

Friday, January 08, 2010

Page 1 of 2  
REQUEST NUMBER: 10-1160

**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: 10-1160

Per Agreement Number: 126310011

Project Cost Code: MR3A05529E00

Please analyse the enclosed samples  
according to the schedule indicated:

SHIP DATE: 1/8/2010

TURNAROUND/REPORT DUE: 2/7/2010

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-846:8082						
1		1	RE12-10-7699	R	1/6/2010	
1		1	RE12-10-7700	R	1/6/2010	
1		1	RE12-10-7701	R	1/6/2010	
1		1	RE12-10-7702	R	1/6/2010	
1		1	RE12-10-7727	R	1/6/2010	
1		1	RE12-10-7734	R	1/6/2010	
SW-846:8321A_MOD						
1		1	RE12-10-7699	R	1/6/2010	
1		1	RE12-10-7700	R	1/6/2010	
1		1	RE12-10-7701	R	1/6/2010	

Friday, January 08, 2010

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REQUEST NUMBER: 10-1160

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
SW-846:8321A_MOD						
		1	RE12-10-7702	R	1/6/2010	
		1	RE12-10-7705	R	1/6/2010	
		1	RE12-10-7706	R	1/6/2010	
		1	RE12-10-7707	R	1/6/2010	
		1	RE12-10-7708	R	1/6/2010	
		1	RE12-10-7709	R	1/6/2010	
		1	RE12-10-7710	R	1/6/2010	
		1	RE12-10-7711	R	1/6/2010	
		1	RE12-10-7712	R	1/6/2010	
		1	RE12-10-7713	R	1/6/2010	
		1	RE12-10-7714	R	1/6/2010	
		1	RE12-10-7715	R	1/6/2010	
		1	RE12-10-7716	R	1/6/2010	
		1	RE12-10-7717	R	1/6/2010	
		1	RE12-10-7718	R	1/6/2010	
		1	RE12-10-7719	R	1/6/2010	
		1	RE12-10-7727	R	1/6/2010	
		1	RE12-10-7734	R	1/6/2010	

Final Page of REQUEST NUMBER 10-1160

Friday, January 08, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1160

**LOS ALAMOS**

REQUEST NUMBER: 10-1160

**NATIONAL LABORATORY**

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 2/7/2010

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
RE12-10-7734	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE12-10-7701	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE12-10-7702	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE12-10-7700	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE12-10-7699	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE12-10-7727	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE12-10-7710	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7715	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7707	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7719	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7717	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7708	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7706	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7714	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7705	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7709	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7711	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7712	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7716	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7718	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7713	1	AMBER GLASS	NMED Explosives list	Ice	R

**Relinquished By:****Date****Time****Received By:****Date****Time**

 1/5/10 3:00

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

**Received for DISPOSAL By:****Date****Time****Remarks:**

Printed Name

Signature

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2493

EVENT NAME: 4th Qtr. FY09 - CU 12-001(a)-99 - Threemile Canyon

SAMPLE ID: RE12-10-7699

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/06/2010		MEDIA:	QBT3		ALLH
TIME COLLECTED(HH:MM)		0957		SUB-MEDIA:	TUFF 1		NA
PRS ID:	12-001(a)-99	ok		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	12-610667			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	Yes	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY 7m 1/6/10	None	Yes	
1		Met+U+CLO4+C N	1 GAL POLY 1 Liter	Ice	Yes	
1	✓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Yes	

SAMPLE DESC:

Dark brown moist sandy silt, some clay  
few roots, some rocks

SAMPLE COMMENTS:

NA

LOCATION DESC:

1a-15 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

 $\alpha \leq 27$  dpm $\text{BY} \leq 2480$  dpm

PID

ambient  
reading0.0  
0.0 ppm

HE NEG

COLLECTED BY (PRINT)

REVIEWED BY (PRINT)

TL McFarland

RELINQUISHED BY (Printed Name) R. Saunders (Signature) R. Saunders	Date/Time 01/06/2010 1555	RECEIVED BY (Printed Name) S. MADRILL (Signature) [Signature]	Date/Time 1/6/10 1555
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time



## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2493

EVENT NAME: 4th Qtr. FY09 - CU 12-001(a)-99 - Threemile Canyon

SAMPLE ID: RE12-10-7700

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/06/2010		MEDIA:	QBT3		ok
TIME COLLECTED (HH:MM)		1012		SUB-MEDIA:	TUFF 1		L
PRS ID:	12-001(a)-99		ok	SAMPLE TECH CODE:	HA		ok
LOCATION ID:	12-610667			FIELD QC TYPE:	NA		
LOCATION TYPE:	GENERIC			FIELD PREP:	NA		
TOP DEPTH:	0		1.0	SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0		2.0	SCREEN/PORT DESC:	NA		
FIELD MATRIX:	R		ok	EXCAVATED: YES/NO/NA	NO/NA		
COMPOSITE TYPE:	N/A			COMPOSITE TIME INTERVAL:	N/A		
BOREHOLE: YES/NO/NA	NO/NA			BOREHOLE DECLINATION:	N/A		
				BOREHOLE DIRECTION:	N/A		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	NORMAL	8082+NMED-HEXP	250 ML AMBER GLASS	Ice	Yes	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY 13m 1/6/10	None	Yes	
1		Met+U+CLO4+C N	1 GAL POLY 1 Liter	Ice	Yes	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Yes	

SAMPLE DESC:

Pinkish gray weathered tuff, some clay

SAMPLE COMMENTS:

NA

LOCATION DESC: 1a-15 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

 $\alpha \leq 11 \text{ dpm}$  $\text{BY} \leq 2750 \text{ dpm}$ PID Ambient 0.0 ppm  
reading 0.0 HE NEG

COLLECTED BY (PRINT)

Nick Gallegos

REVIEWED BY (PRINT)

TL McFarlane

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) R. Saunders	01/06/2010	S. MADONAN	1/6/10
(Signature) R. Saunders	1555	W	1555
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2493

EVENT NAME: 4th Qtr. FY09 - CU 12-001(a)-99 - Threemile Canyon

SAMPLE ID: RE12-10-7701

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/06/2010		MEDIA:	QBT3		11h
TIME COLLECTED (HH:MM)		1259		SUB-MEDIA:	TUFF 1		NA
PRS ID:	12-001(a)-99	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	12-610668	↓		FIELD QC TYPE:	NA		
LOCATION TYPE:	GENERIC	↓		FIELD PREP:	NA		
TOP DEPTH:	0	0.0		SAMPLE USAGE:	INV		
BOTTOM DEPTH:	0	1.0		SCREEN/PORT DESC:			↓
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 1.2M 1/6/10	None	Y	
1	↓	Met+U+CLO4+C N	1 GAL POLY 1 Liter	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: Wet brown silty sand

FD RE 12-10-7727

SAMPLE COMMENTS:

Drainage

LOCATION DESC: 1a-19

FIELD SCREENING/MEASUREMENT RESULTS:

 $\alpha \leq 11$  dpm

PID

ambient  
reading0.0 ppm  
0.0

HE NEG

 $BY \leq 2458$  ppmCOLLECTED BY (PRINT)  
TL McFarland

REVIEWED BY (PRINT)

R. Saunders

RELINQUISHED BY (Printed Name) TLMcFarland (Signature) <i>Tracy McFarland</i>	Date/Time 01/06/2010 1555	RECEIVED BY (Printed Name) S. MARIZ AK (Signature) <i>[Signature]</i>	Date/Time 1/6/10 1555
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

**SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY**

EVENT ID: 2493

EVENT NAME: 4th Qtr. FY09 - CU 12-001(a)-99 - Threemile Canyon

SAMPLE ID: RE12-10-7702

WORK ORDER:

AS PLANNED		AS COLLECTED	AS PLANNED		AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		01/06/2010	MEDIA:		QBT3
TIME COLLECTED (HH:MM)		1320	SUB-MEDIA:		TUFF 1
PRS ID:	12-001(a)-99	OK	SAMPLE TECH CODE:		HA
LOCATION ID:	12-610668	↓	FIELD QC TYPE:		NA
LOCATION TYPE:	GENERIC	↓	FIELD PREP:		NA
TOP DEPTH:	0	1.0	SAMPLE USAGE:		INV
BOTTOM DEPTH:	0	1.9	SCREEN/PORT DESC:		NA
FIELD MATRIX:	R	OK	EXCAVATED: YES/NO/NA		
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA	WATER FLOWING: YES/NO/NA		
BOREHOLE: YES/NO/NA		BOREHOLE DECLINATION: 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 72m 1/6/10	None	Y	
1	↓	Met+U+CLO4+C N	1 GAL POLY 1 Liter	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Brown moist weathered stuff

SAMPLE COMMENTS:

NA

LOCATION DESC:

1a-19, drainage

FIELD SCREENING/MEASUREMENT RESULTS:

$\alpha \leq 11$  dpm      PID       $\frac{\text{ambient}}{\text{reading}} = \frac{0.0}{0.0}$  ppm  
 $BY \leq 2770$  dpm

COLLECTED BY (PRINT)

TLMcFarland

REVIEWED BY (PRINT)

R. Saunders

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) TLMcFarland	01/06/2010	G. MARRAS	1/6/10
(Signature) Tracy Ruit	1555	(Signature) [Signature]	1555
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2493

EVENT NAME: 4th Qtr. FY09 - CU 12-001(a)-99 - Threemile Canyon

SAMPLE ID: RE12-10-7705

WORK ORDER:

AS PLANNED		AS COLLECTED	AS PLANNED		AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		01/06/2010	MEDIA:		OBT3
TIME COLLECTED (HH:MM)		932	SUB-MEDIA:		TUFF 1
PRS ID:	12-001(a)-99	ok	SAMPLE TECH CODE:		HA
LOCATION ID:	12-610670	↓	FIELD QC TYPE:		NA
LOCATION TYPE:	GENERIC	↓	FIELD PREP:		NA
TOP DEPTH:	0	0.0	SAMPLE USAGE:		INV
BOTTOM DEPTH:	0	0.7	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	CNTR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	AM241+GS+ISO PU+ISOU	1 LITER POLY T25 1/6/10	None	Y	
1	↓	Met+U+CLO4+C N	1 GAL POLY 1 Liter	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, moist, some clay, and pinkish gray, buff

SAMPLE COMMENTS: Hit tuff at 0.5 ft

LOCATION DESC: 1a-14, drainage

## FIELD SCREENING/MEASUREMENT RESULTS:

Alpha ≤ 38 dpm  
Beta/Gamma ≤ 2100 dpm

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

COLLECTED BY (PRINT)

TbMcFarland

REVIEWED BY (PRINT)

R. Saunders

RELINQUISHED BY (Printed Name) TbMcFarland (Signature) Tracy Z et	Date/Time 01/06/2010 1555	RECEIVED BY (Printed Name) S. MADRAN (Signature) [Signature]	Date/Time 1/6/10 1555
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2493

EVENT NAME: 4th Qtr. FY09 - CU 12-001(a)-99 - Threemile Canyon

SAMPLE ID: RE12-10-7706

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/06/2010		MEDIA:	QBT3		OK
TIME COLLECTED (HH:MM)		945		SUB-MEDIA:	TUFF1		OK
PRS ID:	12-001(a)-99	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	12-610670			FIELD QC TYPE:	NA		
LOCATION TYPE:	GENERIC			FIELD PREP:	NA		
TOP DEPTH:	0	1.0		SAMPLE USAGE:	INV		
BOTTOM DEPTH:	0	2.0		SCREEN/PORT DESC:	NA		
FIELD MATRIX:	R	R		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
BOREHOLE: YES/NO/NA				BOREHOLE DECLINATION:	NA		
				BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	AM241+GS+ISO PU+ISOU	1 LITER POLY 12m 1/6/2010	None	Y	
1		Met+U+CLO4+C N	1 GAL POLY 1 Liter	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: Pinkish - Gray, weathered tuff, some clay  
FR RE12-10-7738

SAMPLE COMMENTS: IN OAK Bush AREA

LOCATION DESC: 1a-14, south of Road

## FIELD SCREENING/MEASUREMENT RESULTS:

PID Ambient 00  
Recount 00 ppm

Alpha < 22 dpm  
Beta/Gamma < 2310 dpm

COLLECTED BY (PRINT)  
LARRY A. LOPEZ

REVIEWED BY (PRINT) TLMcFarland

RELINQUISHED BY (Printed Name) TLMcFarland (Signature) TLMcFarland	Date/Time 01/06/2010 1555	RECEIVED BY (Printed Name) S. MAROZAY (Signature) [Signature]	Date/Time 1/6/10 1555
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

**SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY**

EVENT ID: 2493

EVENT NAME: 4th Qtr. FY09 - CU 12-001(a)-99 - Threemile Canyon

SAMPLE ID: RE12-10-7707

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/06/2010		MEDIA:	QBT3		A11h
TIME COLLECTED (HH:MM)		1029		SUB-MEDIA:	TUFF 1		NA
PRS ID:	12-001(a)-99	ok		SAMPLE TECH CODE:	HA		ok
LOCATION ID:	12-610671			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 12m 11/6/2010	None	Y	
1		Met+U+CLO4+C N	1 GAL POLY 1 Liter	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 loamy silty sand, roots and rocks

SAMPLE COMMENTS: small sediment pocket in drainage

LOCATION DESC: 1a-16 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha  $\leq$  33 dpm  
Beta/Gamma  $\leq$  2460 dpm

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

COLLECTED BY (PRINT)  
TLMcFarland

REVIEWED BY (PRINT) R. Saunders

RELINQUISHED BY (Printed Name) TLMcFarland (Signature) TLMcFarland	Date/Time 01/06/2010 1555	RECEIVED BY (Printed Name) S. MARJAK (Signature) [Signature]	Date/Time 1/6/10 1555
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2493

EVENT NAME: 4th Qtr. FY09 - CU 12-001(a)-99 - Threemile Canyon

SAMPLE ID: RE12-10-7708

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/06/2010		MEDIA:	QBT3		ok
TIME COLLECTED(HH:MM)		1049		SUB-MEDIA:	TUFF 1		↓
PRS ID:	12-001(a)-99	ok		SAMPLE TECH CODE:	HA		ok
LOCATION ID:	12-610671	↓		FIELD QC TYPE:	NA		↓
LOCATION TYPE:	GENERIC	↓		FIELD PREP:	NA		↓
TOP DEPTH:	0	1.0		SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0	1.0		SCREEN/PORT DESC:	NA		
FIELD MATRIX:	R	1.0		EXCAVATED: YES/NO/NA	NA		
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
BOREHOLE: YES/NO/NA	NO/NA			BOREHOLE DECLINATION:	NA		
				BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	AM241+GS+ISO PU+ISOU	1 LITER POLY 1.0 LITER	None	Y	
1	↓	Met+U+CLO4+C N	1 GAL POLY 1 Liter	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: Pinkish gray Tuff

SAMPLE COMMENTS:

Tuff at 0.5 ft

LOCATION DESC: 1a-16 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha  $\leq$  44 dpm  
Beta/Gamma  $\leq$  2790 dpm

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

COLLECTED BY (PRINT)

TLMcFarland

REVIEWED BY (PRINT)

R. Saunders

RELINQUISHED BY (Printed Name) TLMcFarland (Signature) TLMcFarland	Date/Time 1/10/2010 1555	RECEIVED BY (Printed Name) S. MADON (Signature) S. Madon	Date/Time 1/6/20 1555
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2493

EVENT NAME: 4th Qtr. FY09 - CU 12-001(a)-99 - Threemile Canyon

SAMPLE ID: RE12-10-7709

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/06/2010		MEDIA: QBT3		ALLH	
TIME COLLECTED (HH:MM)		1108		SUB-MEDIA: TUFF 1		NA	
PRS ID: 12-001(a)-99		OK		SAMPLE TECH CODE: HA		OK	
LOCATION ID: 12-610672		↓		FIELD QC TYPE: NA		↓	
LOCATION TYPE: GENERIC		↓		FIELD PREP: NA		↓	
TOP DEPTH: 0		0.0		SAMPLE USAGE: INV		↓	
BOTTOM DEPTH: 0		0.8		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 13m 1/06/10	None	Yes	
1	↓	Met+U+CLO4+C N	1 GAL POLY 1 Liter	Ice	Yes	
1	↓	NMED Explosives list	250 ML AMBER GLASS	Ice	Yes	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Yes	

SAMPLE DESC: brown silty sand, some rocks, some roots

SAMPLE COMMENTS: NA

LOCATION DESC: 1a-17 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha  $\leq$  27 dpm  
Beta/Gamma  $\leq$  3060 dpm

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

COLLECTED BY (PRINT)

R Saunders

REVIEWED BY (PRINT) TLMcFarlane

RELINQUISHED BY (Printed Name) TLMcFarlane (Signature) TLMcFarlane	Date/Time 01/06/2010 1555	RECEIVED BY (Printed Name) S. MADHAN (Signature) [Signature]	Date/Time 1/6/10 1555
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time



## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2493

EVENT NAME: 4th Qtr. FY09 - CU 12-001(a)-99 - Threemile Canyon

SAMPLE ID: RE12-10-7710

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/06/2010		MEDIA:	QBT3		OK
TIME COLLECTED (HH:MM)		1118		SUB-MEDIA:	TUFF1		OK
PRS ID:	12-001(a)-99	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	12-610672	↓		FIELD QC TYPE:	NA		↓
LOCATION TYPE:	GENERIC	↓		FIELD PREP:	NA		↓
TOP DEPTH:	0	1.0		SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0	2.8		SCREEN/PORT DESC:	NA		
FIELD MATRIX:	R	R		EXCAVATED: YES/NO/NA	NA		
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
BOREHOLE: YES/NO/NA	NO/NA			BOREHOLE DECLINATION:	NA		
BOREHOLE DIRECTION:	NA			WATER FLOWING: YES/NO/NA	NO/NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	AM241+GS+ISO PU+ISOU	1 LITER POLY 12m 1/06/10	None	Yes	
1	↓	Met+U+CLO4+C N	1 GAL POLY 1 Liter	Ice	Yes	
1	↓	NMED Explosives list	250 ML AMBER GLASS	Ice	Yes	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Yes	

SAMPLE DESC: pinkish grey tuff

FD RE12-10-7734

SAMPLE COMMENTS:

NA

LOCATION DESC: 1a-17 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha ≤ 44 dpm  
Beta/Gamma ≤ 2930 dpm

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

COLLECTED BY (PRINT)

Nicholas Gallegos

REVIEWED BY (PRINT)

TL McFarlane

RELINQUISHED BY (Printed Name) TLMcFarlane (Signature) Tray 20	Date/Time 01/06/2010 1555	RECEIVED BY (Printed Name) S. MAHARJY (Signature) [Signature]	Date/Time 1/6/10 1555
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2493

EVENT NAME: 4th Qtr. FY09 - CU 12-001(a)-99 - Threemile Canyon

SAMPLE ID: RE12-10-7711

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/06/2010		MEDIA:		OBT3	
TIME COLLECTED (HH:MM)		1137		SUB-MEDIA:		TUFF 1	
PRS ID: 12-001(a)-99		OK		SAMPLE TECH CODE: HA		OK	
LOCATION ID: 12-610673		↓		FIELD QC TYPE: NA		↓	
LOCATION TYPE: GENERIC		↓		FIELD PREP: NA		↓	
TOP DEPTH: 0		0.0		SAMPLE USAGE: INV		↓	
BOTTOM DEPTH: 0		0.9		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 13m 1/06/2010	None	Y	
1	↓	Met+U+CLO4+C N	1 GAL POLY 1 Liter	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, slightly moist, rocks, few roots

SAMPLE COMMENTS: NA

LOCATION DESC: 1a-18, drainage

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha  $\leq$  22 dpm  
Beta/Gamma  $\leq$  2550 dpm

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

COLLECTED BY (PRINT)

TL McFarland

REVIEWED BY (PRINT)

R. Saunders

RELINQUISHED BY (Printed Name) TL McFarland (Signature) Tracy Felt	Date/Time 01/06/2010 1555	RECEIVED BY (Printed Name) S. MARUZAY (Signature) [Signature]	Date/Time 1/6/10 1555
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2493

EVENT NAME: 4th Qtr. FY09 - CU 12-001(a)-99 - Threemile Canyon

SAMPLE ID: RE12-10-7712

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/06/2010		MEDIA:	QBT3		OK
TIME COLLECTED (HH:MM)		1147		SUB-MEDIA:	TUFF 1		OK
PRS ID:	12-001(a)-99	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	12-610673			FIELD QC TYPE:	NA		
LOCATION TYPE:	GENERIC			FIELD PREP:	NA		
TOP DEPTH:	0	1.0		SAMPLE USAGE:	INV		
BOTTOM DEPTH:	0	1.9		SCREEN/PORT DESC:	NA		
FIELD MATRIX:	R	OK		EXCAVATED: YES/NO/NA	NO/NA		
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
				WATER FLOWING: YES/NO/NA	NO/NA		
BOREHOLE: YES/NO/NA	NO/NA			BOREHOLE DECLINATION:	NA		
				BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	AM241+GS+ISO PU+ISOU	1 LITER POLY 13m 1/06/2010	None	Yes	
1		Met+U+CLO4+C N	1 GAL POLY 1 Liter	Ice	Yes	
1		NMED Explosives list	250 ML AMBER GLASS	Ice	Yes	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Yes	

SAMPLE DESC: brownish grey weathered tuff, slightly moist

## SAMPLE COMMENTS:

Hit tuff at 1.5 ft

LOCATION DESC: 1a-18, drainage

## FIELD SCREENING/MEASUREMENT RESULTS:

Alpha  $\leq$  27 dpm  
Beta/Gamma  $\leq$  21670 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) TLMcFarland (Signature) TLMcFarland	Date/Time 01/06/2010 1555	RECEIVED BY (Printed Name) S. MATHAY (Signature) [Signature]	Date/Time 1/6/10 1555
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2493

EVENT NAME: 4th Qtr. FY09 - CU 12-001(a)-99 - Threemile Canyon

SAMPLE ID: RE12-10-7713

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/06/2010		MEDIA:		OBT3	
TIME COLLECTED (HH:MM)		1303		SUB-MEDIA:		TUFF 1	
PRS ID: 12-001(a)-99		ok		SAMPLE TECH CODE:		HA	
LOCATION ID: 12-610674		↓		FIELD QC TYPE:		NA	
LOCATION TYPE: GENERIC		↓		FIELD PREP:		NA	
TOP DEPTH: 0		0.0		SAMPLE USAGE:		INV	
BOTTOM DEPTH: 0		0.10		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		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 72m 1/4 110	None	Yes	
1	↓	Met+U+CLO4+C N	1 GAL POLY 1 Liter	Ice	Yes	
1	↓	NMED Explosives list	250 ML AMBER GLASS	Ice	Yes	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Yes	

SAMPLE DESC: silty-brown with some root fragments - 100SE soil  
sand

## SAMPLE COMMENTS:

DRAINAGE AREA

LOCATION DESC: 1a-20 drainage

## FIELD SCREENING/MEASUREMENT RESULTS:

Alpha  $\pm$  33 dpm  
Beta/Gamma  $\pm$  2210 dpm

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

COLLECTED BY (PRINT)

R Saunders

REVIEWED BY (PRINT)

LARRY A. Lopez

RELINQUISHED BY (Printed Name) Larry A Lopez (Signature) Larry A Lopez	Date/Time 01/06/10 1555	RECEIVED BY (Printed Name) S. MARICAN (Signature) [Signature]	Date/Time 1/6/10 1555
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2493

EVENT NAME: 4th Qtr. FY09 - CU 12-001(a)-99 - Threemile Canyon

SAMPLE ID: RE12-10-7714

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/06/2010		MEDIA:	OBT3		ALLH
TIME COLLECTED (HH:MM)		1315		SUB-MEDIA:	TUFF 1		NA
PRS ID:	12-001(a)-99	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	12-610674	↓		FIELD QC TYPE:	NA		↓
LOCATION TYPE:	GENERIC	↓		FIELD PREP:	NA		↓
TOP DEPTH:	0	1.0		SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0	2.0		SCREEN/PORT DESC:	NA		
FIELD MATRIX:	R	S		EXCAVATED: YES/NO/NA	NO		
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		WATER FLOWING: YES/NO/NA
BOREHOLE: YES/NO/NA	NO			BOREHOLE DECLINATION:	NA		BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	normal	AM241+GS+ISO PU+ISOU	1 LITER POLY 72m 1/6/10	None	Yes	
1	↓	Met+U+CLO4+C N	1 GAL POLY 1 Liter	Ice	Yes	
1	↓	NMED Explosives list	250 ML AMBER GLASS	Ice	Yes	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Yes	

SAMPLE DESC: Light brown with root fragments  
silty sand

SAMPLE COMMENTS:

72m 01/06/10

Drainage area / location

LOCATION DESC: 1a-20 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha  $\leq$  44 dpmBeta/Gamma  $\leq$  2640 dpmPID  $\frac{\text{Ambient Reading}}{0.0}$  ppm

COLLECTED BY (PRINT)

Larry A. Lopez

REVIEWED BY (PRINT)

R. Saunders

RELINQUISHED BY (Printed Name) Larry A. Lopez (Signature) Larry A. Lopez	Date/Time 01/06/10 1555	RECEIVED BY (Printed Name) S. MARY (Signature) [Signature]	Date/Time 1/6/10 1555
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2493

EVENT NAME: 4th Qtr. FY09 - CU 12-001(a)-99 - Threemile Canyon

SAMPLE ID: RE12-10-7715

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/06/2010		MEDIA: QBT3		ALLH	
TIME COLLECTED (HH:MM)		1331		SUB-MEDIA: TUFF 1		NA	
PRS ID: 12-001(a)-99		OK		SAMPLE TECH CODE: HA		OK	
LOCATION ID: 12-610675		↓		FIELD QC TYPE: NA		↓	
LOCATION TYPE: GENERIC		↓		FIELD PREP: NA		↓	
TOP DEPTH: 0		0.0		SAMPLE USAGE: INV		↓	
BOTTOM DEPTH: 0		0.10		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 12m 1/6/10	None	Yes	
1	↓	Met+U+CLO4+C N	1 GAL POLY 1 Liter	Ice	Yes	
1	↓	NMED Explosives list	250 ML AMBER GLASS	Ice	Yes	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Yes	

SAMPLE DESC:

sandy silt tan 1/6/10

Dark brown, moist, soil - rocks - roots

SAMPLE COMMENTS:

N/A

LOCATION DESC: 1a-21 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 33 dpm  
Beta/Gamma = 2220 dpm

PID Ambient Reading 0.0 ppm

HE NEG

COLLECTED BY (PRINT)

R. Saunders

REVIEWED BY (PRINT) TLMcFarland

RELINQUISHED BY (Printed Name) R. Saunders (Signature) R. Saunders	Date/Time 01/06/2010 1555	RECEIVED BY (Printed Name) G. MAROZAN (Signature) [Signature]	Date/Time 1/6/10 1555
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

**SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY**

EVENT ID: 2493

EVENT NAME: 4th Qtr. FY09 - CU 12-001(a)-99 - Threemile Canyon

SAMPLE ID: RE12-10-7716

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/06/2010		MEDIA:	QBT3		ALL H
TIME COLLECTED (HH:MM)		1350		SUB-MEDIA:	TUFF 1		NA
PRS ID:	12-001(a)-99	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	12-610675	↓		FIELD QC TYPE:	NA		↓
LOCATION TYPE:	GENERIC	↓		FIELD PREP:	NA		↓
TOP DEPTH:	0	1.0		SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0	2.0		SCREEN/PORT DESC:			NA
FIELD MATRIX:	R	S		EXCAVATED: YES/NO/NA	NO		
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		WATER FLOWING: YES/NO/NA
BOREHOLE: YES/NO/NA	NO			BOREHOLE DECLINATION:	NA		BOREHOLE DIRECTION:
							NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	normal	AM241+GS+ISO PU+ISOU	1 LITER POLY 73m 1/6/10	None	Yes	
1	↓	Met+U+ClO4+C N	1 GAL POLY 1 Liter	Ice	Yes	
1	↓	NMED Explosives list	250 ML AMBER GLASS	Ice	Yes	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Yes	

SAMPLE DESC: brown silty sand, few roots, some rock

SAMPLE COMMENTS:

NA

LOCATION DESC: 1a-21 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha  $\neq$  16 dpm  
Beta/Gamma  $\neq$  2460 dpm

PID ambient  
reading 0.0  
0.0 ppm

COLLECTED BY (PRINT)

R. Saunders

REVIEWED BY (PRINT) T. McFarland

RELINQUISHED BY (Printed Name) R. Saunders (Signature) R. Saunders	Date/Time 01/06/2010 1555	RECEIVED BY (Printed Name) S. Malarkey (Signature) [Signature]	Date/Time 1/6/10 1555
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

**SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY**

EVENT ID: 2493

EVENT NAME: 4th Qtr. FY09 - CU 12-001(a)-99 - Threemile Canyon

SAMPLE ID: RE12-10-7717

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/06/2010		MEDIA:	QBT3		Alh
TIME COLLECTED (HH:MM)		1344		SUB-MEDIA:	TUFF 1		NA
PRS ID:	12-001(a)-99	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	12-610676			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	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 TAM 1/6/10	None	Y	
1	↓	Met+U+CLO4+C N	1 GAL POLY 1 Liter	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:

wet sand

SAMPLE COMMENTS:

NA

LOCATION DESC:

1a-22, drainage

FIELD SCREENING/MEASUREMENT RESULTS:

 $\alpha \leq 22$  dpm $\text{BY} \leq 2430$  dpmPID ambient reading  $\frac{0.0}{0.0}$  ppm

HE neg

COLLECTED BY (PRINT)

TL McFarlane

REVIEWED BY (PRINT)

R Saunders

RELINQUISHED BY (Printed Name) R. Saunders (Signature) R. Saunders	Date/Time 01/06/2010 1555	RECEIVED BY (Printed Name) S. MARIKAY (Signature) [Signature]	Date/Time 1/6/10 1555
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time



## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2493

EVENT NAME: 4th Qtr. FY09 - CU 12-001(a)-99 - Threemile Canyon

SAMPLE ID: RE12-10-7718

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/06/2010		MEDIA:	QBT3		ok
TIME COLLECTED (HH:MM)		1411		SUB-MEDIA:	TUFF 1		↓
PRS ID:	12-001(a)-99	ok		SAMPLE TECH CODE:	HA		ok
LOCATION ID:	12-610676	↓		FIELD QC TYPE:	NA		↓
LOCATION TYPE:	GENERIC	↓		FIELD PREP:	NA		↓
TOP DEPTH:	0	1.0		SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0	1.5		SCREEN/PORT DESC:	NA		
FIELD MATRIX:	R	ok		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 TAM 11/6/10	None	Y	
1	↓	Met+U+CLO4+C N	1 GAE POLY 1 Liter	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:

1a-22, drainage

FIELD SCREENING/MEASUREMENT RESULTS:

$\alpha \leq 11$  dpm      PID ambient reading  $\frac{0.0}{0.0}$  ppm  
 $\text{BX} \leq 3110$  dpm

COLLECTED BY (PRINT)

TLMcFarland

REVIEWED BY (PRINT)

R Saunders

RELINQUISHED BY (Printed Name) R. Saunders (Signature) R. Saunders	Date/Time 01/06/2010 1555	RECEIVED BY (Printed Name) S. MARIAN (Signature) [Signature]	Date/Time 1/6/10 1555
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2493

EVENT NAME: 4th Qtr. FY09 - CU 12-001(a)-99 - Threemile Canyon

SAMPLE ID: RE12-10-7719

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/06/2010		MEDIA:	QBT3		ALLH
TIME COLLECTED (HH:MM)		1431		SUB-MEDIA:	TUFF 1		PS 01-06-10 NA
PRS ID:	12-001(a)-99	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	12-610677	↓		FIELD QC TYPE:	NA		↓
LOCATION TYPE:	GENERIC	↓		FIELD PREP:	NA		↓
TOP DEPTH:	0	0.0		SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0	PS 01-06-10 0.3 0.7		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 13m 1/6/10	None	Yes	
1	↓	Met+U+CLO4+C N	1 GAL POLY 1 Liter	Ice	Yes	
1	↓	NMED Explosives list	250 ML AMBER GLASS	Ice	Yes	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Yes	

SAMPLE DESC: dark brown wet silty sand, some roots

FR RE12-10-7737

SAMPLE COMMENTS:

NA

LOCATION DESC: 1a-23, drainage

FIELD SCREENING/MEASUREMENT RESULTS:

HE negative

 $\alpha \leq 27$  dpm

PID

ambient  
reading0.0  
0.0 ppmBY  $\leq 2230$  dpm

COLLECTED BY (PRINT)

R. Saunders

REVIEWED BY (PRINT) TLMcFarland

RELINQUISHED BY (Printed Name) R. Saunders (Signature) R. Saunders	Date/Time 01/06/2010 1555	RECEIVED BY (Printed Name) S. MARCZAK (Signature) [Signature]	Date/Time 1/6/10 1555
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

**SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY**

EVENT ID: 2493

EVENT NAME: 4th Qtr. FY09 - CU 12-001(a)-99 - Threemile Canyon

SAMPLE ID: RE12-10-7727

WORK ORDER:

AS PLANNED		AS COLLECTED	AS PLANNED		AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		01/06/2010	MEDIA:		QBT3
TIME COLLECTED (HH:MM)		1259	SUB-MEDIA:		TUFF 1
PRS ID:	12-001(a)-99	OK	SAMPLE TECH CODE:		HA
LOCATION ID:	UNK	12-610668	FIELD QC TYPE:		NA
LOCATION TYPE:	GENERIC	OK	FIELD PREP:		NA
TOP DEPTH:	0	0.0	SAMPLE USAGE:		INV
BOTTOM DEPTH:	0	1.0	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 12m 11/6/10	None	Y	
1		Met+U+CLO4+C N	1 GAL POLY 1L	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: QC sample of RE12-10-7701  
Wet brown silty sand

SAMPLE COMMENTS:  
NA

LOCATION DESC: 1a-19, drainage

FIELD SCREENING/MEASUREMENT RESULTS:  
 $\alpha \leq 11$  dpm  
 $\beta \leq 2450$  dpm  
 PID ambient reading 0.0  
 HE neg 0.0

COLLECTED BY (PRINT)  
TL McFarland

REVIEWED BY (PRINT) R. Saunders

RELINQUISHED BY (Printed Name) R. Saunders (Signature) R. Saunders	Date/Time 01/06/2010 1555	RECEIVED BY (Printed Name) S. MARITAKU (Signature) [Signature]	Date/Time 1/6/10 1555
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2493

EVENT NAME: 4th Qtr. FY09 - CU 12-001(a)-99 - Threemile Canyon

SAMPLE ID: RE12-10-7734

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/06/2010		MEDIA:	QBT3		ok
TIME COLLECTED (HH:MM)		1118		SUB-MEDIA:	TUFF 1		
PRS ID:	12-001(a)-99	ok		SAMPLE TECH CODE:	HA		
LOCATION ID:	UNK	12-610672		FIELD QC TYPE:	ED		
LOCATION TYPE:	GENERIC	ok		FIELD PREP:	NA		
TOP DEPTH:	0	1.0		SAMPLE USAGE:	QC		
BOTTOM DEPTH:	0	2.8		SCREEN/PORT DESC:	NA		
FIELD MATRIX:	R	ok		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
				WATER FLOWING: YES/NO/NA			
BOREHOLE: YES/NO/NA	NO/NA			BOREHOLE DECLINATION:	NA		
				BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	724 1/6/2010 8082+NMED-HEXP	250 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		Met+U+CLO4+C N	1 GAL POLY 1 Liter	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: QC Sample of RE12-10-7710

Pinkish gray tuff

SAMPLE COMMENTS:

NA

LOCATION DESC: 1a-17, drainage

## FIELD SCREENING/MEASUREMENT RESULTS:

 $\alpha \leq 44$  dpm  
 $\text{BY} \leq 2930$  dpm

 PID ambient reading  $\frac{0.0}{0.0}$ 

COLLECTED BY (PRINT)

NICKOLAS GALLEGOS

REVIEWED BY (PRINT)

T. McFarland

RELINQUISHED BY (Printed Name) R. Saunders (Signature) R. Saunders	Date/Time 01/06/2010 1555	RECEIVED BY (Printed Name) S. MARCZAK (Signature) <i>[Signature]</i>	Date/Time 1/6/10 1555
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

**SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY**

EVENT ID: 2493

EVENT NAME: 4th Qtr. FY09 - CU 12-001(a)-99 - Threemile Canyon

SAMPLE ID: RE12-10-7737

WORK ORDER:

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		01/06/2010	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		1507	SUB-MEDIA:	OTHER	
PRS ID:	12-001(a)-99	ok	SAMPLE TECH CODE:	DC	
LOCATION ID:	UNK	12-610677	FIELD QC TYPE:	ER	
LOCATION TYPE:	GENERIC	ok	FIELD PREP:	UF	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:	NA	
FIELD MATRIX:	W	w	EXCAVATED: YES/NO/NA		
COMPOSITE TYPE:	NA		COMPOSITE TIME INTERVAL:	NA	
			WATER FLOWING: YES/NO/NA		
BOREHOLE: YES/NO/NA			BOREHOLE DECLINATION:	NA	
			BOREHOLE DIRECTION:	NA	

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

SAMPLE DESC: QC Sample of RE12-10-7719

## SAMPLE COMMENTS:

Rinsate

## LOCATION DESC:

1a-23

## FIELD SCREENING/MEASUREMENT RESULTS:

NA

COLLECTED BY (PRINT)

TL McFarland

REVIEWED BY (PRINT)

R Saunders

RELINQUISHED BY (Printed Name) R. Saunders (Signature) R. Saunders	Date/Time 01/06/2010 1555	RECEIVED BY (Printed Name) S. MARRAS (Signature) [Signature]	Date/Time 1/6/10 1555
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

**SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY**

EVENT ID: 2493

EVENT NAME: 4th Qtr. FY09 - CU 12-001(a)-99 - Threemile Canyon

SAMPLE ID: RE12-10-7738

WORK ORDER:

	<u>AS PLANNED</u>	<u>AS COLLECTED</u>		<u>AS PLANNED</u>	<u>AS COLLECTED</u>
DATE COLLECTED(MM/DD/YYYY):		01/06/2010	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		1000	SUB-MEDIA:	OTHER	
PRS ID:	12-001(a)-99	ok	SAMPLE TECH CODE:	DC	
LOCATION ID:	UNK	12-610670	FIELD QC TYPE:	FR	
LOCATION TYPE:	GENERIC	ok	FIELD PREP:	UF	
TOP DEPTH:	0	↓	SAMPLE USAGE:	QC	↓
BOTTOM DEPTH:	0	↓	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	W	w	EXCAVATED: YES/NO/NA		
COMPOSITE TYPE:	NA		COMPOSITE TIME INTERVAL:	NA	
			WATER FLOWING: YES/NO/NA		
BOREHOLE: YES/NO/NA			BOREHOLE DECLINATION:	NA	
			BOREHOLE DIRECTION:	NA	

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

SAMPLE DESC: QC Sample of RE12-10-7706

SAMPLE COMMENTS: Rinsate

LOCATION DESC:

1a-14

FIELD SCREENING/MEASUREMENT RESULTS:

NA

COLLECTED BY (PRINT)

TL McFarland

REVIEWED BY (PRINT)

R. Saunders

RELINQUISHED BY (Printed Name) R. Saunders (Signature) R. Saunders	Date/Time 01/06/2010 1555	RECEIVED BY (Printed Name) S. MATHIAS (Signature) [Signature]	Date/Time 1/6/10 1555
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):

RE12-10-7701  
7702  
7705  
7706  
7707  
7708  
7709  
7710  
7711  
7712

RE12-10-7713  
7714  
7715  
7716  
7717  
7718  
7719  
7720  
7721  
7722  
7723  
7724

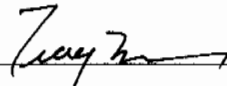
These samples will not be shipped until radiological screening data documentation arrives at the FSF. I understand that it is my responsibility to ensure this information arrives at the FSF in a timely manner. If holding times are missed because screening data does not arrive, I will pick up the samples.

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

RE12-10-7737  
7738

Reason: Rinsate

.....  
Print Last Name McFarlane

Signature 

Date 01/06/2010



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00006

Request or PO Number:

Client Sample ID: RE12-10-7699

ARS Sample ID: ARS2-10-00006-001

Sample Collection Date: 01/06/10 09:57

Date Received: 01/07/10 00:00

Sample Matrix: Soil/Solid

Report Date: 01/07/10 19:16

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MNC	TPH	Final	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	3.27	12.59	25.95	12.60		pCi/g	EPA 900.0M	1/7/2010	ME	N/A
GROSS BETA	32.39	10.40	13.50	11.33		pCi/g	EPA 900.0M	1/7/2010	ME	N/A
NA-22	0.00	0.00	0.12	0.00		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
K-40	25.02	9.02	1.85	9.05		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
CO-60	0.07	0.15	0.12	0.15		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
CS-134	0.00	0.00	0.09	0.00		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
CS-137	-0.01	15.84	0.08	15.84		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
EU-152	0.25	0.31	0.14	0.31		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
PB-212	0.99	0.42	0.10	0.42		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
RA-226	1.38	0.85	0.32	0.83		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
U-235	0.76	1.02	0.28	1.02		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
U-238	5.26	3.73	1.40	3.92		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
AM-241	0.23	0.37	0.16	0.37		pCi/g	EPA 901.1M	1/7/2010	ME	N/A

NOTES: % Moisture: 1.36

*Matthew J. Eder*  
Quality Assurance Review

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LELAP Certificate# 30658

NELAP Certificate # E87558





133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: AR52-10-00006

Request or PO Number:

Client Sample ID: RE12-10-7700

ARS Sample ID: AR52-10-00006-002

Sample Collection Date: 01/06/10 10:12

Date Received: 01/07/10 00:00

Sample Matrix: Soil/Solid

Report Date: 01/07/10 19:16

Analysis Description	Analysis Results	Analysis Error +/- 2 s	unc	TPU	Unit	Analysis Units	Analysis test method	Analysis Date/Time	Analysis Technician	Tracer/Chem recovery
GROSS ALPHA	18.19	14.53	18.95	14.70		pCi/g	EPA 900.0M	1/7/2010	ME	N/A
GROSS BETA	35.48	10.49	12.82	11.33		pCi/g	EPA 900.0M	1/7/2010	ME	N/A
NA-22	0.00	0.00	0.12	0.00		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
K-40	27.12	9.47	1.89	9.51		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
CO-60	0.00	12.37	0.13	12.37		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
CS-134	0.00	0.00	0.09	0.00		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
CS-137	0.01	0.04	0.08	0.04		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
EU-152	0.00	12.86	0.14	12.86		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
PB-212	1.74	0.60	0.18	0.60		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
RA-228	-0.14	124.15	0.33	124.15		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
U-238	1.16	0.74	0.30	0.74		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
U-235	4.47	2.98	1.19	3.15		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
AM-241	0.24	0.14	0.09	0.24		pCi/g	EPA 901.1M	1/7/2010	ME	N/A

NOTES: % Moisture: 0.49

*Matt J. Edley*  
Quality Assurance Review

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LELAP Certificate # 30656

NELAP Certificate # EB7558



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00006

Request or PO Number:

Client Sample ID: RE12-10-7701

ARS Sample ID: ARS2-10-00006-003

Sample Collection Date: 01/06/10 12:59

Date Received: 01/07/10 00:00

Sample Matrix: Soil/Solid

Report Date: 01/07/10 19:16

Analysis Description	Analysis Results	Analysis Error +/- 2s	MDC	TDH	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	17.63	15.27	20.54	15.42		pCi/g	EPA 900.0M	1/7/2010	ME	N/A
GROSS BETA	46.34	12.08	13.94	13.35		pCi/g	EPA 900.0M	1/7/2010	ME	N/A
NA-22	0.00	0.00	0.10	0.00		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
K-40	24.58	8.00	1.50	5.03		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
CO-60	0.00	0.80	0.10	0.80		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
CS-134	0.08	0.11	0.07	0.11		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
CS-137	0.33	0.23	0.06	0.23		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
EU-152	0.00	10.19	0.11	10.19		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
PB-212	1.27	0.44	0.12	0.45		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
RA-228	0.94	0.43	0.26	0.43		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
U-235	-0.06	55.10	0.15	55.10		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
U-238	1.54	1.82	0.94	1.86		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
AM-241	0.39	0.30	0.10	0.30		pCi/g	EPA 901.1M	1/7/2010	ME	N/A

NOTES: % Moisture: 2.77

*Matthew J. Foley*  
Quality Assurance Review

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

LELAP Certificate # 30653

NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00006

Request or PU Number:

Client Sample ID: RE12-10-7702

ARS Sample ID: ARS2-10-00006-004

Sample Collection Date: 01/06/10 13:20

Date Received: 01/07/10 00:00

Sample Matrix: Soil/Solid

Report Date: 01/07/10 19:16

Analysis Description	Analysis Results	Analysis Error +/- 1 s	MDC	TPU	Qual	Analysis Unit	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	13.30	14.68	22.83	14.77		pCi/g	EPA 900.0M	1/7/2010	ME	N/A
GROSS BETA	26.04	9.87	13.10	10.37		pCi/g	EPA 900.0M	1/7/2010	ME	N/A
NA-22	0.00	0.00	0.10	0.00		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
K-40	27.00	8.67	1.61	8.71		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
CO-60	6.09	10.50	0.11	10.50		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
CS-134	0.31	0.20	0.08	0.20		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
CS-137	0.00	0.03	0.07	0.03		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
EU-152	0.55	0.62	0.12	0.62		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
PB-212	1.21	0.54	0.21	0.54		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
RA-228	2.12	0.87	0.28	0.88		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
U-235	1.72	1.08	0.31	1.08		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
U-238	4.07	2.49	0.90	2.60		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
AM-241	0.16	0.22	0.09	0.22		pCi/g	EPA 901.1M	1/7/2010	ME	N/A

NOTES: % Moisture: 1.53

*Matthew J. Edley*  
Quality Assurance Review

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LELAP Certificate # 30658

NELAP Certificate # E97558



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00006

Request or PO Number:

Client Sample ID: RE12-10-7703

ARS Sample ID: ARS2-10-00006-005

Sample Collection Date: 01/06/10 09:32

Date Received: 01/07/10 00:00

Sample Matrix: Soli/Solid

Report Date: 01/07/10 19:16

Analysis Description	Analysis Results	Analysis Error +/- %	MDC	TPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	28.04	19.85	25.55	20.14		pCi/g	EPA 900.0M	1/7/2010	ME	N/A
GROSS BETA	17.51	10.31	13.80	10.85		pCi/g	EPA 900.0M	1/7/2010	ME	N/A
NA-12	0.00	0.00	0.12	0.00		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
K-40	22.09	8.69	1.93	8.72		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
CO-60	0.00	12.51	0.13	12.61		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
CS-134	0.00	0.00	0.09	0.00		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
CS-137	0.33	0.26	0.06	0.26		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
EU-152	0.47	0.58	0.17	0.58		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
PB-212	1.42	0.55	0.17	0.56		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
RA-228	-0.15	406.11	0.73	406.11		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
U-235	1.97	1.21	0.29	1.21		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
U-238	3.90	3.31	1.27	3.41		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
AM-241	0.01	0.07	0.07	0.07		pCi/g	EPA 901.1M	1/7/2010	ME	N/A

NOTES: % Moisture: 1.53

*Matthew J. Edley*  
Quality Assurance Review

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

LELAP Certificate# 30658

NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: AR52-10-00006

Request or PO Number:

Client Sample ID: RE12-10-7706

ARS Sample ID: AR52-10-00006-006

Sample Collection Date: 01/06/10 09:45

Date Received: 01/07/10 00:00

Sample Matrix: Soil/Solid

Report Date: 01/07/10 19:16

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	TBU	Qual	Analysis Units	Analysis Task Memo	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	29.73	17.71	18.09	18.08		pCi/g	EPA 900.0M	1/7/2010	ME	N/A
GROSS BETA	38.83	10.89	12.62	11.89		pCi/g	EPA 900.0M	1/7/2010	ME	N/A
NA-22	0.09	0.17	0.14	0.17		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
K-40	18.22	8.62	2.23	8.54		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
CO-60	0.18	0.25	0.15	0.25		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
CS-134	0.00	0.00	0.11	0.00		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
CS-137	-0.01	19.09	0.09	19.09		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
EU-152	0.50	0.62	0.20	0.62		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
PB-212	1.36	0.61	0.21	0.61		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
RA-228	1.60	0.85	0.39	0.86		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
U-235	1.58	1.05	0.43	1.06		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
U-238	2.40	3.87	1.81	3.91		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
AM-241	0.17	0.26	0.11	0.26		pCi/g	EPA 901.1M	1/7/2010	ME	N/A

NOTES: % Moisture: 0.93

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Quality Assurance Review

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NELAP Certificate # E87558



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ARS Sample Delivery Group: ARS2-10-00006

Request or PQ Number:

Client Sample ID: RE12-10-7707

ARS Sample ID: ARS2-10-00006-007

Sample Collection Date: 01/06/10 10:24

Date Received: 01/07/10 00:00

Sample Matrix: Soil/Solid

Report Date: 01/07/10 19:16

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MC	TPU	Qua	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	41.77	23.38	20.34	21.98		pCi/g	EPA 900.0M	1/7/2010	ME	N/A
GROSS BETA	46.33	12.42	13.94	13.65		pCi/g	EPA 900.0M	1/7/2010	ME	N/A
NA-22	0.00	0.00	0.14	0.00		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
K-40	21.71	9.29	2.21	9.31		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
CO-60	0.03	0.07	0.15	0.07		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
CS-134	0.00	0.00	0.11	0.00		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
CS-137	1.10	0.50	0.09	0.50		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
SU-152	0.00	15.05	0.17	15.05		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
PB-212	1.12	0.51	0.15	0.51		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
RA-226	0.84	0.50	0.42	0.50		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
U-235	1.60	0.86	0.22	0.86		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
U-238	2.52	2.89	1.46	2.99		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
AM-241	0.33	0.57	0.21	0.57		pCi/g	EPA 901.1M	1/7/2010	ME	N/A

NOTES: % Moisture: 2.62

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Quality Assurance Review

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ARS Sample Delivery Group: ARS2-10-00005

Request or PO Number:

Client Sample ID: RE12-10-7708

ARS Sample ID: ARS2-10-00006-008

Sample Collection Date: 01/06/10 10:49

Date Received: 01/07/10 09:00

Sample Matrix: Soil/Solid

Report Date: 01/07/10 19:16

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	TPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	36.25	20.46	22.83	20.93		pCi/g	EPA 900.0M	1/7/2010	ME	N/A
GROSS BETA	52.50	12.15	13.10	13.74		pCi/g	EPA 900.0M	1/7/2010	ME	N/A
NA-22	0.03	0.07	0.15	0.07		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
K-40	99.31	12.47	2.28	12.53		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
CO-60	0.00	14.93	0.15	14.93		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
CS-134	0.15	0.20	0.11	0.20		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
CS-137	0.11	0.22	0.10	0.22		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
EU-152	0.67	0.54	0.17	0.54		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
PB-212	1.50	0.62	0.20	0.63		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
RA-228	-0.17	232.40	0.52	232.40		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
U-235	-0.09	133.12	0.30	133.12		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
U-238	5.09	3.34	1.39	3.73		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
AM-241	0.83	0.15	0.09	0.15		pCi/g	EPA 901.1M	1/7/2010	ME	N/A

NOTES: % Moisture: 0.27

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ARS Sample Delivery Group: ARS2-10-00006

Request or PO Number:

Client Sample ID: RE12-10-7709

ARS Sample ID: ARS2-10-00006-009

Sample Collection Date: 01/06/10 11:08

Date Received: 01/07/10 00:00

Sample Matrix: Soil/Solid

Report Date: 01/07/10 19:16

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MNR	TPH	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	52.71	25.11	25.55	25.93		pCi/g	EPA 900.0M	1/7/2010	ME	N/A
GROSS BETA	66.72	13.30	13.50	15.61		pCi/g	EPA 900.0M	1/7/2010	ME	N/A
NA-22	0.09	0.17	0.14	0.17		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
K-40	26.26	10.15	2.21	10.18		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
CO-60	0.00	14.47	0.15	14.47		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
CS-134	0.04	0.06	0.11	0.06		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
CS-137	0.54	0.35	0.09	0.35		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
EU-152	0.41	0.34	0.24	0.54		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
PB-212	1.62	0.61	0.17	0.61		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
RA-228	N/A	0.90	0.45	0.90		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
U-235	1.95	1.26	0.59	1.26		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
U-238	3.97	3.63	1.91	3.74		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
AM-241	0.58	0.60	0.21	0.60		pCi/g	EPA 901.1M	1/7/2010	ME	N/A

NOTES: % Moisture: 1.38

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ARS Sample Delivery Group: ARS2-10-00006

Request or PO Number:

Client Sample ID: RE12-10-7710

ARS Sample ID: ARS2-10-00006-010

Sample Collection Date: 01/06/10 11:18

Date Received: 01/07/10 00:00

Sample Matrix: Soil/Solid

Report Date: 01/07/10 19:16

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	YMU	Qnet	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	22.80	15.88	18.05	16.12		pCi/g	EPA 900.0M	1/7/2010	ME	N/A
GROSS BETA	42.84	11.11	12.62	12.29		pCi/g	EPA 900.0M	1/7/2010	ME	N/A
NA-22	0.00	0.00	0.10	0.00		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
K-40	20.42	7.48	1.56	7.51		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
CR-60	0.00	10.19	0.10	10.19		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
CS-134	0.00	0.00	0.07	0.00		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
CS-137	0.27	0.41	0.06	0.21		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
EU-152	0.31	0.29	0.12	0.29		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
PB-212	1.27	0.43	0.09	0.43		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
RA-228	1.43	0.77	0.27	0.77		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
U-235	0.78	0.59	0.27	0.59		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
U-238	0.79	2.22	1.17	2.22		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
AM-241	0.45	0.55	0.19	0.55		pCi/g	EPA 901.1M	1/7/2010	ME	N/A

NOTES: % Moisture: 0.01

*Matthew J. Eden*  
Quality Assurance Review

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ARS Sample Delivery Group: ARS2-10-00006

Request or PO Number:

Client Sample ID: RE12-10-7711

ARS Sample ID: ARS2-10-00006-011

Sample Collection Date: 01/06/10 11:30

Date Received: 01/07/10 00:00

Sample Matrix: Soil/Solid

Report Date: 01/07/10 19:16

Analysis Description	Analysis Results	Analysis Error +/- 2 s	min	TPH	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	0.72	8.73	20.54	8.73		pCi/g	EPA 900.0M	1/7/2010	ME	N/A
GROSS BETA	49.83	12.10	13.94	13.55		pCi/g	EPA 900.0M	1/7/2010	ME	N/A
NA-22	0.07	0.15	0.12	0.15		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
K-40	26.89	9.54	1.93	9.57		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
CO-60	0.00	12.62	0.13	12.62		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
CS-134	0.27	0.18	0.09	0.18		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
CS-137	-0.01	39.22	0.09	39.22		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
EU-152	0.62	0.47	0.15	0.47		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
PB-212	1.22	0.33	0.17	0.52		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
RA-228	1.02	0.53	0.34	0.53		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
U-235	2.36	1.18	0.30	1.18		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
U-238	3.59	3.19	1.43	3.59		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
AM-241	-0.01	26.33	0.06	26.33		pCi/g	EPA 901.1M	1/7/2010	ME	N/A

NOTES: % Moisture: 1.23

*Matthew J. Edley*  
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ARS Sample Delivery Group: ARS2-10-00007

Request or PO Number:

Client Sample ID: RE12-10-7712

ARS Sample ID: ARS2-10-00007-001

Sample Collection Date: 01/06/10 11:47

Date Received: 01/07/10 00:00

Sample Matrix: Soil/Solid

Report Date: 01/07/10 21:41

Analysis Description	Analysis Results	Analysis Error +/- 2σ	MDC	TPU	QuM	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	20.87	17.99	26.55	18.17		pCi/g	EPA 900.0M	1/7/2010	ME	N/A
GROSS BETA	43.91	11.46	13.50	12.66		pCi/g	EPA 900.0M	1/7/2010	ME	N/A
NA-22	0.00	0.00	0.12	0.00		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
K-40	24.43	9.11	1.92	9.13		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
CO-60	0.00	12.59	0.13	12.59		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
CS-134	0.09	0.11	0.08	0.11		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
CS-137	0.18	0.19	0.08	0.19		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
EU-152	0.34	0.34	0.18	0.34		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
PB-212	1.18	0.53	0.18	0.53		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
RA-228	1.25	1.08	0.34	1.08		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
U-235	0.79	0.59	0.20	0.59		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
U-238	2.06	4.31	1.89	4.34		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
AM-241	-0.01	26.26	0.06	26.26		pCi/g	EPA 901.1M	1/7/2010	ME	N/A

NOTES: % Moisture: 0.39

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ARS Sample Delivery Group: AR52-10-00007

Client Sample ID: RE12-10-7713

Sample Collection Date: 01/06/10 13:03

Sample Matrix: Soil/Solid

Request or PQ Number:

ARS Sample ID: AR52-10-00007-002

Date Received: 01/07/10 00:00

Report Date: 01/07/10 21:41

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	TPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	13.57	13.05	18.03	13.16		pCi/g	EPA 900.0M	1/7/2010	ME	N/A
GROSS BETA	44.02	11.09	12.62	12.33		pCi/g	EPA 900.0M	1/7/2010	ME	N/A
NA-22	0.10	0.14	0.08	0.14		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
K-40	22.67	7.10	1.28	7.14		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
CS-40	0.10	0.15	0.09	0.15		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
CS-134	0.15	0.11	0.06	0.11		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
CS-137	0.67	0.30	0.05	0.30		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
EU-152	0.00	8.74	0.10	8.74		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
PB-212	1.31	0.43	0.12	0.43		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
RA-228	1.64	0.68	0.22	0.68		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
U-235	0.83	0.75	0.21	0.75		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
U-238	4.84	2.01	0.84	2.11		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
AM-241	0.10	0.19	0.09	0.19		pCi/g	EPA 901.1M	1/7/2010	ME	N/A

NOTES: % Moisture: 2.40

*Matthew J. Eden*  
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ARS Sample Delivery Group: ARS2-10-00007

Request or PO Number:

Client Sample ID: RE12-10-7714

ARS Sample ID: ARS2-10-00007-003

Sample Collection Date: 01/06/10 13:15

Date Received: 01/07/10 00:00

Sample Matrix: Soil/Solid

Report Date: 01/07/10 21:41

Analysis Description	Analysis Results	Analysis Error +/- 2 s	NDC	YDI	QDC	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	12.80	13.72	20.34	13.81		pCi/g	EPA 900.0M	1/7/2010	ME	N/A
GROSS BETA	40.19	11.55	13.94	12.56		pCi/g	EPA 900.0M	1/7/2010	ME	N/A
NA-22	0.00	0.00	0.12	0.00		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
K-40	27.60	9.67	1.93	9.71		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
CO-60	0.00	12.62	0.11	12.62		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
CS-134	0.17	0.16	0.09	0.16		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
CS-137	-0.01	16.52	0.88	16.52		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
EU-152	0.26	0.30	0.15	0.30		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
PB-212	0.89	0.55	0.24	0.55		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
RA-228	1.77	1.00	0.34	1.00		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
U-235	0.95	0.96	0.34	0.97		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
U-238	0.05	1.68	1.16	1.68		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
AM-241	0.02	0.13	0.08	0.13		pCi/g	EPA 901.1M	1/7/2010	ME	N/A

NOTES: % Moisture: 0.54

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ARS Sample Delivery Group: ARS2-10-00007

Request or PO Number:

Client Sample ID: RE12-10-7715

ARS Sample ID: ARS2-10-00007-004

Sample Collection Date: 01/06/10 13:36

Date Received: 01/07/10 00:00

Sample Matrix: Soil/Solid

Report Date: 01/07/10 21:41

Analysis Description	Analysis Results	Analysis Error +/- 3 s	MNR	TEN	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	24.77	17.81	22.83	18.06		pCi/g	EPA 900.0M	1/7/2010	ME	N/A
GROSS BETA	43.58	11.38	13.10	12.57		pCi/g	EPA 900.0M	1/7/2010	ME	N/A
NA-22	0.00	0.00	0.13	0.00		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
K-40	27.79	9.86	1.99	9.90		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
CS-60	0.00	11.04	0.13	13.05		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
CS-134	0.16	0.19	0.10	0.19		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
CS-137	0.48	0.32	0.08	0.32		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
EU-152	0.29	0.38	0.18	0.38		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
PB-212	1.32	0.60	0.11	0.50		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
RA-228	1.06	0.79	0.35	0.70		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
U-235	0.38	0.67	0.37	0.67		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
U-238	3.45	2.30	1.12	2.68		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
AM-241	0.18	0.28	0.12	0.28		pCi/g	EPA 901.1M	1/7/2010	ME	N/A

NOTES: % Moisture: 3.32

*Matthew J. Edley*  
Quality Assurance Review

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

LELAP Certificate # 30658

NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87544

505-872-2770 FAX 505-872-9534

ARS Sample Delivery Group: ARS2-10-00007

Request or PO Number:

Client Sample ID: RE12-10-7716

ARS Sample ID: ARS2-10-00007-005

Sample Collection Date: 01/06/10 13:50

Date Received: 01/07/10 00:00

Sample Matrix: Soil/Solid

Report Date: 01/07/10 21:41

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDL	YDL	Q-val	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	13.19	15.89	28.88	15.97		pCi/g	EPA 900.0M	1/7/2010	ME	N/A
GROSS BETA	23.07	9.76	13.80	10.16		pCi/g	EPA 900.0M	1/7/2010	ME	N/A
NA-22	0.13	0.18	0.11	0.18		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
K-40	27.03	8.97	1.66	9.01		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
CO-60	0.13	0.18	0.11	0.19		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
CS-134	0.11	0.11	0.08	0.11		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
CS-137	0.03	0.08	0.07	0.08		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
RU-152	0.47	0.42	0.13	0.42		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
PB-212	1.81	0.49	0.11	0.49		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
RA-226	1.45	0.74	0.29	0.74		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
U-235	1.05	0.68	0.17	0.68		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
U-238	2.65	3.32	1.51	3.38		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
AM-241	0.04	0.20	0.11	0.20		pCi/g	EPA 901.1M	1/7/2010	ME	N/A

NOTES: % Moisture: 0.82

*Matthew A. Eden*  
Quality Assurance Review

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NELAP Certificate # E87558



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505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00007

Request or PQ Number:

Client Sample ID: RE12-10-7717

ARS Sample ID: ARS2-10-00007-006

Sample Collection Date: 01/06/10 13:44

Date Received: 01/07/10 00:00

Sample Matrix: Soil/Solid

Report Date: 01/07/10 21:41

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	TPU	Unit	Analysis Unit	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	4.36	9.41	18.05	9.42	pCi/g		EPA 900.0M	1/7/2010	ME	N/A
GROSS BETA	18.44	9.73	12.62	10.33	pCi/g		EPA 900.0M	1/7/2010	ME	N/A
NA-22	0.00	0.00	0.09	0.00	pCi/g		EPA 901.1M	1/7/2010	ME	N/A
K-40	1.13	7.23	3.62	7.23	pCi/g		EPA 901.1M	1/7/2010	ME	N/A
CO-60	0.00	9.02	0.09	9.02	pCi/g		EPA 901.1M	1/7/2010	ME	N/A
CS-134	0.11	0.11	0.07	0.11	pCi/g		EPA 901.1M	1/7/2010	ME	N/A
CS-137	0.17	0.15	0.06	0.15	pCi/g		EPA 901.1M	1/7/2010	ME	N/A
EU-152	0.71	0.42	0.11	0.42	pCi/g		EPA 901.1M	1/7/2010	ME	N/A
PB-212	0.73	0.39	0.15	0.39	pCi/g		EPA 901.1M	1/7/2010	ME	N/A
RA-228	1.33	0.65	0.24	0.66	pCi/g		EPA 901.1M	1/7/2010	ME	N/A
U-238	0.71	0.78	0.19	0.78	pCi/g		EPA 901.1M	1/7/2010	ME	N/A
U-235	2.99	2.37	0.96	2.47	pCi/g		EPA 901.1M	1/7/2010	ME	N/A
AM-241	0.02	0.09	0.06	0.09	pCi/g		EPA 901.1M	1/7/2010	ME	N/A

NOTES: % Moisture: 0.59

*Matthew J. Eder*  
Quality Assurance Review

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

LELAP Certificate # 30658

NELAP Certificate # 887558





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505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00007

Client Sample ID: RE12-10-7718

Sample Collection Date: 01/06/10 14:11

Sample Matrix: Soil/Solid

Request or PO Number:

ARS Sample ID: ARS2-10-00007-007

Date Received: 01/07/10 00:00

Report Date: 01/07/10 21:41

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDG	TPU	Unit	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	10.38	12.88	20.54	12.94		pCi/g	EPA 900.0M	1/7/2010	ME	N/A
GROSS BETA	41.46	11.61	13.94	12.67		pCi/g	EPA 900.0M	1/7/2010	ME	N/A
NA-22	0.07	0.13	0.11	0.13		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
K-40	28.15	9.16	1.72	9.20		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
CS-60	0.00	11.23	0.11	11.23		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
CS-134	0.15	0.17	0.08	0.17		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
CS-137	0.15	0.17	0.07	0.17		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
EU-152	0.29	0.42	0.13	0.42		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
PB-212	1.61	0.57	0.18	0.57		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
RA-228	1.13	0.69	0.30	0.69		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
U-235	0.59	0.70	0.20	0.70		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
U-238	2.07	4.74	1.38	2.76		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
AM-241	0.23	0.31	0.14	0.31		pCi/g	EPA 901.1M	1/7/2010	ME	N/A

NOTES: % Moisture: 1.60

Quality Assurance Review

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

LELAP Certificate # 30658

NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87344

505-672-2770 FAX 505-672-8534

ARS Sample Delivery Group: ARS2-10-00007

Client Sample ID: RE12-10-7719

Sample Collection Date: 01/06/10 14:31

Sample Matrix: Soil/Solid

Request or PO Number:

ARS Sample ID: ARS2-10-00007-008

Date Received: 01/07/10 00:00

Report Date: 01/07/10 21:41

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MNR	TPH	/gal	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	29.37	18.91	22.83	19.25		pCi/g	EPA 900.0M	1/7/2010	ME	N/A
GROSS BETA	40.61	11.22	13.10	12.28		pCi/g	EPA 900.0M	1/7/2010	ME	N/A
MA-22	0.00	0.00	0.09	0.00		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
K-40	19.94	7.19	1.47	7.21		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
CO-60	0.00	0.65	0.10	9.65		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
CS-134	0.00	0.00	0.07	0.00		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
CS-137	0.69	0.32	0.06	0.32		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
EU-152	0.37	0.38	0.11	0.38		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
PB-212	0.85	0.36	0.10	0.35		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
RA-228	1.14	0.50	0.26	0.59		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
U-235	0.78	0.49	0.21	0.49		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
U-238	3.52	3.50	1.45	3.59		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
AM-241	0.34	0.31	0.12	0.31		pCi/g	EPA 901.1M	1/7/2010	ME	N/A

NOTES: % Moisture: 4.46

*[Signature]*  
Quality Assurance Review

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

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NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87544

505-874-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00007

Client Sample ID: RE12-10-7727

Sample Collection Date: 01/06/10 12:59

Sample Matrix: Soil/Solid

Request or PO Number:

ARS Sample ID: ARS2-10-00007-009

Date Received: 01/07/10 00:00

Report Date: 01/07/10 21:41

Analysis Description	Analysis Results	Analysis Error +/- 2 s	Min	Max	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	32.03	21.02	25.53	21.40		pCi/g	EPA 900.0M	1/7/2010	ME	N/A
GROSS BETA	54.53	12.33	13.50	14.02		pCi/g	EPA 900.0M	1/7/2010	ME	N/A
NA-22	0.00	0.00	0.00	0.00		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
K-40	22.19	6.87	1.33	6.90		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
CO-60	0.00	0.04	0.00	0.04		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
CS-134	0.20	0.10	0.06	0.18		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
CS-137	0.24	0.17	0.05	0.17		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
Pu-152	0.34	0.29	0.09	0.29		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
Pu-212	1.22	0.39	0.10	0.39		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
Pa-230	1.80	0.72	0.21	0.72		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
U-238	0.85	0.57	0.31	0.57		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
U-235	1.00	1.98	1.04	2.00		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
AM-241	0.20	0.23	0.09	0.23		pCi/g	EPA 901.1M	1/7/2010	ME	N/A

NOTES: % Moisture: 2.89

*Matthew J. Eder*  
Quality Assurance Review

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

NELAP Certificate # 30658

NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00007

Request or PO Number:

Client Sample ID: RE12-10-7734

ARS Sample ID: ARS2-10-00007-010

Sample Collection Date: 01/06/10 11:18

Date Received: 01/07/10 00:00

Sample Matrix: Soil/Solid

Report Date: 01/07/10 21:41

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDM	Total	Unit	Analysis Units	Analysis Test Method	Analysis Date/Time	Analyst Technician	Tracer/Chem Recovery
GROSS ALPHA	12.80	15.88	18.05	18.13		pCi/g	EPA 900.0M	1/7/2010	ME	N/A
GROSS BETA	44.86	11.14	12.61	12.49		pCi/g	EPA 900.0M	1/7/2010	ME	N/A
NA-22	0.00	0.00	0.12	0.00		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
K-40	30.81	9.96	1.87	10.01		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
CO-60	0.00	12.21	0.12	12.21		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
CS-134	0.00	0.00	0.09	0.00		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
CR-137	0.13	0.16	0.08	0.16		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
EU-152	0.18	0.39	0.17	0.39		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
PB-212	1.20	0.60	0.25	0.60		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
SA-228	1.64	1.21	0.33	1.21		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
U-235	1.46	0.81	0.28	0.81		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
U-238	5.51	3.99	1.38	4.18		pCi/g	EPA 901.1M	1/7/2010	ME	N/A
AM-241	0.16	0.20	0.08	0.20		pCi/g	EPA 901.1M	1/7/2010	ME	N/A

NOTES: % Moisture: 0.66

*Matthew J. Edwards*  
Quality Assurance Review

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LELAP Certificate # 30658

NELAP Certificate # E87558

## DATA VALIDATION COVER SHEET

5122-1

Records Use only

## Data Validation Cover Sheet



## Section I.

REQUEST NUMBER: 10-1160 VALIDATION DATE: 02/16/10 LAB CODE: GELCONTRACT LABORATORY NAME: GEL Laboratories LLCVALIDATOR: Monica Dymerski ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

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

1. The %D was >20% with a positive bias for RDX in CCVs associated with all samples. The %Ds were also >20% with positive bias for 1,3,5-trinitrobenzene and 2,4,6-trinitrotoluene in CCVs associated with all samples except RE12-10-7699 through -7702, -7727, and -7734. All associated sample results were NDs and, thus, were not qualified.
2. It should be noted that the raw ICAL data from the instrument used for the secondary HF analysis were not reported in the data package. Thus, the surrogate retention time criteria could not be evaluated. No sample data were qualified as a result.


Reviewed by: Mary DonovanLevel: IDate: 02/17/10VALIDATOR'S SIGNATURE: Monica DymerskiDATE: 02/16/10

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

Yes   No   N/A				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	
<b>5122-2</b>  <b>LC/MS/MS High Explosive Analytical Data Validation Checklist</b>	Records Use only 

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

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

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



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

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

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7734

Lab Code: GEL

GEL Job No (SDG) 10-1160

Matrix: SOIL

GEL Sample ID: 244209001

Sample Amount 2

Moisture: 6.5

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940104

Concentrated Extract Volume (mL) 10

Date Extracted: 14-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0118068a

Date Analyzed: 19-JAN-10 23:00

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: RE12-10-7734

Lab Code: GEL

GEL Job No (SDG) 10-1160

Matrix: SOIL

GEL Sample ID: 244209001

Sample Amount 2

Moisture: 6.5

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940104

Concentrated Extract Volume (mL) 10

Date Extracted: 14-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01190020.wiff

Date Analyzed: 19-JAN-10 19:12

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

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7701

Lab Code: GEL

GEL Job No (SDG) 10-1160

Matrix: SOIL

GEL Sample ID: 244209002

Sample Amount 2

Moisture: 25.6

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940104

Concentrated Extract Volume (mL) 10

Date Extracted: 14-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0118071a

Date Analyzed: 20-JAN-10 00:28

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: RE12-10-7701

Lab Code: GEL

GEL Job No (SDG) 10-1160

Matrix: SOIL

GEL Sample ID: 244209002

Sample Amount 2

Moisture: 25.6

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940104

Concentrated Extract Volume (mL) 10

Date Extracted: 14-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01190026.wiff

Date Analyzed: 19-JAN-10 20:46

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

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1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7702

Lab Code: GEL

GEL Job No (SDG) 10-1160

Matrix: SOIL

GEL Sample ID: 244209003

Sample Amount 2

Moisture: 15.0

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940104

Concentrated Extract Volume (mL) 10

Date Extracted: 14-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0118072a

Date Analyzed: 20-JAN-10 00:58

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: RE12-10-7702

Lab Code: GEL

GEL Job No (SDG) 10-1160

Matrix: SOIL

GEL Sample ID: 244209003

Sample Amount 2

Moisture: 15.0

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940104

Concentrated Extract Volume (mL) 10

Date Extracted: 14-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01190027.wiff

Date Analyzed: 19-JAN-10 21:02

Units: ug/kg

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

\*Concentration =

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

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1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7700

Lab Code: GEL

GEL Job No (SDG) 10-1160

Matrix: SOIL

GEL Sample ID: 244209004

Sample Amount 2

Moisture: 6.3

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940104

Concentrated Extract Volume (mL) 10

Date Extracted: 14-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0118073a

Date Analyzed: 20-JAN-10 01:27

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



1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7700

Lab Code: GEL

GEL Job No (SDG) 10-1160

Matrix: SOIL

GEL Sample ID: 244209004

Sample Amount 2

Moisture: 6.3

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940104

Concentrated Extract Volume (mL) 10

Date Extracted: 14-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01190028.wiff

Date Analyzed: 19-JAN-10 21:18

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: RE12-10-7699

Lab Code: GEL

GEL Job No (SDG) 10-1160

Matrix: SOIL

GEL Sample ID: 244209005

Sample Amount 2

Moisture: 20.4

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940104

Concentrated Extract Volume (mL) 10

Date Extracted: 14-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0118074a

Date Analyzed: 20-JAN-10 01:57

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: RE12-10-7699

Lab Code: GEL

GEL Job No (SDG) 10-1160

Matrix: SOIL

GEL Sample ID: 244209005

Sample Amount 2

Moisture: 20.4

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940104

Concentrated Extract Volume (mL) 10

Date Extracted: 14-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01190029.wiff

Date Analyzed: 19-JAN-10 21:33

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

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7727

Lab Code: GEL

GEL Job No (SDG) 10-1160

Matrix: SOIL

GEL Sample ID: 244209006

Sample Amount 2

Moisture: 25.3

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940104

Concentrated Extract Volume (mL) 10

Date Extracted: 14-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0118075a

Date Analyzed: 20-JAN-10 02:26

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

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1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7727

Lab Code: GEL

GEL Job No (SDG) 10-1160

Matrix: SOIL

GEL Sample ID: 244209006

Sample Amount 2

Moisture: 25.3

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940104

Concentrated Extract Volume (mL) 10

Date Extracted: 14-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01190030.wiff

Date Analyzed: 19-JAN-10 21:49

Units: ug/kg

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

\*Concentration =

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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7710

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210001

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125121a

Date Analyzed: 27-JAN-10 22:22

Units: ug/kg

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

\*Concentration =

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

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7710

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210001

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01220047.wiff

Date Analyzed: 22-JAN-10 22:28

Units: ug/kg

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

\*Concentration =

Instrument Value	X	Concentrated Extract Volume	X	Dilution Factor
		Sample Amount		

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7715

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210002

Sample Amount 2

Molsture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125124a

Date Analyzed: 27-JAN-10 23:50

Units: ug/kg

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

\*Concentration =

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



1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7715

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210002

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01220053.wiff

Date Analyzed: 23-JAN-10 00:02

Units: ug/kg

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

\*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7707

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210003

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125125a

Date Analyzed: 28-JAN-10 00:20

Units: ug/kg

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

\*Concentration =

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

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1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7707

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210003

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01220054.wiff

Date Analyzed: 23-JAN-10 00:18

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

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1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7719

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210004

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125126a

Date Analyzed: 28-JAN-10 00:49

Units: ug/kg

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

\*Concentration =

Instrument Value	X	Concentrated Extract Volume	X	Dilution Factor
		Sample Amount		

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7719

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210004

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01220055.wiff

Date Analyzed: 23-JAN-10 00:33

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	<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: RE12-10-7717

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210005

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125127a

Date Analyzed: 28-JAN-10 01:19

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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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7717

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210005

Sample Amount 2

Molsture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01220056.wiff

Date Analyzed: 23-JAN-10 00:49

Units: ug/kg

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

\*Concentration =

Instrument X Concentrated Extract Volume X Dilution  
Value Sample Amoun Factor

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7708

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210006

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125128a

Date Analyzed: 28-JAN-10 01:48

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: RE12-10-7708

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210006

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01220057.wiff

Date Analyzed: 23-JAN-10 01:05

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: RE12-10-7706

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210007

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125132a

Date Analyzed: 28-JAN-10 03:46

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: RE12-10-7706

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210007

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01220058.wiff

Date Analyzed: 23-JAN-10 01:20

Units: ug/kg

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

\*Concentration =

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

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1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7714

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210008

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125133a

Date Analyzed: 28-JAN-10 04:16

Units: ug/kg

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

\*Concentration =

Instrument Value	X	$\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$	X	Dilution Factor
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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7714

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210008

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01220059.wiff

Date Analyzed: 23-JAN-10 01:36

Units: ug/kg

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

\*Concentration =

Instrument Value X Concentrated Extract Volume X Dilution Factor  
Sample Amount

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7705

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210009

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125134a

Date Analyzed: 28-JAN-10 04:45

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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1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7705

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210009

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01220060.wiff

Date Analyzed: 23-JAN-10 01:52

Units: ug/kg

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

\*Concentration =

Instrument	X	Concentrated Extract Volume	X	Dilution
Value		Sample Amount		Factor

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7709

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210010

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125135a

Date Analyzed: 28-JAN-10 05:15

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: RE12-10-7709

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210010

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01220061.wiff

Date Analyzed: 23-JAN-10 02:07

Units: ug/kg

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

\*Concentration =

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

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7711

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210011

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125136a

Date Analyzed: 28-JAN-10 05:44

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: RE12-10-7711

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210011

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01220062.wiff

Date Analyzed: 23-JAN-10 02:23

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

MLD 02/16/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7712

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210012

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125137a

Date Analyzed: 28-JAN-10 06:14

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: RE12-10-7712

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210012

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01220066.wiff

Date Analyzed: 23-JAN-10 03:26

Units: ug/kg

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

\*Concentration =

Instrument	X	Concentrated Extract Volume	X	Dilution
Value		Sample Amount		Factor

MLD 02/16/10

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7716

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210013

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125138a

Date Analyzed: 28-JAN-10 06:43

Units: ug/kg

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

\*Concentration =

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

MLD 02/16/10

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7716

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210013

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01220067.wiff

Date Analyzed: 23-JAN-10 03:42

Units: ug/kg

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

\*Concentration =

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

MLD 02/16/10

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7718

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210014

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125139a

Date Analyzed: 28-JAN-10 07:13

Units: ug/kg

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

\*Concentration =

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



1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7718

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210014

Sample Amount 2

Molsture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01220068.wiff

Date Analyzed: 23-JAN-10 03:57

Units: ug/kg

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

\*Concentration =

Instrument	X	Concentrated Extract Volume	X	Dilution
Value		Sample Amoun		Factor

MLD 02/16/10

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7713

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210015

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125140a

Date Analyzed: 28-JAN-10 07:42

Units: ug/kg

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

\*Concentration =

Instrument X Concentrated Extract Volume X Dilution  
Value Sample Amount Factor

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7713

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210015

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01220069.wiff

Date Analyzed: 23-JAN-10 04:13

Units: ug/kg

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

\*Concentration =

Instrument X Concentrated Extract Volume X Dilution  
Value Sample Amount Factor

MLD 02/16/10

## DATA VALIDATION COVER SHEET

5116-1

## Data Validation Cover Sheet

Records Use only



## Section I.

REQUEST NUMBER: 10-1160 VALIDATION DATE: 02/16/10 LAB CODE: GELCONTRACT LABORATORY NAME: GEL Laboratories LLCVALIDATOR: Monica Dymerski ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- |  |  |   |  |
|--|--|---|--|
| <input type="checkbox"/> TPH-GRO                       | <input type="checkbox"/> HIGH EXPLOSIVES | <input type="checkbox"/> DIOXIN FURANS          | <input type="checkbox"/> LCMSMS PERCHLORATES       |
| <input type="checkbox"/> TPH-DRO                       | <input type="checkbox"/> METALS          | <input type="checkbox"/> PCB CONGENERS          | <input 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):

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

Reviewed by: Mary Donovan Level: I Date: 02/17/10VALIDATOR'S SIGNATURE: *Monica Dymerski*DATE: 02/16/10

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

5116-2

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

Records Use only



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

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

5116-2

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

Records Use only



Yes No N/A				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**

5116-2

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

Records Use only \_\_\_\_\_



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

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

5116-2

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

Records Use only



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



## PCB

Page 1 of 1

## Certificate of Analysis

## Sample Summary

SDG Number:	10-1160	Date Collected:	01/06/2010 12:00	Matrix:	R
Lab Sample ID:	244209005	Date Received:	01/09/2010 09:30	%Moisture:	20.4
Client ID:	RE12-10-7699	Client:	LANL010	Project:	LANL01004
Batch ID:	941128	Method:	SW846 8082	SOP Ref:	GL-OA-E-040
Run Date:	01/14/2010 11:56	Inst:	ECD1A.I	Dilution:	1
Prep Date:	01/13/2010 19:31	Analyst:	YS1	Inj. Vol:	1 uL
Data File:	018f1801.d	Allquot:	30.12 g	Final Volume:	1 mL
	018b1801.d	Column:	1 CLP1	Level:	LOW
			2 CLP2		

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.17	ug/kg	1.39	4.17	1
11104-28-2	Aroclor-1221	U	4.17	ug/kg	1.39	4.17	1
11141-16-5	Aroclor-1232	U	4.17	ug/kg	1.39	4.17	1
53469-21-9	Aroclor-1242	U	4.17	ug/kg	1.39	4.17	1
12672-29-6	Aroclor-1248	U	4.17	ug/kg	1.39	4.17	1
11097-69-1	Aroclor-1254	U	4.17	ug/kg	1.39	4.17	1
11096-82-5	Aroclor-1260	U	4.17	ug/kg	1.39	4.17	1

MLD 02/16/10

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

SDG Number: 10-1160  
Lab Sample ID: 244209004

Client ID: RE12-10-7700  
Batch ID: 941128  
Run Date: 01/14/2010 11:44  
Prep Date: 01/13/2010 19:31  
Data File: 017f1701.d  
017b1701.d

Date Collected: 01/06/2010 12:00  
Date Received: 01/09/2010 09:30  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.I  
Analyst: YS1  
Aliquot: 30.02 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
%Moisture: 6.3  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.56	ug/kg	1.18	3.56	1
11104-28-2	Aroclor-1221	U	3.56	ug/kg	1.18	3.56	1
11141-16-5	Aroclor-1232	U	3.56	ug/kg	1.18	3.56	1
53469-21-9	Aroclor-1242	U	3.56	ug/kg	1.18	3.56	1
12672-29-6	Aroclor-1248	U	3.56	ug/kg	1.18	3.56	1
11097-69-1	Aroclor-1254	U	3.56	ug/kg	1.18	3.56	1
11096-82-5	Aroclor-1260	U	3.56	ug/kg	1.18	3.56	1

## PCB

Page 1 of 1

## Certificate of Analysis

## Sample Summary

SDG Number:	10-1160	Date Collected:	01/06/2010 12:00	Matrix:	R
Lab Sample ID:	244209002	Date Received:	01/09/2010 09:30	%Moisture:	25.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE12-10-7701	Method:	SW846 8082	SOP Ref:	GL-OA-E-040
Batch ID:	941128	Inst:	ECD1AJ	Dilution:	1
Run Date:	01/14/2010 11:19	Analyst:	YS1	Inj. Vol:	1 uL
Prep Date:	01/13/2010 19:31	Aliquot:	30.18 g	Final Volume:	1 mL
Data File:	015f1501.d	Column:	1 CLP1	Level:	LOW
	015b1501.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDI/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.45	ug/kg	1.48	4.45	1
11104-28-2	Aroclor-1221	U	4.45	ug/kg	1.48	4.45	1
11141-16-5	Aroclor-1232	U	4.45	ug/kg	1.48	4.45	1
53469-21-9	Aroclor-1242	U	4.45	ug/kg	1.48	4.45	1
12672-29-6	Aroclor-1248	U	4.45	ug/kg	1.48	4.45	1
11097-69-1	Aroclor-1254	U	4.45	ug/kg	1.48	4.45	1
11096-82-5	Aroclor-1260	U	4.45	ug/kg	1.48	4.45	1

MLD 02/16/10

## PCB

Page 1 of 1

## Certificate of Analysis

## Sample Summary

SDG Number:	10-1160	Date Collected:	01/06/2010 12:00	Matrix:	R
Lab Sample ID:	244209003	Date Received:	01/09/2010 09:30	%Moisture:	15
		Client:	LANL010	Project:	LANL01004
Client ID:	RE12-10-7702	Method:	SW846 8082	SOP Ref:	GL-OA-E-040
Batch ID:	941128	Inst:	ECD1A.J	Dilution:	1
Run Date:	01/14/2010 11:31	Analyst:	YS1	Inj. Vol:	1 uL
Prep Date:	01/13/2010 19:31	Aliquot:	30.15 g	Final Volume:	1 mL
Data File:	016f1601.d	Column:	1 CLP1	Level:	LOW
	016b1601.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.90	ug/kg	1.30	3.90	1
11104-28-2	Aroclor-1221	U	3.90	ug/kg	1.30	3.90	1
11141-16-5	Aroclor-1232	U	3.90	ug/kg	1.30	3.90	1
53469-21-9	Aroclor-1242	U	3.90	ug/kg	1.30	3.90	1
12672-29-6	Aroclor-1248	U	3.90	ug/kg	1.30	3.90	1
11097-69-1	Aroclor-1254	U	3.90	ug/kg	1.30	3.90	1
11096-82-5	Aroclor-1260	U	3.90	ug/kg	1.30	3.90	1

MLD 02/16/10

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

SDG Number: 10-1160  
Lab Sample ID: 244209006

Date Collected: 01/06/2010 12:00  
Date Received: 01/09/2010 09:30  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.I  
Analyst: YS1  
Aliquot: 30.05 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
%Moisture: 25.3  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.45	ug/kg	1.48	4.45	1
11104-28-2	Aroclor-1221	U	4.45	ug/kg	1.48	4.45	1
11141-16-5	Aroclor-1232	U	4.45	ug/kg	1.48	4.45	1
53469-21-9	Aroclor-1242	U	4.45	ug/kg	1.48	4.45	1
12672-29-6	Aroclor-1248	U	4.45	ug/kg	1.48	4.45	1
11097-69-1	Aroclor-1254	U	4.45	ug/kg	1.48	4.45	1
11096-82-5	Aroclor-1260	U	4.45	ug/kg	1.48	4.45	1

## PCB

Page 1 of 1

## Certificate of Analysis

## Sample Summary

SDG Number: 10-1160

Lab Sample ID: 244209001

Client ID: RE12-10-7734

Batch ID: 941128

Run Date: 01/14/2010 11:06

Prep Date: 01/13/2010 19:31

Data File: 014f1401.d

014b1401.d

Date Collected: 01/06/2010 12:00

Date Received: 01/09/2010 09:30

Client: LANL010

Method: SW846 8082

Inst: ECD1A.I

Analyst: YS1

Aliquot: 30.04 g

Column: 1 CLP1

2 CLP2

Matrix: R

%Moisture: 6.5

Project: LANL01004

SOP Ref: GL-OA-E-040

Dilution: 1

Inj. Vol: 1 uL

Final Volume: 1 mL

Level: LOW

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.56	ug/kg	1.19	3.56	1
11104-28-2	Aroclor-1221	U	3.56	ug/kg	1.19	3.56	1
11141-16-5	Aroclor-1232	U	3.56	ug/kg	1.19	3.56	1
53469-21-9	Aroclor-1242	U	3.56	ug/kg	1.19	3.56	1
12672-29-6	Aroclor-1248	U	3.56	ug/kg	1.19	3.56	1
11097-69-1	Aroclor-1254	U	3.56	ug/kg	1.19	3.56	1
11096-82-5	Aroclor-1260	U	3.56	ug/kg	1.19	3.56	1

Friday, January 08, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1160

LOS ALAMOS

REQUEST NUMBER: 10-1160

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 2/7/2010

General Engineering Laboratories, Inc.,  
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

244209, 244210

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE12-10-7734	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE12-10-7701	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE12-10-7702	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE12-10-7700	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE12-10-7699	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE12-10-7727	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE12-10-7710	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7715	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7707	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7719	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7717	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7708	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7706	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7714	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7705	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7709	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7711	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7712	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7718	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7718	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7713	1	AMBER GLASS	NMED Explosives list	Ice	R

Relinquished By:

Date

Time

Received By:

Date

Time

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Received for DISPOSAL By:

Date

Time

Remarks:

Printed Name

Signature

Friday, January 08, 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: 1/8/2010

TURNAROUND/REPORT DUE: 2/7/2010

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature: 

Page 1 of 2

REQUEST NUMBER: 10-1160

These Samples are on:

LANL Request Number: 10-1160

Per Agreement Number: 126310011

Project Cost Code: MR3A05529E00

PRIORITY	METHOD CODE	CNTR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846-8082	1	RE12-10-7699	R	1/6/2010	
		1	RE12-10-7700	R	1/6/2010	
		1	RE12-10-7701	R	1/6/2010	
		1	RE12-10-7702	R	1/6/2010	
		1	RE12-10-7727	R	1/6/2010	
		1	RE12-10-7734	R	1/6/2010	
	SW-846-8321A_MOD	1	RE12-10-7699	R	1/6/2010	
		1	RE12-10-7700	R	1/6/2010	
		1	RE12-10-7701	R	1/6/2010	



Friday, January 08, 2010

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8321A_MOD	1	RE12-10-7702	R	1/6/2010	
		1	RE12-10-7705	R	1/6/2010	
		1	RE12-10-7706	R	1/6/2010	
		1	RE12-10-7707	R	1/6/2010	
		1	RE12-10-7708	R	1/6/2010	
		1	RE12-10-7709	R	1/6/2010	
		1	RE12-10-7710	R	1/6/2010	
		1	RE12-10-7711	R	1/6/2010	
		1	RE12-10-7712	R	1/6/2010	
		1	RE12-10-7713	R	1/6/2010	
		1	RE12-10-7714	R	1/6/2010	
		1	RE12-10-7715	R	1/6/2010	
		1	RE12-10-7716	R	1/6/2010	
		1	RE12-10-7717	R	1/6/2010	
		1	RE12-10-7718	R	1/6/2010	
		1	RE12-10-7719	R	1/6/2010	
		1	RE12-10-7727	R	1/6/2010	
		1	RE12-10-7734	R	1/6/2010	

Final Page of REQUEST NUMBER 10-1160



January 12, 2010

[www.gel.com](http://www.gel.com)

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

Re: LANL ER Project  
Work Orders: 244209 244210  
SDG: 10-1160

Dear Ms. Valdez:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on January 09, 2010, and analyzed for Explosives by LCMSMS and GC Semivolatile PCB. 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: 10-1160  
Enclosures

**Los Alamos National Laboratory (72733-001-09)**

**LANL ER Project**

**Work Order #: 244209 and 244210**

**SDG: 10-1160**

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# Case Narrative

**Case Narrative for  
Los Alamos National Laboratory (72733-001-09)  
LANL ER Project  
Workorder #: 244209 and 244210  
SDG # : 10-1160**

**January 12, 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 09, 2010 for analysis. The samples were prepared/analyzed within the required holding time. Shipping container temperatures were checked, documented, and within specifications. The samples were screened according to GEL Standard Operating Procedure. The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. Containers were checked for pH, where appropriate, and matched the preservative as documented on the accompanying chain of custody. Shipping container temperature was within specification (0 - 6C).

