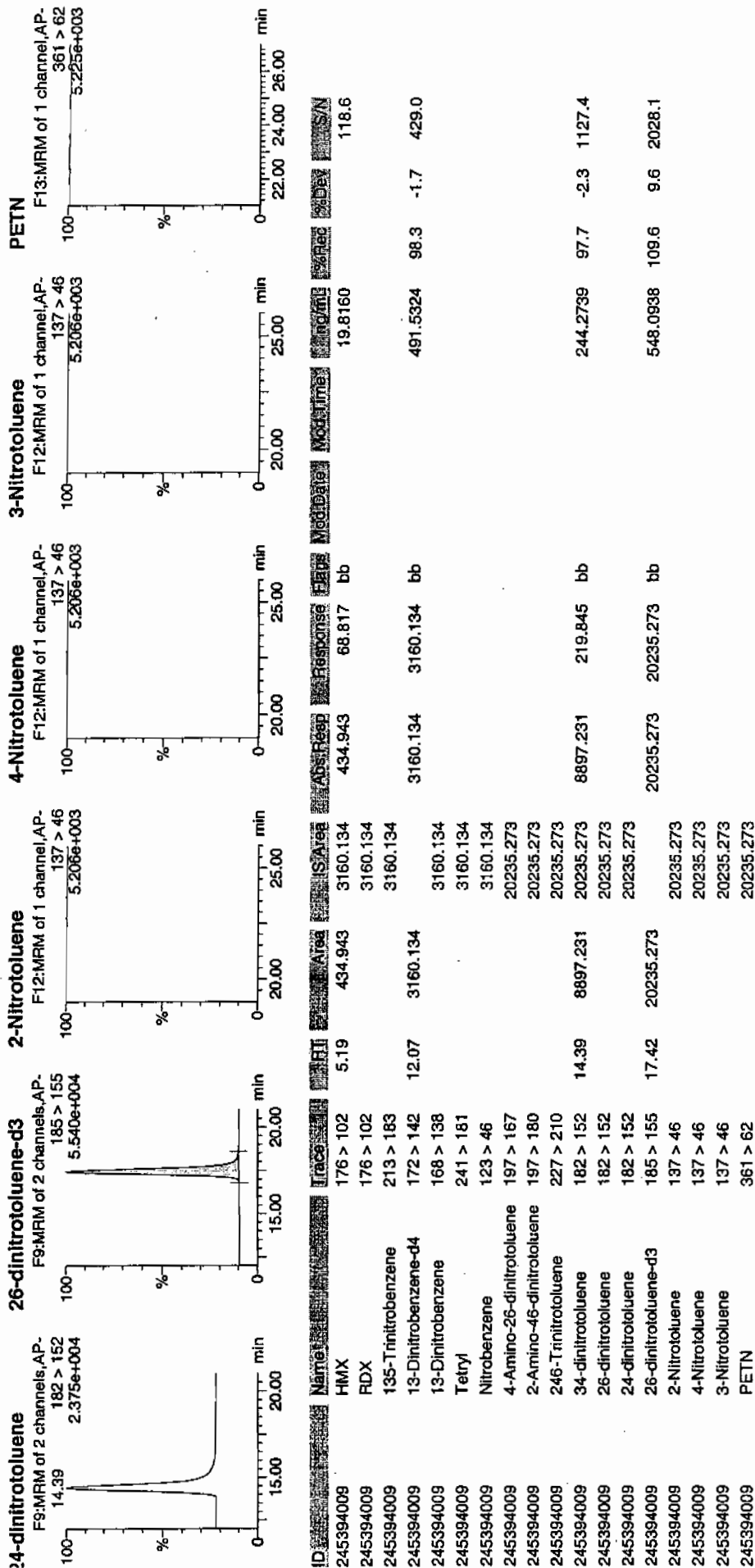
100%
 94935/8022/21

Page 407 of 1574



100%
 2/15/10

Dataset: C:\MASSLYNX\New_Exp_PRO\020810expA6.qld, Time: Mon Feb 15 07:43:55 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7912

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394009

Sample Amount 2

Moisture: 13.5

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140079.wiff

Date Analyzed: 15-FEB-10 10:43

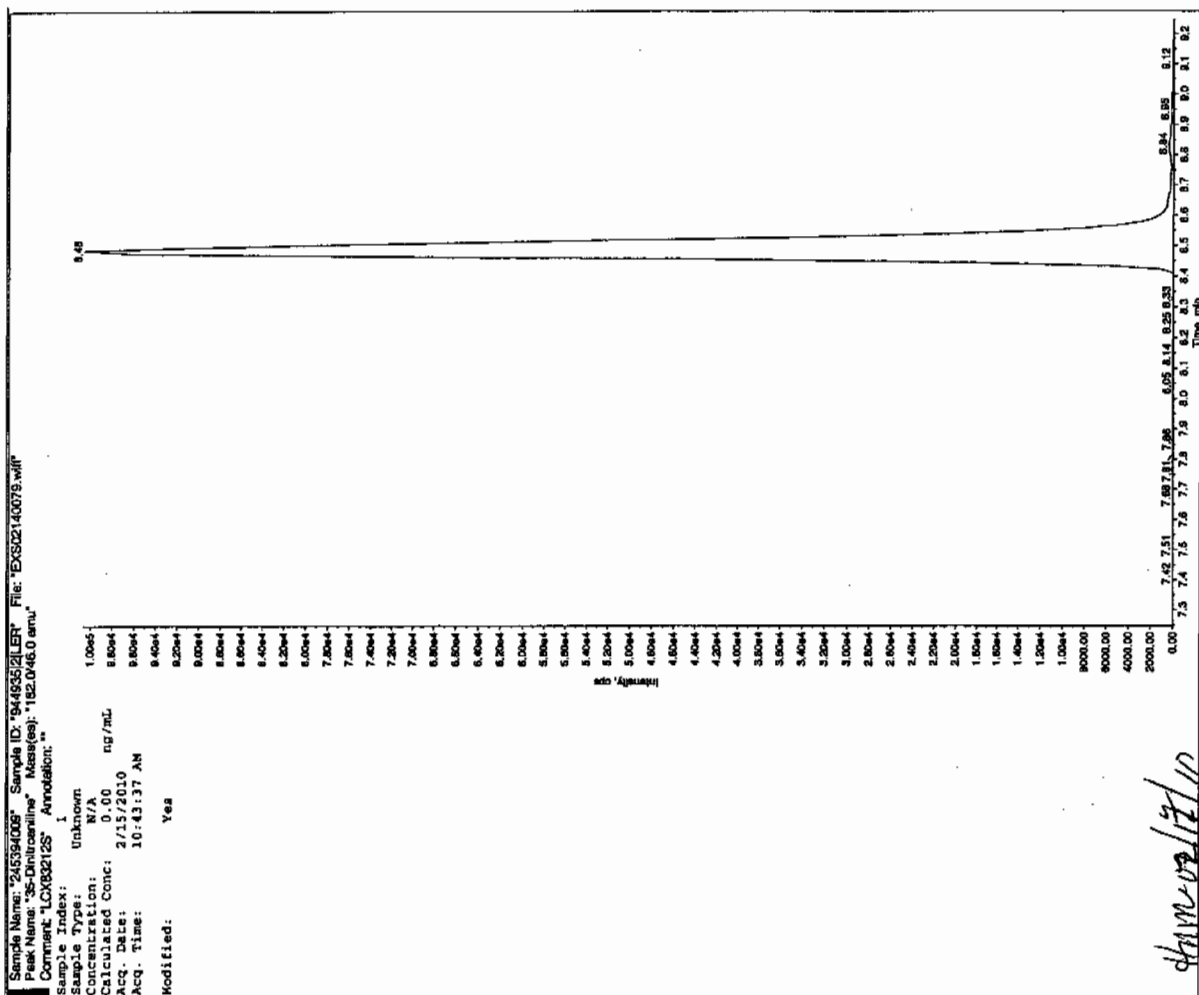
Units: ug/kg

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

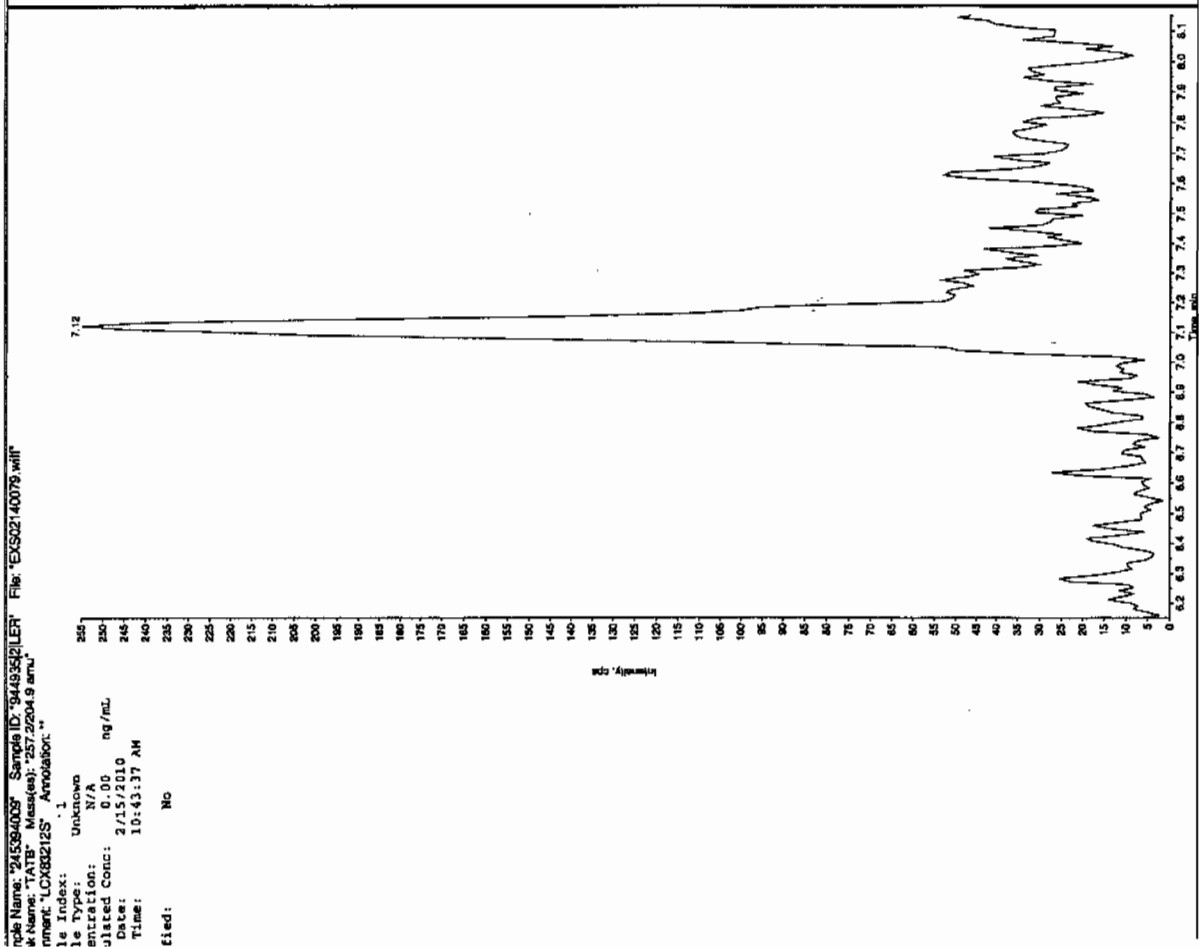
*Concentration =

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

Jan 21/10



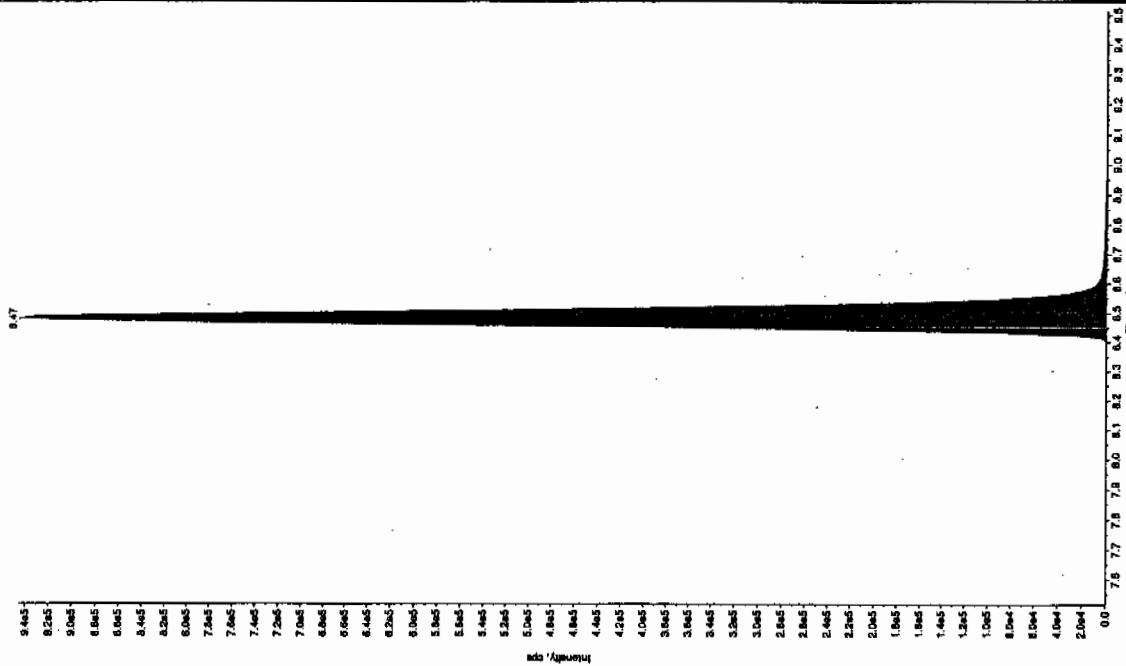
Jan 22/10



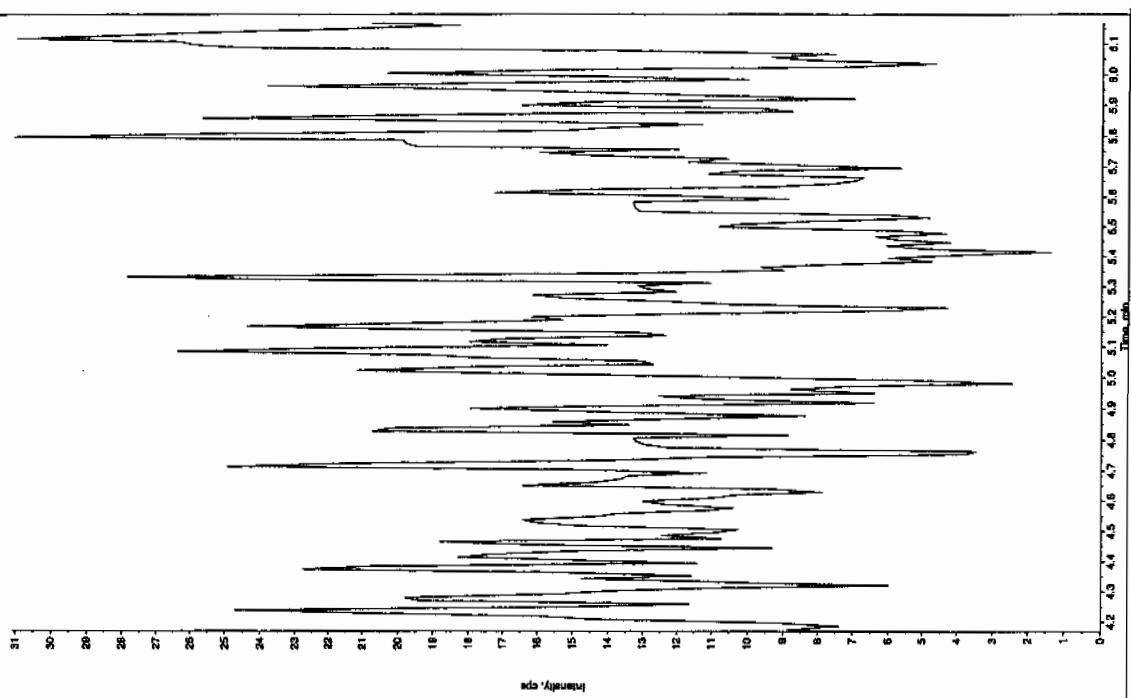
L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

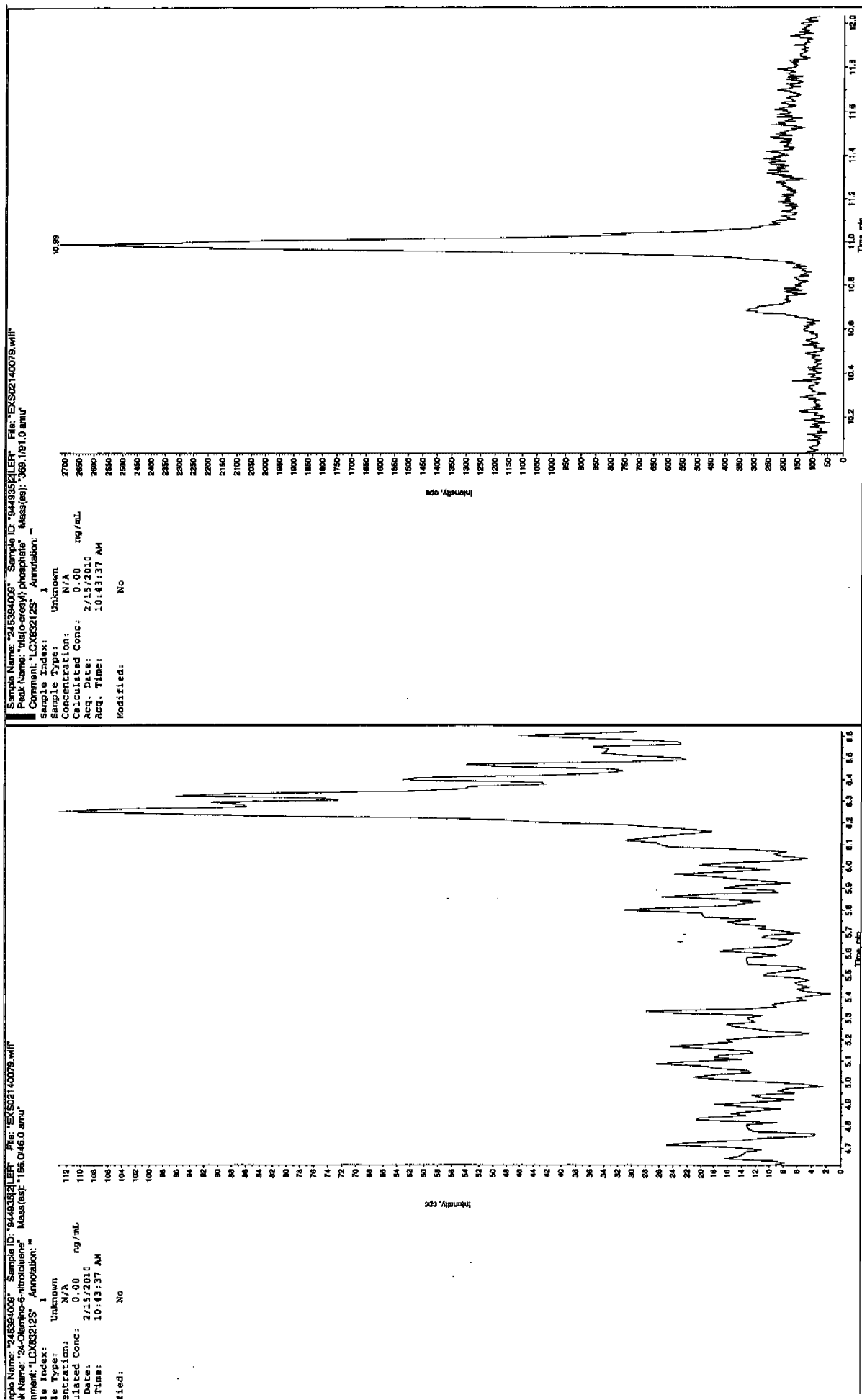
Sample Name: "25394008" Sample ID: "94493512.1ER" File: "EXS02140079.wiff"
Peak Name: "25-Diamino-4-nitrotoluene" Mass(es): "166.046.0 amu"
Comment: "1 CVAS0125" Acquisition: "2"

File Index:	1	
File Type:	Unknown	
Concentration:	287	ng/mL
Diluted Concent:	N/A	
Date:	2/15/2010	
Time:	10:43:37 AM	
File:	NO	
Algorithm:	IntelliQuan - TOA	
Peak Height:	1450.00	cps
Peak Width:	0.00	seconds
Acq. Width:	3	points
Acq. Window:	15.0	sec
Acq. Rate:	8.52	min
Relative RT:	NO	
File Type:	Valley	
Acquisition Time:	8.47	min
Count:	3,745,005	counts
Count Rate:	94598.191	cps
Time:	8.31	min
Time:	8.86	min



Sample Name: "245394009"	Sample ID: 1
Peak Name: "26-Digimino-4-nitrotoluene"	Peak ID: 1
Comment: "LCX832125"	Annotation: ""
Sample Index: 1	
Sample Type: Unknown	
Concentration: N/A	
Calculated Conc: 0.00	ng/ml
Acq. Date: 2/15/2010	
Acq. Time: 10:43:37 AM	
Modified: N/A	





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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7906

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394010

Sample Amount 2

Moisture: 10

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208291a

Date Analyzed: 14-FEB-10 13:27

Units: ug/kg

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

*Concentration =

Instrument Value	X	Concentrated Extract Volume	X	Dilution Factor
		Sample Amount		

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA6.qld, Time: Mon Feb 15 07:43:55 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208291a

Date: 14-Feb-2010

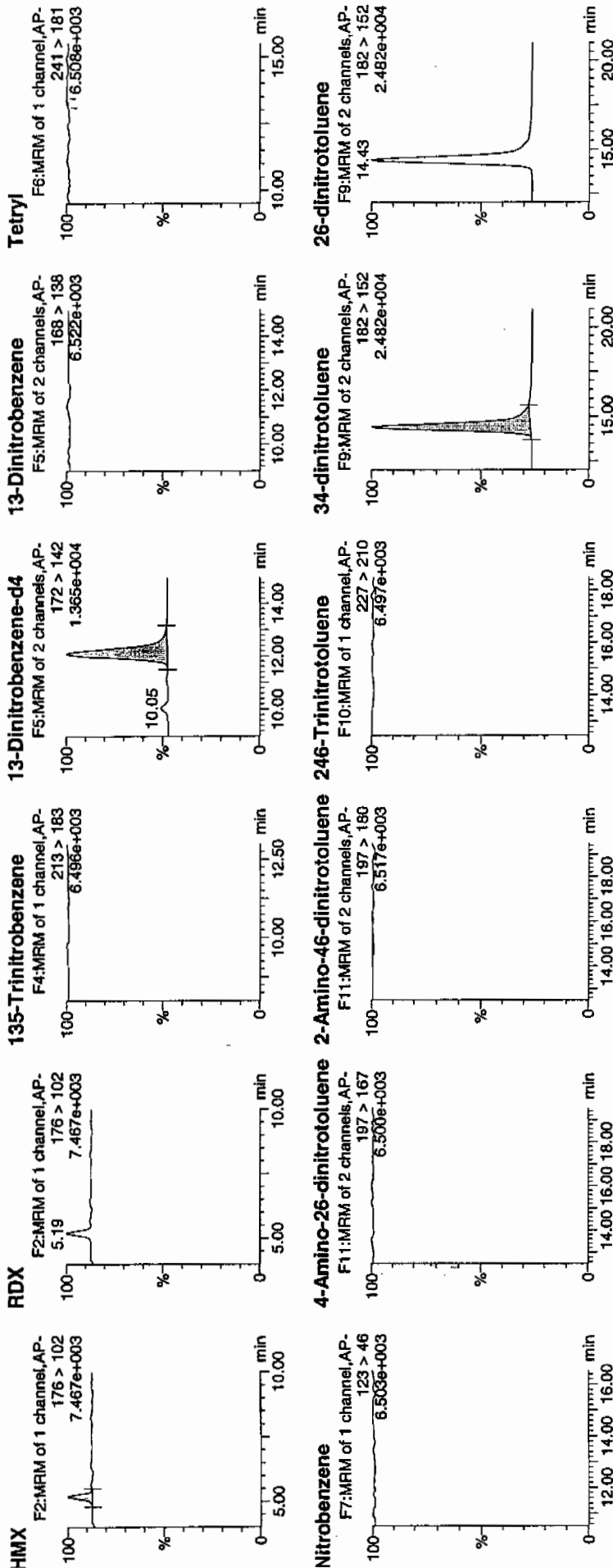
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D: 245394010

Vial: 3:3,B

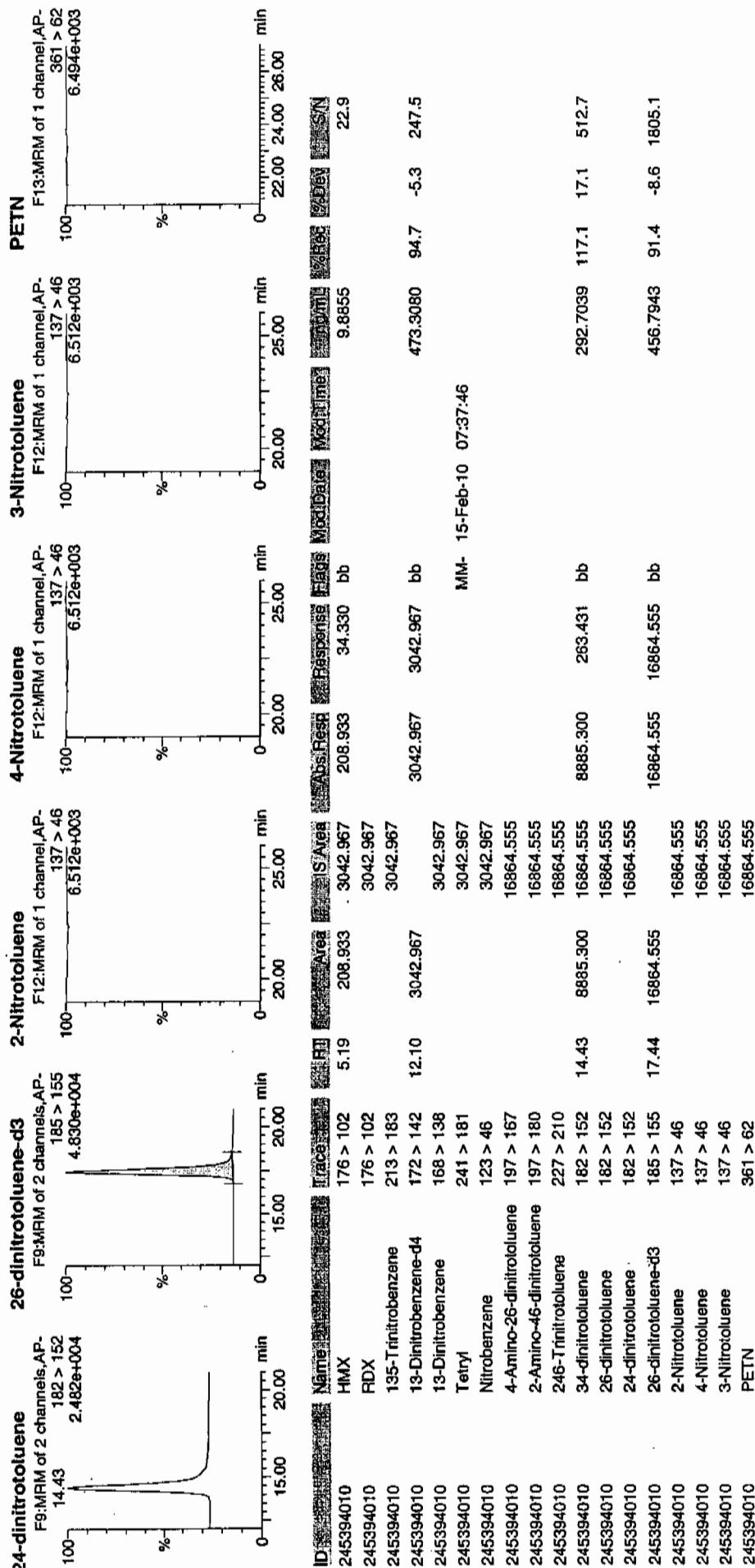
Handwritten: 2/15/10

Handwritten: 944935 / 21



Handwritten: 2/15/10

Dataset: C:\MASSLYNX\New_Exp\PRO\020810expA6.qld, Time: Mon Feb 15 07:43:55 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7906

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394010

Sample Amount 2

Moisture: 10

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140080.wiff

Date Analyzed: 15-FEB-10 10:59

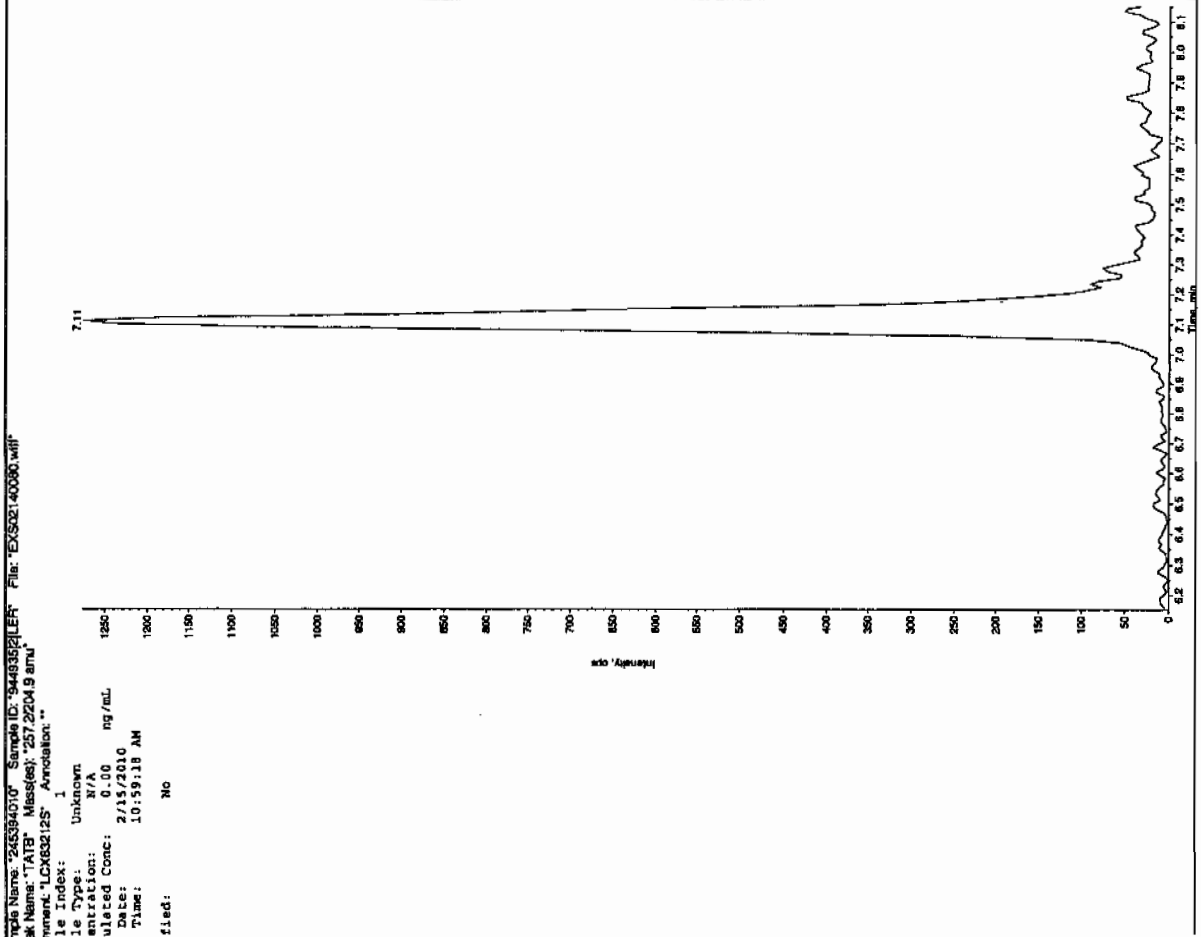
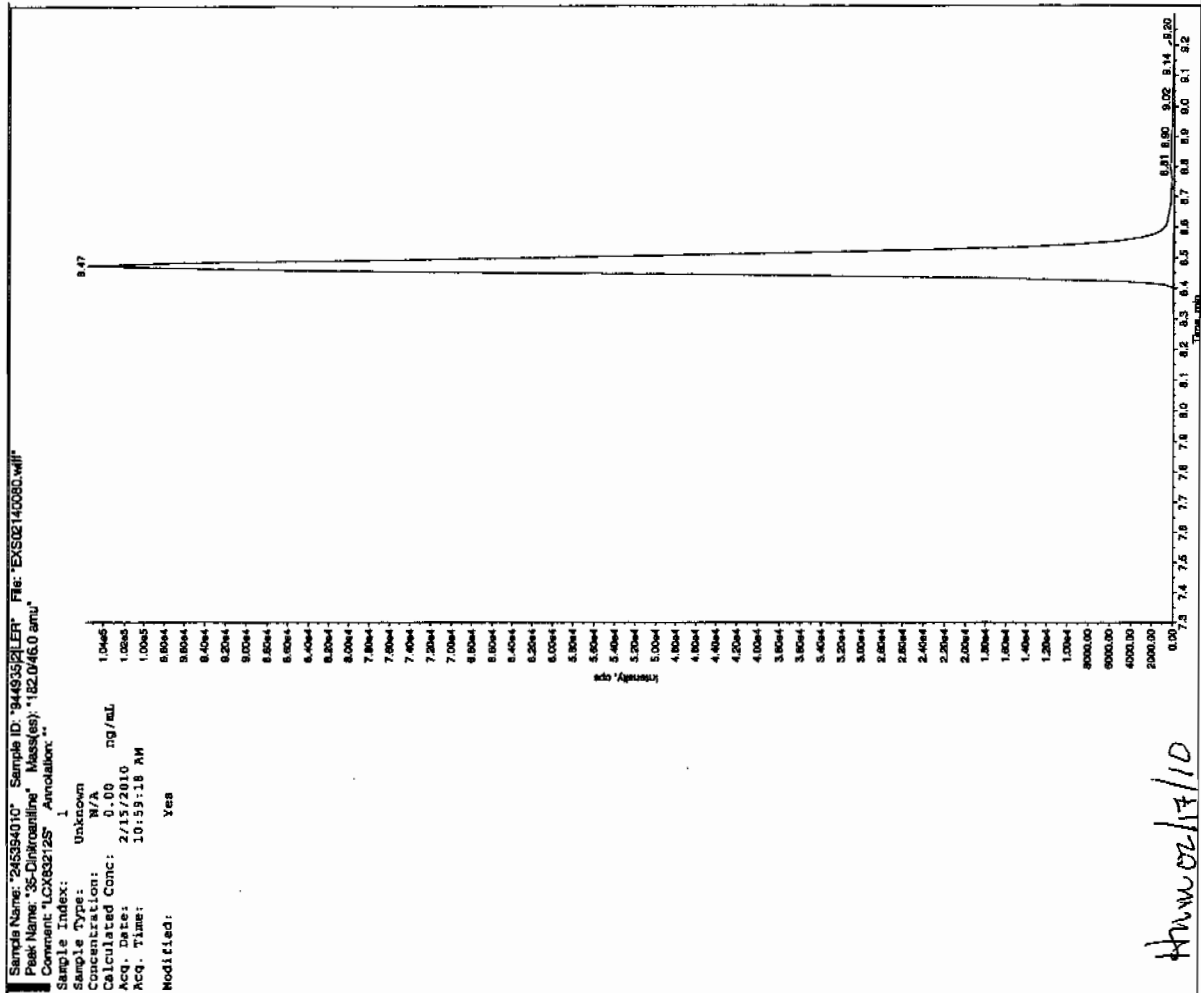
Units: ug/kg

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

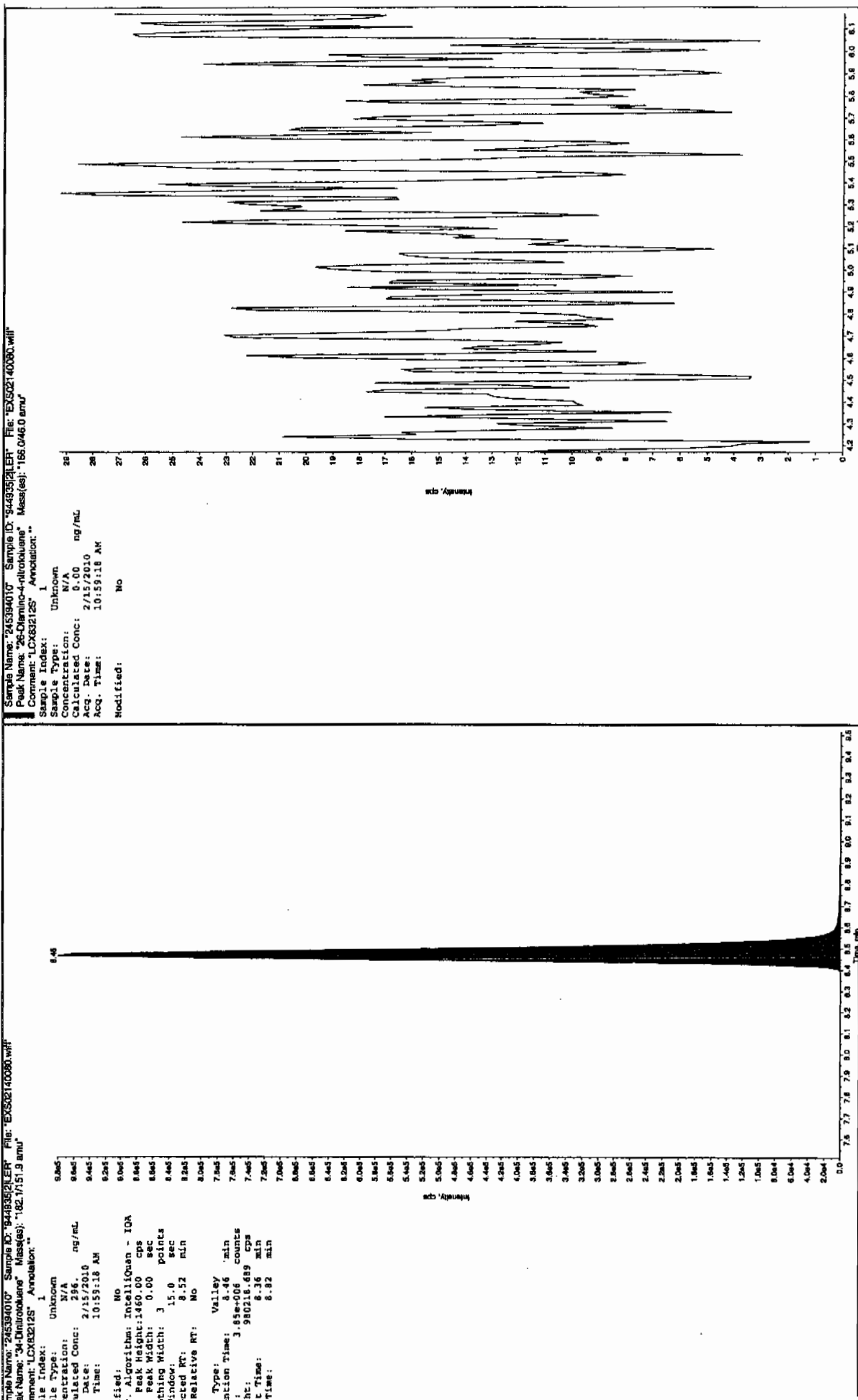
*Concentration =

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

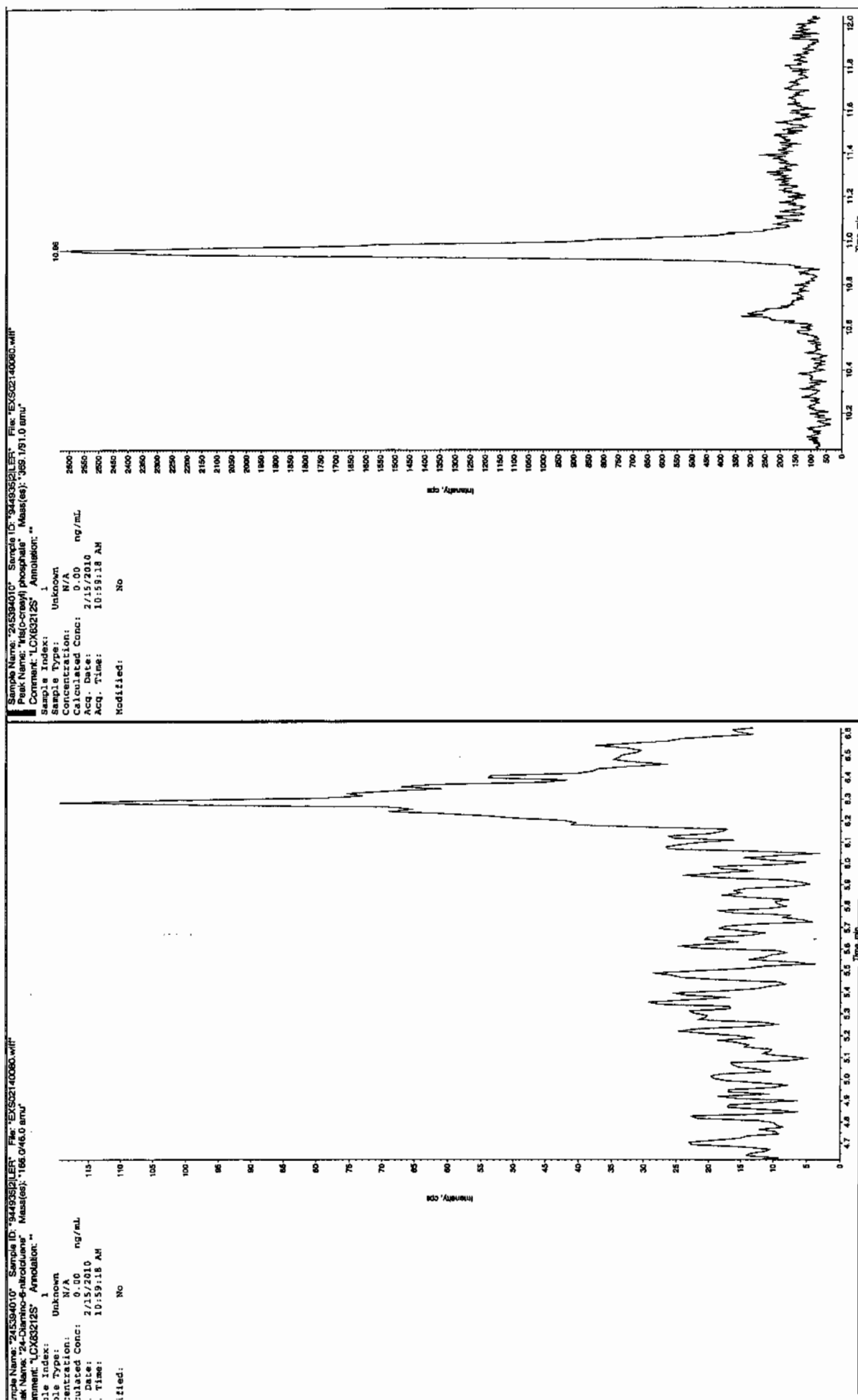
See 21/1/10



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



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



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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7905

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394011

Sample Amount 2

Moisture: 21.8

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208292a

Date Analyzed: 14-FEB-10 13:56

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	1220	
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

*Concentration =

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

Printed: Mon Feb 15 07:46:07 2010, Page 35 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\EXP0208292a

Date: 14-Feb-2010

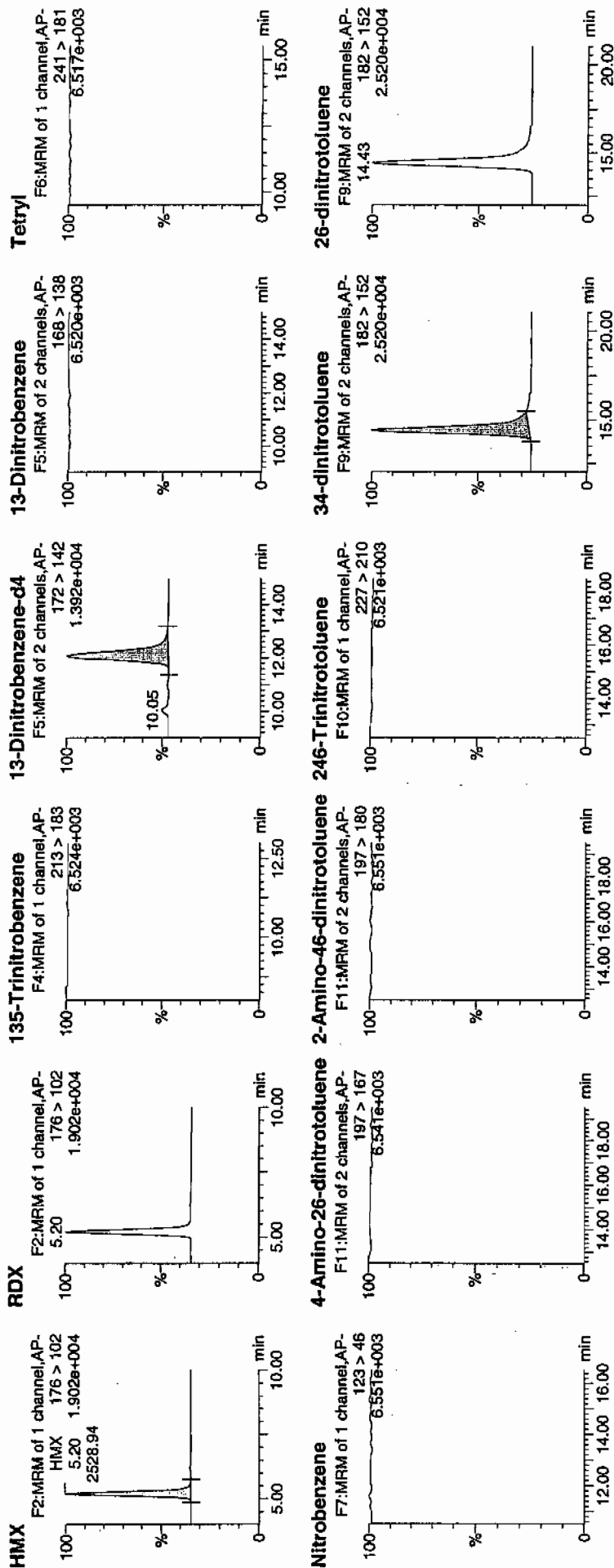
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ID: 245394011

Vial: 3,3,C

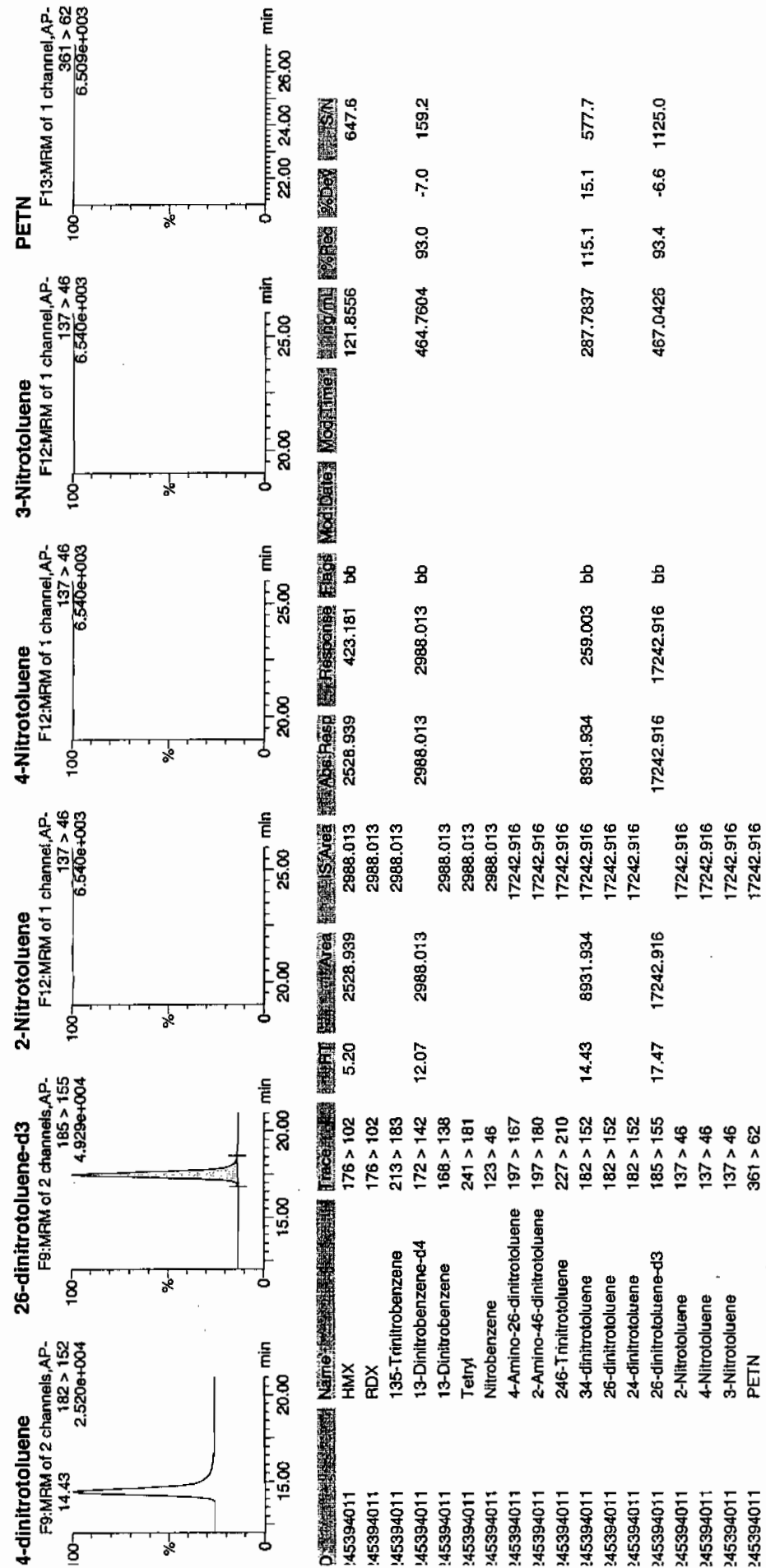
not
2/5/10

LAU 944935 / 8022 / 2 /



Amu 115/110

atasset: C:\MASSLYNX\New_Exp.PRO\020810expA6.qld, Time: Mon Feb 15 07:43:55 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7905

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394011

Sample Amount 2

Moisture: 21.8

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140081.wiff

Date Analyzed: 15-FEB-10 11:15

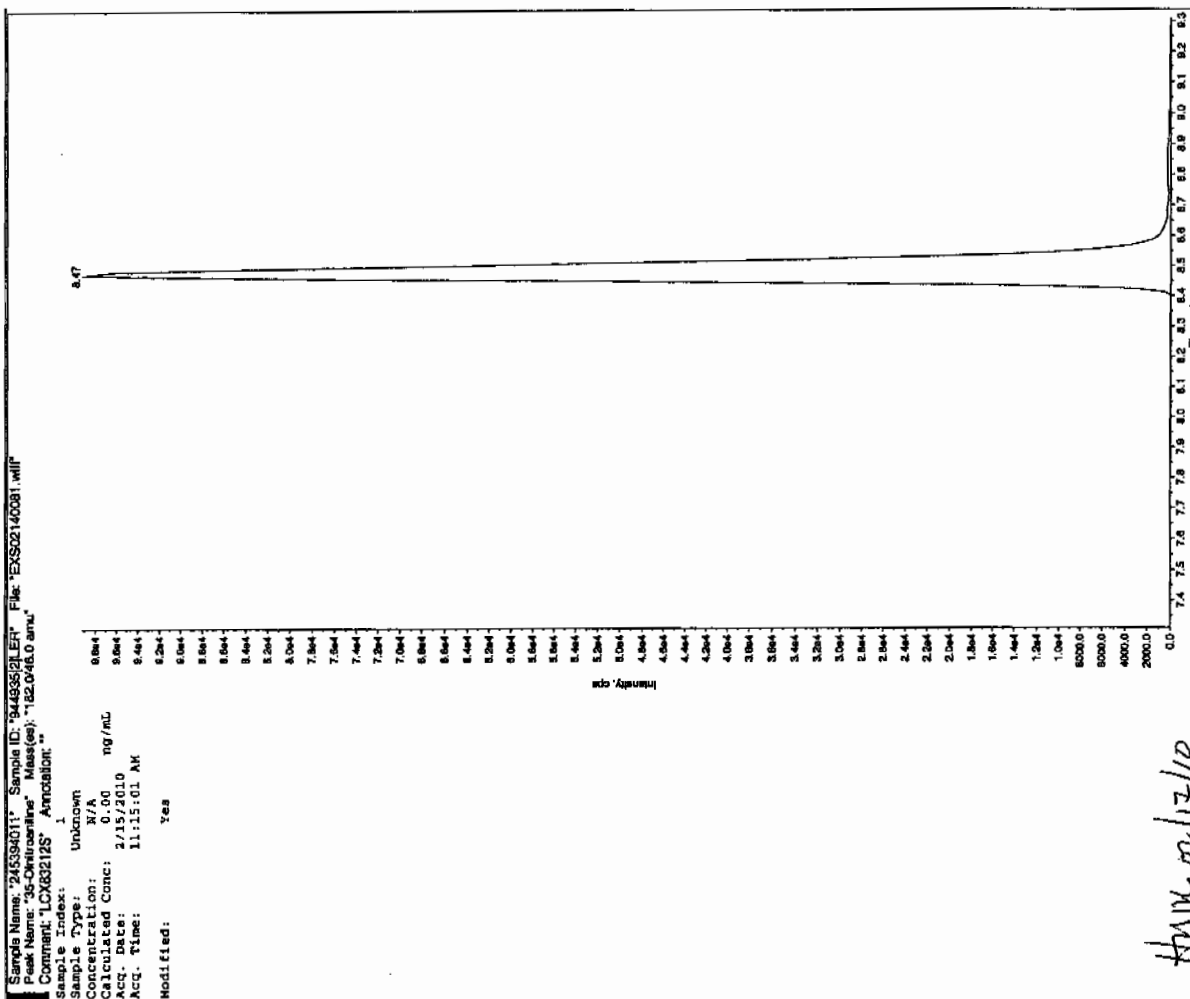
Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	6060	
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

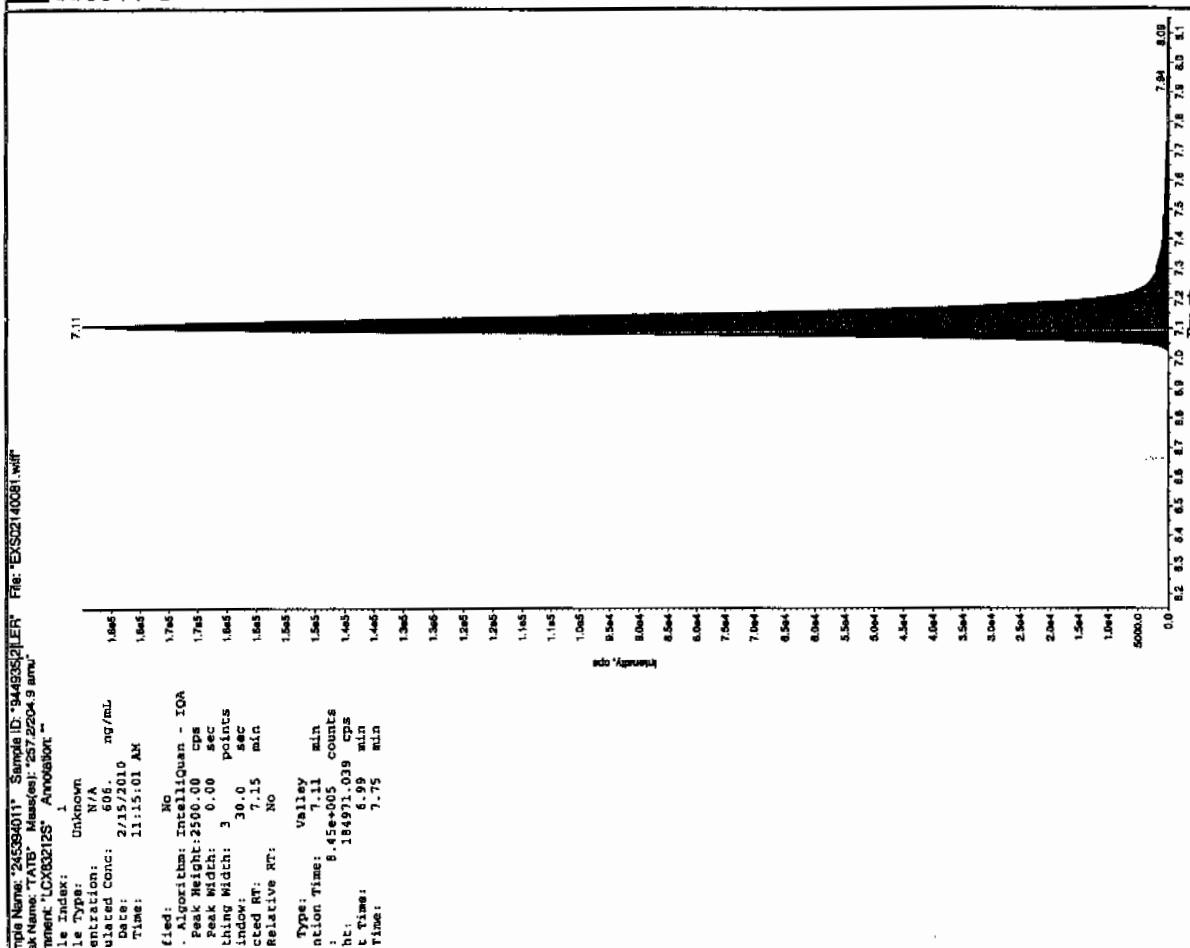
*Concentration =

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

for file



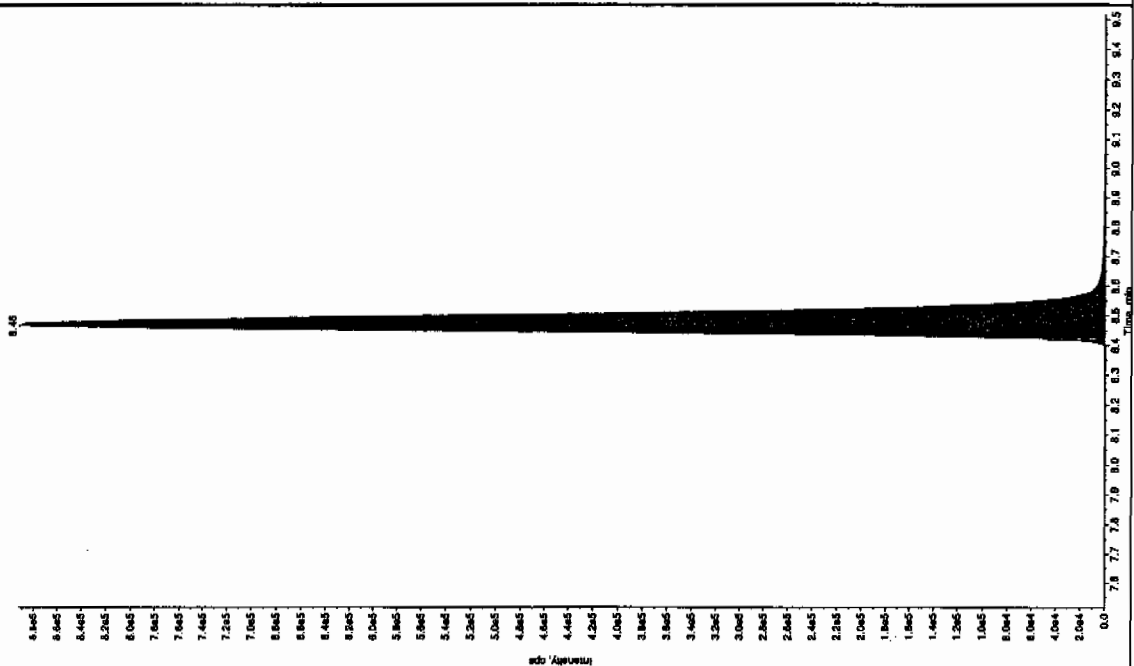
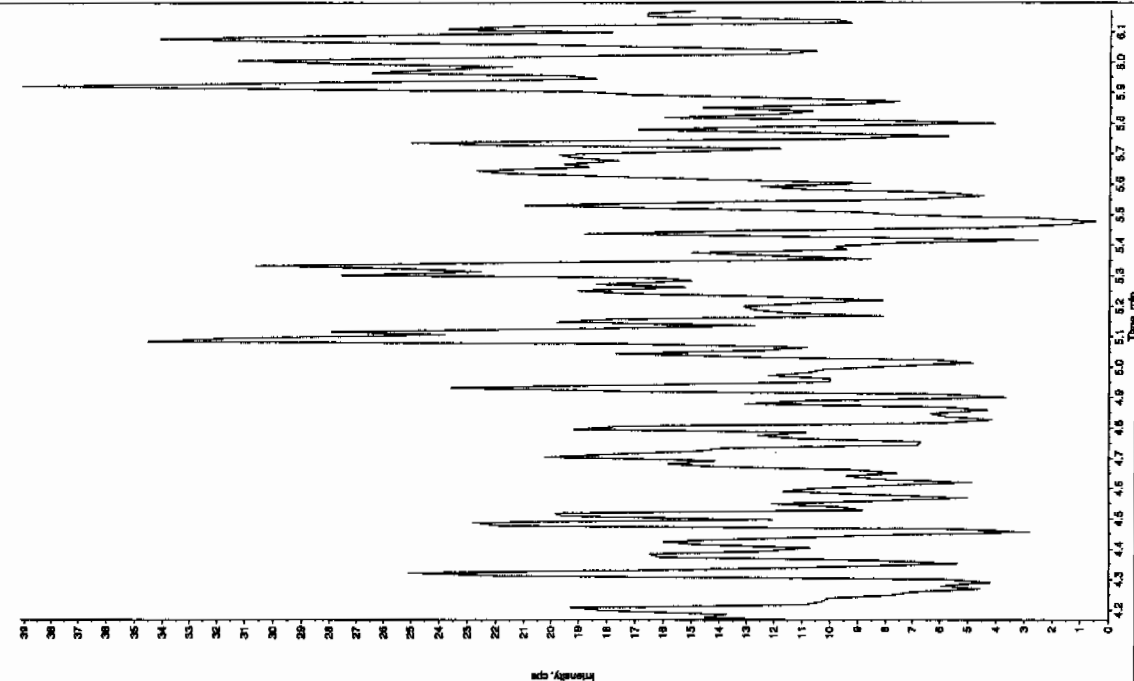
THINK 2/17/10

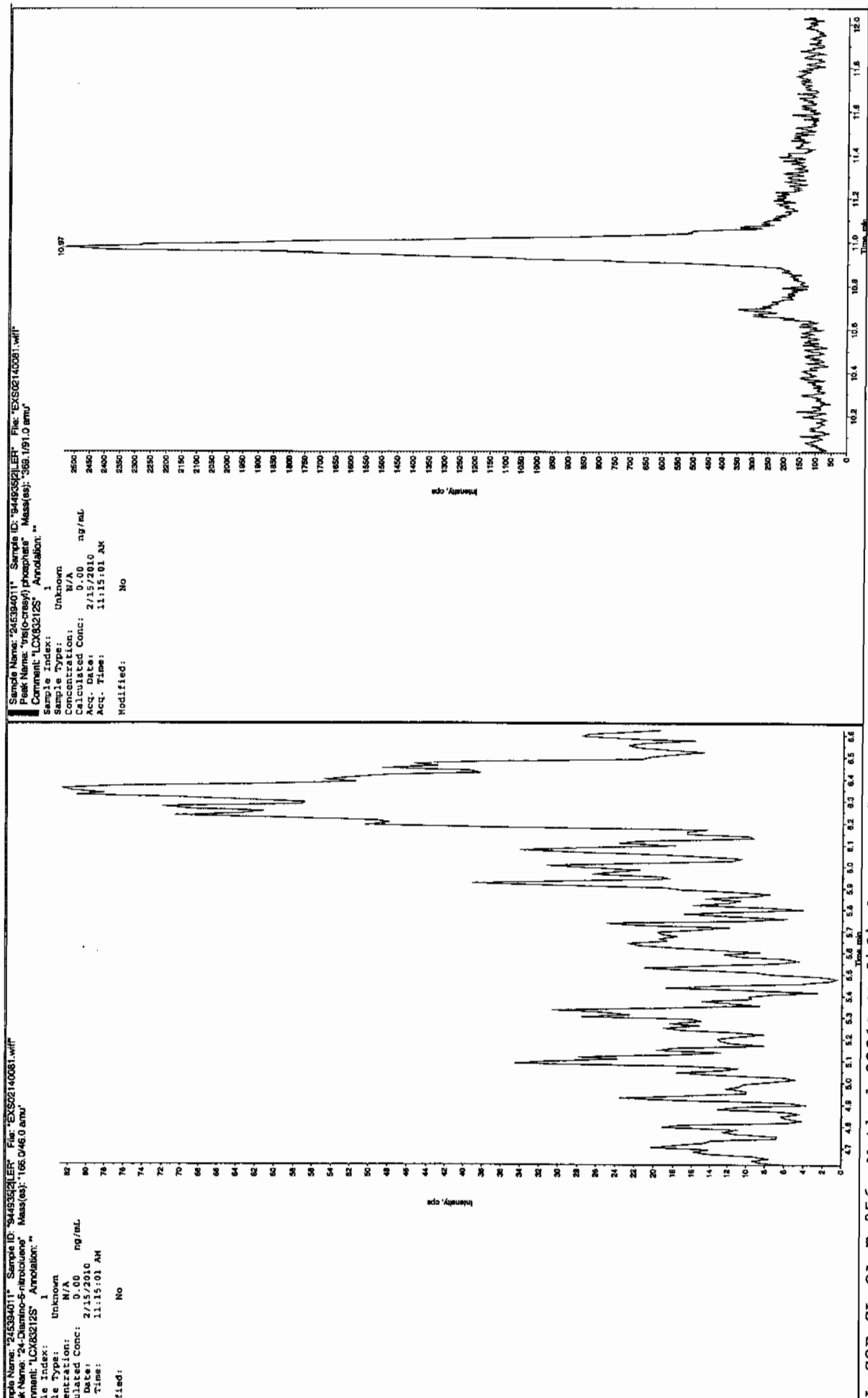


L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Bundle Name: "245394011" Sample ID: "94495921LEF" File: "EX5021.40081.wif"
Peak Name: "34-Dinitrofluorene" Mass(es): "182.17(51.9 amu)"
Comment: "CY3001052" Annotation: "4"

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	2/15/2010
Acq. Time:	11:15:01 AM
Modified:	NO

[illegible]



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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7907

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394012

Sample Amount 2

Moisture: 19.1

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208293a

Date Analyzed: 14-FEB-10 14:26

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
 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\EXP0208293a

Date: 14-Feb-2010

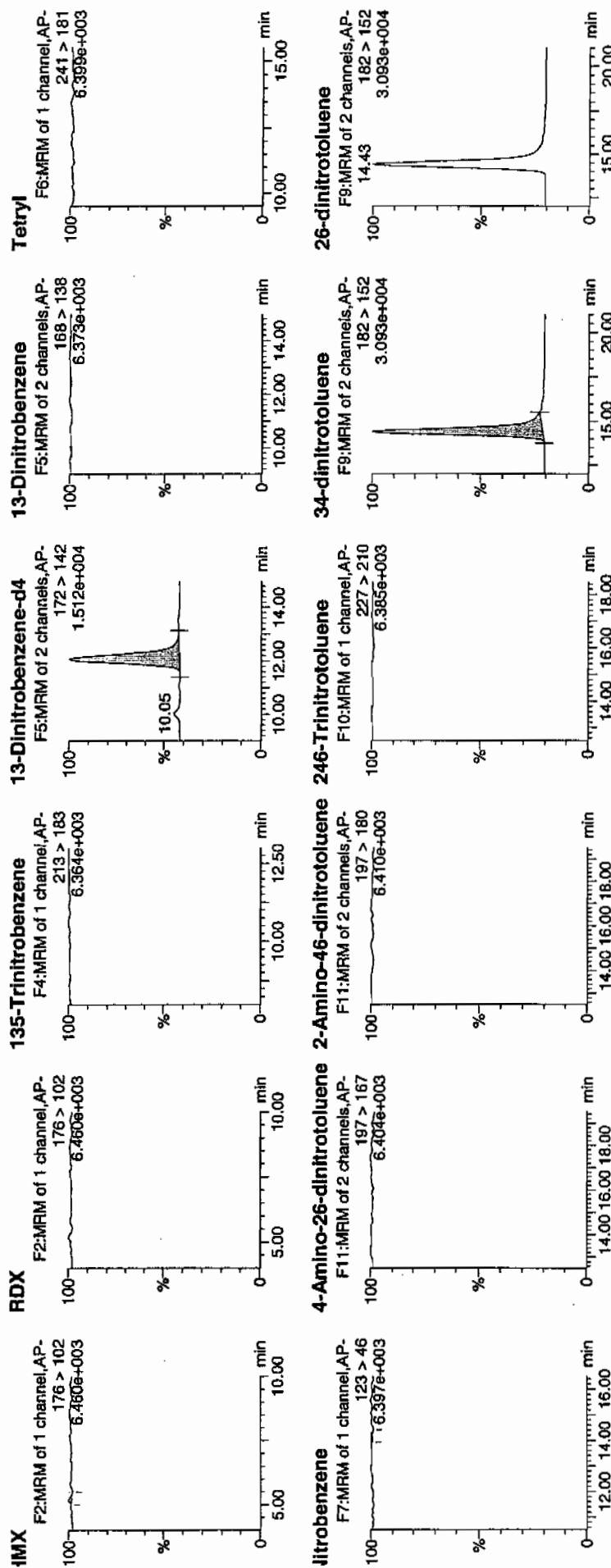
Time: 14:26:18

ID: 245394012

File: 3:3.D

2/5/10

Law 944935 / 21

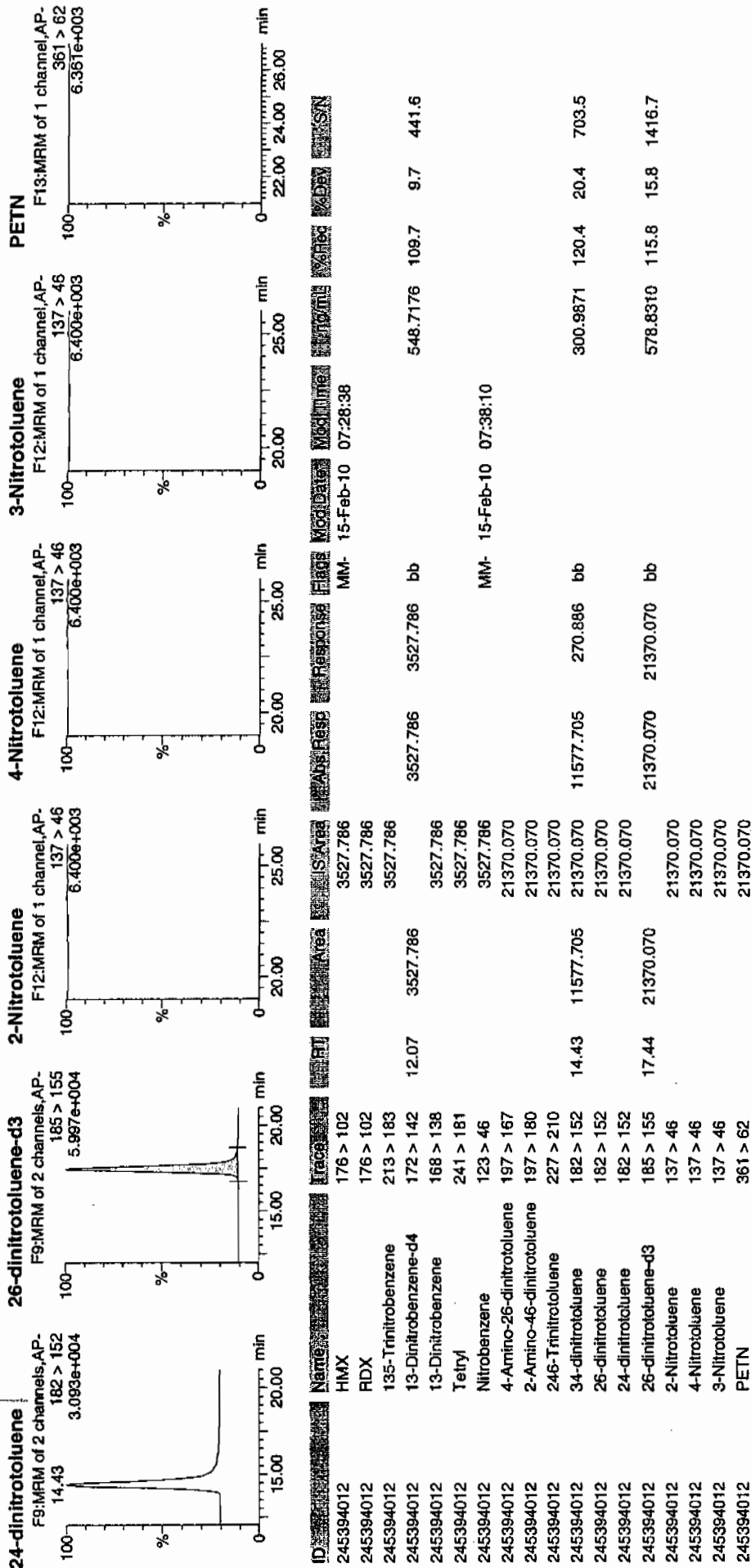


Handwritten signature: Hume 1/5/10

Printed: Mon Feb 15 07:46:07 2010, Page 38 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



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7907

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394012

Sample Amount 2

Moisture: 19.1

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140085.wiff

Date Analyzed: 15-FEB-10 12:17

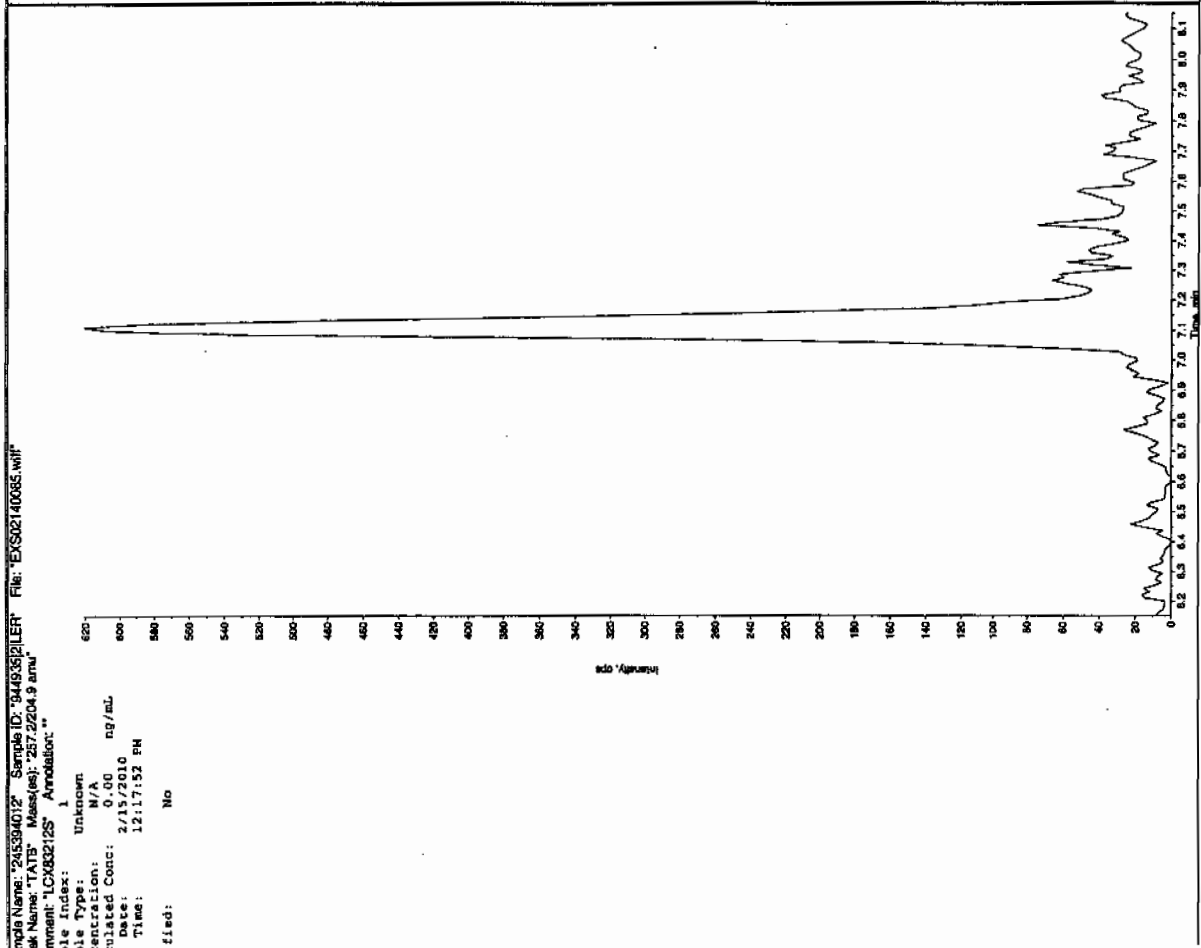
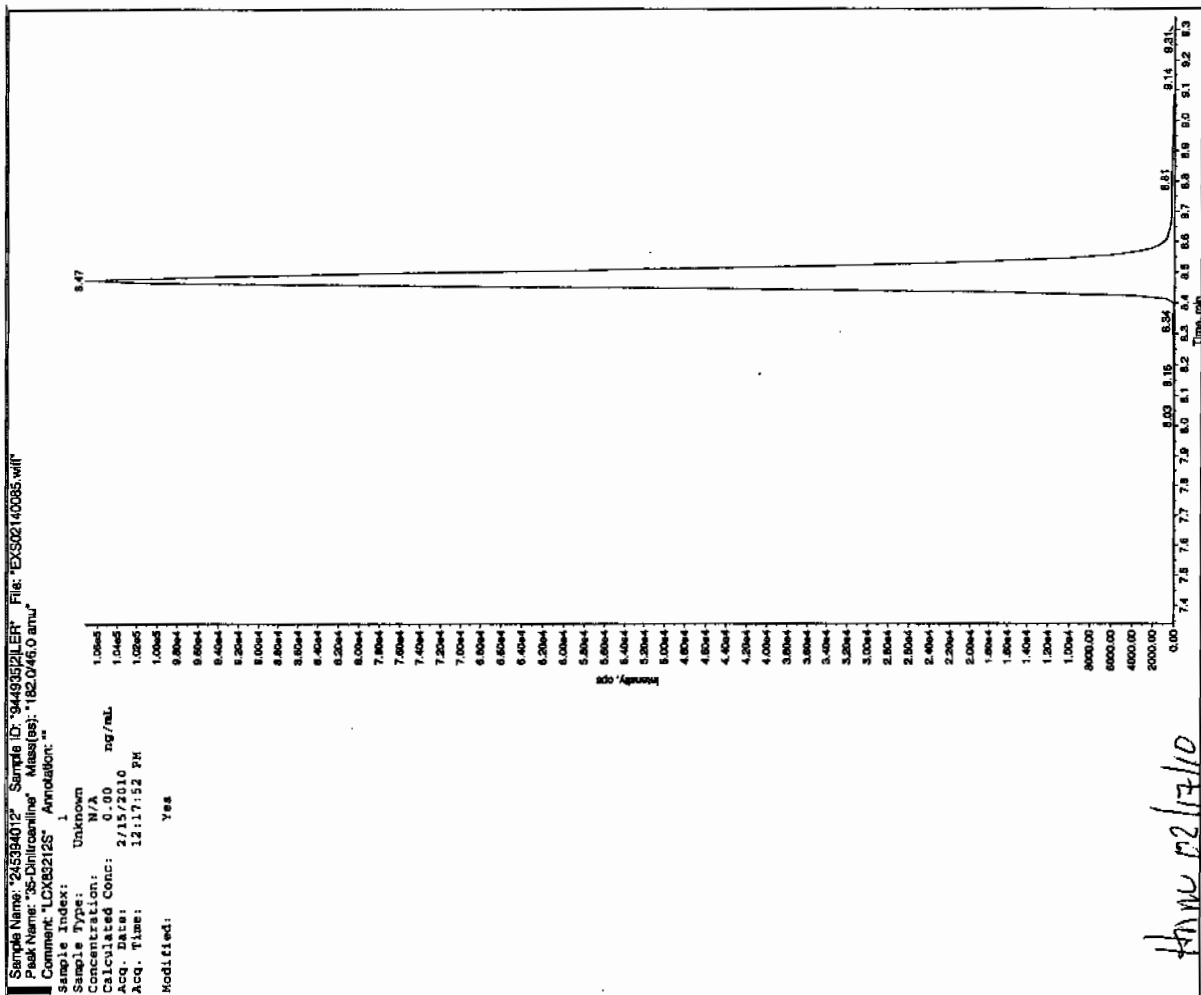
Units: ug/kg

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

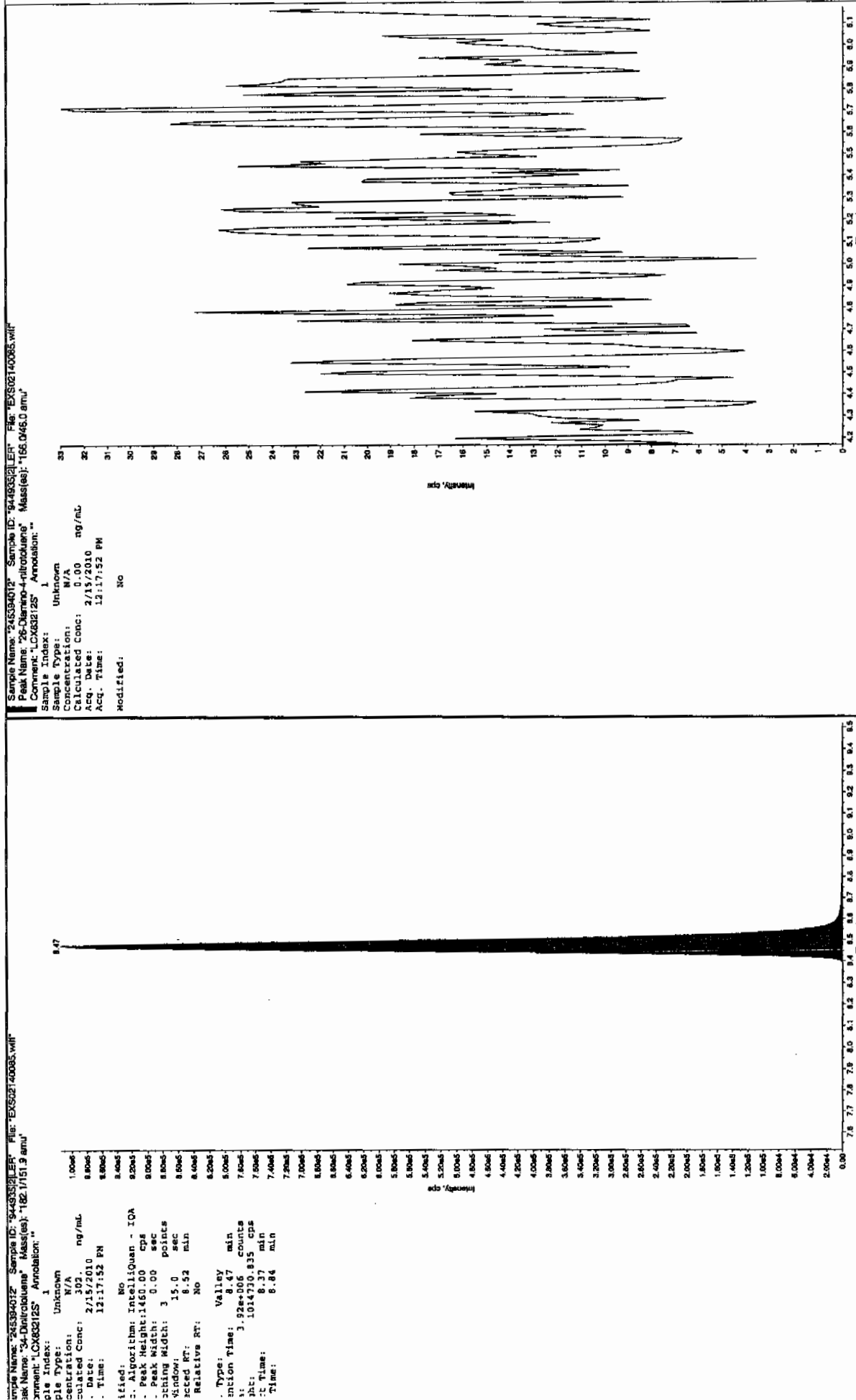
*Concentration =

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

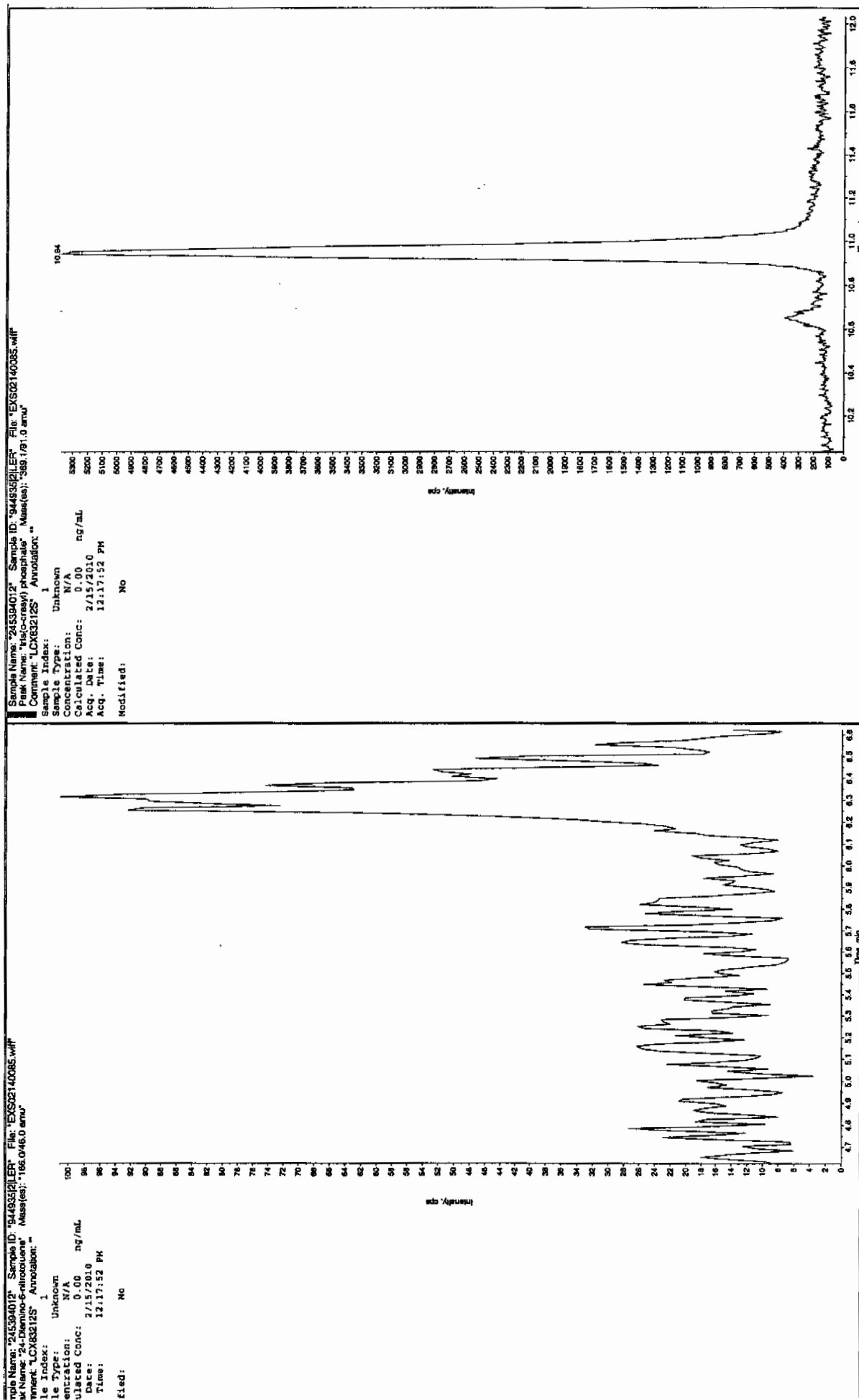
See 2/17/10



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



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



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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7913

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394013

Sample Amount 2

Moisture: 21.3

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208294a

Date Analyzed: 14-FEB-10 14:55

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

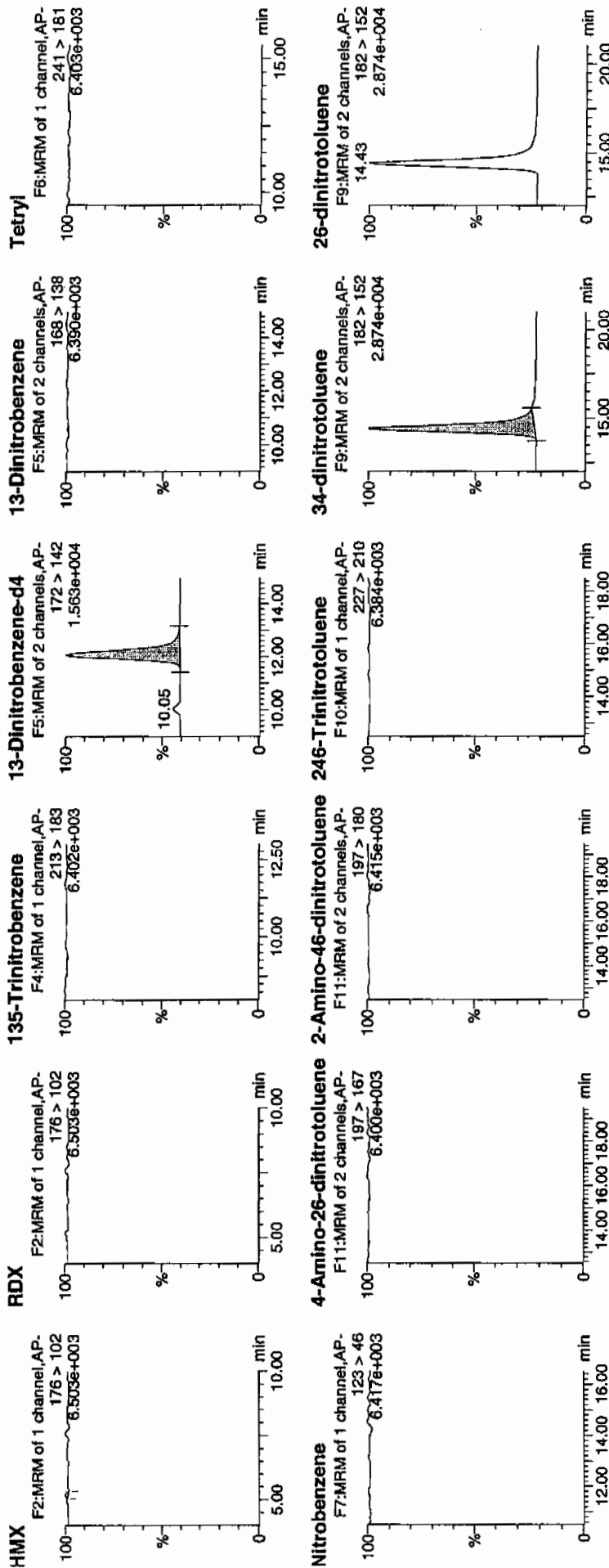
Time: 14:55:47

ID: 245394013

Vial: 3:3,E

not
2/15/10

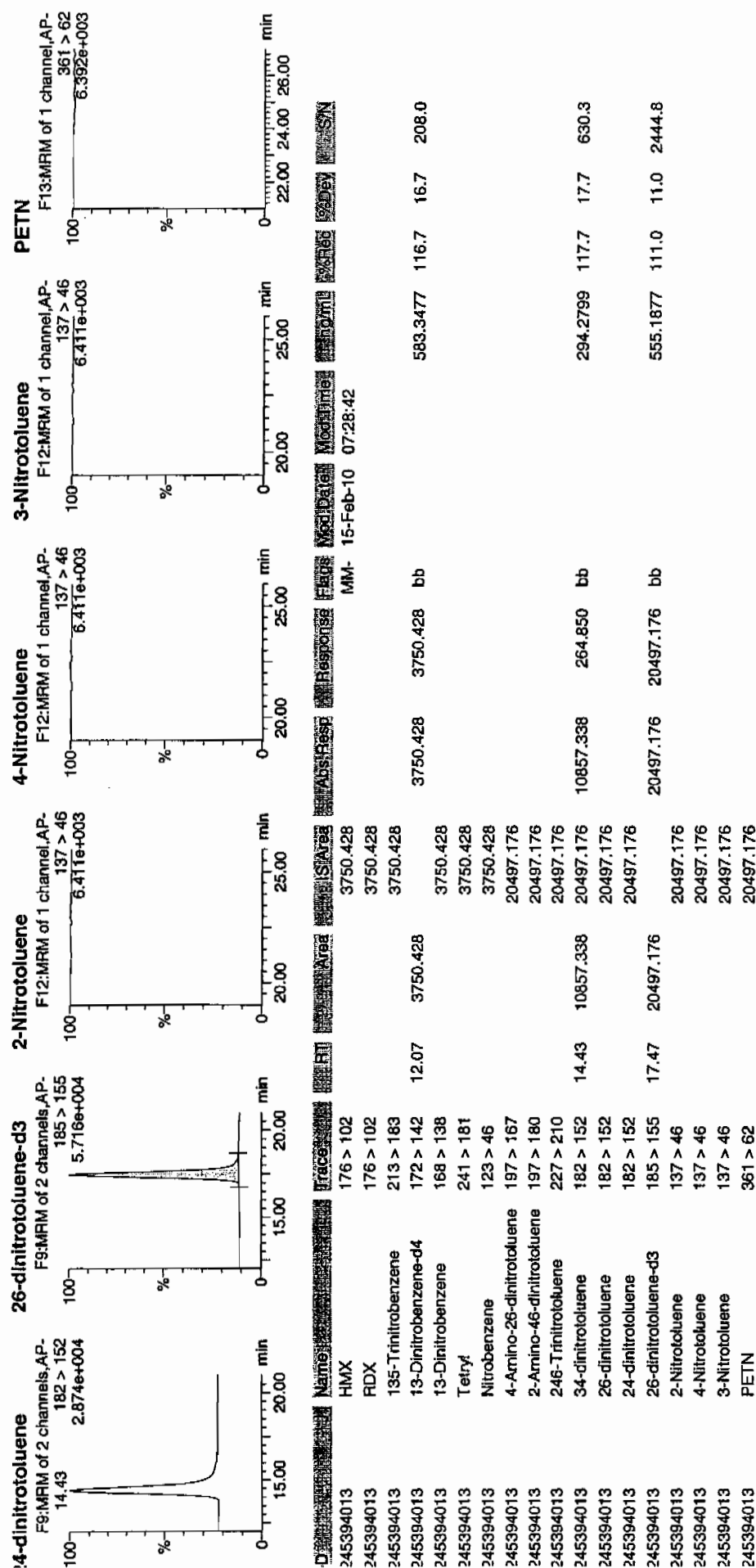
LAUL 944935 | 80123 | 21



Amr 1/5/10

Dataset: C:\MASSLYN\New_Exp.PRO\020810expA6.qld, Time: Mon Feb 15 07:43:55 2010

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7913

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394013

Sample Amount 2

Moisture: 21.3

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140086.wiff

Date Analyzed: 15-FEB-10 12:33

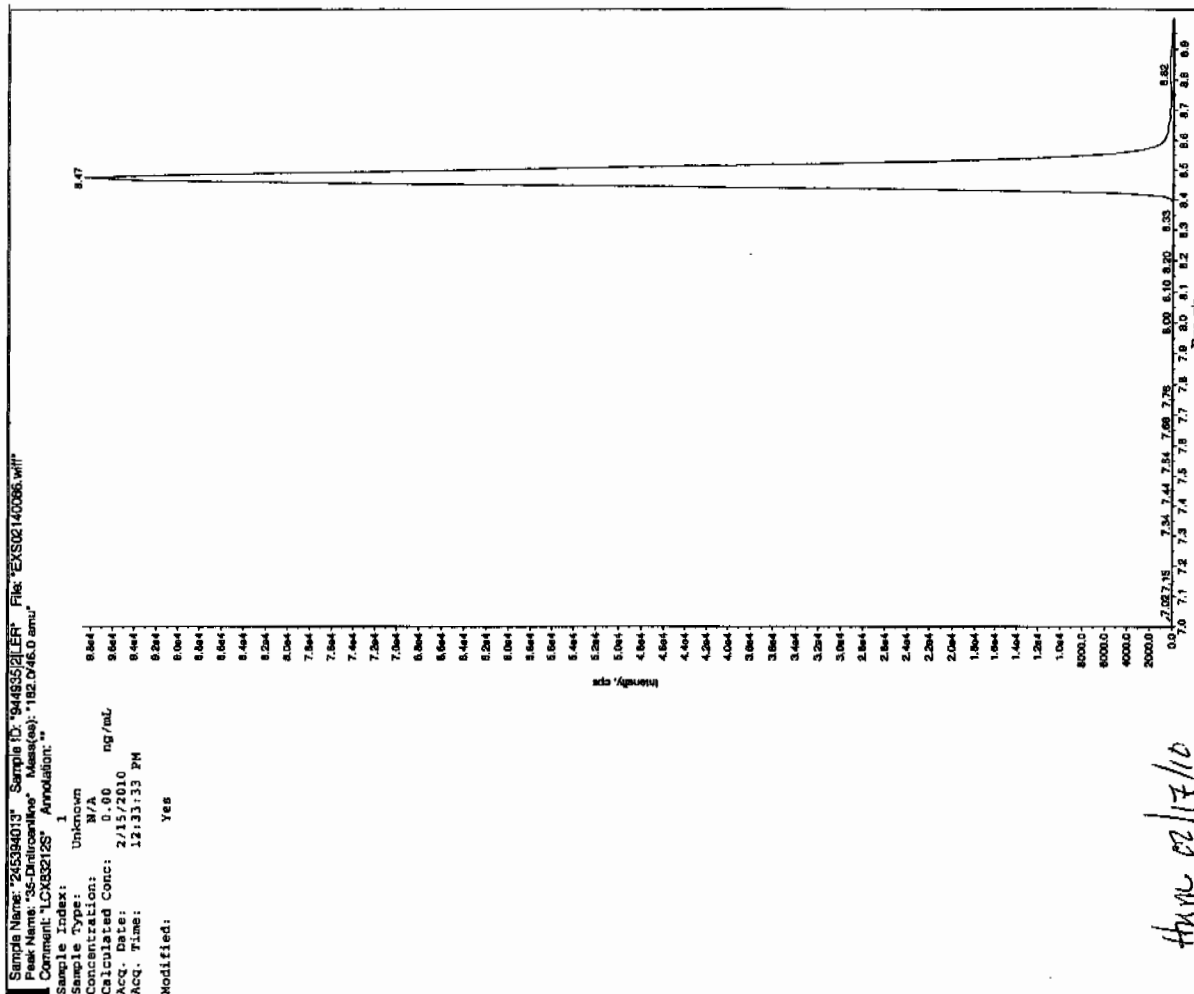
Units: ug/kg

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

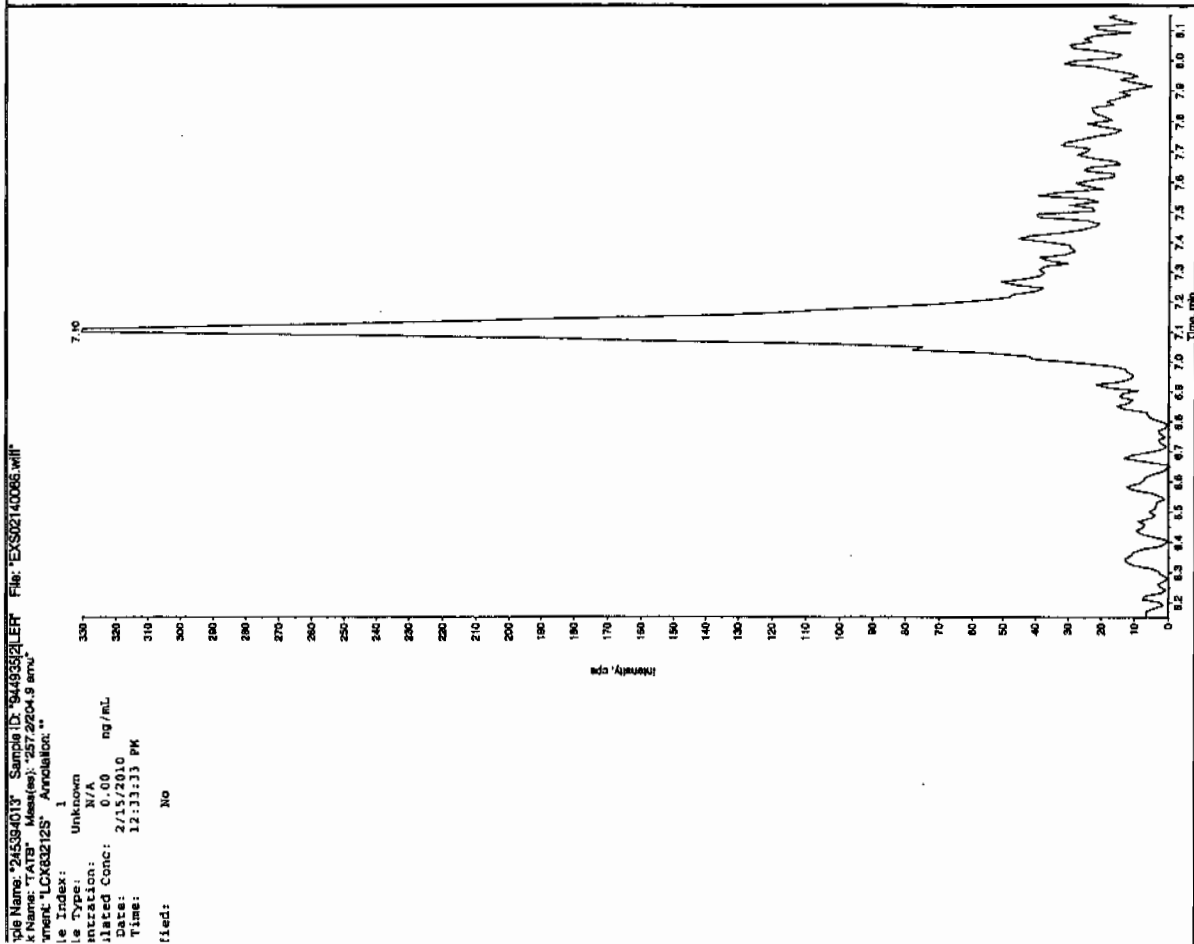
*Concentration =

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

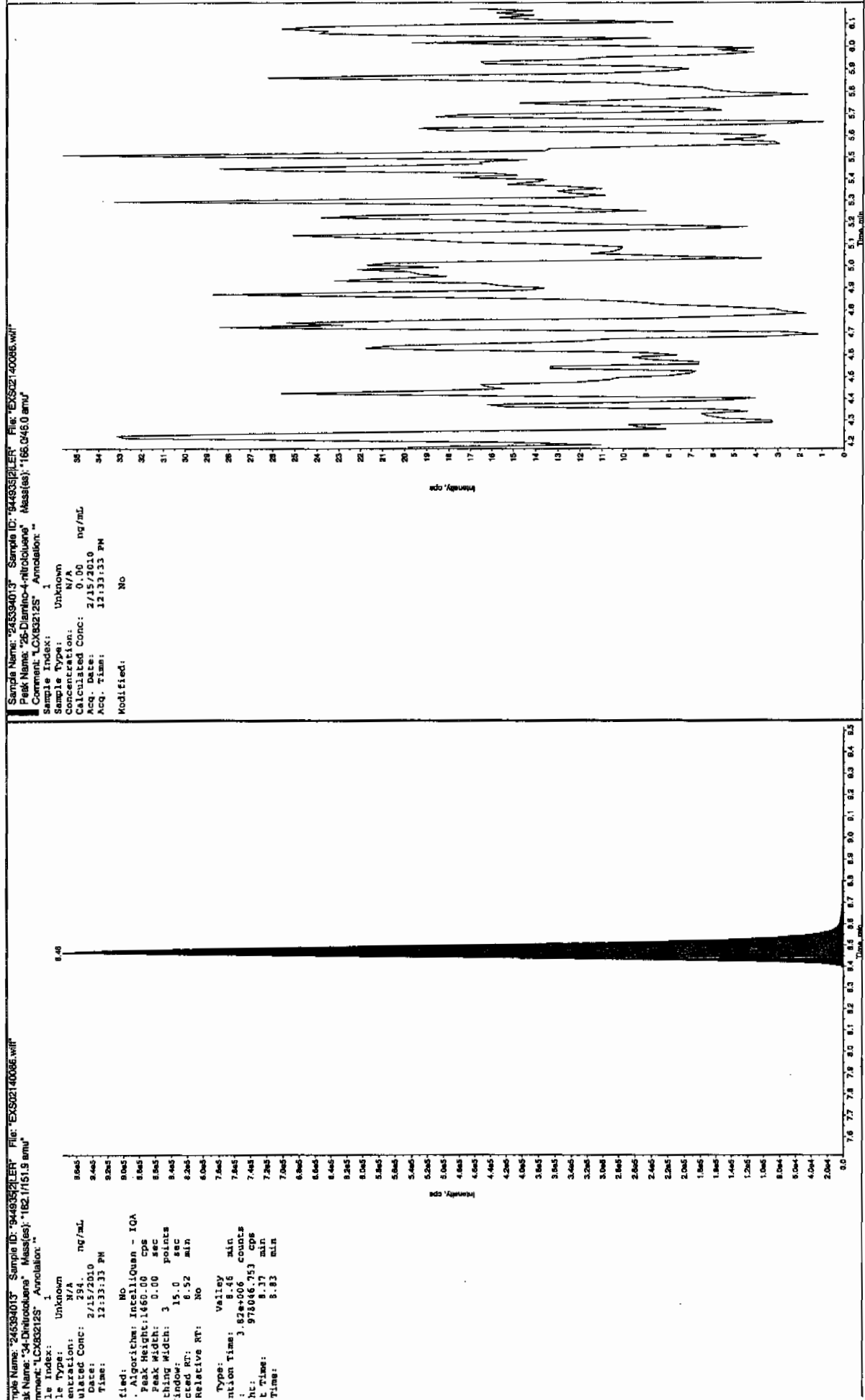
Jan 2/17/10



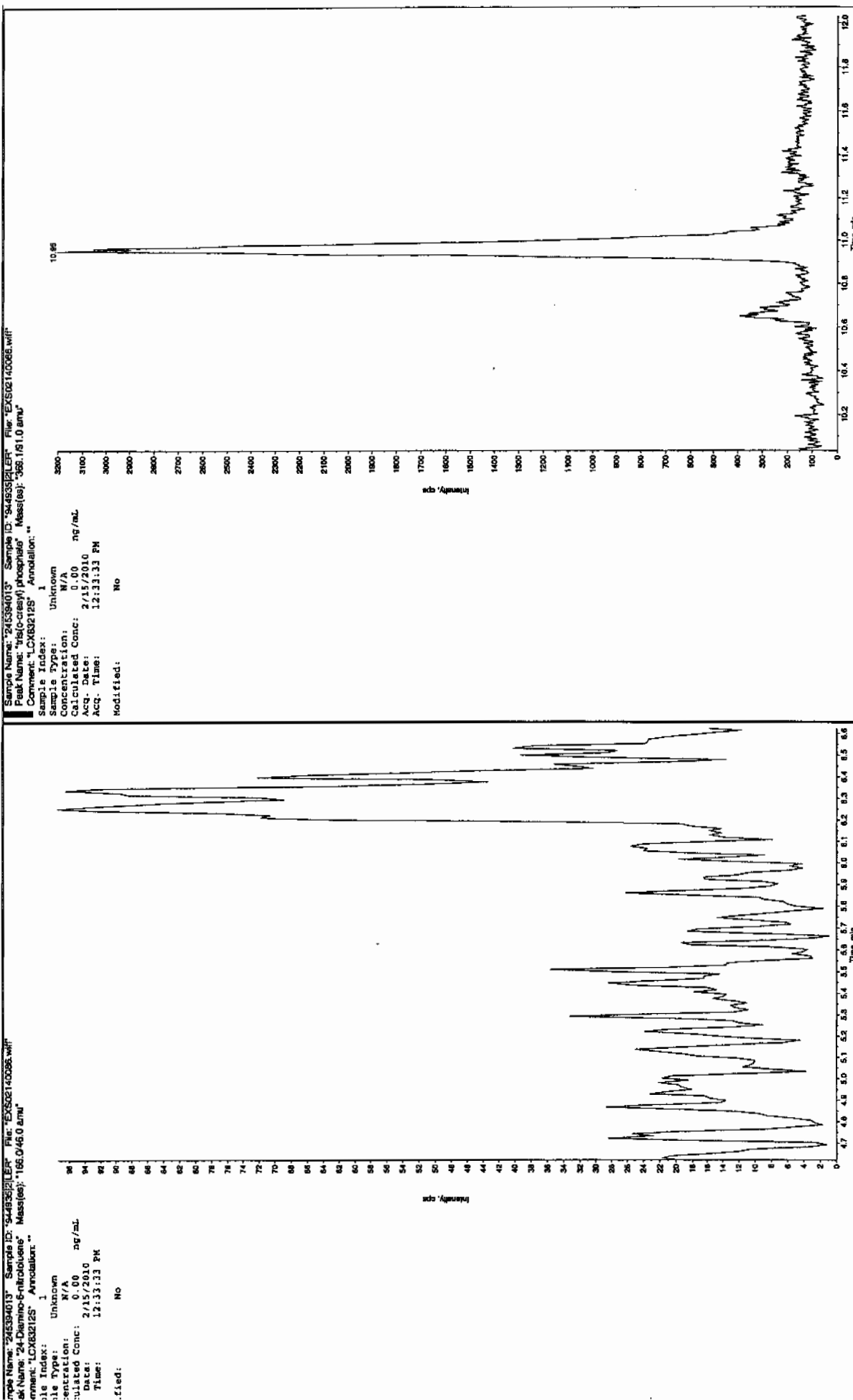
Jan 2/17/10



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



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



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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7909

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394014

Sample Amount 2

Moisture: 15.8

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208295a

Date Analyzed: 14-FEB-10 15:25

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

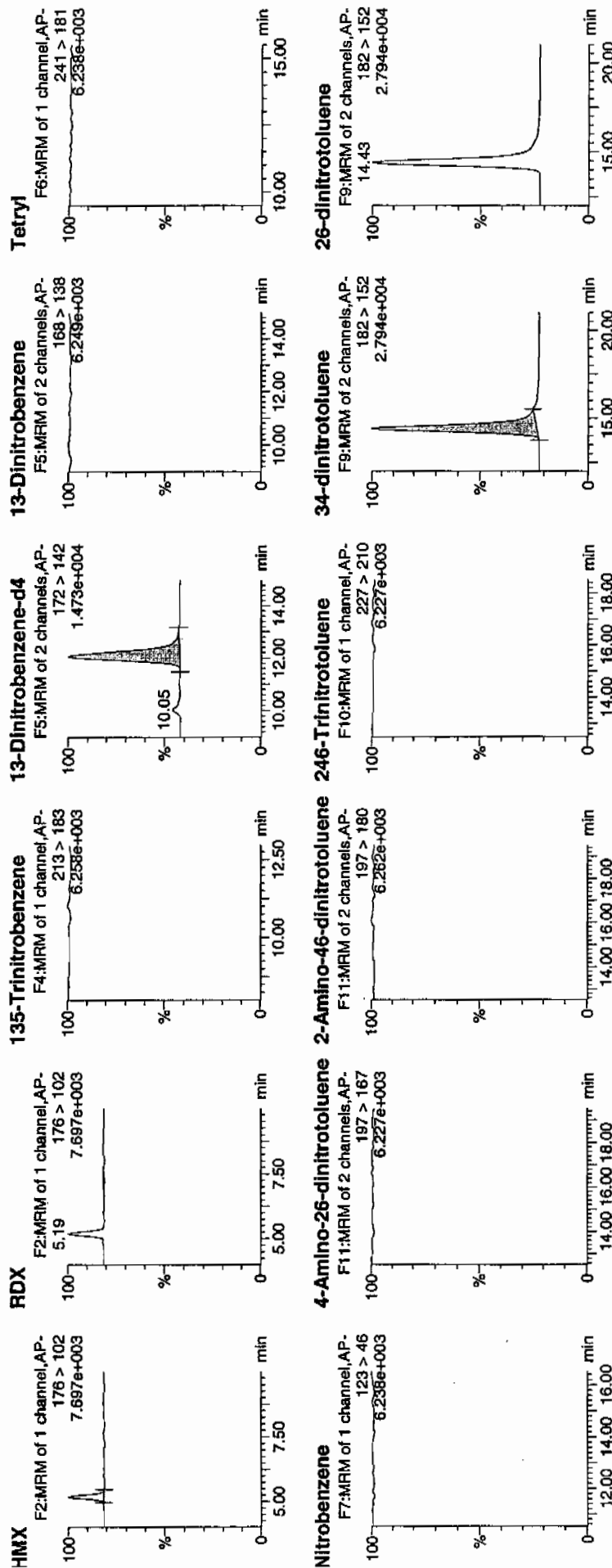
Time: 15:25:15

ID: 245394014

Vial: 3:3.F

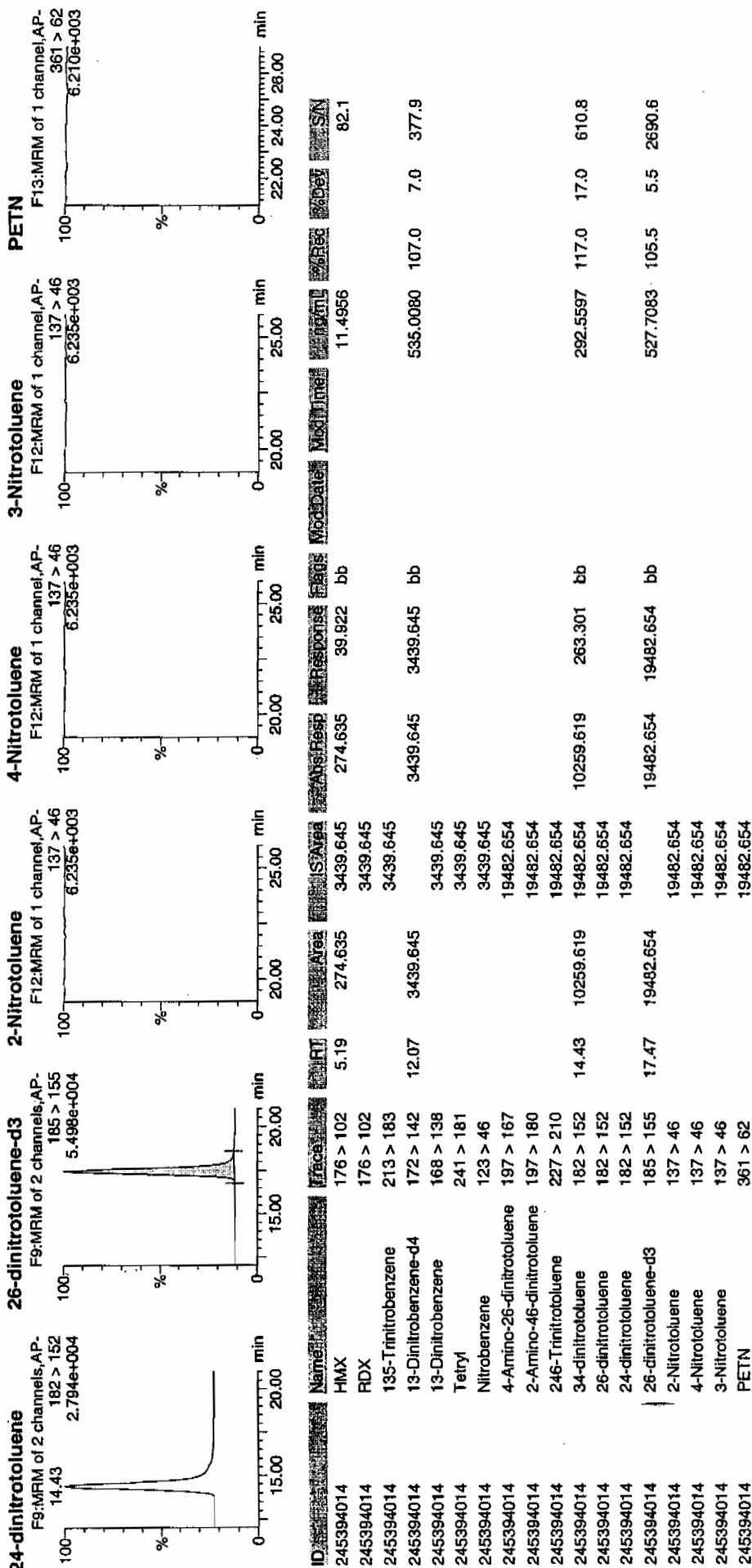
*not
2/15/10*

LAU/944935/8022



Sample 13.10

Dataset: C:\MASSL\YNNXNew_Exp.PRO\020810expA6.qld, Time: Mon Feb 15 07:43:55 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7909

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394014

Sample Amount 2

Moisture: 15.8

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140087.wiff

Date Analyzed: 15-FEB-10 12:49

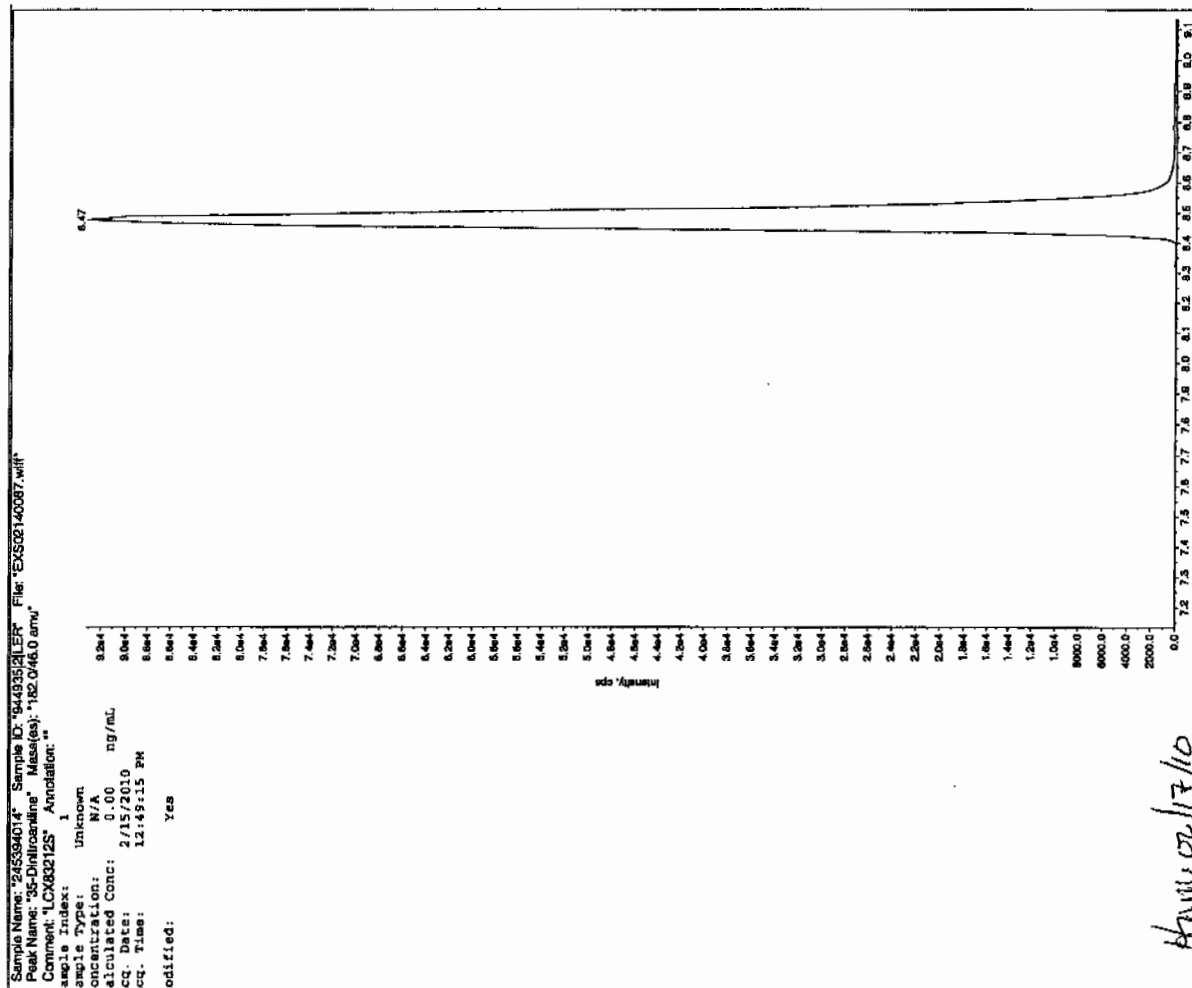
Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	12900	
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

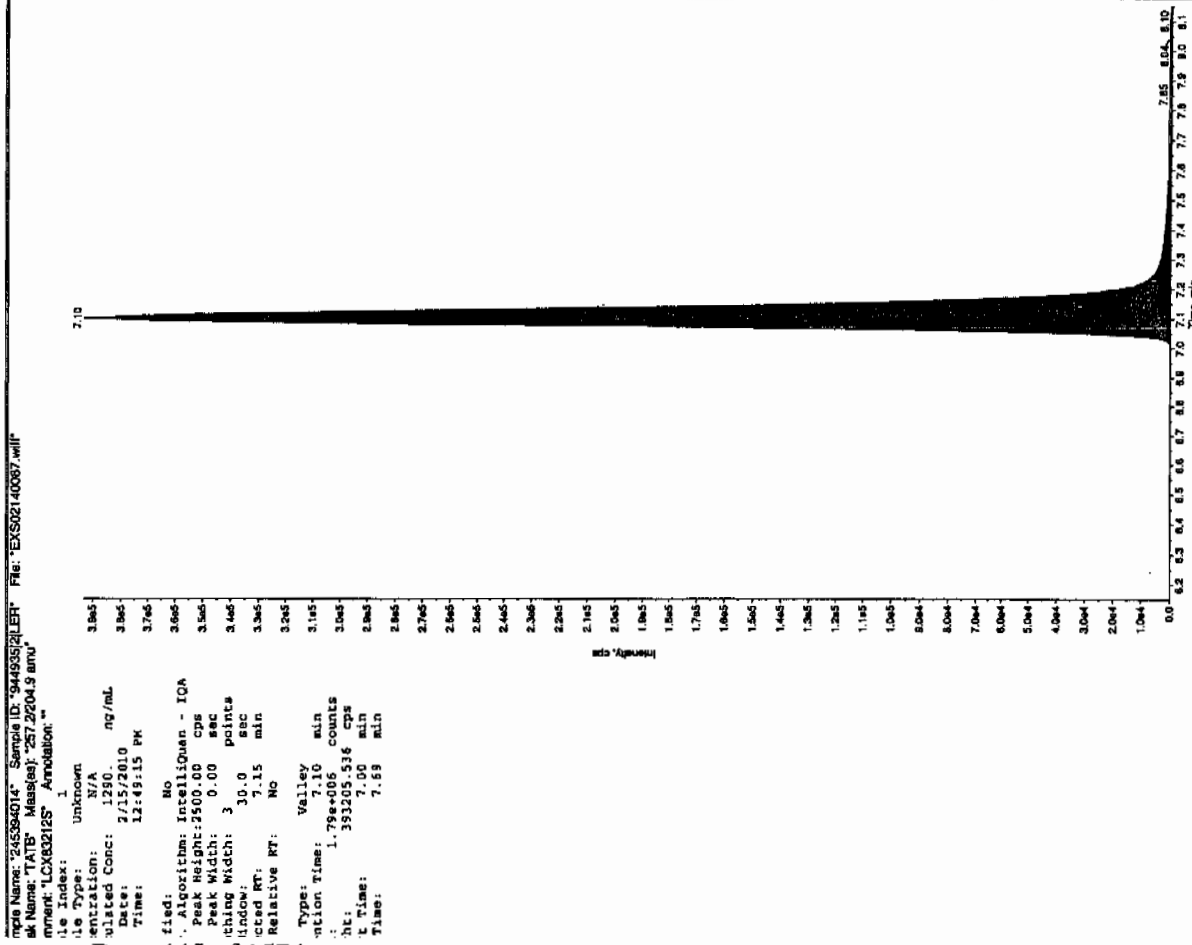
*Concentration =

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

See 2/17/10



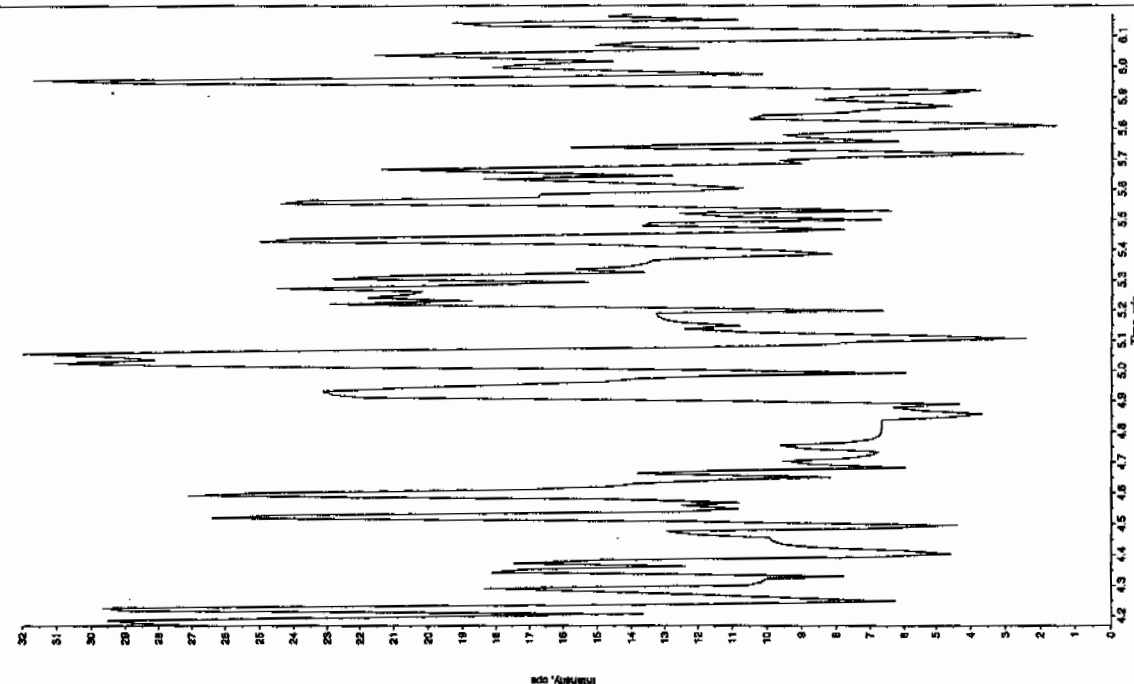
2/17/10



3L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "245394014" Sample ID: "94483521ER" File: "EXS02140087.wif"
 Peak Name: "26-Diamino-4-nitrobenzene" Mass(es): "156.046.0 amu"
 Comment: "LCX83212S" Annotation: "

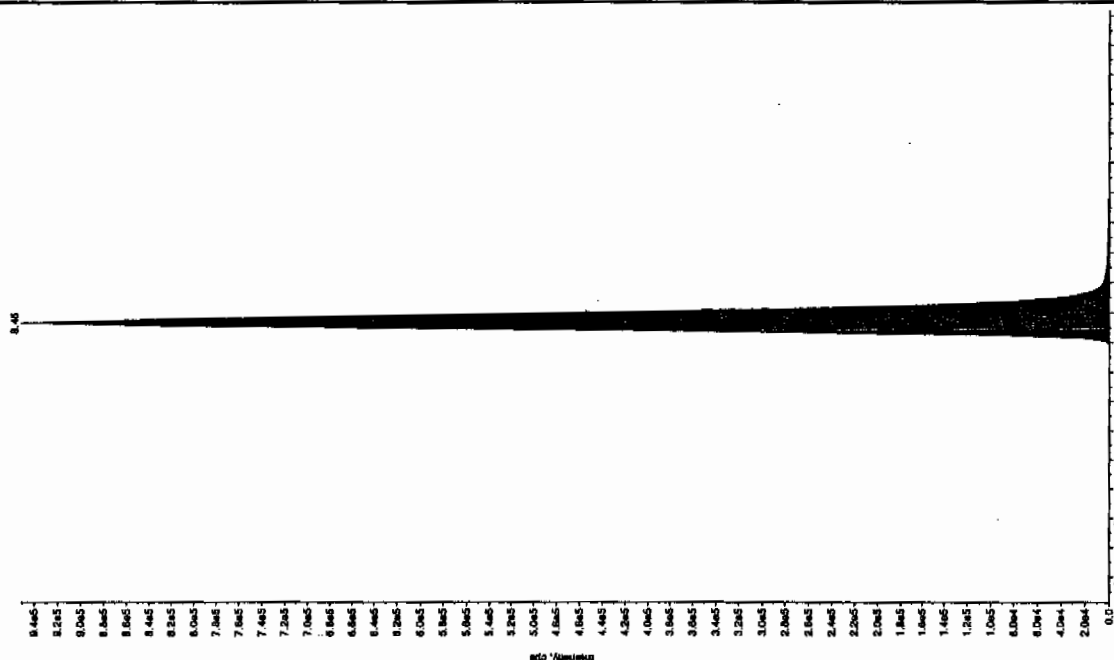
Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A ng/mL
 Calculated Conc: 0.00
 Acq. Date: 2/15/2010
 Acq. Time: 12:49:15 PM
 Modified: No



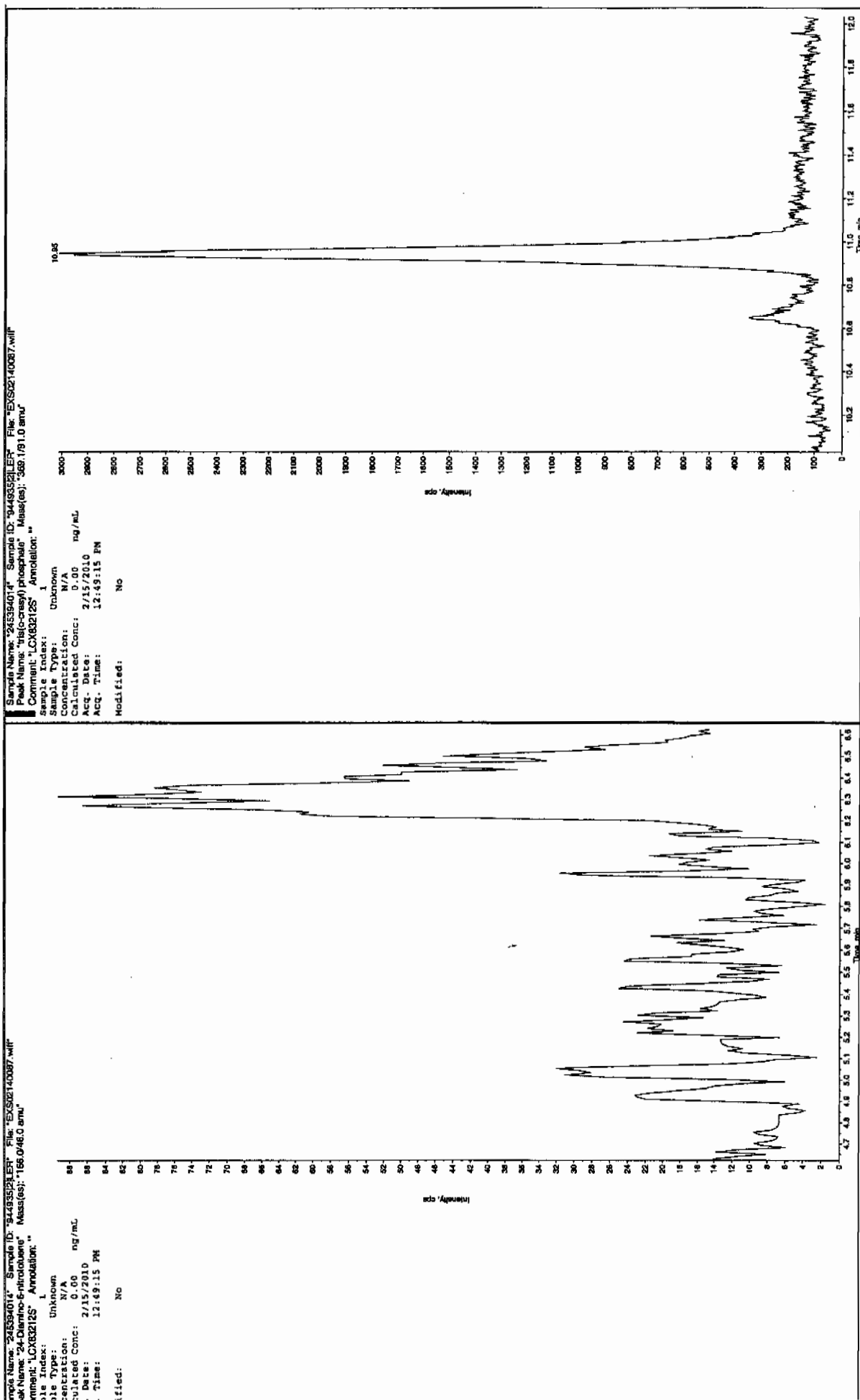
Sample Name: "245394014" Sample ID: "94483521ER" File: "EXS02140087.wif"
 Peak Name: "34-Dinitrobenzene" Mass(es): "182.051.9 amu"
 Comment: "LCX83212S" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A ng/mL
 Calculated Conc: 279.0
 Acq. Date: 2/15/2010
 Acq. Time: 12:49:15 PM
 Modified: No

Algorithm: IntelliQuan - IQA
 Peak Height: 1460.00 cps
 Peak Width: 0.00 sec
 Window: 3 points
 Window: 15.0 sec
 Retention Time: 8.52 min
 Relative RT: No
 Type: Valley
 Retention Time: 8.46 min
 Integration Time: 3.61e+006 counts
 Height: 951600.098 cps
 Retention Time: 8.36 min
 Retention Time: 8.84 min



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



3L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7910

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394015

Sample Amount 2

Moisture: 9.9

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208296a

Date Analyzed: 14-FEB-10 15:54

Units: ug/kg

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

*Concentration =

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

Dataset: C:\MASSLYNX\New_Exp\PRO\020810expA6.qld, Time: Mon Feb 15 07:43:55 2010

Name: C:\MASSLYNX\NEW_EXP\PRO\data\EXP0208296a

Date: 14-Feb-2010

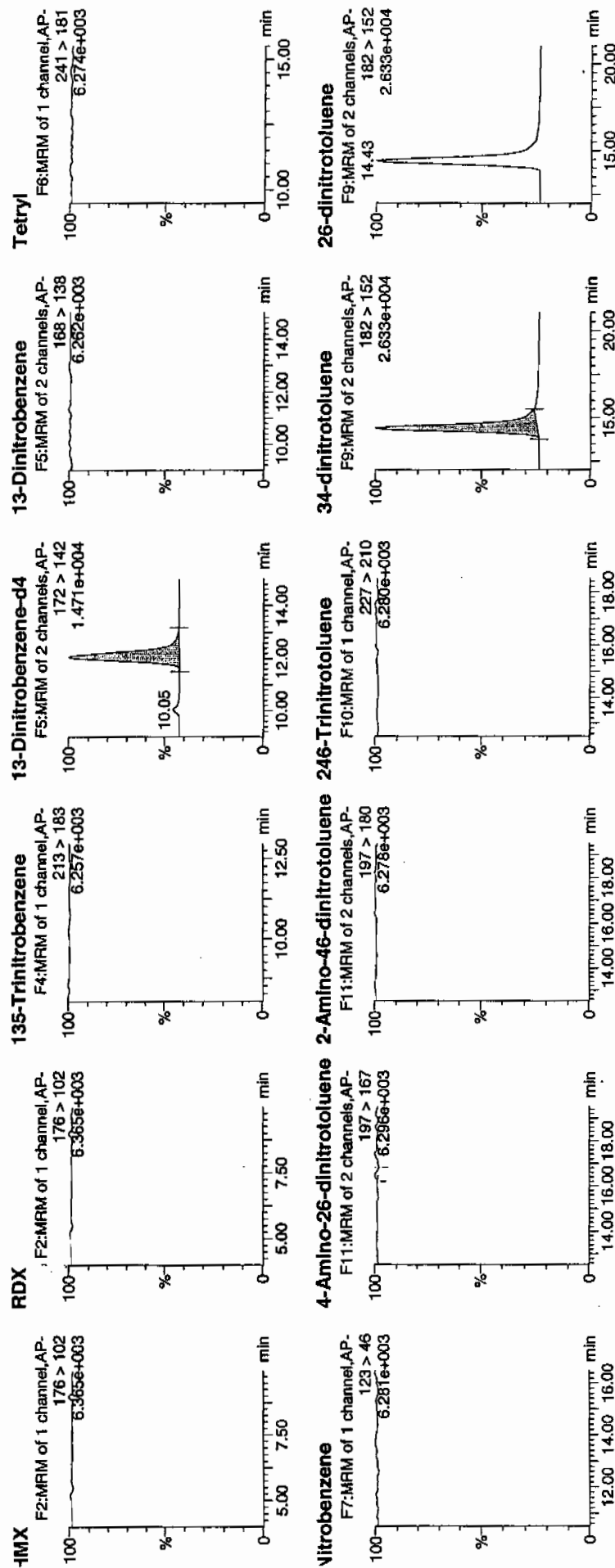
Time: 15:54:43

D: 245394015

/lat: 3:4.A

ADP
2/5/10

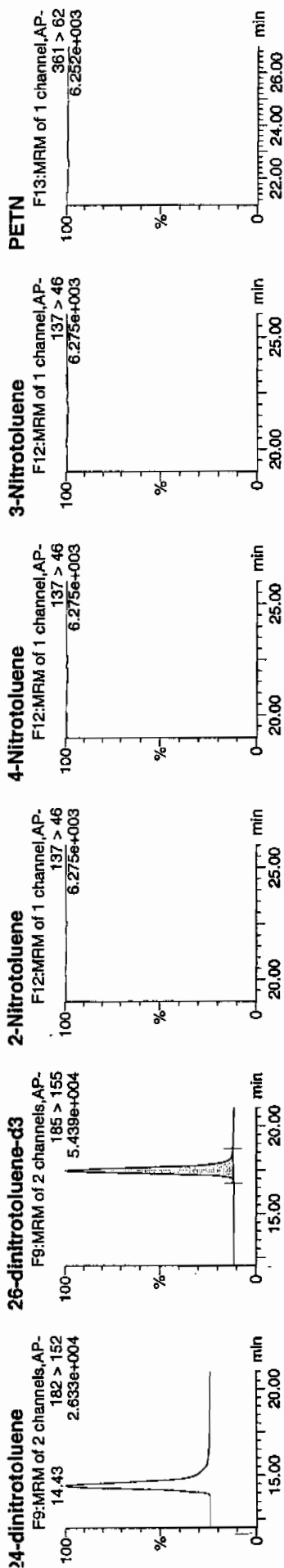
944935 / 80121



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Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA6.qld, Time: Mon Feb 15 07:43:55 2010

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7910

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 245394015

Sample Amount 2

Moisture: 9.9

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140088.wiff

Date Analyzed: 15-FEB-10 13:04

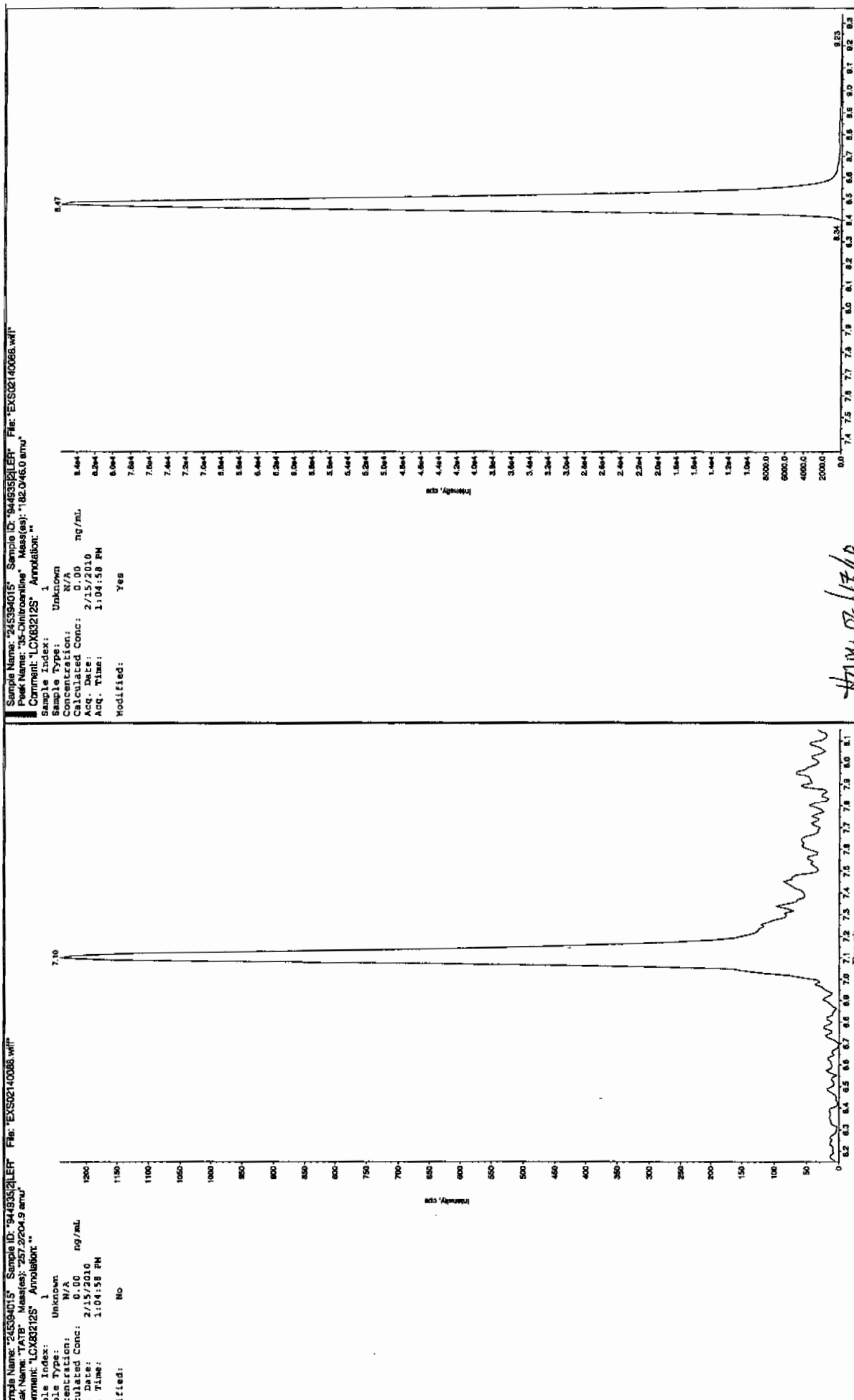
Units: ug/kg

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 2/17/10



Jan 2/17/10

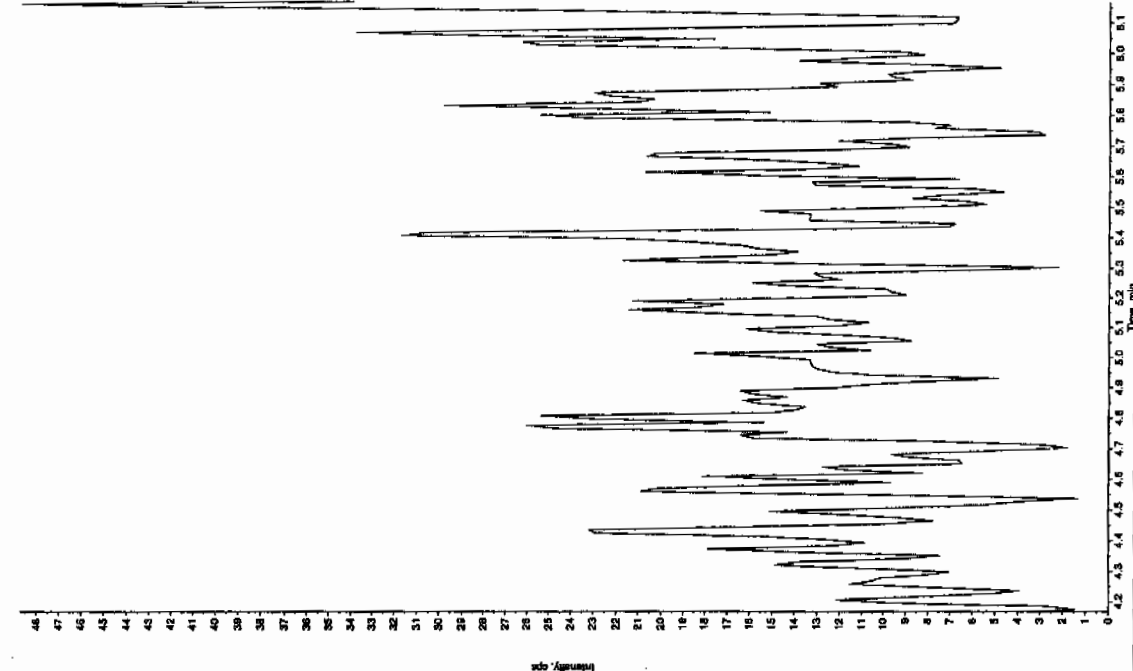
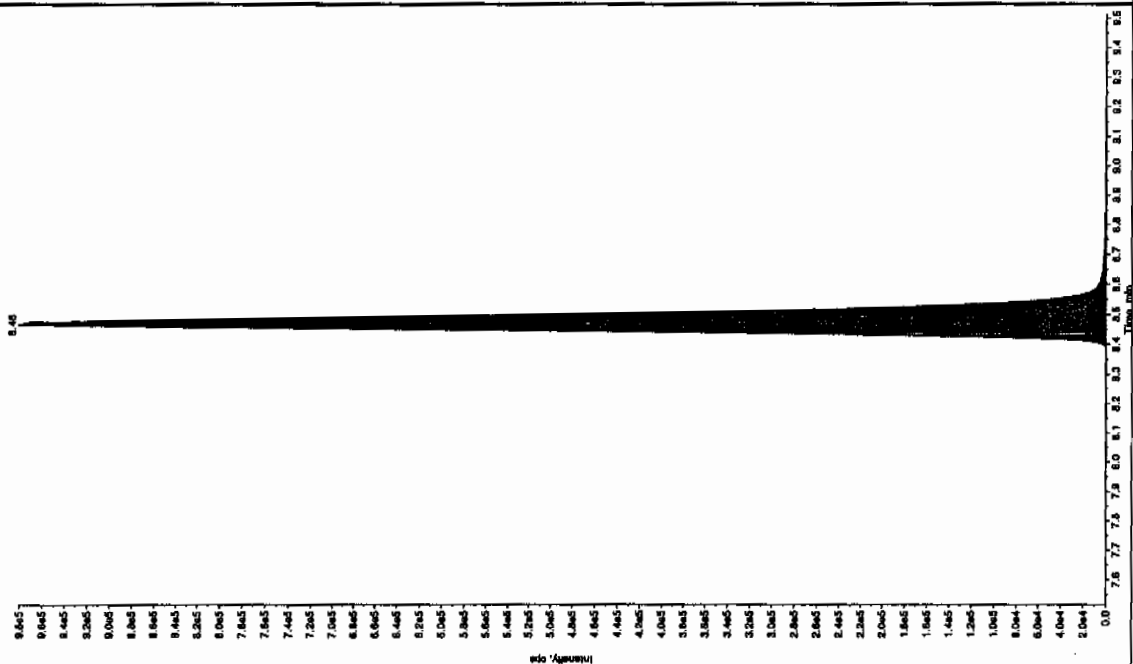
EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "245394015" Sample ID: "94493521LRF" File: "EX502140088.wiff"
 Peak Name: "28-Diamino-4-nitrobenzene" Mass(es): "166.046.0 amu"
 Comment: "LCX832125" Annotation: ""

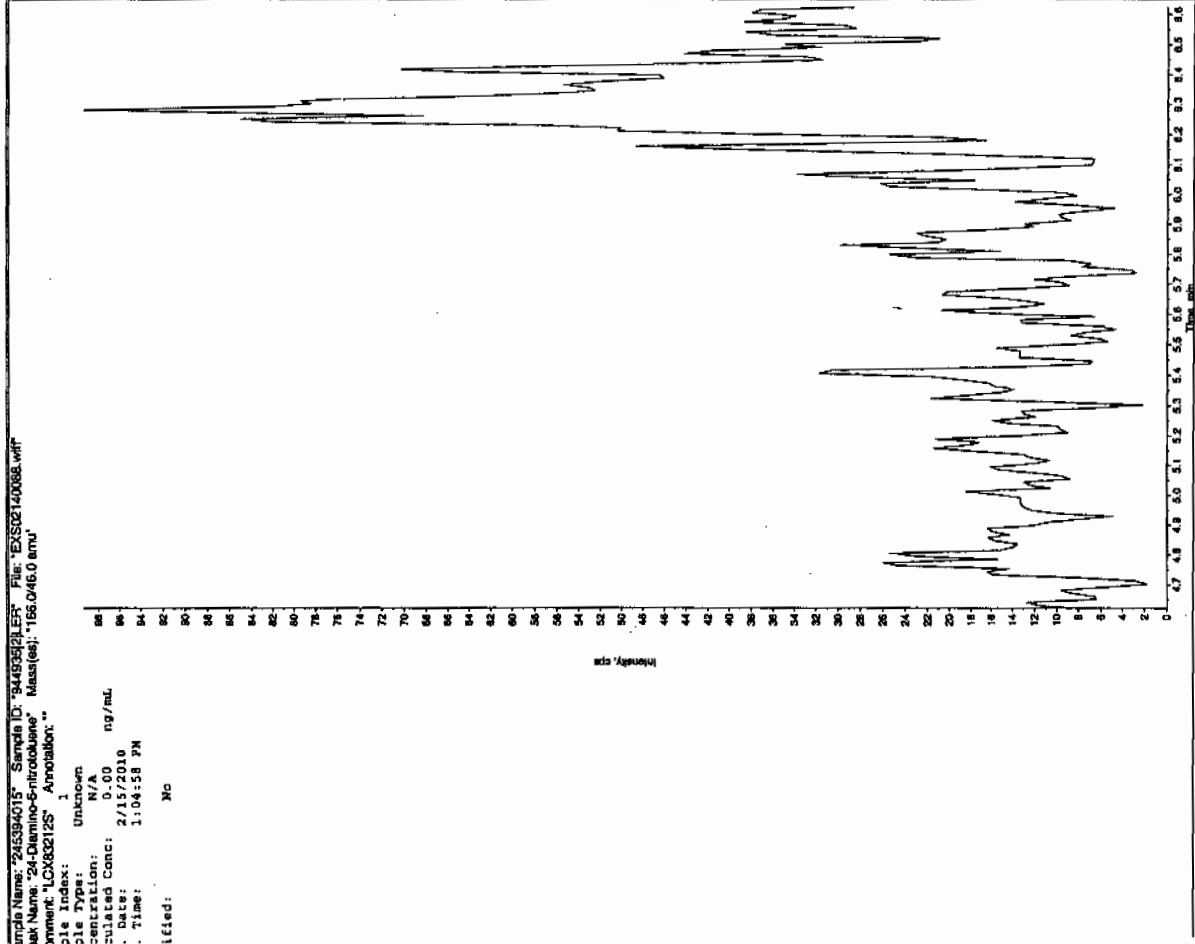
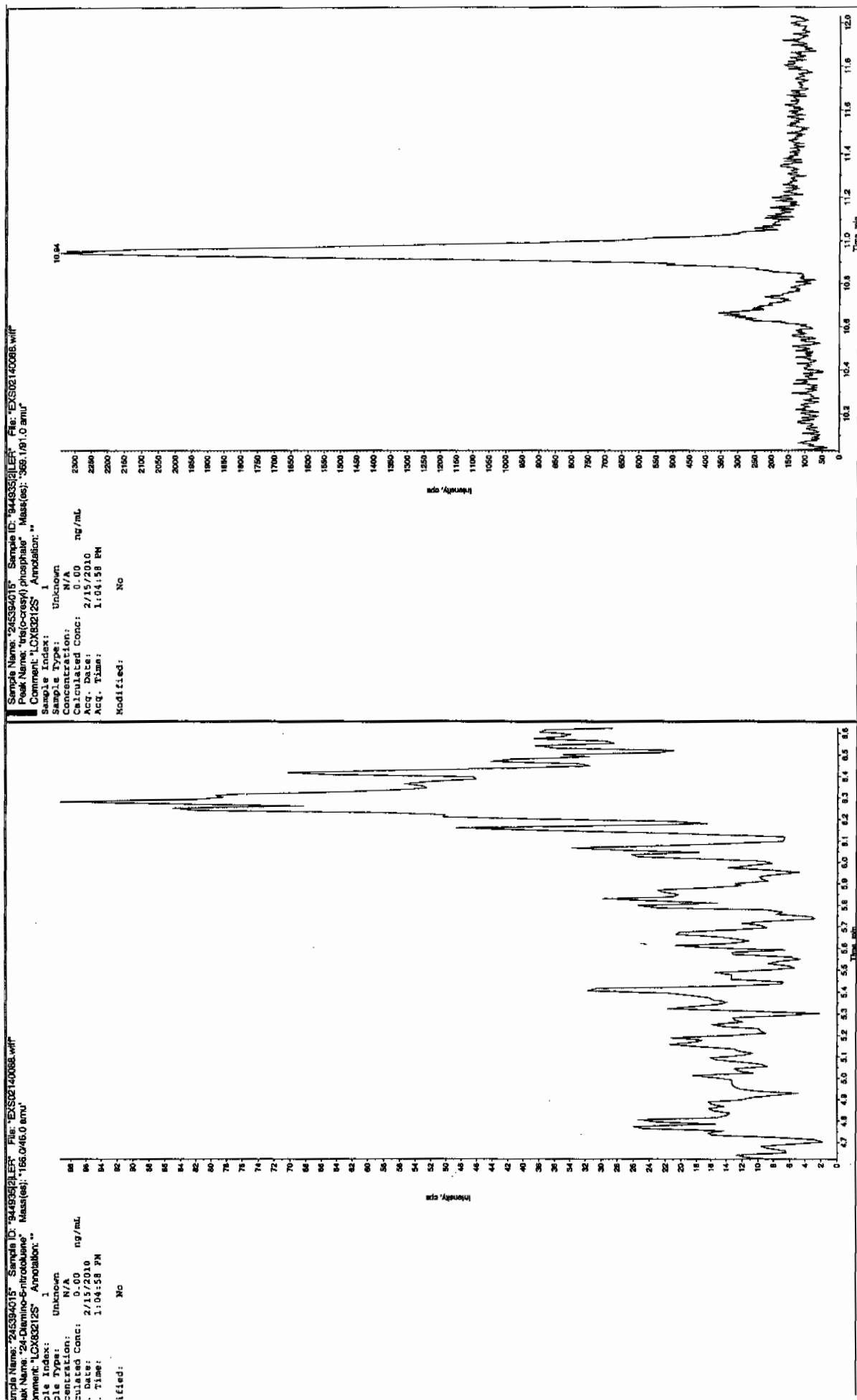
Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/15/2010
 Acq. Time: 1:04:58 PM
 Modified: No

Sample Name: "245394015" Sample ID: "94493521LRF" File: "EX502140088.wiff"
 Peak Name: "34-Dinitrobenzene" Mass(es): "182.07151.9 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 2/15/2010 ng/mL
 Acq. Date: 2/15/2010
 Acq. Time: 1:04:58 PM
 Modified: No
 Algorithm: IntraQuan - IQA
 Peak Name: "34-Dinitrobenzene" Mass(es): "182.07151.9 amu"
 Peak Width: 3.00 posits
 Window: 15.0 sec
 Retention Time: 8.52 min
 Relative RT: No
 Type: Valley
 Retention Time: 8.46 min
 Height: 3.89e+006 counts
 Area: 980958.059 cps
 Width: 8.34 min
 Time: 8.87 min



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



XL 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
MXN	25	50	200	400	800	1000	na	600
TNX	25	50	200	400	800	1000	na	600
1,3,5-Trinitrobenzene	25	50	200	400	800	1000	na	600
1,3-Dinitrobenzene	25	50	200	400	800	1000	na	600
Nitrobenzene	25	50	200	400	800	1000	na	600
Tetryl	25	50	200	400	800	1000	na	600
Nitroglycerin	50	100	200	400	800	1000	na	600
2,4,6-Trinitrotoluene	25	50	200	400	800	1000	na	600
2-Amino-4,6-dinitrotoluene	25	50	200	400	800	1000	na	600
4-Amino-2,6-dinitrotoluene	25	50	200	400	800	1000	na	600
2,4-Dinitrotoluene	25	50	200	400	800	1000	na	600
2,6-Dinitrotoluene	25	50	200	400	800	1000	na	600
2-Nitrotoluene	25	50	200	400	800	1000	na	600
4-Nitrotoluene	25	50	200	400	800	1000	na	600
3-Nitrotoluene	25	50	200	400	800	1000	na	600
PETN	25	50	200	400	800	1000	na	600
Picric Acid	200	400	1600	3200	6400	8000	na	4800
3,4-Dinitrotoluene (Surrogate)	25	50	125	250	375	500	1000	250
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: 10-1392

Lab Code: GEL

Run Date: 08-FEB-10 14-FEB-10

LCMSMS Instrument ID: LCMSMS

Method: 8321A Modified

HPLC Column: Phenomenex Ultracarb 5 ODS(20)

Calibration Type: Average RF

Parname	1	2	3	4	5	6	Ave RF	RSD	Q
Calibration Level:	EXP0208003a	EXP0208004a	EXP0208005a	EXP0208006a	EXP0208007a	EXP0208008a			
Data File:									
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

Explosives Initial Calibration

Lab Name: GEL Laboratories LLC

GEL Job No: 10-1392

Lab Code: GEL

Run Date: 08-FEB-10 14-FEB-10

LCMSMS Instrument ID: LCMSMS

Method: 8321A Modified

HPLC Column: Phenomenex Ultracarb 5 ODS(20)

Calibration Type: 2nd Order

Calibration Level:	1	2	3	4	5	6	X	X^2	Intercept	COD	Q
Data File:	EXP0208003a	EXP0208004a	EXP0208005a	EXP0208006a	EXP0208007a	EXP0208008a					
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)

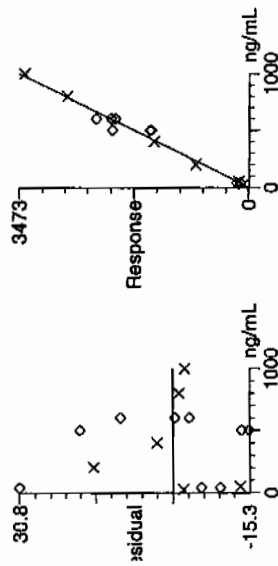
* Values outside of QC Limit

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

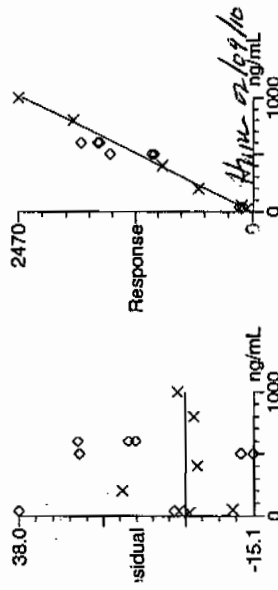
Dataset: C:\MASSLYNX\New_Exp\PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

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

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



Identify Calibration Report

Printed: Tue Feb 09 10:21:18 2010, Page 2 of 9

EL Laboratories, LLC / Analyst : Michael A. Penny

taset: C:\MASSLYNX\New_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

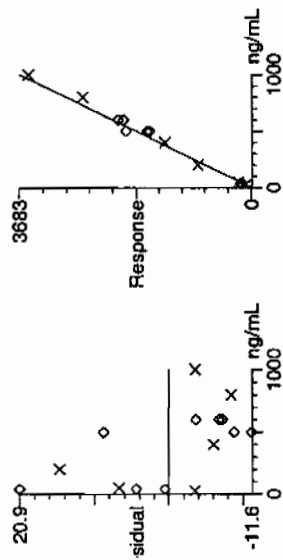
mpound name: 135-Trinitrobenzene

sponse Factor: 3.68306

IF SD: 0.340458, % Relative SD: 9.2439

sponse type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)

ve type: RF



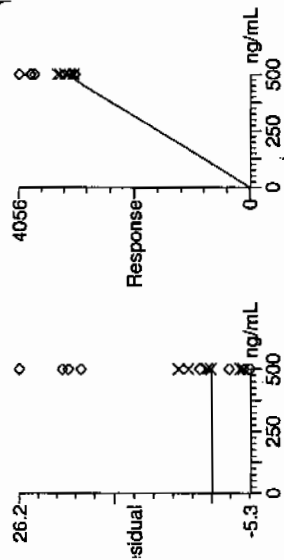
mpound name: 13-Dinitrobenzene-d4

sponse Factor: 6.42915

IF SD: 0.232214, % Relative SD: 3.6119

sponse type: External Std, Area

ve type: RF



Identify Calibration Report
 :L Laboratories, LLC / Analyst: Michael A. Penny

taset: C:\MASSLYNX\New_Exp.PRO\020810expA.qtd, Time: Tue Feb 09 10:19:05 2010

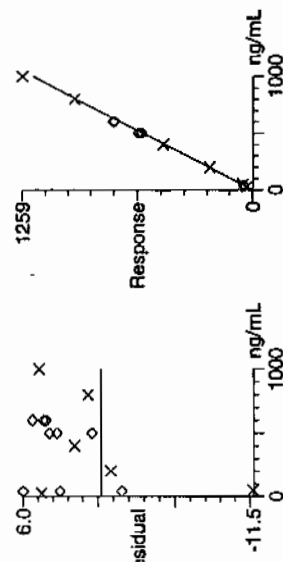
mpound name: 13-Dinitrobenzene

sponse Factor: 1.2024

IF SD: 0.0720671, % Relative SD: 5.99362

sponse type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)

ive type: RIF



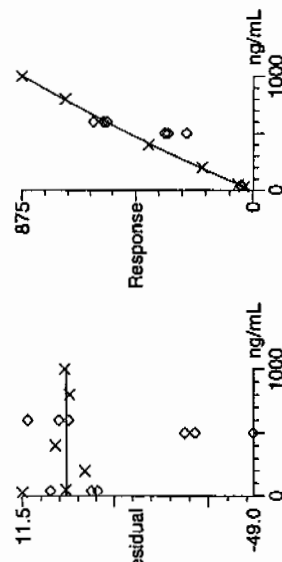
mpound name: Tetryl

efficient of Determination: 0.999624

ilibration curve: $-9.80877e-005 * x^2 + 0.962233 * x + 8.00395$

sponse type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)

ive type: 2nd Order, Origin: Exclude, Weighting: Null, Axis trans: None



uantify Calibration Report

EL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Tue Feb 09 10:21:18 2010, Page 4 of 9

ataset: C:\MASSLYNX\New_Exp\PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

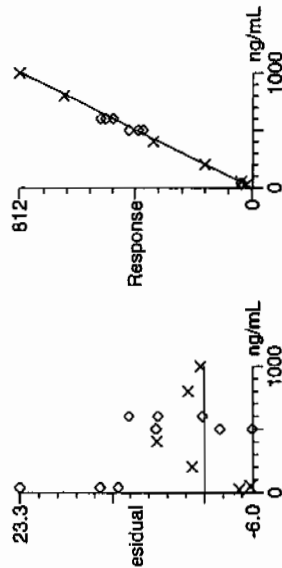
Compound name: Nitrobenzene

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



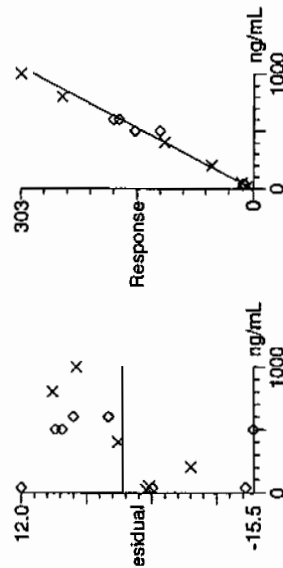
Compound name: 4-Amino-26-dinitrotoluene

Response Factor: 0.287245

RF SD: 0.0173125, % Relative SD: 6.02707

Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)

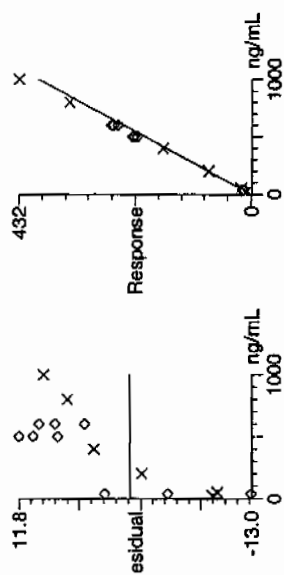
Curve type: RF



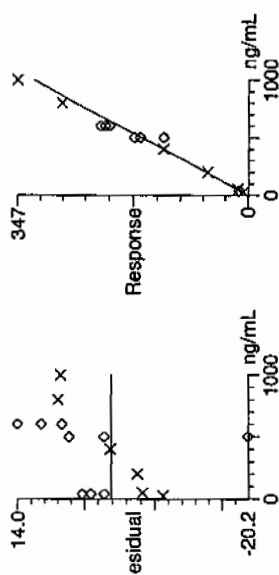
uantify Calibration Report
EL Laboratories, LLC / Analyst : Michael A. Penny

ataset: C:\MASSLYNX\New_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

ompound name: 2-Amino-46-dinitrotoluene
esponse Factor: 0.39603
RF SD: 0.0312733, % Relative SD: 7.8967
esponse type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
urve type: RF



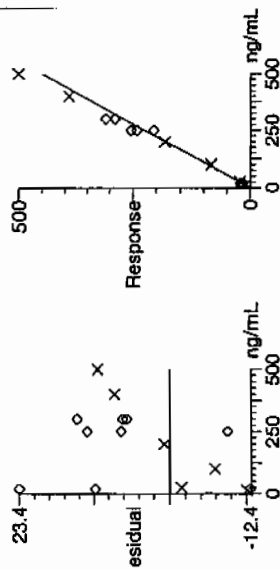
ompound name: 246-Trinitrotoluene
esponse Factor: 0.322663
RF SD: 0.0207501, % Relative SD: 6.43088
esponse type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
urve type: RF



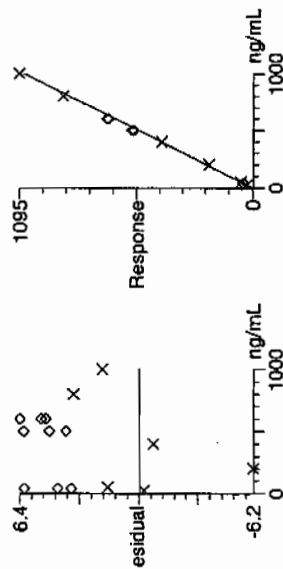
uantify Calibration Report
EL Laboratories, LLC / Analyst : Michael A. Penny

ataset: 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

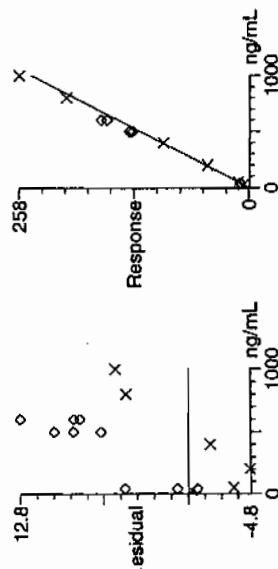


Quantify Calibration Report
EL Laboratories, LLC / Analyst : Michael A. Penny

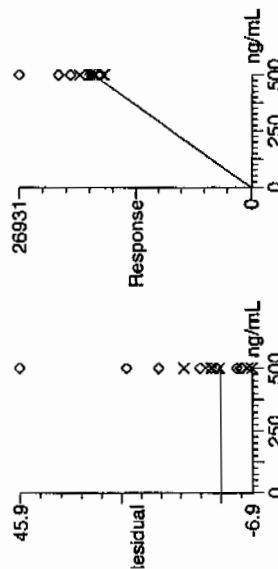
atset: C:\MASSLYNX\New_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

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

Page 465 of 1574



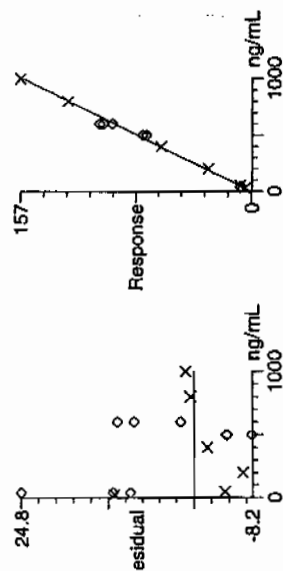
compound name: 26-dinitrotoluene-d3
response factor: 36.9194
RF SD: 2.09302, % Relative SD: 5.66917
response type: External Std, Area
curve type: RF



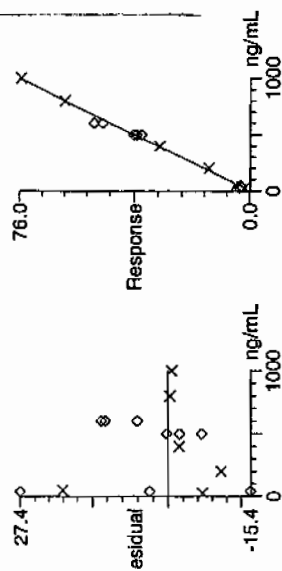
Quantify Calibration Report
EL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYN\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



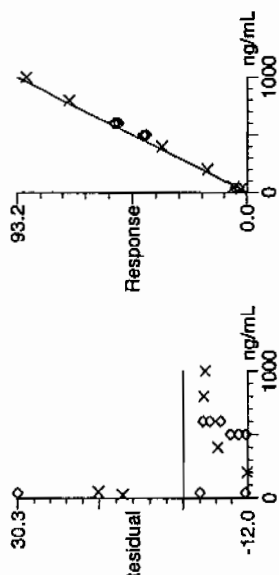
Compound name: 4-Nitrotoluene
Response Factor: 0.0760026
RF SD: 0.00771034, % Relative SD: 10.1448
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



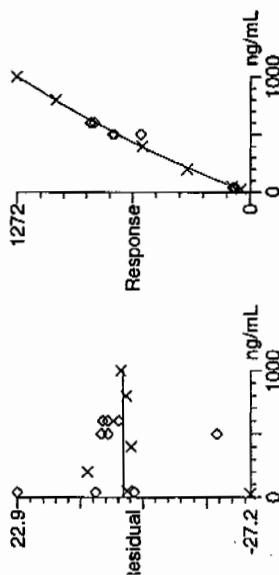
uantify Calibration Report
EL Laboratories, LLC / Analyst : Michael A. Penny

atasset: C:\MASSLYNX\New_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

omound name: 3-Nitrotoluene
esponse Factor: 0.0931713
RF SD: 0.0099568, % Relative SD: 10.6887
esponse type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
urve type: RF



omound name: PETN
oefficient of Determination: 0.999420
alibration curve: $-0.000297734 \cdot x^2 + 1.54409 \cdot x + 21.0556$
esponse type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
urve type: 2nd Order, Origin: Exclude, Weighting: Null, Axis trans: None



Explosives Initial Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1392

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
m-Dinitrobenzene	600	625.274	104	
m-Nitrotoluene	600	570.29	95	
o-Nitrotoluene	600	651.604	109	
p-Nitrotoluene	600	672.143	112	
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	

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\EXP0208010a

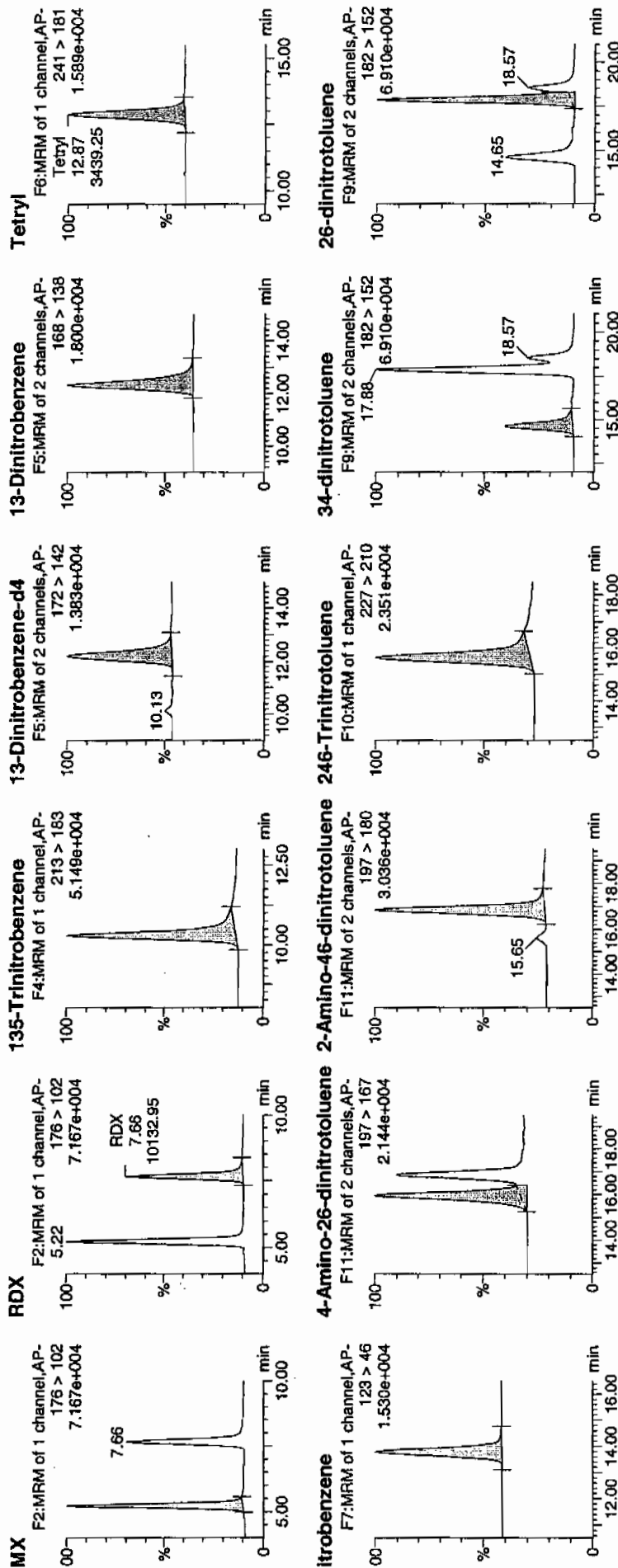
ate: 08-Feb-2010

ime: 19:10:05

); WXX100208-07ICV

ial: 1:1,B

WXX100208-07ICV



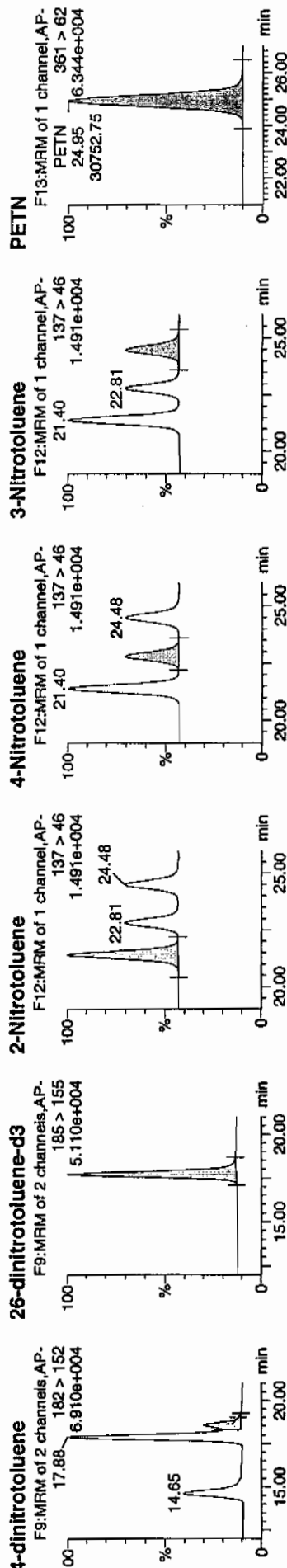
WXX100208-07ICV

unify Sample Report

EL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Tue Feb 09 10:21:18 2010, Page 20 of 77

atset: C:\MASSLYNX\New_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010



Name	Trace	RT	Area	SI Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Area	%Dev	ISN
/XX100208-07ICV HMX	176 > 102	5.22	12762.877	3071.677	12762.877	2077.510	bb			598.2226	99.7	-0.3
/XX100208-07ICV RDX	176 > 102	7.66	10132.953	3071.677	10132.953	1649.417	bb			679.2915	113.2	13.2
/XX100208-07ICV 135-Trinitrobenzene	213 > 183	10.30	13065.338	3071.677	13065.338	2126.743	bb			577.4399	96.2	-3.8
/XX100208-07ICV 13-Dinitrobenzene-d4	172 > 142	12.21	3071.677	3071.677	3071.677	3071.677	bb			477.7736	95.6	-4.4
/XX100208-07ICV 13-Dinitrobenzene	168 > 138	12.34	4618.735	3071.677	4618.735	751.826	bb			625.2737	104.2	4.2
/XX100208-07ICV Tetryl	241 > 181	12.87	3439.246	3071.677	3439.246	559.832	bb			611.6196	101.9	1.9
/XX100208-07ICV Nitrobenzene	123 > 46	13.76	3150.282	3071.677	3150.282	512.795	bb			634.8275	105.8	5.8
/XX100208-07ICV 4-Amino-26-dinitrotoluene	197 > 167	15.95	6225.456	17785.730	6225.456	175.013	MM	09-Feb-10	10:07:09	609.2803	101.5	1.5
/XX100208-07ICV 2-Amino-46-dinitrotoluene	197 > 180	16.84	9269.226	17785.730	9269.226	260.580	bb			657.9810	109.7	9.7
/XX100208-07ICV 246-Trinitrotoluene	227 > 210	15.64	7388.070	17785.730	7388.070	207.697	bb			643.6946	107.3	7.3
/XX100208-07ICV 34-dinitrotoluene	182 > 152	14.65	10293.978	17785.730	10293.978	289.389	bb			321.5458	107.2	7.2
/XX100208-07ICV 26-dinitrotoluene	182 > 152	17.88	24128.742	17785.730	24128.742	678.317	MM	09-Feb-10	10:13:53	631.5288	105.3	5.3
/XX100208-07ICV 24-dinitrotoluene	182 > 152	18.57	5663.705	17785.730	5663.705	159.220	MM	09-Feb-10	10:16:51	652.4052	108.7	8.7
/XX100208-07ICV 26-dinitrotoluene-d3	185 > 155	17.71	17785.730	17785.730	17785.730	17785.730	bb			481.7453	96.3	-3.7
/XX100208-07ICV 2-Nitrotoluene	137 > 46	21.40	3593.784	17785.730	3593.784	101.030	bb			651.6036	108.6	8.6
/XX100208-07ICV 4-Nitrotoluene	137 > 46	22.81	1817.156	17785.730	1817.156	51.085	bb			672.1432	112.0	12.0
/XX100208-07ICV 3-Nitrotoluene	137 > 46	24.48	1890.078	17785.730	1890.078	53.135	bb			570.2904	95.0	-5.0
/XX100208-07ICV PETN	361 > 62	24.95	30752.746	17785.730	30752.746	864.534	bb			620.5038	103.4	3.4

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: 10-1392

Lab Code: GEL

Run Date: 08-FEB-10, 14-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:	EXS02140003.wif	EXS02140004.wif	EXS02140005.wif	EXS02140006.wif	EXS02140007.wif	EXS02140008.wif	EXS02140009.wif					
Parname:												
2,4-Diamino-6-nitrotoluene	96700	195000	467000	994000	1380000	1900000	3740000	4600	1900	-.018	.9998	
2,6-Diamino-4-nitrotoluene	158000	309000	718000	1470000	2150000	2900000	6070000	29800	2750	.136	1	
3,4-Dinitrotoluene	338000	640000	1510000	3190000	4510000	6140000	11400000	-53500	13900	-2.42	.9993	
3,5-Dinitroaniline	340000	650000	1620000	3310000	4740000	6350000	11500000	-28100	6880	-.557	.9999	
TATB	71000	140000	338000	700000	1050000	1390000	2740000	-3590	1410	-.022	1	
tris(o-cresyl) phosphate	1250000	2440000	5720000	10800000	15500000	19900000	31700000	61600	23700	-3.92	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

021410ICAL

Peak Name: TATB
No Internal Standard
Q1/Q3 Masses: 257.20/204.90 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	-3.59e+003			
a1	1.41e+003			
a2	-0.022			
Correlation coefficient 1.0000				
Use Area				

Peak Name: 35-Dinitroaniline
No Internal Standard
Q1/Q3 Masses: 182.00/46.00 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	-2.81e+004			
a1	6.88e+003			
a2	-0.557			
Correlation coefficient 0.9999				
Use Area				

Peak Name: 34-Dinitrotoluene
No Internal Standard
Q1/Q3 Masses: 182.08/151.90 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	-5.35e+004			
a1	1.39e+004			
a2	-2.42			
Correlation coefficient 0.9993				
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	2.98e+004			
a1	2.75e+003			
a2	0.136			
Correlation coefficient 1.0000				
Use Area				

San 2/16/10

HW 2/11/10

021410ICAL

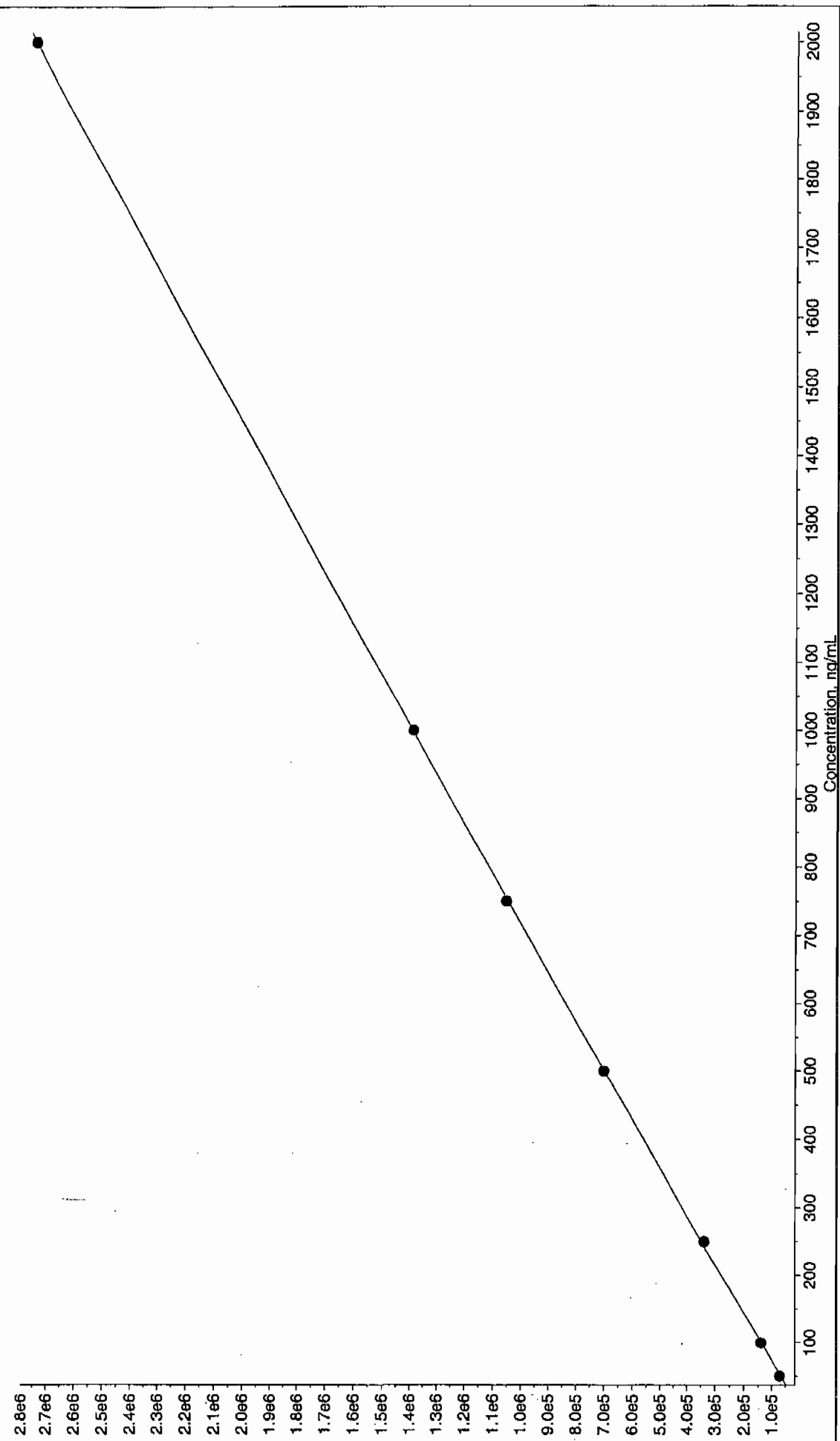
Peak Name: 24-Diamino-6-nitrotoluene
No Internal Standard
Q1/Q3 Masses: 165.97/46.00 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	4.6e+003			
a1	1.9e+003			
a2	-0.0179			
Correlation coefficient 0.9998				
Use Area				

Peak Name: tris(o-cresyl) phosphate
No Internal Standard
Q1/Q3 Masses: 369.15/91.00 amu

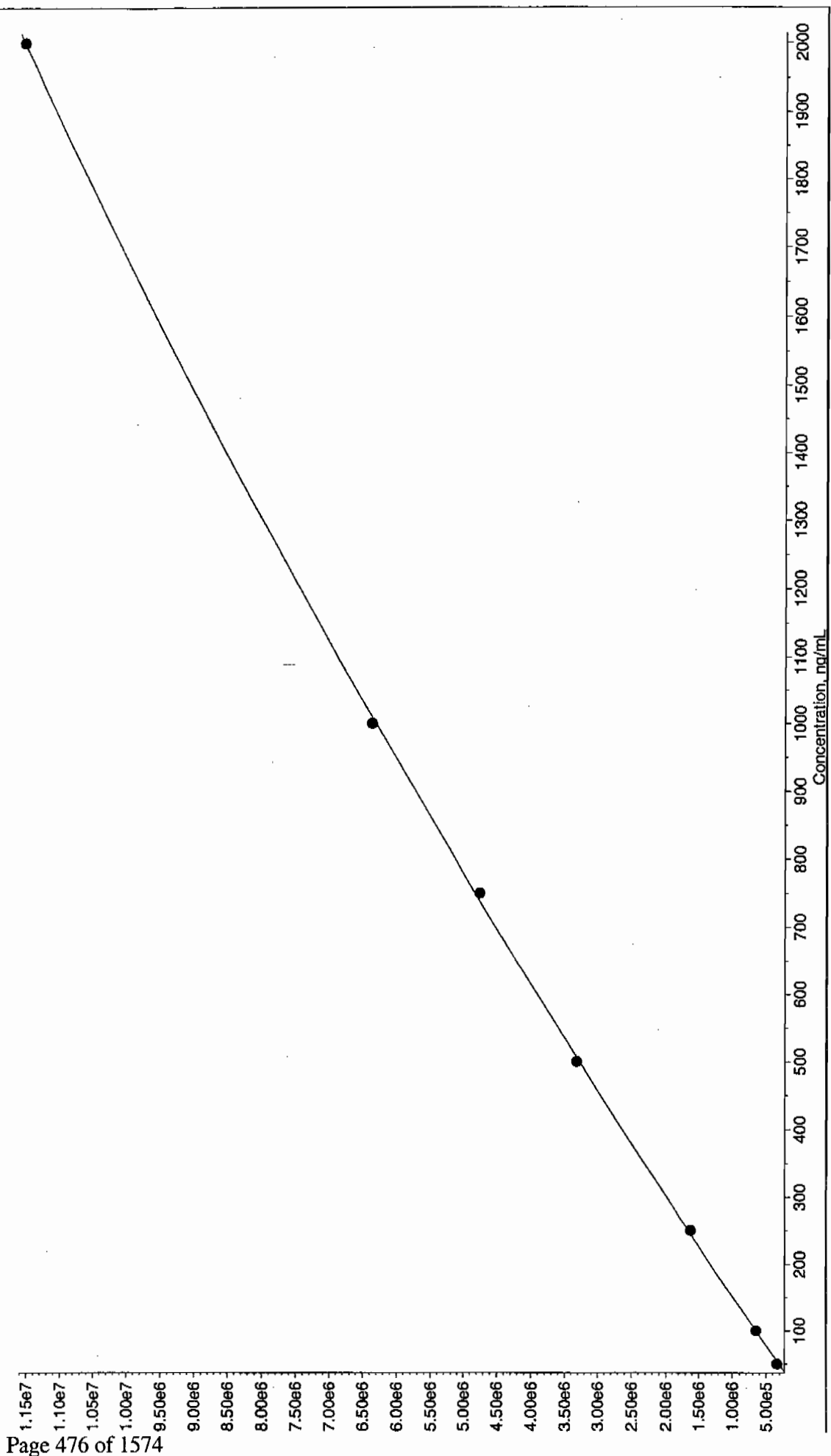
Fit	Quadratic	Weighting	None	Iterate No
a0	6.16e+004			
a1	2.37e+004			
a2	-3.92			
Correlation coefficient 1.0000				
Use Area				

J21410.rdb (TATB): "Quadratic" Regression ("No" weighting): $y = -0.022 x^2 + 1.41e+003 x + -3.59e+003$ ($r = 1.0000$)



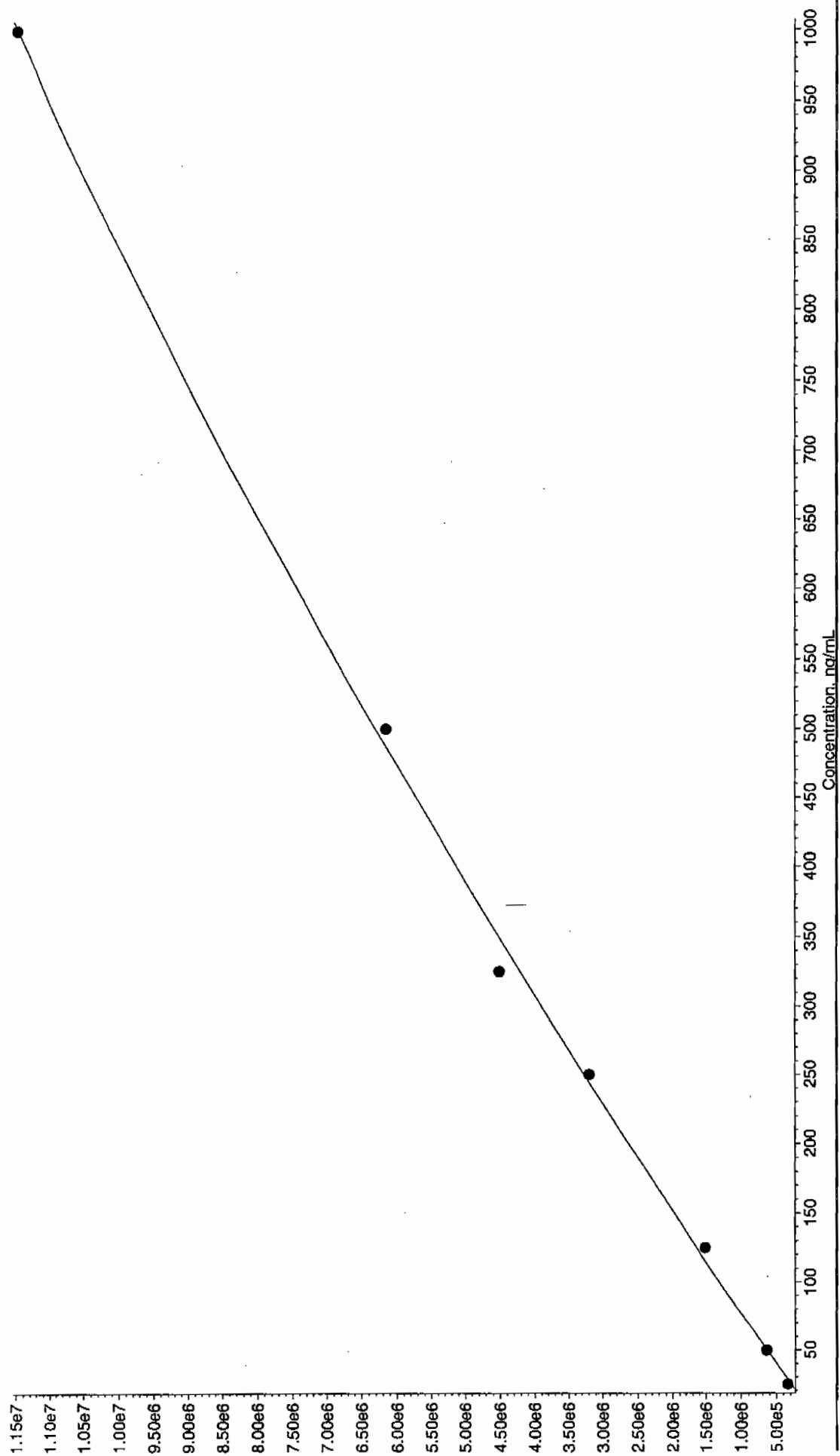
IL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

021410.rdb (35-Dinitroaniline): "Quadratic" Regression ("No" weighting): $y = -0.557 x^2 + 6.88e+003 x + -2.81e+004$ ($r = 0.9999$)



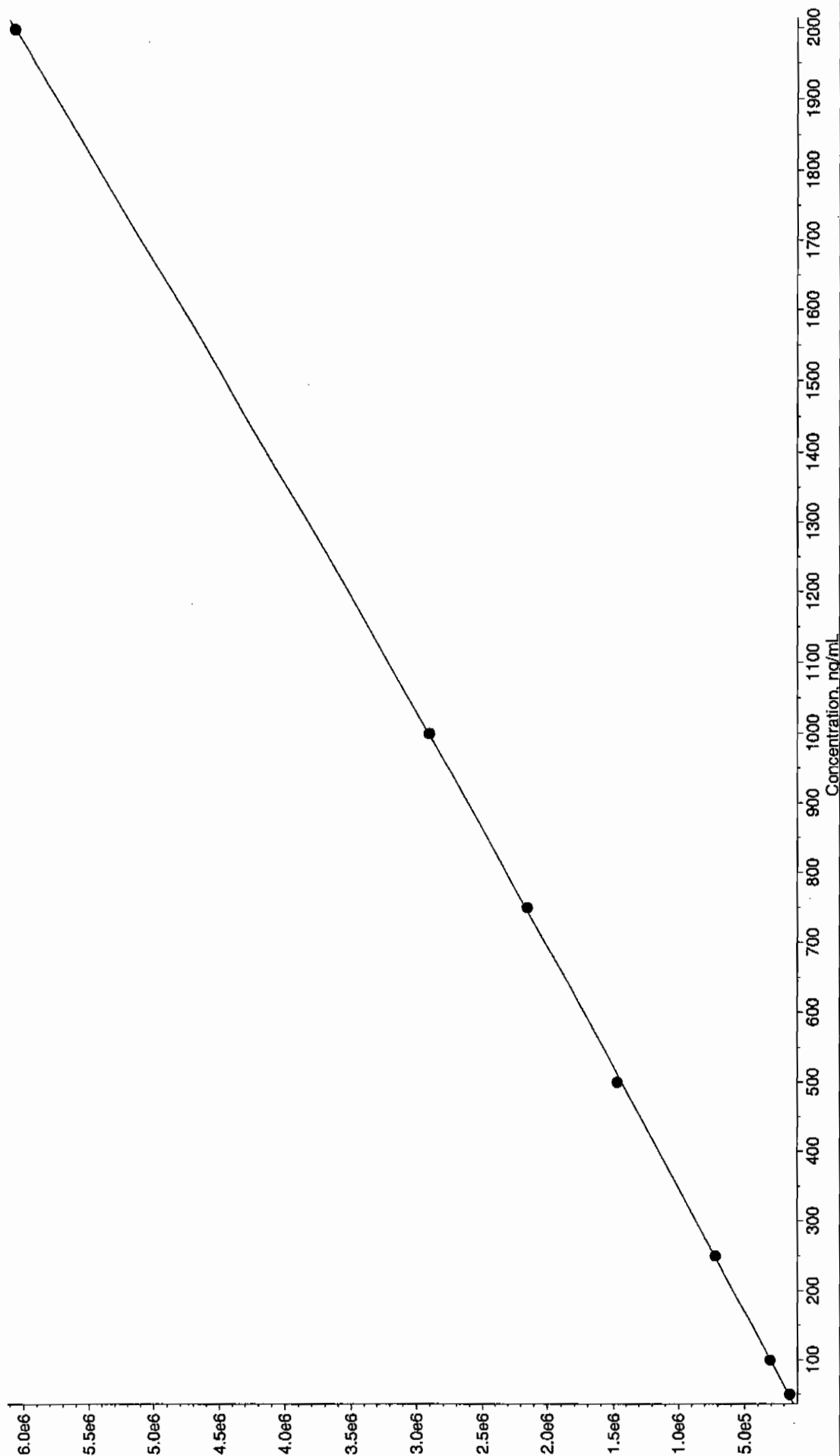
L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

021410.rdb (34-Dinitrotoluene): "Quadratic" Regression ("No" weighting): $y = -2.42 x^2 + 1.39e+004 x + -5.35e+004$ ($r = 0.9993$)



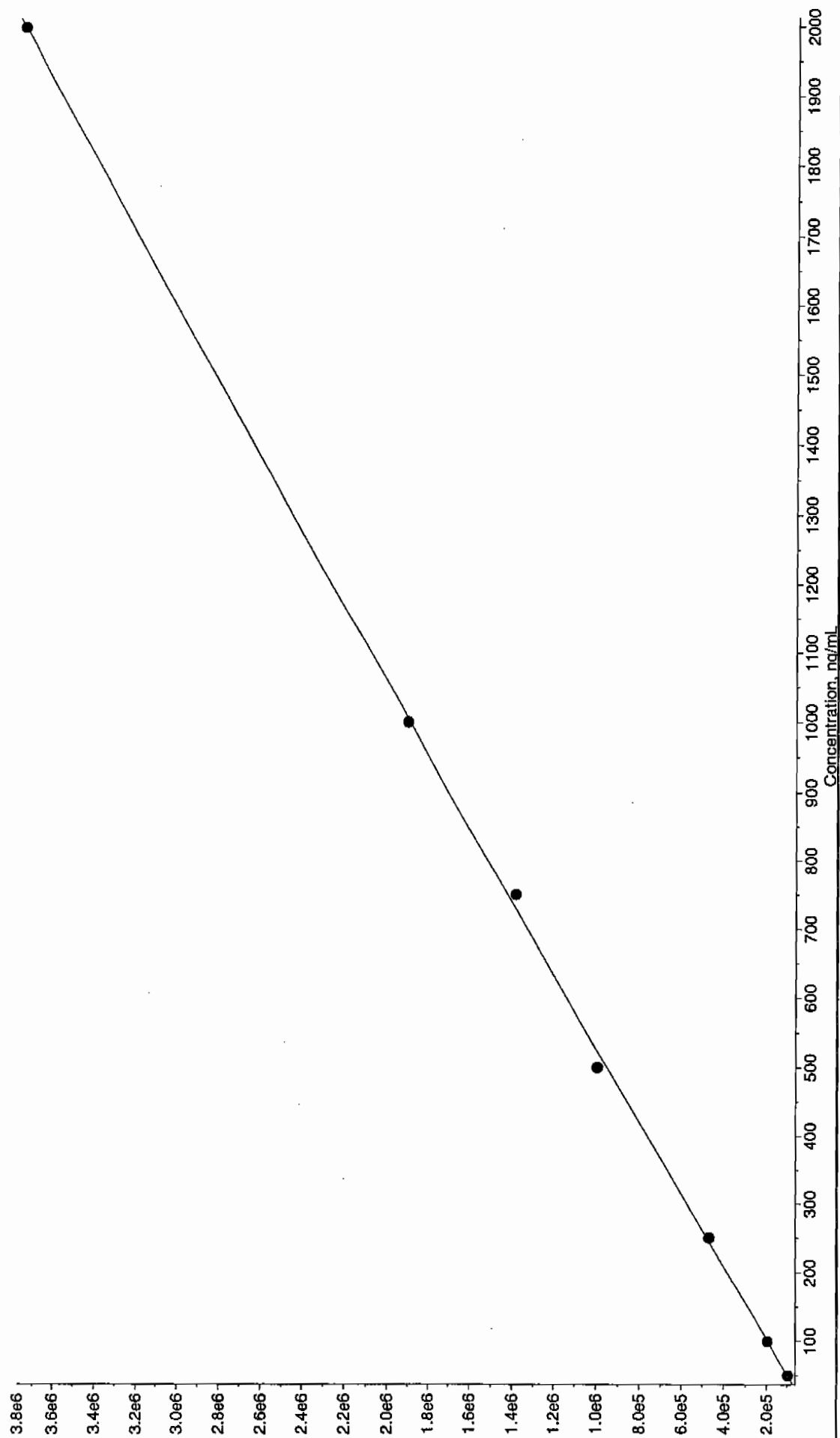
L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

021410.rdb (26-Diamino-4-nitrotoluene): "Quadratic" Regression ("No" weighting): $y = 0.136 x^2 + 2.75e+003 x + 2.98e+004$ ($r = 1.0000$)



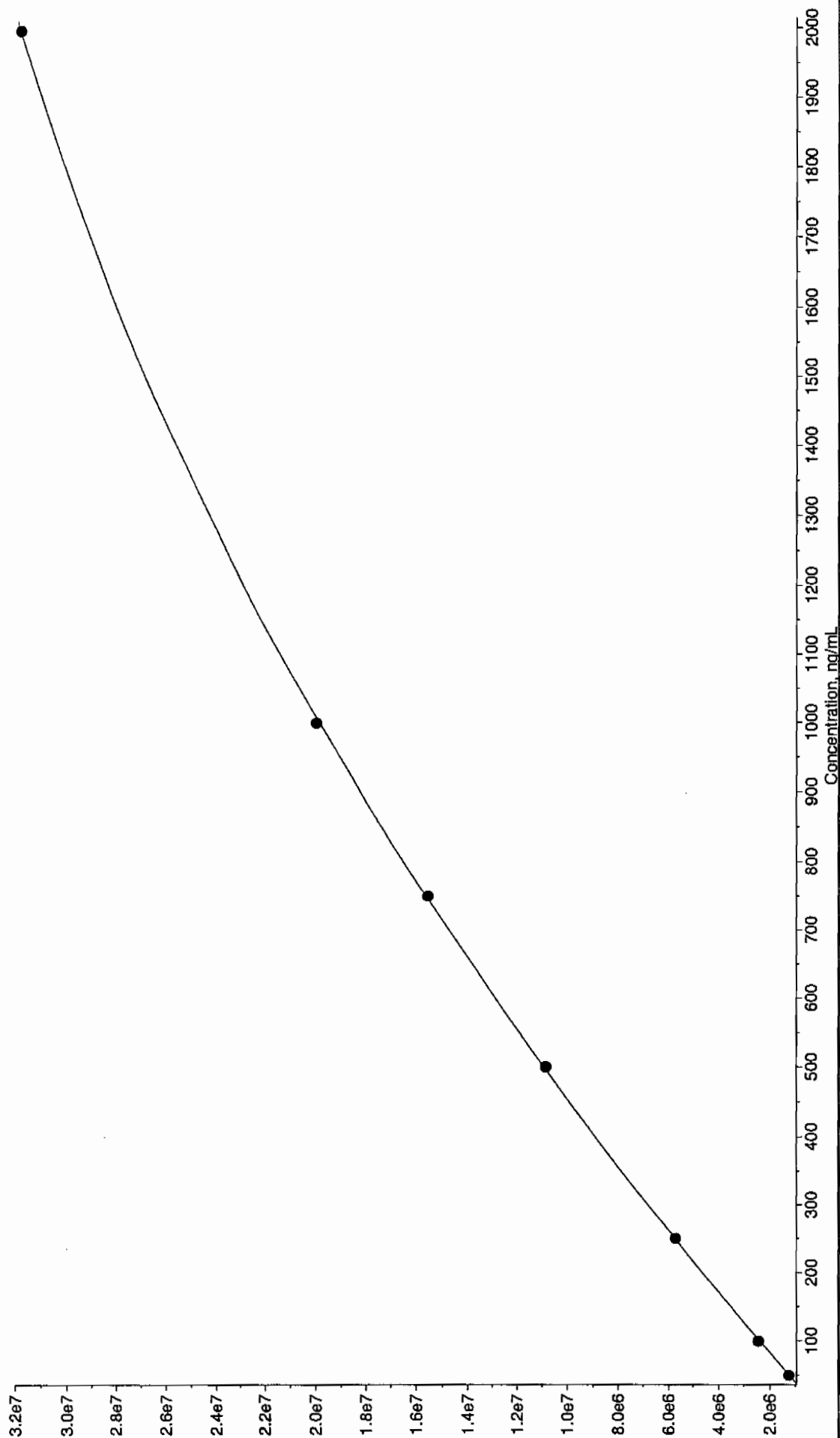
L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

021410.rdb (24-Diamino-6-nitrotoluene): "Quadratic" Regression ("No" weighting): $y = -0.0179 x^2 + 1.9e+003 x + 4.6e+003$ ($r = 0.9998$)



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

021410.rdb (tris(o-cresyl) phosphate): "Quadratic" Regression ("No" weighting): $y = -3.92 x^2 + 2.37e+004 x + 6.16e+004$ ($r = 1.0000$)



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

Explosives Initial Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1392

Lab Code: GEL

GEL Sample ID: WXXICV

GEL Data File EXS02140011.wiff

Analysis Date: 14-FEB-10 16:54

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	528	106	
2,6-Diamino-4-nitrotoluene	500	535	107	
3,4-Dinitrotoluene	250	215	86	
3,5-Dinitroaniline	500	495	99	
TATB	500	501	100	
tris(o-cresyl) phosphate	500	493	99	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

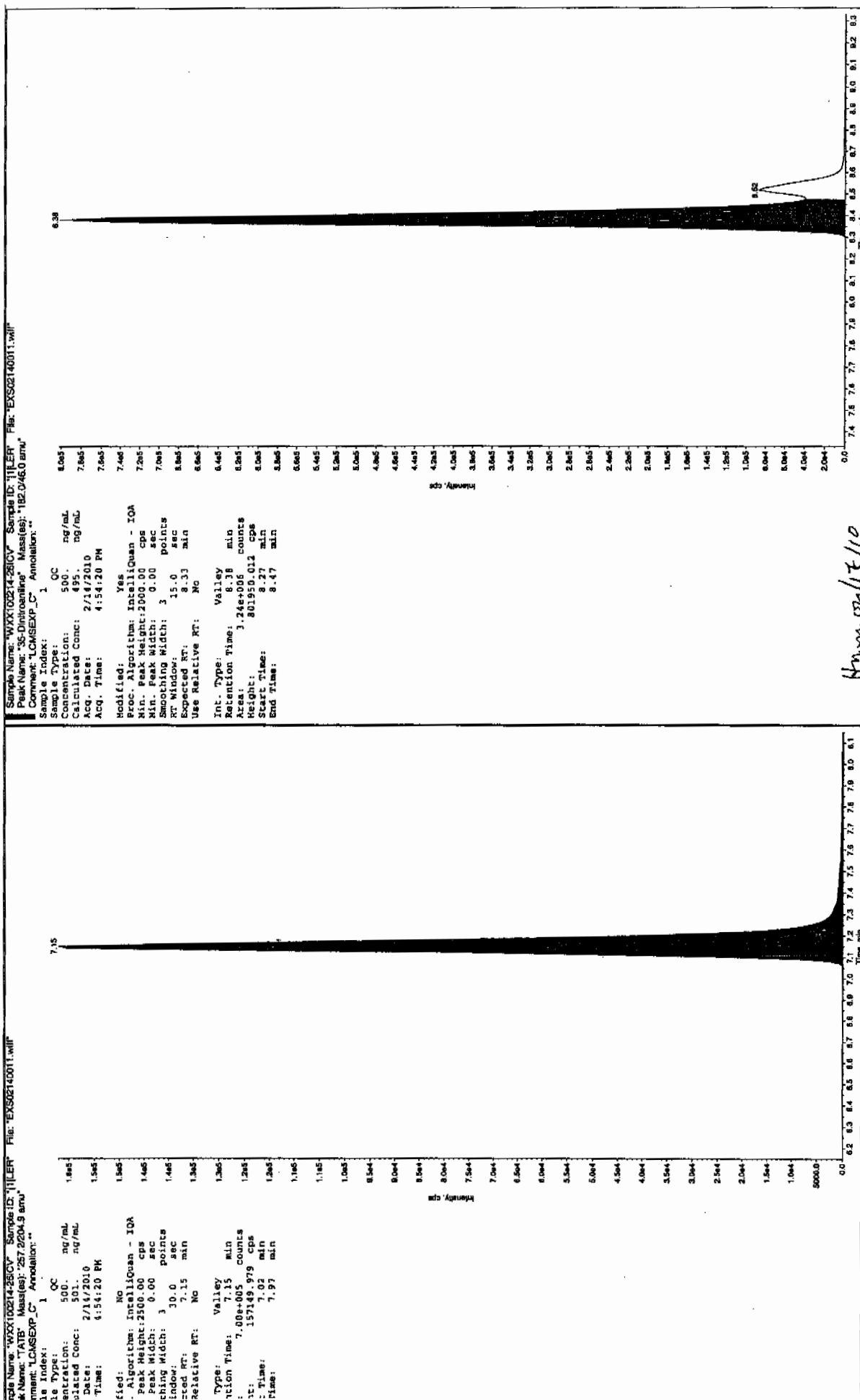
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

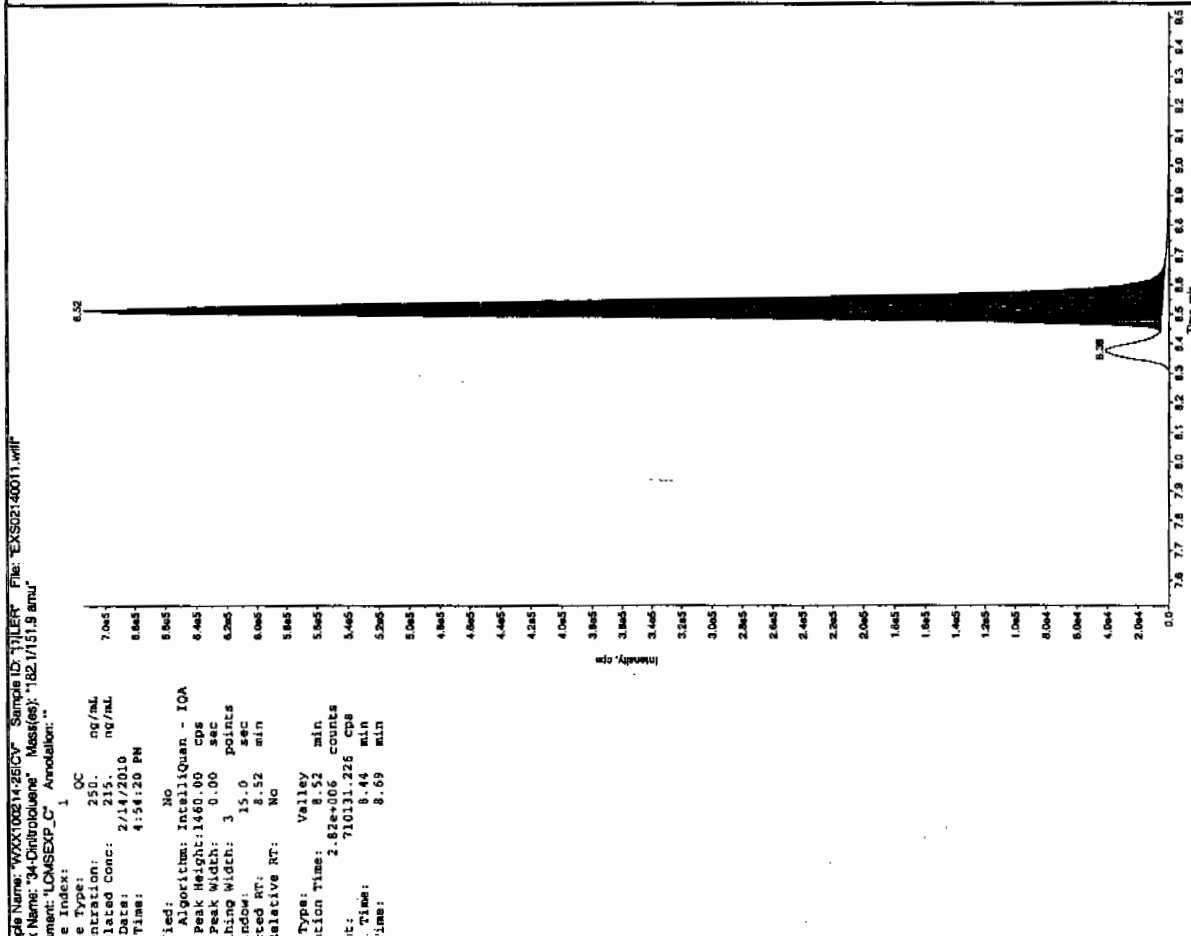
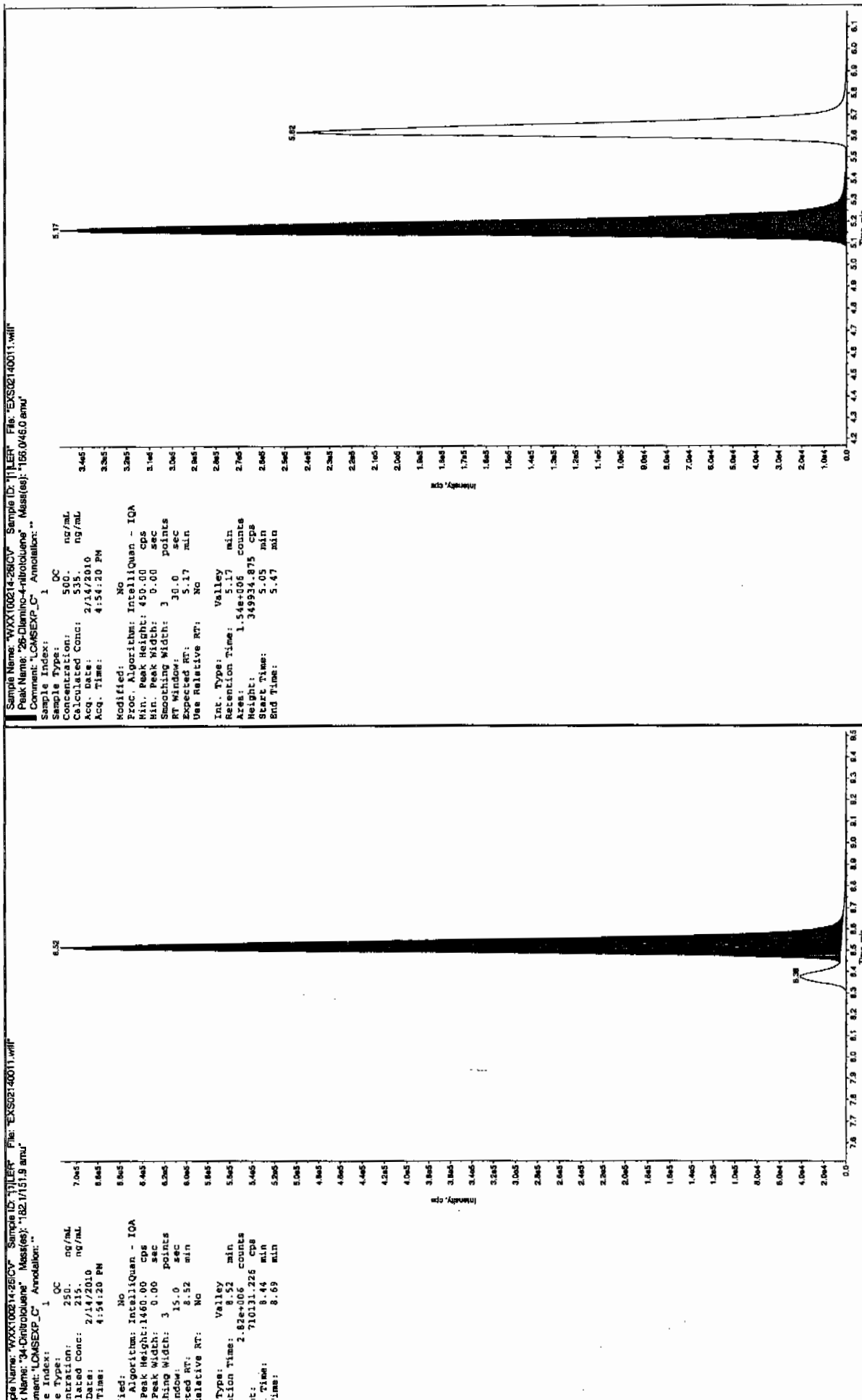
Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

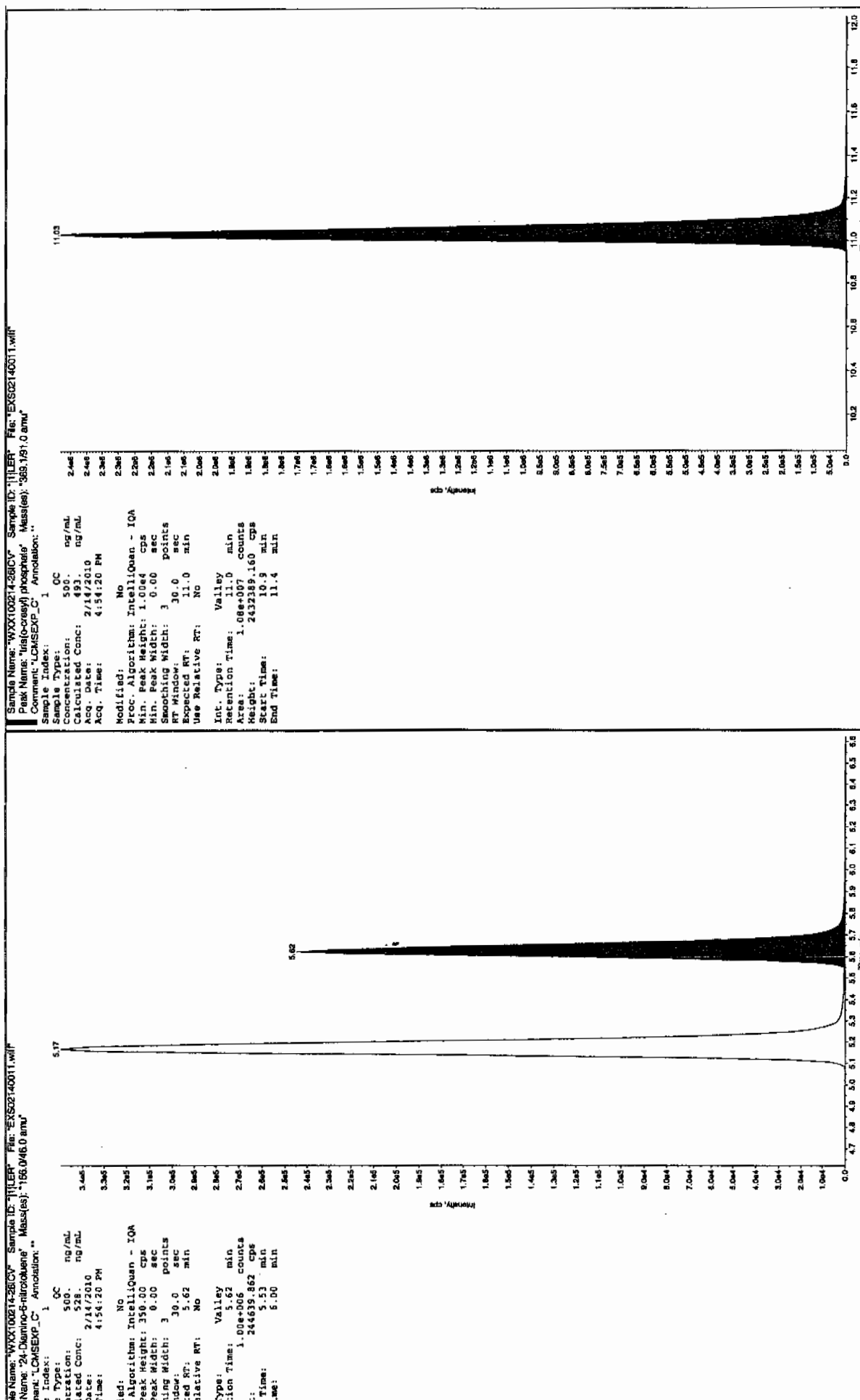
OK 2/16/10



Handwritten: 2/16/10



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



7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1392

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
1,3,5-Trinitrobenzene	40	40.21	101	
1,3-Dinitrobenzene-d4	500	487.883	98	
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	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene, 2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

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ame: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208012a

ate: 08-Feb-2010

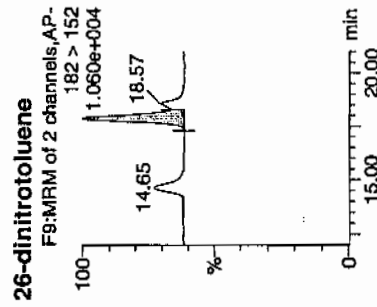
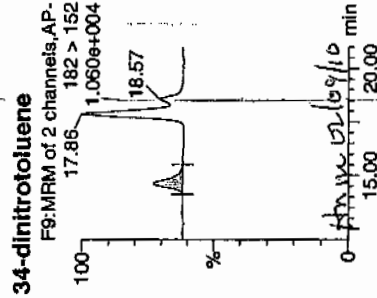
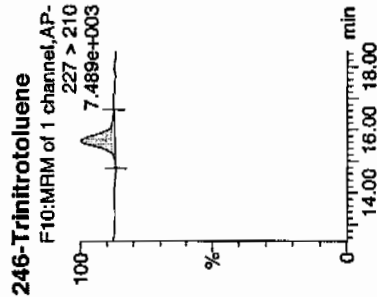
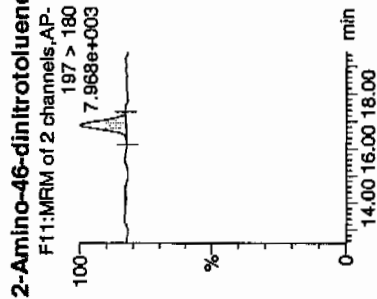
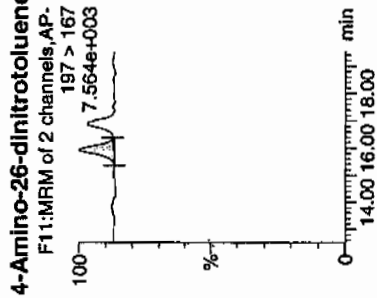
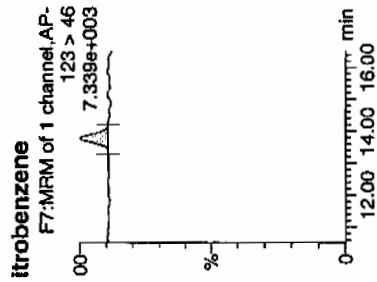
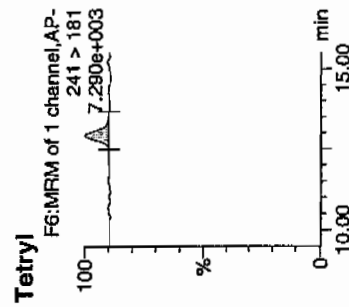
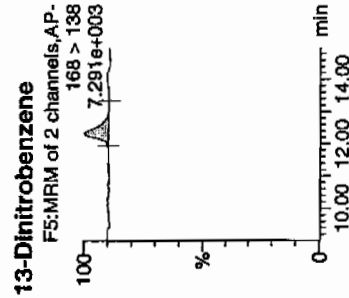
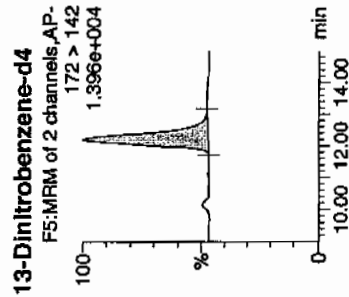
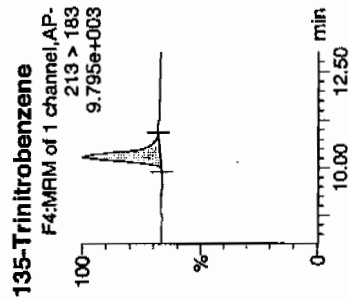
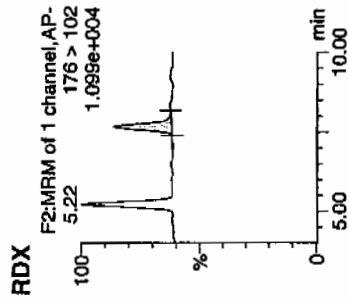
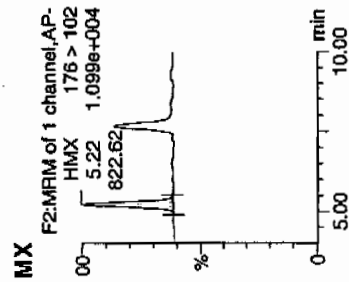
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Page: WXX100208-08CRI

ia: 1:1,C

10/17
2/9/10

MX
486 of 1574

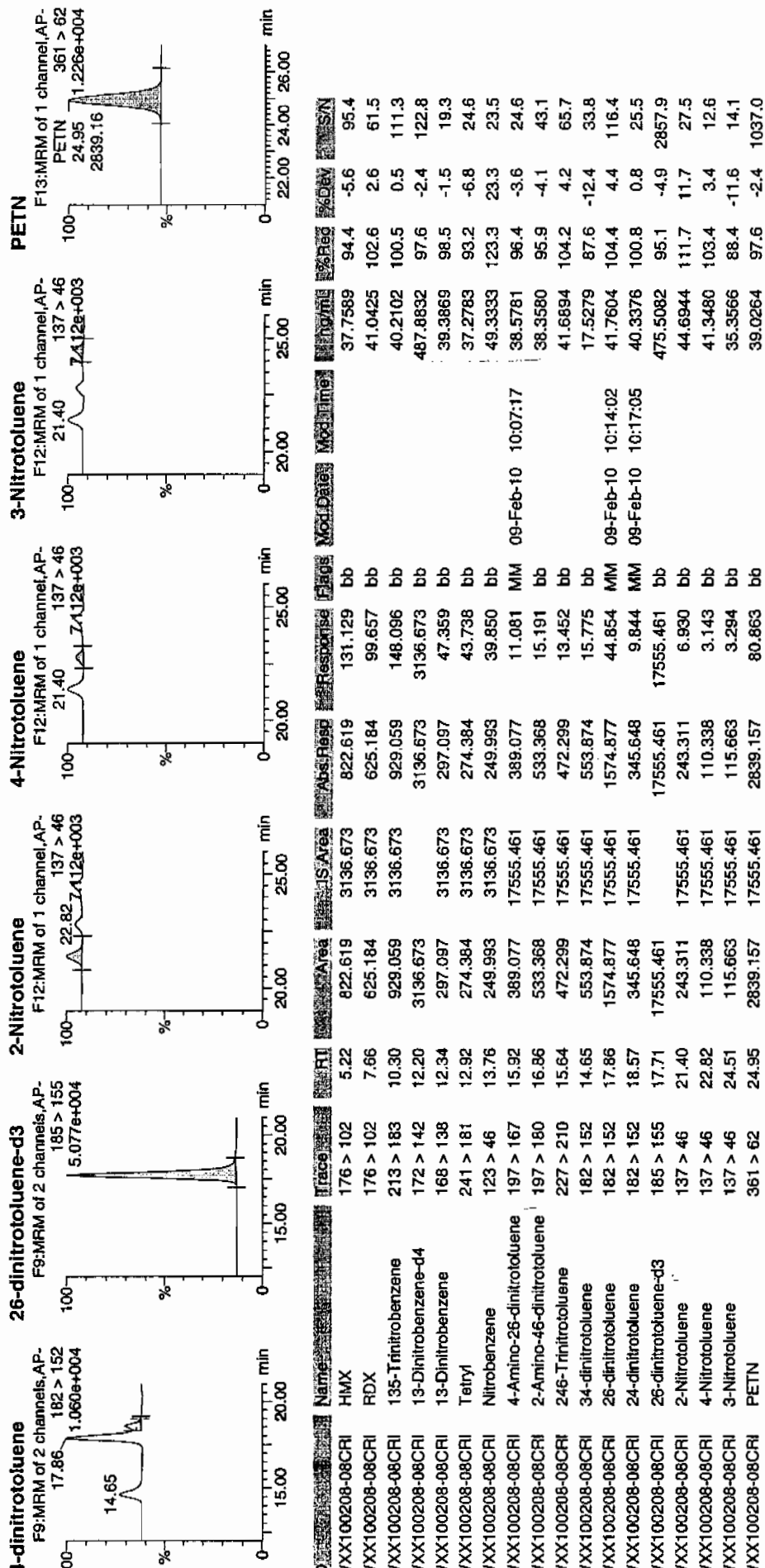


quantify Sample Report

EL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Tue Feb 09 10:21:18 2010, Page 24 of 77

atset: C:\MASSLYN\New_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010



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

*not
2/9/10*

Total 1602.9

Average 100.2

sum on log 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): 10-1392

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
o-Nitrotoluene	600	666.647	111	
p-Nitrotoluene	600	667.754	111	
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	

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\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

Sample Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208023a

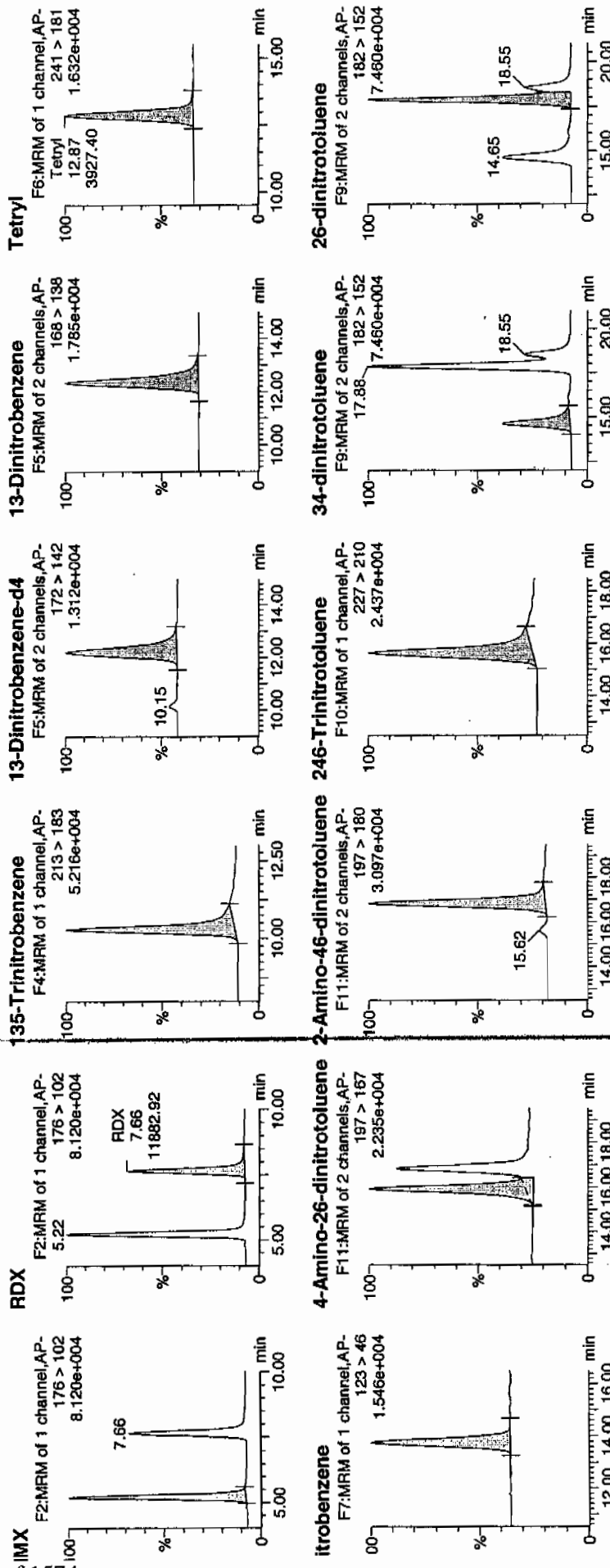
Date: 09-Feb-2010

Time: 01:33:25

File: WXX100208-07CCV

Ratio: 1:1,B

1/17
2/1/10

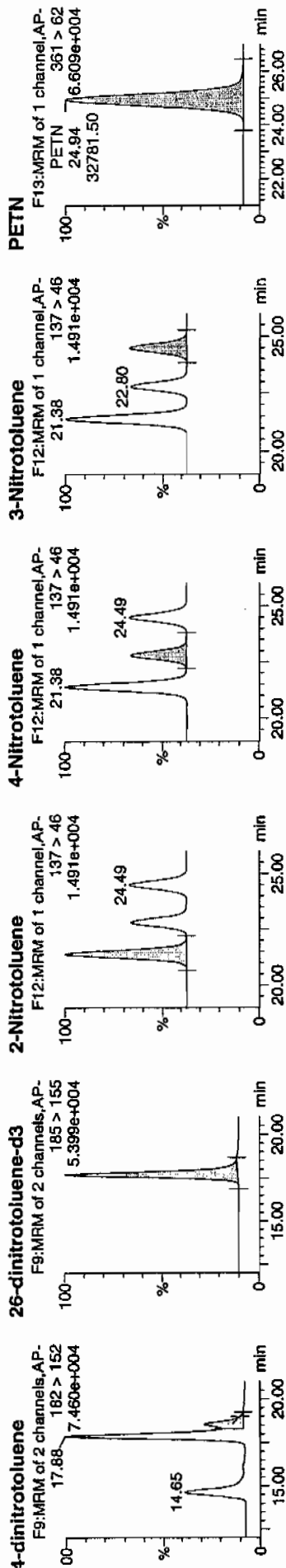


Quantify Sample Report

EL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Tue Feb 09 10:21:18 2010, Page 46 of 77

atset: C:\MASSLYN\New_Exp_PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010



Name	Trace	RT	Area	Area	Abs. Resp	Response	Flags	Mod Date	Mod Time	Int. Conc	% Rec	% Dev	SN
/XX100208-07CCV HMX	176 > 102	5.22	15037.290	3266.656	15037.290	2301.634	bb			662.7595	110.5	10.5	1639.6
/XX100208-07CCV RDX	176 > 102	7.56	11882.921	3266.656	11882.921	1818.820	bb			749.0581	124.8	24.8	1082.1
/XX100208-07CCV 135-Trinitrobenzene	213 > 183	10.28	13352.233	3266.656	13352.233	2043.716	bb			554.8968	92.5	-7.5	1376.9
/XX100208-07CCV 13-Dinitrobenzene	172 > 142	12.20	3266.656		3266.656	3266.656	bb			508.1010	101.6	1.6	605.5
/XX100208-07CCV 13-Dinitrobenzene	168 > 138	12.34	4920.726	3266.656	4920.726	753.175	bb			626.3952	104.4	4.4	650.7
/XX100208-07CCV Tetra	241 > 181	12.87	3927.402	3266.656	3927.402	601.135	bb			660.9418	110.2	10.2	338.7
/XX100208-07CCV Nitrobenzene	123 > 46	13.76	3467.394	3266.656	3467.394	530.725	bb			657.0246	109.5	9.5	301.8
/XX100208-07CCV 4-Amino-26-dinitrotoluene	197 > 167	15.95	7050.759	19339.496	7050.759	182.289	MM	09-Feb-10	10:08:16	634.6121	105.8	5.8	309.2
/XX100208-07CCV 2-Amino-46-dinitrotoluene	197 > 180	16.84	9920.775	19339.496	9920.775	256.490	bb			647.6525	107.9	7.9	941.2
/XX100208-07CCV 246-Trinitrotoluene	227 > 210	15.64	8276.058	19339.496	8276.058	213.968	bb			663.1304	110.5	10.5	495.8
/XX100208-07CCV 34-dinitrotoluene	182 > 152	14.85	11128.977	19339.496	11128.977	287.727	bb			319.6991	106.6	6.6	327.6
/XX100208-07CCV 26-dinitrotoluene	182 > 152	17.88	26179.654	19339.496	26179.654	676.844	MM	09-Feb-10	10:14:49	630.1572	105.0	5.0	989.4
/XX100208-07CCV 24-dinitrotoluene	182 > 152	18.55	6132.196	19339.496	6132.196	158.541	MM	09-Feb-10	10:18:07	649.6200	108.3	8.3	212.0
/XX100208-07CCV 26-dinitrotoluene-d3	185 > 155	17.71	19339.496		19339.496	19339.496	bb			523.8307	104.8	4.8	1406.1
/XX100208-07CCV 2-Nitrotoluene	137 > 46	21.38	3997.954	19339.496	3997.954	103.362	bb			666.6469	111.1	11.1	1102.1
/XX100208-07CCV 4-Nitrotoluene	137 > 46	22.80	1963.000	19339.496	1963.000	50.751	bb			667.7539	111.3	11.3	513.0
/XX100208-07CCV 3-Nitrotoluene	137 > 46	24.49	2084.521	19339.496	2084.521	53.893	bb			578.4278	96.4	-3.6	524.4
/XX100208-07CCV PETN	361 > 62	24.94	32781.500	19339.496	32781.500	847.527	bb			606.0775	101.0	1.0	5719.1

✓

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

*107.2
2/9/10*

Total 1715.8

Average 107.2

107.2 on 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): 10-1392

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
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	
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	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene, 2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report

3EL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Tue Feb 09 10:21:18 2010, Page 49 of 77

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

Sample: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208025a

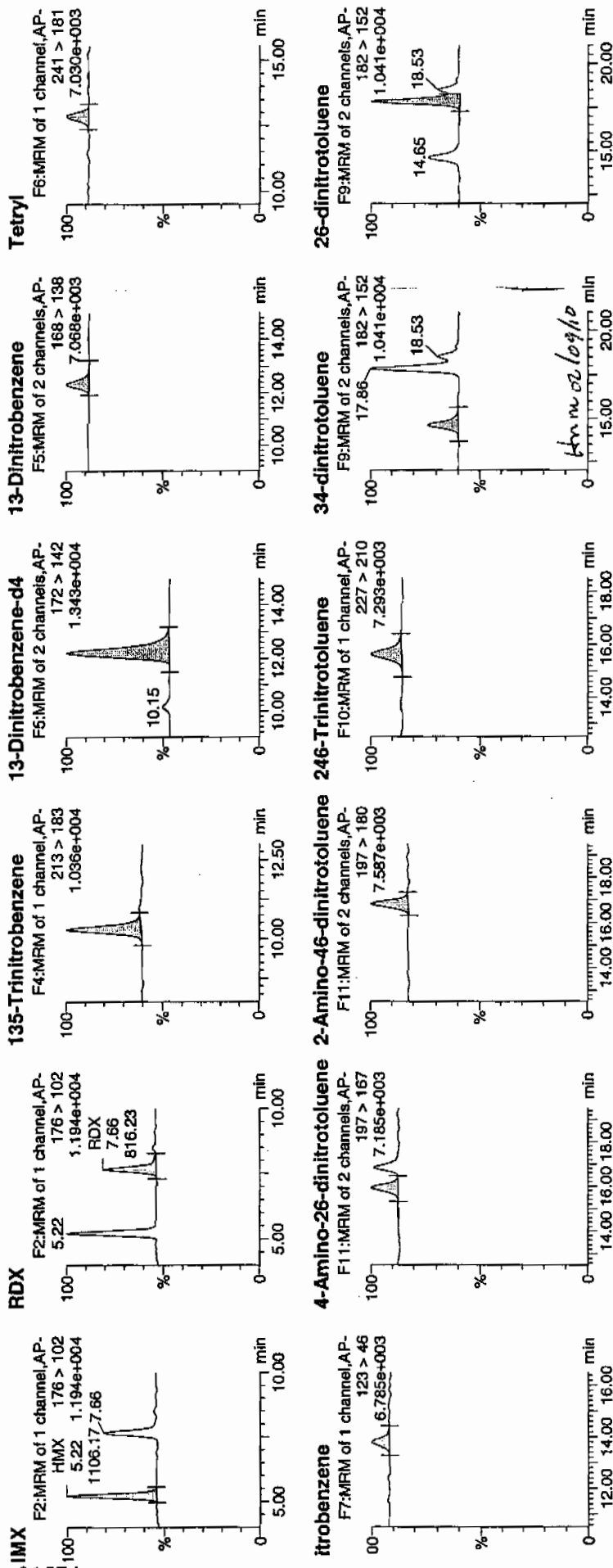
Date: 09-Feb-2010

Time: 02:32:22

File: WXX100208-08CRI

Ratio: 1:1,C

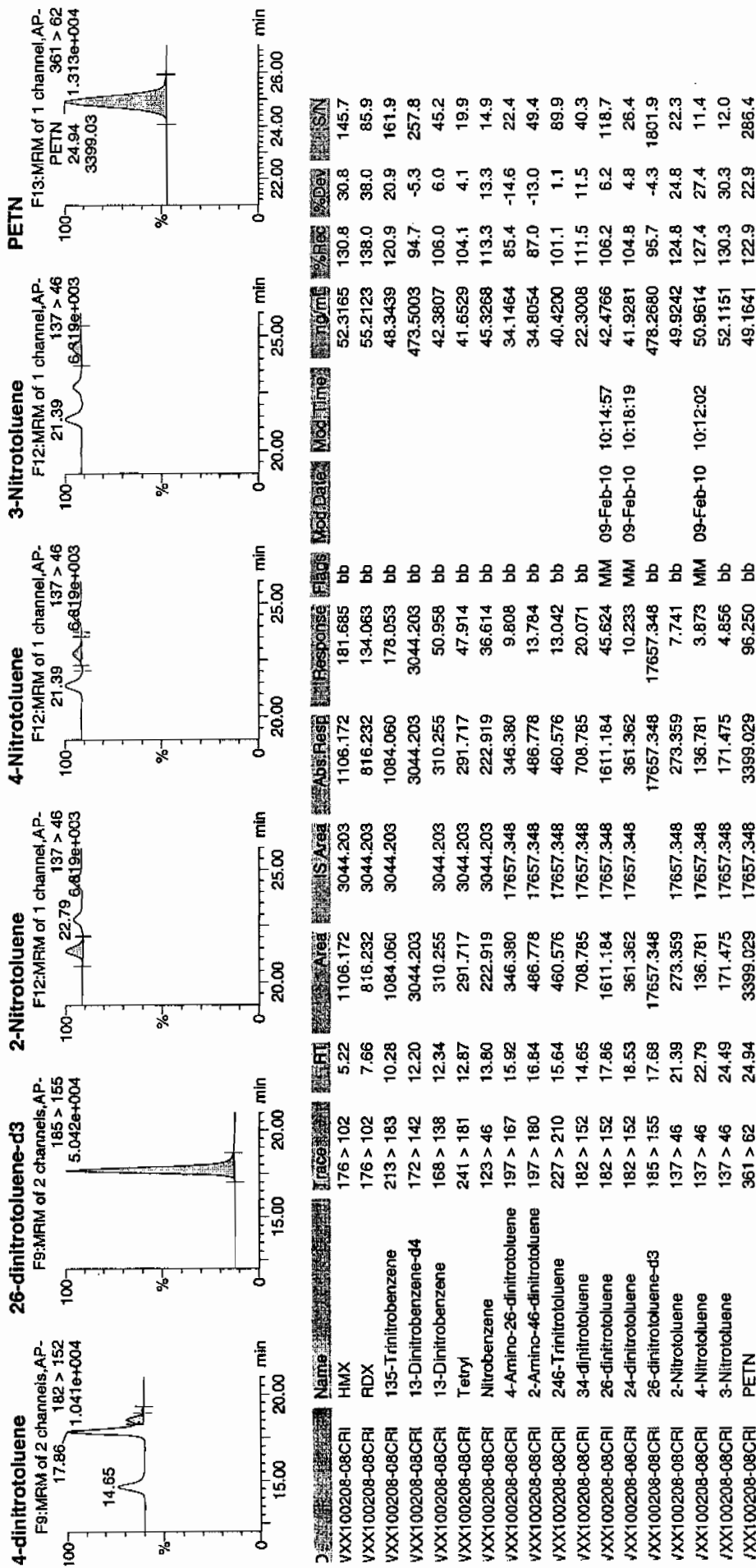
WXX
2/9/10



Printed: Tue Feb 09 10:21:18 2010, Page 50 of 77

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



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): 10-1392

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
1,3,5-Trinitrobenzene	600	557.726	93	
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	

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\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

Sample Name: C:\MASSLYNX\NEW_EXP_PRO\Data\EXP0208036a

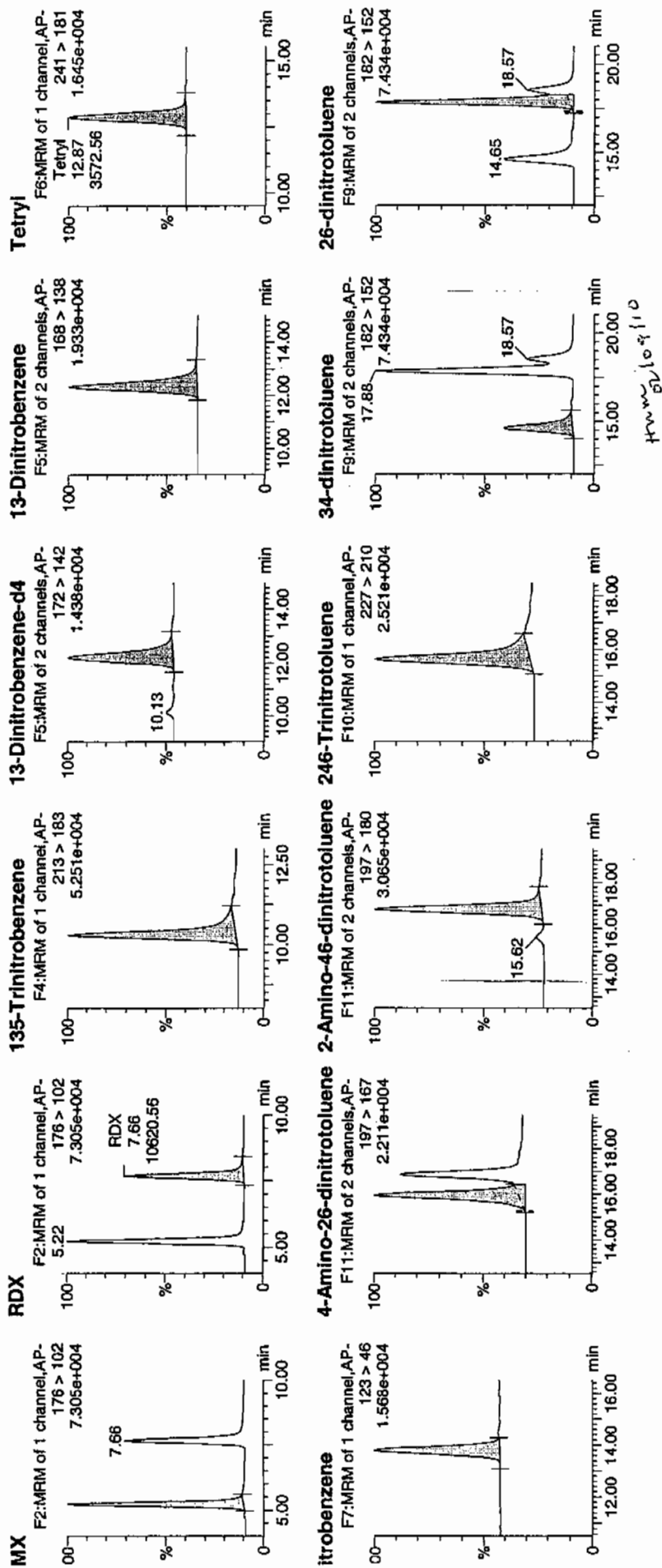
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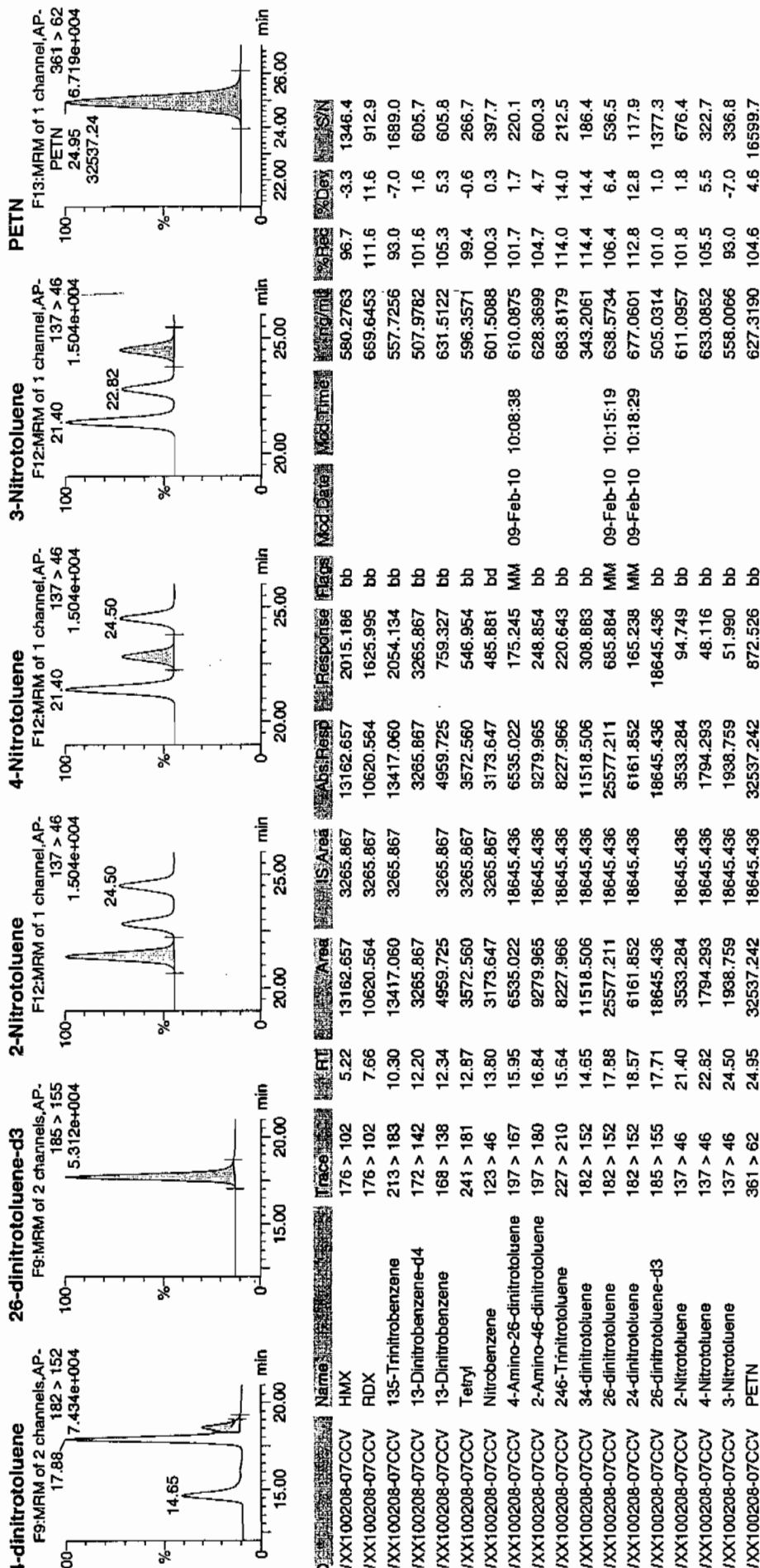
File: WXX100208-07CCV

Ratio: 1:1,B

10/10



atlas: 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: 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

*MTT
2/9/10*

Total 1665.2

Average 104.1

Ann 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): 10-1392

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
m-Nitrotoluene	40	38.786	97	
o-Nitrotoluene	40	43.692	109	
p-Nitrotoluene	40	33.849	85	
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	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

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

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA.qld, Time: Tue Feb 09 10:19:05 2010

Sample Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208038a

Date: 09-Feb-2010

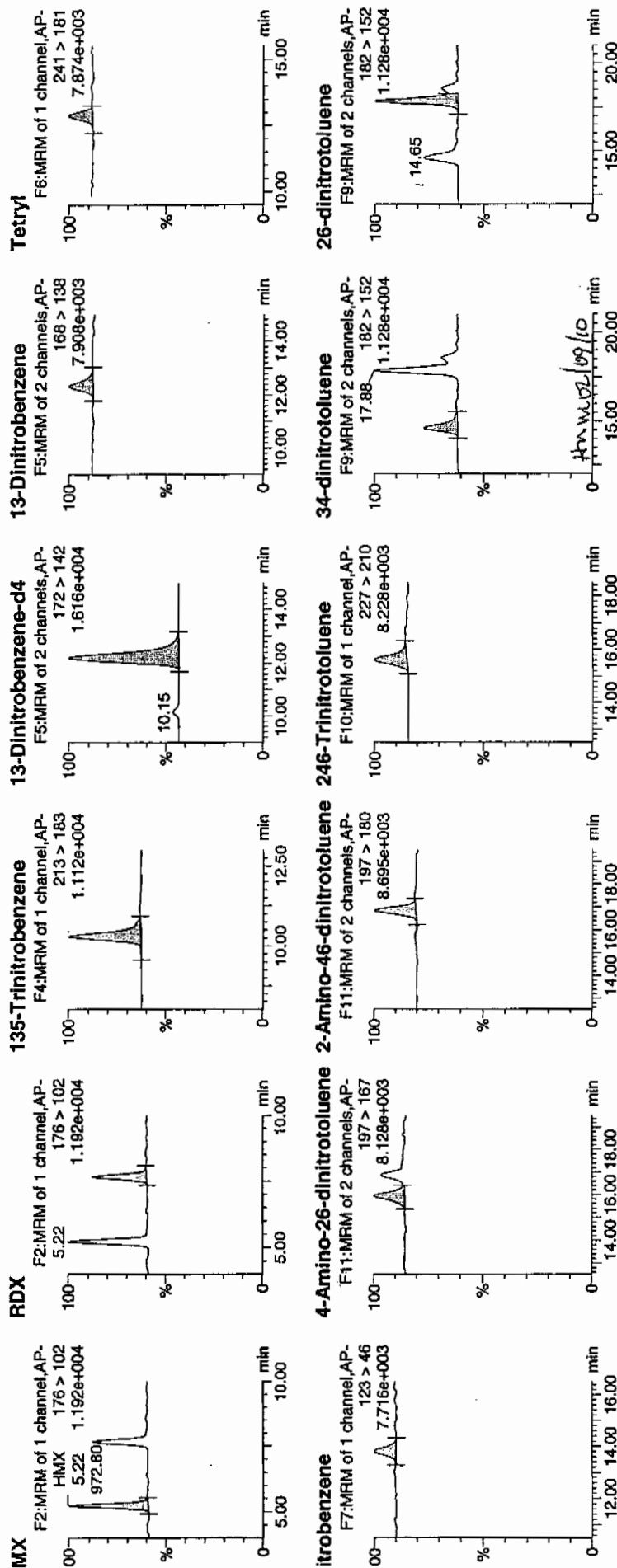
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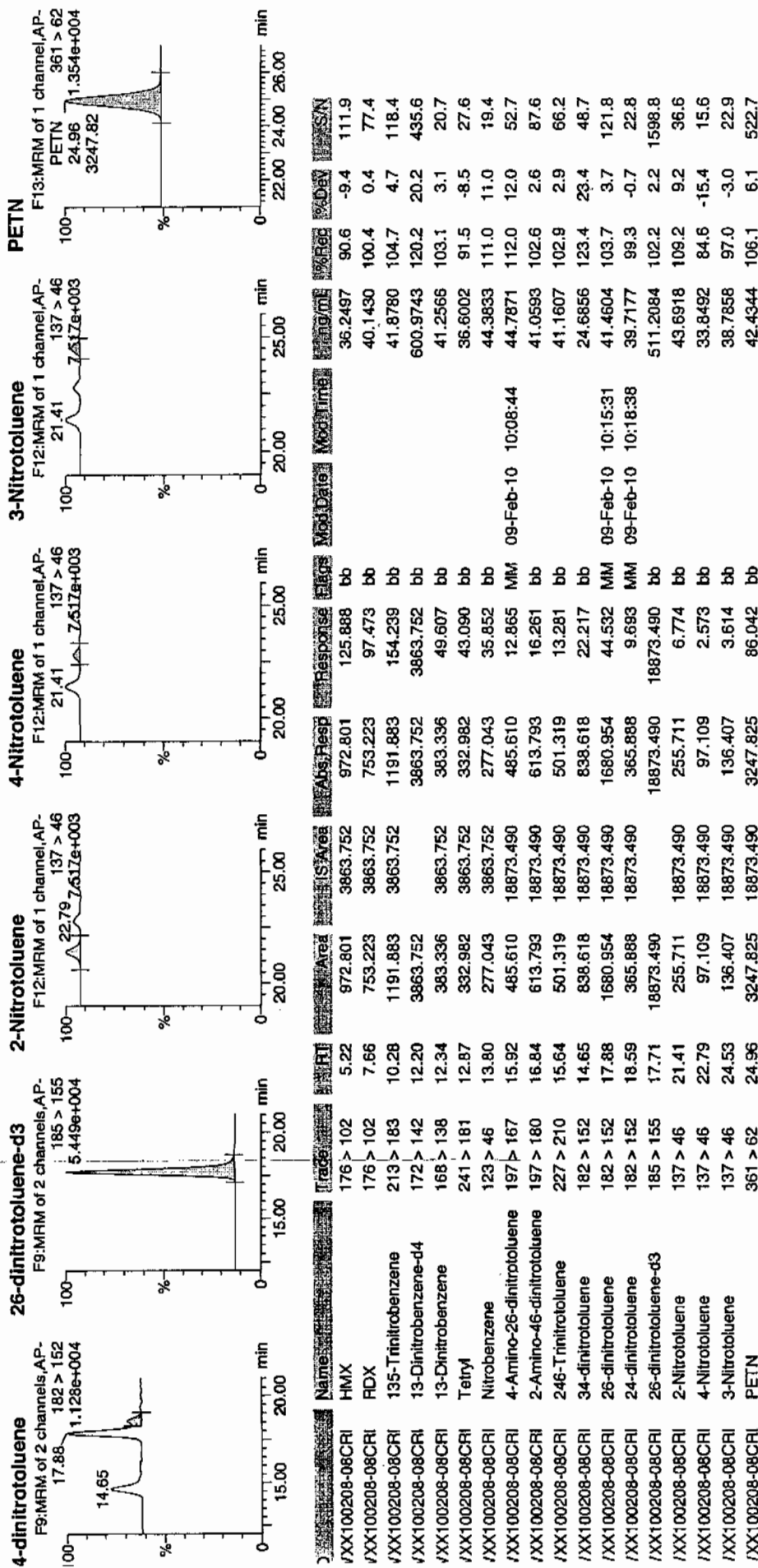
WAT
2/9/10

Page 502 of 1574



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



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

*not
2/9/10*

Total 1642.1

Average 102.6

time calcs

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): 10-1392

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
4-Amino-2,6-dinitrotoluene	600	652.073	109	
HMX	600	648.743	108	
Nitrobenzene	600	534.529	89	
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	

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 21 of 79

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

File: C:\MASSLYNX\New_Exp.PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010

File: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208049a

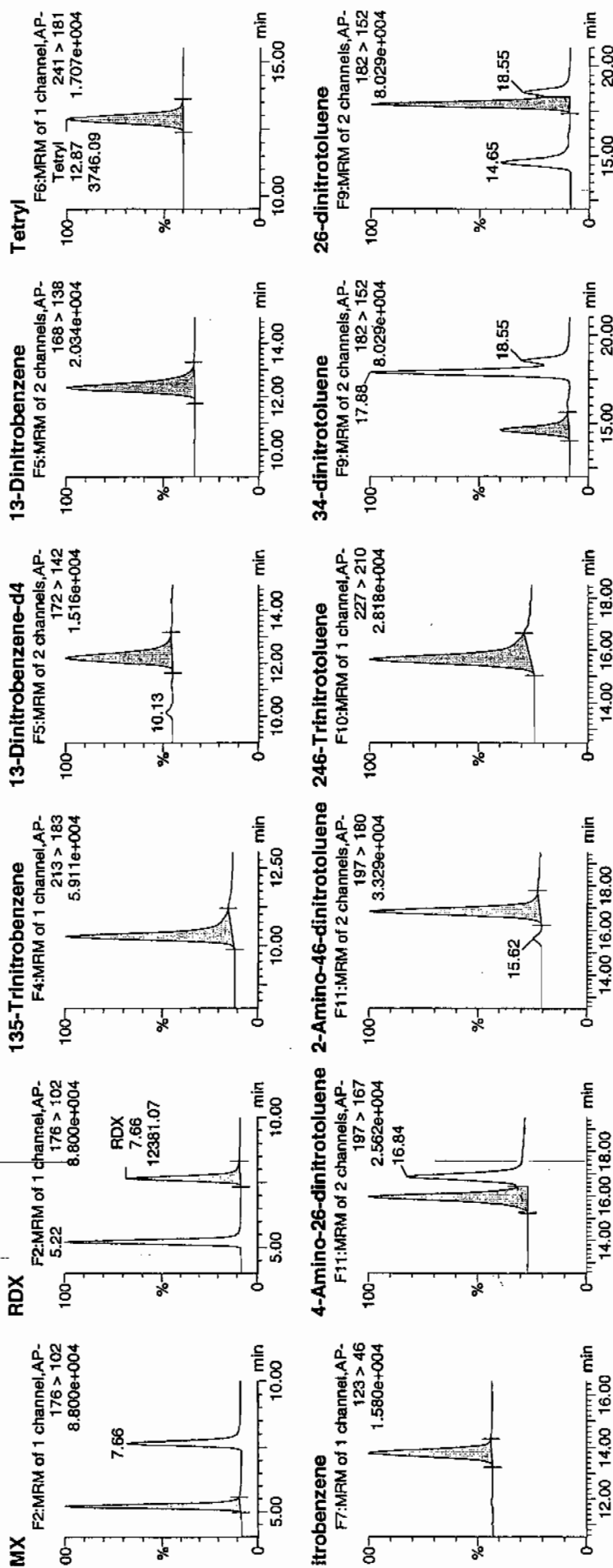
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File: WXX100208-07CCV

Ratio: 1:1,B

2/10/10



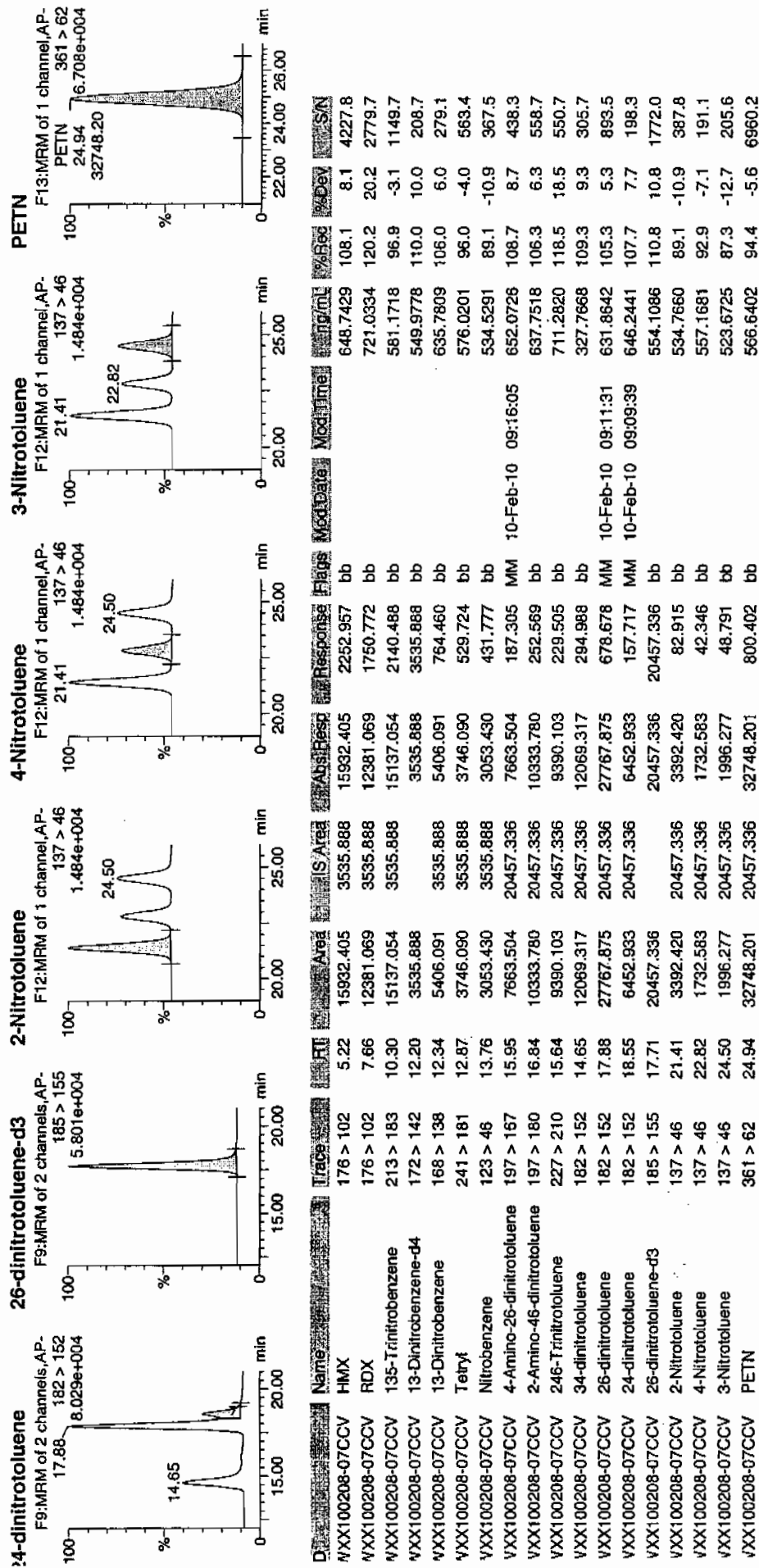
2/10/10

Quantify Sample Report

3EL 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



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

done 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): 10-1392

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
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	
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	

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\EXP0208051a

Plate: 09-Feb-2010

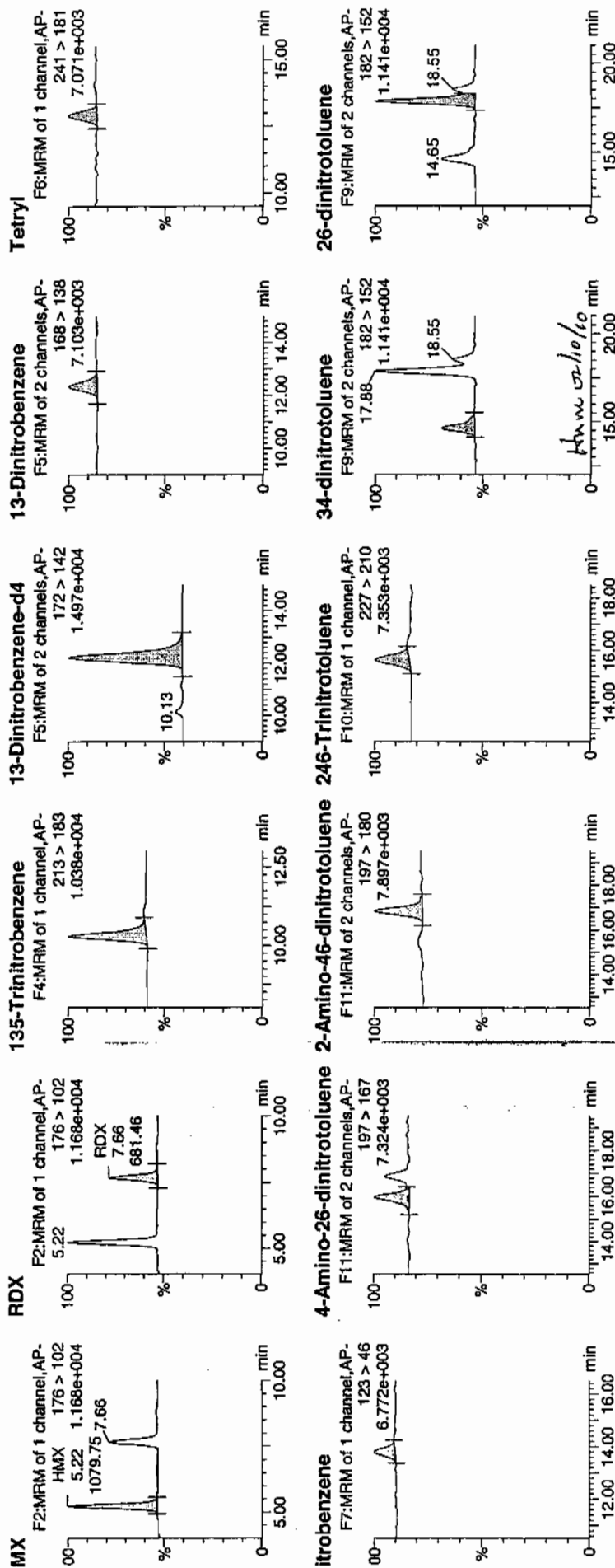
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Page: 510 of 1574

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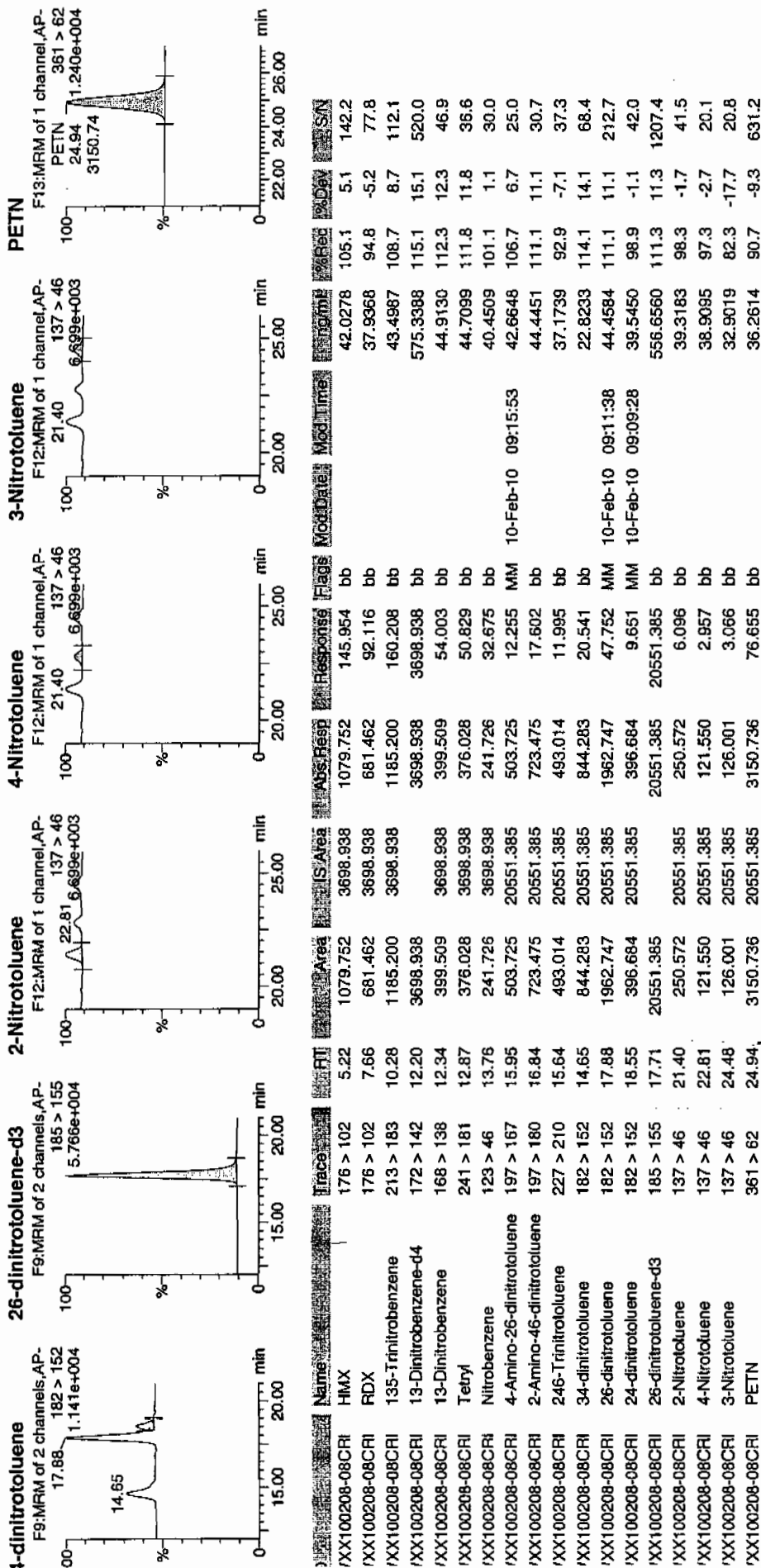
10/10/10



Printed: Wed Feb 10 09:25:16 2010, Page 26 of 79

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

ataset: 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
2/10/10*

Total 1637.2

Average 102.3

MTT 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): 10-1392

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

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

atlas: C:\MASSLYNX\New_Exp.PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010

ame: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208062a

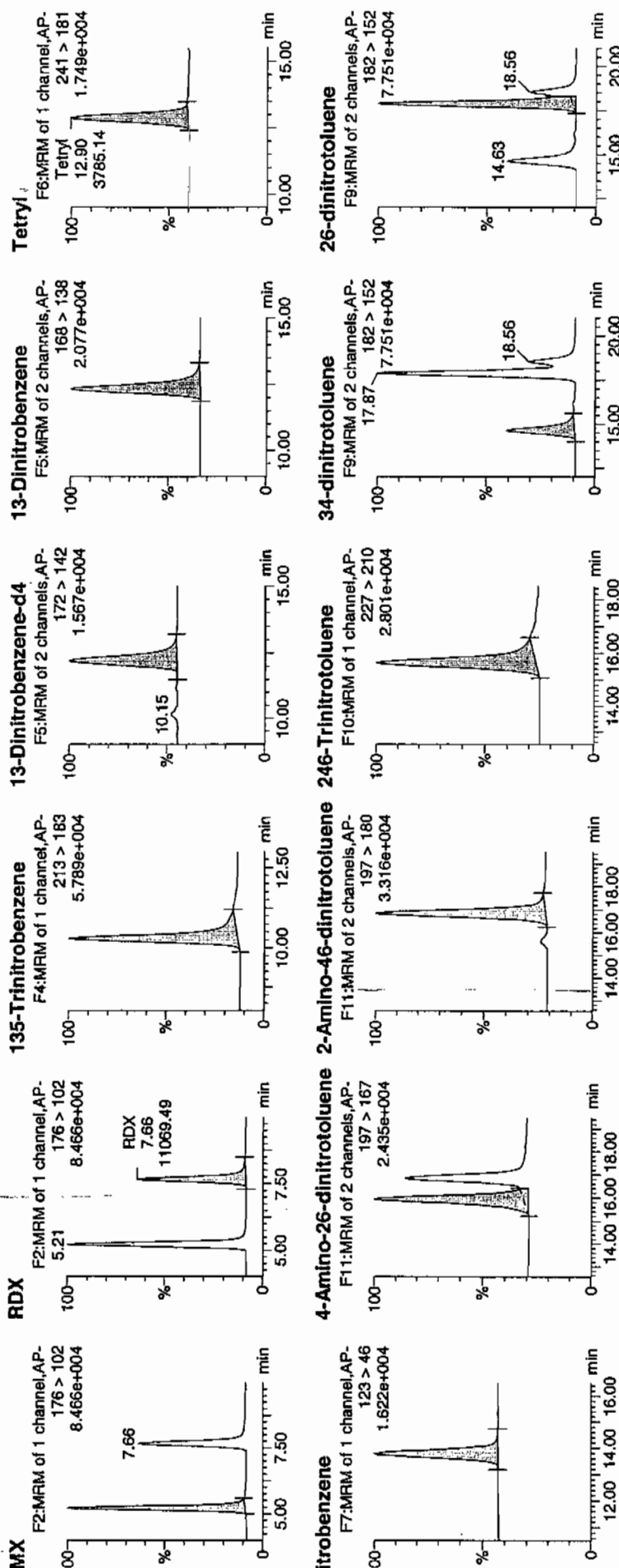
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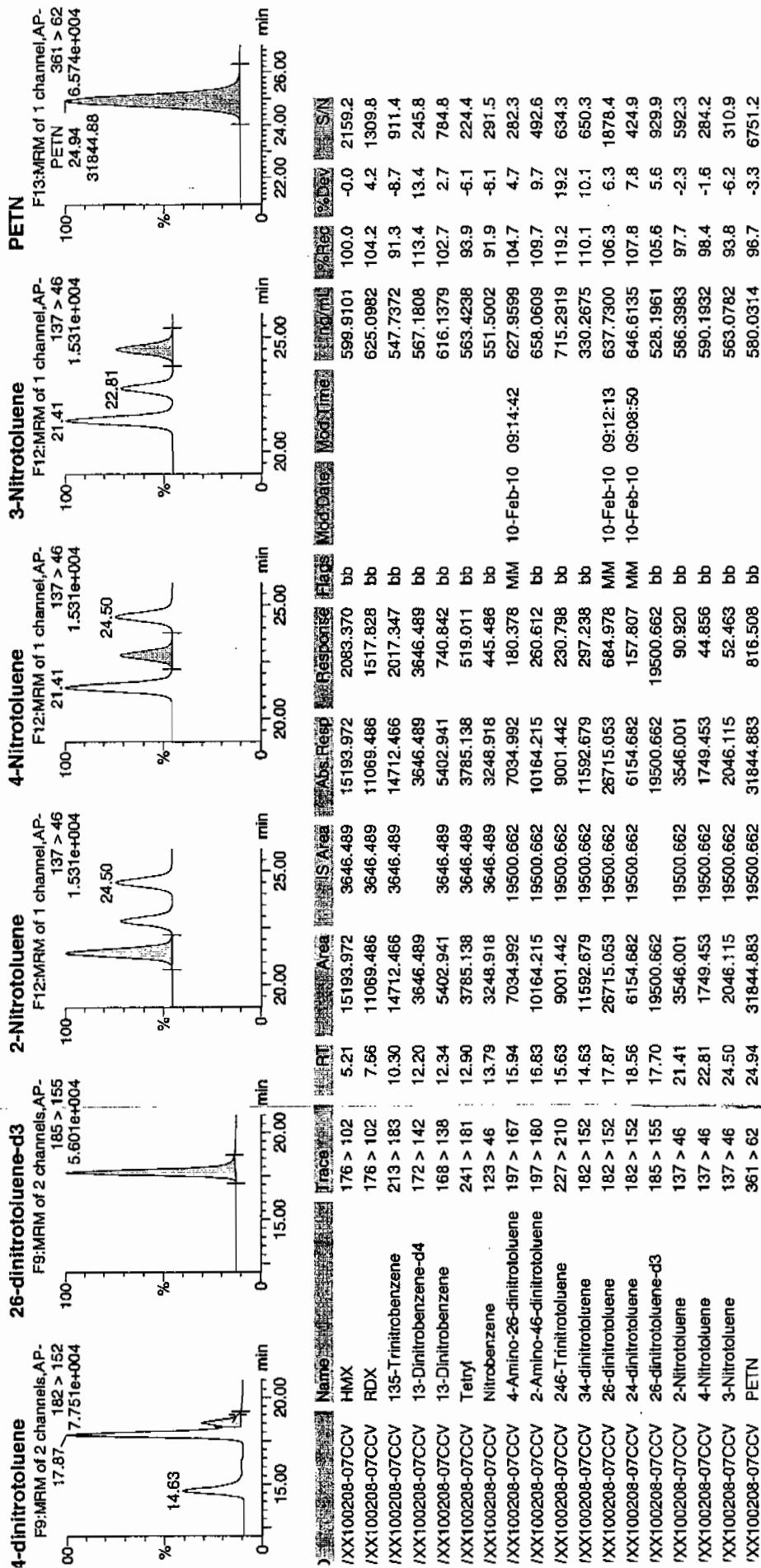
ial: 1:1,B

MM
2/10/10



MM 02/10/10

atset: C:\MASSLYN\New_Exp\PRO1020810expA1.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

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): 10-1392

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
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	
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	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

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

Dataset: C:\MASSLYNX\New_Exp_PRO\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010

Sample Name: C:\MASSLYNX\NEW_EXP_PRO\Data\EXP0208064a

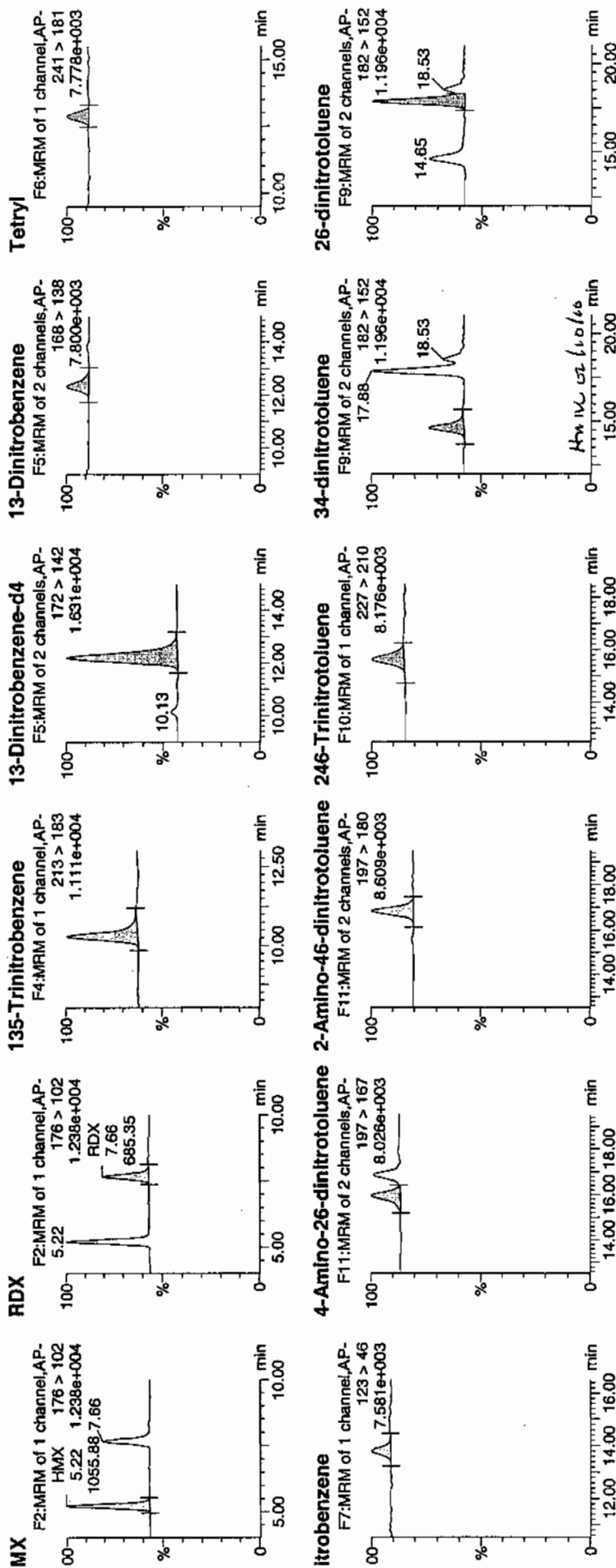
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Time: 21:43:27

File: WXX100208-08CRI

Label: 1:1,C

AP
2/10/10



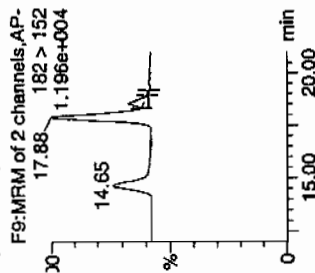
Identify Sample Report

EL Laboratories, LLC / Analyst: Michael A. Penny

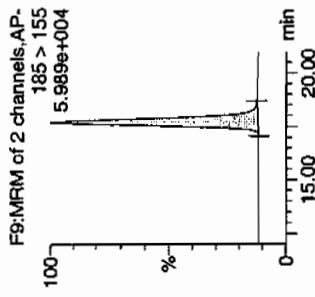
Printed: Wed Feb 10 09:25:16 2010, Page 52 of 79

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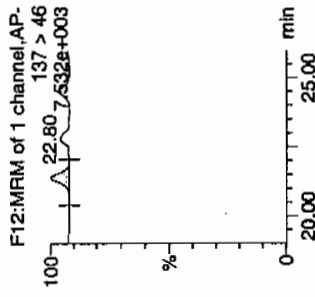
1-Dinitrotoluene



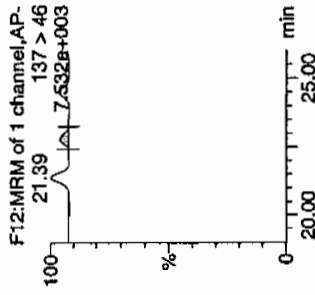
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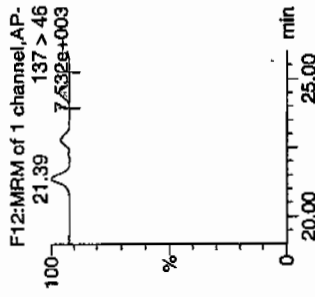
2-Nitrotoluene



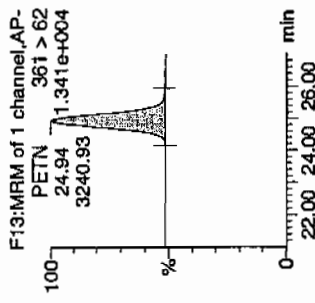
4-Nitrotoluene



3-Nitrotoluene



PETN



Name	Trace	RT	Area	IS-Area	AbsRsp	Response	Flags	ModDate	ModTime	Intm	%Rec	%Dev	SN
XX100208-08CRI	176 > 102	5.22	1055.883	3874.267	1055.883	136.269	bb			39.2388	98.1	-1.9	268.1
XX100208-08CRI	176 > 102	7.66	685.352	3874.267	685.352	88.449	bb			36.4267	91.1	-8.9	148.4
XX100208-08CRI	213 > 183	10.30	1234.027	3874.267	1234.027	159.259	bb			43.2411	108.1	8.1	145.8
XX100208-08CRI	172 > 142	12.20	3874.267	3874.267	3874.267	3874.267	bb			602.6098	120.5	20.5	308.3
XX100208-08CRI	168 > 138	12.34	361.083	3874.267	361.083	46.600	bb			38.7561	96.9	-3.1	29.4
XX100208-08CRI	241 > 181	12.92	315.552	3874.267	315.552	40.724	bb			34.1231	85.3	-14.7	25.2
XX100208-08CRI	123 > 46	13.80	243.681	3874.267	243.681	31.449	bb			38.9327	97.3	-2.7	18.5
XX100208-08CRI	197 > 167	15.95	495.481	20962.824	495.481	11.818	MM	10-Feb-10	09:14:32	41.1429	102.9	2.9	52.0
XX100208-08CRI	2-Amino-46-dinitrotoluene	16.84	657.359	20962.824	657.359	15.679	bb			39.5908	99.0	-1.0	64.0
XX100208-08CRI	246-Tritnitrotoluene	227 > 210	516.055	20962.824	516.055	12.309	bb			38.1476	95.4	-4.6	49.9
XX100208-08CRI	34-dinitrotoluene	182 > 152	908.764	20962.824	908.764	21.676	bb			24.0842	120.4	20.4	46.7
XX100208-08CRI	26-dinitrotoluene	182 > 152	1941.125	20962.824	1941.125	46.299	MM	10-Feb-10	09:12:20	43.1056	107.8	7.8	126.2
XX100208-08CRI	24-dinitrotoluene	182 > 152	399.918	20962.824	399.918	9.539	MM	10-Feb-10	09:08:33	39.0850	97.7	-2.3	25.9
XX100208-08CRI	26-dinitrotoluene-d3	185 > 155	20962.824	20962.824	20962.824	20962.824	bb			567.8003	113.6	13.6	2300.0
XX100208-08CRI	2-Nitrotoluene	137 > 46	262.989	20962.824	262.989	6.273	bb			40.4568	101.1	1.1	52.2
XX100208-08CRI	4-Nitrotoluene	137 > 46	110.147	20962.824	110.147	2.627	bb			34.5672	86.4	-13.6	23.8
XX100208-08CRI	3-Nitrotoluene	137 > 46	152.150	20962.824	152.150	3.629	bb			38.9502	97.4	-2.6	30.6
XX100208-08CRI	PETN	361 > 62	3240.928	20962.824	3240.928	77.302	bb			36.6863	91.7	-8.3	1151.2

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

Handwritten: 2/10/10

Total 1576.6

Average 98.5

Handwritten: 2/10/10

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): 10-1392

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
1,3,5-Trinitrobenzene	600	550.541	92	
1,3-Dinitrobenzene-d4	500	536.255	107	
2,4,6-Trinitrotoluene	600	692.977	115	
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	

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\020810expA1.qld, Time: Wed Feb 10 09:19:53 2010

Sample Name: C:\MASSLYNX\NEW_EXP_PRO\Data\EXP0208075a

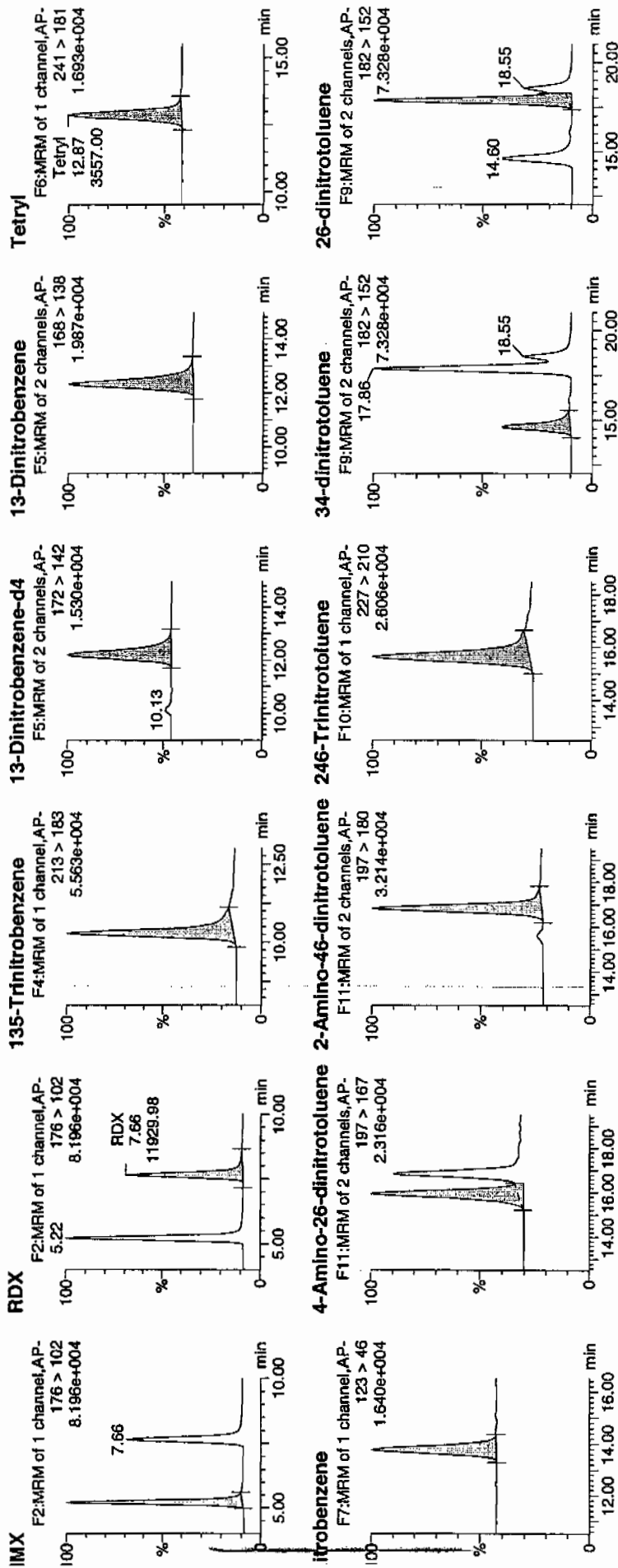
Plate: 10-Feb-2010

Time: 03:07:54

File: WXX100208-07CCV

Label: 1:1,B

2/10/10



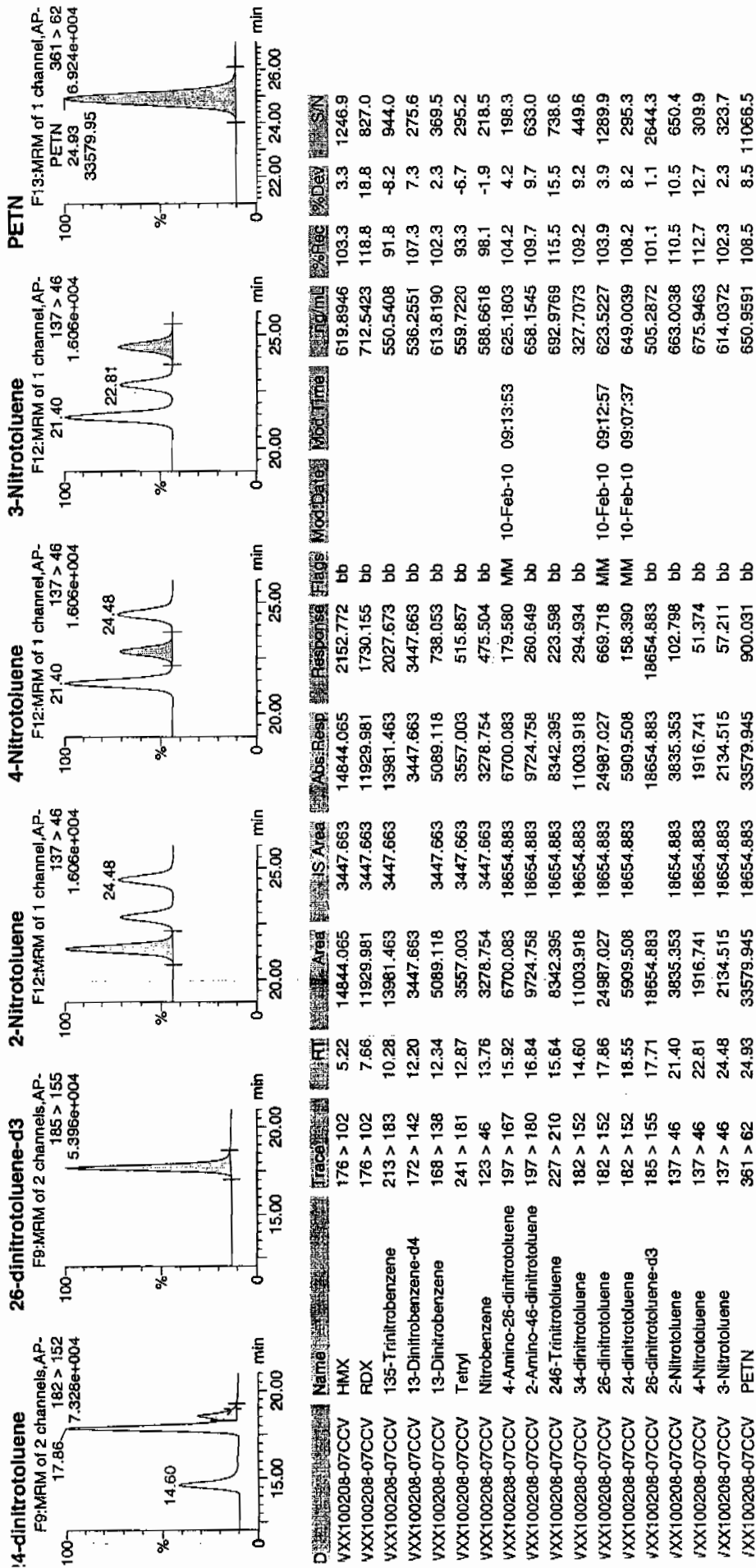
Handwritten note: 10/10

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

Printed: Wed Feb 10 09:25:16 2010, Page 74 of 79



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

*WXX
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): 10-1392

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
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\EXP0208077a

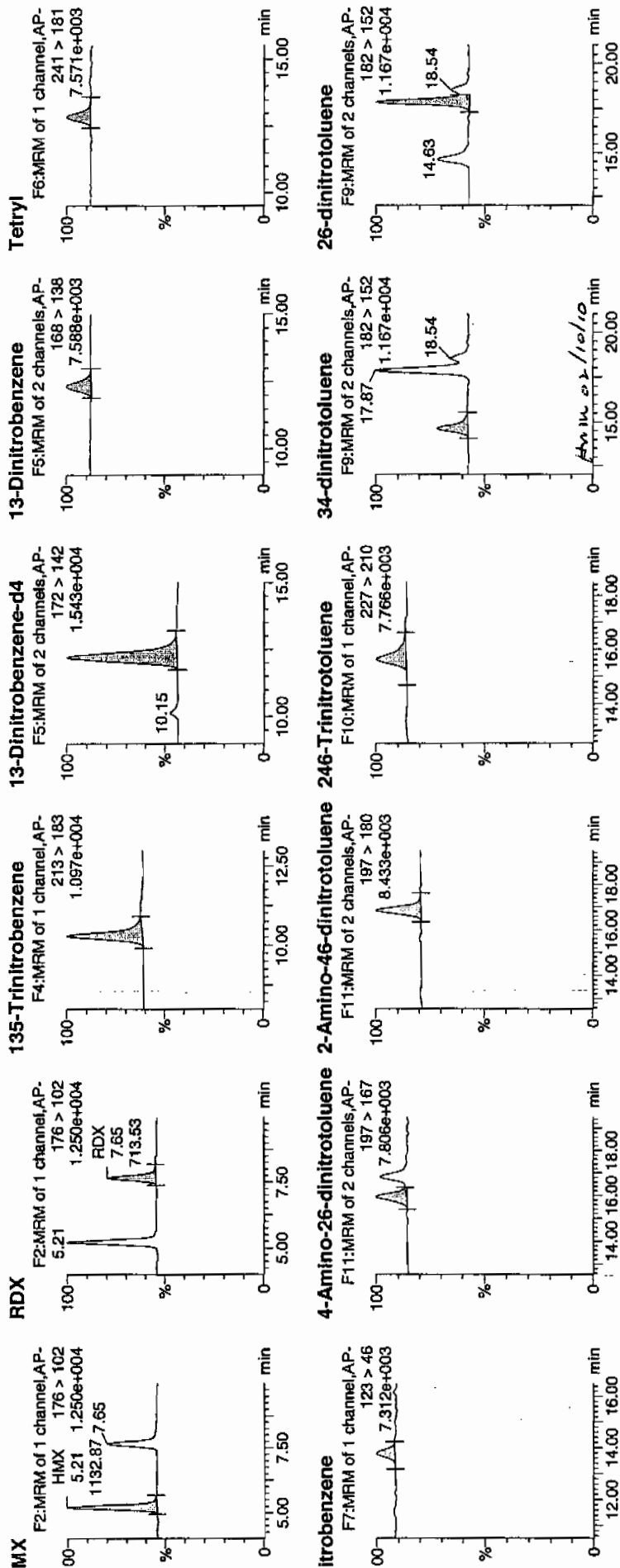
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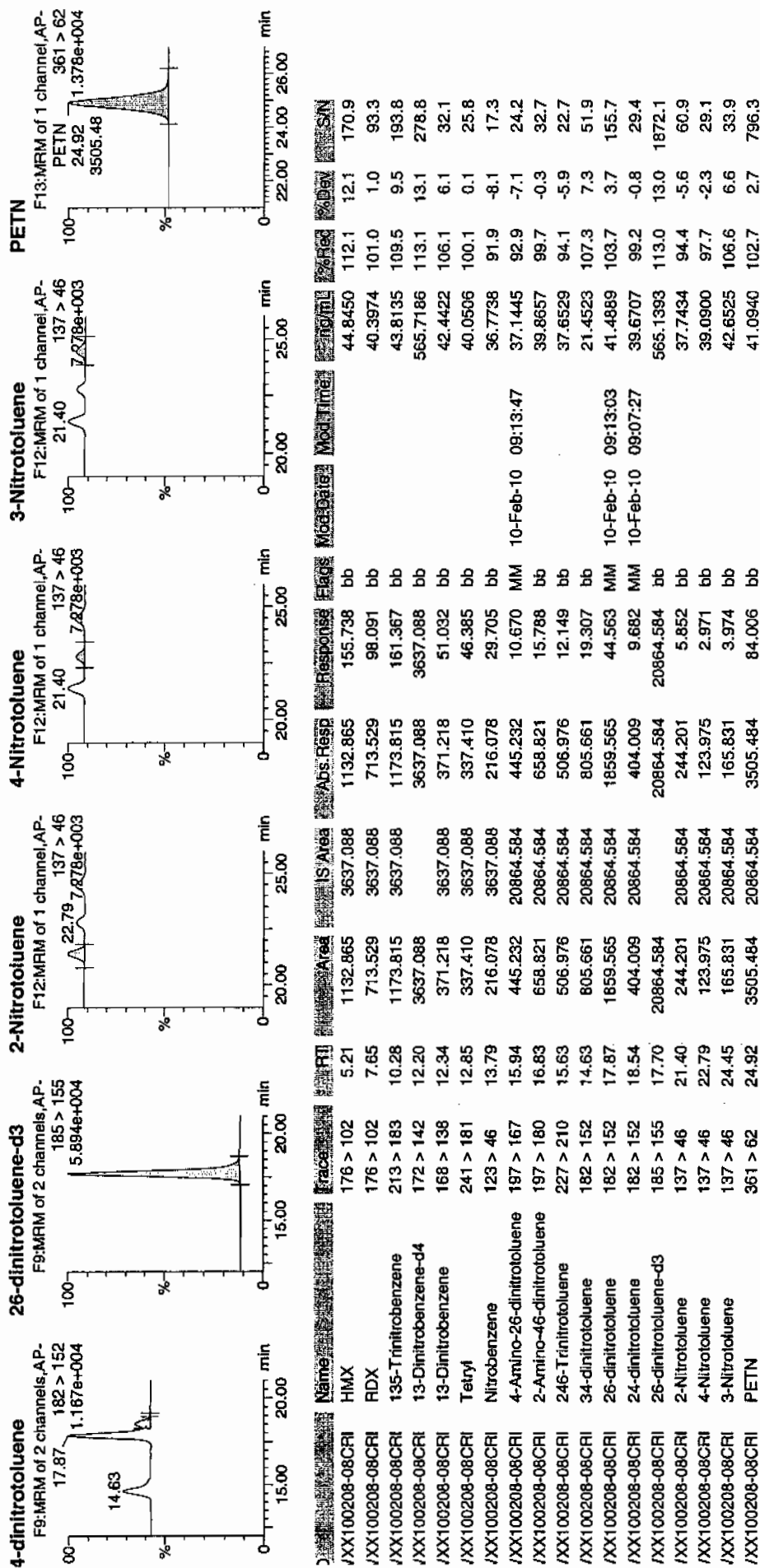
File: WXX100208-08CRI

Ratio: 1:1,C

1/10/10



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

*101.2
2/10/10*

Total 1619.0

Average 101.2

101.2 on 2/10/10

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): 10-1392

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
Nitrobenzene	600	606.863	101	
PETN	600	627.526	105	
RDX	600	633.367	106	
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	

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

ame: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208088a

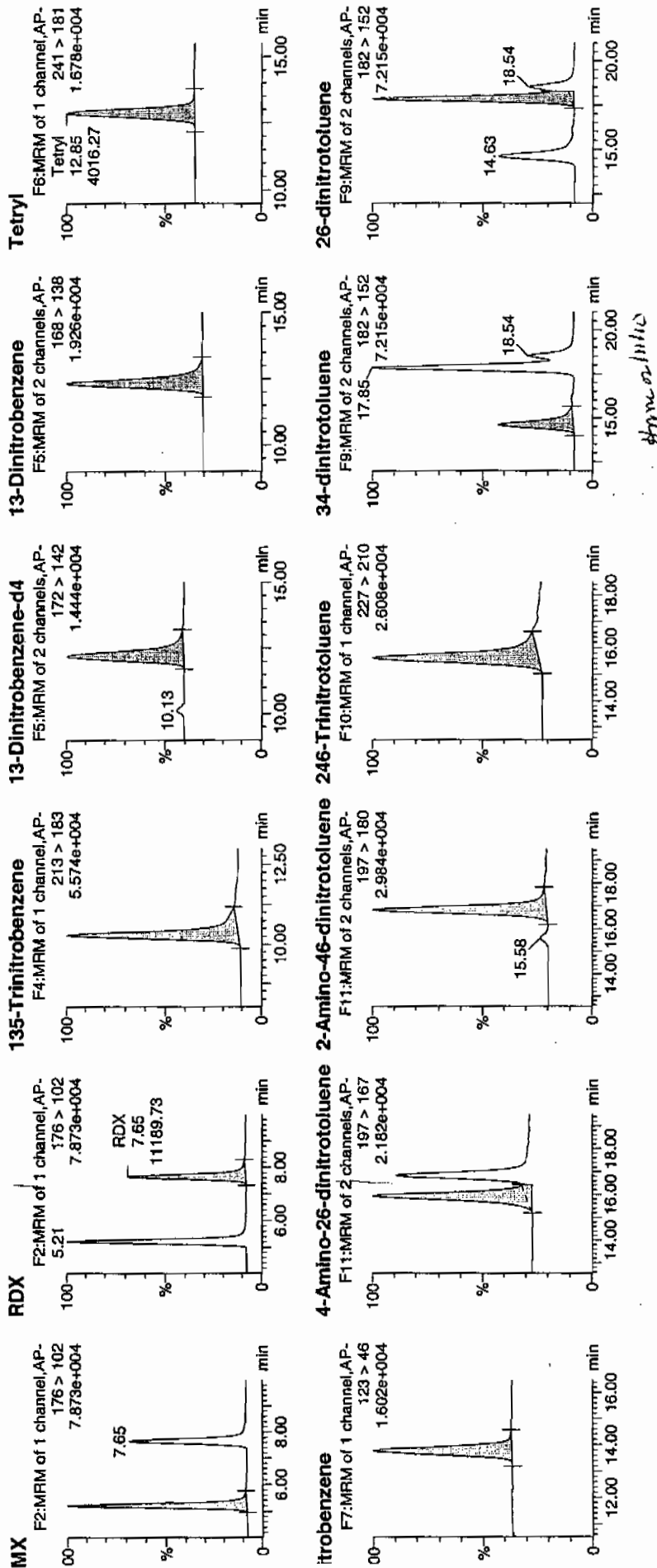
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ime: 09:31:30

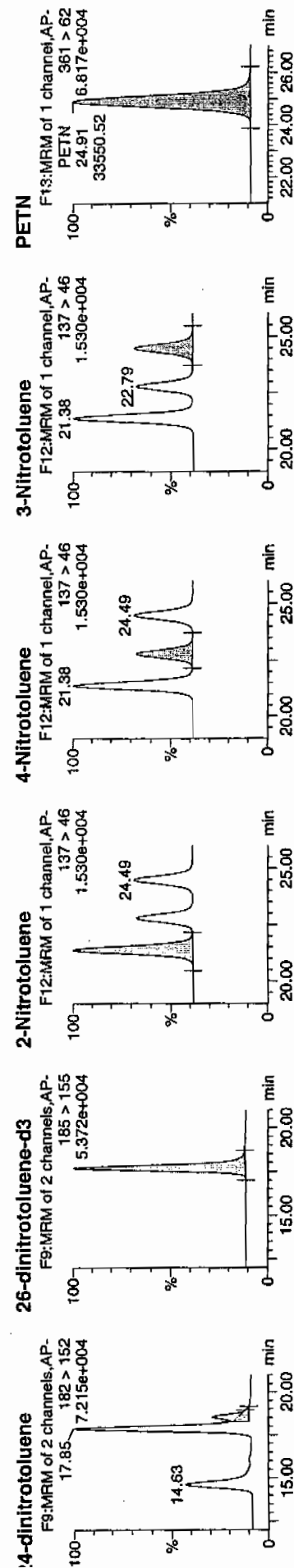
p: WXX100208-07CCV

ial: 1:1,B

WXX
2/11/10



Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010



Name	Trace	Rf	Area	IS Area	Ass Resp	Response	Flags	Mod Date	Mod Time	Find File	%Rec	%Dev	SN
135-Tritrobenzene	176 > 102	5.21	14652.377	3637.978	14652.377	2013.808	bb			579.8796	96.6	-3.4	2714.8
13-Dinitrobenzene	176 > 102	7.65	11189.726	3637.978	11189.726	1537.905	bb			633.3665	105.6	5.6	1781.0
13-Dinitrobenzene-d4	213 > 183	10.28	14523.040	3637.978	14523.040	1996.032	bb			541.9499	90.3	-9.7	563.5
13-Dinitrobenzene	172 > 142	12.20	3637.978	3637.978	3637.978	3637.978	bb			565.8570	113.2	13.2	489.5
13-Dinitrobenzene	168 > 138	12.34	5298.564	3637.978	5298.564	728.229	bb			605.6486	100.9	0.9	921.9
Tetrayl	241 > 181	12.85	4016.270	3637.978	4016.270	551.992	bb			602.3214	100.4	0.4	449.6
Nitrobenzene	123 > 46	13.79	3566.716	3637.978	3566.716	490.206	bb			606.8625	101.1	1.1	460.5
4-Amino-26-dinitrotoluene	197 > 167	15.91	6702.521	19220.766	6702.521	174.356	MM	11-Feb-10	09:29:59	606.9950	101.2	1.2	645.3
2-Amino-46-dinitrotoluene	197 > 180	16.83	9348.814	19220.766	9348.814	243.196	bb			614.0835	102.3	2.3	822.4
246-Tritrobenzene	227 > 210	15.63	8790.558	19220.766	8790.558	228.673	bb			708.7063	118.1	18.1	490.0
34-dinitrotoluene	182 > 152	14.63	12009.858	19220.766	12009.858	312.419	bb			347.1351	115.7	15.7	266.6
26-dinitrotoluene	182 > 152	17.85	24774.061	19220.766	24774.061	644.461	MM	11-Feb-10	09:58:51	600.0075	100.0	0.0	715.2
24-dinitrotoluene	182 > 152	18.54	5692.178	19220.766	5692.178	148.074	MM	11-Feb-10	10:04:27	606.7311	101.1	1.1	152.1
26-dinitrotoluene-d3	185 > 155	17.70	19220.766	19220.766	19220.766	19220.766	bb			520.6148	104.1	4.1	1918.1
2-Nitrotoluene	137 > 46	21.38	3966.684	19220.766	3966.684	103.187	bb			665.5185	110.9	10.9	439.7
4-Nitrotoluene	137 > 46	22.79	1949.940	19220.766	1949.940	50.725	bb			667.4087	111.2	11.2	203.9
3-Nitrotoluene	137 > 46	24.49	2142.158	19220.766	2142.158	55.725	bb			598.0932	99.7	-0.3	213.4
PETN	361 > 62	24.91	33550.523	19220.766	33550.523	872.768	bb			627.5257	104.6	4.6	5599.7

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
Total	1659.7

*WTF
2/11/10*

Average

103.7

Handwritten

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): 10-1392

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
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	
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	

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

atset: C:\MASSLYNX\New_Exp.PRO\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010

ame: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208090a

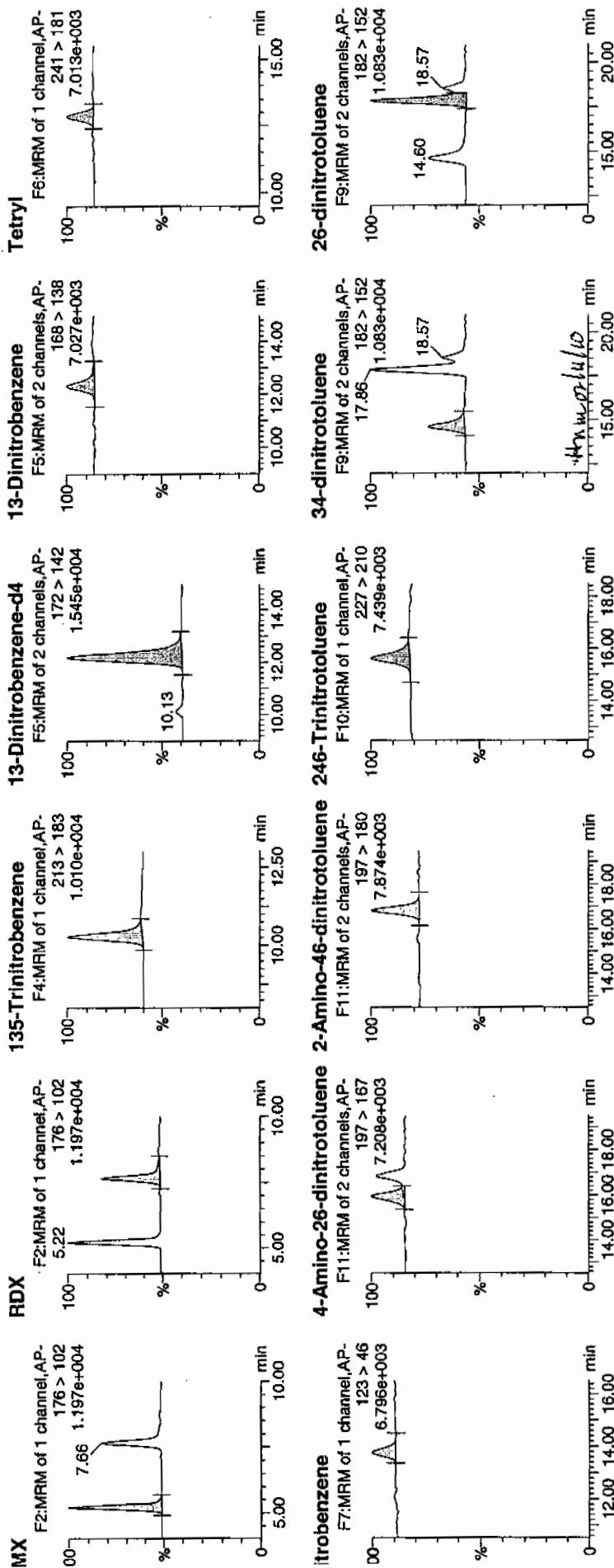
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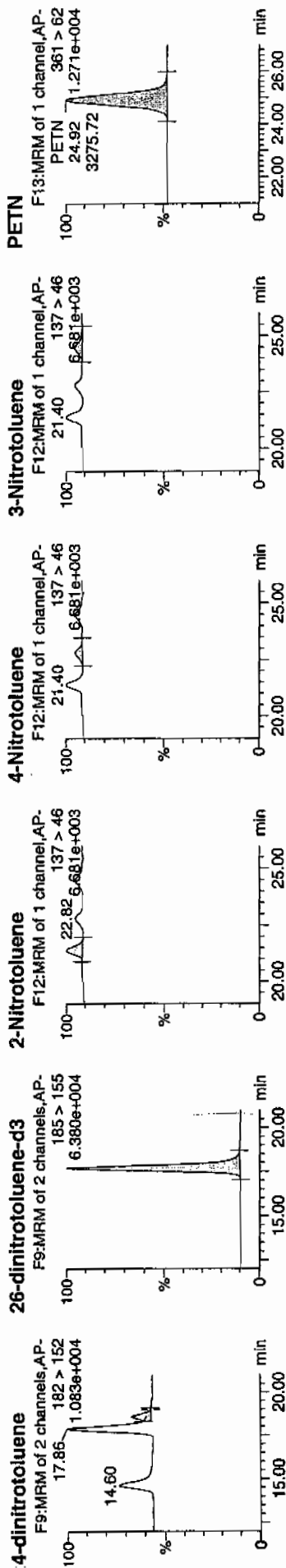
i: WXX100208-08CRI

ial: 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	S Area	Abundance	Response	Flags	Mod Date	Mod Time	Area	%Area	SN
VXX100208-08CRI	HMX	176 > 102	5.22	1170.302	3889.412	1170.302	150.447	bb		43.3215	108.3	8.3
VXX100208-08CRI	RDX	176 > 102	7.66	952.380	3889.412	952.380	122.432	bb		50.4222	126.1	26.1
VXX100208-08CRI	135-Trinitrobenzene	213 > 183	10.28	1118.047	3889.412	1118.047	143.730	bb		39.0245	97.6	-2.4
VXX100208-08CRI	13-Dinitrobenzene	172 > 142	12.21	3889.412	3889.412	3889.412	3889.412	bb		604.9654	121.0	21.0
VXX100208-08CRI	13-Dinitrobenzene	168 > 138	12.31	420.071	3889.412	420.071	54.002	bb		44.9119	112.3	12.3
VXX100208-08CRI	Tetryl	241 > 181	12.87	326.408	3889.412	326.408	41.961	bb		35.4178	88.5	-11.5
VXX100208-08CRI	Nitrobenzene	123 > 46	13.80	265.042	3889.412	265.042	34.072	bb		42.1806	105.5	5.5
VXX100208-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.95	471.715	22126.934	471.715	10.659	MM	11-Feb-10 09:29:49	37.1087	92.8	-7.2
VXX100208-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.84	687.696	22126.934	687.696	15.540	bb		39.2389	98.1	-1.9
VXX100208-08CRI	246-Trinitrotoluene	227 > 210	15.64	579.040	22126.934	579.040	13.085	bb		40.5516	101.4	1.4
VXX100208-08CRI	34-dinitrotoluene	182 > 152	14.60	861.880	22126.934	861.880	19.476	bb		21.6400	108.2	8.2
VXX100208-08CRI	26-dinitrotoluene	182 > 152	17.86	1907.043	22126.934	1907.043	43.093	MM	11-Feb-10 09:57:00	40.1208	100.3	0.3
VXX100208-08CRI	24-dinitrotoluene	182 > 152	18.57	393.149	22126.934	393.149	8.884	MM	11-Feb-10 10:04:19	36.4019	91.0	-9.0
VXX100208-08CRI	26-dinitrotoluene-d3	185 > 155	17.69	22126.934	22126.934	22126.934	22126.934	bb		599.3314	119.9	19.9
VXX100208-08CRI	2-Nitrotoluene	137 > 46	21.40	246.227	22126.934	246.227	5.564	bb		35.8854	89.7	-10.3
VXX100208-08CRI	4-Nitrotoluene	137 > 46	22.82	133.668	22126.934	133.668	3.020	bb		39.7418	99.4	-0.6
VXX100208-08CRI	3-Nitrotoluene	137 > 46	24.48	173.561	22126.934	173.561	3.922	bb		42.0939	105.2	5.2
VXX100208-08CRI	PETN	361 > 62	24.92	3275.725	22126.934	3275.725	74.021	bb		34.5321	86.3	-13.7

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: 2/11/10

Total 1610.7

Average 100.7

Handwritten: 2/11/10

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): 10-1392

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

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

ame: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208100a

ate: 10-Feb-2010

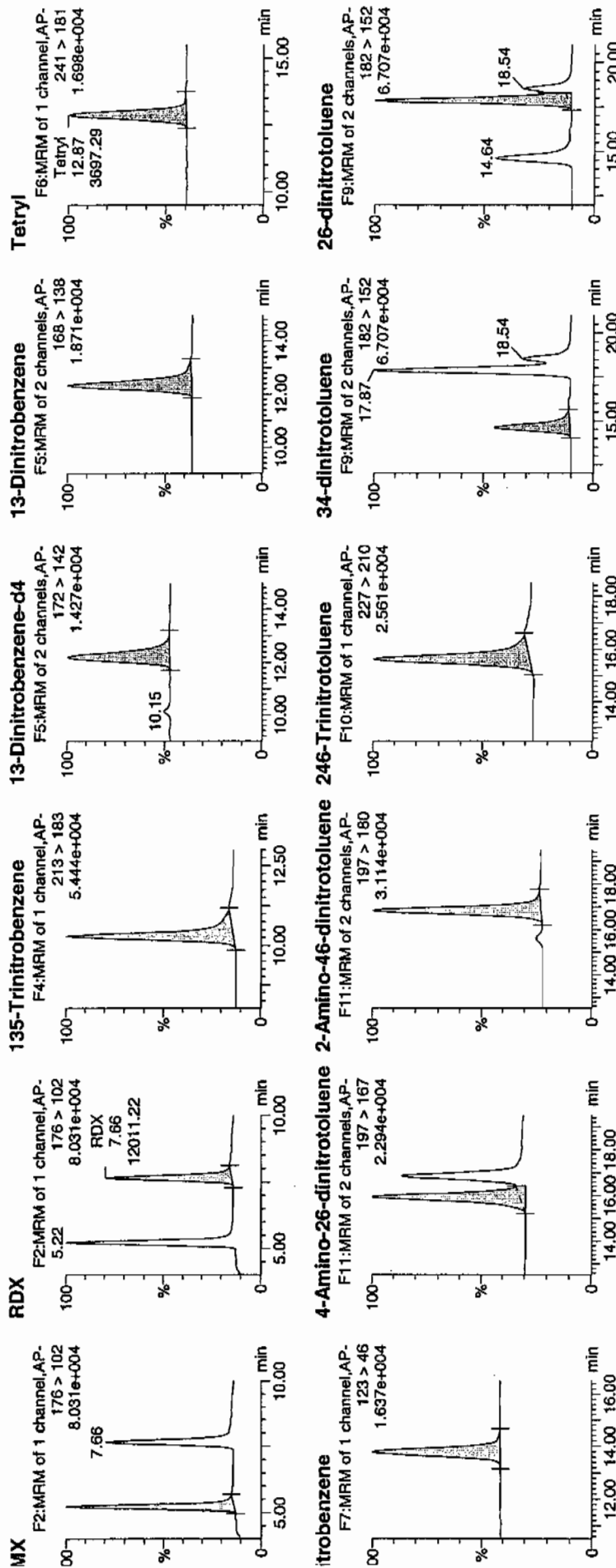
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: WXX100208-07CCV

al: 1:1,B

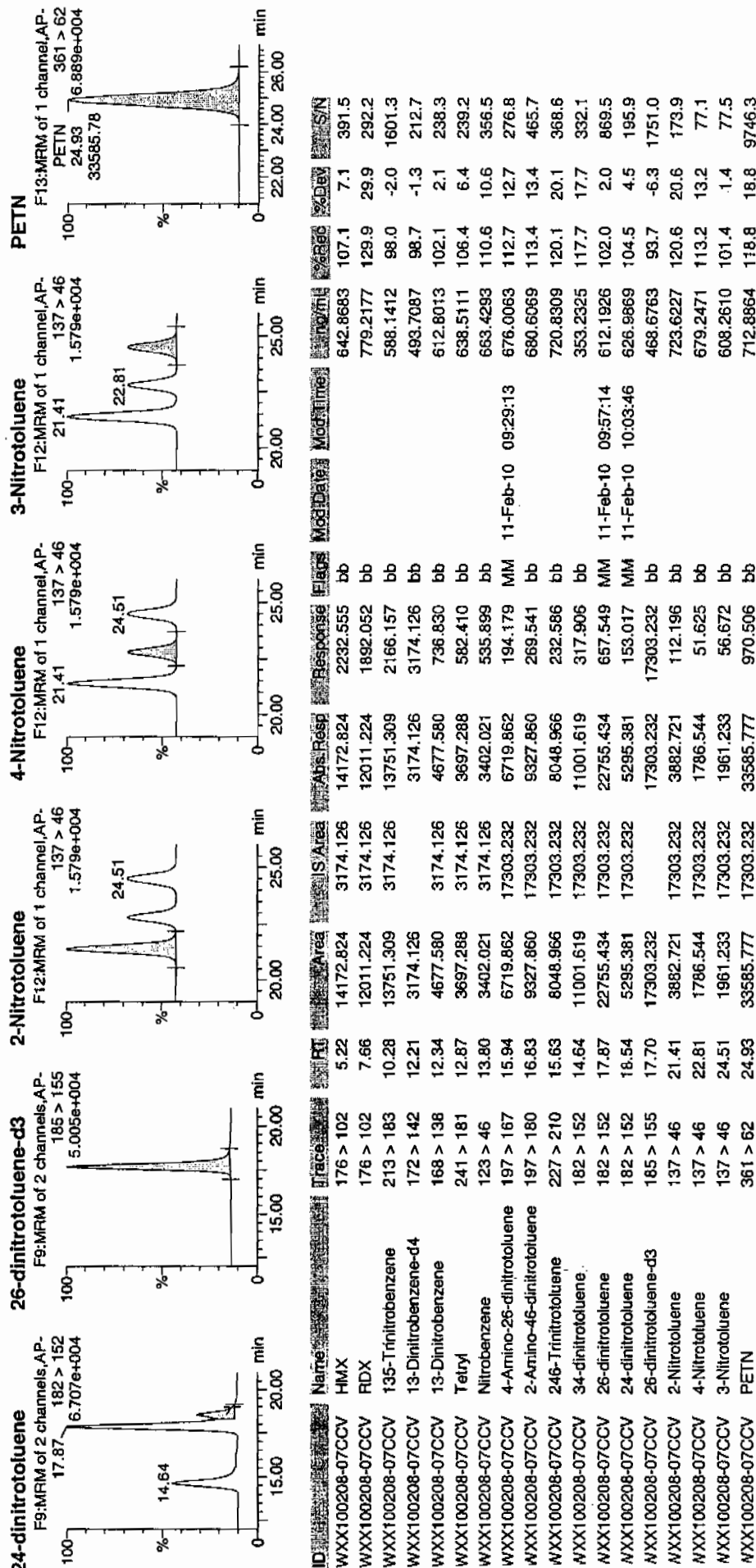
2/11/10

Page 538 of 1574



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Dataset: C:\MASSLYNX\New_Exp_PRO\020810expA2.q.d, 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

*MTD
2/11/10*

Total 1778.5

Average 111.2

done on 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): 10-1392

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
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	*
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	

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

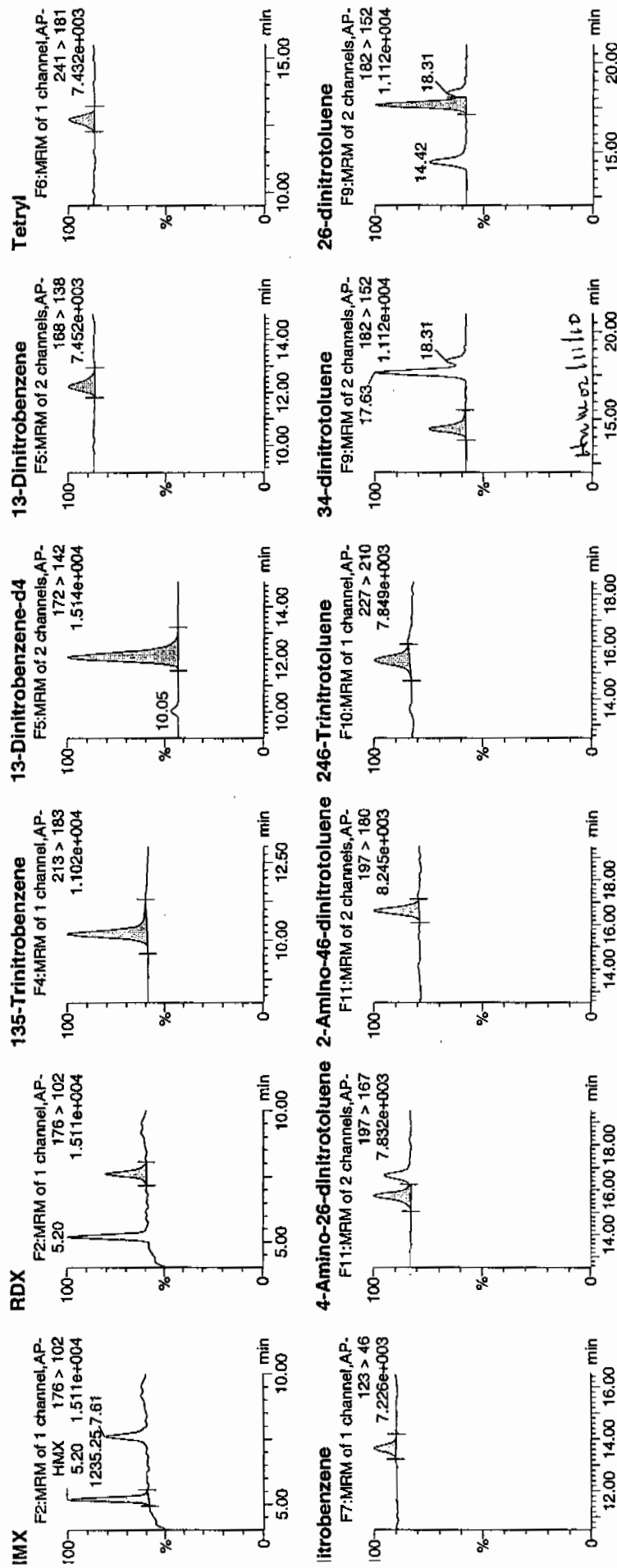
Date: 10-Feb-2010

Time: 16:25:24

Job: WXX100208-08CRI

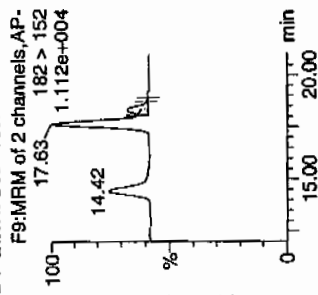
Ratio: 1:1,C

MT
2/11/10

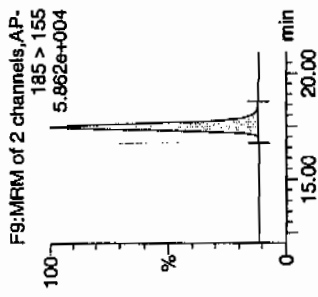


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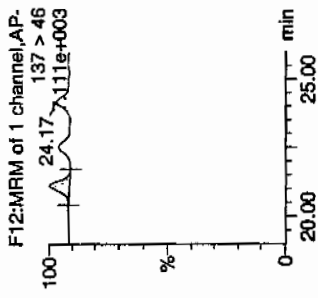
2,4-dinitrotoluene



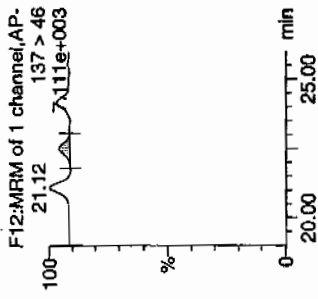
26-dinitrotoluene-d3



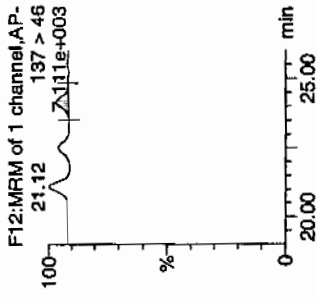
2-Nitrotoluene



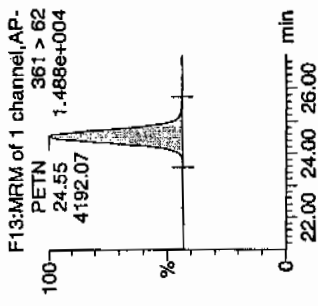
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	Is Area	Abs. Resp	Response	Flags	Mod Date	Mod Time	Yr/ML	%Rec	%Dev	SN
WXX100208-08CRI	HMx	176 > 102	5.20	1235.246	3549.957	1235.246	173.980	bb			50.0980	125.2	25.2	49.5
WXX100208-08CRI	RDX	176 > 102	7.61	851.198	3549.957	851.198	119.888	bb			49.3746	123.4	23.4	25.8
WXX100208-08CRI	135-Trinitrobenzene	213 > 183	10.21	1337.041	3549.957	1337.041	188.318	bb			51.1309	127.8	27.8	114.5
WXX100208-08CRI	13-Dinitrobenzene-d4	172 > 142	12.10	3549.957		3549.957	3549.957	bb			552.1661	110.4	10.4	439.4
WXX100208-08CRI	13-Dinitrobenzene	168 > 138	12.24	397.188	3549.957	397.188	55.943	bb			46.5260	116.3	16.3	33.2
WXX100208-08CRI	Tetryl	241 > 181	12.73	349.726	3549.957	349.726	49.258	bb			43.0820	107.7	7.7	8.0
WXX100208-08CRI	Nitrobenzene	123 > 46	13.62	238.288	3549.957	238.288	33.562	bb			41.5490	103.9	3.9	23.1
WXX100208-08CRI	4-Amino-26-dinitrotoluene	197 > 187	15.73	534.904	20561.957	534.904	13.007	MM	11-Feb-10	09:29:08	45.2824	113.2	13.2	36.3
WXX100208-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.62	638.216	20561.957	638.216	15.519	bb			39.1873	98.0	-2.0	70.0
WXX100208-08CRI	246-Trinitrotoluene	227 > 210	15.48	536.058	20561.957	536.058	13.035	bb			40.3987	101.0	1.0	34.2
WXX100208-08CRI	34-dinitrotoluene	182 > 152	14.42	874.296	20561.957	874.296	21.260	bb			23.6225	118.1	18.1	53.8
WXX100208-08CRI	26-dinitrotoluene	182 > 152	17.63	1796.544	20561.957	1796.544	43.686	MM	11-Feb-10	09:57:21	40.6728	101.7	1.7	132.7
WXX100208-08CRI	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	-1.9	27.1
WXX100208-08CRI	26-dinitrotoluene-d3	185 > 155	17.48	20561.957		20561.957	20561.957	bb			556.9424	111.4	11.4	1502.8
WXX100208-08CRI	2-Nitrotoluene	137 > 46	21.12	283.344	20561.957	283.344	6.890	bb			44.4378	111.1	11.1	16.6
WXX100208-08CRI	4-Nitrotoluene	137 > 46	22.52	170.915	20561.957	170.915	4.156	bb			54.6836	136.7	36.7	8.9
WXX100208-08CRI	3-Nitrotoluene	137 > 46	24.17	193.256	20561.957	193.256	4.699	bb			50.4379	126.1	26.1	10.4
WXX100208-08CRI	PETN	361 > 62	24.55	4192.072	20561.957	4192.072	101.938	bb			52.9217	132.3	32.3	95.8

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
RDY	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: 115.0
2/10/10

Total 1840.6

Average 115.0

Handwritten: 115.0

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): 10-1392

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
2,4,6-Trinitrotoluene	600	662.584	110	
2,4-Dinitrotoluene	600	622.26	104	
2,6-Dinitrotoluene	600	605.94	101	
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	

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\EXP0208113a

Date: 10-Feb-2010

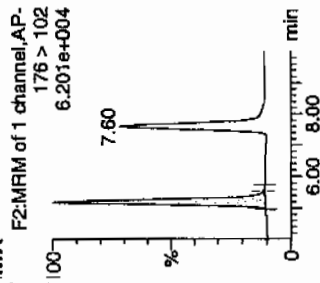
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Page: WXX100208-07CCV

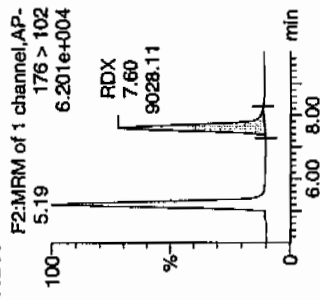
Ratio: 1:1,B

WXX
2/11/10

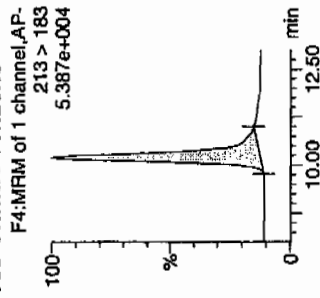
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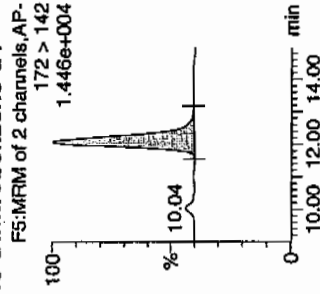
RDX