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

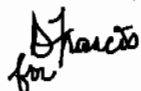
<b><u>Laboratory ID</u></b>	<b><u>Client ID</u></b>
244209001	RE12-10-7734
244209002	RE12-10-7701
244209003	RE12-10-7702
244209004	RE12-10-7700
244209005	RE12-10-7699
244209006	RE12-10-7727
244210001	RE12-10-7710
244210002	RE12-10-7715
244210003	RE12-10-7707
244210004	RE12-10-7719
244210005	RE12-10-7717
244210006	RE12-10-7708
244210007	RE12-10-7706
244210008	RE12-10-7714
244210009	RE12-10-7705
244210010	RE12-10-7709
244210011	RE12-10-7711
244210012	RE12-10-7712
244210013	RE12-10-7716
244210014	RE12-10-7718
244210015	RE12-10-7713

### **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 and GC Semivolatile PCB.

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 Davis", is written above the printed name.

Valerie Davis

Project Manager

**List of current GEL Certifications as of 12 January 2010**

<b>State</b>	<b>Certification</b>
Arizona	AZ0668
Arkansas	88-0651
CLIA	42D0904046
California – NELAP	01151CA
Colorado	GEL
Connecticut	PH-0169
Dept. of Navy	NFESC 413
EPA Region 5	WG-15J
Florida – NELAP	E87156
Georgia	E87156 (FL/NELAP)
Georgia DW	967
Hawaii	N/A
ISO 17025	2567.01
Idaho	SC00012
Illinois – NELAP	200029
Indiana	C-SC-01
Kansas – NELAP	E-10332
Kentucky	90129
Louisiana – NELAP	03046
Maryland	270
Massachusetts	M-SC012
Nevada	SC00012
New Jersey – NELAP	SC002
New Mexico	FL NELAP E87156
New York – NELAP	11501
North Carolina	233
North Carolina DW	45709
Oklahoma	9904
Pennsylvania – NELAP	68-00485
South Carolina	10120001/10120002
Tennessee	TN 02934
Texas – NELAP	T104704235-07B-TX
U.S. Dept. of Agriculture	S-52597
Utah – NELAP	GEL
Vermont	VT87156
Virginia	00151
Washington	CI641



# **Chain of Custody and Supporting Documentation**

Friday, January 08, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1160

LOS ALAMOS

REQUEST NUMBER: 10-1160

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 2/7/2010

General Engineering Laboratories, Inc.,  
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

244209, 244210

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE12-10-7734	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE12-10-7701	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE12-10-7702	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE12-10-7700	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE12-10-7699	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE12-10-7727	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE12-10-7710	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7715	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7707	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7719	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7717	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7708	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7706	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7714	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7705	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7709	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7711	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7712	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7716	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7718	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7713	1	AMBER GLASS	NMED Explosives list	Ice	R

Relinquished By:

Date

Time

Received By:

Date

Time

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Received for DISPOSAL By:

Date

Time

Remarks:

Printed Name

Signature

Friday, January 08, 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: 1/8/2010****TURNAROUND/REPORT DUE: 2/7/2010****TURNAROUND REQ'D: 30 Days****RAD SCREENING: Yes, Below Background****LAB REQUEST COMMENTS:**

LANL ER SMO CONTACT:

Signature: 

Page 1 of 2

REQUEST NUMBER: 10-1160

These Samples are on;

LANL Request Number: 10-1160

Per Agreement Number: 126310011

Project Cost Code: MR3A05529E00

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846-8082	1	RE12-10-7699	R	1/6/2010	
		1	RE12-10-7700	R	1/6/2010	
		1	RE12-10-7701	R	1/6/2010	
		1	RE12-10-7702	R	1/6/2010	
		1	RE12-10-7727	R	1/6/2010	
		1	RE12-10-7734	R	1/6/2010	
	SW-846-8321A_MOD	1	RE12-10-7699	R	1/6/2010	
		1	RE12-10-7700	R	1/6/2010	
		1	RE12-10-7701	R	1/6/2010	

Friday, January 08, 2010

Page 2 of 2

REQUEST NUMBER: 10-1160

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8321A_MOD	1	RE12-10-7702	R	1/6/2010	
		1	RE12-10-7705	R	1/6/2010	
		1	RE12-10-7706	R	1/6/2010	
		1	RE12-10-7707	R	1/6/2010	
		1	RE12-10-7708	R	1/6/2010	
		1	RE12-10-7709	R	1/6/2010	
		1	RE12-10-7710	R	1/6/2010	
		1	RE12-10-7711	R	1/6/2010	
		1	RE12-10-7712	R	1/6/2010	
		1	RE12-10-7713	R	1/6/2010	
		1	RE12-10-7714	R	1/6/2010	
		1	RE12-10-7715	R	1/6/2010	
		1	RE12-10-7716	R	1/6/2010	
		1	RE12-10-7717	R	1/6/2010	
		1	RE12-10-7718	R	1/6/2010	
		1	RE12-10-7719	R	1/6/2010	
		1	RE12-10-7727	R	1/6/2010	
		1	RE12-10-7734	R	1/6/2010	

Final Page of REQUEST NUMBER 10-1160

Client: LANL			SDG/ARCOC/Work Order: 10-1160		
Received By: Patricia Dover-Dent			Date Received: JANUARY 9, 2009		
Suspected Hazard Information		Yes	No	*If Counts > x2 area background on samples not marked "radioactive", contact the Radiation Safety Group of further	
COC/Samples marked as radioactive?			X	Maximum Counts Observed*: 60CPM	
Classified Radioactive II by RSO?			X		
COC/Samples marked containing PCBs?			X		
Shipped as a DOT Hazardous?			X	Hazard Class Shipped: UN#:	
Samples identified as Foreign Soil?			X		

Sample Receipt Criteria		Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	X			Circle Applicable: seals broken    damaged container    leaking container    other (describe)
2	Samples requiring cold preservation within (0 < 6 deg. C)?	X			Preservation Method: ice bags    BLUE ICE    dry ice    NONE    other (describe) 1-4,6,9,10,15
3	Chain of custody documents included with shipment?	X			
4	Sample containers intact and sealed?	X			Circle Applicable: seals broken    damaged container    leaking container    other (describe)
5	Samples requiring chemical preservation at proper pH?		X		Sample ID's, containers affected and observed pH. If Preservative added Lot#
6	VOA vials free of headspace (defined as < 6mm bubble)?		X		Sample ID's and containers affected:
7	Are Encore containers present?			X	(If yes, immediately deliver to Volatiles laboratory)
8	Samples received within holding time?	X			ID's and tests affected:
9	Sample ID's on COC match ID's on bottles?	X			Sample ID's and containers affected:
10	Date & time on COC match date & time on bottles?		X		Sample ID's affected: No Time on Chain of Custody
11	Number of containers received match number indicated on COC?	X			Sample ID's affected:
12	COC form is properly signed in relinquished/received sections?	X			

Comments: FED EX #'S  
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 7209 7849 4442 1C      7209 7849 4556 4C      7209 7849 4420 10C  
 7209 7849 4431 2C      7209 7849 4394 4C      7209 7849 4545 10C  
 7209 7849 4464 2C      7209 7849 4497 4C      7209 7849 4409 15C  
 7209 7849 4501 3C      7209 7849 4523 4C  
 7209 7849 4475 3C      7209 7849 4590 4C  
 7209 7849 4589 3C      7209 7849 4512 4C  
 7209 7849 4486 3C      7209 7849 4578 4C  
 7209 7849 4453 4C      7209 7849 4567 6C

 PM (or PMA) review: Initials P. Ackert

 Date 1-11-10

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

ACTWGT: 66.0 LB MAN  
CAD: 0014176/CAFE2449  
BILL SENDER

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

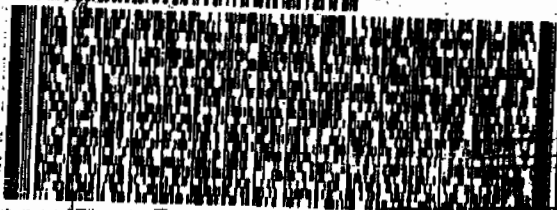
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PRIORITY OVERNIGHT

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Matr# 7209 7849 4442

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

SHIP DATE: 08JUN16  
ACTWGT: 49.0  
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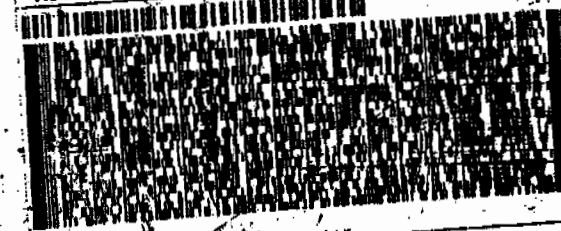


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JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
TA00 BLDG 1237 DPU 03  
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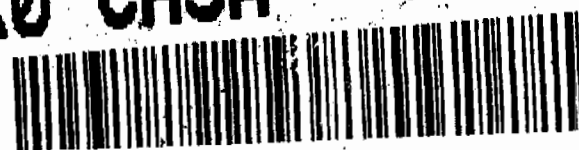
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CAD: 0014176/CAFE2449

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TA00 BLDG 1237 DPU 03  
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UNITED STATES US

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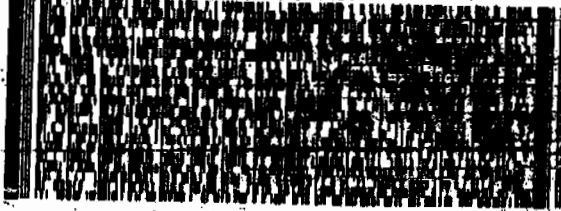
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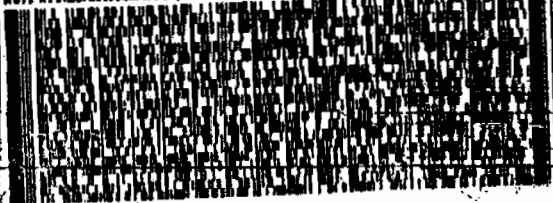


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LOS ALAMOS NATL LAB  
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UNITED STATES US

SHIP DATE: 08JUN10  
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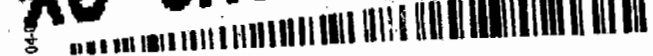


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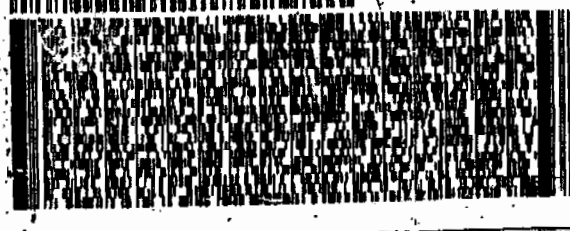
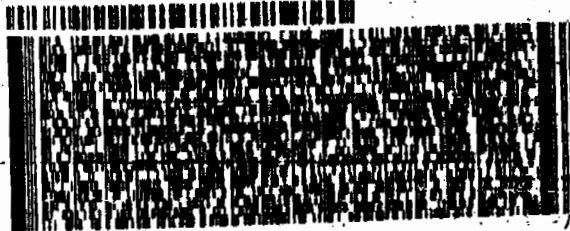
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LOS ALAMOS NATL LAB  
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UNITED STATES US

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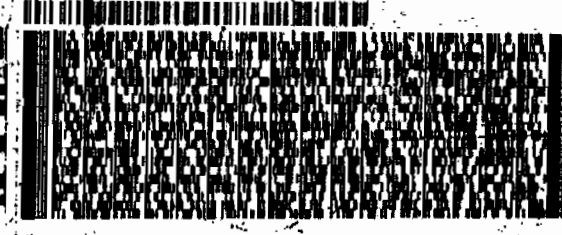
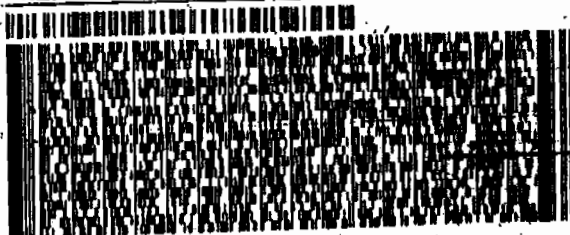
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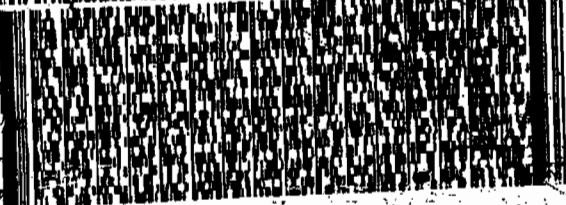
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UNITED STATES US

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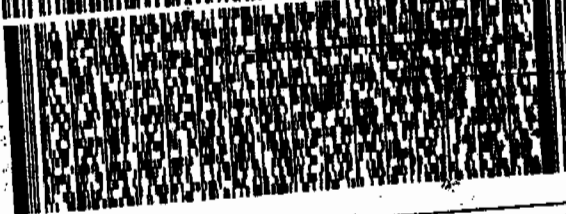
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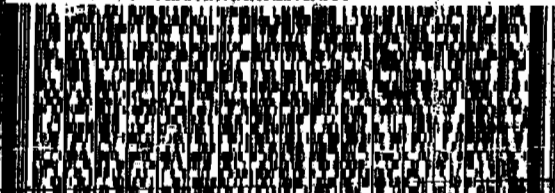
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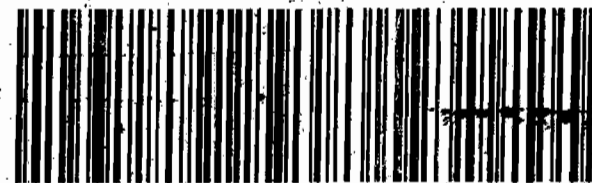
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ORIGIN ID: SAFA (505) 665-9968  
JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
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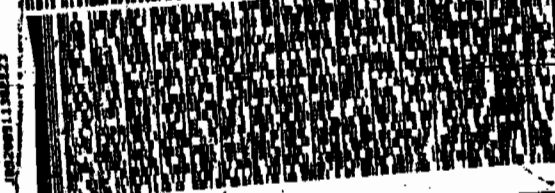
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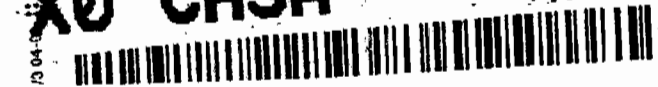
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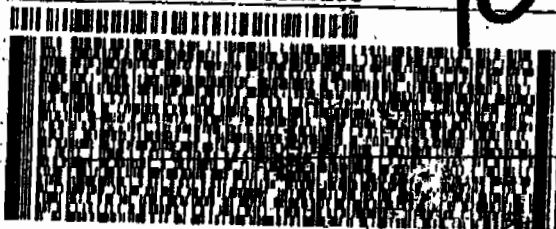
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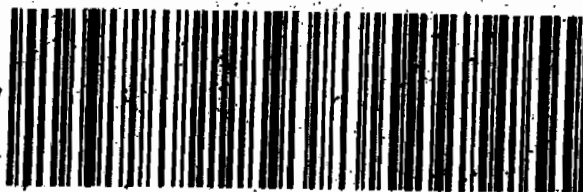
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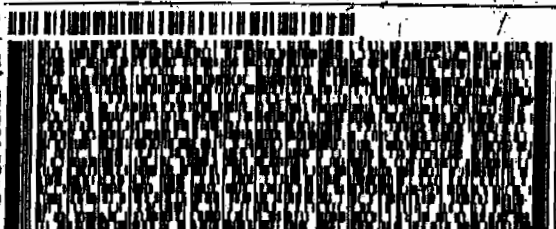
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# **Data Review Qualifier Flag Definition Sheet**

## Data Review Qualifier Definitions

Qualifier    Explanation

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

# LC/MS/MS EXPLOSIVES ANALYSIS

**LC/MS/MS Case Narrative  
Los Alamos National Laboratory (LANL)  
SDG 10-1160**

**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:** 940106

**Prep Batch Number:** 940104

**Sample Analysis**

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

<b>Sample ID</b>	<b>Client ID</b>
244209001	RE12-10-7734
244209002	RE12-10-7701
244209003	RE12-10-7702
244209004	RE12-10-7700
244209005	RE12-10-7699
244209006	RE12-10-7727
1202011756	Method Blank (MB)
1202011757	Laboratory Control Sample (LCS)
1202011758	244209001(RE12-10-7734) Matrix Spike (MS)
1202011759	244209001(RE12-10-7734) 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.

10-1160-EXPLCMS

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## **Primary Analyte Analysis**

### **Calibration Information**

#### **Initial Calibration**

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

#### **Calibration Verification Standard Requirements**

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

#### **Calibration Blank Requirements**

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

#### **CRI Requirements**

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

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

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

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

#### **Surrogate Recoveries**

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

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

The LCS spike recoveries were within the established acceptance limits.

#### **QC Sample Designation**

Sample 244209001 (RE12-10-7734) was chosen for matrix spike and matrix spike duplicate analysis.

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

The MS spike recoveries were within the established acceptance limits.

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

The MSD spike recoveries were within the established acceptance limits.

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

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

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

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



### **Technical Information**

#### **Holding Time Specifications**

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

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

All procedures were performed as stated in the SOP.

#### **Sample Dilutions**

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

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

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

#### **Secondary Analyte Analysis**

### **Calibration Information**

#### **Initial Calibration**

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

#### **Calibration Verification Standard Requirements**

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

#### **Calibration Blank Requirements**

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

#### **CRI Requirements**

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

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

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

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

#### **Surrogate Recoveries**

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

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

The LCS spike recoveries were within the established acceptance limits.

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#### **QC Sample Designation**

Sample 244209001 (RE12-10-7734) was chosen for matrix spike and matrix spike duplicate analysis.

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

The MS spike recoveries were within the established acceptance limits.

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

The MSD spike recoveries were within the established acceptance limits.

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

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

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

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

#### **Technical Information**

##### **Holding Time Specifications**

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

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

All procedures were performed as stated in the SOP.

##### **Sample Dilutions**

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

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

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

#### **Miscellaneous Information**

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

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

##### **Manual Integrations**

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

##### **Flagging Convention**

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

10-1160-EXPLCMS

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#### **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: Hebert M. Mauer Date: 01/22/10

10-1160-EXPLCMS

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# SAMPLE DATA SUMMARY

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7734

Lab Code: GEL

GEL Job No (SDG) 10-1160

Matrix: SOIL

GEL Sample ID: 244209001

Sample Amount 2

Moisture: 6.5

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940104

Concentrated Extract Volume (mL) 10

Date Extracted: 14-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0118068a

Date Analyzed: 19-JAN-10 23:00

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	X	Concentrated Extract Volume	X	Dilution
Value		Sample Amount		Factor

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7734

Lab Code: GEL

GEL Job No (SDG) 10-1160

Matrix: SOIL

GEL Sample ID: 244209001

Sample Amount 2

Moisture: 6.5

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940104

Concentrated Extract Volume (mL) 10

Date Extracted: 14-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01190020.wiff

Date Analyzed: 19-JAN-10 19:12

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: RE12-10-7701

Lab Code: GEL

GEL Job No (SDG) 10-1160

Matrix: SOIL

GEL Sample ID: 244209002

Sample Amount 2

Moisture: 25.6

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940104

Concentrated Extract Volume (mL) 10

Date Extracted: 14-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0118071a

Date Analyzed: 20-JAN-10 00:28

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	<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: RE12-10-7701

Lab Code: GEL

GEL Job No (SDG) 10-1160

Matrix: SOIL

GEL Sample ID: 244209002

Sample Amount 2

Moisture: 25.6

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940104

Concentrated Extract Volume (mL) 10

Date Extracted: 14-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01190026.wiff

Date Analyzed: 19-JAN-10 20:46

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		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: RE12-10-7702

Lab Code: GEL

GEL Job No (SDG) 10-1160

Matrix: SOIL

GEL Sample ID: 244209003

Sample Amount 2

Moisture: 15.0

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940104

Concentrated Extract Volume (mL) 10

Date Extracted: 14-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0118072a

Date Analyzed: 20-JAN-10 00:58

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: RE12-10-7702

Lab Code: GEL

GEL Job No (SDG) 10-1160

Matrix: SOIL

GEL Sample ID: 244209003

Sample Amount 2

Moisture: 15.0

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940104

Concentrated Extract Volume (mL) 10

Date Extracted: 14-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01190027.wiff

Date Analyzed: 19-JAN-10 21:02

Units: ug/kg

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

\*Concentration =

Instrument Value	X	$\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$	X	Dilution Factor
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1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7700

Lab Code: GEL

GEL Job No (SDG) 10-1160

Matrix: SOIL

GEL Sample ID: 244209004

Sample Amount 2

Moisture: 6.3

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940104

Concentrated Extract Volume (mL) 10

Date Extracted: 14-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0118073a

Date Analyzed: 20-JAN-10 01:27

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

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7700

Lab Code: GEL

GEL Job No (SDG) 10-1160

Matrix: SOIL

GEL Sample ID: 244209004

Sample Amount 2

Moisture: 6.3

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940104

Concentrated Extract Volume (mL) 10

Date Extracted: 14-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01190028.wiff

Date Analyzed: 19-JAN-10 21:18

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	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: RE12-10-7699

Lab Code: GEL

GEL Job No (SDG) 10-1160

Matrix: SOIL

GEL Sample ID: 244209005

Sample Amount 2

Moisture: 20.4

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940104

Concentrated Extract Volume (mL) 10

Date Extracted: 14-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0118074a

Date Analyzed: 20-JAN-10 01:57

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		Concentrated Extract Volume		Dilution
Value	X	Sample Amount	X	Factor

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7699

Lab Code: GEL

GEL Job No (SDG) 10-1160

Matrix: SOIL

GEL Sample ID: 244209005

Sample Amount 2

Moisture: 20.4

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940104

Concentrated Extract Volume (mL) 10

Date Extracted: 14-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01190029.wiff

Date Analyzed: 19-JAN-10 21:33

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: RE12-10-7727

Lab Code: GEL

GEL Job No (SDG) 10-1160

Matrix: SOIL

GEL Sample ID: 244209006

Sample Amount 2

Moisture: 25.3

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940104

Concentrated Extract Volume (mL) 10

Date Extracted: 14-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0118075a

Date Analyzed: 20-JAN-10 02:26

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	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: RE12-10-7727

Lab Code: GEL

GEL Job No (SDG) 10-1160

Matrix: SOIL

GEL Sample ID: 244209006

Sample Amount 2

Moisture: 25.3

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940104

Concentrated Extract Volume (mL) 10

Date Extracted: 14-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01190030.wiff

Date Analyzed: 19-JAN-10 21:49

Units: ug/kg

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

\*Concentration =

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



# QUALITY CONTROL SUMMARY

# High Explosives Surrogate Recovery Summary

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1160

Lab Code: GEI

HPLC Column: Phenomenex Ultracarb 5u ODS(20)

Lab Sample ID	Client Sample ID	DNT	QC Limits	Flg
244209001	RE12-10-7734	95.8	73.7 - 133.3	
244209001	RE12-10-7734	114	73.7 - 133.3	
244209002	RE12-10-7701	117	73.7 - 133.3	
244209002	RE12-10-7701	108	73.7 - 133.3	
244209003	RE12-10-7702	105	73.7 - 133.3	
244209003	RE12-10-7702	111	73.7 - 133.3	
244209004	RE12-10-7700	104	73.7 - 133.3	
244209004	RE12-10-7700	114	73.7 - 133.3	
244209005	RE12-10-7699	98.6	73.7 - 133.3	
244209005	RE12-10-7699	114	73.7 - 133.3	
244209006	RE12-10-7727	105	73.7 - 133.3	
244209006	RE12-10-7727	109	73.7 - 133.3	
1202011756	MB for batch 940104	99.5	73.7 - 133.3	
1202011756	MB for batch 940104	107	73.7 - 133.3	
1202011757	LCS for batch 940104	90.4	73.7 - 133.3	
1202011757	LCS for batch 940104	104	73.7 - 133.3	
1202011758	RE12-10-7734(244209001MS)	97.8	73.7 - 133.3	
1202011758	RE12-10-7734(244209001MS)	104	73.7 - 133.3	
1202011759	RE12-10-7734(244209001MSD)	99.2	73.7 - 133.3	
1202011759	RE12-10-7734(244209001MSD)	109	73.7 - 133.3	

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) 10-1160

Extract Batch Code: 940104

Date Extracted: 14-JAN-10

GEL LCS ID: 1202011757

GEL LCSDUP ID:

Analysis Date/Time: 19-JAN-10 22:30

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
Nitrobenzene	5000	4730	94.6					71.8 - 126
PETN	5000	5170	103					64.6 - 147
2,4,6-Trinitrotoluene	5000	4570	91.4					78.3 - 132
2,4-Dinitrotoluene	5000	4550	90.9					82.7 - 132
HMX	5000	4900	98					66.5 - 142
4-Amino-2,6-dinitrotoluene	5000	5180	104					85.6 - 133
2-Amino-4,6-dinitrotoluene	5000	5060	101					84.2 - 149
2,6-Dinitrotoluene	5000	4740	94.8					86.9 - 122
1,3,5-Trinitrobenzene	5000	4440	88.8					62.1 - 124
RDX	5000	5300	106					78.7 - 144
Tetryl	5000	2580	51.7					31.2 - 119
m-Dinitrobenzene	5000	4760	95.3					80.9 - 127
m-Nitrotoluene	5000	4650	92.9					71.9 - 126
o-Nitrotoluene	5000	4760	95.3					75 - 123
p-Nitrotoluene	5000	4790	95.8					73.7 - 124

# 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) 10-1160

Extract Batch Code: 940104

Date Extracted: 14-JAN-10

GEL LCS ID: 1202011757

GEL LCSDUP ID:

Analysis Date/Time: 19-JAN-10 18:57

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	5020	100					64.8 - 128
2,6-Diamino-4-nitrotoluene	5000	5220	104					69.6 - 133
3,5-Dinitroaniline	5000	5220	104					77.3 - 123
TATB	5000	5730	115					46.8 - 166
tris(o-cresyl) phosphate	5000	5060	101					84.3 - 120

# 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: RE12-10-7734

Lab Code: GEL

GEL Job No (SDG) 10-1160

Extract Batch Code: 940104

Date Extracted: 14-JAN-10

GEL Spike ID: 1202011758

GEL SpikeDup ID: 1202011759

Analysis Date/Time: 19-JAN-10 23:29

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
1,3,5-Trinitrobenzene	5000	0	4880	97.7	5140	103	5.16	30	70.7 - 130
2,4,6-Trinitrotoluene	5000	0	5090	102	5060	101	.667	30	83.4 - 138
2,4-Dinitrotoluene	5000	0	4560	91.3	4980	99.5	8.66	30	79.1 - 137
2,6-Dinitrotoluene	5000	0	4730	94.5	4810	96.1	1.71	30	85.4 - 125
2-Amino-4,6-dinitrotoluene	5000	0	5420	108	5010	100	7.81	30	77.4 - 154
4-Amino-2,6-dinitrotoluene	5000	0	5460	109	5270	105	3.68	30	77.3 - 140
HMX	5000	0	5260	105	6060	121	14.1	30	66.7 - 144
o-Nitrotoluene	5000	0	3610	72.2	4550	90.9	23	30	71.2 - 131
Nitrobenzene	5000	0	4520	90.4	4740	94.9	4.87	30	70.4 - 129
PETN	5000	0	4320	86.4	5470	109	23.6	30	61.9 - 153
RDX	5000	0	5630	113	5150	103	8.98	30	73 - 140
Tetryl	5000	0	3940	78.7	4020	80.5	2.24	30	46.8 - 138
m-Dinitrobenzene	5000	0	4980	99.6	4680	93.6	6.25	30	83.5 - 126
m-Nitrotoluene	5000	0	4670	93.3	4640	92.7	.646	30	68.6 - 135
p-Nitrotoluene	5000	0	4680	93.5	4770	95.3	1.91	30	69.3 - 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: RE12-10-7734

Lab Code: GEL

GEL Job No (SDG) 10-1160

Extract Batch Code: 940104

Date Extracted: 14-JAN-10

GEL Spike ID: 1202011758

GEL SpikeDup ID: 1202011759

Analysis Date/Time: 19-JAN-10 19:28

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	4790	95.8	4730	94.6	1.26	30	51.6 - 127
2,6-Diamino-4-nitrotoluene	5000	0	5030	101	5210	104	3.52	30	58.9 - 135
3,5-Dinitroaniline	5000	0	5190	104	5310	106	2.29	30	72.8 - 125
tris(o-cresyl) phosphate	5000	0	4850	97	4850	97	0	30	79.1 - 124
TATB	5000	0	5330	107	7070	141	28.1	30	43.9 - 166

#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): 10-1160

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 18-JAN-10 14:03

GEL Data File: EXP0118001a

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	572.959
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	533.831
2,4,6-Trinitrotoluene	0	0

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\011810expA.qld, Time: Tue Jan 19 10:59:58 2010

Method: C:\MASSLYNX\New\_Exp.PRO\MethDB\011810expa.mdb, Time: Tue Jan 19 09:10:36 2010

Calibration: Untitled, Time: Tue Jan 19 10:56:45 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0118001a

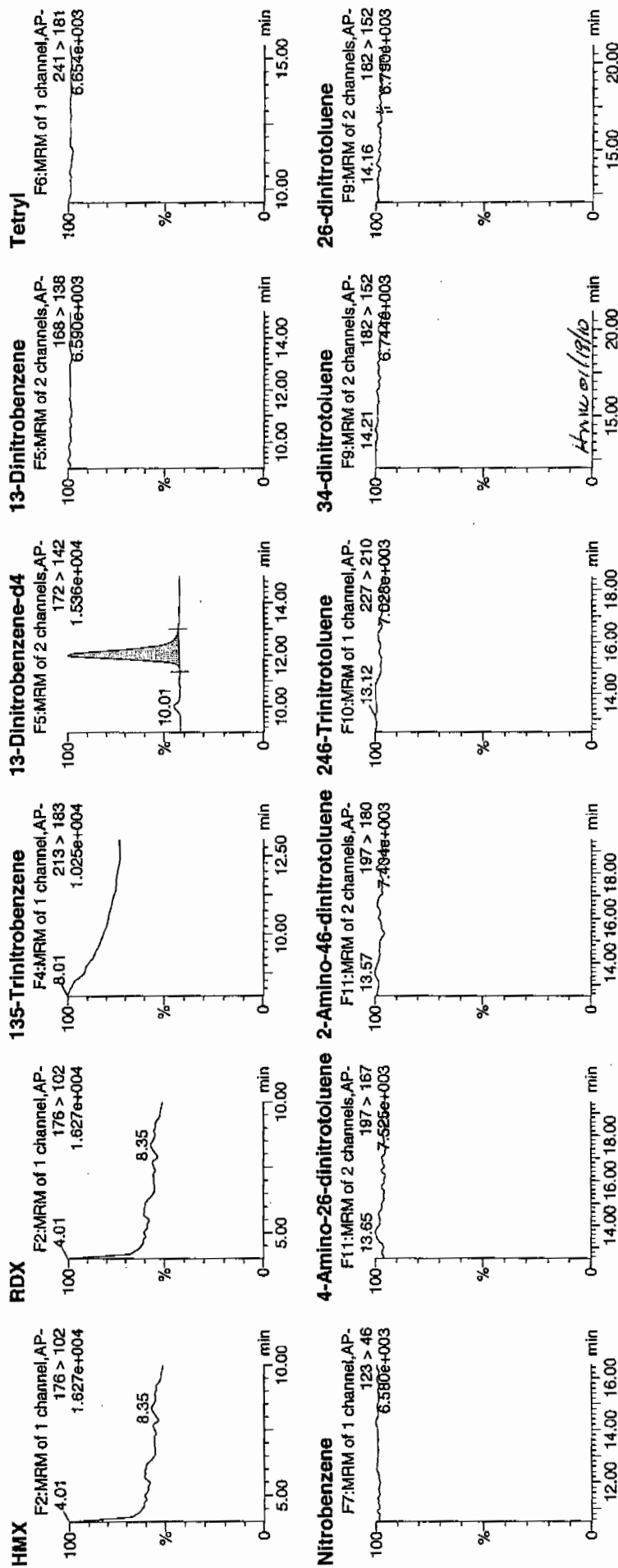
Date: 18-Jan-2010

Time: 14:03:34

ID: XIBLK01

Vial: 1:1,A

1/19/10

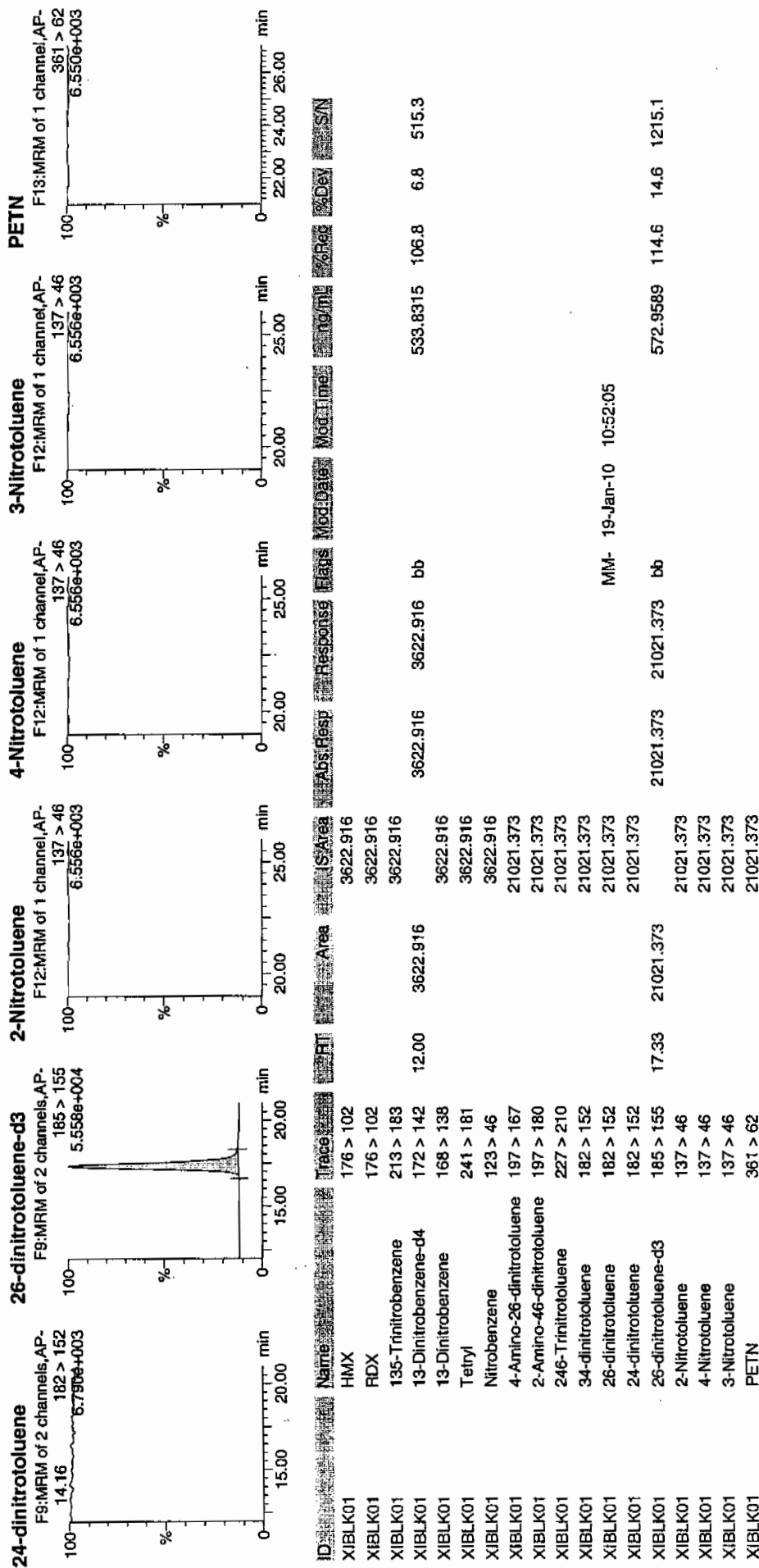




Printed: Tue Jan 19 11:02:03 2010, Page 2 of 85

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

Dataset: C:\MASSLYNX\New\_Exp\PRO1011810expA.qld, Time: Tue Jan 19 10:59:58 2010



Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1160

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 18-JAN-10 14:33

GEL Data File: EXP0118002a

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	548.487
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	599.618
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Printed: Tue Jan 19 11:02:03 2010, Page 3 of 85

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

Dataset: C:\MASSLYNX\New\_Exp\PRO\011810expA.qld, Time: Tue Jan 19 10:59:58 2010

Name: C:\MASSLYNX\NEW\_EXP\PRO\data\EXP0118002a

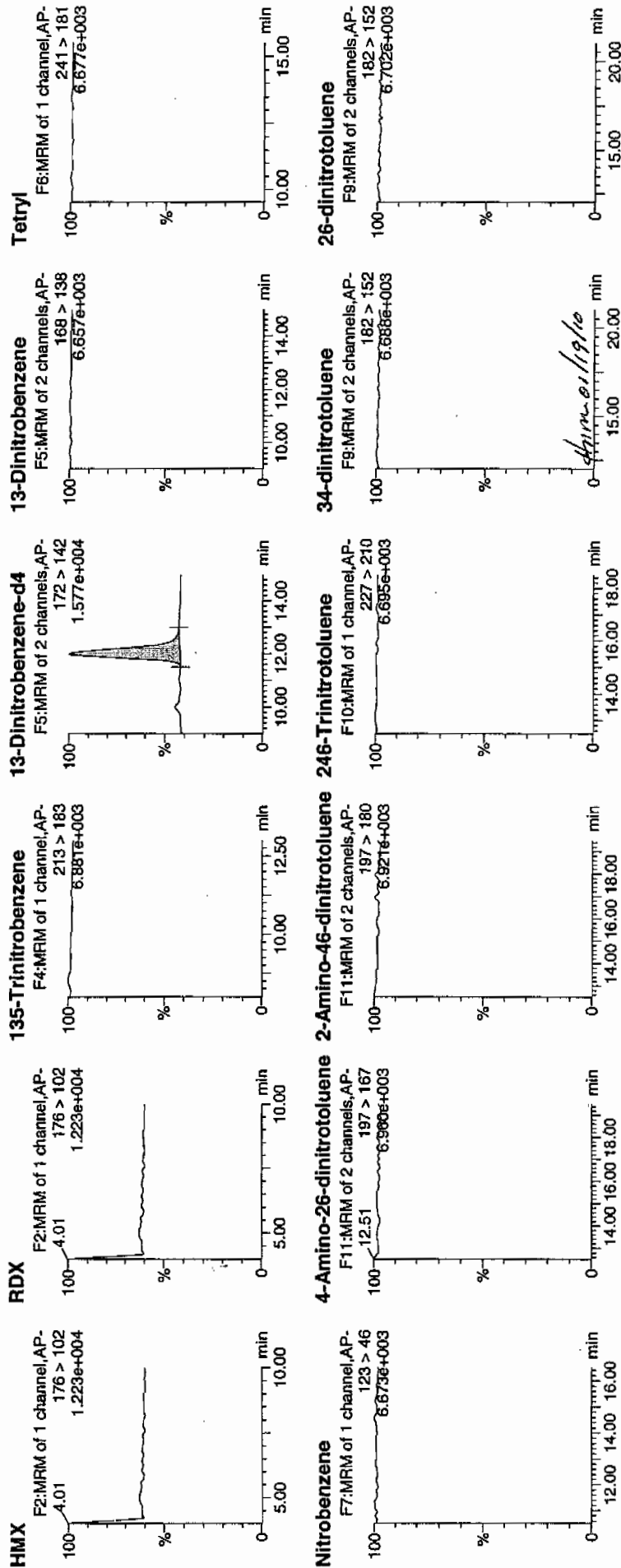
Date: 18-Jan-2010

Time: 14:33:05

ID: XIBLK01

Vial: 1:1,A

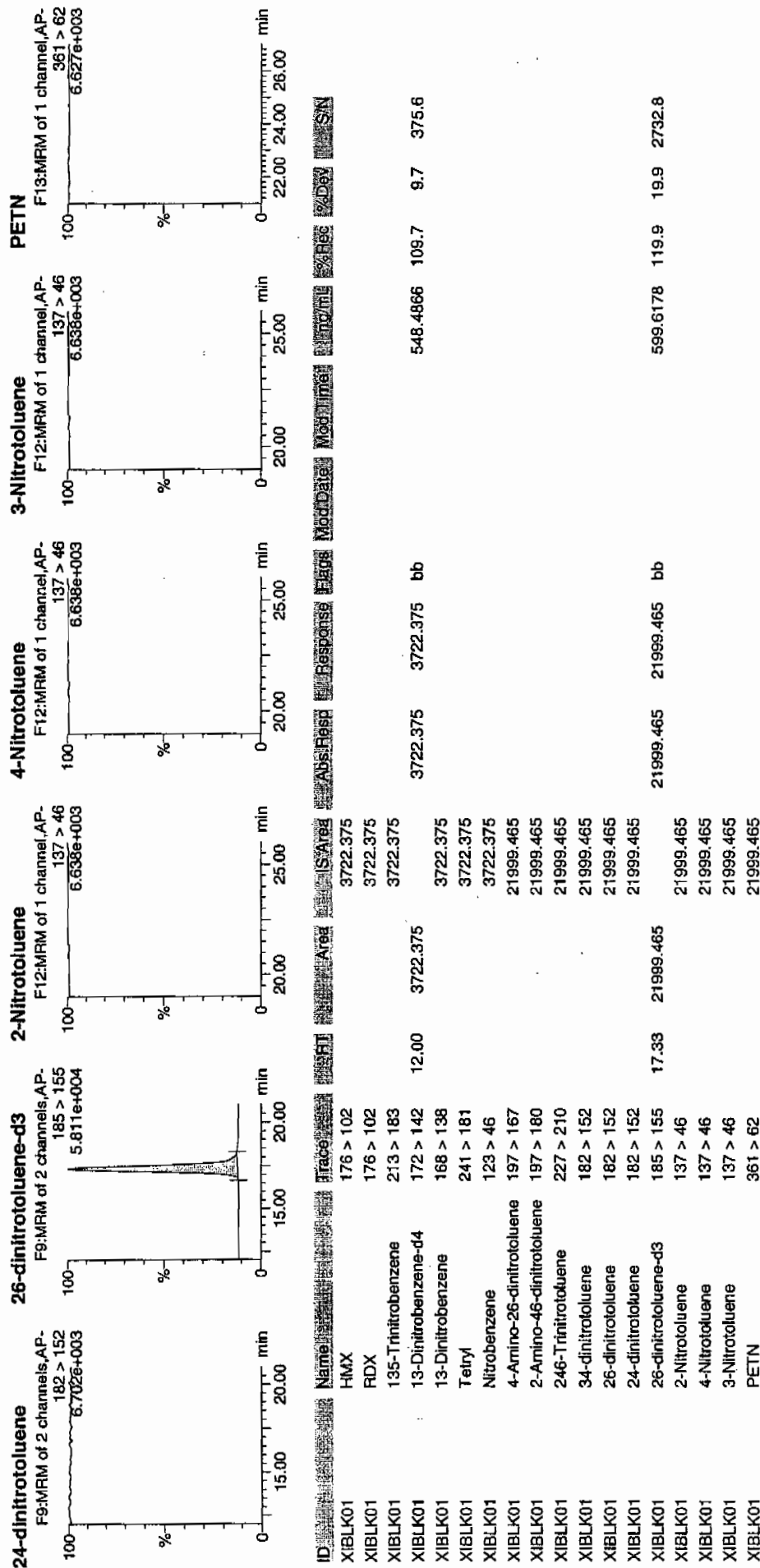
1/19/10



Printed: Tue Jan 19 11:02:03 2010, Page 4 of 85

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

Dataset: C:\MASSLYNX\New\_Exp\PRO\011810expA.qld, Time: Tue Jan 19 10:59:58 2010



Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1160

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 19-JAN-10 14:14

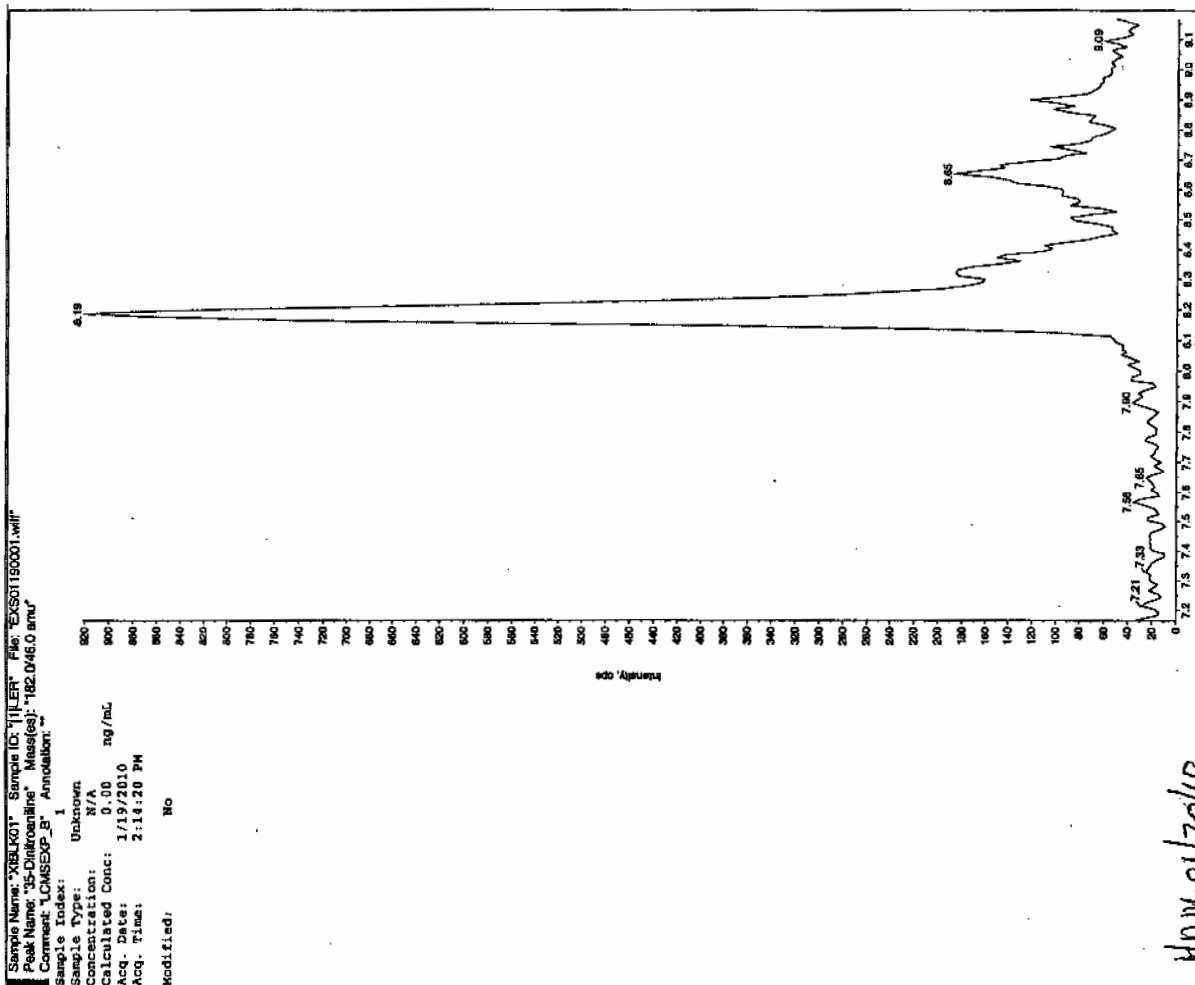
GEL Data File: EXS01190001.wiff

Instrument ID: LCMSMS

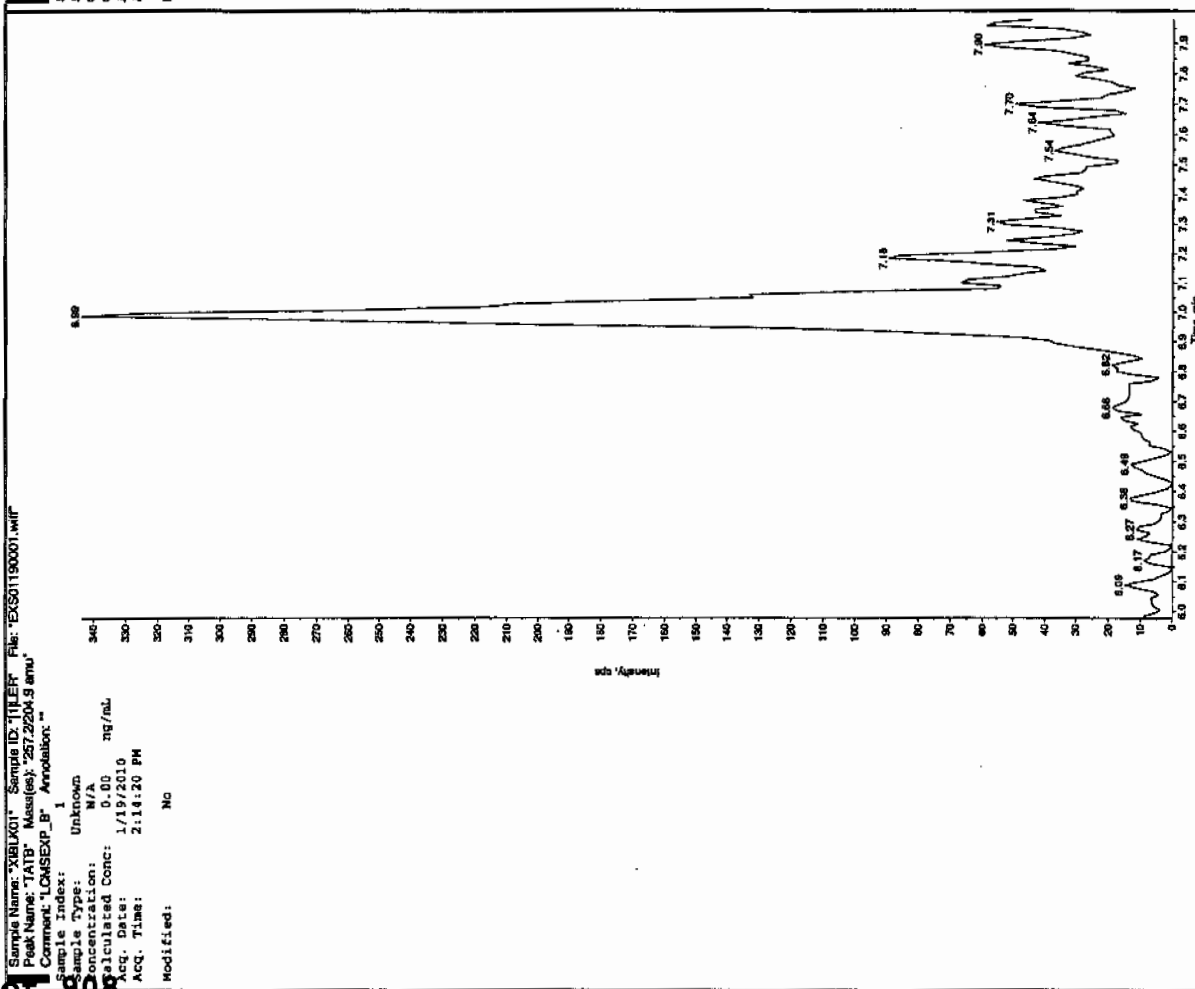
Column: Phenomenex Ultracarb 5u ODS(20)

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

Run 1/20/10



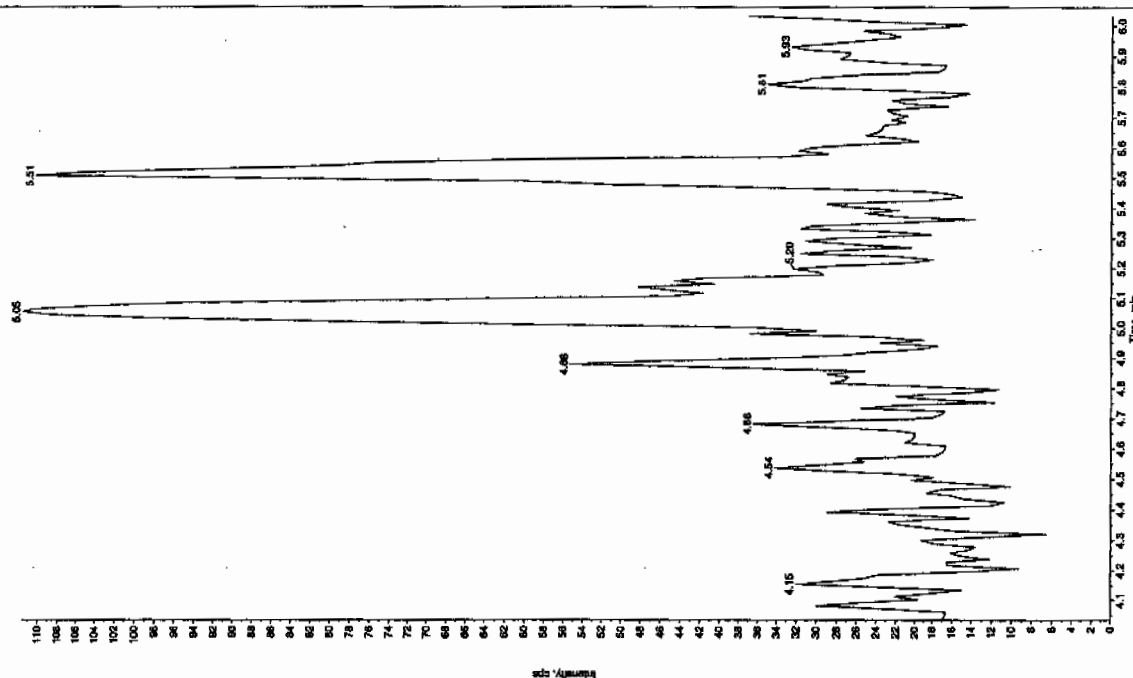
Run 1/20/10



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

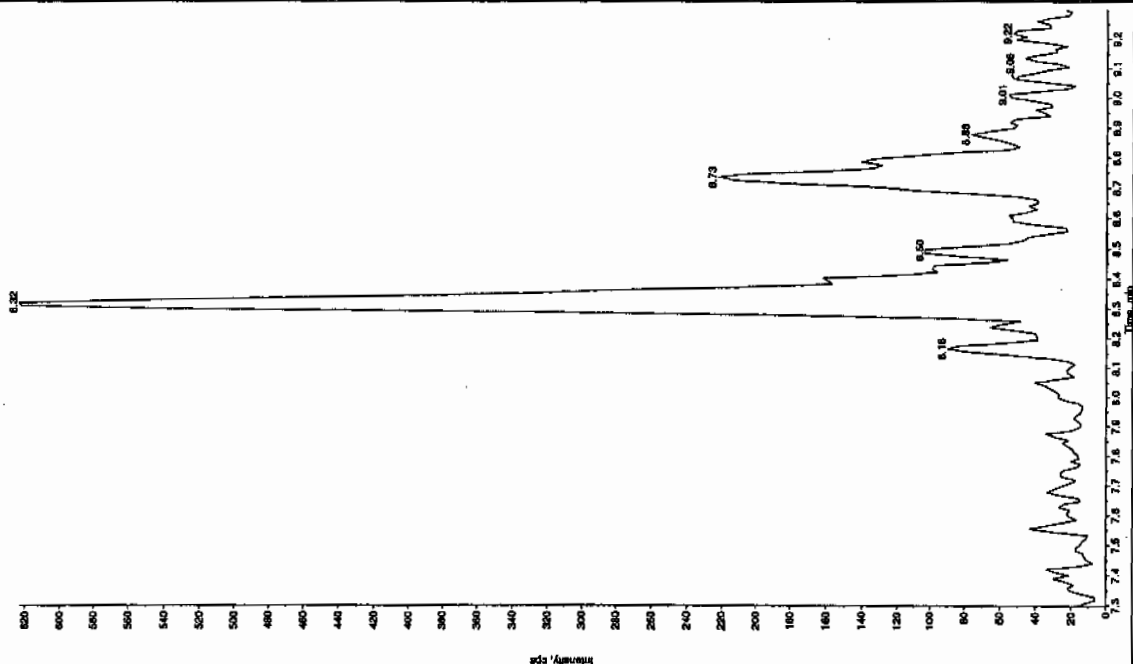
Sample Name: "XIBLK01" Sample ID: "TILLER" File: "EX501190001.wif"  
 Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "162.046.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/19/2010  
 Acq. Time: 2:14:20 PM  
 Modified: No



Sample Name: "XIBLK01" Sample ID: "TILLER" File: "EX501190001.wif"  
 Peak Name: "34-Diaminotoluene" Mass(es): "182.1751.9 amu"  
 Comment: "LCMSEXP\_B" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/19/2010  
 Acq. Time: 2:14:20 PM  
 Modified: No



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

Sample Name: "XBLK01" Sample ID: "11111" File: "EX01190001.wif"  
 Peak Name: "24-O-methylphosphate" Mass(es): "359.191.0 amu"  
 Comment: "LONSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: No Intercept  
 Acq. Date: 1/19/2010  
 Acq. Time: 2:14:20 PM

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: 10.8 min

Use Relative RT: No

Int. Type: Valley

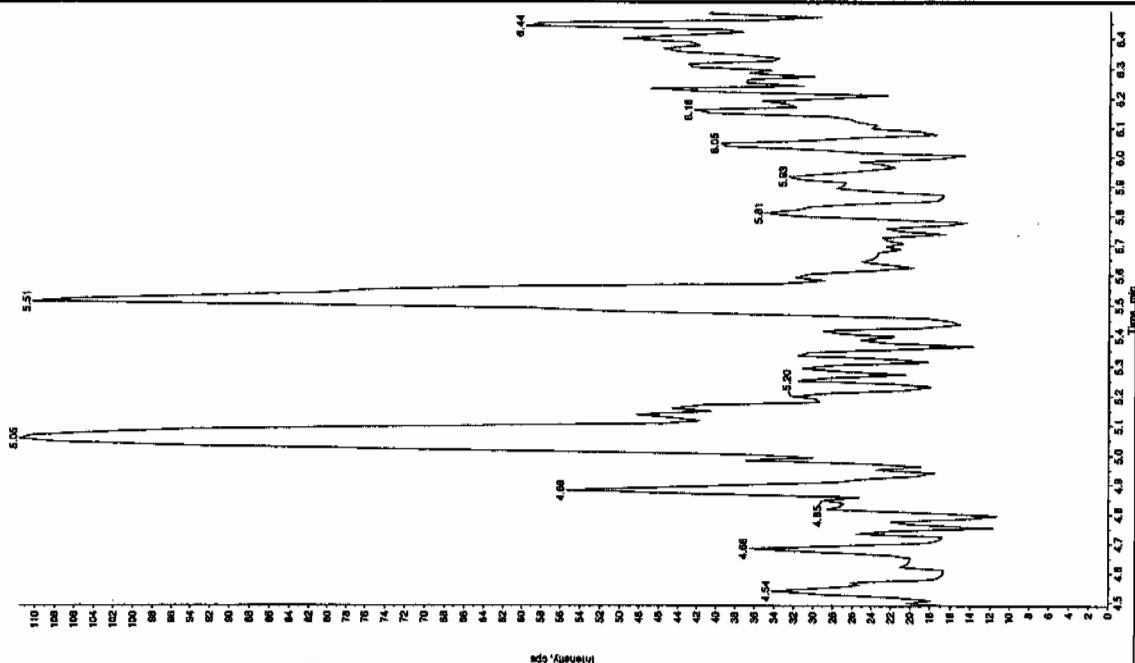
Retention Time: 10.8 min

Area: 5.30e+06 counts

Height: 21673.061 cps

Start Time: 10.7 min

End Time: 11.0 min



Sample Name: "XBLK01" Sample ID: "11111" File: "EX01190001.wif"  
 Peak Name: "24-O-methylphosphate" Mass(es): "165.046.0 amu"  
 Comment: "LONSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/19/2010  
 Acq. Time: 2:14:20 PM

Modified: No



Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1160

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 19-JAN-10 14:30

GEL Data File: EXS01190002.wiff

Instrument ID: LCMSMS

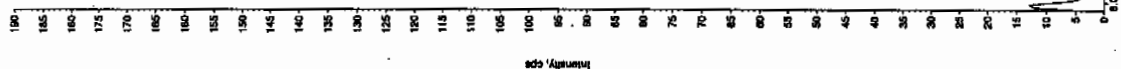
Column: Phenomenex Ultracarb 5u ODS(20)

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

don 120110

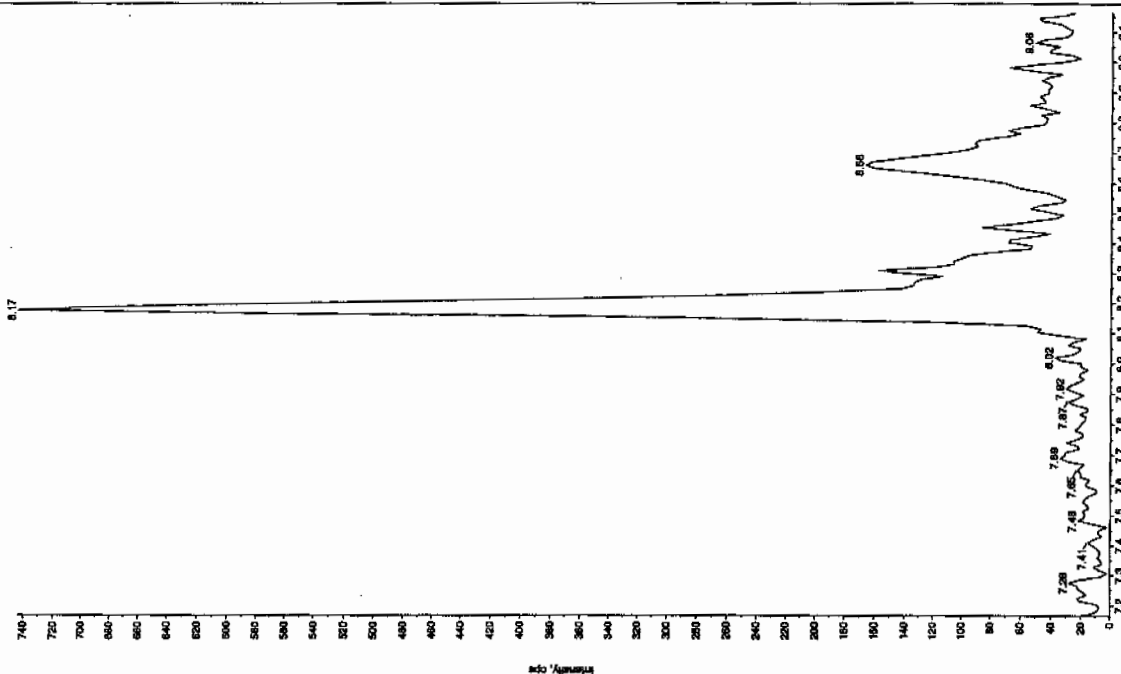
Sample Name: "XIBLK01" Sample ID: "HILER" File: "EXS01190002.wif"  
 Peak Name: "TATB" Mass(es): "257.2204.9 amu"  
 Comment: "LCMSEXP\_B" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A ng/mL  
 Calculated Conc: 0.00  
 Acq. Date: 1/19/2010  
 Acq. Time: 2:30:01 PM  
 Modified: No



Sample Name: "XIBLK01" Sample ID: "HILER" File: "EXS01190002.wif"  
 Peak Name: "35-Chloroaniline" Mass(es): "182.046.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: "

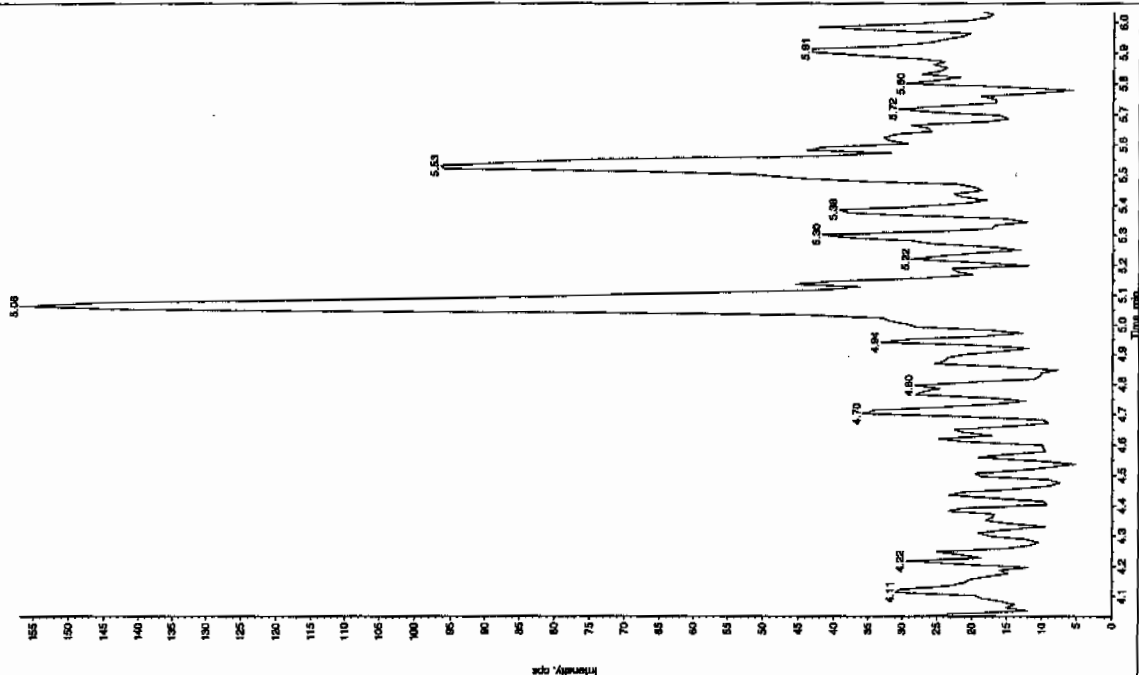
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A ng/mL  
 Calculated Conc: 0.00  
 Acq. Date: 1/19/2010  
 Acq. Time: 2:30:01 PM  
 Modified: No



Amc 01/20/10

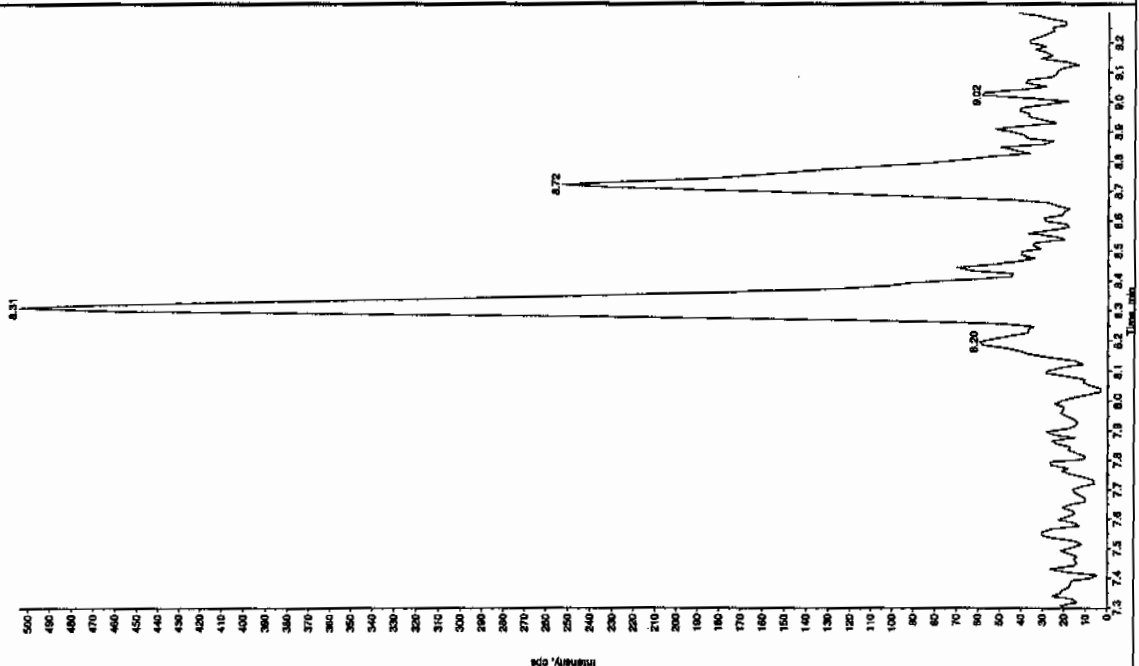
Sample Name: "XBLK01" Sample ID: "111ER" File: "EXS01190002.wif"  
 Peak Name: "25-Dimino-4-nitrobenzoate" Mass(es): "185.048.0 amu"  
 Comment: "LMSDEP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Sample Concentration: N/A  
 Calculated Conc: 0.00 ug/mL  
 Acq. Date: 1/19/2010  
 Acq. Time: 2:30:01 PM  
 Modified: No



Sample Name: "XBLK01" Sample ID: "111ER" File: "EXS01190002.wif"  
 Peak Name: "34-Dimino-4-nitrobenzoate" Mass(es): "182.171.9 amu"  
 Comment: "LMSDEP\_B" Annotation: ""

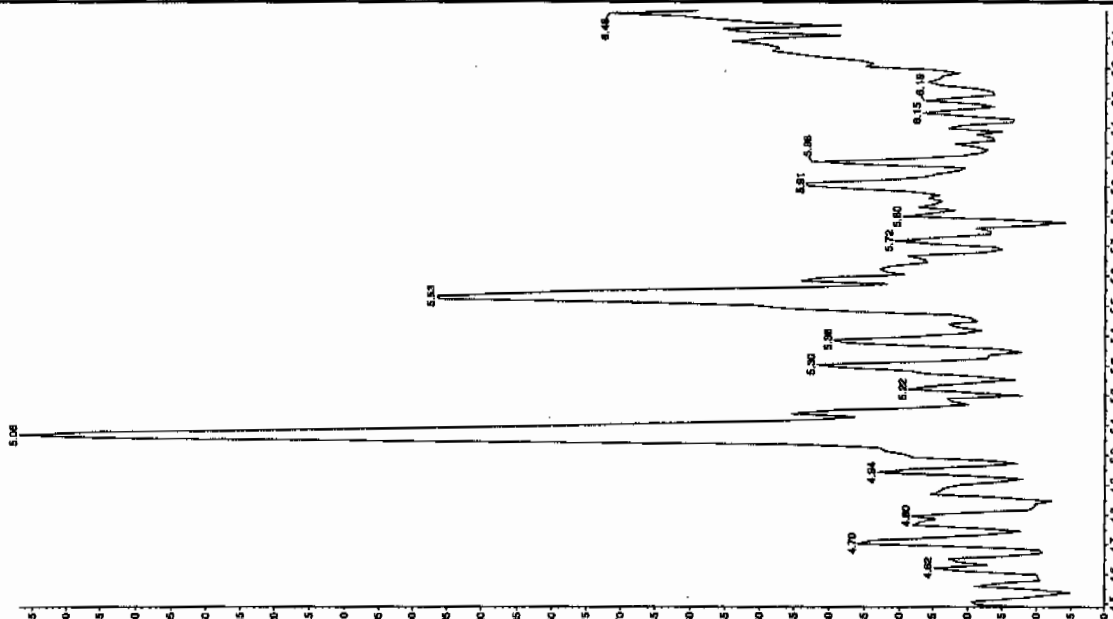
Sample Index: 1  
 Sample Type: Unknown  
 Sample Concentration: N/A  
 Calculated Conc: 0.00 ug/mL  
 Acq. Date: 1/19/2010  
 Acq. Time: 2:30:01 PM  
 Modified: No



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

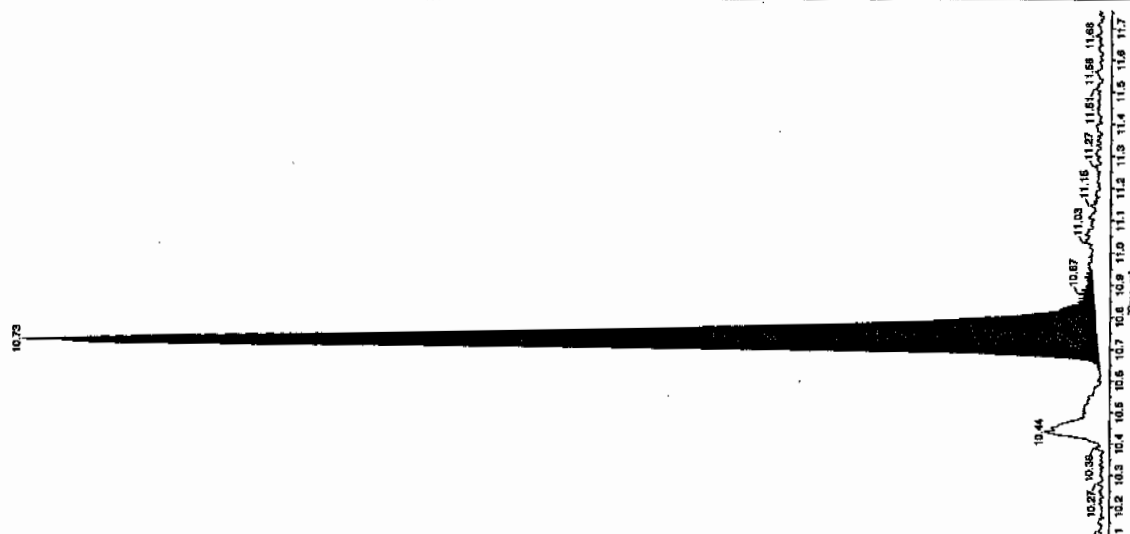
Sample Name: "XBLX01" Sample ID: "111LRF" File: "EXS01190002.wif"  
 Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.046.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""  
 Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 1/13/2010  
 Acq. Date: 2:30:01 PM  
 Modified: No

Intensity, cps



Sample Name: "XBLX01" Sample ID: "111LRF" File: "EXS01190002.wif"  
 Peak Name: "bis(o-cresyl) phosphate" Mass(es): "326.181.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""  
 Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: No Intercept  
 Acq. Date: 1/19/2010  
 Acq. Time: 2:30:01 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 1.00e4 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 10.8 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.7 min  
 Area: 5.86e004 counts  
 Height: 15477.725 cps  
 Start Time: 10.5 min  
 End Time: 10.9 min

Intensity, cps



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1160

Lab Code: GEL

Lab Sample ID: XIBLK02

Analysis Date: 18-JAN-10 17:59

GEL Data File: EXP0118009a

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	491.076
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	469.445

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\011810expA.qld, Time: Tue Jan 19 10:59:58 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0118009a

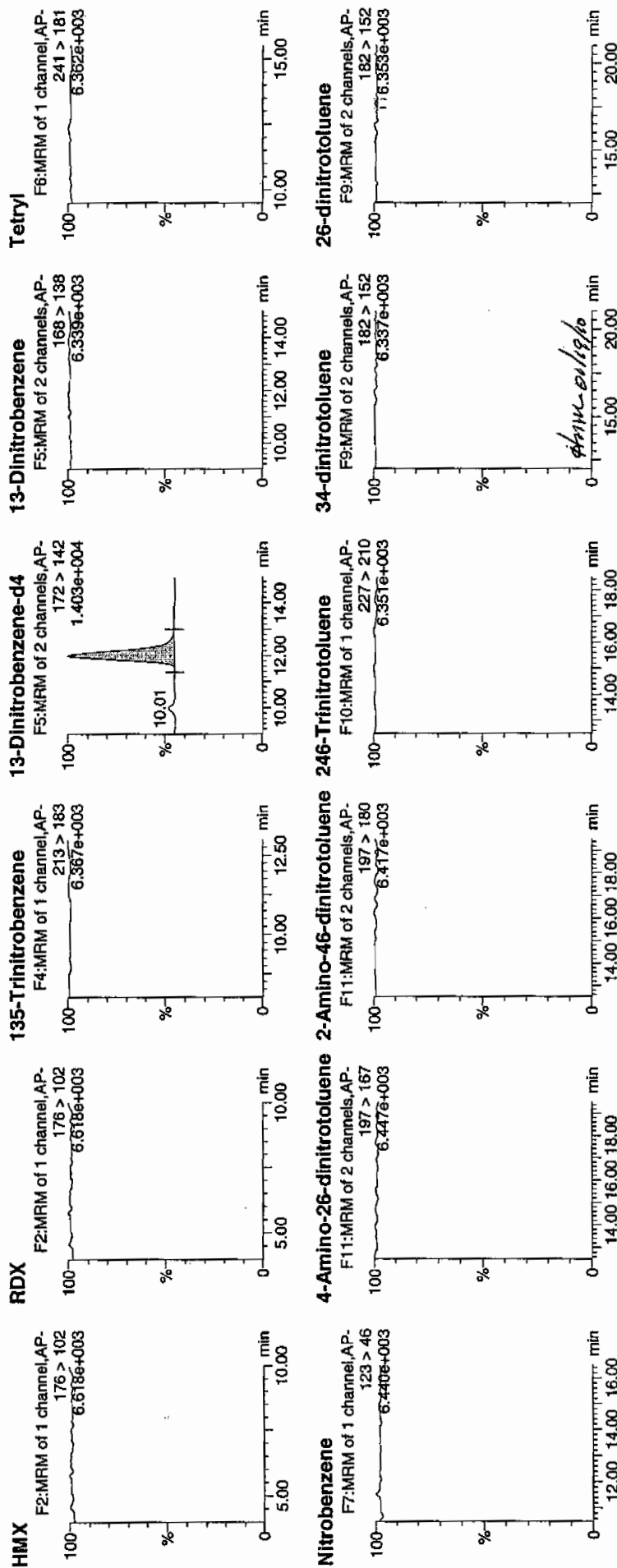
Date: 18-Jan-2010

Time: 17:59:22

ID: XIBLK02

Vial: 1:1,A

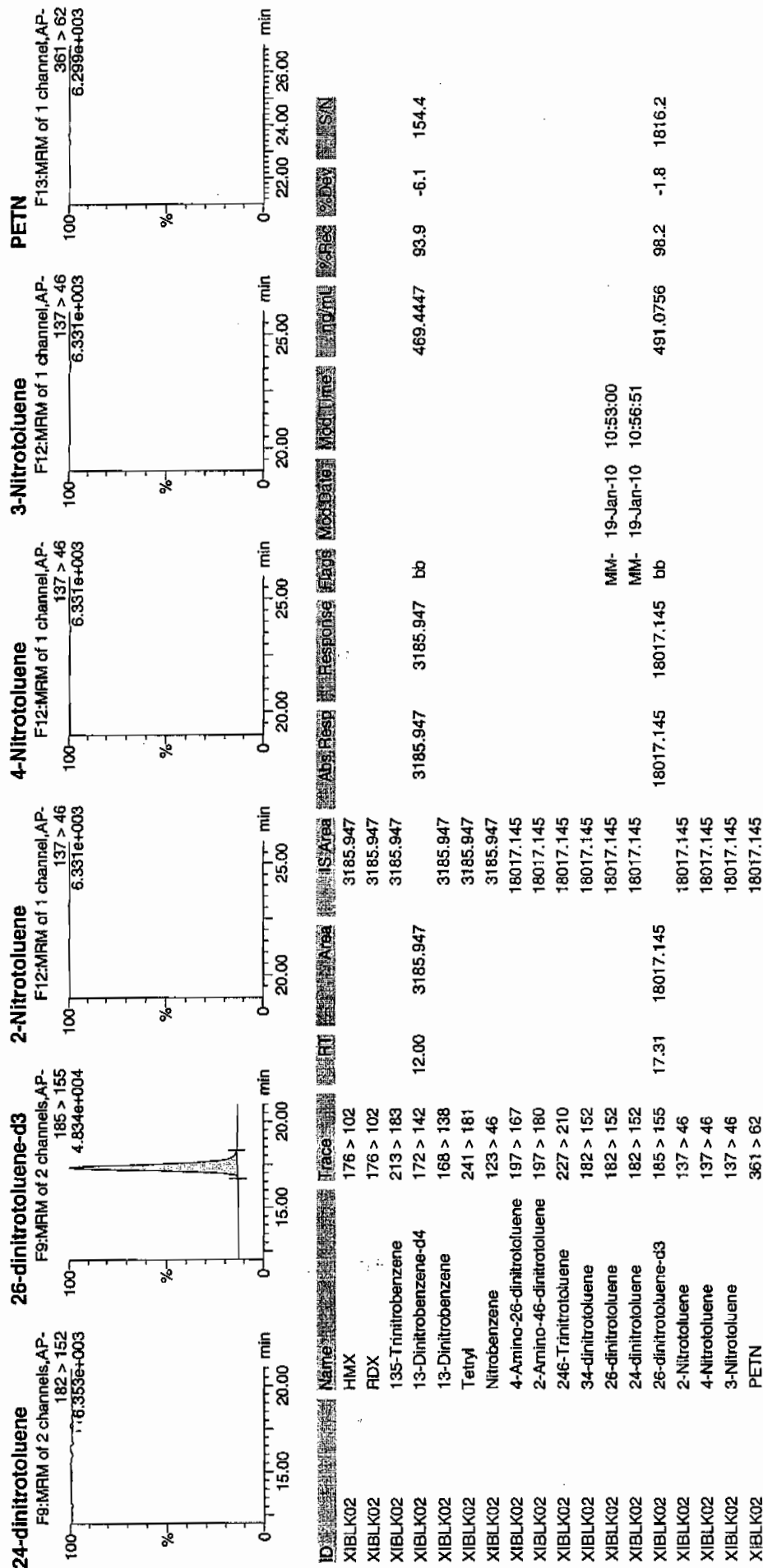
1/19/10  
M.A.P.



Printed: Tue Jan 19 11:02:03 2010, Page 18 of 85

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\011810expA.qld, Time: Tue Jan 19 10:59:58 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1160

Lab Code: GEL

Lab Sample ID: XIBLK03

Analysis Date: 18-JAN-10 18:58

GEL Data File: EXP0118011a

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	464.129
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	483.307
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0



Printed: Tue Jan 19 11:02:03 2010, Page 21 of 85

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\011810expA.qld, Time: Tue Jan 19 10:59:58 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0118011a

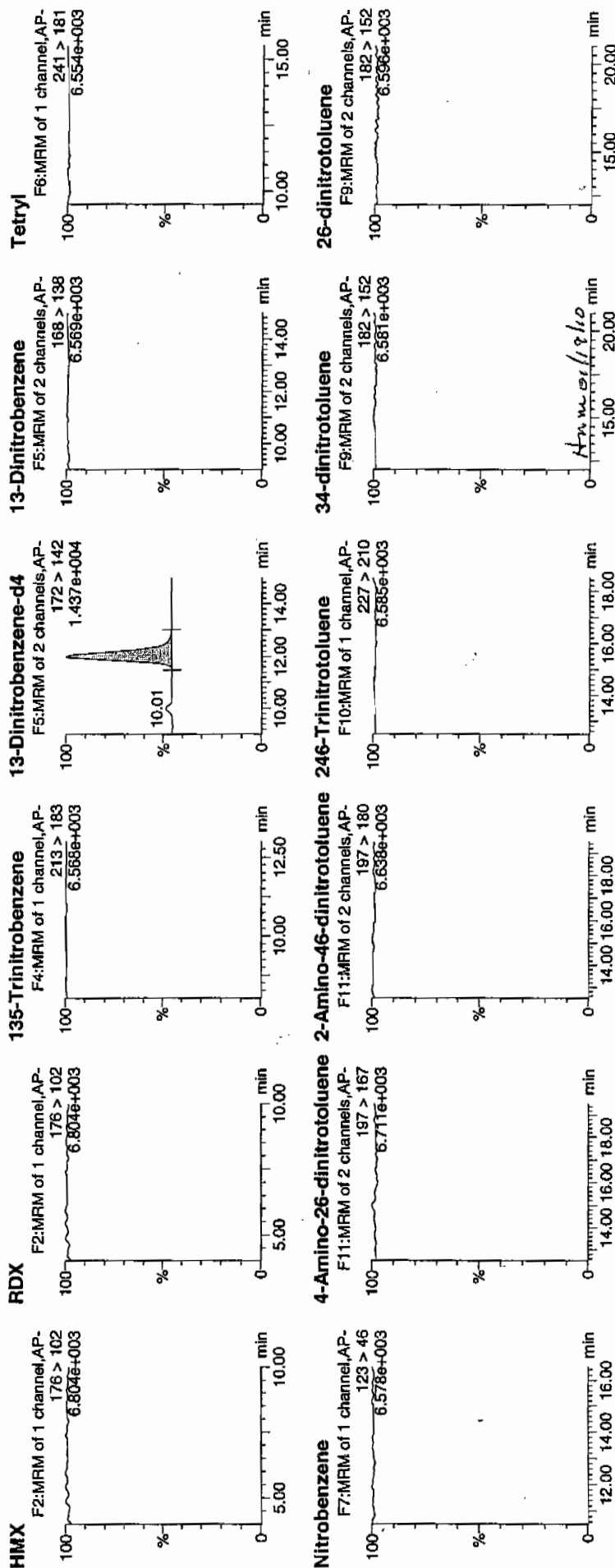
Date: 18-Jan-2010

Time: 18:58:20

ID: XIBLK03

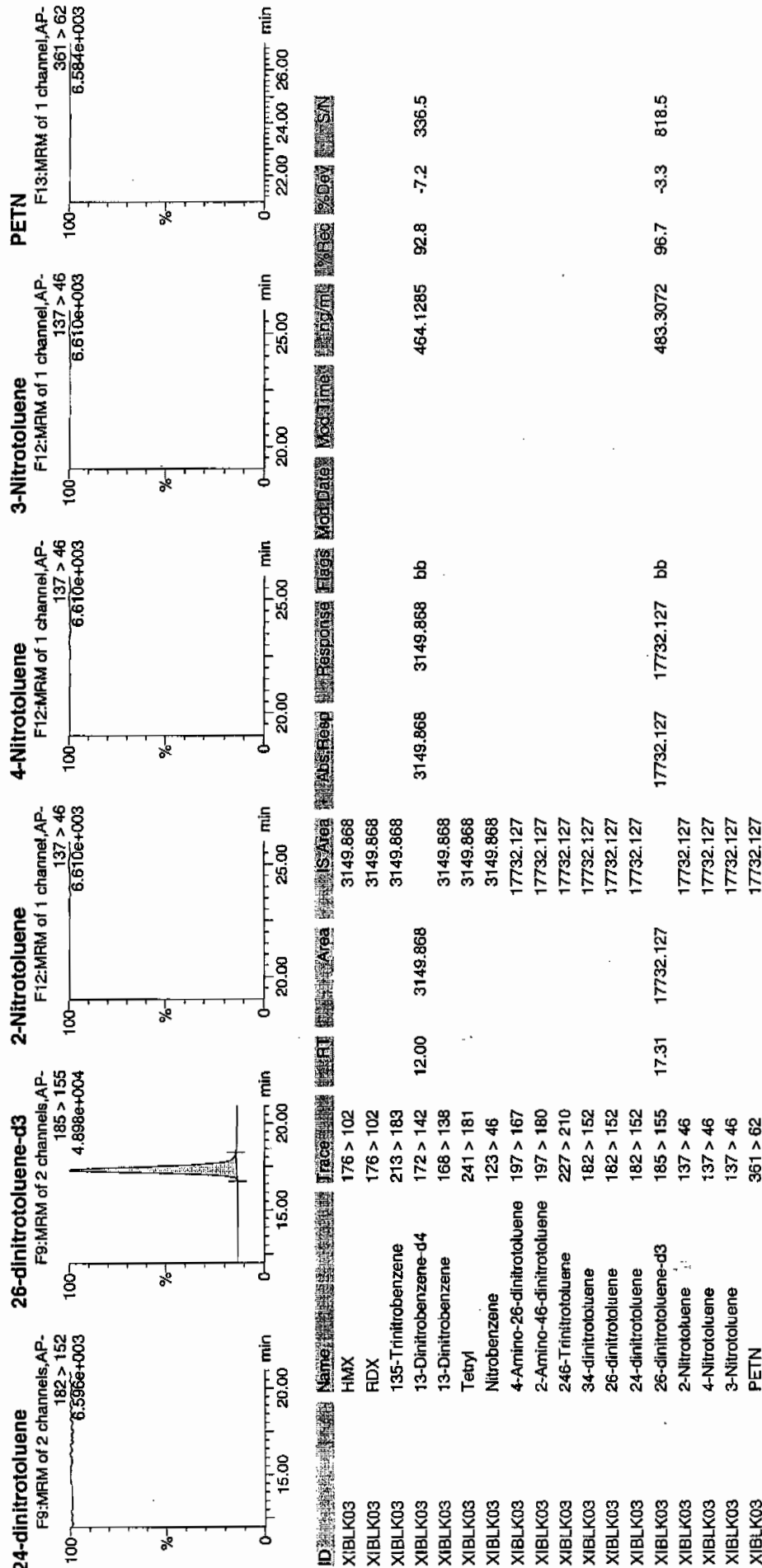
Vial: 1:1,A

AP  
1/19/10



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

Dataset: C:\MASSLYNX\New\_Exp.PRO\011810expA.qld, Time: Tue Jan 19 10:59:58 2010



4A  
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1160

Lab Code: GEL

Lab Sample ID: XIBLK04

Analysis Date: 18-JAN-10 23:23

GEL Data File: EXP0118020a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
1,3-Dinitrobenzene-d4	500	472.082
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	530.135
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

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\011810expA.qld, Time: Tue Jan 19 10:59:58 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0118020a

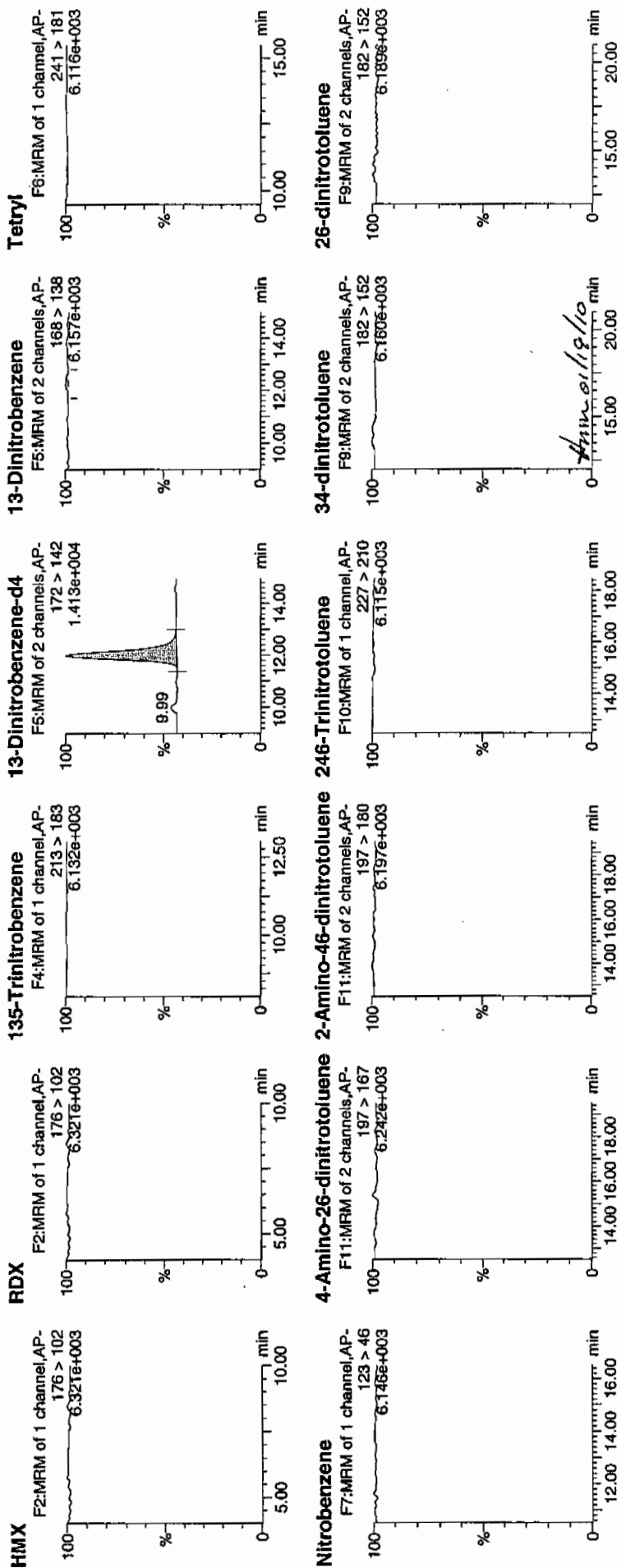
Date: 18-Jan-2010

Time: 23:23:38

ID: XIBLK04

Vial: 1:1,A

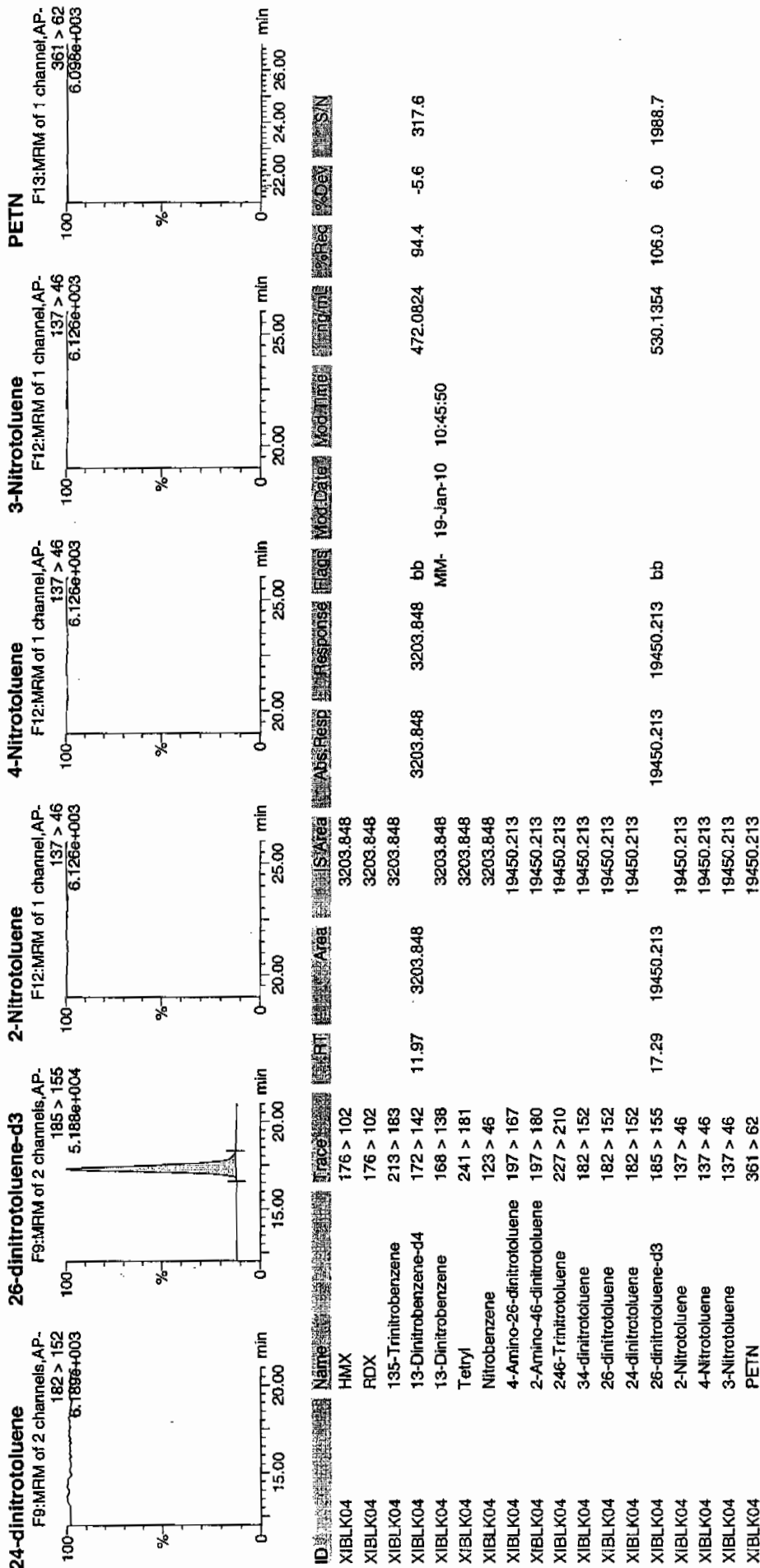
WAT  
11/10



Printed: Tue Jan 19 11:02:03 2010, Page 40 of 85

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\011810expA.qld, Time: Tue Jan 19 10:59:58 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1160

Lab Code: GEL

Lab Sample ID: XIBLK05

Analysis Date: 19-JAN-10 05:47

GEL Data File: EXP0118033a

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	455.774
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	496.57
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

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

Dataset: C:\MASSLYN\New\_Exp.PRO\011810expA.qld, Time: Tue Jan 19 10:59:58 2010

Name: C:\MASSLYN\NEW\_EXP.PRO\Data\EXP0118033a

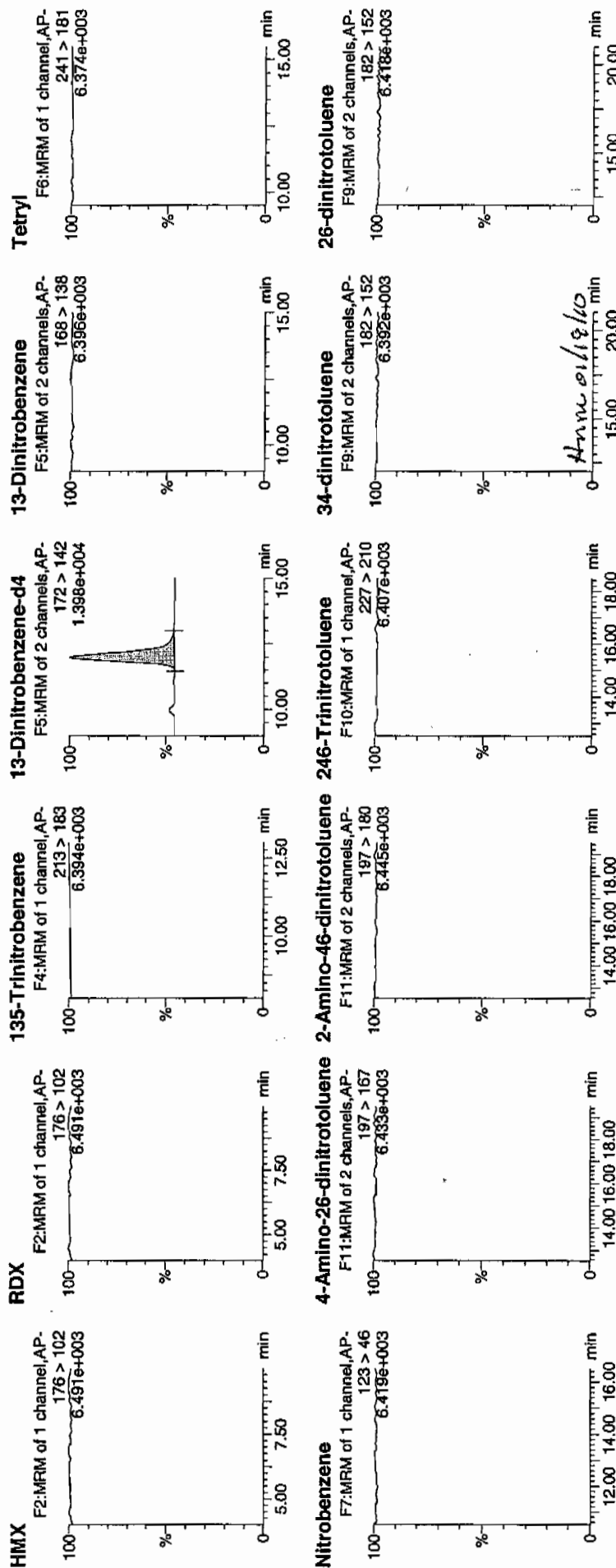
Date: 19-Jan-2010

Time: 05:47:12

ID: XIBLK05

Vial: 1:1,A

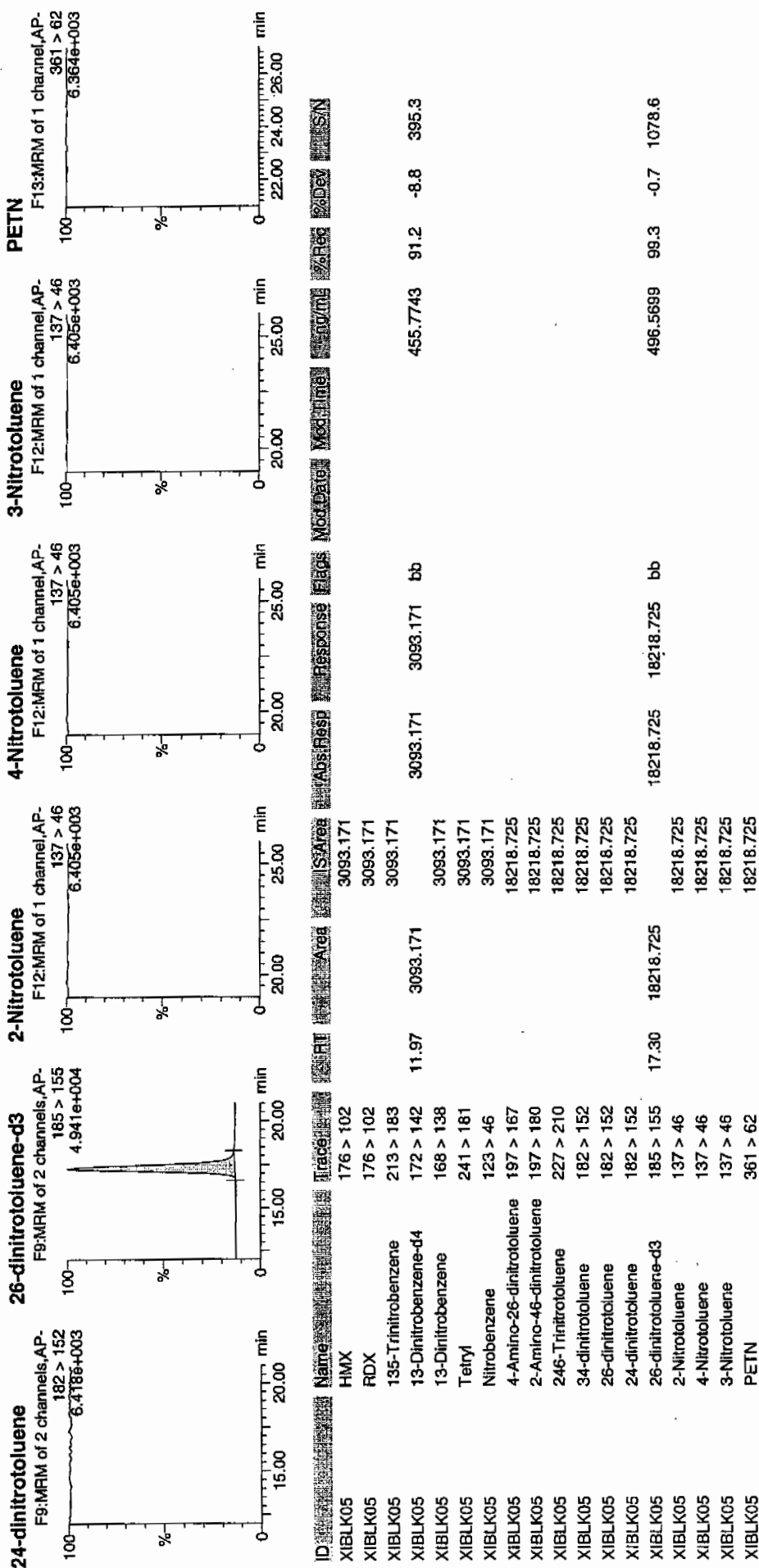
1/19/10



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

Dataset: C:\MASSLYNX\New\_Exp\PRO\011810expA.qld, Time: Tue Jan 19 10:59:58 2010





4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1160

Lab Code: GEL

Lab Sample ID: XIBLK06

Analysis Date: 19-JAN-10 09:43

GEL Data File: EXP0118041a

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	454.25
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	439.42
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

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\011810expA.qld, Time: Tue Jan 19 10:59:58 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0118041a

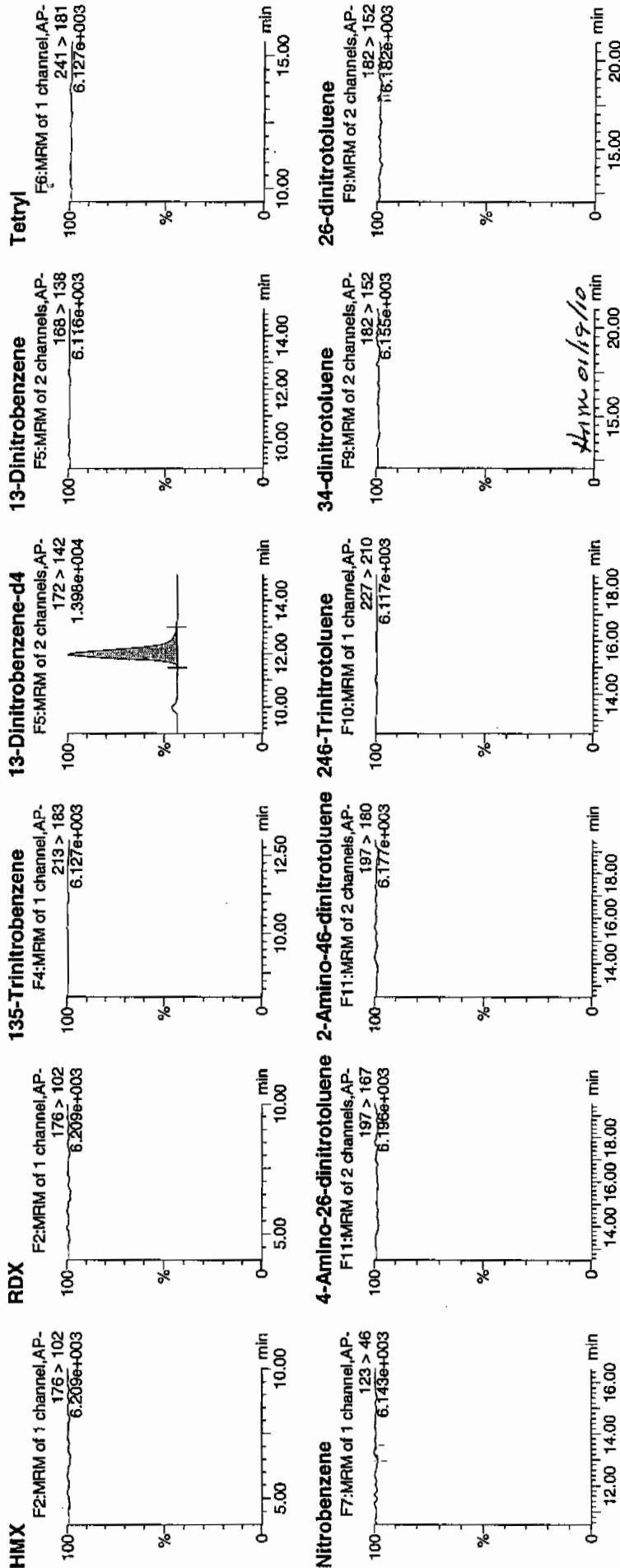
Date: 19-Jan-2010

Time: 09:43:25

ID: XIBLK06

Vial: 1:1,A

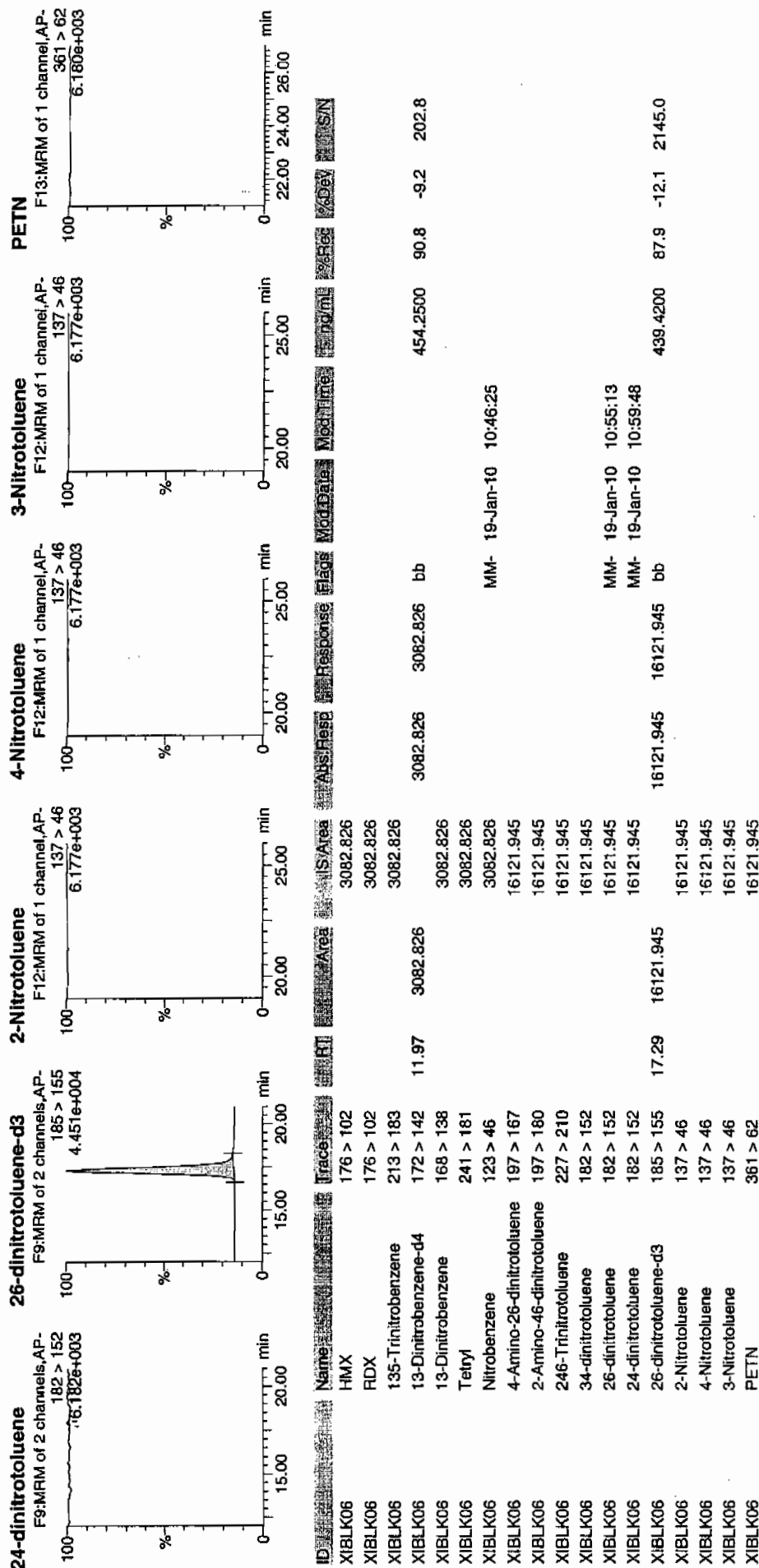
*1/19/10*



## Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\011810expA.qld, Time: Tue Jan 19 10:59:58 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1160

Lab Code: GEL

Lab Sample ID: XIBLK07

Analysis Date: 19-JAN-10 16:07

GEL Data File: EXP0118054a

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	264.495
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	292.749
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\011810expA1.qld, Time: Wed Jan 20 09:06:02 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0118054a

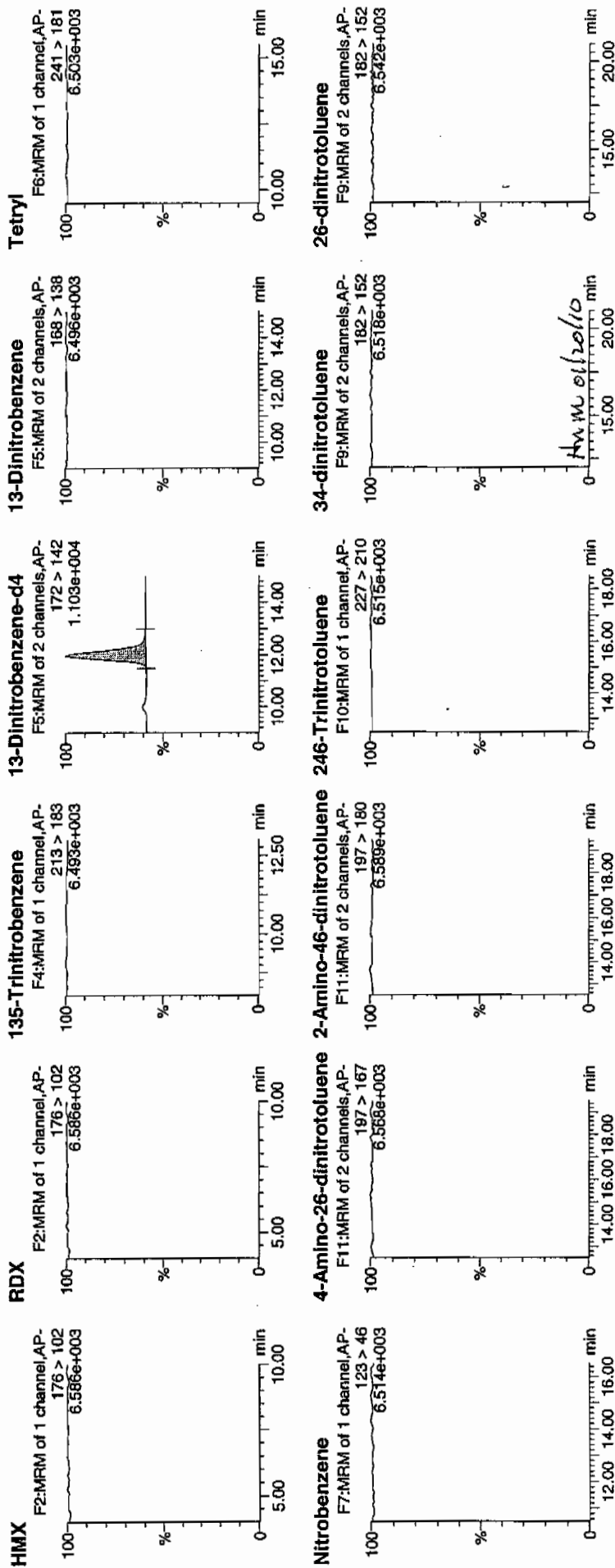
Date: 19-Jan-2010

Time: 16:07:15

ID: XIBLK07

Vial: 1:1,A

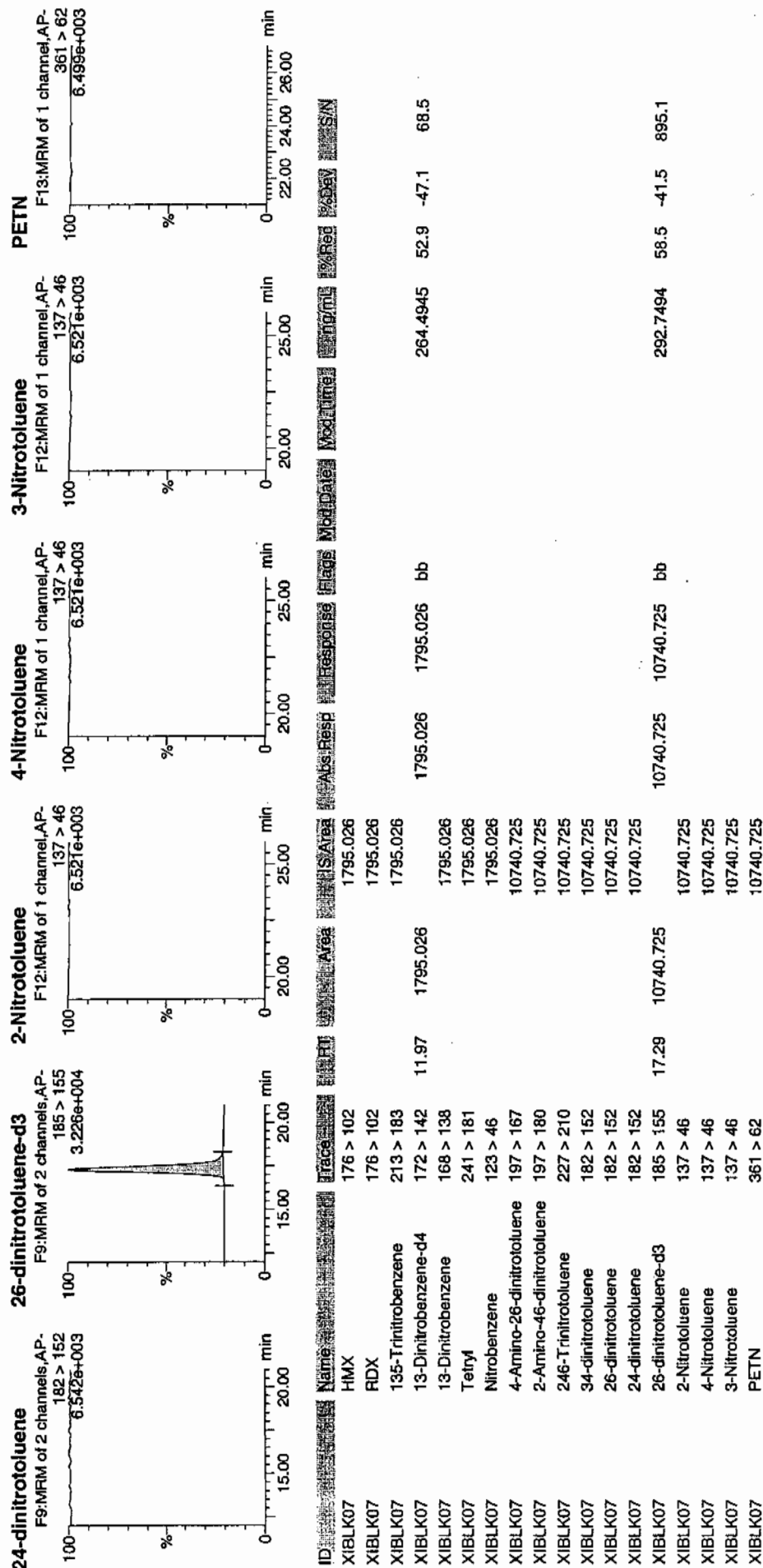
1/20/10



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

Dataset: C:\MASSLYNX\New\_Exp.PRO\011810expA1.qld, Time: Wed Jan 20 09:06:02 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1160

Lab Code: GEL

Lab Sample ID: XIBLK08

Analysis Date: 19-JAN-10 21:02

GEL Data File: EXP0118064a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	331.358
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	339.75

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\011810expA1.qld, Time: Wed Jan 20 09:06:02 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0118064a

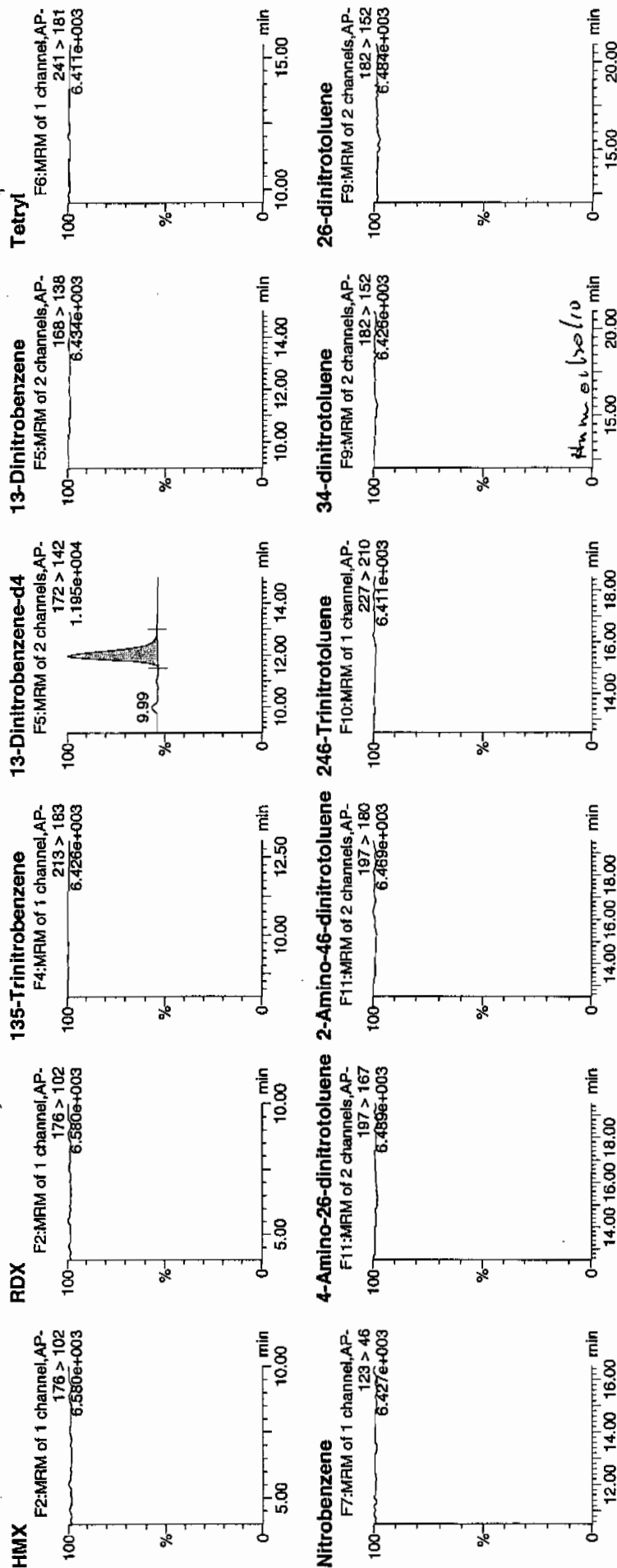
Date: 19-Jan-2010

Time: 21:02:17

ID: XIBLK08

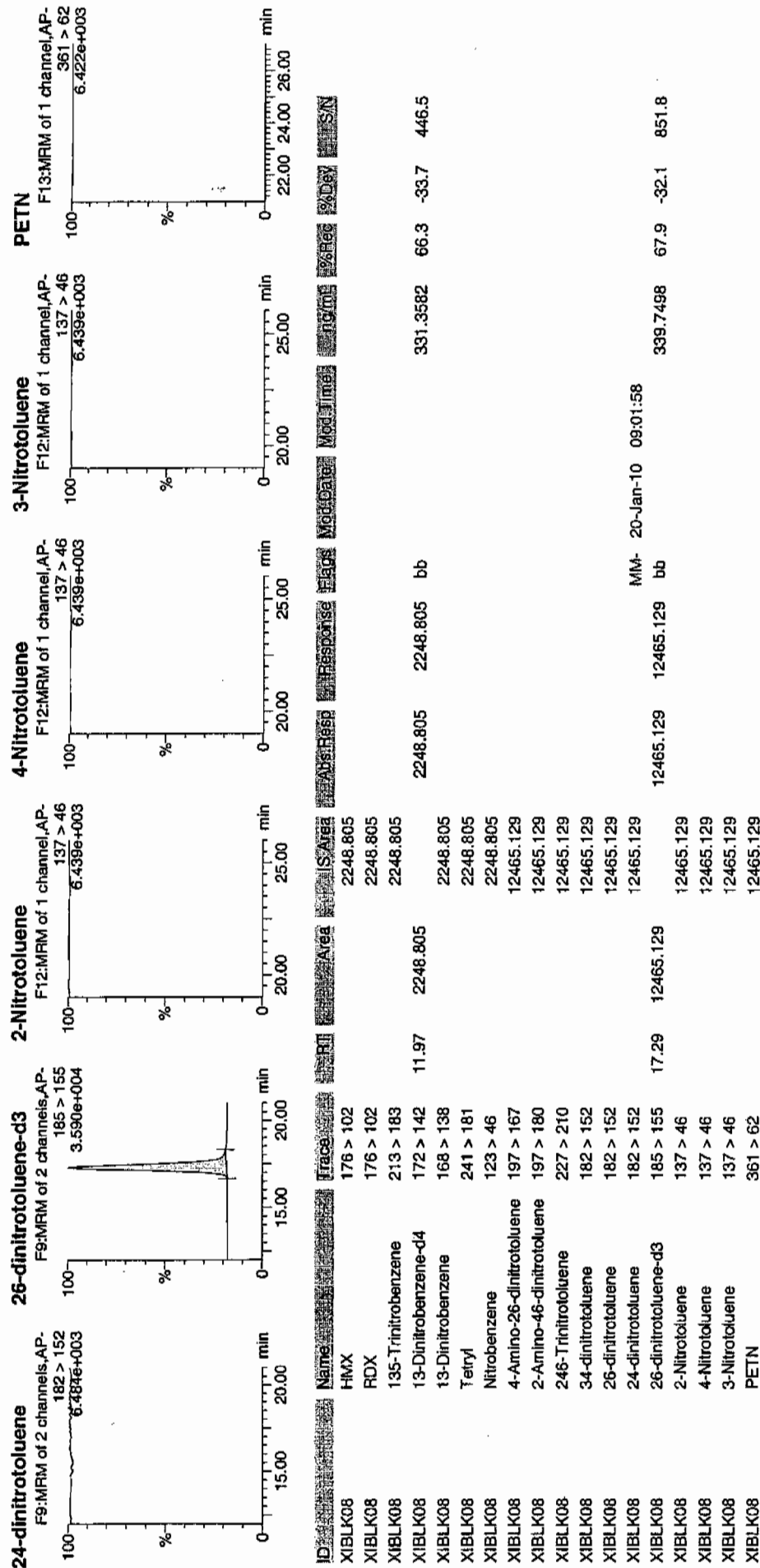
Vial: 1:1,A

1/20/10





Dataset: C:\MASSLYNX\New\_Exp.PRO\011810expA1.qld, Time: Wed Jan 20 09:06:02 2010



4A  
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1160

Lab Code: GEL

Lab Sample ID: XIBLK09

Analysis Date: 20-JAN-10 03:25

GEL Data File: EXP0118077a

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	441.686
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	409.806
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: Wed Jan 20 09:07:58 2010, Page 69 of 91

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\011810expA1.qld, Time: Wed Jan 20 09:06:02 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0118077a

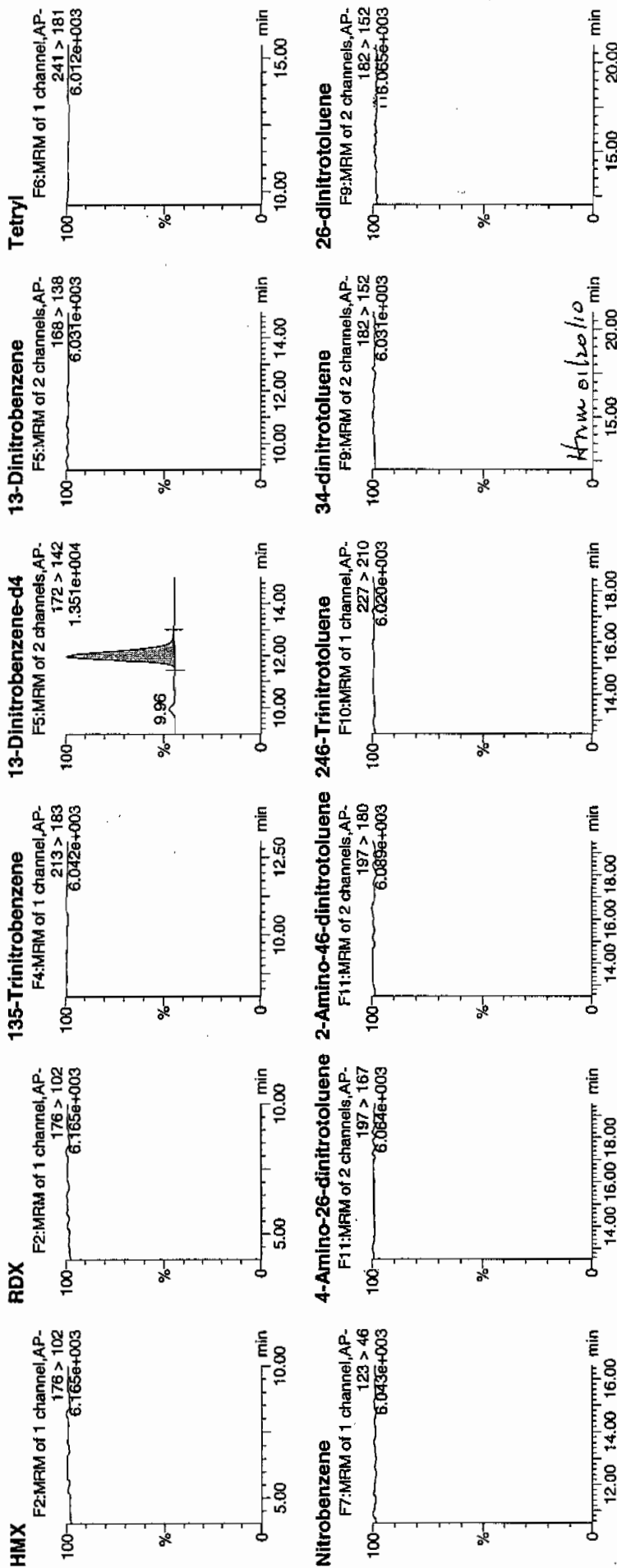
Date: 20-Jan-2010

Time: 03:25:38

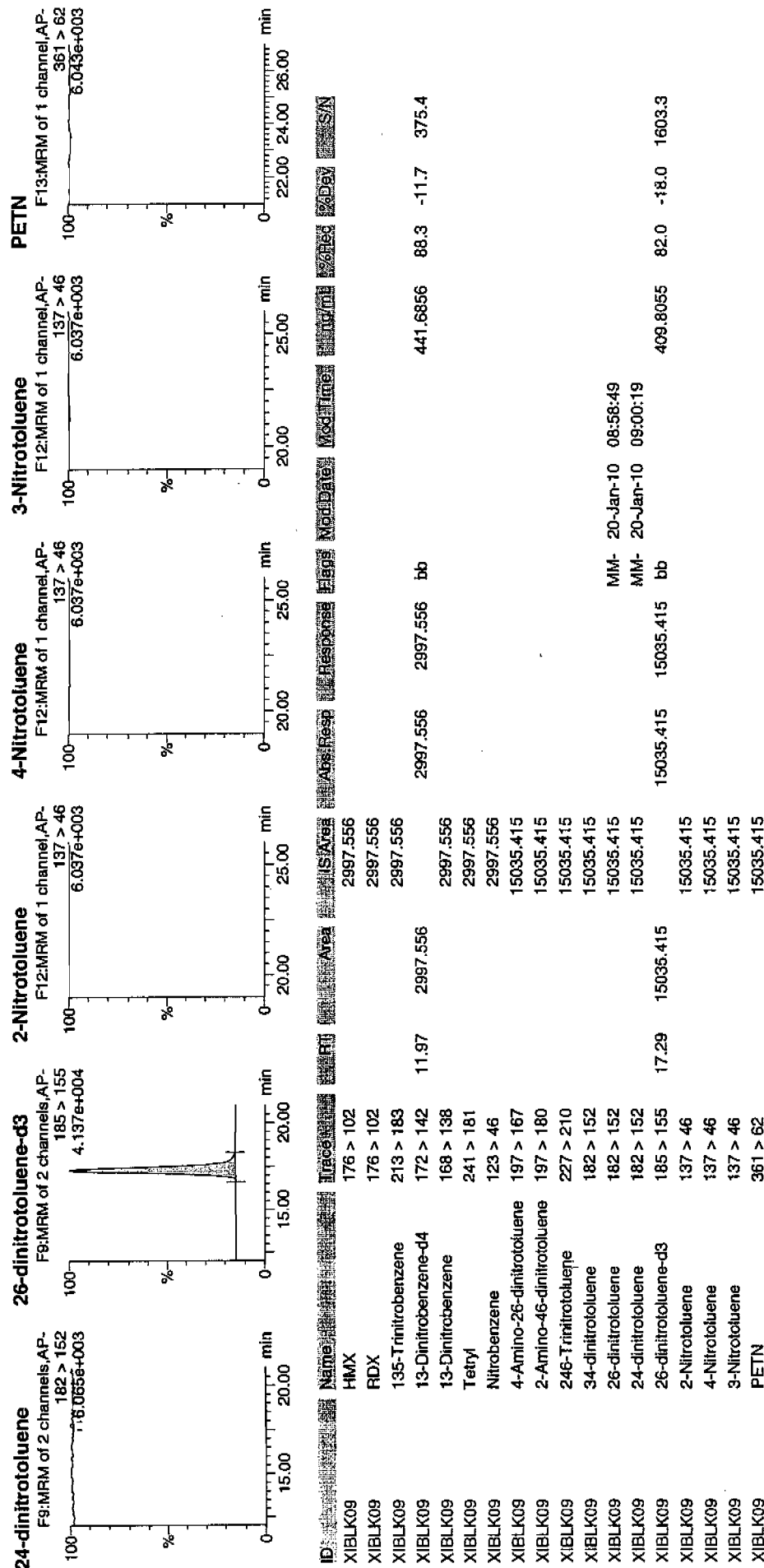
ID: XIBLK09

Vial: 1:1,A

1/20/10



Dataset: C:\MASSLYNX\New\_Exp.PRO\011810expA1.qld, Time: Wed Jan 20 09:06:02 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1160

Lab Code: GEL

Lab Sample ID: XIBLK02

Analysis Date: 19-JAN-10 16:35

GEL Data File: EXS01190010.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	.0504
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

dan 120110

Sample Name: "XBL002" Sample ID: "HLEF" File: "EXS01190010.wif"

Peak Name: "55-Diverting" Mass(es): "162.046.0 amu"

Comment: "LCMSXP\_B" Annotation: "

Sample Index: 1

Sample Type: Unknown

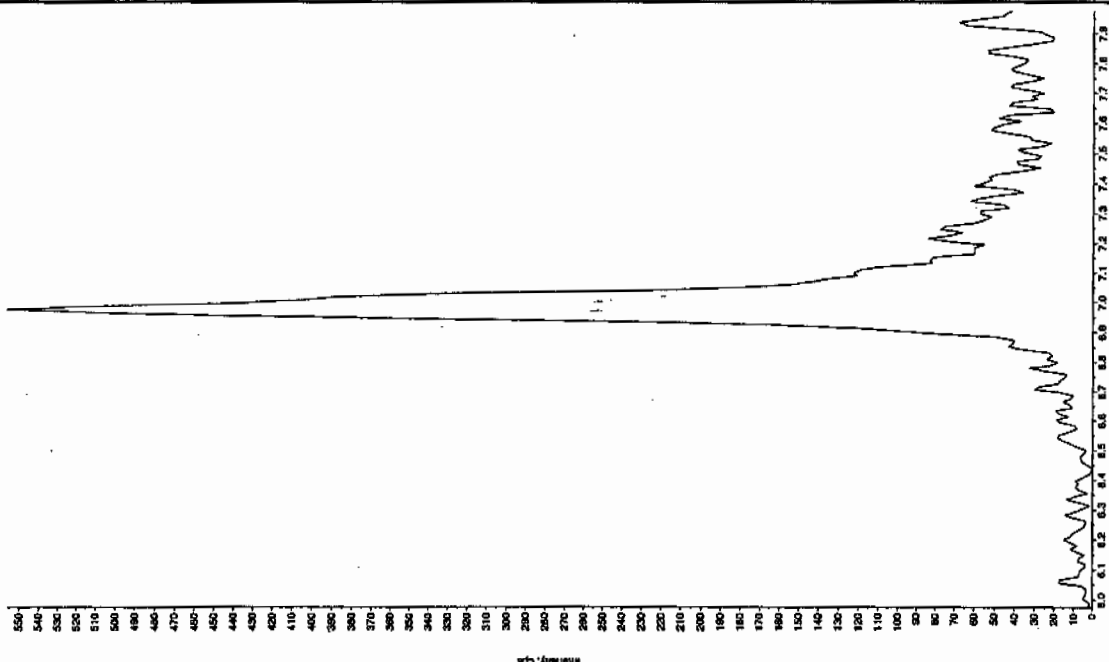
Concentration: 0.00 ng/mL

Calculated Conc: 1/19/2010

Acq. Date: 4:35:36 PM

Acq. Time: No

Modified: No



Sample Name: "XBL002" Sample ID: "HLEF" File: "EXS01190010.wif"

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

Comment: "LCMSXP\_B" Annotation: "

Sample Index: 1

Sample Type: Unknown

Concentration: 0.00 ng/mL

Calculated Conc: 1/19/2010

Acq. Date: 4:35:36 PM

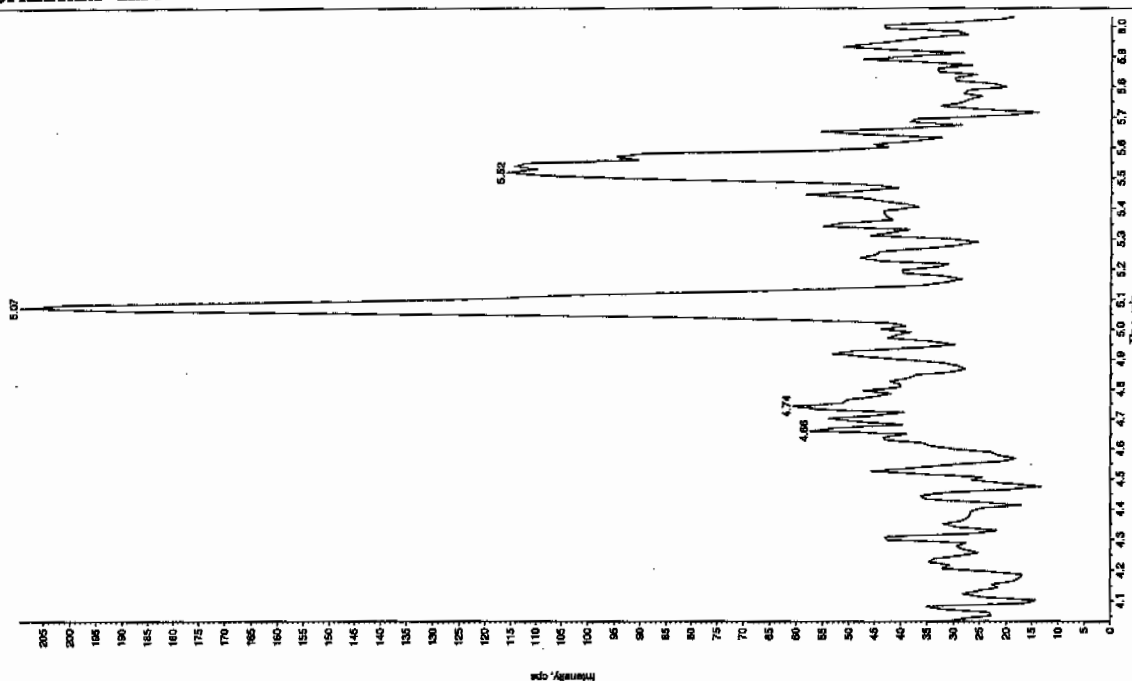
Acq. Time: No

Modified: No

dan 120110

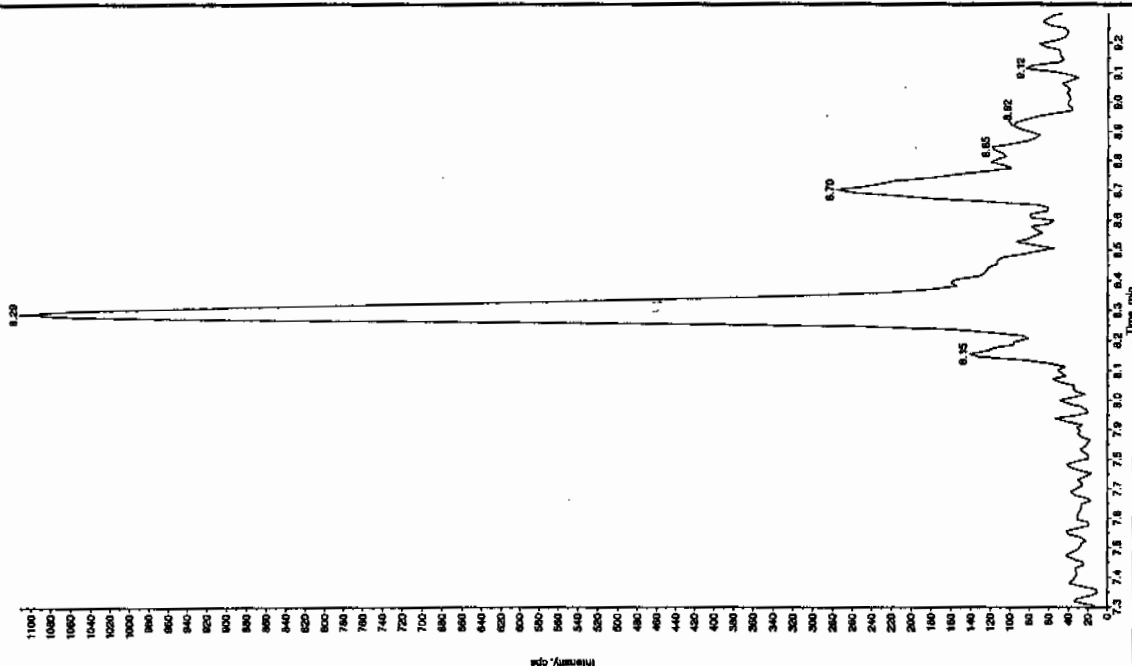
Sample Name: "XBLK02" Sample ID: "11LEP" File: "EXS01160010.wif"  
 Peak Name: "26-Dinitro-4-nitrotoluene" Mass(es): "186.046.0 amu"  
 Comment: "LDMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/19/2010  
 Acq. Time: 4:35:16 PM  
 Modified: No



Sample Name: "XBLK02" Sample ID: "11LEP" File: "EXS01160010.wif"  
 Peak Name: "34-Dinitrotoluene" Mass(es): "162.171.8 amu"  
 Comment: "LDMSEXP\_B" Annotation: ""

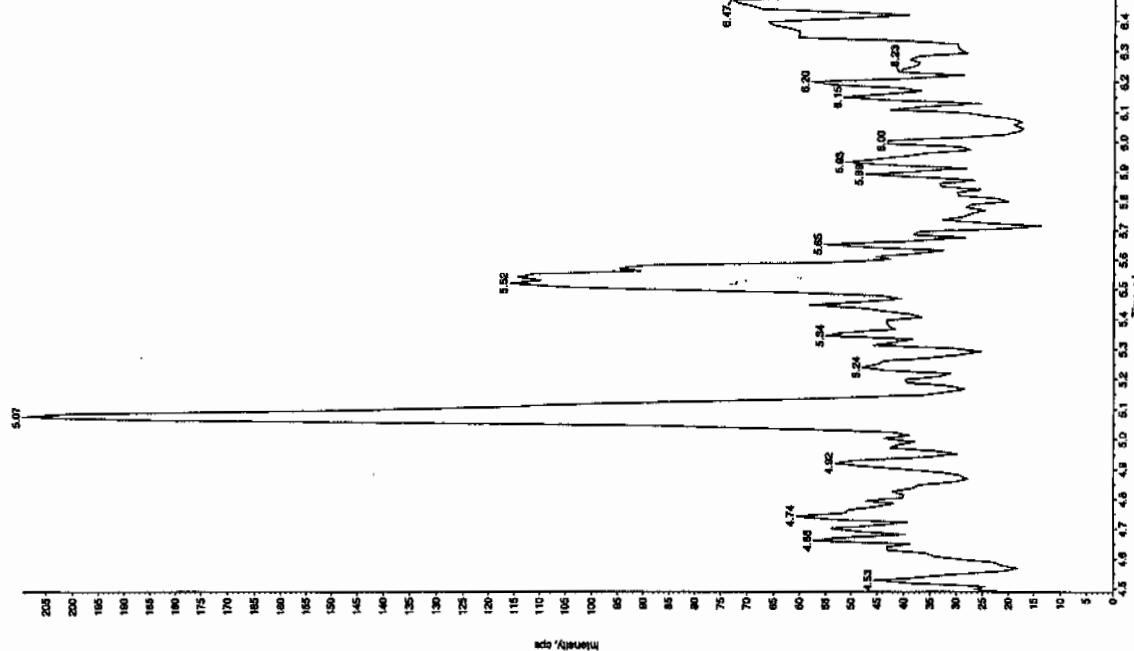
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/19/2010  
 Acq. Time: 4:35:16 PM  
 Modified: No



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

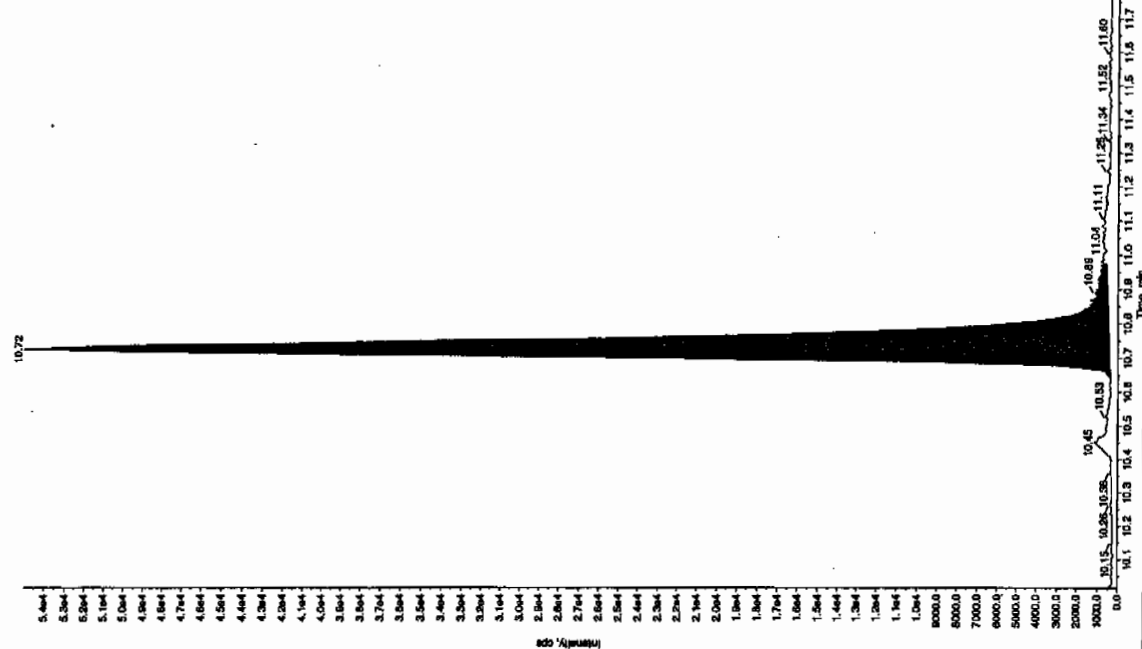
Sample Name: "XBLK02" Sample ID: "HILLER" File: "EXSD1190010.wif"  
 Peak Name: "24-Chloro-5-nitrobenzoate" Mass(es): 165.046.0 amu  
 Comment: "LCMS/EXP\_B" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/19/2010  
 Acq. Time: 4:35:36 PM  
 Modified: No



Sample Name: "XBLK02" Sample ID: "HILLER" File: "EXSD1190010.wif"  
 Peak Name: "10-(3-chloro-5-nitrophenyl)phenol" Mass(es): 358.191.0 amu  
 Comment: "LCMS/EXP\_B" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.0504 ng/mL  
 Acq. Date: 1/19/2010  
 Acq. Time: 4:35:36 PM  
 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: 10.6 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.7 min  
 Area: 2.07e+005 counts  
 Height: 54561.787 cps  
 Start Time: 10.6 min  
 End Time: 11.0 min





4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1160

Lab Code: GEL

Lab Sample ID: XIBLK03

Analysis Date: 19-JAN-10 17:07

GEL Data File: EXS01190012.wiff

Instrument ID: LCMSMS

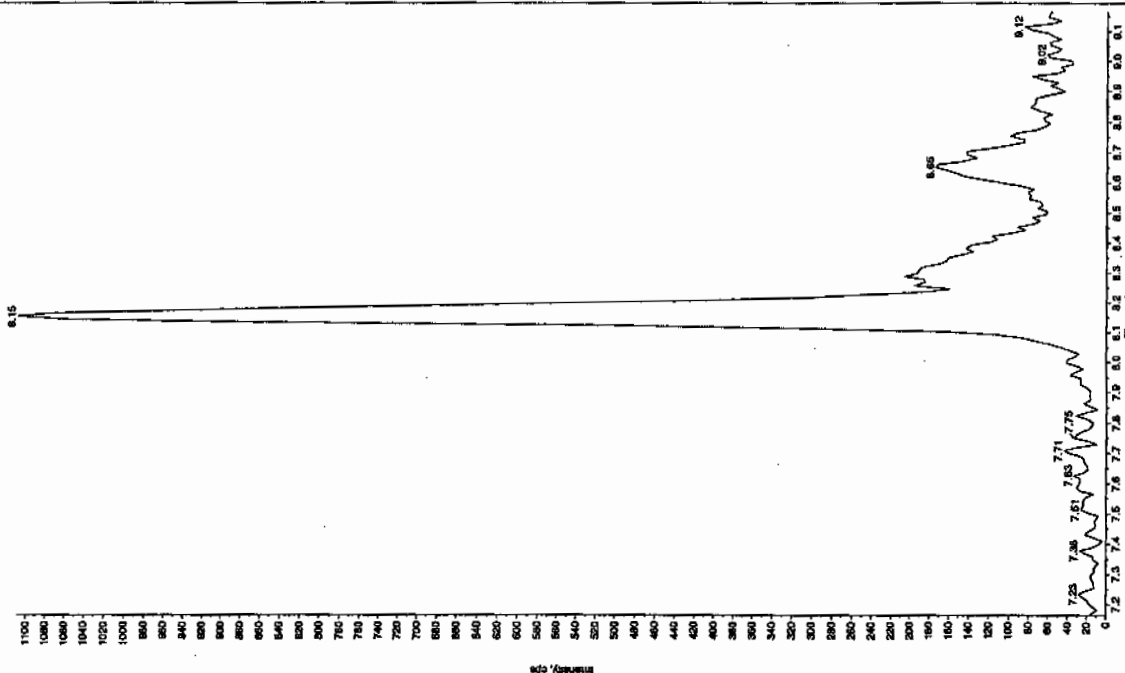
Column: Phenomenex Ultracarb 5u ODS(20)

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

Dec 1/20/10

Sample Name: "XELK03" Sample ID: "T1LER" File: "EX501190012.wif"  
 Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"  
 Comment: "LCMSEXP\_9" Annotation: "

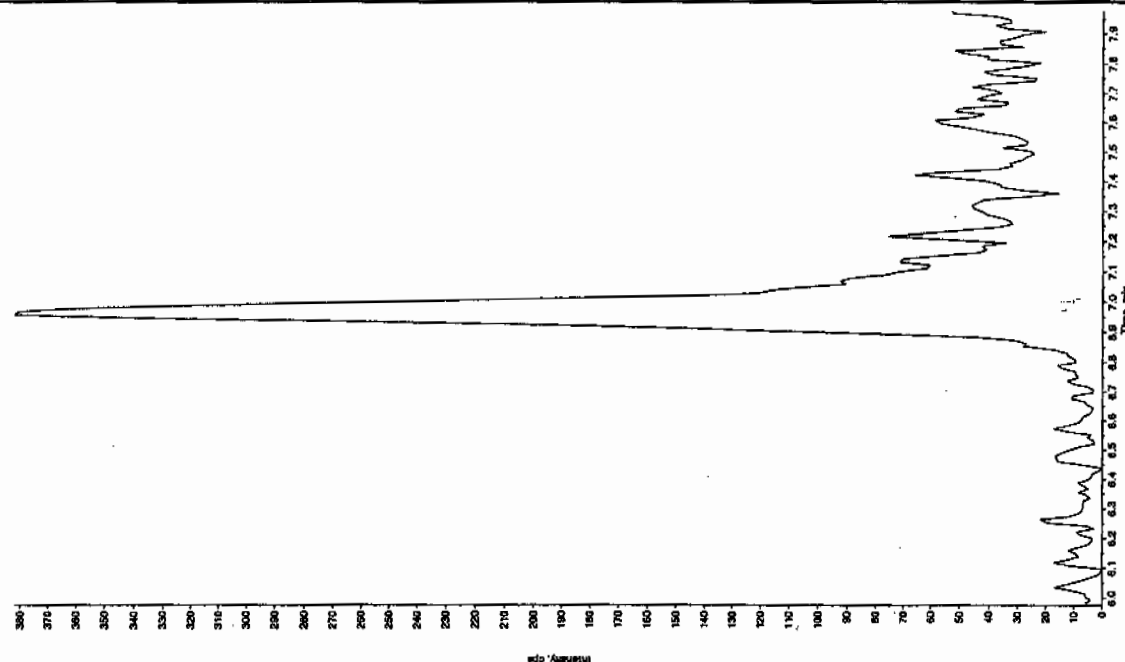
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/19/2010  
 Acq. Time: 5:07:00 PM  
 Modified: No



4/11/10 1/20/10

Sample Name: "XELK03" Sample ID: "T1LER" File: "EX501190012.wif"  
 Peak Name: "TATB" Mass(es): "257.2204.9 amu"  
 Comment: "LCMSEXP\_B" Annotation: "

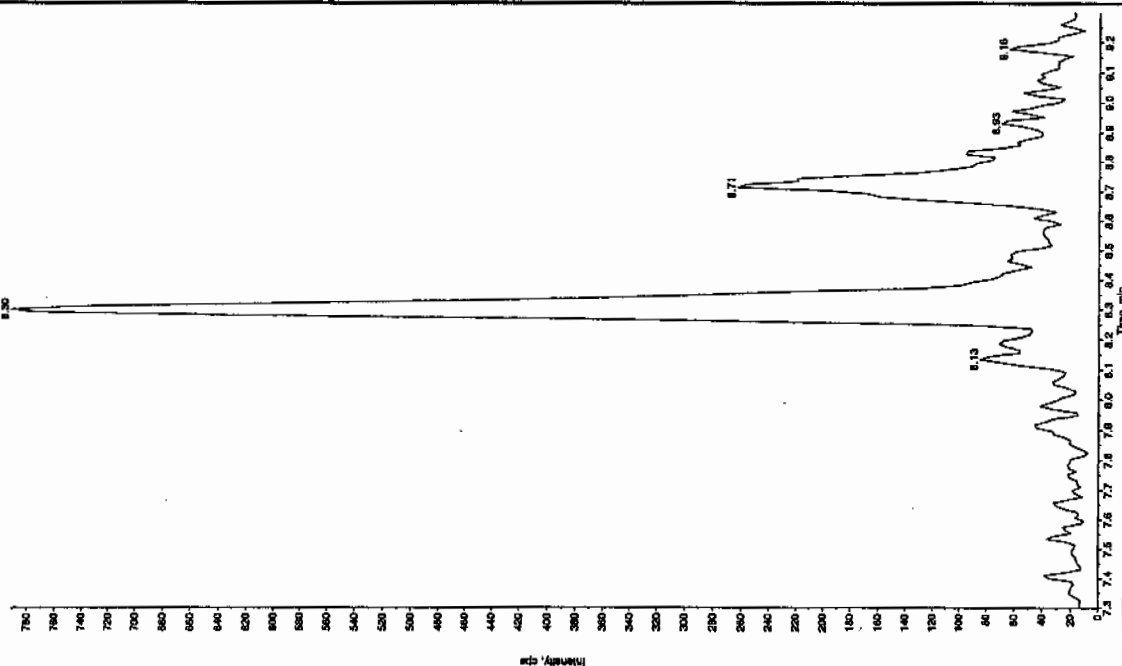
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/19/2010  
 Acq. Time: 5:07:00 PM  
 Modified: No



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

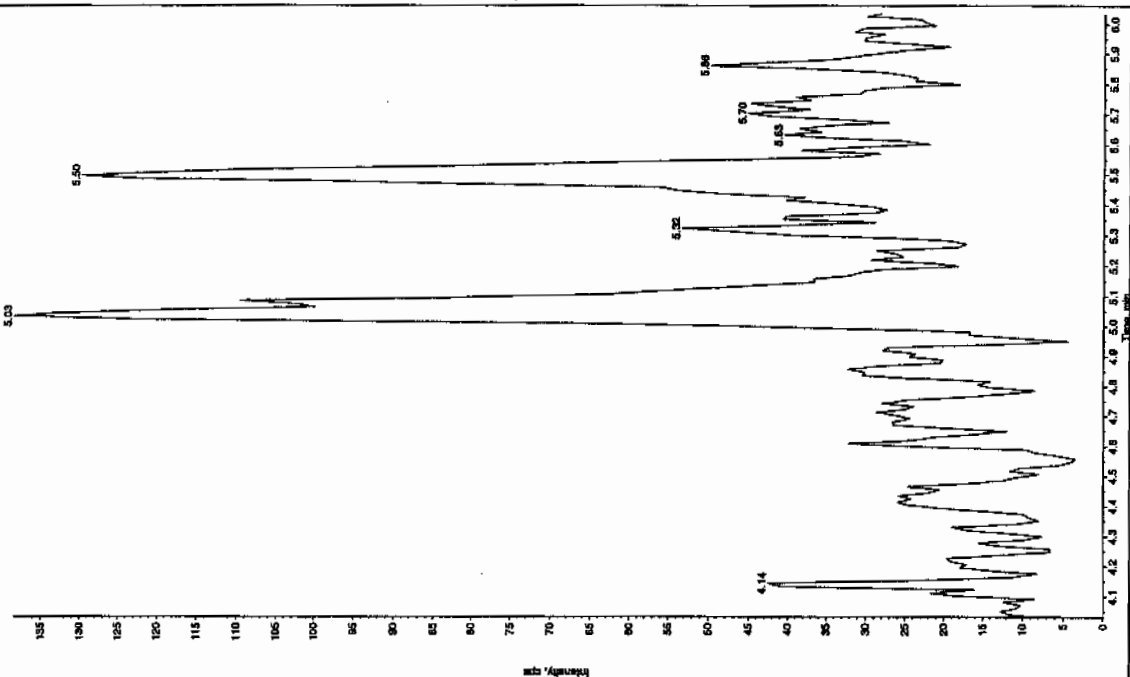
Sample Name: "XIBLK03" Sample ID: "1111ER" File: "EXS01190012.wif"  
 Peak Name: "34-Chloroketone" Mass(es): "162.1751.9 amu"  
 Comment: "LCMSXP\_B" Annotation: "1"

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 1/19/2010  
 Acq. Date: 5:07:00 PM  
 Modified: No



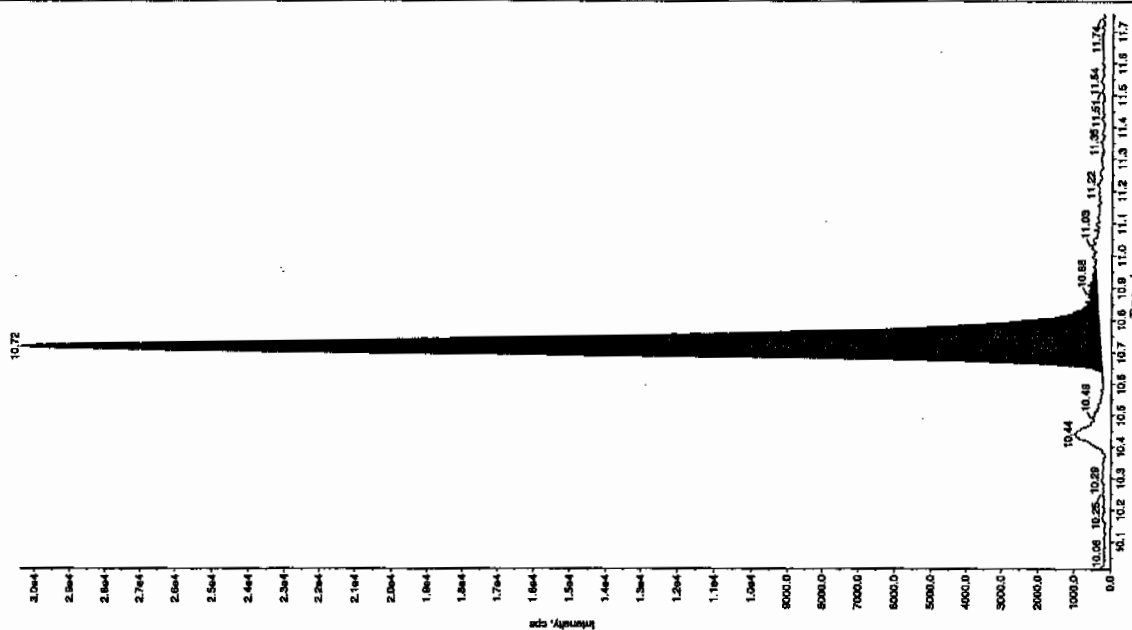
Sample Name: "XIBLK03" Sample ID: "1111ER" File: "EXS01190012.wif"  
 Peak Name: "26-Diamino-4-nitrofluorene" Mass(es): "166.046.0 amu"  
 Comment: "LCMSXP\_B" Annotation: "1"

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 1/19/2010  
 Acq. Date: 5:07:00 PM  
 Modified: No



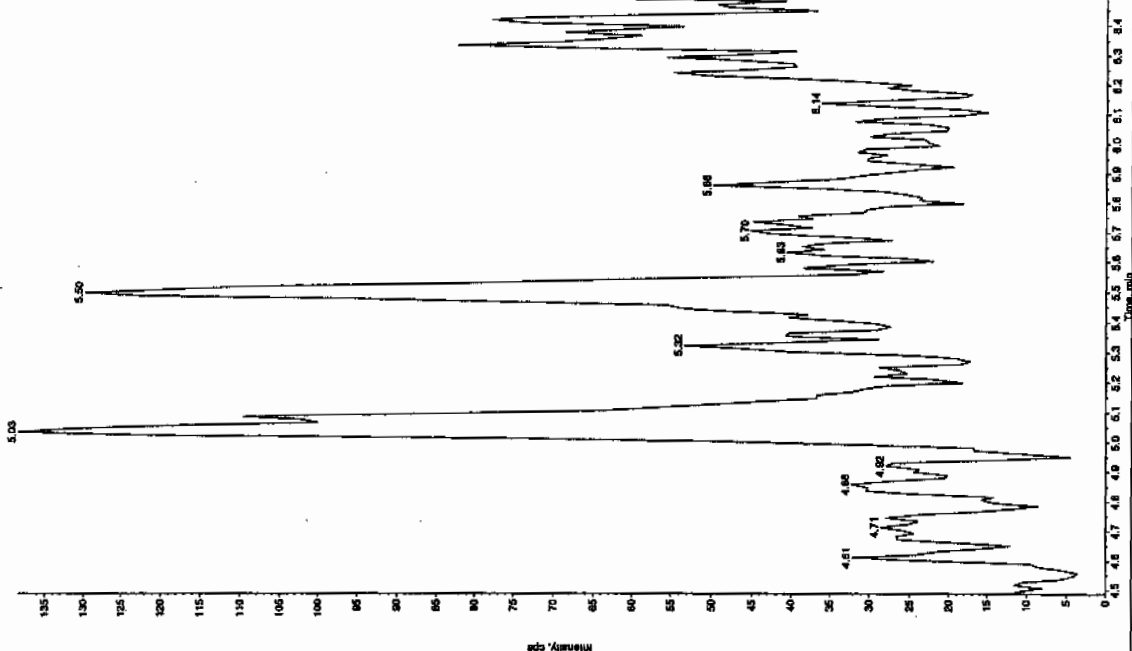
Sample Name: "XBLK03" Sample ID: "JILER" File: "EX01190012.wif"  
 Peak Name: "bis(2-oxo-1-phenylethyl) phosphine" Mass(es): "369.191.0 amu"  
 Comment: "LCMS-EXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: N/A  
 Acq. Date: 1/18/2010  
 Acq. Time: 5:07:00 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IGA  
 Min. Peak Height: 1.00e4 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 10.8 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.7 min  
 Area: 1.20e+005 counts  
 Height: 30105.431 cps  
 Start Time: 10.6 min  
 End Time: 11.0 min