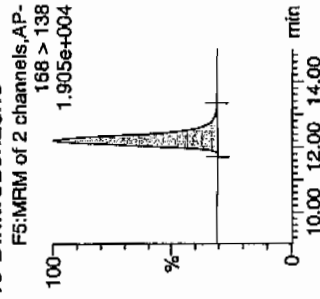
135-Trinitrobenzene



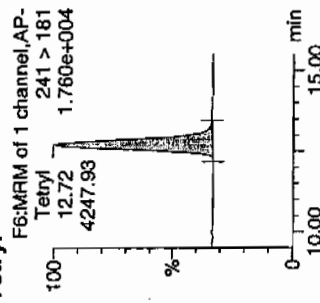
13-Dinitrobenzene-d4



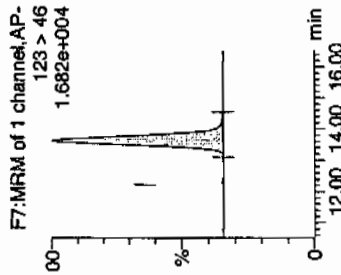
13-Dinitrobenzene



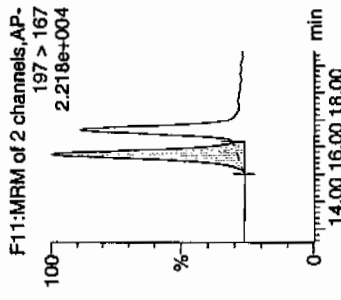
Tetryl



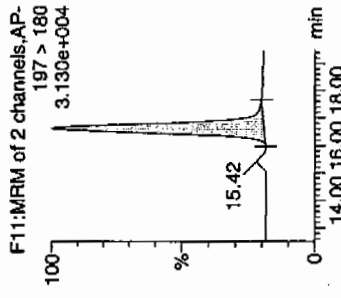
nitrobenzene



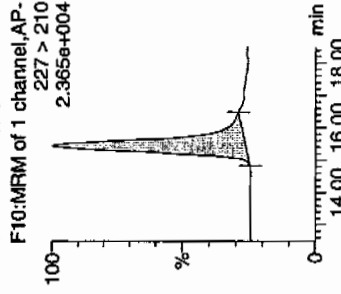
4-Amino-26-dinitrotoluene



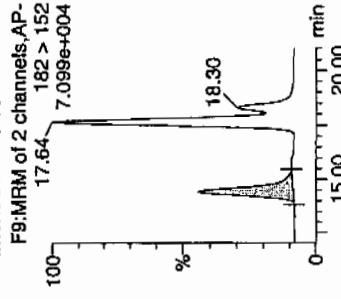
2-Amino-46-dinitrotoluene



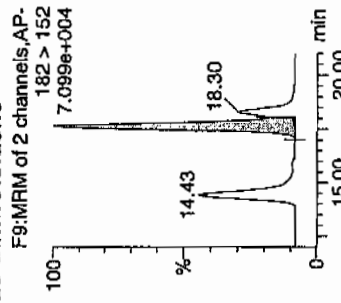
246-Trinitrotoluene



34-dinitrotoluene

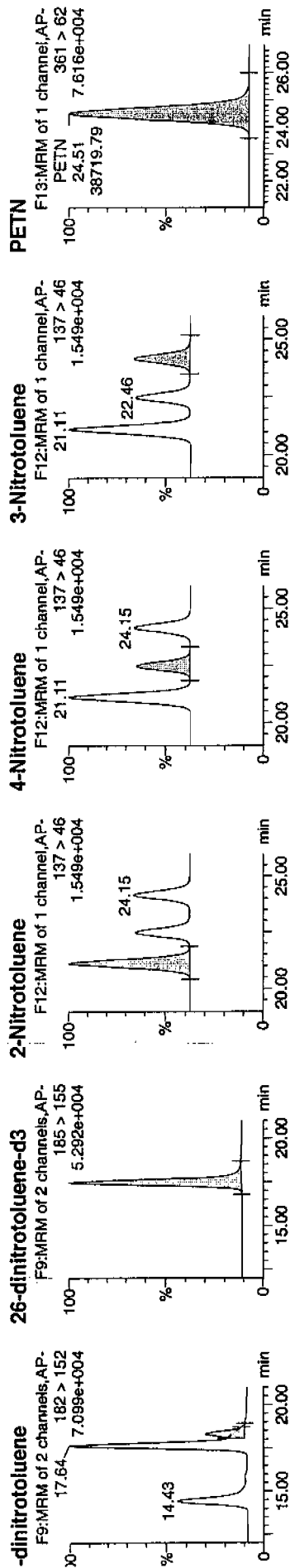


26-dinitrotoluene



WXX
2/11/10

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010



Name	Trace	RT	Area	SArea	Resp	Peak	Mod Date	Mod Time	Ref	Mod	SN
XX100208-07CCV HMX	176 > 102	5.19	11111.813	3500.323	11111.813	1587.255	MM	11-Feb-10 09:22:41	457.0530	76.2	-23.8 909.8
XX100208-07CCV RDX	176 > 102	7.60	9028.113	3500.323	9028.113	1289.611	bb		531.1101	88.5	-11.5 624.4
XX100208-07CCV 135-Trinitrobenzene	213 > 183	10.19	13674.052	3500.323	13674.052	1953.256	bb		530.3356	88.4	-11.6 1522.7
XX100208-07CCV 13-Dinitrobenzene-d4	172 > 142	12.07	3500.323	3500.323	3500.323	728.322	bb		544.4459	108.9	8.9 256.5
XX100208-07CCV 13-Dinitrobenzene	168 > 138	12.20	5098.727	3500.323	5098.727	728.322	bb		605.7261	101.0	1.0 348.3
XX100208-07CCV Tetrayl	241 > 181	12.72	4247.931	3500.323	4247.931	606.791	bb		667.7411	111.3	11.3 340.8
XX100208-07CCV Nitrobenzene	123 > 46	13.63	3859.643	3500.323	3859.643	551.327	bb		682.5286	113.8	13.8 424.7
XX100208-07CCV 4-Amino-26-dinitrotoluene	197 > 167	15.71	6551.677	18803.047	6551.677	174.218	MM	11-Feb-10 09:28:18	606.5155	101.1	1.1 227.0
XX100208-07CCV 2-Amino-46-dinitrotoluene	197 > 180	16.63	10088.809	18803.047	10088.809	268.276	bb		677.4125	112.9	12.9 1285.0
XX100208-07CCV 246-Trinitrotoluene	227 > 210	15.45	8039.858	18803.047	8039.858	213.791	bb		682.5836	110.4	10.4 1020.2
XX100208-07CCV 34-dinitrotoluene	182 > 152	14.43	12212.950	18803.047	12212.950	324.760	bb		360.8475	120.3	20.3 403.2
XX100208-07CCV 26-dinitrotoluene	182 > 152	17.64	24475.283	18803.047	24475.283	650.833	MM	11-Feb-10 09:58:14	605.9401	101.0	1.0 1031.4
XX100208-07CCV 24-dinitrotoluene	182 > 152	18.30	5710.992	18803.047	5710.992	151.863	MM	11-Feb-10 10:02:38	622.2599	103.7	3.7 227.7
XX100208-07CCV 26-dinitrotoluene-d3	185 > 155	17.47	18803.047	18803.047	18803.047	18803.047	bb		509.3004	101.9	1.9 2065.5
XX100208-07CCV 2-Nitrotoluene	137 > 46	21.11	4144.045	18803.047	4144.045	110.196	bb		710.7215	118.5	18.5 1154.1
XX100208-07CCV 4-Nitrotoluene	137 > 46	22.46	1845.305	18803.047	1845.305	49.089	bb		645.6263	107.6	7.6 501.6
XX100208-07CCV 3-Nitrotoluene	137 > 46	24.15	2003.635	18803.047	2003.635	53.280	bb		571.8451	95.3	-4.7 521.6
XX100208-07CCV PETN	361 > 62	24.51	38719.785	18803.047	38719.785	1029.615	bb		766.4443	127.7	27.7 6959.9

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

MTT
2/4/10

Total 1677.7

Average 104.9

4/11/10 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): 10-1392

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%

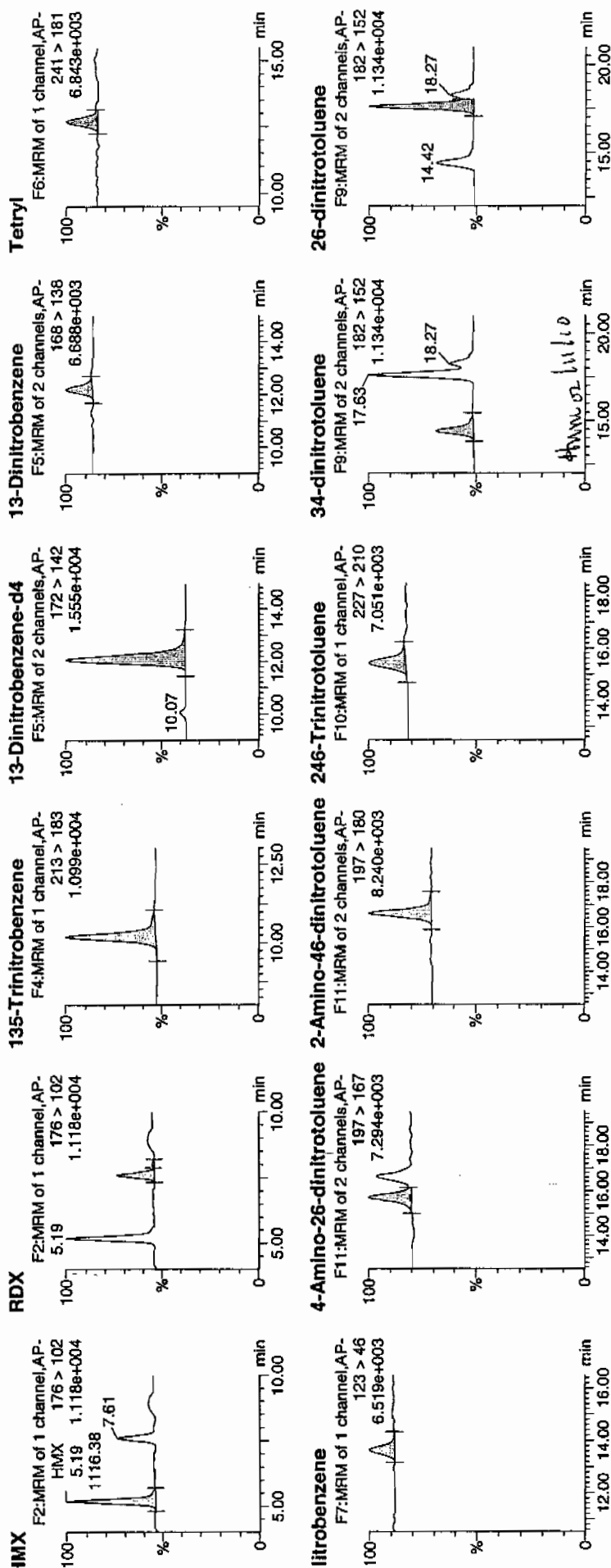
Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

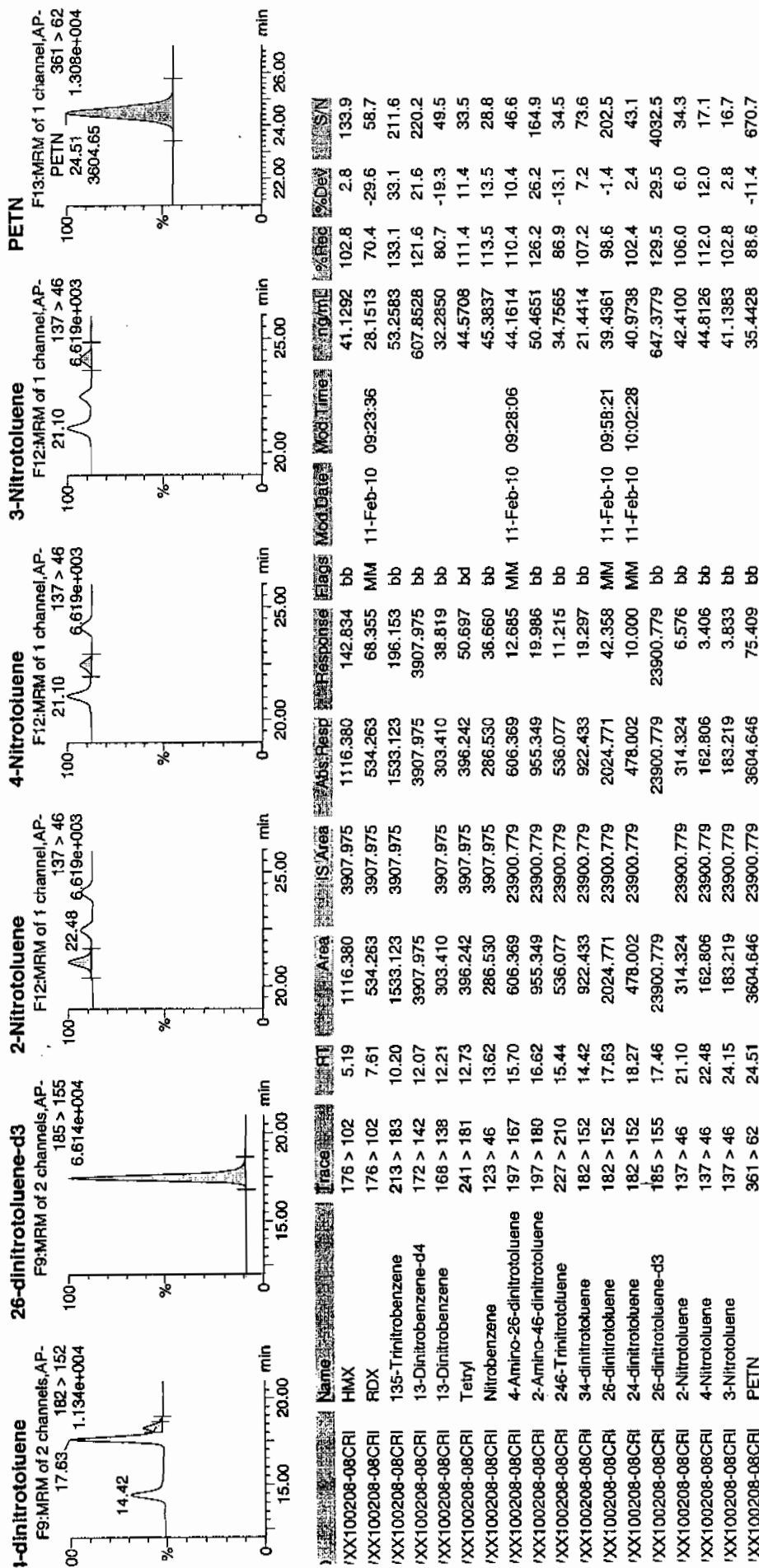
* Value outside of Recovery Limits

10/11/10
10/11/10

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atset: C:\MASSLYN\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 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

*not
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): 10-1392

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
RDX	600	639.449	107	
Tetryl	600	673.554	112	
m-Dinitrobenzene	600	598.675	100	
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	

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\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010

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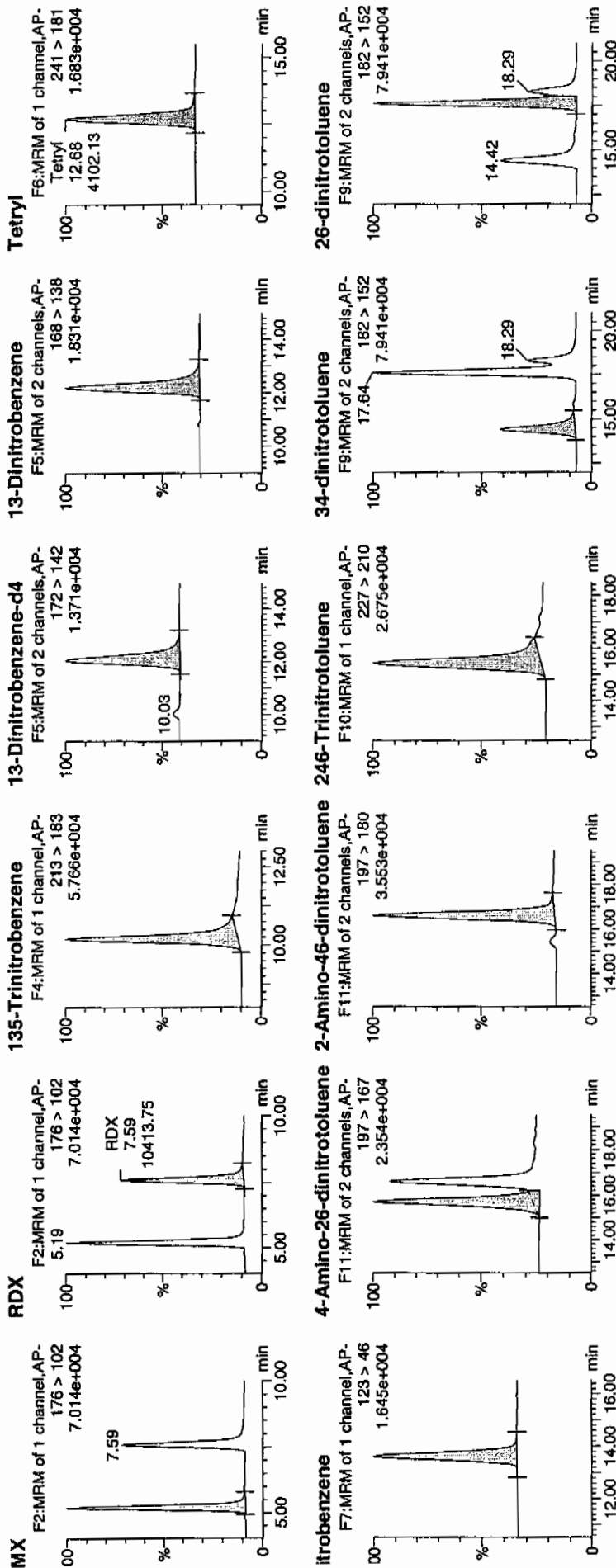
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ime: 01:16:10

je: WXX100208-07CCV

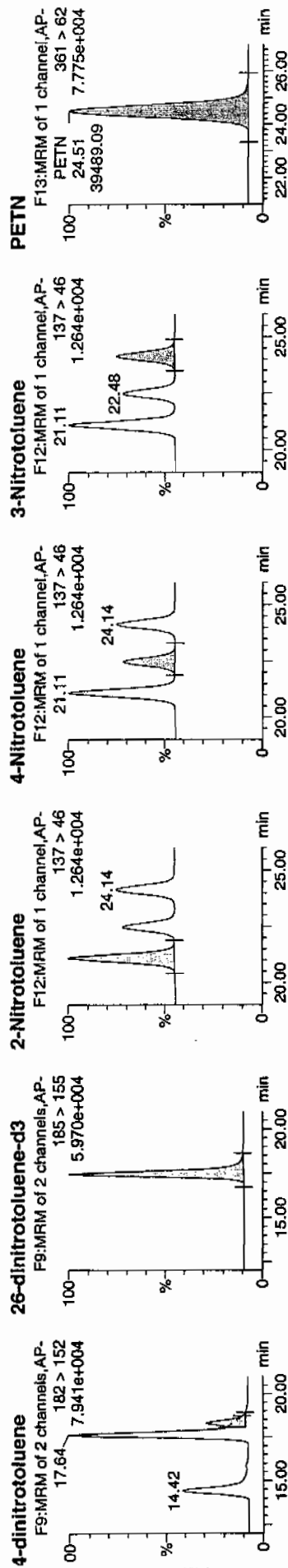
ial: 1:1,B

WXX
2/11/10



Handwritten note: 18.29

atset: C:\MASSLYNX\New_Exp\PRO\020810expA2.qld, Time: Thu Feb 11 10:06:10 2010



Name	Trace	RT	Area	S Area	Abs. Resp	Response	Flags	Mod. Date	Mod. Time	Conc. ng/ml	%Rec	%Dev	S/N
/XX100208-07CCV HMX	176 > 102	5.19	13185.422	3353.490	13185.422	1965.925	dd			566.0917	94.3	-5.7	1010.4
/XX100208-07CCV RDX	176 > 102	7.59	10413.745	3353.490	10413.745	1552.673	bb			639.4486	106.6	6.6	694.8
/XX100208-07CCV 135-Trinitrobenzene	213 > 183	10.20	14770.832	3353.490	14770.832	2202.307	bb			597.9566	99.7	-0.3	1118.6
/XX100208-07CCV 13-Dinitrobenzene-d4	172 > 142	12.07	3353.490		3353.490	3353.490	bb			521.6073	104.3	4.3	344.2
/XX100208-07CCV 13-Dinitrobenzene	168 > 138	12.21	4827.981		4827.981	719.844	bb			598.6751	99.8	-0.2	372.3
/XX100208-07CCV Tetral	241 > 181	12.68	4102.125	3353.490	4102.125	611.620	bb			673.5545	112.3	12.3	228.0
/XX100208-07CCV Nitrobenzene	123 > 46	13.62	3770.225	3353.490	3770.225	562.135	bb			695.9084	116.0	16.0	468.0
/XX100208-07CCV 4-Amino-26-dinitrotoluene	197 > 167	15.70	7465.469	21577.291	7465.469	172.994	MM	11-Feb-10	09:27:53	602.2514	100.4	0.4	1334.8
/XX100208-07CCV 2-Amino-46-dinitrotoluene	197 > 180	16.62	11652.317	21577.291	11652.317	270.013	bb			681.7999	113.6	13.6	680.2
/XX100208-07CCV 246-Trinitrotoluene	227 > 210	15.44	9362.438	21577.291	9362.438	216.951	bb			672.3766	112.1	12.1	499.2
/XX100208-07CCV 34-Dinitrotoluene	182 > 152	14.42	12626.653	21577.291	12626.653	292.591	bb			325.1043	108.4	8.4	639.4
/XX100208-07CCV 26-dinitrotoluene	182 > 152	17.64	27865.813	21577.291	27865.813	645.721	MM	11-Feb-10	09:58:30	601.1806	100.2	0.2	1762.8
/XX100208-07CCV 24-dinitrotoluene	182 > 152	18.29	6323.689	21577.291	6323.689	146.536	MM	11-Feb-10	10:02:17	600.4296	100.1	0.1	383.4
/XX100208-07CCV 26-dinitrotoluene-d3	185 > 155	17.46	21577.291		21577.291	21577.291	bb			584.4438	116.9	16.9	1252.0
/XX100208-07CCV 2-Nitrotoluene	137 > 46	21.11	2981.742	21577.291	2981.742	69.094	bb			445.6320	74.3	-25.7	863.7
/XX100208-07CCV 4-Nitrotoluene	137 > 46	22.48	1529.789	21577.291	1529.789	35.449	bb			466.4187	77.7	-22.3	428.9
/XX100208-07CCV 3-Nitrotoluene	137 > 46	24.14	1784.019	21577.291	1784.019	41.340	bb			443.7012	74.0	-26.0	480.8
/XX100208-07CCV PETN	361 > 62	24.51	39489.086	21577.291	39489.086	915.061	bb			663.9997	110.7	10.7	8570.5

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

*WXX
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): 10-1392

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
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	
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	

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

Name: C:\MASSLYN\NEW_EXP.PRO\DATA\EXP0208122a

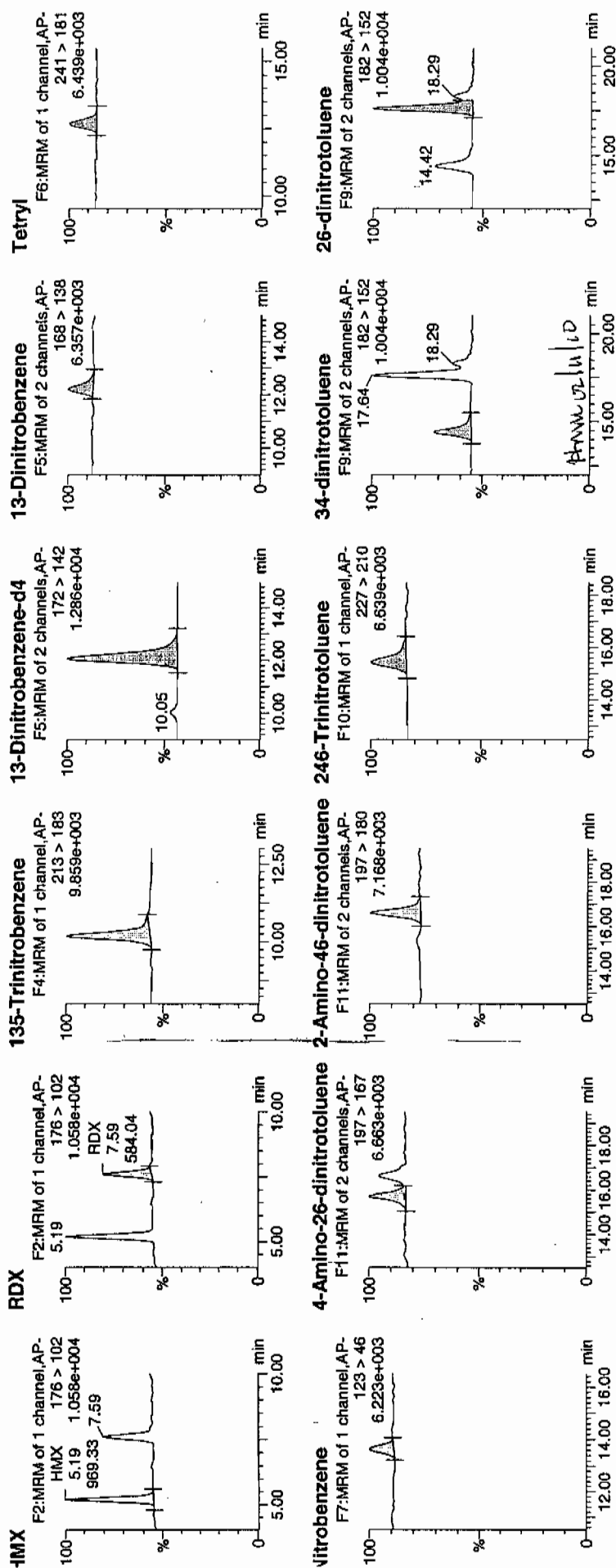
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Time: 02:15:12

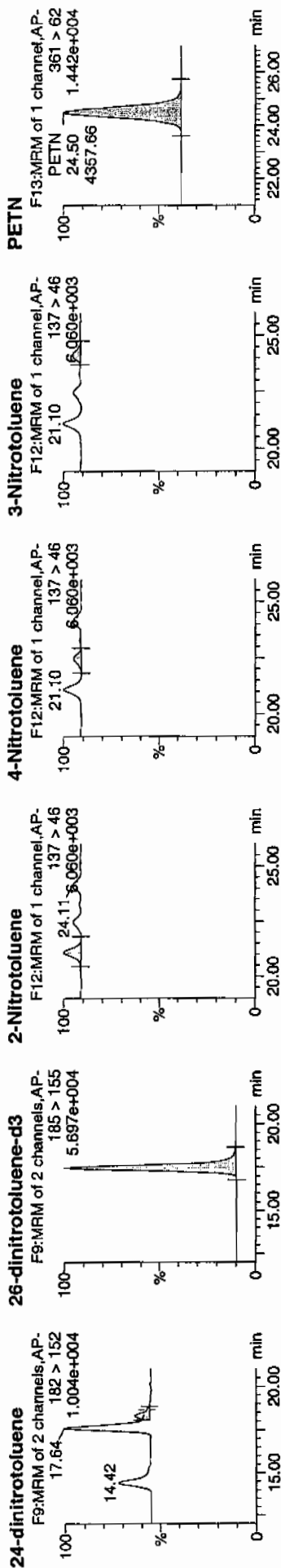
D: WXX100208-08CRI

vial: 1:1,C

2/11/10



Dataset: C:\MASSLYNX\New_Exp\PRO1020810expA2.qld, Time: Thu Feb 11 10:06:10 2010



ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod Date	Mod Time	Ing./ml	%Rec	%Dev	%SN
WXX100208-08CRI	HMX	176 > 102	5.19	969.325	3096.302	969.325	156.529	bb			45.0729	112.7	12.7	123.6
WXX100208-08CRI	RDX	176 > 102	7.59	584.042	3096.302	584.042	94.313	bb			38.8415	97.1	-2.9	66.7
WXX100208-08CRI	135-Trinitrobenzene	213 > 183	10.18	1237.129	3096.302	1237.129	199.775	bb			54.2417	135.6	35.6	118.4
WXX100208-08CRI	13-Dinitrobenzene-d4	172 > 142	12.07	3096.302	3096.302	3096.302	3096.302	bb			481.6038	96.3	-3.7	264.7
WXX100208-08CRI	13-Dinitrobenzene	168 > 138	12.24	317.146	3096.302	317.146	51.214	bb			42.5930	106.5	6.5	61.6
WXX100208-08CRI	Tetryl	241 > 181	12.68	325.616	3096.302	325.616	52.581	bb			46.5480	116.4	16.4	51.6
WXX100208-08CRI	Nitrobenzene	123 > 46	13.62	226.274	3096.302	226.274	36.539	bb			45.2349	113.1	13.1	18.5
WXX100208-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.70	473.189	20666.025	473.189	11.448	MM	11-Feb-10	09:27:41	39.8561	99.6	-0.4	30.6
WXX100208-08CRI	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
WXX100208-08CRI	246-Trinitrotoluene	227 > 210	15.44	527.022	20666.025	527.022	12.751	bb			39.5178	98.8	-1.2	64.8
WXX100208-08CRI	34-dinitrotoluene	182 > 152	14.42	871.385	20666.025	871.385	21.083	bb			23.4253	117.1	17.1	39.2
WXX100208-08CRI	26-dinitrotoluene	182 > 152	17.64	1742.586	20666.025	1742.586	42.161	MM	11-Feb-10	09:58:36	39.2525	98.1	-1.9	102.8
WXX100208-08CRI	24-dinitrotoluene	182 > 152	18.29	344.484	20666.025	344.484	8.335	MM	11-Feb-10	10:02:04	34.1508	85.4	-14.6	18.6
WXX100208-08CRI	26-dinitrotoluene-d3	185 > 155	17.46	20666.025	20666.025	20666.025	20666.025	bb			559.7612	112.0	12.0	1670.7
WXX100208-08CRI	2-Nitrotoluene	137 > 46	21.10	235.119	20666.025	235.119	5.689	bb			36.6888	91.7	-8.3	23.5
WXX100208-08CRI	4-Nitrotoluene	137 > 46	22.46	116.410	20666.025	116.410	2.816	bb			37.0574	92.6	-7.4	10.4
WXX100208-08CRI	3-Nitrotoluene	137 > 46	24.11	114.724	20666.025	114.724	2.776	bb			29.7910	74.5	-25.5	10.6
WXX100208-08CRI	PETN	361 > 62	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: 100% 4/1/10

Total 1677.9

Average 104.9

Handwritten: 100% 4/1/10

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): 10-1392

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
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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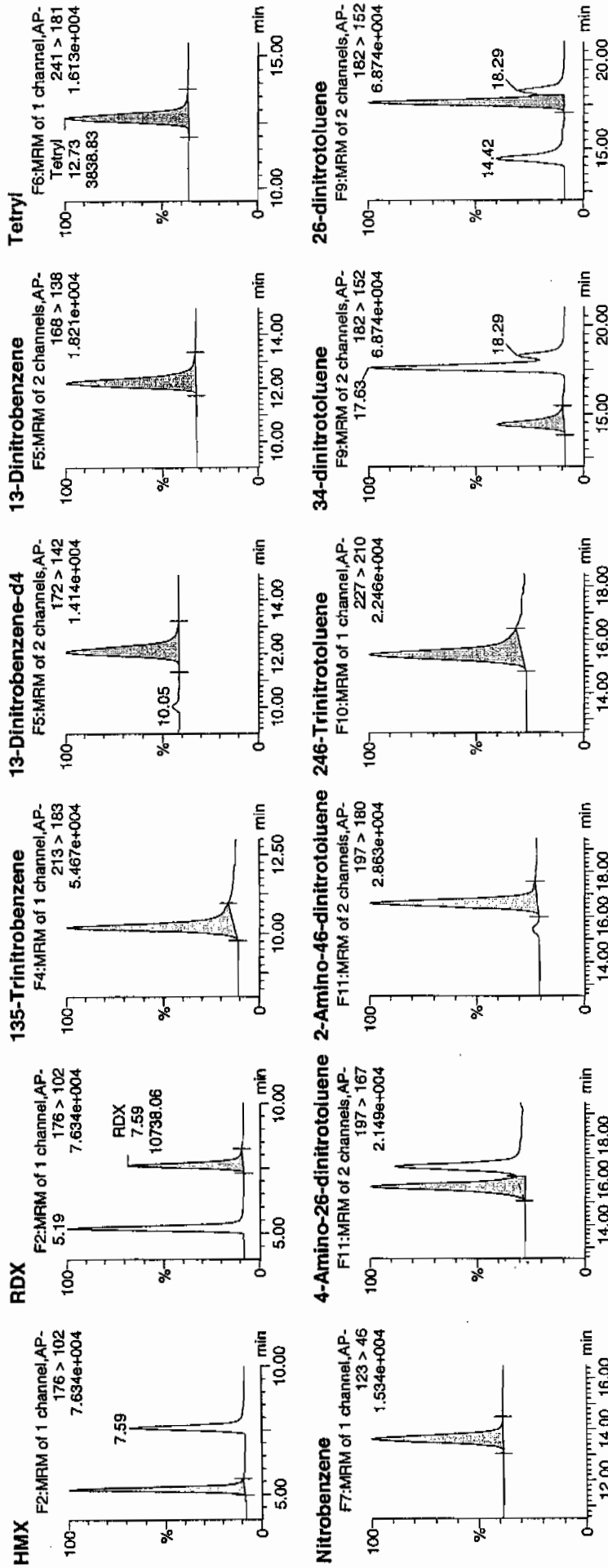
Date: 11-Feb-2010

Time: 07:39:41

ID: WXX100208-07CCV

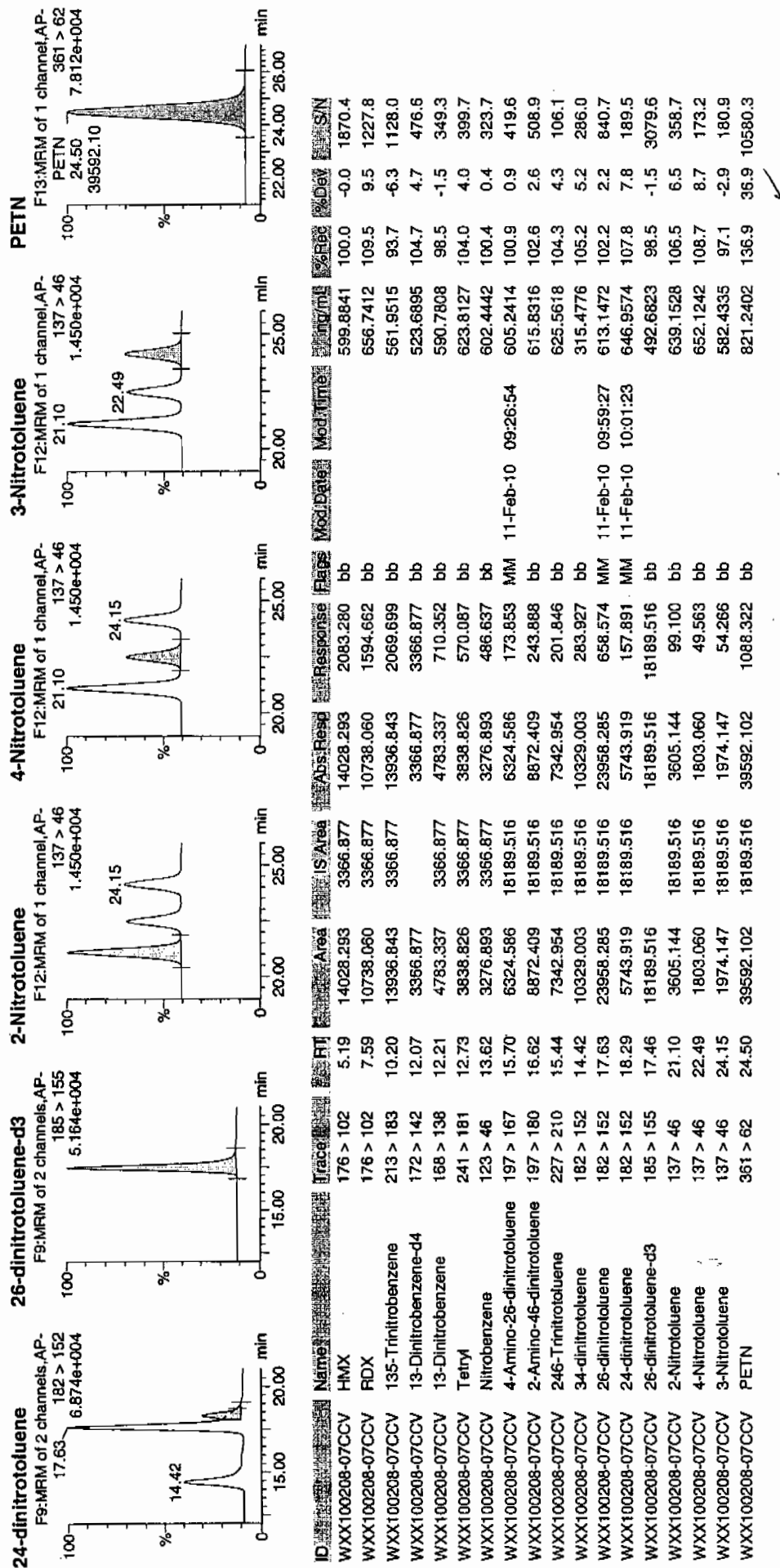
Vial: 1:1,B

Handwritten: 10/11/10



Handwritten: 10/11/10

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: 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

Total 1678.3

Average

104.9

*WTT
2/11/10*

Handed 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): 10-1392

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
m-Dinitrobenzene	40	42.077	105	
m-Nitrotoluene	40	34.831	87	
o-Nitrotoluene	40	41.028	103	
p-Nitrotoluene	40	39.414	99	
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	

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

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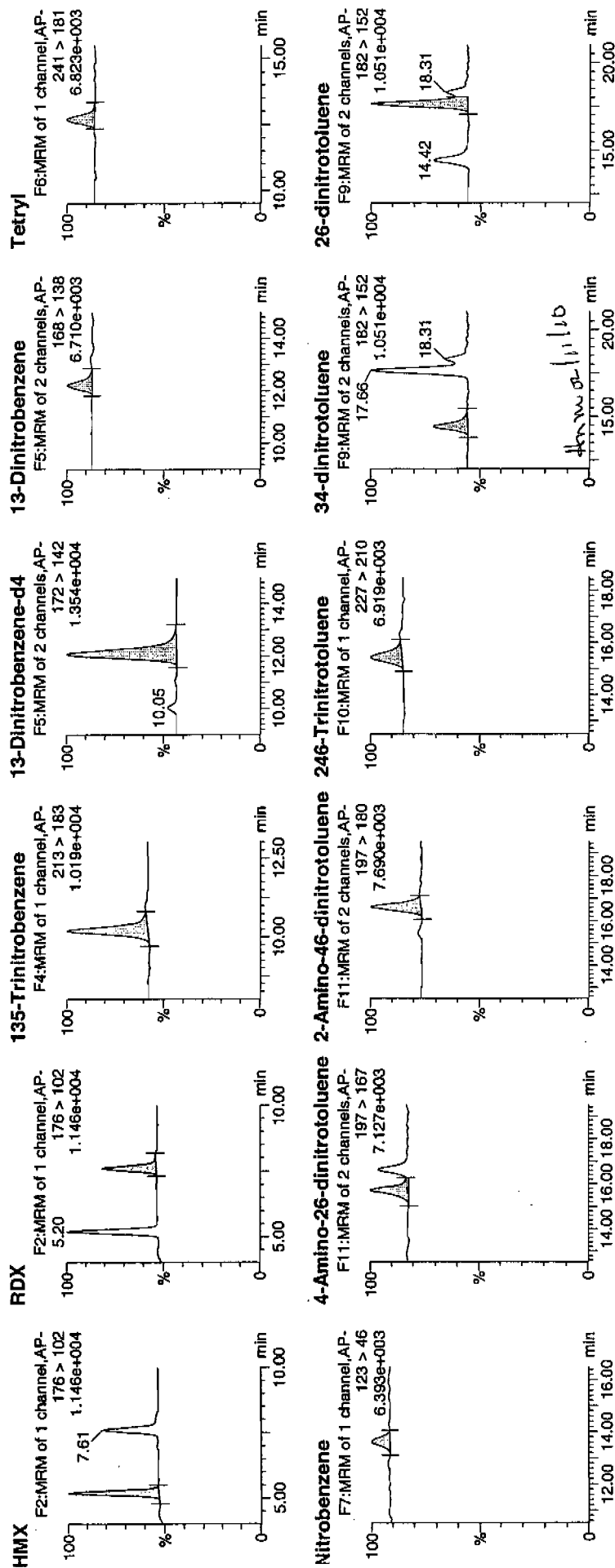
Date: 11-Feb-2010

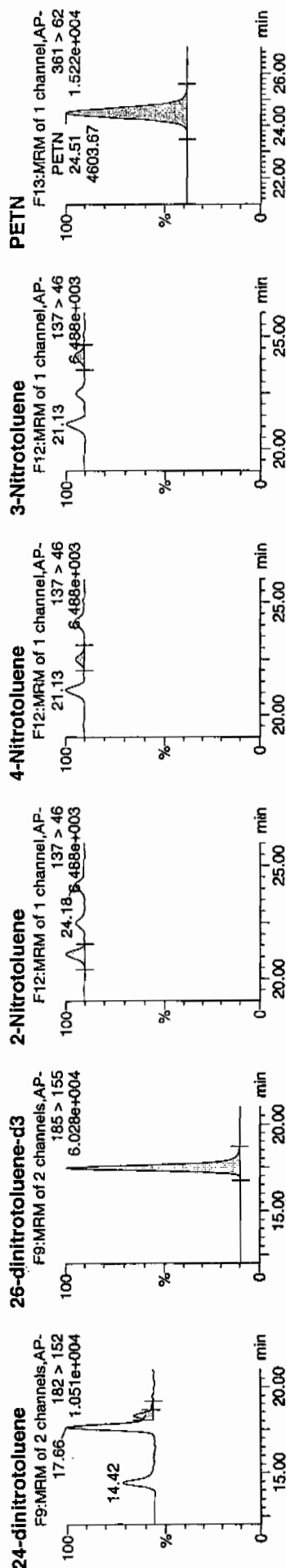
Time: 08:38:44

ID: WXX100208-08CRI

Vial: 1:1,C

2/11/10





Name	Trace	RT	Area	S Area	Abs Resp	Response	Flags	Mod Date	Mod Time	% Neg	% Rec	% Dev	S/N
HMx	176 > 102	5.20	1065.193	3190.386	1065.193	166.938	bb			48.0701	120.2	20.2	123.2
RDX	176 > 102	7.61	728.502	3190.386	728.502	114.171	bb			47.0201	117.6	17.6	72.9
135-Trinitrobenzene	213 > 183	10.20	1251.430	3190.386	1251.430	196.125	bb			53.2507	133.1	33.1	453.1
13-Dinitrobenzene-d4	172 > 142	12.07	3190.386		3190.386	3190.386	bb			496.2378	99.2	-0.8	601.5
13-Dinitrobenzene	168 > 138	12.21	322.827	3190.386	322.827	50.594	bb			42.0774	105.2	5.2	32.7
Tetryl	241 > 181	12.73	356.470	3190.386	356.470	55.866	bb			49.9957	125.0	25.0	24.8
Nitrobenzene	123 > 46	13.62	216.302	3190.386	216.302	33.899	bb			41.9662	104.9	4.9	17.6
4-Amino-26-dinitrotoluene	197 > 167	15.73	526.807	21850.213	526.807	12.055	MM	11-Feb-10	09:26:46	41.9675	104.9	4.9	25.3
2-Amino-46-dinitrotoluene	197 > 180	16.62	666.954	21850.213	666.954	15.262	bb			38.5373	96.3	-3.7	113.0
246-Trinitrotoluene	227 > 210	15.44	452.304	21850.213	452.304	10.350	bb			32.0771	80.2	-19.8	83.9
34-dinitrotoluene	182 > 152	14.42	798.569	21850.213	798.569	18.274	bb			20.3043	101.5	1.5	44.1
26-dinitrotoluene	182 > 152	17.66	1832.985	21850.213	1832.985	41.944	MM	11-Feb-10	09:59:36	39.0511	97.6	-2.4	123.9
24-dinitrotoluene	182 > 152	18.31	439.472	21850.213	439.472	10.056	MM	11-Feb-10	10:01:11	41.2063	103.0	3.0	27.8
26-dinitrotoluene-d3	185 > 155	17.46	21850.213		21850.213	21850.213	bb			591.8361	118.4	18.4	1782.6
2-Nitrotoluene	137 > 46	21.13	277.990	21850.213	277.990	6.361	bb			41.0277	102.6	2.6	61.2
4-Nitrotoluene	137 > 46	22.50	130.906	21850.213	130.906	2.996	bb			39.4135	98.5	-1.5	27.6
3-Nitrotoluene	137 > 46	24.18	141.817	21850.213	141.817	3.245	bb			34.8306	87.1	-12.9	29.5
PETN	361 > 62	24.51	4603.666	21850.213	4603.666	105.346	bb			55.1761	137.9	37.9	894.2

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

Total 1715.6

Average 107.2

mtf
2/11/10

Hmm ok 2/11/10

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): 10-1392

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
2,6-Dinitrotoluene	600	629.897	105	
2,6-Dinitrotoluene-d3	500	498.486	100	
2-Amino-4,6-dinitrotoluene	600	648.791	108	
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	

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

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\EXP0208145a

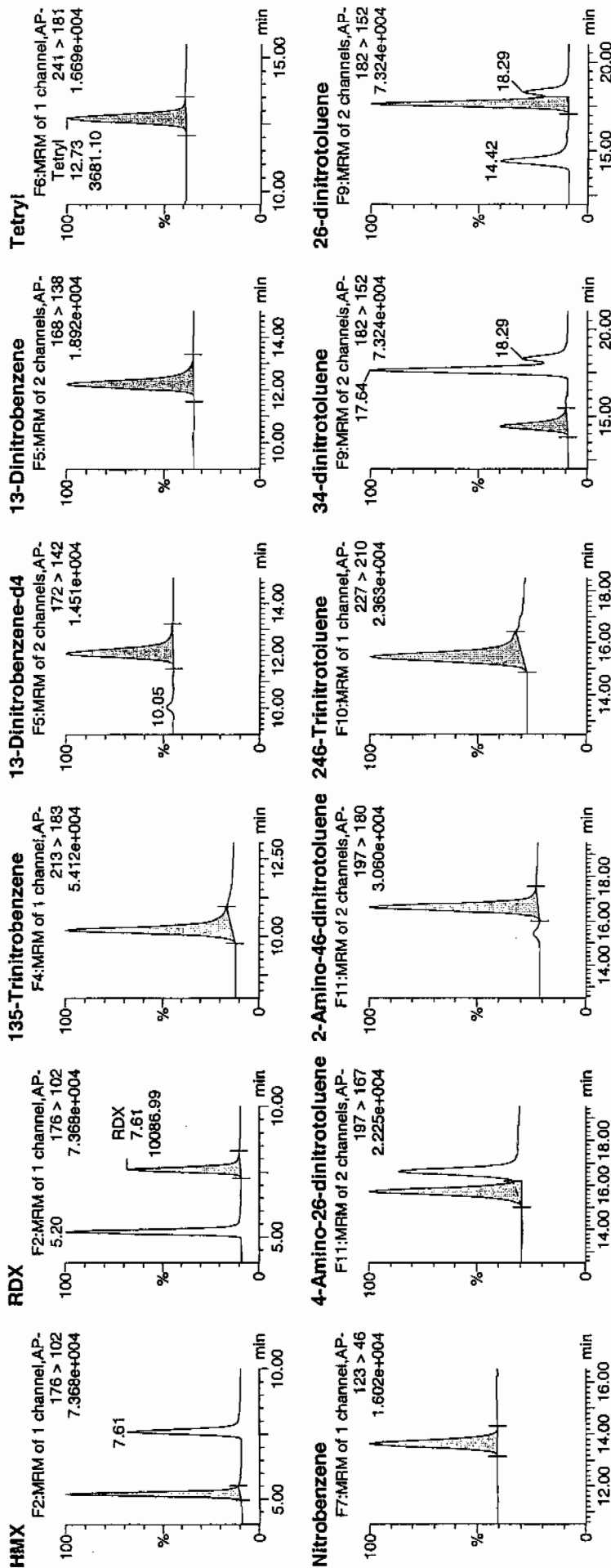
Date: 11-Feb-2010

Time: 13:34:04

ID: WXX100211-07CCV

Vial: 1:1,B

2/20/10



Handwritten signature

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[illegible]

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

*not
4/12/10*

Total 1659.3

Average 103.7

Handwritten: 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): 10-1392

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
1,3,5-Trinitrobenzene	40	49.729	124	
1,3-Dinitrobenzene-d4	500	516.222	103	
2,4,6-Trinitrotoluene	40	38.92	97	
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	

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\020810expA3.qld, Time: Fri Feb 12 08:08:48 2010

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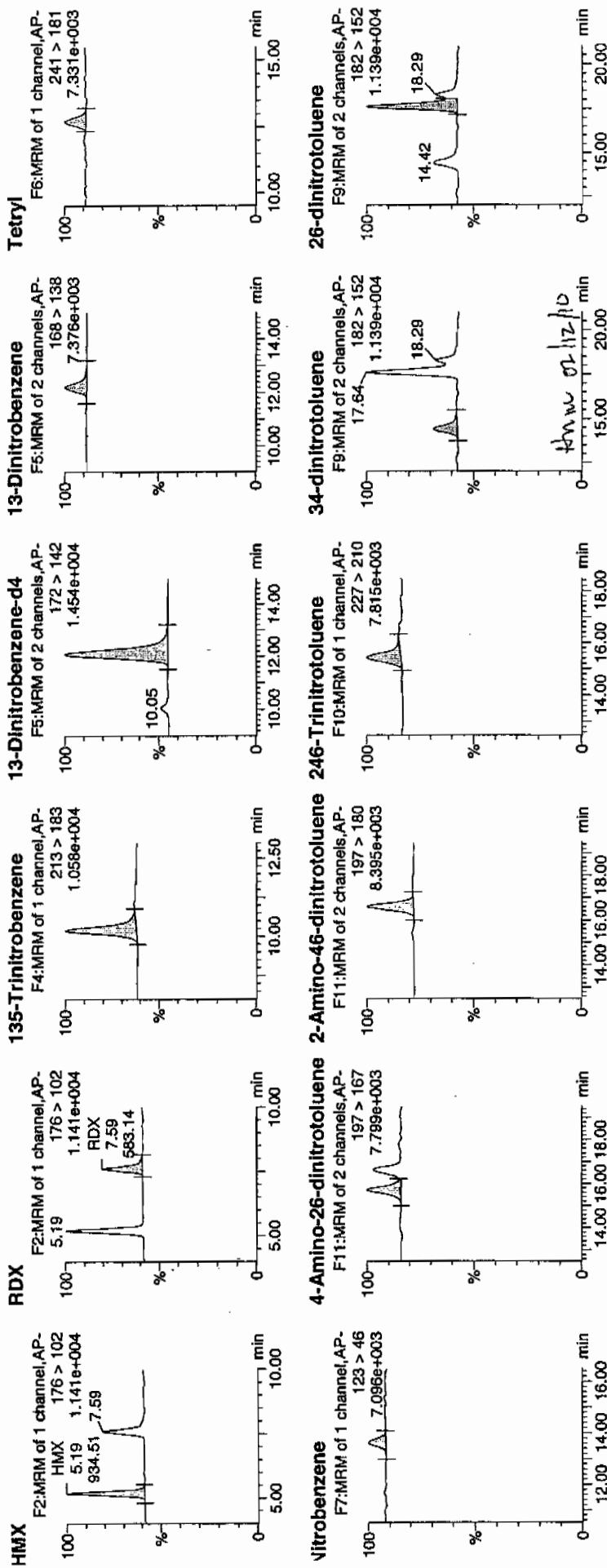
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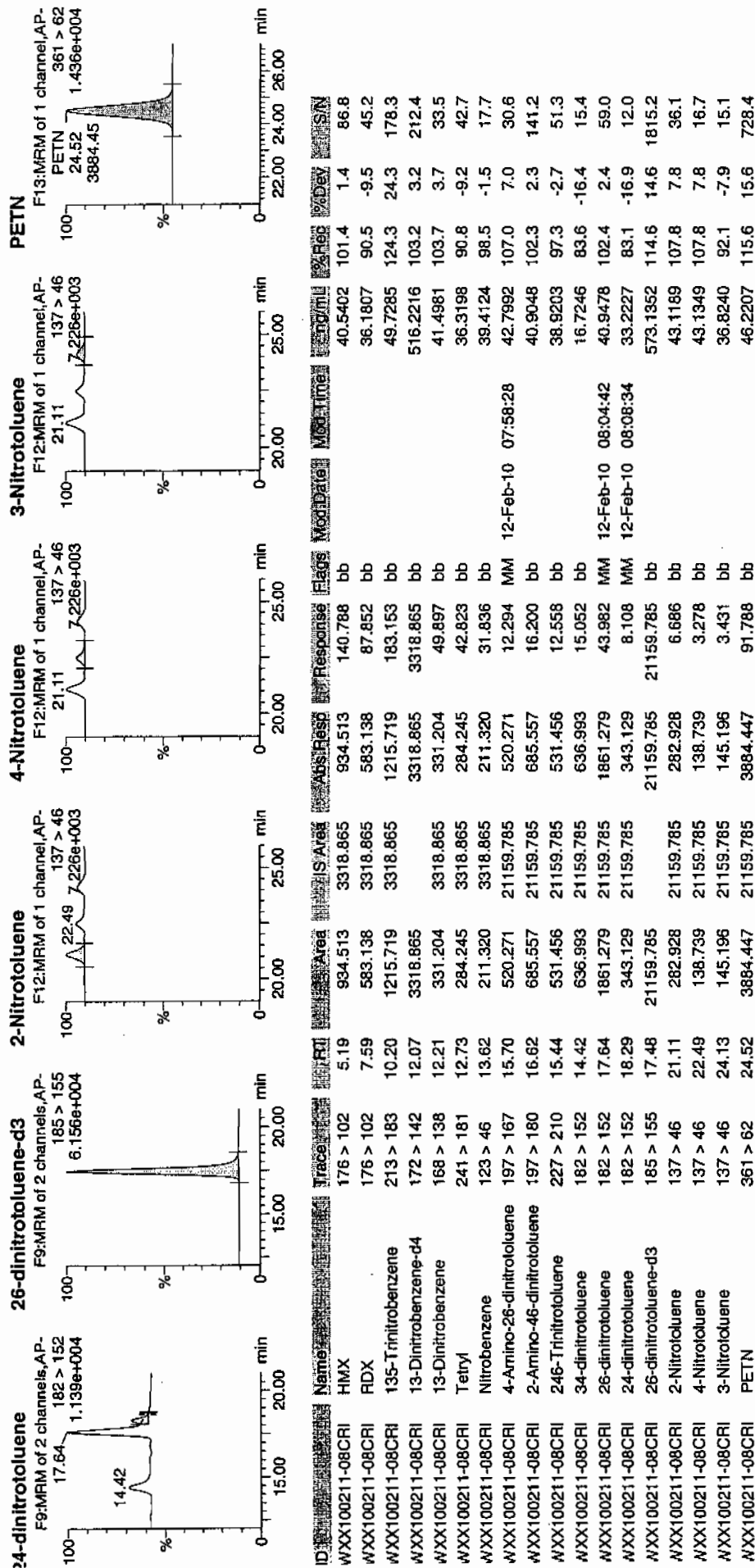
ID: WXX100211-08CRI

Vial: 1:1,C

WJ
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 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

*not
2/11/10*

Total 1608.2

Average 100.5

done 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): 10-1392

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
m-Dinitrobenzene	600	643.098	107	
m-Nitrotoluene	600	479.616	80	*
o-Nitrotoluene	600	649.003	108	
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	

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

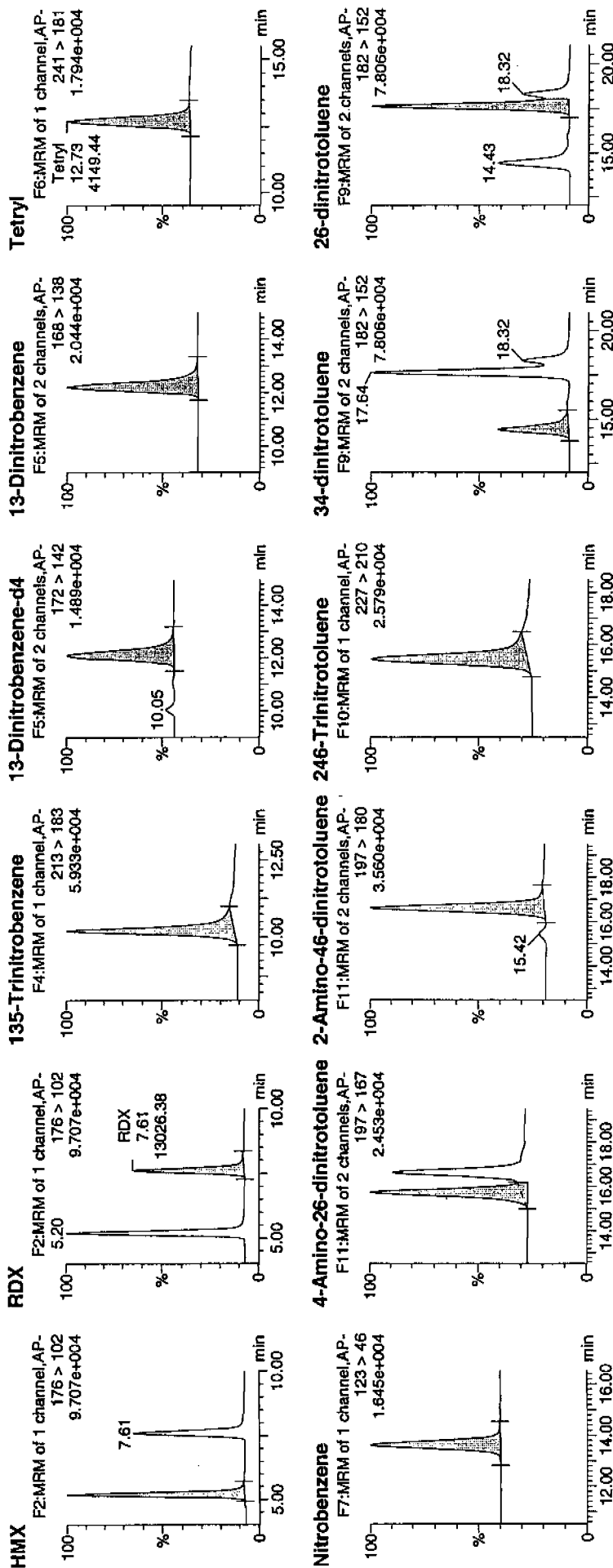
Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA3.qld, Time: Fri Feb 12 08:08:48 2010

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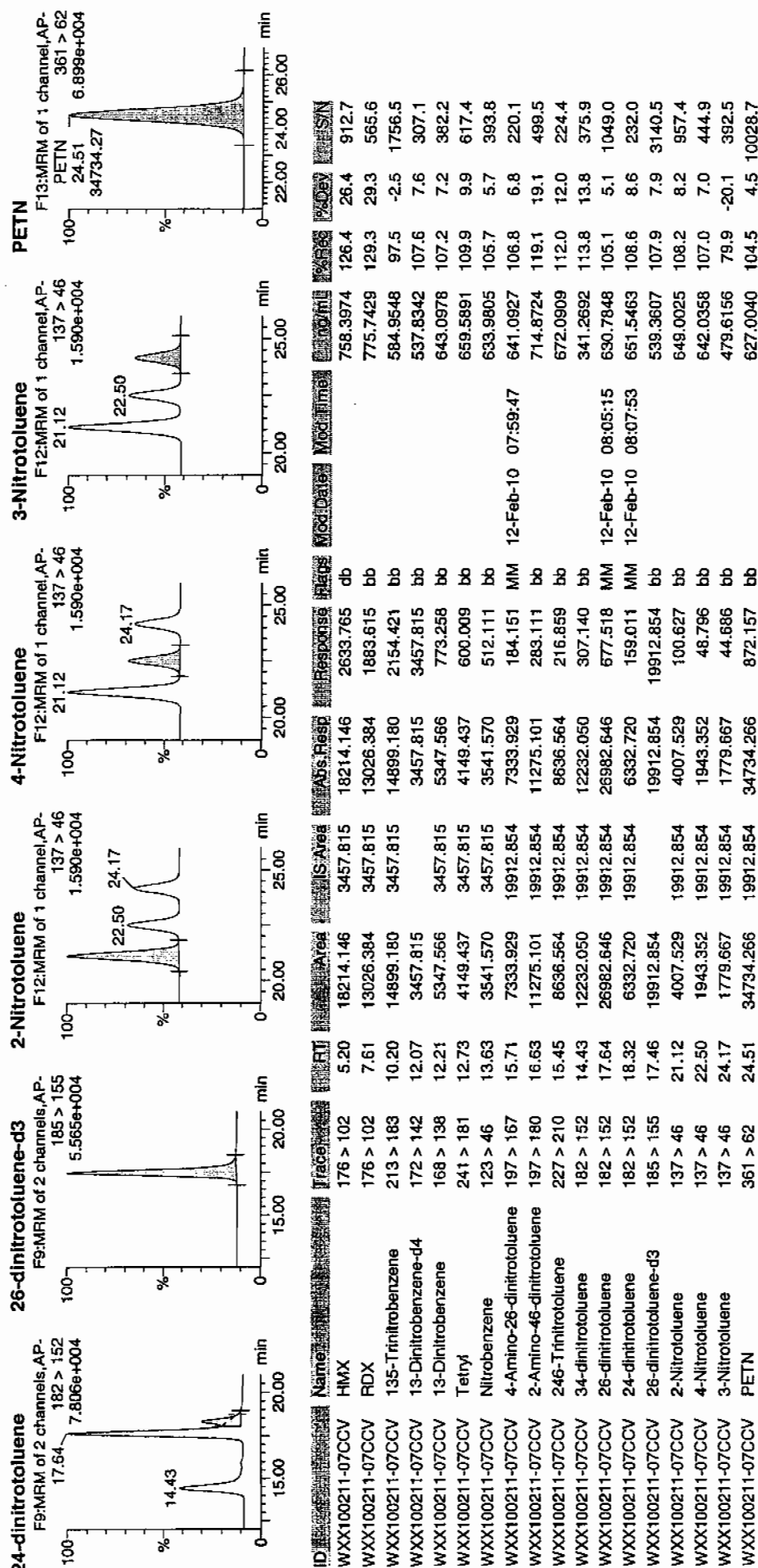
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Time: 18:29:30
ID: WXX100211-07CCV
Vial: 1:1,B

2/12/10



2/12/10

Dataset: C:\MASSLYNX\New_Exp\PRO\020810expA3.qld, Time: Fri Feb 12 08:08:48 2010



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): 10-1392

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
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	
m-Dinitrobenzene	40	35.416	89	
m-Nitrotoluene	40	47.307	118	
o-Nitrotoluene	40	45.523	114	
p-Nitrotoluene	40	40.92	102	
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	

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\020810expA3.qld, Time: Fri Feb 12 08:08:48 2010

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Date: 11-Feb-2010

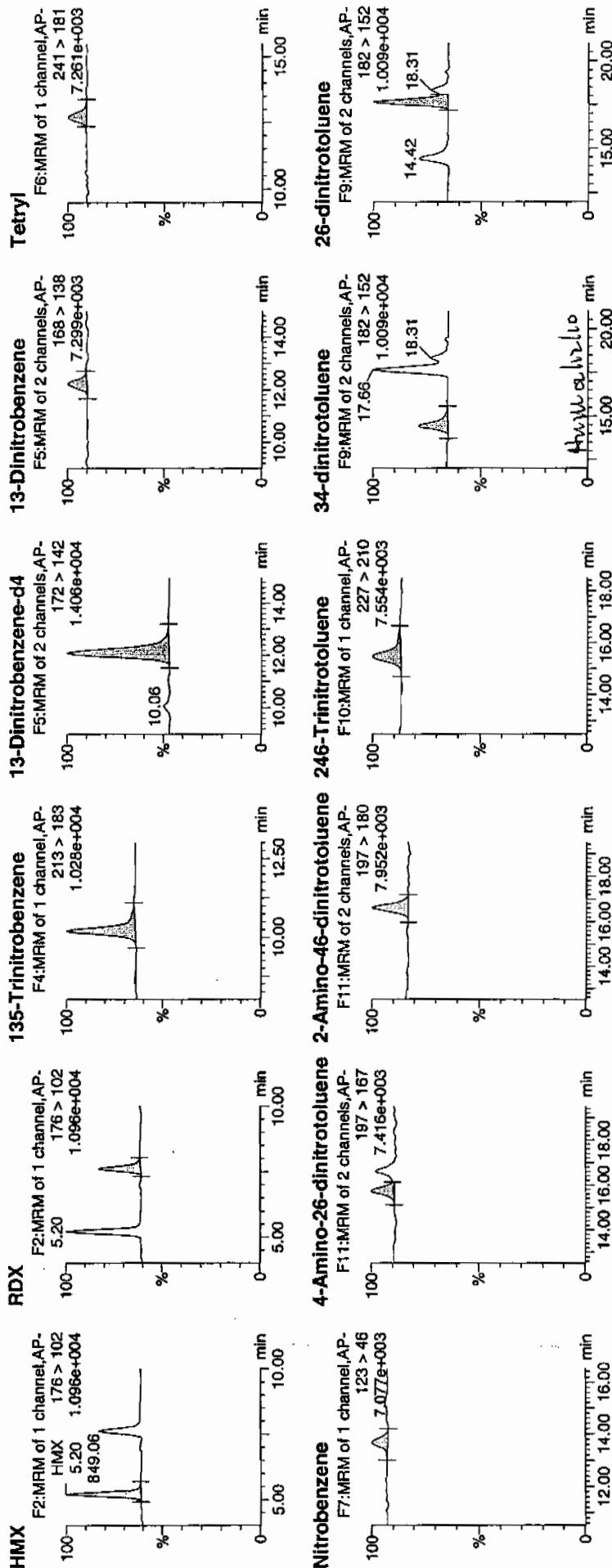
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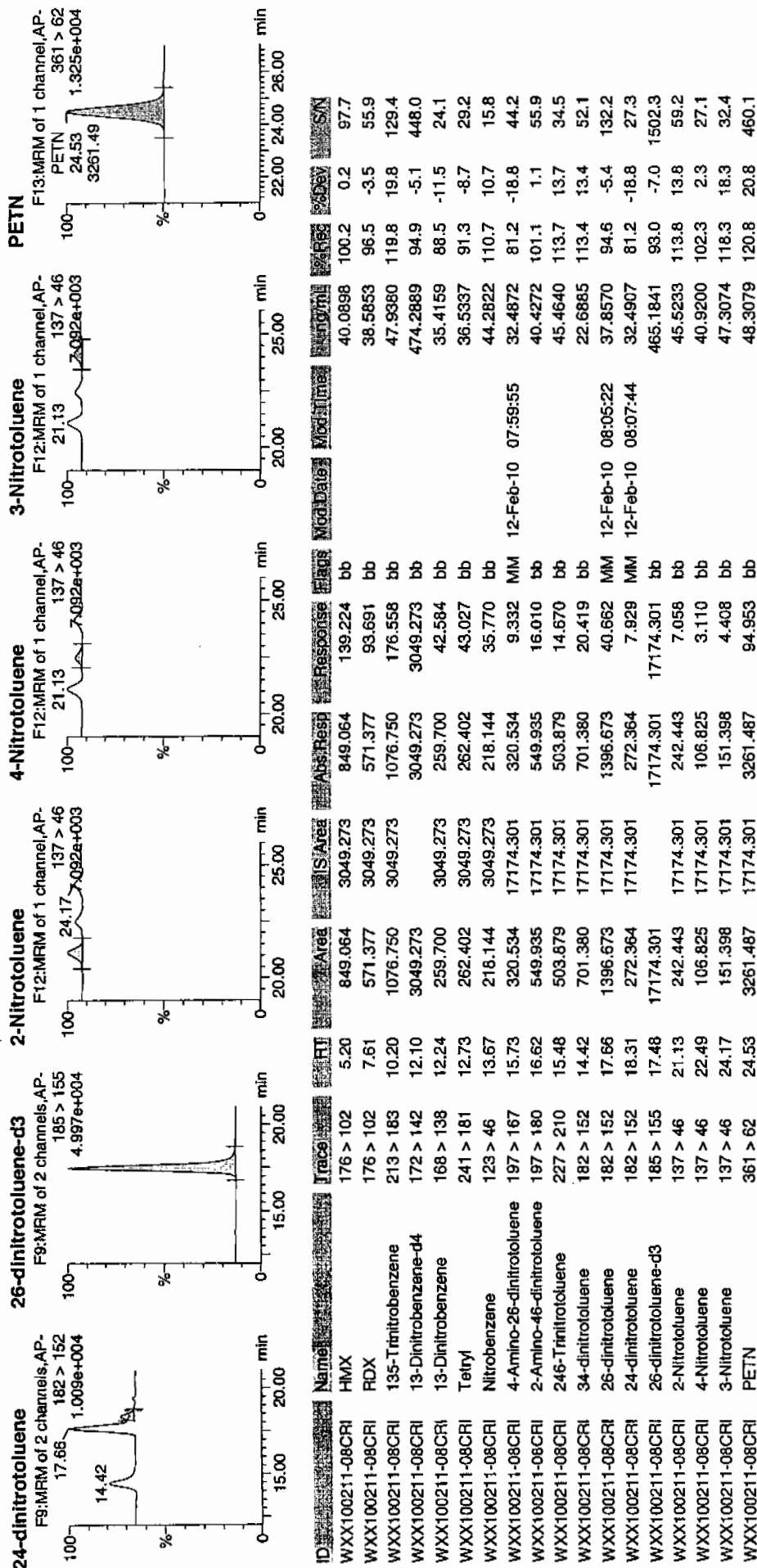
Vial: 1:1,C

WAT
2/12/10

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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

Handwritten: 2/12/10

Total 1647.4

Average 103.0

Handwritten: 103.0

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): 10-1392

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

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\EXP0208168a

Date: 12-Feb-2010

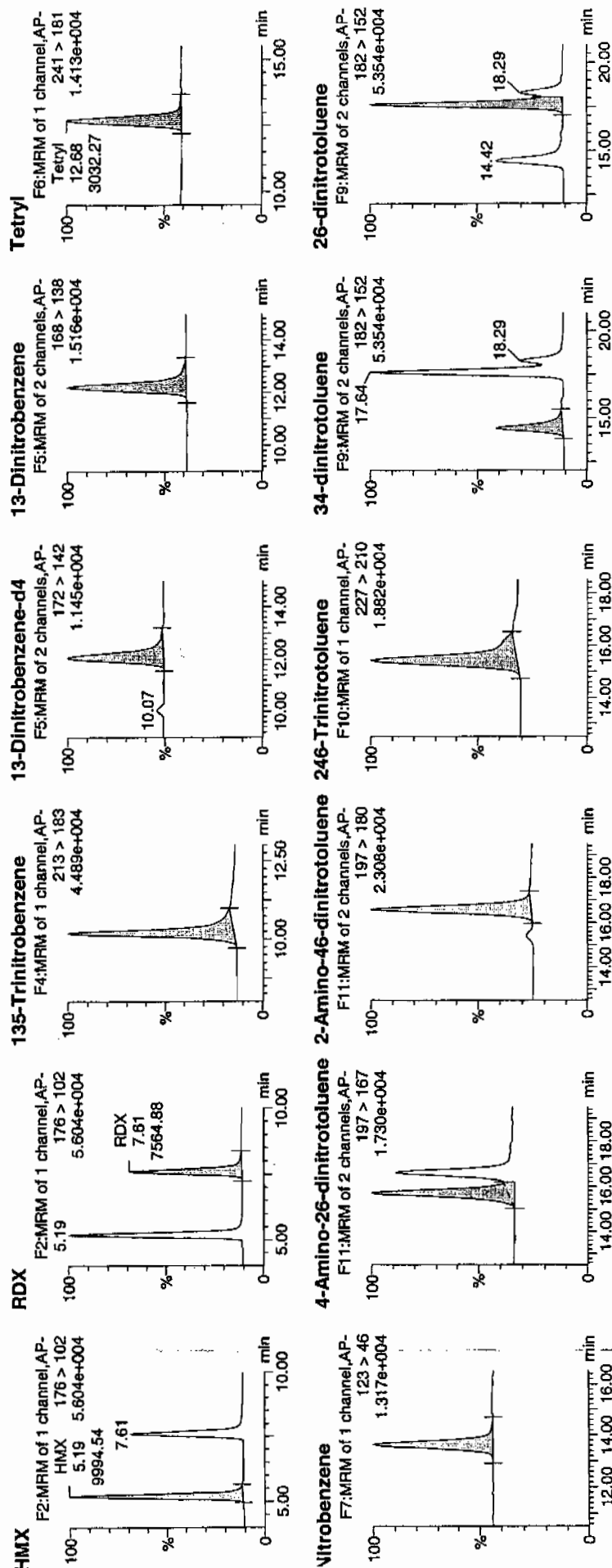
Time: 00:52:53

ID: WXX100211-07CCV

Vial: 1:1,B

WXX
2/12/10

Page 586 of 1574



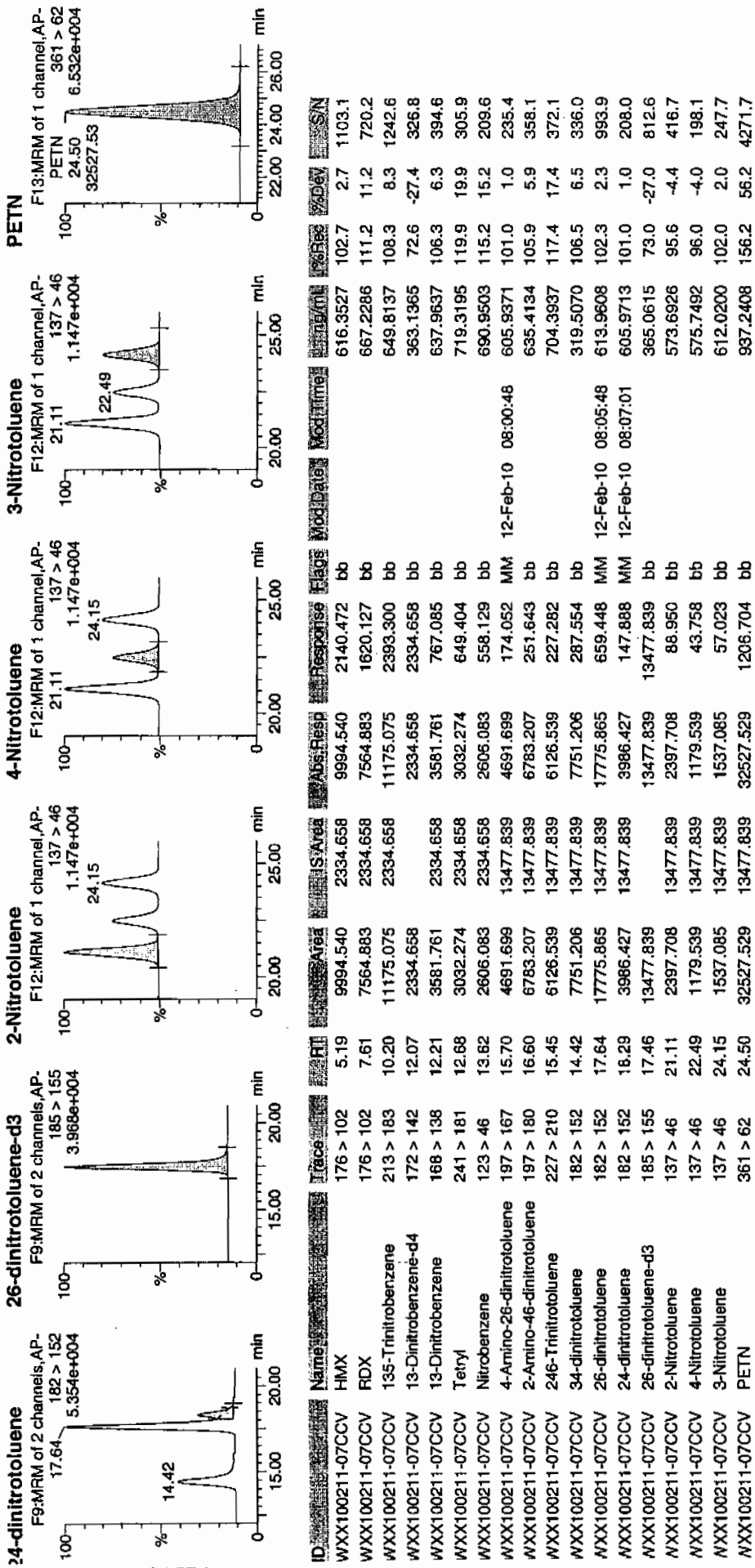
WXX
2/12/10

Quantify Sample Report

3EL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Fri Feb 12 08:13:51 2010, Page 66 of 93

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA3.qld, Time: Fri Feb 12 08:08:48 2010



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

Total 1747.5

Average 109.2

Handwritten: HNT 2/12/10

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): 10-1392

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
p-Nitrotoluene	40	43.248	108	
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	

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 69 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

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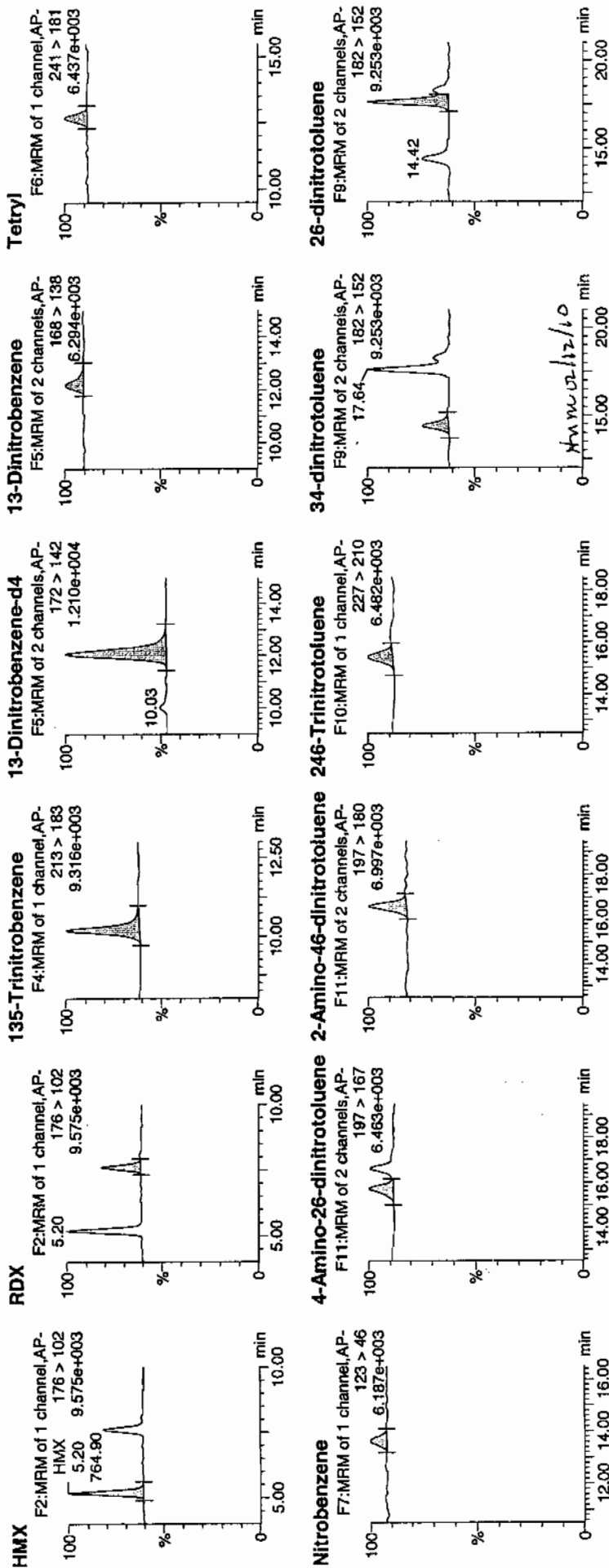
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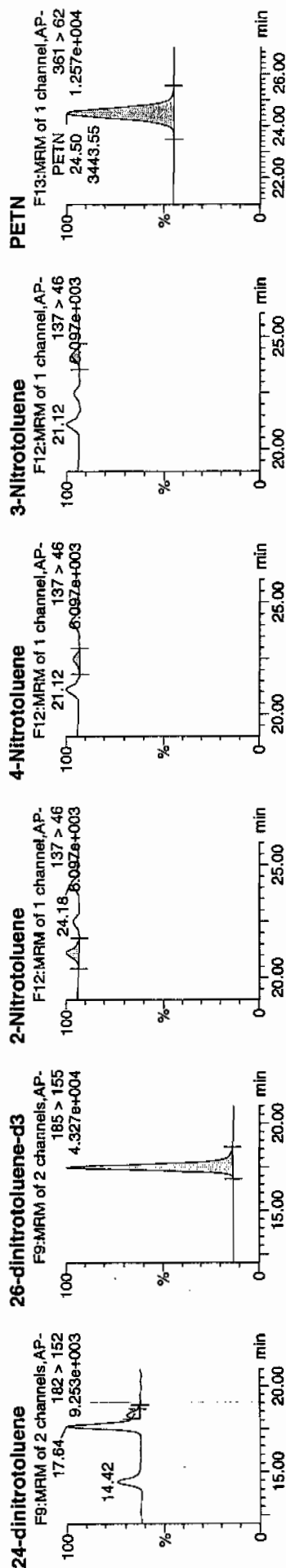
ID: WXX100211-08CRI

Vial: 1:1,C

2/12/10



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ID	Name	Trace	HT	Area	SArea	Abs Resp	Response	Flags	Mod Date	Mod Time	mg/ml	%Rec	%Dev	SN
WXX100211-08CRI	HMX	176 > 102	5.20	764.902	2666.746	764.902	143.415	bb			41.2966	103.2	3.2	84.1
WXX100211-08CRI	RDX	176 > 102	7.61	438.238	2666.746	438.238	82.167	bb			33.8395	84.6	-15.4	44.7
WXX100211-08CRI	135-Trinitrobenzene	213 > 183	10.20	1072.145	2666.746	1072.145	201.021	bb			54.5800	135.5	36.5	119.3
WXX100211-08CRI	13-Dinitrobenzene-d4	172 > 142	12.07	2666.746		2666.746	2666.746	bb			414.7900	83.0	-17.0	202.1
WXX100211-08CRI	13-Dinitrobenzene	168 > 138	12.21	242.490	2666.746	242.490	45.466	bb			37.8124	94.5	-5.5	27.0
WXX100211-08CRI	Tetryl	241 > 181	12.68	254.659	2666.746	254.659	47.747	bb			41.4785	103.7	3.7	19.1
WXX100211-08CRI	Nitrobenzene	123 > 46	13.62	184.121	2666.746	184.121	34.522	bb			42.7369	106.8	6.8	21.3
WXX100211-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.71	320.565	15499.035	320.565	10.341	MM	12-Feb-10	08:00:59	36.0022	90.0	-10.0	38.6
WXX100211-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.60	505.872	15499.035	505.872	16.319	bb			41.2076	103.0	3.0	42.8
WXX100211-08CRI	246-Trinitrotoluene	227 > 210	15.41	319.476	15499.035	319.476	10.306	bb			31.9414	79.9	-20.1	38.8
WXX100211-08CRI	34-dinitrotoluene	182 > 152	14.42	529.277	15499.035	529.277	17.075	bb			18.9719	94.9	-5.1	42.0
WXX100211-08CRI	26-dinitrotoluene	182 > 152	17.64	1328.482	15499.035	1328.482	42.857	MM	12-Feb-10	08:05:54	39.9008	99.8	-0.2	130.8
WXX100211-08CRI	24-dinitrotoluene	182 > 152	18.29	276.327	15499.035	276.327	8.914	MM	12-Feb-10	08:06:52	36.5264	91.3	-8.7	23.6
WXX100211-08CRI	26-dinitrotoluene-d3	185 > 155	17.46	15499.035		15499.035	15499.035	bb			419.8078	84.0	-16.0	2320.2
WXX100211-08CRI	2-Nitrotoluene	137 > 46	21.12	204.514	15499.035	204.514	6.598	bb			42.5522	106.4	6.4	28.1
WXX100211-08CRI	4-Nitrotoluene	137 > 46	22.50	101.890	15499.035	101.890	3.287	bb			43.2482	108.1	8.1	13.0
WXX100211-08CRI	3-Nitrotoluene	137 > 46	24.18	106.126	15499.035	106.126	3.424	bb			36.7456	91.9	-8.1	15.4
WXX100211-08CRI	PETN	361 > 62	24.50	3443.553	15499.035	3443.553	111.089	bb			58.9793	147.4	47.4	2261.0

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

*with
2/12/10*

Total 1642.0

from 02/12/10

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): 10-1392

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
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	
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	

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\020810expA3.qld, Time: Fri Feb 12 08:08:48 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208179a

Date: 12-Feb-2010

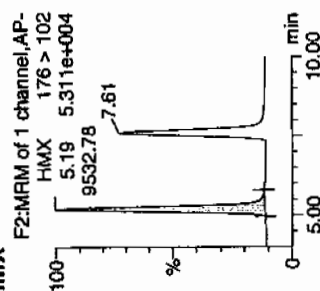
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ID: WXX100211-07CCV

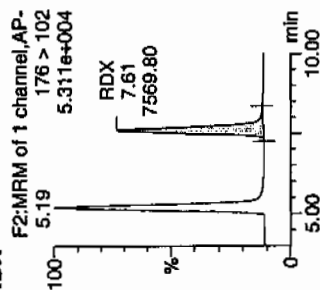
Vial: 1:1,B

2/12/10

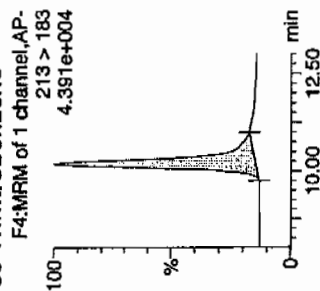
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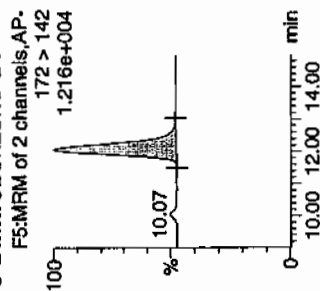
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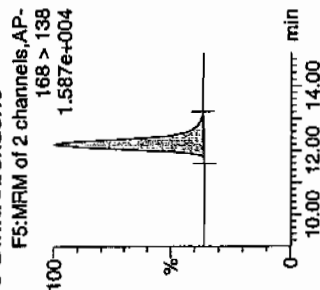
135-Trinitrobenzene



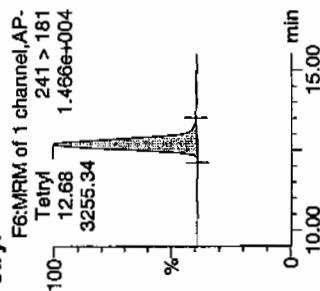
13-Dinitrobenzene-d4



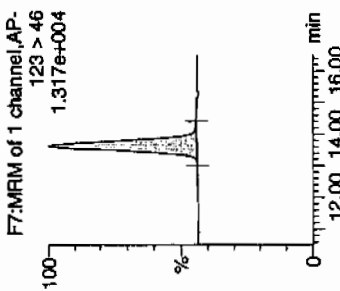
13-Dinitrobenzene



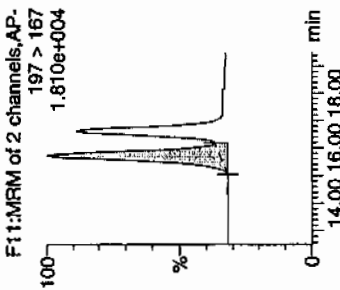
Tetryl



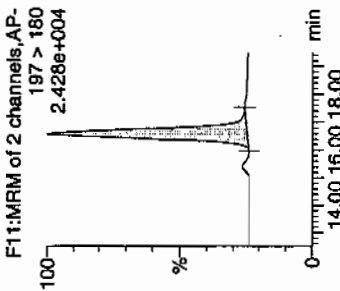
Nitrobenzene



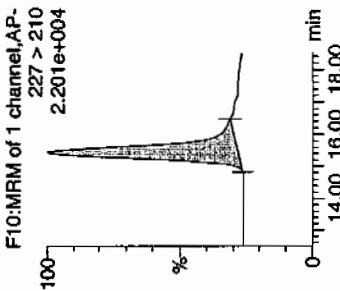
4-Amino-26-dinitrotoluene



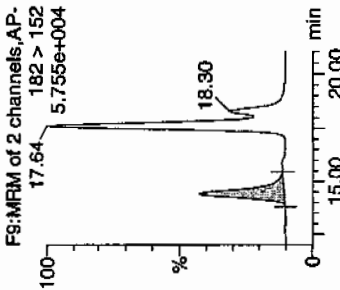
2-Amino-46-dinitrotoluene



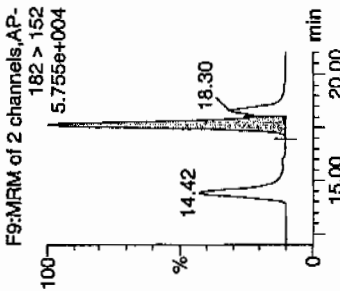
246-Trinitrotoluene



34-dinitrotoluene

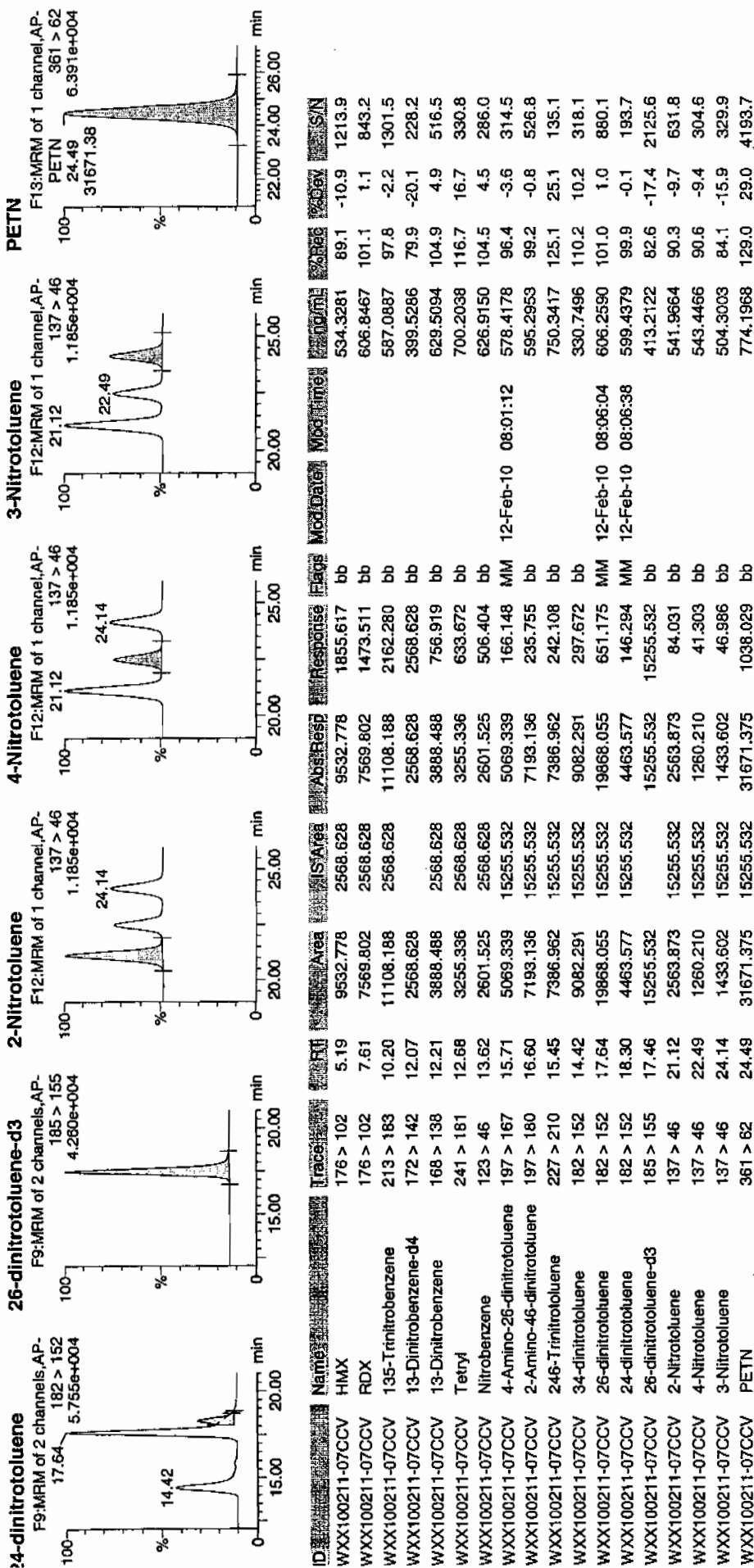


26-dinitrotoluene



Amg 12/10

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA3.qld, Time: Fri Feb 12 08:08:48 2010



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

*mtt
2/12/10*

Total 1639.9

Average 102.5

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): 10-1392

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
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	
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	

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

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA3.qld, Time: Fri Feb 12 08:08:48 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208101a

Date: 12-Feb-2010

Time: 07:16:32

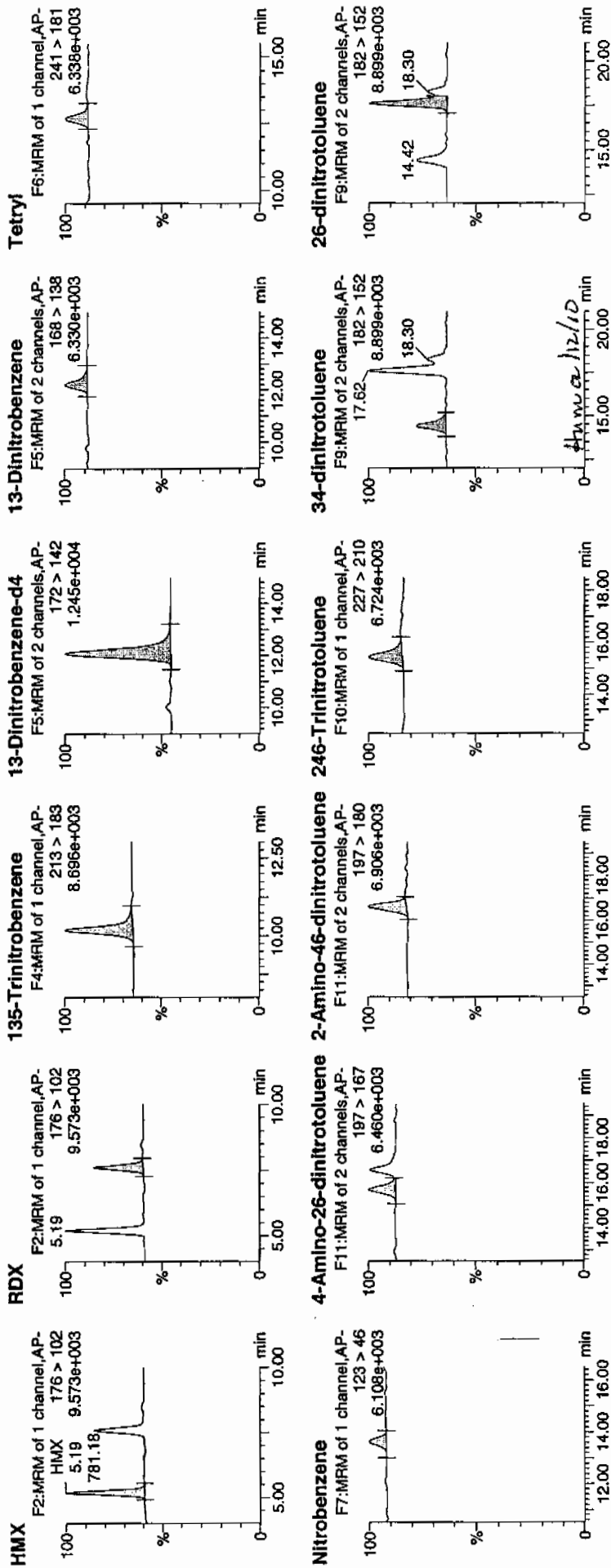
ID: WXX100211-08CRI

Vial: 1:1,C

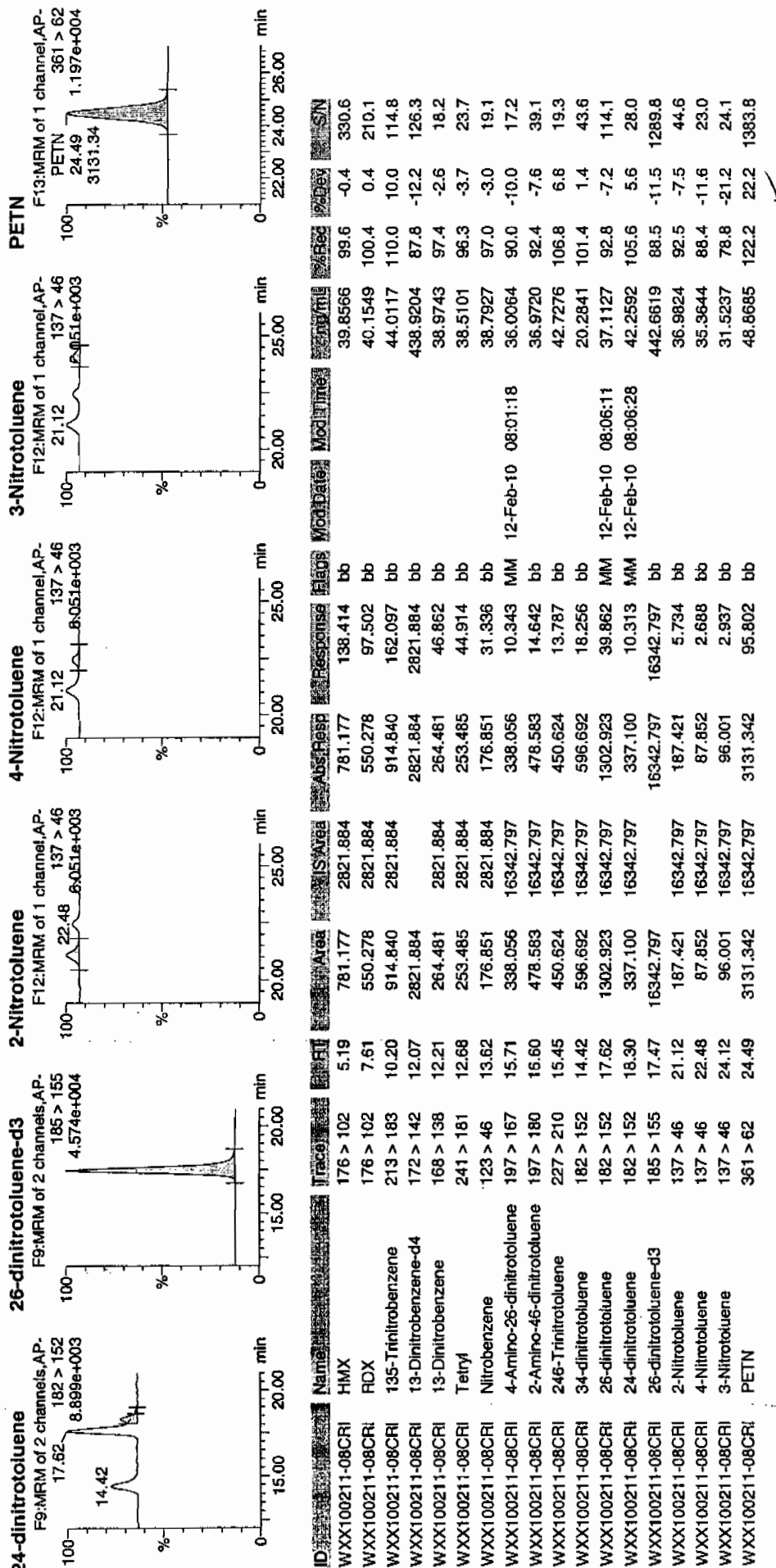
2/12/10

Page 598 of 1574

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Dataset: C:\MASSLYNX\New_Exp\PROV020810expA3.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

Handwritten:
 100%
 2/12/10

Total 1571.6

Average 98.2

Handwritten: 100% on 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): 10-1392

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
o-Nitrotoluene	600	603.62	101	
p-Nitrotoluene	600	632.671	105	
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	

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

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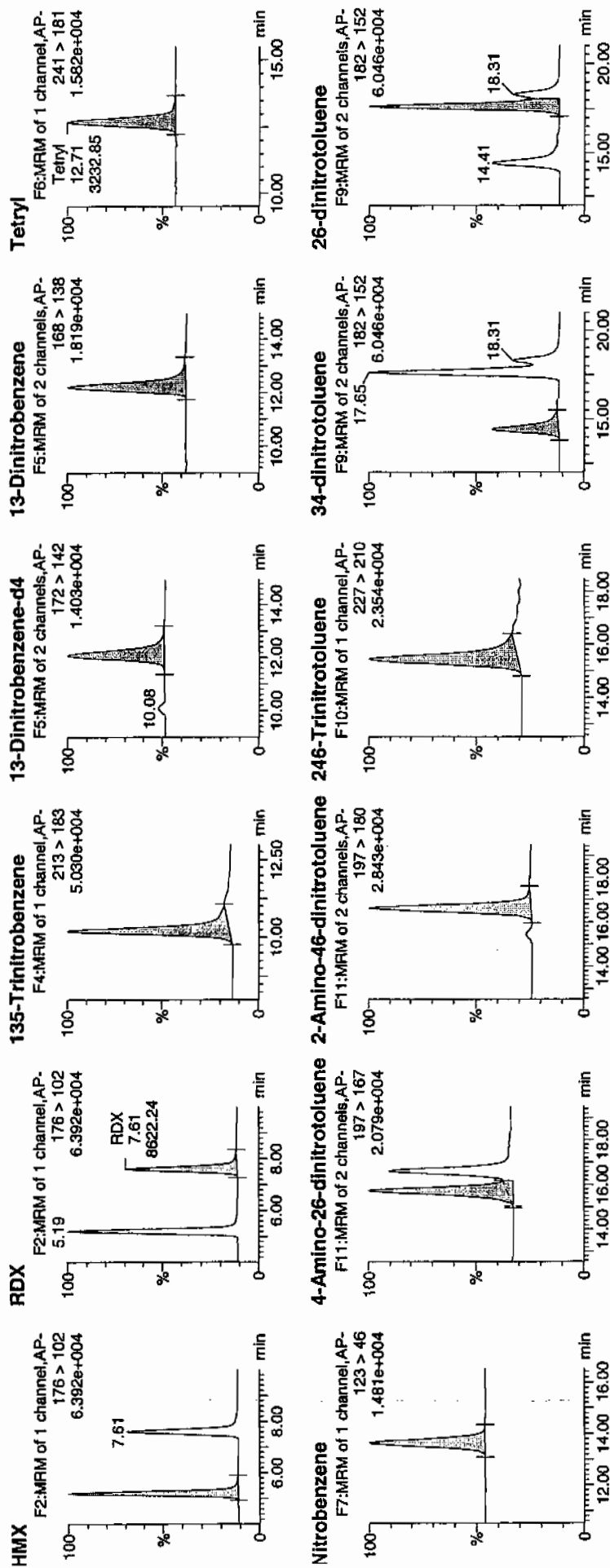
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Time: 12:41:56

ID: WXX100211-07CCV

Vial: 1:1,B

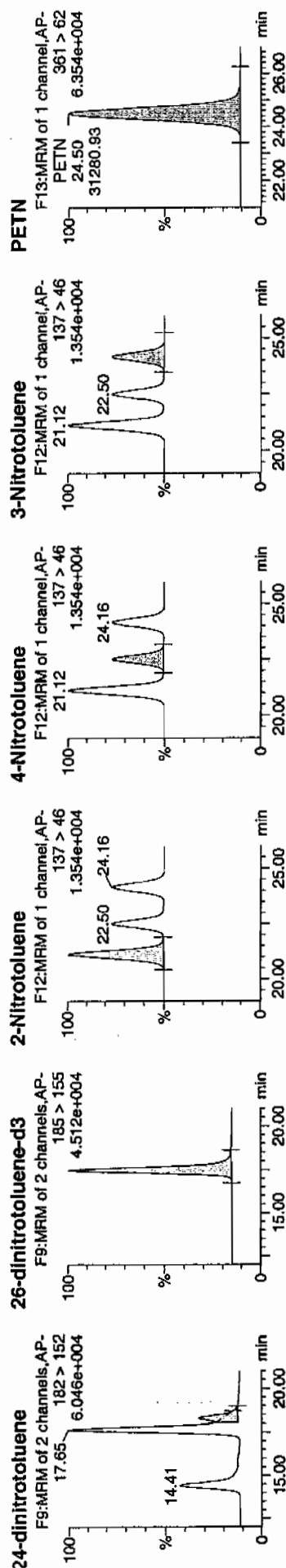
100%
2/13/10



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



ID	Name	Trace	RT	Area	IS Area	Abs. Resp	Response	Flags	ModData	ModTime	Trunc	%Rec	QDev	SN
WXX100211-07CCV	HMX	176 > 102	5.19	11475.284	2929.250	11475.284	1958.741	db			564.0230	94.0	-6.0	1104.0
WXX100211-07CCV	RDX	176 > 102	7.61	8622.236	2929.250	8622.236	1471.748	bb			606.1208	101.0	1.0	721.7
WXX100211-07CCV	135-Trinitrobenzene	213 > 183	10.21	12500.419	2929.250	12500.419	2133.723	bb			579.3351	96.6	-3.4	2459.6
WXX100211-07CCV	13-Dinitrobenzene-d4	172 > 142	12.10	2929.250		2929.250	2929.250	bb			455.6203	91.1	-8.9	197.3
WXX100211-07CCV	13-Dinitrobenzene	168 > 138	12.20	4237.073	2929.250	4237.073	723.235	bb			601.4952	100.2	0.2	417.8
WXX100211-07CCV	Tetryl	241 > 181	12.71	3232.850	2929.250	3232.850	551.822	bb			602.1200	100.4	0.4	271.2
WXX100211-07CCV	Nitrobenzene	123 > 46	13.66	2785.898	2929.250	2785.898	475.531	bb			588.6954	98.1	-1.9	223.5
WXX100211-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.73	5715.073	15494.170	5715.073	184.427	MM	13-Feb-10	09:20:30	642.0533	107.0	7.0	270.2
WXX100211-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.62	8433.699	15494.170	8433.699	272.157	bb			687.2130	114.5	14.5	421.0
WXX100211-07CCV	246-Trinitrotoluene	227 > 210	15.44	7625.437	15494.170	7625.437	246.074	bb			762.6354	127.1	27.1	224.2
WXX100211-07CCV	34-dinitrotoluene	182 > 152	14.41	9102.950	15494.170	9102.950	293.754	bb			326.3963	108.8	8.8	411.4
WXX100211-07CCV	26-dinitrotoluene	182 > 152	17.65	20781.283	15494.170	20781.283	670.616	MM	13-Feb-10	09:24:45	624.3588	104.1	4.1	1180.1
WXX100211-07CCV	24-dinitrotoluene	182 > 152	18.31	5145.382	15494.170	5145.382	166.043	MM	13-Feb-10	09:27:53	680.3585	113.4	13.4	273.9
WXX100211-07CCV	26-dinitrotoluene-d3	185 > 155	17.48	15494.170		15494.170	15494.170	bb			419.6760	83.9	-16.1	1197.5
WXX100211-07CCV	2-Nitrotoluene	137 > 46	21.12	2900.203	15494.170	2900.203	93.590	bb			603.6196	100.6	0.6	508.3
WXX100211-07CCV	4-Nitrotoluene	137 > 46	22.50	1490.065	15494.170	1490.065	48.085	bb			632.6714	105.4	5.4	267.4
WXX100211-07CCV	3-Nitrotoluene	137 > 46	24.16	1653.753	15494.170	1653.753	53.367	bb			572.7833	96.5	-4.5	270.1
WXX100211-07CCV	PETN	361 > 62	24.50	31280.934	15494.170	31280.934	1009.442	bb			747.9914	124.7	24.7	6998.1

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

*not
2/13/10*

Total 1691.4

Average 105.7

done on 1/22/10

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): 10-1392

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
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	
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	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

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

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA4.qld, Time: Sat Feb 13 09:30:34 2010

Sample Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208194a

Date: 12-Feb-2010

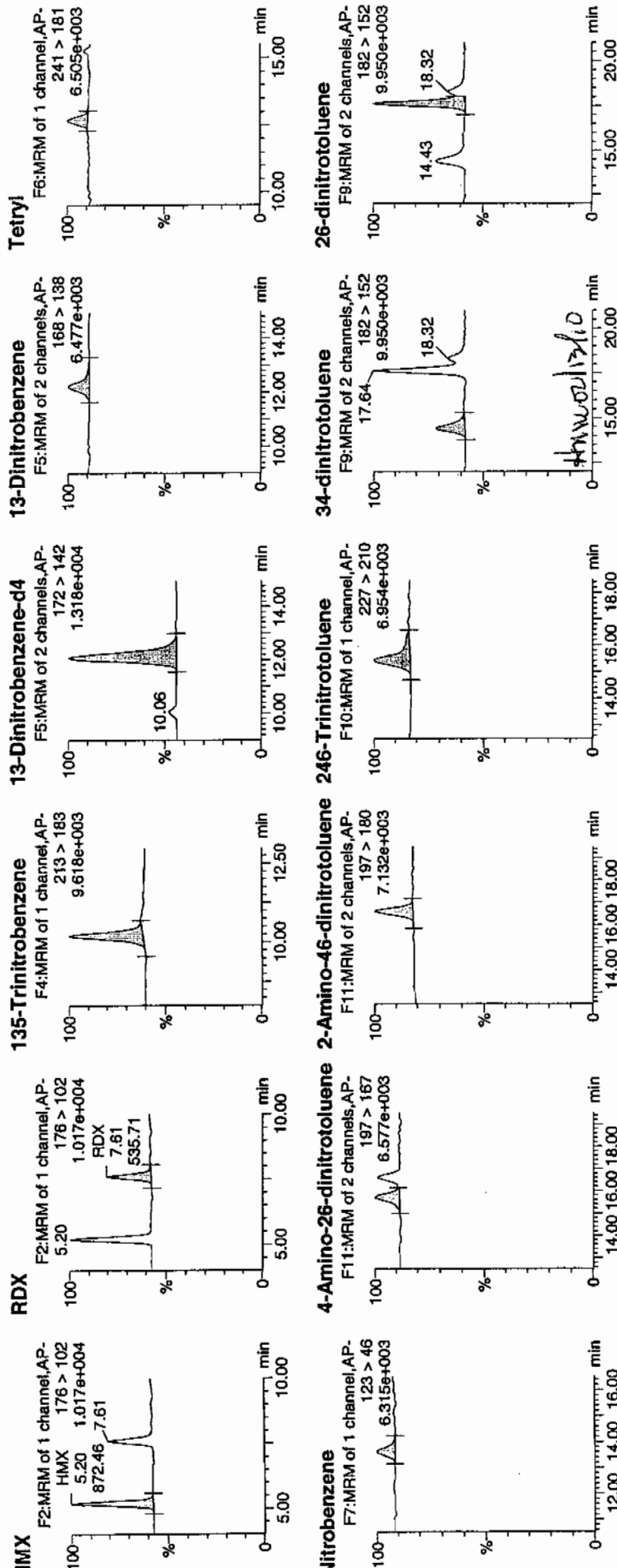
Time: 13:40:57

ID: WXX100211-08CRI

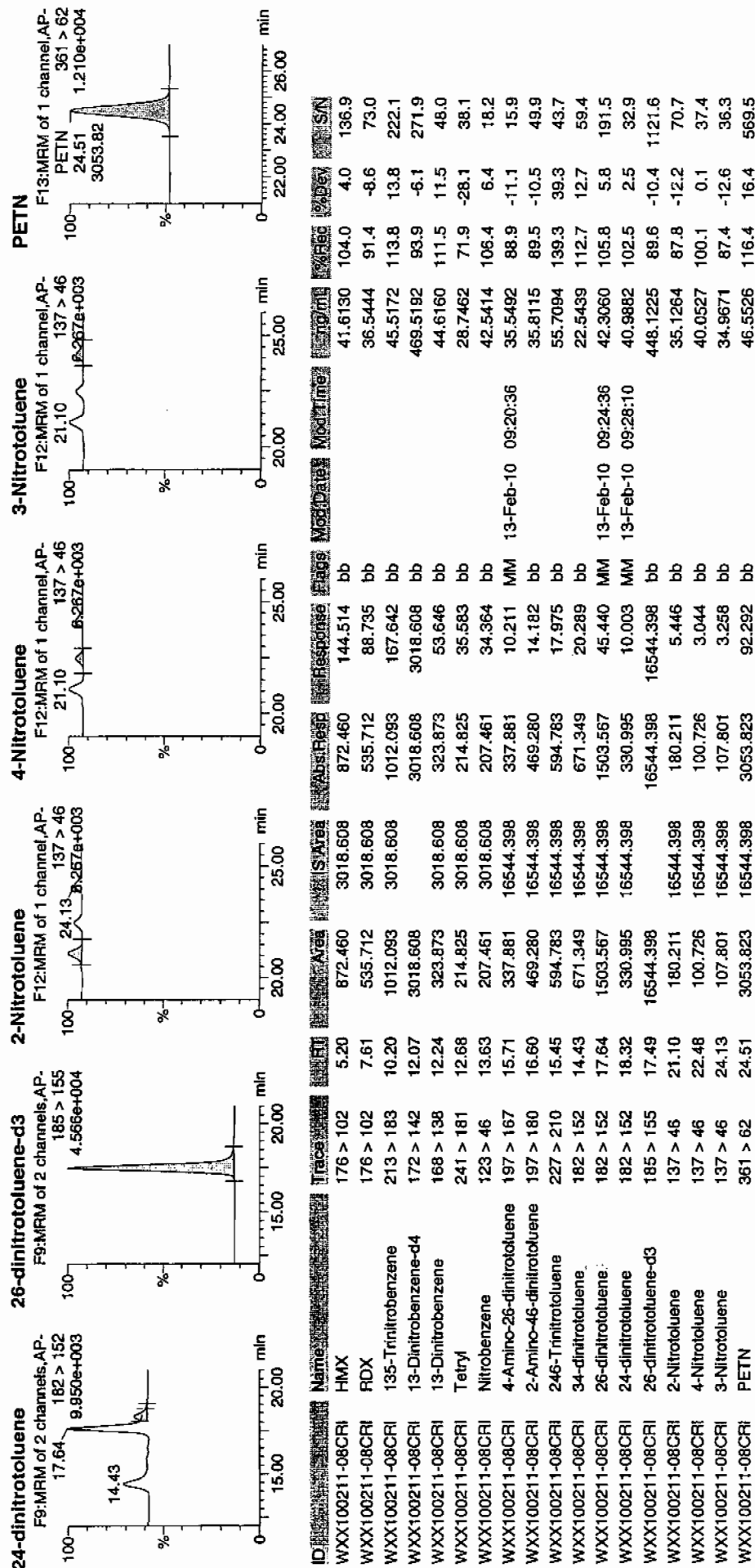
Label: 1:1,C

1/13/10

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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): 10-1392

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
1,3,5-Trinitrobenzene	600	573.104	96	
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	

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\EXP0208204a

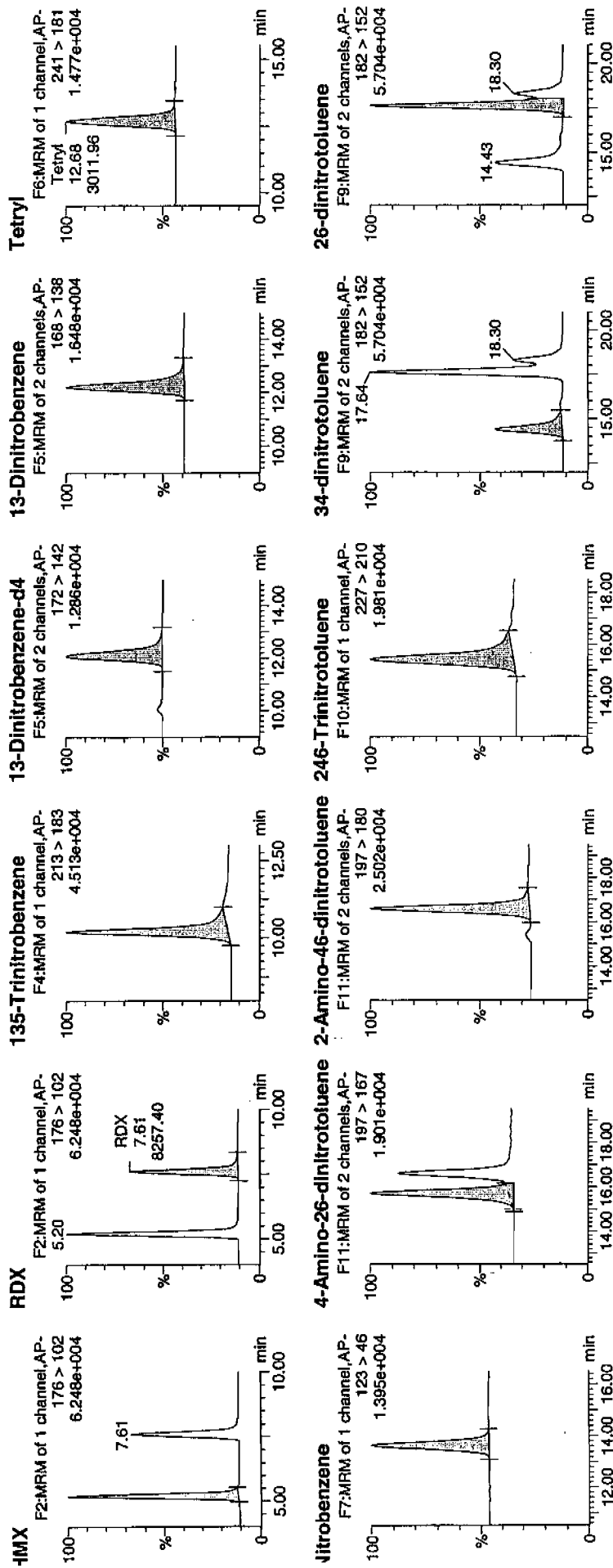
Date: 12-Feb-2010

Time: 18:36:13

D: WXX100211-07CCV

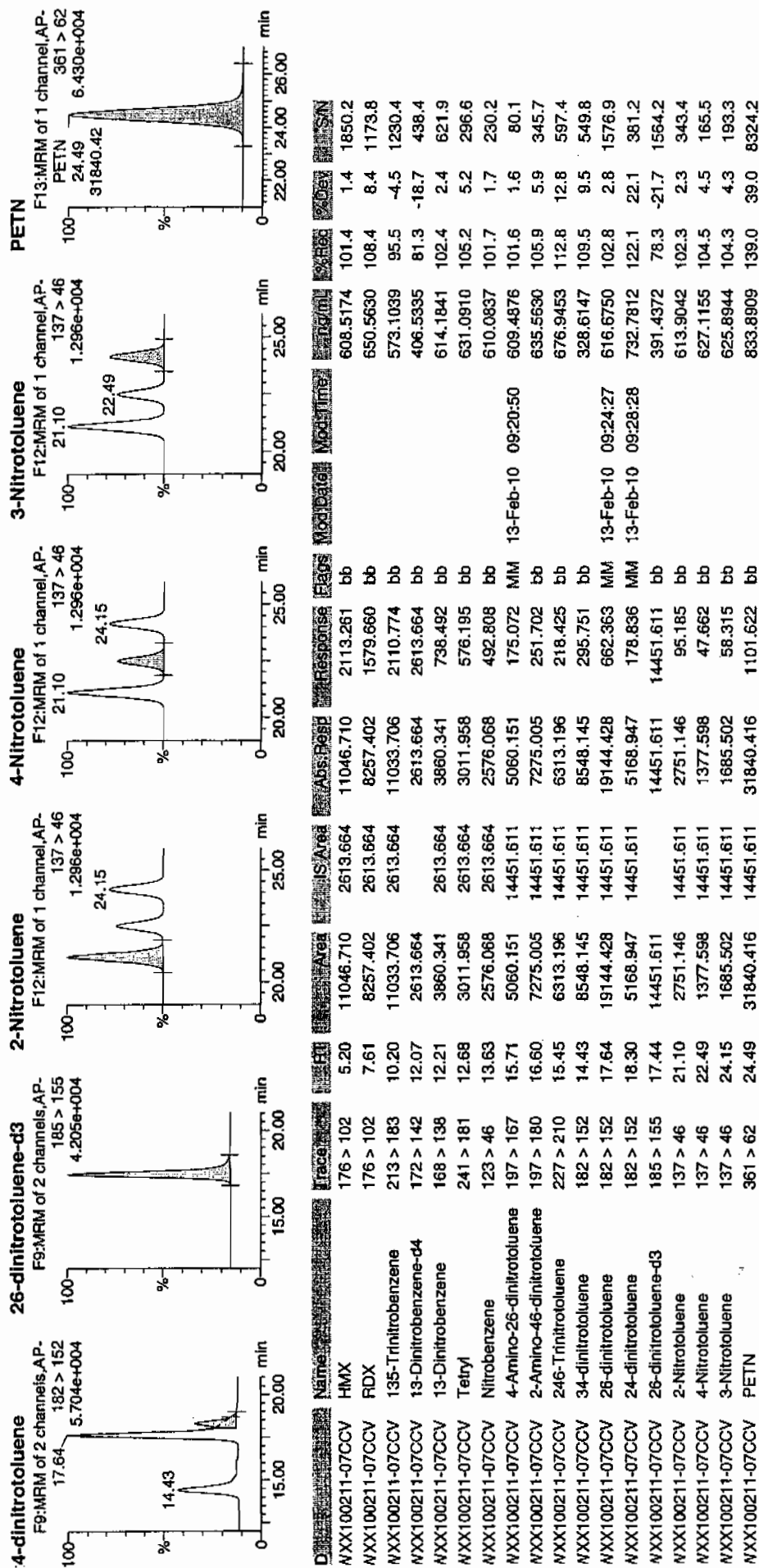
/fal: 1:1,B

13/10
2



Amu 241.3710

Dataset: C:\MASSLYNX\New_Exp\PRO020810expA4.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

*not
2/13/10*

Total 1719.4

Average 107.5

Amended 2/12/10

JCV 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): 10-1392

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

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

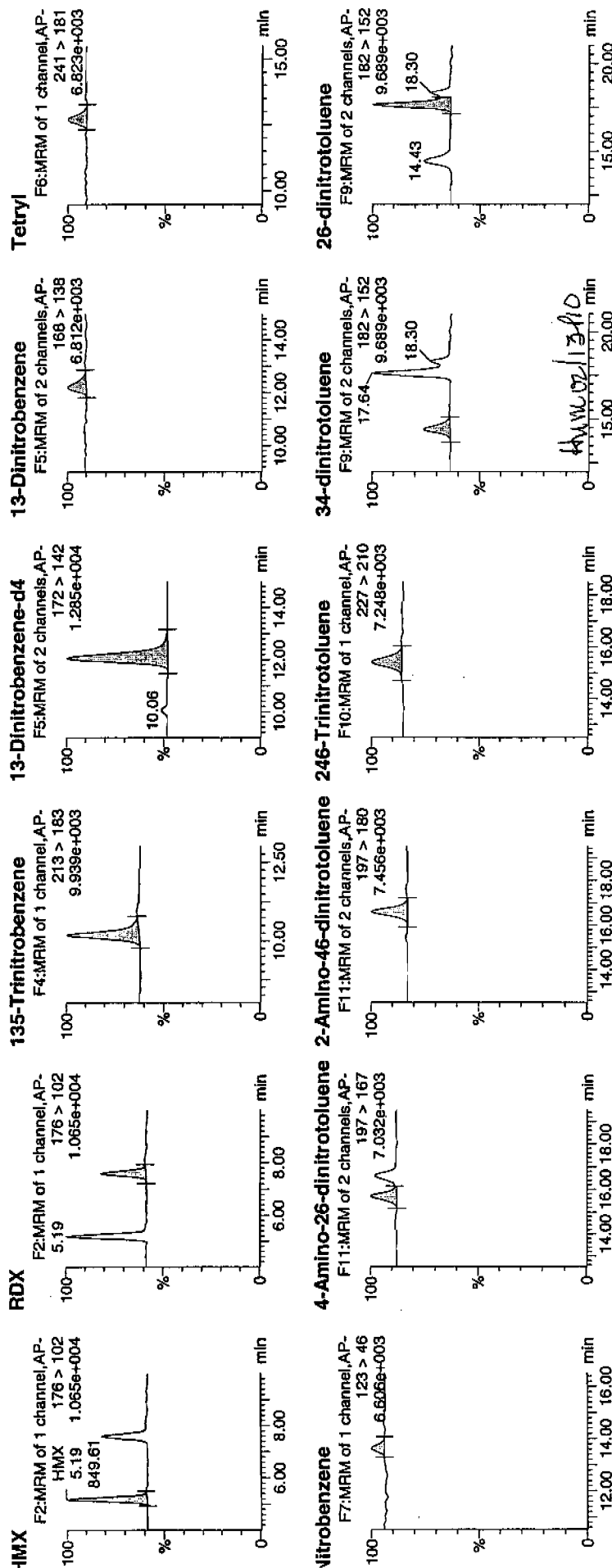
Time: 19:35:13

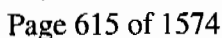
D: WXX100211-08CRI

/ial: 1:1,C

2/13/10

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Name	Trace	Fit	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Thomli	%Rec	%Dev	SN
HMx	176 > 102	5.19	849.611	2720.612	849.611	156.143	bb			44.9618	112.4	12.4	237.7
RDX	176 > 102	7.60	539.750	2720.612	539.750	99.196	bb			40.8528	102.1	2.1	132.6
135-Trinitrobenzene	213 > 183	10.19	1029.363	2720.612	1029.363	189.179	bb			51.3646	128.4	28.4	156.9
13-Dinitrobenzene-d4	172 > 142	12.07	2720.612	2720.612	2720.612	2720.612	bb			423.1684	84.6	-15.4	204.6
13-Dinitrobenzene	168 > 138	12.21	271.075	2720.612	271.075	49.819	bb			41.4329	103.6	3.6	18.9
Tetryl	241 > 181	12.73	268.655	2720.612	268.655	49.374	bb			43.1839	108.0	8.0	18.6
Nitrobenzene	123 > 46	13.63	132.592	2720.612	132.592	24.368	bb			30.1670	75.4	-24.6	14.0
4-Amino-26-dinitrotoluene	197 > 167	15.71	338.182	15595.316	338.182	10.842	MM	13-Feb-10	09:20:57	37.7463	94.4	-5.6	16.1
2-Amino-46-dinitrotoluene	197 > 180	16.60	516.244	15595.316	516.244	16.551	bb			41.7929	104.5	4.5	52.9
246-Trinitrotoluene	227 > 210	15.42	449.253	15595.316	449.253	14.403	bb			44.6393	111.6	11.6	40.0
34-dinitrotoluene	182 > 152	14.43	585.154	15595.316	585.154	18.761	bb			20.8453	104.2	4.2	33.1
26-dinitrotoluene	182 > 152	17.64	1334.560	15595.316	1334.560	42.787	MM	13-Feb-10	09:24:20	39.8359	99.6	-0.4	98.4
24-dinitrotoluene	182 > 152	18.30	271.745	15595.316	271.745	8.712	MM	13-Feb-10	09:28:39	35.6990	89.2	-10.8	22.4
26-dinitrotoluene-d3	185 > 155	17.44	15595.316	15595.316	15595.316	15595.316	bb			422.4156	84.5	-15.5	1228.0
2-Nitrotoluene	137 > 46	21.10	216.941	15595.316	216.941	6.955	bb			44.8591	112.1	12.1	79.5
4-Nitrotoluene	137 > 46	22.45	120.257	15595.316	120.257	3.856	bb			50.7291	126.8	26.8	37.4
3-Nitrotoluene	137 > 46	24.12	161.301	15595.316	161.301	5.171	bb			55.5048	138.8	38.8	52.5
PETN	361 > 62	24.47	3496.129	15595.316	3496.129	112.089	bb			59.6419	149.1	49.1	1430.4

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

WPP
2/13/10

Total 1760.2

Average 110.0

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): 10-1392

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
4-Amino-2,6-dinitrotoluene	600	609.256	102	
HMX	600	660.612	110	
Nitrobenzene	600	632.389	105	
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	

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\020810expA4.qtd, Time: Sat Feb 13 09:30:34 2010

Sample Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208217a

Date: 13-Feb-2010

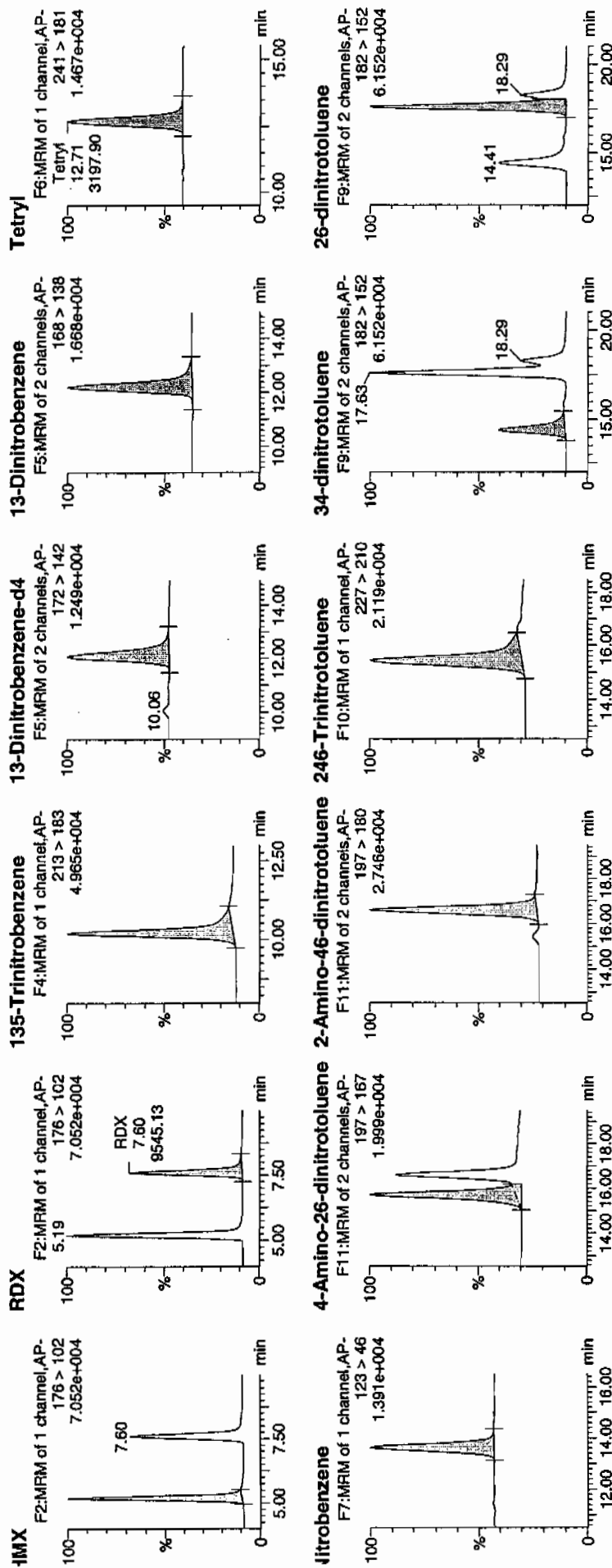
Time: 00:59:51

D: WXX100211-07CCV

/Inlet: 1:1,B

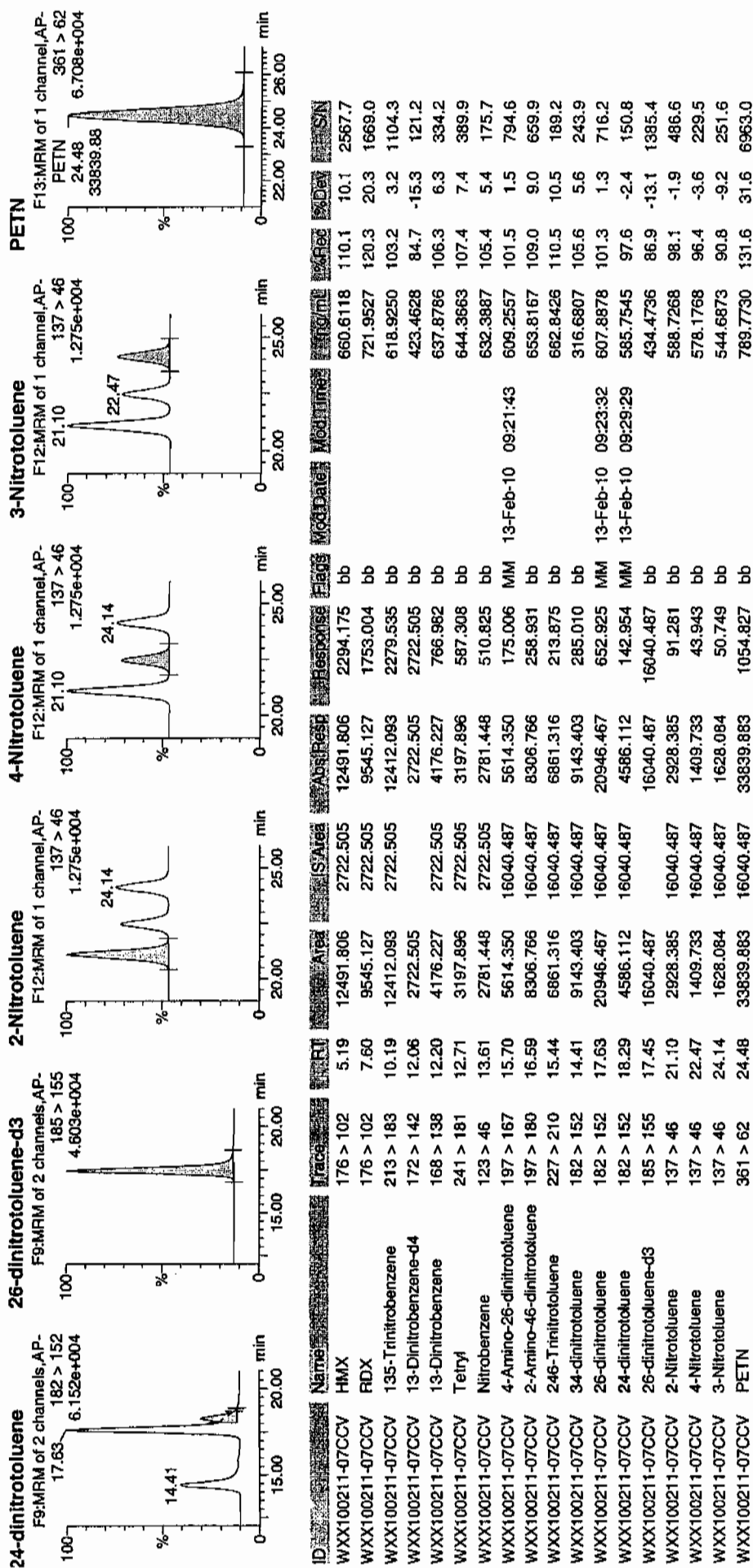
WXX
 2/13/10

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Dataset: C:\MASSL\YNN\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

WTF
2/13/10

Total 1695.1

Average 105.9

WTF
2/13/10

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): 10-1392

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
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	
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	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

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

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA4.qld, Time: Sat Feb 13 09:30:34 2010

Sample Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208219a

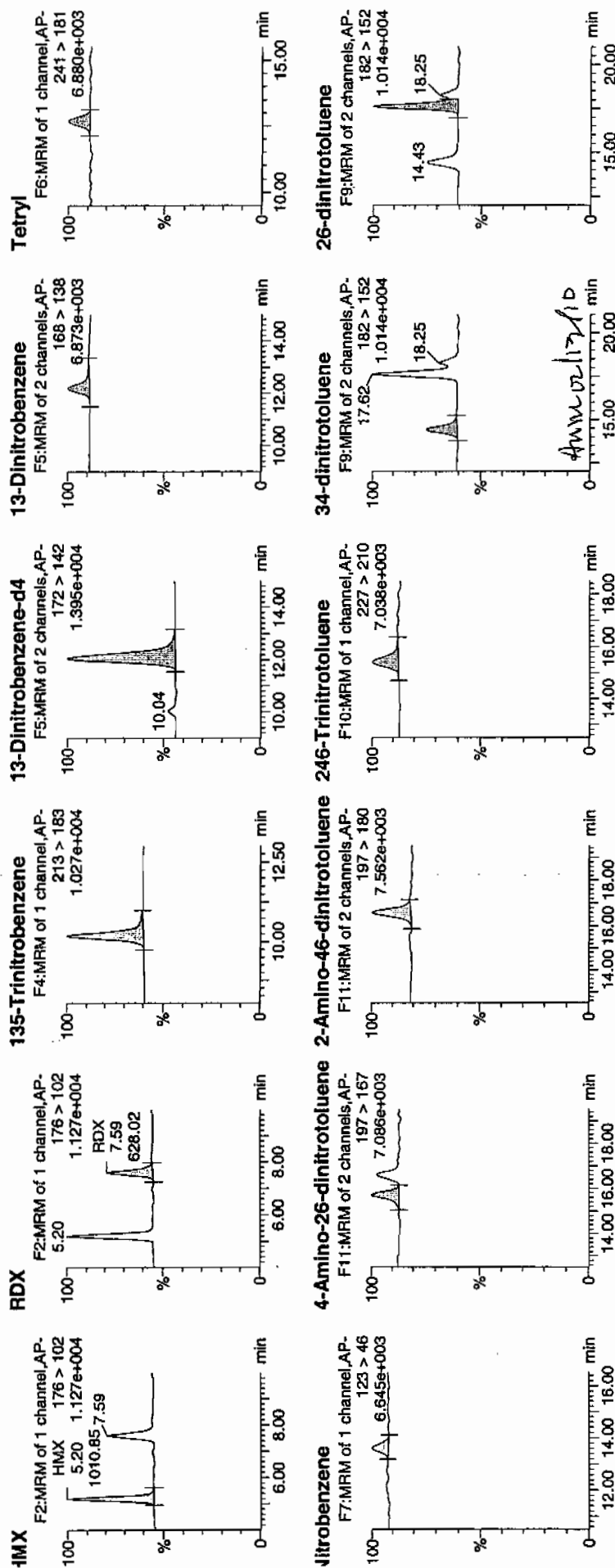
Date: 13-Feb-2010

Time: 01:58:49

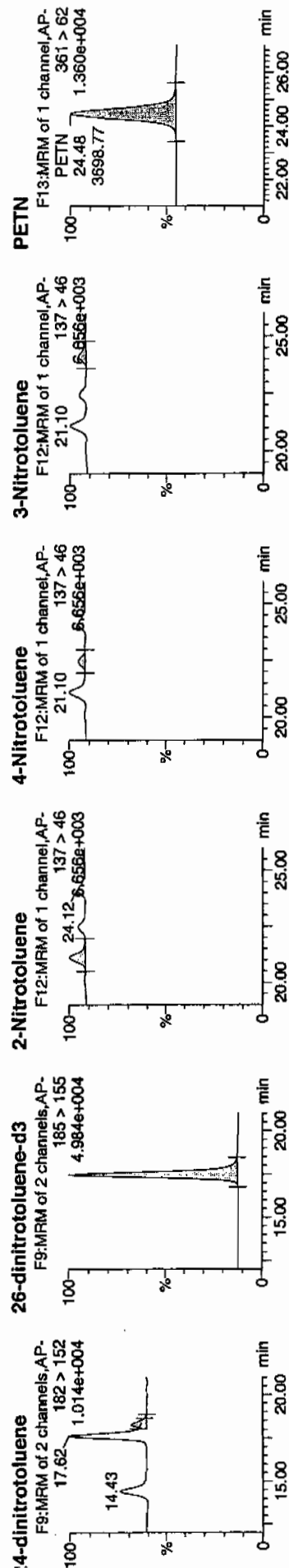
D: WXX100211-08CRI

/rat: 1:1,C

2/13/10



Dataset: C:\MASSLYN\New_Exp.PRO\020810expA4.qld, Time: Sat Feb 13 09:30:34 2010



D	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Agmt	% Rec	#Dev	SN
XXXX100211-08CRI	HMx	176 > 102	5.20	1010.852	3198.300	1010.852	158.030	bb			45.5049	113.8	13.8	250.6
XXXX100211-08CRI	RDX	176 > 102	7.59	628.023	3198.300	628.023	98.181	bb			40.4345	101.1	1.1	131.6
XXXX100211-08CRI	135-Trinitrobenzene	213 > 183	10.19	1172.828	3198.300	1172.828	183.352	bb			49.7825	124.5	24.5	264.7
XXXX100211-08CRI	13-Dinitrobenzene-d4	172 > 142	12.07	3198.300		3198.300	3198.300	bb			497.4688	99.5	-0.5	652.3
XXXX100211-08CRI	13-Dinitrobenzene	168 > 138	12.21	331.465	3198.300	331.465	51.819	bb			43.0964	107.7	7.7	36.9
XXXX100211-08CRI	Tetryl	241 > 181	12.68	286.241	3198.300	286.241	44.749	bb			38.3370	95.8	-4.2	15.3
XXXX100211-08CRI	Nitrobenzene	123 > 46	13.63	199.539	3198.300	199.539	31.195	bb			38.6181	96.5	-3.5	21.2
XXXX100211-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.71	355.862	17501.184	355.862	10.167	bb			35.3942	88.5	-11.5	33.2
XXXX100211-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.58	565.536	17501.184	565.536	16.157	bb			40.7976	102.0	2.0	80.8
XXXX100211-08CRI	246-Trinitrotoluene	227 > 210	15.42	412.875	17501.184	412.875	11.796	bb			36.5571	91.4	-8.6	55.5
XXXX100211-08CRI	34-dinitrotoluene	182 > 152	14.43	665.850	17501.184	665.850	19.023	bb			21.1369	105.7	5.7	31.2
XXXX100211-08CRI	26-dinitrotoluene	182 > 152	17.62	1479.041	17501.184	1479.041	42.255	bd			39.3408	98.4	-1.6	89.2
XXXX100211-08CRI	24-dinitrotoluene	182 > 152	18.25	327.047	17501.184	327.047	9.344	MM	13-Feb-10	09:29:38	38.2852	95.7	-4.3	18.5
XXXX100211-08CRI	26-dinitrotoluene-d3	185 > 155	17.44	17501.184		17501.184	17501.184	bb			474.0381	94.8	-5.2	1442.6
XXXX100211-08CRI	2-Nitrotoluene	137 > 46	21.10	251.104	17501.184	251.104	7.174	bb			46.2689	115.7	15.7	58.0
XXXX100211-08CRI	4-Nitrotoluene	137 > 46	22.46	100.924	17501.184	100.924	2.883	bb			37.9375	94.8	-5.2	24.0
XXXX100211-08CRI	3-Nitrotoluene	137 > 46	24.12	122.018	17501.184	122.018	3.486	bb			37.4149	93.5	-6.5	26.4
XXXX100211-08CRI	PETN	361 > 62	24.48	3698.769	17501.184	3698.769	105.672	bb			55.3918	138.5	38.5	753.5

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

*mt
2/13/10*

Total 1663.6

Average 104.0

Hy m 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): 10-1392

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:

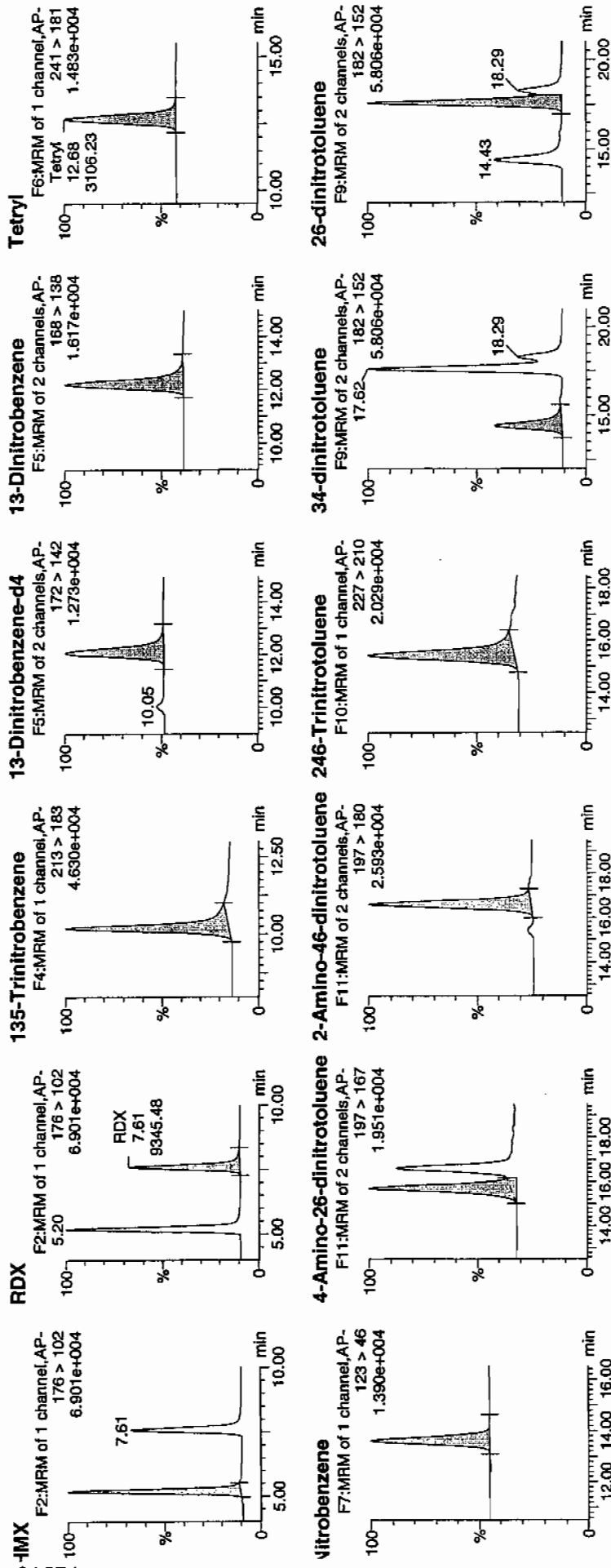
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

2/13/10



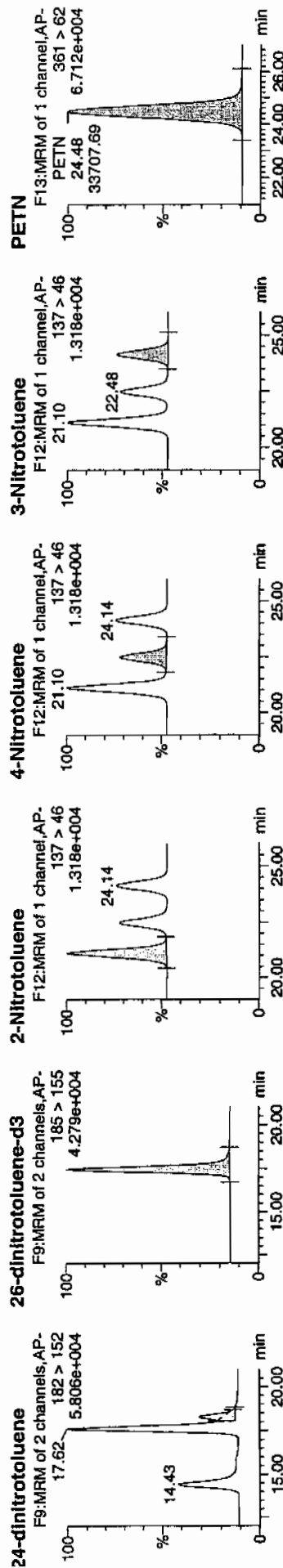
2/13/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Sat Feb 13 09:33:08 2010, Page 88 of 93

Dataset: C:\MASSLYNX\New_Exp\PRO\020810expA4.qld, Time: Sat Feb 13 09:30:34 2010



ID	Name	Trace	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Conc	% Rec	% Dev	S/N
WXX100211-07CCV	HMX	176 > 102	5.20	12287.026	2615.694	2348.712	bb			676.3159	112.7	12.7	2034.0
WXX100211-07CCV	RDX	176 > 102	7.61	9345.477	2615.694	1786.424	bb			735.7161	122.6	22.6	1310.2
WXX100211-07CCV	135-Trinitrobenzene	213 > 183	10.20	11287.690	2615.694	2157.685	bb			585.8411	97.6	-2.4	2693.2
WXX100211-07CCV	13-Dinitrobenzene-d4	172 > 142	12.07	2615.694	2615.694	2615.694	bb			406.8493	81.4	-18.6	250.4
WXX100211-07CCV	13-Dinitrobenzene	168 > 138	12.21	3782.559	2615.694	725.051	bb			601.3418	100.2	0.2	442.0
WXX100211-07CCV	Tetryl	241 > 181	12.68	3106.229	2615.694	593.768	bb			652.1022	108.7	8.7	209.2
WXX100211-07CCV	Nitrobenzene	123 > 46	13.63	2649.277	2615.694	506.420	bb			626.9347	104.5	4.5	176.9
WXX100211-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.71	5314.825	14813.966	179.386	MM	13-Feb-10	09:22:00	624.5041	104.1	4.1	219.8
WXX100211-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.60	7468.332	14813.966	252.071	bb			636.4933	106.1	6.1	924.0
WXX100211-07CCV	246-Trinitrotoluene	227 > 210	15.41	6192.259	14813.966	209.001	bb			647.7364	108.0	8.0	387.0
WXX100211-07CCV	34-dinitrotoluene	182 > 152	14.43	8541.556	14813.966	288.294	bb			320.3295	106.8	6.8	367.1
WXX100211-07CCV	26-dinitrotoluene	182 > 152	17.62	19710.434	14813.966	665.265	MM	13-Feb-10	09:23:19	619.3769	103.2	3.2	1075.2
WXX100211-07CCV	24-dinitrotoluene	182 > 152	18.29	4104.971	14813.966	138.551	MM	13-Feb-10	09:29:47	567.7109	94.6	-5.4	221.1
WXX100211-07CCV	26-dinitrotoluene-d3	185 > 155	17.46	14813.966	14813.966	14813.966	bb			401.2519	80.3	-19.7	1401.4
WXX100211-07CCV	2-Nitrotoluene	137 > 46	21.10	2949.492	14813.966	99.551	bb			642.0651	107.0	7.0	144.0
WXX100211-07CCV	4-Nitrotoluene	137 > 46	22.48	1443.432	14813.966	48.719	bb			641.0122	106.8	6.8	68.0
WXX100211-07CCV	3-Nitrotoluene	137 > 46	24.14	1643.829	14813.966	55.482	bb			595.4884	99.2	-0.8	74.3
WXX100211-07CCV	PETN	361 > 62	24.48	33707.691	14813.966	1137.700	bb			868.6757	144.8	44.8	9463.9

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): 10-1392

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
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	
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	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate),TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

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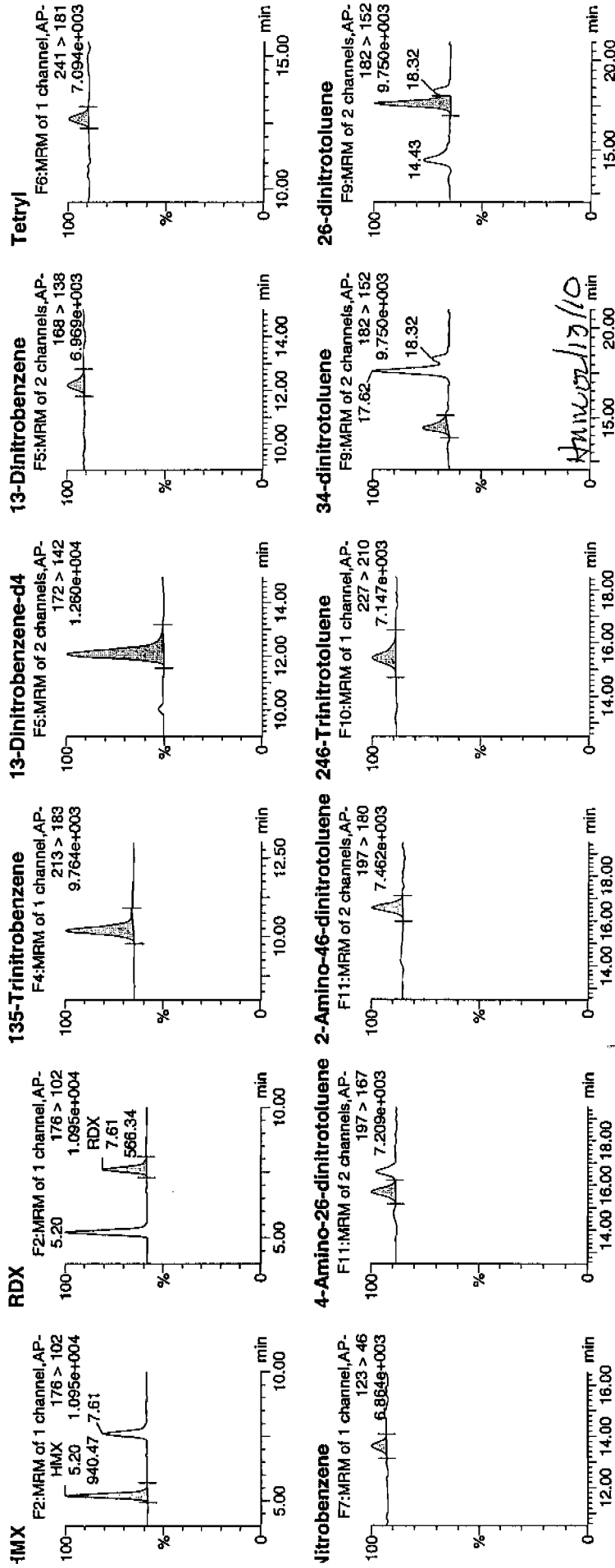
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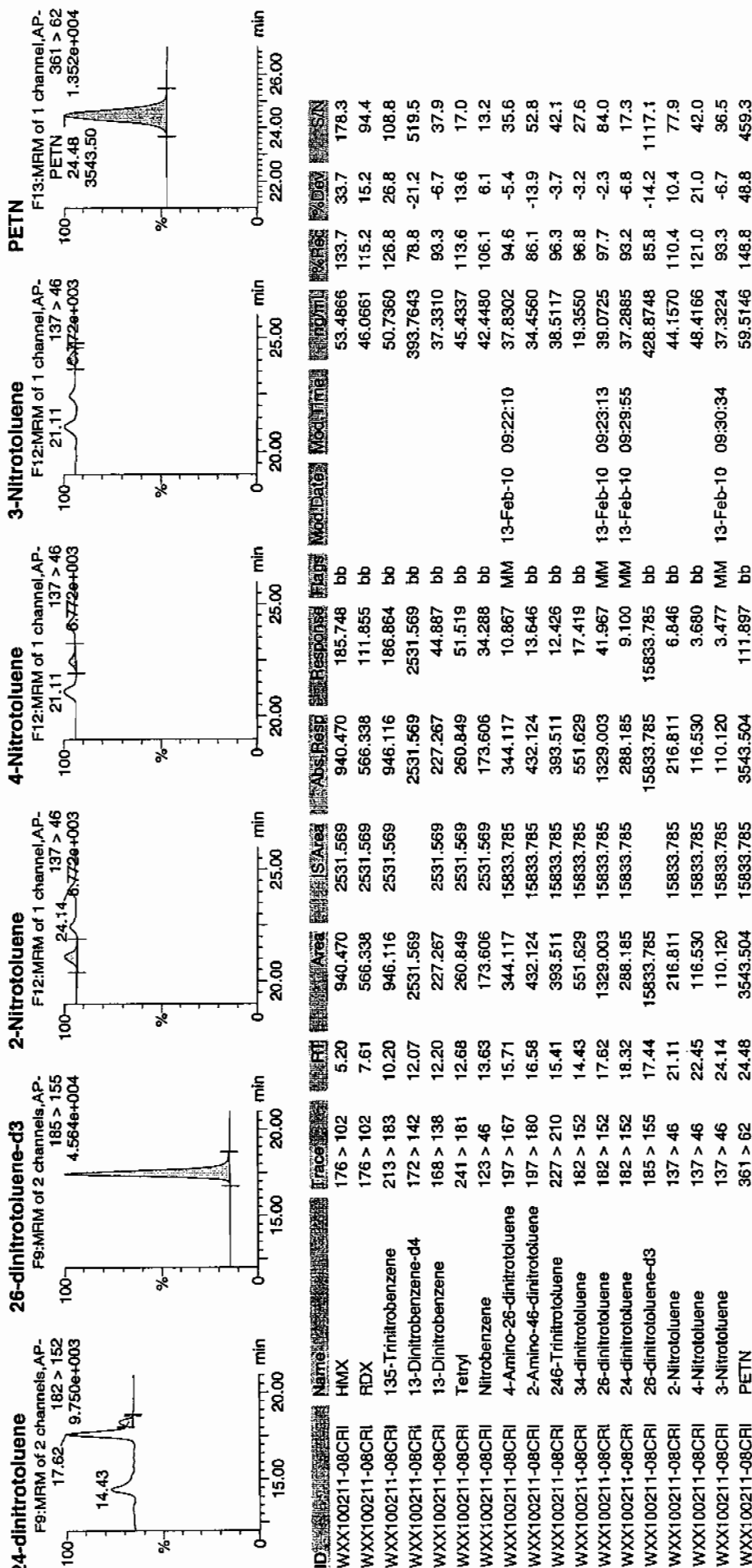
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MR
 2/13/10



Dataset: C:\MASSL\YXXNew_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

*not
2/13/10*

Total 1726.9

Average 107.9

Handwritten: 107.9 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): 10-1392

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
1,3,5-Trinitrobenzene	600	568.559	95	
1,3-Dinitrobenzene-d4	500	448.251	90	
2,4,6-Trinitrotoluene	600	712.244	119	
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	

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

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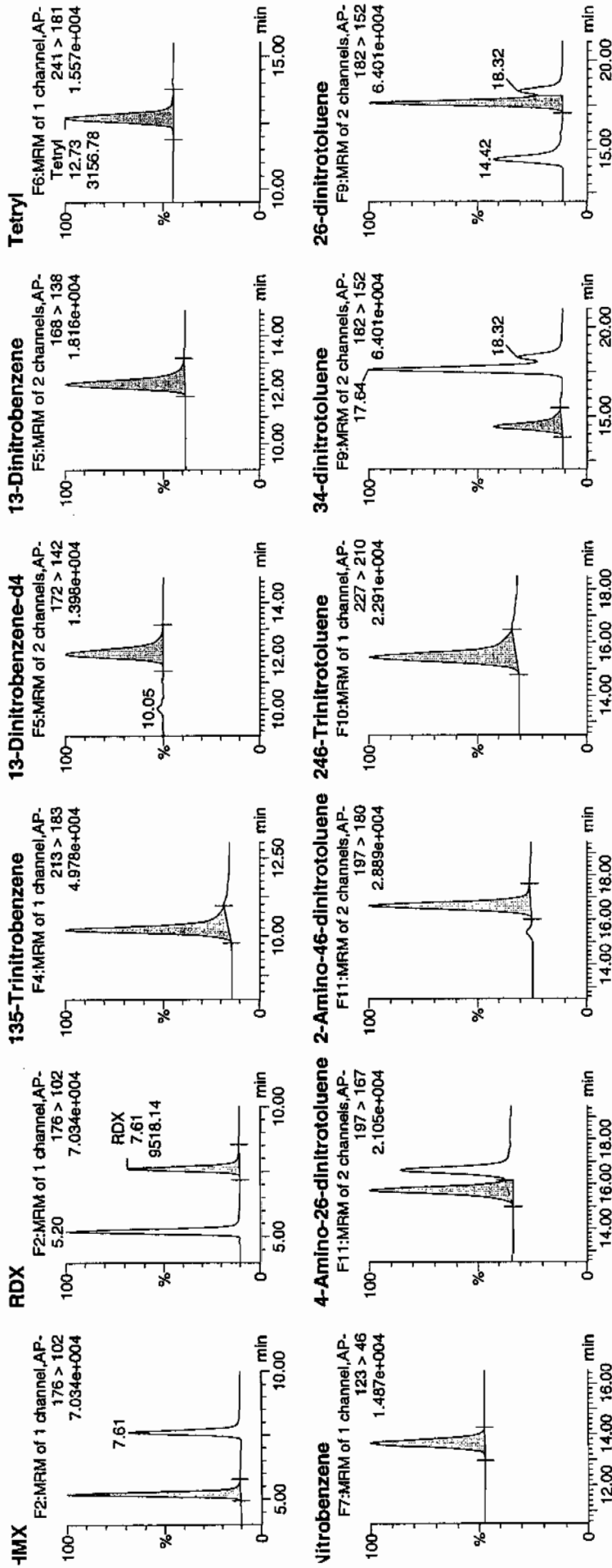
Date: 13-Feb-2010

Time: 11:20:41

D: WXX100211-07CCV

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2/14/10



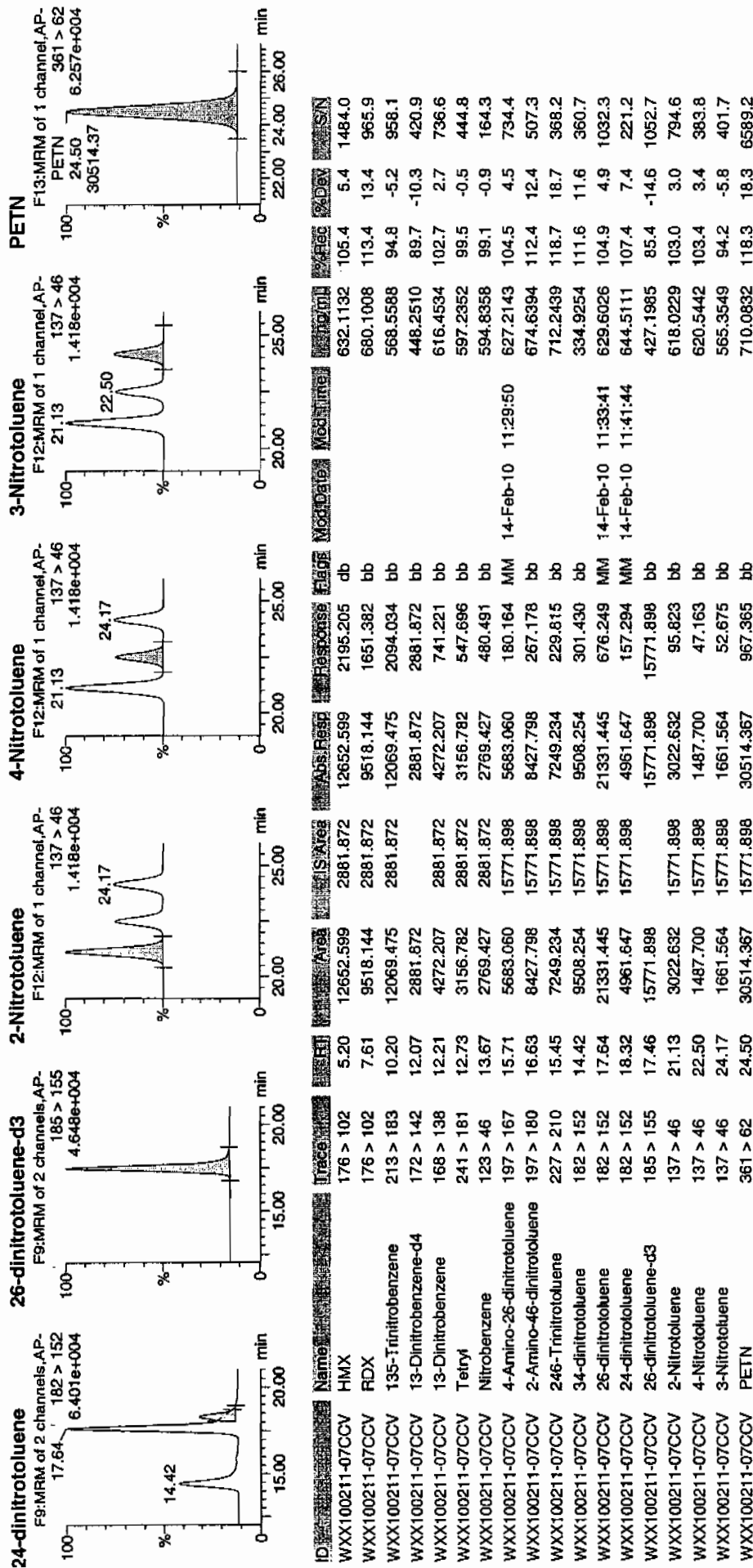
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Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Sun Feb 14 11:45:22 2010, Page 22 of 95

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

HMM 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): 10-1392

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
1,3,5-Trinitrobenzene	40	42.839	107	
1,3-Dinitrobenzene-d4	500	571.598	114	
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	

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\EXP0208240a

Sample Date: 13-Feb-2010

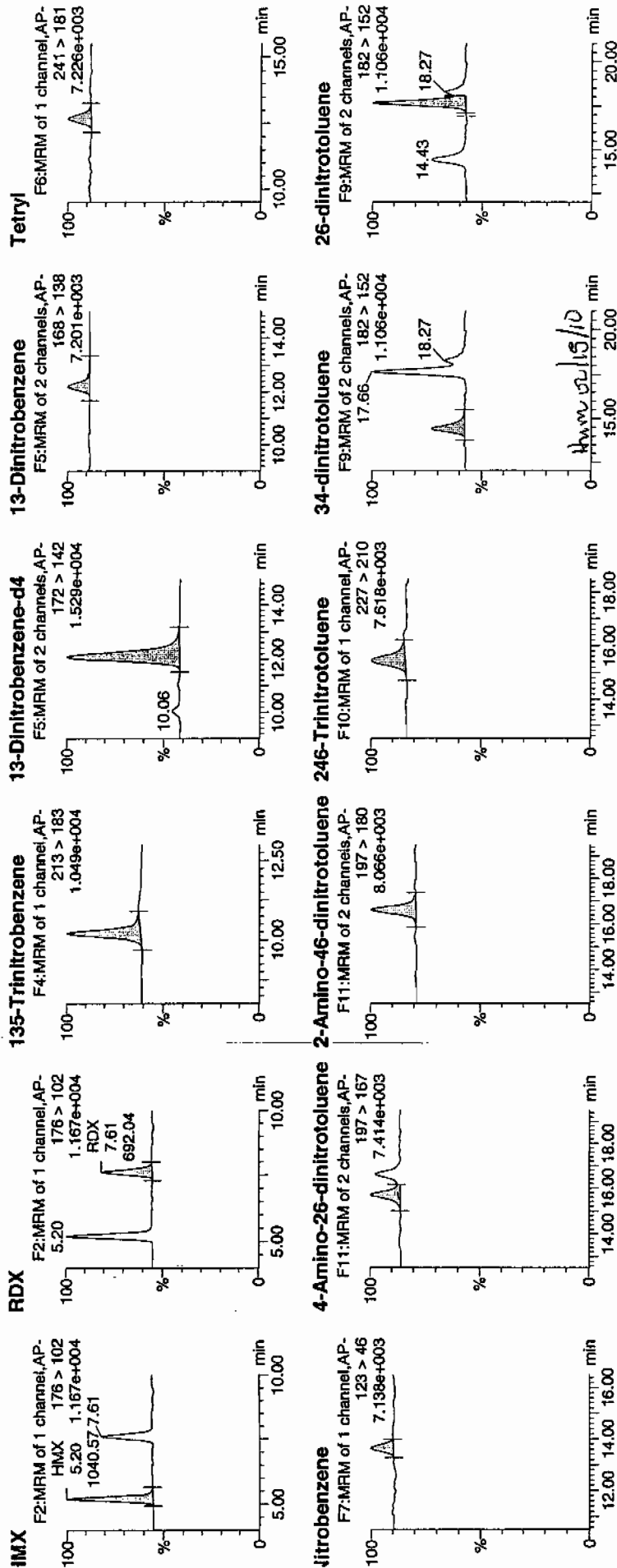
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Sample ID: WXX100211-08CRI

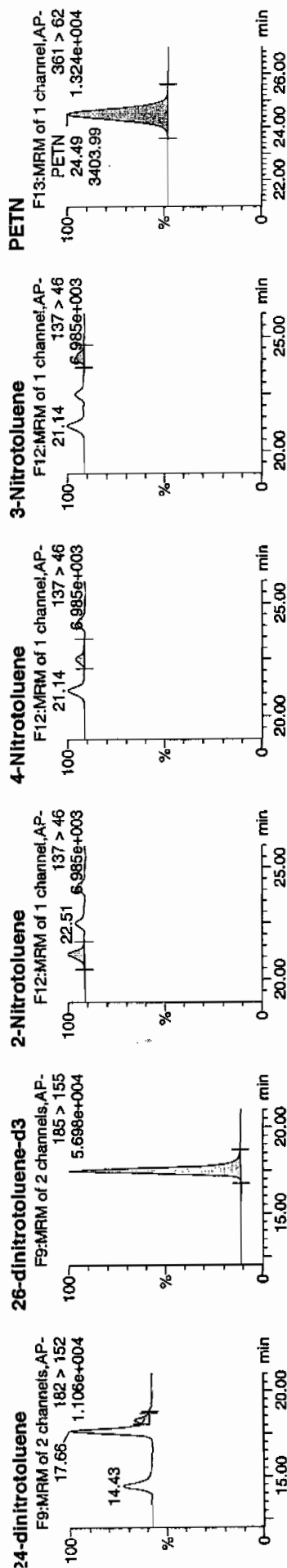
Sample Ref: 1:1,C

1/14/10
1/14/10

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Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010



Name	ID	Trace	RT	Area	S Area	Ass Resp	Response	Flags	Mod Date	Mod Time	mg/ml	Area	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

*sum
2/14/10*

Total 1576.4

Average 98.5

done 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): 10-1392

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
Nitrobenzene	600	622.212	104	
PETN	600	713.245	119	
RDX	600	688.19	115	
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	

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

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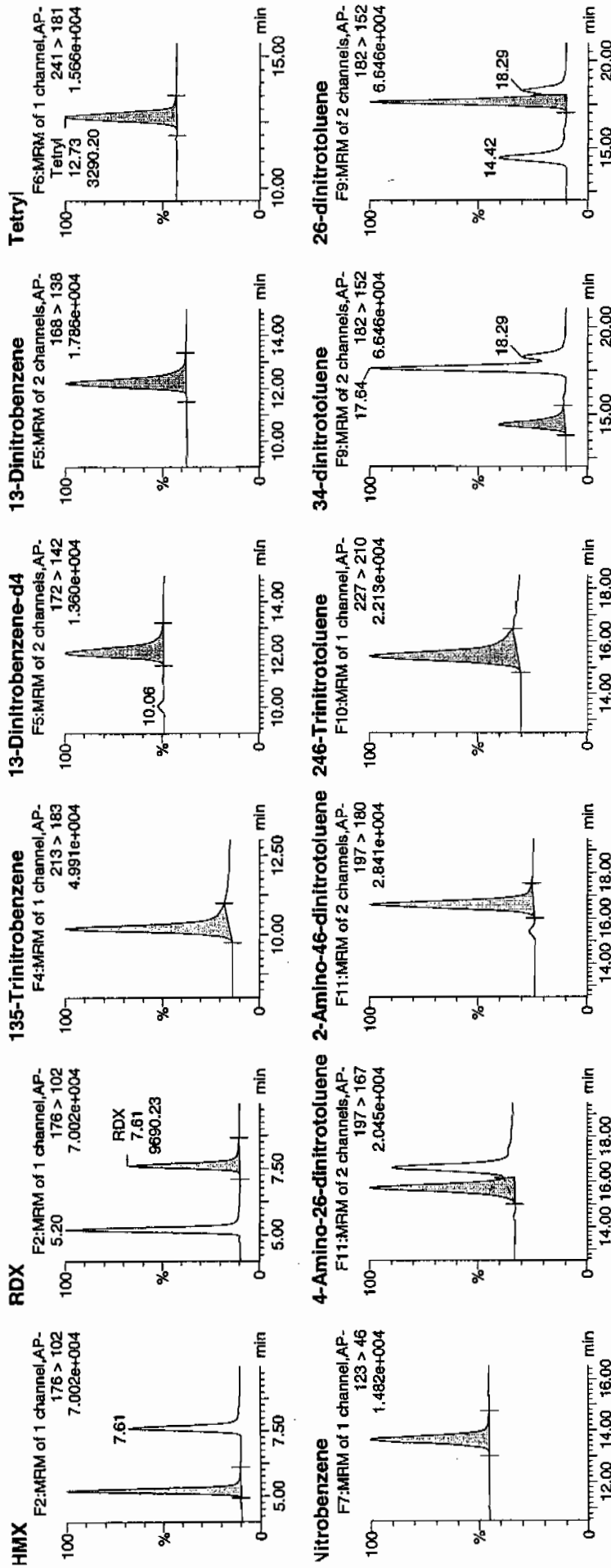
Date: 13-Feb-2010

Time: 17:44:16

ID: WXX100211-07CCV

Vial: 1:1,B

μg/L
2/14/10



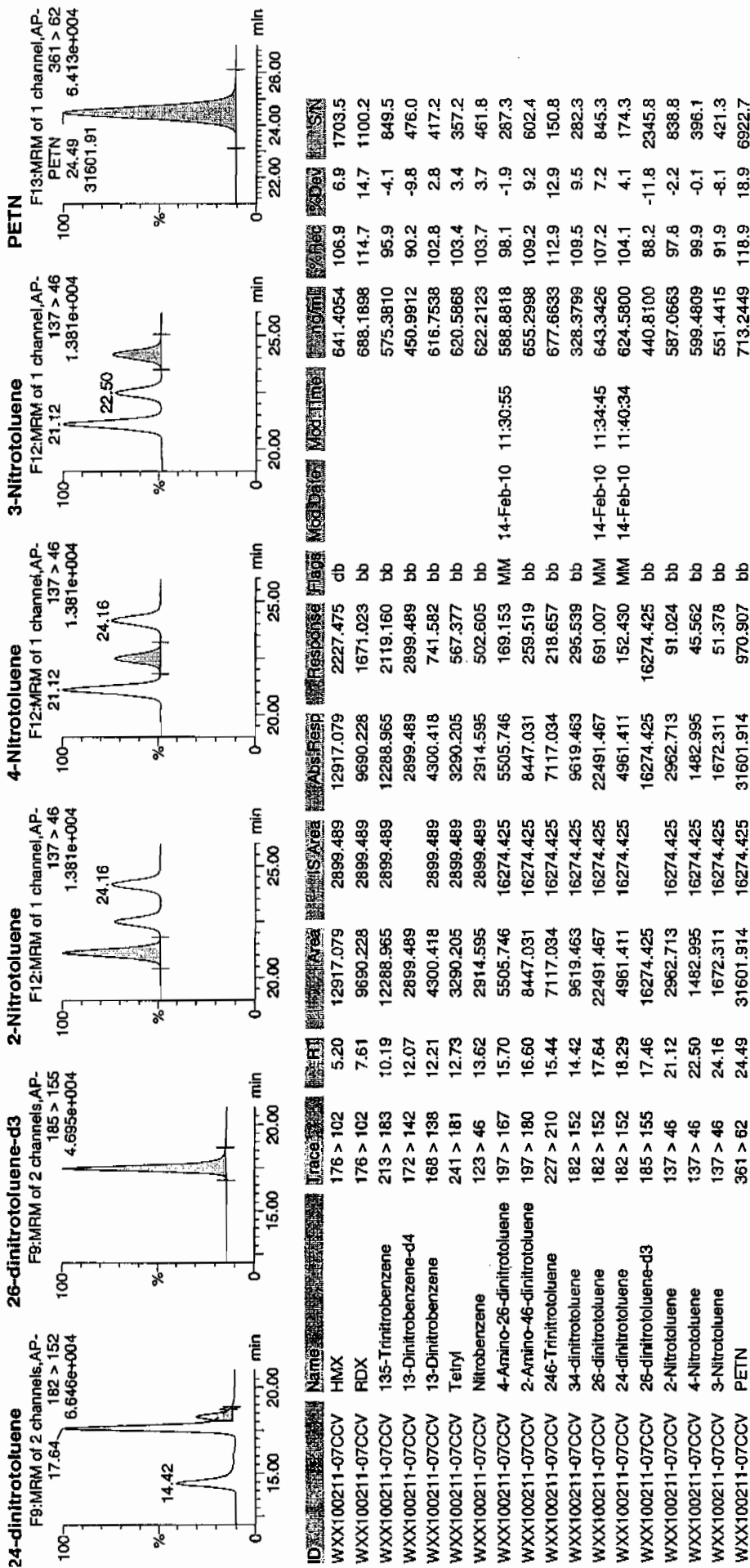
2/15/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Sun Feb 14 11:45:22 2010, Page 48 of 95

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: 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

*MDT
2/14/10*

Total 1676.9

Average 104.8

MDT - 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): 10-1392

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
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	
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	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report

EL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010

Sample Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208253a

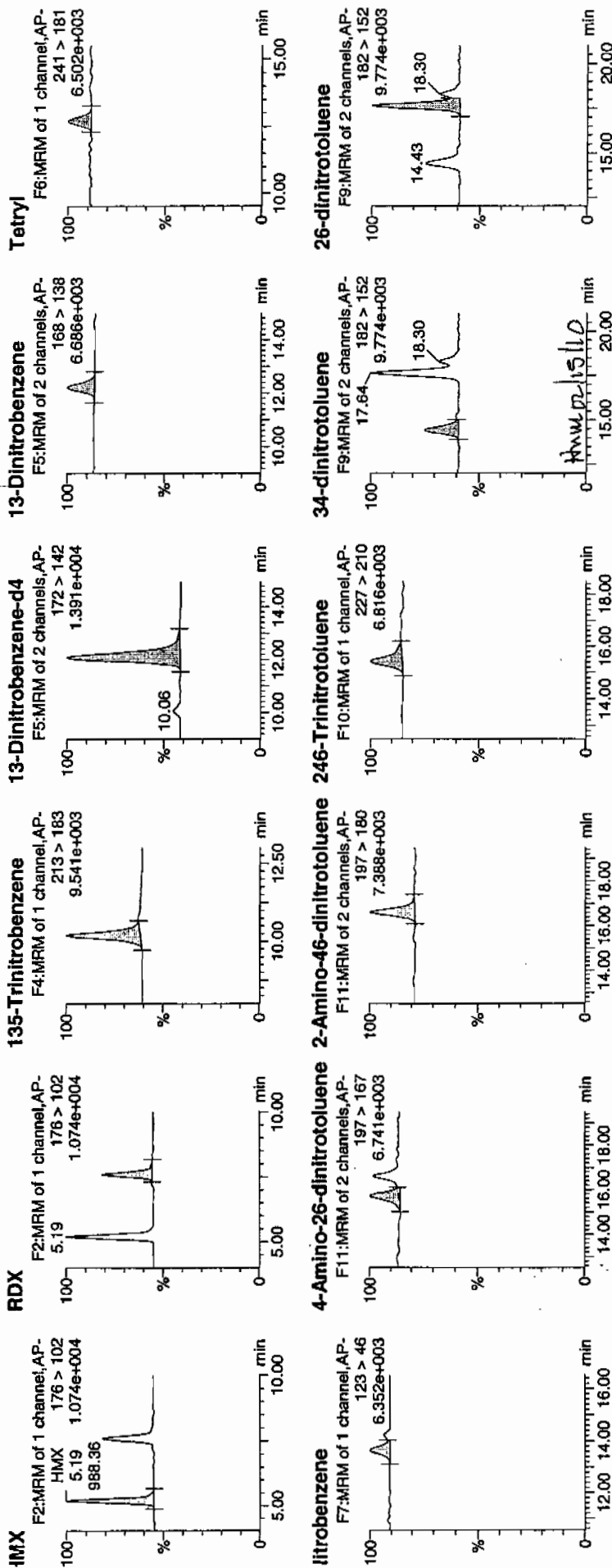
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Time: 18:43:13

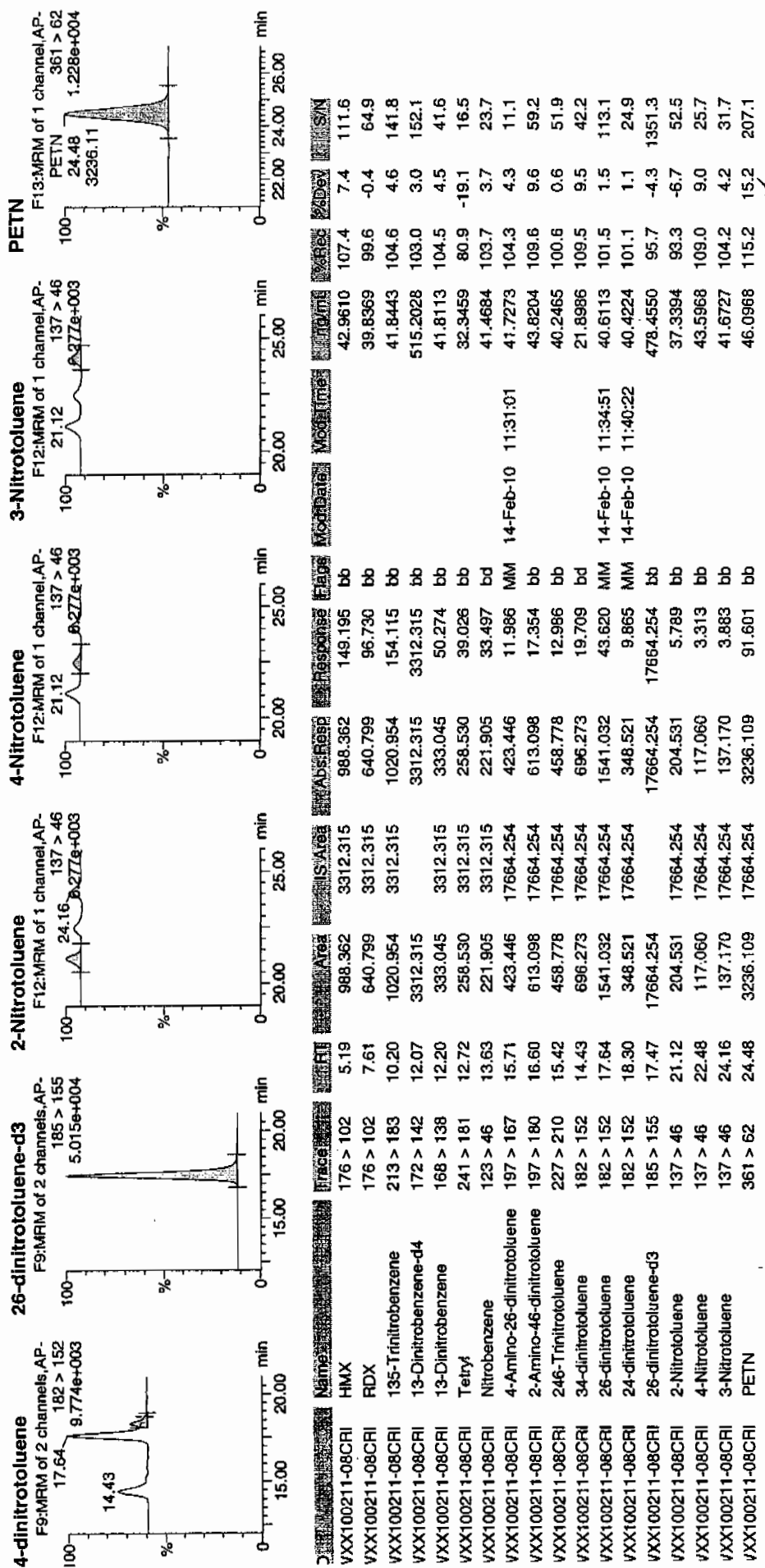
D: WXX100211-08CRI

File: 1:1,C

2/14/10



Dataset: C:\MASSLYNX\New_Exp\PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010



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: 100%
2/14/10

Total 1649.0

Average 103.1

Handwritten: 477M 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): 10-1392

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

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208264a

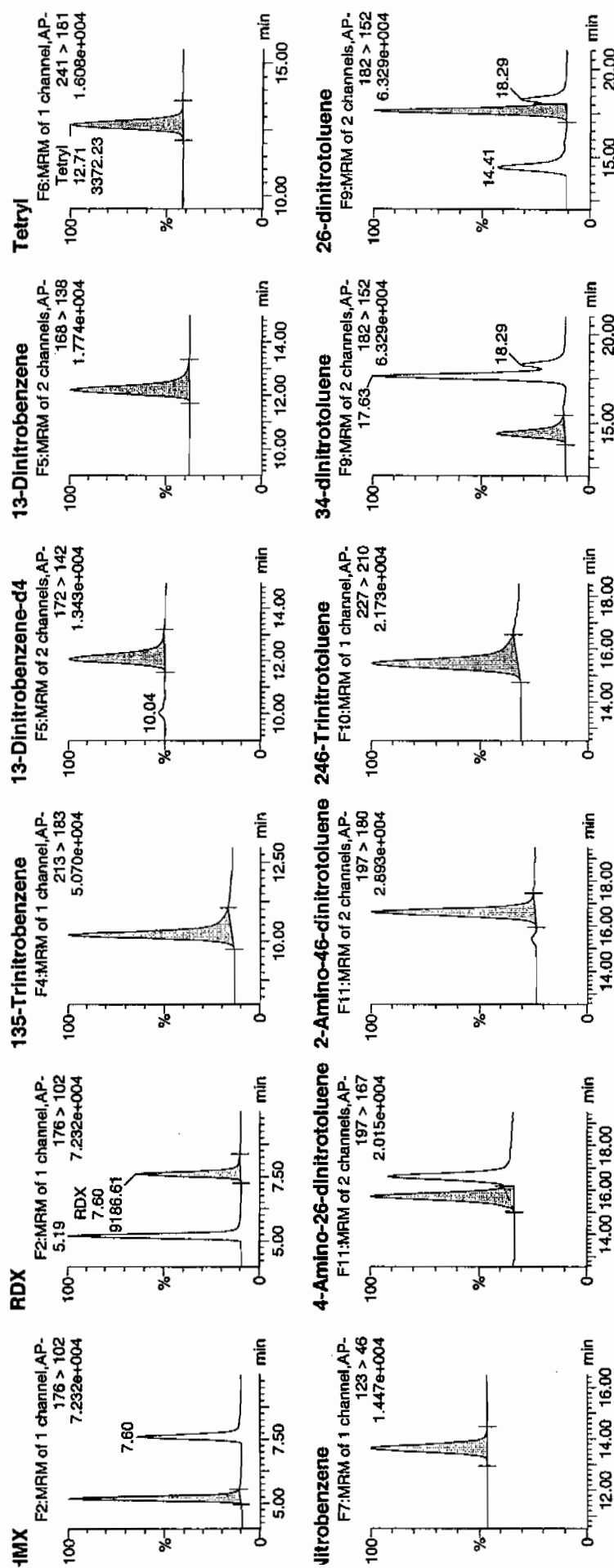
Date: 14-Feb-2010

Time: 00:08:09

D: WXX100211-07CCV

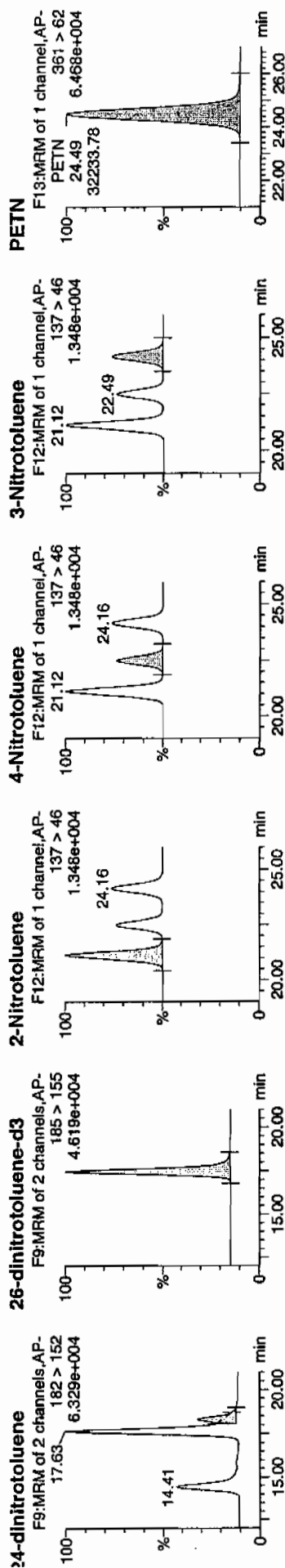
/ial: 1:1,B

WXX
 2/14/10



HW 02/15/10

Dataset: C:\MASS\YNX\New_Exp\PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010



Name	Trace	RFI	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	mg/ml	% Rec	PadDev	SN
HMx	176 > 102	5.19	12762.996	2771.827	12762.996	2302.271	bb			662.9432	110.5	10.5	2350.9
RDX	176 > 102	7.60	9186.607	2771.827	9186.607	1657.139	bb			682.4718	113.7	13.7	1430.9
135-Trinitrobenzene	213 > 183	10.19	12610.063	2771.827	12610.063	2274.684	bb			617.6079	102.9	2.9	598.8
13-Dinitrobenzene-d4	172 > 142	12.06	2771.827		2771.827	2771.827	bb			431.1345	86.2	-13.8	111.8
13-Dinitrobenzene	168 > 138	12.20	4251.118	2771.827	4251.118	766.844	bb			637.7635	106.3	6.3	298.8
Tetryl	241 > 181	12.71	3372.231	2771.827	3372.231	608.305	bb			669.5622	111.6	11.6	141.6
Nitrobenzene	123 > 46	13.66	2766.446	2771.827	2766.446	499.028	bb			617.7858	103.0	3.0	220.4
4-Amino-26-dinitrotoluene	197 > 167	15.70	5511.597	15782.476	5511.597	174.611	MM	14-Feb-10	11:31:49	607.8829	101.3	1.3	458.9
2-Amino-46-dinitrotoluene	197 > 180	16.59	8557.025	15782.476	8557.025	271.093	bb			684.5249	114.1	14.1	273.9
246-Trinitrotoluene	227 > 210	15.44	6909.920	15782.476	6909.920	218.911	bb			678.4509	113.1	13.1	600.2
34-dinitrotoluene	182 > 152	14.41	9726.532	15782.476	9726.532	308.143	bb			342.3846	114.1	14.1	372.4
26-dinitrotoluene	182 > 152	17.63	21272.771	15782.476	21272.771	673.936	MM	14-Feb-10	11:35:25	627.4500	104.6	4.6	1040.0
24-dinitrotoluene	182 > 152	18.29	5114.937	15782.476	5114.937	162.045	MM	14-Feb-10	11:39:34	663.9779	110.7	10.7	230.5
26-dinitrotoluene-d3	185 > 155	17.45	15782.476		15782.476	15782.476	bb			427.4851	85.5	-14.5	624.6
2-Nitrotoluene	137 > 46	21.12	2849.104	15782.476	2849.104	90.262	bb			582.1520	97.0	-3.0	816.5
4-Nitrotoluene	137 > 46	22.49	1396.807	15782.476	1396.807	44.252	bb			582.2407	97.0	-3.0	384.2
3-Nitrotoluene	137 > 46	24.16	1618.424	15782.476	1618.424	51.273	bb			550.3072	91.7	-8.3	421.6
PETN	361 > 62	24.49	32233.779	15782.476	32233.779	1021.189	bb			758.7142	126.5	26.5	7820.7

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	✓

MTF
2/14/10

Total 1718.1

Average 107.4

HTM 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): 10-1392

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
o-Nitrotoluene	40	37.112	93	
p-Nitrotoluene	40	46.081	115	
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	

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
 iEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010

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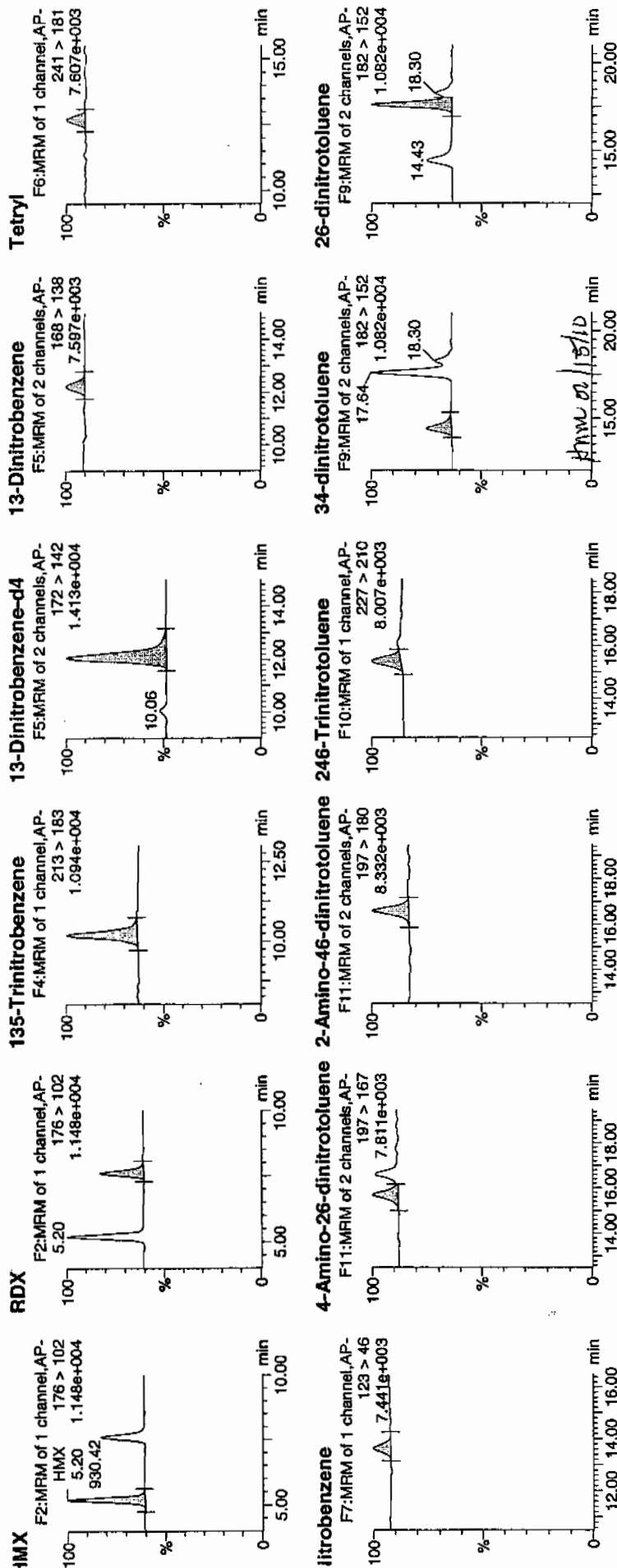
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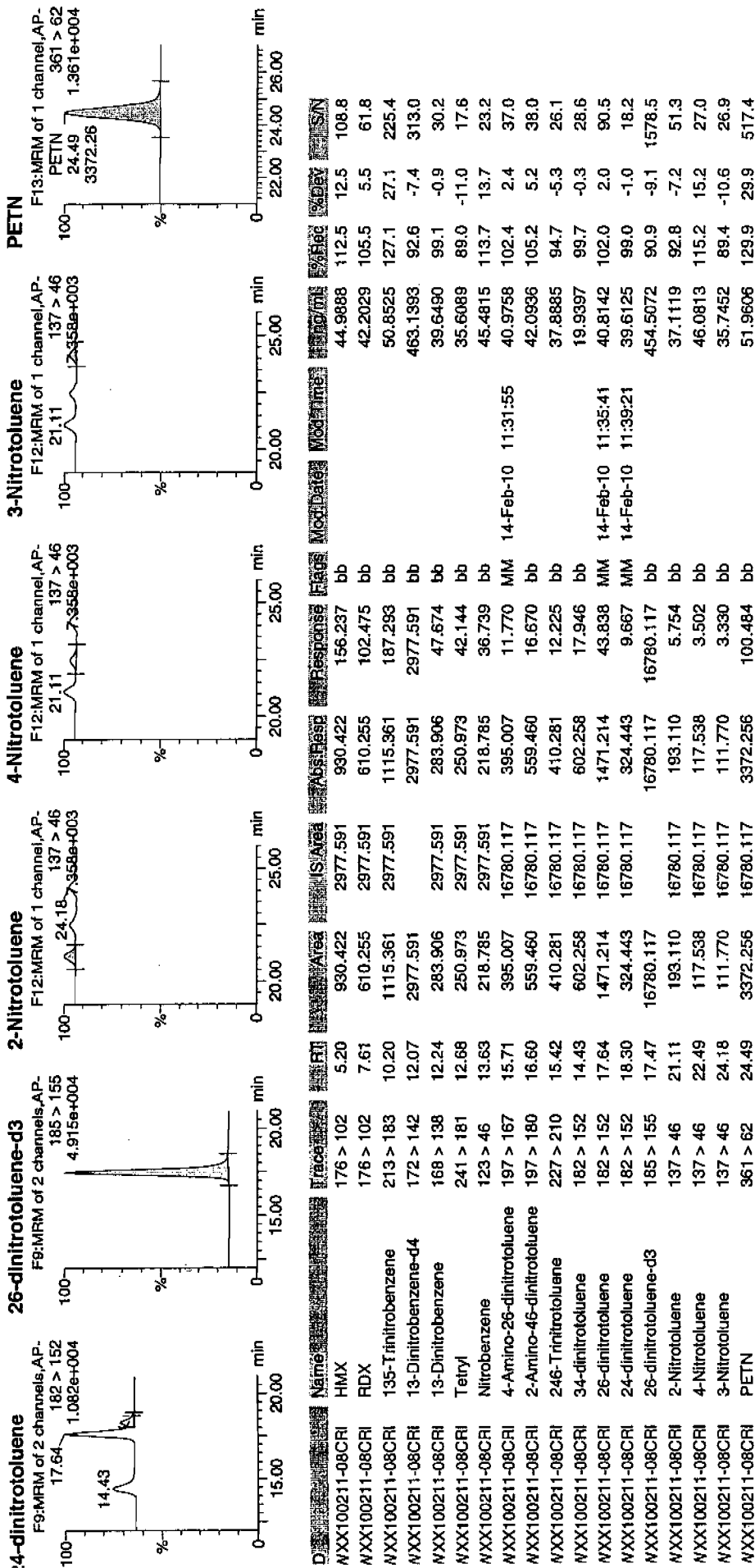
D: WXX100211-08CRI

Ratio: 1:1,C

MRP
 2/14/10



Dataset: C:\MASSLYNX\New_Exp_PRO\020810expA5.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

*WXX
2/14/10*

Total 1677.2

WXX 02/15/10

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): 10-1392

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
2,4,6-Trinitrotoluene	600	736.053	123	*
2,4-Dinitrotoluene	600	655.415	109	
2,6-Dinitrotoluene	600	630.207	105	
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	

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

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208272a

Date: 14-Feb-2010

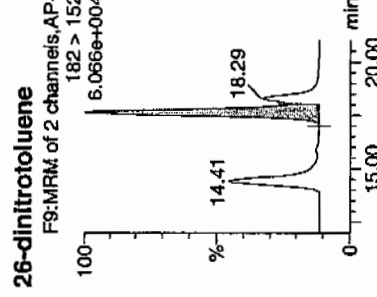
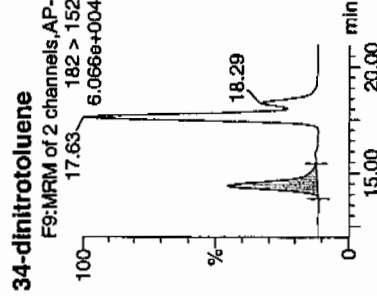
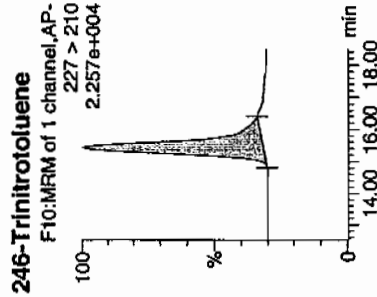
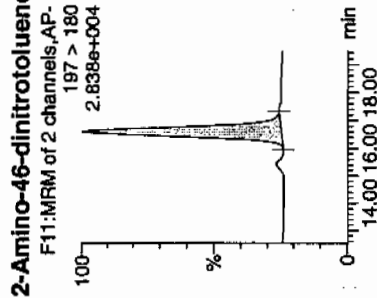
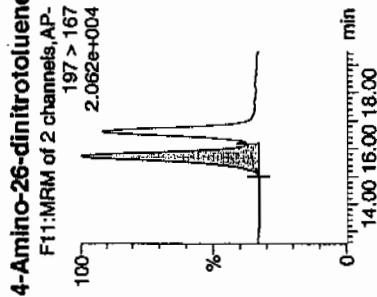
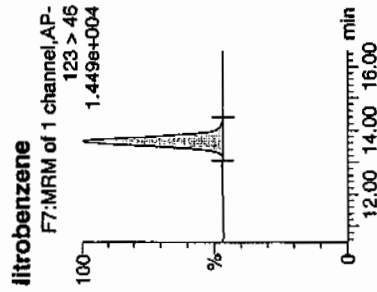
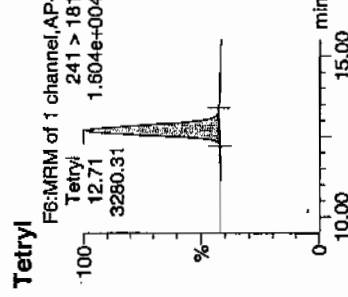
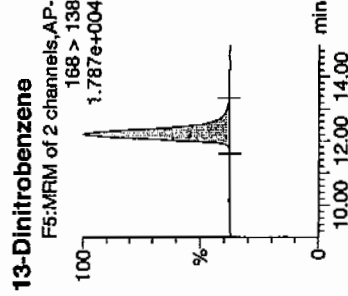
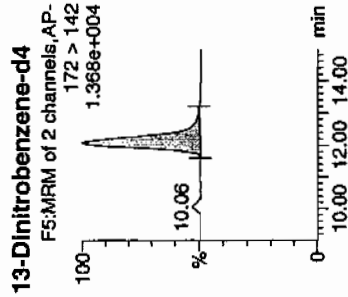
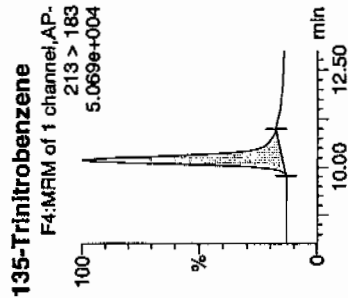
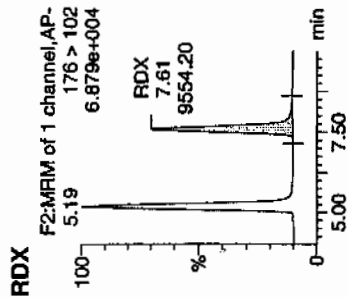
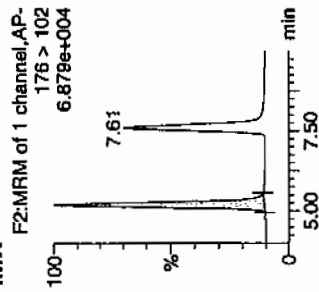
Time: 04:04:28

D: WXX100211-07CCV

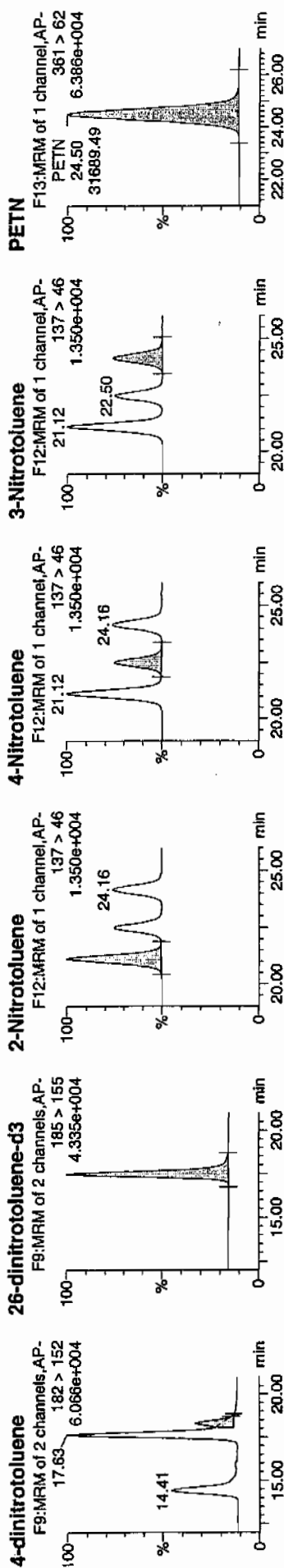
/ial: 1:1,B

WAT
1/14/10

IMX



MMW 07-15/10



Chemical Name	Trace	RT	Area	IS/Agc	Abs/Resp	Response	Flags	Mod Date	Mod Time	Intg/M	%Rec	Abv	SN
VXX100211-07CCV HMX	176 > 102	5.19	12148.152	2847.410	12148.152	2133.193	bb			614.2568	102.4	2.4	1718.5
VXX100211-07CCV RDX	176 > 102	7.61	9554.203	2847.410	9554.203	1677.701	bb			690.9397	115.2	15.2	1139.6
VXX100211-07CCV 135-Trinitrobenzene	213 > 183	10.19	12305.545	2847.410	12305.545	2160.831	bb			586.6952	97.8	-2.2	707.7
VXX100211-07CCV 13-Dinitrobenzene-d4	172 > 142	12.06	2847.410		2847.410	2847.410	bb			442.8908	88.6	-11.4	314.9
VXX100211-07CCV 13-Dinitrobenzene	168 > 138	12.20	4307.789	2847.410	4307.789	756.440	bb			629.1107	104.9	4.9	347.8
VXX100211-07CCV Tetrl	241 > 181	12.71	3280.312	2847.410	3280.312	576.017	bb			630.8790	105.1	5.1	275.1
VXX100211-07CCV Nitrobenzene	123 > 46	13.66	2696.283	2847.410	2696.283	473.482	bb			586.1345	97.7	-2.3	267.0
VXX100211-07CCV 4-Amino-26-dinitrotoluene	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-46-dinitrotoluene	197 > 180	16.59	8298.254	14913.694	8298.254	278.209	bb			702.4947	117.1	17.1	507.1
VXX100211-07CCV 246-Trinitrotoluene	227 > 210	15.44	7083.925	14913.694	7083.925	237.497	bb			796.0533	122.7	22.7	472.6
VXX100211-07CCV 34-dinitrotoluene	182 > 152	14.41	9878.756	14913.694	9878.756	331.197	bb			368.0005	122.7	22.7	308.6
VXX100211-07CCV 26-dinitrotoluene	182 > 152	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	182 > 152	18.29	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	185 > 155	17.48	14913.694		14913.694	14913.694	bb			403.9532	80.8	-19.2	1623.5
VXX100211-07CCV 2-Nitrotoluene	137 > 46	21.12	2866.530	14913.694	2866.530	96.104	bb			619.8327	103.3	3.3	720.9
VXX100211-07CCV 4-Nitrotoluene	137 > 46	22.50	1505.661	14913.694	1505.661	50.479	bb			664.1762	110.7	10.7	364.4
VXX100211-07CCV 3-Nitrotoluene	137 > 46	24.16	1672.574	14913.694	1672.574	56.075	bb			601.8498	100.3	0.3	381.0
VXX100211-07CCV PETN	361 > 62	24.50	31689.494	14913.694	31689.494	1062.429	bb			796.8667	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): 10-1392

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
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	
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	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene, 2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYN\New_Exp.PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010

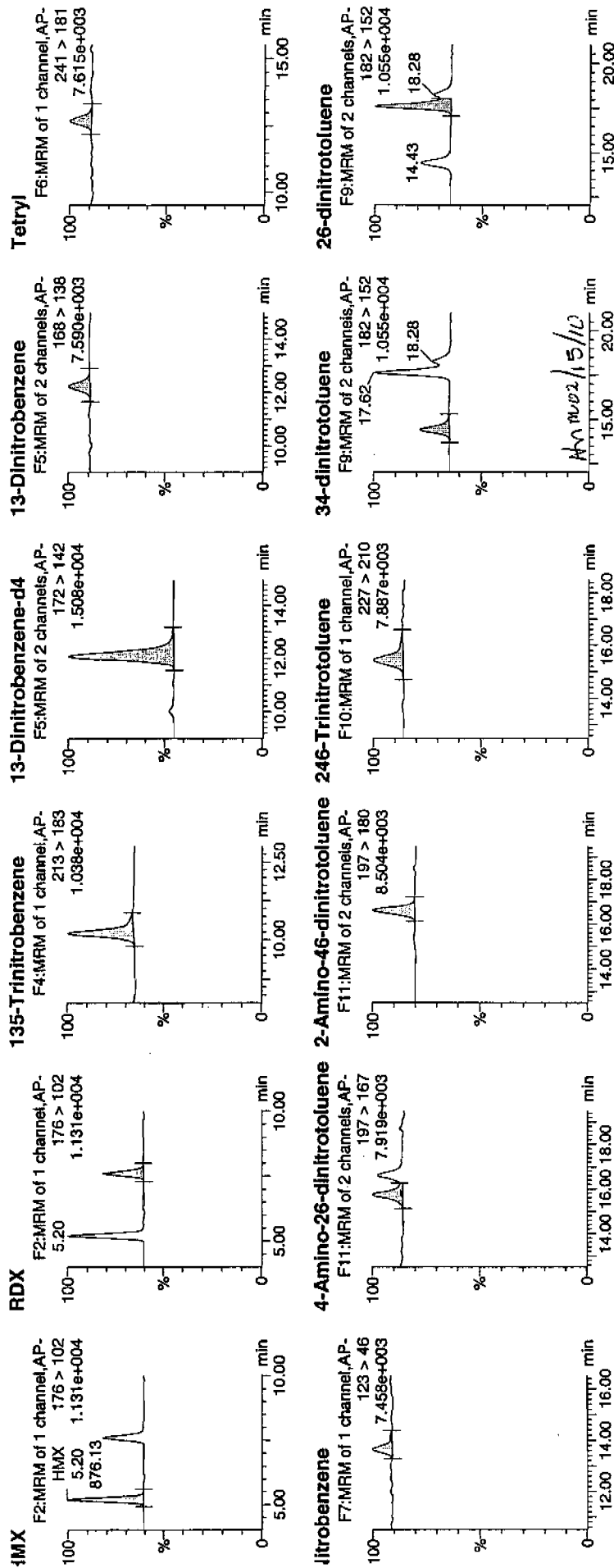
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Date: 14-Feb-2010

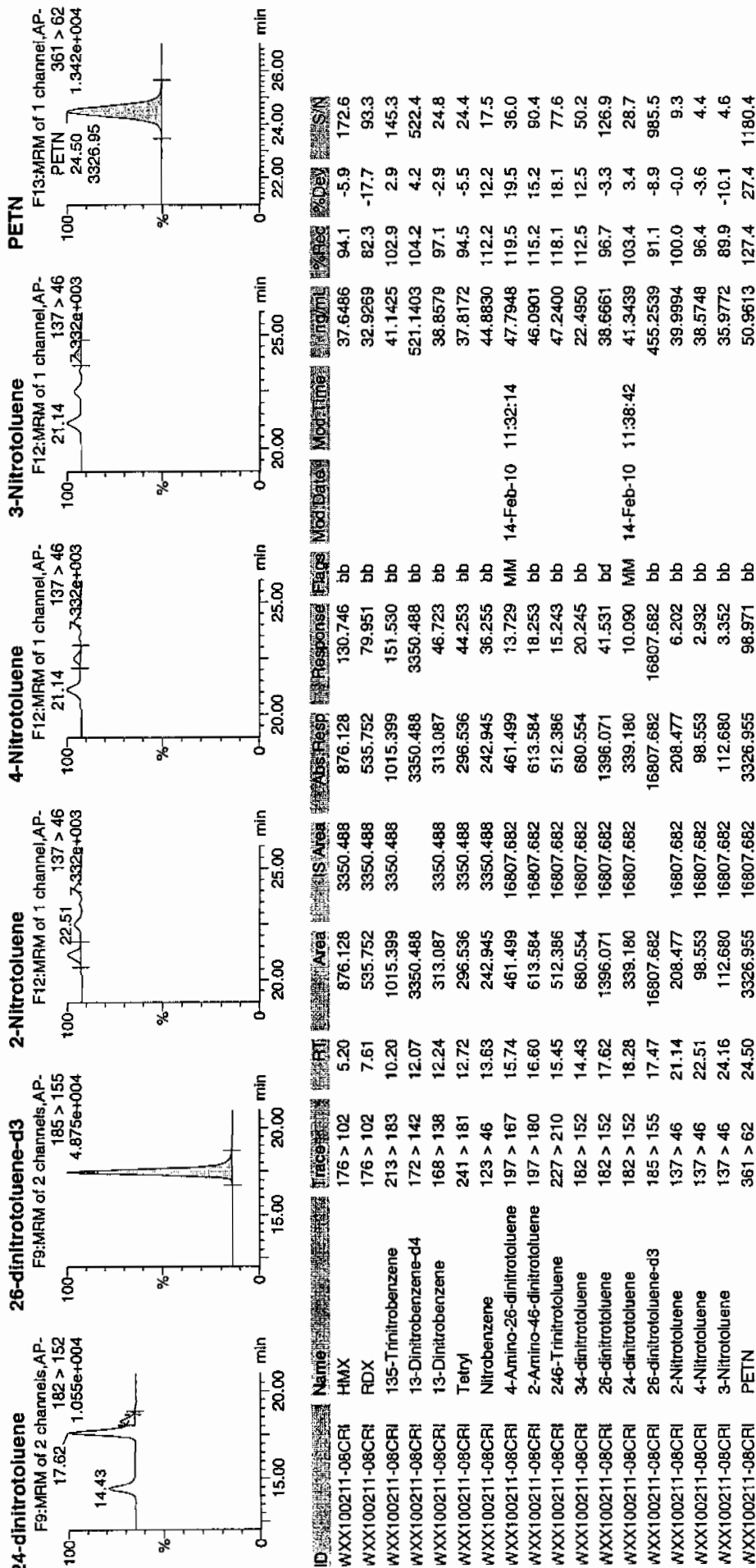
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D: WXX100211-08CRI

trial: 1:1,C



Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA5.qld, Time: Sun Feb 14 11:43:22 2010



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

*WAT
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): 10-1392

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
RDX	600	729.574	122	*
Tetryl	600	719.144	120	
m-Dinitrobenzene	600	648.028	108	
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	*

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\020810expA6.qld, Time: Mon Feb 15 07:43:55 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208285a

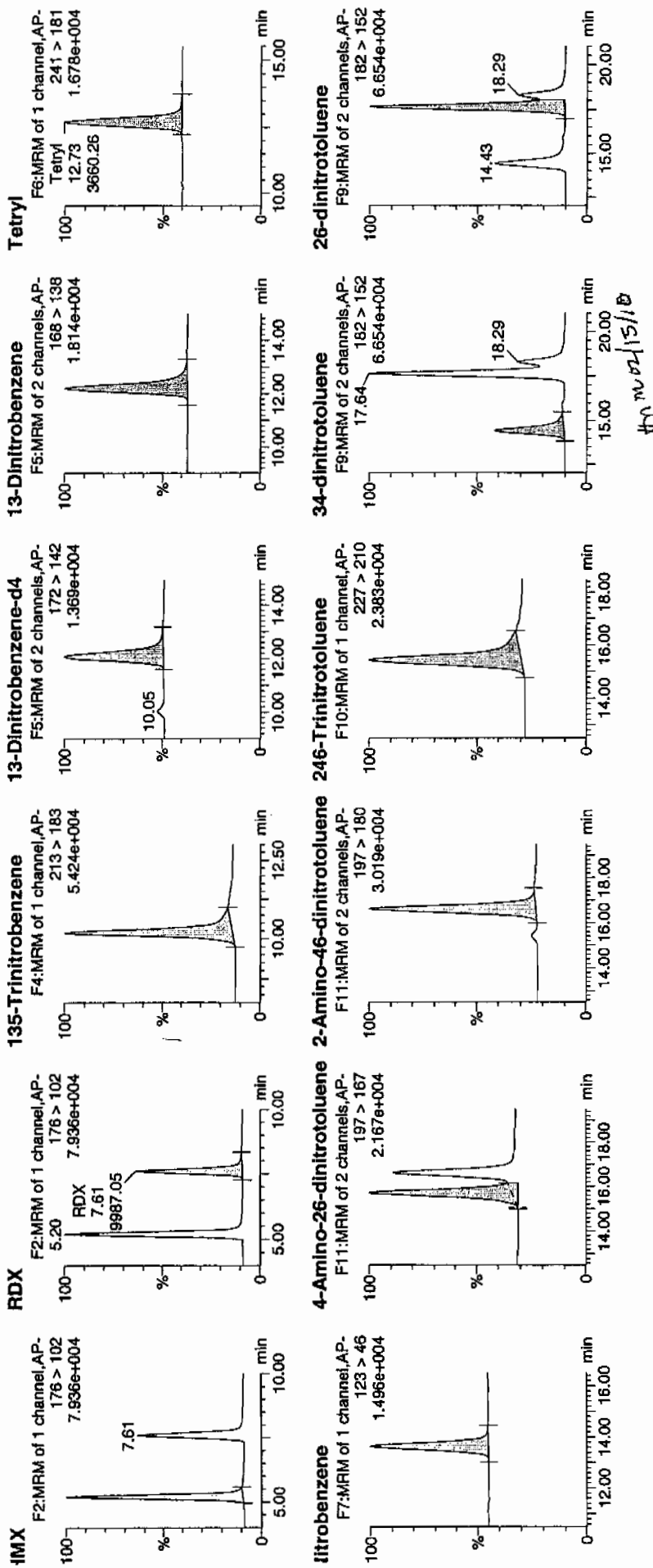
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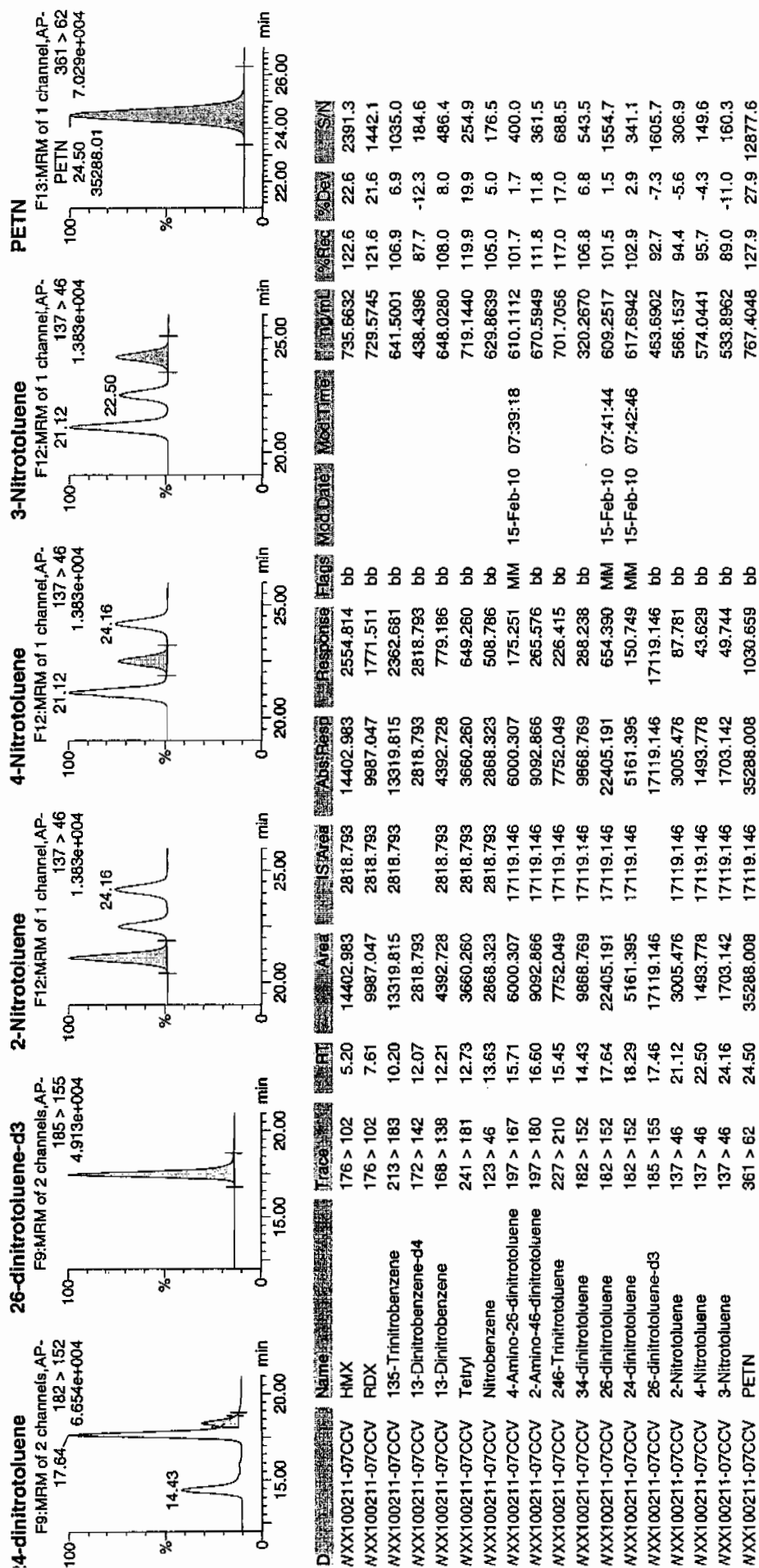
D: WXX100211-07CCV

Ratio: 1:1,B

WXX
2/15/10



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: 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

*WMP
2/15/10*

Total 1732.7

WMP 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): 10-1392

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
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	
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	

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

lame: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208287a

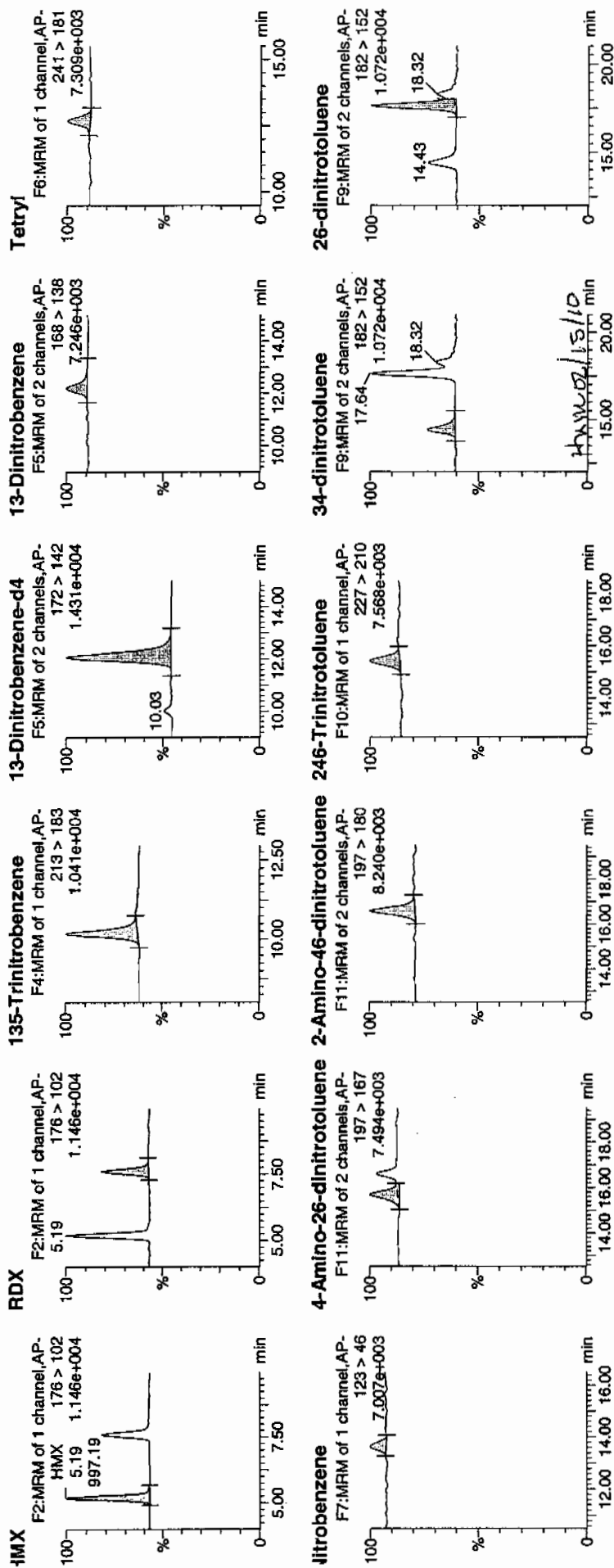
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Time: 11:27:09

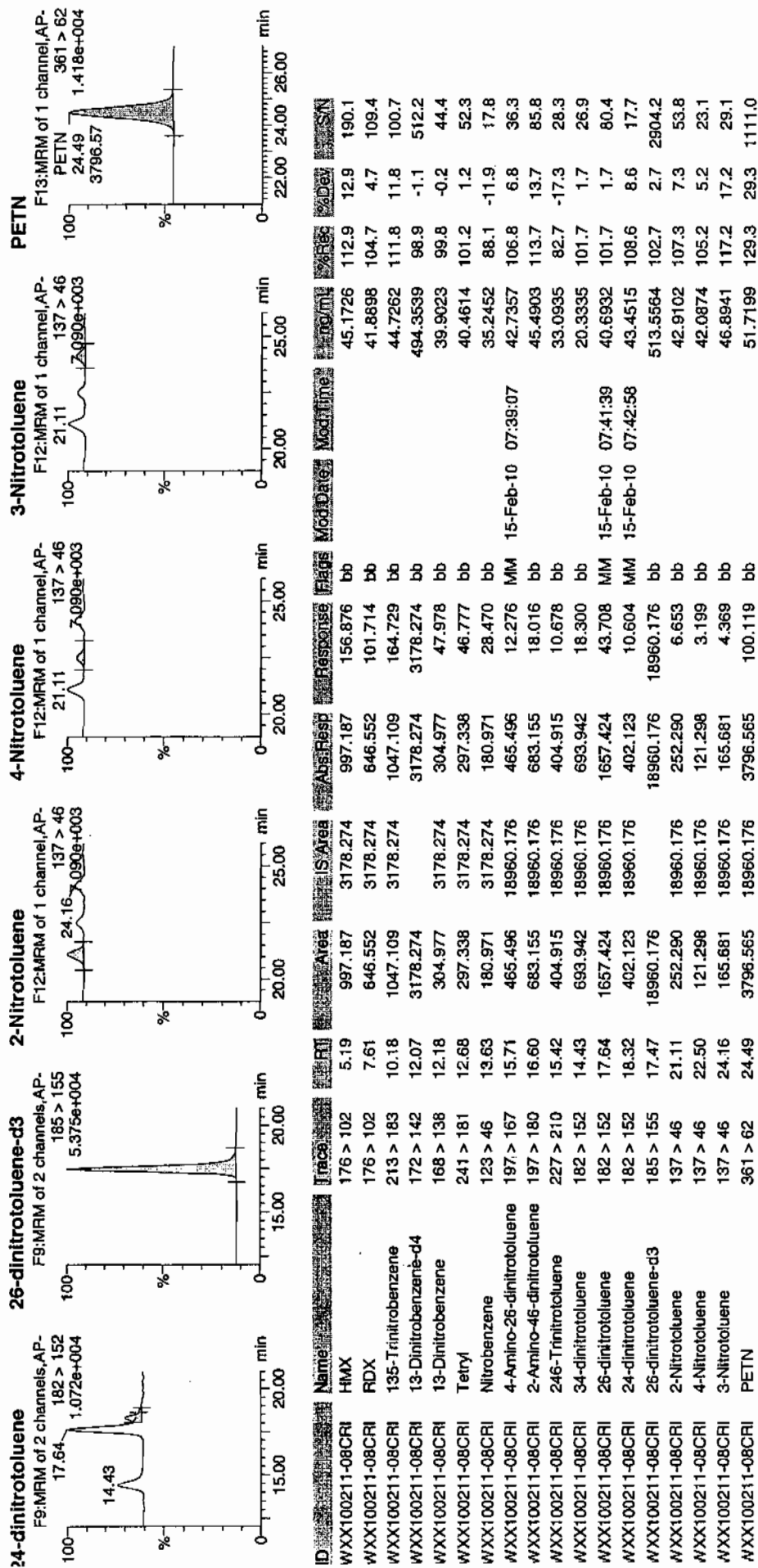
D: WXX100211-08CRI

/lat: 1:1,C

10/17
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 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

MMT 02/15/10

Average 105.8

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): 10-1392

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
 EL 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\EXP0208297a

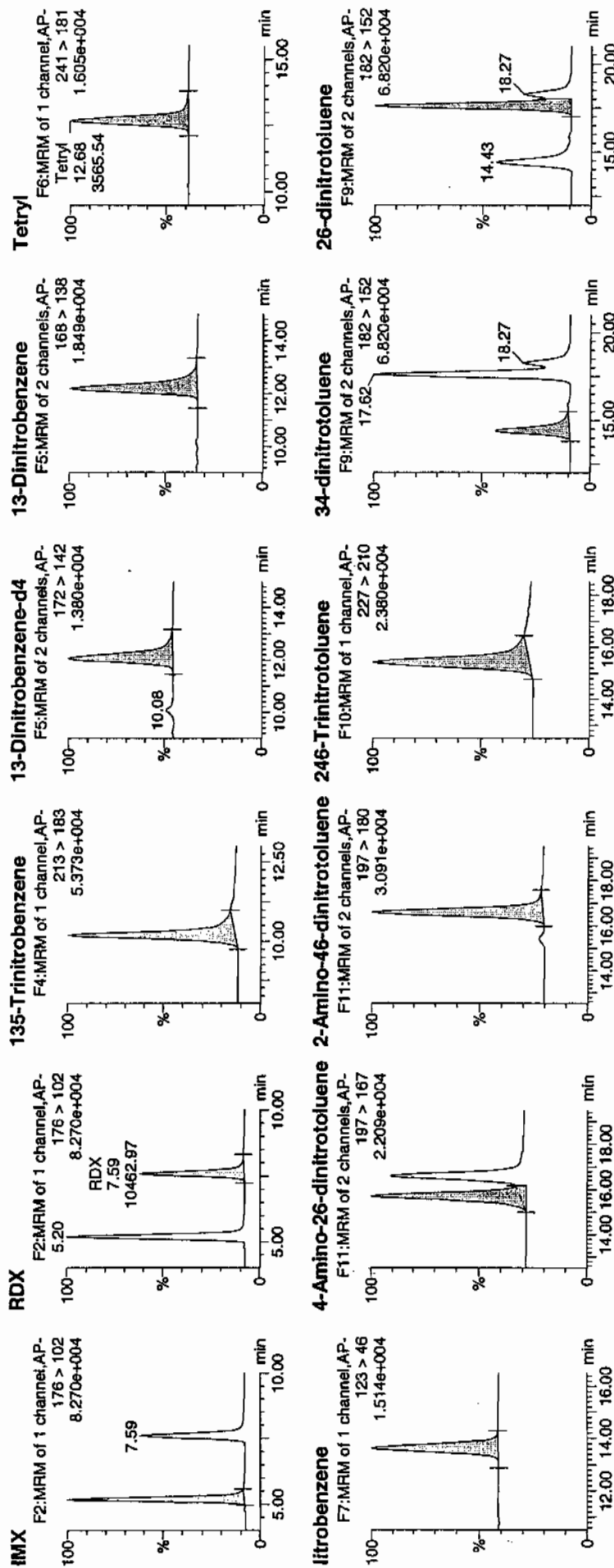
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D: WXX100214-07CCV

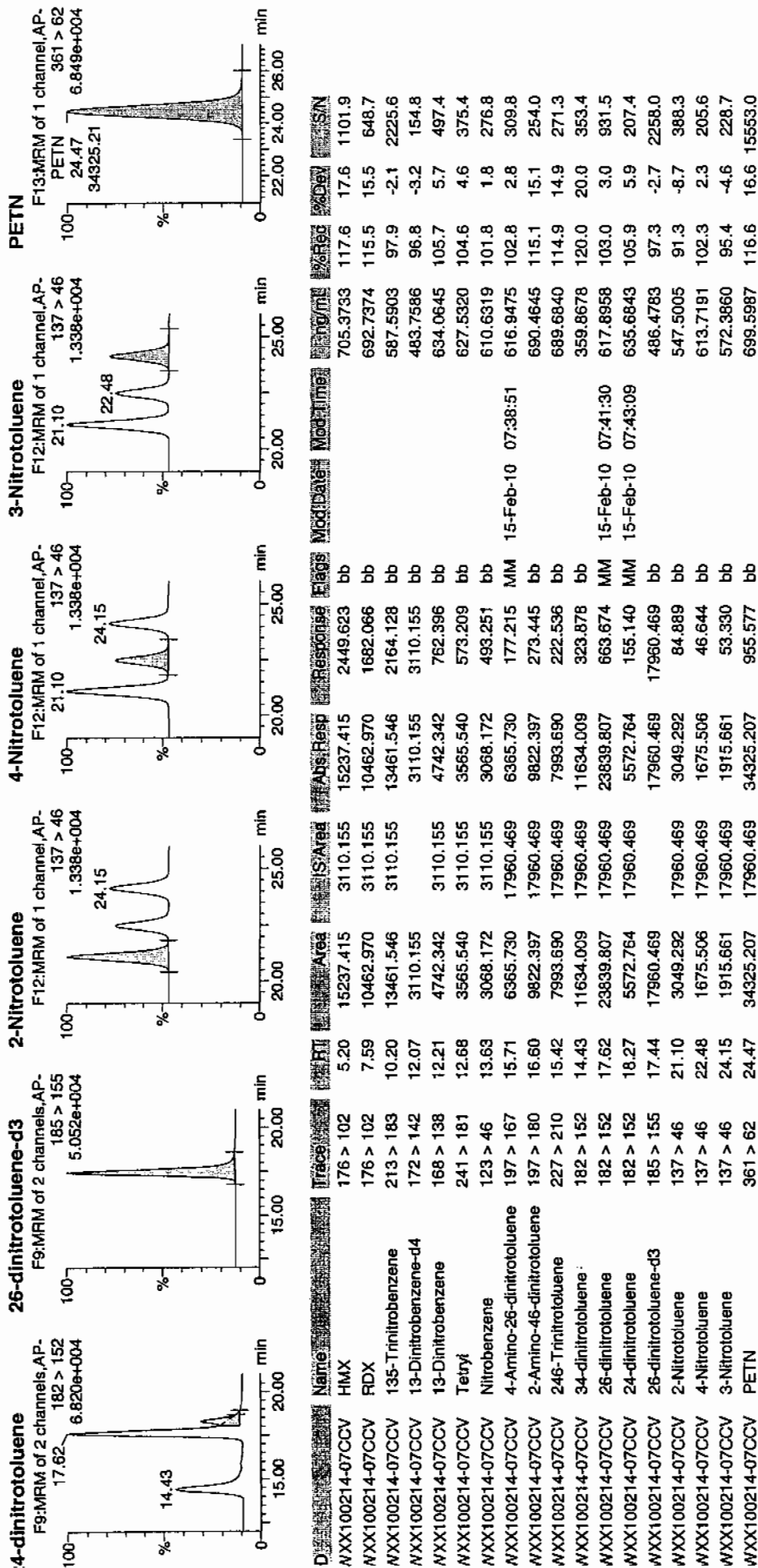
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1/15/10



1/15/10

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

Attn: 2/15/10

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): 10-1392

Lab Code: GEI

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
iEL 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\EXP0208299a

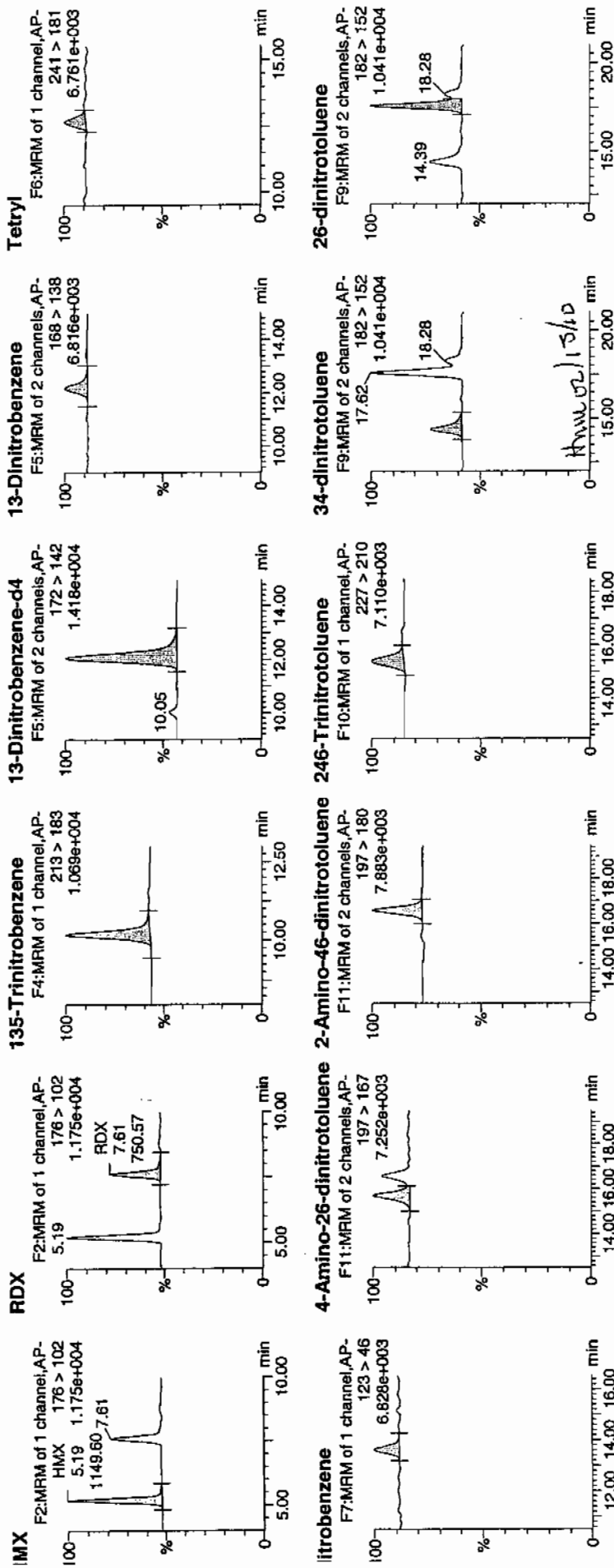
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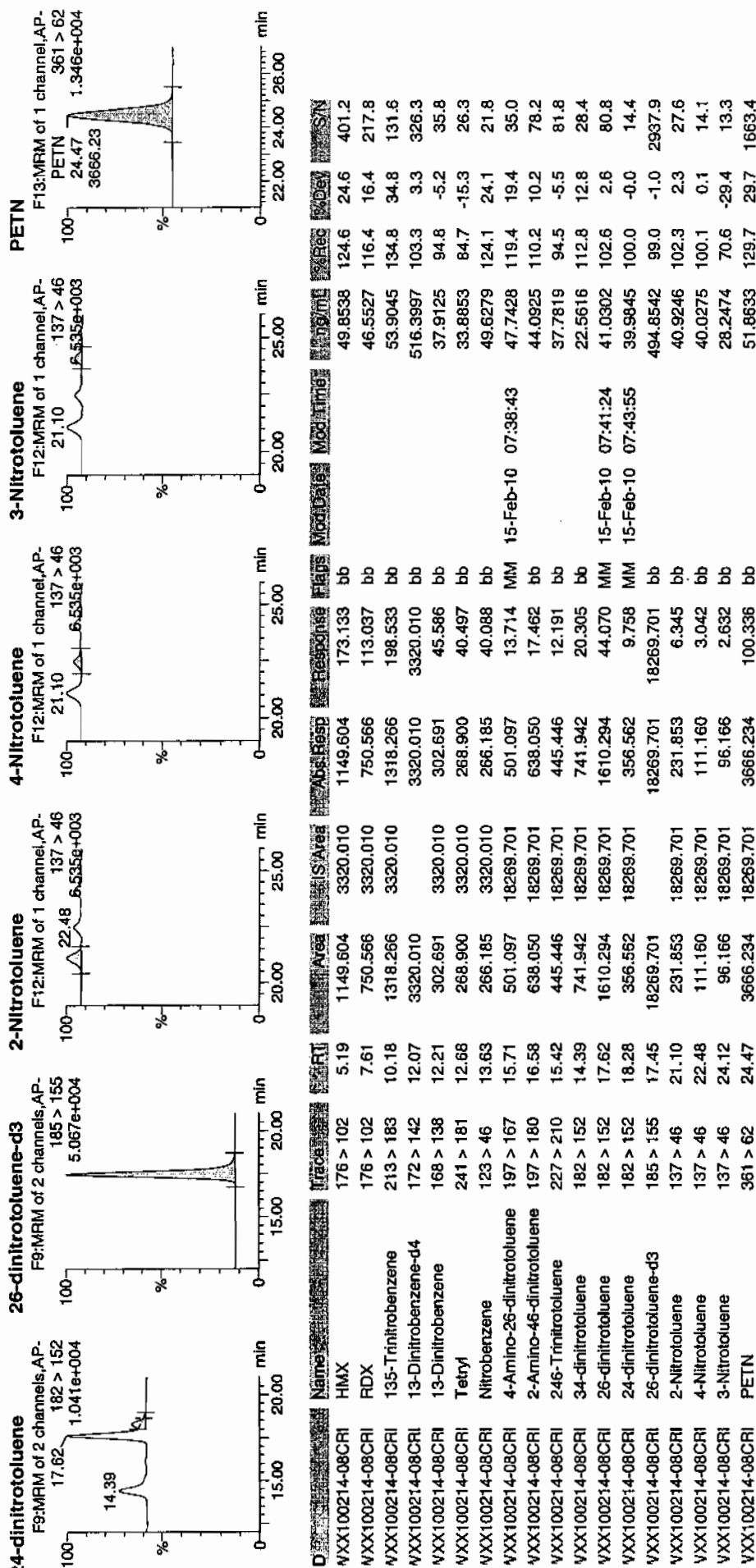
Job: WXX100214-08CRI

Ratio: 1:1,C

MR
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

*WXX
2/15/10*

Total 1721.6

Average 107.6

done on 1/15/10

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): 10-1392

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
2,6-Dinitrotoluene	600	600.78	100	
2,6-Dinitrotoluene-d3	500	500.583	100	
2-Amino-4,6-dinitrotoluene	600	643.871	107	
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	

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\020810expA6.qld, Time: Mon Feb 15 07:43:55 2010

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late: 14-Feb-2010

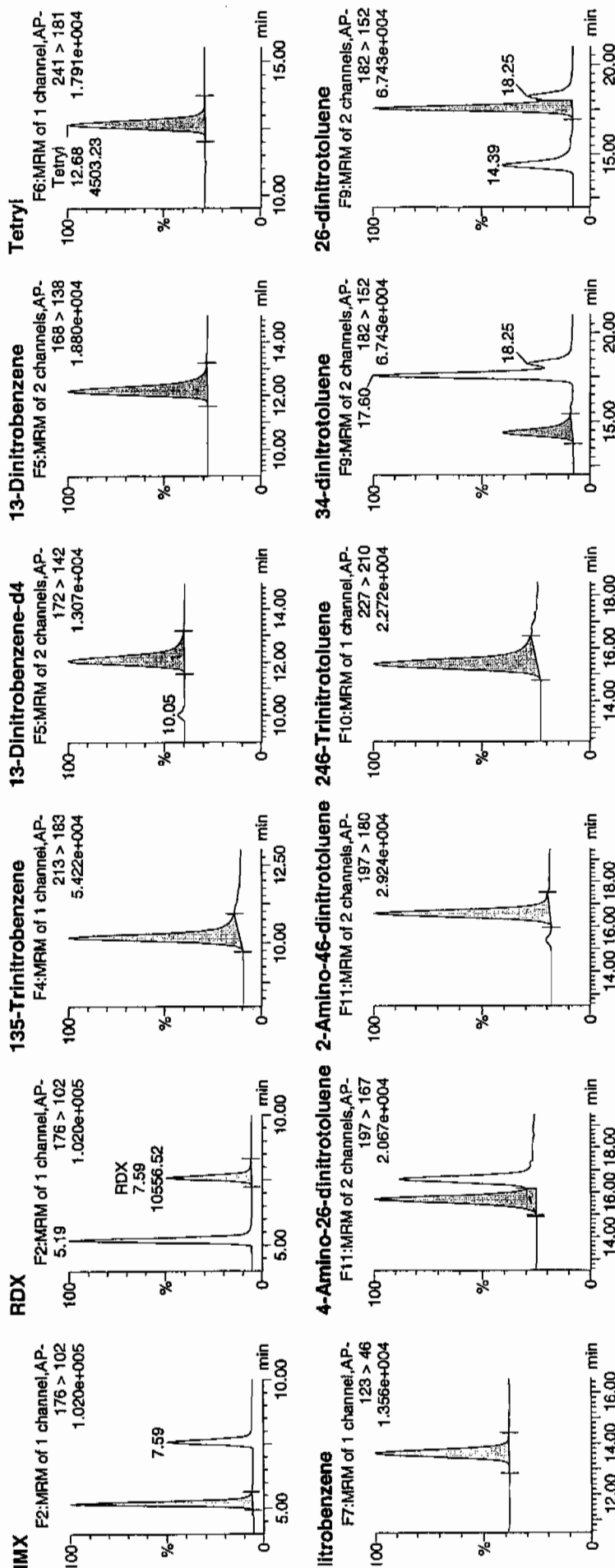
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J: WXX100214-07CCV

tal: 1:1,B

MP
1/15/10

Page 682 of 1574



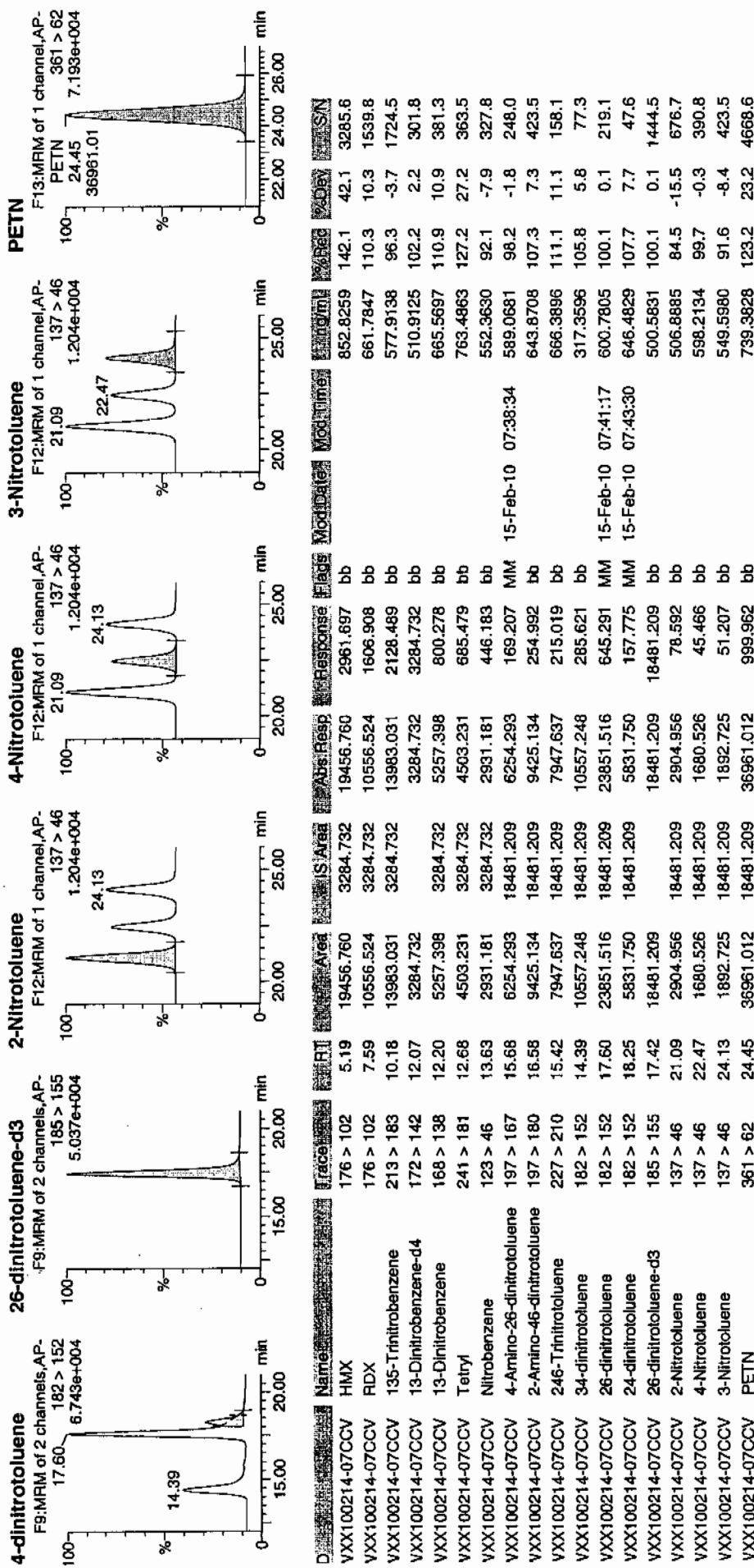
Handwritten note: 1/15/10

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\PROV020810expA6.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

MTT
2/15/10

Total 1708.1

Average 106.8

HM-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): 10-1392

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
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	
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	

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

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208307a

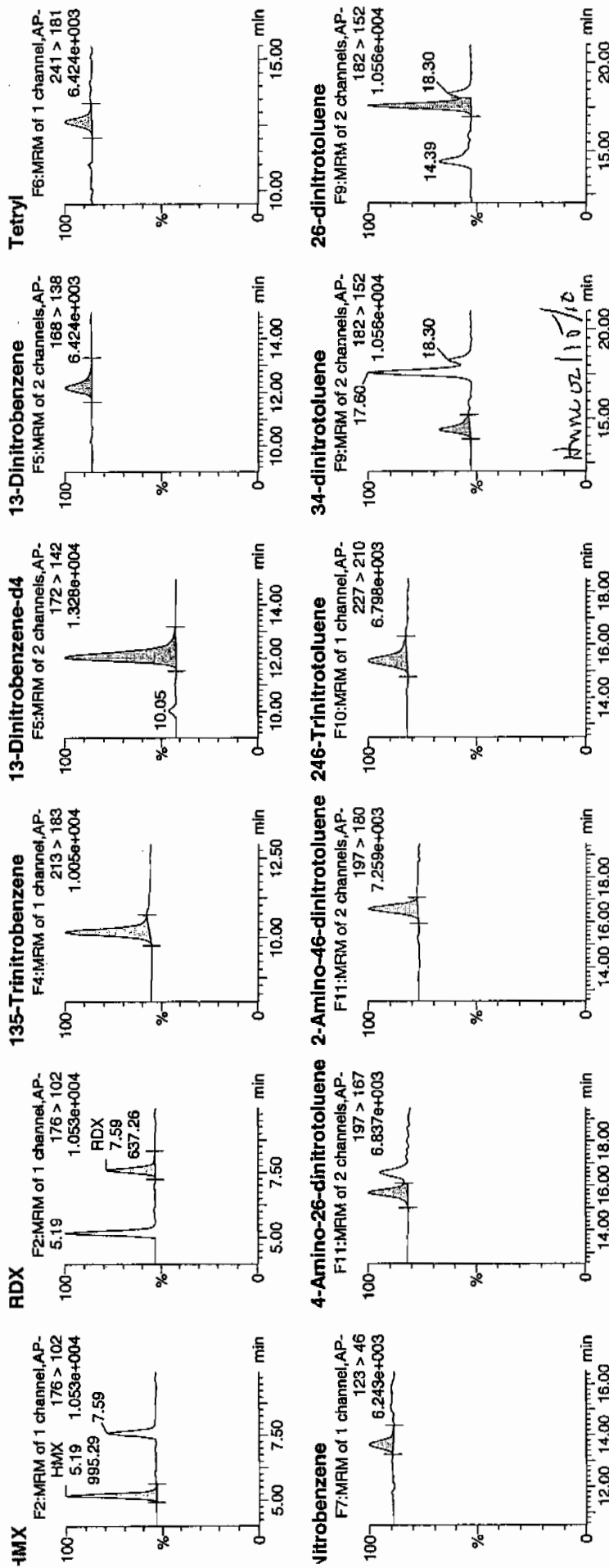
Date: 14-Feb-2010

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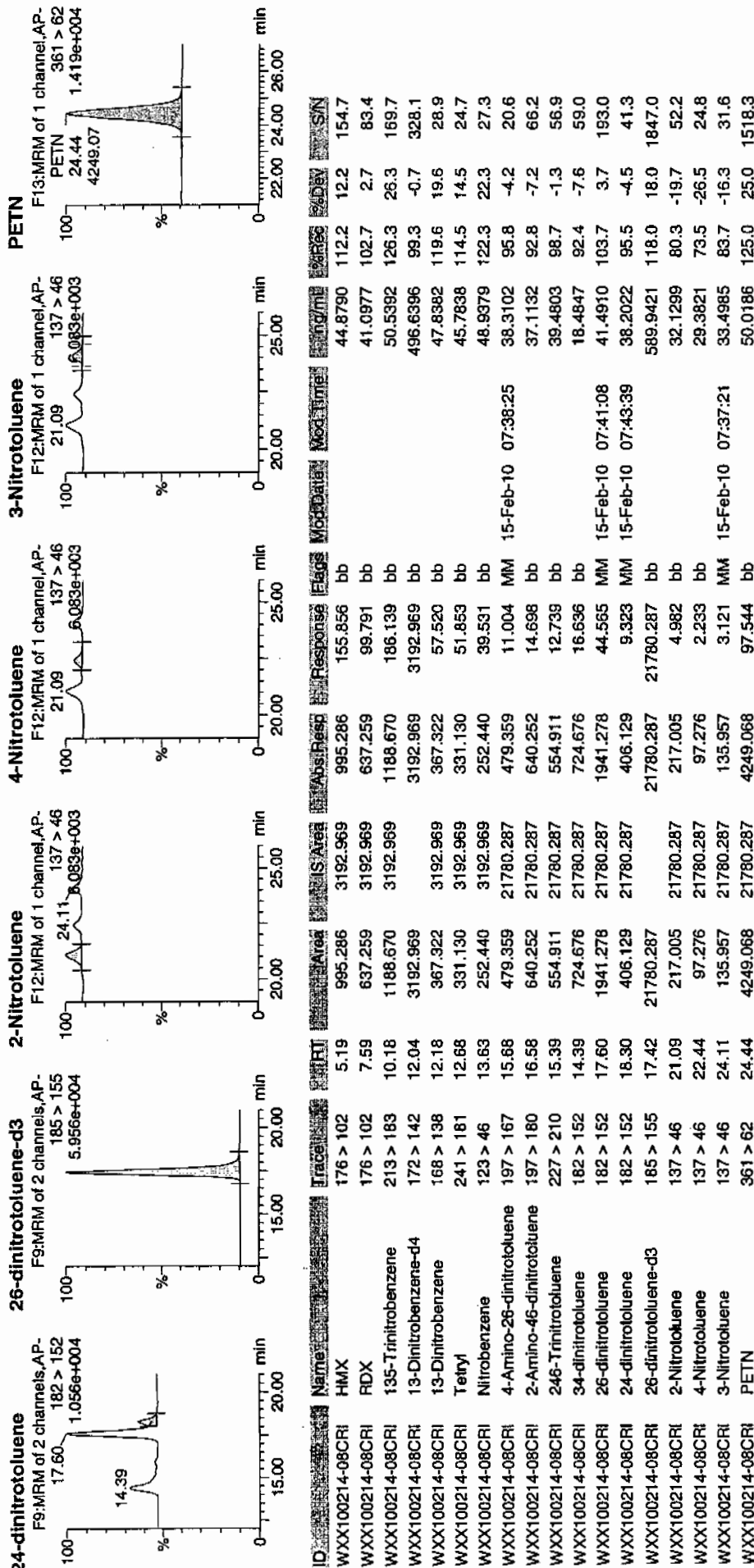
D: WXX100214-08CRI

/ial: 1:1,C

MSA
2/15/10



Dataset: C:\WASSLYN\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 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	✓

*WXX
2/15/10*

Total 1639.0

Average 102.4

WXX 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): 10-1392

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS02140013.wiff

Analysis Date: 14-FEB-10 17:25

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	109	109	
2,6-Diamino-4-nitrotoluene	100	106	106	
3,4-Dinitrotoluene	50	49.4	99	
3,5-Dinitroaniline	100	110	110	
TATB	100	107	107	
tris(o-cresyl) phosphate	100	103	103	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

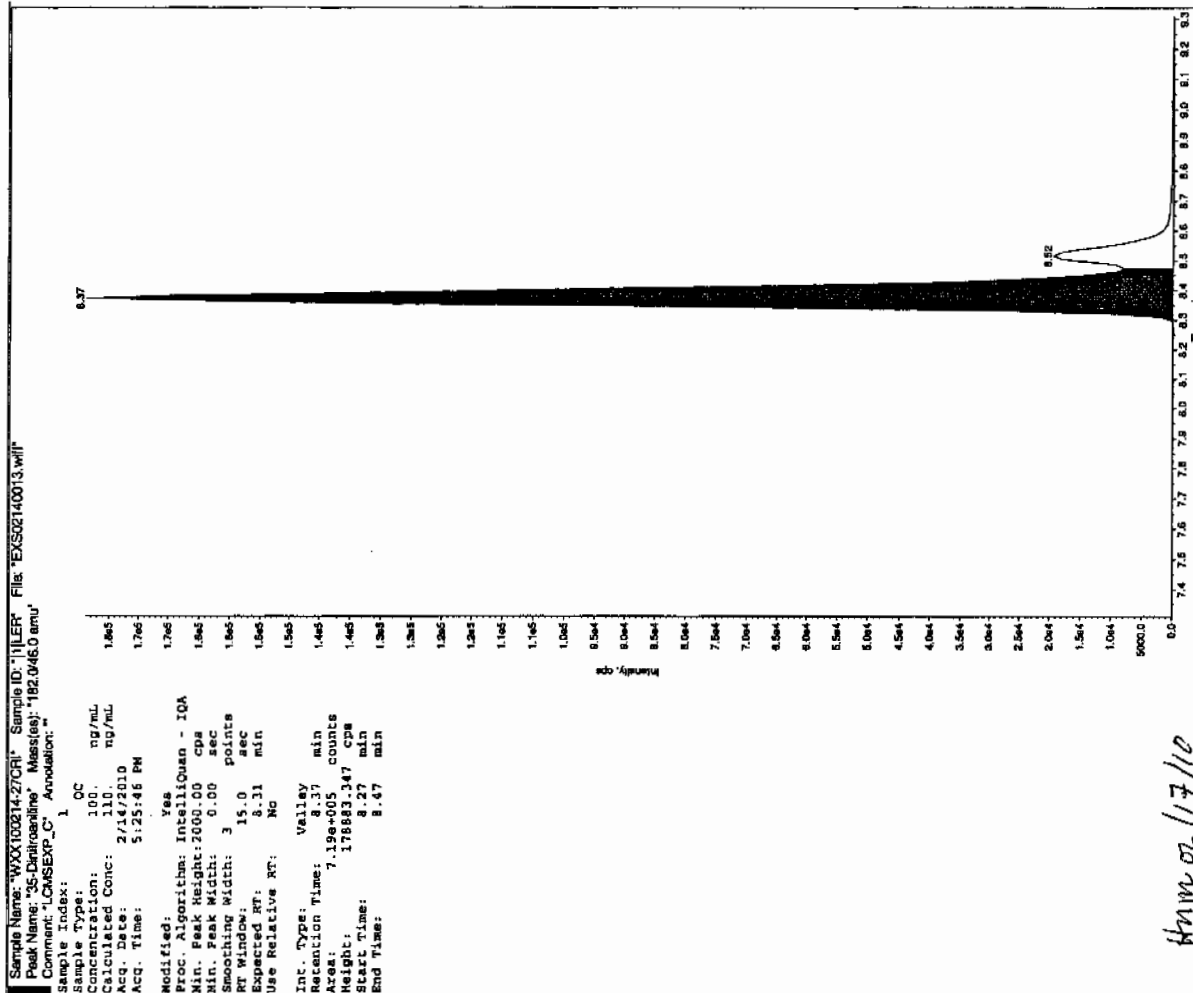
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

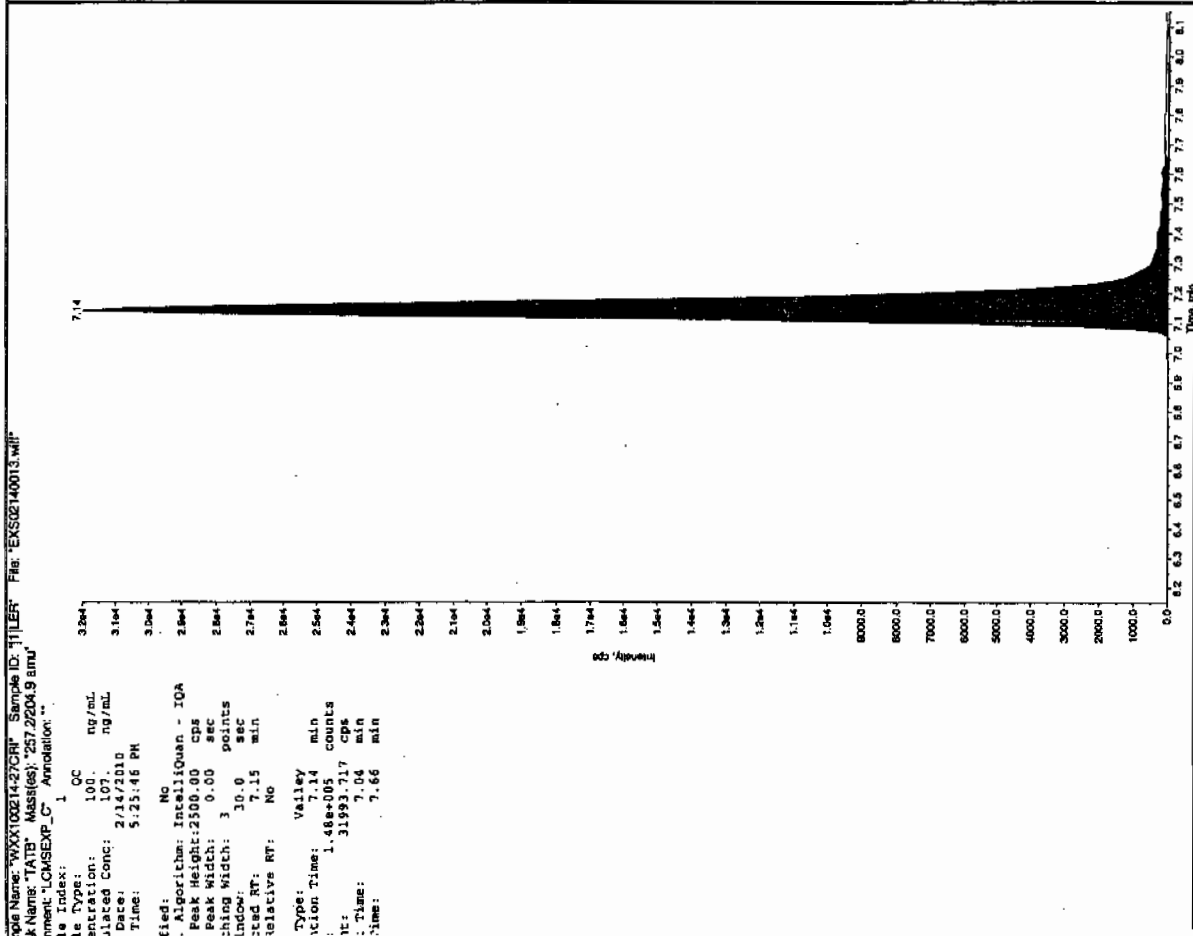
Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

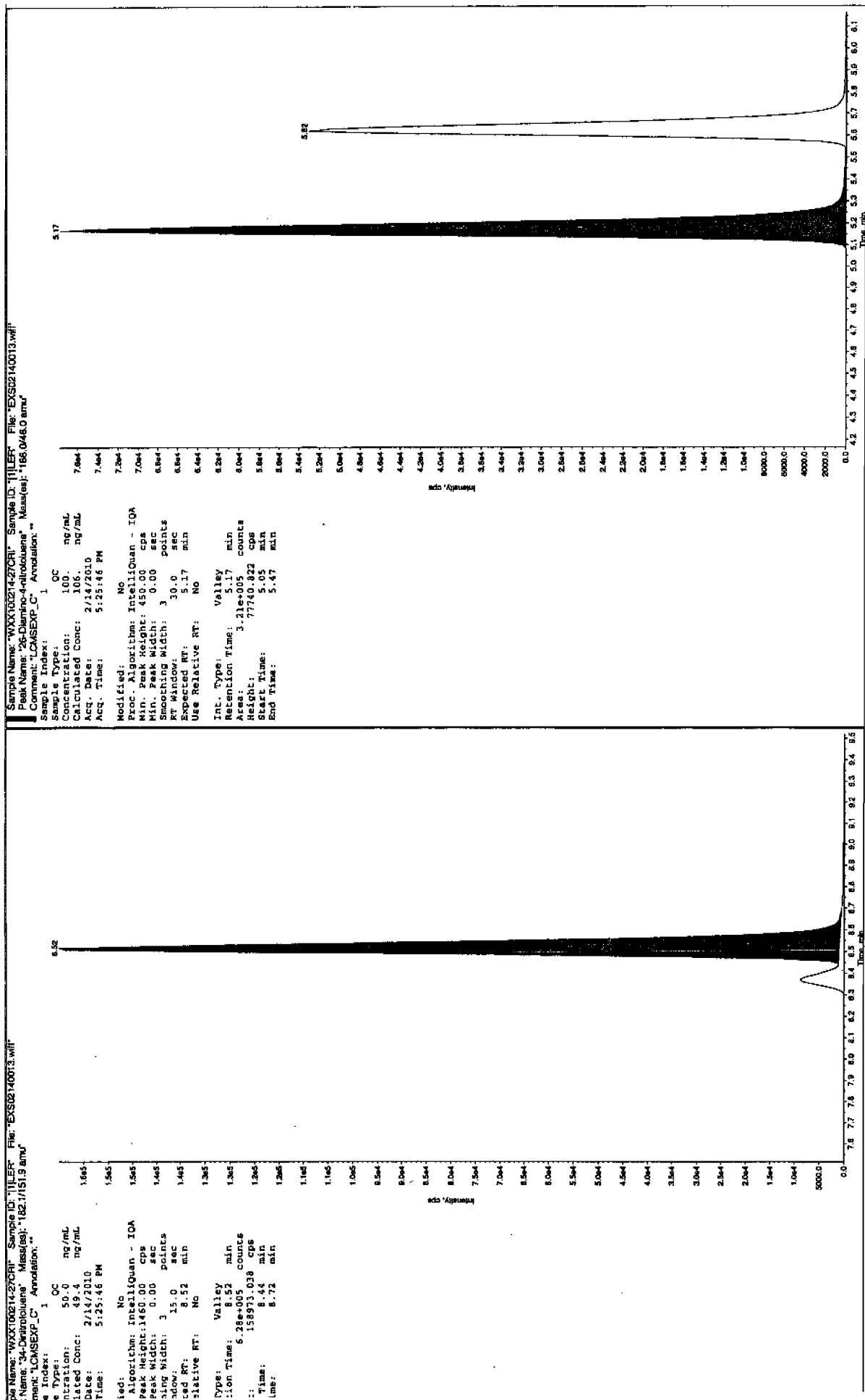
See 2/16/10



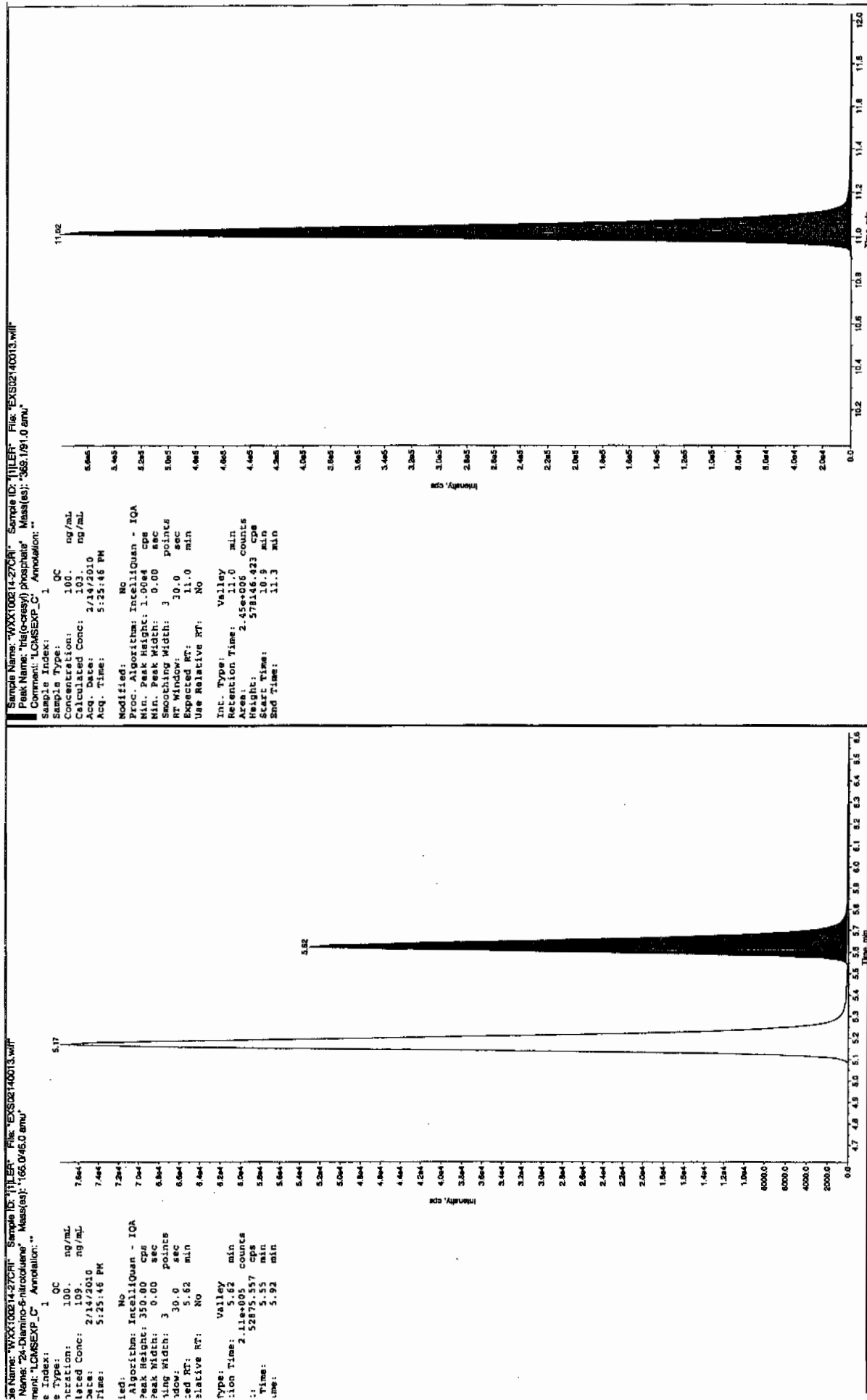
Annex 17/10



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



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



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

7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1392

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS02140017.wiff

Analysis Date: 14-FEB-10 18:28

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	529	106	
2,6-Diamino-4-nitrotoluene	500	502	100	
3,4-Dinitrotoluene	250	236	95	
3,5-Dinitroaniline	500	494	99	
TATB	500	494	99	
tris(o-cresyl) phosphate	500	492	99	

Recovery Limits:

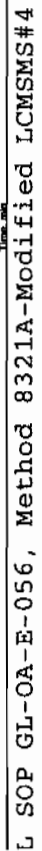
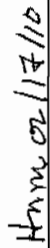
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

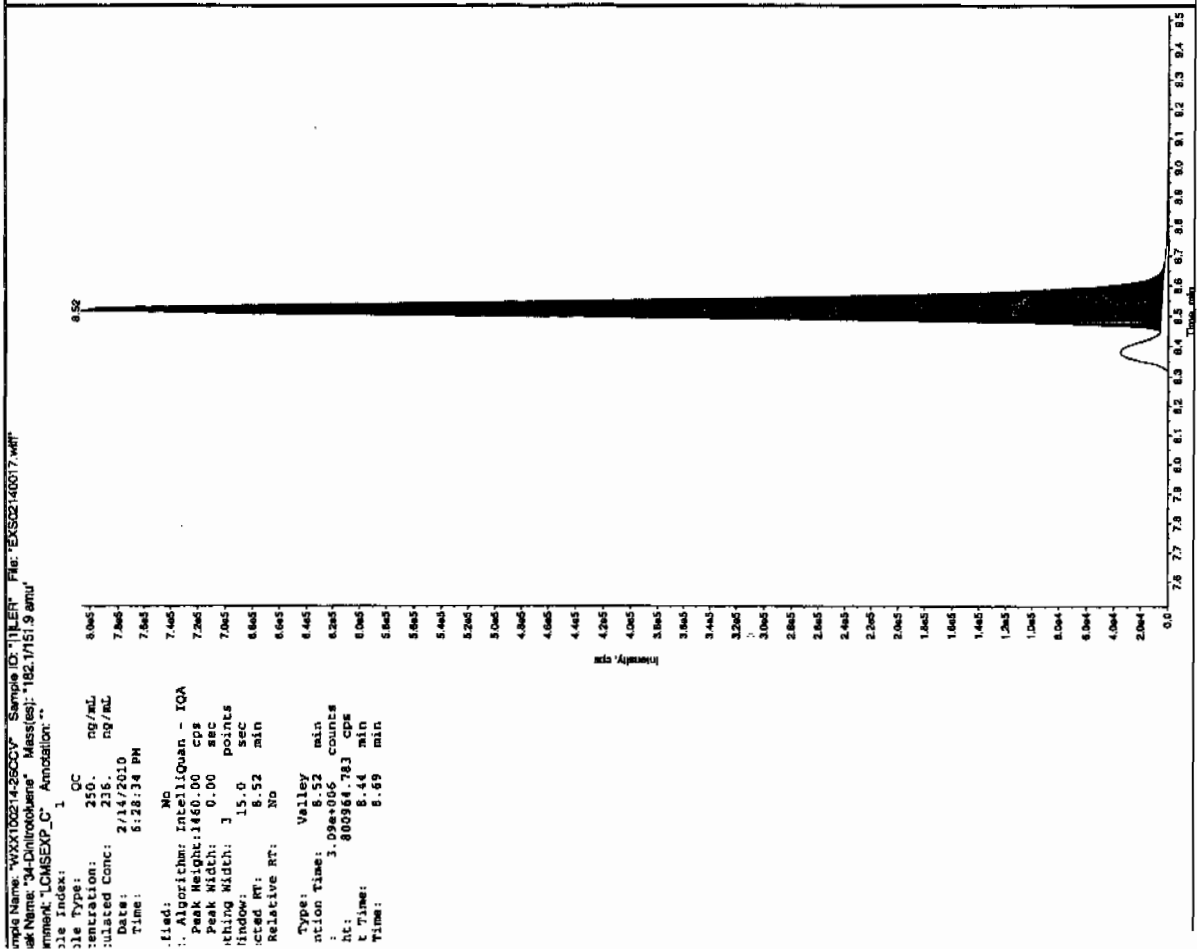
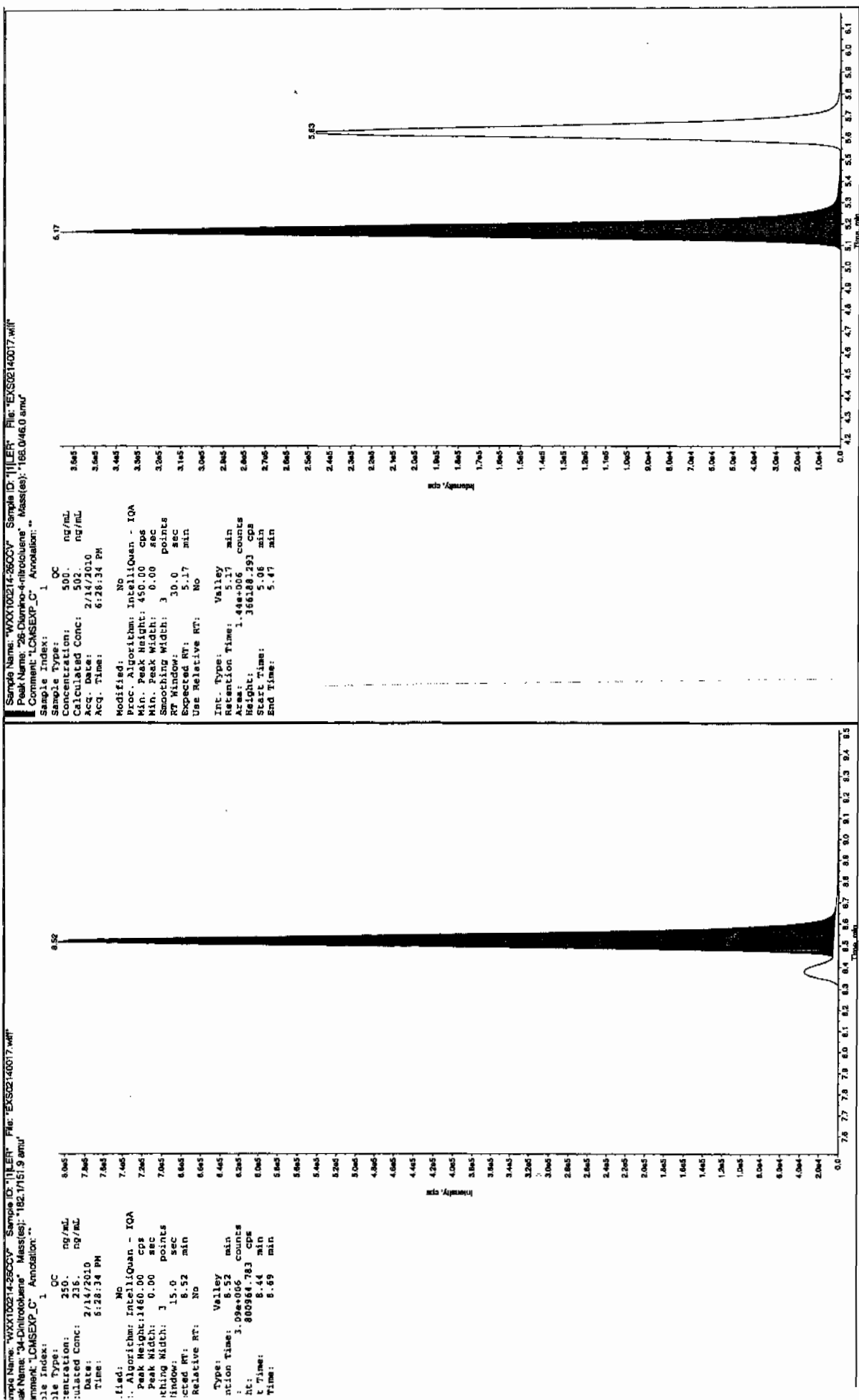
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

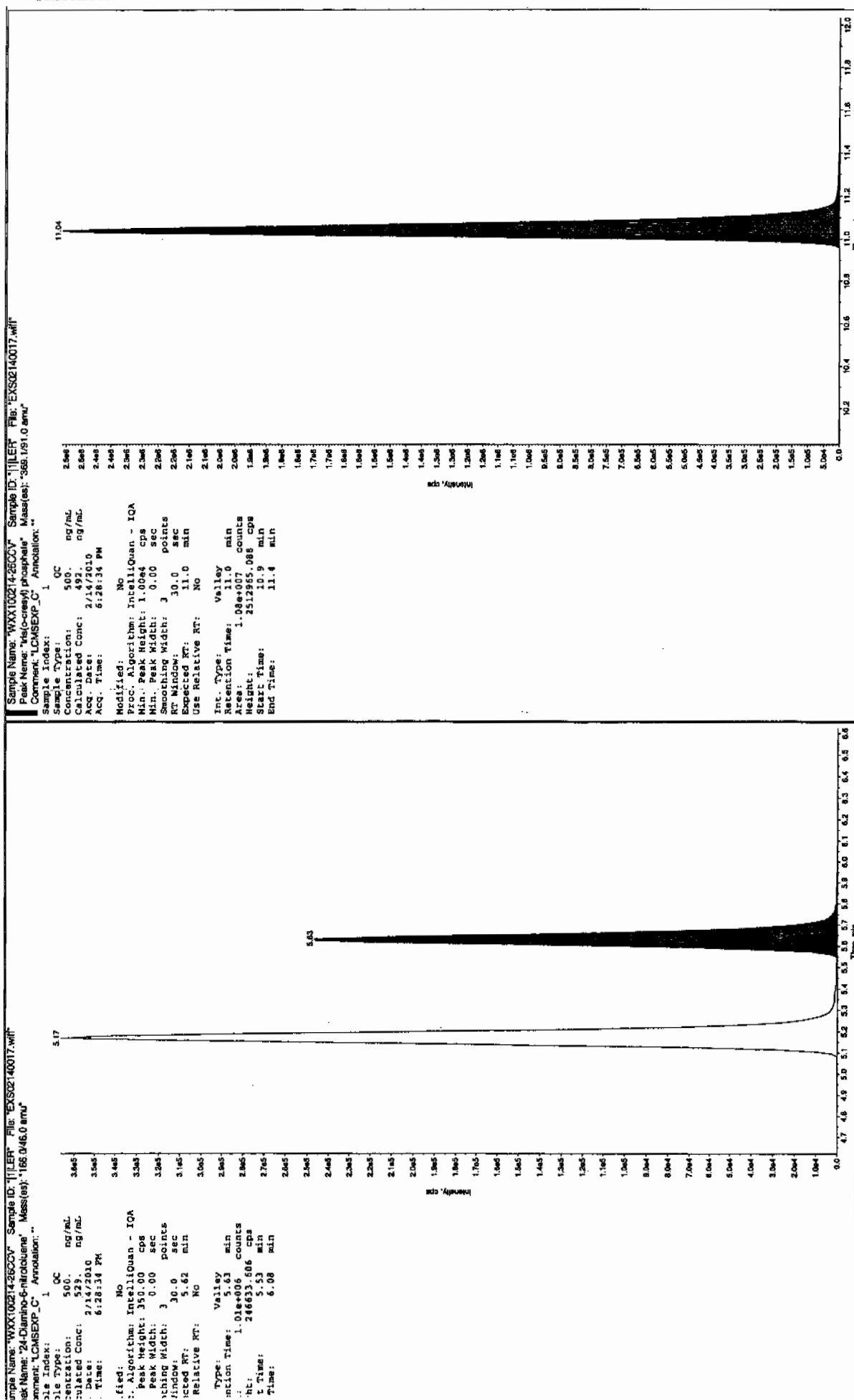
Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits





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



7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1392

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS02140019.wiff

Analysis Date: 14-FEB-10 18:59

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	96.3	96	
2,6-Diamino-4-nitrotoluene	100	97.2	97	
3,4-Dinitrotoluene	50	48.7	97	
3,5-Dinitroaniline	100	100	100	
TATB	100	102	102	
tris(o-cresyl) phosphate	100	103	103	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

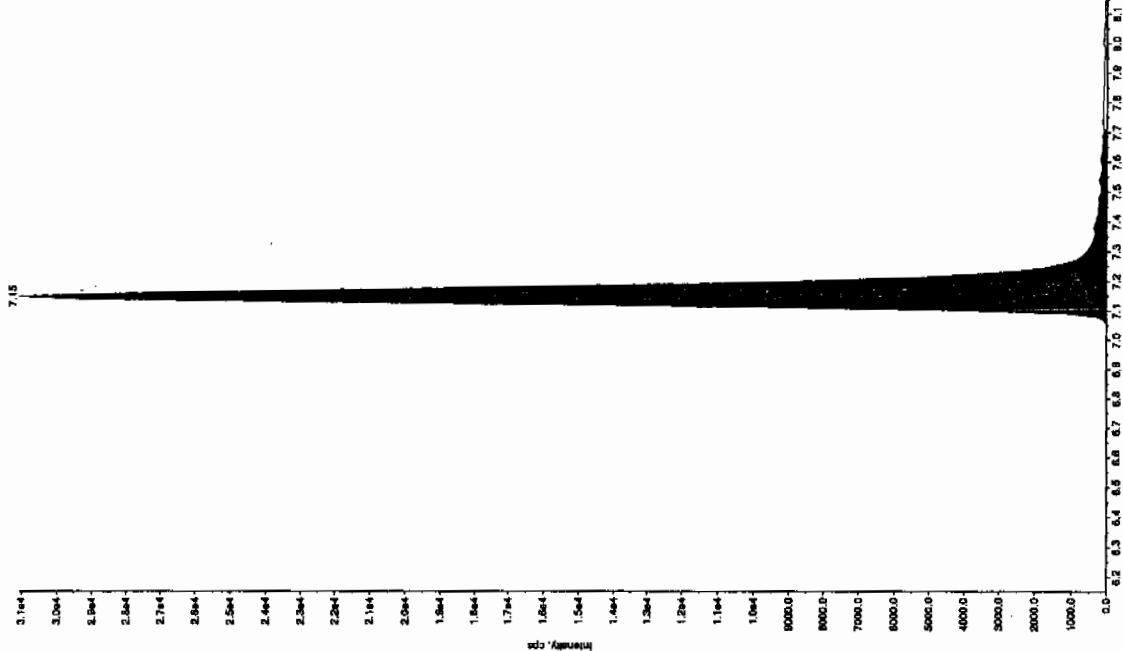
* Value outside of Recovery Limits

See 2/17/10

Sample Name: "VXX1002142709" Sample ID: "JL1ER" File: "EX502140019.wif"
 Peak Name: "TATE" Mass(es): 257.22049 amu
 Concentration: "LCMSEXP_C" Annotation: "Annotat"

Sample Index: 1
 Sample Type: QC
 Concentration: 100. ng/mL
 Calculated Conc: 102. ng/mL
 Acq. Date: 2/14/2010
 Acq. Time: 6:59:59 PM

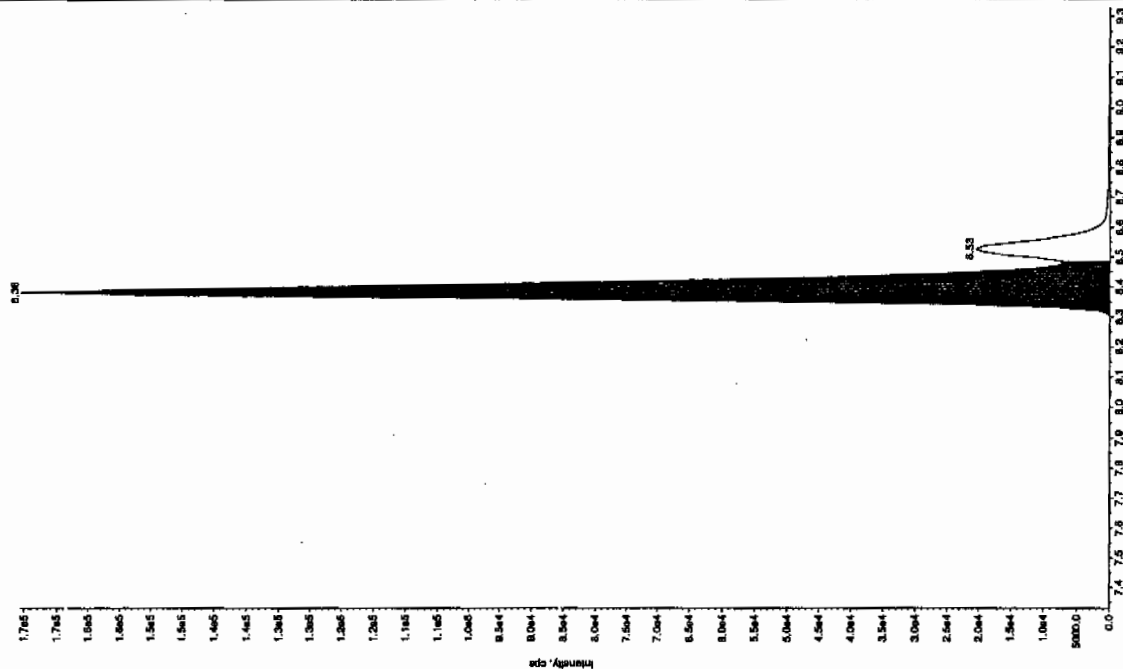
Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 2500.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 7.15 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 7.15 min
 Area: 1.40e+005 counts
 Height: 31053.225 cps
 Start Time: 7.00 min
 End Time: 7.31 min



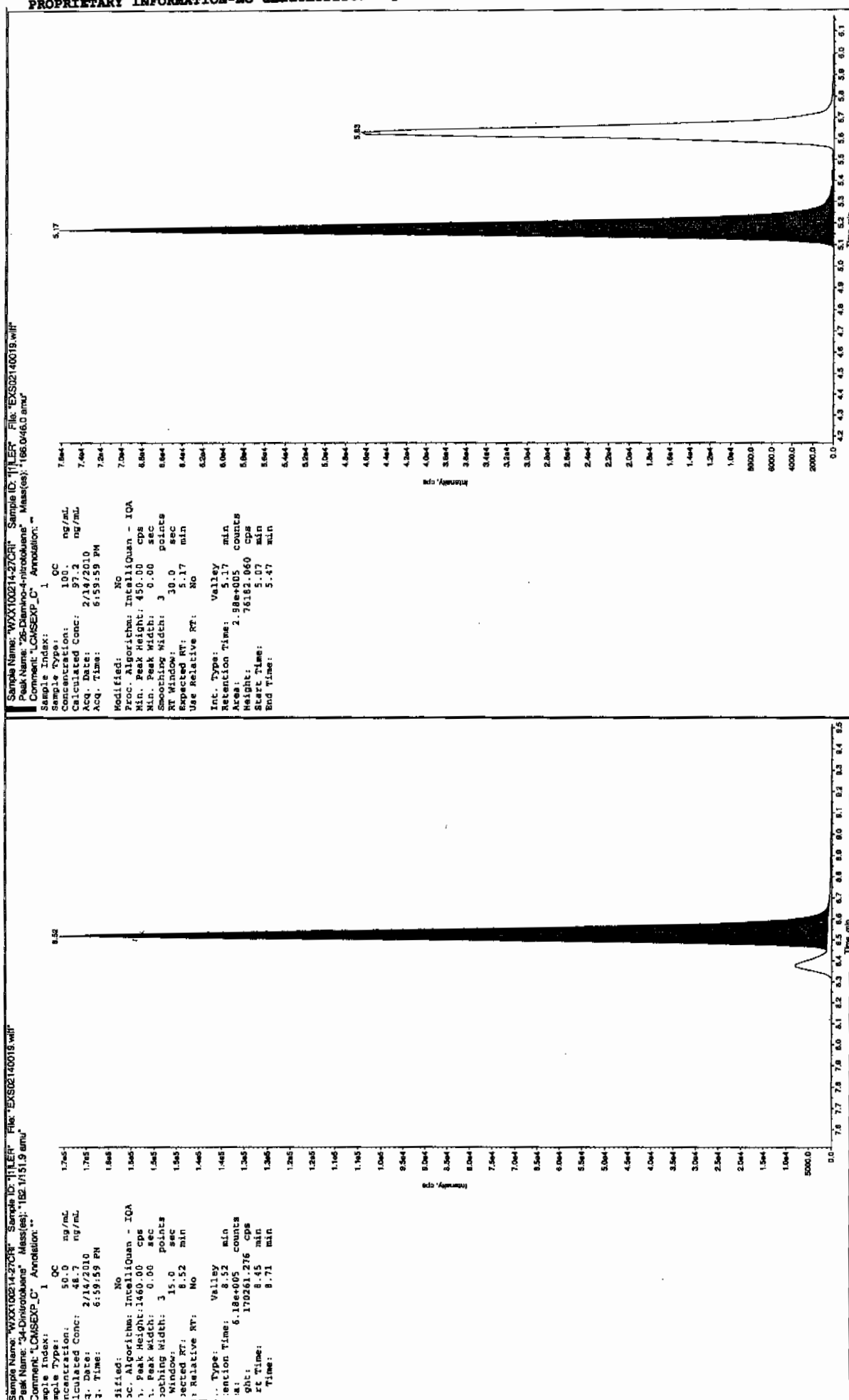
Sample Name: "VXX1002142709" Sample ID: "JL1ER" File: "EX502140019.wif"
 Peak Name: "TATE" Mass(es): 257.22049 amu
 Concentration: "LCMSEXP_C" Annotation: "Annotat"

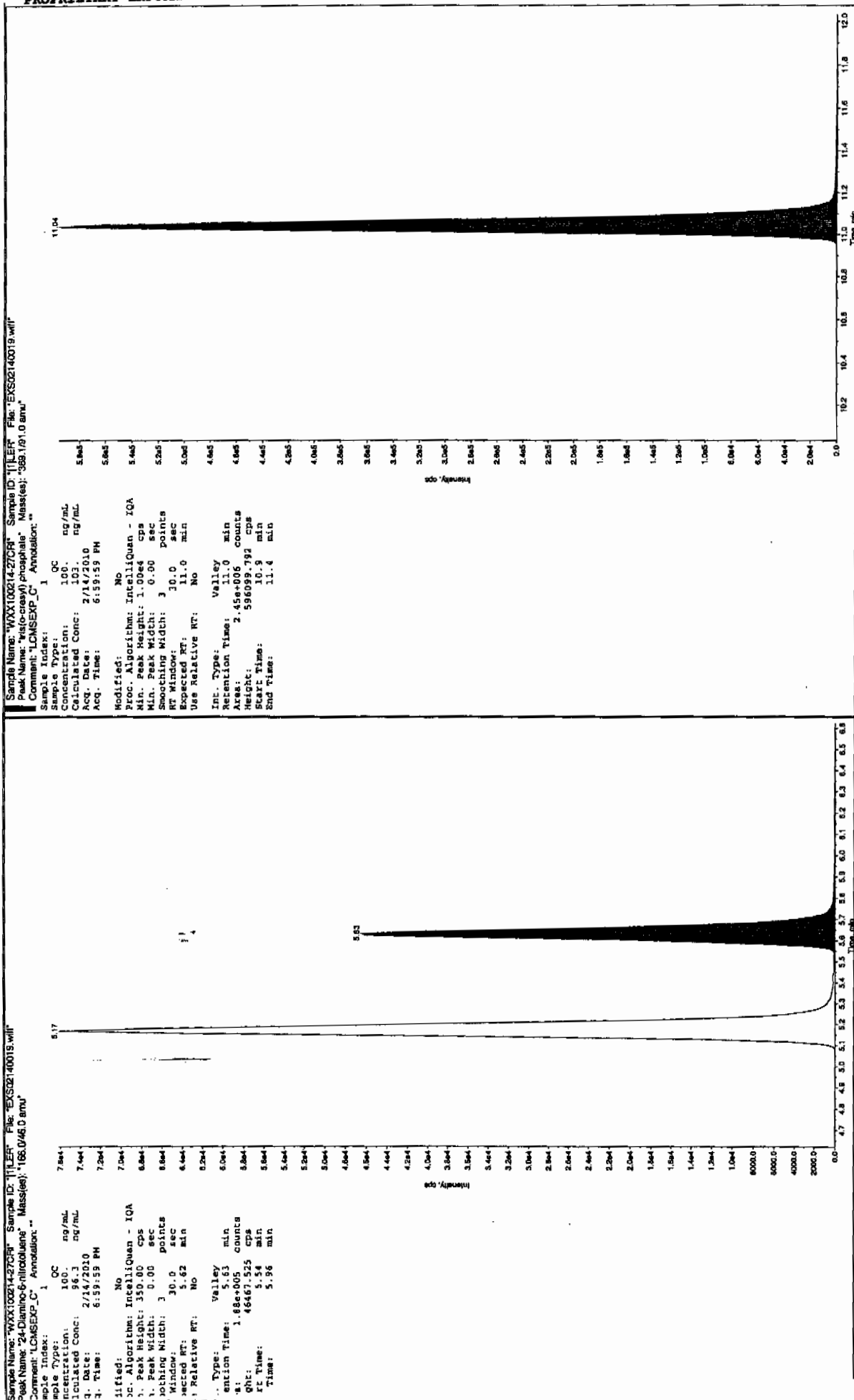
Sample Index: 1
 Sample Type: QC
 Concentration: 100. ng/mL
 Calculated Conc: 100. ng/mL
 Acq. Date: 2/14/2010
 Acq. Time: 6:59:59 PM

Modified: Yes
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 2000.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.33 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.33 min
 Area: 6.57e+005 counts
 Height: 170540.771 cps
 Start Time: 8.27 min
 End Time: 8.48 min



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

7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1392

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS02140030.wiff

Analysis Date: 14-FEB-10 21:52

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	542	108	
2,6-Diamino-4-nitrotoluene	500	542	108	
3,4-Dinitrotoluene	250	258	103	
3,5-Dinitroaniline	500	507	101	
TATB	500	535	107	
tris(o-cresyl) phosphate	500	509	102	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

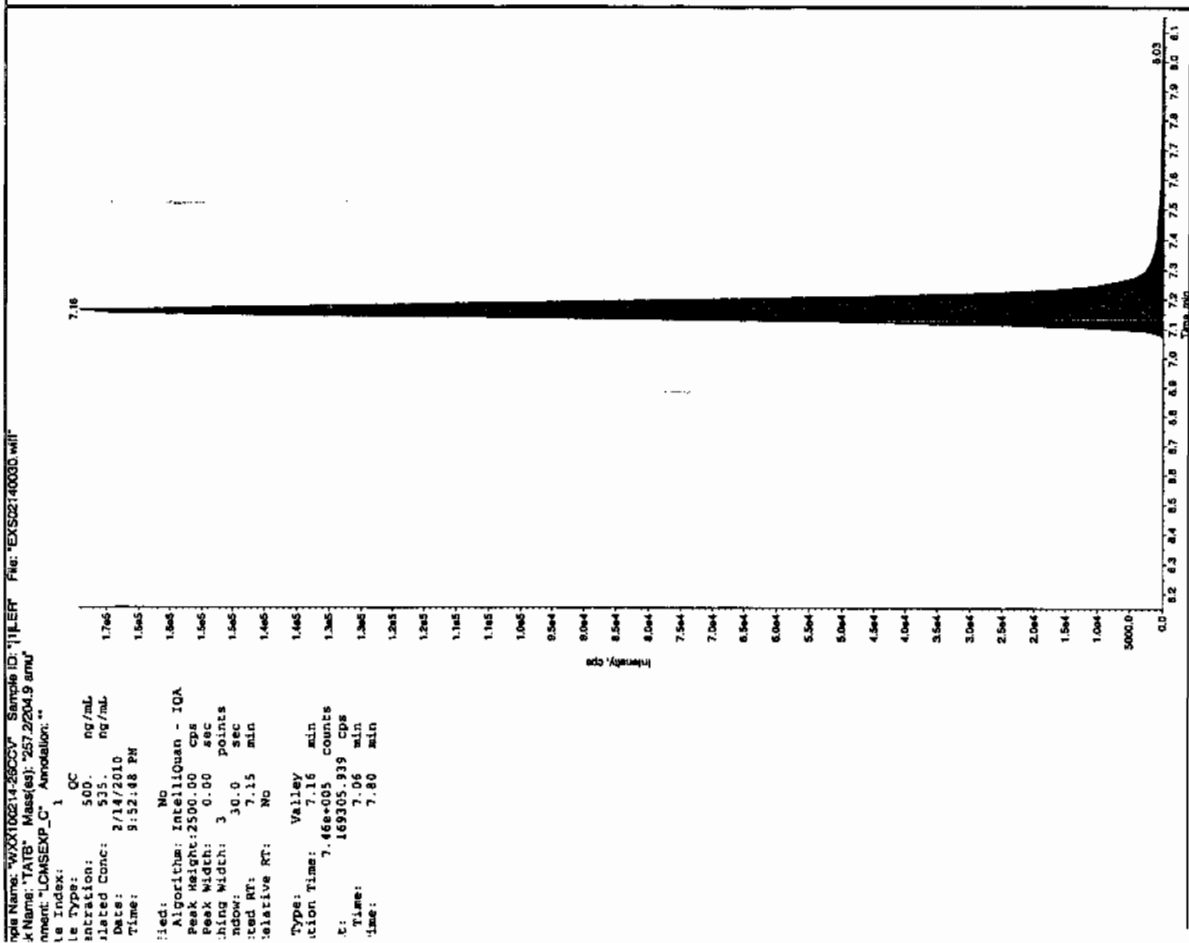
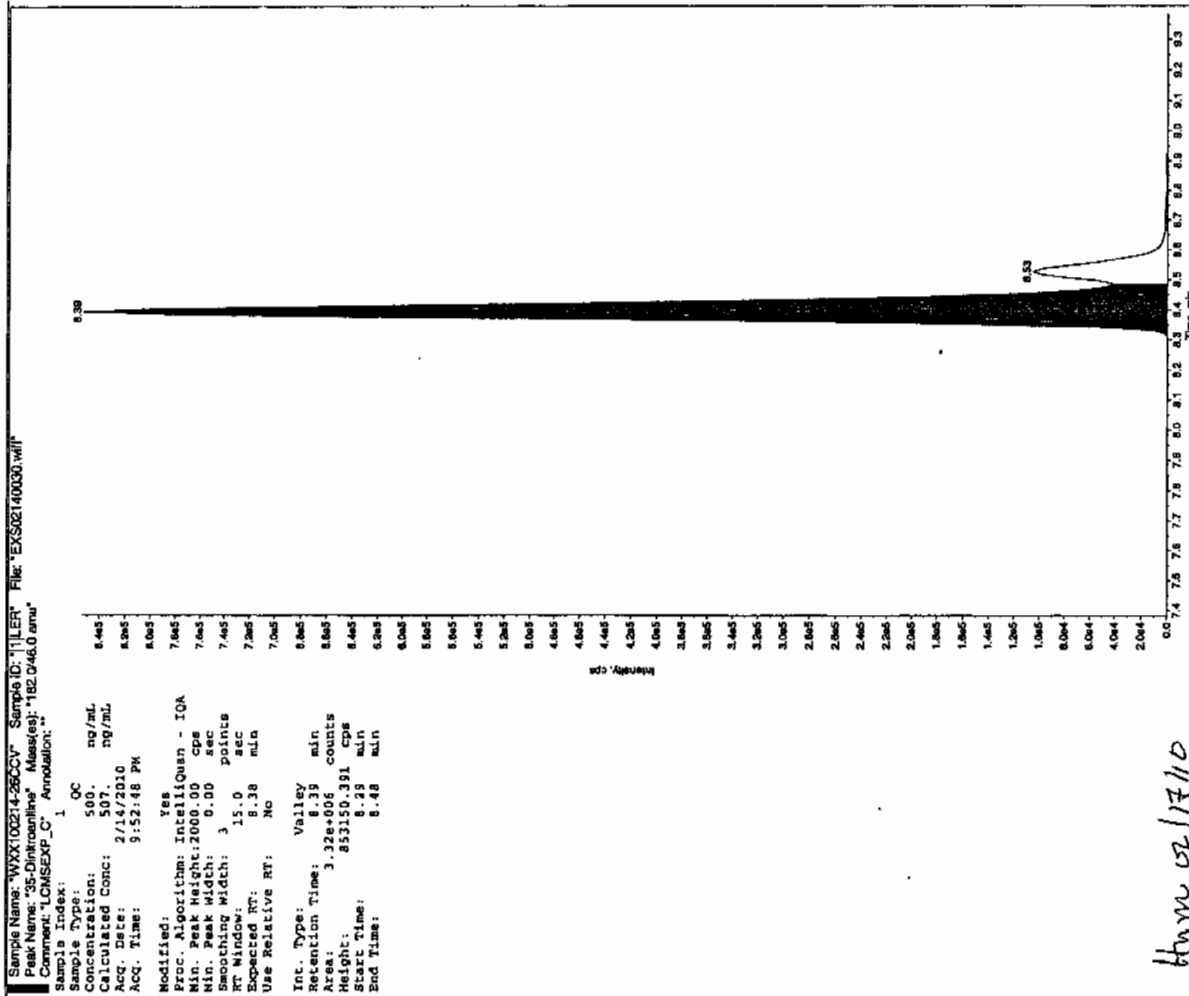
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

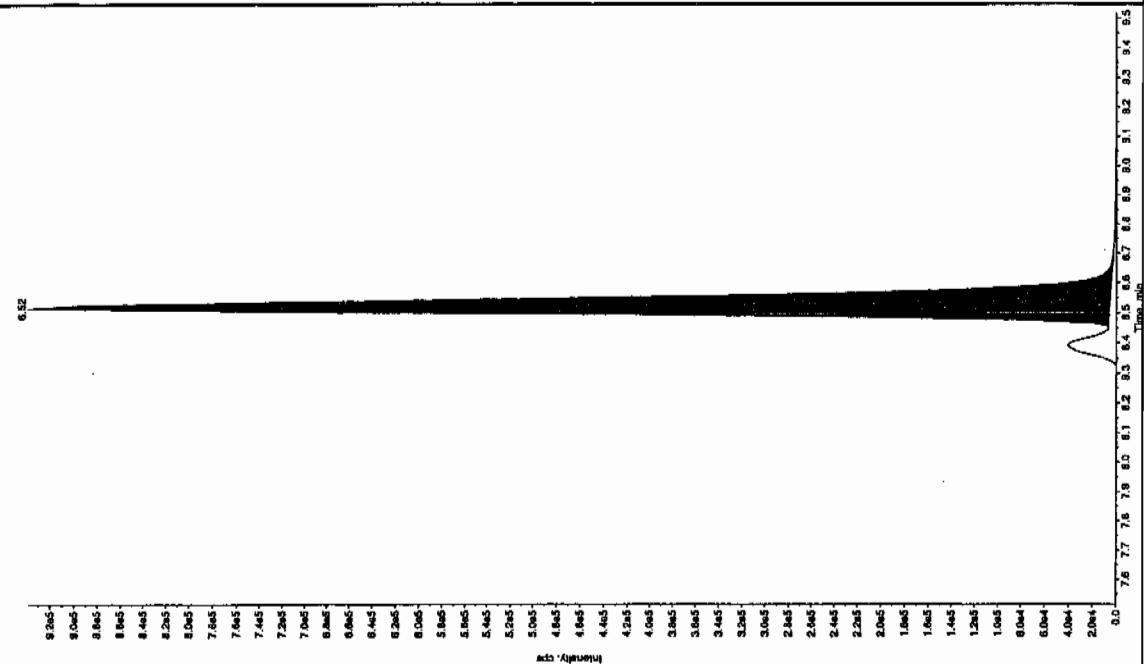
See 2/17/10



Time 02/17/10

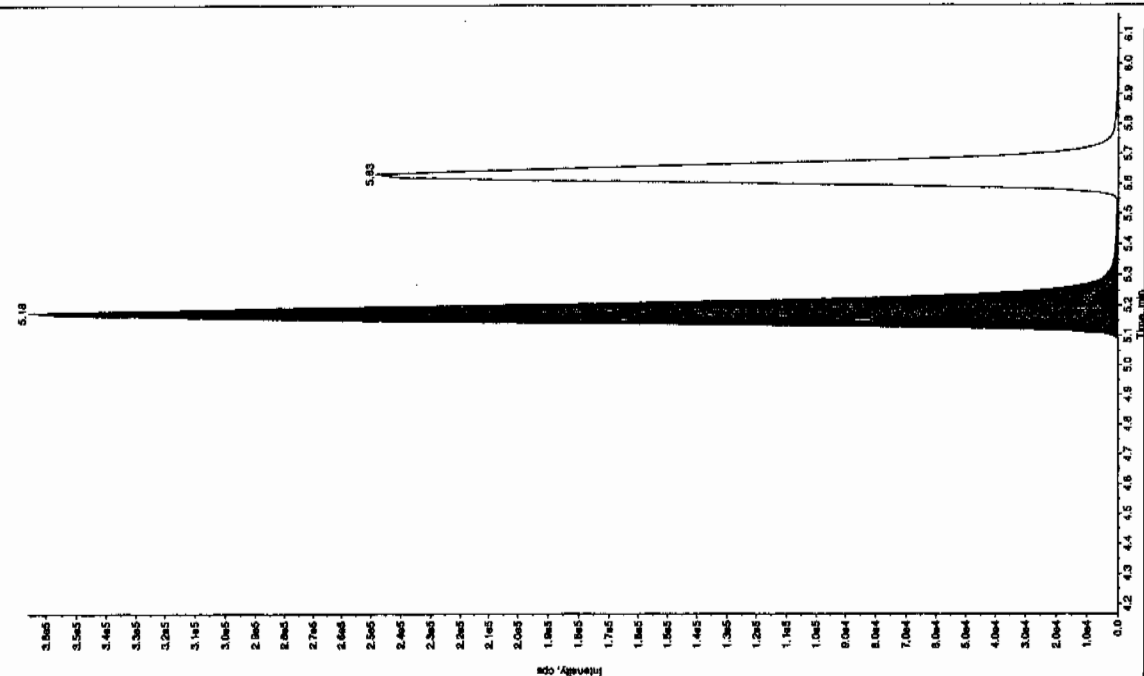
File Name: "WXX100214-2800V" Sample ID: "1111ER" File: "EXS02140030.wif"
 Name: "34-Dinitrofluorene" Mass(es): "182.1/151.9 amu"
 Method: "LCMSXP_C" Annotation: ""

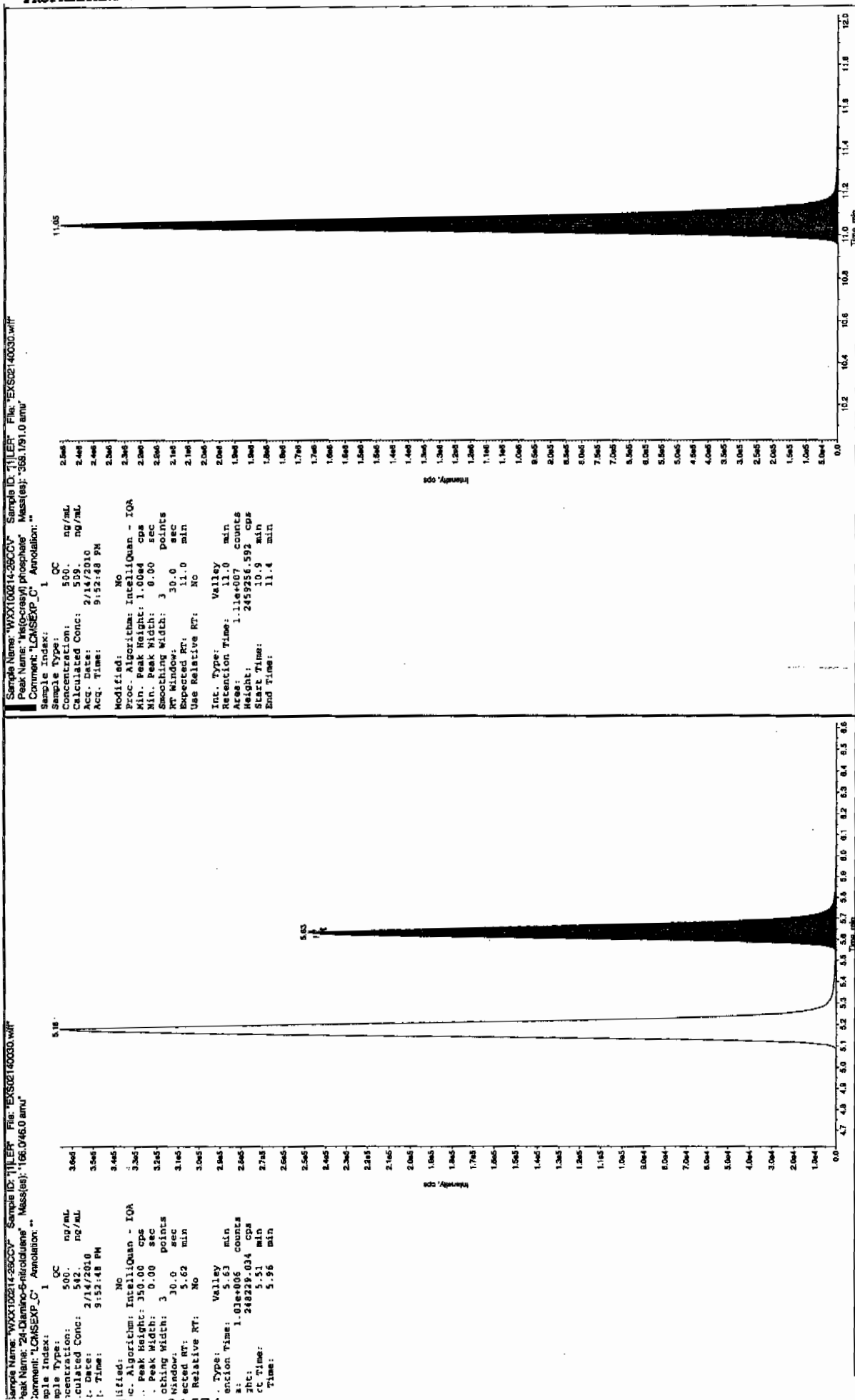
Sample Index: 1
 Sample Type: QC
 Concentration: 250. ng/mL
 Calculated Conc: 258. ng/mL
 Acq. Date: 2/14/2010
 Acq. Time: 9:52:48 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 160.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.52 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.52 min
 Area: 3.37e+006 counts
 Height: 933019.775 cps
 Start Time: 8.45 min
 End Time: 8.71 min



Sample Name: "WXX100214-2800V" Sample ID: "1111ER" File: "EXS02140030.wif"
 Peak Name: "26-Dinitro-4-nitrofluorene" Mass(es): "186.0/166.0 amu"
 Method: "LCMSXP_C" Annotation: ""

Sample Index: 1
 Sample Type: QC
 Concentration: 500. ng/mL
 Calculated Conc: 542. ng/mL
 Acq. Date: 2/14/2010
 Acq. Time: 9:52:48 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 450.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 5.17 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.18 min
 Area: 1.56e+006 counts
 Height: 366078.552 cps
 Start Time: 5.06 min
 End Time: 5.47 min





7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1392

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS02140032.wiff

Analysis Date: 14-FEB-10 22:24

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,6-Diamino-4-nitrotoluene	100	110	110	
3,4-Dinitrotoluene	50	52.2	104	
3,5-Dinitroaniline	100	113	113	
TATB	100	117	117	
tris(o-cresyl) phosphate	100	106	106	
2,4-Diamino-6-nitrotoluene	100	103	103	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

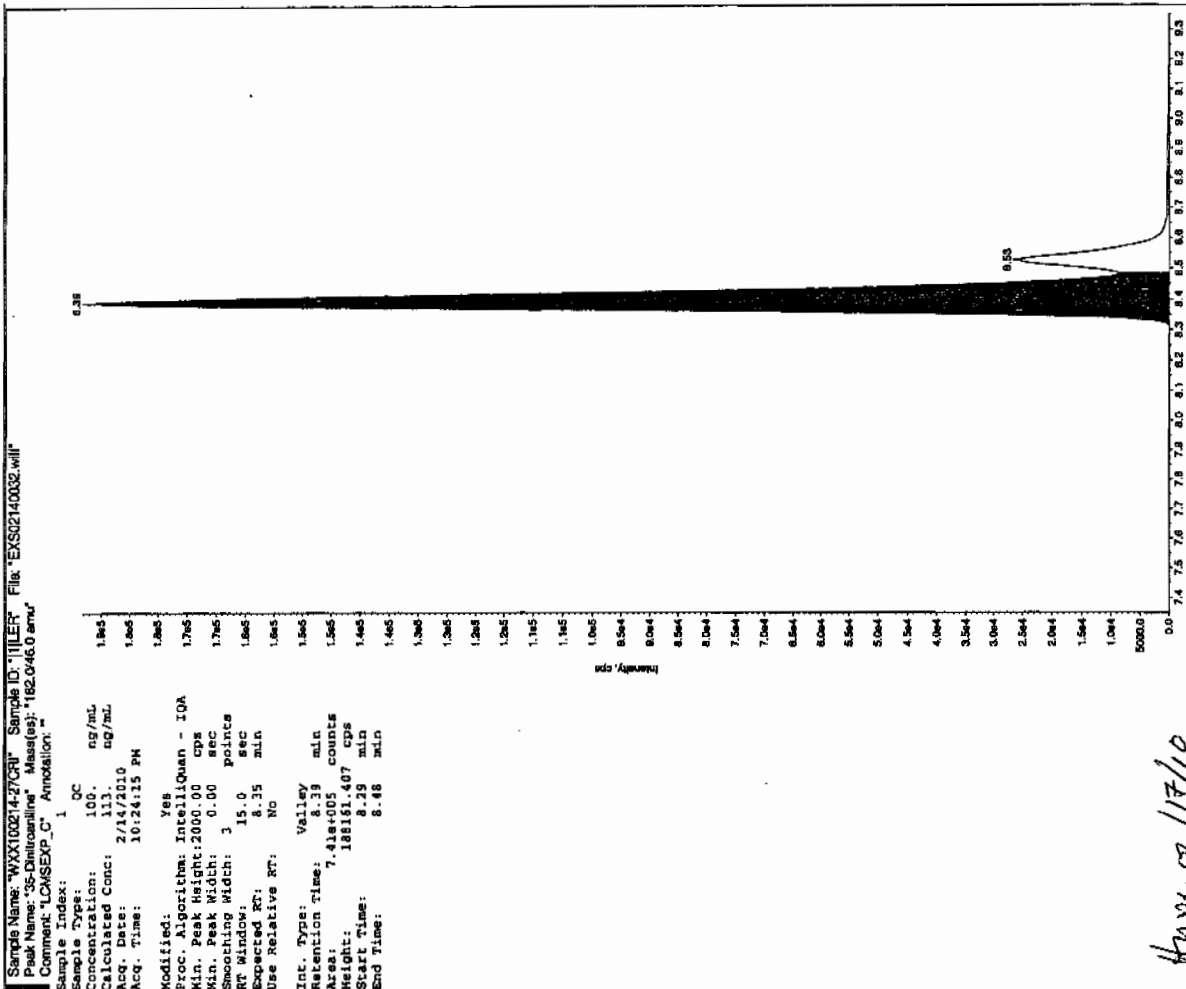
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

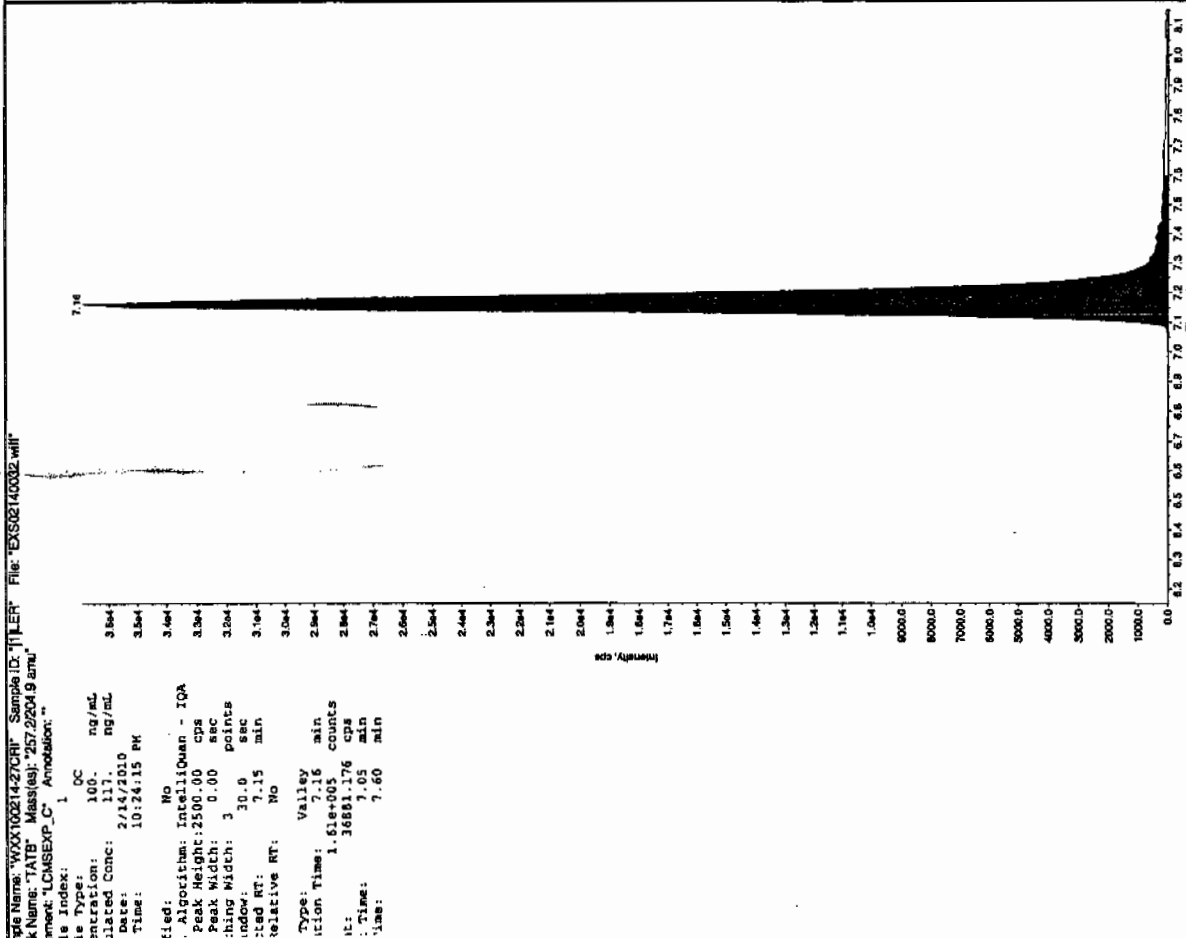
Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

See 2/17/10



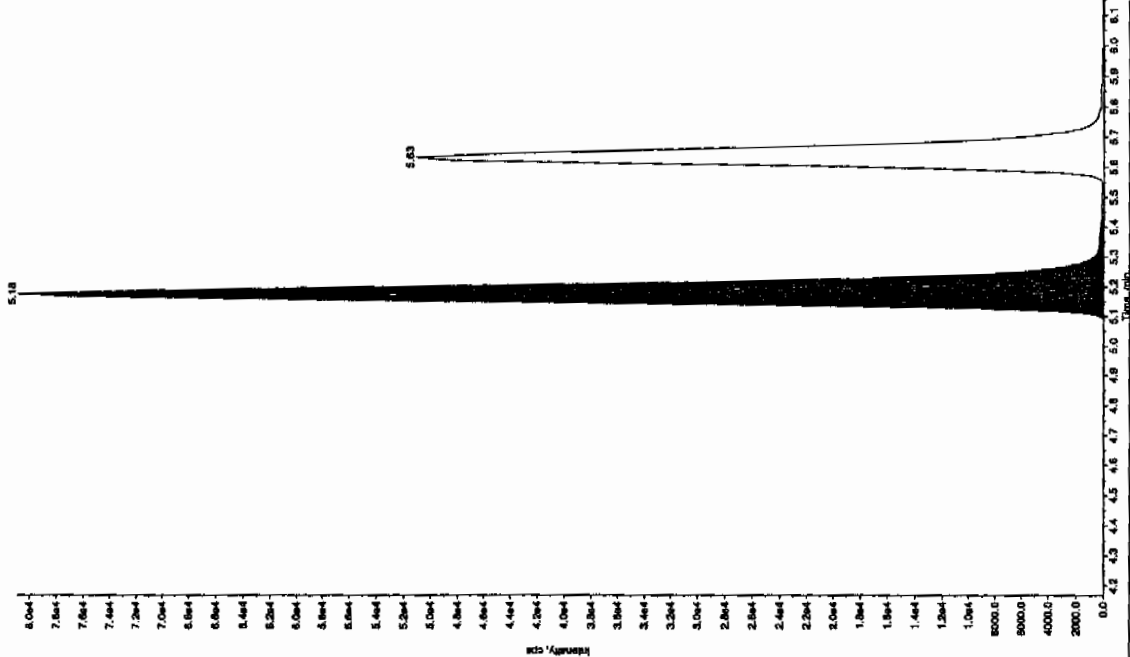
turn on 1/17/10



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

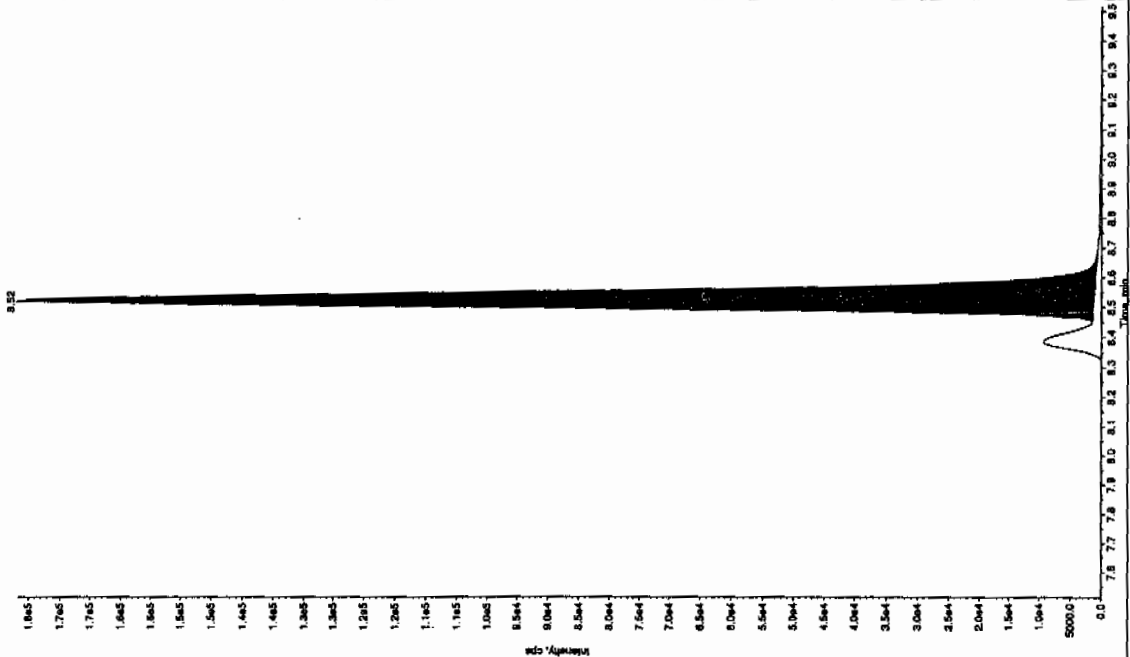
Sample Name: "WXX100214-27C9" Sample ID: "11LER" File: "EXS02140032.wif"
 Peak Name: "28-Diamino-4-nitrotoluene" Mass(es): "186.046.0 amu"
 Comment: "LCMSEXP_C" Annotation: ""

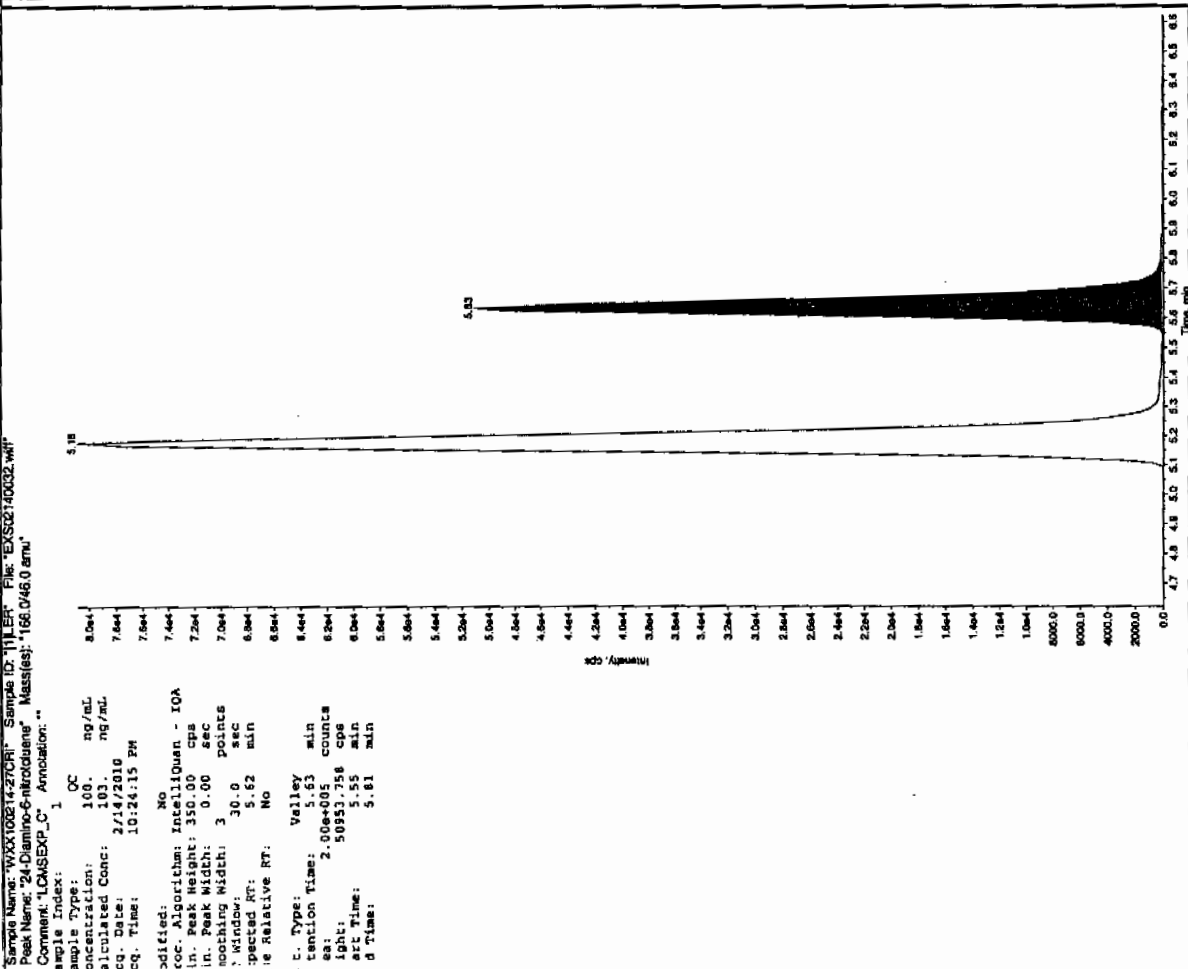
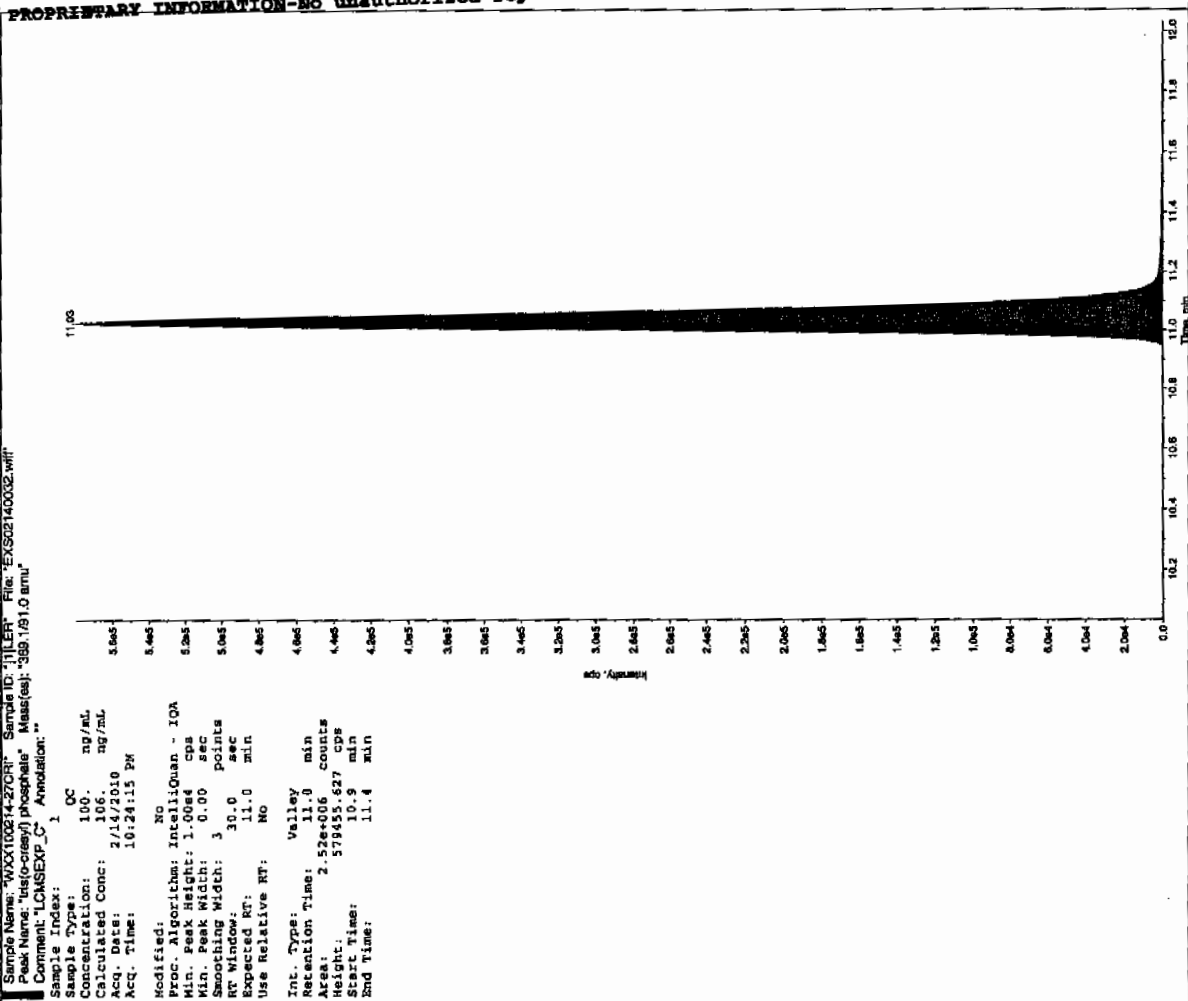
Sample Index: 1
 Sample Type: QC
 Concentration: 100. ng/mL
 Calculated Conc: 110. ng/mL
 Acq. Date: 2/14/2010
 Acq. Time: 10:24:15 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 450.00 cps
 Min. Peak Width: 3.00 sec
 Retention Width: 30.0 points
 Expected RT: 5.17 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.18 min
 Area: 3.35e+005 counts
 Height: 80867.615 cps
 Start Time: 5.03 min
 End Time: 5.44 min



Sample Name: "WXX100214-27C9" Sample ID: "11LER" File: "EXS02140032.wif"
 Peak Name: "34-Dinitrotoluene" Mass(es): "182.1151.9 amu"
 Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
 Sample Type: QC
 Concentration: 50.0 ng/mL
 Calculated Conc: 52.2 ng/mL
 Acq. Date: 2/14/2010
 Acq. Time: 10:24:15 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 1460.00 cps
 Min. Peak Width: 3.00 sec
 Retention Width: 30.0 points
 Expected RT: 8.52 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.52 min
 Area: 6.66e+005 counts
 Height: 175696.732 cps
 Start Time: 8.45 min
 End Time: 8.69 min





7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1392

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS02140043.wiff

Analysis Date: 15-FEB-10 01:16

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
tris(o-cresyl) phosphate	500	512	102	
2,4-Diamino-6-nitrotoluene	500	545	109	
2,6-Diamino-4-nitrotoluene	500	596	119	
3,4-Dinitrotoluene	250	240	96	
3,5-Dinitroaniline	500	533	107	
TATB	500	568	114	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

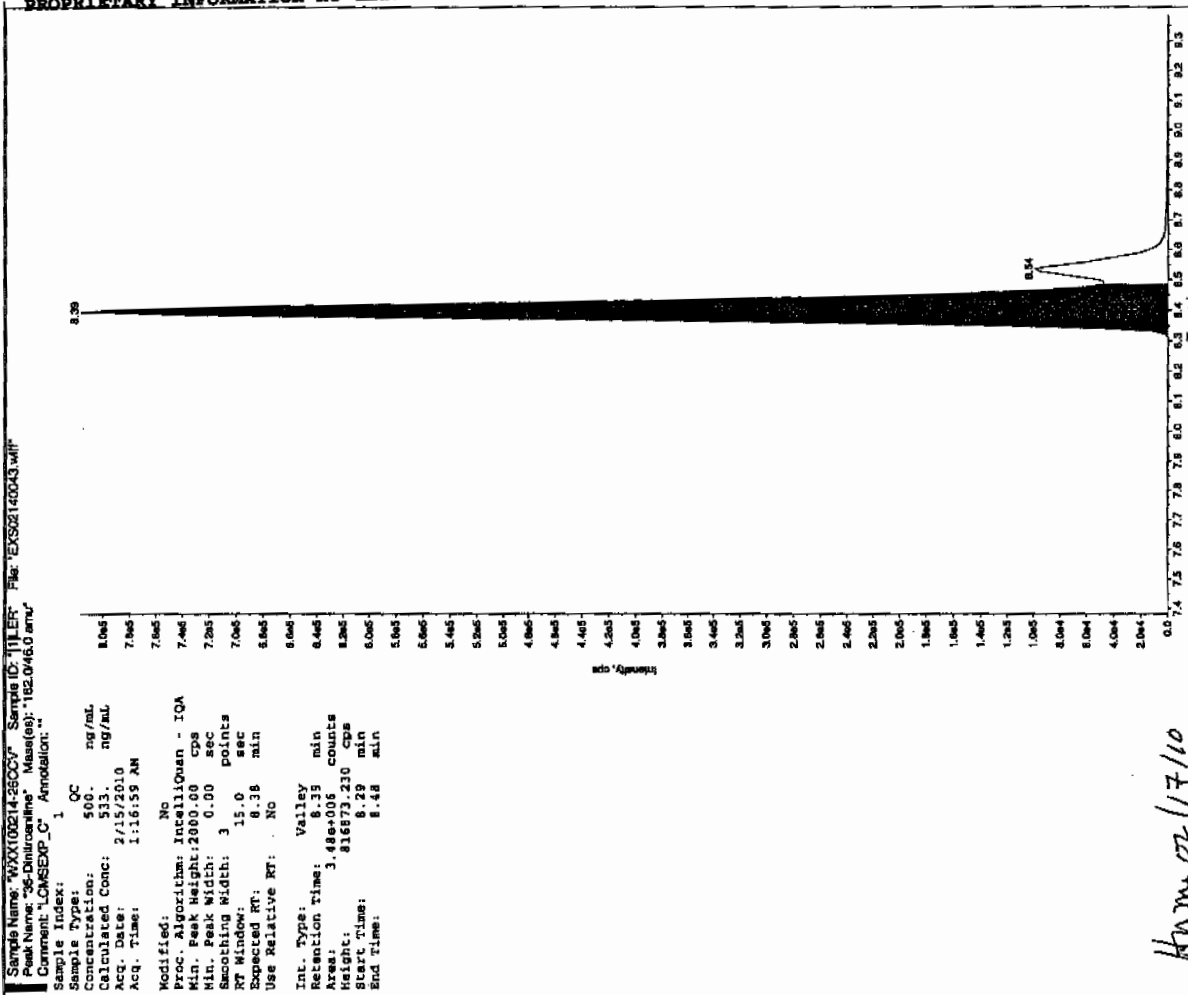
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

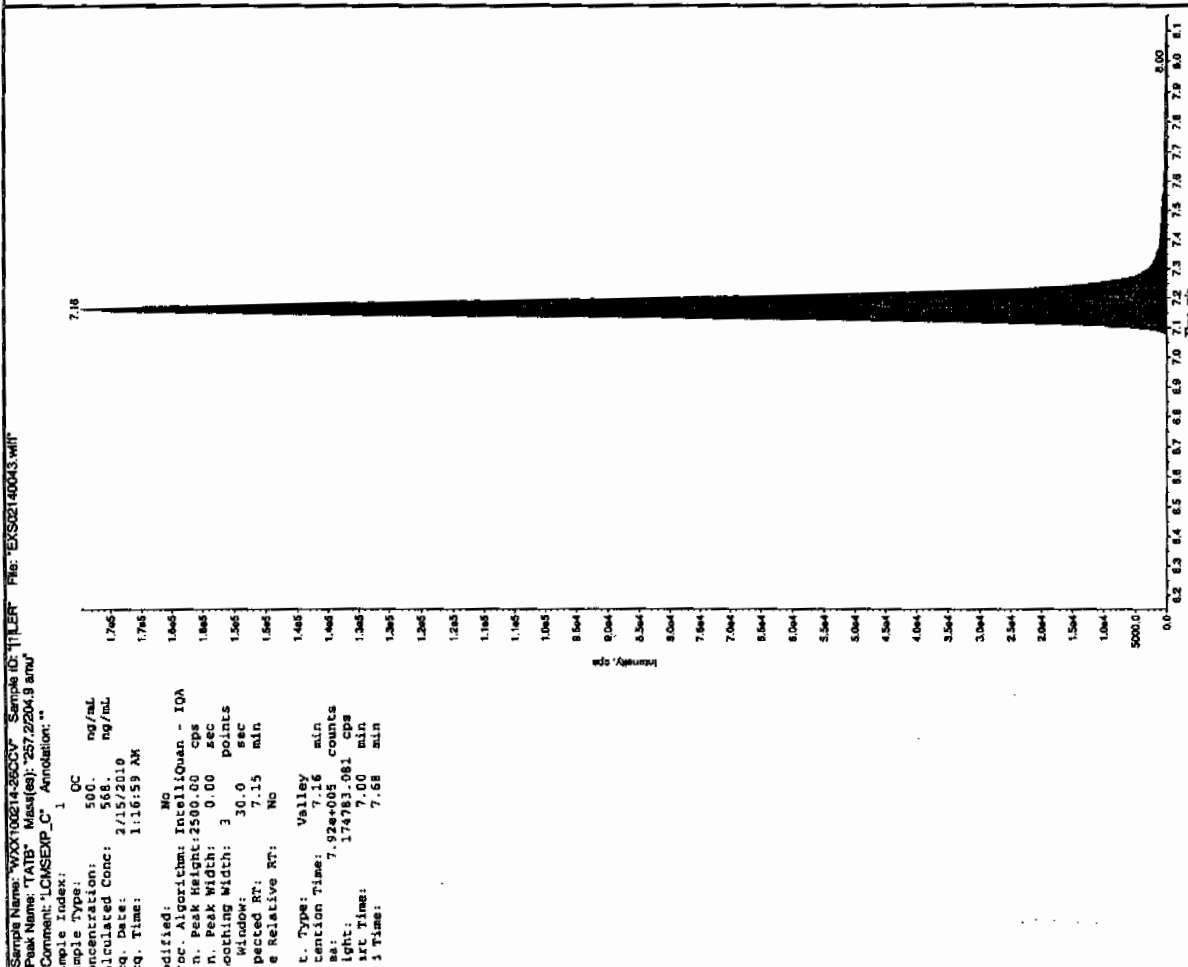
Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