Sample Name: "XBLK03" Sample ID: "JILER" File: "EX01190012.wif"  
 Peak Name: "24-Diamino-6-nitrothiophene" Mass(es): "166.046.0 amu"  
 Comment: "LCMS-EXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 1/18/2010  
 Acq. Date: 5:07:00 PM  
 Modified: No



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

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1160

Lab Code: GEL

Lab Sample ID: XIBLK04

Analysis Date: 19-JAN-10 18:25

GEL Data File: EXS01190017.wiff

Instrument ID: LCMSMS

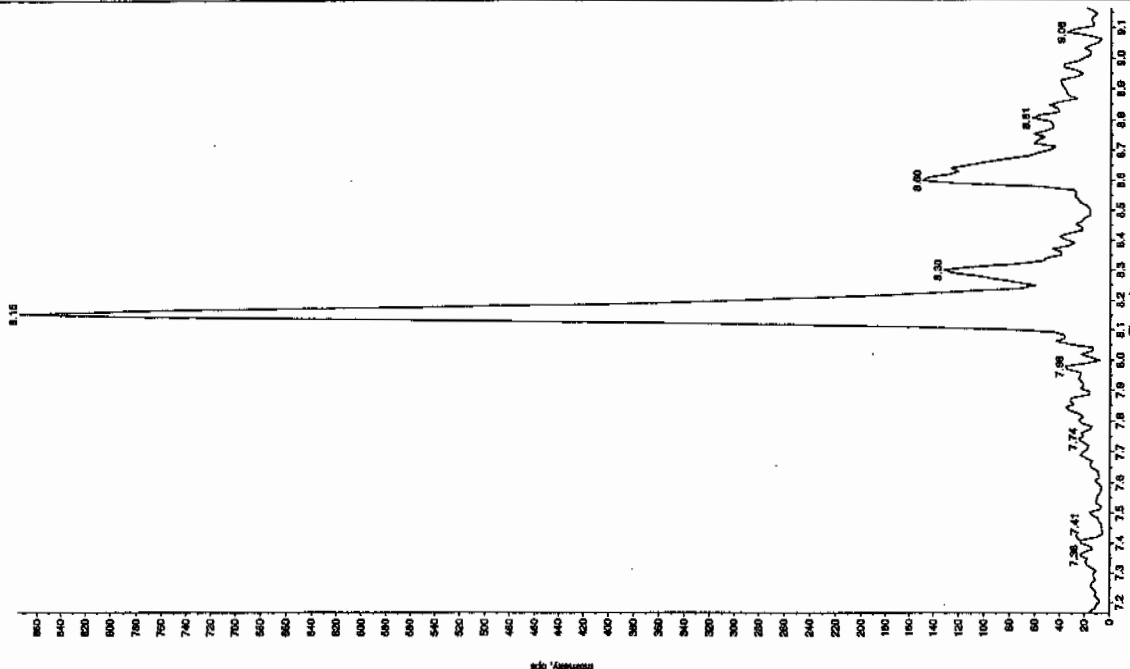
Column: Phenomenex Ultracarb 5u ODS(20)

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

Star 1/20/10

Sample Name: "XIBLX04" Sample ID: "111ER" File: "EXS01190017.will"  
 Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: "

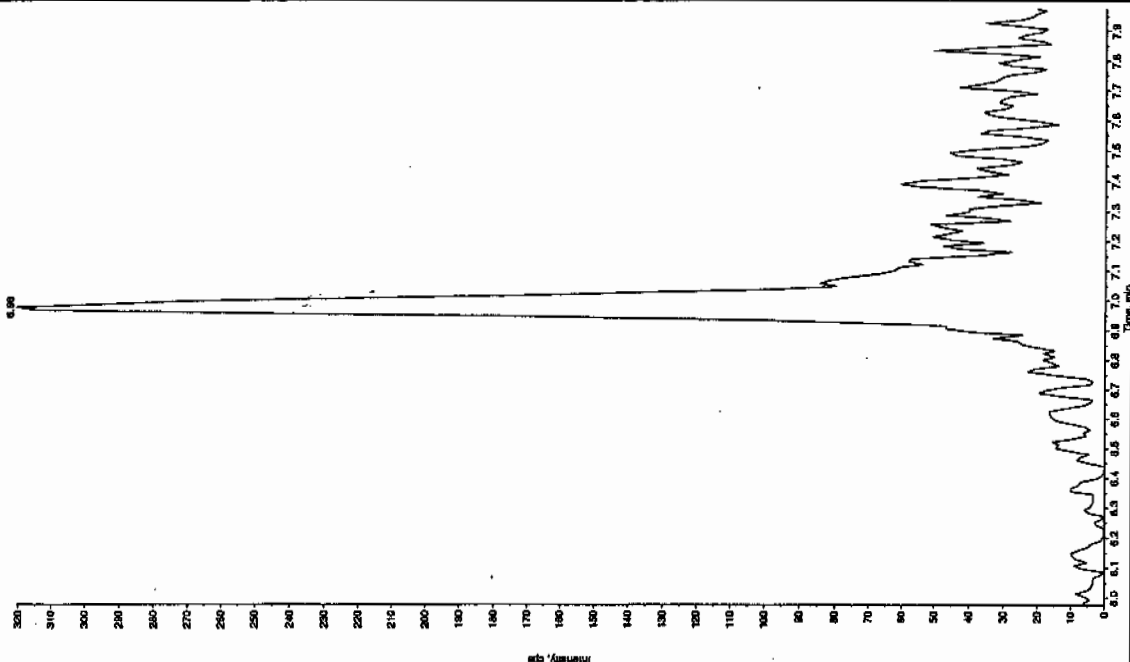
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 mg/mL  
 Acq. Date: 1/19/2010  
 Acq. Time: 6:25:34 PM  
 Modified: No



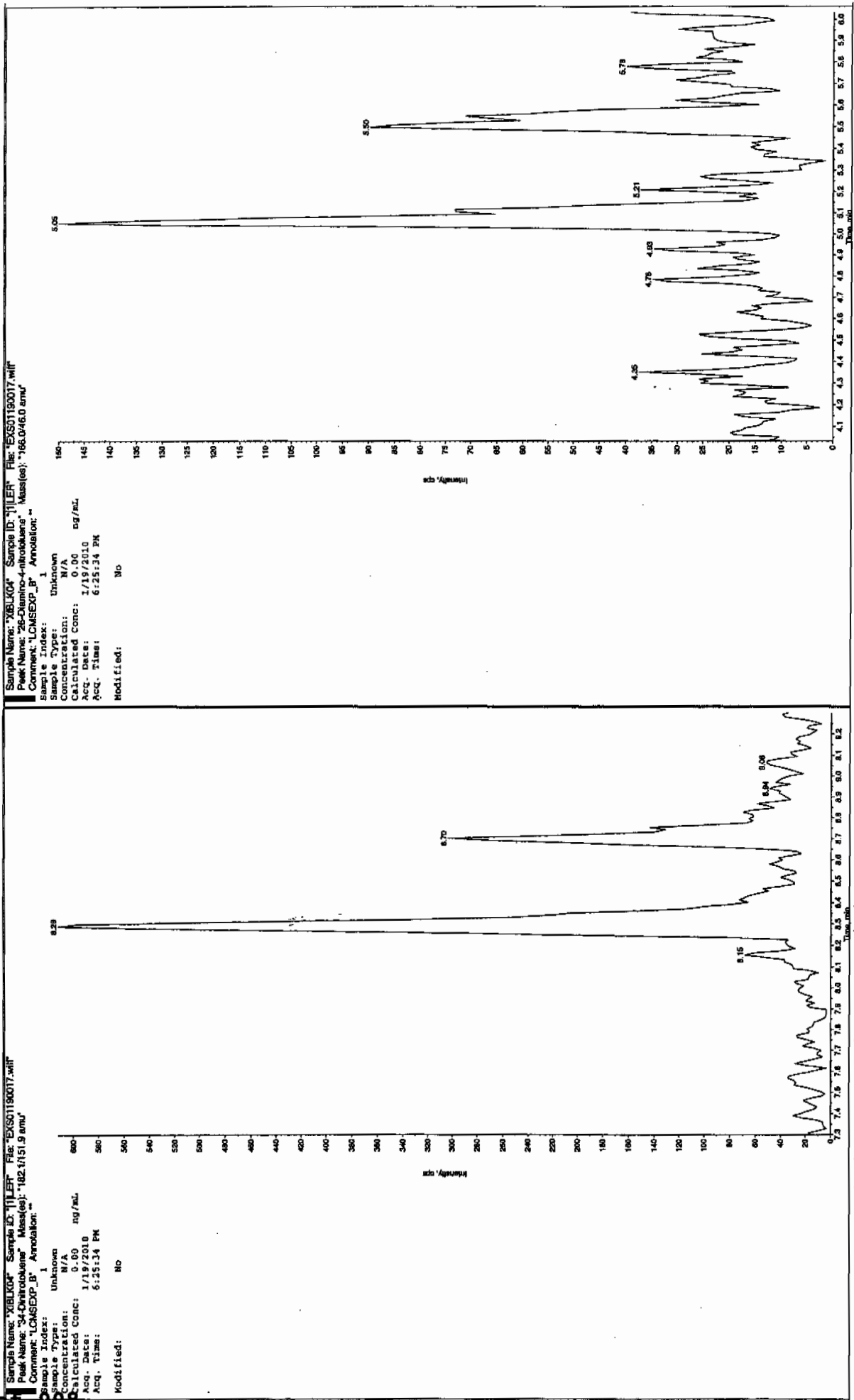
Star 1/20/10

Sample Name: "XIBLX04" Sample ID: "111ER" File: "EXS01190017.will"  
 Peak Name: "TATB" Mass(es): "257.2204.9 amu"  
 Comment: "LCMSEXP\_B" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 mg/mL  
 Acq. Date: 1/19/2010  
 Acq. Time: 6:25:34 PM  
 Modified: No



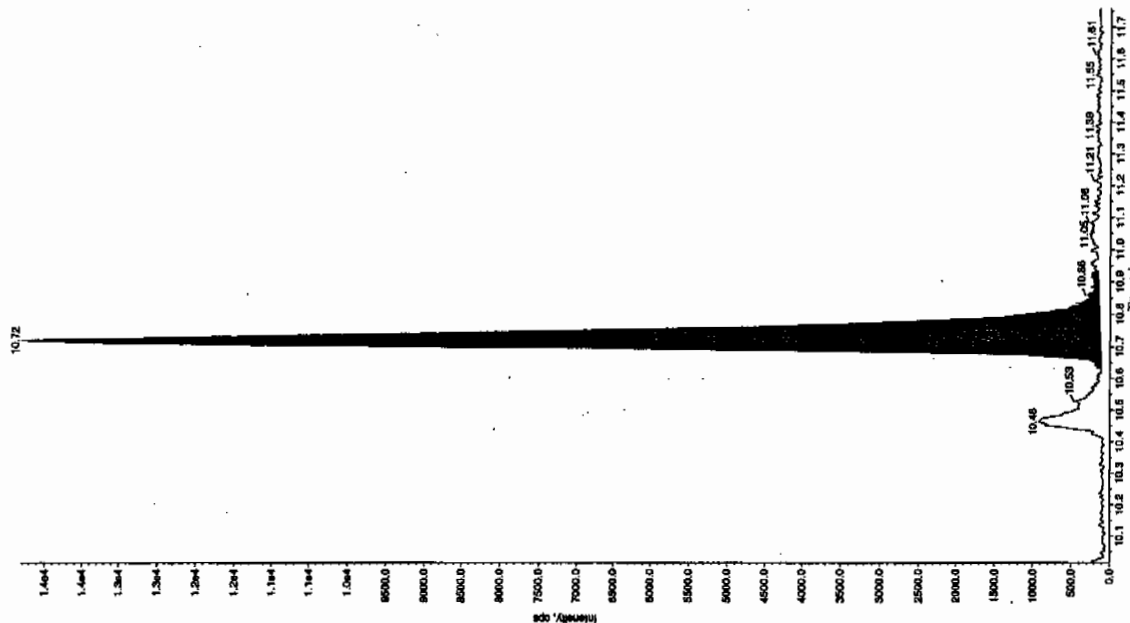
\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



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

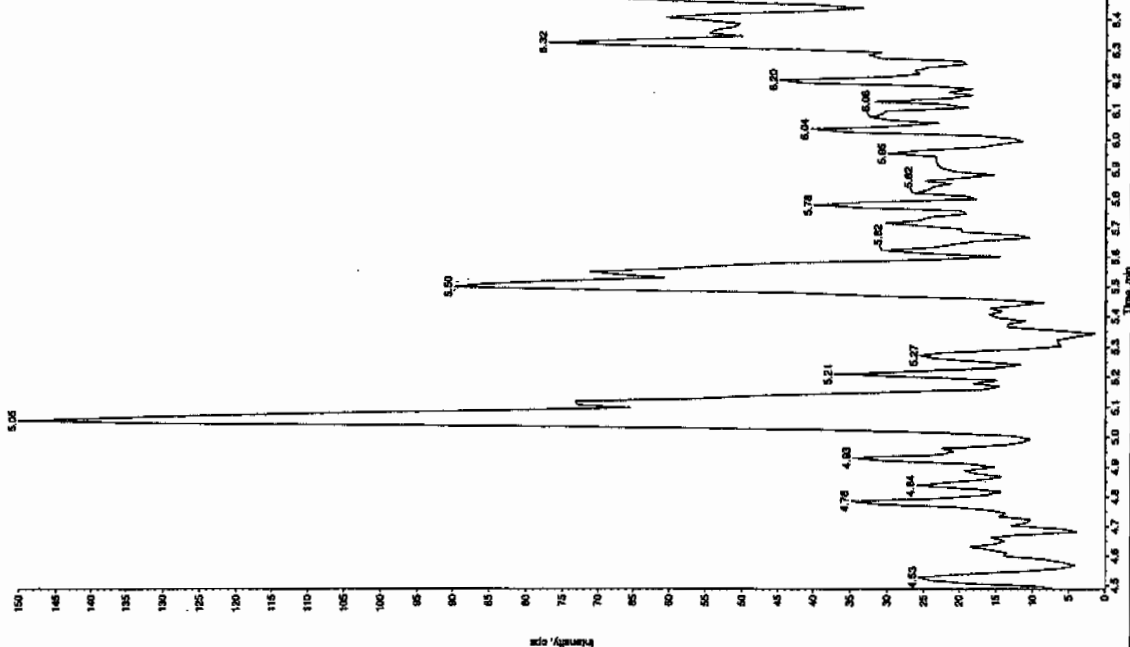
Sample Name: "XBLK04" Sample ID: "T11L1" File: "EXSD119017.wif"  
 Peak Name: "Vib(oxazol) phosphate" Mass(es): "358.191.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: No Intercept  
 Acq. Date: 1/19/2010  
 Acq. Time: 6:25:34 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 1.00e4 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 10.8 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.7 min  
 Area: 5.36e+004 counts  
 Height: 14170.783 cps  
 Start Time: 10.6 min  
 End Time: 10.9 min



Sample Name: "XBLK04" Sample ID: "T11L1" File: "EXSD119017.wif"  
 Peak Name: "24-Diamino-6-nitrocholine" Mass(es): "166.04610 amu"  
 Comment: "LCMSEXP\_B" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/19/2010  
 Acq. Time: 6:25:34 PM  
 Modified: No



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSEXP#4



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1160

Lab Code: GEL

Lab Sample ID: XIBLK05

Analysis Date: 19-JAN-10 20:15

GEL Data File: EXS01190024.wiff

Instrument ID: LCMSMS

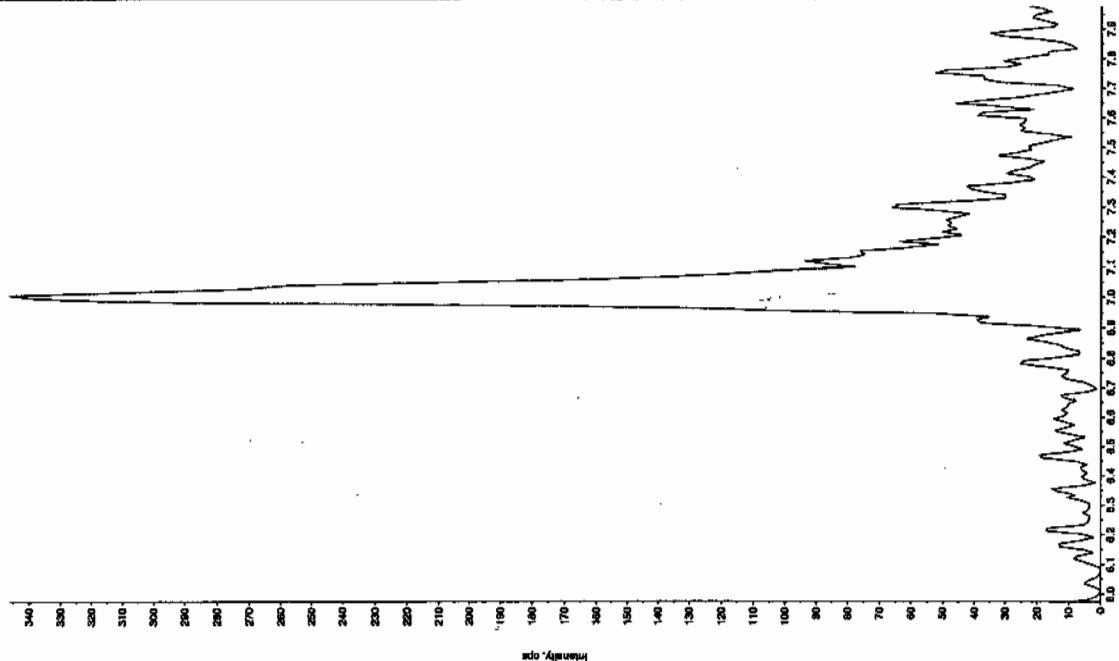
Column: Phenomenex Ultracarb 5u ODS(20)

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

dan 12/20/10

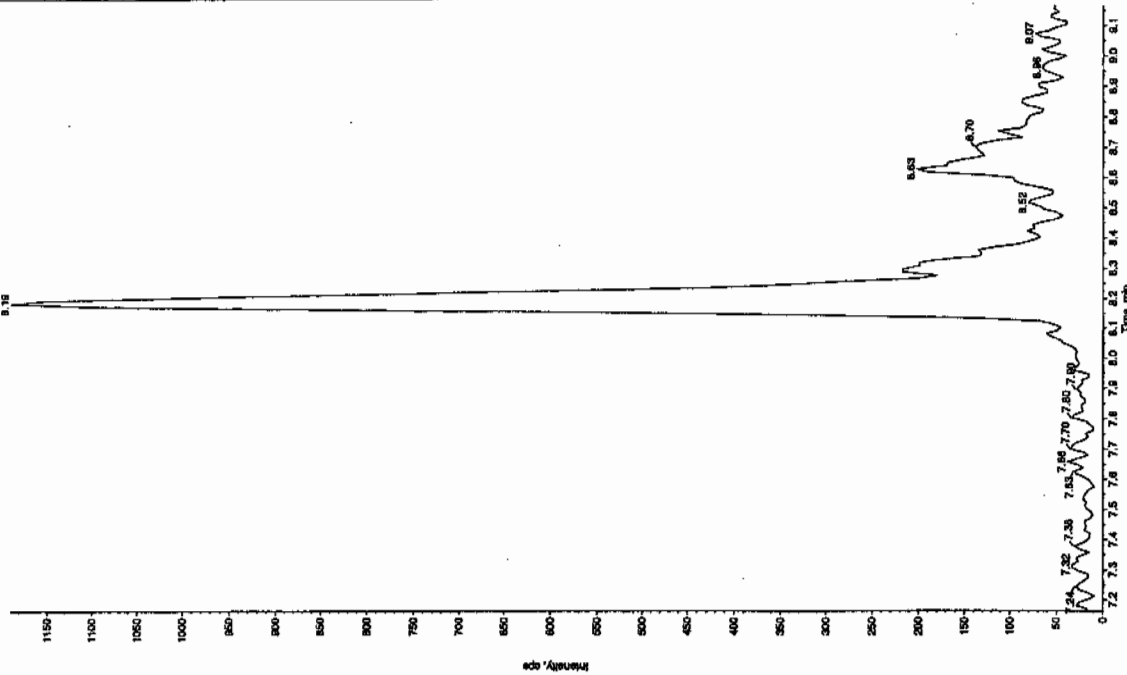
Sample Name: "XIEL005" Sample ID: "TILERY" File: "EX501190024.wif"  
 Peak Name: "TAD" Mass(es): "257.2224.3 amu"  
 Comment: "LCMSXP\_B" Annotation: "1"

Sample Index: Unknown  
 Sample Type: N/A  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 1/19/2010  
 Acq. Date: 8:15:29 PM  
 Acq. Time: 8:15:29 PM  
 Modified: No



Sample Name: "XIEL005" Sample ID: "TILERY" File: "EX501190024.wif"  
 Peak Name: "35-Chlorophyll" Mass(es): "182.045.0 amu"  
 Comment: "LCMSXP\_B" Annotation: "1"

Sample Index: Unknown  
 Sample Type: N/A  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 1/19/2010  
 Acq. Date: 8:15:29 PM  
 Acq. Time: 8:15:29 PM  
 Modified: No



dan 01/20/10

Sample Name: "XBLK05" Sample ID: "T11EF" File: "EX501190024.wif"

Peak Name: "24-Dihydroxy-4-methylpentane" Mass(es): "160.0460 amu"

Comment: "LCMSXP\_B" Annotation: "

Sample Index: 1

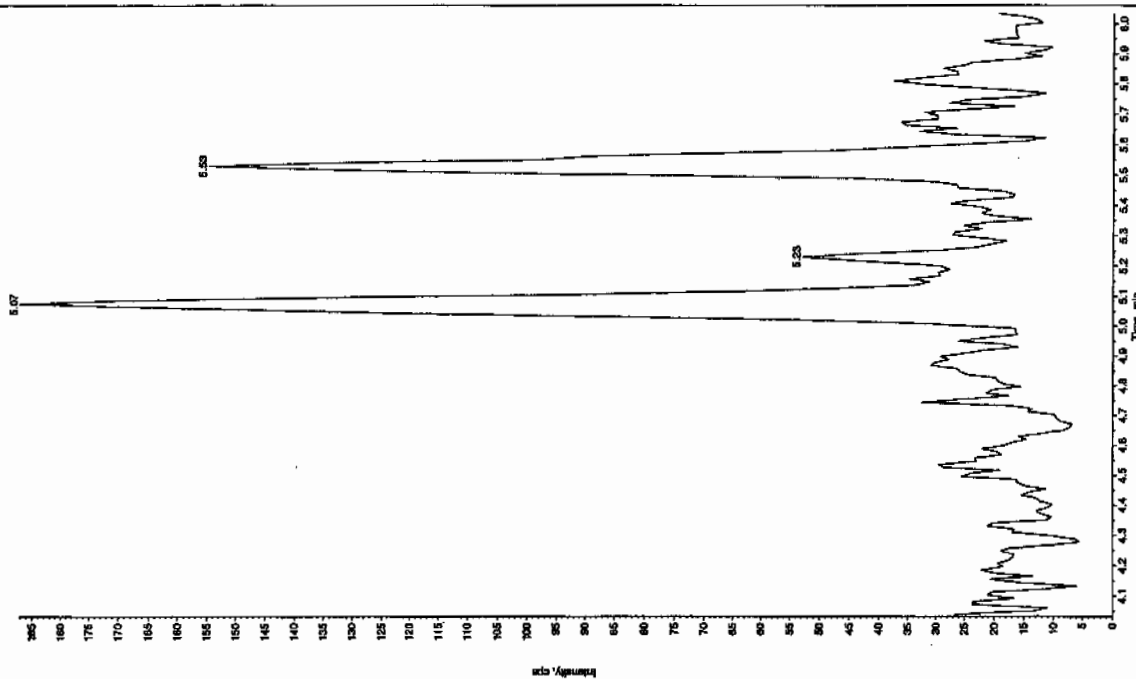
Sample Type: Unknown

Concentration: 0.00 ng/mL

Acq. Date: 1/19/2010

Acq. Time: 8:15:29 PM

Modified: No



Sample Name: "XBLK05" Sample ID: "T11EF" File: "EX501190024.wif"

Peak Name: "24-Dihydroxy-4-methylpentane" Mass(es): "162.11519 amu"

Comment: "LCMSXP\_B" Annotation: "

Sample Index: 1

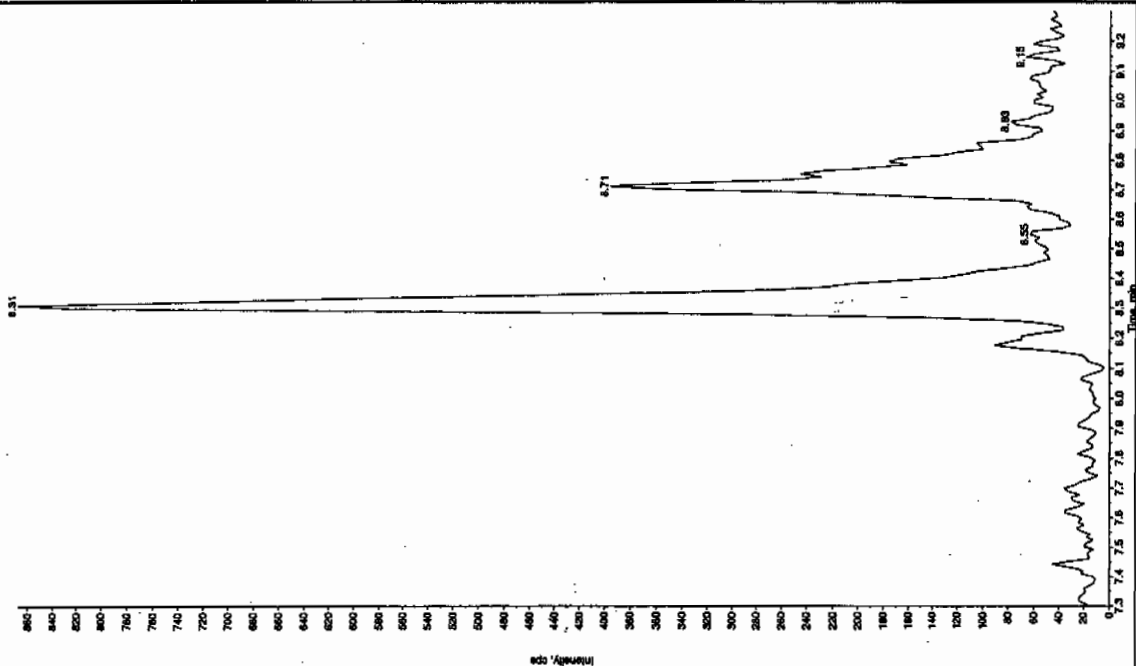
Sample Type: Unknown

Concentration: 0.00 ng/mL

Acq. Date: 1/19/2010

Acq. Time: 8:15:29 PM

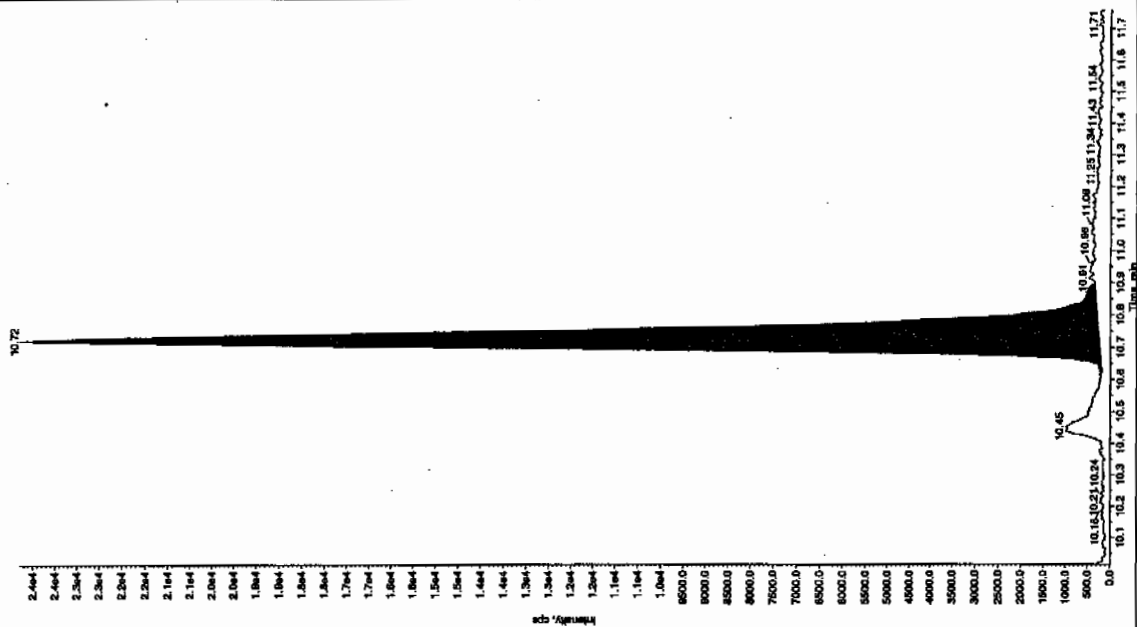
Modified: No



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

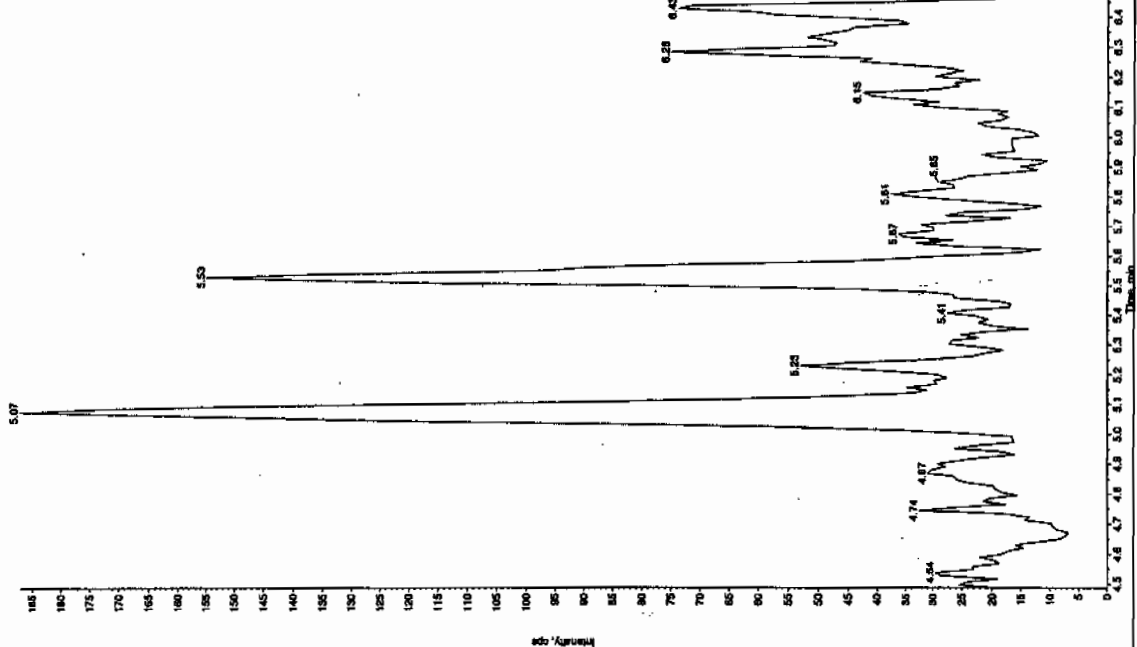
Sample Name: "XBLK05" Sample ID: "111ER" File: "EX501190024.wif"  
 Peak Name: "tris(2-oxo-5-oxo-1-phenyl-1H-imidazol-4-yl) phosphine" Mass(es): "389.181.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: No Intercept  
 Acq. Date: 1/13/2010  
 Acq. Time: 8:15:29 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Weight: 1.00e4 cps  
 Min. Peak Width: 3.00 sec  
 Ret. Width: 30.0 sec  
 Expected RT: 10.8 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.7 min  
 Area: 9.52e+004 counts  
 Height: 24057.533 cps  
 Start Time: 10.6 min  
 End Time: 10.9 min



Sample Name: "XBLK05" Sample ID: "111ER" File: "EX501190024.wif"  
 Peak Name: "24-Oxodino-6-nitrofluorene" Mass(es): "165.046.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/13/2010  
 Acq. Time: 8:15:29 PM  
 Modified: No



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

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1160

Lab Code: GEL

Lab Sample ID: XIBLK06

Analysis Date: 19-JAN-10 23:39

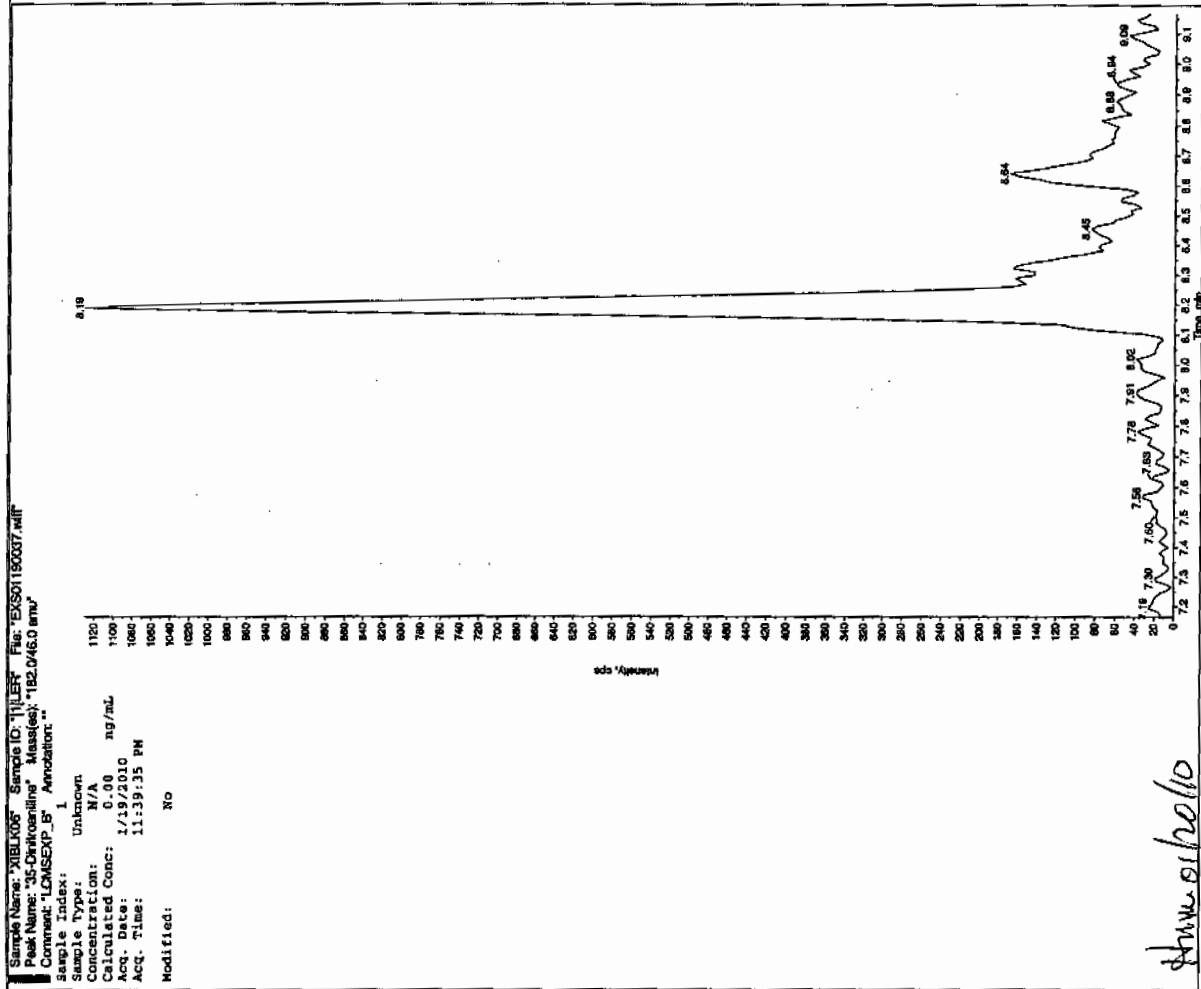
GEL Data File: EXS01190037.wiff

Instrument ID: LCMSMS

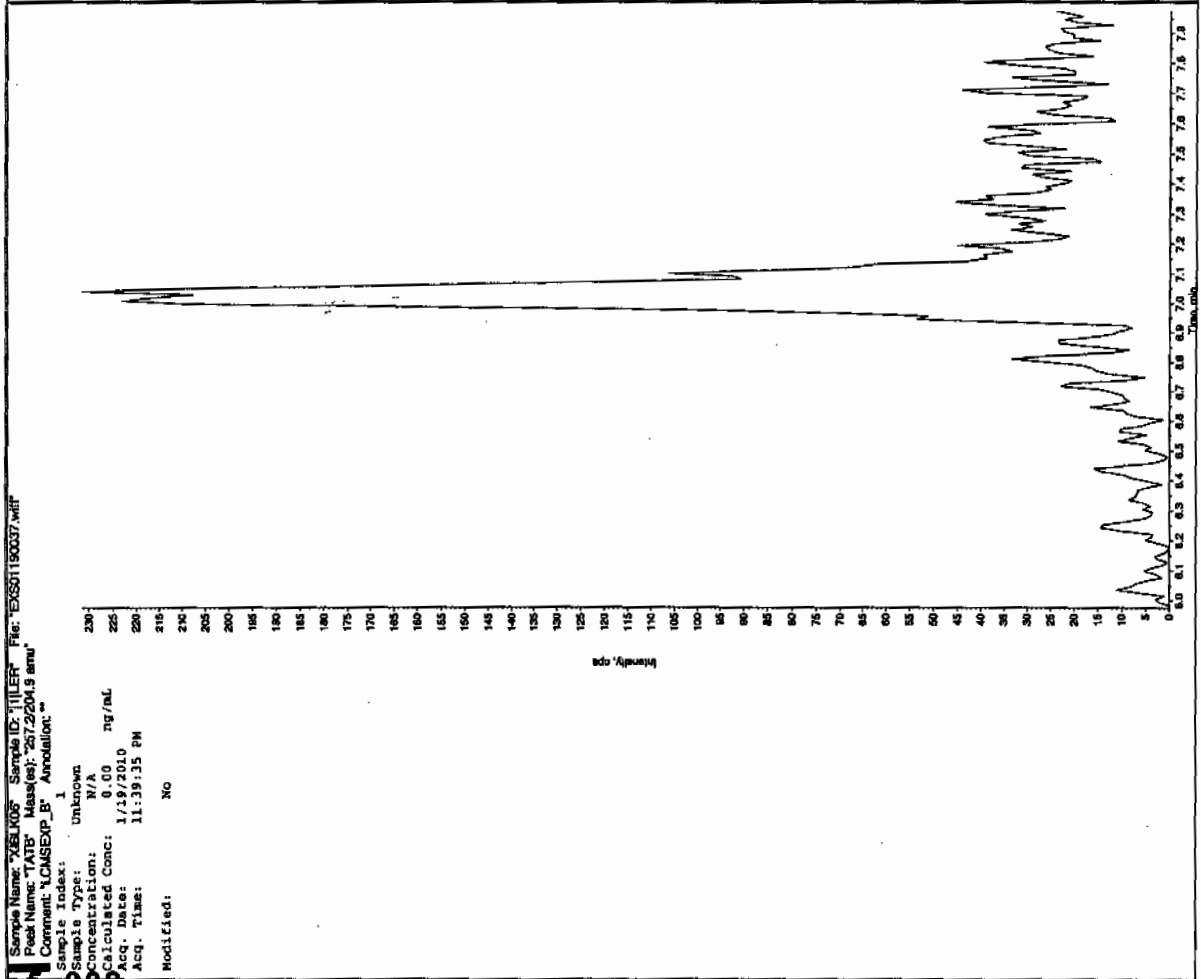
Column: Phenomenex Ultracarb 5u ODS(20)

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

dan 1/20/10

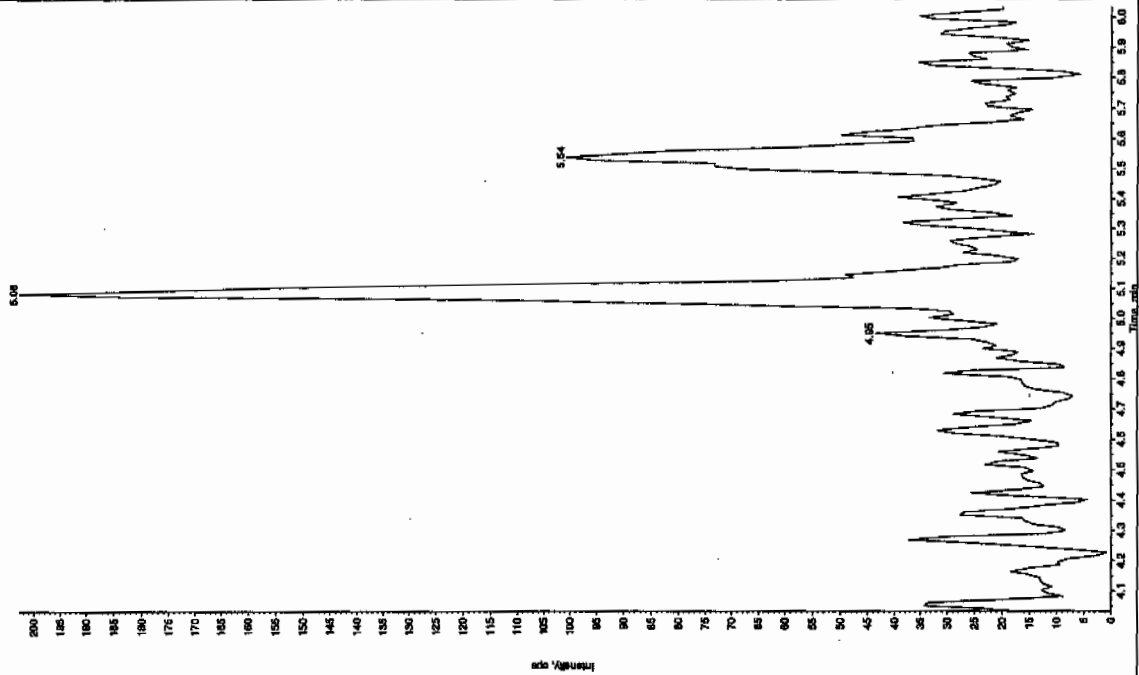


dan 01/20/10

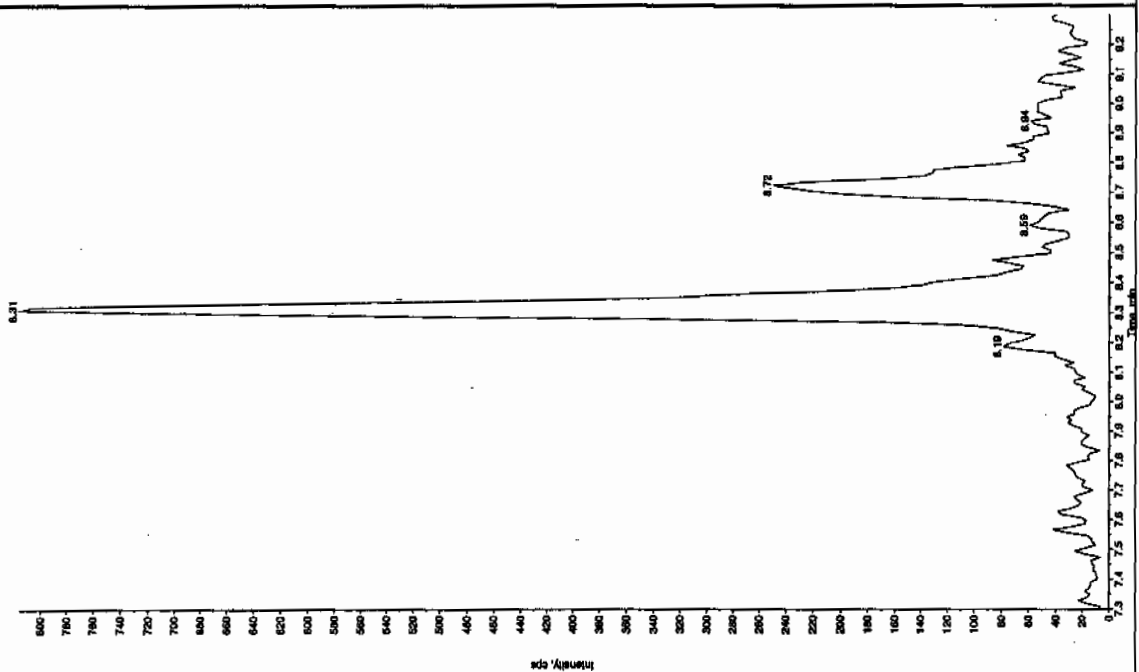


\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "XBLK06" Sample ID: "111ER" File: "EX30190037.wif"  
 Peak Name: "26-Dinitro-4-nitrobenzene" Mass(es): "186.046.0 amu"  
 Comment: "LCMS-EXP\_B" Annotation: "  
 Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A ng/mL  
 Calculated Conc: 1/19/2010  
 Acq. Date: 11/19/2010  
 Acq. Time: 11:39:35 PM  
 Modified: No



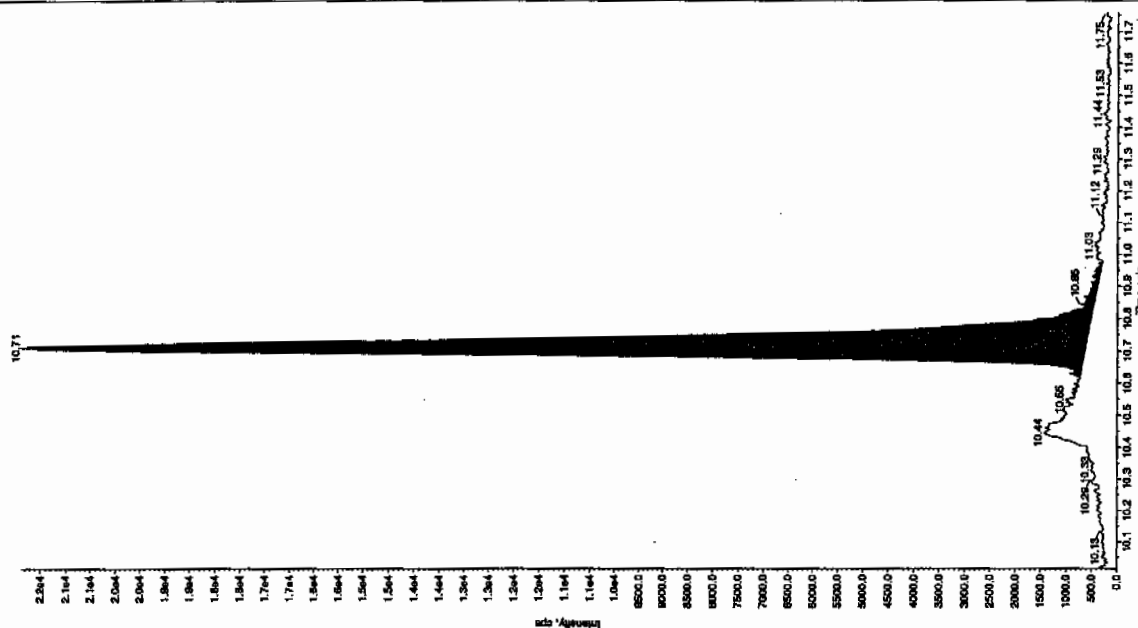
Sample Name: "XBLK06" Sample ID: "111ER" File: "EX30190037.wif"  
 Peak Name: "34-Dinitrobenzene" Mass(es): "182.071.9 amu"  
 Comment: "LCMS-EXP\_B" Annotation: "  
 Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A ng/mL  
 Calculated Conc: 1/19/2010  
 Acq. Date: 11/19/2010  
 Acq. Time: 11:39:35 PM  
 Modified: No



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

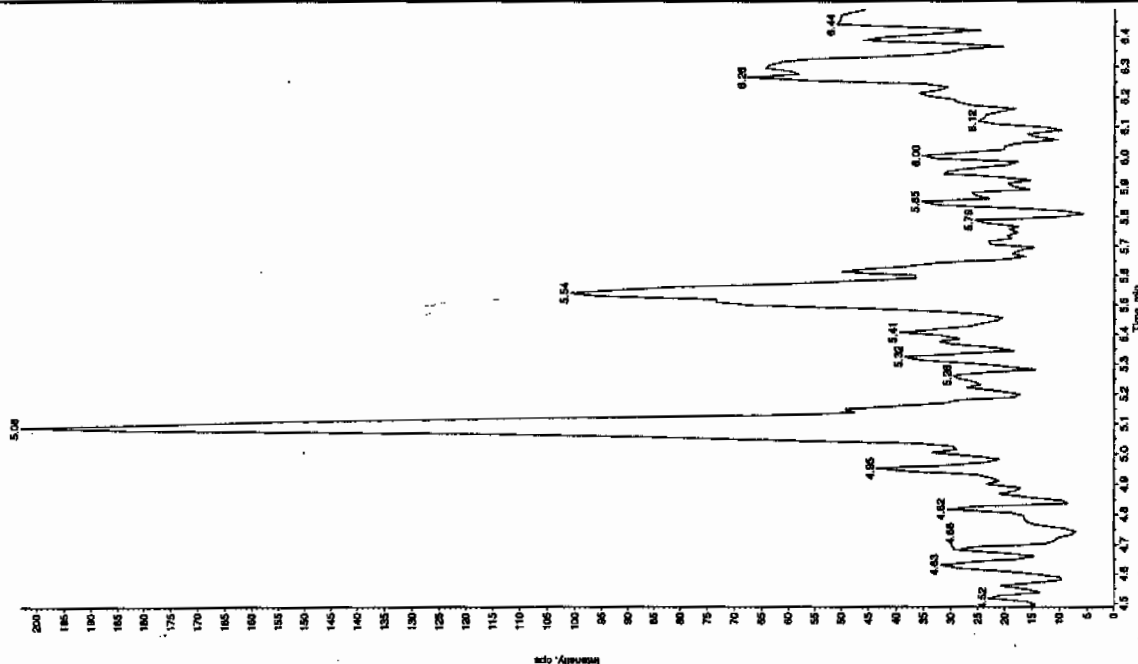
Sample Name: 'VELK05' Sample ID: '1111EF' File: 'EX50119037.wif'  
 Peak Name: 'bis(o-cresyl) phosphate' Mass(es): '359.181.0 amu'  
 Comment: 'LCMS-EXP\_B' Annotation: ''

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: No Intercept  
 Acq. Date: 1/19/2010  
 Acq. Time: 11:39:35 PM  
 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: 10.6 min  
 Use Relative RT: No  
 Idt. Type: Valley  
 Retention Time: 10.7 min  
 Area: 8.22e-004 counts  
 Height: 21240.715 cps  
 Start Time: 10.6 min  
 End Time: 11.0 min



Sample Name: 'VELK05' Sample ID: '1111EF' File: 'EX50119037.wif'  
 Peak Name: '24-Diamino-6-oxo-2,5-dioxane' Mass(es): '166.046.0 amu'  
 Comment: 'LCMS-EXP\_B' Annotation: ''

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ug/mL  
 Acq. Date: 1/19/2010  
 Acq. Time: 11:39:35 PM  
 Modified: No



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



Nairb.ref

;Positive ion monoisotopic and average masses from solution  
 ;of NaI/Rbi (2.0/0.05ug/ul) in 50/20 2-propanol/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

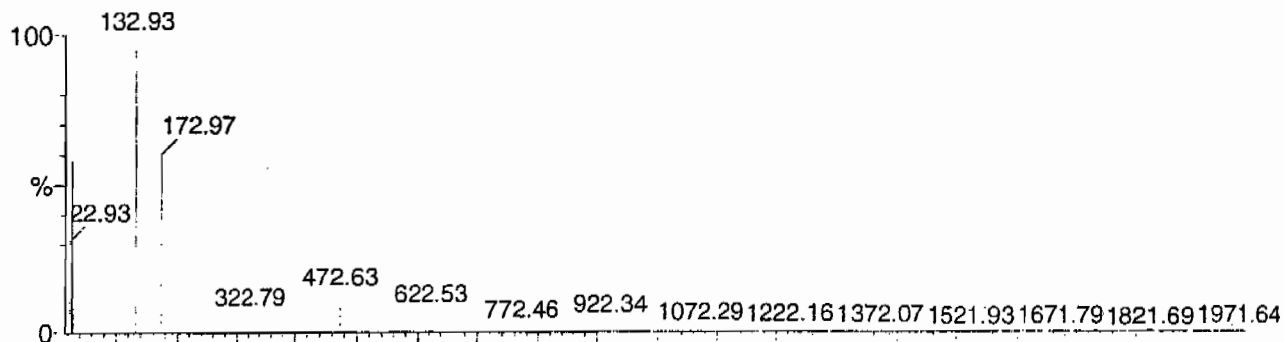
Calibration Report - MS1 Static

Page 1 of 1

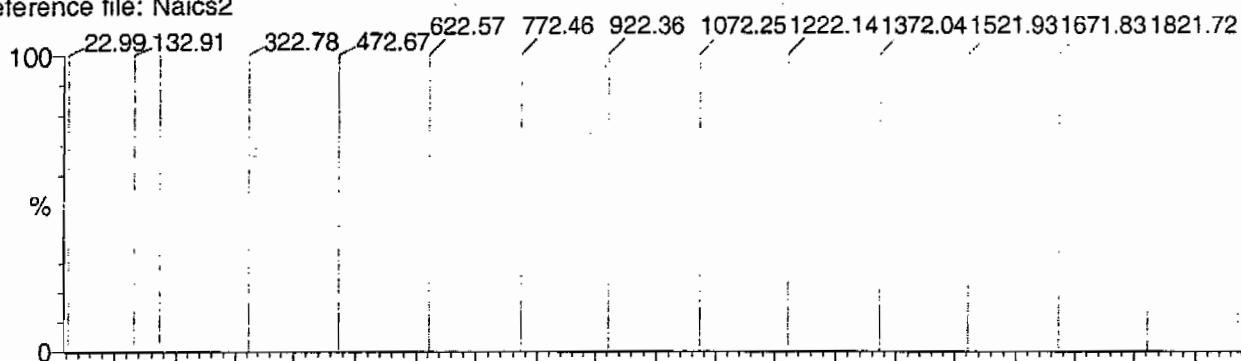
Printed: Fri Aug 25 10:50:01 2006

Data file: STATMS1 - Calibrated

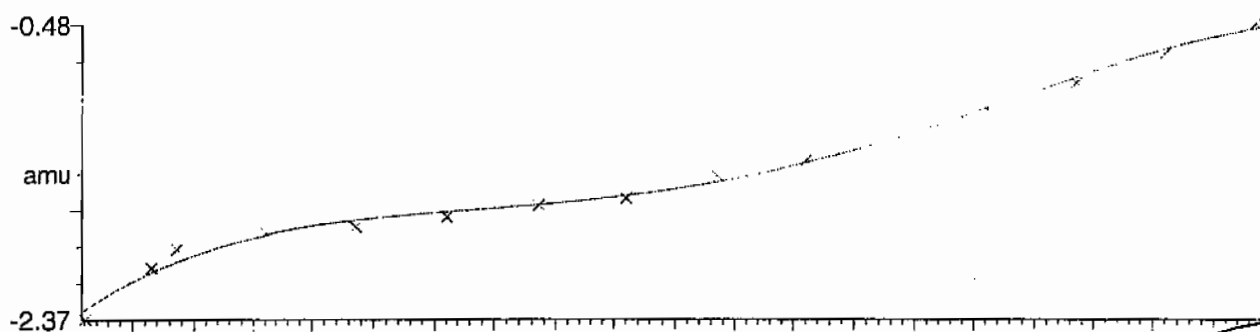
15 matches of 15 tested references



Reference file: Naics2

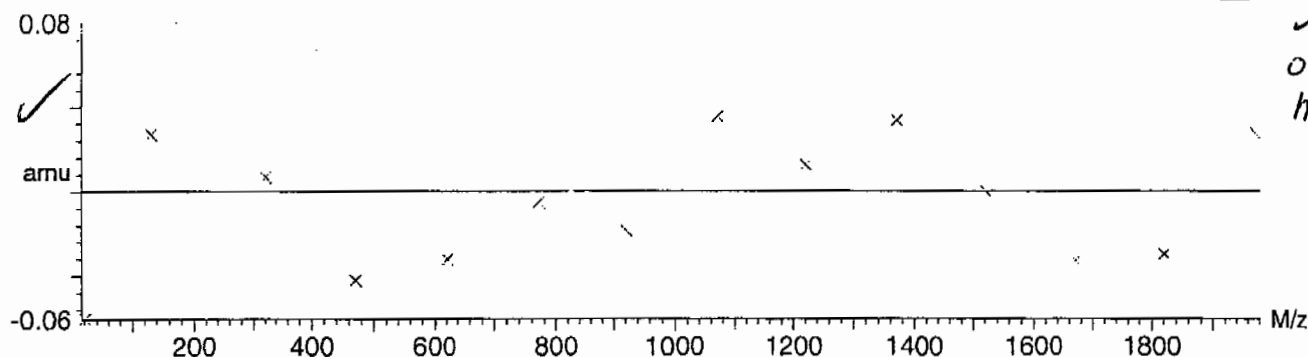


Mass difference (Raw - Ref mass)



Residuals

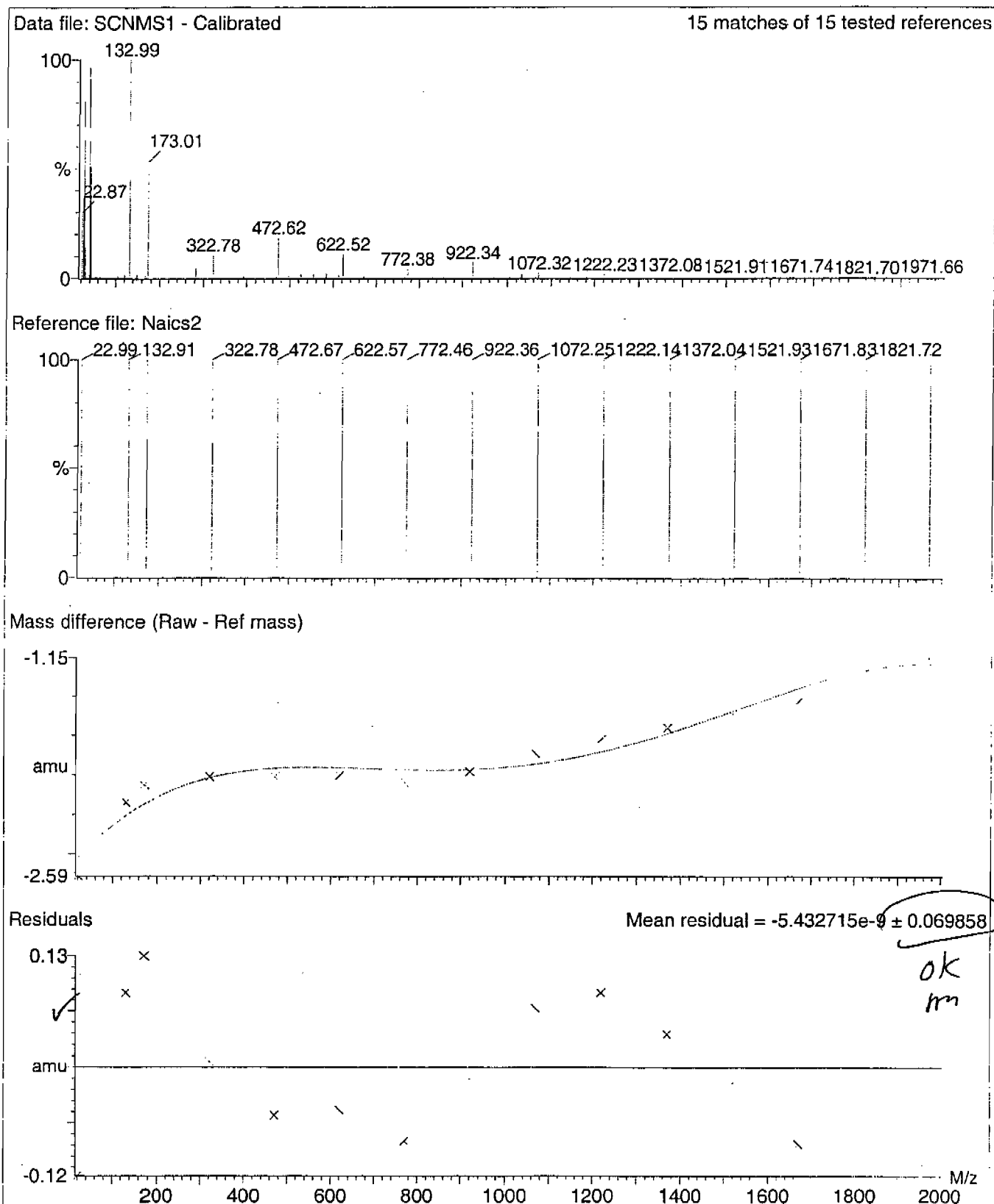
Mean residual =  $-1.673470 \times 10^{-9} \pm 0.036953$



Calibration Report - MS1 Scanning

Page 1 of 1

Printed: Fri Aug 25 10:51:06 2006



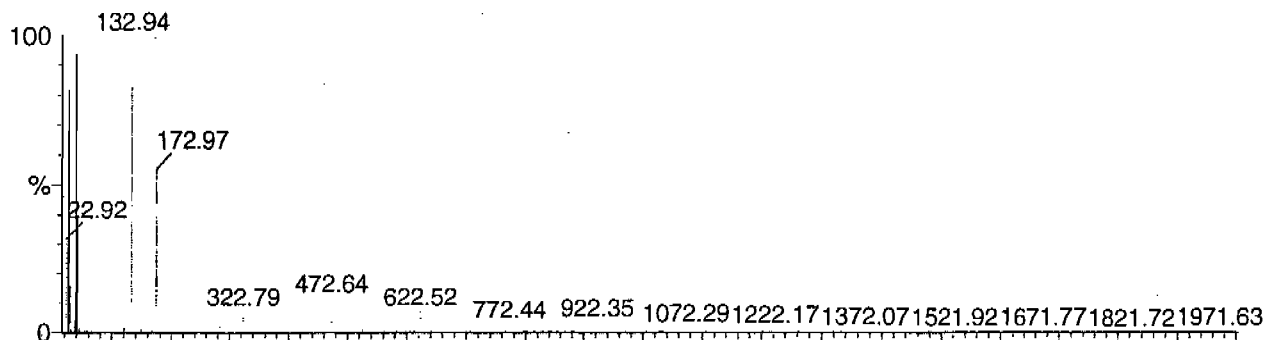
Calibration Report - MS1 Scan Speed Compensation

Page 1 of 1

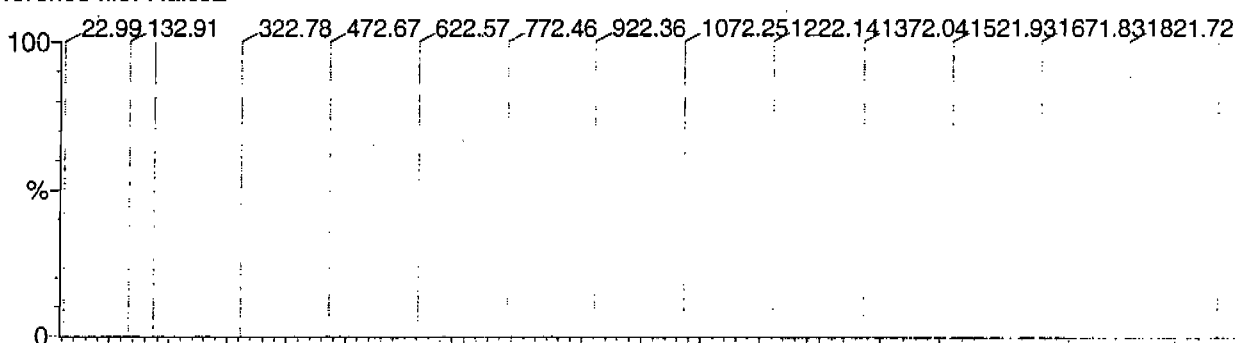
Printed: Fri Aug 25 10:52:01 2006

Data file: FASTMS1 - Calibrated

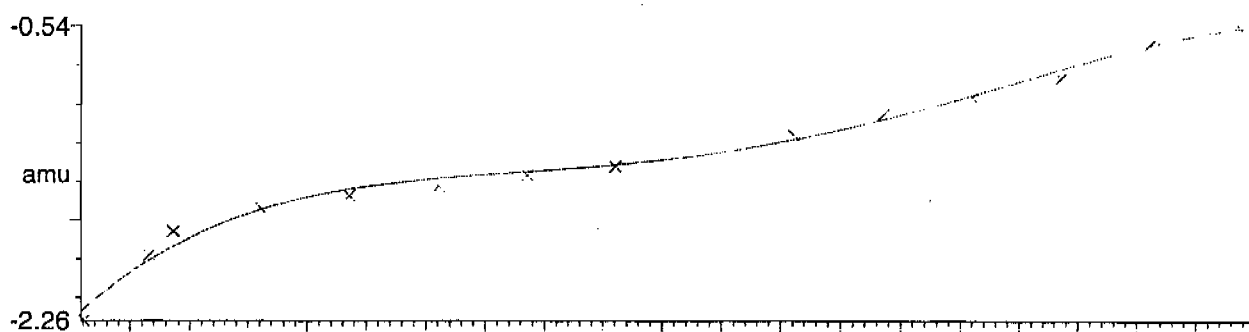
15 matches of 15 tested references



Reference file: Naics2

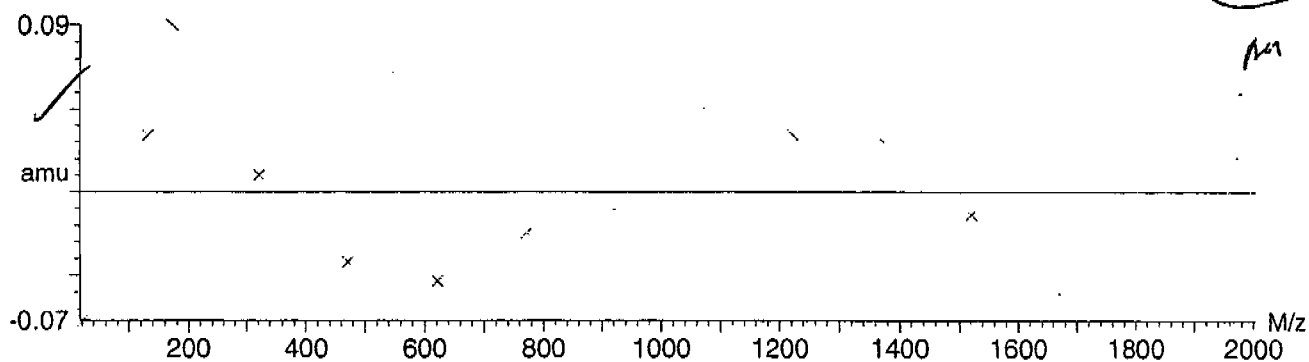


Mass difference (Raw - Ref mass)



Residuals

Mean residual =  $3.486639 \times 10^{-9} \pm 0.040487$



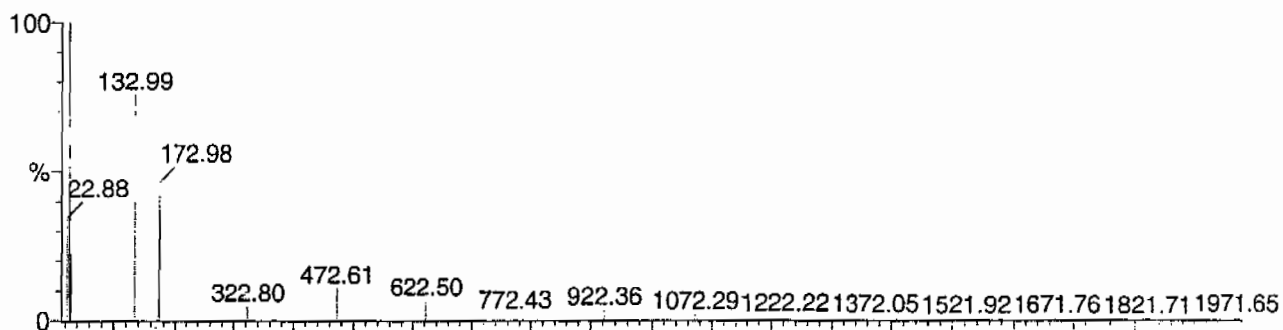
Calibration Report - MS2 Static

Page 1 of 1

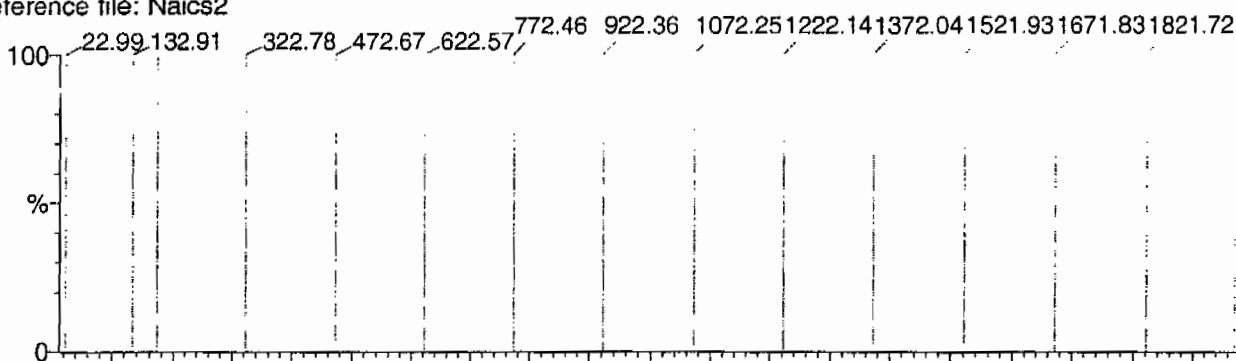
Printed: Fri Aug 25 10:52:54 2006

Data file: STATMS2 - Calibrated

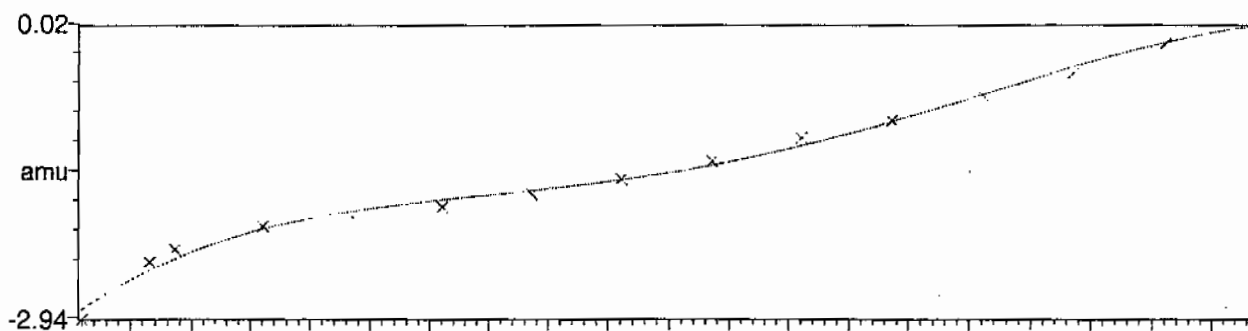
15 matches of 15 tested references



Reference file: Naics2

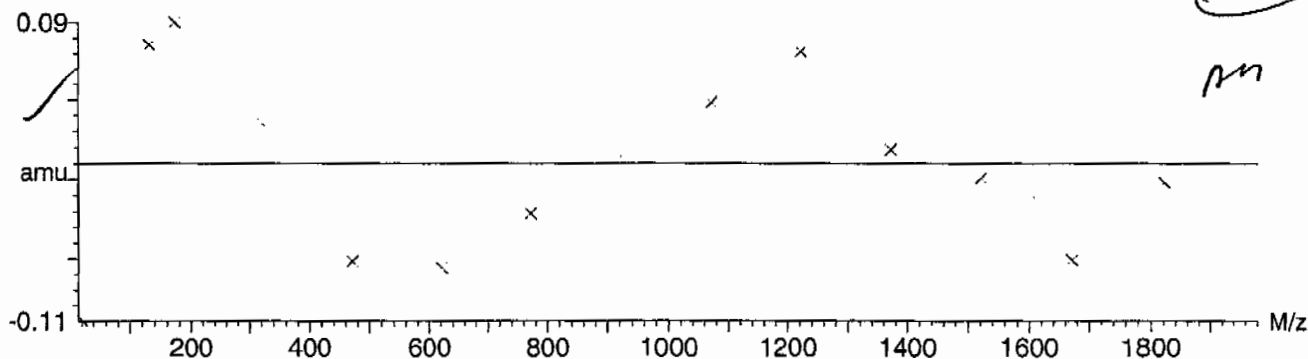


Mass difference (Raw - Ref mass)



Residuals

Mean residual =  $2.048910 \times 10^{-9} \pm 0.057803$



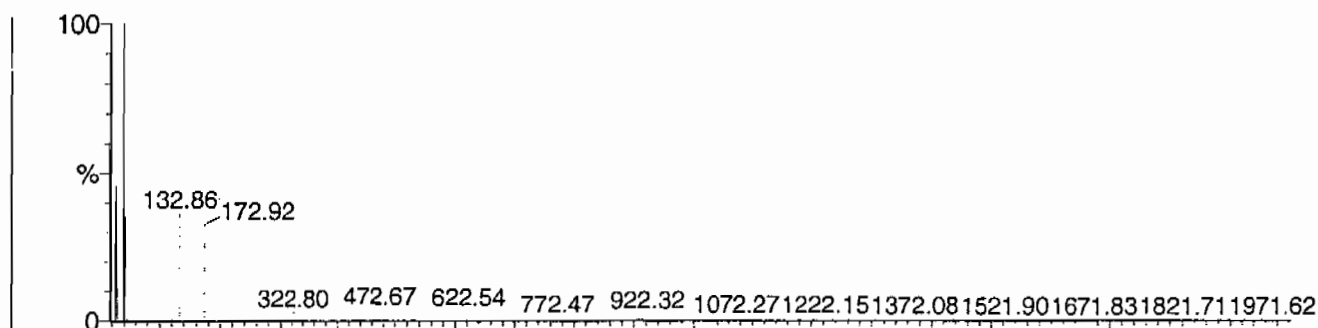
Calibration Report - MS2 Scanning

Page 1 of 1

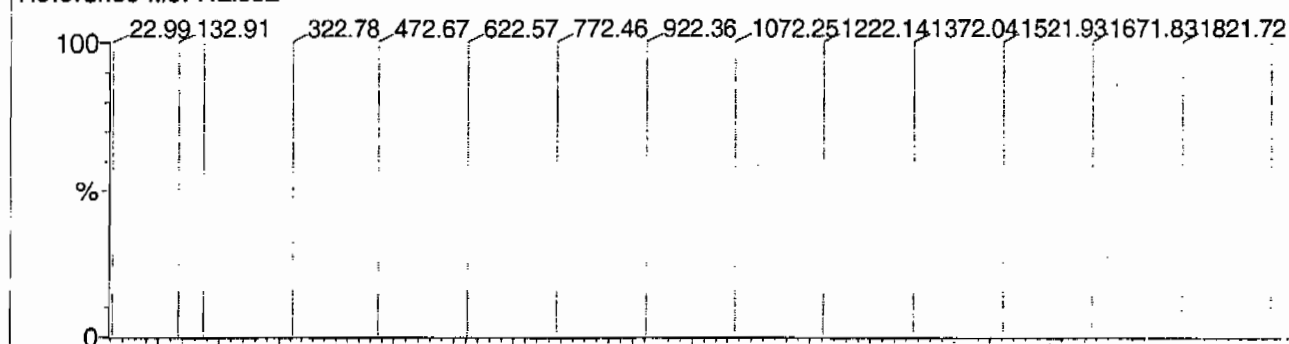
Printed: Fri Aug 25 10:54:00 2006

Data file: SCNMS2 - Calibrated

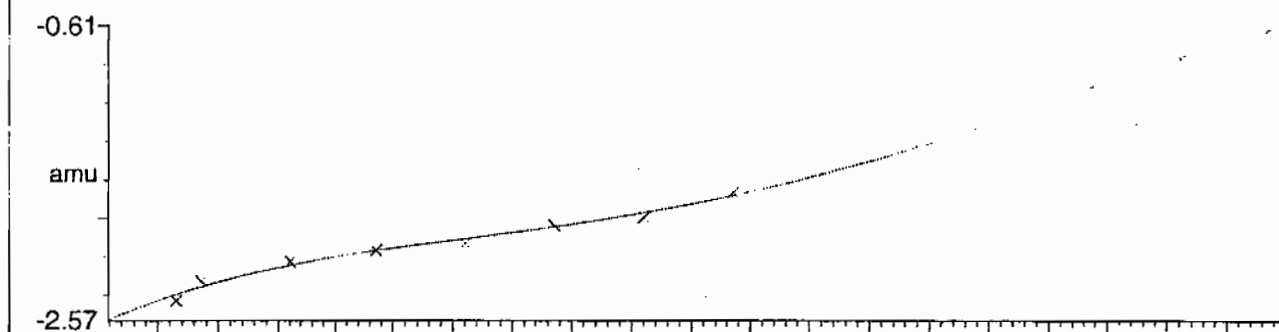
14 matches of 15 tested references



Reference file: Naics2

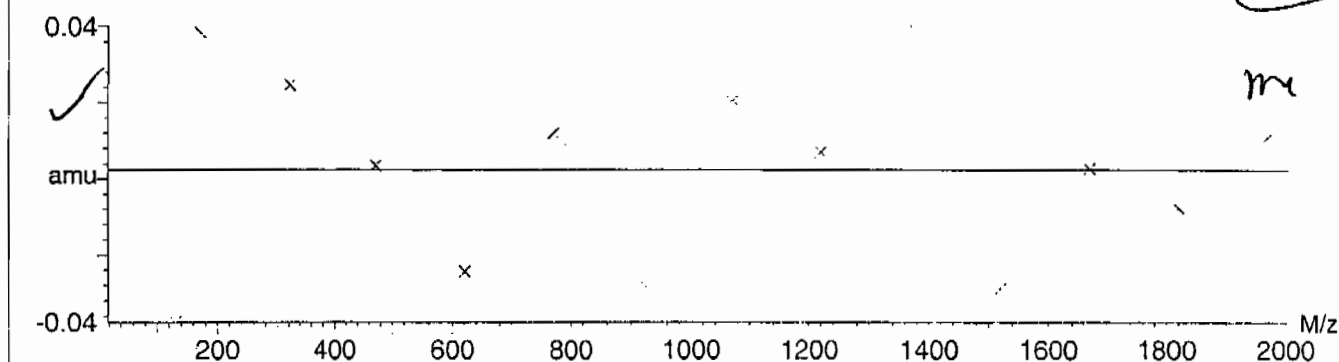


Mass difference (Raw - Ref mass)



Residuals

Mean residual =  $-2.623502 \times 10^{-9} \pm 0.025622$



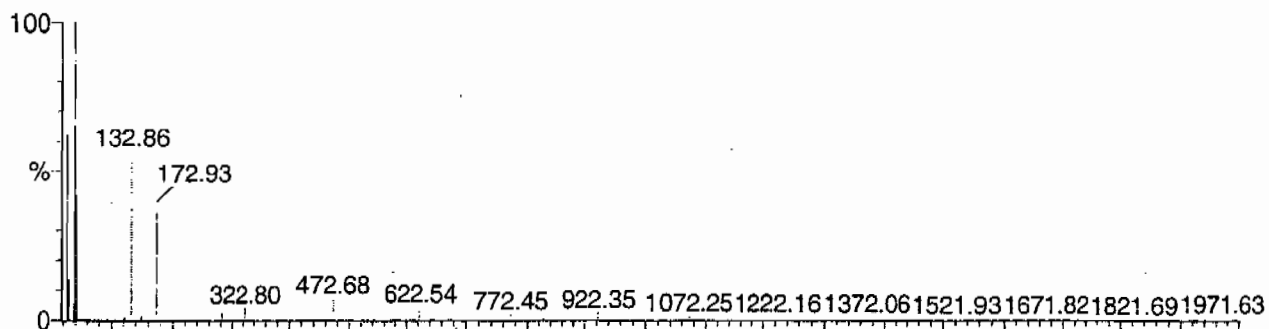
Calibration Report - MS2 Scan Speed Compensation

Page 1 of 1

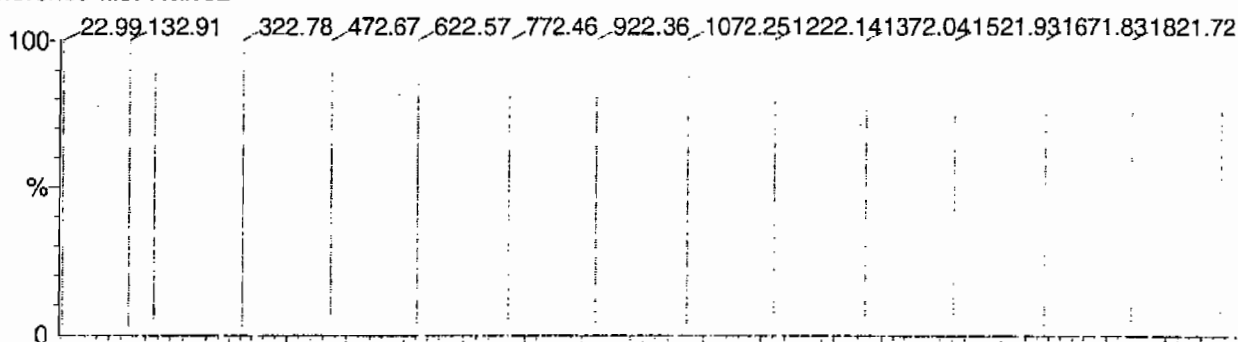
Printed: Fri Aug 25 10:54:54 2006

Data file: FASTMS2 - Calibrated

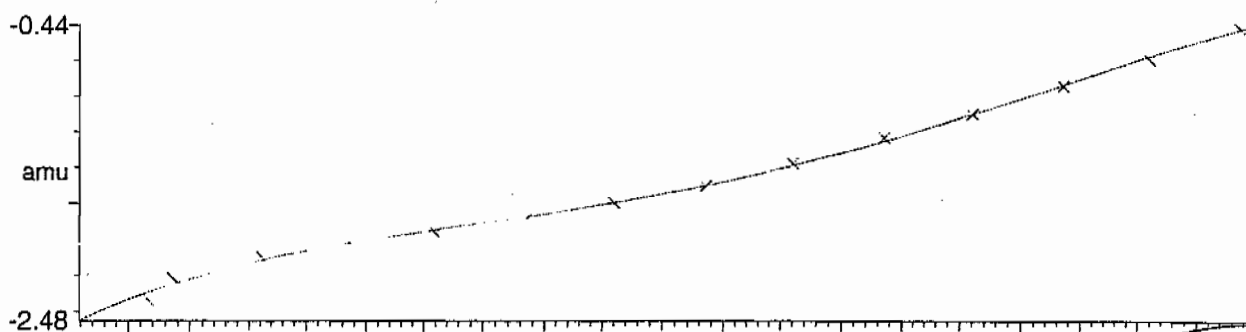
14 matches of 15 tested references



Reference file: Naics2

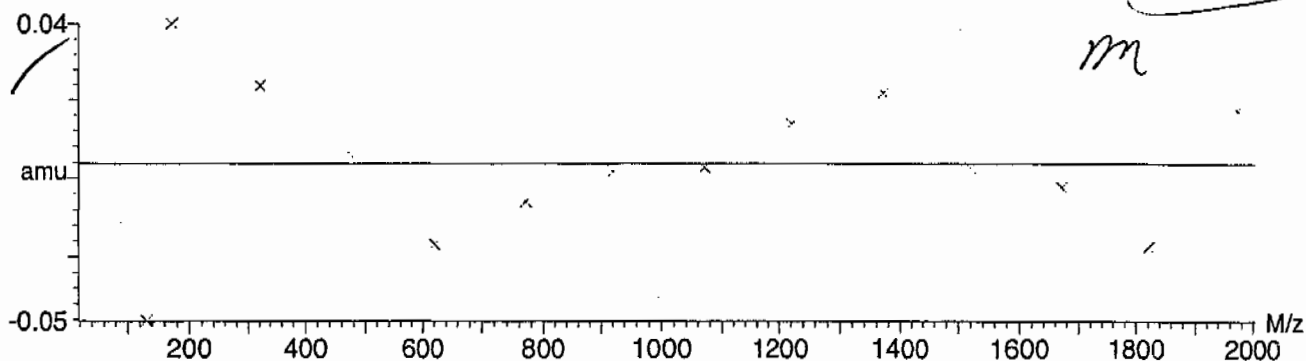


Mass difference (Raw - Ref mass)



Residuals

Mean residual =  $-6.785350 \times 10^{-9} \pm 0.023134$

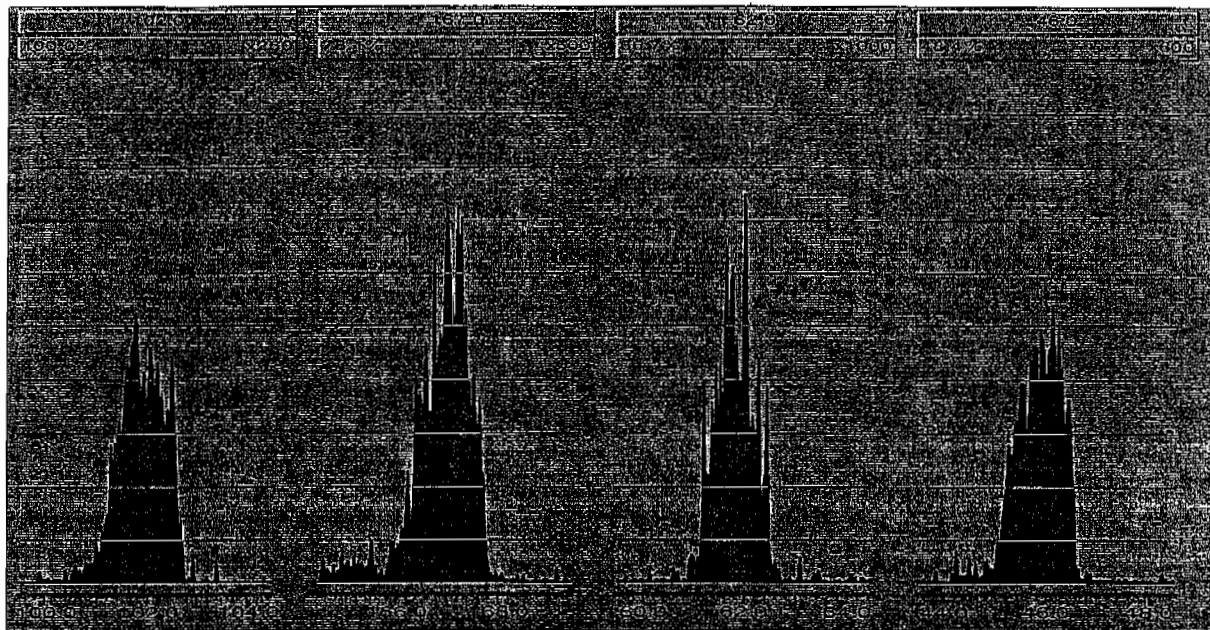


Quattro Micro Tune Parameters

Page 1

Parameter File: C:\MASSLYNX\NEW\_EXP.PRO\ACQUDB\explosives04.ipr

Printed : Mon Jan 18 14:02:19 2010





# High Explosives Internal Standard Summary

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1160

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) #
			3393.317	11.997	18344.583	17.32
Upper Limit			4411.3121	12.497	23847.9579	17.82
Lower Limit			2375.3219	11.497	12841.2081	16.82
MB for batch 940104	19-jan-10 22:01	EXP0118066a	3507.57	11.972	18970.3	17.291
LCS for batch 940104	19-jan-10 22:30	EXP0118067a	3533.03	11.972	20109.1	17.291
RE12-10-7734	19-jan-10 23:00	EXP0118068a	3043.93	11.972	18279.1	17.291
RE12-10-7734(244209001MS)	19-jan-10 23:29	EXP0118069a	4261.45	11.969	23669	17.28
RE12-10-7734(244209001MSD)	19-jan-10 23:59	EXP0118070a	3401.03	11.972	19328.3	17.291
RE12-10-7701	20-jan-10 00:28	EXP0118071a	3048.62	11.97	16602.5	17.281
RE12-10-7702	20-jan-10 00:58	EXP0118072a	2996.62	11.972	16639.3	17.291
RE12-10-7700	20-jan-10 01:27	EXP0118073a	3119.72	11.972	17628.2	17.27
RE12-10-7699	20-jan-10 01:57	EXP0118074a	3317.4	11.972	18560.4	17.291
RE12-10-7727	20-jan-10 02:26	EXP0118075a	3397.28	11.97	18115.6	17.28

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: RE12-10-7734

Lab Code: GEL

GEL Job No (SDG) 10-1160

Matrix: SOIL

GEL Sample ID: 244209001

Sample Amount 2

Moisture: 6.5

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940104

Concentrated Extract Volume (mL) 10

Date Extracted: 14-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0118068a

Date Analyzed: 19-JAN-10 23:00

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

Printed: Wed Jan 20 09:07:58 2010, Page 51 of 91

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\011810expA1.qld, Time: Wed Jan 20 09:06:02 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0118068a

Date: 19-Jan-2010

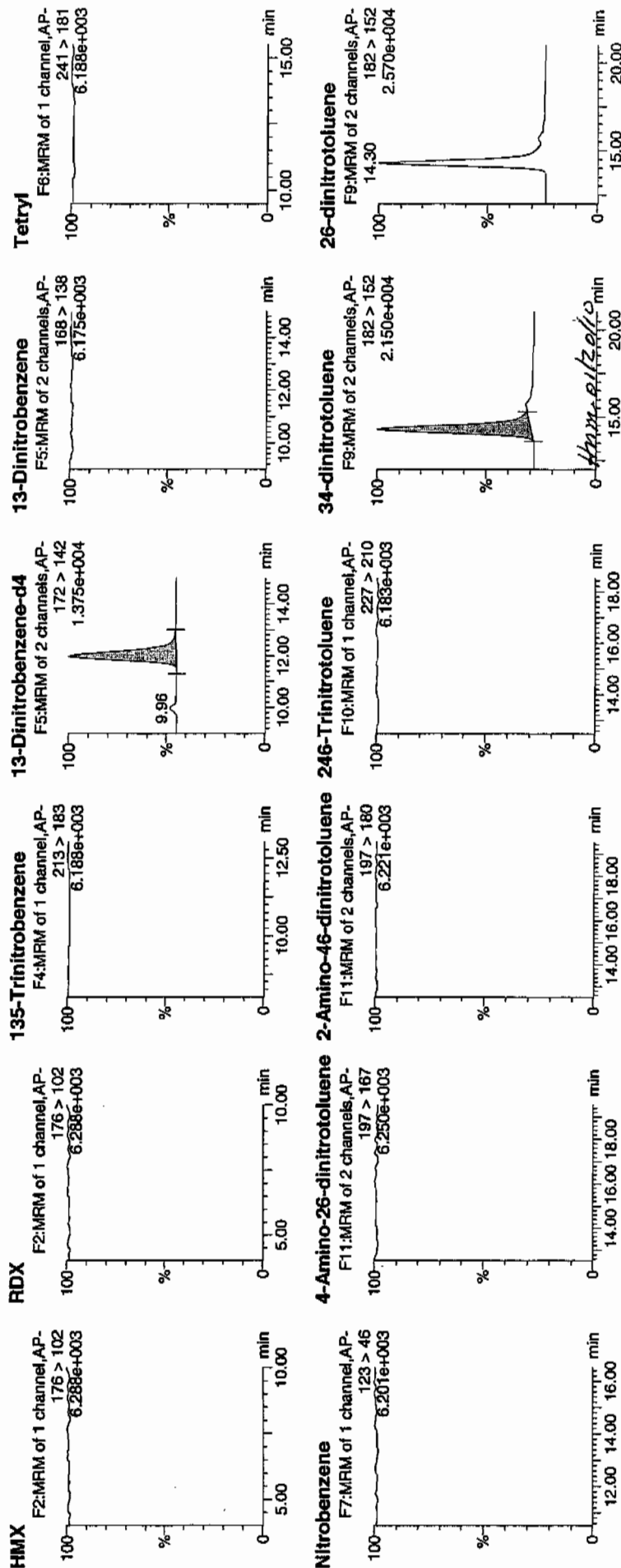
Time: 23:00:18

ID: 244209001

Vial: 3:1,C

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1/20/10

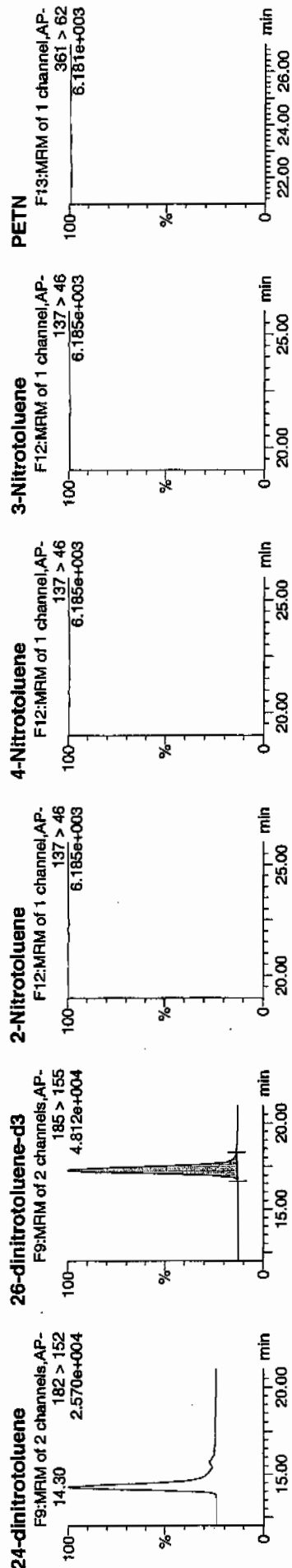
WAW 940106 8022 121



## Quantify Sample Report

**GEL Laboratories, LLC / Analyst : Michael A. Penny**

Dataset: C:\MASSLYNX\New\_Exp.PRO\011810expA1.qld, Time: Wed Jan 20 09:06:02 2010

[illegible]

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7734

Lab Code: GEL

GEL Job No (SDG) 10-1160

Matrix: SOIL

GEL Sample ID: 244209001

Sample Amount 2

Moisture: 6.5

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940104

Concentrated Extract Volume (mL) 10

Date Extracted: 14-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01190020.wiff

Date Analyzed: 19-JAN-10 19:12

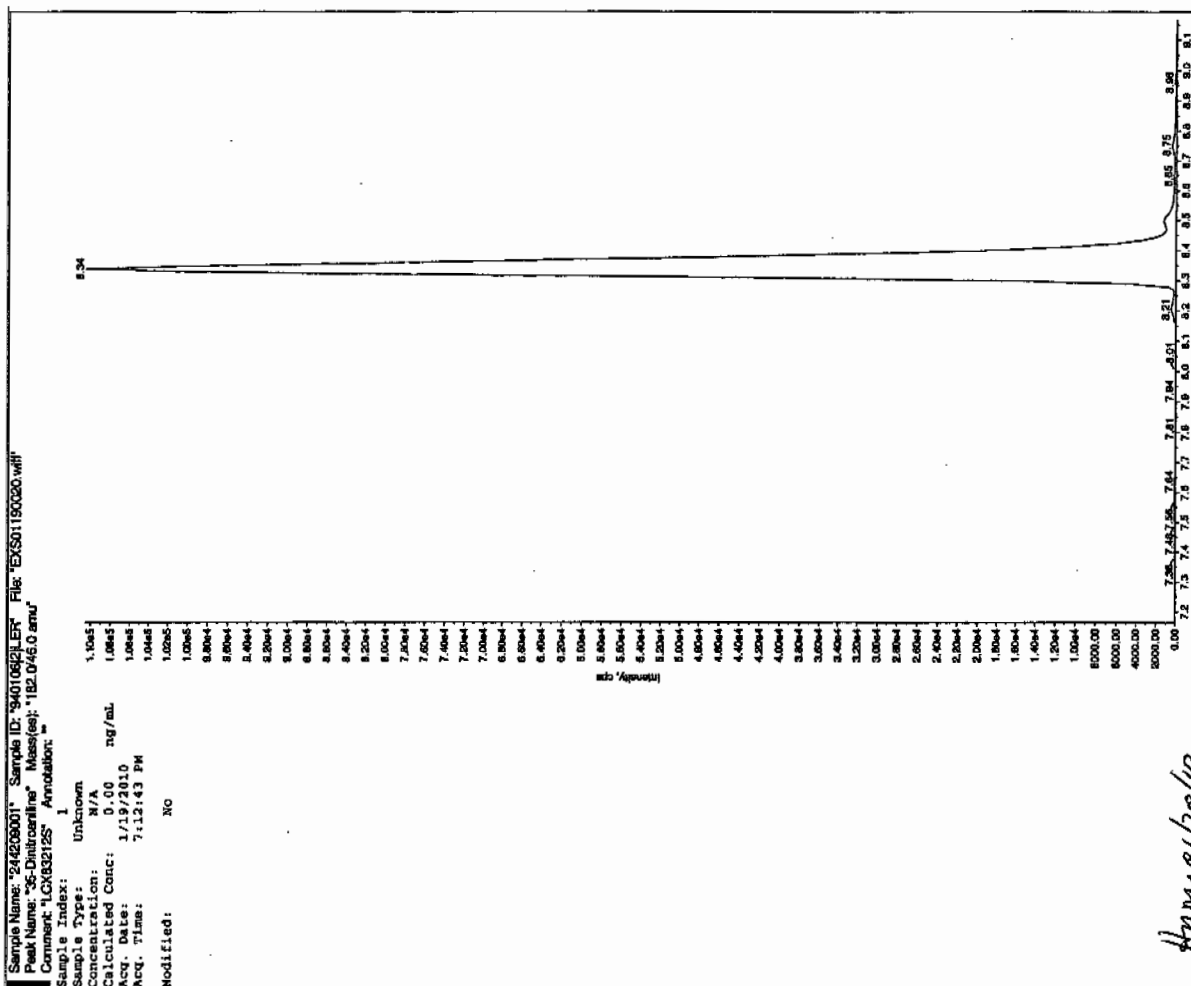
Units: ug/kg

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

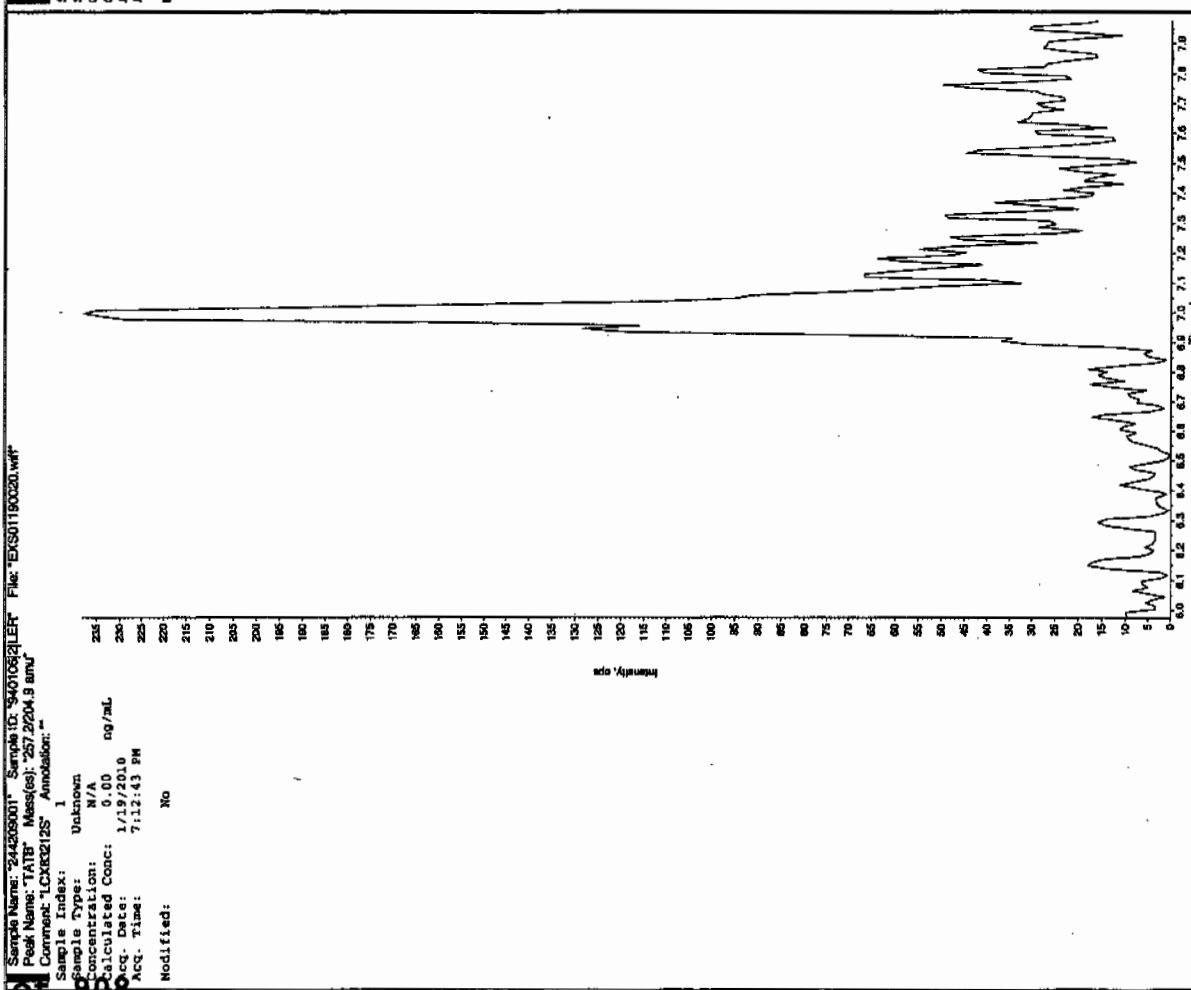
\*Concentration =

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

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Sample Name: "24209001" Sample ID: "94010521.ER" File: "EXS01190020.wif"  
 Peak Name: "28-Diamino-4-nitrobenzoate" Mass(es): "166.0460 amu"  
 Comment: "LCX032125" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 1/19/2010  
 Acq. Date: 7:12:43 PM  
 Acq. Time: 7:12:43 PM  
 Modified: No

Intensity, cps



Sample Name: "24209001" Sample ID: "94010521.ER" File: "EXS01190020.wif"  
 Peak Name: "28-Diamino-4-nitrobenzoate" Mass(es): "166.0460 amu"  
 Comment: "LCX032125" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 1/19/2010  
 Acq. Date: 7:12:43 PM  
 Acq. Time: 7:12:43 PM  
 Modified: No

Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 1460.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 15.0 sec  
 Expected RT: 8.30 min  
 Use Relative RT: No

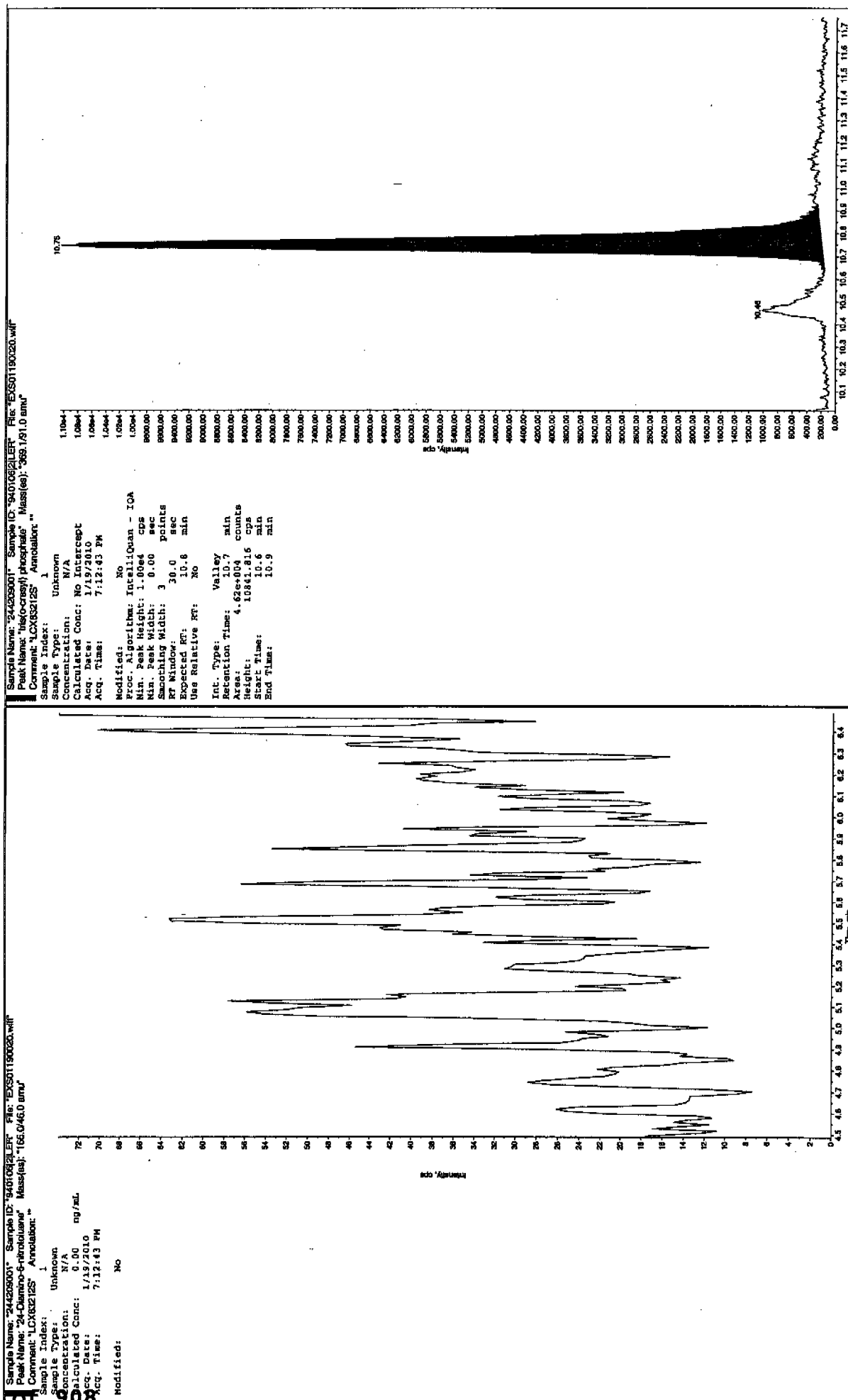
Int. Type: Valley  
 Retention Time: 8.24 min  
 Peak Height: 3.97e+006 counts  
 Peak Width: 989731.445 cps  
 Start Time: 8.24 min  
 End Time: 8.63 min

Intensity, cps



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





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

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7701

Lab Code: GEL

GEL Job No (SDG) 10-1160

Matrix: SOIL

GEL Sample ID: 244209002

Sample Amount 2

Moisture: 25.6

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940104

Concentrated Extract Volume (mL) 10

Date Extracted: 14-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0118071a

Date Analyzed: 20-JAN-10 00:28

Units: ug/kg

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

\*Concentration =

Instrument Value	X	Concentrated Extract Volume	X	Dilution Factor
		Sample Amount		

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

Dataset: C:\MASSLYNX\New\_Exp\PRO\011810expA1.qld, Time: Wed Jan 20 09:06:02 2010

Name: C:\MASSLYNX\NEW\_EXP\PRO\Data\EXP0118071a

Date: 20-Jan-2010

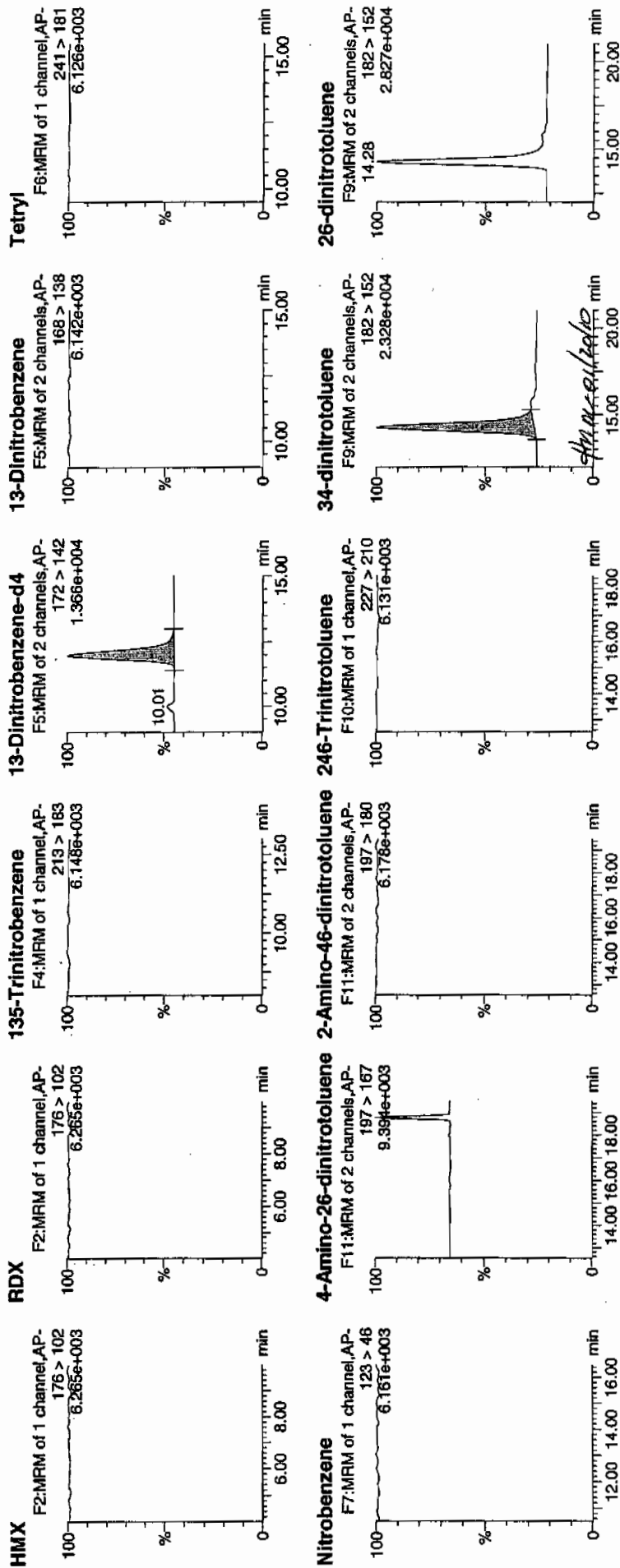
Time: 00:28:41

ID: 244209002

Vial: 3:1,F

1/20/10

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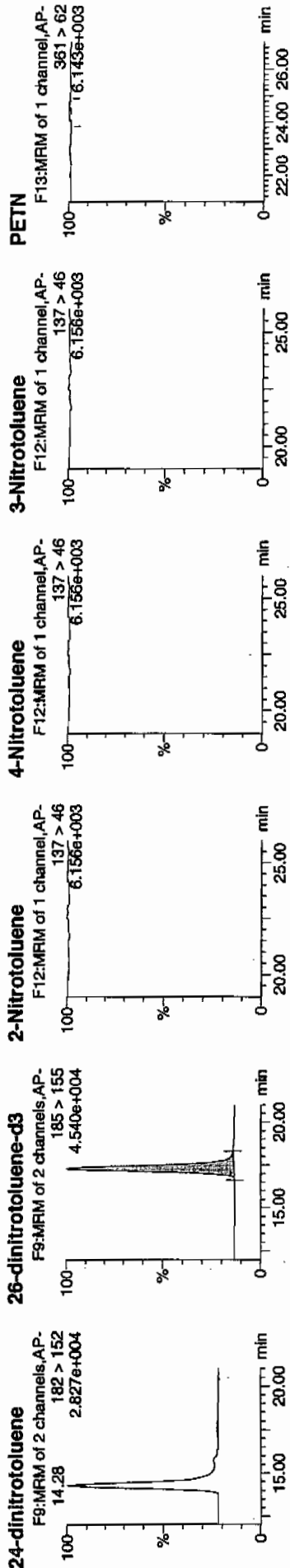


Printed: Wed Jan 20 09:07:58 2010, Page 58 of 91

# Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\011810expA1.qld, Time: Wed Jan 20 09:06:02 2010



ID	Name	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	%Rec	%Dev	SN
244209002	HMX	176 > 102	3048.622								
244209002	RDX	176 > 102	3048.622								
244209002	135-Trinitrobenzene	213 > 183	3048.622								
244209002	13-Dinitrobenzene-d4	172 > 142	11.97	3048.622	3048.622	bb		449.2101	89.8	-10.2	458.4
244209002	13-Dinitrobenzene	168 > 138	3048.622								
244209002	Tetryl	241 > 181	3048.622								
244209002	Nitrobenzene	123 > 46	3048.622								
244209002	4-Amino-26-dinitrotoluene	197 > 167	16602.510								
244209002	2-Amino-46-dinitrotoluene	197 > 180	16602.510								
244209002	246-Trinitrotoluene	227 > 210	16602.510								
244209002	34-dinitrotoluene	182 > 152	9061.358	272.891	bb			292.7256	117.1	17.1	763.8
244209002	26-dinitrotoluene	182 > 152	16602.510								
244209002	24-dinitrotoluene	182 > 152	16602.510								
244209002	26-dinitrotoluene-d3	185 > 155	16602.510	16602.510	bb			452.5183	90.5	-9.5	1670.7
244209002	2-Nitrotoluene	137 > 46	16602.510								
244209002	4-Nitrotoluene	137 > 46	16602.510								
244209002	3-Nitrotoluene	137 > 46	16602.510								
244209002	PETN	361 > 62	16602.510								

MM- 20-Jan-10 09:06:02

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7701

Lab Code: GEL

GEL Job No (SDG) 10-1160

Matrix: SOIL

GEL Sample ID: 244209002

Sample Amount 2

Moisture: 25.6

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940104

Concentrated Extract Volume (mL) 10

Date Extracted: 14-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01190026.wiff

Date Analyzed: 19-JAN-10 20:46

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

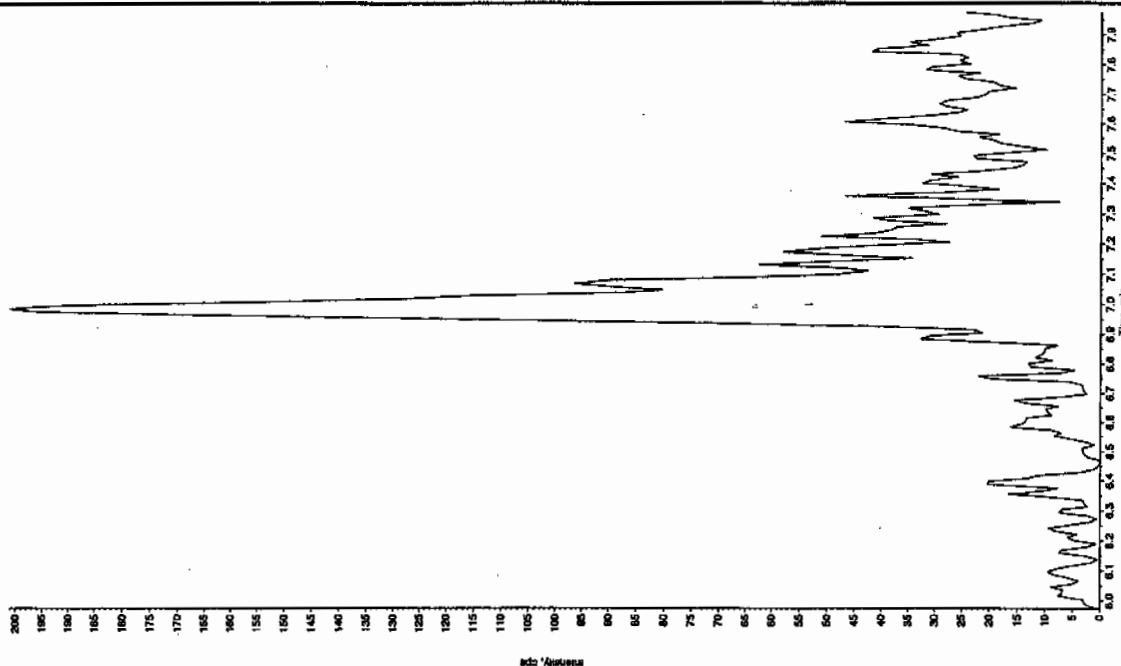
\*Concentration =

Instrument Value	X	$\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$	X	Dilution Factor
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Jan 1/20/10

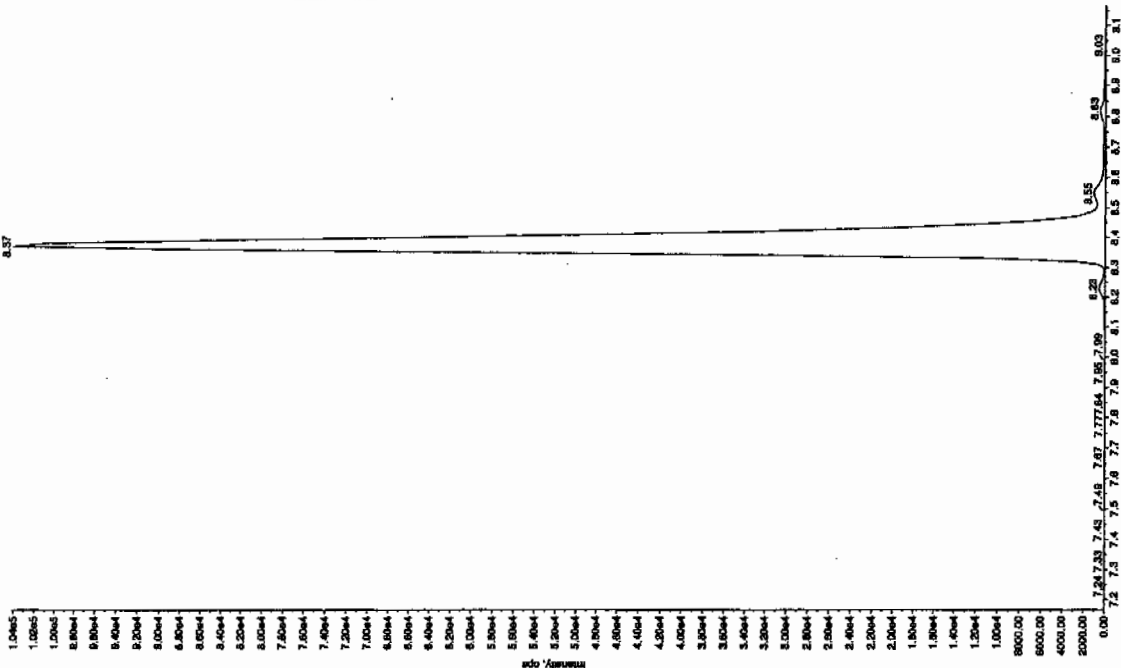
Sample Name: "244209002" Sample ID: "94010821.ER" File: "EX501190026.wif"  
 Peak Name: "TATB" Mass(es): "257.2204.9 amu"  
 Comment: "LCX832125" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/19/2010  
 Acq. Time: 8:46:53 PM  
 Modified: No



Sample Name: "244209002" Sample ID: "94010821.ER" File: "EX501190026.wif"  
 Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"  
 Comment: "LCX832125" Annotation: "

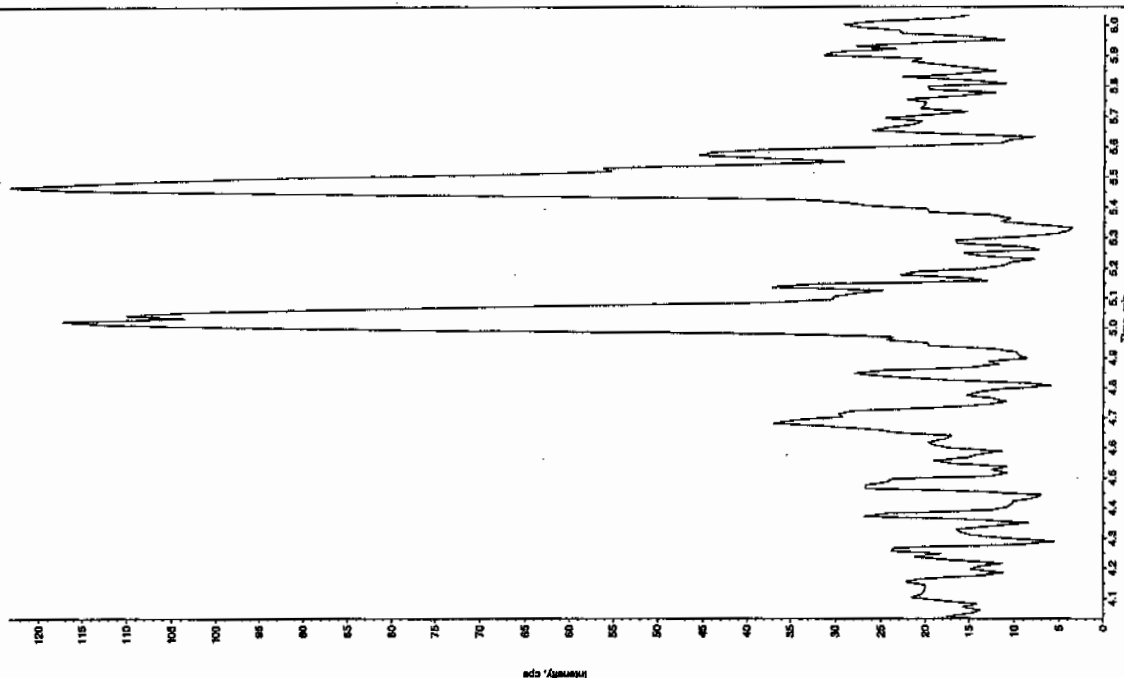
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/19/2010  
 Acq. Time: 8:46:53 PM  
 Modified: No



Jan 2/20/10

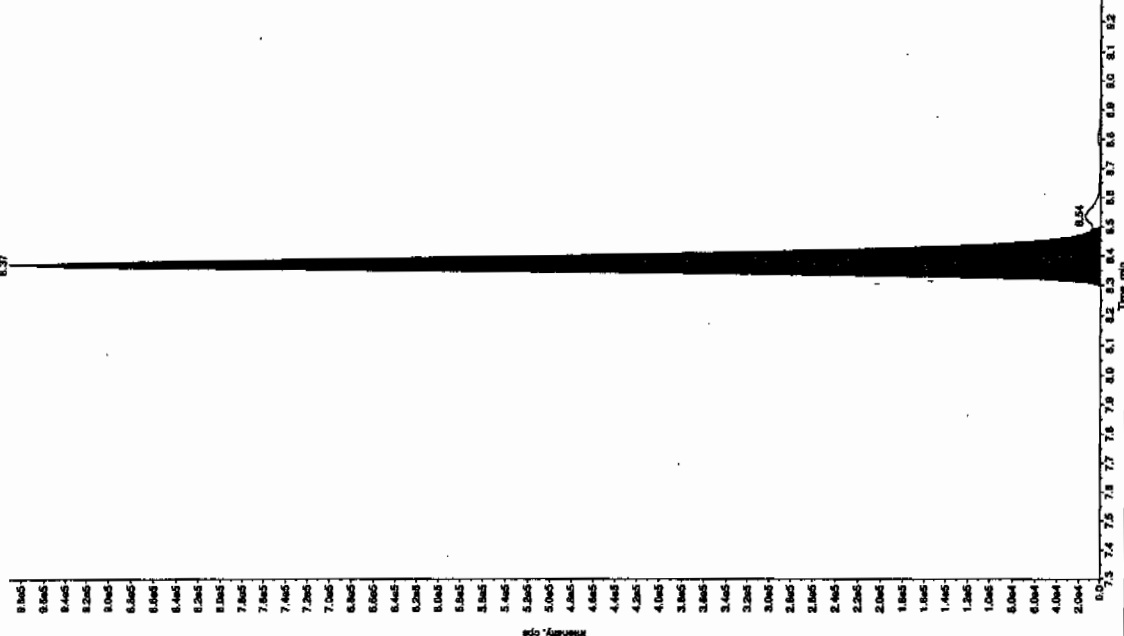
Sample Name: 24420002 Sample ID: 94010821.ER File: EX501190025.wif  
 Peak Name: 24-Oxoteno-4-oxobutanoic Mass(es): 166.046.0 amu  
 Comment: LCX32125 Annotator: 1

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/19/2010  
 Acq. Time: 8:46:53 PM  
 Modified: No



Sample Name: 24420002 Sample ID: 94010821.ER File: EX501190025.wif  
 Peak Name: 34-Oxoteno-4-oxobutanoic Mass(es): 182.176.1.9 amu  
 Comment: LCX32125 Annotator: 1

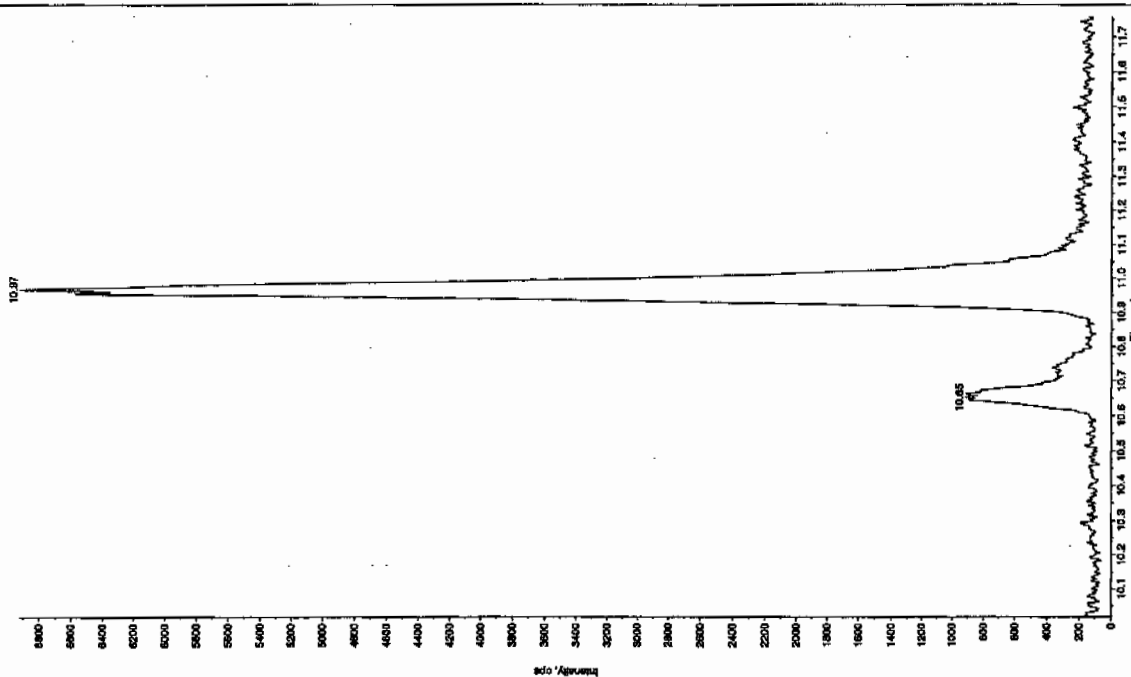
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 271.00 ng/mL  
 Acq. Date: 1/19/2010  
 Acq. Time: 8:46:53 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 1460.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 15.0 sec  
 Expected RT: 8.30 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.37 min  
 Area: 3.79e+006 counts  
 Height: 990345.814 cps  
 Start Time: 8.10 min  
 End Time: 8.50 min



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

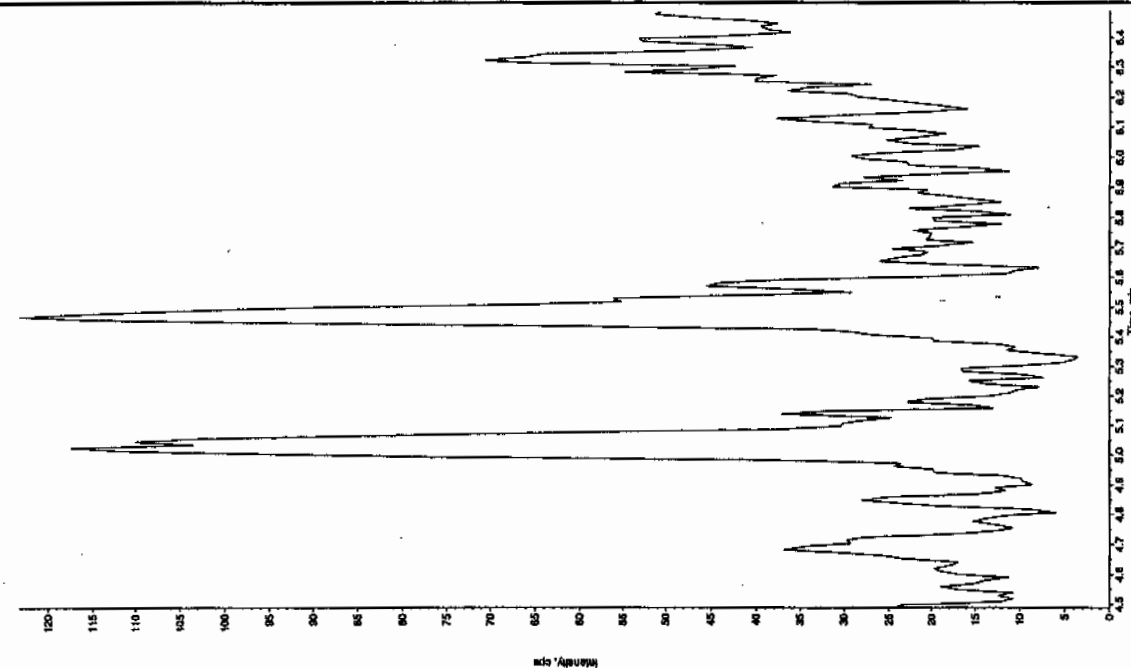
Sample Name: "24420002" Sample ID: "94010621.ER" File: "EX501190026.wit"  
 Peak Name: "116(0-oxyl) phosphate" Mass(es): "353.161.0 amu"  
 Comment: "LCX832125" Annotation: "1"

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A ng/mL  
 Calculated Conc: 8.00  
 Acq. Date: 1/12/2010  
 Acq. Time: 8:46:53 PM  
 Modified: No



Sample Name: "24420002" Sample ID: "94010621.ER" File: "EX501190026.wit"  
 Peak Name: "24-Duonco-6-nitrofluorene" Mass(es): "166.046.0 amu"  
 Comment: "LCX832125" Annotation: "1"

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A ng/mL  
 Calculated Conc: 8.00  
 Acq. Date: 1/12/2010  
 Acq. Time: 8:46:53 PM  
 Modified: No



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



1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7702

Lab Code: GEL

GEL Job No (SDG) 10-1160

Matrix: SOIL

GEL Sample ID: 244209003

Sample Amount 2

Moisture: 15.0

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940104

Concentrated Extract Volume (mL) 10

Date Extracted: 14-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0118072a

Date Analyzed: 20-JAN-10 00:58

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

# Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Wed Jan 20 09:07:58 2010, Page 59 of 91

Dataset: C:\MASSLYNX\New\_Exp.PRO\011810expA1.qld, Time: Wed Jan 20 09:06:02 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0118072a

Date: 20-Jan-2010

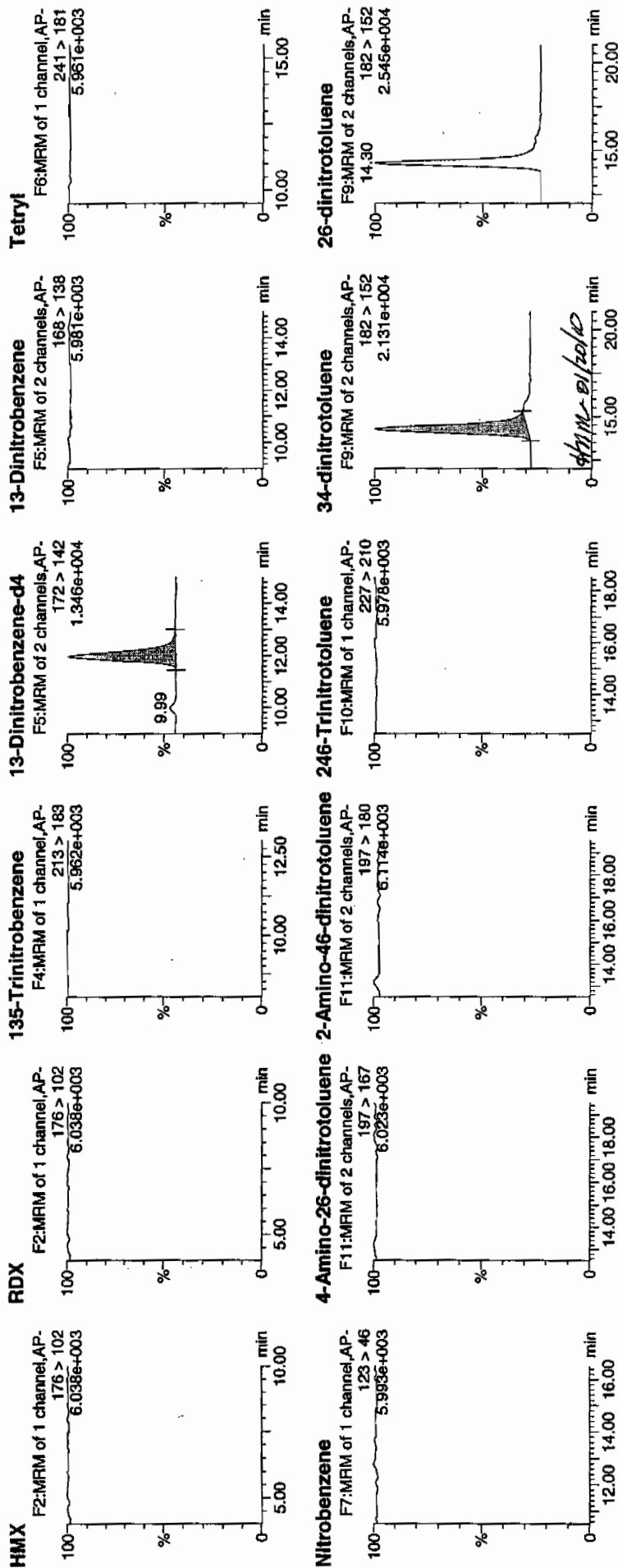
Time: 00:58:08

ID: 244209003

Vial: 3:2,A

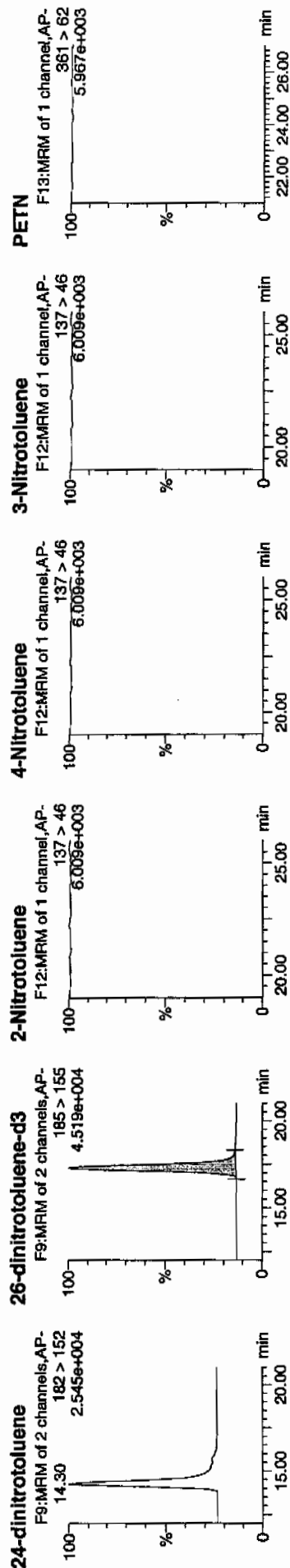
1/20/10

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

Dataset: C:\MASSLYN\New\_Exp.PRO\011810expA1.qld, Time: Wed Jan 20 09:06:02 2010



ID	Name	Area	Height	Width	Retention Time (min)	Mass Ratio	Response	Area	Height	Width	Retention Time (min)	Mass Ratio	Response	Area	Height	Width	Retention Time (min)	Mass Ratio	Response
244209003	HMX	176 > 102	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622
244209003	RDX	176 > 102	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622
244209003	135-Trinitrobenzene	213 > 183	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622
244209003	13-Dinitrobenzene-d4	172 > 142	11.97	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622
244209003	13-Dinitrobenzene	168 > 138	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622
244209003	Tetryl	241 > 181	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622
244209003	Nitrobenzene	123 > 46	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622	2996.622
244209003	4-Amino-26-dinitrotoluene	197 > 167	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348
244209003	2-Amino-46-dinitrotoluene	197 > 180	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348
244209003	246-Trinitrotoluene	227 > 210	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348
244209003	34-dinitrotoluene	182 > 152	14.30	8126.483	8126.483	8126.483	8126.483	8126.483	8126.483	8126.483	8126.483	8126.483	8126.483	8126.483	8126.483	8126.483	8126.483	8126.483	8126.483
244209003	26-dinitrotoluene	182 > 152	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348
244209003	24-dinitrotoluene	182 > 152	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348
244209003	26-dinitrotoluene-d3	185 > 155	17.29	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348
244209003	2-Nitrotoluene	137 > 46	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348
244209003	4-Nitrotoluene	137 > 46	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348
244209003	3-Nitrotoluene	137 > 46	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348	16639.348
244209003	PETN	361 > 62	5.967e+003	5.967e+003	5.967e+003	5.967e+003	5.967e+003	5.967e+003	5.967e+003	5.967e+003	5.967e+003	5.967e+003	5.967e+003	5.967e+003	5.967e+003	5.967e+003	5.967e+003	5.967e+003	5.967e+003

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7702

Lab Code: GEL

GEL Job No (SDG) 10-1160

Matrix: SOIL

GEL Sample ID: 244209003

Sample Amount 2

Moisture: 15.0

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940104

Concentrated Extract Volume (mL) 10

Date Extracted: 14-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01190027.wiff

Date Analyzed: 19-JAN-10 21:02

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 1/20/10

Sample Name: 24420003 Sample ID: 94010821.ER File: EXS01190027.wif

Peak Name: 1A19 Mass(es): 257.2204.9 amu

Comment: LCX832125 Annotation:

Sample Index: 1

Sample Type: Unknown

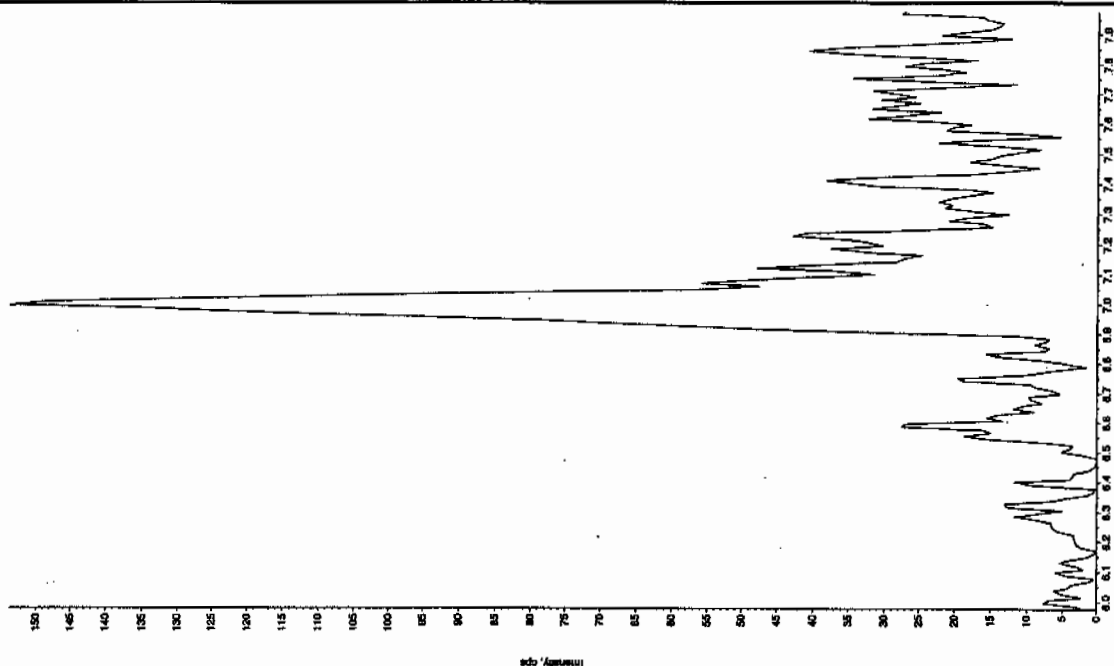
Concentration: 0.00 ng/mL

Calculated Conc: 1/19/2010

Acq. Date: 9:02:33 PM

Acq. Time: 9:02:33 PM

Modified: No



Sample Name: 24420003 Sample ID: 94010821.ER File: EXS01190027.wif

Peak Name: 3S-Dietroline Mass(es): 182.046.0 amu

Comment: LCX832125 Annotation:

Sample Index: 1

Sample Type: Unknown

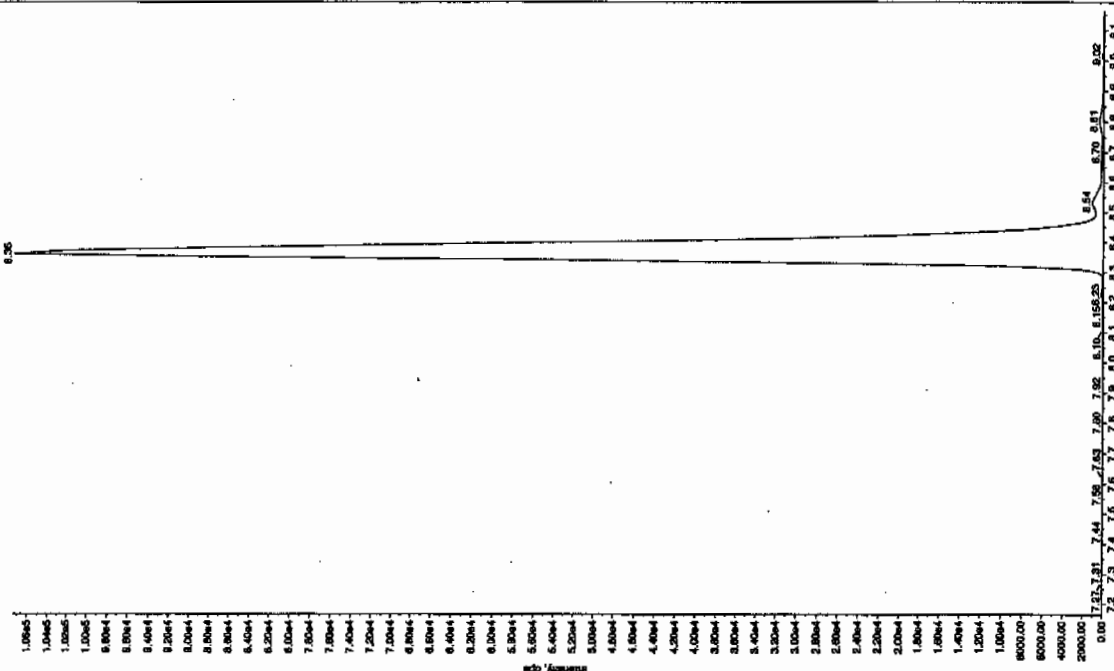
Concentration: 0.00 ng/mL

Calculated Conc: 1/19/2010

Acq. Date: 9:02:33 PM

Acq. Time: 9:02:33 PM

Modified: No

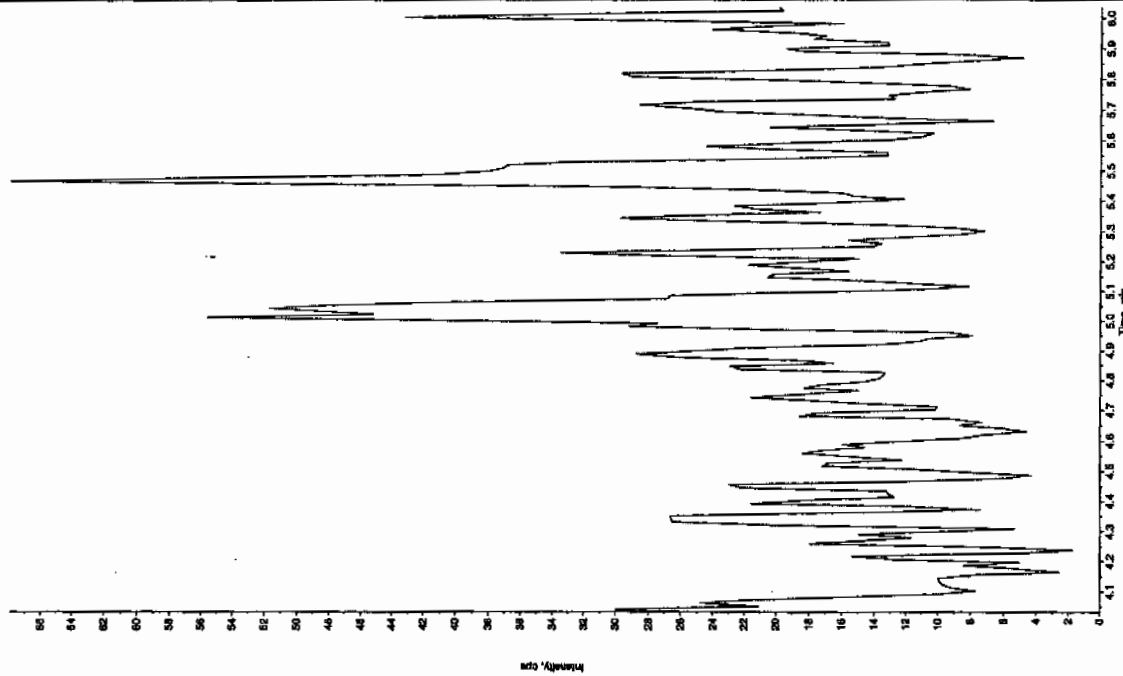


\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Jan 01/20/10

Sample Name: "244206003" Sample ID: "94010821ER" File: "EX501190027.wif"  
 Peak Name: "26-Diamino-4-nitrofluorene" Mass(es): "166.046.0 amu"  
 Comment: "LCX832125" Annotation: "

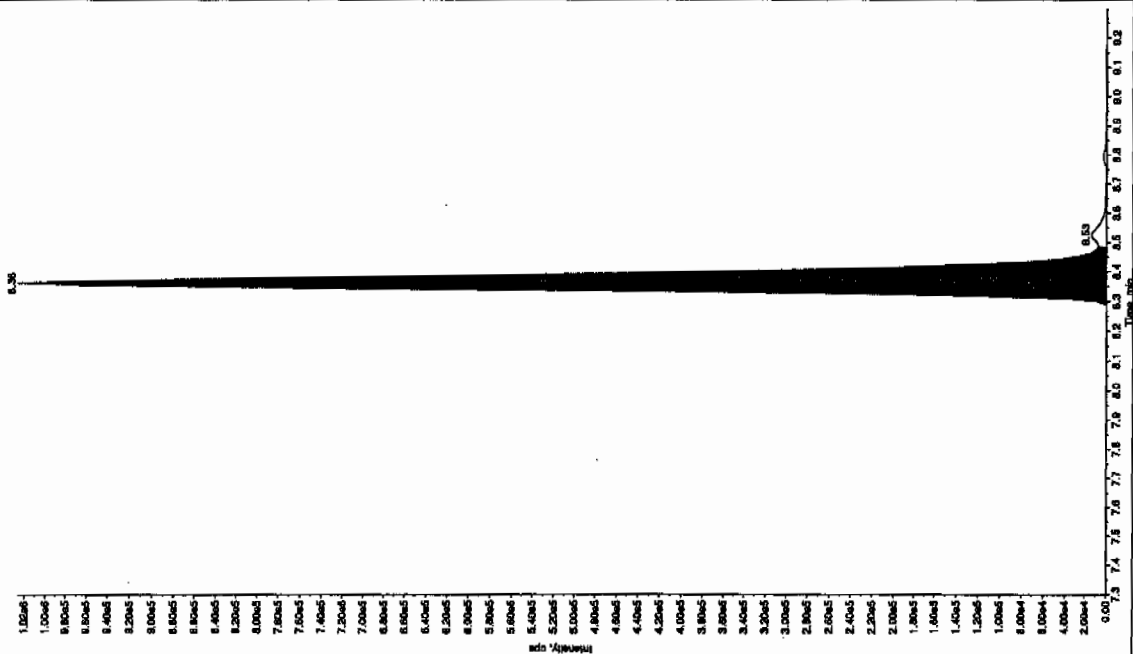
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ug/mL  
 Acq. Date: 1/15/2010  
 Acq. Time: 9:02:33 PM  
 Modified: No



Sample Name: "244206003" Sample ID: "94010821ER" File: "EX501190027.wif"  
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.151.9 amu"  
 Comment: "LCX832125" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 1/15/2010  
 Acq. Date: 1/15/2010  
 Acq. Time: 9:02:33 PM  
 Modified: No

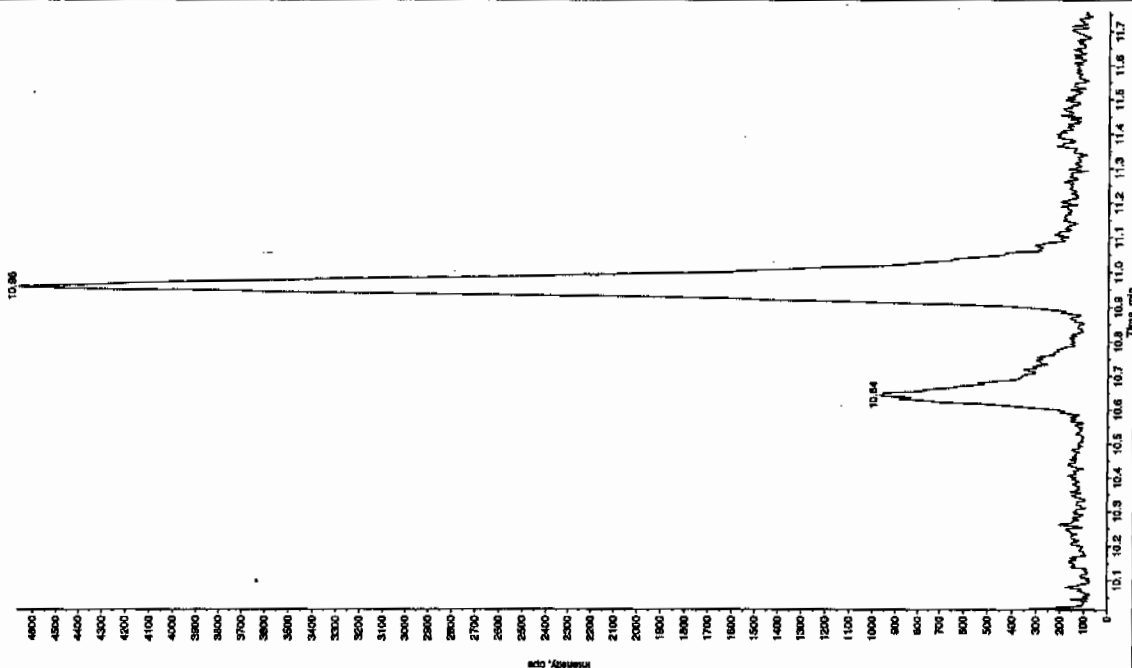
Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 1460.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 15.0 sec  
 Expected RT: 8.30 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.36 min  
 Area: 3.07e+006 counts  
 Height: 1025451.855 cps  
 Start Time: 8.28 min  
 End Time: 8.48 min



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

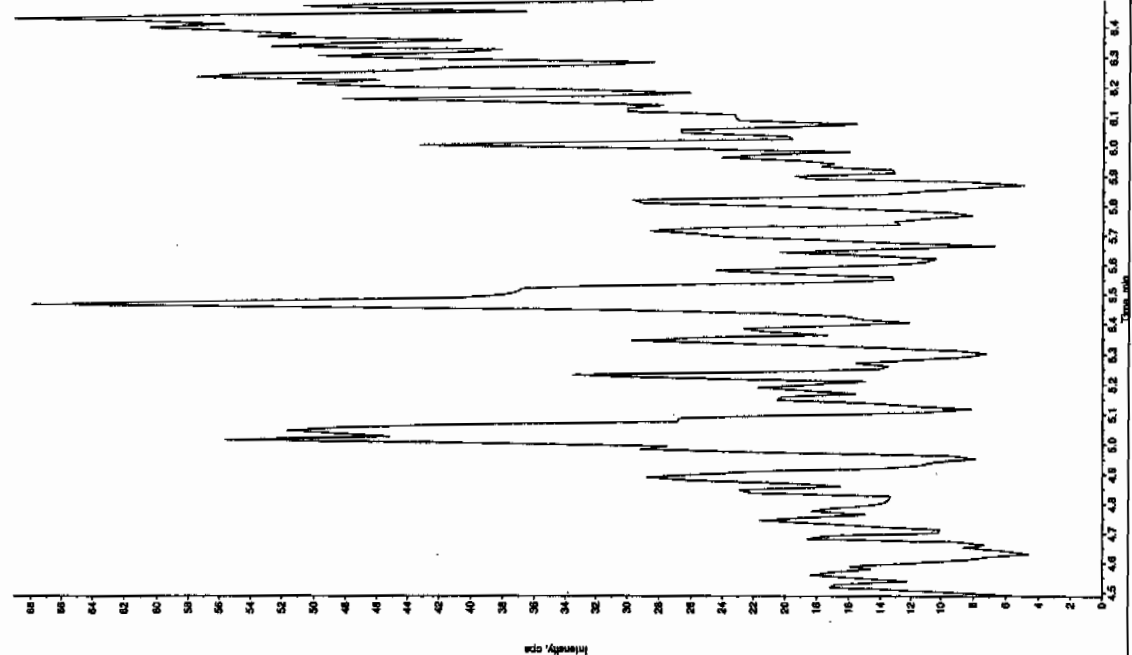
Sample Name: 244200003 Sample ID: 94010921.ER File: EXS01190227.wiff  
 Peak Name: 24-Diamino-6-nitrocholine Mass(es): 355.191.0 amu  
 Comment: LCX83212S Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 1/19/2010  
 Acq. Date: 9:02:33 PM  
 Acq. Time: 9:02:33 PM  
 Modified: No



Sample Name: 244200003 Sample ID: 94010921.ER File: EXS01190227.wiff  
 Peak Name: 24-Diamino-6-nitrocholine Mass(es): 166.046.0 amu  
 Comment: LCX83212S Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 1/19/2010  
 Acq. Date: 9:02:33 PM  
 Acq. Time: 9:02:33 PM  
 Modified: No



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

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7700

Lab Code: GEL

GEL Job No (SDG) 10-1160

Matrix: SOIL

GEL Sample ID: 244209004

Sample Amount 2

Moisture: 6.3

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940104

Concentrated Extract Volume (mL) 10

Date Extracted: 14-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0118073a

Date Analyzed: 20-JAN-10 01:27

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



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

Dataset: C:\MASSLYNX\New\_Exp.PRO\011810expA1.qld, Time: Wed Jan 20 09:06:02 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0118073a

Date: 20-Jan-2010

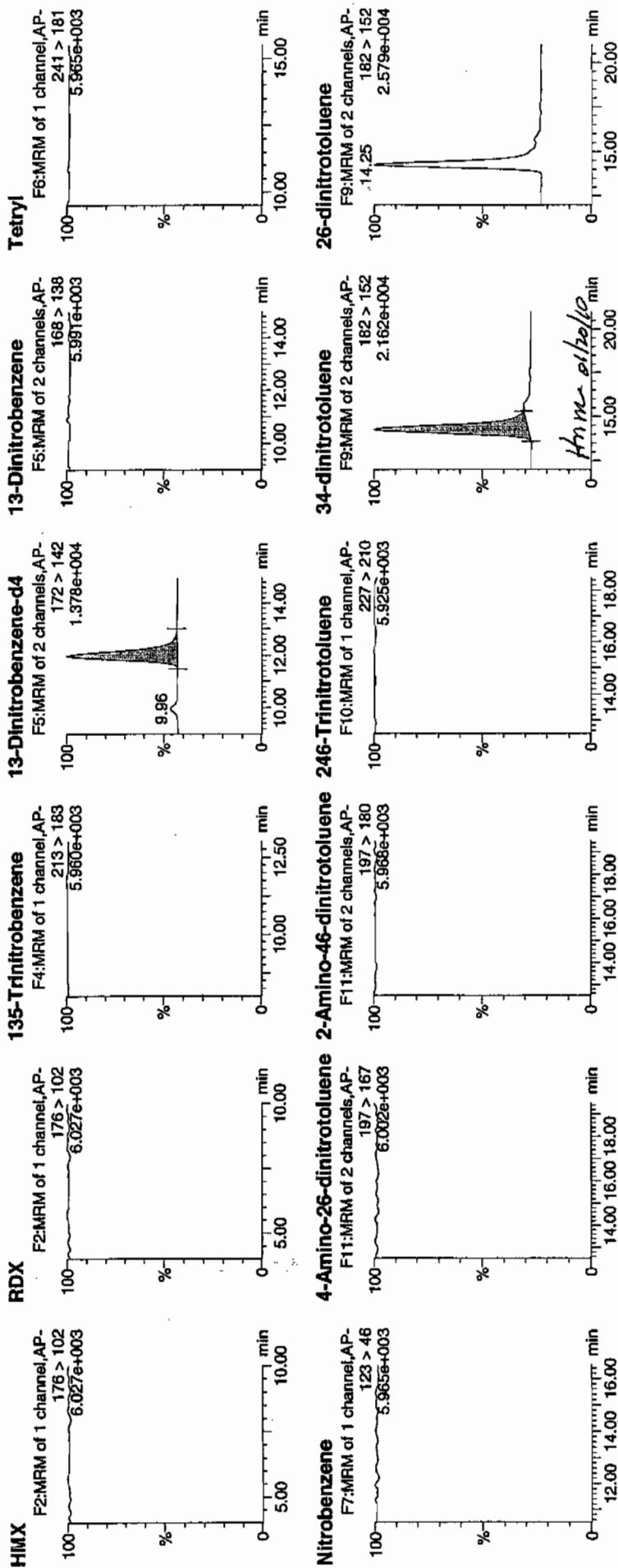
Time: 01:27:38

ID: 244209004

Vial: 3:2,B

12/21/10

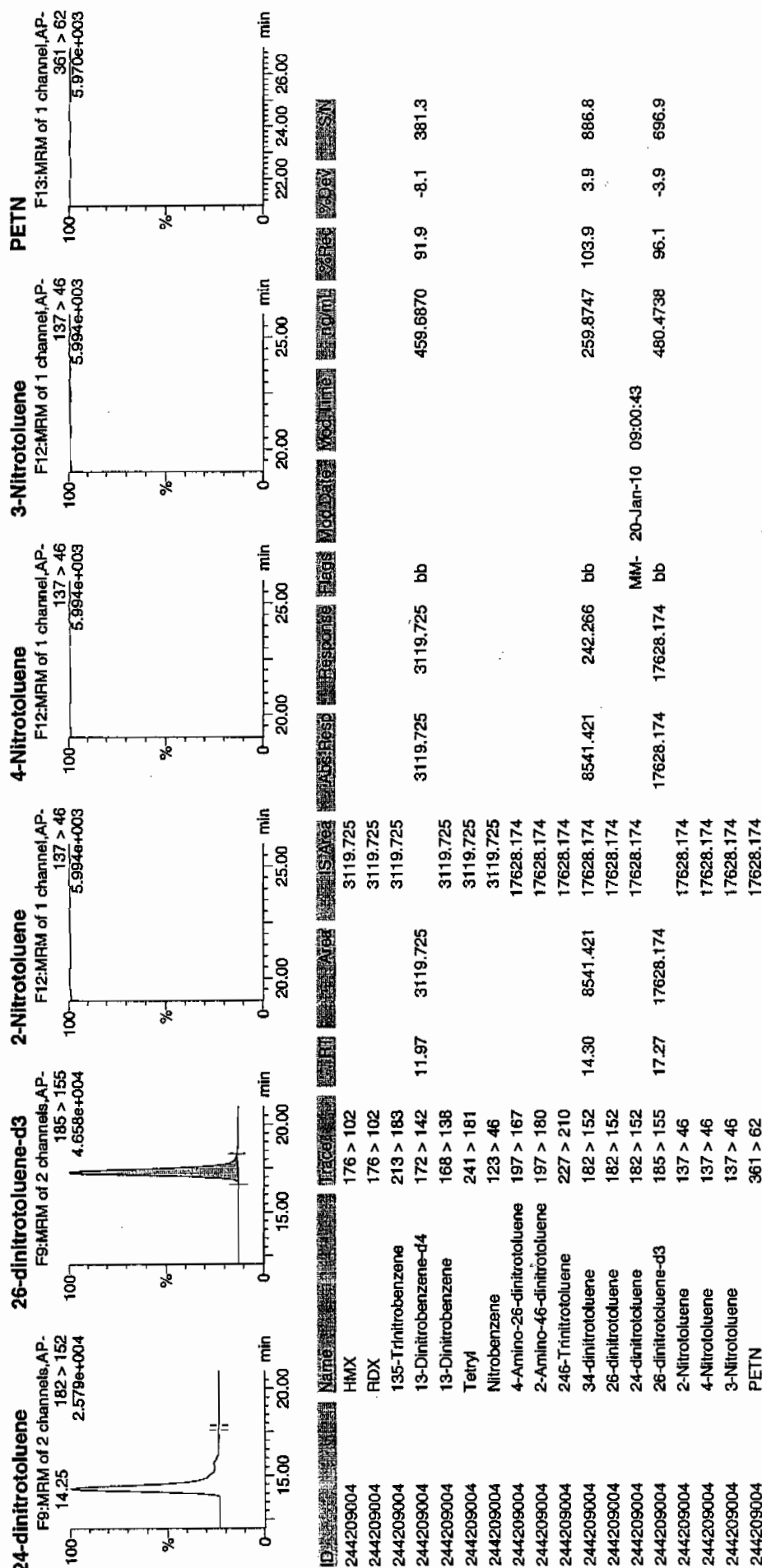
12/21/10



Printed: Wed Jan 20 09:07:58 2010, Page 62 of 91

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\011810expA1.qld, Time: Wed Jan 20 09:06:02 2010



1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7700

Lab Code: GEL

GEL Job No (SDG) 10-1160

Matrix: SOIL

GEL Sample ID: 244209004

Sample Amount 2

Moisture: 6.3

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940104

Concentrated Extract Volume (mL) 10

Date Extracted: 14-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01190028.wiff

Date Analyzed: 19-JAN-10 21:18

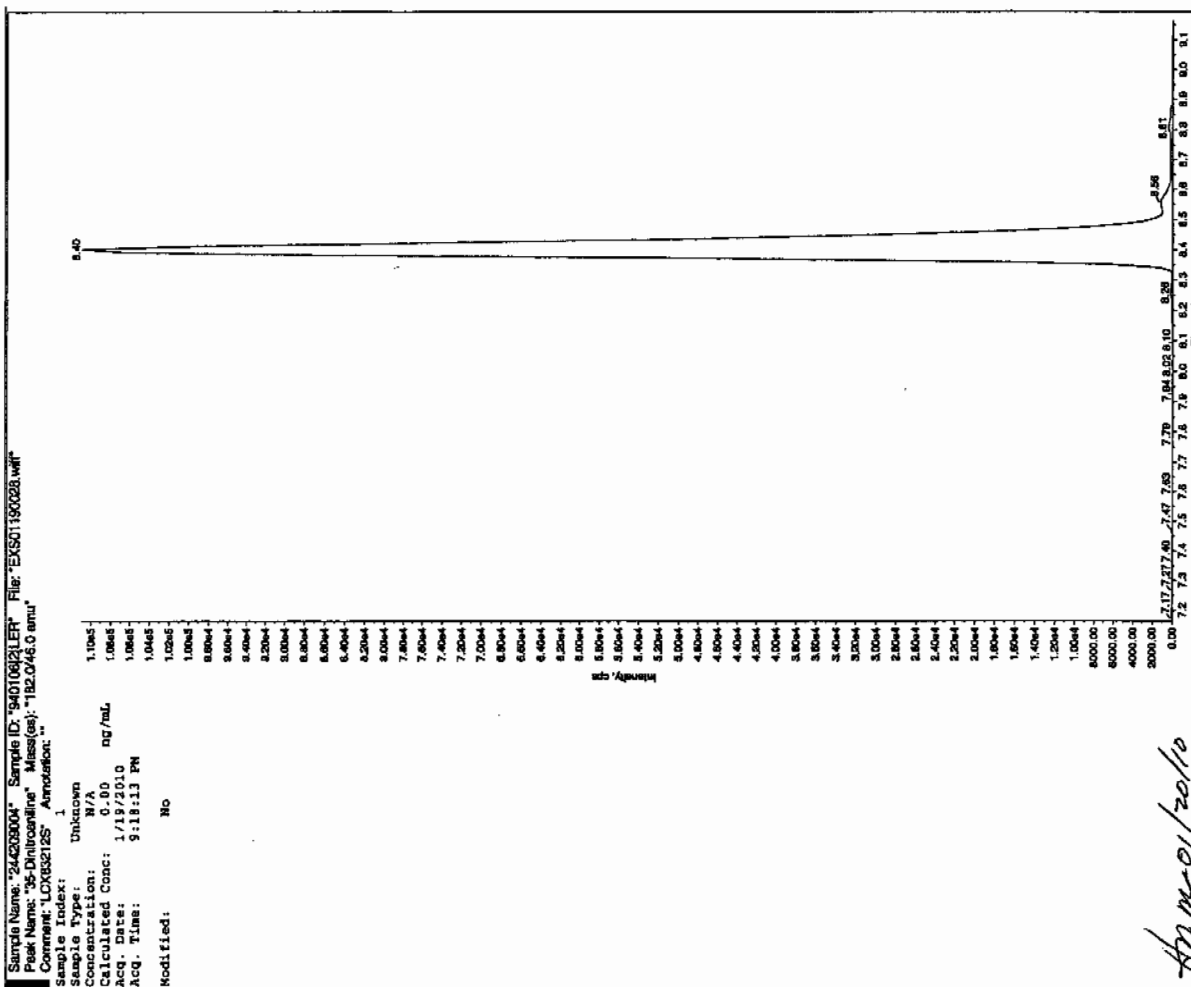
Units: ug/kg

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

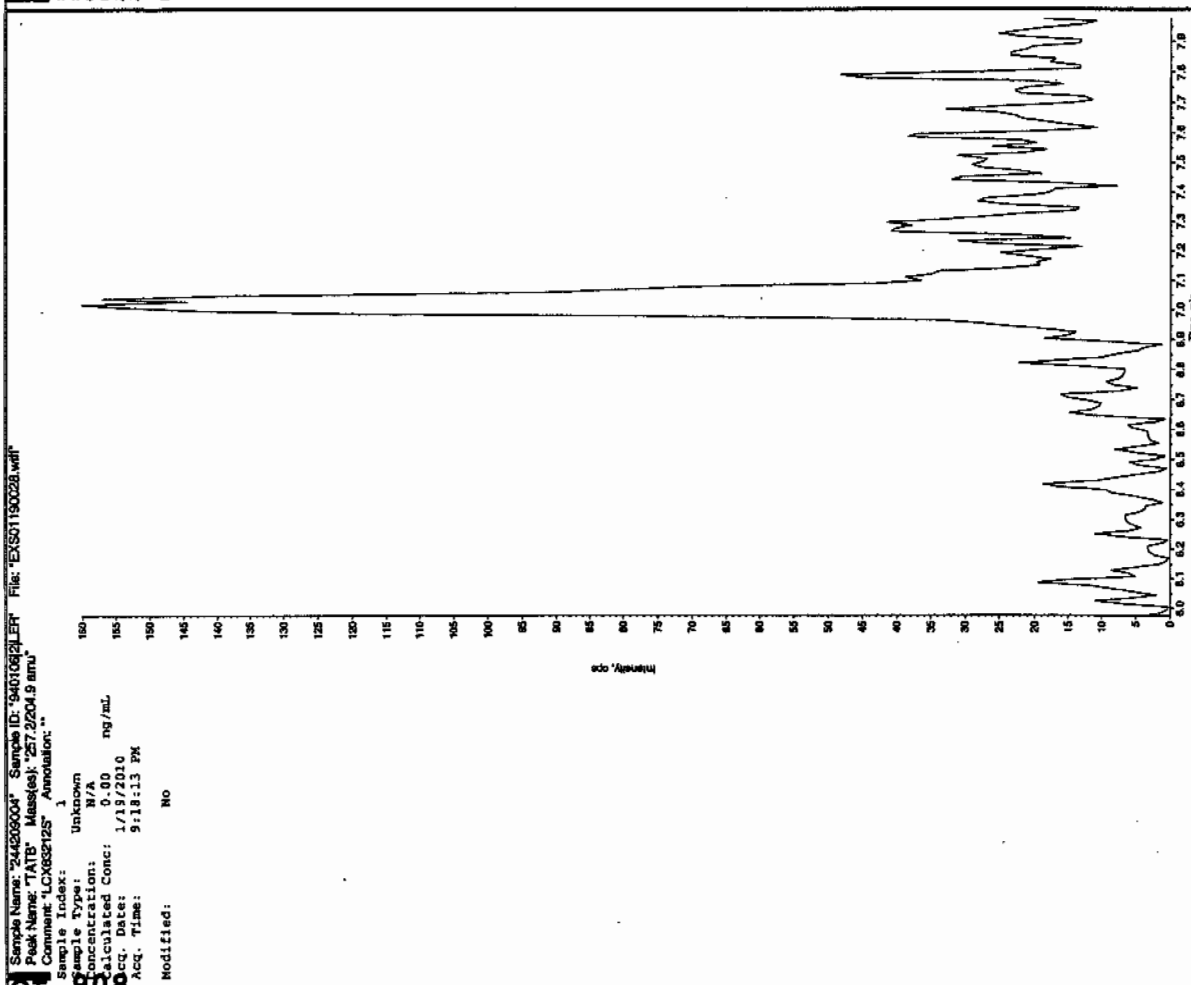
\*Concentration =

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

See 1/20/10



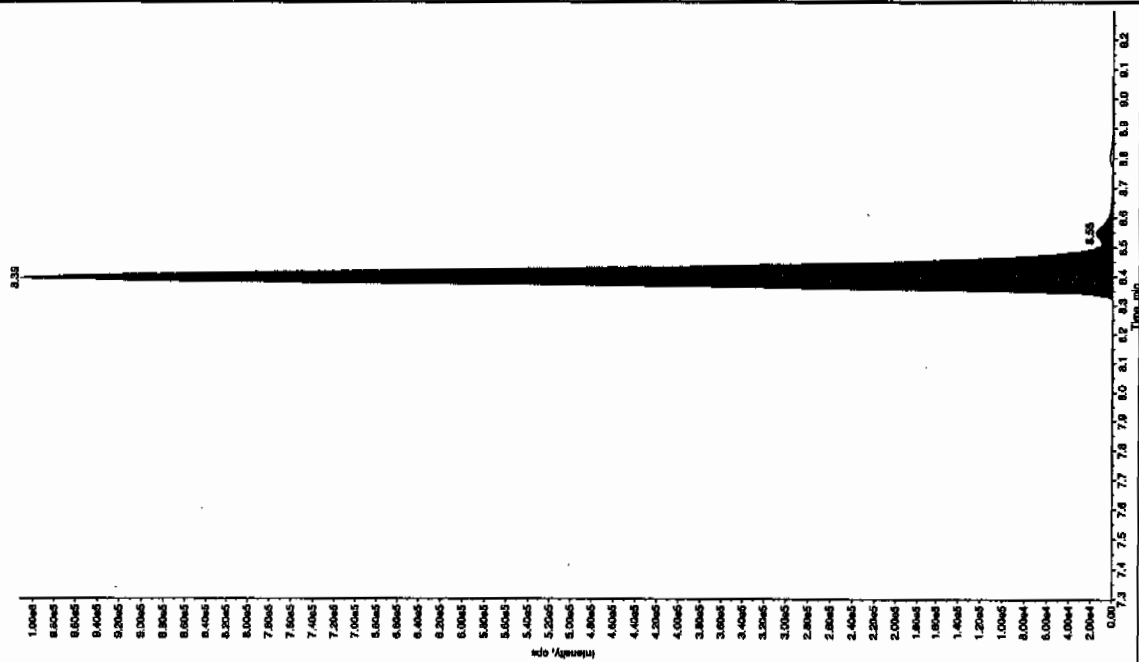
Am 1/20/10



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

Sample Name: "244208004" Sample ID: "94010821EF" File: "EXS01190028.wif"  
 Peak Name: "24-Dinitrofluorene" Mass(es): "182.0460 amu"  
 Comment: "LCX832125" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 mg/mL  
 Acq. Date: 1/19/2010  
 Acq. Time: 9:18:13 PM  
 Modified: No