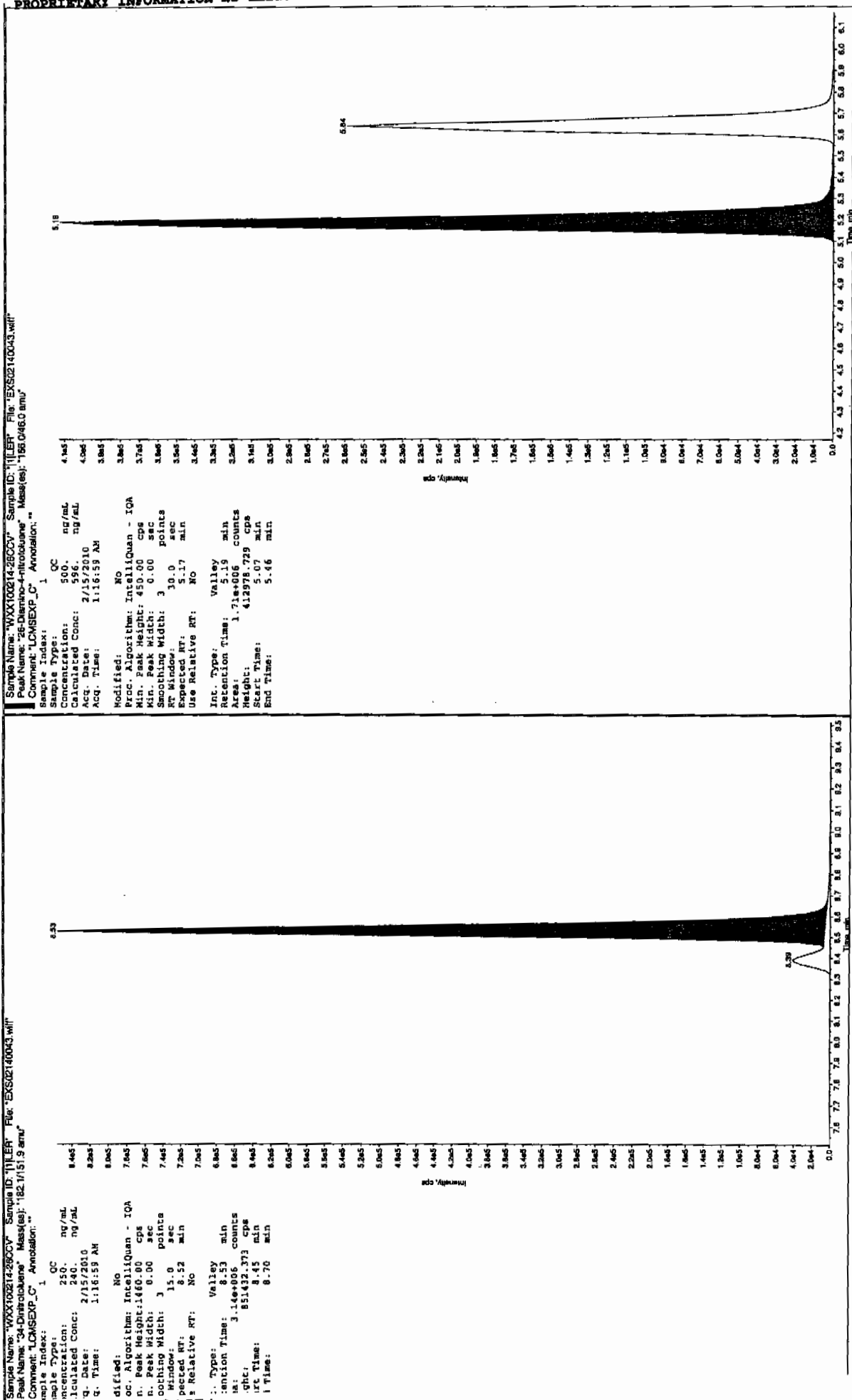
See 2/17/10



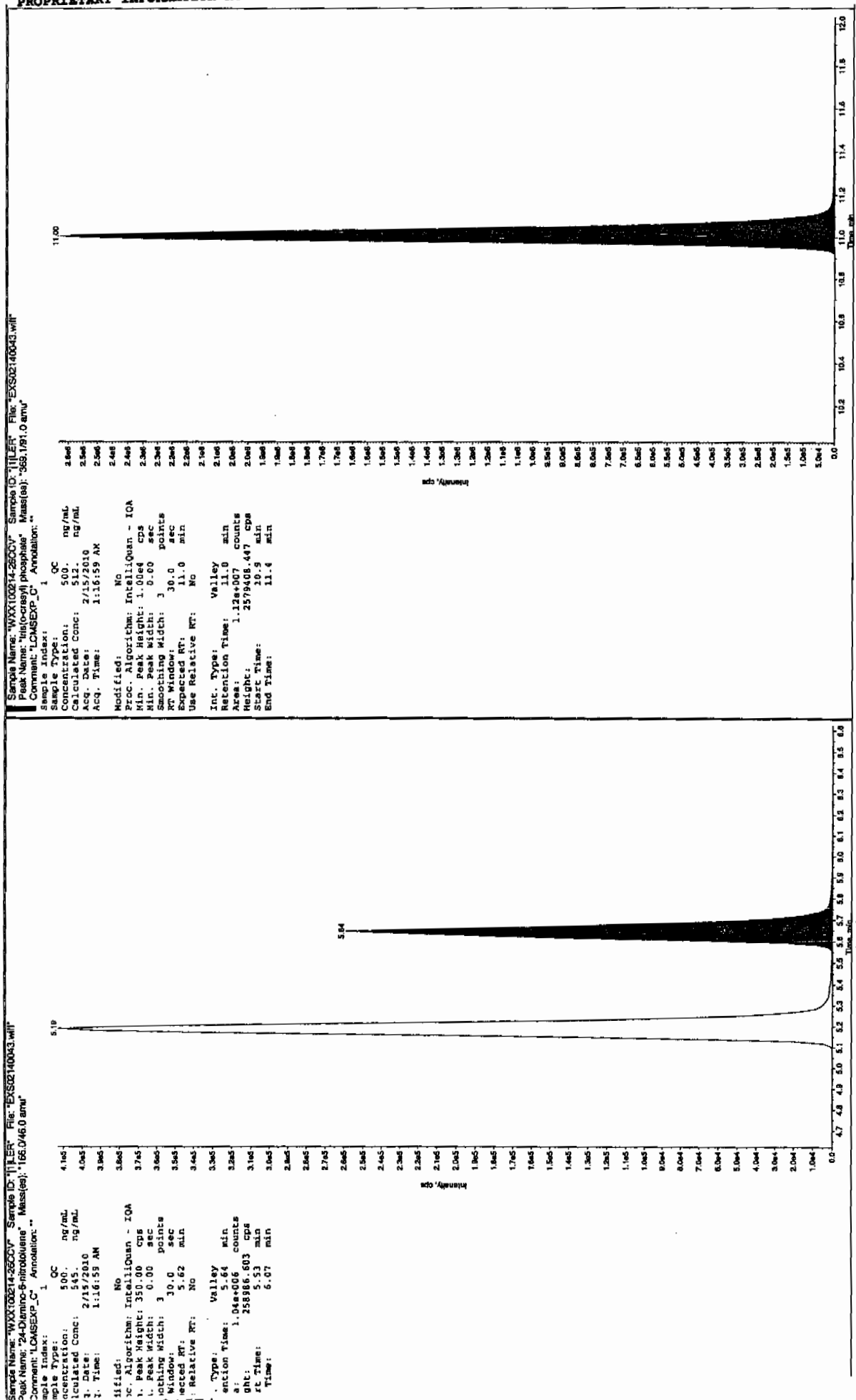
See 2/17/10



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



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



7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1392

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS02140045.wiff

Analysis Date: 15-FEB-10 01:48

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	112	112	
3,4-Dinitrotoluene	50	52.3	105	
3,5-Dinitroaniline	100	120	120	
TATB	100	119	119	
tris(o-cresyl) phosphate	100	105	105	

Recovery Limits:

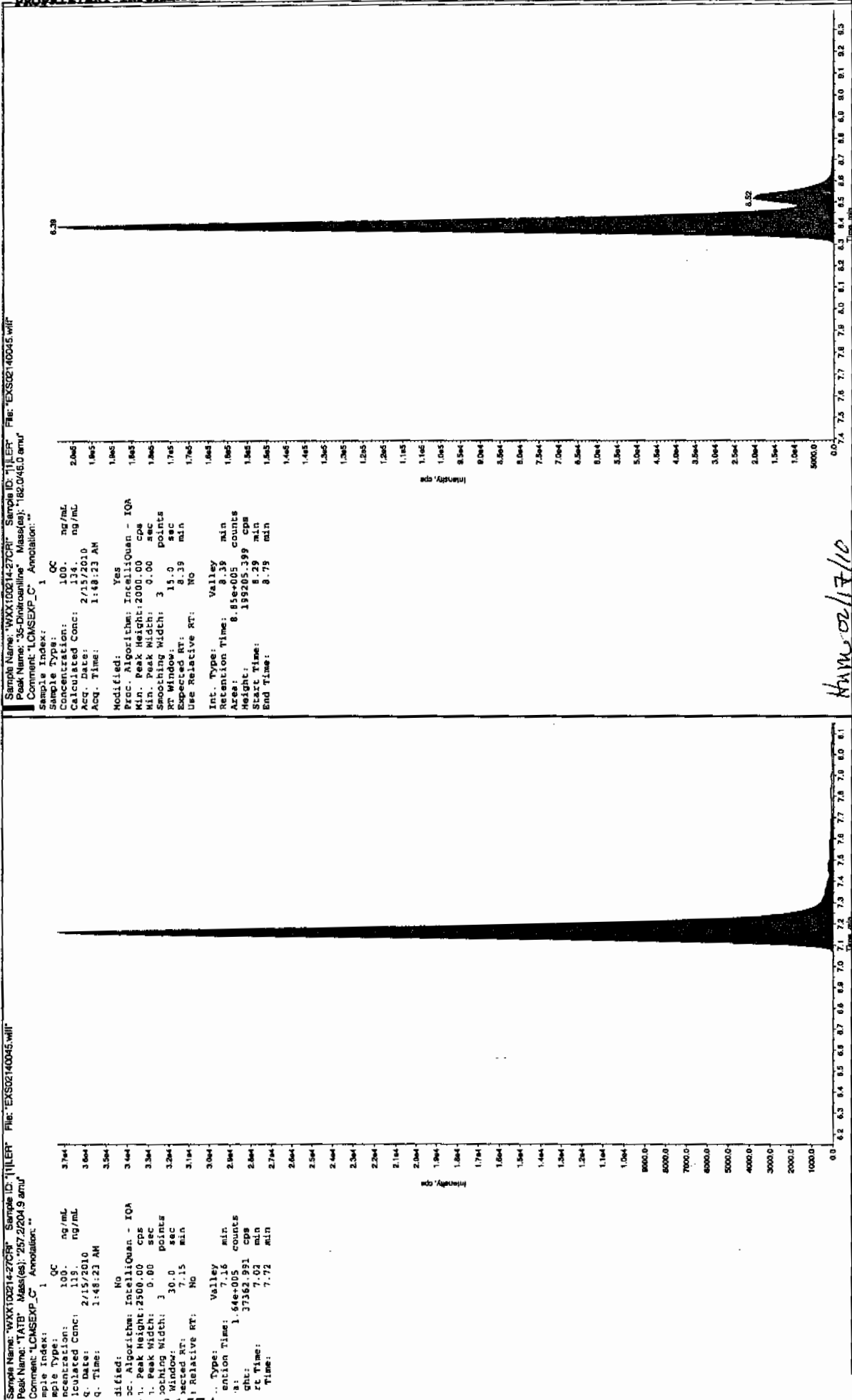
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

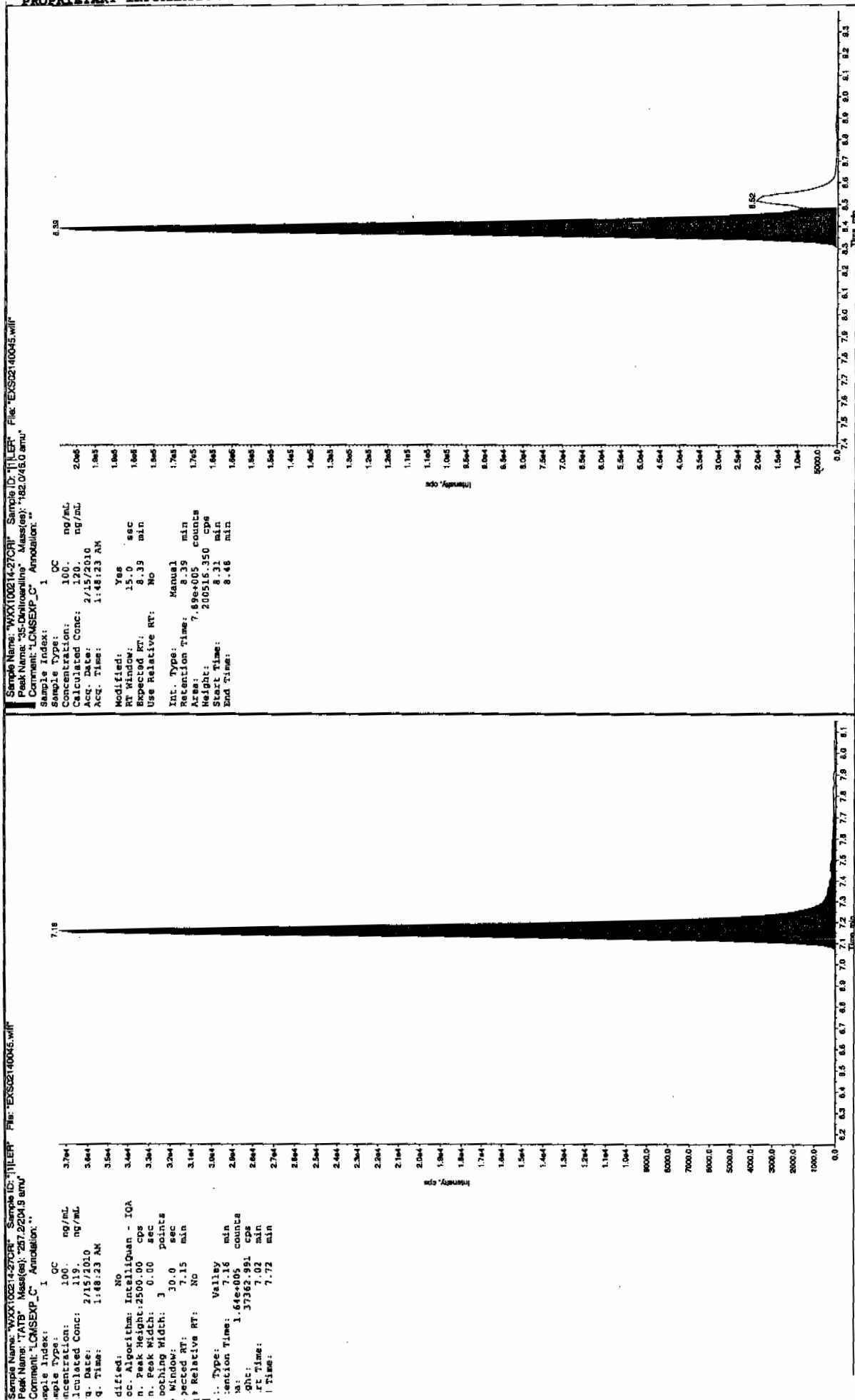
* Value outside of Recovery Limits

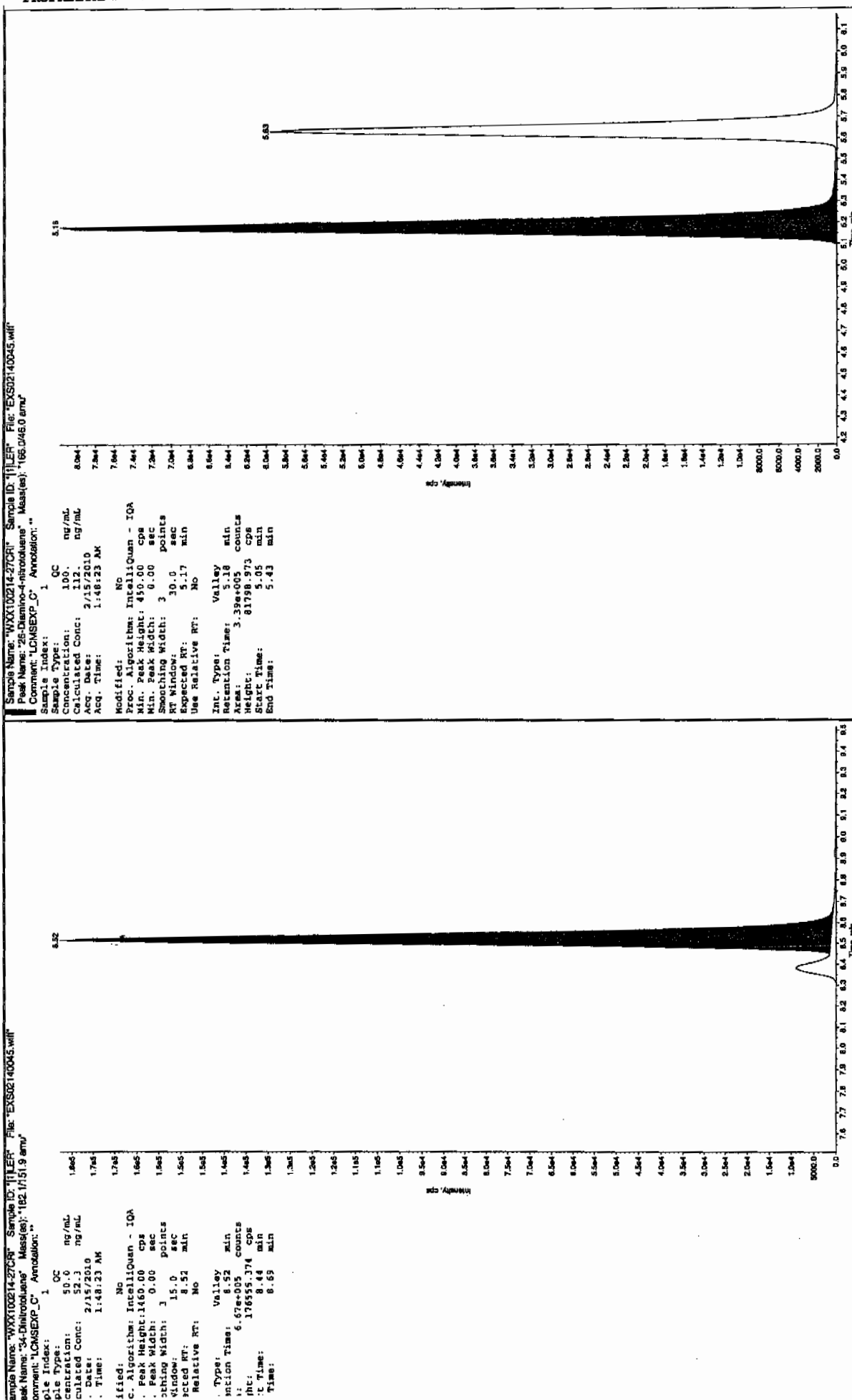
Before Oct 2/16/10

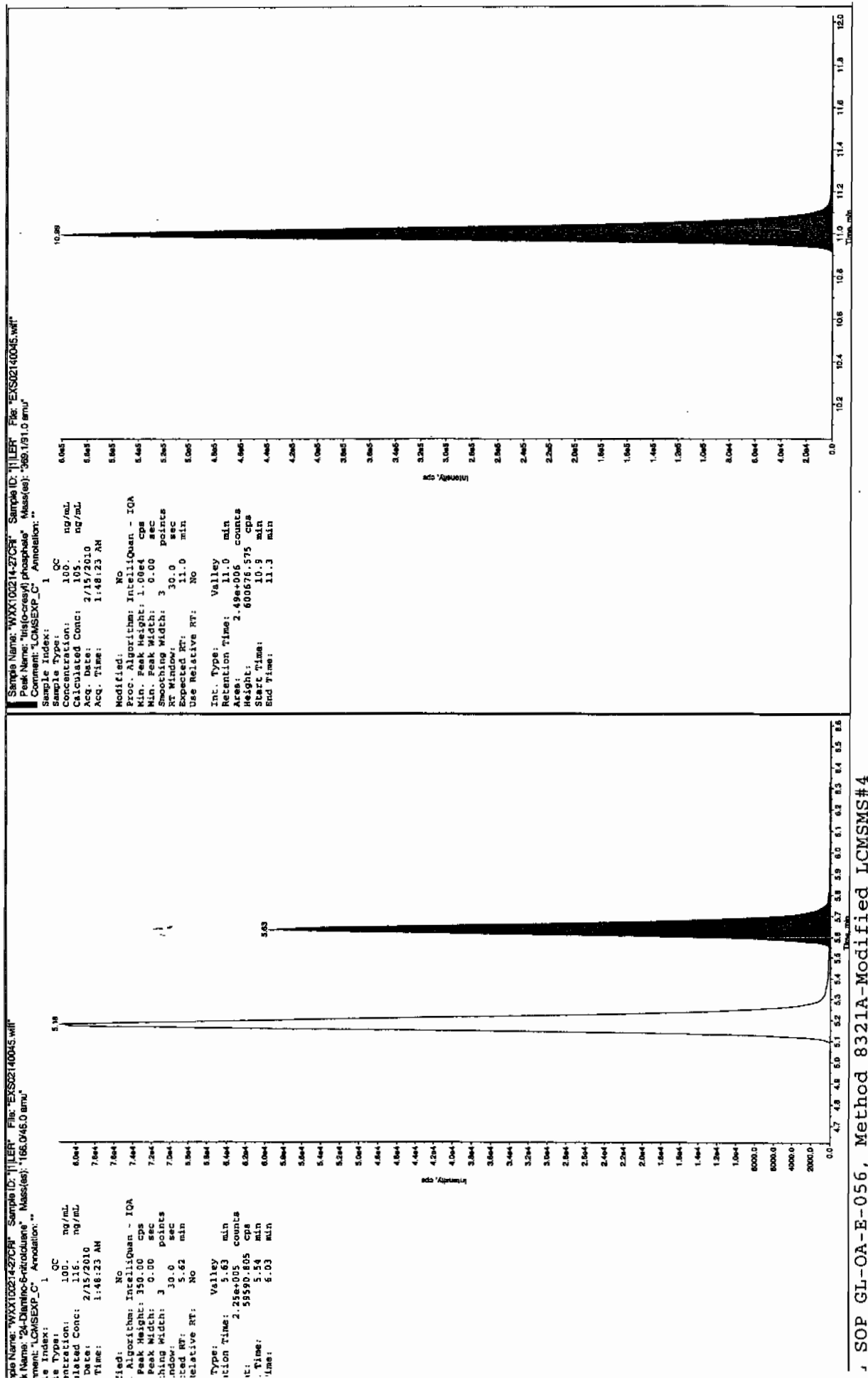


Nov 02/17/10

after Jan 2/17/10







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

7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1392

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS02140056.wiff

Analysis Date: 15-FEB-10 04:41

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	610	122	
2,6-Diamino-4-nitrotoluene	500	600	120	
3,4-Dinitrotoluene	250	253	101	
3,5-Dinitroaniline	500	551	110	
TATB	500	567	113	
tris(o-cresyl) phosphate	500	504	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%

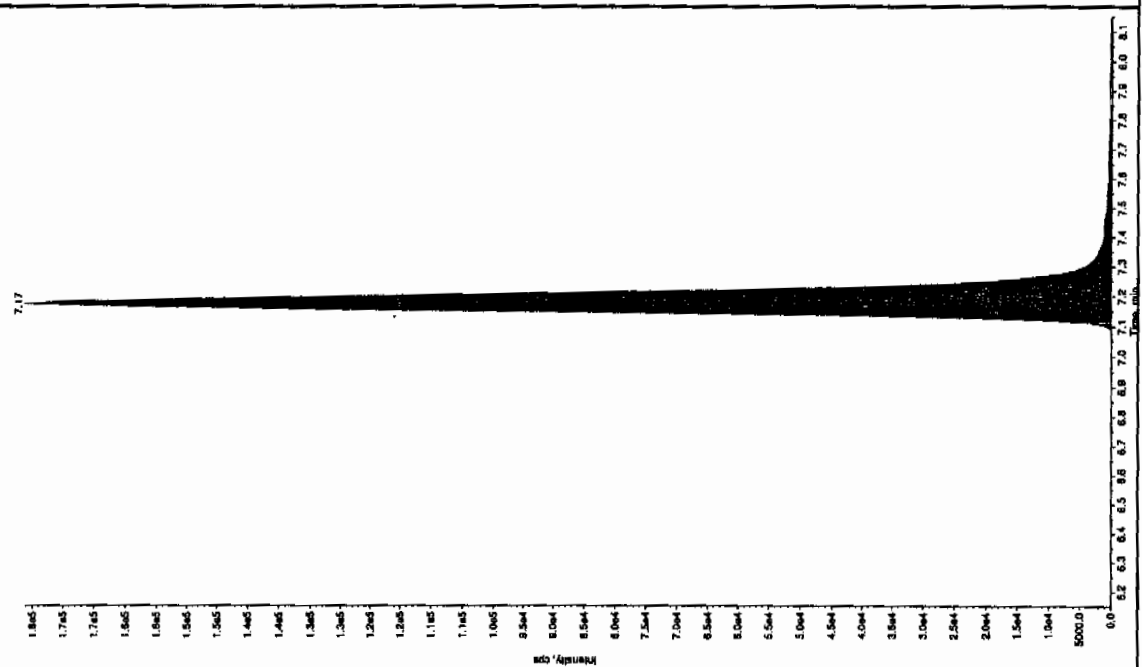
Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Before Scan 2/10/10

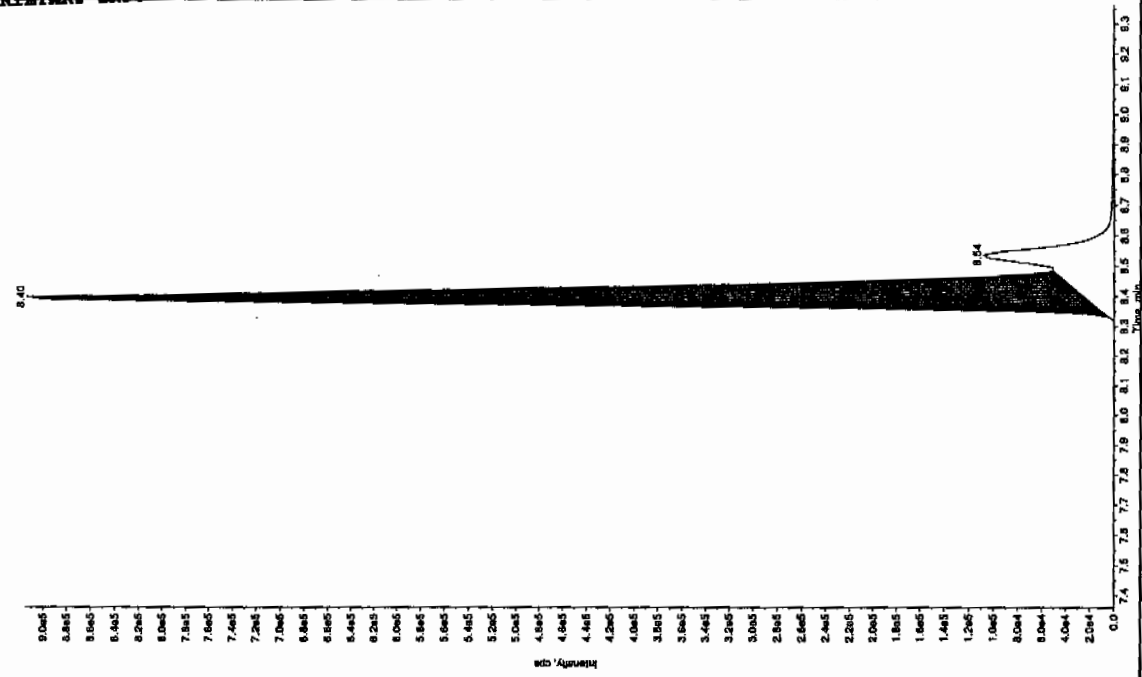
Sample Name: "WXX100214-260CV" Sample ID: "JLER" File: "EXS02140036.wif"
Peak Name: "TAIB" Mass(es): "257.2204.9 amu"
Comment: "LCMSEXP_C" Annotation: "

Sample Index: 1
Sample Type: QC
Concentration: 500 ng/mL
Calculated Conc: 500 ng/mL
Acq. Date: 2/15/2010
Acq. Time: 4:41:08 AM
Modified: No
Proc. Algorithm: IntelliQuan - IQA
In. Peak Height: 2500.00 cps
In. Peak Width: 0.00 sec
Smoothing Width: 3 points
RT Window: 30.0 sec
Expected RT: 7.15 min
Use Relative RT: No
Int. Type: Valley
Retention Time: 7.17 min
Peak Height: 7.91e+005 counts
Peak Width: 176303.864 cps
Start Time: 7.03 min
End Time: 7.83 min



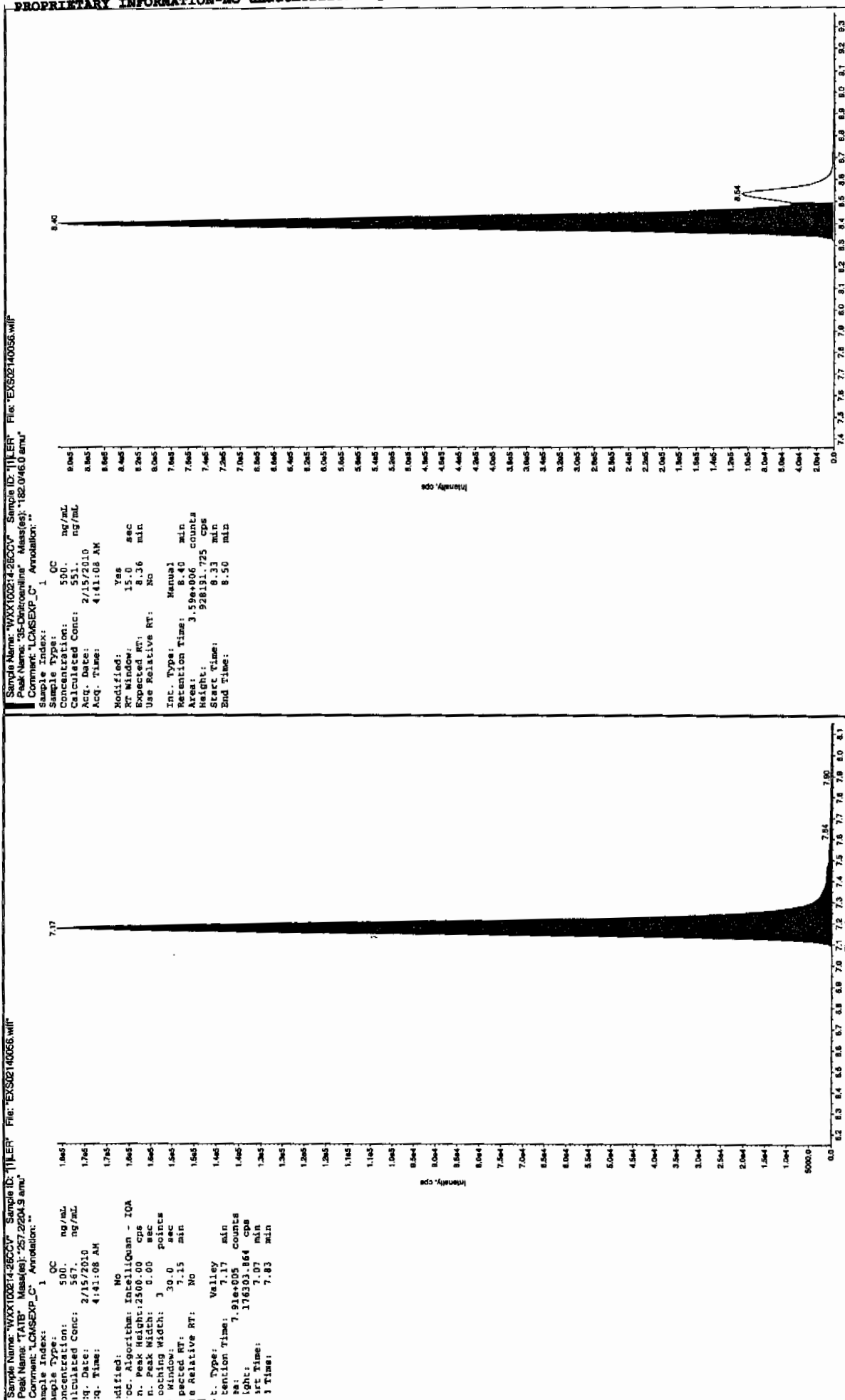
Sample Name: "WXX100214-260CV" Sample ID: "JLER" File: "EXS02140036.wif"
Peak Name: "3C-Dihydroquinone" Mass(es): "192.046.0 amu"
Comment: "LCMSEXP_C" Annotation: "

Sample Index: 1
Sample Type: QC
Concentration: 500 ng/mL
Calculated Conc: 500 ng/mL
Acq. Date: 2/15/2010
Acq. Time: 4:41:08 AM
Modified: Yes
Proc. Algorithm: IntelliQuan - IQA
In. Peak Height: 2000.00 cps
In. Peak Width: 0.00 sec
Smoothing Width: 3 points
RT Window: 15.0 sec
Expected RT: 8.36 min
Use Relative RT: No
Int. Type: Valley
Retention Time: 8.40 min
Peak Height: 3.31e+005 counts
Peak Width: 889455.078 cps
Start Time: 8.33 min
End Time: 8.48 min

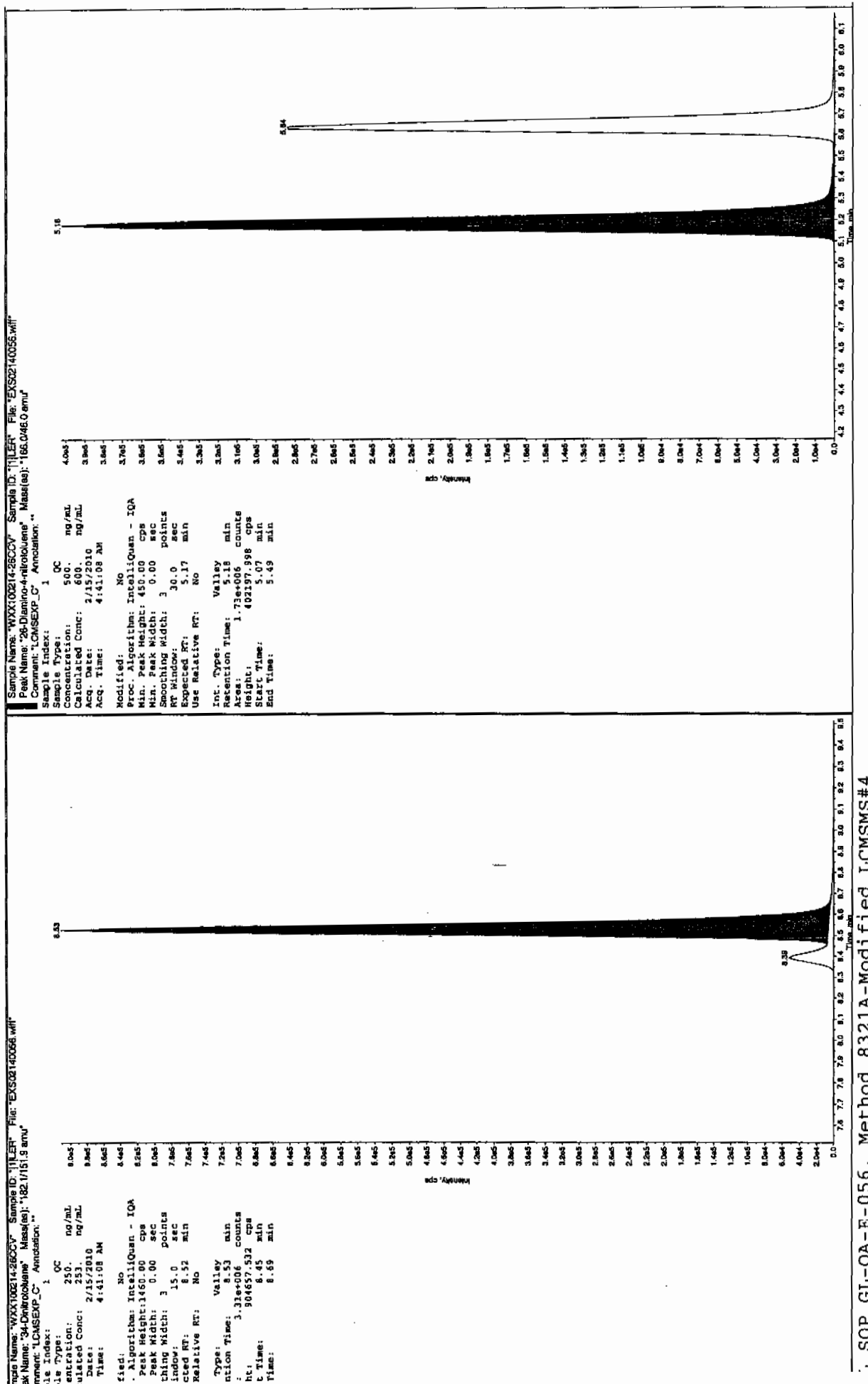


After Scan 2/17/10

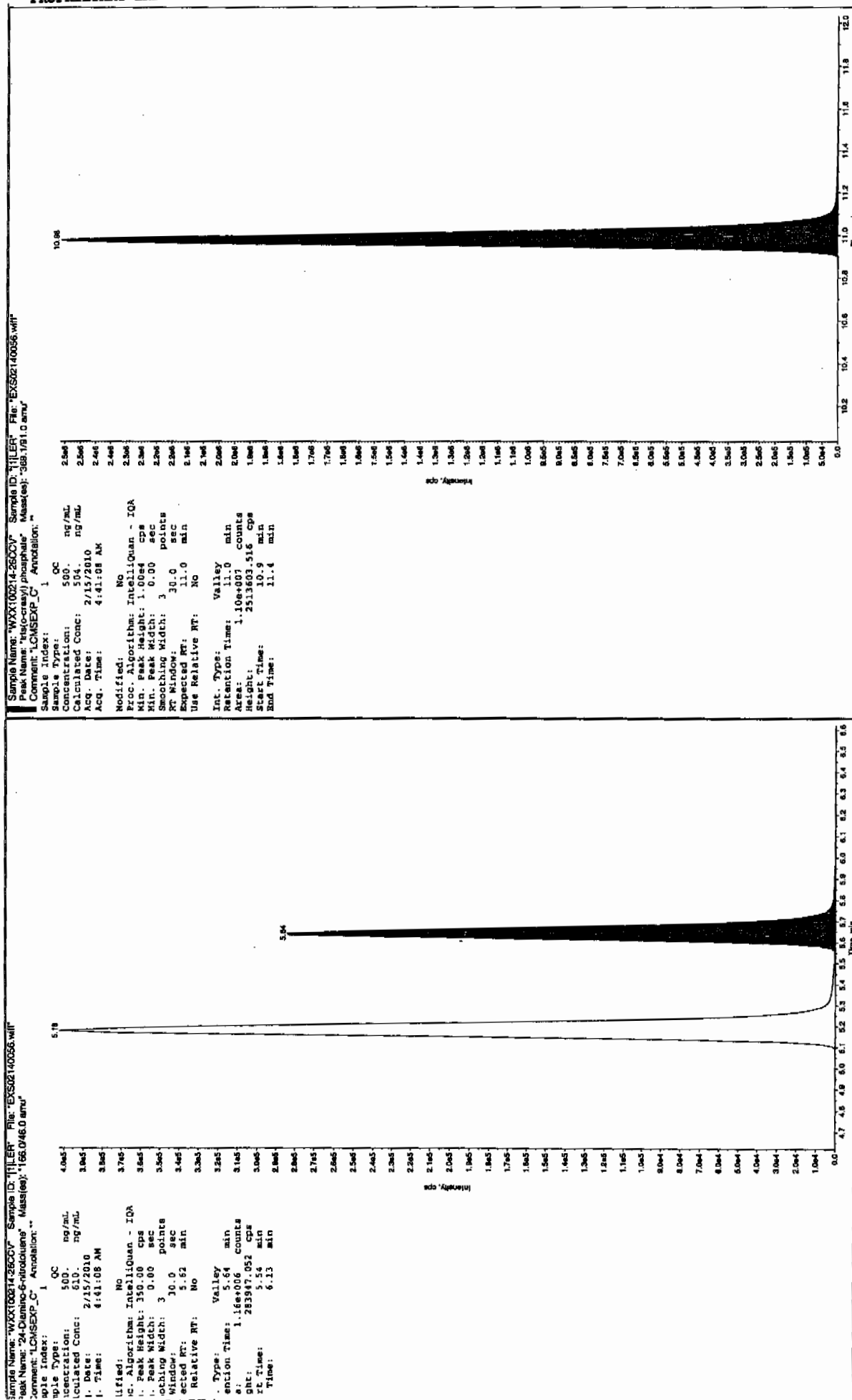
after Jan 2/17/10



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



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



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

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1392

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS02140058.wiff

Analysis Date: 15-FEB-10 05:12

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	119	119	
3,4-Dinitrotoluene	50	54.2	108	
3,5-Dinitroaniline	100	116	116	
TATB	100	114	114	
tris(o-cresyl) phosphate	100	104	104	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

2/17/10

Sample Name: "WXX100214-2701" Sample ID: "111ER" File: "EXS02140058.wif"

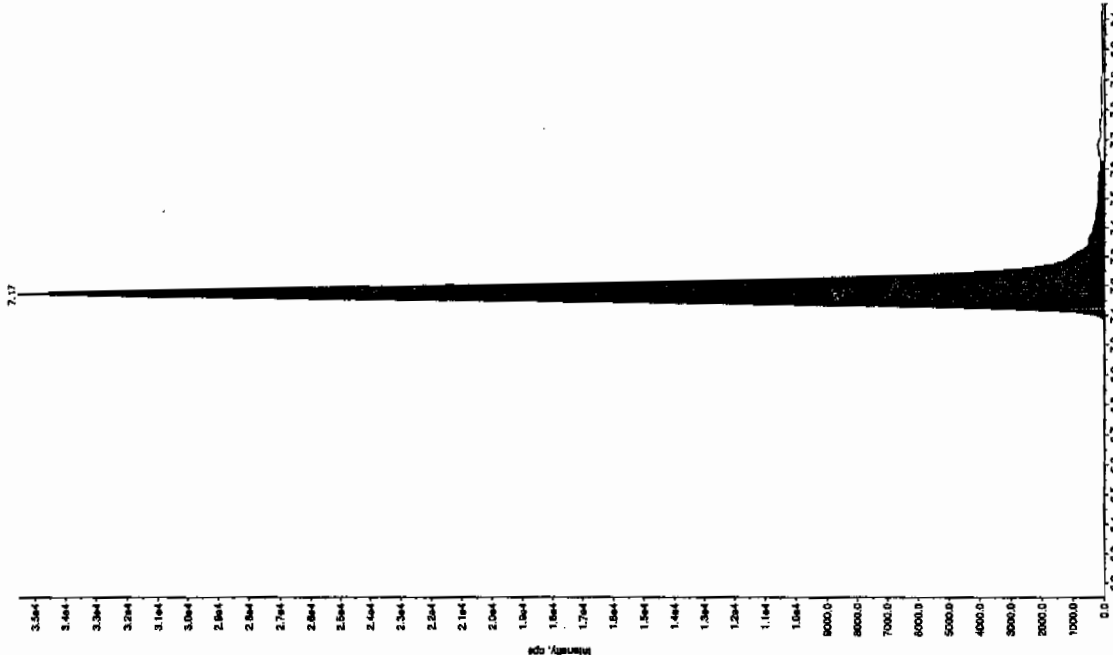
Peak Name: "TATB" Mass(es): "257.2204.9 amu"

Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
 Sample Type: QC
 Concentration: 100. ng/mL
 Calculated Conc: 114. ng/mL
 Acq. Date: 2/15/2010
 Acq. Time: 5:12:32 AM

Modified: NO
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 2500.00 cps
 Min. Peak Width: 3.00 sec
 Smoothing Width: 30.0 points
 RT Window: 30.0 sec
 Expected RT: 7.15 min
 Use Relative RT: NO

Int. Type: Valley
 Retention Time: 7.17 min
 Area: 1.57e+005 counts
 Height: 35565.002 cps
 Start Time: 7.06 min
 End Time: 7.63 min



Sample Name: "WXX100214-2701" Sample ID: "111ER" File: "EXS02140058.wif"

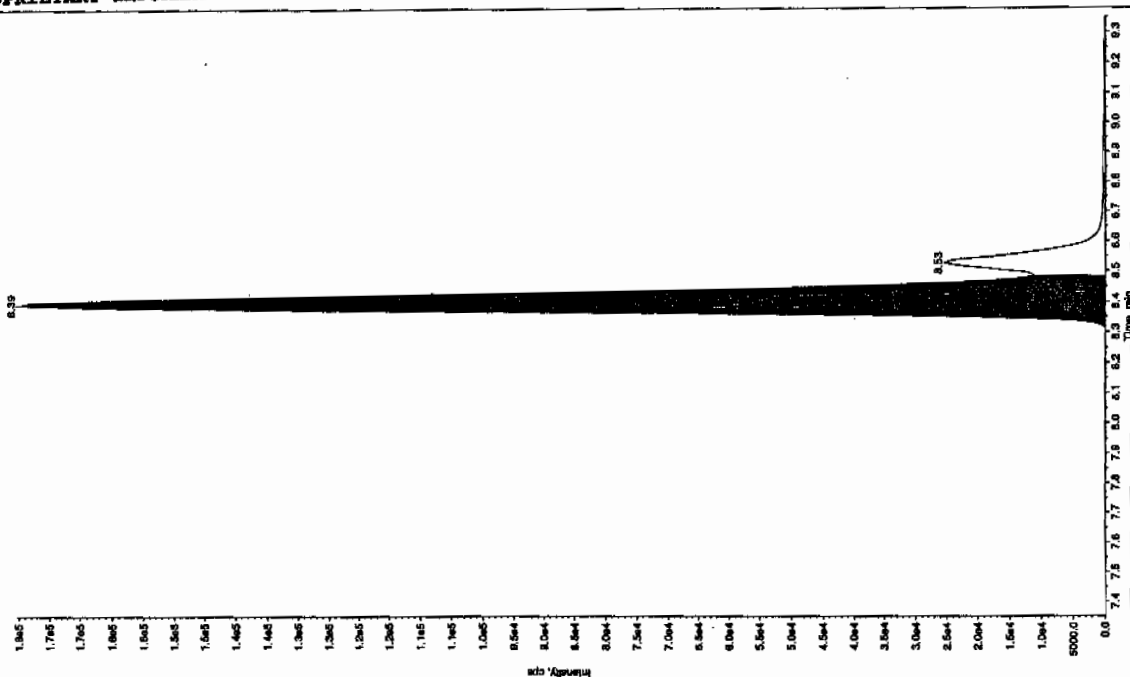
Peak Name: "3S-Diethanolamine" Mass(es): "182.046.0 amu"

Comment: "LCMSEXP_C" Annotation: ""

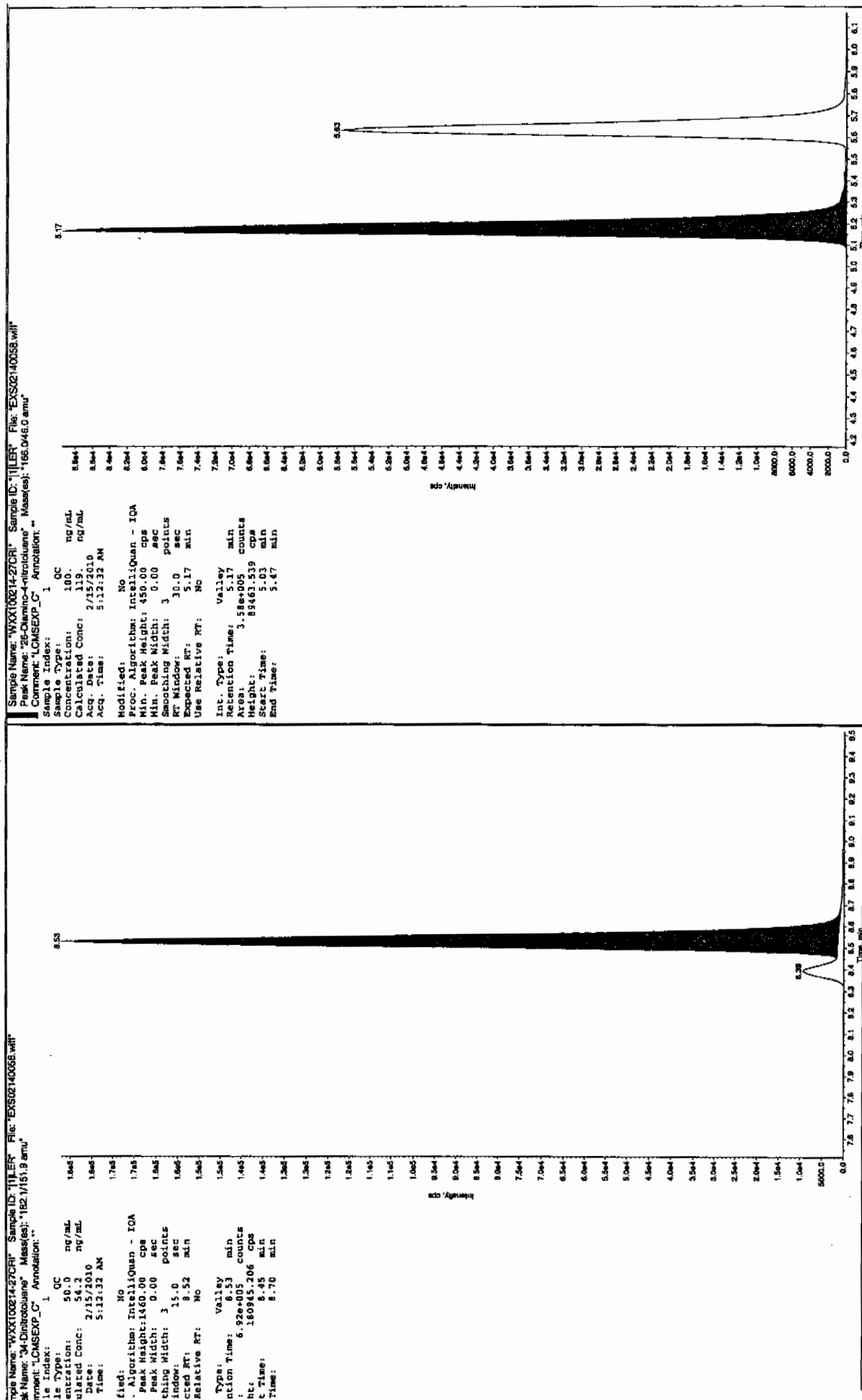
Sample Index: 1
 Sample Type: QC
 Concentration: 100. ng/mL
 Calculated Conc: 116. ng/mL
 Acq. Date: 2/15/2010
 Acq. Time: 5:12:32 AM

Modified: YES
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 2000.00 cps
 Min. Peak Width: 3.00 sec
 Smoothing Width: 30.0 points
 RT Window: 15.0 sec
 Expected RT: 8.35 min
 Use Relative RT: NO

Int. Type: Valley
 Retention Time: 8.39 min
 Area: 7.62e+005 counts
 Height: 175270.462 cps
 Start Time: 8.28 min
 End Time: 8.48 min

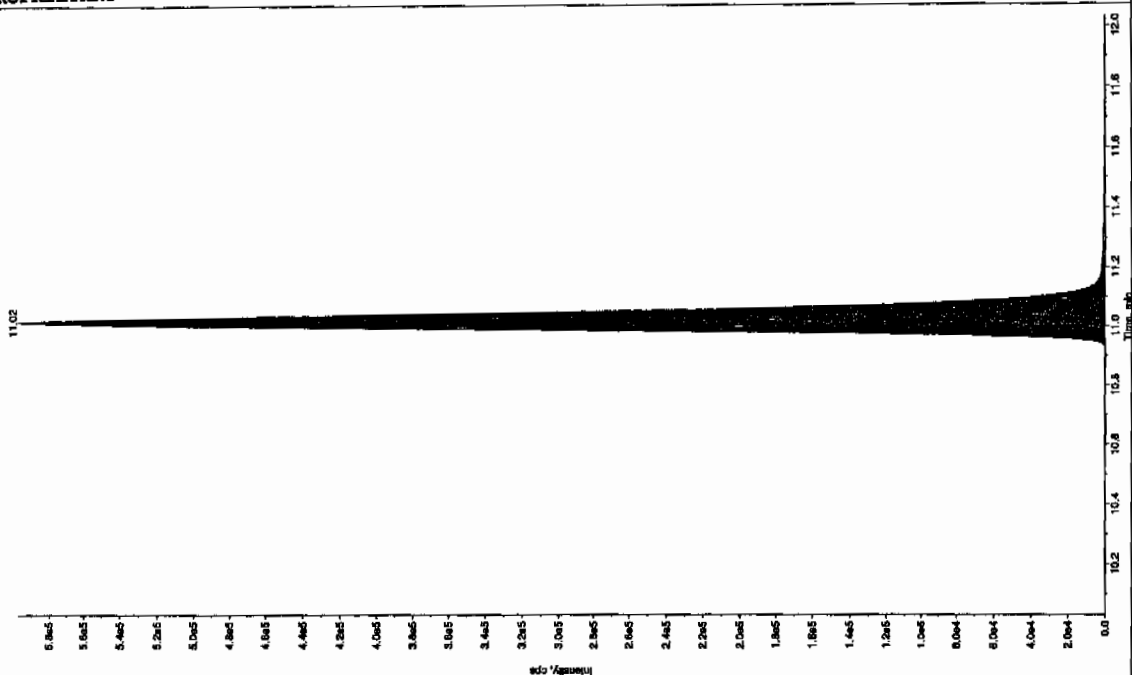


Hum 02/17/10



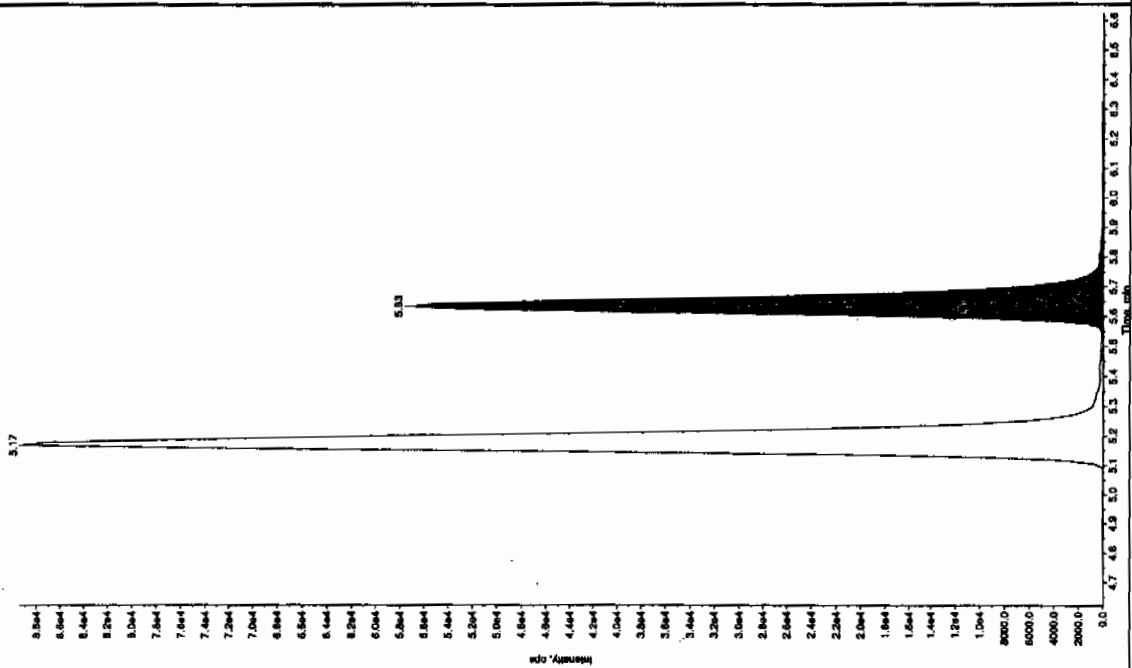
Sample Name: "WXX10214-27CR" Sample ID: "11LER" File: "EXS02140058.wif"
 Peak Name: "Vig(cray) phosphate" Mass(es): "369.191.0 amu"
 Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
 Sample Type: 100 ng/mL
 Calculated Conc: 104 ng/mL
 Acq. Date: 2/15/2010
 Acq. Time: 5:12:32 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 1.00e4 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 11.0 min
 Use Relative RT: No
 Lot Type: Valley
 Retention Time: 11.0 min
 Area: 2.49e+006 counts
 Height: 596468.140 cps
 Start Time: 10.9 min
 End Time: 11.3 min



Sample Name: "WXX10214-27CR" Sample ID: "11LER" File: "EXS02140058.wif"
 Peak Name: "24-Diamino-6-phenylthiopyran" Mass(es): "166.048.0 amu"
 Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
 Sample Type: 100 ng/mL
 Calculated Conc: 120 ng/mL
 Acq. Date: 2/15/2010
 Acq. Time: 5:12:32 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 350.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 5.62 min
 Use Relative RT: No
 Lot Type: Valley
 Retention Time: 5.63 min
 Area: 2.32e+005 counts
 Height: 57557.320 cps
 Start Time: 5.52 min
 End Time: 5.94 min



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

7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1392

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS02140069.wiff

Analysis Date: 15-FEB-10 08:05

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	528	106	
2,6-Diamino-4-nitrotoluene	500	562	112	
3,4-Dinitrotoluene	250	235	94	
3,5-Dinitroaniline	500	535	107	
TATB	500	530	106	
tris(o-cresyl) phosphate	500	505	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%

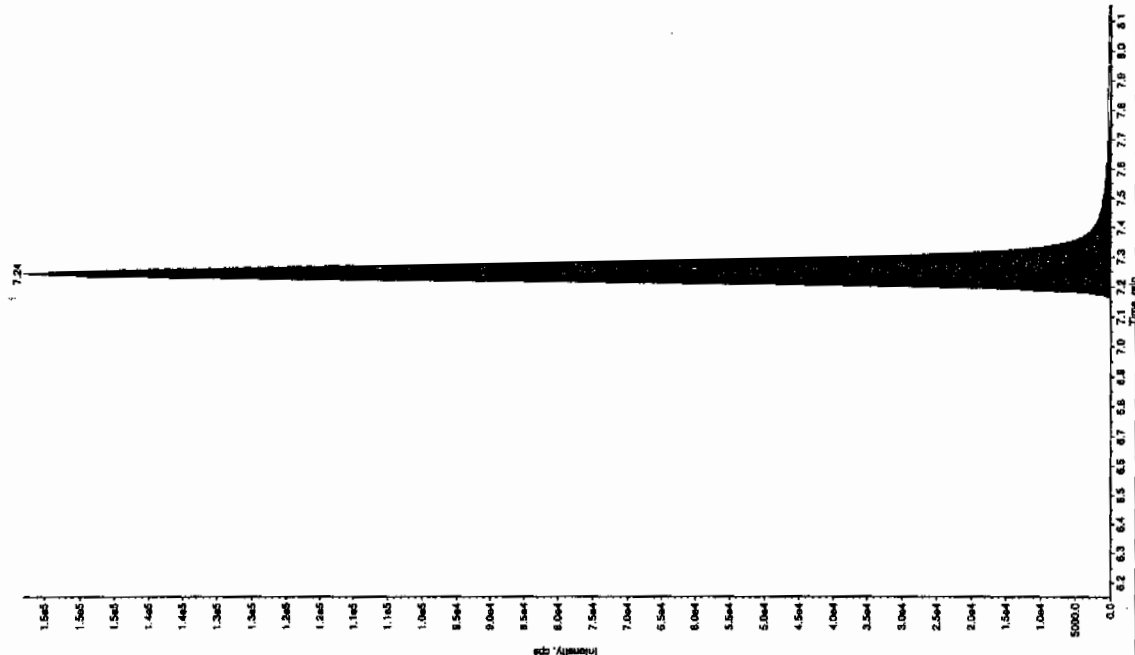
Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Before Jan 2/16/10

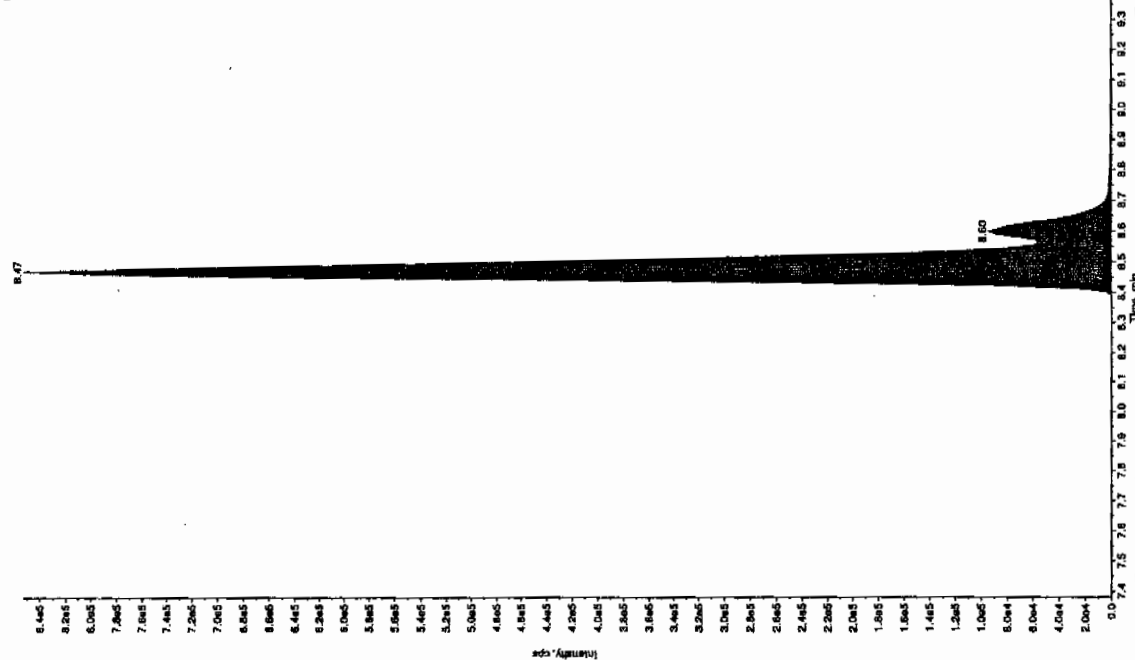
Sample Name: "WXX100214-260CV" Sample ID: "J1LER" File: "EXS02140069.wif"
 Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
 Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
 Sample Type: 500
 Concentration: 500 ng/mL
 Calculated Conc: 2/15/2010
 Acq. Date: 2/15/2010
 Acq. Time: 8:05:19 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 2500.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 7.15 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 7.24 min
 Area: 7.39e+005 counts
 Height: 15793.017 cps
 Start Time: 7.11 min
 End Time: 7.74 min



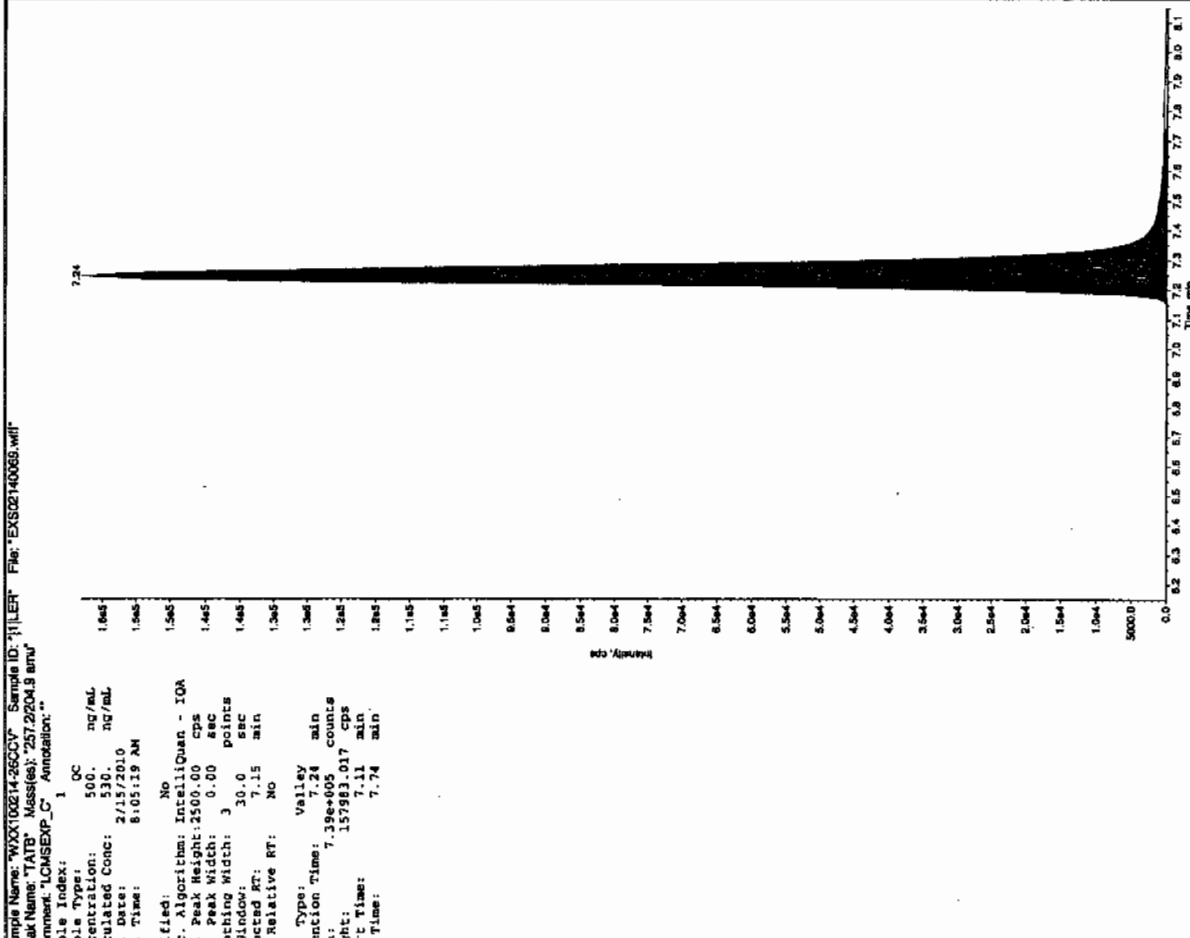
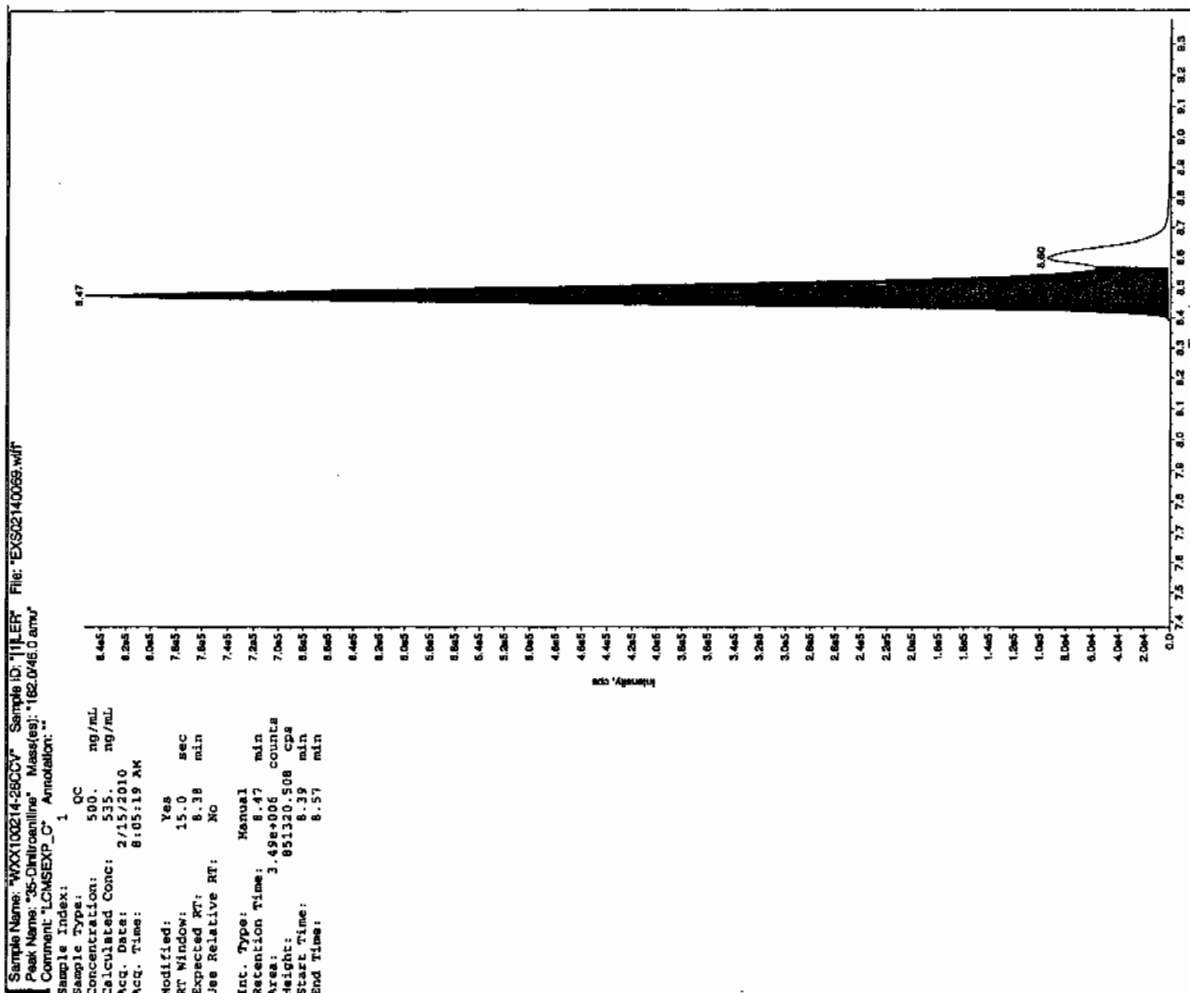
Sample Name: "WXX100214-260CV" Sample ID: "J1LER" File: "EXS02140069.wif"
 Peak Name: "35-Dinitroarline" Mass(es): "182.046.0 amu"
 Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
 Sample Type: 500
 Concentration: 500 ng/mL
 Calculated Conc: 2/15/2010
 Acq. Date: 2/15/2010
 Acq. Time: 8:05:19 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 2000.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.38 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.47 min
 Area: 3.94e+005 counts
 Height: 55263.560 cps
 Start Time: 8.37 min
 End Time: 8.98 min



Humor 1/7/10

after Jan 2/17/10



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

Sample Name: "WXX100214-260CV" Sample ID: "JILLER" File: "EXS02140069.wif"
 Peak Name: "28-Dinitro-4-nitrotoluene" Mass(es): "156.046.0 amu"
 Comment: "LCMSEXP_C" Annotation: ""

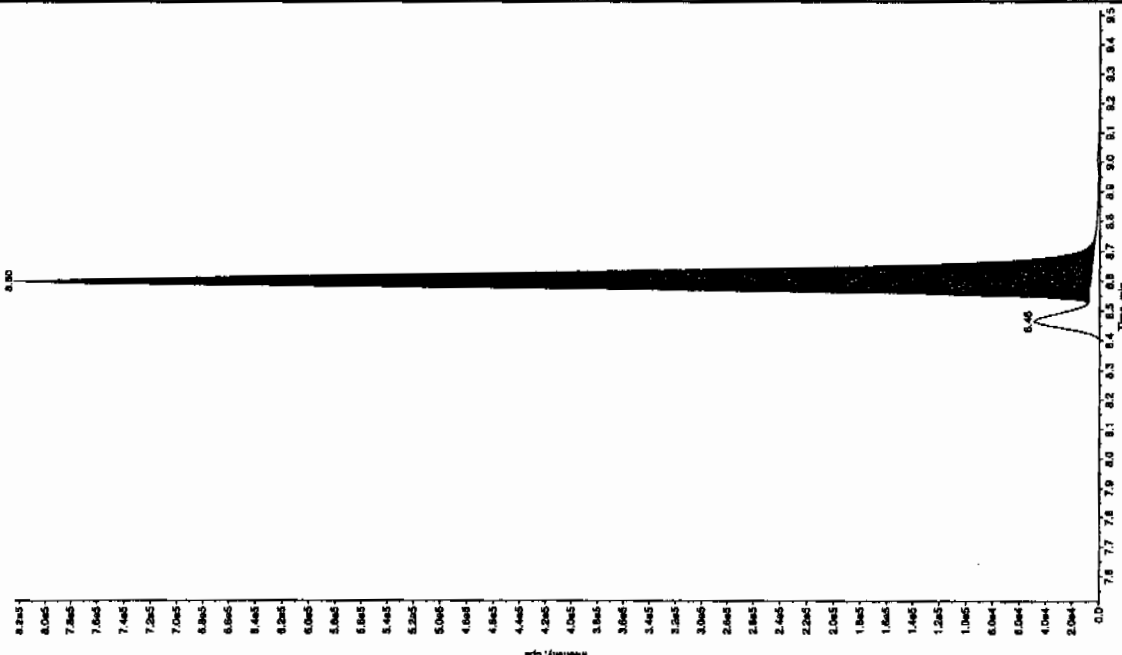
Sample Index: 1

Sample Type: QC
 Concentration: 500. ng/mL
 Calculated Conc: 2/15/2010 ng/mL
 Acq. Time: 8:05:19 AM

Modified: No

Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 450.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 5.17 min
 Use Relative RT: No

Int. Type: Valley
 Retention Time: 5.27 min
 Area: 1.62e+006 counts
 Height: 398730.732 cps
 Start Time: 5.12 min
 End Time: 5.56 min



Sample Name: "WXX100214-260CV" Sample ID: "JILLER" File: "EXS02140069.wif"
 Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
 Comment: "LCMSEXP_C" Annotation: ""

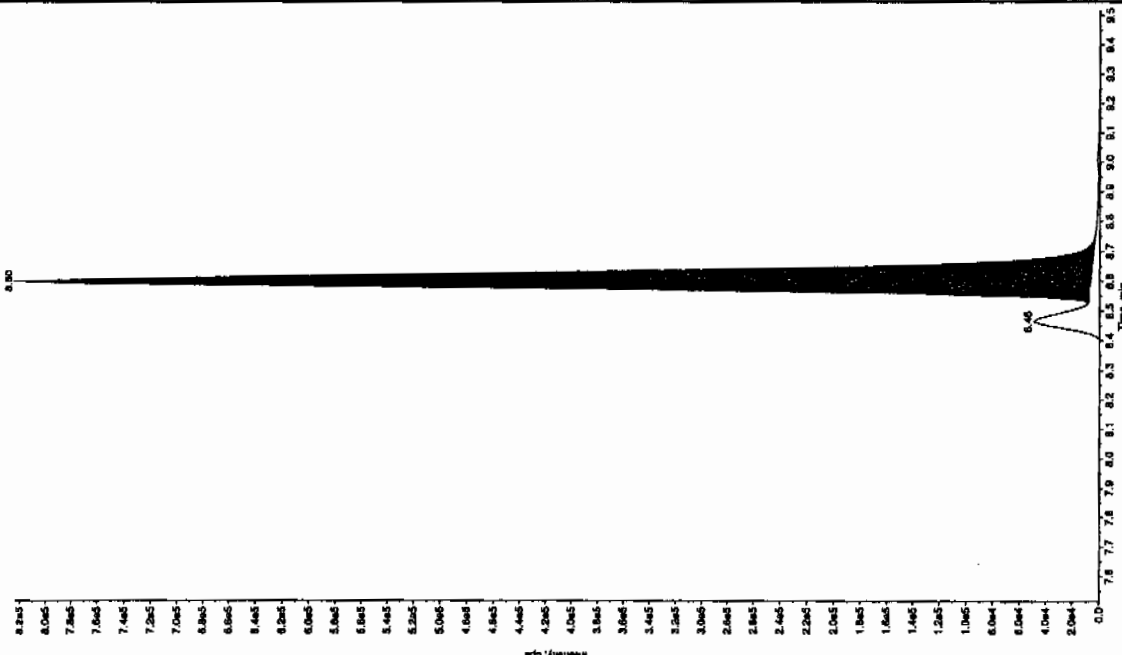
Sample Index: 1

Sample Type: QC
 Concentration: 250. ng/mL
 Calculated Conc: 2/15/2010 ng/mL
 Acq. Time: 8:05:19 AM

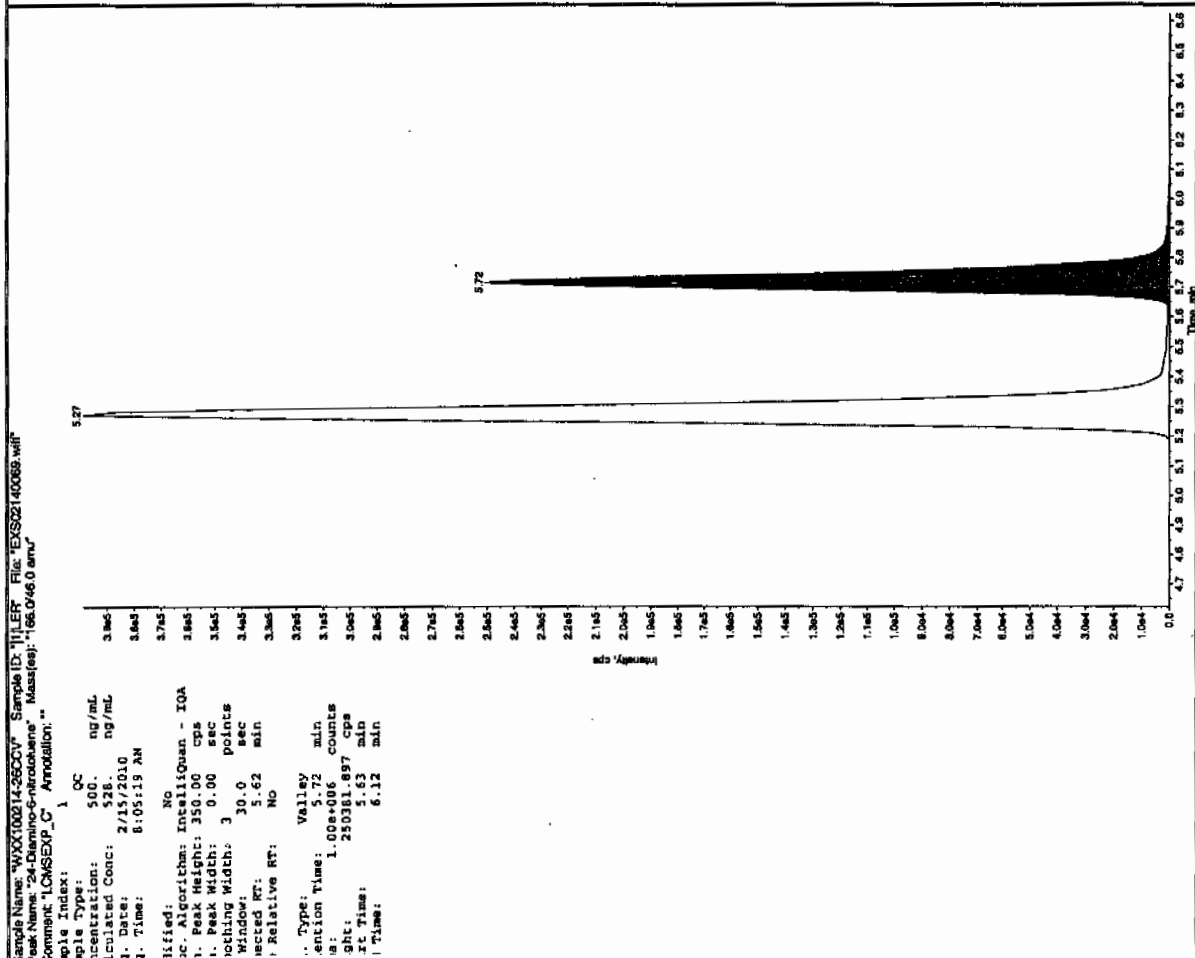
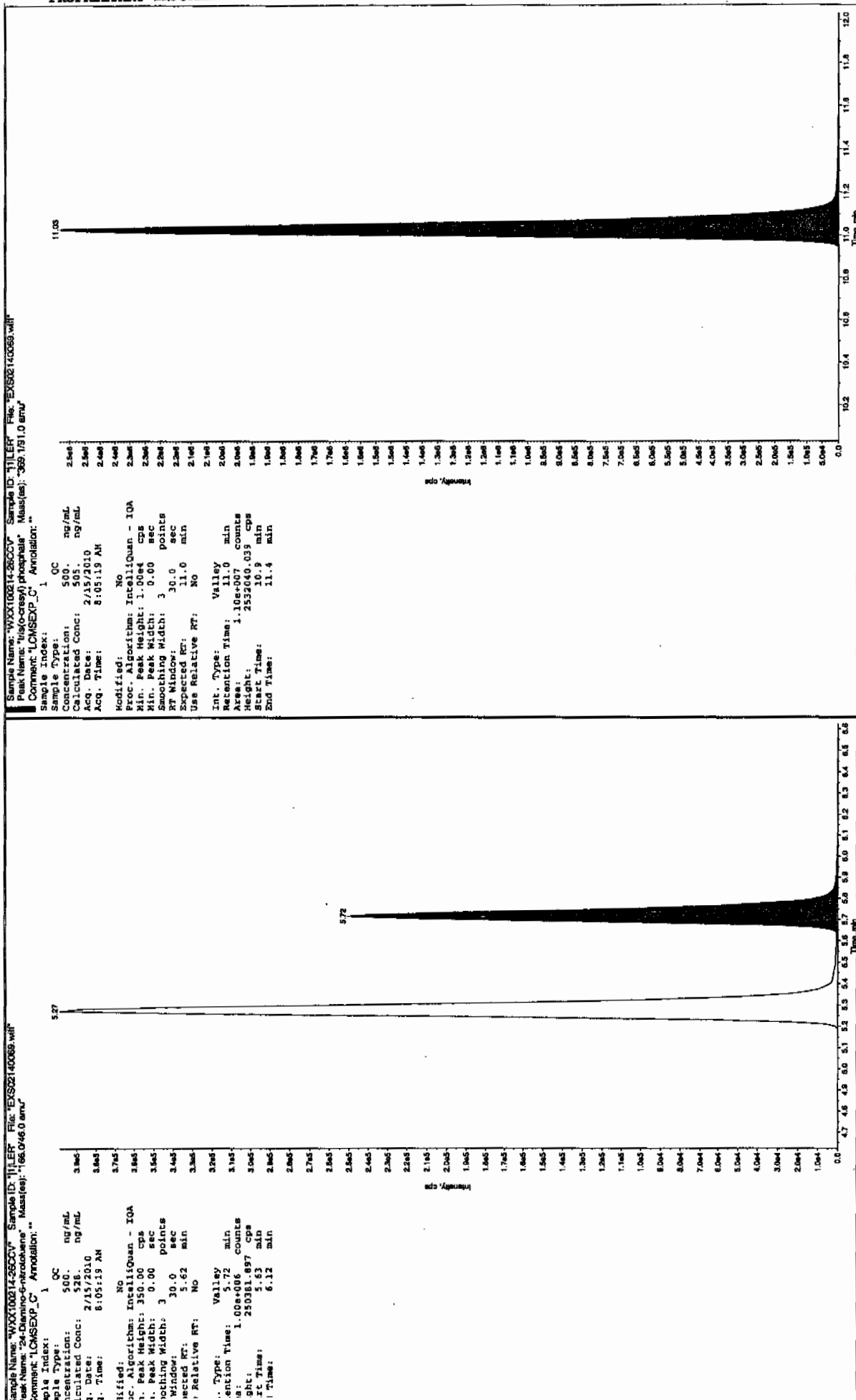
Modified: No

Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 1460.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.52 min
 Use Relative RT: No

Int. Type: Valley
 Retention Time: 8.60 min
 Area: 3.08e+005 counts
 Height: 317162.303 cps
 Start Time: 8.53 min
 End Time: 8.76 min



IL 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): 10-1392

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS02140071.wiff

Analysis Date: 15-FEB-10 08:37

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	105	105	
2,6-Diamino-4-nitrotoluene	100	108	108	
3,4-Dinitrotoluene	50	51.3	103	
3,5-Dinitroaniline	100	115	115	
TATB	100	115	115	
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 ,

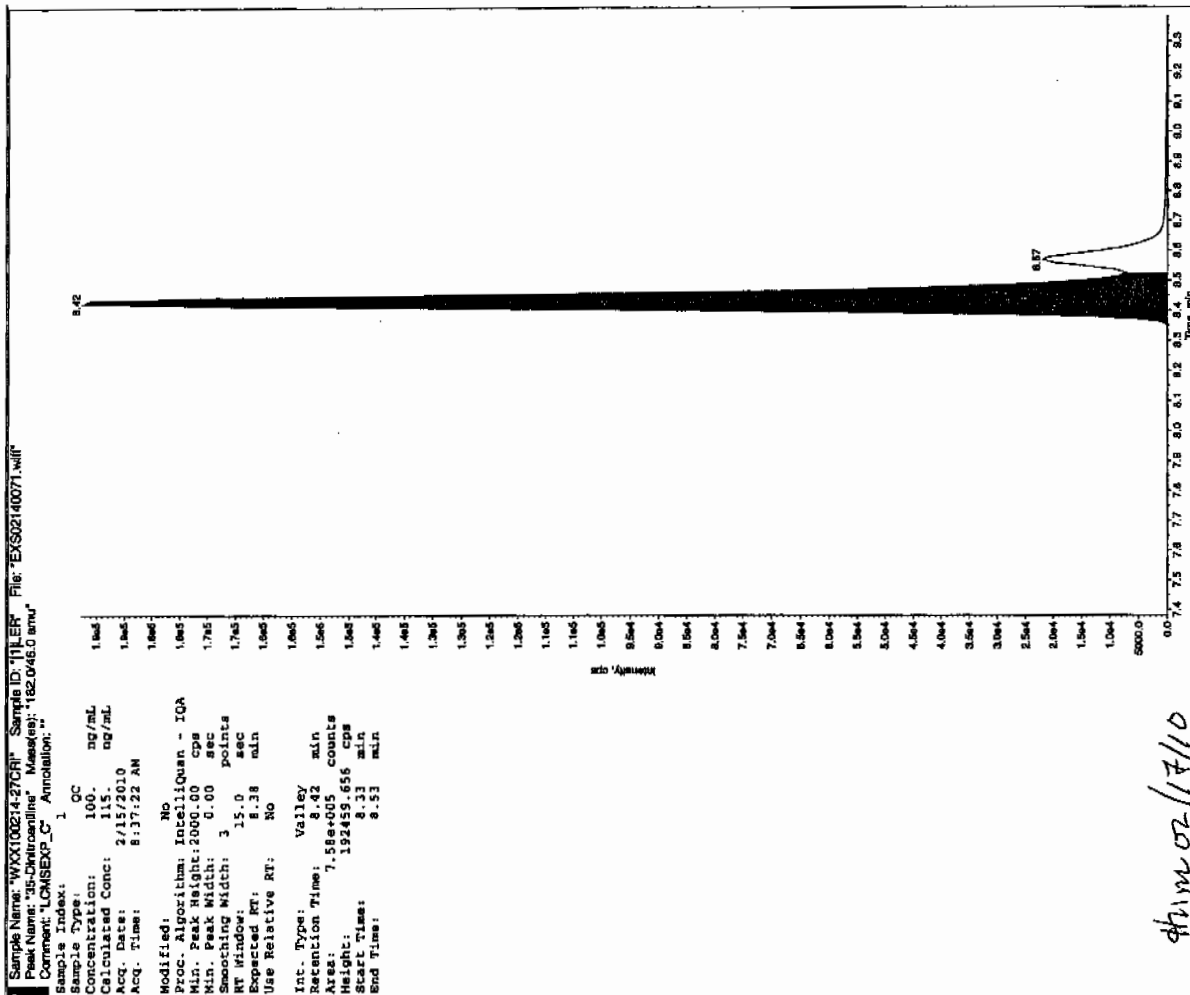
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

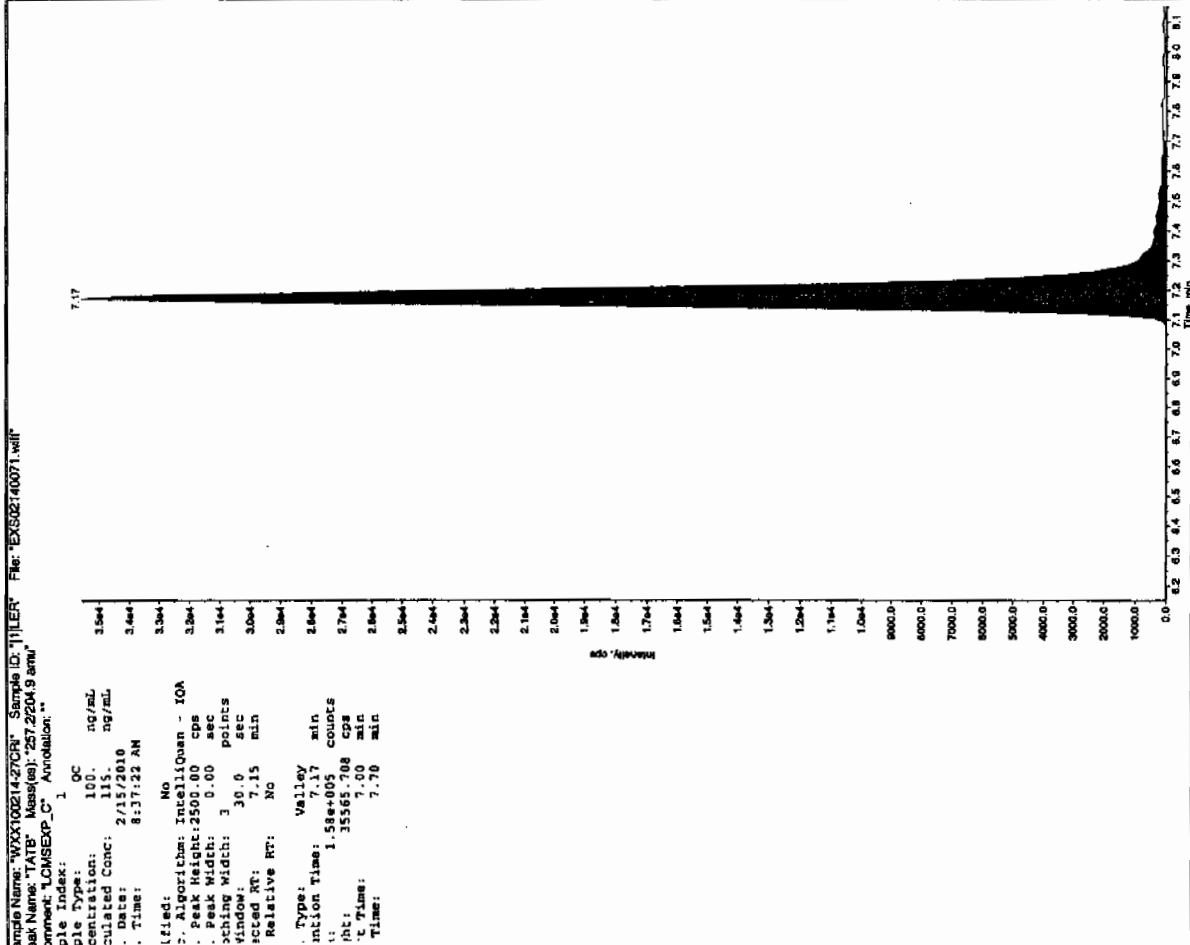
Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

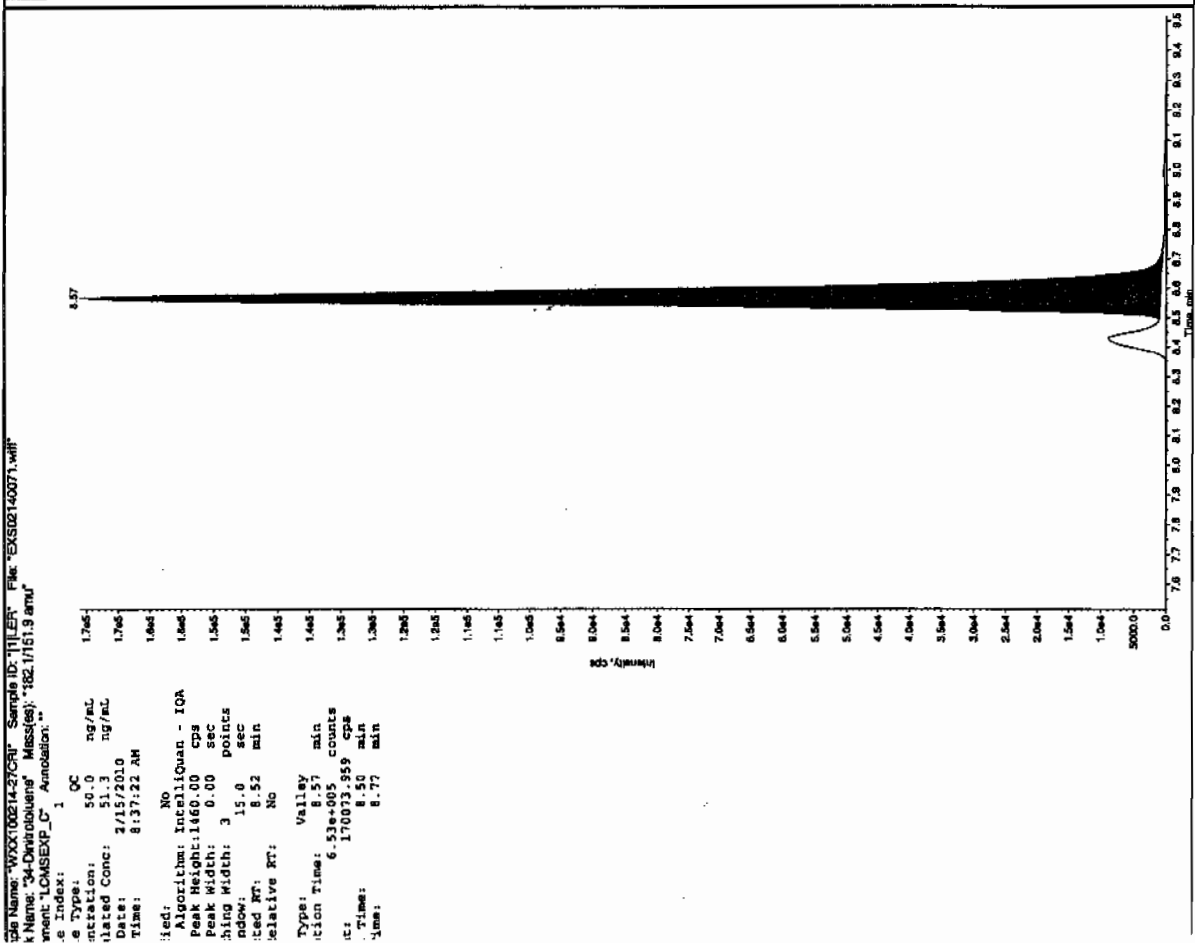
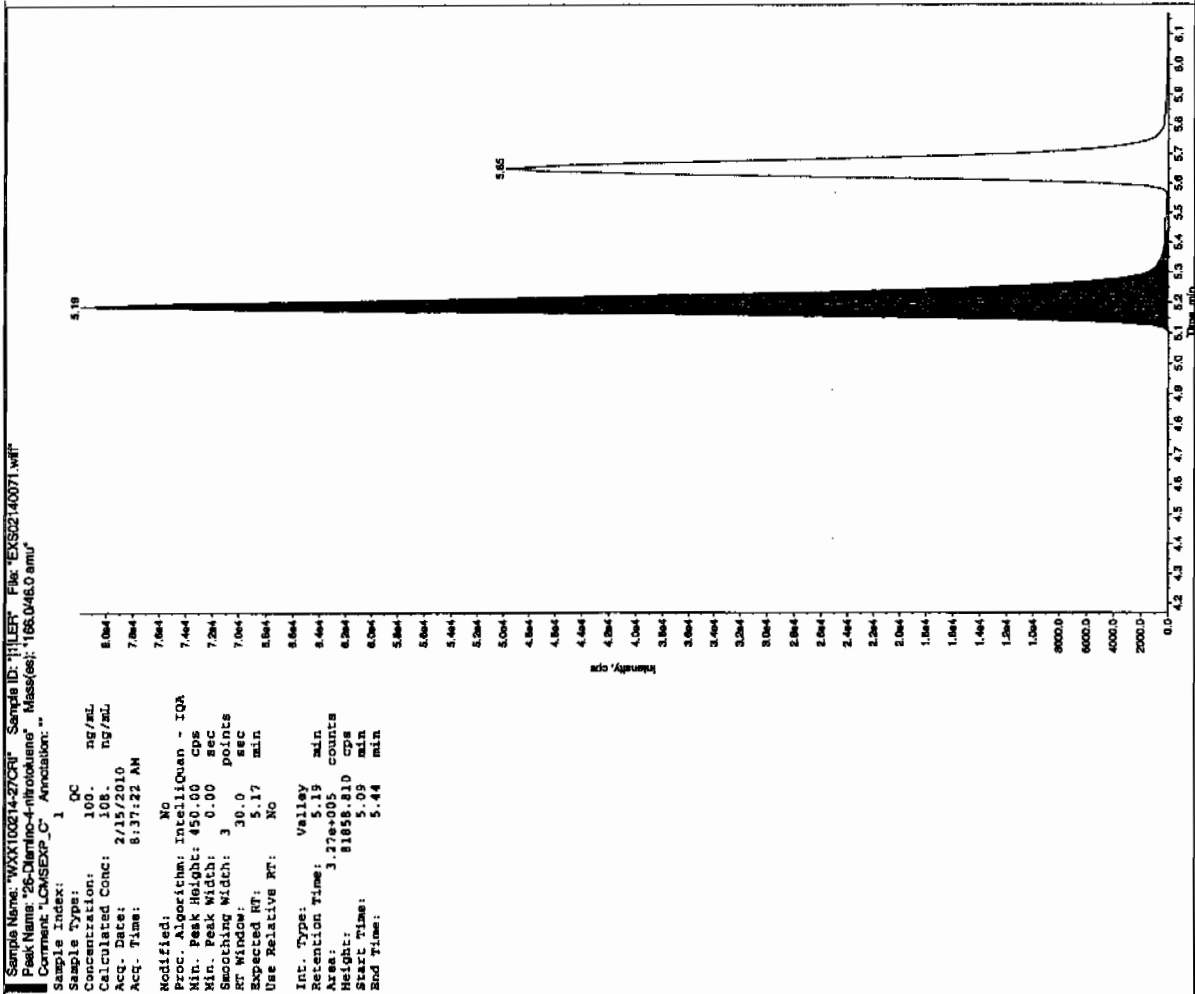
Jan 21/11

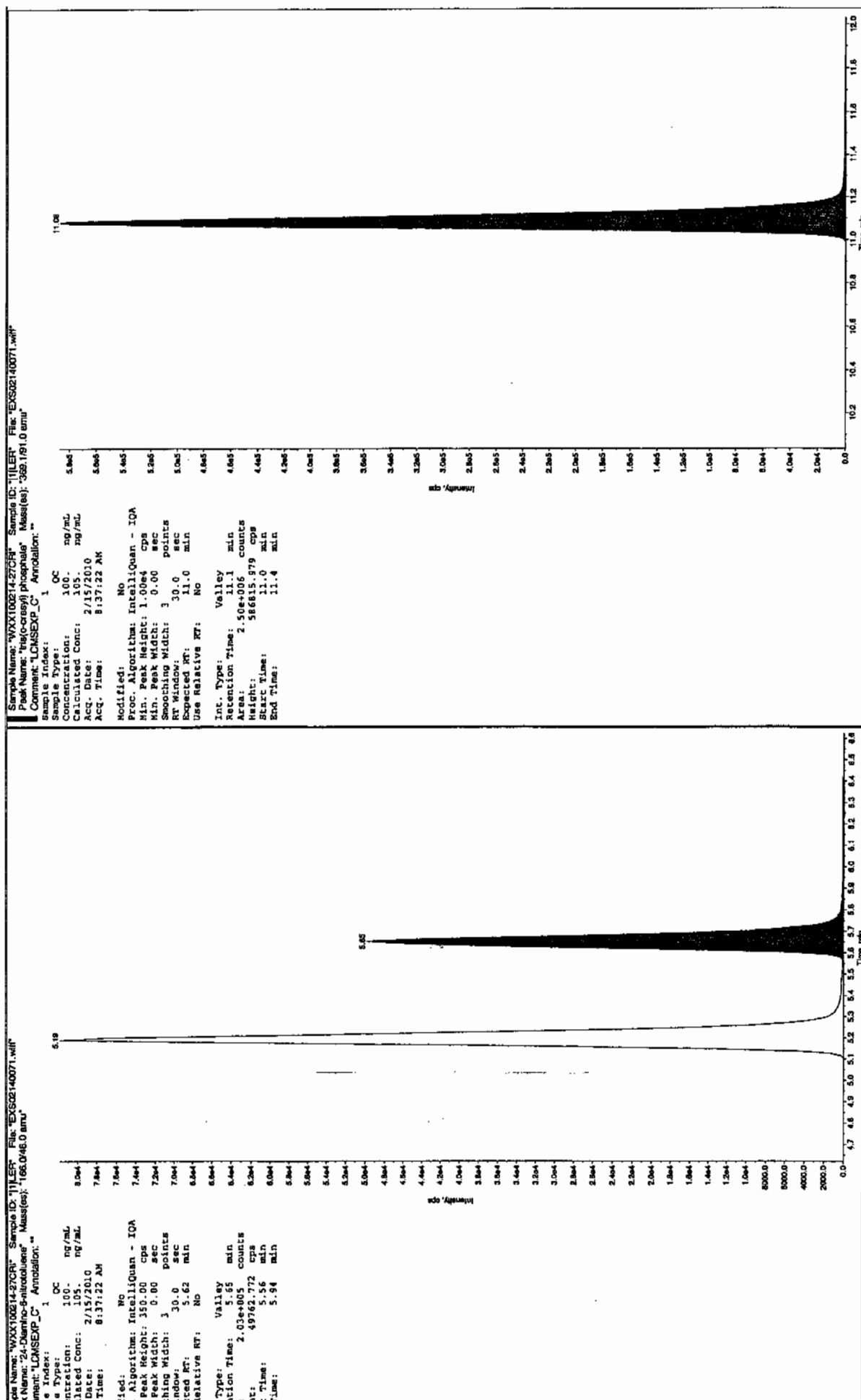


4/11/11



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





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

7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1392

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS02140082.wiff

Analysis Date: 15-FEB-10 11:30

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	382	76	
2,6-Diamino-4-nitrotoluene	500	446	89	
3,4-Dinitrotoluene	250	230	92	
3,5-Dinitroaniline	500	505	101	
TATB	500	544	109	
tris(o-cresyl) phosphate	500	484	97	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

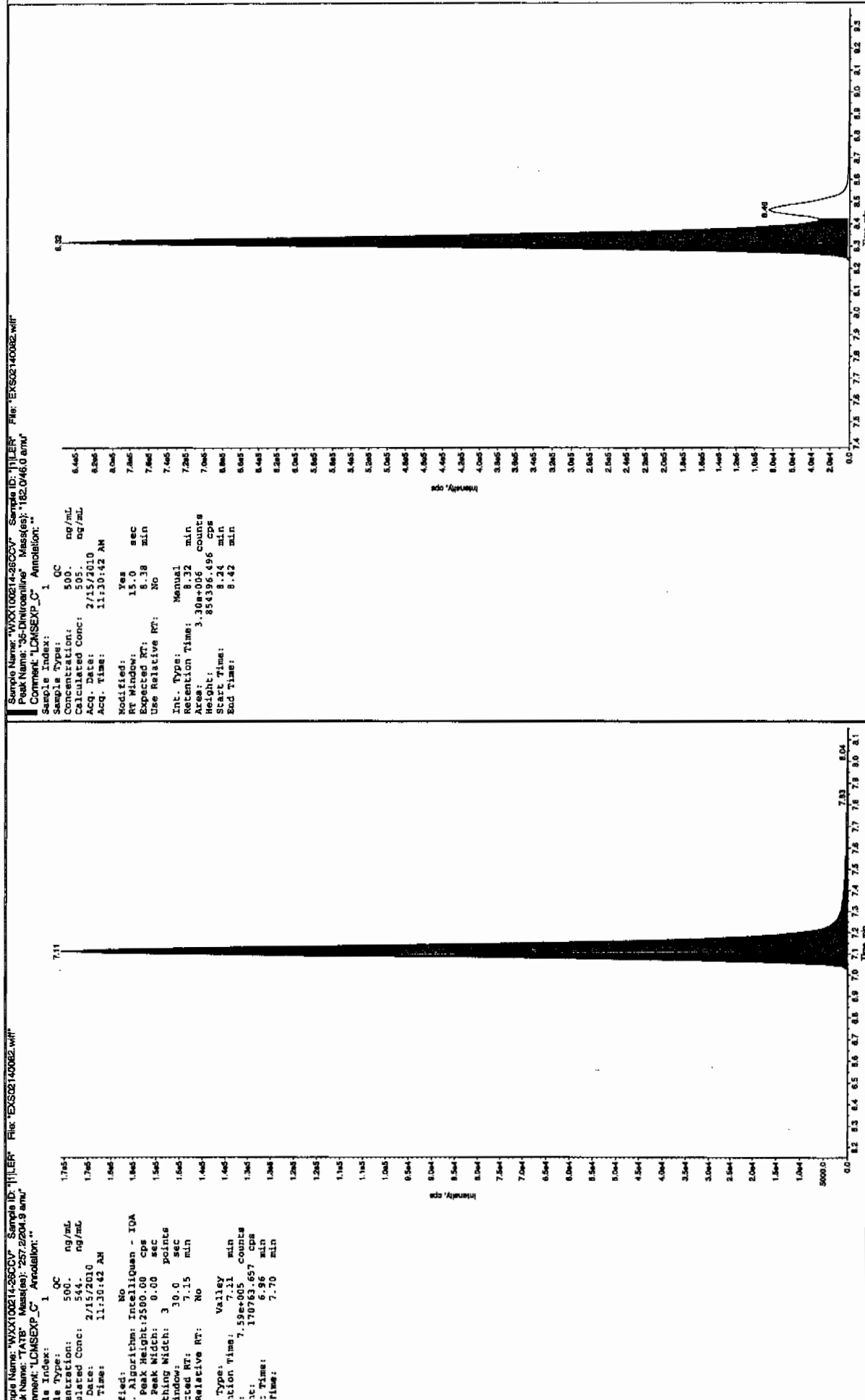
Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

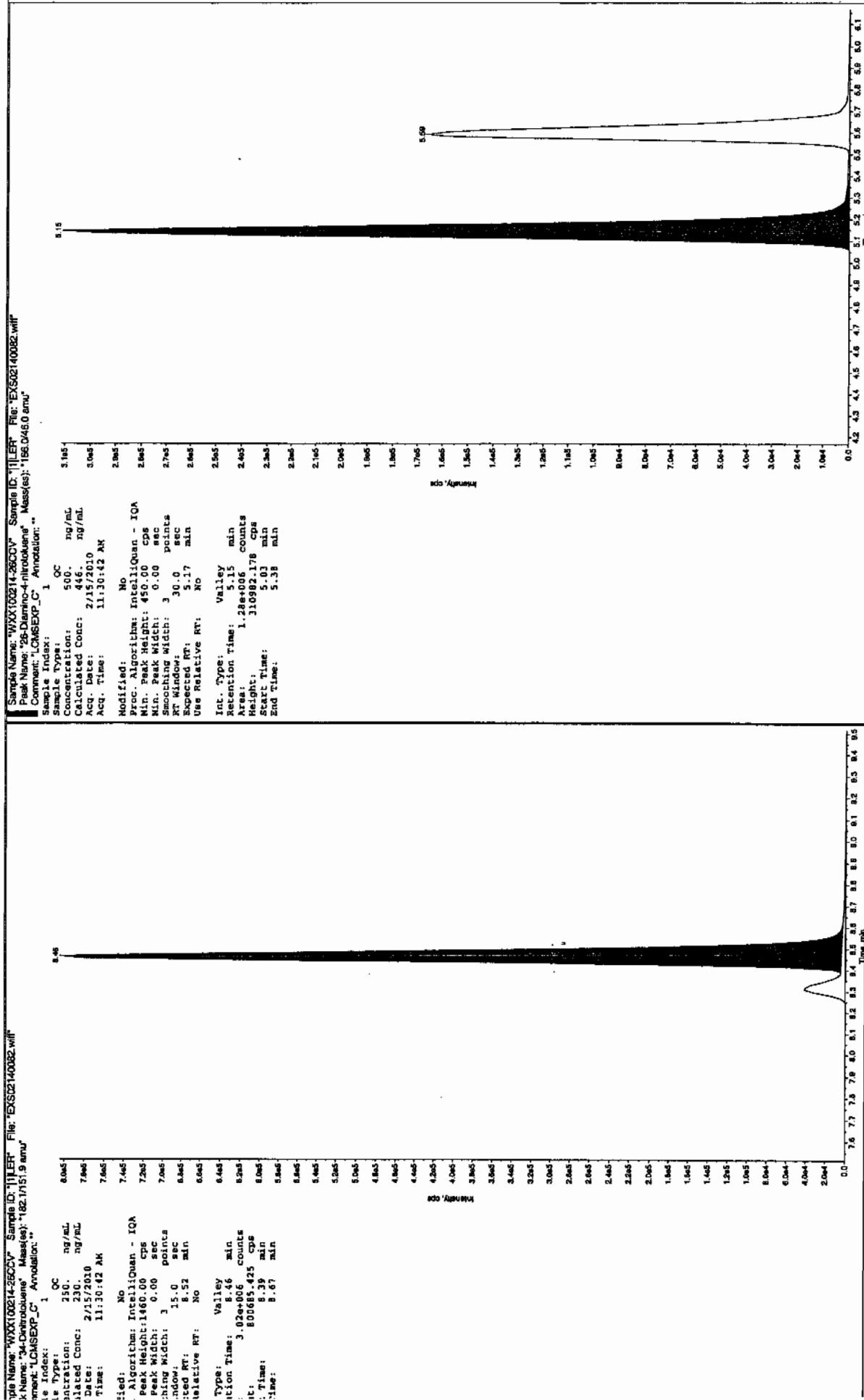


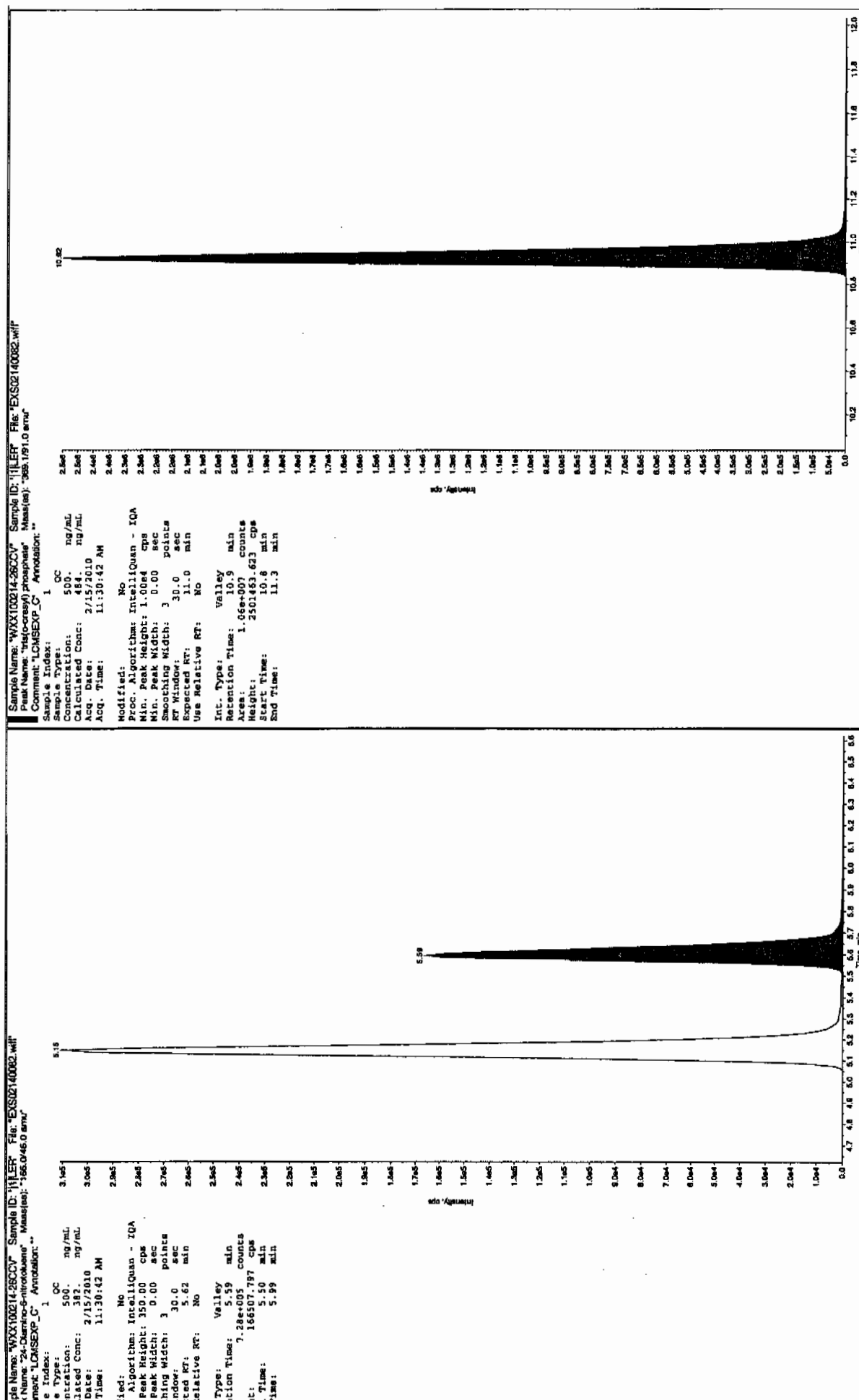
GL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

after Jan 2/17/10



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





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

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1392

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS02140084.wiff

Analysis Date: 15-FEB-10 12:02

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	86.5	87	
2,6-Diamino-4-nitrotoluene	100	85.4	85	
3,4-Dinitrotoluene	50	51.9	104	
3,5-Dinitroaniline	100	108	108	
TATB	100	105	105	
tris(o-cresyl) phosphate	100	99.7	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%

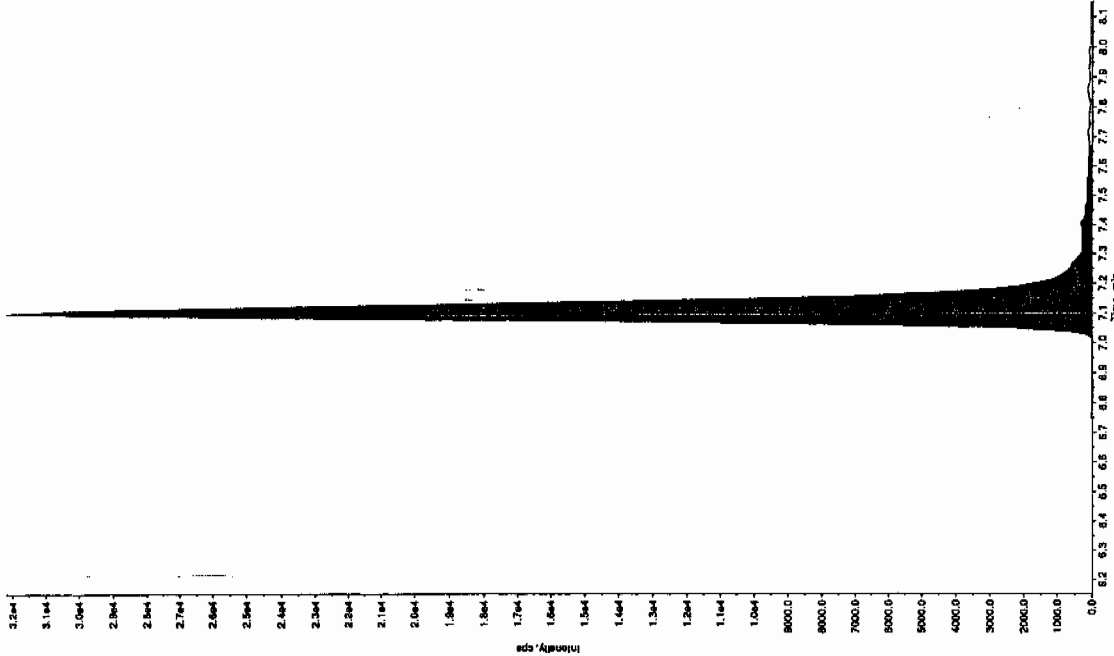
Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Before Sun 2/16/10

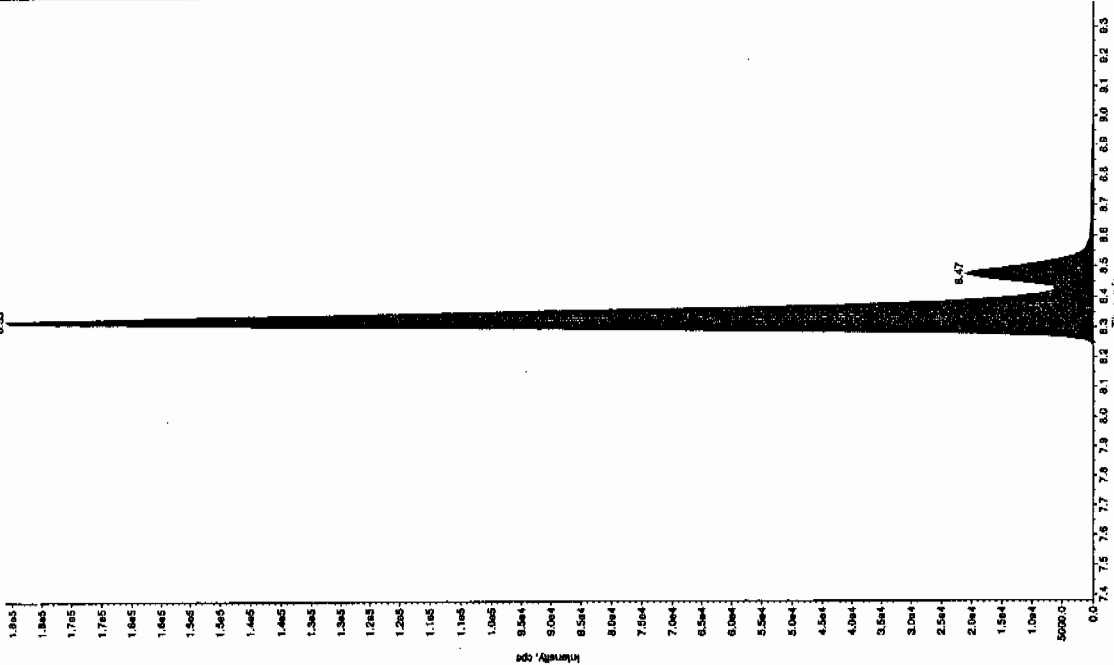
Sample Name: 'WXX100214-27GR' Sample ID: 'JL1ER' File: 'EXS02140084.wif'
 Peak Name: 'TAIR' Mass(es): '257.2204.9 amu'
 Comment: 'LCMSEXP_C' Annotation: ''

Sample Index: 1
 Sample Type: QC
 Concentration: 100. ng/mL
 Calculated Conc: 122. ng/mL
 Acq. Date: 2/15/2010
 Acq. Time: 12:02:09 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 2500.00 cps
 Peak Width: 30.0 sec
 Smoothing Width: 30.0 points
 RT Window: 30.0 sec
 Expected RT: 7.15 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 7.10 min
 Area: 1.45e+005 counts
 Height: 32201.778 cps
 Start Time: 6.96 min
 End Time: 7.57 min



Sample Name: 'WXX100214-27GR' Sample ID: 'JL1ER' File: 'EXS02140084.wif'
 Peak Name: '3S-Dibenzofluorene' Mass(es): '182.046.0 amu'
 Comment: 'LCMSEXP_C' Annotation: ''

Sample Index: 1
 Sample Type: QC
 Concentration: 100. ng/mL
 Calculated Conc: 122. ng/mL
 Acq. Date: 2/15/2010
 Acq. Time: 12:02:09 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 2000.00 cps
 Peak Width: 30.0 sec
 Smoothing Width: 30.0 points
 RT Window: 30.0 sec
 Expected RT: 8.38 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.33 min
 Area: 8.01e+005 counts
 Height: 181292.480 cps
 Start Time: 8.21 min
 End Time: 8.67 min

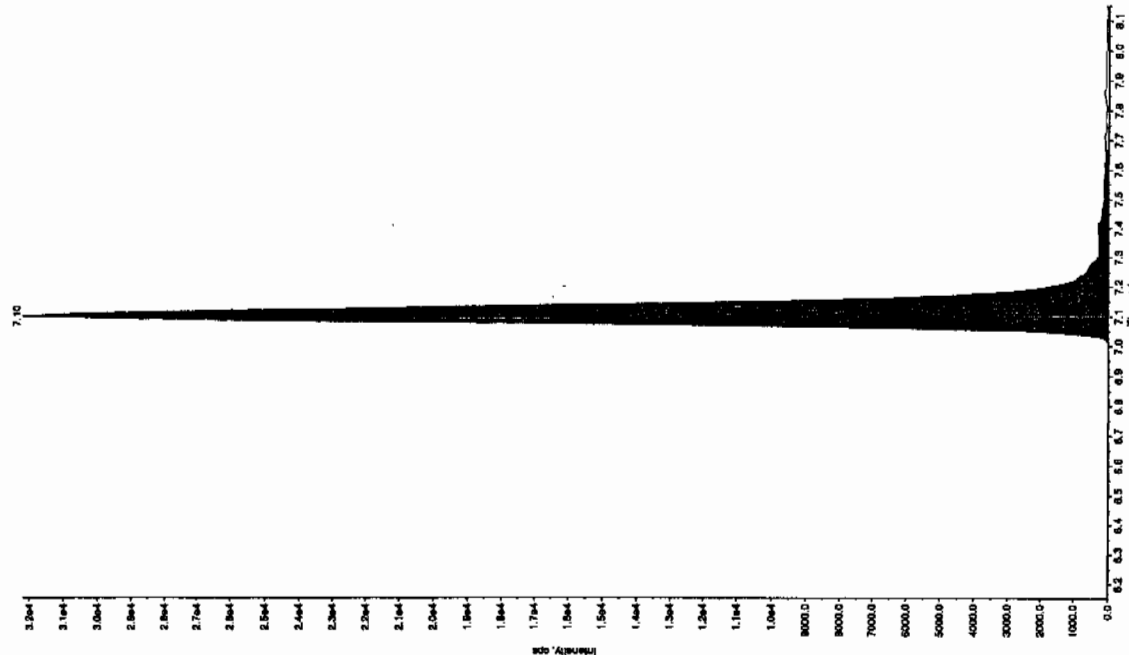


After Sun 2/17/10

after OK 2/17/10

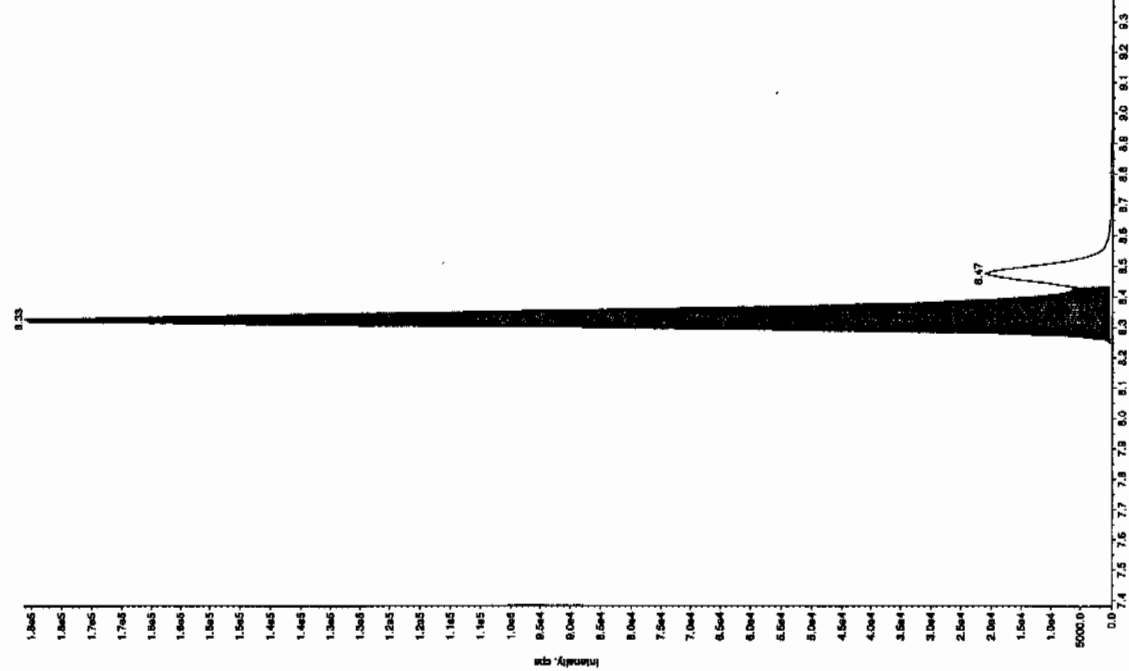
Sample Name: "WXX100214-270R1" Sample ID: "111ER" File: "EXS2140084.will"
 Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"
 Comment: "LCMSEXP_C" Annotation: ""

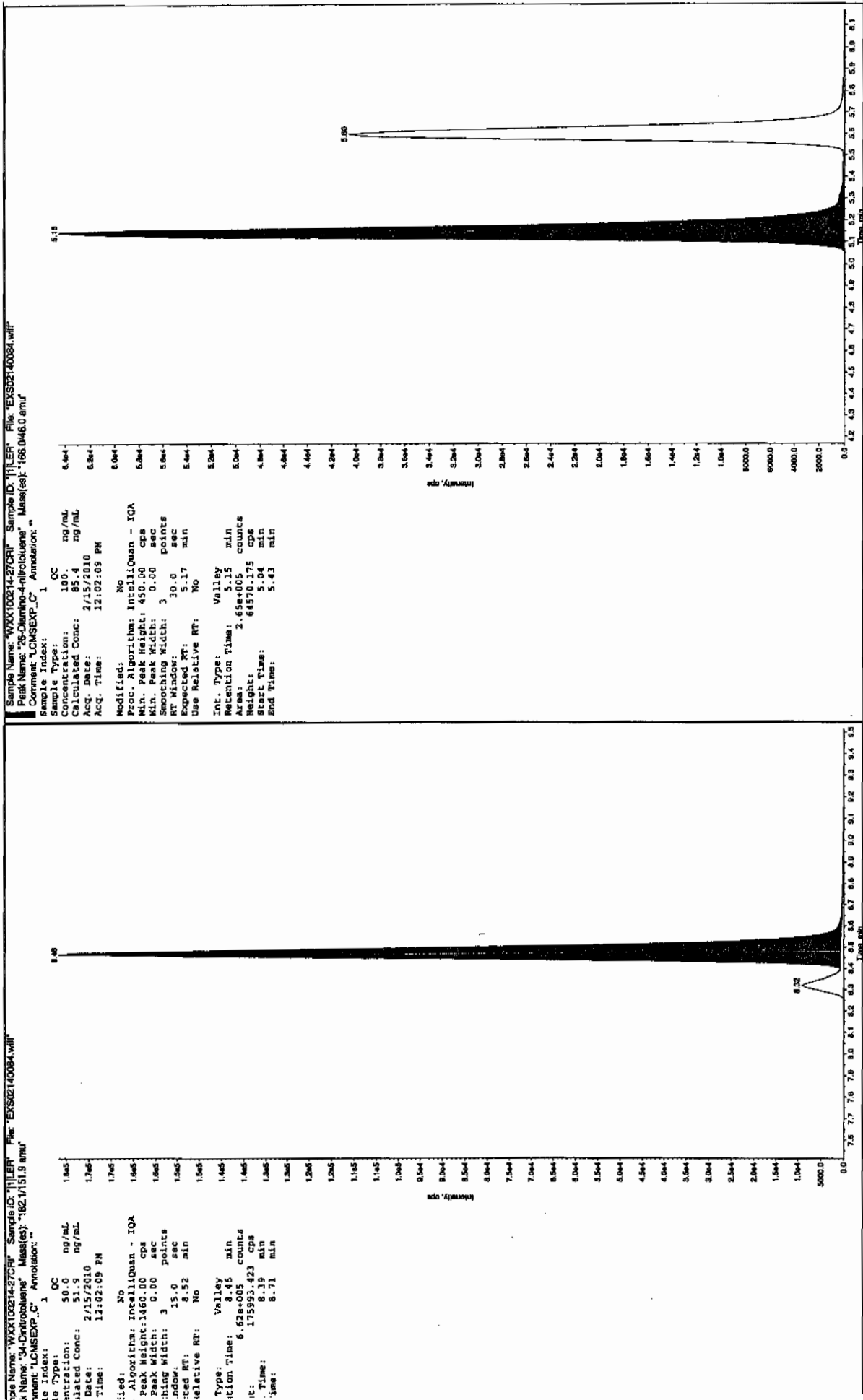
Sample Index: 1
 Sample Type: OC
 Concentration: 100. ng/mL
 Calculated Conc: 108. ng/mL
 Acq. Date: 2/15/2010
 Acq. Time: 12:02:09 PM
 Modified: Yes
 RT Window: 15.0 sec
 Expected RT: 8.38 min
 Use Relative RT: No
 Int. Type: Manual
 Retention Time: 8.32 min
 Area: 7.11e+005 counts
 Height: 184152.898 cps
 Start Time: 8.25 min
 End Time: 8.43 min

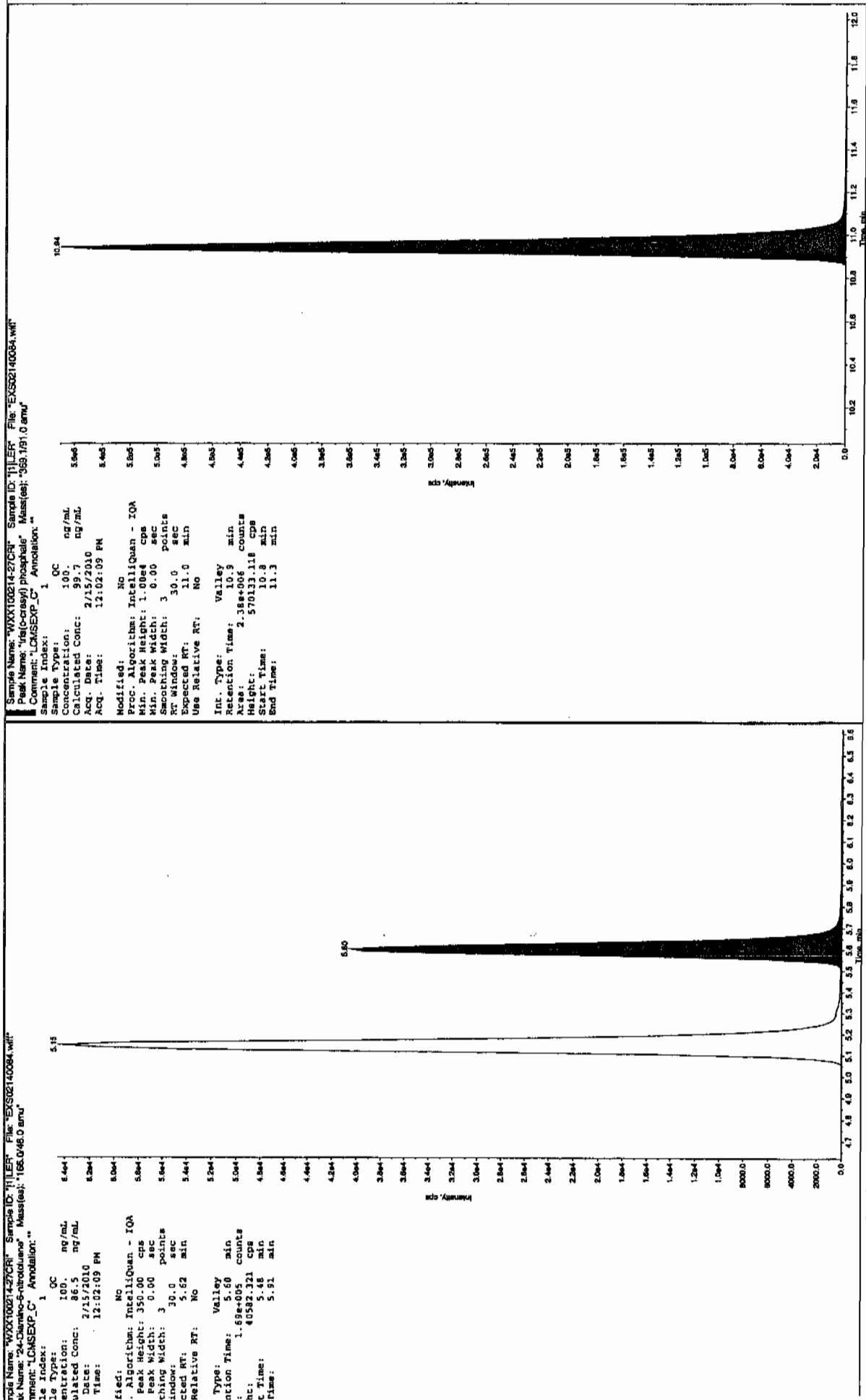


Sample Name: "WXX100214-270R1" Sample ID: "111ER" File: "EXS2140084.will"
 Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"
 Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
 Sample Type: OC
 Concentration: 100. ng/mL
 Calculated Conc: 108. ng/mL
 Acq. Date: 2/15/2010
 Acq. Time: 12:02:09 PM
 Modified: Yes
 RT Window: 15.0 sec
 Expected RT: 8.38 min
 Use Relative RT: No
 Int. Type: Manual
 Retention Time: 8.32 min
 Area: 7.11e+005 counts
 Height: 184152.898 cps
 Start Time: 8.25 min
 End Time: 8.43 min







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

7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1392

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS02140095.wiff

Analysis Date: 15-FEB-10 14:54

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
TATB	500	538	108	
tris(o-cresyl) phosphate	500	486	97	
2,4-Diamino-6-nitrotoluene	500	406	81	
2,6-Diamino-4-nitrotoluene	500	351	70	
3,4-Dinitrotoluene	250	229	92	
3,5-Dinitroaniline	500	474	95	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

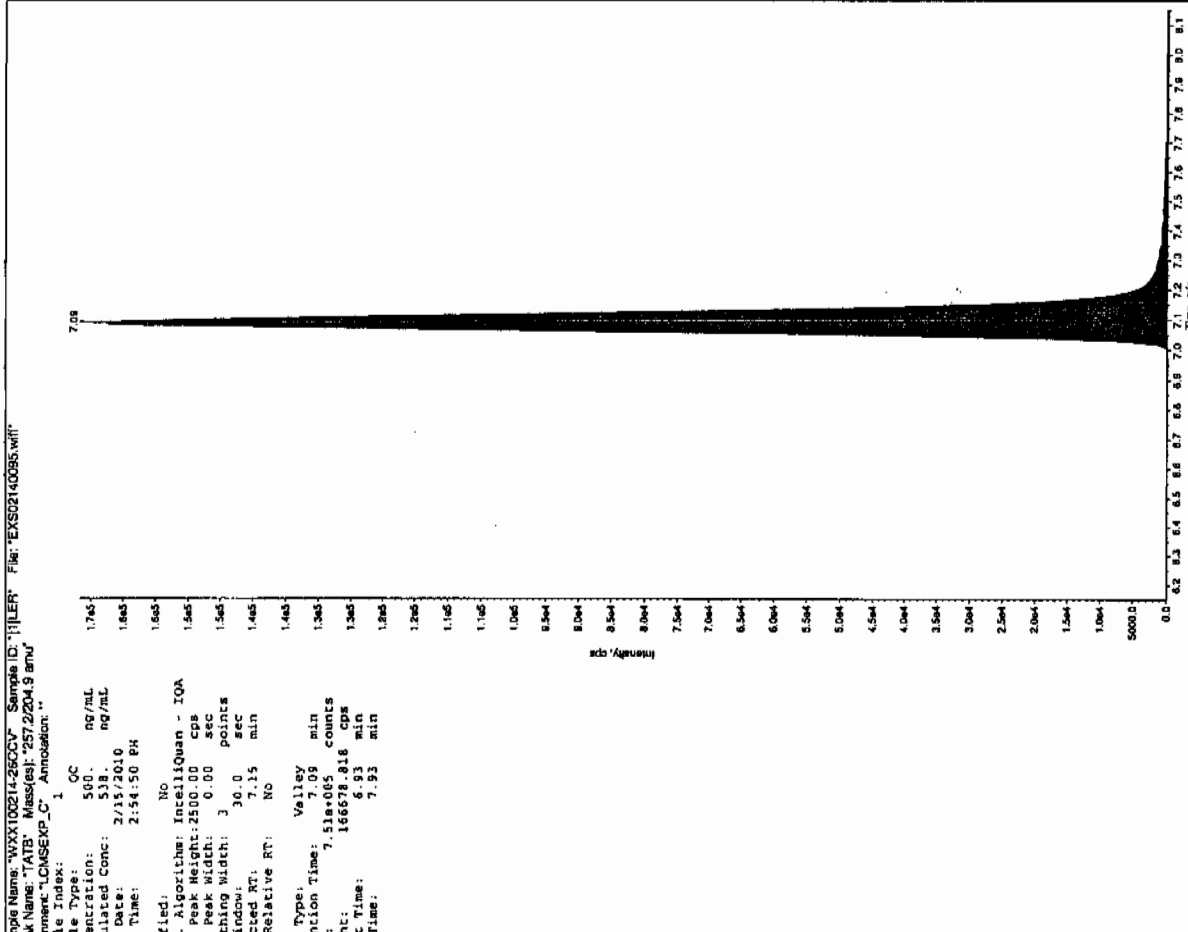
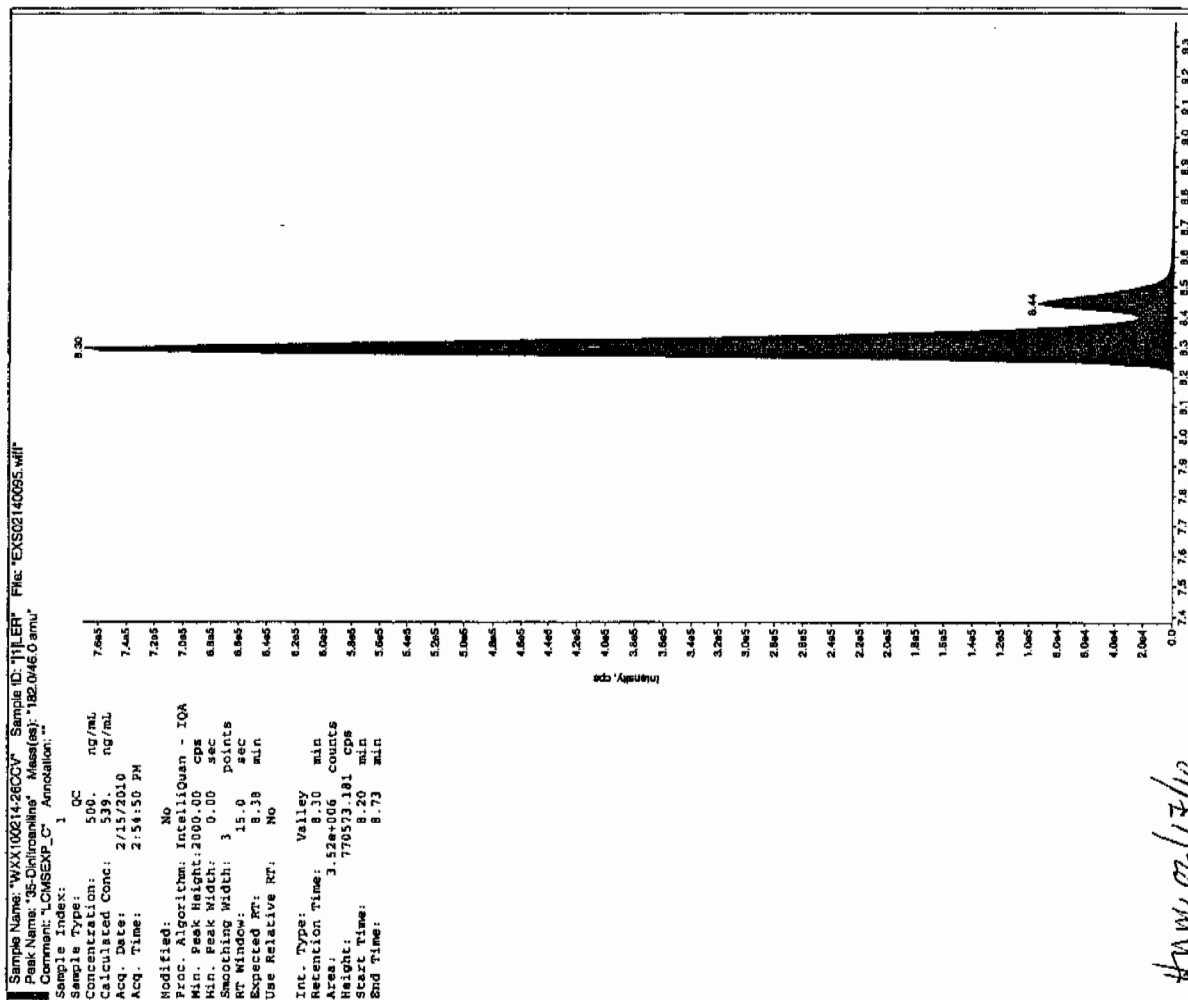
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

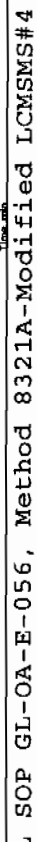
* Value outside of Recovery Limits

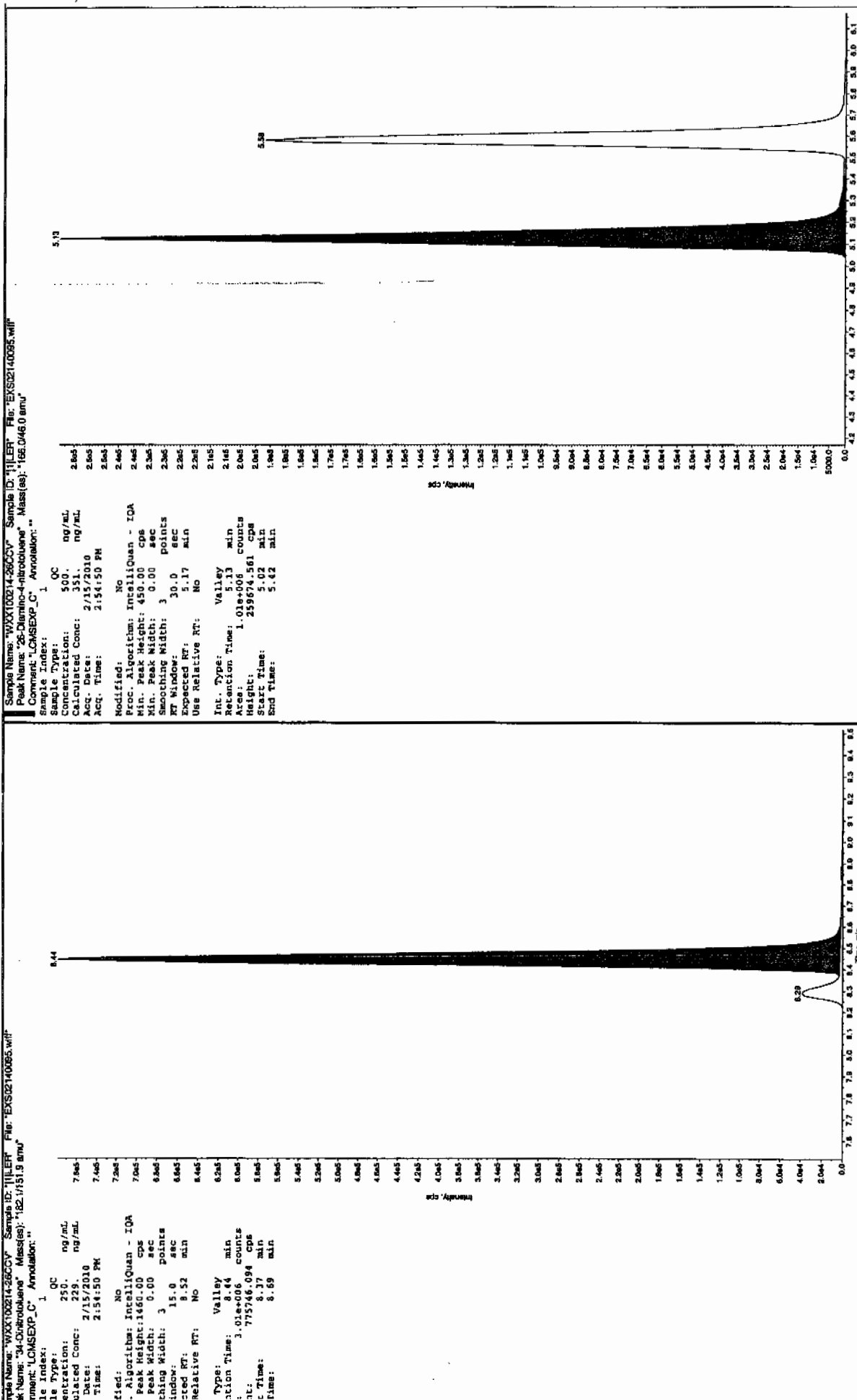
Before Scan 2/16/10

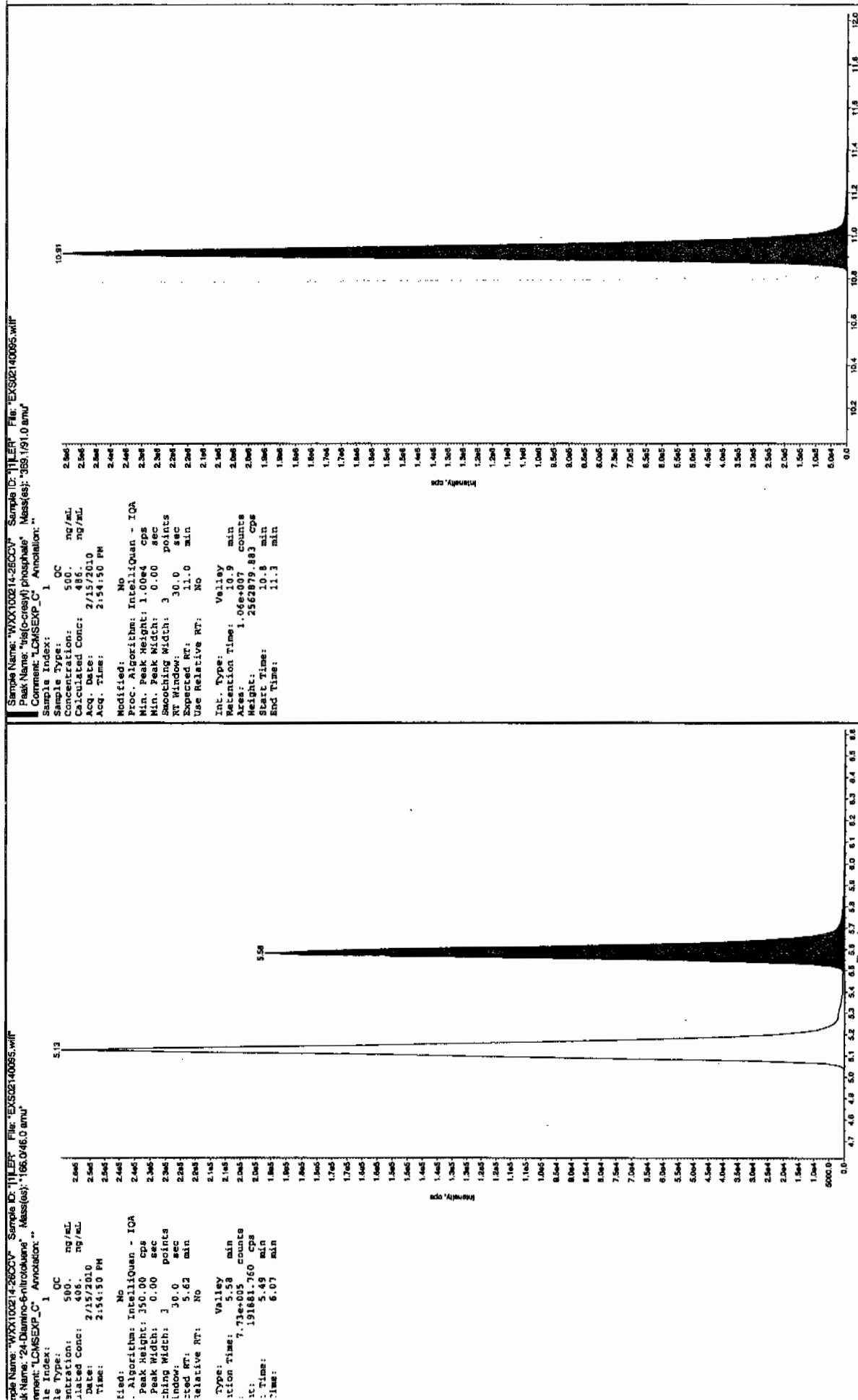


After 02/17/10

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







7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1392

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS02140097.wiff

Analysis Date: 15-FEB-10 15:26

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
3,4-Dinitrotoluene	50	51.7	103	
3,5-Dinitroaniline	100	105	105	
TATB	100	111	111	
tris(o-cresyl) phosphate	100	100	100	
2,4-Diamino-6-nitrotoluene	100	87.3	87	
2,6-Diamino-4-nitrotoluene	100	89.4	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

Before Jan 2/16/10

Sample Name: 'WXX100214-27C1' Sample ID: '111ER' File: 'EX502140097.wif'

Peak Name: 'TATB' Mass(es): '257.2204.9 amu'

Comment: 'LCMSEXP_C' Annotation: ''

Sample Index: 1

Concentration: 100. ng/mL

Calculated Conc: 111. ng/mL

Acq. Date: 2/15/2010

Acq. Time: 3:26:15 PM

Modified: No

Proc. Algorithm: IntelliQuan - IOA

Min. Peak Width: 2500.00 cps

Min. Peak Width: 0.00 sec

Smoothing Width: 3 points

RT Window: 30.0 sec

Expected RT: 7.15 min

Use Relative RT: No

Int. Type: Valley

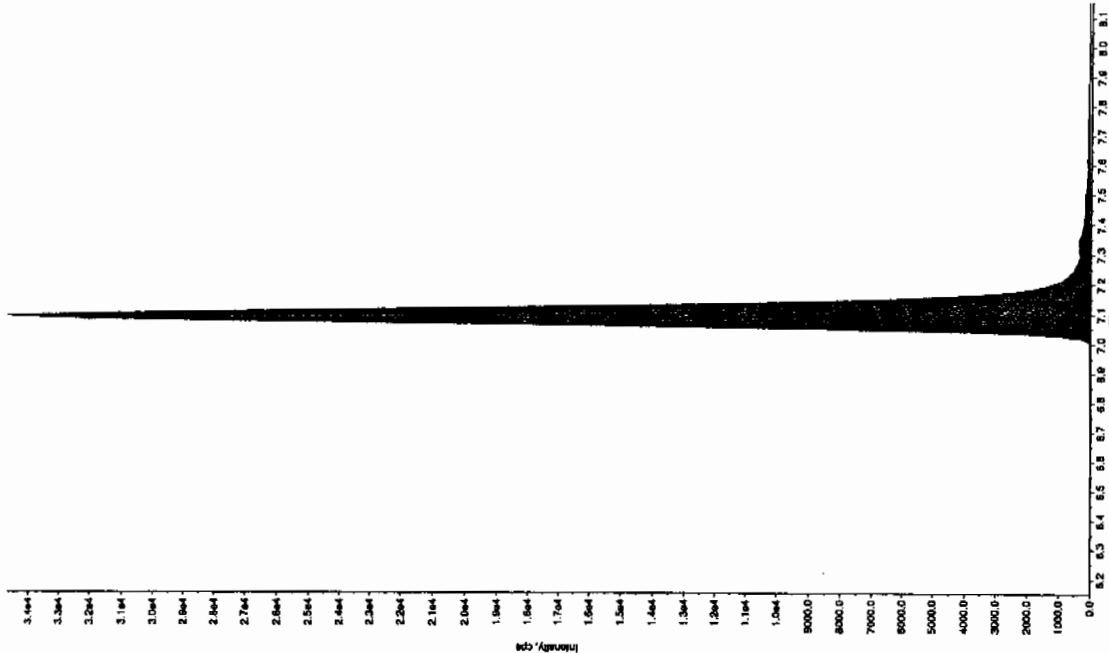
Retention Time: 7.09 min

Area: 1.54e+005 counts

Height: 34696.198 cps

Start Time: 6.91 min

End Time: 7.68 min



Sample Name: 'WXX100214-27C1' Sample ID: '111ER' File: 'EX502140097.wif'

Peak Name: '35-Oxyliponilina' Mass(es): '182.046.0 amu'

Comment: 'LCMSEXP_C' Annotation: ''

Sample Index: 1

Concentration: 100. ng/mL

Calculated Conc: 119. ng/mL

Acq. Date: 2/15/2010

Acq. Time: 3:26:15 PM

Modified: No

Proc. Algorithm: IntelliQuan - IOA

Min. Peak Width: 2000.00 cps

Min. Peak Width: 0.00 sec

Smoothing Width: 3 points

RT Window: 15.0 sec

Expected RT: 8.38 min

Use Relative RT: No

Int. Type: Valley

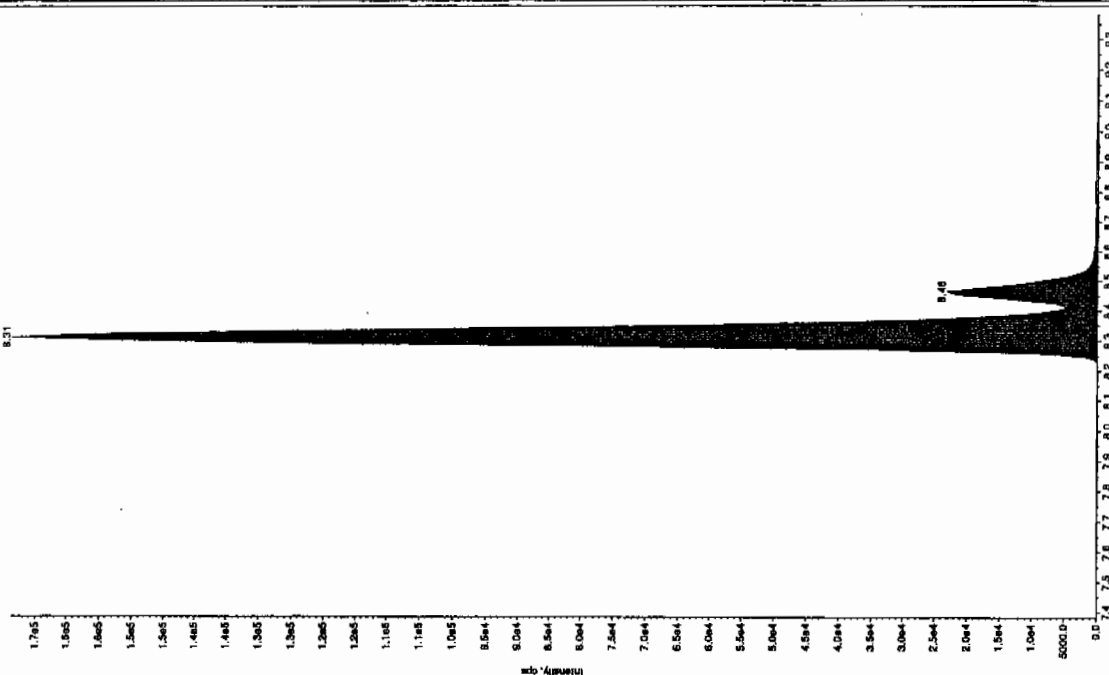
Retention Time: 8.31 min

Area: 7.80e+005 counts

Height: 168751.770 cps

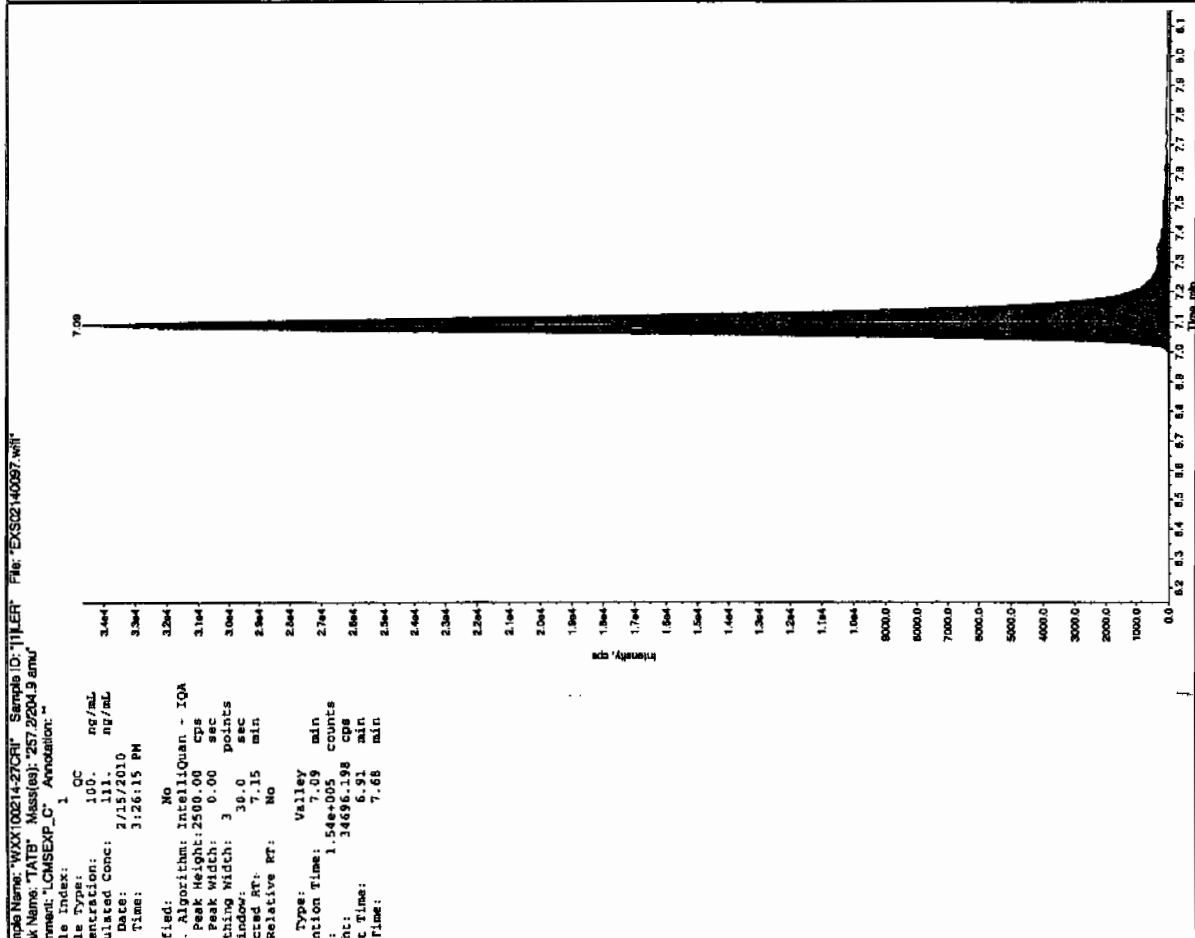
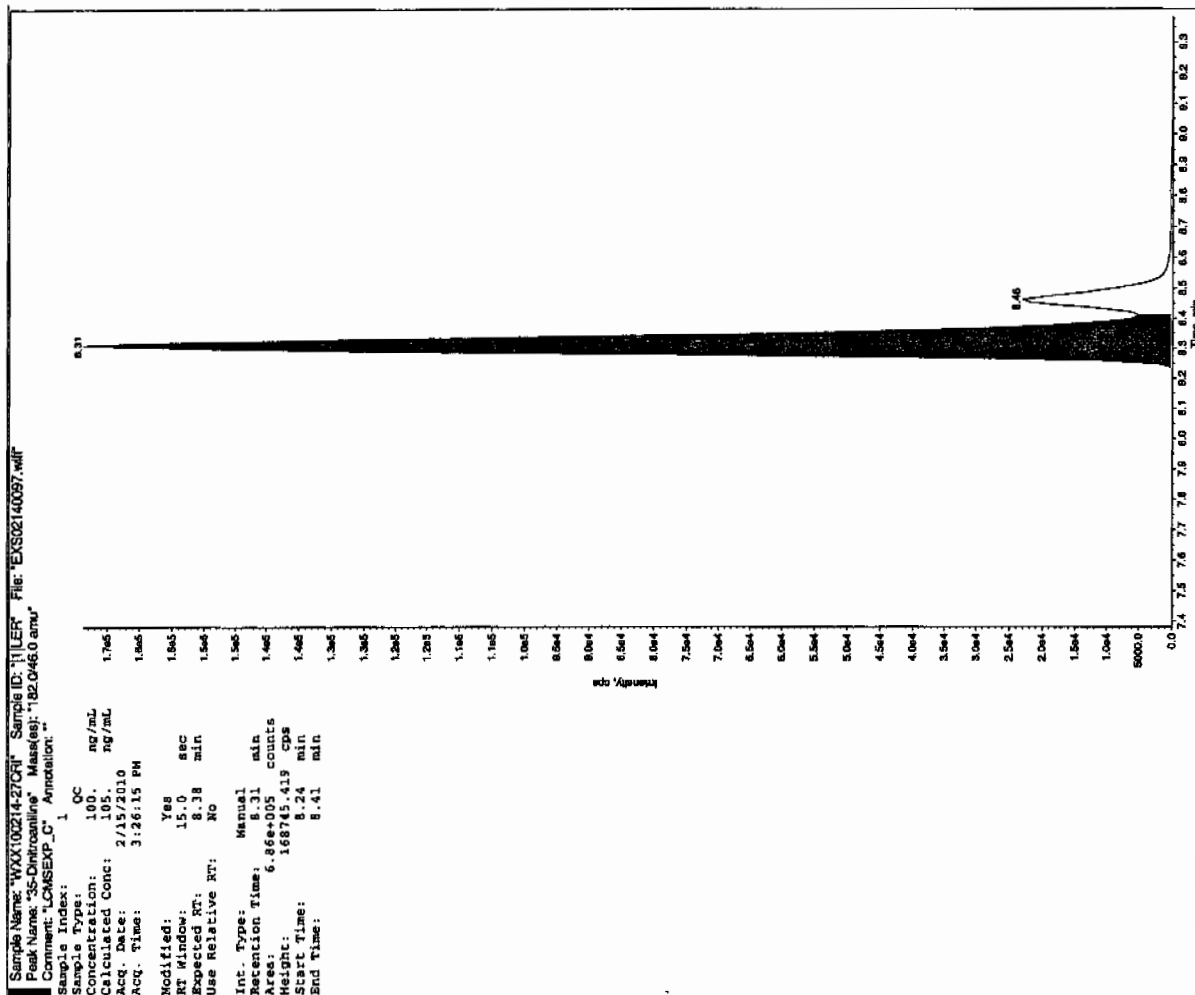
Start Time: 8.20 min

End Time: 8.70 min

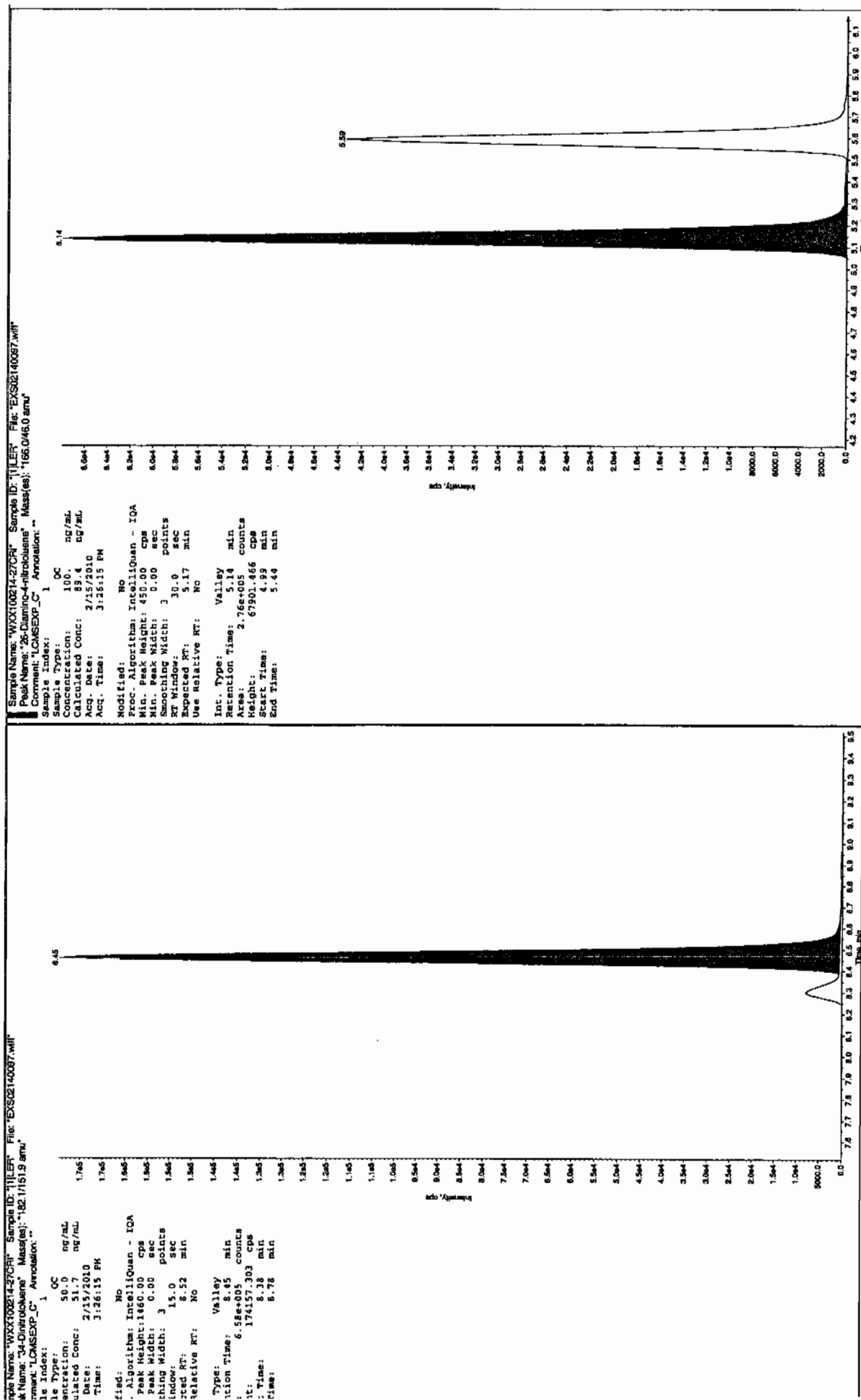


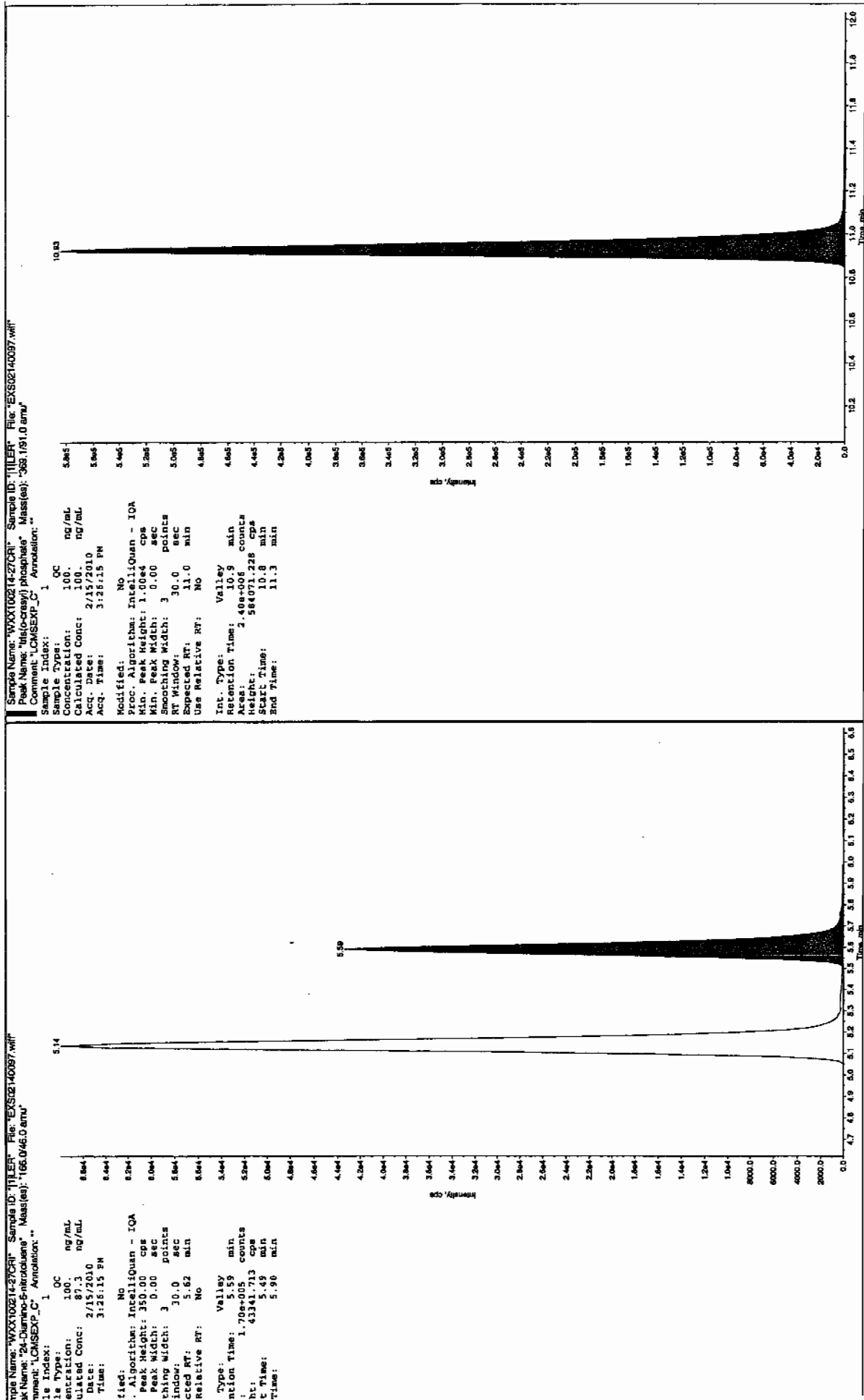
Hum on 1/17/10

after Jan 21/110



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





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

7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1392

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS02140108.wiff

Analysis Date: 15-FEB-10 18:18

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	432	86	
2,6-Diamino-4-nitrotoluene	500	357	71	
3,4-Dinitrotoluene	250	240	96	
3,5-Dinitroaniline	500	517	103	
TATB	500	532	106	
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 ,

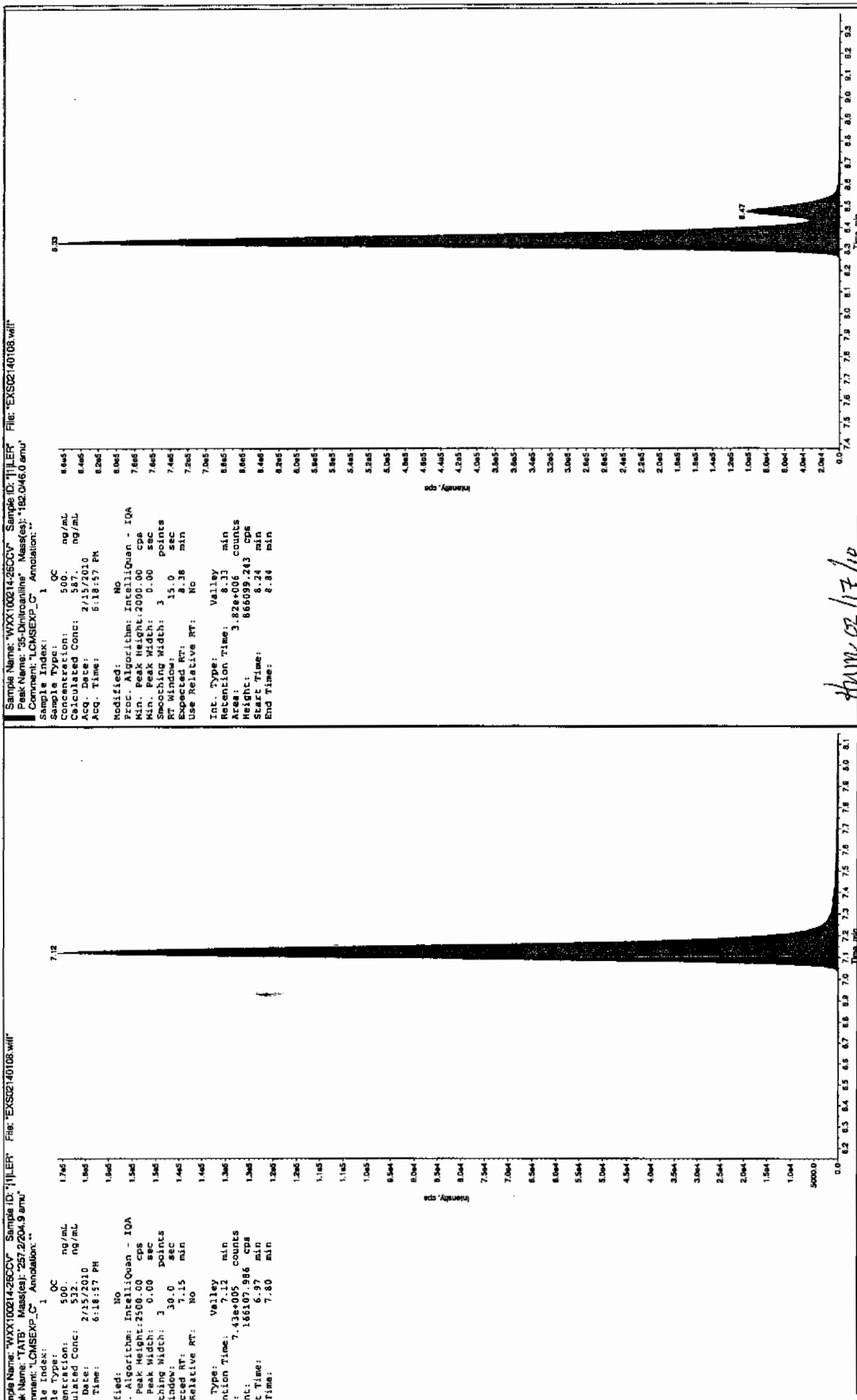
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

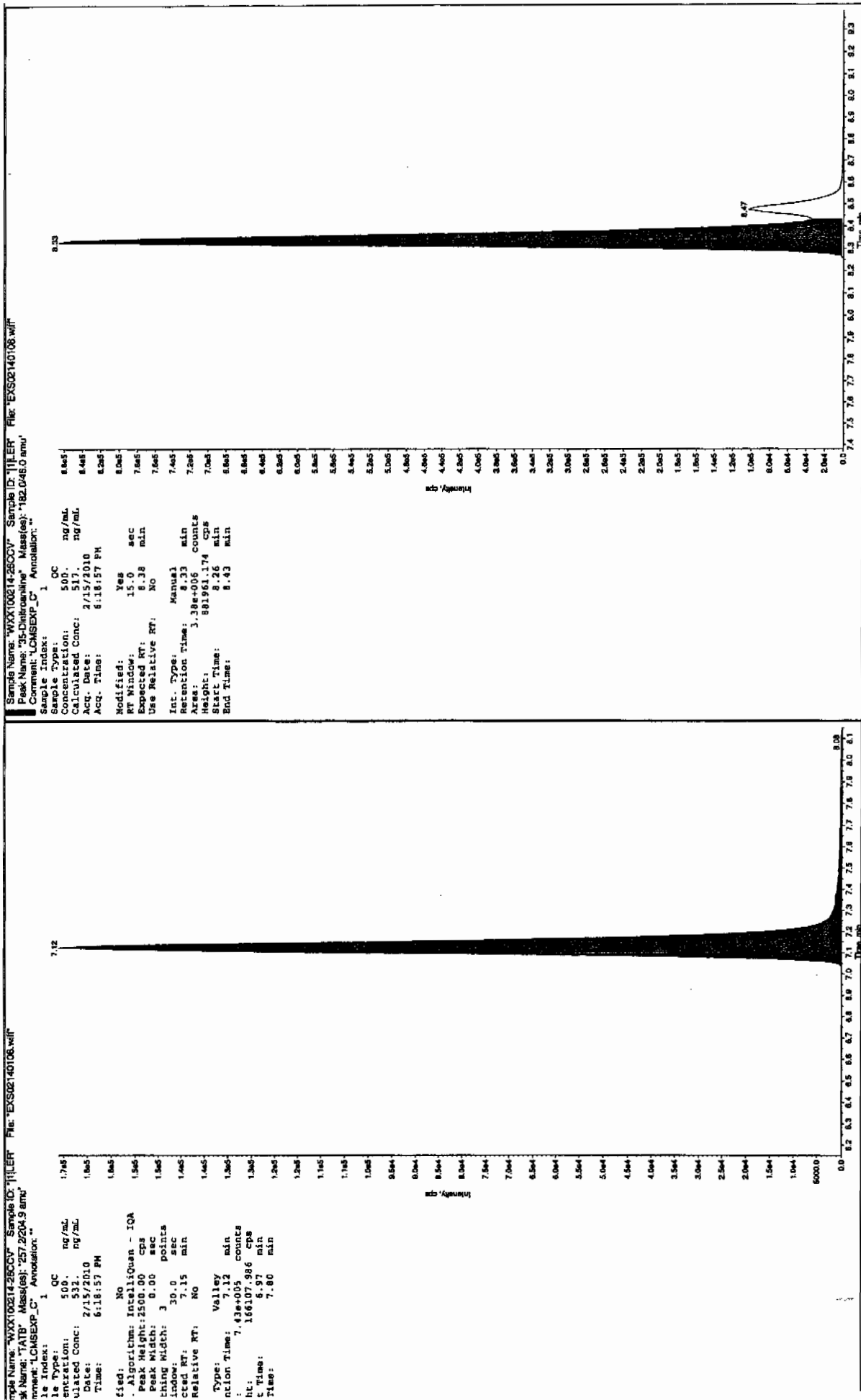
* Value outside of Recovery Limits

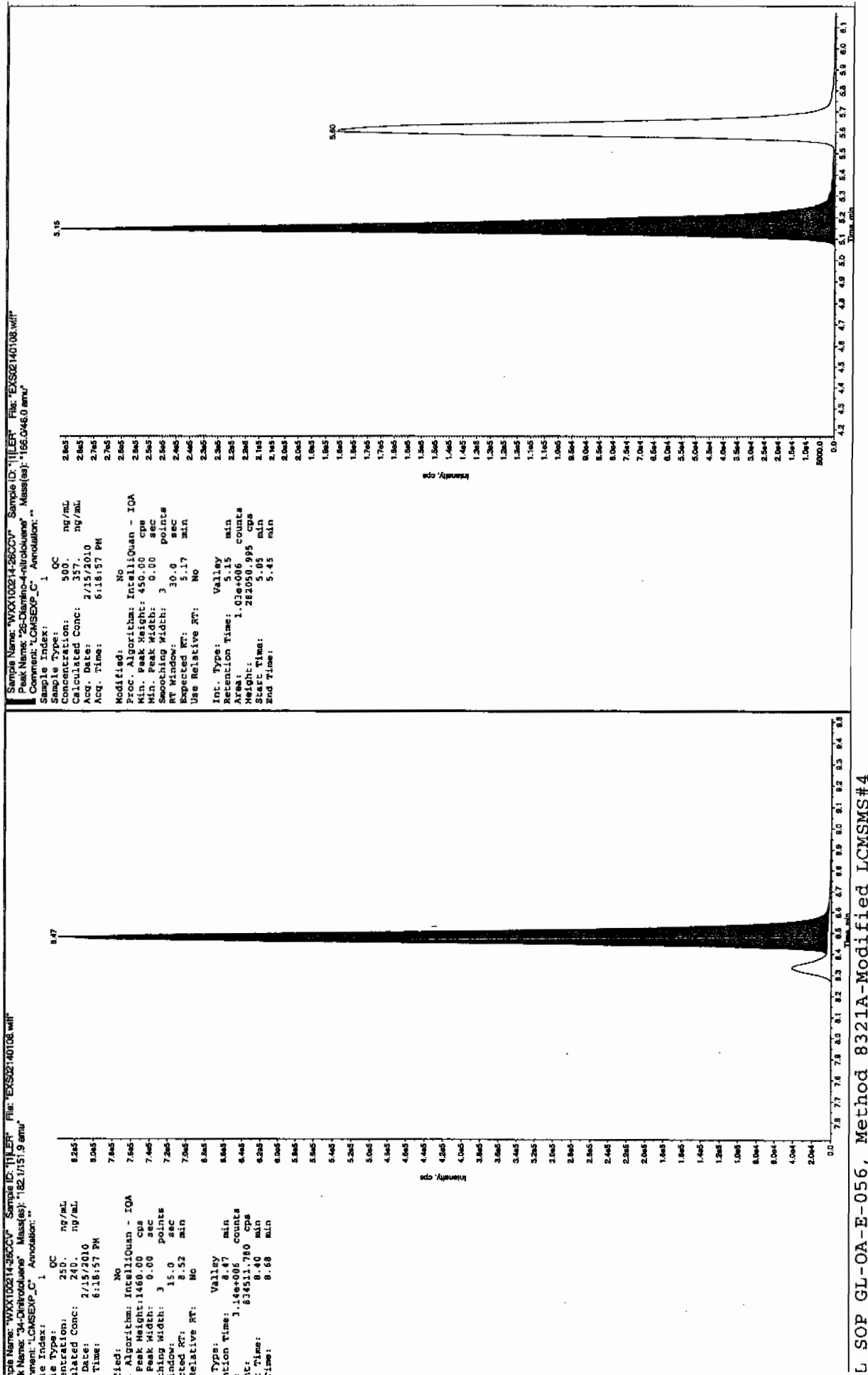
Before Jan 21/10

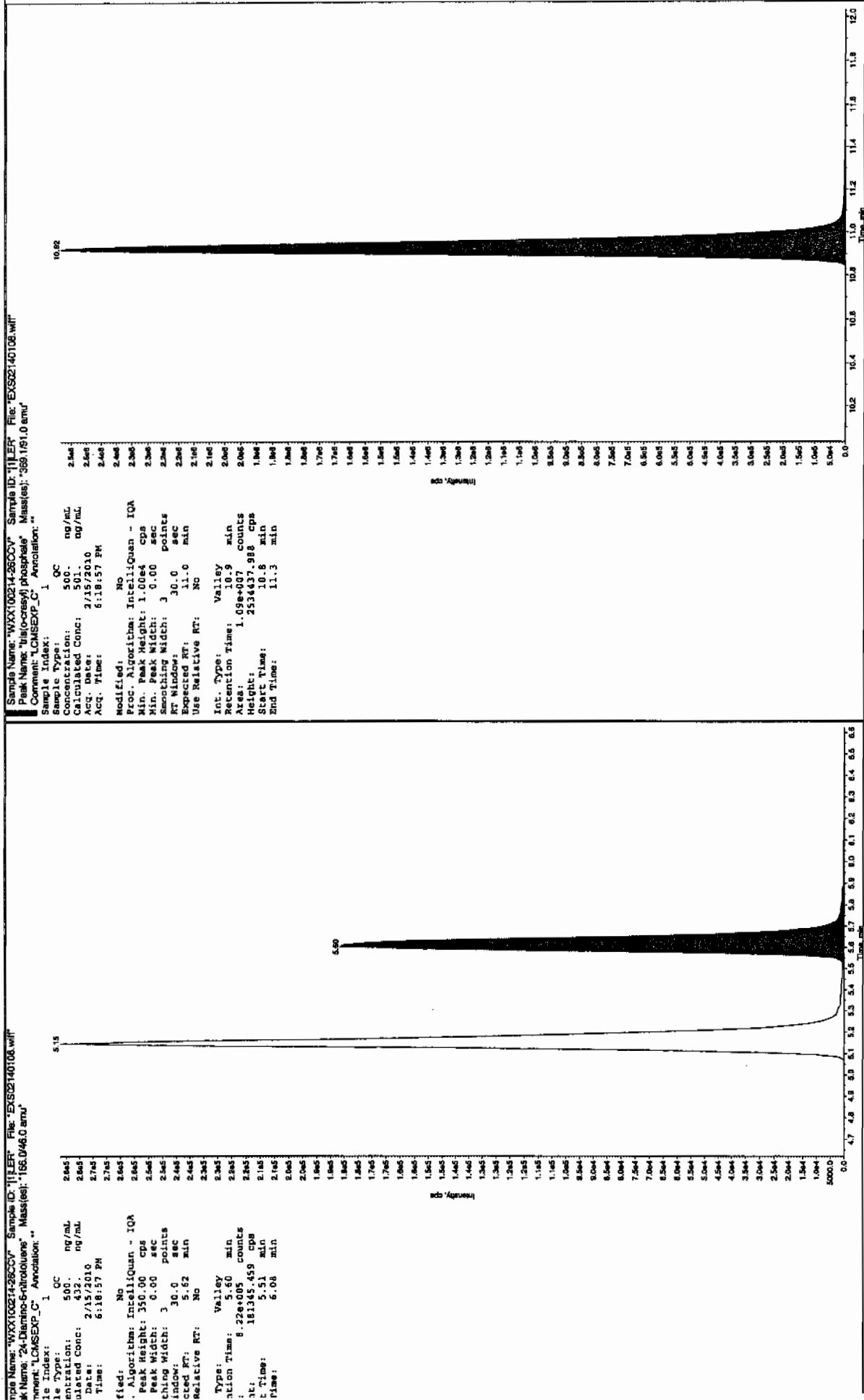


Jan 22 13:10

after Scan 2/17/10







7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1392

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS02140110.wiff

Analysis Date: 15-FEB-10 18:50

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	86.8	87	
2,6-Diamino-4-nitrotoluene	100	80.4	80	
3,4-Dinitrotoluene	50	51.8	104	
3,5-Dinitroaniline	100	105	105	
TATB	100	103	103	
tris(o-cresyl) phosphate	100	103	103	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

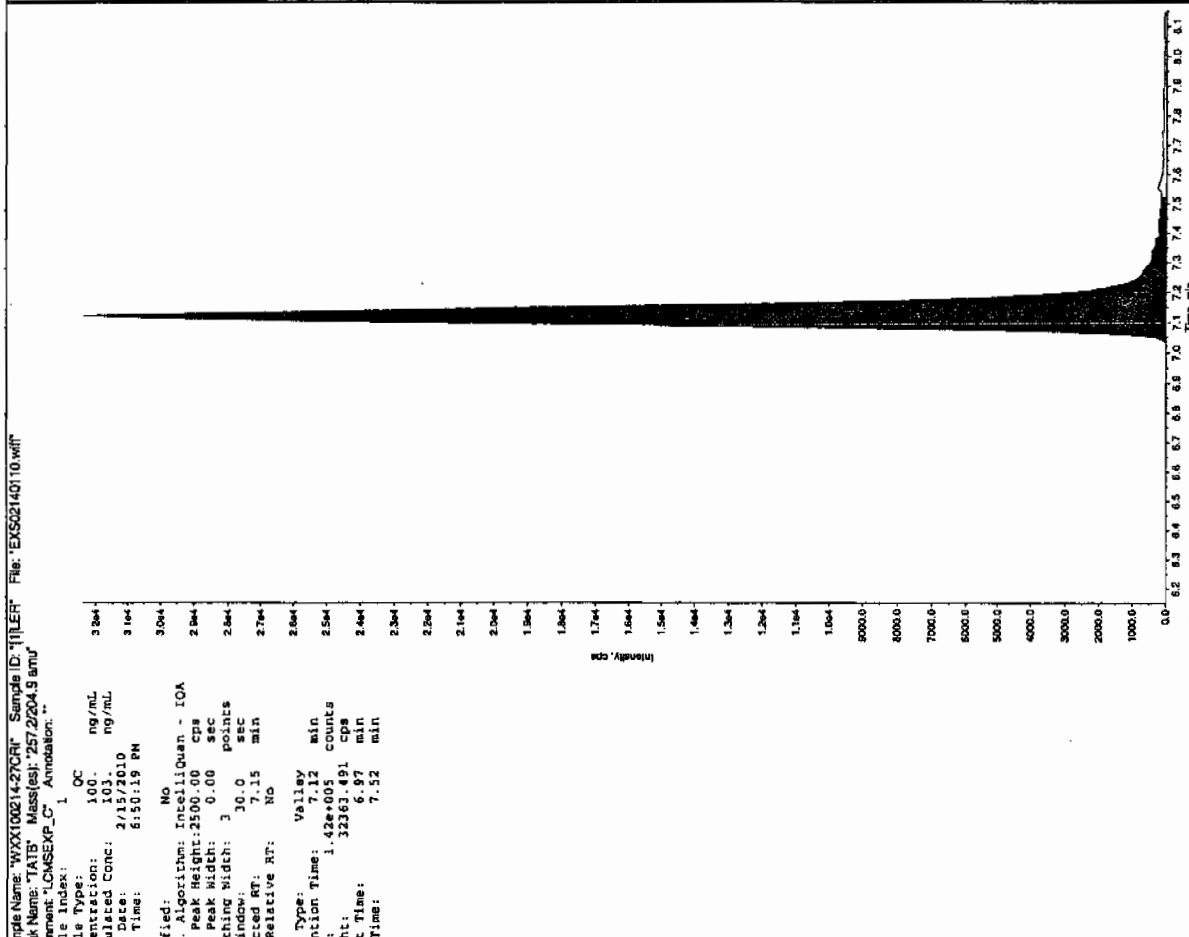
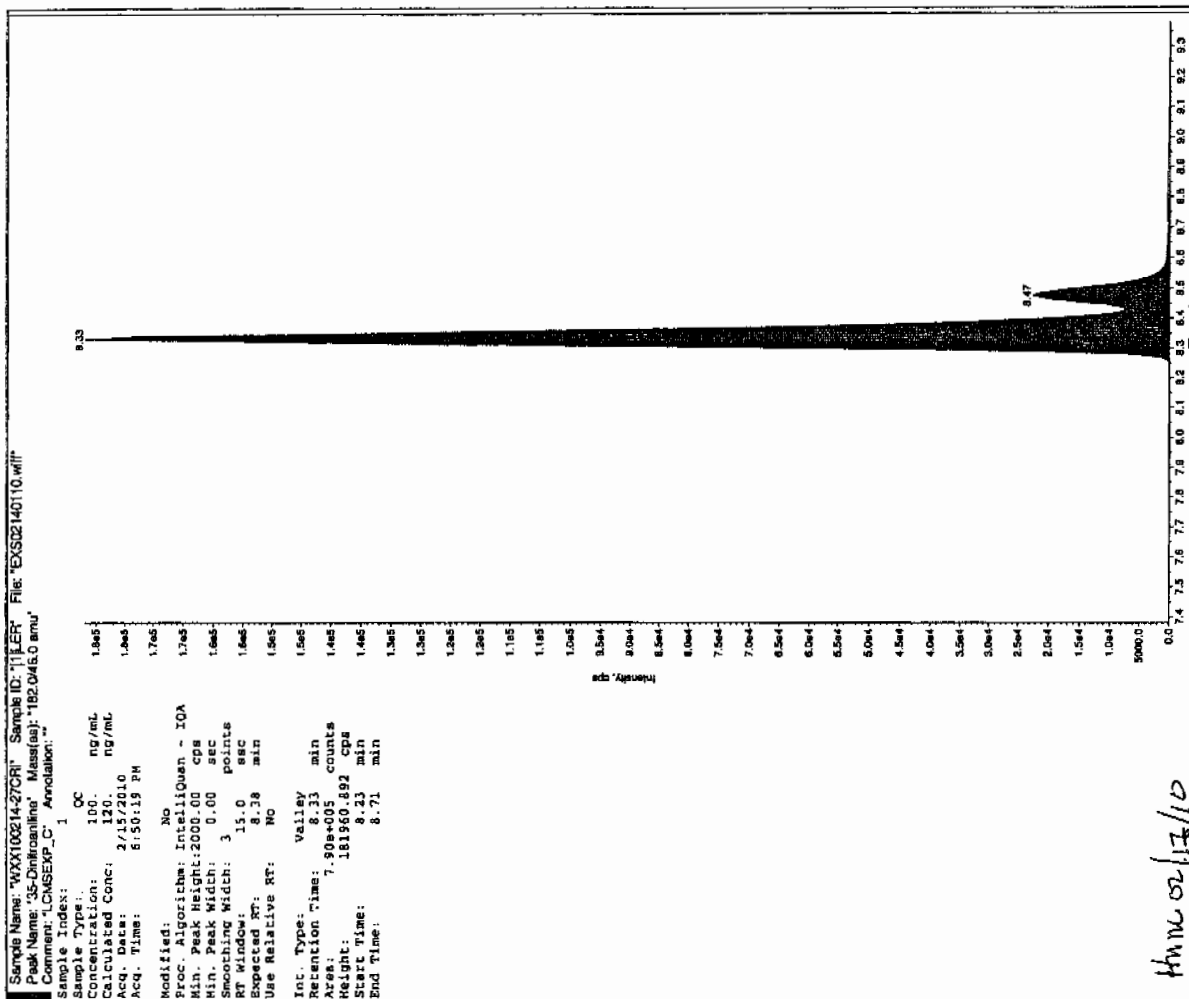
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

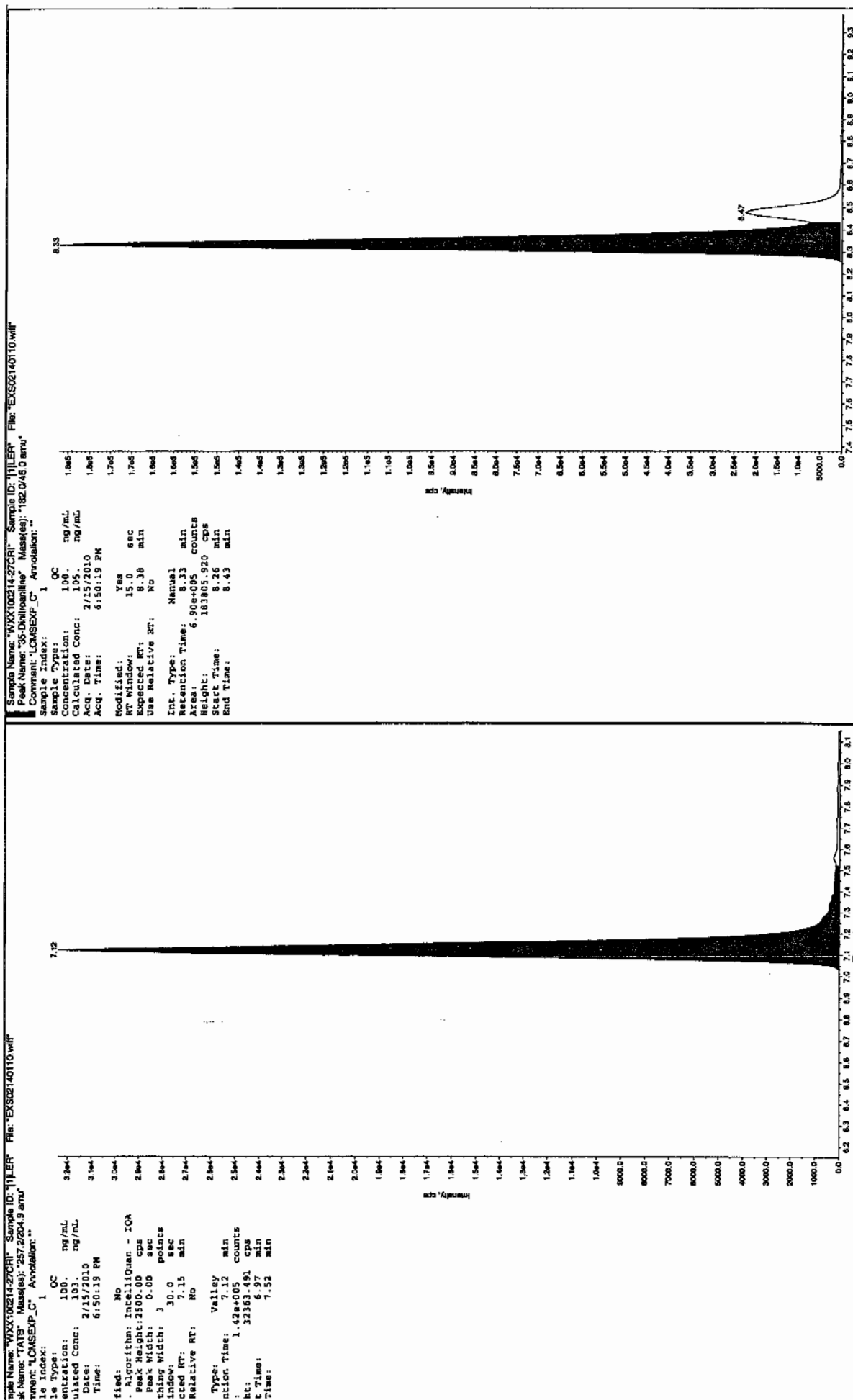
* Value outside of Recovery Limits

Before Jan 2/10/10

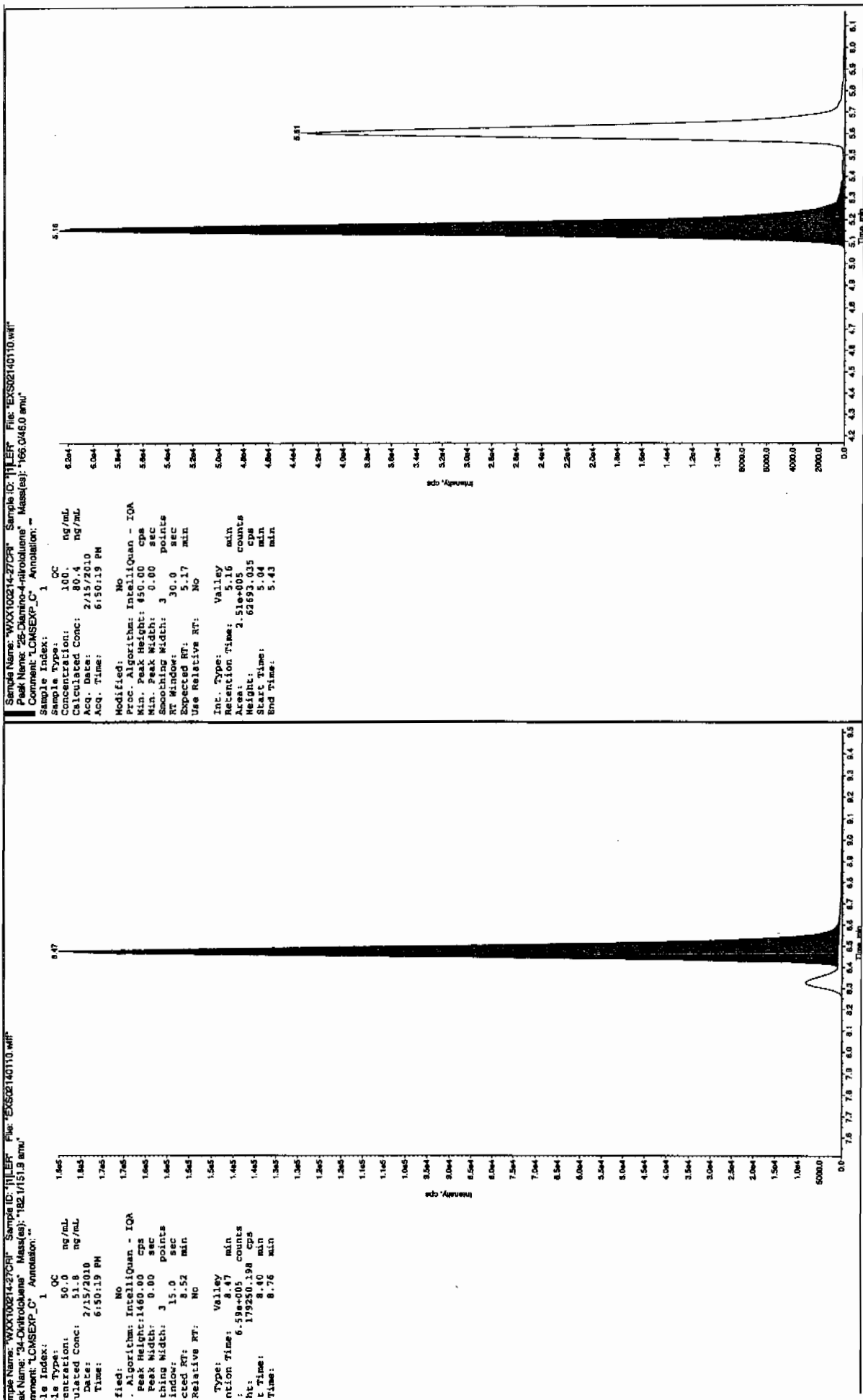


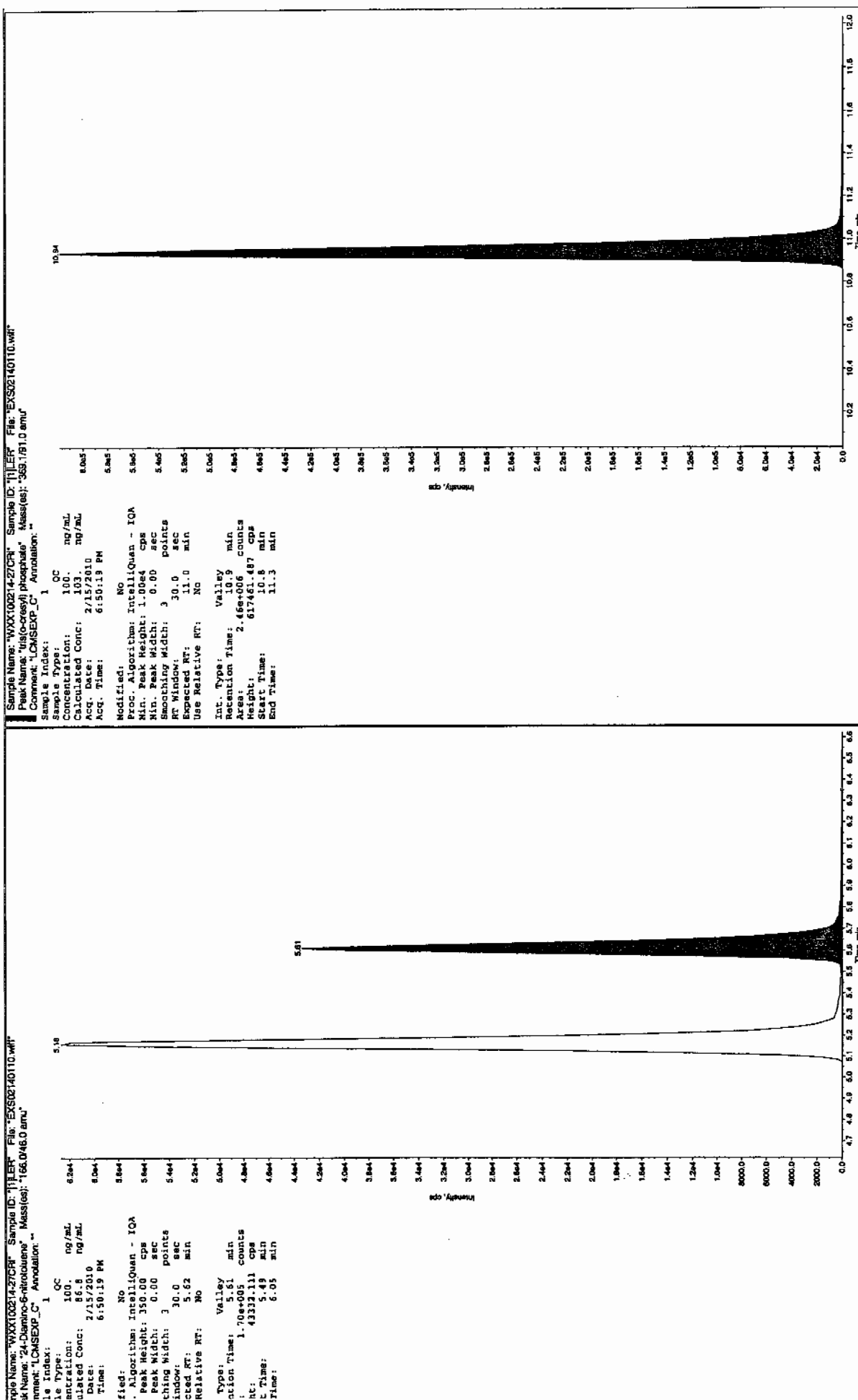
L SOP GL-OA-E-056, Method 8321A-Modified LCM SMS#4

after scan 2/17/10



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





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

7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1392

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS02140117.wiff

Analysis Date: 15-FEB-10 20:40

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	421	84	
2,6-Diamino-4-nitrotoluene	500	441	88	
3,4-Dinitrotoluene	250	243	97	
3,5-Dinitroaniline	500	488	98	
TATB	500	513	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%

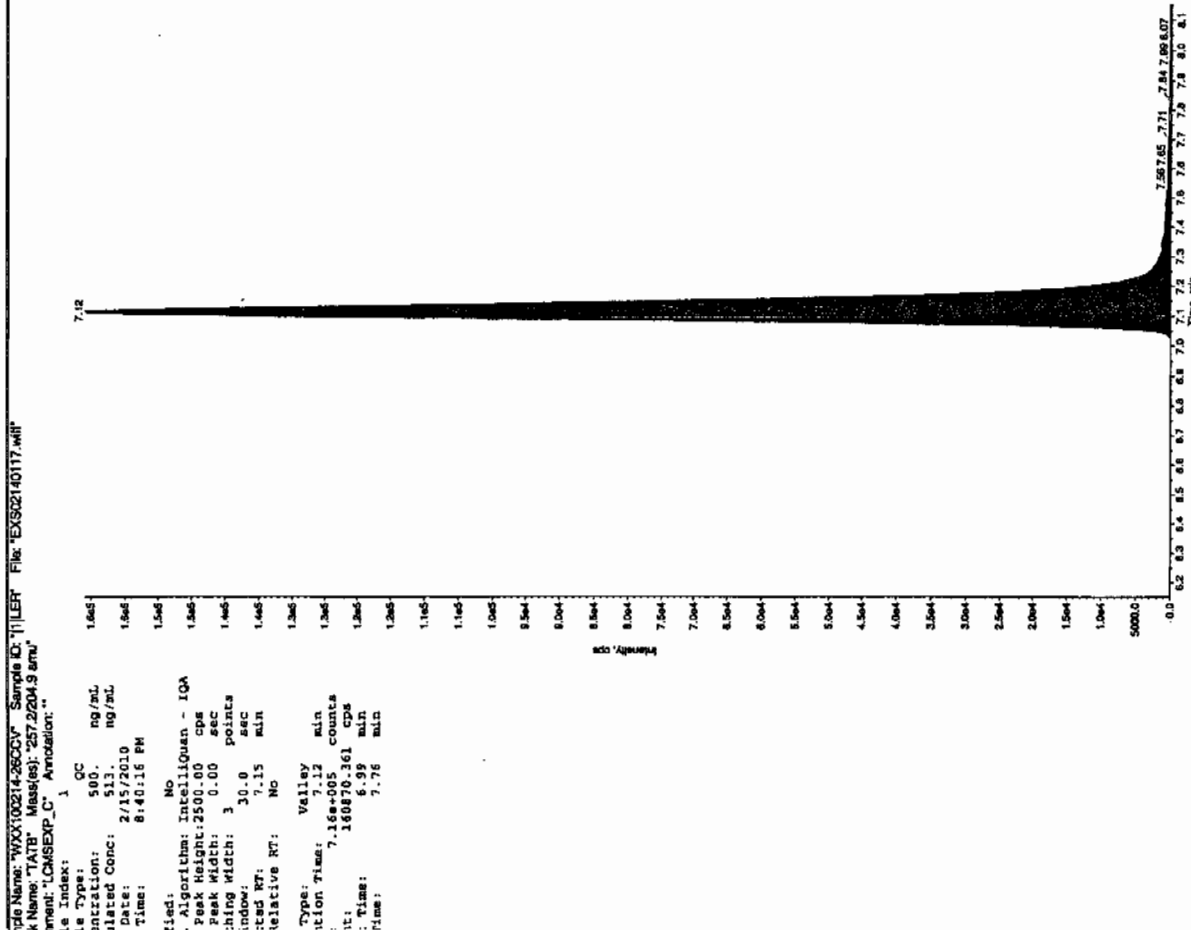
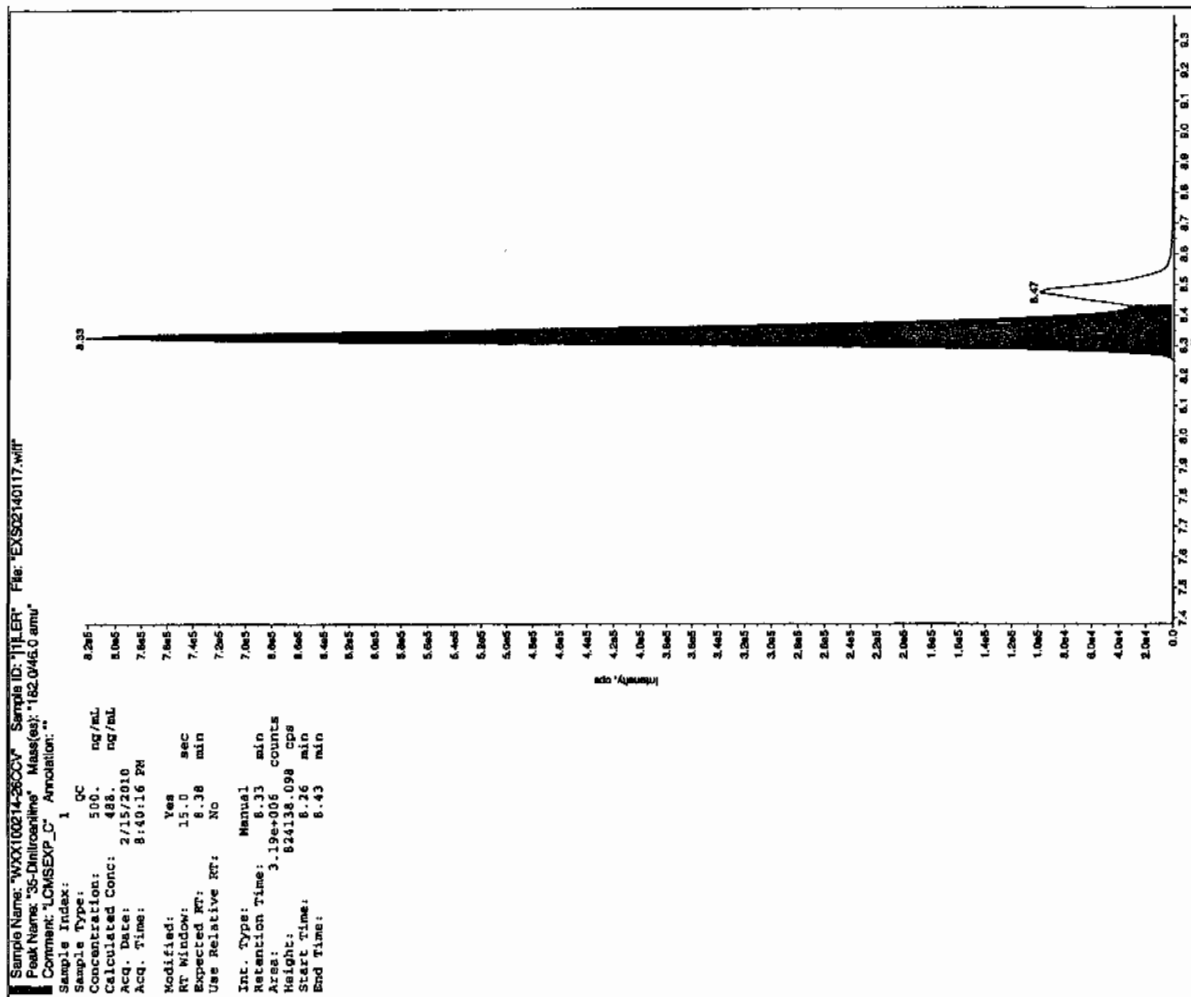
Other Target Analytes 80-120%

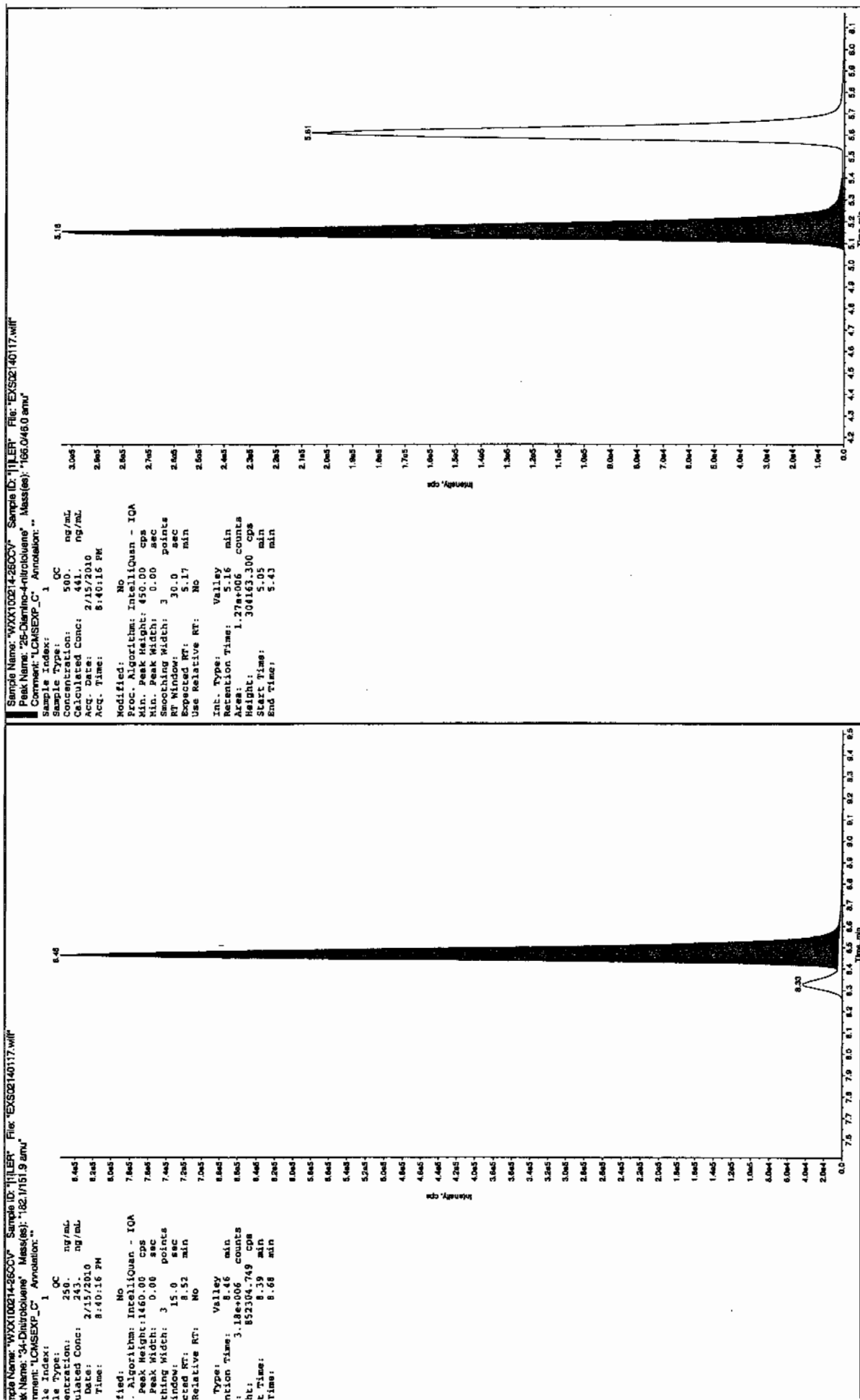
Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

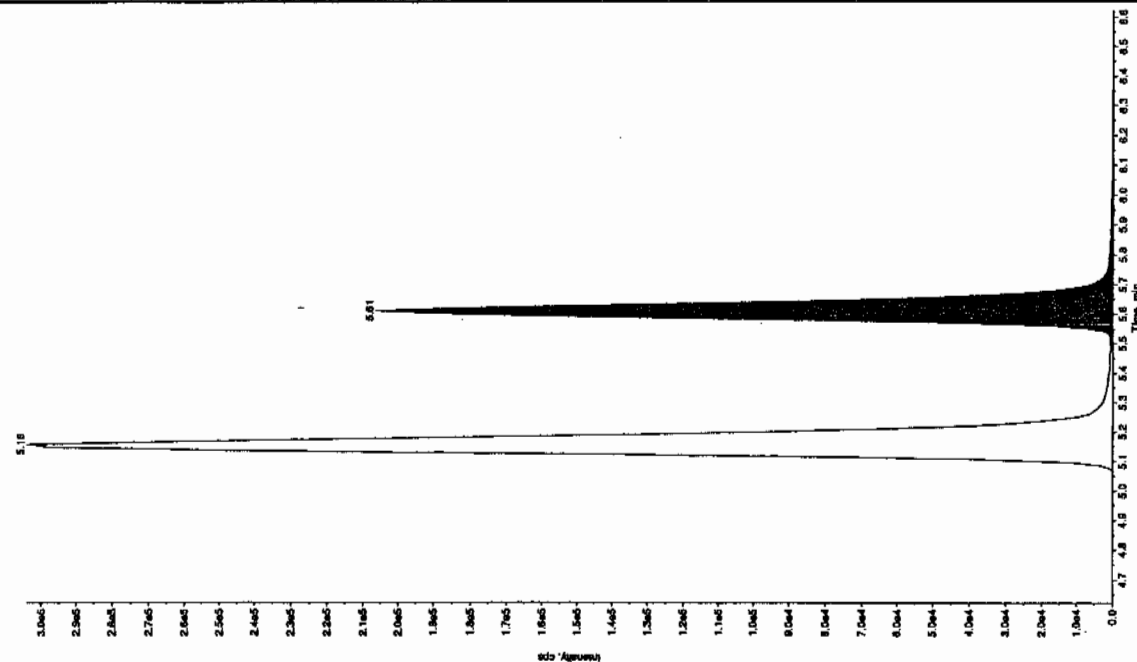


LL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

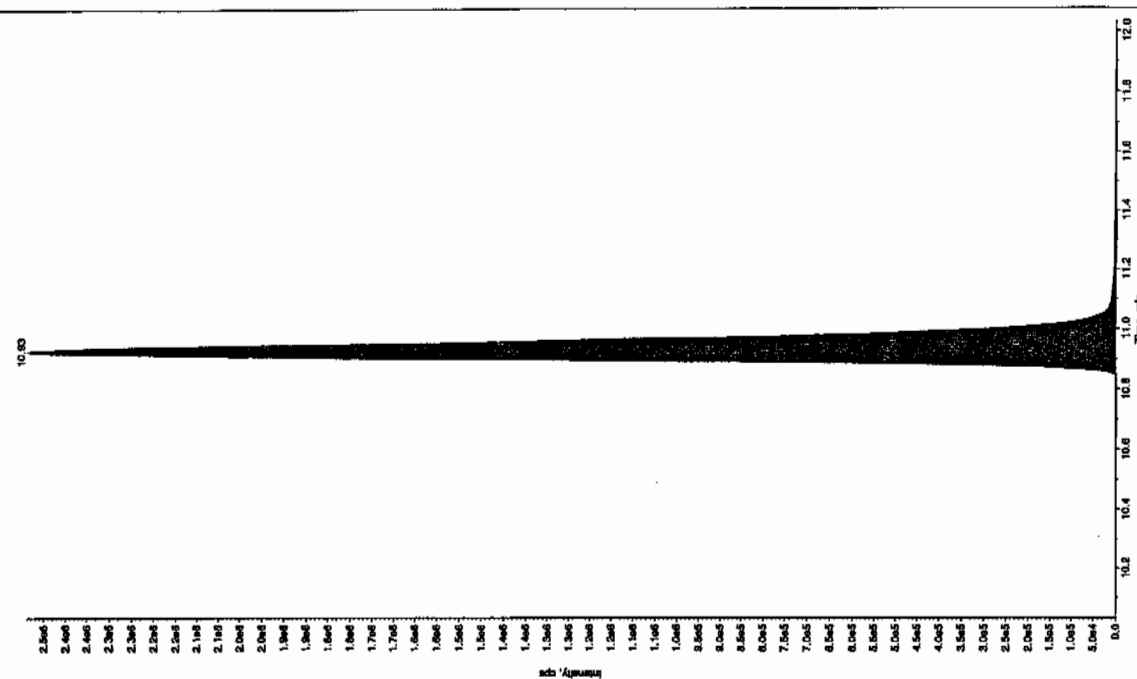




IL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



QC		mg/mL	
mg/mL	mg/mL	mg/mL	mg/mL
2/15/2010	2/15/2010	2/15/2010	2/15/2010
8:40-16 PM	8:40-16 PM	8:40-16 PM	8:40-16 PM



Sample type:	CC	ng/mL
Concentration:	500.	ng/mL
Calculated Conc:	2/13/2010	
Acq. File:	8:40:16 PM	
Acq. Time:		
Modified:	No	
Proc. Algorithm:	IntelliCalc - IQA	
Min. Peak Height:	1.00e4	Cps
Min. Peak Width:	3	sec
Smoothing Width:	30	points
RT window:	30.0	sec
Expected RT:	11.0	min
Use Relative RT:	No	
Int. Type:	Vol %	
Retention Time:	10.9	min
Area:	1.09e+007	counts
Height:	2489432.617	Cps
Start time:	10.8	min
End time:	11.3	min

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1392

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS02140119.wiff

Analysis Date: 15-FEB-10 21:11

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	90.9	91	
2,6-Diamino-4-nitrotoluene	100	91.1	91	
3,4-Dinitrotoluene	50	51	102	
3,5-Dinitroaniline	100	95.2	95	
TATB	100	107	107	
tris(o-cresyl) phosphate	100	103	103	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Before Scan 2/16/10

Sample Name: "WXX100214-270R" Sample ID: "111ER" File: "EXS02140119.vill"

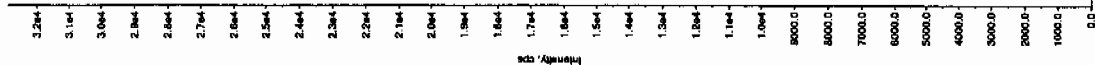
Peak Name: "TATB" Mass(es): "257.2204.9 amu"

Comment: "LCMSEXP_C" Annotation: "

Sample Index: 1
 Sample Type: 100. ng/mL
 Concentration: 107. ng/mL
 Date: 2/15/2010
 Time: 9:11:40 PM

Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 2500.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 7.15 min
 Use Relative RT: No

Int. Type: Valley
 Retention Time: 7.13 min
 Area: 1.48e+005 counts
 Height: 32873.001 cps
 Start Time: 7.03 min
 End Time: 7.39 min



Sample Name: "WXX100214-270R" Sample ID: "111ER" File: "EXS02140119.vill"

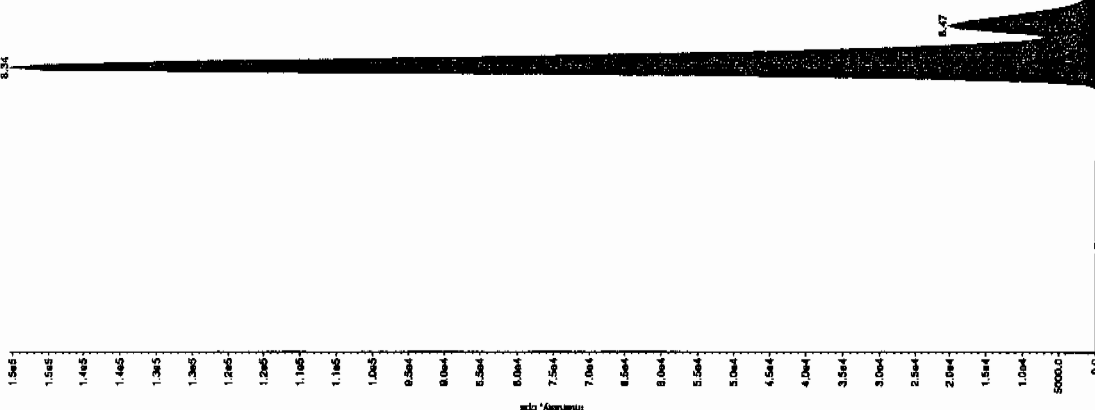
Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"

Comment: "LCMSEXP_C" Annotation: "

Sample Index: 1
 Sample Type: 100. ng/mL
 Concentration: 109. ng/mL
 Date: 2/15/2010
 Time: 9:11:40 PM

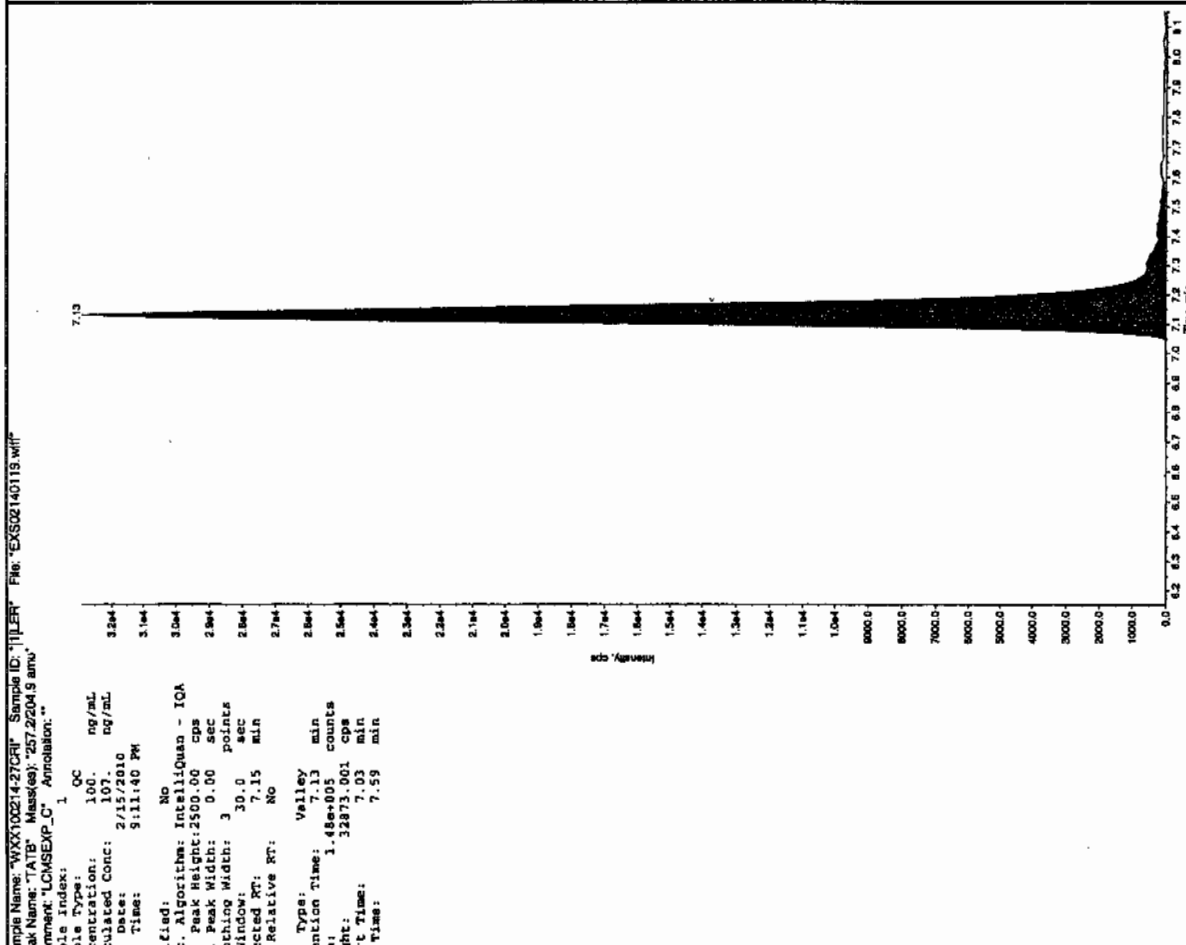
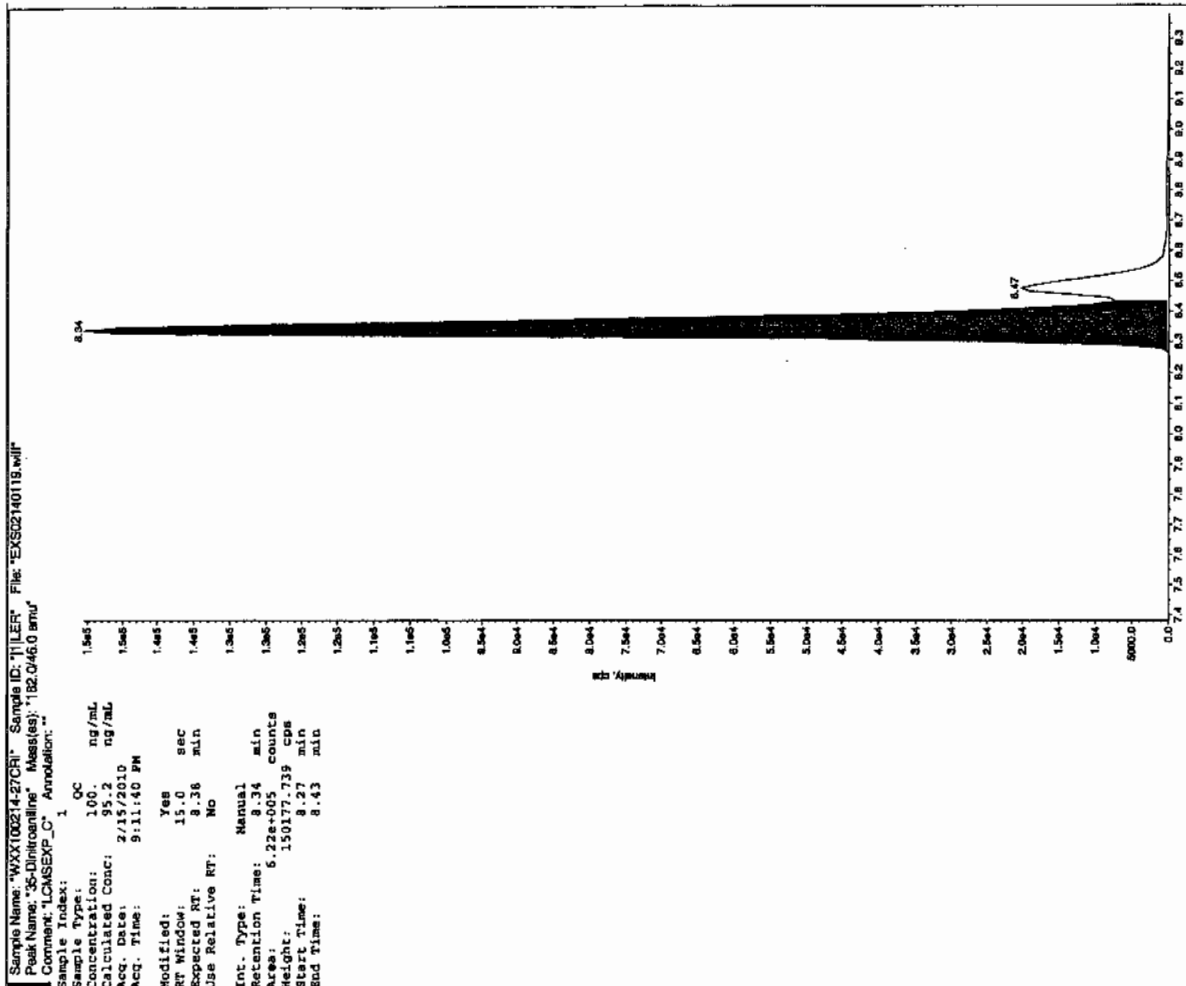
Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 2000.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.38 min
 Use Relative RT: No

Int. Type: Valley
 Retention Time: 8.34 min
 Area: 7.14e+005 counts
 Height: 150470.718 cps
 Start Time: 8.24 min
 End Time: 8.72 min



After Scan 2/17/10

after Jan 21/7/10

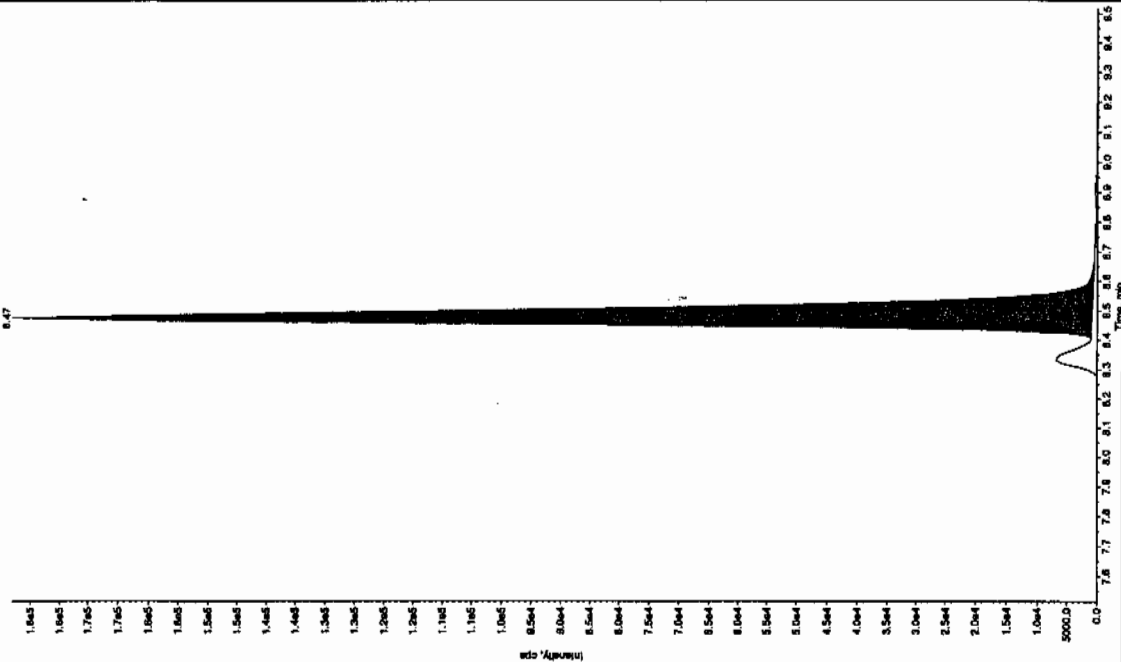


3L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "XXX100214-27CR" Sample ID: "1111" File: "EXS02140113.wif"
 Peak Name: "34-Introductum" Mass(es): "182.1751.9 amu"
 Comment: "LCMS-EXP-C" Annotation: ""

Sample Index: 1
 Peak Type: OC
 Concentration: 50.0 ng/mL
 Calculated Conc: 51.0 ng/mL
 Acq. Date: 2/15/2010
 Acq. Time: 9:11:40 PM

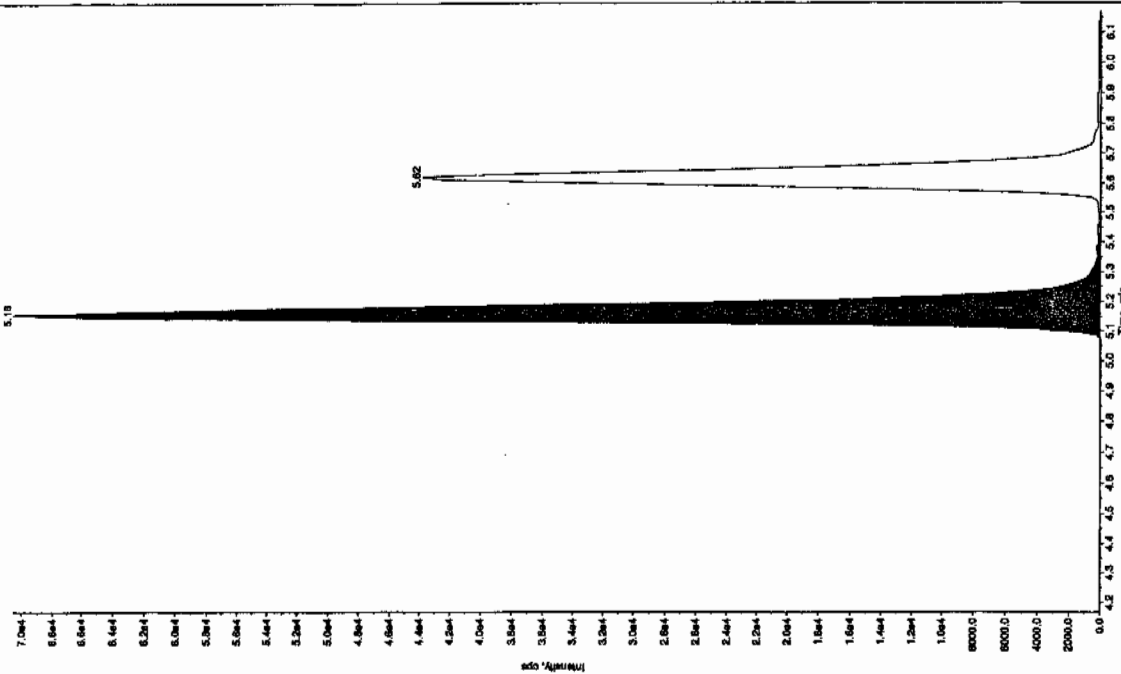
Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 1460.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.52 min
 Use Relative RT: No
 Type: Valley
 Retention Time: 8.47 min
 Area: 6.50e+005 counts
 Height: 182206.466 cps
 Start Time: 8.40 min
 End Time: 8.67 min

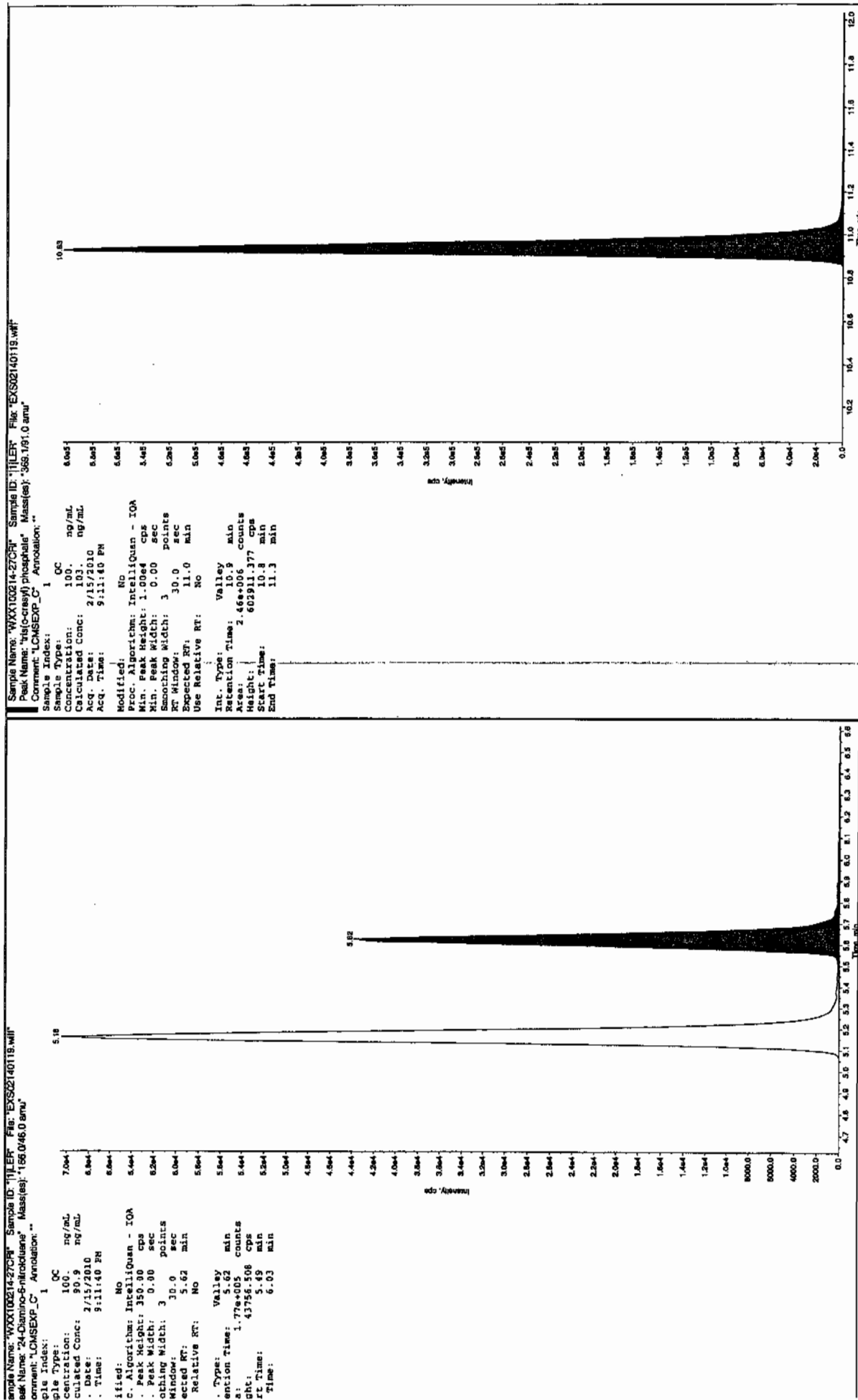


Sample Name: "XXX100214-27CR" Sample ID: "1111" File: "EXS02140113.wif"
 Peak Name: "26-Introductum" Mass(es): "186.0463.0 amu"
 Comment: "LCMS-EXP-C" Annotation: ""

Sample Index: 1
 Peak Type: OC
 Concentration: 100 ng/mL
 Calculated Conc: 91.1 ng/mL
 Acq. Date: 2/15/2010
 Acq. Time: 9:11:40 PM

Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 450.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 5.17 min
 Use Relative RT: No
 Type: Valley
 Retention Time: 5.16 min
 Area: 2.81e+005 counts
 Height: 70540.222 cps
 Start Time: 5.04 min
 End Time: 5.43 min





EL 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 944932

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 1202023631

Sample Amount 2

Moisture:

Amount Units g

Date Received: 25-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208275a

Date Analyzed: 14-FEB-10 05:33

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\020810expA6.qld, Time: Mon Feb 15 07:43:55 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\EXP0208275a

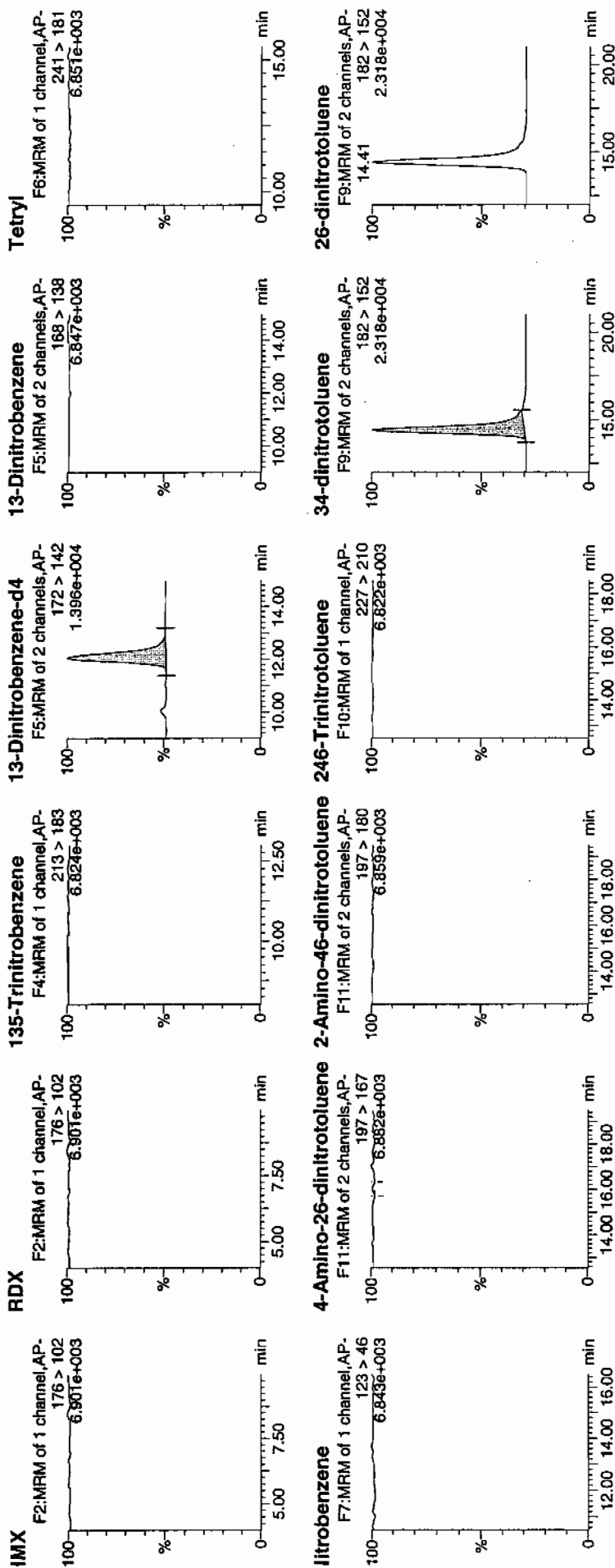
Date: 14-Feb-2010

Time: 05:33:18

ID: 1202023631

File: 3:1,A

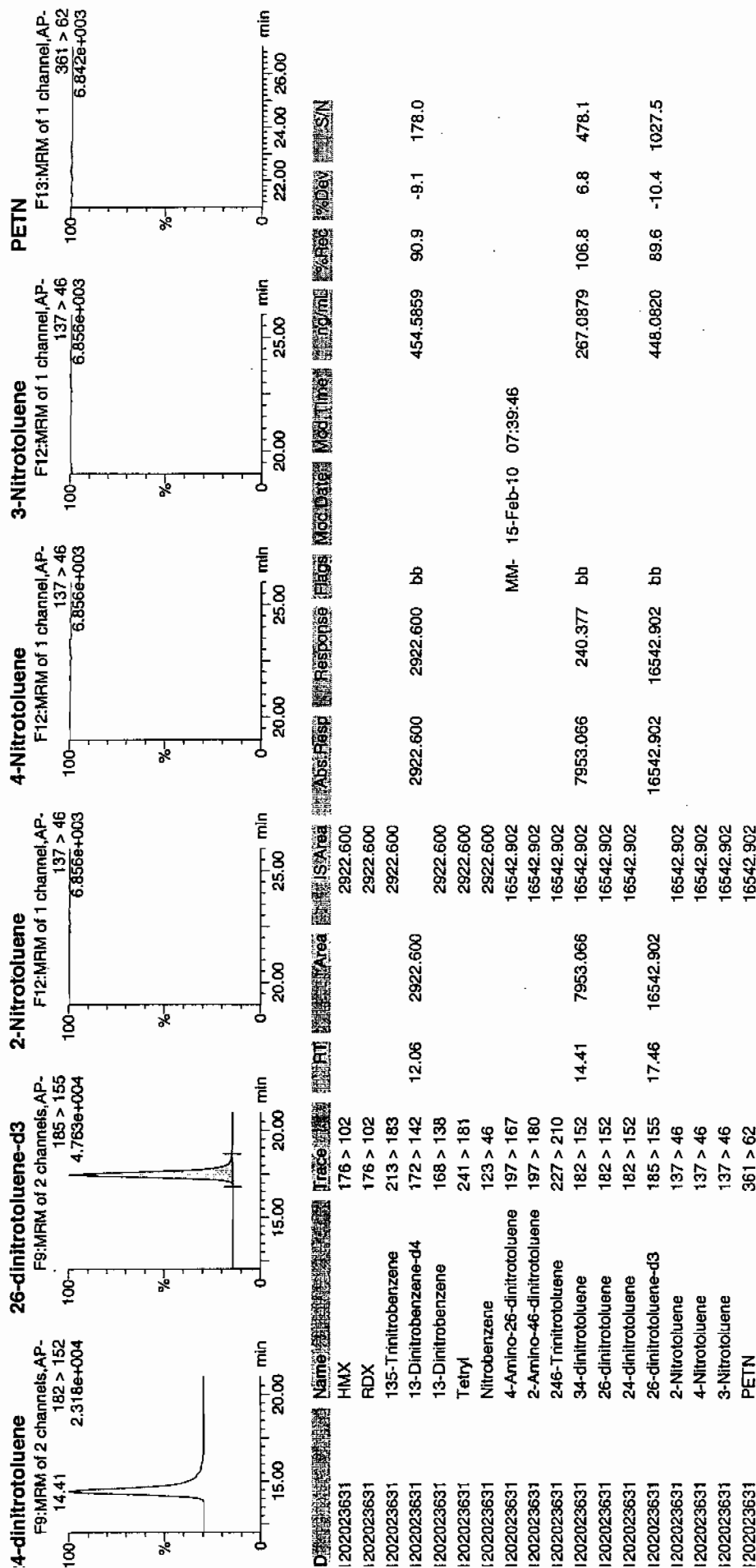
Handwritten notes: *WAV 944935 / 8022 / MSB / 2 /*



Handwritten note: *4m 02/15/10*

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



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: MB for batch 944932

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 1202023631

Sample Amount 2

Moisture:

Amount Units g

Date Received: 25-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140064.wiff

Date Analyzed: 15-FEB-10 06:46

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

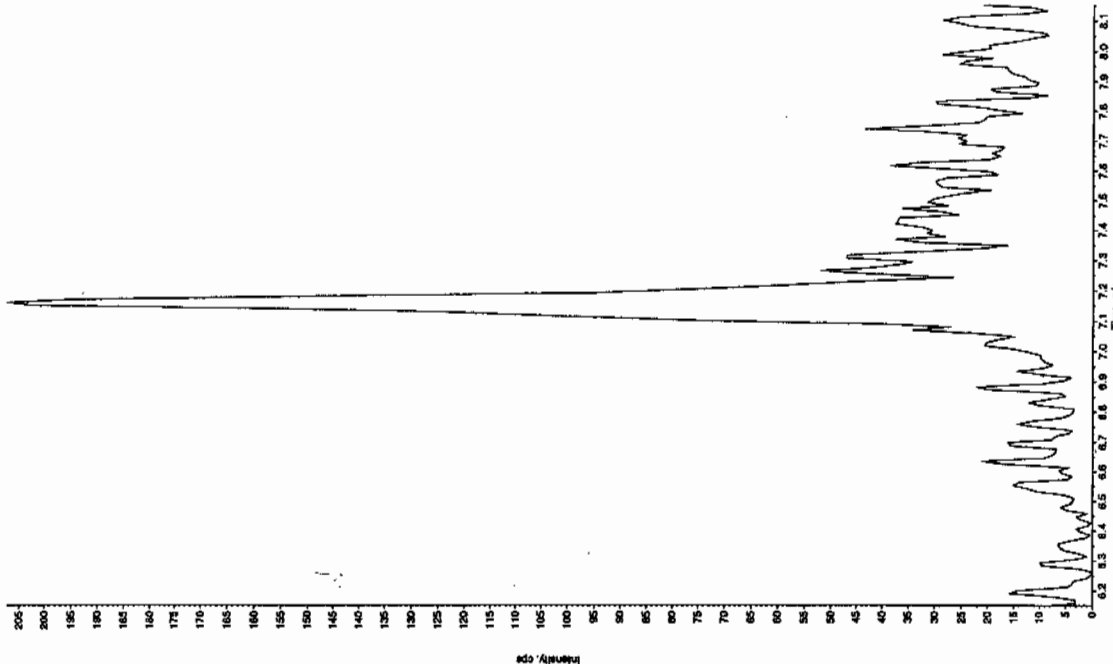
*Concentration =

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

San 2/17/10

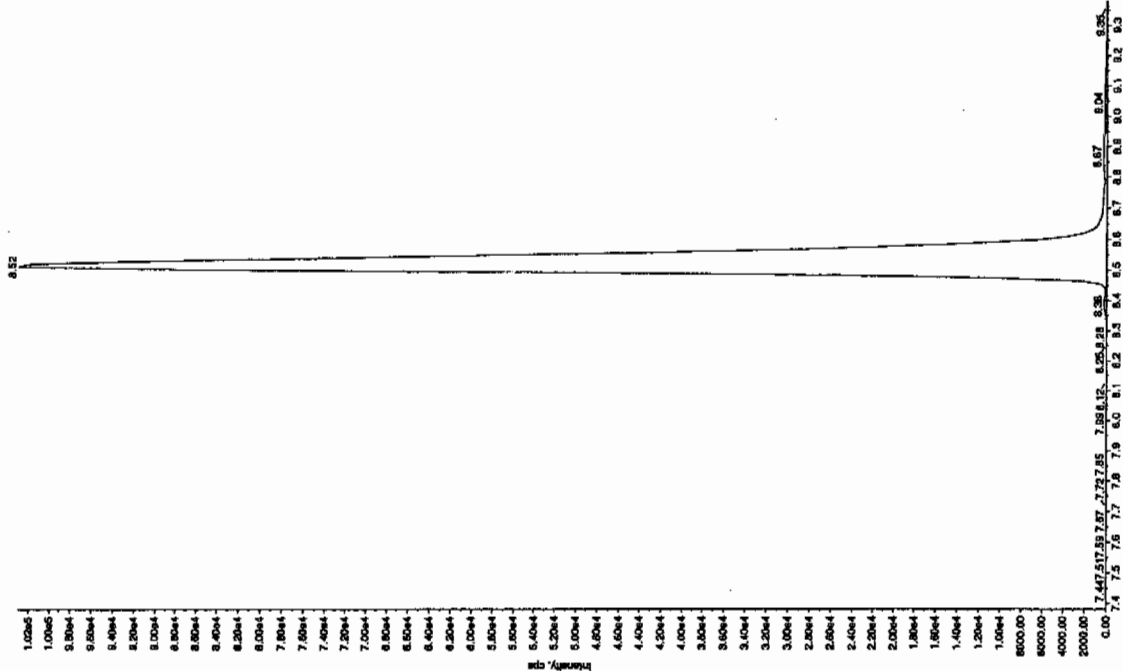
Sample Name: "120023631" Sample ID: "944535121" File: "EX502140064.wif"
 Peak Name: "TAIB" Mass(es): "207.2204.9 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Acq. Date: 2/15/2010
 Acq. Time: 6:46:45 AM
 Modified: No



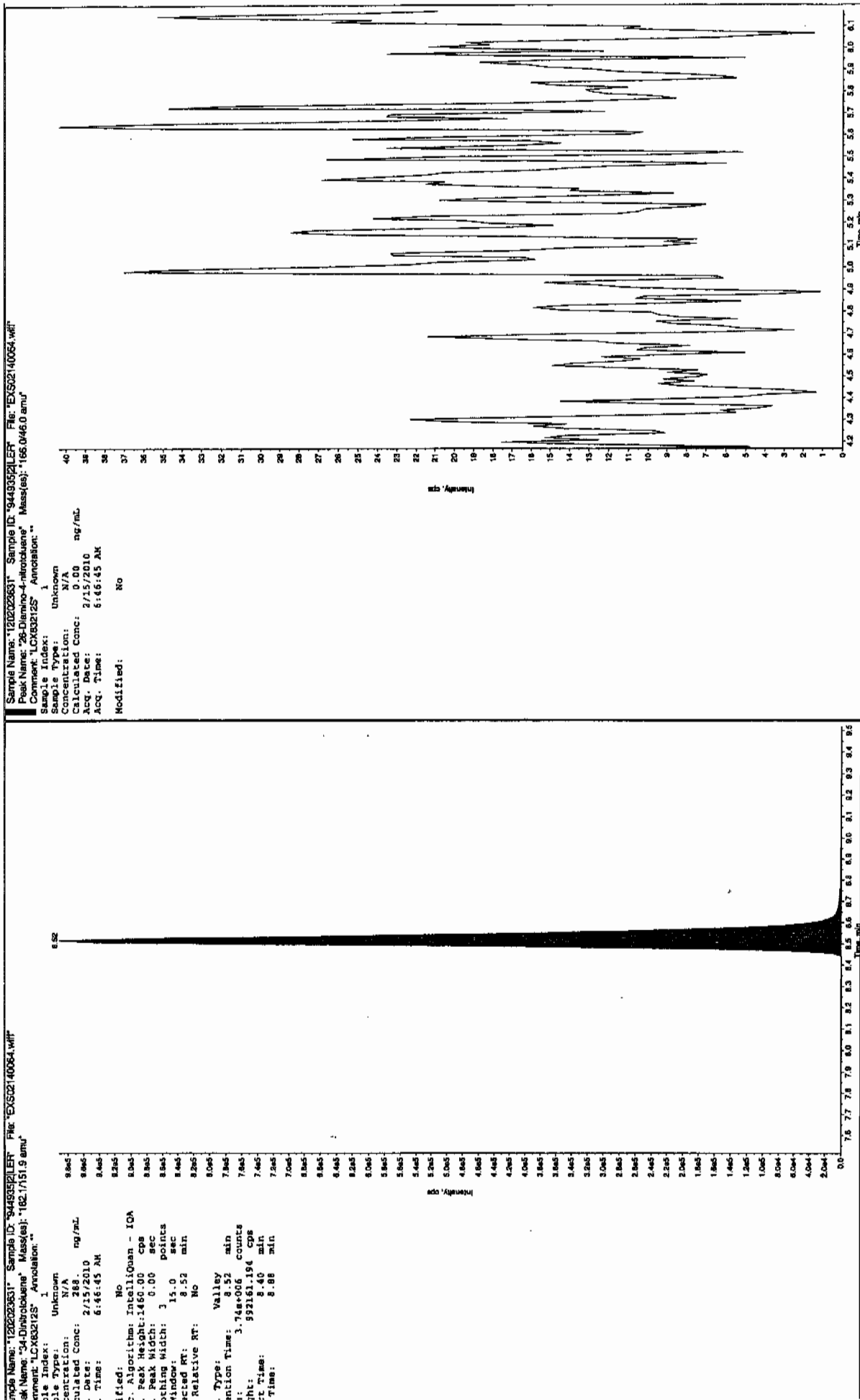
Sample Name: "120023631" Sample ID: "944535121" File: "EX502140064.wif"
 Peak Name: "35-Dinitrophenol" Mass(es): "182.046.0 amu"
 Comment: "LCX832125" Annotation: ""

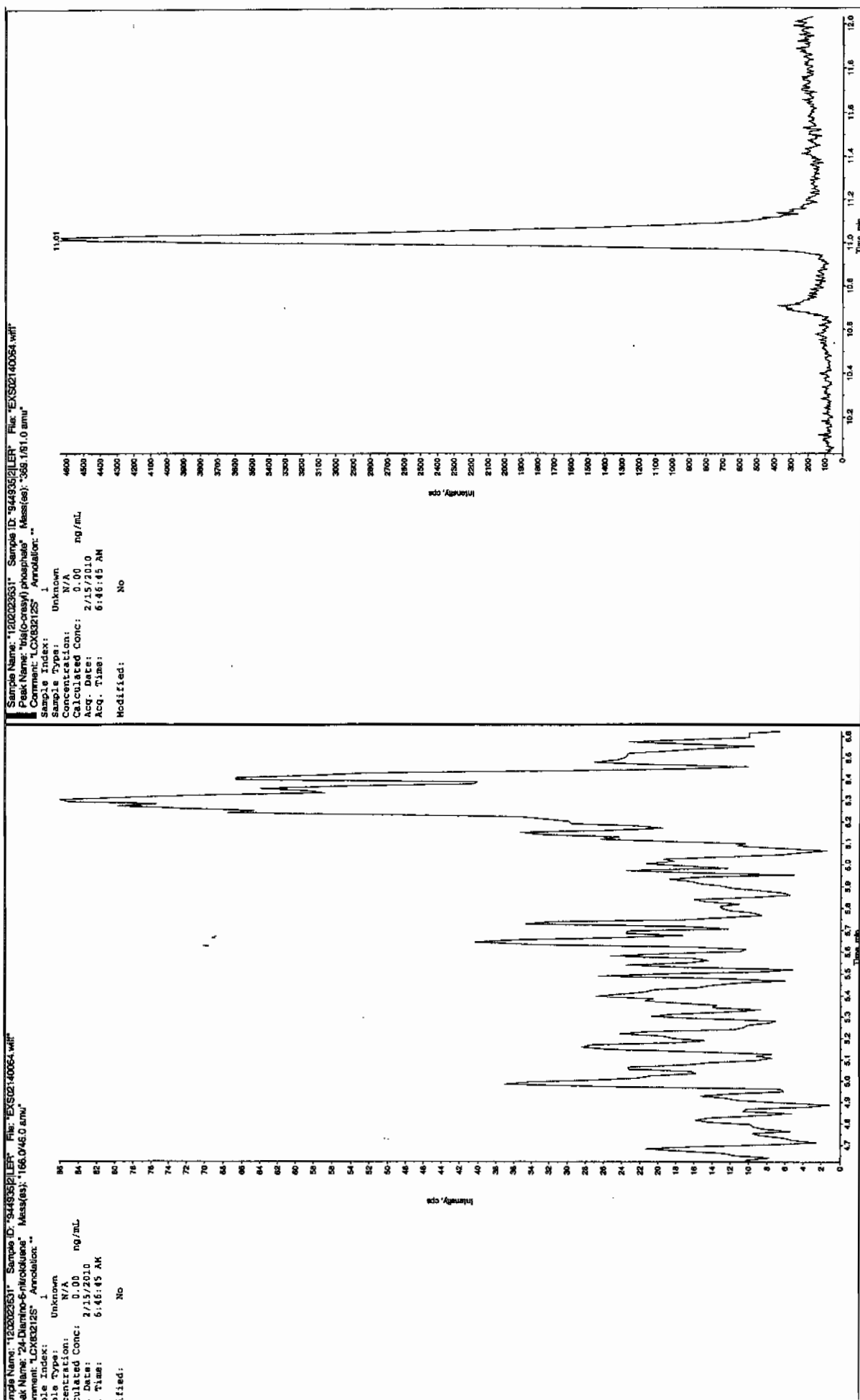
Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Acq. Date: 2/15/2010
 Acq. Time: 6:46:45 AM
 Modified: No



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

San 2/17/10





3L 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 944932

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 1202023632

Sample Amount 2

Moisture:

Amount Units g

Date Received: 25-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208276a

Date Analyzed: 14-FEB-10 06:02

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	4840	
121-14-2	2,4-Dinitrotoluene	5120	
121-82-4	RDX	4760	
19406-51-0	4-Amino-2,6-dinitrotoluene	5210	
2691-41-0	HMX	4350	
35572-78-2	2-Amino-4,6-dinitrotoluene	5450	
479-45-8	Tetryl	2170	
606-20-2	2,6-Dinitrotoluene	5020	
78-11-5	PETN	5780	
88-72-2	o-Nitrotoluene	4640	
98-95-3	Nitrobenzene	4840	
99-08-1	m-Nitrotoluene	4350	
99-35-4	1,3,5-Trinitrobenzene	3950	
99-65-0	m-Dinitrobenzene	4920	
99-99-0	p-Nitrotoluene	4640	

*Concentration =

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

Printed: Mon Feb 15 07:46:07 2010, Page 3 of 67

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\020810expA6.qld, Time: Mon Feb 15 07:43:55 2010

Date: 14-Feb-2010

Time: 06:02:52

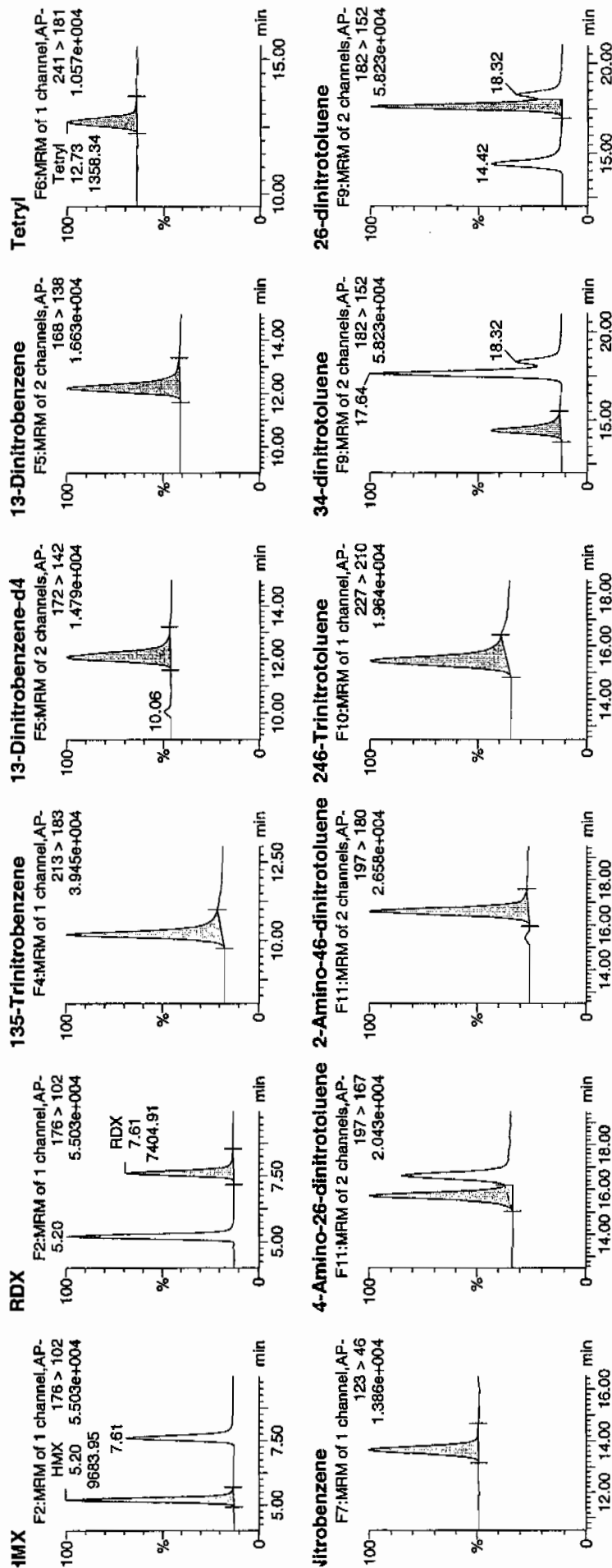
ID: 1202023632

File: 3:1,B

WAV 944935 (S02) / UC8 / 2 /

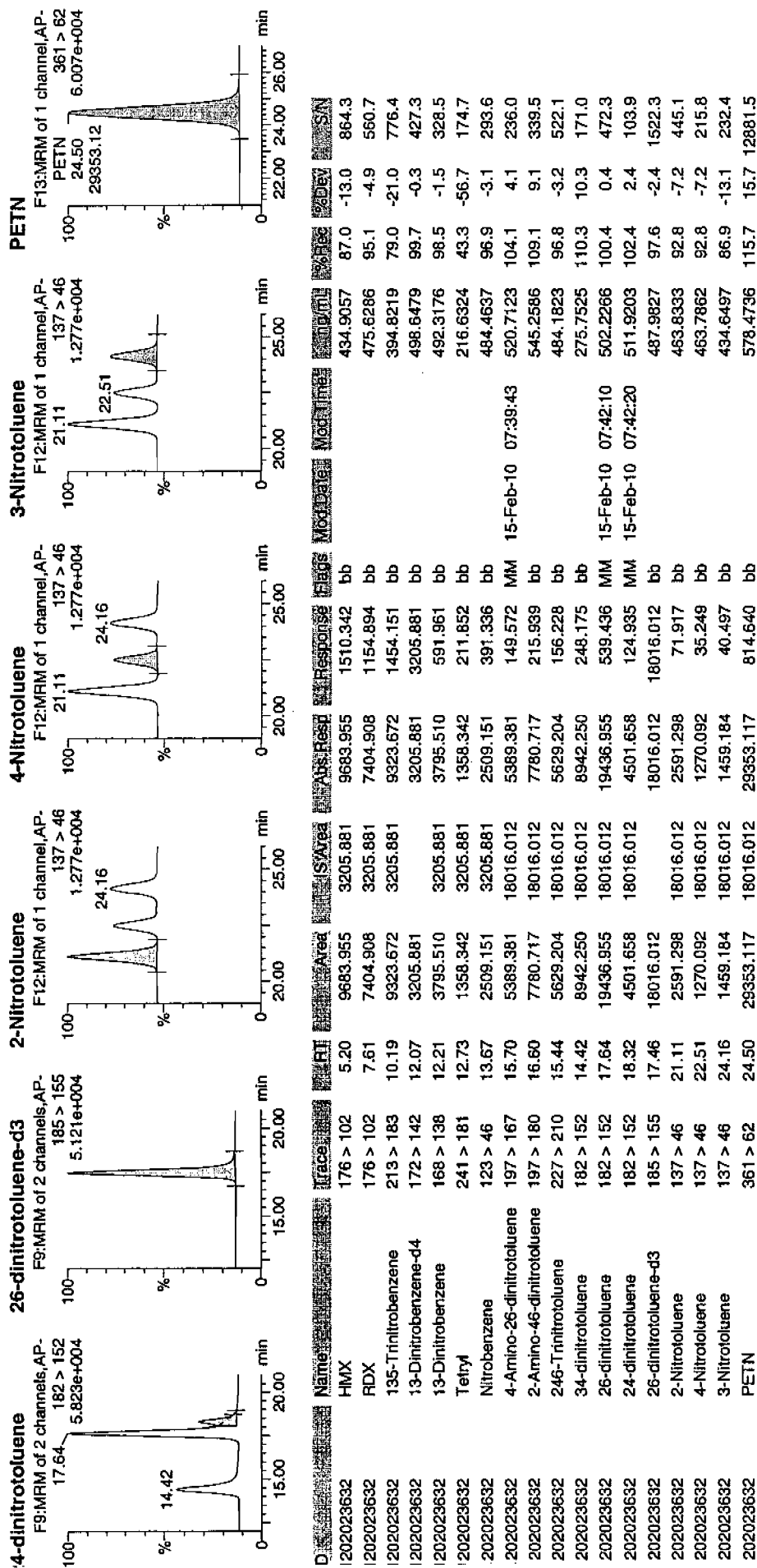
↓ Tetraol

WAV
4/5/10



Annex 1/5/10

Dataset: C:\MASSLYNX\New_Exp\PRO\020810expA6.qld, Time: Mon Feb 15 07:43:55 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: LCS for batch 944932

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 1202023632

Sample Amount 2

Moisture:

Amount Units g

Date Received: 25-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140065.wiff

Date Analyzed: 15-FEB-10 07:02

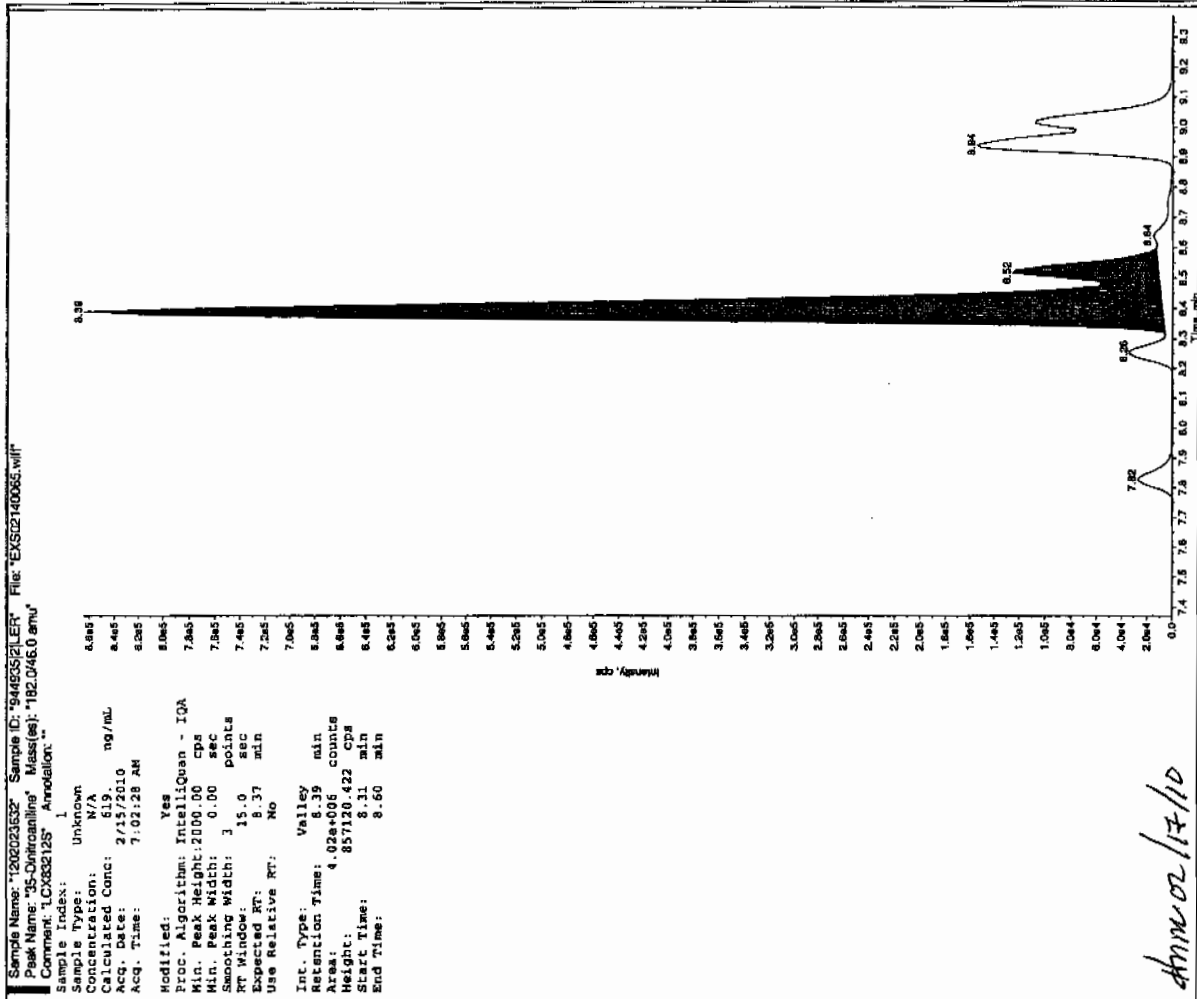
Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	7380	
59229-75-3	2,6-Diamino-4-nitrotoluene	5580	
618-87-1	3,5-Dinitroaniline	5630	
6629-29-4	2,4-Diamino-6-nitrotoluene	5900	
78-30-8	tris(o-cresyl) phosphate	5110	

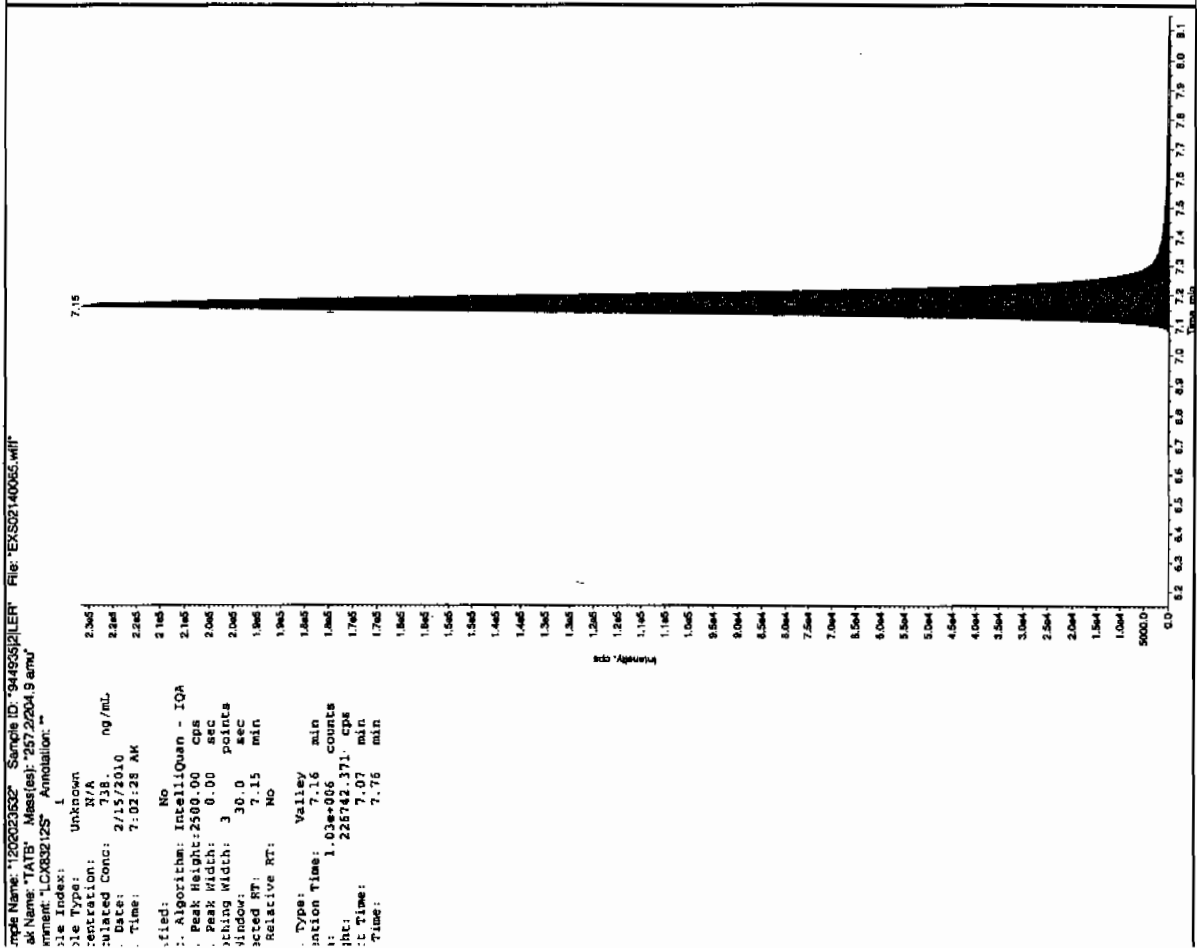
*Concentration =

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

Before Jan 21/6/10

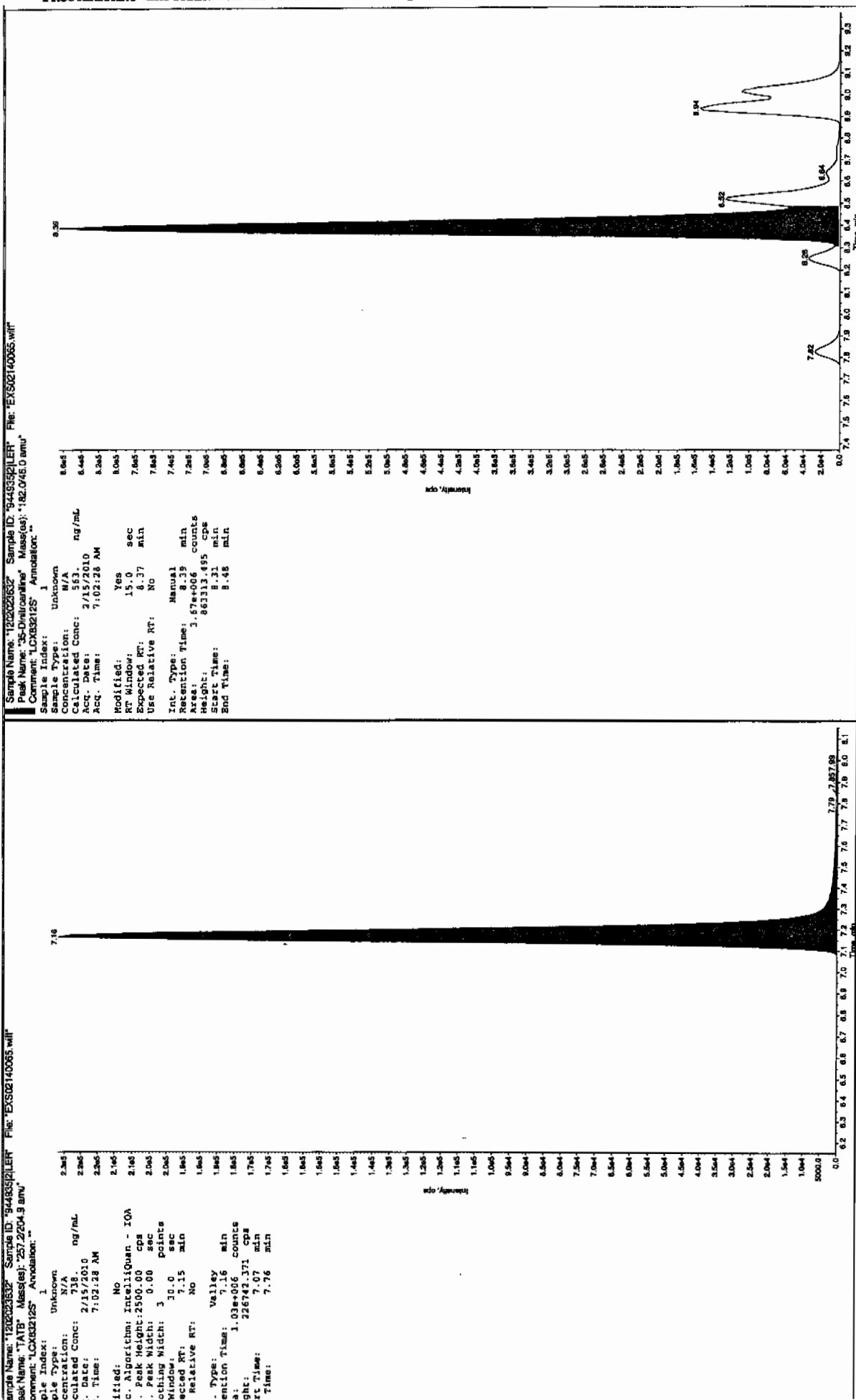


After 12/17/10



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

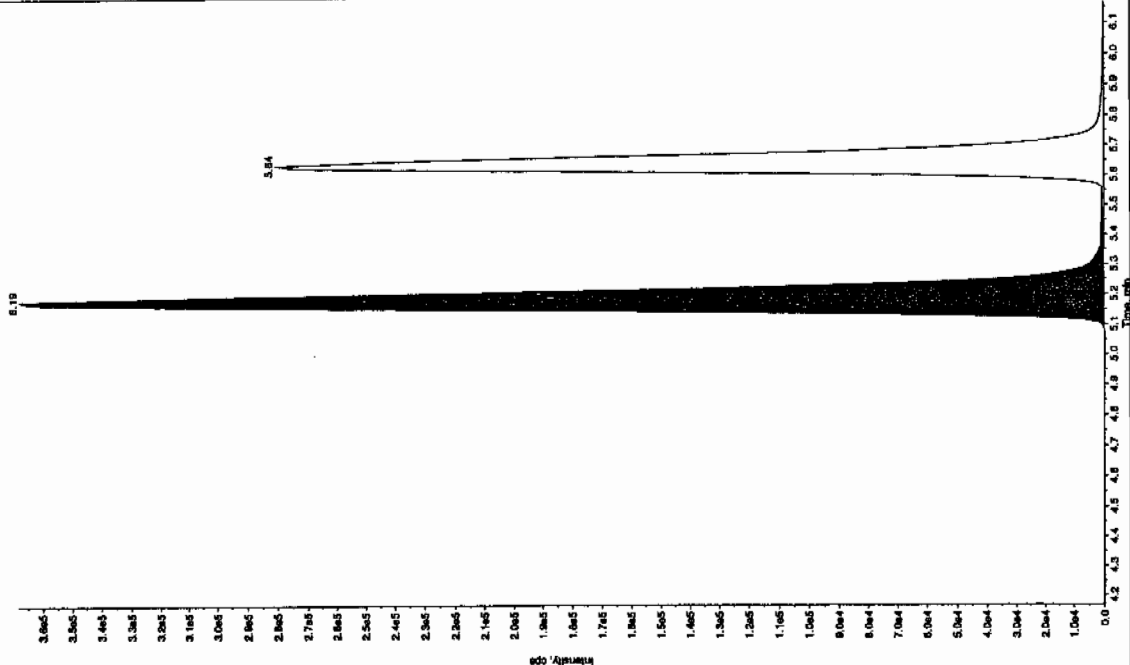
after Len 2/17/10



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

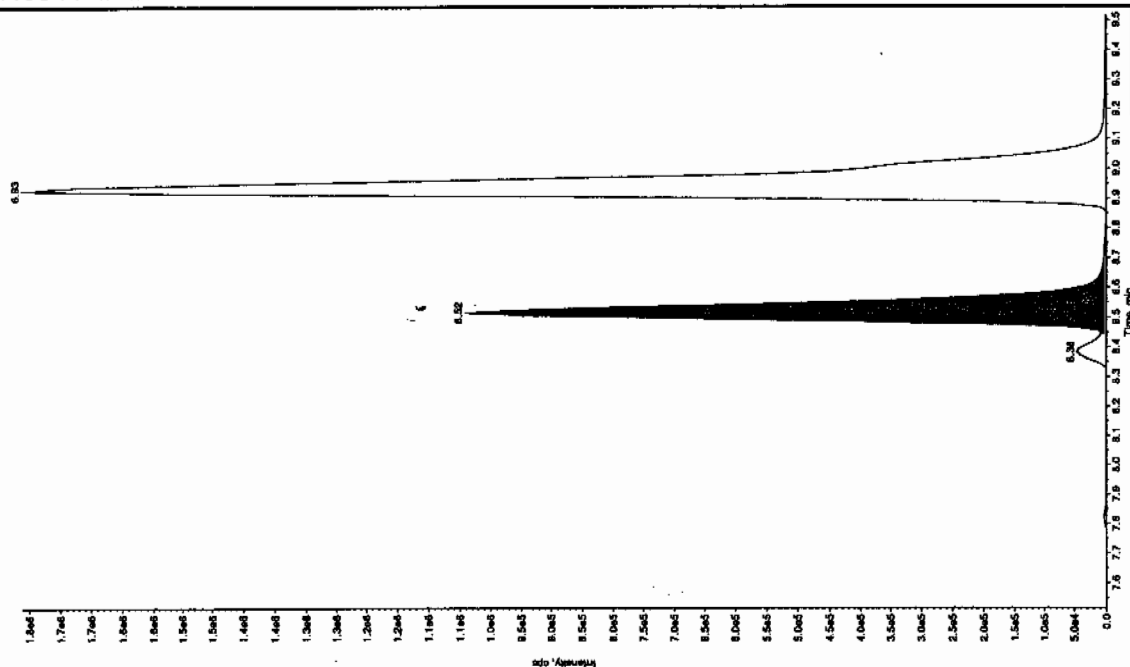
Sample Name: "1202023632" Sample ID: "94493521.ER" File: "EX502140065.wif"
 Peak Name: "34-Dinitrotoluene" Mass(es): "182.17151.9 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 305. ng/mL
 Acq. Date: 2/15/2010
 Acq. Time: 7:02:28 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 450.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 5.17 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.19 min
 Area: 1.60e+06 counts
 Height: 36808771 cps
 Start Time: 5.05 min
 End Time: 5.49 min

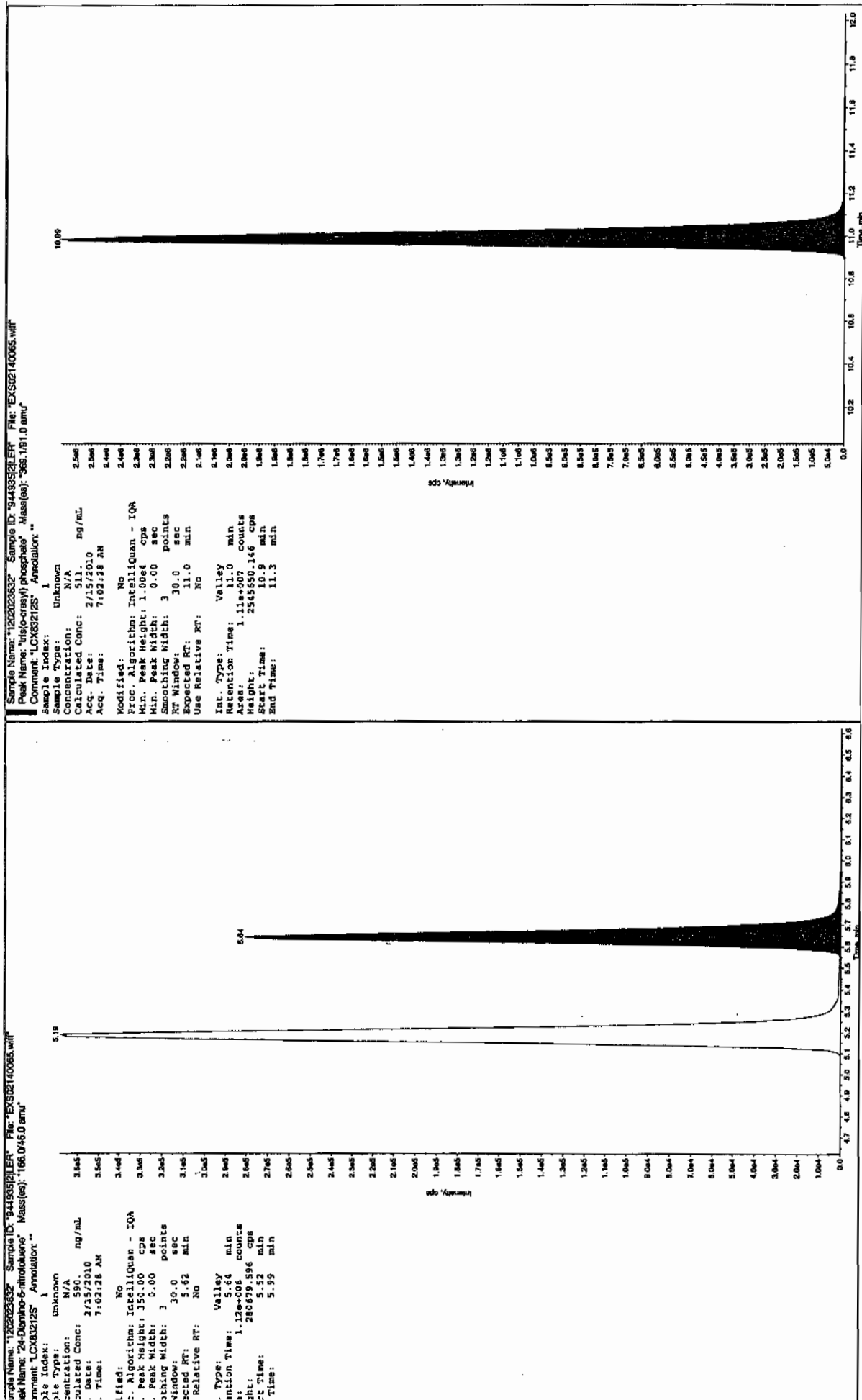


Sample Name: "1202023632" Sample ID: "94493521.ER" File: "EX502140065.wif"
 Peak Name: "34-Dinitrotoluene" Mass(es): "182.17151.9 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 305. ng/mL
 Acq. Date: 2/15/2010
 Acq. Time: 7:02:28 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 450.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 8.52 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.52 min
 Area: 4.01e+06 counts
 Height: 103818726 cps
 Start Time: 8.44 min
 End Time: 8.69 min



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: RE15-10-7869(245394001MS)

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 1202023633

Sample Amount 2

Moisture: 24.7

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208278a

Date Analyzed: 14-FEB-10 07:01

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	5260	
121-14-2	2,4-Dinitrotoluene	5080	
121-82-4	RDX	4550	
19406-51-0	4-Amino-2,6-dinitrotoluene	5260	
2691-41-0	HMX	4730	
35572-78-2	2-Amino-4,6-dinitrotoluene	5600	
479-45-8	Tetryl	4330	
606-20-2	2,6-Dinitrotoluene	5160	
78-11-5	PETN	5770	
88-72-2	o-Nitrotoluene	4760	
98-95-3	Nitrobenzene	4980	
99-08-1	m-Nitrotoluene	4780	
99-35-4	1,3,5-Trinitrobenzene	4870	
99-65-0	m-Dinitrobenzene	5280	
99-99-0	p-Nitrotoluene	4990	

*Concentration =

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

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

Dataset: C:\MASSLYNX\New_Exp.PRO\020810expA6.qld, Time: Mon Feb 15 07:43:55 2010

James: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208278a

Date: 14-Feb-2010

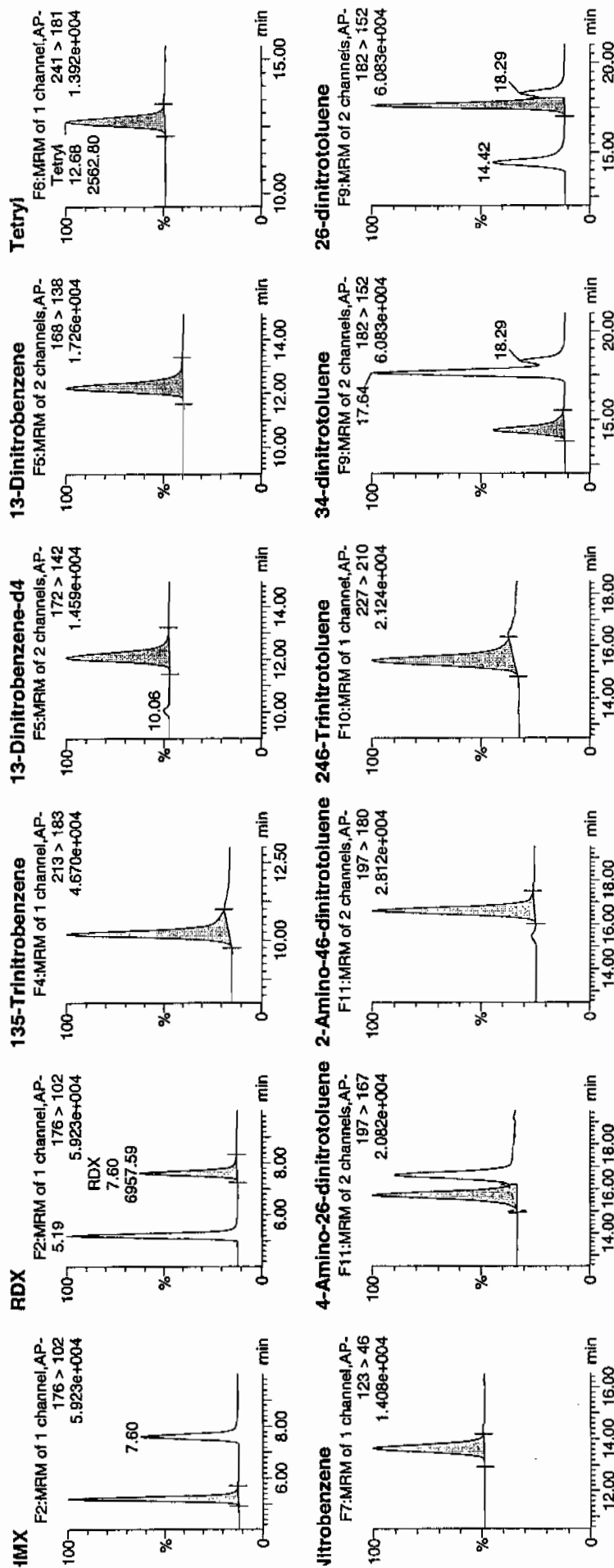
Time: 07:01:48

ID: 1202023633

File: 3-1.D

not
2/15/10

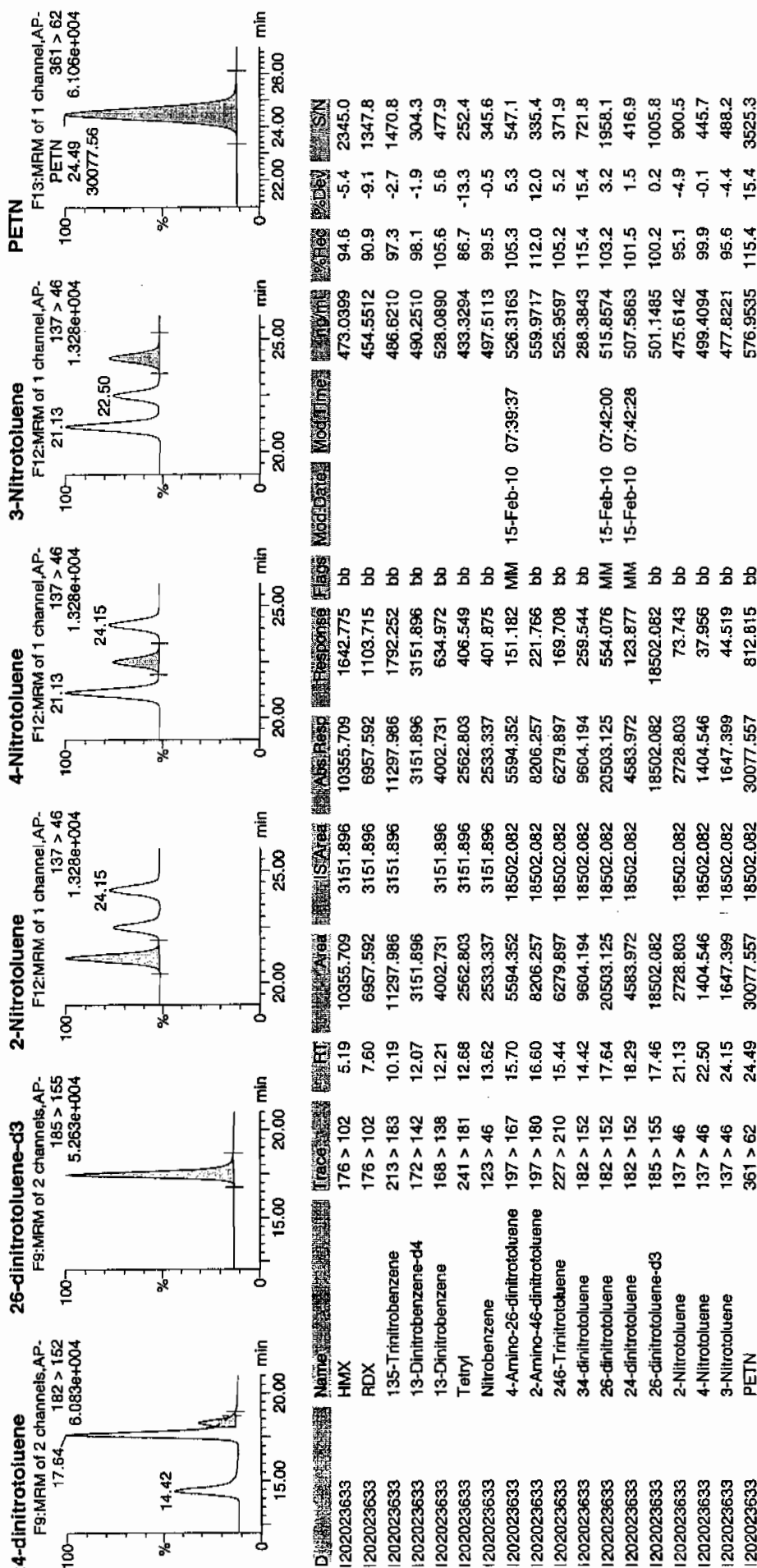
WAV/944935/Sec3/245394001.ms/2/



Amw/15/10

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



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7869(245394001MS)

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 1202023633

Sample Amount 2

Moisture: 24.7

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140067.wiff

Date Analyzed: 15-FEB-10 07:33

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	6620	
59229-75-3	2,6-Diamino-4-nitrotoluene	5790	
618-87-1	3,5-Dinitroaniline	5250	
6629-29-4	2,4-Diamino-6-nitrotoluene	5320	
78-30-8	tris(o-cresyl) phosphate	5190	

*Concentration =

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

Jan 21/7/10

Sample Name: "120202363" Sample ID: "944832125" File: "EXS0210067.mpl"

Peak Name: "TATB" Mass(es): "257.2204.9 amu"

Sample Index: 1 Annotation: " "

Sample Type: Unknown Concentration: N/A

Calculated Conc: 662. ng/mL

Acq. Date: 2/15/2010

Acq. Time: 7:33:52 AM

Modified: No

Proc. Algorithm: IntelliQuan - IOA

Min. Peak Height: 2500.00 cps

Min. Peak Width: 0.00 sec

Smoothing Width: 30.0 points

RT Window: 15.0 sec

Expected RT: 7.15 min

Use Relative RT: No

Int. Type: Valley

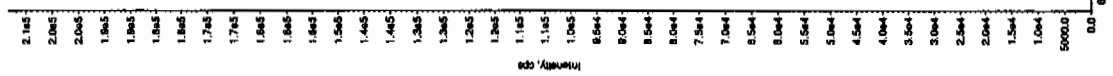
Retention Time: 7.21 min

Area: 9.23e+005 counts

Height: 208629.195 cps

Start Time: 7.09 min

End Time: 7.93 min



Sample Name: "120202363" Sample ID: "944832125" File: "EXS0210067.mpl"

Peak Name: "TATB" Mass(es): "182.046.0 amu"

Sample Index: 1 Annotation: " "

Sample Type: Unknown Concentration: N/A

Calculated Conc: 525. ng/mL

Acq. Date: 2/15/2010

Acq. Time: 7:33:52 AM

Modified: No

Proc. Algorithm: IntelliQuan - IOA

Min. Peak Height: 2000.00 cps

Min. Peak Width: 0.00 sec

Smoothing Width: 30.0 points

RT Window: 15.0 sec

Expected RT: 8.38 min

Use Relative RT: No

Int. Type: Valley

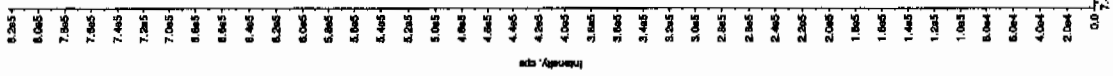
Retention Time: 8.46 min

Area: 3.43e+006 counts

Height: 810889.489 cps

Start Time: 8.39 min

End Time: 8.56 min



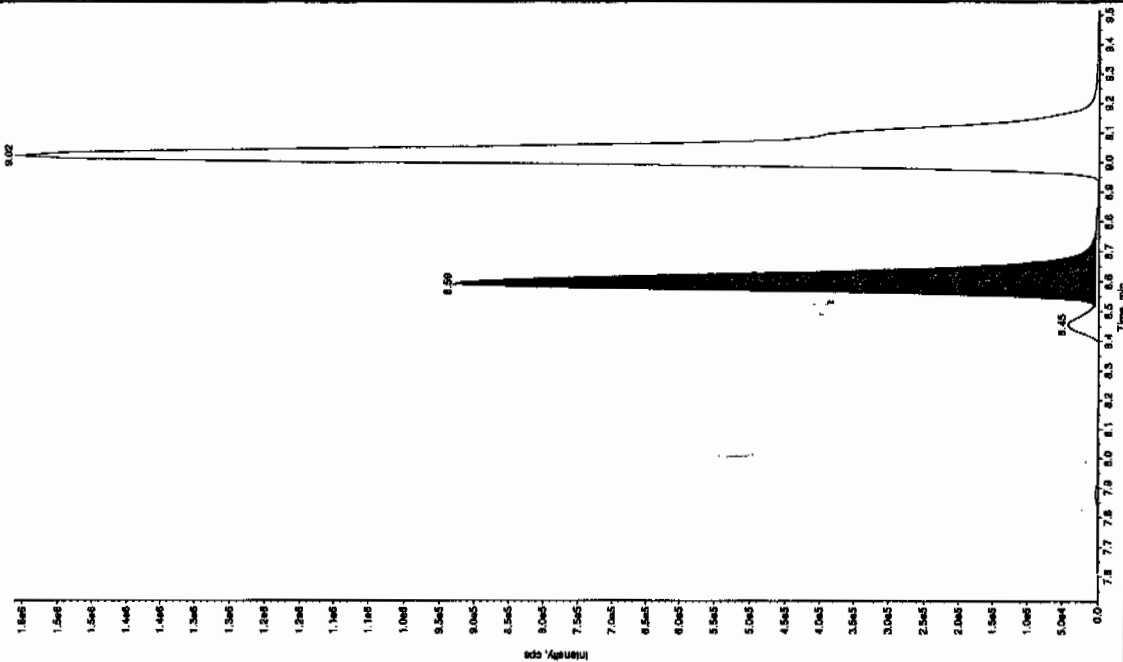
Jan 22/7/10



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

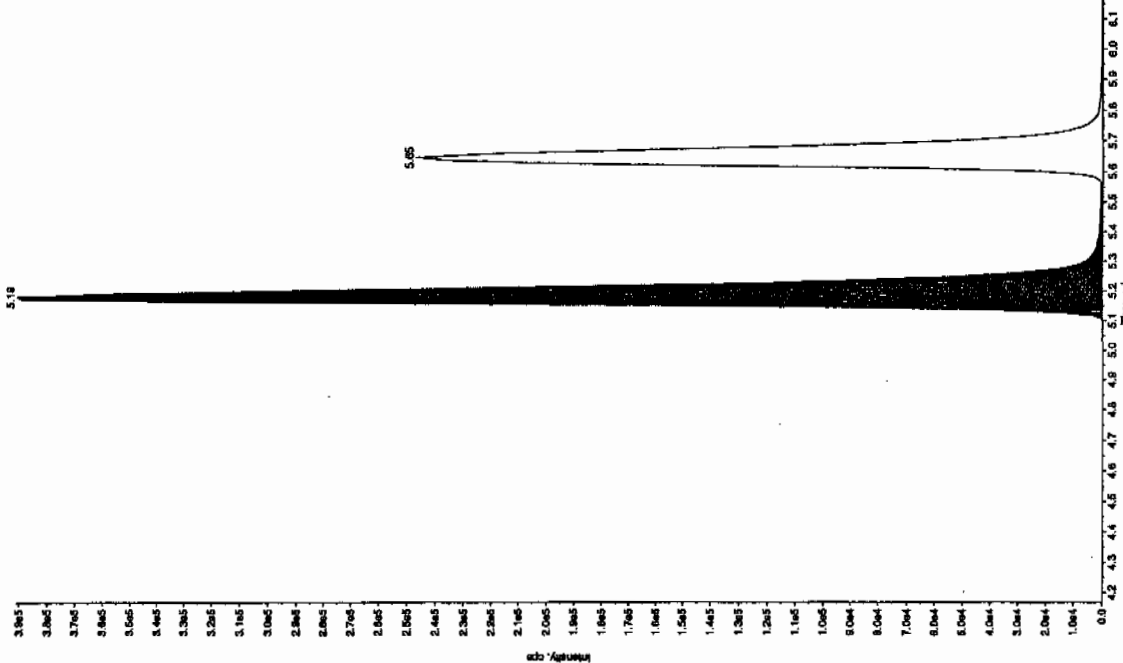
Sample Name: "120202333" Sample ID: "94493921ER" File: "EX02140067.wif"
 Peak Name: "34-Chlorobutene" Mass(es): "162.17(51.9 amu)"
 Comment: "LCX032125" Annotation: "A"

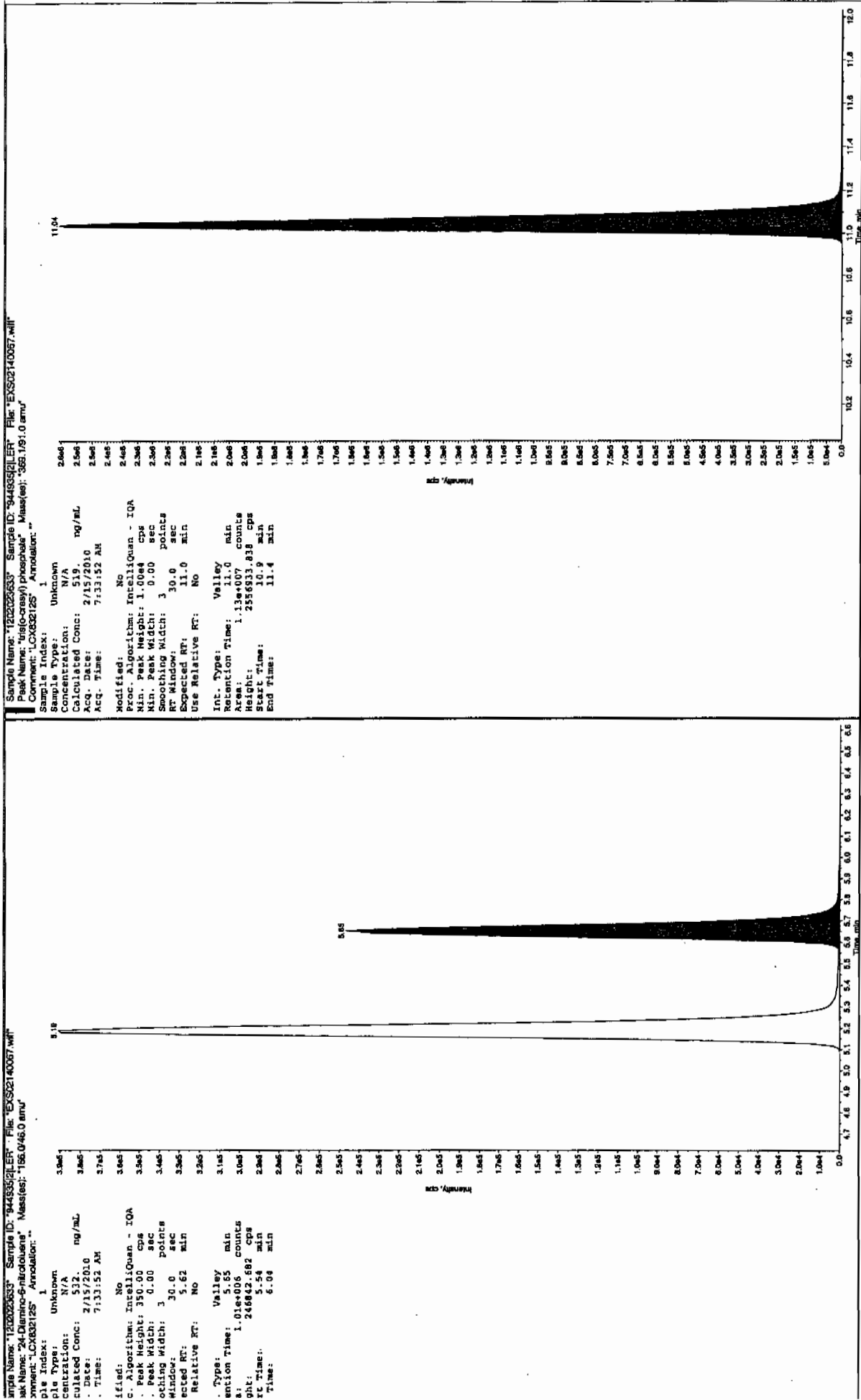
Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 234 ng/mL
 Date: 2/15/2010
 Acq. Time: 7:33:52 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 1460.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.52 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.59 min
 Area: 3.83e+006 counts
 Height: 525144.714 cps
 Start Time: 8.52 min
 End Time: 8.77 min



Sample Name: "120202333" Sample ID: "94493921ER" File: "EX02140067.wif"
 Peak Name: "28-Diamino-4-nitrobutene" Mass(es): "166.04(6.0 amu)"
 Comment: "LCX032125" Annotation: "A"

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 574 ng/mL
 Date: 2/15/2010
 Acq. Time: 7:33:52 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 450.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 5.17 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.19 min
 Area: 1.57e+006 counts
 Height: 390746.796 cps
 Start Time: 5.07 min
 End Time: 5.49 min





1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7869(245394001MSD)

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 1202023634

Sample Amount 2

Moisture: 24.7

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0208279a

Date Analyzed: 14-FEB-10 07:31

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	5230	
121-14-2	2,4-Dinitrotoluene	5030	
121-82-4	RDX	4600	
19406-51-0	4-Amino-2,6-dinitrotoluene	4900	
2691-41-0	HMX	4790	
35572-78-2	2-Amino-4,6-dinitrotoluene	5360	
479-45-8	Tetryl	4560	
606-20-2	2,6-Dinitrotoluene	4990	
78-11-5	PETN	5370	
88-72-2	o-Nitrotoluene	4450	
98-95-3	Nitrobenzene	4800	
99-08-1	m-Nitrotoluene	4280	
99-35-4	1,3,5-Trinitrobenzene	4710	
99-65-0	m-Dinitrobenzene	5270	
99-99-0	p-Nitrotoluene	4530	

*Concentration =

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

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0208279a

Date: 14-Feb-2010

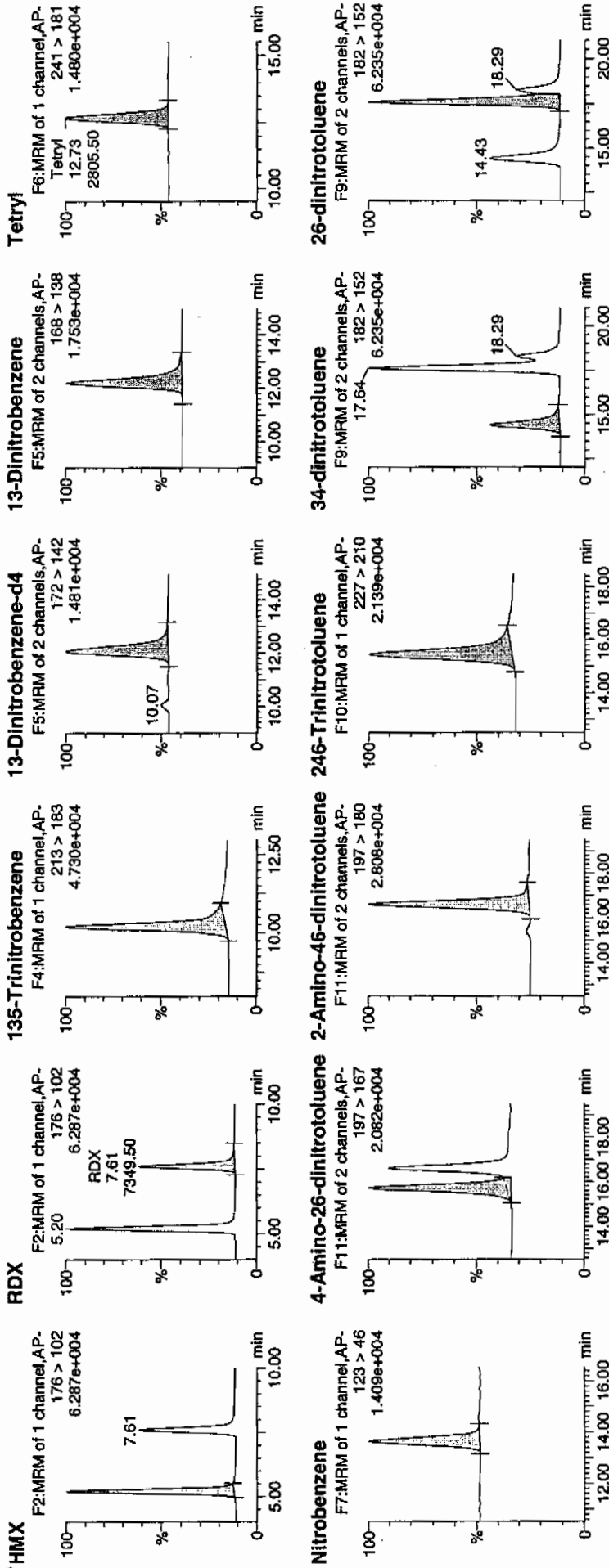
Time: 07:31:16

ID: 1202023634

Vial: 3:1E

4477
2/15/10

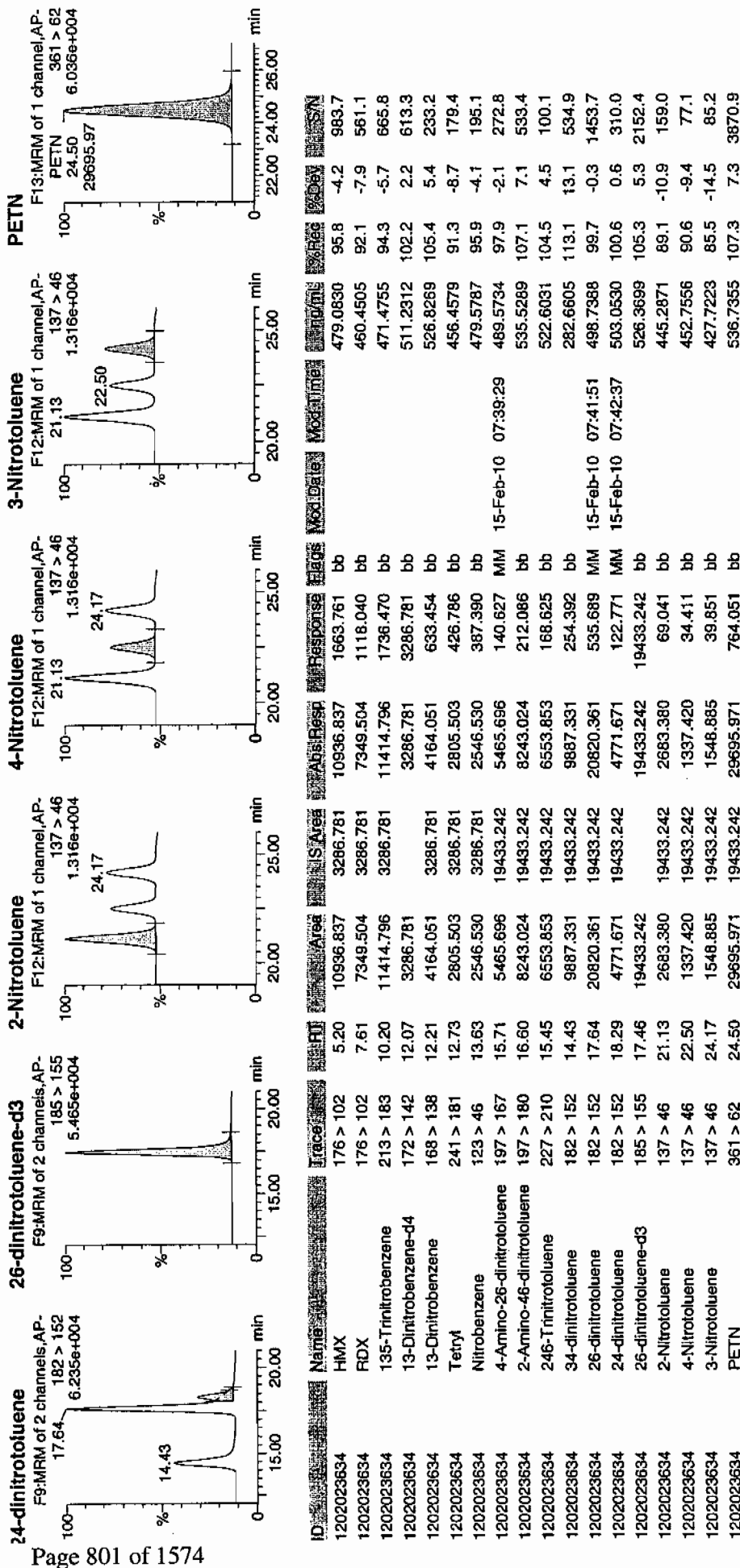
LAU/944935 / 80022 / 245394001 USB / 2 /



4477
2/15/10

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



1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7869(245394001MSD)

Lab Code: GEL

GEL Job No (SDG) 10-1392

Matrix: SOIL

GEL Sample ID: 1202023634

Sample Amount 2

Moisture: 24.7

Amount Units g

Date Received: 23-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944932

Concentrated Extract Volume (mL) 10

Date Extracted: 28-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02140068.wiff

Date Analyzed: 15-FEB-10 07:49

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	5840	
59229-75-3	2,6-Diamino-4-nitrotoluene	5470	
618-87-1	3,5-Dinitroaniline	5530	
6629-29-4	2,4-Diamino-6-nitrotoluene	5020	
78-30-8	tris(o-cresyl) phosphate	5090	

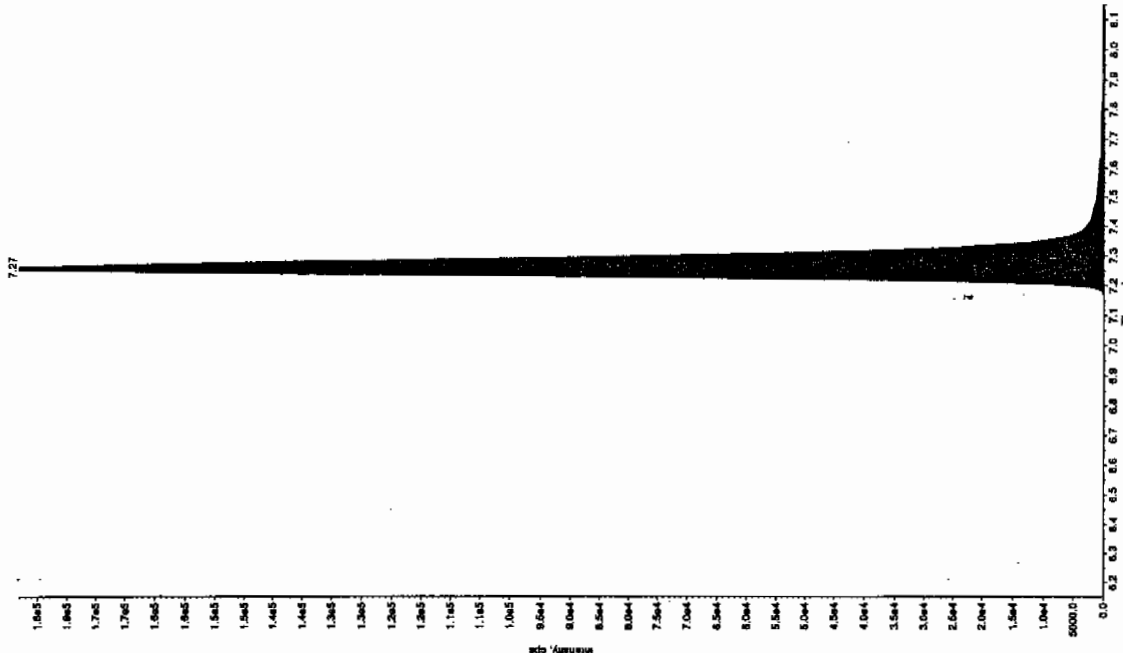
*Concentration =

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

See 2/17/10

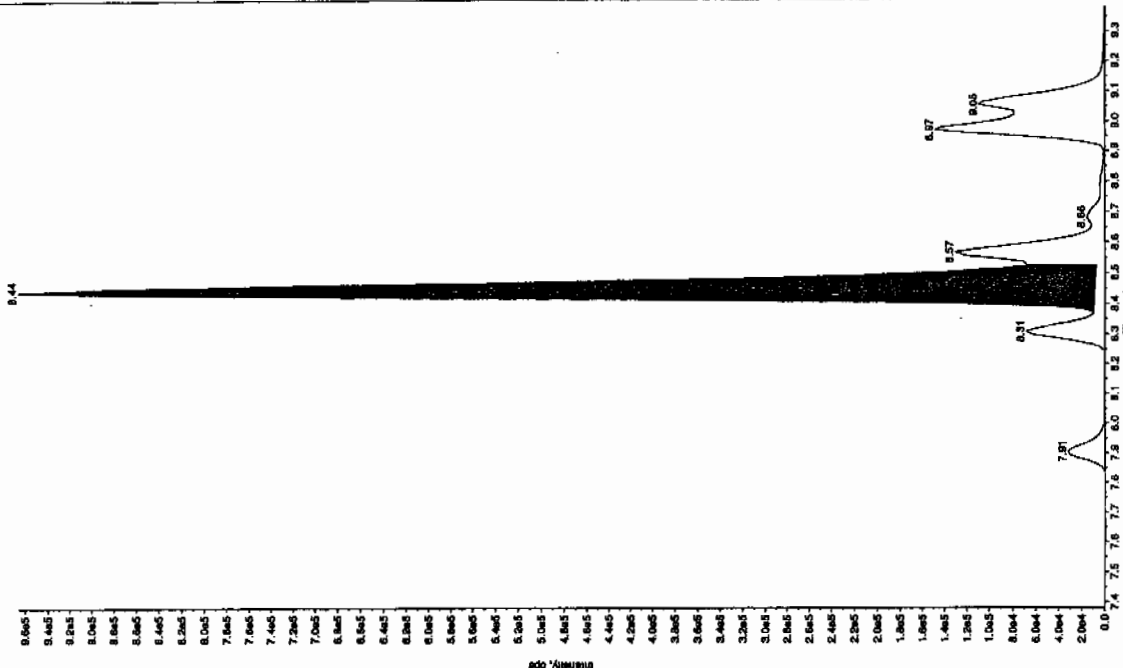
Sample Name: "120202354" Sample ID: "94483321LRF" File: "EXS02140068.wif"
 Peak Name: "1A1B" Mass(es): "257.2204.9 amu"
 Comment: "LCX832125" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 553. ng/mL
 Acq. Date: 2/15/2010
 Acq. Time: 7:49:36 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 2000.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.38 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.44 min
 Area: 3.61e+006 counts
 Height: 557361.633 cps
 Start Time: 8.37 min
 End Time: 8.53 min

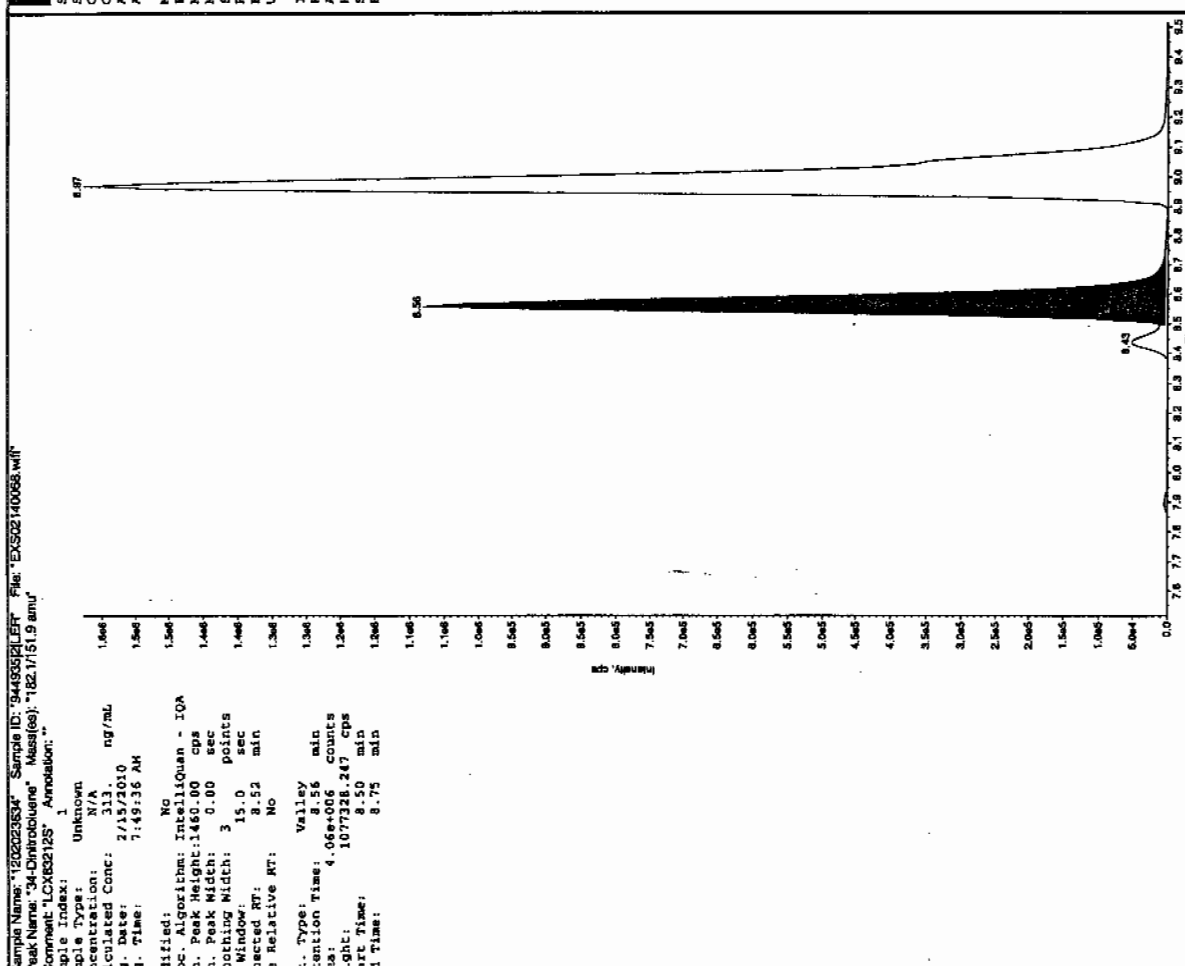
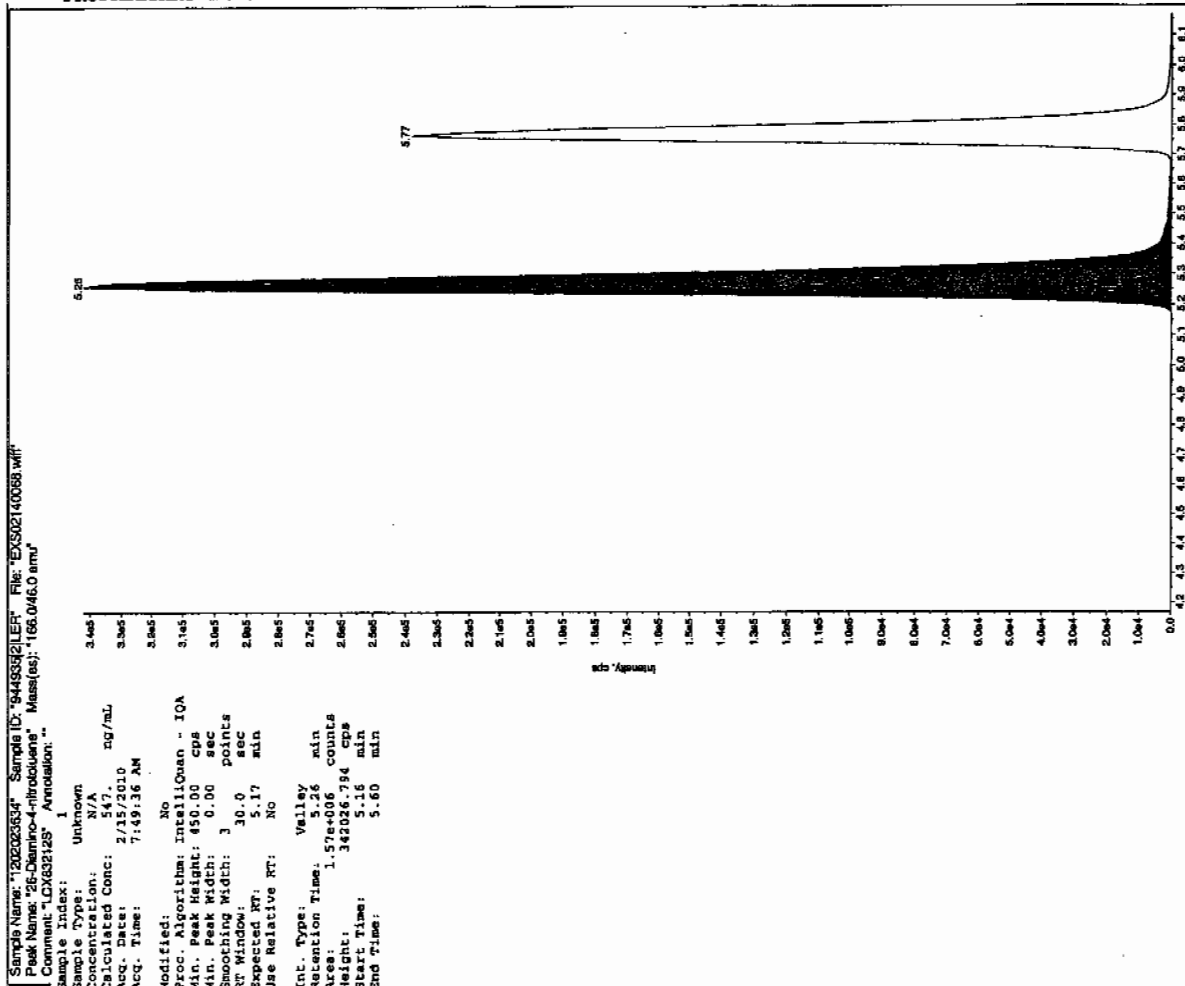


Sample Name: "120202354" Sample ID: "94483321LRF" File: "EXS02140068.wif"
 Peak Name: "35-Difluoromethyl" Mass(es): "182.046.0 amu"
 Comment: "LCX832125" Annotation: "

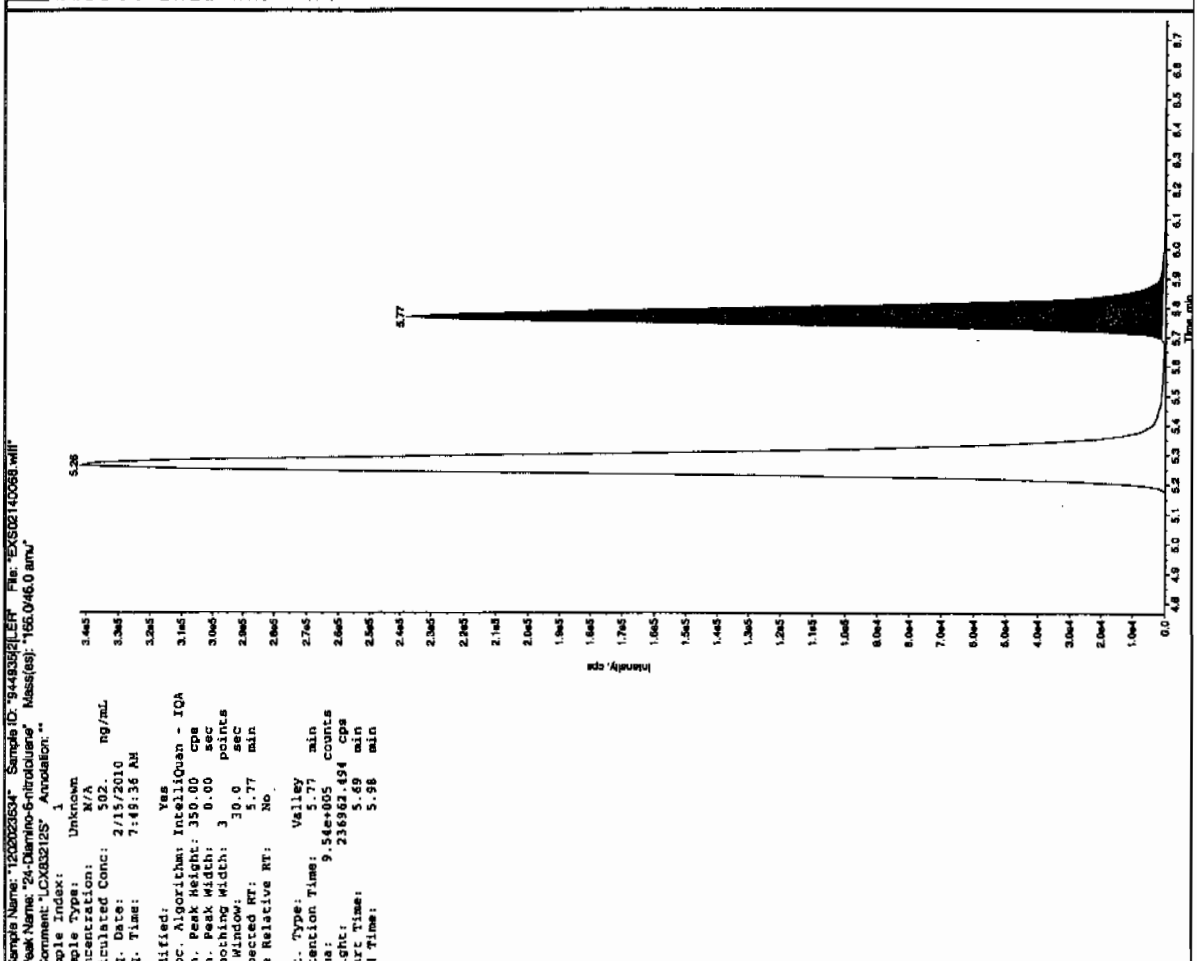
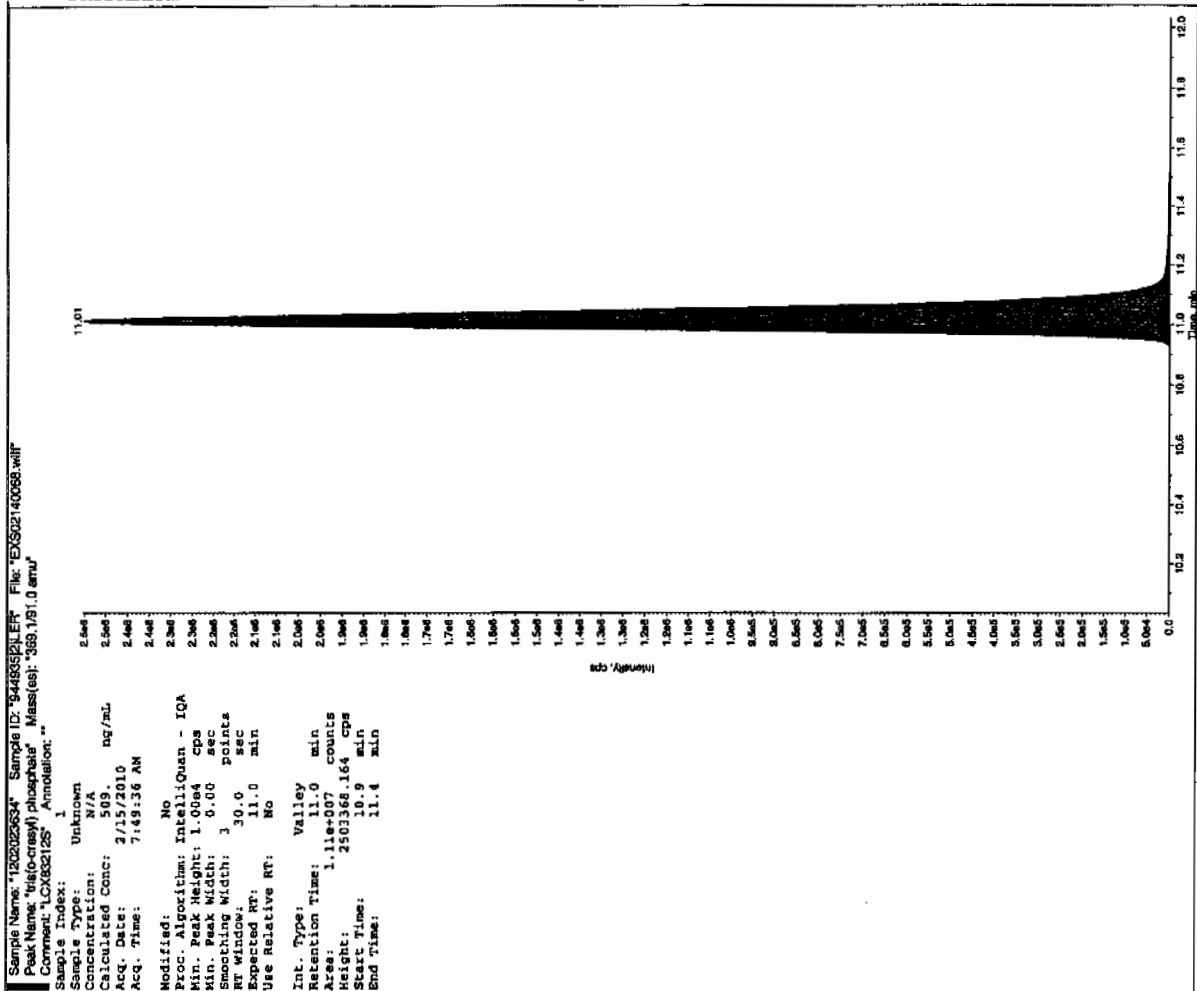
Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 553. ng/mL
 Acq. Date: 2/15/2010
 Acq. Time: 7:49:36 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 2000.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.38 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.44 min
 Area: 3.61e+006 counts
 Height: 557361.633 cps
 Start Time: 8.37 min
 End Time: 8.53 min



See 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

MISCELLANEOUS DATA

Prep Logbook Nitroaromatics and Nitramines by High Performance Liquid Chromatography (HPLC)

Batch ID: 944932 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)
1202023631 MB	28-JAN-2010 16:30:00	2	10	5
1202023632 LCS	28-JAN-2010 16:30:00	2	10	5
245394001	28-JAN-2010 16:30:00	2	10	5
1202023633 MS (245394001)	28-JAN-2010 16:30:00	2	10	5
1202023634 MSD (245394001)	28-JAN-2010 16:30:00	2	10	5
245394002	28-JAN-2010 16:30:00	2	10	5
245394003	28-JAN-2010 16:30:00	2	10	5
245394004	28-JAN-2010 16:30:00	2	10	5
245394005	28-JAN-2010 16:30:00	2	10	5
245394006	28-JAN-2010 16:30:00	2	10	5
245394007	28-JAN-2010 16:30:00	2	10	5
245394008	28-JAN-2010 16:30:00	2	10	5
245394009	28-JAN-2010 16:30:00	2	10	5
245394010	28-JAN-2010 16:30:00	2	10	5
245394011	28-JAN-2010 16:30:00	2	10	5
245394012	28-JAN-2010 16:30:00	2	10	5
245394013	28-JAN-2010 16:30:00	2	10	5
245394014	28-JAN-2010 16:30:00	2	10	5
245394015	28-JAN-2010 16:30:00	2	10	5

Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:
LCS	1202023632	8321 Explosives LCS	DXX100125-03	.1	mL	Final Solvent: ACN
LCS	1202023632	8321 LANL Explosives Mix 10mg/L	UXX100122-01.1	1	mL	
MS	1202023633	8321 Explosives LCS	DXX100125-03	.1	mL	
MS	1202023633	8321 LANL Explosives Mix 10mg/L	UXX100122-01.1	1	mL	
MSD	1202023634	8321 Explosives LCS	DXX100125-03	.1	mL	
MSD	1202023634	8321 LANL Explosives Mix 10mg/L	UXX100122-01.1	1	mL	
SURR	All	3,4-Dinitrobenzene (8330 Sur.) 100ppm	EXP100125-02	.05	mL	

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS #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: *HL*
 Date: *02/15/10*
 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	WXXCCV	MAP	2/9/10 7:57			1		USE	C
EXP0208037a	XIBLK05	MAP	2/9/10 8:26			1		USE	B
EXP0208038a	WXXCRI	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	WXXCCV	MAP	2/9/10 14:20			1		USE	C
EXP0208050a	XIBLK06	MAP	2/9/10 14:50			1		USE	B
EXP0208051a	WXXCRI	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	WXXCCV	MAP	2/9/10 20:44			1		USE	C
EXP0208063a	XIBLK07	MAP	2/9/10 21:13			1		USE	B
EXP0208064a	WXXCRI	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	WXXCVC	MAP	2/10/10 3:07	944718	10-1327	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	WXXCVC	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	WXXCVC	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	WXXCCV	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	WXXCCV	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	WXXCCV	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	WXXCCV	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: 02/14/10
 Extr. Injection Volume: 10uL
 Sequence Number: 021410exs
 Initial Calibration Date: 021410
 Method: 8321A-Modified
 Int. Std.: N/A
 Mobile Phase Lot#:1263794, 1258141
 Standard-Samp Reagent Lot#: 1246195, 1253092
 SOP: GL-OA-E-056 Rev.12
 Alt Check Std. ID: WXX100214-26

Reviewed By: *Handwritten signature*
 Date: 02/17/10

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC Flag
EXS02140001.wiff	XIBLK01	LER	2/14/2010 14:17			1		USE	B
EXS02140002.wiff	XIBLK01	LER	2/14/2010 14:33			1		USE	B
EXS02140003.wiff	WXXICAL-19	LER	2/14/2010 14:48			1		USE	I
EXS02140004.wiff	WXXICAL-20	LER	2/14/2010 15:04			1		USE	I
EXS02140005.wiff	WXXICAL-21	LER	2/14/2010 15:20			1		USE	I
EXS02140006.wiff	WXXICAL-22	LER	2/14/2010 15:35			1		USE	I
EXS02140007.wiff	WXXICAL-23	LER	2/14/2010 15:51			1		USE	I
EXS02140008.wiff	WXXICAL-24	LER	2/14/2010 16:07			1		USE	I
EXS02140009.wiff	WXXICAL-25	LER	2/14/2010 16:22			1		USE	I
EXS02140010.wiff	XIBLK02	LER	2/14/2010 16:38			1		USE	B
EXS02140011.wiff	WXXICV	LER	2/14/2010 16:54			1		USE	C
EXS02140012.wiff	XIBLK03	LER	2/14/2010 17:10			1		USE	B
EXS02140013.wiff	WXXCRI	LER	2/14/2010 17:25			1		USE	C
EXS02140014.wiff	245387008	LER	2/14/2010 17:41	944907	10-1384	2	LANL	USE	S
EXS02140015.wiff	245387009	LER	2/14/2010 17:57	944907	10-1384	2	LANL	USE	S
EXS02140016.wiff	245387010	LER	2/14/2010 18:12	944907	10-1384	2	LANL	USE	S
EXS02140017.wiff	WXXCCV	LER	2/14/2010 18:28			1		USE	C
EXS02140018.wiff	XIBLK04	LER	2/14/2010 18:44			1		USE	B
EXS02140019.wiff	WXXCRI	LER	2/14/2010 18:59			1		USE	C
EXS02140020.wiff	1202030577	LER	2/14/2010 19:15	947919	VARIOUS	2	LANL	USE	S
EXS02140021.wiff	1202030578	LER	2/14/2010 19:31	947919	VARIOUS	2	LANL	USE	S
EXS02140022.wiff	245908001	LER	2/14/2010 19:47	947919	10-1486	2	LANL	USE	S
EXS02140023.wiff	1202030579	LER	2/14/2010 20:02	947919	10-1486	2	LANL	USE	S
EXS02140024.wiff	1202030580	LER	2/14/2010 20:18	947919	10-1486	2	LANL	USE	S
EXS02140025.wiff	245908002	LER	2/14/2010 20:34	947919	10-1486	2	LANL	USE	S
EXS02140026.wiff	245908003	LER	2/14/2010 20:49	947919	10-1486	2	LANL	USE	S
EXS02140027.wiff	245908004	LER	2/14/2010 21:05	947919	10-1486	2	LANL	USE	S
EXS02140028.wiff	245908005	LER	2/14/2010 21:21	947919	10-1486	2	LANL	USE	S
EXS02140029.wiff	245908006	LER	2/14/2010 21:37	947919	10-1486	2	LANL	USE	S
EXS02140030.wiff	WXXCCV	LER	2/14/2010 21:52			1		USE	C

EXS02140031.wiff	XIBLK05	LER	2/14/2010 22:08				1		USE	B
EXS02140032.wiff	WXXCRI	LER	2/14/2010 22:24				1		USE	C
EXS02140033.wiff	245912001	LER	2/14/2010 22:39	947919	10-1488		2	LANL	USE	S
EXS02140034.wiff	245912002	LER	2/14/2010 22:55	947919	10-1488		2	LANL	USE	S
EXS02140035.wiff	245912003	LER	2/14/2010 23:11	947919	10-1488		2	LANL	USE	S
EXS02140036.wiff	245912004	LER	2/14/2010 23:27	947919	10-1488		2	LANL	USE	S
EXS02140037.wiff	245912005	LER	2/14/2010 23:42	947919	10-1488		2	LANL	USE	S
EXS02140038.wiff	245914001	LER	2/14/2010 23:58	947919	10-1490		2	LANL	USE	S
EXS02140039.wiff	245914002	LER	2/15/2010 0:14	947919	10-1490		2	LANL	USE	S
EXS02140040.wiff	245914003	LER	2/15/2010 0:29	947919	10-1490		2	LANL	USE	S
EXS02140041.wiff	245914004	LER	2/15/2010 0:45	947919	10-1490		2	LANL	USE	S
EXS02140042.wiff	245914005	LER	2/15/2010 1:01	947919	10-1490		2	LANL	USE	S
EXS02140043.wiff	WXXCVC	LER	2/15/2010 1:16				1		USE	C
EXS02140044.wiff	XIBLK06	LER	2/15/2010 1:32				1		USE	B
EXS02140045.wiff	WXXCRI	LER	2/15/2010 1:48				1		USE	C
EXS02140046.wiff	245914006	LER	2/15/2010 2:04	947919	10-1490		2	LANL	USE	S
EXS02140047.wiff	UXX100122-01.4	LER	2/15/2010 2:19	SCREEN	LIQUID		2	O2SI	USE	S
EXS02140048.wiff	XIBLK07	LER	2/15/2010 2:35				1		USE	B
EXS02140049.wiff	1202038759	LER	2/15/2010 2:51	951342	VARIOUS		2	LANL	USE	S
EXS02140050.wiff	1202038760	LER	2/15/2010 3:06	951342	VARIOUS		2	LANL	USE	S
EXS02140051.wiff	246569007	LER	2/15/2010 3:22	951342	10-1669		2	LANL	USE	S
EXS02140052.wiff	1202038761	LER	2/15/2010 3:38	951342	10-1669		2	LANL	USE	S
EXS02140053.wiff	1202038762	LER	2/15/2010 3:54	951342	10-1669		2	LANL	USE	S
EXS02140054.wiff	246572005	LER	2/15/2010 4:09	951342	10-1678		2	LANL	USE	S
EXS02140055.wiff	246580002	LER	2/15/2010 4:25	951342	10-1683		2	LANL	USE	S
EXS02140056.wiff	WXXCVC	LER	2/15/2010 4:41				1		USE	C
EXS02140057.wiff	XIBLK08	LER	2/15/2010 4:56				1		USE	B
EXS02140058.wiff	WXXCRI	LER	2/15/2010 5:12				1		USE	C
EXS02140059.wiff	246580003	LER	2/15/2010 5:28	951342	10-1683		2	LANL	USE	S
EXS02140060.wiff	246595004	LER	2/15/2010 5:43	951342	10-1694		2	LANL	USE	S
EXS02140061.wiff	1202038763	LER	2/15/2010 5:59	951342	10-1694		2	LANL	USE	S
EXS02140062.wiff	1202038764	LER	2/15/2010 6:15	951342	10-1694		2	LANL	USE	S
EXS02140063.wiff	XIBLK09	LER	2/15/2010 6:31				1		USE	B
EXS02140064.wiff	1202023631	LER	2/15/2010 6:46	944935	10-1392		2	LANL	USE	S
EXS02140065.wiff	1202023632	LER	2/15/2010 7:02	944935	10-1392		2	LANL	USE	S
EXS02140066.wiff	245394001	LER	2/15/2010 7:18	944935	10-1392		2	LANL	USE	S
EXS02140067.wiff	1202023633	LER	2/15/2010 7:33	944935	10-1392		2	LANL	USE	S

EXS02140068.wiff	1202023634	LER	2/15/2010 7:49	944935	10-1392	2	LANL	USE	S
EXS02140069.wiff	WXXCCV	LER	2/15/2010 8:06			1		USE	C
EXS02140070.wiff	XIBLK10	LER	2/15/2010 8:21			1		USE	B
EXS02140071.wiff	WXXCRI	LER	2/15/2010 8:37			1		USE	C
EXS02140072.wiff	245394002	LER	2/15/2010 8:53	944935	10-1392	2	LANL	USE	S
EXS02140073.wiff	245394003	LER	2/15/2010 9:09	944935	10-1392	2	LANL	USE	S
EXS02140074.wiff	245394004	LER	2/15/2010 9:25	944935	10-1392	2	LANL	USE	S
EXS02140075.wiff	245394005	LER	2/15/2010 9:40	944935	10-1392	2	LANL	USE	S
EXS02140076.wiff	245394006	LER	2/15/2010 9:56	944935	10-1392	2	LANL	USE	S
EXS02140077.wiff	245394007	LER	2/15/2010 10:12	944935	10-1392	2	LANL	USE	S
EXS02140078.wiff	245394008	LER	2/15/2010 10:27	944935	10-1392	2	LANL	USE	S
EXS02140079.wiff	245394009	LER	2/15/2010 10:43	944935	10-1392	2	LANL	USE	S
EXS02140080.wiff	245394010	LER	2/15/2010 10:59	944935	10-1392	2	LANL	USE	S
EXS02140081.wiff	245394011	LER	2/15/2010 11:15	944935	10-1392	2	LANL	USE	S
EXS02140082.wiff	WXXCCV	LER	2/15/2010 11:30			1		USE	C
EXS02140083.wiff	XIBLK11	LER	2/15/2010 11:46			1		USE	B
EXS02140084.wiff	WXXCRI	LER	2/15/2010 12:02			1		USE	C
EXS02140085.wiff	245394012	LER	2/15/2010 12:17	944935	10-1392	2	LANL	USE	S
EXS02140086.wiff	245394013	LER	2/15/2010 12:33	944935	10-1392	2	LANL	USE	S
EXS02140087.wiff	245394014	LER	2/15/2010 12:49	944935	10-1392	2	LANL	USE	S
EXS02140088.wiff	245394015	LER	2/15/2010 13:04	944935	10-1392	2	LANL	USE	S
EXS02140089.wiff	XIBLK12	LER	2/15/2010 13:20			1		USE	B
EXS02140090.wiff	1202032042	LER	2/15/2010 13:36	948561	VARIOUS	2	LANL	USE	S
EXS02140091.wiff	1202032043	LER	2/15/2010 13:52	948561	VARIOUS	2	LANL	USE	S
EXS02140092.wiff	245916001	LER	2/15/2010 14:07	948561	10-1492	2	LANL	USE	S
EXS02140093.wiff	1202032044	LER	2/15/2010 14:23	948561	10-1492	2	LANL	USE	S
EXS02140094.wiff	1202032045	LER	2/15/2010 14:39	948561	10-1492	2	LANL	USE	S
EXS02140095.wiff	WXXCCV	LER	2/15/2010 14:54			1		USE	C
EXS02140096.wiff	XIBLK13	LER	2/15/2010 15:10			1		USE	B
EXS02140097.wiff	WXXCRI	LER	2/15/2010 15:26			1		USE	C
EXS02140098.wiff	245916002	LER	2/15/2010 15:41	948561	10-1492	2	LANL	USE	S
EXS02140099.wiff	245916003	LER	2/15/2010 15:57	948561	10-1492	2	LANL	USE	S
EXS02140100.wiff	245916004	LER	2/15/2010 16:13	948561	10-1492	2	LANL	USE	S
EXS02140101.wiff	245916005	LER	2/15/2010 16:29	948561	10-1492	2	LANL	USE	S
EXS02140102.wiff	245947002	LER	2/15/2010 16:44	948561	10-1507	2	LANL	USE	S
EXS02140103.wiff	245947003	LER	2/15/2010 17:00	948561	10-1507	2	LANL	USE	S
EXS02140104.wiff	245947004	LER	2/15/2010 17:16	948561	10-1507	2	LANL	USE	S

EXS02140105.wiff	245947005	LER	2/15/2010 17:31	948561	10-1507	2	LANL	USE	S
EXS02140106.wiff	245947006	LER	2/15/2010 17:47	948561	10-1507	2	LANL	USE	S
EXS02140107.wiff	245947007	LER	2/15/2010 18:03	948561	10-1507	2	LANL	USE	S
EXS02140108.wiff	WXXCCV	LER	2/15/2010 18:18			1		USE	C
EXS02140109.wiff	XIBLK14	LER	2/15/2010 18:34			1		USE	B
EXS02140110.wiff	WXXCRI	LER	2/15/2010 18:50			1		USE	C
EXS02140111.wiff	245947008	LER	2/15/2010 19:06	948561	10-1507	2	LANL	USE	S
EXS02140112.wiff	245947009	LER	2/15/2010 19:21	948561	10-1507	2	LANL	USE	S
EXS02140113.wiff	245947010	LER	2/15/2010 19:37	948561	10-1507	2	LANL	USE	S
EXS02140114.wiff	XIBLK15	LER	2/15/2010 19:53			1		USE	B
EXS02140115.wiff	245394004	LER	2/15/2010 20:08	944935	10-1392	2	LANL	USE	S
EXS02140116.wiff	245394003	LER	2/15/2010 20:24	944935	10-1392	10	LANL	USE	S
EXS02140117.wiff	WXXCCV	LER	2/15/2010 20:40			1		USE	C
EXS02140118.wiff	XIBLK16	LER	2/15/2010 20:55			1		USE	B
EXS02140119.wiff	WXXCRI	LER	2/15/2010 21:11			1		USE	C
EXS02140120.wiff	1202032097	LER	2/15/2010 21:27	948572	VARIOUS	2	LANL	USE	S
EXS02140121.wiff	1202032098	LER	2/15/2010 21:43	948572	VARIOUS	2	LANL	USE	S
EXS02140122.wiff	245955001	LER	2/15/2010 21:58	948572	10-1509	2	LANL	USE	S
EXS02140123.wiff	245955002	LER	2/15/2010 22:14	948572	10-1509	2	LANL	USE	S
EXS02140124.wiff	245959001	LER	2/15/2010 22:30	948572	10-1510	2	LANL	USE	S
EXS02140125.wiff	1202032099	LER	2/15/2010 22:45	948572	10-1510	2	LANL	USE	S
EXS02140126.wiff	1202032100	LER	2/15/2010 23:01	948572	10-1510	2	LANL	USE	S
EXS02140127.wiff	245959002	LER	2/15/2010 23:17	948572	10-1510	2	LANL	USE	S
EXS02140128.wiff	245959003	LER	2/15/2010 23:32	948572	10-1510	2	LANL	USE	S
EXS02140129.wiff	245959004	LER	2/15/2010 23:48	948572	10-1510	2	LANL	USE	S
EXS02140130.wiff	WXXCCV	LER	2/16/2010 0:04			1		USE	C
EXS02140131.wiff	XIBLK17	LER	2/16/2010 0:19			1		USE	B
EXS02140132.wiff	WXXCRI	LER	2/16/2010 0:35			1		USE	C
EXS02140133.wiff	245959005	LER	2/16/2010 0:51	948572	10-1510	2	LANL	USE	S
EXS02140134.wiff	245959006	LER	2/16/2010 1:07	948572	10-1510	2	LANL	USE	S
EXS02140135.wiff	245959007	LER	2/16/2010 1:22	948572	10-1510	2	LANL	USE	S
EXS02140136.wiff	245959008	LER	2/16/2010 1:38	948572	10-1510	2	LANL	USE	S
EXS02140137.wiff	245959009	LER	2/16/2010 1:54	948572	10-1510	2	LANL	USE	S
EXS02140138.wiff	245959010	LER	2/16/2010 2:09	948572	10-1510	2	LANL	USE	S
EXS02140139.wiff	245959012	LER	2/16/2010 2:25	948572	10-1510	2	LANL	USE	S
EXS02140140.wiff	WXXCCV	LER	2/16/2010 2:41			1		USE	C
EXS02140141.wiff	XIBLK18	LER	2/16/2010 2:56			1		USE	B

EXS02140142.wiff	WXXCRI	LER	2/16/2010 3:12	948579	VARIOUS	1	LANL	USE	C
EXS02140143.wiff	1202032113	LER	2/16/2010 3:28	948579	VARIOUS	2	LANL	USE	S
EXS02140144.wiff	1202032114	LER	2/16/2010 3:43	948579	VARIOUS	2	LANL	USE	S
EXS02140145.wiff	245994001	LER	2/16/2010 3:59	948579	10-1516	2	LANL	USE	S
EXS02140146.wiff	245994002	LER	2/16/2010 4:15	948579	10-1516	2	LANL	USE	S
EXS02140147.wiff	245994003	LER	2/16/2010 4:31	948579	10-1516	2	LANL	USE	S
EXS02140148.wiff	245994004	LER	2/16/2010 4:46	948579	10-1516	2	LANL	USE	S
EXS02140149.wiff	245994005	LER	2/16/2010 5:02	948579	10-1516	2	LANL	USE	S
EXS02140150.wiff	245994006	LER	2/16/2010 5:18	948579	10-1516	2	LANL	USE	S
EXS02140151.wiff	245994007	LER	2/16/2010 5:33	948579	10-1516	2	LANL	USE	S
EXS02140152.wiff	245994008	LER	2/16/2010 5:49	948579	10-1516	2	LANL	USE	S
EXS02140153.wiff	WXXCCV	LER	2/16/2010 6:05			1		USE	C
EXS02140154.wiff	XIBLK19	LER	2/16/2010 6:21			1		USE	B
EXS02140155.wiff	WXXCRI	LER	2/16/2010 6:36			1		USE	C
EXS02140156.wiff	245994009	LER	2/16/2010 6:52	948579	10-1516	2	LANL	DUSE-RA	S
EXS02140157.wiff	246006001	LER	2/16/2010 7:08	948579	10-1520	2	LANL	DUSE-RA	S
EXS02140158.wiff	1202032115	LER	2/16/2010 7:24	948579	10-1520	2	LANL	DUSE-RA	S
EXS02140159.wiff	1202032116	LER	2/16/2010 7:39	948579	10-1520	2	LANL	DUSE-RA	S
EXS02140160.wiff	246006002	LER	2/16/2010 7:55	948579	10-1520	2	LANL	DUSE-RA	S
EXS02140161.wiff	246006003	LER	2/16/2010 8:11	948579	10-1520	2	LANL	DUSE-RA	S
EXS02140162.wiff	246006004	LER	2/16/2010 8:27	948579	10-1520	2	LANL	DUSE-RA	S
EXS02140163.wiff	246006005	LER	2/16/2010 8:42	948579	10-1520	2	LANL	DUSE-RA	S
EXS02140164.wiff	246006006	LER	2/16/2010 8:58	948579	10-1520	2	LANL	DUSE-RA	S
EXS02140165.wiff	246006007	LER	2/16/2010 9:14	948579	10-1520	2	LANL	DUSE-RA	S
EXS02140166.wiff	WXXCCV	LER	2/16/2010 9:29			1		DUSE-RA	C
EXS02140167.wiff	XIBLK20	LER	2/16/2010 9:45			1		DUSE-RA	B
EXS02140168.wiff	WXXCRI	LER	2/16/2010 10:01			1		DUSE-RA	C

GEL Laboratories LLC
Form GEL-DER

DER Report No.: 792215

Revision No.: 1

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: 944935	Sample Numbers: See Below		
Potentially affected work order(s)(SDG): 245394(10-1392) Application Issues: Failed Recovery for LCS/LCSD			
Specification and Requirements		DER Disposition:	
Exception Description:			
1. The LCS(1202023632) did not meet acceptance criteria for the recovery of Tetra at 43.3% and for 2,4-Diamino-6-nitrotoluene at 118%. The limits are 51-112% and 52-114% respectively.		1. The MS(1202023633) and MSD(1202023634) had passing recoveries for all spiked analytes. The data are considered unaffected and are reported.	