Sample Name: "244208004" Sample ID: "94010821EF" File: "EXS01190028.wif"  
 Peak Name: "24-Dinitrofluorene" Mass(es): "182.0460 amu"  
 Comment: "LCX832125" Annotation: "

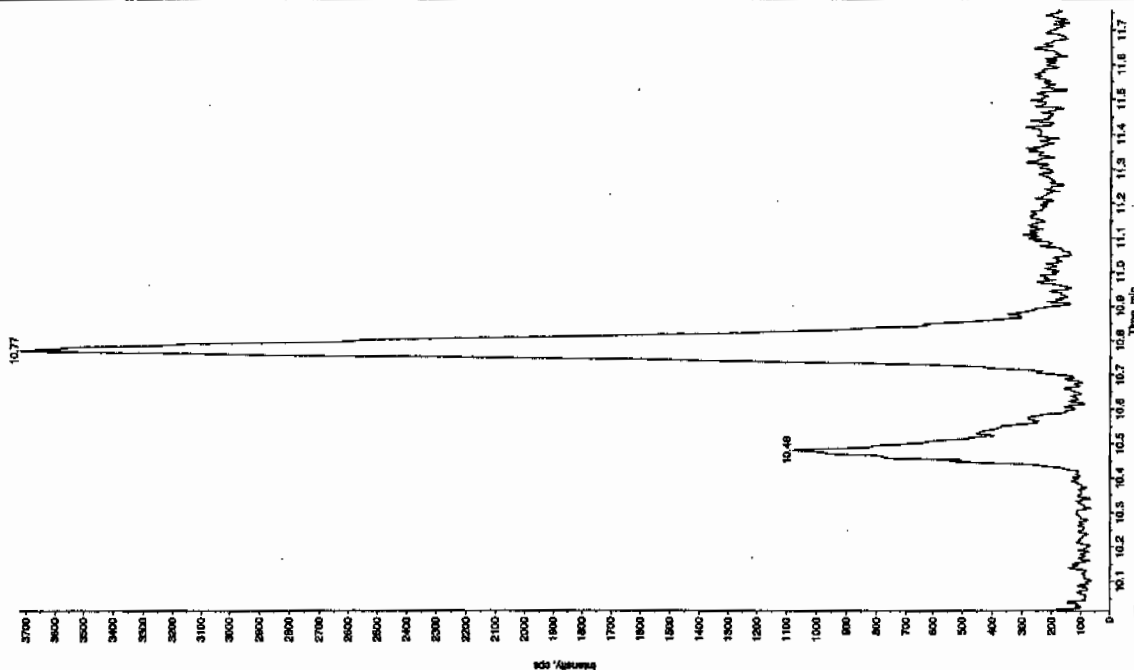
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 284. ng/mL  
 Acq. Date: 1/19/2010  
 Acq. Time: 9:18:13 PM  
 Modified: No

Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 1450.00 cps  
 Min. Peak Width: 0.08 sec  
 Smoothing Width: 3 points  
 RT Window: 15.0 sec  
 Expected RT: 8.30 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.39 min  
 Area: 3.97e+006 counts  
 Height: 1012740.295 cps  
 Start Time: 8.29 min  
 End Time: 8.69 min

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

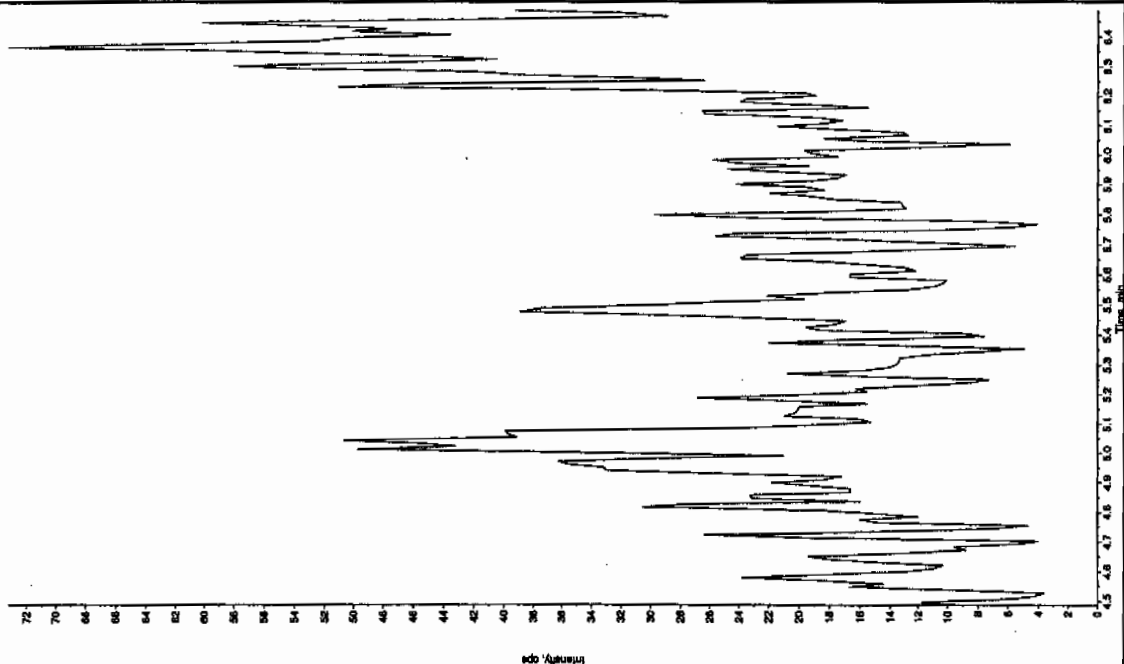
Sample Name: "244209004" Sample ID: "94010621.1" File: "EXS01190028.v" Peak Name: "bis(o-cresyl) phosphate" Mass(es): "369.1511.0 amu" Comment: "LCX832125" Annotation: "

Sample Index: 1  
Sample Type: Unknown  
Concentration: N/A  
Calculated Conc: 0.00 ng/mL  
Acq. Date: 1/19/2010  
Acq. Time: 9:18:13 PM  
Modified: No



Sample Name: "244209004" Sample ID: "94010621.1" File: "EXS01190028.v" Peak Name: "24-Diamino-6-nitrotoluene" 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: 1/19/2010  
Acq. Time: 9:18:13 PM  
Modified: No



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

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7699

Lab Code: GEL

GEL Job No (SDG) 10-1160

Matrix: SOIL

GEL Sample ID: 244209005

Sample Amount 2

Moisture: 20.4

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940104

Concentrated Extract Volume (mL) 10

Date Extracted: 14-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0118074a

Date Analyzed: 20-JAN-10 01:57

Units: ug/kg

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

\*Concentration =

Instrument Value	X	Concentrated Extract Volume	X	Dilution Factor
		Sample Amount		

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\011810expA1.qld, Time: Wed Jan 20 09:06:02 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0118074a

Date: 20-Jan-2010

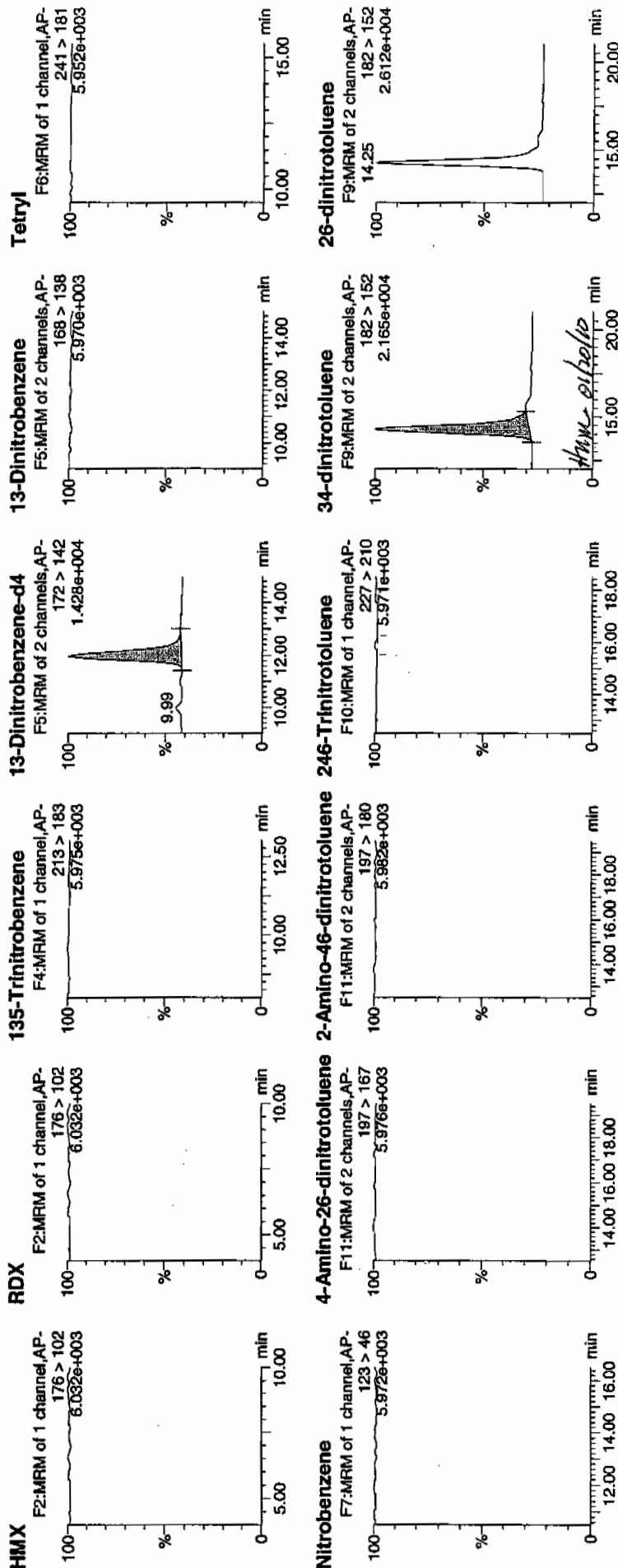
Time: 01:57:07

ID: 244209005

Vial: 3:2,C

1/20/10

DATE 1940106 / 2010

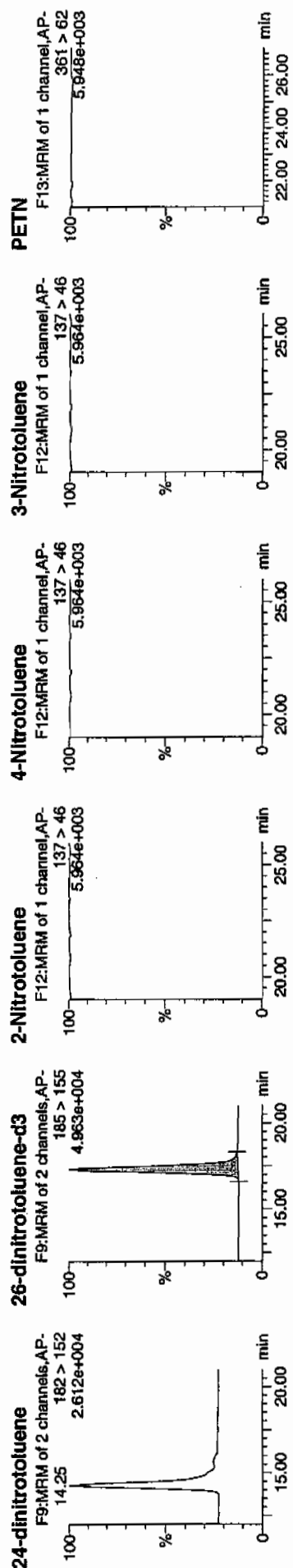




## Quantify Sample Report

**GEL Laboratories, LLC / Analyst : Michael A. Penny**

Dataset: C:\MASSLYN\New\_Exp.PRO\011810expA1.qld, Time: Wed Jan 20 09:06:02 2010

[illegible]

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7699

Lab Code: GEL

GEL Job No (SDG) 10-1160

Matrix: SOIL

GEL Sample ID: 244209005

Sample Amount 2

Moisture: 20.4

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940104

Concentrated Extract Volume (mL) 10

Date Extracted: 14-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01190029.wiff

Date Analyzed: 19-JAN-10 21:33

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

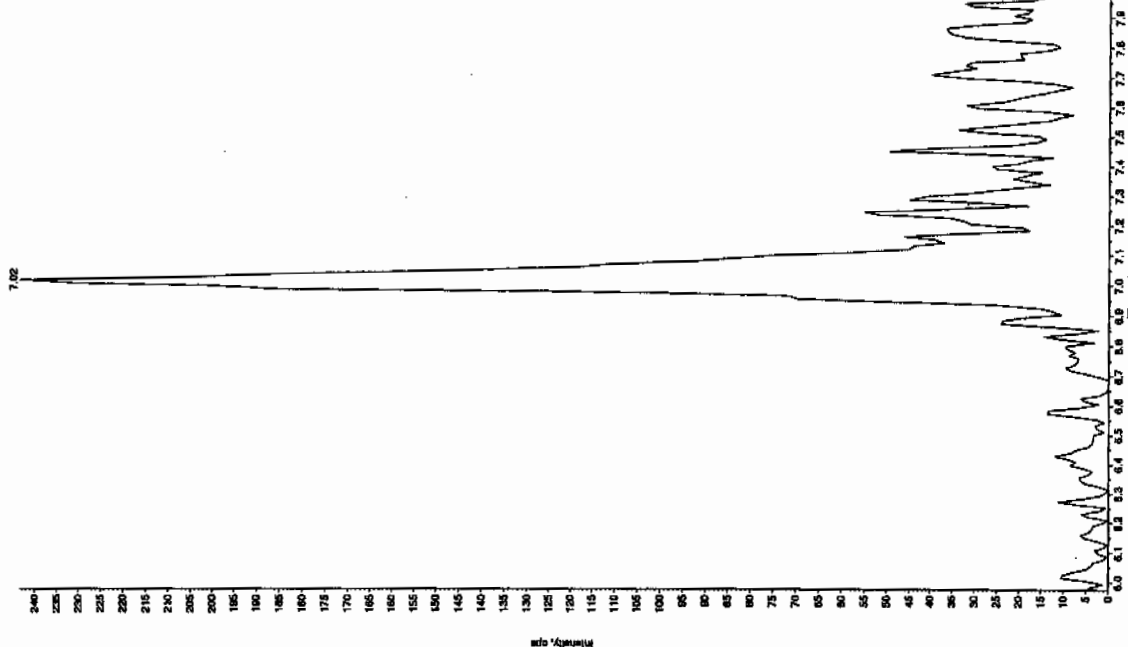
\*Concentration =

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

See 170110

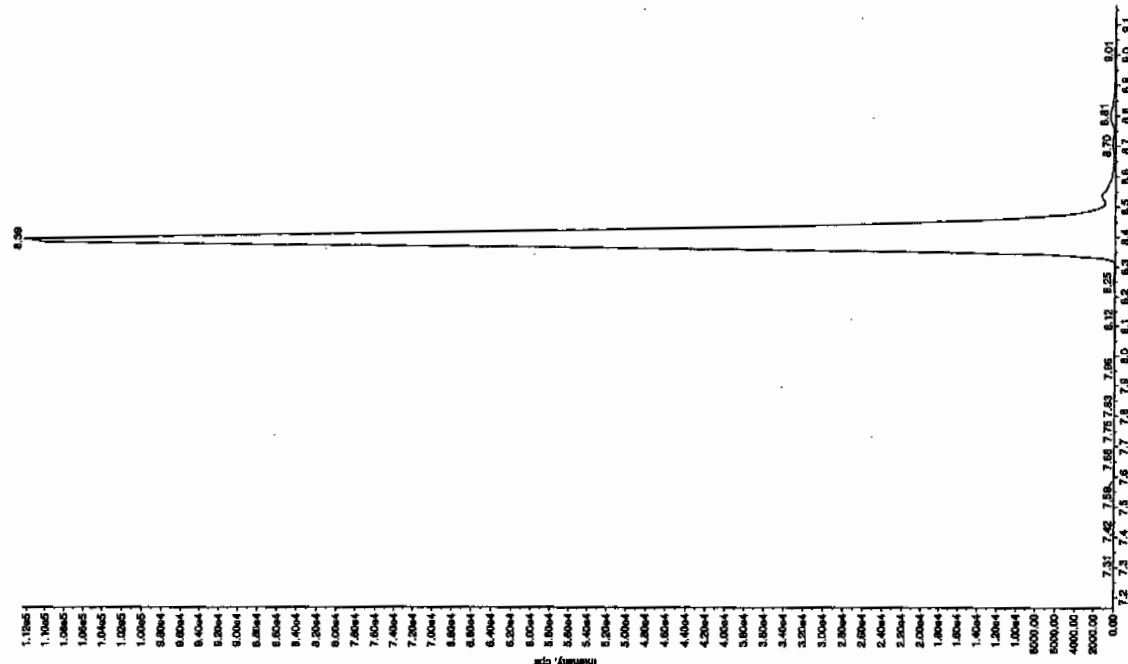
Sample Name: "24420305" Sample ID: "94010621.E" File: "EXS01190229.wif"  
 Peak Name: "TATB" Mass(es): "257.2204.9 amu"  
 Comment: "LCX832125" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/19/2010  
 Acq. Time: 9:33:56 PM  
 Modified: No



Sample Name: "24420305" Sample ID: "94010621.E" File: "EXS01190229.wif"  
 Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"  
 Comment: "LCX832125" Annotation: "

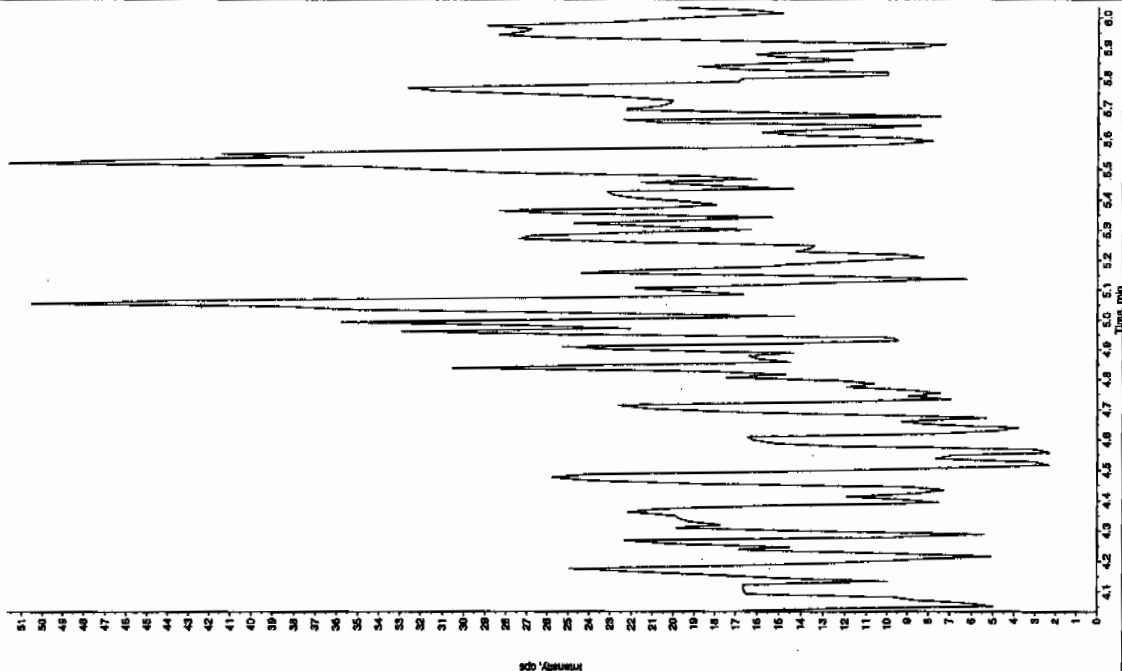
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/19/2010  
 Acq. Time: 9:33:56 PM  
 Modified: No



See 170110

Sample Name: 24420505 Sample ID: 94010621.ER File: EXS01180029.wif  
 Peak Name: 26-Diamino-4-nitrotoluene Mass(es): 168.046.0 amu  
 Comment: LCX832125 Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 1/19/2010  
 Acq. Date: 9:33:56 PM  
 Acq. Time: 9:33:56 PM  
 Modified: No



Sample Name: 24420505 Sample ID: 94010621.ER File: EXS01180029.wif  
 Peak Name: 34-Dinitrotoluene Mass(es): 182.051.9 amu  
 Comment: LCX832125 Annotation: "

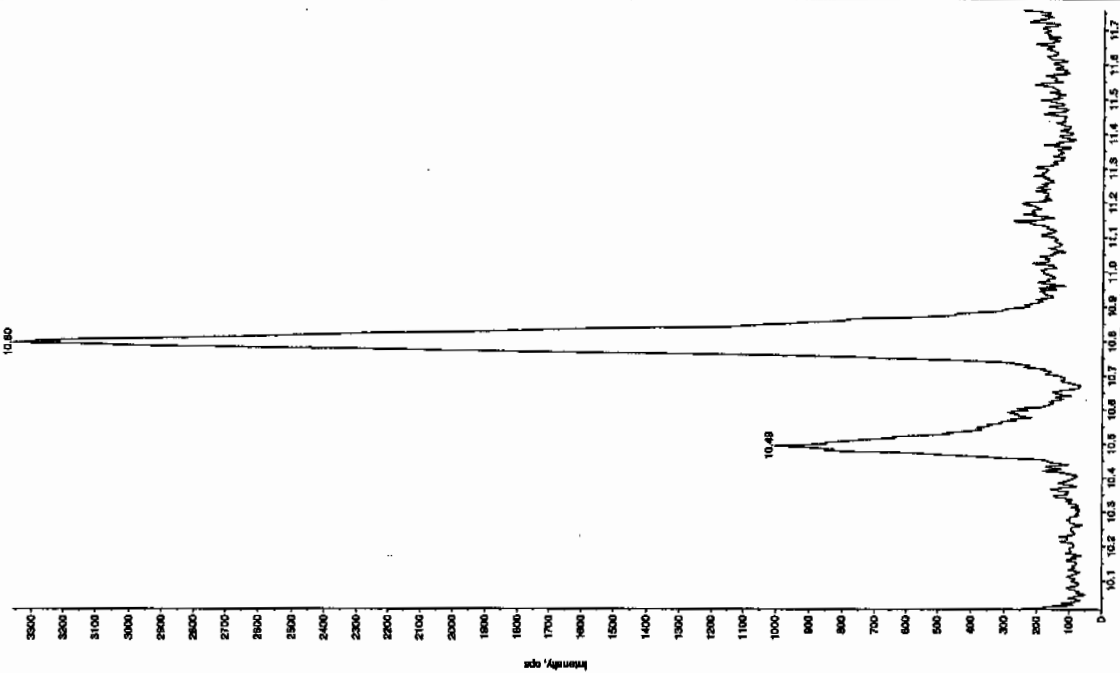
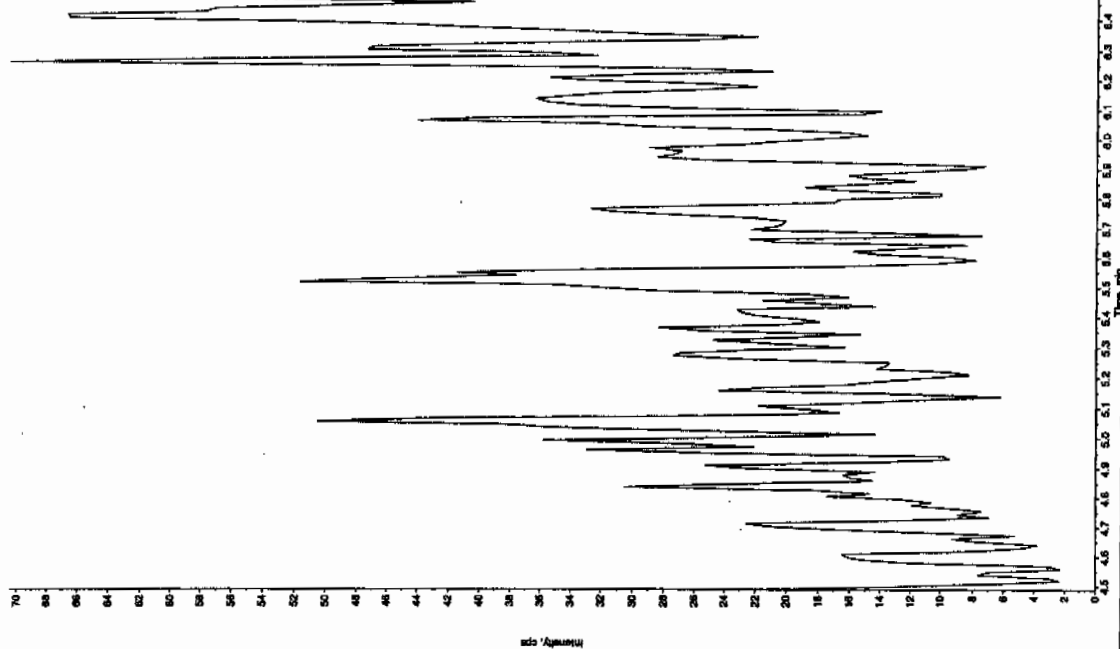
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 285 ng/mL  
 Calculated Conc: 1/19/2010  
 Acq. Date: 9:33:56 PM  
 Acq. Time: 9:33:56 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Width: 0.00 cps  
 Min. Peak Width: 0.00 points  
 Scanning Width: 3 points  
 RT Window: 15.0 sec  
 Expected RT: 8.30 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.38 min  
 Area: 3.98e+006 counts  
 Height: 1032382.813 cps  
 Start Time: 8.28 min  
 End Time: 8.69 min



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

Sample Name: "244209005" Sample ID: "54010621ER" File: "EXS01190029.wif"  
 Peak Name: "166.046.0 amu" Mass(es): "369.181.0 amu"  
 Comment: "LCX832125" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/19/2018  
 Acq. Time: 9:33:56 PM  
 Modified: No



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

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7727

Lab Code: GEL

GEL Job No (SDG) 10-1160

Matrix: SOIL

GEL Sample ID: 244209006

Sample Amount 2

Moisture: 25.3

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940104

Concentrated Extract Volume (mL) 10

Date Extracted: 14-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0118075a

Date Analyzed: 20-JAN-10 02:26

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	Concentrated Extract Volume	X	Dilution Factor
		Sample Amount		

Printed: Wed Jan 20 09:07:58 2010, Page 65 of 91

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\011810expA1.qld, Time: Wed Jan 20 09:06:02 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0118075a

Date: 20-Jan-2010

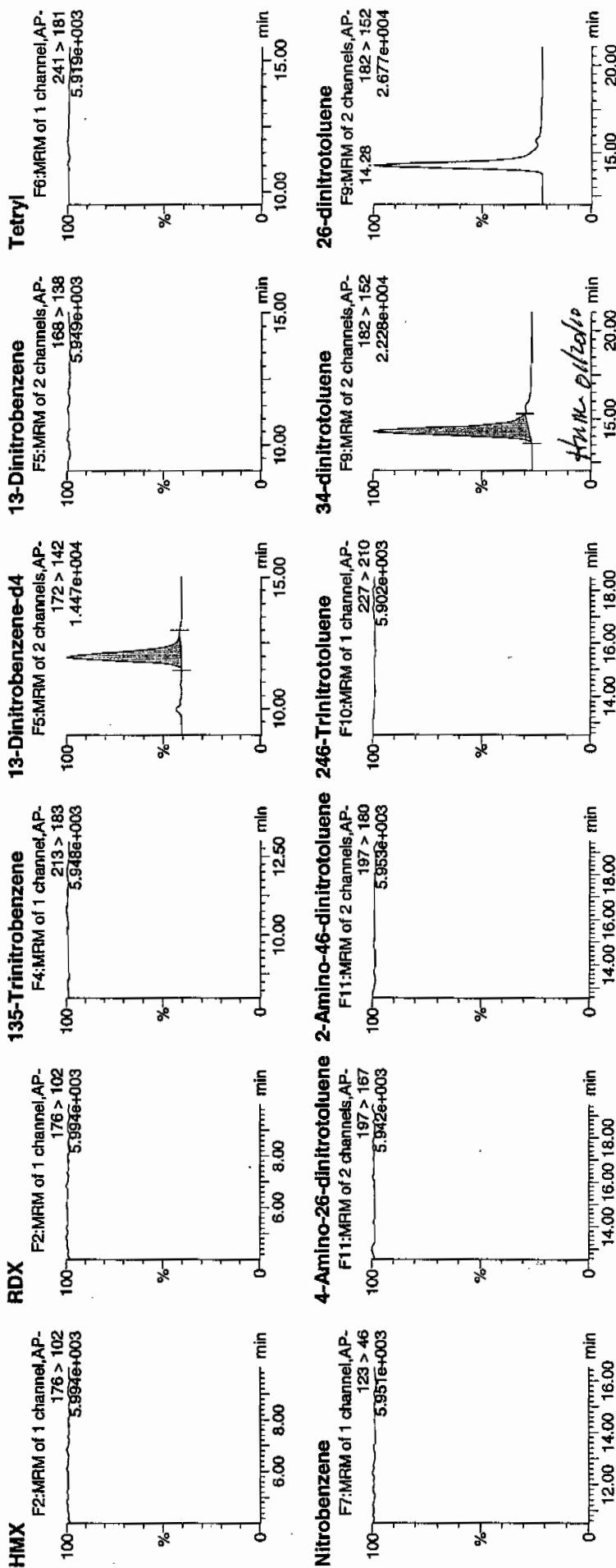
Time: 02:26:35

ID: 244209006

Vial: 3:2,D

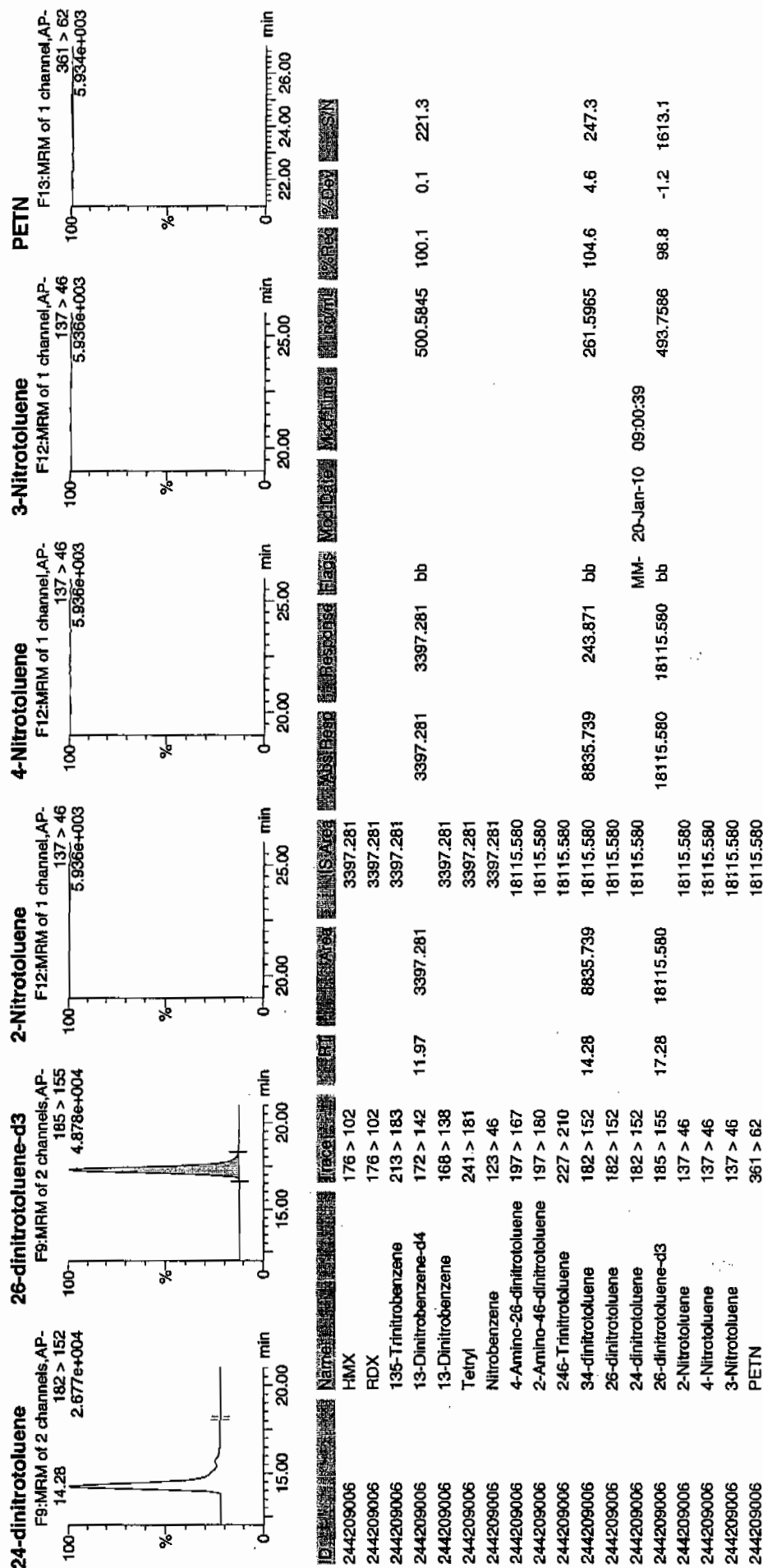
1/20/10

940106 / 2012 / 21



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

Dataset: C:\MASSLYNX\New\_Exp\PROV011810expA1.qld, Time: Wed Jan 20 09:06:02 2010





1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7727

Lab Code: GEL

GEL Job No (SDG) 10-1160

Matrix: SOIL

GEL Sample ID: 244209006

Sample Amount 2

Moisture: 25.3

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940104

Concentrated Extract Volume (mL) 10

Date Extracted: 14-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01190030.wiff

Date Analyzed: 19-JAN-10 21:49

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

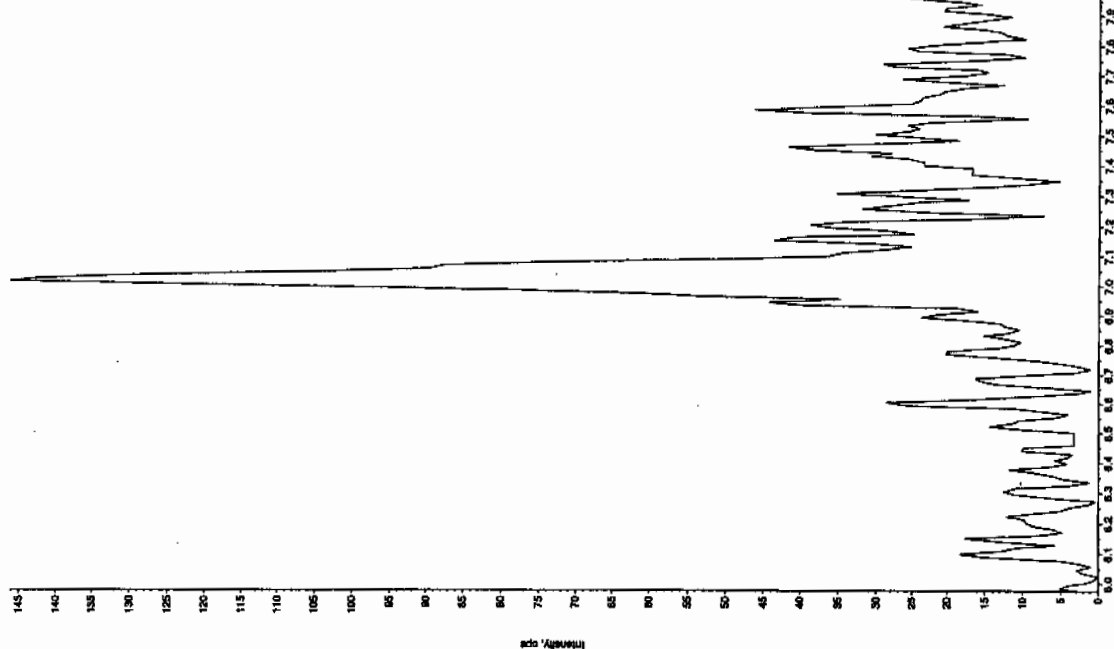
\*Concentration =

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

See 1/20/10

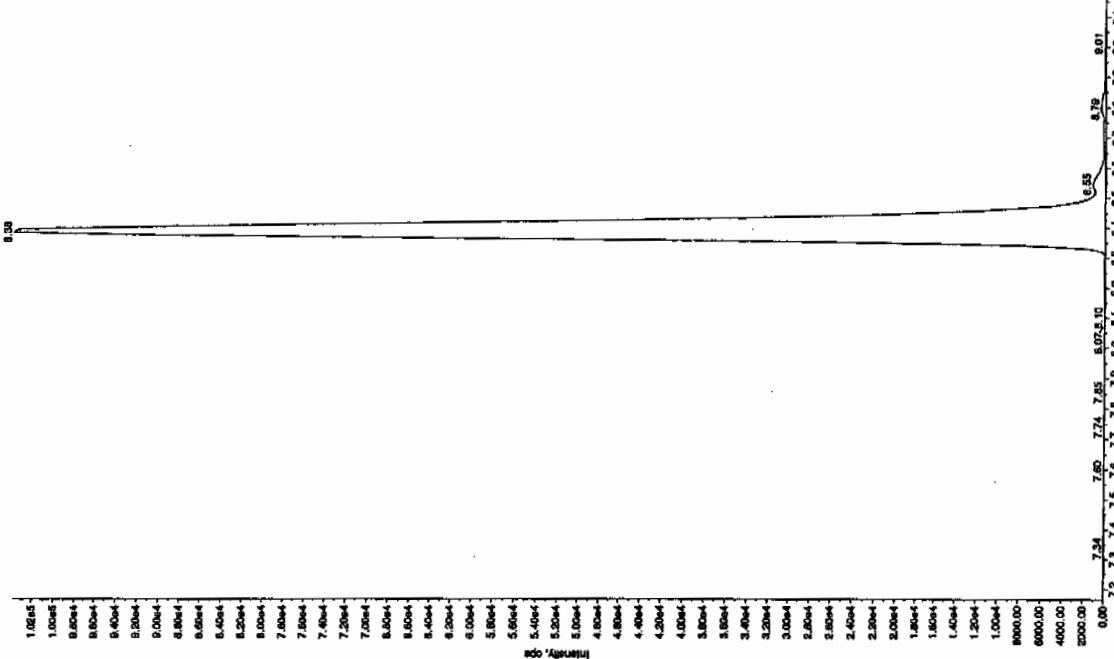
Sample Name: "244208008" Sample ID: "94010821LER" File: "EXS01190000.wif"  
 Peak Name: "TATE" Mass(es): "257.2204.9 amu"  
 Comment: "LCX832125" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ug/mL  
 Acq. Date: 1/19/2010  
 Acq. Time: 9:49:38 PM  
 Modified: No



Sample Name: "244208008" Sample ID: "94010821LER" File: "EXS01190000.wif"  
 Peak Name: "TATE" Mass(es): "182.046.0 amu"  
 Comment: "LCX832125" Annotation: "

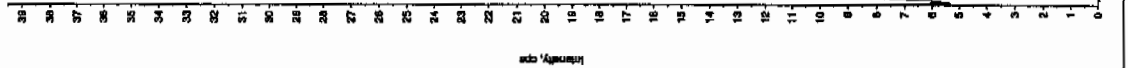
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ug/mL  
 Acq. Date: 1/19/2010  
 Acq. Time: 9:49:38 PM  
 Modified: No



See 1/20/10

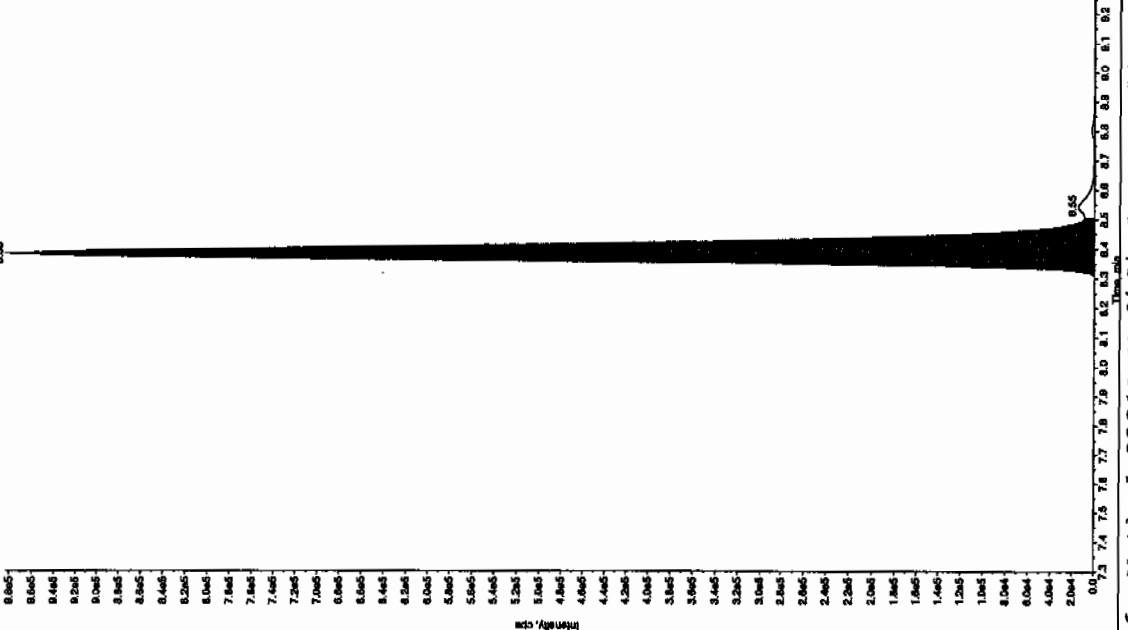
Sample Name: "244208006" Sample ID: "94010821ER" File: "EXS01190300.wif"  
 Peak Name: "26-Dinitro-4-nitrobenzene" Mass(es): "166.046.0 amu"  
 Comment: "LCX832125" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/19/2010  
 Acq. Time: 5:49:38 PM  
 Modified: No



Sample Name: "244208006" Sample ID: "94010821ER" File: "EXS01180300.wif"  
 Peak Name: "34-Dinitrobenzene" Mass(es): "182.1151.9 amu"  
 Comment: "LCX832125" Annotation: "

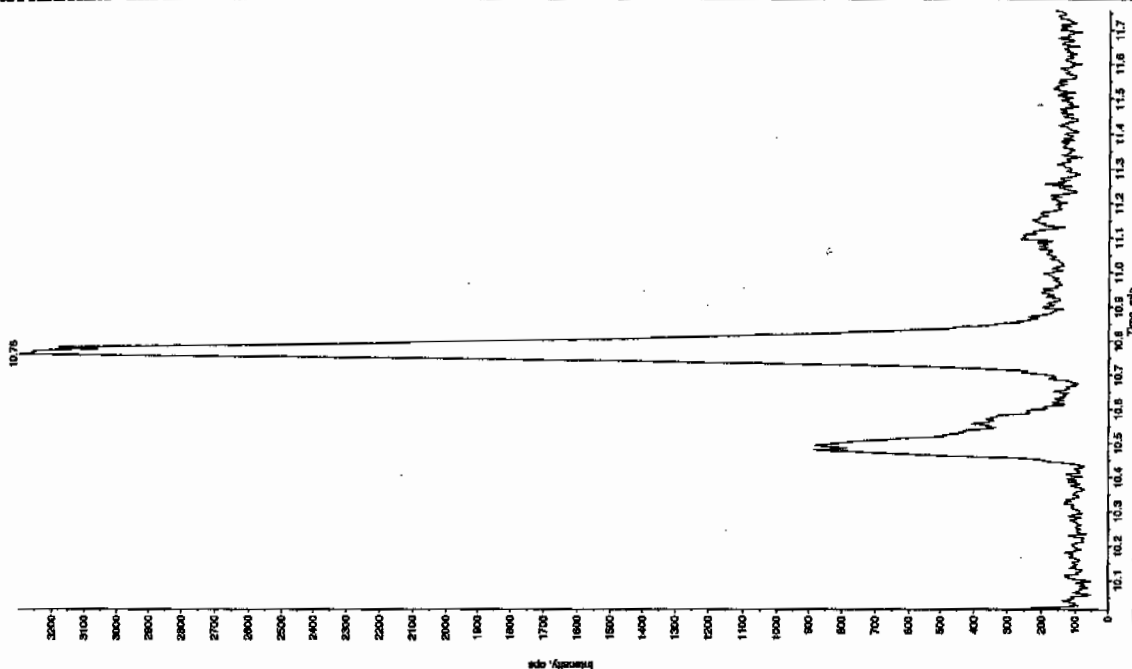
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 272. ng/mL  
 Acq. Date: 1/19/2010  
 Acq. Time: 9:49:38 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQN  
 Min. Peak Height: 1450.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 15.0 sec  
 Expected RT: 8.30 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.38 min  
 Area: 3.81e+006 counts  
 Height: 981422.913 cps  
 Start Time: 8.28 min  
 End Time: 8.51 min



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

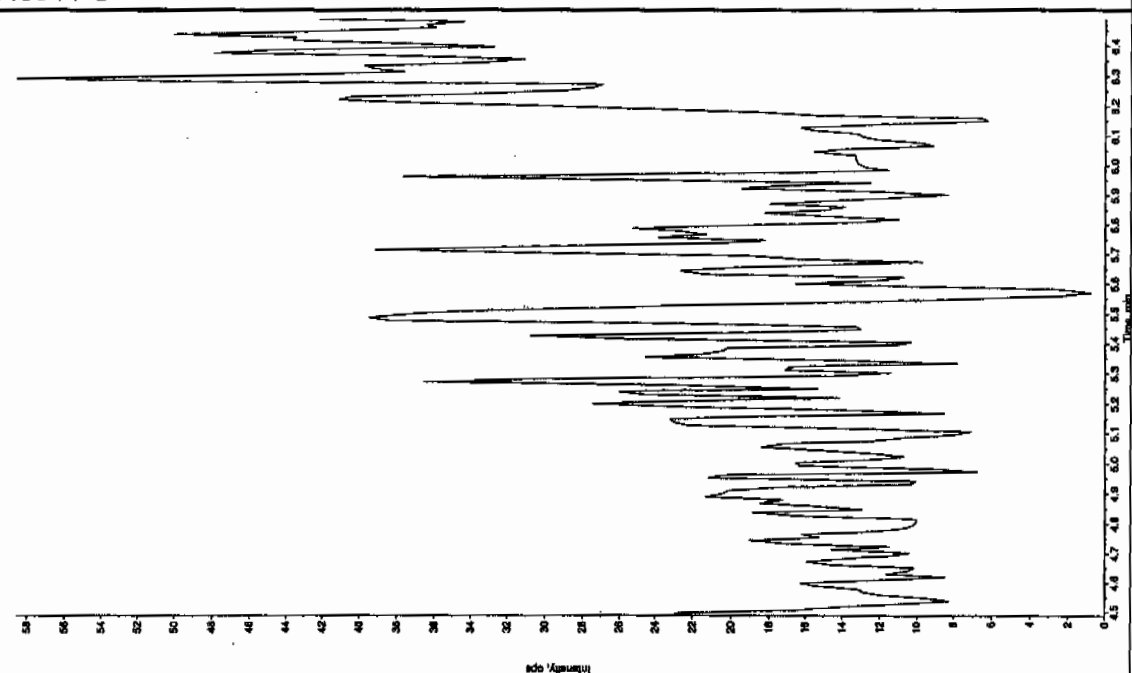
Sample Name: 24420008 Sample ID: 94010321.EP File: EX501190000.wif  
 Peak Name: 24-Chloro-5-oxo-3-phenyl-2-pyridone Mass(es): 358.1/91.0 amu  
 Comment: LCX832125 Annotation: -

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/19/2010  
 Acq. Time: 9:49:38 PM  
 Modified: No



Sample Name: 24420008 Sample ID: 94010321.EP File: EX501190000.wif  
 Peak Name: 24-Chloro-5-oxo-3-phenyl-2-pyridone Mass(es): 358.1/91.0 amu  
 Comment: LCX832125 Annotation: -

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/19/2010  
 Acq. Time: 9:49:38 PM  
 Modified: No



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

# STANDARDS DATA

**SW846 8321A Modified-Explosives  
Calibration Standard Concentration Levels**

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	CCV
3,4-Dinitrotoluene (Surrogate)	12.5	25	100	200	400	500		300
<b>Primary Analytes</b>								
HMX	25	50	200	400	800	1000	na	600
RDX	25	50	200	400	800	1000	na	600
DNX	25	50	200	400	800	1000	na	600
MXN	25	50	200	400	800	1000	na	600
TNX	25	50	200	400	800	1000	na	600
1,3,5-Trinitrobenzene	25	50	200	400	800	1000	na	600
1,3-Dinitrobenzene	25	50	200	400	800	1000	na	600
Nitrobenzene	25	50	200	400	800	1000	na	600
Tetryl	25	50	200	400	800	1000	na	600
Nitroglycerin	50	100	200	400	800	1000	na	600
2,4,6-Trinitrotoluene	25	50	200	400	800	1000	na	600
2-Amino-4,6-dinitrotoluene	25	50	200	400	800	1000	na	600
4-Amino-2,6-dinitrotoluene	25	50	200	400	800	1000	na	600
2,4-Dinitrotoluene	25	50	200	400	800	1000	na	600
2,6-Dinitrotoluene	25	50	200	400	800	1000	na	600
2-Nitrotoluene	25	50	200	400	800	1000	na	600
4-Nitrotoluene	25	50	200	400	800	1000	an	600
3-Nitrotoluene	25	50	200	400	800	1000	na	600
PETN	25	50	200	400	800	1000	na	600
Picric Acid	200	400	1600	3200	6400	8000	na	4800
3,4-Dinitrotoluene (Surrogate)	25	50	125	250	375	500	1000	250
<b>Secondary Analytes</b>								
2,4-Diamino-6-nitrotoluene	50	100	250	500	750	1000	2000	500
2,6-Diamino-4-nitrotoluene	50	100	250	500	750	1000	2000	500
3,5-Dinitroaniline	50	100	250	500	750	1000	2000	500
TATB	50	100	250	500	750	1000	2000	500
tris(o-Cresyl)phosphate	50	100	250	500	750	1000	2000	500

All values are ug/L without the prep factor

Calibration Levels 8321A-Modified-EXPL.xls (08/09A)

Calibration Levels 8321A-Modified-EXPL.xls

Explosives Initial Calibration

Lab Name: GEL Laboratories LLC

GEL Job No: 10-1160

Lab Code: GEL

Run Date: 18-JAN-10 19-JAN-10

LCMSMS Instrument ID: LCMSMS

Method: 8321A Modified

HPLC Column: Phenomenex Ultracarb 5 ODS(20)

Calibration Type: Average RF

Parname	1	2	3	4	5	6	Ave RF	RSD	Q
Data File:	EXP0118003a	EXP0118004a	EXP0118005a	EXP0118006a	EXP0118007a	EXP0118008a			
1,3,5-Trinitrobenzene	3.484	3.337	3.183	3.346	3.389	3.251	3.332	3.151	
1,3-Dinitrobenzene-d4	8.417	7.127	6.57	7.116	5.921	5.569	6.787	14.975	
2,4,6-Trinitrotoluene	.377	.396	.322	.334	.345	.339	0.352	7.994	
2,4-Dinitrotoluene	.243	.259	.246	.253	.265	.251	0.253	3.203	
2,6-Dinitrotoluene	1.153	1.028	1.057	1.111	1.097	1.108	1.092	4.045	
2,6-Dinitrotoluene-d3	39.096	38.049	37.926	39.55	34.278	31.235	36.689	8.867	
2-Amino-4,6-dinitrotoluene	.384	.362	.364	.408	.425	.393	0.389	6.304	
3,4-Dinitrotoluene	1.094	.866	.869	.913	.9	.951	0.932	9.132	
4-Amino-2,6-dinitrotoluene	.207	.279	.263	.272	.282	.281	0.264	10.877	
HMX	2.748	3.079	2.841	3.009	4.254	3.437	3.228	17.23	
Nitrobenzene	.948	.786	.819	.79	.837	.843	0.837	7.056	
PETN	1.934	1.886	1.782	1.556	1.494	1.373	1.671	13.671	
RDX	1.703	2.055	2.131	2.096	3.008	2.349	2.224	19.659	
Tetryl	1.014	1.261	1.006	.872	.832	.875	0.977	16.224	
m-Dinitrobenzene	1.102	1.271	1.177	1.173	1.202	1.167	1.182	4.639	
m-Nitrotoluene	.074	.088	.086	.096	.085	.083	0.085	8.24	
o-Nitrotoluene	.142	.174	.141	.15	.148	.145	0.150	8.071	
p-Nitrotoluene	.072	.076	.065	.075	.072	.069	0.072	5.54	

Q column used to flag RSD values outside of Limit (>20%)

\* Values outside of QC Limit

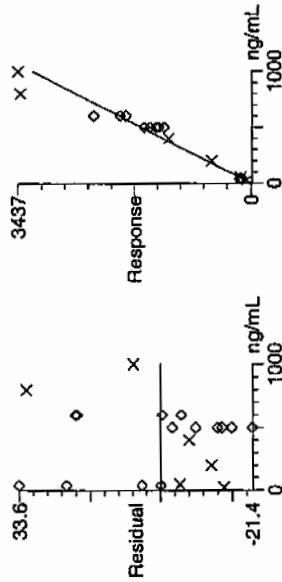
# Quantify Calibration Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

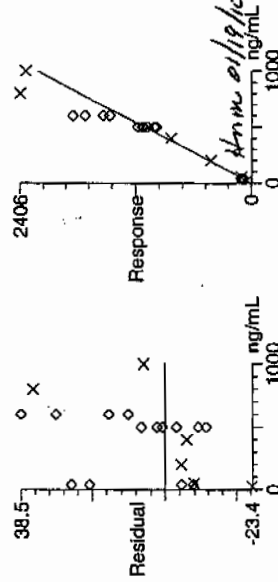
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Method: C:\MASSLYNX\New\_Exp.PRO\MethDB\011810expa.mdb, Time: Tue Jan 19 09:10:36 2010  
Calibration: Untitled, Time: Tue Jan 19 10:56:45 2010

Compound name: HMX  
Response Factor: 3.22807  
RRF SD: 0.556189, % Relative SD: 17.2298  
Response type: Internal Std ( Ref 4 ), Area \* ( IS Conc. / IS Area )  
Curve type: RF



Compound name: RDX  
Response Factor: 2.22353  
RRF SD: 0.437117, % Relative SD: 19.6587  
Response type: Internal Std ( Ref 4 ), Area \* ( IS Conc. / IS Area )  
Curve type: RF

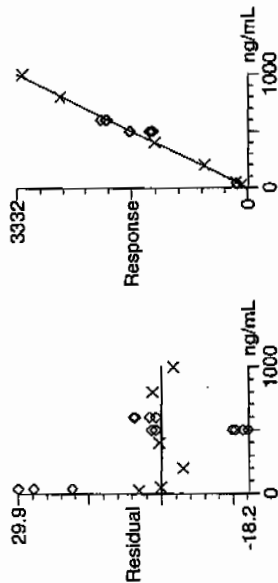




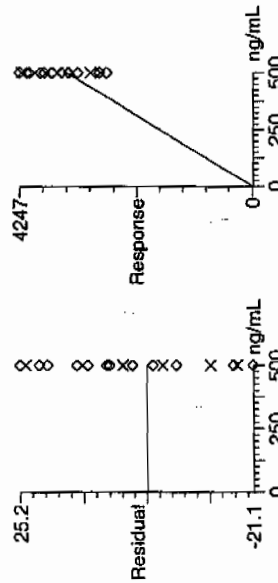
**Quantify Calibration Report**  
 GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYN\New\_Exp.PRO\011810expA.qld, Time: Tue Jan 19 10:59:58 2010

Compound name: 135-Trinitrobenzene  
 Response Factor: 3.33183  
 RRF SD: 0.104974, % Relative SD: 3.15064  
 Response type: Internal Std (Ref 4), Area \* (IS Conc. / IS Area)  
 Curve type: RF



Compound name: 13-Dinitrobenzene-d4  
 Response Factor: 6.78663  
 RRF SD: 1.01627, % Relative SD: 14.9747  
 Response type: External Std, Area  
 Curve type: RF

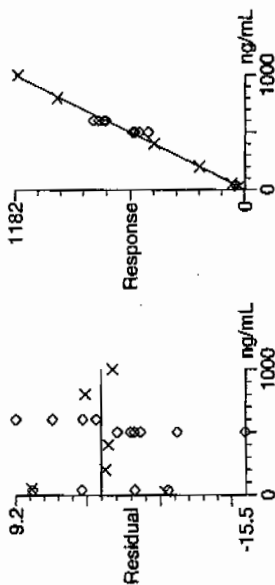


# Quantify Calibration Report

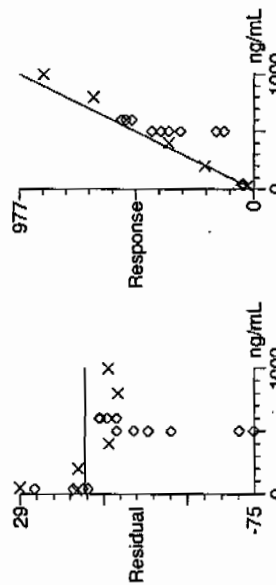
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\011810expA.qld, Time: Tue Jan 19 10:59:58 2010

Compound name: 13-Dinitrobenzene  
 Response Factor: 1.18172  
 RRF SD: 0.0548147, % Relative SD: 4.63857  
 Response type: Internal Std ( Ref 4 ), Area \* ( IS Conc. / IS Area )  
 Curve type: RF



Compound name: Tetraol  
 Response Factor: 0.976612  
 RRF SD: 0.158443, % Relative SD: 16.2237  
 Response type: Internal Std ( Ref 4 ), Area \* ( IS Conc. / IS Area )  
 Curve type: RF



# Quantify Calibration Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\011810expA.qld, Time: Tue Jan 19 10:59:58 2010

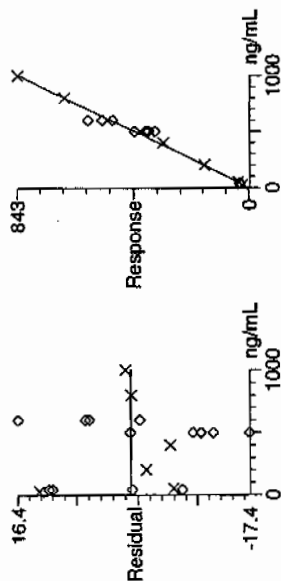
Compound name: Nitrobenzene

Response Factor: 0.837186

RRF SD: 0.0590728, % Relative SD: 7.05612

Response type: Internal Std ( Ref 4 ), Area \* ( IS Conc. / IS Area )

Curve type: RF



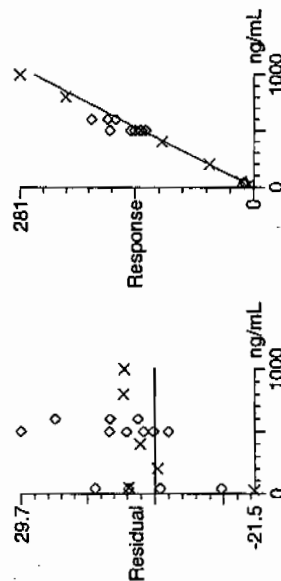
Compound name: 4-Amino-26-dinitrotoluene

Response Factor: 0.263992

RRF SD: 0.0287134, % Relative SD: 10.8766

Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )

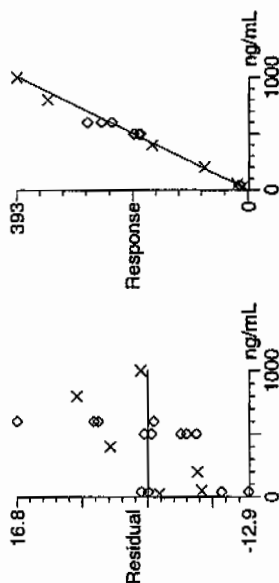
Curve type: RF



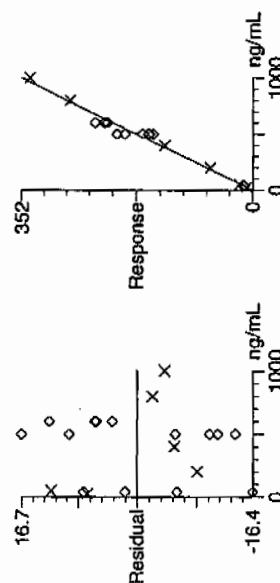
**Quantify Calibration Report**  
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp\_PRO\011810expA.qld, Time: Tue Jan 19 10:59:58 2010

Compound name: 2-Amino-46-dinitrotoluene  
Response Factor: 0.389564  
RRF SD: 0.0245563, % Relative SD: 6.30354  
Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )  
Curve type: RF



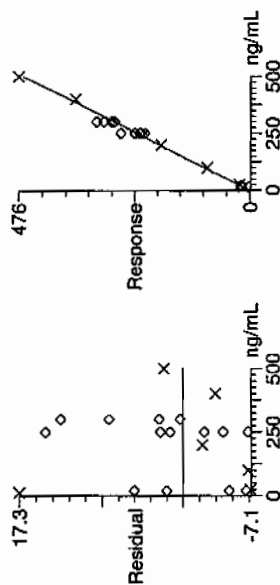
Compound name: 246-Trinitrotoluene  
Response Factor: 0.352125  
RRF SD: 0.0281482, % Relative SD: 7.99381  
Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )  
Curve type: RF



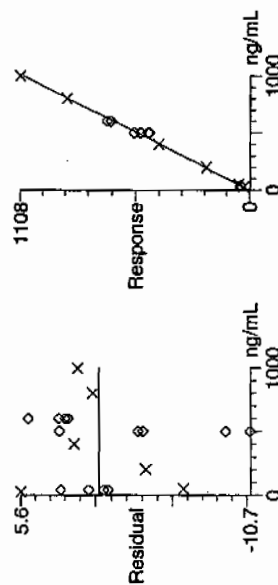
**Quantify Calibration Report**  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYN\New\_Exp.PRO\011810expA.qld, Time: Tue Jan 19 10:59:58 2010

Compound name: 34-dinitrotoluene  
Response Factor: 0.932242  
RRF SD: 0.0851351, % Relative SD: 9.1323  
Response type: Internal Std (Ref 14), Area \* (IS Conc. / IS Area)  
Curve type: RF



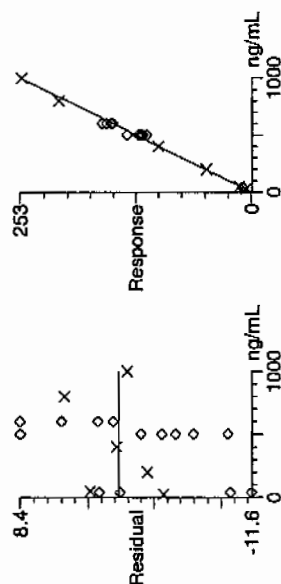
Compound name: 26-dinitrotoluene  
Response Factor: 1.09228  
RRF SD: 0.0441813, % Relative SD: 4.04489  
Response type: Internal Std (Ref 14), Area \* (IS Conc. / IS Area)  
Curve type: RF



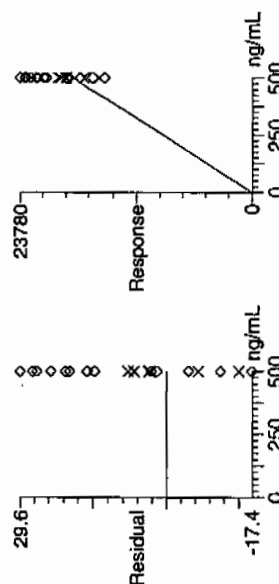
**Quantify Calibration Report**  
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\011810expA.qld, Time: Tue Jan 19 10:59:58 2010

Compound name: 24-dinitrotoluene  
Response Factor: 0.252831  
RRF SD: 0.00809816, % Relative SD: 3.20299  
Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )  
Curve type: RF



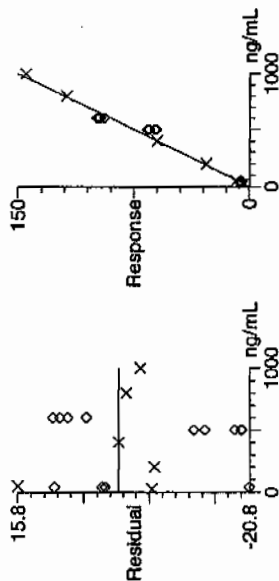
Compound name: 26-dinitrotoluene-d3  
Response Factor: 36.6891  
RRF SD: 3.25316, % Relative SD: 8.86682  
Response type: External Std, Area  
Curve type: RF



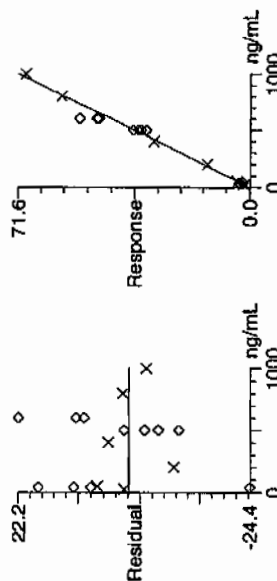
Quantify Calibration Report  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp\PRO\011810expA.qld, Time: Tue Jan 19 10:59:58 2010

Compound name: 2-Nitrotoluene  
Response Factor: 0.150077  
RRF SD: 0.0121131, % Relative SD: 8.07131  
Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )  
Curve type: RF



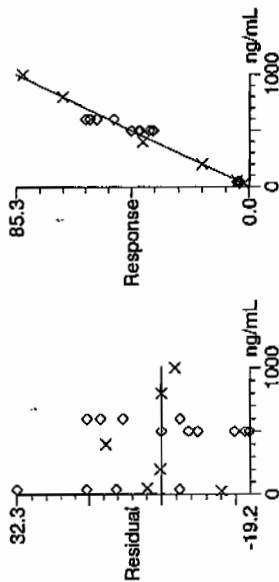
Compound name: 4-Nitrotoluene  
Response Factor: 0.0715991  
RRF SD: 0.00396681, % Relative SD: 5.5403  
Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )  
Curve type: RF



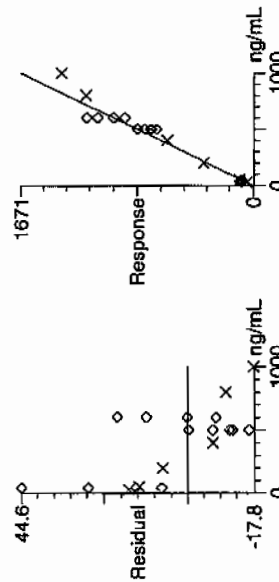
**Quantify Calibration Report**  
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\011810expA.qld, Time: Tue Jan 19 10:59:58 2010

Compound name: 3-Nitrotoluene  
Response Factor: 0.0852801  
RRF SD: 0.00702733, % Relative SD: 8.24029  
Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )  
Curve type: RF



Compound name: PETN  
Response Factor: 1.67101  
RRF SD: 0.228436, % Relative SD: 13.6705  
Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )  
Curve type: RF





Explosives Initial Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1160

Lab Code: GEL

GEL Sample ID: WXXICV

GEL Data File EXP0118010a

Analysis Date: 18-JAN-10 18:28

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
o-Nitrotoluene	600	662.222	110	
p-Nitrotoluene	600	732.953	122	*
1,3,5-Trinitrobenzene	600	606.572	101	
1,3-Dinitrobenzene-d4	500	470.52	94	
2,4,6-Trinitrotoluene	600	621.487	104	
2,4-Dinitrotoluene	600	602.873	100	
2,6-Dinitrotoluene	600	630.14	105	
2,6-Dinitrotoluene-d3	500	515.861	103	
2-Amino-4,6-dinitrotoluene	600	595.43	99	
3,4-Dinitrotoluene	300	300.86	100	
4-Amino-2,6-dinitrotoluene	600	621.304	104	
HMX	600	570.4	95	
Nitrobenzene	600	639.033	107	
PETN	600	552.42	92	
RDX	600	658.602	110	
Tetryl	600	515.579	86	
m-Dinitrobenzene	600	611.69	102	
m-Nitrotoluene	600	682.223	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

Printed: Tue Jan 19 11:02:03 2010, Page 19 of 85

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\011810expA.qld, Time: Tue Jan 19 10:59:58 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0118010a

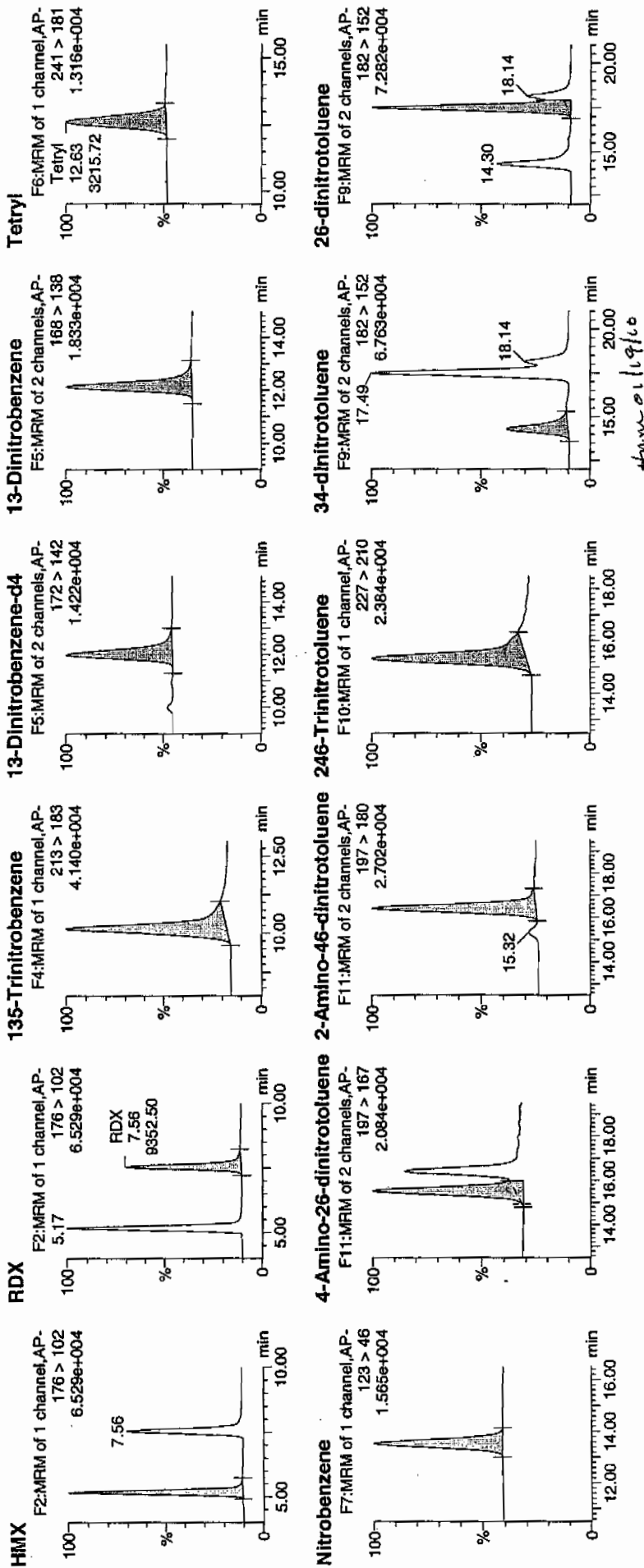
Date: 18-Jan-2010

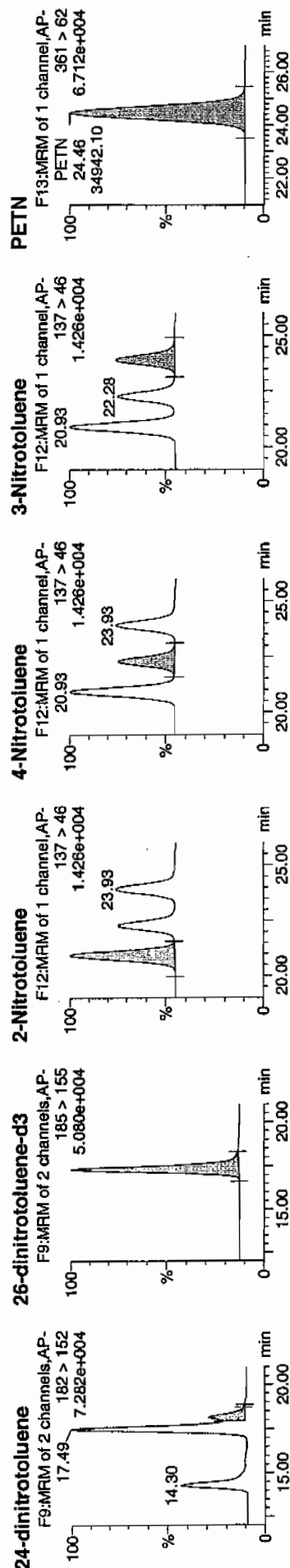
Time: 18:28:52

ID: WXX100118-07ICV

Vial: 1:1,B

1/19/10





ID	Name	Trace	RT	Area	SArea	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	Norm	%Dev	SN	
WXX100118-07ICV	HMX	176 > 102	5.17	11759.395	3193.243	11759.395	1841.293	db			570.4004	95.1	-4.9	1064.9
WXX100118-07ICV	RDX	176 > 102	7.56	9352.498	3193.243	9352.498	1464.420	bb			658.6019	109.8	9.8	713.6
WXX100118-07ICV	135-Trinitrobenzene	213 > 183	10.16	12907.048	3193.243	12907.048	2020.994	bb			606.5717	101.1	1.1	1644.6
WXX100118-07ICV	13-Dinitrobenzene-d4	172 > 142	12.00	3193.243	3193.243	3193.243	3193.243	bb			470.5198	94.1	-5.9	176.3
WXX100118-07ICV	13-Dinitrobenzene	168 > 138	12.14	4616.433	3193.243	4616.433	722.844	bb			611.6900	101.9	1.9	629.5
WXX100118-07ICV	Tetryl	241 > 181	12.63	3215.724	3193.243	3215.724	503.520	bb			515.5786	85.9	-14.1	315.4
WXX100118-07ICV	Nitrobenzene	123 > 46	13.54	3416.705	3193.243	3416.705	534.990	bb			639.0335	106.5	6.5	527.3
WXX100118-07ICV	4-Amino-26-dinitrotoluene	197 > 167	15.53	6208.615	18926.488	6208.615	164.019	MM	19-Jan-10	10:47:48	621.3039	103.6	3.6	189.2
WXX100118-07ICV	2-Amino-46-dinitrotoluene	197 > 180	16.40	8780.297	18926.488	8780.297	231.958	bb			595.4297	99.2	-0.8	266.0
WXX100118-07ICV	246-Trinitrotoluene	227 > 210	15.35	8283.787	18926.488	8283.787	218.841	bb			621.4874	103.6	3.6	346.8
WXX100118-07ICV	34-dinitrotoluene	182 > 152	14.30	10616.799	18926.488	10616.799	280.475	bb			300.8602	100.3	0.3	580.9
WXX100118-07ICV	26-dinitrotoluene	182 > 152	17.49	26053.697	18926.488	26053.697	688.287	MM	19-Jan-10	10:53:08	630.1400	105.0	5.0	1044.8
WXX100118-07ICV	24-dinitrotoluene	182 > 152	18.14	5769.747	18926.488	5769.747	152.425	MM	19-Jan-10	10:57:03	602.8729	100.5	0.5	217.3
WXX100118-07ICV	26-dinitrotoluene-d3	185 > 155	17.31	18926.488	18926.488	18926.488	18926.488	bb			515.8607	103.2	3.2	1349.0
WXX100118-07ICV	2-Nitrotoluene	137 > 46	20.93	3761.979	18926.488	3761.979	99.384	bb			662.2219	110.4	10.4	542.3
WXX100118-07ICV	4-Nitrotoluene	137 > 46	22.28	1986.477	18926.488	1986.477	52.479	bb			732.9527	122.2	22.2	287.7
WXX100118-07ICV	3-Nitrotoluene	137 > 46	23.93	2202.288	18926.488	2202.288	58.180	bb			682.2228	113.7	13.7	300.5
WXX100118-07ICV	PETN	361 > 62	24.46	34942.102	18926.488	34942.102	923.101	bb			552.4198	92.1	-7.9	3601.3

GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis: 01/18/10  
 Time of Injection: 1828  
 Standard Number: WXX100118-07ICV  
 Data File: EXP0118010a

HMX	95.1
RDX	109.8
135-TNB	101.1
13-DNB	101.9
Tetryl	85.9
Nitrobenzene	106.5
4A-26-DNT	103.6
2A-46-DNT	99.2
246-TNT	103.6
34-DNT(surr)	100.3
26-DNT	105.0
24-DNT	100.5
2-NT	110.4
4-NT	122.2
3-NT	113.7
PETN	92.1

*WXX  
1/19/10*

Total 1650.9

*WXX 01/19/10*

Average 103.2

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: 10-1160

Lab Code: GEL

Run Date: 18-JAN-10.19-JAN-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 <sup>2</sup>	Intercept	COD	Q
Data File:	EXS01190003.wiff	EXS01190004.wiff	EXS01190005.wiff	EXS01190006.wiff	EXS01190007.wiff	EXS01190008.wiff	EXS01190009.wiff					
Parameter:												
2,4-Diamino-6-nitrotoluene	136000	278000	705000	1440000	2160000	2790000	5610000	-3940	2870	-.033	.9999	
2,6-Diamino-4-nitrotoluene	204000	410000	1060000	2160000	3230000	4230000	8180000	-26800	4440	-.167	1	
3,4-Dinitrotoluene	347000	668000	1710000	3280000	4960000	6520000	12100000	-57300	15000	-2.81	.9985	
3,5-Dinitroaniline	570000	1080000	2670000	5040000	7470000	9220000	16200000	70100	10600	-1.26	.9998	
TATB	73300	143000	357000	695000	1050000	1390000	2780000	4300	1390	-.003	1	
tris(o-cresyl) phosphate	1360000	2670000	6180000	11600000	16200000	20800000	32600000	206000	24800	-4.31	1	

Quadratic Fit:  $y = Ax^2 + Bx + C$   
 where X<sup>2</sup> 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

011910ICAL

Peak Name: TATB  
No Internal Standard  
Q1/Q3 Masses: 257.20/204.90 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	4.3e+003			
a1	1.39e+003			
a2	-0.0033			
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	7.01e+004			
a1	1.06e+004			
a2	-1.26			
Correlation coefficient 0.9998				
Use Area				

Peak Name: 34-Dinitrotoluene  
No Internal Standard  
Q1/Q3 Masses: 182.08/151.90 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	-5.73e+004			
a1	1.5e+004			
a2	-2.81			
Correlation coefficient 0.9985				
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	-2.68e+004			
a1	4.44e+003			
a2	-0.167			
Correlation coefficient 1.0000				
Use Area				

*Handwritten:* 11/20/10

*Handwritten:* 11/20/10

011910ICAL

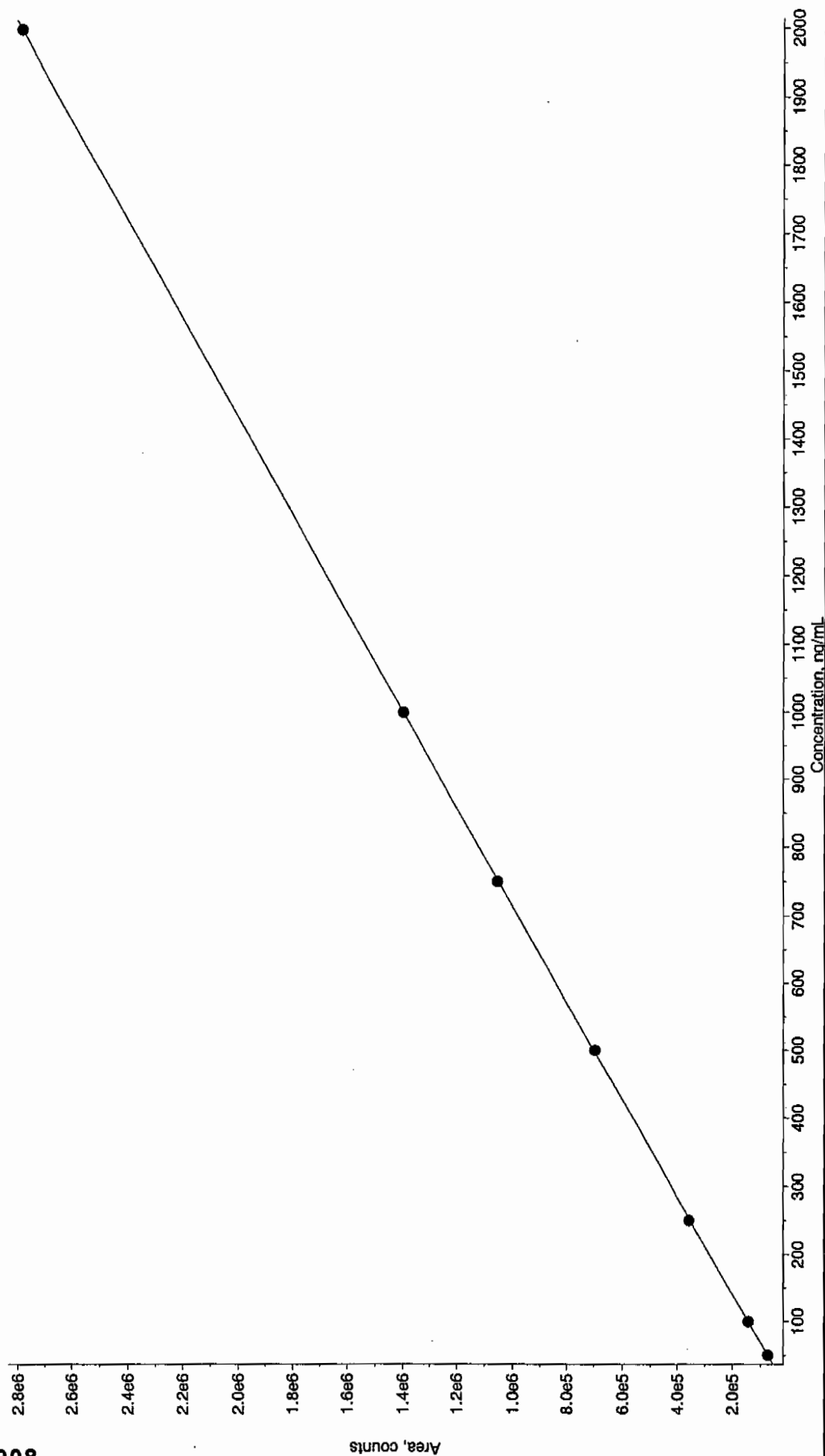
Peak Name: 24-Diamino-6-nitrotoluene  
No Internal Standard  
Q1/Q3 Masses: 165.97/46.00 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	-3.94e+003			
a1	2.87e+003			
a2	-0.0333			
Correlation coefficient 0.9999				
Use Area				

Peak Name: tris(o-cresyl) phosphate  
No Internal Standard  
Q1/Q3 Masses: 369.15/91.00 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	2.06e+005			
a1	2.48e+004			
a2	-4.31			
Correlation coefficient 1.0000				
Use Area				

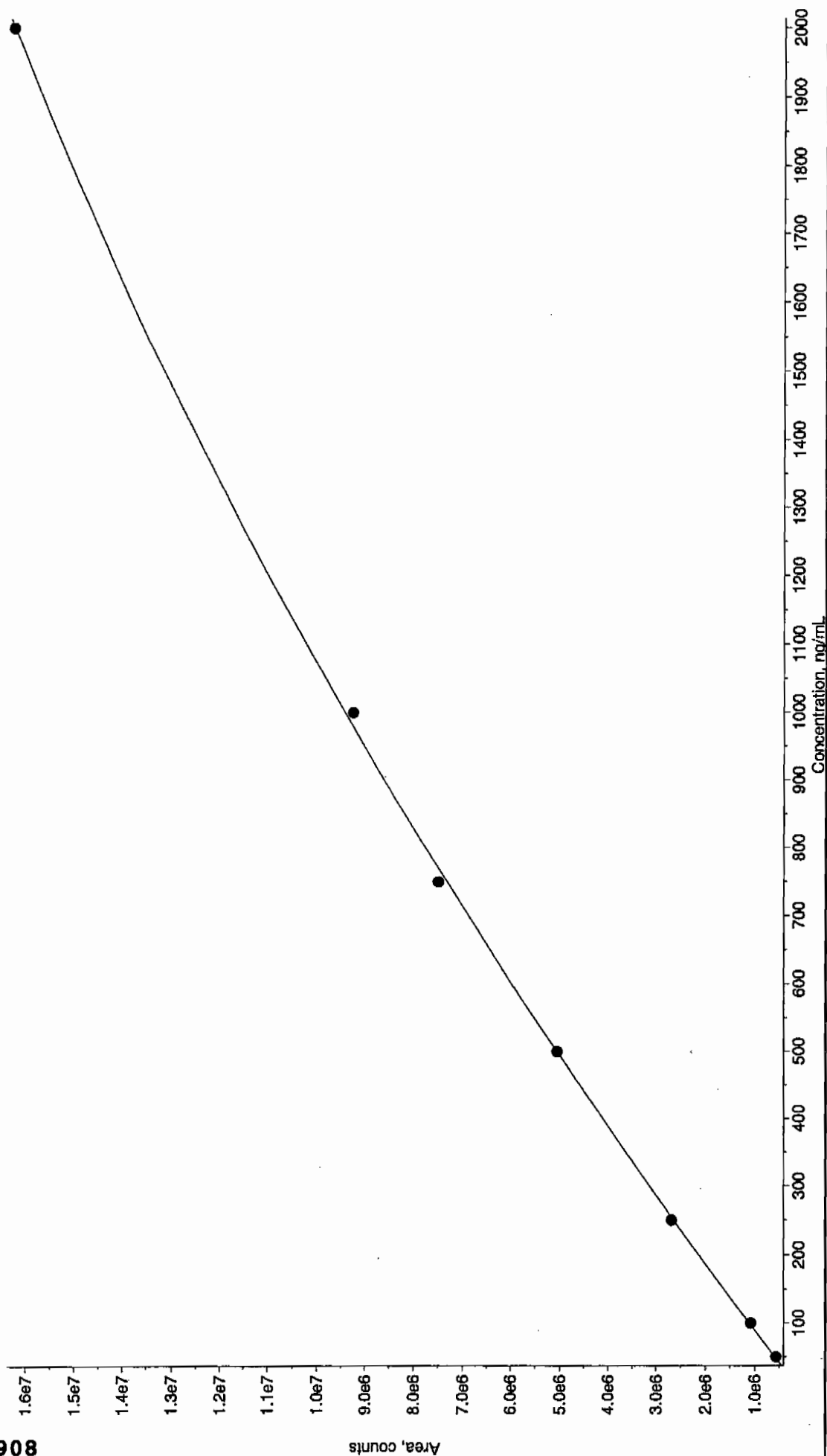
011910.rdb (TATB): "Quadratic" Regression ("No" weighting):  $y = -0.0033x^2 + 1.39e+003x + 4.3e+003$  ( $r = 1.0000$ )



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

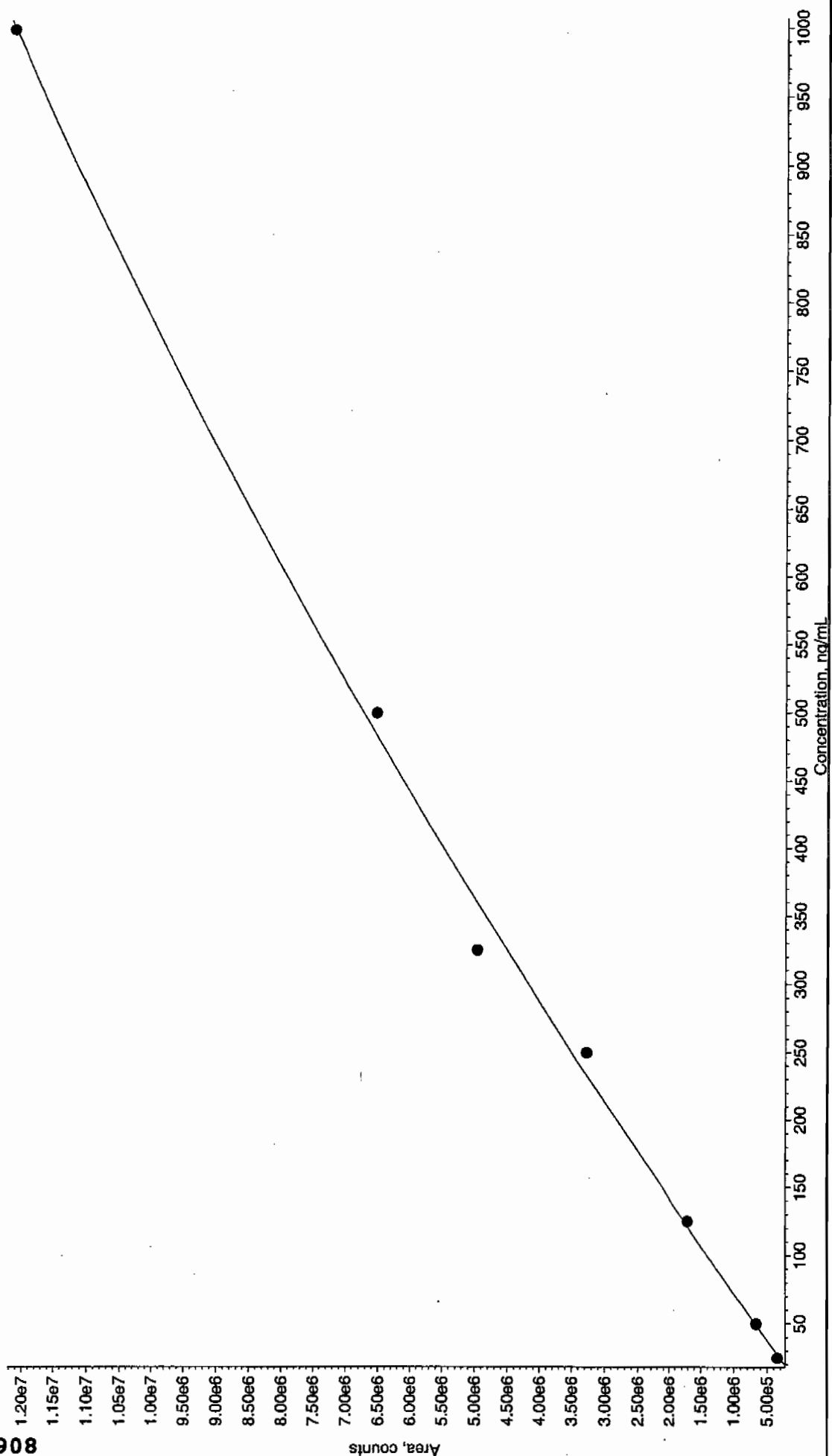


011910.rdb (35-Dinitroaniline): "Quadratic" Regression ("No" weighting):  $y = -1.26 x^2 + 1.06e+004 x + 7.01e+004$  ( $r = 0.9998$ )



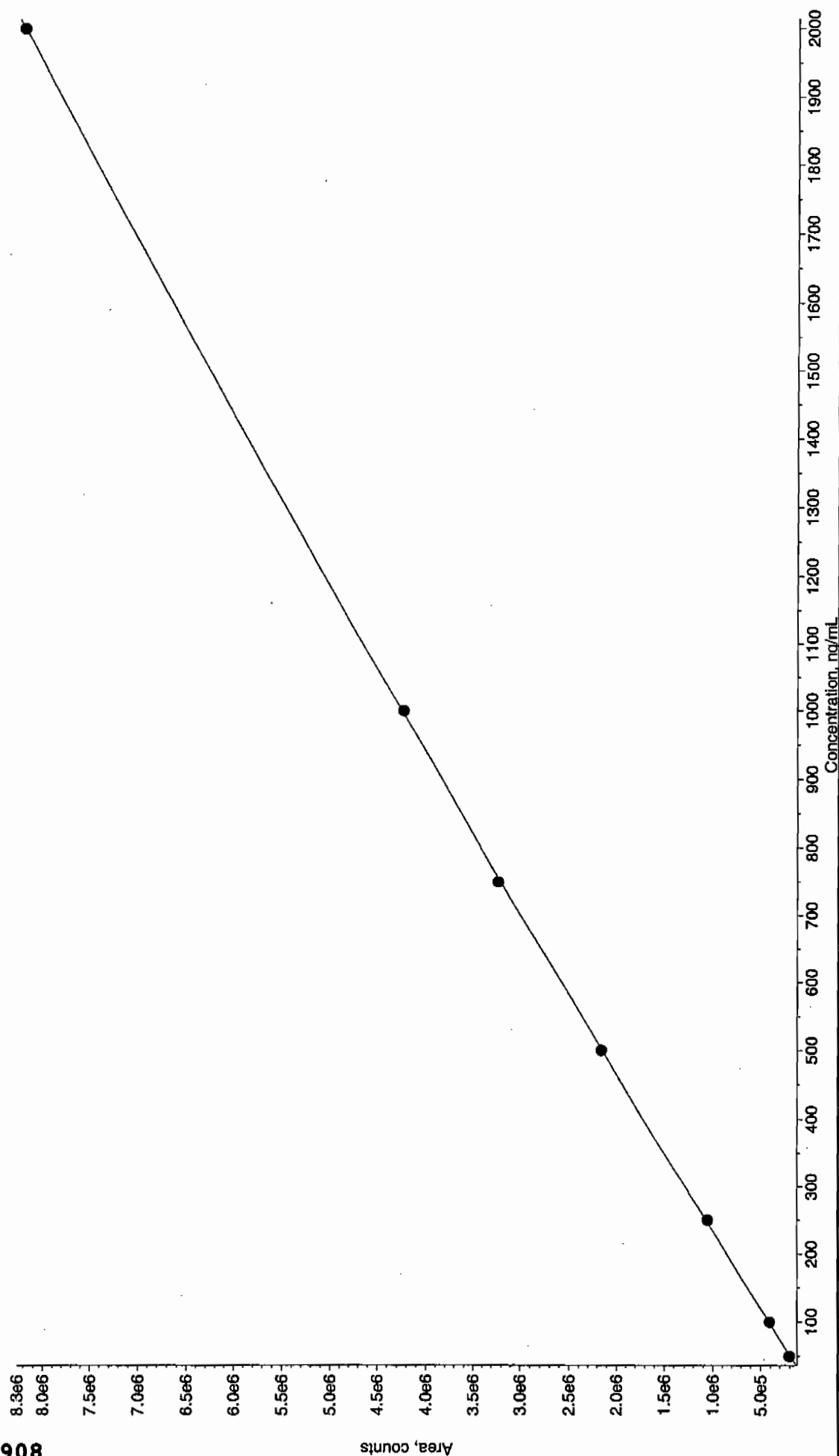
\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

011910.rdb (34-Dinitrotoluene): "Quadratic" Regression ("No" weighting):  $y = -2.81 x^2 + 1.5e+004 x + -5.73e+004$  ( $r = 0.9985$ )

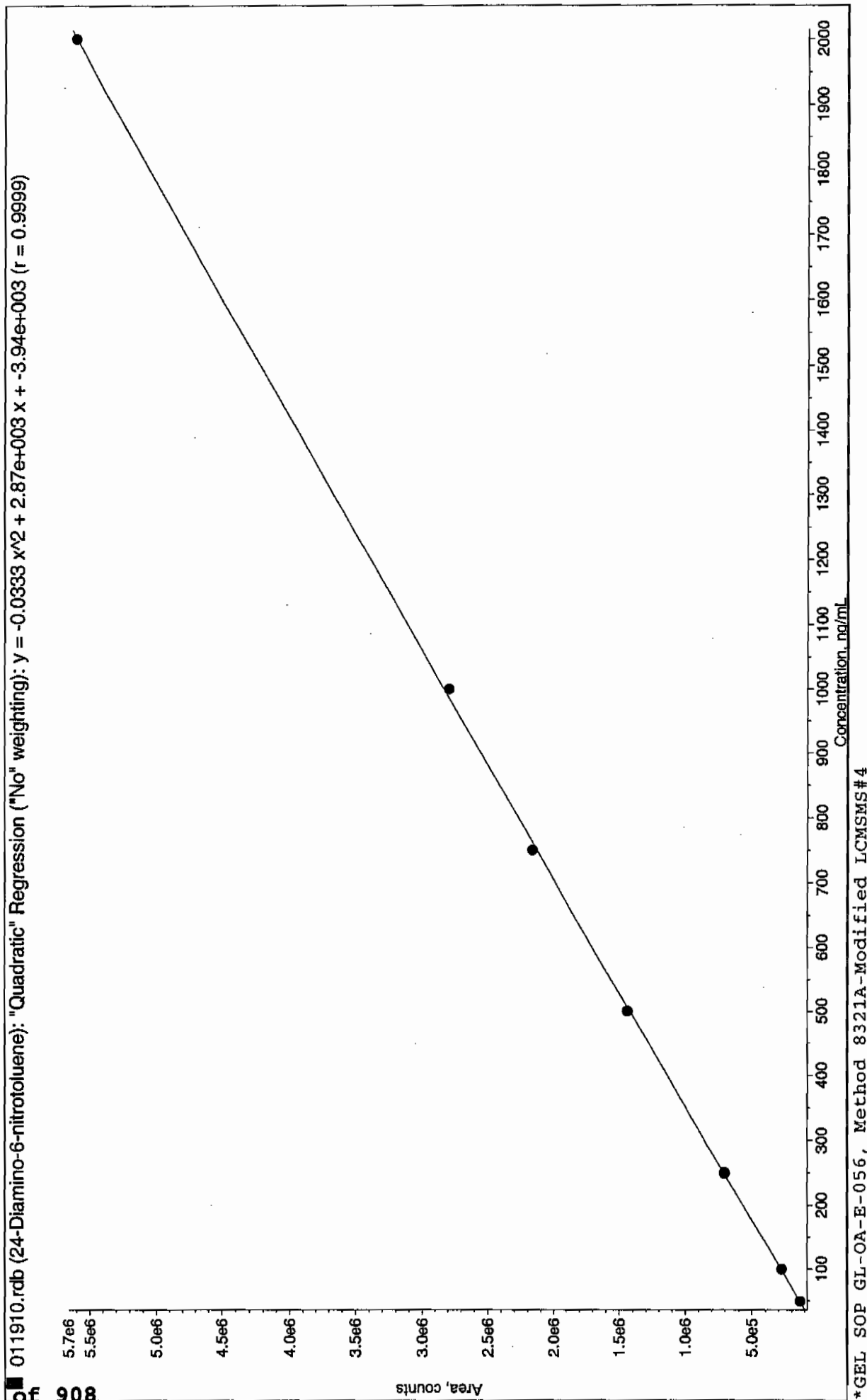


\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

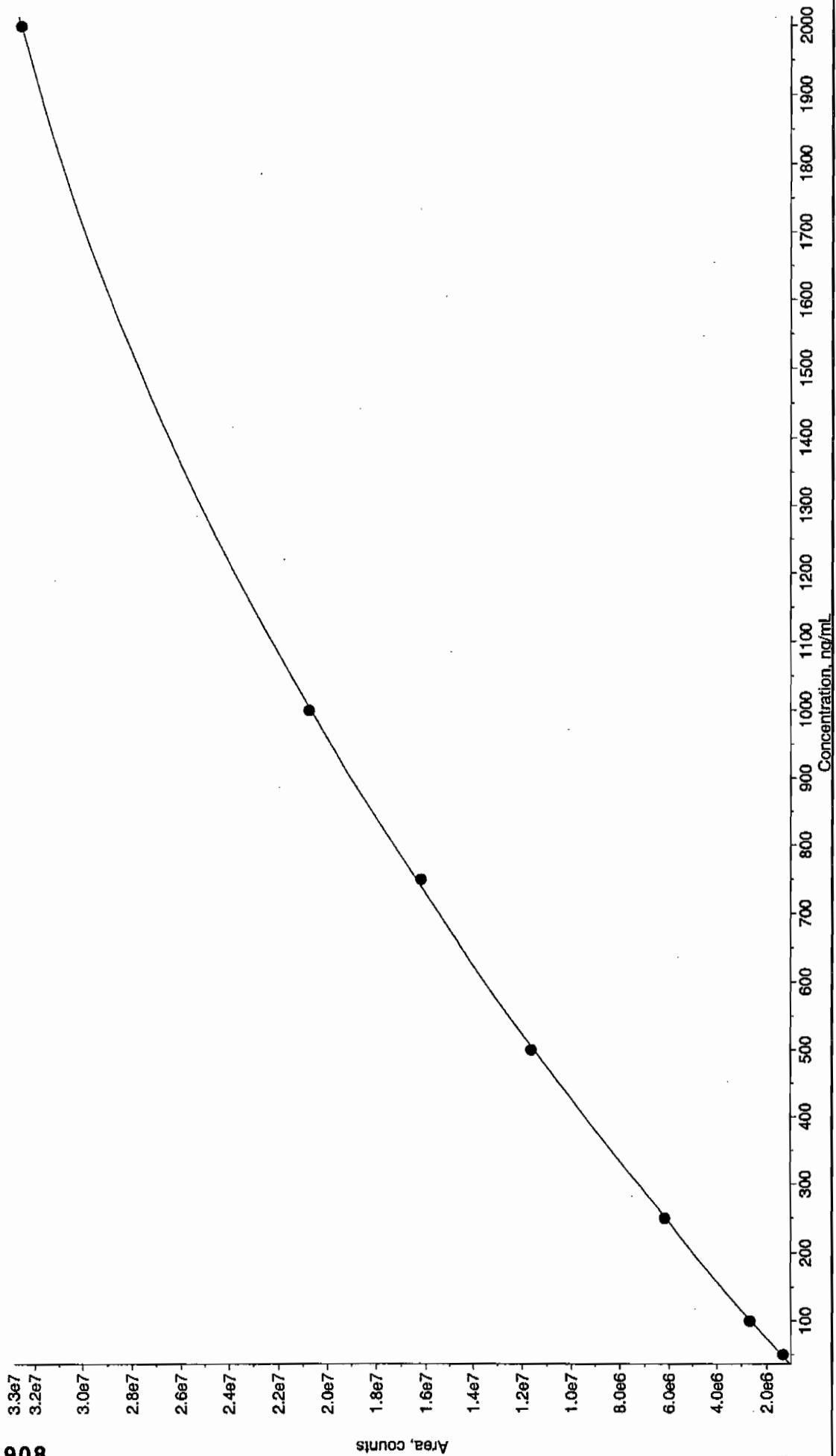
011910.rdb (26-Diamino-4-nitrotoluene): "Quadratic" Regression ("No" weighting):  $y = -0.167 x^2 + 4.44e+003 x + -2.68e+004$  ( $r = 1.0000$ )



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



011910.rdb (tris(o-cresyl) phosphate): "Quadratic" Regression ("No" weighting):  $y = -4.31 x^2 + 2.48e+004 x + 2.06e+005$  ( $r = 1.0000$ )



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

Explosives Initial Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1160

Lab Code: GEL

GEL Sample ID: WXXICV

GEL Data File EXS01190011.wiff

Analysis Date: 19-JAN-10 16:51

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	495	99	
2,6-Diamino-4-nitrotoluene	500	514	103	
3,4-Dinitrotoluene	250	252	101	
3,5-Dinitroaniline	500	534	107	
TATB	500	521	104	
tris(o-cresyl) phosphate	500	499	100	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

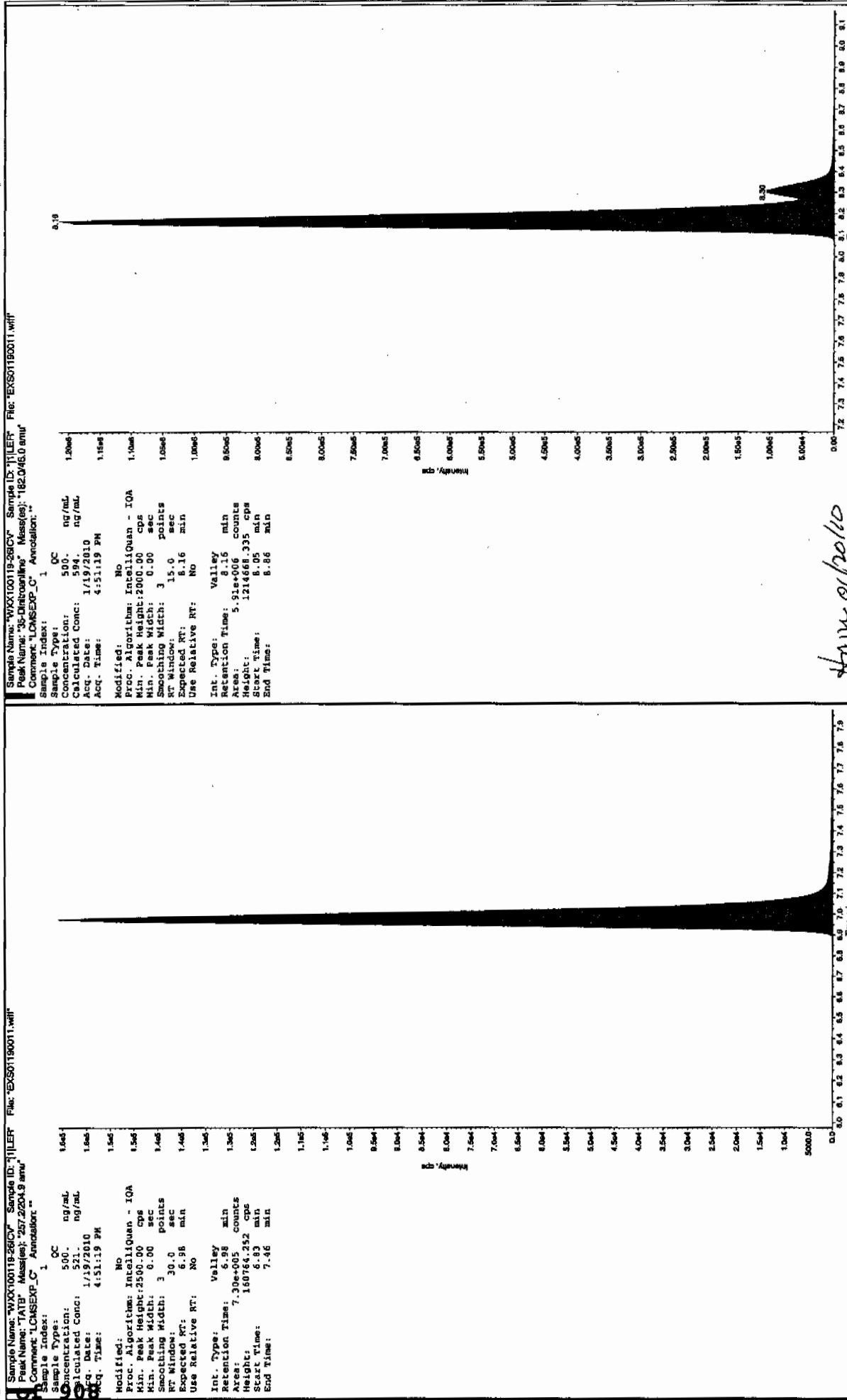
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

# Column used to flag Recovery outside of Limits

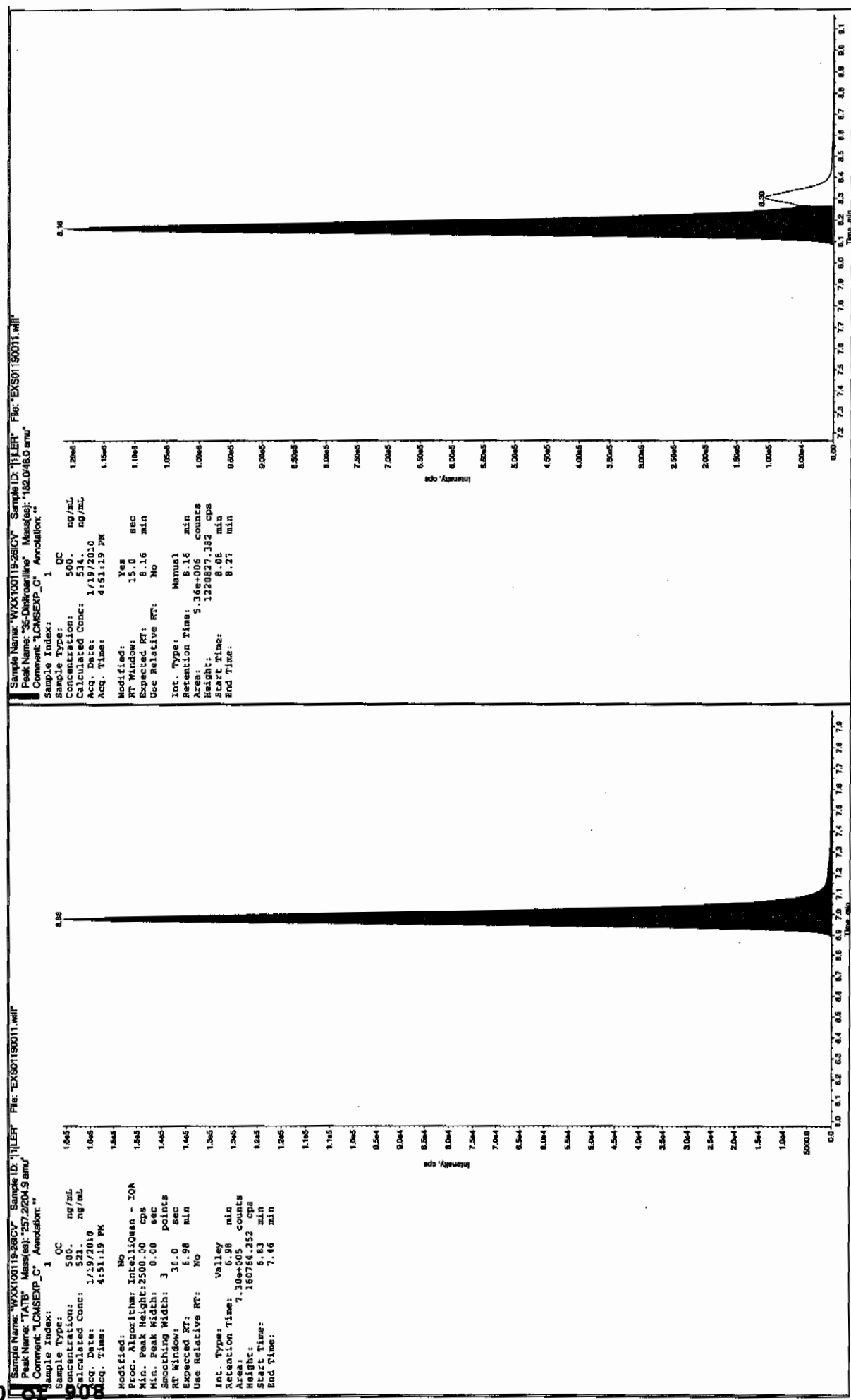
\* Value outside of Recovery Limits

*Refer to 11/20/10*



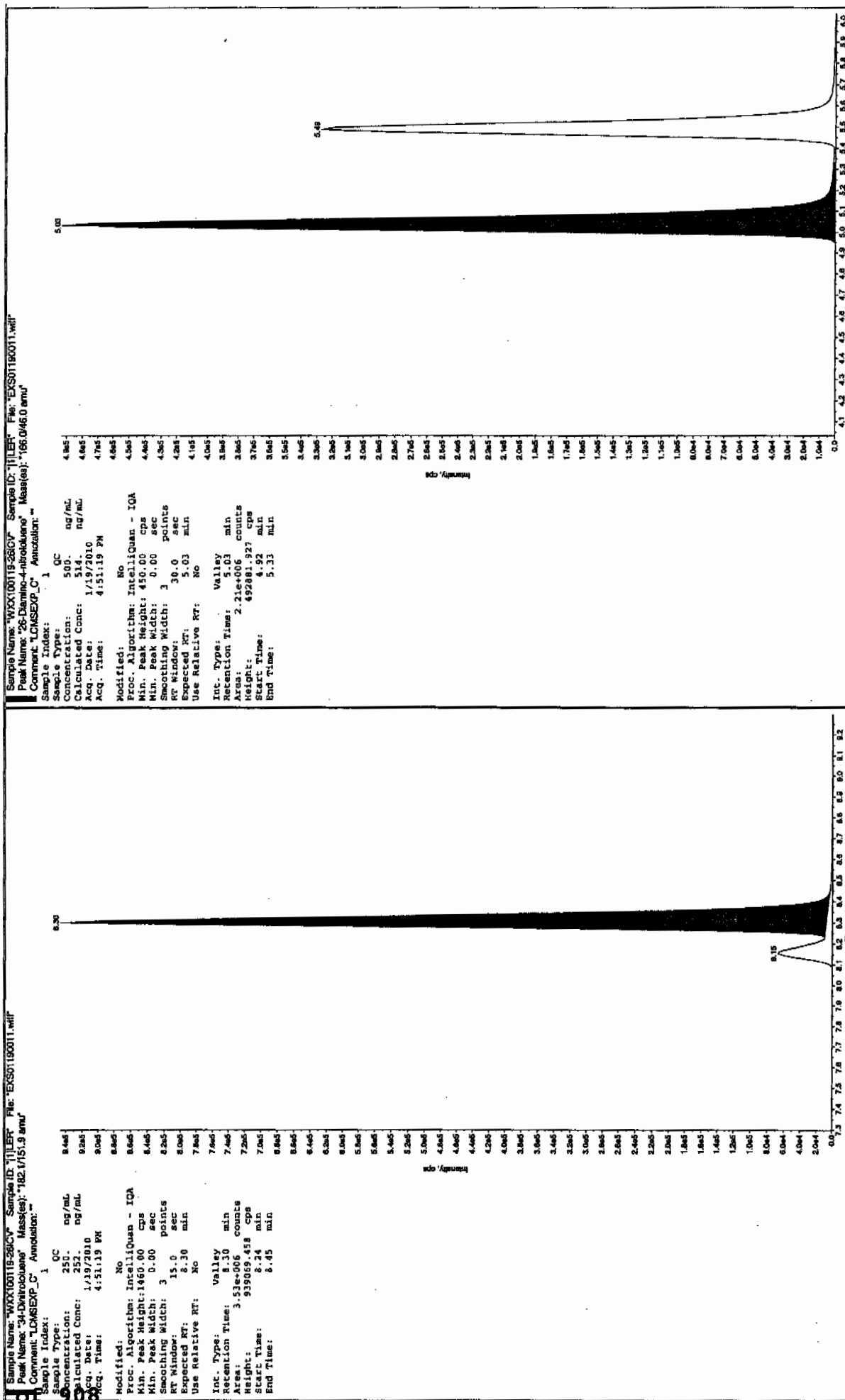
*11/20/10*

after den 1/20/10

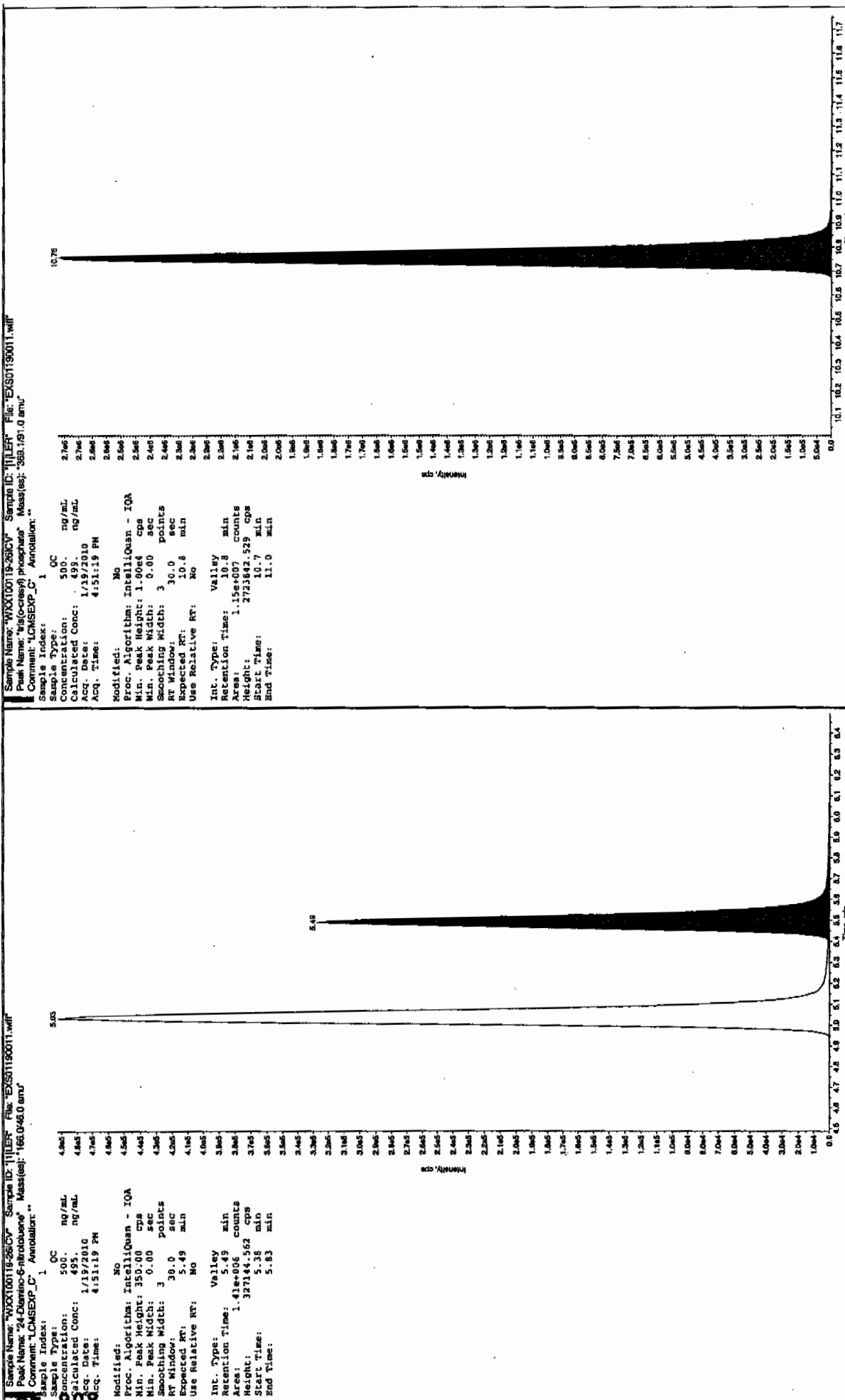


\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4





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



7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1160

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0118012a

Analysis Date: 18-JAN-10 19:27

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
o-Nitrotoluene	40	41.066	103	
p-Nitrotoluene	40	43.026	108	
1,3,5-Trinitrobenzene	40	50.691	127	
1,3-Dinitrobenzene-d4	500	537.934	108	
2,4,6-Trinitrotoluene	40	43.056	108	
2,4-Dinitrotoluene	40	39.965	100	
2,6-Dinitrotoluene	40	39.88	100	
2,6-Dinitrotoluene-d3	500	597.351	119	
2-Amino-4,6-dinitrotoluene	40	39.987	100	
3,4-Dinitrotoluene	20	18.681	93	
4-Amino-2,6-dinitrotoluene	40	42.288	106	
HMX	40	39.982	100	
Nitrobenzene	40	44.51	111	
PETN	40	45.548	114	
RDX	40	37.064	93	
Tetryl	40	49.073	123	
m-Dinitrobenzene	40	40.812	102	
m-Nitrotoluene	40	46.72	117	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene, 2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\011810expA.qld, Time: Tue Jan 19 10:59:58 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0118012a

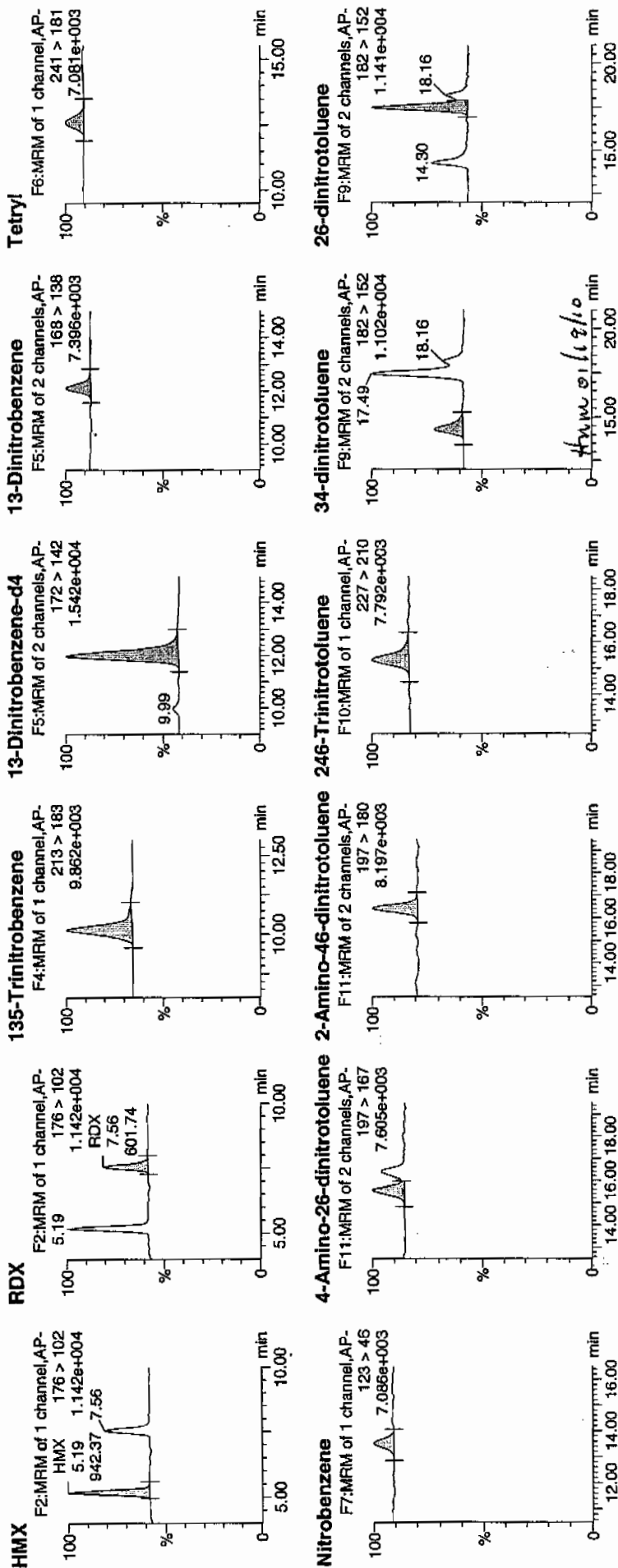
Date: 18-Jan-2010

Time: 19:27:49

ID: WXX100118-08CRI

Vial: 1:1,C

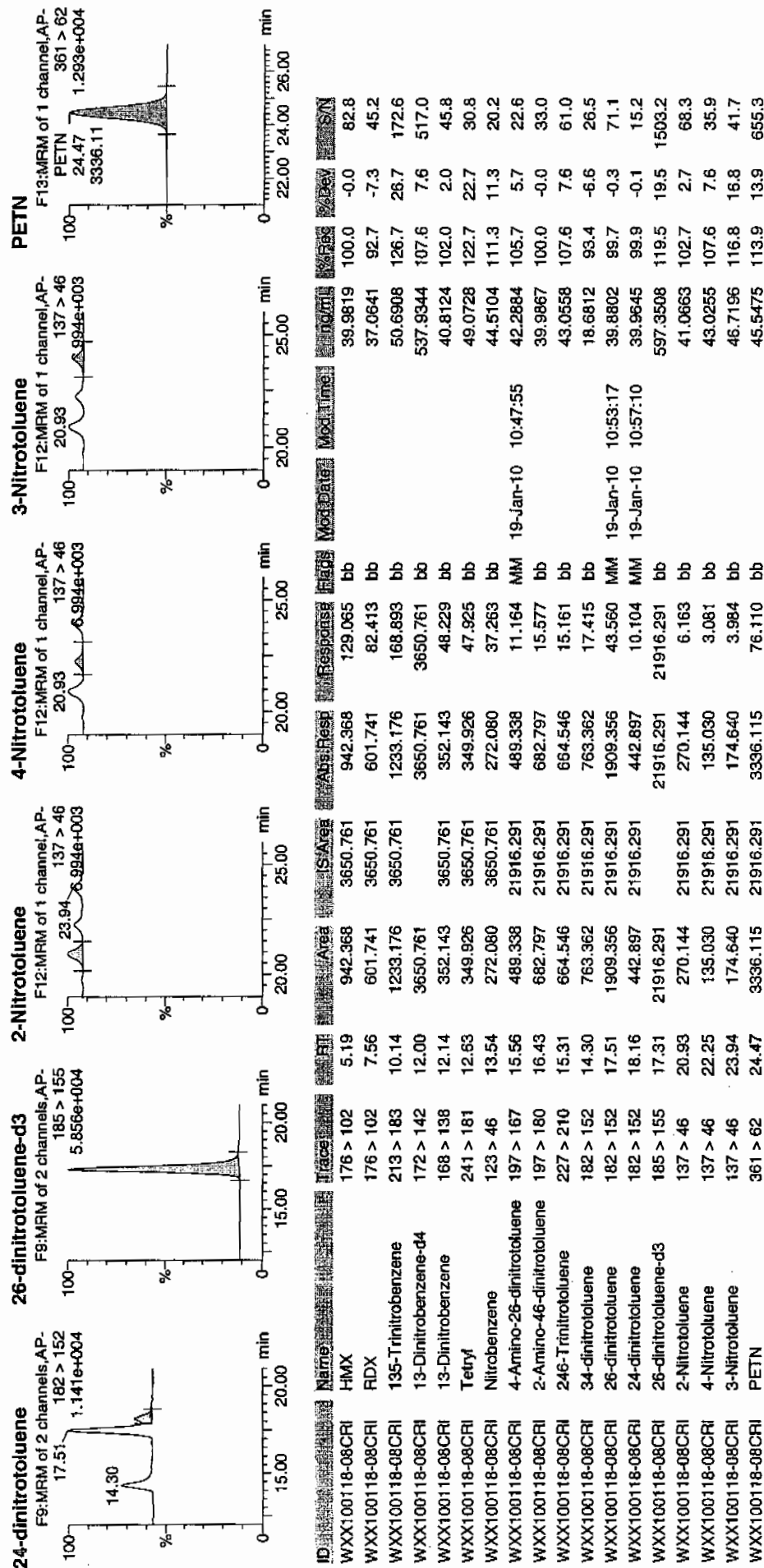
WXX  
1/19/10



Printed: Tue Jan 19 11:02:03 2010, Page 24 of 85

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\011810expA.qld, Time: Tue Jan 19 10:59:58 2010



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

GRAND MEAN AVERAGE

Vendor: UltraScientific  
 Date of Analysis 01/18/10  
 Time of Injection 1927  
 Standard Number WXX100118-08CRI  
 Data File EXP0118012a

HMX	100.0
RDX	92.7
135-TNB	126.7
13-DNB	102.0
Tetryl	122.7
Nitrobenzene	111.3
4A-26-DNT	105.7
2A-46-DNT	100.0
246-TNT	107.6
34-DNT(surr)	93.4
26-DNT	99.7
24-DNT	99.9
2-NT	102.7
4-NT	107.6
3-NT	116.8
PETN	113.9

*Handwritten:* 1/19/10

Total 1702.7

Average 106.4

*Handwritten:* HMM 01/19/10

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): 10-1160

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0118019a

Analysis Date: 18-JAN-10 22:54

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	614.058	102	
1,3-Dinitrobenzene-d4	500	494.251	99	
2,4,6-Trinitrotoluene	600	636.232	106	
2,4-Dinitrotoluene	600	629.771	105	
2,6-Dinitrotoluene	600	614.102	102	
2,6-Dinitrotoluene-d3	500	477.476	95	
2-Amino-4,6-dinitrotoluene	600	641.375	107	
3,4-Dinitrotoluene	300	323.805	108	
4-Amino-2,6-dinitrotoluene	600	659.577	110	
HMX	600	597.765	100	
Nitrobenzene	600	592.53	99	
PETN	600	600.489	100	
RDX	600	688.562	115	
Tetryl	600	559.14	93	
m-Dinitrobenzene	600	603.025	101	
m-Nitrotoluene	600	651.691	109	
o-Nitrotoluene	600	630.709	105	
p-Nitrotoluene	600	662.108	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\011810expA.qld, Time: Tue Jan 19 10:59:58 2010

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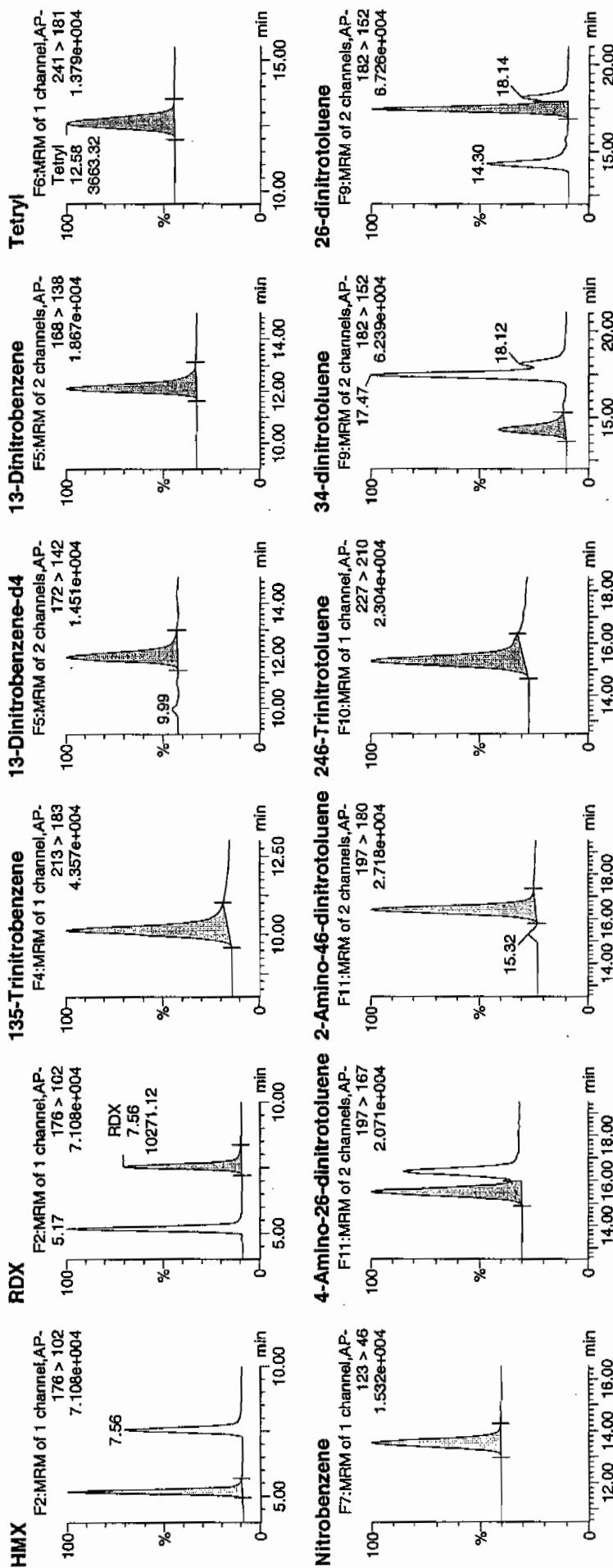
Date: 18-Jan-2010

Time: 22:54:11

ID: WXX100118-07CCV

Vial: 1:1,B

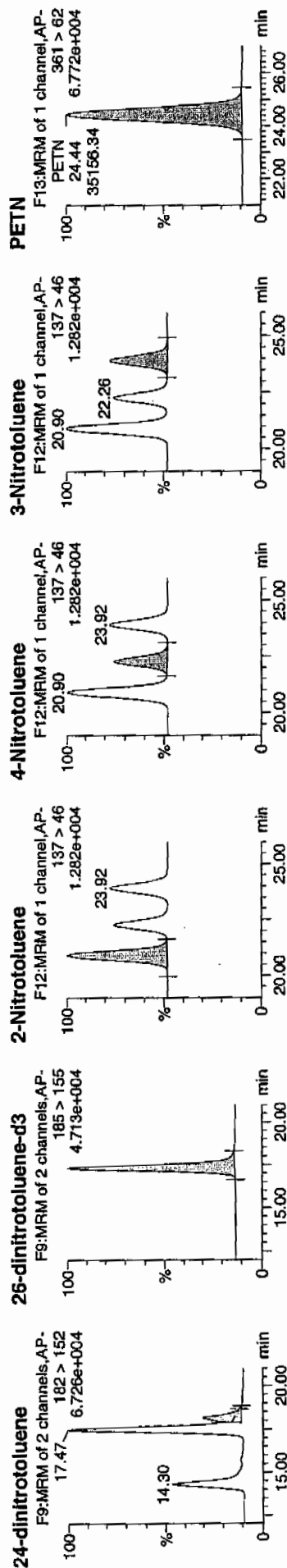
1/18/10  
1/19/10



1/18/10  
1/19/10



Dataset: C:\MASSLYN\New\_Exp.PRO\011810expA.qld, Time: Tue Jan 19 10:59:58 2010



Name	Trace	Height	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Intensity	Area	Height	SN
HMX	176 > 102	5.17	12945.098	3354.300	12945.098	1929.627	bb			597.7646	99.6	-0.4	1846.7
RDX	176 > 102	7.56	10271.115	3354.300	10271.115	1531.037	bb			588.5619	114.8	14.8	1239.7
135-Trinitrobenzene	213 > 183	10.14	13725.381	3354.300	13725.381	2045.938	bb			614.0585	102.3	2.3	5254.0
13-Dinitrobenzene-d4	172 > 142	11.97	3354.300		3354.300	3354.300	bb			494.2513	98.9	-1.1	141.9
13-Dinitrobenzene	168 > 138	12.14	4780.582	3354.300	4780.582	712.605	bb			603.0255	100.5	0.5	527.6
Tetryl	241 > 181	12.58	3663.319	3354.300	3663.319	546.063	bb			559.1405	93.2	-6.8	411.0
Nitrobenzene	123 > 46	13.54	3327.854	3354.300	3327.854	496.058	bb			592.5302	98.8	-1.2	261.0
4-Amino-26-dinitrotoluene	197 > 167	15.53	6100.633	17518.184	6100.633	174.123	MM	19-Jan-10	10:48:31	659.5765	109.9	9.9	175.1
2-Amino-46-dinitrotoluene	197 > 180	16.40	8754.067	17518.184	8754.067	249.857	bb			641.3751	106.9	6.9	378.4
248-Trinitrotoluene	227 > 210	15.34	7849.298	17518.184	7849.298	224.033	bb			636.2316	106.0	6.0	522.3
34-dinitrotoluene	182 > 152	14.30	10576.247	17518.184	10576.247	301.885	bb			323.8051	107.9	7.9	523.1
26-dinitrotoluene	182 > 152	17.47	23501.309	17518.184	23501.309	670.769	MM	19-Jan-10	10:54:02	614.1022	102.4	2.4	880.3
24-dinitrotoluene	182 > 152	18.14	5578.699	17518.184	5578.699	159.226	MM	19-Jan-10	10:58:11	629.7714	105.0	5.0	193.9
26-dinitrotoluene-d3	185 > 155	17.29	17518.184		17518.184	17518.184	bb			477.4759	95.5	-4.5	2270.7
2-Nitrotoluene	137 > 46	20.90	3316.352	17518.184	3316.352	94.655	bb			630.7086	105.1	5.1	204.8
4-Nitrotoluene	137 > 46	22.26	1680.945	17518.184	1660.945	47.406	bb			662.1077	110.4	10.4	107.3
3-Nitrotoluene	137 > 46	23.92	1947.193	17518.184	1947.193	55.576	bb			651.6915	108.6	8.6	116.4
PETN	361 > 62	24.44	35156.344	17518.184	35156.344	1003.424	bb			600.4887	100.1	0.1	10636.3

# GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis: 01/18/10  
 Time of Injection: 2254  
 Standard Number: WXX100118-07CCV  
 Data File: EXP0118019a

HMX	99.6
RDX	114.8
135-TNB	102.3
13-DNB	100.5
Tetryl	93.2
Nitrobenzene	98.8
4A-26-DNT	109.9
2A-46-DNT	106.9
246-TNT	106.0
34-DNT(surr)	107.9
26-DNT	102.4
24-DNT	105.0
2-NT	105.1
4-NT	110.4
3-NT	108.6
PETN	100.1

*WXX  
1/18/10*

Total 1671.5

Average 104.5

*WXX-01/18/10*

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1160

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0118021a

Analysis Date: 18-JAN-10 23:53

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	51.962	130	
1,3-Dinitrobenzene-d4	500	514.616	103	
2,4,6-Trinitrotoluene	40	33.453	84	
2,4-Dinitrotoluene	40	40.668	102	
2,6-Dinitrotoluene	40	41.074	103	
2,6-Dinitrotoluene-d3	500	616.151	123	
2-Amino-4,6-dinitrotoluene	40	34.84	87	
3,4-Dinitrotoluene	20	20.351	102	
4-Amino-2,6-dinitrotoluene	40	34.262	86	
HMX	40	41.795	104	
Nitrobenzene	40	37.04	93	
PETN	40	42.807	107	
RDX	40	38.304	96	
Tetryl	40	40.399	101	
m-Dinitrobenzene	40	37.182	93	
m-Nitrotoluene	40	38.459	96	
o-Nitrotoluene	40	31.698	79	
p-Nitrotoluene	40	30.243	76	

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: Tue Jan 19 11:02:03 2010, Page 41 of 85

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\011810expA.qld, Time: Tue Jan 19 10:59:58 2010

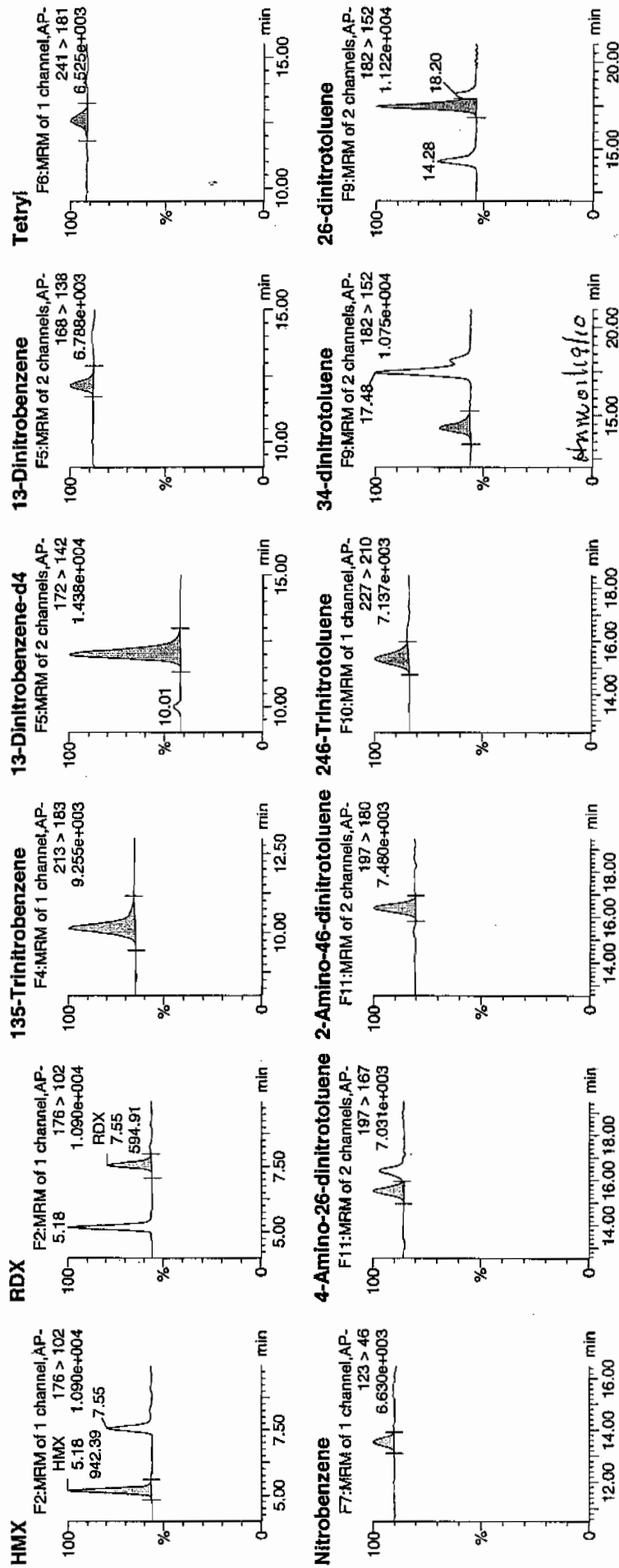
Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0118021a

Date: 18-Jan-2010

Time: 23:53:08

ID: WXX100118-08CRI

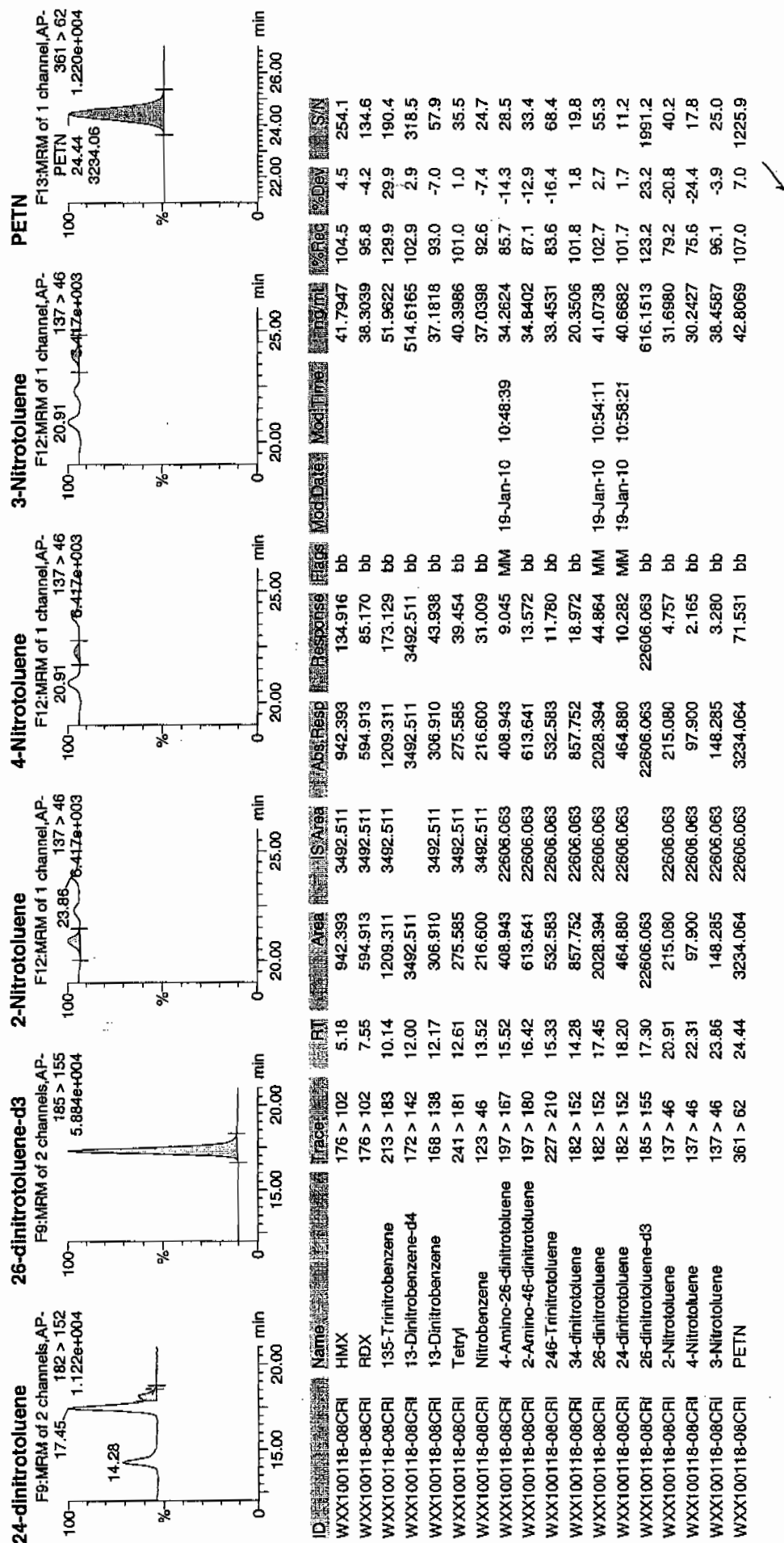
Vial: 1:1,C



Printed: Tue Jan 19 11:02:03 2010, Page 42 of 85

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

Dataset: C:\MASSLYNX\New\_Exp\PRO1011810expA.qtd, Time: Tue Jan 19 10:59:58 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific  
 Date of Analysis 01/18/10  
 Time of Injection 2353  
 Standard Number WXX100118-08CRI  
 Data File EXP0118021a

HMX	104.5
RDX	95.8
135-TNB	129.9
13-DNB	93.0
Tetryl	101.0
Nitrobenzene	92.6
4A-26-DNT	85.7
2A-46-DNT	87.1
246-TNT	83.6
34-DNT(surr)	101.8
26-DNT	102.7
24-DNT	101.7
2-NT	79.2
4-NT	75.6
3-NT	96.1
PETN	107.0

*not  
1/19/10*

Total 1537.3

Average 96.1

*checked 01/18/10*

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1160

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0118032a

Analysis Date: 19-JAN-10 05:17

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
2,6-Dinitrotoluene-d3	500	412.842	83	
2-Amino-4,6-dinitrotoluene	600	700.536	117	
3,4-Dinitrotoluene	300	339.167	113	
4-Amino-2,6-dinitrotoluene	600	733.212	122	*
HMX	600	718.941	120	
Nitrobenzene	600	698.366	116	
PETN	600	712.727	119	
RDX	600	831.01	139	*
Tetryl	600	541.216	90	
m-Dinitrobenzene	600	655.489	109	
m-Nitrotoluene	600	699.981	117	
o-Nitrotoluene	600	655.642	109	
p-Nitrotoluene	600	732.167	122	*
1,3,5-Trinitrobenzene	600	634.051	106	
1,3-Dinitrobenzene-d4	500	394.416	79	*
2,4,6-Trinitrotoluene	600	675.704	113	
2,4-Dinitrotoluene	600	650.536	108	
2,6-Dinitrotoluene	600	616.93	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

Printed: Tue Jan 19 11:02:03 2010, Page 63 of 85

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\011810expA.qld, Time: Tue Jan 19 10:59:58 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0118032a

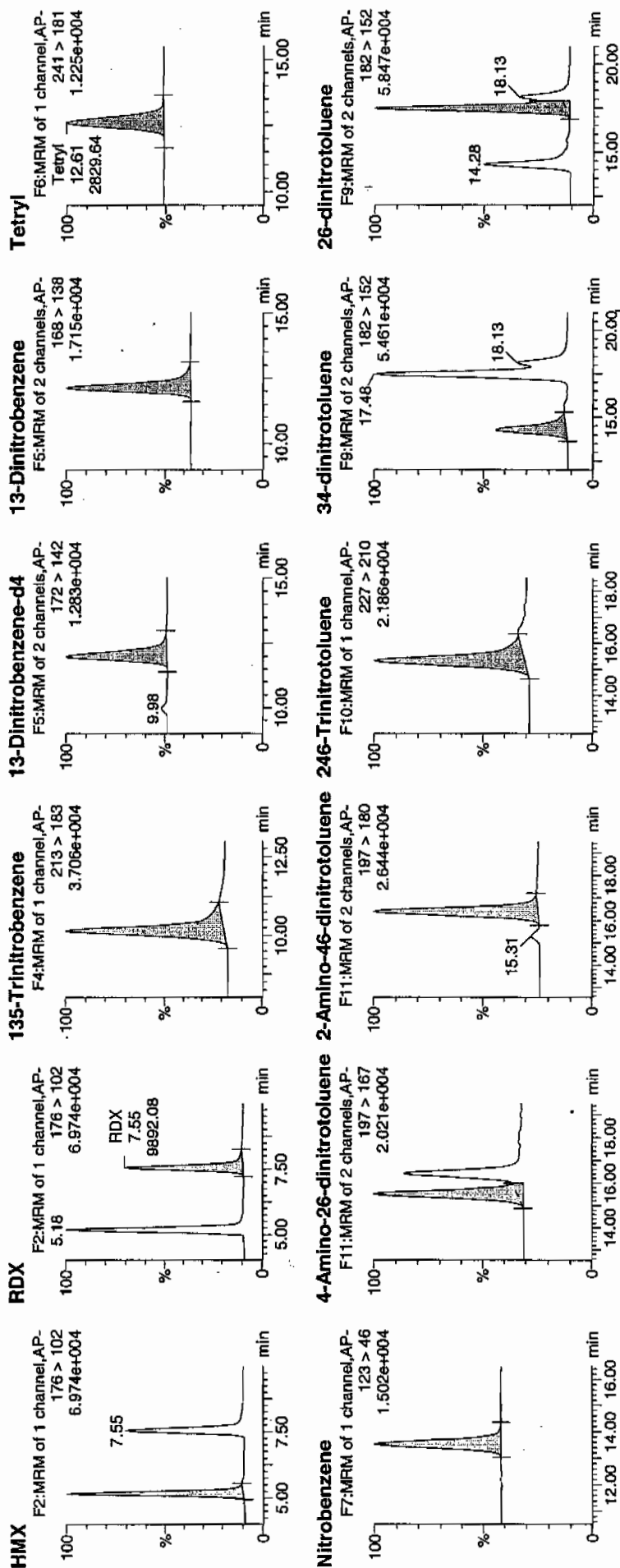
Date: 19-Jan-2010

Time: 05:17:22

ID: WXX100118-07CCV

Vial: 1:1,B

MM  
1/19/10



MM 01/19/10

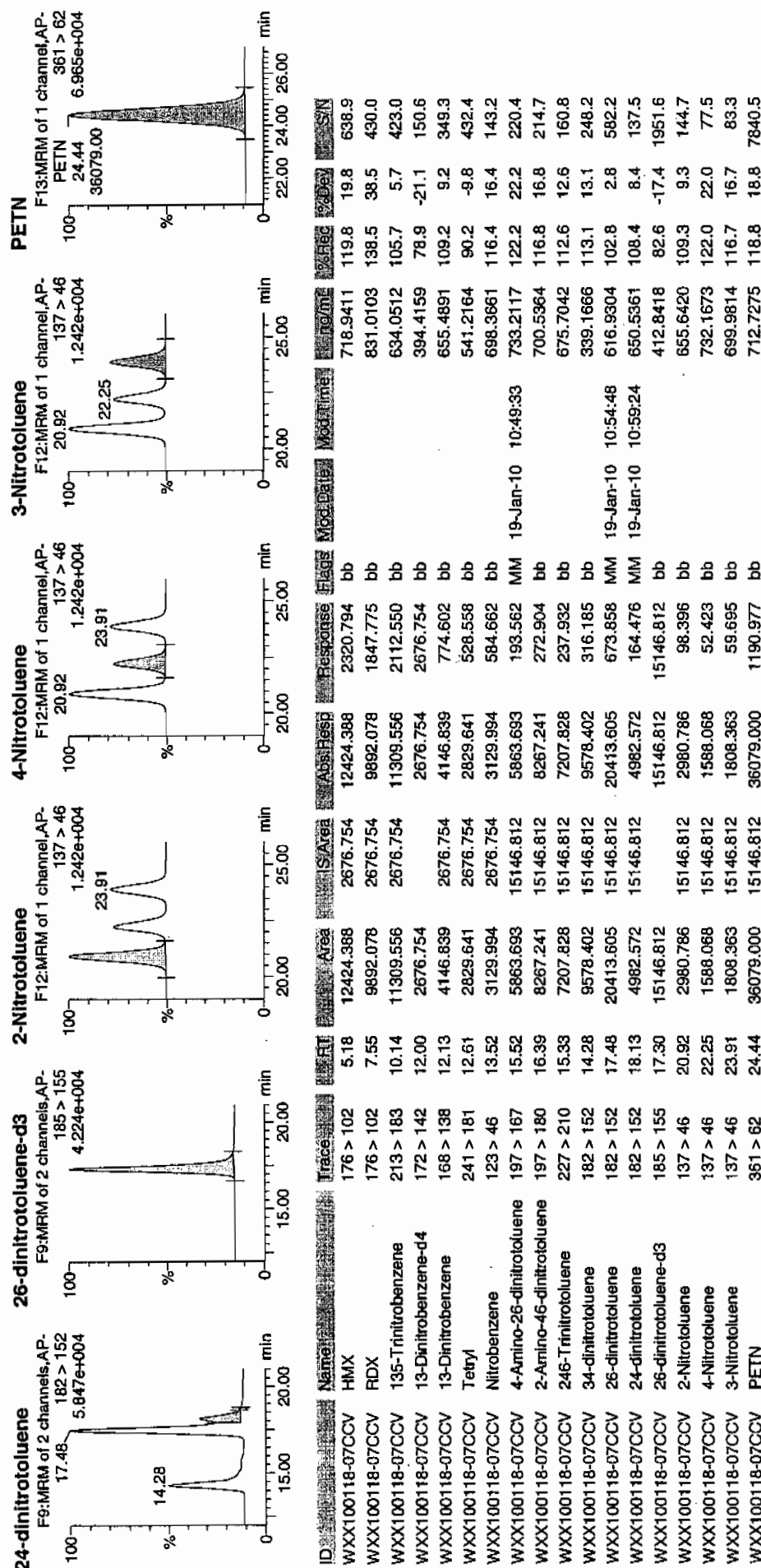


Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Tue Jan 19 11:02:03 2010, Page 64 of 85

Dataset: C:\MASSLYNX\New\_Exp.PRO\011810expA.qld, Time: Tue Jan 19 10:59:58 2010



GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis: 01/19/10  
 Time of Injection: 0517  
 Standard Number: WXX100118-07CCV  
 Data File: EXP0118032a

HMX	119.8
RDX	138.5
135-TNB	105.7
13-DNB	109.2
Tetryl	90.2
Nitrobenzene	116.4
4A-26-DNT	122.2
2A-46-DNT	116.8
246-TNT	112.6
34-DNT(surr)	113.1
26-DNT	102.8
24-DNT	108.4
2-NT	109.3
4-NT	122.0
3-NT	116.7
PETN	118.8

*mtt  
1/19/10*

Total 1822.5

Average 113.9

*Amc 01/19/10*

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): 10-1160

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0118034a

Analysis Date: 19-JAN-10 06:16

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
4-Amino-2,6-dinitrotoluene	40	45.261	113	
HMX	40	48.959	122	
Nitrobenzene	40	39.915	100	
PETN	40	57.829	145	*
RDX	40	47.995	120	
Tetryl	40	42.081	105	
m-Dinitrobenzene	40	38.582	96	
m-Nitrotoluene	40	52.934	132	*
o-Nitrotoluene	40	40.872	102	
p-Nitrotoluene	40	44.36	111	
1,3,5-Trinitrobenzene	40	47.44	119	
1,3-Dinitrobenzene-d4	500	540.81	108	
2,4,6-Trinitrotoluene	40	40.724	102	
2,4-Dinitrotoluene	40	36.114	90	
2,6-Dinitrotoluene	40	40.276	101	
2,6-Dinitrotoluene-d3	500	509.827	102	
2-Amino-4,6-dinitrotoluene	40	40.36	101	
3,4-Dinitrotoluene	20	21.051	105	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

Printed: Tue Jan 19 11:02:03 2010, Page 67 of 85

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\011810expA.qld, Time: Tue Jan 19 10:59:58 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0118034a

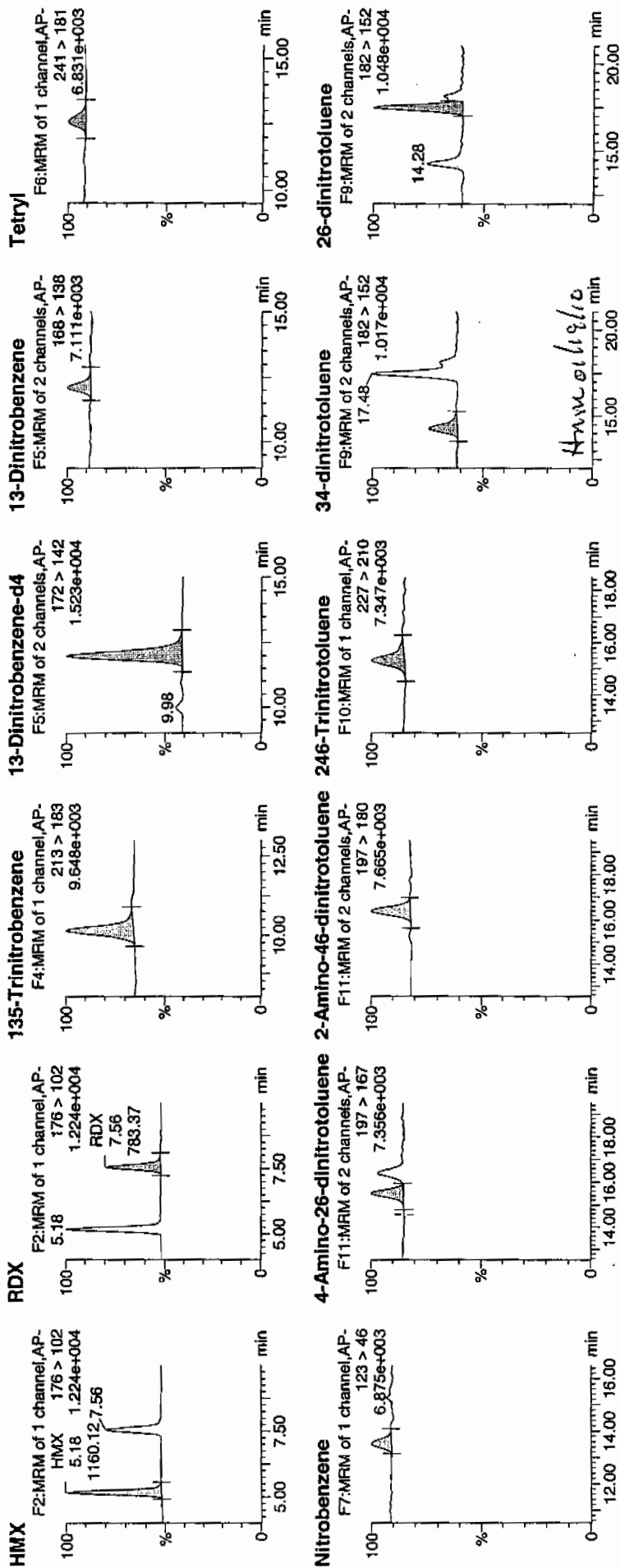
Date: 19-Jan-2010

Time: 06:16:41

ID: WXX100118-08CRI

Vial: 1:1,C

11/10/10

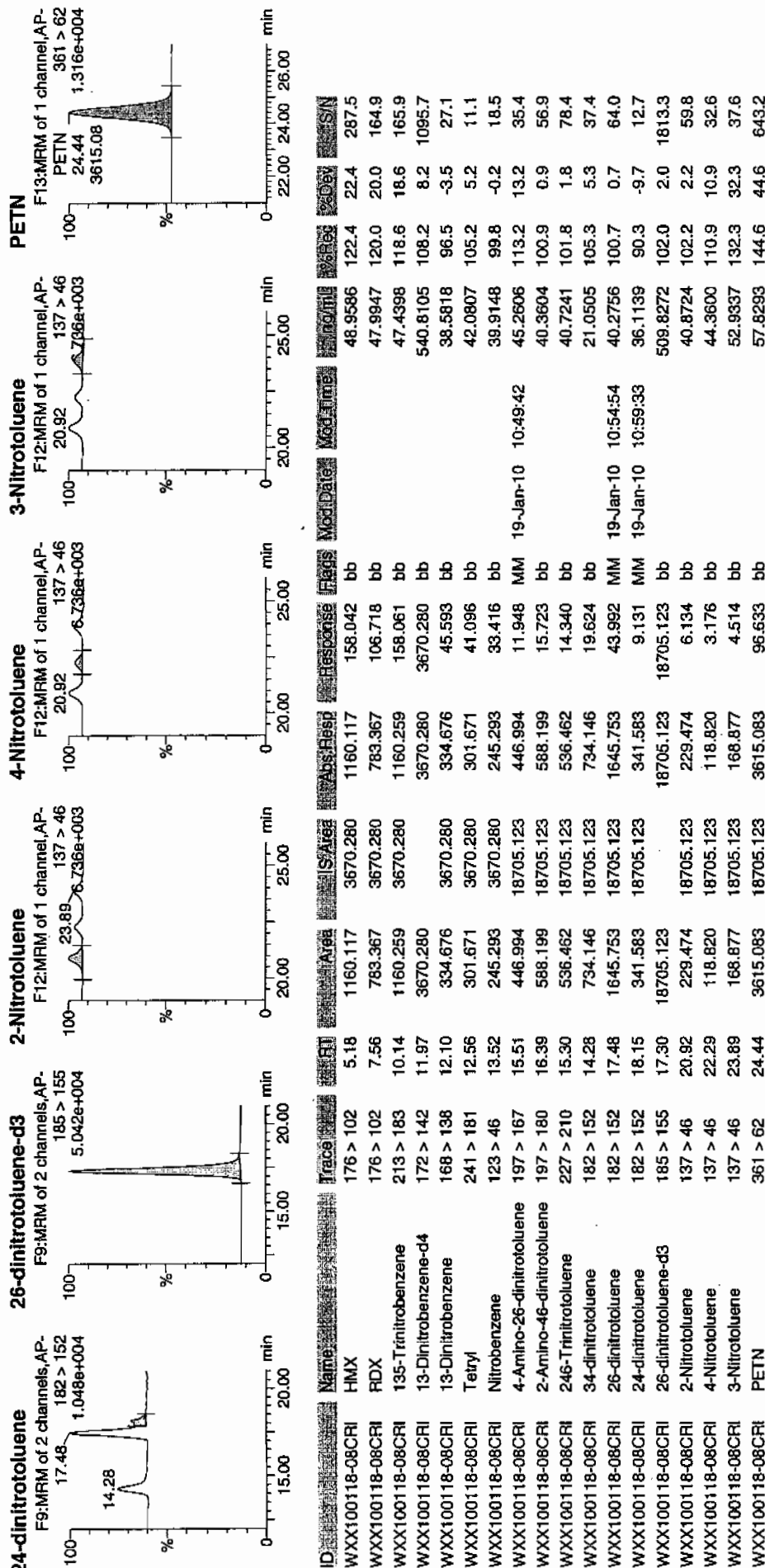


# Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Tue Jan 19 11:02:03 2010, Page 68 of 85

Dataset: C:\MASSLYNX\New\_Exp.PRO\011810expA.qld, Time: Tue Jan 19 10:59:58 2010



# GRAND MEAN AVERAGE

Vendor: UltraScientific  
 Date of Analysis 01/19/10  
 Time of Injection 0616  
 Standard Number WXX100118-08CRI  
 Data File EXP0118034a

HMX	122.4
RDX	120.0
135-TNB	118.6
13-DNB	96.5
Tetryl	105.2
Nitrobenzene	99.8
4A-26-DNT	113.2
2A-46-DNT	100.9
246-TNT	101.8
34-DNT(surr)	105.3
26-DNT	100.7
24-DNT	90.3
2-NT	102.2
4-NT	110.9
3-NT	132.3
PETN	144.6

*WAP  
1/19/10*

Total 1764.7

Average 110.3

*WAP 01/19/10*

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): 10-1160

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0118040a

Analysis Date: 19-JAN-10 09:13

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
m-Nitrotoluene	600	576.242	96	
o-Nitrotoluene	600	648.077	108	
p-Nitrotoluene	600	653.047	109	
1,3,5-Trinitrobenzene	600	631.181	105	
1,3-Dinitrobenzene-d4	500	413.146	83	
2,4,6-Trinitrotoluene	600	634.514	106	
2,4-Dinitrotoluene	600	610.908	102	
2,6-Dinitrotoluene	600	612.692	102	
2,6-Dinitrotoluene-d3	500	444.446	89	
2-Amino-4,6-dinitrotoluene	600	638.318	106	
3,4-Dinitrotoluene	300	307.641	103	
4-Amino-2,6-dinitrotoluene	600	658.172	110	
HMX	600	722.023	120	*
Nitrobenzene	600	635.366	106	
PETN	600	666.241	111	
RDX	600	774.185	129	*
Tetryl	600	563.562	94	
m-Dinitrobenzene	600	631.38	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\011810expA.qld, Time: Tue Jan 19 10:59:58 2010