Originator's Name:

Lynne Russell

17-FEB-10

Data Validator/Group Leader:

Herbert Maier

17-FEB-10

GC
SEMIVOLATILE
PCB
ANALYSIS

**PCB Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1392**

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
245394001	RE15-10-7869
245394002	RE15-10-7874
245394003	RE15-10-7871
245394004	RE15-10-7872
245394005	RE15-10-7870
245394006	RE15-10-7873
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 sample 245394002(RE15-10-7874) was selected for the matrix spike and matrix spike duplicate analysis.

Matrix Spike (MS) Recovery Statement

The MS recoveries for this SDG were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement

The MSD recoveries for this SDG 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

Sample 245394006 (RE15-10-7873) was diluted at 1:5 due to the presence of over -range target analytes.

Sample Re-extraction/Re-analysis

Re-extractions 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 for the MS and MSD are from the same analytical column as the parent sample.

The data reported on the form I and III may differ slightly from the data reported on the form X. This is due to software limitations in rounding differences between the forms.

Aroclors quantitated on the raw data report by the Target data system do not necessarily represent positive Aroclor identification. In order for positive identification to be made, the Aroclor must match in pattern and retention time; as well as quantitate relatively close between the primary and confirmation columns, as specified in SW846 method 8000. When these conditions are not met, the Aroclor is reported as a non-detect on the data report. These situations will be noted on the raw data as DMP, representing does not match pattern, or DNC does not confirm.

Due to software limitation, the Form VII will display the results either in the % difference or % drift depending on the type of the calibration curve. If the curve of all analytes is generated using an average response factor (RF), the Form VII will display results using the %difference calculation (RF). If the curve of one or more analytes is generated using a linear curve, the Form VII will display results using the % drift calculation (by concentration) for all analytes.

System Configuration

The Semi-Volatiles-PCB analysis was performed on the following instrument configuration:

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: Jimi Cao

Date: 2/19/10

Roadmap for LANL 10-1392 PCB

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

This roadmap was reviewed by jim01140 on 02-01-2010, 16:09.

This roadmap was packaged by yml on 02-19-2010, 07:33.

This roadmap was validated by jim01140 on 02-19-2010, 13:34.

Front Sample Column

exclude	manual	datafile	srpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
<input type="checkbox"/>	N	/chem/ecd2a.i/012810.b/021f2101.d	245394001	sample	28-JAN-2010	10:41	10-1392.sub	RE15-10-7869	1.00000	945979	UPLOAD BOTH, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd2a.i/012810.b/022f2201.d	245394002	sample	28-JAN-2010	10:53	10-1392.sub	RE15-10-7874	1.00000	945979	UPLOAD BOTH, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd2a.i/012810.b/025f2501.d	245394003	sample	28-JAN-2010	11:26	10-1392.sub	RE15-10-7871	1.00000	945979	UPLOAD BOTH, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd2a.i/012810.b/026f2601.d	245394004	sample	28-JAN-2010	11:37	10-1392.sub	RE15-10-7872	1.00000	945979	UPLOAD BOTH, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd2a.i/012810.b/027f2701.d	245394005	sample	28-JAN-2010	11:48	10-1392.sub	RE15-10-7870	1.00000	945979	UPLOAD BOTH, USE HIGHER
<input checked="" type="checkbox"/>	N	/chem/ecd2a.i/012810.b/028f2801.d	245394006	sample	28-JAN-2010	11:59	10-1392.sub	RE15-10-7873	1.00000	945979	DUSE, RERUN 5X FILE 51
<input type="checkbox"/>	N	/chem/ecd2a.i/012810.b/051f5101.d	245394006	sample	28-JAN-2010	16:59	10-1392.sub	RE15-10-7873	5.00000	945979	UPLOAD BOTH, USE HIGHER

Back Sample Column

exclude	manual	datafile	srpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
<input type="checkbox"/>	N	/chem/ecd2a.i/012810.b/021b2101.d	245394001	sample	28-JAN-2010	10:41	10-1392.sub	RE15-10-7869	1.00000	945979	UPLOAD BOTH, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd2a.i/012810.b/022b2201.d	245394002	sample	28-JAN-2010	10:53	10-1392.sub	RE15-10-7874	1.00000	945979	UPLOAD BOTH, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd2a.i/012810.b/025b2501.d	245394003	sample	28-JAN-2010	11:26	10-1392.sub	RE15-10-7871	1.00000	945979	UPLOAD BOTH, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd2a.i/012810.b/026b2601.d	245394004	sample	28-JAN-2010	11:37	10-1392.sub	RE15-10-7872	1.00000	945979	UPLOAD BOTH, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd2a.i/012810.b/027b2701.d	245394005	sample	28-JAN-2010	11:48	10-1392.sub	RE15-10-7870	1.00000	945979	UPLOAD BOTH, USE HIGHER
<input checked="" type="checkbox"/>	N	/chem/ecd2a.i/012810.b/028b2801.d	245394006	sample	28-JAN-2010	11:59	10-1392.sub	RE15-10-7873	1.00000	945979	DUSE, RERUN 5X FILE 51
<input type="checkbox"/>	N	/chem/ecd2a.i/012810.b/051b5101.d	245394006	sample	28-JAN-2010	16:59	10-1392.sub	RE15-10-7873	5.00000	945979	UPLOAD BOTH, USE HIGHER

Front QC Sample Column

exclude	manual	datafile	srpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
<input type="checkbox"/>	N	/chem/ecd2a.i/012810.b/012f1201-2.d	1202026167	mb	28-JAN-2010	09:02	10-1392.sub	PBLK01	1.00000	945979	
<input type="checkbox"/>	N	/chem/ecd2a.i/012810.b/013f1301-2.d	1202026168	lcs	28-JAN-2010	09:13	10-1392.sub	PBLK01LCS	1.00000	945979	
<input type="checkbox"/>	N	/chem/ecd2a.i/012810.b/023f2301.d	1202026169	ms	28-JAN-2010	11:04	10-1392.sub	RE15-10-7874MS	1.00000	945979	UPLOAD BOTH, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd2a.i/012810.b/024f2401.d	1202026170	msd	28-JAN-2010	11:15	10-1392.sub	RE15-10-7874MSD	1.00000	945979	UPLOAD BOTH, USE HIGHER

Back QC Sample Column

exclude	manual	datafile	srpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
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<input type="checkbox"/>	N	/chem/ccd2a.i/012810.b/012b1201-2.d	1202026167	mb	28-JAN-2010	09:02	10-1392.sub	PBLK01	1.00000	945979	
<input type="checkbox"/>	N	/chem/ccd2a.i/012810.b/013b1301-2.d	1202026168	lcs	28-JAN-2010	09:13	10-1392.sub	PBLK01LCS	1.00000	945979	
<input type="checkbox"/>	N	/chem/ccd2a.i/012810.b/023b2301.d	1202026169	ms	28-JAN-2010	11:04	10-1392.sub	RE15-10-7874MS	1.00000	945979	UPLOAD BOTH, USE HIGHER
<input type="checkbox"/>	N	/chem/ccd2a.i/012810.b/024b2401.d	1202026170	mad	28-JAN-2010	11:15	10-1392.sub	RE15-10-7874MSD	1.00000	945979	UPLOAD BOTH, USE HIGHER

SAMPLE DATA SUMMARY

PCB
Certificate of Analysis
Sample Summary

SDG Number: 10-1392
 Lab Sample ID: 245394001

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: 30.01 g
 Column: 1 CLP1
 2 CLP2

Matrix: R
 %Moisture: 24.7
 Project: LANL01004
 SOP Ref: GI.-OA-E-040
 Dilution: 1
 Inj. Vol: 1 uL
 Final Volume: 1 mL
 Level: LOW

Client ID: RE15-10-7869
 Batch ID: 945979
 Run Date: 01/28/2010 10:41
 Prep Date: 01/27/2010 20:26
 Data File: 021f2101.d
 021b2101.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.43	ug/kg	1.47	4.43	1
11104-28-2	Aroclor-1221	U	4.43	ug/kg	1.47	4.43	1
11141-16-5	Aroclor-1232	U	4.43	ug/kg	1.47	4.43	1
53469-21-9	Aroclor-1242	U	4.43	ug/kg	1.47	4.43	1
12672-29-6	Aroclor-1248	U	4.43	ug/kg	1.47	4.43	1
11097-69-1	Aroclor-1254		7.00	ug/kg	1.47	4.43	1
11096-82-5	Aroclor-1260	P	6.80	ug/kg	1.47	4.43	2

PCB
Certificate of Analysis
Sample Summary

SDG Number: 10-1392
 Lab Sample ID: 245394005

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: 30.02 g
 Column: 1 CLP1
 2 CLP2

Matrix: R
 %Moisture: 13.1
 Project: LANL01004
 SOP Ref: GL-OA-E-040
 Dilution: 1
 Inj. Vol: 1 uL
 Final Volume: 1 mL
 Level: LOW

Client ID: RE15-10-7870
 Batch ID: 945979
 Run Date: 01/28/2010 11:48
 Prep Date: 01/27/2010 20:26
 Data File: 027f2701.d
 027b2701.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.83	ug/kg	1.28	3.83	1
11104-28-2	Aroclor-1221	U	3.83	ug/kg	1.28	3.83	1
11141-16-5	Aroclor-1232	U	3.83	ug/kg	1.28	3.83	1
53469-21-9	Aroclor-1242	U	3.83	ug/kg	1.28	3.83	1
12672-29-6	Aroclor-1248	U	3.83	ug/kg	1.28	3.83	1
11097-69-1	Aroclor-1254	U	3.83	ug/kg	1.28	3.83	1
11096-82-5	Aroclor-1260	U	3.83	ug/kg	1.28	3.83	1

PCB
Certificate of Analysis
Sample Summary

SDG Number: 10-1392
Lab Sample ID: 245394003

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: 30.07 g
Column: 1 CLP1
2 CLP2

Matrix: R
%Moisture: 10.9
Project: LANL01004
SOP Ref: GL-OA-E-040
Dilution: 1
Inj. Vol: 1 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.73	ug/kg	1.24	3.73	1
11104-28-2	Aroclor-1221	U	3.73	ug/kg	1.24	3.73	1
11141-16-5	Aroclor-1232	U	3.73	ug/kg	1.24	3.73	1
53469-21-9	Aroclor-1242	U	3.73	ug/kg	1.24	3.73	1
12672-29-6	Aroclor-1248	U	3.73	ug/kg	1.24	3.73	1
11097-69-1	Aroclor-1254		23.1	ug/kg	1.24	3.73	1
11096-82-5	Aroclor-1260	P	16.3	ug/kg	1.24	3.73	2

PCB

Page 1 of 1

Certificate of Analysis
Sample SummarySDG Number: 10-1392
Lab Sample ID: 245394004Date Collected: 01/19/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8082
Inst: ECD2A.J
Analyst: JAOC
Aliquot: 30.05 g
Column: 1 CLP1
2 CLP2Matrix: R
%Moisture: 11.2
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	3.75	ug/kg	1.25	3.75	1
11104-28-2	Aroclor-1221	U	3.75	ug/kg	1.25	3.75	1
11141-16-5	Aroclor-1232	U	3.75	ug/kg	1.25	3.75	1
53469-21-9	Aroclor-1242	U	3.75	ug/kg	1.25	3.75	1
12672-29-6	Aroclor-1248	U	3.75	ug/kg	1.25	3.75	1
11097-69-1	Aroclor-1254		4.30	ug/kg	1.25	3.75	1
11096-82-5	Aroclor-1260	JP	2.40	ug/kg	1.25	3.75	2

PCB
Certificate of Analysis
Sample Summary

SDG Number: 10-1392
Lab Sample ID: 245394006

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: 30.19 g
Column: 1 CLP1
2 CLP2

Matrix: R
%Moisture: 12.6
Project: LANL01004
SOP Ref: GL-OA-E-040
Dilution: 5
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	18.9	ug/kg	6.31	18.9	1
11104-28-2	Aroclor-1221	U	18.9	ug/kg	6.31	18.9	1
11141-16-5	Aroclor-1232	U	18.9	ug/kg	6.31	18.9	1
53469-21-9	Aroclor-1242		282	ug/kg	6.31	18.9	1
12672-29-6	Aroclor-1248	U	18.9	ug/kg	6.31	18.9	1
11097-69-1	Aroclor-1254		143	ug/kg	6.31	18.9	1
11096-82-5	Aroclor-1260		60.8	ug/kg	6.31	18.9	2

PCB
Certificate of Analysis
Sample Summary

Page 1 of 1

SDG Number: 10-1392
Lab Sample ID: 245394002

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: 30.08 g
Column: 1 CLP1
2 CLP2

Matrix: R
%Moisture: 4.1
Project: LANL01004
SOP Ref: GL-OA-E-040
Dilution: 1
Inj. Vol: 1 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE15-10-7874
Batch ID: 945979
Run Date: 01/28/2010 10:53
Prep Date: 01/27/2010 20:26
Data File: 022f2201.d
022b2201.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.47	ug/kg	1.15	3.47	1
11104-28-2	Aroclor-1221	U	3.47	ug/kg	1.15	3.47	1
11141-16-5	Aroclor-1232	U	3.47	ug/kg	1.15	3.47	1
53469-21-9	Aroclor-1242	U	3.47	ug/kg	1.15	3.47	1
12672-29-6	Aroclor-1248	U	3.47	ug/kg	1.15	3.47	1
11097-69-1	Aroclor-1254	J	2.90	ug/kg	1.15	3.47	1
11096-82-5	Aroclor-1260	J	3.20	ug/kg	1.15	3.47	2

QUALITY CONTROL SUMMARY

PCB

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Surrogate Recovery Report

SDG Number: 10-1392

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
245394001	RE15-10-7869	65	69	69	72
245394002	RE15-10-7874	63	66	66	71
1202026169	RE15-10-7874MS	58	61	70	73
1202026170	RE15-10-7874MSD	62	65	68	69
245394003	RE15-10-7871	62	66	56	59
245394004	RE15-10-7872	61	65	64	66
245394005	RE15-10-7870	65	66	71	72
245394006	RE15-10-7873	59 D	56 D	63 D	55 D

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: 10-1392

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

Preo 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	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

Page 1 of 2

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.I

Analysis Date: 01/28/2010 11:15

Dilution: 1

Analyst: JAOC

Prep 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	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:	10-1392	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 RE15-10-7869	245394001	021f2101.d 021b2101.d	01/28/10	1041
03 RE15-10-7874	245394002	022f2201.d 022b2201.d	01/28/10	1053
04 RE15-10-7874MS	1202026169	023f2301.d 023b2301.d	01/28/10	1104
05 RE15-10-7874MSD	1202026170	024f2401.d 024b2401.d	01/28/10	1115
06 RE15-10-7871	245394003	025f2501.d 025b2501.d	01/28/10	1126
07 RE15-10-7872	245394004	026f2601.d 026b2601.d	01/28/10	1137
08 RE15-10-7870	245394005	027f2701.d 027b2701.d	01/28/10	1148
09 RE15-10-7873	245394006	051f5101.d 051b5101.d	01/28/10	1659

SAMPLE DATA

PCB
Certificate of Analysis
Sample Summary

SDG Number: 10-1392
 Lab Sample ID: 245394001

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: 30.01 g
 Column: 1 CLP1
 2 CLP2

Matrix: R
 % Moisture: 24.7
 Project: LANL01004
 SOP Ref: GL-OA-E-040
 Dilution: 1
 Inj. Vol: 1 uL
 Final Volume: 1 mL
 Level: LOW

Client ID: RE15-10-7869
 Batch ID: 945979
 Run Date: 01/28/2010 10:41
 Prep Date: 01/27/2010 20:26
 Data File: 021f2101.d
 021b2101.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.43	ug/kg	1.47	4.43	1
11104-28-2	Aroclor-1221	U	4.43	ug/kg	1.47	4.43	1
11141-16-5	Aroclor-1232	U	4.43	ug/kg	1.47	4.43	1
53469-21-9	Aroclor-1242	U	4.43	ug/kg	1.47	4.43	1
12672-29-6	Aroclor-1248	U	4.43	ug/kg	1.47	4.43	1
11097-69-1	Aroclor-1254		7.00	ug/kg	1.47	4.43	1
11096-82-5	Aroclor-1260	P	6.80	ug/kg	1.47	4.43	2

Data File: /chem/ecd2a.i/012810.b/021f2101.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/021f2101.d

Lab Smp Id: 245394001

Client Smp ID: RE15-10-7869

Inj Date : 28-JAN-2010 10:41

Operator : JAOC

Inst ID: ecd2a.i

Smp Info : |245394001|1|

Misc Info : |ECD82P_1S|945979|SVA|LANL|SOIL|RE15-10-7869|||

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: 21

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	30.01000	Weight of sample extracted (g)
M	24.72580	% 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	8744214	130.447	5.8 80.00- 120.00	100.00	
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.605	5.604	0.001	8783893	138.549	6.1 80.00- 120.00	100.00	
6 Aroclor-1254					CAS #: 11097-69-1		
3.239	3.239	0.000	258383	124.219	5.5 80.00- 120.00	100.00 (M)	
3.422	3.422	0.000	375243	135.362	6.0 112.37- 152.37	145.23	
3.691	3.691	0.000	528710	141.276	6.2 163.94- 203.94	204.62	
3.882	3.884	-0.002	264794	95.1570	4.2 115.35- 155.35	102.48	
4.012	4.012	0.000	830556	300.921	13.3 118.56- 158.56	321.44	
Average of Peak Concentrations =				7.0			

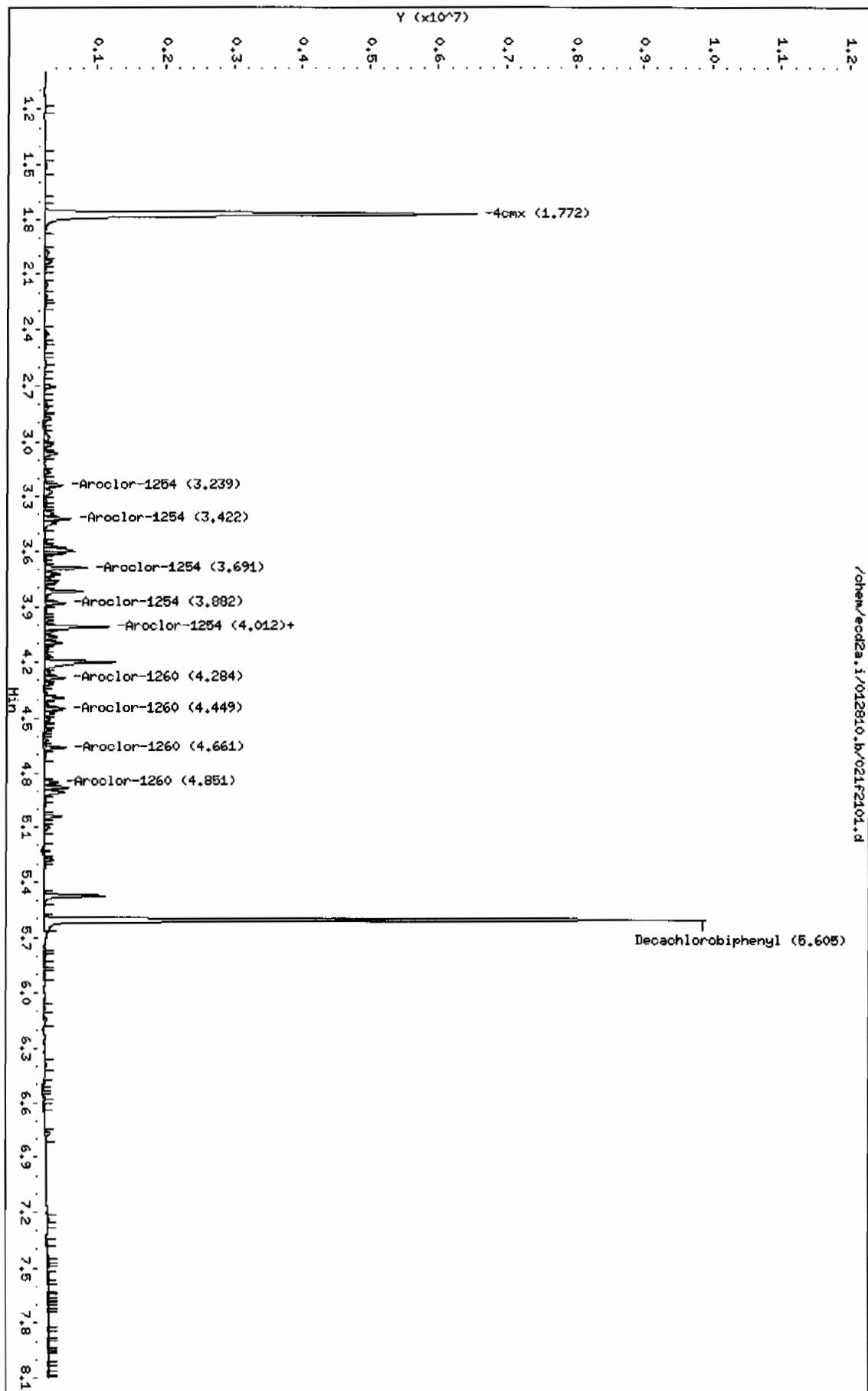
		CONCENTRATIONS					
		ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/Kg)	TARGET RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====	=====
7 Aroclor-1260				CAS #: 11096-82-5			
4.012	4.011	0.001	830556	193.033	8.5	80.00- 120.00	100.00 (a)
4.284	4.282	0.002	267876	95.9775	4.2	42.81- 82.81	32.25
4.449	4.449	0.000	295888	103.211	4.6	45.95- 85.95	35.63
4.661	4.661	0.000	301033	45.7553	2.0	132.37- 172.37	36.24
4.851	4.850	0.001	180118	56.4047	2.5	53.57- 93.57	21.69
Average of Peak Concentrations =				4.4			

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- M - Compound response manually integrated.

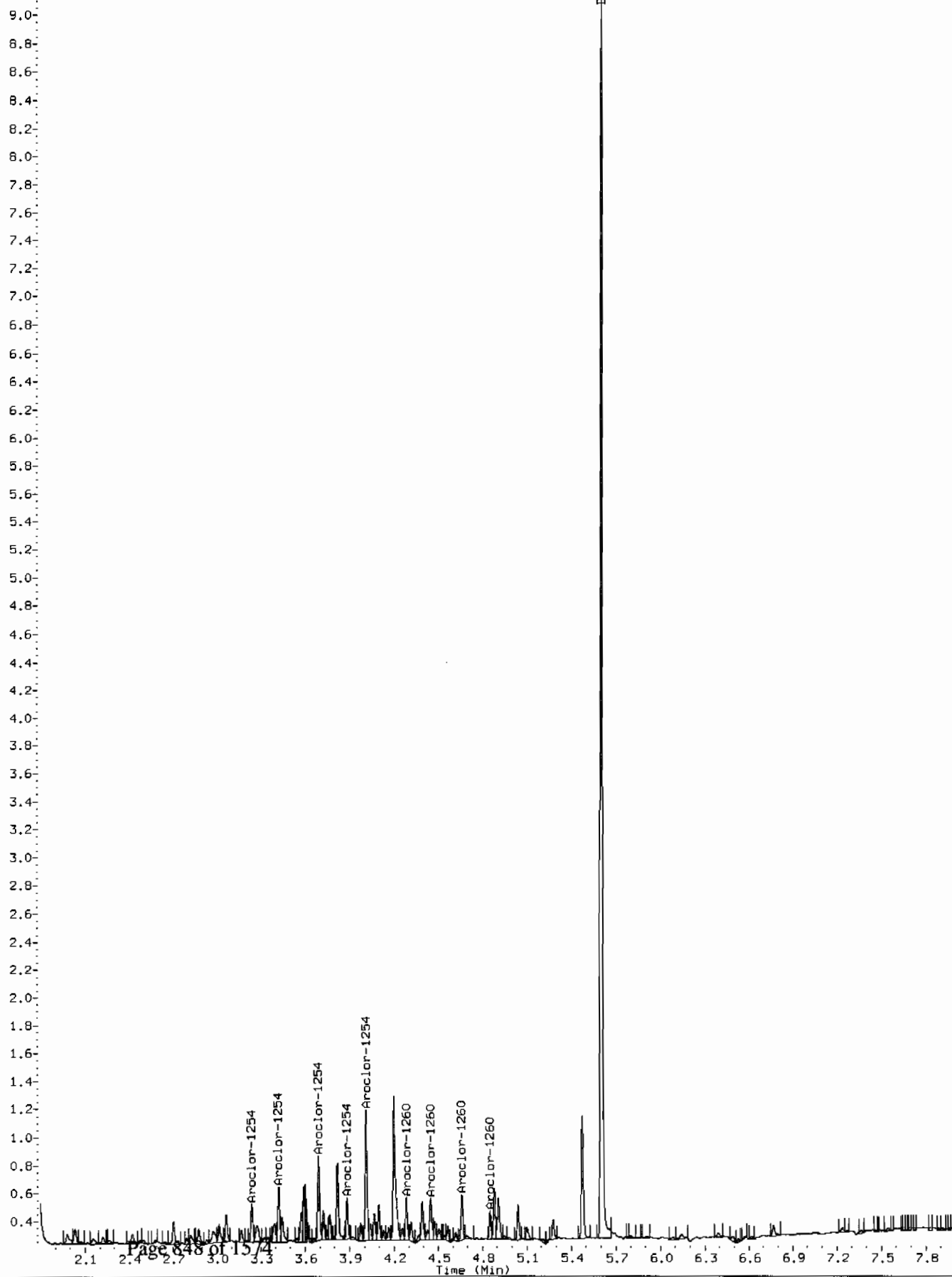
Data File: /chem/eod2a.i/012810.b/021f2101.d
Date : 28-JAN-2010 10:41
Client ID: RE15-10-7869
Sample Info: 124539400114
Volume Injected (uL): 1.0
Column phase: CLP1

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



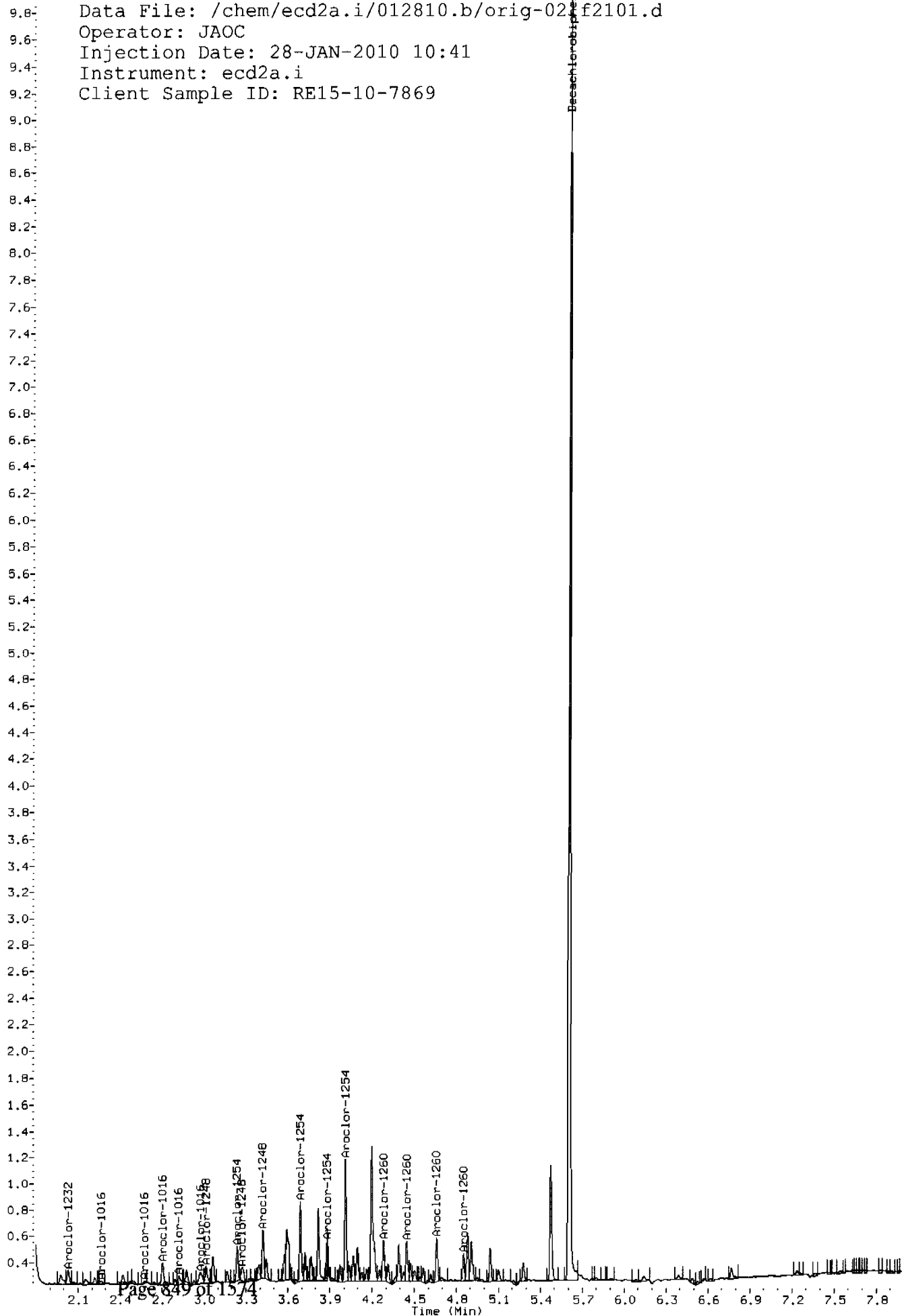
Comment: Manually Integrated
Data File: /chem/ecd2a.i/012810.b/021f2101.d
Operator: JAOC
Injection Date: 28-JAN-2010 10:41
Instrument: ecd2a.i
Client Sample ID: RE15-10-7869

Y (x10⁻⁶)



Comment: Before manual integration
Data File: /chem/ecd2a.i/012810.b/orig-02f2101.d
Operator: JAOC
Injection Date: 28-JAN-2010 10:41
Instrument: ecd2a.i
Client Sample ID: RE15-10-7869

Y (x10⁶)



Data File: /chem/ecd2a.i/012810.b/021b2101.d
Report Date: 28-Jan-2010 11:32

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/021b2101.d

Lab Smp Id: 245394001

Client Smp ID: RE15-10-7869

Inj Date : 28-JAN-2010 10:41

Operator : JAOC

Inst ID: ecd2a.i

Smp Info : |245394001|1|

Misc Info : |ECD82P_1S|945979|SVA|LANL|SOIL|RE15-10-7869|

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: 21

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	30.01000	Weight of sample extracted (g)
M	24.72580	% 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	19194787	137.541	6.1 80.00- 120.00	100.00

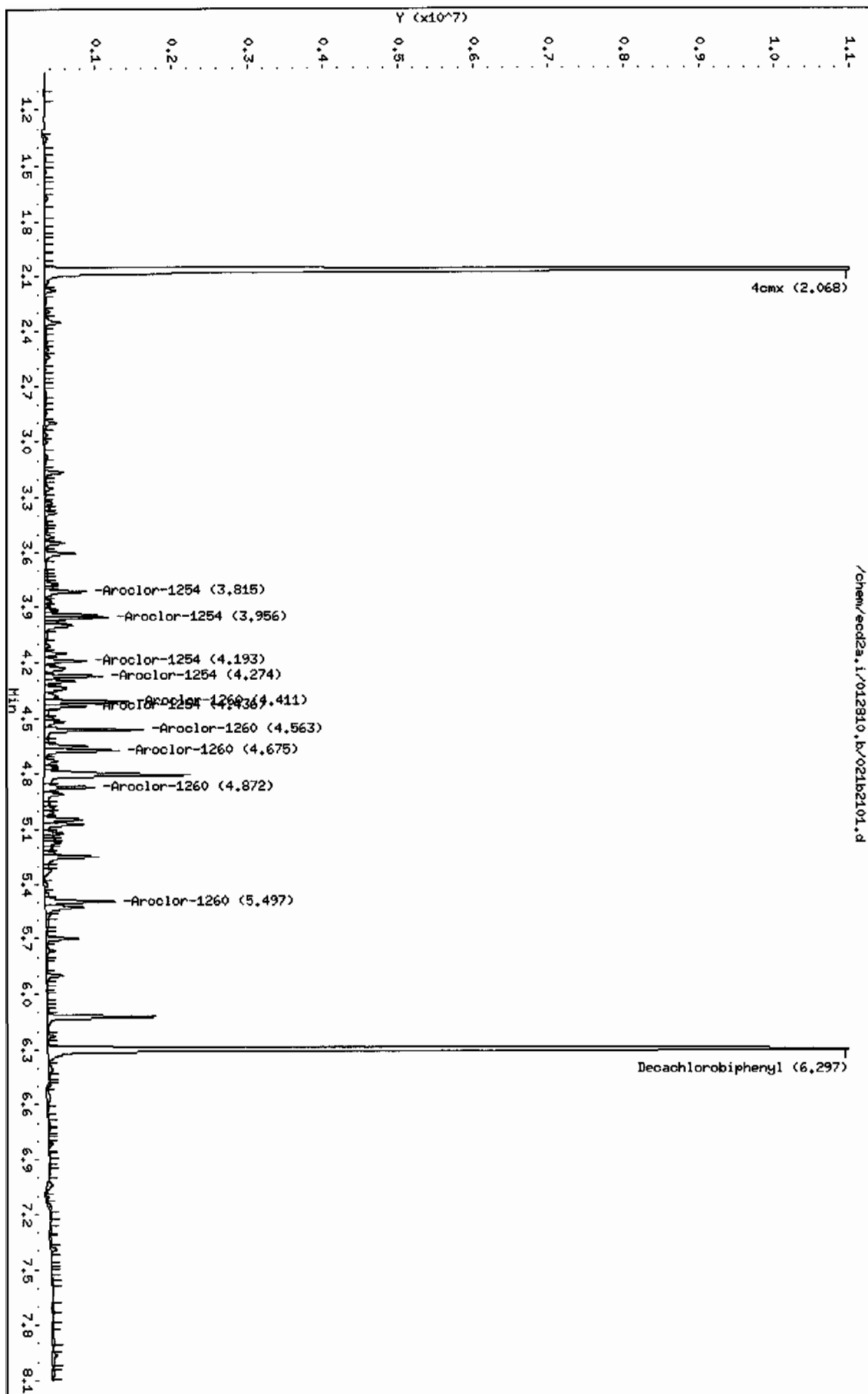
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3	
6.297	6.297	0.000	17896260	143.685	6.4 80.00- 120.00	100.00

6 Aroclor-1254					CAS #: 11097-69-1	
3.815	3.815	0.000	551334	110.592	4.9 80.00- 120.00	100.00
3.956	3.956	0.000	752914	129.836	5.7 94.13- 134.13	136.56
4.193	4.193	0.000	547632	136.126	6.0 61.98- 101.98	99.33
4.274	4.274	0.000	635882	82.2470	3.6 136.55- 176.55	115.34
4.436	4.437	-0.001	528347	94.2079	4.2 92.78- 132.78	95.83
Average of Peak Concentrations =				4.9		

CONCENTRATIONS						
			ON-COL		FINAL	
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/Kg)	TARGET RANGE RATIO
==	=====	=====	=====	=====	=====	=====
7 Aroclor-1260			CAS #: 11096-82-5			
4.411	4.411	0.000	1022367	176.721	7.8 80.00~ 120.00	100.00
4.563	4.562	0.001	1260027	173.482	7.7 106.27~ 146.27	123.25
4.675	4.674	0.001	960304	191.901	8.5 66.48~ 106.48	93.93
4.872	4.872	0.000	691225	119.276	5.3 78.00~ 118.00	67.61
5.497	5.497	0.000	989803	105.360	4.7 140.50~ 180.50	96.81
Average of Peak Concentrations =			6.8			

Data File: /chem/ecd2a.i/012810.b/021b2101.d
 Date: 28-JAN-2010 10:41
 Client ID: RE15-10-7869
 Sample Info: 1245394001141
 Volume Injected (ul): 1.0
 Column phase: CLP2

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



PCB
Certificate of Analysis
Sample Summary

SDG Number: 10-1392
Lab Sample ID: 245394005

Date Collected: 01/19/2010 12:00
Date Received: 01/23/2010 09:20
Client: LANL010
Method: SW846 8082
Inst: ECD2AJ
Analyst: JAOC
Aliquot: 30.02 g
Column: 1 CLP1
2 CLP2

Matrix: R
% Moisture: 13.1
Project: LANL01004
SOP Ref: GI.-OA-E-040
Dilution: 1
Inj. Vol: 1 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE15-10-7870
Batch ID: 945979
Run Date: 01/28/2010 11:48
Prep Date: 01/27/2010 20:26
Data File: 027f2701.d
027b2701.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.83	ug/kg	1.28	3.83	1
11104-28-2	Aroclor-1221	U	3.83	ug/kg	1.28	3.83	1
11141-16-5	Aroclor-1232	U	3.83	ug/kg	1.28	3.83	1
53469-21-9	Aroclor-1242	U	3.83	ug/kg	1.28	3.83	1
12672-29-6	Aroclor-1248	U	3.83	ug/kg	1.28	3.83	1
11097-69-1	Aroclor-1254	U	3.83	ug/kg	1.28	3.83	1
11096-82-5	Aroclor-1260	U	3.83	ug/kg	1.28	3.83	1

Data File: /chem/ecd2a.i/012810.b/027f2701.d
Report Date: 28-Jan-2010 14:31

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/027f2701.d
Lab Smp Id: 245394005 Client Smp ID: RE15-10-7870
Inj Date : 28-JAN-2010 11:48
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |245394005|1|
Misc Info : |ECD82P_1S|945979|SVA|LANL|SOIL|RE15-10-7870|||
Comment :
Method : /chem/ecd2a.i/012810.b/ECD2-F-8082-111209A.m
Meth Date : 28-Jan-2010 14:02 jen01212 Quant Type: ESTD
Cal Date : 21-JAN-2010 08:45 Cal File: 010f1001.d
Als bottle: 27
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	30.02000	Weight of sample extracted (g)
M	13.08080	% Moisture

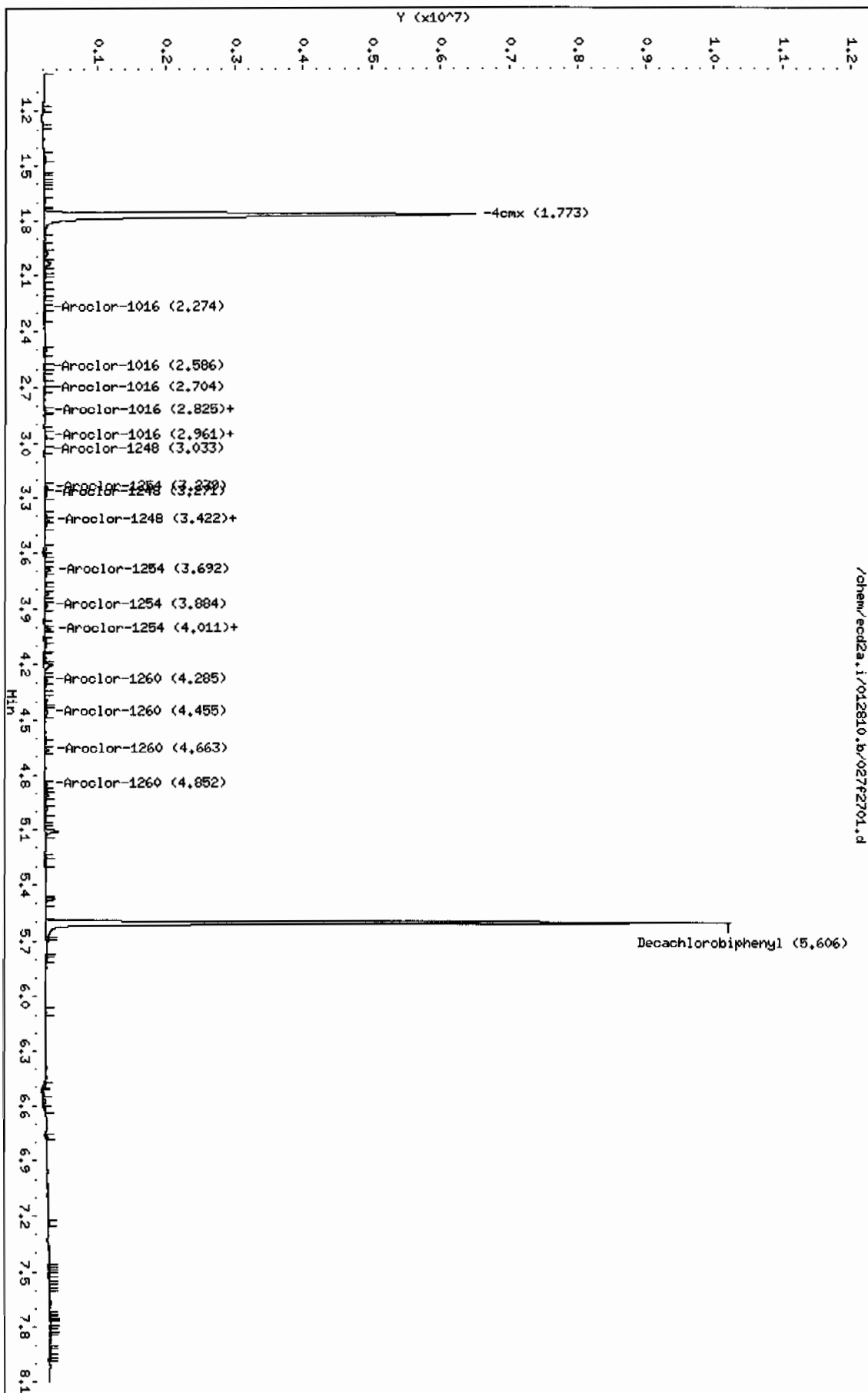
Cpnd Variable Local Compound Variable

		CONCENTRATIONS							
		ON-COL	FINAL						
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO			
==	=====	=====	=====	=====	=====	=====			
\$ 11 4cmx CAS #: 877-09-8									
1.773	1.770	0.003	8683938	129.548	5.0 80.00- 120.00	100.00			

\$ 12 Decachlorobiphenyl CAS #: 2051-24-3									
5.606	5.604	0.002	8946917	141.120	5.4 80.00- 120.00	100.00			

Data File: /chem/ecod2a.i/012810.b/027f2701.d
 Date : 28-JAN-2010 11:48
 Client ID: RE15-10-7870
 Sample Info: 124539400511
 Volume Injected (uL): 1.0
 Column phase: CLP1

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



Data File: /chem/ecd2a.i/012810.b/027b2701.d
 Report Date: 28-Jan-2010 14:05

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/027b2701.d

Lab Smp Id: 245394005

Client Smp ID: RE15-10-7870

Inj Date : 28-JAN-2010 11:48

Operator : JAOC

Inst ID: ecd2a.i

Smp Info : |245394005|1|

Misc Info : |ECD82P_1S|945979|SVA|LANL|SOIL|RE15-10-7870|||

Comment :

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

Meth Date : 28-Jan-2010 14:01 jen01212 Quant Type: ESTD

Cal Date : 21-JAN-2010 08:45

Cal File: 010b1001.d

Als bottle: 27

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	30.02000	Weight of sample extracted (g)
M	13.08080	% Moisture

Cpnd Variable

Local Compound Variable

CONCENTRATIONS

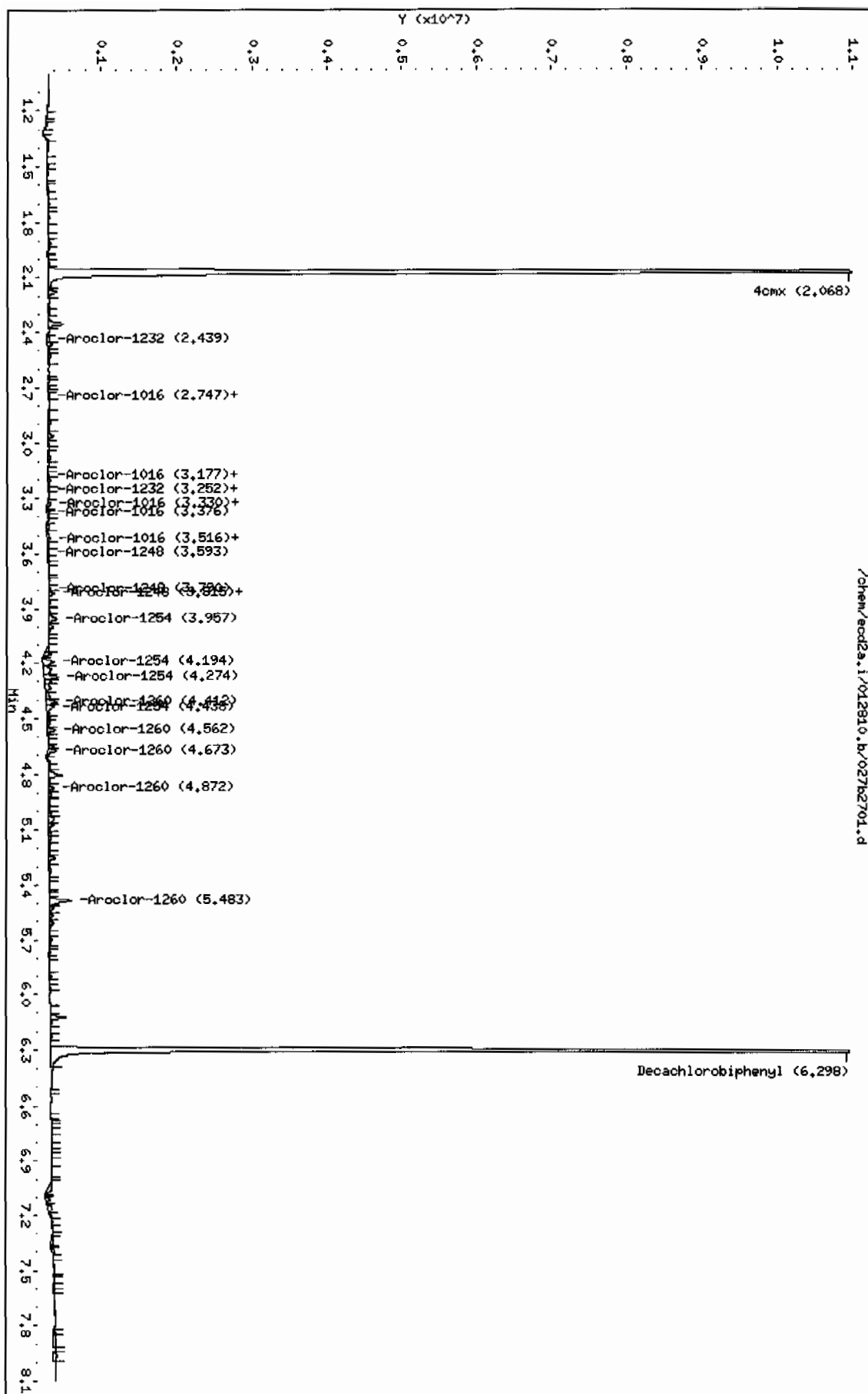
			ON-COL		FINAL		
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/Kg)	TARGET RANGE	RATIO
=====	=====	=====	=====	=====	✓ RT (ug/Kg)	=====	=====

\$ 11 4cmx					CAS #: 877-09-8		
2.068	2.067	0.001	18394980	131.810	5.0	80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.298	6.297	0.001	17983067	144.382	5.5	80.00- 120.00	100.00

Data File: /chem/eod2a.i/012810.b/027b2701.d
 Date: 28-JAN-2010 11:48
 Client ID: REIS-10-7870
 Sample Info: 1245394005111
 Volume Injected (uL): 1.0
 Column phase: CLP2

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



PCB

Page 1 of 1

Certificate of Analysis
Sample SummarySDG Number: 10-1392
Lab Sample ID: 245394003

Date Collected: 01/19/2010 12:00

Date Received: 01/23/2010 09:20

Matrix: R

%Moisture: 10.9

Client ID: RE15-10-7871

Client: LANL010

Project: LANL01004

Batch ID: 945979

Method: SW846 8082

SOP Ref: GL-OA-E-040

Run Date: 01/28/2010 11:26

Inst: ECD2A.I

Dilution: 1

Prep Date: 01/27/2010 20:26

Analyst: JAOC

Inj. Vol: 1 uL

Data File: 025f2501.d

Aliquot: 30.07 g

Final Volume: 1 mL

Column: 1 CLP1
2 CLP2

Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.73	ug/kg	1.24	3.73	1
11104-28-2	Aroclor-1221	U	3.73	ug/kg	1.24	3.73	1
11141-16-5	Aroclor-1232	U	3.73	ug/kg	1.24	3.73	1
53469-21-9	Aroclor-1242	U	3.73	ug/kg	1.24	3.73	1
12672-29-6	Aroclor-1248	U	3.73	ug/kg	1.24	3.73	1
11097-69-1	Aroclor-1254		23.1	ug/kg	1.24	3.73	1
11096-82-5	Aroclor-1260	P	16.3	ug/kg	1.24	3.73	2

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/025f2501.d
Lab Smp Id: 245394003 Client Smp ID: RE15-10-7871
Inj Date : 28-JAN-2010 11:26
Operator : JAOC Inst ID: ecd2a.i
Smp Info : |245394003|1|
Misc Info : |ECD82P_1S|945979|SVA|LANL|SOIL|RE15-10-7871|||
Comment :
Method : /chem/ecd2a.i/012810.b/ECD2-F-8082-111209A.m
Meth Date : 28-Jan-2010 14:02 jen01212 Quant Type: ESTD
Cal Date : 21-JAN-2010 08:45 Cal File: 010f1001.d
Als bottle: 25
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	30.07000	Weight of sample extracted (g)
M	10.93090	% 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	8375695	124.950	4.7 80.00- 120.00	100.00	

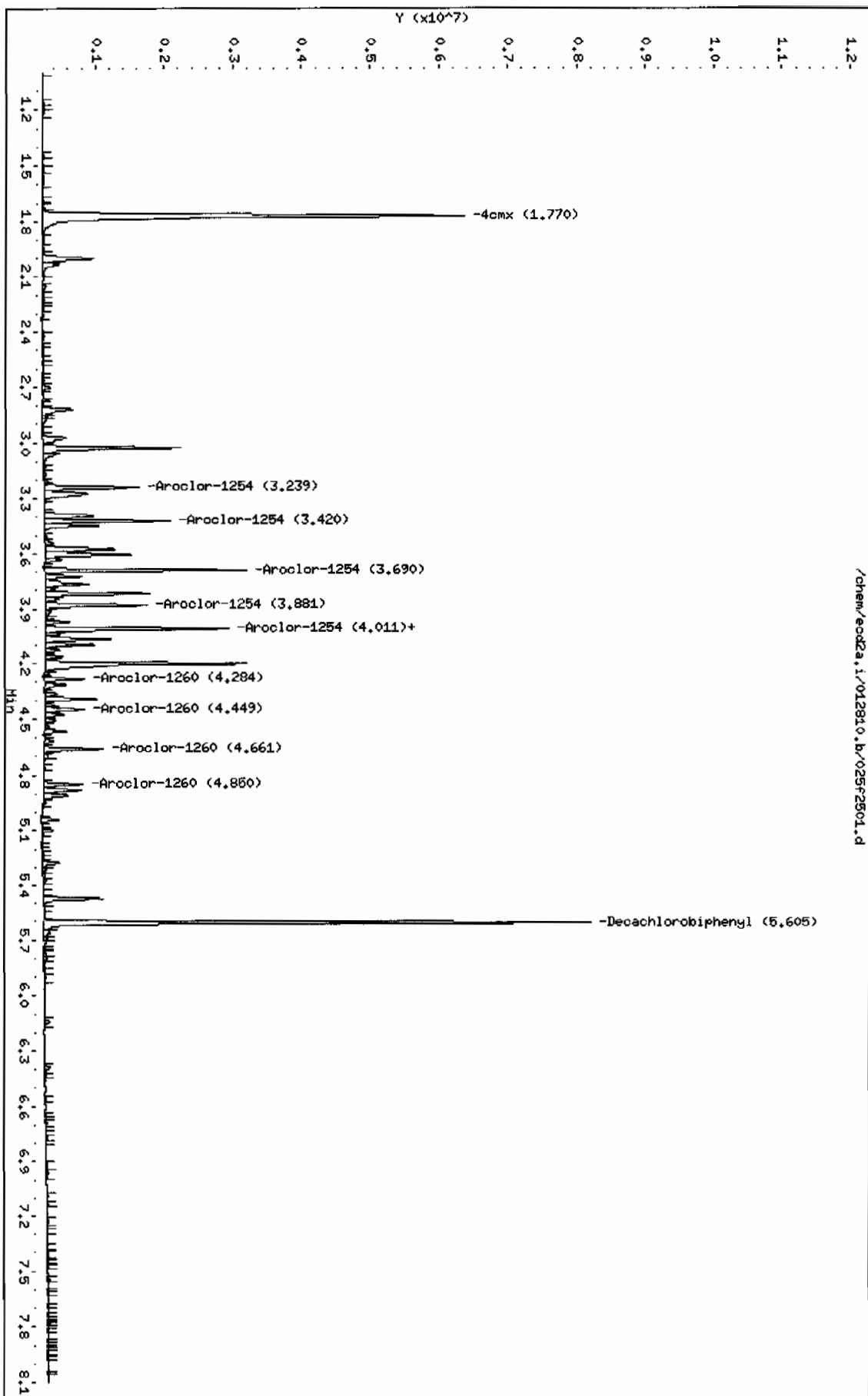
\$ 12 Decachlorobiphenyl CAS #: 2051-24-3							
5.605	5.604	0.001	7115370	112.231	4.2 80.00- 120.00	100.00	

6 Aroclor-1254 CAS #: 11097-69-1							
3.239	3.239	0.000	1209488	581.470	21.7 80.00- 120.00	100.00	
3.420	3.422	-0.002	1580207	570.032	21.3 112.37- 152.37	130.65	
3.690	3.691	-0.001	2324136	621.028	23.2 163.94- 203.94	192.16	
3.881	3.884	-0.003	1334775	479.668	17.9 115.35- 155.35	110.36	
4.011	4.012	-0.001	2320967	840.917	31.4 118.56- 158.56	191.90	
Average of Peak Concentrations =				23.1			

CONCENTRATIONS								
			ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	=====	=====
7 Aroclor-1260					CAS #: 11096-82-5			
4.011	4.011	0.000	2320967	539.425	20.1	80.00- 120.00	100.00	
4.284	4.282	0.002	489231	175.287	6.5	42.77- 82.77	21.08	
4.449	4.449	0.000	515437	179.793	6.7	45.85- 85.85	22.21	
4.661	4.661	0.000	772372	117.396	4.4	133.33- 173.33	33.28	
4.850	4.850	0.000	511494	160.176	6.0	54.19- 94.19	22.04	
Average of Peak Concentrations =					8.7			

Data File: /chem/eod2a.i/012810.b/025f2501.d
Date : 28-JAN-2010 11:26
Client ID: RE15-10-7871
Sample Info: 1245394003111
Volume Injected (uL): 1.0
Column phase: CLP1

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



Data File: /chem/ecd2a.i/012810.b/025b2501.d
Report Date: 28-Jan-2010 14:30

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/025b2501.d

Lab Smp Id: 245394003

Client Smp ID: RE15-10-7871

Inj Date : 28-JAN-2010 11:26

Operator : JAOC

Inst ID: ecd2a.i

Smp Info : |245394003|1|

Misc Info : |ECD82P_1S|945979|SVA|LANL|SOIL|RE15-10-7871|||

Comment :

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

Meth Date : 28-Jan-2010 14:01 jen01212 Quant Type: ESTD

Cal Date : 21-JAN-2010 08:45

Cal File: 010b1001.d

Als bottle: 25

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	30.07000	Weight of sample extracted (g)
M	10.93090	% Moisture

Cpnd Variable

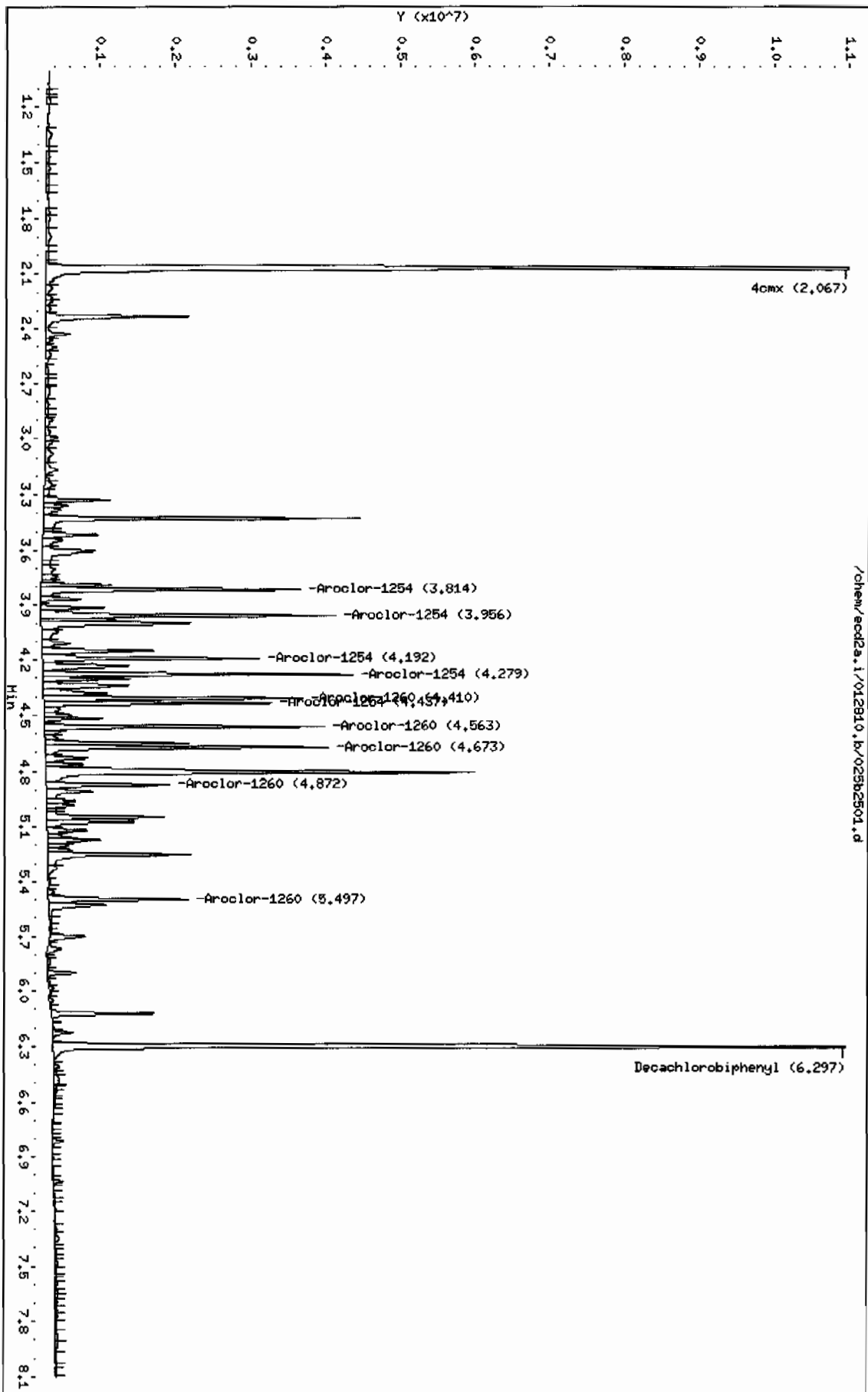
Local Compound Variable

CONCENTRATIONS						
			ON-COL		FINAL	
RT	EXP RT	DLT RT	RESPONSE (ug/L)		TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
\$ 11 4cmx						
			CAS #: 877-09-8			
2.067	2.067	0.000	18376862	131.680	4.9 80.00- 120.00	100.00
\$ 12 Decachlorobiphenyl						
			CAS #: 2051-24-3			
6.297	6.297	0.000	14691138	117.952	4.4 80.00- 120.00	100.00
6 Aroclor-1254						
			CAS #: 11097-69-1			
3.814	3.815	-0.001	3324698	666.901	24.9 80.00- 120.00	100.00
3.956	3.956	0.000	3873724	668.005	24.9 94.13- 134.13	116.51
4.192	4.193	-0.001	2736563	680.231	25.4 61.98- 101.98	82.31
4.279	4.274	0.005	3525730	456.029	17.0 136.55- 176.55	106.05
4.437	4.437	0.000	2707156	482.705	18.0 92.78- 132.78	81.43
Average of Peak Concentrations =				22.0		

CONCENTRATIONS						
			ON-COL		FINAL	
RT	EXP RT	DLT RT	RESPONSE (ug/L)		TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
7 Aroclor-1260			CAS #: 11096-82-5			
4.410	4.411	-0.001	3228384	558.042	20.8 80.00- 120.00	100.00
4.563	4.562	0.001	3186484	438.720	16.4 106.50- 146.50	98.70
4.673	4.674	-0.001	3557402	710.888	26.5 66.28- 106.28	110.19
4.872	4.872	0.000	1597956	275.739	10.3 77.45- 117.45	49.50
5.497	5.497	0.000	1903349	202.604	7.6 138.79- 178.79	58.96
Average of Peak Concentrations =				16.3		

Data File: /chem/eod2a.i/012910.b/025b2501.d
 Date : 28-JAN-2010 11:26
 Client ID: RE15-10-7871
 Sample Info: 1245394003111
 Volume Injected (uL): 1.0
 Column phase: CLP2

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



PCB
Certificate of Analysis
Sample Summary

SDG Number: 10-1392
Lab Sample ID: 245394004

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: 30.05 g
Column: 1 CLP1
2 CLP2

Matrix: R
%Moisture: 11.2
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	3.75	ug/kg	1.25	3.75	1
11104-28-2	Aroclor-1221	U	3.75	ug/kg	1.25	3.75	1
11141-16-5	Aroclor-1232	U	3.75	ug/kg	1.25	3.75	1
53469-21-9	Aroclor-1242	U	3.75	ug/kg	1.25	3.75	1
12672-29-6	Aroclor-1248	U	3.75	ug/kg	1.25	3.75	1
11097-69-1	Aroclor-1254		4.30	ug/kg	1.25	3.75	1
11096-82-5	Aroclor-1260	JP	2.40	ug/kg	1.25	3.75	2

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/026f2601.d

Lab Smp Id: 245394004

Client Smp ID: RE15-10-7872

Inj Date : 28-JAN-2010 11:37

Operator : JAOC

Inst ID: ecd2a.i

Smp Info : |245394004|1|

Misc Info : |ECD82P_1S|945979|SVA|LANL|SOIL|RE15-10-7872|||

Comment :

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

Meth Date : 28-Jan-2010 14:02 jen01212 Quant Type: ESTD

Cal Date : 21-JAN-2010 08:45

Cal File: 010f1001.d

Als bottle: 26

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	30.05000	Weight of sample extracted (g)
M	11.20110	% Moisture

Cpnd Variable

Local Compound Variable

CONCENTRATIONS

RT	EXP RT	DLT RT	ON-COL	FINAL	TARGET RANGE	RATIO
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/Kg)		
\$ 11 4cmx				CAS #: 877-09-8		
1.772	1.770	0.002	8189559 122.173	4.6	80.00- 120.00	100.00
\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3		
5.606	5.604	0.002	8099107 127.748	4.8	80.00- 120.00	100.00
6 Aroclor-1254				CAS #: 11097-69-1		
3.239	3.239	0.000	208734 100.350	3.8	80.00- 120.00	100.00
3.422	3.422	0.000	289587 104.463	3.9	112.37- 152.37	138.74
3.691	3.691	0.000	461542 123.328	4.6	163.94- 203.94	221.12
3.883	3.884	-0.001	293482 105.466	4.0	115.35- 155.35	140.60
4.013	4.012	0.001	377337 136.714	5.1	118.56- 158.56	180.77
Average of Peak Concentrations =				4.3		

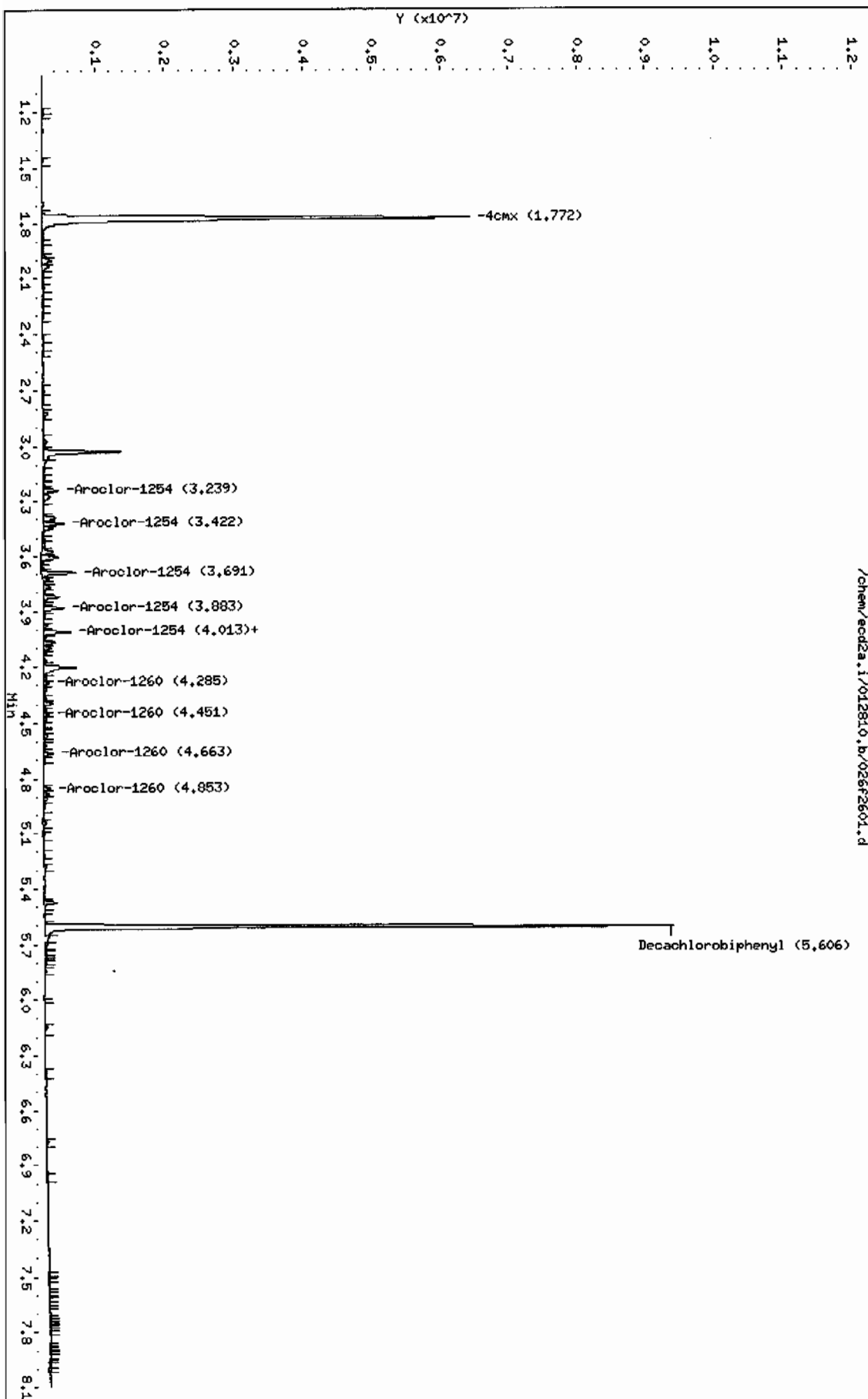
CONCENTRATIONS								
			ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	=====	
7 Aroclor-1260					CAS #: 11096-82-5			
4.013	4.011	0.002	377337	87.6984	3.3	80.00- 120.00	100.00 (a)	
4.285	4.282	0.003	81651	29.2548	1.1	42.77- 82.77	21.64	
4.451	4.449	0.002	83912	29.2700	1.1	45.85- 85.85	22.24	
4.663	4.661	0.002	135231	20.5543	0.77	133.33- 173.33	35.84	
4.853	4.850	0.003	81630	25.5628	0.96	54.19- 94.19	21.63	
Average of Peak Concentrations =					1.4			

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: /chem/ecdd2a.i/012810.b/026f2601.d
Date : 28-JAN-2010 11:37
Client ID: RE15-10-7872
Sample Info: 1245394004111
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecdd2a.i
Operator: JADC
Column diameter: 0.25



Data File: /chem/ecd2a.i/012810.b/026b2601.d
Report Date: 28-Jan-2010 14:31

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/026b2601.d

Lab Smp Id: 245394004

Client Smp ID: RE15-10-7872

Inj Date : 28-JAN-2010 11:37

Operator : JAOC

Inst ID: ecd2a.i

Smp Info : |245394004|1|

Misc Info : |ECD82P_1S|945979|SVA|LANL|SOIL|RE15-10-7872|

Comment :

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

Meth Date : 28-Jan-2010 14:01 jen01212 Quant Type: ESTD

Cal Date : 21-JAN-2010 08:45

Cal File: 010b1001.d

Als bottle: 26

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	30.05000	Weight of sample extracted (g)
M	11.20110	% Moisture

Cpnd Variable

Local Compound Variable

CONCENTRATIONS						
			ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
CAS #: 877-09-8						
\$ 11 4cmx	2.068	2.067	0.001	18029924 129.194	4.8 80.00- 120.00	100.00
CAS #: 2051-24-3						
\$ 12 Decachlorobiphenyl	6.298	6.297	0.001	16544291 132.831	5.0 80.00- 120.00	100.00
CAS #: 11097-69-1						
6 Aroclor-1254	3.815	3.815	0.000	517415 103.788	3.9 80.00- 120.00	100.00(a)
	3.957	3.956	0.001	498626 85.9856	3.2 94.13- 134.13	96.37
	4.193	4.193	0.000	448500 111.484	4.2 61.98- 101.98	86.68
	4.276	4.274	0.002	497099 64.2963	2.4 136.55- 176.55	96.07
	4.437	4.437	0.000	606482 108.140	4.0 92.78- 132.78	117.21
Average of Peak Concentrations ~				3.5		

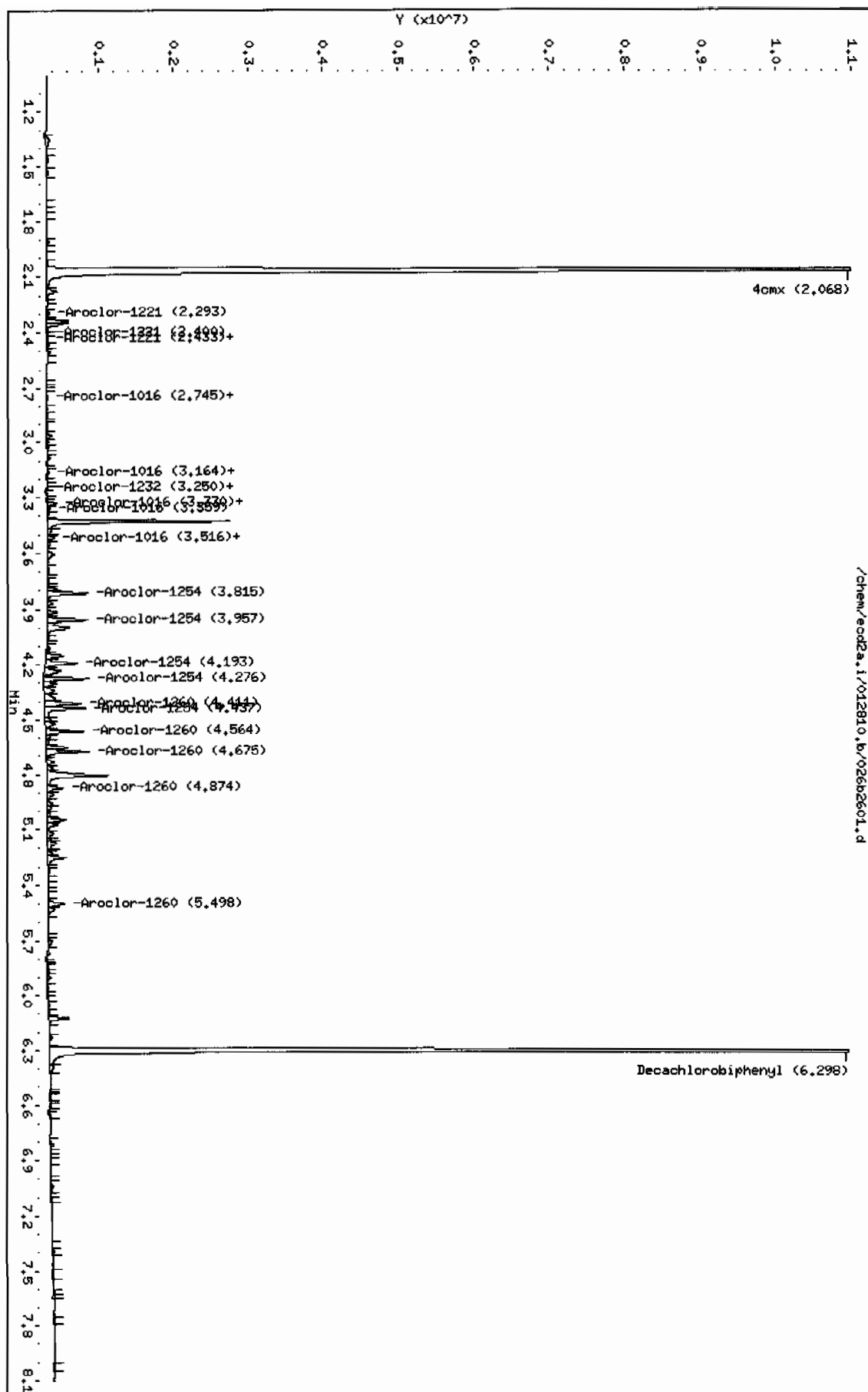
CONCENTRATIONS								
			ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE	{ ug/L)	(ug/Kg)	TARGET	RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====	=====	=====
7 Aroclor-1260					CAS #: 11096-82-5			
4.411	4.411	0.000	497878	86.0606	3.2	80.00-	120.00	100.00(a)
4.564	4.562	0.002	493985	68.0126	2.5	106.50-	146.50	99.22
4.675	4.674	0.001	550921	110.092	4.1	66.28-	106.28	110.65
4.874	4.872	0.002	212518	36.6715	1.4	77.45-	117.45	42.68
5.498	5.497	0.001	230206	24.5045	0.92	138.79-	178.79	46.24
Average of Peak Concentrations =					2.4			

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: /chem/eod2a.i/012810.b/026b2601.d
 Date : 28-JAN-2010 11:37
 Client ID: RE15-10-7872
 Sample Info: 124539400411
 Volume Injected (uL): 1.0
 Column phase: CLP2

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



PCB
Certificate of Analysis
Sample Summary

SDG Number: 10-1392
 Lab Sample ID: 245394006

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: 30.19 g
 Column: 1 CLP1
 2 CLP2

Matrix: R
 %Moisture: 12.6
 Project: LANL01004
 SOP Ref: GL-OA-E-040
 Dilution: 5
 Inj. Vol: 1 uL
 Final Volume: 1 mL
 Level: LOW

Client ID: RE15-10-7873
 Batch ID: 945979
 Run Date: 01/28/2010 16:59
 Prep Date: 01/27/2010 20:26
 Data File: 051f5101.d
 051b5101.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	18.9	ug/kg	6.31	18.9	1
11104-28-2	Aroclor-1221	U	18.9	ug/kg	6.31	18.9	1
11141-16-5	Aroclor-1232	U	18.9	ug/kg	6.31	18.9	1
53469-21-9	Aroclor-1242		282	ug/kg	6.31	18.9	1
12672-29-6	Aroclor-1248	U	18.9	ug/kg	6.31	18.9	1
11097-69-1	Aroclor-1254		143	ug/kg	6.31	18.9	1
11096-82-5	Aroclor-1260		60.8	ug/kg	6.31	18.9	2

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/051f5101.d

Lab Smp Id: 245394006

Client Smp ID: RE15-10-7873

Inj Date : 28-JAN-2010 16:59

Operator : JAOC

Inst ID: ecd2a.i

Smp Info : |245394006|5|

Misc Info : |ECD82P_1S|945979|SVA|LANL|SOIL|RE15-10-7873|||

Comment :

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

Meth Date : 29-Jan-2010 07:51 jen01212 Quant Type: ESTD

Cal Date : 21-JAN-2010 08:45

Cal File: 010f1001.d

Als bottle: 51

Dil Factor: 5.00000

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	5.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.19000	Weight of sample extracted (g)
M	12.56530	% 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	1578407	23.5469	4.5	80.00- 120.00	100.00 (M)

\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.606	5.604	0.002	1603868	25.2979	4.8	80.00- 120.00	100.00 (M)

4 Aroclor-1242					CAS #: 53469-21-9		
2.272	2.273	-0.001	1231430	710.393	134	80.00- 120.00	100.00 (M)
2.687	2.687	0.000	1460908	984.255	186	64.06- 104.06	118.64
2.730	2.730	0.000	754695	833.184	158	31.50- 71.50	61.29
2.822	2.822	0.000	1336052	1838.02	348	22.24- 62.24	108.50
2.969	2.974	-0.005	3461423	3091.91	586	44.46- 84.46	281.09
Average of Peak Concentrations =					282		

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	1282703	616.669	117	80.00- 120.00	100.00 (M)	
3.421	3.422	-0.001	1728019	623.353	118	112.37- 152.37	134.72	
3.692	3.691	0.001	2105801	562.687	106	163.94- 203.94	164.17	
3.882	3.884	-0.002	1782923	640.716	121	115.35- 155.35	139.00	
4.012	4.012	0.000	3712954	1345.25	255	118.56- 158.56	289.46	
Average of Peak Concentrations =					143			

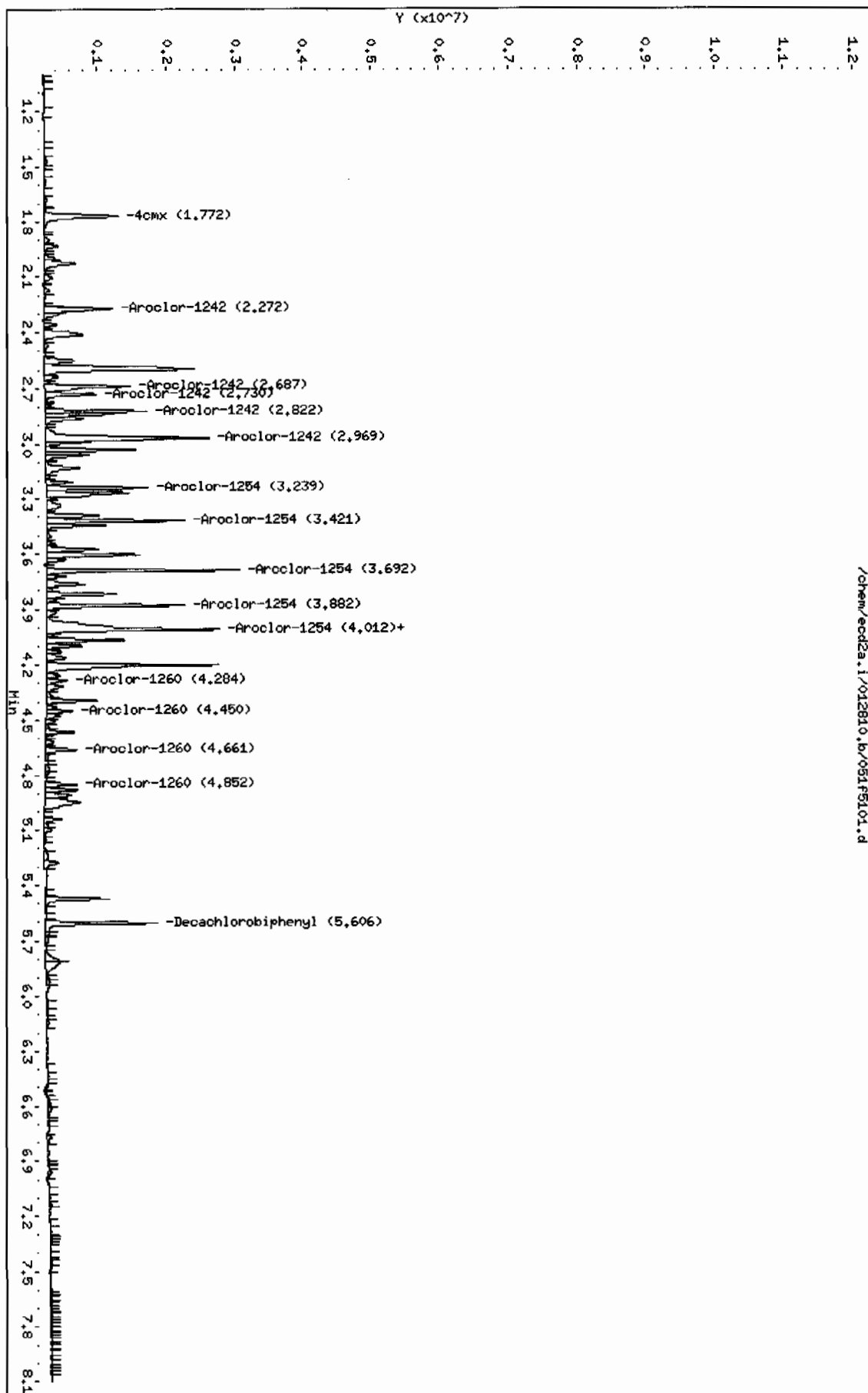
7 Aroclor-1260					CAS #: 11096-82-5			
4.012	4.011	0.001	3712954	862.943	163	80.00- 120.00	100.00 (M)	
4.284	4.282	0.002	288316	103.301	19.6	43.03- 83.03	7.77	
4.450	4.449	0.001	382843	133.542	25.3	44.66- 84.66	10.31	
4.661	4.661	0.000	440432	66.9432	12.7	133.56- 173.56	11.86	
4.852	4.850	0.002	419455	131.354	24.9	54.46- 94.46	11.30	
Average of Peak Concentrations =					49.1			

QC Flag Legend

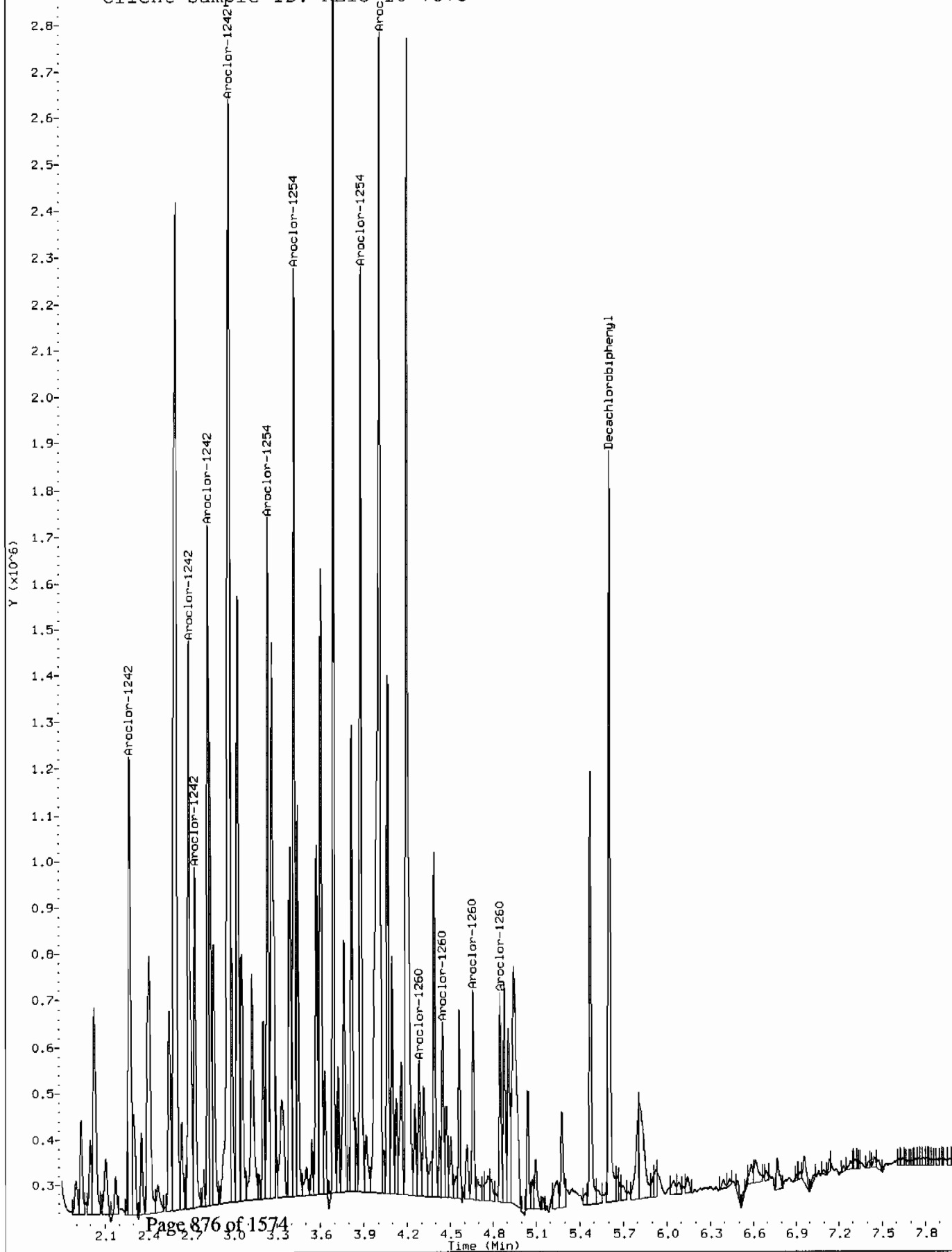
M - Compound response manually integrated.

Data File: /chem/ecod2a.i/012810.b/051F5101.d
Date: 28-JAN-2010 16:59
Client ID: RE15-10-7873
Sample Info: 1245394006151
Volume Injected (uL): 1.0
Column phase: CLP1

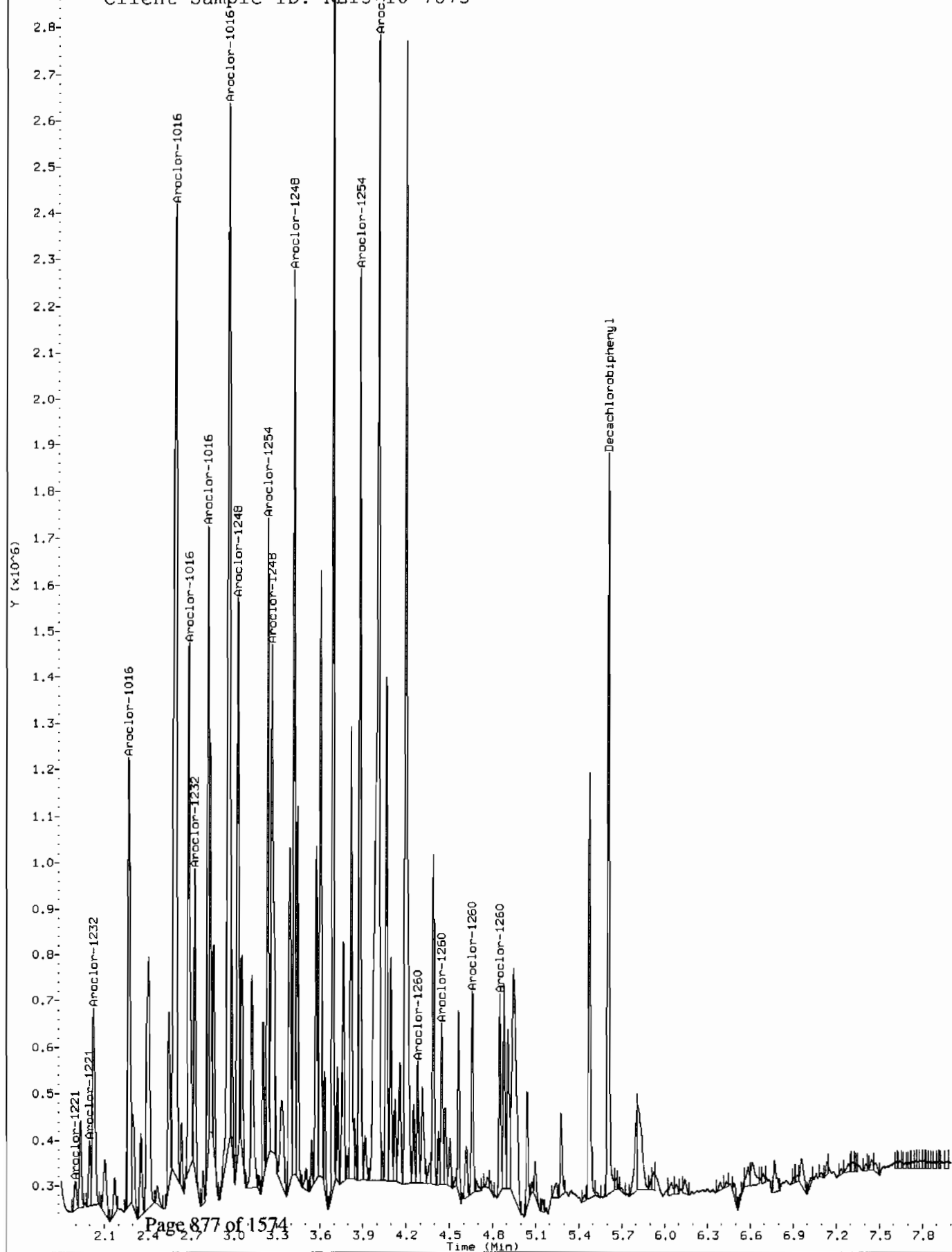
Instrument: ecod2a.i
Operator: JROC
Column diameter: 0.25



Comment: Manually Integrated
Data File: /chem/ecc2a.i/012810.b/051f5101.d
Operator: JAOC
Injection Date: 28-JAN-2010 16:59
Instrument: ecc2a.1
Client Sample ID: RE1510-7873



Comment: Before manual integration
Data File: /chem/ecd2a.i/012810.b/orig-051f5101.d
Operator: JAOC
Injection Date: 28-JAN-2010 16:59
Instrument: ecd2a.i
Client Sample ID: RE1510-7873



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/051b5101.d

Lab Smp Id: 245394006

Client Smp ID: RE15-10-7873

Inj Date : 28-JAN-2010 16:59

Operator : JAOC

Inst ID: ecd2a.i

Smp Info : |245394006|5|

Misc Info : |ECD82P_1S|945979|SVA|LANL|SOIL|RE15-10-7873|||

Comment :

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

Meth Date : 29-Jan-2010 07:38 jen01212 Quant Type: ESTD

Cal Date : 21-JAN-2010 08:45

Cal File: 010b1001.d

Als bottle: 51

Dil Factor: 5.00000

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	5.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.19000	Weight of sample extracted (g)
M	12.56530	% 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	3135795 22.4697	4.2	80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3		
6.298	6.297	0.001	2764103 22.1924	4.2	80.00- 120.00	100.00

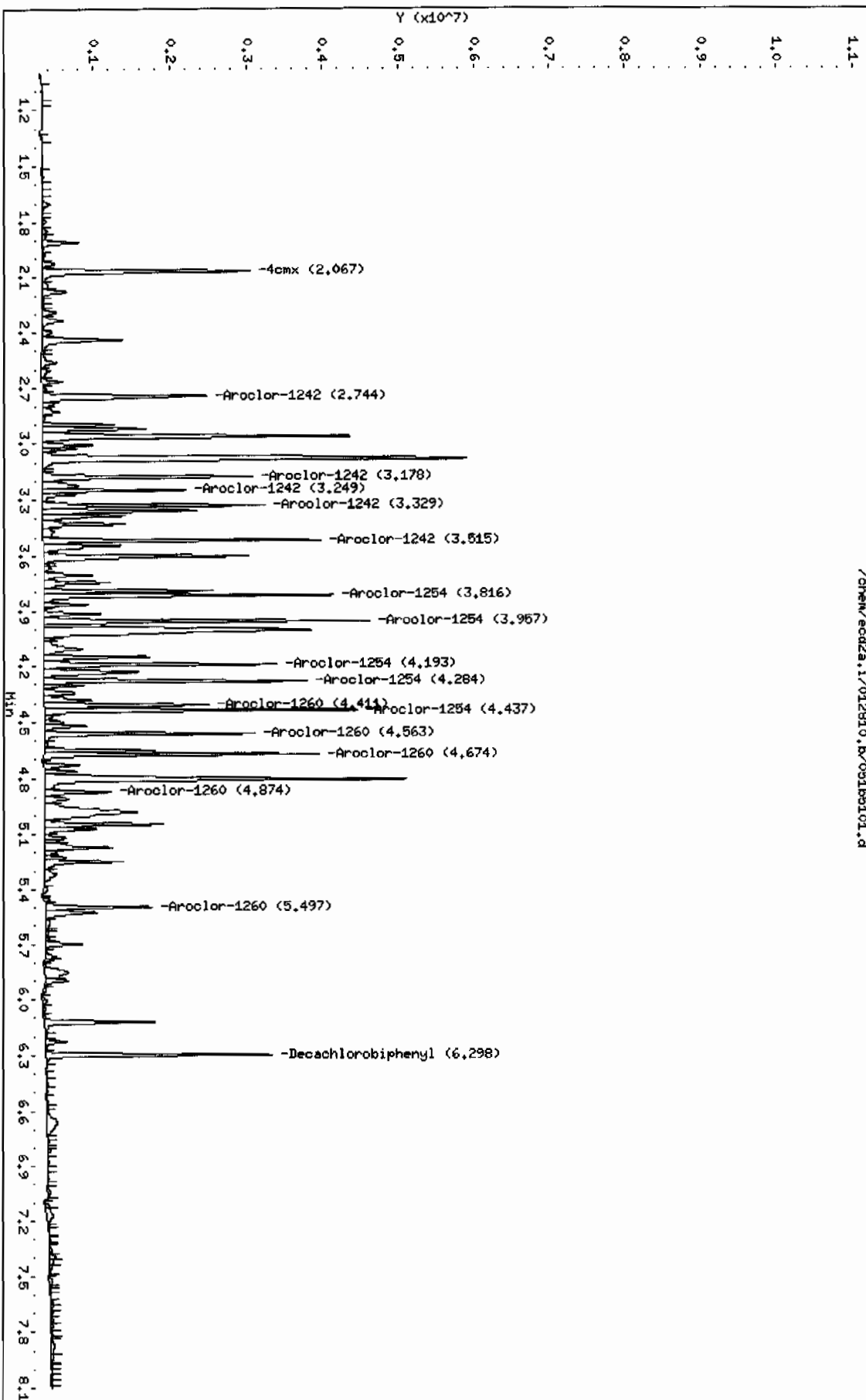
4 Aroclor-1242				CAS #: 53469-21-9		
2.744	2.743	0.001	2770079 804.017	152	80.00- 120.00	100.00
3.178	3.178	0.000	2661288 992.467	188	56.04- 96.04	96.07
3.249	3.250	-0.001	1533139 936.789	177	25.35- 65.35	55.35
3.329	3.328	0.001	2533518 1679.89	318	23.07- 63.07	91.46
3.515	3.516	-0.001	2994143 1395.91	264	43.16- 83.16	108.09
Average of Peak Concentrations =			220			

CONCENTRATIONS								
			ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/Kg)	TARGET RANGE		RATIO
==	=====	=====	=====	=====	=====	=====	=====	=====
6 Aroclor-1254					CAS #: 11097-69-1			
3.816	3.815	0.001	3684692	739.112	140	80.00-	120.00	100.00
3.957	3.956	0.001	3866419	666.745	126	94.13-	134.13	104.93
4.193	4.193	0.000	2809543	698.372	132	61.98-	101.98	76.25
4.284	4.274	0.010	3040917	393.322	74.5	136.55-	176.55	82.53
4.437	4.437	0.000	3573080	637.105	121	92.78-	132.78	96.97
Average of Peak Concentrations =					119			

7 Aroclor-1260					CAS #: 11096-82-5			
4.411	4.411	0.000	2061599	356.357	67.5	80.00-	120.00	100.00
4.563	4.562	0.001	2395855	329.865	62.5	106.07-	146.07	116.21
4.674	4.674	0.000	3127057	624.891	118	65.63-	105.63	151.68
4.874	4.872	0.002	848755	146.459	27.7	77.38-	117.38	41.17
5.497	5.497	0.000	1411375	150.235	28.4	139.35-	179.35	68.46
Average of Peak Concentrations =					60.8			

Data File: /chem/eod2a.i/012810.b/051b5101.d
Date: 28-JAN-2010 16:59
Client ID: RELS-10-7873
Sample Info: 1245394006151
Volume Injected (uL): 1.0
Column phase: CLP2

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



PCB

Page 1 of 1

Certificate of Analysis
Sample SummarySDG Number: 10-1392
Lab Sample ID: 245394002Date Collected: 01/19/2010 12:00
Date Received: 01/23/2010 09:20Matrix: R
%Moisture: 4.1
Project: LANL01004
SOP Ref: GL-OA-E-040Client ID: RE15-10-7874
Batch ID: 945979
Run Date: 01/28/2010 10:53
Prep Date: 01/27/2010 20:26
Data File: 022f2201.d
022b2201.dClient: LANL010
Method: SW846 8082
Inst: ECD2A.I
Analyst: JAOC
Aliquot: 30.08 g
Column: 1 CLP1
2 CLP2Dilution: 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	3.47	ug/kg	1.15	3.47	1
11104-28-2	Aroclor-1221	U	3.47	ug/kg	1.15	3.47	1
11141-16-5	Aroclor-1232	U	3.47	ug/kg	1.15	3.47	1
53469-21-9	Aroclor-1242	U	3.47	ug/kg	1.15	3.47	1
12672-29-6	Aroclor-1248	U	3.47	ug/kg	1.15	3.47	1
11097-69-1	Aroclor-1254	J	2.90	ug/kg	1.15	3.47	1
11096-82-5	Aroclor-1260	J	3.20	ug/kg	1.15	3.47	2

Data File: /chem/ecd2a.i/012810.b/022f2201.d
 Report Date: 28-Jan-2010 11:33

Page 1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/022f2201.d
 Lab Smp Id: 245394002 Client Smp ID: RE15-10-7874
 Inj Date : 28-JAN-2010 10:53
 Operator : JAOC Inst ID: ecd2a.i
 Smp Info : |245394002|1|
 Misc Info : |ECD82P_1S|945979|SVA|LANL|SOIL|RE15-10-7874|
 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: 22
 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	30.08000	Weight of sample extracted (g)
M	4.11510	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS						
RT	EXP RT	DLT RT	ON-COL RESPONSE (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
\$ 11 4cmx					CAS #: 877-09-8	
1.772	1.770	0.002	8430170 125.762	4.4	80.00- 120.00	100.00
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3	
5.605	5.604	0.001	8392244 132.371	4.6	80.00- 120.00	100.00 (M)
6 Aroclor-1254					CAS #: 11097-69-1	
3.239	3.239	0.000	108338 52.0843	1.8	80.00- 120.00	100.00 (aM)
3.422	3.422	0.000	157685 56.8821	2.0	112.37- 152.37	145.55
3.690	3.691	-0.001	299682 80.0775	2.8	163.94- 203.94	276.62
3.882	3.884	-0.002	205447 73.8300	2.6	115.35- 155.35	189.64
4.012	4.012	0.000	405363 146.868	5.1	118.56- 158.56	374.17
Average of Peak Concentrations =				2.9		

			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	405363	94.2121	3.3	80.00-	120.00	100.00 (aM)
4.284	4.282	0.002	209256	74.9745	2.6	42.81-	82.81	51.62
4.452	4.449	0.003	427836	149.237	5.2	45.95-	85.95	105.54
4.661	4.661	0.000	191262	29.0707	1.0	132.37-	172.37	47.18
4.852	4.850	0.002	148118	46.3838	1.6	53.57-	93.57	36.54
Average of Peak Concentrations =					2.7			

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- M - Compound response manually integrated.

Data File: /chem/eod2a.i/012810.b/02f2201.d

Date : 28-JUN-2010 10:53

Client ID: RE15-10-7874

Sample Info: 1245394002141

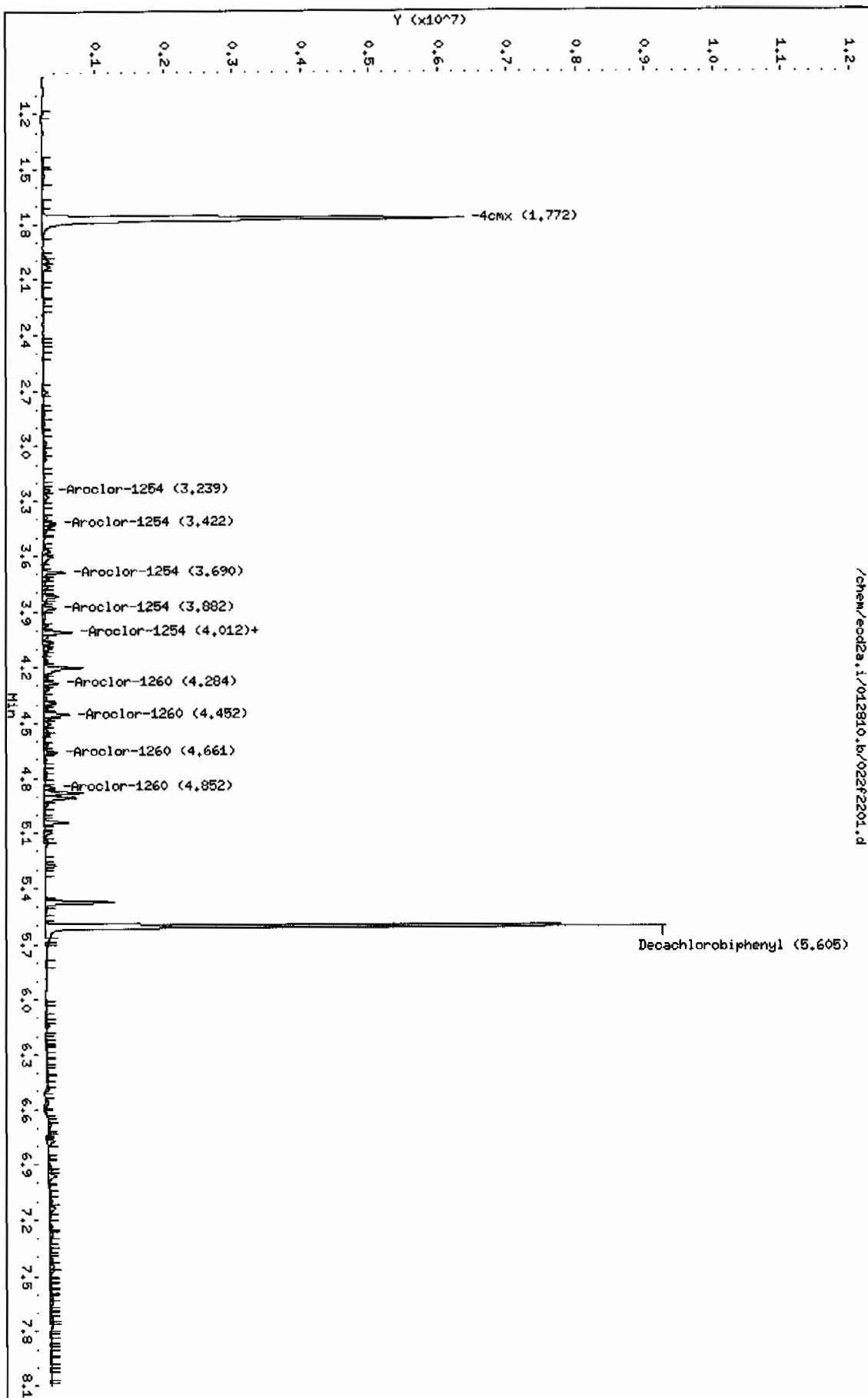
Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: eod2a.i

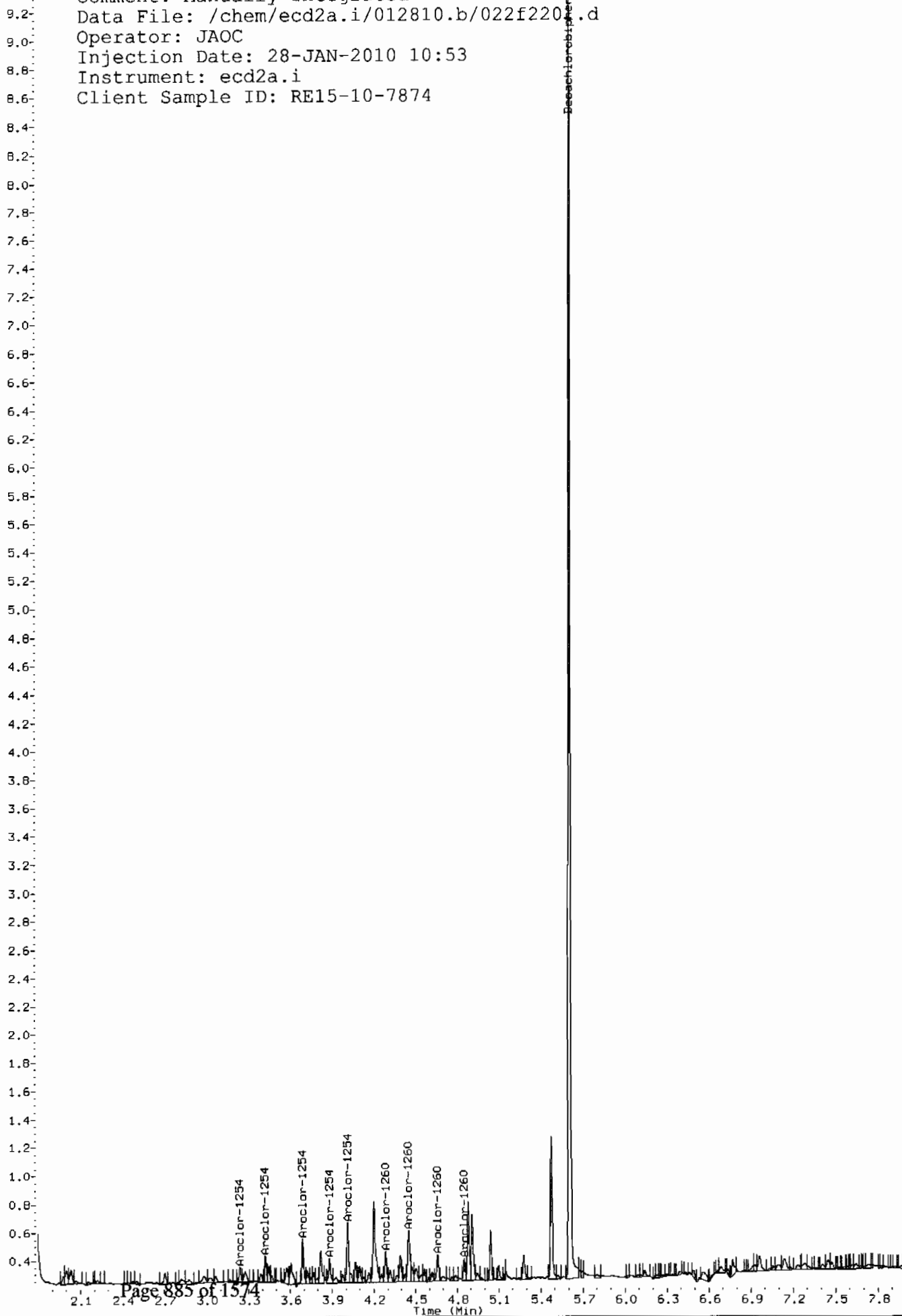
Operator: JHOC

Column diameter: 0.25

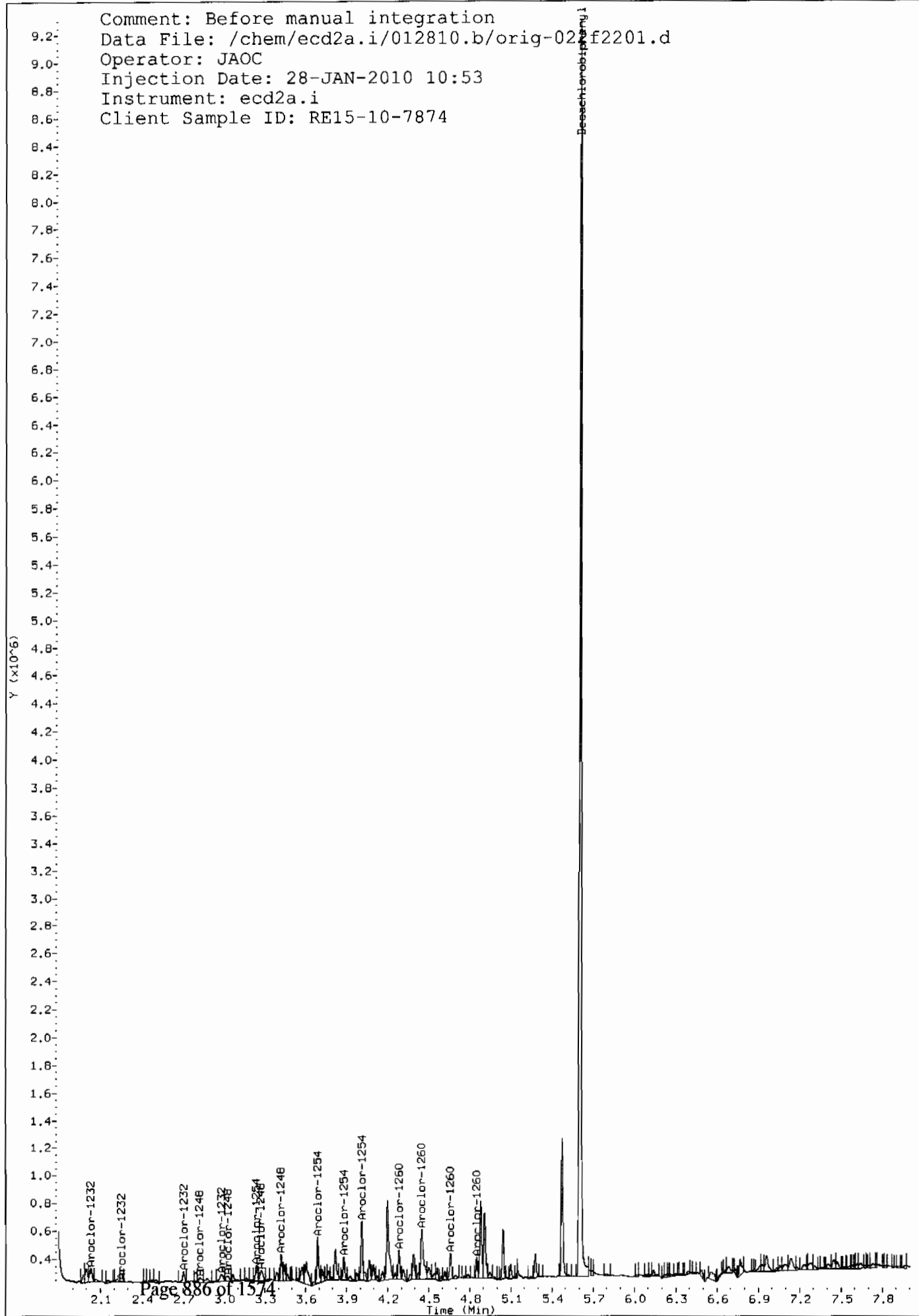


Comment: Manually Integrated
Data File: /chem/ecd2a.i/012810.b/022f220.d
Operator: JAOC
Injection Date: 28-JAN-2010 10:53
Instrument: ecd2a.i
Client Sample ID: RE15-10-7874

Y (x10⁻⁶)



Comment: Before manual integration
Data File: /chem/ecd2a.i/012810.b/orig-02f2201.d
Operator: JAOC
Injection Date: 28-JAN-2010 10:53
Instrument: ecd2a.i
Client Sample ID: RE15-10-7874



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/022b2201.d

Lab Smp Id: 245394002

Client Smp ID: RE15-10-7874

Inj Date : 28-JAN-2010 10:53

Operator : JAOC

Inst ID: ecd2a.i

Smp Info : |245394002|1|

Misc Info : |ECD82P_1S|945979|SVA|LANL|SOIL|RE15-10-7874|

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: 22

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	30.08000	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
==	=====	=====	=====	=====	=====	=====
CAS #: 877-09-8						
2.068	2.067	0.001	18391759 131.787	4.6	80.00-	120.00 100.00
CAS #: 2051-24-3						
6.296	6.297	-0.001	17570392 141.069	4.9	80.00-	120.00 100.00
CAS #: 11097-69-1						
3.815	3.815	0.000	251974 50.5436	1.8	80.00-	120.00 100.00(a)
3.956	3.956	0.000	578939 99.8353	3.5	94.13-	134.13 229.76
4.190	4.193	-0.003	512242 127.329	4.4	61.98-	101.98 203.29
4.275	4.274	0.001	316672 40.9594	1.4	136.55-	176.55 125.68
4.436	4.437	-0.001	348567 62.1520	2.2	92.78-	132.78 138.33
Average of Peak Concentrations =				2.6		

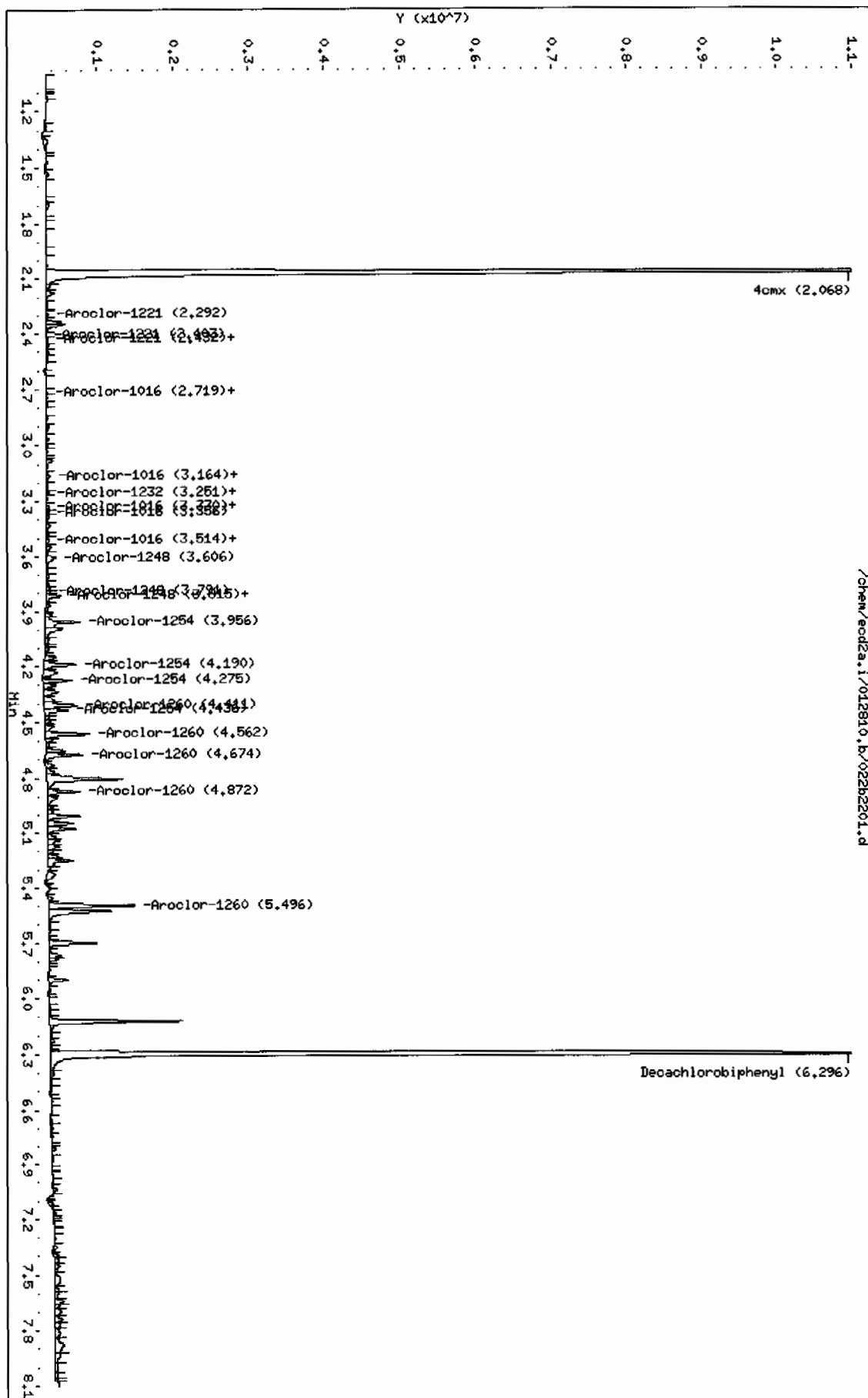
CONCENTRATIONS								
			ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/Kg)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	=====	
7 Aroclor-1260					CAS #: 11096-82-5			
4.411	4.411	0.000	517565	89.4637	3.1	80.00~ 120.00	100.00 (a)	
4.562	4.562	0.000	565929	77.9181	2.7	106.27~ 146.27	109.34	
4.674	4.674	0.000	515269	102.968	3.6	66.48~ 106.48	99.56	
4.872	4.872	0.000	434544	74.9838	2.6	78.00~ 118.00	83.96	
5.496	5.497	-0.001	1070725	113.974	4.0	140.50~ 180.50	206.88	
Average of Peak Concentrations =					3.2			

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/eod2a.i/012810.b/022b2201.d
 Date: 28-JAN-2010 10:53
 Client ID: RE15-10-7874
 Sample Info: 1245394002141
 Volume Injected (uL): 1.0
 Column phase: CLP2

Instrument: eod2a.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
	2.973	2.943-3.003	6.246e+02
4 Aroclor-1242	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
	2.974	2.944-3.004	1.120e+03
5 Aroclor-1248	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	250.000	500.000	1000.000	4000.000	RRF	% RSD
Level 1	Level 2	Level 3	Level 4	Level 5			
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
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
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

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.: 10-1392
 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.: 10-1392
 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.: 10-1392
 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.: 10-1392
 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.: 10-1392
 Instrument ID: ECD2A Calibration Date: 01/28/10 Time: 0733
 Lab File ID: 004F0401 Init. Calib. Date(s): 11/12/09 11/12/09
 Heated Purge: (Y/N) N Init. Calib. Times: 1409 1453
 GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1242	1733.449	1855.361	0.01	7.0	15.0
(2)	1484.278	1559.677	0.01	5.1	15.0
(3)	905.797	955.434	0.01	5.5	15.0
(4)	726.896	783.756	0.01	7.8	15.0
(5)	1119.508	1195.978	0.01	6.8	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1392
 Instrument ID: ECD2A Calibration Date: 01/28/10 Time: 0733
 Lab File ID: 004B0401 Init. Calib. Date(s): 11/12/09 11/12/09
 Heated Purge: (Y/N) N Init. Calib. Times: 1409 1453
 GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1242	3445.297	3843.908	0.01	11.6	15.0
(2)	2681.488	2922.891	0.01	9.0	15.0
(3)	1636.589	1743.190	0.01	6.5	15.0
(4)	1508.146	1655.624	0.01	9.8	15.0
(5)	2144.941	2427.738	0.01	13.2	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.: 10-1392
 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.: 10-1392
 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

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.: 10-1392
 Instrument ID: ECD2A Calibration Date: 01/28/10 Time: 1210
 Lab File ID: 029F2901 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	2145.280	0.01	-5.0	15.0
(2)	4628.914	4573.388	0.01	-1.2	15.0
(3)	1900.304	1824.349	0.01	-4.0	15.0
(4)	983.497	925.091	0.01	-5.9	15.0
(5)	1450.304	1388.549	0.01	-4.2	15.0
Aroclor-1260	4302.665	4448.530	0.01	3.4	15.0
(2)	2791.028	2792.388	0.01	0.0	15.0
(3)	2866.828	2929.208	0.01	2.2	15.0
(4)	6579.193	6821.139	0.01	3.7	15.0
(5)	3193.316	3300.262	0.01	3.3	15.0
4cmx	67032.526	67435.980	0.01	0.6	15.0
Decachlorobiphenyl	63399.298	60222.570	0.01	-5.0	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.: 10-1392
 Instrument ID: ECD2A Calibration Date: 01/28/10 Time: 1210
 Lab File ID: 029B2901 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	4481.709	0.01	-0.2	15.0
(2)	3434.131	3517.268	0.01	2.4	15.0
(3)	2017.371	2022.308	0.01	0.2	15.0
(4)	2105.569	2110.611	0.01	0.2	15.0
(5)	2794.468	2852.634	0.01	2.1	15.0
Aroclor-1260	5785.200	6156.180	0.01	6.4	15.0
(2)	7263.142	7787.500	0.01	7.2	15.0
(3)	5004.167	5311.313	0.01	6.1	15.0
(4)	5795.185	5999.323	0.01	3.5	15.0
(5)	9394.449	9775.469	0.01	4.0	15.0
4cmx	139556.85	145738.93	0.01	4.4	15.0
Decachlorobiphenyl	124551.80	117374.43	0.01	-5.8	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1392
 Instrument ID: ECD2A Calibration Date: 01/28/10 Time: 1508
 Lab File ID: 041F4101 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	2164.349	0.01	-4.1	15.0
(2)	4628.914	4618.079	0.01	-0.2	15.0
(3)	1900.304	1868.529	0.01	-1.7	15.0
(4)	983.497	943.628	0.01	-4.0	15.0
(5)	1450.304	1451.233	0.01	0.1	15.0
Aroclor-1260	4302.665	4573.586	0.01	6.3	15.0
(2)	2791.028	2863.785	0.01	2.6	15.0
(3)	2866.828	2910.885	0.01	1.5	15.0
(4)	6579.193	6916.759	0.01	5.1	15.0
(5)	3193.316	3346.885	0.01	4.8	15.0
4cmx	67032.526	67559.400	0.01	0.8	15.0
Decachlorobiphenyl	63399.298	57393.150	0.01	-9.5	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.: 10-1392
 Instrument ID: ECD2A Calibration Date: 01/28/10 Time: 1508
 Lab File ID: 041B4101 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	4499.785	0.01	0.2	15.0
(2)	3434.131	3561.642	0.01	3.7	15.0
(3)	2017.371	2057.954	0.01	2.0	15.0
(4)	2105.569	2143.781	0.01	1.8	15.0
(5)	2794.468	2907.685	0.01	4.0	15.0
Aroclor-1260	5785.200	6171.376	0.01	6.7	15.0
(2)	7263.142	7765.773	0.01	6.9	15.0
(3)	5004.167	5262.229	0.01	5.2	15.0
(4)	5795.185	5950.063	0.01	2.7	15.0
(5)	9394.449	9380.504	0.01	-0.1	15.0
4cmx	139556.85	145512.21	0.01	4.3	15.0
Decachlorobiphenyl	124551.80	109702.20	0.01	-11.9	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1392
 Instrument ID: ECD2A Calibration Date: 01/28/10 Time: 1710
 Lab File ID: 052F5201 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	2178.802	0.01	-3.5	15.0
(2)	4628.914	4658.467	0.01	0.6	15.0
(3)	1900.304	1861.743	0.01	-2.0	15.0
(4)	983.497	949.061	0.01	-3.5	15.0
(5)	1450.304	1377.167	0.01	-5.0	15.0
Aroclor-1260	4302.665	4539.697	0.01	5.5	15.0
(2)	2791.028	2861.429	0.01	2.5	15.0
(3)	2866.828	2935.204	0.01	2.4	15.0
(4)	6579.193	6971.018	0.01	6.0	15.0
(5)	3193.316	3380.411	0.01	5.8	15.0
4cmx	67032.526	68152.810	0.01	1.7	15.0
Decachlorobiphenyl	63399.298	59591.290	0.01	-6.0	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.: 10-1392
 Instrument ID: ECD2A Calibration Date: 01/28/10 Time: 1710
 Lab File ID: 052B5201 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	4537.781	0.01	1.1	15.0
(2)	3434.131	3594.266	0.01	4.7	15.0
(3)	2017.371	2075.217	0.01	2.9	15.0
(4)	2105.569	2156.701	0.01	2.4	15.0
(5)	2794.468	2945.197	0.01	5.4	15.0
Aroclor-1260	5785.200	6213.243	0.01	7.4	15.0
(2)	7263.142	7833.003	0.01	7.8	15.0
(3)	5004.167	5320.346	0.01	6.3	15.0
(4)	5795.185	6050.714	0.01	4.4	15.0
(5)	9394.449	9900.741	0.01	5.4	15.0
4cmx	139556.85	147115.57	0.01	5.4	15.0
Decachlorobiphenyl	124551.80	116876.17	0.01	-6.2	15.0

FORM VII PEST

Data File: /chem/ecd2a.i/012810.b/002f0201.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/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		

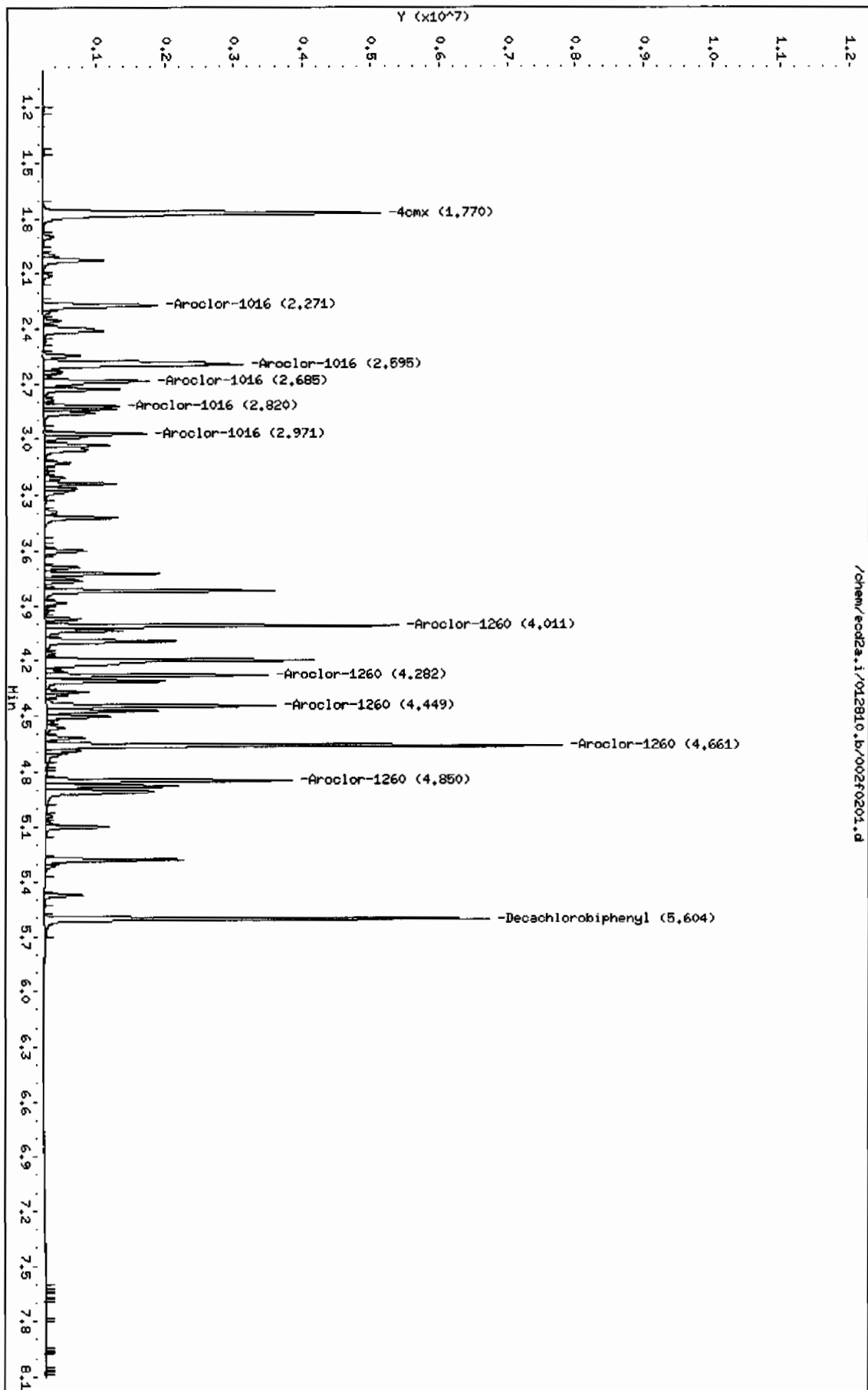
QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/eod2a.i/012810.b/002f0201.d
Date: 28-JAN-2010 07:11
Client ID: BR166001
Sample Info: 146R100104-60 01

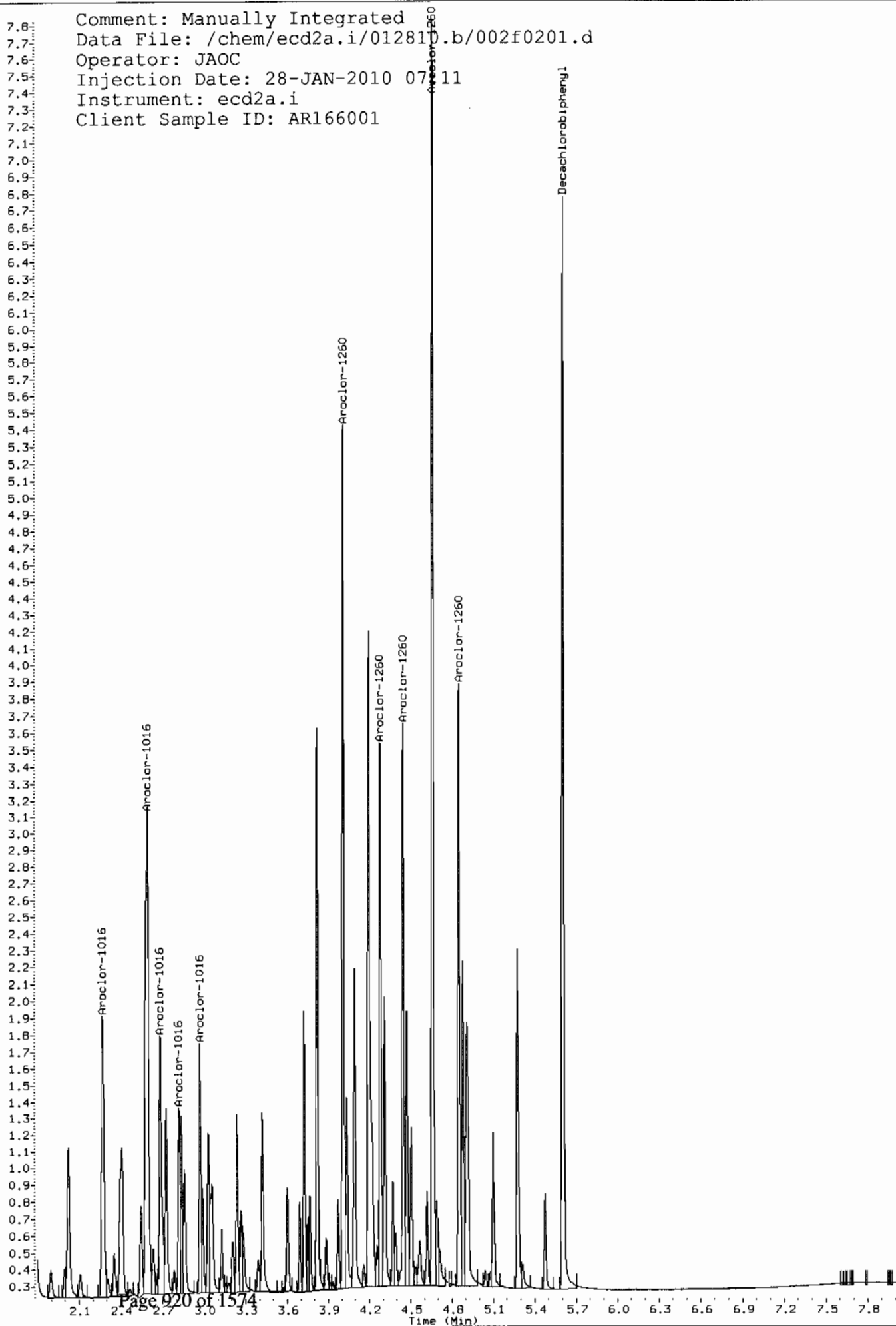
Column phase: CLP1

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

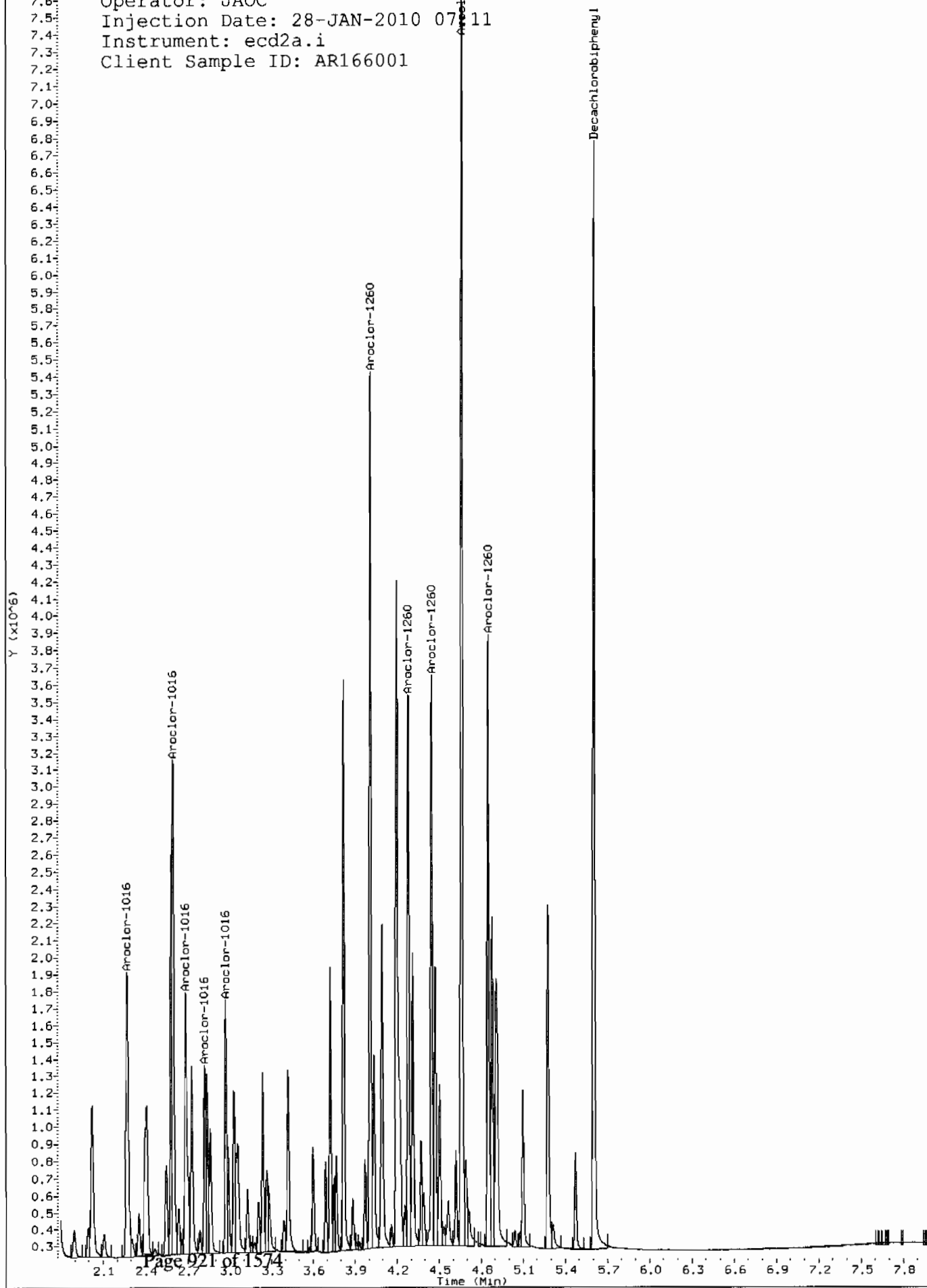


Comment: Manually Integrated
Data File: /chem/ecd2a.i/012810.b/002f0201.d
Operator: JAOC
Injection Date: 28-JAN-2010 07:11
Instrument: ecd2a.i
Client Sample ID: AR166001

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



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/ecod2a.i/012810.b/002b0201.d

Date: 28-JAN-2010 07:11

Client ID: KR16001

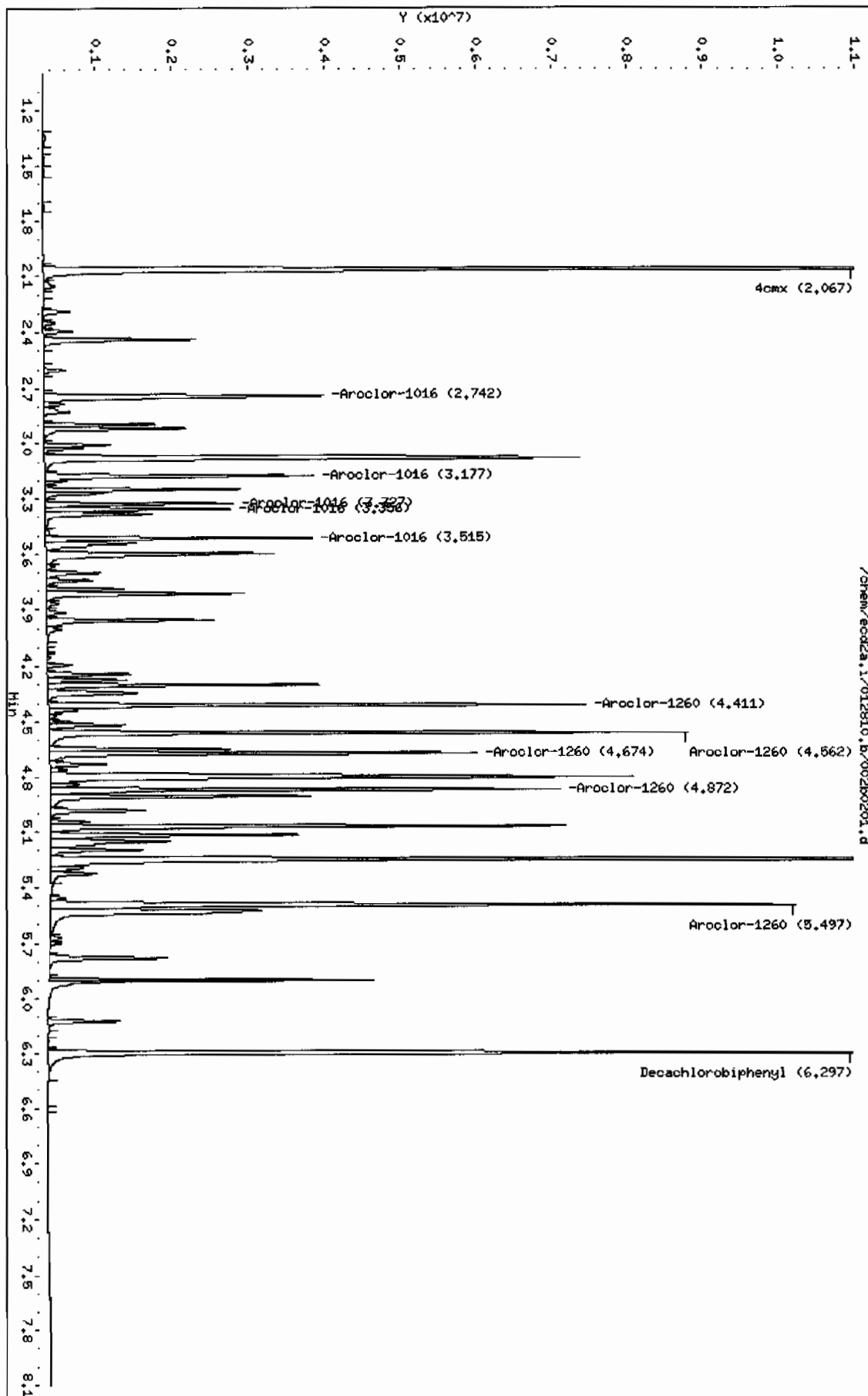
Sample Info: 14MR100104-60 01

Column phase: CLP2

Instrument: ecod2a.i

Operator: JADC

Column diameter: 0.25



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

CAL-AMT ON-COL

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

6 Aroclor-1254

CAS #: 11097-69-1

3.239	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/ecod2a.i/012810.b/003f0301.d

Date : 28-JAN-2010 07:22

Client ID: AR125401

Sample Info: IMR091102-54

Column phase: CLP1

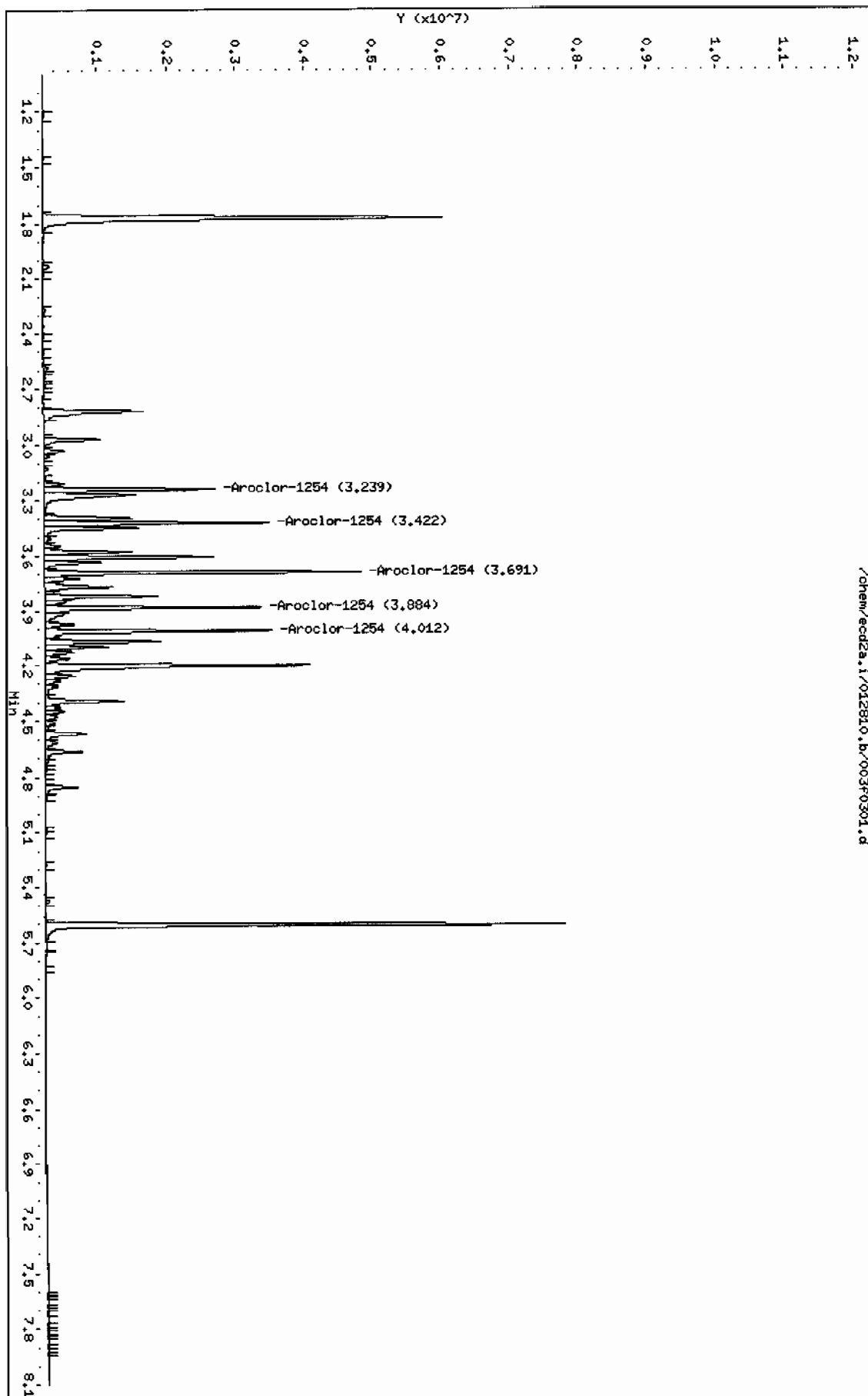
Page 1

Instrument: ecod2a.i

Operator: JAOC

Column diameter: 0.25

/chem/ecod2a.i/012810.b/003f0301.d



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	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	

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/ecod2a.i/012810.b/00300301.d

Date : 28-JAN-2010 07:22

Client ID: AR125401

Sample Info: 1MAR091102-B4

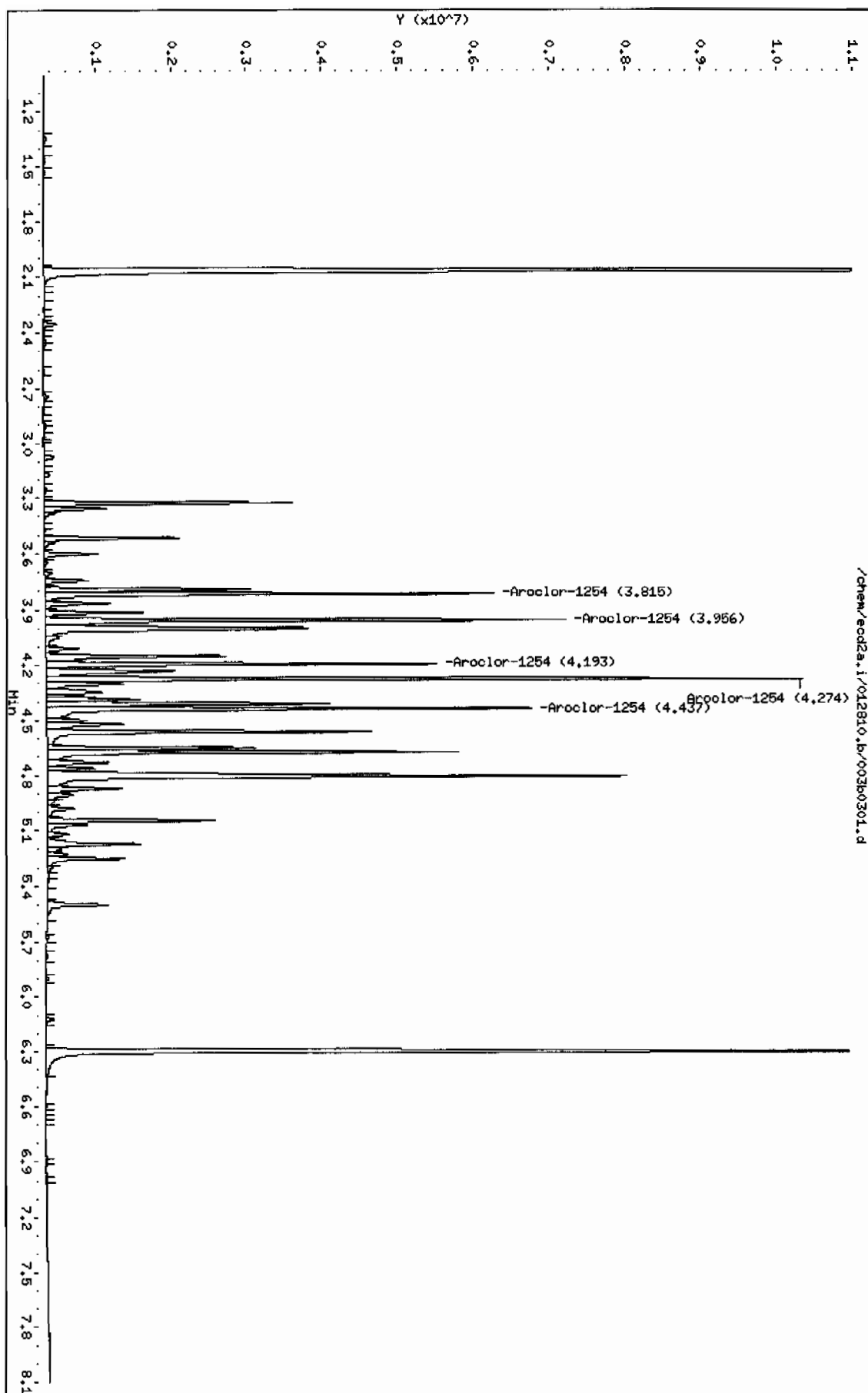
Column phase: CLP2

Instrument: ecod2a.i

Operator: JHOC

Column diameter: 0.25

Page 1



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

RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
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/eod2a.i/012810.b/004f0401.d

Date : 28-JAN-2010 07:33

Client ID: PR124201

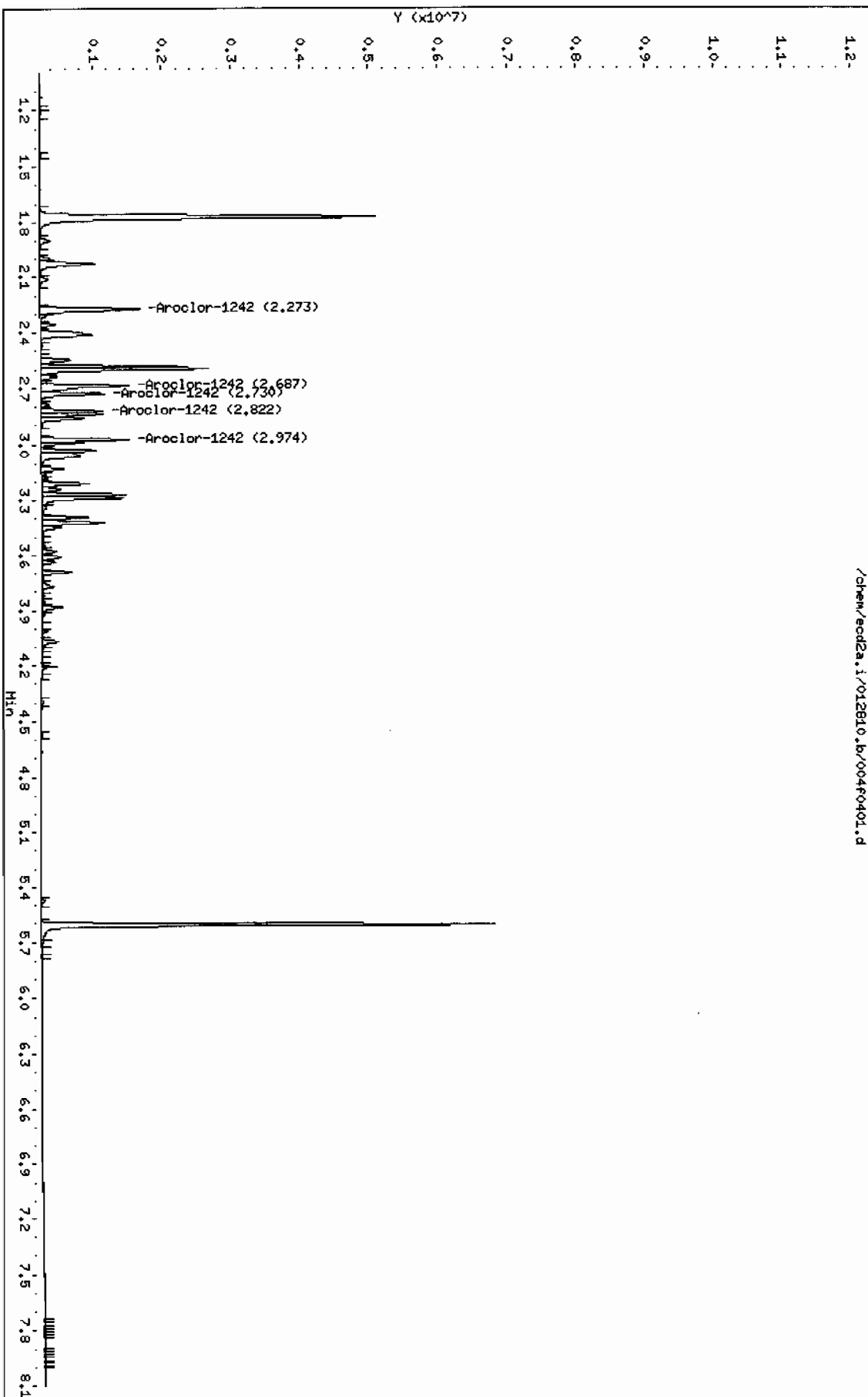
Sample Info: 1MAR091217-42

Column phase: CLP1

Instrument: eod2a.i

Operator: JAC

Column diameter: 0.25



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

CAL-AMT ON-COL

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

4 Aroclor-1242

CAS #: 53469-21-9

2.743	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

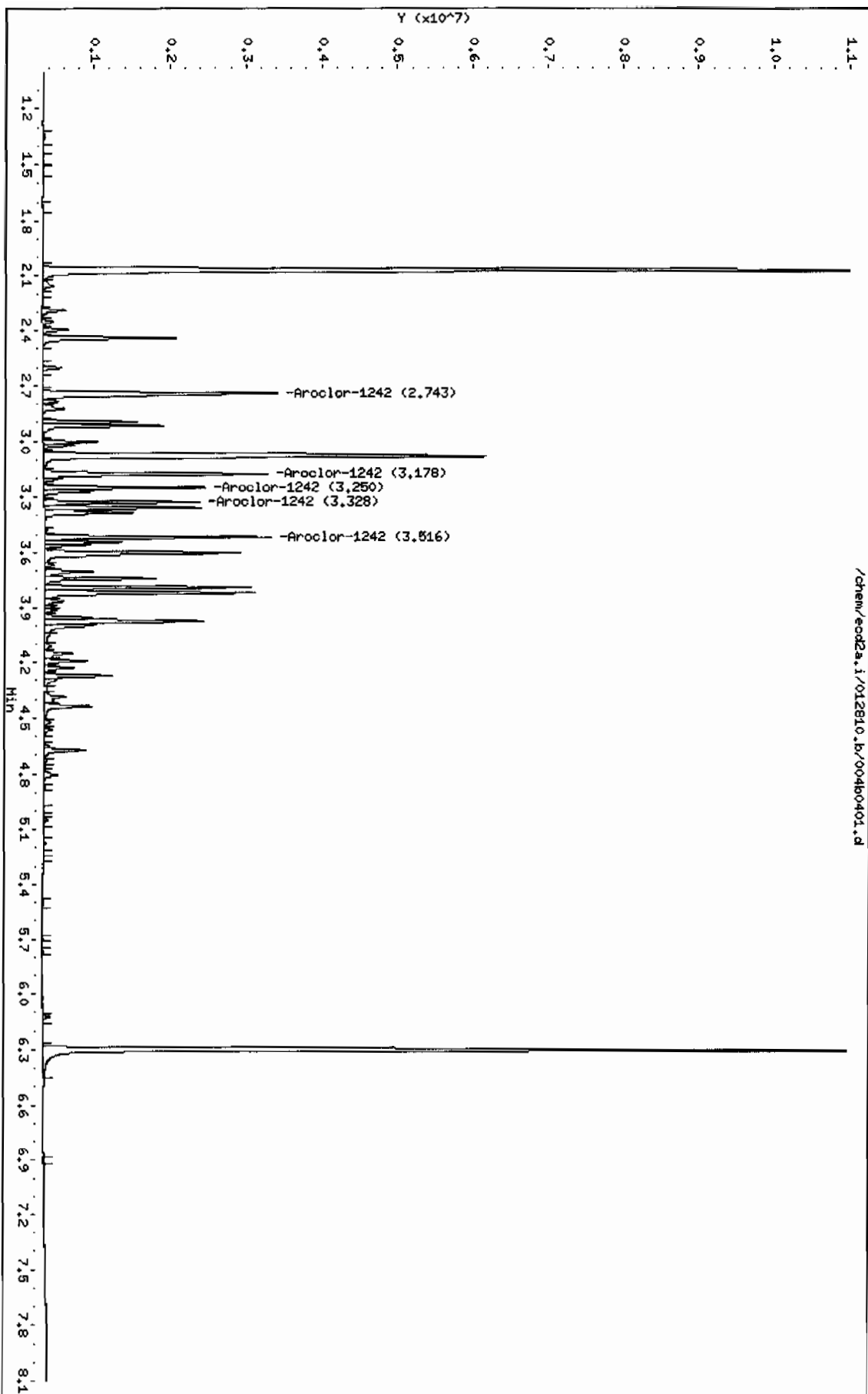
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Date: 28-JAN-2010 07:33
Client ID: AR124201
Sample Info: IMAR091217-42

Instrument: eod2a.i

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Column Phase: CLP2

Operator: JHOC
Column diameter: 0.25



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

Page 1

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

RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (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: ARI24801
Sample Info: IMA091217-48

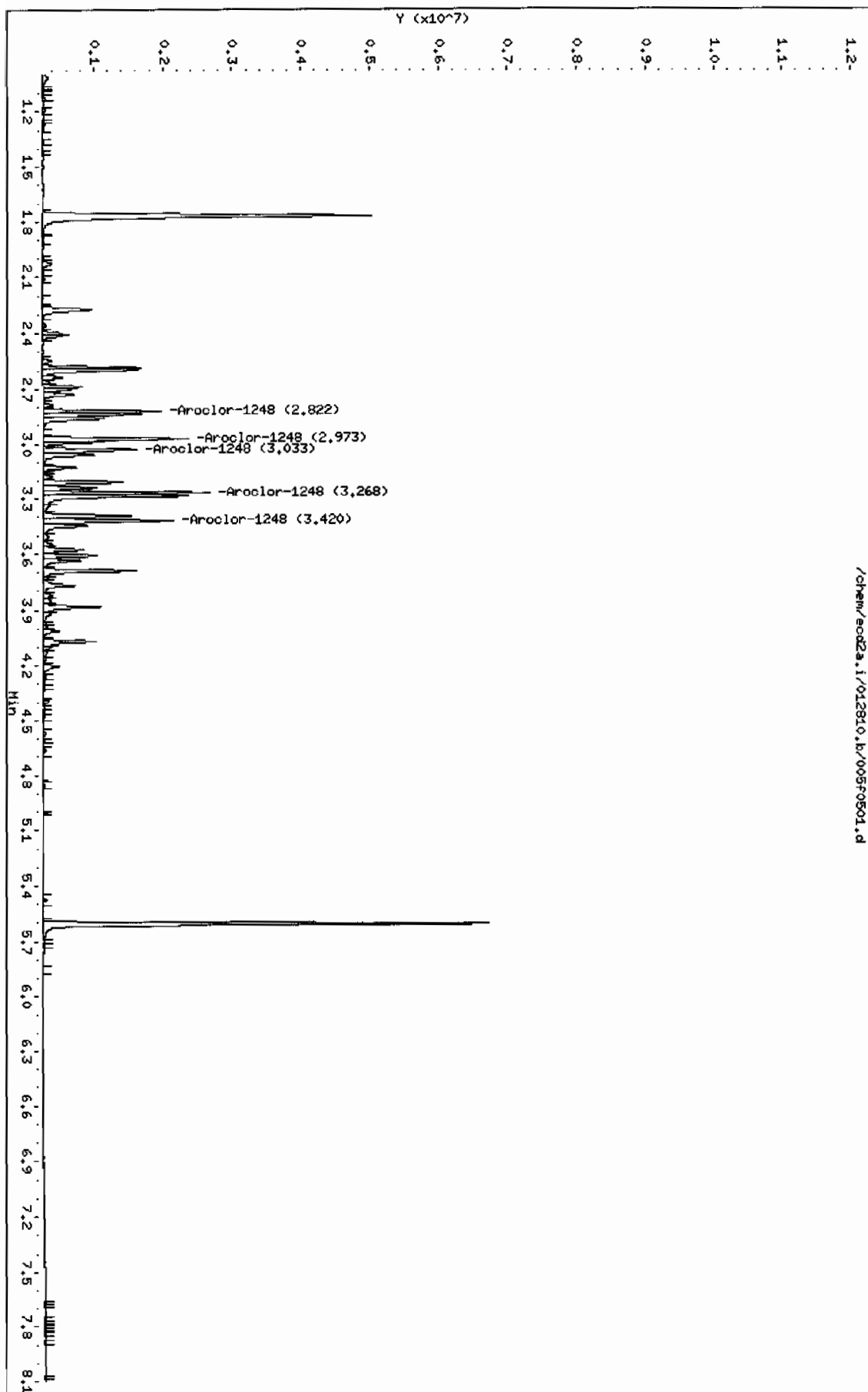
Instrument: ecod2a.i

Page 1

Column phase: CLP1

Operator: JADC
Column diameter: 0.25

/chem/ecod2a.i/012810.b/005f0501.d



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

CAL-AMT ON-COL

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

5 Aroclor-1248

CAS #: 12672-29-6

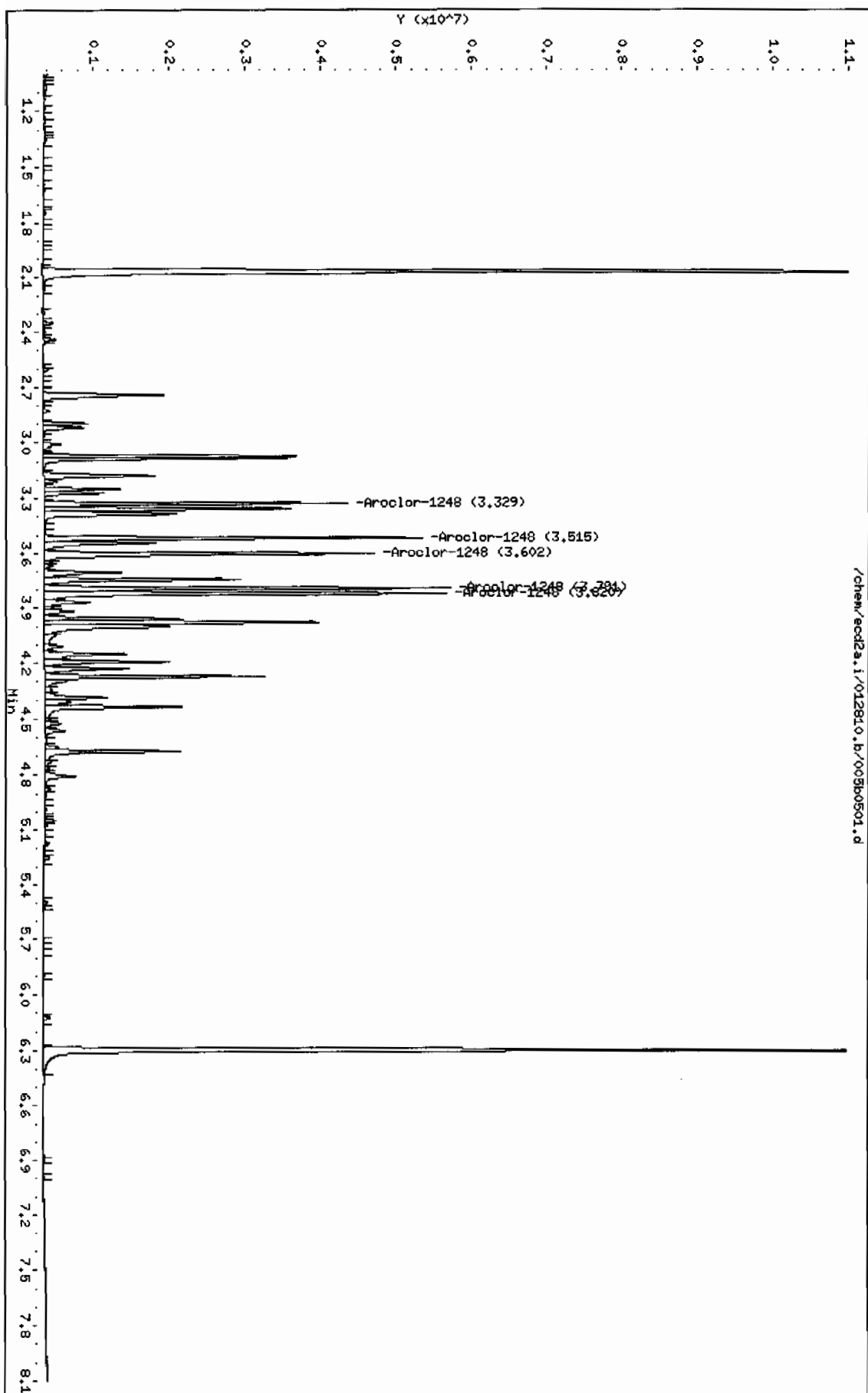
3.329	3.329	0.000	3215095	1000.00	979 80.00~ 120.00	100.00
3.515	3.515	0.000	4142321	1000.00	989 108.84~ 148.84	128.84
3.602	3.602	0.000	4435829	1000.00	996 117.97~ 157.97	137.97
3.791	3.791	0.000	4552663	1000.00	969 121.60~ 161.60	141.60
3.820	3.820	0.000	5384914	1000.00	999 147.49~ 187.49	167.49

Average of Peak Amounts = 987

Data File: /chem/ecd2a.i/012810.b/005b0501.d
Date : 28-JAN-2010 07:44
Client ID: 4R124801
Sample Info: 1MAR091217-48

Column phase: CLP2

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



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

CAL-AMT ON-COL

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

3 Aroclor-1232

CAS #: 11141-16-5

2.025	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/ecod2a.i/012810.b/006f0601.d

Date: 28-JAN-2010 07:55

Client ID: AR123201

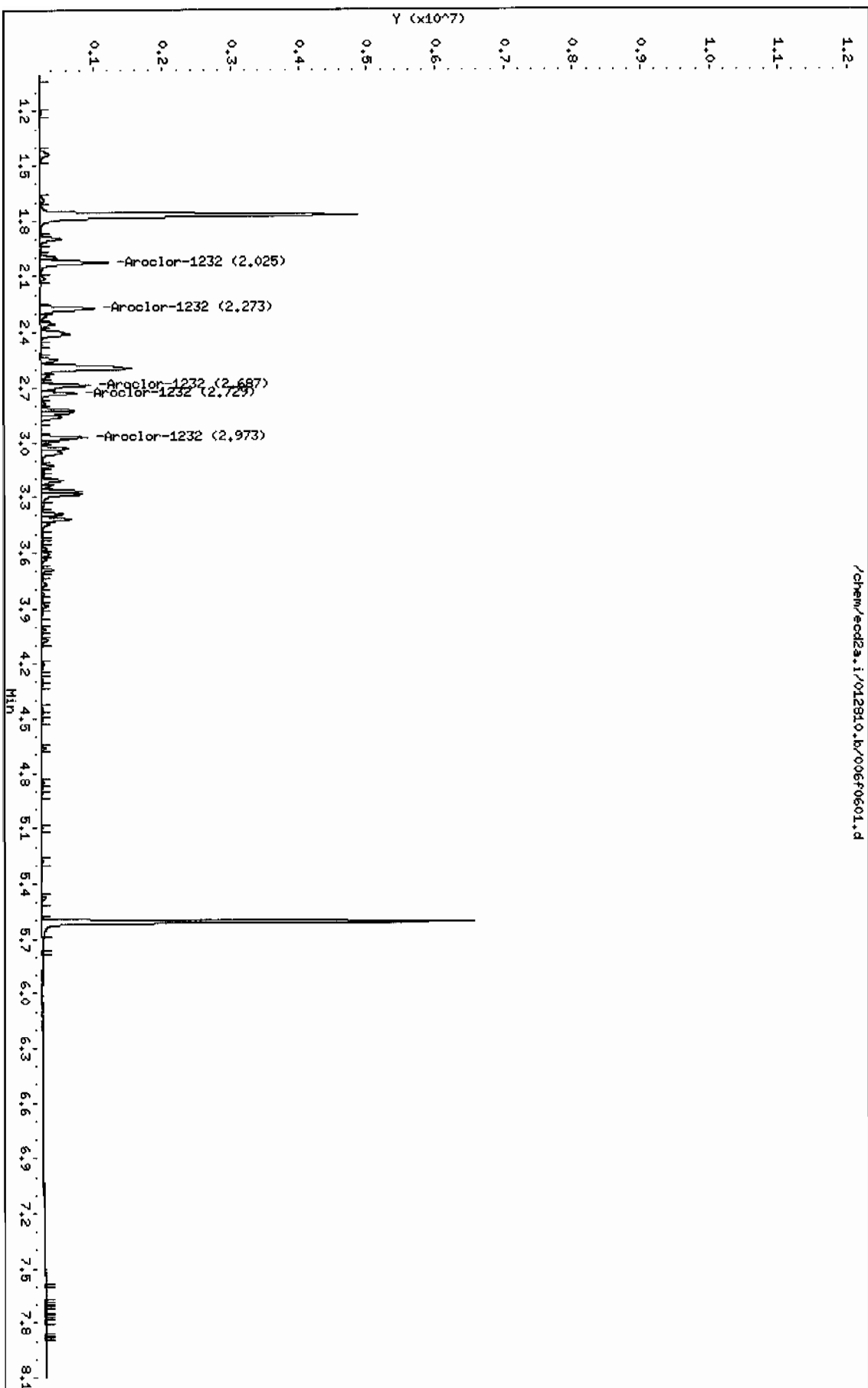
Sample Info: HMR100104-32

Column phase: CLP1

Instrument: ecod2a.i

Operator: JAO

Column diameter: 0.25



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

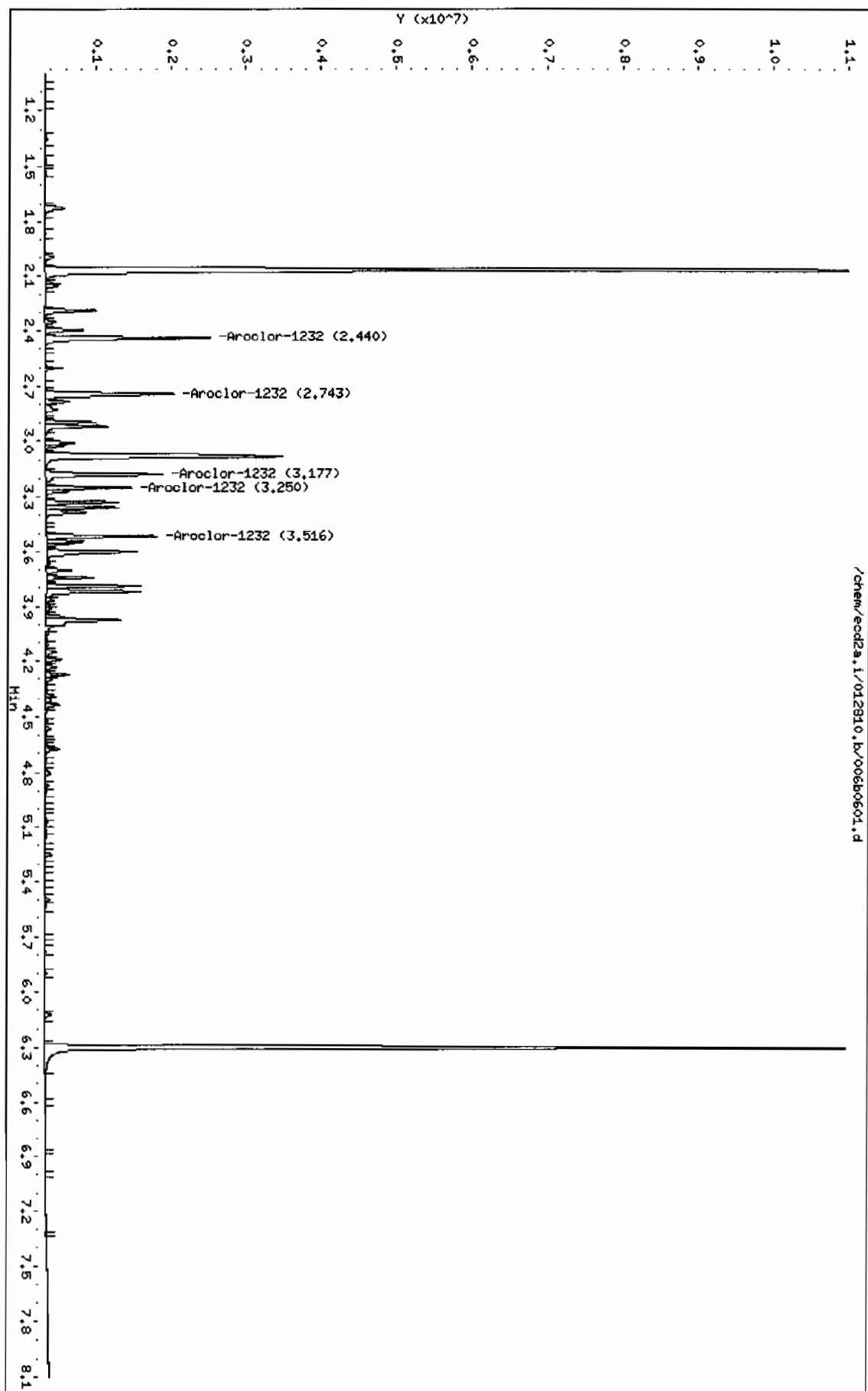
			CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/L)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	=====
3 Aroclor-1232				CAS #: 11141-16-5			
2.440	2.440	0.000	2212125 1000.00	870	80.00- 120.00	100.00	
2.743	2.743	0.000	2121886 1000.00	966	75.92- 115.92	95.92	
3.177	3.177	0.000	1658555 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/eod2a.i/012810.k/00600601.d
Date : 28-JAN-2010 07:55
Client ID: AR123201
Sample Info: IMA100104-32

Column phase: CLP2

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

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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/eod2a.i/012810.b/007f0701.d

Date: 28-JAN-2010 08:07

Client ID: AR122101

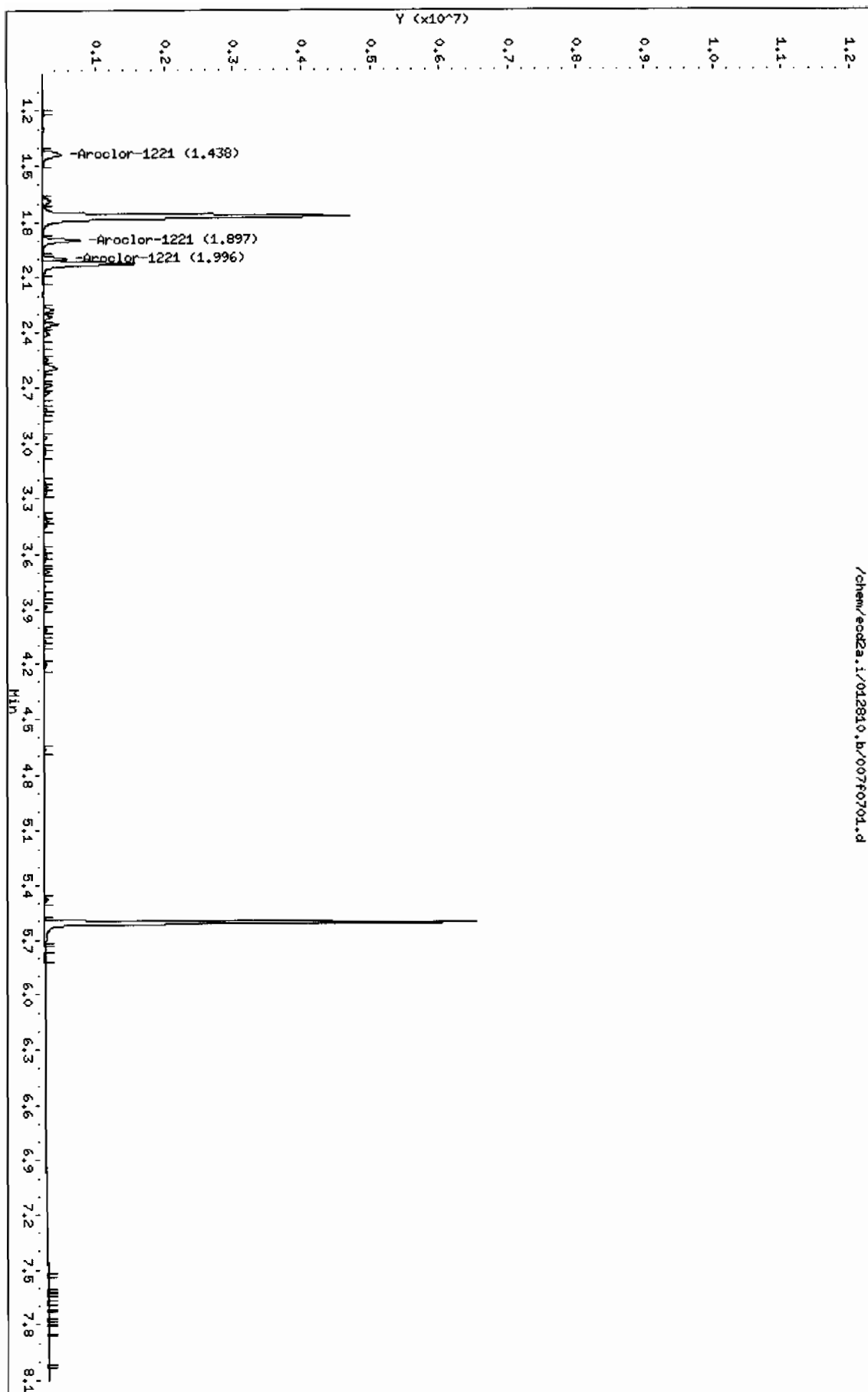
Sample Info: 1MAR100104-21

Column phase: CLP1

Instrument: eod2a.i

Operator: JAD

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/ecd2a.i/012810.b/007b0701.d

Date: 28-JAN-2010 08:07

Client ID: KR122101

Sample Info: I4MR100104-21

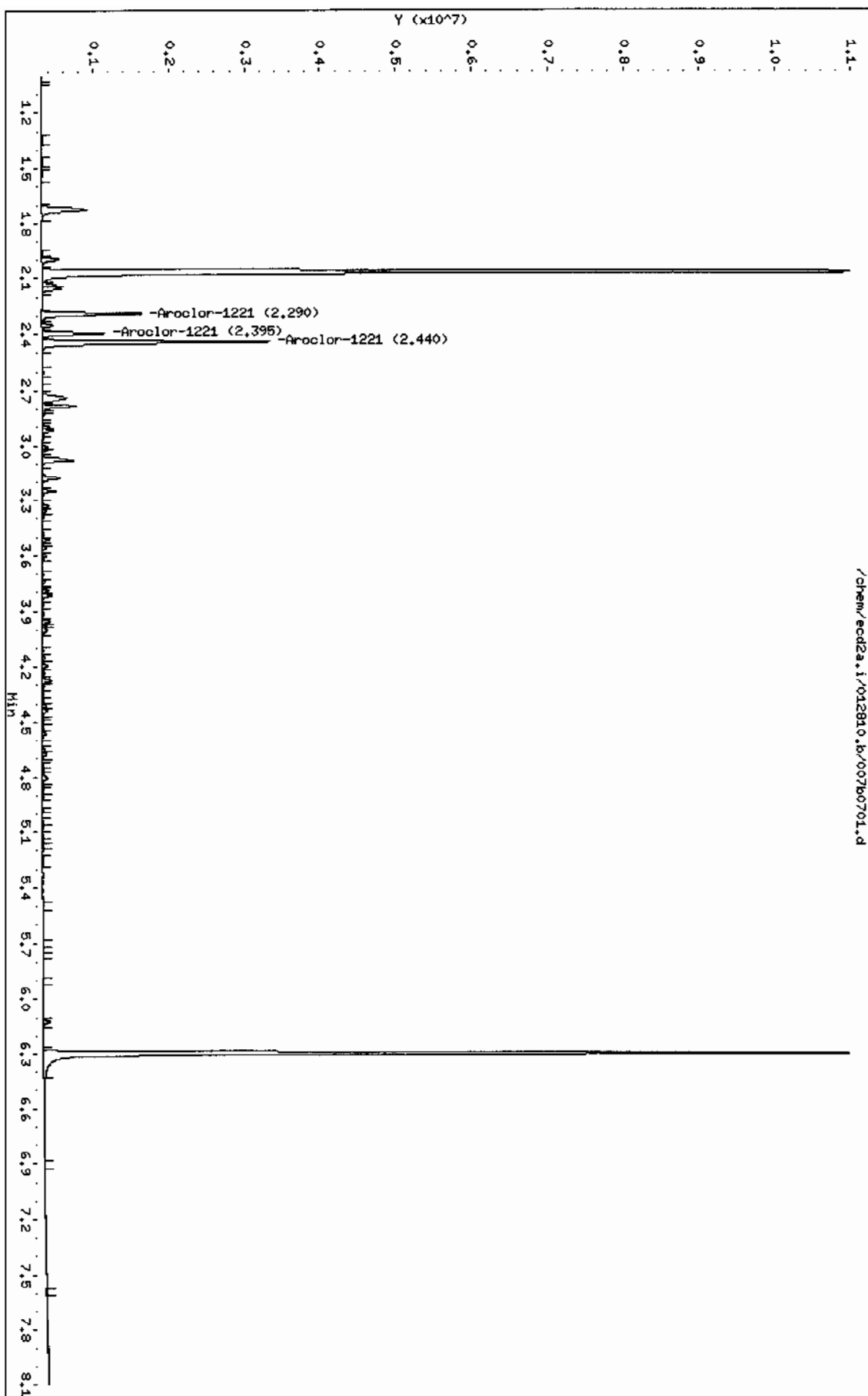
Column phase: CLP2

Instrument: ecd2a.i

Operator: JHOC

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			

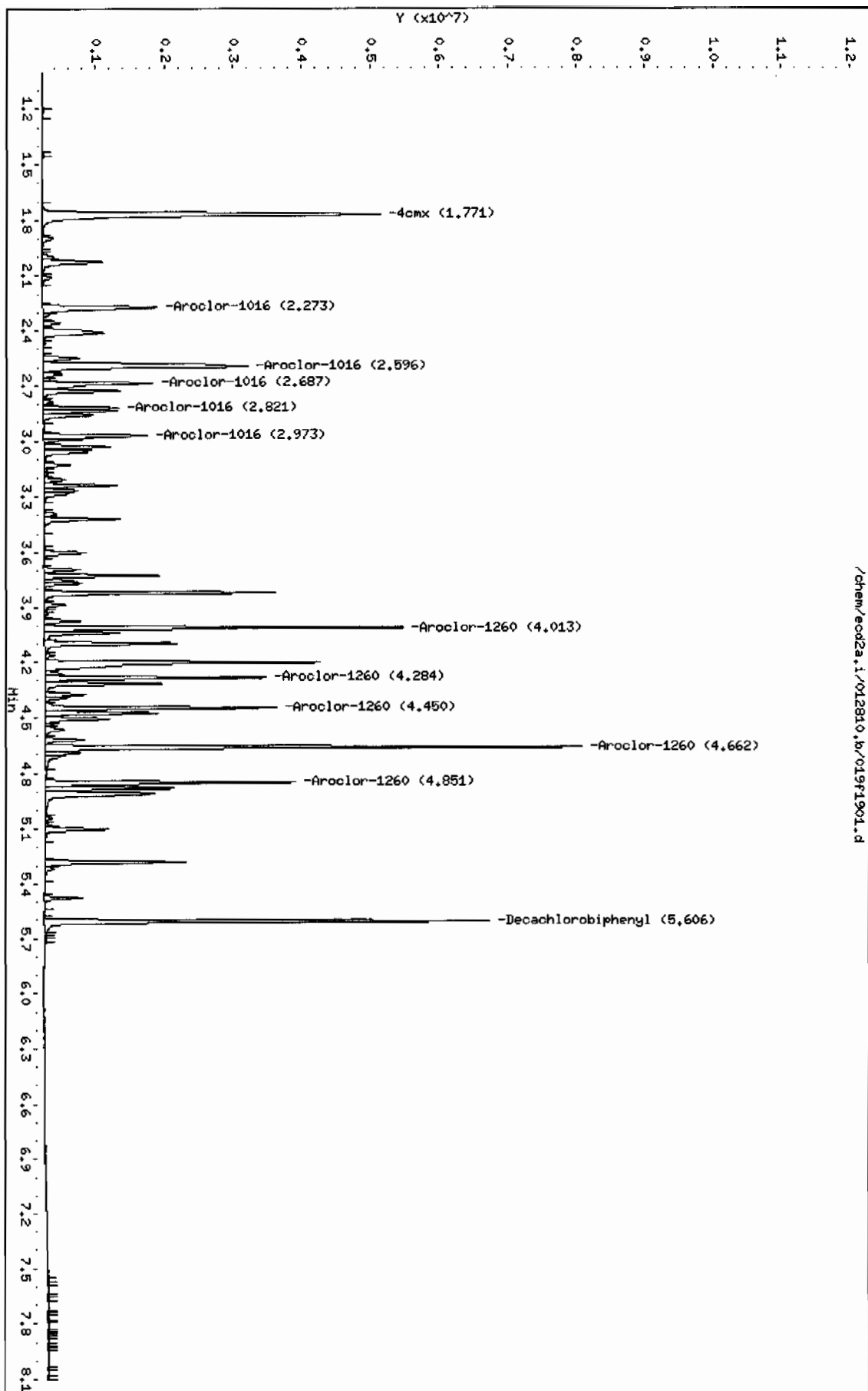
Data File: /chem/eod2a.i/012810.b/019f1901.d
Date: 28-JAN-2010 10:19
Client ID: AR166002
Sample Info: 1MR100104-60 02

Instrument: eod2a.i

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Column phase: CLP1

Operator: JHOC
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

			CAL-AMT		ON-COL		
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(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

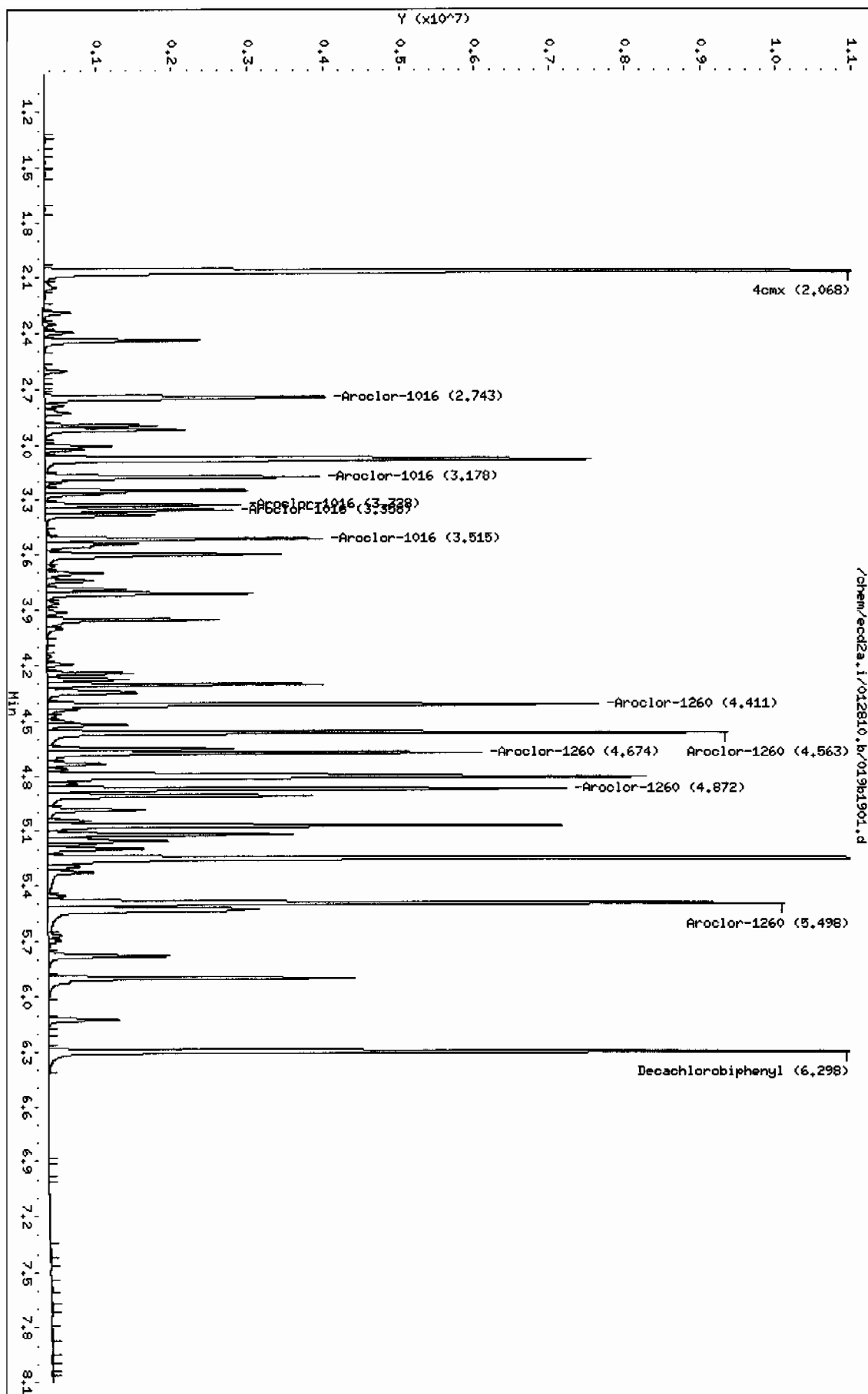
Sample Info: IMR100104-60 02

Column phase: CLP2

Instrument: eod2a.i

Operator: JROC

Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/029f2901.d

Lab Smp Id: WAR100104-60 03

Client Smp ID: AR166003

Inj Date : 28-JAN-2010 12:10

Operator : JAOC

Inst ID: ecd2a.i

Smp Info : |WAR100104-60 03

Misc Info : |PCB_CVS|1660||CVS|

Comment :

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

Meth Date : 28-Jan-2010 14:02 jen01212 Quant Type: ESTD

Cal Date : 21-JAN-2010 08:45

Cal File: 010f1001.d

Als bottle: 29

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	RT	RESPONSE (ug/L)	(ug/L)	TARGET RANGE	RATIO	
==	=====	=====		=====	=====	=====	=====	
\$ 11 4cmx					CAS #: 877-09-8			
1.771	1.770	0.001	6743598	100.000	101	80.00- 120.00	100.00	

\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3			
5.605	5.604	0.001	6022257	100.000	95.0	80.00- 120.00	100.00	

1 Aroclor-1016					CAS #: 12674-11-2			
2.272	2.271	0.001	2145279	1000.00	950	80.00- 120.00	100.00	
2.596	2.595	0.001	4573388	1000.00	988	193.18- 233.18	213.18	
2.687	2.685	0.002	1824348	1000.00	960	65.04- 105.04	85.04	
2.821	2.820	0.001	925090	1000.00	941	23.12- 63.12	43.12	
2.974	2.971	0.003	1388549	1000.00	957	44.73- 84.73	64.73	
Average of Peak Amounts =					959			

7 Aroclor-1260					CAS #: 11096-82-5			
4.013	4.011	0.002	4448529	1000.00	1030	80.00- 120.00	100.00	
4.285	4.282	0.003	2792387	1000.00	1000	42.77- 82.77	62.77	
4.450	4.449	0.001	2929208	1000.00	1020	45.85- 85.85	65.85	
4.662	4.661	0.001	6821139	1000.00	1040	133.33- 173.33	153.33	
4.851	4.850	0.001	3300262	1000.00	1030	54.19- 94.19	74.19	
Average of Peak Amounts =					1.03e+03			

Data File: /chem/ecod2a.i/012810.b/029f2901.d
Date: 28-JAN-2010 12:10
Client ID: MR166003
Sample Info: IMR100104-60 03

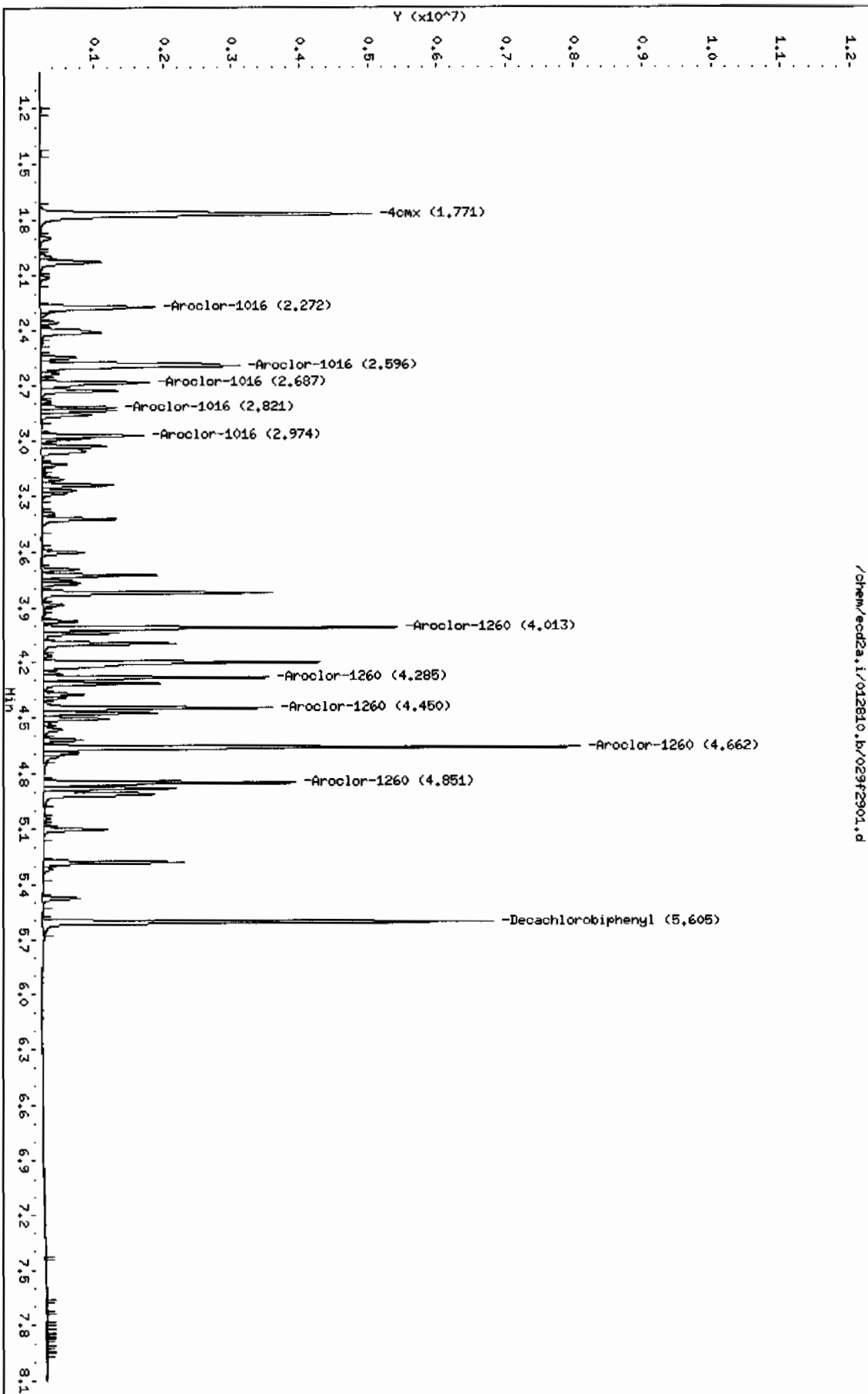
Instrument: ecod2a.i

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Column phase: CLP1

Operator: JHOC
Column diameter: 0.25

/chem/ecod2a.i/012810.b/029f2901.d



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/029b2901.d

Lab Smp Id: WAR100104-60 03

Client Smp ID: AR166003

Inj Date : 28-JAN-2010 12:10

Operator : JAOC

Inst ID: ecd2a.i

Smp Info : |WAR100104-60 03

Misc Info : |PCB_CVS|1660||CVS|

Comment :

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

Meth Date : 28-Jan-2010 14:01 jen01212 Quant Type: ESTD

Cal Date : 21-JAN-2010 08:45

Cal File: 010b1001.d

Als bottle: 29

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		
2.067	2.067	0.000	14573893 100.000	104	80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3		
6.297	6.297	0.000	11737443 100.000	94.2	80.00- 120.00	100.00

1 Aroclor-1016				CAS #: 12674-11-2		
2.743	2.742	0.001	4481708 1000.00	998	80.00- 120.00	100.00
3.177	3.177	0.000	3517268 1000.00	1020	58.48- 98.48	78.48
3.329	3.327	0.002	2022308 1000.00	1000	25.12- 65.12	45.12
3.357	3.356	0.001	2110610 1000.00	1000	27.09- 67.09	47.09
3.516	3.515	0.001	2852633 1000.00	1020	43.65- 83.65	63.65

Average of Peak Amounts = 1.01e+03

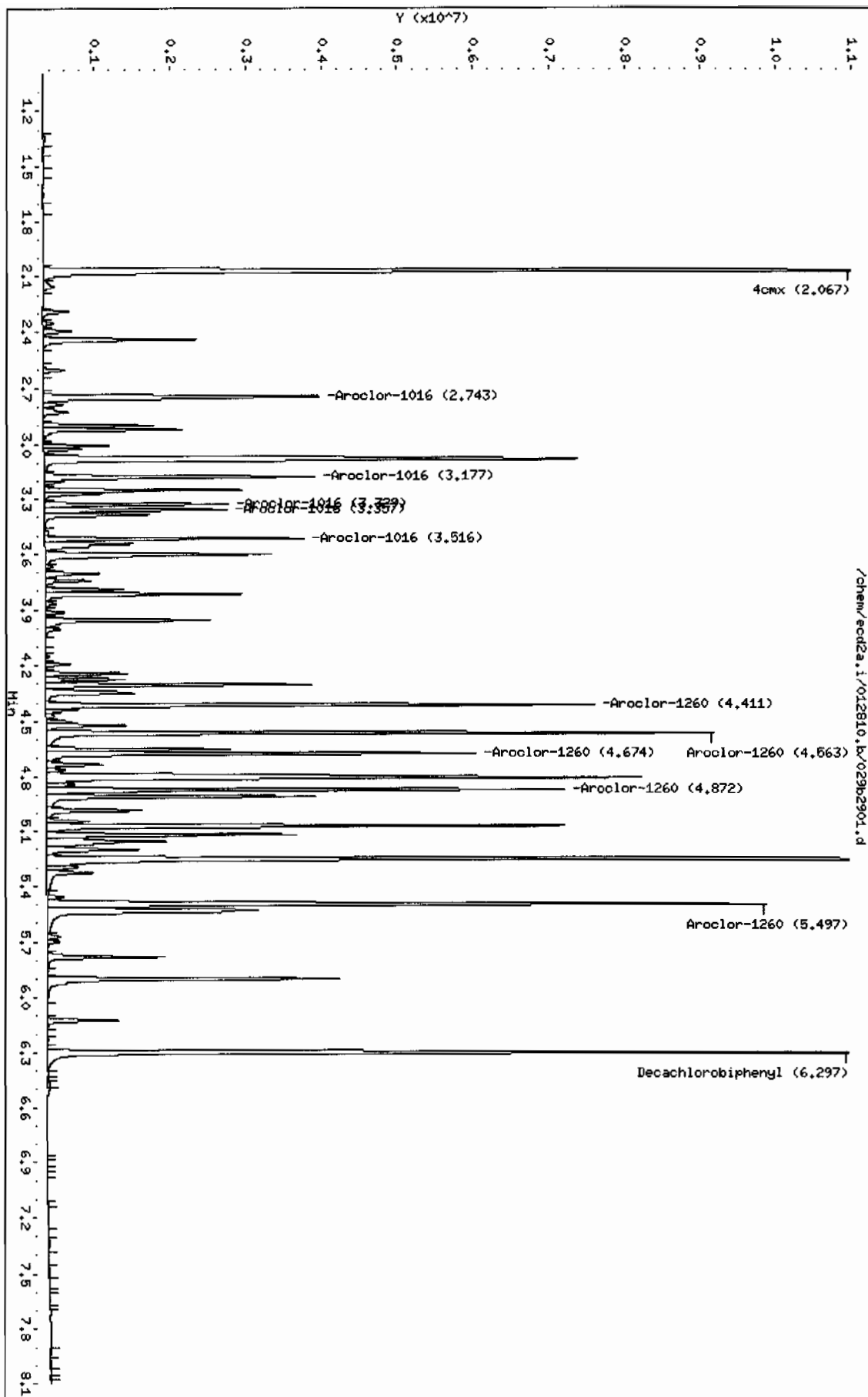
7 Aroclor-1260				CAS #: 11096-82-5		
4.411	4.411	0.000	6156180 1000.00	1060	80.00- 120.00	100.00
4.563	4.562	0.001	7787499 1000.00	1070	106.50- 146.50	126.50
4.674	4.674	0.000	5311313 1000.00	1060	66.28- 106.28	86.28
4.872	4.872	0.000	5999323 1000.00	1040	77.45- 117.45	97.45
5.497	5.497	0.000	9775469 1000.00	1040	138.79- 178.79	158.79

Average of Peak Amounts = 1.05e+03

Data File: /chem/eod2a.i/012810.b/029b2901.d
Date : 28-JAN-2010 12:10
Client ID: AR166003
Sample Info: IAR100104-60 03

Column phase: CLP2

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



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/041f4101.d

Lab Smp Id: WAR100104-60 04

Client Smp ID: AR166004

Inj Date : 28-JAN-2010 15:08

Operator : JAOC

Inst ID: ecd2a.i

Smp Info : |WAR100104-60 04

Misc Info : |PCB_CVS|1660||CVS|

Comment :

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

Meth Date : 29-Jan-2010 07:51 jen01212

Quant Type: ESTD

Cal Date : 21-JAN-2010 08:45

Cal File: 010f1001.d

Als bottle: 41

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	6755940 100.000	101	80.00- 120.00	100.00		

\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3			
5.606	5.604	0.002	5739315 100.000	90.5	80.00- 120.00	100.00		

1 Aroclor-1016					CAS #: 12674-11-2			
2.273	2.271	0.002	2164349 1000.00	958	80.00- 120.00	100.00 (M)		
2.596	2.595	0.001	4618079 1000.00	998	193.81- 233.81	213.37		
2.687	2.685	0.002	1868529 1000.00	983	65.45- 105.45	86.33		
2.822	2.820	0.002	943628 1000.00	959	23.56- 63.56	43.60		
2.973	2.971	0.002	1451233 1000.00	1000	43.21- 83.21	67.05		
Average of Peak Amounts =				980				

7 Aroclor-1260					CAS #: 11096-82-5			
4.013	4.011	0.002	4573586 1000.00	1060	80.00- 120.00	100.00		
4.285	4.282	0.003	2863785 1000.00	1030	43.03- 83.03	62.62		
4.450	4.449	0.001	2910885 1000.00	1020	44.66- 84.66	63.65		
4.663	4.661	0.002	6916759 1000.00	1050	133.56- 173.56	151.23		
4.852	4.850	0.002	3346885 1000.00	1050	54.46- 94.46	73.18		
Average of Peak Amounts =				1.04e+03				

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/eod2a.i/012810.b/041f4101.d

Date : 28-JAN-2010 15:08

Client ID: AR166004

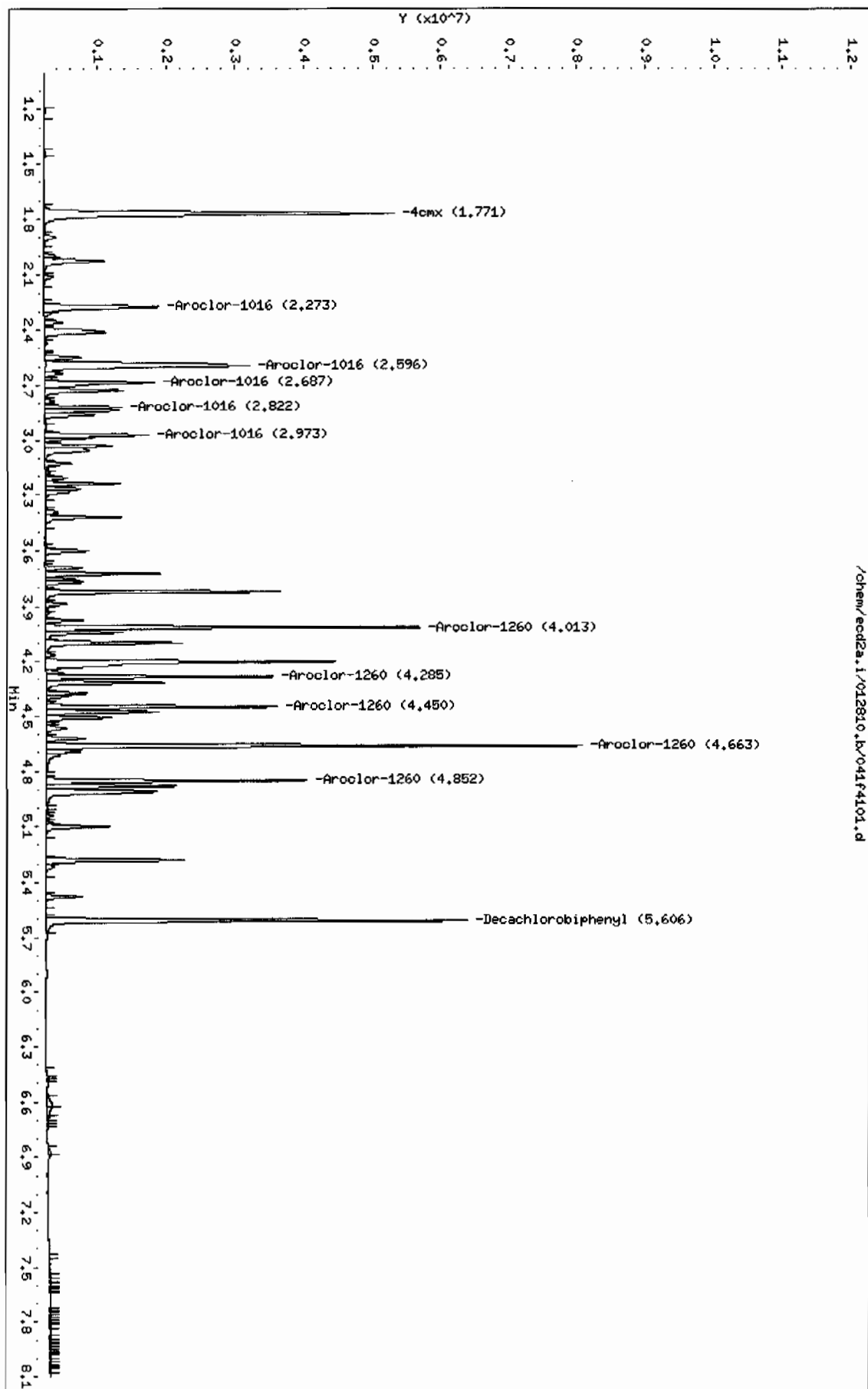
Sample Info: IMR100104-60 04

Column phase: CLP1

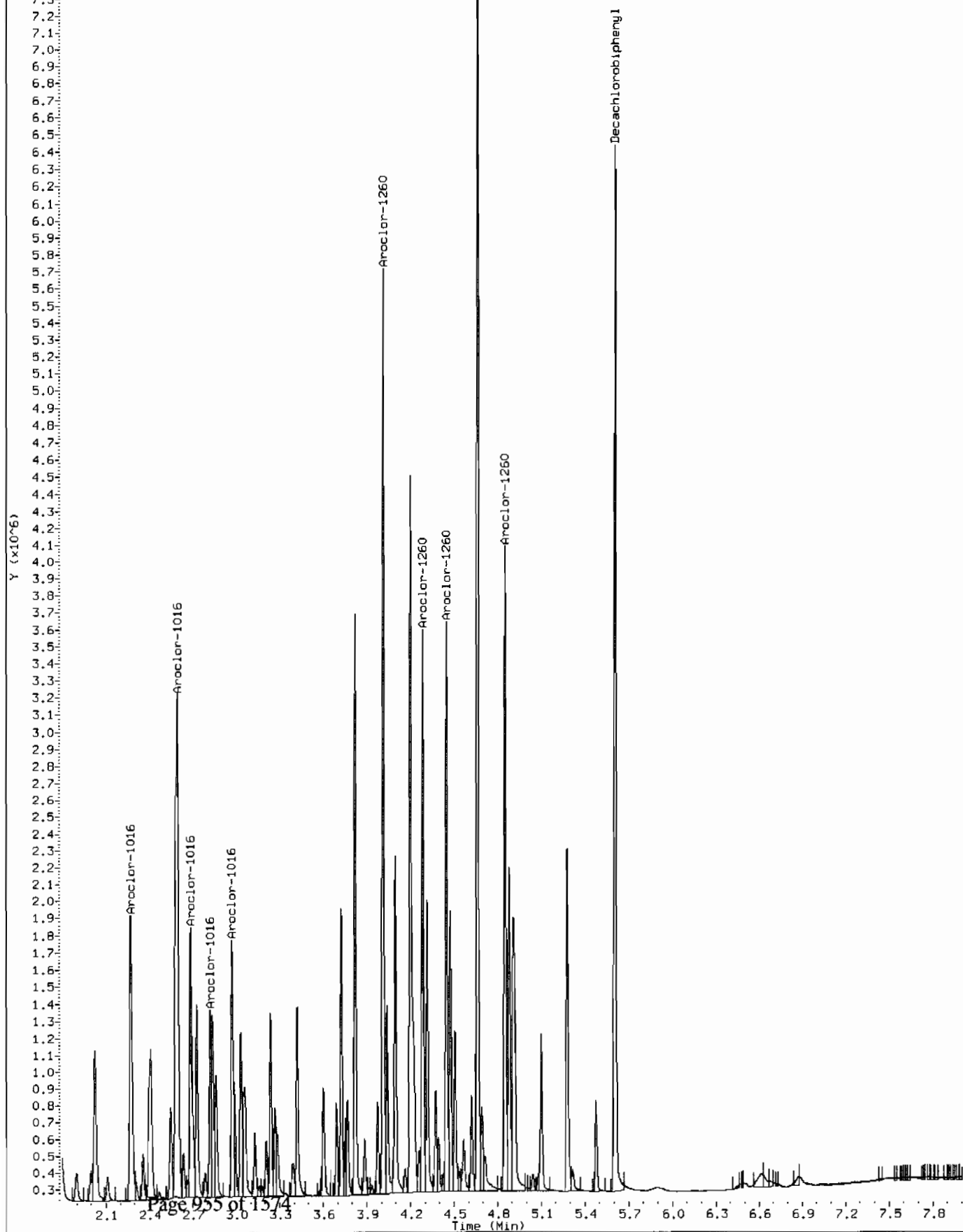
Instrument: eod2a.i

Operator: JMO

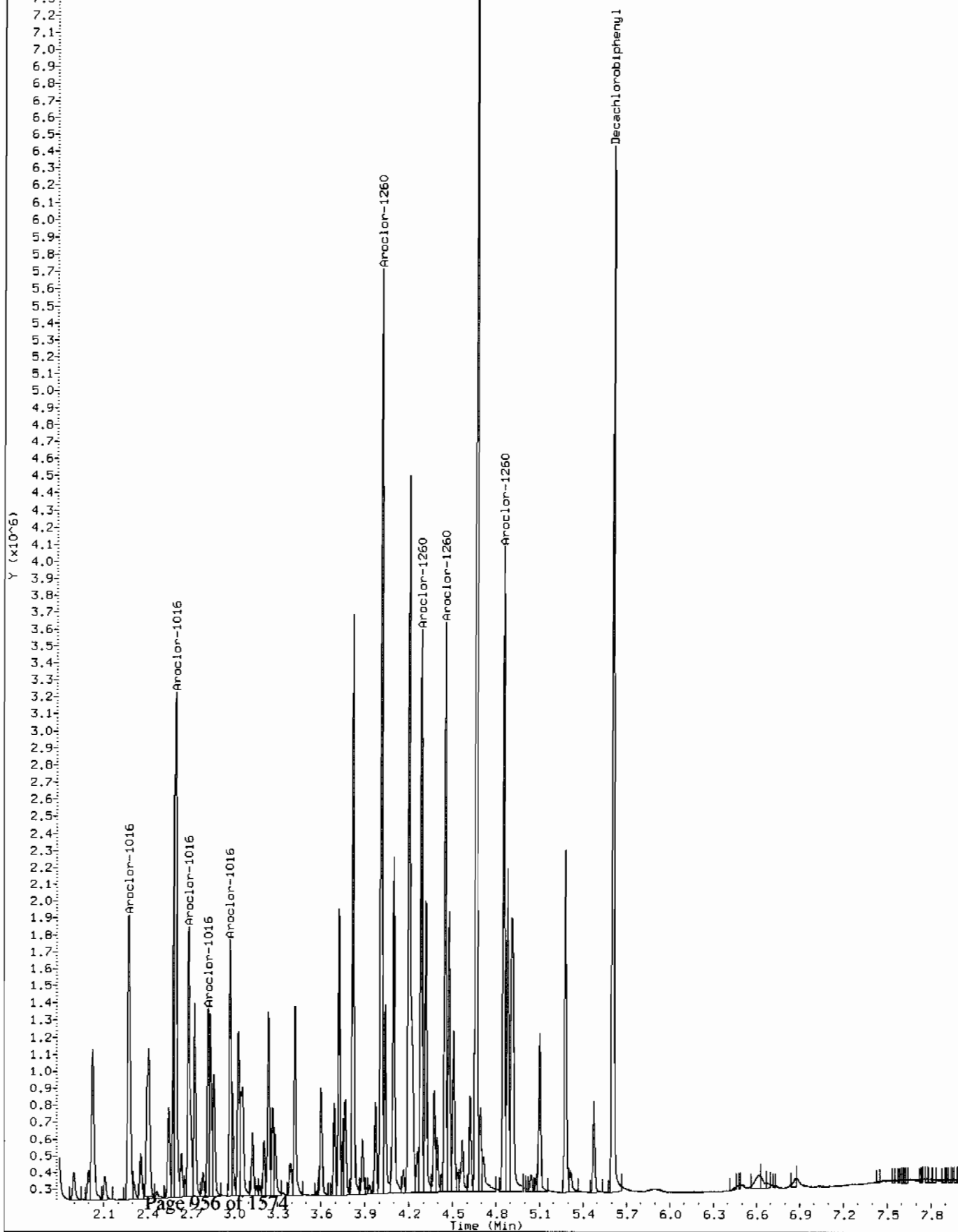
Column diameter: 0.25



Comment: Manually Integrated
Data File: /chem/ecd2a.i/012810.b/041f4101.d
Operator: JAOC
Injection Date: 28-JAN-2010 15:08
Instrument: ecd2a.i
Client Sample ID: AR166004



Comment: Before manual integration
Data File: /chem/ecd2a.i/012810.b/orig-041f4101.d
Operator: JAOC
Injection Date: 28-JAN-2010 15:08
Instrument: ecd2a.i
Client Sample ID: AR166004



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/041b4101.d

Lab Smp Id: WAR100104-60 04

Client Smp ID: AR166004

Inj Date : 28-JAN-2010 15:08

Operator : JAOC

Inst ID: ecd2a.i

Smp Info : |WAR100104-60 04

Misc Info : |PCB_CVS|1660||CVS|

Comment :

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

Meth Date : 29-Jan-2010 07:38 jen01212 Quant Type: ESTD

Cal Date : 21-JAN-2010 08:45

Cal File: 010b1001.d

Als bottle: 41

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			
2.068	2.067	0.001	14551221	100.000	104	80.00- 120.00	100.00	

\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3			
6.298	6.297	0.001	10970220	100.000	88.1	80.00- 120.00	100.00	

1 Aroclor-1016					CAS #: 12674-11-2			
2.743	2.742	0.001	4499785	1000.00	1000	80.00- 120.00	100.00	
3.178	3.177	0.001	3561642	1000.00	1040	59.21- 99.21	79.15	
3.329	3.327	0.002	2057954	1000.00	1020	25.73- 65.73	45.73	
3.357	3.356	0.001	2143781	1000.00	1020	27.53- 67.53	47.64	
3.516	3.515	0.001	2907685	1000.00	1040	44.90- 84.90	64.62	
Average of Peak Amounts =					1.02e+03			

7 Aroclor-1260					CAS #: 11096-82-5			
4.412	4.411	0.001	6171376	1000.00	1070	80.00- 120.00	100.00	
4.563	4.562	0.001	7765773	1000.00	1070	106.07- 146.07	125.84	
4.675	4.674	0.001	5262228	1000.00	1050	65.63- 105.63	85.27	
4.873	4.872	0.001	5950062	1000.00	1030	77.38- 117.38	96.41	
5.498	5.497	0.001	9380503	1000.00	998	139.35- 179.35	152.00	
Average of Peak Amounts =					1.04e+03			

Data File: /chem/ecod2a.i/012810.b/041b4101.d

Date: 28-JAN-2010 15:08

Client ID: AR166004

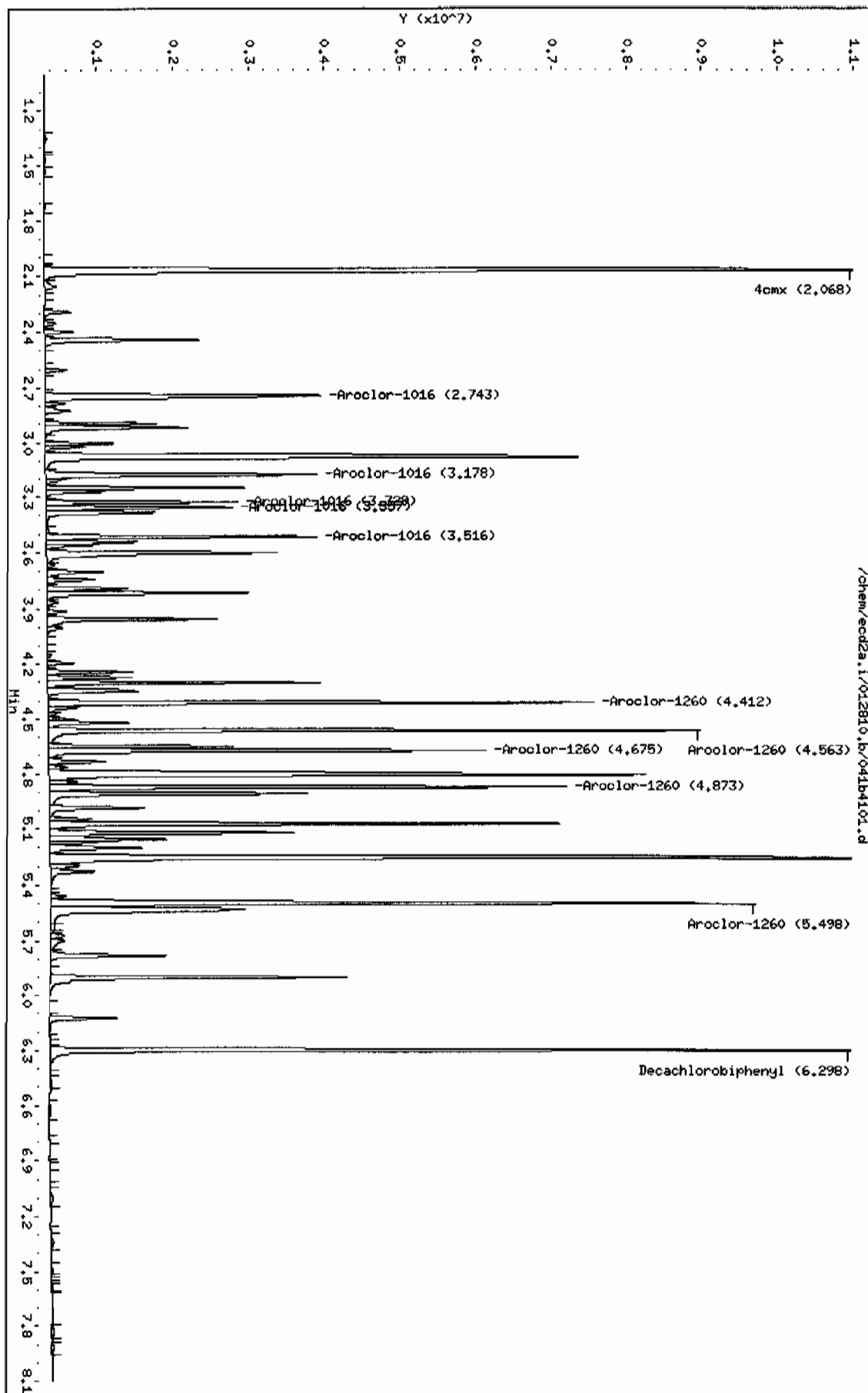
Sample Info: 1HAR100104-60 04

Column Phase: CLP2

Instrument: ecod2a.i

Operator: JROC

Column diameter: 0.25



Data File: /chem/ecd2a.i/012810.b/052f5201.d
Report Date: 29-Jan-2010 07:54

Page 1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/052f5201.d

Lab Smp Id: WAR100104-60 05

Client Smp ID: AR166005

Inj Date : 28-JAN-2010 17:10

Operator : JAOC

Inst ID: ecd2a.i

Smp Info : |WAR100104-60 05

Misc Info : |PCB_CVS|1660||CVS|

Comment :

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

Meth Date : 29-Jan-2010 07:51 jen01212 Quant Type: ESTD

Cal Date : 21-JAN-2010 08:45

Cal File: 010f1001.d

Als bottle: 52

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	
1.773	1.770	0.003	6815281	100.000	102 80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3	
5.606	5.604	0.002	5959129	100.000	94.0 80.00- 120.00	100.00

1 Aroclor-1016					CAS #: 12674-11-2	
2.274	2.271	0.003	2178802	1000.00	965 80.00- 120.00	100.00 (M)
2.597	2.595	0.002	4658467	1000.00	1010 193.81- 233.81	213.81
2.688	2.685	0.003	1861743	1000.00	980 65.45- 105.45	85.45
2.823	2.820	0.003	949061	1000.00	965 23.56- 63.56	43.56
2.974	2.971	0.003	1377167	1000.00	950 43.21- 83.21	63.21
Average of Peak Amounts =				973		

7 Aroclor-1260					CAS #: 11096-82-5	
4.013	4.011	0.002	4539697	1000.00	1060 80.00- 120.00	100.00
4.285	4.282	0.003	2861429	1000.00	1020 43.03- 83.03	63.03
4.450	4.449	0.001	2935204	1000.00	1020 44.66- 84.66	64.66
4.663	4.661	0.002	6971018	1000.00	1060 133.56- 173.56	153.56
4.852	4.850	0.002	3380411	1000.00	1060 54.46- 94.46	74.46
Average of Peak Amounts =				1.04e+03		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/eod2a.i/012810.b/052f5201.d

Date: 28-JAN-2010 17:10

Client ID: AR160005

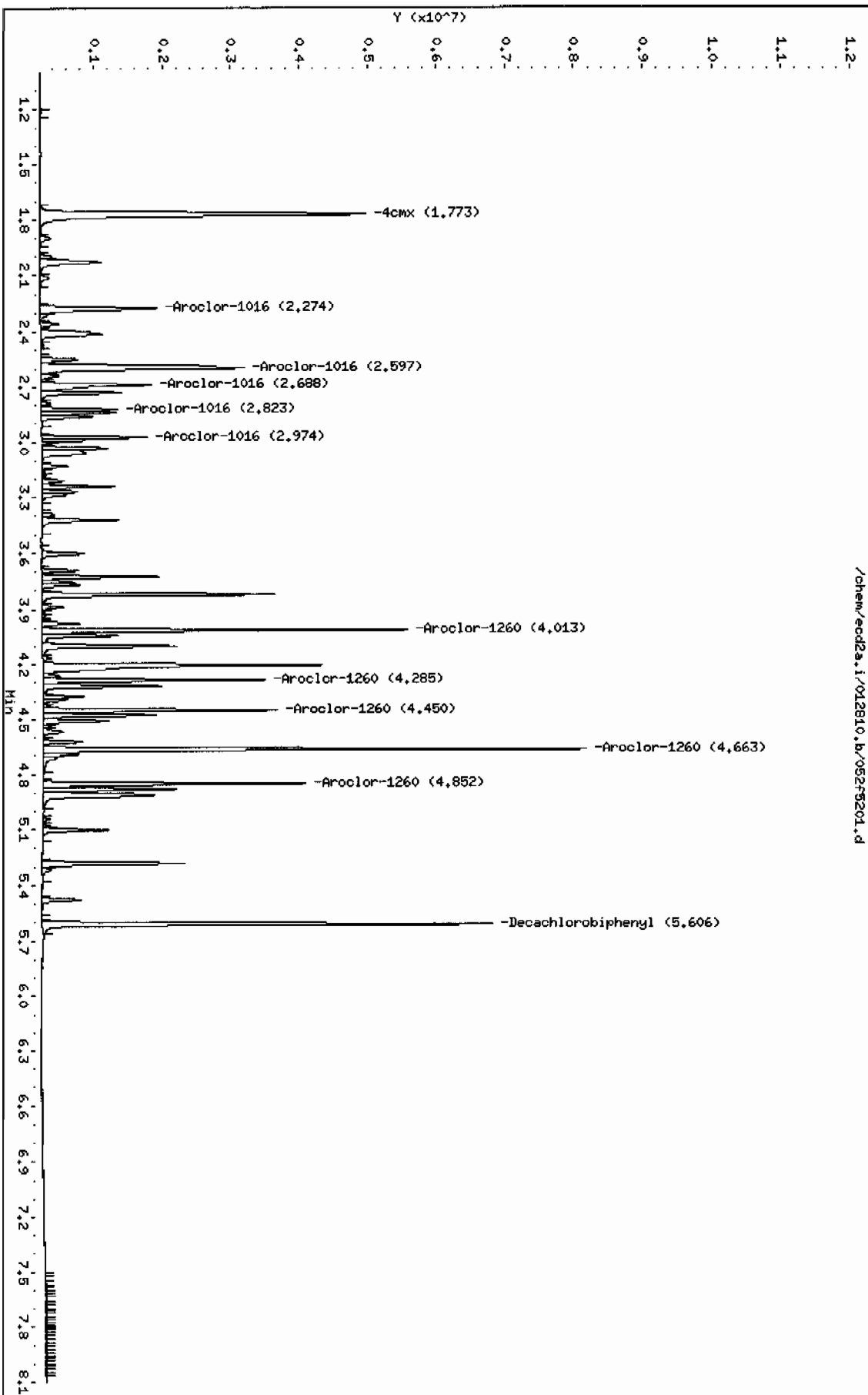
Sample Info: IMAR100104-60 05

Column phase: CLP1

Instrument: eod2a.i

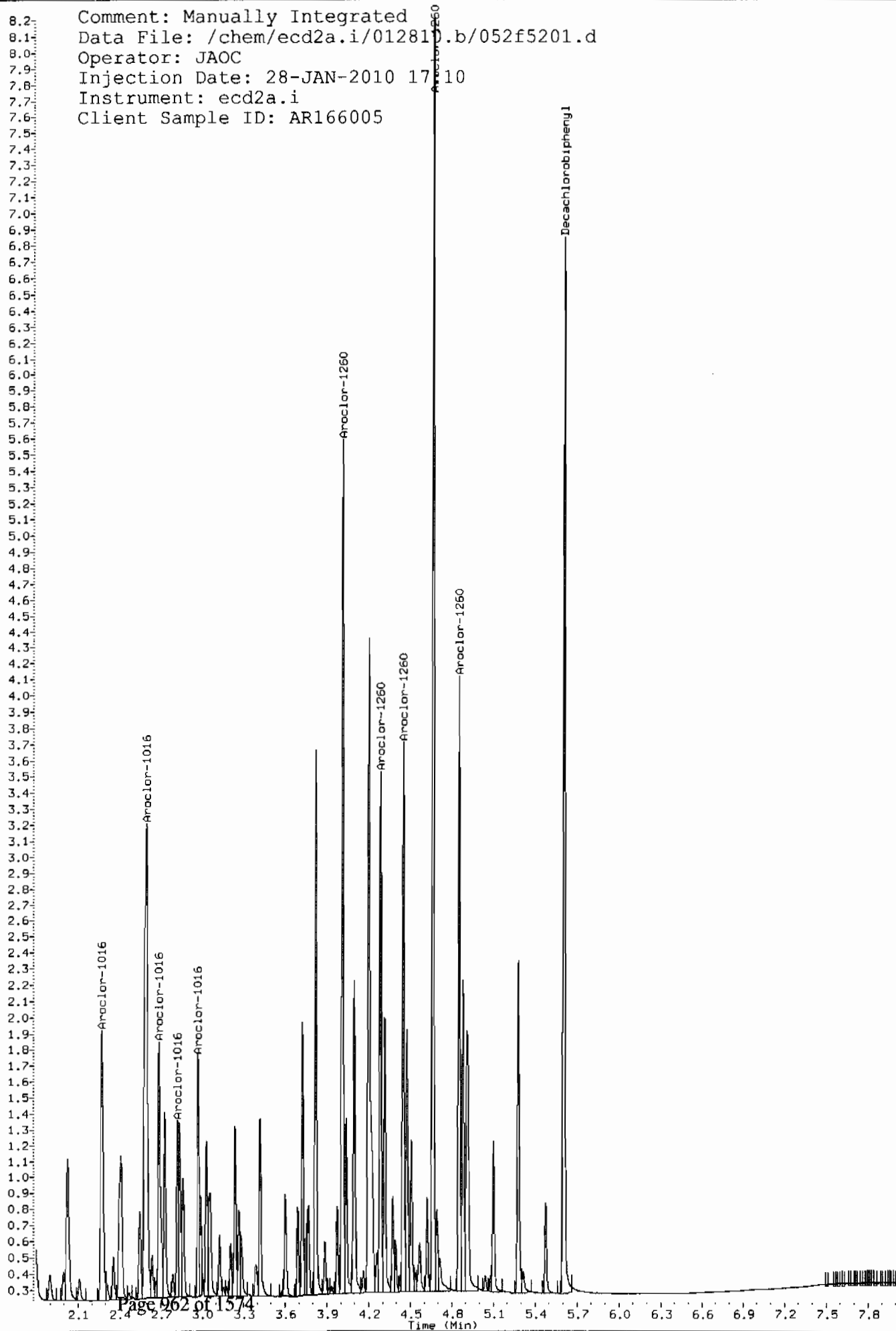
Operator: JADC

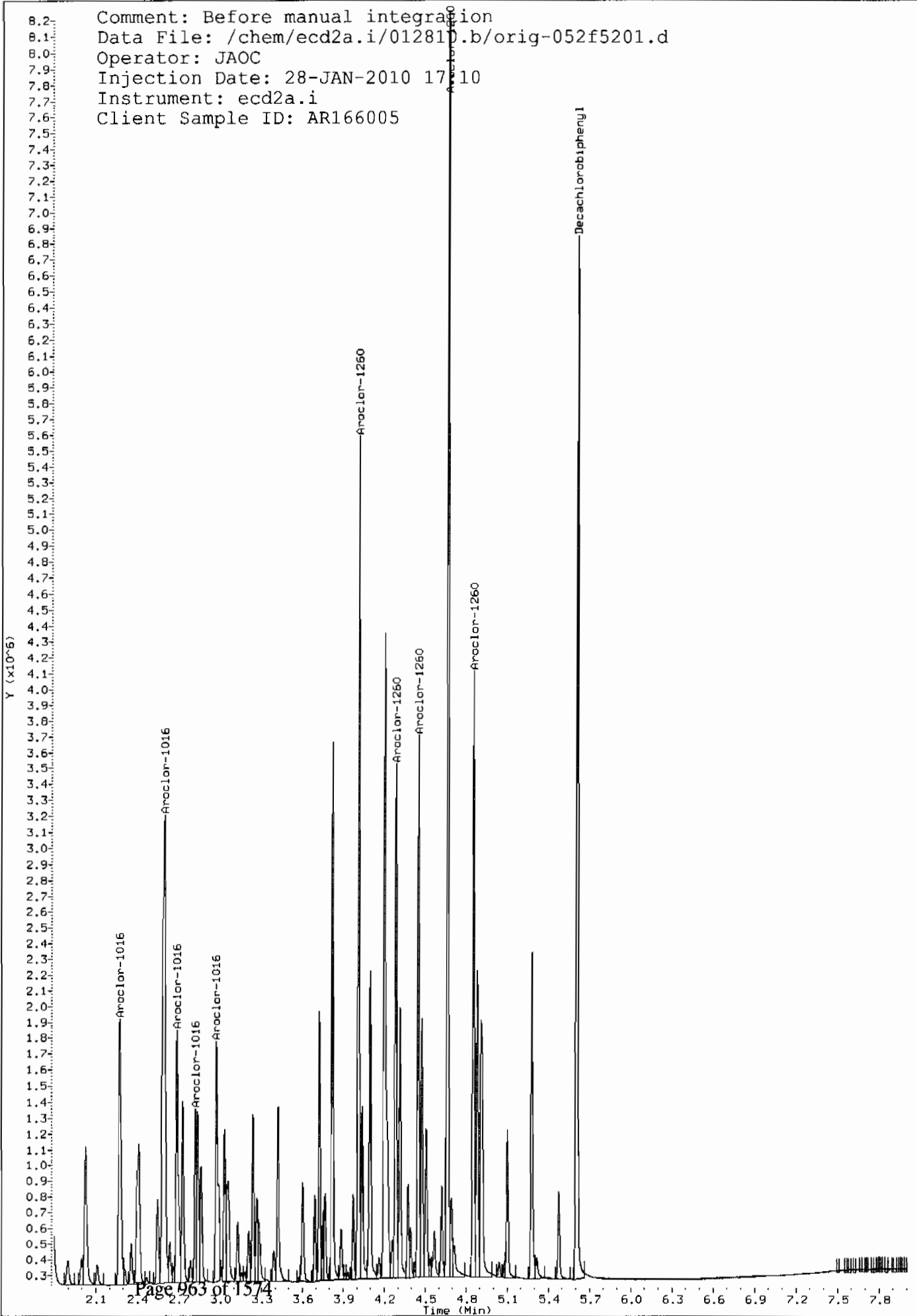
Column diameter: 0.25



Comment: Manually Integrated
Data File: /chem/ecd2a.i/012810.b/052f5201.d
Operator: JAOC
Injection Date: 28-JAN-2010 17:10
Instrument: ecd2a.i
Client Sample ID: AR166005

Y (x10⁶)



$$\overline{Y} \times 10^6$$


GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd2a.i/012810.b/052b5201.d

Lab Smp Id: WAR100104-60 05

Client Smp ID: AR166005

Inj Date : 28-JAN-2010 17:10

Operator : JAOC

Inst ID: ecd2a.i

Smp Info : |WAR100104-60 05

Misc Info : |PCB_CVS|1660||CVS|

Comment :

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

Meth Date : 29-Jan-2010 07:38 jen01212 Quant Type: ESTD

Cal Date : 21-JAN-2010 08:45

Cal File: 010b1001.d

Als bottle: 52

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
<hr/>								
\$ 11 4cmx					CAS #: 877-09-8			
2.069	2.067	0.002	14711557	100.000	105	80.00-	120.00	100.00
<hr/>								
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3			
6.297	6.297	0.000	11687617	100.000	93.8	80.00-	120.00	100.00
<hr/>								
1 Aroclor-1016					CAS #: 12674-11-2			
2.744	2.742	0.002	4537781	1000.00	1010	80.00-	120.00	100.00
3.178	3.177	0.001	3594266	1000.00	1050	59.21-	99.21	79.21
3.329	3.327	0.002	2075216	1000.00	1030	25.73-	65.73	45.73
3.357	3.356	0.001	2156701	1000.00	1020	27.53-	67.53	47.53
3.516	3.515	0.001	2945196	1000.00	1050	44.90-	84.90	64.90
Average of Peak Amounts =					1.03e+03			
<hr/>								
7 Aroclor-1260					CAS #: 11096-82-5			
4.412	4.411	0.001	6213243	1000.00	1070	80.00-	120.00	100.00
4.563	4.562	0.001	7833002	1000.00	1080	106.07-	146.07	126.07
4.675	4.674	0.001	5320345	1000.00	1060	65.63-	105.63	85.63
4.872	4.872	0.000	6050713	1000.00	1040	77.38-	117.38	97.38
5.497	5.497	0.000	9900740	1000.00	1050	139.35-	179.35	159.35
Average of Peak Amounts =					1.06e+03			

Data File: /chem/eod2a.i/012810.b/05285201.d

Date: 28-JAN-2010 17:10

Client ID: AR16005

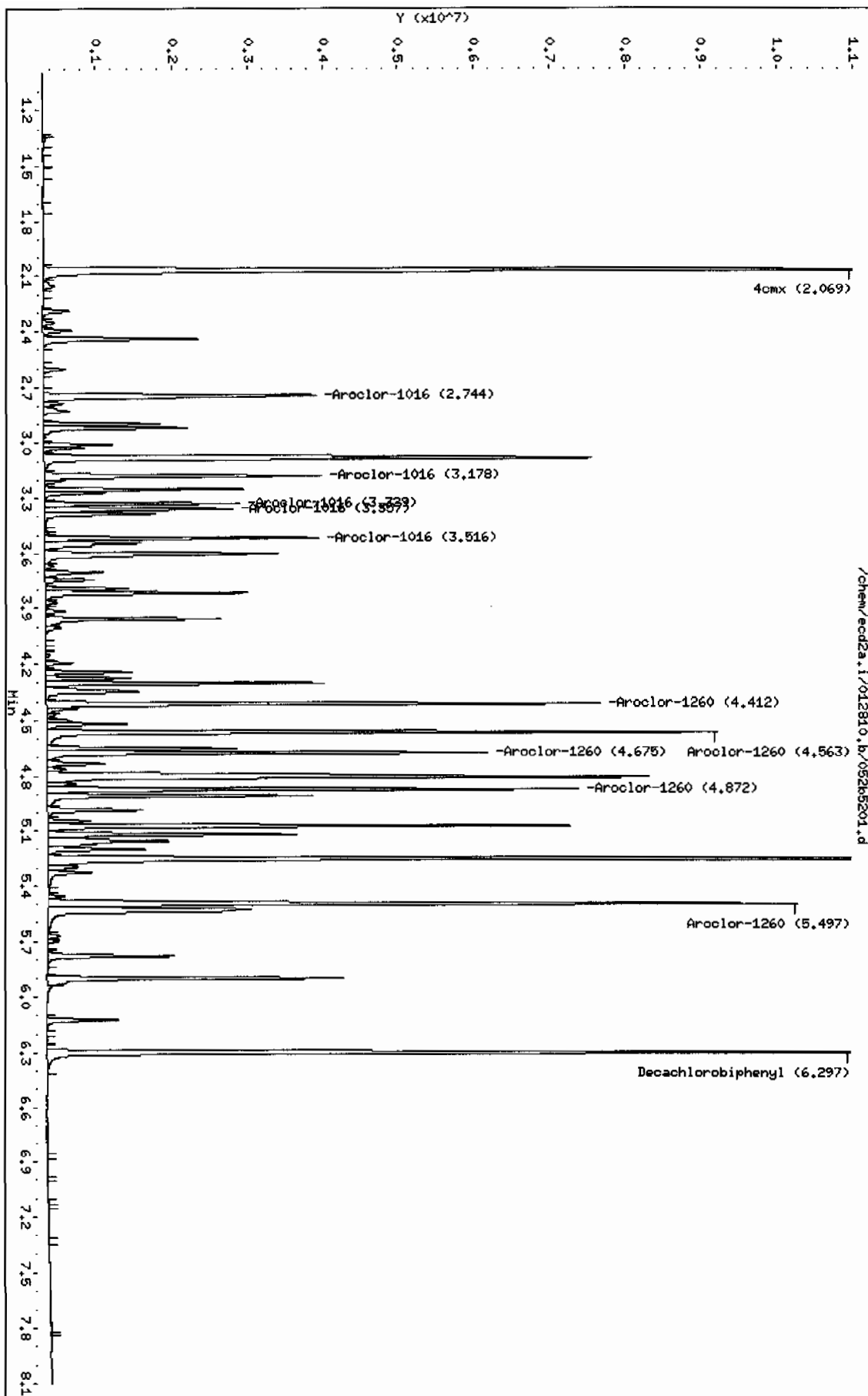
Sample Info: IWR100104-60 05

Column phase: CLP2

Instrument: eod2a.i

Operator: JHQC

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.: 10-1392

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/12/09 11/12/09

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	SI RT	#	DCB RT	#
01	PIBLK01	WAR090916-99	11/12/09	1005	1.78	5.60	
02	ZZZZZ	ZZZZZ	11/12/09	1016	1.78	5.61	
03	ZZZZZ	ZZZZZ	11/12/09	1027	1.78	5.61	
04	ZZZZZ	ZZZZZ	11/12/09	1038	1.78	5.61	
05	ZZZZZ	ZZZZZ	11/12/09	1049	1.78	5.61	
06	AR123201	WAR090930-32	11/12/09	1100	1.78	5.61	
07	AR122101	WAR091111-21	11/12/09	1111	1.78	5.61	
08	AR126201	WAR091111-62	11/12/09	1122	1.78	5.61	
09	ZZZZZ	ZZZZZ	11/12/09	1133	1.78	5.61	
10	DDTANALOGSTD	WAR091020-DD	11/12/09	1145			
11	AR166001	WAR091112-01	11/12/09	1156	1.78	5.61	
12	AR166002	WAR091112-02	11/12/09	1207	1.78	5.61	
13	AR166003	WAR091112-03	11/12/09	1218	1.78	5.61	
14	AR166004	WAR091112-04	11/12/09	1229	1.78	5.61	
15	AR166005	IAR091102-01	11/12/09	1240	1.78	5.61	
16	AR166001	WAR091102-60	11/12/09	1251	1.78	5.61	
17	AR125401	WAR091112-05	11/12/09	1302	1.78	5.61	
18	AR125402	WAR091112-06	11/12/09	1313	1.78	5.61	
19	AR125403	WAR091112-07	11/12/09	1325	1.78	5.61	
20	AR125404	WAR091112-08	11/12/09	1336	1.78	5.61	
21	AR125405	IAR091027-01	11/12/09	1347	1.78	5.61	
22	AR125401	WAR091102-54	11/12/09	1358	1.78	5.61	
23	AR124201	WAR091112-09	11/12/09	1409	1.78	5.61	
24	AR124202	WAR091112-10	11/12/09	1420	1.78	5.61	
25	AR124203	WAR091112-11	11/12/09	1431	1.78	5.61	
26	AR124204	WAR091112-12	11/12/09	1442	1.78	5.61	
27	AR124205	IAR091111-01	11/12/09	1453	1.78	5.61	
28	AR124201	WAR091102-42	11/12/09	1505	1.78	5.61	
29	AR124801	WAR091112-13	11/12/09	1516	1.78	5.61	
30	AR124802	WAR091112-14	11/12/09	1527	1.78	5.61	
31	AR124803	WAR091112-15	11/12/09	1538	1.78	5.61	
32	AR124804	WAR091112-16	11/12/09	1549	1.78	5.61	

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.: 10-1392

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/12/09 11/12/09

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	AR124805	IAR091027-02	11/12/09	1600	1.78	5.61	
02	AR124801	WAR091027-48	11/12/09	1611	1.78	5.61	
03	AR126801	WAR091112-17	11/12/09	1622	1.78	5.61	
04	AR126802	WAR091112-18	11/12/09	1633	1.78	5.61	
05	AR126803	WAR091112-19	11/12/09	1644	1.78	5.61	
06	AR126804	WAR091112-20	11/12/09	1655	1.78	5.61	
07	AR126805	IAR090817-02	11/12/09	1707	1.78	5.61	
08	AR126801	WAR091106-68	11/12/09	1718	1.78	5.61	
09	PIBLK02	WAR090916-99	11/12/09	1729	1.78	5.61	
10							
11							
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29							
30							
31							
32							

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.: 10-1392

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/12/09 11/12/09

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: 6.31			
EPA	LAB	DATE	TIME	S1	DCB		
SAMPLE NO.	SAMPLE ID	ANALYZED	ANALYZED	RT	RT	#	#
01	PIBLK01	WAR090916-99	11/12/09	1005	2.07	6.30	
02	ZZZZZ	ZZZZZ	11/12/09	1016	2.08	6.31	
03	ZZZZZ	ZZZZZ	11/12/09	1027	2.08	6.31	
04	ZZZZZ	ZZZZZ	11/12/09	1038	2.08	6.31	
05	ZZZZZ	ZZZZZ	11/12/09	1049	2.08	6.31	
06	AR123201	WAR090930-32	11/12/09	1100	2.08	6.31	
07	AR122101	WAR091111-21	11/12/09	1111	2.07	6.31	
08	AR126201	WAR091111-62	11/12/09	1122	2.08	6.31	
09	ZZZZZ	ZZZZZ	11/12/09	1133	2.08	6.31	
10	DDTANALOGSTD	WAR091020-DD	11/12/09	1145			
11	AR166001	WAR091112-01	11/12/09	1156	2.08	6.31	
12	AR166002	WAR091112-02	11/12/09	1207	2.08	6.31	
13	AR166003	WAR091112-03	11/12/09	1218	2.07	6.31	
14	AR166004	WAR091112-04	11/12/09	1229	2.08	6.31	
15	AR166005	IAR091102-01	11/12/09	1240	2.08	6.31	
16	AR166001	WAR091102-60	11/12/09	1251	2.08	6.31	
17	AR125401	WAR091112-05	11/12/09	1302	2.07	6.31	
18	AR125402	WAR091112-06	11/12/09	1313	2.08	6.31	
19	AR125403	WAR091112-07	11/12/09	1325	2.07	6.31	
20	AR125404	WAR091112-08	11/12/09	1336	2.08	6.31	
21	AR125405	IAR091027-01	11/12/09	1347	2.08	6.31	
22	AR125401	WAR091102-54	11/12/09	1358	2.08	6.31	
23	AR124201	WAR091112-09	11/12/09	1409	2.08	6.31	
24	AR124202	WAR091112-10	11/12/09	1420	2.08	6.31	
25	AR124203	WAR091112-11	11/12/09	1431	2.07	6.31	
26	AR124204	WAR091112-12	11/12/09	1442	2.08	6.31	
27	AR124205	IAR091111-01	11/12/09	1453	2.08	6.31	
28	AR124201	WAR091102-42	11/12/09	1505	2.08	6.31	
29	AR124801	WAR091112-13	11/12/09	1516	2.08	6.31	
30	AR124802	WAR091112-14	11/12/09	1527	2.08	6.31	
31	AR124803	WAR091112-15	11/12/09	1538	2.07	6.31	
32	AR124804	WAR091112-16	11/12/09	1549	2.08	6.31	

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.: 10-1392

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/12/09 11/12/09

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: 6.31		
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	AR124805	IAR091027-02	11/12/09 1600	2.08	6.31
02	AR124801	WAR091027-48	11/12/09 1611	2.08	6.31
03	AR126801	WAR091112-17	11/12/09 1622	2.08	6.31
04	AR126802	WAR091112-18	11/12/09 1633	2.08	6.31
05	AR126803	WAR091112-19	11/12/09 1644	2.07	6.31
06	AR126804	WAR091112-20	11/12/09 1655	2.08	6.31
07	AR126805	IAR090817-02	11/12/09 1707	2.08	6.31
08	AR126801	WAR091106-68	11/12/09 1718	2.08	6.31
09	PIBLK02	WAR090916-99	11/12/09 1729	2.08	6.31
10					
11					
12					
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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.: 10-1392

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	

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.: 10-1392

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	ZZZZZ	ZZZZZ	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	ZZZZZ	ZZZZZ	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.: 10-1392

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	IAR100104-01	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
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.: 10-1392

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 (+/- 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.: 10-1392

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/12/09 01/21/10

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	SI 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	ZZZZZ	ZZZZZ	01/28/10 0957	1.77	5.60
18	ZZZZZ	ZZZZZ	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	RE15-10-7869	245394001	01/28/10 1041	1.77	5.61
22	RE15-10-7874	245394002	01/28/10 1053	1.77	5.61
23	RE15-10-7874MS	1202026169	01/28/10 1104	1.77	5.60
24	RE15-10-7874MSD	1202026170	01/28/10 1115	1.77	5.61
25	RE15-10-7871	245394003	01/28/10 1126	1.77	5.61
26	RE15-10-7872	245394004	01/28/10 1137	1.77	5.61
27	RE15-10-7870	245394005	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.: 10-1392

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 11/12/09 01/21/10

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	ZZZZZ	01/28/10	1336	1.77	5.61
02	ZZZZZ	01/28/10	1347	1.77	5.61
03	ZZZZZ	01/28/10	1358	1.77	5.61
04	ZZZZZ	01/28/10	1413	1.77	5.61
05	ZZZZZ	01/28/10	1424	1.77	5.61
06	ZZZZZ	01/28/10	1435	1.77	5.61
07	ZZZZZ	01/28/10	1446	1.77	5.61
08	ZZZZZ	01/28/10	1457	1.77	5.61
09	AR166004	WAR100104-60	01/28/10	1508	5.61
10	PIBLK05	WAR100105-99	01/28/10	1519	5.61
11	ZZZZZ	01/28/10	1531	1.77	5.61
12	ZZZZZ	01/28/10	1542	1.77	5.61
13	ZZZZZ	01/28/10	1553	1.77	5.61
14	ZZZZZ	01/28/10	1604	1.77	5.61
15	ZZZZZ	01/28/10	1615	1.77	5.61
16	ZZZZZ	01/28/10	1626	1.77	5.61
17	ZZZZZ	01/28/10	1637	1.77	5.61
18	ZZZZZ	01/28/10	1648	1.77	5.61
19	RE15-10-7873	245394006	01/28/10	1659	5.61
20	AR166005	WAR100104-60	01/28/10	1710	5.61
21	PIBLK06	WAR100105-99	01/28/10	1721	5.61
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					

QC LIMITS

S1 = 4cmx (+/- 0.03 MINUTES)

DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1392

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/12/09 01/21/10

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	SI RT	#	DCB 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	ZZZZZ	ZZZZZ	01/28/10	0957	2.07	6.30	
18	ZZZZZ	ZZZZZ	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	RE15-10-7869	245394001	01/28/10	1041	2.07	6.30	
22	RE15-10-7874	245394002	01/28/10	1053	2.07	6.30	
23	RE15-10-7874MS	1202026169	01/28/10	1104	2.07	6.30	
24	RE15-10-7874MSD	1202026170	01/28/10	1115	2.07	6.30	
25	RE15-10-7871	245394003	01/28/10	1126	2.07	6.30	
26	RE15-10-7872	245394004	01/28/10	1137	2.07	6.30	
27	RE15-10-7870	245394005	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	

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.: 10-1392

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 11/12/09 01/21/10

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	ZZZZZ	ZZZZZ	01/28/10	1336	2.07	6.30	
02	ZZZZZ	ZZZZZ	01/28/10	1347	2.07	6.30	
03	ZZZZZ	ZZZZZ	01/28/10	1358	2.07	6.30	
04	ZZZZZ	ZZZZZ	01/28/10	1413	2.07	6.30	
05	ZZZZZ	ZZZZZ	01/28/10	1424	2.07	6.30	
06	ZZZZZ	ZZZZZ	01/28/10	1435	2.07	6.30	
07	ZZZZZ	ZZZZZ	01/28/10	1446	2.07	6.30	
08	ZZZZZ	ZZZZZ	01/28/10	1457	2.07	6.30	
09	AR166004	WAR100104-60	01/28/10	1508	2.07	6.30	
10	PIBLK05	WAR100105-99	01/28/10	1519	2.07	6.30	
11	ZZZZZ	ZZZZZ	01/28/10	1531	2.07	6.30	
12	ZZZZZ	ZZZZZ	01/28/10	1542	2.07	6.30	
13	ZZZZZ	ZZZZZ	01/28/10	1553	2.07	6.30	
14	ZZZZZ	ZZZZZ	01/28/10	1604	2.07	6.30	
15	ZZZZZ	ZZZZZ	01/28/10	1615	2.07	6.30	
16	ZZZZZ	ZZZZZ	01/28/10	1626	2.07	6.30	
17	ZZZZZ	ZZZZZ	01/28/10	1637	2.07	6.30	
18	ZZZZZ	ZZZZZ	01/28/10	1648	2.07	6.30	
19	RE15-10-7873	245394006	01/28/10	1659	2.07	6.30	
20	AR166005	WAR100104-60	01/28/10	1710	2.07	6.30	
21	PIBLK06	WAR100105-99	01/28/10	1721	2.07	6.30	
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							

QC LIMITS
S1 = 4cmx (+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

Identification Summary

Page 1 of 1

SDG Number: 10-1392

Client ID: LCS for batch 945978

Lab Sample ID: 1202026168

Data File: 013f1301.d

Data File: 013b1301.d

Inst: ECD2A.I_1

Inst: ECD2A.I_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	21.4	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	
Column 2	1	2.74	2.71 – 2.77	21.6	21.8	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	
Aroclor-1260							.803
Column 1	1	4.01	3.98 – 4.04	25.2	25.7	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	
Column 2	1	4.41	4.38 – 4.44	25.1	25.5	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	

Identification Summary

Page 1 of 1

SDG Number: 10-1392

Client ID: RE15-10-7869

Lab Sample ID: 245394001

Data File: 021f2101.d

Data File: 021b2101.d

Inst: ECD2AJ_1

Inst: ECD2AJ_2

Column: CLP1

Column: CLP2

Analyzed: 28-JAN-10 10:41

Analyzed: 28-JAN-10 10:41

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor-1254							36.1
Column 1	1	3.24	3.21 - 3.27	5.5		ug/kg	
	2	3.42	3.39 - 3.45	5.99		ug/kg	
	3	3.69	3.66 - 3.72	6.25		ug/kg	
	4	3.88	3.85 - 3.91	4.21		ug/kg	
	5	4.01	3.98 - 4.04	13.3		ug/kg	
					7.06		
Column 2	1	3.82	3.78 - 3.84	4.9		ug/kg	
	2	3.96	3.93 - 3.99	5.75		ug/kg	
	3	4.19	4.16 - 4.22	6.03		ug/kg	
	4	4.27	4.24 - 4.3	3.64		ug/kg	
	5	4.44	4.41 - 4.47	4.17		ug/kg	
					4.9		
Aroclor-1260							43.2
Column 1	1	4.01	3.98 - 4.04	8.54		ug/kg	
	2	4.28	4.25 - 4.31	4.25		ug/kg	
	3	4.45	4.42 - 4.48	4.57		ug/kg	
	4	4.66	4.63 - 4.69	2.03		ug/kg	
	5	4.85	4.82 - 4.88	2.5		ug/kg	
					4.38		
Column 2	1	4.41	4.38 - 4.44	7.82		ug/kg	
	2	4.56	4.53 - 4.59	7.68		ug/kg	
	3	4.67	4.64 - 4.7	8.49		ug/kg	
	4	4.87	4.84 - 4.9	5.28		ug/kg	
	5	5.5	5.47 - 5.53	4.66		ug/kg	
					6.79		

Identification Summary

Page 1 of 1

SDG Number: 10-1392

Client ID: RE15-10-7871

Lab Sample ID: 245394003

Data File: 025f2501.d

Data File: 025b2501.d

Inst: ECD2A.I_1

Inst: ECD2A.I_2

Column: CLP1

Column: CLP2

Analyzed: 28-JAN-10 11:26

Analyzed: 28-JAN-10 11:26

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor-1254							4.61
Column 1	1	3.24	3.21 - 3.27	21.7		ug/kg	
	2	3.42	3.39 - 3.45	21.3		ug/kg	
	3	3.69	3.66 - 3.72	23.2		ug/kg	
	4	3.88	3.85 - 3.91	17.9		ug/kg	
	5	4.01	3.98 - 4.04	31.4		ug/kg	
					23.1		
Column 2	1	3.81	3.78 - 3.84	24.9		ug/kg	
	2	3.96	3.93 - 3.99	24.9		ug/kg	
	3	4.19	4.16 - 4.22	25.4		ug/kg	
	4	4.28	4.24 - 4.3	17		ug/kg	
	5	4.44	4.41 - 4.47	18		ug/kg	
					22.1		
Aroclor-1260							60.4
Column 1	1	4.01	3.98 - 4.04	20.1		ug/kg	
	2	4.28	4.25 - 4.31	6.55		ug/kg	
	3	4.45	4.42 - 4.48	6.71		ug/kg	
	4	4.66	4.63 - 4.69	4.38		ug/kg	
	5	4.85	4.82 - 4.88	5.98		ug/kg	
					8.75		
Column 2	1	4.41	4.38 - 4.44	20.8		ug/kg	
	2	4.56	4.53 - 4.59	16.4		ug/kg	
	3	4.67	4.64 - 4.7	26.5		ug/kg	
	4	4.87	4.84 - 4.9	10.3		ug/kg	
	5	5.5	5.47 - 5.53	7.57		ug/kg	
					16.3		

Identification Summary

Page 1 of 1

SDG Number: 10-1392

Client ID: RE15-10-7872

Lab Sample ID: 245394004

Data File: 026f2601.d

Data File: 026b2601.d

Inst: ECD2A.I_1

Inst: ECD2A.I_2

Column: CLP1

Column: CLP2

Analyzed: 28-JAN-10 11:37

Analyzed: 28-JAN-10 11:37

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor-1254							18.5
Column 1	1	3.24	3.21 - 3.27	3.76		ug/kg	
	2	3.42	3.39 - 3.45	3.92		ug/kg	
	3	3.69	3.66 - 3.72	4.62		ug/kg	
	4	3.88	3.85 - 3.91	3.95		ug/kg	
	5	4.01	3.98 - 4.04	5.12		ug/kg	
					4.27		
Column 2	1	3.81	3.78 - 3.84	3.89		ug/kg	
	2	3.96	3.93 - 3.99	3.22		ug/kg	
	3	4.19	4.16 - 4.22	4.18		ug/kg	
	4	4.28	4.24 - 4.3	2.41		ug/kg	
	5	4.44	4.41 - 4.47	4.05		ug/kg	
					3.55		
Aroclor-1260							51.4
Column 1	1	4.01	3.98 - 4.04	3.29		ug/kg	
	2	4.29	4.25 - 4.31	1.1		ug/kg	
	3	4.45	4.42 - 4.48	1.1		ug/kg	
	4	4.66	4.63 - 4.69	.77		ug/kg	
	5	4.85	4.82 - 4.88	.958		ug/kg	
					1.44		
Column 2	1	4.41	4.38 - 4.44	3.23		ug/kg	
	2	4.56	4.53 - 4.59	2.55		ug/kg	
	3	4.67	4.64 - 4.7	4.13		ug/kg	
	4	4.87	4.84 - 4.9	1.37		ug/kg	
	5	5.5	5.47 - 5.53	.918		ug/kg	
					2.44		

Identification Summary

Page 1 of 2

SDG Number: 10-1392

Client ID: RE15-10-7873

Lab Sample ID: 245394006

Data File: 051f5101.d

Data File: 051b5101.d

Inst: ECD2A.I_1

Inst: ECD2A.I_2

Column: CLP1

Column: CLP2

Analyzed: 28-JAN-10 16:59

Analyzed: 28-JAN-10 16:59

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor-1242							24.9
Column 1	1	2.27	2.24 - 2.3	135		ug/kg	
	2	2.69	2.66 - 2.72	186		ug/kg	
	3	2.73	2.7 - 2.76	158		ug/kg	
	4	2.82	2.79 - 2.85	348		ug/kg	
	5	2.97	2.94 - 3	586		ug/kg	
					282		
Column 2	1	2.74	2.71 - 2.77	152		ug/kg	
	2	3.18	3.15 - 3.21	188		ug/kg	
	3	3.25	3.22 - 3.28	177		ug/kg	
	4	3.33	3.3 - 3.36	318		ug/kg	
	5	3.52	3.49 - 3.55	264		ug/kg	
					220		
Aroclor-1254							18.9
Column 1	1	3.24	3.21 - 3.27	117		ug/kg	
	2	3.42	3.39 - 3.45	118		ug/kg	
	3	3.69	3.66 - 3.72	107		ug/kg	
	4	3.88	3.85 - 3.91	121		ug/kg	
	5	4.01	3.98 - 4.04	255		ug/kg	
					144		
Column 2	1	3.82	3.78 - 3.84	140		ug/kg	
	2	3.96	3.93 - 3.99	126		ug/kg	
	3	4.19	4.16 - 4.22	132		ug/kg	
	4	4.28	4.24 - 4.3	74.5		ug/kg	
	5	4.44	4.41 - 4.47	121		ug/kg	
					119		

Identification Summary

Page 2 of 2

SDG Number: 10-1392
Lab Sample ID: 245394006

Client ID: RE15-10-7873

Data File: 051f5101.d
Inst: ECD2A.I_1
Column: CLP1
Analyzed: 28-JAN-10 16:59

Data File: 051b5101.d
Inst: ECD2A.I_2
Column: CLP2
Analyzed: 28-JAN-10 16:59

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor-1260							21.3
Column 1	1	4.01	3.98 - 4.04	163		ug/kg	
	2	4.28	4.25 - 4.31	19.6		ug/kg	
	3	4.45	4.42 - 4.48	25.3		ug/kg	
	4	4.66	4.63 - 4.69	12.7		ug/kg	
	5	4.85	4.82 - 4.88	24.9		ug/kg	
					49.2		
Column 2	1	4.41	4.38 - 4.44	67.5		ug/kg	
	2	4.56	4.53 - 4.59	62.5		ug/kg	
	3	4.67	4.64 - 4.7	118		ug/kg	
	4	4.87	4.84 - 4.9	27.7		ug/kg	
	5	5.5	5.47 - 5.53	28.5		ug/kg	
					60.9		

Identification Summary

Page 1 of 1

SDG Number: 10-1392

Client ID: RE15-10-7874

Lab Sample ID: 245394002

Data File: 022f2201.d

Data File: 022b2201.d

Inst: ECD2A.I_1

Inst: ECD2A.I_2

Column: CLP1

Column: CLP2

Analyzed: 28-JAN-10 10:53

Analyzed: 28-JAN-10 10:53

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor-1254							7.32
<i>Column 1</i>	1	3.24	3.21 – 3.27	1.81		ug/kg	
	2	3.42	3.39 – 3.45	1.97		ug/kg	
	3	3.69	3.66 – 3.72	2.78		ug/kg	
	4	3.88	3.85 – 3.91	2.56		ug/kg	
	5	4.01	3.98 – 4.04	5.09		ug/kg	
					2.84		
<i>Column 2</i>	1	3.81	3.78 – 3.84	1.75		ug/kg	
	2	3.96	3.93 – 3.99	3.46		ug/kg	
	3	4.19	4.16 – 4.22	4.41		ug/kg	
	4	4.27	4.24 – 4.3	1.42		ug/kg	
	5	4.44	4.41 – 4.47	2.15		ug/kg	
					2.64		
Aroclor-1260							15.3
<i>Column 1</i>	1	4.01	3.98 – 4.04	3.27		ug/kg	
	2	4.28	4.25 – 4.31	2.6		ug/kg	
	3	4.45	4.42 – 4.48	5.17		ug/kg	
	4	4.66	4.63 – 4.69	1.01		ug/kg	
	5	4.85	4.82 – 4.88	1.61		ug/kg	
					2.73		
<i>Column 2</i>	1	4.41	4.38 – 4.44	3.1		ug/kg	
	2	4.56	4.53 – 4.59	2.7		ug/kg	
	3	4.67	4.64 – 4.7	3.57		ug/kg	
	4	4.87	4.84 – 4.9	2.6		ug/kg	
	5	5.5	5.47 – 5.53	3.95		ug/kg	
					3.18		

Identification Summary

Page 1 of 2

SDG Number: 10-1392

Client ID: RE15-10-7874MS

Lab Sample ID: 1202026169

Data File: 023f2301.d

Data File: 023b2301.d

Inst: ECD2A.I_1

Inst: ECD2A.I_2

Column: CLP1

Column: CLP2

Analyzed: 28-JAN-10 11:04

Analyzed: 28-JAN-10 11:04

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor-1016							5.15
Column 1	1	2.27	2.24 - 2.3	21.7		ug/kg	
	2	2.59	2.56 - 2.62	24.4		ug/kg	
	3	2.69	2.66 - 2.72	24		ug/kg	
	4	2.82	2.79 - 2.85	25.4		ug/kg	
	5	2.97	2.94 - 3	26.1		ug/kg	
					24.3		
Column 2	1	2.74	2.71 - 2.77	23		ug/kg	
	2	3.18	3.15 - 3.21	25.9		ug/kg	
	3	3.33	3.3 - 3.36	25.2		ug/kg	
	4	3.36	3.33 - 3.39	26.3		ug/kg	
	5	3.52	3.48 - 3.54	27.7		ug/kg	
					25.6		
Aroclor-1254							72.4
Column 1	1	3.24	3.21 - 3.27	14.5		ug/kg	
	2	3.42	3.39 - 3.45	12.7		ug/kg	
	3	3.69	3.66 - 3.72	6.6		ug/kg	
	4	3.88	3.85 - 3.91	6.25		ug/kg	
	5	4.01	3.98 - 4.04	49.8		ug/kg	
					18		
Column 2	1	3.82	3.78 - 3.84	16.1		ug/kg	
	2	3.96	3.93 - 3.99	13.5		ug/kg	
	3	4.19	4.16 - 4.22	5.65		ug/kg	
	4	4.28	4.24 - 4.3	3.33		ug/kg	
	5	4.44	4.41 - 4.47	3.51		ug/kg	
					8.41		

Identification Summary

Page 2 of 2

SDG Number: 10-1392

Client ID: RE15-10-7874MS

Lab Sample ID: 1202026169

Data File: 023f2301.d

Data File: 023b2301.d

Inst: ECD2A.I_1

Inst: ECD2A.I_2

Column: CLP1

Column: CLP2

Analyzed: 28-JAN-10 11:04

Analyzed: 28-JAN-10 11:04

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor-1260							4.84
Column 1	1	4.01	3.98 - 4.04	31.9		ug/kg	
	2	4.28	4.25 - 4.31	30.5		ug/kg	
	3	4.45	4.42 - 4.48	30.9		ug/kg	
	4	4.66	4.63 - 4.69	29.4		ug/kg	
	5	4.85	4.82 - 4.88	29.2		ug/kg	
					30.4		
Column 2	1	4.41	4.38 - 4.44	31.1		ug/kg	
	2	4.56	4.53 - 4.59	31.6		ug/kg	
	3	4.67	4.64 - 4.7	32		ug/kg	
	4	4.87	4.84 - 4.9	30.8		ug/kg	
	5	5.5	5.47 - 5.53	34		ug/kg	
					31.9		

Identification Summary

Page 1 of 2

SDG Number: 10-1392

Client ID: RE15-10-7874MSD

Lab Sample ID: 1202026170

Data File: 024f2401.d

Data File: 024b2401.d

Inst: ECD2A.I_1

Inst: ECD2A.I_2

Column: CLP1

Column: CLP2

Analyzed: 28-JAN-10 11:15

Analyzed: 28-JAN-10 11:15

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor-1016							2.94
Column 1	1	2.27	2.24 - 2.3	21.6		ug/kg	
	2	2.6	2.56 - 2.62	23.6		ug/kg	
	3	2.69	2.66 - 2.72	23.8		ug/kg	
	4	2.82	2.79 - 2.85	23.2		ug/kg	
	5	2.97	2.94 - 3	24.8		ug/kg	
					23.4		
Column 2	1	2.74	2.71 - 2.77	22.8		ug/kg	
	2	3.18	3.15 - 3.21	24.2		ug/kg	
	3	3.33	3.3 - 3.36	23.4		ug/kg	
	4	3.36	3.33 - 3.39	24.3		ug/kg	
	5	3.52	3.48 - 3.54	25.7		ug/kg	
					24.1		
Aroclor-1254							70.2
Column 1	1	3.24	3.21 - 3.27	13.6		ug/kg	
	2	3.42	3.39 - 3.45	12		ug/kg	
	3	3.69	3.66 - 3.72	6.29		ug/kg	
	4	3.88	3.85 - 3.91	6.11		ug/kg	
	5	4.01	3.98 - 4.04	47.4		ug/kg	
					17.1		
Column 2	1	3.81	3.78 - 3.84	14.8		ug/kg	
	2	3.96	3.93 - 3.99	13		ug/kg	
	3	4.19	4.16 - 4.22	6.43		ug/kg	
	4	4.28	4.24 - 4.3	3.29		ug/kg	
	5	4.44	4.41 - 4.47	3.54		ug/kg	
					8.21		

Identification Summary

Page 2 of 2

SDG Number: 10-1392

Client ID: RE15-10-7874MSD

Lab Sample ID: 1202026170

Data File: 024f2401.d

Data File: 024b2401.d

Inst: ECD2A.I_1

Inst: ECD2A.I_2

Column: CLP1

Column: CLP2

Analyzed: 28-JAN-10 11:15

Analyzed: 28-JAN-10 11:15

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor-1260							5.68
Column 1	1	4.01	3.98 - 4.04	30.4		ug/kg	
	2	4.28	4.25 - 4.31	29.9		ug/kg	
	3	4.45	4.42 - 4.48	30.1		ug/kg	
	4	4.66	4.63 - 4.69	26.9		ug/kg	
	5	4.85	4.82 - 4.88	28.5		ug/kg	
					29.2		
Column 2	1	4.41	4.38 - 4.44	30		ug/kg	
	2	4.56	4.53 - 4.59	30.7		ug/kg	
	3	4.67	4.64 - 4.7	30.8		ug/kg	
	4	4.87	4.84 - 4.9	29.9		ug/kg	
	5	5.5	5.47 - 5.53	32.8		ug/kg	
					30.9		

QUALITY CONTROL DATA

PCB
Certificate of Analysis
Sample Summary

Page 1 of 1

SDG Number: 10-1392

Matrix: SOIL

Lab Sample ID: 1202026167

Client Sample: QC for batch 945978

Client: LANL010

Project: QC

Client ID: MB for batch 945978

Method: SW846 8082

SOP Ref: GL-OA-E-040

Batch ID: 945979

Inst: ECD2A.I

Dilution: 1

Run Date: 01/28/2010 09:02

Analyst: JAOC

Inj. Vol: 1 uL

Prep Date: 01/27/2010 20:26

Aliquot: 30 g

Final Volume: 1 mL

Data File: 012f1201-1.d

Column: 1 CLP1

Level: LOW

012b1201-1.d

2 CLP2

CAS No.	Parname	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/012f1201-2.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/012f1201-2.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-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: 10-1392.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

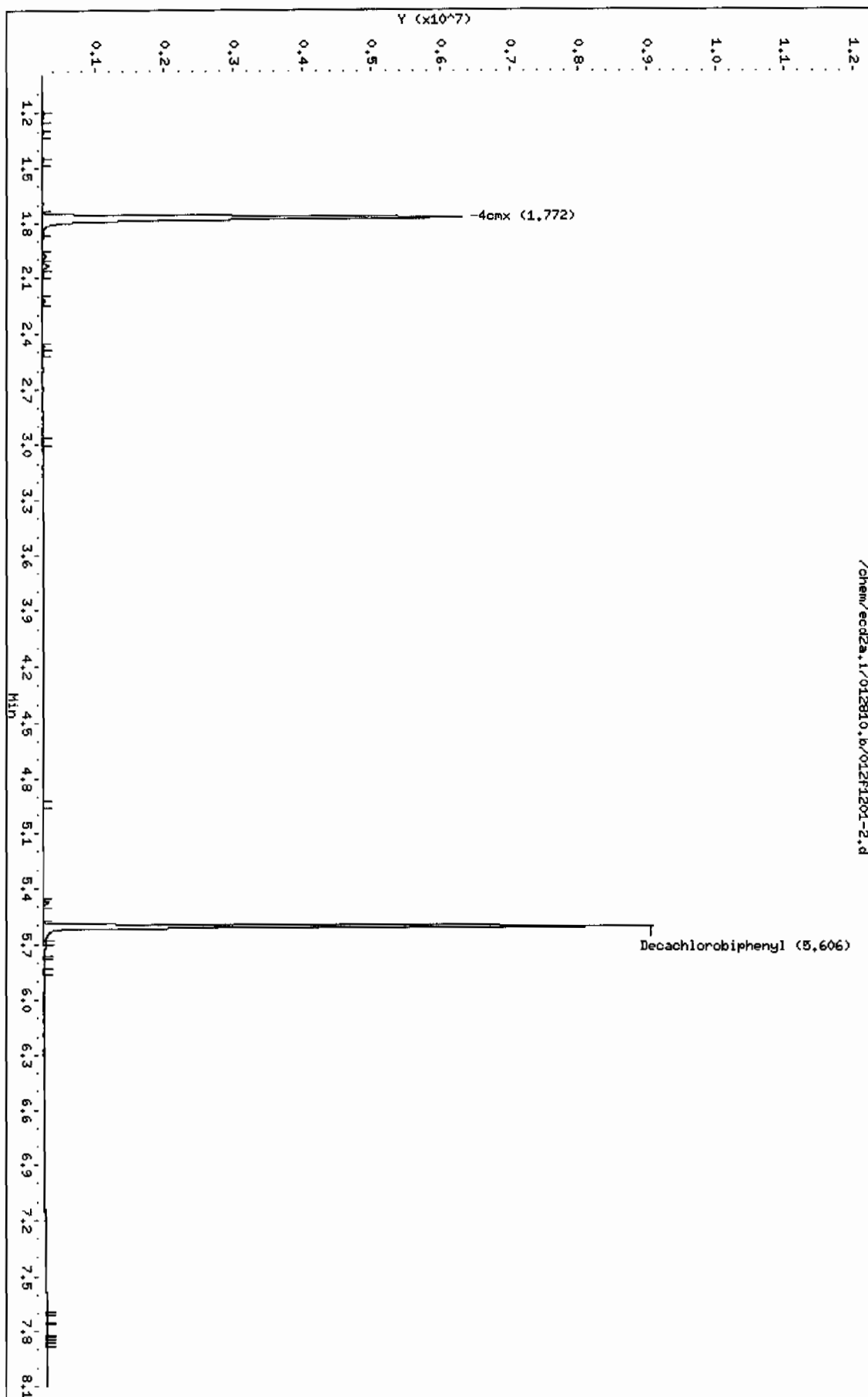
CONCENTRATIONS

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.i/012810.b/012f1201-2.d
Date: 28-JAN-2010 09:02
Client ID: PBLK01
Sample Info: 1120202616711
Volume Injected (uL): 1.0
Column phase: CLP1

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

Page 1



Data File: /chem/ecd2a.i/012810.b/012b1201-2.d
Report Date: 28-Jan-2010 11:37

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL
Data file : /chem/ecd2a.i/012810.b/012b1201-2.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: 10-1392.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpc1p1

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

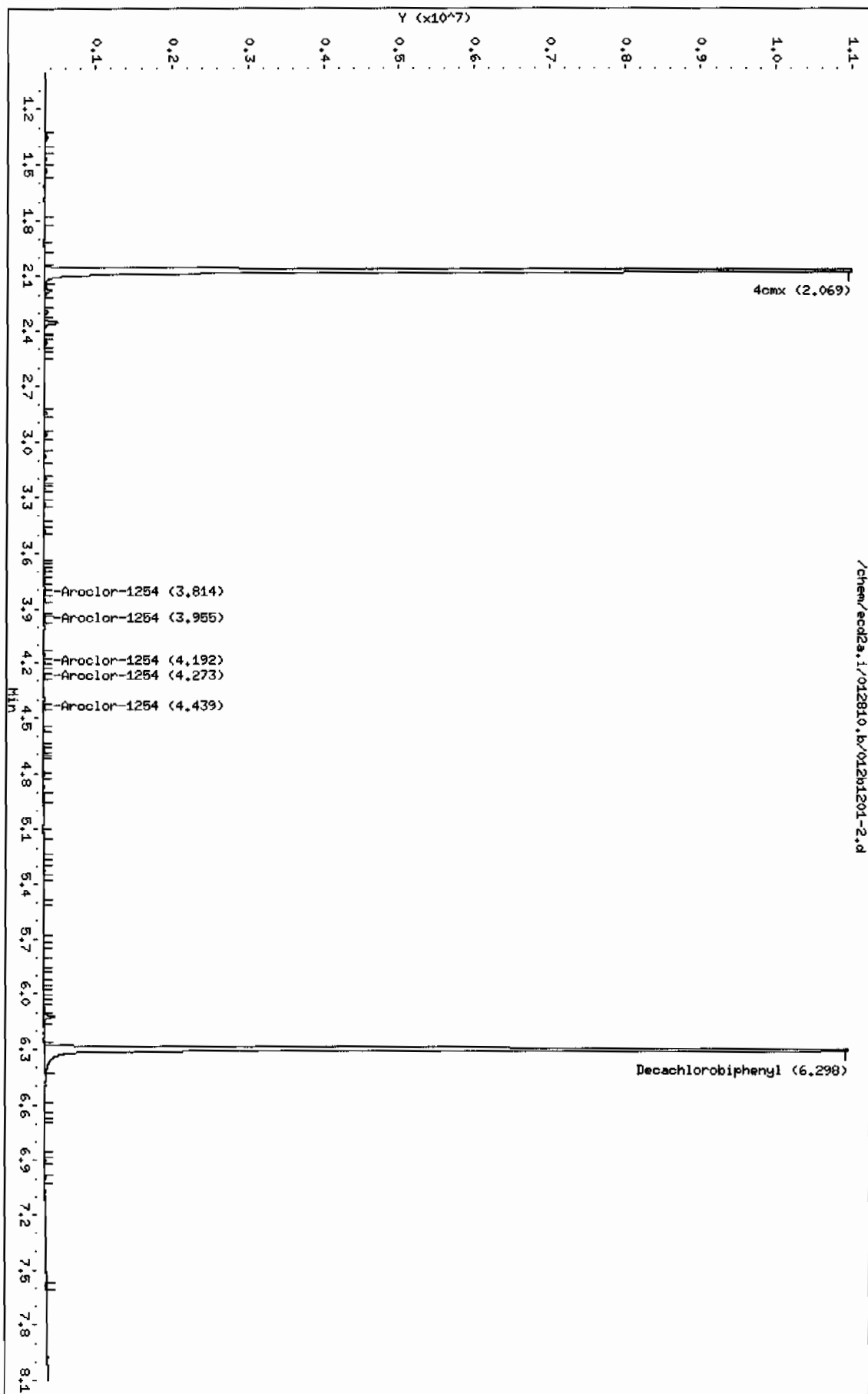
Cpnd Variable Local Compound Variable

CONCENTRATIONS							
			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/ecod2a.i/012810.b/01281201-2.d
Date: 28-JAN-2010 09:02
Client ID: PBLK01
Sample Info: 1420202616711
Volume Injected (uL): 1.0
Column Phase: CLP2

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



PCB
Certificate of Analysis
Sample Summary

Page 1 of 1

SDG Number: 10-1392

Matrix: SOIL

Lab Sample ID: 1202026168

Client Sample: QC for batch 945978

Client: LANL010

Project: QC

Client ID: LCS for batch 945978

Method: SW846 8082

SOP Ref: GL-OA-E-040

Batch ID: 945979

Inst: ECD2A.I

Dilution: 1

Run Date: 01/28/2010 09:13

Analyst: JAOC

Inj. Vol: 1 uL

Prep Date: 01/27/2010 20:26

Aliquot: 30 g

Final Volume: 1 mL

Data File: 013f1301-1.d

Column: 1 CLP1

Level: LOW

013b1301-1.d

2 CLP2

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/013f1301-2.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: 10-1392.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpc1p1

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

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

Cpnd Variable Local Compound Variable

CONCENTRATIONS								
			ON-COL	FINAL				
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	=====	
\$ 11 4cmx					CAS #: 877-09-8			
1.771	1.770	0.001	8526056	127.193	4.2	80.00- 120.00	100.00	

\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3			
5.605	5.604	0.001	8799365	138.793	4.6	80.00- 120.00	100.00	

1 Aroclor-1016					CAS #: 12674-11-2			
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				

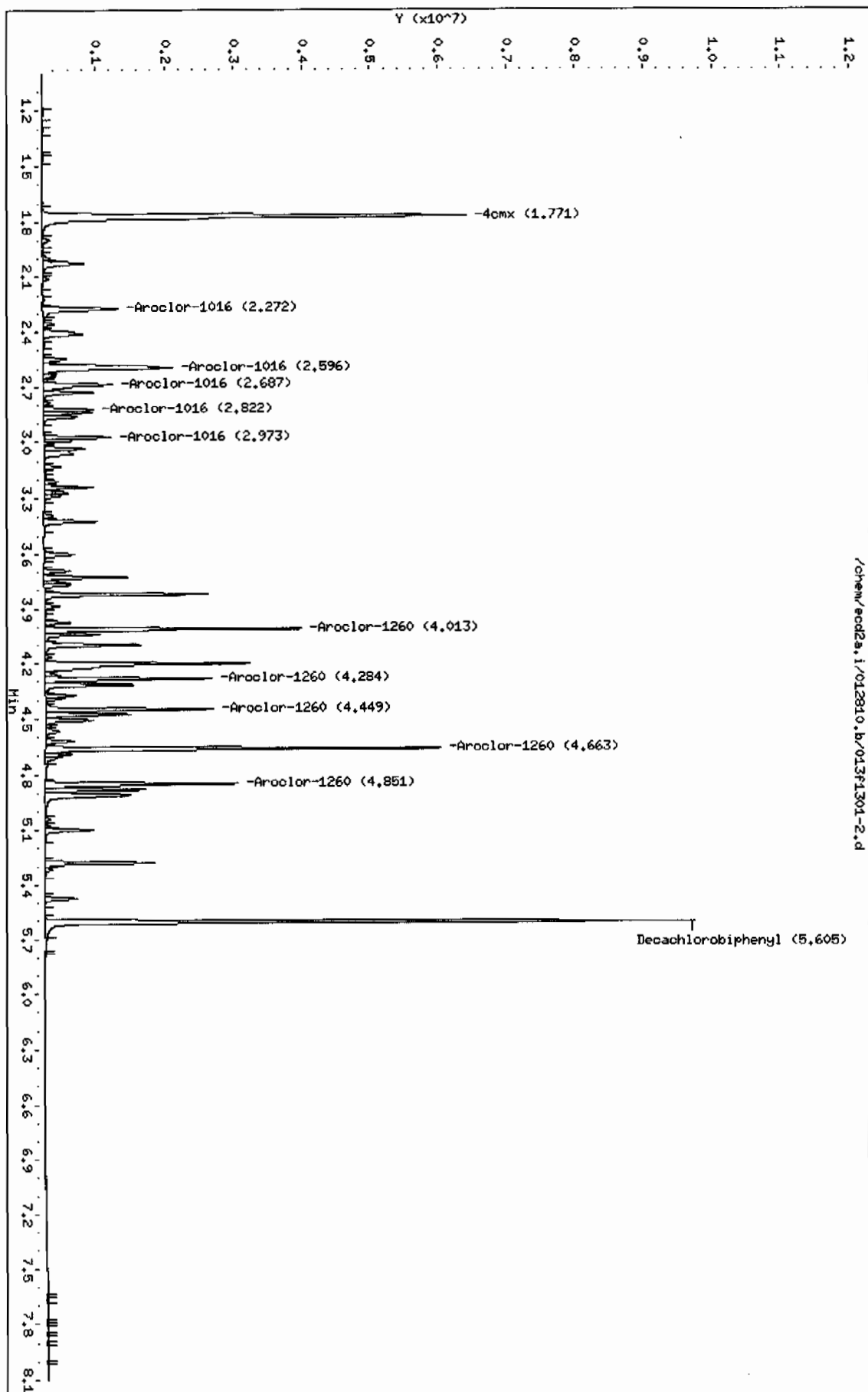
7 Aroclor-1260					CAS #: 11096-82-5				
4.013	4.011	0.002	3248607	755.022	25.2	80.00-	120.00	100.00	
4.284	4.282	0.002	2098956	752.037	25.1	42.81-	82.81	64.61	
4.449	4.449	0.000	2217059	773.349	25.8	45.95-	85.95	68.25	
4.663	4.661	0.002	5149255	782.658	26.1	132.37-	172.37	158.51	
4.851	4.850	0.001	2514477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

QC Flag Legend

M - Compound response manually integrated.

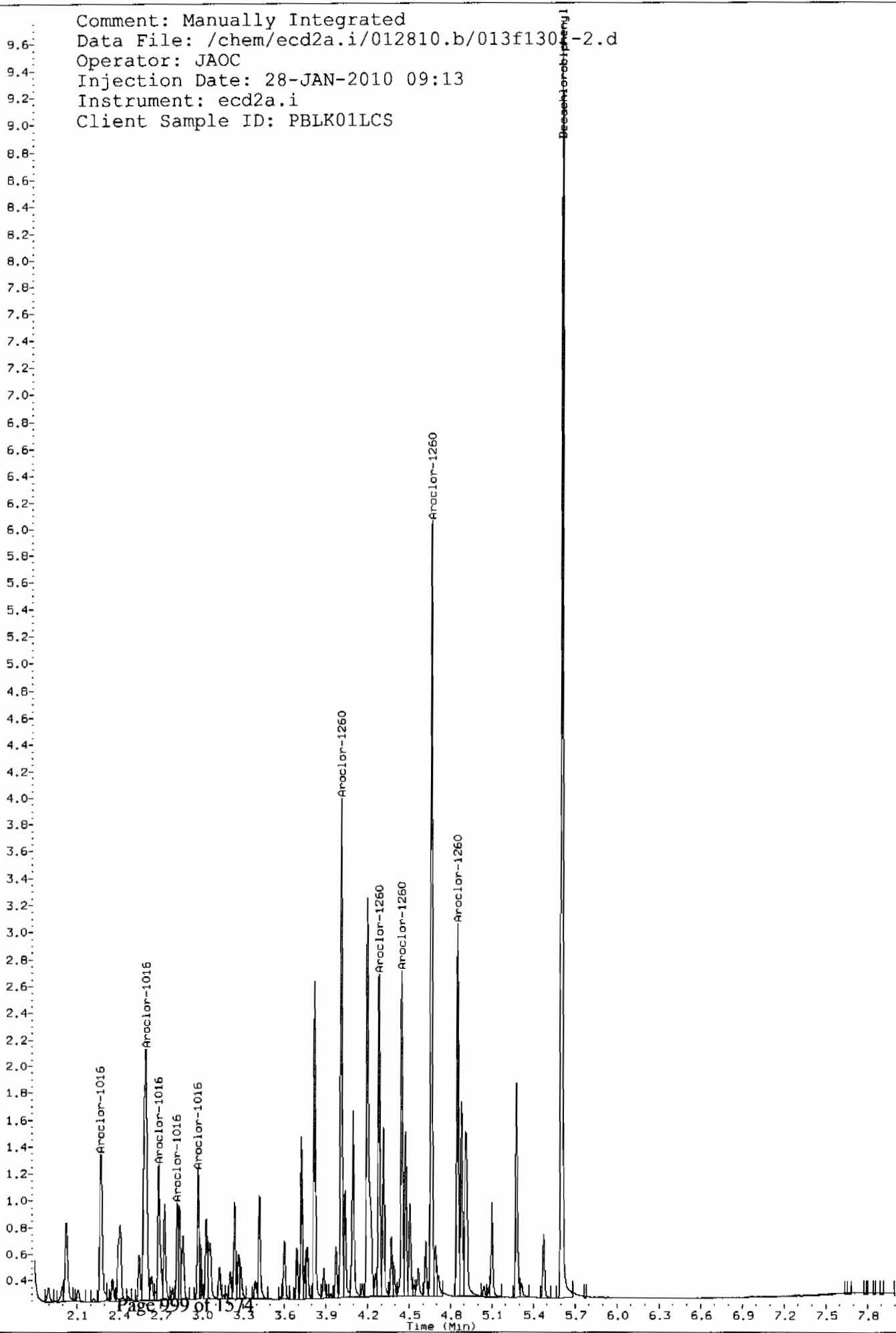
Data File: /chem/eod2a.i/012810.b/013F1301-2.d
Date: 28-JAN-2010 09:13
Client ID: PBLK01LCS
Sample Info: 11202026168141
Volume Injected (uL): 1.0
Column phase: CLP1

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

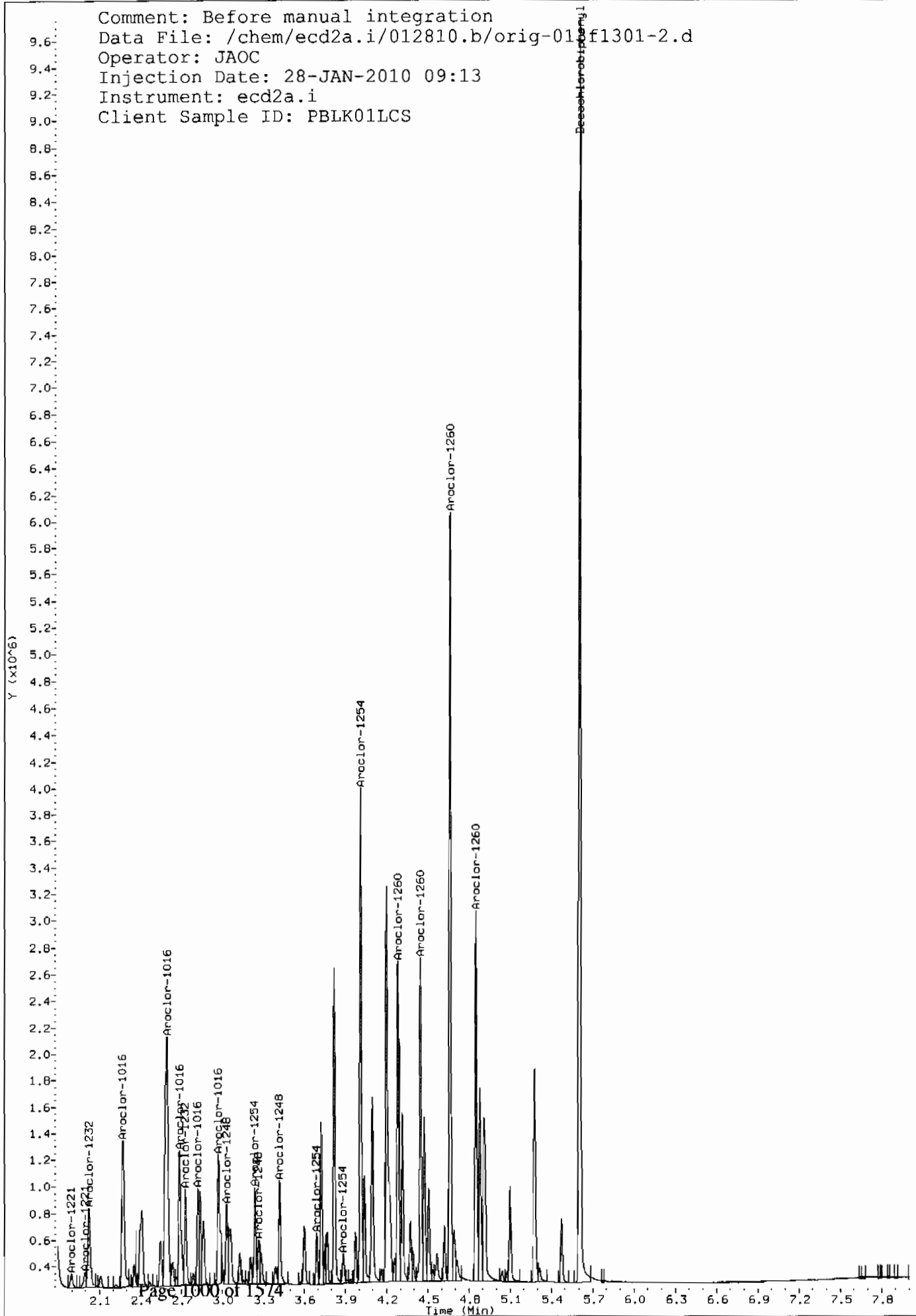


Comment: Manually Integrated
Data File: /chem/ecd2a.i/012810.b/013f130-2.d
Operator: JAOC
Injection Date: 28-JAN-2010 09:13
Instrument: ecd2a.i
Client Sample ID: PBLK01LCS

Y (x10⁶)



Comment: Before manual integration
Data File: /chem/ecd2a.i/012810.b/orig-012810.f1301-2.d
Operator: JAOC
Injection Date: 28-JAN-2010 09:13
Instrument: ecd2a.i
Client Sample ID: PBLK01LCS



Data File: /chem/ecd2a.i/012810.b/013b1301-2.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/013b1301-2.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-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: 10-1392.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpc1pl

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

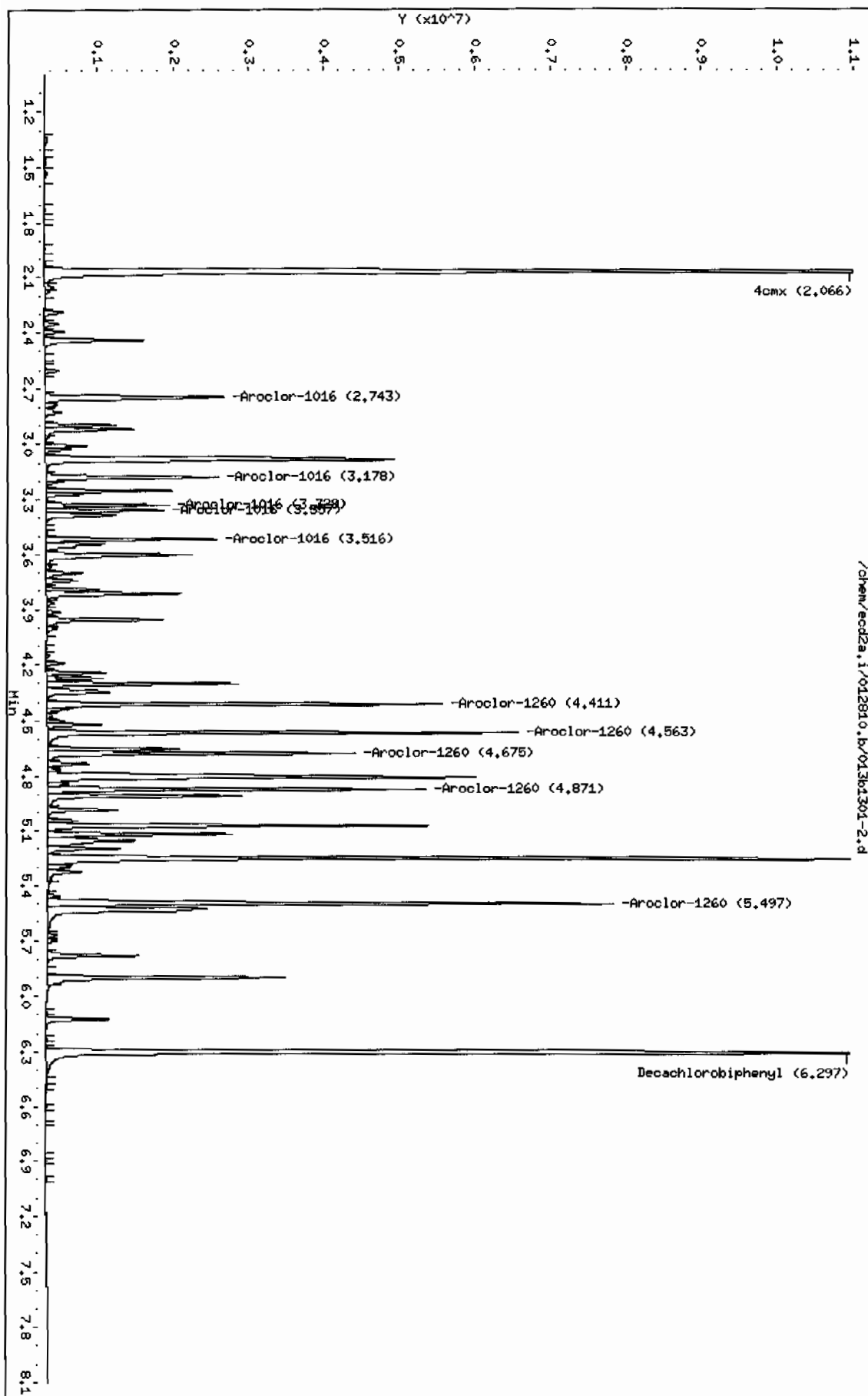
CONCENTRATIONS							
			ON-COL	FINAL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
==	=====	=====	==	=====	=====	=====	
\$ 11 4cmx					CAS #: 877-09-8		
2.066	2.067	-0.001	18720257 134.141	4.5	80.00- 120.00	100.00	
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.297	6.297	0.000	18116994 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/ecd2a.i/012810.b/013b1301-2.d
Date: 28-JAN-2010 09:13
Client ID: PLK01LCS
Sample Info: 1120202616811
Volume Injected (ul): 1.0
Column phase: CLP2

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



PCB
Certificate of Analysis
Sample Summary

SDG Number: 10-1392
Lab Sample ID: 1202026169
Client Sample: QC for batch 945978
Client ID: RE15-10-7874MS
Batch ID: 945979
Run Date: 01/28/2010 11:04
Prep Date: 01/27/2010 20:26
Data File: 023f2301.d
023b2301.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: 30.04 g
Column: 1 CLP1
2 CLP2

Matrix: R
%Moisture: 4.1
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		24.3	ug/kg	1.16	3.47	1
11104-28-2	Aroclor-1221	U	3.47	ug/kg	1.16	3.47	1
11141-16-5	Aroclor-1232	U	3.47	ug/kg	1.16	3.47	1
53469-21-9	Aroclor-1242	U	3.47	ug/kg	1.16	3.47	1
12672-29-6	Aroclor-1248	U	3.47	ug/kg	1.16	3.47	1
11097-69-1	Aroclor-1254	P	18.0	ug/kg	1.16	3.47	1
11096-82-5	Aroclor-1260		31.9	ug/kg	1.16	3.47	2

GEL Laboratories LLC

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_1S|945979|SVA|QC A|SOIL|MS|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: 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								
			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	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	

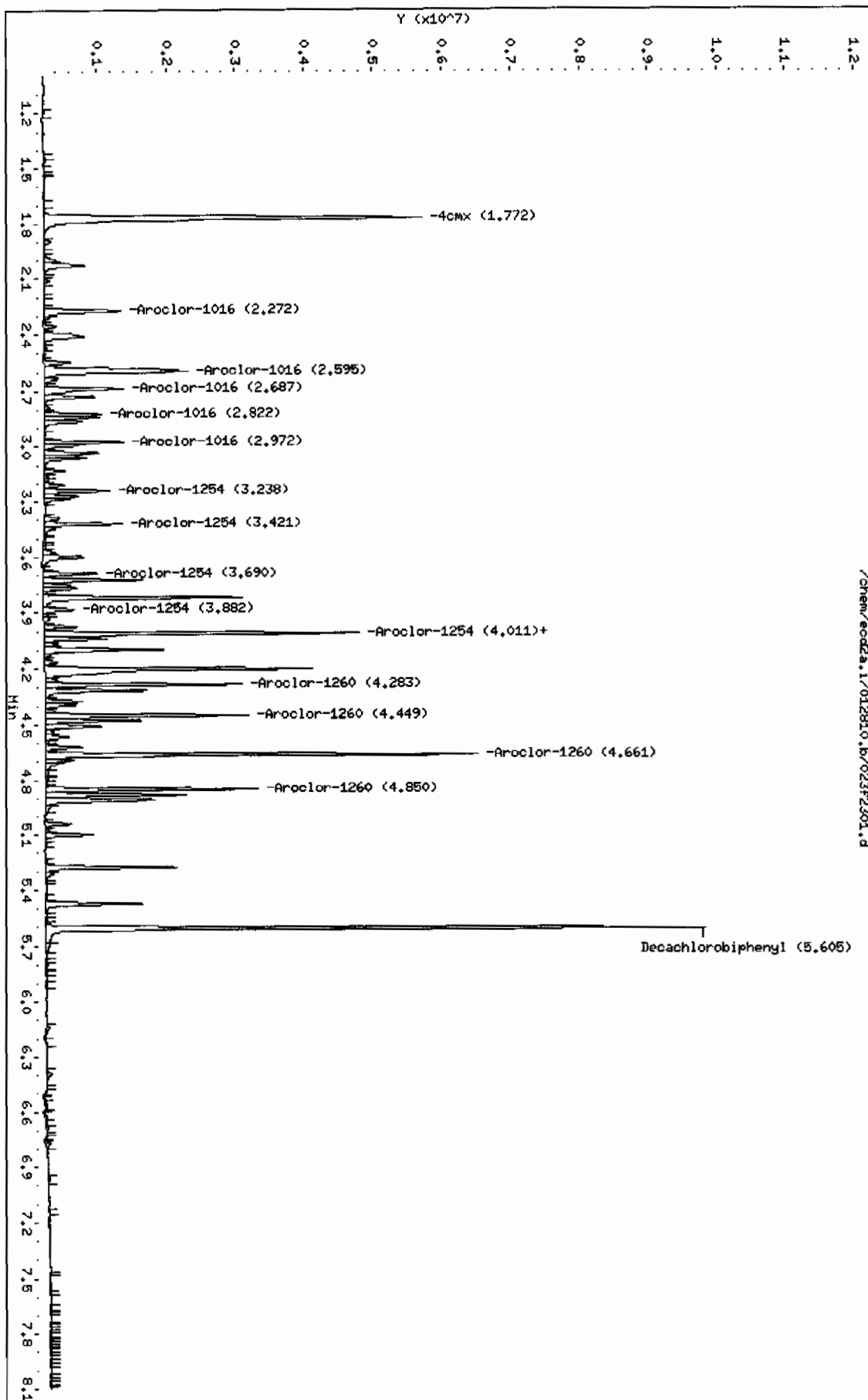
1 Aroclor-1016					CAS #: 12674-11-2			
2.272	2.271	0.001	1414142	626.313	21.7	80.00- 120.00	100.00	
2.595	2.595	0.000	3255242	703.241	24.4	194.16- 234.16	230.19	
2.687	2.685	0.002	1315669	692.347	24.0	65.88- 105.88	93.04	
2.822	2.820	0.002	720216	732.301	25.4	24.35- 64.35	50.93	
2.972	2.971	0.001	1090278	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/ecod2a,i/012810.b/023f2301.d
Date: 28-JAN-2010 11:04
Client ID: REIS-10-7874HS
Sample Info: 11202026169111
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecod2a,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/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_1S|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

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	16906491	121.144	4.2 80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3	
6.298	6.297	0.001	18129870	145.561	5.0 80.00- 120.00	100.00

1 Aroclor-1016					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

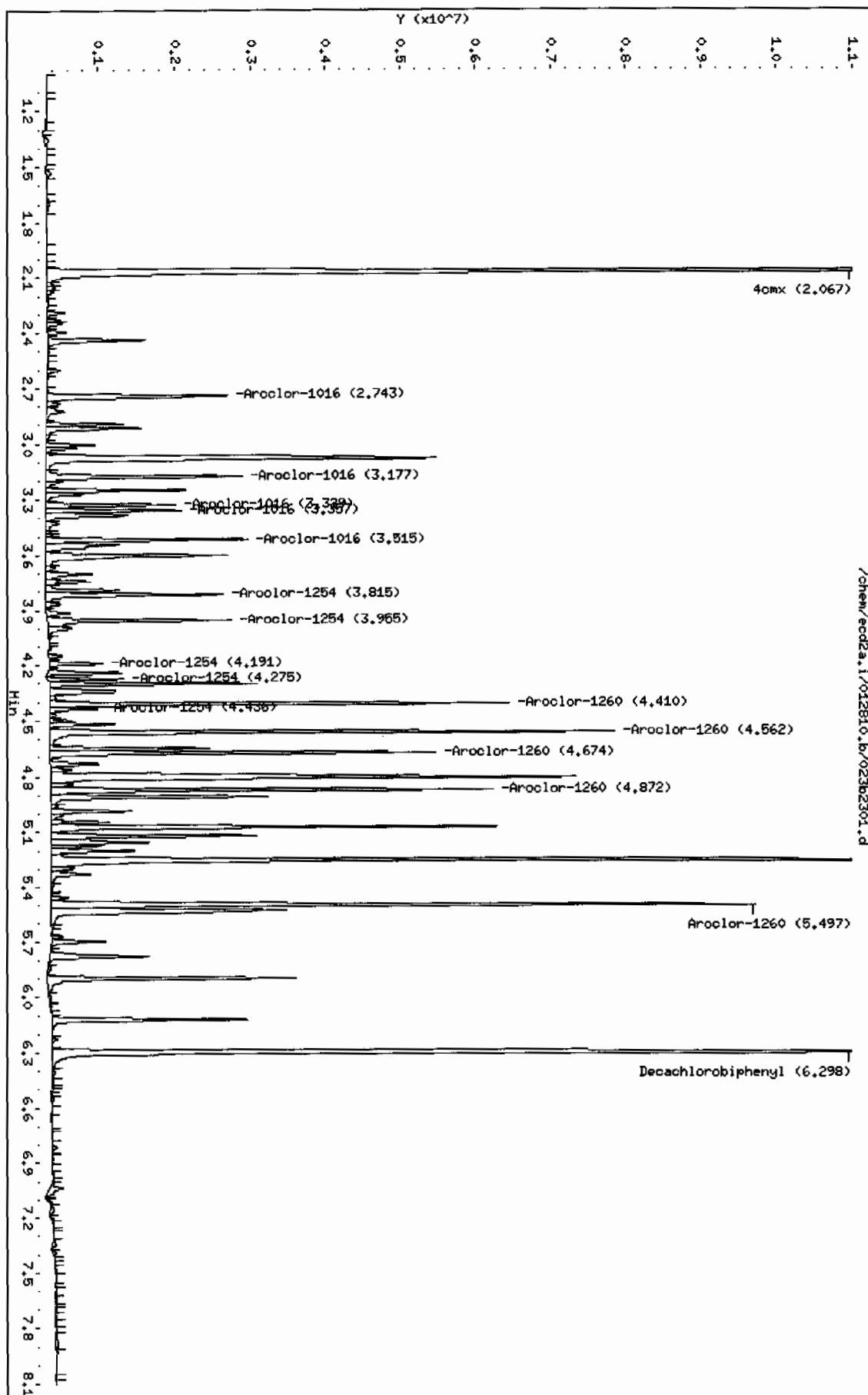
Average of Peak Concentrations = 25.6

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/ecod2a.1/012810.b/023b2301.d
 Date : 28-JAN-2010 11:04
 Client ID: RE15-10-7874HS
 Sample Info: 11202026169111
 Volume Injected (uL): 1.0
 Column phase: CLP2

Instrument: ecod2a.1
 Operator: JROC
 Column diameter: 0.25



PCB
Certificate of Analysis
Sample Summary

Page 1 of 1

SDG Number: 10-1392
Lab Sample ID: 1202026170
Client Sample: QC for batch 945978
Client ID: RE15-10-7874MSD
Batch ID: 945979
Run Date: 01/28/2010 11:15
Prep Date: 01/27/2010 20:26
Data File: 024f2401.d
024b2401.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: 30.13 g
Column: 1 CLP1
2 CLP2

Matrix: R
%Moisture: 4.1
Project: QC
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		23.4	ug/kg	1.15	3.46	1
11104-28-2	Aroclor-1221	U	3.46	ug/kg	1.15	3.46	1
11141-16-5	Aroclor-1232	U	3.46	ug/kg	1.15	3.46	1
53469-21-9	Aroclor-1242	U	3.46	ug/kg	1.15	3.46	1
12672-29-6	Aroclor-1248	U	3.46	ug/kg	1.15	3.46	1
11097-69-1	Aroclor-1254	P	17.1	ug/kg	1.15	3.46	1
11096-82-5	Aroclor-1260		30.8	ug/kg	1.15	3.46	2

GEL Laboratories LLC

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_1S|945979|SVA|QC A|SOIL|MSD|1|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: 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

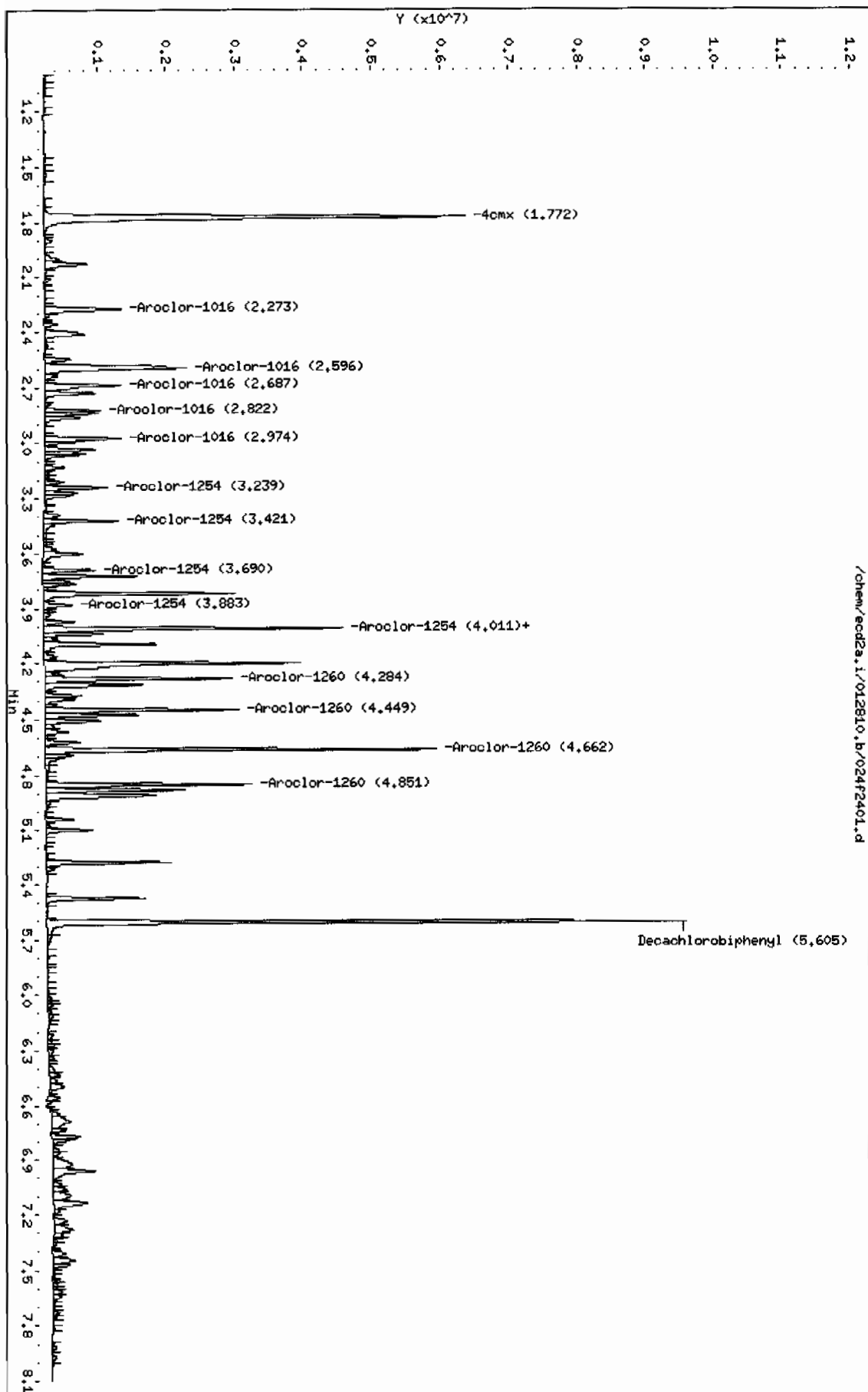
CONCENTRATIONS							
RT	EXP RT	DLT RT	RESPONSE (ug/L)	ON-COL	FINAL	TARGET RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====	=====
\$ 11 4cmx				CAS #: 877-09-8			
1.772	1.770	0.002	8323518 124.171	4.3	80.00- 120.00	100.00	
\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3			
5.605	5.604	0.001	8566767 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/ecod2a.i/012810.b/024f2401.d
Date: 28-JAN-2010 11:15
Client ID: RE15-10-7874HSD
Sample Info: 1120202617011
Volume Injected (uL): 1.0
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/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_1S|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

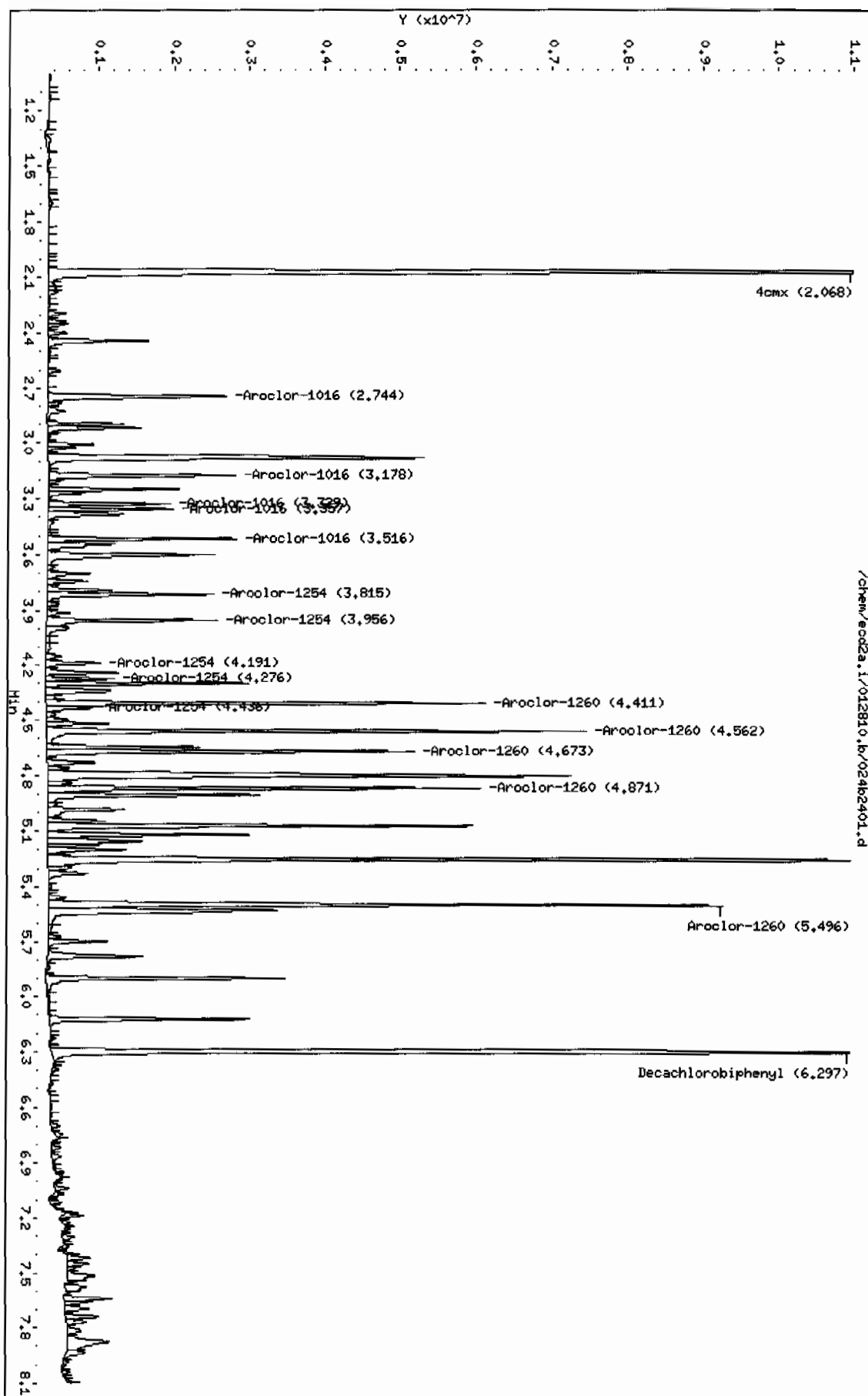
CONCENTRATIONS							
RT	EXP RT	DLT RT	RESPONSE (ug/L)	ON-COL	FINAL	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====	=====
\$ 11 4cmx				CAS #: 877-09-8			
2.068	2.067	0.001	18233519 130.653	4.5	80.00-	120.00	100.00
\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3			
6.297	6.297	0.000	17260834 138.584	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.1/012810.b/024b2401.d
 Date: 28-JUN-2010 11:15
 Client ID: REL5-10-7874MSD
 Sample Info: 1120202617011
 Volume Injected (uL): 1.0
 Column phase: CLP2

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



MISCELLANEOUS DATA

GEL ORGANIC RUN LOG

INSTRUMENT ID: ECD2

DATE: 11/13/2009 METHOD: ECD2-F-8082-111209A.m OPERATOR: YS1 REVIEWED BY: _____
HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT: CZ600
ALUMINA LOT: 1193715-A
COPPER LOT: 091020-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: Injection Volume: 1.0 uL

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
1001f0101.d	1001f0101.d	YS1	12-NOV-2009 10:05	111209a	1.0	1.0	CLEAN	
1002f0201.d	1002f0201.d	YS1	12-NOV-2009 10:16	111209a	1.0	1.0	DUSE RE-ICAL	
1003f0301.d	1003f0301.d	YS1	12-NOV-2009 10:27	111209a	1.0	1.0	DUSE RE-ICAL	
1004f0401.d	1004f0401.d	YS1	12-NOV-2009 10:38	111209a	1.0	1.0	DUSE RE-ICAL	
1005f0501.d	1005f0501.d	YS1	12-NOV-2009 10:49	111209a	1.0	1.0	DUSE RE-ICAL	
1006f0601.d	1006f0601.d	YS1	12-NOV-2009 11:00	111209a	1.0	1.0	PATTERN ONLY	
1007f0701.d	1007f0701.d	YS1	12-NOV-2009 11:11	111209a	1.0	1.0	PATTERN ONLY	
1008f0801.d	1008f0801.d	YS1	12-NOV-2009 11:22	111209a	1.0	1.0	PATTERN ONLY	
1009f0901.d	1009f0901.d	YS1	12-NOV-2009 11:33	111209a	1.0	1.0	DUSE RE-ICAL	
1010f1001.d	1010f1001.d	YS1	12-NOV-2009 11:45	111209a	1.0	1.0	DDT ANALOG STANDARD	
1011f1101.d	1011f1101.d	YS1	12-NOV-2009 11:56	111209a	1.0	1.0	ARI660 I-CAL LEVEL 1	
1012f1201.d	1012f1201.d	YS1	12-NOV-2009 12:07	111209a	1.0	1.0	ARI660 I-CAL LEVEL 2	
1013f1301.d	1013f1301.d	YS1	12-NOV-2009 12:18	111209a	1.0	1.0	ARI660 I-CAL LEVEL 3	
1014f1401.d	1014f1401.d	YS1	12-NOV-2009 12:29	111209a	1.0	1.0	ARI660 I-CAL LEVEL 4	
1015f1501.d	1015f1501.d	YS1	12-NOV-2009 12:40	111209a	1.0	1.0	ARI660 I-CAL LEVEL 5	

Instrument Batch: /chem/ecd2a.i/111209a.b

Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
1016f1601.d	1016f1601.d	YS1	12-NOV-2009 12:51	111209a	1.0	1.0	PASSED ON BOTH COLUMNS	

017f701.d	WAR091112-05 54	YS1	12-NOV-2009 13:02	111209a	1.01	ARI254 I-CAL LEVEL 1
018f1801.d	WAR091112-06 54	YS1	12-NOV-2009 13:13	111209a	1.01	ARI254 I-CAL LEVEL 2
019f1901.d	WAR091112-07 54	YS1	12-NOV-2009 13:25	111209a	1.01	ARI254 I-CAL LEVEL 3
020f2001.d	WAR091112-08 54	YS1	12-NOV-2009 13:36	111209a	1.01	ARI254 I-CAL LEVEL 4
021f2101.d	WAR091027-01	YS1	12-NOV-2009 13:47	111209a	1.01	ARI254 I-CAL LEVEL 5
022f2201.d	WAR091102-54	YS1	12-NOV-2009 13:58	111209a	1.01	PASSED ON BOTH COLUMNS
023f2301.d	WAR091112-09 42	YS1	12-NOV-2009 14:09	111209a	1.01	ARI242 I-CAL LEVEL 1
024f2401.d	WAR091112-10 42	YS1	12-NOV-2009 14:20	111209a	1.01	ARI242 I-CAL LEVEL 2
025f2501.d	WAR091112-11 42	YS1	12-NOV-2009 14:31	111209a	1.01	ARI242 I-CAL LEVEL 3
026f2601.d	WAR091112-12 42	YS1	12-NOV-2009 14:42	111209a	1.01	ARI242 I-CAL LEVEL 4
027f2701.d	WAR091111-01	YS1	12-NOV-2009 14:53	111209a	1.01	ARI242 I-CAL LEVEL 5
028f2801.d	WAR091102-42	YS1	12-NOV-2009 15:05	111209a	1.01	PASSED ON BOTH COLUMNS
029f2901.d	WAR091112-13 48	YS1	12-NOV-2009 15:16	111209a	1.01	ARI248 I-CAL LEVEL 1
030f3001.d	WAR091112-14 48	YS1	12-NOV-2009 15:27	111209a	1.01	ARI248 I-CAL LEVEL 2
031f3101.d	WAR091112-15 48	YS1	12-NOV-2009 15:38	111209a	1.01	ARI248 I-CAL LEVEL 3
032f3201.d	WAR091112-16 48	YS1	12-NOV-2009 15:49	111209a	1.01	ARI248 I-CAL LEVEL 4
033f3301.d	WAR091027-02	YS1	12-NOV-2009 16:00	111209a	1.01	ARI248 I-CAL LEVEL 5
034f3401.d	WAR091027-48	YS1	12-NOV-2009 16:11	111209a	1.01	PASSED ON BOTH COLUMNS
035f3501.d	WAR091112-17 68	YS1	12-NOV-2009 16:22	111209a	1.01	ARI268 I-CAL LEVEL 1

Instrument Batch: /chem/ecd2a.i/111209a.b

Page: 2

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Cient	Comments
036f3601.d	WAR091112-18 68	YS1	12-NOV-2009 16:33		111209a	1.01		AR1268 I-CAL LEVEL 2
037f3701.d	WAR091112-19 68	YS1	12-NOV-2009 16:44		111209a	1.01		AR1268 I-CAL LEVEL 3
038f3801.d	WAR091112-20 68	YS1	12-NOV-2009 16:55		111209a	1.01		AR1268 I-CAL LEVEL 4
039f3901.d	IAR090817-02	YS1	12-NOV-2009 17:07		111209a	1.01		AR1268 I-CAL LEVEL 5
040f4001.d	WAR091106-68	YS1	12-NOV-2009 17:18		111209a	1.01		PASSED ON BOTH COLUMNS
041f4101.d	WAR090916-99 02	YS1	12-NOV-2009 17:29		111209a	1.01		CLEAN

Instrument Batch: /chem/ecd2a.i/111209a.b

Page: 3

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-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: 113009A Injection Volume: 1.0 uL

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WAR090916-99 IB	JAOC	30-NOV-2009 08:21		113009a	1.0:	CLEAN	
002f0201.d	WAR091119-60 01	JAOC	30-NOV-2009 08:32		113009a	1.0:	DUSE	
003f0301.d	WAR091130-05 54	JAOC	30-NOV-2009 08:43		113009a	1.0:	1254 LEVEL 1	
004f0401.d	WAR091130-06 54	JAOC	30-NOV-2009 08:54		113009a	1.0:	1254 LEVEL 2	
005f0501.d	WAR091130-07 54	JAOC	30-NOV-2009 09:05		113009a	1.0:	1254 LEVEL 3	
006f0601.d	WAR091130-08 54	JAOC	30-NOV-2009 09:16		113009a	1.0:	1254 LEVEL 4	
007f0701.d	WAR091027-01 54	JAOC	30-NOV-2009 09:27		113009a	1.0:	1254 LEVEL 5	
008f0801.d	WAR091102-54	JAOC	30-NOV-2009 09:38		113009a	1.0:	PASSES BOTH COLUMNS	
009f0901.d	WAR091102-42	JAOC	30-NOV-2009 09:50		113009a	1.0:	PASSES BOTH COLUMNS	
010f1001.d	WAR091119-60 01	JAOC	30-NOV-2009 10:01		113009a	1.0:	PASSES BOTH COLUMNS	
011f1101.d	WAR091130-13 48	JAOC	30-NOV-2009 10:12		113009a	1.0:	1248 LEVEL 1	
012f1201.d	WAR091130-14 48	JAOC	30-NOV-2009 10:23		113009a	1.0:	1248 LEVEL 2	
013f1301.d	WAR091130-15 48	JAOC	30-NOV-2009 10:34		113009a	1.0:	1248 LEVEL 3	
014f1401.d	WAR091130-16 48	JAOC	30-NOV-2009 10:45		113009a	1.0:	1248 LEVEL 4	
015f1501.d	WAR091027-02 48	JAOC	30-NOV-2009 10:56		113009a	1.0:	1248 LEVEL 5	

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
016f1601.d	WAR091027-48	JAOC	30-NOV-2009 11:07		113009a	1.0:	DUSE	

1017f1701.d	WAR090930-32	JAOC	30-NOV-2009 11:18		113009a	1.0	PATTERN ONLY
1018f1801.d	WAR091027-48	JAOC	30-NOV-2009 11:29		113009a	1.0	PASSES BOTH COLUMNS
1019f1901.d	WAR091111-21	JAOC	30-NOV-2009 11:40		113009a	1.0	PATTERN ONLY
1020f2001.d	WAR091111-62	JAOC	30-NOV-2009 11:51		113009a	1.0	PATTERN ONLY
1021f2101.d	WAR091106-68	JAOC	30-NOV-2009 12:02		113009a	1.0	PATTERN ONLY
1022f2201.d	WAR091020-DDT	JAOC	30-NOV-2009 12:13		113009a	1.0	DDT
1023f2301.d	WAR090916-99 02	JAOC	30-NOV-2009 12:25		113009a	1.0	CLEAN
1024f2401.d	1201981402	JAOC	30-NOV-2009 12:36	926725	EUI-7399	1.0	QC A | UPLOAD BOTH, USE HIGHER
1025f2501.d	1201981405	JAOC	30-NOV-2009 12:47	926725	EUI-7399	1.0	QC A | UPLOAD BOTH, USE HIGHER
1026f2601.d	1241672001	JAOC	30-NOV-2009 12:58	926725	EUI-7399	200.0	CARE | UPLOAD BOTH, USE HIGHER
1027f2701.d	1201981403	JAOC	30-NOV-2009 13:09	926725	EUI-7399	200.0	QC A | UPLOAD BOTH, USE HIGHER
1028f2801.d	1201981404	JAOC	30-NOV-2009 13:20	926725	EUI-7399	200.0	QC A | UPLOAD BOTH, USE HIGHER
1029f2901.d	WAR091119-60 02	JAOC	30-NOV-2009 13:36		113009a	1.0	PASSES BOTH COLUMNS
1030f3001.d	WAR090916-99 03	JAOC	30-NOV-2009 13:47		113009a	1.0	CLEAN
1031f3101.d	1201981478	JAOC	30-NOV-2009 13:58	926760	1241688	1.0	QC A | UPLOAD BOTH, USE HIGHER
1032f3201.d	1201981479	JAOC	30-NOV-2009 14:09	926760	1241688	1.0	QC A | UPLOAD BOTH, USE HIGHER
1033f3301.d	1201981480	JAOC	30-NOV-2009 14:34	926760	1241688	1.0	QC A | UPLOAD BOTH, USE HIGHER
1034f3401.d	1241688001	JAOC	30-NOV-2009 14:45	926760	1241688	1000.0	ROIT | UPLOAD BOTH, USE HIGHER
1035f3501.d	1241688002	JAOC	30-NOV-2009 14:56	926760	1241688	1000.0	ROIT 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	JAOC	30-NOV-2009 15:12		113009a	1.0		PASSES BOTH COLUMNS
1037f3701.d	WAR090916-99 04	JAOC	30-NOV-2009 15:23		113009a	1.0		CLEAN
1038f3801.d	241034012	JAOC	30-NOV-2009 15:34	925599	10-463	100.0	LANL	UPLOAD BOTH, USE HIGHER
1039f3901.d	241034013	JAOC	30-NOV-2009 15:45	925599	10-463	1.0	LANL	UPLOAD BOTH, USE HIGHER
1040f4001.d	241034014	JAOC	30-NOV-2009 15:56	925599	10-463	5.0	LANL	UPLOAD BOTH, USE HIGHER
1041f4101.d	241034015	JAOC	30-NOV-2009 16:07	925599	10-463	20.0	LANL	UPLOAD BOTH, USE HIGHER

1042f4201.d	241034016	JAO	30-NOV-2009 16:18	925599	10-463	1.0.0	LANL	UPLOAD BOTH, USE HIGHER
1043f4301.d	241034017	JAO	30-NOV-2009 16:29	925599	10-463	1.0.0	LANL	UPLOAD BOTH, USE HIGHER
1044f4401.d	241038002	JAO	30-NOV-2009 16:40	925599	10-462	1.0.0	LANL	UPLOAD BOTH, USE HIGHER
1045f4501.d	WAR091119-60 04	JAO	30-NOV-2009 16:51		113009a	1.0		PASSES BOTH COLUMNS
1046f4601.d	WAR090916-99 05	JAO	30-NOV-2009 17:02		113009a	1.0		CLEAN
1047f4701.d	1201980278	JAO	30-NOV-2009 17:13	926186	10-390	1.0	QC A	UPLOAD BOTH, USE HIGHER
1048f4801.d	1201980281	JAO	30-NOV-2009 17:24	926186	10-390	1.0	QC A	UPLOAD BOTH, USE HIGHER
1049f4901.d	240638001	JAO	30-NOV-2009 17:36	926186	10-390	1.0	LANL	UPLOAD BOTH, USE HIGHER
1050f5001.d	1201980279	JAO	30-NOV-2009 17:47	926186	10-390	1.0	QC A	UPLOAD BOTH, USE HIGHER
1051f5101.d	1201980280	JAO	30-NOV-2009 17:58	926186	10-390	1.0	QC A	UPLOAD BOTH, USE HIGHER
1052f5201.d	1240740003	JAO	30-NOV-2009 18:09	926186	10-407	1.0	LANL	UPLOAD BOTH, USE HIGHER
1053f5301.d	1240740005	JAO	30-NOV-2009 18:20	926186	10-407	5.0	LANL	UPLOAD BOTH, USE HIGHER
1054f5401.d	WAR091119-60 05	JAO	30-NOV-2009 18:31		113009a	1.0		PASSES BOTH COLUMNS
1055f5501.d	WAR090916-99 06	JAO	30-NOV-2009 18:42		113009a	1.0		CLEAN

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Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
1056f5601.d	1201981445	JAO	30-NOV-2009 18:53	926744	241365	1.0	QC A	DUSE, SAMPLE HAS SULFUR HITS
1057f5701.d	1201981446	JAO	30-NOV-2009 19:04	926744	241365	1.0	QC A	DUSE, SAMPLE HAS SULFUR HITS
1058f5801.d	1201981447	JAO	30-NOV-2009 19:15	926744	241365	1.0	QC A	DUSE, SAMPLE HAS SULFUR HITS
1059f5901.d	1241365C01	JAO	30-NOV-2009 19:26	926744	241365	1.0	GELC	DUSE, SAMPLE HAS SULFUR HITS
1060f6001.d	WAR091119-60 06	JAO	30-NOV-2009 19:42		113009a	1.0		PASSES BOTH COLUMNS
1061f6101.d	WAR090916-99 07	JAO	30-NOV-2009 19:53		113009a	1.0		CLEAN
1062f6201.d	1201981383	JAO	30-NOV-2009 20:05	926712	10-519	1.0	QC A	UPLOAD BOTH, USE HIGHER
1063f6301.d	1201981386	JAO	30-NOV-2009 20:16	926712	10-519	1.0	QC A	UPLOAD BOTH, USE HIGHER
1064f6401.d	1241033012	JAO	30-NOV-2009 20:27	926712	10-460	1.0	LANL	UPLOAD BOTH, USE HIGHER
1065f6501.d	1241183002	JAO	30-NOV-2009 20:38	926712	10-519	5.0	LANL	UPLOAD BOTH, USE HIGHER

1066f6601.d	1241183003	JAOC	30-NOV-2009 20:49	1926712	10-519	10.0	LANL	UPLOAD BOTH, USE HIGHER
1067f6701.d	1241183004	JAOC	30-NOV-2009 21:00	1926712	10-519	1.0	LANL	UPLOAD BOTH, USE HIGHER
1068f6801.d	1241318001	JAOC	30-NOV-2009 21:11	1926712	10-543	10.0	LANL	UPLOAD BOTH, USE HIGHER
1069f6901.d	1241318002	JAOC	30-NOV-2009 21:22	1926712	10-543	5.0	LANL	UPLOAD BOTH, USE HIGHER
1070f7001.d	1241318003	JAOC	30-NOV-2009 21:33	1926712	10-543	5.0	LANL	UPLOAD BOTH, USE HIGHER
1071f7101.d	1241318004	JAOC	30-NOV-2009 21:44	1926712	10-543	5.0	LANL	UPLOAD BOTH, USE HIGHER
1072f7201.d	10727201-60 07	JAOC	30-NOV-2009 21:55	1113009a	1.0	1.0	LANL	PASSES BOTH COLUMNS
1073f7301.d	10737301-99 08	JAOC	30-NOV-2009 22:07	1113009a	1.0	1.0	LANL	CLEAN
1074f7401.d	1241318005	JAOC	30-NOV-2009 22:18	1926712	10-543	5.0	LANL	UPLOAD BOTH, USE HIGHER
1075f7501.d	1241318006	JAOC	30-NOV-2009 22:29	1926712	10-543	1.0	LANL	UPLOAD BOTH, USE HIGHER

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1076f7601.d	1241318007	JAOC	30-NOV-2009 22:40	1926712	10-543	5.0	LANL	UPLOAD BOTH, USE HIGHER
1077f7701.d	1241318008	JAOC	30-NOV-2009 22:51	1926712	10-543	1.0	LANL	UPLOAD BOTH, USE HIGHER
1078f7801.d	1241318009	JAOC	30-NOV-2009 23:02	1926712	10-543	1.0	LANL	UPLOAD BOTH, USE HIGHER
1079f7901.d	1241318010	JAOC	30-NOV-2009 23:13	1926712	10-543	5.0	LANL	UPLOAD BOTH, USE HIGHER
1080f8001.d	1241318013	JAOC	30-NOV-2009 23:24	1926712	10-543	5.0	LANL	UPLOAD BOTH, USE HIGHER
1081f8101.d	1241318014	JAOC	30-NOV-2009 23:36	1926712	10-543	1.0	LANL	UPLOAD BOTH, USE HIGHER
1082f8201.d	1241336001	JAOC	30-NOV-2009 23:47	1926712	10-546	1.0	LANL	UPLOAD BOTH, USE HIGHER
1083f8301.d	1241336002	JAOC	30-NOV-2009 23:58	1926712	10-546	5.0	LANL	UPLOAD BOTH, USE HIGHER
1084f8401.d	107491119-60 08	JAOC	01-DEC-2009 00:09	1113009a	1.0	1.0	LANL	PASSES BOTH COLUMNS
1085f8501.d	107490916-99 09	JAOC	01-DEC-2009 00:20	1113009a	1.0	1.0	LANL	CLEAN
1086f8601.d	1241417001	JAOC	01-DEC-2009 00:31	1926712	10-575	10.0	LANL	UPLOAD BOTH, USE HIGHER
1087f8701.d	1201981384	JAOC	01-DEC-2009 00:42	1926712	10-575	10.0	QC A	UPLOAD BOTH, USE HIGHER
1088f8801.d	1201981385	JAOC	01-DEC-2009 00:53	1926712	10-575	10.0	QC A	UPLOAD BOTH, USE HIGHER
1089f8901.d	1241417002	JAOC	01-DEC-2009 01:05	1926712	10-575	1.0	LANL	UPLOAD BOTH, USE HIGHER
1090f9001.d	10749091119-60 09	JAOC	01-DEC-2009 01:16	1113009a	1.0	1.0	LANL	PASSES BOTH COLUMNS

1091f9101.d	1WAR090916-99 10	JAOC	01-DEC-2009 01:27		113009a		1.01		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		012010	1.0	CLEAN	
002f0201.d	WAR100104-60 01	JAOC	120-JAN-2010 08:29		012010	1.0	DOSE	
003f0301.d	WAR091102-54	JAOC	120-JAN-2010 08:40		012010	1.0	PASSES BOTH COLUMNS	
004f0401.d	WAR091217-42	JAOC	120-JAN-2010 08:51		012010	1.0	PASSES BOTH COLUMNS	
005f0501.d	WAR091217-48	JAOC	120-JAN-2010 09:02		012010	1.0	PASSES BOTH COLUMNS	
006f0601.d	WAR100104-32	JAOC	120-JAN-2010 09:13		012010	1.0	PATTERN ONLY	
007f0701.d	WAR100104-21	JAOC	120-JAN-2010 09:24		012010	1.0	PATTERN ONLY	
008f0801.d	WAR100104-62	JAOC	120-JAN-2010 09:35		012010	1.0	PASSES BOTH COLUMNS	
009f0901.d	WAR100120-01 60	JAOC	120-JAN-2010 09:46		012010	1.0	1660 LEVEL 1	
010f1001.d	WAR100120-02 60	JAOC	120-JAN-2010 09:57		012010	1.0	1660 LEVEL 2	
011f1101.d	WAR100120-03 60	JAOC	120-JAN-2010 10:09		012010	1.0	1660 LEVEL 3	
012f1201.d	WAR100120-04 60	JAOC	120-JAN-2010 10:20		012010	1.0	1660 LEVEL 4	
013f1301.d	WAR100104-01 60	JAOC	120-JAN-2010 10:31		012010	1.0	1660 LEVEL 5	
014f1401.d	WAR100104-60 01	JAOC	120-JAN-2010 10:42		012010	1.0	PASSES BOTH COLUMNS	
015f1501.d	WAR091106-68	JAOC	120-JAN-2010 10:53		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		012010	1.0	DDT	

017f1701.d	WAR091130-99 02	JAOC	20-JAN-2010 11:15		012010	1.0	CLEAN
018f1801.d	1202019498	JAOC	20-JAN-2010 11:26	943205	10-1256	1.0|QC A	UPLOAD BOTH, USE HIGHER
019f1901.d	1202019499	JAOC	20-JAN-2010 11:38	943205	10-1256	1.0|QC A	UPLOAD BOTH, USE HIGHER
020f2001.d	1244837001	JAOC	20-JAN-2010 11:49	943205	10-1256	1.0|LANL	CPLOAD BOTH, USE HIGHER
021f2101.d	1244837002	JAOC	20-JAN-2010 12:00	943205	10-1256	1.0|LANL	CPLOAD BOTH, USE HIGHER
022f2201.d	1244837003	JAOC	20-JAN-2010 12:11	943205	10-1256	1.0|LANL	UPLOAD BOTH, USE HIGHER
023f2301.d	1244837004	JAOC	20-JAN-2010 12:22	943205	10-1256	1.0|LANL	UPLOAD BOTH, USE HIGHER
024f2401.d	1244837005	JAOC	20-JAN-2010 12:33	943205	10-1256	1.0|LANL	CPLOAD BOTH, USE HIGHER
025f2501.d	1244837006	JAOC	20-JAN-2010 12:44	943205	10-1256	1.0|LANL	UPLOAD BOTH, USE HIGHER
026f2601.d	1244847004	JAOC	20-JAN-2010 12:55	943205	10-1262	5.0|LANL	UPLOAD BOTH, USE HIGHER
027f2701.d	1244852001	JAOC	20-JAN-2010 13:06	943205	10-1263	1.0|LANL	UPLOAD BOTH, USE HIGHER
028f2801.d	WAR100104-60 02	JAOC	20-JAN-2010 13:17		012010	1.0|CCV	PASSES BOTH COLUMNS
029f2901.d	WAR091130-99 03	JAOC	20-JAN-2010 13:28		012010	1.0|IB	CLEAN
030f3001.d	1244852002	JAOC	20-JAN-2010 13:40	943205	10-1263	1.0|LANL	UPLOAD BOTH, USE HIGHER
031f3101.d	1244881001	JAOC	20-JAN-2010 13:51	943205	10-1264-1	1.0|LANL	UPLOAD BOTH, USE HIGHER
032f3201.d	1202019500	JAOC	20-JAN-2010 14:02	943205	10-1264-1	1.0|QC A	UPLOAD BOTH, USE HIGHER
033f3301.d	1202019501	JAOC	20-JAN-2010 14:13	943205	10-1264-1	1.0|QC A	UPLOAD BOTH, USE HIGHER
034f3401.d	1244881002	JAOC	20-JAN-2010 14:24	943205	10-1264-1	10.0|LANL	UPLOAD BOTH, USE HIGHER
035f3501.d	1244881003	JAOC	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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Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	244881004	JAOC	20-JAN-2010 14:46	943205	110-1264-1	1.0	LANL	UPLOAD BOTH, USE HIGHER
037f3701.d	WAR100104-60 03	JAOC	20-JAN-2010 14:57		012010	1.0		PASSES BOTH COLUMNS
038f3801.d	WAR091130-99 04	JAOC	20-JAN-2010 15:09		012010	1.0		CLEAN
039f3901.d	1202018783	JAOC	20-JAN-2010 15:20	942921	1244874	1.0	QC A	UPLOAD BOTH, USE HIGHER
040f4001.d	1202018784	JAOC	20-JAN-2010 15:31	942921	1244874	1.0	QC A	UPLOAD BOTH, USE HIGHER
041f4101.d	244937001	JAOC	20-JAN-2010 15:42	942921	1244937	1.0	WSRB	UPLOAD BOTH, USE HIGHER

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1042f4201.d	1202018785	JAOC	120-JAN-2010 15:53	942921	1244937	1.0 MS	UPLOAD BOTH, USE HIGHER
1043f4301.d	1202018786	JAOC	120-JAN-2010 16:04	942921	1244937	1.0|MSD	UPLOAD BOTH, USE HIGHER
1044f4401.d	1244937002	JAOC	120-JAN-2010 16:15	942921	1244937	1.0|WSRB	UPLOAD BOTH, USE HIGHER
1045f4501.d	1244874002	JAOC	120-JAN-2010 16:26	942921	1244874	1.0|GEEL	SENT FOR RE, LOW SURROGATES
1046f4601.d	1WARI00104-60 04	JAOC	120-JAN-2010 16:37		1012010	1.0|	PASSES BOTH COLUMNS
1047f4701.d	1WARI01130-99 05	JAOC	120-JAN-2010 16:48		1012010	1.0|	CLEAN
1048f4801.d	1202017036	JAOC	120-JAN-2010 17:00	942243	12010MDLVECD21254-S	1.0|QC A	UPLOAD BOTH, USE BOTH
1049f4901.d	1202017037	JAOC	120-JAN-2010 17:11	942243	12010MDLVECD21254-S	1.0|QC A	UPLOAD BOTH, USE BOTH
1050f5001.d	1243888001	JAOC	120-JAN-2010 17:22	942243	12010MDLVECD21254-S	1.0|QCQA	UPLOAD BOTH, USE BOTH
1051f5101.d	1243888002	JAOC	120-JAN-2010 17:33	942243	12010MDLVECD21254-S	1.0|QCQA	UPLOAD BOTH, USE BOTH
1052f5201.d	1243888003	JAOC	120-JAN-2010 17:44	942243	12010MDLVECD21254-S	1.0|QCQA	UPLOAD BOTH, USE BOTH
1053f5301.d	1243888004	JAOC	120-JAN-2010 17:55	942243	12010MDLVECD21254-S	1.0|QCQA	UPLOAD BOTH, USE BOTH
1054f5401.d	1WARI00104-60 05	JAOC	120-JAN-2010 18:06		1012010	1.0	PASSES BOTH COLUMNS
1055f5501.d	1WARI01130-99 06	JAOC	120-JAN-2010 18:18		1012010	1.0	CLEAN

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

1056f5601.d	1202016956	JAOC	120-JAN-2010 18:29	942219	12010MDLVECD21254-L	1.0 QC A	UPLOAD BOTH, USE BOTH
1057f5701.d	1202016957	JAOC	120-JAN-2010 18:40	942219	12010MDLVECD21254-L	1.0|QC A	UPLOAD BOTH, USE BOTH
1058f5801.d	1243868001	JAOC	120-JAN-2010 18:51	942219	12010MDLVECD21254-L	1.0|QCQA	UPLOAD BOTH, USE BOTH
1059f5901.d	1243868002	JAOC	120-JAN-2010 19:02	942219	12010MDLVECD21254-L	1.0|QCQA	UPLOAD BOTH, USE BOTH
1060f6001.d	1243868003	JAOC	120-JAN-2010 19:13	942219	12010MDLVECD21254-L	1.0|QCQA	UPLOAD BOTH, USE BOTH
1061f6101.d	1243868004	JAOC	120-JAN-2010 19:24	942219	12010MDLVECD21254-L	1.0|QCQA	UPLOAD BOTH, USE BOTH
1062f6201.d	1WARI00104-60 06	JAOC	120-JAN-2010 19:35		1012010	1.0|	PASSES BOTH COLUMNS
1063f6301.d	1WARI01130-99 07	JAOC	120-JAN-2010 19:47		1012010	1.0|	CLEAN

GEL ORGANIC RUN LOG

INSTRUMENT ID: ECD2

DATE: 01/29/2010 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
Injection Volume: 1.0 uL

Sequence Number: 012810

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WAR100105-99 1B	JAOC	128-JAN-2010 07:00		012810	1.0	CLEAN	
002f0201.d	WAR100104-60 01	JAOC	128-JAN-2010 07:11		012810	1.0	PASSES BOTH COLUMNS	
003f0301.d	WAR091102-54	JAOC	128-JAN-2010 07:22		012810	1.0	PASSES BOTH COLUMNS	
004f0401.d	WAR091217-42	JAOC	128-JAN-2010 07:33		012810	1.0	PASSES BOTH COLUMNS	
005f0501.d	WAR091217-48	JAOC	128-JAN-2010 07:44		012810	1.0	PASSES BOTH COLUMNS	
006f0601.d	WAR100104-32	JAOC	128-JAN-2010 07:55		012810	1.0	PASSES BOTH COLUMNS	
007f0701.d	WAR100104-21	JAOC	128-JAN-2010 08:07		012810	1.0	PATTERN ONLY	
008f0801.d	WAR100104-62	JAOC	128-JAN-2010 08:18		012810	1.0	PASSES BOTH COLUMNS	
009f0901.d	WAR091106-68	JAOC	128-JAN-2010 08:29		012810	1.0	PASSES BOTH COLUMNS	
010f1001.d	WAR091219-DDT	JAOC	128-JAN-2010 08:40		012810	1.0	DDT	
011f1101.d	WAR100105-99 02	JAOC	128-JAN-2010 08:51		012810	1.0	CLEAN	
012f1201.d	1202026167	JAOC	128-JAN-2010 09:02	945979	10-1384	1.0	QC A	UPLOAD BOTH, USE HIGHER
013f1301.d	1202026168	JAOC	128-JAN-2010 09:13	945979	10-1384	1.0	QC A	UPLOAD BOTH, USE HIGHER
014f1401.d	245387001	JAOC	128-JAN-2010 09:24	945979	10-1384	1.0	LANL	UPLOAD BOTH, USE HIGHER
015f1501.d	245387002	JAOC	128-JAN-2010 09:35	945979	10-1384	1.0	LANL	UPLOAD BOTH, USE HIGHER

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

Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	245387003	JAOC	128-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		012810	1.0	C	PASSES BOTH COLUMNS
1020f2001.d	WAR100105-99 03	JAO	28-JAN-2010 10:30		012810	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		012810	1.0		PASSES BOTH COLUMNS
1030f3001.d	WAR100105-99 04	JAO	28-JAN-2010 12:21		012810	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		012810	1.0		PASSES BOTH COLUMNS

1042f4201.d	1WAR100105-99 05	1JAO	128-JAN-2010 15:19	1	1012810	1	1.01	1	CLEAN
1043f4301.d	1245312007	1JAO	128-JAN-2010 15:31	1945758	110-1364	1	1.01	1LANL	1UPLOAD BOTH, USE HIGHER
1044f4401.d	1245312008	1JAO	128-JAN-2010 15:42	1945758	110-1364	1	1.01	1LANL	1UPLOAD BOTH, USE HIGHER
1045f4501.d	1245312009	1JAO	128-JAN-2010 15:53	1945758	110-1364	1	1.01	1LANL	1UPLOAD BOTH, USE HIGHER
1046f4601.d	1245312010	1JAO	128-JAN-2010 16:04	1945758	110-1364	1	1.01	1LANL	1UPLOAD BOTH, USE HIGHER
1047f4701.d	1245312011	1JAO	128-JAN-2010 16:15	1945758	110-1364	1	1.01	1LANL	1UPLOAD BOTH, USE HIGHER
1048f4801.d	1245312012	1JAO	128-JAN-2010 16:26	1945758	110-1364	1	5.01	1LANL	1UPLOAD BOTH, USE HIGHER
1049f4901.d	1245312013	1JAO	128-JAN-2010 16:37	1945758	110-1364	1	1.01	1LANL	1UPLOAD BOTH, USE HIGHER
1050f5001.d	1245312014	1JAO	128-JAN-2010 16:48	1945758	110-1364	1	1.01	1LANL	1UPLOAD BOTH, USE HIGHER
1051f5101.d	1245394006	1JAO	128-JAN-2010 16:59	1945979	110-1392	1	5.01	1LANL	1UPLOAD BOTH, USE HIGHER
1052f5201.d	1WAR00104-60 05	1JAO	128-JAN-2010 17:10	1	1012810	1	1.01	1	1PASSES BOTH COLUMNS
1053f5301.d	1WAR100105-99 06	1JAO	128-JAN-2010 17:21	1	1012810	1	1.01	1	1CLEAN

Prep Logbook

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

Batch ID: 945978 Verified by: _____

Analyst: Andrew Schwemin Lab SOP: GL-OA-E-010 REV# 18

Method: SW846 3550B 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 UGL	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			

Metals Analysis

Case Narrative

**Metals Fractional Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1392**

Sample Analysis

Sample ID	Client ID
245394001	RE15-10-7869
245394002	RE15-10-7874
245394003	RE15-10-7871
245394004	RE15-10-7872
245394005	RE15-10-7870
245394006	RE15-10-7873
245394007	RE15-10-7911
245394008	RE15-10-7908
245394009	RE15-10-7912
245394010	RE15-10-7906
245394011	RE15-10-7905
245394012	RE15-10-7907
245394013	RE15-10-7913
245394014	RE15-10-7909
245394015	RE15-10-7910
1202024813	Method Blank (MB) ICP
1202024814	Laboratory Control Sample (LCS)
1202024817	245394001(RE15-10-7869L) Serial Dilution (SD)
1202024815	245394001(RE15-10-7869D) Sample Duplicate (DUP)
1202024816	245394001(RE15-10-7869S) Matrix Spike (MS)

1202024818	245394001(RE15-10-7869SD) Matrix Spike Duplicate (MSD)
1202024819	Method Blank (MB) ICP-MS
1202024820	Laboratory Control Sample (LCS)
1202024823	245394001(RE15-10-7869L) Serial Dilution (SD)
1202024821	245394001(RE15-10-7869D) Sample Duplicate (DUP)
1202024822	245394001(RE15-10-7869S) Matrix Spike (MS)
1202024824	245394001(RE15-10-7869SD) Matrix Spike Duplicate (MSD)
1202025301	Method Blank (MB) CVAA
1202025302	Laboratory Control Sample (LCS)
1202025305	245396001(RE15-10-7928L) Serial Dilution (SD)
1202025303	245396001(RE15-10-7928D) Sample Duplicate (DUP)
1202025304	245396001(RE15-10-7928S) Matrix Spike (MS)
1202025306	245396001(RE15-10-7928SD) Matrix Spike Duplicate (MSD)

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

Method/Analysis Information

Analytical Batch:	945421, 945425 and 945628
Prep Batch :	945420, 945424 and 945627
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 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: 245394001 and 245396001.

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 antimony, calcium, copper, lead, magnesium, manganese, potassium, beryllium and nickel, 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 antimony, calcium, copper, lead, magnesium, potassium and selenium, as indicated by the "N" qualifiers.

MS/MSD Relative Percent Difference (RPD) Statement

The relative percent difference (RPD) obtained from the designated matrix spike duplicate (MSD) is evaluated based on acceptance criteria of 20%. The RPD between qualifying elements results in the MS and MSD were within the acceptance limits of 20% with the exception of lead, selenium and uranium, as indicated by the "*" qualifiers.

Duplicate Relative Percent Difference (RPD) Statement

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

Serial Dilution % Difference Statement

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

Technical Information

Holding Time Specifications

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

Sample Dilutions

Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in solid samples and/or to bring over range target analyte concentrations into the linear calibration range of the instrument. The samples in this SDG were diluted the standard 2x for solids on the ICPMS. The samples 245394001, 245394003, 245394004, 245394006, 245394007, 245394008, 245394009, 245394011, 245394012, 245394013, 245394014 and 245394015 S required dilutions for uranium in order to bring over range concentrations within the linear calibration range of the instrument.

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: 791124 and 791810. 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 Larson Date: 2/17/10

Sample Data Summary

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1392

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245394001

BASIS: Dry Weight

DATE COLLECTED 19-JAN-10

CLIENT ID: RE15-10-7869

LEVEL: Low

DATE RECEIVED 23-JAN-10

MATRIX: SOIL

%SOLIDS: 75

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	7330000	ug/Kg	*	8890	26200	26200	1	P	HSC	02/11/10 19:10	021110-1	945421
7440-36-0	Antimony	1310	ug/Kg	UN	431	1310	1310	1	P	HSC	02/11/10 19:10	021110-1	945421
7440-38-2	Arsenic	3.12	mg/kg		0.263	1.32	1.32	2	MS	RMJ	02/14/10 09:56	100213-2	945425
7440-39-3	Barium	87200	ug/Kg		131	654	654	1	P	HSC	02/11/10 19:10	021110-1	945421
7440-41-7	Beryllium	3.07	mg/kg	N	0.0263	0.132	0.132	2	MS	RMJ	02/14/10 09:56	100213-2	945425
7440-43-9	Cadmium	654	ug/Kg	U	131	654	654	1	P	HSC	02/11/10 19:10	021110-1	945421
7440-70-2	Calcium	18000000	ug/Kg	N	10500	32700	32700	1	P	HSC	02/11/10 19:10	021110-1	945421
7440-47-3	Chromium	6770	ug/Kg		196	654	654	1	P	HSC	02/11/10 19:10	021110-1	945421
7440-48-4	Cobalt	2770	ug/Kg		196	654	654	1	P	HSC	02/11/10 19:10	021110-1	945421
7440-50-8	Copper	148000	ug/Kg	*N	392	1310	1310	1	P	HSC	02/11/10 19:10	021110-1	945421
7439-89-6	Iron	10000000	ug/Kg		10500	32700	32700	1	P	HSC	02/11/10 19:10	021110-1	945421
7439-92-1	Lead	64200	ug/Kg	*N	327	1310	1310	1	P	HSC	02/11/10 19:10	021110-1	945421
7439-95-4	Magnesium	1300000	ug/Kg	N	11100	39200	39200	1	P	HSC	02/11/10 19:10	021110-1	945421
7439-96-5	Manganese	174000	ug/Kg	N	262	1310	1310	1	P	HSC	02/11/10 19:10	021110-1	945421
7439-97-6	Mercury	12.7	ug/kg	J	4.59	13.5	13.5	1	AV	ETL	02/10/10 10:19	021010S1-4	945628
7440-02-0	Nickel	9.64	mg/kg	N	0.132	0.526	0.526	2	MS	RMJ	02/14/10 09:56	100213-2	945425
7440-09-7	Potassium	860000	ug/Kg	N	8370	32700	32700	1	P	HSC	02/11/10 19:10	021110-1	945421
7782-49-2	Selenium	1.32	mg/kg	U*N	0.658	1.32	1.32	2	MS	RMJ	02/14/10 09:56	100213-2	945425
7440-22-4	Silver	493	ug/Kg	J	131	654	654	1	P	HSC	02/11/10 19:10	021110-1	945421
7440-23-5	Sodium	62000	ug/Kg		9150	32700	32700	1	P	HSC	02/11/10 19:10	021110-1	945421
7440-28-0	Thallium	0.183	mg/kg	J	0.0789	0.263	0.263	2	MS	RMJ	02/14/10 09:56	100213-2	945425
7440-61-1	Uranium	69.6	mg/kg	*	0.0868	0.263	0.263	10	MS	RMJ	02/16/10 07:38	100215-3	945425
7440-62-2	Vanadium	17700	ug/Kg		131	654	654	1	P	HSC	02/11/10 19:10	021110-1	945421
7440-66-6	Zinc	32600	ug/Kg		431	1310	1310	1	P	HSC	02/11/10 19:10	021110-1	945421

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt/vol.	Units	Final wt/vol.	Units	Date	Analyst
945421	945420	SW846 3050B	0.508	g	50	mL	02/04/10	FGA
945425	945424	SW846 3050B	0.505	g	50	mL	02/04/10	FGA
945628	945627	SW846 7471A Prep	0.591	g	30	mL	02/09/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1392

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245394002

BASIS: Dry Weight

DATE COLLECTED 19-JAN-10

CLIENT ID: RE15-10-7874

LEVEL: Low

DATE RECEIVED 23-JAN-10

MATRIX: SOIL

%SOLIDS: 95.9

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1320000	ug/Kg	*	6830	20100	20100	1	P	HSC	02/11/10 19:58	021110-1	945421
7440-36-0	Antimony	1000	ug/Kg	UN	332	1000	1000	1	P	HSC	02/11/10 19:58	021110-1	945421
7440-38-2	Arsenic	1.08	mg/kg		0.202	1.01	1.01	2	MS	RMJ	02/14/10 10:26	100213-2	945425
7440-39-3	Barium	30100	ug/Kg		100	502	502	1	P	HSC	02/11/10 19:58	021110-1	945421
7440-41-7	Beryllium	0.848	mg/kg	N	0.0202	0.101	0.101	2	MS	RMJ	02/14/10 10:26	100213-2	945425
7440-43-9	Cadmium	502	ug/Kg	U	100	502	502	1	P	HSC	02/11/10 19:58	021110-1	945421
7440-70-2	Calcium	448000	ug/Kg	N	8040	25100	25100	1	P	HSC	02/11/10 19:58	021110-1	945421
7440-47-3	Chromium	2890	ug/Kg		151	502	502	1	P	HSC	02/11/10 19:58	021110-1	945421
7440-48-4	Cobalt	4660	ug/Kg		151	502	502	1	P	HSC	02/11/10 19:58	021110-1	945421
7440-50-8	Copper	45900	ug/Kg	*N	301	1000	1000	1	P	HSC	02/11/10 19:58	021110-1	945421
7439-89-6	Iron	9340000	ug/Kg		8040	25100	25100	1	P	HSC	02/11/10 19:58	021110-1	945421
7439-92-1	Lead	17100	ug/Kg	*N	251	1000	1000	1	P	HSC	02/11/10 19:58	021110-1	945421
7439-95-4	Magnesium	347000	ug/Kg	N	8540	30100	30100	1	P	HSC	02/11/10 19:58	021110-1	945421
7439-96-5	Manganese	319000	ug/Kg	N	201	1000	1000	1	P	HSC	02/11/10 19:58	021110-1	945421
7439-97-6	Mercury	8.06	ug/kg	J	4.06	11.9	11.9	1	AV	ETL	02/10/10 10:21	021010S1-4	945628
7440-02-0	Nickel	6.46	mg/kg	N	0.101	0.403	0.403	2	MS	RMJ	02/14/10 10:26	100213-2	945425
7440-09-7	Potassium	404000	ug/Kg	N	6430	25100	25100	1	P	HSC	02/11/10 19:58	021110-1	945421
7782-49-2	Selenium	1.01	mg/kg	U*N	0.504	1.01	1.01	2	MS	RMJ	02/14/10 10:26	100213-2	945425
7440-22-4	Silver	552	ug/Kg		100	502	502	1	P	HSC	02/11/10 19:58	021110-1	945421
7440-23-5	Sodium	179000	ug/Kg		7030	25100	25100	1	P	HSC	02/11/10 19:58	021110-1	945421
7440-28-0	Thallium	0.202	mg/kg	U	0.0605	0.202	0.202	2	MS	RMJ	02/14/10 10:26	100213-2	945425
7440-61-1	Uranium	13.3	mg/kg	*	0.0133	0.0403	0.0403	2	MS	RMJ	02/16/10 07:56	100215-3	945425
7440-62-2	Vanadium	4290	ug/Kg		100	502	502	1	P	HSC	02/11/10 19:58	021110-1	945421
7440-66-6	Zinc	51800	ug/Kg		332	1000	1000	1	P	HSC	02/11/10 19:58	021110-1	945421

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
945421	945420	SW846 3050B	0.519	g	50	mL	02/04/10	FGA
945425	945424	SW846 3050B	0.517	g	50	mL	02/04/10	FGA
945628	945627	SW846 7471A Prep	0.524	g	30	mL	02/09/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1392

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245394003

BASIS: Dry Weight

DATE COLLECTED 19-JAN-10

CLIENT ID: RE15-10-7871

LEVEL: Low

DATE RECEIVED 23-JAN-10

MATRIX: SOIL

%SOLIDS: 89

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	2520000	ug/Kg	*	7440	21900	21900	1	P	HSC	02/11/10 20:05	021110-1	945421
7440-36-0	Antimony	2070	ug/Kg	N	361	1090	1090	1	P	HSC	02/11/10 20:05	021110-1	945421
7440-38-2	Arsenic	1.84	mg/kg		0.222	1.11	1.11	2	MS	RMJ	02/14/10 10:32	100213-2	945425
7440-39-3	Barium	91700	ug/Kg		109	547	547	1	P	HSC	02/11/10 20:05	021110-1	945421
7440-41-7	Beryllium	4.12	mg/kg	N	0.0222	0.111	0.111	2	MS	RMJ	02/14/10 10:32	100213-2	945425
7440-43-9	Cadmium	547	ug/Kg	U	109	547	547	1	P	HSC	02/11/10 20:05	021110-1	945421
7440-70-2	Calcium	1240000	ug/Kg	N	8750	27400	27400	1	P	HSC	02/11/10 20:05	021110-1	945421
7440-47-3	Chromium	6810	ug/Kg		164	547	547	1	P	HSC	02/11/10 20:05	021110-1	945421
7440-48-4	Cobalt	1370	ug/Kg		164	547	547	1	P	HSC	02/11/10 20:05	021110-1	945421
7440-50-8	Copper	206000	ug/Kg	*N	328	1090	1090	1	P	HSC	02/11/10 20:05	021110-1	945421
7439-89-6	Iron	7380000	ug/Kg		8750	27400	27400	1	P	HSC	02/11/10 20:05	021110-1	945421
7439-92-1	Lead	147000	ug/Kg	*N	274	1090	1090	1	P	HSC	02/11/10 20:05	021110-1	945421
7439-95-4	Magnesium	658000	ug/Kg	N	9300	32800	32800	1	P	HSC	02/11/10 20:05	021110-1	945421
7439-96-5	Manganese	196000	ug/Kg	N	219	1090	1090	1	P	HSC	02/11/10 20:05	021110-1	945421
7439-97-6	Mercury	13	ug/kg		4.37	12.9	12.9	1	AV	ETL	02/10/10 10:23	021010S1-4	945628
7440-02-0	Nickel	21	mg/kg	N	0.111	0.444	0.444	2	MS	RMJ	02/14/10 10:32	100213-2	945425
7440-09-7	Potassium	355000	ug/Kg	N	7000	27400	27400	1	P	HSC	02/11/10 20:05	021110-1	945421
7782-49-2	Selenium	1.11	mg/kg	U*N	0.555	1.11	1.11	2	MS	RMJ	02/14/10 10:32	100213-2	945425
7440-22-4	Silver	570	ug/Kg		109	547	547	1	P	HSC	02/11/10 20:05	021110-1	945421
7440-23-5	Sodium	56500	ug/Kg		7660	27400	27400	1	P	HSC	02/11/10 20:05	021110-1	945421
7440-28-0	Thallium	0.222	mg/kg	U	0.0666	0.222	0.222	2	MS	RMJ	02/14/10 10:32	100213-2	945425
7440-61-1	Uranium	66.9	mg/kg	*	0.0732	0.222	0.222	10	MS	RMJ	02/16/10 08:00	100215-3	945425
7440-62-2	Vanadium	8540	ug/Kg		109	547	547	1	P	HSC	02/11/10 20:05	021110-1	945421
7440-66-6	Zinc	47500	ug/Kg		361	1090	1090	1	P	HSC	02/11/10 20:05	021110-1	945421

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
945421	945420	SW846 3050B	0.513	g	50	mL	02/04/10	FGA
945425	945424	SW846 3050B	0.506	g	50	mL	02/04/10	FGA
945628	945627	SW846 7471A Prep	0.524	g	30	mL	02/09/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1392

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245394004

BASIS: Dry Weight

DATE COLLECTED 19-JAN-10

CLIENT ID: RE15-10-7872

LEVEL: Low

DATE RECEIVED 23-JAN-10

MATRIX: SOIL

%SOLIDS: 89

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	2380000	ug/Kg	*	7580	22300	22300	1	P	HSC	02/11/10 20:12	021110-1	945421
7440-36-0	Antimony	1660	ug/Kg	N	368	1110	1110	1	P	HSC	02/11/10 20:12	021110-1	945421
7440-38-2	Arsenic	1.82	mg/kg		0.215	1.07	1.07	2	MS	RMJ	02/14/10 10:38	100213-2	945425
7440-39-3	Barium	117000	ug/Kg		111	557	557	1	P	HSC	02/11/10 20:12	021110-1	945421
7440-41-7	Beryllium	4.55	mg/kg	N	0.0215	0.107	0.107	2	MS	RMJ	02/14/10 10:38	100213-2	945425
7440-43-9	Cadmium	316	ug/Kg	J	111	557	557	1	P	HSC	02/11/10 20:12	021110-1	945421
7440-70-2	Calcium	2150000	ug/Kg	N	8920	27900	27900	1	P	HSC	02/11/10 20:12	021110-1	945421
7440-47-3	Chromium	6550	ug/Kg		167	557	557	1	P	HSC	02/11/10 20:12	021110-1	945421
7440-48-4	Cobalt	1610	ug/Kg		167	557	557	1	P	HSC	02/11/10 20:12	021110-1	945421
7440-50-8	Copper	317000	ug/Kg	*N	334	1110	1110	1	P	HSC	02/11/10 20:12	021110-1	945421
7439-89-6	Iron	7270000	ug/Kg		8920	27900	27900	1	P	HSC	02/11/10 20:12	021110-1	945421
7439-92-1	Lead	157000	ug/Kg	*N	279	1110	1110	1	P	HSC	02/11/10 20:12	021110-1	945421
7439-95-4	Magnesium	739000	ug/Kg	N	9480	33400	33400	1	P	HSC	02/11/10 20:12	021110-1	945421
7439-96-5	Manganese	199000	ug/Kg	N	223	1110	1110	1	P	HSC	02/11/10 20:12	021110-1	945421
7439-97-6	Mercury	13	ug/kg	U	4.42	13	13	1	AV	ETL	02/10/10 10:25	021010S1-4	945628
7440-02-0	Nickel	6.18	mg/kg	N	0.107	0.429	0.429	2	MS	RMJ	02/14/10 10:38	100213-2	945425
7440-09-7	Potassium	308000	ug/Kg	N	7140	27900	27900	1	P	HSC	02/11/10 20:12	021110-1	945421
7782-49-2	Selenium	1.07	mg/kg	U*N	0.536	1.07	1.07	2	MS	RMJ	02/14/10 10:38	100213-2	945425
7440-22-4	Silver	536	ug/Kg	J	111	557	557	1	P	HSC	02/11/10 20:12	021110-1	945421
7440-23-5	Sodium	61300	ug/Kg		7800	27900	27900	1	P	HSC	02/11/10 20:12	021110-1	945421
7440-28-0	Thallium	0.0845	mg/kg	J	0.0644	0.215	0.215	2	MS	RMJ	02/14/10 10:38	100213-2	945425
7440-61-1	Uranium	82.3	mg/kg	*	0.0708	0.215	0.215	10	MS	RMJ	02/16/10 08:03	100215-3	945425
7440-62-2	Vanadium	10700	ug/Kg		111	557	557	1	P	HSC	02/11/10 20:12	021110-1	945421
7440-66-6	Zinc	50600	ug/Kg		368	1110	1110	1	P	HSC	02/11/10 20:12	021110-1	945421

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
945421	945420	SW846 3050B	0.505	g	50	mL	02/04/10	FGA
945425	945424	SW846 3050B	0.525	g	50	mL	02/04/10	FGA
945628	945627	SW846 7471A Prep	0.52	g	30	mL	02/09/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1392

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245394005

BASIS: Dry Weight

DATE COLLECTED 19-JAN-10

CLIENT ID: RE15-10-7870

LEVEL: Low

DATE RECEIVED 23-JAN-10

MATRIX: SOIL

%SOLIDS: 87

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1230000	ug/Kg	*	7780	22900	22900	1	P	HSC	02/11/10 20:19	021110-1	945421
7440-36-0	Antimony	1140	ug/Kg	UN	377	1140	1140	1	P	HSC	02/11/10 20:19	021110-1	945421
7440-38-2	Arsenic	0.793	mg/kg	J	0.23	1.15	1.15	2	MS	RMJ	02/14/10 10:43	100213-2	945425
7440-39-3	Barium	27400	ug/Kg		114	572	572	1	P	HSC	02/11/10 20:19	021110-1	945421
7440-41-7	Beryllium	0.395	mg/kg	N	0.023	0.115	0.115	2	MS	RMJ	02/14/10 10:43	100213-2	945425
7440-43-9	Cadmium	572	ug/Kg	U	114	572	572	1	P	HSC	02/11/10 20:19	021110-1	945421
7440-70-2	Calcium	366000	ug/Kg	N	9150	28600	28600	1	P	HSC	02/11/10 20:19	021110-1	945421
7440-47-3	Chromium	5350	ug/Kg		172	572	572	1	P	HSC	02/11/10 20:19	021110-1	945421
7440-48-4	Cobalt	9380	ug/Kg		172	572	572	1	P	HSC	02/11/10 20:19	021110-1	945421
7440-50-8	Copper	4560	ug/Kg	*N	343	1140	1140	1	P	HSC	02/11/10 20:19	021110-1	945421
7439-89-6	Iron	7600000	ug/Kg		9150	28600	28600	1	P	HSC	02/11/10 20:19	021110-1	945421
7439-92-1	Lead	9930	ug/Kg	*N	286	1140	1140	1	P	HSC	02/11/10 20:19	021110-1	945421
7439-95-4	Magnesium	268000	ug/Kg	N	9720	34300	34300	1	P	HSC	02/11/10 20:19	021110-1	945421
7439-96-5	Manganese	220000	ug/Kg	N	229	1140	1140	1	P	HSC	02/11/10 20:19	021110-1	945421
7439-97-6	Mercury	6.02	ug/kg	J	4.01	11.8	11.8	1	AV	ETL	02/10/10 10:30	021010S1-4	945628
7440-02-0	Nickel	3.69	mg/kg	N	0.115	0.46	0.46	2	MS	RMJ	02/14/10 10:43	100213-2	945425
7440-09-7	Potassium	301000	ug/Kg	N	7320	28600	28600	1	P	HSC	02/11/10 20:19	021110-1	945421
7782-49-2	Selenium	1.15	mg/kg	U*N	0.575	1.15	1.15	2	MS	RMJ	02/14/10 10:43	100213-2	945425
7440-22-4	Silver	402	ug/Kg	J	114	572	572	1	P	HSC	02/11/10 20:19	021110-1	945421
7440-23-5	Sodium	181000	ug/Kg		8010	28600	28600	1	P	HSC	02/11/10 20:19	021110-1	945421
7440-28-0	Thallium	0.230	mg/kg	U	0.069	0.23	0.23	2	MS	RMJ	02/14/10 10:43	100213-2	945425
7440-61-1	Uranium	3.75	mg/kg	*	0.0152	0.046	0.046	2	MS	RMJ	02/16/10 08:13	100215-3	945425
7440-62-2	Vanadium	2800	ug/Kg		114	572	572	1	P	HSC	02/11/10 20:19	021110-1	945421
7440-66-6	Zinc	29900	ug/Kg		377	1140	1140	1	P	HSC	02/11/10 20:19	021110-1	945421

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
945421	945420	SW846 3050B	0.503	g	50	mL	02/04/10	FGA
945425	945424	SW846 3050B	0.5	g	50	mL	02/04/10	FGA
945628	945627	SW846 7471A Prep	0.585	g	30	mL	02/09/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1392

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245394006

BASIS: Dry Weight

DATE COLLECTED 19-JAN-10

CLIENT ID: RE15-10-7873

LEVEL: Low

DATE RECEIVED 23-JAN-10

MATRIX: SOIL

%SOLIDS: 87

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	3280000	ug/Kg	*	7730	22700	22700	1	P	HSC	02/11/10 20:26	021110-1	945421
7440-36-0	Antimony	1130	ug/Kg	JN	375	1140	1140	1	P	HSC	02/11/10 20:26	021110-1	945421
7440-38-2	Arsenic	2.27	mg/kg		0.221	1.11	1.11	2	MS	RMJ	02/14/10 11:01	100213-2	945425
7440-39-3	Barium	47600	ug/Kg		114	568	568	1	P	HSC	02/11/10 20:26	021110-1	945421
7440-41-7	Beryllium	3.56	mg/kg	N	0.0221	0.111	0.111	2	MS	RMJ	02/14/10 11:01	100213-2	945425
7440-43-9	Cadmium	276	ug/Kg	J	114	568	568	1	P	HSC	02/11/10 20:26	021110-1	945421
7440-70-2	Calcium	1040000	ug/Kg	N	9100	28400	28400	1	P	HSC	02/11/10 20:26	021110-1	945421
7440-47-3	Chromium	4030	ug/Kg		171	568	568	1	P	HSC	02/11/10 20:26	021110-1	945421
7440-48-4	Cobalt	2690	ug/Kg		171	568	568	1	P	HSC	02/11/10 20:26	021110-1	945421
7440-50-8	Copper	177000	ug/Kg	*N	341	1140	1140	1	P	HSC	02/11/10 20:26	021110-1	945421
7439-89-6	Iron	8010000	ug/Kg		9100	28400	28400	1	P	HSC	02/11/10 20:26	021110-1	945421
7439-92-1	Lead	95100	ug/Kg	*N	284	1140	1140	1	P	HSC	02/11/10 20:26	021110-1	945421
7439-95-4	Magnesium	709000	ug/Kg	N	9660	34100	34100	1	P	HSC	02/11/10 20:26	021110-1	945421
7439-96-5	Manganese	218000	ug/Kg	N	227	1140	1140	1	P	HSC	02/11/10 20:26	021110-1	945421
7439-97-6	Mercury	7.4	ug/kg	J	4.34	12.8	12.8	1	AV	ETL	02/10/10 10:31	021010S1-4	945628
7440-02-0	Nickel	6.15	mg/kg	N	0.111	0.442	0.442	2	MS	RMJ	02/14/10 11:01	100213-2	945425
7440-09-7	Potassium	625000	ug/Kg	N	7280	28400	28400	1	P	HSC	02/11/10 20:26	021110-1	945421
7782-49-2	Selenium	1.11	mg/kg	U*N	0.553	1.11	1.11	2	MS	RMJ	02/14/10 11:01	100213-2	945425
7440-22-4	Silver	656	ug/Kg		114	568	568	1	P	HSC	02/11/10 20:26	021110-1	945421
7440-23-5	Sodium	56400	ug/Kg		7960	28400	28400	1	P	HSC	02/11/10 20:26	021110-1	945421
7440-28-0	Thallium	0.0982	mg/kg	J	0.0664	0.221	0.221	2	MS	RMJ	02/14/10 11:01	100213-2	945425
7440-61-1	Uranium	71.1	mg/kg	*	0.073	0.221	0.221	10	MS	RMJ	02/16/10 08:17	100215-3	945425
7440-62-2	Vanadium	9730	ug/Kg		114	568	568	1	P	HSC	02/11/10 20:26	021110-1	945421
7440-66-6	Zinc	53300	ug/Kg		375	1140	1140	1	P	HSC	02/11/10 20:26	021110-1	945421

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
945421	945420	SW846 3050B	0.503	g	50	mL	02/04/10	FGA
945425	945424	SW846 3050B	0.517	g	50	mL	02/04/10	FGA
945628	945627	SW846 7471A Prep	0.538	g	30	mL	02/09/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1392

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245394007

BASIS: Dry Weight

DATE COLLECTED 19-JAN-10

CLIENT ID: RE15-10-7911

LEVEL: Low

DATE RECEIVED 23-JAN-10

MATRIX: SOIL

%SOLIDS: 88

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	2420000	ug/Kg	*	7630	22500	22500	1	P	HSC	02/11/10 20:34	021110-1	945421
7440-36-0	Antimony	5540	ug/Kg	N	371	1120	1120	1	P	HSC	02/11/10 20:34	021110-1	945421
7440-38-2	Arsenic	1.32	mg/kg		0.227	1.14	1.14	2	MS	RMJ	02/14/10 11:07	100213-2	945425
7440-39-3	Barium	122000	ug/Kg		112	561	561	1	P	HSC	02/11/10 20:34	021110-1	945421
7440-41-7	Beryllium	16.5	mg/kg	N	0.0227	0.114	0.114	2	MS	RMJ	02/14/10 11:07	100213-2	945425
7440-43-9	Cadmium	569	ug/Kg		112	561	561	1	P	HSC	02/11/10 20:34	021110-1	945421
7440-70-2	Calcium	1700000	ug/Kg	N	8980	28100	28100	1	P	HSC	02/11/10 20:34	021110-1	945421
7440-47-3	Chromium	13400	ug/Kg		168	561	561	1	P	HSC	02/11/10 20:34	021110-1	945421
7440-48-4	Cobalt	1880	ug/Kg		168	561	561	1	P	HSC	02/11/10 20:34	021110-1	945421
7440-50-8	Copper	1270000	ug/Kg	*N	337	1120	1120	1	P	HSC	02/11/10 20:34	021110-1	945421
7439-89-6	Iron	6290000	ug/Kg		8980	28100	28100	1	P	HSC	02/11/10 20:34	021110-1	945421
7439-92-1	Lead	274000	ug/Kg	*N	281	1120	1120	1	P	HSC	02/11/10 20:34	021110-1	945421
7439-95-4	Magnesium	807000	ug/Kg	N	9540	33700	33700	1	P	HSC	02/11/10 20:34	021110-1	945421
7439-96-5	Manganese	110000	ug/Kg	N	225	1120	1120	1	P	HSC	02/11/10 20:34	021110-1	945421
7439-97-6	Mercury	24.7	ug/kg		4.31	12.7	12.7	1	AV	ETL	02/10/10 10:33	021010S1-4	945628
7440-02-0	Nickel	10.2	mg/kg	N	0.114	0.454	0.454	2	MS	RMJ	02/14/10 11:07	100213-2	945425
7440-09-7	Potassium	336000	ug/Kg	N	7190	28100	28100	1	P	HSC	02/11/10 20:34	021110-1	945421
7782-49-2	Selenium	1.14	mg/kg	U*N	0.568	1.14	1.14	2	MS	RMJ	02/14/10 11:07	100213-2	945425
7440-22-4	Silver	2000	ug/Kg		112	561	561	1	P	HSC	02/11/10 20:34	021110-1	945421
7440-23-5	Sodium	46500	ug/Kg		7860	28100	28100	1	P	HSC	02/11/10 20:34	021110-1	945421
7440-28-0	Thallium	0.227	mg/kg	U	0.0682	0.227	0.227	2	MS	RMJ	02/14/10 11:07	100213-2	945425
7440-61-1	Uranium	348	mg/kg	*	0.3	0.909	0.909	40	MS	RMJ	02/16/10 08:20	100215-3	945425
7440-62-2	Vanadium	12700	ug/Kg		112	561	561	1	P	HSC	02/11/10 20:34	021110-1	945421
7440-66-6	Zinc	54800	ug/Kg		371	1120	1120	1	P	HSC	02/11/10 20:34	021110-1	945421

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt/vol.	Units	Final wt/vol.	Units	Date	Analyst
945421	945420	SW846 3050B	0.506	g	50	mL	02/04/10	FGA
945425	945424	SW846 3050B	0.5	g	50	mL	02/04/10	FGA
945628	945627	SW846 7471A Prep	0.538	g	30	mL	02/09/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1392

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245394008

BASIS: Dry Weight

DATE COLLECTED 19-JAN-10

CLIENT ID: RE15-10-7908

LEVEL: Low

DATE RECEIVED 23-JAN-10

MATRIX: SOIL

%SOLIDS: 91.9

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1860000	ug/Kg	*	7140	21000	21000	1	P	HSC	02/11/10 20:41	021110-1	945421
7440-36-0	Antimony	1960	ug/Kg	N	347	1050	1050	1	P	HSC	02/11/10 20:41	021110-1	945421
7440-38-2	Arsenic	5.91	mg/kg		0.214	1.07	1.07	2	MS	RMJ	02/14/10 11:13	100213-2	945425
7440-39-3	Barium	48200	ug/Kg		105	525	525	1	P	HSC	02/11/10 20:41	021110-1	945421
7440-41-7	Beryllium	3.17	mg/kg	N	0.0214	0.107	0.107	2	MS	RMJ	02/14/10 11:13	100213-2	945425
7440-43-9	Cadmium	525	ug/Kg	U	105	525	525	1	P	HSC	02/11/10 20:41	021110-1	945421
7440-70-2	Calcium	752000	ug/Kg	N	8400	26300	26300	1	P	HSC	02/11/10 20:41	021110-1	945421
7440-47-3	Chromium	5430	ug/Kg		158	525	525	1	P	HSC	02/11/10 20:41	021110-1	945421
7440-48-4	Cobalt	5930	ug/Kg		158	525	525	1	P	HSC	02/11/10 20:41	021110-1	945421
7440-50-8	Copper	77100	ug/Kg	*N	315	1050	1050	1	P	HSC	02/11/10 20:41	021110-1	945421
7439-89-6	Iron	8600000	ug/Kg		8400	26300	26300	1	P	HSC	02/11/10 20:41	021110-1	945421
7439-92-1	Lead	170000	ug/Kg	*N	263	1050	1050	1	P	HSC	02/11/10 20:41	021110-1	945421
7439-95-4	Magnesium	383000	ug/Kg	N	8930	31500	31500	1	P	HSC	02/11/10 20:41	021110-1	945421
7439-96-5	Manganese	239000	ug/Kg	N	210	1050	1050	1	P	HSC	02/11/10 20:41	021110-1	945421
7439-97-6	Mercury	7.32	ug/kg	J	4.22	12.4	12.4	1	AV	ETL	02/10/10 10:35	021010S1-4	945628
7440-02-0	Nickel	3.88	mg/kg	N	0.107	0.428	0.428	2	MS	RMJ	02/14/10 11:13	100213-2	945425
7440-09-7	Potassium	358000	ug/Kg	N	6720	26300	26300	1	P	HSC	02/11/10 20:41	021110-1	945421
7782-49-2	Selenium	1.07	mg/kg	U*N	0.534	1.07	1.07	2	MS	RMJ	02/14/10 11:13	100213-2	945425
7440-22-4	Silver	541	ug/Kg		105	525	525	1	P	HSC	02/11/10 20:41	021110-1	945421
7440-23-5	Sodium	132000	ug/Kg		7350	26300	26300	1	P	HSC	02/11/10 20:41	021110-1	945421
7440-28-0	Thallium	0.214	mg/kg	U	0.0641	0.214	0.214	2	MS	RMJ	02/14/10 11:13	100213-2	945425
7440-61-1	Uranium	403	mg/kg	*	0.282	0.855	0.855	40	MS	RMJ	02/16/10 08:24	100215-3	945425
7440-62-2	Vanadium	5300	ug/Kg		105	525	525	1	P	HSC	02/11/10 20:41	021110-1	945421
7440-66-6	Zinc	34300	ug/Kg		347	1050	1050	1	P	HSC	02/11/10 20:41	021110-1	945421

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
945421	945420	SW846 3050B	0.518	g	50	mL	02/04/10	FGA
945425	945424	SW846 3050B	0.509	g	50	mL	02/04/10	FGA
945628	945627	SW846 7471A Prep	0.526	g	30	mL	02/09/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1392

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245394009

BASIS: Dry Weight

DATE COLLECTED 19-JAN-10

CLIENT ID: RE15-10-7912

LEVEL: Low

DATE RECEIVED 23-JAN-10

MATRIX: SOIL

%SOLIDS: 87

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	5170000	ug/Kg	*	7580	22300	22300	1	P	HSC	02/11/10 21:02	021110-1	945421
7440-36-0	Antimony	2270	ug/Kg	N	368	1120	1120	1	P	HSC	02/11/10 21:02	021110-1	945421
7440-38-2	Arsenic	1.54	mg/kg		0.224	1.12	1.12	2	MS	RMJ	02/14/10 11:19	100213-2	945425
7440-39-3	Barium	85500	ug/Kg		112	558	558	1	P	HSC	02/11/10 21:02	021110-1	945421
7440-41-7	Beryllium	2.15	mg/kg	N	0.0224	0.112	0.112	2	MS	RMJ	02/14/10 11:19	100213-2	945425
7440-43-9	Cadmium	184	ug/Kg	J	112	558	558	1	P	HSC	02/11/10 21:02	021110-1	945421
7440-70-2	Calcium	8790000	ug/Kg	N	8920	27900	27900	1	P	HSC	02/11/10 21:02	021110-1	945421
7440-47-3	Chromium	5370	ug/Kg		167	558	558	1	P	HSC	02/11/10 21:02	021110-1	945421
7440-48-4	Cobalt	1310	ug/Kg		167	558	558	1	P	HSC	02/11/10 21:02	021110-1	945421
7440-50-8	Copper	261000	ug/Kg	*N	335	1120	1120	1	P	HSC	02/11/10 21:02	021110-1	945421
7439-89-6	Iron	6760000	ug/Kg		8920	27900	27900	1	P	HSC	02/11/10 21:02	021110-1	945421
7439-92-1	Lead	79100	ug/Kg	*N	279	1120	1120	1	P	HSC	02/11/10 21:02	021110-1	945421
7439-95-4	Magnesium	1090000	ug/Kg	N	9480	33500	33500	1	P	HSC	02/11/10 21:02	021110-1	945421
7439-96-5	Manganese	167000	ug/Kg	N	223	1120	1120	1	P	HSC	02/11/10 21:02	021110-1	945421
7439-97-6	Mercury	16.6	ug/kg		4.15	12.2	12.2	1	AV	ETL	02/10/10 10:36	021010S1-4	945628
7440-02-0	Nickel	6.26	mg/kg	N	0.112	0.448	0.448	2	MS	RMJ	02/14/10 11:19	100213-2	945425
7440-09-7	Potassium	592000	ug/Kg	N	7140	27900	27900	1	P	HSC	02/11/10 21:02	021110-1	945421
7782-49-2	Selenium	1.12	mg/kg	U*N	0.56	1.12	1.12	2	MS	RMJ	02/14/10 11:19	100213-2	945425
7440-22-4	Silver	880	ug/Kg		112	558	558	1	P	HSC	02/11/10 21:02	021110-1	945421
7440-23-5	Sodium	72500	ug/Kg		7810	27900	27900	1	P	HSC	02/11/10 21:02	021110-1	945421
7440-28-0	Thallium	0.224	mg/kg	U	0.0672	0.224	0.224	2	MS	RMJ	02/14/10 11:19	100213-2	945425
7440-61-1	Uranium	163	mg/kg	*	0.148	0.448	0.448	20	MS	RMJ	02/16/10 08:27	100215-3	945425
7440-62-2	Vanadium	9350	ug/Kg		112	558	558	1	P	HSC	02/11/10 21:02	021110-1	945421
7440-66-6	Zinc	33300	ug/Kg		368	1120	1120	1	P	HSC	02/11/10 21:02	021110-1	945421

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
945421	945420	SW846 3050B	0.518	g	50	mL	02/04/10	FGA
945425	945424	SW846 3050B	0.516	g	50	mL	02/04/10	FGA
945628	945627	SW846 7471A Prep	0.568	g	30	mL	02/09/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1392

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245394010

BASIS: Dry Weight

DATE COLLECTED 19-JAN-10

CLIENT ID: RE15-10-7906

LEVEL: Low

DATE RECEIVED 23-JAN-10

MATRIX: SOIL

%SOLIDS: 90

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1290000	ug/Kg	*	7520	22100	22100	1	P	HSC	02/11/10 21:08	021110-1	945421
7440-36-0	Antimony	1110	ug/Kg	UN	365	1110	1110	1	P	HSC	02/11/10 21:08	021110-1	945421
7440-38-2	Arsenic	1.59	mg/kg		0.214	1.07	1.07	2	MS	RMJ	02/14/10 11:25	100213-2	945425
7440-39-3	Barium	20800	ug/Kg		111	553	553	1	P	HSC	02/11/10 21:08	021110-1	945421
7440-41-7	Beryllium	0.849	mg/kg	N	0.0214	0.107	0.107	2	MS	RMJ	02/14/10 11:25	100213-2	945425
7440-43-9	Cadmium	553	ug/Kg	U	111	553	553	1	P	HSC	02/11/10 21:08	021110-1	945421
7440-70-2	Calcium	607000	ug/Kg	N	8850	27700	27700	1	P	HSC	02/11/10 21:08	021110-1	945421
7440-47-3	Chromium	3560	ug/Kg		166	553	553	1	P	HSC	02/11/10 21:08	021110-1	945421
7440-48-4	Cobalt	1620	ug/Kg		166	553	553	1	P	HSC	02/11/10 21:08	021110-1	945421
7440-50-8	Copper	7300	ug/Kg	*N	332	1110	1110	1	P	HSC	02/11/10 21:08	021110-1	945421
7439-89-6	Iron	6200000	ug/Kg		8850	27700	27700	1	P	HSC	02/11/10 21:08	021110-1	945421
7439-92-1	Lead	15400	ug/Kg	*N	277	1110	1110	1	P	HSC	02/11/10 21:08	021110-1	945421
7439-95-4	Magnesium	256000	ug/Kg	N	9400	33200	33200	1	P	HSC	02/11/10 21:08	021110-1	945421
7439-96-5	Manganese	231000	ug/Kg	N	221	1110	1110	1	P	HSC	02/11/10 21:08	021110-1	945421
7439-97-6	Mercury	11.3	ug/kg	U	3.85	11.3	11.3	1	AV	ETL	02/10/10 10:38	021010S1-4	945628
7440-02-0	Nickel	2.35	mg/kg	N	0.107	0.429	0.429	2	MS	RMJ	02/14/10 11:25	100213-2	945425
7440-09-7	Potassium	215000	ug/Kg	N	7080	27700	27700	1	P	HSC	02/11/10 21:08	021110-1	945421
7782-49-2	Selenium	1.07	mg/kg	U*N	0.536	1.07	1.07	2	MS	RMJ	02/14/10 11:25	100213-2	945425
7440-22-4	Silver	435	ug/Kg	J	111	553	553	1	P	HSC	02/11/10 21:08	021110-1	945421
7440-23-5	Sodium	91600	ug/Kg		7750	27700	27700	1	P	HSC	02/11/10 21:08	021110-1	945421
7440-28-0	Thallium	0.214	mg/kg	U	0.0643	0.214	0.214	2	MS	RMJ	02/14/10 11:25	100213-2	945425
7440-61-1	Uranium	5.34	mg/kg	*	0.0142	0.0429	0.0429	2	MS	RMJ	02/16/10 08:31	100215-3	945425
7440-62-2	Vanadium	2990	ug/Kg		111	553	553	1	P	HSC	02/11/10 21:08	021110-1	945421
7440-66-6	Zinc	20000	ug/Kg		365	1110	1110	1	P	HSC	02/11/10 21:08	021110-1	945421

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
945421	945420	SW846 3050B	0.502	g	50	mL	02/04/10	FGA
945425	945424	SW846 3050B	0.518	g	50	mL	02/04/10	FGA
945628	945627	SW846 7471A Prep	0.588	g	30	mL	02/09/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1392

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245394011

BASIS: Dry Weight

DATE COLLECTED 19-JAN-10

CLIENT ID: RE15-10-7905

LEVEL: Low

DATE RECEIVED 23-JAN-10

MATRIX: SOIL

%SOLIDS: 78

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	3450000	ug/Kg	*	8360	24600	24600	1	P	HSC	02/11/10 21:15	021110-1	945421
7440-36-0	Antimony	5430	ug/Kg	N	406	1230	1230	1	P	HSC	02/11/10 21:15	021110-1	945421
7440-38-2	Arsenic	3.46	mg/kg		0.25	1.25	1.25	2	MS	RMJ	02/14/10 11:31	100213-2	945425
7440-39-3	Barium	66500	ug/Kg		123	615	615	1	P	HSC	02/11/10 21:15	021110-1	945421
7440-41-7	Beryllium	2.75	mg/kg	N	0.025	0.125	0.125	2	MS	RMJ	02/14/10 11:31	100213-2	945425
7440-43-9	Cadmium	615	ug/Kg	U	123	615	615	1	P	HSC	02/11/10 21:15	021110-1	945421
7440-70-2	Calcium	7200000	ug/Kg	N	9840	30700	30700	1	P	HSC	02/11/10 21:15	021110-1	945421
7440-47-3	Chromium	7700	ug/Kg		184	615	615	1	P	HSC	02/11/10 21:15	021110-1	945421
7440-48-4	Cobalt	3790	ug/Kg		184	615	615	1	P	HSC	02/11/10 21:15	021110-1	945421
7440-50-8	Copper	196000	ug/Kg	*N	369	1230	1230	1	P	HSC	02/11/10 21:15	021110-1	945421
7439-89-6	Iron	9340000	ug/Kg		9840	30700	30700	1	P	HSC	02/11/10 21:15	021110-1	945421
7439-92-1	Lead	644000	ug/Kg	*N	307	1230	1230	1	P	HSC	02/11/10 21:15	021110-1	945421
7439-95-4	Magnesium	829000	ug/Kg	N	10500	36900	36900	1	P	HSC	02/11/10 21:15	021110-1	945421
7439-96-5	Manganese	181000	ug/Kg	N	246	1230	1230	1	P	HSC	02/11/10 21:15	021110-1	945421
7439-97-6	Mercury	14.5	ug/kg	U	4.91	14.5	14.5	1	AV	ETL	02/10/10 10:40	021010S1-4	945628
7440-02-0	Nickel	5.37	mg/kg	N	0.125	0.5	0.5	2	MS	RMJ	02/14/10 11:31	100213-2	945425
7440-09-7	Potassium	570000	ug/Kg	N	7870	30700	30700	1	P	HSC	02/11/10 21:15	021110-1	945421
7782-49-2	Selenium	1.25	mg/kg	U*N	0.624	1.25	1.25	2	MS	RMJ	02/14/10 11:31	100213-2	945425
7440-22-4	Silver	767	ug/Kg		123	615	615	1	P	HSC	02/11/10 21:15	021110-1	945421
7440-23-5	Sodium	105000	ug/Kg		8610	30700	30700	1	P	HSC	02/11/10 21:15	021110-1	945421
7440-28-0	Thallium	0.250	mg/kg	U	0.0749	0.25	0.25	2	MS	RMJ	02/14/10 11:31	100213-2	945425
7440-61-1	Uranium	30.9	mg/kg	*	0.0824	0.25	0.25	10	MS	RMJ	02/16/10 08:35	100215-3	945425
7440-62-2	Vanadium	13200	ug/Kg		123	615	615	1	P	HSC	02/11/10 21:15	021110-1	945421
7440-66-6	Zinc	35000	ug/Kg		406	1230	1230	1	P	HSC	02/11/10 21:15	021110-1	945421

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
945421	945420	SW846 3050B	0.52	g	50	mL	02/04/10	FGA
945425	945424	SW846 3050B	0.512	g	50	mL	02/04/10	FGA
945628	945627	SW846 7471A Prep	0.531	g	30	mL	02/09/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1392

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245394012

BASIS: Dry Weight

DATE COLLECTED 19-JAN-10

CLIENT ID: RE15-10-7907

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	5350000	ug/Kg	*	8410	24700	24700	1	P	HSC	02/11/10 21:22	021110-1	945421
7440-36-0	Antimony	1160	ug/Kg	JN	408	1240	1240	1	P	HSC	02/11/10 21:22	021110-1	945421
7440-38-2	Arsenic	3.44	mg/kg		0.235	1.18	1.18	2	MS	RMJ	02/14/10 11:37	100213-2	945425
7440-39-3	Barium	101000	ug/Kg		124	618	618	1	P	HSC	02/11/10 21:22	021110-1	945421
7440-41-7	Beryllium	4.84	mg/kg	N	0.0235	0.118	0.118	2	MS	RMJ	02/14/10 11:37	100213-2	945425
7440-43-9	Cadmium	618	ug/Kg	U	124	618	618	1	P	HSC	02/11/10 21:22	021110-1	945421
7440-70-2	Calcium	2800000	ug/Kg	N	9890	30900	30900	1	P	HSC	02/11/10 21:22	021110-1	945421
7440-47-3	Chromium	6670	ug/Kg		185	618	618	1	P	HSC	02/11/10 21:22	021110-1	945421
7440-48-4	Cobalt	2300	ug/Kg		185	618	618	1	P	HSC	02/11/10 21:22	021110-1	945421
7440-50-8	Copper	163000	ug/Kg	*N	371	1240	1240	1	P	HSC	02/11/10 21:22	021110-1	945421
7439-89-6	Iron	8430000	ug/Kg		9890	30900	30900	1	P	HSC	02/11/10 21:22	021110-1	945421
7439-92-1	Lead	179000	ug/Kg	*N	309	1240	1240	1	P	HSC	02/11/10 21:22	021110-1	945421
7439-95-4	Magnesium	1160000	ug/Kg	N	10500	37100	37100	1	P	HSC	02/11/10 21:22	021110-1	945421
7439-96-5	Manganese	166000	ug/Kg	N	247	1240	1240	1	P	HSC	02/11/10 21:22	021110-1	945421
7439-97-6	Mercury	17.5	ug/kg		4.96	14.6	14.6	1	AV	ETL	02/10/10 10:41	021010S1-4	945628
7440-02-0	Nickel	9.4	mg/kg	N	0.118	0.471	0.471	2	MS	RMJ	02/14/10 11:37	100213-2	945425
7440-09-7	Potassium	775000	ug/Kg	N	7910	30900	30900	1	P	HSC	02/11/10 21:22	021110-1	945421
7782-49-2	Selenium	1.18	mg/kg	U*N	0.589	1.18	1.18	2	MS	RMJ	02/14/10 11:37	100213-2	945425
7440-22-4	Silver	615	ug/Kg	J	124	618	618	1	P	HSC	02/11/10 21:22	021110-1	945421
7440-23-5	Sodium	51000	ug/Kg		8650	30900	30900	1	P	HSC	02/11/10 21:22	021110-1	945421
7440-28-0	Thallium	0.169	mg/kg	J	0.0706	0.235	0.235	2	MS	RMJ	02/14/10 11:37	100213-2	945425
7440-61-1	Uranium	118	mg/kg	*	0.155	0.471	0.471	20	MS	RMJ	02/16/10 08:38	100215-3	945425
7440-62-2	Vanadium	13500	ug/Kg		124	618	618	1	P	HSC	02/11/10 21:22	021110-1	945421
7440-66-6	Zinc	32200	ug/Kg		408	1240	1240	1	P	HSC	02/11/10 21:22	021110-1	945421

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
945421	945420	SW846 3050B	0.5	g	50	mL	02/04/10	FGA
945425	945424	SW846 3050B	0.525	g	50	mL	02/04/10	FGA
945628	945627	SW846 7471A Prep	0.508	g	30	mL	02/09/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1392

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245394013

BASIS: Dry Weight

DATE COLLECTED 19-JAN-10

CLIENT ID: RE15-10-7913

LEVEL: Low

DATE RECEIVED 23-JAN-10

MATRIX: SOIL

%SOLIDS: 79

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	12600000	ug/Kg	*	8230	24200	24200	1	P	HSC	02/11/10 21:29	021110-1	945421
7440-36-0	Antimony	1210	ug/Kg	UN	399	1210	1210	1	P	HSC	02/11/10 21:29	021110-1	945421
7440-38-2	Arsenic	3.63	mg/kg		0.245	1.22	1.22	2	MS	RMJ	02/14/10 11:43	100213-2	945425
7440-39-3	Barium	85100	ug/Kg		121	605	605	1	P	HSC	02/11/10 21:29	021110-1	945421
7440-41-7	Beryllium	1.71	mg/kg	N	0.0245	0.122	0.122	2	MS	RMJ	02/14/10 11:43	100213-2	945425
7440-43-9	Cadmium	605	ug/Kg	U	121	605	605	1	P	HSC	02/11/10 21:29	021110-1	945421
7440-70-2	Calcium	2930000	ug/Kg	N	9680	30300	30300	1	P	HSC	02/11/10 21:29	021110-1	945421
7440-47-3	Chromium	11600	ug/Kg		182	605	605	1	P	HSC	02/11/10 21:29	021110-1	945421
7440-48-4	Cobalt	4520	ug/Kg		182	605	605	1	P	HSC	02/11/10 21:29	021110-1	945421
7440-50-8	Copper	63300	ug/Kg	*N	363	1210	1210	1	P	HSC	02/11/10 21:29	021110-1	945421
7439-89-6	Iron	15500000	ug/Kg		9680	30300	30300	1	P	HSC	02/11/10 21:29	021110-1	945421
7439-92-1	Lead	14100	ug/Kg	*N	303	1210	1210	1	P	HSC	02/11/10 21:29	021110-1	945421
7439-95-4	Magnesium	2650000	ug/Kg	N	10300	36300	36300	1	P	HSC	02/11/10 21:29	021110-1	945421
7439-96-5	Manganese	232000	ug/Kg	N	242	1210	1210	1	P	HSC	02/11/10 21:29	021110-1	945421
7439-97-6	Mercury	24.6	ug/kg		4.69	13.8	13.8	1	AV	ETL	02/10/10 10:43	021010S1-4	945628
7440-02-0	Nickel	16.2	mg/kg	N	0.122	0.49	0.49	2	MS	RMJ	02/14/10 11:43	100213-2	945425
7440-09-7	Potassium	1740000	ug/Kg	N	7750	30300	30300	1	P	HSC	02/11/10 21:29	021110-1	945421
7782-49-2	Selenium	1.22	mg/kg	U*N	0.612	1.22	1.22	2	MS	RMJ	02/14/10 11:43	100213-2	945425
7440-22-4	Silver	738	ug/Kg		121	605	605	1	P	HSC	02/11/10 21:29	021110-1	945421
7440-23-5	Sodium	92700	ug/Kg		8470	30300	30300	1	P	HSC	02/11/10 21:29	021110-1	945421
7440-28-0	Thallium	0.20	mg/kg	J	0.0735	0.245	0.245	2	MS	RMJ	02/14/10 11:43	100213-2	945425
7440-61-1	Uranium	27.2	mg/kg	*	0.0808	0.245	0.245	10	MS	RMJ	02/16/10 08:48	100215-3	945425
7440-62-2	Vanadium	29700	ug/Kg		121	605	605	1	P	HSC	02/11/10 21:29	021110-1	945421
7440-66-6	Zinc	32000	ug/Kg		399	1210	1210	1	P	HSC	02/11/10 21:29	021110-1	945421

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
945421	945420	SW846 3050B	0.525	g	50	mL	02/04/10	FGA
945425	945424	SW846 3050B	0.519	g	50	mL	02/04/10	FGA
945628	945627	SW846 7471A Prep	0.553	g	30	mL	02/09/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1392

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245394014

BASIS: Dry Weight

DATE COLLECTED 19-JAN-10

CLIENT ID: RE15-10-7909

LEVEL: Low

DATE RECEIVED 23-JAN-10

MATRIX: SOIL

%SOLIDS: 84

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	4080000	ug/Kg	*	8060	23700	23700	1	P	HSC	02/11/10 21:36	021110-1	945421
7440-36-0	Antimony	930	ug/Kg	JN	391	1180	1180	1	P	HSC	02/11/10 21:36	021110-1	945421
7440-38-2	Arsenic	1.91	mg/kg		0.226	1.13	1.13	2	MS	RMJ	02/14/10 11:49	100213-2	945425
7440-39-3	Barium	128000	ug/Kg		118	592	592	1	P	HSC	02/11/10 21:36	021110-1	945421
7440-41-7	Beryllium	6.73	mg/kg	N	0.0226	0.113	0.113	2	MS	RMJ	02/14/10 11:49	100213-2	945425
7440-43-9	Cadmium	283	ug/Kg	J	118	592	592	1	P	HSC	02/11/10 21:36	021110-1	945421
7440-70-2	Calcium	1440000	ug/Kg	N	9480	29600	29600	1	P	HSC	02/11/10 21:36	021110-1	945421
7440-47-3	Chromium	8010	ug/Kg		178	592	592	1	P	HSC	02/11/10 21:36	021110-1	945421
7440-48-4	Cobalt	2170	ug/Kg		178	592	592	1	P	HSC	02/11/10 21:36	021110-1	945421
7440-50-8	Copper	339000	ug/Kg	*N	355	1180	1180	1	P	HSC	02/11/10 21:36	021110-1	945421
7439-89-6	Iron	8180000	ug/Kg		9480	29600	29600	1	P	HSC	02/11/10 21:36	021110-1	945421
7439-92-1	Lead	266000	ug/Kg	*N	296	1180	1180	1	P	HSC	02/11/10 21:36	021110-1	945421
7439-95-4	Magnesium	1060000	ug/Kg	N	10100	35500	35500	1	P	HSC	02/11/10 21:36	021110-1	945421
7439-96-5	Manganese	128000	ug/Kg	N	237	1180	1180	1	P	HSC	02/11/10 21:36	021110-1	945421
7439-97-6	Mercury	4.87	ug/kg	J	4.04	11.9	11.9	1	AV	ETL	02/10/10 10:45	021010S1-4	945628
7440-02-0	Nickel	7.91	mg/kg	N	0.113	0.452	0.452	2	MS	RMJ	02/14/10 11:49	100213-2	945425
7440-09-7	Potassium	629000	ug/Kg	N	7580	29600	29600	1	P	HSC	02/11/10 21:36	021110-1	945421
7782-49-2	Selenium	1.13	mg/kg	U*N	0.565	1.13	1.13	2	MS	RMJ	02/14/10 11:49	100213-2	945425
7440-22-4	Silver	674	ug/Kg		118	592	592	1	P	HSC	02/11/10 21:36	021110-1	945421
7440-23-5	Sodium	61900	ug/Kg		8290	29600	29600	1	P	HSC	02/11/10 21:36	021110-1	945421
7440-28-0	Thallium	0.107	mg/kg	J	0.0678	0.226	0.226	2	MS	RMJ	02/14/10 11:49	100213-2	945425
7440-61-1	Uranium	132	mg/kg	*	0.149	0.452	0.452	20	MS	RMJ	02/16/10 08:52	100215-3	945425
7440-62-2	Vanadium	13300	ug/Kg		118	592	592	1	P	HSC	02/11/10 21:36	021110-1	945421
7440-66-6	Zinc	28100	ug/Kg		391	1180	1180	1	P	HSC	02/11/10 21:36	021110-1	945421

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
945421	945420	SW846 3050B	0.501	g	50	mL	02/04/10	FGA
945425	945424	SW846 3050B	0.525	g	50	mL	02/04/10	FGA
945628	945627	SW846 7471A Prep	0.6	g	30	mL	02/09/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1392

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245394015

BASIS: Dry Weight

DATE COLLECTED 19-JAN-10

CLIENT ID: RE15-10-7910

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	1210000	ug/Kg	*	7300	21500	21500	1	P	HSC	02/11/10 21:43	021110-1	945421
7440-36-0	Antimony	1190	ug/Kg	N	354	1070	1070	1	P	HSC	02/11/10 21:43	021110-1	945421
7440-38-2	Arsenic	1.58	mg/kg		0.221	1.1	1.1	2	MS	RMJ	02/14/10 11:54	100213-2	945425
7440-39-3	Barium	26800	ug/Kg		107	537	537	1	P	HSC	02/11/10 21:43	021110-1	945421
7440-41-7	Beryllium	3.27	mg/kg	N	0.0221	0.11	0.11	2	MS	RMJ	02/14/10 11:54	100213-2	945425
7440-43-9	Cadmium	537	ug/Kg	U	107	537	537	1	P	HSC	02/11/10 21:43	021110-1	945421
7440-70-2	Calcium	440000	ug/Kg	N	8590	26800	26800	1	P	HSC	02/11/10 21:43	021110-1	945421
7440-47-3	Chromium	3010	ug/Kg		161	537	537	1	P	HSC	02/11/10 21:43	021110-1	945421
7440-48-4	Cobalt	3170	ug/Kg		161	537	537	1	P	HSC	02/11/10 21:43	021110-1	945421
7440-50-8	Copper	49100	ug/Kg	*N	322	1070	1070	1	P	HSC	02/11/10 21:43	021110-1	945421
7439-89-6	Iron	6500000	ug/Kg		8590	26800	26800	1	P	HSC	02/11/10 21:43	021110-1	945421
7439-92-1	Lead	75400	ug/Kg	*N	268	1070	1070	1	P	HSC	02/11/10 21:43	021110-1	945421
7439-95-4	Magnesium	215000	ug/Kg	N	9120	32200	32200	1	P	HSC	02/11/10 21:43	021110-1	945421
7439-96-5	Manganese	165000	ug/Kg	N	215	1070	1070	1	P	HSC	02/11/10 21:43	021110-1	945421
7439-97-6	Mercury	6.33	ug/kg	J	4.18	12.3	12.3	1	AV	ETL	02/10/10 10:50	021010S1-4	945628
7440-02-0	Nickel	4.31	mg/kg	N	0.11	0.441	0.441	2	MS	RMJ	02/14/10 11:54	100213-2	945425
7440-09-7	Potassium	276000	ug/Kg	N	6870	26800	26800	1	P	HSC	02/11/10 21:43	021110-1	945421
7782-49-2	Selenium	1.1	mg/kg	U*N	0.552	1.1	1.1	2	MS	RMJ	02/14/10 11:54	100213-2	945425
7440-22-4	Silver	439	ug/Kg	J	107	537	537	1	P	HSC	02/11/10 21:43	021110-1	945421
7440-23-5	Sodium	146000	ug/Kg		7510	26800	26800	1	P	HSC	02/11/10 21:43	021110-1	945421
7440-28-0	Thallium	0.221	mg/kg	U	0.0662	0.221	0.221	2	MS	RMJ	02/14/10 11:54	100213-2	945425
7440-61-1	Uranium	62.6	mg/kg	*	0.0728	0.221	0.221	10	MS	RMJ	02/16/10 08:55	100215-3	945425
7440-62-2	Vanadium	3010	ug/Kg		107	537	537	1	P	HSC	02/11/10 21:43	021110-1	945421
7440-66-6	Zinc	21900	ug/Kg		354	1070	1070	1	P	HSC	02/11/10 21:43	021110-1	945421

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
945421	945420	SW846 3050B	0.517	g	50	mL	02/04/10	FGA
945425	945424	SW846 3050B	0.503	g	50	mL	02/04/10	FGA
945628	945627	SW846 7471A Prep	0.542	g	30	mL	02/09/10	TXB3

Quality Control Summary

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1392

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS6,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICV01										
	Mercury	5.23	ug/L	5	ug/L	104.6	90.0 – 110.0	AV	10-FEB-10 09:01	021010S1-4
	Aluminum	5000	ug/L	5000	ug/L	99.9	90.0 – 110.0	P	11-FEB-10 08:54	021110-1
	Antimony	520	ug/L	500	ug/L	104.1	90.0 – 110.0	P	11-FEB-10 08:54	021110-1
	Barium	513	ug/L	500	ug/L	102.7	90.0 – 110.0	P	11-FEB-10 08:54	021110-1
	Cadmium	490	ug/L	500	ug/L	98	90.0 – 110.0	P	11-FEB-10 08:54	021110-1
	Calcium	5050	ug/L	5000	ug/L	101	90.0 – 110.0	P	11-FEB-10 08:54	021110-1
	Chromium	491	ug/L	500	ug/L	98.1	90.0 – 110.0	P	11-FEB-10 08:54	021110-1
	Cobalt	513	ug/L	500	ug/L	102.6	90.0 – 110.0	P	11-FEB-10 08:54	021110-1
	Copper	510	ug/L	500	ug/L	102	90.0 – 110.0	P	11-FEB-10 08:54	021110-1
	Iron	5200	ug/L	5000	ug/L	104	90.0 – 110.0	P	11-FEB-10 08:54	021110-1
	Lead	500	ug/L	500	ug/L	100	90.0 – 110.0	P	11-FEB-10 08:54	021110-1
	Magnesium	5450	ug/L	5000	ug/L	109	90.0 – 110.0	P	11-FEB-10 08:54	021110-1
	Manganese	517	ug/L	500	ug/L	103.4	90.0 – 110.0	P	11-FEB-10 08:54	021110-1
	Potassium	2500	ug/L	2500	ug/L	100	90.0 – 110.0	P	11-FEB-10 08:54	021110-1
	Silver	265	ug/L	250	ug/L	106.1	90.0 – 110.0	P	11-FEB-10 08:54	021110-1
	Sodium	2500	ug/L	2500	ug/L	99.9	90.0 – 110.0	P	11-FEB-10 08:54	021110-1
	Vanadium	520	ug/L	500	ug/L	104	90.0 – 110.0	P	11-FEB-10 08:54	021110-1
	Zinc	512	ug/L	500	ug/L	102.5	90.0 – 110.0	P	11-FEB-10 08:54	021110-1
	Arsenic	45.8	ug/L	50	ug/L	91.5	90.0 – 110.0	MS	14-FEB-10 08:51	100213-2
	Beryllium	50.5	ug/L	50	ug/L	101	90.0 – 110.0	MS	14-FEB-10 08:51	100213-2
	Nickel	52	ug/L	50	ug/L	103.9	90.0 – 110.0	MS	14-FEB-10 08:51	100213-2
	Selenium	49.6	ug/L	50	ug/L	99.2	90.0 – 110.0	MS	14-FEB-10 08:51	100213-2
	Thallium	48.6	ug/L	50	ug/L	97.1	90.0 – 110.0	MS	14-FEB-10 08:51	100213-2
	Uranium	52.5	ug/L	50	ug/L	105.1	90.0 – 110.0	MS	16-FEB-10 07:03	100215-3
CCV01										
	Mercury	5.07	ug/L	5	ug/L	101.3	80.0 – 120.0	AV	10-FEB-10 09:06	021010S1-4
	Aluminum	4990	ug/L	5000	ug/L	99.7	90.0 – 110.0	P	11-FEB-10 09:39	021110-1
	Antimony	507	ug/L	500	ug/L	101.5	90.0 – 110.0	P	11-FEB-10 09:39	021110-1
	Barium	499	ug/L	500	ug/L	99.7	90.0 – 110.0	P	11-FEB-10 09:39	021110-1
	Cadmium	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	11-FEB-10 09:39	021110-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1392

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS6,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Calcium	5020	ug/L	5000	ug/L	100.4	90.0 – 110.0	P	11-FEB-10 09:39	021110-1
	Chromium	495	ug/L	500	ug/L	99	90.0 – 110.0	P	11-FEB-10 09:39	021110-1
	Cobalt	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	11-FEB-10 09:39	021110-1
	Copper	499	ug/L	500	ug/L	99.7	90.0 – 110.0	P	11-FEB-10 09:39	021110-1
	Iron	5100	ug/L	5000	ug/L	102	90.0 – 110.0	P	11-FEB-10 09:39	021110-1
	Lead	488	ug/L	500	ug/L	97.5	90.0 – 110.0	P	11-FEB-10 09:39	021110-1
	Magnesium	5170	ug/L	5000	ug/L	103.3	90.0 – 110.0	P	11-FEB-10 09:39	021110-1
	Manganese	490	ug/L	500	ug/L	97.9	90.0 – 110.0	P	11-FEB-10 09:39	021110-1
	Potassium	5190	ug/L	5000	ug/L	103.7	90.0 – 110.0	P	11-FEB-10 09:39	021110-1
	Silver	496	ug/L	500	ug/L	99.3	90.0 – 110.0	P	11-FEB-10 09:39	021110-1
	Sodium	9910	ug/L	10000	ug/L	99.1	90.0 – 110.0	P	11-FEB-10 09:39	021110-1
	Vanadium	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	11-FEB-10 09:39	021110-1
	Zinc	493	ug/L	500	ug/L	98.5	90.0 – 110.0	P	11-FEB-10 09:39	021110-1
	Arsenic	47.8	ug/L	50	ug/L	95.6	90.0 – 110.0	MS	14-FEB-10 09:21	100213-2
	Beryllium	47.4	ug/L	50	ug/L	94.8	90.0 – 110.0	MS	14-FEB-10 09:21	100213-2
	Nickel	53	ug/L	50	ug/L	106	90.0 – 110.0	MS	14-FEB-10 09:21	100213-2
	Selenium	49.3	ug/L	50	ug/L	98.5	90.0 – 110.0	MS	14-FEB-10 09:21	100213-2
	Thallium	48.9	ug/L	50	ug/L	97.8	90.0 – 110.0	MS	14-FEB-10 09:21	100213-2
	Uranium	52.5	ug/L	50	ug/L	104.9	90.0 – 110.0	MS	16-FEB-10 07:19	100215-3
CCV02	Mercury	5.04	ug/L	5	ug/L	100.8	80.0 – 120.0	AV	10-FEB-10 09:26	021010S1-4
	Aluminum	4810	ug/L	5000	ug/L	96.1	90.0 – 110.0	P	11-FEB-10 10:04	021110-1
	Antimony	500	ug/L	500	ug/L	99.9	90.0 – 110.0	P	11-FEB-10 10:04	021110-1
	Barium	495	ug/L	500	ug/L	99	90.0 – 110.0	P	11-FEB-10 10:04	021110-1
	Cadmium	490	ug/L	500	ug/L	98	90.0 – 110.0	P	11-FEB-10 10:04	021110-1
	Calcium	4920	ug/L	5000	ug/L	98.3	90.0 – 110.0	P	11-FEB-10 10:04	021110-1
	Chromium	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	11-FEB-10 10:04	021110-1
	Cobalt	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	11-FEB-10 10:04	021110-1
	Copper	494	ug/L	500	ug/L	98.9	90.0 – 110.0	P	11-FEB-10 10:04	021110-1
	Iron	4970	ug/L	5000	ug/L	99.3	90.0 – 110.0	P	11-FEB-10 10:04	021110-1

METALS

-2a-

Initial and Continuing Calibration Verification

SDG No: 10-1392

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS6,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Lead	486	ug/L	500	ug/L	97.1	90.0 - 110.0	P	11-FEB-10 10:04	021110-1
	Magnesium	5070	ug/L	5000	ug/L	101.5	90.0 - 110.0	P	11-FEB-10 10:04	021110-1
	Manganese	490	ug/L	500	ug/L	98	90.0 - 110.0	P	11-FEB-10 10:04	021110-1
	Potassium	4840	ug/L	5000	ug/L	96.9	90.0 - 110.0	P	11-FEB-10 10:04	021110-1
	Silver	493	ug/L	500	ug/L	98.6	90.0 - 110.0	P	11-FEB-10 10:04	021110-1
	Sodium	9490	ug/L	10000	ug/L	94.9	90.0 - 110.0	P	11-FEB-10 10:04	021110-1
	Vanadium	497	ug/L	500	ug/L	99.5	90.0 - 110.0	P	11-FEB-10 10:04	021110-1
	Zinc	488	ug/L	500	ug/L	97.7	90.0 - 110.0	P	11-FEB-10 10:04	021110-1
	Arsenic	47	ug/L	50	ug/L	94	90.0 - 110.0	MS	14-FEB-10 09:44	100213-2
	Beryllium	48.2	ug/L	50	ug/L	96.3	90.0 - 110.0	MS	14-FEB-10 09:44	100213-2
	Nickel	51.2	ug/L	50	ug/L	102.4	90.0 - 110.0	MS	14-FEB-10 09:44	100213-2
	Selenium	48.2	ug/L	50	ug/L	96.4	90.0 - 110.0	MS	14-FEB-10 09:44	100213-2
	Thallium	48.4	ug/L	50	ug/L	96.8	90.0 - 110.0	MS	14-FEB-10 09:44	100213-2
	Uranium	52.8	ug/L	50	ug/L	105.7	90.0 - 110.0	MS	16-FEB-10 07:32	100215-3
CCV03	Mercury	5.04	ug/L	5	ug/L	100.8	80.0 - 120.0	AV	10-FEB-10 09:46	021010S1-4
	Aluminum	4940	ug/L	5000	ug/L	98.8	90.0 - 110.0	P	11-FEB-10 11:23	021110-1
	Antimony	504	ug/L	500	ug/L	100.7	90.0 - 110.0	P	11-FEB-10 11:23	021110-1
	Barium	494	ug/L	500	ug/L	98.8	90.0 - 110.0	P	11-FEB-10 11:23	021110-1
	Cadmium	489	ug/L	500	ug/L	97.7	90.0 - 110.0	P	11-FEB-10 11:23	021110-1
	Calcium	5050	ug/L	5000	ug/L	101	90.0 - 110.0	P	11-FEB-10 11:23	021110-1
	Chromium	491	ug/L	500	ug/L	98.2	90.0 - 110.0	P	11-FEB-10 11:23	021110-1
	Cobalt	502	ug/L	500	ug/L	100.3	90.0 - 110.0	P	11-FEB-10 11:23	021110-1
	Copper	492	ug/L	500	ug/L	98.4	90.0 - 110.0	P	11-FEB-10 11:23	021110-1
	Iron	5110	ug/L	5000	ug/L	102.1	90.0 - 110.0	P	11-FEB-10 11:23	021110-1
	Lead	492	ug/L	500	ug/L	98.4	90.0 - 110.0	P	11-FEB-10 11:23	021110-1
	Magnesium	5240	ug/L	5000	ug/L	104.9	90.0 - 110.0	P	11-FEB-10 11:23	021110-1
	Manganese	494	ug/L	500	ug/L	98.8	90.0 - 110.0	P	11-FEB-10 11:23	021110-1
	Potassium	4980	ug/L	5000	ug/L	99.7	90.0 - 110.0	P	11-FEB-10 11:23	021110-1
	Silver	492	ug/L	500	ug/L	98.3	90.0 - 110.0	P	11-FEB-10 11:23	021110-1

METALS

-2a-

Initial and Continuing Calibration Verification

SDG No: 10-1392

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS6,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Sodium	9820	ug/L	10000	ug/L	98.2	90.0 - 110.0	P	11-FEB-10 11:23	021110-1
	Vanadium	496	ug/L	500	ug/L	99.1	90.0 - 110.0	P	11-FEB-10 11:23	021110-1
	Zinc	487	ug/L	500	ug/L	97.4	90.0 - 110.0	P	11-FEB-10 11:23	021110-1
	Arsenic	45.8	ug/L	50	ug/L	91.6	90.0 - 110.0	MS	14-FEB-10 10:49	100213-2
	Beryllium	51.7	ug/L	50	ug/L	103.3	90.0 - 110.0	MS	14-FEB-10 10:49	100213-2
	Nickel	50.9	ug/L	50	ug/L	101.8	90.0 - 110.0	MS	14-FEB-10 10:49	100213-2
	Selenium	46.9	ug/L	50	ug/L	93.7	90.0 - 110.0	MS	14-FEB-10 10:49	100213-2
	Thallium	47.9	ug/L	50	ug/L	95.8	90.0 - 110.0	MS	14-FEB-10 10:49	100213-2
	Uranium	54.4	ug/L	50	ug/L	108.8	90.0 - 110.0	MS	16-FEB-10 08:07	100215-3
CCV04										
	Mercury	5.04	ug/L	5	ug/L	100.8	80.0 - 120.0	AV	10-FEB-10 10:06	021010S1-4
	Aluminum	4940	ug/L	5000	ug/L	98.7	90.0 - 110.0	P	11-FEB-10 11:57	021110-1
	Antimony	503	ug/L	500	ug/L	100.7	90.0 - 110.0	P	11-FEB-10 11:57	021110-1
	Barium	498	ug/L	500	ug/L	99.6	90.0 - 110.0	P	11-FEB-10 11:57	021110-1
	Cadmium	489	ug/L	500	ug/L	97.9	90.0 - 110.0	P	11-FEB-10 11:57	021110-1
	Calcium	4990	ug/L	5000	ug/L	99.9	90.0 - 110.0	P	11-FEB-10 11:57	021110-1
	Chromium	493	ug/L	500	ug/L	98.5	90.0 - 110.0	P	11-FEB-10 11:57	021110-1
	Cobalt	505	ug/L	500	ug/L	101.1	90.0 - 110.0	P	11-FEB-10 11:57	021110-1
	Copper	499	ug/L	500	ug/L	99.7	90.0 - 110.0	P	11-FEB-10 11:57	021110-1
	Iron	5050	ug/L	5000	ug/L	101.1	90.0 - 110.0	P	11-FEB-10 11:57	021110-1
	Lead	490	ug/L	500	ug/L	98	90.0 - 110.0	P	11-FEB-10 11:57	021110-1
	Magnesium	5240	ug/L	5000	ug/L	104.8	90.0 - 110.0	P	11-FEB-10 11:57	021110-1
	Manganese	496	ug/L	500	ug/L	99.1	90.0 - 110.0	P	11-FEB-10 11:57	021110-1
	Potassium	4910	ug/L	5000	ug/L	98.1	90.0 - 110.0	P	11-FEB-10 11:57	021110-1
	Silver	496	ug/L	500	ug/L	99.2	90.0 - 110.0	P	11-FEB-10 11:57	021110-1
	Sodium	9900	ug/L	10000	ug/L	99	90.0 - 110.0	P	11-FEB-10 11:57	021110-1
	Vanadium	499	ug/L	500	ug/L	99.8	90.0 - 110.0	P	11-FEB-10 11:57	021110-1
	Zinc	490	ug/L	500	ug/L	98.1	90.0 - 110.0	P	11-FEB-10 11:57	021110-1
	Arsenic	44.8	ug/L	50	ug/L	89.6	90.0 - 110.0	MS	14-FEB-10 12:00	100213-2
	Beryllium	48.7	ug/L	50	ug/L	97.3	90.0 - 110.0	MS	14-FEB-10 12:00	100213-2

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1392

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS6,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Nickel	48.5	ug/L	50	ug/L	97	90.0 – 110.0	MS	14-FEB-10 12:00	100213-2
	Selenium	47.5	ug/L	50	ug/L	95	90.0 – 110.0	MS	14-FEB-10 12:00	100213-2
	Thallium	45.8	ug/L	50	ug/L	91.7	90.0 – 110.0	MS	14-FEB-10 12:00	100213-2
	Uranium	54.9	ug/L	50	ug/L	109.7	90.0 – 110.0	MS	16-FEB-10 08:42	100215-3
CCV05										
	Mercury	5.02	ug/L	5	ug/L	100.3	80.0 – 120.0	AV	10-FEB-10 10:26	021010S1-4
	Aluminum	4970	ug/L	5000	ug/L	99.3	90.0 – 110.0	P	11-FEB-10 12:53	021110-1
	Antimony	506	ug/L	500	ug/L	101.1	90.0 – 110.0	P	11-FEB-10 12:53	021110-1
	Barium	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	11-FEB-10 12:53	021110-1
	Cadmium	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	11-FEB-10 12:53	021110-1
	Calcium	5020	ug/L	5000	ug/L	100.4	90.0 – 110.0	P	11-FEB-10 12:53	021110-1
	Chromium	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	11-FEB-10 12:53	021110-1
	Cobalt	505	ug/L	500	ug/L	101.1	90.0 – 110.0	P	11-FEB-10 12:53	021110-1
	Copper	496	ug/L	500	ug/L	99.3	90.0 – 110.0	P	11-FEB-10 12:53	021110-1
	Iron	5080	ug/L	5000	ug/L	101.7	90.0 – 110.0	P	11-FEB-10 12:53	021110-1
	Lead	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	11-FEB-10 12:53	021110-1
	Magnesium	5240	ug/L	5000	ug/L	104.7	90.0 – 110.0	P	11-FEB-10 12:53	021110-1
	Manganese	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	11-FEB-10 12:53	021110-1
	Potassium	4970	ug/L	5000	ug/L	99.3	90.0 – 110.0	P	11-FEB-10 12:53	021110-1
	Silver	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	11-FEB-10 12:53	021110-1
	Sodium	9860	ug/L	10000	ug/L	98.6	90.0 – 110.0	P	11-FEB-10 12:53	021110-1
	Vanadium	498	ug/L	500	ug/L	99.5	90.0 – 110.0	P	11-FEB-10 12:53	021110-1
	Zinc	489	ug/L	500	ug/L	97.7	90.0 – 110.0	P	11-FEB-10 12:53	021110-1
	Uranium	54.2	ug/L	50	ug/L	108.5	90.0 – 110.0	MS	16-FEB-10 08:59	100215-3
CCV06										
	Mercury	4.93	ug/L	5	ug/L	98.6	80.0 – 120.0	AV	10-FEB-10 10:46	021010S1-4
	Aluminum	4990	ug/L	5000	ug/L	99.9	90.0 – 110.0	P	11-FEB-10 13:39	021110-1
	Antimony	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	11-FEB-10 13:39	021110-1
	Barium	502	ug/L	500	ug/L	100.3	90.0 – 110.0	P	11-FEB-10 13:39	021110-1
	Cadmium	490	ug/L	500	ug/L	97.9	90.0 – 110.0	P	11-FEB-10 13:39	021110-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1392

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS6,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Calcium	5040	ug/L	5000	ug/L	100.8	90.0 - 110.0	P	11-FEB-10 13:39	021110-1
	Chromium	491	ug/L	500	ug/L	98.1	90.0 - 110.0	P	11-FEB-10 13:39	021110-1
	Cobalt	510	ug/L	500	ug/L	102	90.0 - 110.0	P	11-FEB-10 13:39	021110-1
	Copper	501	ug/L	500	ug/L	100.2	90.0 - 110.0	P	11-FEB-10 13:39	021110-1
	Iron	5100	ug/L	5000	ug/L	101.9	90.0 - 110.0	P	11-FEB-10 13:39	021110-1
	Lead	489	ug/L	500	ug/L	97.8	90.0 - 110.0	P	11-FEB-10 13:39	021110-1
	Magnesium	5190	ug/L	5000	ug/L	103.7	90.0 - 110.0	P	11-FEB-10 13:39	021110-1
	Manganese	499	ug/L	500	ug/L	99.8	90.0 - 110.0	P	11-FEB-10 13:39	021110-1
	Potassium	4970	ug/L	5000	ug/L	99.5	90.0 - 110.0	P	11-FEB-10 13:39	021110-1
	Silver	497	ug/L	500	ug/L	99.4	90.0 - 110.0	P	11-FEB-10 13:39	021110-1
	Sodium	9920	ug/L	10000	ug/L	99.2	90.0 - 110.0	P	11-FEB-10 13:39	021110-1
	Vanadium	497	ug/L	500	ug/L	99.4	90.0 - 110.0	P	11-FEB-10 13:39	021110-1
	Zinc	492	ug/L	500	ug/L	98.3	90.0 - 110.0	P	11-FEB-10 13:39	021110-1
CCV07	Mercury	4.02	ug/L	5	ug/L	80.4	80.0 - 120.0	AV	10-FEB-10 11:06	021010S1-4
	Aluminum	5040	ug/L	5000	ug/L	100.8	90.0 - 110.0	P	11-FEB-10 14:59	021110-1
	Antimony	508	ug/L	500	ug/L	101.5	90.0 - 110.0	P	11-FEB-10 14:59	021110-1
	Barium	512	ug/L	500	ug/L	102.3	90.0 - 110.0	P	11-FEB-10 14:59	021110-1
	Cadmium	499	ug/L	500	ug/L	99.8	90.0 - 110.0	P	11-FEB-10 14:59	021110-1
	Calcium	5020	ug/L	5000	ug/L	100.5	90.0 - 110.0	P	11-FEB-10 14:59	021110-1
	Chromium	499	ug/L	500	ug/L	99.9	90.0 - 110.0	P	11-FEB-10 14:59	021110-1
	Cobalt	520	ug/L	500	ug/L	104.1	90.0 - 110.0	P	11-FEB-10 14:59	021110-1
	Copper	510	ug/L	500	ug/L	102.1	90.0 - 110.0	P	11-FEB-10 14:59	021110-1
	Iron	5040	ug/L	5000	ug/L	100.7	90.0 - 110.0	P	11-FEB-10 14:59	021110-1
	Lead	492	ug/L	500	ug/L	98.4	90.0 - 110.0	P	11-FEB-10 14:59	021110-1
	Magnesium	5170	ug/L	5000	ug/L	103.3	90.0 - 110.0	P	11-FEB-10 14:59	021110-1
	Manganese	503	ug/L	500	ug/L	100.7	90.0 - 110.0	P	11-FEB-10 14:59	021110-1
	Potassium	4960	ug/L	5000	ug/L	99.2	90.0 - 110.0	P	11-FEB-10 14:59	021110-1
	Silver	505	ug/L	500	ug/L	101	90.0 - 110.0	P	11-FEB-10 14:59	021110-1
	Sodium	9950	ug/L	10000	ug/L	99.5	90.0 - 110.0	P	11-FEB-10 14:59	021110-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1392

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS6,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
CCV08	Vanadium	506	ug/L	500	ug/L	101.1	90.0 - 110.0	P	11-FEB-10 14:59	021110-1
	Zinc	502	ug/L	500	ug/L	100.4	90.0 - 110.0	P	11-FEB-10 14:59	021110-1
	Aluminum	4990	ug/L	5000	ug/L	99.7	90.0 - 110.0	P	11-FEB-10 16:06	021110-1
	Antimony	512	ug/L	500	ug/L	102.4	90.0 - 110.0	P	11-FEB-10 16:06	021110-1
	Barium	511	ug/L	500	ug/L	102.2	90.0 - 110.0	P	11-FEB-10 16:06	021110-1
	Cadmium	498	ug/L	500	ug/L	99.5	90.0 - 110.0	P	11-FEB-10 16:06	021110-1
	Calcium	5020	ug/L	5000	ug/L	100.4	90.0 - 110.0	P	11-FEB-10 16:06	021110-1
	Chromium	495	ug/L	500	ug/L	99.1	90.0 - 110.0	P	11-FEB-10 16:06	021110-1
	Cobalt	521	ug/L	500	ug/L	104.3	90.0 - 110.0	P	11-FEB-10 16:06	021110-1
	Copper	506	ug/L	500	ug/L	101.3	90.0 - 110.0	P	11-FEB-10 16:06	021110-1
	Iron	5010	ug/L	5000	ug/L	100.2	90.0 - 110.0	P	11-FEB-10 16:06	021110-1
	Lead	497	ug/L	500	ug/L	99.4	90.0 - 110.0	P	11-FEB-10 16:06	021110-1
	Magnesium	5160	ug/L	5000	ug/L	103.3	90.0 - 110.0	P	11-FEB-10 16:06	021110-1
	Manganese	509	ug/L	500	ug/L	101.9	90.0 - 110.0	P	11-FEB-10 16:06	021110-1
	Potassium	4940	ug/L	5000	ug/L	98.7	90.0 - 110.0	P	11-FEB-10 16:06	021110-1
	Silver	503	ug/L	500	ug/L	100.6	90.0 - 110.0	P	11-FEB-10 16:06	021110-1
	Sodium	9680	ug/L	10000	ug/L	96.8	90.0 - 110.0	P	11-FEB-10 16:06	021110-1
	Vanadium	503	ug/L	500	ug/L	100.5	90.0 - 110.0	P	11-FEB-10 16:06	021110-1
	Zinc	502	ug/L	500	ug/L	100.3	90.0 - 110.0	P	11-FEB-10 16:06	021110-1
CCV09	Aluminum	5030	ug/L	5000	ug/L	100.5	90.0 - 110.0	P	11-FEB-10 16:26	021110-1
	Antimony	519	ug/L	500	ug/L	103.8	90.0 - 110.0	P	11-FEB-10 16:26	021110-1
	Barium	513	ug/L	500	ug/L	102.5	90.0 - 110.0	P	11-FEB-10 16:26	021110-1
	Cadmium	501	ug/L	500	ug/L	100.1	90.0 - 110.0	P	11-FEB-10 16:26	021110-1
	Calcium	5070	ug/L	5000	ug/L	101.4	90.0 - 110.0	P	11-FEB-10 16:26	021110-1
	Chromium	497	ug/L	500	ug/L	99.5	90.0 - 110.0	P	11-FEB-10 16:26	021110-1
	Cobalt	523	ug/L	500	ug/L	104.6	90.0 - 110.0	P	11-FEB-10 16:26	021110-1
	Copper	505	ug/L	500	ug/L	101.1	90.0 - 110.0	P	11-FEB-10 16:26	021110-1
	Iron	5060	ug/L	5000	ug/L	101.2	90.0 - 110.0	P	11-FEB-10 16:26	021110-1

METALS

-2a-

Initial and Continuing Calibration Verification

SDG No: 10-1392

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS6,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
CCV10	Lead	502	ug/L	500	ug/L	100.3	90.0 - 110.0	P	11-FEB-10 16:26	021110-1
	Magnesium	5160	ug/L	5000	ug/L	103.3	90.0 - 110.0	P	11-FEB-10 16:26	021110-1
	Manganese	511	ug/L	500	ug/L	102.2	90.0 - 110.0	P	11-FEB-10 16:26	021110-1
	Potassium	4990	ug/L	5000	ug/L	99.9	90.0 - 110.0	P	11-FEB-10 16:26	021110-1
	Silver	503	ug/L	500	ug/L	100.6	90.0 - 110.0	P	11-FEB-10 16:26	021110-1
	Sodium	9840	ug/L	10000	ug/L	98.5	90.0 - 110.0	P	11-FEB-10 16:26	021110-1
	Vanadium	503	ug/L	500	ug/L	100.7	90.0 - 110.0	P	11-FEB-10 16:26	021110-1
	Zinc	503	ug/L	500	ug/L	100.6	90.0 - 110.0	P	11-FEB-10 16:26	021110-1
CCV10	Aluminum	4960	ug/L	5000	ug/L	99.1	90.0 - 110.0	P	11-FEB-10 17:35	021110-1
	Antimony	511	ug/L	500	ug/L	102.3	90.0 - 110.0	P	11-FEB-10 17:35	021110-1
	Barium	505	ug/L	500	ug/L	101.1	90.0 - 110.0	P	11-FEB-10 17:35	021110-1
	Cadmium	494	ug/L	500	ug/L	98.8	90.0 - 110.0	P	11-FEB-10 17:35	021110-1
	Calcium	4990	ug/L	5000	ug/L	99.8	90.0 - 110.0	P	11-FEB-10 17:35	021110-1
	Chromium	491	ug/L	500	ug/L	98.1	90.0 - 110.0	P	11-FEB-10 17:35	021110-1
	Cobalt	516	ug/L	500	ug/L	103.1	90.0 - 110.0	P	11-FEB-10 17:35	021110-1
	Copper	502	ug/L	500	ug/L	100.3	90.0 - 110.0	P	11-FEB-10 17:35	021110-1
	Iron	4970	ug/L	5000	ug/L	99.4	90.0 - 110.0	P	11-FEB-10 17:35	021110-1
	Lead	492	ug/L	500	ug/L	98.4	90.0 - 110.0	P	11-FEB-10 17:35	021110-1
	Magnesium	5150	ug/L	5000	ug/L	103	90.0 - 110.0	P	11-FEB-10 17:35	021110-1
	Manganese	500	ug/L	500	ug/L	99.9	90.0 - 110.0	P	11-FEB-10 17:35	021110-1
	Potassium	4870	ug/L	5000	ug/L	97.5	90.0 - 110.0	P	11-FEB-10 17:35	021110-1
	Silver	498	ug/L	500	ug/L	99.6	90.0 - 110.0	P	11-FEB-10 17:35	021110-1
	Sodium	9630	ug/L	10000	ug/L	96.3	90.0 - 110.0	P	11-FEB-10 17:35	021110-1
	Vanadium	497	ug/L	500	ug/L	99.4	90.0 - 110.0	P	11-FEB-10 17:35	021110-1
	Zinc	498	ug/L	500	ug/L	99.6	90.0 - 110.0	P	11-FEB-10 17:35	021110-1
CCV11	Aluminum	4970	ug/L	5000	ug/L	99.4	90.0 - 110.0	P	11-FEB-10 18:43	021110-1
	Antimony	509	ug/L	500	ug/L	101.9	90.0 - 110.0	P	11-FEB-10 18:43	021110-1
	Barium	508	ug/L	500	ug/L	101.7	90.0 - 110.0	P	11-FEB-10 18:43	021110-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1392

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS6,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Cadmium	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	11-FEB-10 18:43	021110-1
	Calcium	5030	ug/L	5000	ug/L	100.7	90.0 – 110.0	P	11-FEB-10 18:43	021110-1
	Chromium	492	ug/L	500	ug/L	98.4	90.0 – 110.0	P	11-FEB-10 18:43	021110-1
	Cobalt	518	ug/L	500	ug/L	103.7	90.0 – 110.0	P	11-FEB-10 18:43	021110-1
	Copper	505	ug/L	500	ug/L	101	90.0 – 110.0	P	11-FEB-10 18:43	021110-1
	Iron	4990	ug/L	5000	ug/L	99.8	90.0 – 110.0	P	11-FEB-10 18:43	021110-1
	Lead	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	11-FEB-10 18:43	021110-1
	Magnesium	5200	ug/L	5000	ug/L	104	90.0 – 110.0	P	11-FEB-10 18:43	021110-1
	Manganese	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	11-FEB-10 18:43	021110-1
	Potassium	4880	ug/L	5000	ug/L	97.6	90.0 – 110.0	P	11-FEB-10 18:43	021110-1
	Silver	500	ug/L	500	ug/L	100.1	90.0 – 110.0	P	11-FEB-10 18:43	021110-1
	Sodium	9560	ug/L	10000	ug/L	95.6	90.0 – 110.0	P	11-FEB-10 18:43	021110-1
	Vanadium	499	ug/L	500	ug/L	99.9	90.0 – 110.0	P	11-FEB-10 18:43	021110-1
	Zinc	500	ug/L	500	ug/L	100	90.0 – 110.0	P	11-FEB-10 18:43	021110-1
CCV12	Aluminum	4990	ug/L	5000	ug/L	99.7	90.0 – 110.0	P	11-FEB-10 19:44	021110-1
	Antimony	510	ug/L	500	ug/L	101.9	90.0 – 110.0	P	11-FEB-10 19:44	021110-1
	Barium	506	ug/L	500	ug/L	101.1	90.0 – 110.0	P	11-FEB-10 19:44	021110-1
	Cadmium	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	11-FEB-10 19:44	021110-1
	Calcium	5070	ug/L	5000	ug/L	101.3	90.0 – 110.0	P	11-FEB-10 19:44	021110-1
	Chromium	490	ug/L	500	ug/L	98.1	90.0 – 110.0	P	11-FEB-10 19:44	021110-1
	Cobalt	515	ug/L	500	ug/L	103	90.0 – 110.0	P	11-FEB-10 19:44	021110-1
	Copper	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	11-FEB-10 19:44	021110-1
	Iron	5170	ug/L	5000	ug/L	103.4	90.0 – 110.0	P	11-FEB-10 19:44	021110-1
	Lead	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	11-FEB-10 19:44	021110-1
	Magnesium	5270	ug/L	5000	ug/L	105.4	90.0 – 110.0	P	11-FEB-10 19:44	021110-1
	Manganese	504	ug/L	500	ug/L	100.9	90.0 – 110.0	P	11-FEB-10 19:44	021110-1
	Potassium	4880	ug/L	5000	ug/L	97.7	90.0 – 110.0	P	11-FEB-10 19:44	021110-1
	Silver	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	11-FEB-10 19:44	021110-1
	Sodium	10200	ug/L	10000	ug/L	102.3	90.0 – 110.0	P	11-FEB-10 19:44	021110-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1392

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS6,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Vanadium	497	ug/L	500	ug/L	99.3	90.0 – 110.0	P	11-FEB-10 19:44	021110-1
	Zinc	497	ug/L	500	ug/L	99.3	90.0 – 110.0	P	11-FEB-10 19:44	021110-1
CCV13										
	Aluminum	4810	ug/L	5000	ug/L	96.2	90.0 – 110.0	P	11-FEB-10 20:48	021110-1
	Antimony	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	11-FEB-10 20:48	021110-1
	Barium	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	11-FEB-10 20:48	021110-1
	Cadmium	489	ug/L	500	ug/L	97.9	90.0 – 110.0	P	11-FEB-10 20:48	021110-1
	Calcium	5000	ug/L	5000	ug/L	100.1	90.0 – 110.0	P	11-FEB-10 20:48	021110-1
	Chromium	486	ug/L	500	ug/L	97.3	90.0 – 110.0	P	11-FEB-10 20:48	021110-1
	Cobalt	512	ug/L	500	ug/L	102.4	90.0 – 110.0	P	11-FEB-10 20:48	021110-1
	Copper	497	ug/L	500	ug/L	99.5	90.0 – 110.0	P	11-FEB-10 20:48	021110-1
	Iron	5050	ug/L	5000	ug/L	100.9	90.0 – 110.0	P	11-FEB-10 20:48	021110-1
	Lead	489	ug/L	500	ug/L	97.9	90.0 – 110.0	P	11-FEB-10 20:48	021110-1
	Magnesium	5160	ug/L	5000	ug/L	103.1	90.0 – 110.0	P	11-FEB-10 20:48	021110-1
	Manganese	502	ug/L	500	ug/L	100.3	90.0 – 110.0	P	11-FEB-10 20:48	021110-1
	Potassium	4680	ug/L	5000	ug/L	93.7	90.0 – 110.0	P	11-FEB-10 20:48	021110-1
	Silver	493	ug/L	500	ug/L	98.7	90.0 – 110.0	P	11-FEB-10 20:48	021110-1
	Sodium	9630	ug/L	10000	ug/L	96.3	90.0 – 110.0	P	11-FEB-10 20:48	021110-1
	Vanadium	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	11-FEB-10 20:48	021110-1
	Zinc	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	11-FEB-10 20:48	021110-1
CCV14										
	Aluminum	5030	ug/L	5000	ug/L	100.6	90.0 – 110.0	P	11-FEB-10 21:50	021110-1
	Antimony	509	ug/L	500	ug/L	101.7	90.0 – 110.0	P	11-FEB-10 21:50	021110-1
	Barium	503	ug/L	500	ug/L	100.7	90.0 – 110.0	P	11-FEB-10 21:50	021110-1
	Cadmium	490	ug/L	500	ug/L	98	90.0 – 110.0	P	11-FEB-10 21:50	021110-1
	Calcium	5050	ug/L	5000	ug/L	100.9	90.0 – 110.0	P	11-FEB-10 21:50	021110-1
	Chromium	488	ug/L	500	ug/L	97.7	90.0 – 110.0	P	11-FEB-10 21:50	021110-1
	Cobalt	511	ug/L	500	ug/L	102.3	90.0 – 110.0	P	11-FEB-10 21:50	021110-1
	Copper	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	11-FEB-10 21:50	021110-1
	Iron	5050	ug/L	5000	ug/L	100.9	90.0 – 110.0	P	11-FEB-10 21:50	021110-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1392

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS6,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Lead	490	ug/L	500	ug/L	97.9	90.0 – 110.0	P	11-FEB-10 21:50	021110-1
	Magnesium	5250	ug/L	5000	ug/L	105	90.0 – 110.0	P	11-FEB-10 21:50	021110-1
	Manganese	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	11-FEB-10 21:50	021110-1
	Potassium	4860	ug/L	5000	ug/L	97.2	90.0 – 110.0	P	11-FEB-10 21:50	021110-1
	Silver	495	ug/L	500	ug/L	99.1	90.0 – 110.0	P	11-FEB-10 21:50	021110-1
	Sodium	9800	ug/L	10000	ug/L	98	90.0 – 110.0	P	11-FEB-10 21:50	021110-1
	Vanadium	494	ug/L	500	ug/L	98.9	90.0 – 110.0	P	11-FEB-10 21:50	021110-1
	Zinc	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	11-FEB-10 21:50	021110-1

METALS
-2b-
CRDL Standard for AA & ICP

SDG No: 10-1392

Contract: LANL01004

Lab Code: GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: HG3,ICPMS6,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Advisory Limits (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
CRDL01										
	Mercury	.17	ug/L	.2	ug/L	85	70.0 – 130.0	AV	10-FEB-10 09:04	021010S1-4
	Nickel	2.23	ug/L	2	ug/L	111.3	70.0 – 130.0	MS	14-FEB-10 09:03	100213-2
	Thallium	1.08	ug/L	1	ug/L	108.4	70.0 – 130.0	MS	14-FEB-10 09:03	100213-2
	Beryllium	.564	ug/L	.5	ug/L	112.8	70.0 – 130.0	MS	14-FEB-10 09:03	100213-2
	Selenium	5.28	ug/L	5	ug/L	105.6	70.0 – 130.0	MS	14-FEB-10 09:03	100213-2
	Arsenic	5.28	ug/L	5	ug/L	105.6	70.0 – 130.0	MS	14-FEB-10 09:03	100213-2
	Uranium	.258	ug/L	.2	ug/L	129	70.0 – 130.0	MS	16-FEB-10 07:10	100215-3
PQL01										
	Aluminum	196	ug/L	200	ug/L	98.1	70.0 – 130.0	P	11-FEB-10 09:08	021110-1
	Iron	86.7	ug/L	100	ug/L	86.7	70.0 – 130.0	P	11-FEB-10 09:08	021110-1
	Lead	10.3	ug/L	10	ug/L	102.6	70.0 – 130.0	P	11-FEB-10 09:08	021110-1
	Magnesium	365	ug/L	300	ug/L	121.7	70.0 – 130.0	P	11-FEB-10 09:08	021110-1
	Manganese	10.5	ug/L	10	ug/L	105.4	70.0 – 130.0	P	11-FEB-10 09:08	021110-1
	Potassium	143	ug/L	150	ug/L	95	70.0 – 130.0	P	11-FEB-10 09:08	021110-1
	Silver	5.44	ug/L	5	ug/L	108.8	70.0 – 130.0	P	11-FEB-10 09:08	021110-1
	Sodium	304	ug/L	300	ug/L	101.2	70.0 – 130.0	P	11-FEB-10 09:08	021110-1
	Antimony	9.09	ug/L	10	ug/L	91	70.0 – 130.0	P	11-FEB-10 09:08	021110-1
	Barium	5.16	ug/L	5	ug/L	103.2	70.0 – 130.0	P	11-FEB-10 09:08	021110-1
	Cadmium	5.19	ug/L	5	ug/L	103.7	70.0 – 130.0	P	11-FEB-10 09:08	021110-1
	Chromium	5.14	ug/L	5	ug/L	102.7	70.0 – 130.0	P	11-FEB-10 09:08	021110-1
	Cobalt	5.1	ug/L	5	ug/L	102	70.0 – 130.0	P	11-FEB-10 09:08	021110-1
	Copper	10.7	ug/L	10	ug/L	106.5	70.0 – 130.0	P	11-FEB-10 09:08	021110-1
	Vanadium	5.31	ug/L	5	ug/L	106.2	70.0 – 130.0	P	11-FEB-10 09:08	021110-1
	Zinc	10.5	ug/L	10	ug/L	104.6	70.0 – 130.0	P	11-FEB-10 09:08	021110-1
	Calcium	201	ug/L	200	ug/L	100.7	70.0 – 130.0	P	11-FEB-10 09:08	021110-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-1392

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	10-FEB-10 09:03	021010S1-4
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	11-FEB-10 09:01	021110-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	11-FEB-10 09:01	021110-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	11-FEB-10 09:01	021110-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	11-FEB-10 09:01	021110-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	11-FEB-10 09:01	021110-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	11-FEB-10 09:01	021110-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	11-FEB-10 09:01	021110-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	11-FEB-10 09:01	021110-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	11-FEB-10 09:01	021110-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	11-FEB-10 09:01	021110-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	11-FEB-10 09:01	021110-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	11-FEB-10 09:01	021110-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	11-FEB-10 09:01	021110-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	11-FEB-10 09:01	021110-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	11-FEB-10 09:01	021110-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	11-FEB-10 09:01	021110-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	11-FEB-10 09:01	021110-1
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	14-FEB-10 08:57	100213-2
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	14-FEB-10 08:57	100213-2
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	14-FEB-10 08:57	100213-2
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	14-FEB-10 08:57	100213-2
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	14-FEB-10 08:57	100213-2
	Uranium	0.095	+/-2	J	0.066	0.2	SOL	MS	16-FEB-10 07:06	100215-3
CCB01	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	10-FEB-10 09:08	021010S1-4
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	11-FEB-10 09:46	021110-1
	Antimony	3.47	+/-10	J	3.3	10.0	SOL	P	11-FEB-10 09:46	021110-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	11-FEB-10 09:46	021110-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	11-FEB-10 09:46	021110-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	11-FEB-10 09:46	021110-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-1392

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	11-FEB-10 09:46	021110-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	11-FEB-10 09:46	021110-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	11-FEB-10 09:46	021110-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	11-FEB-10 09:46	021110-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	11-FEB-10 09:46	021110-1
	Magnesium	92.13	+/-300	J	85.0	300	SOL	P	11-FEB-10 09:46	021110-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	11-FEB-10 09:46	021110-1
	Potassium	120.39	+/-250	J	64.0	250	SOL	P	11-FEB-10 09:46	021110-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	11-FEB-10 09:46	021110-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	11-FEB-10 09:46	021110-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	11-FEB-10 09:46	021110-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	11-FEB-10 09:46	021110-1
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	14-FEB-10 09:27	100213-2
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	14-FEB-10 09:27	100213-2
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	14-FEB-10 09:27	100213-2
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	14-FEB-10 09:27	100213-2
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	14-FEB-10 09:27	100213-2
	Uranium	0.08	+/-2	J	0.066	0.2	SOL	MS	16-FEB-10 07:22	100215-3
CCB02	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	10-FEB-10 09:28	021010S1-4
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	11-FEB-10 10:11	021110-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	11-FEB-10 10:11	021110-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	11-FEB-10 10:11	021110-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	11-FEB-10 10:11	021110-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	11-FEB-10 10:11	021110-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	11-FEB-10 10:11	021110-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	11-FEB-10 10:11	021110-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	11-FEB-10 10:11	021110-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	11-FEB-10 10:11	021110-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	11-FEB-10 10:11	021110-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	11-FEB-10 10:11	021110-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-1392

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	11-FEB-10 10:11	021110-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	11-FEB-10 10:11	021110-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	11-FEB-10 10:11	021110-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	11-FEB-10 10:11	021110-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	11-FEB-10 10:11	021110-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	11-FEB-10 10:11	021110-1
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	14-FEB-10 09:50	100213-2
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	14-FEB-10 09:50	100213-2
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	14-FEB-10 09:50	100213-2
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	14-FEB-10 09:50	100213-2
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	14-FEB-10 09:50	100213-2
	Uranium	0.083	+/-2	J	0.066	0.2	SOL	MS	16-FEB-10 07:35	100215-3
CCB03	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	10-FEB-10 09:48	021010S1-4
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	11-FEB-10 11:30	021110-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	11-FEB-10 11:30	021110-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	11-FEB-10 11:30	021110-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	11-FEB-10 11:30	021110-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	11-FEB-10 11:30	021110-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	11-FEB-10 11:30	021110-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	11-FEB-10 11:30	021110-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	11-FEB-10 11:30	021110-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	11-FEB-10 11:30	021110-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	11-FEB-10 11:30	021110-1
	Magnesium	108.47	+/-300	J	85.0	300	SOL	P	11-FEB-10 11:30	021110-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	11-FEB-10 11:30	021110-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	11-FEB-10 11:30	021110-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	11-FEB-10 11:30	021110-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	11-FEB-10 11:30	021110-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	11-FEB-10 11:30	021110-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	11-FEB-10 11:30	021110-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-1392

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
CCB04	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	14-FEB-10 10:55	100213-2
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	14-FEB-10 10:55	100213-2
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	14-FEB-10 10:55	100213-2
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	14-FEB-10 10:55	100213-2
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	14-FEB-10 10:55	100213-2
	Uranium	0.09	+/-2	J	0.066	0.2	SOL	MS	16-FEB-10 08:10	100215-3
CCB04	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	10-FEB-10 10:08	021010S1-4
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	11-FEB-10 12:04	021110-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	11-FEB-10 12:04	021110-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	11-FEB-10 12:04	021110-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	11-FEB-10 12:04	021110-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	11-FEB-10 12:04	021110-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	11-FEB-10 12:04	021110-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	11-FEB-10 12:04	021110-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	11-FEB-10 12:04	021110-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	11-FEB-10 12:04	021110-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	11-FEB-10 12:04	021110-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	11-FEB-10 12:04	021110-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	11-FEB-10 12:04	021110-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	11-FEB-10 12:04	021110-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	11-FEB-10 12:04	021110-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	11-FEB-10 12:04	021110-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	11-FEB-10 12:04	021110-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	11-FEB-10 12:04	021110-1
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	14-FEB-10 12:06	100213-2
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	14-FEB-10 12:06	100213-2
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	14-FEB-10 12:06	100213-2
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	14-FEB-10 12:06	100213-2
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	14-FEB-10 12:06	100213-2
	Uranium	0.077	+/-2	J	0.066	0.2	SOL	MS	16-FEB-10 08:45	100215-3

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-1392

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	10-FEB-10 10:28	021010S1-4
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	11-FEB-10 13:00	021110-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	11-FEB-10 13:00	021110-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	11-FEB-10 13:00	021110-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	11-FEB-10 13:00	021110-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	11-FEB-10 13:00	021110-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	11-FEB-10 13:00	021110-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	11-FEB-10 13:00	021110-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	11-FEB-10 13:00	021110-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	11-FEB-10 13:00	021110-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	11-FEB-10 13:00	021110-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	11-FEB-10 13:00	021110-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	11-FEB-10 13:00	021110-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	11-FEB-10 13:00	021110-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	11-FEB-10 13:00	021110-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	11-FEB-10 13:00	021110-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	11-FEB-10 13:00	021110-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	11-FEB-10 13:00	021110-1
	Uranium	0.082	+/-2	J	0.066	0.2	SOL	MS	16-FEB-10 09:02	100215-3
CCB06	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	10-FEB-10 10:48	021010S1-4
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	11-FEB-10 13:46	021110-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	11-FEB-10 13:46	021110-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	11-FEB-10 13:46	021110-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	11-FEB-10 13:46	021110-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	11-FEB-10 13:46	021110-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	11-FEB-10 13:46	021110-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	11-FEB-10 13:46	021110-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	11-FEB-10 13:46	021110-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	11-FEB-10 13:46	021110-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	11-FEB-10 13:46	021110-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-1392

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ng/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	11-FEB-10 13:46	021110-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	11-FEB-10 13:46	021110-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	11-FEB-10 13:46	021110-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	11-FEB-10 13:46	021110-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	11-FEB-10 13:46	021110-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	11-FEB-10 13:46	021110-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	11-FEB-10 13:46	021110-1
CCB07	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	10-FEB-10 11:08	021010S1-4
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	11-FEB-10 15:06	021110-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	11-FEB-10 15:06	021110-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	11-FEB-10 15:06	021110-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	11-FEB-10 15:06	021110-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	11-FEB-10 15:06	021110-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	11-FEB-10 15:06	021110-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	11-FEB-10 15:06	021110-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	11-FEB-10 15:06	021110-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	11-FEB-10 15:06	021110-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	11-FEB-10 15:06	021110-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	11-FEB-10 15:06	021110-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	11-FEB-10 15:06	021110-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	11-FEB-10 15:06	021110-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	11-FEB-10 15:06	021110-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	11-FEB-10 15:06	021110-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	11-FEB-10 15:06	021110-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	11-FEB-10 15:06	021110-1
CCB08	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	11-FEB-10 16:13	021110-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	11-FEB-10 16:13	021110-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	11-FEB-10 16:13	021110-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	11-FEB-10 16:13	021110-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1392

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>
CCB09	Calcium	80.0	+/-250	U	80.0	250	SOL	P	11-FEB-10 16:13	021110-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	11-FEB-10 16:13	021110-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	11-FEB-10 16:13	021110-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	11-FEB-10 16:13	021110-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	11-FEB-10 16:13	021110-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	11-FEB-10 16:13	021110-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	11-FEB-10 16:13	021110-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	11-FEB-10 16:13	021110-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	11-FEB-10 16:13	021110-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	11-FEB-10 16:13	021110-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	11-FEB-10 16:13	021110-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	11-FEB-10 16:13	021110-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	11-FEB-10 16:13	021110-1
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	11-FEB-10 16:33	021110-1
CCB09	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	11-FEB-10 16:33	021110-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	11-FEB-10 16:33	021110-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	11-FEB-10 16:33	021110-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	11-FEB-10 16:33	021110-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	11-FEB-10 16:33	021110-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	11-FEB-10 16:33	021110-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	11-FEB-10 16:33	021110-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	11-FEB-10 16:33	021110-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	11-FEB-10 16:33	021110-1
	Magnesium	127.2	+/-300	J	85.0	300	SOL	P	11-FEB-10 16:33	021110-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	11-FEB-10 16:33	021110-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	11-FEB-10 16:33	021110-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	11-FEB-10 16:33	021110-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	11-FEB-10 16:33	021110-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	11-FEB-10 16:33	021110-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	11-FEB-10 16:33	021110-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1392

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
CCB10										
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	11-FEB-10 17:42	021110-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	11-FEB-10 17:42	021110-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	11-FEB-10 17:42	021110-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	11-FEB-10 17:42	021110-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	11-FEB-10 17:42	021110-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	11-FEB-10 17:42	021110-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	11-FEB-10 17:42	021110-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	11-FEB-10 17:42	021110-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	11-FEB-10 17:42	021110-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	11-FEB-10 17:42	021110-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	11-FEB-10 17:42	021110-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	11-FEB-10 17:42	021110-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	11-FEB-10 17:42	021110-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	11-FEB-10 17:42	021110-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	11-FEB-10 17:42	021110-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	11-FEB-10 17:42	021110-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	11-FEB-10 17:42	021110-1
CCB11										
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	11-FEB-10 18:50	021110-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	11-FEB-10 18:50	021110-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	11-FEB-10 18:50	021110-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	11-FEB-10 18:50	021110-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	11-FEB-10 18:50	021110-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	11-FEB-10 18:50	021110-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	11-FEB-10 18:50	021110-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	11-FEB-10 18:50	021110-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	11-FEB-10 18:50	021110-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	11-FEB-10 18:50	021110-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	11-FEB-10 18:50	021110-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	11-FEB-10 18:50	021110-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	11-FEB-10 18:50	021110-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-1392

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result ug/L</u>	<u>Acceptance</u>	<u>Conc Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run</u>
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	11-FEB-10 18:50	021110-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	11-FEB-10 18:50	021110-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	11-FEB-10 18:50	021110-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	11-FEB-10 18:50	021110-1
CCB12										
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	11-FEB-10 19:51	021110-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	11-FEB-10 19:51	021110-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	11-FEB-10 19:51	021110-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	11-FEB-10 19:51	021110-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	11-FEB-10 19:51	021110-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	11-FEB-10 19:51	021110-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	11-FEB-10 19:51	021110-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	11-FEB-10 19:51	021110-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	11-FEB-10 19:51	021110-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	11-FEB-10 19:51	021110-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	11-FEB-10 19:51	021110-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	11-FEB-10 19:51	021110-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	11-FEB-10 19:51	021110-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	11-FEB-10 19:51	021110-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	11-FEB-10 19:51	021110-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	11-FEB-10 19:51	021110-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	11-FEB-10 19:51	021110-1
CCB13										
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	11-FEB-10 20:55	021110-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	11-FEB-10 20:55	021110-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	11-FEB-10 20:55	021110-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	11-FEB-10 20:55	021110-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	11-FEB-10 20:55	021110-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	11-FEB-10 20:55	021110-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	11-FEB-10 20:55	021110-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	11-FEB-10 20:55	021110-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1392

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>
CCB14	Iron	80.0	+/-250	U	80.0	250	SOL	P	11-FEB-10 20:55	021110-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	11-FEB-10 20:55	021110-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	11-FEB-10 20:55	021110-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	11-FEB-10 20:55	021110-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	11-FEB-10 20:55	021110-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	11-FEB-10 20:55	021110-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	11-FEB-10 20:55	021110-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	11-FEB-10 20:55	021110-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	11-FEB-10 20:55	021110-1
CCB14	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	11-FEB-10 21:57	021110-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	11-FEB-10 21:57	021110-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	11-FEB-10 21:57	021110-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	11-FEB-10 21:57	021110-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	11-FEB-10 21:57	021110-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	11-FEB-10 21:57	021110-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	11-FEB-10 21:57	021110-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	11-FEB-10 21:57	021110-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	11-FEB-10 21:57	021110-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	11-FEB-10 21:57	021110-1
	Magnesium	127.05	+/-300	J	85.0	300	SOL	P	11-FEB-10 21:57	021110-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	11-FEB-10 21:57	021110-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	11-FEB-10 21:57	021110-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	11-FEB-10 21:57	021110-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	11-FEB-10 21:57	021110-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	11-FEB-10 21:57	021110-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	11-FEB-10 21:57	021110-1

METALS
-3b-
PREPARATION BLANK SUMMARY

SDG NO. 10-1392
 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>
1202024813	Zinc	329	ug/Kg	+/-998	U	P	329	998
	Aluminum	6790	ug/Kg	+/-20000	U	P	6790	20000
	Antimony	329	ug/Kg	+/-998	U	P	329	998
	Cadmium	99.8	ug/Kg	+/-499	U	P	99.8	499
	Cobalt	150	ug/Kg	+/-499	U	P	150	499
	Chromium	150	ug/Kg	+/-499	U	P	150	499
	Calcium	7980	ug/Kg	+/-25000	U	P	7980	25000
	Barium	99.8	ug/Kg	+/-499	U	P	99.8	499
	Copper	299	ug/Kg	+/-998	U	P	299	998
	Vanadium	99.8	ug/Kg	+/-499	U	P	99.8	499
	Sodium	7160	ug/Kg	+/-25000	J	P	6990	25000
	Silver	99.8	ug/Kg	+/-499	U	P	99.8	499
	Potassium	6390	ug/Kg	+/-25000	U	P	6390	25000
	Manganese	200	ug/Kg	+/-998	U	P	200	998
	Magnesium	8480	ug/Kg	+/-29900	U	P	8480	29900
	Lead	250	ug/Kg	+/-998	U	P	250	998
	Iron	16400	ug/Kg	+/-25000	J	P	7980	25000
1202024819	Thallium	0.0586	mg/kg	+/-0.195	U	MS	0.0586	0.195
	Uranium	0.0129	mg/kg	+/-0.0391	U	MS	0.0129	0.0391
	Arsenic	0.195	mg/kg	+/-0.977	U	MS	0.195	0.977
	Nickel	0.0977	mg/kg	+/-0.391	U	MS	0.0977	0.391
	Beryllium	0.0195	mg/kg	+/-0.0977	U	MS	0.0195	0.0977
	Selenium	0.488	mg/kg	+/-0.977	U	MS	0.488	0.977
1202025301	Mercury	3.93	ug/kg	+/-11.6	U	AV	3.93	11.6

METALS
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Interference Check Sample

SDG No: 10-1392

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	532000	ug/L	500000	ug/L	106	80.0 - 120.0	11-FEB-10 09:14	021110-1
	Antimony	-1.13	ug/L					11-FEB-10 09:14	021110-1
	Barium	0.324	ug/L					11-FEB-10 09:14	021110-1
	Cadmium	-1.46	ug/L					11-FEB-10 09:14	021110-1
	Calcium	492000	ug/L	500000	ug/L	98.4	80.0 - 120.0	11-FEB-10 09:14	021110-1
	Chromium	1.62	ug/L					11-FEB-10 09:14	021110-1
	Cobalt	-1.46	ug/L					11-FEB-10 09:14	021110-1
	Copper	2.03	ug/L					11-FEB-10 09:14	021110-1
	Iron	189000	ug/L	200000	ug/L	94.8	80.0 - 120.0	11-FEB-10 09:14	021110-1
	Lead	0.191	ug/L					11-FEB-10 09:14	021110-1
	Magnesium	495000	ug/L	500000	ug/L	99	80.0 - 120.0	11-FEB-10 09:14	021110-1
	Manganese	-2.29	ug/L					11-FEB-10 09:14	021110-1
	Potassium	-180.0	ug/L					11-FEB-10 09:14	021110-1
	Silver	4.34	ug/L					11-FEB-10 09:14	021110-1
	Sodium	27.3	ug/L					11-FEB-10 09:14	021110-1
	Vanadium	-2.41	ug/L					11-FEB-10 09:14	021110-1
	Zinc	-1.31	ug/L					11-FEB-10 09:14	021110-1
ICSAB01									
	Aluminum	511000	ug/L	500000	ug/L	102	80.0 - 120.0	11-FEB-10 09:20	021110-1
	Antimony	516	ug/L	500	ug/L	103	80.0 - 120.0	11-FEB-10 09:20	021110-1
	Barium	483	ug/L	500	ug/L	96.7	80.0 - 120.0	11-FEB-10 09:20	021110-1
	Cadmium	449	ug/L	500	ug/L	89.8	80.0 - 120.0	11-FEB-10 09:20	021110-1
	Calcium	471000	ug/L	500000	ug/L	94.3	80.0 - 120.0	11-FEB-10 09:20	021110-1
	Chromium	478	ug/L	500	ug/L	95.7	80.0 - 120.0	11-FEB-10 09:20	021110-1
	Cobalt	441	ug/L	500	ug/L	88.1	80.0 - 120.0	11-FEB-10 09:20	021110-1
	Copper	546	ug/L	500	ug/L	109	80.0 - 120.0	11-FEB-10 09:20	021110-1
	Iron	183000	ug/L	200000	ug/L	91.6	80.0 - 120.0	11-FEB-10 09:20	021110-1
	Lead	451	ug/L	500	ug/L	90.1	80.0 - 120.0	11-FEB-10 09:20	021110-1
	Magnesium	481000	ug/L	500000	ug/L	96.2	80.0 - 120.0	11-FEB-10 09:20	021110-1

METALS

-4-

Interference Check Sample

SDG No: 10-1392

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	468	ug/L	500	ug/L	93.5	80.0 - 120.0	11-FEB-10 09:20	021110-1
	Potassium	5140	ug/L	5000	ug/L	103	80.0 - 120.0	11-FEB-10 09:20	021110-1
	Silver	271	ug/L	250	ug/L	109	80.0 - 120.0	11-FEB-10 09:20	021110-1
	Sodium	5260	ug/L	5000	ug/L	105	80.0 - 120.0	11-FEB-10 09:20	021110-1
	Vanadium	498	ug/L	500	ug/L	99.6	80.0 - 120.0	11-FEB-10 09:20	021110-1
	Zinc	483	ug/L	500	ug/L	96.6	80.0 - 120.0	11-FEB-10 09:20	021110-1

METALS
-4-
Interference Check Sample

SDG No: 10-1392

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS6

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01									
	Arsenic	0.474	ug/L					14-FEB-10 09:09	100213-2
	Beryllium	0.082	ug/L					14-FEB-10 09:09	100213-2
	Nickel	4.31	ug/L					14-FEB-10 09:09	100213-2
	Selenium	-1.56	ug/L					14-FEB-10 09:09	100213-2
	Thallium	0.024	ug/L					14-FEB-10 09:09	100213-2
ICSAB01									
	Arsenic	23.5	ug/L	20	ug/L	118	80.0 - 120.0	14-FEB-10 09:15	100213-2
	Beryllium	20.9	ug/L	20	ug/L	104	80.0 - 120.0	14-FEB-10 09:15	100213-2
	Nickel	26.1	ug/L	23.31	ug/L	112	80.0 - 120.0	14-FEB-10 09:15	100213-2
	Selenium	19.9	ug/L	20	ug/L	99.6	80.0 - 120.0	14-FEB-10 09:15	100213-2
	Thallium	20.3	ug/L	20	ug/L	102	80.0 - 120.0	14-FEB-10 09:15	100213-2

METALS
-4-
Interference Check Sample

SDG No: 10-1392

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS6

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01	Uranium	0.009	ug/L					16-FEB-10 07:13	100215-3
ICSAB01	Uranium	19.6	ug/L	20	ug/L	97.7	80.0 - 120.0	16-FEB-10 07:16	100215-3

METALS

-5a-

Matrix Spike Summary

SDG NO. 10-1392 Client ID RE15-10-7869S

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 75

Sample ID: 245394001 Spike ID: 1202024816

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Manganese	ug/Kg	75-125	214000		174000		65900	60.7	N	P
Potassium	ug/Kg	75-125	2030000		860000		659000	178	N	P
Silver	ug/Kg	75-125	62800		493	J	65900	94.5		P
Sodium	ug/Kg	75-125	646000		62000		659000	88.6		P
Vanadium	ug/Kg	75-125	78200		17700		65900	91.9		P
Zinc	ug/Kg	75-125	99200		32600		65900	101		P
Aluminum	ug/Kg		18300000		7330000		659000	1670	N/A	P
Antimony	ug/Kg	75-125	46800		431	U	65900	70.6	N	P
Barium	ug/Kg	75-125	166000		87200		65900	120		P
Cadmium	ug/Kg	75-125	56900		131	U	65900	86.3		P
Calcium	ug/Kg	75-125	2680000		1800000		659000	133	N	P
Chromium	ug/Kg	75-125	69000		6770		65900	94.5		P
Cobalt	ug/Kg	75-125	61500		2770		65900	89.2		P
Copper	ug/Kg	75-125	117000		148000		65900	-46.9	N	P
Iron	ug/Kg		13900000		10000000		659000	590	N/A	P
Lead	ug/Kg	75-125	111000		64200		65900	71.2	N	P
Magnesium	ug/Kg	75-125	2720000		1300000		659000	215	N	P

METALS

-5a-

Matrix Spike Duplicate Summary

SDG NO. 10-1392 Client ID RE15-10-7869SD

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 75

Sample ID: 245394001 Spike ID: 1202024818

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/Kg		19400000		7330000		647000	1870	N/A	P
Antimony	ug/Kg	75-125	47800		431	U	64700	73.5	N	P
Barium	ug/Kg	75-125	164000		87200		64700	118		P
Cadmium	ug/Kg	75-125	56800		131	U	64700	87.7		P
Calcium	ug/Kg	75-125	2860000		1800000		647000	164	N	P
Chromium	ug/Kg	75-125	69100		6770		64700	96.2		P
Cobalt	ug/Kg	75-125	62200		2770		64700	91.8		P
Copper	ug/Kg	75-125	127000		148000		64700	-31.3	N	P
Iron	ug/Kg		15000000		10000000		647000	776	N/A	P
Lead	ug/Kg	75-125	203000		64200		64700	215	N	P
Magnesium	ug/Kg	75-125	2850000		1300000		647000	240	N	P
Manganese	ug/Kg	75-125	235000		174000		64700	94.2		P
Potassium	ug/Kg	75-125	2400000		860000		647000	238	N	P
Silver	ug/Kg	75-125	62300		493	J	64700	95.5		P
Sodium	ug/Kg	75-125	659000		62000		647000	92.3		P
Vanadium	ug/Kg	75-125	80800		17700		64700	97.6		P
Zinc	ug/Kg	75-125	101000		32600		64700	105		P

METALS

-5a-

Matrix Spike Summary

SDG NO. 10-1392

Client ID: RE15-10-7869S

Contract: LANL01004

Level: Low

Matrix: SOIL

% Solids: 75

Sample ID: 245394001

Spike ID: 1202024822

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	mg/kg	75-125	12.9		3.12		10.4	94		MS
Beryllium	mg/kg	75-125	11.4		3.07		6.52	127	N	MS
Nickel	mg/kg	75-125	14.2		9.64		6.52	69.5	N	MS
Selenium	mg/kg	75-125	2.46		0.658	U	2.61	89.9		MS
Thallium	mg/kg	75-125	14.1		0.183	J	13	107		MS
Uranium	mg/kg		83.4		69.6		6.52	212	N/A	MS

METALS

-5a-

Matrix Spike Duplicate Summary

SDG NO. 10-1392 Client ID RE15-10-7869SD

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 75

Sample ID: 245394001 Spike ID: 1202024824

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	mg/kg	75-125	14.1		3.12		10.5	105		MS
Beryllium	mg/kg	75-125	9.97		3.07		6.55	105		MS
Nickel	mg/kg	75-125	17.1		9.64		6.55	114		MS
Selenium	mg/kg	75-125	1.97		0.658	U	2.62	70.9	N	MS
Thallium	mg/kg	75-125	13.9		0.183	J	13.1	105		MS
Uranium	mg/kg		50.9		69.6		6.55	-286	N/A	MS

METALS

-5a-

Matrix Spike Summary

SDG NO. 10-1392

Client ID RE15-10-7928S

Contract: LANL01004

Level: Low

Matrix: SOIL

% Solids: 96.4

Sample ID: 245396001

Spike ID: 1202025304

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/kg	75-125	129		9.91	J	115	103		AV

METALS

-5a-

Matrix Spike Duplicate Summary

SDG NO. 10-1392 Client ID RE15-10-7928SD

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 96.4

Sample ID: 245396001 Spike ID: 1202025306

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/kg	75-125	128		9.91	J	116	102		AV

Metals

-6-

Duplicate Sample Summary

SDG No.: 10-1392

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-7869D

Sample ID: 245394001

Duplicate ID: 1202024815

Percent Solids for Dup: 75

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/Kg	+/-20%	7330000		8970000		20.2	*	P
Antimony	ug/Kg		431 U		434 U				P
Barium	ug/Kg	+/-20%	87200		94200		7.69		P
Cadmium	ug/Kg		131 U		132 U				P
Calcium	ug/Kg	+/-20%	1800000		2060000		13.4		P
Chromium	ug/Kg	+/-20%	6770		8220		19.4		P
Cobalt	ug/Kg	+/-658	2770		2750		.766		P
Copper	ug/Kg	+/-20%	148000		52400		95.2	*	P
Iron	ug/Kg	+/-20%	10000000		11900000		17		P
Lead	ug/Kg	+/-20%	64200		69700		8.35		P
Magnesium	ug/Kg	+/-20%	1300000		1460000		11.5		P
Manganese	ug/Kg	+/-20%	174000		154000		12.6		P
Potassium	ug/Kg	+/-20%	860000		1040000		18.5		P
Silver	ug/Kg	+/-658	493 J		566 J		13.8		P
Sodium	ug/Kg	+/-32900	62000		60400		2.58		P
Vanadium	ug/Kg	+/-20%	17700		19900		12		P
Zinc	ug/Kg	+/-20%	32600		33300		2.32		P

Metals

-6-

Duplicate Sample Summary

SDG No.: 10-1392

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-7869SD

Sample ID: 1202024816

Duplicate ID: 1202024818

Percent Solids for Dup: 75

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/Kg	+/-20	18300000		19400000		5.87		P
Antimony	ug/Kg	+/-20	46800		47800		2.28		P
Barium	ug/Kg	+/-20	166000		164000		1.76		P
Cadmium	ug/Kg	+/-20	56900		56800		.237		P
Calcium	ug/Kg	+/-20	2680000		2860000		6.69		P
Chromium	ug/Kg	+/-20	69000		69100		.0898		P
Cobalt	ug/Kg	+/-20	61500		62200		1.04		P
Copper	ug/Kg	+/-20	117000		127000		8.76		P
Iron	ug/Kg	+/-20	13900000		15000000		7.86		P
Lead	ug/Kg	+/-20	111000		203000		58.7	*	P
Magnesium	ug/Kg	+/-20	2720000		2850000		4.81		P
Manganese	ug/Kg	+/-20	214000		235000		9.35		P
Potassium	ug/Kg	+/-20	2030000		2400000		16.4		P
Silver	ug/Kg	+/-20	62800		62300		.676		P
Sodium	ug/Kg	+/-20	646000		659000		2.03		P
Vanadium	ug/Kg	+/-20	78200		80800		3.27		P
Zinc	ug/Kg	+/-20	99200		101000		1.45		P

Metals

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Duplicate Sample Summary

SDG No.: 10-1392

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-7869D

Sample ID: 245394001

Duplicate ID: 1202024821

Percent Solids for Dup: 75

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/-1.27	3.12		3.71		17.2		MS
Beryllium	mg/kg	+/-20%	3.07		2.7		13		MS
Nickel	mg/kg	+/-20%	9.64		10.1		5.14		MS
Selenium	mg/kg		0.658 U		0.633 U				MS
Thallium	mg/kg	+/-0.253	0.183 J		0.21 J		13.5		MS
Uranium	mg/kg	+/-20%	69.6		40.7		52.5	*	MS

Metals

-6-

Duplicate Sample Summary

SDG No.: 10-1392

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-7869SD

Sample ID: 1202024822

Duplicate ID: 1202024824

Percent Solids for Dup: 75

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/-20	12.9		14.1		8.54		MS
Beryllium	mg/kg	+/-20	11.4		9.97		13.3		MS
Nickel	mg/kg	+/-20	14.2		17.1		18.8		MS
Selenium	mg/kg	+/-20	2.46		1.97		22.2	*	MS
Thallium	mg/kg	+/-20	14.1		13.9		1.22		MS
Uranium	mg/kg	+/-20	83.4		50.9		48.5	*	MS

Metals

-6-

Duplicate Sample Summary

SDG No.: 10-1392

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-7928D

Sample ID: 245396001

Duplicate ID: 1202025303

Percent Solids for Dup: 96.4

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg	+/-10.9	9.91 J		10.9		9.87		AV

Metals

-6-

Duplicate Sample Summary

SDG No.: 10-1392

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-7928SD

Sample ID: 1202025304

Duplicate ID: 1202025306

Percent Solids for Dup: 96.4

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg	+/-20	129		128		.797		AV

METALS

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Laboratory Control Sample Summary

SDG NO. 10-1392

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>
1202024814								
	Aluminum	ug/Kg	10500000	8010000		76.3	56-144	P
	Antimony	ug/Kg	173000	131000		75.7	71-130	P
	Barium	ug/Kg	198000	177000		89.3	80-120	P
	Cadmium	ug/Kg	60700	51200		84.3	81-120	P
	Calcium	ug/Kg	9870000	9150000		92.7	83-117	P
	Chromium	ug/Kg	236000	208000		88.1	80-120	P
	Cobalt	ug/Kg	91200	84000		92.1	81-120	P
	Copper	ug/Kg	174000	167000		96	81-118	P
	Iron	ug/Kg	18000000	17100000		95.2	51-149	P
	Lead	ug/Kg	86000	74900		87.1	79-121	P
	Magnesium	ug/Kg	4000000	3450000		86.3	79-122	P
	Manganese	ug/Kg	558000	497000		89.1	81-119	P
	Potassium	ug/Kg	4300000	3700000		86.1	74-127	P
	Silver	ug/Kg	30100	29500		98.1	66-134	P
	Sodium	ug/Kg	1020000	898000		88	74-127	P
	Vanadium	ug/Kg	115000	110000		95.4	79-121	P
	Zinc	ug/Kg	594000	523000		88	80-121	P

METALS

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Laboratory Control Sample Summary

SDG NO. 10-1392

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>
1202024820								
	Beryllium	mg/kg	77.6	82.8		107	84-116	MS
	Nickel	mg/kg	134	153		114	78-123	MS
	Selenium	mg/kg	286	309		108	77-123	MS
	Thallium	mg/kg	121	132		109	78-122	MS
	Uranium	mg/kg	2.13	1.88		88.3	73-127	MS
	Arsenic	mg/kg	104	108		104	78-123	MS

METALS

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Laboratory Control Sample Summary

SDG NO. 10-1392

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>
1202025302	Mercury	ug/kg	5150	5020		97.5	71.6-128.3	AV

METALS

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Serial Dilution Sample Summary

SDG NO. 10-1392

Client ID RE15-10-7869L

Contract: LANL01004

Matrix: SOLID

Level: Low

Sample ID: 245394001

Serial Dilution ID: 1202024817

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Aluminum	56000		56500		.893		10	P
Antimony	3.3	U	16.5	U				P
Barium	667		690		3.45		10	P
Cadmium	1	U	5	U				P
Calcium	13800		14200		2.9		10	P
Chromium	51.8		53.5		3.28			P
Cobalt	21.2		22.7	J	7.08			P
Copper	1130		1120		1.33		10	P
Iron	76600		80500		5.09		10	P
Lead	491		520		5.91		10	P
Magnesium	9940		10700		7.65		10	P
Manganese	1330		1410		6.02		10	P
Potassium	6580		6600		.304		10	P
Silver	3.77	J	5	U	100			P
Sodium	474		670	J	41.4			P
Vanadium	135		138		2.22		10	P
Zinc	249		256		2.61		10	P

METALS

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Serial Dilution Sample Summary

SDG NO. 10-1392

Client ID: RE15-10-7869L

Contract: LANL01004

Matrix: SOLID

Level: Low

Sample ID: 245394001

Serial Dilution ID: 1202024823

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Arsenic	11.9		17.9	J	50			MS
Beryllium	11.7		12.5		6.84		10	MS
Nickel	36.6		39.5		7.79			MS
Selenium	2.5	U	12.5	U				MS
Thallium	.696	J	1.5	U	100			MS
Uranium	52.9		49.4		6.71		10	MS

METALS

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Serial Dilution Sample Summary

SDG NO. 10-1392 Client ID RE15-10-7928L

Contract: LANL01004

Matrix: SOLID Level: Low

Sample ID: 245396001 Serial Dilution ID: 1202025305

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Mercury	.17	J	.34	U	100			AV

METALS
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SAMPLE PREPARATION SUMMARY

SDG No: 10-1392

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 945420							
1202024813	MB for batch 945420	MB	S	04-FEB-10	.501g	50mL	
1202024814	LCS for batch 945420	LCS	S	04-FEB-10	.523g	50mL	
1202024816	RE15-10-7869S	MS	S	04-FEB-10	.504g	50mL	
1202024818	RE15-10-7869SD	MSD	S	04-FEB-10	.513g	50mL	
1202024815	RE15-10-7869D	DUP	S	04-FEB-10	.505g	50mL	
245394001	RE15-10-7869	SAMPLE	S	04-FEB-10	.508g	50mL	
245394002	RE15-10-7874	SAMPLE	S	04-FEB-10	.519g	50mL	
245394003	RE15-10-7871	SAMPLE	S	04-FEB-10	.513g	50mL	
245394004	RE15-10-7872	SAMPLE	S	04-FEB-10	.505g	50mL	
245394005	RE15-10-7870	SAMPLE	S	04-FEB-10	.503g	50mL	
245394006	RE15-10-7873	SAMPLE	S	04-FEB-10	.503g	50mL	
245394007	RE15-10-7911	SAMPLE	S	04-FEB-10	.506g	50mL	
245394008	RE15-10-7908	SAMPLE	S	04-FEB-10	.518g	50mL	
245394009	RE15-10-7912	SAMPLE	S	04-FEB-10	.518g	50mL	
245394010	RE15-10-7906	SAMPLE	S	04-FEB-10	.502g	50mL	
245394011	RE15-10-7905	SAMPLE	S	04-FEB-10	.52g	50mL	
245394012	RE15-10-7907	SAMPLE	S	04-FEB-10	.5g	50mL	
245394013	RE15-10-7913	SAMPLE	S	04-FEB-10	.525g	50mL	
245394014	RE15-10-7909	SAMPLE	S	04-FEB-10	.501g	50mL	

SW846

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1392

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>
245394015	RE15-10-7910	SAMPLE	S	04-FEB-10	.517g	50mL	

SW846

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1392

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 945424							
1202024819	MB for batch 945424	MB	S	04-FEB-10	.512g	50mL	
1202024820	LCS for batch 945424	LCS	S	04-FEB-10	.506g	50mL	
1202024822	RE15-10-7869S	MS	S	04-FEB-10	.509g	50mL	
1202024824	RE15-10-7869SD	MSD	S	04-FEB-10	.507g	50mL	
1202024821	RE15-10-7869D	DUP	S	04-FEB-10	.525g	50mL	
245394001	RE15-10-7869	SAMPLE	S	04-FEB-10	.505g	50mL	
245394002	RE15-10-7874	SAMPLE	S	04-FEB-10	.517g	50mL	
245394003	RE15-10-7871	SAMPLE	S	04-FEB-10	.506g	50mL	
245394004	RE15-10-7872	SAMPLE	S	04-FEB-10	.525g	50mL	
245394005	RE15-10-7870	SAMPLE	S	04-FEB-10	.5g	50mL	
245394006	RE15-10-7873	SAMPLE	S	04-FEB-10	.517g	50mL	
245394007	RE15-10-7911	SAMPLE	S	04-FEB-10	.5g	50mL	
245394008	RE15-10-7908	SAMPLE	S	04-FEB-10	.509g	50mL	
245394009	RE15-10-7912	SAMPLE	S	04-FEB-10	.516g	50mL	
245394010	RE15-10-7906	SAMPLE	S	04-FEB-10	.518g	50mL	
245394011	RE15-10-7905	SAMPLE	S	04-FEB-10	.512g	50mL	
245394012	RE15-10-7907	SAMPLE	S	04-FEB-10	.525g	50mL	
245394013	RE15-10-7913	SAMPLE	S	04-FEB-10	.519g	50mL	
245394014	RE15-10-7909	SAMPLE	S	04-FEB-10	.525g	50mL	

SW846

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1392

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>
245394015	RE15-10-7910	SAMPLE	S	04-FEB-10	.503g	50mL	

SW846

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1392

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 945627							
1202025301	MB for batch 945627	MB	S	09-FEB-10	.519g	30mL	
1202025302	LCS for batch 945627	LCS	S	09-FEB-10	.202g	30mL	
1202025304	RE15-10-7928S	MS	S	09-FEB-10	.54g	30mL	
1202025306	RE15-10-7928SD	MSD	S	09-FEB-10	.538g	30mL	
1202025303	RE15-10-7928D	DUP	S	09-FEB-10	.572g	30mL	
245394001	RE15-10-7869	SAMPLE	S	09-FEB-10	.591g	30mL	
245394002	RE15-10-7874	SAMPLE	S	09-FEB-10	.524g	30mL	
245394003	RE15-10-7871	SAMPLE	S	09-FEB-10	.524g	30mL	
245394004	RE15-10-7872	SAMPLE	S	09-FEB-10	.52g	30mL	
245394005	RE15-10-7870	SAMPLE	S	09-FEB-10	.585g	30mL	
245394006	RE15-10-7873	SAMPLE	S	09-FEB-10	.538g	30mL	
245394007	RE15-10-7911	SAMPLE	S	09-FEB-10	.538g	30mL	
245394008	RE15-10-7908	SAMPLE	S	09-FEB-10	.526g	30mL	
245394009	RE15-10-7912	SAMPLE	S	09-FEB-10	.568g	30mL	
245394010	RE15-10-7906	SAMPLE	S	09-FEB-10	.588g	30mL	
245394011	RE15-10-7905	SAMPLE	S	09-FEB-10	.531g	30mL	
245394012	RE15-10-7907	SAMPLE	S	09-FEB-10	.508g	30mL	
245394013	RE15-10-7913	SAMPLE	S	09-FEB-10	.553g	30mL	
245394014	RE15-10-7909	SAMPLE	S	09-FEB-10	.6g	30mL	

SW846

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1392

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>
245394015	RE15-10-7910	SAMPLE	S	09-FEB-10	.542g	30mL	

SW846

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS6

Start Date: 14-FEB-10

End Date: 14-FEB-10

Client Sdg: 10-1392

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	08:34			X		X											X	X			X				
S10	1	08:40			X		X											X	X			X				
S100	1	08:45			X		X											X	X			X				
ICV01	1	08:51			X		X											X	X			X				
ICB01	1	08:57			X		X											X	X			X				
CRDL01	1	09:03			X		X											X	X			X				
ICSA01	1	09:09			X		X											X	X			X				
ICSAB01	1	09:15			X		X											X	X			X				
CCV01	1	09:21			X		X											X	X			X				
CCB01	1	09:27			X		X											X	X			X				
1202024819	2	09:33			X		X											X	X			X				
1202024820	40	09:39			X		X											X	X			X				
CCV02	1	09:44			X		X											X	X			X				
CCB02	1	09:50			X		X											X	X			X				
245394001	2	09:56			X		X											X	X			X				
1202024821	2	10:02			X		X											X	X			X				
1202024822	2	10:08			X		X											X	X			X				
1202024824	2	10:14			X		X											X	X			X				
1202024823	10	10:20			X		X											X	X			X				
245394002	2	10:26			X		X											X	X			X				
245394003	2	10:32			X		X											X	X			X				
245394004	2	10:38			X		X											X	X			X				
245394005	2	10:43			X		X											X	X			X				
CCV03	1	10:49			X		X											X	X			X				
CCB03	1	10:55			X		X											X	X			X				
245394006	2	11:01			X		X											X	X			X				
245394007	2	11:07			X		X											X	X			X				
245394008	2	11:13			X		X											X	X			X				
245394009	2	11:19			X		X											X	X			X				
245394010	2	11:25			X		X											X	X			X				
245394011	2	11:31			X		X											X	X			X				
245394012	2	11:37			X		X											X	X			X				
245394013	2	11:43			X		X											X	X			X				
245394014	2	11:49			X		X											X	X			X				
245394015	2	11:54			X		X											X	X			X				
CCV04	1	12:00			X		X											X	X			X				
CCB04	1	12:06			X		X											X	X			X				

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS6

Start Date: 16-FEB-10

End Date: 16-FEB-10

Client Sdg: 10-1392

Method MS

Data File: 100215-3

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	06:54																						X		
S10	1	06:57																						X		
S100	1	07:00																						X		
ICV01	1	07:03																						X		
ICB01	1	07:06																						X		
CRDL01	1	07:10																						X		
ICSA01	1	07:13																						X		
ICSAB01	1	07:16																						X		
CCV01	1	07:19																						X		
CCB01	1	07:22																						X		
1202024819	2	07:25																						X		
1202024820	40	07:28																						X		
CCV02	1	07:32																						X		
CCB02	1	07:35																						X		
245394001	10	07:38																						X		
1202024821	10	07:42																						X		
1202024822	10	07:45																						X		
1202024824	10	07:49																						X		
1202024823	50	07:53																						X		
245394002	2	07:56																						X		
245394003	10	08:00																						X		
245394004	10	08:03																						X		
CCV03	1	08:07																						X		
CCB03	1	08:10																						X		
245394005	2	08:13																						X		
245394006	10	08:17																						X		
245394007	40	08:20																						X		
245394008	40	08:24																						X		
245394009	20	08:27																						X		
245394010	2	08:31																						X		
245394011	10	08:35																						X		
245394012	20	08:38																						X		
CCV04	1	08:42																						X		
CCB04	1	08:45																						X		
245394013	10	08:48																						X		
245394014	20	08:52																						X		
245394015	10	08:55																						X		
CCV05	1	08:59																						X		
CCB05	1	09:02																						X		

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: OPTIMA3

Start Date: 11-FEB-10

End Date: 11-FEB-10

Client Sdg: 10-1392

Method P

Data File: 021110-1

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	08:21	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
S0.1	1	08:28		X		X		X		X	X	X		X		X			X		X				X	X
S0.5	1	08:34	X	X		X		X	X	X	X	X		X	X	X			X		X				X	X
SCAL	1	08:41	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
S10	1	08:48	X					X					X		X							X				
ICV01	1	08:54	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ICB01	1	09:01	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
PQL01	1	09:08	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ICSA01	1	09:14	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ICSAB01	1	09:20	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
LR01	1	09:26	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
LR02	1	09:33	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCV01	1	09:39	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB01	1	09:46	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
LR03	1	09:57	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCV02	1	10:04	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB02	1	10:11	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	10:22																								
ZZZZZZ	1	10:28																								
ZZZZZZ	1	10:35																								
ZZZZZZ	1	10:42																								
ZZZZZZ	1	10:49																								
ZZZZZZ	1	10:56																								
ZZZZZZ	1	11:03																								
ZZZZZZ	1	11:10																								
ZZZZZZ	5	11:17																								
CCV03	1	11:23	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB03	1	11:30	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	11:44																								
ZZZZZZ	1	11:51																								
CCV04	1	11:57	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB04	1	12:04	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	12:11																								
ZZZZZZ	1	12:18																								
ZZZZZZ	1	12:25																								
ZZZZZZ	1	12:32																								
ZZZZZZ	1	12:39																								
ZZZZZZ	5	12:46																								
CCV05	1	12:53	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB05	1	13:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X

Metals
-14-
Analysis Run Log

Samp No.	D/F	Run Time																								
ZZZZZZ	1	13:06																								
ZZZZZZ	1	13:13																								
ZZZZZZ	5	13:20																								
ZZZZZZ	1	13:27																								
ZZZZZZ	1	13:33																								
CCV06	1	13:39	X	X		X		X	X	X	X	X	X	X	X	X		X		X	X			X	X	
CCB06	1	13:46	X	X		X		X	X	X	X	X	X	X	X	X		X		X	X			X	X	
ZZZZZZ	1	13:52																								
ZZZZZZ	1	13:59																								
ZZZZZZ	1	14:05																								
ZZZZZZ	1	14:12																								
ZZZZZZ	1	14:19																								
ZZZZZZ	1	14:26																								
ZZZZZZ	5	14:33																								
ZZZZZZ	1	14:40																								
ZZZZZZ	1	14:53																								
CCV07	1	14:59	X	X		X		X	X	X	X	X	X	X	X	X		X		X	X			X	X	
CCB07	1	15:06	X	X		X		X	X	X	X	X	X	X	X	X		X		X	X			X	X	
ZZZZZZ	1	15:19																								
ZZZZZZ	1	15:25																								
ZZZZZZ	1	15:32																								
ZZZZZZ	1	15:39																								
ZZZZZZ	1	15:46																								
ZZZZZZ	1	15:52																								
ZZZZZZ	5	15:59																								
CCV08	1	16:06	X	X		X		X	X	X	X	X	X	X	X	X		X		X	X			X	X	
CCB08	1	16:13	X	X		X		X	X	X	X	X	X	X	X	X		X		X	X			X	X	
CCV09	1	16:26	X	X		X		X	X	X	X	X	X	X	X	X		X		X	X			X	X	
CCB09	1	16:33	X	X		X		X	X	X	X	X	X	X	X	X		X		X	X			X	X	
ZZZZZZ	1	16:40																								
ZZZZZZ	1	16:47																								
ZZZZZZ	1	16:54																								
ZZZZZZ	1	17:00																								
ZZZZZZ	1	17:07																								
ZZZZZZ	1	17:14																								
ZZZZZZ	1	17:21																								
ZZZZZZ	1	17:28																								
CCV10	1	17:35	X	X		X		X	X	X	X	X	X	X	X	X		X		X	X			X	X	
CCB10	1	17:42	X	X		X		X	X	X	X	X	X	X	X	X		X		X	X			X	X	
ZZZZZZ	1	17:48																								

Metals
-14-
Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
ZZZZZZ	5	17:55																								
ZZZZZZ	1	18:02																								
ZZZZZZ	1	18:09																								
ZZZZZZ	1	18:16																								
ZZZZZZ	1	18:23																								
ZZZZZZ	1	18:29																								
ZZZZZZ	1	18:36																								
CCV11	1	18:43	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB11	1	18:50	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
1202024813	1	18:57	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
1202024814	1	19:04	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
245394001	1	19:10	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
1202024815	1	19:17	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
1202024816	1	19:24	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
1202024818	1	19:31	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
1202024817	5	19:37	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCV12	1	19:44	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB12	1	19:51	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
245394002	1	19:58	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
245394003	1	20:05	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
245394004	1	20:12	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
245394005	1	20:19	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
245394006	1	20:26	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
245394007	1	20:34	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
245394008	1	20:41	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCV13	1	20:48	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB13	1	20:55	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
245394009	1	21:02	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
245394010	1	21:08	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
245394011	1	21:15	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
245394012	1	21:22	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
245394013	1	21:29	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
245394014	1	21:36	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
245394015	1	21:43	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCV14	1	21:50	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB14	1	21:57	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: 10-FEB-10

End Date: 10-FEB-10

Client Sdg: 10-1392

Method AV

Data File: 021010S1-4

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	08:51															X									
S0.2	1	08:53															X									
S0.5	1	08:54															X									
S2.0	1	08:56															X									
S5.0	1	08:58															X									
S10.0	1	08:59															X									
ICV01	1	09:01															X									
ICB01	1	09:03															X									
CRDL01	1	09:04															X									
CCV01	1	09:06															X									
CCB01	1	09:08															X									
ZZZZZZ	1	09:09																								
ZZZZZZ	10	09:11																								
ZZZZZZ	1	09:13																								
ZZZZZZ	1	09:14																								
ZZZZZZ	1	09:16																								
ZZZZZZ	1	09:18																								
ZZZZZZ	1	09:19																								
ZZZZZZ	1	09:21																								
ZZZZZZ	1	09:23																								
ZZZZZZ	1	09:24																								
CCV02	1	09:26															X									
CCB02	1	09:28															X									
ZZZZZZ	1	09:29																								
ZZZZZZ	1	09:31																								
ZZZZZZ	5	09:33																								
ZZZZZZ	1	09:34																								
ZZZZZZ	1	09:36																								
ZZZZZZ	1	09:38																								
ZZZZZZ	1	09:39																								
ZZZZZZ	1	09:41																								
ZZZZZZ	10	09:43																								
ZZZZZZ	1	09:44																								
CCV03	1	09:46															X									
CCB03	1	09:48															X									
ZZZZZZ	1	09:49																								
ZZZZZZ	1	09:51																								
ZZZZZZ	1	09:53																								
ZZZZZZ	1	09:54																								
ZZZZZZ	1	09:56																								

Samp No.	D/F	Run Time
ZZZZZZ	1	09:58
ZZZZZZ	1	09:59
ZZZZZZ	1	10:01
ZZZZZZ	1	10:03
ZZZZZZ	5	10:04
CCV04	1	10:06
CCB04	1	10:08
ZZZZZZ	1	10:09
ZZZZZZ	1	10:11
ZZZZZZ	1	10:13
ZZZZZZ	1	10:14
1202025301	1	10:16
1202025302	10	10:18
245394001	1	10:19
245394002	1	10:21
245394003	1	10:23
245394004	1	10:25
CCV05	1	10:26
CCB05	1	10:28
245394005	1	10:30
245394006	1	10:31
245394007	1	10:33
245394008	1	10:35
245394009	1	10:36
245394010	1	10:38
245394011	1	10:40
245394012	1	10:41
245394013	1	10:43
245394014	1	10:45
CCV06	1	10:46
CCB06	1	10:48
245394015	1	10:50
ZZZZZZ	1	10:51
1202025303	1	10:53
1202025304	1	10:55
1202025306	1	10:56
1202025305	5	10:58
ZZZZZZ	1	11:00
ZZZZZZ	1	11:01
ZZZZZZ	1	11:03

Metals
-14-
Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
ZZZZZ	1	11:05																								
CCV07	1	11:06																X								
CCB07	1	11:08																X								

Standards

METALS
-10-
Instrument Detection Limits

SDG NO. 10-1392

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 01-JUL-09

ICP/MS	<u>Analyte</u>	<u>Wavelength</u>	<u>MDL</u>	<u>RDL</u>
		<u>(nm)</u>	<u>ug/L</u>	<u>ug/L</u>
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. 10-1392

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 15-JUN-09

		<u>Wavelength</u> (nm)	<u>MDL</u> ug/L	<u>RDL</u> ug/L
MERCURY	<u>Analyte</u>			
SOLID	Mercury		0.068	.2

METALS
-10-
Instrument Detection Limits

SDG NO. 10-1392

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 01-JUL-09

ICP	<u>Analyte</u>	<u>Wavelength</u>	<u>MDL</u>	<u>RDL</u>
		<u>(nm)</u>	<u>ug/L</u>	<u>ug/L</u>
SOLID	Aluminum	396.153	68.0	200
	Antimony	206.836	3.3	10
	Arsenic	188.979	5.0	30
	Barium	233.527	1.0	5
	Beryllium	313.107	1.0	5
	Cadmium	226.502	1.0	5
	Calcium	317.933	80.0	250
	Chromium	267.716	1.5	5
	Cobalt	228.616	1.5	5
	Copper	324.752	3.0	10
	Iron	238.204	80.0	250
	Lead	220.353	2.5	10
	Magnesium	279.077	85.0	300
	Manganese	257.61	2.0	10
	Nickel	231.604	1.5	5
	Potassium	766.49	64.0	250
	Selenium	196.026	5.0	30
	Silver	328.068	1.0	5
	Sodium	589.592	70.0	250
	Thallium	190.801	5.0	20
	Uranium	409.014	10.0	50
	Vanadium	292.402	1.0	5
	Zinc	213.857	3.3	10

METALS
-11-
Interelement Correction Factors

Lab Code: GELGEL Job No: **10-1392**

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: **01-FEB-10**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Aluminum	Antimony	Arsenic	Barium	Beryllium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.02697	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	-0.48147	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	-0.21356	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	-0.05186	0.00000	0.00000	0.00000	0.00000
Silica	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.18741	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GELGEL Job No: **10-1392**

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: **01-FEB-10**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Boron	Cadmium	Chromium	Cobalt	Copper
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	2.85580	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.44491	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	-29.9151	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.57616
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.60374	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	198.62
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silica	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	4.37985	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.36147	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	2.23785	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.36818	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	1.35273

METALS
-11-
Interelement Correction Factors

Lab Code: GELGEL Job No: **10-1392**

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: **01-FEB-10**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Iron	Lead	Magnesium	Manganese	Molybdenum
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	48.4946
Antimony	206.836	-0.02515	0.00000	0.00000	0.00000	-20.5057
Arsenic	188.979	-0.23424	0.00000	0.00000	0.00000	2.41902
Barium	233.527	-0.03042	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.16240	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.10329	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	-0.01944	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.01444	0.00000	0.00000	0.00000	-2.33100
Copper	324.752	-0.05293	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.09554	0.00000	0.00000	0.00000	-2.48774
Magnesium	279.077	1.04597	0.00000	0.00000	0.00000	-10.4683
Manganese	257.61	-0.09877	0.00000	0.04089	0.00000	0.00000
Molybdenum	202.031	-0.07763	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.80543	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.39429	1.18725
Selenium	196.026	-3.27508	0.00000	0.00000	0.00000	-3.07287
Silica	251.611	0.00000	0.00000	0.00000	0.00000	27.2377
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	12.3082
Silver	328.068	-0.32385	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	-4.77918	0.00000
Tin	189.927	-0.01682	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.08168	0.00000	0.00000
Uranium	409.014	0.11400	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.14564	0.00000	-0.01931	0.00000	-14.1293
Zinc	213.857	0.09701	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL

GEL Job No: 10-1392

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: 01-FEB-10

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Nickel	Phosphorous	Potassium	Selenium	Silica
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	-0.84443	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	-0.63547	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silica	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	6.37026	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL

GEL Job No:

10-1392

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: **01-FEB-10**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Silicon	Silver	Strontium	Sulfur	Thallium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silica	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL

GEL Job No: 10-1392

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. 10-1392

Contract: LANL01004

Lab Code: GEL

Instrument ID ICPMS6

<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. 10-1392

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>
Antimony	20	10000	ug/L	01-FEB-10
Arsenic	20	10000	ug/L	01-FEB-10
Barium	20	15000	ug/L	01-FEB-10
Aluminum	20	500000	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
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
Sodium	20	500000	ug/L	01-FEB-10

Raw Data

Plasma went out unexpectedly.

If this happened during ignition, try the following:

- » Observe the plasma discharge during ignition through the viewing window. If the plasma lights, but then extinguishes right away, check the argon flows, torch condition, and test for air leaks.
- » If the sample is very volatile, try a less volatile sample or switch to water.
- » If analyzing volatile samples, a higher power setting and lower nebulizer gas flow rate may be required.

If this happened during normal operation then the plasma detection circuit that monitors the plasma is the most likely problem. If you continue to have problems, contact PerkinElmer service and arrange a service visit.

[0516]

2/11/2010 08:16:36 Hg ReAlign... Actual peak offset (nm): -0.009
Drift (nm): 0.000 Slit adjustment: -3

Analysis Begun

Start Time: 2/11/2010 08:21:47

Plasma On Time: 2/8/2010 05:57:09

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\021110.sif

Batch ID:

Results Data Set: 021110

Results Library: C:\pe\Optima3\Results\Results.mdb

Method Loaded

Method Name: General Eng.2AX

Method Last Saved: 2/10/2010 09:09:46

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 396.153 Radial	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 317.933 Radial	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: 2/11/2010 08:21:51

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Replicate Data: S0

Net

Corrected

Calib.

Analysis

Repl#	Analyte	Intensity	Intensity	Conc. Units	Time
1	Sc Radial	4743.3	4743.3	98.7 %	08:23:44
1	Y RADIAL	4948.6	4948.6	98.96 %	08:23:44
1	Al 396.153Radial†	-158.5	-160.6	[0.00] ug/L	08:23:44
1	Ca 317.933Radial†	16.8	17.0	[0.00] ug/L	08:24:04
1	Fe 238.204 Radial†	11.9	12.0	[0.00] ug/L	08:24:04
1	K 766.490 Radial†	2824.3	2862.1	[0.00] ug/L	08:23:44
1	Mg 279.077 IEC†	1.7	1.7	[0.00] ug/L	08:24:04
1	Na 589.592 Radial†	-1072.2	-1086.6	[0.00] ug/L	08:23:44
1	Sr 421.552†	-1.9	-1.9	[0.00] ug/L	08:23:44
1	Sc 361.383	858652.8	858652.8	99.601 %	08:25:00
1	Y 371.029	711640.1	711640.1	99.585 %	08:25:00
1	Ag 328.068†	210.9	211.7	[0.00] ug/L	08:25:00
1	As 188.979†	-37.6	-37.8	[0.00] ug/L	08:25:21
1	B 249.677†	-554.0	-556.3	[0.00] ug/L	08:25:21
1	Ba 233.527†	-3.0	-3.0	[0.00] ug/L	08:25:21
1	Be 313.107†	-4312.4	-4329.7	[0.00] ug/L	08:25:00
1	Cd 226.502†	-217.4	-218.3	[0.00] ug/L	08:25:21
1	Co 228.616†	-68.5	-68.8	[0.00] ug/L	08:25:21
1	Cr 267.716†	70.9	71.1	[0.00] ug/L	08:25:21
1	Cu 324.752†	5817.9	5841.2	[0.00] ug/L	08:25:00
1	Mn 257.610†	462.6	464.5	[0.00] ug/L	08:25:21
1	Mo 202.031†	15.3	15.4	[0.00] ug/L	08:25:21
1	Ni 231.604†	106.3	106.7	[0.00] ug/L	08:25:21
1	P 214.914†	228.5	229.5	[0.00] ug/L	08:25:21
1	Pb 220.353†	-66.3	-66.6	[0.00] ug/L	08:25:21
1	S 181.975 Axial†	39.5	39.7	[0.00] ug/L	08:25:21
1	Sb 206.836†	48.0	48.2	[0.00] ug/L	08:25:21
1	Se 196.026†	-19.7	-19.8	[0.00] ug/L	08:25:21
1	Si 251.611†	564.3	566.5	[0.00] ug/L	08:25:21
1	Sn 189.927†	1.1	1.1	[0.00] ug/L	08:25:21
1	Ti 334.940†	-1245.2	-1250.2	[0.00] ug/L	08:25:00
1	Tl 190.801†	-32.7	-32.8	[0.00] ug/L	08:25:21
1	U 409.014†	-2877.1	-2888.7	[0.00] ug/L	08:25:00
1	V 292.402†	-1591.1	-1597.5	[0.00] ug/L	08:25:00
1	Zn 213.857†	709.5	712.4	[0.00] ug/L	08:25:21
1	SiO2†	561.0	563.3	[0.00] ug/L	08:26:17
2	Sc Radial	4842.9	4842.9	101 %	08:24:09
2	Y RADIAL	5035.0	5035.0	100.7 %	08:24:09
2	Al 396.153Radial†	-151.1	-150.0	[0.00] ug/L	08:24:09
2	Ca 317.933Radial†	17.6	17.5	[0.00] ug/L	08:24:29
2	Fe 238.204 Radial†	12.8	12.7	[0.00] ug/L	08:24:29
2	K 766.490 Radial†	2875.3	2854.0	[0.00] ug/L	08:24:09
2	Mg 279.077 IEC†	-0.9	-0.8	[0.00] ug/L	08:24:29
2	Na 589.592 Radial†	-1052.7	-1044.8	[0.00] ug/L	08:24:09
2	Sr 421.552†	-6.5	-6.5	[0.00] ug/L	08:24:09
2	Sc 361.383	858338.4	858338.4	99.564 %	08:25:26
2	Y 371.029	711249.1	711249.1	99.531 %	08:25:26
2	Ag 328.068†	240.3	241.3	[0.00] ug/L	08:25:26
2	As 188.979†	-40.6	-40.8	[0.00] ug/L	08:25:46
2	B 249.677†	-518.0	-520.3	[0.00] ug/L	08:25:46
2	Ba 233.527†	-17.7	-17.8	[0.00] ug/L	08:25:46
2	Be 313.107†	-4336.6	-4355.6	[0.00] ug/L	08:25:26
2	Cd 226.502†	-214.0	-214.9	[0.00] ug/L	08:25:46
2	Co 228.616†	-77.5	-77.9	[0.00] ug/L	08:25:46
2	Cr 267.716†	59.8	60.0	[0.00] ug/L	08:25:46
2	Cu 324.752†	5781.8	5807.1	[0.00] ug/L	08:25:26
2	Mn 257.610†	446.9	448.8	[0.00] ug/L	08:25:46
2	Mo 202.031†	16.5	16.6	[0.00] ug/L	08:25:46
2	Ni 231.604†	113.5	114.0	[0.00] ug/L	08:25:46
2	P 214.914†	232.1	233.1	[0.00] ug/L	08:25:46
2	Pb 220.353†	-54.8	-55.0	[0.00] ug/L	08:25:46
2	S 181.975 Axial†	34.4	34.6	[0.00] ug/L	08:25:46
2	Sb 206.836†	35.5	35.7	[0.00] ug/L	08:25:46
2	Se 196.026†	-26.4	-26.5	[0.00] ug/L	08:25:46
2	Si 251.611†	557.7	560.1	[0.00] ug/L	08:25:46
2	Sn 189.927†	12.1	12.2	[0.00] ug/L	08:25:46
2	Ti 334.940†	-1286.7	-1292.3	[0.00] ug/L	08:25:26
2	Tl 190.801†	-33.0	-33.2	[0.00] ug/L	08:25:46
2	U 409.014†	-2986.6	-2999.7	[0.00] ug/L	08:25:26
2	V 292.402†	-1476.9	-1483.4	[0.00] ug/L	08:25:26

2	Zn 213.857†	711.5	714.7	[0.00]	ug/L	08:25:46
2	SiO2†	597.8	600.4	[0.00]	ug/L	08:26:22
3	Sc Radial	4834.5	4834.5	101	%	08:24:34
3	Y RADIAL	5018.4	5018.4	100.4	%	08:24:34
3	Al 396.153Radial†	-145.0	-144.2	[0.00]	ug/L	08:24:34
3	Ca 317.933Radial†	15.7	15.7	[0.00]	ug/L	08:24:54
3	Fe 238.204 Radial†	9.8	9.7	[0.00]	ug/L	08:24:54
3	K 766.490 Radial†	2776.8	2760.9	[0.00]	ug/L	08:24:34
3	Mg 279.077 IEC†	0.3	0.3	[0.00]	ug/L	08:24:54
3	Na 589.592 Radial†	-1110.4	-1104.1	[0.00]	ug/L	08:24:34
3	Sr 421.552†	14.8	14.8	[0.00]	ug/L	08:24:34
3	Sc 361.383	869291.9	869291.9	100.83	%	08:25:52
3	Y 371.029	720919.8	720919.8	100.88	%	08:25:52
3	Ag 328.068†	235.2	233.3	[0.00]	ug/L	08:25:52
3	As 188.979†	-23.2	-23.0	[0.00]	ug/L	08:26:12
3	B 249.677†	-545.1	-540.6	[0.00]	ug/L	08:26:12
3	Ba 233.527†	-14.1	-13.9	[0.00]	ug/L	08:26:12
3	Be 313.107†	-4367.1	-4330.9	[0.00]	ug/L	08:25:52
3	Cd 226.502†	-204.2	-202.5	[0.00]	ug/L	08:26:12
3	Co 228.616†	-75.1	-74.5	[0.00]	ug/L	08:26:12
3	Cr 267.716†	69.7	69.2	[0.00]	ug/L	08:26:12
3	Cu 324.752†	5862.4	5813.9	[0.00]	ug/L	08:25:52
3	Mn 257.610†	446.1	442.4	[0.00]	ug/L	08:26:12
3	Mo 202.031†	14.8	14.7	[0.00]	ug/L	08:26:12
3	Ni 231.604†	104.3	103.4	[0.00]	ug/L	08:26:12
3	P 214.914†	223.5	221.7	[0.00]	ug/L	08:26:12
3	Pb 220.353†	-64.1	-63.6	[0.00]	ug/L	08:26:12
3	S 181.975 Axial†	44.2	43.8	[0.00]	ug/L	08:26:12
3	Sb 206.836†	42.9	42.6	[0.00]	ug/L	08:26:12
3	Se 196.026†	-20.3	-20.1	[0.00]	ug/L	08:26:12
3	Si 251.611†	564.8	560.2	[0.00]	ug/L	08:26:12
3	Sn 189.927†	12.9	12.8	[0.00]	ug/L	08:26:12
3	Ti 334.940†	-1378.5	-1367.1	[0.00]	ug/L	08:25:52
3	Tl 190.801†	-36.9	-36.6	[0.00]	ug/L	08:26:12
3	U 409.014†	-3077.3	-3051.8	[0.00]	ug/L	08:25:52
3	V 292.402†	-1596.3	-1583.1	[0.00]	ug/L	08:25:52
3	Zn 213.857†	718.7	712.7	[0.00]	ug/L	08:26:12
3	SiO2†	590.6	585.7	[0.00]	ug/L	08:26:27

Mean Data: S0

	Mean Corrected				Calib
Analyte	Intensity	Std.Dev.	RSD	Conc.	Units
Sc 361.383	862094.4	6235.22	0.72%	100.00	%
Sc Radial	4806.9	55.24	1.15%	100	%
Y 371.029	714603.0	5474.01	0.77%	100.00	%
Y RADIAL	5000.7	45.86	0.92%	100.0	%
Ag 328.068†	228.8	15.31	6.69%	[0.00]	ug/L
Al 396.153Radial†	-151.6	8.33	5.49%	[0.00]	ug/L
As 188.979†	-33.9	9.53	28.16%	[0.00]	ug/L
B 249.677†	-539.0	18.02	3.34%	[0.00]	ug/L
Ba 233.527†	-11.6	7.66	66.14%	[0.00]	ug/L
Be 313.107†	-4338.7	14.61	0.34%	[0.00]	ug/L
Ca 317.933Radial†	16.7	0.94	5.63%	[0.00]	ug/L
Cd 226.502†	-211.9	8.32	3.93%	[0.00]	ug/L
Co 228.616†	-73.7	4.60	6.24%	[0.00]	ug/L
Cr 267.716†	66.8	5.94	8.89%	[0.00]	ug/L
Cu 324.752†	5820.7	18.09	0.31%	[0.00]	ug/L
Fe 238.204 Radial†	11.5	1.57	13.67%	[0.00]	ug/L
K 766.490 Radial†	2825.7	56.23	1.99%	[0.00]	ug/L
Mg 279.077 IEC†	0.4	1.30	313.61%	[0.00]	ug/L
Mn 257.610†	451.9	11.35	2.51%	[0.00]	ug/L
Mo 202.031†	15.5	0.94	6.08%	[0.00]	ug/L
Na 589.592 Radial†	-1078.5	30.44	2.82%	[0.00]	ug/L
Ni 231.604†	108.0	5.41	5.01%	[0.00]	ug/L
P 214.914†	228.1	5.81	2.55%	[0.00]	ug/L
Pb 220.353†	-61.7	6.02	9.76%	[0.00]	ug/L
S 181.975 Axial†	39.3	4.63	11.76%	[0.00]	ug/L
Sb 206.836†	42.2	6.25	14.84%	[0.00]	ug/L
Se 196.026†	-22.1	3.78	17.07%	[0.00]	ug/L
Si 251.611†	562.3	3.70	0.66%	[0.00]	ug/L

Sn 189.927†	8.7	6.56	75.55%	[0.00]	ug/L
Sr 421.552†	2.1	11.18	531.03%	[0.00]	ug/L
Ti 334.940†	-1303.2	59.20	4.54%	[0.00]	ug/L
Tl 190.801†	-34.2	2.10	6.14%	[0.00]	ug/L
U 409.014†	-2980.0	83.33	2.80%	[0.00]	ug/L
V 292.402†	-1554.6	62.14	4.00%	[0.00]	ug/L
Zn 213.857†	713.3	1.23	0.17%	[0.00]	ug/L
SiO2†	583.1	18.69	3.20%	[0.00]	ug/L

Sequence No.: 2
 Sample ID: S0.1
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 2
 Date Collected: 2/11/2010 08:28:39
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Analysis Time
1	Sc Radial	4697.2	4697.2	97.7	%	08:30:36
1	Y RADIAL	4924.7	4924.7	98.48	%	08:30:36
1	K 766.490 Radial†	8419.1	5790.1	[1000]	ug/L	08:30:31
1	Sr 421.552†	14106.6	14434.0	[100]	ug/L	08:30:36
1	Sc 361.383	843091.5	843091.5	97.796	%	08:31:03
1	Y 371.029	696143.0	696143.0	97.417	%	08:31:03
1	Ag 328.068†	20987.8	21232.1	[100]	ug/L	08:31:03
1	As 188.979†	194.9	233.2	[100]	ug/L	08:31:23
1	B 249.677†	3337.5	3951.7	[100]	ug/L	08:31:03
1	Ba 233.527†	12126.5	12411.4	[100]	ug/L	08:31:03
1	Be 313.107†	255128.9	265218.1	[100]	ug/L	08:31:03
1	Cd 226.502†	8154.7	8550.4	[100]	ug/L	08:31:03
1	Co 228.616†	4501.8	4677.0	[100]	ug/L	08:31:23
1	Cr 267.716†	8496.4	8621.1	[100]	ug/L	08:31:03
1	Cu 324.752†	37658.7	32686.8	[100]	ug/L	08:31:03
1	Mn 257.610†	86804.4	88309.1	[100]	ug/L	08:31:03
1	Mo 202.031†	1312.4	1326.5	[100]	ug/L	08:31:23
1	Ni 231.604†	3858.2	3837.2	[100]	ug/L	08:31:23
1	P 214.914†	1004.2	798.7	[500]	ug/L	08:31:23
1	Pb 220.353†	734.4	812.6	[100]	ug/L	08:31:23
1	S 181.975 Axial†	173.5	138.0	[200]	ug/L	08:31:23
1	Sb 206.836†	307.5	272.3	[100]	ug/L	08:31:23
1	Se 196.026†	113.4	138.0	[100]	ug/L	08:31:23
1	Si 251.611†	15051.6	14828.5	[500]	ug/L	08:31:03
1	Sn 189.927†	530.8	534.1	[100]	ug/L	08:31:23
1	Ti 334.940†	59742.6	62392.4	[100]	ug/L	08:31:03
1	Tl 190.801†	267.2	307.4	[100]	ug/L	08:31:23
1	U 409.014†	349.1	3337.0	[100]	ug/L	08:31:03
1	V 292.402†	11820.6	13641.7	[100]	ug/L	08:31:03
1	Zn 213.857†	10728.8	10257.3	[100]	ug/L	08:31:03
1	SiO2†	15259.3	15020.1	[1069.5]	ug/L	08:32:20
2	Sc Radial	4770.0	4770.0	99.2	%	08:30:46
2	Y RADIAL	4972.7	4972.7	99.44	%	08:30:46
2	K 766.490 Radial†	8395.9	5635.1	[1000]	ug/L	08:30:41
2	Sr 421.552†	14289.0	14397.3	[100]	ug/L	08:30:46
2	Sc 361.383	841728.5	841728.5	97.638	%	08:31:29
2	Y 371.029	693980.4	693980.4	97.114	%	08:31:29
2	Ag 328.068†	20918.8	21196.1	[100]	ug/L	08:31:29
2	As 188.979†	191.4	229.9	[100]	ug/L	08:31:49
2	B 249.677†	3358.3	3978.6	[100]	ug/L	08:31:29
2	Ba 233.527†	12115.8	12420.6	[100]	ug/L	08:31:29
2	Be 313.107†	254704.9	265206.3	[100]	ug/L	08:31:29
2	Cd 226.502†	8061.2	8468.2	[100]	ug/L	08:31:29
2	Co 228.616†	4524.9	4708.1	[100]	ug/L	08:31:49
2	Cr 267.716†	8472.0	8610.2	[100]	ug/L	08:31:29
2	Cu 324.752†	37682.1	32773.1	[100]	ug/L	08:31:29
2	Mn 257.610†	86821.9	88470.7	[100]	ug/L	08:31:29
2	Mo 202.031†	1330.8	1347.5	[100]	ug/L	08:31:49
2	Ni 231.604†	3893.5	3879.7	[100]	ug/L	08:31:49
2	P 214.914†	1009.6	805.9	[500]	ug/L	08:31:49
2	Pb 220.353†	737.3	816.8	[100]	ug/L	08:31:49
2	S 181.975 Axial†	168.2	132.9	[200]	ug/L	08:31:49
2	Sb 206.836†	312.2	277.6	[100]	ug/L	08:31:49
2	Se 196.026†	110.6	135.3	[100]	ug/L	08:31:49
2	Si 251.611†	15081.3	14883.9	[500]	ug/L	08:31:29
2	Sn 189.927†	535.9	540.2	[100]	ug/L	08:31:49
2	Ti 334.940†	59954.2	62708.0	[100]	ug/L	08:31:29
2	Tl 190.801†	271.5	312.3	[100]	ug/L	08:31:49
2	U 409.014†	527.8	3520.6	[100]	ug/L	08:31:29

2	V 292.402†	11734.5	13573.0	[100]	ug/L	08:31:29
2	Zn 213.857†	10700.6	10246.2	[100]	ug/L	08:31:29
2	SiO2†	15136.0	14919.1	[1069.5]	ug/L	08:32:25
3	Sc Radial	4757.9	4757.9	99.0	%	08:30:57
3	Y RADIAL	4960.8	4960.8	99.20	%	08:30:57
3	K 766.490 Radial†	8337.2	5597.4	[1000]	ug/L	08:30:52
3	Sr 421.552†	14181.2	14325.1	[100]	ug/L	08:30:57
3	Sc 361.383	857711.3	857711.3	99.492	%	08:31:54
3	Y 371.029	708311.9	708311.9	99.120	%	08:31:54
3	Ag 328.068†	21304.0	21184.0	[100]	ug/L	08:31:54
3	As 188.979†	185.7	220.5	[100]	ug/L	08:32:15
3	B 249.677†	3475.9	4032.7	[100]	ug/L	08:31:54
3	Ba 233.527†	12344.0	12418.7	[100]	ug/L	08:31:54
3	Be 313.107†	259560.0	265225.1	[100]	ug/L	08:31:54
3	Cd 226.502†	8214.9	8468.8	[100]	ug/L	08:31:54
3	Co 228.616†	4492.9	4589.6	[100]	ug/L	08:32:15
3	Cr 267.716†	8624.8	8602.1	[100]	ug/L	08:31:54
3	Cu 324.752†	38368.9	32744.2	[100]	ug/L	08:31:54
3	Mn 257.610†	88164.5	88163.1	[100]	ug/L	08:31:54
3	Mo 202.031†	1319.1	1310.3	[100]	ug/L	08:32:15
3	Ni 231.604†	3850.0	3761.7	[100]	ug/L	08:32:15
3	P 214.914†	1005.0	782.0	[500]	ug/L	08:32:15
3	Pb 220.353†	740.2	805.7	[100]	ug/L	08:32:15
3	S 181.975 Axial†	171.3	132.8	[200]	ug/L	08:32:15
3	Sb 206.836†	307.2	266.6	[100]	ug/L	08:32:15
3	Se 196.026†	128.8	151.6	[100]	ug/L	08:32:15
3	Si 251.611†	15274.8	14790.6	[500]	ug/L	08:31:54
3	Sn 189.927†	537.8	531.8	[100]	ug/L	08:32:15
3	Ti 334.940†	60885.2	62499.6	[100]	ug/L	08:31:54
3	Tl 190.801†	274.4	310.0	[100]	ug/L	08:32:15
3	U 409.014†	511.9	3494.6	[100]	ug/L	08:31:54
3	V 292.402†	12083.6	13700.0	[100]	ug/L	08:31:54
3	Zn 213.857†	10828.2	10170.3	[100]	ug/L	08:31:54
3	SiO2†	15035.8	14529.5	[1069.5]	ug/L	08:32:30

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	847510.4	8860.47	1.05%	98.308	%
Sc Radial	4741.7	39.05	0.82%	98.6	%
Y 371.029	699478.4	7726.06	1.10%	97.884	%
Y RADIAL	4952.7	24.96	0.50%	99.04	%
Ag 328.068†	21204.1	24.98	0.12%	[100]	ug/L
As 188.979†	227.9	6.57	2.88%	[100]	ug/L
B 249.677†	3987.7	41.26	1.03%	[100]	ug/L
Ba 233.527†	12416.9	4.85	0.04%	[100]	ug/L
Be 313.107†	265216.5	9.52	0.00%	[100]	ug/L
Cd 226.502†	8495.8	47.31	0.56%	[100]	ug/L
Co 228.616†	4658.2	61.45	1.32%	[100]	ug/L
Cr 267.716†	8611.2	9.54	0.11%	[100]	ug/L
Cu 324.752†	32734.7	43.94	0.13%	[100]	ug/L
K 766.490 Radial†	5674.2	102.16	1.80%	[1000]	ug/L
Mn 257.610†	88314.3	153.88	0.17%	[100]	ug/L
Mo 202.031†	1328.1	18.64	1.40%	[100]	ug/L
Ni 231.604†	3826.2	59.74	1.56%	[100]	ug/L
P 214.914†	795.6	12.26	1.54%	[500]	ug/L
Pb 220.353†	811.7	5.63	0.69%	[100]	ug/L
S 181.975 Axial†	134.6	2.99	2.22%	[200]	ug/L
Sb 206.836†	272.2	5.48	2.01%	[100]	ug/L
Se 196.026†	141.6	8.69	6.14%	[100]	ug/L
Si 251.611†	14834.4	46.93	0.32%	[500]	ug/L
Sn 189.927†	535.4	4.34	0.81%	[100]	ug/L
Sr 421.552†	14385.5	55.40	0.39%	[100]	ug/L
Ti 334.940†	62533.3	160.47	0.26%	[100]	ug/L
Tl 190.801†	309.9	2.44	0.79%	[100]	ug/L
U 409.014†	3450.7	99.33	2.88%	[100]	ug/L
V 292.402†	13638.2	63.57	0.47%	[100]	ug/L
Zn 213.857†	10224.6	47.36	0.46%	[100]	ug/L
SiO2†	14822.9	259.04	1.75%	[1069.5]	ug/L

Sequence No.: 3

Sample ID: S0.5

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 2/11/2010 08:34:41

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	4775.5	4775.5	99.3 %		08:36:34
1	Y RADIAL	4918.1	4918.1	98.35 %		08:36:34
1	Al 396.153Radial†	5173.8	5359.4	[5000] ug/L		08:36:34
1	Ca 317.933Radial†	3032.3	3035.5	[5000] ug/L		08:36:54
1	K 766.490 Radial†	31229.5	28609.1	[5000] ug/L		08:36:34
1	Mg 279.077 IEC†	147.4	148.0	[5000] ug/L		08:36:54
1	Sr 421.552†	72038.7	72510.1	[500] ug/L		08:36:34
1	Sc 361.383	867807.9	867807.9	100.66 %		08:37:51
1	Y 371.029	707253.6	707253.6	98.972 %		08:37:51
1	Ag 328.068†	104951.0	104031.3	[500] ug/L		08:37:56
1	As 188.979†	1075.9	1102.7	[500] ug/L		08:38:16
1	B 249.677†	20164.1	20570.4	[500] ug/L		08:37:56
1	Ba 233.527†	60905.4	60516.0	[500] ug/L		08:37:56
1	Be 313.107†	1337671.9	1333203.6	[500] ug/L		08:37:51
1	Cd 226.502†	41754.0	41691.0	[500] ug/L		08:37:56
1	Co 228.616†	23152.6	23073.9	[500] ug/L		08:37:56
1	Cr 267.716†	42883.4	42534.3	[500] ug/L		08:37:56
1	Cu 324.752†	168304.3	161375.5	[500] ug/L		08:37:56
1	Mn 257.610†	436371.5	433046.6	[500] ug/L		08:37:51
1	Mo 202.031†	6633.2	6574.0	[500] ug/L		08:38:16
1	Ni 231.604†	19401.1	19165.4	[500] ug/L		08:37:56
1	P 214.914†	4235.9	3979.9	[2500] ug/L		08:38:16
1	Pb 220.353†	3922.5	3958.4	[500] ug/L		08:38:16
1	S 181.975 Axial†	718.0	673.9	[1000] ug/L		08:38:16
1	Sb 206.836†	1456.3	1404.6	[500] ug/L		08:38:16
1	Se 196.026†	724.3	741.7	[500] ug/L		08:38:16
1	Si 251.611†	74231.4	73180.4	[2500] ug/L		08:37:56
1	Sn 189.927†	2684.8	2658.4	[500] ug/L		08:38:16
1	Ti 334.940†	302340.0	301652.6	[500] ug/L		08:37:56
1	Tl 190.801†	1527.2	1551.3	[500] ug/L		08:38:16
1	U 409.014†	14256.5	17142.7	[500] ug/L		08:37:56
1	V 292.402†	66738.6	67853.8	[500] ug/L		08:37:56
1	Zn 213.857†	51323.6	50272.4	[500] ug/L		08:37:56
1	SiO2†	75000.0	73923.1	[5347.5] ug/L		08:39:24
2	Sc Radial	4760.1	4760.1	99.0 %		08:36:59
2	Y RADIAL	4955.6	4955.6	99.10 %		08:36:59
2	Al 396.153Radial†	5216.3	5419.2	[5000] ug/L		08:36:59
2	Ca 317.933Radial†	3024.1	3037.1	[5000] ug/L		08:37:19
2	K 766.490 Radial†	31196.0	28677.0	[5000] ug/L		08:36:59
2	Mg 279.077 IEC†	140.7	141.7	[5000] ug/L		08:37:19
2	Sr 421.552†	71809.8	72513.7	[500] ug/L		08:36:59
2	Sc 361.383	874027.1	874027.1	101.38 %		08:38:22
2	Y 371.029	713257.3	713257.3	99.812 %		08:38:22
2	Ag 328.068†	105300.4	103634.0	[500] ug/L		08:38:27
2	As 188.979†	1073.3	1092.5	[500] ug/L		08:38:47
2	B 249.677†	20291.9	20553.9	[500] ug/L		08:38:27
2	Ba 233.527†	61086.4	60264.0	[500] ug/L		08:38:27
2	Be 313.107†	1340300.8	1326340.9	[500] ug/L		08:38:22
2	Cd 226.502†	41829.2	41470.0	[500] ug/L		08:38:27
2	Co 228.616†	23238.4	22994.9	[500] ug/L		08:38:27
2	Cr 267.716†	42880.0	42227.8	[500] ug/L		08:38:27
2	Cu 324.752†	169024.2	160895.9	[500] ug/L		08:38:27
2	Mn 257.610†	437207.3	430786.4	[500] ug/L		08:38:22
2	Mo 202.031†	6579.5	6474.1	[500] ug/L		08:38:47
2	Ni 231.604†	19438.2	19064.8	[500] ug/L		08:38:27
2	P 214.914†	4208.9	3923.3	[2500] ug/L		08:38:47
2	Pb 220.353†	3928.4	3936.5	[500] ug/L		08:38:47
2	S 181.975 Axial†	712.8	663.8	[1000] ug/L		08:38:47
2	Sb 206.836†	1435.7	1373.9	[500] ug/L		08:38:47

2	Se 196.026†	716.2	728.6	[500]	ug/L	08:38:47
2	Si 251.611†	74403.2	72825.1	[2500]	ug/L	08:38:27
2	Sn 189.927†	2674.2	2629.0	[500]	ug/L	08:38:47
2	Ti 334.940†	303013.8	300180.0	[500]	ug/L	08:38:27
2	Tl 190.801†	1515.4	1528.9	[500]	ug/L	08:38:47
2	U 409.014†	14162.6	16949.3	[500]	ug/L	08:38:27
2	V 292.402†	66891.9	67533.3	[500]	ug/L	08:38:27
2	Zn 213.857†	51403.5	49988.5	[500]	ug/L	08:38:27
2	SiO2†	73924.8	72332.4	[5347.5]	ug/L	08:39:29
3	Sc Radial	4764.3	4764.3	99.1	%	08:37:24
3	Y RADIAL	4912.6	4912.6	98.24	%	08:37:24
3	Al 396.153Radial†	5214.9	5413.1	[5000]	ug/L	08:37:24
3	Ca 317.933Radial†	3031.1	3041.5	[5000]	ug/L	08:37:44
3	K 766.490 Radial†	31082.4	28534.7	[5000]	ug/L	08:37:24
3	Mg 279.077 IEC†	148.1	149.0	[5000]	ug/L	08:37:44
3	Sr 421.552†	71533.5	72171.1	[500]	ug/L	08:37:24
3	Sc 361.383	867676.4	867676.4	100.65	%	08:38:53
3	Y 371.029	709037.9	709037.9	99.221	%	08:38:53
3	Ag 328.068†	106402.4	105489.1	[500]	ug/L	08:38:58
3	As 188.979†	1067.1	1094.1	[500]	ug/L	08:39:18
3	B 249.677†	20536.8	20943.7	[500]	ug/L	08:38:58
3	Ba 233.527†	61737.6	61352.0	[500]	ug/L	08:38:58
3	Be 313.107†	1334189.2	1329944.7	[500]	ug/L	08:38:53
3	Cd 226.502†	42310.5	42250.2	[500]	ug/L	08:38:58
3	Co 228.616†	23441.9	23364.8	[500]	ug/L	08:38:58
3	Cr 267.716†	43382.0	43036.1	[500]	ug/L	08:38:58
3	Cu 324.752†	171172.5	164250.5	[500]	ug/L	08:38:58
3	Mn 257.610†	433515.4	430274.6	[500]	ug/L	08:38:53
3	Mo 202.031†	6604.8	6546.8	[500]	ug/L	08:39:18
3	Ni 231.604†	19593.1	19359.1	[500]	ug/L	08:38:58
3	P 214.914†	4204.9	3949.8	[2500]	ug/L	08:39:18
3	Pb 220.353†	3916.1	3952.6	[500]	ug/L	08:39:18
3	S 181.975 Axial†	711.9	668.0	[1000]	ug/L	08:39:18
3	Sb 206.836†	1438.7	1387.2	[500]	ug/L	08:39:18
3	Se 196.026†	709.4	727.0	[500]	ug/L	08:39:18
3	Si 251.611†	75276.2	74229.6	[2500]	ug/L	08:38:58
3	Sn 189.927†	2666.4	2640.6	[500]	ug/L	08:39:18
3	Ti 334.940†	306373.0	305705.2	[500]	ug/L	08:38:58
3	Tl 190.801†	1527.0	1551.4	[500]	ug/L	08:39:18
3	U 409.014†	14289.9	17178.0	[500]	ug/L	08:38:58
3	V 292.402†	67706.6	68825.6	[500]	ug/L	08:38:58
3	Zn 213.857†	51838.6	50791.9	[500]	ug/L	08:38:58
3	SiO2†	74542.2	73479.5	[5347.5]	ug/L	08:39:34

Mean Data: S0.5

Analyte	Mean Corrected			Calib	
	Intensity	Std.Dev.	RSD	Conc.	Units
Sc 361.383	869837.1	3629.19	0.42%	100.90	%
Sc Radial	4766.6	7.97	0.17%	99.2	%
Y 371.029	709849.6	3083.04	0.43%	99.335	%
Y RADIAL	4928.8	23.43	0.48%	98.56	%
Ag 328.068†	104384.8	976.78	0.94%	[500]	ug/L
Al 396.153Radial†	5397.2	32.88	0.61%	[5000]	ug/L
As 188.979†	1096.4	5.49	0.50%	[500]	ug/L
B 249.677†	20689.3	220.47	1.07%	[500]	ug/L
Ba 233.527†	60710.7	569.54	0.94%	[500]	ug/L
Be 313.107†	1329829.7	3432.75	0.26%	[500]	ug/L
Ca 317.933Radial†	3038.1	3.10	0.10%	[5000]	ug/L
Cd 226.502†	41803.7	402.13	0.96%	[500]	ug/L
Co 228.616†	23144.5	194.83	0.84%	[500]	ug/L
Cr 267.716†	42599.4	408.09	0.96%	[500]	ug/L
Cu 324.752†	162174.0	1814.28	1.12%	[500]	ug/L
K 766.490 Radial†	28606.9	71.20	0.25%	[5000]	ug/L
Mg 279.077 IEC†	146.2	3.95	2.70%	[5000]	ug/L
Mn 257.610†	431369.2	1475.05	0.34%	[500]	ug/L
Mo 202.031†	6531.6	51.63	0.79%	[500]	ug/L
Ni 231.604†	19196.4	149.57	0.78%	[500]	ug/L
P 214.914†	3951.0	28.29	0.72%	[2500]	ug/L
Pb 220.353†	3949.2	11.37	0.29%	[500]	ug/L
S 181.975 Axial†	668.5	5.09	0.76%	[1000]	ug/L

Sb 206.836†	1388.6	15.36	1.11%	[500] ug/L
Se 196.026†	732.4	8.07	1.10%	[500] ug/L
Si 251.611†	73411.7	730.27	0.99%	[2500] ug/L
Sn 189.927†	2642.7	14.81	0.56%	[500] ug/L
Sr 421.552†	72398.3	196.74	0.27%	[500] ug/L
Ti 334.940†	302512.6	2861.20	0.95%	[500] ug/L
Tl 190.801†	1543.9	12.97	0.84%	[500] ug/L
U 409.014†	17090.0	123.10	0.72%	[500] ug/L
V 292.402†	68070.9	672.97	0.99%	[500] ug/L
Zn 213.857†	50350.9	407.40	0.81%	[500] ug/L
SiO2†	73245.0	820.85	1.12%	[5347.5] ug/L

Sequence No.: 4

Sample ID: SCAL

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 2/11/2010 08:41:46

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	4754.8	4754.8	98.9 %	08:43:39
1	Y RADIAL	4929.2	4929.2	98.57 %	08:43:39
1	Al 396.153Radial†	10311.1	10575.8	[10000] ug/L	08:43:39
1	Ca 317.933Radial†	6019.7	6069.0	[10000] ug/L	08:43:39
1	Fe 238.204 Radial†	1090.5	1091.0	[10000] ug/L	08:43:59
1	K 766.490 Radial†	58560.2	56376.6	[10000] ug/L	08:43:39
1	Mg 279.077 IEC†	284.9	287.6	[10000] ug/L	08:43:59
1	Na 589.592 Radial†	30863.2	32280.1	[10000] ug/L	08:43:39
1	Sr 421.552†	140324.3	141860.9	[1000] ug/L	08:43:39
1	Sc 361.383	845480.5	845480.5	98.073 %	08:45:02
1	Y 371.029	692547.9	692547.9	96.914 %	08:45:02
1	Ag 328.068†	209232.3	213115.0	[1000] ug/L	08:45:02
1	As 188.979†	2138.2	2214.1	[1000] ug/L	08:45:23
1	B 249.677†	40784.7	42125.2	[1000] ug/L	08:45:02
1	Ba 233.527†	120350.2	122726.7	[1000] ug/L	08:45:02
1	Be 313.107†	2642600.6	2698867.0	[1000] ug/L	08:44:57
1	Cd 226.502†	82431.4	84263.1	[1000] ug/L	08:45:02
1	Co 228.616†	44705.9	45658.1	[1000] ug/L	08:45:23
1	Cr 267.716†	84442.5	86035.1	[1000] ug/L	08:45:02
1	Cu 324.752†	330508.8	331182.7	[1000] ug/L	08:45:02
1	Mn 257.610†	858191.6	874603.3	[1000] ug/L	08:44:57
1	Mo 202.031†	13191.9	13435.6	[1000] ug/L	08:45:23
1	Ni 231.604†	37999.6	38638.3	[1000] ug/L	08:45:02
1	P 214.914†	8146.2	8078.2	[5000] ug/L	08:45:23
1	Pb 220.353†	7872.9	8089.3	[1000] ug/L	08:45:23
1	S 181.975 Axial†	1394.2	1382.2	[2000] ug/L	08:45:23
1	Sb 206.836†	2882.5	2897.0	[1000] ug/L	08:45:23
1	Se 196.026†	1435.4	1485.8	[1000] ug/L	08:45:23
1	Si 251.611†	147800.1	150142.2	[5000] ug/L	08:45:02
1	Sn 189.927†	5325.6	5421.6	[1000] ug/L	08:45:23
1	Ti 334.940†	606347.9	619566.0	[1000] ug/L	08:45:02
1	Tl 190.801†	3041.0	3134.9	[1000] ug/L	08:45:23
1	U 409.014†	31065.3	34655.8	[1000] ug/L	08:45:02
1	V 292.402†	133962.9	138149.9	[1000] ug/L	08:45:02
1	Zn 213.857†	100276.7	101533.9	[1000] ug/L	08:45:02
1	SiO2†	149487.5	151841.8	[10695] ug/L	08:46:31
2	Sc Radial	4707.6	4707.6	97.9 %	08:44:04
2	Y RADIAL	4893.2	4893.2	97.85 %	08:44:04
2	Al 396.153Radial†	10292.8	10661.4	[10000] ug/L	08:44:04
2	Ca 317.933Radial†	6027.4	6137.8	[10000] ug/L	08:44:04
2	Fe 238.204 Radial†	1092.1	1103.6	[10000] ug/L	08:44:24
2	K 766.490 Radial†	58258.3	56661.2	[10000] ug/L	08:44:04
2	Mg 279.077 IEC†	282.6	288.1	[10000] ug/L	08:44:24
2	Na 589.592 Radial†	30526.8	32249.1	[10000] ug/L	08:44:04
2	Sr 421.552†	139526.7	142467.1	[1000] ug/L	08:44:04
2	Sc 361.383	847483.2	847483.2	98.305 %	08:45:34
2	Y 371.029	695071.3	695071.3	97.267 %	08:45:34
2	Ag 328.068†	209668.9	213055.0	[1000] ug/L	08:45:34
2	As 188.979†	2125.7	2196.2	[1000] ug/L	08:45:54
2	B 249.677†	40934.7	42179.5	[1000] ug/L	08:45:34
2	Ba 233.527†	120220.8	122305.1	[1000] ug/L	08:45:34
2	Be 313.107†	2630315.5	2680002.7	[1000] ug/L	08:45:29
2	Cd 226.502†	82319.2	83950.3	[1000] ug/L	08:45:34
2	Co 228.616†	44605.9	45448.6	[1000] ug/L	08:45:54
2	Cr 267.716†	84523.5	85913.9	[1000] ug/L	08:45:34
2	Cu 324.752†	331081.1	330968.4	[1000] ug/L	08:45:34
2	Mn 257.610†	852182.1	866422.4	[1000] ug/L	08:45:29
2	Mo 202.031†	13166.6	13378.0	[1000] ug/L	08:45:54
2	Ni 231.604†	38034.5	38582.2	[1000] ug/L	08:45:34

2	P 214.914†	8123.0	8034.9	[5000]	ug/L	08:45:54
2	Pb 220.353†	7796.1	7992.3	[1000]	ug/L	08:45:54
2	S 181.975 Axial†	1391.5	1376.2	[2000]	ug/L	08:45:54
2	Sb 206.836†	2877.9	2885.4	[1000]	ug/L	08:45:54
2	Se 196.026†	1440.6	1487.6	[1000]	ug/L	08:45:54
2	Si 251.611†	147930.3	149918.4	[5000]	ug/L	08:45:34
2	Sn 189.927†	5315.4	5398.4	[1000]	ug/L	08:45:54
2	Ti 334.940†	606881.9	618648.1	[1000]	ug/L	08:45:34
2	Tl 190.801†	3034.3	3120.8	[1000]	ug/L	08:45:54
2	U 409.014†	30966.8	34480.8	[1000]	ug/L	08:45:34
2	V 292.402†	133992.3	137857.1	[1000]	ug/L	08:45:34
2	Zn 213.857†	100200.0	101214.3	[1000]	ug/L	08:45:34
2	SiO2†	148244.7	150217.4	[10695]	ug/L	08:46:36
3	Sc Radial	4726.0	4726.0	98.3	%	08:44:30
3	Y RADIAL	4894.5	4894.5	97.88	%	08:44:30
3	Al 396.153Radial†	10324.4	10652.6	[10000]	ug/L	08:44:30
3	Ca 317.933Radial†	6007.8	6093.9	[10000]	ug/L	08:44:30
3	Fe 238.204 Radial†	1093.8	1101.0	[10000]	ug/L	08:44:50
3	K 766.490 Radial†	58317.7	56489.9	[10000]	ug/L	08:44:30
3	Mg 279.077 IEC†	286.3	290.8	[10000]	ug/L	08:44:50
3	Na 589.592 Radial†	30496.2	32096.5	[10000]	ug/L	08:44:30
3	Sr 421.552†	139363.7	141746.0	[1000]	ug/L	08:44:30
3	Sc 361.383	842372.6	842372.6	97.712	%	08:46:06
3	Y 371.029	690532.3	690532.3	96.632	%	08:46:06
3	Ag 328.068†	208493.8	213146.4	[1000]	ug/L	08:46:06
3	As 188.979†	2124.1	2207.7	[1000]	ug/L	08:46:26
3	B 249.677†	40860.3	42356.0	[1000]	ug/L	08:46:06
3	Ba 233.527†	120205.6	123031.5	[1000]	ug/L	08:46:06
3	Be 313.107†	2629476.4	2695377.0	[1000]	ug/L	08:46:00
3	Cd 226.502†	82334.1	84473.6	[1000]	ug/L	08:46:06
3	Co 228.616†	44708.7	45829.2	[1000]	ug/L	08:46:26
3	Cr 267.716†	84347.2	86255.2	[1000]	ug/L	08:46:06
3	Cu 324.752†	328978.7	330860.1	[1000]	ug/L	08:46:06
3	Mn 257.610†	851417.5	870899.2	[1000]	ug/L	08:46:00
3	Mo 202.031†	13173.1	13466.0	[1000]	ug/L	08:46:26
3	Ni 231.604†	37963.9	38744.7	[1000]	ug/L	08:46:06
3	P 214.914†	8131.1	8093.4	[5000]	ug/L	08:46:26
3	Pb 220.353†	7807.9	8052.4	[1000]	ug/L	08:46:26
3	S 181.975 Axial†	1389.6	1382.8	[2000]	ug/L	08:46:26
3	Sb 206.836†	2872.5	2897.6	[1000]	ug/L	08:46:26
3	Se 196.026†	1440.2	1496.0	[1000]	ug/L	08:46:26
3	Si 251.611†	147526.0	150417.7	[5000]	ug/L	08:46:06
3	Sn 189.927†	5308.9	5424.5	[1000]	ug/L	08:46:26
3	Ti 334.940†	604327.6	619779.4	[1000]	ug/L	08:46:06
3	Tl 190.801†	3026.4	3131.5	[1000]	ug/L	08:46:26
3	U 409.014†	30851.3	34553.6	[1000]	ug/L	08:46:06
3	V 292.402†	133616.4	138299.3	[1000]	ug/L	08:46:06
3	Zn 213.857†	100180.6	101812.8	[1000]	ug/L	08:46:06
3	SiO2†	147502.0	150372.2	[10695]	ug/L	08:46:41

Mean Data: SCAL

Analyte	Mean Corrected	Std.Dev.	RSD	Conc.	Units
Sc 361.383	845112.1	2575.15	0.30%	98.030	%
Sc Radial	4729.5	23.76	0.50%	98.4	%
Y 371.029	692717.2	2274.22	0.33%	96.937	%
Y RADIAL	4905.6	20.43	0.42%	98.10	%
Ag 328.068†	213105.4	46.42	0.02%	[1000]	ug/L
Al 396.153Radial†	10630.0	47.11	0.44%	[10000]	ug/L
As 188.979†	2206.0	9.07	0.41%	[1000]	ug/L
B 249.677†	42220.2	120.67	0.29%	[1000]	ug/L
Ba 233.527†	122687.8	364.75	0.30%	[1000]	ug/L
Be 313.107†	2691415.6	10036.70	0.37%	[1000]	ug/L
Ca 317.933Radial†	6100.2	34.82	0.57%	[10000]	ug/L
Cd 226.502†	84229.0	263.30	0.31%	[1000]	ug/L
Co 228.616†	45645.3	190.60	0.42%	[1000]	ug/L
Cr 267.716†	86068.1	173.02	0.20%	[1000]	ug/L
Cu 324.752†	331003.7	164.17	0.05%	[1000]	ug/L
Fe 238.204 Radial†	1098.5	6.65	0.60%	[10000]	ug/L
K 766.490 Radial†	56509.2	143.28	0.25%	[10000]	ug/L

Mg 279.077 IEC†	288.8	1.73	0.60%	[10000]	ug/L
Mn 257.610†	870641.7	4096.52	0.47%	[1000]	ug/L
Mo 202.031†	13426.5	44.68	0.33%	[1000]	ug/L
Na 589.592 Radial†	32208.6	98.29	0.31%	[10000]	ug/L
Ni 231.604†	38655.1	82.53	0.21%	[1000]	ug/L
P 214.914†	8068.8	30.34	0.38%	[5000]	ug/L
Pb 220.353†	8044.7	48.99	0.61%	[1000]	ug/L
S 181.975 Axial†	1380.4	3.67	0.27%	[2000]	ug/L
Sb 206.836†	2893.3	6.89	0.24%	[1000]	ug/L
Se 196.026†	1489.8	5.47	0.37%	[1000]	ug/L
Si 251.611†	150159.4	250.07	0.17%	[5000]	ug/L
Sn 189.927†	5414.8	14.32	0.26%	[1000]	ug/L
Sr 421.552†	142024.7	387.43	0.27%	[1000]	ug/L
Ti 334.940†	619331.2	601.10	0.10%	[1000]	ug/L
Tl 190.801†	3129.1	7.36	0.24%	[1000]	ug/L
U 409.014†	34563.4	87.91	0.25%	[1000]	ug/L
V 292.402†	138102.1	224.94	0.16%	[1000]	ug/L
Zn 213.857†	101520.3	299.50	0.30%	[1000]	ug/L
SiO2†	150810.5	896.53	0.59%	[10695]	ug/L

Sequence No.: 5
 Sample ID: S10
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 5
 Date Collected: 2/11/2010 08:48:53
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Analysis Time
1	Sc Radial	4695.4	4695.4	97.7 %		08:51:07
1	Y RADIAL	4853.4	4853.4	97.05 %		08:51:07
1	Al 396.153Radial†	52499.6	53897.9	[50000] ug/L		08:50:46
1	Ca 317.933Radial†	29421.5	30103.4	[50000] ug/L		08:50:46
1	Fe 238.204 Radial†	2152.2	2191.8	[20000] ug/L		08:51:07
1	Mg 279.077 IEC†	1379.4	1411.7	[50000] ug/L		08:51:07
1	Na 589.592 Radial†	63880.6	66476.2	[20000] ug/L		08:50:46
1	Sc 361.383	861192.5	861192.5	99.895 %		08:52:04
1	Y 371.029	701296.9	701296.9	98.138 %		08:52:04
2	Sc Radial	4646.8	4646.8	96.7 %		08:51:32
2	Y RADIAL	4806.8	4806.8	96.12 %		08:51:32
2	Al 396.153Radial†	52103.7	54050.3	[50000] ug/L		08:51:12
2	Ca 317.933Radial†	29244.8	30235.6	[50000] ug/L		08:51:12
2	Fe 238.204 Radial†	2139.5	2201.7	[20000] ug/L		08:51:32
2	Mg 279.077 IEC†	1362.4	1409.0	[50000] ug/L		08:51:32
2	Na 589.592 Radial†	63493.3	66759.2	[20000] ug/L		08:51:12
2	Sc 361.383	847329.2	847329.2	98.287 %		08:52:09
2	Y 371.029	690150.1	690150.1	96.578 %		08:52:09
3	Sc Radial	4671.9	4671.9	97.2 %		08:51:57
3	Y RADIAL	4842.7	4842.7	96.84 %		08:51:57
3	Al 396.153Radial†	52096.6	53753.9	[50000] ug/L		08:51:37
3	Ca 317.933Radial†	29286.2	30115.9	[50000] ug/L		08:51:37
3	Fe 238.204 Radial†	2151.0	2201.7	[20000] ug/L		08:51:57
3	Mg 279.077 IEC†	1366.9	1406.0	[50000] ug/L		08:51:57
3	Na 589.592 Radial†	63513.3	66427.5	[20000] ug/L		08:51:37
3	Sc 361.383	854367.2	854367.2	99.104 %		08:52:15
3	Y 371.029	695943.9	695943.9	97.389 %		08:52:15

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc. Units	Calib
Sc 361.383	854296.3	6931.89	0.81%	99.095 %	
Sc Radial	4671.4	24.29	0.52%	97.2 %	
Y 371.029	695797.0	5574.82	0.80%	97.368 %	
Y RADIAL	4834.3	24.41	0.51%	96.67 %	
Al 396.153Radial†	53900.7	148.22	0.27%	[50000] ug/L	
Ca 317.933Radial†	30151.6	72.95	0.24%	[50000] ug/L	
Fe 238.204 Radial†	2198.4	5.71	0.26%	[20000] ug/L	
Mg 279.077 IEC†	1408.9	2.86	0.20%	[50000] ug/L	
Na 589.592 Radial†	66554.3	179.12	0.27%	[20000] ug/L	

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	212.2	0.00000	0.999967	
Al 396.153Radial	3	Lin Thru 0	0.0	1.077	0.00000	0.999996	
As 188.979	3	Lin Thru 0	0.0	2.204	0.00000	0.999993	
B 249.677	3	Lin Thru 0	0.0	42.03	0.00000	0.999958	
Ba 233.527	3	Lin Thru 0	0.0	122.4	0.00000	0.999991	
Be 313.107	3	Lin Thru 0	0.0	2685	0.00000	0.999988	
Ca 317.933Radial	3	Lin Thru 0	0.0	0.6033	0.00000	0.999997	
Cd 226.502	3	Lin Thru 0	0.0	84.11	0.00000	0.999995	
Co 228.616	3	Lin Thru 0	0.0	45.78	0.00000	0.999983	
Cr 267.716	3	Lin Thru 0	0.0	85.90	0.00000	0.999992	
Cu 324.752	3	Lin Thru 0	0.0	329.7	0.00000	0.999967	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.1099	0.00000	1.000000	
K 766.490 Radial	3	Lin Thru 0	0.0	5.665	0.00000	0.999988	

Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0282	0.00000	0.999982
Mn 257.610	3	Lin Thru 0	0.0	869.2	0.00000	0.999992
Mo 202.031	3	Lin Thru 0	0.0	13.35	0.00000	0.999941
Na 589.592 Radia	2	Lin Thru 0	0.0	3.306	0.00000	0.999916
Ni 231.604	3	Lin Thru 0	0.0	38.60	0.00000	0.999996
P 214.914	3	Lin Thru 0	0.0	1.607	0.00000	0.999965
Pb 220.353	3	Lin Thru 0	0.0	8.016	0.00000	0.999973
S 181.975 Axial	3	Lin Thru 0	0.0	0.6858	0.00000	0.999919
Sb 206.836	3	Lin Thru 0	0.0	2.869	0.00000	0.999859
Se 196.026	3	Lin Thru 0	0.0	1.484	0.00000	0.999969
Si 251.611	3	Lin Thru 0	0.0	29.90	0.00000	0.999960
Sn 189.927	3	Lin Thru 0	0.0	5.389	0.00000	0.999954
Sr 421.552	3	Lin Thru 0	0.0	142.6	0.00000	0.999970
Ti 334.940	3	Lin Thru 0	0.0	616.5	0.00000	0.999956
Tl 190.801	3	Lin Thru 0	0.0	3.121	0.00000	0.999986
U 409.014	3	Lin Thru 0	0.0	34.49	0.00000	0.999990
V 292.402	3	Lin Thru 0	0.0	137.7	0.00000	0.999984
Zn 213.857	3	Lin Thru 0	0.0	101.4	0.00000	0.999995
Sio2	3	Lin Thru 0	0.0	14.02	0.00000	0.999934

Sequence No.: 6

Sample ID: ICV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 9

Date Collected: 2/11/2010 08:54:26

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	4905.6	4905.6	102 %		08:56:19
1	Y RADIAL	5074.8	5074.8	101.5 %		08:56:19
1	Al 396.153Radial†	5302.9	5347.8	4937.0 ug/L	4937.0 ppb	08:56:19
1	Ca 317.933Radial†	3082.5	3003.8	4978.6 ug/L	4978.6 ppb	08:56:39
1	Fe 238.204 Radial†	588.6	565.2	5158.2 ug/L	5158.2 ppb	08:56:39
1	K 766.490 Radial†	17137.1	13966.5	2461.9 ug/L	2461.9 ppb	08:56:19
1	Mg 279.077 IEC†	155.9	152.3	5398.3 ug/L	5398.3 ppb	08:56:39
1	Na 589.592 Radial†	7253.3	8185.8	2475.8 ug/L	2475.8 ppb	08:56:19
1	Sr 421.552†	76953.4	75402.4	528.77 ug/L	528.77 ppb	08:56:19
1	Sc 361.383	873788.1	873788.1	101.36 %		08:57:36
1	Y 371.029	717234.1	717234.1	100.37 %		08:57:36
1	Ag 328.068†	56636.5	55649.7	265.54 ug/L	265.54 ppb	08:57:36
1	As 188.979†	1022.6	1042.8	477.49 ug/L	477.49 ppb	08:57:56
1	B 249.677†	21580.4	21830.7	517.05 ug/L	517.05 ppb	08:57:36
1	Ba 233.527†	63501.3	62663.0	513.04 ug/L	513.04 ppb	08:57:36
1	Be 313.107†	707030.2	701906.9	262.60 ug/L	262.60 ppb	08:57:36
1	Cd 226.502†	41562.2	41217.8	489.92 ug/L	489.92 ppb	08:57:56
1	Co 228.616†	23689.4	23446.0	512.28 ug/L	512.28 ppb	08:57:56
1	Cr 267.716†	42742.3	42103.5	490.80 ug/L	490.80 ppb	08:57:36
1	Cu 324.752†	176399.1	168217.7	510.28 ug/L	510.28 ppb	08:57:36
1	Mn 257.610†	455363.7	448817.8	516.66 ug/L	516.66 ppb	08:57:36
1	Mo 202.031†	7358.7	7244.6	542.99 ug/L	542.99 ppb	08:57:56
1	Ni 231.604†	19796.8	19423.8	502.90 ug/L	502.90 ppb	08:57:56
1	P 214.914†	4305.1	4019.4	2402.0 ug/L	2402.0 ppb	08:57:56
1	Pb 220.353†	3992.1	4000.4	500.75 ug/L	500.75 ppb	08:57:56
1	S 181.975 Axial†	1769.3	1706.2	2487.1 ug/L	2487.1 ppb	08:57:56
1	Sb 206.836†	1509.3	1446.9	523.82 ug/L	523.82 ppb	08:57:56
1	Se 196.026†	3817.3	3788.3	2570.7 ug/L	2570.7 ppb	08:57:56
1	Si 251.611†	148189.5	145644.1	4864.9 ug/L	4864.9 ppb	08:57:36
1	Sn 189.927†	2959.8	2911.5	541.14 ug/L	541.14 ppb	08:57:56
1	Ti 334.940†	320077.4	317097.1	514.15 ug/L	514.15 ppb	08:57:36
1	Tl 190.801†	1634.7	1647.1	531.33 ug/L	531.33 ppb	08:57:56
1	U 409.014†	14498.9	17284.9	499.52 ug/L	499.52 ppb	08:57:36
1	V 292.402†	70050.0	70667.2	520.45 ug/L	520.45 ppb	08:57:36
1	Zn 213.857†	53831.7	52398.0	512.27 ug/L	512.27 ppb	08:57:36
1	SiO2†	145824.7	143290.0	10206 ug/L	10206 ppb	08:58:54
2	Sc Radial	4811.9	4811.9	100 %		08:56:44
2	Y RADIAL	4975.9	4975.9	99.50 %		08:56:44
2	Al 396.153Radial†	5291.0	5437.1	5020.0 ug/L	5020.0 ppb	08:56:44
2	Ca 317.933Radial†	3050.9	3031.0	5023.7 ug/L	5023.7 ppb	08:57:04
2	Fe 238.204 Radial†	577.7	565.6	5161.6 ug/L	5161.6 ppb	08:57:04
2	K 766.490 Radial†	17103.1	14259.5	2513.6 ug/L	2513.6 ppb	08:56:44
2	Mg 279.077 IEC†	152.7	152.1	5391.7 ug/L	5391.7 ppb	08:57:04
2	Na 589.592 Radial†	7234.7	8305.6	2512.0 ug/L	2512.0 ppb	08:56:44
2	Sr 421.552†	76606.4	76524.0	536.64 ug/L	536.64 ppb	08:56:44
2	Sc 361.383	874400.4	874400.4	101.43 %		08:58:02
2	Y 371.029	716650.7	716650.7	100.29 %		08:58:02
2	Ag 328.068†	56642.2	55616.2	265.39 ug/L	265.39 ppb	08:58:02
2	As 188.979†	1029.0	1048.4	480.04 ug/L	480.04 ppb	08:58:22
2	B 249.677†	21625.1	21859.8	517.75 ug/L	517.75 ppb	08:58:02
2	Ba 233.527†	63717.7	62832.5	514.42 ug/L	514.42 ppb	08:58:02
2	Be 313.107†	708671.1	703036.1	263.03 ug/L	263.03 ppb	08:58:02
2	Cd 226.502†	41421.0	41049.9	487.93 ug/L	487.93 ppb	08:58:22
2	Co 228.616†	23660.7	23401.4	511.30 ug/L	511.30 ppb	08:58:22
2	Cr 267.716†	42839.7	42170.0	491.57 ug/L	491.57 ppb	08:58:02
2	Cu 324.752†	176507.0	168202.2	510.24 ug/L	510.24 ppb	08:58:02
2	Mn 257.610†	456480.6	449604.3	517.57 ug/L	517.57 ppb	08:58:02
2	Mo 202.031†	7331.5	7212.8	540.61 ug/L	540.61 ppb	08:58:22
2	Ni 231.604†	19758.4	19372.3	501.57 ug/L	501.57 ppb	08:58:22

2	P 214.914†	4308.7	4020.0	2402.4 ug/L	2402.4 ppb	08:58:22
2	Pb 220.353†	3972.4	3978.2	498.00 ug/L	498.00 ppb	08:58:22
2	S 181.975 Axial†	1774.7	1710.3	2493.1 ug/L	2493.1 ppb	08:58:22
2	Sb 206.836†	1488.2	1425.1	516.11 ug/L	516.11 ppb	08:58:22
2	Se 196.026†	3809.7	3778.2	2564.0 ug/L	2564.0 ppb	08:58:22
2	Si 251.611†	148461.9	145810.2	4870.5 ug/L	4870.5 ppb	08:58:02
2	Sn 189.927†	2945.4	2895.2	538.14 ug/L	538.14 ppb	08:58:22
2	Ti 334.940†	320677.0	317467.1	514.76 ug/L	514.76 ppb	08:58:02
2	Tl 190.801†	1622.3	1633.7	527.05 ug/L	527.05 ppb	08:58:22
2	U 409.014†	14225.6	17005.4	491.41 ug/L	491.41 ppb	08:58:02
2	V 292.402†	70052.8	70621.6	520.07 ug/L	520.07 ppb	08:58:02
2	Zn 213.857†	53923.1	52451.0	512.80 ug/L	512.80 ppb	08:58:02
2	SiO2†	147354.2	144697.2	10307 ug/L	10307 ppb	08:58:59
3	Sc Radial	4748.9	4748.9	98.8 %		08:57:09
3	Y RADIAL	4894.7	4894.7	97.88 %		08:57:09
3	Al 396.153Radial†	5232.4	5447.8	5029.8 ug/L	5029.8 ppb	08:57:09
3	Ca 317.933Radial†	3082.4	3103.3	5143.5 ug/L	5143.5 ppb	08:57:29
3	Fe 238.204 Radial†	583.7	579.3	5286.2 ug/L	5286.2 ppb	08:57:29
3	K 766.490 Radial†	16918.7	14299.5	2520.6 ug/L	2520.6 ppb	08:57:09
3	Mg 279.077 IEC†	155.2	156.7	5554.2 ug/L	5554.2 ppb	08:57:29
3	Na 589.592 Radial†	7120.5	8285.9	2506.1 ug/L	2506.1 ppb	08:57:09
3	Sr 421.552†	75948.0	76872.9	539.08 ug/L	539.08 ppb	08:57:09
3	Sc 361.383	869718.4	869718.4	100.88 %		08:58:28
3	Y 371.029	712306.4	712306.4	99.679 %		08:58:28
3	Ag 328.068†	56276.0	55553.9	265.13 ug/L	265.13 ppb	08:58:28
3	As 188.979†	1024.1	1049.0	480.31 ug/L	480.31 ppb	08:58:48
3	B 249.677†	21376.6	21728.2	514.59 ug/L	514.59 ppb	08:58:28
3	Ba 233.527†	63178.6	62636.4	512.82 ug/L	512.82 ppb	08:58:28
3	Be 313.107†	700526.7	698724.5	261.42 ug/L	261.42 ppb	08:58:28
3	Cd 226.502†	41512.2	41360.2	491.61 ug/L	491.61 ppb	08:58:48
3	Co 228.616†	23706.4	23572.3	515.04 ug/L	515.04 ppb	08:58:48
3	Cr 267.716†	42447.0	42008.1	489.68 ug/L	489.68 ppb	08:58:28
3	Cu 324.752†	175323.2	167965.5	509.52 ug/L	509.52 ppb	08:58:28
3	Mn 257.610†	453146.5	448722.3	516.56 ug/L	516.56 ppb	08:58:28
3	Mo 202.031†	7356.9	7276.8	545.42 ug/L	545.42 ppb	08:58:48
3	Ni 231.604†	19792.0	19510.5	505.14 ug/L	505.14 ppb	08:58:48
3	P 214.914†	4302.8	4037.0	2413.1 ug/L	2413.1 ppb	08:58:48
3	Pb 220.353†	3982.1	4008.9	501.83 ug/L	501.83 ppb	08:58:48
3	S 181.975 Axial†	1779.6	1724.6	2514.0 ug/L	2514.0 ppb	08:58:48
3	Sb 206.836†	1495.1	1439.8	521.41 ug/L	521.41 ppb	08:58:48
3	Se 196.026†	3808.7	3797.5	2577.4 ug/L	2577.4 ppb	08:58:48
3	Si 251.611†	147504.4	145649.0	4865.0 ug/L	4865.0 ppb	08:58:28
3	Sn 189.927†	2952.3	2917.8	542.33 ug/L	542.33 ppb	08:58:48
3	Ti 334.940†	318577.8	317088.3	514.14 ug/L	514.14 ppb	08:58:28
3	Tl 190.801†	1644.0	1663.8	536.68 ug/L	536.68 ppb	08:58:48
3	U 409.014†	14423.0	17276.6	499.27 ug/L	499.27 ppb	08:58:28
3	V 292.402†	69539.9	70484.9	519.15 ug/L	519.15 ppb	08:58:28
3	Zn 213.857†	53523.5	52341.0	511.67 ug/L	511.67 ppb	08:58:28
3	SiO2†	146121.4	144257.4	10275 ug/L	10275 ppb	08:59:04

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	872635.6	101.22 %	0.295			0.29%
Sc Radial	4822.2	100 %	1.6			1.64%
Y 371.029	715397.0	100.11 %	0.377			0.38%
Y RADIAL	4981.8	99.62 %	1.803			1.81%
Ag 328.068†	55606.6	265.35 ug/L	0.210	265.35 ppb	0.210	0.08%
QC value within limits for Ag 328.068 Recovery = 106.14%						
Al 396.153Radial†	5410.9	4995.6 ug/L	50.98	4995.6 ppb	50.98	1.02%
QC value within limits for Al 396.153Radial Recovery = 99.91%						
As 188.979†	1046.7	479.28 ug/L	1.556	479.28 ppb	1.556	0.32%
QC value within limits for As 188.979 Recovery = 95.86%						
B 249.677†	21806.2	516.46 ug/L	1.661	516.46 ppb	1.661	0.32%
QC value within limits for B 249.677 Recovery = 103.29%						
Ba 233.527†	62710.6	513.43 ug/L	0.868	513.43 ppb	0.868	0.17%
QC value within limits for Ba 233.527 Recovery = 102.69%						
Be 313.107†	701222.5	262.35 ug/L	0.833	262.35 ppb	0.833	0.32%
QC value within limits for Be 313.107 Recovery = 104.94%						
Ca 317.933Radial†	3046.0	5048.6 ug/L	85.23	5048.6 ppb	85.23	1.69%

QC value within limits for Ca 317.933 Radial Recovery = 100.97%

Cd 226.502†	41209.3	489.82 ug/L	1.842	489.82 ppb	1.842	0.38%
QC value within limits for Cd 226.502 Recovery = 97.96%						
Co 228.616†	23473.2	512.88 ug/L	1.941	512.88 ppb	1.941	0.38%
QC value within limits for Co 228.616 Recovery = 102.58%						
Cr 267.716†	42093.9	490.68 ug/L	0.948	490.68 ppb	0.948	0.19%
QC value within limits for Cr 267.716 Recovery = 98.14%						
Cu 324.752†	168128.5	510.01 ug/L	0.426	510.01 ppb	0.426	0.08%
QC value within limits for Cu 324.752 Recovery = 102.00%						
Fe 238.204 Radial†	570.0	5202.0 ug/L	72.97	5202.0 ppb	72.97	1.40%
QC value within limits for Fe 238.204 Radial Recovery = 104.04%						
K 766.490 Radial†	14175.2	2498.7 ug/L	32.06	2498.7 ppb	32.06	1.28%
QC value within limits for K 766.490 Radial Recovery = 99.95%						
Mg 279.077 IEC†	153.7	5448.0 ug/L	91.98	5448.0 ppb	91.98	1.69%
QC value within limits for Mg 279.077 IEC Recovery = 108.96%						
Mn 257.610†	449048.1	516.93 ug/L	0.555	516.93 ppb	0.555	0.11%
QC value within limits for Mn 257.610 Recovery = 103.39%						
Mo 202.031†	7244.8	543.01 ug/L	2.403	543.01 ppb	2.403	0.44%
QC value within limits for Mo 202.031 Recovery = 108.60%						
Na 589.592 Radial†	8259.1	2498.0 ug/L	19.43	2498.0 ppb	19.43	0.78%
QC value within limits for Na 589.592 Radial Recovery = 99.92%						
Ni 231.604†	19435.5	503.20 ug/L	1.808	503.20 ppb	1.808	0.36%
QC value within limits for Ni 231.604 Recovery = 100.64%						
P 214.914†	4025.5	2405.9 ug/L	6.28	2405.9 ppb	6.28	0.26%
QC value within limits for P 214.914 Recovery = 96.23%						
Pb 220.353†	3995.8	500.20 ug/L	1.976	500.20 ppb	1.976	0.40%
QC value within limits for Pb 220.353 Recovery = 100.04%						
S 181.975 Axial†	1713.7	2498.1 ug/L	14.09	2498.1 ppb	14.09	0.56%
QC value within limits for S 181.975 Axial Recovery = 99.92%						
Sb 206.836†	1437.3	520.45 ug/L	3.943	520.45 ppb	3.943	0.76%
QC value within limits for Sb 206.836 Recovery = 104.09%						
Se 196.026†	3788.0	2570.7 ug/L	6.70	2570.7 ppb	6.70	0.26%
QC value within limits for Se 196.026 Recovery = 102.83%						
Si 251.611†	145701.1	4866.8 ug/L	3.19	4866.8 ppb	3.19	0.07%
QC value within limits for Si 251.611 Recovery = 97.34%						
Sn 189.927†	2908.2	540.54 ug/L	2.164	540.54 ppb	2.164	0.40%
QC value within limits for Sn 189.927 Recovery = 108.11%						
Sr 421.552†	76266.4	534.83 ug/L	5.388	534.83 ppb	5.388	1.01%
QC value within limits for Sr 421.552 Recovery = 106.97%						
Ti 334.940†	317217.5	514.35 ug/L	0.353	514.35 ppb	0.353	0.07%
QC value within limits for Ti 334.940 Recovery = 102.87%						
Tl 190.801†	1648.2	531.69 ug/L	4.824	531.69 ppb	4.824	0.91%
QC value within limits for Tl 190.801 Recovery = 106.34%						
U 409.014†	17189.0	496.73 ug/L	4.609	496.73 ppb	4.609	0.93%
QC value within limits for U 409.014 Recovery = 99.35%						
V 292.402†	70591.2	519.89 ug/L	0.671	519.89 ppb	0.671	0.13%
QC value within limits for V 292.402 Recovery = 103.98%						
Zn 213.857†	52396.7	512.24 ug/L	0.563	512.24 ppb	0.563	0.11%
QC value within limits for Zn 213.857 Recovery = 102.45%						
SiO2†	144081.5	10263 ug/L	51.4	10263 ppb	51.4	0.50%
QC value within limits for SiO2 Recovery = 95.96%						

All analyte(s) passed QC.

Sequence No.: 7

Sample ID: ICB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 10

Date Collected: 2/11/2010 09:01:15

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	4463.4	4463.4	92.9 %		09:03:28
1	Y RADIAL	4975.7	4975.7	99.50 %		09:03:08
1	Al 396.153Radial†	-156.5	-16.9	-15.754 ug/L	-15.754 ppb	09:03:08
1	Ca 317.933Radial†	11.9	-3.9	-6.4667 ug/L	-6.4667 ppb	09:03:28
1	Fe 238.204 Radial†	10.6	-0.1	-0.8067 ug/L	-0.8067 ppb	09:03:28
1	K 766.490 Radial†	2826.0	217.8	38.456 ug/L	38.456 ppb	09:03:08
1	Mg 279.077 IEC†	0.2	-0.2	-6.2996 ug/L	-6.2996 ppb	09:03:28
1	Na 589.592 Radial†	-1053.8	-56.3	-17.043 ug/L	-17.043 ppb	09:03:08
1	Sr 421.552†	-24.9	-28.9	-0.2027 ug/L	-0.2027 ppb	09:03:08
1	Sc 361.383	857807.6	857807.6	99.503 %		09:04:25
1	Y 371.029	712009.8	712009.8	99.637 %		09:04:25
1	Ag 328.068†	317.2	90.0	0.4255 ug/L	0.4255 ppb	09:04:25
1	As 188.979†	-27.3	6.4	2.9004 ug/L	2.9004 ppb	09:04:45
1	B 249.677†	-220.3	317.7	7.5577 ug/L	7.5577 ppb	09:04:45
1	Ba 233.527†	-9.1	2.4	0.0201 ug/L	0.0201 ppb	09:04:45
1	Be 313.107†	-4212.6	105.0	0.0392 ug/L	0.0392 ppb	09:04:25
1	Cd 226.502†	-191.9	19.1	0.2266 ug/L	0.2266 ppb	09:04:45
1	Co 228.616†	-69.7	3.6	0.0807 ug/L	0.0807 ppb	09:04:45
1	Cr 267.716†	73.5	7.1	0.0833 ug/L	0.0833 ppb	09:04:45
1	Cu 324.752†	5711.7	-80.5	-0.2432 ug/L	-0.2432 ppb	09:04:25
1	Mn 257.610†	467.4	17.8	0.0207 ug/L	0.0207 ppb	09:04:45
1	Mo 202.031†	24.4	9.0	0.6720 ug/L	0.6720 ppb	09:04:45
1	Ni 231.604†	118.2	10.8	0.2797 ug/L	0.2797 ppb	09:04:45
1	P 214.914†	238.1	11.2	7.0228 ug/L	7.0228 ppb	09:04:45
1	Pb 220.353†	-52.2	9.2	1.1474 ug/L	1.1474 ppb	09:04:45
1	S 181.975 Axial†	38.2	-0.9	-1.3462 ug/L	-1.3462 ppb	09:04:45
1	Sb 206.836†	42.0	0.0	0.0608 ug/L	0.0608 ppb	09:04:45
1	Se 196.026†	-11.6	10.4	7.0202 ug/L	7.0202 ppb	09:04:45
1	Si 251.611†	592.7	33.4	1.1087 ug/L	1.1087 ppb	09:04:45
1	Sn 189.927†	18.7	10.1	1.8668 ug/L	1.8668 ppb	09:04:45
1	Ti 334.940†	-1285.2	11.5	0.0191 ug/L	0.0191 ppb	09:04:25
1	Tl 190.801†	-32.7	1.3	0.4275 ug/L	0.4275 ppb	09:04:45
1	U 409.014†	-3025.0	-60.0	-1.7407 ug/L	-1.7407 ppb	09:04:25
1	V 292.402†	-1534.5	12.5	0.0969 ug/L	0.0969 ppb	09:04:25
1	Zn 213.857†	734.2	24.6	0.2411 ug/L	0.2411 ppb	09:04:45
1	SiO2†	597.5	17.4	1.2203 ug/L	1.2203 ppb	09:05:41
2	Sc Radial	4447.0	4447.0	92.5 %		09:03:53
2	Y RADIAL	5012.0	5012.0	100.2 %		09:03:33
2	Al 396.153Radial†	-160.5	-21.9	-20.358 ug/L	-20.358 ppb	09:03:33
2	Ca 317.933Radial†	8.4	-7.6	-12.558 ug/L	-12.558 ppb	09:03:53
2	Fe 238.204 Radial†	11.4	0.8	7.5755 ug/L	7.5755 ppb	09:03:53
2	K 766.490 Radial†	2879.4	286.8	50.636 ug/L	50.636 ppb	09:03:33
2	Mg 279.077 IEC†	2.9	2.8	98.302 ug/L	98.302 ppb	09:03:53
2	Na 589.592 Radial†	-1083.3	-92.5	-27.971 ug/L	-27.971 ppb	09:03:33
2	Sr 421.552†	7.8	6.4	0.0448 ug/L	0.0448 ppb	09:03:33
2	Sc 361.383	852551.0	852551.0	98.893 %		09:04:50
2	Y 371.029	706796.0	706796.0	98.908 %		09:04:50
2	Ag 328.068†	303.4	78.0	0.3677 ug/L	0.3677 ppb	09:04:50
2	As 188.979†	-27.4	6.2	2.8015 ug/L	2.8015 ppb	09:05:10
2	B 249.677†	-267.0	269.1	6.4009 ug/L	6.4009 ppb	09:05:10
2	Ba 233.527†	-2.6	8.9	0.0730 ug/L	0.0730 ppb	09:05:10
2	Be 313.107†	-4306.5	-16.0	-0.0057 ug/L	-0.0057 ppb	09:04:50
2	Cd 226.502†	-200.8	8.9	0.1051 ug/L	0.1051 ppb	09:05:10
2	Co 228.616†	-76.7	-3.9	-0.0842 ug/L	-0.0842 ppb	09:05:10
2	Cr 267.716†	55.4	-10.8	-0.1268 ug/L	-0.1268 ppb	09:05:10
2	Cu 324.752†	5786.9	30.9	0.0926 ug/L	0.0926 ppb	09:04:50
2	Mn 257.610†	465.2	18.5	0.0180 ug/L	0.0180 ppb	09:05:10
2	Mo 202.031†	17.5	2.1	0.1589 ug/L	0.1589 ppb	09:05:10
2	Ni 231.604†	99.4	-7.5	-0.1939 ug/L	-0.1939 ppb	09:05:10

2	P 214.914†	221.7	-3.9	-2.4313 ug/L	-2.4313 ppb	09:05:10
2	Pb 220.353†	-56.7	4.4	0.5401 ug/L	0.5401 ppb	09:05:10
2	S 181.975 Axial†	40.0	1.1	1.6221 ug/L	1.6221 ppb	09:05:10
2	Sb 206.836†	31.7	-10.0	-3.5083 ug/L	-3.5083 ppb	09:05:10
2	Se 196.026†	-16.2	5.7	3.8786 ug/L	3.8786 ppb	09:05:10
2	Si 251.611†	585.5	29.8	0.9939 ug/L	0.9939 ppb	09:05:10
2	Sn 189.927†	5.5	-3.1	-0.5828 ug/L	-0.5828 ppb	09:05:10
2	Ti 334.940†	-1211.4	78.2	0.1160 ug/L	0.1160 ppb	09:04:50
2	Tl 190.801†	-27.7	6.2	1.9824 ug/L	1.9824 ppb	09:05:10
2	U 409.014†	-2853.3	94.8	2.7475 ug/L	2.7475 ppb	09:04:50
2	V 292.402†	-1545.4	-8.0	-0.0500 ug/L	-0.0500 ppb	09:04:50
2	Zn 213.857†	713.3	8.1	0.0796 ug/L	0.0796 ppb	09:05:10
2	SiO2†	598.4	21.9	1.5600 ug/L	1.5600 ppb	09:05:46
3	Sc Radial	4475.5	4475.5	93.1 %		09:04:18
3	Y RADIAL	5015.8	5015.8	100.3 %		09:03:58
3	Al 396.153Radial†	-137.6	3.8	3.5080 ug/L	3.5080 ppb	09:03:58
3	Ca 317.933Radial†	18.6	3.2	5.3351 ug/L	5.3351 ppb	09:04:18
3	Fe 238.204 Radial†	12.0	1.4	12.650 ug/L	12.650 ppb	09:04:18
3	K 766.490 Radial†	2880.9	268.5	47.410 ug/L	47.410 ppb	09:03:58
3	Mg 279.077 IEC†	1.0	0.6	22.919 ug/L	22.919 ppb	09:04:18
3	Na 589.592 Radial†	-1130.6	-135.8	-41.067 ug/L	-41.067 ppb	09:03:58
3	Sr 421.552†	-25.0	-28.9	-0.2030 ug/L	-0.2030 ppb	09:03:58
3	Sc 361.383	861208.5	861208.5	99.897 %		09:05:15
3	Y 371.029	713423.0	713423.0	99.835 %		09:05:15
3	Ag 328.068†	278.9	50.4	0.2438 ug/L	0.2438 ppb	09:05:15
3	As 188.979†	-15.0	18.9	8.5754 ug/L	8.5754 ppb	09:05:36
3	B 249.677†	-286.4	252.4	6.0010 ug/L	6.0010 ppb	09:05:36
3	Ba 233.527†	2.0	13.6	0.1121 ug/L	0.1121 ppb	09:05:36
3	Be 313.107†	-4302.7	31.6	0.0116 ug/L	0.0116 ppb	09:05:15
3	Cd 226.502†	-200.1	11.6	0.1370 ug/L	0.1370 ppb	09:05:36
3	Co 228.616†	-61.8	11.9	0.2603 ug/L	0.2603 ppb	09:05:36
3	Cr 267.716†	73.8	7.1	0.0838 ug/L	0.0838 ppb	09:05:36
3	Cu 324.752†	5825.9	11.2	0.0349 ug/L	0.0349 ppb	09:05:15
3	Mn 257.610†	475.0	23.6	0.0275 ug/L	0.0275 ppb	09:05:36
3	Mo 202.031†	18.9	3.4	0.2523 ug/L	0.2523 ppb	09:05:36
3	Ni 231.604†	112.3	4.4	0.1144 ug/L	0.1144 ppb	09:05:36
3	P 214.914†	228.8	1.0	0.6167 ug/L	0.6167 ppb	09:05:36
3	Pb 220.353†	-60.4	1.3	0.1626 ug/L	0.1626 ppb	09:05:36
3	S 181.975 Axial†	44.2	4.9	7.1398 ug/L	7.1398 ppb	09:05:36
3	Sb 206.836†	38.4	-3.7	-1.2850 ug/L	-1.2850 ppb	09:05:36
3	Se 196.026†	-15.1	7.0	4.7421 ug/L	4.7421 ppb	09:05:36
3	Si 251.611†	586.3	24.6	0.8199 ug/L	0.8199 ppb	09:05:36
3	Sn 189.927†	12.2	3.5	0.6598 ug/L	0.6598 ppb	09:05:36
3	Ti 334.940†	-1333.3	-31.5	-0.0520 ug/L	-0.0520 ppb	09:05:15
3	Tl 190.801†	-25.1	9.1	2.9150 ug/L	2.9150 ppb	09:05:36
3	U 409.014†	-2998.1	-21.1	-0.6147 ug/L	-0.6147 ppb	09:05:15
3	V 292.402†	-1496.3	56.8	0.4134 ug/L	0.4134 ppb	09:05:15
3	Zn 213.857†	712.6	0.1	-0.0016 ug/L	-0.0016 ppb	09:05:36
3	SiO2†	614.9	32.4	2.3073 ug/L	2.3073 ppb	09:05:51

Mean Data: ICB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	857189.0	99.431 %		0.5059			0.51%
Sc Radial	4462.0	92.8 %		0.30			0.32%
Y 371.029	710743.0	99.460 %		0.4884			0.49%
Y RADIAL	5001.2	100.0 %		0.44			0.44%
Ag 328.068†	72.8	0.3457 ug/L		0.09286	0.3457 ppb	0.09286	26.86%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	-11.7	-10.868 ug/L		12.6609	-10.868 ppb	12.6609	116.50%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	10.5	4.7591 ug/L		3.30538	4.7591 ppb	3.30538	69.45%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	279.7	6.6532 ug/L		0.80844	6.6532 ppb	0.80844	12.15%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	8.3	0.0684 ug/L		0.04618	0.0684 ppb	0.04618	67.55%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	40.2	0.0151 ug/L		0.02261	0.0151 ppb	0.02261	150.21%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	-2.8	-4.5632 ug/L		9.09720	-4.5632 ppb	9.09720	199.36%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd 226.502†	13.2	0.1563 ug/L	0.06300	0.1563 ppb	0.06300	40.32%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	3.9	0.0856 ug/L	0.17231	0.0856 ppb	0.17231	201.24%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	1.1	0.0135 ug/L	0.12144	0.0135 ppb	0.12144	902.69%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	-12.8	-0.0386 ug/L	0.17956	-0.0386 ppb	0.17956	465.74%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	0.7	6.4729 ug/L	6.79576	6.4729 ppb	6.79576	104.99%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	257.7	45.501 ug/L	6.3105	45.501 ppb	6.3105	13.87%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	1.1	38.307 ug/L	53.9719	38.307 ppb	53.9719	140.89%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	20.0	0.0221 ug/L	0.00489	0.0221 ppb	0.00489	22.17%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	4.8	0.3611 ug/L	0.27332	0.3611 ppb	0.27332	75.69%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	-94.9	-28.694 ug/L	12.0284	-28.694 ppb	12.0284	41.92%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	2.6	0.0667 ug/L	0.24039	0.0667 ppb	0.24039	360.32%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	2.8	1.7361 ug/L	4.82541	1.7361 ppb	4.82541	277.95%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	5.0	0.6167 ug/L	0.49687	0.6167 ppb	0.49687	80.57%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	1.7	2.4719 ug/L	4.30637	2.4719 ppb	4.30637	174.21%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	-4.6	-1.5775 ug/L	1.80244	-1.5775 ppb	1.80244	114.26%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	7.7	5.2136 ug/L	1.62300	5.2136 ppb	1.62300	31.13%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	29.3	0.9742 ug/L	0.14539	0.9742 ppb	0.14539	14.92%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	3.5	0.6479 ug/L	1.22488	0.6479 ppb	1.22488	189.05%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	-17.2	-0.1203 ug/L	0.14301	-0.1203 ppb	0.14301	118.85%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	19.4	0.0277 ug/L	0.08430	0.0277 ppb	0.08430	304.33%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	5.5	1.7750 ug/L	1.25664	1.7750 ppb	1.25664	70.80%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	4.5	0.1307 ug/L	2.33507	0.1307 ppb	2.33507	>999.9%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	20.4	0.1534 ug/L	0.23680	0.1534 ppb	0.23680	154.34%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	10.9	0.1064 ug/L	0.12355	0.1064 ppb	0.12355	116.12%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	23.9	1.6959 ug/L	0.55610	1.6959 ppb	0.55610	32.79%	
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: 2/11/2010 09:08:03

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	4822.5	4822.5	100 %		09:09:56
1	Y RADIAL	5023.6	5023.6	100.5 %		09:09:56
1	Al 396.153Radial†	60.8	212.2	196.44 ug/L	196.44 ppb	09:09:56
1	Ca 317.933Radial†	140.1	122.9	203.75 ug/L	203.75 ppb	09:10:16
1	Fe 238.204 Radial†	22.7	11.2	101.69 ug/L	101.69 ppb	09:10:16
1	K 766.490 Radial†	3634.0	796.6	140.40 ug/L	140.40 ppb	09:09:56
1	Mg 279.077 IEC†	10.4	9.9	351.66 ug/L	351.66 ppb	09:10:16
1	Na 589.592 Radial†	-48.1	1030.5	311.68 ug/L	311.68 ppb	09:09:56
1	Sr 421.552†	720.1	715.6	5.0172 ug/L	5.0172 ppb	09:09:56
1	Sc 361.383	845854.5	845854.5	98.116 %		09:11:13
1	Y 371.029	711995.2	711995.2	99.635 %		09:11:13
1	Ag 328.068†	1392.8	1190.8	5.6181 ug/L	5.6181 ppb	09:11:13
1	As 188.979†	38.4	73.0	33.161 ug/L	33.161 ppb	09:11:33
1	B 249.677†	1668.3	2239.4	53.244 ug/L	53.244 ppb	09:11:13
1	Ba 233.527†	607.3	630.6	5.1636 ug/L	5.1636 ppb	09:11:33
1	Be 313.107†	8856.1	13364.9	4.9893 ug/L	4.9893 ppb	09:11:13
1	Cd 226.502†	217.7	433.8	5.1609 ug/L	5.1609 ppb	09:11:33
1	Co 228.616†	159.1	235.9	5.1655 ug/L	5.1655 ppb	09:11:33
1	Cr 267.716†	478.1	420.5	4.8831 ug/L	4.8831 ppb	09:11:33
1	Cu 324.752†	9191.8	3547.5	10.737 ug/L	10.737 ppb	09:11:13
1	Mn 257.610†	9505.9	9236.5	10.622 ug/L	10.622 ppb	09:11:13
1	Mo 202.031†	154.9	142.3	10.670 ug/L	10.670 ppb	09:11:33
1	Ni 231.604†	298.0	195.7	5.0674 ug/L	5.0674 ppb	09:11:33
1	P 214.914†	465.2	246.1	151.07 ug/L	151.07 ppb	09:11:33
1	Pb 220.353†	24.8	87.0	10.907 ug/L	10.907 ppb	09:11:33
1	S 181.975 Axial†	105.7	68.4	99.701 ug/L	99.701 ppb	09:11:33
1	Sb 206.836†	68.4	27.6	10.005 ug/L	10.005 ppb	09:11:33
1	Se 196.026†	30.6	53.3	36.307 ug/L	36.307 ppb	09:11:33
1	Si 251.611†	3421.7	2925.2	97.711 ug/L	97.711 ppb	09:11:33
1	Sn 189.927†	69.3	62.0	11.534 ug/L	11.534 ppb	09:11:33
1	Ti 334.940†	1750.6	3087.4	4.9811 ug/L	4.9811 ppb	09:11:13
1	Tl 190.801†	36.1	71.0	22.819 ug/L	22.819 ppb	09:11:33
1	U 409.014†	-1119.5	1839.1	53.304 ug/L	53.304 ppb	09:11:13
1	V 292.402†	-876.1	661.7	5.0428 ug/L	5.0428 ppb	09:11:13
1	Zn 213.857†	1733.3	1053.3	10.330 ug/L	10.330 ppb	09:11:33
1	SiO2†	3516.5	3000.9	213.77 ug/L	213.77 ppb	09:12:29
2	Sc Radial	4686.9	4686.9	97.5 %		09:10:21
2	Y RADIAL	4883.4	4883.4	97.65 %		09:10:21
2	Al 396.153Radial†	45.9	198.7	183.91 ug/L	183.91 ppb	09:10:21
2	Ca 317.933Radial†	135.0	121.8	201.83 ug/L	201.83 ppb	09:10:41
2	Fe 238.204 Radial†	21.2	10.3	93.435 ug/L	93.435 ppb	09:10:41
2	K 766.490 Radial†	3692.7	961.6	169.54 ug/L	169.54 ppb	09:10:21
2	Mg 279.077 IEC†	10.7	10.6	375.58 ug/L	375.58 ppb	09:10:41
2	Na 589.592 Radial†	-66.5	1010.3	305.56 ug/L	305.56 ppb	09:10:21
2	Sr 421.552†	705.2	721.2	5.0561 ug/L	5.0561 ppb	09:10:21
2	Sc 361.383	843797.3	843797.3	97.878 %		09:11:38
2	Y 371.029	708306.1	708306.1	99.119 %		09:11:38
2	Ag 328.068†	1414.5	1216.4	5.7439 ug/L	5.7439 ppb	09:11:38
2	As 188.979†	36.6	71.2	32.359 ug/L	32.359 ppb	09:11:58
2	B 249.677†	1656.1	2231.0	53.046 ug/L	53.046 ppb	09:11:38
2	Ba 233.527†	605.4	630.1	5.1602 ug/L	5.1602 ppb	09:11:58
2	Be 313.107†	8754.4	13282.9	4.9592 ug/L	4.9592 ppb	09:11:38
2	Cd 226.502†	222.3	439.0	5.2221 ug/L	5.2221 ppb	09:11:58
2	Co 228.616†	155.9	233.0	5.0992 ug/L	5.0992 ppb	09:11:58
2	Cr 267.716†	511.4	455.8	5.2970 ug/L	5.2970 ppb	09:11:58
2	Cu 324.752†	9154.0	3531.8	10.693 ug/L	10.693 ppb	09:11:38
2	Mn 257.610†	9361.9	9113.0	10.479 ug/L	10.479 ppb	09:11:38
2	Mo 202.031†	142.1	129.7	9.7192 ug/L	9.7192 ppb	09:11:58
2	Ni 231.604†	313.3	212.1	5.4916 ug/L	5.4916 ppb	09:11:58

2	P 214.914†	470.4	252.5	155.07 ug/L	155.07 ppb	09:11:58
2	Pb 220.353†	11.7	73.7	9.2442 ug/L	9.2442 ppb	09:11:58
2	S 181.975 Axial†	106.5	69.5	101.24 ug/L	101.24 ppb	09:11:58
2	Sb 206.836†	54.4	13.4	5.0308 ug/L	5.0308 ppb	09:11:58
2	Se 196.026†	29.1	51.9	35.283 ug/L	35.283 ppb	09:11:58
2	Si 251.611†	3426.7	2938.7	98.177 ug/L	98.177 ppb	09:11:58
2	Sn 189.927†	64.1	56.8	10.576 ug/L	10.576 ppb	09:11:58
2	Ti 334.940†	1840.2	3183.3	5.1376 ug/L	5.1376 ppb	09:11:38
2	Tl 190.801†	31.2	66.0	21.222 ug/L	21.222 ppb	09:11:58
2	U 409.014†	-1373.8	1576.5	45.691 ug/L	45.691 ppb	09:11:38
2	V 292.402†	-815.8	721.2	5.4482 ug/L	5.4482 ppb	09:11:38
2	Zn 213.857†	1742.6	1067.1	10.464 ug/L	10.464 ppb	09:11:58
2	SiO2†	3498.1	2990.8	213.07 ug/L	213.07 ppb	09:12:34
3	Sc Radial	4965.1	4965.1	103 %		09:10:46
3	Y RADIAL	5174.6	5174.6	103.5 %		09:10:46
3	Al 396.153Radial†	76.0	225.2	208.49 ug/L	208.49 ppb	09:10:46
3	Ca 317.933Radial†	141.0	119.8	198.50 ug/L	198.50 ppb	09:11:06
3	Fe 238.204 Radial†	19.2	7.1	64.842 ug/L	64.842 ppb	09:11:06
3	K 766.490 Radial†	3608.1	667.5	117.63 ug/L	117.63 ppb	09:10:46
3	Mg 279.077 IEC†	11.2	10.4	368.05 ug/L	368.05 ppb	09:11:06
3	Na 589.592 Radial†	-110.4	971.7	293.88 ug/L	293.88 ppb	09:10:46
3	Sr 421.552†	768.4	741.9	5.2013 ug/L	5.2013 ppb	09:10:46
3	Sc 361.383	838794.7	838794.7	97.297 %		09:12:04
3	Y 371.029	701118.5	701118.5	98.113 %		09:12:04
3	Ag 328.068†	1246.7	1052.6	4.9594 ug/L	4.9594 ppb	09:12:04
3	As 188.979†	33.1	67.9	30.824 ug/L	30.824 ppb	09:12:24
3	B 249.677†	1601.6	2185.1	51.959 ug/L	51.959 ppb	09:12:04
3	Ba 233.527†	601.2	629.5	5.1542 ug/L	5.1542 ppb	09:12:24
3	Be 313.107†	8736.0	13317.4	4.9714 ug/L	4.9714 ppb	09:12:04
3	Cd 226.502†	217.1	435.0	5.1785 ug/L	5.1785 ppb	09:12:24
3	Co 228.616†	152.0	229.9	5.0349 ug/L	5.0349 ppb	09:12:24
3	Cr 267.716†	502.8	450.0	5.2278 ug/L	5.2278 ppb	09:12:24
3	Cu 324.752†	9046.5	3477.1	10.524 ug/L	10.524 ppb	09:12:04
3	Mn 257.610†	9345.5	9153.2	10.522 ug/L	10.522 ppb	09:12:04
3	Mo 202.031†	146.5	135.1	10.122 ug/L	10.122 ppb	09:12:24
3	Ni 231.604†	312.8	213.4	5.5264 ug/L	5.5264 ppb	09:12:24
3	P 214.914†	473.4	258.4	158.79 ug/L	158.79 ppb	09:12:24
3	Pb 220.353†	22.3	84.6	10.621 ug/L	10.621 ppb	09:12:24
3	S 181.975 Axial†	107.8	71.5	104.16 ug/L	104.16 ppb	09:12:24
3	Sb 206.836†	74.3	34.2	12.248 ug/L	12.248 ppb	09:12:24
3	Se 196.026†	28.1	51.0	34.616 ug/L	34.616 ppb	09:12:24
3	Si 251.611†	3427.0	2959.9	98.881 ug/L	98.881 ppb	09:12:24
3	Sn 189.927†	46.9	39.6	7.3719 ug/L	7.3719 ppb	09:12:24
3	Ti 334.940†	1667.1	3016.6	4.8658 ug/L	4.8658 ppb	09:12:04
3	Tl 190.801†	24.2	59.1	18.988 ug/L	18.988 ppb	09:12:24
3	U 409.014†	-1242.4	1703.2	49.367 ug/L	49.367 ppb	09:12:04
3	V 292.402†	-814.4	717.6	5.4397 ug/L	5.4397 ppb	09:12:04
3	Zn 213.857†	1742.7	1077.9	10.574 ug/L	10.574 ppb	09:12:24
3	SiO2†	3544.6	3059.9	217.99 ug/L	217.99 ppb	09:12:39

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	842815.5	97.764 %	0.4212			0.43%
Sc Radial	4824.8	100 %	2.9			2.88%
Y 371.029	707139.9	98.956 %	0.7740			0.78%
Y RADIAL	5027.2	100.5 %	2.91			2.90%
Ag 328.068†	1153.3	5.4405 ug/L	0.42133	5.4405 ppb	0.42133	7.74%
QC value within limits for Ag 328.068 Recovery = 108.81%						
Al 396.153Radial†	212.0	196.28 ug/L	12.289	196.28 ppb	12.289	6.26%
QC value within limits for Al 396.153Radial Recovery = 98.14%						
As 188.979†	70.7	32.115 ug/L	1.1878	32.115 ppb	1.1878	3.70%
QC value within limits for As 188.979 Recovery = 107.05%						
B 249.677†	2218.5	52.750 ug/L	0.6922	52.750 ppb	0.6922	1.31%
QC value within limits for B 249.677 Recovery = 105.50%						
Ba 233.527†	630.1	5.1594 ug/L	0.00474	5.1594 ppb	0.00474	0.09%
QC value within limits for Ba 233.527 Recovery = 103.19%						
Be 313.107†	13321.7	4.9733 ug/L	0.01517	4.9733 ppb	0.01517	0.31%
QC value within limits for Be 313.107 Recovery = 99.47%						
Ca 317.933Radial†	121.5	201.36 ug/L	2.655	201.36 ppb	2.655	1.32%

QC value within limits for Ca 317.933 Radial Recovery = 100.68%

Cd 226.502†	436.0	5.1872 ug/L	0.03152	5.1872 ppb	0.03152	0.61%
QC value within limits for Cd 226.502 Recovery = 103.74%						
Co 228.616†	232.9	5.0999 ug/L	0.06531	5.0999 ppb	0.06531	1.28%
QC value within limits for Co 228.616 Recovery = 102.00%						
Cr 267.716†	442.1	5.1360 ug/L	0.22170	5.1360 ppb	0.22170	4.32%
QC value within limits for Cr 267.716 Recovery = 102.72%						
Cu 324.752†	3518.8	10.651 ug/L	0.1127	10.651 ppb	0.1127	1.06%
QC value within limits for Cu 324.752 Recovery = 106.51%						
Fe 238.204 Radial†	9.5	86.655 ug/L	19.3364	86.655 ppb	19.3364	22.31%
QC value within limits for Fe 238.204 Radial Recovery = 86.66%						
K 766.490 Radial†	808.5	142.52 ug/L	26.020	142.52 ppb	26.020	18.26%
QC value within limits for K 766.490 Radial Recovery = 95.01%						
Mg 279.077 IEC†	10.3	365.10 ug/L	12.231	365.10 ppb	12.231	3.35%
QC value within limits for Mg 279.077 IEC Recovery = 121.70%						
Mn 257.610†	9167.6	10.541 ug/L	0.0738	10.541 ppb	0.0738	0.70%
QC value within limits for Mn 257.610 Recovery = 105.41%						
Mo 202.031†	135.7	10.170 ug/L	0.4772	10.170 ppb	0.4772	4.69%
QC value within limits for Mo 202.031 Recovery = 101.70%						
Na 589.592 Radial†	1004.2	303.71 ug/L	9.044	303.71 ppb	9.044	2.98%
QC value within limits for Na 589.592 Radial Recovery = 101.24%						
Ni 231.604†	207.1	5.3618 ug/L	0.25553	5.3618 ppb	0.25553	4.77%
QC value within limits for Ni 231.604 Recovery = 107.24%						
P 214.914†	252.3	154.98 ug/L	3.862	154.98 ppb	3.862	2.49%
QC value within limits for P 214.914 Recovery = 103.32%						
Pb 220.353†	81.8	10.257 ug/L	0.8890	10.257 ppb	0.8890	8.67%
QC value within limits for Pb 220.353 Recovery = 102.57%						
S 181.975 Axial†	69.8	101.70 ug/L	2.262	101.70 ppb	2.262	2.22%
QC value within limits for S 181.975 Axial Recovery = 101.70%						
Sb 206.836†	25.1	9.0946 ug/L	3.69377	9.0946 ppb	3.69377	40.61%
QC value within limits for Sb 206.836 Recovery = 90.95%						
Se 196.026†	52.1	35.402 ug/L	0.8518	35.402 ppb	0.8518	2.41%
QC value within limits for Se 196.026 Recovery = 118.01%						
Si 251.611†	2941.3	98.256 ug/L	0.5889	98.256 ppb	0.5889	0.60%
QC value within limits for Si 251.611 Recovery = 98.26%						
Sn 189.927†	52.8	9.8272 ug/L	2.17961	9.8272 ppb	2.17961	22.18%
QC value within limits for Sn 189.927 Recovery = 98.27%						
Sr 421.552†	726.2	5.0915 ug/L	0.09704	5.0915 ppb	0.09704	1.91%
QC value within limits for Sr 421.552 Recovery = 101.83%						
Ti 334.940†	3095.8	4.9948 ug/L	0.13641	4.9948 ppb	0.13641	2.73%
QC value within limits for Ti 334.940 Recovery = 99.90%						
Tl 190.801†	65.4	21.010 ug/L	1.9247	21.010 ppb	1.9247	9.16%
QC value within limits for Tl 190.801 Recovery = 105.05%						
U 409.014†	1706.3	49.454 ug/L	3.8076	49.454 ppb	3.8076	7.70%
QC value within limits for U 409.014 Recovery = 98.91%						
V 292.402†	700.2	5.3102 ug/L	0.23160	5.3102 ppb	0.23160	4.36%
QC value within limits for V 292.402 Recovery = 106.20%						
Zn 213.857†	1066.1	10.456 ug/L	0.1226	10.456 ppb	0.1226	1.17%
QC value within limits for Zn 213.857 Recovery = 104.56%						
SiO2†	3017.2	214.94 ug/L	2.662	214.94 ppb	2.662	1.24%
QC value within limits for SiO2 Recovery = 100.91%						

All analyte(s) passed QC.

Sequence No.: 9
 Sample ID: ICSA
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 13
 Date Collected: 2/11/2010 09:14:51
 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	4326.5	4326.5	90.0 %		09:16:49
1	Y RADIAL	4511.2	4511.2	90.21 %		09:16:49
1	Al 396.153Radial†	503296.9	559331.5	519120 ug/L	519120 ppb	09:16:44
1	Ca 317.933Radial†	262031.1	291108.8	482490 ug/L	482490 ppb	09:16:44
1	Fe 238.204 Radial†	18673.8	20735.8	188670 ug/L	188670 ppb	09:16:49
1	K 766.490 Radial†	2498.4	-49.8	-170.18 ug/L	-170.18 ppb	09:16:44
1	Mg 279.077 IEC†	12536.8	13928.4	493450 ug/L	493450 ppb	09:16:49
1	Na 589.592 Radial†	-877.7	103.4	31.258 ug/L	31.258 ppb	09:16:49
1	Sr 421.552†	499.4	552.7	0.2735 ug/L	0.2735 ppb	09:16:49
1	Sc 361.383	756661.2	756661.2	87.770 %		09:17:16
1	Y 371.029	614842.6	614842.6	86.040 %		09:17:16
1	Ag 328.068†	-9783.5	-11375.5	3.5636 ug/L	3.5636 ppb	09:17:16
1	As 188.979†	-79.7	-57.0	18.184 ug/L	18.184 ppb	09:17:36
1	B 249.677†	428.7	1027.5	-6.1975 ug/L	-6.1975 ppb	09:17:16
1	Ba 233.527†	-574.5	-642.9	0.5243 ug/L	0.5243 ppb	09:17:36
1	Be 313.107†	-4762.2	-1087.1	-0.4615 ug/L	-0.4615 ppb	09:17:16
1	Cd 226.502†	1149.7	1521.8	-1.3855 ug/L	-1.3855 ppb	09:17:36
1	Co 228.616†	-17.9	53.3	-1.5563 ug/L	-1.5563 ppb	09:17:36
1	Cr 267.716†	-103.9	-185.2	1.5172 ug/L	1.5172 ppb	09:17:36
1	Cu 324.752†	2878.3	-2541.3	2.2550 ug/L	2.2550 ppb	09:17:16
1	Mn 257.610†	-120.4	-589.1	-2.2279 ug/L	-2.2279 ppb	09:17:16
1	Mo 202.031†	-219.4	-265.5	0.5037 ug/L	0.5037 ppb	09:17:36
1	Ni 231.604†	217.6	139.9	3.6229 ug/L	3.6229 ppb	09:17:36
1	P 214.914†	176.6	-26.9	-38.446 ug/L	-38.446 ppb	09:17:36
1	Pb 220.353†	-784.0	-831.5	-1.7906 ug/L	-1.7906 ppb	09:17:36
1	S 181.975 Axial†	48.9	16.3	-73.463 ug/L	-73.463 ppb	09:17:36
1	Sb 206.836†	74.6	42.8	-2.6229 ug/L	-2.6229 ppb	09:17:36
1	Se 196.026†	-908.7	-1013.2	-57.581 ug/L	-57.581 ppb	09:17:36
1	Si 251.611†	419.3	-84.6	-2.5834 ug/L	-2.5834 ppb	09:17:36
1	Sn 189.927†	-350.6	-408.1	0.7610 ug/L	0.7610 ppb	09:17:36
1	Ti 334.940†	-14629.1	-15364.3	-0.5425 ug/L	-0.5425 ppb	09:17:16
1	Tl 190.801†	-75.8	-52.1	-16.947 ug/L	-16.947 ppb	09:17:36
1	U 409.014†	-1407.2	1376.7	18.417 ug/L	18.417 ppb	09:17:16
1	V 292.402†	548.1	2179.1	-2.2965 ug/L	-2.2965 ppb	09:17:36
1	Zn 213.857†	3040.2	2750.6	-1.1107 ug/L	-1.1107 ppb	09:17:36
1	SiO2†	425.3	-98.5	-6.4871 ug/L	-6.4871 ppb	09:18:33
2	Sc Radial	4271.5	4271.5	88.9 %		09:16:59
2	Y RADIAL	4476.6	4476.6	89.52 %		09:16:59
2	Al 396.153Radial†	512980.6	577434.4	535930 ug/L	535930 ppb	09:16:54
2	Ca 317.933Radial†	265619.6	298898.4	495400 ug/L	495400 ppb	09:16:54
2	Fe 238.204 Radial†	18581.2	20898.9	190150 ug/L	190150 ppb	09:16:59
2	K 766.490 Radial†	2359.4	-170.5	-195.80 ug/L	-195.80 ppb	09:16:54
2	Mg 279.077 IEC†	12452.8	14013.4	496460 ug/L	496460 ppb	09:16:59
2	Na 589.592 Radial†	-912.1	52.0	15.737 ug/L	15.737 ppb	09:16:59
2	Sr 421.552†	480.6	538.7	0.0789 ug/L	0.0789 ppb	09:16:59
2	Sc 361.383	754714.5	754714.5	87.544 %		09:17:42
2	Y 371.029	615095.6	615095.6	86.075 %		09:17:42
2	Ag 328.068†	-9621.7	-11219.5	4.6281 ug/L	4.6281 ppb	09:17:42
2	As 188.979†	-90.1	-69.1	13.027 ug/L	13.027 ppb	09:18:02
2	B 249.677†	264.3	841.0	-10.877 ug/L	-10.877 ppb	09:17:42
2	Ba 233.527†	-619.6	-696.2	0.1342 ug/L	0.1342 ppb	09:18:02
2	Be 313.107†	-4764.6	-1103.8	-0.4669 ug/L	-0.4669 ppb	09:17:42
2	Cd 226.502†	1162.9	1540.2	-1.3211 ug/L	-1.3211 ppb	09:18:02
2	Co 228.616†	-17.6	53.6	-1.5760 ug/L	-1.5760 ppb	09:18:02
2	Cr 267.716†	-112.5	-195.2	1.4311 ug/L	1.4311 ppb	09:18:02
2	Cu 324.752†	2755.3	-2673.4	1.9361 ug/L	1.9361 ppb	09:17:42
2	Mn 257.610†	-225.9	-710.0	-2.3435 ug/L	-2.3435 ppb	09:17:42
2	Mo 202.031†	-239.3	-288.8	-0.9757 ug/L	-0.9757 ppb	09:18:02
2	Ni 231.604†	194.4	114.0	2.9532 ug/L	2.9532 ppb	09:18:02

2	P 214.914†	170.5	-33.3	-39.381 ug/L	-39.381 ppb	09:18:02
2	Pb 220.353†	-772.0	-820.1	3.3215 ug/L	3.3215 ppb	09:18:02
2	S 181.975 Axial†	56.3	25.0	-64.046 ug/L	-64.046 ppb	09:18:02
2	Sb 206.836†	83.8	53.5	0.5867 ug/L	0.5867 ppb	09:18:02
2	Se 196.026†	-902.9	-1009.2	-49.581 ug/L	-49.581 ppb	09:18:02
2	Si 251.611†	461.2	-35.5	-0.9207 ug/L	-0.9207 ppb	09:18:02
2	Sn 189.927†	-353.7	-412.8	1.8855 ug/L	1.8855 ppb	09:18:02
2	Ti 334.940†	-14406.9	-15153.5	1.2878 ug/L	1.2878 ppb	09:17:42
2	Tl 190.801†	-66.8	-42.1	-13.742 ug/L	-13.742 ppb	09:18:02
2	U 409.014†	-1586.2	1168.1	12.200 ug/L	12.200 ppb	09:17:42
2	V 292.402†	513.6	2141.3	-2.7653 ug/L	-2.7653 ppb	09:18:02
2	Zn 213.857†	3036.5	2755.3	-1.2816 ug/L	-1.2816 ppb	09:18:02
2	SiO2†	470.7	-45.5	-2.6559 ug/L	-2.6559 ppb	09:18:38
3	Sc Radial	4258.1	4258.1	88.6 %		09:17:10
3	Y RADIAL	4456.2	4456.2	89.11 %		09:17:10
3	Al 396.153Radial†	515024.4	581552.3	539750 ug/L	539750 ppb	09:17:05
3	Ca 317.933Radial†	266059.5	300332.5	497780 ug/L	497780 ppb	09:17:05
3	Fe 238.204 Radial†	18473.9	20843.3	189650 ug/L	189650 ppb	09:17:10
3	K 766.490 Radial†	2466.4	-41.5	-173.82 ug/L	-173.82 ppb	09:17:05
3	Mg 279.077 IEC†	12393.1	13990.0	495630 ug/L	495630 ppb	09:17:10
3	Na 589.592 Radial†	-853.2	115.4	34.896 ug/L	34.896 ppb	09:17:10
3	Sr 421.552†	465.5	523.4	-0.0465 ug/L	-0.0465 ppb	09:17:10
3	Sc 361.383	755768.5	755768.5	87.667 %		09:18:07
3	Y 371.029	616708.1	616708.1	86.301 %		09:18:07
3	Ag 328.068†	-9560.5	-11134.3	4.8227 ug/L	4.8227 ppb	09:18:07
3	As 188.979†	-82.9	-60.7	16.730 ug/L	16.730 ppb	09:18:27
3	B 249.677†	288.5	868.1	-10.149 ug/L	-10.149 ppb	09:18:07
3	Ba 233.527†	-599.8	-672.6	0.3123 ug/L	0.3123 ppb	09:18:27
3	Be 313.107†	-4606.8	-916.2	-0.3960 ug/L	-0.3960 ppb	09:18:07
3	Cd 226.502†	1135.0	1506.6	-1.6662 ug/L	-1.6662 ppb	09:18:27
3	Co 228.616†	-5.3	67.6	-1.2588 ug/L	-1.2588 ppb	09:18:27
3	Cr 267.716†	-75.9	-153.4	1.9061 ug/L	1.9061 ppb	09:18:27
3	Cu 324.752†	2758.9	-2673.7	1.9044 ug/L	1.9044 ppb	09:18:07
3	Mn 257.610†	-175.5	-652.0	-2.2927 ug/L	-2.2927 ppb	09:18:07
3	Mo 202.031†	-216.1	-262.0	1.0217 ug/L	1.0217 ppb	09:18:27
3	Ni 231.604†	231.6	156.1	4.0441 ug/L	4.0441 ppb	09:18:27
3	P 214.914†	203.6	4.1	-14.688 ug/L	-14.688 ppb	09:18:27
3	Pb 220.353†	-809.6	-861.7	-0.9582 ug/L	-0.9582 ppb	09:18:27
3	S 181.975 Axial†	44.6	11.5	-84.346 ug/L	-84.346 ppb	09:18:27
3	Sb 206.836†	79.1	48.1	-1.3410 ug/L	-1.3410 ppb	09:18:27
3	Se 196.026†	-919.7	-1027.0	-63.050 ug/L	-63.050 ppb	09:18:27
3	Si 251.611†	454.2	-44.2	-1.2364 ug/L	-1.2364 ppb	09:18:27
3	Sn 189.927†	-345.5	-402.8	4.0886 ug/L	4.0886 ppb	09:18:27
3	Ti 334.940†	-14189.3	-14882.3	2.1109 ug/L	2.1109 ppb	09:18:07
3	Tl 190.801†	-60.0	-34.2	-11.215 ug/L	-11.215 ppb	09:18:27
3	U 409.014†	-1365.7	1422.3	19.625 ug/L	19.625 ppb	09:18:07
3	V 292.402†	574.2	2209.6	-2.1700 ug/L	-2.1700 ppb	09:18:27
3	Zn 213.857†	3012.1	2722.6	-1.5360 ug/L	-1.5360 ppb	09:18:27
3	SiO2†	481.6	-33.8	-1.8752 ug/L	-1.8752 ppb	09:18:43

Mean Data: ICSCA

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	755714.7	87.660 %	0.1130			0.13%
Sc Radial	4285.4	89.2 %	0.75			0.85%
Y 371.029	615548.8	86.139 %	0.1416			0.16%
Y RADIAL	4481.4	89.62 %	0.556			0.62%
Ag 328.068†	-11243.1	4.3381 ug/L	0.67777	4.3381 ppb	0.67777	15.62%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	572772.7	531600 ug/L	10971.3	531600 ppb	10971.3	2.06%
QC value within limits for Al 396.153Radial Recovery = 106.32%						
As 188.979†	-62.2	15.980 ug/L	2.6589	15.980 ppb	2.6589	16.64%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	912.2	-9.0743 ug/L	2.51784	-9.0743 ppb	2.51784	27.75%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	-670.6	0.3236 ug/L	0.19527	0.3236 ppb	0.19527	60.34%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-1035.7	-0.4415 ug/L	0.03944	-0.4415 ppb	0.03944	8.93%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	296779.9	491890 ug/L	8226.5	491890 ppb	8226.5	1.67%

QC value within limits for Ca 317.933 Radial Recovery = 98.38%

Cd	226.502†	1522.9	-1.4576 ug/L	0.18350	-1.4576 ppb	0.18350	12.59%
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co	228.616†	58.2	-1.4637 ug/L	0.17773	-1.4637 ppb	0.17773	12.14%
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr	267.716†	-178.0	1.6181 ug/L	0.25308	1.6181 ppb	0.25308	15.64%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu	324.752†	-2629.5	2.0318 ug/L	0.19389	2.0318 ppb	0.19389	9.54%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe	238.204 Radial†	20826.0	189490 ug/L	754.5	189490 ppb	754.5	0.40%
QC value within limits for Fe 238.204 Radial Recovery = 94.74%							
K	766.490 Radial†	-87.3	-179.93 ug/L	13.858	-179.93 ppb	13.858	7.70%
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg	279.077 IEC†	13977.3	495180 ug/L	1554.3	495180 ppb	1554.3	0.31%
QC value within limits for Mg 279.077 IEC Recovery = 99.04%							
Mn	257.610†	-650.4	-2.2880 ug/L	0.05795	-2.2880 ppb	0.05795	2.53%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo	202.031†	-272.1	0.1832 ug/L	1.03653	0.1832 ppb	1.03653	565.70%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na	589.592 Radial†	90.3	27.297 ug/L	10.1754	27.297 ppb	10.1754	37.28%
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni	231.604†	136.7	3.5401 ug/L	0.55015	3.5401 ppb	0.55015	15.54%
QC value within limits for Ni 231.604 Recovery = Not calculated							
P	214.914†	-18.7	-30.838 ug/L	13.9943	-30.838 ppb	13.9943	45.38%
QC value within limits for P 214.914 Recovery = Not calculated							
Pb	220.353†	-837.8	0.1909 ug/L	2.74297	0.1909 ppb	2.74297	>999.9%
QC value within limits for Pb 220.353 Recovery = Not calculated							
S	181.975 Axial†	17.6	-73.952 ug/L	10.1589	-73.952 ppb	10.1589	13.74%
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb	206.836†	48.2	-1.1258 ug/L	1.61558	-1.1258 ppb	1.61558	143.51%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se	196.026†	-1016.5	-56.738 ug/L	6.7740	-56.738 ppb	6.7740	11.94%
QC value within limits for Se 196.026 Recovery = Not calculated							
Si	251.611†	-54.7	-1.5802 ug/L	0.88305	-1.5802 ppb	0.88305	55.88%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn	189.927†	-407.9	2.2451 ug/L	1.69268	2.2451 ppb	1.69268	75.40%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr	421.552†	538.3	0.1020 ug/L	0.16126	0.1020 ppb	0.16126	158.13%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti	334.940†	-15133.3	0.9521 ug/L	1.35820	0.9521 ppb	1.35820	142.66%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl	190.801†	-42.8	-13.968 ug/L	2.8728	-13.968 ppb	2.8728	20.57%
QC value within limits for Tl 190.801 Recovery = Not calculated							
U	409.014†	1322.4	16.747 ug/L	3.9841	16.747 ppb	3.9841	23.79%
QC value within limits for U 409.014 Recovery = Not calculated							
V	292.402†	2176.7	-2.4106 ug/L	0.31365	-2.4106 ppb	0.31365	13.01%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn	213.857†	2742.8	-1.3094 ug/L	0.21398	-1.3094 ppb	0.21398	16.34%
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†		-59.3	-3.6728 ug/L	2.46839	-3.6728 ppb	2.46839	67.21%
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: 2/11/2010 09:20:55
 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	4396.9	4396.9	91.5 %		09:22:52
1	Y RADIAL	4610.6	4610.6	92.20 %		09:22:52
1	Al 396.153Radial†	506685.4	554079.7	514230 ug/L	514230 ppb	09:22:47
1	Ca 317.933Radial†	261800.7	286194.0	474350 ug/L	474350 ppb	09:22:47
1	Fe 238.204 Radial†	18412.4	20117.6	183060 ug/L	183060 ppb	09:22:52
1	K 766.490 Radial†	30129.7	30113.2	5154.1 ug/L	5154.1 ppb	09:22:47
1	Mg 279.077 IEC†	12405.8	13562.1	480480 ug/L	480480 ppb	09:22:52
1	Na 589.592 Radial†	14834.9	17296.5	5231.3 ug/L	5231.3 ppb	09:22:52
1	Sr 421.552†	66068.1	72226.1	502.99 ug/L	502.99 ppb	09:22:47
1	Sc 361.383	772772.6	772772.6	89.639 %		09:23:20
1	Y 371.029	628033.3	628033.3	87.886 %		09:23:20
1	Ag 328.068†	40946.5	45450.6	271.13 ug/L	271.13 ppb	09:23:20
1	As 188.979†	891.5	1028.4	512.59 ug/L	512.59 ppb	09:23:40
1	B 249.677†	19385.3	22165.0	496.31 ug/L	496.31 ppb	09:23:20
1	Ba 233.527†	52316.8	58375.5	483.43 ug/L	483.43 ppb	09:23:20
1	Be 313.107†	574171.6	644876.5	241.29 ug/L	241.29 ppb	09:23:20
1	Cd 226.502†	35085.2	39352.5	449.33 ug/L	449.33 ppb	09:23:40
1	Co 228.616†	18112.6	20279.9	440.41 ug/L	440.41 ppb	09:23:40
1	Cr 267.716†	36591.2	40753.8	478.53 ug/L	478.53 ppb	09:23:20
1	Cu 324.752†	163531.5	176612.7	545.16 ug/L	545.16 ppb	09:23:20
1	Mn 257.610†	366154.8	408025.3	467.87 ug/L	467.87 ppb	09:23:20
1	Mo 202.031†	5497.6	6117.5	477.98 ug/L	477.98 ppb	09:23:40
1	Ni 231.604†	15356.6	17023.6	440.76 ug/L	440.76 ppb	09:23:40
1	P 214.914†	3739.4	3943.6	2332.2 ug/L	2332.2 ppb	09:23:40
1	Pb 220.353†	2446.7	2791.2	450.35 ug/L	450.35 ppb	09:23:40
1	S 181.975 Axial†	1625.7	1774.2	2490.8 ug/L	2490.8 ppb	09:23:40
1	Sb 206.836†	1370.0	1486.2	518.08 ug/L	518.08 ppb	09:23:40
1	Se 196.026†	2363.9	2659.3	2399.9 ug/L	2399.9 ppb	09:23:40
1	Si 251.611†	137825.4	153193.9	5118.5 ug/L	5118.5 ppb	09:23:20
1	Sn 189.927†	1983.7	2204.3	484.24 ug/L	484.24 ppb	09:23:40
1	Ti 334.940†	266479.3	298583.8	508.25 ug/L	508.25 ppb	09:23:20
1	Tl 190.801†	1155.1	1322.8	427.27 ug/L	427.27 ppb	09:23:40
1	U 409.014†	13233.0	17742.6	492.55 ug/L	492.55 ppb	09:23:20
1	V 292.402†	61400.5	70052.2	498.13 ug/L	498.13 ppb	09:23:20
1	Zn 213.857†	47401.4	52167.1	483.73 ug/L	483.73 ppb	09:23:20
1	SiO2†	137069.3	152329.4	10853 ug/L	10853 ppb	09:24:38
2	Sc Radial	4421.7	4421.7	92.0 %		09:23:03
2	Y RADIAL	4650.4	4650.4	93.00 %		09:23:03
2	Al 396.153Radial†	505026.4	549169.2	509670 ug/L	509670 ppb	09:22:58
2	Ca 317.933Radial†	260692.2	283383.5	469690 ug/L	469690 ppb	09:22:58
2	Fe 238.204 Radial†	18454.7	20050.7	182450 ug/L	182450 ppb	09:22:03
2	K 766.490 Radial†	30107.0	29903.9	5118.7 ug/L	5118.7 ppb	09:22:58
2	Mg 279.077 IEC†	12417.0	13498.2	478220 ug/L	478220 ppb	09:23:03
2	Na 589.592 Radial†	14964.9	17346.9	5246.6 ug/L	5246.6 ppb	09:23:03
2	Sr 421.552†	65690.1	71410.0	497.30 ug/L	497.30 ppb	09:22:58
2	Sc 361.383	764739.9	764739.9	88.707 %		09:23:46
2	Y 371.029	621595.5	621595.5	86.985 %		09:23:46
2	Ag 328.068†	40590.0	45528.5	271.35 ug/L	271.35 ppb	09:23:46
2	As 188.979†	889.2	1036.2	515.99 ug/L	515.99 ppb	09:24:06
2	B 249.677†	19258.0	22248.6	498.39 ug/L	498.39 ppb	09:23:46
2	Ba 233.527†	51845.8	58457.6	484.08 ug/L	484.08 ppb	09:23:46
2	Be 313.107†	566394.6	642837.6	240.54 ug/L	240.54 ppb	09:23:46
2	Cd 226.502†	35086.9	39765.5	454.31 ug/L	454.31 ppb	09:24:06
2	Co 228.616†	18134.0	20516.3	445.59 ug/L	445.59 ppb	09:24:06
2	Cr 267.716†	36251.6	40799.8	479.05 ug/L	479.05 ppb	09:23:46
2	Cu 324.752†	162008.2	176811.7	545.73 ug/L	545.73 ppb	09:23:46
2	Mn 257.610†	362408.4	408092.5	467.98 ug/L	467.98 ppb	09:23:46
2	Mo 202.031†	5494.0	6177.9	482.40 ug/L	482.40 ppb	09:24:06
2	Ni 231.604†	15385.0	17235.5	446.25 ug/L	446.25 ppb	09:24:06

2	P 214.914†	3735.3	3982.7	2355.8 ug/L	2355.8 ppb	09:24:06
2	Pb 220.353†	2463.6	2839.0	455.32 ug/L	455.32 ppb	09:24:06
2	S 181.975 Axial†	1635.9	1804.8	2536.2 ug/L	2536.2 ppb	09:24:06
2	Sb 206.836†	1363.5	1494.9	521.30 ug/L	521.30 ppb	09:24:06
2	Se 196.026†	2372.3	2696.4	2422.8 ug/L	2422.8 ppb	09:24:06
2	Si 251.611†	136413.4	153217.1	5119.2 ug/L	5119.2 ppb	09:23:46
2	Sn 189.927†	1955.7	2196.0	481.97 ug/L	481.97 ppb	09:24:06
2	Ti 334.940†	264346.3	299301.9	508.98 ug/L	508.98 ppb	09:23:46
2	Tl 190.801†	1161.7	1343.8	433.96 ug/L	433.96 ppb	09:24:06
2	U 409.014†	13093.8	17740.8	492.56 ug/L	492.56 ppb	09:23:46
2	V 292.402†	60740.6	70027.7	498.06 ug/L	498.06 ppb	09:23:46
2	Zn 213.857†	46852.4	52103.7	483.16 ug/L	483.16 ppb	09:23:46
2	SiO2†	136656.7	153470.5	10935 ug/L	10935 ppb	09:24:43
3	Sc Radial	4483.7	4483.7	93.3 %		09:23:13
3	Y RADIAL	4690.0	4690.0	93.79 %		09:23:13
3	Al 396.153Radial†	512382.5	549473.1	509950 ug/L	509950 ppb	09:23:08
3	Ca 317.933Radial†	264386.7	283430.3	469770 ug/L	469770 ppb	09:23:08
3	Fe 238.204 Radial†	18884.1	20234.0	184110 ug/L	184110 ppb	09:23:13
3	K 766.490 Radial†	30633.6	30016.3	5138.5 ug/L	5138.5 ppb	09:23:08
3	Mg 279.077 IEC†	12744.8	13663.2	484060 ug/L	484060 ppb	09:23:13
3	Na 589.592 Radial†	15367.6	17554.0	5309.2 ug/L	5309.2 ppb	09:23:13
3	Sr 421.552†	66790.6	71603.6	498.66 ug/L	498.66 ppb	09:23:08
3	Sc 361.383	773931.5	773931.5	89.773 %		09:24:12
3	Y 371.029	628740.5	628740.5	87.985 %		09:24:12
3	Ag 328.068†	41068.9	45518.5	271.87 ug/L	271.87 ppb	09:24:12
3	As 188.979†	889.9	1025.2	511.37 ug/L	511.37 ppb	09:24:32
3	B 249.677†	19510.9	22272.5	498.71 ug/L	498.71 ppb	09:24:12
3	Ba 233.527†	52312.7	58283.5	482.70 ug/L	482.70 ppb	09:24:12
3	Be 313.107†	573158.4	642788.7	240.52 ug/L	240.52 ppb	09:24:12
3	Cd 226.502†	34724.6	38892.2	443.75 ug/L	443.75 ppb	09:24:32
3	Co 228.616†	17941.8	20059.3	435.56 ug/L	435.56 ppb	09:24:32
3	Cr 267.716†	36580.1	40680.3	477.69 ug/L	477.69 ppb	09:24:12
3	Cu 324.752†	164653.0	177588.8	548.17 ug/L	548.17 ppb	09:24:12
3	Mn 257.610†	366043.8	407290.0	466.98 ug/L	466.98 ppb	09:24:12
3	Mo 202.031†	5447.0	6052.0	473.10 ug/L	473.10 ppb	09:24:32
3	Ni 231.604†	15217.0	16842.4	436.07 ug/L	436.07 ppb	09:24:32
3	P 214.914†	3695.9	3888.9	2295.6 ug/L	2295.6 ppb	09:24:32
3	Pb 220.353†	2426.8	2765.0	445.97 ug/L	445.97 ppb	09:24:32
3	S 181.975 Axial†	1615.7	1760.4	2471.4 ug/L	2471.4 ppb	09:24:32
3	Sb 206.836†	1350.7	1462.4	509.61 ug/L	509.61 ppb	09:24:32
3	Se 196.026†	2320.9	2607.4	2368.2 ug/L	2368.2 ppb	09:24:32
3	Si 251.611†	138009.6	153168.8	5117.7 ug/L	5117.7 ppb	09:24:12
3	Sn 189.927†	1937.3	2149.4	473.35 ug/L	473.35 ppb	09:24:32
3	Ti 334.940†	266979.3	298695.6	507.53 ug/L	507.53 ppb	09:24:12
3	Tl 190.801†	1132.8	1296.0	418.69 ug/L	418.69 ppb	09:24:32
3	U 409.014†	13256.7	17746.9	492.55 ug/L	492.55 ppb	09:24:12
3	V 292.402†	61377.1	69923.5	497.04 ug/L	497.04 ppb	09:24:12
3	Zn 213.857†	47365.2	52047.6	482.41 ug/L	482.41 ppb	09:24:12
3	SiO2†	136694.3	151682.8	10807 ug/L	10807 ppb	09:24:48

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	770481.4	89.373 %	0.5807			0.65%
Sc Radial	4434.1	92.2 %	0.93			1.01%
Y 371.029	626123.1	87.618 %	0.5509			0.63%
Y RADIAL	4650.4	92.99 %	0.794			0.85%
Ag 328.068†	45499.2	271.45 ug/L	0.377	271.45 ppb	0.377	0.14%
QC value within limits for Ag 328.068 Recovery = 108.58%						
Al 396.153Radial†	550907.4	511280 ug/L	2553.8	511280 ppb	2553.8	0.50%
QC value within limits for Al 396.153Radial Recovery = 102.26%						
As 188.979†	1029.9	513.31 ug/L	2.393	513.31 ppb	2.393	0.47%
QC value within limits for As 188.979 Recovery = 102.66%						
B 249.677†	22228.7	497.80 ug/L	1.301	497.80 ppb	1.301	0.26%
QC value within limits for B 249.677 Recovery = 99.56%						
Ba 233.527†	58372.2	483.40 ug/L	0.687	483.40 ppb	0.687	0.14%
QC value within limits for Ba 233.527 Recovery = 96.68%						
Be 313.107†	643500.9	240.78 ug/L	0.443	240.78 ppb	0.443	0.18%
QC value within limits for Be 313.107 Recovery = 96.31%						
Ca 317.933Radial†	284335.9	471270 ug/L	2667.3	471270 ppb	2667.3	0.57%

QC value within limits for Ca 317.933 Radial Recovery = 94.25%							
Cd 226.502†	39336.8	449.13 ug/L	5.284	449.13 ppb	5.284	1.18%	
QC value within limits for Cd 226.502 Recovery = 89.83%							
Co 228.616†	20285.2	440.52 ug/L	5.014	440.52 ppb	5.014	1.14%	
QC value within limits for Co 228.616 Recovery = 88.10%							
Cr 267.716†	40744.7	478.42 ug/L	0.686	478.42 ppb	0.686	0.14%	
QC value within limits for Cr 267.716 Recovery = 95.68%							
Cu 324.752†	177004.4	546.35 ug/L	1.603	546.35 ppb	1.603	0.29%	
QC value within limits for Cu 324.752 Recovery = 109.27%							
Fe 238.204 Radial†	20134.1	183210 ug/L	843.7	183210 ppb	843.7	0.46%	
QC value within limits for Fe 238.204 Radial Recovery = 91.60%							
K 766.490 Radial†	30011.2	5137.1 ug/L	17.75	5137.1 ppb	17.75	0.35%	
QC value within limits for K 766.490 Radial Recovery = 102.74%							
Mg 279.077 IEC†	13574.5	480920 ug/L	2948.0	480920 ppb	2948.0	0.61%	
QC value within limits for Mg 279.077 IEC Recovery = 96.18%							
Mn 257.610†	407802.6	467.61 ug/L	0.547	467.61 ppb	0.547	0.12%	
QC value within limits for Mn 257.610 Recovery = 93.52%							
Mo 202.031†	6115.8	477.83 ug/L	4.651	477.83 ppb	4.651	0.97%	
QC value within limits for Mo 202.031 Recovery = 95.57%							
Na 589.592 Radial†	17399.2	5262.4 ug/L	41.27	5262.4 ppb	41.27	0.78%	
QC value within limits for Na 589.592 Radial Recovery = 105.25%							
Ni 231.604†	17033.9	441.03 ug/L	5.094	441.03 ppb	5.094	1.15%	
QC value within limits for Ni 231.604 Recovery = 88.21%							
P 214.914†	3938.4	2327.9 ug/L	30.33	2327.9 ppb	30.33	1.30%	
QC value within limits for P 214.914 Recovery = 93.12%							
Pb 220.353†	2798.4	450.55 ug/L	4.678	450.55 ppb	4.678	1.04%	
QC value within limits for Pb 220.353 Recovery = 90.11%							
S 181.975 Axial†	1779.8	2499.5 ug/L	33.27	2499.5 ppb	33.27	1.33%	
QC value within limits for S 181.975 Axial Recovery = 99.98%							
Sb 206.836†	1481.2	516.33 ug/L	6.036	516.33 ppb	6.036	1.17%	
QC value within limits for Sb 206.836 Recovery = 103.27%							
Se 196.026†	2654.4	2397.0 ug/L	27.43	2397.0 ppb	27.43	1.14%	
QC value within limits for Se 196.026 Recovery = 95.88%							
Si 251.611†	153193.2	5118.5 ug/L	0.75	5118.5 ppb	0.75	0.01%	
QC value within limits for Si 251.611 Recovery = 102.37%							
Sn 189.927†	2183.2	479.85 ug/L	5.743	479.85 ppb	5.743	1.20%	
QC value within limits for Sn 189.927 Recovery = 95.97%							
Sr 421.552†	71746.5	499.65 ug/L	2.971	499.65 ppb	2.971	0.59%	
QC value within limits for Sr 421.552 Recovery = 99.93%							
Ti 334.940†	298860.4	508.25 ug/L	0.725	508.25 ppb	0.725	0.14%	
QC value within limits for Ti 334.940 Recovery = 101.65%							
Tl 190.801†	1320.9	426.64 ug/L	7.653	426.64 ppb	7.653	1.79%	
QC value within limits for Tl 190.801 Recovery = 85.33%							
U 409.014†	17743.4	492.55 ug/L	0.008	492.55 ppb	0.008	0.00%	
QC value within limits for U 409.014 Recovery = 98.51%							
V 292.402†	70001.2	497.74 ug/L	0.609	497.74 ppb	0.609	0.12%	
QC value within limits for V 292.402 Recovery = 99.55%							
Zn 213.857†	52106.1	483.10 ug/L	0.658	483.10 ppb	0.658	0.14%	
QC value within limits for Zn 213.857 Recovery = 96.62%							
SiO2†	152494.3	10865 ug/L	64.4	10865 ppb	64.4	0.59%	
QC value within limits for SiO2 Recovery = 101.59%							
All analyte(s) passed QC.							

Sequence No.: 11
 Sample ID: LR1
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 15
 Date Collected: 2/11/2010 09:26:58
 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	4347.3	4347.3	90.4 %		09:28:57
1	Y RADIAL	4521.2	4521.2	90.41 %		09:28:57
1	Al 396.153Radial†	489004.3	540851.8	501970 ug/L	501970 ppb	09:28:52
1	Ca 317.933Radial†	256021.7	283070.7	469170 ug/L	469170 ppb	09:28:52
1	Fe 238.204 Radial†	43293.2	47858.6	435450 ug/L	435450 ppb	09:28:57
1	K 766.490 Radial†	3051.6	548.5	-258.43 ug/L	-258.43 ppb	09:28:52
1	Mg 279.077 IEC†	12226.8	13519.0	478680 ug/L	478680 ppb	09:28:57
1	Na 589.592 Radial†	1519647.4	1681377.9	508530 ug/L	508530 ppb	09:28:52
1	Sr 421.552†	733.2	808.6	2.1678 ug/L	2.1678 ppb	09:28:57
1	Sc 361.383	750316.7	750316.7	87.034 %		09:29:25
1	Y 371.029	611296.0	611296.0	85.543 %		09:29:25
1	Ag 328.068†	-22360.4	-25920.3	7.6759 ug/L	7.6759 ppb	09:29:25
1	As 188.979†	-189.1	-183.4	18.724 ug/L	18.724 ppb	09:29:45
1	B 249.677†	1106.7	1810.6	-27.660 ug/L	-27.660 ppb	09:29:25
1	Ba 233.527†	-1542.6	-1760.8	-1.0734 ug/L	-1.0734 ppb	09:29:45
1	Be 313.107†	-10095.0	-7260.1	-2.7412 ug/L	-2.7412 ppb	09:29:25
1	Cd 226.502†	3076.9	3747.2	2.1814 ug/L	2.1814 ppb	09:29:45
1	Co 228.616†	201.4	305.2	0.3152 ug/L	0.3152 ppb	09:29:45
1	Cr 267.716†	-14.1	-82.9	2.2310 ug/L	2.2310 ppb	09:29:45
1	Cu 324.752†	169.3	-5626.3	-1.4253 ug/L	-1.4253 ppb	09:29:25
1	Mn 257.610†	-22883.6	-26744.6	-7.3534 ug/L	-7.3534 ppb	09:29:25
1	Mo 202.031†	-431.2	-511.0	1.1160 ug/L	1.1160 ppb	09:29:45
1	Ni 231.604†	343.0	286.1	7.4087 ug/L	7.4087 ppb	09:29:45
1	P 214.914†	571.1	428.1	43.527 ug/L	43.527 ppb	09:29:45
1	Pb 220.353†	-484.2	-494.6	12.703 ug/L	12.703 ppb	09:29:45
1	S 181.975 Axial†	87.6	61.3	-4.6955 ug/L	-4.6955 ppb	09:29:45
1	Sb 206.836†	83.5	53.8	-1.4746 ug/L	-1.4746 ppb	09:29:45
1	Se 196.026†	-2120.9	-2414.7	-207.36 ug/L	-207.36 ppb	09:29:45
1	Si 251.611†	-139.3	-722.4	-23.691 ug/L	-23.691 ppb	09:29:45
1	Sn 189.927†	-351.0	-411.9	2.1771 ug/L	2.1771 ppb	09:29:45
1	Ti 334.940†	-9901.0	-10072.8	1.5803 ug/L	1.5803 ppb	09:29:25
1	Tl 190.801†	-75.4	-52.5	-17.178 ug/L	-17.178 ppb	09:29:45
1	U 409.014†	398970.0	461386.2	13329 ug/L	13329 ppb	09:29:25
1	V 292.402†	1819.1	3644.8	-2.6158 ug/L	-2.6158 ppb	09:29:45
1	Zn 213.857†	5754.2	5898.2	-7.0000 ug/L	-7.0000 ppb	09:29:45
1	SiO2†	-561.3	-1228.1	-86.557 ug/L	-86.557 ppb	09:30:42
2	Sc Radial	4319.7	4319.7	89.9 %		09:29:07
2	Y RADIAL	4515.1	4515.1	90.29 %		09:29:07
2	Al 396.153Radial†	488967.7	544267.8	505140 ug/L	505140 ppb	09:29:02
2	Ca 317.933Radial†	253798.3	282406.3	468070 ug/L	468070 ppb	09:29:02
2	Fe 238.204 Radial†	42961.6	47795.6	434870 ug/L	434870 ppb	09:29:07
2	K 766.490 Radial†	2851.4	347.3	-293.37 ug/L	-293.37 ppb	09:29:02
2	Mg 279.077 IEC†	12150.8	13520.8	478750 ug/L	478750 ppb	09:29:07
2	Na 589.592 Radial†	1508482.9	1679696.5	508020 ug/L	508020 ppb	09:29:02
2	Sr 421.552†	684.7	759.8	1.8337 ug/L	1.8337 ppb	09:29:07
2	Sc 361.383	752895.9	752895.9	87.333 %		09:29:51
2	Y 371.029	613943.5	613943.5	85.914 %		09:29:51
2	Ag 328.068†	-21490.2	-24835.8	12.608 ug/L	12.608 ppb	09:29:51
2	As 188.979†	-177.3	-169.2	25.061 ug/L	25.061 ppb	09:30:11
2	B 249.677†	1167.2	1875.5	-26.019 ug/L	-26.019 ppb	09:29:51
2	Ba 233.527†	-1648.7	-1876.2	-2.0328 ug/L	-2.0328 ppb	09:30:11
2	Be 313.107†	-8181.7	-5029.6	-1.9109 ug/L	-1.9109 ppb	09:29:51
2	Cd 226.502†	3019.0	3668.8	1.3074 ug/L	1.3074 ppb	09:30:11
2	Co 228.616†	168.2	266.3	-0.5350 ug/L	-0.5350 ppb	09:30:11
2	Cr 267.716†	-39.9	-112.5	1.8767 ug/L	1.8767 ppb	09:30:11
2	Cu 324.752†	3630.1	-1664.2	10.564 ug/L	10.564 ppb	09:29:51
2	Mn 257.610†	-19761.1	-23079.0	-3.1954 ug/L	-3.1954 ppb	09:29:51
2	Mo 202.031†	-475.4	-559.9	-2.6030 ug/L	-2.6030 ppb	09:30:11
2	Ni 231.604†	289.6	223.5	5.7879 ug/L	5.7879 ppb	09:30:11

2	P 214.914†	562.6	416.1	34.892 ug/L	34.892 ppb	09:30:11
2	Pb 220.353†	-547.2	-564.9	4.6358 ug/L	4.6358 ppb	09:30:11
2	S 181.975 Axial†	83.4	56.2	-12.737 ug/L	-12.737 ppb	09:30:11
2	Sb 206.836†	88.3	59.0	0.1380 ug/L	0.1380 ppb	09:30:11
2	Se 196.026†	-2116.4	-2401.3	-200.06 ug/L	-200.06 ppb	09:30:11
2	Si 251.611†	-519.1	-1156.6	-38.171 ug/L	-38.171 ppb	09:30:11
2	Sn 189.927†	-362.9	-424.2	-0.2790 ug/L	-0.2790 ppb	09:30:11
2	Ti 334.940†	-10032.5	-10184.4	1.2469 ug/L	1.2469 ppb	09:29:51
2	Tl 190.801†	-87.3	-65.8	-21.418 ug/L	-21.418 ppb	09:30:11
2	U 409.014†	400317.4	461358.7	13328 ug/L	13328 ppb	09:29:51
2	V 292.402†	1851.8	3675.1	-2.3640 ug/L	-2.3640 ppb	09:30:11
2	Zn 213.857†	5420.0	5492.9	-10.919 ug/L	-10.919 ppb	09:30:11
2	SiO2†	-492.8	-1147.4	-80.702 ug/L	-80.702 ppb	09:30:47
3	Sc Radial	4286.5	4286.5	89.2 %		09:29:18
3	Y RADIAL	4491.7	4491.7	89.82 %		09:29:18
3	Al 396.153Radial†	487236.0	546543.4	507260 ug/L	507260 ppb	09:29:13
3	Ca 317.933Radial†	253808.7	284607.1	471720 ug/L	471720 ppb	09:29:13
3	Fe 238.204 Radial†	42617.9	47780.7	434740 ug/L	434740 ppb	09:29:18
3	K 766.490 Radial†	2862.5	384.4	-288.63 ug/L	-288.63 ppb	09:29:13
3	Mg 279.077 IEC†	12064.9	13529.3	479050 ug/L	479050 ppb	09:29:18
3	Na 589.592 Radial†	1501252.5	1684599.7	509510 ug/L	509510 ppb	09:29:13
3	Sr 421.552†	701.9	785.0	1.9830 ug/L	1.9830 ppb	09:29:18
3	Sc 361.383	749846.5	749846.5	86.980 %		09:30:16
3	Y 371.029	610956.0	610956.0	85.496 %		09:30:16
3	Ag 328.068†	-22316.8	-25886.3	7.5572 ug/L	7.5572 ppb	09:30:16
3	As 188.979†	-185.0	-178.8	20.672 ug/L	20.672 ppb	09:30:36
3	B 249.677†	1074.6	1774.5	-28.401 ug/L	-28.401 ppb	09:30:16
3	Ba 233.527†	-1700.5	-1943.5	-2.5842 ug/L	-2.5842 ppb	09:30:36
3	Be 313.107†	-10036.7	-7200.5	-2.7212 ug/L	-2.7212 ppb	09:30:16
3	Cd 226.502†	3001.2	3662.4	1.2484 ug/L	1.2484 ppb	09:30:36
3	Co 228.616†	168.0	266.8	-0.5205 ug/L	-0.5205 ppb	09:30:36
3	Cr 267.716†	-29.3	-100.5	2.0096 ug/L	2.0096 ppb	09:30:36
3	Cu 324.752†	314.4	-5459.3	-0.9628 ug/L	-0.9628 ppb	09:30:16
3	Mn 257.610†	-22476.5	-26293.0	-6.9189 ug/L	-6.9189 ppb	09:30:16
3	Mo 202.031†	-477.8	-564.8	-2.9394 ug/L	-2.9394 ppb	09:30:36
3	Ni 231.604†	305.9	243.7	6.3100 ug/L	6.3100 ppb	09:30:36
3	P 214.914†	553.6	408.4	33.018 ug/L	33.018 ppb	09:30:36
3	Pb 220.353†	-569.0	-592.5	1.7311 ug/L	1.7311 ppb	09:30:36
3	S 181.975 Axial†	84.3	57.5	-11.185 ug/L	-11.185 ppb	09:30:36
3	Sb 206.836†	80.0	49.8	-3.0915 ug/L	-3.0915 ppb	09:30:36
3	Se 196.026†	-2111.2	-2405.2	-203.04 ug/L	-203.04 ppb	09:30:36
3	Si 251.611†	-476.2	-1109.7	-36.598 ug/L	-36.598 ppb	09:30:36
3	Sn 189.927†	-356.7	-418.8	1.2746 ug/L	1.2746 ppb	09:30:36
3	Ti 334.940†	-10401.3	-10655.1	0.9425 ug/L	0.9425 ppb	09:30:16
3	Tl 190.801†	-109.3	-91.4	-29.659 ug/L	-29.659 ppb	09:30:36
3	U 409.014†	399065.3	461783.3	13341 ug/L	13341 ppb	09:30:16
3	V 292.402†	1948.4	3794.7	-1.4509 ug/L	-1.4509 ppb	09:30:36
3	Zn 213.857†	5409.8	5506.3	-10.754 ug/L	-10.754 ppb	09:30:36
3	SiO2†	-505.8	-1164.7	-81.925 ug/L	-81.925 ppb	09:30:52

Mean Data: LR1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	751019.7	87.116 %		0.1904			0.22%
Sc Radial	4317.8	89.8 %		0.63			0.71%
Y 371.029	612065.1	85.651 %		0.2289			0.27%
Y RADIAL	4509.3	90.17 %		0.312			0.35%
Ag 328.068†	-25547.5	9.2805 ug/L		2.88268	9.2805 ppb	2.88268	31.06%
Al 396.153Radial†	543887.7	504790 ug/L		2659.0	504790 ppb	2659.0	0.53%
QC value within limits for Al 396.153Radial Recovery = 100.96%							
As 188.979†	-177.1	21.486 ug/L		3.2460	21.486 ppb	3.2460	15.11%
B 249.677†	1820.2	-27.360 ug/L		1.2190	-27.360 ppb	1.2190	4.46%
Ba 233.527†	-1860.2	-1.8968 ug/L		0.76456	-1.8968 ppb	0.76456	40.31%
Be 313.107†	-6496.7	-2.4578 ug/L		0.47372	-2.4578 ppb	0.47372	19.27%
Ca 317.933Radial†	283361.4	469650 ug/L		1871.0	469650 ppb	1871.0	0.40%
QC value within limits for Ca 317.933Radial Recovery = 93.93%							
Cd 226.502†	3692.8	1.5791 ug/L		0.52249	1.5791 ppb	0.52249	33.09%
Co 228.616†	279.4	-0.2468 ug/L		0.48674	-0.2468 ppb	0.48674	197.25%
Cr 267.716†	-98.6	2.0391 ug/L		0.17900	2.0391 ppb	0.17900	8.78%
Cu 324.752†	-4249.9	2.7252 ug/L		6.79225	2.7252 ppb	6.79225	249.24%

Fe 238.204 Radial†	47811.6	435020 ug/L	376.2	435020 ppb	376.2	0.09%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 87.00%						
K 766.490 Radial†	426.7	-280.15 ug/L	18.953	-280.15 ppb	18.953	6.77%
Mg 279.077 IEC†	13523.0	478830 ug/L	196.1	478830 ppb	196.1	0.04%
QC value within limits for Mg 279.077 IEC Recovery = 95.77%						
Mn 257.610†	-25372.2	-5.8226 ug/L	2.28557	-5.8226 ppb	2.28557	39.25%
Mo 202.031†	-545.3	-1.4755 ug/L	2.25058	-1.4755 ppb	2.25058	152.53%
Na 589.592 Radial†	1681891.4	508690 ug/L	753.6	508690 ppb	753.6	0.15%
QC value within limits for Na 589.592 Radial Recovery = 101.74%						
Ni 231.604†	251.1	6.5022 ug/L	0.82734	6.5022 ppb	0.82734	12.72%
P 214.914†	417.5	37.146 ug/L	5.6054	37.146 ppb	5.6054	15.09%
Pb 220.353†	-550.6	6.3566 ug/L	5.68472	6.3566 ppb	5.68472	89.43%
S 181.975 Axial†	58.3	-9.5392 ug/L	4.26602	-9.5392 ppb	4.26602	44.72%
Sb 206.836†	54.2	-1.4761 ug/L	1.61473	-1.4761 ppb	1.61473	109.39%
Se 196.026†	-2407.1	-203.49 ug/L	3.672	-203.49 ppb	3.672	1.80%
Si 251.611†	-996.2	-32.820 ug/L	7.9450	-32.820 ppb	7.9450	24.21%
Sn 189.927†	-418.3	1.0575 ug/L	1.24235	1.0575 ppb	1.24235	117.48%
Sr 421.552†	784.5	1.9948 ug/L	0.16737	1.9948 ppb	0.16737	8.39%
Ti 334.940†	-10304.1	1.2566 ug/L	0.31902	1.2566 ppb	0.31902	25.39%
Tl 190.801†	-69.9	-22.752 ug/L	6.3461	-22.752 ppb	6.3461	27.89%
U 409.014†	461509.4	13333 ug/L	6.9	13333 ppb	6.9	0.05%
QC value less than the lower limit for U 409.014 Recovery = 88.88%						
V 292.402†	3704.8	-2.1435 ug/L	0.61293	-2.1435 ppb	0.61293	28.59%
Zn 213.857†	5632.5	-9.5576 ug/L	2.21654	-9.5576 ppb	2.21654	23.19%
SiO2†	-1180.0	-83.062 ug/L	3.0883	-83.062 ppb	3.0883	3.72%

QC Failed. Continue with analysis.

Sequence No.: 12

Sample ID: LR2

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 16

Date Collected: 2/11/2010 09:33:02

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	4650.9	4650.9	96.8 %		09:35:00
1	Y RADIAL	4783.5	4783.5	95.66 %		09:35:00
1	Al 396.153Radial†	333.6	496.4	0.7108 ug/L	0.7108 ppb	09:35:00
1	Ca 317.933Radial†	23.7	7.8	12.862 ug/L	12.862 ppb	09:35:20
1	Fe 238.204 Radial†	-14.4	-26.3	36.152 ug/L	36.152 ppb	09:35:20
1	K 766.490 Radial†	1611190.8	1662413.1	293430 ug/L	293430 ppb	09:34:55
1	Mg 279.077 IEC†	-5.0	-5.6	-98.127 ug/L	-98.127 ppb	09:35:20
1	Na 589.592 Radial†	-585.2	473.6	143.25 ug/L	143.25 ppb	09:35:00
1	Sr 421.552†	1340172.7	1385127.1	9714.1 ug/L	9714.1 ppb	09:34:55
1	Sc 361.383	830480.9	830480.9	96.333 %		09:36:38
1	Y 371.029	671491.8	671491.8	93.967 %		09:36:38
1	Ag 328.068†	-6762.9	-7249.1	5.4086 ug/L	5.4086 ppb	09:36:43
1	As 188.979†	20200.0	21002.8	9593.7 ug/L	9593.7 ppb	09:36:43
1	B 249.677†	196689.0	204715.3	4843.9 ug/L	4843.9 ppb	09:36:38
1	Ba 233.527†	1600343.8	1661274.8	13589 ug/L	13589 ppb	09:36:38
1	Be 313.107†	7265166.3	7546064.4	2833.5 ug/L	2833.5 ppb	09:36:31
1	Cd 226.502†	755144.3	784101.9	9328.1 ug/L	9328.1 ppb	09:36:38
1	Co 228.616†	406593.6	422144.9	9218.3 ug/L	9218.3 ppb	09:36:43
1	Cr 267.716†	1932202.1	2005687.5	23364 ug/L	23364 ppb	09:36:38
1	Cu 324.752†	6365638.9	6602135.7	20027 ug/L	20027 ppb	09:36:31
1	Mn 257.610†	7763667.0	8058750.7	9271.7 ug/L	9271.7 ppb	09:36:31
1	Mo 202.031†	122028.6	126658.3	9485.1 ug/L	9485.1 ppb	09:36:43
1	Ni 231.604†	344682.0	357694.9	9261.2 ug/L	9261.2 ppb	09:36:43
1	P 214.914†	26983.0	27782.1	13404 ug/L	13404 ppb	09:36:43
1	Pb 220.353†	180598.4	187534.9	23407 ug/L	23407 ppb	09:36:43
1	S 181.975 Axial†	33933.7	35186.1	51309 ug/L	51309 ppb	09:36:43
1	Sb 206.836†	28522.8	29566.4	10656 ug/L	10656 ppb	09:36:43
1	Se 196.026†	14083.5	14641.8	9893.2 ug/L	9893.2 ppb	09:36:43
1	Si 251.611†	1364633.1	1416017.6	47247 ug/L	47247 ppb	09:36:38
1	Sn 189.927†	51351.7	53297.8	9890.8 ug/L	9890.8 ppb	09:36:43
1	Ti 334.940†	5971468.8	6200084.9	10048 ug/L	10048 ppb	09:36:31
1	Tl 190.801†	27850.2	28944.6	9344.2 ug/L	9344.2 ppb	09:36:43
1	U 409.014†	-1666.1	1250.5	-15.966 ug/L	-15.966 ppb	09:36:43
1	V 292.402†	1299912.8	1350950.5	9925.7 ug/L	9925.7 ppb	09:36:38
1	Zn 213.857†	1324301.5	1373999.8	13469 ug/L	13469 ppb	09:36:38
1	SiO2†	1387661.4	1439901.6	102450 ug/L	102450 ppb	09:37:29
2	Sc Radial	4697.1	4697.1	97.7 %		09:35:31
2	Y RADIAL	4897.2	4897.2	97.93 %		09:35:31
2	Al 396.153Radial†	338.3	497.8	0.4691 ug/L	0.4691 ppb	09:35:31
2	Ca 317.933Radial†	31.7	15.7	26.032 ug/L	26.032 ppb	09:35:51
2	Fe 238.204 Radial†	-16.6	-28.4	17.783 ug/L	17.783 ppb	09:35:51
2	K 766.490 Radial†	1593050.7	1627452.8	287260 ug/L	287260 ppb	09:35:26
2	Mg 279.077 IEC†	-5.5	-6.1	-114.98 ug/L	-114.98 ppb	09:35:51
2	Na 589.592 Radial†	-558.2	507.3	153.44 ug/L	153.44 ppb	09:35:31
2	Sr 421.552†	1321540.4	1352421.2	9484.7 ug/L	9484.7 ppb	09:35:26
2	Sc 361.383	843181.2	843181.2	97.806 %		09:36:57
2	Y 371.029	682273.7	682273.7	95.476 %		09:36:57
2	Ag 328.068†	-6938.2	-7322.6	4.9778 ug/L	4.9778 ppb	09:37:03
2	As 188.979†	20654.0	21151.2	9659.4 ug/L	9659.4 ppb	09:37:03
2	B 249.677†	200176.9	205206.0	4855.5 ug/L	4855.5 ppb	09:36:57
2	Ba 233.527†	1620078.9	1656430.0	13549 ug/L	13549 ppb	09:36:57
2	Be 313.107†	7256909.8	7424026.1	2787.6 ug/L	2787.6 ppb	09:36:51
2	Cd 226.502†	764766.7	782132.8	9304.7 ug/L	9304.7 ppb	09:36:57
2	Co 228.616†	413805.0	423160.7	9240.9 ug/L	9240.9 ppb	09:37:03
2	Cr 267.716†	1954235.5	1998003.6	23275 ug/L	23275 ppb	09:36:57
2	Cu 324.752†	6350118.1	6486735.0	19677 ug/L	19677 ppb	09:36:51
2	Mn 257.610†	7738091.4	7911210.3	9102.0 ug/L	9102.0 ppb	09:36:51
2	Mo 202.031†	124307.1	127079.8	9516.7 ug/L	9516.7 ppb	09:37:03
2	Ni 231.604†	350664.5	358422.1	9280.0 ug/L	9280.0 ppb	09:37:03

2	P 214.914†	27516.2	27905.4	13550 ug/L	13550 ppb	09:37:03
2	Pb 220.353†	183977.4	188165.8	23486 ug/L	23486 ppb	09:37:03
2	S 181.975 Axial†	34674.3	35412.7	51639 ug/L	51639 ppb	09:37:03
2	Sb 206.836†	29160.7	29772.7	10729 ug/L	10729 ppb	09:37:03
2	Se 196.026†	14370.3	14714.7	9942.4 ug/L	9942.4 ppb	09:37:03
2	Si 251.611†	1385670.7	1416190.0	47252 ug/L	47252 ppb	09:36:57
2	Sn 189.927†	52228.9	53391.7	9908.2 ug/L	9908.2 ppb	09:37:03
2	Ti 334.940†	5953376.9	6088218.5	9866.4 ug/L	9866.4 ppb	09:36:51
2	Tl 190.801†	28344.1	29014.1	9364.1 ug/L	9364.1 ppb	09:37:03
2	U 409.014†	-1704.1	1237.7	-16.135 ug/L	-16.135 ppb	09:37:03
2	V 292.402†	1317190.3	1348290.4	9907.1 ug/L	9907.1 ppb	09:36:57
2	Zn 213.857†	1340432.9	1369786.5	13428 ug/L	13428 ppb	09:36:57
2	SiO2†	1381582.9	1411989.6	100460 ug/L	100460 ppb	09:37:35
3	Sc Radial	4719.4	4719.4	98.2 %		09:36:01
3	Y RADIAL	4867.3	4867.3	97.33 %		09:36:01
3	Al 396.153Radial†	379.3	537.9	37.057 ug/L	37.057 ppb	09:36:01
3	Ca 317.933Radial†	30.1	13.9	23.111 ug/L	23.111 ppb	09:36:21
3	Fe 238.204 Radial†	-15.3	-27.1	30.834 ug/L	30.834 ppb	09:36:21
3	K 766.490 Radial†	1634353.5	1661813.6	293330 ug/L	293330 ppb	09:35:56
3	Mg 279.077 IEC†	-7.0	-7.5	-165.80 ug/L	-165.80 ppb	09:36:21
3	Na 589.592 Radial†	-523.3	545.5	164.99 ug/L	164.99 ppb	09:36:01
3	Sr 421.552†	1365024.9	1390317.7	9750.5 ug/L	9750.5 ppb	09:35:56
3	Sc 361.383	838614.3	838614.3	97.276 %		09:37:17
3	Y 371.029	678129.6	678129.6	94.896 %		09:37:17
3	Ag 328.068†	-6966.0	-7389.9	4.6620 ug/L	4.6620 ppb	09:37:22
3	As 188.979†	20579.2	21189.3	9677.8 ug/L	9677.8 ppb	09:37:22
3	B 249.677†	199331.9	205452.0	4861.3 ug/L	4861.3 ppb	09:37:17
3	Ba 233.527†	1612295.6	1657449.3	13557 ug/L	13557 ppb	09:37:17
3	Be 313.107†	7301723.8	7510501.0	2820.1 ug/L	2820.1 ppb	09:37:11
3	Cd 226.502†	760235.1	781732.6	9300.0 ug/L	9300.0 ppb	09:37:17
3	Co 228.616†	412652.0	424279.4	9265.1 ug/L	9265.1 ppb	09:37:22
3	Cr 267.716†	1944080.4	1998445.3	23280 ug/L	23280 ppb	09:37:17
3	Cu 324.752†	6411990.8	6585697.2	19978 ug/L	19978 ppb	09:37:11
3	Mn 257.610†	7803218.9	8021246.7	9228.6 ug/L	9228.6 ppb	09:37:11
3	Mo 202.031†	123822.2	127273.6	9531.2 ug/L	9531.2 ppb	09:37:22
3	Ni 231.604†	349393.8	359068.3	9296.7 ug/L	9296.7 ppb	09:37:22
3	P 214.914†	27410.8	27950.2	13519 ug/L	13519 ppb	09:37:22
3	Pb 220.353†	183260.8	188453.6	23521 ug/L	23521 ppb	09:37:22
3	S 181.975 Axial†	34522.5	35449.7	51693 ug/L	51693 ppb	09:37:22
3	Sb 206.836†	29057.7	29829.2	10749 ug/L	10749 ppb	09:37:22
3	Se 196.026†	14316.1	14739.1	9958.9 ug/L	9958.9 ppb	09:37:22
3	Si 251.611†	1378793.9	1416836.0	47274 ug/L	47274 ppb	09:37:17
3	Sn 189.927†	52112.1	53562.5	9939.9 ug/L	9939.9 ppb	09:37:22
3	Ti 334.940†	6003889.3	6173293.3	10004 ug/L	10004 ppb	09:37:11
3	Tl 190.801†	28160.2	28982.8	9355.7 ug/L	9355.7 ppb	09:37:22
3	U 409.014†	-1709.0	1223.2	-16.569 ug/L	-16.569 ppb	09:37:22
3	V 292.402†	1309937.5	1348168.6	9906.2 ug/L	9906.2 ppb	09:37:17
3	Zn 213.857†	1334404.9	1371053.2	13440 ug/L	13440 ppb	09:37:17
3	SiO2†	1364075.6	1401684.8	99725 ug/L	99725 ppb	09:37:41

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	837425.5	97.138 %	0.7462			0.77%
Sc Radial	4689.2	97.6 %	0.73			0.75%
Y 371.029	677298.4	94.780 %	0.7611			0.80%
Y RADIAL	4849.3	96.97 %	1.178			1.21%
Ag 328.068†	-7320.5	5.0161 ug/L	0.37476	5.0161 ppb	0.37476	7.47%
Al 396.153Radial†	510.7	12.746 ug/L	21.0546	12.746 ppb	21.0546	165.19%
As 188.979†	21114.4	9643.6 ug/L	44.20	9643.6 ppb	44.20	0.46%
QC value within limits for As 188.979 Recovery = 96.44%						
B 249.677†	205124.4	4853.5 ug/L	8.86	4853.5 ppb	8.86	0.18%
QC value within limits for B 249.677 Recovery = 97.07%						
Ba 233.527†	1658384.7	13565 ug/L	20.9	13565 ppb	20.9	0.15%
QC value within limits for Ba 233.527 Recovery = 90.43%						
Be 313.107†	7493530.5	2813.8 ug/L	23.59	2813.8 ppb	23.59	0.84%
QC value within limits for Be 313.107 Recovery = 93.79%						
Ca 317.933Radial†	12.5	20.668 ug/L	6.9165	20.668 ppb	6.9165	33.46%
Cd 226.502†	782655.8	9310.9 ug/L	15.07	9310.9 ppb	15.07	0.16%
QC value within limits for Cd 226.502 Recovery = 93.11%						

Co 228.616†	423195.0	9241.4 ug/L	23.43	9241.4 ppb	23.43	0.25%
QC value within limits for Co 228.616 Recovery = 92.41%						
Cr 267.716†	2000712.1	23306 ug/L	50.2	23306 ppb	50.2	0.22%
QC value within limits for Cr 267.716 Recovery = 93.22%						
Cu 324.752†	6558189.3	19894 ug/L	189.4	19894 ppb	189.4	0.95%
QC value within limits for Cu 324.752 Recovery = 99.47%						
Fe 238.204 Radial†	-27.3	28.256 ug/L	9.4518	28.256 ppb	9.4518	33.45%
K 766.490 Radial†	1650559.8	291340 ug/L	3532.7	291340 ppb	3532.7	1.21%
QC value within limits for K 766.490 Radial Recovery = 97.11%						
Mg 279.077 IEC†	-6.4	-126.30 ug/L	35.229	-126.30 ppb	35.229	27.89%
Mn 257.610†	7997069.2	9200.8 ug/L	88.23	9200.8 ppb	88.23	0.96%
QC value within limits for Mn 257.610 Recovery = 92.01%						
Mo 202.031†	127003.9	9511.0 ug/L	23.56	9511.0 ppb	23.56	0.25%
QC value within limits for Mo 202.031 Recovery = 95.11%						
Na 589.592 Radial†	508.8	153.89 ug/L	10.878	153.89 ppb	10.878	7.07%
Ni 231.604†	358395.1	9279.3 ug/L	17.79	9279.3 ppb	17.79	0.19%
QC value within limits for Ni 231.604 Recovery = 92.79%						
P 214.914†	27879.2	13491 ug/L	77.1	13491 ppb	77.1	0.57%
QC value less than the lower limit for P 214.914 Recovery = 89.94%						
Pb 220.353†	188051.4	23471 ug/L	58.7	23471 ppb	58.7	0.25%
QC value within limits for Pb 220.353 Recovery = 93.88%						
S 181.975 Axial†	35349.5	51547 ug/L	208.1	51547 ppb	208.1	0.40%
QC value within limits for S 181.975 Axial Recovery = 103.09%						
Sb 206.836†	29722.7	10711 ug/L	49.2	10711 ppb	49.2	0.46%
QC value within limits for Sb 206.836 Recovery = 107.11%						
Se 196.026†	14698.5	9931.5 ug/L	34.17	9931.5 ppb	34.17	0.34%
QC value within limits for Se 196.026 Recovery = 99.31%						
Si 251.611†	1416347.9	47258 ug/L	14.2	47258 ppb	14.2	0.03%
QC value within limits for Si 251.611 Recovery = 94.52%						
Sn 189.927†	53417.3	9913.0 ug/L	24.90	9913.0 ppb	24.90	0.25%
QC value within limits for Sn 189.927 Recovery = 99.13%						
Sr 421.552†	1375955.3	9649.8 ug/L	144.09	9649.8 ppb	144.09	1.49%
QC value within limits for Sr 421.552 Recovery = 96.50%						
Ti 334.940†	6153865.6	9972.9 ug/L	94.72	9972.9 ppb	94.72	0.95%
QC value within limits for Ti 334.940 Recovery = 99.73%						
Tl 190.801†	28980.5	9354.6 ug/L	9.99	9354.6 ppb	9.99	0.11%
QC value within limits for Tl 190.801 Recovery = 93.55%						
U 409.014†	1237.2	-16.223 ug/L	0.3110	-16.223 ppb	0.3110	1.92%
V 292.402†	1349136.5	9913.0 ug/L	11.01	9913.0 ppb	11.01	0.11%
QC value within limits for V 292.402 Recovery = 99.13%						
Zn 213.857†	1371613.1	13446 ug/L	21.2	13446 ppb	21.2	0.16%
QC value less than the lower limit for Zn 213.857 Recovery = 89.64%						
SiO2†	1417858.7	100880 ug/L	1411.1	100880 ppb	1411.1	1.40%
QC value within limits for SiO2 Recovery = 94.28%						
QC Failed. Continue with analysis.						

Sequence No.: 13

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/11/2010 09:39:50

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4670.4	4670.4	97.2 %		09:41:42
1	Y RADIAL	4823.4	4823.4	96.46 %		09:41:42
1	Al 396.153Radial†	5123.5	5424.7	5011.1 ug/L	5011.1 ppb	09:41:42
1	Ca 317.933Radial†	3015.0	3086.3	5115.4 ug/L	5115.4 ppb	09:42:02
1	Fe 238.204 Radial†	565.0	570.1	5202.1 ug/L	5202.1 ppb	09:42:02
1	K 766.490 Radial†	31539.8	29635.5	5224.9 ug/L	5224.9 ppb	09:41:42
1	Mg 279.077 IEC†	144.2	148.0	5243.8 ug/L	5243.8 ppb	09:42:02
1	Na 589.592 Radial†	30750.2	32727.1	9898.3 ug/L	9898.3 ppb	09:41:42
1	Sr 421.552†	71023.6	73096.4	512.60 ug/L	512.60 ppb	09:41:42
1	Sc 361.383	861497.2	861497.2	99.931 %		09:43:00
1	Y 371.029	702306.5	702306.5	98.279 %		09:43:00
1	Ag 328.068†	105494.3	105338.6	499.61 ug/L	499.61 ppb	09:43:05
1	As 188.979†	1102.8	1137.5	520.44 ug/L	520.44 ppb	09:43:25
1	B 249.677†	21775.9	22330.0	528.94 ug/L	528.94 ppb	09:43:05
1	Ba 233.527†	61166.3	61220.3	501.22 ug/L	501.22 ppb	09:43:05
1	Be 313.107†	1303101.7	1308343.7	488.45 ug/L	488.45 ppb	09:43:00
1	Cd 226.502†	41552.9	41793.6	496.76 ug/L	496.76 ppb	09:43:05
1	Co 228.616†	23177.2	23267.0	508.27 ug/L	508.27 ppb	09:43:05
1	Cr 267.716†	42798.2	42761.1	498.43 ug/L	498.43 ppb	09:43:05
1	Cu 324.752†	171474.0	165772.1	502.86 ug/L	502.86 ppb	09:43:05
1	Mn 257.610†	425443.4	425286.4	489.60 ug/L	489.60 ppb	09:43:00
1	Mo 202.031†	6534.4	6523.4	488.99 ug/L	488.99 ppb	09:43:25
1	Ni 231.604†	19280.3	19185.6	496.73 ug/L	496.73 ppb	09:43:05
1	P 214.914†	4111.5	3886.3	2320.2 ug/L	2320.2 ppb	09:43:25
1	Pb 220.353†	3850.2	3914.5	489.93 ug/L	489.93 ppb	09:43:25
1	S 181.975 Axial†	717.2	678.4	988.26 ug/L	988.26 ppb	09:43:25
1	Sb 206.836†	1459.7	1418.6	512.05 ug/L	512.05 ppb	09:43:25
1	Se 196.026†	717.2	739.8	516.83 ug/L	516.83 ppb	09:43:25
1	Si 251.611†	75036.2	74526.0	2486.8 ug/L	2486.8 ppb	09:43:05
1	Sn 189.927†	2646.0	2639.1	490.62 ug/L	490.62 ppb	09:43:25
1	Ti 334.940†	305681.5	307196.6	498.12 ug/L	498.12 ppb	09:43:05
1	Tl 190.801†	1506.2	1541.5	497.27 ug/L	497.27 ppb	09:43:25
1	U 409.014†	14331.4	17321.4	500.56 ug/L	500.56 ppb	09:43:05
1	V 292.402†	66956.5	68557.5	504.38 ug/L	504.38 ppb	09:43:05
1	Zn 213.857†	51424.0	50746.4	496.01 ug/L	496.01 ppb	09:43:05
1	SiO2†	74219.5	73687.8	5243.0 ug/L	5243.0 ppb	09:44:33
2	Sc Radial	4885.8	4885.8	102 %		09:42:08
2	Y RADIAL	5063.3	5063.3	101.3 %		09:42:08
2	Al 396.153Radial†	5273.5	5340.0	4932.5 ug/L	4932.5 ppb	09:42:08
2	Ca 317.933Radial†	3042.0	2976.2	4932.8 ug/L	4932.8 ppb	09:42:28
2	Fe 238.204 Radial†	571.6	550.9	5027.6 ug/L	5027.6 ppb	09:42:28
2	K 766.490 Radial†	32442.3	29092.8	5129.2 ug/L	5129.2 ppb	09:42:08
2	Mg 279.077 IEC†	147.0	144.2	5111.5 ug/L	5111.5 ppb	09:42:28
2	Na 589.592 Radial†	31888.4	32451.9	9815.1 ug/L	9815.1 ppb	09:42:08
2	Sr 421.552†	73180.6	71996.8	504.89 ug/L	504.89 ppb	09:42:08
2	Sc 361.383	864633.3	864633.3	100.29 %		09:43:31
2	Y 371.029	705630.1	705630.1	98.744 %		09:43:31
2	Ag 328.068†	104840.4	104303.7	494.67 ug/L	494.67 ppb	09:43:36
2	As 188.979†	1105.7	1136.3	519.84 ug/L	519.84 ppb	09:43:56
2	B 249.677†	21597.8	22073.4	522.87 ug/L	522.87 ppb	09:43:36
2	Ba 233.527†	60847.9	60680.8	496.80 ug/L	496.80 ppb	09:43:36
2	Be 313.107†	1314109.6	1314589.5	490.76 ug/L	490.76 ppb	09:43:31
2	Cd 226.502†	41341.7	41432.2	492.48 ug/L	492.48 ppb	09:43:36
2	Co 228.616†	23086.0	23091.9	504.45 ug/L	504.45 ppb	09:43:36
2	Cr 267.716†	42557.5	42365.8	493.82 ug/L	493.82 ppb	09:43:36
2	Cu 324.752†	170015.5	163695.5	496.56 ug/L	496.56 ppb	09:43:36
2	Mn 257.610†	427958.4	426249.9	490.69 ug/L	490.69 ppb	09:43:31
2	Mo 202.031†	6526.9	6492.2	486.63 ug/L	486.63 ppb	09:43:56
2	Ni 231.604†	19245.0	19080.5	494.01 ug/L	494.01 ppb	09:43:36

2	P 214.914†	4117.3	3877.1	2315.8 ug/L	2315.8 ppb	09:43:56
2	Pb 220.353†	3853.2	3903.6	488.56 ug/L	488.56 ppb	09:43:56
2	S 181.975 Axial†	715.0	673.6	981.29 ug/L	981.29 ppb	09:43:56
2	Sb 206.836†	1453.1	1406.7	507.80 ug/L	507.80 ppb	09:43:56
2	Se 196.026†	705.8	725.9	506.87 ug/L	506.87 ppb	09:43:56
2	Si 251.611†	74374.4	73593.8	2455.6 ug/L	2455.6 ppb	09:43:36
2	Sn 189.927†	2633.2	2616.7	486.44 ug/L	486.44 ppb	09:43:56
2	Ti 334.940†	303051.3	303464.6	492.06 ug/L	492.06 ppb	09:43:36
2	Tl 190.801†	1510.8	1540.5	496.95 ug/L	496.95 ppb	09:43:56
2	U 409.014†	14033.6	16972.5	490.47 ug/L	490.47 ppb	09:43:36
2	V 292.402†	66533.7	67893.0	499.53 ug/L	499.53 ppb	09:43:36
2	Zn 213.857†	51089.5	50226.2	490.93 ug/L	490.93 ppb	09:43:36
2	SiO2†	74415.2	73613.6	5237.8 ug/L	5237.8 ppb	09:44:38
3	Sc Radial	4806.3	4806.3	100.0 %		09:42:33
3	Y RADIAL	4987.4	4987.4	99.73 %		09:42:33
3	Al 396.153Radial†	5274.4	5426.7	5013.0 ug/L	5013.0 ppb	09:42:33
3	Ca 317.933Radial†	3039.9	3023.5	5011.3 ug/L	5011.3 ppb	09:42:53
3	Fe 238.204 Radial†	566.3	554.9	5063.6 ug/L	5063.6 ppb	09:42:53
3	K 766.490 Radial†	32341.8	29519.9	5204.5 ug/L	5204.5 ppb	09:42:33
3	Mg 279.077 IEC†	145.5	145.1	5142.1 ug/L	5142.1 ppb	09:42:53
3	Na 589.592 Radial†	32007.4	33089.7	10008 ug/L	10008 ppb	09:42:33
3	Sr 421.552†	73573.8	73580.3	515.99 ug/L	515.99 ppb	09:42:33
3	Sc 361.383	866646.2	866646.2	100.53 %		09:44:02
3	Y 371.029	705779.0	705779.0	98.765 %		09:44:02
3	Ag 328.068†	105067.1	104286.4	494.59 ug/L	494.59 ppb	09:44:07
3	As 188.979†	1098.0	1126.1	515.24 ug/L	515.24 ppb	09:44:27
3	B 249.677†	21681.5	22106.7	523.65 ug/L	523.65 ppb	09:44:07
3	Ba 233.527†	61108.1	60798.7	497.76 ug/L	497.76 ppb	09:44:07
3	Be 313.107†	1304278.6	1301767.0	485.98 ug/L	485.98 ppb	09:44:02
3	Cd 226.502†	41405.1	41399.5	492.09 ug/L	492.09 ppb	09:44:07
3	Co 228.616†	23181.2	23133.1	505.35 ug/L	505.35 ppb	09:44:07
3	Cr 267.716†	42560.1	42269.8	492.70 ug/L	492.70 ppb	09:44:07
3	Cu 324.752†	170405.3	163689.6	496.54 ug/L	496.54 ppb	09:44:07
3	Mn 257.610†	427104.0	424408.9	488.58 ug/L	488.58 ppb	09:44:02
3	Mo 202.031†	6540.3	6490.4	486.50 ug/L	486.50 ppb	09:44:27
3	Ni 231.604†	19295.9	19086.5	494.17 ug/L	494.17 ppb	09:44:07
3	P 214.914†	4134.2	3884.4	2320.4 ug/L	2320.4 ppb	09:44:27
3	Pb 220.353†	3830.3	3871.9	484.63 ug/L	484.63 ppb	09:44:27
3	S 181.975 Axial†	703.2	660.1	961.69 ug/L	961.69 ppb	09:44:27
3	Sb 206.836†	1440.7	1390.9	502.33 ug/L	502.33 ppb	09:44:27
3	Se 196.026†	715.8	734.1	512.54 ug/L	512.54 ppb	09:44:27
3	Si 251.611†	74658.3	73703.9	2459.3 ug/L	2459.3 ppb	09:44:07
3	Sn 189.927†	2648.3	2625.7	488.11 ug/L	488.11 ppb	09:44:27
3	Ti 334.940†	304012.2	303718.7	492.47 ug/L	492.47 ppb	09:44:07
3	Tl 190.801†	1513.4	1539.6	496.66 ug/L	496.66 ppb	09:44:27
3	U 409.014†	14198.9	17104.4	494.29 ug/L	494.29 ppb	09:44:07
3	V 292.402†	66536.1	67741.3	498.43 ug/L	498.43 ppb	09:44:07
3	Zn 213.857†	51169.4	50187.4	490.54 ug/L	490.54 ppb	09:44:07
3	SiO2†	73541.8	72572.5	5163.5 ug/L	5163.5 ppb	09:44:43

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	864258.9	100.25 %		0.301			0.30%
Sc Radial	4787.5	99.6 %		2.27			2.27%
Y 371.029	704571.9	98.596 %		0.2747			0.28%
Y RADIAL	4958.0	99.15 %		2.452			2.47%
Ag 328.068†	104642.9	496.29 ug/L		2.877	496.29 ppb	2.877	0.58%
QC value within limits for Ag 328.068 Recovery = 99.26%							
Al 396.153Radial†	5397.1	4985.5 ug/L		45.91	4985.5 ppb	45.91	0.92%
QC value within limits for Al 396.153Radial Recovery = 99.71%							
As 188.979†	1133.3	518.51 ug/L		2.850	518.51 ppb	2.850	0.55%
QC value within limits for As 188.979 Recovery = 103.70%							
B 249.677†	22170.0	525.15 ug/L		3.299	525.15 ppb	3.299	0.63%
QC value within limits for B 249.677 Recovery = 105.03%							
Ba 233.527†	60899.9	498.60 ug/L		2.325	498.60 ppb	2.325	0.47%
QC value within limits for Ba 233.527 Recovery = 99.72%							
Be 313.107†	1308233.4	488.40 ug/L		2.388	488.40 ppb	2.388	0.49%
QC value within limits for Be 313.107 Recovery = 97.68%							
Ca 317.933Radial†	3028.7	5019.8 ug/L		91.58	5019.8 ppb	91.58	1.82%

QC value within limits for Ca 317.933 Radial Recovery = 100.40%

Cd 226.502†	41541.8	493.78 ug/L	2.593	493.78 ppb	2.593	0.53%
QC value within limits for Cd 226.502 Recovery = 98.76%						
Co 228.616†	23164.0	506.03 ug/L	1.994	506.03 ppb	1.994	0.39%
QC value within limits for Co 228.616 Recovery = 101.21%						
Cr 267.716†	42465.5	494.98 ug/L	3.036	494.98 ppb	3.036	0.61%
QC value within limits for Cr 267.716 Recovery = 99.00%						
Cu 324.752†	164385.7	498.66 ug/L	3.644	498.66 ppb	3.644	0.73%
QC value within limits for Cu 324.752 Recovery = 99.73%						
Fe 238.204 Radial†	558.6	5097.8 ug/L	92.12	5097.8 ppb	92.12	1.81%
QC value within limits for Fe 238.204 Radial Recovery = 101.96%						
K 766.490 Radial†	29416.1	5186.2 ug/L	50.41	5186.2 ppb	50.41	0.97%
QC value within limits for K 766.490 Radial Recovery = 103.72%						
Mg 279.077 IEC†	145.8	5165.8 ug/L	69.27	5165.8 ppb	69.27	1.34%
QC value within limits for Mg 279.077 IEC Recovery = 103.32%						
Mn 257.610†	425315.0	489.62 ug/L	1.058	489.62 ppb	1.058	0.22%
QC value within limits for Mn 257.610 Recovery = 97.92%						
Mo 202.031†	6502.0	487.37 ug/L	1.399	487.37 ppb	1.399	0.29%
QC value within limits for Mo 202.031 Recovery = 97.47%						
Na 589.592 Radial†	32756.2	9907.1 ug/L	96.74	9907.1 ppb	96.74	0.98%
QC value within limits for Na 589.592 Radial Recovery = 99.07%						
Ni 231.604†	19117.5	494.97 ug/L	1.528	494.97 ppb	1.528	0.31%
QC value within limits for Ni 231.604 Recovery = 98.99%						
P 214.914†	3882.6	2318.8 ug/L	2.58	2318.8 ppb	2.58	0.11%
QC value within limits for P 214.914 Recovery = 92.75%						
Pb 220.353†	3896.7	487.70 ug/L	2.753	487.70 ppb	2.753	0.56%
QC value within limits for Pb 220.353 Recovery = 97.54%						
S 181.975 Axial†	670.7	977.08 ug/L	13.777	977.08 ppb	13.777	1.41%
QC value within limits for S 181.975 Axial Recovery = 97.71%						
Sb 206.836†	1405.4	507.39 ug/L	4.872	507.39 ppb	4.872	0.96%
QC value within limits for Sb 206.836 Recovery = 101.48%						
Se 196.026†	733.3	512.08 ug/L	4.996	512.08 ppb	4.996	0.98%
QC value within limits for Se 196.026 Recovery = 102.42%						
Si 251.611†	73941.2	2467.2 ug/L	17.02	2467.2 ppb	17.02	0.69%
QC value within limits for Si 251.611 Recovery = 98.69%						
Sn 189.927†	2627.2	488.39 ug/L	2.107	488.39 ppb	2.107	0.43%
QC value within limits for Sn 189.927 Recovery = 97.68%						
Sr 421.552†	72891.2	511.16 ug/L	5.691	511.16 ppb	5.691	1.11%
QC value within limits for Sr 421.552 Recovery = 102.23%						
Ti 334.940†	304793.3	494.22 ug/L	3.385	494.22 ppb	3.385	0.68%
QC value within limits for Ti 334.940 Recovery = 98.84%						
Tl 190.801†	1540.5	496.96 ug/L	0.305	496.96 ppb	0.305	0.06%
QC value within limits for Tl 190.801 Recovery = 99.39%						
U 409.014†	17132.8	495.11 ug/L	5.093	495.11 ppb	5.093	1.03%
QC value within limits for U 409.014 Recovery = 99.02%						
V 292.402†	68063.9	500.78 ug/L	3.165	500.78 ppb	3.165	0.63%
QC value within limits for V 292.402 Recovery = 100.16%						
Zn 213.857†	50386.6	492.50 ug/L	3.051	492.50 ppb	3.051	0.62%
QC value within limits for Zn 213.857 Recovery = 98.50%						
SiO2†	73291.3	5214.7 ug/L	44.46	5214.7 ppb	44.46	0.85%
QC value within limits for SiO2 Recovery = 97.52%						

All analyte(s) passed QC.

Sequence No.: 14

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/11/2010 09:46:54

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	4734.7	4734.7	98.5 %		09:48:47
1	Y RADIAL	4964.3	4964.3	99.27 %		09:48:47
1	Al 396.153Radial†	-150.8	-1.5	-1.4646 ug/L	-1.4646 ppb	09:48:47
1	Ca 317.933Radial†	16.3	-0.2	-0.2671 ug/L	-0.2671 ppb	09:49:07
1	Fe 238.204 Radial†	13.4	2.2	19.695 ug/L	19.695 ppb	09:49:07
1	K 766.490 Radial†	3573.3	802.1	141.56 ug/L	141.56 ppb	09:48:47
1	Mg 279.077 IEC†	2.9	2.5	89.003 ug/L	89.003 ppb	09:49:07
1	Na 589.592 Radial†	-923.5	140.9	42.627 ug/L	42.627 ppb	09:48:47
1	Sr 421.552†	14.6	12.7	0.0891 ug/L	0.0891 ppb	09:48:47
1	Sc 361.383	859259.9	859259.9	99.671 %		09:50:03
1	Y 371.029	711240.7	711240.7	99.529 %		09:50:03
1	Ag 328.068†	295.5	67.7	0.3243 ug/L	0.3243 ppb	09:50:03
1	As 188.979†	-10.2	23.7	10.734 ug/L	10.734 ppb	09:50:23
1	B 249.677†	398.8	939.1	22.338 ug/L	22.338 ppb	09:50:23
1	Ba 233.527†	-5.1	6.4	0.0524 ug/L	0.0524 ppb	09:50:23
1	Be 313.107†	-4186.5	138.4	0.0516 ug/L	0.0516 ppb	09:50:03
1	Cd 226.502†	-173.0	38.3	0.4537 ug/L	0.4537 ppb	09:50:23
1	Co 228.616†	-65.0	8.5	0.1893 ug/L	0.1893 ppb	09:50:23
1	Cr 267.716†	87.0	20.5	0.2382 ug/L	0.2382 ppb	09:50:23
1	Cu 324.752†	5846.5	45.1	0.1379 ug/L	0.1379 ppb	09:50:03
1	Mn 257.610†	465.9	15.6	0.0162 ug/L	0.0162 ppb	09:50:23
1	Mo 202.031†	43.0	27.6	2.0667 ug/L	2.0667 ppb	09:50:23
1	Ni 231.604†	114.3	6.7	0.1731 ug/L	0.1731 ppb	09:50:23
1	P 214.914†	224.2	-3.1	-1.9524 ug/L	-1.9524 ppb	09:50:23
1	Pb 220.353†	-34.1	27.5	3.4373 ug/L	3.4373 ppb	09:50:23
1	S 181.975 Axial†	43.3	4.1	5.9263 ug/L	5.9263 ppb	09:50:23
1	Sb 206.836†	53.8	11.8	4.2181 ug/L	4.2181 ppb	09:50:23
1	Se 196.026†	-15.9	6.2	4.2299 ug/L	4.2299 ppb	09:50:23
1	Si 251.611†	629.8	69.6	2.3014 ug/L	2.3014 ppb	09:50:23
1	Sn 189.927†	31.9	23.4	4.3362 ug/L	4.3362 ppb	09:50:23
1	Ti 334.940†	-1288.0	11.0	0.0105 ug/L	0.0105 ppb	09:50:03
1	Tl 190.801†	-26.8	7.4	2.3554 ug/L	2.3554 ppb	09:50:23
1	U 409.014†	-2976.1	-5.9	-0.1744 ug/L	-0.1744 ppb	09:50:03
1	V 292.402†	-1594.5	-45.1	-0.3003 ug/L	-0.3003 ppb	09:50:03
1	Zn 213.857†	722.7	11.9	0.1128 ug/L	0.1128 ppb	09:50:23
1	SiO2†	668.2	87.2	6.1665 ug/L	6.1665 ppb	09:51:19
2	Sc Radial	4851.7	4851.7	101 %		09:49:12
2	Y RADIAL	5095.2	5095.2	101.9 %		09:49:12
2	Al 396.153Radial†	-115.2	37.5	34.701 ug/L	34.701 ppb	09:49:12
2	Ca 317.933Radial†	20.4	3.5	5.7726 ug/L	5.7726 ppb	09:49:32
2	Fe 238.204 Radial†	9.9	-1.7	-15.375 ug/L	-15.375 ppb	09:49:32
2	K 766.490 Radial†	3498.8	640.8	113.10 ug/L	113.10 ppb	09:49:12
2	Mg 279.077 IEC†	1.1	0.6	22.595 ug/L	22.595 ppb	09:49:32
2	Na 589.592 Radial†	-919.4	167.6	50.696 ug/L	50.696 ppb	09:49:12
2	Sr 421.552†	-17.5	-19.4	-0.1361 ug/L	-0.1361 ppb	09:49:12
2	Sc 361.383	850504.8	850504.8	98.656 %		09:50:29
2	Y 371.029	704312.6	704312.6	98.560 %		09:50:29
2	Ag 328.068†	269.4	44.3	0.2043 ug/L	0.2043 ppb	09:50:29
2	As 188.979†	-5.5	28.3	12.834 ug/L	12.834 ppb	09:50:49
2	B 249.677†	398.0	942.4	22.422 ug/L	22.422 ppb	09:50:49
2	Ba 233.527†	5.5	17.2	0.1409 ug/L	0.1409 ppb	09:50:49
2	Be 313.107†	-4196.2	85.3	0.0320 ug/L	0.0320 ppb	09:50:29
2	Cd 226.502†	-160.9	48.8	0.5818 ug/L	0.5818 ppb	09:50:49
2	Co 228.616†	-66.1	6.7	0.1493 ug/L	0.1493 ppb	09:50:49
2	Cr 267.716†	89.3	23.7	0.2759 ug/L	0.2759 ppb	09:50:49
2	Cu 324.752†	5914.7	174.6	0.5279 ug/L	0.5279 ppb	09:50:29
2	Mn 257.610†	480.8	35.5	0.0384 ug/L	0.0384 ppb	09:50:49
2	Mo 202.031†	33.8	18.7	1.3991 ug/L	1.3991 ppb	09:50:49
2	Ni 231.604†	104.7	-1.9	-0.0499 ug/L	-0.0499 ppb	09:50:49

2	P 214.914†	217.6	-7.5	-4.7167 ug/L	-4.7167 ppb	09:50:49
2	Pb 220.353†	-72.0	-11.2	-1.3885 ug/L	-1.3885 ppb	09:50:49
2	S 181.975 Axial†	40.6	1.8	2.6265 ug/L	2.6265 ppb	09:50:49
2	Sb 206.836†	55.3	13.9	4.9567 ug/L	4.9567 ppb	09:50:49
2	Se 196.026†	-11.7	10.2	6.8372 ug/L	6.8372 ppb	09:50:49
2	Si 251.611†	635.7	82.1	2.7283 ug/L	2.7283 ppb	09:50:49
2	Sn 189.927†	31.9	23.7	4.3979 ug/L	4.3979 ppb	09:50:49
2	Ti 334.940†	-1236.2	50.2	0.0794 ug/L	0.0794 ppb	09:50:29
2	Tl 190.801†	-15.5	18.5	5.9356 ug/L	5.9356 ppb	09:50:49
2	U 409.014†	-2878.5	62.4	1.8098 ug/L	1.8098 ppb	09:50:29
2	V 292.402†	-1456.7	78.1	0.5928 ug/L	0.5928 ppb	09:50:29
2	Zn 213.857†	720.1	16.6	0.1658 ug/L	0.1658 ppb	09:50:49
2	SiO2†	636.8	62.4	4.4121 ug/L	4.4121 ppb	09:51:25
3	Sc Radial	4898.6	4898.6	102 %		09:49:37
3	Y RADIAL	5106.9	5106.9	102.1 %		09:49:37
3	Al 396.153Radial†	-161.5	-6.9	-6.4540 ug/L	-6.4540 ppb	09:49:37
3	Ca 317.933Radial†	17.4	0.4	0.6105 ug/L	0.6105 ppb	09:49:57
3	Fe 238.204 Radial†	9.8	-1.8	-16.496 ug/L	-16.496 ppb	09:49:57
3	K 766.490 Radial†	3494.7	603.6	106.52 ug/L	106.52 ppb	09:49:37
3	Mg 279.077 IEC†	5.2	4.6	164.80 ug/L	164.80 ppb	09:49:57
3	Na 589.592 Radial†	-899.8	195.5	59.140 ug/L	59.140 ppb	09:49:37
3	Sr 421.552†	-13.1	-15.0	-0.1052 ug/L	-0.1052 ppb	09:49:37
3	Sc 361.383	860144.3	860144.3	99.774 %		09:50:54
3	Y 371.029	710750.2	710750.2	99.461 %		09:50:54
3	Ag 328.068†	277.0	48.8	0.2220 ug/L	0.2220 ppb	09:50:54
3	As 188.979†	-12.7	21.1	9.5787 ug/L	9.5787 ppb	09:51:14
3	B 249.677†	366.7	906.6	21.570 ug/L	21.570 ppb	09:51:14
3	Ba 233.527†	-6.7	4.9	0.0413 ug/L	0.0413 ppb	09:51:14
3	Be 313.107†	-4270.9	58.2	0.0219 ug/L	0.0219 ppb	09:50:54
3	Cd 226.502†	-176.5	35.0	0.4193 ug/L	0.4193 ppb	09:51:14
3	Co 228.616†	-61.1	12.5	0.2766 ug/L	0.2766 ppb	09:51:14
3	Cr 267.716†	65.6	-1.1	-0.0145 ug/L	-0.0145 ppb	09:51:14
3	Cu 324.752†	5926.2	118.9	0.3561 ug/L	0.3561 ppb	09:50:54
3	Mn 257.610†	480.0	29.2	0.0252 ug/L	0.0252 ppb	09:51:14
3	Mo 202.031†	35.4	20.0	1.4940 ug/L	1.4940 ppb	09:51:14
3	Ni 231.604†	120.4	12.6	0.3272 ug/L	0.3272 ppb	09:51:14
3	P 214.914†	228.5	0.9	0.5462 ug/L	0.5462 ppb	09:51:14
3	Pb 220.353†	-48.2	13.5	1.6824 ug/L	1.6824 ppb	09:51:14
3	S 181.975 Axial†	45.2	5.9	8.6472 ug/L	8.6472 ppb	09:51:14
3	Sb 206.836†	45.3	3.3	1.2402 ug/L	1.2402 ppb	09:51:14
3	Se 196.026†	-18.1	3.9	2.5947 ug/L	2.5947 ppb	09:51:14
3	Si 251.611†	625.1	64.3	2.1319 ug/L	2.1319 ppb	09:51:14
3	Sn 189.927†	33.5	24.9	4.6269 ug/L	4.6269 ppb	09:51:14
3	Ti 334.940†	-1241.1	59.3	0.0798 ug/L	0.0798 ppb	09:50:54
3	Tl 190.801†	-33.1	1.1	0.3403 ug/L	0.3403 ppb	09:51:14
3	U 409.014†	-2737.0	236.9	6.8701 ug/L	6.8701 ppb	09:50:54
3	V 292.402†	-1447.1	104.3	0.7969 ug/L	0.7969 ppb	09:50:54
3	Zn 213.857†	729.7	18.2	0.1790 ug/L	0.1790 ppb	09:51:14
3	SiO2†	623.0	41.2	2.9005 ug/L	2.9005 ppb	09:51:30

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	856636.3	99.367 %	0.6181			0.62%
Sc Radial	4828.3	100 %	1.8			1.75%
Y 371.029	708767.8	99.183 %	0.5410			0.55%
Y RADIAL	5055.5	101.1 %	1.58			1.57%
Ag 328.068†	53.6	0.2502 ug/L	0.06479	0.2502 ppb	0.06479	25.90%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	9.7	8.9274 ug/L	22.45943	8.9274 ppb	22.45943	251.58%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	24.4	11.049 ug/L	1.6506	11.049 ppb	1.6506	14.94%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	929.4	22.110 ug/L	0.4696	22.110 ppb	0.4696	2.12%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	9.5	0.0782 ug/L	0.05461	0.0782 ppb	0.05461	69.83%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	93.9	0.0351 ug/L	0.01510	0.0351 ppb	0.01510	42.98%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	1.2	2.0386 ug/L	3.26333	2.0386 ppb	3.26333	160.07%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd	226.502†	40.7	0.4849 ug/L	0.08560	0.4849 ppb	0.08560	17.65%
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co	228.616†	9.2	0.2051 ug/L	0.06510	0.2051 ppb	0.06510	31.74%
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr	267.716†	14.4	0.1666 ug/L	0.15791	0.1666 ppb	0.15791	94.81%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu	324.752†	112.9	0.3406 ug/L	0.19547	0.3406 ppb	0.19547	57.39%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe	238.204 Radial†	-0.4	-4.0589 ug/L	20.57911	-4.0589 ppb	20.57911	507.02%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K	766.490 Radial†	682.2	120.39 ug/L	18.626	120.39 ppb	18.626	15.47%
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg	279.077 IEC†	2.6	92.132 ug/L	71.1522	92.132 ppb	71.1522	77.23%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn	257.610†	26.7	0.0266 ug/L	0.01114	0.0266 ppb	0.01114	41.91%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo	202.031†	22.1	1.6533 ug/L	0.36118	1.6533 ppb	0.36118	21.85%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na	589.592 Radial†	168.0	50.821 ug/L	8.2576	50.821 ppb	8.2576	16.25%
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni	231.604†	5.8	0.1501 ug/L	0.18956	0.1501 ppb	0.18956	126.26%
QC value within limits for Ni 231.604 Recovery = Not calculated							
P	214.914†	-3.2	-2.0410 ug/L	2.63255	-2.0410 ppb	2.63255	128.99%
QC value within limits for P 214.914 Recovery = Not calculated							
Pb	220.353†	9.9	1.2437 ug/L	2.44260	1.2437 ppb	2.44260	196.39%
QC value within limits for Pb 220.353 Recovery = Not calculated							
S	181.975 Axial†	3.9	5.7333 ug/L	3.01498	5.7333 ppb	3.01498	52.59%
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb	206.836†	9.7	3.4717 ug/L	1.96747	3.4717 ppb	1.96747	56.67%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se	196.026†	6.8	4.5540 ug/L	2.13969	4.5540 ppb	2.13969	46.99%
QC value within limits for Se 196.026 Recovery = Not calculated							
Si	251.611†	72.0	2.3872 ug/L	0.30731	2.3872 ppb	0.30731	12.87%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn	189.927†	24.0	4.4537 ug/L	0.15317	4.4537 ppb	0.15317	3.44%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr	421.552†	-7.2	-0.0508 ug/L	0.12207	-0.0508 ppb	0.12207	240.45%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti	334.940†	40.2	0.0566 ug/L	0.03991	0.0566 ppb	0.03991	70.53%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl	190.801†	9.0	2.8771 ug/L	2.83391	2.8771 ppb	2.83391	98.50%
QC value within limits for Tl 190.801 Recovery = Not calculated							
U	409.014†	97.8	2.8352 ug/L	3.63242	2.8352 ppb	3.63242	128.12%
QC value within limits for U 409.014 Recovery = Not calculated							
V	292.402†	45.7	0.3632 ug/L	0.58355	0.3632 ppb	0.58355	160.68%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn	213.857†	15.5	0.1525 ug/L	0.03500	0.1525 ppb	0.03500	22.95%
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†		63.6	4.4930 ug/L	1.63450	4.4930 ppb	1.63450	36.38%
QC value within limits for SiO2 Recovery = Not calculated							

All analyte(s) passed QC.

=====
Analysis Begun

Start Time: 2/11/2010 09:57:43

Plasma On Time: 2/8/2010 05:57:09

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\021110.sif

Batch ID:

Results Data Set: 021110

Results Library: C:\pe\Optima3\Results\Results.mdb
=====

Method Loaded

Method Name: General Eng.2AX

Method Last Saved: 2/11/2010 08:26:30

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: 2/11/2010 09:57:45

Analyst: HSC

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:
=====

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4740.4	4740.4	98.6 %			09:59:38
1	Y RADIAL	4954.0	4954.0	99.07 %			09:59:38
1	Al 396.153Radial†	-161.0	-11.7	-9.5398 ug/L		-9.5398 ppb	09:59:38

1	Ca 317.933Radial†	13.8	-2.7	-4.5259 ug/L	-4.5259 ppb	09:59:58
1	Fe 238.204 Radial†	40798.3	41359.2	376310 ug/L	376310 ppb	09:59:38
1	K 766.490 Radial†	2921.2	136.5	24.135 ug/L	24.135 ppb	09:59:38
1	Mg 279.077 IEC†	12.9	12.6	53.575 ug/L	53.575 ppb	09:59:58
1	Na 589.592 Radial†	-991.0	73.6	22.272 ug/L	22.272 ppb	09:59:38
1	Sr 421.552†	83.8	82.8	0.5809 ug/L	0.5809 ppb	09:59:38
1	Sc 361.383	841857.2	841857.2	97.653 %		10:00:56
1	Y 371.029	690958.1	690958.1	96.691 %		10:00:56
1	Ag 328.068†	-22044.7	-22803.4	11.385 ug/L	11.385 ppb	10:00:56
1	As 188.979†	-193.9	-164.7	13.504 ug/L	13.504 ppb	10:01:16
1	B 249.677†	1489.3	2064.1	-12.024 ug/L	-12.024 ppb	10:00:56
1	Ba 233.527†	-1870.2	-1903.6	-4.0237 ug/L	-4.0237 ppb	10:00:56
1	Be 313.107†	-8962.5	-4839.3	-1.7921 ug/L	-1.7921 ppb	10:00:56
1	Cd 226.502†	2605.3	2879.8	-2.6405 ug/L	-2.6405 ppb	10:00:56
1	Co 228.616†	221.9	300.9	1.0590 ug/L	1.0590 ppb	10:01:16
1	Cr 267.716†	-206.6	-278.3	0.0691 ug/L	0.0691 ppb	10:00:56
1	Cu 324.752†	363.0	-5449.0	-2.2683 ug/L	-2.2683 ppb	10:00:56
1	Mn 257.610†	-32822.7	-34063.6	-2.0423 ug/L	-2.0423 ppb	10:00:56
1	Mo 202.031†	-337.5	-361.1	2.1689 ug/L	2.1689 ppb	10:00:56
1	Ni 231.604†	222.7	120.0	3.1056 ug/L	3.1056 ppb	10:01:16
1	P 214.914†	742.4	532.2	31.347 ug/L	31.347 ppb	10:01:16
1	Pb 220.353†	208.6	275.3	-1.6678 ug/L	-1.6678 ppb	10:01:16
1	S 181.975 Axial†	53.4	15.4	22.398 ug/L	22.398 ppb	10:01:16
1	Sb 206.836†	32.5	-8.9	-7.8066 ug/L	-7.8066 ppb	10:01:16
1	Se 196.026†	-1827.5	-1849.3	-33.554 ug/L	-33.554 ppb	10:01:16
1	Si 251.611†	-790.8	-1372.1	-45.561 ug/L	-45.561 ppb	10:00:56
1	Sn 189.927†	-9.2	-18.1	2.9662 ug/L	2.9662 ppb	10:01:16
1	Ti 334.940†	1468.4	2806.9	0.0292 ug/L	0.0292 ppb	10:00:56
1	Tl 190.801†	-59.4	-26.6	-8.7646 ug/L	-8.7646 ppb	10:01:16
1	U 409.014†	341229.2	352411.9	10176 ug/L	10176 ppb	10:00:56
1	V 292.402†	2962.3	4588.2	-2.3071 ug/L	-2.3071 ppb	10:00:56
1	Zn 213.857†	4255.8	3644.9	-20.354 ug/L	-20.354 ppb	10:01:16
1	SiO2†	-781.0	-1382.9	-97.911 ug/L	-97.911 ppb	10:02:13
2	Sc Radial	4799.6	4799.6	99.8 %		10:00:04
2	Y RADIAL	4986.2	4986.2	99.71 %		10:00:04
2	Al 396.153Radial†	-155.5	-4.2	-2.5135 ug/L	-2.5135 ppb	10:00:04
2	Ca 317.933Radial†	10.9	-5.7	-9.5149 ug/L	-9.5149 ppb	10:00:24
2	Fe 238.204 Radial†	40906.3	40957.3	372650 ug/L	372650 ppb	10:00:04
2	K 766.490 Radial†	2915.1	93.9	16.624 ug/L	16.624 ppb	10:00:04
2	Mg 279.077 IEC†	13.9	13.5	87.007 ug/L	87.007 ppb	10:00:24
2	Na 589.592 Radial†	-1103.9	-27.1	-8.1850 ug/L	-8.1850 ppb	10:00:04
2	Sr 421.552†	90.7	88.7	0.6220 ug/L	0.6220 ppb	10:00:04
2	Sc 361.383	851531.7	851531.7	98.775 %		10:01:22
2	Y 371.029	698630.5	698630.5	97.765 %		10:01:22
2	Ag 328.068†	-22367.3	-22873.5	9.7911 ug/L	9.7911 ppb	10:01:22
2	As 188.979†	-185.5	-153.9	17.566 ug/L	17.566 ppb	10:01:42
2	B 249.677†	1539.8	2097.9	-10.624 ug/L	-10.624 ppb	10:01:22
2	Ba 233.527†	-1889.9	-1901.8	-4.1196 ug/L	-4.1196 ppb	10:01:22
2	Be 313.107†	-9012.3	-4785.4	-1.7717 ug/L	-1.7717 ppb	10:01:22
2	Cd 226.502†	2595.3	2839.4	-2.7352 ug/L	-2.7352 ppb	10:01:22
2	Co 228.616†	191.4	267.5	0.3810 ug/L	0.3810 ppb	10:01:42
2	Cr 267.716†	-220.3	-289.8	-0.1494 ug/L	-0.1494 ppb	10:01:22
2	Cu 324.752†	326.7	-5490.0	-2.6060 ug/L	-2.6060 ppb	10:01:22
2	Mn 257.610†	-33186.7	-34050.3	-2.3894 ug/L	-2.3894 ppb	10:01:22
2	Mo 202.031†	-348.8	-368.6	1.3235 ug/L	1.3235 ppb	10:01:22
2	Ni 231.604†	271.9	167.3	4.3309 ug/L	4.3309 ppb	10:01:42
2	P 214.914†	758.9	540.3	39.344 ug/L	39.344 ppb	10:01:42
2	Pb 220.353†	209.9	274.2	-1.4575 ug/L	-1.4575 ppb	10:01:42
2	S 181.975 Axial†	50.2	11.5	16.709 ug/L	16.709 ppb	10:01:42
2	Sb 206.836†	20.6	-21.3	-12.080 ug/L	-12.080 ppb	10:01:42
2	Se 196.026†	-1866.2	-1867.2	-57.422 ug/L	-57.422 ppb	10:01:42
2	Si 251.611†	-781.2	-1353.2	-44.923 ug/L	-44.923 ppb	10:01:22
2	Sn 189.927†	-2.4	-11.1	4.2059 ug/L	4.2059 ppb	10:01:42
2	Ti 334.940†	1586.6	2909.5	0.1768 ug/L	0.1768 ppb	10:01:22
2	Tl 190.801†	-46.6	-13.0	-4.4054 ug/L	-4.4054 ppb	10:01:42
2	U 409.014†	346369.6	353646.1	10212 ug/L	10212 ppb	10:01:22
2	V 292.402†	3008.2	4600.1	-1.6264 ug/L	-1.6264 ppb	10:01:22
2	Zn 213.857†	4300.7	3640.8	-19.854 ug/L	-19.854 ppb	10:01:42
2	SiO2†	-743.7	-1336.1	-94.555 ug/L	-94.555 ppb	10:02:19
3	Sc Radial	4766.9	4766.9	99.2 %		10:00:29
3	Y RADIAL	4992.1	4992.1	99.83 %		10:00:29

3	Al 396.153Radial†	-148.2	2.2	3.2739 ug/L	3.2739 ppb	10:00:29
3	Ca 317.933Radial†	11.0	-5.6	-9.2419 ug/L	-9.2419 ppb	10:00:49
3	Fe 238.204 Radial†	40736.1	41066.8	373650 ug/L	373650 ppb	10:00:29
3	K 766.490 Radial†	2797.3	-4.9	-0.8049 ug/L	-0.8049 ppb	10:00:29
3	Mg 279.077 IEC†	12.3	12.0	34.252 ug/L	34.252 ppb	10:00:49
3	Na 589.592 Radial†	-1089.5	-20.1	-6.0932 ug/L	-6.0932 ppb	10:00:29
3	Sr 421.552†	131.8	130.8	0.9172 ug/L	0.9172 ppb	10:00:29
3	Sc 361.383	853653.1	853653.1	99.021 %		10:01:48
3	Y 371.029	701510.8	701510.8	98.168 %		10:01:48
3	Ag 328.068†	-22423.9	-22874.4	10.117 ug/L	10.117 ppb	10:01:48
3	As 188.979†	-209.9	-178.1	6.8005 ug/L	6.8005 ppb	10:02:08
3	B 249.677†	1519.7	2073.8	-11.362 ug/L	-11.362 ppb	10:01:48
3	Ba 233.527†	-1904.9	-1912.1	-4.1757 ug/L	-4.1757 ppb	10:01:48
3	Be 313.107†	-8926.7	-4676.3	-1.7310 ug/L	-1.7310 ppb	10:01:48
3	Cd 226.502†	2606.6	2844.3	-2.7796 ug/L	-2.7796 ppb	10:01:48
3	Co 228.616†	201.1	276.8	0.5733 ug/L	0.5733 ppb	10:02:08
3	Cr 267.716†	-229.8	-298.8	-0.2376 ug/L	-0.2376 ppb	10:01:48
3	Cu 324.752†	309.1	-5508.5	-2.6116 ug/L	-2.6116 ppb	10:01:48
3	Mn 257.610†	-33209.7	-33990.0	-2.2195 ug/L	-2.2195 ppb	10:01:48
3	Mo 202.031†	-328.7	-347.5	2.9804 ug/L	2.9804 ppb	10:01:48
3	Ni 231.604†	248.6	143.0	3.7011 ug/L	3.7011 ppb	10:02:08
3	P 214.914†	737.6	516.9	23.984 ug/L	23.984 ppb	10:02:08
3	Pb 220.353†	231.0	295.0	1.0487 ug/L	1.0487 ppb	10:02:08
3	S 181.975 Axial†	45.6	6.7	9.7874 ug/L	9.7874 ppb	10:02:08
3	Sb 206.836†	35.1	-6.7	-6.9963 ug/L	-6.9963 ppb	10:02:08
3	Se 196.026†	-1853.1	-1849.3	-42.132 ug/L	-42.132 ppb	10:02:08
3	Si 251.611†	-842.4	-1413.0	-46.942 ug/L	-46.942 ppb	10:01:48
3	Sn 189.927†	-4.1	-12.8	3.9007 ug/L	3.9007 ppb	10:02:08
3	Ti 334.940†	1591.6	2910.5	0.1812 ug/L	0.1812 ppb	10:01:48
3	Tl 190.801†	-50.7	-17.0	-5.6701 ug/L	-5.6701 ppb	10:02:08
3	U 409.014†	347355.3	353770.1	10216 ug/L	10216 ppb	10:01:48
3	V 292.402†	2901.2	4484.6	-2.5827 ug/L	-2.5827 ppb	10:01:48
3	Zn 213.857†	4272.2	3601.2	-20.390 ug/L	-20.390 ppb	10:02:08
3	SiO2†	-805.2	-1396.3	-98.891 ug/L	-98.891 ppb	10:02:24

Mean Data: LR1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	849014.0	98.483 %	%	0.7294			0.74%
Sc Radial	4768.9	99.2 %	%	0.62			0.62%
Y 371.029	697033.1	97.541 %	%	0.7633			0.78%
Y RADIAL	4977.4	99.54 %	%	0.410			0.41%
Ag 328.068†	-22850.5	10.431 ug/L	ug/L	0.8418	10.431 ppb	0.8418	8.07%
Al 396.153Radial†	-4.6	-2.9265 ug/L	ug/L	6.41681	-2.9265 ppb	6.41681	219.27%
As 188.979†	-165.6	12.624 ug/L	ug/L	5.4366	12.624 ppb	5.4366	43.07%
B 249.677†	2078.6	-11.337 ug/L	ug/L	0.7005	-11.337 ppb	0.7005	6.18%
Ba 233.527†	-1905.8	-4.1063 ug/L	ug/L	0.07691	-4.1063 ppb	0.07691	1.87%
Be 313.107†	-4767.0	-1.7649 ug/L	ug/L	0.03110	-1.7649 ppb	0.03110	1.76%
Ca 317.933Radial†	-4.7	-7.7609 ug/L	ug/L	2.80494	-7.7609 ppb	2.80494	36.14%
Cd 226.502†	2854.5	-2.7184 ug/L	ug/L	0.07108	-2.7184 ppb	0.07108	2.61%
Co 228.616†	281.7	0.6711 ug/L	ug/L	0.34944	0.6711 ppb	0.34944	52.07%
Cr 267.716†	-289.0	-0.1060 ug/L	ug/L	0.15789	-0.1060 ppb	0.15789	148.95%
Cu 324.752†	-5482.5	-2.4953 ug/L	ug/L	0.19663	-2.4953 ppb	0.19663	7.88%
Fe 238.204 Radial†	41127.8	374210 ug/L	ug/L	1890.5	374210 ppb	1890.5	0.51%
K 766.490 Radial†	75.2	13.318 ug/L	ug/L	12.7946	13.318 ppb	12.7946	96.07%
Mg 279.077 IEC†	12.7	58.278 ug/L	ug/L	26.6898	58.278 ppb	26.6898	45.80%
Mn 257.610†	-34034.6	-2.2171 ug/L	ug/L	0.17356	-2.2171 ppb	0.17356	7.83%
Mo 202.031†	-359.1	2.1576 ug/L	ug/L	0.82852	2.1576 ppb	0.82852	38.40%
Na 589.592 Radial†	8.8	2.6645 ug/L	ug/L	17.01254	2.6645 ppb	17.01254	638.49%
Ni 231.604†	143.4	3.7125 ug/L	ug/L	0.61273	3.7125 ppb	0.61273	16.50%
P 214.914†	529.8	31.558 ug/L	ug/L	7.6824	31.558 ppb	7.6824	24.34%
Pb 220.353†	281.5	-0.6922 ug/L	ug/L	1.51134	-0.6922 ppb	1.51134	218.34%
S 181.975 Axial†	11.2	16.298 ug/L	ug/L	6.3151	16.298 ppb	6.3151	38.75%
Sb 206.836†	-12.3	-8.9610 ug/L	ug/L	2.73143	-8.9610 ppb	2.73143	30.48%
Se 196.026†	-1855.3	-44.369 ug/L	ug/L	12.0904	-44.369 ppb	12.0904	27.25%
Si 251.611†	-1379.4	-45.809 ug/L	ug/L	1.0318	-45.809 ppb	1.0318	2.25%
Sn 189.927†	-14.0	3.6909 ug/L	ug/L	0.64592	3.6909 ppb	0.64592	17.50%
Sr 421.552†	100.8	0.7067 ug/L	ug/L	0.18347	0.7067 ppb	0.18347	25.96%
Ti 334.940†	2875.6	0.1291 ug/L	ug/L	0.08649	0.1291 ppb	0.08649	67.02%
Tl 190.801†	-18.9	-6.2800 ug/L	ug/L	2.24271	-6.2800 ppb	2.24271	35.71%

U 409.014†	353276.0	10201 ug/L	22.0	10201 ppb	22.0	0.22%
V 292.402†	4557.6	-2.1721 ug/L	0.49225	-2.1721 ppb	0.49225	22.66%
Zn 213.857†	3629.0	-20.200 ug/L	0.2995	-20.200 ppb	0.2995	1.48%
SiO2†	-1371.8	-97.119 ug/L	2.2742	-97.119 ppb	2.2742	2.34%

Sequence No.: 2
 Sample ID: CCV
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 7
 Date Collected: 2/11/2010 10:04:36
 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	5033.7	5033.7	105 %		10:06:28
1	Y RADIAL	5190.7	5190.7	103.8 %		10:06:28
1	Al 396.153Radial†	5070.4	4993.5	4611.1 ug/L	4611.1 ppb	10:06:28
1	Ca 317.933Radial†	2993.3	2841.7	4709.9 ug/L	4709.9 ppb	10:06:48
1	Fe 238.204 Radial†	557.9	521.3	4757.9 ug/L	4757.9 ppb	10:06:48
1	K 766.490 Radial†	30624.0	26418.4	4657.4 ug/L	4657.4 ppb	10:06:28
1	Mg 279.077 IEC†	143.2	136.3	4831.5 ug/L	4831.5 ppb	10:06:48
1	Na 589.592 Radial†	30619.8	30318.6	9169.8 ug/L	9169.8 ppb	10:06:28
1	Sr 421.552†	70551.5	67370.3	472.44 ug/L	472.44 ppb	10:06:28
1	Sc 361.383	875140.1	875140.1	101.51 %		10:07:45
1	Y 371.029	712431.5	712431.5	99.696 %		10:07:45
1	Ag 328.068†	104626.9	102838.5	487.65 ug/L	487.65 ppb	10:07:51
1	As 188.979†	1069.7	1087.7	497.65 ug/L	497.65 ppb	10:08:11
1	B 249.677†	20615.4	20847.1	493.76 ug/L	493.76 ppb	10:07:51
1	Ba 233.527†	60826.3	59931.1	490.66 ug/L	490.66 ppb	10:07:51
1	Be 313.107†	1320921.4	1305569.2	487.38 ug/L	487.38 ppb	10:07:45
1	Cd 226.502†	41286.4	40882.9	485.97 ug/L	485.97 ppb	10:07:51
1	Co 228.616†	23107.5	22836.7	498.89 ug/L	498.89 ppb	10:07:51
1	Cr 267.716†	42485.5	41785.4	487.05 ug/L	487.05 ppb	10:07:51
1	Cu 324.752†	169439.3	161092.7	488.65 ug/L	488.65 ppb	10:07:51
1	Mn 257.610†	431681.5	424794.6	489.01 ug/L	489.01 ppb	10:07:45
1	Mo 202.031†	6556.9	6443.6	482.97 ug/L	482.97 ppb	10:08:11
1	Ni 231.604†	19213.2	18818.8	487.23 ug/L	487.23 ppb	10:07:51
1	P 214.914†	4153.9	3863.9	2309.3 ug/L	2309.3 ppb	10:08:11
1	Pb 220.353†	3864.4	3868.5	484.13 ug/L	484.13 ppb	10:08:11
1	S 181.975 Axial†	711.3	661.4	963.56 ug/L	963.56 ppb	10:08:11
1	Sb 206.836†	1435.4	1371.8	495.53 ug/L	495.53 ppb	10:08:11
1	Se 196.026†	706.7	718.3	500.84 ug/L	500.84 ppb	10:08:11
1	Si 251.611†	74142.6	72475.1	2418.3 ug/L	2418.3 ppb	10:07:51
1	Sn 189.927†	2645.9	2597.7	482.87 ug/L	482.87 ppb	10:08:11
1	Ti 334.940†	302446.2	299240.8	485.20 ug/L	485.20 ppb	10:07:51
1	Tl 190.801†	1517.2	1528.8	493.16 ug/L	493.16 ppb	10:08:11
1	U 409.014†	14048.8	16819.4	486.08 ug/L	486.08 ppb	10:07:51
1	V 292.402†	66425.6	66990.0	492.95 ug/L	492.95 ppb	10:07:51
1	Zn 213.857†	50993.4	49519.9	484.06 ug/L	484.06 ppb	10:07:51
1	SiO2†	73971.9	72286.1	5143.2 ug/L	5143.2 ppb	10:09:18
2	Sc Radial	4797.7	4797.7	99.8 %		10:06:53
2	Y RADIAL	4973.1	4973.1	99.45 %		10:06:53
2	Al 396.153Radial†	5127.7	5289.1	4885.3 ug/L	4885.3 ppb	10:06:53
2	Ca 317.933Radial†	3041.8	3030.9	5023.6 ug/L	5023.6 ppb	10:07:13
2	Fe 238.204 Radial†	568.3	557.9	5091.2 ug/L	5091.2 ppb	10:07:13
2	K 766.490 Radial†	30671.4	27904.5	4919.5 ug/L	4919.5 ppb	10:06:53
2	Mg 279.077 IEC†	145.2	145.1	5140.9 ug/L	5140.9 ppb	10:07:13
2	Na 589.592 Radial†	30730.1	31867.5	9638.3 ug/L	9638.3 ppb	10:06:53
2	Sr 421.552†	71251.9	71386.3	500.61 ug/L	500.61 ppb	10:06:53
2	Sc 361.383	859789.1	859789.1	99.733 %		10:08:16
2	Y 371.029	700429.0	700429.0	98.017 %		10:08:16
2	Ag 328.068†	104789.7	104841.9	497.22 ug/L	497.22 ppb	10:08:22
2	As 188.979†	1044.9	1081.5	495.02 ug/L	495.02 ppb	10:08:42
2	B 249.677†	20530.3	21124.4	500.28 ug/L	500.28 ppb	10:08:22
2	Ba 233.527†	60771.1	60945.6	498.97 ug/L	498.97 ppb	10:08:22
2	Be 313.107†	1298645.1	1306465.7	487.74 ug/L	487.74 ppb	10:08:16
2	Cd 226.502†	41169.2	41491.5	493.18 ug/L	493.18 ppb	10:08:22
2	Co 228.616†	23068.0	23203.5	506.89 ug/L	506.89 ppb	10:08:22
2	Cr 267.716†	42432.0	42479.0	495.14 ug/L	495.14 ppb	10:08:22
2	Cu 324.752†	169837.7	164472.4	498.92 ug/L	498.92 ppb	10:08:22
2	Mn 257.610†	426224.0	426914.9	491.46 ug/L	491.46 ppb	10:08:16
2	Mo 202.031†	6481.1	6482.9	485.95 ug/L	485.95 ppb	10:08:42
2	Ni 231.604†	19164.1	19107.5	494.71 ug/L	494.71 ppb	10:08:22

2	P 214.914†	4110.0	3893.0	2325.2 ug/L	2325.2 ppb	10:08:42
2	Pb 220.353†	3838.0	3910.0	489.34 ug/L	489.34 ppb	10:08:42
2	S 181.975 Axial†	701.2	663.7	966.96 ug/L	966.96 ppb	10:08:42
2	Sb 206.836†	1435.5	1397.2	504.49 ug/L	504.49 ppb	10:08:42
2	Se 196.026†	701.7	725.7	506.93 ug/L	506.93 ppb	10:08:42
2	Si 251.611†	74186.3	73822.9	2463.3 ug/L	2463.3 ppb	10:08:22
2	Sn 189.927†	2622.8	2621.1	487.27 ug/L	487.27 ppb	10:08:42
2	Ti 334.940†	302992.5	305108.0	494.73 ug/L	494.73 ppb	10:08:22
2	Tl 190.801†	1504.8	1543.0	497.77 ug/L	497.77 ppb	10:08:42
2	U 409.014†	14225.0	17243.2	498.31 ug/L	498.31 ppb	10:08:22
2	V 292.402†	66351.4	68083.9	500.91 ug/L	500.91 ppb	10:08:22
2	Zn 213.857†	50879.3	50302.5	491.67 ug/L	491.67 ppb	10:08:22
2	SiO2†	74527.3	74144.0	5275.6 ug/L	5275.6 ppb	10:09:23
3	Sc Radial	4817.1	4817.1	100 %		10:07:18
3	Y RADIAL	5011.0	5011.0	100.2 %		10:07:18
3	Al 396.153Radial†	5190.0	5330.6	4924.0 ug/L	4924.0 ppb	10:07:18
3	Ca 317.933Radial†	3050.1	3026.9	5016.9 ug/L	5016.9 ppb	10:07:38
3	Fe 238.204 Radial†	565.9	553.2	5048.6 ug/L	5048.6 ppb	10:07:38
3	K 766.490 Radial†	30992.2	28101.0	4954.2 ug/L	4954.2 ppb	10:07:18
3	Mg 279.077 IEC†	148.9	148.1	5249.6 ug/L	5249.6 ppb	10:07:38
3	Na 589.592 Radial†	30969.3	31982.3	9673.0 ug/L	9673.0 ppb	10:07:18
3	Sr 421.552†	71857.6	71703.5	502.83 ug/L	502.83 ppb	10:07:18
3	Sc 361.383	868044.0	868044.0	100.69 %		10:08:47
3	Y 371.029	707440.4	707440.4	98.998 %		10:08:47
3	Ag 328.068†	105006.1	104057.6	493.51 ug/L	493.51 ppb	10:08:53
3	As 188.979†	1050.2	1076.9	492.88 ug/L	492.88 ppb	10:09:13
3	B 249.677†	20753.2	21150.0	500.90 ug/L	500.90 ppb	10:08:53
3	Ba 233.527†	60917.8	60511.8	495.42 ug/L	495.42 ppb	10:08:53
3	Be 313.107†	1312769.6	1308110.5	488.34 ug/L	488.34 ppb	10:08:47
3	Cd 226.502†	41368.6	41297.0	490.87 ug/L	490.87 ppb	10:08:53
3	Co 228.616†	23144.3	23059.4	503.74 ug/L	503.74 ppb	10:08:53
3	Cr 267.716†	42512.9	42154.7	491.36 ug/L	491.36 ppb	10:08:53
3	Cu 324.752†	170360.9	163372.5	495.58 ug/L	495.58 ppb	10:08:53
3	Mn 257.610†	428585.8	425196.4	489.48 ug/L	489.48 ppb	10:08:47
3	Mo 202.031†	6504.1	6443.9	483.02 ug/L	483.02 ppb	10:09:13
3	Ni 231.604†	19280.9	19040.7	492.98 ug/L	492.98 ppb	10:08:53
3	P 214.914†	4111.0	3854.8	2302.0 ug/L	2302.0 ppb	10:09:13
3	Pb 220.353†	3826.2	3861.7	483.33 ug/L	483.33 ppb	10:09:13
3	S 181.975 Axial†	706.5	662.3	964.86 ug/L	964.86 ppb	10:09:13
3	Sb 206.836†	1433.2	1381.3	498.78 ug/L	498.78 ppb	10:09:13
3	Se 196.026†	701.2	718.5	501.93 ug/L	501.93 ppb	10:09:13
3	Si 251.611†	74462.0	73389.3	2448.8 ug/L	2448.8 ppb	10:08:53
3	Sn 189.927†	2613.2	2586.6	480.85 ug/L	480.85 ppb	10:09:13
3	Ti 334.940†	303715.2	302936.7	491.20 ug/L	491.20 ppb	10:08:53
3	Tl 190.801†	1498.8	1522.7	491.24 ug/L	491.24 ppb	10:09:13
3	U 409.014†	14120.1	17003.4	491.37 ug/L	491.37 ppb	10:08:53
3	V 292.402†	66675.1	67772.7	498.61 ug/L	498.61 ppb	10:08:53
3	Zn 213.857†	51123.1	50059.5	489.29 ug/L	489.29 ppb	10:08:53
3	SiO2†	74434.3	73341.0	5218.4 ug/L	5218.4 ppb	10:09:28

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	867657.7	100.65 %	0.891			0.89%
Sc Radial	4882.8	102 %	2.7			2.68%
Y 371.029	706766.9	98.903 %	0.8438			0.85%
Y RADIAL	5058.3	101.2 %	2.32			2.30%
Ag 328.068†	103912.7	492.79 ug/L	4.825	492.79 ppb	4.825	0.98%
QC value within limits for Ag 328.068 Recovery = 98.56%						
Al 396.153Radial†	5204.4	4806.8 ug/L	170.56	4806.8 ppb	170.56	3.55%
QC value within limits for Al 396.153Radial Recovery = 96.14%						
As 188.979†	1082.0	495.18 ug/L	2.391	495.18 ppb	2.391	0.48%
QC value within limits for As 188.979 Recovery = 99.04%						
B 249.677†	21040.5	498.31 ug/L	3.957	498.31 ppb	3.957	0.79%
QC value within limits for B 249.677 Recovery = 99.66%						
Ba 233.527†	60462.8	495.02 ug/L	4.171	495.02 ppb	4.171	0.84%
QC value within limits for Ba 233.527 Recovery = 99.00%						
Be 313.107†	1306715.2	487.82 ug/L	0.485	487.82 ppb	0.485	0.10%
QC value within limits for Be 313.107 Recovery = 97.56%						
Ca 317.933Radial†	2966.5	4916.8 ug/L	179.19	4916.8 ppb	179.19	3.64%

QC value within limits for Ca 317.933 Radial Recovery = 98.34%							
Cd 226.502†	41223.8	490.01 ug/L	3.681	490.01 ppb	3.681	0.75%	
QC value within limits for Cd 226.502 Recovery = 98.00%							
Co 228.616†	23033.2	503.17 ug/L	4.028	503.17 ppb	4.028	0.80%	
QC value within limits for Co 228.616 Recovery = 100.63%							
Cr 267.716†	42139.7	491.18 ug/L	4.046	491.18 ppb	4.046	0.82%	
QC value within limits for Cr 267.716 Recovery = 98.24%							
Cu 324.752†	162979.2	494.38 ug/L	5.235	494.38 ppb	5.235	1.06%	
QC value within limits for Cu 324.752 Recovery = 98.88%							
Fe 238.204 Radial†	544.1	4965.9 ug/L	181.36	4965.9 ppb	181.36	3.65%	
QC value within limits for Fe 238.204 Radial Recovery = 99.32%							
K 766.490 Radial†	27474.6	4843.7 ug/L	162.23	4843.7 ppb	162.23	3.35%	
QC value within limits for K 766.490 Radial Recovery = 96.87%							
Mg 279.077 IEC†	143.2	5074.0 ug/L	216.91	5074.0 ppb	216.91	4.27%	
QC value within limits for Mg 279.077 IEC Recovery = 101.48%							
Mn 257.610†	425635.3	489.98 ug/L	1.305	489.98 ppb	1.305	0.27%	
QC value within limits for Mn 257.610 Recovery = 98.00%							
Mo 202.031†	6456.8	483.98 ug/L	1.703	483.98 ppb	1.703	0.35%	
QC value within limits for Mo 202.031 Recovery = 96.80%							
Na 589.592 Radial†	31389.5	9493.7 ug/L	281.03	9493.7 ppb	281.03	2.96%	
QC value within limits for Na 589.592 Radial Recovery = 94.94%							
Ni 231.604†	18989.0	491.64 ug/L	3.913	491.64 ppb	3.913	0.80%	
QC value within limits for Ni 231.604 Recovery = 98.33%							
P 214.914†	3870.6	2312.2 ug/L	11.83	2312.2 ppb	11.83	0.51%	
QC value within limits for P 214.914 Recovery = 92.49%							
Pb 220.353†	3880.1	485.60 ug/L	3.263	485.60 ppb	3.263	0.67%	
QC value within limits for Pb 220.353 Recovery = 97.12%							
S 181.975 Axial†	662.5	965.13 ug/L	1.712	965.13 ppb	1.712	0.18%	
QC value within limits for S 181.975 Axial Recovery = 96.51%							
Sb 206.836†	1383.4	499.60 ug/L	4.536	499.60 ppb	4.536	0.91%	
QC value within limits for Sb 206.836 Recovery = 99.92%							
Se 196.026†	720.8	503.24 ug/L	3.244	503.24 ppb	3.244	0.64%	
QC value within limits for Se 196.026 Recovery = 100.65%							
Si 251.611†	73229.1	2443.5 ug/L	23.00	2443.5 ppb	23.00	0.94%	
QC value within limits for Si 251.611 Recovery = 97.74%							
Sn 189.927†	2601.8	483.66 ug/L	3.280	483.66 ppb	3.280	0.68%	
QC value within limits for Sn 189.927 Recovery = 96.73%							
Sr 421.552†	70153.4	491.96 ug/L	16.938	491.96 ppb	16.938	3.44%	
QC value within limits for Sr 421.552 Recovery = 98.39%							
Ti 334.940†	302428.5	490.38 ug/L	4.816	490.38 ppb	4.816	0.98%	
QC value within limits for Ti 334.940 Recovery = 98.08%							
Tl 190.801†	1531.5	494.05 ug/L	3.354	494.05 ppb	3.354	0.68%	
QC value within limits for Tl 190.801 Recovery = 98.81%							
U 409.014†	17022.0	491.92 ug/L	6.134	491.92 ppb	6.134	1.25%	
QC value within limits for U 409.014 Recovery = 98.38%							
V 292.402†	67615.5	497.49 ug/L	4.093	497.49 ppb	4.093	0.82%	
QC value within limits for V 292.402 Recovery = 99.50%							
Zn 213.857†	49960.6	488.34 ug/L	3.893	488.34 ppb	3.893	0.80%	
QC value within limits for Zn 213.857 Recovery = 97.67%							
SiO2†	73257.0	5212.4 ug/L	66.43	5212.4 ppb	66.43	1.27%	
QC value within limits for SiO2 Recovery = 97.47%							
All analyte(s) passed QC.							

Sequence No.: 3
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 2/11/2010 10:11:39
 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	4887.7	4887.7	102 %		10:13:31
1	Y RADIAL	5083.6	5083.6	101.7 %		10:13:31
1	Al 396.153Radial†	-139.2	14.7	13.593 ug/L	13.593 ppb	10:13:51
1	Ca 317.933Radial†	16.5	-0.5	-0.8146 ug/L	-0.8146 ppb	10:13:51
1	Fe 238.204 Radial†	9.7	-1.9	-17.279 ug/L	-17.279 ppb	10:13:51
1	K 766.490 Radial†	2989.4	114.3	20.154 ug/L	20.154 ppb	10:13:31
1	Mg 279.077 IEC†	1.5	1.1	39.318 ug/L	39.318 ppb	10:13:51
1	Na 589.592 Radial†	-915.7	177.9	53.818 ug/L	53.818 ppb	10:13:31
1	Sr 421.552†	22.2	19.7	0.1382 ug/L	0.1382 ppb	10:13:31
1	Sc 361.383	857373.3	857373.3	99.452 %		10:14:48
1	Y 371.029	709211.7	709211.7	99.246 %		10:14:48
1	Ag 328.068†	260.0	32.7	0.1462 ug/L	0.1462 ppb	10:14:48
1	As 188.979†	-17.5	16.3	7.3951 ug/L	7.3951 ppb	10:15:08
1	B 249.677†	38.1	577.3	13.736 ug/L	13.736 ppb	10:15:08
1	Ba 233.527†	-3.5	8.1	0.0666 ug/L	0.0666 ppb	10:15:08
1	Be 313.107†	-4234.6	80.8	0.0305 ug/L	0.0305 ppb	10:14:48
1	Cd 226.502†	-196.1	14.8	0.1783 ug/L	0.1783 ppb	10:15:08
1	Co 228.616†	-64.7	8.7	0.1907 ug/L	0.1907 ppb	10:15:08
1	Cr 267.716†	87.8	21.5	0.2492 ug/L	0.2492 ppb	10:15:08
1	Cu 324.752†	5832.5	43.9	0.1294 ug/L	0.1294 ppb	10:14:48
1	Mn 257.610†	461.4	12.0	0.0105 ug/L	0.0105 ppb	10:15:08
1	Mo 202.031†	23.2	7.8	0.5830 ug/L	0.5830 ppb	10:15:08
1	Ni 231.604†	106.9	-0.6	-0.0147 ug/L	-0.0147 ppb	10:15:08
1	P 214.914†	221.8	-5.1	-3.1474 ug/L	-3.1474 ppb	10:15:08
1	Pb 220.353†	-69.6	-8.2	-1.0227 ug/L	-1.0227 ppb	10:15:08
1	S 181.975 Axial†	46.5	7.5	10.878 ug/L	10.878 ppb	10:15:08
1	Sb 206.836†	42.6	0.6	0.2593 ug/L	0.2593 ppb	10:15:08
1	Se 196.026†	-21.1	0.9	0.5784 ug/L	0.5784 ppb	10:15:08
1	Si 251.611†	580.8	21.7	0.7192 ug/L	0.7192 ppb	10:15:08
1	Sn 189.927†	16.0	7.4	1.3691 ug/L	1.3691 ppb	10:15:08
1	Ti 334.940†	-1188.8	107.8	0.1692 ug/L	0.1692 ppb	10:14:48
1	Tl 190.801†	-26.1	8.0	2.5607 ug/L	2.5607 ppb	10:15:08
1	U 409.014†	-2789.8	174.9	5.0727 ug/L	5.0727 ppb	10:14:48
1	V 292.402†	-1471.7	74.8	0.5643 ug/L	0.5643 ppb	10:14:48
1	Zn 213.857†	707.6	-1.8	-0.0150 ug/L	-0.0150 ppb	10:15:08
1	SiO2†	598.8	19.0	1.3373 ug/L	1.3373 ppb	10:16:04
2	Sc Radial	4935.7	4935.7	103 %		10:13:56
2	Y RADIAL	5173.6	5173.6	103.5 %		10:13:56
2	Al 396.153Radial†	-153.8	1.8	1.6952 ug/L	1.6952 ppb	10:14:16
2	Ca 317.933Radial†	13.4	-3.7	-6.1155 ug/L	-6.1155 ppb	10:14:16
2	Fe 238.204 Radial†	10.2	-1.6	-14.151 ug/L	-14.151 ppb	10:14:16
2	K 766.490 Radial†	3003.4	99.3	17.522 ug/L	17.522 ppb	10:13:56
2	Mg 279.077 IEC†	0.7	0.2	8.7505 ug/L	8.7505 ppb	10:14:16
2	Na 589.592 Radial†	-963.3	140.3	42.445 ug/L	42.445 ppb	10:13:56
2	Sr 421.552†	-18.9	-20.5	-0.1438 ug/L	-0.1438 ppb	10:13:56
2	Sc 361.383	861043.1	861043.1	99.878 %		10:15:13
2	Y 371.029	712178.9	712178.9	99.661 %		10:15:13
2	Ag 328.068†	235.4	6.9	0.0295 ug/L	0.0295 ppb	10:15:13
2	As 188.979†	-11.8	22.1	10.023 ug/L	10.023 ppb	10:15:33
2	B 249.677†	17.6	556.6	13.244 ug/L	13.244 ppb	10:15:33
2	Ba 233.527†	-17.7	-6.1	-0.0490 ug/L	-0.0490 ppb	10:15:33
2	Be 313.107†	-4216.1	117.5	0.0440 ug/L	0.0440 ppb	10:15:13
2	Cd 226.502†	-177.9	33.8	0.4028 ug/L	0.4028 ppb	10:15:33
2	Co 228.616†	-62.8	10.8	0.2365 ug/L	0.2365 ppb	10:15:33
2	Cr 267.716†	80.5	13.8	0.1606 ug/L	0.1606 ppb	10:15:33
2	Cu 324.752†	5893.9	80.3	0.2424 ug/L	0.2424 ppb	10:15:13
2	Mn 257.610†	443.1	-8.2	-0.0112 ug/L	-0.0112 ppb	10:15:33
2	Mo 202.031†	21.1	5.6	0.4198 ug/L	0.4198 ppb	10:15:33
2	Ni 231.604†	100.0	-7.9	-0.2043 ug/L	-0.2043 ppb	10:15:33

2	P 214.914†	216.6	-11.2	-7.0124 ug/L	-7.0124 ppb	10:15:33
2	Pb 220.353†	-75.1	-13.4	-1.6734 ug/L	-1.6734 ppb	10:15:33
2	S 181.975 Axial†	35.2	-4.1	-5.9630 ug/L	-5.9630 ppb	10:15:33
2	Sb 206.836†	40.8	-1.3	-0.4062 ug/L	-0.4062 ppb	10:15:33
2	Se 196.026†	-16.3	5.8	3.8379 ug/L	3.8379 ppb	10:15:33
2	Si 251.611†	591.9	30.3	1.0096 ug/L	1.0096 ppb	10:15:33
2	Sn 189.927†	16.1	7.5	1.3854 ug/L	1.3854 ppb	10:15:33
2	Ti 334.940†	-1249.0	52.7	0.0835 ug/L	0.0835 ppb	10:15:13
2	Tl 190.801†	-32.4	1.8	0.5744 ug/L	0.5744 ppb	10:15:33
2	U 409.014†	-2942.4	34.0	0.9879 ug/L	0.9879 ppb	10:15:13
2	V 292.402†	-1461.7	91.1	0.6718 ug/L	0.6718 ppb	10:15:13
2	Zn 213.857†	705.7	-6.7	-0.0630 ug/L	-0.0630 ppb	10:15:33
2	SiO2†	582.0	-0.5	-0.0443 ug/L	-0.0443 ppb	10:16:09
3	Sc Radial	4780.6	4780.6	99.5 %		10:14:21
3	Y RADIAL	5061.5	5061.5	101.2 %		10:14:21
3	Al 396.153Radial†	-146.5	4.3	3.9252 ug/L	3.9252 ppb	10:14:41
3	Ca 317.933Radial†	12.6	-4.0	-6.6076 ug/L	-6.6076 ppb	10:14:41
3	Fe 238.204 Radial†	10.1	-1.4	-12.453 ug/L	-12.453 ppb	10:14:41
3	K 766.490 Radial†	2938.7	129.2	22.794 ug/L	22.794 ppb	10:14:21
3	Mg 279.077 IEC†	1.3	0.9	31.312 ug/L	31.312 ppb	10:14:41
3	Na 589.592 Radial†	-1013.4	59.5	17.997 ug/L	17.997 ppb	10:14:21
3	Sr 421.552†	27.6	25.6	0.1799 ug/L	0.1799 ppb	10:14:21
3	Sc 361.383	856303.6	856303.6	99.328 %		10:15:39
3	Y 371.029	709481.5	709481.5	99.283 %		10:15:39
3	Ag 328.068†	336.5	110.0	0.5151 ug/L	0.5151 ppb	10:15:39
3	As 188.979†	-23.5	10.2	4.6390 ug/L	4.6390 ppb	10:15:59
3	B 249.677†	19.1	558.3	13.282 ug/L	13.282 ppb	10:15:59
3	Ba 233.527†	1.2	12.8	0.1059 ug/L	0.1059 ppb	10:15:59
3	Be 313.107†	-4122.9	187.9	0.0703 ug/L	0.0703 ppb	10:15:39
3	Cd 226.502†	-194.4	16.2	0.1941 ug/L	0.1941 ppb	10:15:59
3	Co 228.616†	-62.7	10.6	0.2333 ug/L	0.2333 ppb	10:15:59
3	Cr 267.716†	71.1	4.8	0.0552 ug/L	0.0552 ppb	10:15:59
3	Cu 324.752†	5747.4	-34.4	-0.1067 ug/L	-0.1067 ppb	10:15:39
3	Mn 257.610†	454.6	5.8	0.0041 ug/L	0.0041 ppb	10:15:59
3	Mo 202.031†	31.2	15.9	1.1913 ug/L	1.1913 ppb	10:15:59
3	Ni 231.604†	112.5	5.3	0.1366 ug/L	0.1366 ppb	10:15:59
3	P 214.914†	233.0	6.5	4.0950 ug/L	4.0950 ppb	10:15:59
3	Pb 220.353†	-58.4	2.9	0.3671 ug/L	0.3671 ppb	10:15:59
3	S 181.975 Axial†	44.5	5.4	7.8993 ug/L	7.8993 ppb	10:15:59
3	Sb 206.836†	49.7	7.9	2.8047 ug/L	2.8047 ppb	10:15:59
3	Se 196.026†	-15.9	6.1	4.0634 ug/L	4.0634 ppb	10:15:59
3	Si 251.611†	580.8	22.5	0.7377 ug/L	0.7377 ppb	10:15:59
3	Sn 189.927†	19.3	10.7	1.9885 ug/L	1.9885 ppb	10:15:59
3	Ti 334.940†	-1211.8	83.2	0.1302 ug/L	0.1302 ppb	10:15:39
3	Tl 190.801†	-20.3	13.8	4.4177 ug/L	4.4177 ppb	10:15:59
3	U 409.014†	-2863.7	97.0	2.8130 ug/L	2.8130 ppb	10:15:39
3	V 292.402†	-1430.7	114.3	0.8545 ug/L	0.8545 ppb	10:15:39
3	Zn 213.857†	717.6	9.2	0.0921 ug/L	0.0921 ppb	10:15:59
3	SiO2†	599.0	19.9	1.3879 ug/L	1.3879 ppb	10:16:14

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	858240.0	99.553 %	0.2883			0.29%
Sc Radial	4868.0	101 %	1.7			1.63%
Y 371.029	710290.7	99.397 %	0.2296			0.23%
Y RADIAL	5106.2	102.1 %	1.19			1.16%
Ag 328.068†	49.8	0.2303 ug/L	0.25348	0.2303 ppb	0.25348	110.07%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	6.9	6.4043 ug/L	6.32427	6.4043 ppb	6.32427	98.75%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	16.2	7.3523 ug/L	2.69211	7.3523 ppb	2.69211	36.62%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	564.1	13.421 ug/L	0.2739	13.421 ppb	0.2739	2.04%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	4.9	0.0412 ug/L	0.08052	0.0412 ppb	0.08052	195.61%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	128.7	0.0483 ug/L	0.02025	0.0483 ppb	0.02025	41.98%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-2.7	-4.5126 ug/L	3.21196	-4.5126 ppb	3.21196	71.18%

QC value within limits for Ca 317.933Radial Recovery = Not calculated							
Cd 226.502†	21.6	0.2584 ug/L	0.12529	0.2584 ppb	0.12529	48.48%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	10.0	0.2202 ug/L	0.02557	0.2202 ppb	0.02557	11.61%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	13.4	0.1550 ug/L	0.09711	0.1550 ppb	0.09711	62.64%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	29.9	0.0883 ug/L	0.17812	0.0883 ppb	0.17812	201.61%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	-1.6	-14.628 ug/L	2.4482	-14.628 ppb	2.4482	16.74%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	114.3	20.157 ug/L	2.6362	20.157 ppb	2.6362	13.08%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	0.7	26.460 ug/L	15.8507	26.460 ppb	15.8507	59.90%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	3.2	0.0011 ug/L	0.01115	0.0011 ppb	0.01115	982.24%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	9.8	0.7314 ug/L	0.40658	0.7314 ppb	0.40658	55.59%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	125.9	38.087 ug/L	18.3042	38.087 ppb	18.3042	48.06%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	-1.1	-0.0275 ug/L	0.17083	-0.0275 ppb	0.17083	621.78%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	-3.3	-2.0216 ug/L	5.63861	-2.0216 ppb	5.63861	278.92%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	-6.3	-0.7763 ug/L	1.04230	-0.7763 ppb	1.04230	134.26%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	2.9	4.2715 ug/L	8.98759	4.2715 ppb	8.98759	210.41%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	2.4	0.8860 ug/L	1.69471	0.8860 ppb	1.69471	191.29%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	4.3	2.8266 ug/L	1.95027	2.8266 ppb	1.95027	69.00%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	24.8	0.8222 ug/L	0.16257	0.8222 ppb	0.16257	19.77%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	8.5	1.5810 ug/L	0.35302	1.5810 ppb	0.35302	22.33%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	8.3	0.0581 ug/L	0.17606	0.0581 ppb	0.17606	302.94%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	81.2	0.1276 ug/L	0.04293	0.1276 ppb	0.04293	33.63%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	7.9	2.5176 ug/L	1.92203	2.5176 ppb	1.92203	76.34%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	102.0	2.9579 ug/L	2.04626	2.9579 ppb	2.04626	69.18%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	93.4	0.6969 ug/L	0.14672	0.6969 ppb	0.14672	21.05%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	0.3	0.0047 ug/L	0.07938	0.0047 ppb	0.07938	>999.9%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	12.8	0.8936 ug/L	0.81267	0.8936 ppb	0.81267	90.94%	
QC value within limits for SiO2 Recovery = Not calculated							
All analyte(s) passed QC.							

Sequence No.: 10
 Sample ID: CCV
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 7
 Date Collected: 2/11/2010 11:23:51
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4828.3	4828.3	100 %		11:25:43
1	Y RADIAL	5053.5	5053.5	101.1 %		11:25:43
1	Al 396.153Radial†	5185.0	5313.7	4908.2 ug/L	4908.2 ppb	11:25:43
1	Ca 317.933Radial†	3061.8	3031.5	5024.5 ug/L	5024.5 ppb	11:26:03
1	Fe 238.204 Radial†	574.7	560.7	5116.6 ug/L	5116.6 ppb	11:26:03
1	K 766.490 Radial†	31120.6	28157.1	4964.0 ug/L	4964.0 ppb	11:25:43
1	Mg 279.077 IEC†	146.9	145.8	5168.7 ug/L	5168.7 ppb	11:26:03
1	Na 589.592 Radial†	31358.4	32297.9	9768.5 ug/L	9768.5 ppb	11:25:43
1	Sr 421.552†	72440.0	72116.9	505.73 ug/L	505.73 ppb	11:25:43
1	Sc 361.383	873372.0	873372.0	101.31 %		11:27:01
1	Y 371.029	713104.8	713104.8	99.790 %		11:27:01
1	Ag 328.068†	104829.8	103247.4	489.69 ug/L	489.69 ppb	11:27:06
1	As 188.979†	1061.7	1081.8	495.10 ug/L	495.10 ppb	11:27:26
1	B 249.677†	22865.4	23109.2	547.51 ug/L	547.51 ppb	11:27:06
1	Ba 233.527†	60836.9	60062.9	491.75 ug/L	491.75 ppb	11:27:06
1	Be 313.107†	1332646.8	1319777.3	492.68 ug/L	492.68 ppb	11:27:01
1	Cd 226.502†	41148.7	40829.3	485.30 ug/L	485.30 ppb	11:27:06
1	Co 228.616†	23051.6	22827.6	498.69 ug/L	498.69 ppb	11:27:06
1	Cr 267.716†	42494.2	41878.7	488.14 ug/L	488.14 ppb	11:27:06
1	Cu 324.752†	169724.5	161712.2	490.55 ug/L	490.55 ppb	11:27:06
1	Mn 257.610†	434299.2	428239.3	492.99 ug/L	492.99 ppb	11:27:01
1	Mo 202.031†	6561.1	6460.8	484.29 ug/L	484.29 ppb	11:27:26
1	Ni 231.604†	19238.2	18881.7	488.86 ug/L	488.86 ppb	11:27:06
1	P 214.914†	4150.1	3868.4	2311.5 ug/L	2311.5 ppb	11:27:26
1	Pb 220.353†	3893.0	3904.4	488.65 ug/L	488.65 ppb	11:27:26
1	S 181.975 Axial†	711.9	663.4	966.46 ug/L	966.46 ppb	11:27:26
1	Sb 206.836†	1443.9	1383.1	499.46 ug/L	499.46 ppb	11:27:26
1	Se 196.026†	721.0	733.8	512.50 ug/L	512.50 ppb	11:27:26
1	Si 251.611†	74121.6	72602.2	2422.5 ug/L	2422.5 ppb	11:27:06
1	Sn 189.927†	2633.4	2590.7	481.61 ug/L	481.61 ppb	11:27:26
1	Ti 334.940†	302699.2	300093.7	486.60 ug/L	486.60 ppb	11:27:06
1	Tl 190.801†	1518.2	1532.8	494.48 ug/L	494.48 ppb	11:27:26
1	U 409.014†	14342.1	17136.9	495.24 ug/L	495.24 ppb	11:27:06
1	V 292.402†	66423.3	67120.2	493.89 ug/L	493.89 ppb	11:27:06
1	Zn 213.857†	50984.6	49612.9	484.91 ug/L	484.91 ppb	11:27:06
1	SiO2†	74354.2	72810.9	5180.6 ug/L	5180.6 ppb	11:28:33
2	Sc Radial	4762.6	4762.6	99.1 %		11:26:08
2	Y RADIAL	4925.2	4925.2	98.49 %		11:26:08
2	Al 396.153Radial†	5174.9	5374.5	4964.1 ug/L	4964.1 ppb	11:26:08
2	Ca 317.933Radial†	3057.3	3069.0	5086.7 ug/L	5086.7 ppb	11:26:28
2	Fe 238.204 Radial†	566.1	559.9	5109.2 ug/L	5109.2 ppb	11:26:28
2	K 766.490 Radial†	30888.5	28349.8	4998.0 ug/L	4998.0 ppb	11:26:08
2	Mg 279.077 IEC†	148.7	149.6	5302.8 ug/L	5302.8 ppb	11:26:28
2	Na 589.592 Radial†	31158.5	32526.6	9837.6 ug/L	9837.6 ppb	11:26:08
2	Sr 421.552†	71741.8	72406.4	507.76 ug/L	507.76 ppb	11:26:08
2	Sc 361.383	861194.4	861194.4	99.896 %		11:27:32
2	Y 371.029	703870.3	703870.3	98.498 %		11:27:32
2	Ag 328.068†	104530.9	104411.3	495.20 ug/L	495.20 ppb	11:27:37
2	As 188.979†	1067.7	1102.7	504.57 ug/L	504.57 ppb	11:27:57
2	B 249.677†	22872.7	23435.6	555.27 ug/L	555.27 ppb	11:27:37
2	Ba 233.527†	60700.0	60775.1	497.57 ug/L	497.57 ppb	11:27:37
2	Be 313.107†	1315447.9	1321161.2	493.21 ug/L	493.21 ppb	11:27:32
2	Cd 226.502†	41134.3	41389.2	491.96 ug/L	491.96 ppb	11:27:37
2	Co 228.616†	22966.8	23064.5	503.88 ug/L	503.88 ppb	11:27:37
2	Cr 267.716†	42501.3	42479.0	495.14 ug/L	495.14 ppb	11:27:37
2	Cu 324.752†	169103.5	163459.5	495.85 ug/L	495.85 ppb	11:27:37
2	Mn 257.610†	428755.6	428751.7	493.57 ug/L	493.57 ppb	11:27:32
2	Mo 202.031†	6628.6	6620.0	496.22 ug/L	496.22 ppb	11:27:57
2	Ni 231.604†	19144.5	19056.5	493.39 ug/L	493.39 ppb	11:27:37

2	P 214.914†	4202.5	3978.8	2379.3 ug/L	2379.3 ppb	11:27:57
2	Pb 220.353†	3925.2	3991.0	499.49 ug/L	499.49 ppb	11:27:57
2	S 181.975 Axial†	709.5	670.9	977.39 ug/L	977.39 ppb	11:27:57
2	Sb 206.836†	1450.4	1409.7	509.17 ug/L	509.17 ppb	11:27:57
2	Se 196.026†	727.7	750.6	523.80 ug/L	523.80 ppb	11:27:57
2	Si 251.611†	73992.2	73507.2	2452.6 ug/L	2452.6 ppb	11:27:37
2	Sn 189.927†	2664.2	2658.3	494.17 ug/L	494.17 ppb	11:27:57
2	Ti 334.940†	301943.1	303561.8	492.22 ug/L	492.22 ppb	11:27:37
2	Tl 190.801†	1515.8	1551.6	500.52 ug/L	500.52 ppb	11:27:57
2	U 409.014†	14022.8	17017.5	491.76 ug/L	491.76 ppb	11:27:37
2	V 292.402†	66186.1	67809.9	499.05 ug/L	499.05 ppb	11:27:37
2	Zn 213.857†	50873.4	50213.4	490.80 ug/L	490.80 ppb	11:27:37
2	SiO2†	74670.5	74165.4	5276.9 ug/L	5276.9 ppb	11:28:38
3	Sc Radial	4825.2	4825.2	100 %		11:26:33
3	Y RADIAL	5028.7	5028.7	100.6 %		11:26:33
3	Al 396.153Radial†	5226.9	5358.6	4949.7 ug/L	4949.7 ppb	11:26:33
3	Ca 317.933Radial†	3065.6	3037.2	5033.9 ug/L	5033.9 ppb	11:26:54
3	Fe 238.204 Radial†	571.8	558.1	5093.3 ug/L	5093.3 ppb	11:26:54
3	K 766.490 Radial†	31227.3	28282.8	4986.2 ug/L	4986.2 ppb	11:26:33
3	Mg 279.077 IEC†	149.5	148.5	5263.3 ug/L	5263.3 ppb	11:26:54
3	Na 589.592 Radial†	31627.8	32586.0	9855.6 ug/L	9855.6 ppb	11:26:33
3	Sr 421.552†	72870.4	72591.1	509.06 ug/L	509.06 ppb	11:26:33
3	Sc 361.383	870385.3	870385.3	100.96 %		11:28:03
3	Y 371.029	709166.2	709166.2	99.239 %		11:28:03
3	Ag 328.068†	104482.3	103258.2	489.73 ug/L	489.73 ppb	11:28:08
3	As 188.979†	1055.5	1079.4	493.96 ug/L	493.96 ppb	11:28:28
3	B 249.677†	22912.5	23233.3	550.46 ug/L	550.46 ppb	11:28:08
3	Ba 233.527†	60704.1	60137.4	492.35 ug/L	492.35 ppb	11:28:08
3	Be 313.107†	1328694.1	1320376.3	492.90 ug/L	492.90 ppb	11:28:03
3	Cd 226.502†	41279.1	41097.8	488.50 ug/L	488.50 ppb	11:28:08
3	Co 228.616†	23136.4	22989.8	502.24 ug/L	502.24 ppb	11:28:08
3	Cr 267.716†	42479.2	42007.8	489.64 ug/L	489.64 ppb	11:28:08
3	Cu 324.752†	168864.0	161434.7	489.70 ug/L	489.70 ppb	11:28:08
3	Mn 257.610†	434328.2	429739.1	494.71 ug/L	494.71 ppb	11:28:03
3	Mo 202.031†	6595.0	6516.6	488.47 ug/L	488.47 ppb	11:28:28
3	Ni 231.604†	19220.3	18929.2	490.09 ug/L	490.09 ppb	11:28:08
3	P 214.914†	4160.9	3893.2	2327.1 ug/L	2327.1 ppb	11:28:28
3	Pb 220.353†	3875.6	3900.4	488.17 ug/L	488.17 ppb	11:28:28
3	S 181.975 Axial†	716.3	670.2	976.33 ug/L	976.33 ppb	11:28:28
3	Sb 206.836†	1446.5	1390.6	502.20 ug/L	502.20 ppb	11:28:28
3	Se 196.026†	719.2	734.5	512.88 ug/L	512.88 ppb	11:28:28
3	Si 251.611†	73946.4	72679.8	2425.0 ug/L	2425.0 ppb	11:28:08
3	Sn 189.927†	2645.6	2611.7	485.51 ug/L	485.51 ppb	11:28:28
3	Ti 334.940†	301882.4	300310.0	486.94 ug/L	486.94 ppb	11:28:08
3	Tl 190.801†	1504.5	1524.4	491.77 ug/L	491.77 ppb	11:28:28
3	U 409.014†	14354.5	17197.8	497.00 ug/L	497.00 ppb	11:28:08
3	V 292.402†	66191.4	67115.5	493.92 ug/L	493.92 ppb	11:28:08
3	Zn 213.857†	50864.3	49666.6	485.44 ug/L	485.44 ppb	11:28:08
3	SiO2†	74094.3	72805.3	5180.1 ug/L	5180.1 ppb	11:28:44

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	868317.2	100.72 %	0.736			0.73%
Sc Radial	4805.4	100.0 %	0.77			0.77%
Y 371.029	708713.8	99.176 %	0.6484			0.65%
Y RADIAL	5002.5	100.0 %	1.36			1.36%
Ag 328.068†	103639.0	491.54 ug/L	3.166	491.54 ppb	3.166	0.64%
QC value within limits for Ag 328.068 Recovery = 98.31%						
Al 396.153Radial†	5348.9	4940.7 ug/L	29.04	4940.7 ppb	29.04	0.59%
QC value within limits for Al 396.153Radial Recovery = 98.81%						
As 188.979†	1088.0	497.88 ug/L	5.824	497.88 ppb	5.824	1.17%
QC value within limits for As 188.979 Recovery = 99.58%						
B 249.677†	23259.4	551.08 ug/L	3.913	551.08 ppb	3.913	0.71%
QC value greater than the upper limit for B 249.677 Recovery = 110.22%						
Ba 233.527†	60325.1	493.89 ug/L	3.203	493.89 ppb	3.203	0.65%
QC value within limits for Ba 233.527 Recovery = 98.78%						
Be 313.107†	1320438.3	492.93 ug/L	0.265	492.93 ppb	0.265	0.05%
QC value within limits for Be 313.107 Recovery = 98.59%						
Ca 317.933Radial†	3045.9	5048.4 ug/L	33.50	5048.4 ppb	33.50	0.66%

QC value within limits for Ca 317.933 Radial Recovery = 100.97%							
Cd	226.502†	41105.4	488.58 ug/L	3.331	488.58 ppb	3.331	0.68%
QC value within limits for Cd 226.502 Recovery = 97.72%							
Co	228.616†	22960.6	501.60 ug/L	2.653	501.60 ppb	2.653	0.53%
QC value within limits for Co 228.616 Recovery = 100.32%							
Cr	267.716†	42121.8	490.98 ug/L	3.683	490.98 ppb	3.683	0.75%
QC value within limits for Cr 267.716 Recovery = 98.20%							
Cu	324.752†	162202.1	492.03 ug/L	3.331	492.03 ppb	3.331	0.68%
QC value within limits for Cu 324.752 Recovery = 98.41%							
Fe	238.204 Radial†	559.6	5106.4 ug/L	11.95	5106.4 ppb	11.95	0.23%
QC value within limits for Fe 238.204 Radial Recovery = 102.13%							
K	766.490 Radial†	28263.3	4982.7 ug/L	17.24	4982.7 ppb	17.24	0.35%
QC value within limits for K 766.490 Radial Recovery = 99.65%							
Mg	279.077 IEC†	148.0	5244.9 ug/L	68.91	5244.9 ppb	68.91	1.31%
QC value within limits for Mg 279.077 IEC Recovery = 104.90%							
Mn	257.610†	428910.0	493.76 ug/L	0.874	493.76 ppb	0.874	0.18%
QC value within limits for Mn 257.610 Recovery = 98.75%							
Mo	202.031†	6532.5	489.66 ug/L	6.050	489.66 ppb	6.050	1.24%
QC value within limits for Mo 202.031 Recovery = 97.93%							
Na	589.592 Radial†	32470.2	9820.6 ug/L	46.01	9820.6 ppb	46.01	0.47%
QC value within limits for Na 589.592 Radial Recovery = 98.21%							
Ni	231.604†	18955.8	490.78 ug/L	2.339	490.78 ppb	2.339	0.48%
QC value within limits for Ni 231.604 Recovery = 98.16%							
P	214.914†	3913.5	2339.3 ug/L	35.51	2339.3 ppb	35.51	1.52%
QC value within limits for P 214.914 Recovery = 93.57%							
Pb	220.353†	3931.9	492.10 ug/L	6.402	492.10 ppb	6.402	1.30%
QC value within limits for Pb 220.353 Recovery = 98.42%							
S	181.975 Axial†	668.2	973.39 ug/L	6.025	973.39 ppb	6.025	0.62%
QC value within limits for S 181.975 Axial Recovery = 97.34%							
Sb	206.836†	1394.5	503.61 ug/L	5.009	503.61 ppb	5.009	0.99%
QC value within limits for Sb 206.836 Recovery = 100.72%							
Se	196.026†	739.6	516.39 ug/L	6.416	516.39 ppb	6.416	1.24%
QC value within limits for Se 196.026 Recovery = 103.28%							
Si	251.611†	72929.7	2433.4 ug/L	16.71	2433.4 ppb	16.71	0.69%
QC value within limits for Si 251.611 Recovery = 97.34%							
Sn	189.927†	2620.2	487.10 ug/L	6.428	487.10 ppb	6.428	1.32%
QC value within limits for Sn 189.927 Recovery = 97.42%							
Sr	421.552†	72371.5	507.51 ug/L	1.676	507.51 ppb	1.676	0.33%
QC value within limits for Sr 421.552 Recovery = 101.50%							
Ti	334.940†	301321.8	488.58 ug/L	3.151	488.58 ppb	3.151	0.64%
QC value within limits for Ti 334.940 Recovery = 97.72%							
Tl	190.801†	1536.3	495.59 ug/L	4.477	495.59 ppb	4.477	0.90%
QC value within limits for Tl 190.801 Recovery = 99.12%							
U	409.014†	17117.4	494.67 ug/L	2.667	494.67 ppb	2.667	0.54%
QC value within limits for U 409.014 Recovery = 98.93%							
V	292.402†	67348.6	495.62 ug/L	2.973	495.62 ppb	2.973	0.60%
QC value within limits for V 292.402 Recovery = 99.12%							
Zn	213.857†	49831.0	487.05 ug/L	3.259	487.05 ppb	3.259	0.67%
QC value within limits for Zn 213.857 Recovery = 97.41%							
SiO2†		73260.6	5212.5 ug/L	55.74	5212.5 ppb	55.74	1.07%
QC value within limits for SiO2 Recovery = 97.48%							
QC Failed. Continue with analysis.							

Sequence No.: 11
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 2/11/2010 11:30:53
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4937.2	4937.2	103 %		11:32:46
1	Y RADIAL	5172.4	5172.4	103.4 %		11:32:46
1	Al 396.153Radial†	-147.6	7.8	7.2517 ug/L	7.2517 ppb	11:33:06
1	Ca 317.933Radial†	20.4	3.1	5.2039 ug/L	5.2039 ppb	11:33:06
1	Fe 238.204 Radial†	12.5	0.7	6.4065 ug/L	6.4065 ppb	11:33:06
1	K 766.490 Radial†	2878.3	-23.4	-4.1430 ug/L	-4.1430 ppb	11:32:46
1	Mg 279.077 IEC†	2.1	1.6	57.919 ug/L	57.919 ppb	11:33:06
1	Na 589.592 Radial†	-967.4	136.7	41.337 ug/L	41.337 ppb	11:32:46
1	Sr 421.552†	4.2	2.0	0.0142 ug/L	0.0142 ppb	11:32:46
1	Sc 361.383	864522.7	864522.7	100.28 %		11:34:03
1	Y 371.029	716030.2	716030.2	100.20 %		11:34:03
1	Ag 328.068†	351.5	121.7	0.5768 ug/L	0.5768 ppb	11:34:03
1	As 188.979†	-23.8	10.1	4.5992 ug/L	4.5992 ppb	11:34:23
1	B 249.677†	2037.7	2571.0	61.163 ug/L	61.163 ppb	11:34:03
1	Ba 233.527†	-9.8	1.9	0.0166 ug/L	0.0166 ppb	11:34:23
1	Be 313.107†	-4302.3	48.5	0.0181 ug/L	0.0181 ppb	11:34:03
1	Cd 226.502†	-204.6	7.9	0.0938 ug/L	0.0938 ppb	11:34:23
1	Co 228.616†	-66.3	7.6	0.1678 ug/L	0.1678 ppb	11:34:23
1	Cr 267.716†	72.9	5.9	0.0691 ug/L	0.0691 ppb	11:34:23
1	Cu 324.752†	5955.1	117.6	0.3563 ug/L	0.3563 ppb	11:34:03
1	Mn 257.610†	450.3	-2.9	-0.0051 ug/L	-0.0051 ppb	11:34:23
1	Mo 202.031†	23.3	7.7	0.5770 ug/L	0.5770 ppb	11:34:23
1	Ni 231.604†	122.2	13.8	0.3579 ug/L	0.3579 ppb	11:34:23
1	P 214.914†	223.5	-5.2	-3.2925 ug/L	-3.2925 ppb	11:34:23
1	Pb 220.353†	-51.8	10.0	1.2538 ug/L	1.2538 ppb	11:34:23
1	S 181.975 Axial†	44.0	4.5	6.5563 ug/L	6.5563 ppb	11:34:23
1	Sb 206.836†	36.8	-5.5	-1.8812 ug/L	-1.8812 ppb	11:34:23
1	Se 196.026†	-18.9	3.2	2.1962 ug/L	2.1962 ppb	11:34:23
1	Si 251.611†	551.2	-12.6	-0.4297 ug/L	-0.4297 ppb	11:34:23
1	Sn 189.927†	14.3	5.6	1.0426 ug/L	1.0426 ppb	11:34:23
1	Ti 334.940†	-1309.7	-2.9	-0.0093 ug/L	-0.0093 ppb	11:34:03
1	Tl 190.801†	-23.3	11.0	3.5275 ug/L	3.5275 ppb	11:34:23
1	U 409.014†	-2941.7	46.6	1.3496 ug/L	1.3496 ppb	11:34:03
1	V 292.402†	-1481.7	77.1	0.5706 ug/L	0.5706 ppb	11:34:03
1	Zn 213.857†	749.2	33.8	0.3297 ug/L	0.3297 ppb	11:34:23
1	SiO2†	573.5	-11.2	-0.8180 ug/L	-0.8180 ppb	11:35:19
2	Sc Radial	4929.8	4929.8	103 %		11:33:11
2	Y RADIAL	5097.9	5097.9	101.9 %		11:33:11
2	Al 396.153Radial†	-144.1	11.1	10.276 ug/L	10.276 ppb	11:33:31
2	Ca 317.933Radial†	20.9	3.7	6.1384 ug/L	6.1384 ppb	11:33:31
2	Fe 238.204 Radial†	10.3	-1.4	-12.938 ug/L	-12.938 ppb	11:33:31
2	K 766.490 Radial†	2925.6	27.0	4.7477 ug/L	4.7477 ppb	11:33:11
2	Mg 279.077 IEC†	3.2	2.7	95.257 ug/L	95.257 ppb	11:33:31
2	Na 589.592 Radial†	-964.7	137.9	41.705 ug/L	41.705 ppb	11:33:11
2	Sr 421.552†	15.0	12.5	0.0877 ug/L	0.0877 ppb	11:33:11
2	Sc 361.383	862469.3	862469.3	100.04 %		11:34:28
2	Y 371.029	713778.4	713778.4	99.885 %		11:34:28
2	Ag 328.068†	267.4	38.5	0.1767 ug/L	0.1767 ppb	11:34:28
2	As 188.979†	-28.7	5.2	2.3475 ug/L	2.3475 ppb	11:34:48
2	B 249.677†	2011.8	2550.0	60.665 ug/L	60.665 ppb	11:34:28
2	Ba 233.527†	-7.5	4.1	0.0351 ug/L	0.0351 ppb	11:34:48
2	Be 313.107†	-4199.6	141.0	0.0527 ug/L	0.0527 ppb	11:34:28
2	Cd 226.502†	-177.7	34.3	0.4099 ug/L	0.4099 ppb	11:34:48
2	Co 228.616†	-64.3	9.4	0.2076 ug/L	0.2076 ppb	11:34:48
2	Cr 267.716†	67.7	0.9	0.0093 ug/L	0.0093 ppb	11:34:48
2	Cu 324.752†	5892.4	69.1	0.2066 ug/L	0.2066 ppb	11:34:28
2	Mn 257.610†	479.6	27.5	0.0264 ug/L	0.0264 ppb	11:34:48
2	Mo 202.031†	26.9	11.3	0.8479 ug/L	0.8479 ppb	11:34:48
2	Ni 231.604†	97.9	-10.1	-0.2630 ug/L	-0.2630 ppb	11:34:48

2	P 214.914†	226.0	-2.2	-1.3741 ug/L	-1.3741 ppb	11:34:48
2	Pb 220.353†	-71.3	-9.6	-1.1898 ug/L	-1.1898 ppb	11:34:48
2	S 181.975 Axial†	45.9	6.5	9.5141 ug/L	9.5141 ppb	11:34:48
2	Sb 206.836†	46.8	4.7	1.6745 ug/L	1.6745 ppb	11:34:48
2	Se 196.026†	-12.5	9.6	6.4469 ug/L	6.4469 ppb	11:34:48
2	Si 251.611†	558.3	-4.2	-0.1510 ug/L	-0.1510 ppb	11:34:48
2	Sn 189.927†	18.6	9.9	1.8436 ug/L	1.8436 ppb	11:34:48
2	Ti 334.940†	-1238.3	65.4	0.0971 ug/L	0.0971 ppb	11:34:28
2	Tl 190.801†	-22.2	12.0	3.8314 ug/L	3.8314 ppb	11:34:48
2	U 409.014†	-2826.0	155.3	4.5041 ug/L	4.5041 ppb	11:34:28
2	V 292.402†	-1439.5	115.8	0.8649 ug/L	0.8649 ppb	11:34:28
2	Zn 213.857†	755.8	42.2	0.4199 ug/L	0.4199 ppb	11:34:48
2	SiO2†	576.7	-6.7	-0.5029 ug/L	-0.5029 ppb	11:35:24
3	Sc Radial	4866.7	4866.7	101 %		11:33:36
3	Y RADIAL	5074.7	5074.7	101.5 %		11:33:36
3	Al 396.153Radial†	-138.6	14.7	13.640 ug/L	13.640 ppb	11:33:56
3	Ca 317.933Radial†	21.9	4.9	8.2040 ug/L	8.2040 ppb	11:33:56
3	Fe 238.204 Radial†	12.3	0.7	6.1455 ug/L	6.1455 ppb	11:33:56
3	K 766.490 Radial†	2778.8	-81.0	-14.316 ug/L	-14.316 ppb	11:33:36
3	Mg 279.077 IEC†	5.3	4.9	172.22 ug/L	172.22 ppb	11:33:56
3	Na 589.592 Radial†	-1014.5	76.5	23.125 ug/L	23.125 ppb	11:33:36
3	Sr 421.552†	10.4	8.1	0.0570 ug/L	0.0570 ppb	11:33:36
3	Sc 361.383	857245.8	857245.8	99.438 %		11:34:53
3	Y 371.029	708885.4	708885.4	99.200 %		11:34:53
3	Ag 328.068†	235.7	8.3	0.0423 ug/L	0.0423 ppb	11:34:53
3	As 188.979†	-30.5	3.2	1.4520 ug/L	1.4520 ppb	11:35:13
3	B 249.677†	2009.3	2559.7	60.893 ug/L	60.893 ppb	11:34:53
3	Ba 233.527†	4.4	16.1	0.1323 ug/L	0.1323 ppb	11:35:13
3	Be 313.107†	-4201.1	113.8	0.0424 ug/L	0.0424 ppb	11:34:53
3	Cd 226.502†	-188.4	22.4	0.2659 ug/L	0.2659 ppb	11:35:13
3	Co 228.616†	-72.1	1.2	0.0277 ug/L	0.0277 ppb	11:35:13
3	Cr 267.716†	68.7	2.4	0.0280 ug/L	0.0280 ppb	11:35:13
3	Cu 324.752†	5827.9	40.2	0.1218 ug/L	0.1218 ppb	11:34:53
3	Mn 257.610†	484.4	35.2	0.0341 ug/L	0.0341 ppb	11:35:13
3	Mo 202.031†	23.0	7.6	0.5689 ug/L	0.5689 ppb	11:35:13
3	Ni 231.604†	89.2	-18.3	-0.4744 ug/L	-0.4744 ppb	11:35:13
3	P 214.914†	225.9	-0.9	-0.5751 ug/L	-0.5751 ppb	11:35:13
3	Pb 220.353†	-76.0	-14.7	-1.8261 ug/L	-1.8261 ppb	11:35:13
3	S 181.975 Axial†	38.6	-0.5	-0.7679 ug/L	-0.7679 ppb	11:35:13
3	Sb 206.836†	40.7	-1.2	-0.4006 ug/L	-0.4006 ppb	11:35:13
3	Se 196.026†	-18.8	3.2	2.1685 ug/L	2.1685 ppb	11:35:13
3	Si 251.611†	565.8	6.7	0.2179 ug/L	0.2179 ppb	11:35:13
3	Sn 189.927†	7.5	-1.2	-0.2145 ug/L	-0.2145 ppb	11:35:13
3	Ti 334.940†	-1290.1	5.8	-0.0038 ug/L	-0.0038 ppb	11:34:53
3	Tl 190.801†	-31.4	2.6	0.8376 ug/L	0.8376 ppb	11:35:13
3	U 409.014†	-2940.4	23.1	0.6679 ug/L	0.6679 ppb	11:34:53
3	V 292.402†	-1481.1	65.2	0.4850 ug/L	0.4850 ppb	11:34:53
3	Zn 213.857†	760.6	51.6	0.5113 ug/L	0.5113 ppb	11:35:13
3	SiO2†	617.5	37.8	2.6843 ug/L	2.6843 ppb	11:35:29

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	861412.6	99.921 %	0.4352			0.44%
Sc Radial	4911.3	102 %	0.8			0.79%
Y 371.029	712898.0	99.761 %	0.5112			0.51%
Y RADIAL	5115.0	102.3 %	1.02			1.00%
Ag 328.068†	56.2	0.2653 ug/L	0.27805	0.2653 ppb	0.27805	104.82%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	11.2	10.389 ug/L	3.1957	10.389 ppb	3.1957	30.76%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	6.2	2.7996 ug/L	1.62157	2.7996 ppb	1.62157	57.92%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	2560.2	60.907 ug/L	0.2493	60.907 ppb	0.2493	0.41%
QC value greater than the upper limit for B 249.677 Recovery = Not calculated						
Ba 233.527†	7.3	0.0613 ug/L	0.06216	0.0613 ppb	0.06216	101.35%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	101.1	0.0377 ug/L	0.01781	0.0377 ppb	0.01781	47.18%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	3.9	6.5155 ug/L	1.53515	6.5155 ppb	1.53515	23.56%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd 226.502†	21.5	0.2565 ug/L	0.15823	0.2565 ppb	0.15823	61.68%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	6.1	0.1344 ug/L	0.09448	0.1344 ppb	0.09448	70.30%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	3.0	0.0355 ug/L	0.03060	0.0355 ppb	0.03060	86.27%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	75.6	0.2282 ug/L	0.11873	0.2282 ppb	0.11873	52.02%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	-0.0	-0.1285 ug/L	11.09372	-0.1285 ppb	11.09372	>999.9%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	-25.8	-4.5704 ug/L	9.53904	-4.5704 ppb	9.53904	208.71%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	3.1	108.47 ug/L	58.285	108.47 ppb	58.285	53.74%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	19.9	0.0185 ug/L	0.02076	0.0185 ppb	0.02076	112.27%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	8.9	0.6646 ug/L	0.15877	0.6646 ppb	0.15877	23.89%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	117.0	35.389 ug/L	10.6226	35.389 ppb	10.6226	30.02%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	-4.9	-0.1265 ug/L	0.43260	-0.1265 ppb	0.43260	342.00%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	-2.8	-1.7472 ug/L	1.39662	-1.7472 ppb	1.39662	79.93%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	-4.7	-0.5874 ug/L	1.62590	-0.5874 ppb	1.62590	276.81%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	3.5	5.1008 ug/L	5.29327	5.1008 ppb	5.29327	103.77%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	-0.7	-0.2024 ug/L	1.78611	-0.2024 ppb	1.78611	882.30%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	5.3	3.6039 ug/L	2.46220	3.6039 ppb	2.46220	68.32%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	-3.4	-0.1209 ug/L	0.32486	-0.1209 ppb	0.32486	268.66%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	4.8	0.8906 ug/L	1.03745	0.8906 ppb	1.03745	116.49%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	7.6	0.0530 ug/L	0.03696	0.0530 ppb	0.03696	69.77%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	22.8	0.0280 ug/L	0.05992	0.0280 ppb	0.05992	214.01%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	8.5	2.7322 ug/L	1.64777	2.7322 ppb	1.64777	60.31%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	75.0	2.1739 ug/L	2.04663	2.1739 ppb	2.04663	94.15%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	86.0	0.6402 ug/L	0.19925	0.6402 ppb	0.19925	31.13%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	42.6	0.4203 ug/L	0.09078	0.4203 ppb	0.09078	21.60%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	6.6	0.4545 ug/L	1.93751	0.4545 ppb	1.93751	426.31%	
QC value within limits for SiO2 Recovery = Not calculated							
QC Failed. Continue with analysis.							

Sequence No.: 3
 Sample ID: CCV
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 7
 Date Collected: 2/11/2010 11:57:47
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4863.6	4863.6	101 %		11:59:40
1	Y RADIAL	5063.0	5063.0	101.2 %		11:59:40
1	Al 396.153Radial†	5272.9	5363.0	4954.1 ug/L	4954.1 ppb	11:59:40
1	Ca 317.933Radial†	3065.9	3013.5	4994.6 ug/L	4994.6 ppb	12:00:00
1	Fe 238.204 Radial†	571.4	553.2	5048.5 ug/L	5048.5 ppb	12:00:00
1	K 766.490 Radial†	31053.2	27865.6	4912.5 ug/L	4912.5 ppb	11:59:40
1	Mg 279.077 IEC†	150.0	147.8	5237.9 ug/L	5237.9 ppb	12:00:00
1	Na 589.592 Radial†	31966.2	32672.1	9881.6 ug/L	9881.6 ppb	11:59:40
1	Sr 421.552†	73656.0	72795.3	510.49 ug/L	510.49 ppb	11:59:40
1	Sc 361.383	865780.2	865780.2	100.43 %		12:00:57
1	Y 371.029	704855.3	704855.3	98.636 %		12:00:57
1	Ag 328.068†	104469.3	103795.8	492.26 ug/L	492.26 ppb	12:01:03
1	As 188.979†	1038.1	1067.6	488.65 ug/L	488.65 ppb	12:01:23
1	B 249.677†	21482.5	21930.1	519.46 ug/L	519.46 ppb	12:01:03
1	Ba 233.527†	60644.3	60397.7	494.48 ug/L	494.48 ppb	12:01:03
1	Be 313.107†	1313026.3	1311775.1	489.71 ug/L	489.71 ppb	12:00:57
1	Cd 226.502†	40937.1	40974.7	487.04 ug/L	487.04 ppb	12:01:03
1	Co 228.616†	22997.1	22972.9	501.85 ug/L	501.85 ppb	12:01:03
1	Cr 267.716†	42220.4	41973.9	489.25 ug/L	489.25 ppb	12:01:03
1	Cu 324.752†	169875.2	163331.3	495.45 ug/L	495.45 ppb	12:01:03
1	Mn 257.610†	429898.4	427616.3	492.26 ug/L	492.26 ppb	12:00:57
1	Mo 202.031†	6482.8	6439.6	482.70 ug/L	482.70 ppb	12:01:23
1	Ni 231.604†	19102.2	18912.9	489.67 ug/L	489.67 ppb	12:01:03
1	P 214.914†	4094.5	3849.0	2298.4 ug/L	2298.4 ppb	12:01:23
1	Pb 220.353†	3821.4	3866.8	483.97 ug/L	483.97 ppb	12:01:23
1	S 181.975 Axial†	703.8	661.4	963.56 ug/L	963.56 ppb	12:01:23
1	Sb 206.836†	1419.9	1371.7	495.40 ug/L	495.40 ppb	12:01:23
1	Se 196.026†	699.1	718.3	501.80 ug/L	501.80 ppb	12:01:23
1	Si 251.611†	74136.2	73258.3	2444.5 ug/L	2444.5 ppb	12:01:03
1	Sn 189.927†	2598.8	2579.1	479.45 ug/L	479.45 ppb	12:01:23
1	Ti 334.940†	303081.9	303094.7	491.45 ug/L	491.45 ppb	12:01:03
1	Tl 190.801†	1490.6	1518.5	489.90 ug/L	489.90 ppb	12:01:23
1	U 409.014†	14191.1	17110.7	494.48 ug/L	494.48 ppb	12:01:03
1	V 292.402†	66124.7	67397.9	495.89 ug/L	495.89 ppb	12:01:03
1	Zn 213.857†	50782.0	49852.6	487.27 ug/L	487.27 ppb	12:01:03
1	SiO2†	74764.1	73862.6	5255.6 ug/L	5255.6 ppb	12:02:30
2	Sc Radial	4864.4	4864.4	101 %		12:00:05
2	Y RADIAL	5042.3	5042.3	100.8 %		12:00:05
2	Al 396.153Radial†	5221.6	5311.4	4906.0 ug/L	4906.0 ppb	12:00:05
2	Ca 317.933Radial†	3055.3	3002.4	4976.3 ug/L	4976.3 ppb	12:00:25
2	Fe 238.204 Radial†	570.3	552.1	5038.3 ug/L	5038.3 ppb	12:00:25
2	K 766.490 Radial†	31030.4	27837.6	4907.6 ug/L	4907.6 ppb	12:00:05
2	Mg 279.077 IEC†	149.0	146.8	5202.8 ug/L	5202.8 ppb	12:00:25
2	Na 589.592 Radial†	31972.6	32672.8	9881.9 ug/L	9881.9 ppb	12:00:05
2	Sr 421.552†	73355.0	72485.0	508.31 ug/L	508.31 ppb	12:00:05
2	Sc 361.383	864784.3	864784.3	100.31 %		12:01:28
2	Y 371.029	703923.4	703923.4	98.506 %		12:01:28
2	Ag 328.068†	104641.1	104086.8	493.63 ug/L	493.63 ppb	12:01:34
2	As 188.979†	1052.0	1082.6	495.47 ug/L	495.47 ppb	12:01:54
2	B 249.677†	21546.5	22018.5	521.57 ug/L	521.57 ppb	12:01:34
2	Ba 233.527†	60673.4	60496.3	495.29 ug/L	495.29 ppb	12:01:34
2	Be 313.107†	1314706.7	1314956.0	490.89 ug/L	490.89 ppb	12:01:28
2	Cd 226.502†	40864.1	40948.9	486.73 ug/L	486.73 ppb	12:01:34
2	Co 228.616†	22946.7	22949.0	501.34 ug/L	501.34 ppb	12:01:34
2	Cr 267.716†	42172.0	41974.0	489.25 ug/L	489.25 ppb	12:01:34
2	Cu 324.752†	169790.6	163441.7	495.79 ug/L	495.79 ppb	12:01:34
2	Mn 257.610†	430196.1	428406.0	493.17 ug/L	493.17 ppb	12:01:28
2	Mo 202.031†	6529.7	6493.8	486.76 ug/L	486.76 ppb	12:01:54
2	Ni 231.604†	19066.5	18899.1	489.31 ug/L	489.31 ppb	12:01:34

2	P 214.914†	4144.9	3903.9	2332.5 ug/L	2332.5 ppb	12:01:54
2	Pb 220.353†	3859.0	3908.7	489.19 ug/L	489.19 ppb	12:01:54
2	S 181.975 Axial†	702.6	661.1	963.04 ug/L	963.04 ppb	12:01:54
2	Sb 206.836†	1428.4	1381.8	499.01 ug/L	499.01 ppb	12:01:54
2	Se 196.026†	710.4	730.3	509.85 ug/L	509.85 ppb	12:01:54
2	Si 251.611†	74130.0	73337.2	2447.0 ug/L	2447.0 ppb	12:01:34
2	Sn 189.927†	2597.4	2580.6	479.74 ug/L	479.74 ppb	12:01:54
2	Ti 334.940†	302855.7	303216.8	491.65 ug/L	491.65 ppb	12:01:34
2	Tl 190.801†	1519.4	1548.9	499.65 ug/L	499.65 ppb	12:01:54
2	U 409.014†	14189.6	17125.5	494.91 ug/L	494.91 ppb	12:01:34
2	V 292.402†	66189.7	67538.5	496.97 ug/L	496.97 ppb	12:01:34
2	Zn 213.857†	50708.1	49837.1	487.13 ug/L	487.13 ppb	12:01:34
2	SiO2†	72948.2	72138.2	5132.5 ug/L	5132.5 ppb	12:02:35
3	Sc Radial	4881.5	4881.5	102 %		12:00:30
3	Y RADIAL	5076.4	5076.4	101.5 %		12:00:30
3	Al 396.153Radial†	5284.4	5355.3	4946.2 ug/L	4946.2 ppb	12:00:30
3	Ca 317.933Radial†	3085.8	3022.0	5008.7 ug/L	5008.7 ppb	12:00:50
3	Fe 238.204 Radial†	576.1	555.8	5072.5 ug/L	5072.5 ppb	12:00:50
3	K 766.490 Radial†	31093.2	27792.5	4899.6 ug/L	4899.6 ppb	12:00:30
3	Mg 279.077 IEC†	151.8	149.1	5283.8 ug/L	5283.8 ppb	12:00:50
3	Na 589.592 Radial†	32246.6	32832.5	9930.2 ug/L	9930.2 ppb	12:00:30
3	Sr 421.552†	74049.8	72916.6	511.34 ug/L	511.34 ppb	12:00:30
3	Sc 361.383	846229.6	846229.6	98.160 %		12:01:59
3	Y 371.029	688392.1	688392.1	96.332 %		12:01:59
3	Ag 328.068†	104067.2	105789.5	501.69 ug/L	501.69 ppb	12:02:05
3	As 188.979†	1048.0	1101.5	504.11 ug/L	504.11 ppb	12:02:25
3	B 249.677†	21430.2	22371.0	529.92 ug/L	529.92 ppb	12:02:05
3	Ba 233.527†	60435.3	61579.9	504.16 ug/L	504.16 ppb	12:02:05
3	Be 313.107†	1303086.4	1331854.9	497.21 ug/L	497.21 ppb	12:01:59
3	Cd 226.502†	40625.8	41599.4	494.47 ug/L	494.47 ppb	12:02:05
3	Co 228.616†	22966.7	23471.0	512.74 ug/L	512.74 ppb	12:02:05
3	Cr 267.716†	42103.4	42825.9	499.18 ug/L	499.18 ppb	12:02:05
3	Cu 324.752†	168984.1	166331.4	504.55 ug/L	504.55 ppb	12:02:05
3	Mn 257.610†	427731.1	435298.2	501.10 ug/L	501.10 ppb	12:01:59
3	Mo 202.031†	6540.3	6647.4	498.26 ug/L	498.26 ppb	12:02:25
3	Ni 231.604†	18990.4	19238.4	498.09 ug/L	498.09 ppb	12:02:05
3	P 214.914†	4123.6	3972.8	2373.8 ug/L	2373.8 ppb	12:02:25
3	Pb 220.353†	3839.7	3973.4	497.29 ug/L	497.29 ppb	12:02:25
3	S 181.975 Axial†	696.5	670.3	976.45 ug/L	976.45 ppb	12:02:25
3	Sb 206.836†	1442.5	1427.4	515.39 ug/L	515.39 ppb	12:02:25
3	Se 196.026†	705.5	740.8	517.12 ug/L	517.12 ppb	12:02:25
3	Si 251.611†	73755.9	74576.4	2488.3 ug/L	2488.3 ppb	12:02:05
3	Sn 189.927†	2626.9	2667.5	495.87 ug/L	495.87 ppb	12:02:25
3	Ti 334.940†	301978.5	308943.1	500.93 ug/L	500.93 ppb	12:02:05
3	Tl 190.801†	1501.9	1564.3	504.64 ug/L	504.64 ppb	12:02:25
3	U 409.014†	14209.4	17455.9	504.47 ug/L	504.47 ppb	12:02:05
3	V 292.402†	65720.7	68507.4	504.17 ug/L	504.17 ppb	12:02:05
3	Zn 213.857†	50591.3	50826.5	496.81 ug/L	496.81 ppb	12:02:05
3	SiO2†	73409.4	74202.6	5279.5 ug/L	5279.5 ppb	12:02:40

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	858931.4	99.633 %	1.2773			1.28%
Sc Radial	4869.8	101 %	0.2			0.21%
Y 371.029	699057.0	97.825 %	1.2941			1.32%
Y RADIAL	5060.6	101.2 %	0.34			0.34%
Ag 328.068†	104557.4	495.86 ug/L	5.092	495.86 ppb	5.092	1.03%
QC value within limits for Ag 328.068 Recovery = 99.17%						
Al 396.153Radial†	5343.2	4935.4 ug/L	25.77	4935.4 ppb	25.77	0.52%
QC value within limits for Al 396.153Radial Recovery = 98.71%						
As 188.979†	1083.9	496.08 ug/L	7.748	496.08 ppb	7.748	1.56%
QC value within limits for As 188.979 Recovery = 99.22%						
B 249.677†	22106.5	523.65 ug/L	5.529	523.65 ppb	5.529	1.06%
QC value within limits for B 249.677 Recovery = 104.73%						
Ba 233.527†	60824.6	497.98 ug/L	5.367	497.98 ppb	5.367	1.08%
QC value within limits for Ba 233.527 Recovery = 99.60%						
Be 313.107†	1319528.6	492.60 ug/L	4.032	492.60 ppb	4.032	0.82%
QC value within limits for Be 313.107 Recovery = 98.52%						
Ca 317.933Radial†	3012.6	4993.2 ug/L	16.24	4993.2 ppb	16.24	0.33%

QC value within limits for Ca 317.933 Radial Recovery = 99.86%							
Cd 226.502†	41174.3	489.41 ug/L	4.382	489.41 ppb	4.382	0.90%	
QC value within limits for Cd 226.502 Recovery = 97.88%							
Co 228.616†	23131.0	505.31 ug/L	6.444	505.31 ppb	6.444	1.28%	
QC value within limits for Co 228.616 Recovery = 101.06%							
Cr 267.716†	42257.9	492.56 ug/L	5.731	492.56 ppb	5.731	1.16%	
QC value within limits for Cr 267.716 Recovery = 98.51%							
Cu 324.752†	164368.1	498.60 ug/L	5.158	498.60 ppb	5.158	1.03%	
QC value within limits for Cu 324.752 Recovery = 99.72%							
Fe 238.204 Radial†	553.7	5053.1 ug/L	17.54	5053.1 ppb	17.54	0.35%	
QC value within limits for Fe 238.204 Radial Recovery = 101.06%							
K 766.490 Radial†	27831.9	4906.6 ug/L	6.53	4906.6 ppb	6.53	0.13%	
QC value within limits for K 766.490 Radial Recovery = 98.13%							
Mg 279.077 IEC†	147.9	5241.5 ug/L	40.63	5241.5 ppb	40.63	0.78%	
QC value within limits for Mg 279.077 IEC Recovery = 104.83%							
Mn 257.610†	430440.2	495.51 ug/L	4.862	495.51 ppb	4.862	0.98%	
QC value within limits for Mn 257.610 Recovery = 99.10%							
Mo 202.031†	6527.0	489.24 ug/L	8.073	489.24 ppb	8.073	1.65%	
QC value within limits for Mo 202.031 Recovery = 97.85%							
Na 589.592 Radial†	32725.8	9897.9 ug/L	27.94	9897.9 ppb	27.94	0.28%	
QC value within limits for Na 589.592 Radial Recovery = 98.98%							
Ni 231.604†	19016.8	492.36 ug/L	4.971	492.36 ppb	4.971	1.01%	
QC value within limits for Ni 231.604 Recovery = 98.47%							
P 214.914†	3908.6	2334.9 ug/L	37.74	2334.9 ppb	37.74	1.62%	
QC value within limits for P 214.914 Recovery = 93.40%							
Pb 220.353†	3916.3	490.15 ug/L	6.711	490.15 ppb	6.711	1.37%	
QC value within limits for Pb 220.353 Recovery = 98.03%							
S 181.975 Axial†	664.2	967.68 ug/L	7.600	967.68 ppb	7.600	0.79%	
QC value within limits for S 181.975 Axial Recovery = 96.77%							
Sb 206.836†	1393.6	503.27 ug/L	10.651	503.27 ppb	10.651	2.12%	
QC value within limits for Sb 206.836 Recovery = 100.65%							
Se 196.026†	729.8	509.59 ug/L	7.663	509.59 ppb	7.663	1.50%	
QC value within limits for Se 196.026 Recovery = 101.92%							
Si 251.611†	73723.9	2459.9 ug/L	24.63	2459.9 ppb	24.63	1.00%	
QC value within limits for Si 251.611 Recovery = 98.40%							
Sn 189.927†	2609.1	485.02 ug/L	9.395	485.02 ppb	9.395	1.94%	
QC value within limits for Sn 189.927 Recovery = 97.00%							
Sr 421.552†	72732.3	510.05 ug/L	1.561	510.05 ppb	1.561	0.31%	
QC value within limits for Sr 421.552 Recovery = 102.01%							
Ti 334.940†	305084.9	494.68 ug/L	5.415	494.68 ppb	5.415	1.09%	
QC value within limits for Ti 334.940 Recovery = 98.94%							
Tl 190.801†	1543.9	498.07 ug/L	7.494	498.07 ppb	7.494	1.50%	
QC value within limits for Tl 190.801 Recovery = 99.61%							
U 409.014†	17230.7	497.96 ug/L	5.644	497.96 ppb	5.644	1.13%	
QC value within limits for U 409.014 Recovery = 99.59%							
V 292.402†	67814.6	499.01 ug/L	4.502	499.01 ppb	4.502	0.90%	
QC value within limits for V 292.402 Recovery = 99.80%							
Zn 213.857†	50172.1	490.40 ug/L	5.551	490.40 ppb	5.551	1.13%	
QC value within limits for Zn 213.857 Recovery = 98.08%							
SiO2†	73401.1	5222.5 ug/L	78.86	5222.5 ppb	78.86	1.51%	
QC value within limits for SiO2 Recovery = 97.66%							
All analyte(s) passed QC.							

Sequence No.: 4
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 2/11/2010 12:04:50
 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	4952.7	4952.7	103 %		12:06:43
1	Y RADIAL	5184.7	5184.7	103.7 %		12:06:43
1	Al 396.153Radial†	-140.8	15.0	13.887 ug/L	13.887 ppb	12:07:04
1	Ca 317.933Radial†	26.3	8.8	14.648 ug/L	14.648 ppb	12:07:04
1	Fe 238.204 Radial†	11.9	0.1	1.0274 ug/L	1.0274 ppb	12:07:04
1	K 766.490 Radial†	2818.4	-90.3	-15.956 ug/L	-15.956 ppb	12:06:43
1	Mg 279.077 IEC†	3.0	2.5	88.527 ug/L	88.527 ppb	12:07:04
1	Na 589.592 Radial†	-990.1	117.6	35.556 ug/L	35.556 ppb	12:06:43
1	Sr 421.552†	32.1	29.1	0.2037 ug/L	0.2037 ppb	12:06:43
1	Sc 361.383	850678.4	850678.4	98.676 %		12:08:00
1	Y 371.029	703357.8	703357.8	98.426 %		12:08:00
1	Ag 328.068†	284.5	59.6	0.2781 ug/L	0.2781 ppb	12:08:00
1	As 188.979†	-23.1	10.5	4.7624 ug/L	4.7624 ppb	12:08:20
1	B 249.677†	882.5	1433.4	34.099 ug/L	34.099 ppb	12:08:00
1	Ba 233.527†	-14.9	-3.5	-0.0276 ug/L	-0.0276 ppb	12:08:20
1	Be 313.107†	-4192.5	90.0	0.0343 ug/L	0.0343 ppb	12:08:00
1	Cd 226.502†	-194.0	15.3	0.1824 ug/L	0.1824 ppb	12:08:20
1	Co 228.616†	-59.7	13.2	0.2880 ug/L	0.2880 ppb	12:08:20
1	Cr 267.716†	74.7	8.9	0.1020 ug/L	0.1020 ppb	12:08:20
1	Cu 324.752†	5873.5	131.6	0.3963 ug/L	0.3963 ppb	12:08:00
1	Mn 257.610†	494.8	49.6	0.0535 ug/L	0.0535 ppb	12:08:20
1	Mo 202.031†	15.2	-0.1	-0.0071 ug/L	-0.0071 ppb	12:08:20
1	Ni 231.604†	103.5	-3.2	-0.0823 ug/L	-0.0823 ppb	12:08:20
1	P 214.914†	227.8	2.8	1.6550 ug/L	1.6550 ppb	12:08:20
1	Pb 220.353†	-53.2	7.8	0.9778 ug/L	0.9778 ppb	12:08:20
1	S 181.975 Axial†	32.8	-6.1	-8.9045 ug/L	-8.9045 ppb	12:08:20
1	Sb 206.836†	48.2	6.7	2.3436 ug/L	2.3436 ppb	12:08:20
1	Se 196.026†	-17.8	4.1	2.7571 ug/L	2.7571 ppb	12:08:20
1	Si 251.611†	535.5	-19.6	-0.6563 ug/L	-0.6563 ppb	12:08:20
1	Sn 189.927†	12.9	4.4	0.8125 ug/L	0.8125 ppb	12:08:20
1	Ti 334.940†	-1066.4	222.5	0.3531 ug/L	0.3531 ppb	12:08:00
1	Tl 190.801†	-30.3	3.5	1.1327 ug/L	1.1327 ppb	12:08:20
1	U 409.014†	-2750.8	192.3	5.5754 ug/L	5.5754 ppb	12:08:00
1	V 292.402†	-1470.6	64.3	0.4787 ug/L	0.4787 ppb	12:08:00
1	Zn 213.857†	763.6	60.5	0.5972 ug/L	0.5972 ppb	12:08:20
1	SiO2†	547.7	-28.1	-2.0064 ug/L	-2.0064 ppb	12:09:16
2	Sc Radial	4884.6	4884.6	102 %		12:07:09
2	Y RADIAL	5089.2	5089.2	101.8 %		12:07:09
2	Al 396.153Radial†	-144.1	9.8	9.0326 ug/L	9.0326 ppb	12:07:29
2	Ca 317.933Radial†	24.0	6.9	11.493 ug/L	11.493 ppb	12:07:29
2	Fe 238.204 Radial†	10.1	-1.5	-13.969 ug/L	-13.969 ppb	12:07:29
2	K 766.490 Radial†	2882.9	11.3	1.9838 ug/L	1.9838 ppb	12:07:09
2	Mg 279.077 IEC†	2.3	1.9	66.818 ug/L	66.818 ppb	12:07:29
2	Na 589.592 Radial†	-989.5	104.8	31.688 ug/L	31.688 ppb	12:07:09
2	Sr 421.552†	64.1	61.0	0.4278 ug/L	0.4278 ppb	12:07:09
2	Sc 361.383	854144.5	854144.5	99.078 %		12:08:26
2	Y 371.029	706080.3	706080.3	98.807 %		12:08:26
2	Ag 328.068†	259.7	33.4	0.1510 ug/L	0.1510 ppb	12:08:26
2	As 188.979†	-25.8	7.9	3.5587 ug/L	3.5587 ppb	12:08:46
2	B 249.677†	924.6	1472.3	35.026 ug/L	35.026 ppb	12:08:26
2	Ba 233.527†	-9.3	2.2	0.0182 ug/L	0.0182 ppb	12:08:46
2	Be 313.107†	-4188.9	110.8	0.0415 ug/L	0.0415 ppb	12:08:26
2	Cd 226.502†	-195.4	14.7	0.1764 ug/L	0.1764 ppb	12:08:46
2	Co 228.616†	-59.7	13.5	0.2965 ug/L	0.2965 ppb	12:08:46
2	Cr 267.716†	82.0	16.0	0.1853 ug/L	0.1853 ppb	12:08:46
2	Cu 324.752†	5724.6	-42.9	-0.1325 ug/L	-0.1325 ppb	12:08:26
2	Mn 257.610†	470.5	22.9	0.0223 ug/L	0.0223 ppb	12:08:46
2	Mo 202.031†	25.7	10.4	0.7758 ug/L	0.7758 ppb	12:08:46
2	Ni 231.604†	101.7	-5.4	-0.1402 ug/L	-0.1402 ppb	12:08:46

2	P 214.914†	224.5	-1.5	-0.8906 ug/L	-0.8906 ppb	12:08:46
2	Pb 220.353†	-60.4	0.8	0.1045 ug/L	0.1045 ppb	12:08:46
2	S 181.975 Axial†	39.9	1.0	1.3920 ug/L	1.3920 ppb	12:08:46
2	Sb 206.836†	46.1	4.4	1.5566 ug/L	1.5566 ppb	12:08:46
2	Se 196.026†	-15.8	6.2	4.1072 ug/L	4.1072 ppb	12:08:46
2	Si 251.611†	553.5	-3.6	-0.1290 ug/L	-0.1290 ppb	12:08:46
2	Sn 189.927†	14.8	6.3	1.1642 ug/L	1.1642 ppb	12:08:46
2	Ti 334.940†	-1231.8	59.9	0.0919 ug/L	0.0919 ppb	12:08:26
2	Tl 190.801†	-29.0	4.9	1.5666 ug/L	1.5666 ppb	12:08:46
2	U 409.014†	-2853.0	100.5	2.9164 ug/L	2.9164 ppb	12:08:26
2	V 292.402†	-1505.9	34.7	0.2721 ug/L	0.2721 ppb	12:08:26
2	Zn 213.857†	776.5	70.5	0.6983 ug/L	0.6983 ppb	12:08:46
2	SiO2†	573.1	-4.7	-0.3547 ug/L	-0.3547 ppb	12:09:21
3	Sc Radial	4949.7	4949.7	103 %		12:07:34
3	Y RADIAL	5151.5	5151.5	103.0 %		12:07:34
3	Al 396.153Radial†	-143.9	11.9	11.030 ug/L	11.030 ppb	12:07:54
3	Ca 317.933Radial†	19.5	2.2	3.6841 ug/L	3.6841 ppb	12:07:54
3	Fe 238.204 Radial†	10.4	-1.4	-12.958 ug/L	-12.958 ppb	12:07:54
3	K 766.490 Radial†	2843.5	-64.2	-11.350 ug/L	-11.350 ppb	12:07:34
3	Mg 279.077 IEC†	2.6	2.1	74.351 ug/L	74.351 ppb	12:07:54
3	Na 589.592 Radial†	-1005.4	102.1	30.891 ug/L	30.891 ppb	12:07:34
3	Sr 421.552†	22.3	19.6	0.1374 ug/L	0.1374 ppb	12:07:34
3	Sc 361.383	851001.9	851001.9	98.713 %		12:08:51
3	Y 371.029	701869.4	701869.4	98.218 %		12:08:51
3	Ag 328.068†	202.9	-23.3	-0.1159 ug/L	-0.1159 ppb	12:08:51
3	As 188.979†	-23.8	9.7	4.4032 ug/L	4.4032 ppb	12:09:11
3	B 249.677†	896.5	1447.2	34.430 ug/L	34.430 ppb	12:08:51
3	Ba 233.527†	-17.8	-6.5	-0.0517 ug/L	-0.0517 ppb	12:09:11
3	Be 313.107†	-4258.4	24.8	0.0097 ug/L	0.0097 ppb	12:08:51
3	Cd 226.502†	-190.1	19.3	0.2322 ug/L	0.2322 ppb	12:09:11
3	Co 228.616†	-68.4	4.5	0.0964 ug/L	0.0964 ppb	12:09:11
3	Cr 267.716†	63.0	-2.9	-0.0354 ug/L	-0.0354 ppb	12:09:11
3	Cu 324.752†	5761.0	15.4	0.0429 ug/L	0.0429 ppb	12:08:51
3	Mn 257.610†	465.3	19.4	0.0180 ug/L	0.0180 ppb	12:09:11
3	Mo 202.031†	10.6	-4.8	-0.3577 ug/L	-0.3577 ppb	12:09:11
3	Ni 231.604†	123.2	16.8	0.4357 ug/L	0.4357 ppb	12:09:11
3	P 214.914†	231.3	6.2	3.9035 ug/L	3.9035 ppb	12:09:11
3	Pb 220.353†	-57.4	3.6	0.4533 ug/L	0.4533 ppb	12:09:11
3	S 181.975 Axial†	38.9	0.1	0.0794 ug/L	0.0794 ppb	12:09:11
3	Sb 206.836†	41.4	-0.2	-0.0400 ug/L	-0.0400 ppb	12:09:11
3	Se 196.026†	-6.9	15.1	10.123 ug/L	10.123 ppb	12:09:11
3	Si 251.611†	535.6	-19.7	-0.6530 ug/L	-0.6530 ppb	12:09:11
3	Sn 189.927†	16.9	8.5	1.5697 ug/L	1.5697 ppb	12:09:11
3	Ti 334.940†	-1154.7	133.4	0.2083 ug/L	0.2083 ppb	12:08:51
3	Tl 190.801†	-38.7	-5.0	-1.6100 ug/L	-1.6100 ppb	12:09:11
3	U 409.014†	-2750.2	194.0	5.6283 ug/L	5.6283 ppb	12:08:51
3	V 292.402†	-1441.6	94.2	0.6932 ug/L	0.6932 ppb	12:08:51
3	Zn 213.857†	765.0	61.8	0.6083 ug/L	0.6083 ppb	12:09:11
3	SiO2†	555.8	-20.1	-1.4224 ug/L	-1.4224 ppb	12:09:27

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	851941.6	98.822 %	0.2221			0.22%
Sc Radial	4929.0	103 %	0.8			0.78%
Y 371.029	703769.1	98.484 %	0.2988			0.30%
Y RADIAL	5141.8	102.8 %	0.97			0.94%
Ag 328.068†	23.2	0.1044 ug/L	0.20113	0.1044 ppb	0.20113	192.64%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	12.2	11.317 ug/L	2.4398	11.317 ppb	2.4398	21.56%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	9.3	4.2415 ug/L	0.61795	4.2415 ppb	0.61795	14.57%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	1450.9	34.518 ug/L	0.4700	34.518 ppb	0.4700	1.36%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	-2.6	-0.0204 ug/L	0.03550	-0.0204 ppb	0.03550	174.21%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	75.2	0.0285 ug/L	0.01666	0.0285 ppb	0.01666	58.40%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	6.0	9.9418 ug/L	5.64420	9.9418 ppb	5.64420	56.77%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd 226.502†	16.4	0.1970 ug/L	0.03065	0.1970 ppb	0.03065	15.56%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	10.4	0.2269 ug/L	0.11316	0.2269 ppb	0.11316	49.86%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	7.3	0.0840 ug/L	0.11146	0.0840 ppb	0.11146	132.73%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	34.7	0.1022 ug/L	0.26931	0.1022 ppb	0.26931	263.39%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	-0.9	-8.6331 ug/L	8.38145	-8.6331 ppb	8.38145	97.09%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	-47.7	-8.4407 ug/L	9.31702	-8.4407 ppb	9.31702	110.38%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	2.2	76.565 ug/L	11.0227	76.565 ppb	11.0227	14.40%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	30.7	0.0313 ug/L	0.01938	0.0313 ppb	0.01938	61.94%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	1.8	0.1370 ug/L	0.58036	0.1370 ppb	0.58036	423.56%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	108.2	32.712 ug/L	2.4953	32.712 ppb	2.4953	7.63%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	2.7	0.0711 ug/L	0.31708	0.0711 ppb	0.31708	446.23%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	2.5	1.5559 ug/L	2.39858	1.5559 ppb	2.39858	154.16%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	4.1	0.5119 ug/L	0.43955	0.5119 ppb	0.43955	85.87%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	-1.7	-2.4777 ug/L	5.60430	-2.4777 ppb	5.60430	226.19%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	3.6	1.2867 ug/L	1.21454	1.2867 ppb	1.21454	94.39%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	8.4	5.6624 ug/L	3.92140	5.6624 ppb	3.92140	69.25%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	-14.3	-0.4794 ug/L	0.30344	-0.4794 ppb	0.30344	63.29%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	6.4	1.1822 ug/L	0.37893	1.1822 ppb	0.37893	32.05%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	36.6	0.2563 ug/L	0.15219	0.2563 ppb	0.15219	59.38%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	138.6	0.2178 ug/L	0.13086	0.2178 ppb	0.13086	60.09%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	1.1	0.3631 ug/L	1.72245	0.3631 ppb	1.72245	474.34%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	162.3	4.7067 ug/L	1.55071	4.7067 ppb	1.55071	32.95%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	64.4	0.4813 ug/L	0.21059	0.4813 ppb	0.21059	43.75%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	64.3	0.6346 ug/L	0.05545	0.6346 ppb	0.05545	8.74%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	-17.6	-1.2612 ug/L	0.83758	-1.2612 ppb	0.83758	66.41%	
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: 2/11/2010 12:53:04
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4837.9	4837.9	101 %		12:54:57
1	Y RADIAL	5017.8	5017.8	100.3 %		12:54:57
1	Al 396.153Radial†	5274.7	5392.5	4981.2 ug/L	4981.2 ppb	12:54:57
1	Ca 317.933Radial†	3065.4	3029.1	5020.5 ug/L	5020.5 ppb	12:55:17
1	Fe 238.204 Radial†	576.3	561.1	5120.5 ug/L	5120.5 ppb	12:55:17
1	K 766.490 Radial†	31192.3	28166.6	4965.7 ug/L	4965.7 ppb	12:54:57
1	Mg 279.077 IEC†	150.4	149.0	5282.2 ug/L	5282.2 ppb	12:55:17
1	Na 589.592 Radial†	31816.2	32690.7	9887.3 ug/L	9887.3 ppb	12:54:57
1	Sr 421.552†	73457.9	72984.8	511.82 ug/L	511.82 ppb	12:54:57
1	Sc 361.383	868818.6	868818.6	100.78 %		12:56:14
1	Y 371.029	706341.6	706341.6	98.844 %		12:56:14
1	Ag 328.068†	103196.2	102168.7	484.60 ug/L	484.60 ppb	12:56:20
1	As 188.979†	1057.3	1083.0	495.59 ug/L	495.59 ppb	12:56:40
1	B 249.677†	21059.0	21435.0	507.69 ug/L	507.69 ppb	12:56:20
1	Ba 233.527†	60094.6	59641.1	488.29 ug/L	488.29 ppb	12:56:20
1	Be 313.107†	1325883.0	1319960.0	492.74 ug/L	492.74 ppb	12:56:14
1	Cd 226.502†	40531.4	40429.7	480.54 ug/L	480.54 ppb	12:56:20
1	Co 228.616†	22814.5	22711.7	496.17 ug/L	496.17 ppb	12:56:20
1	Cr 267.716†	41797.6	41407.3	482.65 ug/L	482.65 ppb	12:56:20
1	Cu 324.752†	167171.2	160056.6	485.53 ug/L	485.53 ppb	12:56:20
1	Mn 257.610†	435580.9	431757.9	497.03 ug/L	497.03 ppb	12:56:14
1	Mo 202.031†	6579.6	6513.1	488.21 ug/L	488.21 ppb	12:56:40
1	Ni 231.604†	18915.2	18660.8	483.14 ug/L	483.14 ppb	12:56:20
1	P 214.914†	4176.7	3916.3	2342.4 ug/L	2342.4 ppb	12:56:40
1	Pb 220.353†	3889.5	3921.1	490.76 ug/L	490.76 ppb	12:56:40
1	S 181.975 Axial†	715.3	670.4	976.69 ug/L	976.69 ppb	12:56:40
1	Sb 206.836†	1455.6	1402.2	506.26 ug/L	506.26 ppb	12:56:40
1	Se 196.026†	724.6	741.1	517.45 ug/L	517.45 ppb	12:56:40
1	Si 251.611†	73289.1	72159.6	2407.6 ug/L	2407.6 ppb	12:56:20
1	Sn 189.927†	2650.0	2620.8	487.20 ug/L	487.20 ppb	12:56:40
1	Ti 334.940†	299376.6	298362.8	483.78 ug/L	483.78 ppb	12:56:20
1	Tl 190.801†	1529.3	1551.7	500.54 ug/L	500.54 ppb	12:56:40
1	U 409.014†	13997.9	16869.6	487.50 ug/L	487.50 ppb	12:56:20
1	V 292.402†	65379.8	66428.4	488.91 ug/L	488.91 ppb	12:56:20
1	Zn 213.857†	50226.3	49124.3	480.13 ug/L	480.13 ppb	12:56:20
1	SiO2†	74473.5	73314.0	5216.3 ug/L	5216.3 ppb	12:57:47
2	Sc Radial	4811.3	4811.3	100 %		12:55:22
2	Y RADIAL	5012.3	5012.3	100.2 %		12:55:22
2	Al 396.153Radial†	5241.2	5388.0	4977.1 ug/L	4977.1 ppb	12:55:22
2	Ca 317.933Radial†	3093.3	3073.8	5094.6 ug/L	5094.6 ppb	12:55:42
2	Fe 238.204 Radial†	574.8	562.8	5136.0 ug/L	5136.0 ppb	12:55:42
2	K 766.490 Radial†	31082.1	28228.2	4976.5 ug/L	4976.5 ppb	12:55:22
2	Mg 279.077 IEC†	151.6	151.1	5354.7 ug/L	5354.7 ppb	12:55:42
2	Na 589.592 Radial†	31591.0	32640.9	9872.2 ug/L	9872.2 ppb	12:55:22
2	Sr 421.552†	73056.5	72988.1	511.84 ug/L	511.84 ppb	12:55:22
2	Sc 361.383	869935.0	869935.0	100.91 %		12:56:45
2	Y 371.029	707378.5	707378.5	98.989 %		12:56:45
2	Ag 328.068†	106246.4	105060.1	498.26 ug/L	498.26 ppb	12:56:51
2	As 188.979†	1055.6	1080.0	494.34 ug/L	494.34 ppb	12:57:11
2	B 249.677†	21912.3	22253.8	527.13 ug/L	527.13 ppb	12:56:51
2	Ba 233.527†	61719.2	61174.6	500.84 ug/L	500.84 ppb	12:56:51
2	Be 313.107†	1326025.6	1318412.9	492.19 ug/L	492.19 ppb	12:56:45
2	Cd 226.502†	41567.2	41404.4	492.14 ug/L	492.14 ppb	12:56:51
2	Co 228.616†	23446.2	23308.6	509.18 ug/L	509.18 ppb	12:56:51
2	Cr 267.716†	42876.6	42423.3	494.49 ug/L	494.49 ppb	12:56:51
2	Cu 324.752†	172710.7	165333.3	501.53 ug/L	501.53 ppb	12:56:51
2	Mn 257.610†	435993.6	431612.2	496.86 ug/L	496.86 ppb	12:56:45
2	Mo 202.031†	6563.2	6488.5	486.37 ug/L	486.37 ppb	12:57:11
2	Ni 231.604†	19385.2	19102.5	494.58 ug/L	494.58 ppb	12:56:51

2	P 214.914†	4175.4	3909.7	2335.0 ug/L	2335.0 ppb	12:57:11
2	Pb 220.353†	3873.5	3900.3	488.15 ug/L	488.15 ppb	12:57:11
2	S 181.975 Axial†	718.3	672.5	979.65 ug/L	979.65 ppb	12:57:11
2	Sb 206.836†	1443.4	1388.3	501.33 ug/L	501.33 ppb	12:57:11
2	Se 196.026†	713.2	728.9	509.24 ug/L	509.24 ppb	12:57:11
2	Si 251.611†	75301.3	74060.4	2471.2 ug/L	2471.2 ppb	12:56:51
2	Sn 189.927†	2634.7	2602.3	483.78 ug/L	483.78 ppb	12:57:11
2	Ti 334.940†	307990.4	306517.7	497.00 ug/L	497.00 ppb	12:56:51
2	Tl 190.801†	1527.4	1547.8	499.33 ug/L	499.33 ppb	12:57:11
2	U 409.014†	14702.9	17550.4	507.21 ug/L	507.21 ppb	12:56:51
2	V 292.402†	67186.8	68135.9	501.30 ug/L	501.30 ppb	12:56:51
2	Zn 213.857†	51523.6	50346.0	492.09 ug/L	492.09 ppb	12:56:51
2	SiO2†	74498.7	73244.1	5211.4 ug/L	5211.4 ppb	12:57:52
3	Sc Radial	4939.1	4939.1	103 %		12:55:47
3	Y RADIAL	5135.1	5135.1	102.7 %		12:55:47
3	Al 396.153Radial†	5339.9	5348.6	4940.2 ug/L	4940.2 ppb	12:55:47
3	Ca 317.933Radial†	3086.8	2987.4	4951.5 ug/L	4951.5 ppb	12:56:07
3	Fe 238.204 Radial†	573.8	547.0	4991.9 ug/L	4991.9 ppb	12:56:07
3	K 766.490 Radial†	31771.0	28094.7	4953.0 ug/L	4953.0 ppb	12:55:47
3	Mg 279.077 IEC†	147.4	143.1	5070.6 ug/L	5070.6 ppb	12:56:07
3	Na 589.592 Radial†	32218.7	32434.7	9809.8 ug/L	9809.8 ppb	12:55:47
3	Sr 421.552†	74536.5	72538.9	508.69 ug/L	508.69 ppb	12:55:47
3	Sc 361.383	857830.8	857830.8	99.505 %		12:57:16
3	Y 371.029	697229.1	697229.1	97.569 %		12:57:16
3	Ag 328.068†	105007.3	105300.4	499.35 ug/L	499.35 ppb	12:57:22
3	As 188.979†	1060.9	1100.1	503.43 ug/L	503.43 ppb	12:57:42
3	B 249.677†	21554.1	22200.2	525.88 ug/L	525.88 ppb	12:57:22
3	Ba 233.527†	61004.2	61318.9	502.02 ug/L	502.02 ppb	12:57:22
3	Be 313.107†	1307439.3	1318276.1	492.15 ug/L	492.15 ppb	12:57:16
3	Cd 226.502†	41171.3	41587.8	494.34 ug/L	494.34 ppb	12:57:22
3	Co 228.616†	23181.0	23369.9	510.53 ug/L	510.53 ppb	12:57:22
3	Cr 267.716†	42400.0	42543.9	495.89 ug/L	495.89 ppb	12:57:22
3	Cu 324.752†	170509.4	165536.1	502.13 ug/L	502.13 ppb	12:57:22
3	Mn 257.610†	429959.0	431644.1	496.90 ug/L	496.90 ppb	12:57:16
3	Mo 202.031†	6557.4	6574.4	492.79 ug/L	492.79 ppb	12:57:42
3	Ni 231.604†	19176.7	19164.0	496.17 ug/L	496.17 ppb	12:57:22
3	P 214.914†	4164.3	3957.0	2364.5 ug/L	2364.5 ppb	12:57:42
3	Pb 220.353†	3870.6	3951.5	494.56 ug/L	494.56 ppb	12:57:42
3	S 181.975 Axial†	713.1	677.3	986.73 ug/L	986.73 ppb	12:57:42
3	Sb 206.836†	1444.5	1409.6	508.98 ug/L	508.98 ppb	12:57:42
3	Se 196.026†	708.9	734.6	512.62 ug/L	512.62 ppb	12:57:42
3	Si 251.611†	74405.0	74212.5	2476.2 ug/L	2476.2 ppb	12:57:22
3	Sn 189.927†	2631.7	2636.1	490.04 ug/L	490.04 ppb	12:57:42
3	Ti 334.940†	304414.8	307230.9	498.16 ug/L	498.16 ppb	12:57:22
3	Tl 190.801†	1510.5	1552.2	500.75 ug/L	500.75 ppb	12:57:42
3	U 409.014†	14397.7	17449.3	504.29 ug/L	504.29 ppb	12:57:22
3	V 292.402†	66407.6	68292.3	502.54 ug/L	502.54 ppb	12:57:22
3	Zn 213.857†	50925.6	50465.4	493.28 ug/L	493.28 ppb	12:57:22
3	SiO2†	74841.4	74630.2	5310.1 ug/L	5310.1 ppb	12:57:57

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	865528.2	100.40 %	0.776			0.77%
Sc Radial	4862.8	101 %	1.4			1.39%
Y 371.029	703649.7	98.467 %	0.7815			0.79%
Y RADIAL	5055.1	101.1 %	1.39			1.37%
Ag 328.068†	104176.4	494.07 ug/L	8.221	494.07 ppb	8.221	1.66%
QC value within limits for Ag 328.068 Recovery = 98.81%						
Al 396.153Radial†	5376.4	4966.2 ug/L	22.59	4966.2 ppb	22.59	0.45%
QC value within limits for Al 396.153Radial Recovery = 99.32%						
As 188.979†	1087.7	497.79 ug/L	4.923	497.79 ppb	4.923	0.99%
QC value within limits for As 188.979 Recovery = 99.56%						
B 249.677†	21963.0	520.23 ug/L	10.879	520.23 ppb	10.879	2.09%
QC value within limits for B 249.677 Recovery = 104.05%						
Ba 233.527†	60711.5	497.05 ug/L	7.609	497.05 ppb	7.609	1.53%
QC value within limits for Ba 233.527 Recovery = 99.41%						
Be 313.107†	1318883.0	492.36 ug/L	0.330	492.36 ppb	0.330	0.07%
QC value within limits for Be 313.107 Recovery = 98.47%						
Ca 317.933Radial†	3030.1	5022.2 ug/L	71.56	5022.2 ppb	71.56	1.42%

QC value within limits for Ca 317.933 Radial Recovery = 100.44%

Cd 226.502†	41140.6	489.01 ug/L	7.412	489.01 ppb	7.412	1.52%
QC value within limits for Cd 226.502 Recovery = 97.80%						
Co 228.616†	23130.1	505.29 ug/L	7.929	505.29 ppb	7.929	1.57%
QC value within limits for Co 228.616 Recovery = 101.06%						
Cr 267.716†	42124.9	491.01 ug/L	7.274	491.01 ppb	7.274	1.48%
QC value within limits for Cr 267.716 Recovery = 98.20%						
Cu 324.752†	163642.0	496.40 ug/L	9.416	496.40 ppb	9.416	1.90%
QC value within limits for Cu 324.752 Recovery = 99.28%						
Fe 238.204 Radial†	557.0	5082.8 ug/L	79.12	5082.8 ppb	79.12	1.56%
QC value within limits for Fe 238.204 Radial Recovery = 101.66%						
K 766.490 Radial†	28163.2	4965.1 ug/L	11.76	4965.1 ppb	11.76	0.24%
QC value within limits for K 766.490 Radial Recovery = 99.30%						
Mg 279.077 IEC†	147.7	5235.8 ug/L	147.63	5235.8 ppb	147.63	2.82%
QC value within limits for Mg 279.077 IEC Recovery = 104.72%						
Mn 257.610†	431671.4	496.93 ug/L	0.089	496.93 ppb	0.089	0.02%
QC value within limits for Mn 257.610 Recovery = 99.39%						
Mo 202.031†	6525.4	489.12 ug/L	3.307	489.12 ppb	3.307	0.68%
QC value within limits for Mo 202.031 Recovery = 97.82%						
Na 589.592 Radial†	32588.7	9856.4 ug/L	41.06	9856.4 ppb	41.06	0.42%
QC value within limits for Na 589.592 Radial Recovery = 98.56%						
Ni 231.604†	18975.8	491.30 ug/L	7.107	491.30 ppb	7.107	1.45%
QC value within limits for Ni 231.604 Recovery = 98.26%						
P 214.914†	3927.7	2347.3 ug/L	15.32	2347.3 ppb	15.32	0.65%
QC value within limits for P 214.914 Recovery = 93.89%						
Pb 220.353†	3924.3	491.15 ug/L	3.222	491.15 ppb	3.222	0.66%
QC value within limits for Pb 220.353 Recovery = 98.23%						
S 181.975 Axial†	673.4	981.02 ug/L	5.160	981.02 ppb	5.160	0.53%
QC value within limits for S 181.975 Axial Recovery = 98.10%						
Sb 206.836†	1400.0	505.52 ug/L	3.879	505.52 ppb	3.879	0.77%
QC value within limits for Sb 206.836 Recovery = 101.10%						
Se 196.026†	734.9	513.10 ug/L	4.127	513.10 ppb	4.127	0.80%
QC value within limits for Se 196.026 Recovery = 102.62%						
Si 251.611†	73477.5	2451.7 ug/L	38.25	2451.7 ppb	38.25	1.56%
QC value within limits for Si 251.611 Recovery = 98.07%						
Sn 189.927†	2619.7	487.00 ug/L	3.136	487.00 ppb	3.136	0.64%
QC value within limits for Sn 189.927 Recovery = 97.40%						
Sr 421.552†	72837.3	510.78 ug/L	1.812	510.78 ppb	1.812	0.35%
QC value within limits for Sr 421.552 Recovery = 102.16%						
Ti 334.940†	304037.1	492.98 ug/L	7.988	492.98 ppb	7.988	1.62%
QC value within limits for Ti 334.940 Recovery = 98.60%						
Tl 190.801†	1550.6	500.20 ug/L	0.767	500.20 ppb	0.767	0.15%
QC value within limits for Tl 190.801 Recovery = 100.04%						
U 409.014†	17289.8	499.67 ug/L	10.639	499.67 ppb	10.639	2.13%
QC value within limits for U 409.014 Recovery = 99.93%						
V 292.402†	67618.9	497.59 ug/L	7.537	497.59 ppb	7.537	1.51%
QC value within limits for V 292.402 Recovery = 99.52%						
Zn 213.857†	49978.6	488.50 ug/L	7.270	488.50 ppb	7.270	1.49%
QC value within limits for Zn 213.857 Recovery = 97.70%						
SiO2†	73729.4	5246.0 ug/L	55.61	5246.0 ppb	55.61	1.06%
QC value within limits for SiO2 Recovery = 98.10%						

All analyte(s) passed QC.

Sequence No.: 12
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 2/11/2010 13:00:07
 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	4548.3	4548.3	94.6 %		13:02:00
1	Y RADIAL	4743.9	4743.9	94.87 %		13:02:00
1	Al 396.153Radial†	-139.3	4.3	4.0280 ug/L	4.0280 ppb	13:02:20
1	Ca 317.933Radial†	23.9	8.6	14.252 ug/L	14.252 ppb	13:02:20
1	Fe 238.204 Radial†	11.6	0.8	7.0309 ug/L	7.0309 ppb	13:02:20
1	K 766.490 Radial†	2723.3	52.5	9.2430 ug/L	9.2430 ppb	13:02:00
1	Mg 279.077 IEC†	3.7	3.5	125.24 ug/L	125.24 ppb	13:02:20
1	Na 589.592 Radial†	-923.1	103.0	31.145 ug/L	31.145 ppb	13:02:00
1	Sr 421.552†	-13.6	-16.4	-0.1153 ug/L	-0.1153 ppb	13:02:00
1	Sc 361.383	847002.2	847002.2	98.249 %		13:03:17
1	Y 371.029	698147.9	698147.9	97.697 %		13:03:17
1	Ag 328.068†	298.3	74.9	0.3573 ug/L	0.3573 ppb	13:03:17
1	As 188.979†	-24.6	8.8	4.0094 ug/L	4.0094 ppb	13:03:37
1	B 249.677†	694.4	1245.8	29.635 ug/L	29.635 ppb	13:03:17
1	Ba 233.527†	-9.1	2.4	0.0205 ug/L	0.0205 ppb	13:03:37
1	Be 313.107†	-4286.8	-24.5	-0.0093 ug/L	-0.0093 ppb	13:03:17
1	Cd 226.502†	-178.7	30.0	0.3557 ug/L	0.3557 ppb	13:03:37
1	Co 228.616†	-55.4	17.3	0.3773 ug/L	0.3773 ppb	13:03:37
1	Cr 267.716†	68.3	2.8	0.0334 ug/L	0.0334 ppb	13:03:37
1	Cu 324.752†	5795.8	78.4	0.2386 ug/L	0.2386 ppb	13:03:17
1	Mn 257.610†	493.2	50.1	0.0532 ug/L	0.0532 ppb	13:03:37
1	Mo 202.031†	11.5	-3.8	-0.2874 ug/L	-0.2874 ppb	13:03:37
1	Ni 231.604†	90.9	-15.5	-0.4024 ug/L	-0.4024 ppb	13:03:37
1	P 214.914†	233.9	10.0	6.1762 ug/L	6.1762 ppb	13:03:37
1	Pb 220.353†	-54.0	6.8	0.8449 ug/L	0.8449 ppb	13:03:37
1	S 181.975 Axial†	35.6	-3.1	-4.4745 ug/L	-4.4745 ppb	13:03:37
1	Sb 206.836†	45.0	3.7	1.2850 ug/L	1.2850 ppb	13:03:37
1	Se 196.026†	-20.5	1.2	0.8373 ug/L	0.8373 ppb	13:03:37
1	Si 251.611†	526.3	-26.6	-0.8846 ug/L	-0.8846 ppb	13:03:37
1	Sn 189.927†	10.9	2.4	0.4489 ug/L	0.4489 ppb	13:03:37
1	Ti 334.940†	-1321.7	-42.0	-0.0761 ug/L	-0.0761 ppb	13:03:17
1	Tl 190.801†	-33.7	-0.1	-0.0453 ug/L	-0.0453 ppb	13:03:37
1	U 409.014†	-2959.8	-32.5	-0.9428 ug/L	-0.9428 ppb	13:03:17
1	V 292.402†	-1470.8	57.6	0.4142 ug/L	0.4142 ppb	13:03:17
1	Zn 213.857†	754.4	54.6	0.5400 ug/L	0.5400 ppb	13:03:37
1	SiO2†	563.6	-9.5	-0.6720 ug/L	-0.6720 ppb	13:04:33
2	Sc Radial	4884.9	4884.9	102 %		13:02:25
2	Y RADIAL	5114.2	5114.2	102.3 %		13:02:25
2	Al 396.153Radial†	-144.6	9.3	8.6095 ug/L	8.6095 ppb	13:02:45
2	Ca 317.933Radial†	22.9	5.9	9.7348 ug/L	9.7348 ppb	13:02:45
2	Fe 238.204 Radial†	8.8	-2.9	-26.064 ug/L	-26.064 ppb	13:02:45
2	K 766.490 Radial†	2719.8	-149.3	-26.382 ug/L	-26.382 ppb	13:02:25
2	Mg 279.077 IEC†	-0.6	-1.0	-34.444 ug/L	-34.444 ppb	13:02:45
2	Na 589.592 Radial†	-910.4	182.6	55.232 ug/L	55.232 ppb	13:02:25
2	Sr 421.552†	1.0	-1.2	-0.0082 ug/L	-0.0082 ppb	13:02:25
2	Sc 361.383	853156.3	853156.3	98.963 %		13:03:42
2	Y 371.029	702857.6	702857.6	98.356 %		13:03:42
2	Ag 328.068†	266.1	40.1	0.1804 ug/L	0.1804 ppb	13:03:42
2	As 188.979†	-29.0	4.6	2.0800 ug/L	2.0800 ppb	13:04:02
2	B 249.677†	680.4	1226.5	29.183 ug/L	29.183 ppb	13:03:42
2	Ba 233.527†	-7.2	4.3	0.0353 ug/L	0.0353 ppb	13:04:02
2	Be 313.107†	-4348.3	-55.2	-0.0202 ug/L	-0.0202 ppb	13:03:42
2	Cd 226.502†	-179.7	30.3	0.3633 ug/L	0.3633 ppb	13:04:02
2	Co 228.616†	-69.3	3.7	0.0805 ug/L	0.0805 ppb	13:04:02
2	Cr 267.716†	83.1	17.2	0.1992 ug/L	0.1992 ppb	13:04:02
2	Cu 324.752†	5831.0	71.4	0.2141 ug/L	0.2141 ppb	13:03:42
2	Mn 257.610†	500.8	54.1	0.0611 ug/L	0.0611 ppb	13:04:02
2	Mo 202.031†	19.2	3.8	0.2847 ug/L	0.2847 ppb	13:04:02
2	Ni 231.604†	116.8	10.0	0.2599 ug/L	0.2599 ppb	13:04:02

2	P 214.914†	233.6	8.0	4.9772 ug/L	4.9772 ppb	13:04:02
2	Pb 220.353†	-53.8	7.3	0.9178 ug/L	0.9178 ppb	13:04:02
2	S 181.975 Axial†	39.1	0.2	0.2567 ug/L	0.2567 ppb	13:04:02
2	Sb 206.836†	32.8	-9.0	-3.1010 ug/L	-3.1010 ppb	13:04:02
2	Se 196.026†	-9.0	13.1	8.7217 ug/L	8.7217 ppb	13:04:02
2	Si 251.611†	544.4	-12.2	-0.4120 ug/L	-0.4120 ppb	13:04:02
2	Sn 189.927†	17.0	8.5	1.5735 ug/L	1.5735 ppb	13:04:02
2	Ti 334.940†	-1194.3	96.4	0.1595 ug/L	0.1595 ppb	13:03:42
2	Tl 190.801†	-33.6	0.3	0.0814 ug/L	0.0814 ppb	13:04:02
2	U 409.014†	-2885.0	64.8	1.8822 ug/L	1.8822 ppb	13:03:42
2	V 292.402†	-1478.4	60.8	0.4520 ug/L	0.4520 ppb	13:03:42
2	Zn 213.857†	734.2	28.6	0.2844 ug/L	0.2844 ppb	13:04:02
2	SiO2†	573.3	-3.8	-0.2803 ug/L	-0.2803 ppb	13:04:38
3	Sc Radial	4790.8	4790.8	99.7 %		13:02:50
3	Y RADIAL	5005.5	5005.5	100.1 %		13:02:50
3	Al 396.153Radial†	-142.2	8.9	8.2874 ug/L	8.2874 ppb	13:03:10
3	Ca 317.933Radial†	25.4	8.7	14.487 ug/L	14.487 ppb	13:03:10
3	Fe 238.204 Radial†	9.3	-2.2	-19.960 ug/L	-19.960 ppb	13:03:10
3	K 766.490 Radial†	2799.8	-16.5	-2.9244 ug/L	-2.9244 ppb	13:02:50
3	Mg 279.077 IEC†	1.0	0.6	19.738 ug/L	19.738 ppb	13:03:10
3	Na 589.592 Radial†	-957.5	117.8	35.639 ug/L	35.639 ppb	13:02:50
3	Sr 421.552†	1.1	-1.0	-0.0069 ug/L	-0.0069 ppb	13:02:50
3	Sc 361.383	853117.9	853117.9	98.959 %		13:04:07
3	Y 371.029	703548.6	703548.6	98.453 %		13:04:07
3	Ag 328.068†	274.7	48.8	0.2197 ug/L	0.2197 ppb	13:04:07
3	As 188.979†	-27.6	5.9	2.6852 ug/L	2.6852 ppb	13:04:27
3	B 249.677†	663.8	1209.8	28.784 ug/L	28.784 ppb	13:04:07
3	Ba 233.527†	-14.5	-3.0	-0.0248 ug/L	-0.0248 ppb	13:04:27
3	Be 313.107†	-4356.7	-63.8	-0.0236 ug/L	-0.0236 ppb	13:04:07
3	Cd 226.502†	-181.3	28.7	0.3443 ug/L	0.3443 ppb	13:04:27
3	Co 228.616†	-65.5	7.6	0.1644 ug/L	0.1644 ppb	13:04:27
3	Cr 267.716†	74.2	8.2	0.0935 ug/L	0.0935 ppb	13:04:27
3	Cu 324.752†	5863.5	104.5	0.3131 ug/L	0.3131 ppb	13:04:07
3	Mn 257.610†	491.9	45.1	0.0492 ug/L	0.0492 ppb	13:04:27
3	Mo 202.031†	12.4	-3.0	-0.2287 ug/L	-0.2287 ppb	13:04:27
3	Ni 231.604†	98.2	-8.8	-0.2278 ug/L	-0.2278 ppb	13:04:27
3	P 214.914†	235.4	9.8	6.0982 ug/L	6.0982 ppb	13:04:27
3	Pb 220.353†	-62.0	-0.9	-0.1097 ug/L	-0.1097 ppb	13:04:27
3	S 181.975 Axial†	44.8	5.9	8.6415 ug/L	8.6415 ppb	13:04:27
3	Sb 206.836†	34.3	-7.5	-2.5735 ug/L	-2.5735 ppb	13:04:27
3	Se 196.026†	-10.1	11.9	7.9259 ug/L	7.9259 ppb	13:04:27
3	Si 251.611†	512.1	-44.8	-1.4962 ug/L	-1.4962 ppb	13:04:27
3	Sn 189.927†	18.5	10.0	1.8651 ug/L	1.8651 ppb	13:04:27
3	Ti 334.940†	-1232.5	57.7	0.0917 ug/L	0.0917 ppb	13:04:07
3	Tl 190.801†	-30.9	3.0	0.9621 ug/L	0.9621 ppb	13:04:27
3	U 409.014†	-2779.6	171.2	4.9652 ug/L	4.9652 ppb	13:04:07
3	V 292.402†	-1510.0	28.7	0.2181 ug/L	0.2181 ppb	13:04:07
3	Zn 213.857†	745.4	40.0	0.3988 ug/L	0.3988 ppb	13:04:27
3	SiO2†	546.1	-31.3	-2.2239 ug/L	-2.2239 ppb	13:04:43

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	851092.1	98.724 %		0.4109				0.42%
Sc Radial	4741.3	98.6 %		3.61				3.66%
Y 371.029	701518.0	98.169 %		0.4113				0.42%
Y RADIAL	4954.6	99.08 %		3.806				3.84%
Ag 328.068†	54.6	0.2525 ug/L		0.09292	0.2525 ppb		0.09292	36.80%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	7.5	6.9750 ug/L		2.55723	6.9750 ppb		2.55723	36.66%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	6.5	2.9249 ug/L		0.98678	2.9249 ppb		0.98678	33.74%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	1227.4	29.201 ug/L		0.4258	29.201 ppb		0.4258	1.46%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	1.2	0.0103 ug/L		0.03130	0.0103 ppb		0.03130	303.42%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-47.8	-0.0177 ug/L		0.00746	-0.0177 ppb		0.00746	42.21%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	7.7	12.824 ug/L		2.6783	12.824 ppb		2.6783	20.88%

QC value within limits for Ca 317.933Radial Recovery = Not calculated							
Cd 226.502†	29.7	0.3544 ug/L	0.00956	0.3544 ppb	0.00956	2.70%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	9.5	0.2074 ug/L	0.15299	0.2074 ppb	0.15299	73.76%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	9.4	0.1087 ug/L	0.08394	0.1087 ppb	0.08394	77.25%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	84.7	0.2553 ug/L	0.05154	0.2553 ppb	0.05154	20.19%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	-1.4	-12.998 ug/L	17.6119	-12.998 ppb	17.6119	135.50%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	-37.8	-6.6879 ug/L	18.10839	-6.6879 ppb	18.10839	270.76%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	1.0	36.844 ug/L	81.2036	36.844 ppb	81.2036	220.40%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	49.8	0.0545 ug/L	0.00609	0.0545 ppb	0.00609	11.17%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	-1.0	-0.0771 ug/L	0.31472	-0.0771 ppb	0.31472	408.17%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	134.5	40.672 ug/L	12.8082	40.672 ppb	12.8082	31.49%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	-4.8	-0.1234 ug/L	0.34324	-0.1234 ppb	0.34324	278.06%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	9.3	5.7505 ug/L	0.67086	5.7505 ppb	0.67086	11.67%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	4.4	0.5510 ug/L	0.57339	0.5510 ppb	0.57339	104.06%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	1.0	1.4746 ug/L	6.64232	1.4746 ppb	6.64232	450.46%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	-4.3	-1.4632 ug/L	2.39454	-1.4632 ppb	2.39454	163.66%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	8.7	5.8283 ug/L	4.34060	5.8283 ppb	4.34060	74.47%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	-27.9	-0.9309 ug/L	0.54361	-0.9309 ppb	0.54361	58.39%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	7.0	1.2959 ug/L	0.74781	1.2959 ppb	0.74781	57.71%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	-6.2	-0.0435 ug/L	0.06225	-0.0435 ppb	0.06225	143.23%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	37.4	0.0584 ug/L	0.12128	0.0584 ppb	0.12128	207.69%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	1.0	0.3327 ug/L	0.54872	0.3327 ppb	0.54872	164.91%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	67.8	1.9682 ug/L	2.95493	1.9682 ppb	2.95493	150.13%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	49.1	0.3615 ug/L	0.12557	0.3615 ppb	0.12557	34.74%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	41.1	0.4077 ug/L	0.12804	0.4077 ppb	0.12804	31.40%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	-14.9	-1.0587 ug/L	1.02790	-1.0587 ppb	1.02790	97.09%	
QC value within limits for SiO2 Recovery = Not calculated							
All analyte(s) passed QC.							

Sequence No.: 18
 Sample ID: CCV
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 7
 Date Collected: 2/11/2010 13:39:38
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4812.3	4812.3	100 %		13:41:31
1	Y RADIAL	5017.3	5017.3	100.3 %		13:41:31
1	Al 396.153Radial†	5264.3	5410.0	4997.5 ug/L	4997.5 ppb	13:41:31
1	Ca 317.933Radial†	3040.0	3019.9	5005.3 ug/L	5005.3 ppb	13:41:51
1	Fe 238.204 Radial†	567.4	555.3	5067.6 ug/L	5067.6 ppb	13:41:51
1	K 766.490 Radial†	31070.8	28210.6	4973.4 ug/L	4973.4 ppb	13:41:31
1	Mg 279.077 IEC†	149.7	149.1	5285.1 ug/L	5285.1 ppb	13:41:51
1	Na 589.592 Radial†	31729.1	32772.2	9911.9 ug/L	9911.9 ppb	13:41:31
1	Sr 421.552†	73574.0	73490.0	515.36 ug/L	515.36 ppb	13:41:31
1	Sc 361.383	852595.3	852595.3	98.898 %		13:42:48
1	Y 371.029	689759.4	689759.4	96.523 %		13:42:48
1	Ag 328.068†	104866.7	105806.3	501.75 ug/L	501.75 ppb	13:42:53
1	As 188.979†	1035.7	1081.1	494.88 ug/L	494.88 ppb	13:43:13
1	B 249.677†	20739.6	21509.7	509.43 ug/L	509.43 ppb	13:42:53
1	Ba 233.527†	61059.4	61751.3	505.55 ug/L	505.55 ppb	13:42:53
1	Be 313.107†	1299347.2	1318162.4	492.11 ug/L	492.11 ppb	13:42:48
1	Cd 226.502†	40857.8	41524.9	493.58 ug/L	493.58 ppb	13:42:53
1	Co 228.616†	23184.9	23516.9	513.72 ug/L	513.72 ppb	13:42:53
1	Cr 267.716†	41996.2	42397.3	494.19 ug/L	494.19 ppb	13:42:53
1	Cu 324.752†	170932.2	167015.9	506.63 ug/L	506.63 ppb	13:42:53
1	Mn 257.610†	429793.8	434130.4	499.76 ug/L	499.76 ppb	13:42:48
1	Mo 202.031†	6428.4	6484.4	486.06 ug/L	486.06 ppb	13:43:13
1	Ni 231.604†	19001.9	19105.5	494.65 ug/L	494.65 ppb	13:42:53
1	P 214.914†	4116.5	3934.3	2349.3 ug/L	2349.3 ppb	13:43:13
1	Pb 220.353†	3795.7	3899.7	488.08 ug/L	488.08 ppb	13:43:13
1	S 181.975 Axial†	696.2	664.6	968.24 ug/L	968.24 ppb	13:43:13
1	Sb 206.836†	1422.2	1395.9	503.96 ug/L	503.96 ppb	13:43:13
1	Se 196.026†	700.8	730.7	510.24 ug/L	510.24 ppb	13:43:13
1	Si 251.611†	74636.5	74905.8	2499.5 ug/L	2499.5 ppb	13:42:53
1	Sn 189.927†	2584.4	2604.5	484.19 ug/L	484.19 ppb	13:43:13
1	Ti 334.940†	305255.6	309959.8	502.58 ug/L	502.58 ppb	13:42:53
1	Tl 190.801†	1512.4	1563.4	504.38 ug/L	504.38 ppb	13:43:13
1	U 409.014†	14229.2	17367.8	501.92 ug/L	501.92 ppb	13:42:53
1	V 292.402†	65755.0	68042.2	500.61 ug/L	500.61 ppb	13:42:53
1	Zn 213.857†	50866.6	50720.1	495.78 ug/L	495.78 ppb	13:42:53
1	SiO2†	74829.2	75079.8	5342.4 ug/L	5342.4 ppb	13:44:21
2	Sc Radial	4831.8	4831.8	101 %		13:41:56
2	Y RADIAL	5022.3	5022.3	100.4 %		13:41:56
2	Al 396.153Radial†	5251.2	5375.7	4965.7 ug/L	4965.7 ppb	13:41:56
2	Ca 317.933Radial†	3051.3	3018.9	5003.6 ug/L	5003.6 ppb	13:42:16
2	Fe 238.204 Radial†	570.4	556.0	5073.8 ug/L	5073.8 ppb	13:42:16
2	K 766.490 Radial†	31107.8	28121.9	4957.8 ug/L	4957.8 ppb	13:41:56
2	Mg 279.077 IEC†	144.2	143.1	5070.2 ug/L	5070.2 ppb	13:42:16
2	Na 589.592 Radial†	31857.7	32772.1	9911.9 ug/L	9911.9 ppb	13:41:56
2	Sr 421.552†	73844.7	73462.1	515.16 ug/L	515.16 ppb	13:41:56
2	Sc 361.383	861113.8	861113.8	99.886 %		13:43:19
2	Y 371.029	697366.9	697366.9	97.588 %		13:43:19
2	Ag 328.068†	105212.6	105103.6	498.44 ug/L	498.44 ppb	13:43:24
2	As 188.979†	1046.4	1081.4	495.02 ug/L	495.02 ppb	13:43:44
2	B 249.677†	20785.0	21347.7	505.58 ug/L	505.58 ppb	13:43:24
2	Ba 233.527†	61445.8	61527.4	503.71 ug/L	503.71 ppb	13:43:24
2	Be 313.107†	1309585.4	1315415.4	491.08 ug/L	491.08 ppb	13:43:19
2	Cd 226.502†	41094.2	41352.9	491.53 ug/L	491.53 ppb	13:43:24
2	Co 228.616†	23340.1	23440.4	512.05 ug/L	512.05 ppb	13:43:24
2	Cr 267.716†	42265.8	42247.1	492.44 ug/L	492.44 ppb	13:43:24
2	Cu 324.752†	171252.4	165626.7	502.42 ug/L	502.42 ppb	13:43:24
2	Mn 257.610†	431649.3	431689.0	496.96 ug/L	496.96 ppb	13:43:19
2	Mo 202.031†	6480.2	6472.0	485.13 ug/L	485.13 ppb	13:43:44
2	Ni 231.604†	19128.8	19042.5	493.02 ug/L	493.02 ppb	13:43:24

2	P 214.914†	4157.9	3934.5	2350.3 ug/L	2350.3 ppb	13:43:44
2	Pb 220.353†	3838.5	3904.6	488.68 ug/L	488.68 ppb	13:43:44
2	S 181.975 Axial†	707.4	668.9	974.41 ug/L	974.41 ppb	13:43:44
2	Sb 206.836†	1420.2	1379.7	498.30 ug/L	498.30 ppb	13:43:44
2	Se 196.026†	704.0	726.9	507.68 ug/L	507.68 ppb	13:43:44
2	Si 251.611†	74996.0	74519.1	2486.6 ug/L	2486.6 ppb	13:43:24
2	Sn 189.927†	2606.8	2601.0	483.53 ug/L	483.53 ppb	13:43:44
2	Ti 334.940†	306340.1	307992.2	499.41 ug/L	499.41 ppb	13:43:24
2	Tl 190.801†	1506.5	1542.4	497.62 ug/L	497.62 ppb	13:43:44
2	U 409.014†	14259.4	17255.7	498.68 ug/L	498.68 ppb	13:43:24
2	V 292.402†	66127.2	67757.1	498.52 ug/L	498.52 ppb	13:43:24
2	Zn 213.857†	51066.3	50411.2	492.75 ug/L	492.75 ppb	13:43:24
2	SiO2†	73633.8	73134.5	5203.6 ug/L	5203.6 ppb	13:44:26
3	Sc Radial	4734.2	4734.2	98.5 %		13:42:21
3	Y RADIAL	4890.0	4890.0	97.79 %		13:42:21
3	Al 396.153Radial†	5197.4	5428.9	5015.0 ug/L	5015.0 ppb	13:42:21
3	Ca 317.933Radial†	3054.8	3085.0	5113.2 ug/L	5113.2 ppb	13:42:41
3	Fe 238.204 Radial†	566.7	563.9	5146.2 ug/L	5146.2 ppb	13:42:41
3	K 766.490 Radial†	30646.3	28291.6	4987.7 ug/L	4987.7 ppb	13:42:21
3	Mg 279.077 IEC†	145.0	146.8	5201.7 ug/L	5201.7 ppb	13:42:41
3	Na 589.592 Radial†	31331.0	32890.9	9947.8 ug/L	9947.8 ppb	13:42:21
3	Sr 421.552†	72815.8	73932.6	518.46 ug/L	518.46 ppb	13:42:21
3	Sc 361.383	860146.3	860146.3	99.774 %		13:43:50
3	Y 371.029	695624.9	695624.9	97.344 %		13:43:50
3	Ag 328.068†	103414.9	103420.4	490.51 ug/L	490.51 ppb	13:43:55
3	As 188.979†	1039.1	1075.4	492.21 ug/L	492.21 ppb	13:44:16
3	B 249.677†	20576.8	21162.5	501.18 ug/L	501.18 ppb	13:43:55
3	Ba 233.527†	60397.6	60546.0	495.69 ug/L	495.69 ppb	13:43:55
3	Be 313.107†	1312530.2	1319841.6	492.71 ug/L	492.71 ppb	13:43:50
3	Cd 226.502†	40397.4	40700.8	483.77 ug/L	483.77 ppb	13:43:55
3	Co 228.616†	22961.5	23087.2	504.35 ug/L	504.35 ppb	13:43:55
3	Cr 267.716†	41594.9	41622.4	485.16 ug/L	485.16 ppb	13:43:55
3	Cu 324.752†	168463.3	163024.1	494.53 ug/L	494.53 ppb	13:43:55
3	Mn 257.610†	433802.6	434333.2	500.00 ug/L	500.00 ppb	13:43:50
3	Mo 202.031†	6488.3	6487.4	486.29 ug/L	486.29 ppb	13:44:16
3	Ni 231.604†	18820.9	18755.5	485.59 ug/L	485.59 ppb	13:43:55
3	P 214.914†	4140.9	3922.2	2344.2 ug/L	2344.2 ppb	13:44:16
3	Pb 220.353†	3843.9	3914.3	489.91 ug/L	489.91 ppb	13:44:16
3	S 181.975 Axial†	709.1	671.4	978.03 ug/L	978.03 ppb	13:44:16
3	Sb 206.836†	1435.7	1396.8	504.29 ug/L	504.29 ppb	13:44:16
3	Se 196.026†	714.8	738.6	515.81 ug/L	515.81 ppb	13:44:16
3	Si 251.611†	73817.3	73422.2	2449.9 ug/L	2449.9 ppb	13:43:55
3	Sn 189.927†	2605.9	2603.2	483.95 ug/L	483.95 ppb	13:44:16
3	Ti 334.940†	301248.8	303234.2	491.70 ug/L	491.70 ppb	13:43:55
3	Tl 190.801†	1506.4	1544.0	498.13 ug/L	498.13 ppb	13:44:16
3	U 409.014†	13927.8	16939.4	489.51 ug/L	489.51 ppb	13:43:55
3	V 292.402†	65054.3	66756.3	491.25 ug/L	491.25 ppb	13:43:55
3	Zn 213.857†	50366.7	49767.5	486.45 ug/L	486.45 ppb	13:43:55
3	SiO2†	74022.0	73606.5	5237.3 ug/L	5237.3 ppb	13:44:31

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	857951.8	99.519 %	0.5410			0.54%
Sc Radial	4792.7	99.7 %	1.07			1.08%
Y 371.029	694250.4	97.152 %	0.5577			0.57%
Y RADIAL	4976.5	99.52 %	1.500			1.51%
Ag 328.068†	104776.8	496.90 ug/L	5.778	496.90 ppb	5.778	1.16%
QC value within limits for Ag 328.068 Recovery = 99.38%						
Al 396.153Radial†	5404.9	4992.8 ug/L	25.00	4992.8 ppb	25.00	0.50%
QC value within limits for Al 396.153Radial Recovery = 99.86%						
As 188.979†	1079.3	494.03 ug/L	1.585	494.03 ppb	1.585	0.32%
QC value within limits for As 188.979 Recovery = 98.81%						
B 249.677†	21340.0	505.39 ug/L	4.126	505.39 ppb	4.126	0.82%
QC value within limits for B 249.677 Recovery = 101.08%						
Ba 233.527†	61274.9	501.65 ug/L	5.245	501.65 ppb	5.245	1.05%
QC value within limits for Ba 233.527 Recovery = 100.33%						
Be 313.107†	1317806.5	491.97 ug/L	0.825	491.97 ppb	0.825	0.17%
QC value within limits for Be 313.107 Recovery = 98.39%						
Ca 317.933Radial†	3041.3	5040.7 ug/L	62.83	5040.7 ppb	62.83	1.25%

QC value within limits for Ca 317.933 Radial Recovery = 100.81%							
Cd 226.502†	41192.8	489.63 ug/L	5.177	489.63 ppb	5.177	1.06%	
QC value within limits for Cd 226.502 Recovery = 97.93%							
Co 228.616†	23348.1	510.04 ug/L	4.996	510.04 ppb	4.996	0.98%	
QC value within limits for Co 228.616 Recovery = 102.01%							
Cr 267.716†	42088.9	490.59 ug/L	4.788	490.59 ppb	4.788	0.98%	
QC value within limits for Cr 267.716 Recovery = 98.12%							
Cu 324.752†	165222.2	501.19 ug/L	6.141	501.19 ppb	6.141	1.23%	
QC value within limits for Cu 324.752 Recovery = 100.24%							
Fe 238.204 Radial†	558.4	5095.9 ug/L	43.73	5095.9 ppb	43.73	0.86%	
QC value within limits for Fe 238.204 Radial Recovery = 101.92%							
K 766.490 Radial†	28208.0	4972.9 ug/L	14.95	4972.9 ppb	14.95	0.30%	
QC value within limits for K 766.490 Radial Recovery = 99.46%							
Mg 279.077 IEC†	146.3	5185.7 ug/L	108.37	5185.7 ppb	108.37	2.09%	
QC value within limits for Mg 279.077 IEC Recovery = 103.71%							
Mn 257.610†	433384.2	498.91 ug/L	1.691	498.91 ppb	1.691	0.34%	
QC value within limits for Mn 257.610 Recovery = 99.78%							
Mo 202.031†	6481.3	485.83 ug/L	0.615	485.83 ppb	0.615	0.13%	
QC value within limits for Mo 202.031 Recovery = 97.17%							
Na 589.592 Radial†	32811.8	9923.9 ug/L	20.73	9923.9 ppb	20.73	0.21%	
QC value within limits for Na 589.592 Radial Recovery = 99.24%							
Ni 231.604†	18967.9	491.09 ug/L	4.830	491.09 ppb	4.830	0.98%	
QC value within limits for Ni 231.604 Recovery = 98.22%							
P 214.914†	3930.3	2347.9 ug/L	3.31	2347.9 ppb	3.31	0.14%	
QC value within limits for P 214.914 Recovery = 93.92%							
Pb 220.353†	3906.2	488.89 ug/L	0.933	488.89 ppb	0.933	0.19%	
QC value within limits for Pb 220.353 Recovery = 97.78%							
S 181.975 Axial†	668.3	973.56 ug/L	4.949	973.56 ppb	4.949	0.51%	
QC value within limits for S 181.975 Axial Recovery = 97.36%							
Sb 206.836†	1390.8	502.18 ug/L	3.370	502.18 ppb	3.370	0.67%	
QC value within limits for Sb 206.836 Recovery = 100.44%							
Se 196.026†	732.0	511.24 ug/L	4.158	511.24 ppb	4.158	0.81%	
QC value within limits for Se 196.026 Recovery = 102.25%							
Si 251.611†	74282.4	2478.7 ug/L	25.75	2478.7 ppb	25.75	1.04%	
QC value within limits for Si 251.611 Recovery = 99.15%							
Sn 189.927†	2602.9	483.89 ug/L	0.330	483.89 ppb	0.330	0.07%	
QC value within limits for Sn 189.927 Recovery = 96.78%							
Sr 421.552†	73628.2	516.33 ug/L	1.851	516.33 ppb	1.851	0.36%	
QC value within limits for Sr 421.552 Recovery = 103.27%							
Ti 334.940†	307062.1	497.90 ug/L	5.595	497.90 ppb	5.595	1.12%	
QC value within limits for Ti 334.940 Recovery = 99.58%							
Tl 190.801†	1550.0	500.04 ug/L	3.765	500.04 ppb	3.765	0.75%	
QC value within limits for Tl 190.801 Recovery = 100.01%							
U 409.014†	17187.6	496.71 ug/L	6.436	496.71 ppb	6.436	1.30%	
QC value within limits for U 409.014 Recovery = 99.34%							
V 292.402†	67518.5	496.80 ug/L	4.912	496.80 ppb	4.912	0.99%	
QC value within limits for V 292.402 Recovery = 99.36%							
Zn 213.857†	50299.6	491.66 ug/L	4.762	491.66 ppb	4.762	0.97%	
QC value within limits for Zn 213.857 Recovery = 98.33%							
SiO2†	73940.3	5261.1 ug/L	72.37	5261.1 ppb	72.37	1.38%	
QC value within limits for SiO2 Recovery = 98.38%							
All analyte(s) passed QC.							

Sequence No.: 19

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/11/2010 13:46:41

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	4874.5	4874.5	101 %		13:48:34
1	Y RADIAL	5064.1	5064.1	101.3 %		13:48:34
1	Al 396.153Radial†	-166.8	-12.9	-12.005 ug/L	-12.005 ppb	13:48:34
1	Ca 317.933Radial†	26.4	9.4	15.527 ug/L	15.527 ppb	13:48:54
1	Fe 238.204 Radial†	10.8	-0.9	-7.9116 ug/L	-7.9116 ppb	13:48:54
1	K 766.490 Radial†	2847.0	-18.2	-3.2495 ug/L	-3.2495 ppb	13:48:34
1	Mg 279.077 IEC†	1.4	0.9	32.877 ug/L	32.877 ppb	13:48:54
1	Na 589.592 Radial†	-863.1	227.4	68.768 ug/L	68.768 ppb	13:48:34
1	Sr 421.552†	-9.0	-11.0	-0.0774 ug/L	-0.0774 ppb	13:48:34
1	Sc 361.383	832976.5	832976.5	96.622 %		13:49:51
1	Y 371.029	682037.9	682037.9	95.443 %		13:49:51
1	Ag 328.068†	258.2	38.5	0.1764 ug/L	0.1764 ppb	13:49:51
1	As 188.979†	-35.5	-2.8	-1.2900 ug/L	-1.2900 ppb	13:50:11
1	B 249.677†	62.3	603.5	14.359 ug/L	14.359 ppb	13:50:11
1	Ba 233.527†	-16.5	-5.5	-0.0449 ug/L	-0.0449 ppb	13:50:11
1	Be 313.107†	-4119.6	75.1	0.0279 ug/L	0.0279 ppb	13:49:51
1	Cd 226.502†	-192.4	12.8	0.1527 ug/L	0.1527 ppb	13:50:11
1	Co 228.616†	-63.7	7.8	0.1706 ug/L	0.1706 ppb	13:50:11
1	Cr 267.716†	74.2	10.0	0.1157 ug/L	0.1157 ppb	13:50:11
1	Cu 324.752†	5623.0	-1.2	-0.0054 ug/L	-0.0054 ppb	13:49:51
1	Mn 257.610†	488.1	53.3	0.0592 ug/L	0.0592 ppb	13:50:11
1	Mo 202.031†	18.5	3.6	0.2705 ug/L	0.2705 ppb	13:50:11
1	Ni 231.604†	83.1	-22.0	-0.5711 ug/L	-0.5711 ppb	13:50:11
1	P 214.914†	224.5	4.2	2.6473 ug/L	2.6473 ppb	13:50:11
1	Pb 220.353†	-59.5	0.1	0.0174 ug/L	0.0174 ppb	13:50:11
1	S 181.975 Axial†	43.3	5.5	8.0487 ug/L	8.0487 ppb	13:50:11
1	Sb 206.836†	46.9	6.4	2.2505 ug/L	2.2505 ppb	13:50:11
1	Se 196.026†	-18.0	3.4	2.2925 ug/L	2.2925 ppb	13:50:11
1	Si 251.611†	538.0	-5.5	-0.1872 ug/L	-0.1872 ppb	13:50:11
1	Sn 189.927†	8.7	0.3	0.0618 ug/L	0.0618 ppb	13:50:11
1	Ti 334.940†	-1270.2	-11.4	-0.0203 ug/L	-0.0203 ppb	13:49:51
1	Tl 190.801†	-38.2	-5.3	-1.7045 ug/L	-1.7045 ppb	13:50:11
1	U 409.014†	-2791.0	91.5	2.6548 ug/L	2.6548 ppb	13:49:51
1	V 292.402†	-1494.0	8.4	0.0718 ug/L	0.0718 ppb	13:49:51
1	Zn 213.857†	744.4	57.2	0.5692 ug/L	0.5692 ppb	13:50:11
1	SiO2†	575.5	12.5	0.8848 ug/L	0.8848 ppb	13:51:07
2	Sc Radial	4847.5	4847.5	101 %		13:48:59
2	Y RADIAL	5075.6	5075.6	101.5 %		13:48:59
2	Al 396.153Radial†	-145.6	7.2	6.6259 ug/L	6.6259 ppb	13:48:59
2	Ca 317.933Radial†	26.0	9.1	15.116 ug/L	15.116 ppb	13:49:19
2	Fe 238.204 Radial†	12.5	0.9	8.1458 ug/L	8.1458 ppb	13:49:19
2	K 766.490 Radial†	2722.1	-126.4	-22.332 ug/L	-22.332 ppb	13:48:59
2	Mg 279.077 IEC†	3.6	3.2	113.13 ug/L	113.13 ppb	13:49:19
2	Na 589.592 Radial†	-906.2	179.9	54.413 ug/L	54.413 ppb	13:48:59
2	Sr 421.552†	13.4	11.2	0.0782 ug/L	0.0782 ppb	13:48:59
2	Sc 361.383	848163.2	848163.2	98.384 %		13:50:16
2	Y 371.029	695647.6	695647.6	97.347 %		13:50:16
2	Ag 328.068†	192.4	-33.2	-0.1570 ug/L	-0.1570 ppb	13:50:16
2	As 188.979†	-24.4	9.0	4.1041 ug/L	4.1041 ppb	13:50:36
2	B 249.677†	66.5	606.7	14.431 ug/L	14.431 ppb	13:50:36
2	Ba 233.527†	-15.7	-4.4	-0.0343 ug/L	-0.0343 ppb	13:50:36
2	Be 313.107†	-4165.2	105.1	0.0389 ug/L	0.0389 ppb	13:50:16
2	Cd 226.502†	-185.6	23.2	0.2762 ug/L	0.2762 ppb	13:50:36
2	Co 228.616†	-70.9	1.7	0.0390 ug/L	0.0390 ppb	13:50:36
2	Cr 267.716†	72.7	7.1	0.0814 ug/L	0.0814 ppb	13:50:36
2	Cu 324.752†	5525.7	-204.3	-0.6228 ug/L	-0.6228 ppb	13:50:16
2	Mn 257.610†	492.3	48.4	0.0519 ug/L	0.0519 ppb	13:50:36
2	Mo 202.031†	26.8	11.7	0.8800 ug/L	0.8800 ppb	13:50:36
2	Ni 231.604†	79.4	-27.4	-0.7086 ug/L	-0.7086 ppb	13:50:36

2	P 214.914†	235.9	11.7	7.4195 ug/L	7.4195 ppb	13:50:36
2	Pb 220.353†	-43.6	17.4	2.1700 ug/L	2.1700 ppb	13:50:36
2	S 181.975 Axial†	36.3	-2.5	-3.6299 ug/L	-3.6299 ppb	13:50:36
2	Sb 206.836†	43.7	2.3	0.8571 ug/L	0.8571 ppb	13:50:36
2	Se 196.026†	-13.8	8.0	5.4522 ug/L	5.4522 ppb	13:50:36
2	Si 251.611†	540.5	-12.9	-0.4410 ug/L	-0.4410 ppb	13:50:36
2	Sn 189.927†	20.5	12.2	2.2582 ug/L	2.2582 ppb	13:50:36
2	Ti 334.940†	-1335.4	-54.1	-0.0978 ug/L	-0.0978 ppb	13:50:16
2	Tl 190.801†	-28.6	5.1	1.6350 ug/L	1.6350 ppb	13:50:36
2	U 409.014†	-2721.6	213.7	6.1957 ug/L	6.1957 ppb	13:50:16
2	V 292.402†	-1462.3	68.4	0.5218 ug/L	0.5218 ppb	13:50:16
2	Zn 213.857†	765.5	64.8	0.6437 ug/L	0.6437 ppb	13:50:36
2	SiO2†	569.3	-4.4	-0.3402 ug/L	-0.3402 ppb	13:51:12
3	Sc Radial	4980.3	4980.3	104 %		13:49:24
3	Y RADIAL	5191.0	5191.0	103.8 %		13:49:24
3	Al 396.153Radial†	-157.1	-0.0	-0.0682 ug/L	-0.0682 ppb	13:49:24
3	Ca 317.933Radial†	21.6	4.1	6.7953 ug/L	6.7953 ppb	13:49:44
3	Fe 238.204 Radial†	10.0	-1.9	-16.921 ug/L	-16.921 ppb	13:49:44
3	K 766.490 Radial†	2769.5	-152.6	-26.974 ug/L	-26.974 ppb	13:49:24
3	Mg 279.077 IEC†	1.5	1.0	35.623 ug/L	35.623 ppb	13:49:44
3	Na 589.592 Radial†	-841.7	266.1	80.470 ug/L	80.470 ppb	13:49:24
3	Sr 421.552†	-7.1	-9.0	-0.0631 ug/L	-0.0631 ppb	13:49:24
3	Sc 361.383	851237.6	851237.6	98.741 %		13:50:42
3	Y 371.029	697709.8	697709.8	97.636 %		13:50:42
3	Ag 328.068†	203.8	-22.4	-0.1059 ug/L	-0.1059 ppb	13:50:42
3	As 188.979†	-27.3	6.2	2.8281 ug/L	2.8281 ppb	13:51:02
3	B 249.677†	48.6	588.2	13.996 ug/L	13.996 ppb	13:51:02
3	Ba 233.527†	-7.3	4.2	0.0360 ug/L	0.0360 ppb	13:51:02
3	Be 313.107†	-4222.6	62.3	0.0234 ug/L	0.0234 ppb	13:50:42
3	Cd 226.502†	-206.5	2.8	0.0340 ug/L	0.0340 ppb	13:51:02
3	Co 228.616†	-68.7	4.2	0.0933 ug/L	0.0933 ppb	13:51:02
3	Cr 267.716†	72.6	6.8	0.0806 ug/L	0.0806 ppb	13:51:02
3	Cu 324.752†	5564.8	-185.0	-0.5612 ug/L	-0.5612 ppb	13:50:42
3	Mn 257.610†	492.0	46.4	0.0502 ug/L	0.0502 ppb	13:51:02
3	Mo 202.031†	28.8	13.6	1.0180 ug/L	1.0180 ppb	13:51:02
3	Ni 231.604†	88.0	-18.8	-0.4883 ug/L	-0.4883 ppb	13:51:02
3	P 214.914†	230.4	5.2	3.4251 ug/L	3.4251 ppb	13:51:02
3	Pb 220.353†	-47.7	13.4	1.6819 ug/L	1.6819 ppb	13:51:02
3	S 181.975 Axial†	33.9	-5.0	-7.2357 ug/L	-7.2357 ppb	13:51:02
3	Sb 206.836†	39.8	-1.9	-0.5664 ug/L	-0.5664 ppb	13:51:02
3	Se 196.026†	-18.7	3.1	2.0674 ug/L	2.0674 ppb	13:51:02
3	Si 251.611†	544.8	-10.6	-0.3661 ug/L	-0.3661 ppb	13:51:02
3	Sn 189.927†	27.5	19.2	3.5660 ug/L	3.5660 ppb	13:51:02
3	Ti 334.940†	-1245.0	42.3	0.0673 ug/L	0.0673 ppb	13:50:42
3	Tl 190.801†	-23.5	10.4	3.3198 ug/L	3.3198 ppb	13:51:02
3	U 409.014†	-2996.5	-54.7	-1.5842 ug/L	-1.5842 ppb	13:50:42
3	V 292.402†	-1394.4	142.5	1.0490 ug/L	1.0490 ppb	13:50:42
3	Zn 213.857†	755.8	52.2	0.5210 ug/L	0.5210 ppb	13:51:02
3	SiO2†	579.8	4.0	0.2589 ug/L	0.2589 ppb	13:51:17

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	844125.8	97.916 %		1.1341				1.16%
Sc Radial	4900.8	102 %		1.5				1.43%
Y 371.029	691798.4	96.809 %		1.1916				1.23%
Y RADIAL	5110.2	102.2 %		1.40				1.37%
Ag 328.068†	-5.7	-0.0288 ug/L		0.17960	-0.0288 ppb		0.17960	622.82%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-1.9	-1.8156 ug/L		9.43731	-1.8156 ppb		9.43731	519.79%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	4.2	1.8807 ug/L		2.81909	1.8807 ppb		2.81909	149.89%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	599.5	14.262 ug/L		0.2331	14.262 ppb		0.2331	1.63%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-1.9	-0.0144 ug/L		0.04397	-0.0144 ppb		0.04397	304.96%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	80.8	0.0301 ug/L		0.00800	0.0301 ppb		0.00800	26.61%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	7.5	12.479 ug/L		4.9268	12.479 ppb		4.9268	39.48%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd 226.502†	12.9	0.1543 ug/L	0.12111	0.1543 ppb	0.12111	78.49%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	4.5	0.1010 ug/L	0.06616	0.1010 ppb	0.06616	65.51%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	8.0	0.0926 ug/L	0.02004	0.0926 ppb	0.02004	21.64%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	-130.1	-0.3964 ug/L	0.34006	-0.3964 ppb	0.34006	85.78%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	-0.6	-5.5622 ug/L	12.69730	-5.5622 ppb	12.69730	228.28%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	-99.1	-17.519 ug/L	12.5736	-17.519 ppb	12.5736	71.77%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	1.7	60.545 ug/L	45.5643	60.545 ppb	45.5643	75.26%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	49.4	0.0538 ug/L	0.00475	0.0538 ppb	0.00475	8.84%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	9.7	0.7228 ug/L	0.39774	0.7228 ppb	0.39774	55.02%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	224.4	67.884 ug/L	13.0513	67.884 ppb	13.0513	19.23%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	-22.7	-0.5894 ug/L	0.11128	-0.5894 ppb	0.11128	18.88%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	7.1	4.4973 ug/L	2.56043	4.4973 ppb	2.56043	56.93%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	10.3	1.2898 ug/L	1.12860	1.2898 ppb	1.12860	87.50%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	-0.6	-0.9390 ug/L	7.98962	-0.9390 ppb	7.98962	850.90%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	2.3	0.8471 ug/L	1.40844	0.8471 ppb	1.40844	166.27%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	4.9	3.2707 ug/L	1.89256	3.2707 ppb	1.89256	57.86%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	-9.6	-0.3314 ug/L	0.13040	-0.3314 ppb	0.13040	39.34%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	10.6	1.9620 ug/L	1.77078	1.9620 ppb	1.77078	90.25%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	-2.9	-0.0207 ug/L	0.08597	-0.0207 ppb	0.08597	414.38%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	-7.8	-0.0169 ug/L	0.08260	-0.0169 ppb	0.08260	487.66%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	3.4	1.0834 ug/L	2.55714	1.0834 ppb	2.55714	236.03%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	83.5	2.4221 ug/L	3.89514	2.4221 ppb	3.89514	160.82%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	73.1	0.5476 ug/L	0.48909	0.5476 ppb	0.48909	89.32%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	58.1	0.5780 ug/L	0.06183	0.5780 ppb	0.06183	10.70%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	4.0	0.2678 ug/L	0.61252	0.2678 ppb	0.61252	228.69%	
QC value within limits for SiO2 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 2
 Sample ID: CCV
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 7
 Date Collected: 2/11/2010 14:59:41
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4896.9	4896.9	102 %		15:01:33
1	Y RADIAL	5064.3	5064.3	101.3 %		15:01:33
1	Al 396.153Radial†	5362.8	5415.8	5002.8 ug/L	5002.8 ppb	15:01:33
1	Ca 317.933Radial†	3076.8	3003.5	4978.2 ug/L	4978.2 ppb	15:01:53
1	Fe 238.204 Radial†	567.7	545.8	4981.4 ug/L	4981.4 ppb	15:01:53
1	K 766.490 Radial†	31444.5	28040.8	4943.4 ug/L	4943.4 ppb	15:01:33
1	Mg 279.077 IEC†	144.9	141.8	5026.7 ug/L	5026.7 ppb	15:01:53
1	Na 589.592 Radial†	32560.6	33040.7	9993.1 ug/L	9993.1 ppb	15:01:33
1	Sr 421.552†	75675.9	74282.9	520.92 ug/L	520.92 ppb	15:01:33
1	Sc 361.383	855266.4	855266.4	99.208 %		15:02:50
1	Y 371.029	690506.7	690506.7	96.628 %		15:02:50
1	Ag 328.068†	105333.1	105945.2	502.39 ug/L	502.39 ppb	15:02:55
1	As 188.979†	1043.7	1085.9	497.05 ug/L	497.05 ppb	15:03:15
1	B 249.677†	20778.5	21483.5	508.80 ug/L	508.80 ppb	15:02:55
1	Ba 233.527†	61683.7	62187.7	509.11 ug/L	509.11 ppb	15:02:55
1	Be 313.107†	1311373.8	1326181.8	495.10 ug/L	495.10 ppb	15:02:50
1	Cd 226.502†	41257.9	41799.2	496.85 ug/L	496.85 ppb	15:02:55
1	Co 228.616†	23451.2	23712.1	517.98 ug/L	517.98 ppb	15:02:55
1	Cr 267.716†	42320.1	42591.2	496.45 ug/L	496.45 ppb	15:02:55
1	Cu 324.752†	171769.0	167319.6	507.55 ug/L	507.55 ppb	15:02:55
1	Mn 257.610†	435123.8	438145.7	504.38 ug/L	504.38 ppb	15:02:50
1	Mo 202.031†	6473.5	6509.6	487.94 ug/L	487.94 ppb	15:03:15
1	Ni 231.604†	19245.0	19290.6	499.45 ug/L	499.45 ppb	15:02:55
1	P 214.914†	4150.0	3955.0	2362.1 ug/L	2362.1 ppb	15:03:15
1	Pb 220.353†	3807.0	3899.2	488.02 ug/L	488.02 ppb	15:03:15
1	S 181.975 Axial†	705.5	671.8	978.66 ug/L	978.66 ppb	15:03:15
1	Sb 206.836†	1426.2	1395.5	503.86 ug/L	503.86 ppb	15:03:15
1	Se 196.026†	699.5	727.2	507.58 ug/L	507.58 ppb	15:03:15
1	Si 251.611†	75576.4	75617.5	2523.3 ug/L	2523.3 ppb	15:02:55
1	Sn 189.927†	2594.2	2606.2	484.49 ug/L	484.49 ppb	15:03:15
1	Ti 334.940†	307425.7	311183.2	504.58 ug/L	504.58 ppb	15:02:55
1	Tl 190.801†	1509.1	1555.4	501.82 ug/L	501.82 ppb	15:03:15
1	U 409.014†	14058.7	17151.0	495.64 ug/L	495.64 ppb	15:02:55
1	V 292.402†	66247.2	68330.7	502.73 ug/L	502.73 ppb	15:02:55
1	Zn 213.857†	51389.5	51086.5	499.38 ug/L	499.38 ppb	15:02:55
1	SiO2†	74555.9	74568.0	5305.8 ug/L	5305.8 ppb	15:04:23
2	Sc Radial	4831.8	4831.8	101 %		15:01:58
2	Y RADIAL	5051.5	5051.5	101.0 %		15:01:58
2	Al 396.153Radial†	5389.0	5512.8	5092.5 ug/L	5092.5 ppb	15:01:58
2	Ca 317.933Radial†	3110.2	3077.4	5100.6 ug/L	5100.6 ppb	15:02:18
2	Fe 238.204 Radial†	572.2	557.7	5090.2 ug/L	5090.2 ppb	15:02:18
2	K 766.490 Radial†	31116.0	28130.1	4959.2 ug/L	4959.2 ppb	15:01:58
2	Mg 279.077 IEC†	150.7	149.5	5297.6 ug/L	5297.6 ppb	15:02:18
2	Na 589.592 Radial†	31875.7	32790.0	9917.3 ug/L	9917.3 ppb	15:01:58
2	Sr 421.552†	74806.6	74419.1	521.87 ug/L	521.87 ppb	15:01:58
2	Sc 361.383	844722.4	844722.4	97.985 %		15:03:21
2	Y 371.029	682760.1	682760.1	95.544 %		15:03:21
2	Ag 328.068†	104784.6	106710.7	506.05 ug/L	506.05 ppb	15:03:26
2	As 188.979†	1057.1	1112.7	509.26 ug/L	509.26 ppb	15:03:47
2	B 249.677†	20588.7	21551.2	510.39 ug/L	510.39 ppb	15:03:26
2	Ba 233.527†	61277.4	62549.2	512.08 ug/L	512.08 ppb	15:03:26
2	Be 313.107†	1295669.2	1326653.8	495.29 ug/L	495.29 ppb	15:03:21
2	Cd 226.502†	40938.2	41992.0	499.14 ug/L	499.14 ppb	15:03:26
2	Co 228.616†	23279.8	23832.3	520.62 ug/L	520.62 ppb	15:03:26
2	Cr 267.716†	42080.8	42879.5	499.81 ug/L	499.81 ppb	15:03:26
2	Cu 324.752†	170708.1	168398.0	510.82 ug/L	510.82 ppb	15:03:26
2	Mn 257.610†	428929.0	437298.2	503.40 ug/L	503.40 ppb	15:03:21
2	Mo 202.031†	6474.5	6592.1	494.12 ug/L	494.12 ppb	15:03:47
2	Ni 231.604†	19121.0	19406.2	502.44 ug/L	502.44 ppb	15:03:26

2	P 214.914†	4157.0	4014.4	2398.5 ug/L	2398.5 ppb	15:03:47
2	Pb 220.353†	3816.0	3956.2	495.16 ug/L	495.16 ppb	15:03:47
2	S 181.975 Axial†	702.0	677.1	986.38 ug/L	986.38 ppb	15:03:47
2	Sb 206.836†	1428.1	1415.3	511.03 ug/L	511.03 ppb	15:03:47
2	Se 196.026†	701.8	738.3	515.47 ug/L	515.47 ppb	15:03:47
2	Si 251.611†	74822.9	75799.4	2529.3 ug/L	2529.3 ppb	15:03:26
2	Sn 189.927†	2609.1	2654.1	493.39 ug/L	493.39 ppb	15:03:47
2	Ti 334.940†	305426.0	313010.3	507.54 ug/L	507.54 ppb	15:03:26
2	Tl 190.801†	1502.3	1567.3	505.65 ug/L	505.65 ppb	15:03:47
2	U 409.014†	14046.2	17315.1	500.38 ug/L	500.38 ppb	15:03:26
2	V 292.402†	65892.7	68802.5	506.23 ug/L	506.23 ppb	15:03:26
2	Zn 213.857†	51083.3	51420.6	502.64 ug/L	502.64 ppb	15:03:26
2	SiO2†	74890.6	75847.6	5396.9 ug/L	5396.9 ppb	15:04:28
3	Sc Radial	4861.1	4861.1	101 %		15:02:23
3	Y RADIAL	5095.8	5095.8	101.9 %		15:02:23
3	Al 396.153Radial†	5342.4	5434.4	5019.9 ug/L	5019.9 ppb	15:02:23
3	Ca 317.933Radial†	3064.7	3013.9	4995.3 ug/L	4995.3 ppb	15:02:43
3	Fe 238.204 Radial†	570.0	552.1	5039.4 ug/L	5039.4 ppb	15:02:43
3	K 766.490 Radial†	31421.8	28245.8	4979.6 ug/L	4979.6 ppb	15:02:23
3	Mg 279.077 IEC†	148.1	146.0	5174.3 ug/L	5174.3 ppb	15:02:43
3	Na 589.592 Radial†	32126.6	32846.9	9934.5 ug/L	9934.5 ppb	15:02:23
3	Sr 421.552†	75217.1	74376.3	521.58 ug/L	521.58 ppb	15:02:23
3	Sc 361.383	854008.1	854008.1	99.062 %		15:03:52
3	Y 371.029	691507.2	691507.2	96.768 %		15:03:52
3	Ag 328.068†	106127.9	106904.0	506.95 ug/L	506.95 ppb	15:03:57
3	As 188.979†	1056.6	1100.4	503.69 ug/L	503.69 ppb	15:04:18
3	B 249.677†	21061.8	21800.3	516.32 ug/L	516.32 ppb	15:03:57
3	Ba 233.527†	62128.7	62728.5	513.54 ug/L	513.54 ppb	15:03:57
3	Be 313.107†	1313718.8	1330496.6	496.72 ug/L	496.72 ppb	15:03:52
3	Cd 226.502†	41590.7	42196.4	501.57 ug/L	501.57 ppb	15:03:57
3	Co 228.616†	23635.8	23933.3	522.81 ug/L	522.81 ppb	15:03:57
3	Cr 267.716†	42682.2	43019.6	501.44 ug/L	501.44 ppb	15:03:57
3	Cu 324.752†	173224.8	169044.3	512.78 ug/L	512.78 ppb	15:03:57
3	Mn 257.610†	432964.7	436612.4	502.62 ug/L	502.62 ppb	15:03:52
3	Mo 202.031†	6524.6	6570.9	492.53 ug/L	492.53 ppb	15:04:18
3	Ni 231.604†	19378.9	19454.4	503.69 ug/L	503.69 ppb	15:03:57
3	P 214.914†	4194.6	4006.3	2393.0 ug/L	2393.0 ppb	15:04:18
3	Pb 220.353†	3840.2	3938.3	492.91 ug/L	492.91 ppb	15:04:18
3	S 181.975 Axial†	715.7	683.1	995.16 ug/L	995.16 ppb	15:04:18
3	Sb 206.836†	1436.0	1407.5	508.21 ug/L	508.21 ppb	15:04:18
3	Se 196.026†	726.4	755.4	526.83 ug/L	526.83 ppb	15:04:18
3	Si 251.611†	76128.3	76286.8	2545.6 ug/L	2545.6 ppb	15:03:57
3	Sn 189.927†	2616.6	2632.6	489.40 ug/L	489.40 ppb	15:04:18
3	Ti 334.940†	309943.9	314181.8	509.43 ug/L	509.43 ppb	15:03:57
3	Tl 190.801†	1530.4	1579.1	509.42 ug/L	509.42 ppb	15:04:18
3	U 409.014†	14182.3	17296.7	499.85 ug/L	499.85 ppb	15:03:57
3	V 292.402†	66801.0	68988.1	507.56 ug/L	507.56 ppb	15:03:57
3	Zn 213.857†	51777.5	51554.5	503.95 ug/L	503.95 ppb	15:03:57
3	SiO2†	75058.2	75185.8	5349.7 ug/L	5349.7 ppb	15:04:33

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	851332.3	98.752 %		0.6680			0.68%
Sc Radial	4863.3	101 %		0.7			0.67%
Y 371.029	688258.0	96.313 %		0.6700			0.70%
Y RADIAL	5070.6	101.4 %		0.46			0.45%
Ag 328.068†	106520.0	505.13 ug/L		2.411	505.13 ppb	2.411	0.48%
QC value within limits for Ag 328.068 Recovery = 101.03%							
Al 396.153Radial†	5454.3	5038.4 ug/L		47.64	5038.4 ppb	47.64	0.95%
QC value within limits for Al 396.153Radial Recovery = 100.77%							
As 188.979†	1099.7	503.33 ug/L		6.113	503.33 ppb	6.113	1.21%
QC value within limits for As 188.979 Recovery = 100.67%							
B 249.677†	21611.6	511.84 ug/L		3.960	511.84 ppb	3.960	0.77%
QC value within limits for B 249.677 Recovery = 102.37%							
Ba 233.527†	62488.5	511.58 ug/L		2.256	511.58 ppb	2.256	0.44%
QC value within limits for Ba 233.527 Recovery = 102.32%							
Be 313.107†	1327777.4	495.70 ug/L		0.886	495.70 ppb	0.886	0.18%
QC value within limits for Be 313.107 Recovery = 99.14%							
Ca 317.933Radial†	3031.6	5024.7 ug/L		66.33	5024.7 ppb	66.33	1.32%

QC value within limits for Ca 317.933 Radial Recovery = 100.49%

Cd 226.502†	41995.9	499.19 ug/L	2.360	499.19 ppb	2.360	0.47%
QC value within limits for Cd 226.502 Recovery = 99.84%						
Co 228.616†	23825.9	520.47 ug/L	2.419	520.47 ppb	2.419	0.46%
QC value within limits for Co 228.616 Recovery = 104.09%						
Cr 267.716†	42830.1	499.23 ug/L	2.546	499.23 ppb	2.546	0.51%
QC value within limits for Cr 267.716 Recovery = 99.85%						
Cu 324.752†	168253.9	510.38 ug/L	2.644	510.38 ppb	2.644	0.52%
QC value within limits for Cu 324.752 Recovery = 102.08%						
Fe 238.204 Radial†	551.9	5037.0 ug/L	54.44	5037.0 ppb	54.44	1.08%
QC value within limits for Fe 238.204 Radial Recovery = 100.74%						
K 766.490 Radial†	28138.9	4960.7 ug/L	18.14	4960.7 ppb	18.14	0.37%
QC value within limits for K 766.490 Radial Recovery = 99.21%						
Mg 279.077 IEC†	145.8	5166.2 ug/L	135.63	5166.2 ppb	135.63	2.63%
QC value within limits for Mg 279.077 IEC Recovery = 103.32%						
Mn 257.610†	437352.1	503.47 ug/L	0.884	503.47 ppb	0.884	0.18%
QC value within limits for Mn 257.610 Recovery = 100.69%						
Mo 202.031†	6557.5	491.53 ug/L	3.213	491.53 ppb	3.213	0.65%
QC value within limits for Mo 202.031 Recovery = 98.31%						
Na 589.592 Radial†	32892.5	9948.3 ug/L	39.75	9948.3 ppb	39.75	0.40%
QC value within limits for Na 589.592 Radial Recovery = 99.48%						
Ni 231.604†	19383.8	501.86 ug/L	2.179	501.86 ppb	2.179	0.43%
QC value within limits for Ni 231.604 Recovery = 100.37%						
P 214.914†	3991.9	2384.5 ug/L	19.59	2384.5 ppb	19.59	0.82%
QC value within limits for P 214.914 Recovery = 95.38%						
Pb 220.353†	3931.2	492.03 ug/L	3.647	492.03 ppb	3.647	0.74%
QC value within limits for Pb 220.353 Recovery = 98.41%						
S 181.975 Axial†	677.3	986.73 ug/L	8.255	986.73 ppb	8.255	0.84%
QC value within limits for S 181.975 Axial Recovery = 98.67%						
Sb 206.836†	1406.1	507.70 ug/L	3.610	507.70 ppb	3.610	0.71%
QC value within limits for Sb 206.836 Recovery = 101.54%						
Se 196.026†	740.3	516.63 ug/L	9.677	516.63 ppb	9.677	1.87%
QC value within limits for Se 196.026 Recovery = 103.33%						
Si 251.611†	75901.2	2532.7 ug/L	11.56	2532.7 ppb	11.56	0.46%
QC value within limits for Si 251.611 Recovery = 101.31%						
Sn 189.927†	2631.0	489.09 ug/L	4.460	489.09 ppb	4.460	0.91%
QC value within limits for Sn 189.927 Recovery = 97.82%						
Sr 421.552†	74359.5	521.46 ug/L	0.488	521.46 ppb	0.488	0.09%
QC value within limits for Sr 421.552 Recovery = 104.29%						
Ti 334.940†	312791.8	507.19 ug/L	2.444	507.19 ppb	2.444	0.48%
QC value within limits for Ti 334.940 Recovery = 101.44%						
Tl 190.801†	1567.3	505.63 ug/L	3.799	505.63 ppb	3.799	0.75%
QC value within limits for Tl 190.801 Recovery = 101.13%						
U 409.014†	17254.2	498.63 ug/L	2.597	498.63 ppb	2.597	0.52%
QC value within limits for U 409.014 Recovery = 99.73%						
V 292.402†	68707.1	505.51 ug/L	2.498	505.51 ppb	2.498	0.49%
QC value within limits for V 292.402 Recovery = 101.10%						
Zn 213.857†	51353.9	501.99 ug/L	2.355	501.99 ppb	2.355	0.47%
QC value within limits for Zn 213.857 Recovery = 100.40%						
SiO2†	75200.5	5350.8 ug/L	45.56	5350.8 ppb	45.56	0.85%
QC value within limits for SiO2 Recovery = 100.06%						

All analyte(s) passed QC.

Sequence No.: 3
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 2/11/2010 15:06:43
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4794.0	4794.0	99.7 %		15:08:36
1	Y RADIAL	5035.1	5035.1	100.7 %		15:08:36
1	Al 396.153Radial†	-145.2	6.0	5.5428 ug/L	5.5428 ppb	15:08:56
1	Ca 317.933Radial†	24.3	7.6	12.669 ug/L	12.669 ppb	15:08:56
1	Fe 238.204 Radial†	9.1	-2.3	-21.361 ug/L	-21.361 ppb	15:08:56
1	K 766.490 Radial†	2777.9	-40.3	-7.1527 ug/L	-7.1527 ppb	15:08:36
1	Mg 279.077 IEC†	4.7	4.3	152.14 ug/L	152.14 ppb	15:08:56
1	Na 589.592 Radial†	-843.1	233.2	70.516 ug/L	70.516 ppb	15:08:36
1	Sr 421.552†	4.6	2.5	0.0172 ug/L	0.0172 ppb	15:08:36
1	Sc 361.383	838391.8	838391.8	97.251 %		15:09:53
1	Y 371.029	685807.8	685807.8	95.970 %		15:09:53
1	Ag 328.068†	302.1	81.8	0.3787 ug/L	0.3787 ppb	15:09:53
1	As 188.979†	-24.1	9.1	4.1108 ug/L	4.1108 ppb	15:10:13
1	B 249.677†	-17.6	521.0	12.396 ug/L	12.396 ppb	15:10:13
1	Ba 233.527†	3.5	15.2	0.1227 ug/L	0.1227 ppb	15:10:13
1	Be 313.107†	-4135.9	85.9	0.0316 ug/L	0.0316 ppb	15:09:53
1	Cd 226.502†	-163.7	43.5	0.5196 ug/L	0.5196 ppb	15:10:13
1	Co 228.616†	-62.2	9.7	0.2140 ug/L	0.2140 ppb	15:10:13
1	Cr 267.716†	100.5	36.6	0.4262 ug/L	0.4262 ppb	15:10:13
1	Cu 324.752†	5755.3	97.2	0.2948 ug/L	0.2948 ppb	15:09:53
1	Mn 257.610†	791.9	362.4	0.4087 ug/L	0.4087 ppb	15:10:13
1	Mo 202.031†	23.8	8.9	0.6649 ug/L	0.6649 ppb	15:10:13
1	Ni 231.604†	117.6	12.9	0.3344 ug/L	0.3344 ppb	15:10:13
1	P 214.914†	227.9	6.3	3.9073 ug/L	3.9073 ppb	15:10:13
1	Pb 220.353†	-53.4	6.8	0.8586 ug/L	0.8586 ppb	15:10:13
1	S 181.975 Axial†	37.6	-0.7	-1.0104 ug/L	-1.0104 ppb	15:10:13
1	Sb 206.836†	44.6	3.7	1.3246 ug/L	1.3246 ppb	15:10:13
1	Se 196.026†	-22.5	-1.0	-0.7575 ug/L	-0.7575 ppb	15:10:13
1	Si 251.611†	628.9	84.4	2.8152 ug/L	2.8152 ppb	15:10:13
1	Sn 189.927†	18.0	9.8	1.8216 ug/L	1.8216 ppb	15:10:13
1	Ti 334.940†	-1361.6	-96.9	-0.1673 ug/L	-0.1673 ppb	15:09:53
1	Tl 190.801†	-30.1	3.3	1.0561 ug/L	1.0561 ppb	15:10:13
1	U 409.014†	-2955.8	-59.3	-1.7194 ug/L	-1.7194 ppb	15:09:53
1	V 292.402†	-1541.4	-30.3	-0.2081 ug/L	-0.2081 ppb	15:09:53
1	Zn 213.857†	812.4	122.1	1.2054 ug/L	1.2054 ppb	15:10:13
1	SiO2†	607.8	41.8	2.9645 ug/L	2.9645 ppb	15:11:09
2	Sc Radial	4926.1	4926.1	102 %		15:09:01
2	Y RADIAL	5152.4	5152.4	103.0 %		15:09:01
2	Al 396.153Radial†	-127.4	27.3	25.250 ug/L	25.250 ppb	15:09:21
2	Ca 317.933Radial†	24.1	6.8	11.280 ug/L	11.280 ppb	15:09:21
2	Fe 238.204 Radial†	12.1	0.4	3.3027 ug/L	3.3027 ppb	15:09:21
2	K 766.490 Radial†	2880.4	-15.0	-2.6793 ug/L	-2.6793 ppb	15:09:01
2	Mg 279.077 IEC†	0.7	0.2	8.0343 ug/L	8.0343 ppb	15:09:21
2	Na 589.592 Radial†	-899.9	200.4	60.618 ug/L	60.618 ppb	15:09:01
2	Sr 421.552†	3.6	1.4	0.0101 ug/L	0.0101 ppb	15:09:01
2	Sc 361.383	847669.0	847669.0	98.327 %		15:10:18
2	Y 371.029	693856.3	693856.3	97.097 %		15:10:18
2	Ag 328.068†	282.6	58.6	0.2791 ug/L	0.2791 ppb	15:10:18
2	As 188.979†	-31.7	1.6	0.7413 ug/L	0.7413 ppb	15:10:39
2	B 249.677†	-19.9	518.8	12.341 ug/L	12.341 ppb	15:10:39
2	Ba 233.527†	-14.6	-3.2	-0.0253 ug/L	-0.0253 ppb	15:10:39
2	Be 313.107†	-4136.7	131.7	0.0491 ug/L	0.0491 ppb	15:10:18
2	Cd 226.502†	-184.0	24.8	0.2937 ug/L	0.2937 ppb	15:10:39
2	Co 228.616†	-75.5	-3.1	-0.0649 ug/L	-0.0649 ppb	15:10:39
2	Cr 267.716†	67.8	2.2	0.0261 ug/L	0.0261 ppb	15:10:39
2	Cu 324.752†	5648.7	-75.9	-0.2296 ug/L	-0.2296 ppb	15:10:18
2	Mn 257.610†	548.6	106.0	0.1220 ug/L	0.1220 ppb	15:10:39
2	Mo 202.031†	27.7	12.6	0.9463 ug/L	0.9463 ppb	15:10:39
2	Ni 231.604†	88.2	-18.3	-0.4739 ug/L	-0.4739 ppb	15:10:39

2	P 214.914†	230.5	6.4	4.0139 ug/L	4.0139 ppb	15:10:39
2	Pb 220.353†	-48.3	12.6	1.5837 ug/L	1.5837 ppb	15:10:39
2	S 181.975 Axial†	37.2	-1.5	-2.1995 ug/L	-2.1995 ppb	15:10:39
2	Sb 206.836†	33.7	-7.8	-2.7173 ug/L	-2.7173 ppb	15:10:39
2	Se 196.026†	-8.0	14.0	9.4572 ug/L	9.4572 ppb	15:10:39
2	Si 251.611†	606.5	54.6	1.8141 ug/L	1.8141 ppb	15:10:39
2	Sn 189.927†	7.1	-1.4	-0.2669 ug/L	-0.2669 ppb	15:10:39
2	Ti 334.940†	-1276.1	5.3	0.0097 ug/L	0.0097 ppb	15:10:18
2	Tl 190.801†	-35.4	-1.9	-0.5931 ug/L	-0.5931 ppb	15:10:39
2	U 409.014†	-2947.9	-18.0	-0.5234 ug/L	-0.5234 ppb	15:10:18
2	V 292.402†	-1472.4	57.2	0.4275 ug/L	0.4275 ppb	15:10:18
2	Zn 213.857†	773.7	73.7	0.7295 ug/L	0.7295 ppb	15:10:39
2	SiO2†	601.4	28.5	2.0085 ug/L	2.0085 ppb	15:11:14
3	Sc Radial	4803.6	4803.6	99.9 %		15:09:26
3	Y RADIAL	5048.4	5048.4	101.0 %		15:09:26
3	Al 396.153Radial†	-141.3	10.2	9.4508 ug/L	9.4508 ppb	15:09:47
3	Ca 317.933Radial†	29.8	13.1	21.673 ug/L	21.673 ppb	15:09:47
3	Fe 238.204 Radial†	9.0	-2.5	-22.492 ug/L	-22.492 ppb	15:09:47
3	K 766.490 Radial†	2877.2	53.5	9.4037 ug/L	9.4037 ppb	15:09:26
3	Mg 279.077 IEC†	1.0	0.5	19.175 ug/L	19.175 ppb	15:09:47
3	Na 589.592 Radial†	-861.3	216.6	65.512 ug/L	65.512 ppb	15:09:26
3	Sr 421.552†	2.1	0.0	0.0001 ug/L	0.0001 ppb	15:09:26
3	Sc 361.383	839553.0	839553.0	97.385 %		15:10:44
3	Y 371.029	688242.3	688242.3	96.311 %		15:10:44
3	Ag 328.068†	291.8	70.8	0.3211 ug/L	0.3211 ppb	15:10:44
3	As 188.979†	-22.2	11.1	5.0377 ug/L	5.0377 ppb	15:11:04
3	B 249.677†	-54.6	482.9	11.492 ug/L	11.492 ppb	15:11:04
3	Ba 233.527†	-2.2	9.3	0.0744 ug/L	0.0744 ppb	15:11:04
3	Be 313.107†	-4146.9	80.5	0.0300 ug/L	0.0300 ppb	15:10:44
3	Cd 226.502†	-192.1	14.7	0.1774 ug/L	0.1774 ppb	15:11:04
3	Co 228.616†	-67.9	4.0	0.0875 ug/L	0.0875 ppb	15:11:04
3	Cr 267.716†	71.3	6.4	0.0723 ug/L	0.0723 ppb	15:11:04
3	Cu 324.752†	5642.7	-26.5	-0.0837 ug/L	-0.0837 ppb	15:10:44
3	Mn 257.610†	557.9	121.0	0.1362 ug/L	0.1362 ppb	15:11:04
3	Mo 202.031†	18.4	3.4	0.2496 ug/L	0.2496 ppb	15:11:04
3	Ni 231.604†	90.5	-15.1	-0.3902 ug/L	-0.3902 ppb	15:11:04
3	P 214.914†	246.5	25.0	15.602 ug/L	15.602 ppb	15:11:04
3	Pb 220.353†	-65.2	-5.2	-0.6436 ug/L	-0.6436 ppb	15:11:04
3	S 181.975 Axial†	36.9	-1.5	-2.1417 ug/L	-2.1417 ppb	15:11:04
3	Sb 206.836†	39.1	-2.0	-0.6724 ug/L	-0.6724 ppb	15:11:04
3	Se 196.026†	-14.8	6.9	4.5869 ug/L	4.5869 ppb	15:11:04
3	Si 251.611†	590.8	44.4	1.4808 ug/L	1.4808 ppb	15:11:04
3	Sn 189.927†	10.5	2.1	0.3867 ug/L	0.3867 ppb	15:11:04
3	Ti 334.940†	-1257.1	12.4	0.0197 ug/L	0.0197 ppb	15:10:44
3	Tl 190.801†	-36.3	-3.1	-0.9954 ug/L	-0.9954 ppb	15:11:04
3	U 409.014†	-2772.5	133.1	3.8629 ug/L	3.8629 ppb	15:10:44
3	V 292.402†	-1567.9	-55.3	-0.3872 ug/L	-0.3872 ppb	15:10:44
3	Zn 213.857†	786.0	93.8	0.9314 ug/L	0.9314 ppb	15:11:04
3	SiO2†	580.5	13.0	0.9174 ug/L	0.9174 ppb	15:11:19

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	841871.3	97.654 %		0.5863				0.60%
Sc Radial	4841.2	101 %		1.5				1.52%
Y 371.029	689302.1	96.459 %		0.5776				0.60%
Y RADIAL	5078.6	101.6 %		1.28				1.27%
Ag 328.068†	70.4	0.3263 ug/L		0.04999	0.3263 ppb		0.04999	15.32%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	14.5	13.415 ug/L		10.4347	13.415 ppb		10.4347	77.79%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	7.3	3.2966 ug/L		2.26096	3.2966 ppb		2.26096	68.58%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	507.5	12.076 ug/L		0.5068	12.076 ppb		0.5068	4.20%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	7.1	0.0573 ug/L		0.07550	0.0573 ppb		0.07550	131.82%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	99.3	0.0369 ug/L		0.01055	0.0369 ppb		0.01055	28.59%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	9.2	15.207 ug/L		5.6425	15.207 ppb		5.6425	37.10%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated									
Cd	226.502†	27.7	0.3302 ug/L	0.17401	0.3302 ppb	0.17401	52.69%		
QC value within limits for Cd 226.502 Recovery = Not calculated									
Co	228.616†	3.5	0.0789 ug/L	0.13964	0.0789 ppb	0.13964	177.06%		
QC value within limits for Co 228.616 Recovery = Not calculated									
Cr	267.716†	15.1	0.1749 ug/L	0.21886	0.1749 ppb	0.21886	125.17%		
QC value within limits for Cr 267.716 Recovery = Not calculated									
Cu	324.752†	-1.7	-0.0062 ug/L	0.27070	-0.0062 ppb	0.27070	>999.9%		
QC value within limits for Cu 324.752 Recovery = Not calculated									
Fe	238.204 Radial†	-1.5	-13.517 ug/L	14.5771	-13.517 ppb	14.5771	107.84%		
QC value within limits for Fe 238.204 Radial Recovery = Not calculated									
K	766.490 Radial†	-0.6	-0.1428 ug/L	8.56471	-0.1428 ppb	8.56471	>999.9%		
QC value within limits for K 766.490 Radial Recovery = Not calculated									
Mg	279.077 IEC†	1.7	59.784 ug/L	80.1792	59.784 ppb	80.1792	134.11%		
QC value within limits for Mg 279.077 IEC Recovery = Not calculated									
Mn	257.610†	196.5	0.2223 ug/L	0.16158	0.2223 ppb	0.16158	72.70%		
QC value within limits for Mn 257.610 Recovery = Not calculated									
Mo	202.031†	8.3	0.6203 ug/L	0.35046	0.6203 ppb	0.35046	56.50%		
QC value within limits for Mo 202.031 Recovery = Not calculated									
Na	589.592 Radial†	216.7	65.549 ug/L	4.9491	65.549 ppb	4.9491	7.55%		
QC value within limits for Na 589.592 Radial Recovery = Not calculated									
Ni	231.604†	-6.8	-0.1766 ug/L	0.44452	-0.1766 ppb	0.44452	251.76%		
QC value within limits for Ni 231.604 Recovery = Not calculated									
P	214.914†	12.6	7.8411 ug/L	6.72145	7.8411 ppb	6.72145	85.72%		
QC value within limits for P 214.914 Recovery = Not calculated									
Pb	220.353†	4.8	0.5996 ug/L	1.13603	0.5996 ppb	1.13603	189.48%		
QC value within limits for Pb 220.353 Recovery = Not calculated									
S	181.975 Axial†	-1.2	-1.7839 ug/L	0.67046	-1.7839 ppb	0.67046	37.58%		
QC value within limits for S 181.975 Axial Recovery = Not calculated									
Sb	206.836†	-2.0	-0.6884 ug/L	2.02099	-0.6884 ppb	2.02099	293.59%		
QC value within limits for Sb 206.836 Recovery = Not calculated									
Se	196.026†	6.6	4.4289 ug/L	5.10917	4.4289 ppb	5.10917	115.36%		
QC value within limits for Se 196.026 Recovery = Not calculated									
Si	251.611†	61.1	2.0367 ug/L	0.69447	2.0367 ppb	0.69447	34.10%		
QC value within limits for Si 251.611 Recovery = Not calculated									
Sn	189.927†	3.5	0.6471 ug/L	1.06835	0.6471 ppb	1.06835	165.10%		
QC value within limits for Sn 189.927 Recovery = Not calculated									
Sr	421.552†	1.3	0.0091 ug/L	0.00859	0.0091 ppb	0.00859	94.06%		
QC value within limits for Sr 421.552 Recovery = Not calculated									
Ti	334.940†	-26.4	-0.0459 ug/L	0.10520	-0.0459 ppb	0.10520	228.97%		
QC value within limits for Ti 334.940 Recovery = Not calculated									
Tl	190.801†	-0.6	-0.1775 ug/L	1.08708	-0.1775 ppb	1.08708	612.45%		
QC value within limits for Tl 190.801 Recovery = Not calculated									
U	409.014†	18.6	0.5400 ug/L	2.93919	0.5400 ppb	2.93919	544.27%		
QC value within limits for U 409.014 Recovery = Not calculated									
V	292.402†	-9.5	-0.0559 ug/L	0.42814	-0.0559 ppb	0.42814	765.28%		
QC value within limits for V 292.402 Recovery = Not calculated									
Zn	213.857†	96.5	0.9555 ug/L	0.23884	0.9555 ppb	0.23884	25.00%		
QC value within limits for Zn 213.857 Recovery = Not calculated									
SiO2†		27.8	1.9635 ug/L	1.02431	1.9635 ppb	1.02431	52.17%		
QC value within limits for SiO2 Recovery = Not calculated									
All analyte(s) passed QC.									

Sequence No.: 8

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/11/2010 16:06:37

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	4839.5	4839.5	101 %		16:08:29
1	Y RADIAL	5039.7	5039.7	100.8 %		16:08:29
1	Al 396.153Radial†	5231.8	5348.1	4940.2 ug/L	4940.2 ppb	16:08:29
1	Ca 317.933Radial†	3087.0	3049.5	5054.3 ug/L	5054.3 ppb	16:08:49
1	Fe 238.204 Radial†	567.8	552.5	5042.4 ug/L	5042.4 ppb	16:08:49
1	K 766.490 Radial†	30672.3	27639.8	4872.8 ug/L	4872.8 ppb	16:08:29
1	Mg 279.077 IEC†	150.4	148.9	5278.3 ug/L	5278.3 ppb	16:08:49
1	Na 589.592 Radial†	30733.4	31604.6	9558.8 ug/L	9558.8 ppb	16:08:29
1	Sr 421.552†	72707.2	72214.9	506.42 ug/L	506.42 ppb	16:08:29
1	Sc 361.383	863412.4	863412.4	100.15 %		16:09:46
1	Y 371.029	695489.8	695489.8	97.325 %		16:09:46
1	Ag 328.068†	105550.3	105160.4	498.70 ug/L	498.70 ppb	16:09:51
1	As 188.979†	1051.5	1083.7	496.07 ug/L	496.07 ppb	16:10:12
1	B 249.677†	20410.0	20917.9	495.34 ug/L	495.34 ppb	16:09:51
1	Ba 233.527†	61843.8	61760.9	505.62 ug/L	505.62 ppb	16:09:51
1	Be 313.107†	1332668.0	1334972.4	498.37 ug/L	498.37 ppb	16:09:46
1	Cd 226.502†	41343.1	41491.9	493.19 ug/L	493.19 ppb	16:09:51
1	Co 228.616†	23614.9	23652.5	516.68 ug/L	516.68 ppb	16:09:51
1	Cr 267.716†	42246.5	42115.2	490.90 ug/L	490.90 ppb	16:09:51
1	Cu 324.752†	171407.0	165324.6	501.50 ug/L	501.50 ppb	16:09:51
1	Mn 257.610†	441033.5	439908.4	506.40 ug/L	506.40 ppb	16:09:46
1	Mo 202.031†	6488.6	6463.2	484.46 ug/L	484.46 ppb	16:10:12
1	Ni 231.604†	19281.9	19144.4	495.66 ug/L	495.66 ppb	16:09:51
1	P 214.914†	4180.7	3946.2	2357.8 ug/L	2357.8 ppb	16:10:12
1	Pb 220.353†	3830.9	3886.8	486.46 ug/L	486.46 ppb	16:10:12
1	S 181.975 Axial†	713.8	673.4	980.97 ug/L	980.97 ppb	16:10:12
1	Sb 206.836†	1430.2	1385.9	500.39 ug/L	500.39 ppb	16:10:12
1	Se 196.026†	685.1	706.2	493.64 ug/L	493.64 ppb	16:10:12
1	Si 251.611†	75450.3	74772.8	2495.1 ug/L	2495.1 ppb	16:09:51
1	Sn 189.927†	2598.2	2585.6	480.67 ug/L	480.67 ppb	16:10:12
1	Ti 334.940†	307843.4	308676.7	500.51 ug/L	500.51 ppb	16:09:51
1	Tl 190.801†	1521.2	1553.1	501.07 ug/L	501.07 ppb	16:10:12
1	U 409.014†	14053.2	17011.8	491.61 ug/L	491.61 ppb	16:09:51
1	V 292.402†	66158.5	67612.1	497.45 ug/L	497.45 ppb	16:09:51
1	Zn 213.857†	51667.1	50874.9	497.31 ug/L	497.31 ppb	16:09:51
1	SiO2†	75160.3	74462.4	5298.4 ug/L	5298.4 ppb	16:11:19
2	Sc Radial	4920.7	4920.7	102 %		16:08:54
2	Y RADIAL	5089.7	5089.7	101.8 %		16:08:54
2	Al 396.153Radial†	5368.2	5395.6	4983.6 ug/L	4983.6 ppb	16:08:54
2	Ca 317.933Radial†	3088.7	3000.5	4973.2 ug/L	4973.2 ppb	16:09:14
2	Fe 238.204 Radial†	567.1	542.5	4951.5 ug/L	4951.5 ppb	16:09:14
2	K 766.490 Radial†	31705.8	28146.6	4962.2 ug/L	4962.2 ppb	16:08:54
2	Mg 279.077 IEC†	145.7	141.9	5028.3 ug/L	5028.3 ppb	16:09:14
2	Na 589.592 Radial†	31767.7	32111.3	9712.0 ug/L	9712.0 ppb	16:08:54
2	Sr 421.552†	75008.3	73270.9	513.82 ug/L	513.82 ppb	16:08:54
2	Sc 361.383	846133.9	846133.9	98.149 %		16:10:17
2	Y 371.029	682588.1	682588.1	95.520 %		16:10:17
2	Ag 328.068†	103780.6	105509.4	500.33 ug/L	500.33 ppb	16:10:22
2	As 188.979†	1072.6	1126.7	515.52 ug/L	515.52 ppb	16:10:43
2	B 249.677†	20021.1	20937.8	495.82 ug/L	495.82 ppb	16:10:22
2	Ba 233.527†	61141.7	62306.6	510.08 ug/L	510.08 ppb	16:10:22
2	Be 313.107†	1314584.2	1343719.7	501.63 ug/L	501.63 ppb	16:10:17
2	Cd 226.502†	40712.7	41692.6	495.59 ug/L	495.59 ppb	16:10:22
2	Co 228.616†	23293.1	23806.2	520.07 ug/L	520.07 ppb	16:10:22
2	Cr 267.716†	41622.9	42341.2	493.54 ug/L	493.54 ppb	16:10:22
2	Cu 324.752†	168700.8	166062.2	503.74 ug/L	503.74 ppb	16:10:22
2	Mn 257.610†	435057.5	442812.0	509.75 ug/L	509.75 ppb	16:10:17
2	Mo 202.031†	6541.8	6649.7	498.42 ug/L	498.42 ppb	16:10:43
2	Ni 231.604†	18975.9	19225.8	497.77 ug/L	497.77 ppb	16:10:22

2	P 214.914†	4235.7	4087.5	2445.5 ug/L	2445.5 ppb	16:10:43
2	Pb 220.353†	3888.0	4023.1	503.51 ug/L	503.51 ppb	16:10:43
2	S 181.975 Axial†	715.4	689.5	1004.5 ug/L	1004.5 ppb	16:10:43
2	Sb 206.836†	1445.1	1430.2	516.43 ug/L	516.43 ppb	16:10:43
2	Se 196.026†	715.7	751.3	523.78 ug/L	523.78 ppb	16:10:43
2	Si 251.611†	74199.1	75036.4	2503.7 ug/L	2503.7 ppb	16:10:22
2	Sn 189.927†	2652.3	2693.7	500.72 ug/L	500.72 ppb	16:10:43
2	Ti 334.940†	303314.9	310339.4	503.22 ug/L	503.22 ppb	16:10:22
2	Tl 190.801†	1539.6	1602.9	517.04 ug/L	517.04 ppb	16:10:43
2	U 409.014†	13719.5	16958.3	490.07 ug/L	490.07 ppb	16:10:22
2	V 292.402†	65406.0	68194.4	501.88 ug/L	501.88 ppb	16:10:22
2	Zn 213.857†	50850.9	51096.8	499.50 ug/L	499.50 ppb	16:10:22
2	SiO2†	75240.9	76077.1	5413.2 ug/L	5413.2 ppb	16:11:24
3	Sc Radial	4863.9	4863.9	101 %		16:09:19
3	Y RADIAL	5060.8	5060.8	101.2 %		16:09:19
3	Al 396.153Radial†	5365.5	5454.2	5037.9 ug/L	5037.9 ppb	16:09:19
3	Ca 317.933Radial†	3092.9	3040.0	5038.6 ug/L	5038.6 ppb	16:09:39
3	Fe 238.204 Radial†	569.6	551.5	5033.2 ug/L	5033.2 ppb	16:09:39
3	K 766.490 Radial†	31394.7	28201.0	4971.8 ug/L	4971.8 ppb	16:09:19
3	Mg 279.077 IEC†	148.4	146.3	5183.6 ug/L	5183.6 ppb	16:09:39
3	Na 589.592 Radial†	31542.7	32251.5	9754.4 ug/L	9754.4 ppb	16:09:19
3	Sr 421.552†	74407.8	73533.6	515.66 ug/L	515.66 ppb	16:09:19
3	Sc 361.383	844359.2	844359.2	97.943 %		16:10:48
3	Y 371.029	680157.7	680157.7	95.180 %		16:10:48
3	Ag 328.068†	105462.5	107448.9	509.51 ug/L	509.51 ppb	16:10:54
3	As 188.979†	1070.6	1127.0	515.76 ug/L	515.76 ppb	16:11:14
3	B 249.677†	20423.5	21391.5	506.58 ug/L	506.58 ppb	16:10:54
3	Ba 233.527†	61895.3	63206.9	517.45 ug/L	517.45 ppb	16:10:54
3	Be 313.107†	1316527.6	1348519.1	503.44 ug/L	503.44 ppb	16:10:48
3	Cd 226.502†	41310.4	42390.0	503.88 ug/L	503.88 ppb	16:10:54
3	Co 228.616†	23562.8	24131.4	527.15 ug/L	527.15 ppb	16:10:54
3	Cr 267.716†	42209.0	43028.8	501.55 ug/L	501.55 ppb	16:10:54
3	Cu 324.752†	171604.5	169388.2	513.82 ug/L	513.82 ppb	16:10:54
3	Mn 257.610†	436277.1	444988.9	512.25 ug/L	512.25 ppb	16:10:48
3	Mo 202.031†	6538.5	6660.3	499.22 ug/L	499.22 ppb	16:11:14
3	Ni 231.604†	19245.0	19541.2	505.93 ug/L	505.93 ppb	16:10:54
3	P 214.914†	4199.5	4059.6	2426.0 ug/L	2426.0 ppb	16:11:14
3	Pb 220.353†	3864.2	4007.1	501.52 ug/L	501.52 ppb	16:11:14
3	S 181.975 Axial†	716.0	691.7	1007.7 ug/L	1007.7 ppb	16:11:14
3	Sb 206.836†	1450.7	1439.0	519.44 ug/L	519.44 ppb	16:11:14
3	Se 196.026†	699.2	736.0	513.71 ug/L	513.71 ppb	16:11:14
3	Si 251.611†	75480.7	76503.9	2552.8 ug/L	2552.8 ppb	16:10:54
3	Sn 189.927†	2622.7	2669.1	496.16 ug/L	496.16 ppb	16:11:14
3	Ti 334.940†	307975.6	315747.6	511.98 ug/L	511.98 ppb	16:10:54
3	Tl 190.801†	1527.2	1593.4	514.06 ug/L	514.06 ppb	16:11:14
3	U 409.014†	14217.3	17496.0	505.63 ug/L	505.63 ppb	16:10:54
3	V 292.402†	66189.6	69134.5	508.73 ug/L	508.73 ppb	16:10:54
3	Zn 213.857†	51588.3	51958.7	507.93 ug/L	507.93 ppb	16:10:54
3	SiO2†	74095.5	75068.7	5341.2 ug/L	5341.2 ppb	16:11:29

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	851301.8	98.748 %	1.2209			1.24%
Sc Radial	4874.7	101 %	0.9			0.85%
Y 371.029	686078.5	96.008 %	1.1532			1.20%
Y RADIAL	5063.4	101.3 %	0.50			0.50%
Ag 328.068†	106039.6	502.85 ug/L	5.829	502.85 ppb	5.829	1.16%
QC value within limits for Ag 328.068 Recovery = 100.57%						
Al 396.153Radial†	5399.3	4987.2 ug/L	48.98	4987.2 ppb	48.98	0.98%
QC value within limits for Al 396.153Radial Recovery = 99.74%						
As 188.979†	1112.5	509.11 ug/L	11.297	509.11 ppb	11.297	2.22%
QC value within limits for As 188.979 Recovery = 101.82%						
B 249.677†	21082.4	499.25 ug/L	6.355	499.25 ppb	6.355	1.27%
QC value within limits for B 249.677 Recovery = 99.85%						
Ba 233.527†	62424.8	511.05 ug/L	5.976	511.05 ppb	5.976	1.17%
QC value within limits for Ba 233.527 Recovery = 102.21%						
Be 313.107†	1342403.7	501.15 ug/L	2.570	501.15 ppb	2.570	0.51%
QC value within limits for Be 313.107 Recovery = 100.23%						
Ca 317.933Radial†	3030.0	5022.0 ug/L	43.02	5022.0 ppb	43.02	0.86%

QC value within limits for Ca 317.933 Radial Recovery = 100.44%							
Cd 226.502†	41858.2	497.55 ug/L	5.608	497.55 ppb	5.608	1.13%	
QC value within limits for Cd 226.502 Recovery = 99.51%							
Co 228.616†	23863.4	521.30 ug/L	5.343	521.30 ppb	5.343	1.02%	
QC value within limits for Co 228.616 Recovery = 104.26%							
Cr 267.716†	42495.1	495.33 ug/L	5.544	495.33 ppb	5.544	1.12%	
QC value within limits for Cr 267.716 Recovery = 99.07%							
Cu 324.752†	166925.0	506.35 ug/L	6.563	506.35 ppb	6.563	1.30%	
QC value within limits for Cu 324.752 Recovery = 101.27%							
Fe 238.204 Radial†	548.8	5009.0 ug/L	50.01	5009.0 ppb	50.01	1.00%	
QC value within limits for Fe 238.204 Radial Recovery = 100.18%							
K 766.490 Radial†	27995.8	4935.6 ug/L	54.59	4935.6 ppb	54.59	1.11%	
QC value within limits for K 766.490 Radial Recovery = 98.71%							
Mg 279.077 IEC†	145.7	5163.4 ug/L	126.21	5163.4 ppb	126.21	2.44%	
QC value within limits for Mg 279.077 IEC Recovery = 103.27%							
Mn 257.610†	442569.7	509.47 ug/L	2.934	509.47 ppb	2.934	0.58%	
QC value within limits for Mn 257.610 Recovery = 101.89%							
Mo 202.031†	6591.0	494.04 ug/L	8.299	494.04 ppb	8.299	1.68%	
QC value within limits for Mo 202.031 Recovery = 98.81%							
Na 589.592 Radial†	31989.2	9675.1 ug/L	102.93	9675.1 ppb	102.93	1.06%	
QC value within limits for Na 589.592 Radial Recovery = 96.75%							
Ni 231.604†	19303.8	499.79 ug/L	5.427	499.79 ppb	5.427	1.09%	
QC value within limits for Ni 231.604 Recovery = 99.96%							
P 214.914†	4031.1	2409.8 ug/L	46.08	2409.8 ppb	46.08	1.91%	
QC value within limits for P 214.914 Recovery = 96.39%							
Pb 220.353†	3972.3	497.16 ug/L	9.323	497.16 ppb	9.323	1.88%	
QC value within limits for Pb 220.353 Recovery = 99.43%							
S 181.975 Axial†	684.8	997.72 ug/L	14.592	997.72 ppb	14.592	1.46%	
QC value within limits for S 181.975 Axial Recovery = 99.77%							
Sb 206.836†	1418.4	512.09 ug/L	10.243	512.09 ppb	10.243	2.00%	
QC value within limits for Sb 206.836 Recovery = 102.42%							
Se 196.026†	731.1	510.38 ug/L	15.345	510.38 ppb	15.345	3.01%	
QC value within limits for Se 196.026 Recovery = 102.08%							
Si 251.611†	75437.7	2517.2 ug/L	31.13	2517.2 ppb	31.13	1.24%	
QC value within limits for Si 251.611 Recovery = 100.69%							
Sn 189.927†	2649.4	492.52 ug/L	10.510	492.52 ppb	10.510	2.13%	
QC value within limits for Sn 189.927 Recovery = 98.50%							
Sr 421.552†	73006.5	511.97 ug/L	4.895	511.97 ppb	4.895	0.96%	
QC value within limits for Sr 421.552 Recovery = 102.39%							
Ti 334.940†	311587.9	505.24 ug/L	5.993	505.24 ppb	5.993	1.19%	
QC value within limits for Ti 334.940 Recovery = 101.05%							
Tl 190.801†	1583.1	510.73 ug/L	8.491	510.73 ppb	8.491	1.66%	
QC value within limits for Tl 190.801 Recovery = 102.15%							
U 409.014†	17155.4	495.77 ug/L	8.573	495.77 ppb	8.573	1.73%	
QC value within limits for U 409.014 Recovery = 99.15%							
V 292.402†	68313.7	502.69 ug/L	5.680	502.69 ppb	5.680	1.13%	
QC value within limits for V 292.402 Recovery = 100.54%							
Zn 213.857†	51310.2	501.58 ug/L	5.603	501.58 ppb	5.603	1.12%	
QC value within limits for Zn 213.857 Recovery = 100.32%							
SiO2†	75202.7	5350.9 ug/L	58.01	5350.9 ppb	58.01	1.08%	
QC value within limits for SiO2 Recovery = 100.06%							
All analyte(s) passed QC.							

Sequence No.: 9

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/11/2010 16:13:39

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	4834.9	4834.9	101 %		16:15:32
1	Y RADIAL	5077.2	5077.2	101.5 %		16:15:32
1	Al 396.153Radial†	-146.6	5.8	5.3864 ug/L	5.3864 ppb	16:15:32
1	Ca 317.933Radial†	27.8	11.0	18.172 ug/L	18.172 ppb	16:15:52
1	Fe 238.204 Radial†	10.3	-1.2	-11.010 ug/L	-11.010 ppb	16:15:52
1	K 766.490 Radial†	2824.4	-17.6	-3.1337 ug/L	-3.1337 ppb	16:15:32
1	Mg 279.077 IEC†	2.0	1.6	56.120 ug/L	56.120 ppb	16:15:52
1	Na 589.592 Radial†	-931.7	152.2	46.030 ug/L	46.030 ppb	16:15:32
1	Sr 421.552†	49.6	47.2	0.3307 ug/L	0.3307 ppb	16:15:32
1	Sc 361.383	835341.4	835341.4	96.897 %		16:16:49
1	Y 371.029	684465.2	684465.2	95.783 %		16:16:49
1	Ag 328.068†	206.7	-15.5	-0.0794 ug/L	-0.0794 ppb	16:16:49
1	As 188.979†	-21.0	12.2	5.5376 ug/L	5.5376 ppb	16:17:09
1	B 249.677†	-185.0	348.1	8.2843 ug/L	8.2843 ppb	16:17:09
1	Ba 233.527†	4.4	16.1	0.1307 ug/L	0.1307 ppb	16:17:09
1	Be 313.107†	-4241.9	-39.0	-0.0147 ug/L	-0.0147 ppb	16:16:49
1	Cd 226.502†	-194.2	11.5	0.1382 ug/L	0.1382 ppb	16:17:09
1	Co 228.616†	-81.8	-10.7	-0.2324 ug/L	-0.2324 ppb	16:17:09
1	Cr 267.716†	97.6	33.9	0.3938 ug/L	0.3938 ppb	16:17:09
1	Cu 324.752†	5345.1	-304.5	-0.9250 ug/L	-0.9250 ppb	16:16:49
1	Mn 257.610†	563.6	129.7	0.1459 ug/L	0.1459 ppb	16:17:09
1	Mo 202.031†	19.9	5.0	0.3703 ug/L	0.3703 ppb	16:17:09
1	Ni 231.604†	112.3	7.9	0.2045 ug/L	0.2045 ppb	16:17:09
1	P 214.914†	231.5	10.8	6.9073 ug/L	6.9073 ppb	16:17:09
1	Pb 220.353†	-65.7	-6.1	-0.7553 ug/L	-0.7553 ppb	16:17:09
1	S 181.975 Axial†	38.0	-0.1	-0.2186 ug/L	-0.2186 ppb	16:17:09
1	Sb 206.836†	39.5	-1.4	-0.4831 ug/L	-0.4831 ppb	16:17:09
1	Se 196.026†	-19.4	2.1	1.3617 ug/L	1.3617 ppb	16:17:09
1	Si 251.611†	551.7	7.1	0.2315 ug/L	0.2315 ppb	16:17:09
1	Sn 189.927†	2.3	-6.3	-1.1653 ug/L	-1.1653 ppb	16:17:09
1	Ti 334.940†	-1311.0	-49.8	-0.0838 ug/L	-0.0838 ppb	16:16:49
1	Tl 190.801†	-40.7	-7.8	-2.4993 ug/L	-2.4993 ppb	16:17:09
1	U 409.014†	-2837.1	52.1	1.5119 ug/L	1.5119 ppb	16:16:49
1	V 292.402†	-1553.1	-48.2	-0.3389 ug/L	-0.3389 ppb	16:16:49
1	Zn 213.857†	774.8	86.4	0.8537 ug/L	0.8537 ppb	16:17:09
1	SiO2†	601.5	37.6	2.6750 ug/L	2.6750 ppb	16:18:05
2	Sc Radial	4870.8	4870.8	101 %		16:15:57
2	Y RADIAL	5116.7	5116.7	102.3 %		16:15:57
2	Al 396.153Radial†	-156.8	-3.2	-2.9618 ug/L	-2.9618 ppb	16:15:57
2	Ca 317.933Radial†	27.1	10.0	16.642 ug/L	16.642 ppb	16:16:17
2	Fe 238.204 Radial†	10.9	-0.7	-6.7136 ug/L	-6.7136 ppb	16:16:17
2	K 766.490 Radial†	2874.4	11.0	1.9214 ug/L	1.9214 ppb	16:15:57
2	Mg 279.077 IEC†	2.2	1.8	63.126 ug/L	63.126 ppb	16:16:17
2	Na 589.592 Radial†	-894.6	195.7	59.185 ug/L	59.185 ppb	16:15:57
2	Sr 421.552†	16.8	14.5	0.1016 ug/L	0.1016 ppb	16:15:57
2	Sc 361.383	832104.4	832104.4	96.521 %		16:17:14
2	Y 371.029	681312.8	681312.8	95.341 %		16:17:14
2	Ag 328.068†	198.3	-23.3	-0.1132 ug/L	-0.1132 ppb	16:17:14
2	As 188.979†	-14.8	18.6	8.4345 ug/L	8.4345 ppb	16:17:34
2	B 249.677†	-240.2	290.2	6.9038 ug/L	6.9038 ppb	16:17:34
2	Ba 233.527†	3.1	14.8	0.1216 ug/L	0.1216 ppb	16:17:34
2	Be 313.107†	-3747.4	456.3	0.1725 ug/L	0.1725 ppb	16:17:14
2	Cd 226.502†	-198.0	6.8	0.0818 ug/L	0.0818 ppb	16:17:34
2	Co 228.616†	-66.1	5.2	0.1129 ug/L	0.1129 ppb	16:17:34
2	Cr 267.716†	76.5	12.4	0.1438 ug/L	0.1438 ppb	16:17:34
2	Cu 324.752†	5448.2	-176.2	-0.5368 ug/L	-0.5368 ppb	16:17:14
2	Mn 257.610†	549.0	116.9	0.1312 ug/L	0.1312 ppb	16:17:34
2	Mo 202.031†	18.7	3.8	0.2878 ug/L	0.2878 ppb	16:17:34
2	Ni 231.604†	91.9	-12.8	-0.3310 ug/L	-0.3310 ppb	16:17:34

2	P 214.914†	229.2	9.4	5.9488 ug/L	5.9488 ppb	16:17:34
2	Pb 220.353†	-54.0	5.7	0.7184 ug/L	0.7184 ppb	16:17:34
2	S 181.975 Axial†	38.2	0.2	0.3097 ug/L	0.3097 ppb	16:17:34
2	Sb 206.836†	37.9	-2.9	-1.0201 ug/L	-1.0201 ppb	16:17:34
2	Se 196.026†	-23.7	-2.4	-1.6489 ug/L	-1.6489 ppb	16:17:34
2	Si 251.611†	555.3	13.1	0.4342 ug/L	0.4342 ppb	16:17:34
2	Sn 189.927†	5.5	-3.0	-0.5570 ug/L	-0.5570 ppb	16:17:34
2	Ti 334.940†	-590.8	691.1	1.1164 ug/L	1.1164 ppb	16:17:14
2	Tl 190.801†	-29.1	4.0	1.2979 ug/L	1.2979 ppb	16:17:34
2	U 409.014†	-2757.6	123.1	3.5697 ug/L	3.5697 ppb	16:17:14
2	V 292.402†	-1437.5	65.3	0.4861 ug/L	0.4861 ppb	16:17:14
2	Zn 213.857†	765.8	80.2	0.7950 ug/L	0.7950 ppb	16:17:34
2	SiO2†	592.8	31.1	2.2077 ug/L	2.2077 ppb	16:18:10
3	Sc Radial	4749.1	4749.1	98.8 %		16:16:22
3	Y RADIAL	4939.6	4939.6	98.78 %		16:16:22
3	Al 396.153Radial†	-136.5	13.4	12.445 ug/L	12.445 ppb	16:16:22
3	Ca 317.933Radial†	30.3	14.0	23.220 ug/L	23.220 ppb	16:16:42
3	Fe 238.204 Radial†	9.6	-1.8	-16.165 ug/L	-16.165 ppb	16:16:42
3	K 766.490 Radial†	2881.3	90.7	15.980 ug/L	15.980 ppb	16:16:22
3	Mg 279.077 IEC†	1.8	1.4	50.434 ug/L	50.434 ppb	16:16:42
3	Na 589.592 Radial†	-876.2	191.6	57.954 ug/L	57.954 ppb	16:16:22
3	Sr 421.552†	11.3	9.3	0.0654 ug/L	0.0654 ppb	16:16:22
3	Sc 361.383	834151.2	834151.2	96.759 %		16:17:39
3	Y 371.029	683233.3	683233.3	95.610 %		16:17:39
3	Ag 328.068†	198.0	-24.2	-0.1213 ug/L	-0.1213 ppb	16:17:39
3	As 188.979†	-28.4	4.5	2.0411 ug/L	2.0411 ppb	16:17:59
3	B 249.677†	-238.9	292.1	6.9526 ug/L	6.9526 ppb	16:17:59
3	Ba 233.527†	-20.1	-9.2	-0.0761 ug/L	-0.0761 ppb	16:17:59
3	Be 313.107†	-4119.8	80.9	0.0300 ug/L	0.0300 ppb	16:17:39
3	Cd 226.502†	-208.7	-3.8	-0.0432 ug/L	-0.0432 ppb	16:17:59
3	Co 228.616†	-69.5	1.9	0.0425 ug/L	0.0425 ppb	16:17:59
3	Cr 267.716†	67.2	2.6	0.0296 ug/L	0.0296 ppb	16:17:59
3	Cu 324.752†	5250.2	-394.7	-1.1986 ug/L	-1.1986 ppb	16:17:39
3	Mn 257.610†	518.8	84.2	0.0933 ug/L	0.0933 ppb	16:17:59
3	Mo 202.031†	23.6	8.8	0.6603 ug/L	0.6603 ppb	16:17:59
3	Ni 231.604†	107.9	3.5	0.0899 ug/L	0.0899 ppb	16:17:59
3	P 214.914†	242.1	22.1	14.051 ug/L	14.051 ppb	16:17:59
3	Pb 220.353†	-67.2	-7.8	-0.9610 ug/L	-0.9610 ppb	16:17:59
3	S 181.975 Axial†	34.4	-3.8	-5.5383 ug/L	-5.5383 ppb	16:17:59
3	Sb 206.836†	52.1	11.7	4.1275 ug/L	4.1275 ppb	16:17:59
3	Se 196.026†	-21.9	-0.6	-0.4228 ug/L	-0.4228 ppb	16:17:59
3	Si 251.611†	551.3	7.5	0.2414 ug/L	0.2414 ppb	16:17:59
3	Sn 189.927†	19.5	11.5	2.1293 ug/L	2.1293 ppb	16:17:59
3	Ti 334.940†	-1305.4	-45.9	-0.0759 ug/L	-0.0759 ppb	16:17:39
3	Tl 190.801†	-34.6	-1.5	-0.4919 ug/L	-0.4919 ppb	16:17:59
3	U 409.014†	-2851.8	32.8	0.9518 ug/L	0.9518 ppb	16:17:39
3	V 292.402†	-1531.5	-28.2	-0.1899 ug/L	-0.1899 ppb	16:17:39
3	Zn 213.857†	780.8	93.7	0.9280 ug/L	0.9280 ppb	16:17:59
3	SiO2†	590.7	27.3	1.9315 ug/L	1.9315 ppb	16:18:15

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	833865.7	96.726 %	0.1899			0.20%
Sc Radial	4818.3	100 %	1.3			1.30%
Y 371.029	683003.8	95.578 %	0.2223			0.23%
Y RADIAL	5044.5	100.9 %	1.86			1.84%
Ag 328.068†	-21.0	-0.1047 ug/L	0.02222	-0.1047 ppb	0.02222	21.23%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	5.4	4.9564 ug/L	7.71219	4.9564 ppb	7.71219	155.60%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	11.8	5.3377 ug/L	3.20139	5.3377 ppb	3.20139	59.98%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	310.1	7.3803 ug/L	0.78334	7.3803 ppb	0.78334	10.61%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	7.2	0.0587 ug/L	0.11686	0.0587 ppb	0.11686	198.95%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	166.0	0.0626 ug/L	0.09778	0.0626 ppb	0.09778	156.27%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	11.7	19.345 ug/L	3.4420	19.345 ppb	3.4420	17.79%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	4.8	0.0589 ug/L	0.09285	0.0589 ppb	0.09285	157.54%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-1.2	-0.0257 ug/L	0.18249	-0.0257 ppb	0.18249	710.89%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	16.3	0.1891 ug/L	0.18624	0.1891 ppb	0.18624	98.50%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-291.8	-0.8868 ug/L	0.33254	-0.8868 ppb	0.33254	37.50%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	-1.2	-11.296 ug/L	4.7324	-11.296 ppb	4.7324	41.89%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	28.0	4.9224 ug/L	9.90373	4.9224 ppb	9.90373	201.20%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	1.6	56.560 ug/L	6.3571	56.560 ppb	6.3571	11.24%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	110.3	0.1234 ug/L	0.02715	0.1234 ppb	0.02715	22.00%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	5.9	0.4395 ug/L	0.19562	0.4395 ppb	0.19562	44.51%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	179.8	54.390 ug/L	7.2658	54.390 ppb	7.2658	13.36%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-0.5	-0.0122 ug/L	0.28202	-0.0122 ppb	0.28202	>999.9%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	14.1	8.9691 ug/L	4.42718	8.9691 ppb	4.42718	49.36%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-2.7	-0.3327 ug/L	0.91600	-0.3327 ppb	0.91600	275.36%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	-1.2	-1.8157 ug/L	3.23465	-1.8157 ppb	3.23465	178.15%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	2.5	0.8748 ug/L	2.82969	0.8748 ppb	2.82969	323.48%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-0.3	-0.2367 ug/L	1.51390	-0.2367 ppb	1.51390	639.68%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	9.2	0.3023 ug/L	0.11430	0.3023 ppb	0.11430	37.80%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	0.7	0.1357 ug/L	1.75315	0.1357 ppb	1.75315	>999.9%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	23.7	0.1659 ug/L	0.14390	0.1659 ppb	0.14390	86.73%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	198.5	0.3189 ug/L	0.69068	0.3189 ppb	0.69068	216.58%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-1.8	-0.5644 ug/L	1.89964	-0.5644 ppb	1.89964	336.56%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	69.3	2.0111 ug/L	1.37849	2.0111 ppb	1.37849	68.54%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-3.7	-0.0142 ug/L	0.43969	-0.0142 ppb	0.43969	>999.9%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	86.8	0.8589 ug/L	0.06661	0.8589 ppb	0.06661	7.76%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	32.0	2.2714 ug/L	0.37583	2.2714 ppb	0.37583	16.55%
QC value within limits for SiO2 Recovery = Not calculated						

All analyte(s) passed QC.

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Analysis Begun

Start Time: 2/11/2010 16:26:41 Plasma On Time: 2/8/2010 05:57:09
 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\021110.sif

Batch ID:

Results Data Set: 021110

Results Library: C:\pe\Optima3\Results\Results.mdb

=====

Sequence No.: 1 Autosampler Location: 7
 Sample ID: CCV Date Collected: 2/11/2010 16:26:42
 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	4857.9	4857.9	101 %		16:28:34
1	Y RADIAL	5069.8	5069.8	101.4 %		16:28:34
1	Al 396.153Radial†	5318.0	5413.8	5000.4 ug/L	5000.4 ppb	16:28:34
1	Ca 317.933Radial†	3087.1	3038.0	5035.3 ug/L	5035.3 ppb	16:28:54
1	Fe 238.204 Radial†	570.3	552.8	5045.6 ug/L	5045.6 ppb	16:28:54
1	K 766.490 Radial†	31421.1	28265.6	4983.1 ug/L	4983.1 ppb	16:28:34
1	Mg 279.077 IEC†	144.2	142.3	5043.2 ug/L	5043.2 ppb	16:28:54
1	Na 589.592 Radial†	31891.8	32635.5	9870.6 ug/L	9870.6 ppb	16:28:34
1	Sr 421.552†	74719.3	73932.8	518.46 ug/L	518.46 ppb	16:28:34
1	Sc 361.383	843251.6	843251.6	97.814 %		16:29:51
1	Y 371.029	678467.3	678467.3	94.943 %		16:29:51
1	Ag 328.068†	104603.8	106712.4	506.05 ug/L	506.05 ppb	16:29:57
1	As 188.979†	1055.9	1113.4	509.55 ug/L	509.55 ppb	16:30:17
1	B 249.677†	20290.2	21282.6	503.99 ug/L	503.99 ppb	16:29:57
1	Ba 233.527†	61839.0	63232.4	517.66 ug/L	517.66 ppb	16:29:57
1	Be 313.107†	1311684.8	1345333.6	502.25 ug/L	502.25 ppb	16:29:51
1	Cd 226.502†	41414.6	42551.9	505.80 ug/L	505.80 ppb	16:29:57
1	Co 228.616†	23585.2	24186.0	528.35 ug/L	528.35 ppb	16:29:57
1	Cr 267.716†	42147.4	43022.5	501.48 ug/L	501.48 ppb	16:29:57
1	Cu 324.752†	169418.4	167383.4	507.75 ug/L	507.75 ppb	16:29:57
1	Mn 257.610†	435097.3	444367.8	511.54 ug/L	511.54 ppb	16:29:51
1	Mo 202.031†	6531.1	6661.5	499.32 ug/L	499.32 ppb	16:30:17
1	Ni 231.604†	19276.6	19599.4	507.44 ug/L	507.44 ppb	16:29:57
1	P 214.914†	4221.3	4087.5	2444.6 ug/L	2444.6 ppb	16:30:17
1	Pb 220.353†	3867.9	4016.1	502.63 ug/L	502.63 ppb	16:30:17
1	S 181.975 Axial†	717.0	693.7	1010.6 ug/L	1010.6 ppb	16:30:17
1	Sb 206.836†	1449.9	1440.1	519.88 ug/L	519.88 ppb	16:30:17
1	Se 196.026†	705.8	743.7	518.96 ug/L	518.96 ppb	16:30:17
1	Si 251.611†	75093.0	76208.7	2542.9 ug/L	2542.9 ppb	16:29:57
1	Sn 189.927†	2628.0	2678.0	497.83 ug/L	497.83 ppb	16:30:17
1	Ti 334.940†	305801.7	313938.1	509.06 ug/L	509.06 ppb	16:29:57
1	Tl 190.801†	1525.9	1594.2	514.29 ug/L	514.29 ppb	16:30:17
1	U 409.014†	13736.2	17023.2	491.92 ug/L	491.92 ppb	16:29:57
1	V 292.402†	65857.2	68883.4	506.88 ug/L	506.88 ppb	16:29:57
1	Zn 213.857†	51465.9	51902.6	507.37 ug/L	507.37 ppb	16:29:57
1	SiO2†	74608.2	75692.2	5385.7 ug/L	5385.7 ppb	16:31:24
2	Sc Radial	4822.1	4822.1	100 %		16:28:59
2	Y RADIAL	5029.9	5029.9	100.6 %		16:28:59
2	Al 396.153Radial†	5326.4	5461.2	5044.4 ug/L	5044.4 ppb	16:28:59
2	Ca 317.933Radial†	3089.3	3062.8	5076.4 ug/L	5076.4 ppb	16:29:19
2	Fe 238.204 Radial†	568.7	555.5	5069.8 ug/L	5069.8 ppb	16:29:19
2	K 766.490 Radial†	31173.7	28249.9	4980.3 ug/L	4980.3 ppb	16:28:59
2	Mg 279.077 IEC†	147.0	146.1	5179.5 ug/L	5179.5 ppb	16:29:19
2	Na 589.592 Radial†	31430.1	32409.6	9802.3 ug/L	9802.3 ppb	16:28:59
2	Sr 421.552†	74214.9	73979.0	518.79 ug/L	518.79 ppb	16:28:59
2	Sc 361.383	844701.7	844701.7	97.983 %		16:30:22
2	Y 371.029	679861.8	679861.8	95.138 %		16:30:22

2	Ag 328.068†	104961.9	106894.4	506.90 ug/L	506.90 ppb	16:30:28
2	As 188.979†	1064.1	1119.9	512.50 ug/L	512.50 ppb	16:30:48
2	B 249.677†	20254.6	21210.7	502.28 ug/L	502.28 ppb	16:30:28
2	Ba 233.527†	61565.9	62845.2	514.49 ug/L	514.49 ppb	16:30:28
2	Be 313.107†	1311258.5	1342596.5	501.23 ug/L	501.23 ppb	16:30:22
2	Cd 226.502†	41187.7	42247.6	502.18 ug/L	502.18 ppb	16:30:28
2	Co 228.616†	23480.7	24037.9	525.12 ug/L	525.12 ppb	16:30:28
2	Cr 267.716†	42066.9	42866.2	499.65 ug/L	499.65 ppb	16:30:28
2	Cu 324.752†	170530.4	168221.0	510.28 ug/L	510.28 ppb	16:30:28
2	Mn 257.610†	435363.5	443875.8	510.98 ug/L	510.98 ppb	16:30:22
2	Mo 202.031†	6543.3	6662.5	499.39 ug/L	499.39 ppb	16:30:48
2	Ni 231.604†	19166.7	19453.4	503.66 ug/L	503.66 ppb	16:30:28
2	P 214.914†	4234.5	4093.6	2447.9 ug/L	2447.9 ppb	16:30:48
2	Pb 220.353†	3871.0	4012.4	502.18 ug/L	502.18 ppb	16:30:48
2	S 181.975 Axial†	724.5	700.1	1020.0 ug/L	1020.0 ppb	16:30:48
2	Sb 206.836†	1455.4	1443.3	520.98 ug/L	520.98 ppb	16:30:48
2	Se 196.026†	700.6	737.1	514.61 ug/L	514.61 ppb	16:30:48
2	Si 251.611†	75140.7	76125.6	2540.2 ug/L	2540.2 ppb	16:30:28
2	Sn 189.927†	2642.8	2688.6	499.79 ug/L	499.79 ppb	16:30:48
2	Ti 334.940†	306430.2	314042.9	509.22 ug/L	509.22 ppb	16:30:28
2	Tl 190.801†	1526.5	1592.1	513.62 ug/L	513.62 ppb	16:30:48
2	U 409.014†	14074.6	17344.4	501.24 ug/L	501.24 ppb	16:30:28
2	V 292.402†	65796.3	68705.7	505.61 ug/L	505.61 ppb	16:30:28
2	Zn 213.857†	51332.5	51676.2	505.15 ug/L	505.15 ppb	16:30:28
2	SiO2†	75451.8	76422.3	5437.8 ug/L	5437.8 ppb	16:31:29
3	Sc Radial	4822.9	4822.9	100 %		16:29:24
3	Y RADIAL	5024.6	5024.6	100.5 %		16:29:24
3	Al 396.153Radial†	5317.6	5451.6	5035.8 ug/L	5035.8 ppb	16:29:24
3	Ca 317.933Radial†	3099.3	3072.3	5092.2 ug/L	5092.2 ppb	16:29:44
3	Fe 238.204 Radial†	569.0	555.7	5071.1 ug/L	5071.1 ppb	16:29:44
3	K 766.490 Radial†	31404.4	28474.6	5020.0 ug/L	5020.0 ppb	16:29:24
3	Mg 279.077 IEC†	149.5	148.6	5267.2 ug/L	5267.2 ppb	16:29:44
3	Na 589.592 Radial†	31631.3	32605.0	9861.3 ug/L	9861.3 ppb	16:29:24
3	Sr 421.552†	74401.9	74153.2	520.01 ug/L	520.01 ppb	16:29:24
3	Sc 361.383	847014.9	847014.9	98.251 %		16:30:53
3	Y 371.029	683045.0	683045.0	95.584 %		16:30:53
3	Ag 328.068†	103039.4	104645.1	496.29 ug/L	496.29 ppb	16:30:59
3	As 188.979†	1063.5	1116.3	510.80 ug/L	510.80 ppb	16:31:19
3	B 249.677†	20021.8	20917.3	495.33 ug/L	495.33 ppb	16:30:59
3	Ba 233.527†	60697.0	61789.1	505.85 ug/L	505.85 ppb	16:30:59
3	Be 313.107†	1317194.8	1344983.7	502.09 ug/L	502.09 ppb	16:30:53
3	Cd 226.502†	40606.9	41541.7	493.78 ug/L	493.78 ppb	16:30:59
3	Co 228.616†	23104.3	23589.3	515.33 ug/L	515.33 ppb	16:30:59
3	Cr 267.716†	41480.5	42152.2	491.34 ug/L	491.34 ppb	16:30:59
3	Cu 324.752†	167048.0	164201.2	498.10 ug/L	498.10 ppb	16:30:59
3	Mn 257.610†	435966.1	443275.7	510.28 ug/L	510.28 ppb	16:30:53
3	Mo 202.031†	6493.1	6593.2	494.20 ug/L	494.20 ppb	16:31:19
3	Ni 231.604†	18879.1	19107.2	494.69 ug/L	494.69 ppb	16:30:59
3	P 214.914†	4186.0	4032.5	2412.2 ug/L	2412.2 ppb	16:31:19
3	Pb 220.353†	3865.2	3995.7	500.09 ug/L	500.09 ppb	16:31:19
3	S 181.975 Axial†	715.7	689.1	1003.9 ug/L	1003.9 ppb	16:31:19
3	Sb 206.836†	1447.3	1430.9	516.50 ug/L	516.50 ppb	16:31:19
3	Se 196.026†	696.1	730.6	510.24 ug/L	510.24 ppb	16:31:19
3	Si 251.611†	73836.5	74588.8	2488.8 ug/L	2488.8 ppb	16:30:59
3	Sn 189.927†	2621.2	2659.2	494.34 ug/L	494.34 ppb	16:31:19
3	Ti 334.940†	300835.6	307494.6	498.60 ug/L	498.60 ppb	16:30:59
3	Tl 190.801†	1531.2	1592.7	513.76 ug/L	513.76 ppb	16:31:19
3	U 409.014†	13553.7	16775.0	484.74 ug/L	484.74 ppb	16:30:59
3	V 292.402†	64958.1	67669.2	497.99 ug/L	497.99 ppb	16:30:59
3	Zn 213.857†	50665.2	50854.0	497.11 ug/L	497.11 ppb	16:30:59
3	SiO2†	75487.7	76248.5	5425.5 ug/L	5425.5 ppb	16:31:34

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	844989.4	98.016 %	0.2202			0.22%
Sc Radial	4834.3	101 %	0.4			0.42%
Y 371.029	680458.0	95.222 %	0.3283			0.34%
Y RADIAL	5041.4	100.8 %	0.49			0.49%
Ag 328.068†	106084.0	503.08 ug/L	5.898	503.08 ppb	5.898	1.17%

QC value within limits for Ag 328.068 Recovery = 100.62%						
Al 396.153Radial†	5442.2	5026.9 ug/L	23.32	5026.9 ppb	23.32	0.46%
QC value within limits for Al 396.153Radial Recovery = 100.54%						
As 188.979†	1116.5	510.95 ug/L	1.483	510.95 ppb	1.483	0.29%
QC value within limits for As 188.979 Recovery = 102.19%						
B 249.677†	21136.9	500.53 ug/L	4.586	500.53 ppb	4.586	0.92%
QC value within limits for B 249.677 Recovery = 100.11%						
Ba 233.527†	62622.2	512.67 ug/L	6.111	512.67 ppb	6.111	1.19%
QC value within limits for Ba 233.527 Recovery = 102.53%						
Be 313.107†	1344304.6	501.86 ug/L	0.549	501.86 ppb	0.549	0.11%
QC value within limits for Be 313.107 Recovery = 100.37%						
Ca 317.933Radial†	3057.7	5068.0 ug/L	29.38	5068.0 ppb	29.38	0.58%
QC value within limits for Ca 317.933Radial Recovery = 101.36%						
Cd 226.502†	42113.8	500.58 ug/L	6.167	500.58 ppb	6.167	1.23%
QC value within limits for Cd 226.502 Recovery = 100.12%						
Co 228.616†	23937.7	522.93 ug/L	6.782	522.93 ppb	6.782	1.30%
QC value within limits for Co 228.616 Recovery = 104.59%						
Cr 267.716†	42680.3	497.49 ug/L	5.406	497.49 ppb	5.406	1.09%
QC value within limits for Cr 267.716 Recovery = 99.50%						
Cu 324.752†	166601.9	505.38 ug/L	6.429	505.38 ppb	6.429	1.27%
QC value within limits for Cu 324.752 Recovery = 101.08%						
Fe 238.204 Radial†	554.6	5062.2 ug/L	14.35	5062.2 ppb	14.35	0.28%
QC value within limits for Fe 238.204 Radial Recovery = 101.24%						
K 766.490 Radial†	28330.0	4994.5 ug/L	22.14	4994.5 ppb	22.14	0.44%
QC value within limits for K 766.490 Radial Recovery = 99.89%						
Mg 279.077 IEC†	145.7	5163.3 ug/L	112.90	5163.3 ppb	112.90	2.19%
QC value within limits for Mg 279.077 IEC Recovery = 103.27%						
Mn 257.610†	443839.8	510.93 ug/L	0.633	510.93 ppb	0.633	0.12%
QC value within limits for Mn 257.610 Recovery = 102.19%						
Mo 202.031†	6639.1	497.64 ug/L	2.976	497.64 ppb	2.976	0.60%
QC value within limits for Mo 202.031 Recovery = 99.53%						
Na 589.592 Radial†	32550.0	9844.7 ug/L	37.07	9844.7 ppb	37.07	0.38%
QC value within limits for Na 589.592 Radial Recovery = 98.45%						
Ni 231.604†	19386.6	501.93 ug/L	6.545	501.93 ppb	6.545	1.30%
QC value within limits for Ni 231.604 Recovery = 100.39%						
P 214.914†	4071.2	2434.9 ug/L	19.72	2434.9 ppb	19.72	0.81%
QC value within limits for P 214.914 Recovery = 97.40%						
Pb 220.353†	4008.1	501.63 ug/L	1.355	501.63 ppb	1.355	0.27%
QC value within limits for Pb 220.353 Recovery = 100.33%						
S 181.975 Axial†	694.3	1011.5 ug/L	8.08	1011.5 ppb	8.08	0.80%
QC value within limits for S 181.975 Axial Recovery = 101.15%						
Sb 206.836†	1438.1	519.12 ug/L	2.337	519.12 ppb	2.337	0.45%
QC value within limits for Sb 206.836 Recovery = 103.82%						
Se 196.026†	737.1	514.60 ug/L	4.359	514.60 ppb	4.359	0.85%
QC value within limits for Se 196.026 Recovery = 102.92%						
Si 251.611†	75641.1	2524.0 ug/L	30.48	2524.0 ppb	30.48	1.21%
QC value within limits for Si 251.611 Recovery = 100.96%						
Sn 189.927†	2675.3	497.32 ug/L	2.759	497.32 ppb	2.759	0.55%
QC value within limits for Sn 189.927 Recovery = 99.46%						
Sr 421.552†	74021.7	519.09 ug/L	0.815	519.09 ppb	0.815	0.16%
QC value within limits for Sr 421.552 Recovery = 103.82%						
Ti 334.940†	311825.2	505.63 ug/L	6.083	505.63 ppb	6.083	1.20%
QC value within limits for Ti 334.940 Recovery = 101.13%						
Tl 190.801†	1593.0	513.89 ug/L	0.350	513.89 ppb	0.350	0.07%
QC value within limits for Tl 190.801 Recovery = 102.78%						
U 409.014†	17047.6	492.63 ug/L	8.269	492.63 ppb	8.269	1.68%
QC value within limits for U 409.014 Recovery = 98.53%						
V 292.402†	68419.4	503.49 ug/L	4.807	503.49 ppb	4.807	0.95%
QC value within limits for V 292.402 Recovery = 100.70%						
Zn 213.857†	51477.6	503.21 ug/L	5.396	503.21 ppb	5.396	1.07%
QC value within limits for Zn 213.857 Recovery = 100.64%						
SiO2†	76121.0	5416.3 ug/L	27.23	5416.3 ppb	27.23	0.50%
QC value within limits for SiO2 Recovery = 101.29%						
All analyte(s) passed QC.						

Sequence No.: 2

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/11/2010 16:33:44

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4797.5	4797.5	99.8 %		16:35:37
1	Y RADIAL	5016.9	5016.9	100.3 %		16:35:37
1	Al 396.153Radial†	-155.3	-4.0	-3.7127 ug/L	-3.7127 ppb	16:35:37
1	Ca 317.933Radial†	23.4	6.8	11.224 ug/L	11.224 ppb	16:35:57
1	Fe 238.204 Radial†	8.9	-2.6	-23.635 ug/L	-23.635 ppb	16:35:57
1	K 766.490 Radial†	2737.9	-82.5	-14.576 ug/L	-14.576 ppb	16:35:37
1	Mg 279.077 IEC†	3.0	2.6	92.693 ug/L	92.693 ppb	16:35:57
1	Na 589.592 Radial†	-940.8	135.9	41.088 ug/L	41.088 ppb	16:35:37
1	Sr 421.552†	13.0	10.9	0.0767 ug/L	0.0767 ppb	16:35:37
1	Sc 361.383	785054.7	785054.7	91.064 %		16:36:54
1	Y 371.029	639674.3	639674.3	89.515 %		16:36:54
1	Ag 328.068†	286.1	85.4	0.4036 ug/L	0.4036 ppb	16:36:54
1	As 188.979†	-27.6	3.5	1.5915 ug/L	1.5915 ppb	16:37:14
1	B 249.677†	-233.4	282.7	6.7305 ug/L	6.7305 ppb	16:37:14
1	Ba 233.527†	-10.8	-0.3	-0.0040 ug/L	-0.0040 ppb	16:37:14
1	Be 313.107†	-4193.2	-266.0	-0.0997 ug/L	-0.0997 ppb	16:36:54
1	Cd 226.502†	-189.6	3.7	0.0443 ug/L	0.0443 ppb	16:37:14
1	Co 228.616†	-73.8	-7.4	-0.1584 ug/L	-0.1584 ppb	16:37:14
1	Cr 267.716†	77.1	17.9	0.2131 ug/L	0.2131 ppb	16:37:14
1	Cu 324.752†	5258.5	-46.2	-0.1340 ug/L	-0.1340 ppb	16:36:54
1	Mn 257.610†	523.4	122.9	0.1353 ug/L	0.1353 ppb	16:37:14
1	Mo 202.031†	21.4	7.9	0.5927 ug/L	0.5927 ppb	16:37:14
1	Ni 231.604†	109.5	12.3	0.3180 ug/L	0.3180 ppb	16:37:14
1	P 214.914†	237.8	33.1	20.632 ug/L	20.632 ppb	16:37:14
1	Pb 220.353†	-57.5	-1.5	-0.1789 ug/L	-0.1789 ppb	16:37:14
1	S 181.975 Axial†	42.7	7.5	10.991 ug/L	10.991 ppb	16:37:14
1	Sb 206.836†	44.5	6.7	2.3560 ug/L	2.3560 ppb	16:37:14
1	Se 196.026†	-15.1	5.5	3.6344 ug/L	3.6344 ppb	16:37:14
1	Si 251.611†	537.7	28.2	0.9354 ug/L	0.9354 ppb	16:37:14
1	Sn 189.927†	13.6	6.3	1.1657 ug/L	1.1657 ppb	16:37:14
1	Ti 334.940†	-1329.4	-156.7	-0.2543 ug/L	-0.2543 ppb	16:36:54
1	Tl 190.801†	-29.9	1.4	0.4402 ug/L	0.4402 ppb	16:37:14
1	U 409.014†	-3136.1	-463.9	-13.448 ug/L	-13.448 ppb	16:36:54
1	V 292.402†	-1472.8	-62.7	-0.4673 ug/L	-0.4673 ppb	16:36:54
1	Zn 213.857†	762.4	123.9	1.2242 ug/L	1.2242 ppb	16:37:14
1	SiO2†	560.8	32.7	2.3143 ug/L	2.3143 ppb	16:38:10
2	Sc Radial	4996.3	4996.3	104 %		16:36:02
2	Y RADIAL	5249.1	5249.1	105.0 %		16:36:02
2	Al 396.153Radial†	-148.3	8.9	8.2309 ug/L	8.2309 ppb	16:36:02
2	Ca 317.933Radial†	23.1	5.5	9.1639 ug/L	9.1639 ppb	16:36:22
2	Fe 238.204 Radial†	9.9	-2.0	-18.026 ug/L	-18.026 ppb	16:36:22
2	K 766.490 Radial†	2677.6	-249.6	-44.089 ug/L	-44.089 ppb	16:36:02
2	Mg 279.077 IEC†	3.8	3.3	115.93 ug/L	115.93 ppb	16:36:22
2	Na 589.592 Radial†	-874.5	237.1	71.718 ug/L	71.718 ppb	16:36:02
2	Sr 421.552†	10.6	8.1	0.0570 ug/L	0.0570 ppb	16:36:02
2	Sc 361.383	829730.0	829730.0	96.246 %		16:37:19
2	Y 371.029	676808.5	676808.5	94.711 %		16:37:19
2	Ag 328.068†	270.8	52.6	0.2440 ug/L	0.2440 ppb	16:37:19
2	As 188.979†	-20.5	12.6	5.7156 ug/L	5.7156 ppb	16:37:39
2	B 249.677†	-262.9	265.9	6.3300 ug/L	6.3300 ppb	16:37:39
2	Ba 233.527†	-4.9	6.5	0.0523 ug/L	0.0523 ppb	16:37:39
2	Be 313.107†	-4154.2	22.5	0.0084 ug/L	0.0084 ppb	16:37:19
2	Cd 226.502†	-196.8	7.4	0.0894 ug/L	0.0894 ppb	16:37:39
2	Co 228.616†	-81.0	-10.4	-0.2267 ug/L	-0.2267 ppb	16:37:39
2	Cr 267.716†	74.3	10.4	0.1222 ug/L	0.1222 ppb	16:37:39
2	Cu 324.752†	5231.7	-385.0	-1.1668 ug/L	-1.1668 ppb	16:37:19
2	Mn 257.610†	483.0	50.0	0.0510 ug/L	0.0510 ppb	16:37:39
2	Mo 202.031†	20.0	5.3	0.3948 ug/L	0.3948 ppb	16:37:39
2	Ni 231.604†	108.3	4.5	0.1158 ug/L	0.1158 ppb	16:37:39

2	P 214.914†	231.1	12.0	7.7445 ug/L	7.7445 ppb	16:37:39
2	Pb 220.353†	-42.8	17.2	2.1549 ug/L	2.1549 ppb	16:37:39
2	S 181.975 Axial†	42.5	4.8	7.0640 ug/L	7.0640 ppb	16:37:39
2	Sb 206.836†	33.5	-7.4	-2.5417 ug/L	-2.5417 ppb	16:37:39
2	Se 196.026†	-14.5	7.1	4.7251 ug/L	4.7251 ppb	16:37:39
2	Si 251.611†	558.5	18.0	0.5972 ug/L	0.5972 ppb	16:37:39
2	Sn 189.927†	13.3	5.1	0.9492 ug/L	0.9492 ppb	16:37:39
2	Ti 334.940†	-1253.8	0.5	-0.0059 ug/L	-0.0059 ppb	16:37:19
2	Tl 190.801†	-32.7	0.2	0.0603 ug/L	0.0603 ppb	16:37:39
2	U 409.014†	-2986.7	-123.1	-3.5685 ug/L	-3.5685 ppb	16:37:19
2	V 292.402†	-1514.1	-18.5	-0.1308 ug/L	-0.1308 ppb	16:37:19
2	Zn 213.857†	761.7	78.1	0.7742 ug/L	0.7742 ppb	16:37:39
2	SiO2†	506.9	-56.5	-4.0396 ug/L	-4.0396 ppb	16:38:15
3	Sc Radial	4930.9	4930.9	103 %		16:36:27
3	Y RADIAL	5185.3	5185.3	103.7 %		16:36:27
3	Al 396.153Radial†	-164.3	-8.6	-8.0552 ug/L	-8.0552 ppb	16:36:27
3	Ca 317.933Radial†	22.1	4.8	7.9444 ug/L	7.9444 ppb	16:36:47
3	Fe 238.204 Radial†	8.8	-2.9	-26.181 ug/L	-26.181 ppb	16:36:47
3	K 766.490 Radial†	2829.6	-67.2	-11.896 ug/L	-11.896 ppb	16:36:27
3	Mg 279.077 IEC†	5.4	4.9	172.99 ug/L	172.99 ppb	16:36:47
3	Na 589.592 Radial†	-875.6	225.0	68.042 ug/L	68.042 ppb	16:36:27
3	Sr 421.552†	10.2	7.8	0.0548 ug/L	0.0548 ppb	16:36:27
3	Sc 361.383	828758.2	828758.2	96.133 %		16:37:44
3	Y 371.029	677275.2	677275.2	94.776 %		16:37:44
3	Ag 328.068†	225.0	5.3	0.0201 ug/L	0.0201 ppb	16:37:44
3	As 188.979†	-28.8	3.9	1.7545 ug/L	1.7545 ppb	16:38:04
3	B 249.677†	-249.4	279.6	6.6554 ug/L	6.6554 ppb	16:38:04
3	Ba 233.527†	-5.7	5.6	0.0456 ug/L	0.0456 ppb	16:38:04
3	Be 313.107†	-4146.0	26.0	0.0096 ug/L	0.0096 ppb	16:37:44
3	Cd 226.502†	-194.0	10.1	0.1213 ug/L	0.1213 ppb	16:38:04
3	Co 228.616†	-65.2	5.9	0.1322 ug/L	0.1322 ppb	16:38:04
3	Cr 267.716†	89.2	26.1	0.3048 ug/L	0.3048 ppb	16:38:04
3	Cu 324.752†	5239.5	-370.5	-1.1229 ug/L	-1.1229 ppb	16:37:44
3	Mn 257.610†	516.9	85.8	0.0891 ug/L	0.0891 ppb	16:38:04
3	Mo 202.031†	28.1	13.7	1.0249 ug/L	1.0249 ppb	16:38:04
3	Ni 231.604†	92.5	-11.8	-0.3050 ug/L	-0.3050 ppb	16:38:04
3	P 214.914†	251.1	33.2	20.860 ug/L	20.860 ppb	16:38:04
3	Pb 220.353†	-38.8	21.4	2.6716 ug/L	2.6716 ppb	16:38:04
3	S 181.975 Axial†	36.3	-1.6	-2.2683 ug/L	-2.2683 ppb	16:38:04
3	Sb 206.836†	40.1	-0.4	-0.1528 ug/L	-0.1528 ppb	16:38:04
3	Se 196.026†	-19.4	1.9	1.2254 ug/L	1.2254 ppb	16:38:04
3	Si 251.611†	543.8	3.4	0.1003 ug/L	0.1003 ppb	16:38:04
3	Sn 189.927†	-0.1	-8.8	-1.6299 ug/L	-1.6299 ppb	16:38:04
3	Ti 334.940†	-1274.7	-22.7	-0.0483 ug/L	-0.0483 ppb	16:37:44
3	Tl 190.801†	-31.4	1.6	0.5000 ug/L	0.5000 ppb	16:38:04
3	U 409.014†	-3001.2	-141.9	-4.1109 ug/L	-4.1109 ppb	16:37:44
3	V 292.402†	-1465.6	30.1	0.2326 ug/L	0.2326 ppb	16:37:44
3	Zn 213.857†	762.2	79.6	0.7924 ug/L	0.7924 ppb	16:38:04
3	SiO2†	564.7	4.3	0.2771 ug/L	0.2771 ppb	16:38:20

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	814514.3	94.481 %	2.9599			3.13%
Sc Radial	4908.2	102 %	2.1			2.06%
Y 371.029	664586.0	93.001 %	3.0192			3.25%
Y RADIAL	5150.4	103.0 %	2.40			2.33%
Ag 328.068†	47.8	0.2225 ug/L	0.19263	0.2225 ppb	0.19263	86.56%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-1.2	-1.1790 ug/L	8.43354	-1.1790 ppb	8.43354	715.30%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	6.7	3.0205 ug/L	2.33542	3.0205 ppb	2.33542	77.32%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	276.1	6.5720 ug/L	0.21285	6.5720 ppb	0.21285	3.24%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	3.9	0.0313 ug/L	0.03079	0.0313 ppb	0.03079	98.39%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-72.5	-0.0272 ug/L	0.06273	-0.0272 ppb	0.06273	230.38%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	5.7	9.4442 ug/L	1.65784	9.4442 ppb	1.65784	17.55%

QC value within limits for Ca 317.933Radial Recovery = Not calculated							
Cd 226.502†	7.1	0.0850 ug/L	0.03865	0.0850 ppb	0.03865	45.47%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	-4.0	-0.0843 ug/L	0.19061	-0.0843 ppb	0.19061	226.07%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	18.1	0.2134 ug/L	0.09133	0.2134 ppb	0.09133	42.81%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	-267.2	-0.8079 ug/L	0.58403	-0.8079 ppb	0.58403	72.29%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	-2.5	-22.614 ug/L	4.1725	-22.614 ppb	4.1725	18.45%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	-133.1	-23.520 ug/L	17.8634	-23.520 ppb	17.8634	75.95%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	3.6	127.20 ug/L	41.318	127.20 ppb	41.318	32.48%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	86.2	0.0918 ug/L	0.04220	0.0918 ppb	0.04220	45.98%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	9.0	0.6708 ug/L	0.32221	0.6708 ppb	0.32221	48.03%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	199.3	60.283 ug/L	16.7244	60.283 ppb	16.7244	27.74%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	1.7	0.0430 ug/L	0.31782	0.0430 ppb	0.31782	739.87%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	26.1	16.412 ug/L	7.5073	16.412 ppb	7.5073	45.74%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	12.4	1.5492 ug/L	1.51869	1.5492 ppb	1.51869	98.03%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	3.6	5.2624 ug/L	6.81101	5.2624 ppb	6.81101	129.43%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	-0.4	-0.1128 ug/L	2.44909	-0.1128 ppb	2.44909	>999.9%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	4.8	3.1950 ug/L	1.79074	3.1950 ppb	1.79074	56.05%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	16.5	0.5443 ug/L	0.42002	0.5443 ppb	0.42002	77.17%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	0.9	0.1617 ug/L	1.55534	0.1617 ppb	1.55534	962.12%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	9.0	0.0628 ug/L	0.01204	0.0628 ppb	0.01204	19.17%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	-59.6	-0.1028 ug/L	0.13291	-0.1028 ppb	0.13291	129.27%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	1.0	0.3335 ug/L	0.23850	0.3335 ppb	0.23850	71.52%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	-242.9	-7.0424 ug/L	5.55398	-7.0424 ppb	5.55398	78.86%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	-17.0	-0.1218 ug/L	0.35004	-0.1218 ppb	0.35004	287.30%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	93.9	0.9303 ug/L	0.25470	0.9303 ppb	0.25470	27.38%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	-6.5	-0.4827 ug/L	3.24436	-0.4827 ppb	3.24436	672.07%	
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: 1
 Date Collected: 2/11/2010 17:35:02
 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	4883.4	4883.4	102 %		17:36:54
1	Y RADIAL	5090.0	5090.0	101.8 %		17:36:54
1	Al 396.153Radial†	5290.9	5359.6	4951.1 ug/L	4951.1 ppb	17:36:54
1	Ca 317.933Radial†	3076.8	3011.9	4992.0 ug/L	4992.0 ppb	17:37:14
1	Fe 238.204 Radial†	567.9	547.5	4997.1 ug/L	4997.1 ppb	17:37:14
1	K 766.490 Radial†	30889.3	27579.5	4862.1 ug/L	4862.1 ppb	17:36:54
1	Mg 279.077 IEC†	148.9	146.2	5181.2 ug/L	5181.2 ppb	17:37:14
1	Na 589.592 Radial†	31339.6	31927.0	9656.3 ug/L	9656.3 ppb	17:36:54
1	Sr 421.552†	73601.4	72445.9	508.04 ug/L	508.04 ppb	17:36:54
1	Sc 361.383	867650.1	867650.1	100.64 %		17:38:11
1	Y 371.029	699059.3	699059.3	97.825 %		17:38:11
1	Ag 328.068†	104259.4	103363.1	490.19 ug/L	490.19 ppb	17:38:16
1	As 188.979†	1056.3	1083.4	495.82 ug/L	495.82 ppb	17:38:37
1	B 249.677†	20158.7	20568.7	487.07 ug/L	487.07 ppb	17:38:16
1	Ba 233.527†	61238.4	60857.9	498.23 ug/L	498.23 ppb	17:38:16
1	Be 313.107†	1320577.3	1316460.1	491.46 ug/L	491.46 ppb	17:38:11
1	Cd 226.502†	41132.7	41081.3	488.31 ug/L	488.31 ppb	17:38:16
1	Co 228.616†	23336.8	23261.1	508.14 ug/L	508.14 ppb	17:38:16
1	Cr 267.716†	41933.5	41598.2	484.87 ug/L	484.87 ppb	17:38:16
1	Cu 324.752†	169192.7	162288.5	492.29 ug/L	492.29 ppb	17:38:16
1	Mn 257.610†	435775.5	432533.2	497.92 ug/L	497.92 ppb	17:38:11
1	Mo 202.031†	6446.4	6389.6	478.95 ug/L	478.95 ppb	17:38:37
1	Ni 231.604†	19116.7	18886.3	488.98 ug/L	488.98 ppb	17:38:16
1	P 214.914†	4190.9	3936.0	2353.2 ug/L	2353.2 ppb	17:38:37
1	Pb 220.353†	3838.5	3875.7	485.07 ug/L	485.07 ppb	17:38:37
1	S 181.975 Axial†	718.4	674.5	982.63 ug/L	982.63 ppb	17:38:37
1	Sb 206.836†	1444.0	1392.6	502.57 ug/L	502.57 ppb	17:38:37
1	Se 196.026†	711.0	728.6	508.57 ug/L	508.57 ppb	17:38:37
1	Si 251.611†	75299.5	74255.1	2477.8 ug/L	2477.8 ppb	17:38:16
1	Sn 189.927†	2595.3	2570.0	477.78 ug/L	477.78 ppb	17:38:37
1	Ti 334.940†	304143.6	303499.3	492.12 ug/L	492.12 ppb	17:38:16
1	Tl 190.801†	1519.9	1544.4	498.23 ug/L	498.23 ppb	17:38:37
1	U 409.014†	13948.4	16839.2	486.63 ug/L	486.63 ppb	17:38:16
1	V 292.402†	65486.2	66621.5	490.19 ug/L	490.19 ppb	17:38:16
1	Zn 213.857†	51187.1	50146.1	490.19 ug/L	490.19 ppb	17:38:16
1	SiO2†	75433.0	74366.9	5291.7 ug/L	5291.7 ppb	17:39:44
2	Sc Radial	4874.4	4874.4	101 %		17:37:19
2	Y RADIAL	5086.8	5086.8	101.7 %		17:37:19
2	Al 396.153Radial†	5291.6	5369.8	4959.9 ug/L	4959.9 ppb	17:37:19
2	Ca 317.933Radial†	3092.2	3032.7	5026.5 ug/L	5026.5 ppb	17:37:39
2	Fe 238.204 Radial†	567.6	548.2	5003.6 ug/L	5003.6 ppb	17:37:39
2	K 766.490 Radial†	30996.2	27741.0	4890.6 ug/L	4890.6 ppb	17:37:19
2	Mg 279.077 IEC†	151.1	148.6	5267.7 ug/L	5267.7 ppb	17:37:39
2	Na 589.592 Radial†	31287.1	31932.0	9657.8 ug/L	9657.8 ppb	17:37:19
2	Sr 421.552†	73705.2	72681.8	509.69 ug/L	509.69 ppb	17:37:19
2	Sc 361.383	845811.7	845811.7	98.111 %		17:38:42
2	Y 371.029	680468.1	680468.1	95.223 %		17:38:42
2	Ag 328.068†	103771.4	105540.3	500.48 ug/L	500.48 ppb	17:38:47
2	As 188.979†	1063.2	1117.5	511.39 ug/L	511.39 ppb	17:39:08
2	B 249.677†	20110.1	21036.3	498.16 ug/L	498.16 ppb	17:38:47
2	Ba 233.527†	60935.9	62120.6	508.56 ug/L	508.56 ppb	17:38:47
2	Be 313.107†	1288464.0	1317606.9	491.91 ug/L	491.91 ppb	17:38:42
2	Cd 226.502†	40777.5	41774.5	496.55 ug/L	496.55 ppb	17:38:47
2	Co 228.616†	23206.8	23727.3	518.33 ug/L	518.33 ppb	17:38:47
2	Cr 267.716†	41495.0	42227.0	492.20 ug/L	492.20 ppb	17:38:47
2	Cu 324.752†	169070.2	166504.2	505.08 ug/L	505.08 ppb	17:38:47
2	Mn 257.610†	427634.3	435414.8	501.23 ug/L	501.23 ppb	17:38:42
2	Mo 202.031†	6479.7	6588.9	493.87 ug/L	493.87 ppb	17:39:08
2	Ni 231.604†	19011.8	19269.8	498.90 ug/L	498.90 ppb	17:38:47

2	P 214.914†	4198.4	4051.1	2422.5 ug/L	2422.5 ppb	17:39:08
2	Pb 220.353†	3845.6	3981.4	498.28 ug/L	498.28 ppb	17:39:08
2	S 181.975 Axial†	712.6	686.9	1000.7 ug/L	1000.7 ppb	17:39:08
2	Sb 206.836†	1446.7	1432.4	517.02 ug/L	517.02 ppb	17:39:08
2	Se 196.026†	718.7	754.6	526.18 ug/L	526.18 ppb	17:39:08
2	Si 251.611†	75014.4	75896.3	2532.6 ug/L	2532.6 ppb	17:38:47
2	Sn 189.927†	2624.5	2666.3	495.65 ug/L	495.65 ppb	17:39:08
2	Ti 334.940†	303028.2	310164.9	502.92 ug/L	502.92 ppb	17:38:47
2	Tl 190.801†	1526.1	1589.6	512.77 ug/L	512.77 ppb	17:39:08
2	U 409.014†	13886.3	17133.7	495.15 ug/L	495.15 ppb	17:38:47
2	V 292.402†	65108.8	67916.9	499.81 ug/L	499.81 ppb	17:38:47
2	Zn 213.857†	51000.2	51268.8	501.18 ug/L	501.18 ppb	17:38:47
2	SiO2†	74777.4	75633.8	5381.7 ug/L	5381.7 ppb	17:39:49
3	Sc Radial	4927.4	4927.4	103 %		17:37:44
3	Y RADIAL	5146.7	5146.7	102.9 %		17:37:44
3	Al 396.153Radial†	5342.4	5363.3	4954.0 ug/L	4954.0 ppb	17:37:44
3	Ca 317.933Radial†	3081.5	2989.4	4954.7 ug/L	4954.7 ppb	17:38:04
3	Fe 238.204 Radial†	562.3	537.0	4901.8 ug/L	4901.8 ppb	17:38:04
3	K 766.490 Radial†	31221.6	27632.2	4871.4 ug/L	4871.4 ppb	17:37:44
3	Mg 279.077 IEC†	145.2	141.2	5005.4 ug/L	5005.4 ppb	17:38:04
3	Na 589.592 Radial†	31391.6	31702.2	9588.3 ug/L	9588.3 ppb	17:37:44
3	Sr 421.552†	74447.1	72623.9	509.29 ug/L	509.29 ppb	17:37:44
3	Sc 361.383	849007.6	849007.6	98.482 %		17:39:13
3	Y 371.029	683415.1	683415.1	95.636 %		17:39:13
3	Ag 328.068†	104613.5	105997.2	502.60 ug/L	502.60 ppb	17:39:19
3	As 188.979†	1050.4	1100.5	503.66 ug/L	503.66 ppb	17:39:39
3	B 249.677†	20339.5	21192.1	501.88 ug/L	501.88 ppb	17:39:19
3	Ba 233.527†	61206.8	62161.8	508.90 ug/L	508.90 ppb	17:39:19
3	Be 313.107†	1293636.3	1317915.4	492.03 ug/L	492.03 ppb	17:39:13
3	Cd 226.502†	40971.1	41814.6	497.04 ug/L	497.04 ppb	17:39:19
3	Co 228.616†	23388.6	23822.8	520.41 ug/L	520.41 ppb	17:39:19
3	Cr 267.716†	41845.8	42424.1	494.50 ug/L	494.50 ppb	17:39:19
3	Cu 324.752†	170500.1	167307.4	507.51 ug/L	507.51 ppb	17:39:19
3	Mn 257.610†	427973.8	434118.8	499.74 ug/L	499.74 ppb	17:39:13
3	Mo 202.031†	6458.4	6542.4	490.38 ug/L	490.38 ppb	17:39:39
3	Ni 231.604†	19096.7	19283.0	499.25 ug/L	499.25 ppb	17:39:19
3	P 214.914†	4194.5	4031.1	2409.6 ug/L	2409.6 ppb	17:39:39
3	Pb 220.353†	3812.1	3932.6	492.20 ug/L	492.20 ppb	17:39:39
3	S 181.975 Axial†	708.9	680.5	991.31 ug/L	991.31 ppb	17:39:39
3	Sb 206.836†	1446.2	1426.4	514.77 ug/L	514.77 ppb	17:39:39
3	Se 196.026†	699.2	732.1	510.67 ug/L	510.67 ppb	17:39:39
3	Si 251.611†	75460.3	76061.2	2538.1 ug/L	2538.1 ppb	17:39:19
3	Sn 189.927†	2606.2	2637.7	490.32 ug/L	490.32 ppb	17:39:39
3	Ti 334.940†	305245.1	311253.4	504.70 ug/L	504.70 ppb	17:39:19
3	Tl 190.801†	1520.8	1578.4	509.16 ug/L	509.16 ppb	17:39:39
3	U 409.014†	14031.2	17227.5	497.87 ug/L	497.87 ppb	17:39:19
3	V 292.402†	65553.4	68118.5	501.24 ug/L	501.24 ppb	17:39:19
3	Zn 213.857†	51317.7	51395.5	502.44 ug/L	502.44 ppb	17:39:19
3	SiO2†	74501.0	75066.3	5341.3 ug/L	5341.3 ppb	17:39:54

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	854156.5	99.079 %	1.3681			1.38%
Sc Radial	4895.1	102 %	0.6			0.58%
Y 371.029	687647.5	96.228 %	1.3983			1.45%
Y RADIAL	5107.8	102.1 %	0.67			0.66%
Ag 328.068†	104966.9	497.76 ug/L	6.640	497.76 ppb	6.640	1.33%
QC value within limits for Ag 328.068 Recovery = 99.55%						
Al 396.153Radial†	5364.3	4955.0 ug/L	4.48	4955.0 ppb	4.48	0.09%
QC value within limits for Al 396.153Radial Recovery = 99.10%						
As 188.979†	1100.5	503.62 ug/L	7.784	503.62 ppb	7.784	1.55%
QC value within limits for As 188.979 Recovery = 100.72%						
B 249.677†	20932.4	495.70 ug/L	7.706	495.70 ppb	7.706	1.55%
QC value within limits for B 249.677 Recovery = 99.14%						
Ba 233.527†	61713.4	505.23 ug/L	6.065	505.23 ppb	6.065	1.20%
QC value within limits for Ba 233.527 Recovery = 101.05%						
Be 313.107†	1317327.4	491.80 ug/L	0.301	491.80 ppb	0.301	0.06%
QC value within limits for Be 313.107 Recovery = 98.36%						
Ca 317.933Radial†	3011.3	4991.0 ug/L	35.91	4991.0 ppb	35.91	0.72%

QC value within limits for Ca 317.933 Radial Recovery = 99.82%							
Cd 226.502†	41556.8	493.97 ug/L	4.909	493.97 ppb	4.909	0.99%	
QC value within limits for Cd 226.502 Recovery = 98.79%							
Co 228.616†	23603.7	515.63 ug/L	6.569	515.63 ppb	6.569	1.27%	
QC value within limits for Co 228.616 Recovery = 103.13%							
Cr 267.716†	42083.1	490.52 ug/L	5.027	490.52 ppb	5.027	1.02%	
QC value within limits for Cr 267.716 Recovery = 98.10%							
Cu 324.752†	165366.7	501.63 ug/L	8.173	501.63 ppb	8.173	1.63%	
QC value within limits for Cu 324.752 Recovery = 100.33%							
Fe 238.204 Radial†	544.3	4967.5 ug/L	56.99	4967.5 ppb	56.99	1.15%	
QC value within limits for Fe 238.204 Radial Recovery = 99.35%							
K 766.490 Radial†	27650.9	4874.7 ug/L	14.52	4874.7 ppb	14.52	0.30%	
QC value within limits for K 766.490 Radial Recovery = 97.49%							
Mg 279.077 IEC†	145.4	5151.4 ug/L	133.69	5151.4 ppb	133.69	2.60%	
QC value within limits for Mg 279.077 IEC Recovery = 103.03%							
Mn 257.610†	434022.3	499.63 ug/L	1.659	499.63 ppb	1.659	0.33%	
QC value within limits for Mn 257.610 Recovery = 99.93%							
Mo 202.031†	6506.9	487.73 ug/L	7.808	487.73 ppb	7.808	1.60%	
QC value within limits for Mo 202.031 Recovery = 97.55%							
Na 589.592 Radial†	31853.8	9634.1 ug/L	39.70	9634.1 ppb	39.70	0.41%	
QC value within limits for Na 589.592 Radial Recovery = 96.34%							
Ni 231.604†	19146.3	495.71 ug/L	5.834	495.71 ppb	5.834	1.18%	
QC value within limits for Ni 231.604 Recovery = 99.14%							
P 214.914†	4006.1	2395.1 ug/L	36.84	2395.1 ppb	36.84	1.54%	
QC value within limits for P 214.914 Recovery = 95.80%							
Pb 220.353†	3929.9	491.85 ug/L	6.615	491.85 ppb	6.615	1.34%	
QC value within limits for Pb 220.353 Recovery = 98.37%							
S 181.975 Axial†	680.6	991.56 ug/L	9.059	991.56 ppb	9.059	0.91%	
QC value within limits for S 181.975 Axial Recovery = 99.16%							
Sb 206.836†	1417.1	511.45 ug/L	7.775	511.45 ppb	7.775	1.52%	
QC value within limits for Sb 206.836 Recovery = 102.29%							
Se 196.026†	738.4	515.14 ug/L	9.618	515.14 ppb	9.618	1.87%	
QC value within limits for Se 196.026 Recovery = 103.03%							
Si 251.611†	75404.2	2516.2 ug/L	33.31	2516.2 ppb	33.31	1.32%	
QC value within limits for Si 251.611 Recovery = 100.65%							
Sn 189.927†	2624.7	487.92 ug/L	9.175	487.92 ppb	9.175	1.88%	
QC value within limits for Sn 189.927 Recovery = 97.58%							
Sr 421.552†	72583.9	509.00 ug/L	0.862	509.00 ppb	0.862	0.17%	
QC value within limits for Sr 421.552 Recovery = 101.80%							
Ti 334.940†	308305.9	499.91 ug/L	6.807	499.91 ppb	6.807	1.36%	
QC value within limits for Ti 334.940 Recovery = 99.98%							
Tl 190.801†	1570.8	506.72 ug/L	7.572	506.72 ppb	7.572	1.49%	
QC value within limits for Tl 190.801 Recovery = 101.34%							
U 409.014†	17066.8	493.22 ug/L	5.868	493.22 ppb	5.868	1.19%	
QC value within limits for U 409.014 Recovery = 98.64%							
V 292.402†	67552.3	497.08 ug/L	6.009	497.08 ppb	6.009	1.21%	
QC value within limits for V 292.402 Recovery = 99.42%							
Zn 213.857†	50936.8	497.94 ug/L	6.741	497.94 ppb	6.741	1.35%	
QC value within limits for Zn 213.857 Recovery = 99.59%							
SiO2†	75022.3	5338.2 ug/L	45.06	5338.2 ppb	45.06	0.84%	
QC value within limits for SiO2 Recovery = 99.83%							
All analyte(s) passed QC.							

Sequence No.: 12

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 2/11/2010 17:42:04

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4864.0	4864.0	101 %		17:43:56
1	Y RADIAL	5099.9	5099.9	102.0 %		17:43:56
1	Al 396.153Radial†	-150.2	3.2	2.9438 ug/L	2.9438 ppb	17:43:56
1	Ca 317.933Radial†	20.1	3.1	5.1674 ug/L	5.1674 ppb	17:44:16
1	Fe 238.204 Radial†	9.1	-2.5	-22.690 ug/L	-22.690 ppb	17:44:16
1	K 766.490 Radial†	2933.8	73.6	12.968 ug/L	12.968 ppb	17:43:56
1	Mg 279.077 IEC†	2.0	1.6	54.973 ug/L	54.973 ppb	17:44:16
1	Na 589.592 Radial†	-851.9	236.7	71.578 ug/L	71.578 ppb	17:43:56
1	Sr 421.552†	-3.0	-5.1	-0.0357 ug/L	-0.0357 ppb	17:43:56
1	Sc 361.383	844454.4	844454.4	97.954 %		17:45:13
1	Y 371.029	688428.9	688428.9	96.337 %		17:45:13
1	Ag 328.068†	272.2	49.1	0.2215 ug/L	0.2215 ppb	17:45:13
1	As 188.979†	-31.4	1.8	0.7938 ug/L	0.7938 ppb	17:45:33
1	B 249.677†	-338.6	193.4	4.6028 ug/L	4.6028 ppb	17:45:33
1	Ba 233.527†	-12.8	-1.5	-0.0129 ug/L	-0.0129 ppb	17:45:33
1	Be 313.107†	-4226.3	24.1	0.0086 ug/L	0.0086 ppb	17:45:13
1	Cd 226.502†	-204.1	3.5	0.0444 ug/L	0.0444 ppb	17:45:33
1	Co 228.616†	-52.1	20.5	0.4491 ug/L	0.4491 ppb	17:45:33
1	Cr 267.716†	79.3	14.1	0.1630 ug/L	0.1630 ppb	17:45:33
1	Cu 324.752†	5448.9	-258.0	-0.7854 ug/L	-0.7854 ppb	17:45:13
1	Mn 257.610†	470.9	28.8	0.0287 ug/L	0.0287 ppb	17:45:33
1	Mo 202.031†	14.7	-0.5	-0.0418 ug/L	-0.0418 ppb	17:45:33
1	Ni 231.604†	102.0	-3.8	-0.0998 ug/L	-0.0998 ppb	17:45:33
1	P 214.914†	237.4	14.3	9.0844 ug/L	9.0844 ppb	17:45:33
1	Pb 220.353†	-56.8	3.7	0.4686 ug/L	0.4686 ppb	17:45:33
1	S 181.975 Axial†	34.9	-3.7	-5.4085 ug/L	-5.4085 ppb	17:45:33
1	Sb 206.836†	39.3	-2.0	-0.6995 ug/L	-0.6995 ppb	17:45:33
1	Se 196.026†	-12.3	9.6	6.4003 ug/L	6.4003 ppb	17:45:33
1	Si 251.611†	549.4	-1.4	-0.0474 ug/L	-0.0474 ppb	17:45:33
1	Sn 189.927†	8.1	-0.5	-0.0841 ug/L	-0.0841 ppb	17:45:33
1	Ti 334.940†	-1386.5	-112.3	-0.1872 ug/L	-0.1872 ppb	17:45:13
1	Tl 190.801†	-42.7	-9.4	-3.0004 ug/L	-3.0004 ppb	17:45:33
1	U 409.014†	-2824.2	96.9	2.8114 ug/L	2.8114 ppb	17:45:13
1	V 292.402†	-1519.9	3.0	0.0308 ug/L	0.0308 ppb	17:45:13
1	Zn 213.857†	727.7	29.7	0.2978 ug/L	0.2978 ppb	17:45:33
1	SiO2†	555.8	-15.8	-1.1229 ug/L	-1.1229 ppb	17:46:29
2	Sc Radial	4887.4	4887.4	102 %		17:44:21
2	Y RADIAL	5145.5	5145.5	102.9 %		17:44:21
2	Al 396.153Radial†	-132.7	21.0	19.504 ug/L	19.504 ppb	17:44:21
2	Ca 317.933Radial†	16.6	-0.4	-0.5969 ug/L	-0.5969 ppb	17:44:41
2	Fe 238.204 Radial†	10.7	-1.0	-9.0168 ug/L	-9.0168 ppb	17:44:41
2	K 766.490 Radial†	2783.2	-88.3	-15.621 ug/L	-15.621 ppb	17:44:21
2	Mg 279.077 IEC†	2.0	1.6	55.174 ug/L	55.174 ppb	17:44:41
2	Na 589.592 Radial†	-849.8	242.7	73.402 ug/L	73.402 ppb	17:44:21
2	Sr 421.552†	18.7	16.2	0.1139 ug/L	0.1139 ppb	17:44:21
2	Sc 361.383	838646.0	838646.0	97.280 %		17:45:38
2	Y 371.029	683833.3	683833.3	95.694 %		17:45:38
2	Ag 328.068†	335.6	116.2	0.5473 ug/L	0.5473 ppb	17:45:38
2	As 188.979†	-29.9	3.1	1.4002 ug/L	1.4002 ppb	17:45:58
2	B 249.677†	-374.7	153.9	3.6616 ug/L	3.6616 ppb	17:45:58
2	Ba 233.527†	-18.5	-7.4	-0.0604 ug/L	-0.0604 ppb	17:45:58
2	Be 313.107†	-4232.1	-11.7	-0.0047 ug/L	-0.0047 ppb	17:45:38
2	Cd 226.502†	-195.1	11.4	0.1354 ug/L	0.1354 ppb	17:45:58
2	Co 228.616†	-67.3	4.5	0.1000 ug/L	0.1000 ppb	17:45:58
2	Cr 267.716†	72.4	7.6	0.0898 ug/L	0.0898 ppb	17:45:58
2	Cu 324.752†	5275.1	-398.1	-1.2067 ug/L	-1.2067 ppb	17:45:38
2	Mn 257.610†	440.5	0.9	-0.0021 ug/L	-0.0021 ppb	17:45:58
2	Mo 202.031†	21.9	7.0	0.5244 ug/L	0.5244 ppb	17:45:58
2	Ni 231.604†	90.7	-14.8	-0.3838 ug/L	-0.3838 ppb	17:45:58

2	P 214.914†	234.1	12.6	8.0900 ug/L	8.0900 ppb	17:45:58
2	Pb 220.353†	-61.1	-1.0	-0.1239 ug/L	-0.1239 ppb	17:45:58
2	S 181.975 Axial†	40.5	2.3	3.3625 ug/L	3.3625 ppb	17:45:58
2	Sb 206.836†	40.3	-0.7	-0.2398 ug/L	-0.2398 ppb	17:45:58
2	Se 196.026†	-29.2	-7.9	-5.3352 ug/L	-5.3352 ppb	17:45:58
2	Si 251.611†	547.6	0.7	0.0165 ug/L	0.0165 ppb	17:45:58
2	Sn 189.927†	9.2	0.8	0.1496 ug/L	0.1496 ppb	17:45:58
2	Ti 334.940†	-1349.4	-83.9	-0.1395 ug/L	-0.1395 ppb	17:45:38
2	Tl 190.801†	-30.1	3.2	1.0352 ug/L	1.0352 ppb	17:45:58
2	U 409.014†	-2993.7	-97.4	-2.8228 ug/L	-2.8228 ppb	17:45:38
2	V 292.402†	-1497.2	15.5	0.1173 ug/L	0.1173 ppb	17:45:38
2	Zn 213.857†	727.4	34.5	0.3461 ug/L	0.3461 ppb	17:45:58
2	SiO2†	569.6	2.4	0.1594 ug/L	0.1594 ppb	17:46:34
3	Sc Radial	4815.3	4815.3	100 %		17:44:46
3	Y RADIAL	5028.0	5028.0	100.5 %		17:44:46
3	Al 396.153Radial†	-139.7	12.1	11.252 ug/L	11.252 ppb	17:44:46
3	Ca 317.933Radial†	19.5	2.8	4.6011 ug/L	4.6011 ppb	17:45:06
3	Fe 238.204 Radial†	7.6	-3.8	-35.006 ug/L	-35.006 ppb	17:45:06
3	K 766.490 Radial†	2871.0	40.4	7.1012 ug/L	7.1012 ppb	17:44:46
3	Mg 279.077 IEC†	2.5	2.1	74.990 ug/L	74.990 ppb	17:45:06
3	Na 589.592 Radial†	-874.3	205.7	62.219 ug/L	62.219 ppb	17:44:46
3	Sr 421.552†	-27.3	-29.4	-0.2062 ug/L	-0.2062 ppb	17:44:46
3	Sc 361.383	838695.6	838695.6	97.286 %		17:46:04
3	Y 371.029	683481.0	683481.0	95.645 %		17:46:04
3	Ag 328.068†	290.2	69.6	0.3139 ug/L	0.3139 ppb	17:46:04
3	As 188.979†	-23.3	9.9	4.4693 ug/L	4.4693 ppb	17:46:24
3	B 249.677†	-376.2	152.4	3.6303 ug/L	3.6303 ppb	17:46:24
3	Ba 233.527†	-22.5	-11.5	-0.0952 ug/L	-0.0952 ppb	17:46:24
3	Be 313.107†	-4293.1	-74.1	-0.0277 ug/L	-0.0277 ppb	17:46:04
3	Cd 226.502†	-185.5	21.2	0.2558 ug/L	0.2558 ppb	17:46:24
3	Co 228.616†	-68.7	3.1	0.0666 ug/L	0.0666 ppb	17:46:24
3	Cr 267.716†	57.9	-7.2	-0.0860 ug/L	-0.0860 ppb	17:46:24
3	Cu 324.752†	5315.2	-357.3	-1.0867 ug/L	-1.0867 ppb	17:46:04
3	Mn 257.610†	457.7	18.5	0.0148 ug/L	0.0148 ppb	17:46:24
3	Mo 202.031†	11.1	-4.1	-0.3120 ug/L	-0.3120 ppb	17:46:24
3	Ni 231.604†	95.7	-9.6	-0.2499 ug/L	-0.2499 ppb	17:46:24
3	P 214.914†	234.9	13.4	8.5848 ug/L	8.5848 ppb	17:46:24
3	Pb 220.353†	-54.6	5.6	0.7013 ug/L	0.7013 ppb	17:46:24
3	S 181.975 Axial†	38.7	0.4	0.6278 ug/L	0.6278 ppb	17:46:24
3	Sb 206.836†	42.2	1.3	0.4079 ug/L	0.4079 ppb	17:46:24
3	Se 196.026†	-18.3	3.4	2.1459 ug/L	2.1459 ppb	17:46:24
3	Si 251.611†	554.1	7.3	0.2469 ug/L	0.2469 ppb	17:46:24
3	Sn 189.927†	-0.4	-9.1	-1.6878 ug/L	-1.6878 ppb	17:46:24
3	Ti 334.940†	-1299.2	-32.3	-0.0587 ug/L	-0.0587 ppb	17:46:04
3	Tl 190.801†	-36.1	-2.9	-0.9291 ug/L	-0.9291 ppb	17:46:24
3	U 409.014†	-2832.5	68.6	1.9920 ug/L	1.9920 ppb	17:46:04
3	V 292.402†	-1522.0	-9.8	-0.0650 ug/L	-0.0650 ppb	17:46:04
3	Zn 213.857†	713.0	19.7	0.2023 ug/L	0.2023 ppb	17:46:24
3	SiO2†	572.4	5.3	0.3839 ug/L	0.3839 ppb	17:46:39

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	840598.7	97.507 %	0.3873			0.40%
Sc Radial	4855.6	101 %	0.8			0.76%
Y 371.029	685247.7	95.892 %	0.3863			0.40%
Y RADIAL	5091.2	101.8 %	1.18			1.16%
Ag 328.068†	78.3	0.3609 ug/L	0.16791	0.3609 ppb	0.16791	46.52%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	12.1	11.233 ug/L	8.2799	11.233 ppb	8.2799	73.71%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	4.9	2.2211 ug/L	1.97047	2.2211 ppb	1.97047	88.72%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	166.5	3.9649 ug/L	0.55267	3.9649 ppb	0.55267	13.94%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	-6.8	-0.0562 ug/L	0.04132	-0.0562 ppb	0.04132	73.58%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-20.6	-0.0079 ug/L	0.01837	-0.0079 ppb	0.01837	231.33%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	1.8	3.0572 ug/L	3.17716	3.0572 ppb	3.17716	103.92%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd 226.502†	12.0	0.1452 ug/L	0.10606	0.1452 ppb	0.10606	73.05%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	9.4	0.2052 ug/L	0.21183	0.2052 ppb	0.21183	103.22%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	4.8	0.0556 ug/L	0.12796	0.0556 ppb	0.12796	230.13%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	-337.8	-1.0263 ug/L	0.21702	-1.0263 ppb	0.21702	21.15%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	-2.4	-22.237 ug/L	13.0005	-22.237 ppb	13.0005	58.46%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	8.6	1.4829 ug/L	15.09979	1.4829 ppb	15.09979	>999.9%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	1.7	61.712 ug/L	11.4994	61.712 ppb	11.4994	18.63%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	16.1	0.0138 ug/L	0.01541	0.0138 ppb	0.01541	111.73%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	0.8	0.0569 ug/L	0.42683	0.0569 ppb	0.42683	750.44%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	228.4	69.066 ug/L	5.9995	69.066 ppb	5.9995	8.69%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	-9.4	-0.2445 ug/L	0.14206	-0.2445 ppb	0.14206	58.10%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	13.4	8.5864 ug/L	0.49718	8.5864 ppb	0.49718	5.79%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	2.8	0.3487 ug/L	0.42548	0.3487 ppb	0.42548	122.03%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	-0.3	-0.4727 ug/L	4.48787	-0.4727 ppb	4.48787	949.38%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	-0.5	-0.1771 ug/L	0.55632	-0.1771 ppb	0.55632	314.05%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	1.7	1.0703 ug/L	5.94121	1.0703 ppb	5.94121	555.09%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	2.2	0.0720 ug/L	0.15481	0.0720 ppb	0.15481	215.02%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	-2.9	-0.5408 ug/L	1.00024	-0.5408 ppb	1.00024	184.96%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	-6.1	-0.0426 ug/L	0.16018	-0.0426 ppb	0.16018	375.57%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	-76.2	-0.1285 ug/L	0.06493	-0.1285 ppb	0.06493	50.53%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	-3.0	-0.9647 ug/L	2.01802	-0.9647 ppb	2.01802	209.18%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	22.7	0.6602 ug/L	3.04404	0.6602 ppb	3.04404	461.07%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	2.9	0.0277 ug/L	0.09118	0.0277 ppb	0.09118	328.89%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	28.0	0.2821 ug/L	0.07321	0.2821 ppb	0.07321	25.95%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	-2.7	-0.1932 ug/L	0.81291	-0.1932 ppb	0.81291	420.78%	
QC value within limits for SiO2 Recovery = Not calculated							
All analyte(s) passed QC.							

Sequence No.: 21

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 2/11/2010 18:43:32

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	4898.3	4898.3	102 %		18:45:24
1	Y RADIAL	5094.3	5094.3	101.9 %		18:45:24
1	Al 396.153Radial†	5321.6	5374.0	4963.7 ug/L	4963.7 ppb	18:45:24
1	Ca 317.933Radial†	3077.8	3003.6	4978.3 ug/L	4978.3 ppb	18:45:44
1	Fe 238.204 Radial†	562.6	540.6	4934.8 ug/L	4934.8 ppb	18:45:44
1	K 766.490 Radial†	31073.9	27668.6	4877.9 ug/L	4877.9 ppb	18:45:24
1	Mg 279.077 IEC†	148.1	145.0	5137.6 ug/L	5137.6 ppb	18:45:44
1	Na 589.592 Radial†	31287.8	31782.8	9612.7 ug/L	9612.7 ppb	18:45:24
1	Sr 421.552†	73908.0	72527.5	508.61 ug/L	508.61 ppb	18:45:24
1	Sc 361.383	841502.2	841502.2	97.611 %		18:46:41
1	Y 371.029	676715.5	676715.5	94.698 %		18:46:41
1	Ag 328.068†	104884.6	107222.4	508.41 ug/L	508.41 ppb	18:46:46
1	As 188.979†	1044.4	1103.8	505.21 ug/L	505.21 ppb	18:47:06
1	B 249.677†	20354.0	21391.1	506.59 ug/L	506.59 ppb	18:46:46
1	Ba 233.527†	61637.4	63157.3	517.04 ug/L	517.04 ppb	18:46:46
1	Be 313.107†	1306809.0	1343126.3	501.43 ug/L	501.43 ppb	18:46:41
1	Cd 226.502†	41253.9	42475.4	504.90 ug/L	504.90 ppb	18:46:46
1	Co 228.616†	23461.5	24109.4	526.66 ug/L	526.66 ppb	18:46:46
1	Cr 267.716†	41878.3	42836.3	499.30 ug/L	499.30 ppb	18:46:46
1	Cu 324.752†	171278.1	169648.7	514.61 ug/L	514.61 ppb	18:46:46
1	Mn 257.610†	432954.3	443097.1	510.07 ug/L	510.07 ppb	18:46:41
1	Mo 202.031†	6443.2	6585.3	493.60 ug/L	493.60 ppb	18:47:06
1	Ni 231.604†	19201.8	19563.6	506.51 ug/L	506.51 ppb	18:46:46
1	P 214.914†	4172.1	4046.1	2417.5 ug/L	2417.5 ppb	18:47:06
1	Pb 220.353†	3802.8	3957.6	495.32 ug/L	495.32 ppb	18:47:06
1	S 181.975 Axial†	712.2	690.3	1005.6 ug/L	1005.6 ppb	18:47:06
1	Sb 206.836†	1445.0	1438.2	518.99 ug/L	518.99 ppb	18:47:06
1	Se 196.026†	697.8	737.0	514.07 ug/L	514.07 ppb	18:47:06
1	Si 251.611†	76025.4	77323.6	2580.3 ug/L	2580.3 ppb	18:46:46
1	Sn 189.927†	2594.8	2649.6	492.55 ug/L	492.55 ppb	18:47:06
1	Ti 334.940†	306888.3	315701.2	511.90 ug/L	511.90 ppb	18:46:46
1	Tl 190.801†	1499.9	1570.8	506.81 ug/L	506.81 ppb	18:47:06
1	U 409.014†	14009.8	17332.7	500.91 ug/L	500.91 ppb	18:46:46
1	V 292.402†	65688.1	68850.2	506.59 ug/L	506.59 ppb	18:46:46
1	Zn 213.857†	51597.1	52146.4	509.79 ug/L	509.79 ppb	18:46:46
1	SiO2†	74932.5	76183.0	5420.9 ug/L	5420.9 ppb	18:48:14
2	Sc Radial	4871.6	4871.6	101 %		18:45:49
2	Y RADIAL	5050.9	5050.9	101.0 %		18:45:49
2	Al 396.153Radial†	5283.7	5365.1	4955.9 ug/L	4955.9 ppb	18:45:49
2	Ca 317.933Radial†	3092.2	3034.4	5029.3 ug/L	5029.3 ppb	18:46:09
2	Fe 238.204 Radial†	562.1	543.2	4957.7 ug/L	4957.7 ppb	18:46:09
2	K 766.490 Radial†	30985.4	27747.9	4891.9 ug/L	4891.9 ppb	18:45:49
2	Mg 279.077 IEC†	150.7	148.2	5254.0 ug/L	5254.0 ppb	18:46:09
2	Na 589.592 Radial†	30920.3	31587.8	9553.7 ug/L	9553.7 ppb	18:45:49
2	Sr 421.552†	73474.5	72495.9	508.39 ug/L	508.39 ppb	18:45:49
2	Sc 361.383	855235.2	855235.2	99.204 %		18:47:12
2	Y 371.029	687753.9	687753.9	96.243 %		18:47:12
2	Ag 328.068†	104084.4	104690.4	496.45 ug/L	496.45 ppb	18:47:17
2	As 188.979†	1051.1	1093.4	500.39 ug/L	500.39 ppb	18:47:37
2	B 249.677†	20099.2	20799.4	492.54 ug/L	492.54 ppb	18:47:17
2	Ba 233.527†	61148.7	61650.8	504.71 ug/L	504.71 ppb	18:47:17
2	Be 313.107†	1306033.3	1320846.7	493.10 ug/L	493.10 ppb	18:47:12
2	Cd 226.502†	40848.1	41387.6	491.96 ug/L	491.96 ppb	18:47:17
2	Co 228.616†	23316.3	23577.0	515.04 ug/L	515.04 ppb	18:47:17
2	Cr 267.716†	41676.0	41943.5	488.90 ug/L	488.90 ppb	18:47:17
2	Cu 324.752†	169333.5	164870.9	500.12 ug/L	500.12 ppb	18:47:17
2	Mn 257.610†	432295.6	435310.8	501.11 ug/L	501.11 ppb	18:47:12
2	Mo 202.031†	6445.0	6481.2	485.80 ug/L	485.80 ppb	18:47:37
2	Ni 231.604†	19034.1	19078.7	493.96 ug/L	493.96 ppb	18:47:17

2	P 214.914†	4157.9	3963.2	2368.7 ug/L	2368.7 ppb	18:47:37
2	Pb 220.353†	3799.6	3891.8	487.09 ug/L	487.09 ppb	18:47:37
2	S 181.975 Axial†	714.4	680.8	991.80 ug/L	991.80 ppb	18:47:37
2	Sb 206.836†	1434.0	1403.4	506.54 ug/L	506.54 ppb	18:47:37
2	Se 196.026†	698.1	725.8	506.60 ug/L	506.60 ppb	18:47:37
2	Si 251.611†	75242.4	75283.5	2512.2 ug/L	2512.2 ppb	18:47:17
2	Sn 189.927†	2585.1	2597.1	482.81 ug/L	482.81 ppb	18:47:37
2	Ti 334.940†	303903.6	307644.1	498.84 ug/L	498.84 ppb	18:47:17
2	Tl 190.801†	1503.1	1549.3	499.84 ug/L	499.84 ppb	18:47:37
2	U 409.014†	13894.4	16985.8	490.87 ug/L	490.87 ppb	18:47:17
2	V 292.402†	65279.8	67358.0	495.64 ug/L	495.64 ppb	18:47:17
2	Zn 213.857†	50994.7	50690.4	495.52 ug/L	495.52 ppb	18:47:17
2	SiO2†	74233.0	74245.2	5282.8 ug/L	5282.8 ppb	18:48:19
3	Sc Radial	4848.2	4848.2	101 %		18:46:14
3	Y RADIAL	5022.4	5022.4	100.4 %		18:46:14
3	Al 396.153Radial†	5286.8	5393.4	4982.4 ug/L	4982.4 ppb	18:46:14
3	Ca 317.933Radial†	3115.5	3072.3	5092.1 ug/L	5092.1 ppb	18:46:34
3	Fe 238.204 Radial†	572.1	555.7	5071.6 ug/L	5071.6 ppb	18:46:34
3	K 766.490 Radial†	30718.6	27631.5	4871.3 ug/L	4871.3 ppb	18:46:14
3	Mg 279.077 IEC†	148.6	146.9	5207.0 ug/L	5207.0 ppb	18:46:34
3	Na 589.592 Radial†	30664.8	31482.3	9521.8 ug/L	9521.8 ppb	18:46:14
3	Sr 421.552†	73012.9	72389.3	507.64 ug/L	507.64 ppb	18:46:14
3	Sc 361.383	857751.3	857751.3	99.496 %		18:47:43
3	Y 371.029	690942.7	690942.7	96.689 %		18:47:43
3	Ag 328.068†	104252.5	104551.5	495.83 ug/L	495.83 ppb	18:47:48
3	As 188.979†	1036.3	1075.4	492.28 ug/L	492.28 ppb	18:48:08
3	B 249.677†	20125.7	20766.7	491.75 ug/L	491.75 ppb	18:47:48
3	Ba 233.527†	61185.0	61506.4	503.54 ug/L	503.54 ppb	18:47:48
3	Be 313.107†	1312097.7	1323080.0	493.94 ug/L	493.94 ppb	18:47:43
3	Cd 226.502†	40954.4	41373.7	491.78 ug/L	491.78 ppb	18:47:48
3	Co 228.616†	23298.4	23490.1	513.13 ug/L	513.13 ppb	18:47:48
3	Cr 267.716†	41715.2	41859.7	487.92 ug/L	487.92 ppb	18:47:48
3	Cu 324.752†	169932.0	164971.7	500.43 ug/L	500.43 ppb	18:47:48
3	Mn 257.610†	432972.1	434712.4	500.43 ug/L	500.43 ppb	18:47:43
3	Mo 202.031†	6385.2	6402.0	479.89 ug/L	479.89 ppb	18:48:08
3	Ni 231.604†	19095.5	19084.2	494.10 ug/L	494.10 ppb	18:47:48
3	P 214.914†	4137.2	3930.1	2347.9 ug/L	2347.9 ppb	18:48:08
3	Pb 220.353†	3786.2	3867.1	484.00 ug/L	484.00 ppb	18:48:08
3	S 181.975 Axial†	710.8	675.1	983.46 ug/L	983.46 ppb	18:48:08
3	Sb 206.836†	1427.3	1392.4	502.49 ug/L	502.49 ppb	18:48:08
3	Se 196.026†	688.1	713.7	498.80 ug/L	498.80 ppb	18:48:08
3	Si 251.611†	75355.7	75175.0	2508.6 ug/L	2508.6 ppb	18:47:48
3	Sn 189.927†	2560.4	2564.7	476.80 ug/L	476.80 ppb	18:48:08
3	Ti 334.940†	304631.2	307476.8	498.58 ug/L	498.58 ppb	18:47:48
3	Tl 190.801†	1508.9	1550.8	500.30 ug/L	500.30 ppb	18:48:08
3	U 409.014†	13915.5	16966.0	490.29 ug/L	490.29 ppb	18:47:48
3	V 292.402†	65461.8	67347.9	495.47 ug/L	495.47 ppb	18:47:48
3	Zn 213.857†	51024.5	50569.6	494.31 ug/L	494.31 ppb	18:47:48
3	SiO2†	74357.9	74151.3	5276.3 ug/L	5276.3 ppb	18:48:24

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	851496.2	98.771 %	1.0145			1.03%
Sc Radial	4872.7	101 %	0.5			0.51%
Y 371.029	685137.4	95.877 %	1.0447			1.09%
Y RADIAL	5055.9	101.1 %	0.72			0.72%
Ag 328.068†	105488.1	500.23 ug/L	7.089	500.23 ppb	7.089	1.42%
QC value within limits for Ag 328.068 Recovery = 100.05%						
Al 396.153Radial†	5377.5	4967.3 ug/L	13.63	4967.3 ppb	13.63	0.27%
QC value within limits for Al 396.153Radial Recovery = 99.35%						
As 188.979†	1090.8	499.30 ug/L	6.537	499.30 ppb	6.537	1.31%
QC value within limits for As 188.979 Recovery = 99.86%						
B 249.677†	20985.7	496.96 ug/L	8.348	496.96 ppb	8.348	1.68%
QC value within limits for B 249.677 Recovery = 99.39%						
Ba 233.527†	62104.8	508.43 ug/L	7.479	508.43 ppb	7.479	1.47%
QC value within limits for Ba 233.527 Recovery = 101.69%						
Be 313.107†	1329017.6	496.16 ug/L	4.587	496.16 ppb	4.587	0.92%
QC value within limits for Be 313.107 Recovery = 99.23%						
Ca 317.933Radial†	3036.8	5033.2 ug/L	56.98	5033.2 ppb	56.98	1.13%

QC value within limits for Ca 317.933 Radial Recovery = 100.66%							
Cd	226.502†	41745.5	496.21 ug/L	7.525	496.21 ppb	7.525	1.52%
QC value within limits for Cd 226.502 Recovery = 99.24%							
Co	228.616†	23725.5	518.28 ug/L	7.325	518.28 ppb	7.325	1.41%
QC value within limits for Co 228.616 Recovery = 103.66%							
Cr	267.716†	42213.1	492.04 ug/L	6.307	492.04 ppb	6.307	1.28%
QC value within limits for Cr 267.716 Recovery = 98.41%							
Cu	324.752†	166497.1	505.05 ug/L	8.275	505.05 ppb	8.275	1.64%
QC value within limits for Cu 324.752 Recovery = 101.01%							
Fe	238.204 Radial†	546.5	4988.0 ug/L	73.26	4988.0 ppb	73.26	1.47%
QC value within limits for Fe 238.204 Radial Recovery = 99.76%							
K	766.490 Radial†	27682.7	4880.4 ug/L	10.51	4880.4 ppb	10.51	0.22%
QC value within limits for K 766.490 Radial Recovery = 97.61%							
Mg	279.077 IEC†	146.7	5199.5 ug/L	58.54	5199.5 ppb	58.54	1.13%
QC value within limits for Mg 279.077 IEC Recovery = 103.99%							
Mn	257.610†	437706.8	503.87 ug/L	5.379	503.87 ppb	5.379	1.07%
QC value within limits for Mn 257.610 Recovery = 100.77%							
Mo	202.031†	6489.5	486.43 ug/L	6.881	486.43 ppb	6.881	1.41%
QC value within limits for Mo 202.031 Recovery = 97.29%							
Na	589.592 Radial†	31617.6	9562.7 ug/L	46.11	9562.7 ppb	46.11	0.48%
QC value within limits for Na 589.592 Radial Recovery = 95.63%							
Ni	231.604†	19242.2	498.19 ug/L	7.208	498.19 ppb	7.208	1.45%
QC value within limits for Ni 231.604 Recovery = 99.64%							
P	214.914†	3979.8	2378.0 ug/L	35.75	2378.0 ppb	35.75	1.50%
QC value within limits for P 214.914 Recovery = 95.12%							
Pb	220.353†	3905.5	488.80 ug/L	5.851	488.80 ppb	5.851	1.20%
QC value within limits for Pb 220.353 Recovery = 97.76%							
S	181.975 Axial†	682.0	993.62 ug/L	11.184	993.62 ppb	11.184	1.13%
QC value within limits for S 181.975 Axial Recovery = 99.36%							
Sb	206.836†	1411.3	509.34 ug/L	8.597	509.34 ppb	8.597	1.69%
QC value within limits for Sb 206.836 Recovery = 101.87%							
Se	196.026†	725.5	506.49 ug/L	7.637	506.49 ppb	7.637	1.51%
QC value within limits for Se 196.026 Recovery = 101.30%							
Si	251.611†	75927.4	2533.7 ug/L	40.41	2533.7 ppb	40.41	1.59%
QC value within limits for Si 251.611 Recovery = 101.35%							
Sn	189.927†	2603.8	484.05 ug/L	7.948	484.05 ppb	7.948	1.64%
QC value within limits for Sn 189.927 Recovery = 96.81%							
Sr	421.552†	72470.9	508.21 ug/L	0.508	508.21 ppb	0.508	0.10%
QC value within limits for Sr 421.552 Recovery = 101.64%							
Ti	334.940†	310274.1	503.11 ug/L	7.618	503.11 ppb	7.618	1.51%
QC value within limits for Ti 334.940 Recovery = 100.62%							
Tl	190.801†	1557.0	502.31 ug/L	3.899	502.31 ppb	3.899	0.78%
QC value within limits for Tl 190.801 Recovery = 100.46%							
U	409.014†	17094.8	494.02 ug/L	5.971	494.02 ppb	5.971	1.21%
QC value within limits for U 409.014 Recovery = 98.80%							
V	292.402†	67852.0	499.23 ug/L	6.373	499.23 ppb	6.373	1.28%
QC value within limits for V 292.402 Recovery = 99.85%							
Zn	213.857†	51135.5	499.87 ug/L	8.608	499.87 ppb	8.608	1.72%
QC value within limits for Zn 213.857 Recovery = 99.97%							
SiO2†		74859.9	5326.7 ug/L	81.64	5326.7 ppb	81.64	1.53%
QC value within limits for SiO2 Recovery = 99.61%							

All analyte(s) passed QC.

Sequence No.: 22

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 2/11/2010 18:50:34

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	4915.1	4915.1	102 %		18:52:26
1	Y RADIAL	5137.6	5137.6	102.7 %		18:52:26
1	Al 396.153Radial†	-147.0	7.8	7.2301 ug/L	7.2301 ppb	18:52:26
1	Ca 317.933Radial†	14.7	-2.3	-3.7949 ug/L	-3.7949 ppb	18:52:46
1	Fe 238.204 Radial†	11.3	-0.5	-4.2891 ug/L	-4.2891 ppb	18:52:46
1	K 766.490 Radial†	2739.2	-146.8	-25.934 ug/L	-25.934 ppb	18:52:26
1	Mg 279.077 IEC†	0.7	0.2	8.3574 ug/L	8.3574 ppb	18:52:46
1	Na 589.592 Radial†	-902.8	195.6	59.145 ug/L	59.145 ppb	18:52:26
1	Sr 421.552†	4.5	2.3	0.0164 ug/L	0.0164 ppb	18:52:26
1	Sc 361.383	841871.0	841871.0	97.654 %		18:53:43
1	Y 371.029	686186.9	686186.9	96.024 %		18:53:43
1	Ag 328.068†	202.9	-21.0	-0.1012 ug/L	-0.1012 ppb	18:53:43
1	As 188.979†	-31.9	1.2	0.5610 ug/L	0.5610 ppb	18:54:03
1	B 249.677†	-416.5	112.6	2.6783 ug/L	2.6783 ppb	18:54:03
1	Ba 233.527†	-31.0	-20.2	-0.1641 ug/L	-0.1641 ppb	18:54:03
1	Be 313.107†	-4253.5	-17.0	-0.0063 ug/L	-0.0063 ppb	18:53:43
1	Cd 226.502†	-196.0	11.2	0.1340 ug/L	0.1340 ppb	18:54:03
1	Co 228.616†	-67.7	4.4	0.0965 ug/L	0.0965 ppb	18:54:03
1	Cr 267.716†	79.1	14.2	0.1645 ug/L	0.1645 ppb	18:54:03
1	Cu 324.752†	5353.6	-338.5	-1.0285 ug/L	-1.0285 ppb	18:53:43
1	Mn 257.610†	451.3	10.2	0.0110 ug/L	0.0110 ppb	18:54:03
1	Mo 202.031†	18.7	3.7	0.2732 ug/L	0.2732 ppb	18:54:03
1	Ni 231.604†	91.4	-14.4	-0.3735 ug/L	-0.3735 ppb	18:54:03
1	P 214.914†	237.6	15.3	9.7069 ug/L	9.7069 ppb	18:54:03
1	Pb 220.353†	-57.8	2.6	0.3246 ug/L	0.3246 ppb	18:54:03
1	S 181.975 Axial†	37.7	-0.7	-1.0842 ug/L	-1.0842 ppb	18:54:03
1	Sb 206.836†	39.4	-1.8	-0.6343 ug/L	-0.6343 ppb	18:54:03
1	Se 196.026†	-15.0	6.8	4.5394 ug/L	4.5394 ppb	18:54:03
1	Si 251.611†	562.5	13.8	0.4578 ug/L	0.4578 ppb	18:54:03
1	Sn 189.927†	7.6	-0.9	-0.1755 ug/L	-0.1755 ppb	18:54:03
1	Ti 334.940†	-1260.0	12.9	0.0185 ug/L	0.0185 ppb	18:53:43
1	Tl 190.801†	-35.7	-2.4	-0.7588 ug/L	-0.7588 ppb	18:54:03
1	U 409.014†	-2818.8	93.5	2.7116 ug/L	2.7116 ppb	18:53:43
1	V 292.402†	-1469.4	49.9	0.3724 ug/L	0.3724 ppb	18:53:43
1	Zn 213.857†	725.7	29.9	0.2996 ug/L	0.2996 ppb	18:54:03
1	SiO2†	546.4	-23.6	-1.6935 ug/L	-1.6935 ppb	18:54:59
2	Sc Radial	4891.2	4891.2	102 %		18:52:51
2	Y RADIAL	5119.4	5119.4	102.4 %		18:52:51
2	Al 396.153Radial†	-149.9	4.2	3.9284 ug/L	3.9284 ppb	18:52:51
2	Ca 317.933Radial†	18.9	1.9	3.0853 ug/L	3.0853 ppb	18:53:11
2	Fe 238.204 Radial†	10.3	-1.4	-12.533 ug/L	-12.533 ppb	18:53:11
2	K 766.490 Radial†	2687.1	-184.9	-32.658 ug/L	-32.658 ppb	18:52:51
2	Mg 279.077 IEC†	2.4	2.0	69.586 ug/L	69.586 ppb	18:53:11
2	Na 589.592 Radial†	-915.3	179.0	54.137 ug/L	54.137 ppb	18:52:51
2	Sr 421.552†	22.6	20.1	0.1411 ug/L	0.1411 ppb	18:52:51
2	Sc 361.383	831442.5	831442.5	96.444 %		18:54:08
2	Y 371.029	677260.4	677260.4	94.774 %		18:54:08
2	Ag 328.068†	230.6	10.3	0.0531 ug/L	0.0531 ppb	18:54:08
2	As 188.979†	-17.1	16.2	7.3271 ug/L	7.3271 ppb	18:54:28
2	B 249.677†	-394.2	130.3	3.1026 ug/L	3.1026 ppb	18:54:28
2	Ba 233.527†	-6.4	5.0	0.0415 ug/L	0.0415 ppb	18:54:28
2	Be 313.107†	-4280.9	-100.0	-0.0377 ug/L	-0.0377 ppb	18:54:08
2	Cd 226.502†	-186.4	18.7	0.2213 ug/L	0.2213 ppb	18:54:28
2	Co 228.616†	-73.2	-2.2	-0.0466 ug/L	-0.0466 ppb	18:54:28
2	Cr 267.716†	88.9	25.4	0.2995 ug/L	0.2995 ppb	18:54:28
2	Cu 324.752†	5305.3	-319.9	-0.9664 ug/L	-0.9664 ppb	18:54:08
2	Mn 257.610†	450.3	15.0	0.0132 ug/L	0.0132 ppb	18:54:28
2	Mo 202.031†	15.2	0.2	0.0127 ug/L	0.0127 ppb	18:54:28
2	Ni 231.604†	89.5	-15.2	-0.3946 ug/L	-0.3946 ppb	18:54:28

2	P 214.914†	222.9	3.1	2.1172 ug/L	2.1172 ppb	18:54:28
2	Pb 220.353†	-60.4	-1.0	-0.1168 ug/L	-0.1168 ppb	18:54:28
2	S 181.975 Axial†	41.4	3.6	5.1964 ug/L	5.1964 ppb	18:54:28
2	Sb 206.836†	46.5	6.1	2.1364 ug/L	2.1364 ppb	18:54:28
2	Se 196.026†	-18.9	2.5	1.6554 ug/L	1.6554 ppb	18:54:28
2	Si 251.611†	553.9	12.1	0.4037 ug/L	0.4037 ppb	18:54:28
2	Sn 189.927†	10.0	1.7	0.3146 ug/L	0.3146 ppb	18:54:28
2	Ti 334.940†	-1363.6	-110.7	-0.1813 ug/L	-0.1813 ppb	18:54:08
2	Tl 190.801†	-35.8	-2.9	-0.9449 ug/L	-0.9449 ppb	18:54:28
2	U 409.014†	-3151.6	-287.7	-8.3413 ug/L	-8.3413 ppb	18:54:08
2	V 292.402†	-1434.0	67.8	0.4799 ug/L	0.4799 ppb	18:54:08
2	Zn 213.857†	705.8	18.6	0.1888 ug/L	0.1888 ppb	18:54:28
2	SiO2†	590.9	29.6	2.1092 ug/L	2.1092 ppb	18:55:04
3	Sc Radial	4909.9	4909.9	102 %		18:53:16
3	Y RADIAL	5151.7	5151.7	103.0 %		18:53:16
3	Al 396.153Radial†	-158.7	-3.7	-3.4925 ug/L	-3.4925 ppb	18:53:16
3	Ca 317.933Radial†	14.8	-2.2	-3.7084 ug/L	-3.7084 ppb	18:53:36
3	Fe 238.204 Radial†	9.3	-2.4	-21.859 ug/L	-21.859 ppb	18:53:36
3	K 766.490 Radial†	2818.7	-66.2	-11.701 ug/L	-11.701 ppb	18:53:16
3	Mg 279.077 IEC†	1.9	1.5	51.431 ug/L	51.431 ppb	18:53:36
3	Na 589.592 Radial†	-911.1	186.6	56.425 ug/L	56.425 ppb	18:53:16
3	Sr 421.552†	-2.1	-4.2	-0.0294 ug/L	-0.0294 ppb	18:53:16
3	Sc 361.383	834826.2	834826.2	96.837 %		18:54:33
3	Y 371.029	681258.3	681258.3	95.334 %		18:54:33
3	Ag 328.068†	210.3	-11.6	-0.0623 ug/L	-0.0623 ppb	18:54:33
3	As 188.979†	-27.8	5.1	2.3169 ug/L	2.3169 ppb	18:54:53
3	B 249.677†	-397.9	128.1	3.0510 ug/L	3.0510 ppb	18:54:53
3	Ba 233.527†	-13.4	-2.3	-0.0194 ug/L	-0.0194 ppb	18:54:53
3	Be 313.107†	-4230.8	-30.3	-0.0112 ug/L	-0.0112 ppb	18:54:33
3	Cd 226.502†	-201.4	3.9	0.0487 ug/L	0.0487 ppb	18:54:53
3	Co 228.616†	-64.1	7.5	0.1653 ug/L	0.1653 ppb	18:54:53
3	Cr 267.716†	83.1	19.0	0.2205 ug/L	0.2205 ppb	18:54:53
3	Cu 324.752†	5334.7	-311.8	-0.9473 ug/L	-0.9473 ppb	18:54:33
3	Mn 257.610†	434.1	-3.6	-0.0084 ug/L	-0.0084 ppb	18:54:53
3	Mo 202.031†	20.7	5.9	0.4371 ug/L	0.4371 ppb	18:54:53
3	Ni 231.604†	106.0	1.5	0.0386 ug/L	0.0386 ppb	18:54:53
3	P 214.914†	225.9	5.2	3.4380 ug/L	3.4380 ppb	18:54:53
3	Pb 220.353†	-60.1	-0.3	-0.0402 ug/L	-0.0402 ppb	18:54:53
3	S 181.975 Axial†	36.3	-1.9	-2.7843 ug/L	-2.7843 ppb	18:54:53
3	Sb 206.836†	38.5	-2.4	-0.7876 ug/L	-0.7876 ppb	18:54:53
3	Se 196.026†	-11.5	10.3	6.8501 ug/L	6.8501 ppb	18:54:53
3	Si 251.611†	543.1	-1.5	-0.0543 ug/L	-0.0543 ppb	18:54:53
3	Sn 189.927†	17.5	9.4	1.7400 ug/L	1.7400 ppb	18:54:53
3	Ti 334.940†	-1237.4	25.4	0.0361 ug/L	0.0361 ppb	18:54:33
3	Tl 190.801†	-36.8	-3.9	-1.2348 ug/L	-1.2348 ppb	18:54:53
3	U 409.014†	-2869.7	16.6	0.4847 ug/L	0.4847 ppb	18:54:33
3	V 292.402†	-1506.7	-1.3	0.0018 ug/L	0.0018 ppb	18:54:33
3	Zn 213.857†	714.3	24.4	0.2452 ug/L	0.2452 ppb	18:54:53
3	SiO2†	536.2	-29.4	-2.1068 ug/L	-2.1068 ppb	18:55:09

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	836046.6	96.979 %	0.6171			0.64%
Sc Radial	4905.4	102 %	0.3			0.26%
Y 371.029	681568.5	95.377 %	0.6257			0.66%
Y RADIAL	5136.2	102.7 %	0.32			0.32%
Ag 328.068†	-7.4	-0.0368 ug/L	0.08029	-0.0368 ppb	0.08029	218.11%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	2.8	2.5553 ug/L	5.49160	2.5553 ppb	5.49160	214.91%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	7.5	3.4017 ug/L	3.51107	3.4017 ppb	3.51107	103.22%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	123.7	2.9440 ug/L	0.23149	2.9440 ppb	0.23149	7.86%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	-5.8	-0.0473 ug/L	0.10557	-0.0473 ppb	0.10557	223.09%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-49.1	-0.0184 ug/L	0.01688	-0.0184 ppb	0.01688	91.90%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-0.9	-1.4727 ug/L	3.94754	-1.4727 ppb	3.94754	268.05%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd 226.502†	11.3	0.1347 ug/L	0.08629	0.1347 ppb	0.08629	64.07%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	3.3	0.0717 ug/L	0.10808	0.0717 ppb	0.10808	150.70%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	19.5	0.2281 ug/L	0.06783	0.2281 ppb	0.06783	29.73%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	-323.4	-0.9807 ug/L	0.04247	-0.9807 ppb	0.04247	4.33%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	-1.4	-12.894 ug/L	8.7907	-12.894 ppb	8.7907	68.18%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	-132.6	-23.431 ug/L	10.7004	-23.431 ppb	10.7004	45.67%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	1.2	43.125 ug/L	31.4483	43.125 ppb	31.4483	72.92%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	7.2	0.0052 ug/L	0.01190	0.0052 ppb	0.01190	226.83%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	3.2	0.2410 ug/L	0.21405	0.2410 ppb	0.21405	88.82%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	187.0	56.569 ug/L	2.5072	56.569 ppb	2.5072	4.43%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	-9.4	-0.2432 ug/L	0.24428	-0.2432 ppb	0.24428	100.45%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	7.8	5.0874 ug/L	4.05476	5.0874 ppb	4.05476	79.70%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	0.4	0.0559 ug/L	0.23589	0.0559 ppb	0.23589	422.17%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	0.3	0.4426 ug/L	4.20376	0.4426 ppb	4.20376	949.71%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	0.6	0.2382 ug/L	1.64573	0.2382 ppb	1.64573	691.00%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	6.5	4.3483 ug/L	2.60263	4.3483 ppb	2.60263	59.85%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	8.1	0.2691 ug/L	0.28137	0.2691 ppb	0.28137	104.57%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	3.4	0.6263 ug/L	0.99508	0.6263 ppb	0.99508	158.87%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	6.1	0.0427 ug/L	0.08826	0.0427 ppb	0.08826	206.72%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	-24.1	-0.0422 ug/L	0.12076	-0.0422 ppb	0.12076	286.14%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	-3.1	-0.9795 ug/L	0.23985	-0.9795 ppb	0.23985	24.49%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	-59.2	-1.7150 ug/L	5.84556	-1.7150 ppb	5.84556	340.85%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	38.8	0.2847 ug/L	0.25081	0.2847 ppb	0.25081	88.10%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	24.3	0.2445 ug/L	0.05540	0.2445 ppb	0.05540	22.65%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	-7.8	-0.5637 ug/L	2.32398	-0.5637 ppb	2.32398	412.27%	
QC value within limits for SiO2 Recovery = Not calculated							
All analyte(s) passed QC.							

Sequence No.: 23

Sample ID: 1202024813|945421|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 54

Date Collected: 2/11/2010 18:57:19

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202024813|945421|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4919.2	4919.2	102 %		18:59:12
1	Y RADIAL	5117.3	5117.3	102.3 %		18:59:12
1	Al 396.153Radial†	-101.4	52.5	48.726 ug/L	48.726 ppb	18:59:12
1	Ca 317.933Radial†	57.7	39.7	65.829 ug/L	65.829 ppb	18:59:32
1	Fe 238.204 Radial†	29.3	17.2	156.52 ug/L	156.52 ppb	18:59:32
1	K 766.490 Radial†	2770.2	-118.7	-21.001 ug/L	-21.001 ppb	18:59:12
1	Mg 279.077 IEC†	4.1	3.6	126.27 ug/L	126.27 ppb	18:59:32
1	Na 589.592 Radial†	-846.6	251.2	75.983 ug/L	75.983 ppb	18:59:12
1	Sr 421.552†	44.2	41.1	0.2875 ug/L	0.2875 ppb	18:59:12
1	Sc 361.383	854355.8	854355.8	99.102 %		19:00:29
1	Y 371.029	696378.8	696378.8	97.450 %		19:00:29
1	Ag 328.068†	206.8	-20.1	-0.0411 ug/L	-0.0411 ppb	19:00:29
1	As 188.979†	-24.8	8.8	4.1205 ug/L	4.1205 ppb	19:00:49
1	B 249.677†	-452.3	82.6	1.9409 ug/L	1.9409 ppb	19:00:49
1	Ba 233.527†	37.2	49.2	0.4078 ug/L	0.4078 ppb	19:00:49
1	Be 313.107†	-4282.5	17.4	0.0252 ug/L	0.0252 ppb	19:00:29
1	Cd 226.502†	-207.8	2.2	0.0103 ug/L	0.0103 ppb	19:00:49
1	Co 228.616†	-74.0	-1.0	-0.0385 ug/L	-0.0385 ppb	19:00:49
1	Cr 267.716†	106.1	40.3	0.4724 ug/L	0.4724 ppb	19:00:49
1	Cu 324.752†	5556.8	-213.6	-0.6405 ug/L	-0.6405 ppb	19:00:29
1	Mn 257.610†	1825.6	1390.2	1.6098 ug/L	1.6098 ppb	19:00:49
1	Mo 202.031†	25.6	10.3	0.7841 ug/L	0.7841 ppb	19:00:49
1	Ni 231.604†	121.1	14.2	0.3671 ug/L	0.3671 ppb	19:00:49
1	P 214.914†	220.4	-5.7	-3.3953 ug/L	-3.3953 ppb	19:00:49
1	Pb 220.353†	-46.3	15.0	1.8655 ug/L	1.8655 ppb	19:00:49
1	S 181.975 Axial†	50.4	11.5	16.815 ug/L	16.815 ppb	19:00:49
1	Sb 206.836†	32.9	-8.9	-2.8858 ug/L	-2.8858 ppb	19:00:49
1	Se 196.026†	-18.0	3.9	3.1609 ug/L	3.1609 ppb	19:00:49
1	Si 251.611†	1288.4	737.8	24.669 ug/L	24.669 ppb	19:00:49
1	Sn 189.927†	91.1	83.3	15.464 ug/L	15.464 ppb	19:00:49
1	Ti 334.940†	3743.5	5080.6	8.2382 ug/L	8.2382 ppb	19:00:29
1	Tl 190.801†	-39.9	-6.1	-1.8776 ug/L	-1.8776 ppb	19:00:49
1	U 409.014†	-2904.9	48.8	1.3968 ug/L	1.3968 ppb	19:00:29
1	V 292.402†	-1440.9	100.7	0.7154 ug/L	0.7154 ppb	19:00:29
1	Zn 213.857†	974.6	270.2	2.6404 ug/L	2.6404 ppb	19:00:49
1	SiO2†	1347.2	776.2	55.349 ug/L	55.349 ppb	19:01:45
2	Sc Radial	4927.0	4927.0	102 %		18:59:37
2	Y RADIAL	5163.8	5163.8	103.3 %		18:59:37
2	Al 396.153Radial†	-113.1	41.2	38.230 ug/L	38.230 ppb	18:59:37
2	Ca 317.933Radial†	55.1	37.1	61.425 ug/L	61.425 ppb	18:59:57
2	Fe 238.204 Radial†	30.2	18.0	163.81 ug/L	163.81 ppb	18:59:57
2	K 766.490 Radial†	2891.1	-5.1	-0.9457 ug/L	-0.9457 ppb	18:59:37
2	Mg 279.077 IEC†	1.6	1.2	40.721 ug/L	40.721 ppb	18:59:57
2	Na 589.592 Radial†	-827.1	271.5	82.121 ug/L	82.121 ppb	18:59:37
2	Sr 421.552†	24.3	21.6	0.1511 ug/L	0.1511 ppb	18:59:37
2	Sc 361.383	840233.2	840233.2	97.464 %		19:00:54
2	Y 371.029	683914.0	683914.0	95.705 %		19:00:54
2	Ag 328.068†	295.5	74.4	0.4069 ug/L	0.4069 ppb	19:00:54
2	As 188.979†	-23.3	10.0	4.6469 ug/L	4.6469 ppb	19:01:14
2	B 249.677†	-443.8	83.7	1.9650 ug/L	1.9650 ppb	19:01:14
2	Ba 233.527†	27.6	39.9	0.3318 ug/L	0.3318 ppb	19:01:14
2	Be 313.107†	-4312.3	-85.7	-0.0137 ug/L	-0.0137 ppb	19:00:54
2	Cd 226.502†	-189.3	17.7	0.1940 ug/L	0.1940 ppb	19:01:14
2	Co 228.616†	-66.5	5.5	0.1018 ug/L	0.1018 ppb	19:01:14
2	Cr 267.716†	114.5	50.7	0.5935 ug/L	0.5935 ppb	19:01:14
2	Cu 324.752†	5546.7	-129.7	-0.3852 ug/L	-0.3852 ppb	19:00:54
2	Mn 257.610†	1846.4	1442.5	1.6741 ug/L	1.6741 ppb	19:01:14
2	Mo 202.031†	24.8	9.9	0.7545 ug/L	0.7545 ppb	19:01:14
2	Ni 231.604†	110.9	5.8	0.1495 ug/L	0.1495 ppb	19:01:14

2	P 214.914†	238.2	16.4	10.293 ug/L	10.293 ppb	19:01:14
2	Pb 220.353†	-57.9	2.3	0.2781 ug/L	0.2781 ppb	19:01:14
2	S 181.975 Axial†	56.1	18.2	26.505 ug/L	26.505 ppb	19:01:14
2	Sb 206.836†	42.3	1.2	0.6620 ug/L	0.6620 ppb	19:01:14
2	Se 196.026†	-22.9	-1.4	-0.4247 ug/L	-0.4247 ppb	19:01:14
2	Si 251.611†	1293.5	764.8	25.574 ug/L	25.574 ppb	19:01:14
2	Sn 189.927†	93.2	87.0	16.150 ug/L	16.150 ppb	19:01:14
2	Ti 334.940†	3563.9	4959.8	8.0489 ug/L	8.0489 ppb	19:00:54
2	Tl 190.801†	-23.6	10.0	3.2647 ug/L	3.2647 ppb	19:01:14
2	U 409.014†	-2883.9	21.1	0.5914 ug/L	0.5914 ppb	19:00:54
2	V 292.402†	-1436.8	80.5	0.5644 ug/L	0.5644 ppb	19:00:54
2	Zn 213.857†	982.5	294.8	2.8836 ug/L	2.8836 ppb	19:01:14
2	SiO2†	1314.3	765.3	54.572 ug/L	54.572 ppb	19:01:50
3	Sc Radial	4904.3	4904.3	102 %		19:00:02
3	Y RADIAL	5148.3	5148.3	103.0 %		19:00:02
3	Al 396.153Radial†	-113.8	40.1	37.180 ug/L	37.180 ppb	19:00:02
3	Ca 317.933Radial†	55.3	37.5	62.145 ug/L	62.145 ppb	19:00:22
3	Fe 238.204 Radial†	30.9	18.8	171.27 ug/L	171.27 ppb	19:00:22
3	K 766.490 Radial†	2874.3	-8.5	-1.5366 ug/L	-1.5366 ppb	19:00:02
3	Mg 279.077 IEC†	0.5	0.1	1.8319 ug/L	1.8319 ppb	19:00:22
3	Na 589.592 Radial†	-907.3	189.2	57.235 ug/L	57.235 ppb	19:00:02
3	Sr 421.552†	14.7	12.3	0.0861 ug/L	0.0861 ppb	19:00:02
3	Sc 361.383	841051.3	841051.3	97.559 %		19:01:20
3	Y 371.029	685231.9	685231.9	95.890 %		19:01:20
3	Ag 328.068†	194.6	-29.3	-0.0746 ug/L	-0.0746 ppb	19:01:20
3	As 188.979†	-21.5	11.8	5.4563 ug/L	5.4563 ppb	19:01:40
3	B 249.677†	-439.9	88.2	2.0696 ug/L	2.0696 ppb	19:01:40
3	Ba 233.527†	26.7	38.9	0.3253 ug/L	0.3253 ppb	19:01:40
3	Be 313.107†	-4271.1	-39.3	0.0038 ug/L	0.0038 ppb	19:01:20
3	Cd 226.502†	-188.5	18.7	0.2045 ug/L	0.2045 ppb	19:01:40
3	Co 228.616†	-69.8	2.2	0.0290 ug/L	0.0290 ppb	19:01:40
3	Cr 267.716†	107.7	43.6	0.5140 ug/L	0.5140 ppb	19:01:40
3	Cu 324.752†	5592.9	-87.9	-0.2559 ug/L	-0.2559 ppb	19:01:20
3	Mn 257.610†	1821.6	1415.2	1.6451 ug/L	1.6451 ppb	19:01:40
3	Mo 202.031†	22.3	7.4	0.5660 ug/L	0.5660 ppb	19:01:40
3	Ni 231.604†	109.6	4.3	0.1118 ug/L	0.1118 ppb	19:01:40
3	P 214.914†	229.6	7.3	4.6043 ug/L	4.6043 ppb	19:01:40
3	Pb 220.353†	-57.1	3.1	0.3870 ug/L	0.3870 ppb	19:01:40
3	S 181.975 Axial†	48.8	10.7	15.524 ug/L	15.524 ppb	19:01:40
3	Sb 206.836†	38.2	-3.0	-0.8388 ug/L	-0.8388 ppb	19:01:40
3	Se 196.026†	-18.2	3.5	2.9143 ug/L	2.9143 ppb	19:01:40
3	Si 251.611†	1290.1	760.2	25.419 ug/L	25.419 ppb	19:01:40
3	Sn 189.927†	88.8	82.4	15.296 ug/L	15.296 ppb	19:01:40
3	Ti 334.940†	3620.9	5014.7	8.1429 ug/L	8.1429 ppb	19:01:20
3	Tl 190.801†	-23.1	10.5	3.4452 ug/L	3.4452 ppb	19:01:40
3	U 409.014†	-3009.7	-104.9	-3.0629 ug/L	-3.0629 ppb	19:01:20
3	V 292.402†	-1387.8	132.1	0.9275 ug/L	0.9275 ppb	19:01:20
3	Zn 213.857†	965.3	276.2	2.6991 ug/L	2.6991 ppb	19:01:40
3	SiO2†	1297.4	746.7	53.251 ug/L	53.251 ppb	19:01:55

Mean Data: 1202024813|945421|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	845213.4	98.042 %		0.9196			0.94%
Sc Radial	4916.8	102 %		0.2			0.23%
Y 371.029	688508.2	96.348 %		0.9583			0.99%
Y RADIAL	5143.1	102.8 %		0.47			0.46%
Ag 328.068†	8.3	0.0971 ug/L		0.26888	0.0971 ppb	0.26888	277.03%
Al 396.153Radial†	44.6	41.379 ug/L		6.3847	41.379 ppb	6.3847	15.43%
As 188.979†	10.2	4.7412 ug/L		0.67290	4.7412 ppb	0.67290	14.19%
B 249.677†	84.8	1.9918 ug/L		0.06841	1.9918 ppb	0.06841	3.43%
Ba 233.527†	42.6	0.3549 ug/L		0.04587	0.3549 ppb	0.04587	12.92%
Be 313.107†	-35.9	0.0051 ug/L		0.01946	0.0051 ppb	0.01946	380.18%
Ca 317.933Radial†	38.1	63.133 ug/L		2.3623	63.133 ppb	2.3623	3.74%
Cd 226.502†	12.9	0.1363 ug/L		0.10923	0.1363 ppb	0.10923	80.17%
Co 228.616†	2.2	0.0308 ug/L		0.07020	0.0308 ppb	0.07020	228.07%
Cr 267.716†	44.9	0.5266 ug/L		0.06154	0.5266 ppb	0.06154	11.69%
Cu 324.752†	-143.7	-0.4272 ug/L		0.19567	-0.4272 ppb	0.19567	45.80%
Fe 238.204 Radial†	18.0	163.87 ug/L		7.376	163.87 ppb	7.376	4.50%
K 766.490 Radial†	-44.1	-7.8279 ug/L		11.41245	-7.8279 ppb	11.41245	145.79%

Mg 279.077 IEC†	1.6	56.276 ug/L	63.6629	56.276 ppb	63.6629	113.13%
Mn 257.610†	1416.0	1.6430 ug/L	0.03223	1.6430 ppb	0.03223	1.96%
Mo 202.031†	9.2	0.7015 ug/L	0.11832	0.7015 ppb	0.11832	16.87%
Na 589.592 Radial†	237.3	71.780 ug/L	12.9641	71.780 ppb	12.9641	18.06%
Ni 231.604†	8.1	0.2095 ug/L	0.13777	0.2095 ppb	0.13777	65.77%
P 214.914†	6.0	3.8339 ug/L	6.87648	3.8339 ppb	6.87648	179.36%
Pb 220.353†	6.8	0.8435 ug/L	0.88671	0.8435 ppb	0.88671	105.12%
S 181.975 Axial†	13.5	19.615 ug/L	6.0021	19.615 ppb	6.0021	30.60%
Sb 206.836†	-3.6	-1.0209 ug/L	1.78087	-1.0209 ppb	1.78087	174.45%
Se 196.026†	2.0	1.8835 ug/L	2.00275	1.8835 ppb	2.00275	106.33%
Si 251.611†	754.3	25.221 ug/L	0.4840	25.221 ppb	0.4840	1.92%
Sn 189.927†	84.2	15.637 ug/L	0.4529	15.637 ppb	0.4529	2.90%
Sr 421.552†	25.0	0.1749 ug/L	0.10280	0.1749 ppb	0.10280	58.77%
Ti 334.940†	5018.4	8.1434 ug/L	0.09465	8.1434 ppb	0.09465	1.16%
Tl 190.801†	4.8	1.6108 ug/L	3.02237	1.6108 ppb	3.02237	187.63%
U 409.014†	-11.7	-0.3583 ug/L	2.37668	-0.3583 ppb	2.37668	663.38%
V 292.402†	104.4	0.7358 ug/L	0.18241	0.7358 ppb	0.18241	24.79%
Zn 213.857†	280.4	2.7410 ug/L	0.12692	2.7410 ppb	0.12692	4.63%
SiO2†	762.8	54.391 ug/L	1.0610	54.391 ppb	1.0610	1.95%

Sequence No.: 24

Sample ID: 1202024814|945421|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 55

Date Collected: 2/11/2010 19:04:06

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202024814|945421|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5106.3	5106.3	106 %		19:06:19
1	Y RADIAL	5861.0	5861.0	117.2 %		19:06:19
1	Al 396.153Radial†	94727.2	89324.8	82882 ug/L	82882 ppb	19:05:59
1	Ca 317.933Radial†	60787.8	57207.1	94817 ug/L	94817 ppb	19:05:59
1	Fe 238.204 Radial†	20788.4	19558.0	177980 ug/L	177980 ppb	19:05:59
1	K 766.490 Radial†	234160.8	217606.2	38374 ug/L	38374 ppb	19:05:59
1	Mg 279.077 IEC†	1080.9	1017.1	35868 ug/L	35868 ppb	19:06:19
1	Na 589.592 Radial†	31661.8	30884.0	9340.8 ug/L	9340.8 ppb	19:05:59
1	Sr 421.552†	338813.4	318946.5	2236.1 ug/L	2236.1 ppb	19:05:59
1	Sc 361.383	879148.3	879148.3	101.98 %		19:07:20
1	Y 371.029	780314.9	780314.9	109.20 %		19:07:20
1	Ag 328.068†	53180.4	51920.0	308.28 ug/L	308.28 ppb	19:07:20
1	As 188.979†	2091.8	2085.0	1034.4 ug/L	1034.4 ppb	19:07:25
1	B 249.677†	60049.4	59423.6	1382.3 ug/L	1382.3 ppb	19:07:20
1	Ba 233.527†	229743.2	225298.2	1847.9 ug/L	1847.9 ppb	19:07:20
1	Be 313.107†	2000314.7	1965850.9	744.72 ug/L	744.72 ppb	19:07:20
1	Cd 226.502†	46915.8	46217.6	531.83 ug/L	531.83 ppb	19:07:25
1	Co 228.616†	41147.4	40422.9	869.83 ug/L	869.83 ppb	19:07:25
1	Cr 267.716†	190091.6	186337.4	2174.5 ug/L	2174.5 ppb	19:07:20
1	Cu 324.752†	588752.9	571511.4	1743.2 ug/L	1743.2 ppb	19:07:20
1	Mn 257.610†	4593733.3	4504171.3	5198.2 ug/L	5198.2 ppb	19:07:20
1	Mo 202.031†	6136.1	6001.6	464.39 ug/L	464.39 ppb	19:07:25
1	Ni 231.604†	47159.1	46136.3	1194.7 ug/L	1194.7 ppb	19:07:25
1	P 214.914†	13566.1	13074.9	7678.4 ug/L	7678.4 ppb	19:07:25
1	Pb 220.353†	6312.6	6251.9	782.53 ug/L	782.53 ppb	19:07:25
1	S 181.975 Axial†	2587.9	2498.4	3627.7 ug/L	3627.7 ppb	19:07:25
1	Sb 206.836†	3969.4	3850.3	1348.2 ug/L	1348.2 ppb	19:07:25
1	Se 196.026†	3270.1	3228.8	2752.8 ug/L	2752.8 ppb	19:07:25
1	Si 251.611†	816819.3	800412.2	26767 ug/L	26767 ppb	19:07:20
1	Sn 189.927†	5331.2	5219.1	985.95 ug/L	985.95 ppb	19:07:25
1	Ti 334.940†	3463187.7	3397311.3	5519.3 ug/L	5519.3 ppb	19:07:20
1	Tl 190.801†	3428.3	3396.0	1152.7 ug/L	1152.7 ppb	19:07:25
1	U 409.014†	-8343.5	-5201.6	-175.97 ug/L	-175.97 ppb	19:07:20
1	V 292.402†	162971.8	161365.1	1146.1 ug/L	1146.1 ppb	19:07:20
1	Zn 213.857†	569855.7	558088.2	5469.2 ug/L	5469.2 ppb	19:07:20
1	SiO2†	821409.6	804892.7	57402 ug/L	57402 ppb	19:08:00
2	Sc Radial	5004.8	5004.8	104 %		19:06:44
2	Y RADIAL	5771.8	5771.8	115.4 %		19:06:44
2	Al 396.153Radial†	94379.4	90798.6	84249 ug/L	84249 ppb	19:06:24
2	Ca 317.933Radial†	60299.0	57897.6	95961 ug/L	95961 ppb	19:06:24
2	Fe 238.204 Radial†	20584.5	19759.0	179810 ug/L	179810 ppb	19:06:24
2	K 766.490 Radial†	232342.7	220328.6	38854 ug/L	38854 ppb	19:06:24
2	Mg 279.077 IEC†	1076.3	1033.3	36439 ug/L	36439 ppb	19:06:44
2	Na 589.592 Radial†	31199.1	31043.8	9389.2 ug/L	9389.2 ppb	19:06:24
2	Sr 421.552†	336445.1	323137.7	2265.5 ug/L	2265.5 ppb	19:06:24
2	Sc 361.383	878761.3	878761.3	101.93 %		19:07:34
2	Y 371.029	780101.2	780101.2	109.17 %		19:07:34
2	Ag 328.068†	53223.0	51984.8	309.20 ug/L	309.20 ppb	19:07:34
2	As 188.979†	2129.2	2122.7	1052.0 ug/L	1052.0 ppb	19:07:39
2	B 249.677†	60605.8	59995.4	1395.5 ug/L	1395.5 ppb	19:07:34
2	Ba 233.527†	230330.8	225973.8	1853.5 ug/L	1853.5 ppb	19:07:34
2	Be 313.107†	2004404.4	1970726.8	746.58 ug/L	746.58 ppb	19:07:34
2	Cd 226.502†	47333.9	46648.1	536.77 ug/L	536.77 ppb	19:07:39
2	Co 228.616†	41648.7	40932.5	880.91 ug/L	880.91 ppb	19:07:39
2	Cr 267.716†	190552.9	186872.1	2180.8 ug/L	2180.8 ppb	19:07:34
2	Cu 324.752†	590799.1	573773.1	1750.1 ug/L	1750.1 ppb	19:07:34
2	Mn 257.610†	4602539.8	4514794.3	5210.6 ug/L	5210.6 ppb	19:07:34
2	Mo 202.031†	6223.6	6090.0	471.16 ug/L	471.16 ppb	19:07:39
2	Ni 231.604†	47714.9	46701.9	1209.4 ug/L	1209.4 ppb	19:07:39

2	P 214.914†	13788.2	13298.6	7815.2 ug/L	7815.2 ppb	19:07:39
2	Pb 220.353†	6318.6	6260.5	783.75 ug/L	783.75 ppb	19:07:39
2	S 181.975 Axial†	2620.4	2531.3	3675.4 ug/L	3675.4 ppb	19:07:39
2	Sb 206.836†	4073.0	3953.6	1384.3 ug/L	1384.3 ppb	19:07:39
2	Se 196.026†	3339.1	3297.9	2805.4 ug/L	2805.4 ppb	19:07:39
2	Si 251.611†	818641.2	802552.2	26839 ug/L	26839 ppb	19:07:34
2	Sn 189.927†	5349.2	5239.1	989.85 ug/L	989.85 ppb	19:07:39
2	Ti 334.940†	3472922.6	3408357.0	5537.4 ug/L	5537.4 ppb	19:07:34
2	Tl 190.801†	3451.6	3420.3	1160.6 ug/L	1160.6 ppb	19:07:39
2	U 409.014†	-8266.9	-5130.0	-174.12 ug/L	-174.12 ppb	19:07:34
2	V 292.402†	163396.8	161852.4	1149.4 ug/L	1149.4 ppb	19:07:34
2	Zn 213.857†	571249.5	559701.7	5484.8 ug/L	5484.8 ppb	19:07:34
2	SiO2†	808430.9	792514.7	56519 ug/L	56519 ppb	19:08:06
3	Sc Radial	5109.2	5109.2	106 %		19:07:09
3	Y RADIAL	5900.1	5900.1	118.0 %		19:07:09
3	Al 396.153Radial†	96480.6	90924.3	84366 ug/L	84366 ppb	19:06:49
3	Ca 317.933Radial†	61727.5	58059.0	96229 ug/L	96229 ppb	19:06:49
3	Fe 238.204 Radial†	21051.4	19794.5	180130 ug/L	180130 ppb	19:06:49
3	K 766.490 Radial†	237929.9	221028.0	38977 ug/L	38977 ppb	19:06:49
3	Mg 279.077 IEC†	1086.1	1021.4	36017 ug/L	36017 ppb	19:07:09
3	Na 589.592 Radial†	32023.2	31207.2	9438.6 ug/L	9438.6 ppb	19:06:49
3	Sr 421.552†	344368.2	323992.9	2271.5 ug/L	2271.5 ppb	19:06:49
3	Sc 361.383	877987.2	877987.2	101.84 %		19:07:49
3	Y 371.029	779243.1	779243.1	109.05 %		19:07:49
3	Ag 328.068†	53108.1	51918.0	308.98 ug/L	308.98 ppb	19:07:49
3	As 188.979†	2106.9	2102.6	1042.8 ug/L	1042.8 ppb	19:07:54
3	B 249.677†	60239.4	59688.0	1388.2 ug/L	1388.2 ppb	19:07:49
3	Ba 233.527†	228944.1	224811.5	1844.0 ug/L	1844.0 ppb	19:07:49
3	Be 313.107†	1994605.0	1962838.5	743.59 ug/L	743.59 ppb	19:07:49
3	Cd 226.502†	47324.2	46679.5	537.11 ug/L	537.11 ppb	19:07:54
3	Co 228.616†	41769.4	41087.0	884.33 ug/L	884.33 ppb	19:07:54
3	Cr 267.716†	189495.7	185998.8	2170.6 ug/L	2170.6 ppb	19:07:49
3	Cu 324.752†	588961.4	572479.6	1746.2 ug/L	1746.2 ppb	19:07:49
3	Mn 257.610†	4578291.5	4494965.9	5187.9 ug/L	5187.9 ppb	19:07:49
3	Mo 202.031†	6241.9	6113.4	472.95 ug/L	472.95 ppb	19:07:54
3	Ni 231.604†	47882.3	46907.5	1214.7 ug/L	1214.7 ppb	19:07:54
3	P 214.914†	13784.7	13307.1	7821.1 ug/L	7821.1 ppb	19:07:54
3	Pb 220.353†	6326.6	6273.8	785.42 ug/L	785.42 ppb	19:07:54
3	S 181.975 Axial†	2647.5	2560.3	3717.6 ug/L	3717.6 ppb	19:07:54
3	Sb 206.836†	4051.6	3936.1	1378.4 ug/L	1378.4 ppb	19:07:54
3	Se 196.026†	3363.4	3324.7	2824.5 ug/L	2824.5 ppb	19:07:54
3	Si 251.611†	814399.6	799095.5	26723 ug/L	26723 ppb	19:07:49
3	Sn 189.927†	5389.7	5283.5	998.14 ug/L	998.14 ppb	19:07:54
3	Ti 334.940†	3456013.0	3394757.4	5515.4 ug/L	5515.4 ppb	19:07:49
3	Tl 190.801†	3493.9	3464.8	1174.6 ug/L	1174.6 ppb	19:07:54
3	U 409.014†	-8338.1	-5207.1	-176.36 ug/L	-176.36 ppb	19:07:49
3	V 292.402†	162741.2	161350.0	1145.8 ug/L	1145.8 ppb	19:07:49
3	Zn 213.857†	567948.3	556954.4	5457.6 ug/L	5457.6 ppb	19:07:49
3	SiO2†	806250.2	791072.8	56416 ug/L	56416 ppb	19:08:12

Mean Data: 1202024814|945421|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	878632.3	101.92 %		0.069			0.07%
Sc Radial	5073.4	106 %		1.2			1.17%
Y 371.029	779886.4	109.14 %		0.079			0.07%
Y RADIAL	5844.3	116.9 %		1.32			1.13%
Ag 328.068†	51940.9	308.82 ug/L		0.480	308.82 ppb	0.480	0.16%
Al 396.153Radial†	90349.3	83832 ug/L		825.2	83832 ppb	825.2	0.98%
As 188.979†	2103.5	1043.1 ug/L		8.83	1043.1 ppb	8.83	0.85%
B 249.677†	59702.3	1388.7 ug/L		6.65	1388.7 ppb	6.65	0.48%
Ba 233.527†	225361.2	1848.5 ug/L		4.77	1848.5 ppb	4.77	0.26%
Be 313.107†	1966472.1	744.97 ug/L		1.509	744.97 ppb	1.509	0.20%
Ca 317.933Radial†	57721.2	95669 ug/L		750.0	95669 ppb	750.0	0.78%
Cd 226.502†	46515.1	535.24 ug/L		2.956	535.24 ppb	2.956	0.55%
Co 228.616†	40814.1	878.36 ug/L		7.582	878.36 ppb	7.582	0.86%
Cr 267.716†	186402.8	2175.3 ug/L		5.13	2175.3 ppb	5.13	0.24%
Cu 324.752†	572588.0	1746.5 ug/L		3.49	1746.5 ppb	3.49	0.20%
Fe 238.204 Radial†	19703.8	179300 ug/L		1160.2	179300 ppb	1160.2	0.65%
K 766.490 Radial†	219654.3	38735 ug/L		318.8	38735 ppb	318.8	0.82%

Mg 279.077 IEC†	1023.9	36108 ug/L	296.0	36108 ppb	296.0	0.82%
Mn 257.610†	4504643.9	5198.9 ug/L	11.40	5198.9 ppb	11.40	0.22%
Mo 202.031†	6068.3	469.50 ug/L	4.516	469.50 ppb	4.516	0.96%
Na 589.592 Radial†	31045.0	9389.5 ug/L	48.89	9389.5 ppb	48.89	0.52%
Ni 231.604†	46581.9	1206.3 ug/L	10.34	1206.3 ppb	10.34	0.86%
P 214.914†	13226.8	7771.6 ug/L	80.71	7771.6 ppb	80.71	1.04%
Pb 220.353†	6262.1	783.90 ug/L	1.451	783.90 ppb	1.451	0.19%
S 181.975 Axial†	2530.0	3673.6 ug/L	45.00	3673.6 ppb	45.00	1.22%
Sb 206.836†	3913.3	1370.3 ug/L	19.38	1370.3 ppb	19.38	1.41%
Se 196.026†	3283.8	2794.2 ug/L	37.09	2794.2 ppb	37.09	1.33%
Si 251.611†	800686.6	26776 ug/L	58.4	26776 ppb	58.4	0.22%
Sn 189.927†	5247.2	991.31 ug/L	6.228	991.31 ppb	6.228	0.63%
Sr 421.552†	322025.7	2257.7 ug/L	18.93	2257.7 ppb	18.93	0.84%
Ti 334.940†	3400141.9	5524.0 ug/L	11.72	5524.0 ppb	11.72	0.21%
Tl 190.801†	3427.0	1162.6 ug/L	11.10	1162.6 ppb	11.10	0.95%
U 409.014†	-5179.6	-175.48 ug/L	1.200	-175.48 ppb	1.200	0.68%
V 292.402†	161522.5	1147.1 ug/L	2.03	1147.1 ppb	2.03	0.18%
Zn 213.857†	558248.1	5470.5 ug/L	13.64	5470.5 ppb	13.64	0.25%
SiO2†	796160.1	56779 ug/L	542.0	56779 ppb	542.0	0.95%

Sequence No.: 25

Sample ID: 245394001|945421|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 56

Date Collected: 2/11/2010 19:10:23

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245394001|945421|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5193.0	5193.0	108 %		19:12:16
1	Y RADIAL	5845.8	5845.8	116.9 %		19:12:16
1	Al 396.153Radial†	63902.4	59303.3	55040 ug/L	55040 ppb	19:12:16
1	Ca 317.933Radial†	8804.0	8132.8	13480 ug/L	13480 ppb	19:12:16
1	Fe 238.204 Radial†	8915.4	8241.1	74983 ug/L	74983 ppb	19:12:16
1	K 766.490 Radial†	42545.3	36556.7	6447.8 ug/L	6447.8 ppb	19:12:16
1	Mg 279.077 IEC†	299.2	276.6	9723.1 ug/L	9723.1 ppb	19:12:36
1	Na 589.592 Radial†	524.4	1563.9	473.01 ug/L	473.01 ppb	19:12:16
1	Sr 421.552†	16595.7	15359.8	107.62 ug/L	107.62 ppb	19:12:16
1	Sc 361.383	878401.5	878401.5	101.89 %		19:13:34
1	Y 371.029	761361.4	761361.4	106.54 %		19:13:34
1	Ag 328.068†	-4618.2	-4761.3	3.1083 ug/L	3.1083 ppb	19:13:34
1	As 188.979†	-9.9	24.2	39.797 ug/L	39.797 ppb	19:13:54
1	B 249.677†	700.1	1226.1	16.922 ug/L	16.922 ppb	19:13:34
1	Ba 233.527†	82786.6	81261.3	666.24 ug/L	666.24 ppb	19:13:34
1	Be 313.107†	24531.7	28414.9	13.536 ug/L	13.536 ppb	19:13:34
1	Cd 226.502†	478.1	681.1	0.4260 ug/L	0.4260 ppb	19:13:54
1	Co 228.616†	1066.6	1120.5	20.959 ug/L	20.959 ppb	19:13:54
1	Cr 267.716†	4460.5	4310.9	51.765 ug/L	51.765 ppb	19:13:54
1	Cu 324.752†	384346.5	371390.6	1130.5 ug/L	1130.5 ppb	19:13:34
1	Mn 257.610†	1172341.4	1150125.5	1330.2 ug/L	1330.2 ppb	19:13:34
1	Mo 202.031†	-21.2	-36.3	3.2619 ug/L	3.2619 ppb	19:13:54
1	Ni 231.604†	1972.7	1828.1	47.346 ug/L	47.346 ppb	19:13:54
1	P 214.914†	1546.6	1289.8	532.18 ug/L	532.18 ppb	19:13:54
1	Pb 220.353†	3891.7	3881.1	488.35 ug/L	488.35 ppb	19:13:54
1	S 181.975 Axial†	185.8	143.0	198.20 ug/L	198.20 ppb	19:13:54
1	Sb 206.836†	68.4	25.0	2.4211 ug/L	2.4211 ppb	19:13:54
1	Se 196.026†	-387.6	-358.3	1.9915 ug/L	1.9915 ppb	19:13:54
1	Si 251.611†	799470.2	784066.2	26226 ug/L	26226 ppb	19:13:34
1	Sn 189.927†	-14.3	-22.7	-0.8993 ug/L	-0.8993 ppb	19:13:54
1	Ti 334.940†	815558.1	801720.8	1301.2 ug/L	1301.2 ppb	19:13:34
1	Tl 190.801†	-91.6	-55.7	-1.1192 ug/L	-1.1192 ppb	19:13:54
1	U 409.014†	4753.0	7644.9	213.01 ug/L	213.01 ppb	19:13:34
1	V 292.402†	19009.0	20210.7	135.03 ug/L	135.03 ppb	19:13:34
1	Zn 213.857†	27774.9	26546.0	248.84 ug/L	248.84 ppb	19:13:34
1	SiO2†	794656.8	779321.3	55591 ug/L	55591 ppb	19:14:52
2	Sc Radial	4978.0	4978.0	104 %		19:12:41
2	Y RADIAL	5566.5	5566.5	111.3 %		19:12:41
2	Al 396.153Radial†	62856.8	60848.2	56474 ug/L	56474 ppb	19:12:41
2	Ca 317.933Radial†	8708.2	8392.3	13910 ug/L	13910 ppb	19:12:41
2	Fe 238.204 Radial†	8836.4	8521.2	77532 ug/L	77532 ppb	19:12:41
2	K 766.490 Radial†	41963.1	37695.3	6648.6 ug/L	6648.6 ppb	19:12:41
2	Mg 279.077 IEC†	296.1	285.5	10038 ug/L	10038 ppb	19:13:01
2	Na 589.592 Radial†	502.0	1563.0	472.82 ug/L	472.82 ppb	19:12:41
2	Sr 421.552†	16374.9	15810.3	110.77 ug/L	110.77 ppb	19:12:41
2	Sc 361.383	874448.3	874448.3	101.43 %		19:13:59
2	Y 371.029	758432.9	758432.9	106.13 %		19:13:59
2	Ag 328.068†	-4517.7	-4682.7	4.3389 ug/L	4.3389 ppb	19:13:59
2	As 188.979†	-7.1	26.9	41.631 ug/L	41.631 ppb	19:14:20
2	B 249.677†	797.5	1325.3	18.867 ug/L	18.867 ppb	19:13:59
2	Ba 233.527†	82502.7	81348.7	667.04 ug/L	667.04 ppb	19:13:59
2	Be 313.107†	24439.2	28432.6	13.542 ug/L	13.542 ppb	19:13:59
2	Cd 226.502†	446.6	652.1	-0.1824 ug/L	-0.1824 ppb	19:14:20
2	Co 228.616†	1078.7	1137.2	21.286 ug/L	21.286 ppb	19:14:20
2	Cr 267.716†	4413.0	4283.9	51.501 ug/L	51.501 ppb	19:14:20
2	Cu 324.752†	381336.3	370128.2	1126.8 ug/L	1126.8 ppb	19:13:59
2	Mn 257.610†	1169407.7	1152434.8	1333.1 ug/L	1333.1 ppb	19:13:59
2	Mo 202.031†	-25.4	-40.6	3.1427 ug/L	3.1427 ppb	19:14:20
2	Ni 231.604†	1961.0	1825.3	47.272 ug/L	47.272 ppb	19:14:20

2	P 214.914†	1541.3	1291.4	532.23 ug/L	532.23 ppb	19:14:20
2	Pb 220.353†	3864.9	3872.0	487.28 ug/L	487.28 ppb	19:14:20
2	S 181.975 Axial†	172.2	130.4	179.55 ug/L	179.55 ppb	19:14:20
2	Sb 206.836†	67.8	24.7	2.2833 ug/L	2.2833 ppb	19:14:20
2	Se 196.026†	-389.9	-362.2	7.6190 ug/L	7.6190 ppb	19:14:20
2	Si 251.611†	795867.3	784061.2	26226 ug/L	26226 ppb	19:13:59
2	Sn 189.927†	-8.6	-17.2	0.2339 ug/L	0.2339 ppb	19:14:20
2	Ti 334.940†	811844.9	801678.6	1301.2 ug/L	1301.2 ppb	19:13:59
2	Tl 190.801†	-88.8	-53.4	-0.3636 ug/L	-0.3636 ppb	19:14:20
2	U 409.014†	4626.1	7540.8	209.71 ug/L	209.71 ppb	19:13:59
2	V 292.402†	19038.7	20324.4	135.48 ug/L	135.48 ppb	19:13:59
2	Zn 213.857†	27660.9	26556.9	248.57 ug/L	248.57 ppb	19:13:59
2	SiO2†	790495.2	778744.2	55549 ug/L	55549 ppb	19:14:58
3	Sc Radial	5033.3	5033.3	105 %		19:13:06
3	Y RADIAL	5647.3	5647.3	112.9 %		19:13:06
3	Al 396.153Radial†	63645.5	60933.9	56554 ug/L	56554 ppb	19:13:06
3	Ca 317.933Radial†	8818.4	8405.0	13931 ug/L	13931 ppb	19:13:06
3	Fe 238.204 Radial†	8903.7	8491.6	77263 ug/L	77263 ppb	19:13:06
3	K 766.490 Radial†	42332.0	37602.0	6632.1 ug/L	6632.1 ppb	19:13:06
3	Mg 279.077 IEC†	300.0	286.1	10060 ug/L	10060 ppb	19:13:26
3	Na 589.592 Radial†	519.8	1574.9	476.34 ug/L	476.34 ppb	19:13:06
3	Sr 421.552†	16601.8	15852.8	111.07 ug/L	111.07 ppb	19:13:06
3	Sc 361.383	869373.1	869373.1	100.84 %		19:14:25
3	Y 371.029	753456.9	753456.9	105.44 %		19:14:25
3	Ag 328.068†	-4572.1	-4762.6	3.8693 ug/L	3.8693 ppb	19:14:25
3	As 188.979†	-13.2	20.8	38.828 ug/L	38.828 ppb	19:14:45
3	B 249.677†	696.3	1229.5	16.632 ug/L	16.632 ppb	19:14:25
3	Ba 233.527†	82181.7	81505.3	668.31 ug/L	668.31 ppb	19:14:25
3	Be 313.107†	24223.6	28359.5	13.520 ug/L	13.520 ppb	19:14:25
3	Cd 226.502†	461.0	669.0	0.0465 ug/L	0.0465 ppb	19:14:45
3	Co 228.616†	1075.1	1139.8	21.345 ug/L	21.345 ppb	19:14:45
3	Cr 267.716†	4435.5	4331.6	52.051 ug/L	52.051 ppb	19:14:45
3	Cu 324.752†	379966.0	370964.1	1129.3 ug/L	1129.3 ppb	19:14:25
3	Mn 257.610†	1164160.0	1153961.3	1334.9 ug/L	1334.9 ppb	19:14:25
3	Mo 202.031†	-22.2	-37.5	3.3545 ug/L	3.3545 ppb	19:14:45
3	Ni 231.604†	1967.7	1843.2	47.737 ug/L	47.737 ppb	19:14:45
3	P 214.914†	1538.9	1297.9	535.99 ug/L	535.99 ppb	19:14:45
3	Pb 220.353†	3914.5	3943.4	496.24 ug/L	496.24 ppb	19:14:45
3	S 181.975 Axial†	171.0	130.2	179.25 ug/L	179.25 ppb	19:14:45
3	Sb 206.836†	63.3	20.6	0.8220 ug/L	0.8220 ppb	19:14:45
3	Se 196.026†	-382.1	-356.8	10.407 ug/L	10.407 ppb	19:14:45
3	Si 251.611†	792756.3	785556.7	26276 ug/L	26276 ppb	19:14:25
3	Sn 189.927†	-17.5	-26.0	-1.4117 ug/L	-1.4117 ppb	19:14:45
3	Ti 334.940†	808410.9	802945.8	1303.3 ug/L	1303.3 ppb	19:14:25
3	Tl 190.801†	-100.4	-65.3	-4.1649 ug/L	-4.1649 ppb	19:14:45
3	U 409.014†	4645.2	7586.4	211.06 ug/L	211.06 ppb	19:14:25
3	V 292.402†	18903.5	20299.9	135.35 ug/L	135.35 ppb	19:14:25
3	Zn 213.857†	27611.7	26667.3	249.70 ug/L	249.70 ppb	19:14:25
3	SiO2†	801368.7	794076.2	56643 ug/L	56643 ppb	19:15:04

Mean Data: 245394001|945421|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	874074.3	101.39 %	0.525			0.52%
Sc Radial	5068.1	105 %	2.3			2.20%
Y 371.029	757750.4	106.04 %	0.559			0.53%
Y RADIAL	5686.5	113.7 %	2.87			2.53%
Ag 328.068†	-4735.5	3.7722 ug/L	0.62106	3.7722 ppb	0.62106	16.46%
Al 396.153Radial†	60361.8	56023 ug/L	851.7	56023 ppb	851.7	1.52%
As 188.979†	23.9	40.085 ug/L	1.4238	40.085 ppb	1.4238	3.55%
B 249.677†	1260.3	17.474 ug/L	1.2154	17.474 ppb	1.2154	6.96%
Ba 233.527†	81371.8	667.19 ug/L	1.041	667.19 ppb	1.041	0.16%
Be 313.107†	28402.4	13.533 ug/L	0.0116	13.533 ppb	0.0116	0.09%
Ca 317.933Radial†	8310.0	13773 ug/L	254.6	13773 ppb	254.6	1.85%
Cd 226.502†	667.4	0.0967 ug/L	0.30731	0.0967 ppb	0.30731	317.73%
Co 228.616†	1132.5	21.197 ug/L	0.2077	21.197 ppb	0.2077	0.98%
Cr 267.716†	4308.8	51.772 ug/L	0.2748	51.772 ppb	0.2748	0.53%
Cu 324.752†	370827.6	1128.8 ug/L	1.89	1128.8 ppb	1.89	0.17%
Fe 238.204 Radial†	8418.0	76593 ug/L	1400.4	76593 ppb	1400.4	1.83%
K 766.490 Radial†	37284.7	6576.2 ug/L	111.51	6576.2 ppb	111.51	1.70%

Mg 279.077 IEC†	282.7	9940.3 ug/L	188.45	9940.3 ppb	188.45	1.90%
Mn 257.610†	1152173.9	1332.8 ug/L	2.34	1332.8 ppb	2.34	0.18%
Mo 202.031†	-38.1	3.2531 ug/L	0.10617	3.2531 ppb	0.10617	3.26%
Na 589.592 Radial†	1567.4	474.05 ug/L	1.981	474.05 ppb	1.981	0.42%
Ni 231.604†	1832.2	47.452 ug/L	0.2498	47.452 ppb	0.2498	0.53%
P 214.914†	1293.1	533.46 ug/L	2.186	533.46 ppb	2.186	0.41%
Pb 220.353†	3898.8	490.62 ug/L	4.892	490.62 ppb	4.892	1.00%
S 181.975 Axial†	134.5	185.67 ug/L	10.852	185.67 ppb	10.852	5.84%
Sb 206.836†	23.4	1.8421 ug/L	0.88615	1.8421 ppb	0.88615	48.10%
Se 196.026†	-359.1	6.6724 ug/L	4.28674	6.6724 ppb	4.28674	64.25%
Si 251.611†	784561.4	26243 ug/L	28.8	26243 ppb	28.8	0.11%
Sn 189.927†	-22.0	-0.6924 ug/L	0.84209	-0.6924 ppb	0.84209	121.62%
Sr 421.552†	15674.2	109.82 ug/L	1.913	109.82 ppb	1.913	1.74%
Ti 334.940†	802115.1	1301.9 ug/L	1.18	1301.9 ppb	1.18	0.09%
Tl 190.801†	-58.1	-1.8826 ug/L	2.01233	-1.8826 ppb	2.01233	106.89%
U 409.014†	7590.7	211.26 ug/L	1.663	211.26 ppb	1.663	0.79%
V 292.402†	20278.3	135.29 ug/L	0.231	135.29 ppb	0.231	0.17%
Zn 213.857†	26590.1	249.04 ug/L	0.587	249.04 ppb	0.587	0.24%
SiO2†	784047.2	55928 ug/L	619.9	55928 ppb	619.9	1.11%

Sequence No.: 26
 Sample ID: 1202024815|945421|1
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 57
 Date Collected: 2/11/2010 19:17:14
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 1202024815|945421|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4970.3	4970.3	103 %		19:19:27
1	Y RADIAL	5467.8	5467.8	109.3 %		19:19:27
1	Al 396.153Radial†	77268.7	74880.1	69497 ug/L	69497 ppb	19:19:07
1	Ca 317.933Radial†	9966.5	9622.1	15948 ug/L	15948 ppb	19:19:07
1	Fe 238.204 Radial†	10419.0	10065.0	91578 ug/L	91578 ppb	19:19:07
1	K 766.490 Radial†	49874.3	45409.0	8009.6 ug/L	8009.6 ppb	19:19:07
1	Mg 279.077 IEC†	327.4	316.2	11112 ug/L	11112 ppb	19:19:27
1	Na 589.592 Radial†	495.5	1557.7	471.12 ug/L	471.12 ppb	19:19:07
1	Sr 421.552†	18938.6	18313.9	128.32 ug/L	128.32 ppb	19:19:07
1	Sc 361.383	854815.1	854815.1	99.156 %		19:20:24
1	Y 371.029	729934.6	729934.6	102.15 %		19:20:24
1	Ag 328.068†	-5349.6	-5623.9	4.6617 ug/L	4.6617 ppb	19:20:24
1	As 188.979†	-8.2	25.6	48.022 ug/L	48.022 ppb	19:20:44
1	B 249.677†	744.3	1289.7	15.736 ug/L	15.736 ppb	19:20:24
1	Ba 233.527†	86962.4	87714.5	719.49 ug/L	719.49 ppb	19:20:24
1	Be 313.107†	26257.4	30819.7	15.392 ug/L	15.392 ppb	19:20:24
1	Cd 226.502†	563.1	779.8	-0.1076 ug/L	-0.1076 ppb	19:20:44
1	Co 228.616†	1088.8	1171.8	20.971 ug/L	20.971 ppb	19:20:44
1	Cr 267.716†	5308.2	5286.6	63.459 ug/L	63.459 ppb	19:20:44
1	Cu 324.752†	134990.7	130319.5	400.03 ug/L	400.03 ppb	19:20:24
1	Mn 257.610†	1004668.7	1012772.2	1173.8 ug/L	1173.8 ppb	19:20:24
1	Mo 202.031†	-35.6	-51.4	3.4486 ug/L	3.4486 ppb	19:20:44
1	Ni 231.604†	1934.1	1842.6	47.720 ug/L	47.720 ppb	19:20:44
1	P 214.914†	1259.6	1042.3	513.55 ug/L	513.55 ppb	19:20:44
1	Pb 220.353†	4152.5	4249.5	536.28 ug/L	536.28 ppb	19:20:44
1	S 181.975 Axial†	194.5	156.8	215.67 ug/L	215.67 ppb	19:20:44
1	Sb 206.836†	64.8	23.3	-0.1971 ug/L	-0.1971 ppb	19:20:44
1	Se 196.026†	-466.6	-448.5	-4.8139 ug/L	-4.8139 ppb	19:20:44
1	Si 251.611†	777757.7	783818.5	26218 ug/L	26218 ppb	19:20:24
1	Sn 189.927†	-39.9	-48.9	-5.1150 ug/L	-5.1150 ppb	19:20:44
1	Ti 334.940†	1052435.6	1062701.0	1724.7 ug/L	1724.7 ppb	19:20:24
1	Tl 190.801†	-110.0	-76.7	-5.1482 ug/L	-5.1482 ppb	19:20:44
1	U 409.014†	5842.8	8872.6	246.70 ug/L	246.70 ppb	19:20:24
1	V 292.402†	21152.9	22887.7	151.68 ug/L	151.68 ppb	19:20:24
1	Zn 213.857†	27763.6	27286.8	254.65 ug/L	254.65 ppb	19:20:24
1	SiO2†	801652.4	807895.9	57629 ug/L	57629 ppb	19:21:42
2	Sc Radial	5054.0	5054.0	105 %		19:19:52
2	Y RADIAL	5543.3	5543.3	110.9 %		19:19:52
2	Al 396.153Radial†	74941.7	71428.6	66294 ug/L	66294 ppb	19:19:32
2	Ca 317.933Radial†	9681.7	9191.6	15234 ug/L	15234 ppb	19:19:32
2	Fe 238.204 Radial†	10201.4	9691.1	88176 ug/L	88176 ppb	19:19:32
2	K 766.490 Radial†	48750.6	43541.0	7680.1 ug/L	7680.1 ppb	19:19:32
2	Mg 279.077 IEC†	329.0	312.5	10984 ug/L	10984 ppb	19:19:52
2	Na 589.592 Radial†	419.4	1477.4	446.85 ug/L	446.85 ppb	19:19:32
2	Sr 421.552†	18452.3	17547.9	122.95 ug/L	122.95 ppb	19:19:32
2	Sc 361.383	864225.1	864225.1	100.25 %		19:20:50
2	Y 371.029	738149.8	738149.8	103.30 %		19:20:50
2	Ag 328.068†	-5395.2	-5610.7	3.5838 ug/L	3.5838 ppb	19:20:50
2	As 188.979†	-23.3	10.7	40.443 ug/L	40.443 ppb	19:21:10
2	B 249.677†	753.9	1291.1	16.322 ug/L	16.322 ppb	19:20:50
2	Ba 233.527†	87870.9	87665.9	718.99 ug/L	718.99 ppb	19:20:50
2	Be 313.107†	26453.2	30726.7	15.361 ug/L	15.361 ppb	19:20:50
2	Cd 226.502†	586.2	796.6	0.4445 ug/L	0.4445 ppb	19:21:10
2	Co 228.616†	1098.5	1169.5	20.966 ug/L	20.966 ppb	19:21:10
2	Cr 267.716†	5318.1	5238.2	62.829 ug/L	62.829 ppb	19:21:10
2	Cu 324.752†	136576.9	130419.4	400.15 ug/L	400.15 ppb	19:20:50
2	Mn 257.610†	1014831.9	1011878.0	1172.4 ug/L	1172.4 ppb	19:20:50
2	Mo 202.031†	-36.2	-51.7	3.1559 ug/L	3.1559 ppb	19:21:10
2	Ni 231.604†	1965.0	1852.2	47.969 ug/L	47.969 ppb	19:21:10

2	P 214.914†	1263.0	1031.8	508.92 ug/L	508.92 ppb	19:21:10
2	Pb 220.353†	4174.8	4226.2	532.99 ug/L	532.99 ppb	19:21:10
2	S 181.975 Axial†	185.5	145.7	200.05 ug/L	200.05 ppb	19:21:10
2	Sb 206.836†	60.7	18.4	-1.7928 ug/L	-1.7928 ppb	19:21:10
2	Se 196.026†	-450.2	-427.0	-1.4039 ug/L	-1.4039 ppb	19:21:10
2	Si 251.611†	786798.8	784296.7	26234 ug/L	26234 ppb	19:20:50
2	Sn 189.927†	-46.8	-55.3	-6.4703 ug/L	-6.4703 ppb	19:21:10
2	Ti 334.940†	1064987.9	1063665.4	1726.2 ug/L	1726.2 ppb	19:20:50
2	Tl 190.801†	-110.6	-76.2	-4.9516 ug/L	-4.9516 ppb	19:21:10
2	U 409.014†	6067.4	9032.5	251.72 ug/L	251.72 ppb	19:20:50
2	V 292.402†	21467.4	22969.1	152.77 ug/L	152.77 ppb	19:20:50
2	Zn 213.857†	27997.9	27215.6	254.46 ug/L	254.46 ppb	19:20:50
2	SiO2†	791355.7	788821.5	56268 ug/L	56268 ppb	19:21:48
3	Sc Radial	5015.1	5015.1	104 %		19:20:17
3	Y RADIAL	5500.5	5500.5	110.0 %		19:20:17
3	Al 396.153Radial†	77265.5	74209.2	68875 ug/L	68875 ppb	19:19:57
3	Ca 317.933Radial†	9959.7	9529.5	15795 ug/L	15795 ppb	19:19:57
3	Fe 238.204 Radial†	10454.4	10008.9	91067 ug/L	91067 ppb	19:19:57
3	K 766.490 Radial†	49788.8	44896.0	7919.1 ug/L	7919.1 ppb	19:19:57
3	Mg 279.077 IEC†	332.1	317.9	11171 ug/L	11171 ppb	19:20:17
3	Na 589.592 Radial†	460.7	1520.1	459.76 ug/L	459.76 ppb	19:19:57
3	Sr 421.552†	18980.5	18190.4	127.45 ug/L	127.45 ppb	19:19:57
3	Sc 361.383	887551.1	887551.1	102.95 %		19:21:16
3	Y 371.029	756560.8	756560.8	105.87 %		19:21:16
3	Ag 328.068†	-5513.4	-5584.0	4.6677 ug/L	4.6677 ppb	19:21:16
3	As 188.979†	-23.2	11.4	41.256 ug/L	41.256 ppb	19:21:36
3	B 249.677†	756.4	1273.7	15.440 ug/L	15.440 ppb	19:21:16
3	Ba 233.527†	89136.8	86591.7	710.30 ug/L	710.30 ppb	19:21:16
3	Be 313.107†	26871.4	30439.3	15.205 ug/L	15.205 ppb	19:21:16
3	Cd 226.502†	565.7	761.4	-0.2741 ug/L	-0.2741 ppb	19:21:36
3	Co 228.616†	1120.1	1161.7	20.795 ug/L	20.795 ppb	19:21:36
3	Cr 267.716†	5319.2	5099.9	61.271 ug/L	61.271 ppb	19:21:36
3	Cu 324.752†	138476.2	128683.7	395.03 ug/L	395.03 ppb	19:21:16
3	Mn 257.610†	1028877.2	998915.1	1157.8 ug/L	1157.8 ppb	19:21:16
3	Mo 202.031†	-40.2	-54.6	3.1707 ug/L	3.1707 ppb	19:21:36
3	Ni 231.604†	1927.3	1764.0	45.684 ug/L	45.684 ppb	19:21:36
3	P 214.914†	1252.9	988.9	481.57 ug/L	481.57 ppb	19:21:36
3	Pb 220.353†	4189.7	4131.2	521.43 ug/L	521.43 ppb	19:21:36
3	S 181.975 Axial†	187.0	142.3	194.59 ug/L	194.59 ppb	19:21:36
3	Sb 206.836†	70.9	26.8	1.0750 ug/L	1.0750 ppb	19:21:36
3	Se 196.026†	-459.5	-424.2	9.8835 ug/L	9.8835 ppb	19:21:36
3	Si 251.611†	798471.6	775007.6	25923 ug/L	25923 ppb	19:21:16
3	Sn 189.927†	-51.9	-59.1	-7.0401 ug/L	-7.0401 ppb	19:21:36
3	Ti 334.940†	1079953.6	1050281.6	1704.6 ug/L	1704.6 ppb	19:21:16
3	Tl 190.801†	-96.4	-59.5	0.1468 ug/L	0.1468 ppb	19:21:36
3	U 409.014†	6330.3	9128.8	254.19 ug/L	254.19 ppb	19:21:16
3	V 292.402†	21768.1	22698.4	150.42 ug/L	150.42 ppb	19:21:16
3	Zn 213.857†	28442.9	26913.8	251.07 ug/L	251.07 ppb	19:21:16
3	SiO2†	814674.9	790725.3	56404 ug/L	56404 ppb	19:21:54

Mean Data: 1202024815|945421|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	868863.7	100.79 %		1.955				1.94%
Sc Radial	5013.1	104 %		0.9				0.84%
Y 371.029	741548.4	103.77 %		1.908				1.84%
Y RADIAL	5503.8	110.1 %		0.76				0.69%
Ag 328.068†	-5606.2	4.3044 ug/L		0.62407	4.3044 ppb		0.62407	14.50%
Al 396.153Radial†	73506.0	68222 ug/L		1698.5	68222 ppb		1698.5	2.49%
As 188.979†	15.9	43.241 ug/L		4.1606	43.241 ppb		4.1606	9.62%
B 249.677†	1284.8	15.833 ug/L		0.4486	15.833 ppb		0.4486	2.83%
Ba 233.527†	87324.0	716.26 ug/L		5.167	716.26 ppb		5.167	0.72%
Be 313.107†	30661.9	15.320 ug/L		0.1004	15.320 ppb		0.1004	0.66%
Ca 317.933Radial†	9447.7	15659 ug/L		375.6	15659 ppb		375.6	2.40%
Cd 226.502†	779.3	0.0209 ug/L		0.37615	0.0209 ppb		0.37615	>999.9%
Co 228.616†	1167.7	20.911 ug/L		0.1003	20.911 ppb		0.1003	0.48%
Cr 267.716†	5208.2	62.520 ug/L		1.1266	62.520 ppb		1.1266	1.80%
Cu 324.752†	129807.5	398.40 ug/L		2.918	398.40 ppb		2.918	0.73%
Fe 238.204 Radial†	9921.6	90274 ug/L		1834.4	90274 ppb		1834.4	2.03%
K 766.490 Radial†	44615.3	7869.6 ug/L		170.23	7869.6 ppb		170.23	2.16%

Mg 279.077 IEC†	315.5	11089 ug/L	95.9	11089 ppb	95.9	0.87%
Mn 257.610†	1007855.1	1168.0 ug/L	8.87	1168.0 ppb	8.87	0.76%
Mo 202.031†	-52.6	3.2584 ug/L	0.16486	3.2584 ppb	0.16486	5.06%
Na 589.592 Radial†	1518.4	459.24 ug/L	12.144	459.24 ppb	12.144	2.64%
Ni 231.604†	1819.6	47.124 ug/L	1.2532	47.124 ppb	1.2532	2.66%
P 214.914†	1021.0	501.35 ug/L	17.281	501.35 ppb	17.281	3.45%
Pb 220.353†	4202.3	530.23 ug/L	7.797	530.23 ppb	7.797	1.47%
S 181.975 Axial†	148.3	203.44 ug/L	10.942	203.44 ppb	10.942	5.38%
Sb 206.836†	22.8	-0.3050 ug/L	1.43695	-0.3050 ppb	1.43695	471.18%
Se 196.026†	-433.2	1.2219 ug/L	7.69249	1.2219 ppb	7.69249	629.56%
Si 251.611†	781040.9	26125 ug/L	175.0	26125 ppb	175.0	0.67%
Sn 189.927†	-54.5	-6.2084 ug/L	0.98891	-6.2084 ppb	0.98891	15.93%
Sr 421.552†	18017.4	126.24 ug/L	2.881	126.24 ppb	2.881	2.28%
Ti 334.940†	1058882.7	1718.5 ug/L	12.10	1718.5 ppb	12.10	0.70%
Tl 190.801†	-70.8	-3.3177 ug/L	3.00192	-3.3177 ppb	3.00192	90.48%
U 409.014†	9011.3	250.87 ug/L	3.818	250.87 ppb	3.818	1.52%
V 292.402†	22851.7	151.62 ug/L	1.180	151.62 ppb	1.180	0.78%
Zn 213.857†	27138.7	253.39 ug/L	2.015	253.39 ppb	2.015	0.80%
SiO2†	795814.2	56767 ug/L	749.4	56767 ppb	749.4	1.32%

Sequence No.: 27

Sample ID: 1202024816|945421|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 58

Date Collected: 2/11/2010 19:24:05

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202024816|945421|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5045.6	5045.6	105 %		19:26:18
1	Y RADIAL	5575.1	5575.1	111.5 %		19:26:18
1	Al 396.153Radial†	153530.2	146418.2	135870 ug/L	135870 ppb	19:25:58
1	Ca 317.933Radial†	12605.2	11992.2	19876 ug/L	19876 ppb	19:25:58
1	Fe 238.204 Radial†	11948.1	11371.3	103480 ug/L	103480 ppb	19:25:58
1	K 766.490 Radial†	93008.3	85782.4	15133 ug/L	15133 ppb	19:25:58
1	Mg 279.077 IEC†	606.6	577.5	20363 ug/L	20363 ppb	19:26:18
1	Na 589.592 Radial†	15518.5	15862.8	4797.7 ug/L	4797.7 ppb	19:25:58
1	Sr 421.552†	89060.1	84844.6	594.88 ug/L	594.88 ppb	19:25:58
1	Sc 361.383	886498.9	886498.9	102.83 %		19:27:17
1	Y 371.029	757219.8	757219.8	105.96 %		19:27:17
1	Ag 328.068†	95897.3	93028.5	474.86 ug/L	474.86 ppb	19:27:17
1	As 188.979†	968.9	976.1	489.28 ug/L	489.28 ppb	19:27:37
1	B 249.677†	20159.7	20143.8	461.07 ug/L	461.07 ppb	19:27:17
1	Ba 233.527†	157656.4	153327.8	1256.7 ug/L	1256.7 ppb	19:27:17
1	Be 313.107†	1319081.0	1287106.6	485.47 ug/L	485.47 ppb	19:27:17
1	Cd 226.502†	37779.5	36951.4	429.08 ug/L	429.08 ppb	19:27:37
1	Co 228.616†	22066.2	21532.5	464.59 ug/L	464.59 ppb	19:27:37
1	Cr 267.716†	45927.5	44596.4	521.78 ug/L	521.78 ppb	19:27:17
1	Cu 324.752†	304690.1	290481.5	886.26 ug/L	886.26 ppb	19:27:17
1	Mn 257.610†	1439689.6	1399604.4	1619.7 ug/L	1619.7 ppb	19:27:17
1	Mo 202.031†	5753.8	5579.9	426.13 ug/L	426.13 ppb	19:27:37
1	Ni 231.604†	19626.5	18978.2	491.38 ug/L	491.38 ppb	19:27:37
1	P 214.914†	1944.6	1663.0	814.56 ug/L	814.56 ppb	19:27:37
1	Pb 220.353†	6667.9	6546.0	836.64 ug/L	836.64 ppb	19:27:37
1	S 181.975 Axial†	3489.1	3353.7	4865.0 ug/L	4865.0 ppb	19:27:37
1	Sb 206.836†	1079.1	1007.3	355.02 ug/L	355.02 ppb	19:27:37
1	Se 196.026†	161.5	179.2	459.87 ug/L	459.87 ppb	19:27:37
1	Si 251.611†	947064.5	920430.4	30782 ug/L	30782 ppb	19:27:17
1	Sn 189.927†	2472.9	2396.1	449.43 ug/L	449.43 ppb	19:27:37
1	Ti 334.940†	1693878.2	1648550.5	2674.4 ug/L	2674.4 ppb	19:27:17
1	Tl 190.801†	1310.2	1308.3	445.94 ug/L	445.94 ppb	19:27:37
1	U 409.014†	21474.1	23863.0	678.99 ug/L	678.99 ppb	19:27:17
1	V 292.402†	83893.1	83138.3	593.30 ug/L	593.30 ppb	19:27:17
1	Zn 213.857†	81103.3	78157.3	751.25 ug/L	751.25 ppb	19:27:17
1	SiO2†	929413.2	903244.2	64419 ug/L	64419 ppb	19:28:38
2	Sc Radial	5032.3	5032.3	105 %		19:26:44
2	Y RADIAL	5542.2	5542.2	110.8 %		19:26:44
2	Al 396.153Radial†	152083.2	145423.5	134950 ug/L	134950 ppb	19:26:24
2	Ca 317.933Radial†	12478.0	11902.4	19727 ug/L	19727 ppb	19:26:24
2	Fe 238.204 Radial†	11795.3	11255.6	102420 ug/L	102420 ppb	19:26:24
2	K 766.490 Radial†	92239.7	85282.9	15045 ug/L	15045 ppb	19:26:24
2	Mg 279.077 IEC†	610.2	582.5	20542 ug/L	20542 ppb	19:26:44
2	Na 589.592 Radial†	15422.0	15809.8	4781.7 ug/L	4781.7 ppb	19:26:24
2	Sr 421.552†	88248.9	84294.4	591.02 ug/L	591.02 ppb	19:26:24
2	Sc 361.383	874442.7	874442.7	101.43 %		19:27:45
2	Y 371.029	746322.0	746322.0	104.44 %		19:27:45
2	Ag 328.068†	95041.4	93470.5	476.60 ug/L	476.60 ppb	19:27:45
2	As 188.979†	980.6	1000.6	500.33 ug/L	500.33 ppb	19:28:05
2	B 249.677†	19919.5	20177.2	462.02 ug/L	462.02 ppb	19:27:45
2	Ba 233.527†	157499.7	155287.2	1272.6 ug/L	1272.6 ppb	19:27:45
2	Be 313.107†	1311072.1	1296896.7	489.17 ug/L	489.17 ppb	19:27:45
2	Cd 226.502†	37813.7	37491.6	435.61 ug/L	435.61 ppb	19:28:05
2	Co 228.616†	22033.2	21795.8	470.33 ug/L	470.33 ppb	19:28:05
2	Cr 267.716†	45804.0	45090.4	527.52 ug/L	527.52 ppb	19:27:45
2	Cu 324.752†	301004.9	290933.6	887.58 ug/L	887.58 ppb	19:27:45
2	Mn 257.610†	1434933.1	1414217.9	1636.4 ug/L	1636.4 ppb	19:27:45
2	Mo 202.031†	5748.8	5652.1	431.46 ug/L	431.46 ppb	19:28:05
2	Ni 231.604†	19618.9	19233.8	498.00 ug/L	498.00 ppb	19:28:05

2	P 214.914†	1938.2	1682.8	827.28 ug/L	827.28 ppb	19:28:05
2	Pb 220.353†	6657.6	6625.3	846.45 ug/L	846.45 ppb	19:28:05
2	S 181.975 Axial†	3504.5	3415.6	4955.4 ug/L	4955.4 ppb	19:28:05
2	Sb 206.836†	1075.2	1017.9	358.93 ug/L	358.93 ppb	19:28:05
2	Se 196.026†	168.6	188.3	462.63 ug/L	462.63 ppb	19:28:05
2	Si 251.611†	940504.6	926661.1	30990 ug/L	30990 ppb	19:27:45
2	Sn 189.927†	2481.6	2437.9	457.14 ug/L	457.14 ppb	19:28:05
2	Ti 334.940†	1683927.6	1661451.4	2695.3 ug/L	2695.3 ppb	19:27:45
2	Tl 190.801†	1281.5	1297.6	442.72 ug/L	442.72 ppb	19:28:05
2	U 409.014†	21089.2	23771.4	676.44 ug/L	676.44 ppb	19:27:45
2	V 292.402†	83244.0	83623.1	597.02 ug/L	597.02 ppb	19:27:45
2	Zn 213.857†	80544.3	78693.7	756.66 ug/L	756.66 ppb	19:27:45
2	SiO2†	942494.4	928602.0	66227 ug/L	66227 ppb	19:28:44
3	Sc Radial	4943.6	4943.6	103 %		19:27:09
3	Y RADIAL	5452.6	5452.6	109.0 %		19:27:09
3	Al 396.153Radial†	162032.2	157702.9	146350 ug/L	146350 ppb	19:26:49
3	Ca 317.933Radial†	13227.0	12844.5	21289 ug/L	21289 ppb	19:26:49
3	Fe 238.204 Radial†	12500.2	12143.1	110500 ug/L	110500 ppb	19:26:49
3	K 766.490 Radial†	97024.7	91515.9	16144 ug/L	16144 ppb	19:26:49
3	Mg 279.077 IEC†	611.5	594.1	20947 ug/L	20947 ppb	19:27:09
3	Na 589.592 Radial†	16319.8	16947.0	5125.6 ug/L	5125.6 ppb	19:26:49
3	Sr 421.552†	93979.9	91378.9	640.70 ug/L	640.70 ppb	19:26:49
3	Sc 361.383	885010.3	885010.3	102.66 %		19:28:12
3	Y 371.029	754267.2	754267.2	105.55 %		19:28:12
3	Ag 328.068†	95724.9	93017.5	477.15 ug/L	477.15 ppb	19:28:12
3	As 188.979†	980.5	989.0	496.74 ug/L	496.74 ppb	19:28:32
3	B 249.677†	20064.8	20084.3	458.52 ug/L	458.52 ppb	19:28:12
3	Ba 233.527†	157673.2	153602.1	1259.1 ug/L	1259.1 ppb	19:28:12
3	Be 313.107†	1313796.1	1284116.2	484.35 ug/L	484.35 ppb	19:28:12
3	Cd 226.502†	37916.3	37146.4	430.67 ug/L	430.67 ppb	19:28:32
3	Co 228.616†	22081.3	21583.3	465.61 ug/L	465.61 ppb	19:28:32
3	Cr 267.716†	45828.1	44574.6	521.66 ug/L	521.66 ppb	19:28:12
3	Cu 324.752†	302629.2	288972.4	882.06 ug/L	882.06 ppb	19:28:12
3	Mn 257.610†	1437690.4	1400011.8	1620.8 ug/L	1620.8 ppb	19:28:12
3	Mo 202.031†	5776.3	5611.2	429.04 ug/L	429.04 ppb	19:28:32
3	Ni 231.604†	19651.3	19034.5	492.84 ug/L	492.84 ppb	19:28:32
3	P 214.914†	1935.3	1657.1	808.79 ug/L	808.79 ppb	19:28:32
3	Pb 220.353†	6711.0	6599.0	844.85 ug/L	844.85 ppb	19:28:32
3	S 181.975 Axial†	3503.0	3372.9	4891.0 ug/L	4891.0 ppb	19:28:32
3	Sb 206.836†	1064.3	994.6	350.32 ug/L	350.32 ppb	19:28:32
3	Se 196.026†	171.4	189.1	489.52 ug/L	489.52 ppb	19:28:32
3	Si 251.611†	944827.4	919800.4	30761 ug/L	30761 ppb	19:28:12
3	Sn 189.927†	2477.4	2404.6	451.33 ug/L	451.33 ppb	19:28:32
3	Ti 334.940†	1688933.1	1646504.0	2671.2 ug/L	2671.2 ppb	19:28:12
3	Tl 190.801†	1316.6	1316.7	448.60 ug/L	448.60 ppb	19:28:32
3	U 409.014†	21394.2	23820.3	676.95 ug/L	676.95 ppb	19:28:12
3	V 292.402†	83542.7	82934.1	590.84 ug/L	590.84 ppb	19:28:12
3	Zn 213.857†	80936.8	78127.8	749.91 ug/L	749.91 ppb	19:28:12
3	SiO2†	944657.2	919613.6	65586 ug/L	65586 ppb	19:28:50

Mean Data: 1202024816|945421|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	881984.0	102.31 %		0.762				0.75%
Sc Radial	5007.2	104 %		1.2				1.11%
Y 371.029	752603.0	105.32 %		0.789				0.75%
Y RADIAL	5523.3	110.5 %		1.27				1.15%
Ag 328.068†	93172.2	476.20 ug/L		1.198	476.20 ppb		1.198	0.25%
Al 396.153Radial†	149848.2	139060 ug/L		6330.2	139060 ppb		6330.2	4.55%
As 188.979†	988.6	495.45 ug/L		5.637	495.45 ppb		5.637	1.14%
B 249.677†	20135.1	460.54 ug/L		1.814	460.54 ppb		1.814	0.39%
Ba 233.527†	154072.4	1262.8 ug/L		8.60	1262.8 ppb		8.60	0.68%
Be 313.107†	1289373.2	486.33 ug/L		2.520	486.33 ppb		2.520	0.52%
Ca 317.933Radial†	12246.4	20297 ug/L		861.7	20297 ppb		861.7	4.25%
Cd 226.502†	37196.5	431.78 ug/L		3.407	431.78 ppb		3.407	0.79%
Co 228.616†	21637.2	466.85 ug/L		3.063	466.85 ppb		3.063	0.66%
Cr 267.716†	44753.8	523.65 ug/L		3.347	523.65 ppb		3.347	0.64%
Cu 324.752†	290129.2	885.30 ug/L		2.884	885.30 ppb		2.884	0.33%
Fe 238.204 Radial†	11590.0	105470 ug/L		4389.8	105470 ppb		4389.8	4.16%
K 766.490 Radial†	87527.1	15440 ug/L		611.0	15440 ppb		611.0	3.96%

Mg 279.077 IEC†	584.7	20617 ug/L	299.2	20617 ppb	299.2	1.45%
Mn 257.610†	1404611.4	1625.6 ug/L	9.33	1625.6 ppb	9.33	0.57%
Mo 202.031†	5614.4	428.88 ug/L	2.666	428.88 ppb	2.666	0.62%
Na 589.592 Radial†	16206.5	4901.6 ug/L	194.12	4901.6 ppb	194.12	3.96%
Ni 231.604†	19082.2	494.07 ug/L	3.478	494.07 ppb	3.478	0.70%
P 214.914†	1667.6	816.87 ug/L	9.460	816.87 ppb	9.460	1.16%
Pb 220.353†	6590.1	842.65 ug/L	5.263	842.65 ppb	5.263	0.62%
S 181.975 Axial†	3380.8	4903.8 ug/L	46.57	4903.8 ppb	46.57	0.95%
Sb 206.836†	1006.6	354.76 ug/L	4.310	354.76 ppb	4.310	1.21%
Se 196.026†	185.5	470.67 ug/L	16.381	470.67 ppb	16.381	3.48%
Si 251.611†	922297.3	30844 ug/L	126.8	30844 ppb	126.8	0.41%
Sn 189.927†	2412.9	452.63 ug/L	4.015	452.63 ppb	4.015	0.89%
Sr 421.552†	86839.3	608.87 ug/L	27.632	608.87 ppb	27.632	4.54%
Ti 334.940†	1652168.7	2680.3 ug/L	13.07	2680.3 ppb	13.07	0.49%
Tl 190.801†	1307.5	445.75 ug/L	2.946	445.75 ppb	2.946	0.66%
U 409.014†	23818.2	677.46 ug/L	1.348	677.46 ppb	1.348	0.20%
V 292.402†	83231.8	593.72 ug/L	3.114	593.72 ppb	3.114	0.52%
Zn 213.857†	78326.3	752.60 ug/L	3.573	752.60 ppb	3.573	0.47%
SiO2†	917153.3	65411 ug/L	917.0	65411 ppb	917.0	1.40%

Sequence No.: 28

Sample ID: 1202024818|945421|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 59

Date Collected: 2/11/2010 19:31:01

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202024818|945421|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4952.4	4952.4	103 %		19:33:15
1	Y RADIAL	5479.0	5479.0	109.6 %		19:33:15
1	Al 396.153Radial†	168132.6	163344.2	151580 ug/L	151580 ppb	19:32:55
1	Ca 317.933Radial†	13867.1	13443.0	22281 ug/L	22281 ppb	19:32:55
1	Fe 238.204 Radial†	13320.5	12917.7	117550 ug/L	117550 ppb	19:32:55
1	K 766.490 Radial†	112002.3	105885.8	18680 ug/L	18680 ppb	19:32:55
1	Mg 279.077 IEC†	648.4	628.9	22171 ug/L	22171 ppb	19:33:15
1	Na 589.592 Radial†	16397.6	16994.3	5139.9 ug/L	5139.9 ppb	19:32:55
1	Sr 421.552†	93620.7	90867.9	637.10 ug/L	637.10 ppb	19:32:55
1	Sc 361.383	867630.1	867630.1	100.64 %		19:34:14
1	Y 371.029	743723.2	743723.2	104.08 %		19:34:14
1	Ag 328.068†	94289.4	93459.1	481.72 ug/L	481.72 ppb	19:34:14
1	As 188.979†	997.8	1025.3	518.83 ug/L	518.83 ppb	19:34:34
1	B 249.677†	19970.7	20382.3	464.41 ug/L	464.41 ppb	19:34:14
1	Ba 233.527†	154881.6	153905.0	1261.9 ug/L	1261.9 ppb	19:34:14
1	Be 313.107†	1313518.1	1309476.2	494.84 ug/L	494.84 ppb	19:34:14
1	Cd 226.502†	38077.7	38046.6	440.66 ug/L	440.66 ppb	19:34:34
1	Co 228.616†	22470.6	22401.0	482.43 ug/L	482.43 ppb	19:34:34
1	Cr 267.716†	45894.7	45535.1	533.02 ug/L	533.02 ppb	19:34:14
1	Cu 324.752†	330040.4	322113.9	982.96 ug/L	982.96 ppb	19:34:14
1	Mn 257.610†	1578564.5	1568040.9	1814.8 ug/L	1814.8 ppb	19:34:14
1	Mo 202.031†	5803.0	5750.5	440.03 ug/L	440.03 ppb	19:34:34
1	Ni 231.604†	20041.3	19805.4	512.80 ug/L	512.80 ppb	19:34:34
1	P 214.914†	2805.1	2559.2	1346.6 ug/L	1346.6 ppb	19:34:34
1	Pb 220.353†	12519.8	12501.6	1581.6 ug/L	1581.6 ppb	19:34:34
1	S 181.975 Axial†	3548.0	3486.0	5054.9 ug/L	5054.9 ppb	19:34:34
1	Sb 206.836†	1107.6	1058.4	372.46 ug/L	372.46 ppb	19:34:34
1	Se 196.026†	117.8	139.2	478.82 ug/L	478.82 ppb	19:34:34
1	Si 251.611†	893153.8	886893.0	29660 ug/L	29660 ppb	19:34:14
1	Sn 189.927†	2885.5	2858.4	535.82 ug/L	535.82 ppb	19:34:34
1	Ti 334.940†	1940558.7	1929480.6	3130.2 ug/L	3130.2 ppb	19:34:14
1	Tl 190.801†	1298.9	1324.8	455.77 ug/L	455.77 ppb	19:34:34
1	U 409.014†	21599.1	24441.3	694.13 ug/L	694.13 ppb	19:34:14
1	V 292.402†	86606.6	87608.7	623.47 ug/L	623.47 ppb	19:34:14
1	Zn 213.857†	82141.7	80904.4	775.98 ug/L	775.98 ppb	19:34:14
1	SiO2†	892907.9	886627.8	63233 ug/L	63233 ppb	19:35:35
2	Sc Radial	4958.3	4958.3	103 %		19:33:40
2	Y RADIAL	5472.9	5472.9	109.4 %		19:33:40
2	Al 396.153Radial†	168170.0	163186.7	151440 ug/L	151440 ppb	19:33:20
2	Ca 317.933Radial†	13851.7	13412.0	22230 ug/L	22230 ppb	19:33:20
2	Fe 238.204 Radial†	13249.9	12833.8	116780 ug/L	116780 ppb	19:33:20
2	K 766.490 Radial†	112035.9	105789.3	18663 ug/L	18663 ppb	19:33:20
2	Mg 279.077 IEC†	643.3	623.3	21973 ug/L	21973 ppb	19:33:40
2	Na 589.592 Radial†	16327.9	16907.9	5113.8 ug/L	5113.8 ppb	19:33:20
2	Sr 421.552†	93787.3	90921.5	637.48 ug/L	637.48 ppb	19:33:20
2	Sc 361.383	879786.6	879786.6	102.05 %		19:34:41
2	Y 371.029	753552.2	753552.2	105.45 %		19:34:41
2	Ag 328.068†	95598.4	93447.2	481.41 ug/L	481.41 ppb	19:34:41
2	As 188.979†	986.7	1000.7	507.52 ug/L	507.52 ppb	19:35:01
2	B 249.677†	20384.1	20513.3	467.67 ug/L	467.67 ppb	19:34:41
2	Ba 233.527†	156967.3	153822.3	1261.2 ug/L	1261.2 ppb	19:34:41
2	Be 313.107†	1332676.5	1310215.6	495.12 ug/L	495.12 ppb	19:34:41
2	Cd 226.502†	38077.2	37523.4	434.51 ug/L	434.51 ppb	19:35:01
2	Co 228.616†	22478.6	22100.3	475.85 ug/L	475.85 ppb	19:35:01
2	Cr 267.716†	46523.2	45520.8	532.84 ug/L	532.84 ppb	19:34:41
2	Cu 324.752†	335297.3	322733.8	984.79 ug/L	984.79 ppb	19:34:41
2	Mn 257.610†	1601753.1	1569090.5	1815.9 ug/L	1815.9 ppb	19:34:41
2	Mo 202.031†	5773.9	5642.3	431.87 ug/L	431.87 ppb	19:35:01
2	Ni 231.604†	20067.7	19556.1	506.35 ug/L	506.35 ppb	19:35:01

2	P 214.914†	2823.6	2538.7	1334.0 ug/L	1334.0 ppb	19:35:01
2	Pb 220.353†	12487.6	12298.2	1556.3 ug/L	1556.3 ppb	19:35:01
2	S 181.975 Axial†	3547.2	3436.6	4982.9 ug/L	4982.9 ppb	19:35:01
2	Sb 206.836†	1095.5	1031.3	362.77 ug/L	362.77 ppb	19:35:01
2	Se 196.026†	129.0	148.5	482.62 ug/L	482.62 ppb	19:35:01
2	Si 251.611†	907400.7	888590.9	29717 ug/L	29717 ppb	19:34:41
2	Sn 189.927†	2899.7	2832.7	531.02 ug/L	531.02 ppb	19:35:01
2	Ti 334.940†	1969137.0	1930841.4	3132.4 ug/L	3132.4 ppb	19:34:41
2	Tl 190.801†	1293.3	1301.5	448.37 ug/L	448.37 ppb	19:35:01
2	U 409.014†	22125.1	24660.2	700.56 ug/L	700.56 ppb	19:34:41
2	V 292.402†	87986.1	87771.4	624.66 ug/L	624.66 ppb	19:34:41
2	Zn 213.857†	83452.5	81061.0	777.68 ug/L	777.68 ppb	19:34:41
2	SiO2†	896027.7	877425.7	62577 ug/L	62577 ppb	19:35:41
3	Sc Radial	5014.5	5014.5	104 %		19:34:05
3	Y RADIAL	5560.9	5560.9	111.2 %		19:34:05
3	Al 396.153Radial†	165440.4	158743.1	147310 ug/L	147310 ppb	19:33:45
3	Ca 317.933Radial†	13710.5	13126.2	21756 ug/L	21756 ppb	19:33:45
3	Fe 238.204 Radial†	13091.7	12538.3	114100 ug/L	114100 ppb	19:33:45
3	K 766.490 Radial†	110719.9	103310.6	18226 ug/L	18226 ppb	19:33:45
3	Mg 279.077 IEC†	648.9	621.6	21916 ug/L	21916 ppb	19:34:05
3	Na 589.592 Radial†	16193.7	16601.8	5021.2 ug/L	5021.2 ppb	19:33:45
3	Sr 421.552†	92217.1	88397.4	619.78 ug/L	619.78 ppb	19:33:45
3	Sc 361.383	866999.4	866999.4	100.57 %		19:35:08
3	Y 371.029	740940.5	740940.5	103.69 %		19:35:08
3	Ag 328.068†	94351.2	93588.6	481.18 ug/L	481.18 ppb	19:35:08
3	As 188.979†	969.8	998.2	505.74 ug/L	505.74 ppb	19:35:28
3	B 249.677†	19954.0	20380.2	464.92 ug/L	464.92 ppb	19:35:08
3	Ba 233.527†	155241.8	154375.1	1265.6 ug/L	1265.6 ppb	19:35:08
3	Be 313.107†	1311239.2	1308159.6	494.36 ug/L	494.36 ppb	19:35:08
3	Cd 226.502†	37978.3	37975.3	440.17 ug/L	440.17 ppb	19:35:28
3	Co 228.616†	22442.9	22389.7	482.22 ug/L	482.22 ppb	19:35:28
3	Cr 267.716†	46002.5	45675.5	534.59 ug/L	534.59 ppb	19:35:08
3	Cu 324.752†	329912.7	322225.5	983.11 ug/L	983.11 ppb	19:35:08
3	Mn 257.610†	1582255.1	1572851.6	1820.0 ug/L	1820.0 ppb	19:35:08
3	Mo 202.031†	5772.5	5724.3	437.80 ug/L	437.80 ppb	19:35:28
3	Ni 231.604†	20013.7	19792.4	512.46 ug/L	512.46 ppb	19:35:28
3	P 214.914†	2814.6	2570.6	1355.3 ug/L	1355.3 ppb	19:35:28
3	Pb 220.353†	12445.2	12436.5	1572.9 ug/L	1572.9 ppb	19:35:28
3	S 181.975 Axial†	3537.6	3478.2	5044.4 ug/L	5044.4 ppb	19:35:28
3	Sb 206.836†	1108.3	1059.8	373.03 ug/L	373.03 ppb	19:35:28
3	Se 196.026†	128.6	150.0	474.85 ug/L	474.85 ppb	19:35:28
3	Si 251.611†	894773.1	889148.6	29735 ug/L	29735 ppb	19:35:08
3	Sn 189.927†	2876.1	2851.1	534.33 ug/L	534.33 ppb	19:35:28
3	Ti 334.940†	1942025.9	1932342.0	3134.8 ug/L	3134.8 ppb	19:35:08
3	Tl 190.801†	1284.2	1311.1	451.47 ug/L	451.47 ppb	19:35:28
3	U 409.014†	21544.7	24402.9	693.40 ug/L	693.40 ppb	19:35:08
3	V 292.402†	86700.7	87764.9	625.07 ug/L	625.07 ppb	19:35:08
3	Zn 213.857†	82241.7	81063.2	778.07 ug/L	778.07 ppb	19:35:08
3	SiO2†	896679.2	891023.1	63547 ug/L	63547 ppb	19:35:47

Mean Data: 1202024818|945421|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	871472.0	101.09 %		0.836			0.83%
Sc Radial	4975.1	103 %		0.7			0.69%
Y 371.029	746072.0	104.40 %		0.927			0.89%
Y RADIAL	5504.3	110.1 %		0.98			0.89%
Ag 328.068†	93498.3	481.44 ug/L		0.272	481.44 ppb	0.272	0.06%
Al 396.153Radial†	161758.0	150110 ug/L		2424.4	150110 ppb	2424.4	1.62%
As 188.979†	1008.1	510.69 ug/L		7.098	510.69 ppb	7.098	1.39%
B 249.677†	20425.3	465.67 ug/L		1.752	465.67 ppb	1.752	0.38%
Ba 233.527†	154034.1	1262.9 ug/L		2.38	1262.9 ppb	2.38	0.19%
Be 313.107†	1309283.8	494.77 ug/L		0.384	494.77 ppb	0.384	0.08%
Ca 317.933Radial†	13327.1	22089 ug/L		289.4	22089 ppb	289.4	1.31%
Cd 226.502†	37848.4	438.45 ug/L		3.415	438.45 ppb	3.415	0.78%
Co 228.616†	22297.0	480.17 ug/L		3.740	480.17 ppb	3.740	0.78%
Cr 267.716†	45577.1	533.48 ug/L		0.963	533.48 ppb	0.963	0.18%
Cu 324.752†	322357.7	983.62 ug/L		1.018	983.62 ppb	1.018	0.10%
Fe 238.204 Radial†	12763.3	116140 ug/L		1813.3	116140 ppb	1813.3	1.56%
K 766.490 Radial†	104995.3	18523 ug/L		257.6	18523 ppb	257.6	1.39%

Mg 279.077 IEC†	624.6	22020 ug/L	134.1	22020 ppb	134.1	0.61%
Mn 257.610†	1569994.3	1816.9 ug/L	2.74	1816.9 ppb	2.74	0.15%
Mo 202.031†	5705.7	436.57 ug/L	4.219	436.57 ppb	4.219	0.97%
Na 589.592 Radial†	16834.7	5091.6 ug/L	62.37	5091.6 ppb	62.37	1.23%
Ni 231.604†	19718.0	510.54 ug/L	3.634	510.54 ppb	3.634	0.71%
P 214.914†	2556.2	1345.3 ug/L	10.72	1345.3 ppb	10.72	0.80%
Pb 220.353†	12412.1	1570.3 ug/L	12.88	1570.3 ppb	12.88	0.82%
S 181.975 Axial†	3466.9	5027.4 ug/L	38.91	5027.4 ppb	38.91	0.77%
Sb 206.836†	1049.9	369.42 ug/L	5.767	369.42 ppb	5.767	1.56%
Se 196.026†	145.9	478.76 ug/L	3.889	478.76 ppb	3.889	0.81%
Si 251.611†	888210.8	29704 ug/L	39.3	29704 ppb	39.3	0.13%
Sn 189.927†	2847.4	533.72 ug/L	2.458	533.72 ppb	2.458	0.46%
Sr 421.552†	90062.3	631.46 ug/L	10.111	631.46 ppb	10.111	1.60%
Ti 334.940†	1930888.0	3132.5 ug/L	2.30	3132.5 ppb	2.30	0.07%
Tl 190.801†	1312.5	451.87 ug/L	3.718	451.87 ppb	3.718	0.82%
U 409.014†	24501.5	696.03 ug/L	3.940	696.03 ppb	3.940	0.57%
V 292.402†	87715.0	624.40 ug/L	0.829	624.40 ppb	0.829	0.13%
Zn 213.857†	81009.5	777.24 ug/L	1.109	777.24 ppb	1.109	0.14%
SiO2†	885025.5	63119 ug/L	494.9	63119 ppb	494.9	0.78%

Sequence No.: 29

Sample ID: 1202024817|945421|5

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 60

Date Collected: 2/11/2010 19:37:57

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202024817|945421|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5000.2	5000.2	104 %		19:39:51
1	Y RADIAL	5282.2	5282.2	105.6 %		19:39:51
1	Al 396.153Radial†	12374.0	12047.2	11181 ug/L	11181 ppb	19:39:51
1	Ca 317.933Radial†	1756.3	1671.7	2770.7 ug/L	2770.7 ppb	19:40:11
1	Fe 238.204 Radial†	1822.2	1740.3	15835 ug/L	15835 ppb	19:40:11
1	K 766.490 Radial†	10689.1	7450.2	1314.0 ug/L	1314.0 ppb	19:39:51
1	Mg 279.077 IEC†	63.9	61.0	2146.5 ug/L	2146.5 ppb	19:40:11
1	Na 589.592 Radial†	-651.6	452.1	136.73 ug/L	136.73 ppb	19:39:51
1	Sr 421.552†	3311.7	3181.5	22.292 ug/L	22.292 ppb	19:39:51
1	Sc 361.383	850780.2	850780.2	98.688 %		19:41:08
1	Y 371.029	700791.2	700791.2	98.067 %		19:41:08
1	Ag 328.068†	-771.0	-1010.1	0.6346 ug/L	0.6346 ppb	19:41:08
1	As 188.979†	-21.8	11.8	11.391 ug/L	11.391 ppb	19:41:28
1	B 249.677†	-165.0	371.8	6.2593 ug/L	6.2593 ppb	19:41:08
1	Ba 233.527†	16618.6	16851.2	138.17 ug/L	138.17 ppb	19:41:08
1	Be 313.107†	1345.9	5702.5	2.7335 ug/L	2.7335 ppb	19:41:08
1	Cd 226.502†	-66.9	144.1	0.0913 ug/L	0.0913 ppb	19:41:28
1	Co 228.616†	160.1	236.0	4.4240 ug/L	4.4240 ppb	19:41:28
1	Cr 267.716†	940.0	885.7	10.644 ug/L	10.644 ppb	19:41:28
1	Cu 324.752†	78223.2	73442.7	223.60 ug/L	223.60 ppb	19:41:08
1	Mn 257.610†	240826.3	243577.0	281.72 ug/L	281.72 ppb	19:41:08
1	Mo 202.031†	11.9	-3.5	0.9995 ug/L	0.9995 ppb	19:41:28
1	Ni 231.604†	458.4	356.5	9.2329 ug/L	9.2329 ppb	19:41:28
1	P 214.914†	495.6	274.1	116.32 ug/L	116.32 ppb	19:41:28
1	Pb 220.353†	750.4	822.1	103.35 ug/L	103.35 ppb	19:41:28
1	S 181.975 Axial†	68.6	30.2	41.882 ug/L	41.882 ppb	19:41:28
1	Sb 206.836†	38.5	-3.1	-2.3851 ug/L	-2.3851 ppb	19:41:28
1	Se 196.026†	-92.3	-71.4	3.3084 ug/L	3.3084 ppb	19:41:28
1	Si 251.611†	159906.3	161470.5	5401.0 ug/L	5401.0 ppb	19:41:08
1	Sn 189.927†	1.9	-6.8	-0.5684 ug/L	-0.5684 ppb	19:41:28
1	Ti 334.940†	162067.9	165526.3	268.65 ug/L	268.65 ppb	19:41:08
1	Tl 190.801†	-43.0	-9.4	0.4901 ug/L	0.4901 ppb	19:41:28
1	U 409.014†	-1509.4	1450.6	40.234 ug/L	40.234 ppb	19:41:08
1	V 292.402†	2511.4	4099.5	27.295 ug/L	27.295 ppb	19:41:08
1	Zn 213.857†	6059.8	5427.1	50.811 ug/L	50.811 ppb	19:41:08
1	SiO2†	160931.5	162488.5	11591 ug/L	11591 ppb	19:42:24
2	Sc Radial	4820.0	4820.0	100 %		19:40:16
2	Y RADIAL	5123.2	5123.2	102.4 %		19:40:16
2	Al 396.153Radial†	12025.4	12144.3	11271 ug/L	11271 ppb	19:40:16
2	Ca 317.933Radial†	1767.8	1746.3	2894.3 ug/L	2894.3 ppb	19:40:36
2	Fe 238.204 Radial†	1820.2	1803.8	16412 ug/L	16412 ppb	19:40:36
2	K 766.490 Radial†	10404.8	7550.9	1331.7 ug/L	1331.7 ppb	19:40:16
2	Mg 279.077 IEC†	63.3	62.7	2206.0 ug/L	2206.0 ppb	19:40:36
2	Na 589.592 Radial†	-634.3	446.0	134.88 ug/L	134.88 ppb	19:40:16
2	Sr 421.552†	3218.4	3207.6	22.474 ug/L	22.474 ppb	19:40:16
2	Sc 361.383	854548.2	854548.2	99.125 %		19:41:33
2	Y 371.029	703819.1	703819.1	98.491 %		19:41:33
2	Ag 328.068†	-820.3	-1056.3	0.6050 ug/L	0.6050 ppb	19:41:33
2	As 188.979†	-24.8	8.9	10.195 ug/L	10.195 ppb	19:41:53
2	B 249.677†	-187.0	350.4	5.6546 ug/L	5.6546 ppb	19:41:33
2	Ba 233.527†	16695.5	16854.5	138.21 ug/L	138.21 ppb	19:41:33
2	Be 313.107†	1312.2	5662.5	2.7173 ug/L	2.7173 ppb	19:41:33
2	Cd 226.502†	-61.2	150.1	0.1055 ug/L	0.1055 ppb	19:41:53
2	Co 228.616†	170.4	245.6	4.6270 ug/L	4.6270 ppb	19:41:53
2	Cr 267.716†	937.8	879.3	10.579 ug/L	10.579 ppb	19:41:53
2	Cu 324.752†	78486.7	73359.1	223.37 ug/L	223.37 ppb	19:41:33
2	Mn 257.610†	241701.2	243383.7	281.55 ug/L	281.55 ppb	19:41:33
2	Mo 202.031†	5.7	-9.8	0.5737 ug/L	0.5737 ppb	19:41:53
2	Ni 231.604†	468.9	365.0	9.4523 ug/L	9.4523 ppb	19:41:53

2	P 214.914†	486.4	262.6	108.78 ug/L	108.78 ppb	19:41:53
2	Pb 220.353†	769.8	838.3	105.34 ug/L	105.34 ppb	19:41:53
2	S 181.975 Axial†	65.0	26.2	36.097 ug/L	36.097 ppb	19:41:53
2	Sb 206.836†	34.5	-7.3	-3.9042 ug/L	-3.9042 ppb	19:41:53
2	Se 196.026†	-93.1	-71.8	4.8538 ug/L	4.8538 ppb	19:41:53
2	Si 251.611†	160562.9	161418.5	5399.2 ug/L	5399.2 ppb	19:41:33
2	Sn 189.927†	-10.1	-18.8	-2.7802 ug/L	-2.7802 ppb	19:41:53
2	Ti 334.940†	162442.1	165179.7	268.09 ug/L	268.09 ppb	19:41:33
2	Tl 190.801†	-39.6	-5.8	1.6312 ug/L	1.6312 ppb	19:41:53
2	U 409.014†	-1246.9	1722.1	48.042 ug/L	48.042 ppb	19:41:33
2	V 292.402†	2574.4	4151.8	27.601 ug/L	27.601 ppb	19:41:33
2	Zn 213.857†	6108.6	5449.3	50.942 ug/L	50.942 ppb	19:41:33
2	SiO2†	158849.3	159668.9	11390 ug/L	11390 ppb	19:42:30
3	Sc Radial	4872.7	4872.7	101 %		19:40:41
3	Y RADIAL	5191.1	5191.1	103.8 %		19:40:41
3	Al 396.153Radial†	12196.6	12183.6	11308 ug/L	11308 ppb	19:40:41
3	Ca 317.933Radial†	1761.2	1720.7	2852.0 ug/L	2852.0 ppb	19:41:01
3	Fe 238.204 Radial†	1808.8	1772.9	16131 ug/L	16131 ppb	19:41:01
3	K 766.490 Radial†	10480.1	7512.9	1325.1 ug/L	1325.1 ppb	19:40:41
3	Mg 279.077 IEC†	59.8	58.6	2058.3 ug/L	2058.3 ppb	19:41:01
3	Na 589.592 Radial†	-653.3	434.0	131.26 ug/L	131.26 ppb	19:40:41
3	Sr 421.552†	3299.6	3252.9	22.792 ug/L	22.792 ppb	19:40:41
3	Sc 361.383	843067.8	843067.8	97.793 %		19:41:59
3	Y 371.029	692828.0	692828.0	96.953 %		19:41:59
3	Ag 328.068†	-694.2	-938.7	1.0681 ug/L	1.0681 ppb	19:41:59
3	As 188.979†	-19.9	13.6	12.258 ug/L	12.258 ppb	19:42:19
3	B 249.677†	-134.9	401.1	6.9062 ug/L	6.9062 ppb	19:41:59
3	Ba 233.527†	16516.2	16900.5	138.58 ug/L	138.58 ppb	19:41:59
3	Be 313.107†	1508.9	5881.7	2.8002 ug/L	2.8002 ppb	19:41:59
3	Cd 226.502†	-64.8	145.6	0.0808 ug/L	0.0808 ppb	19:42:19
3	Co 228.616†	165.3	242.8	4.5686 ug/L	4.5686 ppb	19:42:19
3	Cr 267.716†	946.9	901.5	10.832 ug/L	10.832 ppb	19:42:19
3	Cu 324.752†	77479.1	73407.0	223.51 ug/L	223.51 ppb	19:41:59
3	Mn 257.610†	239467.9	244420.4	282.72 ug/L	282.72 ppb	19:41:59
3	Mo 202.031†	11.5	-3.8	1.0008 ug/L	1.0008 ppb	19:42:19
3	Ni 231.604†	475.6	378.3	9.7979 ug/L	9.7979 ppb	19:42:19
3	P 214.914†	486.1	268.9	112.95 ug/L	112.95 ppb	19:42:19
3	Pb 220.353†	733.2	811.5	102.03 ug/L	102.03 ppb	19:42:19
3	S 181.975 Axial†	67.9	30.1	41.716 ug/L	41.716 ppb	19:42:19
3	Sb 206.836†	42.9	1.7	-0.7060 ug/L	-0.7060 ppb	19:42:19
3	Se 196.026†	-90.5	-70.4	4.8881 ug/L	4.8881 ppb	19:42:19
3	Si 251.611†	158674.4	161693.2	5408.4 ug/L	5408.4 ppb	19:41:59
3	Sn 189.927†	2.3	-6.3	-0.4621 ug/L	-0.4621 ppb	19:42:19
3	Ti 334.940†	160572.0	165499.0	268.62 ug/L	268.62 ppb	19:41:59
3	Tl 190.801†	-36.0	-2.6	2.6525 ug/L	2.6525 ppb	19:42:19
3	U 409.014†	-1314.0	1636.4	45.587 ug/L	45.587 ppb	19:41:59
3	V 292.402†	2564.0	4176.6	27.820 ug/L	27.820 ppb	19:41:59
3	Zn 213.857†	6079.9	5503.8	51.520 ug/L	51.520 ppb	19:41:59
3	SiO2†	157914.2	160894.9	11477 ug/L	11477 ppb	19:42:35

Mean Data: 1202024817|945421|5

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	849465.4	98.535 %	0.6788			0.69%
Sc Radial	4897.6	102 %	1.9			1.89%
Y 371.029	699146.1	97.837 %	0.7945			0.81%
Y RADIAL	5198.8	104.0 %	1.60			1.53%
Ag 328.068†	-1001.7	0.7693 ug/L	0.25920	0.7693 ppb	0.25920	33.70%
Al 396.153Radial†	12125.0	11253 ug/L	65.2	11253 ppb	65.2	0.58%
As 188.979†	11.4	11.281 ug/L	1.0357	11.281 ppb	1.0357	9.18%
B 249.677†	374.4	6.2734 ug/L	0.62592	6.2734 ppb	0.62592	9.98%
Ba 233.527†	16868.7	138.32 ug/L	0.226	138.32 ppb	0.226	0.16%
Be 313.107†	5748.9	2.7503 ug/L	0.04389	2.7503 ppb	0.04389	1.60%
Ca 317.933Radial†	1712.9	2839.0 ug/L	62.83	2839.0 ppb	62.83	2.21%
Cd 226.502†	146.6	0.0925 ug/L	0.01237	0.0925 ppb	0.01237	13.37%
Co 228.616†	241.5	4.5399 ug/L	0.10451	4.5399 ppb	0.10451	2.30%
Cr 267.716†	888.8	10.685 ug/L	0.1316	10.685 ppb	0.1316	1.23%
Cu 324.752†	73402.9	223.49 ug/L	0.114	223.49 ppb	0.114	0.05%
Fe 238.204 Radial†	1772.4	16126 ug/L	288.9	16126 ppb	288.9	1.79%
K 766.490 Radial†	7504.7	1323.6 ug/L	8.96	1323.6 ppb	8.96	0.68%

Mg 279.077 IEC†	60.8	2136.9 ug/L	74.31	2136.9 ppb	74.31	3.48%
Mn 257.610†	243793.7	281.99 ug/L	0.633	281.99 ppb	0.633	0.22%
Mo 202.031†	-5.7	0.8580 ug/L	0.24621	0.8580 ppb	0.24621	28.70%
Na 589.592 Radial†	444.0	134.29 ug/L	2.780	134.29 ppb	2.780	2.07%
Ni 231.604†	366.6	9.4944 ug/L	0.28481	9.4944 ppb	0.28481	3.00%
P 214.914†	268.5	112.68 ug/L	3.778	112.68 ppb	3.778	3.35%
Pb 220.353†	823.9	103.57 ug/L	1.667	103.57 ppb	1.667	1.61%
S 181.975 Axial†	28.8	39.898 ug/L	3.2931	39.898 ppb	3.2931	8.25%
Sb 206.836†	-2.9	-2.3318 ug/L	1.59978	-2.3318 ppb	1.59978	68.61%
Se 196.026†	-71.2	4.3501 ug/L	0.90232	4.3501 ppb	0.90232	20.74%
Si 251.611†	161527.4	5402.9 ug/L	4.88	5402.9 ppb	4.88	0.09%
Sn 189.927†	-10.6	-1.2702 ug/L	1.30877	-1.2702 ppb	1.30877	103.03%
Sr 421.552†	3214.0	22.519 ug/L	0.2532	22.519 ppb	0.2532	1.12%
Ti 334.940†	165401.7	268.45 ug/L	0.312	268.45 ppb	0.312	0.12%
Tl 190.801†	-5.9	1.5913 ug/L	1.08178	1.5913 ppb	1.08178	67.98%
U 409.014†	1603.0	44.621 ug/L	3.9924	44.621 ppb	3.9924	8.95%
V 292.402†	4142.6	27.572 ug/L	0.2636	27.572 ppb	0.2636	0.96%
Zn 213.857†	5460.1	51.091 ug/L	0.3772	51.091 ppb	0.3772	0.74%
SiO2†	161017.5	11486 ug/L	100.8	11486 ppb	100.8	0.88%

Sequence No.: 30

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 2/11/2010 19:44:46

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	4892.3	4892.3	102 %		19:46:38
1	Y RADIAL	5112.4	5112.4	102.2 %		19:46:38
1	Al 396.153Radial†	5389.9	5447.4	5032.1 ug/L	5032.1 ppb	19:46:38
1	Ca 317.933Radial†	3106.7	3035.7	5031.5 ug/L	5031.5 ppb	19:46:58
1	Fe 238.204 Radial†	582.8	561.1	5121.1 ug/L	5121.1 ppb	19:46:58
1	K 766.490 Radial†	30986.8	27620.3	4869.1 ug/L	4869.1 ppb	19:46:38
1	Mg 279.077 IEC†	151.9	148.9	5276.1 ug/L	5276.1 ppb	19:46:58
1	Na 589.592 Radial†	33473.1	33967.4	10273 ug/L	10273 ppb	19:46:38
1	Sr 421.552†	76828.8	75485.9	529.36 ug/L	529.36 ppb	19:46:38
1	Sc 361.383	844484.5	844484.5	97.957 %		19:47:55
1	Y 371.029	681689.6	681689.6	95.394 %		19:47:55
1	Ag 328.068†	103140.5	105062.5	498.27 ug/L	498.27 ppb	19:48:00
1	As 188.979†	1039.4	1095.0	501.16 ug/L	501.16 ppb	19:48:20
1	B 249.677†	20002.0	20958.2	496.29 ug/L	496.29 ppb	19:48:00
1	Ba 233.527†	60529.7	61803.5	505.97 ug/L	505.97 ppb	19:48:00
1	Be 313.107†	1301198.0	1332670.4	497.51 ug/L	497.51 ppb	19:47:55
1	Cd 226.502†	40393.4	41447.7	492.65 ug/L	492.65 ppb	19:48:00
1	Co 228.616†	23070.9	23625.7	516.11 ug/L	516.11 ppb	19:48:00
1	Cr 267.716†	41389.4	42185.7	491.73 ug/L	491.73 ppb	19:48:00
1	Cu 324.752†	167859.6	165539.2	502.16 ug/L	502.16 ppb	19:48:00
1	Mn 257.610†	428823.2	437313.5	503.43 ug/L	503.43 ppb	19:47:55
1	Mo 202.031†	6419.3	6537.7	490.05 ug/L	490.05 ppb	19:48:20
1	Ni 231.604†	18874.1	19159.7	496.05 ug/L	496.05 ppb	19:48:00
1	P 214.914†	4137.6	3995.8	2388.5 ug/L	2388.5 ppb	19:48:20
1	Pb 220.353†	3795.3	3936.2	492.64 ug/L	492.64 ppb	19:48:20
1	S 181.975 Axial†	700.3	675.5	984.14 ug/L	984.14 ppb	19:48:20
1	Sb 206.836†	1431.4	1419.1	512.14 ug/L	512.14 ppb	19:48:20
1	Se 196.026†	696.6	733.2	512.13 ug/L	512.13 ppb	19:48:20
1	Si 251.611†	74449.7	75439.9	2517.3 ug/L	2517.3 ppb	19:48:00
1	Sn 189.927†	2568.9	2613.8	485.91 ug/L	485.91 ppb	19:48:20
1	Ti 334.940†	301008.1	308588.2	500.37 ug/L	500.37 ppb	19:48:00
1	Tl 190.801†	1493.0	1558.3	502.73 ug/L	502.73 ppb	19:48:20
1	U 409.014†	13492.5	16753.9	484.12 ug/L	484.12 ppb	19:48:00
1	V 292.402†	64755.7	67660.7	497.86 ug/L	497.86 ppb	19:48:00
1	Zn 213.857†	50498.5	50838.3	496.94 ug/L	496.94 ppb	19:48:00
1	SiO2†	75442.2	76432.3	5438.7 ug/L	5438.7 ppb	19:49:28
2	Sc Radial	4782.0	4782.0	99.5 %		19:47:03
2	Y RADIAL	4979.5	4979.5	99.58 %		19:47:03
2	Al 396.153Radial†	5208.0	5386.8	4976.2 ug/L	4976.2 ppb	19:47:03
2	Ca 317.933Radial†	3091.1	3090.4	5122.2 ug/L	5122.2 ppb	19:47:23
2	Fe 238.204 Radial†	582.3	573.8	5236.4 ug/L	5236.4 ppb	19:47:23
2	K 766.490 Radial†	30491.7	27824.8	4905.2 ug/L	4905.2 ppb	19:47:03
2	Mg 279.077 IEC†	147.8	148.2	5251.0 ug/L	5251.0 ppb	19:47:23
2	Na 589.592 Radial†	32580.7	33828.9	10232 ug/L	10232 ppb	19:47:03
2	Sr 421.552†	74747.4	75134.6	526.89 ug/L	526.89 ppb	19:47:03
2	Sc 361.383	856895.4	856895.4	99.397 %		19:48:26
2	Y 371.029	690435.0	690435.0	96.618 %		19:48:26
2	Ag 328.068†	104436.2	104841.1	497.26 ug/L	497.26 ppb	19:48:31
2	As 188.979†	1044.1	1084.3	496.39 ug/L	496.39 ppb	19:48:51
2	B 249.677†	20451.7	21114.8	500.00 ug/L	500.00 ppb	19:48:31
2	Ba 233.527†	61609.6	61995.0	507.54 ug/L	507.54 ppb	19:48:31
2	Be 313.107†	1320688.0	1333039.6	497.65 ug/L	497.65 ppb	19:48:26
2	Cd 226.502†	41209.8	41671.7	495.31 ug/L	495.31 ppb	19:48:31
2	Co 228.616†	23425.5	23641.4	516.43 ug/L	516.43 ppb	19:48:31
2	Cr 267.716†	41989.6	42177.6	491.63 ug/L	491.63 ppb	19:48:31
2	Cu 324.752†	170215.1	165427.1	501.82 ug/L	501.82 ppb	19:48:31
2	Mn 257.610†	436421.0	438617.0	504.94 ug/L	504.94 ppb	19:48:26
2	Mo 202.031†	6405.2	6428.6	481.89 ug/L	481.89 ppb	19:48:51
2	Ni 231.604†	19185.4	19193.8	496.94 ug/L	496.94 ppb	19:48:31

2	P 214.914†	4158.5	3955.6	2363.4 ug/L	2363.4 ppb	19:48:51
2	Pb 220.353†	3773.7	3858.4	482.89 ug/L	482.89 ppb	19:48:51
2	S 181.975 Axial†	705.7	670.6	976.97 ug/L	976.97 ppb	19:48:51
2	Sb 206.836†	1426.4	1392.9	502.77 ug/L	502.77 ppb	19:48:51
2	Se 196.026†	687.9	714.1	499.62 ug/L	499.62 ppb	19:48:51
2	Si 251.611†	75761.2	75658.5	2524.7 ug/L	2524.7 ppb	19:48:31
2	Sn 189.927†	2569.5	2576.4	478.98 ug/L	478.98 ppb	19:48:51
2	Ti 334.940†	305617.9	308775.3	500.68 ug/L	500.68 ppb	19:48:31
2	Tl 190.801†	1491.7	1534.9	495.25 ug/L	495.25 ppb	19:48:51
2	U 409.014†	14066.9	17132.3	495.08 ug/L	495.08 ppb	19:48:31
2	V 292.402†	65675.9	67629.0	497.52 ug/L	497.52 ppb	19:48:31
2	Zn 213.857†	51346.8	50945.1	497.97 ug/L	497.97 ppb	19:48:31
2	SiO2†	75358.0	75232.1	5353.3 ug/L	5353.3 ppb	19:49:33
3	Sc Radial	4857.0	4857.0	101 %		19:47:28
3	Y RADIAL	5072.2	5072.2	101.4 %		19:47:28
3	Al 396.153Radial†	5263.2	5360.5	4951.5 ug/L	4951.5 ppb	19:47:28
3	Ca 317.933Radial†	3091.6	3043.0	5043.5 ug/L	5043.5 ppb	19:47:48
3	Fe 238.204 Radial†	582.0	564.5	5151.4 ug/L	5151.4 ppb	19:47:48
3	K 766.490 Radial†	30787.4	27644.1	4873.3 ug/L	4873.3 ppb	19:47:28
3	Mg 279.077 IEC†	151.1	149.1	5283.6 ug/L	5283.6 ppb	19:47:48
3	Na 589.592 Radial†	32913.7	33652.6	10178 ug/L	10178 ppb	19:47:28
3	Sr 421.552†	75619.1	74836.9	524.80 ug/L	524.80 ppb	19:47:28
3	Sc 361.383	846381.8	846381.8	98.177 %		19:48:57
3	Y 371.029	680808.1	680808.1	95.271 %		19:48:57
3	Ag 328.068†	102802.8	104482.5	495.53 ug/L	495.53 ppb	19:49:02
3	As 188.979†	1031.0	1084.0	496.19 ug/L	496.19 ppb	19:49:22
3	B 249.677†	19986.5	20896.6	494.83 ug/L	494.83 ppb	19:49:02
3	Ba 233.527†	60362.9	61495.1	503.44 ug/L	503.44 ppb	19:49:02
3	Be 313.107†	1301355.3	1329852.9	496.46 ug/L	496.46 ppb	19:48:57
3	Cd 226.502†	40284.5	41244.3	490.23 ug/L	490.23 ppb	19:49:02
3	Co 228.616†	22925.6	23424.9	511.72 ug/L	511.72 ppb	19:49:02
3	Cr 267.716†	41166.6	41864.1	487.98 ug/L	487.98 ppb	19:49:02
3	Cu 324.752†	167352.8	164638.8	499.43 ug/L	499.43 ppb	19:49:02
3	Mn 257.610†	430983.2	438532.3	504.83 ug/L	504.83 ppb	19:48:57
3	Mo 202.031†	6404.5	6507.9	487.82 ug/L	487.82 ppb	19:49:22
3	Ni 231.604†	18742.0	18981.9	491.45 ug/L	491.45 ppb	19:49:02
3	P 214.914†	4117.9	3966.2	2370.6 ug/L	2370.6 ppb	19:49:22
3	Pb 220.353†	3788.3	3920.3	490.64 ug/L	490.64 ppb	19:49:22
3	S 181.975 Axial†	704.0	677.7	987.32 ug/L	987.32 ppb	19:49:22
3	Sb 206.836†	1439.5	1424.0	513.80 ug/L	513.80 ppb	19:49:22
3	Se 196.026†	692.5	727.5	508.37 ug/L	508.37 ppb	19:49:22
3	Si 251.611†	74242.6	75058.6	2504.6 ug/L	2504.6 ppb	19:49:02
3	Sn 189.927†	2564.2	2603.1	483.92 ug/L	483.92 ppb	19:49:22
3	Ti 334.940†	300261.1	307138.4	498.02 ug/L	498.02 ppb	19:49:02
3	Tl 190.801†	1482.5	1544.3	498.24 ug/L	498.24 ppb	19:49:22
3	U 409.014†	13522.0	16753.1	484.10 ug/L	484.10 ppb	19:49:02
3	V 292.402†	64464.8	67216.2	494.60 ug/L	494.60 ppb	19:49:02
3	Zn 213.857†	50386.1	50608.2	494.70 ug/L	494.70 ppb	19:49:02
3	SiO2†	74726.5	75530.7	5374.5 ug/L	5374.5 ppb	19:49:38

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	849253.9	98.511 %	0.7755			0.79%
Sc Radial	4843.8	101 %	1.2			1.16%
Y 371.029	684310.9	95.761 %	0.7447			0.78%
Y RADIAL	5054.7	101.1 %	1.36			1.35%
Ag 328.068†	104795.3	497.02 ug/L	1.383	497.02 ppb	1.383	0.28%
QC value within limits for Ag 328.068 Recovery = 99.40%						
Al 396.153Radial†	5398.2	4986.6 ug/L	41.26	4986.6 ppb	41.26	0.83%
QC value within limits for Al 396.153Radial Recovery = 99.73%						
As 188.979†	1087.8	497.91 ug/L	2.815	497.91 ppb	2.815	0.57%
QC value within limits for As 188.979 Recovery = 99.58%						
B 249.677†	20989.8	497.04 ug/L	2.663	497.04 ppb	2.663	0.54%
QC value within limits for B 249.677 Recovery = 99.41%						
Ba 233.527†	61764.5	505.65 ug/L	2.065	505.65 ppb	2.065	0.41%
QC value within limits for Ba 233.527 Recovery = 101.13%						
Be 313.107†	1331854.3	497.21 ug/L	0.653	497.21 ppb	0.653	0.13%
QC value within limits for Be 313.107 Recovery = 99.44%						
Ca 317.933Radial†	3056.4	5065.7 ug/L	49.26	5065.7 ppb	49.26	0.97%

QC value within limits for Ca 317.933 Radial Recovery = 101.31%

Cd	226.502†	41454.5	492.73 ug/L	2.540	492.73 ppb	2.540	0.52%
QC value within limits for Cd 226.502 Recovery = 98.55%							
Co	228.616†	23564.0	514.75 ug/L	2.630	514.75 ppb	2.630	0.51%
QC value within limits for Co 228.616 Recovery = 102.95%							
Cr	267.716†	42075.8	490.44 ug/L	2.136	490.44 ppb	2.136	0.44%
QC value within limits for Cr 267.716 Recovery = 98.09%							
Cu	324.752†	165201.7	501.14 ug/L	1.488	501.14 ppb	1.488	0.30%
QC value within limits for Cu 324.752 Recovery = 100.23%							
Fe	238.204 Radial†	566.5	5169.6 ug/L	59.79	5169.6 ppb	59.79	1.16%
QC value within limits for Fe 238.204 Radial Recovery = 103.39%							
K	766.490 Radial†	27696.4	4882.5 ug/L	19.73	4882.5 ppb	19.73	0.40%
QC value within limits for K 766.490 Radial Recovery = 97.65%							
Mg	279.077 IEC†	148.7	5270.3 ug/L	17.06	5270.3 ppb	17.06	0.32%
QC value within limits for Mg 279.077 IEC Recovery = 105.41%							
Mn	257.610†	438154.2	504.40 ug/L	0.844	504.40 ppb	0.844	0.17%
QC value within limits for Mn 257.610 Recovery = 100.88%							
Mo	202.031†	6491.4	486.59 ug/L	4.218	486.59 ppb	4.218	0.87%
QC value within limits for Mo 202.031 Recovery = 97.32%							
Na	589.592 Radial†	33816.3	10228 ug/L	47.7	10228 ppb	47.7	0.47%
QC value within limits for Na 589.592 Radial Recovery = 102.28%							
Ni	231.604†	19111.8	494.81 ug/L	2.946	494.81 ppb	2.946	0.60%
QC value within limits for Ni 231.604 Recovery = 98.96%							
P	214.914†	3972.6	2374.2 ug/L	12.95	2374.2 ppb	12.95	0.55%
QC value within limits for P 214.914 Recovery = 94.97%							
Pb	220.353†	3904.9	488.73 ug/L	5.148	488.73 ppb	5.148	1.05%
QC value within limits for Pb 220.353 Recovery = 97.75%							
S	181.975 Axial†	674.6	982.81 ug/L	5.304	982.81 ppb	5.304	0.54%
QC value within limits for S 181.975 Axial Recovery = 98.28%							
Sb	206.836†	1412.0	509.57 ug/L	5.950	509.57 ppb	5.950	1.17%
QC value within limits for Sb 206.836 Recovery = 101.91%							
Se	196.026†	725.0	506.71 ug/L	6.419	506.71 ppb	6.419	1.27%
QC value within limits for Se 196.026 Recovery = 101.34%							
Si	251.611†	75385.7	2515.6 ug/L	10.19	2515.6 ppb	10.19	0.40%
QC value within limits for Si 251.611 Recovery = 100.62%							
Sn	189.927†	2597.7	482.93 ug/L	3.569	482.93 ppb	3.569	0.74%
QC value within limits for Sn 189.927 Recovery = 96.59%							
Sr	421.552†	75152.5	527.02 ug/L	2.278	527.02 ppb	2.278	0.43%
QC value within limits for Sr 421.552 Recovery = 105.40%							
Ti	334.940†	308167.3	499.69 ug/L	1.455	499.69 ppb	1.455	0.29%
QC value within limits for Ti 334.940 Recovery = 99.94%							
Tl	190.801†	1545.8	498.74 ug/L	3.770	498.74 ppb	3.770	0.76%
QC value within limits for Tl 190.801 Recovery = 99.75%							
U	409.014†	16879.8	487.77 ug/L	6.333	487.77 ppb	6.333	1.30%
QC value within limits for U 409.014 Recovery = 97.55%							
V	292.402†	67501.9	496.66 ug/L	1.792	496.66 ppb	1.792	0.36%
QC value within limits for V 292.402 Recovery = 99.33%							
Zn	213.857†	50797.2	496.53 ug/L	1.673	496.53 ppb	1.673	0.34%
QC value within limits for Zn 213.857 Recovery = 99.31%							
SiO2†		75731.7	5388.8 ug/L	44.47	5388.8 ppb	44.47	0.83%
QC value within limits for SiO2 Recovery = 100.77%							

All analyte(s) passed QC.

Sequence No.: 31

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 2/11/2010 19:51:48

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4852.6	4852.6	101 %		19:53:40
1	Y RADIAL	5104.9	5104.9	102.1 %		19:53:40
1	Al 396.153Radial†	-156.8	-3.7	-3.4672 ug/L	-3.4672 ppb	19:53:40
1	Ca 317.933Radial†	13.3	-3.5	-5.7723 ug/L	-5.7723 ppb	19:54:00
1	Fe 238.204 Radial†	11.1	-0.5	-4.3777 ug/L	-4.3777 ppb	19:54:00
1	K 766.490 Radial†	2923.7	70.5	12.423 ug/L	12.423 ppb	19:53:40
1	Mg 279.077 IEC†	4.4	3.9	139.91 ug/L	139.91 ppb	19:54:00
1	Na 589.592 Radial†	-915.0	172.1	52.065 ug/L	52.065 ppb	19:53:40
1	Sr 421.552†	-6.2	-8.2	-0.0577 ug/L	-0.0577 ppb	19:53:40
1	Sc 361.383	845000.9	845000.9	98.017 %		19:54:57
1	Y 371.029	690047.0	690047.0	96.564 %		19:54:57
1	Ag 328.068†	339.3	117.3	0.5487 ug/L	0.5487 ppb	19:54:57
1	As 188.979†	-28.0	5.3	2.4128 ug/L	2.4128 ppb	19:55:17
1	B 249.677†	-298.5	234.5	5.5805 ug/L	5.5805 ppb	19:55:17
1	Ba 233.527†	-12.0	-0.7	-0.0055 ug/L	-0.0055 ppb	19:55:17
1	Be 313.107†	-4157.8	96.8	0.0361 ug/L	0.0361 ppb	19:54:57
1	Cd 226.502†	-196.0	12.0	0.1432 ug/L	0.1432 ppb	19:55:17
1	Co 228.616†	-79.3	-7.1	-0.1547 ug/L	-0.1547 ppb	19:55:17
1	Cr 267.716†	74.4	9.1	0.1043 ug/L	0.1043 ppb	19:55:17
1	Cu 324.752†	5390.6	-321.1	-0.9765 ug/L	-0.9765 ppb	19:54:57
1	Mn 257.610†	508.7	67.1	0.0710 ug/L	0.0710 ppb	19:55:17
1	Mo 202.031†	23.3	8.3	0.6191 ug/L	0.6191 ppb	19:55:17
1	Ni 231.604†	92.1	-14.0	-0.3633 ug/L	-0.3633 ppb	19:55:17
1	P 214.914†	239.6	16.4	10.413 ug/L	10.413 ppb	19:55:17
1	Pb 220.353†	-62.4	-2.0	-0.2437 ug/L	-0.2437 ppb	19:55:17
1	S 181.975 Axial†	39.4	0.9	1.2460 ug/L	1.2460 ppb	19:55:17
1	Sb 206.836†	39.6	-1.7	-0.5625 ug/L	-0.5625 ppb	19:55:17
1	Se 196.026†	-21.7	-0.0	-0.0403 ug/L	-0.0403 ppb	19:55:17
1	Si 251.611†	638.1	88.8	2.9615 ug/L	2.9615 ppb	19:55:17
1	Sn 189.927†	16.1	7.7	1.4322 ug/L	1.4322 ppb	19:55:17
1	Ti 334.940†	-1251.8	26.1	0.0284 ug/L	0.0284 ppb	19:54:57
1	Tl 190.801†	-32.4	1.2	0.3822 ug/L	0.3822 ppb	19:55:17
1	U 409.014†	-2790.5	133.1	3.8593 ug/L	3.8593 ppb	19:54:57
1	V 292.402†	-1514.3	9.7	0.0897 ug/L	0.0897 ppb	19:54:57
1	Zn 213.857†	718.1	19.4	0.1959 ug/L	0.1959 ppb	19:55:17
1	SiO2†	634.2	63.9	4.5404 ug/L	4.5404 ppb	19:56:13
2	Sc Radial	4870.6	4870.6	101 %		19:54:05
2	Y RADIAL	5110.5	5110.5	102.2 %		19:54:05
2	Al 396.153Radial†	-132.3	21.0	19.477 ug/L	19.477 ppb	19:54:05
2	Ca 317.933Radial†	19.5	2.6	4.2675 ug/L	4.2675 ppb	19:54:25
2	Fe 238.204 Radial†	12.6	1.0	8.9535 ug/L	8.9535 ppb	19:54:25
2	K 766.490 Radial†	2956.4	92.0	16.228 ug/L	16.228 ppb	19:54:05
2	Mg 279.077 IEC†	1.4	1.0	35.252 ug/L	35.252 ppb	19:54:25
2	Na 589.592 Radial†	-939.4	151.4	45.801 ug/L	45.801 ppb	19:54:05
2	Sr 421.552†	6.8	4.6	0.0326 ug/L	0.0326 ppb	19:54:05
2	Sc 361.383	846282.8	846282.8	98.166 %		19:55:22
2	Y 371.029	690372.9	690372.9	96.609 %		19:55:22
2	Ag 328.068†	232.9	8.5	0.0439 ug/L	0.0439 ppb	19:55:22
2	As 188.979†	-24.3	9.1	4.1481 ug/L	4.1481 ppb	19:55:42
2	B 249.677†	-293.7	239.8	5.7033 ug/L	5.7033 ppb	19:55:42
2	Ba 233.527†	-8.8	2.6	0.0218 ug/L	0.0218 ppb	19:55:42
2	Be 313.107†	-4166.7	94.1	0.0352 ug/L	0.0352 ppb	19:55:22
2	Cd 226.502†	-202.2	5.9	0.0690 ug/L	0.0690 ppb	19:55:42
2	Co 228.616†	-64.1	8.4	0.1860 ug/L	0.1860 ppb	19:55:42
2	Cr 267.716†	68.4	2.9	0.0342 ug/L	0.0342 ppb	19:55:42
2	Cu 324.752†	5417.8	-301.7	-0.9143 ug/L	-0.9143 ppb	19:55:22
2	Mn 257.610†	481.7	38.8	0.0440 ug/L	0.0440 ppb	19:55:42
2	Mo 202.031†	25.6	10.5	0.7882 ug/L	0.7882 ppb	19:55:42
2	Ni 231.604†	80.0	-26.5	-0.6859 ug/L	-0.6859 ppb	19:55:42

2	P 214.914†	243.5	20.0	12.633 ug/L	12.633 ppb	19:55:42
2	Pb 220.353†	-66.6	-6.1	-0.7606 ug/L	-0.7606 ppb	19:55:42
2	S 181.975 Axial†	38.1	-0.5	-0.7480 ug/L	-0.7480 ppb	19:55:42
2	Sb 206.836†	46.1	4.9	1.7428 ug/L	1.7428 ppb	19:55:42
2	Se 196.026†	-16.5	5.3	3.6098 ug/L	3.6098 ppb	19:55:42
2	Si 251.611†	609.8	58.9	1.9608 ug/L	1.9608 ppb	19:55:42
2	Sn 189.927†	20.3	12.0	2.2248 ug/L	2.2248 ppb	19:55:42
2	Ti 334.940†	-1234.0	46.1	0.0729 ug/L	0.0729 ppb	19:55:22
2	Tl 190.801†	-28.0	5.7	1.8148 ug/L	1.8148 ppb	19:55:42
2	U 409.014†	-2955.9	-31.1	-0.9016 ug/L	-0.9016 ppb	19:55:22
2	V 292.402†	-1517.6	8.7	0.0716 ug/L	0.0716 ppb	19:55:22
2	Zn 213.857†	711.6	11.7	0.1193 ug/L	0.1193 ppb	19:55:42
2	SiO2†	637.5	66.3	4.7055 ug/L	4.7055 ppb	19:56:18
3	Sc Radial	4823.0	4823.0	100 %		19:54:30
3	Y RADIAL	5057.4	5057.4	101.1 %		19:54:30
3	Al 396.153Radial†	-142.5	9.6	8.8790 ug/L	8.8790 ppb	19:54:30
3	Ca 317.933Radial†	17.0	0.3	0.4427 ug/L	0.4427 ppb	19:54:50
3	Fe 238.204 Radial†	12.6	1.1	9.6699 ug/L	9.6699 ppb	19:54:50
3	K 766.490 Radial†	2863.2	27.9	4.9112 ug/L	4.9112 ppb	19:54:30
3	Mg 279.077 IEC†	-0.3	-0.7	-26.259 ug/L	-26.259 ppb	19:54:50
3	Na 589.592 Radial†	-955.9	125.8	38.039 ug/L	38.039 ppb	19:54:30
3	Sr 421.552†	16.6	14.5	0.1015 ug/L	0.1015 ppb	19:54:30
3	Sc 361.383	846616.8	846616.8	98.205 %		19:55:47
3	Y 371.029	689796.8	689796.8	96.529 %		19:55:47
3	Ag 328.068†	217.5	-7.3	-0.0282 ug/L	-0.0282 ppb	19:55:47
3	As 188.979†	-25.1	8.3	3.7642 ug/L	3.7642 ppb	19:56:07
3	B 249.677†	-307.9	225.5	5.3638 ug/L	5.3638 ppb	19:56:07
3	Ba 233.527†	-14.6	-3.3	-0.0260 ug/L	-0.0260 ppb	19:56:07
3	Be 313.107†	-4125.1	138.2	0.0511 ug/L	0.0511 ppb	19:55:47
3	Cd 226.502†	-201.9	6.4	0.0738 ug/L	0.0738 ppb	19:56:07
3	Co 228.616†	-70.2	2.2	0.0507 ug/L	0.0507 ppb	19:56:07
3	Cr 267.716†	71.7	6.3	0.0743 ug/L	0.0743 ppb	19:56:07
3	Cu 324.752†	5375.8	-346.7	-1.0501 ug/L	-1.0501 ppb	19:55:47
3	Mn 257.610†	478.6	35.5	0.0429 ug/L	0.0429 ppb	19:56:07
3	Mo 202.031†	25.7	10.6	0.7942 ug/L	0.7942 ppb	19:56:07
3	Ni 231.604†	84.5	-22.0	-0.5696 ug/L	-0.5696 ppb	19:56:07
3	P 214.914†	244.1	20.5	12.977 ug/L	12.977 ppb	19:56:07
3	Pb 220.353†	-60.1	0.6	0.0728 ug/L	0.0728 ppb	19:56:07
3	S 181.975 Axial†	36.6	-2.1	-3.0922 ug/L	-3.0922 ppb	19:56:07
3	Sb 206.836†	39.0	-2.5	-0.8359 ug/L	-0.8359 ppb	19:56:07
3	Se 196.026†	-16.8	5.1	3.4383 ug/L	3.4383 ppb	19:56:07
3	Si 251.611†	601.2	49.9	1.6596 ug/L	1.6596 ppb	19:56:07
3	Sn 189.927†	13.5	5.1	0.9382 ug/L	0.9382 ppb	19:56:07
3	Ti 334.940†	-1388.3	-110.5	-0.1763 ug/L	-0.1763 ppb	19:55:47
3	Tl 190.801†	-31.7	1.9	0.6171 ug/L	0.6171 ppb	19:56:07
3	U 409.014†	-2987.1	-61.6	-1.7881 ug/L	-1.7881 ppb	19:55:47
3	V 292.402†	-1484.1	43.4	0.3211 ug/L	0.3211 ppb	19:55:47
3	Zn 213.857†	720.5	20.4	0.2048 ug/L	0.2048 ppb	19:56:07
3	SiO2†	674.5	103.7	7.3722 ug/L	7.3722 ppb	19:56:23

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	845966.8	98.129 %	0.0989			0.10%
Sc Radial	4848.7	101 %	0.5			0.50%
Y 371.029	690072.3	96.567 %	0.0404			0.04%
Y RADIAL	5090.9	101.8 %	0.58			0.57%
Ag 328.068†	39.5	0.1881 ug/L	0.31431	0.1881 ppb	0.31431	167.09%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	9.0	8.2962 ug/L	11.48308	8.2962 ppb	11.48308	138.41%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	7.6	3.4417 ug/L	0.91151	3.4417 ppb	0.91151	26.48%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	233.3	5.5492 ug/L	0.17189	5.5492 ppb	0.17189	3.10%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	-0.5	-0.0032 ug/L	0.02400	-0.0032 ppb	0.02400	743.55%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	109.7	0.0408 ug/L	0.00890	0.0408 ppb	0.00890	21.80%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-0.2	-0.3541 ug/L	5.06709	-0.3541 ppb	5.06709	>999.9%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd 226.502†	8.1	0.0953 ug/L	0.04151	0.0953 ppb	0.04151	43.54%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	1.2	0.0273 ug/L	0.17156	0.0273 ppb	0.17156	627.74%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	6.1	0.0709 ug/L	0.03516	0.0709 ppb	0.03516	49.57%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	-323.2	-0.9803 ug/L	0.06800	-0.9803 ppb	0.06800	6.94%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	0.5	4.7485 ug/L	7.91170	4.7485 ppb	7.91170	166.61%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	63.5	11.188 ug/L	5.7588	11.188 ppb	5.7588	51.47%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	1.4	49.635 ug/L	84.0147	49.635 ppb	84.0147	169.26%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	47.1	0.0526 ug/L	0.01593	0.0526 ppb	0.01593	30.25%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	9.8	0.7338 ug/L	0.09940	0.7338 ppb	0.09940	13.54%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	149.8	45.302 ug/L	7.0264	45.302 ppb	7.0264	15.51%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	-20.8	-0.5396 ug/L	0.16340	-0.5396 ppb	0.16340	30.28%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	19.0	12.008 ug/L	1.3913	12.008 ppb	1.3913	11.59%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	-2.5	-0.3105 ug/L	0.42069	-0.3105 ppb	0.42069	135.47%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	-0.6	-0.8647 ug/L	2.17143	-0.8647 ppb	2.17143	251.11%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	0.2	0.1148 ug/L	1.41654	0.1148 ppb	1.41654	>999.9%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	3.4	2.3359 ug/L	2.05969	2.3359 ppb	2.05969	88.17%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	65.9	2.1940 ug/L	0.68157	2.1940 ppb	0.68157	31.07%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	8.3	1.5317 ug/L	0.64906	1.5317 ppb	0.64906	42.37%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	3.6	0.0255 ug/L	0.07988	0.0255 ppb	0.07988	313.83%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	-12.8	-0.0250 ug/L	0.13286	-0.0250 ppb	0.13286	531.34%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	2.9	0.9381 ug/L	0.76833	0.9381 ppb	0.76833	81.91%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	13.5	0.3899 ug/L	3.03713	0.3899 ppb	3.03713	778.98%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	20.6	0.1608 ug/L	0.13913	0.1608 ppb	0.13913	86.52%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	17.2	0.1733 ug/L	0.04702	0.1733 ppb	0.04702	27.13%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	77.9	5.5394 ug/L	1.58942	5.5394 ppb	1.58942	28.69%	
QC value within limits for SiO2 Recovery = Not calculated							
All analyte(s) passed QC.							

Sequence No.: 32

Sample ID: 245394002|945421|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 61

Date Collected: 2/11/2010 19:58:34

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245394002|945421|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4969.6	4969.6	103 %		20:00:27
1	Y RADIAL	6665.9	6665.9	133.3 %		20:00:27
1	Al 396.153Radial†	14494.0	14171.1	13152 ug/L	13152 ppb	20:00:27
1	Ca 317.933Radial†	2778.7	2671.0	4427.0 ug/L	4427.0 ppb	20:00:47
1	Fe 238.204 Radial†	10590.0	10231.8	93096 ug/L	93096 ppb	20:00:27
1	K 766.490 Radial†	26513.7	22820.0	4024.8 ug/L	4024.8 ppb	20:00:27
1	Mg 279.077 IEC†	104.1	100.2	3455.4 ug/L	3455.4 ppb	20:00:47
1	Na 589.592 Radial†	4987.5	5902.8	1785.3 ug/L	1785.3 ppb	20:00:27
1	Sr 421.552†	4724.7	4567.9	32.002 ug/L	32.002 ppb	20:00:27
1	Sc 361.383	863256.2	863256.2	100.13 %		20:01:45
1	Y 371.029	894698.6	894698.6	125.20 %		20:01:45
1	Ag 328.068†	-5346.3	-5567.9	5.4810 ug/L	5.4810 ppb	20:01:50
1	As 188.979†	-50.3	-16.4	29.736 ug/L	29.736 ppb	20:02:10
1	B 249.677†	475.8	1014.2	8.8607 ug/L	8.8607 ppb	20:01:50
1	Ba 233.527†	36899.3	36861.3	304.00 ug/L	304.00 ppb	20:01:50
1	Be 313.107†	-53.4	4285.4	5.6265 ug/L	5.6265 ppb	20:01:50
1	Cd 226.502†	605.1	816.2	0.0959 ug/L	0.0959 ppb	20:02:10
1	Co 228.616†	2309.0	2379.6	47.053 ug/L	47.053 ppb	20:02:10
1	Cr 267.716†	2382.6	2312.6	28.870 ug/L	28.870 ppb	20:02:10
1	Cu 324.752†	157263.0	151230.7	463.76 ug/L	463.76 ppb	20:01:50
1	Mn 257.610†	2758472.5	2754308.2	3177.9 ug/L	3177.9 ppb	20:01:45
1	Mo 202.031†	44.2	28.6	9.4227 ug/L	9.4227 ppb	20:02:10
1	Ni 231.604†	2221.5	2110.5	54.644 ug/L	54.644 ppb	20:02:10
1	P 214.914†	1625.8	1395.5	705.65 ug/L	705.65 ppb	20:02:10
1	Pb 220.353†	1362.1	1422.0	171.13 ug/L	171.13 ppb	20:02:10
1	S 181.975 Axial†	103.6	64.1	91.021 ug/L	91.021 ppb	20:02:10
1	Sb 206.836†	64.6	22.4	0.8656 ug/L	0.8656 ppb	20:02:10
1	Se 196.026†	-447.3	-424.6	14.306 ug/L	14.306 ppb	20:02:10
1	Si 251.611†	397667.0	396569.6	13265 ug/L	13265 ppb	20:01:45
1	Sn 189.927†	35.1	26.4	7.1341 ug/L	7.1341 ppb	20:02:10
1	Ti 334.940†	1094679.3	1094509.3	1775.6 ug/L	1775.6 ppb	20:01:45
1	Tl 190.801†	-146.3	-111.9	-6.3292 ug/L	-6.3292 ppb	20:02:10
1	U 409.014†	-7695.7	-4705.3	-147.11 ug/L	-147.11 ppb	20:01:45
1	V 292.402†	6531.8	8077.7	43.050 ug/L	43.050 ppb	20:01:50
1	Zn 213.857†	55268.9	54481.3	522.58 ug/L	522.58 ppb	20:01:50
1	SiO2†	397476.7	396358.7	28273 ug/L	28273 ppb	20:03:18
2	Sc Radial	4989.1	4989.1	104 %		20:00:52
2	Y RADIAL	6670.3	6670.3	133.4 %		20:00:52
2	Al 396.153Radial†	14490.3	14112.6	13098 ug/L	13098 ppb	20:00:52
2	Ca 317.933Radial†	2812.5	2693.1	4463.6 ug/L	4463.6 ppb	20:01:12
2	Fe 238.204 Radial†	10594.6	10196.2	92773 ug/L	92773 ppb	20:00:52
2	K 766.490 Radial†	26568.8	22772.8	4016.4 ug/L	4016.4 ppb	20:00:52
2	Mg 279.077 IEC†	107.6	103.2	3561.3 ug/L	3561.3 ppb	20:01:12
2	Na 589.592 Radial†	4997.4	5893.4	1782.5 ug/L	1782.5 ppb	20:00:52
2	Sr 421.552†	4725.8	4551.1	31.884 ug/L	31.884 ppb	20:00:52
2	Sc 361.383	878102.7	878102.7	101.86 %		20:02:16
2	Y 371.029	909450.3	909450.3	127.27 %		20:02:16
2	Ag 328.068†	-5401.1	-5531.4	5.5415 ug/L	5.5415 ppb	20:02:21
2	As 188.979†	-56.5	-21.6	27.328 ug/L	27.328 ppb	20:02:41
2	B 249.677†	463.5	994.1	8.4399 ug/L	8.4399 ppb	20:02:21
2	Ba 233.527†	36342.7	35691.7	294.43 ug/L	294.43 ppb	20:02:21
2	Be 313.107†	-6.0	4332.8	5.6513 ug/L	5.6513 ppb	20:02:21
2	Cd 226.502†	566.8	768.3	-0.4410 ug/L	-0.4410 ppb	20:02:41
2	Co 228.616†	2292.1	2324.0	45.833 ug/L	45.833 ppb	20:02:41
2	Cr 267.716†	2402.6	2292.1	28.624 ug/L	28.624 ppb	20:02:41
2	Cu 324.752†	155045.9	146398.6	449.09 ug/L	449.09 ppb	20:02:21
2	Mn 257.610†	2807928.2	2756286.2	3180.2 ug/L	3180.2 ppb	20:02:16
2	Mo 202.031†	51.6	35.1	9.8858 ug/L	9.8858 ppb	20:02:41
2	Ni 231.604†	2214.0	2065.6	53.482 ug/L	53.482 ppb	20:02:41

2	P 214.914†	1614.9	1357.4	685.06 ug/L	685.06 ppb	20:02:41
2	Pb 220.353†	1376.8	1413.4	170.08 ug/L	170.08 ppb	20:02:41
2	S 181.975 Axial†	88.3	47.3	66.543 ug/L	66.543 ppb	20:02:41
2	Sb 206.836†	69.6	26.2	2.1970 ug/L	2.1970 ppb	20:02:41
2	Se 196.026†	-455.4	-425.0	13.013 ug/L	13.013 ppb	20:02:41
2	Si 251.611†	405288.5	397337.6	13290 ug/L	13290 ppb	20:02:16
2	Sn 189.927†	36.5	27.1	7.2682 ug/L	7.2682 ppb	20:02:41
2	Ti 334.940†	1115492.2	1096459.3	1778.8 ug/L	1778.8 ppb	20:02:16
2	Tl 190.801†	-143.0	-106.2	-4.4576 ug/L	-4.4576 ppb	20:02:41
2	U 409.014†	-7940.2	-4815.4	-150.27 ug/L	-150.27 ppb	20:02:16
2	V 292.402†	6498.5	7934.7	42.058 ug/L	42.058 ppb	20:02:21
2	Zn 213.857†	54589.7	52881.2	506.87 ug/L	506.87 ppb	20:02:21
2	SiO2†	400235.3	392355.6	27987 ug/L	27987 ppb	20:03:23
3	Sc Radial	4968.8	4968.8	103 %		20:01:17
3	Y RADIAL	6687.5	6687.5	133.7 %		20:01:17
3	Al 396.153Radial†	14507.3	14186.1	13166 ug/L	13166 ppb	20:01:17
3	Ca 317.933Radial†	2811.1	2702.8	4479.7 ug/L	4479.7 ppb	20:01:37
3	Fe 238.204 Radial†	10583.1	10226.8	93051 ug/L	93051 ppb	20:01:17
3	K 766.490 Radial†	26510.0	22820.3	4024.8 ug/L	4024.8 ppb	20:01:17
3	Mg 279.077 IEC†	100.7	97.0	3341.2 ug/L	3341.2 ppb	20:01:37
3	Na 589.592 Radial†	4960.8	5877.6	1777.7 ug/L	1777.7 ppb	20:01:17
3	Sr 421.552†	4746.5	4589.7	32.155 ug/L	32.155 ppb	20:01:17
3	Sc 361.383	870895.8	870895.8	101.02 %		20:02:47
3	Y 371.029	902028.8	902028.8	126.23 %		20:02:47
3	Ag 328.068†	-5396.4	-5570.7	5.4533 ug/L	5.4533 ppb	20:02:52
3	As 188.979†	-45.6	-11.2	32.071 ug/L	32.071 ppb	20:03:12
3	B 249.677†	472.8	1007.1	8.7017 ug/L	8.7017 ppb	20:02:52
3	Ba 233.527†	36710.5	36351.1	299.83 ug/L	299.83 ppb	20:02:52
3	Be 313.107†	83.8	4421.6	5.6758 ug/L	5.6758 ppb	20:02:52
3	Cd 226.502†	585.5	791.5	-0.1941 ug/L	-0.1941 ppb	20:03:12
3	Co 228.616†	2291.5	2342.0	46.233 ug/L	46.233 ppb	20:03:12
3	Cr 267.716†	2403.6	2312.5	28.868 ug/L	28.868 ppb	20:03:12
3	Cu 324.752†	156823.5	149417.9	458.26 ug/L	458.26 ppb	20:02:52
3	Mn 257.610†	2776978.6	2748462.0	3171.2 ug/L	3171.2 ppb	20:02:47
3	Mo 202.031†	47.8	31.8	9.6596 ug/L	9.6596 ppb	20:03:12
3	Ni 231.604†	2221.6	2091.1	54.144 ug/L	54.144 ppb	20:03:12
3	P 214.914†	1624.0	1379.5	696.80 ug/L	696.80 ppb	20:03:12
3	Pb 220.353†	1358.3	1406.3	169.18 ug/L	169.18 ppb	20:03:12
3	S 181.975 Axial†	89.0	48.8	68.662 ug/L	68.662 ppb	20:03:12
3	Sb 206.836†	67.4	24.6	1.6573 ug/L	1.6573 ppb	20:03:12
3	Se 196.026†	-448.6	-421.9	15.986 ug/L	15.986 ppb	20:03:12
3	Si 251.611†	400443.4	395834.2	13240 ug/L	13240 ppb	20:02:47
3	Sn 189.927†	38.2	29.1	7.6495 ug/L	7.6495 ppb	20:03:12
3	Ti 334.940†	1103988.4	1094134.5	1775.0 ug/L	1775.0 ppb	20:02:47
3	Tl 190.801†	-144.1	-108.5	-5.2547 ug/L	-5.2547 ppb	20:03:12
3	U 409.014†	-7846.9	-4787.5	-149.49 ug/L	-149.49 ppb	20:02:47
3	V 292.402†	6567.4	8055.7	42.894 ug/L	42.894 ppb	20:02:52
3	Zn 213.857†	55090.2	53820.2	516.08 ug/L	516.08 ppb	20:02:52
3	SiO2†	400883.0	396248.5	28265 ug/L	28265 ppb	20:03:29

Mean Data: 245394002|945421|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	870751.6	101.00 %	0.861			0.85%
Sc Radial	4975.8	104 %	0.2			0.23%
Y 371.029	902059.2	126.23 %	1.032			0.82%
Y RADIAL	6674.6	133.5 %	0.23			0.17%
Ag 328.068†	-5556.7	5.4919 ug/L	0.04512	5.4919 ppb	0.04512	0.82%
Al 396.153Radial†	14156.6	13139 ug/L	36.0	13139 ppb	36.0	0.27%
As 188.979†	-16.4	29.712 ug/L	2.3716	29.712 ppb	2.3716	7.98%
B 249.677†	1005.1	8.6674 ug/L	0.21249	8.6674 ppb	0.21249	2.45%
Ba 233.527†	36301.4	299.42 ug/L	4.795	299.42 ppb	4.795	1.60%
Be 313.107†	4346.6	5.6512 ug/L	0.02467	5.6512 ppb	0.02467	0.44%
Ca 317.933Radial†	2689.0	4456.8 ug/L	26.97	4456.8 ppb	26.97	0.61%
Cd 226.502†	792.0	-0.1797 ug/L	0.26876	-0.1797 ppb	0.26876	149.53%
Co 228.616†	2348.5	46.373 ug/L	0.6218	46.373 ppb	0.6218	1.34%
Cr 267.716†	2305.7	28.787 ug/L	0.1415	28.787 ppb	0.1415	0.49%
Cu 324.752†	149015.7	457.03 ug/L	7.413	457.03 ppb	7.413	1.62%
Fe 238.204 Radial†	10218.3	92973 ug/L	175.2	92973 ppb	175.2	0.19%
K 766.490 Radial†	22804.4	4022.0 ug/L	4.84	4022.0 ppb	4.84	0.12%

Mg 279.077 IEC†	100.2	3452.6 ug/L	110.11	3452.6 ppb	110.11	3.19%
Mn 257.610†	2753018.8	3176.4 ug/L	4.67	3176.4 ppb	4.67	0.15%
Mo 202.031†	31.9	9.6560 ug/L	0.23158	9.6560 ppb	0.23158	2.40%
Na 589.592 Radial†	5891.3	1781.8 ug/L	3.85	1781.8 ppb	3.85	0.22%
Ni 231.604†	2089.1	54.090 ug/L	0.5827	54.090 ppb	0.5827	1.08%
P 214.914†	1377.5	695.84 ug/L	10.329	695.84 ppb	10.329	1.48%
Pb 220.353†	1413.9	170.13 ug/L	0.977	170.13 ppb	0.977	0.57%
S 181.975 Axial†	53.4	75.409 ug/L	13.5623	75.409 ppb	13.5623	17.98%
Sb 206.836†	24.4	1.5733 ug/L	0.66967	1.5733 ppb	0.66967	42.56%
Se 196.026†	-423.8	14.435 ug/L	1.4906	14.435 ppb	1.4906	10.33%
Si 251.611†	396580.4	13265 ug/L	25.1	13265 ppb	25.1	0.19%
Sn 189.927†	27.5	7.3506 ug/L	0.26739	7.3506 ppb	0.26739	3.64%
Sr 421.552†	4569.6	32.014 ug/L	0.1356	32.014 ppb	0.1356	0.42%
Ti 334.940†	1095034.4	1776.5 ug/L	2.02	1776.5 ppb	2.02	0.11%
Tl 190.801†	-108.9	-5.3471 ug/L	0.93921	-5.3471 ppb	0.93921	17.56%
U 409.014†	-4769.4	-148.96 ug/L	1.644	-148.96 ppb	1.644	1.10%
V 292.402†	8022.7	42.667 ug/L	0.5333	42.667 ppb	0.5333	1.25%
Zn 213.857†	53727.6	515.18 ug/L	7.894	515.18 ppb	7.894	1.53%
SiO2†	394987.6	28175 ug/L	162.6	28175 ppb	162.6	0.58%

Sequence No.: 33

Sample ID: 245394003|945421|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 62

Date Collected: 2/11/2010 20:05:41

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245394003|945421|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4955.5	4955.5	103 %		20:07:34
1	Y RADIAL	5951.9	5951.9	119.0 %		20:07:34
1	Al 396.153Radial†	24731.9	24142.0	22406 ug/L	22406 ppb	20:07:34
1	Ca 317.933Radial†	6862.4	6639.9	11005 ug/L	11005 ppb	20:07:34
1	Fe 238.204 Radial†	7458.1	7223.0	65720 ug/L	65720 ppb	20:07:34
1	K 766.490 Radial†	21377.9	17911.2	3157.1 ug/L	3157.1 ppb	20:07:34
1	Mg 279.077 IEC†	171.6	166.0	5815.2 ug/L	5815.2 ppb	20:07:54
1	Na 589.592 Radial†	694.5	1752.2	529.95 ug/L	529.95 ppb	20:07:34
1	Sr 421.552†	6994.5	6782.7	47.486 ug/L	47.486 ppb	20:07:34
1	Sc 361.383	866693.2	866693.2	100.53 %		20:08:52
1	Y 371.029	805005.9	805005.9	112.65 %		20:08:52
1	Ag 328.068†	-3572.5	-3782.4	4.2405 ug/L	4.2405 ppb	20:08:57
1	As 188.979†	-30.7	3.3	30.402 ug/L	30.402 ppb	20:09:17
1	B 249.677†	87.1	625.7	4.1666 ug/L	4.1666 ppb	20:08:57
1	Ba 233.527†	104338.7	103796.6	849.87 ug/L	849.87 ppb	20:08:57
1	Be 313.107†	56014.9	60056.4	25.911 ug/L	25.911 ppb	20:08:57
1	Cd 226.502†	453.0	662.5	1.1964 ug/L	1.1964 ppb	20:09:17
1	Co 228.616†	680.4	750.5	12.567 ug/L	12.567 ppb	20:09:17
1	Cr 267.716†	5353.4	5258.3	62.457 ug/L	62.457 ppb	20:09:17
1	Cu 324.752†	630677.0	621509.8	1888.6 ug/L	1888.6 ppb	20:08:52
1	Mn 257.610†	1559646.7	1550919.0	1790.6 ug/L	1790.6 ppb	20:08:52
1	Mo 202.031†	68.3	52.4	9.1559 ug/L	9.1559 ppb	20:09:17
1	Ni 231.604†	1874.1	1756.1	45.485 ug/L	45.485 ppb	20:09:17
1	P 214.914†	2715.7	2473.2	1117.5 ug/L	1117.5 ppb	20:09:17
1	Pb 220.353†	10813.5	10817.8	1347.1 ug/L	1347.1 ppb	20:09:17
1	S 181.975 Axial†	168.0	127.8	182.11 ug/L	182.11 ppb	20:09:17
1	Sb 206.836†	117.5	74.7	20.315 ug/L	20.315 ppb	20:09:17
1	Se 196.026†	-332.0	-308.1	4.9304 ug/L	4.9304 ppb	20:09:17
1	Si 251.611†	457681.5	454690.7	15209 ug/L	15209 ppb	20:08:52
1	Sn 189.927†	142.8	133.4	27.534 ug/L	27.534 ppb	20:09:17
1	Ti 334.940†	965755.4	961934.1	1561.0 ug/L	1561.0 ppb	20:08:52
1	Tl 190.801†	-120.1	-85.3	-6.0988 ug/L	-6.0988 ppb	20:09:17
1	U 409.014†	11228.0	14148.5	402.63 ug/L	402.63 ppb	20:08:57
1	V 292.402†	10788.2	12285.6	78.927 ug/L	78.927 ppb	20:08:57
1	Zn 213.857†	46871.6	45909.6	440.24 ug/L	440.24 ppb	20:08:57
1	SiO2†	453965.4	450973.4	32169 ug/L	32169 ppb	20:10:25
2	Sc Radial	5026.7	5026.7	105 %		20:07:59
2	Y RADIAL	6052.7	6052.7	121.0 %		20:07:59
2	Al 396.153Radial†	25137.1	24189.5	22450 ug/L	22450 ppb	20:07:59
2	Ca 317.933Radial†	6961.4	6640.3	11006 ug/L	11006 ppb	20:07:59
2	Fe 238.204 Radial†	7558.5	7216.5	65660 ug/L	65660 ppb	20:07:59
2	K 766.490 Radial†	21574.7	17805.6	3138.5 ug/L	3138.5 ppb	20:07:59
2	Mg 279.077 IEC†	176.0	167.9	5883.1 ug/L	5883.1 ppb	20:08:19
2	Na 589.592 Radial†	581.9	1635.0	494.49 ug/L	494.49 ppb	20:07:59
2	Sr 421.552†	7075.7	6764.1	47.356 ug/L	47.356 ppb	20:07:59
2	Sc 361.383	857147.4	857147.4	99.426 %		20:09:23
2	Y 371.029	795255.3	795255.3	111.29 %		20:09:23
2	Ag 328.068†	-3445.4	-3694.1	4.6417 ug/L	4.6417 ppb	20:09:28
2	As 188.979†	-23.1	10.6	33.682 ug/L	33.682 ppb	20:09:48
2	B 249.677†	99.4	639.0	4.4928 ug/L	4.4928 ppb	20:09:28
2	Ba 233.527†	101882.8	102482.4	839.14 ug/L	839.14 ppb	20:09:28
2	Be 313.107†	54345.1	58997.4	25.512 ug/L	25.512 ppb	20:09:28
2	Cd 226.502†	456.8	671.4	1.3071 ug/L	1.3071 ppb	20:09:48
2	Co 228.616†	677.1	754.7	12.655 ug/L	12.655 ppb	20:09:48
2	Cr 267.716†	5320.3	5284.2	62.761 ug/L	62.761 ppb	20:09:48
2	Cu 324.752†	622618.7	620391.4	1885.2 ug/L	1885.2 ppb	20:09:23
2	Mn 257.610†	1542257.1	1550706.3	1790.4 ug/L	1790.4 ppb	20:09:23
2	Mo 202.031†	55.1	39.8	8.2113 ug/L	8.2113 ppb	20:09:48
2	Ni 231.604†	1875.7	1778.6	46.067 ug/L	46.067 ppb	20:09:48

2	P 214.914†	2716.0	2503.6	1137.2 ug/L	1137.2 ppb	20:09:48
2	Pb 220.353†	10777.0	10900.9	1357.5 ug/L	1357.5 ppb	20:09:48
2	S 181.975 Axial†	167.3	128.9	183.72 ug/L	183.72 ppb	20:09:48
2	Sb 206.836†	110.5	69.0	18.330 ug/L	18.330 ppb	20:09:48
2	Se 196.026†	-335.5	-315.4	-0.1698 ug/L	-0.1698 ppb	20:09:48
2	Si 251.611†	452294.2	454342.4	15197 ug/L	15197 ppb	20:09:23
2	Sn 189.927†	147.9	140.1	28.774 ug/L	28.774 ppb	20:09:48
2	Ti 334.940†	953972.0	960781.0	1559.1 ug/L	1559.1 ppb	20:09:23
2	Tl 190.801†	-108.6	-75.0	-2.8155 ug/L	-2.8155 ppb	20:09:48
2	U 409.014†	10816.4	13858.9	394.24 ug/L	394.24 ppb	20:09:28
2	V 292.402†	10622.3	12238.3	78.566 ug/L	78.566 ppb	20:09:28
2	Zn 213.857†	45772.2	45323.1	434.47 ug/L	434.47 ppb	20:09:28
2	SiO2†	456045.0	458093.9	32677 ug/L	32677 ppb	20:10:31
3	Sc Radial	4712.7	4712.7	98.0 %		20:08:24
3	Y RADIAL	5750.0	5750.0	115.0 %		20:08:24
3	Al 396.153Radial†	25420.0	26079.6	24205 ug/L	24205 ppb	20:08:24
3	Ca 317.933Radial†	7054.5	7178.8	11898 ug/L	11898 ppb	20:08:24
3	Fe 238.204 Radial†	7663.1	7804.7	71013 ug/L	71013 ppb	20:08:24
3	K 766.490 Radial†	21844.1	19455.0	3429.3 ug/L	3429.3 ppb	20:08:24
3	Mg 279.077 IEC†	177.6	180.7	6330.2 ug/L	6330.2 ppb	20:08:44
3	Na 589.592 Radial†	643.5	1734.9	524.71 ug/L	524.71 ppb	20:08:24
3	Sr 421.552†	7167.8	7309.0	51.170 ug/L	51.170 ppb	20:08:24
3	Sc 361.383	877963.9	877963.9	101.84 %		20:09:54
3	Y 371.029	814680.2	814680.2	114.00 %		20:09:54
3	Ag 328.068†	-3461.7	-3627.9	6.7435 ug/L	6.7435 ppb	20:09:59
3	As 188.979†	-21.9	12.3	35.686 ug/L	35.686 ppb	20:10:19
3	B 249.677†	57.0	595.0	2.5769 ug/L	2.5769 ppb	20:09:59
3	Ba 233.527†	102634.9	100791.4	825.49 ug/L	825.49 ppb	20:09:59
3	Be 313.107†	54952.1	58297.6	25.243 ug/L	25.243 ppb	20:09:59
3	Cd 226.502†	440.1	644.1	0.4290 ug/L	0.4290 ppb	20:10:19
3	Co 228.616†	679.6	741.0	12.284 ug/L	12.284 ppb	20:10:19
3	Cr 267.716†	5330.1	5167.0	61.499 ug/L	61.499 ppb	20:10:19
3	Cu 324.752†	637541.9	620197.3	1884.9 ug/L	1884.9 ppb	20:09:54
3	Mn 257.610†	1571511.1	1542653.5	1781.6 ug/L	1781.6 ppb	20:09:54
3	Mo 202.031†	73.4	56.6	9.8907 ug/L	9.8907 ppb	20:10:19
3	Ni 231.604†	1865.4	1723.7	44.645 ug/L	44.645 ppb	20:10:19
3	P 214.914†	2671.7	2395.3	1066.0 ug/L	1066.0 ppb	20:10:19
3	Pb 220.353†	10760.6	10627.9	1323.3 ug/L	1323.3 ppb	20:10:19
3	S 181.975 Axial†	162.4	120.1	170.63 ug/L	170.63 ppb	20:10:19
3	Sb 206.836†	112.9	68.7	18.147 ug/L	18.147 ppb	20:10:19
3	Se 196.026†	-329.0	-300.9	26.861 ug/L	26.861 ppb	20:10:19
3	Si 251.611†	461609.8	452703.8	15142 ug/L	15142 ppb	20:09:54
3	Sn 189.927†	150.8	139.4	28.877 ug/L	28.877 ppb	20:10:19
3	Ti 334.940†	974619.2	958305.7	1555.2 ug/L	1555.2 ppb	20:09:54
3	Tl 190.801†	-122.7	-86.3	-6.5040 ug/L	-6.5040 ppb	20:10:19
3	U 409.014†	11053.1	13833.3	392.89 ug/L	392.89 ppb	20:09:59
3	V 292.402†	10701.8	12063.0	76.543 ug/L	76.543 ppb	20:09:59
3	Zn 213.857†	46138.9	44591.7	426.46 ug/L	426.46 ppb	20:09:59
3	SiO2†	461845.9	452914.7	32307 ug/L	32307 ppb	20:10:36

Mean Data: 245394003|945421|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	867268.2	100.60 %	%	1.209			1.20%
Sc Radial	4898.3	102 %	%	3.4			3.36%
Y 371.029	804980.5	112.65 %	%	1.359			1.21%
Y RADIAL	5918.2	118.3 %	%	3.08			2.60%
Ag 328.068†	-3701.5	5.2085 ug/L	ug/L	1.34437	5.2085 ppb	1.34437	25.81%
Al 396.153Radial†	24803.7	23020 ug/L	ug/L	1025.8	23020 ppb	1025.8	4.46%
As 188.979†	8.7	33.257 ug/L	ug/L	2.6679	33.257 ppb	2.6679	8.02%
B 249.677†	619.9	3.7454 ug/L	ug/L	1.02506	3.7454 ppb	1.02506	27.37%
Ba 233.527†	102356.8	838.17 ug/L	ug/L	12.222	838.17 ppb	12.222	1.46%
Be 313.107†	59117.1	25.555 ug/L	ug/L	0.3363	25.555 ppb	0.3363	1.32%
Ca 317.933Radial†	6819.7	11303 ug/L	ug/L	515.4	11303 ppb	515.4	4.56%
Cd 226.502†	659.3	0.9775 ug/L	ug/L	0.47826	0.9775 ppb	0.47826	48.93%
Co 228.616†	748.8	12.502 ug/L	ug/L	0.1940	12.502 ppb	0.1940	1.55%
Cr 267.716†	5236.5	62.239 ug/L	ug/L	0.6588	62.239 ppb	0.6588	1.06%
Cu 324.752†	620699.5	1886.2 ug/L	ug/L	2.05	1886.2 ppb	2.05	0.11%
Fe 238.204 Radial†	7414.8	67464 ug/L	ug/L	3073.0	67464 ppb	3073.0	4.55%
K 766.490 Radial†	18390.6	3241.6 ug/L	ug/L	162.81	3241.6 ppb	162.81	5.02%

Mg 279.077 IEC†	171.5	6009.5 ug/L	279.82	6009.5 ppb	279.82	4.66%
Mn 257.610†	1548092.9	1787.5 ug/L	5.13	1787.5 ppb	5.13	0.29%
Mo 202.031†	49.6	9.0860 ug/L	0.84187	9.0860 ppb	0.84187	9.27%
Na 589.592 Radial†	1707.3	516.38 ug/L	19.138	516.38 ppb	19.138	3.71%
Ni 231.604†	1752.8	45.399 ug/L	0.7147	45.399 ppb	0.7147	1.57%
P 214.914†	2457.4	1106.9 ug/L	36.74	1106.9 ppb	36.74	3.32%
Pb 220.353†	10782.2	1342.7 ug/L	17.52	1342.7 ppb	17.52	1.31%
S 181.975 Axial†	125.6	178.82 ug/L	7.138	178.82 ppb	7.138	3.99%
Sb 206.836†	70.8	18.931 ug/L	1.2021	18.931 ppb	1.2021	6.35%
Se 196.026†	-308.1	10.540 ug/L	14.3620	10.540 ppb	14.3620	136.26%
Si 251.611†	453912.3	15183 ug/L	35.5	15183 ppb	35.5	0.23%
Sn 189.927†	137.6	28.395 ug/L	0.7473	28.395 ppb	0.7473	2.63%
Sr 421.552†	6951.9	48.671 ug/L	2.1657	48.671 ppb	2.1657	4.45%
Ti 334.940†	960340.3	1558.4 ug/L	2.96	1558.4 ppb	2.96	0.19%
Tl 190.801†	-82.2	-5.1395 ug/L	2.02274	-5.1395 ppb	2.02274	39.36%
U 409.014†	13946.9	396.58 ug/L	5.277	396.58 ppb	5.277	1.33%
V 292.402†	12195.6	78.012 ug/L	1.2848	78.012 ppb	1.2848	1.65%
Zn 213.857†	45274.8	433.72 ug/L	6.921	433.72 ppb	6.921	1.60%
SiO2†	453994.0	32384 ug/L	262.6	32384 ppb	262.6	0.81%

Sequence No.: 34

Sample ID: 245394004|945421|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 63

Date Collected: 2/11/2010 20:12:47

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245394004|945421|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4907.4	4907.4	102 %		20:14:40
1	Y RADIAL	5849.9	5849.9	117.0 %		20:14:40
1	Al 396.153Radial†	23892.9	23554.9	21862 ug/L	21862 ppb	20:14:40
1	Ca 317.933Radial†	12187.6	11921.2	19759 ug/L	19759 ppb	20:14:40
1	Fe 238.204 Radial†	7543.8	7377.8	67128 ug/L	67128 ppb	20:14:40
1	K 766.490 Radial†	19341.8	16119.9	2837.9 ug/L	2837.9 ppb	20:14:40
1	Mg 279.077 IEC†	199.8	195.3	6849.9 ug/L	6849.9 ppb	20:15:00
1	Na 589.592 Radial†	782.3	1844.8	557.96 ug/L	557.96 ppb	20:14:40
1	Sr 421.552†	9594.9	9396.2	65.750 ug/L	65.750 ppb	20:14:40
1	Sc 361.383	855699.2	855699.2	99.258 %		20:15:58
1	Y 371.029	787702.2	787702.2	110.23 %		20:15:58
1	Ag 328.068†	-3301.2	-3554.7	5.3947 ug/L	5.3947 ppb	20:16:03
1	As 188.979†	-26.2	7.5	35.748 ug/L	35.748 ppb	20:16:23
1	B 249.677†	135.3	675.3	5.1098 ug/L	5.1098 ppb	20:16:03
1	Ba 233.527†	128825.4	129799.8	1062.3 ug/L	1062.3 ppb	20:16:03
1	Be 313.107†	73050.1	77934.8	33.384 ug/L	33.384 ppb	20:16:03
1	Cd 226.502†	585.2	801.4	2.7835 ug/L	2.7835 ppb	20:16:23
1	Co 228.616†	810.1	889.9	14.936 ug/L	14.936 ppb	20:16:23
1	Cr 267.716†	5046.5	5017.4	59.537 ug/L	59.537 ppb	20:16:23
1	Cu 324.752†	933260.3	934414.4	2837.6 ug/L	2837.6 ppb	20:15:58
1	Mn 257.610†	1539726.2	1550781.7	1790.6 ug/L	1790.6 ppb	20:15:58
1	Mo 202.031†	37.4	22.2	7.1055 ug/L	7.1055 ppb	20:16:23
1	Ni 231.604†	1706.3	1611.1	41.726 ug/L	41.726 ppb	20:16:23
1	P 214.914†	4092.1	3894.6	1812.0 ug/L	1812.0 ppb	20:16:23
1	Pb 220.353†	11265.7	11411.6	1420.6 ug/L	1420.6 ppb	20:16:03
1	S 181.975 Axial†	231.4	193.7	278.43 ug/L	278.43 ppb	20:16:23
1	Sb 206.836†	106.0	64.6	15.238 ug/L	15.238 ppb	20:16:23
1	Se 196.026†	-339.9	-320.3	1.2020 ug/L	1.2020 ppb	20:16:23
1	Si 251.611†	438644.9	441360.9	14763 ug/L	14763 ppb	20:15:58
1	Sn 189.927†	19.4	10.9	6.1540 ug/L	6.1540 ppb	20:16:23
1	Ti 334.940†	1172973.9	1183043.5	1920.5 ug/L	1920.5 ppb	20:15:58
1	Tl 190.801†	-118.1	-84.8	-3.0217 ug/L	-3.0217 ppb	20:16:23
1	U 409.014†	25610.6	28782.1	826.80 ug/L	826.80 ppb	20:16:03
1	V 292.402†	13066.3	14718.6	96.813 ug/L	96.813 ppb	20:16:03
1	Zn 213.857†	48391.6	48040.0	459.79 ug/L	459.79 ppb	20:16:03
1	SiO2†	437686.3	440374.3	31413 ug/L	31413 ppb	20:17:32
2	Sc Radial	4922.7	4922.7	102 %		20:15:06
2	Y RADIAL	5868.2	5868.2	117.3 %		20:15:06
2	Al 396.153Radial†	23890.9	23480.3	21792 ug/L	21792 ppb	20:15:06
2	Ca 317.933Radial†	12232.1	11927.5	19769 ug/L	19769 ppb	20:15:06
2	Fe 238.204 Radial†	7521.1	7332.7	66717 ug/L	66717 ppb	20:15:06
2	K 766.490 Radial†	19386.5	16104.7	2835.3 ug/L	2835.3 ppb	20:15:06
2	Mg 279.077 IEC†	196.5	191.5	6716.5 ug/L	6716.5 ppb	20:15:26
2	Na 589.592 Radial†	801.6	1861.2	562.93 ug/L	562.93 ppb	20:15:06
2	Sr 421.552†	9581.8	9354.2	65.455 ug/L	65.455 ppb	20:15:06
2	Sc 361.383	871460.0	871460.0	101.09 %		20:16:29
2	Y 371.029	801547.4	801547.4	112.17 %		20:16:29
2	Ag 328.068†	-3338.8	-3531.7	5.3696 ug/L	5.3696 ppb	20:16:34
2	As 188.979†	-27.0	7.1	35.513 ug/L	35.513 ppb	20:16:55
2	B 249.677†	142.7	680.2	5.2950 ug/L	5.2950 ppb	20:16:34
2	Ba 233.527†	128635.1	127264.2	1041.6 ug/L	1041.6 ppb	20:16:34
2	Be 313.107†	72793.1	76349.5	32.801 ug/L	32.801 ppb	20:16:34
2	Cd 226.502†	579.7	785.4	2.6316 ug/L	2.6316 ppb	20:16:55
2	Co 228.616†	780.2	845.6	13.957 ug/L	13.957 ppb	20:16:55
2	Cr 267.716†	4981.4	4861.1	57.713 ug/L	57.713 ppb	20:16:55
2	Cu 324.752†	954819.8	938737.6	2850.7 ug/L	2850.7 ppb	20:16:29
2	Mn 257.610†	1564924.9	1547654.7	1786.9 ug/L	1786.9 ppb	20:16:29
2	Mo 202.031†	26.8	11.0	6.2386 ug/L	6.2386 ppb	20:16:55
2	Ni 231.604†	1690.0	1563.8	40.502 ug/L	40.502 ppb	20:16:55

2	P 214.914†	4008.9	3737.8	1712.1 ug/L	1712.1 ppb	20:16:55
2	Pb 220.353†	11271.1	11211.7	1395.6 ug/L	1395.6 ppb	20:16:34
2	S 181.975 Axial†	225.8	184.0	264.21 ug/L	264.21 ppb	20:16:55
2	Sb 206.836†	105.2	61.9	14.285 ug/L	14.285 ppb	20:16:55
2	Se 196.026†	-344.8	-319.0	0.7940 ug/L	0.7940 ppb	20:16:55
2	Si 251.611†	447041.1	441674.4	14773 ug/L	14773 ppb	20:16:29
2	Sn 189.927†	23.0	14.1	6.7368 ug/L	6.7368 ppb	20:16:55
2	Ti 334.940†	1196474.6	1184919.3	1923.6 ug/L	1923.6 ppb	20:16:29
2	Tl 190.801†	-121.5	-86.0	-3.3883 ug/L	-3.3883 ppb	20:16:55
2	U 409.014†	25594.8	28299.8	812.86 ug/L	812.86 ppb	20:16:34
2	V 292.402†	13110.4	14524.2	95.417 ug/L	95.417 ppb	20:16:34
2	Zn 213.857†	48162.5	46931.7	448.91 ug/L	448.91 ppb	20:16:34
2	SiO2†	447887.6	442491.0	31564 ug/L	31564 ppb	20:17:37
3	Sc Radial	5229.8	5229.8	109 %		20:15:31
3	Y RADIAL	6207.8	6207.8	124.1 %		20:15:31
3	Al 396.153Radial†	23575.7	21820.8	20252 ug/L	20252 ppb	20:15:31
3	Ca 317.933Radial†	12028.1	11038.8	18296 ug/L	18296 ppb	20:15:31
3	Fe 238.204 Radial†	7409.5	6798.9	61861 ug/L	61861 ppb	20:15:31
3	K 766.490 Radial†	19238.4	14857.0	2615.5 ug/L	2615.5 ppb	20:15:31
3	Mg 279.077 IEC†	196.0	179.8	6307.0 ug/L	6307.0 ppb	20:15:51
3	Na 589.592 Radial†	727.7	1747.4	528.50 ug/L	528.50 ppb	20:15:31
3	Sr 421.552†	9397.6	8635.6	60.426 ug/L	60.426 ppb	20:15:31
3	Sc 361.383	861108.6	861108.6	99.886 %		20:17:01
3	Y 371.029	793523.5	793523.5	111.04 %		20:17:01
3	Ag 328.068†	-3321.0	-3553.6	3.6530 ug/L	3.6530 ppb	20:17:06
3	As 188.979†	-25.4	8.4	34.957 ug/L	34.957 ppb	20:17:26
3	B 249.677†	160.6	699.8	6.5488 ug/L	6.5488 ppb	20:17:06
3	Ba 233.527†	127529.9	127687.5	1044.9 ug/L	1044.9 ppb	20:17:06
3	Be 313.107†	72178.2	76599.6	32.893 ug/L	32.893 ppb	20:17:06
3	Cd 226.502†	569.2	781.8	3.0895 ug/L	3.0895 ppb	20:17:26
3	Co 228.616†	793.1	867.8	14.516 ug/L	14.516 ppb	20:17:26
3	Cr 267.716†	5035.3	4974.3	58.939 ug/L	58.939 ppb	20:17:26
3	Cu 324.752†	942347.8	937605.8	2847.0 ug/L	2847.0 ppb	20:17:01
3	Mn 257.610†	1547713.9	1549033.8	1788.0 ug/L	1788.0 ppb	20:17:01
3	Mo 202.031†	35.1	19.6	6.4901 ug/L	6.4901 ppb	20:17:26
3	Ni 231.604†	1702.3	1596.3	41.343 ug/L	41.343 ppb	20:17:26
3	P 214.914†	4044.1	3820.7	1767.9 ug/L	1767.9 ppb	20:17:26
3	Pb 220.353†	11178.9	11253.4	1401.0 ug/L	1401.0 ppb	20:17:06
3	S 181.975 Axial†	229.8	190.8	274.37 ug/L	274.37 ppb	20:17:26
3	Sb 206.836†	106.3	64.2	15.194 ug/L	15.194 ppb	20:17:26
3	Se 196.026†	-341.2	-319.5	-15.253 ug/L	-15.253 ppb	20:17:26
3	Si 251.611†	441630.7	441574.0	14770 ug/L	14770 ppb	20:17:01
3	Sn 189.927†	17.9	9.2	5.5285 ug/L	5.5285 ppb	20:17:26
3	Ti 334.940†	1182062.9	1184719.3	1923.1 ug/L	1923.1 ppb	20:17:01
3	Tl 190.801†	-112.9	-78.8	-1.0664 ug/L	-1.0664 ppb	20:17:26
3	U 409.014†	25099.8	28108.6	807.87 ug/L	807.87 ppb	20:17:06
3	V 292.402†	12999.6	14569.1	96.440 ug/L	96.440 ppb	20:17:06
3	Zn 213.857†	47883.4	47225.0	452.53 ug/L	452.53 ppb	20:17:06
3	SiO2†	443413.8	443338.2	31624 ug/L	31624 ppb	20:17:42

Mean Data: 245394004|945421|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	862755.9	100.08 %		0.929				0.93%
Sc Radial	5020.0	104 %		3.8				3.62%
Y 371.029	794257.7	111.15 %		0.973				0.88%
Y RADIAL	5975.3	119.5 %		4.03				3.37%
Ag 328.068†	-3546.7	4.8058 ug/L		0.99844	4.8058 ppb		0.99844	20.78%
Al 396.153Radial†	22952.0	21302 ug/L		909.9	21302 ppb		909.9	4.27%
As 188.979†	7.7	35.406 ug/L		0.4061	35.406 ppb		0.4061	1.15%
B 249.677†	685.1	5.6512 ug/L		0.78285	5.6512 ppb		0.78285	13.85%
Ba 233.527†	128250.5	1049.6 ug/L		11.13	1049.6 ppb		11.13	1.06%
Be 313.107†	76961.3	33.026 ug/L		0.3137	33.026 ppb		0.3137	0.95%
Ca 317.933Radial†	11629.2	19275 ug/L		847.4	19275 ppb		847.4	4.40%
Cd 226.502†	789.5	2.8349 ug/L		0.23324	2.8349 ppb		0.23324	8.23%
Co 228.616†	867.7	14.470 ug/L		0.4911	14.470 ppb		0.4911	3.39%
Cr 267.716†	4950.9	58.730 ug/L		0.9299	58.730 ppb		0.9299	1.58%
Cu 324.752†	936919.3	2845.1 ug/L		6.76	2845.1 ppb		6.76	0.24%
Fe 238.204 Radial†	7169.8	65236 ug/L		2929.7	65236 ppb		2929.7	4.49%
K 766.490 Radial†	15693.9	2762.9 ug/L		127.65	2762.9 ppb		127.65	4.62%

Mg 279.077 IEC†	188.8	6624.4 ug/L	282.92	6624.4 ppb	282.92	4.27%
Mn 257.610†	1549156.7	1788.5 ug/L	1.86	1788.5 ppb	1.86	0.10%
Mo 202.031†	17.6	6.6114 ug/L	0.44596	6.6114 ppb	0.44596	6.75%
Na 589.592 Radial†	1817.8	549.79 ug/L	18.612	549.79 ppb	18.612	3.39%
Ni 231.604†	1590.4	41.190 ug/L	0.6263	41.190 ppb	0.6263	1.52%
P 214.914†	3817.7	1764.0 ug/L	50.05	1764.0 ppb	50.05	2.84%
Pb 220.353†	11292.2	1405.7 ug/L	13.13	1405.7 ppb	13.13	0.93%
S 181.975 Axial†	189.5	272.33 ug/L	7.324	272.33 ppb	7.324	2.69%
Sb 206.836†	63.6	14.906 ug/L	0.5380	14.906 ppb	0.5380	3.61%
Se 196.026†	-319.6	-4.4190 ug/L	9.38471	-4.4190 ppb	9.38471	212.37%
Si 251.611†	441536.5	14769 ug/L	5.4	14769 ppb	5.4	0.04%
Sn 189.927†	11.4	6.1398 ug/L	0.60426	6.1398 ppb	0.60426	9.84%
Sr 421.552†	9128.7	63.877 ug/L	2.9921	63.877 ppb	2.9921	4.68%
Ti 334.940†	1184227.4	1922.4 ug/L	1.65	1922.4 ppb	1.65	0.09%
Tl 190.801†	-83.2	-2.4921 ug/L	1.24821	-2.4921 ppb	1.24821	50.09%
U 409.014†	28396.8	815.84 ug/L	9.809	815.84 ppb	9.809	1.20%
V 292.402†	14604.0	96.223 ug/L	0.7228	96.223 ppb	0.7228	0.75%
Zn 213.857†	47398.9	453.74 ug/L	5.542	453.74 ppb	5.542	1.22%
SiO2†	442067.9	31534 ug/L	108.9	31534 ppb	108.9	0.35%

Sequence No.: 35

Sample ID: 245394005|945421|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 64

Date Collected: 2/11/2010 20:19:53

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245394005|945421|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4926.0	4926.0	102 %		20:21:46
1	Y RADIAL	6113.4	6113.4	122.3 %		20:21:46
1	Al 396.153Radial†	11712.1	11580.5	10748 ug/L	10748 ppb	20:21:46
1	Ca 317.933Radial†	2008.4	1943.1	3220.5 ug/L	3220.5 ppb	20:22:06
1	Fe 238.204 Radial†	7510.1	7317.1	66577 ug/L	66577 ppb	20:21:46
1	K 766.490 Radial†	18384.8	15114.7	2665.6 ug/L	2665.6 ppb	20:21:46
1	Mg 279.077 IEC†	69.7	67.6	2324.8 ug/L	2324.8 ppb	20:22:06
1	Na 589.592 Radial†	4378.9	5351.5	1618.6 ug/L	1618.6 ppb	20:21:46
1	Sr 421.552†	4385.3	4277.1	29.972 ug/L	29.972 ppb	20:21:46
1	Sc 361.383	870293.9	870293.9	100.95 %		20:23:04
1	Y 371.029	831037.6	831037.6	116.29 %		20:23:04
1	Ag 328.068†	-3906.1	-4098.1	3.4145 ug/L	3.4145 ppb	20:23:09
1	As 188.979†	-38.4	-4.2	24.528 ug/L	24.528 ppb	20:23:30
1	B 249.677†	323.1	859.1	9.3831 ug/L	9.3831 ppb	20:23:09
1	Ba 233.527†	29352.3	29087.4	239.65 ug/L	239.65 ppb	20:23:09
1	Be 313.107†	-7088.6	-2683.1	1.8440 ug/L	1.8440 ppb	20:23:09
1	Cd 226.502†	321.6	530.4	-0.5813 ug/L	-0.5813 ppb	20:23:30
1	Co 228.616†	3871.8	3909.0	81.897 ug/L	81.897 ppb	20:23:30
1	Cr 267.716†	3983.2	3878.9	46.575 ug/L	46.575 ppb	20:23:30
1	Cu 324.752†	17821.4	11832.8	39.519 ug/L	39.519 ppb	20:23:09
1	Mn 257.610†	1683555.9	1667242.3	1924.7 ug/L	1924.7 ppb	20:23:04
1	Mo 202.031†	31.0	15.2	6.3431 ug/L	6.3431 ppb	20:23:30
1	Ni 231.604†	1611.6	1488.4	38.507 ug/L	38.507 ppb	20:23:30
1	P 214.914†	787.0	551.5	285.14 ug/L	285.14 ppb	20:23:30
1	Pb 220.353†	669.7	725.1	86.435 ug/L	86.435 ppb	20:23:30
1	S 181.975 Axial†	63.6	23.6	32.432 ug/L	32.432 ppb	20:23:30
1	Sb 206.836†	42.1	-0.5	-5.1558 ug/L	-5.1558 ppb	20:23:30
1	Se 196.026†	-324.1	-298.9	13.463 ug/L	13.463 ppb	20:23:30
1	Si 251.611†	334064.8	330355.1	11050 ug/L	11050 ppb	20:23:09
1	Sn 189.927†	18.5	9.6	3.3932 ug/L	3.3932 ppb	20:23:30
1	Ti 334.940†	778223.4	772194.5	1252.8 ug/L	1252.8 ppb	20:23:04
1	Tl 190.801†	-113.4	-78.1	-5.9057 ug/L	-5.9057 ppb	20:23:30
1	U 409.014†	-9346.3	-6278.1	-189.74 ug/L	-189.74 ppb	20:23:04
1	V 292.402†	3386.9	4909.7	24.329 ug/L	24.329 ppb	20:23:30
1	Zn 213.857†	28599.6	27616.9	262.20 ug/L	262.20 ppb	20:23:09
1	SiO2†	335728.2	331981.9	23681 ug/L	23681 ppb	20:24:37
2	Sc Radial	5008.7	5008.7	104 %		20:22:12
2	Y RADIAL	6208.8	6208.8	124.2 %		20:22:12
2	Al 396.153Radial†	11836.0	11510.8	10683 ug/L	10683 ppb	20:22:12
2	Ca 317.933Radial†	2014.7	1916.8	3176.9 ug/L	3176.9 ppb	20:22:32
2	Fe 238.204 Radial†	7590.1	7272.8	66175 ug/L	66175 ppb	20:22:12
2	K 766.490 Radial†	18360.1	14794.7	2609.1 ug/L	2609.1 ppb	20:22:12
2	Mg 279.077 IEC†	70.4	67.1	2309.9 ug/L	2309.9 ppb	20:22:32
2	Na 589.592 Radial†	4270.5	5177.0	1565.8 ug/L	1565.8 ppb	20:22:12
2	Sr 421.552†	4371.4	4193.2	29.384 ug/L	29.384 ppb	20:22:12
2	Sc 361.383	871292.2	871292.2	101.07 %		20:23:35
2	Y 371.029	832111.6	832111.6	116.44 %		20:23:35
2	Ag 328.068†	-3829.4	-4017.7	3.6573 ug/L	3.6573 ppb	20:23:40
2	As 188.979†	-45.5	-11.2	21.252 ug/L	21.252 ppb	20:24:01
2	B 249.677†	347.8	883.2	10.022 ug/L	10.022 ppb	20:23:40
2	Ba 233.527†	29286.3	28988.8	238.84 ug/L	238.84 ppb	20:23:40
2	Be 313.107†	-7043.6	-2630.6	1.8580 ug/L	1.8580 ppb	20:23:40
2	Cd 226.502†	313.8	522.4	-0.6347 ug/L	-0.6347 ppb	20:24:01
2	Co 228.616†	3854.3	3887.3	81.432 ug/L	81.432 ppb	20:24:01
2	Cr 267.716†	3962.7	3854.0	46.277 ug/L	46.277 ppb	20:24:01
2	Cu 324.752†	18037.9	12026.8	40.086 ug/L	40.086 ppb	20:23:40
2	Mn 257.610†	1684505.5	1666271.1	1923.5 ug/L	1923.5 ppb	20:23:35
2	Mo 202.031†	21.5	5.8	5.6054 ug/L	5.6054 ppb	20:24:01
2	Ni 231.604†	1608.8	1483.8	38.389 ug/L	38.389 ppb	20:24:01

2	P 214.914†	795.0	558.5	289.72 ug/L	289.72 ppb	20:24:01
2	Pb 220.353†	664.1	718.8	85.673 ug/L	85.673 ppb	20:24:01
2	S 181.975 Axial†	72.6	32.5	45.432 ug/L	45.432 ppb	20:24:01
2	Sb 206.836†	34.2	-8.3	-7.8880 ug/L	-7.8880 ppb	20:24:01
2	Se 196.026†	-325.6	-300.0	11.415 ug/L	11.415 ppb	20:24:01
2	Si 251.611†	333771.2	329685.5	11028 ug/L	11028 ppb	20:23:40
2	Sn 189.927†	19.3	10.4	3.5290 ug/L	3.5290 ppb	20:24:01
2	Ti 334.940†	777583.9	770678.6	1250.3 ug/L	1250.3 ppb	20:23:35
2	Tl 190.801†	-100.4	-65.2	-1.7946 ug/L	-1.7946 ppb	20:24:01
2	U 409.014†	-9323.2	-6244.7	-188.72 ug/L	-188.72 ppb	20:23:35
2	V 292.402†	3398.1	4916.9	24.434 ug/L	24.434 ppb	20:24:01
2	Zn 213.857†	28461.4	27447.6	260.59 ug/L	260.59 ppb	20:23:40
2	SiO2†	340701.8	336522.1	24005 ug/L	24005 ppb	20:24:42
3	Sc Radial	4934.5	4934.5	103 %		20:22:37
3	Y RADIAL	6118.2	6118.2	122.3 %		20:22:37
3	Al 396.153Radial†	11723.2	11571.6	10740 ug/L	10740 ppb	20:22:37
3	Ca 317.933Radial†	1995.1	1926.8	3193.5 ug/L	3193.5 ppb	20:22:57
3	Fe 238.204 Radial†	7516.6	7310.7	66519 ug/L	66519 ppb	20:22:37
3	K 766.490 Radial†	18227.6	14930.4	2633.1 ug/L	2633.1 ppb	20:22:37
3	Mg 279.077 IEC†	72.1	69.8	2403.5 ug/L	2403.5 ppb	20:22:57
3	Na 589.592 Radial†	4218.5	5187.9	1569.1 ug/L	1569.1 ppb	20:22:37
3	Sr 421.552†	4288.8	4175.8	29.262 ug/L	29.262 ppb	20:22:37
3	Sc 361.383	862339.7	862339.7	100.03 %		20:24:06
3	Y 371.029	824780.8	824780.8	115.42 %		20:24:06
3	Ag 328.068†	-3852.8	-4080.5	3.4822 ug/L	3.4822 ppb	20:24:11
3	As 188.979†	-42.5	-8.6	22.504 ug/L	22.504 ppb	20:24:32
3	B 249.677†	330.4	869.3	9.6333 ug/L	9.6333 ppb	20:24:11
3	Ba 233.527†	29159.4	29162.7	240.27 ug/L	240.27 ppb	20:24:11
3	Be 313.107†	-7102.3	-2761.5	1.8068 ug/L	1.8068 ppb	20:24:11
3	Cd 226.502†	311.1	523.0	-0.6642 ug/L	-0.6642 ppb	20:24:32
3	Co 228.616†	3875.0	3947.6	82.749 ug/L	82.749 ppb	20:24:32
3	Cr 267.716†	4015.8	3947.9	47.379 ug/L	47.379 ppb	20:24:32
3	Cu 324.752†	17798.8	11973.0	39.943 ug/L	39.943 ppb	20:24:11
3	Mn 257.610†	1665655.0	1664729.3	1921.8 ug/L	1921.8 ppb	20:24:06
3	Mo 202.031†	30.3	14.7	6.3051 ug/L	6.3051 ppb	20:24:32
3	Ni 231.604†	1636.4	1527.9	39.531 ug/L	39.531 ppb	20:24:32
3	P 214.914†	792.0	563.7	292.70 ug/L	292.70 ppb	20:24:32
3	Pb 220.353†	679.0	740.5	88.358 ug/L	88.358 ppb	20:24:32
3	S 181.975 Axial†	76.1	36.8	51.578 ug/L	51.578 ppb	20:24:32
3	Sb 206.836†	42.1	-0.1	-4.9786 ug/L	-4.9786 ppb	20:24:32
3	Se 196.026†	-317.7	-295.5	15.601 ug/L	15.601 ppb	20:24:32
3	Si 251.611†	331196.1	330539.6	11056 ug/L	11056 ppb	20:24:11
3	Sn 189.927†	28.1	19.4	5.2025 ug/L	5.2025 ppb	20:24:32
3	Ti 334.940†	768934.7	770019.2	1249.2 ug/L	1249.2 ppb	20:24:06
3	Tl 190.801†	-99.0	-64.8	-1.6854 ug/L	-1.6854 ppb	20:24:32
3	U 409.014†	-9383.6	-6400.9	-193.29 ug/L	-193.29 ppb	20:24:06
3	V 292.402†	3391.7	4945.4	24.595 ug/L	24.595 ppb	20:24:32
3	Zn 213.857†	28399.3	27678.0	262.80 ug/L	262.80 ppb	20:24:11
3	SiO2†	339394.7	338715.0	24161 ug/L	24161 ppb	20:24:48

Mean Data: 245394005|945421|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	867975.2	100.68	%	0.569			0.57%
Sc Radial	4956.4	103	%	0.9			0.92%
Y 371.029	829310.0	116.05	%	0.554			0.48%
Y RADIAL	6146.8	122.9	%	1.08			0.87%
Ag 328.068†	-4065.4	3.5180	ug/L	0.12527	3.5180 ppb	0.12527	3.56%
Al 396.153Radial†	11554.3	10724	ug/L	35.2	10724 ppb	35.2	0.33%
As 188.979†	-8.0	22.761	ug/L	1.6534	22.761 ppb	1.6534	7.26%
B 249.677†	870.5	9.6794	ug/L	0.32182	9.6794 ppb	0.32182	3.32%
Ba 233.527†	29079.6	239.58	ug/L	0.718	239.58 ppb	0.718	0.30%
Be 313.107†	-2691.8	1.8363	ug/L	0.02647	1.8363 ppb	0.02647	1.44%
Ca 317.933Radial†	1928.9	3197.0	ug/L	22.01	3197.0 ppb	22.01	0.69%
Cd 226.502†	525.3	-0.6267	ug/L	0.04200	-0.6267 ppb	0.04200	6.70%
Co 228.616†	3914.6	82.026	ug/L	0.6681	82.026 ppb	0.6681	0.81%
Cr 267.716†	3893.6	46.743	ug/L	0.5700	46.743 ppb	0.5700	1.22%
Cu 324.752†	11944.2	39.849	ug/L	0.2948	39.849 ppb	0.2948	0.74%
Fe 238.204 Radial†	7300.2	66424	ug/L	217.5	66424 ppb	217.5	0.33%
K 766.490 Radial†	14946.6	2635.9	ug/L	28.33	2635.9 ppb	28.33	1.07%

Mg 279.077 IEC†	68.2	2346.1 ug/L	50.31	2346.1 ppb	50.31	2.14%
Mn 257.610†	1666080.9	1923.3 ug/L	1.46	1923.3 ppb	1.46	0.08%
Mo 202.031†	11.9	6.0845 ug/L	0.41537	6.0845 ppb	0.41537	6.83%
Na 589.592 Radial†	5238.8	1584.5 ug/L	29.57	1584.5 ppb	29.57	1.87%
Ni 231.604†	1500.0	38.809 ug/L	0.6280	38.809 ppb	0.6280	1.62%
P 214.914†	557.9	289.19 ug/L	3.805	289.19 ppb	3.805	1.32%
Pb 220.353†	728.2	86.822 ug/L	1.3833	86.822 ppb	1.3833	1.59%
S 181.975 Axial†	31.0	43.147 ug/L	9.7754	43.147 ppb	9.7754	22.66%
Sb 206.836†	-3.0	-6.0074 ug/L	1.63102	-6.0074 ppb	1.63102	27.15%
Se 196.026†	-298.1	13.493 ug/L	2.0935	13.493 ppb	2.0935	15.52%
Si 251.611†	330193.4	11044 ug/L	15.0	11044 ppb	15.0	0.14%
Sn 189.927†	13.1	4.0416 ug/L	1.00768	4.0416 ppb	1.00768	24.93%
Sr 421.552†	4215.4	29.539 ug/L	0.3799	29.539 ppb	0.3799	1.29%
Ti 334.940†	770964.1	1250.8 ug/L	1.81	1250.8 ppb	1.81	0.14%
Tl 190.801†	-69.4	-3.1286 ug/L	2.40571	-3.1286 ppb	2.40571	76.89%
U 409.014†	-6307.9	-190.58 ug/L	2.400	-190.58 ppb	2.400	1.26%
V 292.402†	4924.0	24.453 ug/L	0.1337	24.453 ppb	0.1337	0.55%
Zn 213.857†	27580.9	261.86 ug/L	1.144	261.86 ppb	1.144	0.44%
SiO2†	335739.7	23949 ug/L	245.0	23949 ppb	245.0	1.02%

Sequence No.: 36

Sample ID: 245394006|945421|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 65

Date Collected: 2/11/2010 20:26:58

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245394006|945421|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5095.5	5095.5	106 %		20:28:51
1	Y RADIAL	6187.8	6187.8	123.7 %		20:28:51
1	Al 396.153Radial†	32812.4	31105.2	28869 ug/L	28869 ppb	20:28:51
1	Ca 317.933Radial†	5854.5	5506.2	9126.1 ug/L	9126.1 ppb	20:28:51
1	Fe 238.204 Radial†	8224.9	7747.5	70492 ug/L	70492 ppb	20:28:51
1	K 766.490 Radial†	36057.9	31189.6	5501.6 ug/L	5501.6 ppb	20:28:51
1	Mg 279.077 IEC†	187.6	176.5	6182.4 ug/L	6182.4 ppb	20:29:11
1	Na 589.592 Radial†	575.9	1621.8	490.51 ug/L	490.51 ppb	20:28:51
1	Sr 421.552†	11288.1	10646.5	74.597 ug/L	74.597 ppb	20:28:51
1	Sc 361.383	866580.5	866580.5	100.52 %		20:30:09
1	Y 371.029	818630.5	818630.5	114.56 %		20:30:09
1	Ag 328.068†	-2993.3	-3206.6	5.4661 ug/L	5.4661 ppb	20:30:14
1	As 188.979†	-17.6	16.3	39.411 ug/L	39.411 ppb	20:30:34
1	B 249.677†	83.3	621.9	3.2664 ug/L	3.2664 ppb	20:30:14
1	Ba 233.527†	51214.9	50961.3	418.53 ug/L	418.53 ppb	20:30:14
1	Be 313.107†	55180.9	59234.0	26.121 ug/L	26.121 ppb	20:30:14
1	Cd 226.502†	543.6	752.7	2.5158 ug/L	2.5158 ppb	20:30:34
1	Co 228.616†	1229.6	1296.9	23.749 ug/L	23.749 ppb	20:30:34
1	Cr 267.716†	3167.8	3084.6	35.727 ug/L	35.727 ppb	20:30:34
1	Cu 324.752†	520928.6	512411.1	1555.8 ug/L	1555.8 ppb	20:30:09
1	Mn 257.610†	1665746.5	1656671.3	1912.7 ug/L	1912.7 ppb	20:30:09
1	Mo 202.031†	11.6	-4.0	5.2792 ug/L	5.2792 ppb	20:30:34
1	Ni 231.604†	1544.2	1428.1	36.982 ug/L	36.982 ppb	20:30:34
1	P 214.914†	1950.8	1712.6	707.41 ug/L	707.41 ppb	20:30:34
1	Pb 220.353†	6772.8	6799.5	846.92 ug/L	846.92 ppb	20:30:34
1	S 181.975 Axial†	275.3	234.5	336.61 ug/L	336.61 ppb	20:30:34
1	Sb 206.836†	86.5	43.9	8.0821 ug/L	8.0821 ppb	20:30:34
1	Se 196.026†	-367.3	-343.2	-3.1824 ug/L	-3.1824 ppb	20:30:34
1	Si 251.611†	542833.5	539461.1	18044 ug/L	18044 ppb	20:30:09
1	Sn 189.927†	1.5	-7.2	1.2382 ug/L	1.2382 ppb	20:30:34
1	Ti 334.940†	1106640.1	1102214.5	1786.6 ug/L	1786.6 ppb	20:30:09
1	Tl 190.801†	-123.0	-88.1	-4.5845 ug/L	-4.5845 ppb	20:30:34
1	U 409.014†	143849.0	146084.4	4227.8 ug/L	4227.8 ppb	20:30:09
1	V 292.402†	10766.9	12265.8	85.126 ug/L	85.126 ppb	20:30:14
1	Zn 213.857†	49668.6	48698.2	467.54 ug/L	467.54 ppb	20:30:14
1	SiO2†	544467.5	541065.8	38595 ug/L	38595 ppb	20:31:42
2	Sc Radial	5184.2	5184.2	108 %		20:29:16
2	Y RADIAL	6350.9	6350.9	127.0 %		20:29:16
2	Al 396.153Radial†	32769.2	30535.7	28341 ug/L	28341 ppb	20:29:16
2	Ca 317.933Radial†	5851.3	5408.8	8964.6 ug/L	8964.6 ppb	20:29:16
2	Fe 238.204 Radial†	8226.1	7615.9	69295 ug/L	69295 ppb	20:29:16
2	K 766.490 Radial†	36044.0	30594.8	5396.7 ug/L	5396.7 ppb	20:29:16
2	Mg 279.077 IEC†	195.0	180.4	6319.6 ug/L	6319.6 ppb	20:29:36
2	Na 589.592 Radial†	603.5	1638.1	495.43 ug/L	495.43 ppb	20:29:16
2	Sr 421.552†	11292.9	10468.9	73.353 ug/L	73.353 ppb	20:29:16
2	Sc 361.383	880015.3	880015.3	102.08 %		20:30:40
2	Y 371.029	832363.3	832363.3	116.48 %		20:30:40
2	Ag 328.068†	-2932.7	-3101.7	5.5442 ug/L	5.5442 ppb	20:30:45
2	As 188.979†	-20.2	14.0	38.122 ug/L	38.122 ppb	20:31:05
2	B 249.677†	168.1	703.7	5.4072 ug/L	5.4072 ppb	20:30:45
2	Ba 233.527†	51735.6	50693.6	416.30 ug/L	416.30 ppb	20:30:45
2	Be 313.107†	55942.2	59141.6	26.095 ug/L	26.095 ppb	20:30:45
2	Cd 226.502†	559.6	760.1	2.7305 ug/L	2.7305 ppb	20:31:05
2	Co 228.616†	1242.8	1291.2	23.632 ug/L	23.632 ppb	20:31:05
2	Cr 267.716†	3196.0	3064.2	35.459 ug/L	35.459 ppb	20:31:05
2	Cu 324.752†	531009.1	514374.7	1561.7 ug/L	1561.7 ppb	20:30:40
2	Mn 257.610†	1692699.2	1657776.7	1913.9 ug/L	1913.9 ppb	20:30:40
2	Mo 202.031†	3.8	-11.8	4.6019 ug/L	4.6019 ppb	20:31:05
2	Ni 231.604†	1550.8	1411.2	36.543 ug/L	36.543 ppb	20:31:05

2	P 214.914†	1945.1	1677.4	685.17 ug/L	685.17 ppb	20:31:05
2	Pb 220.353†	6781.4	6705.0	835.13 ug/L	835.13 ppb	20:31:05
2	S 181.975 Axial†	282.0	236.9	340.21 ug/L	340.21 ppb	20:31:05
2	Sb 206.836†	93.1	49.1	9.9125 ug/L	9.9125 ppb	20:31:05
2	Se 196.026†	-364.5	-335.0	-1.4815 ug/L	-1.4815 ppb	20:31:05
2	Si 251.611†	551769.8	539971.1	18061 ug/L	18061 ppb	20:30:40
2	Sn 189.927†	8.1	-0.7	2.3974 ug/L	2.3974 ppb	20:31:05
2	Ti 334.940†	1126140.1	1104510.2	1790.3 ug/L	1790.3 ppb	20:30:40
2	Tl 190.801†	-119.5	-82.9	-2.8736 ug/L	-2.8736 ppb	20:31:05
2	U 409.014†	146697.8	146690.5	4245.5 ug/L	4245.5 ppb	20:30:40
2	V 292.402†	10945.2	12276.9	85.406 ug/L	85.406 ppb	20:30:45
2	Zn 213.857†	50454.2	48713.5	467.87 ug/L	467.87 ppb	20:30:45
2	SiO2†	546431.7	534720.9	38143 ug/L	38143 ppb	20:31:48
3	Sc Radial	5076.5	5076.5	106 %		20:29:41
3	Y RADIAL	6219.0	6219.0	124.4 %		20:29:41
3	Al 396.153Radial†	33219.8	31607.4	29335 ug/L	29335 ppb	20:29:41
3	Ca 317.933Radial†	5904.8	5574.5	9239.4 ug/L	9239.4 ppb	20:29:41
3	Fe 238.204 Radial†	8326.0	7872.4	71628 ug/L	71628 ppb	20:29:41
3	K 766.490 Radial†	36492.6	31729.1	5596.8 ug/L	5596.8 ppb	20:29:41
3	Mg 279.077 IEC†	187.7	177.3	6210.3 ug/L	6210.3 ppb	20:30:01
3	Na 589.592 Radial†	619.7	1665.3	503.66 ug/L	503.66 ppb	20:29:41
3	Sr 421.552†	11511.9	10898.5	76.364 ug/L	76.364 ppb	20:29:41
3	Sc 361.383	879916.3	879916.3	102.07 %		20:31:11
3	Y 371.029	830854.7	830854.7	116.27 %		20:31:11
3	Ag 328.068†	-2942.5	-3111.7	6.2870 ug/L	6.2870 ppb	20:31:17
3	As 188.979†	-21.3	13.0	38.213 ug/L	38.213 ppb	20:31:37
3	B 249.677†	189.8	725.0	5.5349 ug/L	5.5349 ppb	20:31:17
3	Ba 233.527†	52248.1	51201.4	420.53 ug/L	420.53 ppb	20:31:17
3	Be 313.107†	56518.7	59712.7	26.310 ug/L	26.310 ppb	20:31:17
3	Cd 226.502†	521.0	722.3	2.0404 ug/L	2.0404 ppb	20:31:37
3	Co 228.616†	1237.0	1285.7	23.480 ug/L	23.480 ppb	20:31:37
3	Cr 267.716†	3171.6	3040.6	35.233 ug/L	35.233 ppb	20:31:37
3	Cu 324.752†	530779.8	514208.5	1561.3 ug/L	1561.3 ppb	20:31:11
3	Mn 257.610†	1695030.6	1660247.3	1917.0 ug/L	1917.0 ppb	20:31:11
3	Mo 202.031†	15.6	-0.3	5.6513 ug/L	5.6513 ppb	20:31:37
3	Ni 231.604†	1555.9	1416.4	36.677 ug/L	36.677 ppb	20:31:37
3	P 214.914†	1953.7	1686.0	689.00 ug/L	689.00 ppb	20:31:37
3	Pb 220.353†	6716.2	6641.9	827.26 ug/L	827.26 ppb	20:31:37
3	S 181.975 Axial†	269.4	224.6	321.95 ug/L	321.95 ppb	20:31:37
3	Sb 206.836†	98.8	54.7	11.818 ug/L	11.818 ppb	20:31:37
3	Se 196.026†	-348.3	-319.2	16.731 ug/L	16.731 ppb	20:31:37
3	Si 251.611†	552511.7	540758.8	18088 ug/L	18088 ppb	20:31:11
3	Sn 189.927†	5.9	-3.0	2.0616 ug/L	2.0616 ppb	20:31:37
3	Ti 334.940†	1126488.5	1104975.7	1791.1 ug/L	1791.1 ppb	20:31:11
3	Tl 190.801†	-120.9	-84.2	-3.2788 ug/L	-3.2788 ppb	20:31:37
3	U 409.014†	146655.8	146665.5	4244.5 ug/L	4244.5 ppb	20:31:11
3	V 292.402†	11118.8	12448.2	86.317 ug/L	86.317 ppb	20:31:17
3	Zn 213.857†	50858.1	49114.8	471.48 ug/L	471.48 ppb	20:31:17
3	SiO2†	545276.5	533649.3	38066 ug/L	38066 ppb	20:31:53

Mean Data: 245394006|945421|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	875504.0	101.56 %	%	0.896			0.88%
Sc Radial	5118.7	106 %	%	1.2			1.12%
Y 371.029	827282.9	115.77 %	%	1.054			0.91%
Y RADIAL	6252.6	125.0 %	%	1.73			1.38%
Ag 328.068†	-3140.0	5.7658 ug/L	ug/L	0.45313	5.7658 ppb	0.45313	7.86%
Al 396.153Radial†	31082.8	28848 ug/L	ug/L	497.6	28848 ppb	497.6	1.73%
As 188.979†	14.5	38.582 ug/L	ug/L	0.7197	38.582 ppb	0.7197	1.87%
B 249.677†	683.5	4.7362 ug/L	ug/L	1.27441	4.7362 ppb	1.27441	26.91%
Ba 233.527†	50952.1	418.45 ug/L	ug/L	2.112	418.45 ppb	2.112	0.50%
Be 313.107†	59362.8	26.176 ug/L	ug/L	0.1170	26.176 ppb	0.1170	0.45%
Ca 317.933Radial†	5496.5	9110.1 ug/L	ug/L	138.07	9110.1 ppb	138.07	1.52%
Cd 226.502†	745.0	2.4289 ug/L	ug/L	0.35315	2.4289 ppb	0.35315	14.54%
Co 228.616†	1291.3	23.620 ug/L	ug/L	0.1350	23.620 ppb	0.1350	0.57%
Cr 267.716†	3063.1	35.473 ug/L	ug/L	0.2476	35.473 ppb	0.2476	0.70%
Cu 324.752†	513664.8	1559.6 ug/L	ug/L	3.29	1559.6 ppb	3.29	0.21%
Fe 238.204 Radial†	7745.3	70472 ug/L	ug/L	1167.0	70472 ppb	1167.0	1.66%
K 766.490 Radial†	31171.2	5498.3 ug/L	ug/L	100.10	5498.3 ppb	100.10	1.82%

Mg 279.077 IEC†	178.1	6237.5 ug/L	72.53	6237.5 ppb	72.53	1.16%
Mn 257.610†	1658231.8	1914.5 ug/L	2.18	1914.5 ppb	2.18	0.11%
Mo 202.031†	-5.4	5.1774 ug/L	0.53203	5.1774 ppb	0.53203	10.28%
Na 589.592 Radial†	1641.7	496.53 ug/L	6.642	496.53 ppb	6.642	1.34%
Ni 231.604†	1418.6	36.734 ug/L	0.2249	36.734 ppb	0.2249	0.61%
P 214.914†	1692.0	693.86 ug/L	11.892	693.86 ppb	11.892	1.71%
Pb 220.353†	6715.5	836.44 ug/L	9.896	836.44 ppb	9.896	1.18%
S 181.975 Axial†	232.0	332.92 ug/L	9.674	332.92 ppb	9.674	2.91%
Sb 206.836†	49.2	9.9376 ug/L	1.86818	9.9376 ppb	1.86818	18.80%
Se 196.026†	-332.5	4.0222 ug/L	11.03857	4.0222 ppb	11.03857	274.44%
Si 251.611†	540063.7	18064 ug/L	21.9	18064 ppb	21.9	0.12%
Sn 189.927†	-3.6	1.8991 ug/L	0.59649	1.8991 ppb	0.59649	31.41%
Sr 421.552†	10671.3	74.771 ug/L	1.5131	74.771 ppb	1.5131	2.02%
Ti 334.940†	1103900.1	1789.3 ug/L	2.39	1789.3 ppb	2.39	0.13%
Tl 190.801†	-85.1	-3.5790 ug/L	0.89404	-3.5790 ppb	0.89404	24.98%
U 409.014†	146480.1	4239.3 ug/L	9.95	4239.3 ppb	9.95	0.23%
V 292.402†	12330.3	85.616 ug/L	0.6230	85.616 ppb	0.6230	0.73%
Zn 213.857†	48842.2	468.96 ug/L	2.184	468.96 ppb	2.184	0.47%
SiO2†	536478.6	38268 ug/L	285.9	38268 ppb	285.9	0.75%

Sequence No.: 37

Sample ID: 245394007|945421|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 66

Date Collected: 2/11/2010 20:34:04

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245394007|945421|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4974.8	4974.8	103 %		20:35:57
1	Y RADIAL	5466.7	5466.7	109.3 %		20:35:57
1	Al 396.153Radial†	23907.1	23251.9	21580 ug/L	21580 ppb	20:35:57
1	Ca 317.933Radial†	9498.1	9160.8	15183 ug/L	15183 ppb	20:35:57
1	Fe 238.204 Radial†	6424.9	6196.6	56381 ug/L	56381 ppb	20:35:57
1	K 766.490 Radial†	20589.8	17069.2	3007.4 ug/L	3007.4 ppb	20:35:57
1	Mg 279.077 IEC†	209.8	202.3	7109.4 ug/L	7109.4 ppb	20:36:17
1	Na 589.592 Radial†	280.7	1349.7	408.22 ug/L	408.22 ppb	20:35:57
1	Sr 421.552†	8021.8	7748.9	54.231 ug/L	54.231 ppb	20:35:57
1	Sc 361.383	867277.0	867277.0	100.60 %		20:37:15
1	Y 371.029	733314.2	733314.2	102.62 %		20:37:15
1	Ag 328.068†	672.8	440.0	17.866 ug/L	17.866 ppb	20:37:20
1	As 188.979†	-55.8	-21.6	17.536 ug/L	17.536 ppb	20:37:40
1	B 249.677†	317.2	854.3	11.110 ug/L	11.110 ppb	20:37:20
1	Ba 233.527†	133192.1	132407.8	1083.3 ug/L	1083.3 ppb	20:37:20
1	Be 313.107†	254683.8	257500.6	99.614 ug/L	99.614 ppb	20:37:15
1	Cd 226.502†	642.3	850.3	5.1763 ug/L	5.1763 ppb	20:37:40
1	Co 228.616†	867.6	936.1	16.682 ug/L	16.682 ppb	20:37:40
1	Cr 267.716†	10454.2	10325.0	119.76 ug/L	119.76 ppb	20:37:20
1	Cu 324.752†	3753098.0	3724849.8	11300 ug/L	11300 ppb	20:37:15
1	Mn 257.610†	851485.3	845945.2	978.55 ug/L	978.55 ppb	20:37:15
1	Mo 202.031†	7.1	-8.5	3.9229 ug/L	3.9229 ppb	20:37:40
1	Ni 231.604†	3484.5	3355.6	86.921 ug/L	86.921 ppb	20:37:40
1	P 214.914†	5703.5	5441.4	1102.0 ug/L	1102.0 ppb	20:37:20
1	Pb 220.353†	19695.2	19639.2	2442.9 ug/L	2442.9 ppb	20:37:20
1	S 181.975 Axial†	202.7	162.1	232.35 ug/L	232.35 ppb	20:37:40
1	Sb 206.836†	198.1	154.8	48.045 ug/L	48.045 ppb	20:37:40
1	Se 196.026†	-280.0	-256.2	9.7775 ug/L	9.7775 ppb	20:37:40
1	Si 251.611†	376339.6	373528.4	12494 ug/L	12494 ppb	20:37:20
1	Sn 189.927†	116.5	107.1	23.133 ug/L	23.133 ppb	20:37:40
1	Ti 334.940†	1010510.6	1005775.2	1630.8 ug/L	1630.8 ppb	20:37:15
1	Tl 190.801†	-105.1	-70.3	-4.6400 ug/L	-4.6400 ppb	20:37:40
1	U 409.014†	145766.9	147875.9	4281.2 ug/L	4281.2 ppb	20:37:15
1	V 292.402†	14422.1	15890.6	113.75 ug/L	113.75 ppb	20:37:20
1	Zn 213.857†	53023.8	51993.7	488.67 ug/L	488.67 ppb	20:37:20
1	SiO2†	382065.2	379199.0	27049 ug/L	27049 ppb	20:38:48
2	Sc Radial	4939.0	4939.0	103 %		20:36:22
2	Y RADIAL	5409.8	5409.8	108.2 %		20:36:22
2	Al 396.153Radial†	23824.9	23339.3	21661 ug/L	21661 ppb	20:36:22
2	Ca 317.933Radial†	9480.0	9209.7	15265 ug/L	15265 ppb	20:36:22
2	Fe 238.204 Radial†	6366.2	6184.4	56270 ug/L	56270 ppb	20:36:22
2	K 766.490 Radial†	20450.4	17077.7	3008.9 ug/L	3008.9 ppb	20:36:22
2	Mg 279.077 IEC†	215.2	209.1	7351.1 ug/L	7351.1 ppb	20:36:42
2	Na 589.592 Radial†	315.8	1385.9	419.16 ug/L	419.16 ppb	20:36:22
2	Sr 421.552†	7927.1	7713.0	53.979 ug/L	53.979 ppb	20:36:22
2	Sc 361.383	863932.3	863932.3	100.21 %		20:37:46
2	Y 371.029	730185.8	730185.8	102.18 %		20:37:46
2	Ag 328.068†	717.5	487.2	18.049 ug/L	18.049 ppb	20:37:51
2	As 188.979†	-34.6	-0.7	26.996 ug/L	26.996 ppb	20:38:11
2	B 249.677†	233.7	772.3	9.1762 ug/L	9.1762 ppb	20:37:51
2	Ba 233.527†	132390.2	132120.1	1081.0 ug/L	1081.0 ppb	20:37:51
2	Be 313.107†	253355.0	257154.8	99.486 ug/L	99.486 ppb	20:37:46
2	Cd 226.502†	616.0	826.6	4.9053 ug/L	4.9053 ppb	20:38:11
2	Co 228.616†	868.3	940.2	16.771 ug/L	16.771 ppb	20:38:11
2	Cr 267.716†	10345.7	10256.9	118.97 ug/L	118.97 ppb	20:37:51
2	Cu 324.752†	3738897.7	3725122.8	11301 ug/L	11301 ppb	20:37:46
2	Mn 257.610†	849683.3	847423.8	980.23 ug/L	980.23 ppb	20:37:46
2	Mo 202.031†	14.7	-0.9	4.4819 ug/L	4.4819 ppb	20:38:11
2	Ni 231.604†	3489.8	3374.4	87.407 ug/L	87.407 ppb	20:38:11

2	P 214.914†	5662.3	5422.1	1089.9 ug/L	1089.9 ppb	20:37:51
2	Pb 220.353†	19555.6	19575.7	2435.0 ug/L	2435.0 ppb	20:37:51
2	S 181.975 Axial†	205.6	165.9	237.79 ug/L	237.79 ppb	20:38:11
2	Sb 206.836†	195.5	153.0	47.425 ug/L	47.425 ppb	20:38:11
2	Se 196.026†	-296.7	-274.0	-2.5716 ug/L	-2.5716 ppb	20:38:11
2	Si 251.611†	373881.2	372523.5	12460 ug/L	12460 ppb	20:37:51
2	Sn 189.927†	116.3	107.4	23.195 ug/L	23.195 ppb	20:38:11
2	Ti 334.940†	1006917.5	1006078.5	1631.3 ug/L	1631.3 ppb	20:37:46
2	Tl 190.801†	-104.2	-69.8	-4.4660 ug/L	-4.4660 ppb	20:38:11
2	U 409.014†	145149.2	147820.4	4279.6 ug/L	4279.6 ppb	20:37:46
2	V 292.402†	14287.0	15811.2	113.20 ug/L	113.20 ppb	20:37:51
2	Zn 213.857†	52548.5	51723.5	486.01 ug/L	486.01 ppb	20:37:51
2	SiO2†	380015.0	378623.4	27008 ug/L	27008 ppb	20:38:54
3	Sc Radial	5035.7	5035.7	105 %		20:36:47
3	Y RADIAL	5498.9	5498.9	110.0 %		20:36:47
3	Al 396.153Radial†	24019.5	23079.9	21421 ug/L	21421 ppb	20:36:47
3	Ca 317.933Radial†	9553.1	9102.4	15087 ug/L	15087 ppb	20:36:47
3	Fe 238.204 Radial†	6407.1	6104.5	55543 ug/L	55543 ppb	20:36:47
3	K 766.490 Radial†	20642.2	16878.8	2973.8 ug/L	2973.8 ppb	20:36:47
3	Mg 279.077 IEC†	212.3	202.2	7109.4 ug/L	7109.4 ppb	20:37:07
3	Na 589.592 Radial†	308.7	1373.2	415.33 ug/L	415.33 ppb	20:36:47
3	Sr 421.552†	8004.0	7638.2	53.456 ug/L	53.456 ppb	20:36:47
3	Sc 361.383	862455.8	862455.8	100.04 %		20:38:17
3	Y 371.029	728043.4	728043.4	101.88 %		20:38:17
3	Ag 328.068†	684.9	455.8	17.654 ug/L	17.654 ppb	20:38:23
3	As 188.979†	-54.8	-20.9	17.647 ug/L	17.647 ppb	20:38:43
3	B 249.677†	276.4	815.3	10.318 ug/L	10.318 ppb	20:38:23
3	Ba 233.527†	133070.3	133026.2	1088.3 ug/L	1088.3 ppb	20:38:23
3	Be 313.107†	252258.2	256491.2	99.233 ug/L	99.233 ppb	20:38:17
3	Cd 226.502†	626.1	837.7	5.1142 ug/L	5.1142 ppb	20:38:43
3	Co 228.616†	868.3	941.7	16.823 ug/L	16.823 ppb	20:38:43
3	Cr 267.716†	10412.6	10341.5	119.94 ug/L	119.94 ppb	20:38:23
3	Cu 324.752†	3726081.3	3718699.2	11281 ug/L	11281 ppb	20:38:17
3	Mn 257.610†	846262.9	845456.4	977.91 ug/L	977.91 ppb	20:38:17
3	Mo 202.031†	13.4	-2.2	4.3281 ug/L	4.3281 ppb	20:38:43
3	Ni 231.604†	3507.5	3398.0	88.019 ug/L	88.019 ppb	20:38:43
3	P 214.914†	5701.5	5471.1	1124.8 ug/L	1124.8 ppb	20:38:23
3	Pb 220.353†	19599.6	19653.1	2444.7 ug/L	2444.7 ppb	20:38:23
3	S 181.975 Axial†	196.8	157.4	225.45 ug/L	225.45 ppb	20:38:43
3	Sb 206.836†	209.5	167.3	52.434 ug/L	52.434 ppb	20:38:43
3	Se 196.026†	-287.7	-265.5	0.7869 ug/L	0.7869 ppb	20:38:43
3	Si 251.611†	376570.7	375850.7	12572 ug/L	12572 ppb	20:38:23
3	Sn 189.927†	119.7	111.0	23.828 ug/L	23.828 ppb	20:38:43
3	Ti 334.940†	1003664.3	1004546.9	1628.8 ug/L	1628.8 ppb	20:38:17
3	Tl 190.801†	-99.4	-65.2	-3.0177 ug/L	-3.0177 ppb	20:38:43
3	U 409.014†	145148.0	148067.2	4286.8 ug/L	4286.8 ppb	20:38:17
3	V 292.402†	14315.1	15863.7	113.70 ug/L	113.70 ppb	20:38:23
3	Zn 213.857†	52932.9	52197.4	490.82 ug/L	490.82 ppb	20:38:23
3	SiO2†	380364.4	379621.9	27079 ug/L	27079 ppb	20:38:59

Mean Data: 245394007|945421|1

Analyte	Mean Corrected	Calib.	Std.Dev.	Sample	Std.Dev.	RSD
	Intensity	Conc. Units		Conc. Units		
Sc 361.383	864555.0	100.29 %	0.287			0.29%
Sc Radial	4983.2	104 %	1.0			0.98%
Y 371.029	730514.5	102.23 %	0.371			0.36%
Y RADIAL	5458.5	109.2 %	0.90			0.83%
Ag 328.068†	461.0	17.856 ug/L	0.1977	17.856 ppb	0.1977	1.11%
Al 396.153Radial†	23223.7	21554 ug/L	122.5	21554 ppb	122.5	0.57%
As 188.979†	-14.4	20.726 ug/L	5.4301	20.726 ppb	5.4301	26.20%
B 249.677†	814.0	10.201 ug/L	0.9720	10.201 ppb	0.9720	9.53%
Ba 233.527†	132518.0	1084.2 ug/L	3.77	1084.2 ppb	3.77	0.35%
Be 313.107†	257048.9	99.445 ug/L	0.1936	99.445 ppb	0.1936	0.19%
Ca 317.933Radial†	9157.7	15178 ug/L	89.0	15178 ppb	89.0	0.59%
Cd 226.502†	838.2	5.0653 ug/L	0.14200	5.0653 ppb	0.14200	2.80%
Co 228.616†	939.3	16.759 ug/L	0.0717	16.759 ppb	0.0717	0.43%
Cr 267.716†	10307.8	119.55 ug/L	0.516	119.55 ppb	0.516	0.43%
Cu 324.752†	3722890.6	11294 ug/L	11.0	11294 ppb	11.0	0.10%
Fe 238.204 Radial†	6161.8	56065 ug/L	455.0	56065 ppb	455.0	0.81%
K 766.490 Radial†	17008.6	2996.7 ug/L	19.83	2996.7 ppb	19.83	0.66%

Mg 279.077 IEC†	204.5	7190.0 ug/L	139.52	7190.0 ppb	139.52	1.94%
Mn 257.610†	846275.1	978.90 ug/L	1.201	978.90 ppb	1.201	0.12%
Mo 202.031†	-3.9	4.2443 ug/L	0.28875	4.2443 ppb	0.28875	6.80%
Na 589.592 Radial†	1369.6	414.24 ug/L	5.551	414.24 ppb	5.551	1.34%
Ni 231.604†	3376.0	87.449 ug/L	0.5502	87.449 ppb	0.5502	0.63%
P 214.914†	5444.8	1105.6 ug/L	17.70	1105.6 ppb	17.70	1.60%
Pb 220.353†	19622.7	2440.9 ug/L	5.15	2440.9 ppb	5.15	0.21%
S 181.975 Axial†	161.8	231.86 ug/L	6.186	231.86 ppb	6.186	2.67%
Sb 206.836†	158.3	49.301 ug/L	2.7303	49.301 ppb	2.7303	5.54%
Se 196.026†	-265.2	2.6643 ug/L	6.38504	2.6643 ppb	6.38504	239.65%
Si 251.611†	373967.5	12509 ug/L	57.1	12509 ppb	57.1	0.46%
Sn 189.927†	108.5	23.385 ug/L	0.3847	23.385 ppb	0.3847	1.64%
Sr 421.552†	7700.1	53.888 ug/L	0.3956	53.888 ppb	0.3956	0.73%
Ti 334.940†	1005466.9	1630.3 ug/L	1.32	1630.3 ppb	1.32	0.08%
Tl 190.801†	-68.4	-4.0412 ug/L	0.89069	-4.0412 ppb	0.89069	22.04%
U 409.014†	147921.2	4282.5 ug/L	3.80	4282.5 ppb	3.80	0.09%
V 292.402†	15855.2	113.55 ug/L	0.304	113.55 ppb	0.304	0.27%
Zn 213.857†	51971.5	488.50 ug/L	2.408	488.50 ppb	2.408	0.49%
SiO2†	379148.1	27045 ug/L	35.8	27045 ppb	35.8	0.13%

Sequence No.: 38

Sample ID: 245394008|945421|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 67

Date Collected: 2/11/2010 20:41:10

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245394008|945421|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5000.3	5000.3	104 %		20:43:03
1	Y RADIAL	6378.1	6378.1	127.5 %		20:43:03
1	Al 396.153Radial†	19669.7	19060.4	17690 ug/L	17690 ppb	20:43:03
1	Ca 317.933Radial†	4500.1	4309.3	7142.4 ug/L	7142.4 ppb	20:43:03
1	Fe 238.204 Radial†	9374.1	9000.0	81890 ug/L	81890 ppb	20:43:03
1	K 766.490 Radial†	22918.7	19206.4	3386.5 ug/L	3386.5 ppb	20:43:03
1	Mg 279.077 IEC†	111.2	106.4	3687.0 ug/L	3687.0 ppb	20:43:24
1	Na 589.592 Radial†	3254.1	4206.8	1272.3 ug/L	1272.3 ppb	20:43:03
1	Sr 421.552†	7255.3	6972.6	48.846 ug/L	48.846 ppb	20:43:03
1	Sc 361.383	870512.1	870512.1	100.98 %		20:44:21
1	Y 371.029	858942.5	858942.5	120.20 %		20:44:21
1	Ag 328.068†	-4347.2	-4534.0	5.0707 ug/L	5.0707 ppb	20:44:26
1	As 188.979†	-10.9	23.0	43.308 ug/L	43.308 ppb	20:44:46
1	B 249.677†	230.9	767.7	4.7920 ug/L	4.7920 ppb	20:44:26
1	Ba 233.527†	57014.3	56474.6	463.84 ug/L	463.84 ppb	20:44:26
1	Be 313.107†	21344.5	25476.8	13.075 ug/L	13.075 ppb	20:44:26
1	Cd 226.502†	482.7	689.9	0.0938 ug/L	0.0938 ppb	20:44:46
1	Co 228.616†	2746.8	2793.9	56.743 ug/L	56.743 ppb	20:44:46
1	Cr 267.716†	4474.6	4364.5	51.829 ug/L	51.829 ppb	20:44:46
1	Cu 324.752†	252730.8	244466.2	745.00 ug/L	745.00 ppb	20:44:26
1	Mn 257.610†	1991088.7	1971383.2	2276.0 ug/L	2276.0 ppb	20:44:21
1	Mo 202.031†	51.5	35.5	9.0985 ug/L	9.0985 ppb	20:44:46
1	Ni 231.604†	1660.8	1536.8	39.775 ug/L	39.775 ppb	20:44:46
1	P 214.914†	1637.0	1393.1	658.20 ug/L	658.20 ppb	20:44:46
1	Pb 220.353†	13167.0	13101.4	1630.0 ug/L	1630.0 ppb	20:44:26
1	S 181.975 Axial†	109.7	69.3	97.668 ug/L	97.668 ppb	20:44:46
1	Sb 206.836†	110.1	66.9	17.154 ug/L	17.154 ppb	20:44:46
1	Se 196.026†	-401.5	-375.5	11.421 ug/L	11.421 ppb	20:44:46
1	Si 251.611†	421656.8	417017.1	13949 ug/L	13949 ppb	20:44:21
1	Sn 189.927†	77.6	68.1	15.105 ug/L	15.105 ppb	20:44:46
1	Ti 334.940†	981854.0	973662.7	1579.1 ug/L	1579.1 ppb	20:44:21
1	Tl 190.801†	-123.0	-87.6	-4.5220 ug/L	-4.5220 ppb	20:44:46
1	U 409.014†	55005.0	57453.1	1656.5 ug/L	1656.5 ppb	20:44:21
1	V 292.402†	6920.3	8408.0	50.741 ug/L	50.741 ppb	20:44:26
1	Zn 213.857†	35938.6	34877.8	330.57 ug/L	330.57 ppb	20:44:26
1	SiO2†	419403.5	414764.8	29586 ug/L	29586 ppb	20:45:54
2	Sc Radial	4976.3	4976.3	104 %		20:43:29
2	Y RADIAL	6363.5	6363.5	127.3 %		20:43:29
2	Al 396.153Radial†	19586.2	19071.2	17700 ug/L	17700 ppb	20:43:29
2	Ca 317.933Radial†	4470.9	4302.0	7130.3 ug/L	7130.3 ppb	20:43:29
2	Fe 238.204 Radial†	9355.0	9025.1	82117 ug/L	82117 ppb	20:43:29
2	K 766.490 Radial†	22957.8	19350.7	3412.0 ug/L	3412.0 ppb	20:43:29
2	Mg 279.077 IEC†	110.5	106.3	3681.3 ug/L	3681.3 ppb	20:43:49
2	Na 589.592 Radial†	3162.8	4133.6	1250.2 ug/L	1250.2 ppb	20:43:29
2	Sr 421.552†	7234.8	6986.4	48.944 ug/L	48.944 ppb	20:43:29
2	Sc 361.383	887321.9	887321.9	102.93 %		20:44:52
2	Y 371.029	874975.6	874975.6	122.44 %		20:44:52
2	Ag 328.068†	-4426.4	-4529.3	5.1645 ug/L	5.1645 ppb	20:44:57
2	As 188.979†	-21.1	13.4	38.988 ug/L	38.988 ppb	20:45:17
2	B 249.677†	279.2	810.3	5.7711 ug/L	5.7711 ppb	20:44:57
2	Ba 233.527†	56570.5	54973.7	451.59 ug/L	451.59 ppb	20:44:57
2	Be 313.107†	21166.7	24903.6	12.863 ug/L	12.863 ppb	20:44:57
2	Cd 226.502†	503.5	701.1	0.2027 ug/L	0.2027 ppb	20:45:17
2	Co 228.616†	2759.2	2754.5	55.871 ug/L	55.871 ppb	20:45:17
2	Cr 267.716†	4497.5	4302.8	51.113 ug/L	51.113 ppb	20:45:17
2	Cu 324.752†	249823.5	236900.0	722.06 ug/L	722.06 ppb	20:44:57
2	Mn 257.610†	2028072.3	1969960.2	2274.4 ug/L	2274.4 ppb	20:44:52
2	Mo 202.031†	53.0	35.9	9.1509 ug/L	9.1509 ppb	20:45:17
2	Ni 231.604†	1653.6	1498.6	38.788 ug/L	38.788 ppb	20:45:17

2	P 214.914†	1641.1	1366.3	645.91 ug/L	645.91 ppb	20:45:17
2	Pb 220.353†	13127.9	12816.4	1594.5 ug/L	1594.5 ppb	20:44:57
2	S 181.975 Axial†	106.8	64.5	90.668 ug/L	90.668 ppb	20:45:17
2	Sb 206.836†	120.4	74.9	19.937 ug/L	19.937 ppb	20:45:17
2	Se 196.026†	-389.8	-356.6	24.890 ug/L	24.890 ppb	20:45:17
2	Si 251.611†	430437.0	417636.9	13969 ug/L	13969 ppb	20:44:52
2	Sn 189.927†	79.5	68.5	15.184 ug/L	15.184 ppb	20:45:17
2	Ti 334.940†	1001317.9	974152.6	1579.9 ug/L	1579.9 ppb	20:44:52
2	Tl 190.801†	-121.0	-83.3	-3.1318 ug/L	-3.1318 ppb	20:45:17
2	U 409.014†	56102.1	57487.1	1657.5 ug/L	1657.5 ppb	20:44:52
2	V 292.402†	6897.2	8255.7	49.604 ug/L	49.604 ppb	20:44:57
2	Zn 213.857†	35685.5	33957.7	321.50 ug/L	321.50 ppb	20:44:57
2	SiO2†	425300.7	412625.8	29433 ug/L	29433 ppb	20:46:00
3	Sc Radial	5048.1	5048.1	105 %		20:43:54
3	Y RADIAL	6448.2	6448.2	128.9 %		20:43:54
3	Al 396.153Radial†	19890.6	19091.9	17719 ug/L	17719 ppb	20:43:54
3	Ca 317.933Radial†	4573.6	4338.4	7190.6 ug/L	7190.6 ppb	20:43:54
3	Fe 238.204 Radial†	9445.3	8982.6	81730 ug/L	81730 ppb	20:43:54
3	K 766.490 Radial†	23370.7	19428.5	3425.7 ug/L	3425.7 ppb	20:43:54
3	Mg 279.077 IEC†	108.4	102.9	3559.9 ug/L	3559.9 ppb	20:44:14
3	Na 589.592 Radial†	3243.3	4166.8	1260.2 ug/L	1260.2 ppb	20:43:54
3	Sr 421.552†	7291.4	6940.9	48.624 ug/L	48.624 ppb	20:43:54
3	Sc 361.383	876927.7	876927.7	101.72 %		20:45:23
3	Y 371.029	864279.7	864279.7	120.95 %		20:45:23
3	Ag 328.068†	-4338.5	-4493.9	5.2023 ug/L	5.2023 ppb	20:45:28
3	As 188.979†	-15.5	18.7	41.265 ug/L	41.265 ppb	20:45:48
3	B 249.677†	224.2	759.4	4.6206 ug/L	4.6206 ppb	20:45:28
3	Ba 233.527†	57003.7	56051.0	460.37 ug/L	460.37 ppb	20:45:28
3	Be 313.107†	21216.3	25196.1	12.963 ug/L	12.963 ppb	20:45:28
3	Cd 226.502†	515.4	718.6	0.4522 ug/L	0.4522 ppb	20:45:48
3	Co 228.616†	2765.3	2792.3	56.714 ug/L	56.714 ppb	20:45:48
3	Cr 267.716†	4538.5	4395.0	52.179 ug/L	52.179 ppb	20:45:48
3	Cu 324.752†	251268.5	241197.6	735.07 ug/L	735.07 ppb	20:45:28
3	Mn 257.610†	1998957.0	1964692.6	2268.3 ug/L	2268.3 ppb	20:45:23
3	Mo 202.031†	56.8	40.3	9.4477 ug/L	9.4477 ppb	20:45:48
3	Ni 231.604†	1689.2	1552.6	40.186 ug/L	40.186 ppb	20:45:48
3	P 214.914†	1637.1	1381.3	652.96 ug/L	652.96 ppb	20:45:48
3	Pb 220.353†	13168.0	13007.0	1618.3 ug/L	1618.3 ppb	20:45:28
3	S 181.975 Axial†	104.8	63.7	89.505 ug/L	89.505 ppb	20:45:48
3	Sb 206.836†	115.8	71.7	18.858 ug/L	18.858 ppb	20:45:48
3	Se 196.026†	-405.4	-376.4	10.315 ug/L	10.315 ppb	20:45:48
3	Si 251.611†	423603.3	415875.8	13910 ug/L	13910 ppb	20:45:23
3	Sn 189.927†	77.5	67.5	14.989 ug/L	14.989 ppb	20:45:48
3	Ti 334.940†	987283.1	971886.4	1576.3 ug/L	1576.3 ppb	20:45:23
3	Tl 190.801†	-115.5	-79.3	-1.9143 ug/L	-1.9143 ppb	20:45:48
3	U 409.014†	55580.6	57620.5	1661.4 ug/L	1661.4 ppb	20:45:23
3	V 292.402†	7011.8	8447.9	51.069 ug/L	51.069 ppb	20:45:28
3	Zn 213.857†	35872.1	34552.1	327.40 ug/L	327.40 ppb	20:45:28
3	SiO2†	423145.0	415404.3	29632 ug/L	29632 ppb	20:46:05

Mean Data: 245394008|945421|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	878253.9	101.87 %		0.984			0.97%
Sc Radial	5008.2	104 %		0.8			0.73%
Y 371.029	866066.0	121.20 %		1.143			0.94%
Y RADIAL	6396.6	127.9 %		0.91			0.71%
Ag 328.068†	-4519.1	5.1458 ug/L		0.06780	5.1458 ppb	0.06780	1.32%
Al 396.153Radial†	19074.5	17703 ug/L		14.8	17703 ppb	14.8	0.08%
As 188.979†	18.4	41.187 ug/L		2.1611	41.187 ppb	2.1611	5.25%
B 249.677†	779.2	5.0612 ug/L		0.62072	5.0612 ppb	0.62072	12.26%
Ba 233.527†	55833.1	458.60 ug/L		6.316	458.60 ppb	6.316	1.38%
Be 313.107†	25192.2	12.967 ug/L		0.1059	12.967 ppb	0.1059	0.82%
Ca 317.933Radial†	4316.6	7154.4 ug/L		31.87	7154.4 ppb	31.87	0.45%
Cd 226.502†	703.2	0.2495 ug/L		0.18374	0.2495 ppb	0.18374	73.63%
Co 228.616†	2780.2	56.443 ug/L		0.4955	56.443 ppb	0.4955	0.88%
Cr 267.716†	4354.1	51.707 ug/L		0.5435	51.707 ppb	0.5435	1.05%
Cu 324.752†	240854.6	734.04 ug/L		11.505	734.04 ppb	11.505	1.57%
Fe 238.204 Radial†	9002.6	81912 ug/L		194.5	81912 ppb	194.5	0.24%
K 766.490 Radial†	19328.5	3408.1 ug/L		19.88	3408.1 ppb	19.88	0.58%

Mg 279.077 IEC†	105.2	3642.7 ug/L	71.81	3642.7 ppb	71.81	1.97%
Mn 257.610†	1968678.6	2272.9 ug/L	4.07	2272.9 ppb	4.07	0.18%
Mo 202.031†	37.2	9.2324 ug/L	0.18836	9.2324 ppb	0.18836	2.04%
Na 589.592 Radial†	4169.1	1260.9 ug/L	11.08	1260.9 ppb	11.08	0.88%
Ni 231.604†	1529.3	39.583 ug/L	0.7190	39.583 ppb	0.7190	1.82%
P 214.914†	1380.3	652.36 ug/L	6.169	652.36 ppb	6.169	0.95%
Pb 220.353†	12974.9	1614.3 ug/L	18.11	1614.3 ppb	18.11	1.12%
S 181.975 Axial†	65.8	92.614 ug/L	4.4156	92.614 ppb	4.4156	4.77%
Sb 206.836†	71.1	18.650 ug/L	1.4031	18.650 ppb	1.4031	7.52%
Se 196.026†	-369.5	15.542 ug/L	8.1145	15.542 ppb	8.1145	52.21%
Si 251.611†	416843.3	13943 ug/L	29.9	13943 ppb	29.9	0.21%
Sn 189.927†	68.0	15.093 ug/L	0.0982	15.093 ppb	0.0982	0.65%
Sr 421.552†	6966.6	48.805 ug/L	0.1638	48.805 ppb	0.1638	0.34%
Ti 334.940†	973233.9	1578.4 ug/L	1.93	1578.4 ppb	1.93	0.12%
Tl 190.801†	-83.4	-3.1894 ug/L	1.30483	-3.1894 ppb	1.30483	40.91%
U 409.014†	57520.2	1658.4 ug/L	2.58	1658.4 ppb	2.58	0.16%
V 292.402†	8370.5	50.471 ug/L	0.7689	50.471 ppb	0.7689	1.52%
Zn 213.857†	34462.5	326.49 ug/L	4.604	326.49 ppb	4.604	1.41%
SiO2†	414264.9	29550 ug/L	103.8	29550 ppb	103.8	0.35%

Sequence No.: 39

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 2/11/2010 20:48:17

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4899.1	4899.1	102 %		20:50:08
1	Y RADIAL	5112.2	5112.2	102.2 %		20:50:08
1	Al 396.153Radial†	4741.7	4804.0	4435.2 ug/L	4435.2 ppb	20:50:08
1	Ca 317.933Radial†	3076.7	3002.1	4975.8 ug/L	4975.8 ppb	20:50:28
1	Fe 238.204 Radial†	575.5	553.1	5048.0 ug/L	5048.0 ppb	20:50:28
1	K 766.490 Radial†	28090.5	24736.2	4360.5 ug/L	4360.5 ppb	20:50:08
1	Mg 279.077 IEC†	148.4	145.2	5146.0 ug/L	5146.0 ppb	20:50:28
1	Na 589.592 Radial†	29278.3	29805.8	9014.7 ug/L	9014.7 ppb	20:50:08
1	Sr 421.552†	67832.8	66554.1	466.72 ug/L	466.72 ppb	20:50:08
1	Sc 361.383	861325.6	861325.6	99.911 %		20:51:26
1	Y 371.029	693563.4	693563.4	97.056 %		20:51:26
1	Ag 328.068†	103155.4	103018.7	488.58 ug/L	488.58 ppb	20:51:31
1	As 188.979†	1048.5	1083.3	495.78 ug/L	495.78 ppb	20:51:51
1	B 249.677†	19920.9	20477.8	484.90 ug/L	484.90 ppb	20:51:31
1	Ba 233.527†	60792.1	60858.0	498.22 ug/L	498.22 ppb	20:51:31
1	Be 313.107†	1321558.7	1327077.0	495.41 ug/L	495.41 ppb	20:51:26
1	Cd 226.502†	40605.2	40853.3	485.59 ug/L	485.59 ppb	20:51:31
1	Co 228.616†	23104.8	23199.1	506.80 ug/L	506.80 ppb	20:51:31
1	Cr 267.716†	41326.7	41296.8	481.36 ug/L	481.36 ppb	20:51:31
1	Cu 324.752†	167846.7	162175.8	491.95 ug/L	491.95 ppb	20:51:31
1	Mn 257.610†	437080.2	437018.4	503.08 ug/L	503.08 ppb	20:51:26
1	Mo 202.031†	6470.6	6460.9	484.29 ug/L	484.29 ppb	20:51:51
1	Ni 231.604†	18890.5	18799.3	486.72 ug/L	486.72 ppb	20:51:31
1	P 214.914†	4180.3	3956.0	2365.6 ug/L	2365.6 ppb	20:51:51
1	Pb 220.353†	3843.1	3908.2	489.03 ug/L	489.03 ppb	20:51:51
1	S 181.975 Axial†	707.4	668.7	974.26 ug/L	974.26 ppb	20:51:51
1	Sb 206.836†	1426.9	1386.1	500.48 ug/L	500.48 ppb	20:51:51
1	Se 196.026†	707.6	730.3	509.92 ug/L	509.92 ppb	20:51:51
1	Si 251.611†	74533.8	74038.0	2470.5 ug/L	2470.5 ppb	20:51:31
1	Sn 189.927†	2599.4	2593.0	482.04 ug/L	482.04 ppb	20:51:51
1	Ti 334.940†	301561.7	303134.1	491.53 ug/L	491.53 ppb	20:51:31
1	Tl 190.801†	1502.9	1538.4	496.34 ug/L	496.34 ppb	20:51:51
1	U 409.014†	13793.9	16786.2	485.09 ug/L	485.09 ppb	20:51:31
1	V 292.402†	64763.2	66375.7	488.47 ug/L	488.47 ppb	20:51:31
1	Zn 213.857†	50672.7	50004.7	488.80 ug/L	488.80 ppb	20:51:31
1	SiO2†	74868.3	74352.0	5290.5 ug/L	5290.5 ppb	20:52:58
2	Sc Radial	4892.8	4892.8	102 %		20:50:33
2	Y RADIAL	5100.9	5100.9	102.0 %		20:50:33
2	Al 396.153Radial†	5336.7	5394.6	4983.0 ug/L	4983.0 ppb	20:50:33
2	Ca 317.933Radial†	3058.0	2987.6	4951.8 ug/L	4951.8 ppb	20:50:53
2	Fe 238.204 Radial†	566.7	545.2	4976.2 ug/L	4976.2 ppb	20:50:53
2	K 766.490 Radial†	30754.6	27389.0	4828.4 ug/L	4828.4 ppb	20:50:33
2	Mg 279.077 IEC†	149.4	146.4	5188.0 ug/L	5188.0 ppb	20:50:53
2	Na 589.592 Radial†	32180.5	32694.0	9888.3 ug/L	9888.3 ppb	20:50:33
2	Sr 421.552†	75292.6	73968.5	518.72 ug/L	518.72 ppb	20:50:33
2	Sc 361.383	844206.4	844206.4	97.925 %		20:51:57
2	Y 371.029	679202.9	679202.9	95.046 %		20:51:57
2	Ag 328.068†	102741.0	104689.2	496.45 ug/L	496.45 ppb	20:52:02
2	As 188.979†	1053.5	1109.7	507.80 ug/L	507.80 ppb	20:52:22
2	B 249.677†	19810.9	20769.7	491.83 ug/L	491.83 ppb	20:52:02
2	Ba 233.527†	60434.9	61727.1	505.33 ug/L	505.33 ppb	20:52:02
2	Be 313.107†	1289243.1	1320899.8	493.13 ug/L	493.13 ppb	20:51:57
2	Cd 226.502†	40311.7	41377.7	491.84 ug/L	491.84 ppb	20:52:02
2	Co 228.616†	23015.3	23576.7	515.05 ug/L	515.05 ppb	20:52:02
2	Cr 267.716†	41179.5	41985.2	489.39 ug/L	489.39 ppb	20:52:02
2	Cu 324.752†	167315.2	165039.8	500.64 ug/L	500.64 ppb	20:52:02
2	Mn 257.610†	427878.7	436493.2	502.47 ug/L	502.47 ppb	20:51:57
2	Mo 202.031†	6441.8	6562.8	491.91 ug/L	491.91 ppb	20:52:22
2	Ni 231.604†	18780.4	19070.4	493.74 ug/L	493.74 ppb	20:52:02

2	P 214.914†	4164.6	4024.7	2407.0 ug/L	2407.0 ppb	20:52:22
2	Pb 220.353†	3795.0	3937.2	492.78 ug/L	492.78 ppb	20:52:22
2	S 181.975 Axial†	706.4	682.0	993.59 ug/L	993.59 ppb	20:52:22
2	Sb 206.836†	1441.2	1429.6	515.91 ug/L	515.91 ppb	20:52:22
2	Se 196.026†	700.2	737.1	514.29 ug/L	514.29 ppb	20:52:22
2	Si 251.611†	74215.9	75226.2	2510.2 ug/L	2510.2 ppb	20:52:02
2	Sn 189.927†	2592.0	2638.2	490.42 ug/L	490.42 ppb	20:52:22
2	Ti 334.940†	300363.3	308030.9	499.46 ug/L	499.46 ppb	20:52:02
2	Tl 190.801†	1504.6	1570.7	506.68 ug/L	506.68 ppb	20:52:22
2	U 409.014†	13438.4	16703.2	482.67 ug/L	482.67 ppb	20:52:02
2	V 292.402†	64334.6	67252.4	494.94 ug/L	494.94 ppb	20:52:02
2	Zn 213.857†	50349.3	50702.9	495.64 ug/L	495.64 ppb	20:52:02
2	SiO2†	74506.5	75502.1	5372.3 ug/L	5372.3 ppb	20:53:03
3	Sc Radial	4854.5	4854.5	101 %		20:50:58
3	Y RADIAL	5080.4	5080.4	101.6 %		20:50:58
3	Al 396.153Radial†	5329.3	5428.6	5014.9 ug/L	5014.9 ppb	20:50:58
3	Ca 317.933Radial†	3114.8	3067.5	5084.2 ug/L	5084.2 ppb	20:51:18
3	Fe 238.204 Radial†	577.4	560.3	5112.9 ug/L	5112.9 ppb	20:51:18
3	K 766.490 Radial†	30723.3	27596.2	4864.9 ug/L	4864.9 ppb	20:50:58
3	Mg 279.077 IEC†	146.8	144.9	5135.9 ug/L	5135.9 ppb	20:51:18
3	Na 589.592 Radial†	32229.4	32991.7	9978.3 ug/L	9978.3 ppb	20:50:58
3	Sr 421.552†	75312.8	74571.9	522.95 ug/L	522.95 ppb	20:50:58
3	Sc 361.383	856473.5	856473.5	99.348 %		20:52:28
3	Y 371.029	690691.2	690691.2	96.654 %		20:52:28
3	Ag 328.068†	103913.8	104367.0	494.98 ug/L	494.98 ppb	20:52:33
3	As 188.979†	1048.2	1088.9	498.41 ug/L	498.41 ppb	20:52:53
3	B 249.677†	20212.4	20884.1	494.54 ug/L	494.54 ppb	20:52:33
3	Ba 233.527†	61088.1	61500.6	503.49 ug/L	503.49 ppb	20:52:33
3	Be 313.107†	1307337.4	1320255.8	492.88 ug/L	492.88 ppb	20:52:28
3	Cd 226.502†	40820.8	41300.6	490.90 ug/L	490.90 ppb	20:52:33
3	Co 228.616†	23272.4	23498.8	513.33 ug/L	513.33 ppb	20:52:33
3	Cr 267.716†	41705.7	41912.6	488.54 ug/L	488.54 ppb	20:52:33
3	Cu 324.752†	169253.6	164543.7	499.14 ug/L	499.14 ppb	20:52:33
3	Mn 257.610†	431437.4	433816.9	499.41 ug/L	499.41 ppb	20:52:28
3	Mo 202.031†	6442.0	6468.7	484.88 ug/L	484.88 ppb	20:52:53
3	Ni 231.604†	19012.8	19029.6	492.69 ug/L	492.69 ppb	20:52:33
3	P 214.914†	4157.4	3956.6	2364.7 ug/L	2364.7 ppb	20:52:53
3	Pb 220.353†	3799.1	3885.7	486.34 ug/L	486.34 ppb	20:52:53
3	S 181.975 Axial†	700.5	665.8	969.89 ug/L	969.89 ppb	20:52:53
3	Sb 206.836†	1429.6	1396.8	504.20 ug/L	504.20 ppb	20:52:53
3	Se 196.026†	703.8	730.6	510.30 ug/L	510.30 ppb	20:52:53
3	Si 251.611†	75175.7	75106.8	2506.3 ug/L	2506.3 ppb	20:52:33
3	Sn 189.927†	2575.9	2584.1	480.41 ug/L	480.41 ppb	20:52:53
3	Ti 334.940†	303729.6	307026.1	497.85 ug/L	497.85 ppb	20:52:33
3	Tl 190.801†	1501.5	1545.6	498.63 ug/L	498.63 ppb	20:52:53
3	U 409.014†	13906.0	16977.3	490.61 ug/L	490.61 ppb	20:52:33
3	V 292.402†	65415.5	67399.5	495.90 ug/L	495.90 ppb	20:52:33
3	Zn 213.857†	50967.8	50589.0	494.51 ug/L	494.51 ppb	20:52:33
3	SiO2†	75069.8	74979.4	5335.2 ug/L	5335.2 ppb	20:53:09

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	854001.8	99.061 %		1.0235			1.03%
Sc Radial	4882.1	102 %		0.5			0.49%
Y 371.029	687819.2	96.252 %		1.0634			1.10%
Y RADIAL	5097.8	101.9 %		0.32			0.32%
Ag 328.068†	104025.0	493.34 ug/L		4.186	493.34 ppb	4.186	0.85%
QC value within limits for Ag 328.068 Recovery = 98.67%							
Al 396.153Radial†	5209.1	4811.0 ug/L		325.83	4811.0 ppb	325.83	6.77%
QC value within limits for Al 396.153Radial Recovery = 96.22%							
As 188.979†	1094.0	500.66 ug/L		6.322	500.66 ppb	6.322	1.26%
QC value within limits for As 188.979 Recovery = 100.13%							
B 249.677†	20710.5	490.42 ug/L		4.971	490.42 ppb	4.971	1.01%
QC value within limits for B 249.677 Recovery = 98.08%							
Ba 233.527†	61361.9	502.35 ug/L		3.690	502.35 ppb	3.690	0.73%
QC value within limits for Ba 233.527 Recovery = 100.47%							
Be 313.107†	1322744.2	493.81 ug/L		1.394	493.81 ppb	1.394	0.28%
QC value within limits for Be 313.107 Recovery = 98.76%							
Ca 317.933Radial†	3019.1	5003.9 ug/L		70.59	5003.9 ppb	70.59	1.41%

QC value within limits for Ca 317.933 Radial Recovery = 100.08%							
Cd	226.502†	41177.2	489.44 ug/L	3.370	489.44 ppb	3.370	0.69%
QC value within limits for Cd 226.502 Recovery = 97.89%							
Co	228.616†	23424.9	511.73 ug/L	4.353	511.73 ppb	4.353	0.85%
QC value within limits for Co 228.616 Recovery = 102.35%							
Cr	267.716†	41731.6	486.43 ug/L	4.409	486.43 ppb	4.409	0.91%
QC value within limits for Cr 267.716 Recovery = 97.29%							
Cu	324.752†	163919.7	497.24 ug/L	4.642	497.24 ppb	4.642	0.93%
QC value within limits for Cu 324.752 Recovery = 99.45%							
Fe	238.204 Radial†	552.9	5045.7 ug/L	68.38	5045.7 ppb	68.38	1.36%
QC value within limits for Fe 238.204 Radial Recovery = 100.91%							
K	766.490 Radial†	26573.8	4684.6 ug/L	281.29	4684.6 ppb	281.29	6.00%
QC value within limits for K 766.490 Radial Recovery = 93.69%							
Mg	279.077 IEC†	145.5	5156.6 ug/L	27.63	5156.6 ppb	27.63	0.54%
QC value within limits for Mg 279.077 IEC Recovery = 103.13%							
Mn	257.610†	435776.2	501.65 ug/L	1.970	501.65 ppb	1.970	0.39%
QC value within limits for Mn 257.610 Recovery = 100.33%							
Mo	202.031†	6497.5	487.03 ug/L	4.240	487.03 ppb	4.240	0.87%
QC value within limits for Mo 202.031 Recovery = 97.41%							
Na	589.592 Radial†	31830.5	9627.1 ug/L	532.23	9627.1 ppb	532.23	5.53%
QC value within limits for Na 589.592 Radial Recovery = 96.27%							
Ni	231.604†	18966.4	491.05 ug/L	3.783	491.05 ppb	3.783	0.77%
QC value within limits for Ni 231.604 Recovery = 98.21%							
P	214.914†	3979.1	2379.1 ug/L	24.15	2379.1 ppb	24.15	1.01%
QC value within limits for P 214.914 Recovery = 95.16%							
Pb	220.353†	3910.4	489.38 ug/L	3.235	489.38 ppb	3.235	0.66%
QC value within limits for Pb 220.353 Recovery = 97.88%							
S	181.975 Axial†	672.2	979.25 ug/L	12.614	979.25 ppb	12.614	1.29%
QC value within limits for S 181.975 Axial Recovery = 97.92%							
Sb	206.836†	1404.2	506.87 ug/L	8.055	506.87 ppb	8.055	1.59%
QC value within limits for Sb 206.836 Recovery = 101.37%							
Se	196.026†	732.7	511.50 ug/L	2.420	511.50 ppb	2.420	0.47%
QC value within limits for Se 196.026 Recovery = 102.30%							
Si	251.611†	74790.3	2495.6 ug/L	21.85	2495.6 ppb	21.85	0.88%
QC value within limits for Si 251.611 Recovery = 99.83%							
Sn	189.927†	2605.1	484.29 ug/L	5.375	484.29 ppb	5.375	1.11%
QC value within limits for Sn 189.927 Recovery = 96.86%							
Sr	421.552†	71698.2	502.79 ug/L	31.314	502.79 ppb	31.314	6.23%
QC value within limits for Sr 421.552 Recovery = 100.56%							
Ti	334.940†	306063.7	496.28 ug/L	4.194	496.28 ppb	4.194	0.85%
QC value within limits for Ti 334.940 Recovery = 99.26%							
Tl	190.801†	1551.6	500.55 ug/L	5.433	500.55 ppb	5.433	1.09%
QC value within limits for Tl 190.801 Recovery = 100.11%							
U	409.014†	16822.2	486.13 ug/L	4.068	486.13 ppb	4.068	0.84%
QC value within limits for U 409.014 Recovery = 97.23%							
V	292.402†	67009.2	493.10 ug/L	4.043	493.10 ppb	4.043	0.82%
QC value within limits for V 292.402 Recovery = 98.62%							
Zn	213.857†	50432.2	492.98 ug/L	3.667	492.98 ppb	3.667	0.74%
QC value within limits for Zn 213.857 Recovery = 98.60%							
SiO2†		74944.5	5332.7 ug/L	40.98	5332.7 ppb	40.98	0.77%
QC value within limits for SiO2 Recovery = 99.72%							
All analyte(s) passed QC.							

Sequence No.: 40

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 2/11/2010 20:55:18

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	4905.0	4905.0	102 %		20:57:10
1	Y RADIAL	5153.1	5153.1	103.0 %		20:57:10
1	Al 396.153Radial†	-159.4	-4.6	-4.3047 ug/L	-4.3047 ppb	20:57:10
1	Ca 317.933Radial†	15.9	-1.2	-1.9207 ug/L	-1.9207 ppb	20:57:30
1	Fe 238.204 Radial†	10.3	-1.4	-12.348 ug/L	-12.348 ppb	20:57:30
1	K 766.490 Radial†	2839.9	-42.5	-7.5296 ug/L	-7.5296 ppb	20:57:10
1	Mg 279.077 IEC†	1.4	0.9	33.315 ug/L	33.315 ppb	20:57:30
1	Na 589.592 Radial†	-930.2	167.0	50.498 ug/L	50.498 ppb	20:57:10
1	Sr 421.552†	10.4	8.0	0.0564 ug/L	0.0564 ppb	20:57:10
1	Sc 361.383	839406.7	839406.7	97.368 %		20:58:27
1	Y 371.029	683831.9	683831.9	95.694 %		20:58:27
1	Ag 328.068†	289.4	68.4	0.3199 ug/L	0.3199 ppb	20:58:27
1	As 188.979†	-31.0	2.0	0.9209 ug/L	0.9209 ppb	20:58:47
1	B 249.677†	-405.3	122.8	2.9231 ug/L	2.9231 ppb	20:58:47
1	Ba 233.527†	-3.8	7.7	0.0640 ug/L	0.0640 ppb	20:58:47
1	Be 313.107†	-4149.5	77.1	0.0288 ug/L	0.0288 ppb	20:58:27
1	Cd 226.502†	-207.2	-0.9	-0.0093 ug/L	-0.0093 ppb	20:58:47
1	Co 228.616†	-67.0	4.9	0.1068 ug/L	0.1068 ppb	20:58:47
1	Cr 267.716†	89.2	24.9	0.2897 ug/L	0.2897 ppb	20:58:47
1	Cu 324.752†	5441.8	-231.9	-0.7048 ug/L	-0.7048 ppb	20:58:27
1	Mn 257.610†	526.7	89.0	0.0998 ug/L	0.0998 ppb	20:58:47
1	Mo 202.031†	17.2	2.2	0.1611 ug/L	0.1611 ppb	20:58:47
1	Ni 231.604†	97.8	-7.5	-0.1954 ug/L	-0.1954 ppb	20:58:47
1	P 214.914†	255.3	34.1	21.374 ug/L	21.374 ppb	20:58:47
1	Pb 220.353†	-51.7	8.7	1.0831 ug/L	1.0831 ppb	20:58:47
1	S 181.975 Axial†	34.7	-3.7	-5.3434 ug/L	-5.3434 ppb	20:58:47
1	Sb 206.836†	35.7	-5.5	-1.8771 ug/L	-1.8771 ppb	20:58:47
1	Se 196.026†	-14.6	7.1	4.7275 ug/L	4.7275 ppb	20:58:47
1	Si 251.611†	589.8	43.5	1.4515 ug/L	1.4515 ppb	20:58:47
1	Sn 189.927†	19.8	11.7	2.1643 ug/L	2.1643 ppb	20:58:47
1	Ti 334.940†	-1235.2	34.6	0.0525 ug/L	0.0525 ppb	20:58:27
1	Tl 190.801†	-33.5	-0.2	-0.0505 ug/L	-0.0505 ppb	20:58:47
1	U 409.014†	-2860.1	42.6	1.2366 ug/L	1.2366 ppb	20:58:27
1	V 292.402†	-1424.3	91.8	0.6738 ug/L	0.6738 ppb	20:58:27
1	Zn 213.857†	719.6	25.8	0.2583 ug/L	0.2583 ppb	20:58:47
1	SiO2†	564.4	-3.4	-0.2497 ug/L	-0.2497 ppb	20:59:43
2	Sc Radial	4950.9	4950.9	103 %		20:57:35
2	Y RADIAL	5207.9	5207.9	104.1 %		20:57:35
2	Al 396.153Radial†	-137.8	17.8	16.468 ug/L	16.468 ppb	20:57:35
2	Ca 317.933Radial†	18.8	1.5	2.5348 ug/L	2.5348 ppb	20:57:55
2	Fe 238.204 Radial†	10.0	-1.7	-15.739 ug/L	-15.739 ppb	20:57:55
2	K 766.490 Radial†	2767.1	-139.1	-24.566 ug/L	-24.566 ppb	20:57:35
2	Mg 279.077 IEC†	4.3	3.7	132.02 ug/L	132.02 ppb	20:57:55
2	Na 589.592 Radial†	-946.8	159.3	48.171 ug/L	48.171 ppb	20:57:35
2	Sr 421.552†	-16.4	-18.0	-0.1262 ug/L	-0.1262 ppb	20:57:35
2	Sc 361.383	831406.2	831406.2	96.440 %		20:58:52
2	Y 371.029	676589.7	676589.7	94.680 %		20:58:52
2	Ag 328.068†	242.5	22.6	0.1084 ug/L	0.1084 ppb	20:58:52
2	As 188.979†	-28.4	4.5	2.0204 ug/L	2.0204 ppb	20:59:12
2	B 249.677†	-382.0	143.0	3.4037 ug/L	3.4037 ppb	20:59:12
2	Ba 233.527†	-17.8	-6.8	-0.0553 ug/L	-0.0553 ppb	20:59:12
2	Be 313.107†	-4205.8	-22.4	-0.0087 ug/L	-0.0087 ppb	20:58:52
2	Cd 226.502†	-203.3	1.1	0.0130 ug/L	0.0130 ppb	20:59:12
2	Co 228.616†	-70.2	0.9	0.0221 ug/L	0.0221 ppb	20:59:12
2	Cr 267.716†	61.8	-2.7	-0.0282 ug/L	-0.0282 ppb	20:59:12
2	Cu 324.752†	5342.4	-281.1	-0.8500 ug/L	-0.8500 ppb	20:58:52
2	Mn 257.610†	513.8	80.8	0.0861 ug/L	0.0861 ppb	20:59:12
2	Mo 202.031†	21.4	6.7	0.4973 ug/L	0.4973 ppb	20:59:12
2	Ni 231.604†	70.6	-34.8	-0.9014 ug/L	-0.9014 ppb	20:59:12

2	P 214.914†	226.4	6.7	4.3619 ug/L	4.3619 ppb	20:59:12
2	Pb 220.353†	-52.6	7.2	0.9025 ug/L	0.9025 ppb	20:59:12
2	S 181.975 Axial†	37.2	-0.8	-1.1871 ug/L	-1.1871 ppb	20:59:12
2	Sb 206.836†	38.2	-2.5	-0.8466 ug/L	-0.8466 ppb	20:59:12
2	Se 196.026†	-21.3	-0.0	-0.0521 ug/L	-0.0521 ppb	20:59:12
2	Si 251.611†	570.7	29.5	0.9799 ug/L	0.9799 ppb	20:59:12
2	Sn 189.927†	18.5	10.5	1.9531 ug/L	1.9531 ppb	20:59:12
2	Ti 334.940†	-1349.4	-96.0	-0.1633 ug/L	-0.1633 ppb	20:58:52
2	Tl 190.801†	-39.4	-6.6	-2.1204 ug/L	-2.1204 ppb	20:59:12
2	U 409.014†	-3088.9	-222.9	-6.4602 ug/L	-6.4602 ppb	20:58:52
2	V 292.402†	-1440.2	61.2	0.4445 ug/L	0.4445 ppb	20:58:52
2	Zn 213.857†	706.2	19.0	0.1971 ug/L	0.1971 ppb	20:59:12
2	SiO2†	565.7	3.5	0.2360 ug/L	0.2360 ppb	20:59:48
3	Sc Radial	4675.0	4675.0	97.3 %		20:58:00
3	Y RADIAL	4942.0	4942.0	98.83 %		20:58:00
3	Al 396.153Radial†	-149.4	-2.1	-1.9227 ug/L	-1.9227 ppb	20:58:00
3	Ca 317.933Radial†	12.5	-3.9	-6.4160 ug/L	-6.4160 ppb	20:58:20
3	Fe 238.204 Radial†	12.5	1.4	12.520 ug/L	12.520 ppb	20:58:20
3	K 766.490 Radial†	2803.8	57.2	10.104 ug/L	10.104 ppb	20:58:00
3	Mg 279.077 IEC†	0.3	-0.1	-4.8546 ug/L	-4.8546 ppb	20:58:20
3	Na 589.592 Radial†	-1024.5	25.1	7.5929 ug/L	7.5929 ppb	20:58:00
3	Sr 421.552†	15.1	13.5	0.0945 ug/L	0.0945 ppb	20:58:00
3	Sc 361.383	834150.1	834150.1	96.759 %		20:59:18
3	Y 371.029	681290.2	681290.2	95.338 %		20:59:18
3	Ag 328.068†	295.3	76.4	0.3646 ug/L	0.3646 ppb	20:59:18
3	As 188.979†	-31.3	1.5	0.6920 ug/L	0.6920 ppb	20:59:38
3	B 249.677†	-388.4	137.6	3.2725 ug/L	3.2725 ppb	20:59:38
3	Ba 233.527†	-18.2	-7.2	-0.0584 ug/L	-0.0584 ppb	20:59:38
3	Be 313.107†	-4115.5	85.4	0.0316 ug/L	0.0316 ppb	20:59:18
3	Cd 226.502†	-201.3	3.8	0.0443 ug/L	0.0443 ppb	20:59:38
3	Co 228.616†	-80.6	-9.5	-0.2087 ug/L	-0.2087 ppb	20:59:38
3	Cr 267.716†	72.5	8.2	0.0957 ug/L	0.0957 ppb	20:59:38
3	Cu 324.752†	5247.7	-397.2	-1.2045 ug/L	-1.2045 ppb	20:59:18
3	Mn 257.610†	503.4	68.4	0.0801 ug/L	0.0801 ppb	20:59:38
3	Mo 202.031†	14.8	-0.3	-0.0209 ug/L	-0.0209 ppb	20:59:38
3	Ni 231.604†	111.5	7.3	0.1881 ug/L	0.1881 ppb	20:59:38
3	P 214.914†	235.8	15.6	9.9651 ug/L	9.9651 ppb	20:59:38
3	Pb 220.353†	-51.4	8.6	1.0662 ug/L	1.0662 ppb	20:59:38
3	S 181.975 Axial†	30.7	-7.6	-11.057 ug/L	-11.057 ppb	20:59:38
3	Sb 206.836†	38.7	-2.2	-0.7631 ug/L	-0.7631 ppb	20:59:38
3	Se 196.026†	-8.3	13.5	9.1365 ug/L	9.1365 ppb	20:59:38
3	Si 251.611†	572.7	29.7	0.9926 ug/L	0.9926 ppb	20:59:38
3	Sn 189.927†	9.1	0.7	0.1337 ug/L	0.1337 ppb	20:59:38
3	Ti 334.940†	-1305.9	-46.4	-0.0760 ug/L	-0.0760 ppb	20:59:18
3	Tl 190.801†	-29.2	4.0	1.2826 ug/L	1.2826 ppb	20:59:38
3	U 409.014†	-2870.8	13.0	0.3764 ug/L	0.3764 ppb	20:59:18
3	V 292.402†	-1486.4	18.5	0.1326 ug/L	0.1326 ppb	20:59:18
3	Zn 213.857†	713.7	24.3	0.2384 ug/L	0.2384 ppb	20:59:38
3	SiO2†	583.8	20.3	1.4460 ug/L	1.4460 ppb	20:59:53

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	834987.7	96.856 %		0.4716			0.49%
Sc Radial	4843.7	101 %		3.1			3.05%
Y 371.029	680570.6	95.238 %		0.5142			0.54%
Y RADIAL	5101.0	102.0 %		2.81			2.75%
Ag 328.068†	55.8	0.2643 ug/L		0.13682	0.2643 ppb	0.13682	51.77%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	3.7	3.4135 ug/L		11.36809	3.4135 ppb	11.36809	333.03%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	2.7	1.2111 ug/L		0.71017	1.2111 ppb	0.71017	58.64%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	134.5	3.1997 ug/L		0.24839	3.1997 ppb	0.24839	7.76%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	-2.1	-0.0166 ug/L		0.06982	-0.0166 ppb	0.06982	421.48%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	46.7	0.0173 ug/L		0.02251	0.0173 ppb	0.02251	130.43%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	-1.2	-1.9340 ug/L		4.47543	-1.9340 ppb	4.47543	231.41%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	1.3	0.0160 ug/L	0.02689	0.0160 ppb	0.02689	167.88%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-1.2	-0.0266 ug/L	0.16331	-0.0266 ppb	0.16331	613.40%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	10.1	0.1191 ug/L	0.16026	0.1191 ppb	0.16026	134.58%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-303.4	-0.9198 ug/L	0.25707	-0.9198 ppb	0.25707	27.95%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	-0.6	-5.1892 ug/L	15.42983	-5.1892 ppb	15.42983	297.35%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	-41.5	-7.3305 ug/L	17.33544	-7.3305 ppb	17.33544	236.48%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	1.5	53.494 ug/L	70.6339	53.494 ppb	70.6339	132.04%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	79.4	0.0887 ug/L	0.01013	0.0887 ppb	0.01013	11.42%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	2.8	0.2125 ug/L	0.26288	0.2125 ppb	0.26288	123.69%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	117.1	35.421 ug/L	24.1275	35.421 ppb	24.1275	68.12%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-11.7	-0.3029 ug/L	0.55265	-0.3029 ppb	0.55265	182.45%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	18.8	11.900 ug/L	8.6694	11.900 ppb	8.6694	72.85%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	8.1	1.0172 ug/L	0.09972	1.0172 ppb	0.09972	9.80%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	-4.0	-5.8625 ug/L	4.95538	-5.8625 ppb	4.95538	84.53%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	-3.4	-1.1623 ug/L	0.62050	-1.1623 ppb	0.62050	53.39%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	6.9	4.6040 ug/L	4.59554	4.6040 ppb	4.59554	99.82%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	34.2	1.1413 ug/L	0.26872	1.1413 ppb	0.26872	23.54%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	7.6	1.4171 ug/L	1.11640	1.4171 ppb	1.11640	78.78%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	1.2	0.0083 ug/L	0.11796	0.0083 ppb	0.11796	>999.9%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-35.9	-0.0623 ug/L	0.10857	-0.0623 ppb	0.10857	174.41%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-0.9	-0.2961 ug/L	1.71474	-0.2961 ppb	1.71474	579.13%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	-55.7	-1.6157 ug/L	4.21744	-1.6157 ppb	4.21744	261.02%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	57.2	0.4170 ug/L	0.27163	0.4170 ppb	0.27163	65.15%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	23.0	0.2313 ug/L	0.03124	0.2313 ppb	0.03124	13.51%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	6.8	0.4774 ug/L	0.87326	0.4774 ppb	0.87326	182.90%
QC value within limits for SiO2 Recovery = Not calculated						
All analyte(s) passed QC.						

Sequence No.: 41

Sample ID: 245394009|945421|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 68

Date Collected: 2/11/2010 21:02:03

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245394009|945421|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4962.7	4962.7	103 %		21:03:56
1	Y RADIAL	5786.1	5786.1	115.7 %		21:03:56
1	Al 396.153Radial†	50525.4	49090.4	45561 ug/L	45561 ppb	21:03:56
1	Ca 317.933Radial†	48359.7	46824.5	77608 ug/L	77608 ppb	21:03:56
1	Fe 238.204 Radial†	6802.1	6577.0	59842 ug/L	59842 ppb	21:03:56
1	K 766.490 Radial†	33570.8	29691.0	5214.2 ug/L	5214.2 ppb	21:03:56
1	Mg 279.077 IEC†	283.2	273.9	9645.2 ug/L	9645.2 ppb	21:04:16
1	Na 589.592 Radial†	1106.2	2149.9	650.25 ug/L	650.25 ppb	21:03:56
1	Sr 421.552†	33429.7	32377.8	226.49 ug/L	226.49 ppb	21:03:56
1	Sc 361.383	850424.8	850424.8	98.646 %		21:05:14
1	Y 371.029	765949.6	765949.6	107.19 %		21:05:14
1	Ag 328.068†	-2073.4	-2330.6	7.4502 ug/L	7.4502 ppb	21:05:14
1	As 188.979†	-16.4	17.2	32.899 ug/L	32.899 ppb	21:05:34
1	B 249.677†	527.8	1074.0	15.790 ug/L	15.790 ppb	21:05:14
1	Ba 233.527†	92635.1	93917.9	769.02 ug/L	769.02 ppb	21:05:14
1	Be 313.107†	18585.4	23179.2	11.536 ug/L	11.536 ppb	21:05:14
1	Cd 226.502†	414.3	631.9	1.6201 ug/L	1.6201 ppb	21:05:34
1	Co 228.616†	612.4	694.5	11.985 ug/L	11.985 ppb	21:05:34
1	Cr 267.716†	4106.2	4095.7	48.448 ug/L	48.448 ppb	21:05:34
1	Cu 324.752†	768199.1	772919.6	2347.1 ug/L	2347.1 ppb	21:05:14
1	Mn 257.610†	1283099.9	1300254.8	1501.5 ug/L	1501.5 ppb	21:05:14
1	Mo 202.031†	67.8	53.2	9.5549 ug/L	9.5549 ppb	21:05:34
1	Ni 231.604†	1874.8	1792.5	46.428 ug/L	46.428 ppb	21:05:34
1	P 214.914†	1876.3	1673.9	538.91 ug/L	538.91 ppb	21:05:34
1	Pb 220.353†	5540.4	5678.1	712.47 ug/L	712.47 ppb	21:05:34
1	S 181.975 Axial†	283.1	247.6	352.53 ug/L	352.53 ppb	21:05:34
1	Sb 206.836†	122.6	82.1	22.518 ug/L	22.518 ppb	21:05:34
1	Se 196.026†	-316.5	-298.7	-6.9279 ug/L	-6.9279 ppb	21:05:34
1	Si 251.611†	675202.8	683905.7	22876 ug/L	22876 ppb	21:05:14
1	Sn 189.927†	-113.1	-123.4	-10.096 ug/L	-10.096 ppb	21:05:34
1	Ti 334.940†	776237.5	788192.3	1287.4 ug/L	1287.4 ppb	21:05:14
1	Tl 190.801†	-102.8	-70.0	-4.9210 ug/L	-4.9210 ppb	21:05:34
1	U 409.014†	42295.3	45855.7	1322.7 ug/L	1322.7 ppb	21:05:14
1	V 292.402†	10922.7	12627.2	84.402 ug/L	84.402 ppb	21:05:14
1	Zn 213.857†	31931.4	31656.4	299.88 ug/L	299.88 ppb	21:05:14
1	SiO2†	682390.2	691170.9	49302 ug/L	49302 ppb	21:06:31
2	Sc Radial	4945.0	4945.0	103 %		21:04:21
2	Y RADIAL	5798.3	5798.3	115.9 %		21:04:21
2	Al 396.153Radial†	51207.0	49928.5	46339 ug/L	46339 ppb	21:04:21
2	Ca 317.933Radial†	48852.8	47471.8	78681 ug/L	78681 ppb	21:04:21
2	Fe 238.204 Radial†	6822.7	6620.7	60239 ug/L	60239 ppb	21:04:21
2	K 766.490 Radial†	33945.4	30171.7	5298.7 ug/L	5298.7 ppb	21:04:21
2	Mg 279.077 IEC†	287.3	278.8	9819.2 ug/L	9819.2 ppb	21:04:41
2	Na 589.592 Radial†	1115.9	2163.3	654.28 ug/L	654.28 ppb	21:04:21
2	Sr 421.552†	33796.5	32850.6	229.80 ug/L	229.80 ppb	21:04:21
2	Sc 361.383	850995.7	850995.7	98.713 %		21:05:40
2	Y 371.029	766903.4	766903.4	107.32 %		21:05:40
2	Ag 328.068†	-1974.2	-2228.7	8.0452 ug/L	8.0452 ppb	21:05:40
2	As 188.979†	-20.8	12.8	30.983 ug/L	30.983 ppb	21:06:00
2	B 249.677†	540.1	1086.2	16.016 ug/L	16.016 ppb	21:05:40
2	Ba 233.527†	92704.5	93925.1	769.09 ug/L	769.09 ppb	21:05:40
2	Be 313.107†	18580.4	23161.4	11.531 ug/L	11.531 ppb	21:05:40
2	Cd 226.502†	430.8	648.4	1.7755 ug/L	1.7755 ppb	21:06:00
2	Co 228.616†	608.0	689.6	11.874 ug/L	11.874 ppb	21:06:00
2	Cr 267.716†	4068.7	4055.0	47.979 ug/L	47.979 ppb	21:06:00
2	Cu 324.752†	768866.7	773073.5	2347.6 ug/L	2347.6 ppb	21:05:40
2	Mn 257.610†	1282854.9	1299133.9	1500.2 ug/L	1500.2 ppb	21:05:40
2	Mo 202.031†	76.2	61.7	10.231 ug/L	10.231 ppb	21:06:00
2	Ni 231.604†	1868.3	1784.6	46.224 ug/L	46.224 ppb	21:06:00

2	P 214.914†	1861.6	1657.8	528.64 ug/L	528.64 ppb	21:06:00
2	Pb 220.353†	5537.5	5671.5	711.79 ug/L	711.79 ppb	21:06:00
2	S 181.975 Axial†	280.1	244.4	347.65 ug/L	347.65 ppb	21:06:00
2	Sb 206.836†	114.5	73.9	19.612 ug/L	19.612 ppb	21:06:00
2	Se 196.026†	-313.6	-295.6	-3.4954 ug/L	-3.4954 ppb	21:06:00
2	Si 251.611†	675262.2	683506.7	22862 ug/L	22862 ppb	21:05:40
2	Sn 189.927†	-120.7	-130.9	-11.328 ug/L	-11.328 ppb	21:06:00
2	Ti 334.940†	777115.6	788553.9	1288.1 ug/L	1288.1 ppb	21:05:40
2	Tl 190.801†	-105.4	-72.6	-5.7354 ug/L	-5.7354 ppb	21:06:00
2	U 409.014†	42496.0	46030.2	1327.7 ug/L	1327.7 ppb	21:05:40
2	V 292.402†	10906.2	12603.1	84.191 ug/L	84.191 ppb	21:05:40
2	Zn 213.857†	31934.1	31637.3	299.64 ug/L	299.64 ppb	21:05:40
2	SiO2†	679874.1	688157.9	49088 ug/L	49088 ppb	21:06:37
3	Sc Radial	4867.9	4867.9	101 %		21:04:46
3	Y RADIAL	5708.7	5708.7	114.2 %		21:04:46
3	Al 396.153Radial†	51302.7	50811.6	47159 ug/L	47159 ppb	21:04:46
3	Ca 317.933Radial†	48915.7	48286.1	80031 ug/L	80031 ppb	21:04:46
3	Fe 238.204 Radial†	6877.8	6780.1	61690 ug/L	61690 ppb	21:04:46
3	K 766.490 Radial†	34030.6	30778.6	5405.4 ug/L	5405.4 ppb	21:04:46
3	Mg 279.077 IEC†	283.9	279.9	9856.7 ug/L	9856.7 ppb	21:05:07
3	Na 589.592 Radial†	1066.5	2131.6	644.71 ug/L	644.71 ppb	21:04:46
3	Sr 421.552†	33792.6	33367.1	233.41 ug/L	233.41 ppb	21:04:46
3	Sc 361.383	860436.5	860436.5	99.808 %		21:06:06
3	Y 371.029	776365.4	776365.4	108.64 %		21:06:06
3	Ag 328.068†	-2069.6	-2302.4	8.1752 ug/L	8.1752 ppb	21:06:06
3	As 188.979†	-10.7	23.1	35.938 ug/L	35.938 ppb	21:06:26
3	B 249.677†	506.4	1046.5	14.835 ug/L	14.835 ppb	21:06:06
3	Ba 233.527†	92788.5	92978.9	761.41 ug/L	761.41 ppb	21:06:06
3	Be 313.107†	18581.5	22956.0	11.436 ug/L	11.436 ppb	21:06:06
3	Cd 226.502†	429.9	642.6	1.5548 ug/L	1.5548 ppb	21:06:26
3	Co 228.616†	591.5	666.4	11.355 ug/L	11.355 ppb	21:06:26
3	Cr 267.716†	4113.6	4054.7	48.008 ug/L	48.008 ppb	21:06:26
3	Cu 324.752†	773839.0	769509.3	2336.8 ug/L	2336.8 ppb	21:06:06
3	Mn 257.610†	1285539.8	1287564.9	1487.1 ug/L	1487.1 ppb	21:06:06
3	Mo 202.031†	66.1	50.7	9.5349 ug/L	9.5349 ppb	21:06:26
3	Ni 231.604†	1898.2	1793.8	46.464 ug/L	46.464 ppb	21:06:26
3	P 214.914†	1847.4	1622.9	508.14 ug/L	508.14 ppb	21:06:26
3	Pb 220.353†	5534.4	5606.8	703.79 ug/L	703.79 ppb	21:06:26
3	S 181.975 Axial†	283.3	244.5	347.75 ug/L	347.75 ppb	21:06:26
3	Sb 206.836†	114.0	72.1	18.997 ug/L	18.997 ppb	21:06:26
3	Se 196.026†	-310.6	-289.1	5.5613 ug/L	5.5613 ppb	21:06:26
3	Si 251.611†	678031.6	678775.8	22704 ug/L	22704 ppb	21:06:06
3	Sn 189.927†	-111.3	-120.2	-9.1032 ug/L	-9.1032 ppb	21:06:26
3	Ti 334.940†	780879.1	783686.9	1280.4 ug/L	1280.4 ppb	21:06:06
3	Tl 190.801†	-102.6	-68.6	-4.5971 ug/L	-4.5971 ppb	21:06:26
3	U 409.014†	42544.8	45606.9	1315.3 ug/L	1315.3 ppb	21:06:06
3	V 292.402†	10876.7	12452.3	82.859 ug/L	82.859 ppb	21:06:06
3	Zn 213.857†	32072.1	31420.6	297.29 ug/L	297.29 ppb	21:06:06
3	SiO2†	669207.6	669913.8	47786 ug/L	47786 ppb	21:06:42

Mean Data: 245394009|945421|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	853952.3	99.056 %	%	0.6522			0.66%
Sc Radial	4925.2	102 %	%	1.0			1.02%
Y 371.029	769739.5	107.72 %	%	0.806			0.75%
Y RADIAL	5764.3	115.3 %	%	0.97			0.84%
Ag 328.068†	-2287.2	7.8902 ug/L	ug/L	0.38655	7.8902 ppb	0.38655	4.90%
Al 396.153Radial†	49943.5	46353 ug/L	ug/L	798.8	46353 ppb	798.8	1.72%
As 188.979†	17.7	33.273 ug/L	ug/L	2.4987	33.273 ppb	2.4987	7.51%
B 249.677†	1068.9	15.547 ug/L	ug/L	0.6265	15.547 ppb	0.6265	4.03%
Ba 233.527†	93607.3	766.51 ug/L	ug/L	4.417	766.51 ppb	4.417	0.58%
Be 313.107†	23098.9	11.501 ug/L	ug/L	0.0561	11.501 ppb	0.0561	0.49%
Ca 317.933Radial†	47527.4	78774 ug/L	ug/L	1213.9	78774 ppb	1213.9	1.54%
Cd 226.502†	641.0	1.6501 ug/L	ug/L	0.11337	1.6501 ppb	0.11337	6.87%
Co 228.616†	683.5	11.738 ug/L	ug/L	0.3359	11.738 ppb	0.3359	2.86%
Cr 267.716†	4068.5	48.145 ug/L	ug/L	0.2630	48.145 ppb	0.2630	0.55%
Cu 324.752†	771834.1	2343.8 ug/L	ug/L	6.06	2343.8 ppb	6.06	0.26%
Fe 238.204 Radial†	6659.3	60590 ug/L	ug/L	972.8	60590 ppb	972.8	1.61%
K 766.490 Radial†	30213.8	5306.1 ug/L	ug/L	95.80	5306.1 ppb	95.80	1.81%

Mg 279.077 IEC†	277.6	9773.7 ug/L	112.87	9773.7 ppb	112.87	1.15%
Mn 257.610†	1295651.2	1496.3 ug/L	7.99	1496.3 ppb	7.99	0.53%
Mo 202.031†	55.2	9.7737 ug/L	0.39637	9.7737 ppb	0.39637	4.06%
Na 589.592 Radial†	2148.3	649.75 ug/L	4.802	649.75 ppb	4.802	0.74%
Ni 231.604†	1790.3	46.372 ug/L	0.1293	46.372 ppb	0.1293	0.28%
P 214.914†	1651.5	525.23 ug/L	15.668	525.23 ppb	15.668	2.98%
Pb 220.353†	5652.1	709.35 ug/L	4.829	709.35 ppb	4.829	0.68%
S 181.975 Axial†	245.5	349.31 ug/L	2.785	349.31 ppb	2.785	0.80%
Sb 206.836†	76.0	20.375 ug/L	1.8807	20.375 ppb	1.8807	9.23%
Se 196.026†	-294.5	-1.6206 ug/L	6.45223	-1.6206 ppb	6.45223	398.13%
Si 251.611†	682062.7	22814 ug/L	95.4	22814 ppb	95.4	0.42%
Sn 189.927†	-124.8	-10.175 ug/L	1.1143	-10.175 ppb	1.1143	10.95%
Sr 421.552†	32865.2	229.90 ug/L	3.461	229.90 ppb	3.461	1.51%
Ti 334.940†	786811.0	1285.3 ug/L	4.26	1285.3 ppb	4.26	0.33%
Tl 190.801†	-70.4	-5.0845 ug/L	0.58648	-5.0845 ppb	0.58648	11.53%
U 409.014†	45830.9	1321.9 ug/L	6.26	1321.9 ppb	6.26	0.47%
V 292.402†	12560.9	83.817 ug/L	0.8368	83.817 ppb	0.8368	1.00%
Zn 213.857†	31571.4	298.94 ug/L	1.429	298.94 ppb	1.429	0.48%
SiO2†	683080.9	48725 ug/L	820.5	48725 ppb	820.5	1.68%

Sequence No.: 42

Sample ID: 245394010|945421|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 69

Date Collected: 2/11/2010 21:08:53

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245394010|945421|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4842.7	4842.7	101 %		21:10:46
1	Y RADIAL	6248.2	6248.2	124.9 %		21:10:46
1	Al 396.153Radial†	12543.7	12602.7	11697 ug/L	11697 ppb	21:10:46
1	Ca 317.933Radial†	3377.3	3335.6	5528.6 ug/L	5528.6 ppb	21:11:06
1	Fe 238.204 Radial†	6259.7	6202.0	56430 ug/L	56430 ppb	21:10:46
1	K 766.490 Radial†	14110.6	11180.8	1970.6 ug/L	1970.6 ppb	21:10:46
1	Mg 279.077 IEC†	67.9	67.0	2315.4 ug/L	2315.4 ppb	21:11:06
1	Na 589.592 Radial†	1646.3	2712.7	820.44 ug/L	820.44 ppb	21:10:46
1	Sr 421.552†	5339.4	5297.9	37.113 ug/L	37.113 ppb	21:10:46
1	Sc 361.383	865668.5	865668.5	100.41 %		21:12:04
1	Y 371.029	859131.1	859131.1	120.22 %		21:12:04
1	Ag 328.068†	-3054.6	-3270.7	3.8457 ug/L	3.8457 ppb	21:12:09
1	As 188.979†	-6.6	27.3	34.933 ug/L	34.933 ppb	21:12:29
1	B 249.677†	-32.8	506.4	2.8327 ug/L	2.8327 ppb	21:12:09
1	Ba 233.527†	23120.1	23036.2	189.93 ug/L	189.93 ppb	21:12:09
1	Be 313.107†	5618.5	9934.1	6.1493 ug/L	6.1493 ppb	21:12:09
1	Cd 226.502†	241.6	452.6	-0.4641 ug/L	-0.4641 ppb	21:12:29
1	Co 228.616†	739.1	809.8	14.696 ug/L	14.696 ppb	21:12:29
1	Cr 267.716†	2790.9	2712.6	32.793 ug/L	32.793 ppb	21:12:09
1	Cu 324.752†	27024.6	21092.3	67.060 ug/L	67.060 ppb	21:12:09
1	Mn 257.610†	1827726.2	1819728.2	2099.1 ug/L	2099.1 ppb	21:12:04
1	Mo 202.031†	51.7	35.9	7.1376 ug/L	7.1376 ppb	21:12:29
1	Ni 231.604†	1080.1	967.6	25.057 ug/L	25.057 ppb	21:12:29
1	P 214.914†	1314.6	1081.1	617.52 ug/L	617.52 ppb	21:12:29
1	Pb 220.353†	1103.2	1160.3	141.93 ug/L	141.93 ppb	21:12:29
1	S 181.975 Axial†	84.4	44.7	63.014 ug/L	63.014 ppb	21:12:29
1	Sb 206.836†	40.5	-1.8	-4.9323 ug/L	-4.9323 ppb	21:12:29
1	Se 196.026†	-279.1	-255.8	9.8438 ug/L	9.8438 ppb	21:12:29
1	Si 251.611†	337576.2	335620.2	11226 ug/L	11226 ppb	21:12:04
1	Sn 189.927†	17.6	8.9	3.4381 ug/L	3.4381 ppb	21:12:29
1	Ti 334.940†	666577.5	665128.6	1079.4 ug/L	1079.4 ppb	21:12:04
1	Tl 190.801†	-113.7	-79.0	-6.5074 ug/L	-6.5074 ppb	21:12:29
1	U 409.014†	-8626.1	-5610.4	-169.19 ug/L	-169.19 ppb	21:12:04
1	V 292.402†	3547.0	5087.0	27.342 ug/L	27.342 ppb	21:12:09
1	Zn 213.857†	20285.9	19488.9	183.58 ug/L	183.58 ppb	21:12:09
1	SiO2†	339866.6	337880.2	24102 ug/L	24102 ppb	21:13:36
2	Sc Radial	4870.6	4870.6	101 %		21:11:11
2	Y RADIAL	6353.6	6353.6	127.1 %		21:11:11
2	Al 396.153Radial†	12619.1	12605.6	11699 ug/L	11699 ppb	21:11:11
2	Ca 317.933Radial†	3400.9	3339.7	5535.4 ug/L	5535.4 ppb	21:11:31
2	Fe 238.204 Radial†	6297.6	6203.7	56445 ug/L	56445 ppb	21:11:11
2	K 766.490 Radial†	14057.8	11048.2	1947.2 ug/L	1947.2 ppb	21:11:11
2	Mg 279.077 IEC†	70.1	68.8	2377.9 ug/L	2377.9 ppb	21:11:31
2	Na 589.592 Radial†	1723.6	2779.5	840.66 ug/L	840.66 ppb	21:11:11
2	Sr 421.552†	5337.1	5265.1	36.884 ug/L	36.884 ppb	21:11:11
2	Sc 361.383	882579.7	882579.7	102.38 %		21:12:35
2	Y 371.029	874844.8	874844.8	122.42 %		21:12:35
2	Ag 328.068†	-3094.0	-3251.0	3.9369 ug/L	3.9369 ppb	21:12:40
2	As 188.979†	-22.8	11.6	27.793 ug/L	27.793 ppb	21:13:00
2	B 249.677†	-222.6	321.6	-1.5667 ug/L	-1.5667 ppb	21:12:40
2	Ba 233.527†	23079.0	22554.9	186.00 ug/L	186.00 ppb	21:12:40
2	Be 313.107†	5457.1	9669.1	6.0409 ug/L	6.0409 ppb	21:12:40
2	Cd 226.502†	242.1	448.4	-0.5151 ug/L	-0.5151 ppb	21:13:00
2	Co 228.616†	755.2	811.4	14.737 ug/L	14.737 ppb	21:13:00
2	Cr 267.716†	2768.5	2637.5	31.916 ug/L	31.916 ppb	21:12:40
2	Cu 324.752†	26817.6	20374.4	64.881 ug/L	64.881 ppb	21:12:40
2	Mn 257.610†	1851565.7	1808137.6	2085.8 ug/L	2085.8 ppb	21:12:35
2	Mo 202.031†	39.3	22.9	6.1615 ug/L	6.1615 ppb	21:13:00
2	Ni 231.604†	1060.7	928.0	24.032 ug/L	24.032 ppb	21:13:00

2	P 214.914†	1305.3	1047.0	596.74 ug/L	596.74 ppb	21:13:00
2	Pb 220.353†	1090.8	1127.2	137.79 ug/L	137.79 ppb	21:13:00
2	S 181.975 Axial†	82.1	40.9	57.399 ug/L	57.399 ppb	21:13:00
2	Sb 206.836†	46.7	3.5	-3.0552 ug/L	-3.0552 ppb	21:13:00
2	Se 196.026†	-265.0	-236.8	22.727 ug/L	22.727 ppb	21:13:00
2	Si 251.611†	342413.7	333903.7	11169 ug/L	11169 ppb	21:12:35
2	Sn 189.927†	34.4	24.9	6.4155 ug/L	6.4155 ppb	21:13:00
2	Ti 334.940†	676903.0	662494.7	1075.1 ug/L	1075.1 ppb	21:12:35
2	Tl 190.801†	-108.4	-71.7	-4.2657 ug/L	-4.2657 ppb	21:13:00
2	U 409.014†	-8656.3	-5475.3	-165.27 ug/L	-165.27 ppb	21:12:35
2	V 292.402†	3479.0	4952.9	26.366 ug/L	26.366 ppb	21:12:40
2	Zn 213.857†	20050.5	18871.9	177.50 ug/L	177.50 ppb	21:12:40
2	SiO2†	337900.7	329474.6	23502 ug/L	23502 ppb	21:13:42
3	Sc Radial	4984.5	4984.5	104 %		21:11:36
3	Y RADIAL	6409.8	6409.8	128.2 %		21:11:36
3	Al 396.153Radial†	12634.5	12336.0	11449 ug/L	11449 ppb	21:11:36
3	Ca 317.933Radial†	3391.8	3254.3	5393.7 ug/L	5393.7 ppb	21:11:56
3	Fe 238.204 Radial†	6291.7	6056.1	55103 ug/L	55103 ppb	21:11:36
3	K 766.490 Radial†	14126.8	10797.9	1903.1 ug/L	1903.1 ppb	21:11:36
3	Mg 279.077 IEC†	68.3	65.4	2261.0 ug/L	2261.0 ppb	21:11:56
3	Na 589.592 Radial†	1706.1	2723.8	823.81 ug/L	823.81 ppb	21:11:36
3	Sr 421.552†	5348.3	5155.7	36.117 ug/L	36.117 ppb	21:11:36
3	Sc 361.383	877923.9	877923.9	101.84 %		21:13:06
3	Y 371.029	872560.7	872560.7	122.10 %		21:13:06
3	Ag 328.068†	-2965.2	-3140.5	4.0098 ug/L	4.0098 ppb	21:13:11
3	As 188.979†	-21.9	12.4	27.826 ug/L	27.826 ppb	21:13:31
3	B 249.677†	-106.7	434.3	1.3337 ug/L	1.3337 ppb	21:13:11
3	Ba 233.527†	23218.6	22811.5	188.05 ug/L	188.05 ppb	21:13:11
3	Be 313.107†	5632.9	9870.0	6.1134 ug/L	6.1134 ppb	21:13:11
3	Cd 226.502†	221.4	429.3	-0.6035 ug/L	-0.6035 ppb	21:13:31
3	Co 228.616†	742.8	803.1	14.580 ug/L	14.580 ppb	21:13:31
3	Cr 267.716†	2747.8	2631.5	31.822 ug/L	31.822 ppb	21:13:11
3	Cu 324.752†	27028.1	20720.1	65.859 ug/L	65.859 ppb	21:13:11
3	Mn 257.610†	1836948.8	1803375.5	2080.2 ug/L	2080.2 ppb	21:13:06
3	Mo 202.031†	50.1	33.6	6.8605 ug/L	6.8605 ppb	21:13:31
3	Ni 231.604†	1079.6	952.1	24.655 ug/L	24.655 ppb	21:13:31
3	P 214.914†	1318.8	1066.9	609.98 ug/L	609.98 ppb	21:13:31
3	Pb 220.353†	1083.3	1125.5	137.66 ug/L	137.66 ppb	21:13:31
3	S 181.975 Axial†	84.4	43.5	61.330 ug/L	61.330 ppb	21:13:31
3	Sb 206.836†	49.5	6.5	-1.9590 ug/L	-1.9590 ppb	21:13:31
3	Se 196.026†	-275.5	-248.4	10.563 ug/L	10.563 ppb	21:13:31
3	Si 251.611†	340555.4	333852.7	11167 ug/L	11167 ppb	21:13:06
3	Sn 189.927†	38.2	28.8	7.0878 ug/L	7.0878 ppb	21:13:31
3	Ti 334.940†	672671.7	661846.2	1074.1 ug/L	1074.1 ppb	21:13:06
3	Tl 190.801†	-107.2	-71.0	-4.0882 ug/L	-4.0882 ppb	21:13:31
3	U 409.014†	-8647.3	-5511.3	-166.16 ug/L	-166.16 ppb	21:13:06
3	V 292.402†	3569.9	5060.1	27.348 ug/L	27.348 ppb	21:13:11
3	Zn 213.857†	20274.8	19196.0	180.89 ug/L	180.89 ppb	21:13:11
3	SiO2†	338525.7	331838.8	23671 ug/L	23671 ppb	21:13:47

Mean Data: 245394010|945421|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	875390.7	101.54 %		1.013				1.00%
Sc Radial	4899.2	102 %		1.6				1.53%
Y 371.029	868845.5	121.58 %		1.188				0.98%
Y RADIAL	6337.2	126.7 %		1.64				1.29%
Ag 328.068†	-3220.7	3.9308 ug/L		0.08222	3.9308 ppb		0.08222	2.09%
Al 396.153Radial†	12514.7	11615 ug/L		143.7	11615 ppb		143.7	1.24%
As 188.979†	17.1	30.184 ug/L		4.1133	30.184 ppb		4.1133	13.63%
B 249.677†	420.8	0.8666 ug/L		2.23659	0.8666 ppb		2.23659	258.09%
Ba 233.527†	22800.9	187.99 ug/L		1.967	187.99 ppb		1.967	1.05%
Be 313.107†	9824.4	6.1012 ug/L		0.05521	6.1012 ppb		0.05521	0.90%
Ca 317.933Radial†	3309.9	5485.9 ug/L		79.89	5485.9 ppb		79.89	1.46%
Cd 226.502†	443.4	-0.5276 ug/L		0.07051	-0.5276 ppb		0.07051	13.37%
Co 228.616†	808.1	14.671 ug/L		0.0811	14.671 ppb		0.0811	0.55%
Cr 267.716†	2660.5	32.177 ug/L		0.5357	32.177 ppb		0.5357	1.66%
Cu 324.752†	20728.9	65.933 ug/L		1.0914	65.933 ppb		1.0914	1.66%
Fe 238.204 Radial†	6153.9	55993 ug/L		770.9	55993 ppb		770.9	1.38%
K 766.490 Radial†	11009.0	1940.3 ug/L		34.29	1940.3 ppb		34.29	1.77%

Mg 279.077 IEC†	67.1	2318.1 ug/L	58.50	2318.1 ppb	58.50	2.52%
Mn 257.610†	1810413.8	2088.3 ug/L	9.73	2088.3 ppb	9.73	0.47%
Mo 202.031†	30.8	6.7198 ug/L	0.50303	6.7198 ppb	0.50303	7.49%
Na 589.592 Radial†	2738.7	828.30 ug/L	10.835	828.30 ppb	10.835	1.31%
Ni 231.604†	949.3	24.581 ug/L	0.5167	24.581 ppb	0.5167	2.10%
P 214.914†	1065.0	608.08 ug/L	10.518	608.08 ppb	10.518	1.73%
Pb 220.353†	1137.7	139.12 ug/L	2.429	139.12 ppb	2.429	1.75%
S 181.975 Axial†	43.0	60.581 ug/L	2.8814	60.581 ppb	2.8814	4.76%
Sb 206.836†	2.7	-3.3155 ug/L	1.50363	-3.3155 ppb	1.50363	45.35%
Se 196.026†	-247.0	14.378 ug/L	7.2396	14.378 ppb	7.2396	50.35%
Si 251.611†	334458.9	11187 ug/L	33.6	11187 ppb	33.6	0.30%
Sn 189.927†	20.9	5.6471 ug/L	1.94240	5.6471 ppb	1.94240	34.40%
Sr 421.552†	5239.6	36.705 ug/L	0.5216	36.705 ppb	0.5216	1.42%
Ti 334.940†	663156.5	1076.2 ug/L	2.83	1076.2 ppb	2.83	0.26%
Tl 190.801†	-73.9	-4.9538 ug/L	1.34838	-4.9538 ppb	1.34838	27.22%
U 409.014†	-5532.4	-166.87 ug/L	2.053	-166.87 ppb	2.053	1.23%
V 292.402†	5033.4	27.019 ug/L	0.5655	27.019 ppb	0.5655	2.09%
Zn 213.857†	19185.6	180.65 ug/L	3.047	180.65 ppb	3.047	1.69%
SiO2†	333064.5	23758 ug/L	309.2	23758 ppb	309.2	1.30%

Sequence No.: 43

Sample ID: 245394011|945421|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 70

Date Collected: 2/11/2010 21:15:58

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245394011|945421|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4988.2	4988.2	104 %		21:17:51
1	Y RADIAL	5981.4	5981.4	119.6 %		21:17:51
1	Al 396.153Radial†	30568.5	29608.9	27480 ug/L	27480 ppb	21:17:51
1	Ca 317.933Radial†	35882.7	34561.7	57284 ug/L	57284 ppb	21:17:51
1	Fe 238.204 Radial†	8493.4	8173.2	74365 ug/L	74365 ppb	21:17:51
1	K 766.490 Radial†	29711.0	25805.4	4535.1 ug/L	4535.1 ppb	21:17:51
1	Mg 279.077 IEC†	198.5	190.9	6687.1 ug/L	6687.1 ppb	21:18:11
1	Na 589.592 Radial†	1800.4	2813.5	850.94 ug/L	850.94 ppb	21:17:51
1	Sr 421.552†	27775.5	26763.8	187.27 ug/L	187.27 ppb	21:17:51
1	Sc 361.383	846313.8	846313.8	98.170 %		21:19:09
1	Y 371.029	780505.1	780505.1	109.22 %		21:19:09
1	Ag 328.068†	-3735.6	-4034.0	5.6663 ug/L	5.6663 ppb	21:19:09
1	As 188.979†	1.7	35.6	50.215 ug/L	50.215 ppb	21:19:29
1	B 249.677†	224.7	767.9	6.0875 ug/L	6.0875 ppb	21:19:09
1	Ba 233.527†	64809.4	66029.4	541.77 ug/L	541.77 ppb	21:19:09
1	Be 313.107†	29851.2	34746.5	17.305 ug/L	17.305 ppb	21:19:09
1	Cd 226.502†	526.4	748.1	1.2757 ug/L	1.2757 ppb	21:19:29
1	Co 228.616†	1564.0	1666.8	31.541 ug/L	31.541 ppb	21:19:29
1	Cr 267.716†	5269.1	5300.6	63.257 ug/L	63.257 ppb	21:19:29
1	Cu 324.752†	519688.0	523557.5	1592.0 ug/L	1592.0 ppb	21:19:09
1	Mn 257.610†	1252464.4	1275366.3	1474.4 ug/L	1474.4 ppb	21:19:09
1	Mo 202.031†	14.2	-1.0	6.3779 ug/L	6.3779 ppb	21:19:29
1	Ni 231.604†	1862.8	1789.5	46.339 ug/L	46.339 ppb	21:19:29
1	P 214.914†	3381.0	3215.9	1632.5 ug/L	1632.5 ppb	21:19:29
1	Pb 220.353†	41250.7	42081.5	5248.5 ug/L	5248.5 ppb	21:19:09
1	S 181.975 Axial†	514.1	484.3	701.13 ug/L	701.13 ppb	21:19:29
1	Sb 206.836†	196.6	158.1	47.216 ug/L	47.216 ppb	21:19:29
1	Se 196.026†	-373.7	-358.5	-1.0448 ug/L	-1.0448 ppb	21:19:29
1	Si 251.611†	543535.9	553108.5	18501 ug/L	18501 ppb	21:19:09
1	Sn 189.927†	-113.0	-123.7	-13.008 ug/L	-13.008 ppb	21:19:29
1	Ti 334.940†	1162047.4	1185018.5	1929.1 ug/L	1929.1 ppb	21:19:09
1	Tl 190.801†	-116.4	-84.3	-4.4464 ug/L	-4.4464 ppb	21:19:29
1	U 409.014†	2846.5	5879.7	161.87 ug/L	161.87 ppb	21:19:09
1	V 292.402†	14764.5	16594.5	108.08 ug/L	108.08 ppb	21:19:09
1	Zn 213.857†	30462.0	30316.8	285.52 ug/L	285.52 ppb	21:19:09
1	SiO2†	554628.7	564387.3	40259 ug/L	40259 ppb	21:20:27
2	Sc Radial	4838.3	4838.3	101 %		21:18:16
2	Y RADIAL	5856.6	5856.6	117.1 %		21:18:16
2	Al 396.153Radial†	31032.6	30983.0	28756 ug/L	28756 ppb	21:18:16
2	Ca 317.933Radial†	36486.9	36233.6	60055 ug/L	60055 ppb	21:18:16
2	Fe 238.204 Radial†	8596.7	8529.5	77607 ug/L	77607 ppb	21:18:16
2	K 766.490 Radial†	30022.8	27002.4	4745.4 ug/L	4745.4 ppb	21:18:16
2	Mg 279.077 IEC†	199.2	197.5	6918.7 ug/L	6918.7 ppb	21:18:36
2	Na 589.592 Radial†	1838.6	2905.2	878.68 ug/L	878.68 ppb	21:18:16
2	Sr 421.552†	28226.2	28041.0	196.21 ug/L	196.21 ppb	21:18:16
2	Sc 361.383	856209.9	856209.9	99.317 %		21:19:35
2	Y 371.029	791004.4	791004.4	110.69 %		21:19:35
2	Ag 328.068†	-3748.7	-4003.3	6.8645 ug/L	6.8645 ppb	21:19:35
2	As 188.979†	-1.1	32.7	49.687 ug/L	49.687 ppb	21:19:55
2	B 249.677†	211.2	751.7	5.1786 ug/L	5.1786 ppb	21:19:35
2	Ba 233.527†	65325.3	65785.9	539.88 ug/L	539.88 ppb	21:19:35
2	Be 313.107†	30237.2	34783.7	17.320 ug/L	17.320 ppb	21:19:35
2	Cd 226.502†	526.5	742.1	0.8691 ug/L	0.8691 ppb	21:19:55
2	Co 228.616†	1528.6	1612.8	30.311 ug/L	30.311 ppb	21:19:55
2	Cr 267.716†	5265.9	5235.3	62.559 ug/L	62.559 ppb	21:19:55
2	Cu 324.752†	527470.2	525274.6	1597.4 ug/L	1597.4 ppb	21:19:35
2	Mn 257.610†	1264367.0	1272604.7	1471.5 ug/L	1471.5 ppb	21:19:35
2	Mo 202.031†	9.9	-5.6	6.3229 ug/L	6.3229 ppb	21:19:55
2	Ni 231.604†	1865.9	1770.7	45.853 ug/L	45.853 ppb	21:19:55

2	P 214.914†	3352.7	3147.7	1586.7 ug/L	1586.7 ppb	21:19:55
2	Pb 220.353†	41592.9	41940.4	5230.9 ug/L	5230.9 ppb	21:19:35
2	S 181.975 Axial†	487.5	451.5	652.96 ug/L	652.96 ppb	21:19:55
2	Sb 206.836†	192.7	151.9	44.964 ug/L	44.964 ppb	21:19:55
2	Se 196.026†	-370.2	-350.6	14.764 ug/L	14.764 ppb	21:19:55
2	Si 251.611†	550446.2	553667.0	18519 ug/L	18519 ppb	21:19:35
2	Sn 189.927†	-116.2	-125.6	-12.884 ug/L	-12.884 ppb	21:19:55
2	Ti 334.940†	1175718.4	1185101.9	1929.6 ug/L	1929.6 ppb	21:19:35
2	Tl 190.801†	-108.5	-75.1	-1.4927 ug/L	-1.4927 ppb	21:19:55
2	U 409.014†	2952.6	5952.9	163.63 ug/L	163.63 ppb	21:19:35
2	V 292.402†	14887.0	16544.0	107.24 ug/L	107.24 ppb	21:19:35
2	Zn 213.857†	30745.9	30244.0	284.31 ug/L	284.31 ppb	21:19:35
2	SiO2†	550693.6	553895.3	39510 ug/L	39510 ppb	21:20:32
3	Sc Radial	4920.3	4920.3	102 %		21:18:41
3	Y RADIAL	5901.8	5901.8	118.0 %		21:18:41
3	Al 396.153Radial†	30763.7	30206.3	28035 ug/L	28035 ppb	21:18:41
3	Ca 317.933Radial†	36067.2	35219.3	58374 ug/L	58374 ppb	21:18:41
3	Fe 238.204 Radial†	8560.4	8351.7	75990 ug/L	75990 ppb	21:18:41
3	K 766.490 Radial†	29823.4	26310.4	4623.9 ug/L	4623.9 ppb	21:18:41
3	Mg 279.077 IEC†	193.9	189.0	6618.7 ug/L	6618.7 ppb	21:19:01
3	Na 589.592 Radial†	1738.6	2777.0	839.90 ug/L	839.90 ppb	21:18:41
3	Sr 421.552†	27989.6	27342.4	191.32 ug/L	191.32 ppb	21:18:41
3	Sc 361.383	856198.4	856198.4	99.316 %		21:20:01
3	Y 371.029	790633.3	790633.3	110.64 %		21:20:01
3	Ag 328.068†	-3784.0	-4038.9	6.1753 ug/L	6.1753 ppb	21:20:01
3	As 188.979†	6.1	40.0	52.608 ug/L	52.608 ppb	21:20:21
3	B 249.677†	170.6	710.8	4.4690 ug/L	4.4690 ppb	21:20:01
3	Ba 233.527†	65529.6	65992.5	541.52 ug/L	541.52 ppb	21:20:01
3	Be 313.107†	30371.8	34919.7	17.374 ug/L	17.374 ppb	21:20:01
3	Cd 226.502†	504.5	719.9	0.7720 ug/L	0.7720 ppb	21:20:21
3	Co 228.616†	1543.6	1627.9	30.663 ug/L	30.663 ppb	21:20:21
3	Cr 267.716†	5232.7	5201.9	62.140 ug/L	62.140 ppb	21:20:21
3	Cu 324.752†	527006.3	524814.7	1595.9 ug/L	1595.9 ppb	21:20:01
3	Mn 257.610†	1265924.3	1274189.8	1473.2 ug/L	1473.2 ppb	21:20:01
3	Mo 202.031†	7.9	-7.6	6.0248 ug/L	6.0248 ppb	21:20:21
3	Ni 231.604†	1850.2	1754.9	45.443 ug/L	45.443 ppb	21:20:21
3	P 214.914†	3338.0	3132.9	1578.9 ug/L	1578.9 ppb	21:20:21
3	Pb 220.353†	41656.8	42005.4	5239.0 ug/L	5239.0 ppb	21:20:01
3	S 181.975 Axial†	496.8	460.9	666.83 ug/L	666.83 ppb	21:20:21
3	Sb 206.836†	179.5	138.6	40.354 ug/L	40.354 ppb	21:20:21
3	Se 196.026†	-355.7	-336.1	19.349 ug/L	19.349 ppb	21:20:21
3	Si 251.611†	550248.7	553475.6	18513 ug/L	18513 ppb	21:20:01
3	Sn 189.927†	-120.2	-129.7	-13.914 ug/L	-13.914 ppb	21:20:21
3	Ti 334.940†	1176651.0	1186056.8	1930.9 ug/L	1930.9 ppb	21:20:01
3	Tl 190.801†	-116.1	-82.7	-3.9025 ug/L	-3.9025 ppb	21:20:21
3	U 409.014†	2924.1	5924.3	162.99 ug/L	162.99 ppb	21:20:01
3	V 292.402†	14918.6	16575.9	107.70 ug/L	107.70 ppb	21:20:01
3	Zn 213.857†	30746.4	30244.9	284.56 ug/L	284.56 ppb	21:20:01
3	SiO2†	554054.8	557287.0	39752 ug/L	39752 ppb	21:20:37

Mean Data: 245394011|945421|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	852907.4	98.934 %	%	0.6624			0.67%
Sc Radial	4915.6	102 %	%	1.6			1.53%
Y 371.029	787380.9	110.18 %	%	0.834			0.76%
Y RADIAL	5913.3	118.2 %	%	1.26			1.07%
Ag 328.068†	-4025.4	6.2354 ug/L	ug/L	0.60140	6.2354 ppb	0.60140	9.64%
Al 396.153Radial†	30266.1	28090 ug/L	ug/L	639.4	28090 ppb	639.4	2.28%
As 188.979†	36.1	50.837 ug/L	ug/L	1.5569	50.837 ppb	1.5569	3.06%
B 249.677†	743.5	5.2450 ug/L	ug/L	0.81132	5.2450 ppb	0.81132	15.47%
Ba 233.527†	65935.9	541.06 ug/L	ug/L	1.027	541.06 ppb	1.027	0.19%
Be 313.107†	34816.6	17.333 ug/L	ug/L	0.0361	17.333 ppb	0.0361	0.21%
Ca 317.933Radial†	35338.2	58571 ug/L	ug/L	1396.0	58571 ppb	1396.0	2.38%
Cd 226.502†	736.7	0.9723 ug/L	ug/L	0.26722	0.9723 ppb	0.26722	27.48%
Co 228.616†	1635.8	30.838 ug/L	ug/L	0.6331	30.838 ppb	0.6331	2.05%
Cr 267.716†	5246.0	62.652 ug/L	ug/L	0.5646	62.652 ppb	0.5646	0.90%
Cu 324.752†	524548.9	1595.1 ug/L	ug/L	2.78	1595.1 ppb	2.78	0.17%
Fe 238.204 Radial†	8351.4	75987 ug/L	ug/L	1620.9	75987 ppb	1620.9	2.13%
K 766.490 Radial†	26372.7	4634.8 ug/L	ug/L	105.61	4634.8 ppb	105.61	2.28%

Mg 279.077 IEC†	192.5	6741.5 ug/L	157.21	6741.5 ppb	157.21	2.33%
Mn 257.610†	1274053.6	1473.0 ug/L	1.44	1473.0 ppb	1.44	0.10%
Mo 202.031†	-4.7	6.2419 ug/L	0.18996	6.2419 ppb	0.18996	3.04%
Na 589.592 Radial†	2831.9	856.51 ug/L	19.979	856.51 ppb	19.979	2.33%
Ni 231.604†	1771.7	45.878 ug/L	0.4488	45.878 ppb	0.4488	0.98%
P 214.914†	3165.5	1599.4 ug/L	28.96	1599.4 ppb	28.96	1.81%
Pb 220.353†	42009.1	5239.5 ug/L	8.81	5239.5 ppb	8.81	0.17%
S 181.975 Axial†	465.6	673.64 ug/L	24.799	673.64 ppb	24.799	3.68%
Sb 206.836†	149.6	44.178 ug/L	3.4978	44.178 ppb	3.4978	7.92%
Se 196.026†	-348.4	11.023 ug/L	10.6992	11.023 ppb	10.6992	97.07%
Si 251.611†	553417.1	18511 ug/L	9.5	18511 ppb	9.5	0.05%
Sn 189.927†	-126.4	-13.269 ug/L	0.5622	-13.269 ppb	0.5622	4.24%
Sr 421.552†	27382.4	191.60 ug/L	4.475	191.60 ppb	4.475	2.34%
Ti 334.940†	1185392.4	1929.9 ug/L	0.95	1929.9 ppb	0.95	0.05%
Tl 190.801†	-80.7	-3.2805 ug/L	1.57202	-3.2805 ppb	1.57202	47.92%
U 409.014†	5919.0	162.83 ug/L	0.889	162.83 ppb	0.889	0.55%
V 292.402†	16571.5	107.67 ug/L	0.418	107.67 ppb	0.418	0.39%
Zn 213.857†	30268.5	284.80 ug/L	0.636	284.80 ppb	0.636	0.22%
SiO2†	558523.2	39841 ug/L	381.9	39841 ppb	381.9	0.96%

Sequence No.: 44

Sample ID: 245394012|945421|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 71

Date Collected: 2/11/2010 21:22:48

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245394012|945421|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4777.6	4777.6	99.4 %		21:24:41
1	Y RADIAL	5458.1	5458.1	109.1 %		21:24:41
1	Al 396.153Radial†	46194.2	46629.3	43277 ug/L	43277 ppb	21:24:41
1	Ca 317.933Radial†	13612.5	13679.3	22673 ug/L	22673 ppb	21:24:41
1	Fe 238.204 Radial†	7486.8	7521.3	68434 ug/L	68434 ppb	21:24:41
1	K 766.490 Radial†	38268.5	35677.7	6289.5 ug/L	6289.5 ppb	21:24:41
1	Mg 279.077 IEC†	275.0	276.3	9719.8 ug/L	9719.8 ppb	21:25:01
1	Na 589.592 Radial†	261.0	1341.1	405.60 ug/L	405.60 ppb	21:24:41
1	Sr 421.552†	18622.1	18734.3	131.22 ug/L	131.22 ppb	21:24:41
1	Sc 361.383	862290.7	862290.7	100.02 %		21:25:59
1	Y 371.029	759642.0	759642.0	106.30 %		21:25:59
1	Ag 328.068†	-3509.0	-3737.0	4.9322 ug/L	4.9322 ppb	21:25:59
1	As 188.979†	-6.6	27.3	40.278 ug/L	40.278 ppb	21:26:19
1	B 249.677†	343.9	882.9	9.8276 ug/L	9.8276 ppb	21:25:59
1	Ba 233.527†	100335.1	100323.8	821.66 ug/L	821.66 ppb	21:25:59
1	Be 313.107†	61823.1	66147.7	27.748 ug/L	27.748 ppb	21:25:59
1	Cd 226.502†	422.9	634.7	0.6852 ug/L	0.6852 ppb	21:26:19
1	Co 228.616†	943.1	1016.6	18.715 ug/L	18.715 ppb	21:26:19
1	Cr 267.716†	4607.0	4539.2	53.987 ug/L	53.987 ppb	21:26:19
1	Cu 324.752†	439085.6	433164.9	1317.1 ug/L	1317.1 ppb	21:25:59
1	Mn 257.610†	1169027.1	1168309.1	1350.5 ug/L	1350.5 ppb	21:25:59
1	Mo 202.031†	-3.7	-19.3	4.1385 ug/L	4.1385 ppb	21:26:19
1	Ni 231.604†	2058.6	1950.2	50.509 ug/L	50.509 ppb	21:26:19
1	P 214.914†	1516.9	1288.5	496.43 ug/L	496.43 ppb	21:26:19
1	Pb 220.353†	11593.9	11653.0	1456.1 ug/L	1456.1 ppb	21:25:59
1	S 181.975 Axial†	215.1	175.7	248.16 ug/L	248.16 ppb	21:26:19
1	Sb 206.836†	86.7	44.5	9.2998 ug/L	9.2998 ppb	21:26:19
1	Se 196.026†	-337.4	-315.2	9.5492 ug/L	9.5492 ppb	21:26:19
1	Si 251.611†	700048.7	699327.1	23392 ug/L	23392 ppb	21:25:59
1	Sn 189.927†	-33.5	-42.2	-3.2300 ug/L	-3.2300 ppb	21:26:19
1	Ti 334.940†	843530.1	844641.3	1371.8 ug/L	1371.8 ppb	21:25:59
1	Tl 190.801†	-98.4	-64.2	-3.0924 ug/L	-3.0924 ppb	21:26:19
1	U 409.014†	28144.1	31117.7	894.39 ug/L	894.39 ppb	21:25:59
1	V 292.402†	14888.2	16439.5	109.84 ug/L	109.84 ppb	21:25:59
1	Zn 213.857†	28460.2	27740.5	261.33 ug/L	261.33 ppb	21:25:59
1	SiO2†	710194.5	709449.7	50606 ug/L	50606 ppb	21:27:17
2	Sc Radial	5022.7	5022.7	104 %		21:25:06
2	Y RADIAL	5762.3	5762.3	115.2 %		21:25:06
2	Al 396.153Radial†	48728.6	46786.7	43423 ug/L	43423 ppb	21:25:06
2	Ca 317.933Radial†	14327.7	13695.5	22699 ug/L	22699 ppb	21:25:06
2	Fe 238.204 Radial†	7855.4	7506.5	68299 ug/L	68299 ppb	21:25:06
2	K 766.490 Radial†	40132.8	35582.9	6272.8 ug/L	6272.8 ppb	21:25:06
2	Mg 279.077 IEC†	278.2	265.9	9350.8 ug/L	9350.8 ppb	21:25:26
2	Na 589.592 Radial†	319.0	1383.8	418.53 ug/L	418.53 ppb	21:25:06
2	Sr 421.552†	19684.6	18836.8	131.94 ug/L	131.94 ppb	21:25:06
2	Sc 361.383	865559.1	865559.1	100.40 %		21:26:25
2	Y 371.029	762968.2	762968.2	106.77 %		21:26:25
2	Ag 328.068†	-3478.9	-3693.7	5.0899 ug/L	5.0899 ppb	21:26:25
2	As 188.979†	-2.5	31.4	42.088 ug/L	42.088 ppb	21:26:45
2	B 249.677†	413.3	950.7	11.462 ug/L	11.462 ppb	21:26:25
2	Ba 233.527†	100418.1	100027.8	819.24 ug/L	819.24 ppb	21:26:25
2	Be 313.107†	62069.3	66159.6	27.750 ug/L	27.750 ppb	21:26:25
2	Cd 226.502†	436.5	646.6	0.8409 ug/L	0.8409 ppb	21:26:45
2	Co 228.616†	947.1	1017.0	18.726 ug/L	18.726 ppb	21:26:45
2	Cr 267.716†	4621.2	4535.9	53.946 ug/L	53.946 ppb	21:26:45
2	Cu 324.752†	440952.5	433366.7	1317.7 ug/L	1317.7 ppb	21:26:25
2	Mn 257.610†	1171172.0	1166032.1	1347.9 ug/L	1347.9 ppb	21:26:25
2	Mo 202.031†	-9.1	-24.6	3.7276 ug/L	3.7276 ppb	21:26:45
2	Ni 231.604†	2080.6	1964.3	50.875 ug/L	50.875 ppb	21:26:45

2	P 214.914†	1515.5	1281.3	492.02 ug/L	492.02 ppb	21:26:45
2	Pb 220.353†	11598.0	11613.3	1451.1 ug/L	1451.1 ppb	21:26:25
2	S 181.975 Axial†	215.0	174.8	246.82 ug/L	246.82 ppb	21:26:45
2	Sb 206.836†	92.6	50.1	11.258 ug/L	11.258 ppb	21:26:45
2	Se 196.026†	-339.9	-316.4	8.2881 ug/L	8.2881 ppb	21:26:45
2	Si 251.611†	701667.5	698296.6	23357 ug/L	23357 ppb	21:26:25
2	Sn 189.927†	-18.3	-26.9	-0.3944 ug/L	-0.3944 ppb	21:26:45
2	Ti 334.940†	846147.0	844063.2	1370.9 ug/L	1370.9 ppb	21:26:25
2	Tl 190.801†	-108.3	-73.7	-6.1571 ug/L	-6.1571 ppb	21:26:45
2	U 409.014†	28181.6	31048.9	892.41 ug/L	892.41 ppb	21:26:25
2	V 292.402†	14885.8	16380.9	109.42 ug/L	109.42 ppb	21:26:25
2	Zn 213.857†	28365.5	27538.8	259.36 ug/L	259.36 ppb	21:26:25
2	SiO2†	690116.2	686770.6	48989 ug/L	48989 ppb	21:27:22
3	Sc Radial	5037.2	5037.2	105 %		21:25:32
3	Y RADIAL	5734.9	5734.9	114.7 %		21:25:32
3	Al 396.153Radial†	48645.2	46572.6	43225 ug/L	43225 ppb	21:25:32
3	Ca 317.933Radial†	14269.8	13600.7	22542 ug/L	22542 ppb	21:25:32
3	Fe 238.204 Radial†	7820.2	7451.1	67795 ug/L	67795 ppb	21:25:32
3	K 766.490 Radial†	40145.1	35483.9	6255.4 ug/L	6255.4 ppb	21:25:32
3	Mg 279.077 IEC†	272.1	259.3	9118.2 ug/L	9118.2 ppb	21:25:52
3	Na 589.592 Radial†	303.1	1367.7	413.67 ug/L	413.67 ppb	21:25:32
3	Sr 421.552†	19547.7	18651.9	130.64 ug/L	130.64 ppb	21:25:32
3	Sc 361.383	864657.3	864657.3	100.30 %		21:26:51
3	Y 371.029	762960.9	762960.9	106.77 %		21:26:51
3	Ag 328.068†	-3478.2	-3696.6	4.9106 ug/L	4.9106 ppb	21:26:51
3	As 188.979†	-8.9	25.0	39.030 ug/L	39.030 ppb	21:27:11
3	B 249.677†	394.0	931.9	11.097 ug/L	11.097 ppb	21:26:51
3	Ba 233.527†	99746.0	99461.9	814.60 ug/L	814.60 ppb	21:26:51
3	Be 313.107†	61811.1	65966.6	27.664 ug/L	27.664 ppb	21:26:51
3	Cd 226.502†	405.1	615.8	0.5257 ug/L	0.5257 ppb	21:27:11
3	Co 228.616†	924.4	995.4	18.272 ug/L	18.272 ppb	21:27:11
3	Cr 267.716†	4620.2	4539.7	53.981 ug/L	53.981 ppb	21:27:11
3	Cu 324.752†	439040.5	431918.4	1313.3 ug/L	1313.3 ppb	21:26:51
3	Mn 257.610†	1164609.4	1160705.5	1341.7 ug/L	1341.7 ppb	21:26:51
3	Mo 202.031†	-4.7	-20.2	4.0164 ug/L	4.0164 ppb	21:27:11
3	Ni 231.604†	2062.4	1948.3	50.461 ug/L	50.461 ppb	21:27:11
3	P 214.914†	1492.2	1259.7	479.82 ug/L	479.82 ppb	21:27:11
3	Pb 220.353†	11499.4	11527.0	1440.4 ug/L	1440.4 ppb	21:26:51
3	S 181.975 Axial†	216.6	176.6	249.41 ug/L	249.41 ppb	21:27:11
3	Sb 206.836†	81.8	39.4	7.5745 ug/L	7.5745 ppb	21:27:11
3	Se 196.026†	-337.1	-313.9	8.3419 ug/L	8.3419 ppb	21:27:11
3	Si 251.611†	697928.8	695297.8	23257 ug/L	23257 ppb	21:26:51
3	Sn 189.927†	-18.0	-26.7	-0.3823 ug/L	-0.3823 ppb	21:27:11
3	Ti 334.940†	841395.4	840204.6	1364.6 ug/L	1364.6 ppb	21:26:51
3	Tl 190.801†	-107.2	-72.7	-5.9327 ug/L	-5.9327 ppb	21:27:11
3	U 409.014†	28034.3	30931.2	889.05 ug/L	889.05 ppb	21:26:51
3	V 292.402†	14851.4	16362.0	109.36 ug/L	109.36 ppb	21:26:51
3	Zn 213.857†	28353.5	27556.2	259.61 ug/L	259.61 ppb	21:26:51
3	SiO2†	699484.5	696828.0	49706 ug/L	49706 ppb	21:27:28

Mean Data: 245394012|945421|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	864169.0	100.24 %		0.196				0.20%
Sc Radial	4945.8	103 %		3.0				2.95%
Y 371.029	761857.0	106.61 %		0.268				0.25%
Y RADIAL	5651.8	113.0 %		3.37				2.98%
Ag 328.068†	-3709.1	4.9776 ug/L		0.09786	4.9776 ppb		0.09786	1.97%
Al 396.153Radial†	46662.9	43308 ug/L		103.0	43308 ppb		103.0	0.24%
As 188.979†	27.9	40.465 ug/L		1.5373	40.465 ppb		1.5373	3.80%
B 249.677†	921.8	10.796 ug/L		0.8581	10.796 ppb		0.8581	7.95%
Ba 233.527†	99937.8	818.50 ug/L		3.587	818.50 ppb		3.587	0.44%
Be 313.107†	66091.3	27.721 ug/L		0.0490	27.721 ppb		0.0490	0.18%
Ca 317.933Radial†	13658.5	22638 ug/L		84.1	22638 ppb		84.1	0.37%
Cd 226.502†	632.4	0.6840 ug/L		0.15760	0.6840 ppb		0.15760	23.04%
Co 228.616†	1009.7	18.571 ug/L		0.2587	18.571 ppb		0.2587	1.39%
Cr 267.716†	4538.3	53.971 ug/L		0.0222	53.971 ppb		0.0222	0.04%
Cu 324.752†	432816.7	1316.1 ug/L		2.40	1316.1 ppb		2.40	0.18%
Fe 238.204 Radial†	7493.0	68176 ug/L		336.5	68176 ppb		336.5	0.49%
K 766.490 Radial†	35581.5	6272.6 ug/L		17.08	6272.6 ppb		17.08	0.27%

Mg 279.077 IEC†	267.1	9396.3 ug/L	303.38	9396.3 ppb	303.38	3.23%
Mn 257.610†	1165015.6	1346.7 ug/L	4.51	1346.7 ppb	4.51	0.33%
Mo 202.031†	-21.4	3.9608 ug/L	0.21102	3.9608 ppb	0.21102	5.33%
Na 589.592 Radial†	1364.2	412.60 ug/L	6.530	412.60 ppb	6.530	1.58%
Ni 231.604†	1954.2	50.615 ug/L	0.2263	50.615 ppb	0.2263	0.45%
P 214.914†	1276.5	489.42 ug/L	8.606	489.42 ppb	8.606	1.76%
Pb 220.353†	11597.8	1449.2 ug/L	8.01	1449.2 ppb	8.01	0.55%
S 181.975 Axial†	175.7	248.13 ug/L	1.298	248.13 ppb	1.298	0.52%
Sb 206.836†	44.7	9.3774 ug/L	1.84291	9.3774 ppb	1.84291	19.65%
Se 196.026†	-315.2	8.7264 ug/L	0.71305	8.7264 ppb	0.71305	8.17%
Si 251.611†	697640.5	23335 ug/L	70.0	23335 ppb	70.0	0.30%
Sn 189.927†	-31.9	-1.3356 ug/L	1.64066	-1.3356 ppb	1.64066	122.84%
Sr 421.552†	18741.0	131.26 ug/L	0.649	131.26 ppb	0.649	0.49%
Ti 334.940†	842969.7	1369.1 ug/L	3.90	1369.1 ppb	3.90	0.28%
Tl 190.801†	-70.2	-5.0607 ug/L	1.70830	-5.0607 ppb	1.70830	33.76%
U 409.014†	31032.6	891.95 ug/L	2.697	891.95 ppb	2.697	0.30%
V 292.402†	16394.1	109.54 ug/L	0.264	109.54 ppb	0.264	0.24%
Zn 213.857†	27611.8	260.10 ug/L	1.073	260.10 ppb	1.073	0.41%
SiO2†	697682.8	49767 ug/L	810.6	49767 ppb	810.6	1.63%

Sequence No.: 45

Sample ID: 245394013|945421|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 72

Date Collected: 2/11/2010 21:29:39

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245394013|945421|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5072.1	5072.1	106 %		21:31:52
1	Y RADIAL	5684.2	5684.2	113.7 %		21:31:52
1	Al 396.153Radial†	117461.7	111471.1	103460 ug/L	103460 ppb	21:31:32
1	Ca 317.933Radial†	15403.6	14581.4	24168 ug/L	24168 ppb	21:31:32
1	Fe 238.204 Radial†	14851.0	14062.9	127950 ug/L	127950 ppb	21:31:32
1	K 766.490 Radial†	88423.7	80974.3	14284 ug/L	14284 ppb	21:31:32
1	Mg 279.077 IEC†	656.0	621.3	21887 ug/L	21887 ppb	21:31:52
1	Na 589.592 Radial†	1538.4	2536.4	767.14 ug/L	767.14 ppb	21:31:32
1	Sr 421.552†	35889.5	34010.7	238.34 ug/L	238.34 ppb	21:31:32
1	Sc 361.383	883492.1	883492.1	102.48 %		21:32:50
1	Y 371.029	765388.9	765388.9	107.11 %		21:32:50
1	Ag 328.068†	-8075.9	-8109.1	5.7958 ug/L	5.7958 ppb	21:32:55
1	As 188.979†	15.1	48.6	63.943 ug/L	63.943 ppb	21:33:15
1	B 249.677†	2057.1	2546.3	39.677 ug/L	39.677 ppb	21:32:55
1	Ba 233.527†	88019.8	85899.6	706.00 ug/L	706.00 ppb	21:32:55
1	Be 313.107†	25585.3	29304.4	14.037 ug/L	14.037 ppb	21:32:55
1	Cd 226.502†	854.5	1045.7	-0.7414 ug/L	-0.7414 ppb	21:33:15
1	Co 228.616†	1897.9	1925.7	37.614 ug/L	37.614 ppb	21:33:15
1	Cr 267.716†	8238.7	7972.4	95.707 ug/L	95.707 ppb	21:32:55
1	Cu 324.752†	180562.7	170368.8	523.63 ug/L	523.63 ppb	21:32:55
1	Mn 257.610†	1703614.2	1661901.7	1923.8 ug/L	1923.8 ppb	21:32:50
1	Mo 202.031†	-81.7	-95.2	3.0902 ug/L	3.0902 ppb	21:33:15
1	Ni 231.604†	3681.6	3484.4	90.244 ug/L	90.244 ppb	21:33:15
1	P 214.914†	1270.3	1011.5	449.33 ug/L	449.33 ppb	21:33:15
1	Pb 220.353†	821.1	862.9	117.66 ug/L	117.66 ppb	21:33:15
1	S 181.975 Axial†	258.3	212.7	290.74 ug/L	290.74 ppb	21:33:15
1	Sb 206.836†	60.3	16.7	-2.5535 ug/L	-2.5535 ppb	21:33:15
1	Se 196.026†	-641.5	-603.9	8.8277 ug/L	8.8277 ppb	21:33:15
1	Si 251.611†	930486.5	907388.4	30351 ug/L	30351 ppb	21:32:50
1	Sn 189.927†	-96.7	-103.0	-13.290 ug/L	-13.290 ppb	21:33:15
1	Ti 334.940†	867477.2	847770.5	1376.5 ug/L	1376.5 ppb	21:32:50
1	Tl 190.801†	-100.6	-63.9	-0.6217 ug/L	-0.6217 ppb	21:33:15
1	U 409.014†	-5730.5	-2611.6	-90.523 ug/L	-90.523 ppb	21:32:50
1	V 292.402†	35955.0	36638.9	246.13 ug/L	246.13 ppb	21:32:55
1	Zn 213.857†	30451.3	29000.5	265.68 ug/L	265.68 ppb	21:32:55
1	SiO2†	929216.2	906127.9	64636 ug/L	64636 ppb	21:34:23
2	Sc Radial	5052.9	5052.9	105 %		21:32:17
2	Y RADIAL	5670.0	5670.0	113.4 %		21:32:17
2	Al 396.153Radial†	117142.3	111590.7	103570 ug/L	103570 ppb	21:31:57
2	Ca 317.933Radial†	15331.5	14568.4	24146 ug/L	24146 ppb	21:31:57
2	Fe 238.204 Radial†	14772.9	14042.2	127770 ug/L	127770 ppb	21:31:57
2	K 766.490 Radial†	88235.9	81114.4	14309 ug/L	14309 ppb	21:31:57
2	Mg 279.077 IEC†	654.9	622.6	21932 ug/L	21932 ppb	21:32:17
2	Na 589.592 Radial†	1517.9	2522.5	762.93 ug/L	762.93 ppb	21:31:57
2	Sr 421.552†	35654.0	33916.0	237.68 ug/L	237.68 ppb	21:31:57
2	Sc 361.383	886133.1	886133.1	102.79 %		21:33:21
2	Y 371.029	769285.0	769285.0	107.65 %		21:33:21
2	Ag 328.068†	-8096.7	-8105.8	5.7570 ug/L	5.7570 ppb	21:33:26
2	As 188.979†	27.4	60.5	69.300 ug/L	69.300 ppb	21:33:46
2	B 249.677†	2150.8	2631.5	41.736 ug/L	41.736 ppb	21:33:26
2	Ba 233.527†	88558.9	86168.1	708.19 ug/L	708.19 ppb	21:33:26
2	Be 313.107†	25792.3	29431.3	14.078 ug/L	14.078 ppb	21:33:26
2	Cd 226.502†	842.4	1031.5	-0.8923 ug/L	-0.8923 ppb	21:33:46
2	Co 228.616†	1883.1	1905.7	37.189 ug/L	37.189 ppb	21:33:46
2	Cr 267.716†	8313.3	8021.0	96.273 ug/L	96.273 ppb	21:33:26
2	Cu 324.752†	182947.8	172164.2	529.06 ug/L	529.06 ppb	21:33:26
2	Mn 257.610†	1702492.0	1655855.4	1916.8 ug/L	1916.8 ppb	21:33:21
2	Mo 202.031†	-65.2	-79.0	4.2929 ug/L	4.2929 ppb	21:33:46
2	Ni 231.604†	3678.2	3470.4	89.882 ug/L	89.882 ppb	21:33:46

2	P 214.914†	1240.2	978.5	427.91 ug/L	427.91 ppb	21:33:46
2	Pb 220.353†	801.4	841.4	115.01 ug/L	115.01 ppb	21:33:46
2	S 181.975 Axial†	260.2	213.8	292.30 ug/L	292.30 ppb	21:33:46
2	Sb 206.836†	73.2	29.1	1.7902 ug/L	1.7902 ppb	21:33:46
2	Se 196.026†	-637.8	-598.4	11.886 ug/L	11.886 ppb	21:33:46
2	Si 251.611†	931457.4	905626.8	30292 ug/L	30292 ppb	21:33:21
2	Sn 189.927†	-97.7	-103.8	-13.438 ug/L	-13.438 ppb	21:33:46
2	Ti 334.940†	868540.6	846282.3	1374.1 ug/L	1374.1 ppb	21:33:21
2	Tl 190.801†	-110.4	-73.2	-3.6542 ug/L	-3.6542 ppb	21:33:46
2	U 409.014†	-5841.3	-2702.8	-93.147 ug/L	-93.147 ppb	21:33:21
2	V 292.402†	36303.5	36873.3	247.88 ug/L	247.88 ppb	21:33:26
2	Zn 213.857†	30644.2	29099.6	266.68 ug/L	266.68 ppb	21:33:26
2	SiO2†	923414.6	897781.3	64041 ug/L	64041 ppb	21:34:29
3	Sc Radial	4999.7	4999.7	104 %		21:32:42
3	Y RADIAL	5619.7	5619.7	112.4 %		21:32:42
3	Al 396.153Radial†	116949.4	112592.0	104500 ug/L	104500 ppb	21:32:22
3	Ca 317.933Radial†	15337.6	14729.6	24413 ug/L	24413 ppb	21:32:22
3	Fe 238.204 Radial†	14775.5	14194.3	129150 ug/L	129150 ppb	21:32:22
3	K 766.490 Radial†	88131.2	81907.7	14449 ug/L	14449 ppb	21:32:22
3	Mg 279.077 IEC†	645.1	619.8	21832 ug/L	21832 ppb	21:32:42
3	Na 589.592 Radial†	1519.7	2539.6	768.11 ug/L	768.11 ppb	21:32:22
3	Sr 421.552†	35641.9	34265.6	240.13 ug/L	240.13 ppb	21:32:22
3	Sc 361.383	898386.1	898386.1	104.21 %		21:33:52
3	Y 371.029	780460.4	780460.4	109.22 %		21:33:52
3	Ag 328.068†	-8088.0	-7990.0	6.7354 ug/L	6.7354 ppb	21:33:57
3	As 188.979†	10.4	43.9	61.986 ug/L	61.986 ppb	21:34:17
3	B 249.677†	2106.2	2560.2	39.814 ug/L	39.814 ppb	21:33:57
3	Ba 233.527†	88184.9	84634.1	695.69 ug/L	695.69 ppb	21:33:57
3	Be 313.107†	25641.4	28944.3	13.876 ug/L	13.876 ppb	21:33:57
3	Cd 226.502†	847.7	1025.4	-1.1051 ug/L	-1.1051 ppb	21:34:17
3	Co 228.616†	1908.3	1904.9	37.167 ug/L	37.167 ppb	21:34:17
3	Cr 267.716†	8310.5	7908.0	94.973 ug/L	94.973 ppb	21:33:57
3	Cu 324.752†	181235.4	168093.4	516.78 ug/L	516.78 ppb	21:33:57
3	Mn 257.610†	1711414.7	1641827.5	1900.8 ug/L	1900.8 ppb	21:33:52
3	Mo 202.031†	-57.7	-70.9	5.0049 ug/L	5.0049 ppb	21:34:17
3	Ni 231.604†	3710.1	3452.2	89.411 ug/L	89.411 ppb	21:34:17
3	P 214.914†	1268.0	988.7	435.84 ug/L	435.84 ppb	21:34:17
3	Pb 220.353†	817.8	846.5	115.73 ug/L	115.73 ppb	21:34:17
3	S 181.975 Axial†	268.0	217.9	298.09 ug/L	298.09 ppb	21:34:17
3	Sb 206.836†	70.4	25.4	0.4855 ug/L	0.4855 ppb	21:34:17
3	Se 196.026†	-636.3	-588.5	23.082 ug/L	23.082 ppb	21:34:17
3	Si 251.611†	937952.0	899499.7	30087 ug/L	30087 ppb	21:33:52
3	Sn 189.927†	-101.1	-105.7	-13.733 ug/L	-13.733 ppb	21:34:17
3	Ti 334.940†	874734.6	840701.5	1365.1 ug/L	1365.1 ppb	21:33:52
3	Tl 190.801†	-104.8	-66.4	-1.6024 ug/L	-1.6024 ppb	21:34:17
3	U 409.014†	-5464.7	-2263.9	-80.575 ug/L	-80.575 ppb	21:33:52
3	V 292.402†	36081.0	36178.1	242.67 ug/L	242.67 ppb	21:33:57
3	Zn 213.857†	30507.0	28561.4	261.18 ug/L	261.18 ppb	21:33:57
3	SiO2†	935111.7	896753.2	63967 ug/L	63967 ppb	21:34:35

Mean Data: 245394013|945421|1

Analyte	Mean Corrected	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	889337.1	103.16 %		0.922				0.89%
Sc Radial	5041.6	105 %		0.8				0.74%
Y 371.029	771711.4	107.99 %		1.095				1.01%
Y RADIAL	5657.9	113.1 %		0.68				0.60%
Ag 328.068†	-8068.3	6.0961 ug/L		0.55405	6.0961 ppb		0.55405	9.09%
Al 396.153Radial†	111884.6	103840 ug/L		571.3	103840 ppb		571.3	0.55%
As 188.979†	51.0	65.076 ug/L		3.7864	65.076 ppb		3.7864	5.82%
B 249.677†	2579.3	40.409 ug/L		1.1510	40.409 ppb		1.1510	2.85%
Ba 233.527†	85567.3	703.29 ug/L		6.673	703.29 ppb		6.673	0.95%
Be 313.107†	29226.6	13.997 ug/L		0.1066	13.997 ppb		0.1066	0.76%
Ca 317.933Radial†	14626.5	24242 ug/L		148.4	24242 ppb		148.4	0.61%
Cd 226.502†	1034.2	-0.9129 ug/L		0.18271	-0.9129 ppb		0.18271	20.01%
Co 228.616†	1912.1	37.323 ug/L		0.2523	37.323 ppb		0.2523	0.68%
Cr 267.716†	7967.1	95.651 ug/L		0.6520	95.651 ppb		0.6520	0.68%
Cu 324.752†	170208.8	523.16 ug/L		6.155	523.16 ppb		6.155	1.18%
Fe 238.204 Radial†	14099.8	128290 ug/L		750.6	128290 ppb		750.6	0.59%
K 766.490 Radial†	81332.1	14348 ug/L		88.8	14348 ppb		88.8	0.62%

Mg 279.077 IEC†	621.2	21884 ug/L	50.1	21884 ppb	50.1	0.23%
Mn 257.610†	1653194.9	1913.8 ug/L	11.78	1913.8 ppb	11.78	0.62%
Mo 202.031†	-81.7	4.1293 ug/L	0.96777	4.1293 ppb	0.96777	23.44%
Na 589.592 Radial†	2532.9	766.06 ug/L	2.754	766.06 ppb	2.754	0.36%
Ni 231.604†	3469.0	89.846 ug/L	0.4173	89.846 ppb	0.4173	0.46%
P 214.914†	992.9	437.69 ug/L	10.830	437.69 ppb	10.830	2.47%
Pb 220.353†	850.3	116.13 ug/L	1.370	116.13 ppb	1.370	1.18%
S 181.975 Axial†	214.8	293.71 ug/L	3.873	293.71 ppb	3.873	1.32%
Sb 206.836†	23.7	-0.0926 ug/L	2.22880	-0.0926 ppb	2.22880	>999.9%
Se 196.026†	-596.9	14.599 ug/L	7.5043	14.599 ppb	7.5043	51.40%
Si 251.611†	904171.6	30243 ug/L	138.5	30243 ppb	138.5	0.46%
Sn 189.927†	-104.2	-13.487 ug/L	0.2254	-13.487 ppb	0.2254	1.67%
Sr 421.552†	34064.1	238.72 ug/L	1.267	238.72 ppb	1.267	0.53%
Ti 334.940†	844918.1	1371.9 ug/L	6.02	1371.9 ppb	6.02	0.44%
Tl 190.801†	-67.8	-1.9594 ug/L	1.54746	-1.9594 ppb	1.54746	78.98%
U 409.014†	-2526.1	-88.081 ug/L	6.6318	-88.081 ppb	6.6318	7.53%
V 292.402†	36563.4	245.56 ug/L	2.651	245.56 ppb	2.651	1.08%
Zn 213.857†	28887.2	264.52 ug/L	2.928	264.52 ppb	2.928	1.11%
SiO2†	900220.8	64215 ug/L	366.8	64215 ppb	366.8	0.57%

Sequence No.: 46

Sample ID: 245394014|945421|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 73

Date Collected: 2/11/2010 21:36:47

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245394014|945421|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5018.0	5018.0	104 %		21:38:40
1	Y RADIAL	5561.0	5561.0	111.2 %		21:38:40
1	Al 396.153Radial†	38678.4	37202.7	34528 ug/L	34528 ppb	21:38:40
1	Ca 317.933Radial†	7710.1	7369.0	12214 ug/L	12214 ppb	21:38:40
1	Fe 238.204 Radial†	7940.0	7594.5	69100 ug/L	69100 ppb	21:38:40
1	K 766.490 Radial†	34422.5	30148.7	5317.1 ug/L	5317.1 ppb	21:38:40
1	Mg 279.077 IEC†	261.7	250.3	8799.3 ug/L	8799.3 ppb	21:39:00
1	Na 589.592 Radial†	684.7	1734.4	524.56 ug/L	524.56 ppb	21:38:40
1	Sr 421.552†	10087.7	9661.2	67.664 ug/L	67.664 ppb	21:38:40
1	Sc 361.383	857843.7	857843.7	99.507 %		21:39:58
1	Y 371.029	732523.0	732523.0	102.51 %		21:39:58
1	Ag 328.068†	-3538.1	-3784.5	5.1043 ug/L	5.1043 ppb	21:39:58
1	As 188.979†	-30.7	3.0	32.607 ug/L	32.607 ppb	21:40:18
1	B 249.677†	58.1	597.5	2.9283 ug/L	2.9283 ppb	21:39:58
1	Ba 233.527†	130951.3	131611.7	1077.2 ug/L	1077.2 ppb	21:39:58
1	Be 313.107†	78554.4	83282.4	34.966 ug/L	34.966 ppb	21:39:58
1	Cd 226.502†	560.0	774.7	2.2730 ug/L	2.2730 ppb	21:40:18
1	Co 228.616†	953.2	1031.6	18.381 ug/L	18.381 ppb	21:40:18
1	Cr 267.716†	5704.8	5666.3	67.134 ug/L	67.134 ppb	21:40:18
1	Cu 324.752†	940063.0	938900.3	2851.3 ug/L	2851.3 ppb	21:39:58
1	Mn 257.610†	924845.8	928976.6	1075.3 ug/L	1075.3 ppb	21:39:58
1	Mo 202.031†	7.3	-8.2	4.8950 ug/L	4.8950 ppb	21:40:18
1	Ni 231.604†	1882.1	1783.4	46.188 ug/L	46.188 ppb	21:40:18
1	P 214.914†	2567.9	2352.5	851.29 ug/L	851.29 ppb	21:40:18
1	Pb 220.353†	17840.3	17990.5	2243.6 ug/L	2243.6 ppb	21:39:58
1	S 181.975 Axial†	539.3	502.6	726.44 ug/L	726.44 ppb	21:40:18
1	Sb 206.836†	85.4	43.6	8.2703 ug/L	8.2703 ppb	21:40:18
1	Se 196.026†	-360.0	-339.6	-5.0521 ug/L	-5.0521 ppb	21:40:18
1	Si 251.611†	576502.0	578796.3	19360 ug/L	19360 ppb	21:39:58
1	Sn 189.927†	55.9	47.5	11.825 ug/L	11.825 ppb	21:40:18
1	Ti 334.940†	1065184.0	1071765.2	1738.9 ug/L	1738.9 ppb	21:39:58
1	Tl 190.801†	-103.4	-69.8	-3.1502 ug/L	-3.1502 ppb	21:40:18
1	U 409.014†	27193.2	30308.0	870.80 ug/L	870.80 ppb	21:39:58
1	V 292.402†	15139.7	16769.4	111.70 ug/L	111.70 ppb	21:39:58
1	Zn 213.857†	25782.7	25197.2	234.09 ug/L	234.09 ppb	21:39:58
1	SiO2†	579980.4	582271.1	41535 ug/L	41535 ppb	21:41:15
2	Sc Radial	4957.2	4957.2	103 %		21:39:05
2	Y RADIAL	5482.7	5482.7	109.6 %		21:39:05
2	Al 396.153Radial†	38124.7	37120.1	34452 ug/L	34452 ppb	21:39:05
2	Ca 317.933Radial†	7614.4	7366.7	12210 ug/L	12210 ppb	21:39:05
2	Fe 238.204 Radial†	7846.6	7597.2	69124 ug/L	69124 ppb	21:39:05
2	K 766.490 Radial†	34021.6	30164.2	5319.9 ug/L	5319.9 ppb	21:39:05
2	Mg 279.077 IEC†	269.6	261.0	9177.2 ug/L	9177.2 ppb	21:39:25
2	Na 589.592 Radial†	669.4	1727.6	522.52 ug/L	522.52 ppb	21:39:05
2	Sr 421.552†	9924.4	9621.3	67.384 ug/L	67.384 ppb	21:39:05
2	Sc 361.383	860585.1	860585.1	99.825 %		21:40:24
2	Y 371.029	735886.2	735886.2	102.98 %		21:40:24
2	Ag 328.068†	-3084.2	-3318.4	7.3039 ug/L	7.3039 ppb	21:40:24
2	As 188.979†	-35.0	-1.2	30.678 ug/L	30.678 ppb	21:40:44
2	B 249.677†	159.4	698.7	5.3328 ug/L	5.3328 ppb	21:40:24
2	Ba 233.527†	130957.2	131198.5	1073.8 ug/L	1073.8 ppb	21:40:24
2	Be 313.107†	79580.2	84058.5	35.250 ug/L	35.250 ppb	21:40:24
2	Cd 226.502†	584.2	797.1	2.5385 ug/L	2.5385 ppb	21:40:44
2	Co 228.616†	948.5	1023.9	18.213 ug/L	18.213 ppb	21:40:44
2	Cr 267.716†	5749.1	5692.4	67.435 ug/L	67.435 ppb	21:40:44
2	Cu 324.752†	950407.3	946253.4	2873.6 ug/L	2873.6 ppb	21:40:24
2	Mn 257.610†	932916.6	934100.9	1081.1 ug/L	1081.1 ppb	21:40:24
2	Mo 202.031†	-4.1	-19.6	4.0436 ug/L	4.0436 ppb	21:40:44
2	Ni 231.604†	1858.5	1753.7	45.420 ug/L	45.420 ppb	21:40:44

2	P 214.914†	2584.6	2361.1	852.14 ug/L	852.14 ppb	21:40:44
2	Pb 220.353†	17969.7	18062.9	2252.6 ug/L	2252.6 ppb	21:40:24
2	S 181.975 Axial†	540.3	501.9	725.40 ug/L	725.40 ppb	21:40:44
2	Sb 206.836†	81.4	39.4	6.7742 ug/L	6.7742 ppb	21:40:44
2	Se 196.026†	-344.3	-322.8	6.3470 ug/L	6.3470 ppb	21:40:44
2	Si 251.611†	582082.1	582540.7	19485 ug/L	19485 ppb	21:40:24
2	Sn 189.927†	49.3	40.7	10.580 ug/L	10.580 ppb	21:40:44
2	Ti 334.940†	1067135.0	1070309.7	1736.5 ug/L	1736.5 ppb	21:40:24
2	Tl 190.801†	-97.7	-63.7	-1.2066 ug/L	-1.2066 ppb	21:40:44
2	U 409.014†	27620.6	30649.1	880.69 ug/L	880.69 ppb	21:40:24
2	V 292.402†	15310.7	16892.2	112.60 ug/L	112.60 ppb	21:40:24
2	Zn 213.857†	26768.6	26102.3	242.99 ug/L	242.99 ppb	21:40:24
2	SiO2†	587003.7	587450.0	41904 ug/L	41904 ppb	21:41:21
3	Sc Radial	4986.8	4986.8	104 %		21:39:30
3	Y RADIAL	5497.2	5497.2	109.9 %		21:39:30
3	Al 396.153Radial†	38156.3	36931.4	34277 ug/L	34277 ppb	21:39:30
3	Ca 317.933Radial†	7588.6	7298.1	12096 ug/L	12096 ppb	21:39:30
3	Fe 238.204 Radial†	7864.7	7569.6	68873 ug/L	68873 ppb	21:39:30
3	K 766.490 Radial†	34008.1	29955.7	5283.1 ug/L	5283.1 ppb	21:39:30
3	Mg 279.077 IEC†	263.2	253.3	8906.2 ug/L	8906.2 ppb	21:39:50
3	Na 589.592 Radial†	661.9	1716.5	519.16 ug/L	519.16 ppb	21:39:30
3	Sr 421.552†	9948.4	9587.5	67.148 ug/L	67.148 ppb	21:39:30
3	Sc 361.383	850186.3	850186.3	98.619 %		21:40:50
3	Y 371.029	726942.8	726942.8	101.73 %		21:40:50
3	Ag 328.068†	-3584.4	-3863.4	4.6581 ug/L	4.6581 ppb	21:40:50
3	As 188.979†	-41.9	-8.6	27.283 ug/L	27.283 ppb	21:41:10
3	B 249.677†	97.8	638.3	3.9354 ug/L	3.9354 ppb	21:40:50
3	Ba 233.527†	129926.6	131758.0	1078.4 ug/L	1078.4 ppb	21:40:50
3	Be 313.107†	78009.4	83440.7	35.023 ug/L	35.023 ppb	21:40:50
3	Cd 226.502†	560.4	780.2	2.3626 ug/L	2.3626 ppb	21:41:10
3	Co 228.616†	943.2	1030.1	18.351 ug/L	18.351 ppb	21:41:10
3	Cr 267.716†	5753.7	5767.6	68.308 ug/L	68.308 ppb	21:41:10
3	Cu 324.752†	930796.2	938012.6	2848.6 ug/L	2848.6 ppb	21:40:50
3	Mn 257.610†	917076.4	929469.5	1075.8 ug/L	1075.8 ppb	21:40:50
3	Mo 202.031†	-1.5	-17.1	4.2107 ug/L	4.2107 ppb	21:41:10
3	Ni 231.604†	1871.9	1790.1	46.363 ug/L	46.363 ppb	21:41:10
3	P 214.914†	2593.7	2401.9	882.68 ug/L	882.68 ppb	21:41:10
3	Pb 220.353†	17715.3	18025.1	2247.9 ug/L	2247.9 ppb	21:40:50
3	S 181.975 Axial†	537.5	505.7	731.03 ug/L	731.03 ppb	21:41:10
3	Sb 206.836†	85.2	44.3	8.4954 ug/L	8.4954 ppb	21:41:10
3	Se 196.026†	-345.5	-328.2	1.9119 ug/L	1.9119 ppb	21:41:10
3	Si 251.611†	571362.2	578802.6	19360 ug/L	19360 ppb	21:40:50
3	Sn 189.927†	53.9	46.0	11.525 ug/L	11.525 ppb	21:41:10
3	Ti 334.940†	1055145.2	1071227.1	1738.0 ug/L	1738.0 ppb	21:40:50
3	Tl 190.801†	-91.9	-58.9	0.3109 ug/L	0.3109 ppb	21:41:10
3	U 409.014†	27038.5	30397.2	873.41 ug/L	873.41 ppb	21:40:50
3	V 292.402†	15106.6	16872.8	112.48 ug/L	112.48 ppb	21:40:50
3	Zn 213.857†	25590.5	25235.7	234.51 ug/L	234.51 ppb	21:40:50
3	SiO2†	583802.0	591395.8	42185 ug/L	42185 ppb	21:41:26

Mean Data: 245394014|945421|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	856205.0	99.317 %	%	0.6252			0.63%
Sc Radial	4987.3	104 %	%	0.6			0.61%
Y 371.029	731784.0	102.40 %	%	0.632			0.62%
Y RADIAL	5513.6	110.3 %	%	0.83			0.76%
Ag 328.068†	-3655.4	5.6888 ug/L	ug/L	1.41640	5.6888 ppb	1.41640	24.90%
Al 396.153Radial†	37084.8	34419 ug/L	ug/L	129.1	34419 ppb	129.1	0.37%
As 188.979†	-2.3	30.190 ug/L	ug/L	2.6956	30.190 ppb	2.6956	8.93%
B 249.677†	644.8	4.0655 ug/L	ug/L	1.20753	4.0655 ppb	1.20753	29.70%
Ba 233.527†	131522.7	1076.5 ug/L	ug/L	2.37	1076.5 ppb	2.37	0.22%
Be 313.107†	83593.9	35.080 ug/L	ug/L	0.1501	35.080 ppb	0.1501	0.43%
Ca 317.933Radial†	7344.6	12173 ug/L	ug/L	66.8	12173 ppb	66.8	0.55%
Cd 226.502†	784.0	2.3914 ug/L	ug/L	0.13510	2.3914 ppb	0.13510	5.65%
Co 228.616†	1028.5	18.315 ug/L	ug/L	0.0896	18.315 ppb	0.0896	0.49%
Cr 267.716†	5708.8	67.626 ug/L	ug/L	0.6098	67.626 ppb	0.6098	0.90%
Cu 324.752†	941055.4	2857.8 ug/L	ug/L	13.72	2857.8 ppb	13.72	0.48%
Fe 238.204 Radial†	7587.1	69032 ug/L	ug/L	138.6	69032 ppb	138.6	0.20%
K 766.490 Radial†	30089.5	5306.7 ug/L	ug/L	20.48	5306.7 ppb	20.48	0.39%

Mg 279.077 IEC†	254.9	8960.9 ug/L	194.80	8960.9 ppb	194.80	2.17%
Mn 257.610†	930849.0	1077.4 ug/L	3.25	1077.4 ppb	3.25	0.30%
Mo 202.031†	-15.0	4.3831 ug/L	0.45113	4.3831 ppb	0.45113	10.29%
Na 589.592 Radial†	1726.2	522.08 ug/L	2.729	522.08 ppb	2.729	0.52%
Ni 231.604†	1775.8	45.991 ug/L	0.5018	45.991 ppb	0.5018	1.09%
P 214.914†	2371.9	862.03 ug/L	17.882	862.03 ppb	17.882	2.07%
Pb 220.353†	18026.2	2248.1 ug/L	4.51	2248.1 ppb	4.51	0.20%
S 181.975 Axial†	503.4	727.62 ug/L	2.996	727.62 ppb	2.996	0.41%
Sb 206.836†	42.4	7.8467 ug/L	0.93555	7.8467 ppb	0.93555	11.92%
Se 196.026†	-330.2	1.0690 ug/L	5.74610	1.0690 ppb	5.74610	537.54%
Si 251.611†	580046.5	19402 ug/L	72.3	19402 ppb	72.3	0.37%
Sn 189.927†	44.7	11.310 ug/L	0.6501	11.310 ppb	0.6501	5.75%
Sr 421.552†	9623.3	67.399 ug/L	0.2583	67.399 ppb	0.2583	0.38%
Ti 334.940†	1071100.7	1737.8 ug/L	1.21	1737.8 ppb	1.21	0.07%
Tl 190.801†	-64.1	-1.3486 ug/L	1.73494	-1.3486 ppb	1.73494	128.65%
U 409.014†	30451.4	874.97 ug/L	5.123	874.97 ppb	5.123	0.59%
V 292.402†	16844.8	112.26 ug/L	0.491	112.26 ppb	0.491	0.44%
Zn 213.857†	25511.7	237.20 ug/L	5.023	237.20 ppb	5.023	2.12%
SiO2†	587039.0	41875 ug/L	326.4	41875 ppb	326.4	0.78%

Sequence No.: 47

Sample ID: 245394015|945421|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 74

Date Collected: 2/11/2010 21:43:38

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245394015|945421|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4764.6	4764.6	99.1 %		21:45:31
1	Y RADIAL	6029.2	6029.2	120.6 %		21:45:31
1	Al 396.153Radial†	12137.4	12396.7	11505 ug/L	11505 ppb	21:45:31
1	Ca 317.933Radial†	2531.5	2537.2	4205.2 ug/L	4205.2 ppb	21:45:51
1	Fe 238.204 Radial†	6780.6	6829.2	62138 ug/L	62138 ppb	21:45:31
1	K 766.490 Radial†	17488.5	14817.9	2613.1 ug/L	2613.1 ppb	21:45:31
1	Mg 279.077 IEC†	58.9	59.0	2026.3 ug/L	2026.3 ppb	21:45:51
1	Na 589.592 Radial†	3473.4	4582.7	1386.0 ug/L	1386.0 ppb	21:45:31
1	Sr 421.552†	2962.8	2987.0	20.917 ug/L	20.917 ppb	21:45:31
1	Sc 361.383	851372.6	851372.6	98.756 %		21:46:48
1	Y 371.029	828361.0	828361.0	115.92 %		21:46:48
1	Ag 328.068†	-3219.7	-3489.1	4.4691 ug/L	4.4691 ppb	21:46:48
1	As 188.979†	-27.0	6.5	31.060 ug/L	31.060 ppb	21:47:08
1	B 249.677†	-125.0	412.5	-0.3739 ug/L	-0.3739 ppb	21:46:48
1	Ba 233.527†	30012.7	30402.2	250.26 ug/L	250.26 ppb	21:46:48
1	Be 313.107†	26084.3	30751.5	15.008 ug/L	15.008 ppb	21:46:48
1	Cd 226.502†	296.1	511.7	-0.2766 ug/L	-0.2766 ppb	21:47:08
1	Co 228.616†	1461.0	1553.1	29.863 ug/L	29.863 ppb	21:47:08
1	Cr 267.716†	2385.5	2348.8	28.526 ug/L	28.526 ppb	21:47:08
1	Cu 324.752†	153673.2	149787.7	457.56 ug/L	457.56 ppb	21:46:48
1	Mn 257.610†	1314117.9	1330215.3	1536.5 ug/L	1536.5 ppb	21:46:48
1	Mo 202.031†	57.9	43.1	8.0983 ug/L	8.0983 ppb	21:47:08
1	Ni 231.604†	1204.7	1111.9	28.784 ug/L	28.784 ppb	21:47:08
1	P 214.914†	1249.5	1037.2	508.13 ug/L	508.13 ppb	21:47:08
1	Pb 220.353†	5586.1	5718.2	709.67 ug/L	709.67 ppb	21:47:08
1	S 181.975 Axial†	68.0	29.6	40.936 ug/L	40.936 ppb	21:47:08
1	Sb 206.836†	91.4	50.4	11.819 ug/L	11.819 ppb	21:47:08
1	Se 196.026†	-298.5	-280.1	11.851 ug/L	11.851 ppb	21:47:08
1	Si 251.611†	343846.8	347614.7	11627 ug/L	11627 ppb	21:46:48
1	Sn 189.927†	89.0	81.5	16.805 ug/L	16.805 ppb	21:47:08
1	Ti 334.940†	951990.2	965282.2	1565.9 ug/L	1565.9 ppb	21:46:48
1	Tl 190.801†	-103.3	-70.4	-2.4799 ug/L	-2.4799 ppb	21:47:08
1	U 409.014†	3938.5	6968.2	194.91 ug/L	194.91 ppb	21:46:48
1	V 292.402†	3661.4	5262.1	27.969 ug/L	27.969 ppb	21:47:08
1	Zn 213.857†	22164.3	21730.2	204.28 ug/L	204.28 ppb	21:46:48
1	SiO2†	345853.1	349625.5	24939 ug/L	24939 ppb	21:48:06
2	Sc Radial	4920.3	4920.3	102 %		21:45:56
2	Y RADIAL	6186.6	6186.6	123.7 %		21:45:56
2	Al 396.153Radial†	12129.4	12001.3	11138 ug/L	11138 ppb	21:45:56
2	Ca 317.933Radial†	2513.6	2438.9	4042.3 ug/L	4042.3 ppb	21:46:16
2	Fe 238.204 Radial†	6715.1	6548.8	59586 ug/L	59586 ppb	21:45:56
2	K 766.490 Radial†	17729.1	14494.7	2556.1 ug/L	2556.1 ppb	21:45:56
2	Mg 279.077 IEC†	60.8	59.0	2028.1 ug/L	2028.1 ppb	21:46:16
2	Na 589.592 Radial†	3416.0	4415.8	1335.5 ug/L	1335.5 ppb	21:45:56
2	Sr 421.552†	2976.3	2905.5	20.347 ug/L	20.347 ppb	21:45:56
2	Sc 361.383	859715.6	859715.6	99.724 %		21:47:14
2	Y 371.029	837337.5	837337.5	117.18 %		21:47:14
2	Ag 328.068†	-3213.6	-3451.2	3.7834 ug/L	3.7834 ppb	21:47:14
2	As 188.979†	-40.6	-6.8	24.402 ug/L	24.402 ppb	21:47:34
2	B 249.677†	-153.9	384.7	-0.6191 ug/L	-0.6191 ppb	21:47:14
2	Ba 233.527†	30187.4	30282.5	249.20 ug/L	249.20 ppb	21:47:14
2	Be 313.107†	26395.5	30807.2	15.025 ug/L	15.025 ppb	21:47:14
2	Cd 226.502†	294.1	506.8	-0.0713 ug/L	-0.0713 ppb	21:47:34
2	Co 228.616†	1447.1	1524.9	29.286 ug/L	29.286 ppb	21:47:34
2	Cr 267.716†	2330.7	2270.4	27.562 ug/L	27.562 ppb	21:47:34
2	Cu 324.752†	154999.3	149607.4	456.87 ug/L	456.87 ppb	21:47:14
2	Mn 257.610†	1324488.2	1327701.1	1533.3 ug/L	1533.3 ppb	21:47:14
2	Mo 202.031†	60.1	44.7	8.0237 ug/L	8.0237 ppb	21:47:34
2	Ni 231.604†	1183.9	1079.1	27.936 ug/L	27.936 ppb	21:47:34

2	P 214.914†	1237.8	1013.2	495.28 ug/L	495.28 ppb	21:47:34
2	Pb 220.353†	5527.9	5604.9	695.71 ug/L	695.71 ppb	21:47:34
2	S 181.975 Axial†	64.8	25.7	35.333 ug/L	35.333 ppb	21:47:34
2	Sb 206.836†	86.9	45.0	9.9683 ug/L	9.9683 ppb	21:47:34
2	Se 196.026†	-290.8	-269.5	10.803 ug/L	10.803 ppb	21:47:34
2	Si 251.611†	346775.2	347172.4	11612 ug/L	11612 ppb	21:47:14
2	Sn 189.927†	84.7	76.3	15.768 ug/L	15.768 ppb	21:47:34
2	Ti 334.940†	960337.8	964298.1	1564.3 ug/L	1564.3 ppb	21:47:14
2	Tl 190.801†	-101.7	-67.8	-1.6568 ug/L	-1.6568 ppb	21:47:34
2	U 409.014†	4070.7	7062.0	197.92 ug/L	197.92 ppb	21:47:14
2	V 292.402†	3616.8	5181.5	27.763 ug/L	27.763 ppb	21:47:34
2	Zn 213.857†	22357.4	21706.0	204.43 ug/L	204.43 ppb	21:47:14
2	SiO2†	341958.1	342321.1	24418 ug/L	24418 ppb	21:48:11
3	Sc Radial	4861.0	4861.0	101 %		21:46:21
3	Y RADIAL	6162.5	6162.5	123.2 %		21:46:21
3	Al 396.153Radial†	11901.3	11920.4	11063 ug/L	11063 ppb	21:46:21
3	Ca 317.933Radial†	2494.9	2450.5	4061.5 ug/L	4061.5 ppb	21:46:41
3	Fe 238.204 Radial†	6661.3	6575.7	59831 ug/L	59831 ppb	21:46:21
3	K 766.490 Radial†	17426.1	14406.5	2540.5 ug/L	2540.5 ppb	21:46:21
3	Mg 279.077 IEC†	57.7	56.7	1945.8 ug/L	1945.8 ppb	21:46:41
3	Na 589.592 Radial†	3482.5	4522.2	1367.7 ug/L	1367.7 ppb	21:46:21
3	Sr 421.552†	2924.9	2890.2	20.239 ug/L	20.239 ppb	21:46:21
3	Sc 361.383	857145.3	857145.3	99.426 %		21:47:40
3	Y 371.029	833167.3	833167.3	116.59 %		21:47:40
3	Ag 328.068†	-3174.3	-3421.4	4.0057 ug/L	4.0057 ppb	21:47:40
3	As 188.979†	-26.6	7.1	30.744 ug/L	30.744 ppb	21:48:00
3	B 249.677†	-95.8	442.7	0.7187 ug/L	0.7187 ppb	21:47:40
3	Ba 233.527†	30089.9	30275.2	249.15 ug/L	249.15 ppb	21:47:40
3	Be 313.107†	26208.2	30698.2	14.979 ug/L	14.979 ppb	21:47:40
3	Cd 226.502†	314.4	528.2	0.1578 ug/L	0.1578 ppb	21:48:00
3	Co 228.616†	1456.2	1538.3	29.579 ug/L	29.579 ppb	21:48:00
3	Cr 267.716†	2362.2	2309.1	28.017 ug/L	28.017 ppb	21:48:00
3	Cu 324.752†	154468.5	149539.7	456.68 ug/L	456.68 ppb	21:47:40
3	Mn 257.610†	1320318.7	1327490.2	1533.1 ug/L	1533.1 ppb	21:47:40
3	Mo 202.031†	50.7	35.4	7.3445 ug/L	7.3445 ppb	21:48:00
3	Ni 231.604†	1183.4	1082.2	28.016 ug/L	28.016 ppb	21:48:00
3	P 214.914†	1255.9	1035.1	508.73 ug/L	508.73 ppb	21:48:00
3	Pb 220.353†	5564.9	5658.7	702.38 ug/L	702.38 ppb	21:48:00
3	S 181.975 Axial†	66.2	27.3	37.679 ug/L	37.679 ppb	21:48:00
3	Sb 206.836†	90.9	49.2	11.443 ug/L	11.443 ppb	21:48:00
3	Se 196.026†	-287.9	-267.4	12.958 ug/L	12.958 ppb	21:48:00
3	Si 251.611†	345872.8	347307.6	11617 ug/L	11617 ppb	21:47:40
3	Sn 189.927†	85.5	77.3	15.964 ug/L	15.964 ppb	21:48:00
3	Ti 334.940†	955933.2	962755.9	1561.8 ug/L	1561.8 ppb	21:47:40
3	Tl 190.801†	-111.4	-77.9	-4.9173 ug/L	-4.9173 ppb	21:48:00
3	U 409.014†	4179.6	7183.8	201.42 ug/L	201.42 ppb	21:47:40
3	V 292.402†	3682.9	5258.8	28.287 ug/L	28.287 ppb	21:48:00
3	Zn 213.857†	22309.5	21725.0	204.58 ug/L	204.58 ppb	21:47:40
3	SiO2†	343716.5	345117.9	24618 ug/L	24618 ppb	21:48:16

Mean Data: 245394015|945421|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	856077.8	99.302 %	%	0.4956			0.50%
Sc Radial	4848.7	101 %	%	1.6			0.54%
Y 371.029	832955.2	116.56 %	%	0.629			1.62%
Y RADIAL	6126.1	122.5 %	%	1.70			1.38%
Ag 328.068†	-3453.9	4.0861 ug/L	ug/L	0.34982	4.0861 ppb	0.34982	8.56%
Al 396.153Radial†	12106.1	11236 ug/L	ug/L	236.5	11236 ppb	236.5	2.10%
As 188.979†	2.2	28.735 ug/L	ug/L	3.7558	28.735 ppb	3.7558	13.07%
B 249.677†	413.3	-0.0914 ug/L	ug/L	0.71223	-0.0914 ppb	0.71223	778.85%
Ba 233.527†	30320.0	249.54 ug/L	ug/L	0.625	249.54 ppb	0.625	0.25%
Be 313.107†	30752.3	15.004 ug/L	ug/L	0.0234	15.004 ppb	0.0234	0.16%
Ca 317.933Radial†	2475.5	4103.0 ug/L	ug/L	89.04	4103.0 ppb	89.04	2.17%
Cd 226.502†	515.6	-0.0634 ug/L	ug/L	0.21730	-0.0634 ppb	0.21730	342.95%
Co 228.616†	1538.8	29.576 ug/L	ug/L	0.2885	29.576 ppb	0.2885	0.98%
Cr 267.716†	2309.4	28.035 ug/L	ug/L	0.4823	28.035 ppb	0.4823	1.72%
Cu 324.752†	149645.0	457.04 ug/L	ug/L	0.461	457.04 ppb	0.461	0.10%
Fe 238.204 Radial†	6651.2	60518 ug/L	ug/L	1408.0	60518 ppb	1408.0	2.33%
K 766.490 Radial†	14573.0	2569.9 ug/L	ug/L	38.20	2569.9 ppb	38.20	1.49%

Mg 279.077 IEC†	58.2	2000.0 ug/L	46.98	2000.0 ppb	46.98	2.35%
Mn 257.610†	1328468.9	1534.3 ug/L	1.88	1534.3 ppb	1.88	0.12%
Mo 202.031†	41.1	7.8222 ug/L	0.41537	7.8222 ppb	0.41537	5.31%
Na 589.592 Radial†	4506.9	1363.1 ug/L	25.57	1363.1 ppb	25.57	1.88%
Ni 231.604†	1091.1	28.246 ug/L	0.4683	28.246 ppb	0.4683	1.66%
P 214.914†	1028.5	504.04 ug/L	7.599	504.04 ppb	7.599	1.51%
Pb 220.353†	5660.6	702.59 ug/L	6.984	702.59 ppb	6.984	0.99%
S 181.975 Axial†	27.5	37.983 ug/L	2.8139	37.983 ppb	2.8139	7.41%
Sb 206.836†	48.2	11.077 ug/L	0.9782	11.077 ppb	0.9782	8.83%
Se 196.026†	-272.4	11.871 ug/L	1.0775	11.871 ppb	1.0775	9.08%
Si 251.611†	347364.9	11619 ug/L	7.6	11619 ppb	7.6	0.07%
Sn 189.927†	78.3	16.179 ug/L	0.5514	16.179 ppb	0.5514	3.41%
Sr 421.552†	2927.6	20.501 ug/L	0.3642	20.501 ppb	0.3642	1.78%
Ti 334.940†	964112.1	1564.0 ug/L	2.07	1564.0 ppb	2.07	0.13%
Tl 190.801†	-72.0	-3.0180 ug/L	1.69555	-3.0180 ppb	1.69555	56.18%
U 409.014†	7071.3	198.08 ug/L	3.261	198.08 ppb	3.261	1.65%
V 292.402†	5234.1	28.006 ug/L	0.2639	28.006 ppb	0.2639	0.94%
Zn 213.857†	21720.4	204.43 ug/L	0.150	204.43 ppb	0.150	0.07%
SiO2†	345688.2	24659 ug/L	262.9	24659 ppb	262.9	1.07%

Sequence No.: 48

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 2/11/2010 21:50:27

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4818.4	4818.4	100 %		21:52:19
1	Y RADIAL	5049.0	5049.0	101.0 %		21:52:19
1	Al 396.153Radial†	5324.5	5463.4	5047.3 ug/L	5047.3 ppb	21:52:19
1	Ca 317.933Radial†	3059.4	3035.4	5030.9 ug/L	5030.9 ppb	21:52:39
1	Fe 238.204 Radial†	562.4	549.5	5015.2 ug/L	5015.2 ppb	21:52:39
1	K 766.490 Radial†	30562.5	27664.0	4876.9 ug/L	4876.9 ppb	21:52:19
1	Mg 279.077 IEC†	149.5	148.7	5269.4 ug/L	5269.4 ppb	21:52:39
1	Na 589.592 Radial†	31711.3	32714.3	9894.4 ug/L	9894.4 ppb	21:52:19
1	Sr 421.552†	75172.0	74990.8	525.88 ug/L	525.88 ppb	21:52:19
1	Sc 361.383	856638.5	856638.5	99.367 %		21:53:37
1	Y 371.029	690482.6	690482.6	96.625 %		21:53:37
1	Ag 328.068†	103159.9	103588.1	491.26 ug/L	491.26 ppb	21:53:42
1	As 188.979†	1044.7	1085.2	496.68 ug/L	496.68 ppb	21:54:02
1	B 249.677†	19861.7	20527.2	486.08 ug/L	486.08 ppb	21:53:42
1	Ba 233.527†	60643.2	61041.1	499.72 ug/L	499.72 ppb	21:53:42
1	Be 313.107†	1311744.6	1324437.7	494.43 ug/L	494.43 ppb	21:53:37
1	Cd 226.502†	40465.9	40935.5	486.57 ug/L	486.57 ppb	21:53:42
1	Co 228.616†	23046.1	23266.6	508.26 ug/L	508.26 ppb	21:53:42
1	Cr 267.716†	41380.5	41577.3	484.63 ug/L	484.63 ppb	21:53:42
1	Cu 324.752†	167757.1	163004.8	494.47 ug/L	494.47 ppb	21:53:42
1	Mn 257.610†	433444.6	435753.3	501.62 ug/L	501.62 ppb	21:53:37
1	Mo 202.031†	6420.6	6446.0	483.18 ug/L	483.18 ppb	21:54:02
1	Ni 231.604†	18854.8	18866.9	488.47 ug/L	488.47 ppb	21:53:42
1	P 214.914†	4132.1	3930.4	2349.4 ug/L	2349.4 ppb	21:54:02
1	Pb 220.353†	3798.4	3884.3	486.18 ug/L	486.18 ppb	21:54:02
1	S 181.975 Axial†	696.1	661.2	963.22 ug/L	963.22 ppb	21:54:02
1	Sb 206.836†	1441.4	1408.4	508.20 ug/L	508.20 ppb	21:54:02
1	Se 196.026†	697.3	723.8	505.42 ug/L	505.42 ppb	21:54:02
1	Si 251.611†	74450.8	74362.7	2481.4 ug/L	2481.4 ppb	21:53:42
1	Sn 189.927†	2579.0	2586.7	480.88 ug/L	480.88 ppb	21:54:02
1	Ti 334.940†	301277.3	304499.3	493.74 ug/L	493.74 ppb	21:53:42
1	Tl 190.801†	1515.4	1559.3	503.03 ug/L	503.03 ppb	21:54:02
1	U 409.014†	13711.9	16779.2	484.89 ug/L	484.89 ppb	21:53:42
1	V 292.402†	64692.1	66658.8	490.51 ug/L	490.51 ppb	21:53:42
1	Zn 213.857†	50509.1	50117.5	489.90 ug/L	489.90 ppb	21:53:42
1	SiO2†	75327.3	75224.0	5352.7 ug/L	5352.7 ppb	21:55:10
2	Sc Radial	4837.3	4837.3	101 %		21:52:45
2	Y RADIAL	5085.3	5085.3	101.7 %		21:52:45
2	Al 396.153Radial†	5334.4	5452.5	5036.7 ug/L	5036.7 ppb	21:52:45
2	Ca 317.933Radial†	3097.7	3061.5	5074.3 ug/L	5074.3 ppb	21:53:05
2	Fe 238.204 Radial†	572.3	557.3	5085.9 ug/L	5085.9 ppb	21:53:05
2	K 766.490 Radial†	30649.0	27630.8	4871.1 ug/L	4871.1 ppb	21:52:45
2	Mg 279.077 IEC†	149.1	147.8	5237.7 ug/L	5237.7 ppb	21:53:05
2	Na 589.592 Radial†	31441.4	32322.4	9775.9 ug/L	9775.9 ppb	21:52:45
2	Sr 421.552†	74721.7	74250.3	520.69 ug/L	520.69 ppb	21:52:45
2	Sc 361.383	845413.2	845413.2	98.065 %		21:54:08
2	Y 371.029	681907.2	681907.2	95.425 %		21:54:08
2	Ag 328.068†	103718.3	105536.0	500.50 ug/L	500.50 ppb	21:54:13
2	As 188.979†	1045.4	1099.8	503.39 ug/L	503.39 ppb	21:54:33
2	B 249.677†	19982.0	20915.3	495.28 ug/L	495.28 ppb	21:54:13
2	Ba 233.527†	60852.4	62064.7	508.11 ug/L	508.11 ppb	21:54:13
2	Be 313.107†	1298582.0	1328543.6	495.98 ug/L	495.98 ppb	21:54:08
2	Cd 226.502†	40560.7	41572.9	494.15 ug/L	494.15 ppb	21:54:13
2	Co 228.616†	23091.4	23620.7	516.00 ug/L	516.00 ppb	21:54:13
2	Cr 267.716†	41629.9	42384.5	494.04 ug/L	494.04 ppb	21:54:13
2	Cu 324.752†	169175.5	166692.9	505.66 ug/L	505.66 ppb	21:54:13
2	Mn 257.610†	428152.3	436148.5	502.08 ug/L	502.08 ppb	21:54:08
2	Mo 202.031†	6446.2	6557.8	491.55 ug/L	491.55 ppb	21:54:33
2	Ni 231.604†	18883.4	19148.0	495.75 ug/L	495.75 ppb	21:54:13

2	P 214.914†	4167.3	4021.5	2403.9 ug/L	2403.9 ppb	21:54:33
2	Pb 220.353†	3793.3	3929.9	491.87 ug/L	491.87 ppb	21:54:33
2	S 181.975 Axial†	714.0	688.8	1003.4 ug/L	1003.4 ppb	21:54:33
2	Sb 206.836†	1427.1	1413.1	510.15 ug/L	510.15 ppb	21:54:33
2	Se 196.026†	705.0	741.1	517.31 ug/L	517.31 ppb	21:54:33
2	Si 251.611†	74829.8	75744.0	2527.5 ug/L	2527.5 ppb	21:54:13
2	Sn 189.927†	2591.1	2633.6	489.58 ug/L	489.58 ppb	21:54:33
2	Ti 334.940†	302926.9	310207.2	503.00 ug/L	503.00 ppb	21:54:13
2	Tl 190.801†	1509.2	1573.2	507.50 ug/L	507.50 ppb	21:54:33
2	U 409.014†	13635.4	16884.5	487.91 ug/L	487.91 ppb	21:54:13
2	V 292.402†	65137.0	67976.9	500.18 ug/L	500.18 ppb	21:54:13
2	Zn 213.857†	50776.1	51064.7	499.17 ug/L	499.17 ppb	21:54:13
2	SiO2†	75217.2	76118.2	5416.3 ug/L	5416.3 ppb	21:55:15
3	Sc Radial	4860.5	4860.5	101 %		21:53:10
3	Y RADIAL	5063.8	5063.8	101.3 %		21:53:10
3	Al 396.153Radial†	5328.7	5421.5	5008.3 ug/L	5008.3 ppb	21:53:10
3	Ca 317.933Radial†	3086.8	3036.0	5032.0 ug/L	5032.0 ppb	21:53:30
3	Fe 238.204 Radial†	570.0	552.2	5039.6 ug/L	5039.6 ppb	21:53:30
3	K 766.490 Radial†	30598.2	27435.0	4836.6 ug/L	4836.6 ppb	21:53:10
3	Mg 279.077 IEC†	150.1	148.0	5245.2 ug/L	5245.2 ppb	21:53:30
3	Na 589.592 Radial†	31481.9	32213.0	9742.8 ug/L	9742.8 ppb	21:53:10
3	Sr 421.552†	74631.6	73806.2	517.58 ug/L	517.58 ppb	21:53:10
3	Sc 361.383	857496.4	857496.4	99.467 %		21:54:39
3	Y 371.029	690308.9	690308.9	96.600 %		21:54:39
3	Ag 328.068†	103856.3	104184.4	494.08 ug/L	494.08 ppb	21:54:44
3	As 188.979†	1046.0	1085.5	496.83 ug/L	496.83 ppb	21:55:04
3	B 249.677†	20024.6	20671.0	489.49 ug/L	489.49 ppb	21:54:44
3	Ba 233.527†	60994.7	61333.3	502.12 ug/L	502.12 ppb	21:54:44
3	Be 313.107†	1315302.5	1326694.0	495.28 ug/L	495.28 ppb	21:54:39
3	Cd 226.502†	40689.0	41119.1	488.75 ug/L	488.75 ppb	21:54:44
3	Co 228.616†	23123.5	23321.2	509.46 ug/L	509.46 ppb	21:54:44
3	Cr 267.716†	41600.5	41756.8	486.72 ug/L	486.72 ppb	21:54:44
3	Cu 324.752†	168637.8	163721.3	496.64 ug/L	496.64 ppb	21:54:44
3	Mn 257.610†	435169.2	437050.7	503.12 ug/L	503.12 ppb	21:54:39
3	Mo 202.031†	6458.3	6477.4	485.53 ug/L	485.53 ppb	21:55:04
3	Ni 231.604†	18967.1	18960.8	490.91 ug/L	490.91 ppb	21:54:44
3	P 214.914†	4179.0	3973.3	2375.6 ug/L	2375.6 ppb	21:55:04
3	Pb 220.353†	3839.9	3922.2	490.89 ug/L	490.89 ppb	21:55:04
3	S 181.975 Axial†	708.9	673.3	980.91 ug/L	980.91 ppb	21:55:04
3	Sb 206.836†	1440.5	1406.0	507.51 ug/L	507.51 ppb	21:55:04
3	Se 196.026†	703.2	729.1	509.08 ug/L	509.08 ppb	21:55:04
3	Si 251.611†	74807.6	74646.5	2490.9 ug/L	2490.9 ppb	21:54:44
3	Sn 189.927†	2609.4	2614.7	486.07 ug/L	486.07 ppb	21:55:04
3	Ti 334.940†	302813.4	305740.3	495.75 ug/L	495.75 ppb	21:54:44
3	Tl 190.801†	1519.2	1561.5	503.75 ug/L	503.75 ppb	21:55:04
3	U 409.014†	13822.1	16876.3	487.69 ug/L	487.69 ppb	21:54:44
3	V 292.402†	65050.1	66953.6	492.69 ug/L	492.69 ppb	21:54:44
3	Zn 213.857†	50913.0	50472.8	493.38 ug/L	493.38 ppb	21:54:44
3	SiO2†	75103.9	74923.5	5331.2 ug/L	5331.2 ppb	21:55:20

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	853182.7	98.966 %	0.7821			0.79%
Sc Radial	4838.7	101 %	0.4			0.44%
Y 371.029	687566.2	96.217 %	0.6859			0.71%
Y RADIAL	5066.0	101.3 %	0.37			0.36%
Ag 328.068†	104436.2	495.28 ug/L	4.733	495.28 ppb	4.733	0.96%
QC value within limits for Ag 328.068 Recovery = 99.06%						
Al 396.153Radial†	5445.8	5030.8 ug/L	20.17	5030.8 ppb	20.17	0.40%
QC value within limits for Al 396.153Radial Recovery = 100.62%						
As 188.979†	1090.2	498.97 ug/L	3.833	498.97 ppb	3.833	0.77%
QC value within limits for As 188.979 Recovery = 99.79%						
B 249.677†	20704.5	490.28 ug/L	4.650	490.28 ppb	4.650	0.95%
QC value within limits for B 249.677 Recovery = 98.06%						
Ba 233.527†	61479.7	503.32 ug/L	4.318	503.32 ppb	4.318	0.86%
QC value within limits for Ba 233.527 Recovery = 100.66%						
Be 313.107†	1326558.4	495.23 ug/L	0.776	495.23 ppb	0.776	0.16%
QC value within limits for Be 313.107 Recovery = 99.05%						
Ca 317.933Radial†	3044.3	5045.7 ug/L	24.73	5045.7 ppb	24.73	0.49%

QC value within limits for Ca 317.933 Radial Recovery = 100.91%							
Cd 226.502†	41209.2	489.82 ug/L	3.900	489.82 ppb	3.900	0.80%	
QC value within limits for Cd 226.502 Recovery = 97.96%							
Co 228.616†	23402.8	511.24 ug/L	4.164	511.24 ppb	4.164	0.81%	
QC value within limits for Co 228.616 Recovery = 102.25%							
Cr 267.716†	41906.2	488.47 ug/L	4.942	488.47 ppb	4.942	1.01%	
QC value within limits for Cr 267.716 Recovery = 97.69%							
Cu 324.752†	164473.0	498.92 ug/L	5.933	498.92 ppb	5.933	1.19%	
QC value within limits for Cu 324.752 Recovery = 99.78%							
Fe 238.204 Radial†	553.0	5046.9 ug/L	35.88	5046.9 ppb	35.88	0.71%	
QC value within limits for Fe 238.204 Radial Recovery = 100.94%							
K 766.490 Radial†	27576.6	4861.5 ug/L	21.82	4861.5 ppb	21.82	0.45%	
QC value within limits for K 766.490 Radial Recovery = 97.23%							
Mg 279.077 IEC†	148.2	5250.7 ug/L	16.55	5250.7 ppb	16.55	0.32%	
QC value within limits for Mg 279.077 IEC Recovery = 105.01%							
Mn 257.610†	436317.5	502.27 ug/L	0.766	502.27 ppb	0.766	0.15%	
QC value within limits for Mn 257.610 Recovery = 100.45%							
Mo 202.031†	6493.7	486.75 ug/L	4.322	486.75 ppb	4.322	0.89%	
QC value within limits for Mo 202.031 Recovery = 97.35%							
Na 589.592 Radial†	32416.6	9804.4 ug/L	79.71	9804.4 ppb	79.71	0.81%	
QC value within limits for Na 589.592 Radial Recovery = 98.04%							
Ni 231.604†	18991.9	491.71 ug/L	3.704	491.71 ppb	3.704	0.75%	
QC value within limits for Ni 231.604 Recovery = 98.34%							
P 214.914†	3975.1	2376.3 ug/L	27.26	2376.3 ppb	27.26	1.15%	
QC value within limits for P 214.914 Recovery = 95.05%							
Pb 220.353†	3912.1	489.65 ug/L	3.043	489.65 ppb	3.043	0.62%	
QC value within limits for Pb 220.353 Recovery = 97.93%							
S 181.975 Axial†	674.4	982.52 ug/L	20.162	982.52 ppb	20.162	2.05%	
QC value within limits for S 181.975 Axial Recovery = 98.25%							
Sb 206.836†	1409.2	508.62 ug/L	1.367	508.62 ppb	1.367	0.27%	
QC value within limits for Sb 206.836 Recovery = 101.72%							
Se 196.026†	731.3	510.60 ug/L	6.085	510.60 ppb	6.085	1.19%	
QC value within limits for Se 196.026 Recovery = 102.12%							
Si 251.611†	74917.7	2499.9 ug/L	24.35	2499.9 ppb	24.35	0.97%	
QC value within limits for Si 251.611 Recovery = 100.00%							
Sn 189.927†	2611.7	485.51 ug/L	4.379	485.51 ppb	4.379	0.90%	
QC value within limits for Sn 189.927 Recovery = 97.10%							
Sr 421.552†	74349.1	521.38 ug/L	4.197	521.38 ppb	4.197	0.81%	
QC value within limits for Sr 421.552 Recovery = 104.28%							
Ti 334.940†	306815.6	497.50 ug/L	4.871	497.50 ppb	4.871	0.98%	
QC value within limits for Ti 334.940 Recovery = 99.50%							
Tl 190.801†	1564.6	504.76 ug/L	2.399	504.76 ppb	2.399	0.48%	
QC value within limits for Tl 190.801 Recovery = 100.95%							
U 409.014†	16846.7	486.83 ug/L	1.686	486.83 ppb	1.686	0.35%	
QC value within limits for U 409.014 Recovery = 97.37%							
V 292.402†	67196.4	494.46 ug/L	5.075	494.46 ppb	5.075	1.03%	
QC value within limits for V 292.402 Recovery = 98.89%							
Zn 213.857†	50551.7	494.15 ug/L	4.684	494.15 ppb	4.684	0.95%	
QC value within limits for Zn 213.857 Recovery = 98.83%							
SiO2†	75421.9	5366.7 ug/L	44.23	5366.7 ppb	44.23	0.82%	
QC value within limits for SiO2 Recovery = 100.36%							
All analyte(s) passed QC.							

Sequence No.: 49

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 2/11/2010 21:57:29

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	4901.3	4901.3	102 %		21:59:21
1	Y RADIAL	5123.8	5123.8	102.5 %		21:59:21
1	Al 396.153Radial†	-162.2	-7.5	-6.9947 ug/L	-6.9947 ppb	21:59:21
1	Ca 317.933Radial†	20.2	3.1	5.1616 ug/L	5.1616 ppb	21:59:41
1	Fe 238.204 Radial†	11.9	0.2	1.8287 ug/L	1.8287 ppb	21:59:41
1	K 766.490 Radial†	2796.9	-82.6	-14.600 ug/L	-14.600 ppb	21:59:21
1	Mg 279.077 IEC†	3.7	3.2	114.76 ug/L	114.76 ppb	21:59:41
1	Na 589.592 Radial†	-977.5	119.8	36.248 ug/L	36.248 ppb	21:59:21
1	Sr 421.552†	-5.0	-7.0	-0.0493 ug/L	-0.0493 ppb	21:59:21
1	Sc 361.383	826935.4	826935.4	95.922 %		22:00:38
1	Y 371.029	675508.6	675508.6	94.529 %		22:00:38
1	Ag 328.068†	197.1	-23.3	-0.1067 ug/L	-0.1067 ppb	22:00:38
1	As 188.979†	-22.6	10.3	4.6755 ug/L	4.6755 ppb	22:00:58
1	B 249.677†	-421.6	99.5	2.3669 ug/L	2.3669 ppb	22:00:58
1	Ba 233.527†	-1.1	10.4	0.0829 ug/L	0.0829 ppb	22:00:58
1	Be 313.107†	-4153.5	8.6	0.0027 ug/L	0.0027 ppb	22:00:38
1	Cd 226.502†	-193.8	9.8	0.1149 ug/L	0.1149 ppb	22:00:58
1	Co 228.616†	-82.1	-11.8	-0.2581 ug/L	-0.2581 ppb	22:00:58
1	Cr 267.716†	80.0	16.6	0.1947 ug/L	0.1947 ppb	22:00:58
1	Cu 324.752†	5271.1	-325.6	-0.9832 ug/L	-0.9832 ppb	22:00:38
1	Mn 257.610†	518.7	88.9	0.0977 ug/L	0.0977 ppb	22:00:58
1	Mo 202.031†	16.4	1.6	0.1189 ug/L	0.1189 ppb	22:00:58
1	Ni 231.604†	94.8	-9.2	-0.2380 ug/L	-0.2380 ppb	22:00:58
1	P 214.914†	212.0	-7.0	-4.1809 ug/L	-4.1809 ppb	22:00:58
1	Pb 220.353†	-58.1	1.1	0.1406 ug/L	0.1406 ppb	22:00:58
1	S 181.975 Axial†	37.6	-0.2	-0.2305 ug/L	-0.2305 ppb	22:00:58
1	Sb 206.836†	43.8	3.5	1.2338 ug/L	1.2338 ppb	22:00:58
1	Se 196.026†	-26.4	-5.4	-3.6229 ug/L	-3.6229 ppb	22:00:58
1	Si 251.611†	565.7	27.5	0.9180 ug/L	0.9180 ppb	22:00:58
1	Sn 189.927†	12.9	4.8	0.8823 ug/L	0.8823 ppb	22:00:58
1	Ti 334.940†	-1394.7	-150.8	-0.2500 ug/L	-0.2500 ppb	22:00:38
1	Tl 190.801†	-31.2	1.6	0.5219 ug/L	0.5219 ppb	22:00:58
1	U 409.014†	-3111.3	-263.5	-7.6415 ug/L	-7.6415 ppb	22:00:38
1	V 292.402†	-1611.7	-125.6	-0.9231 ug/L	-0.9231 ppb	22:00:38
1	Zn 213.857†	711.8	28.8	0.2866 ug/L	0.2866 ppb	22:00:58
1	SiO2†	564.5	5.4	0.3796 ug/L	0.3796 ppb	22:01:54
2	Sc Radial	4804.1	4804.1	99.9 %		21:59:46
2	Y RADIAL	5034.1	5034.1	100.7 %		21:59:46
2	Al 396.153Radial†	-153.9	-2.4	-2.2158 ug/L	-2.2158 ppb	21:59:46
2	Ca 317.933Radial†	16.1	-0.6	-1.0129 ug/L	-1.0129 ppb	22:00:06
2	Fe 238.204 Radial†	10.7	-0.8	-7.0330 ug/L	-7.0330 ppb	22:00:06
2	K 766.490 Radial†	2799.6	-24.5	-4.3247 ug/L	-4.3247 ppb	21:59:46
2	Mg 279.077 IEC†	6.6	6.1	217.77 ug/L	217.77 ppb	22:00:06
2	Na 589.592 Radial†	-1005.4	72.5	21.935 ug/L	21.935 ppb	21:59:46
2	Sr 421.552†	12.5	10.4	0.0729 ug/L	0.0729 ppb	21:59:46
2	Sc 361.383	834710.7	834710.7	96.824 %		22:01:03
2	Y 371.029	682191.9	682191.9	95.464 %		22:01:03
2	Ag 328.068†	260.2	40.0	0.1882 ug/L	0.1882 ppb	22:01:03
2	As 188.979†	-32.6	0.2	0.0943 ug/L	0.0943 ppb	22:01:23
2	B 249.677†	-422.3	102.9	2.4480 ug/L	2.4480 ppb	22:01:23
2	Ba 233.527†	-9.0	2.3	0.0188 ug/L	0.0188 ppb	22:01:23
2	Be 313.107†	-4152.0	50.5	0.0188 ug/L	0.0188 ppb	22:01:03
2	Cd 226.502†	-197.2	8.3	0.0986 ug/L	0.0986 ppb	22:01:23
2	Co 228.616†	-60.7	11.0	0.2400 ug/L	0.2400 ppb	22:01:23
2	Cr 267.716†	61.3	-3.4	-0.0391 ug/L	-0.0391 ppb	22:01:23
2	Cu 324.752†	5347.8	-297.4	-0.9017 ug/L	-0.9017 ppb	22:01:03
2	Mn 257.610†	567.1	133.8	0.1444 ug/L	0.1444 ppb	22:01:23
2	Mo 202.031†	7.1	-8.2	-0.6172 ug/L	-0.6172 ppb	22:01:23
2	Ni 231.604†	94.3	-10.6	-0.2758 ug/L	-0.2758 ppb	22:01:23

2	P 214.914†	231.7	11.2	7.1477 ug/L	7.1477 ppb	22:01:23
2	Pb 220.353†	-64.8	-5.2	-0.6452 ug/L	-0.6452 ppb	22:01:23
2	S 181.975 Axial†	35.2	-3.0	-4.3060 ug/L	-4.3060 ppb	22:01:23
2	Sb 206.836†	45.1	4.5	1.5356 ug/L	1.5356 ppb	22:01:23
2	Se 196.026†	-17.4	4.1	2.7580 ug/L	2.7580 ppb	22:01:23
2	Si 251.611†	591.5	48.6	1.6333 ug/L	1.6333 ppb	22:01:23
2	Sn 189.927†	4.3	-4.3	-0.7930 ug/L	-0.7930 ppb	22:01:23
2	Ti 334.940†	-1263.4	-1.7	-0.0199 ug/L	-0.0199 ppb	22:01:03
2	Tl 190.801†	-32.8	0.3	0.0924 ug/L	0.0924 ppb	22:01:23
2	U 409.014†	-2944.3	-60.8	-1.7626 ug/L	-1.7626 ppb	22:01:03
2	V 292.402†	-1476.2	30.0	0.2112 ug/L	0.2112 ppb	22:01:03
2	Zn 213.857†	720.9	31.3	0.3127 ug/L	0.3127 ppb	22:01:23
2	SiO2†	527.8	-38.0	-2.6956 ug/L	-2.6956 ppb	22:01:59
3	Sc Radial	4819.3	4819.3	100 %		22:00:11
3	Y RADIAL	5081.5	5081.5	101.6 %		22:00:11
3	Al 396.153Radial†	-145.1	6.9	6.3659 ug/L	6.3659 ppb	22:00:11
3	Ca 317.933Radial†	16.8	0.1	0.1367 ug/L	0.1367 ppb	22:00:31
3	Fe 238.204 Radial†	9.2	-2.3	-20.793 ug/L	-20.793 ppb	22:00:31
3	K 766.490 Radial†	2842.7	9.6	1.6840 ug/L	1.6840 ppb	22:00:11
3	Mg 279.077 IEC†	1.8	1.4	48.625 ug/L	48.625 ppb	22:00:31
3	Na 589.592 Radial†	-923.4	157.5	47.621 ug/L	47.621 ppb	22:00:11
3	Sr 421.552†	35.2	33.0	0.2312 ug/L	0.2312 ppb	22:00:11
3	Sc 361.383	832657.6	832657.6	96.585 %		22:01:29
3	Y 371.029	679926.1	679926.1	95.147 %		22:01:29
3	Ag 328.068†	148.3	-75.2	-0.3588 ug/L	-0.3588 ppb	22:01:29
3	As 188.979†	-27.7	5.2	2.3716 ug/L	2.3716 ppb	22:01:49
3	B 249.677†	-439.1	84.4	2.0103 ug/L	2.0103 ppb	22:01:49
3	Ba 233.527†	-14.4	-3.3	-0.0282 ug/L	-0.0282 ppb	22:01:49
3	Be 313.107†	-4159.6	32.1	0.0122 ug/L	0.0122 ppb	22:01:29
3	Cd 226.502†	-200.8	4.0	0.0482 ug/L	0.0482 ppb	22:01:49
3	Co 228.616†	-64.7	6.7	0.1477 ug/L	0.1477 ppb	22:01:49
3	Cr 267.716†	47.0	-18.1	-0.2095 ug/L	-0.2095 ppb	22:01:49
3	Cu 324.752†	5219.5	-416.7	-1.2624 ug/L	-1.2624 ppb	22:01:29
3	Mn 257.610†	468.2	32.9	0.0338 ug/L	0.0338 ppb	22:01:49
3	Mo 202.031†	19.6	4.7	0.3525 ug/L	0.3525 ppb	22:01:49
3	Ni 231.604†	93.5	-11.2	-0.2894 ug/L	-0.2894 ppb	22:01:49
3	P 214.914†	223.0	2.8	2.0012 ug/L	2.0012 ppb	22:01:49
3	Pb 220.353†	-48.7	11.3	1.4200 ug/L	1.4200 ppb	22:01:49
3	S 181.975 Axial†	39.7	1.7	2.4938 ug/L	2.4938 ppb	22:01:49
3	Sb 206.836†	32.8	-8.2	-2.8484 ug/L	-2.8484 ppb	22:01:49
3	Se 196.026†	-20.5	0.9	0.5645 ug/L	0.5645 ppb	22:01:49
3	Si 251.611†	566.3	24.1	0.8017 ug/L	0.8017 ppb	22:01:49
3	Sn 189.927†	12.5	4.3	0.7934 ug/L	0.7934 ppb	22:01:49
3	Ti 334.940†	-1185.9	75.4	0.1205 ug/L	0.1205 ppb	22:01:29
3	Tl 190.801†	-25.6	7.7	2.4565 ug/L	2.4565 ppb	22:01:49
3	U 409.014†	-3038.4	-165.8	-4.8044 ug/L	-4.8044 ppb	22:01:29
3	V 292.402†	-1539.0	-38.8	-0.2820 ug/L	-0.2820 ppb	22:01:29
3	Zn 213.857†	720.8	33.1	0.3328 ug/L	0.3328 ppb	22:01:49
3	SiO2†	602.3	40.5	2.8802 ug/L	2.8802 ppb	22:02:04

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	831434.6	96.444 %		0.4674			0.48%
Sc Radial	4841.6	101 %		1.1			1.08%
Y 371.029	679208.8	95.047 %		0.4756			0.50%
Y RADIAL	5079.8	101.6 %		0.90			0.88%
Ag 328.068†	-19.5	-0.0924 ug/L		0.27379	-0.0924 ppb	0.27379	296.23%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	-1.0	-0.9482 ug/L		6.76988	-0.9482 ppb	6.76988	713.97%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	5.3	2.3805 ug/L		2.29063	2.3805 ppb	2.29063	96.22%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	95.6	2.2751 ug/L		0.23289	2.2751 ppb	0.23289	10.24%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	3.1	0.0245 ug/L		0.05577	0.0245 ppb	0.05577	227.22%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	30.4	0.0112 ug/L		0.00811	0.0112 ppb	0.00811	72.29%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	0.9	1.4285 ug/L		3.28372	1.4285 ppb	3.28372	229.87%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd	226.502†	7.4	0.0872 ug/L	0.03479	0.0872 ppb	0.03479	39.88%
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co	228.616†	2.0	0.0432 ug/L	0.26496	0.0432 ppb	0.26496	613.21%
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr	267.716†	-1.6	-0.0179 ug/L	0.20293	-0.0179 ppb	0.20293	>999.9%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu	324.752†	-346.6	-1.0491 ug/L	0.18917	-1.0491 ppb	0.18917	18.03%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe	238.204 Radial†	-1.0	-8.6658 ug/L	11.39899	-8.6658 ppb	11.39899	131.54%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K	766.490 Radial†	-32.5	-5.7469 ug/L	8.23470	-5.7469 ppb	8.23470	143.29%
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg	279.077 IEC†	3.6	127.05 ug/L	85.239	127.05 ppb	85.239	67.09%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn	257.610†	85.2	0.0920 ug/L	0.05551	0.0920 ppb	0.05551	60.35%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo	202.031†	-0.6	-0.0486 ug/L	0.50611	-0.0486 ppb	0.50611	>999.9%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na	589.592 Radial†	116.6	35.268 ug/L	12.8710	35.268 ppb	12.8710	36.49%
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni	231.604†	-10.3	-0.2677 ug/L	0.02666	-0.2677 ppb	0.02666	9.96%
QC value within limits for Ni 231.604 Recovery = Not calculated							
P	214.914†	2.3	1.6560 ug/L	5.67215	1.6560 ppb	5.67215	342.52%
QC value within limits for P 214.914 Recovery = Not calculated							
Pb	220.353†	2.4	0.3052 ug/L	1.04240	0.3052 ppb	1.04240	341.60%
QC value within limits for Pb 220.353 Recovery = Not calculated							
S	181.975 Axial†	-0.5	-0.6809 ug/L	3.42218	-0.6809 ppb	3.42218	502.60%
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb	206.836†	-0.1	-0.0264 ug/L	2.44866	-0.0264 ppb	2.44866	>999.9%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se	196.026†	-0.1	-0.1001 ug/L	3.24195	-0.1001 ppb	3.24195	>999.9%
QC value within limits for Se 196.026 Recovery = Not calculated							
Si	251.611†	33.4	1.1177 ug/L	0.45034	1.1177 ppb	0.45034	40.29%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn	189.927†	1.6	0.2942 ug/L	0.94265	0.2942 ppb	0.94265	320.38%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr	421.552†	12.1	0.0849 ug/L	0.14067	0.0849 ppb	0.14067	165.62%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti	334.940†	-25.7	-0.0498 ug/L	0.18705	-0.0498 ppb	0.18705	375.59%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl	190.801†	3.2	1.0236 ug/L	1.25933	1.0236 ppb	1.25933	123.03%
QC value within limits for Tl 190.801 Recovery = Not calculated							
U	409.014†	-163.4	-4.7362 ug/L	2.94000	-4.7362 ppb	2.94000	62.08%
QC value within limits for U 409.014 Recovery = Not calculated							
V	292.402†	-44.8	-0.3313 ug/L	0.56877	-0.3313 ppb	0.56877	171.68%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn	213.857†	31.0	0.3107 ug/L	0.02314	0.3107 ppb	0.02314	7.45%
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†		2.6	0.1881 ug/L	2.79282	0.1881 ppb	2.79282	>999.9%
QC value within limits for SiO2 Recovery = Not calculated							

All analyte(s) passed QC.

ICPMS #6 Daily Performance Report

Sample ID: Sample

Sample Date/Time: Saturday, February 13, 2010 21:03:50

Sample Description:

Method File: C:\elandata\Method\Daily2.mth

Dataset File: c:\elandata\Dataset\100204\Sample.828

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		2680.9		2680.852		72.600		2.7
Mg	24.0		28257.5		28257.523		376.216		1.3
Co	58.9		38357.6		38357.635		530.885		1.4
Rh	102.9		67484.8		67484.841		837.127		1.2
In	114.9		74146.7		74146.750		982.801		1.3
Pb	208.0		36874.3		36874.333		374.637		1.0
[> Ba	137.9		66161.5		66161.503		1402.619		2.1
[Ba++	69.0		2239.3		0.034		0.001		1.8
[> Ce	139.9		88689.1		88689.057		525.789		0.6
[CeO	155.9		2380.7		0.027		0.000		1.7
Bkgd	220.0		9.6		9.600		0.742		7.7

Current Optimization File Data

Current Value	Description
0.81	Nebulizer Gas Flow
14.00	Lens Voltage
1450.00	ICP RF Power
-1781.25	Analog Stage Voltage
900.00	Pulse Stage Voltage
40.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	21	9.5	2667.9
Co	59	21	10.3	22492.4
In	115	21	11.5	46343.4

ICPMS #6 Instrument Tuning Report

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	583	2080	0.652
Be	9.0	9.0	2031	2080	0.664
Mg	24.0	24.0	5680	2120	0.658
Mg	25.0	25.1	5909	2080	0.706
Mg	26.0	26.1	6176	2120	0.692
Co	58.9	59.0	14164	2170	0.635
Rh	102.9	102.9	24856	2230	0.691
In	114.9	114.9	27788	2260	0.678
Ce	139.9	139.9	33846	2280	0.735
Pb	206.0	205.9	49948	2433	0.721
Pb	207.0	206.9	50123	2385	0.677
Pb	208.0	208.0	50451	2430	0.703
U	238.1	238.0	57724	2470	0.692

ICPMS#6 - Summary Report

Sample ID: Blank

Sample Date/Time: Sunday, February 14, 2010 08:34:10

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 nohrs thtimozr.mth

Dataset File: C:\elandata\Dataset\100213\Blank.160

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7		ug/L		97	
Be	9		ug/L		4	
B	11		ug/L		685	
Na	23		ug/L		9337	
Mg	24		ug/L		2000	
Al	27		ug/L		4001	
P	31		ug/L		6263	
K	39		ug/L		459615	
Ca	43		ug/L		492	
Sc	45		ug/L		722260	
V	51		ug/L		-4048	
Cr	52		ug/L		-417	
Cr	53		ug/L		154463	
Mn	55		ug/L		1406	
Fe	57		ug/L		3988	
Co	59		ug/L		166	
Ni	60		ug/L		64	
Cu	63		ug/L		133	
Cu	65		ug/L		57	
Zn	66		ug/L		103	
Zn	67		ug/L		9351	
Zn	68		ug/L		882	
Ge	74		ug/L		150768	
As	75		ug/L		-148	
Se	77		ug/L		7340	
Se	82		ug/L		-12	
Kr	83		ug/L		61	
Sr	88		ug/L		95	
Y	89		ug/L		47	
Ag	107		ug/L		27	
Cd	111		ug/L		13	
Cd	114		ug/L		17	
In	115		ug/L		74065	
Sn	120		ug/L		155	
Sb	121		ug/L		321	
Sb	123		ug/L		233	
Ba	135		ug/L		13	
Ba	137		ug/L		20	
Ho	165		ug/L		12	
Lu	175		ug/L		85735	
Tl	205		ug/L		95	
Pb	208		ug/L		262	
Bi	209		ug/L		18	
U	238		ug/L		54	

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	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	0.9999
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	
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	0.9998
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	
U	238Linear Thru Zero	1.0000

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					
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					
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					
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#6 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Sunday, February 14, 2010 08:40:04

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 nolrs thtimozr.mth

Dataset File: C:\elandata\Dataset\100213\Standard 1.161

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	10.000	ug/L	1.427	8434	0.011
Be	9	10.000	ug/L	3.864	3086	0.004
B	11	20.000	ug/L	3.290	6027	0.007
Na	23	1000.000	ug/L	5.493	3095066	3.955
Mg	24	1000.000	ug/L	8.943	1996986	2.558
Al	27	1000.000	ug/L	4.482	2587167	3.311
P	31	1000.000	ug/L	2.627	145514	0.178
K	39	1000.000	ug/L	2.078	2999740	3.209
Ca	43	1000.000	ug/L	2.014	6702	0.008
> Sc	45		ug/L		780126	780125.953
V	51	10.000	ug/L	11.304	25620	0.038
Cr	52	10.000	ug/L	0.623	22557	0.029
Cr	53		ug/L		124412	-0.054
Mn	55	10.000	ug/L	0.699	36989	0.045
Fe	57	1000.000	ug/L	0.987	75467	0.091
Co	59	10.000	ug/L	0.543	25586	0.033
Ni	60	10.000	ug/L	2.200	5152	0.007
Cu	63		ug/L		11375	0.014
Cu	65	10.000	ug/L	0.863	5350	0.007
Zn	66	10.000	ug/L	1.560	3919	0.024
Zn	67		ug/L		7638	-0.015
Zn	68		ug/L		3445	0.015
> Ge	74		ug/L		162012	162011.811
As	75	10.000	ug/L	8.163	4688	0.030
Se	77		ug/L		5819	-0.013
Se	82	10.000	ug/L	3.403	406	0.003
Kr	83		ug/L		52	-0.000
Sr	88	10.000	ug/L	2.267	47548	0.586
Y	89		ug/L		54	0.000
Ag	107	10.000	ug/L	1.402	16830	0.208
Cd	111	10.000	ug/L	1.937	4107	0.051
Cd	114		ug/L		9256	0.114
> In	115		ug/L		80957	80957.120
Sn	120	10.000	ug/L	2.134	16276	0.199
Sb	121	10.000	ug/L	13.982	11646	0.140
Sb	123		ug/L		9024	0.108
Ba	135		ug/L		3948	0.042
Ba	137	10.000	ug/L	0.690	6832	0.073
Ho	165		ug/L		9	-0.000
> Lu	175		ug/L		93074	93074.177
Tl	205	10.000	ug/L	1.566	26507	0.284
Pb	208	10.000	ug/L	0.974	43297	0.462
Bi	209		ug/L		26	0.000
U	238	10.000	ug/L	1.277	42809	0.459

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	
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	
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	
U	238Linear Thru Zero	1.0000

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					
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					
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					
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#6 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Sunday, February 14, 2010 08:45:55

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 nohrs thtlimozr.mth

Dataset File: C:\elandata\Dataset\100213\Standard 2.162

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
|	Li	7	99.989	ug/L	0.438	77524	0.106
|	Be	9	100.010	ug/L	0.787	29254	0.040
|	B	11	200.120	ug/L	0.157	53579	0.072
|	Na	23	10008.458	ug/L	4.484	31703619	43.242
|	Mg	24	10004.974	ug/L	7.141	19748369	26.934
|	Al	27	10000.333	ug/L	11.640	24349811	33.225
|	P	31	9997.557	ug/L	1.066	1278971	1.736
|	K	39	10017.278	ug/L	12.252	28999828	38.863
|	Ca	43	10006.209	ug/L	1.096	62357	0.084
>	Sc	45		ug/L		732985	732985.301
|	V	51	99.914	ug/L	1.578	254990	0.354
|	Cr	52	100.028	ug/L	0.971	221956	0.303
|	Cr	53		ug/L		143909	-0.017
|	Mn	55	100.035	ug/L	1.135	346907	0.471
|	Fe	57	9999.336	ug/L	1.203	668109	0.906
|	Co	59	100.008	ug/L	1.549	240672	0.328
|	Ni	60	100.023	ug/L	0.615	48981	0.067
|	Cu	63		ug/L		109027	0.149
|	Cu	65	100.051	ug/L	1.605	52459	0.072
|	Zn	66	100.037	ug/L	0.778	36566	0.244
|	Zn	67		ug/L		12658	0.023
|	Zn	68		ug/L		26219	0.170
>	Ge	74		ug/L		149327	149326.967
|	As	75	99.991	ug/L	0.563	44117	0.296
|	Se	77		ug/L		8424	0.008
|	Se	82	100.040	ug/L	2.902	4010	0.027
|	Kr	83		ug/L		74	0.000
|	Sr	88	100.015	ug/L	2.153	450724	5.951
|	Y	89		ug/L		103	0.001
|	Ag	107	100.025	ug/L	0.684	161353	2.130
|	Cd	111	100.045	ug/L	0.538	40154	0.530
|	Cd	114		ug/L		90762	1.198
>	In	115		ug/L		75751	75751.495
|	Sn	120	100.057	ug/L	0.912	160022	2.111
|	Sb	121	100.170	ug/L	13.794	127696	1.686
|	Sb	123		ug/L		99704	1.316
|	Ba	135		ug/L		38574	0.431
|	Ba	137	100.026	ug/L	1.887	67154	0.751
|	Ho	165		ug/L		11	-0.000
>	Lu	175		ug/L		89389	89389.155
|	Tl	205	100.001	ug/L	1.052	253811	2.839
|	Pb	208	99.981	ug/L	0.531	405513	4.534
|	Bi	209		ug/L		49	0.000
|	U	238	99.967	ug/L	1.527	397398	4.446

Calibration

Analyte	Mass Curve 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	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
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	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

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				
|	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				
|	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				
|	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#6 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Sunday, February 14, 2010 08:51:47

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 nohrs thtimozr.mth

Dataset File: C:\elandata\Dataset\100213\QC Std 1.163

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	49.375	ug/L	1.875	38526	0.052
Be	9	50.503	ug/L	0.683	14850	0.020
B	11	101.246	ug/L	1.674	27585	0.037
Na	23	4488.161	ug/L	5.348	14288425	19.391
Mg	24	4968.345	ug/L	3.064	9852702	13.375
Al	27	4906.380	ug/L	5.528	12007871	16.301
P	31	5145.933	ug/L	0.408	664602	0.894
K	39	4870.683	ug/L	3.118	14387512	18.896
Ca	43	4918.646	ug/L	0.489	31057	0.041
> Sc	45		ug/L		736677	736677.221
V	51	50.177	ug/L	1.807	126690	0.178
Cr	52	51.142	ug/L	0.672	113863	0.155
Cr	53		ug/L		137812	-0.027
Mn	55	51.063	ug/L	0.579	178676	0.241
Fe	57	5036.724	ug/L	0.457	340307	0.456
Co	59	49.542	ug/L	1.424	119952	0.163
Ni	60	51.970	ug/L	2.381	25607	0.035
Cu	63		ug/L		56145	0.076
Cu	65	50.200	ug/L	0.450	26489	0.036
Zn	66	50.085	ug/L	1.332	18881	0.122
Zn	67		ug/L		9697	0.001
Zn	68		ug/L		13900	0.085
> Ge	74		ug/L		153596	153595.924
As	75	45.772	ug/L	1.176	20693	0.136
Se	77		ug/L		7145	-0.002
Se	82	49.587	ug/L	2.268	2038	0.013
Kr	83		ug/L		69	0.000
Sr	88	50.315	ug/L	1.460	231845	2.994
Y	89		ug/L		72	0.000
Ag	107	51.133	ug/L	0.642	84312	1.089
Cd	111	49.043	ug/L	1.566	20125	0.260
Cd	114		ug/L		45614	0.589
> In	115		ug/L		77414	77414.415
Sn	120	49.625	ug/L	0.875	81207	1.047
Sb	121	48.256	ug/L	13.530	63144	0.812
Sb	123		ug/L		48864	0.629
Ba	135		ug/L		19896	0.224
Ba	137	51.387	ug/L	0.456	34289	0.386
Ho	165		ug/L		16	0.000
> Lu	175		ug/L		88794	88793.688
Tl	205	48.554	ug/L	1.277	122475	1.378
Pb	208	50.922	ug/L	1.078	205290	2.309
Bi	209		ug/L		58	0.000
U	238	53.640	ug/L	0.465	211865	2.386

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	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
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	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Li	7	98.750				
Be	9	101.005				
B	11	101.246				
Na	23	89.763				
Mg	24	99.367				
Al	27	97.156				
P	31	102.919				
K	39	97.414				
Ca	43	98.373				
> Sc	45		102.0			
V	51	100.353				
Cr	52	102.285				
Cr	53					
Mn	55	102.126				
Fe	57	100.734				
Co	59	99.083				
Ni	60	103.939				
Cu	63					
Cu	65	100.401				
Zn	66	100.169				
Zn	67					
Zn	68					
> Ge	74		101.9			
As	75	91.545				
Se	77					
Se	82	99.175				
Kr	83					
Sr	88	100.629				
Y	89					
Ag	107	102.265				
Cd	111	98.087				
Cd	114					
> In	115		104.5			
Sn	120	99.251				
Sb	121	96.511				
Sb	123					
Ba	135					
Ba	137	102.773				
Ho	165					
> Lu	175		103.6			
Tl	205	97.109				
Pb	208	101.844				
Bi	209					
U	238	107.281				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 1	Na	23	ICV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Sunday, February 14, 2010 08:57:42

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 nohrs thtimozr.mth

Dataset File: C:\elandata\Dataset\100213\QC Std 2.164

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Li	7	0.019 ug/L	86.908	111	0.000
|	Be	9	0.008 ug/L	24.125	6	0.000
|	B	11	3.585 ug/L	21.390	1614	0.001
|	Na	23	-0.222 ug/L	805.903	8670	-0.001
|	Mg	24	1.710 ug/L	73.673	5334	0.005
|	Al	27	1.250 ug/L	85.280	7002	0.004
|	P	31	-2.210 ug/L	103.226	5968	-0.000
|	K	39	12.065 ug/L	143.319	491689	0.047
|	Ca	43	0.367 ug/L	1378.536	493	0.000
>	Sc	45	ug/L		720385	720384.704
|	V	51	0.020 ug/L	3777.424	-3981	0.000
|	Cr	52	0.635 ug/L	23.914	975	0.002
|	Cr	53	ug/L		160935	0.010
|	Mn	55	-0.022 ug/L	24.380	1328	-0.000
|	Fe	57	10.821 ug/L	12.640	4685	0.001
|	Co	59	0.011 ug/L	81.127	190	0.000
|	Ni	60	0.012 ug/L	156.747	69	0.000
|	Cu	63	ug/L		153	0.000
|	Cu	65	0.042 ug/L	25.205	79	0.000
|	Zn	66	0.036 ug/L	37.555	115	0.000
|	Zn	67	ug/L		9029	-0.002
|	Zn	68	ug/L		819	-0.000
>	Ge	74	ug/L		149320	149319.501
|	As	75	0.728 ug/L	31.277	176	0.002
|	Se	77	ug/L		8050	0.005
|	Se	82	0.186 ug/L	207.542	-4	0.000
|	Kr	83	ug/L		60	-0.000
[	Sr	88	0.001 ug/L	114.243	99	0.000
|	Y	89	ug/L		39	-0.000
|	Ag	107	0.007 ug/L	21.265	37	0.000
|	Cd	111	-0.014 ug/L	31.854	7	-0.000
|	Cd	114	ug/L		28	0.000
>	In	115	ug/L		72888	72888.061
|	Sn	120	0.556 ug/L	11.201	1007	0.012
|	Sb	121	2.702 ug/L	27.387	3633	0.045
|	Sb	123	ug/L		2781	0.035
[	Ba	135	ug/L		15	0.000
|	Ba	137	0.010 ug/L	62.364	25	0.000
|	Ho	165	ug/L		8	-0.000
>	Lu	175	ug/L		83153	83153.137
|	Tl	205	0.097 ug/L	13.995	321	0.003
|	Pb	208	0.004 ug/L	47.674	269	0.000
|	Bi	209	ug/L		22	0.000
|	U	238	0.093 ug/L	31.374	397	0.004

Calibration

Analyte	Mass Curve 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	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
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	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution %	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		99.7			
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		99.0			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Ag	107					
Cd	111					
Cd	114					
> In	115		98.4			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		97.0			
Tl	205					
Pb	208					
Bi	209					
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#6 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Sunday, February 14, 2010 09:03:37

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 nohrs tht\mozr.mth

Dataset File: C:\elandata\Dataset\100213\QC Std 3.165

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	11.126	ug/L	2.881	9127	0.012
Be	9	0.564	ug/L	0.405	177	0.000
B	11	17.102	ug/L	1.556	5461	0.006
Na	23	295.612	ug/L	6.053	990230	1.277
Mg	24	19.641	ug/L	11.003	42731	0.053
Al	27	32.805	ug/L	9.779	87938	0.109
P	31	47.222	ug/L	6.645	12951	0.008
K	39	324.403	ug/L	11.138	1454299	1.259
Ca	43	202.042	ug/L	4.846	1831	0.002
> Sc	45		ug/L		767730	767730.425
V	51	11.815	ug/L	3.679	27790	0.042
Cr	52	11.041	ug/L	4.597	25264	0.033
Cr	53		ug/L		131400	-0.043
Mn	55	5.652	ug/L	1.974	21937	0.027
Fe	57	110.787	ug/L	1.485	11946	0.010
Co	59	1.103	ug/L	2.468	2955	0.004
Ni	60	2.225	ug/L	2.398	1208	0.001
Cu	63		ug/L		1474	0.002
Cu	65	1.161	ug/L	5.812	698	0.001
Zn	66	11.161	ug/L	3.013	4433	0.027
Zn	67		ug/L		7865	-0.012
Zn	68		ug/L		3613	0.017
> Ge	74		ug/L		158785	158784.669
As	75	5.279	ug/L	8.672	2326	0.016
Se	77		ug/L		6003	-0.011
Se	82	5.278	ug/L	7.186	213	0.001
Kr	83		ug/L		54	-0.000
Sr	88	11.167	ug/L	3.579	53622	0.664
Y	89		ug/L		39	-0.000
Ag	107	0.997	ug/L	1.999	1740	0.021
Cd	111	1.032	ug/L	7.845	454	0.005
Cd	114		ug/L		1083	0.013
> In	115		ug/L		80580	80579.703
Sn	120	5.260	ug/L	2.179	9107	0.111
Sb	121	3.004	ug/L	10.235	4419	0.051
Sb	123		ug/L		3462	0.040
Ba	135		ug/L		880	0.009
Ba	137	2.204	ug/L	2.525	1538	0.017
Ho	165		ug/L		13	-0.000
> Lu	175		ug/L		91651	91651.392
Tl	205	1.084	ug/L	4.278	2920	0.031
Pb	208	2.249	ug/L	2.607	9624	0.102
Bi	209		ug/L		23	0.000
U	238	0.258	ug/L	2.707	1110	0.011

Calibration

Analyte	Mass Curve 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	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
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	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std	% Recovery	Int Std	% Recovery	Spike	% Recovery	Dilution	% Dil	Duplicate	Rel. % Difference
Li	7		111.255								
Be	9		112.778								
B	11		114.012								
Na	23		118.245								
Mg	24		130.943								
Al	27		109.350								
P	31		94.443								
K	39		108.134								
Ca	43		101.021								
> Sc	45					106.3					
V	51		118.153								
Cr	52		110.414								
Cr	53										
Mn	55		113.043								
Fe	57		110.787								
Co	59		110.287								
Ni	60		111.252								
Cu	63										
Cu	65		116.145								
Zn	66		111.610								
Zn	67										
Zn	68										
> Ge	74					105.3					
As	75		105.578								
Se	77										
Se	82		105.568								
Kr	83										
Sr	88		111.675								
Y	89										
Ag	107		99.657								
Cd	111		103.174								
Cd	114										
> In	115					108.8					
Sn	120		105.202								
Sb	121		100.136								
Sb	123										
Ba	135										
Ba	137		110.202								
Ho	165										
> Lu	175					106.9					
Tl	205		108.387								
Pb	208		112.453								
Bi	209										
U	238		129.090								

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 3	Mg	24	CRDL is out of limits

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Sunday, February 14, 2010 09:09:31

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 nohrs thtimozr.mth

Dataset File: C:\elandata\Dataset\100213\QC Std 4.166

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.103	ug/L	27.537	146	0.000
Be	9	0.082	ug/L	18.350	23	0.000
B	11	1.238	ug/L	18.939	840	0.000
Na	23	101383.850	ug/L	8.696	263520481	438.035
Mg	24	108053.223	ug/L	5.181	174985552	290.888
Al	27	105814.971	ug/L	5.332	211665182	351.564
P	31	115411.863	ug/L	2.637	12065582	20.040
K	39	98934.793	ug/L	1.691	231436613	383.824
Ca	43	96311.413	ug/L	0.977	489349	0.812
> Sc	45		ug/L		602145	602144.728
V	51	3.264	ug/L	9.139	3569	0.012
Cr	52	2.971	ug/L	5.797	5085	0.009
Cr	53		ug/L		118583	-0.017
Mn	55	6.097	ug/L	0.262	18468	0.029
Fe	57	91307.700	ug/L	2.671	4982993	8.274
Co	59	0.394	ug/L	1.217	917	0.001
Ni	60	4.312	ug/L	3.976	1785	0.003
Cu	63		ug/L		2947	0.005
Cu	65	6.213	ug/L	3.634	2720	0.004
Zn	66	6.744	ug/L	1.446	2155	0.016
Zn	67		ug/L		6692	-0.009
Zn	68		ug/L		947	0.002
> Ge	74		ug/L		125684	125684.452
As	75	0.474	ug/L	193.267	52	0.001
Se	77		ug/L		6389	0.002
Se	82	-1.557	ug/L	8.554	-63	-0.000
Kr	83		ug/L		143	0.001
Sr	88	3.094	ug/L	0.758	11872	0.184
Y	89		ug/L		164	0.002
Ag	107	0.512	ug/L	45.160	726	0.011
Cd	111	1.806	ug/L	20.027	625	0.010
Cd	114		ug/L		3302	0.051
> In	115		ug/L		64043	64042.806
Sn	120	0.492	ug/L	0.469	798	0.010
Sb	121	0.580	ug/L	31.398	904	0.010
Sb	123		ug/L		704	0.008
Ba	135		ug/L		283	0.004
Ba	137	0.764	ug/L	2.348	462	0.006
Ho	165		ug/L		1771	0.023
> Lu	175		ug/L		77413	77413.401
Tl	205	0.024	ug/L	17.118	139	0.001
Pb	208	0.254	ug/L	2.727	1127	0.012
Bi	209		ug/L		595	0.007
U	238	0.006	ug/L	17.944	70	0.000

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	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
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	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

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	101.384				
Mg	24	108.053				
Al	27	105.815				
P	31	115.412				
K	39	98.935				
Ca	43	96.311				
> Sc	45		83.4			
V	51					
Cr	52	90.030				
Cr	53					
Mn	55	105.117				
Fe	57	91.308				
Co	59	167.624				
Ni	60	130.273				
Cu	63					
Cu	65	186.018				
Zn	66	179.356				
Zn	67					
Zn	68					
> Ge	74		83.4			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88	104.542				
Y	89					
Ag	107					
Cd	111	406.831				
Cd	114					
> In	115		86.5			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137	95.744				
Ho	165					
> Lu	175		90.3			
Tl	205					
Pb	208	134.186				
Bi	209					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 4	Cu	65	ICSA is out of limits

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Sunday, February 14, 2010 09:15:25

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 noirs thtimozr.mth

Dataset File: C:\elandata\Dataset\100213\QC Std 5.167

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	20.703	ug/L	1.985	12851	0.022
Be	9	20.892	ug/L	1.754	4872	0.008
B	11	21.164	ug/L	0.545	5009	0.008
Na	23	96103.404	ug/L	1.347	242469278	415.221
Mg	24	109497.904	ug/L	3.221	172110789	294.777
Al	27	104676.273	ug/L	7.762	203113053	347.780
P	31	116907.168	ug/L	0.842	11857671	20.299
K	39	104084.569	ug/L	6.046	236157515	403.803
Ca	43	97241.519	ug/L	2.134	479175	0.820
> Sc	45		ug/L		583910	583910.203
V	51	24.448	ug/L	4.174	47240	0.087
Cr	52	25.581	ug/L	1.850	44973	0.078
Cr	53		ug/L		125338	0.001
Mn	55	28.227	ug/L	1.731	78796	0.133
Fe	57	93489.526	ug/L	0.483	4950113	8.472
Co	59	22.513	ug/L	1.694	43274	0.074
Ni	60	26.110	ug/L	2.664	10225	0.017
Cu	63		ug/L		21391	0.036
Cu	65	27.768	ug/L	1.733	11634	0.020
Zn	66	27.765	ug/L	0.794	8242	0.068
Zn	67		ug/L		7890	0.004
Zn	68		ug/L		5225	0.038
> Ge	74		ug/L		120412	120411.587
As	75	23.504	ug/L	2.572	8273	0.070
Se	77		ug/L		7150	0.011
Se	82	19.915	ug/L	4.323	636	0.005
Kr	83		ug/L		133	0.001
Sr	88	26.273	ug/L	2.776	97251	1.563
Y	89		ug/L		150	0.002
Ag	107	22.072	ug/L	0.432	29246	0.470
Cd	111	22.434	ug/L	1.868	7398	0.119
Cd	114		ug/L		19684	0.316
> In	115		ug/L		62180	62180.393
Sn	120	23.687	ug/L	1.760	31194	0.500
Sb	121	27.912	ug/L	2.475	29463	0.470
Sb	123		ug/L		22769	0.363
Ba	135		ug/L		7532	0.100
Ba	137	23.258	ug/L	1.095	13192	0.175
Ho	165		ug/L		1729	0.023
> Lu	175		ug/L		75417	75417.303
Tl	205	20.321	ug/L	0.789	43590	0.577
Pb	208	22.063	ug/L	0.888	75683	1.000
Bi	209		ug/L		645	0.008
U	238	23.318	ug/L	1.213	78255	1.037

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	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
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	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Duplicate Rel. % Difference
Li	7	103.514				
Be	9	104.461				
B	11	105.819				
Na	23	96.103				
Mg	24	109.498				
Al	27	104.676				
P	31	116.907				
K	39	104.085				
Ca	43	97.242				
> Sc	45		80.8			
V	51	122.240				
Cr	52	109.789				
Cr	53					
Mn	55	109.406				
Fe	57	93.490				
Co	59	111.174				
Ni	60	112.010				
Cu	63					
Cu	65	121.256				
Zn	66	116.858				
Zn	67					
Zn	68					
> Ge	74		79.9			
As	75	117.520				
Se	77					
Se	82	99.574				
Kr	83					
Sr	88	114.428				
Y	89					
Ag	107	110.360				
Cd	111	109.732				
Cd	114					
> In	115		84.0			
Sn	120	118.436				
Sb	121	139.558				
Sb	123					
Ba	135					
Ba	137	112.522				
Ho	165					
> Lu	175		88.0			
Tl	205	101.607				
Pb	208	109.222				
Bi	209					
U	238	116.588				

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	Cu	65	ICSAB is out of limits
	Ge	74	
QC Std 5	Sb	121	ICSAB is out of limits

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, February 14, 2010 09:21:18

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 nohrs thtimozr.mth

Dataset File: C:\elandata\Dataset\100213\QC Std 6.168

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	46.110	ug/L	1.069	33867	0.049
Be	9	47.417	ug/L	0.266	13122	0.019
B	11	92.748	ug/L	4.120	23838	0.033
Na	23	5086.161	ug/L	5.821	15241515	21.975
Mg	24	5221.790	ug/L	6.367	9747242	14.057
Al	27	5015.062	ug/L	3.040	11556880	16.662
P	31	5209.242	ug/L	0.577	633111	0.905
K	39	4651.743	ug/L	2.503	12954381	18.047
Ca	43	4875.982	ug/L	1.200	28978	0.041
> Sc	45		ug/L		693318	693317.958
V	51	51.778	ug/L	1.945	123149	0.183
Cr	52	51.878	ug/L	0.204	108705	0.157
Cr	53		ug/L		145580	-0.004
Mn	55	51.461	ug/L	1.138	169448	0.242
Fe	57	5098.651	ug/L	1.381	324153	0.462
Co	59	50.577	ug/L	2.254	115228	0.166
Ni	60	52.987	ug/L	0.692	24574	0.035
Cu	63		ug/L		54363	0.078
Cu	65	52.069	ug/L	1.912	25854	0.037
Zn	66	50.038	ug/L	2.346	18053	0.122
Zn	67		ug/L		9772	0.004
Zn	68		ug/L		13398	0.085
> Ge	74		ug/L		146988	146987.800
As	75	47.809	ug/L	1.530	20688	0.142
Se	77		ug/L		7823	0.005
Se	82	49.260	ug/L	2.274	1937	0.013
Kr	83		ug/L		58	-0.000
Sr	88	51.480	ug/L	1.053	226578	3.063
Y	89		ug/L		61	0.000
Ag	107	51.762	ug/L	0.904	81527	1.102
Cd	111	49.396	ug/L	1.022	19359	0.262
Cd	114		ug/L		44468	0.601
> In	115		ug/L		73947	73947.390
Sn	120	50.416	ug/L	0.553	78796	1.064
Sb	121	46.359	ug/L	15.874	57916	0.780
Sb	123		ug/L		44633	0.601
Ba	135		ug/L		19169	0.222
Ba	137	51.178	ug/L	1.531	33131	0.384
Ho	165		ug/L		16	0.000
> Lu	175		ug/L		86159	86158.978
Tl	205	48.873	ug/L	2.277	119601	1.387
Pb	208	51.262	ug/L	1.042	200507	2.324
Bi	209		ug/L		52	0.000
U	238	53.375	ug/L	1.813	204518	2.374

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	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
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	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Li	7	92.219				
|	Be	9	94.833				
|	B	11	92.748				
|	Na	23	101.723				
|	Mg	24	104.436				
|	Al	27	99.308				
|	P	31	104.185				
|	K	39	93.035				
|	Ca	43	97.520				
>	Sc	45		96.0			
|	V	51	103.556				
|	Cr	52	103.757				
|	Cr	53					
|	Mn	55	102.922				
|	Fe	57	101.973				
|	Co	59	101.155				
|	Ni	60	105.973				
|	Cu	63					
|	Cu	65	104.139				
[	Zn	66	100.076				
|	Zn	67					
|	Zn	68					
>	Ge	74		97.5			
|	As	75	95.618				
|	Se	77					
|	Se	82	98.520				
|	Kr	83					
[	Sr	88	102.959				
|	Y	89					
|	Ag	107	103.524				
|	Cd	111	98.792				
|	Cd	114					
>	In	115		99.8			
|	Sn	120	100.833				
|	Sb	121	92.718				
|	Sb	123					
[	Ba	135					
|	Ba	137	102.355				
|	Ho	165					
>	Lu	175		100.5			
|	Tl	205	97.747				
|	Pb	208	102.523				
|	Bi	209					
|	U	238	106.750				

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, February 14, 2010 09:27:12

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 nohrs thtimozr.mth

Dataset File: C:\elandata\Dataset\100213\QC Std 7.169

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.060	ug/L	30.071	136	0.000
Be	9	0.008	ug/L	229.238	6	0.000
B	11	1.993	ug/L	32.493	1152	0.001
Na	23	5.285	ug/L	16.535	24688	0.023
Mg	24	1.131	ug/L	97.073	4001	0.003
Al	27	1.525	ug/L	41.208	7335	0.005
P	31	-4.010	ug/L	14.268	5506	-0.001
K	39	5.372	ug/L	49.597	453761	0.021
Ca	43	2.127	ug/L	165.055	483	0.000
> Sc	45		ug/L		690521	690520.863
V	51	-0.789	ug/L	26.229	-5803	-0.003
Cr	52	0.189	ug/L	31.145	-3	0.001
Cr	53		ug/L		170008	0.032
Mn	55	-0.025	ug/L	23.299	1264	-0.000
Fe	57	21.962	ug/L	13.387	5186	0.002
Co	59	0.006	ug/L	98.216	171	0.000
Ni	60	0.034	ug/L	30.861	77	0.000
Cu	63		ug/L		100	-0.000
Cu	65	0.065	ug/L	26.948	87	0.000
Zn	66	0.019	ug/L	123.389	106	0.000
Zn	67		ug/L		8931	-0.001
Zn	68		ug/L		850	0.000
> Ge	74		ug/L		145217	145217.129
As	75	0.444	ug/L	132.969	48	0.001
Se	77		ug/L		9231	0.015
Se	82	0.144	ug/L	115.067	-6	0.000
Kr	83		ug/L		54	-0.000
Sr	88	0.001	ug/L	277.676	100	0.000
Y	89		ug/L		29	-0.000
Ag	107	0.008	ug/L	84.419	39	0.000
Cd	111	-0.005	ug/L	741.103	11	-0.000
Cd	114		ug/L		20	0.000
> In	115		ug/L		73446	73445.903
Sn	120	0.403	ug/L	20.271	777	0.008
Sb	121	2.050	ug/L	33.592	2849	0.034
Sb	123		ug/L		2180	0.027
Ba	135		ug/L		22	0.000
Ba	137	0.019	ug/L	36.910	31	0.000
Ho	165		ug/L		10	-0.000
> Lu	175		ug/L		82929	82929.245
Tl	205	0.089	ug/L	27.653	303	0.003
Pb	208	0.005	ug/L	75.701	274	0.000
Bi	209		ug/L		19	0.000
U	238	0.077	ug/L	25.763	337	0.003

Calibration

Analyte	Mass Curve 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	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
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	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution %	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		95.6			
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		96.3			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Ag	107					
Cd	111					
Cd	114					
> In	115		99.2			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		96.7			
Tl	205					
Pb	208					
Bi	209					
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#6 - Summary Report

Sample ID: 1202024819

Sample Date/Time: Sunday, February 14, 2010 09:33:07

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 945425|2|rmj

Method File: c:\elandata\Method\6020 nolrs thtimozr.mth

Dataset File: C:\elandata\Dataset\100213\1202024819.170

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Li	7	0.024 ug/L	91.673	105	0.000
|	Be	9	0.009 ug/L	184.582	6	0.000
|	B	11	0.636 ug/L	17.459	775	0.000
|	Na	23	12.276 ug/L	21.343	43400	0.053
|	Mg	24	5.563 ug/L	16.019	11671	0.015
|	Al	27	20.333 ug/L	17.391	48082	0.068
|	P	31	40.220 ug/L	7.671	10301	0.007
|	K	39	9.828 ug/L	98.487	443801	0.038
|	Ca	43	18.697 ug/L	20.261	552	0.000
>	Sc	45	ug/L		658025	658024.658
|	V	51	1.475 ug/L	59.128	-251	0.005
|	Cr	52	0.230 ug/L	47.256	79	0.001
|	Cr	53	ug/L		133505	-0.011
|	Mn	55	0.687 ug/L	7.351	3409	0.003
|	Fe	57	78.041 ug/L	2.884	8286	0.007
|	Co	59	0.028 ug/L	15.688	212	0.000
|	Ni	60	0.331 ug/L	2.144	204	0.000
|	Cu	63	ug/L		756	0.001
|	Cu	65	0.736 ug/L	3.808	398	0.001
|	Zn	66	3.489 ug/L	1.604	1263	0.009
|	Zn	67	ug/L		7249	-0.009
|	Zn	68	ug/L		1475	0.005
>	Ge	74	ug/L		137372	137371.698
|	As	75	0.178 ug/L	346.982	-63	0.001
|	Se	77	ug/L		6626	-0.000
|	Se	82	0.569 ug/L	7.372	10	0.000
|	Kr	83	ug/L		50	-0.000
|	Sr	88	0.048 ug/L	2.006	287	0.003
|	Y	89	ug/L		57	0.000
|	Ag	107	0.021 ug/L	38.342	56	0.000
|	Cd	111	0.143 ug/L	15.985	64	0.001
|	Cd	114	ug/L		66	0.001
>	In	115	ug/L		68981	68981.365
|	Sn	120	0.529 ug/L	1.213	914	0.011
|	Sb	121	0.336 ug/L	21.262	688	0.006
|	Sb	123	ug/L		544	0.005
|	Ba	135	ug/L		126	0.001
|	Ba	137	0.322 ug/L	9.445	210	0.002
|	Ho	165	ug/L		13	0.000
>	Lu	175	ug/L		79433	79433.361
|	Tl	205	0.066 ug/L	17.404	236	0.002
|	Pb	208	0.109 ug/L	9.425	637	0.005
|	Bi	209	ug/L		30	0.000
|	U	238	0.050 ug/L	2.853	227	0.002

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	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
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	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

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		91.1			
|	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		91.1			
|	As	75					
|	Se	77					
|	Se	82					
|	Kr	83					
[	Sr	88					
|	Y	89					
|	Ag	107					
|	Cd	111					
|	Cd	114					
>	In	115		93.1			
|	Sn	120					
|	Sb	121					
|	Sb	123					
[	Ba	135					
|	Ba	137					
|	Ho	165					
>	Lu	175		92.6			
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	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#6 - Summary Report

Sample ID: 1202024820

Sample Date/Time: Sunday, February 14, 2010 09:39:02

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 945425[40]rmj

Method File: c:\elandata\Method\6020 nolrs thtimozr.mth

Dataset File: C:\elandata\Dataset\100213\1202024820.171

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	2.676	ug/L	0.640	2077	0.003
Be	9	20.960	ug/L	2.618	5869	0.008
B	11	41.636	ug/L	5.447	11188	0.015
Na	23	292.380	ug/L	9.614	895388	1.263
Mg	24	1050.003	ug/L	1.313	1984182	2.827
Al	27	3281.347	ug/L	5.391	7646434	10.902
P	31	228.949	ug/L	2.678	33957	0.040
K	39	1115.742	ug/L	4.901	3480963	4.329
Ca	43	2700.759	ug/L	0.532	16451	0.023
> Sc	45		ug/L		701335	701335.181
V	51	29.220	ug/L	1.727	68588	0.103
Cr	52	66.939	ug/L	2.241	141984	0.203
Cr	53		ug/L		189233	0.056
Mn	55	151.206	ug/L	1.213	500957	0.712
Fe	57	4695.108	ug/L	1.112	302242	0.425
Co	59	26.547	ug/L	1.128	61254	0.087
Ni	60	38.655	ug/L	2.744	18148	0.026
Cu	63		ug/L		49436	0.070
Cu	65	46.964	ug/L	1.470	23592	0.034
Zn	66	151.830	ug/L	1.640	54011	0.371
Zn	67		ug/L		17689	0.060
Zn	68		ug/L		39454	0.265
> Ge	74		ug/L		145482	145482.490
As	75	27.233	ug/L	7.845	11602	0.081
Se	77		ug/L		11247	0.029
Se	82	78.089	ug/L	4.085	3046	0.021
Kr	83		ug/L		59	0.000
Sr	88	62.603	ug/L	2.762	268563	3.725
Y	89		ug/L		14050	0.194
Ag	107	5.680	ug/L	2.024	8744	0.121
Cd	111	15.748	ug/L	1.331	6025	0.083
Cd	114		ug/L		14095	0.195
> In	115		ug/L		72079	72079.029
Sn	120	8.318	ug/L	0.732	12799	0.175
Sb	121	19.743	ug/L	1.416	24256	0.332
Sb	123		ug/L		18640	0.255
Ba	135		ug/L		19061	0.233
Ba	137	53.357	ug/L	1.810	32833	0.401
Ho	165		ug/L		577	0.007
> Lu	175		ug/L		81877	81877.456
Tl	205	33.412	ug/L	0.370	77751	0.949
Pb	208	24.114	ug/L	0.827	89780	1.093
Bi	209		ug/L		778	0.009
U	238	0.535	ug/L	1.927	2000	0.024

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	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
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	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

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		97.1			
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		96.5			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Ag	107					
Cd	111					
Cd	114					
> In	115		97.3			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		95.5			
Tl	205					
Pb	208					
Bi	209					
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#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, February 14, 2010 09:44:56

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 nohrs thtimozr.mth

Dataset File: C:\elandata\Dataset\100213\QC Std 6.172

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	47.387	ug/L	2.051	36792	0.050
Be	9	48.156	ug/L	2.954	14086	0.019
B	11	93.868	ug/L	3.857	25489	0.034
Na	23	4934.239	ug/L	11.889	15606106	21.319
Mg	24	5096.815	ug/L	5.641	10053857	13.721
Al	27	4931.234	ug/L	4.187	12017151	16.384
P	31	5090.901	ug/L	1.942	654435	0.884
K	39	4743.994	ug/L	2.720	13953708	18.405
Ca	43	4842.093	ug/L	2.055	30430	0.041
Sc	45		ug/L		733332	733331.905
V	51	50.024	ug/L	3.522	125584	0.177
Cr	52	50.523	ug/L	2.966	111911	0.153
Cr	53		ug/L		145784	-0.015
Mn	55	50.747	ug/L	2.792	176677	0.239
Fe	57	4981.042	ug/L	3.040	334808	0.451
Co	59	49.317	ug/L	2.087	118800	0.162
Ni	60	51.182	ug/L	3.729	25093	0.034
Cu	63		ug/L		54798	0.075
Cu	65	49.512	ug/L	2.456	25992	0.035
Zn	66	49.823	ug/L	1.699	18488	0.122
Zn	67		ug/L		10006	0.004
Zn	68		ug/L		13859	0.086
Ge	74		ug/L		151233	151232.623
As	75	47.009	ug/L	0.590	20928	0.139
Se	77		ug/L		7787	0.003
Se	82	48.207	ug/L	4.221	1950	0.013
Kr	83		ug/L		59	-0.000
Sr	88	50.390	ug/L	2.103	230077	2.998
Y	89		ug/L		65	0.000
Ag	107	50.663	ug/L	0.487	82808	1.079
Cd	111	48.970	ug/L	2.050	19911	0.259
Cd	114		ug/L		45878	0.598
In	115		ug/L		76740	76740.229
Sn	120	49.149	ug/L	2.774	79674	1.037
Sb	121	45.561	ug/L	17.819	58954	0.767
Sb	123		ug/L		45792	0.596
Ba	135		ug/L		19371	0.220
Ba	137	51.450	ug/L	1.051	33990	0.386
Ho	165		ug/L		18	0.000
Lu	175		ug/L		87919	87919.437
Tl	205	48.387	ug/L	0.844	120846	1.374
Pb	208	51.138	ug/L	0.457	204125	2.319
Bi	209		ug/L		66	0.001
U	238	53.581	ug/L	1.265	209504	2.383

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	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
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	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Li	7	94.775				
Be	9	96.313				
B	11	93.868				
Na	23	98.685				
Mg	24	101.936				
Al	27	97.648				
P	31	101.818				
K	39	94.880				
Ca	43	96.842				
> Sc	45		101.5			
V	51	100.048				
Cr	52	101.045				
Cr	53					
Mn	55	101.494				
Fe	57	99.621				
Co	59	98.635				
Ni	60	102.364				
Cu	63					
Cu	65	99.024				
Zn	66	99.647				
Zn	67					
Zn	68					
> Ge	74		100.3			
As	75	94.018				
Se	77					
Se	82	96.413				
Kr	83					
Sr	88	100.779				
Y	89					
Ag	107	101.326				
Cd	111	97.940				
Cd	114					
> In	115		103.6			
Sn	120	98.297				
Sb	121	91.122				
Sb	123					
Ba	135					
Ba	137	102.900				
Ho	165					
> Lu	175		102.5			
Tl	205	96.775				
Pb	208	102.275				
Bi	209					
U	238	107.162				

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, February 14, 2010 09:50:50

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 nohrs thtimozr.mth

Dataset File: C:\elandata\Dataset\100213\QC Std 7.173

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.008	ug/L	241.412	98	0.000
Be	9	0.016	ug/L	106.320	8	0.000
B	11	2.167	ug/L	21.837	1186	0.001
Na	23	2.415	ug/L	72.664	16010	0.010
Mg	24	1.140	ug/L	2.966	4001	0.003
Al	27	0.376	ug/L	234.598	4668	0.001
P	31	-2.094	ug/L	44.135	5694	-0.000
K	39	22.894	ug/L	56.620	497210	0.089
Ca	43	6.268	ug/L	152.122	503	0.000
Sc	45		ug/L		685219	685219.358
V	51	-0.535	ug/L	267.830	-5124	-0.002
Cr	52	0.319	ug/L	50.087	271	0.001
Cr	53		ug/L		170444	0.035
Mn	55	-0.006	ug/L	31.848	1315	-0.000
Fe	57	19.081	ug/L	11.481	4968	0.002
Co	59	0.015	ug/L	19.324	190	0.000
Ni	60	0.023	ug/L	85.235	71	0.000
Cu	63		ug/L		101	-0.000
Cu	65	0.041	ug/L	75.795	74	0.000
Zn	66	0.043	ug/L	51.289	112	0.000
Zn	67		ug/L		8954	0.001
Zn	68		ug/L		853	0.000
Ge	74		ug/L		142953	142953.478
As	75	0.742	ug/L	63.710	173	0.002
Se	77		ug/L		9124	0.015
Se	82	0.973	ug/L	22.802	26	0.000
Kr	83		ug/L		58	0.000
Sr	88	0.000	ug/L	767.981	95	0.000
Y	89		ug/L		23	-0.000
Ag	107	0.009	ug/L	48.322	41	0.000
Cd	111	0.004	ug/L	516.024	14	0.000
Cd	114		ug/L		19	0.000
In	115		ug/L		72285	72284.587
Sn	120	0.402	ug/L	23.007	762	0.008
Sb	121	1.971	ug/L	38.066	2703	0.033
Sb	123		ug/L		2134	0.026
Ba	135		ug/L		18	0.000
Ba	137	0.010	ug/L	66.899	25	0.000
Ho	165		ug/L		8	-0.000
Lu	175		ug/L		81702	81702.122
Tl	205	0.121	ug/L	13.913	372	0.003
Pb	208	0.017	ug/L	13.641	315	0.001
Bi	209		ug/L		23	0.000
U	238	0.073	ug/L	35.111	316	0.003

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	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
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	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

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						94.9
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						94.8
As	75						
Se	77						
Se	82						
Kr	83						
Sr	88						
Y	89						
Ag	107						
Cd	111						
Cd	114						
> In	115						97.6
Sn	120						
Sb	121						
Sb	123						
Ba	135						
Ba	137						
Ho	165						
> Lu	175						95.3
Tl	205						
Pb	208						
Bi	209						
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#6 - Summary Report

Sample ID: 245394001

Sample Date/Time: Sunday, February 14, 2010 09:56:45

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945425[2]rmj

Method File: c:\elandata\Method\6020 nohrs thtimozr.mth

Dataset File: C:\elandata\Dataset\100213\245394001.174

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	90.187	ug/L	3.743	65247	0.095
Be	9	11.665	ug/L	3.315	3187	0.005
B	11	19.318	ug/L	0.958	5411	0.007
Na	23	500.850	ug/L	3.698	1488793	2.164
Mg	24	11260.016	ug/L	12.835	20748287	30.313
Al	27	75991.139	ug/L	4.983	172705485	252.476
P	31	314.501	ug/L	0.447	43280	0.055
K	39	7971.091	ug/L	8.744	21581267	30.924
Ca	43	8496.773	ug/L	0.753	49467	0.072
> Sc	45		ug/L		683937	683936.913
V	51	79.229	ug/L	0.668	187913	0.280
Cr	52	45.662	ug/L	0.743	94339	0.139
Cr	53		ug/L		120611	-0.038
Mn	55	746.103	ug/L	1.933	2405446	3.515
Fe	57	45345.460	ug/L	1.253	2814035	4.109
Co	59	12.870	ug/L	2.304	29046	0.042
Ni	60	36.630	ug/L	1.642	16779	0.024
Cu	63		ug/L		640191	0.936
Cu	65	650.368	ug/L	1.128	317948	0.465
Zn	66	178.901	ug/L	1.614	55865	0.437
Zn	67		ug/L		15935	0.063
Zn	68		ug/L		41925	0.322
> Ge	74		ug/L		127745	127744.965
As	75	11.863	ug/L	5.235	4369	0.035
Se	77		ug/L		5104	-0.009
Se	82	0.427	ug/L	188.416	5	0.000
Kr	83		ug/L		143	0.001
Sr	88	77.484	ug/L	1.657	301263	4.610
Y	89		ug/L		213185	3.262
Ag	107	1.028	ug/L	2.271	1454	0.022
Cd	111	1.671	ug/L	6.548	590	0.009
Cd	114		ug/L		357	0.005
> In	115		ug/L		65343	65342.654
Sn	120	3.029	ug/L	3.353	4310	0.064
Sb	121	2.397	ug/L	3.076	2919	0.040
Sb	123		ug/L		2260	0.031
Ba	135		ug/L		155152	1.983
Ba	137	455.229	ug/L	1.430	267486	3.419
Ho	165		ug/L		8370	0.107
> Lu	175		ug/L		78237	78236.793
Tl	205	0.696	ug/L	3.152	1633	0.020
Pb	208	538.957	ug/L	1.571	1912077	24.439
Bi	209		ug/L		2634	0.033
U	238	268.160	ug/L	1.842	932917	11.926

Sample ID: 245394001

Report Date/Time: Sunday, February 14, 2010 09:59:16

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	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
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	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution %	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		94.7			
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		84.7			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Ag	107					
Cd	111					
Cd	114					
> In	115		88.2			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		91.3			
Tl	205					
Pb	208					
Bi	209					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: 1202024821

Sample Date/Time: Sunday, February 14, 2010 10:02:40

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 945425[2]rmj

Method File: c:\elandata\Method\6020 nohrs thtimozr.mth

Dataset File: C:\elandata\Dataset\100213\1202024821.175

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	83.824	ug/L	1.552	62527	0.089
Be	9	10.651	ug/L	1.633	3000	0.004
B	11	26.653	ug/L	3.229	7442	0.010
Na	23	439.240	ug/L	10.898	1347880	1.898
Mg	24	13305.828	ug/L	7.009	25247915	35.820
Al	27	112154.988	ug/L	5.357	262859174	372.628
P	31	330.675	ug/L	1.448	46594	0.057
K	39	9981.322	ug/L	6.427	27763401	38.723
Ca	43	11865.842	ug/L	0.231	71028	0.100
Sc	45		ug/L		705079	705079.209
V	51	106.138	ug/L	0.486	260853	0.376
Cr	52	56.167	ug/L	0.974	119712	0.170
Cr	53		ug/L		112678	-0.054
Mn	55	514.827	ug/L	0.663	1711607	2.426
Fe	57	57363.935	ug/L	1.111	3668884	5.198
Co	59	17.153	ug/L	0.774	39852	0.056
Ni	60	40.091	ug/L	0.604	18923	0.027
Cu	63		ug/L		201665	0.286
Cu	65	194.005	ug/L	1.488	97804	0.139
Zn	66	168.497	ug/L	1.206	53780	0.411
Zn	67		ug/L		15396	0.056
Zn	68		ug/L		41898	0.315
Ge	74		ug/L		130567	130567.419
As	75	14.650	ug/L	5.658	5543	0.043
Se	77		ug/L		4505	-0.014
Se	82	-0.139	ug/L	123.663	-15	-0.000
Kr	83		ug/L		175	0.001
Sr	88	107.860	ug/L	0.962	427279	6.418
Y	89		ug/L		185873	2.792
Ag	107	0.681	ug/L	1.334	990	0.014
Cd	111	1.568	ug/L	12.754	564	0.008
Cd	114		ug/L		312	0.004
In	115		ug/L		66561	66561.336
Sn	120	1.102	ug/L	4.509	1687	0.023
Sb	121	0.908	ug/L	4.906	1305	0.015
Sb	123		ug/L		1010	0.012
Ba	135		ug/L		196338	2.503
Ba	137	562.265	ug/L	1.178	331232	4.223
Ho	165		ug/L		7498	0.095
Lu	175		ug/L		78440	78439.924
Tl	205	0.828	ug/L	6.432	1928	0.023
Pb	208	205.856	ug/L	2.727	732225	9.335
Bi	209		ug/L		2301	0.029
U	238	170.922	ug/L	3.230	596056	7.601

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	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
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	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

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			97.6		
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			86.6		
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Ag	107					
Cd	111					
Cd	114					
In	115			89.9		
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
Lu	175			91.5		
Tl	205					
Pb	208					
Bi	209					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)
	V	51	Sample is out of limits (over linear range)
	Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: 1202024822

Sample Date/Time: Sunday, February 14, 2010 10:08:33

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 945425[2]rmj

Method File: c:\elandata\Method\6020 noirs thtimozr.mth

Dataset File: C:\elandata\Dataset\100213\1202024822.176

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	88.730	ug/L	1.718	63654	0.094
Be	9	43.613	ug/L	2.573	11803	0.017
B	11	79.183	ug/L	3.242	19997	0.029
Na	23	1531.605	ug/L	1.007	4495969	6.617
Mg	24	9596.456	ug/L	15.038	17498555	25.834
Al	27	70867.848	ug/L	1.810	159639733	235.454
P	31	1410.179	ug/L	1.618	171898	0.245
K	39	7912.382	ug/L	5.922	21244060	30.697
Ca	43	7649.717	ug/L	1.229	44199	0.065
Sc	45		ug/L		678071	678070.963
V	51	93.632	ug/L	1.688	220832	0.331
Cr	52	66.162	ug/L	1.676	135676	0.201
Cr	53		ug/L		112979	-0.047
Mn	55	443.416	ug/L	1.848	1417772	2.089
Fe	57	35514.470	ug/L	1.554	2185812	3.218
Co	59	35.813	ug/L	1.706	79836	0.118
Ni	60	54.304	ug/L	3.178	24624	0.036
Cu	63		ug/L		288204	0.425
Cu	65	283.987	ug/L	1.420	137662	0.203
Zn	66	156.750	ug/L	0.656	50636	0.383
Zn	67		ug/L		14199	0.045
Zn	68		ug/L		38565	0.286
Ge	74		ug/L		132112	132111.745
As	75	49.538	ug/L	1.756	19270	0.147
Se	77		ug/L		4692	-0.013
Se	82	9.425	ug/L	8.028	325	0.003
Kr	83		ug/L		150	0.001
Sr	88	88.189	ug/L	1.425	345581	5.247
Y	89		ug/L		173477	2.634
Ag	107	29.419	ug/L	2.046	41268	0.626
Cd	111	8.130	ug/L	3.606	2848	0.043
Cd	114		ug/L		4716	0.071
In	115		ug/L		65845	65844.855
Sn	120	16.820	ug/L	1.617	23498	0.355
Sb	121	66.955	ug/L	1.382	74462	1.127
Sb	123		ug/L		57202	0.866
Ba	135		ug/L		123919	1.558
Ba	137	353.763	ug/L	1.306	211334	2.657
Ho	165		ug/L		7048	0.088
Lu	175		ug/L		79541	79540.690
Tl	205	54.010	ug/L	0.522	122035	1.533
Pb	208	426.216	ug/L	1.960	1537064	19.327
Bi	209		ug/L		2322	0.029
U	238	315.862	ug/L	2.067	1117023	14.047

Calibration

Analyte	Mass Curve 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	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
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	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

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		93.9			
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		87.6			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Ag	107					
Cd	111					
Cd	114					
> In	115		88.9			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		92.8			
Tl	205					
Pb	208					
Bi	209					
U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message
 Al 27 Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: 1202024824

Sample Date/Time: Sunday, February 14, 2010 10:14:27

Sample Type:

Sample Description: LANL 6020 MSD

Number of Replicates: 3

Batch ID: 945425|2|rmj

Method File: c:\elandata\Method\6020 noirs thtimozr.mth

Dataset File: C:\elandata\Dataset\100213\1202024824.177

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	117.120	ug/L	2.489	87897	0.124
Be	9	38.042	ug/L	1.967	10777	0.015
B	11	84.003	ug/L	1.247	22165	0.030
Na	23	1476.202	ug/L	3.464	4535599	6.378
Mg	24	14387.074	ug/L	4.769	27497730	38.731
Al	27	117602.922	ug/L	4.626	277350281	390.728
P	31	1325.682	ug/L	0.626	169530	0.230
K	39	11189.871	ug/L	7.547	31247877	43.412
Ca	43	11158.945	ug/L	2.284	67278	0.094
Sc	45		ug/L		709727	709726.535
V	51	131.940	ug/L	0.661	327365	0.467
Cr	52	83.768	ug/L	1.176	179945	0.254
Cr	53		ug/L		115863	-0.051
Mn	55	570.483	ug/L	2.789	1908739	2.688
Fe	57	56552.396	ug/L	2.454	3640475	5.125
Co	59	41.392	ug/L	0.814	96566	0.136
Ni	60	65.300	ug/L	0.812	30986	0.044
Cu	63		ug/L		202334	0.285
Cu	65	192.698	ug/L	1.371	97792	0.138
Zn	66	200.767	ug/L	2.278	63970	0.490
Zn	67		ug/L		16812	0.067
Zn	68		ug/L		48755	0.368
Ge	74		ug/L		130378	130378.257
As	75	53.743	ug/L	2.304	20643	0.159
Se	77		ug/L		4615	-0.013
Se	82	7.514	ug/L	18.800	253	0.002
Kr	83		ug/L		216	0.001
Sr	88	124.962	ug/L	1.829	491492	7.435
Y	89		ug/L		197313	2.984
Ag	107	28.734	ug/L	1.110	40471	0.612
Cd	111	8.636	ug/L	4.345	3037	0.046
Cd	114		ug/L		4920	0.074
In	115		ug/L		66106	66106.108
Sn	120	9.527	ug/L	2.104	13419	0.201
Sb	121	43.796	ug/L	2.757	48985	0.737
Sb	123		ug/L		37787	0.569
Ba	135		ug/L		186717	2.364
Ba	137	538.245	ug/L	1.373	319364	4.043
Ho	165		ug/L		8231	0.104
Lu	175		ug/L		78996	78996.281
Tl	205	53.143	ug/L	1.306	119254	1.509
Pb	208	304.318	ug/L	1.292	1090261	13.799
Bi	209		ug/L		2210	0.028
U	238	201.611	ug/L	0.637	708324	8.966

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	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
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	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

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		98.3				
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		86.5				
As	75						
Se	77						
Se	82						
Kr	83						
Sr	88						
Y	89						
Ag	107						
Cd	111						
Cd	114						
> In	115		89.3				
Sn	120						
Sb	121						
Sb	123						
Ba	135						
Ba	137						
Ho	165						
> Lu	175		92.1				
Tl	205						
Pb	208						
Bi	209						
U	238						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)
	V	51	Sample is out of limits (over linear range)
	Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: 1202024823

Sample Date/Time: Sunday, February 14, 2010 10:20:21

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 945425|10|rmj

Method File: c:\elandata\Method\6020 noirs thtimozr.mth

Dataset File: C:\elandata\Dataset\100213\1202024823.178

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	19.907	ug/L	1.985	13879	0.021
Be	9	2.498	ug/L	1.117	657	0.001
B	11	6.200	ug/L	3.684	2088	0.002
Na	23	120.868	ug/L	6.115	350935	0.522
Mg	24	2182.052	ug/L	7.520	3853197	5.874
Al	27	16133.210	ug/L	7.250	35158751	53.602
P	31	73.067	ug/L	5.589	14007	0.013
K	39	1646.114	ug/L	2.228	4604987	6.386
Ca	43	1791.466	ug/L	1.781	10353	0.015
> Sc	45		ug/L		655748	655747.722
V	51	16.313	ug/L	0.568	34176	0.058
Cr	52	9.612	ug/L	2.518	18741	0.029
Cr	53		ug/L		139794	-0.001
Mn	55	174.522	ug/L	1.007	540472	0.822
Fe	57	10369.855	ug/L	0.305	619839	0.940
Co	59	2.708	ug/L	1.884	5978	0.009
Ni	60	7.887	ug/L	1.001	3509	0.005
Cu	63		ug/L		139976	0.213
Cu	65	143.340	ug/L	2.076	67232	0.102
Zn	66	34.488	ug/L	0.247	11453	0.084
Zn	67		ug/L		9853	0.011
Zn	68		ug/L		9226	0.063
> Ge	74		ug/L		134959	134958.623
As	75	3.565	ug/L	8.139	1293	0.011
Se	77		ug/L		6699	0.001
Se	82	0.705	ug/L	42.095	15	0.000
Kr	83		ug/L		84	0.000
Sr	88	15.254	ug/L	1.820	60782	0.908
Y	89		ug/L		41984	0.627
Ag	107	0.195	ug/L	7.700	302	0.004
Cd	111	0.291	ug/L	23.605	115	0.002
Cd	114		ug/L		80	0.001
> In	115		ug/L		66884	66884.206
Sn	120	0.584	ug/L	2.797	964	0.012
Sb	121	0.471	ug/L	8.878	820	0.008
Sb	123		ug/L		633	0.006
Ba	135		ug/L		30984	0.400
Ba	137	91.529	ug/L	0.070	53269	0.687
Ho	165		ug/L		1638	0.021
> Lu	175		ug/L		77460	77459.573
Tl	205	0.290	ug/L	14.754	724	0.008
Pb	208	117.579	ug/L	0.928	413189	5.332
Bi	209		ug/L		541	0.007
U	238	60.176	ug/L	0.829	207327	2.676

Calibration

Analyte	Mass Curve 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	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
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	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

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		90.8			
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		89.5			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Ag	107					
Cd	111					
Cd	114					
> In	115		90.3			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		90.3			
Tl	205					
Pb	208					
Bi	209					
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#6 - Summary Report

Sample ID: 245394002

Sample Date/Time: Sunday, February 14, 2010 10:26:16

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945425[2]rmj

Method File: c:\elandata\Method\6020 nolrs thtimozr.mth

Dataset File: C:\elandata\Dataset\100213\245394002.179

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	57.114	ug/L	1.259	39894	0.060
Be	9	4.206	ug/L	4.381	1111	0.002
B	11	4.341	ug/L	1.469	1658	0.002
Na	23	1821.596	ug/L	6.578	5203356	7.870
Mg	24	2747.416	ug/L	8.162	4878503	7.396
Al	27	12996.028	ug/L	11.244	28507095	43.178
P	31	358.061	ug/L	1.984	46743	0.062
K	39	3618.328	ug/L	3.023	9682416	14.038
Ca	43	2621.320	ug/L	0.621	15033	0.022
> Sc	45		ug/L		659723	659723.177
V	51	20.466	ug/L	3.697	44075	0.072
Cr	52	13.153	ug/L	0.494	25942	0.040
Cr	53		ug/L		105252	-0.054
Mn	55	1395.053	ug/L	1.602	4337269	6.573
Fe	57	33001.907	ug/L	1.469	1976441	2.991
Co	59	30.285	ug/L	1.054	65716	0.099
Ni	60	32.000	ug/L	0.739	14144	0.021
Cu	63		ug/L		237449	0.360
Cu	65	242.827	ug/L	1.218	114545	0.174
Zn	66	211.972	ug/L	2.517	68041	0.517
Zn	67		ug/L		16608	0.064
Zn	68		ug/L		48992	0.367
> Ge	74		ug/L		131370	131370.030
As	75	5.336	ug/L	3.472	1949	0.016
Se	77		ug/L		4499	-0.014
Se	82	1.315	ug/L	23.429	36	0.000
Kr	83		ug/L		132	0.001
Sr	88	18.326	ug/L	1.171	73353	1.090
Y	89		ug/L		519929	7.737
Ag	107	0.855	ug/L	5.180	1248	0.018
Cd	111	2.335	ug/L	9.353	843	0.012
Cd	114		ug/L		298	0.004
> In	115		ug/L		67190	67190.417
Sn	120	7.853	ug/L	0.887	11271	0.166
Sb	121	4.388	ug/L	1.998	5253	0.074
Sb	123		ug/L		4060	0.057
Ba	135		ug/L		58595	0.706
Ba	137	159.884	ug/L	0.336	99602	1.201
Ho	165		ug/L		21321	0.257
> Lu	175		ug/L		82926	82926.492
Tl	205	0.264	ug/L	1.976	712	0.007
Pb	208	107.797	ug/L	1.407	405582	4.888
Bi	209		ug/L		407	0.005
U	238	86.993	ug/L	0.299	320875	3.869

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	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
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	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

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		91.3			
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		87.1			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Ag	107					
Cd	111					
Cd	114					
> In	115		90.7			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		96.7			
Tl	205					
Pb	208					
Bi	209					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Mn	55	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: 245394003

Sample Date/Time: Sunday, February 14, 2010 10:32:11

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945425[2]rmj

Method File: c:\elandata\Method\6020 nolrs thtimozr.mth

Dataset File: C:\elandata\Dataset\100213\245394003.180

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	48.653	ug/L	1.261	33947	0.051
Be	9	18.590	ug/L	0.716	4891	0.007
B	11	10.893	ug/L	1.925	3211	0.004
Na	23	581.575	ug/L	8.514	1662736	2.513
Mg	24	14930.504	ug/L	7.212	26497812	40.194
Al	27	29666.523	ug/L	7.445	64972421	98.565
P	31	1646.672	ug/L	1.403	194052	0.286
K	39	2790.206	ug/L	3.765	7548526	10.825
Ca	43	10118.612	ug/L	0.422	56658	0.085
> Sc	45		ug/L		658791	658791.422
V	51	54.419	ug/L	2.389	123142	0.193
Cr	52	51.603	ug/L	1.513	102727	0.157
Cr	53		ug/L		110394	-0.046
Mn	55	744.589	ug/L	1.693	2312105	3.508
Fe	57	30920.565	ug/L	1.854	1849296	2.802
Co	59	20.500	ug/L	0.284	44473	0.067
Ni	60	94.607	ug/L	0.874	41644	0.063
Cu	63		ug/L		2487017	3.775
Cu	65	2550.758	ug/L	1.504	1200873	1.823
Zn	66	231.001	ug/L	0.716	74775	0.564
Zn	67		ug/L		18078	0.074
Zn	68		ug/L		56438	0.420
> Ge	74		ug/L		132458	132457.572
As	75	8.283	ug/L	5.702	3123	0.025
Se	77		ug/L		4523	-0.015
Se	82	0.944	ug/L	46.498	23	0.000
Kr	83		ug/L		127	0.001
Sr	88	48.844	ug/L	0.655	192405	2.906
Y	89		ug/L		273618	4.134
Ag	107	1.384	ug/L	0.336	1974	0.029
Cd	111	2.411	ug/L	6.445	856	0.013
Cd	114		ug/L		889	0.013
> In	115		ug/L		66180	66179.811
Sn	120	19.818	ug/L	0.292	27804	0.418
Sb	121	5.469	ug/L	1.664	6376	0.092
Sb	123		ug/L		4929	0.071
Ba	135		ug/L		168648	2.086
Ba	137	470.670	ug/L	0.232	285780	3.535
Ho	165		ug/L		10976	0.136
> Lu	175		ug/L		80834	80834.196
Tl	205	0.292	ug/L	3.166	759	0.008
Pb	208	536.476	ug/L	0.938	1966675	24.327
Bi	209		ug/L		1948	0.024
U	238	305.848	ug/L	1.101	1099577	13.602

Calibration

Analyte	Mass Curve 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	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
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	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		91.2			
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		87.9			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Ag	107					
Cd	111					
Cd	114					
> In	115		89.4			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		94.3			
Tl	205					
Pb	208					
Bi	209					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass Out of Limits Message
	Cu	65 Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: 245394004

Sample Date/Time: Sunday, February 14, 2010 10:38:05

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945425[2]rmj

Method File: c:\elandata\Method\6020 nolrs thtimozr.mth

Dataset File: C:\elandata\Dataset\100213\245394004.181

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	47.248	ug/L	2.495	33299	0.050
Be	9	21.198	ug/L	1.894	5631	0.008
B	11	8.632	ug/L	1.593	2701	0.003
Na	23	702.339	ug/L	4.170	2027050	3.035
Mg	24	5905.802	ug/L	3.983	10585064	15.899
Al	27	36268.467	ug/L	5.257	80176205	120.500
P	31	780.119	ug/L	1.203	95901	0.135
K	39	4074.134	ug/L	1.682	10939918	15.806
Ca	43	7797.226	ug/L	1.529	44208	0.066
> Sc	45		ug/L		665418	665417.591
V	51	46.924	ug/L	1.989	106771	0.166
Cr	52	36.096	ug/L	3.157	72462	0.109
Cr	53		ug/L		103726	-0.058
Mn	55	663.669	ug/L	2.307	2081669	3.127
Fe	57	27400.103	ug/L	1.981	1655672	2.483
Co	59	9.128	ug/L	1.573	20084	0.030
Ni	60	28.826	ug/L	0.111	12858	0.019
Cu	63		ug/L		1091569	1.640
Cu	65	1149.654	ug/L	1.350	546736	0.822
Zn	66	211.939	ug/L	0.692	66920	0.517
Zn	67		ug/L		16909	0.069
Zn	68		ug/L		51256	0.391
> Ge	74		ug/L		129196	129195.965
As	75	8.478	ug/L	3.813	3119	0.025
Se	77		ug/L		4380	-0.015
Se	82	0.750	ug/L	22.786	16	0.000
Kr	83		ug/L		119	0.001
Sr	88	42.685	ug/L	0.026	166359	2.540
Y	89		ug/L		299912	4.580
Ag	107	3.804	ug/L	2.435	5327	0.081
Cd	111	2.680	ug/L	8.762	941	0.014
Cd	114		ug/L		760	0.011
> In	115		ug/L		65468	65467.987
Sn	120	8.310	ug/L	1.062	11614	0.175
Sb	121	6.058	ug/L	0.899	6957	0.102
Sb	123		ug/L		5266	0.077
Ba	135		ug/L		187550	2.344
Ba	137	532.959	ug/L	1.694	320270	4.003
Ho	165		ug/L		12269	0.153
> Lu	175		ug/L		80017	80016.633
Tl	205	0.394	ug/L	1.959	982	0.011
Pb	208	645.523	ug/L	0.718	2342341	29.271
Bi	209		ug/L		1848	0.023
U	238	377.198	ug/L	0.653	1342245	16.775

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	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
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	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

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		92.1			
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		85.7			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Ag	107					
Cd	111					
Cd	114					
> In	115		88.4			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		93.3			
Tl	205					
Pb	208					
Bi	209					
U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message
Cu 65 Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: 245394005

Sample Date/Time: Sunday, February 14, 2010 10:43:59

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945425|2|rmj

Method File: c:\elandata\Method\6020 noirs thtimozr.mth

Dataset File: C:\elandata\Dataset\100213\245394005.182

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	19.690	ug/L	2.162	13769	0.021
Be	9	1.715	ug/L	4.824	454	0.001
B	11	3.664	ug/L	5.136	1492	0.001
Na	23	1738.858	ug/L	8.047	4949728	7.513
Mg	24	2018.282	ug/L	6.195	3575877	5.433
Al	27	11684.609	ug/L	4.183	25537606	38.821
P	31	305.662	ug/L	0.468	40608	0.053
K	39	2709.454	ug/L	5.904	7330746	10.512
Ca	43	2462.432	ug/L	3.840	14104	0.021
> Sc	45		ug/L		657675	657675.446
V	51	16.096	ug/L	4.630	33776	0.057
Cr	52	13.631	ug/L	1.469	26814	0.041
Cr	53		ug/L		100584	-0.061
Mn	55	738.422	ug/L	1.709	2289321	3.479
Fe	57	28741.015	ug/L	1.321	1716509	2.605
Co	59	45.389	ug/L	1.279	98112	0.149
Ni	60	16.042	ug/L	2.173	7099	0.011
Cu	63		ug/L		26961	0.041
Cu	65	27.477	ug/L	1.671	12967	0.020
Zn	66	98.771	ug/L	1.513	32088	0.241
Zn	67		ug/L		10619	0.018
Zn	68		ug/L		23323	0.170
> Ge	74		ug/L		132730	132730.101
As	75	3.447	ug/L	15.693	1224	0.010
Se	77		ug/L		4446	-0.015
Se	82	0.431	ug/L	0.355	5	0.000
Kr	83		ug/L		118	0.000
Sr	88	20.659	ug/L	1.598	81940	1.229
Y	89		ug/L		403749	6.063
Ag	107	0.317	ug/L	7.459	474	0.007
Cd	111	1.126	ug/L	7.398	409	0.006
Cd	114		ug/L		61	0.001
> In	115		ug/L		66590	66589.606
Sn	120	6.966	ug/L	1.001	9925	0.147
Sb	121	0.622	ug/L	5.662	986	0.010
Sb	123		ug/L		764	0.008
Ba	135		ug/L		44033	0.533
Ba	137	122.784	ug/L	1.271	76154	0.922
Ho	165		ug/L		16764	0.203
> Lu	175		ug/L		82556	82556.014
Tl	205	0.158	ug/L	9.572	460	0.004
Pb	208	59.893	ug/L	1.379	224467	2.716
Bi	209		ug/L		246	0.003
U	238	22.029	ug/L	2.468	80926	0.980

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	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
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	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		91.1			
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		88.0			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Ag	107					
Cd	111					
Cd	114					
> In	115		89.9			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		96.3			
Tl	205					
Pb	208					
Bi	209					
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#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, February 14, 2010 10:49:52

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 nolrs thtimozr.mth

Dataset File: C:\elandata\Dataset\100213\QC Std 6.183

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	53.590	ug/L	2.790	40833	0.057
Be	9	51.660	ug/L	3.163	14837	0.021
B	11	99.697	ug/L	4.128	26540	0.036
Na	23	4567.324	ug/L	10.664	14225018	19.733
Mg	24	5350.310	ug/L	1.302	10366332	14.403
Al	27	4635.603	ug/L	5.774	11091042	15.401
P	31	5219.548	ug/L	1.408	658391	0.906
K	39	4670.938	ug/L	6.243	13502342	18.121
Ca	43	4932.596	ug/L	1.197	30421	0.042
> Sc	45		ug/L		719676	719675.889
V	51	50.715	ug/L	2.961	125074	0.179
Cr	52	50.690	ug/L	2.922	110209	0.154
Cr	53		ug/L		122062	-0.044
Mn	55	51.753	ug/L	1.946	176861	0.244
Fe	57	5086.367	ug/L	1.705	335628	0.461
Co	59	49.585	ug/L	2.487	117240	0.163
Ni	60	50.906	ug/L	2.924	24503	0.034
Cu	63		ug/L		53310	0.074
Cu	65	50.107	ug/L	1.702	25826	0.036
Zn	66	49.262	ug/L	1.965	18248	0.120
Zn	67		ug/L		8902	-0.003
Zn	68		ug/L		13403	0.083
> Ge	74		ug/L		150897	150896.599
As	75	45.796	ug/L	0.937	20338	0.136
Se	77		ug/L		6442	-0.006
Se	82	46.871	ug/L	1.378	1892	0.013
Kr	83		ug/L		69	0.000
Sr	88	51.158	ug/L	1.263	228895	3.044
Y	89		ug/L		101	0.001
Ag	107	50.427	ug/L	1.974	80730	1.074
Cd	111	48.994	ug/L	0.885	19521	0.260
Cd	114		ug/L		44794	0.596
> In	115		ug/L		75174	75174.399
Sn	120	49.951	ug/L	2.179	79344	1.054
Sb	121	48.099	ug/L	14.965	61052	0.809
Sb	123		ug/L		47311	0.627
Ba	135		ug/L		18793	0.210
Ba	137	48.506	ug/L	0.816	32559	0.364
Ho	165		ug/L		12	-0.000
> Lu	175		ug/L		89314	89313.892
Tl	205	47.915	ug/L	1.145	121580	1.360
Pb	208	50.364	ug/L	0.395	204250	2.284
Bi	209		ug/L		55	0.000
U	238	53.245	ug/L	1.052	211555	2.368

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	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
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	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution %	Duplicate Rel. % Difference
Li	7	107.180				
Be	9	103.320				
B	11	99.697				
Na	23	91.346				
Mg	24	107.006				
Al	27	91.794				
P	31	104.391				
K	39	93.419				
Ca	43	98.652				
Sc	45		99.6			
V	51	101.429				
Cr	52	101.381				
Cr	53					
Mn	55	103.506				
Fe	57	101.727				
Co	59	99.170				
Ni	60	101.812				
Cu	63					
Cu	65	100.214				
Zn	66	98.524				
Zn	67					
Zn	68					
Ge	74		100.1			
As	75	91.593				
Se	77					
Se	82	93.742				
Kr	83					
Sr	88	102.317				
Y	89					
Ag	107	100.854				
Cd	111	97.988				
Cd	114					
In	115		101.5			
Sn	120	99.901				
Sb	121	96.199				
Sb	123					
Ba	135					
Ba	137	97.012				
Ho	165					
Lu	175		104.2			
Tl	205	95.830				
Pb	208	100.729				
Bi	209					
U	238	106.489				

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, February 14, 2010 10:55:46

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 nohrs thtimozr.mth

Dataset File: C:\elandata\Dataset\100213\QC Std 7.184

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.051	ug/L	13.383	130	0.000
Be	9	0.002	ug/L	633.608	4	0.000
B	11	1.865	ug/L	35.191	1120	0.001
Na	23	1.025	ug/L	85.349	12005	0.004
Mg	24	0.226	ug/L	365.155	2334	0.001
Al	27	-0.067	ug/L	1977.748	3667	-0.000
P	31	2.431	ug/L	24.792	6287	0.000
K	39	4.424	ug/L	264.596	451716	0.017
Ca	43	-5.648	ug/L	76.520	438	-0.000
> Sc	45		ug/L		691385	691384.575
V	51	-0.183	ug/L	367.784	-4321	-0.001
Cr	52	0.142	ug/L	68.882	-101	0.000
Cr	53		ug/L		145902	-0.003
Mn	55	0.035	ug/L	38.485	1458	0.000
Fe	57	6.589	ug/L	19.392	4230	0.001
Co	59	0.009	ug/L	76.520	178	0.000
Ni	60	-0.001	ug/L	2549.024	61	-0.000
Cu	63		ug/L		305	0.000
Cu	65	0.088	ug/L	15.926	98	0.000
Zn	66	0.027	ug/L	86.488	106	0.000
Zn	67		ug/L		8381	-0.003
Zn	68		ug/L		812	-0.000
> Ge	74		ug/L		142449	142448.852
As	75	0.163	ug/L	278.253	-72	0.000
Se	77		ug/L		7137	0.001
Se	82	0.228	ug/L	86.644	-3	0.000
Kr	83		ug/L		61	0.000
Sr	88	0.003	ug/L	73.402	104	0.000
Y	89		ug/L		55	0.000
Ag	107	0.004	ug/L	101.766	33	0.000
Cd	111	0.007	ug/L	258.922	15	0.000
Cd	114		ug/L		23	0.000
> In	115		ug/L		71792	71792.201
Sn	120	0.345	ug/L	20.104	674	0.007
Sb	121	1.684	ug/L	34.905	2350	0.028
Sb	123		ug/L		1782	0.022
Ba	135		ug/L		21	0.000
Ba	137	0.009	ug/L	22.665	25	0.000
Ho	165		ug/L		15	0.000
> Lu	175		ug/L		83356	83355.670
Tl	205	0.102	ug/L	25.191	334	0.003
Pb	208	0.019	ug/L	15.137	329	0.001
Bi	209		ug/L		17	-0.000
U	238	0.084	ug/L	20.456	362	0.004

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	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
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	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

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		95.7				
|	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		94.5				
|	As	75						
|	Se	77						
|	Se	82						
|	Kr	83						
[	Sr	88						
|	Y	89						
|	Ag	107						
|	Cd	111						
|	Cd	114						
>	In	115		96.9				
|	Sn	120						
|	Sb	121						
|	Sb	123						
[	Ba	135						
|	Ba	137						
|	Ho	165						
>	Lu	175		97.2				
|	Tl	205						
|	Pb	208						
|	Bi	209						
|	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#6 - Summary Report

Sample ID: 245394006

Sample Date/Time: Sunday, February 14, 2010 11:01:41

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945425[2]rmj

Method File: c:\elandata\Method\6020 noirs thtmozt.mth

Dataset File: C:\elandata\Dataset\100213\245394006.185

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	60.654	ug/L	1.941	43670	0.064
Be	9	16.108	ug/L	0.408	4376	0.006
B	11	13.102	ug/L	3.759	3858	0.005
Na	23	524.417	ug/L	7.857	1550086	2.266
Mg	24	6241.168	ug/L	2.506	11428744	16.802
Al	27	36115.848	ug/L	2.909	81601560	119.993
P	31	439.622	ug/L	2.351	57809	0.076
K	39	6013.814	ug/L	5.044	16298353	23.331
Ca	43	5402.281	ug/L	2.801	31443	0.046
Sc	45		ug/L		680177	680176.567
V	51	47.906	ug/L	2.449	111468	0.170
Cr	52	28.351	ug/L	2.757	58090	0.086
Cr	53		ug/L		106406	-0.057
Mn	55	763.782	ug/L	0.929	2448961	3.599
Fe	57	27710.361	ug/L	2.255	1711480	2.511
Co	59	13.563	ug/L	2.950	30424	0.045
Ni	60	27.795	ug/L	2.231	12673	0.019
Cu	63		ug/L		1806749	2.656
Cu	65	1926.367	ug/L	3.280	936259	1.377
Zn	66	245.670	ug/L	3.401	80066	0.600
Zn	67		ug/L		18516	0.077
Zn	68		ug/L		57774	0.427
Ge	74		ug/L		133414	133413.830
As	75	10.274	ug/L	11.099	3936	0.030
Se	77		ug/L		4501	-0.015
Se	82	-0.156	ug/L	425.559	-16	-0.000
Kr	83		ug/L		139	0.001
Sr	88	49.468	ug/L	3.471	200072	2.943
Y	89		ug/L		357532	5.261
Ag	107	2.218	ug/L	0.635	3235	0.047
Cd	111	3.399	ug/L	6.122	1235	0.018
Cd	114		ug/L		1311	0.019
In	115		ug/L		67949	67948.909
Sn	120	7.674	ug/L	2.107	11140	0.162
Sb	121	7.253	ug/L	1.338	8587	0.122
Sb	123		ug/L		6612	0.094
Ba	135		ug/L		85365	1.016
Ba	137	230.775	ug/L	4.257	145668	1.733
Ho	165		ug/L		14544	0.173
Lu	175		ug/L		84066	84066.169
Tl	205	0.444	ug/L	4.699	1153	0.013
Pb	208	552.307	ug/L	3.020	2104976	25.044
Bi	209		ug/L		2119	0.025
U	238	303.330	ug/L	1.987	1133867	13.490

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	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
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	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

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		94.2			
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		88.5			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Ag	107					
Cd	111					
Cd	114					
> In	115		91.7			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		98.1			
Tl	205					
Pb	208					
Bi	209					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Cu	65	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: 245394007

Sample Date/Time: Sunday, February 14, 2010 11:07:36

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945425[2][rm]

Method File: c:\elandata\Method\6020 nohrs thtimozr.mth

Dataset File: C:\elandata\Dataset\100213\245394007.186

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	61.111	ug/L	2.695	42576	0.065
Be	9	72.480	ug/L	2.936	19036	0.029
B	11	21.166	ug/L	6.683	5644	0.008
Na	23	479.689	ug/L	6.895	1371592	2.073
Mg	24	5261.194	ug/L	3.116	9321496	14.164
Al	27	18134.274	ug/L	4.394	39672374	60.250
P	31	760.869	ug/L	1.826	92654	0.132
K	39	2705.294	ug/L	5.168	7325477	10.495
Ca	43	11950.951	ug/L	0.777	66792	0.101
> Sc	45		ug/L		658266	658265.674
V	51	34.991	ug/L	2.678	77807	0.124
Cr	52	44.472	ug/L	0.961	88412	0.135
Cr	53		ug/L		106122	-0.053
Mn	55	429.908	ug/L	0.801	1334525	2.026
Fe	57	17625.143	ug/L	0.571	1054937	1.597
Co	59	7.212	ug/L	1.409	15729	0.024
Ni	60	44.982	ug/L	1.935	19812	0.030
Cu	63		ug/L		11130984	16.917
Cu	65	11583.513	ug/L	2.705	5447671	8.279
Zn	66	226.910	ug/L	1.707	72434	0.554
Zn	67		ug/L		17266	0.070
Zn	68		ug/L		53437	0.403
> Ge	74		ug/L		130637	130637.284
As	75	5.803	ug/L	21.031	2115	0.017
Se	77		ug/L		4427	-0.015
Se	82	0.001	ug/L	29078.444	-10	0.000
Kr	83		ug/L		94	0.000
Sr	88	49.611	ug/L	2.236	194513	2.952
Y	89		ug/L		126303	1.917
Ag	107	4.417	ug/L	0.842	6220	0.094
Cd	111	3.300	ug/L	5.182	1163	0.017
Cd	114		ug/L		2106	0.032
> In	115		ug/L		65877	65877.434
Sn	120	42.188	ug/L	2.361	58753	0.890
Sb	121	19.211	ug/L	3.111	21577	0.323
Sb	123		ug/L		16472	0.247
Ba	135		ug/L		167374	2.117
Ba	137	480.582	ug/L	0.824	285459	3.610
Ho	165		ug/L		5153	0.065
> Lu	175		ug/L		79083	79083.436
Tl	205	0.183	ug/L	2.611	498	0.005
Pb	208	1025.628	ug/L	1.160	3677856	46.507
Bi	209		ug/L		3223	0.041
U	238	1562.197	ug/L	0.258	5494353	69.474

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	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
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	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

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		91.1			
|	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		86.6			
|	As	75					
|	Se	77					
|	Se	82					
|	Kr	83					
[	Sr	88					
|	Y	89					
|	Ag	107					
|	Cd	111					
|	Cd	114					
>	In	115		88.9			
|	Sn	120					
|	Sb	121					
|	Sb	123					
[	Ba	135					
|	Ba	137					
|	Ho	165					
>	Lu	175		92.2			
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Cu	65	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: 245394008

Sample Date/Time: Sunday, February 14, 2010 11:13:30

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945425|2|rmj

Method File: c:\elandata\Method\6020 nolrs thtimozr.mth

Dataset File: C:\elandata\Dataset\100213\245394008.187

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	26.924	ug/L	1.625	18925	0.028
Be	9	14.843	ug/L	0.828	3926	0.006
B	11	6.767	ug/L	6.293	2244	0.002
Na	23	1089.083	ug/L	2.912	3124788	4.705
Mg	24	3161.273	ug/L	9.307	5640159	8.510
Al	27	19918.557	ug/L	9.968	43829659	66.178
P	31	496.183	ug/L	1.155	62800	0.086
K	39	3057.566	ug/L	4.159	8275629	11.862
Ca	43	7212.794	ug/L	0.569	40729	0.061
> Sc	45		ug/L		662237	662237.438
V	51	29.388	ug/L	1.406	65160	0.104
Cr	52	18.926	ug/L	0.460	37636	0.057
Cr	53		ug/L		99307	-0.064
Mn	55	1015.765	ug/L	0.978	3170553	4.786
Fe	57	25736.435	ug/L	0.288	1548128	2.332
Co	59	30.653	ug/L	0.547	66771	0.101
Ni	60	18.156	ug/L	2.541	8082	0.012
Cu	63		ug/L		829867	1.253
Cu	65	867.655	ug/L	2.155	410730	0.620
Zn	66	139.872	ug/L	0.702	44460	0.341
Zn	67		ug/L		12607	0.035
Zn	68		ug/L		33048	0.248
> Ge	74		ug/L		129970	129969.915
As	75	27.663	ug/L	2.222	10530	0.082
Se	77		ug/L		4430	-0.015
Se	82	0.655	ug/L	24.897	13	0.000
Kr	83		ug/L		119	0.001
Sr	88	31.916	ug/L	8.188	125833	1.899
Y	89		ug/L		447417	6.754
Ag	107	1.006	ug/L	2.904	1444	0.021
Cd	111	1.685	ug/L	5.431	602	0.009
Cd	114		ug/L		479	0.007
> In	115		ug/L		66253	66253.032
Sn	120	11.444	ug/L	2.469	16127	0.241
Sb	121	62.791	ug/L	1.448	70275	1.057
Sb	123		ug/L		55116	0.829
Ba	135		ug/L		91869	1.109
Ba	137	252.450	ug/L	1.008	157068	1.896
Ho	165		ug/L		18428	0.222
> Lu	175		ug/L		82830	82829.597
Tl	205	0.261	ug/L	8.667	705	0.007
Pb	208	4638.115	ug/L	0.713	17420119	210.316
Bi	209		ug/L		6325	0.076
U	238	1892.562	ug/L	0.178	6971539	84.167

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	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
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	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution %	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		91.7			
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		86.2			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Ag	107					
Cd	111					
Cd	114					
> In	115		89.5			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		96.6			
Tl	205					
Pb	208					
Bi	209					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Mn	55	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: 245394009

Sample Date/Time: Sunday, February 14, 2010 11:19:25

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945425[2]rmj

Method File: c:\elandata\Method\6020 nolrs thtimozr.mth

Dataset File: C:\elandata\Dataset\100213\245394009.188

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	47.444	ug/L	1.007	32919	0.050
Be	9	9.602	ug/L	2.696	2513	0.004
B	11	14.953	ug/L	1.400	4152	0.005
Na	23	732.245	ug/L	3.182	2080550	3.164
Mg	24	4945.891	ug/L	2.971	8721936	13.315
Al	27	26198.740	ug/L	1.602	57014190	87.044
P	31	480.164	ug/L	1.314	60290	0.083
K	39	3403.233	ug/L	5.717	9062446	13.203
Ca	43	13379.562	ug/L	0.944	74346	0.113
> Sc	45		ug/L		655033	655033.463
V	51	38.414	ug/L	2.733	85351	0.136
Cr	52	25.281	ug/L	1.719	49851	0.077
Cr	53		ug/L		102994	-0.057
Mn	55	533.925	ug/L	1.744	1649131	2.516
Fe	57	21432.430	ug/L	1.819	1275881	1.942
Co	59	7.159	ug/L	1.928	15538	0.023
Ni	60	27.970	ug/L	3.400	12282	0.019
Cu	63		ug/L		1739258	2.655
Cu	65	1962.748	ug/L	2.274	918800	1.403
Zn	66	139.280	ug/L	0.945	44499	0.340
Zn	67		ug/L		12971	0.037
Zn	68		ug/L		33312	0.249
> Ge	74		ug/L		130628	130627.813
As	75	6.862	ug/L	12.241	2528	0.020
Se	77		ug/L		4517	-0.014
Se	82	0.611	ug/L	81.257	11	0.000
Kr	83		ug/L		90	0.000
Sr	88	62.029	ug/L	0.961	242552	3.691
Y	89		ug/L		233716	3.557
Ag	107	4.193	ug/L	2.579	5889	0.089
Cd	111	2.189	ug/L	8.048	773	0.012
Cd	114		ug/L		1044	0.016
> In	115		ug/L		65694	65694.183
Sn	120	12.302	ug/L	1.766	17185	0.259
Sb	121	12.295	ug/L	2.750	13878	0.207
Sb	123		ug/L		10702	0.160
Ba	135		ug/L		109582	1.390
Ba	137	321.645	ug/L	0.544	190435	2.416
Ho	165		ug/L		9503	0.120
> Lu	175		ug/L		78818	78817.638
Tl	205	0.269	ug/L	4.619	688	0.008
Pb	208	497.714	ug/L	0.702	1779002	22.569
Bi	209		ug/L		3497	0.044
U	238	753.237	ug/L	2.462	2639827	33.498

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	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
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	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

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	90.7			
|	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	86.6			
|	As	75				
|	Se	77				
|	Se	82				
|	Kr	83				
|	Sr	88				
|	Y	89				
|	Ag	107				
|	Cd	111				
|	Cd	114				
>	In	115	88.7			
|	Sn	120				
|	Sb	121				
|	Sb	123				
|	Ba	135				
|	Ba	137				
|	Ho	165				
>	Lu	175	91.9			
|	Tl	205				
|	Pb	208				
|	Bi	209				
|	U	238				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Cu	65	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: 245394010

Sample Date/Time: Sunday, February 14, 2010 11:25:19

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945425[2]rmj

Method File: c:\elandata\Method\6020 nolrs thtimozr.mth

Dataset File: C:\elandata\Dataset\100213\245394010.189

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	20.400	ug/L	2.152	14469	0.022
Be	9	3.959	ug/L	2.966	1058	0.002
B	11	3.827	ug/L	1.201	1553	0.001
Na	23	808.117	ug/L	1.234	2338142	3.492
Mg	24	1967.876	ug/L	4.076	3536817	5.298
Al	27	12267.380	ug/L	5.502	27200520	40.758
P	31	343.673	ug/L	2.055	45601	0.060
K	39	2166.618	ug/L	8.284	6031093	8.406
Ca	43	3276.592	ug/L	2.579	18889	0.028
> Sc	45		ug/L		667183	667183.269
V	51	16.973	ug/L	4.153	36338	0.060
Cr	52	10.457	ug/L	1.522	20778	0.032
Cr	53		ug/L		100159	-0.064
Mn	55	637.764	ug/L	1.252	2006035	3.005
Fe	57	13960.141	ug/L	0.432	847714	1.265
Co	59	11.686	ug/L	1.103	25740	0.038
Ni	60	10.958	ug/L	0.837	4938	0.007
Cu	63		ug/L		39983	0.060
Cu	65	40.600	ug/L	1.709	19413	0.029
Zn	66	76.638	ug/L	1.215	25019	0.187
Zn	67		ug/L		9586	0.010
Zn	68		ug/L		18423	0.132
> Ge	74		ug/L		133270	133269.803
As	75	7.415	ug/L	2.885	2798	0.022
Se	77		ug/L		4562	-0.014
Se	82	0.820	ug/L	17.076	19	0.000
Kr	83		ug/L		119	0.000
Sr	88	21.832	ug/L	1.045	87525	1.299
Y	89		ug/L		466711	6.934
Ag	107	0.282	ug/L	6.770	429	0.006
Cd	111	1.198	ug/L	6.888	439	0.006
Cd	114		ug/L		118	0.002
> In	115		ug/L		67318	67317.885
Sn	120	5.349	ug/L	3.162	7734	0.113
Sb	121	1.928	ug/L	0.145	2476	0.032
Sb	123		ug/L		1973	0.026
Ba	135		ug/L		38428	0.454
Ba	137	103.744	ug/L	1.486	65914	0.779
Ho	165		ug/L		19852	0.235
> Lu	175		ug/L		84578	84578.190
Tl	205	0.277	ug/L	3.488	759	0.008
Pb	208	98.284	ug/L	2.151	377108	4.457
Bi	209		ug/L		808	0.009
U	238	33.409	ug/L	1.597	125706	1.486

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	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
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	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

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		92.4			
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		88.4			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Ag	107					
Cd	111					
Cd	114					
> In	115		90.9			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		98.7			
Tl	205					
Pb	208					
Bi	209					
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#6 - Summary Report

Sample ID: 245394011

Sample Date/Time: Sunday, February 14, 2010 11:31:14

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945425[2]rmj

Method File: c:\elandata\Method\6020 nolrs thtimozr.mth

Dataset File: C:\elandata\Dataset\100213\245394011.190

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	28.835	ug/L	1.305	19935	0.030
Be	9	11.004	ug/L	3.045	2864	0.004
B	11	7.115	ug/L	4.494	2289	0.003
Na	23	779.331	ug/L	11.561	2201420	3.367
Mg	24	4885.727	ug/L	1.035	8571558	13.153
Al	27	24740.660	ug/L	8.144	53569583	82.199
P	31	1132.346	ug/L	1.468	133758	0.197
K	39	3297.287	ug/L	1.893	8749827	12.792
Ca	43	27330.923	ug/L	0.945	150608	0.230
> Sc	45		ug/L		651554	651553.638
V	51	56.300	ug/L	1.492	126147	0.199
Cr	52	28.858	ug/L	0.615	56658	0.088
Cr	53		ug/L		102675	-0.056
Mn	55	525.154	ug/L	1.398	1613420	2.474
Fe	57	23511.686	ug/L	0.854	1391817	2.131
Co	59	14.174	ug/L	0.877	30457	0.047
Ni	60	21.501	ug/L	1.272	9405	0.014
Cu	63		ug/L		444519	0.682
Cu	65	458.338	ug/L	0.677	213475	0.328
Zn	66	124.598	ug/L	1.290	39782	0.304
Zn	67		ug/L		12042	0.030
Zn	68		ug/L		30014	0.224
> Ge	74		ug/L		130525	130525.330
As	75	13.836	ug/L	2.849	5224	0.041
Se	77		ug/L		4724	-0.012
Se	82	0.494	ug/L	33.811	7	0.000
Kr	83		ug/L		98	0.000
Sr	88	97.627	ug/L	1.740	382393	5.809
Y	89		ug/L		282840	4.297
Ag	107	1.324	ug/L	4.901	1880	0.028
Cd	111	1.766	ug/L	8.480	627	0.009
Cd	114		ug/L		517	0.008
> In	115		ug/L		65819	65819.117
Sn	120	5.944	ug/L	0.436	8391	0.125
Sb	121	14.672	ug/L	0.390	16535	0.247
Sb	123		ug/L		12607	0.188
Ba	135		ug/L		102791	1.287
Ba	137	292.535	ug/L	1.439	175486	2.197
Ho	165		ug/L		11579	0.145
> Lu	175		ug/L		79862	79862.429
Tl	205	0.249	ug/L	5.672	652	0.007
Pb	208	1504.703	ug/L	0.604	5449039	68.231
Bi	209		ug/L		2106	0.026
U	238	135.624	ug/L	1.150	481693	6.032

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	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
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	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

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	90.2			
|	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	86.6			
|	As	75				
|	Se	77				
|	Se	82				
|	Kr	83				
[	Sr	88				
|	Y	89				
|	Ag	107				
|	Cd	111				
|	Cd	114				
>	In	115	88.9			
|	Sn	120				
|	Sb	121				
|	Sb	123				
[	Ba	135				
|	Ba	137				
|	Ho	165				
>	Lu	175	93.1			
|	Tl	205				
|	Pb	208				
|	Bi	209				
|	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#6 - Summary Report

Sample ID: 245394012

Sample Date/Time: Sunday, February 14, 2010 11:37:09

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945425[2]rmj

Method File: c:\elandata\Method\6020 nolrs thtlimozr.mth

Dataset File: C:\elandata\Dataset\100213\245394012.191

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	69.679	ug/L	1.012	50252	0.074
Be	9	20.544	ug/L	1.794	5589	0.008
B	11	20.868	ug/L	1.802	5772	0.008
Na	23	429.811	ug/L	2.306	1274458	1.857
Mg	24	10562.406	ug/L	6.698	19373400	28.435
Al	27	71982.238	ug/L	0.683	162965561	239.156
P	31	479.020	ug/L	2.021	62581	0.083
K	39	8377.627	ug/L	11.335	22592889	32.502
Ca	43	11293.144	ug/L	1.161	65352	0.095
> Sc	45		ug/L		681436	681436.412
V	51	91.363	ug/L	2.702	216490	0.323
Cr	52	47.830	ug/L	0.521	98475	0.145
Cr	53		ug/L		103686	-0.062
Mn	55	708.421	ug/L	1.507	2275827	3.338
Fe	57	43251.306	ug/L	0.290	2674563	3.919
Co	59	17.942	ug/L	2.658	40278	0.059
Ni	60	39.913	ug/L	0.735	18209	0.027
Cu	63		ug/L		319688	0.469
Cu	65	319.079	ug/L	1.788	155433	0.228
Zn	66	177.005	ug/L	0.771	55841	0.432
Zn	67		ug/L		15189	0.056
Zn	68		ug/L		43194	0.329
> Ge	74		ug/L		129040	129040.176
As	75	14.599	ug/L	2.190	5458	0.043
Se	77		ug/L		4279	-0.016
Se	82	-0.607	ug/L	38.364	-31	-0.000
Kr	83		ug/L		145	0.001
Sr	88	102.104	ug/L	0.867	397708	6.075
Y	89		ug/L		270312	4.129
Ag	107	1.450	ug/L	2.850	2044	0.031
Cd	111	1.952	ug/L	3.322	688	0.010
Cd	114		ug/L		617	0.009
> In	115		ug/L		65457	65456.550
Sn	120	4.423	ug/L	2.920	6243	0.093
Sb	121	3.128	ug/L	2.689	3729	0.053
Sb	123		ug/L		2889	0.041
Ba	135		ug/L		196428	2.476
Ba	137	565.967	ug/L	1.667	337195	4.251
Ho	165		ug/L		10988	0.138
> Lu	175		ug/L		79335	79334.854
Tl	205	0.718	ug/L	1.673	1705	0.020
Pb	208	549.024	ug/L	0.951	1975116	24.896
Bi	209		ug/L		2583	0.032
U	238	480.458	ug/L	0.716	1695153	21.367

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	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
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	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		94.3			
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		85.6			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Ag	107					
Cd	111					
Cd	114					
> In	115		88.4			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		92.5			
Tl	205					
Pb	208					
Bi	209					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: 245394013

Sample Date/Time: Sunday, February 14, 2010 11:43:04

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945425[2]rmj

Method File: c:\elandata\Method\6020 noirs thtlimozr.mth

Dataset File: C:\elandata\Dataset\100213\245394013.192

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	78.985	ug/L	0.455	57216	0.083
Be	9	6.969	ug/L	1.918	1907	0.003
B	11	35.424	ug/L	0.845	9391	0.013
Na	23	439.208	ug/L	2.081	1307950	1.898
Mg	24	13566.945	ug/L	2.374	24997936	36.523
Al	27	93618.886	ug/L	10.106	212971757	311.043
P	31	328.279	ug/L	0.897	44959	0.057
K	39	10417.030	ug/L	2.090	28100609	40.414
Ca	43	9585.290	ug/L	1.038	55801	0.081
> Sc	45		ug/L		684554	684554.206
V	51	117.017	ug/L	1.881	279563	0.414
Cr	52	58.840	ug/L	2.021	121763	0.178
Cr	53		ug/L		107736	-0.056
Mn	55	714.543	ug/L	1.439	2305658	3.367
Fe	57	54223.404	ug/L	1.807	3366914	4.914
Co	59	20.693	ug/L	2.109	46634	0.068
Ni	60	66.116	ug/L	0.452	30262	0.044
Cu	63		ug/L		108090	0.158
Cu	65	105.171	ug/L	1.980	51499	0.075
Zn	66	154.660	ug/L	0.660	48724	0.378
Zn	67		ug/L		13775	0.045
Zn	68		ug/L		36374	0.276
> Ge	74		ug/L		128844	128844.112
As	75	14.810	ug/L	5.513	5533	0.044
Se	77		ug/L		4292	-0.015
Se	82	-1.426	ug/L	18.600	-60	-0.000
Kr	83		ug/L		175	0.001
Sr	88	103.901	ug/L	1.618	403204	6.182
Y	89		ug/L		183016	2.806
Ag	107	0.496	ug/L	8.285	712	0.011
Cd	111	1.482	ug/L	8.431	523	0.008
Cd	114		ug/L		192	0.003
> In	115		ug/L		65216	65216.460
Sn	120	5.298	ug/L	2.584	7423	0.112
Sb	121	0.421	ug/L	7.567	745	0.007
Sb	123		ug/L		574	0.006
Ba	135		ug/L		117011	1.495
Ba	137	341.239	ug/L	0.678	200575	2.563
Ho	165		ug/L		8494	0.108
> Lu	175		ug/L		78249	78248.839
Tl	205	0.816	ug/L	2.006	1899	0.023
Pb	208	69.248	ug/L	0.331	245941	3.140
Bi	209		ug/L		2296	0.029
U	238	128.803	ug/L	0.666	448272	5.728

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	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
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	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

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		94.8			
|	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		85.5			
|	As	75					
|	Se	77					
|	Se	82					
|	Kr	83					
|	Sr	88					
|	Y	89					
|	Ag	107					
|	Cd	111					
|	Cd	114					
>	In	115		88.1			
|	Sn	120					
|	Sb	121					
|	Sb	123					
|	Ba	135					
|	Ba	137					
|	Ho	165					
>	Lu	175		91.3			
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)
	V	51	Sample is out of limits (over linear range)
	Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: 245394014

Sample Date/Time: Sunday, February 14, 2010 11:49:00

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945425|2|rmj

Method File: c:\elandata\Method\6020 noirs thtmozr.mth

Dataset File: C:\elandata\Dataset\100213\245394014.193

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	53.424	ug/L	3.753	37990	0.056
Be	9	29.766	ug/L	4.611	7979	0.012
B	11	12.017	ug/L	6.058	3545	0.004
Na	23	489.749	ug/L	4.068	1429501	2.116
Mg	24	8796.667	ug/L	11.596	15908843	23.681
Al	27	41099.123	ug/L	9.373	91697823	136.549
P	31	877.920	ug/L	1.252	108188	0.152
K	39	5667.213	ug/L	4.993	15190135	21.986
Ca	43	9280.387	ug/L	1.740	53008	0.078
Sc	45		ug/L		671545	671544.696
V	51	59.777	ug/L	2.317	138274	0.212
Cr	52	45.247	ug/L	3.251	91777	0.137
Cr	53		ug/L		102042	-0.062
Mn	55	602.678	ug/L	1.730	1908116	2.840
Fe	57	30142.730	ug/L	0.920	1838007	2.732
Co	59	12.342	ug/L	2.554	27353	0.041
Ni	60	34.975	ug/L	1.992	15732	0.023
Cu	63		ug/L		1079391	1.607
Cu	65	1129.890	ug/L	0.623	542325	0.808
Zn	66	165.796	ug/L	1.595	52382	0.405
Zn	67		ug/L		14861	0.053
Zn	68		ug/L		41918	0.319
Ge	74		ug/L		129234	129233.920
As	75	8.454	ug/L	4.405	3112	0.025
Se	77		ug/L		4097	-0.017
Se	82	-0.925	ug/L	32.938	-42	-0.000
Kr	83		ug/L		124	0.001
Sr	88	60.184	ug/L	3.391	232794	3.581
Y	89		ug/L		172132	2.647
Ag	107	1.667	ug/L	1.299	2331	0.035
Cd	111	3.689	ug/L	6.834	1281	0.020
Cd	114		ug/L		2182	0.033
In	115		ug/L		65014	65013.534
Sn	120	6.362	ug/L	2.708	8858	0.134
Sb	121	5.089	ug/L	4.115	5846	0.086
Sb	123		ug/L		4494	0.066
Ba	135		ug/L		250138	3.158
Ba	137	720.518	ug/L	0.822	428708	5.412
Ho	165		ug/L		7101	0.089
Lu	175		ug/L		79214	79214.144
Tl	205	0.474	ug/L	2.519	1153	0.013
Pb	208	1354.103	ug/L	0.219	4864187	61.402
Bi	209		ug/L		3134	0.039
U	238	573.053	ug/L	1.060	2018909	25.485

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	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
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	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

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		93.0			
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		85.7			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Ag	107					
Cd	111					
Cd	114					
> In	115		87.8			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		92.4			
Tl	205					
Pb	208					
Bi	209					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Cu	65	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: 245394015

Sample Date/Time: Sunday, February 14, 2010 11:54:55

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945425[2]rmj

Method File: c:\elandata\Method\6020 nohrs tht\mozr.mth

Dataset File: C:\elandata\Dataset\100213\245394015.194

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	61.879	ug/L	3.125	43756	0.065
Be	9	14.826	ug/L	3.797	3955	0.006
B	11	2.505	ug/L	6.304	1236	0.001
Na	23	1281.674	ug/L	9.667	3707342	5.538
Mg	24	2308.403	ug/L	6.446	4152001	6.214
Al	27	12412.607	ug/L	4.522	27556859	41.240
P	31	485.146	ug/L	1.389	62072	0.084
K	39	2563.716	ug/L	6.743	7067303	9.946
Ca	43	7106.173	ug/L	1.110	40488	0.060
Sc	45		ug/L		668049	668049.024
V	51	14.247	ug/L	3.594	29939	0.050
Cr	52	15.163	ug/L	0.849	30341	0.046
Cr	53		ug/L		95783	-0.070
Mn	55	701.315	ug/L	1.441	2208616	3.304
Fe	57	21329.197	ug/L	1.250	1294900	1.933
Co	59	15.331	ug/L	0.634	33763	0.050
Ni	60	19.532	ug/L	1.492	8766	0.013
Cu	63		ug/L		791760	1.185
Cu	65	814.576	ug/L	1.103	388958	0.582
Zn	66	103.958	ug/L	0.841	33687	0.254
Zn	67		ug/L		10841	0.020
Zn	68		ug/L		24982	0.183
Ge	74		ug/L		132398	132398.352
As	75	7.183	ug/L	4.806	2689	0.021
Se	77		ug/L		4265	-0.016
Se	82	0.895	ug/L	30.019	21	0.000
Kr	83		ug/L		100	0.000
Sr	88	32.052	ug/L	1.858	128834	1.907
Y	89		ug/L		428646	6.348
Ag	107	0.865	ug/L	2.957	1268	0.018
Cd	111	1.848	ug/L	3.687	673	0.010
Cd	114		ug/L		347	0.005
In	115		ug/L		67524	67524.091
Sn	120	10.069	ug/L	1.039	14483	0.212
Sb	121	6.911	ug/L	2.688	8142	0.116
Sb	123		ug/L		6548	0.094
Ba	135		ug/L		67740	0.786
Ba	137	179.920	ug/L	1.482	116384	1.351
Ho	165		ug/L		17056	0.198
Lu	175		ug/L		86125	86125.422
Tl	205	0.162	ug/L	4.103	491	0.005
Pb	208	400.420	ug/L	1.415	1563769	18.157
Bi	209		ug/L		847	0.010
U	238	277.167	ug/L	0.844	1061547	12.326

Sample ID: 245394015

Page 1422 of 1574
Report Date/Time: Sunday, February 14, 2010 11:57:27

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	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
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	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

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		92.5			
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		87.8			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Ag	107					
Cd	111					
Cd	114					
> In	115		91.2			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		100.5			
Tl	205					
Pb	208					
Bi	209					
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#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, February 14, 2010 12:00:50

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 nohrs thtimozr.mth

Dataset File: C:\elandata\Dataset\100213\QC Std 6.195

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	52.006	ug/L	2.100	41352	0.055
Be	9	48.649	ug/L	3.303	14577	0.019
B	11	98.739	ug/L	4.390	27431	0.036
Na	23	4563.957	ug/L	3.518	14813516	19.719
Mg	24	5151.360	ug/L	3.931	10411250	13.868
Al	27	4630.786	ug/L	2.847	11560592	15.385
P	31	5031.031	ug/L	1.860	662339	0.874
K	39	5286.496	ug/L	9.451	15862794	20.509
Ca	43	4773.399	ug/L	2.206	30730	0.040
> Sc	45		ug/L		750902	750901.520
V	51	48.280	ug/L	0.424	124081	0.171
Cr	52	48.858	ug/L	1.793	110851	0.148
Cr	53		ug/L		117258	-0.058
Mn	55	50.171	ug/L	0.257	178960	0.236
Fe	57	4892.000	ug/L	1.445	337031	0.443
Co	59	47.679	ug/L	0.576	117668	0.156
Ni	60	48.518	ug/L	2.268	24372	0.032
Cu	63		ug/L		53538	0.071
Cu	65	48.176	ug/L	2.004	25910	0.034
Zn	66	48.002	ug/L	1.975	18288	0.117
Zn	67		ug/L		8667	-0.006
Zn	68		ug/L		13375	0.080
> Ge	74		ug/L		155210	155209.924
As	75	44.818	ug/L	1.475	20472	0.133
Se	77		ug/L		6173	-0.009
Se	82	47.496	ug/L	3.944	1971	0.013
Kr	83		ug/L		70	0.000
Sr	88	49.063	ug/L	2.224	230064	2.919
Y	89		ug/L		114	0.001
Ag	107	48.415	ug/L	1.668	81226	1.031
Cd	111	47.020	ug/L	1.061	19633	0.249
Cd	114		ug/L		44608	0.566
> In	115		ug/L		78766	78766.064
Sn	120	47.866	ug/L	2.386	79677	1.010
Sb	121	45.197	ug/L	13.742	60172	0.761
Sb	123		ug/L		46766	0.591
Ba	135		ug/L		18763	0.201
Ba	137	47.105	ug/L	1.976	33082	0.354
Ho	165		ug/L		16	0.000
> Lu	175		ug/L		93440	93440.209
Tl	205	45.843	ug/L	0.040	121706	1.301
Pb	208	49.321	ug/L	1.089	209269	2.236
Bi	209		ug/L		61	0.000
U	238	51.377	ug/L	1.230	213539	2.285

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	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
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	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std	% Recovery	Int Std	% Recovery	Spike	% Recovery	Dilution	% Dil	Duplicate	Rel. % Difference
[	Li	7		104.012								
|	Be	9		97.298								
|	B	11		98.739								
|	Na	23		91.279								
|	Mg	24		103.027								
|	Al	27		91.699								
|	P	31		100.621								
|	K	39		105.730								
|	Ca	43		95.468								
>	Sc	45					104.0					
|	V	51		96.560								
|	Cr	52		97.717								
|	Cr	53										
|	Mn	55		100.342								
|	Fe	57		97.840								
|	Co	59		95.359								
|	Ni	60		97.035								
|	Cu	63										
|	Cu	65		96.351								
|	Zn	66		96.003								
|	Zn	67										
|	Zn	68										
>	Ge	74					102.9					
|	As	75		89.635								
|	Se	77										
|	Se	82		94.992								
|	Kr	83										
|	Sr	88		98.126								
|	Y	89										
|	Ag	107		96.829								
|	Cd	111		94.041								
|	Cd	114										
>	In	115					106.3					
|	Sn	120		95.731								
|	Sb	121		90.395								
|	Sb	123										
|	Ba	135										
|	Ba	137		94.209								
|	Ho	165										
>	Lu	175					109.0					
|	Tl	205		91.686								
|	Pb	208		98.642								
|	Bi	209										
|	U	238		102.754								

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	As	75	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, February 14, 2010 12:06:44

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 noirs thtmozr.mth

Dataset File: C:\elandata\Dataset\100213\QC Std 7.196

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.025	ug/L	99.039	115	0.000
Be	9	0.015	ug/L	14.236	8	0.000
B	11	1.657	ug/L	40.081	1112	0.001
Na	23	3.122	ug/L	38.400	19013	0.013
Mg	24	0.859	ug/L	90.233	3667	0.002
Al	27	1.399	ug/L	46.217	7335	0.005
P	31	-1.567	ug/L	24.959	6050	-0.000
K	39	-11.087	ug/L	61.572	427302	-0.043
Ca	43	-14.928	ug/L	5.758	400	-0.000
> Sc	45		ug/L		720338	720337.948
V	51	1.710	ug/L	18.793	319	0.006
Cr	52	0.131	ug/L	79.648	-130	0.000
Cr	53		ug/L		138645	-0.021
Mn	55	-0.005	ug/L	433.616	1383	-0.000
Fe	57	-2.520	ug/L	98.325	3812	-0.000
Co	59	-0.005	ug/L	69.401	153	-0.000
Ni	60	-0.009	ug/L	311.829	60	-0.000
Cu	63		ug/L		313	0.000
Cu	65	0.100	ug/L	20.646	109	0.000
Zn	66	-0.016	ug/L	27.170	96	-0.000
Zn	67		ug/L		8058	-0.008
Zn	68		ug/L		714	-0.001
> Ge	74		ug/L		149766	149765.796
As	75	0.722	ug/L	28.376	173	0.002
Se	77		ug/L		6955	-0.002
Se	82	0.348	ug/L	84.429	2	0.000
Kr	83		ug/L		55	-0.000
Sr	88	0.002	ug/L	110.234	102	0.000
Y	89		ug/L		50	0.000
Ag	107	0.007	ug/L	12.587	38	0.000
Cd	111	0.016	ug/L	150.913	19	0.000
Cd	114		ug/L		20	0.000
> In	115		ug/L		73880	73879.669
Sn	120	0.335	ug/L	17.884	677	0.007
Sb	121	1.640	ug/L	34.887	2358	0.028
Sb	123		ug/L		1797	0.021
Ba	135		ug/L		15	0.000
Ba	137	0.009	ug/L	102.617	25	0.000
Ho	165		ug/L		7	-0.000
> Lu	175		ug/L		84842	84842.088
Tl	205	0.099	ug/L	28.757	333	0.003
Pb	208	0.013	ug/L	11.863	308	0.001
Bi	209		ug/L		20	0.000
U	238	0.122	ug/L	19.502	515	0.005

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	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
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	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		99.7			
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		99.3			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Ag	107					
Cd	111					
Cd	114					
> In	115		99.7			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		99.0			
Tl	205					
Pb	208					
Bi	209					
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 #6 Daily Performance Report

Sample ID: Sample

Sample Date/Time: Tuesday, February 16, 2010 02:06:57

Sample Description:

Method File: C:\elandata\Method\Daily2.mth

Dataset File: c:\elandata\Dataset\100204\Sample.829

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		1669.9		1669.898		48.428		2.9
Mg	24.0		16921.0		16921.016		174.825		1.0
Co	58.9		22066.0		22066.029		147.794		0.7
Rh	102.9		40737.8		40737.805		330.804		0.8
In	114.9		51333.3		51333.275		641.193		1.2
Pb	208.0		23973.1		23973.100		279.555		1.2
[> Ba	137.9		43855.2		43855.161		274.275		0.6
[Ba++	69.0		1289.0		0.029		0.001		2.5
[> Ce	139.9		56751.5		56751.522		833.066		1.5
[CeO	155.9		1122.2		0.020		0.000		1.4
Bkgd	220.0		16.0		16.000		3.021		18.9

Current Optimization File Data

Current Value	Description
0.78	Nebulizer Gas Flow
14.00	Lens Voltage
1450.00	ICP RF Power
-1781.25	Analog Stage Voltage
900.00	Pulse Stage Voltage
40.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	17	9.0	2628.9
Co	59	17	9.8	22788.8
In	115	17	10.8	48270.7

ICPMS #6 Instrument Tuning Report

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	585	2080	0.653
Be	9.0	9.0	2023	2080	0.671
Mg	24.0	24.0	5690	2120	0.661
Mg	25.0	25.0	5907	2080	0.730
Mg	26.0	26.0	6174	2120	0.754
Co	58.9	58.9	14162	2170	0.649
Rh	102.9	103.0	24873	2230	0.690
In	114.9	114.9	27781	2260	0.694
Ce	139.9	140.0	33863	2280	0.742
Pb	206.0	206.0	49948	2433	0.726
Pb	207.0	207.1	50147	2385	0.672
Pb	208.0	208.0	50463	2430	0.706
U	238.1	238.1	57730	2470	0.688

ICPMS#6 - Summary Report

Sample ID: Blank

Sample Date/Time: Tuesday, February 16, 2010 06:54:40

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w.mth

Dataset File: c:\elandata\dataset\100215\Blank.073

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		65854	
[	U	238	ug/L		44	

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	

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

ICPMS#6 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Tuesday, February 16, 2010 06:57:45

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu.mth

Dataset File: c:\elandata\dataset\100215\Standard 1.074

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		66378	66377.866
[	U	238	10.000 ug/L	1.503	41860	0.630

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 % Dil	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

1

ICPMS#6 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Tuesday, February 16, 2010 07:00:47

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w.mth

Dataset File: c:\elandata\dataset\100215\Standard 2.075

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu 175		ug/L		64501	64500.624
[	U 238	99.966	ug/L	1.119	393037	6.094

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 % Dil	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

ICPMS#6 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Tuesday, February 16, 2010 07:03:49

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w.mth

Dataset File: c:\elandata\dataset\100215\QC Std 1.076

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175	ug/L		63014	63013.980
[	U	238	52.536 ug/L	0.881	201827	3.202

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 % Dil	Duplicate Rel. % Difference
>	Lu	175		95.7		
[U	238	105.072			

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#6 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Tuesday, February 16, 2010 07:06:54

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu.mth

Dataset File: c:\elandata\dataset\100215\QC Std 2.077

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Lu	175		ug/L		65141	65141.177
U	238	0.095	ug/L	6.077	421	0.006

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 % Dil	Duplicate Rel. % Difference
Lu	175		98.9			
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

ICPMS#6 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Tuesday, February 16, 2010 07:10:00

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu.mth

Dataset File: c:\elandata\dataset\100215\QC Std 3.078

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		65344	65343.781
[U	238	0.258	ug/L	2.270	1073	0.016

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 % Dil	Duplicate Rel. % Difference
[> Lu	175			99.2		
[U	238	129.208				

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#6 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Tuesday, February 16, 2010 07:13:03

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\U.mth

Dataset File: c:\elandata\dataset\100215\QC Std 4.079

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		62451	62450.506
[	U	238	0.009 ug/L	27.771	77	0.001

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 % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175		94.8			
[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

ICPMS#6 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Tuesday, February 16, 2010 07:16:07

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w.mth

Dataset File: c:\elandata\dataset\100215\QC Std 5.080

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu 175		ug/L		63041	63041.106
[U 238	19.547	ug/L	0.725	75159	1.192

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 % Dil	Duplicate Rel. % Difference
[> Lu 175			95.7		
[U 238	97.735				

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#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Tuesday, February 16, 2010 07:19:11

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w.mth

Dataset File: c:\elandata\dataset\100215\QC Std 6.081

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		61519	61519.132
[	U	238	52.447 ug/L	1.040	196708	3.197

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 % Dif	Duplicate Rel. % Difference
[>	Lu	175		93.4		
[	U	238	104.895			

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Tuesday, February 16, 2010 07:22:16

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w.mth

Dataset File: c:\elandata\dataset\100215\QC Std 7.082

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu 175		ug/L		62235	62235.238
[U 238	0.080	ug/L	3.845	345	0.005

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 % Dil	Duplicate Rel. % Difference
[> Lu 175			94.5		
[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#6 - Summary Report

Sample ID: 1202024819

Sample Date/Time: Tuesday, February 16, 2010 07:25:22

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 945425|2|rmj

Method File: c:\elandata\Method\w.mth

Dataset File: c:\elandata\dataset\100215\1202024819.083

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		71368	71367.537
[	U	238	0.044 ug/L	4.826	238	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 % Recov	Dilution % Di	Duplicate Rel. % Difference
[>	Lu	175		108.4		
[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

ICPMS#6 - Summary Report

Sample ID: 1202024820

Sample Date/Time: Tuesday, February 16, 2010 07:28:57

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 945425|40|rm|

Method File: c:\elandata\Method\w.mth

Dataset File: c:\elandata\dataset\100215\1202024820.084

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		63170	63169.677
[	U	238	0.476 ug/L	3.071	1875	0.029

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 % Dil	Duplicate Rel. % Difference
[>	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

ICPMS#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Tuesday, February 16, 2010 07:32:31

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\U.mth

Dataset File: c:\elandata\dataset\100215\QC Std 6.085

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		62192	62192.043
[	U	238	52.844 ug/L	2.085	200359	3.221

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 % Dil	Duplicate Rel.	% Difference
[>	Lu	175		94.4			
[U	238	105.688				

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#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Tuesday, February 16, 2010 07:35:36

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w.mth

Dataset File: c:\elandata\dataset\100215\QC Std 7.086

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175	ug/L		62392	62391.935
[	U	238	ug/L	8.015	357	0.005

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	Duplicate Rel. % Difference
>	Lu	175		94.7		
[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#6 - Summary Report

Sample ID: 245394001

Sample Date/Time: Tuesday, February 16, 2010 07:38:41

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945425|10|rmj

Method File: c:\elandata\Method\w.mth

Dataset File: c:\elandata\dataset\100215\245394001.087

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu 175		ug/L		62815	62815.436
[U 238	52.934	ug/L	2.203	202706	3.227

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 % Dil	Duplicate Rel. % Difference
[> Lu 175			95.4		
[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

ICPMS#6 - Summary Report

Sample ID: 1202024821

Sample Date/Time: Tuesday, February 16, 2010 07:42:16

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 945425[10]rmj

Method File: c:\elandata\Method\w.mth

Dataset File: c:\elandata\dataset\100215\1202024821.088

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		59980	59979.599
[U	238	32.155	ug/L	1.368	117593	1.960

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 % Dil	Duplicate Rel. % Difference
[> Lu	175		91.1			
[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#6 - Summary Report

Sample ID: 1202024822

Sample Date/Time: Tuesday, February 16, 2010 07:45:51

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 945425|10|rmj

Method File: c:\elandata\Method\w.mth

Dataset File: c:\elandata\dataset\100215\1202024822.089

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		59443	59443.346
[	U	238	63.939 ug/L	1.551	231711	3.897

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 % Dif	Duplicate Rel. % Difference
[>	Lu	175		90.3		
[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

ICPMS#6 - Summary Report

Sample ID: 1202024824

Sample Date/Time: Tuesday, February 16, 2010 07:49:26

Sample Type:

Sample Description: LANL 6020 MSD

Number of Replicates: 3

Batch ID: 945425[10]rmj

Method File: c:\elandata\Method\U.mth

Dataset File: c:\elandata\dataset\100215\1202024824.090

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu 175		ug/L		59696	59695.728
[U 238	38.840	ug/L	1.830	141373	2.368

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 % Dil	Duplicate Rel. % Difference
[> Lu 175		90.6			
[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

ICPMS#6 - Summary Report

Sample ID: 1202024823

Sample Date/Time: Tuesday, February 16, 2010 07:53:00

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 945425[50]rmj

Method File: c:\elandata\Method\lu.mth

Dataset File: c:\elandata\dataset\100215\1202024823.091

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		63369	63368.542
[	U	238	ug/L	1.321	38163	0.602

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 % Dil	Duplicate Rel. % Difference
[>	Lu	175		96.2		
[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

ICPMS#6 - Summary Report

Sample ID: 245394002

Sample Date/Time: Tuesday, February 16, 2010 07:56:36

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945425[2]rm]

Method File: c:\elandata\Method\w.mth

Dataset File: c:\elandata\dataset\100215\245394002.092

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		72932	72931.764
[	U	238	65.707 ug/L	1.426	292159	4.005

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 % Dil	Duplicate Rel. % Difference
[>	Lu	175		110.7		
[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#6 - Summary Report

Sample ID: 245394003

Sample Date/Time: Tuesday, February 16, 2010 08:00:11

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945425|10|rmj

Method File: c:\elandata\Method\w.mth

Dataset File: c:\elandata\dataset\100215\245394003.093

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		60886	60886.419
[	U	238	ug/L	0.281	223874	3.676

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 % Dil	Duplicate Rel. % Difference
[>	Lu	175		92.5		
[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#6 - Summary Report

Sample ID: 245394004

Sample Date/Time: Tuesday, February 16, 2010 08:03:46

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945425|10|rmj

Method File: c:\elandata\Method\w.mth

Dataset File: c:\elandata\dataset\100215\245394004.094

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		59947	59946.790
[	U	238	76.750 ug/L	1.619	280462	4.678

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 % Dil	Duplicate Rel.	% Difference
[>	Lu	175		91.0			
[	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#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Tuesday, February 16, 2010 08:07:20

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w.mth

Dataset File: c:\elandata\dataset\100215\QC Std 6.095

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		58376	58376.287
[	U	238	54.416 ug/L	1.696	193649	3.317

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 % Dil	Duplicate Rel. % Difference
[>	Lu	175		88.6		
[U	238	108.831			

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#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Tuesday, February 16, 2010 08:10:25

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu.mth

Dataset File: c:\elandata\dataset\100215\QC Std 7.096

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		58074	58073.714
[	U	238	0.090 ug/L	7.821	359	0.006

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 % Dil	Duplicate Rel.	% Difference
[>	Lu	175		88.2			
[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

ICPMS#6 - Summary Report

Sample ID: 245394005

Sample Date/Time: Tuesday, February 16, 2010 08:13:31

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945425[2]rmj

Method File: c:\elandata\Method\lu.mth

Dataset File: c:\elandata\dataset\100215\245394005.097

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu 175		ug/L		71526	71526.338
[U 238	16.281	ug/L	1.277	71031	0.992

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 % Dil	Duplicate Rel. % Difference
[> Lu 175		108.6			
[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#6 - Summary Report

Sample ID: 245394006

Sample Date/Time: Tuesday, February 16, 2010 08:17:06

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945425|10|rmj

Method File: c:\elandata\Method\w.mth

Dataset File: c:\elandata\dataset\100215\245394006.098

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu 175		ug/L		61003	61002.583
[U 238	64.268	ug/L	0.666	239013	3.918

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		92.6			
[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

ICPMS#6 - Summary Report

Sample ID: 245394007

Sample Date/Time: Tuesday, February 16, 2010 08:20:41

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945425|40|rmj

Method File: c:\elandata\Method\w.mth

Dataset File: c:\elandata\dataset\100215\245394007.099

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		63371	63370.896
[	U	238	76.610 ug/L	0.516	295959	4.670

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 % Dil	Duplicate Rel. % Difference
[>	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

ICPMS#6 - Summary Report

Sample ID: 245394008

Sample Date/Time: Tuesday, February 16, 2010 08:24:16

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945425|40|rmj

Method File: c:\elandata\Method\w.mth

Dataset File: c:\elandata\dataset\100215\245394008.100

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
> Lu 175		ug/L		64083	64082.721
[U 238	94.132	ug/L	1.461	367716	5.738

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 % Dil	Duplicate Rel. % Difference
> Lu 175			97.3		
[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#6 - Summary Report

Sample ID: 245394009

Sample Date/Time: Tuesday, February 16, 2010 08:27:52

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945425|20|rmj

Method File: c:\elandata\Method\w.mth

Dataset File: c:\elandata\dataset\100215\245394009.101

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		62342	62341.690
[	U	238	72.749 ug/L	1.636	276478	4.434

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 % Dil	Duplicate Rel. % Difference
[>	Lu	175		94.7		
[	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#6 - Summary Report

Sample ID: 245394010

Sample Date/Time: Tuesday, February 16, 2010 08:31:27

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945425|2|rmj

Method File: c:\elandata\Method\w.mth

Dataset File: c:\elandata\dataset\100215\245394010.102

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175	ug/L		73801	73801.211
[	U	238	24.912 ug/L	0.263	112119	1.519

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 % Dil	Duplicate Rel. % Difference
>	Lu	175		112.1		
[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#6 - Summary Report

Sample ID: 245394011

Sample Date/Time: Tuesday, February 16, 2010 08:35:03

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945425|10|rmj

Method File: c:\elandata\Method\lu.mth

Dataset File: c:\elandata\dataset\100215\245394011.103

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		61575	61574.732
[	U	238	24.760 ug/L	2.043	92953	1.509

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 % Diff	Duplicate Rel. % Difference
[>	Lu	175		93.5		
[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#6 - Summary Report

Sample ID: 245394012

Sample Date/Time: Tuesday, February 16, 2010 08:38:39

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945425|20|rmj

Method File: c:\elandata\Method\w.mth

Dataset File: c:\elandata\dataset\100215\245394012.104

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu 175		ug/L		63547	63547.331
[U 238	49.980	ug/L	1.530	193634	3.047

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 % Dil	Duplicate Rel. % Difference
[> Lu 175			96.5		
[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#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Tuesday, February 16, 2010 08:42:13

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w.mth

Dataset File: c:\elandata\dataset\100215\QC Std 6.105

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu 175		ug/L		58862	58861.937
[U 238	54.851	ug/L	0.308	196843	3.343

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			89.4		
[U 238	109.701				

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Tuesday, February 16, 2010 08:45:18

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w.mth

Dataset File: c:\elandata\dataset\100215\QC Std 7.106

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		59542	59541.761
[	U	238	0.077 ug/L	7.952	320	0.005

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		90.4		
[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

ICPMS#6 - Summary Report

Sample ID: 245394013

Sample Date/Time: Tuesday, February 16, 2010 08:48:24

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945425|10|rm|

Method File: c:\elandata\Method\lu.mth

Dataset File: c:\elandata\dataset\100215\245394013.107

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu 175		ug/L		60562	60561.704
[U 238	22.186	ug/L	0.982	81943	1.352

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 % Recov	Dilution % Di	Duplicate Rel. % Difference
[> Lu 175		92.0			
[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

ICPMS#6 - Summary Report

Sample ID: 245394014

Sample Date/Time: Tuesday, February 16, 2010 08:52:00

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945425[20]rmj

Method File: c:\elandata\Method\lu.mth

Dataset File: c:\elandata\dataset\100215\245394014.108

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu 175		ug/L		62366	62366.127
[U 238	58.180	ug/L	1.347	221219	3.546

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 % Dil	Duplicate Rel. % Difference
[> Lu 175			94.7		
[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#6 - Summary Report

Sample ID: 245394015

Sample Date/Time: Tuesday, February 16, 2010 08:55:35

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 945425|10|rmj

Method File: c:\elandata\Method\w.mth

Dataset File: c:\elandata\dataset\100215\245394015.109

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu 175		ug/L		61160	61160.290
[U 238	56.743	ug/L	1.812	211532	3.459

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 % Dil	Duplicate Rel. % Difference
[> Lu 175			92.9		
[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

ICPMS#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Tuesday, February 16, 2010 08:59:10

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w.mth

Dataset File: c:\elandata\dataset\100215\QC Std 6.110

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		59159	59159.165
[	U	238	54.239 ug/L	0.087	195629	3.306

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		89.8			
[U	238	108.477				

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#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Tuesday, February 16, 2010 09:02:15

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu.mth

Dataset File: c:\elandata\dataset\100215\QC Std 7.111

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		59961	59960.847
[	U	238	0.082 ug/L	7.257	341	0.005

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 % Dil	Duplicate Rel. % Difference
[>	Lu	175		91.1		
[	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

=====
Analysis BegunLogged In Analyst: Administrator
Spectrometer Model: FIMS-100, S/N B050-9550Technique: AA FIMS-MHS
Autosampler Model: S10Sample Information File: C:\data-AA\Administrator\Sample Information\021010S1.sif
Batch ID:
Results Data Set: 021010S1
Results Library: C:\data-AA\Administrator\Results\Results.mdb=====
Method LoadedMethod Name: SOIL
Method Description: 7471A, ILM04 ANALYST JXL

Method Last Saved: 1/4/2010 13:53:20

Sequence No.: 1
Sample ID: Calib Blank
Analyst:Autosampler Location: 1
Date Collected: 2/10/2010 08:50:00
Data Type: Original-----
Replicate Data: Calib Blank

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1		[0.00]	0.0003	0.0003	0.0003	08:50:51	Yes
2		[0.00]	0.0004	0.0013	0.0004	08:51:20	Yes
Mean:		[0.00]	0.0003				
SD:		0.00	0.0000				
%RSD:		0.00	14.85				

Auto-zero performed.

Sequence No.: 2
Sample ID: S0.2
Analyst:Autosampler Location: 2
Date Collected: 2/10/2010 08:51:39
Data Type: Original-----
Replicate Data: S0.2

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1		[0.2]	0.0024	0.0111	0.0027	08:52:30	Yes
2		[0.2]	0.0023	0.0094	0.0026	08:53:00	Yes
Mean:		[0.2]	0.0023				
SD:		0.0	0.0001				
%RSD:		0.0	3.93				

Standard number 1 applied. [0.2]
Correlation Coef.: 1.000000 Slope: 0.01161 Intercept: 0.00000

Sequence No.: 3
Sample ID: S0.5
Analyst:Autosampler Location: 3
Date Collected: 2/10/2010 08:53:19
Data Type: Original-----
Replicate Data: S0.5

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1		[0.5]	0.0057	0.0243	0.0061	08:54:09	Yes
2		[0.5]	0.0057	0.0233	0.0060	08:54:39	Yes
Mean:		[0.5]	0.0057				
SD:		0.0	0.0001				
%RSD:		0.0	1.03				

Standard number 2 applied. [0.5]
Correlation Coef.: 0.999969 Slope: 0.01141 Intercept: 0.00002

Sequence No.: 4
Sample ID: S2.0
Analyst:Autosampler Location: 4
Date Collected: 2/10/2010 08:54:59
Data Type: Original

Replicate Data: S2.0

Repl #	SampleConc ug/L	StdConc ug/L	BlankCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2.0]	0.0231	0.0954	0.0234	08:55:50	Yes
2		[2.0]	0.0229	0.0944	0.0232	08:56:20	Yes
Mean:		[2.0]	0.0230				
SD:		0.0	0.0002				
%RSD:		0.0	0.70				

Standard number 3 applied. [2.0]
Correlation Coef.: 0.999997 Slope: 0.01149 Intercept: -0.00000

Sequence No.: 5

Sample ID: S5.0

Analyst:

Autosampler Location: 5

Date Collected: 2/10/2010 08:56:40

Data Type: Original

Replicate Data: S5.0

Repl #	SampleConc ug/L	StdConc ug/L	BlankCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5.0]	0.0565	0.2345	0.0568	08:57:32	Yes
2		[5.0]	0.0560	0.2313	0.0563	08:58:01	Yes
Mean:		[5.0]	0.0562				
SD:		0.0	0.0003				
%RSD:		0.0	0.59				

Standard number 4 applied. [5.0]
Correlation Coef.: 0.999961 Slope: 0.01125 Intercept: 0.00013

Sequence No.: 6

Sample ID: S10.0

Analyst:

Autosampler Location: 6

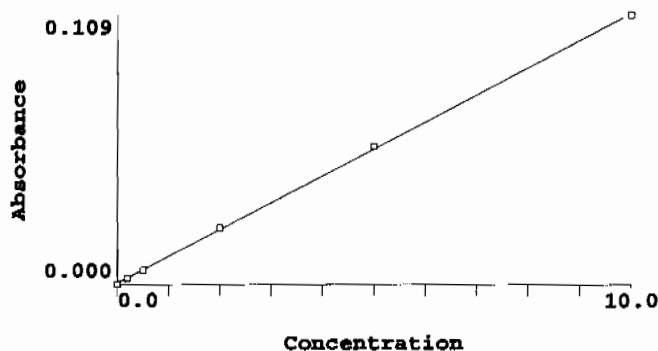
Date Collected: 2/10/2010 08:58:22

Data Type: Original

Replicate Data: S10.0

Repl #	SampleConc ug/L	StdConc ug/L	BlankCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10.0]	0.1100	0.4525	0.1103	08:59:12	Yes
2		[10.0]	0.1089	0.4493	0.1092	08:59:42	Yes
Mean:		[10.0]	0.1094				
SD:		0.0	0.0008				
%RSD:		0.0	0.71				

Standard number 5 applied. [10.0]
Correlation Coef.: 0.999887 Slope: 0.01096 Intercept: 0.00046

-----
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	-0.042	0.00	14.8
S0.2	0.0023	0.2	0.170	0.00	3.9
S0.5	0.0057	0.5	0.479	0.00	1.0
S2.0	0.0230	2.0	2.056	0.00	0.7

S5.0 0.0562 5.0 5.090 0.00 0.6
S10.0 0.1094 10.0 9.945 0.00 0.7
Correlation Coef.: 0.999887 Slope: 0.01096 Intercept: 0.00046

Sequence No.: 7

Autosampler Location: 9

Sample ID: ICV

Date Collected: 2/10/2010 09:00:01

Analyst:

Data Type: Original

Replicate Data: ICV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.248	5.248	0.0580	0.2383	0.0583	09:00:52	Yes
2	5.207	5.207	0.0575	0.2344	0.0578	09:01:22	Yes
Mean:	5.228	5.228	0.0577				
SD:	0.030	0.030	0.0003				
%RSD:	0.566	0.566	0.56				

QC value within limits for Hg 253.7 Recovery = 104.55%
All analyte(s) passed QC.

Sequence No.: 8

Autosampler Location: 10

Sample ID: ICB

Date Collected: 2/10/2010 09:01:41

Analyst:

Data Type: Original

Replicate Data: ICB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.028	-0.028	0.0001	0.0010	0.0005	09:02:33	Yes
2	-0.031	-0.031	0.0001	0.0010	0.0004	09:03:03	Yes
Mean:	-0.030	-0.030	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	7.743	7.743	19.45				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 9

Autosampler Location: 11

Sample ID: CRDL

Date Collected: 2/10/2010 09:03:23

Analyst:

Data Type: Original

Replicate Data: CRDL

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.171	0.171	0.0023	0.0103	0.0026	09:04:14	Yes
2	0.168	0.168	0.0023	0.0101	0.0026	09:04:44	Yes
Mean:	0.170	0.170	0.0023				
SD:	0.002	0.002	0.0000				
%RSD:	1.222	1.222	0.98				

QC value within limits for Hg 253.7 Recovery = 84.87%
All analyte(s) passed QC.

Sequence No.: 10

Autosampler Location: 7

Sample ID: CCV

Date Collected: 2/10/2010 09:05:04

Analyst:

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.071	5.071	0.0560	0.2297	0.0563	09:05:55	Yes
2	5.062	5.062	0.0559	0.2309	0.0562	09:06:25	Yes
Mean:	5.066	5.066	0.0560				
SD:	0.006	0.006	0.0001				
%RSD:	0.124	0.124	0.12				

QC value within limits for Hg 253.7 Recovery = 101.32%
All analyte(s) passed QC.

Sequence No.: 11

Sample ID: CCB

Analyst:

Autosampler Location: 8

Date Collected: 2/10/2010 09:06:44

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.029	-0.029	0.0001	0.0015	0.0005	09:07:34	Yes
2	-0.024	-0.024	0.0002	0.0022	0.0005	09:08:04	Yes
Mean:	-0.027	-0.027	0.0002				
SD:	0.004	0.004	0.0000				
%RSD:	14.23	14.23	25.29				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 12

Sample ID: 1202037073|950546|1

Analyst: JXL

Autosampler Location: 12

Date Collected: 2/10/2010 09:08:23

Data Type: Original

Replicate Data: 1202037073|950546|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.029	-0.029	0.0001	0.0023	0.0005	09:09:14	Yes
2	-0.024	-0.024	0.0002	0.0028	0.0005	09:09:44	Yes
Mean:	-0.027	-0.027	0.0002				
SD:	0.003	0.003	0.0000				
%RSD:	12.04	12.04	21.14				

Sequence No.: 13

Sample ID: 1202037074|950546|10

Analyst: JXL

Autosampler Location: 13

Date Collected: 2/10/2010 09:10:04

Data Type: Original

Replicate Data: 1202037074|950546|10

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	3.567	3.567	0.0395	0.1631	0.0399	09:10:56	Yes
2	3.525	3.525	0.0391	0.1620	0.0394	09:11:26	Yes
Mean:	3.546	3.546	0.0393				
SD:	0.030	0.030	0.0003				
%RSD:	0.843	0.843	0.83				

Sequence No.: 14

Sample ID: 245910001|950546|1

Analyst: JXL

Autosampler Location: 14

Date Collected: 2/10/2010 09:11:46

Data Type: Original

Replicate Data: 245910001|950546|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.425	0.425	0.0051	0.0236	0.0054	09:12:36	Yes
2	0.422	0.422	0.0051	0.0228	0.0054	09:13:06	Yes
Mean:	0.424	0.424	0.0051				
SD:	0.002	0.002	0.0000				
%RSD:	0.516	0.516	0.47				

Sequence No.: 15

Sample ID: 245910002|950546|1

Analyst: JXL

Autosampler Location: 15

Date Collected: 2/10/2010 09:13:25

Data Type: Original

Replicate Data: 245910002|950546|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
------	------------	---------	---------	------	------	------	------

Replicate Data: 245913001|950546|1

Repl	SampleConc	StdndConc	BlndCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.053	0.053	0.0010	0.0053	0.0014	09:22:33	Yes
2	0.057	0.057	0.0011	0.0055	0.0014	09:23:03	Yes
Mean:	0.055	0.055	0.0011				
SD:	0.003	0.003	0.0000				
%RSD:	5.084	5.084	2.90				

=====

Sequence No.: 21
Sample ID: 1202037075|950546|1
Analyst: JXLAutosampler Location: 21
Date Collected: 2/10/2010 09:23:23
Data Type: Original-----
Replicate Data: 1202037075|950546|1

Repl	SampleConc	StdndConc	BlndCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.073	0.073	0.0013	0.0070	0.0016	09:24:14	Yes
2	0.075	0.075	0.0013	0.0076	0.0016	09:24:44	Yes
Mean:	0.074	0.074	0.0013				
SD:	0.001	0.001	0.0000				
%RSD:	1.353	1.353	0.87				

=====

Sequence No.: 22
Sample ID: CCV
Analyst:Autosampler Location: 7
Date Collected: 2/10/2010 09:25:03
Data Type: Original-----
Replicate Data: CCV

Repl	SampleConc	StdndConc	BlndCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.059	5.059	0.0559	0.2322	0.0562	09:25:54	Yes
2	5.022	5.022	0.0555	0.2308	0.0558	09:26:24	Yes
Mean:	5.041	5.041	0.0557				
SD:	0.026	0.026	0.0003				
%RSD:	0.518	0.518	0.51				

QC value within limits for Hg 253.7 Recovery = 100.82%
All analyte(s) passed QC.

=====

Sequence No.: 23
Sample ID: CCB
Analyst:Autosampler Location: 8
Date Collected: 2/10/2010 09:26:43
Data Type: Original-----
Replicate Data: CCB

Repl	SampleConc	StdndConc	BlndCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.029	-0.029	0.0001	0.0028	0.0005	09:27:34	Yes
2	-0.022	-0.022	0.0002	0.0043	0.0005	09:28:04	Yes
Mean:	-0.025	-0.025	0.0002				
SD:	0.005	0.005	0.0001				
%RSD:	20.69	20.69	32.62				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

=====

Sequence No.: 24
Sample ID: 1202037076|950546|1
Analyst: JXLAutosampler Location: 22
Date Collected: 2/10/2010 09:28:23
Data Type: Original-----
Replicate Data: 1202037076|950546|1

Repl	SampleConc	StdndConc	BlndCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.134	2.134	0.0238	0.0991	0.0242	09:29:15	Yes
2	2.148	2.148	0.0240	0.0995	0.0243	09:29:45	Yes

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.016	0.016	0.0006	0.0041	0.0009	09:37:39	Yes
2	0.016	0.016	0.0006	0.0038	0.0009	09:38:09	Yes
Mean:	0.016	0.016	0.0006				
SD:	0.000	0.000	0.0000				
%RSD:	1.593	1.593	0.44				

Sequence No.: 30

Autosampler Location: 28

Sample ID: 245913005|950546|1

Date Collected: 2/10/2010 09:38:28

Analyst: JXL

Data Type: Original

Replicate Data: 245913005|950546|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.179	0.179	0.0024	0.0113	0.0027	09:39:19	Yes
2	0.175	0.175	0.0024	0.0114	0.0027	09:39:49	Yes
Mean:	0.177	0.177	0.0024				
SD:	0.003	0.003	0.0000				
%RSD:	1.737	1.737	1.41				

Sequence No.: 31

Autosampler Location: 29

Sample ID: 1202037079|950549|1

Date Collected: 2/10/2010 09:40:08

Analyst: JXL

Data Type: Original

Replicate Data: 1202037079|950549|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.039	-0.039	0.0000	0.0013	0.0003	09:40:59	Yes
2	-0.037	-0.037	0.0001	0.0011	0.0004	09:41:28	Yes
Mean:	-0.038	-0.038	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	4.954	4.954	53.16				

Sequence No.: 32

Autosampler Location: 30

Sample ID: 1202037080|950549|10

Date Collected: 2/10/2010 09:41:48

Analyst: JXL

Data Type: Original

Replicate Data: 1202037080|950549|10

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	3.626	3.626	0.0402	0.1670	0.0405	09:42:38	Yes
2	3.608	3.608	0.0400	0.1650	0.0403	09:43:08	Yes
Mean:	3.617	3.617	0.0401				
SD:	0.013	0.013	0.0001				
%RSD:	0.346	0.346	0.34				

Sequence No.: 33

Autosampler Location: 31

Sample ID: 245915001|950549|1

Date Collected: 2/10/2010 09:43:27

Analyst: JXL

Data Type: Original

Replicate Data: 245915001|950549|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.320	0.320	0.0040	0.0176	0.0043	09:44:17	Yes
2	0.321	0.321	0.0040	0.0181	0.0043	09:44:47	Yes
Mean:	0.321	0.321	0.0040				
SD:	0.001	0.001	0.0000				
%RSD:	0.400	0.400	0.35				

Sequence No.: 34

Autosampler Location: 7

Sample ID: CCV

Date Collected: 2/10/2010 09:45:06

Analyst:

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.032	5.032	0.0556	0.2317	0.0559	09:45:56	Yes
2	5.045	5.045	0.0557	0.2313	0.0560	09:46:26	Yes
Mean:	5.038	5.038	0.0557				
SD:	0.009	0.009	0.0001				
%RSD:	0.188	0.188	0.19				

QC value within limits for Hg 253.7 Recovery = 100.77%
All analyte(s) passed QC.

=====

Sequence No.: 35

Autosampler Location: 8

Sample ID: CCB

Date Collected: 2/10/2010 09:46:45

Analyst:

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.040	-0.040	0.0000	0.0012	0.0003	09:47:36	Yes
2	-0.033	-0.033	0.0001	0.0018	0.0004	09:48:05	Yes
Mean:	-0.036	-0.036	0.0001				
SD:	0.005	0.005	0.0001				
%RSD:	14.00	14.00	91.62				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

=====

Sequence No.: 36

Autosampler Location: 32

Sample ID: 245915002|950549|1

Date Collected: 2/10/2010 09:48:25

Analyst: JXL

Data Type: Original

Replicate Data: 245915002|950549|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.112	0.112	0.0017	0.0083	0.0020	09:49:16	Yes
2	0.118	0.118	0.0017	0.0086	0.0021	09:49:46	Yes
Mean:	0.115	0.115	0.0017				
SD:	0.005	0.005	0.0001				
%RSD:	3.996	3.996	2.93				

=====

Sequence No.: 37

Autosampler Location: 33

Sample ID: 245915003|950549|1

Date Collected: 2/10/2010 09:50:05

Analyst: JXL

Data Type: Original

Replicate Data: 245915003|950549|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.293	0.293	0.0037	0.0166	0.0040	09:50:56	Yes
2	0.289	0.289	0.0036	0.0164	0.0039	09:51:26	Yes
Mean:	0.291	0.291	0.0036				
SD:	0.003	0.003	0.0000				
%RSD:	0.996	0.996	0.87				

=====

Sequence No.: 38

Autosampler Location: 34

Sample ID: 245915004|950549|1

Date Collected: 2/10/2010 09:51:45

Analyst: JXL

Data Type: Original

Replicate Data: 245915004|950549|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.161	0.161	0.0022	0.0106	0.0025	09:52:37	Yes

Replicate Data: 1202037082|950549|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.259	2.259	0.0252	0.1063	0.0255	10:01:04	Yes
2	2.272	2.272	0.0253	0.1068	0.0257	10:01:34	Yes
Mean:	2.265	2.265	0.0253				
SD:	0.009	0.009	0.0001				
%RSD:	0.392	0.392	0.39				

Sequence No.: 44

Autosampler Location: 40

Sample ID: 1202037084|950549|1

Date Collected: 2/10/2010 10:01:53

Analyst: JXL

Data Type: Original

Replicate Data: 1202037084|950549|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.217	2.217	0.0247	0.1037	0.0251	10:02:45	Yes
2	2.197	2.197	0.0245	0.1026	0.0248	10:03:14	Yes
Mean:	2.207	2.207	0.0246				
SD:	0.014	0.014	0.0002				
%RSD:	0.649	0.649	0.64				

Sequence No.: 45

Autosampler Location: 41

Sample ID: 1202037083|950549|5

Date Collected: 2/10/2010 10:03:34

Analyst: JXL

Data Type: Original

Replicate Data: 1202037083|950549|5

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.010	-0.010	0.0004	0.0029	0.0007	10:04:24	Yes
2	-0.009	-0.009	0.0004	0.0025	0.0007	10:04:54	Yes
Mean:	-0.009	-0.009	0.0004				
SD:	0.001	0.001	0.0000				
%RSD:	6.870	6.870	1.93				

Sequence No.: 46

Autosampler Location: 7

Sample ID: CCV

Date Collected: 2/10/2010 10:05:14

Analyst:

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.036	5.036	0.0556	0.2333	0.0559	10:06:04	Yes
2	5.040	5.040	0.0557	0.2322	0.0560	10:06:34	Yes
Mean:	5.038	5.038	0.0557				
SD:	0.003	0.003	0.0000				
%RSD:	0.065	0.065	0.06				

QC value within limits for Hg 253.7 Recovery = 100.76%

All analyte(s) passed QC.

Sequence No.: 47

Autosampler Location: 8

Sample ID: CCB

Date Collected: 2/10/2010 10:06:53

Analyst:

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.038	-0.038	0.0000	0.0011	0.0004	10:07:44	Yes
2	-0.038	-0.038	0.0000	0.0015	0.0004	10:08:14	Yes
Mean:	-0.038	-0.038	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	0.142	0.142	1.47				

QC value within limits for Hg 253.7 Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 48

Sample ID: 245921002|950549|1

Analyst: JXL

Autosampler Location: 42

Date Collected: 2/10/2010 10:08:33

Data Type: Original

Replicate Data: 245921002|950549|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.171	0.171	0.0023	0.0107	0.0026	10:09:25	Yes
2	0.167	0.167	0.0023	0.0108	0.0026	10:09:54	Yes
Mean:	0.169	0.169	0.0023				
SD:	0.003	0.003	0.0000				
%RSD:	1.717	1.717	1.38				

Sequence No.: 49

Sample ID: 245921003|950549|1

Analyst: JXL

Autosampler Location: 43

Date Collected: 2/10/2010 10:10:14

Data Type: Original

Replicate Data: 245921003|950549|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.136	0.136	0.0019	0.0092	0.0023	10:11:05	Yes
2	0.133	0.133	0.0019	0.0095	0.0022	10:11:35	Yes
Mean:	0.134	0.134	0.0019				
SD:	0.002	0.002	0.0000				
%RSD:	1.504	1.504	1.15				

Sequence No.: 50

Sample ID: 245921004|950549|1

Analyst: JXL

Autosampler Location: 44

Date Collected: 2/10/2010 10:11:54

Data Type: Original

Replicate Data: 245921004|950549|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.208	0.208	0.0027	0.0124	0.0030	10:12:45	Yes
2	0.206	0.206	0.0027	0.0121	0.0030	10:13:15	Yes
Mean:	0.207	0.207	0.0027				
SD:	0.001	0.001	0.0000				
%RSD:	0.502	0.502	0.42				

Sequence No.: 51

Sample ID: 245921005|950549|1

Analyst: JXL

Autosampler Location: 45

Date Collected: 2/10/2010 10:13:35

Data Type: Original

Replicate Data: 245921005|950549|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.194	0.194	0.0026	0.0119	0.0029	10:14:26	Yes
2	0.198	0.198	0.0026	0.0123	0.0029	10:14:56	Yes
Mean:	0.196	0.196	0.0026				
SD:	0.003	0.003	0.0000				
%RSD:	1.390	1.390	1.15				

Sequence No.: 52

Sample ID: 1202025301|945628|1

Analyst: JXL

Autosampler Location: 46

Date Collected: 2/10/2010 10:15:15

Data Type: Original

Replicate Data: 1202025301|945628|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored

1	-0.041	-0.041	0.0000	0.0014	0.0003	10:16:06	Yes
2	-0.043	-0.043	-0.0000	0.0011	0.0003	10:16:36	Yes
Mean:	-0.042	-0.042	-0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	3.477	3.477	>999.9%				

Sequence No.: 53

Sample ID: 1202025302|945628|10

Analyst: JXL

Autosampler Location: 47

Date Collected: 2/10/2010 10:16:56

Data Type: Original

Replicate Data: 1202025302|945628|10

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	3.378	3.378	0.0375	0.1574	0.0378	10:17:48	Yes
2	3.381	3.381	0.0375	0.1568	0.0378	10:18:18	Yes
Mean:	3.380	3.380	0.0375				
SD:	0.002	0.002	0.0000				
%RSD:	0.058	0.058	0.06				

Sequence No.: 54

Sample ID: 245394001|945628|1

Analyst: JXL

Autosampler Location: 48

Date Collected: 2/10/2010 10:18:38

Data Type: Original

Replicate Data: 245394001|945628|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.190	0.190	0.0025	0.0118	0.0029	10:19:29	Yes
2	0.188	0.188	0.0025	0.0121	0.0028	10:19:59	Yes
Mean:	0.189	0.189	0.0025				
SD:	0.001	0.001	0.0000				
%RSD:	0.685	0.685	0.56				

Sequence No.: 55

Sample ID: 245394002|945628|1

Analyst: JXL

Autosampler Location: 49

Date Collected: 2/10/2010 10:20:19

Data Type: Original

Replicate Data: 245394002|945628|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.135	0.135	0.0019	0.0094	0.0023	10:21:11	Yes
2	0.135	0.135	0.0019	0.0096	0.0023	10:21:41	Yes
Mean:	0.135	0.135	0.0019				
SD:	0.000	0.000	0.0000				
%RSD:	0.085	0.085	0.06				

Sequence No.: 56

Sample ID: 245394003|945628|1

Analyst: JXL

Autosampler Location: 50

Date Collected: 2/10/2010 10:22:01

Data Type: Original

Replicate Data: 245394003|945628|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.202	0.202	0.0027	0.0123	0.0030	10:22:52	Yes
2	0.203	0.203	0.0027	0.0123	0.0030	10:23:22	Yes
Mean:	0.203	0.203	0.0027				
SD:	0.001	0.001	0.0000				
%RSD:	0.340	0.340	0.28				

Sequence No.: 57

Sample ID: 245394004|945628|1

Analyst: JXL

Autosampler Location: 51

Date Collected: 2/10/2010 10:23:42

Data Type: Original

Replicate Data: 245394004|945628|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.052	0.052	0.0010	0.0053	0.0013	10:24:32	Yes
2	0.047	0.047	0.0010	0.0052	0.0013	10:25:02	Yes
Mean:	0.050	0.050	0.0010				
SD:	0.003	0.003	0.0000				
%RSD:	6.928	6.928	3.76				

Sequence No.: 58

Autosampler Location: 7

Sample ID: CCV

Date Collected: 2/10/2010 10:25:22

Analyst:

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.013	5.013	0.0554	0.2332	0.0557	10:26:13	Yes
2	5.018	5.018	0.0554	0.2321	0.0557	10:26:43	Yes
Mean:	5.016	5.016	0.0554				
SD:	0.003	0.003	0.0000				
%RSD:	0.064	0.064	0.06				

QC value within limits for Hg 253.7 Recovery = 100.31%
All analyte(s) passed QC.

Sequence No.: 59

Autosampler Location: 8

Sample ID: CCB

Date Collected: 2/10/2010 10:27:01

Analyst:

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.039	-0.039	0.0000	0.0014	0.0003	10:27:52	Yes
2	-0.041	-0.041	0.0000	0.0015	0.0003	10:28:22	Yes
Mean:	-0.040	-0.040	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	3.624	3.624	108.53				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 60

Autosampler Location: 52

Sample ID: 245394005|945628|1

Date Collected: 2/10/2010 10:28:41

Analyst: JXL

Data Type: Original

Replicate Data: 245394005|945628|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.102	0.102	0.0016	0.0082	0.0019	10:29:32	Yes
2	0.102	0.102	0.0016	0.0078	0.0019	10:30:02	Yes
Mean:	0.102	0.102	0.0016				
SD:	0.000	0.000	0.0000				
%RSD:	0.082	0.082	0.06				

Sequence No.: 61

Autosampler Location: 53

Sample ID: 245394006|945628|1

Date Collected: 2/10/2010 10:30:21

Analyst: JXL

Data Type: Original

Replicate Data: 245394006|945628|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.116	0.116	0.0017	0.0085	0.0020	10:31:12	Yes
2	0.116	0.116	0.0017	0.0088	0.0020	10:31:42	Yes
Mean:	0.116	0.116	0.0017				

SD: 0.000 0.000 0.0000
%RSD: 0.160 0.160 0.12

Sequence No.: 62

Sample ID: 245394007|945628|1

Analyst: JXL

Autosampler Location: 54

Date Collected: 2/10/2010 10:32:02

Data Type: Original

Replicate Data: 245394007|945628|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.394	0.394	0.0048	0.0218	0.0051	10:32:53	Yes
2	0.387	0.387	0.0047	0.0215	0.0050	10:33:23	Yes
Mean:	0.390	0.390	0.0047				
SD:	0.005	0.005	0.0001				
%RSD:	1.256	1.256	1.13				

Sequence No.: 63

Sample ID: 245394008|945628|1

Analyst: JXL

Autosampler Location: 55

Date Collected: 2/10/2010 10:33:42

Data Type: Original

Replicate Data: 245394008|945628|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.116	0.116	0.0017	0.0087	0.0020	10:34:33	Yes
2	0.119	0.119	0.0018	0.0090	0.0021	10:35:03	Yes
Mean:	0.118	0.118	0.0017				
SD:	0.002	0.002	0.0000				
%RSD:	1.680	1.680	1.24				

Sequence No.: 64

Sample ID: 245394009|945628|1

Analyst: JXL

Autosampler Location: 56

Date Collected: 2/10/2010 10:35:22

Data Type: Original

Replicate Data: 245394009|945628|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.269	0.269	0.0034	0.0162	0.0037	10:36:14	Yes
2	0.275	0.275	0.0035	0.0160	0.0038	10:36:44	Yes
Mean:	0.272	0.272	0.0034				
SD:	0.004	0.004	0.0000				
%RSD:	1.438	1.438	1.25				

Sequence No.: 65

Sample ID: 245394010|945628|1

Analyst: JXL

Autosampler Location: 57

Date Collected: 2/10/2010 10:37:03

Data Type: Original

Replicate Data: 245394010|945628|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.032	0.032	0.0008	0.0051	0.0011	10:37:54	Yes
2	0.036	0.036	0.0009	0.0052	0.0012	10:38:24	Yes
Mean:	0.034	0.034	0.0008				
SD:	0.003	0.003	0.0000				
%RSD:	8.628	8.628	3.89				

Sequence No.: 66

Sample ID: 245394011|945628|1

Analyst: JXL

Autosampler Location: 58

Date Collected: 2/10/2010 10:38:43

Data Type: Original

Replicate Data: 245394011|945628|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
------	------------	----------	---------	------	------	------	------

#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.062	0.062	0.0011	0.0062	0.0015	10:39:34	Yes
2	0.063	0.063	0.0011	0.0063	0.0015	10:40:04	Yes
Mean:	0.063	0.063	0.0011				
SD:	0.001	0.001	0.0000				
%RSD:	1.645	1.645	0.99				

Sequence No.: 67

Autosampler Location: 59

Sample ID: 245394012|945628|1

Date Collected: 2/10/2010 10:40:24

Analyst: JXL

Data Type: Original

Replicate Data: 245394012|945628|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.239	0.239	0.0031	0.0146	0.0034	10:41:16	Yes
2	0.241	0.241	0.0031	0.0147	0.0034	10:41:45	Yes
Mean:	0.240	0.240	0.0031				
SD:	0.001	0.001	0.0000				
%RSD:	0.364	0.364	0.31				

Sequence No.: 68

Autosampler Location: 60

Sample ID: 245394013|945628|1

Date Collected: 2/10/2010 10:42:05

Analyst: JXL

Data Type: Original

Replicate Data: 245394013|945628|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.359	0.359	0.0044	0.0198	0.0047	10:42:57	Yes
2	0.356	0.356	0.0044	0.0198	0.0047	10:43:27	Yes
Mean:	0.357	0.357	0.0044				
SD:	0.002	0.002	0.0000				
%RSD:	0.452	0.452	0.41				

Sequence No.: 69

Autosampler Location: 61

Sample ID: 245394014|945628|1

Date Collected: 2/10/2010 10:43:47

Analyst: JXL

Data Type: Original

Replicate Data: 245394014|945628|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.081	0.081	0.0013	0.0069	0.0017	10:44:38	Yes
2	0.083	0.083	0.0014	0.0075	0.0017	10:45:08	Yes
Mean:	0.082	0.082	0.0014				
SD:	0.001	0.001	0.0000				
%RSD:	1.641	1.641	1.09				

Sequence No.: 70

Autosampler Location: 7

Sample ID: CCV

Date Collected: 2/10/2010 10:45:28

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	0.0542	0.2292	0.0545	10:46:19	Yes
2	4.951	4.951	0.0547	0.2318	0.0550	10:46:49	Yes
Mean:	4.929	4.929	0.0545				
SD:	0.032	0.032	0.0003				
%RSD:	0.641	0.641	0.64				

QC value within limits for Hg 253.7 Recovery = 98.58%
All analyte(s) passed QC.

Sequence No.: 71

Autosampler Location: 8

Sample ID: CCB
Analyst:

Date Collected: 2/10/2010 10:47:08
Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.041	-0.041	0.0000	0.0013	0.0003	10:47:59	Yes
2	-0.040	-0.040	0.0000	0.0017	0.0003	10:48:29	Yes
Mean:	-0.041	-0.041	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	2.451	2.451	100.14				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

=====

Sequence No.: 72
Sample ID: 245394015|945628|1
Analyst: JXL

Autosampler Location: 62
Date Collected: 2/10/2010 10:48:48
Data Type: Original

Replicate Data: 245394015|945628|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.101	0.101	0.0016	0.0078	0.0019	10:49:40	Yes
2	0.105	0.105	0.0016	0.0085	0.0019	10:50:10	Yes
Mean:	0.103	0.103	0.0016				
SD:	0.003	0.003	0.0000				
%RSD:	2.458	2.458	1.75				

=====

Sequence No.: 73
Sample ID: 245396001|945628|1
Analyst: JXL

Autosampler Location: 63
Date Collected: 2/10/2010 10:50:29
Data Type: Original

Replicate Data: 245396001|945628|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.169	0.169	0.0023	0.0110	0.0026	10:51:21	Yes
2	0.172	0.172	0.0023	0.0116	0.0027	10:51:51	Yes
Mean:	0.170	0.170	0.0023				
SD:	0.002	0.002	0.0000				
%RSD:	1.307	1.307	1.05				

=====

Sequence No.: 74
Sample ID: 1202025303|945628|1
Analyst: JXL

Autosampler Location: 64
Date Collected: 2/10/2010 10:52:11
Data Type: Original

Replicate Data: 1202025303|945628|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.198	0.198	0.0026	0.0124	0.0029	10:53:01	Yes
2	0.204	0.204	0.0027	0.0131	0.0030	10:53:31	Yes
Mean:	0.201	0.201	0.0027				
SD:	0.004	0.004	0.0000				
%RSD:	2.008	2.008	1.66				

=====

Sequence No.: 75
Sample ID: 1202025304|945628|1
Analyst: JXL

Autosampler Location: 65
Date Collected: 2/10/2010 10:53:51
Data Type: Original

Replicate Data: 1202025304|945628|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.236	2.236	0.0250	0.1052	0.0253	10:54:43	Yes
2	2.239	2.239	0.0250	0.1050	0.0253	10:55:13	Yes

Mean: 2.238 2.238 0.0250
SD: 0.002 0.002 0.0000
%RSD: 0.086 0.086 0.08

Sequence No.: 76

Sample ID: 1202025306|945628|1

Analyst: JXL

Autosampler Location: 66

Date Collected: 2/10/2010 10:55:32

Data Type: Original

Replicate Data: 1202025306|945628|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.212	2.212	0.0247	0.1043	0.0250	10:56:24	Yes
2	2.211	2.211	0.0247	0.1044	0.0250	10:56:54	Yes
Mean:	2.212	2.212	0.0247				
SD:	0.001	0.001	0.0000				
%RSD:	0.030	0.030	0.03				

Sequence No.: 77

Sample ID: 1202025305|945628|5

Analyst: JXL

Autosampler Location: 67

Date Collected: 2/10/2010 10:57:14

Data Type: Original

Replicate Data: 1202025305|945628|5

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.001	0.001	0.0005	0.0035	0.0008	10:58:04	Yes
2	0.001	0.001	0.0005	0.0036	0.0008	10:58:34	Yes
Mean:	0.001	0.001	0.0005				
SD:	0.000	0.000	0.0000				
%RSD:	17.74	17.74	0.42				

Sequence No.: 78

Sample ID: 245396002|945628|1

Analyst: JXL

Autosampler Location: 68

Date Collected: 2/10/2010 10:58:54

Data Type: Original

Replicate Data: 245396002|945628|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.302	0.302	0.0038	0.0172	0.0041	10:59:46	Yes
2	0.309	0.309	0.0038	0.0179	0.0042	11:00:15	Yes
Mean:	0.306	0.306	0.0038				
SD:	0.005	0.005	0.0001				
%RSD:	1.600	1.600	1.41				

Sequence No.: 79

Sample ID: 245396003|945628|1

Analyst: JXL

Autosampler Location: 69

Date Collected: 2/10/2010 11:00:35

Data Type: Original

Replicate Data: 245396003|945628|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.205	0.205	0.0027	0.0123	0.0030	11:01:26	Yes
2	0.205	0.205	0.0027	0.0128	0.0030	11:01:56	Yes
Mean:	0.205	0.205	0.0027				
SD:	0.000	0.000	0.0000				
%RSD:	0.006	0.006	0.01				

Sequence No.: 80

Sample ID: 245396004|945628|1

Analyst: JXL

Autosampler Location: 70

Date Collected: 2/10/2010 11:02:16

Data Type: Original

Replicate Data: 245396004|945628|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.192	0.192	0.0026	0.0119	0.0029	11:03:07	Yes
2	0.198	0.198	0.0026	0.0124	0.0029	11:03:37	Yes
Mean:	0.195	0.195	0.0026				
SD:	0.004	0.004	0.0000				
%RSD:	2.208	2.208	1.82				

Sequence No.: 81

Sample ID: 1202037458|950741|1

Analyst: JXL

Autosampler Location: 71

Date Collected: 2/10/2010 11:03:56

Data Type: Original

Replicate Data: 1202037458|950741|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.045	-0.045	-0.0000	0.0011	0.0003	11:04:48	Yes
2	-0.039	-0.039	0.0000	0.0019	0.0003	11:05:18	Yes
Mean:	-0.042	-0.042	-0.0000				
SD:	0.004	0.004	0.0000				
%RSD:	9.471	9.471	696.05				

Sequence No.: 82

Sample ID: CCV

Analyst:

Autosampler Location: 7

Date Collected: 2/10/2010 11:05:38

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	4.053	4.053	0.0449	0.2377	0.0452	11:06:29	Yes
2	3.983	3.983	0.0441	0.2366	0.0444	11:06:59	Yes
Mean:	4.018	4.018	0.0445				
SD:	0.050	0.050	0.0005				
%RSD:	1.236	1.236	1.22				

QC value within limits for Hg 253.7 Recovery = 80.36%
All analyte(s) passed QC.

Sequence No.: 83

Sample ID: CCB

Analyst:

Autosampler Location: 8

Date Collected: 2/10/2010 11:07:17

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.046	-0.046	-0.0001	0.0012	0.0003	11:08:08	Yes
2	-0.050	-0.050	-0.0001	0.0010	0.0002	11:08:38	Yes
Mean:	-0.048	-0.048	-0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	5.174	5.174	38.40				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 84

Sample ID: 1202037459|950741|10

Analyst: JXL

Autosampler Location: 72

Date Collected: 2/10/2010 11:08:58

Data Type: Original

Replicate Data: 1202037459|950741|10

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.903	2.903	0.0323	0.1710	0.0326	11:09:50	Yes
2	2.926	2.926	0.0325	0.1678	0.0328	11:10:19	Yes
Mean:	2.914	2.914	0.0324				
SD:	0.016	0.016	0.0002				
%RSD:	0.557	0.557	0.55				

Miscellaneous

Prep LogBook

Analyst: FGA
 Batch: 945420
 Lab SOP: GL-MA-E-009 REV# 19

Verified by: _____

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1202024814	U1062540-1	.523	g
MS	1202024816	U1100120-01	.25	mL
MS	1202024816	U1100120-06	.25	mL
MSD	1202024818	U1100120-01	.25	mL
MSD	1202024818	U1100120-06	.25	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1202024813		SW846 3050B	04-FEB-2010 13:30	0.501 g	50 mL	99.8004	SOIL
LCS	1202024814		SW846 3050B	04-FEB-2010 13:30	0.523 g	50 mL	95.60229	SOIL
SAMPLE	245394001		SW846 3050B	04-FEB-2010 13:30	0.508 g	50 mL	98.4252	SOIL
DUP	1202024815	245394001	SW846 3050B	04-FEB-2010 13:30	0.505 g	50 mL	99.0099	SOIL
MS	1202024816	245394001	SW846 3050B	04-FEB-2010 13:30	0.504 g	50 mL	99.20635	SOIL
MSD	1202024818	245394001	SW846 3050B	04-FEB-2010 13:30	0.513 g	50 mL	97.46589	SOIL
SDILT	1202024817	245394001	SW846 3050B	04-FEB-2010 13:30	0.508 g	50 mL	98.4252	SOIL
SAMPLE	245394002		SW846 3050B	04-FEB-2010 13:30	0.519 g	50 mL	96.33911	SOIL
SAMPLE	245394003		SW846 3050B	04-FEB-2010 13:30	0.513 g	50 mL	97.46589	SOIL
SAMPLE	245394004		SW846 3050B	04-FEB-2010 13:30	0.505 g	50 mL	99.0099	SOIL
SAMPLE	245394005		SW846 3050B	04-FEB-2010 13:30	0.503 g	50 mL	99.40358	SOIL
SAMPLE	245394006		SW846 3050B	04-FEB-2010 13:30	0.503 g	50 mL	99.40358	SOIL
SAMPLE	245394007		SW846 3050B	04-FEB-2010 13:30	0.506 g	50 mL	98.81423	SOIL
SAMPLE	245394008		SW846 3050B	04-FEB-2010 13:30	0.518 g	50 mL	96.5251	SOIL
SAMPLE	245394009		SW846 3050B	04-FEB-2010 13:30	0.518 g	50 mL	96.5251	SOIL
SAMPLE	245394010		SW846 3050B	04-FEB-2010 13:30	0.502 g	50 mL	99.60159	SOIL
SAMPLE	245394011		SW846 3050B	04-FEB-2010 13:30	0.52 g	50 mL	96.15385	SOIL
SAMPLE	245394012		SW846 3050B	04-FEB-2010 13:30	0.5 g	50 mL	100	SOIL
SAMPLE	245394013		SW846 3050B	04-FEB-2010 13:30	0.525 g	50 mL	95.2381	SOIL
SAMPLE	245394014		SW846 3050B	04-FEB-2010 13:30	0.501 g	50 mL	99.8004	SOIL
SAMPLE	245394015		SW846 3050B	04-FEB-2010 13:30	0.517 g	50 mL	96.7118	SOIL

Comments: Brown, muddy soil.

Reagent/Solvent Lot ID	Amount	Description
100202	10 mL	HYDROCHLORIC ACID
1264396	1.25 mL	Nitric Acid CONC.

Prep LogBook

Analyst: FGA
Batch: 945424
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	1202024819		SW846 3050B	04-FEB-2010 13:30	0.512 g	50 mL	97.65625	506	g
LCS	1202024820		SW846 3050B	04-FEB-2010 13:30	0.506 g	50 mL	98.81423	.5	mL
SAMPLE	245394001		SW846 3050B	04-FEB-2010 13:30	0.505 g	50 mL	99.0099	.5	mL
DUP	1202024821	245394001	SW846 3050B	04-FEB-2010 13:30	0.525 g	50 mL	95.2381	.5	mL
MS	1202024822	245394001	SW846 3050B	04-FEB-2010 13:30	0.509 g	50 mL	98.23183	.5	mL
MSD	1202024824	245394001	SW846 3050B	04-FEB-2010 13:30	0.507 g	50 mL	98.61933	.5	mL
SDILT	1202024823	245394001	SW846 3050B	04-FEB-2010 13:30	0.505 g	50 mL	99.0099	.5	mL
SAMPLE	245394002		SW846 3050B	04-FEB-2010 13:30	0.517 g	50 mL	96.7118	.5	mL
SAMPLE	245394003		SW846 3050B	04-FEB-2010 13:30	0.506 g	50 mL	98.81423	.5	mL
SAMPLE	245394004		SW846 3050B	04-FEB-2010 13:30	0.525 g	50 mL	95.2381	.5	mL
SAMPLE	245394005		SW846 3050B	04-FEB-2010 13:30	0.5 g	50 mL	100	.5	mL
SAMPLE	245394006		SW846 3050B	04-FEB-2010 13:30	0.517 g	50 mL	96.7118	.5	mL
SAMPLE	245394007		SW846 3050B	04-FEB-2010 13:30	0.5 g	50 mL	100	.5	mL
SAMPLE	245394008		SW846 3050B	04-FEB-2010 13:30	0.509 g	50 mL	98.23183	.5	mL
SAMPLE	245394009		SW846 3050B	04-FEB-2010 13:30	0.516 g	50 mL	96.89922	.5	mL
SAMPLE	245394010		SW846 3050B	04-FEB-2010 13:30	0.518 g	50 mL	96.5251	.5	mL
SAMPLE	245394011		SW846 3050B	04-FEB-2010 13:30	0.512 g	50 mL	97.65625	.5	mL
SAMPLE	245394012		SW846 3050B	04-FEB-2010 13:30	0.525 g	50 mL	95.2381	.5	mL
SAMPLE	245394013		SW846 3050B	04-FEB-2010 13:30	0.519 g	50 mL	96.33911	.5	mL
SAMPLE	245394014		SW846 3050B	04-FEB-2010 13:30	0.525 g	50 mL	95.2381	.5	mL
SAMPLE	245394015		SW846 3050B	04-FEB-2010 13:30	0.503 g	50 mL	99.40358	.5	mL

Comments Brown,muddy soil.

Reagent/Solvent Lot ID Amount Description
1203655-02 1.5 mL Hydrogen Peroxide 30%
1264396 5 mL Nitric Acid CONC.

Prep LogBook

Analyst: TXB3 Verified by: _____

Batch: 945627

Lab SOP: GL-MA-E-010 REV# 23

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Type	Sample Id	Lot. Id	Spike Amount	Spike Units
MB	1202025301		SW846 7471A Prep	09-FEB-2010 13:50	LCS	1202025302	U1031809A	.202	g
LCS	1202025302		SW846 7471A Prep	09-FEB-2010 13:50	MS	1202025304	WHG100209-14	.3	mL
SAMPLE	245394001		SW846 7471A Prep	09-FEB-2010 13:50	MSD	1202025306	WHG100209-14	.3	mL
SAMPLE	245394002		SW846 7471A Prep	09-FEB-2010 13:50					
SAMPLE	245394003		SW846 7471A Prep	09-FEB-2010 13:50					
SAMPLE	245394004		SW846 7471A Prep	09-FEB-2010 13:50					
SAMPLE	245394005		SW846 7471A Prep	09-FEB-2010 13:50					
SAMPLE	245394006		SW846 7471A Prep	09-FEB-2010 13:50					
SAMPLE	245394007		SW846 7471A Prep	09-FEB-2010 13:50					
SAMPLE	245394008		SW846 7471A Prep	09-FEB-2010 13:50					
SAMPLE	245394009		SW846 7471A Prep	09-FEB-2010 13:50					
SAMPLE	245394010		SW846 7471A Prep	09-FEB-2010 13:50					
SAMPLE	245394011		SW846 7471A Prep	09-FEB-2010 13:50					
SAMPLE	245394012		SW846 7471A Prep	09-FEB-2010 13:50					
SAMPLE	245394013		SW846 7471A Prep	09-FEB-2010 13:50					
SAMPLE	245394014		SW846 7471A Prep	09-FEB-2010 13:50					
SAMPLE	245394015		SW846 7471A Prep	09-FEB-2010 13:50					
SAMPLE	245396001		SW846 7471A Prep	09-FEB-2010 13:50					
DUP	1202025303	245396001	SW846 7471A Prep	09-FEB-2010 13:50					
MS	1202025304	245396001	SW846 7471A Prep	09-FEB-2010 13:50					
MSD	1202025306	245396001	SW846 7471A Prep	09-FEB-2010 13:50					
SDILT	1202025305	245396001	SW846 7471A Prep	09-FEB-2010 13:50					
SAMPLE	245396002		SW846 7471A Prep	09-FEB-2010 13:50					
SAMPLE	245396003		SW846 7471A Prep	09-FEB-2010 13:50					
SAMPLE	245396004		SW846 7471A Prep	09-FEB-2010 13:50					

Reagent/Solvent Lot ID	Amount	Description
1264796-A	1.125 mL	Hydrochloric Acid Conc.
1257474-1	.375 mL	NITRIC ACID
1264984-C	7.5 mL	5% KMnO4 solution
1255532-C	2 mL	Hg reducing agent

Comments: Sample 245396001 is a dry powdery brown soil.
Digestion Start Date: 09-FEB-10 13:50
Digestion End Date: 09-FEB-10 14:20

Prep Data Logbook Version 1:1

GEL Laboratories LLC

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Prep LogBook

WHG100209-07	30 uL	Mercury Working Standard 1st Source CAL S 0.2/CRA
WHG100209-08	75 uL	Mercury Working Standard 1st Source CAL S 0.5
WHG100209-11	1.5 mL	Mercury Working 1st Source CAL S 10.0
WHG100209-09	300 uL	Mercury Working 1st Source CAL S 2.0
WHG100209-10	750 uL	Mercury Working 1st Source CAL S 5.0/CCV
WHG100209-12	750 uL	Mercury Working 2nd Source S 5.0/ICV

DATA EXCEPTION REPORT

Mo. Day Yr. 15-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: 945421	Sample Numbers: See Below		
<p>Potentially affected work order(s)(SDG): 245394(10-1392)</p> <p>Application Issues:</p> <p>Failed Recovery for MS/PS</p> <p>Failed RPD for MS/MSD, or PS/PSD</p> <p>Failed Recovery for MSD/PSD</p> <p>Failed RPD for DUP</p>			
Specification and Requirements		DER Disposition:	
<p>Exception Description:</p> <p>1. Failed Recovery for MS/PS:</p> <p>QC 1202024816MS</p> <p>2. Failed RPD for DUP:</p> <p>QC 1202024815DUP</p> <p>3. Failed RPD for MS/MSD, or PS/PSD:</p> <p>QC 1202024818MSD</p> <p>4. Failed Recovery for MSD/PSD:</p> <p>QC 1202024818MSD</p>		<p>1. The matrix spike recovery failed outside of the control limits for antimony, calcium, copper, lead, manganese, 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.</p> <p>2. The sample and sample duplicate % RPD failed outside the control limits for aluminum and copper 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.</p> <p>3. The matrix spike and matrix spike duplicate % RPD failed outside of the control limits for lead due to possible matrix interferences and/or sample non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.</p> <p>4. The matrix spike duplicate recovery failed outside of the control limits for antimony, calcium, copper, lead, 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.</p>	

Originator's Name:

Helen Camello 16-FEB-10

Data Validator/Group Leader:

Eric Lawson 16-FEB-10

DATA EXCEPTION REPORT

Mo. Day Yr. 16-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: 945425	Sample Numbers: See Below		

Potentially affected work order(s)(SDG): 245394(10-1392)

Application Issues:

Failed Recovery for MS/PS
Failed RPD for MS/MSD, or PS/PSD
Failed RPD for DUP
Failed Recovery for MSD/PSD

**Specification and Requirements
Exception Description:**

1. Failed Recovery for MS/PS:
QC 1202024822MS
2. Failed RPD for DUP:
QC 1202024821DUP
3. Failed RPD for MS/MSD, or PS/PSD:
QC 1202024824MSD
4. Failed Recovery for MSD/PSD:
QC 1202024824MSD

DER Disposition:

The matrix spike failed outside the control limits for Be and Ni and the matrix spike duplicate failed outside the control limits for Se due to matrix interference and/or sample non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

The duplicate failed outside the control limits for U 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.

The matrix spike and matrix spike duplicate % RPD failed outside of the control limits for Se and U due to matrix interference and/or sample non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

Originator's Name:

Rose Jenkins 17-FEB-10

Data Validator/Group Leader:

Samantha Jacobs 17-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 ICESA SOLN A **Received:** 22-APR-09 **Catalog Number :** 160005-01-03
Type: Source Material **Expires:** 04-MAY-10 **Lot Number :** 1013357
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: o2si
Description: TRACE ICP ICESA SOLN A mg/L +/- 0.5% IN 5% HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Calcium	5000 mg/L
Iron	2000 mg/L	Magnesium	5000 mg/L

Serial ID: UI090610-03 **Opened:** 10-JUN-09 **Catalog Number :** 060074-06-01
Name: ICPMS Tungsten - 10mg/L **Received:** 10-JUN-09 **Lot Number :** 1016338
Type: Source Material **Expires:** 10-JUN-10 **Solvent :** 2% HNO3
Employee: Paul Boyd
Supplier: O2SI
Description: ICPMS Tungsten standard SPIKE - 10mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Tungsten	10 mg/L		

Serial ID: UI090701-09 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #1 **Received:** 01-JUL-09 **Catalog Number :** 160044-09-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016477
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: O2SI
Description: ICPMS CRDL Master Soln #1
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	15 mg/L	Arsenic	5 mg/L
Barium	2 mg/L	Beryllium	.5 mg/L
Boron	15 mg/L	Cadmium	1 mg/L
Calcium	100 mg/L	Chromium	3 mg/L
Cobalt	1 mg/L	Copper	1 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Iron	25 mg/L	Lead	2 mg/L
Lithium	10 mg/L	Magnesium	15 mg/L
Manganese	5 mg/L	Nickel	2 mg/L
Phosphorous	50 mg/L	Potassium	300 mg/L
Selenium	5 mg/L	Sodium	250 mg/L
Strontium	10 mg/L	Thallium	1 mg/L
Thorium	1 mg/L	Uranium	.2 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UI090701-10 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #2 **Received:** 01-JUL-09 **Catalog Number :** 160044-08-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016476
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: 02SI
Description: ICPMS CRDL Soln #2
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Molybdenum	.5 mg/L
Silver	1 mg/L	Tin	2 mg/L
Titanium	10 mg/L	Tungsten	5 mg/L
Zirconium	2 mg/L		

Serial ID: UI090701-40 **Opened:** 01-JUL-09 **Amount :** 500 mL
Name: TRACE ICP Stock PQL St **Received:** 30-JUN-09 **Catalog Number :** 160543-01-03
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016475
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3+TrHF
Supplier: 02si
Description: TRACE ICP Stock PQL Standard
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	100 mg/L	Antimony	5 mg/L
Arsenic	15 mg/L	Barium	2.5 mg/L
Beryllium	2.5 mg/L	Boron	25 mg/L
Cadmium	2.5 mg/L	Calcium	100 mg/L
Chromium	2.5 mg/L	Cobalt	2.5 mg/L
Copper	5 mg/L	Iron	50 mg/L
Lead	5 mg/L	Magnesium	150 mg/L
Manganese	5 mg/L	Molybdenum	5 mg/L
Nickel	2.5 mg/L	Phosphorous	75 mg/L
Potassium	75 mg/L	Selenium	15 mg/L
Silicon	50 mg/L	Silver	2.5 mg/L
Sodium	150 mg/L	Strontium	2.5 mg/L
Sulfur	50 mg/L	Thallium	10 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Tin	5 mg/L	Titanium	2.5 mg/L
Uranium	25 mg/L	Vanadium	2.5 mg/L
Zinc	5 mg/L		

Serial ID: UI090828-42 **Opened:** 16-SEP-09 **Amount :** 500 mL
Name: TRACE ICP Na-1000SOUR **Received:** 27-AUG-09 **Catalog Number :** 060011-02-03
Type: Source Material **Expires:** 16-SEP-10 **Lot Number :** 1017098
Employee: Helen Camello **Solvent :** 1%HNO3
Supplier: Q2SI
Description: Sodium 1000 +/- 3 ug/mL in 1% HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Sodium	1000 ug/mL		

Serial ID: UI090925-40 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX38-500N
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909129
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1A 5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Arsenic	100 mg/L
Barium	100 mg/L	Boron	100 mg/L
Cadmium	100 mg/L	Calcium	1000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	1000 mg/L
Lead	100 mg/L	Phosphorous	500 mg/L
Potassium	500 mg/L	Selenium	500 mg/L
Sodium	500 mg/L	Strontium	100 mg/L

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: Q2si
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: ENVIRNMENTAL EXPRESS
Description: SILICON 1000mg/L H2O/tr HF
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091217-06 **Opened:** 17-DEC-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master A **Received:** 17-DEC-09 **Catalog Number :** 160055-01
Type: Source Material **Expires:** 17-DEC-10 **Lot Number :** 1018209
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV SOLN A - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2020 mg/L	Calcium	2000 mg/L
Iron	2000 mg/L	Magnesium	2000 mg/L
Phosphorous	2000 mg/L	Potassium	2000 mg/L
Sodium	2000 mg/L		

Serial ID: UI091217-07 **Opened:** 17-DEC-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master B **Received:** 17-DEC-09 **Catalog Number :** 160054-02
Type: Source Material **Expires:** 17-DEC-10 **Lot Number :** 1018210
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln B - 10ppm
Comments: None

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

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Uranium	20 mg/L	Vanadium	20 mg/L
Zinc	20 mg/L		

Serial ID: UI091217-08 **Opened:** 17-DEC-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master C **Received:** 17-DEC-09 **Catalog Number :** 160054-03
Type: Source Material **Expires:** 17-DEC-10 **Lot Number :** 1018211
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln C - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	20 mg/L
Silver	20 mg/L	Tin	20 mg/L
Titanium	20 mg/L	Tungsten	20 mg/L
Zirconium	20 mg/L		

Serial ID: UI091217-12 **Opened:** 17-DEC-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master B **Received:** 17-DEC-09 **Catalog Number :** 160033-02
Type: Source Material **Expires:** 17-DEC-10 **Lot Number :** 1018212
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	2 mg/L	Barium	2 mg/L
Beryllium	2 mg/L	Boron	2 mg/L
Cadmium	2 mg/L	Chromium	2 mg/L
Cobalt	2 mg/L	Copper	2 mg/L
Lead	2 mg/L	Lithium	2 mg/L
Manganese	2 mg/L	Nickel	2 mg/L
Selenium	2 mg/L	Strontium	2 mg/L
Thallium	2 mg/L	Thorium	2 mg/L
Uranium	2 mg/L	Vanadium	2 mg/L
Zinc	2 mg/L		

Serial ID: UI091217-13 **Opened:** 17-DEC-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master C **Received:** 17-DEC-09 **Catalog Number :** 160033-03
Type: Source Material **Expires:** 17-DEC-10 **Lot Number :** 1016926
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master C
Comments: None

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Silver	2 mg/L
Tin	2 mg/L	Tungsten	2 mg/L
Zirconium	2 mg/L		

Serial ID: UI100120-01 **Opened:** 20-JAN-10 **Lot Number :** 1018095
Name: METALSPIKE-1 **Received:** 20-JAN-10
Type: Source Material **Expires:** 20-JAN-11
Employee: Bryan Davis
Supplier: OS2I
Description: Metals Spike Mix I
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 ug/mL	Arsenic	100 ug/mL
Barium	100 ug/mL	Beryllium	100 ug/mL
Boron	100 ug/mL	Cadmium	100 ug/mL
Calcium	1000 ug/mL	Cobalt	100 ug/mL
Iron	1000 ug/mL	Lead	100 ug/mL
Magnesium	1000 ug/mL	Phosphorous	100 ug/mL
Potassium	1000 ug/mL	Silver	100 ug/mL
Sodium	1000 ug/mL	Strontium	100 ug/mL

Serial ID: UI100120-06 **Opened:** 20-JAN-10 **Lot Number :** 1018096
Name: METALSPIKE-2 **Received:** 20-JAN-10
Type: Source Material **Expires:** 20-JAN-11
Employee: Bryan Davis
Supplier: OS2I
Description: Metals Spike Mix II
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 ug/mL	Chromium	100 ug/mL
Copper	100 ug/mL	Manganese	100 ug/mL
Molybdenum	100 ug/mL	Nickel	100 ug/mL
Selenium	100 ug/mL	Silica	2141 ug/mL
Silicon	1000 ug/mL	Sulfur	1000 ug/mL
Thallium	100 ug/mL	Tin	100 ug/mL
Titanium	100 ug/mL	Uranium	100 ug/mL
Vanadium	100 ug/mL	Zinc	100 ug/mL

Standard Logbook

Serial ID: 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: Q2SI
Description: ICP-MS ICSA Master A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Carbon	2000 mg/L	Chloride	10000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Molybdenum	20 mg/L	Phosphorous	1000 mg/L
Potassium	1000 mg/L	Sodium	1000 mg/L
Sulfur	1000 mg/L	Titanium	20 mg/L

Serial ID: UI100210-48 **Opened:** 11-FEB-10 **Amount :** 1000 mL
Name: Trace ICP ICSA **Received:** 10-FEB-10 **Catalog Number :** 160005-02
Type: Source Material **Expires:** 11-FEB-11 **Lot Number :** 1018807
Employee: Helen Camello **Solvent :** 3% HCl + 1% HNO3
Supplier: o2si
Description: Trace ICP Interferent Check Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 UG/L	Calcium	500000 UG/L
Iron	200000 UG/L	Magnesium	500000 UG/L

Serial ID: UI100211-40 **Opened:** 11-FEB-10 **Amount :** 500 mL
Name: ICP HIGH RANGE STD-A **Received:** 10-FEB-10 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 11-FEB-11 **Lot Number :** 1018409
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: Q2SI
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

Standard Logbook

Analyte	Concentration	Analyte	Concentration
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: Q2SI
Description: ICP HIGH RANGE STD SOLUTION B
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 ug/L	Calcium	500000 ug/L
Iron	500000 ug/L	Magnesium	500000 ug/L
Sodium	500000 ug/L	Uranium	15000 ug/L

Serial ID: UMS090303-01 **Opened:** 03-MAR-09 **Amount :** 250 mL
Name: ICPMSCaSPIKEB **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: ICPMSCaSPIKEA **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

Standard Logbook

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

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: IHG100209-01 Opened: 09-FEB-10 Instrument Id : Mercury
 Name: MHGINTER1 Received: 09-FEB-10 Pipet Id : Minou1
 Type: Intermediate Expires: 10-FEB-10 Solvent : 1mL HNO3 + Type1 H2O
 Employee: Tara Griffin
 Supplier: GEL
 Description: Mercury Intermediate 1st Source 200 ug/L
 Comments: Prepare fresh daily

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: IHG100209-02 Opened: 09-FEB-10 Pipet Id : Minou1
 Name: MHGINTER2 Received: 09-FEB-10 Solvent : 2% HNO3-1257474
 Type: Intermediate Expires: 10-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

Standard Logbook

Serial ID: WHG100209-07 **Opened:** 09-FEB-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS0.2CRA **Received:** 09-FEB-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 16-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.
IHG100209-01	Mercury	200 ug/L	30 uL	30 mL	.2 ug/L

Serial ID: WHG100209-08 **Opened:** 09-FEB-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS0.5 **Received:** 09-FEB-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 16-FEB-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working Standard 1st Source CAL S 0.5
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100209-01	Mercury	200 ug/L	75 uL	30 mL	.5 ug/L

Serial ID: WHG100209-09 **Opened:** 09-FEB-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS2.0 **Received:** 09-FEB-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 16-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.
IHG100209-01	Mercury	200 ug/L	300 uL	30 mL	2 ug/L

Serial ID: WHG100209-10 **Opened:** 09-FEB-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS5.0CCV **Received:** 09-FEB-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 16-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.
IHG100209-01	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Standard Logbook

Serial ID: WHG100209-11 **Opened:** 09-FEB-10 **Pipet Id :** Hg1289245
Name: MHGWORKCAL S10.0 **Received:** 09-FEB-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 16-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.
IHG100209-01	Mercury	200 ug/L	1.5 mL	30 mL	10 ug/L

Serial ID: WHG100209-12 **Opened:** 09-FEB-10 **Pipet Id :** Hg1289245
Name: MHGWORKS5.0ICV **Received:** 09-FEB-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 16-FEB-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 2nd Source S 5.0/ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100209-02	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Serial ID: WHG100209-14 **Opened:** 09-FEB-10 **Pipet Id :** Hg1289245
Name: MHGSOILMSSPIKE **Received:** 09-FEB-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 16-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: 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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI100211-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100211-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100211-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100211-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI100211-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100211-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI100211-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI100211-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100211-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI100211-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
UI091102-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Serial ID: 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.	Allquot	Final Vol.	Final Conc.
UI091015-42	Silica	2139 mg/L	2.5 mL	500 mL	10698 ug/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Barium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Boron	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	500 mL	10000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Chromium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Copper	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Iron	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Lead	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Manganese	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Nickel	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Selenium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Strontium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Thallium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Uranium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Zinc	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Antimony	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Silver	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	500 mL	2000 ug/L
UI091102-41	Tin	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Titanium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Serial ID: 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

Standard Logbook

Comments: None

Parent Material	Analyte	Parent Conc.	Alliquot	Final Vol.	Final Conc.
UI090925-40	Aluminum	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Arsenic	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Barium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Boron	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cadmium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Calcium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Chromium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cobalt	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Copper	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Iron	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Lead	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Phosphorous	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Potassium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Selenium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Sodium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Strontium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Antimony	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Beryllium	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Magnesium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-41	Manganese	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Molybdenum	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Nickel	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Silver	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Sulfur	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-41	Thallium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Tin	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Titanium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Uranium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Vanadium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Zinc	100 mg/L	2.5 mL	500 mL	500 ug/L
UI091102-42	Silica	2139 mg/L	2.5 mL	500 mL	10695 ug/L
UI091102-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L

Serial ID: 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 Carnello
Supplier: 02si
Description: PQL Working Standard
Comments: None

Parent Material	Analyte	Parent Conc.	Alliquot	Final Vol.	Final Conc.
UI090701-40	Aluminum	100 mg/L	2 mL	1000 mL	200 ug/L
UI090701-40	Antimony	5 mg/L	2 mL	1000 mL	10 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Arsenic	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Barium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Beryllium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Boron	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Cadmium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Calcium	100 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Chromium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Cobalt	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Copper	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Iron	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Lead	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Magnesium	150 mg/L	2 mL	1000 mL	300 ug/L
UI090701-40	Manganese	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Molybdenum	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Nickel	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Phosphorous	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Potassium	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Selenium	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Silicon	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Silver	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sodium	150 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Strontium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sulfur	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Thallium	10 mg/L	2 mL	1000 mL	20 ug/L
UI090701-40	Tin	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Titanium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Uranium	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Vanadium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Zinc	5 mg/L	2 mL	1000 mL	10 ug/L

Serial ID: WMS100213-04AB **Opened:** 13-FEB-10 **Balance Id :** 40245216
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: Rose Jenkins
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100213-04B	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100213-04B	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100213-04B	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100213-04B	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100213-04B	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100213-04B	Boron	200 ug/l	5 mL	50 mL	20 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100213-04B	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100213-04B	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100213-04B	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100213-04B	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100213-04B	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100213-04B	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100213-04B	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100213-04B	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100213-04B	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100213-04B	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100213-04B	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100213-04B	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100213-04B	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100213-04B	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100213-04B	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100213-04B	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100213-04B	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100213-04B	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100213-04B	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100213-04B	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100213-04B	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100213-04B	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100213-04B	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100213-04B	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100213-04B	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100213-04B	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100213-04B	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS100213-04B **Opened:** 13-FEB-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 13-FEB-10 **Balance Id :** 40245216
Type: Working **Expires:** 14-FEB-10 **Pipet Id :** 1758088
Employee: Rose Jenkins **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	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5	50 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090303-01	Copper	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5	50 mL	100 ug/l

Serial ID: WMS100213-05B **Opened:** 13-FEB-10 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 13-FEB-10 **Pipet Id :** 1758088
Type: Working **Expires:** 14-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1266278
Employee: Rose Jenkins
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI091217-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
UI091217-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI091217-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS100213-06B **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: Rose Jenkins
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: WMS100213-07B **Opened:** 13-FEB-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 13-FEB-10 **Lot Number :** 1010773
Type: Working **Expres:** 14-FEB-10 **Pipet Id :** 3541598
Employee: Rose Jenkins **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

Standard Logbook

Serial ID: WMS100213-08B **Opened:** 13-FEB-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 13-FEB-10 **Pipet Id :** 3541598/1758088
Type: Working **Expires:** 14-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1266278
Employee: Rose Jenkins
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
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

Standard Logbook

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
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

Standard Logbook

Serial ID: WMS100215-04AB **Opened:** 15-FEB-10 **Balance Id :** 40245216
Name: ICPMS Cal Standard 10 **Received:** 15-FEB-10 **Pipet Id :** 3541598
Type: Working **Expres:** 16-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1269792
Employee: Rose Jenkins
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
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

Standard Logbook

Serial ID: WMS100215-04B **Opened:** 15-FEB-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 15-FEB-10 **Balance Id :** 40245216
Type: Working **Expres:** 16-FEB-10 **Pipet Id :** 1758088
Employee: Rose Jenkins **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	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5	50 mL	100 ug/l

Standard Logbook

Serial ID: WMS100215-05B **Opened:** 15-FEB-10 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 15-FEB-10 **Pipet Id :** 1758088
Type: Working **Expires:** 16-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1269792
Employee: Rose Jenkins
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
UI091217-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Serial ID: WMS100215-06B **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%HNO3/1%HCl - 1269792
Employee: Rose Jenkins
Suppller: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Standard Logbook

Serial ID: WMS100215-07B **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: Rose Jenkins **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: WMS100215-08B **Opened:** 15-FEB-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 15-FEB-10 **Pipet Id :** 3541598/1758088
Type: Working **Expires:** 16-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1269792
Employee: Rose Jenkins
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI091217-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI091217-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI091217-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI091217-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI091217-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI091217-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI091217-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI091217-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
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

Serial ID: 1100721TCLP **Opened:** 16-APR-09 **Lot Number :** H02026 L
Name: I-HNO3 **Received:** 02-APR-09
Type: Reagent/Solvent **Expires:** 02-APR-10
Employee: Clifford Postell
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1156689-A **Opened:** 20-JUL-09 **Lot Number :** 41226920
Name: B-KMnO4(VWR)-MER **Received:** 20-JUL-09
Type: Reagent/Solvent **Expires:** 20-JUL-10
Employee: Tara Griffin **Verified:** 07-AUG-07
Supplier: VWR
Description: Potassium Permanganate
Comments: None

Standard Logbook

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: 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

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: 1255532-C Opened: 15-JAN-10 Balance Id : BAL-002
 Name: B-NaCl.NH2OH.HCl-MER Received: 15-JAN-10
 Type: Reagent/Solvent Expires: 15-JUL-10
 Employee: Tara Griffin
 Supplier: GEL
 Description: Hg reducing agent
 Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1228372-A	B-NH2OH.HCl-MER	N/A	120 g	1000 mL	N/A

Standard Logbook

Serial ID: 1257474-1 **Opened:** 20-JAN-10 **Instrument Id :** MERCURY
Name: B-HNO3-MER **Received:** 20-JAN-10 **Lot Number :** H20053
Type: Reagent/Solvent **Expires:** 20-JAN-11
Employee: Tara Griffin
Supplier: Mallinckrodt Chemicals
Description: NITRIC ACID
Comments: None

Serial ID: 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: 1264796-A **Opened:** 04-FEB-10 **Lot Number :** 200930201
Name: B-HCl-MER **Received:** 04-FEB-10
Type: Reagent/Solvent **Expires:** 04-FEB-11
Employee: Tara Griffin
Supplier: Aristar
Description: Hydrochloric Acid Conc.
Comments: None

Serial ID: 1264984-C **Opened:** 04-FEB-10 **Balance Id :** BAL-002
Name: B-KMnO4-MER **Received:** 04-FEB-10
Type: Reagent/Solvent **Expires:** 20-JUL-10
Employee: Tara Griffin
Supplier: GEL
Description: 5% KMnO4 solution
Comments: None

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
1156689-A	B-KMnO4(VWR)-MER	Crystals	50 g	1000 mL	3%

Serial ID: 1266278 **Opened:** 08-FEB-10 **Solvent :** Type I Water
Name: B-2%HNO3/1%HCl-ICPMS **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

Standard Logbook

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

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

General Chemistry Analysis

Case Narrative

**General Chemistry Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1392**

Method/Analysis Information

Product: Cyanide, Total
Analytical Batch: 944841 and 944843 **Method:** SW9012A Cyanide and Total
Prep Batch : 944840 and 944842 **Method:** SSW846 9010B Prep

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9012A:

Sample ID	Client ID
245394001	RE15-10-7869
245394002	RE15-10-7874
245394003	RE15-10-7871
245394004	RE15-10-7872
245394005	RE15-10-7870
245394006	RE15-10-7873
245394007	RE15-10-7911
245394008	RE15-10-7908
245394009	RE15-10-7912
245394010	RE15-10-7906
245394011	RE15-10-7905
245394012	RE15-10-7907
245394013	RE15-10-7913
245394014	RE15-10-7909
245394015	RE15-10-7910
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)
1202023410	Method Blank (MB)
1202023411	245394011(RE15-10-7905) Sample Duplicate (DUP)
1202023412	245394012(RE15-10-7907) Sample Duplicate (DUP)
1202023413	245394011(RE15-10-7905) Matrix Spike (MS)
1202023414	245394012(RE15-10-7907) Matrix Spike (MS)
1202023415	245394011(RE15-10-7905) Matrix Spike Duplicate (MSD)
1202023416	245394012(RE15-10-7907) Matrix Spike Duplicate (MSD)
1202023417	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: 245391002 (RE15-10-7915), 245391003 (RE15-10-7920)- Batch 944841, 245394011 (RE15-10-7905) and 245394012 (RE15-10-7907)- Batch 944843.

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. 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. 1202023403 (RE15-10-7915), 1202023404 (RE15-10-7920)- Batch 944841, 1202023411 (RE15-10-7905), 1202023412 (RE15-10-7907), 245394011 (RE15-10-7905) and 245394012 (RE15-10-7907)- Batch 944843.

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: 1202023409 (LCS)- Batch 944841 and 1202023417 (LCS)- Batch 944843.

Sample Re-analysis

The samples in this SDG did not require re-analysis.

Miscellaneous Information**Data Exception (DER) Documentation**

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: 10-1392 GEL Work Order: 245394

The Qualifiers in this report are defined as follows:

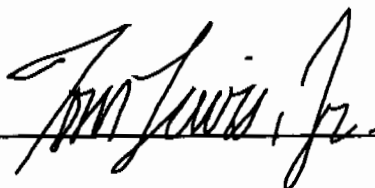
- * Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
- ** Indicates the analyte is a surrogate compound.

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.

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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 9, 2010

Client SDG: 10-1392

Client Sample ID: RE15-10-7912
Sample ID: 245394009
Matrix: R
Collect Date: 19-JAN-10 12:00
Receive Date: 23-JAN-10
Collector: Client
Moisture: 13.5%

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	77.0	283	ug/kg	1	AXC2	02/02/10	1709	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: 10-1392

Client Sample ID: RE15-10-7906
Sample ID: 245394010
Matrix: R
Collect Date: 19-JAN-10 12:00
Receive Date: 23-JAN-10
Collector: Client
Moisture: 9.98%

Project: LANL01004
Client ID: LANL010

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

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	U	ND	66.3	244	ug/kg	1	AXC2	02/02/10	1710	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: 10-1392

Client Sample ID: RE15-10-7905
Sample ID: 245394011
Matrix: R
Collect Date: 19-JAN-10 12:00
Receive Date: 23-JAN-10
Collector: Client
Moisture: 21.8%

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	82.0	302	ug/kg	1	AXC2	02/02/10	1713	944843	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	1537	944842

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: 10-1392

Client Sample ID: RE15-10-7907
Sample ID: 245394012
Matrix: R
Collect Date: 19-JAN-10 12:00
Receive Date: 23-JAN-10
Collector: Client
Moisture: 19.1%

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	84.1	309	ug/kg	1	AXC2	02/02/10	1720	944843	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	1537	944842

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Report Date: February 9, 2010

Client SDG: 10-1392

Client Sample ID: RE15-10-7913
Sample ID: 245394013
Matrix: R
Collect Date: 19-JAN-10 12:00
Receive Date: 23-JAN-10
Collector: Client
Moisture: 21.3%

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	81.5	300	ug/kg	1	AXC2	02/02/10	1724	944843	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/02/10	1537	944842

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Report Date: February 9, 2010

Client SDG: 10-1392

Client Sample ID: RE15-10-7909
Sample ID: 245394014
Matrix: R
Collect Date: 19-JAN-10 12:00
Receive Date: 23-JAN-10
Collector: Client
Moisture: 15.8%

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	72.1	265	ug/kg	1	AXC2	02/02/10	1725	944843	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	1537	944842

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: 10-1392

Client Sample ID: RE15-10-7910
Sample ID: 245394015
Matrix: R
Collect Date: 19-JAN-10 12:00
Receive Date: 23-JAN-10
Collector: Client
Moisture: 9.89%

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	68.6	252	ug/kg	1	AXC2	02/02/10	1725	944843	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	1537	944842

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: 10-1392

Client Sample ID: RE15-10-7869
Sample ID: 245394001
Matrix: R
Collect Date: 19-JAN-10 12:00
Receive Date: 23-JAN-10
Collector: Client
Moisture: 24.7%

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	86.9	319	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		

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Report Date: February 9, 2010

Client SDG: 10-1392

Client Sample ID: RE15-10-7874
Sample ID: 245394002
Matrix: R
Collect Date: 19-JAN-10 12:00
Receive Date: 23-JAN-10
Collector: Client
Moisture: 4.12%

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	63.3	233	ug/kg	1	AXC2	02/02/10	1659	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: 10-1392

Client Sample ID: RE15-10-7871
Sample ID: 245394003
Matrix: R
Collect Date: 19-JAN-10 12:00
Receive Date: 23-JAN-10
Collector: Client
Moisture: 10.9%

Project: LANL01004
Client ID: LANL010

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

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	U	ND	74.8	275	ug/kg	1	AXC2	02/02/10	1700	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: 10-1392

Client Sample ID: RE15-10-7872
Sample ID: 245394004
Matrix: R
Collect Date: 19-JAN-10 12:00
Receive Date: 23-JAN-10
Collector: Client
Moisture: 11.2%

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	70.9	261	ug/kg	1	AXC2	02/02/10	1701	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: 10-1392

Client Sample ID: RE15-10-7870

Sample ID: 245394005

Matrix: R

Collect Date: 19-JAN-10 12:00

Receive Date: 23-JAN-10

Collector: Client

Moisture: 13.1%

Project: LANL01004

Client ID: LANL010

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

Flow Injection Analysis

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	U	ND	73.8	271	ug/kg	1	AXC2	02/02/10	1702	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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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: February 9, 2010

Client SDG: 10-1392

Client Sample ID: RE15-10-7873
Sample ID: 245394006
Matrix: R
Collect Date: 19-JAN-10 12:00
Receive Date: 23-JAN-10
Collector: Client
Moisture: 12.6%

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	77.8	286	ug/kg	1	AXC2	02/02/10	1703	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: 10-1392

Client Sample ID: RE15-10-7911
Sample ID: 245394007
Matrix: R
Collect Date: 19-JAN-10 12:00
Receive Date: 23-JAN-10
Collector: Client
Moisture: 12%

Project: LANL01004
Client ID: LANL010

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

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	U	ND	72.9	268	ug/kg	1	AXC2	02/02/10	1707	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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Company : Los Alamos National Laboratory
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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: February 9, 2010

Client SDG: 10-1392

Client Sample ID: RE15-10-7908
Sample ID: 245394008
Matrix: R
Collect Date: 19-JAN-10 12:00
Receive Date: 23-JAN-10
Collector: Client
Moisture: 8.11%

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	64.9	239	ug/kg	1	AXC2	02/02/10	1708	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

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QC Summary

Report Date: February 9, 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: 245394

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Flow Injection Analysis											
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
Batch	944843										
QC1202023411	245394011	DUP									
Cyanide, Total		U	ND	U	ND	ug/kg	N/A		AXC2	02/02/10	17:14
QC1202023412	245394012	DUP									
Cyanide, Total		U	ND	U	ND	ug/kg	N/A			02/02/10	17:21
QC1202023417	LCS										
Cyanide, Total	67900				97000	ug/kg	143	(32%-157%)		02/02/10	17:12
QC1202023410	MB										
Cyanide, Total				U	250	ug/kg				02/02/10	17:11
QC1202023413	245394011	MS									
Cyanide, Total	5920	U	ND		6220	ug/kg	105	(26%-158%)		02/02/10	17:15
QC1202023414	245394012	MS									
Cyanide, Total	5330	U	ND		5700	ug/kg	107	(26%-158%)		02/02/10	17:22
QC1202023415	245394011	MSD									
Cyanide, Total	6150	U	ND		6330	ug/kg	1.85	103	(0%-30%)	02/02/10	17:15
QC1202023416	245394012	MSD									
Cyanide, Total	5520	U	ND		6240	ug/kg	8.96	113	(0%-30%)	02/02/10	17:23

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: 245394

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 #: 10-1392

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 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
CCV	02-FEB-2010 17:16:49	OM_2-2-2010_15-12-07	103	100	103	(90%-110%)	Yes
CCV	02-FEB-2010 17:29:26	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 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
CCB	02-FEB-2010 17:18:39	OM_2-2-2010_15-12-07	-1.08	10	Yes
CCB	02-FEB-2010 17:31:17	OM_2-2-2010_15-12-07	-1.64	10	Yes

Cyanide, Total

Prep LogBook

Analyst: AXSS
 Batch: 944842
 Lab SOP: GL-GC-E-067 REV# 13

Verified by: _____

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Spike Amount	Spike Units
MB	1202023410		SW846 9010B Prep	02-FEB-2010 15:37	>12	0.5 g	25 mL	50	.25	g
LCS	1202023417		SW846 9010B Prep	02-FEB-2010 15:37	>12	0.25 g	25 mL	100	.025	mL
SAMPLE	245313001		SW846 9010B Prep	02-FEB-2010 15:37	>12	0.56 g	25 mL	44.64286	.025	mL
SAMPLE	245313002		SW846 9010B Prep	02-FEB-2010 15:37	>12	0.52 g	25 mL	48.07692	.025	mL
SAMPLE	245313003		SW846 9010B Prep	02-FEB-2010 15:37	>12	0.55 g	25 mL	45.45455	.025	mL
SAMPLE	245313004		SW846 9010B Prep	02-FEB-2010 15:37	>12	0.5 g	25 mL	50	.025	mL
SAMPLE	245313005		SW846 9010B Prep	02-FEB-2010 15:37	>12	0.51 g	25 mL	49.01961	.025	mL
SAMPLE	245313006		SW846 9010B Prep	02-FEB-2010 15:37	>12	0.5 g	25 mL	50	.025	mL
SAMPLE	245313007		SW846 9010B Prep	02-FEB-2010 15:37	>12	0.5 g	25 mL	50	.025	mL
SAMPLE	245313008		SW846 9010B Prep	02-FEB-2010 15:37	>12	0.5 g	25 mL	50	.025	mL
SAMPLE	245313009		SW846 9010B Prep	02-FEB-2010 15:37	>12	0.5 g	25 mL	50	.025	mL
SAMPLE	245313010		SW846 9010B Prep	02-FEB-2010 15:37	>12	0.51 g	25 mL	49.01961	.025	mL
SAMPLE	245313011		SW846 9010B Prep	02-FEB-2010 15:37	>12	0.5 g	25 mL	50	.025	mL
SAMPLE	245313012		SW846 9010B Prep	02-FEB-2010 15:37	>12	0.5 g	25 mL	50	.025	mL
SAMPLE	245313013		SW846 9010B Prep	02-FEB-2010 15:37	>12	0.52 g	25 mL	48.07692	.025	mL
SAMPLE	245313014		SW846 9010B Prep	02-FEB-2010 15:37	>12	0.52 g	25 mL	48.07692	.025	mL
SAMPLE	245377001		SW846 9010B Prep	02-FEB-2010 15:37	>12	0.55 g	25 mL	45.45455	.025	mL
SAMPLE	245394011		SW846 9010B Prep	02-FEB-2010 15:37	>12	0.53 g	25 mL	47.16981	.025	mL
DUP	1202023411	245394011	SW846 9010B Prep	02-FEB-2010 15:37	>12	0.52 g	25 mL	48.07692	.025	mL
MS	1202023413	245394011	SW846 9010B Prep	02-FEB-2010 15:37	>12	0.54 g	25 mL	46.2963	.025	mL
MSD	1202023415	245394011	SW846 9010B Prep	02-FEB-2010 15:37	>12	0.52 g	25 mL	48.07692	.025	mL
SAMPLE	245394012		SW846 9010B Prep	02-FEB-2010 15:37	>12	0.5 g	25 mL	50	.025	mL
DUP	1202023412	245394012	SW846 9010B Prep	02-FEB-2010 15:37	>12	0.56 g	25 mL	44.64286	.025	mL
MS	1202023414	245394012	SW846 9010B Prep	02-FEB-2010 15:37	>12	0.58 g	25 mL	43.10345	.025	mL
MSD	1202023416	245394012	SW846 9010B Prep	02-FEB-2010 15:37	>12	0.56 g	25 mL	44.64286	.025	mL
SAMPLE	245394013		SW846 9010B Prep	02-FEB-2010 15:37	>12	0.53 g	25 mL	47.16981	.025	mL
SAMPLE	245394014		SW846 9010B Prep	02-FEB-2010 15:37	>12	0.56 g	25 mL	44.64286	.025	mL
SAMPLE	245394015		SW846 9010B Prep	02-FEB-2010 15:37	>12	0.55 g	25 mL	45.45455	.025	mL

Prep LogBook

Reagent/Solvent Lot ID	Amount	Description	Comments
091211-C	25 mL	0.25N Sodium Hydroxide Solution	
WCN100202-07	.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 Verified by: _____

Batch: 944840

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	1202023402		SW846 9010B Prep	02-FEB-2010 15:39	>12	0.5 g	25 mL	50	.25	g
LCS	1202023409		SW846 9010B Prep	02-FEB-2010 15:39	>12	0.25 g	25 mL	100	.025	mL
SAMPLE	245391002		SW846 9010B Prep	02-FEB-2010 15:39	>12	0.52 g	25 mL	48.07692	.025	mL
DUP	1202023403	245391002	SW846 9010B Prep	02-FEB-2010 15:39	>12	0.53 g	25 mL	47.16981	.025	mL
MS	1202023405	245391002	SW846 9010B Prep	02-FEB-2010 15:39	>12	0.57 g	25 mL	43.85965	.025	mL
MSD	1202023407	245391002	SW846 9010B Prep	02-FEB-2010 15:39	>12	0.5 g	25 mL	50	.025	mL
SAMPLE	245391003		SW846 9010B Prep	02-FEB-2010 15:39	>12	0.51 g	25 mL	49.01961	.025	mL
DUP	1202023404	245391003	SW846 9010B Prep	02-FEB-2010 15:39	>12	0.52 g	25 mL	48.07692	.025	mL
MS	1202023406	245391003	SW846 9010B Prep	02-FEB-2010 15:39	>12	0.5 g	25 mL	50	.025	mL
MSD	1202023408	245391003	SW846 9010B Prep	02-FEB-2010 15:39	>12	0.55 g	25 mL	45.45455	.025	mL
SAMPLE	245391004		SW846 9010B Prep	02-FEB-2010 15:39	>12	0.53 g	25 mL	47.16981	.025	mL
SAMPLE	245391005		SW846 9010B Prep	02-FEB-2010 15:39	>12	0.5 g	25 mL	50	.025	mL
SAMPLE	245391006		SW846 9010B Prep	02-FEB-2010 15:39	>12	0.51 g	25 mL	49.01961	.025	mL
SAMPLE	245391007		SW846 9010B Prep	02-FEB-2010 15:39	>12	0.54 g	25 mL	46.2963	.025	mL
SAMPLE	245391008		SW846 9010B Prep	02-FEB-2010 15:39	>12	0.51 g	25 mL	49.01961	.025	mL
SAMPLE	245391009		SW846 9010B Prep	02-FEB-2010 15:39	>12	0.51 g	25 mL	49.01961	.025	mL
SAMPLE	245391010		SW846 9010B Prep	02-FEB-2010 15:39	>12	0.5 g	25 mL	50	.025	mL
SAMPLE	245391011		SW846 9010B Prep	02-FEB-2010 15:39	>12	0.51 g	25 mL	49.01961	.025	mL
SAMPLE	245394001		SW846 9010B Prep	02-FEB-2010 15:39	>12	0.52 g	25 mL	48.07692	.025	mL
SAMPLE	245394002		SW846 9010B Prep	02-FEB-2010 15:39	>12	0.56 g	25 mL	44.64286	.025	mL
SAMPLE	245394003		SW846 9010B Prep	02-FEB-2010 15:39	>12	0.51 g	25 mL	49.01961	.025	mL
SAMPLE	245394004		SW846 9010B Prep	02-FEB-2010 15:39	>12	0.54 g	25 mL	46.2963	.025	mL
SAMPLE	245394005		SW846 9010B Prep	02-FEB-2010 15:39	>12	0.53 g	25 mL	47.16981	.025	mL
SAMPLE	245394006		SW846 9010B Prep	02-FEB-2010 15:39	>12	0.5 g	25 mL	50	.025	mL
SAMPLE	245394007		SW846 9010B Prep	02-FEB-2010 15:39	>12	0.53 g	25 mL	47.16981	.025	mL
SAMPLE	245394008		SW846 9010B Prep	02-FEB-2010 15:39	>12	0.57 g	25 mL	43.85965	.025	mL
SAMPLE	245394009		SW846 9010B Prep	02-FEB-2010 15:39	>12	0.51 g	25 mL	49.01961	.025	mL
SAMPLE	245394010		SW846 9010B Prep	02-FEB-2010 15:39	>12	0.57 g	25 mL	43.85965	.025	mL

Prep LogBook

Reagent/Solvent Lot ID	Amount	Description	Comments
091211-C	25 mL	0.25N Sodium Hydroxide Solution	
WCN100202-07	.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

Author: axc2

Date : 2/2/2010

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	1	32	0.335	0.0657	2/2/2010@16:06:17			
1202023386	MS	1	33	92.1	3.30	2/2/2010@16:07:11			
1202023388	MSD	1	34	69.9	2.51	2/2/2010@16:08:04			
245243003		1	35	0.697	0.0784	2/2/2010@16:08:58			
1202023385	DUP	1	36	0.374	0.0670	2/2/2010@16:09:51			
1202023387	MS	1	37	89.1	3.19	2/2/2010@16:10:44			
1202023389	MSD	1	38	97.6	3.49	2/2/2010@16:11:37			
245243004		1	39	7.98	0.335	2/2/2010@16:12:30			
245243005		1	40	-0.0613	0.0517	2/2/2010@16:13:22			
WCN100202-03		1	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

	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 is a linear calibration plot showing the relationship between Peak Area (V.s) on the y-axis and TCYANIDE concentration, ug/L on the x-axis. The plot includes a linear regression line and the following equations:

- Area = 0.0352 * Conc + 0.0541
- Conc = 28.4 * Area - 1.53
- Correlation Coefficient (r) = 0.99996

The text "No Weighting" is also present on the plot.

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: 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		DER Disposition:	
Exception Description: 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