Name: C:\MASSLYNX\NEW\_EXP\PRO\Data\EXP0118040a

Date: 19-Jan-2010

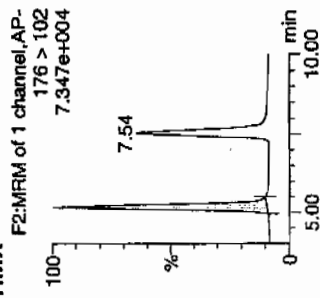
Time: 09:13:50

ID: WXX100118-07CCV

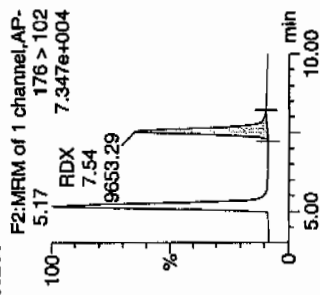
Vial: 1:1,B

WXX  
1/19/10

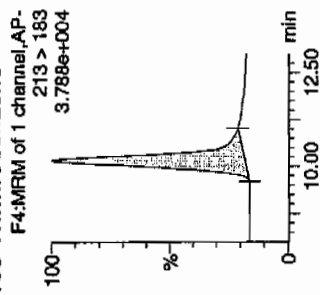
# HMX



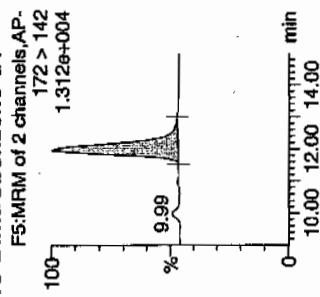
# RDX



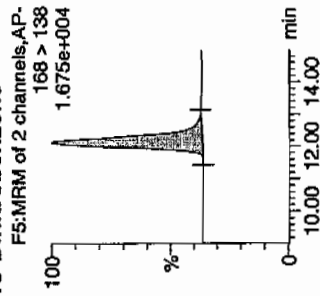
# 135-Trinitrobenzene



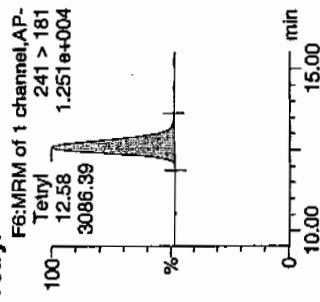
# 13-Dinitrobenzene-d4



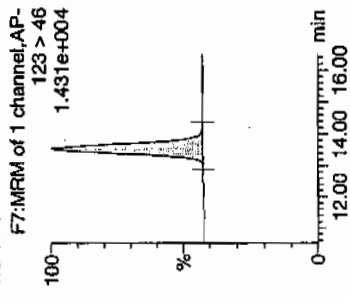
# 13-Dinitrobenzene



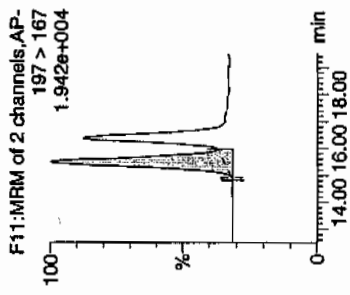
# Tetryl



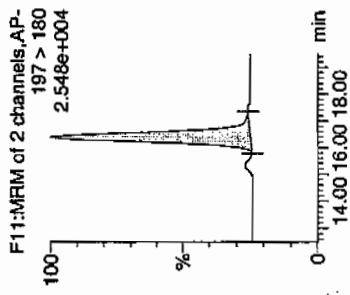
# Nitrobenzene



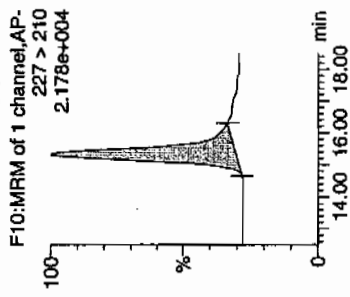
# 4-Amino-26-dinitrotoluene



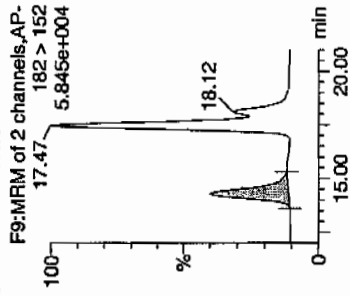
# 2-Amino-46-dinitrotoluene



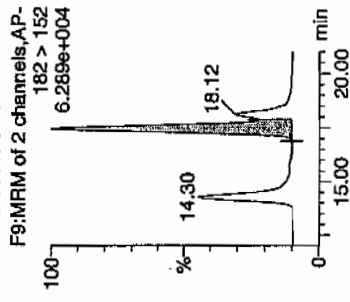
# 246-Trinitrotoluene



# 34-dinitrotoluene

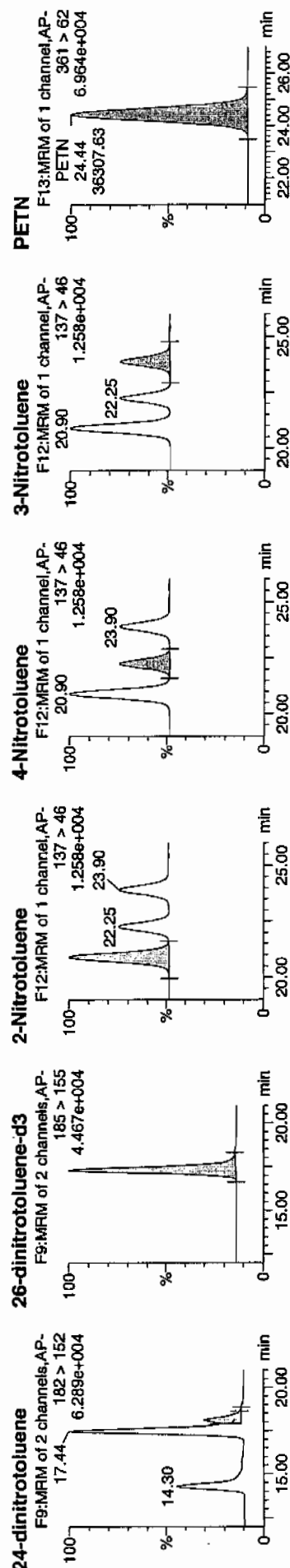


# 26-dinitrotoluene



Handwritten note: HMX 9.99





ID	Name	Trace	RT	Area	SArea	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	Int.Mn	%Rec	%Day	S/N
WXX100118-07CCV	HMX	176 > 102	5.17	13070.210	2803.871	13070.210	2330.744	bb			722.0235	120.3	20.3	1315.1
WXX100118-07CCV	RDX	176 > 102	7.54	9653.289	2803.871	9653.289	1721.422	bb			774.1847	129.0	29.0	808.7
WXX100118-07CCV	135-Trinitrobenzene	213 > 183	10.14	11793.014	2803.871	11793.014	2102.988	bb			631.1811	105.2	5.2	1546.3
WXX100118-07CCV	13-Dinitrobenzene-d4	172 > 142	11.97	2803.871	2803.871	2803.871	2803.871	bb			413.1464	82.6	-17.4	176.8
WXX100118-07CCV	13-Dinitrobenzene	168 > 138	12.14	4184.004	2803.871	4184.004	746.112	bb			631.3800	105.2	5.2	358.8
WXX100118-07CCV	Tetryl	241 > 181	12.58	3086.394	2803.871	3086.394	550.381	bb			563.5616	93.9	-6.1	229.8
WXX100118-07CCV	Nitrobenzene	123 > 46	13.54	2982.869	2803.871	2982.869	531.920	bb			635.3664	105.9	5.9	400.4
WXX100118-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.53	5666.526	16306.342	5666.526	173.752	MM	19-Jan-10	10:49:57	658.1725	109.7	9.7	273.8
WXX100118-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.40	8109.655	16306.342	8109.655	248.666	bb			638.3181	106.4	6.4	635.6
WXX100118-07CCV	246-Trinitrotoluene	227 > 210	15.31	7286.585	16306.342	7286.585	223.428	bb			634.5136	105.8	5.8	332.8
WXX100118-07CCV	34-dinitrotoluene	182 > 152	14.30	9353.200	16306.342	9353.200	286.796	bb			307.6415	102.5	2.5	304.7
WXX100118-07CCV	26-dinitrotoluene	182 > 152	17.44	21825.346	16306.342	21825.346	669.229	MM	19-Jan-10	10:55:09	612.6921	102.1	2.1	825.3
WXX100118-07CCV	24-dinitrotoluene	182 > 152	18.12	5037.244	16306.342	5037.244	154.457	MM	19-Jan-10	10:59:45	610.9076	101.8	1.8	178.5
WXX100118-07CCV	26-dinitrotoluene-d3	185 > 155	17.29	16306.342	16306.342	16306.342	16306.342	bb			444.4460	88.9	-11.1	1394.6
WXX100118-07CCV	2-Nitrotoluene	137 > 46	20.90	3171.949	16306.342	3171.949	97.261	bb			648.0774	108.0	8.0	511.5
WXX100118-07CCV	4-Nitrotoluene	137 > 46	22.25	1524.889	16306.342	1524.889	46.758	bb			653.0465	108.8	8.8	260.1
WXX100118-07CCV	3-Nitrotoluene	137 > 46	23.90	1602.653	16306.342	1602.653	49.142	bb			576.2422	96.0	-4.0	257.5
WXX100118-07CCV	PETN	361 > 62	24.44	36307.629	16306.342	36307.629	1113.298	bb			666.2413	111.0	11.0	5934.4

GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis: 01/19/10  
 Time of Injection: 0913  
 Standard Number: WXX100118-07CCV  
 Data File: EXP0118040a

HMX	120.3
RDX	129.0
135-TNB	105.2
13-DNB	105.2
Tetryl	93.9
Nitrobenzene	105.9
4A-26-DNT	109.7
2A-46-DNT	106.4
246-TNT	105.8
34-DNT(surr)	102.5
26-DNT	102.1
24-DNT	101.8
2-NT	108.0
4-NT	108.8
3-NT	96.0
PETN	111.0

*MTF  
1/19/10*

Total 1711.6

Average 107.0

*Sum 01/19/10*

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): 10-1160

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0118042a

Analysis Date: 19-JAN-10 10:12

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	47.396	118	
1,3-Dinitrobenzene-d4	500	569.733	114	
2,4,6-Trinitrotoluene	40	37.811	95	
2,4-Dinitrotoluene	40	35.368	88	
2,6-Dinitrotoluene	40	39.754	99	
2,6-Dinitrotoluene-d3	500	579.167	116	
2-Amino-4,6-dinitrotoluene	40	36.213	91	
3,4-Dinitrotoluene	20	19.032	95	
4-Amino-2,6-dinitrotoluene	40	39.56	99	
HMX	40	53.426	134	*
Nitrobenzene	40	44.713	112	
PETN	40	50.574	126	
RDX	40	49.946	125	
Tetryl	40	39.539	99	
m-Dinitrobenzene	40	42.962	107	
m-Nitrotoluene	40	44.032	110	
o-Nitrotoluene	40	44.062	110	
p-Nitrotoluene	40	47.224	118	

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  
NGEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\011810expA.qld, Time: Tue Jan 19 10:59:58 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0118042a

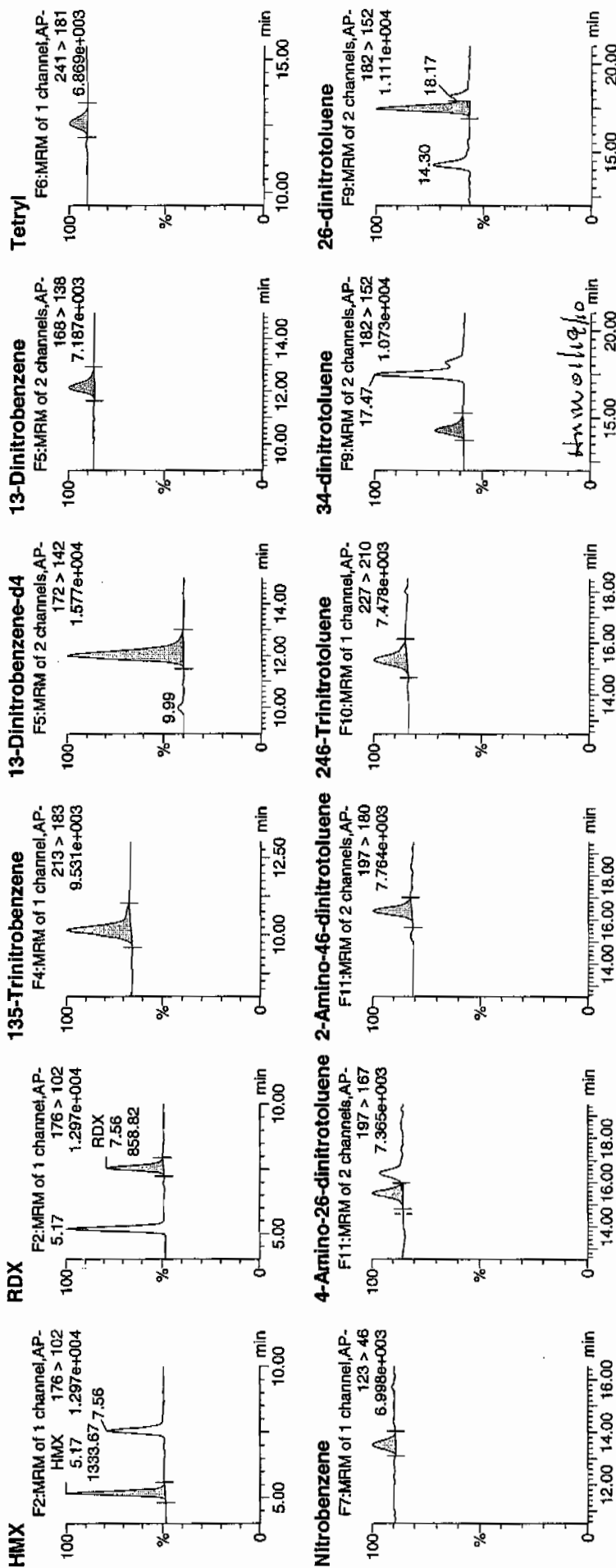
Date: 19-Jan-2010

Time: 10:12:54

ID: WXX100118-08CRI

Vial: 1:1,C

*Run 1/19/10*

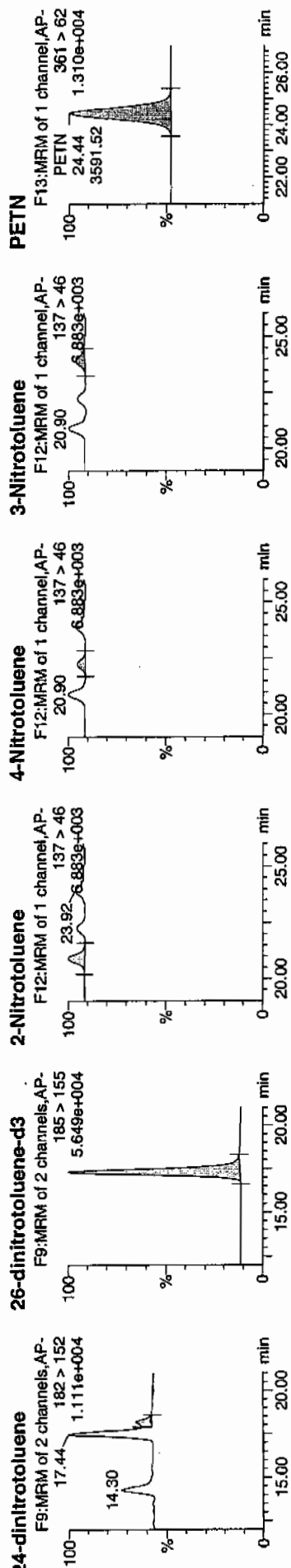


Printed: Tue Jan 19 11:02:03 2010, Page 84 of 85

### Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\011810expA.qld, Time: Tue Jan 19 10:59:58 2010



ID	Name	Trace	RT	Area	S/Ave	Abs Resp	Response	Flags	Mod Date	Mod Time	Indpt	%Area	%Dev	SN
WXX100118-08CRI	HMx	178 > 102	5.17	1333.665	3866.563	1333.665	172.461	bb			53.4255	133.6	33.6	292.4
WXX100118-08CRI	RDX	176 > 102	7.56	858.817	3866.563	858.817	111.057	bb			49.9462	124.9	24.9	166.5
WXX100118-08CRI	135-Trinitrobenzene	213 > 183	10.14	1221.177	3866.563	1221.177	157.915	bb			47.3959	118.5	18.5	239.4
WXX100118-08CRI	13-Dinitrobenzene-d4	172 > 142	12.00	3866.563		3866.563	3866.563	bb			569.7325	113.9	13.9	203.5
WXX100118-08CRI	13-Dinitrobenzene	168 > 138	12.14	392.604	3866.563	392.604	50.769	bb			42.9622	107.4	7.4	51.7
WXX100118-08CRI	Tetryl	241 > 181	12.58	298.612	3866.563	298.612	38.615	bb			39.5394	98.8	-1.2	27.5
WXX100118-08CRI	Nitrobenzene	123 > 46	13.54	289.477	3866.563	289.477	37.433	bb			44.7133	111.8	11.8	25.4
WXX100118-08CRI	4-Amino-2,6-dinitrotoluene	197 > 167	15.53	443.835	21249.145	443.835	10.444	MM	19-Jan-10	10:50:07	39.5603	98.9	-1.1	21.3
WXX100118-08CRI	2-Amino-4,6-dinitrotoluene	197 > 180	16.40	599.542	21249.145	599.542	14.107	bb			36.2134	90.5	-9.5	46.5
WXX100118-08CRI	2,4,6-Trinitrotoluene	227 > 210	15.35	565.831	21249.145	565.831	13.314	bb			37.8111	94.5	-5.5	47.9
WXX100118-08CRI	34-dinitrotoluene	182 > 152	14.30	754.022	21249.145	754.022	17.742	bb			19.0320	95.2	-4.8	61.7
WXX100118-08CRI	26-dinitrotoluene	182 > 152	17.44	1845.370	21249.145	1845.370	43.422	MM	19-Jan-10	10:55:26	39.7539	99.4	-0.6	71.0
WXX100118-08CRI	24-dinitrotoluene	182 > 152	18.17	380.030	21249.145	380.030	8.942	MM	19-Jan-10	10:59:58	35.3684	88.4	-11.6	13.4
WXX100118-08CRI	26-dinitrotoluene-d3	185 > 155	17.31	21249.145		21249.145	21249.145	bb			579.1671	115.8	15.8	2376.2
WXX100118-08CRI	2-Nitrotoluene	137 > 46	20.90	281.027	21249.145	281.027	6.613	bb			44.0620	110.2	10.2	22.8
WXX100118-08CRI	4-Nitrotoluene	137 > 46	22.26	143.694	21249.145	143.694	3.381	bb			47.2237	118.1	18.1	11.7
WXX100118-08CRI	3-Nitrotoluene	137 > 46	23.92	159.584	21249.145	159.584	3.755	bb			44.0322	110.1	10.1	12.0
WXX100118-08CRI	PETN	361 > 62	24.44	3591.523	21249.145	3591.523	84.510	bb			50.5740	126.4	26.4	1221.5

# GRAND MEAN AVERAGE

Vendor: UltraScientific  
 Date of Analysis 01/19/10  
 Time of Injection 1012  
 Standard Number WXX100118-08CRI  
 Data File EXP0118042a

HMX	133.6
RDX	124.9
135-TNB	118.5
13-DNB	107.4
Tetryl	98.8
Nitrobenzene	111.8
4A-26-DNT	98.9
2A-46-DNT	90.5
246-TNT	94.5
34-DNT(surr)	95.2
26-DNT	99.4
24-DNT	88.4
2-NT	110.2
4-NT	118.1
3-NT	110.1
PETN	126.4

*not  
1/19/10*

Total 1726.7  
 Average 107.9

*done 01/19/10*

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): 10-1160

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0118053a

Analysis Date: 19-JAN-10 15:37

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	641.265	107	
1,3-Dinitrobenzene-d4	500	449.958	90	
2,4,6-Trinitrotoluene	600	684.57	114	
2,4-Dinitrotoluene	600	624.701	104	
2,6-Dinitrotoluene	600	610.092	102	
2,6-Dinitrotoluene-d3	500	486.695	97	
2-Amino-4,6-dinitrotoluene	600	652.06	109	
3,4-Dinitrotoluene	300	339.189	113	
4-Amino-2,6-dinitrotoluene	600	690.543	115	
HMX	600	654.179	109	
Nitrobenzene	600	680.594	113	
PETN	600	613.545	102	
RDX	600	715.015	119	
Tetryl	600	579.396	97	
m-Dinitrobenzene	600	604.233	101	
m-Nitrotoluene	600	609.049	102	
o-Nitrotoluene	600	583.021	97	
p-Nitrotoluene	600	625.888	104	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene, 2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

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

Dataset: C:\MASSLYNX\New\_Exp\PRO\011810expA1.qld, Time: Wed Jan 20 09:06:02 2010

Name: C:\MASSLYNX\NEW\_EXP\PRO\Data\EXP0118053a

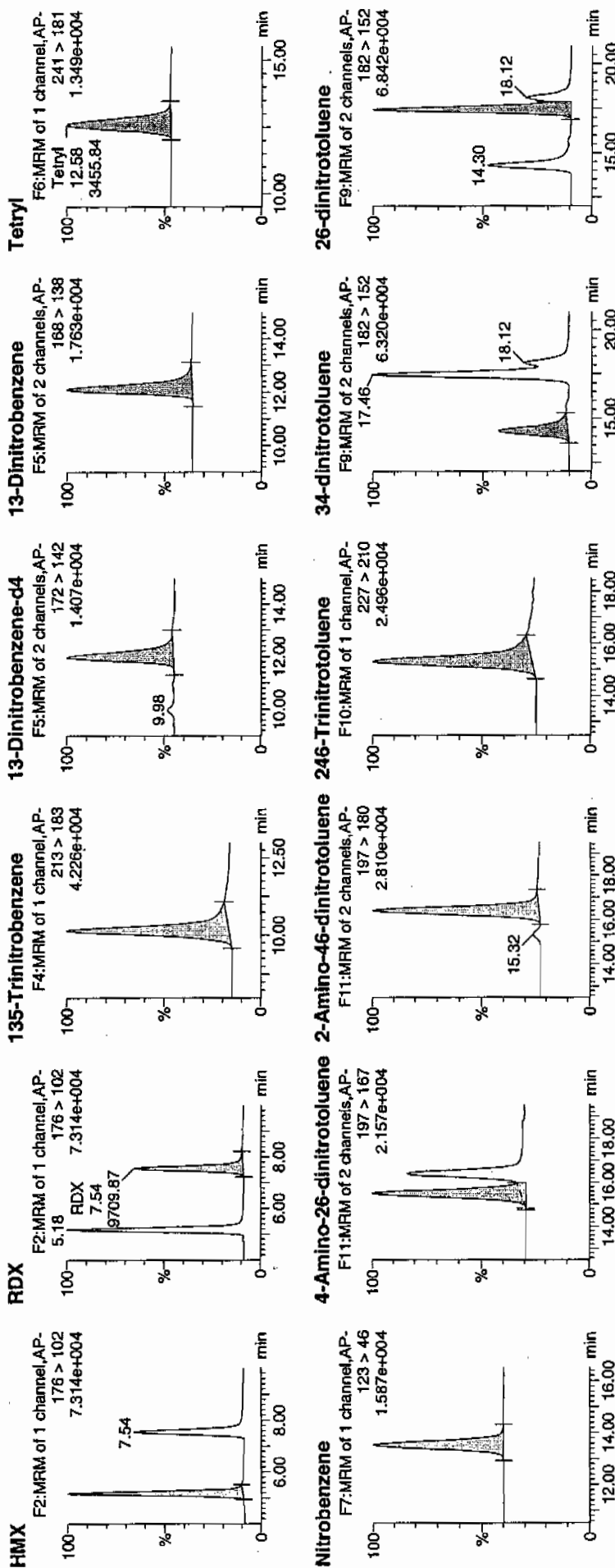
Date: 19-Jan-2010

Time: 15:37:40

ID: WXX100118-07CCV

Vial: 1:1,B

1/20/10



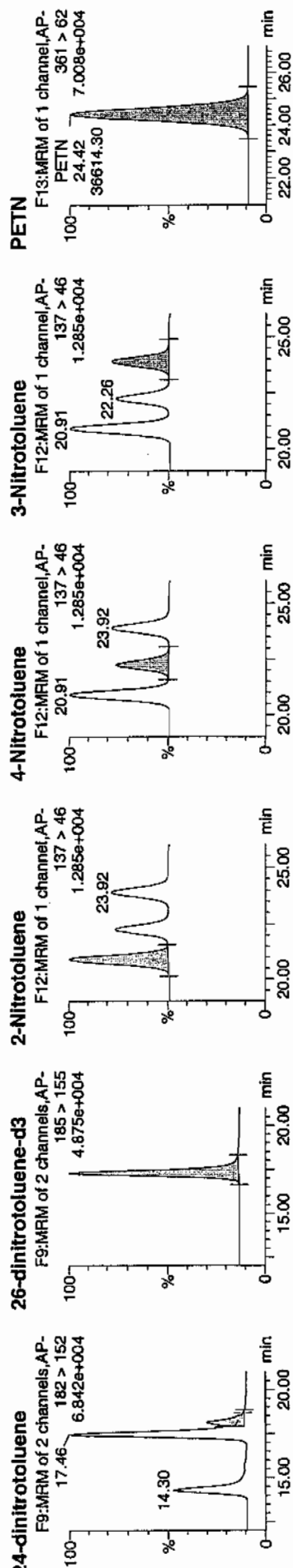
1/20/10



Printed: Wed Jan 20 09:07:58 2010, Page 22 of 91

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

Dataset: C:\MASSLYN\New\_Exp\PRO\011810expA1.qld, Time: Wed Jan 20 09:06:02 2010



ID	Name	RT	Area	IS Area	Avg. Resp	Response	Flags	Mod Date	Mod Time	Int. Refs	%Sec	%Dev	SN
WXX100118-07CCV	HMX	176 > 102	5.18	12897.193	3053.695	12897.193	2111.796	bb	654.1786	109.0	9.0	1605.2	
WXX100118-07CCV	RDX	176 > 102	7.54	9709.867	3053.695	9709.867	1589.855	bb	715.0147	119.2	19.2	1005.3	
WXX100118-07CCV	135-Trinitrobenzene	213 > 183	10.14	13048.964	3053.695	13048.964	2136.586	bb	641.2651	106.9	6.9	652.8	
WXX100118-07CCV	13-Dinitrobenzene-d4	172 > 142	11.97	3053.695	3053.695	3053.695	714.032	bb	449.9576	90.0	-10.0	275.3	
WXX100118-07CCV	13-Dinitrobenzene	168 > 138	12.10	4360.870	3053.695	4360.870	604.2328	bb	579.3962	100.7	0.7	319.5	
WXX100118-07CCV	Tetryl	241 > 181	12.58	3455.837	3053.695	3455.837	565.845	bb	680.5938	96.6	-3.4	477.8	
WXX100118-07CCV	Nitrobenzene	123 > 46	13.54	3479.890	3053.695	3479.890	569.783	bb	890.5433	113.4	13.4	256.7	
WXX100118-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.52	6510.371	17856.412	6510.371	182.298	MM	20-Jan-10 08:53:22	115.1	15.1	276.2	
WXX100118-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.40	9071.741	17856.412	9071.741	254.019	bb	652.0603	108.7	8.7	510.3	
WXX100118-07CCV	246-Trinitrotoluene	227 > 210	15.31	8608.719	17856.412	8608.719	241.054	bb	684.5699	114.1	14.1	434.5	
WXX100118-07CCV	34-dinitrotoluene	182 > 152	14.30	11292.611	17856.412	11292.611	316.206	bb	339.1887	113.1	13.1	196.9	
WXX100118-07CCV	26-dinitrotoluene	182 > 152	17.46	23798.637	17856.412	23798.637	666.389	MM	20-Jan-10 08:57:01	101.7	1.7	934.5	
WXX100118-07CCV	24-dinitrotoluene	182 > 152	18.12	5640.626	17856.412	5640.626	157.944	MM	20-Jan-10 09:03:28	104.1	4.1	204.9	
WXX100118-07CCV	26-dinitrotoluene-d3	185 > 155	17.29	17856.412	17856.412	17856.412	17856.412	bb	486.6947	97.3	-2.7	1020.3	
WXX100118-07CCV	2-Nitrotoluene	137 > 46	20.91	3124.791	17856.412	3124.791	87.498	bb	583.0207	97.2	-2.8	376.5	
WXX100118-07CCV	4-Nitrotoluene	137 > 46	22.26	1600.400	17856.412	1600.400	44.813	bb	625.8882	104.3	4.3	194.3	
WXX100118-07CCV	3-Nitrotoluene	137 > 46	23.92	1854.917	17856.412	1854.917	51.940	bb	609.0493	101.5	1.5	210.7	
WXX100118-07CCV	PETN	361 > 62	24.42	36614.297	17856.412	36614.297	1025.242	bb	613.5454	102.3	2.3	5926.0	

# GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis: 01/19/10  
 Time of Injection: 1537  
 Standard Number: WXX100118-07CCV  
 Data File: EXP0118053a

HMX	109.0
RDX	119.2
135-TNB	106.9
13-DNB	100.7
Tetryl	96.6
Nitrobenzene	113.4
4A-26-DNT	115.1
2A-46-DNT	108.7
246-TNT	114.1
34-DNT(surr)	113.1
26-DNT	101.7
24-DNT	104.1
2-NT	97.2
4-NT	104.3
3-NT	101.5
PETN	102.3

MITT  
1/20/10

Total 1707.9

Average 106.7

Handwritten: 01/20/10

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): 10-1160

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0118055a

Analysis Date: 19-JAN-10 16:36

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
Tetryl	40	46.869	117	
m-Dinitrobenzene	40	38.753	97	
m-Nitrotoluene	40	44.424	111	
o-Nitrotoluene	40	41.754	104	
p-Nitrotoluene	40	38.156	95	
1,3,5-Trinitrobenzene	40	52.005	130	*
1,3-Dinitrobenzene-d4	500	471.448	94	
2,4,6-Trinitrotoluene	40	53.52	134	*
2,4-Dinitrotoluene	40	40.215	101	
2,6-Dinitrotoluene	40	39.93	100	
2,6-Dinitrotoluene-d3	500	509.225	102	
2-Amino-4,6-dinitrotoluene	40	45.269	113	
3,4-Dinitrotoluene	20	26.069	130	*
4-Amino-2,6-dinitrotoluene	40	61.793	154	*
HMX	40	48.373	121	
Nitrobenzene	40	46.845	117	
PETN	40	58.517	146	*
RDX	40	45.247	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 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\011810expA1.qld, Time: Wed Jan 20 09:06:02 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0118055a

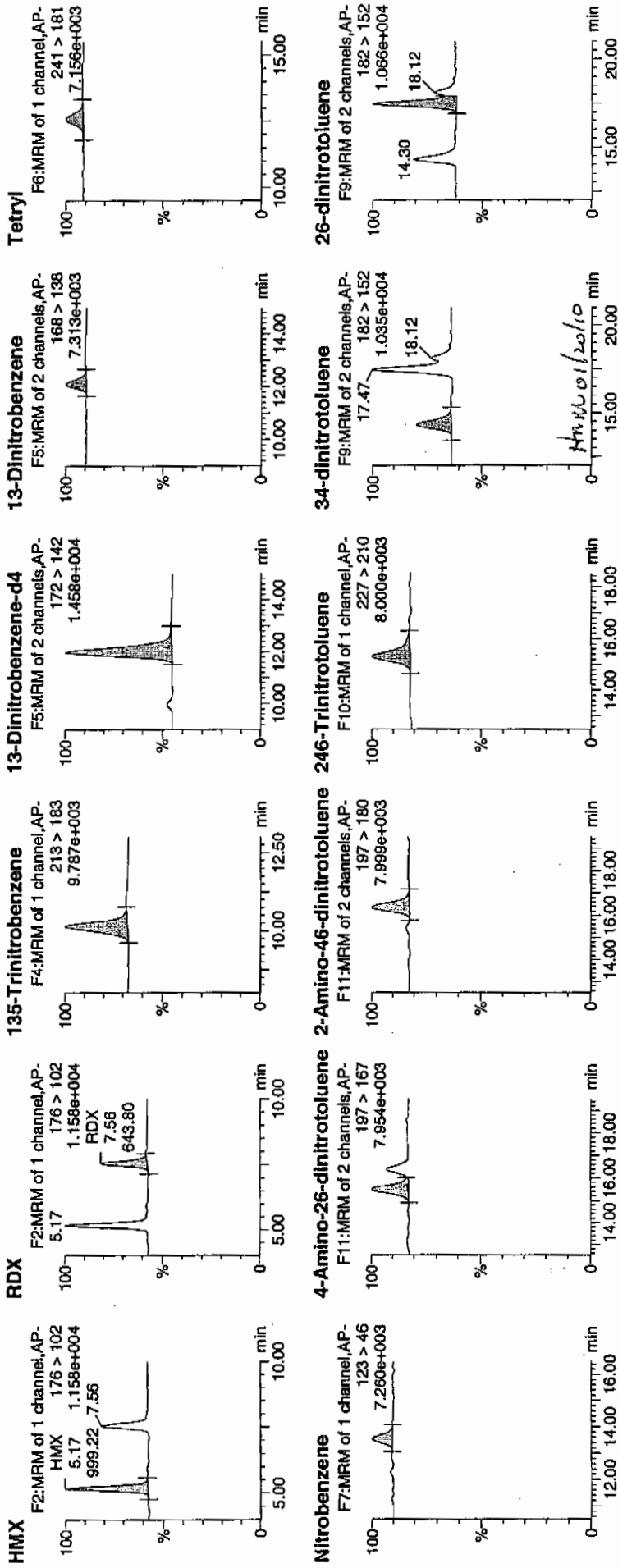
Date: 19-Jan-2010

Time: 16:36:45

ID: WXX100118-08CRI

Vial: 1:1,C

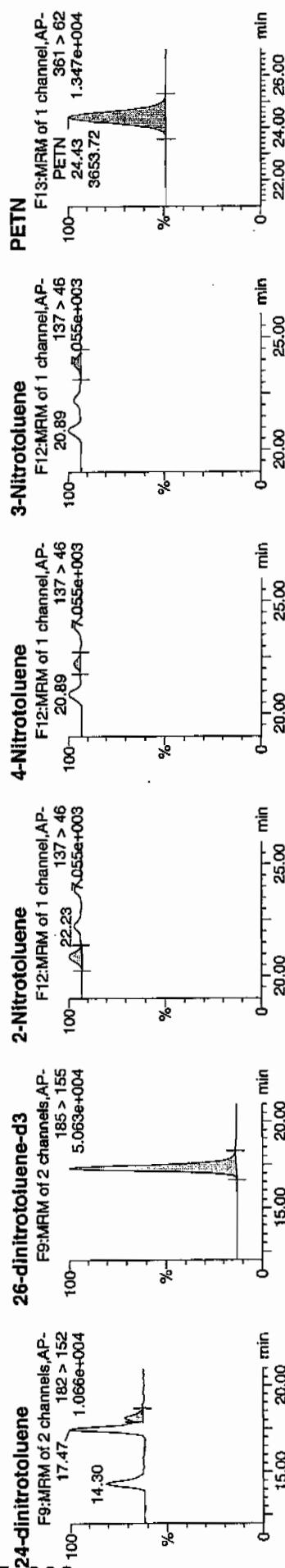
1/20/10



Printed: Wed Jan 20 09:07:58 2010, Page 26 of 91

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\011810expA1.qld, Time: Wed Jan 20 09:06:02 2010



ID	Name	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	%Rec	SN
WXX100118-08CRI	HMZ	176 > 102	5.17	999.224	156.151	bb			48.3729	120.9
WXX100118-08CRI	RDX	176 > 102	7.56	643.797	100.608	bb			45.2469	113.1
WXX100118-08CRI	135-Trinitrobenzene	213 > 183	10.14	1108.781	173.272	bb			52.0050	130.0
WXX100118-08CRI	13-Dinitrobenzene-d4	172 > 142	11.97	3199.541	3199.541	bb			471.4478	94.3
WXX100118-08CRI	13-Dinitrobenzene	168 > 138	12.10	293.048	45.795	bb			38.7532	96.9
WXX100118-08CRI	Tetryl	241 > 181	12.58	292.906	45.773	bb			46.8693	117.2
WXX100118-08CRI	Nitrobenzene	123 > 46	13.54	250.958	39.218	bb			46.8448	117.1
WXX100118-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.49	609.543	16.313	MM	20-Jan-10	08:53:29	61.7927	154.5
WXX100118-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.37	658.955	17.635	bb			45.2689	113.2
WXX100118-08CRI	246-Trinitrotoluene	227 > 210	15.31	704.195	18.846	bb			53.5204	133.8
WXX100118-08CRI	34-dinitrotoluene	182 > 152	14.34	908.079	24.302	bb			26.0686	130.3
WXX100118-08CRI	26-dinitrotoluene	182 > 152	17.47	1629.697	43.614	MM	20-Jan-10	08:57:10	39.9298	99.8
WXX100118-08CRI	24-dinitrotoluene	182 > 152	18.12	379.920	10.168	MM	20-Jan-10	09:03:11	40.2147	100.5
WXX100118-08CRI	26-dinitrotoluene-d3	185 > 155	17.29	18683.012	18683.012	bb			509.2245	101.8
WXX100118-08CRI	2-Nitrotoluene	137 > 46	20.89	234.144	6.266	bb			41.7535	104.4
WXX100118-08CRI	4-Nitrotoluene	137 > 46	22.23	102.081	2.732	bb			38.1558	95.4
WXX100118-08CRI	3-Nitrotoluene	137 > 46	23.86	141.562	3.789	bb			44.4244	111.1
WXX100118-08CRI	PETN	361 > 62	24.43	3653.719	97.782	bb			58.5165	146.3

GRAND MEAN AVERAGE

Vendor: UltraScientific  
 Date of Analysis 01/19/10  
 Time of Injection 1636  
 Standard Number WXX100118-08CRI  
 Data File EXP0118055a

HMX	120.9
RDX	113.1
135-TNB	130.0
13-DNB	96.9
Tetryl	117.2
Nitrobenzene	117.1
4A-26-DNT	154.5
2A-46-DNT	113.2
246-TNT	133.8
34-DNT(surr)	130.3
26-DNT	99.8
24-DNT	100.5
2-NT	104.4
4-NT	95.4
3-NT	111.1
PETN	146.3

*mtt  
1/24/10*

Total 1884.5

Average 117.8

*4mm 01/20/10*

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): 10-1160

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0118063a

Analysis Date: 19-JAN-10 20:32

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
3,4-Dinitrotoluene	300	317.724	106	
4-Amino-2,6-dinitrotoluene	600	675.893	113	
HMX	600	589.035	98	
Nitrobenzene	600	539.341	90	
PETN	600	624.935	104	
RDX	600	603.348	101	
Tetryl	600	551.593	92	
m-Dinitrobenzene	600	587.865	98	
m-Nitrotoluene	600	623.448	104	
o-Nitrotoluene	600	569.875	95	
p-Nitrotoluene	600	638.952	106	
1,3,5-Trinitrobenzene	600	597.48	100	
1,3-Dinitrobenzene-d4	500	493.748	99	
2,4,6-Trinitrotoluene	600	651.248	109	
2,4-Dinitrotoluene	600	634.193	106	
2,6-Dinitrotoluene	600	609.367	102	
2,6-Dinitrotoluene-d3	500	459.861	92	
2-Amino-4,6-dinitrotoluene	600	665.061	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

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

Dataset: C:\MASSLYNX\New\_Exp\_PRO\011810expA1.qld, Time: Wed Jan 20 09:06:02 2010

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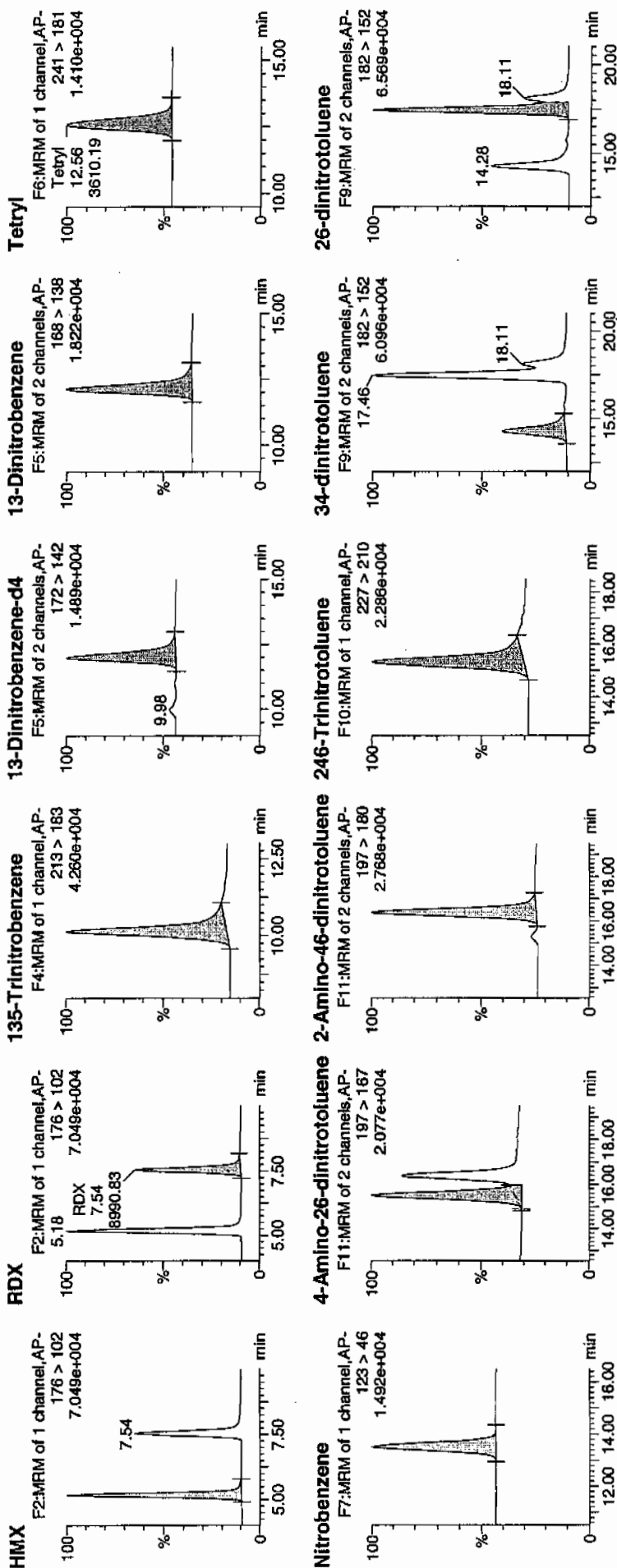
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Time: 20:32:42

ID: WXX100118-07CCV

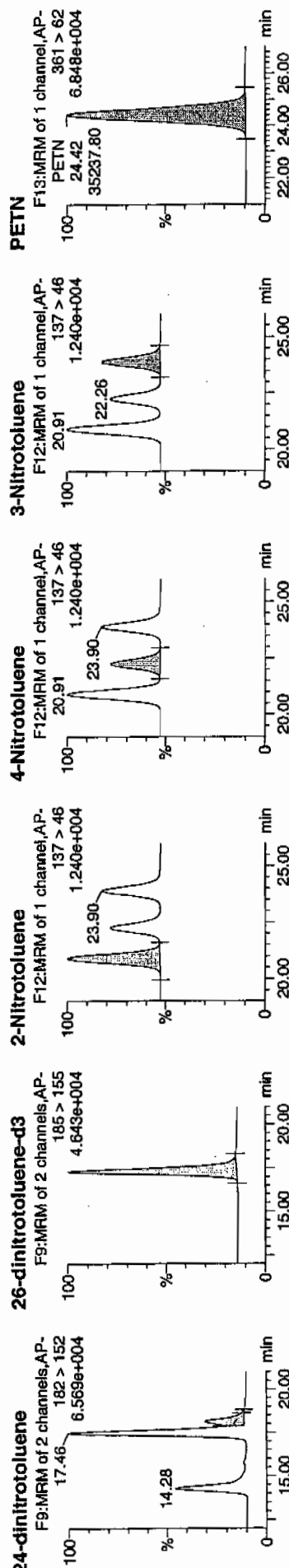
Vial: 1:1,B

1/20/10



1/20/10





ID	Name	Trace	RT	Area	SArea	AbsResp	Response	Flags	Mod.Date	Mod.Time	Intensity	Ratio	%Dev	SN
WX100118-07CCV	HMx	176 > 102	5.18	12743.064	3350.884	12743.064	1901.448	db			589.0352	98.2	-1.8	2926.4
WX100118-07CCV	RDX	176 > 102	7.54	8990.833	3350.884	8990.833	1341.561	bb			603.3480	100.6	0.6	1769.9
WX100118-07CCV	135-Trinitrobenzene	213 > 183	10.14	13341.229	3350.884	13341.229	1990.703	bb			597.4804	99.6	-0.4	1645.4
WX100118-07CCV	13-Dinitrobenzene-d4	172 > 142	11.97	3350.884		3350.884	3350.884	bb			493.7480	98.7	-1.3	335.0
WX100118-07CCV	13-Dinitrobenzene	168 > 138	12.13	4655.647	3350.884	4655.647	694.689	bb			587.8648	98.0	-2.0	579.2
WX100118-07CCV	Tetryl	241 > 181	12.56	3610.188	3350.884	3610.188	538.692	bb			551.5927	91.9	-8.1	546.5
WX100118-07CCV	Nitrobenzene	123 > 46	13.53	3026.039	3350.884	3026.039	451.528	bb			539.3408	89.9	-10.1	298.3
WX100118-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.52	6020.920	16871.916	6020.920	178.430	MM	20-Jan-10	08:53:53	675.8928	112.6	12.6	342.0
WX100118-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.39	8742.483	16871.916	8742.483	259.084	bb			665.0614	110.8	10.8	292.1
WX100118-07CCV	246-Trinitrotoluene	227 > 210	15.33	7738.158	16871.916	7738.158	229.321	bb			651.2484	108.5	8.5	469.3
WX100118-07CCV	34-dinitrotoluene	182 > 152	14.28	9994.788	16871.916	9994.788	296.196	bb			317.7243	105.9	5.9	515.6
WX100118-07CCV	26-dinitrotoluene	182 > 152	17.46	22459.803	16871.916	22459.803	665.597	MM	20-Jan-10	08:57:52	609.3674	101.6	1.6	866.8
WX100118-07CCV	24-dinitrotoluene	182 > 152	18.11	5410.613	16871.916	5410.613	160.344	MM	20-Jan-10	09:02:07	634.1925	105.7	5.7	187.6
WX100118-07CCV	26-dinitrotoluene-d3	185 > 155	17.30	16871.916		16871.916	16871.916	bb			459.8612	92.0	-8.0	1513.5
WX100118-07CCV	2-Nitrotoluene	137 > 46	20.91	2885.936	16871.916	2885.936	85.525	bb			569.8749	95.0	-5.0	180.8
WX100118-07CCV	4-Nitrotoluene	137 > 46	22.26	1543.726	16871.916	1543.726	45.748	bb			638.9520	106.5	6.5	96.7
WX100118-07CCV	3-Nitrotoluene	137 > 46	23.90	1794.082	16871.916	1794.082	53.168	bb			623.4477	103.9	3.9	112.9
WX100118-07CCV	PETN	361 > 62	24.42	35237.797	16871.916	35237.797	1044.274	bb			624.9346	104.2	4.2	4694.1

GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis: 01/19/10  
 Time of Injection: 2032  
 Standard Number: WXX100118-07CCV  
 Data File: EXP0118063a

HMX	98.2
RDX	100.6
135-TNB	99.6
13-DNB	98.0
Tetryl	91.9
Nitrobenzene	89.9
4A-26-DNT	112.6
2A-46-DNT	110.8
246-TNT	108.5
34-DNT(surr)	105.9
26-DNT	101.6
24-DNT	105.7
2-NT	95.0
4-NT	106.5
3-NT	103.9
PETN	104.2

*not  
1/20/10*

Total 1632.9

*from 01/20/10*

Average 102.1

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%

No single analyte > +/- 60%

7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1160

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0118065a

Analysis Date: 19-JAN-10 21:31

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	53.768	134	*
1,3-Dinitrobenzene-d4	500	477.108	95	
2,4,6-Trinitrotoluene	40	40.849	102	
2,4-Dinitrotoluene	40	38.415	96	
2,6-Dinitrotoluene	40	40.096	100	
2,6-Dinitrotoluene-d3	500	481.721	96	
2-Amino-4,6-dinitrotoluene	40	40.575	101	
3,4-Dinitrotoluene	20	19.64	98	
4-Amino-2,6-dinitrotoluene	40	43.191	108	
HMX	40	46.336	116	
Nitrobenzene	40	40.877	102	
PETN	40	62.952	157	*
RDX	40	43.65	109	
Tetryl	40	41.268	103	
m-Dinitrobenzene	40	42.917	107	
m-Nitrotoluene	40	37.778	94	
o-Nitrotoluene	40	41.925	105	
p-Nitrotoluene	40	38.775	97	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene, 2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\011810expA1.qld, Time: Wed Jan 20 09:06:02 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0118065a

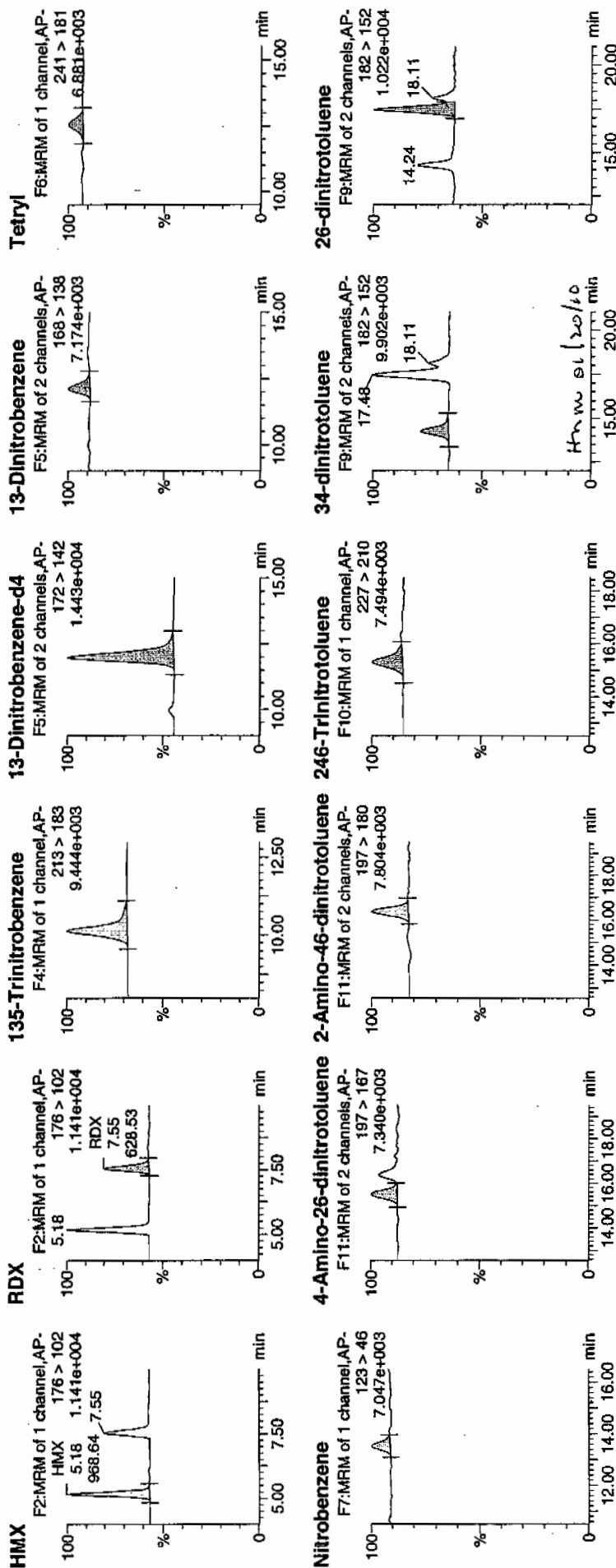
Date: 19-Jan-2010

Time: 21:31:46

ID: WXX100118-08CRI

Vial: 1:1,C

1/20/10

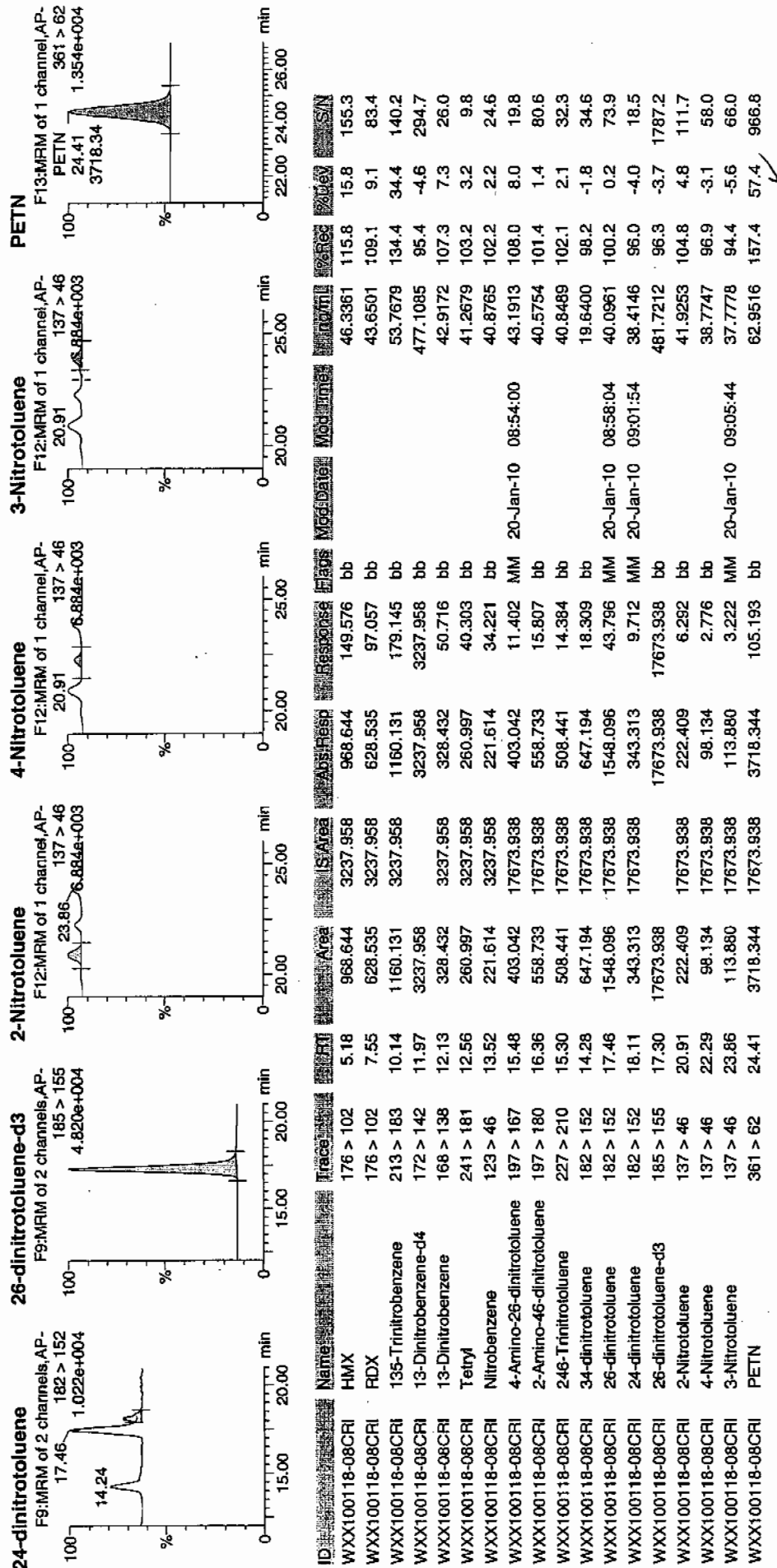


# Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Wed Jan 20 09:07:58 2010, Page 46 of 91

Dataset: C:\MASSLYNX\New\_Exp.PRO\011810expA1.qld, Time: Wed Jan 20 09:06:02 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific  
 Date of Analysis 01/19/10  
 Time of Injection 2131  
 Standard Number WXX100118-08CRI  
 Data File EXP0118065a

HMX	115.8
RDX	109.1
135-TNB	134.4
13-DNB	107.3
Tetryl	103.2
Nitrobenzene	102.2
4A-26-DNT	108.0
2A-46-DNT	101.4
246-TNT	102.1
34-DNT(surr)	98.2
26-DNT	100.2
24-DNT	96.0
2-NT	104.8
4-NT	96.9
3-NT	94.4
PETN	157.4

*NTT  
1/20/10*

Total 1731.4

*NTT-01/20/10*

Average 108.2

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%

No single analyte > +/- 60%

7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1160

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0118076a

Analysis Date: 20-JAN-10 02:56

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
p-Nitrotoluene	600	592.52	99	
1,3,5-Trinitrobenzene	600	640.284	107	
1,3-Dinitrobenzene-d4	500	490.948	98	
2,4,6-Trinitrotoluene	600	650.13	108	
2,4-Dinitrotoluene	600	652.421	109	
2,6-Dinitrotoluene	600	608.03	101	
2,6-Dinitrotoluene-d3	500	511.595	102	
2-Amino-4,6-dinitrotoluene	600	628.911	105	
3,4-Dinitrotoluene	300	313.769	105	
4-Amino-2,6-dinitrotoluene	600	625.949	104	
HMX	600	668.961	111	
Nitrobenzene	600	609.741	102	
PETN	600	626.708	104	
RDX	600	734.827	122	*
Tetryl	600	568.121	95	
m-Dinitrobenzene	600	608.053	101	
m-Nitrotoluene	600	591.079	99	
o-Nitrotoluene	600	567.32	95	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene, 2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\011810expA1.qld, Time: Wed Jan 20 09:06:02 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0118076a

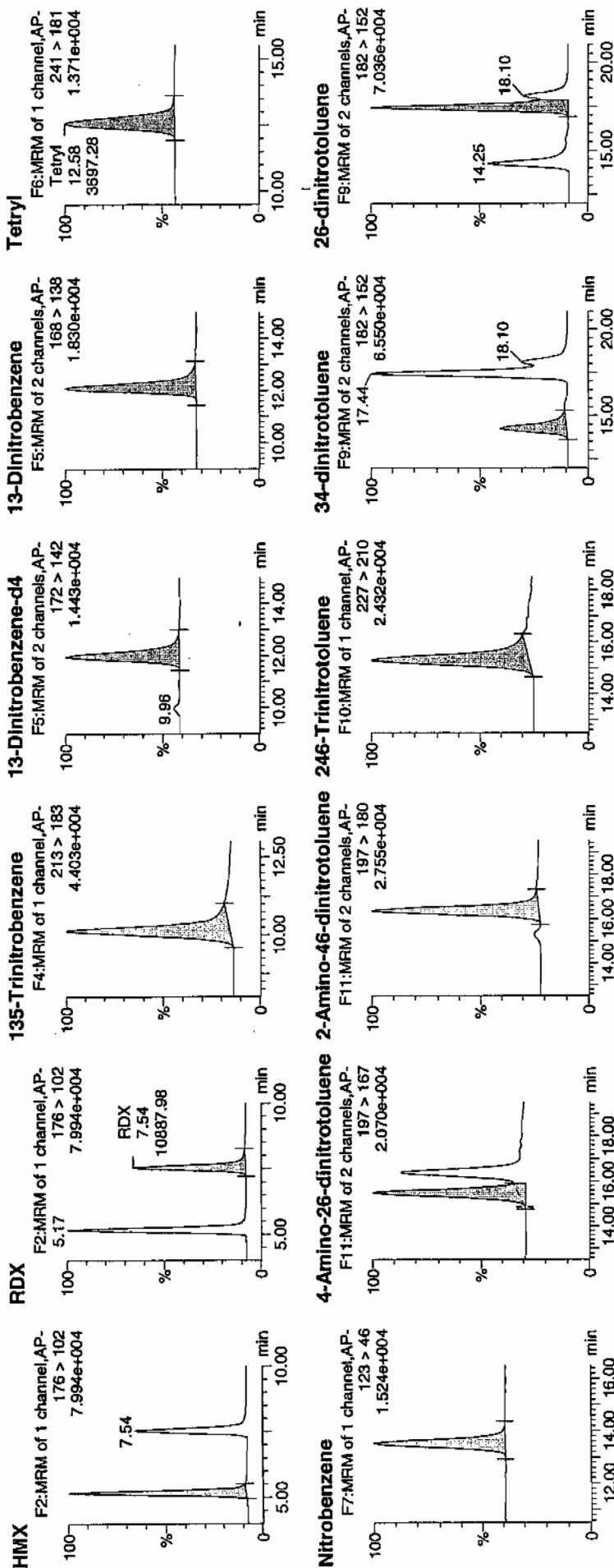
Date: 20-Jan-2010

Time: 02:56:03

ID: WXX100118-07CCV

Vial: 1:1,B

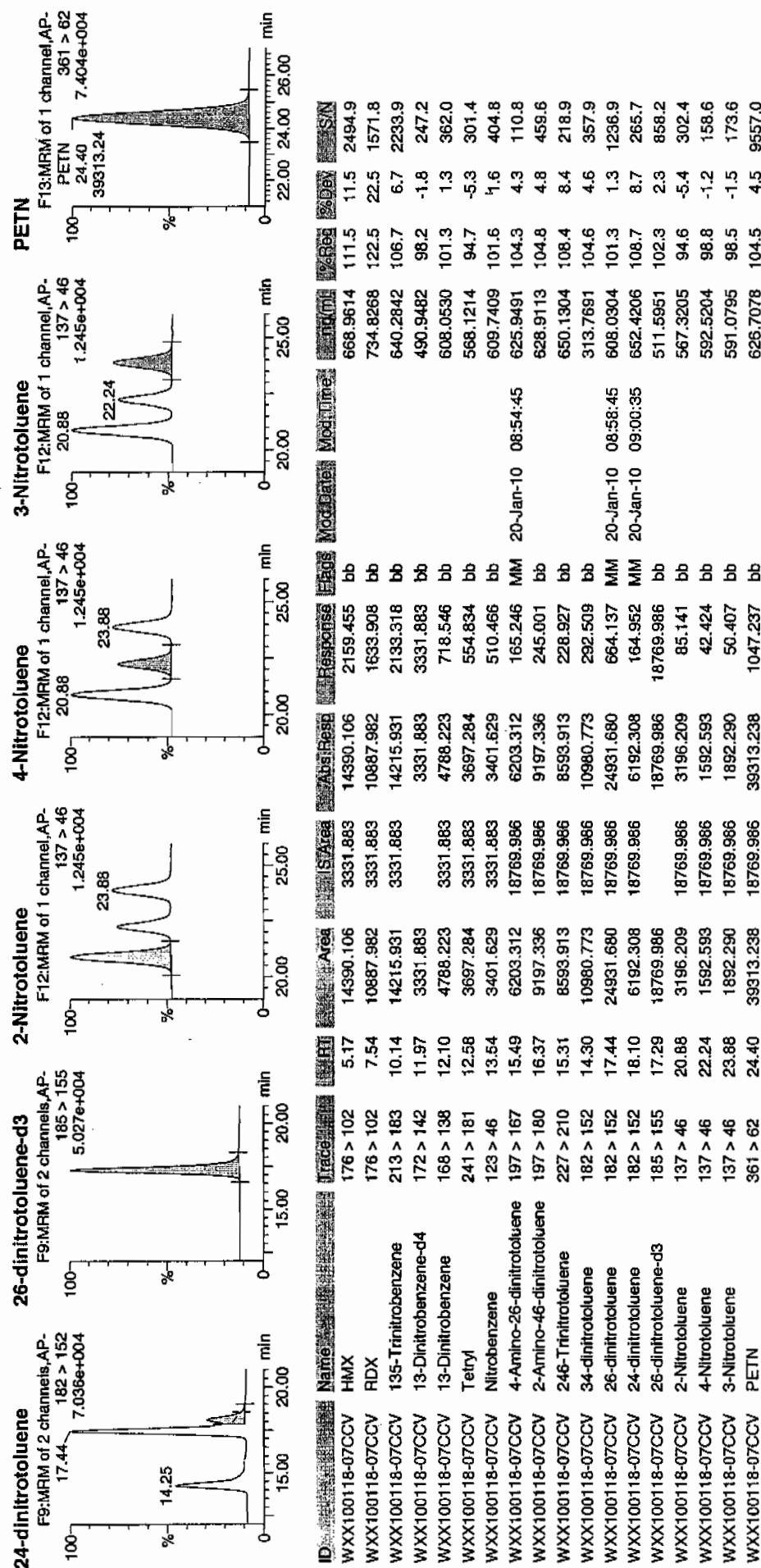
10/2/10  
10/2/10



10/2/10



Dataset: C:\MASSLYN\New\_Exp.PRO\011810expA1.qld, Time: Wed Jan 20 09:06:02 2010



GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis: 01/20/10  
 Time of Injection: 0256  
 Standard Number: WXX100118-07CCV  
 Data File: EXP0118076a

HMX	111.5
RDX	122.5
135-TNB	106.7
13-DNB	101.3
Tetryl	94.7
Nitrobenzene	101.6
4A-26-DNT	104.3
2A-46-DNT	104.8
246-TNT	108.4
34-DNT(surr)	104.6
26-DNT	101.3
24-DNT	108.7
2-NT	94.6
4-NT	98.8
3-NT	98.5
PETN	104.5

*WMT  
1/20/10*

Total 1666.8

*WMT 01/20/10*

Average 104.2

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60%

7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1160

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0118078a

Analysis Date: 20-JAN-10 03:55

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
2,6-Dinitrotoluene-d3	500	509.997	102	
2-Amino-4,6-dinitrotoluene	40	40.777	102	
3,4-Dinitrotoluene	20	22.038	110	
4-Amino-2,6-dinitrotoluene	40	38.054	95	
HMX	40	45.427	114	
Nitrobenzene	40	35.181	88	
PETN	40	60.716	152	*
RDX	40	44.087	110	
Tetryl	40	41.817	105	
m-Dinitrobenzene	40	40.818	102	
m-Nitrotoluene	40	38.014	95	
o-Nitrotoluene	40	41.099	103	
p-Nitrotoluene	40	42.203	106	
1,3,5-Trinitrobenzene	40	47.507	119	
1,3-Dinitrobenzene-d4	500	492.654	99	
2,4,6-Trinitrotoluene	40	36.482	91	
2,4-Dinitrotoluene	40	37.365	93	
2,6-Dinitrotoluene	40	43.09	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\011810expA1.qld, Time: Wed Jan 20 09:06:02 2010

Name: C:\MASSLYNX\NEW\_EXP\PRO\Data\EXP0118078a

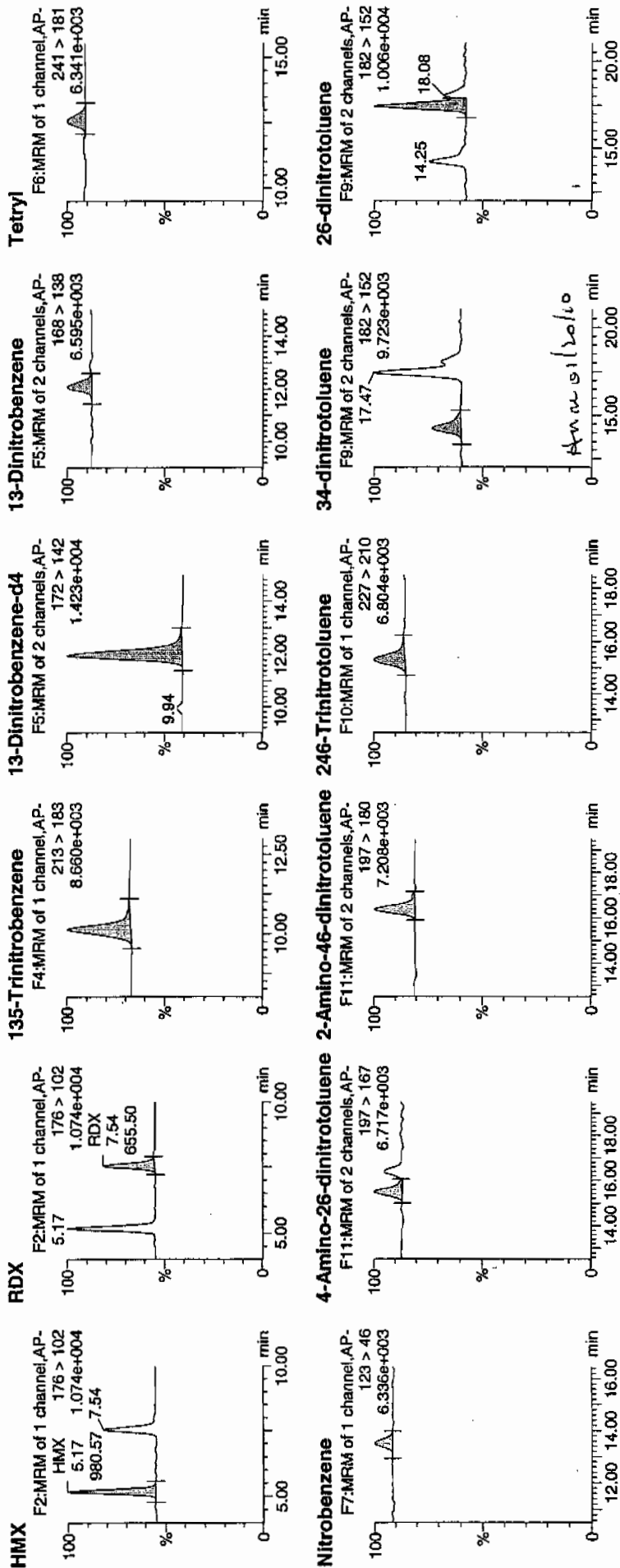
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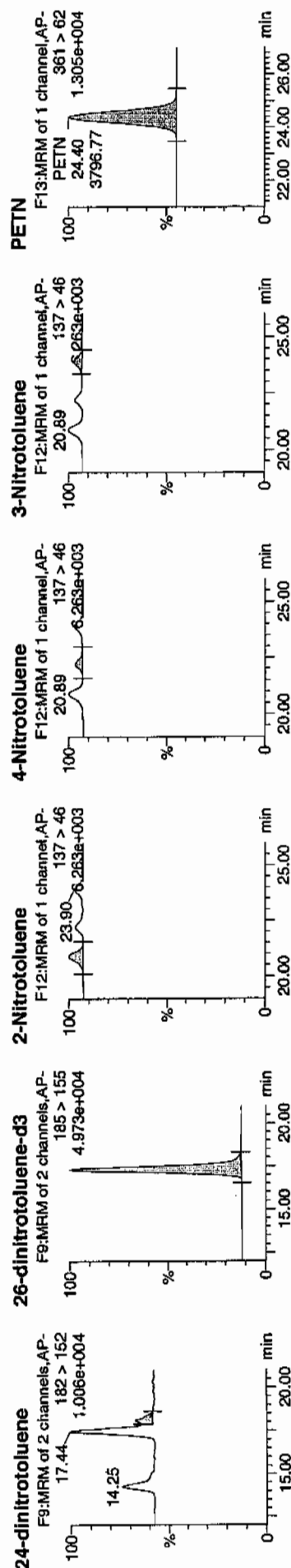
Time: 03:55:06

ID: WXX100118-08CRI

Vial: 1:1,C

1/20/10





ID	Name	Trace	RT	Area	S Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Int	Std	Reg	Dev	SN
WXX100118-08CRI	HMX	176 > 102	5.17	980.572	3343.459	980.572	146.640	bb			45.4266	113.6	13.6	158.8	
WXX100118-08CRI	RDX	176 > 102	7.54	655.504	3343.459	655.504	98.028	bb			44.0866	110.2	10.2	93.1	
WXX100118-08CRI	135-Trinitrobenzene	213 > 183	10.14	1058.448	3343.459	1058.448	158.286	bb			47.5073	118.8	18.8	120.9	
WXX100118-08CRI	13-Dinitrobenzene-d4	172 > 142	11.97	3343.459	3343.459	3343.459	3343.459	bb			492.6539	98.5	-1.5	178.3	
WXX100118-08CRI	13-Dinitrobenzene	168 > 138	12.10	322.549	3343.459	322.549	48.236	bd			40.8184	102.0	2.0	40.9	
WXX100118-08CRI	Tetryl	241 > 181	12.58	273.085	3343.459	273.085	40.839	bb			41.8167	104.5	4.5	29.1	
WXX100118-08CRI	Nitrobenzene	123 > 46	13.50	196.952	3343.459	196.952	29.453	bb			35.1814	88.0	-12.0	19.9	
WXX100118-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.49	375.943	18711.342	375.943	10.046	MM	20-Jan-10	08:54:52	38.0537	95.1	-4.9	37.0	
WXX100118-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.37	594.466	18711.342	594.466	15.885	bb			40.7768	101.9	1.9	48.4	
WXX100118-08CRI	246-Trinitrotoluene	227 > 210	15.31	480.744	18711.342	480.744	12.846	bb			36.4823	91.2	-8.8	75.2	
WXX100118-08CRI	34-dinitrotoluene	182 > 152	14.25	768.850	18711.342	768.850	20.545	bb			22.0383	110.2	10.2	22.5	
WXX100118-08CRI	26-dinitrotoluene	182 > 152	17.44	1761.346	18711.342	1761.346	47.066	MM	20-Jan-10	08:58:56	43.0901	107.7	7.7	67.5	
WXX100118-08CRI	24-dinitrotoluene	182 > 152	18.08	353.531	18711.342	353.531	9.447	MM	20-Jan-10	09:00:15	37.3647	93.4	-6.6	14.4	
WXX100118-08CRI	26-dinitrotoluene-d3	185 > 155	17.27	18711.342	18711.342	18711.342	18711.342	bb			509.9967	102.0	2.0	1017.3	
WXX100118-08CRI	2-Nitrotoluene	137 > 46	20.89	230.822	18711.342	230.822	6.168	bb			41.0988	102.7	2.7	81.5	
WXX100118-08CRI	4-Nitrotoluene	137 > 46	22.20	113.080	18711.342	113.080	3.022	bb			42.2030	105.5	5.5	43.2	
WXX100118-08CRI	3-Nitrotoluene	137 > 46	23.90	121.318	18711.342	121.318	3.242	bb			38.0139	95.0	-5.0	45.2	
WXX100118-08CRI	PETN	361 > 62	24.40	3796.772	18711.342	3796.772	101.456	bb			60.7155	151.8	51.8	441.6	

GRAND MEAN AVERAGE

Vendor: UltraScientific  
 Date of Analysis 01/20/10  
 Time of Injection 0355  
 Standard Number WXX100118-08CRI  
 Data File EXP0118078a

HMX	113.6
RDX	110.2
135-TNB	118.8
13-DNB	102.0
Tetryl	104.5
Nitrobenzene	88.0
4A-26-DNT	95.1
2A-46-DNT	101.9
246-TNT	91.2
34-DNT(surr)	110.2
26-DNT	107.7
24-DNT	93.4
2-NT	102.7
4-NT	105.5
3-NT	95.0
PETN	151.8

*WAT*  
*1/20/10*

Total 1691.6

Average 105.7

*Hum. or. 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): 10-1160

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS01190013.wiff

Analysis Date: 19-JAN-10 17:22

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,6-Diamino-4-nitrotoluene	100	101	101	
3,4-Dinitrotoluene	50	51	102	
3,5-Dinitroaniline	100	99.6	100	
TATB	100	104	104	
tris(o-cresyl) phosphate	100	97.8	98	
2,4-Diamino-6-nitrotoluene	100	101	101	

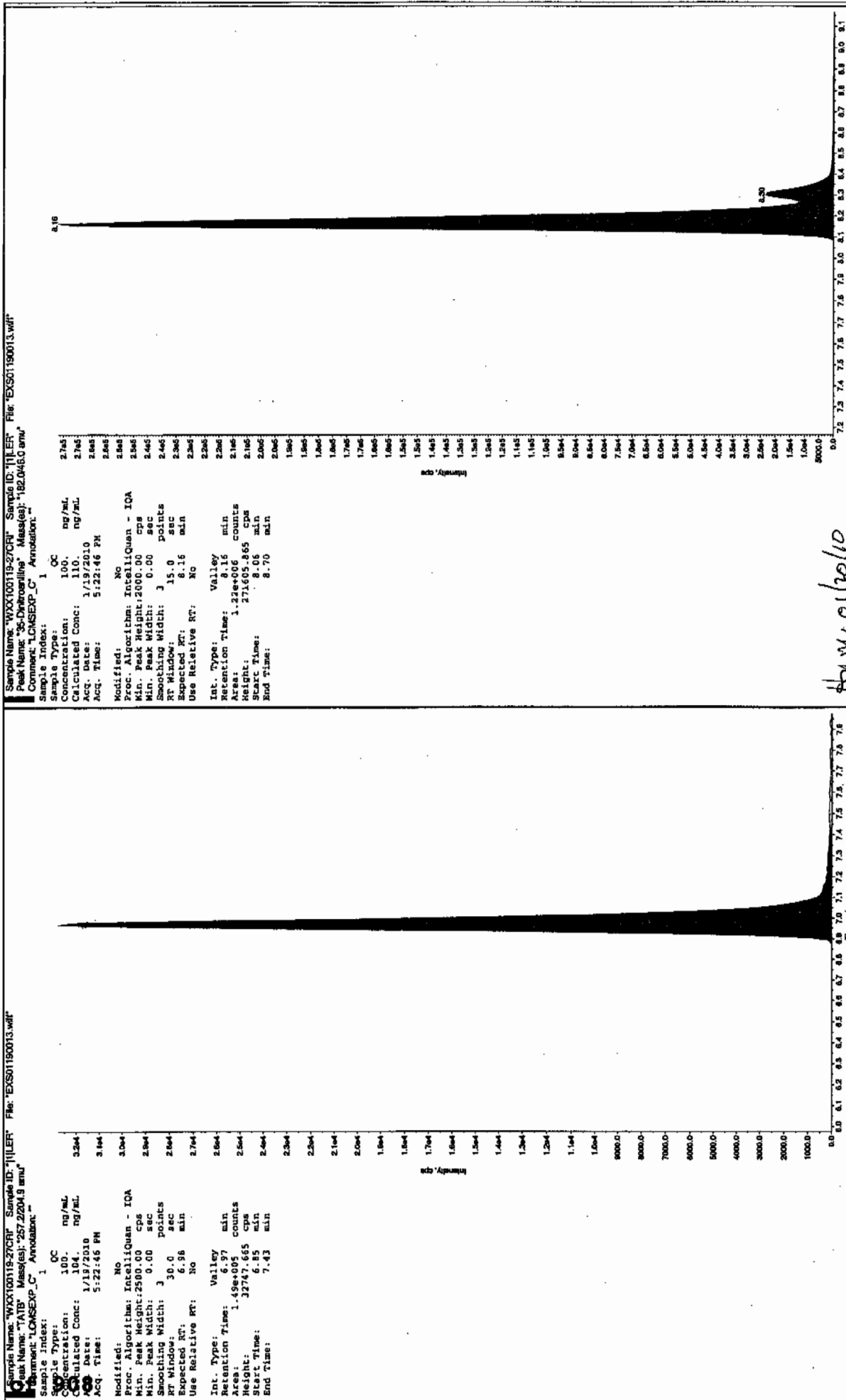
Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

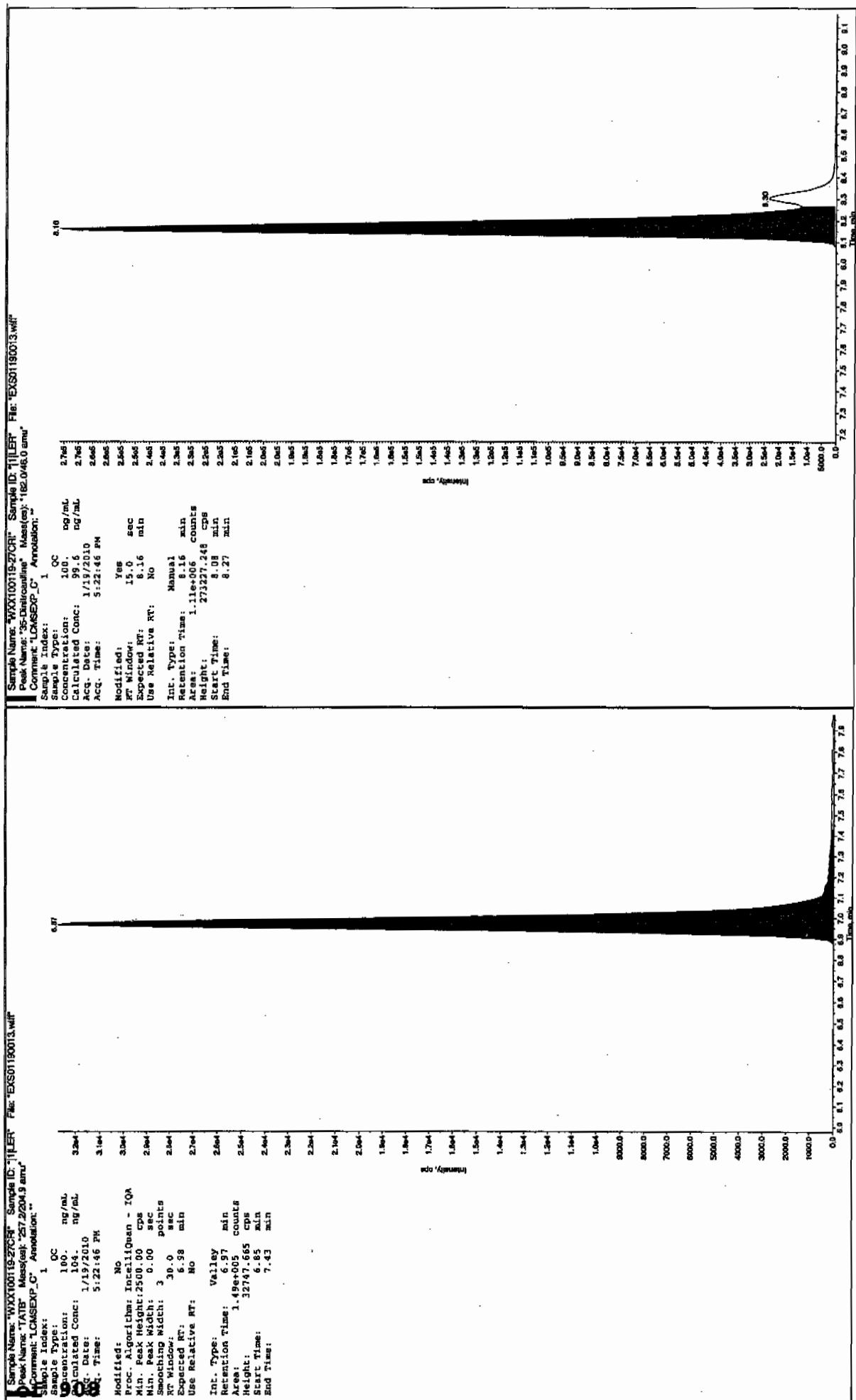
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

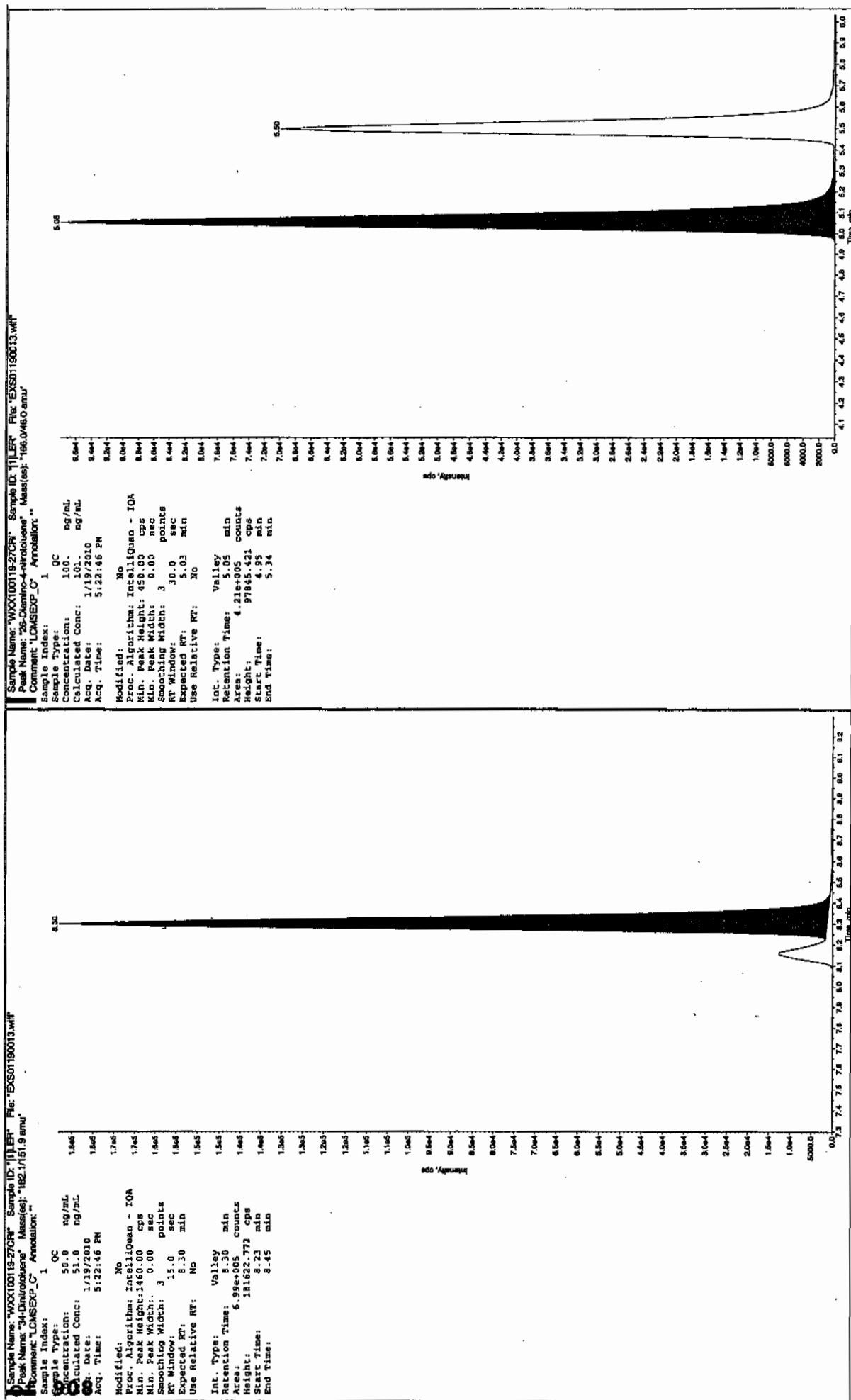


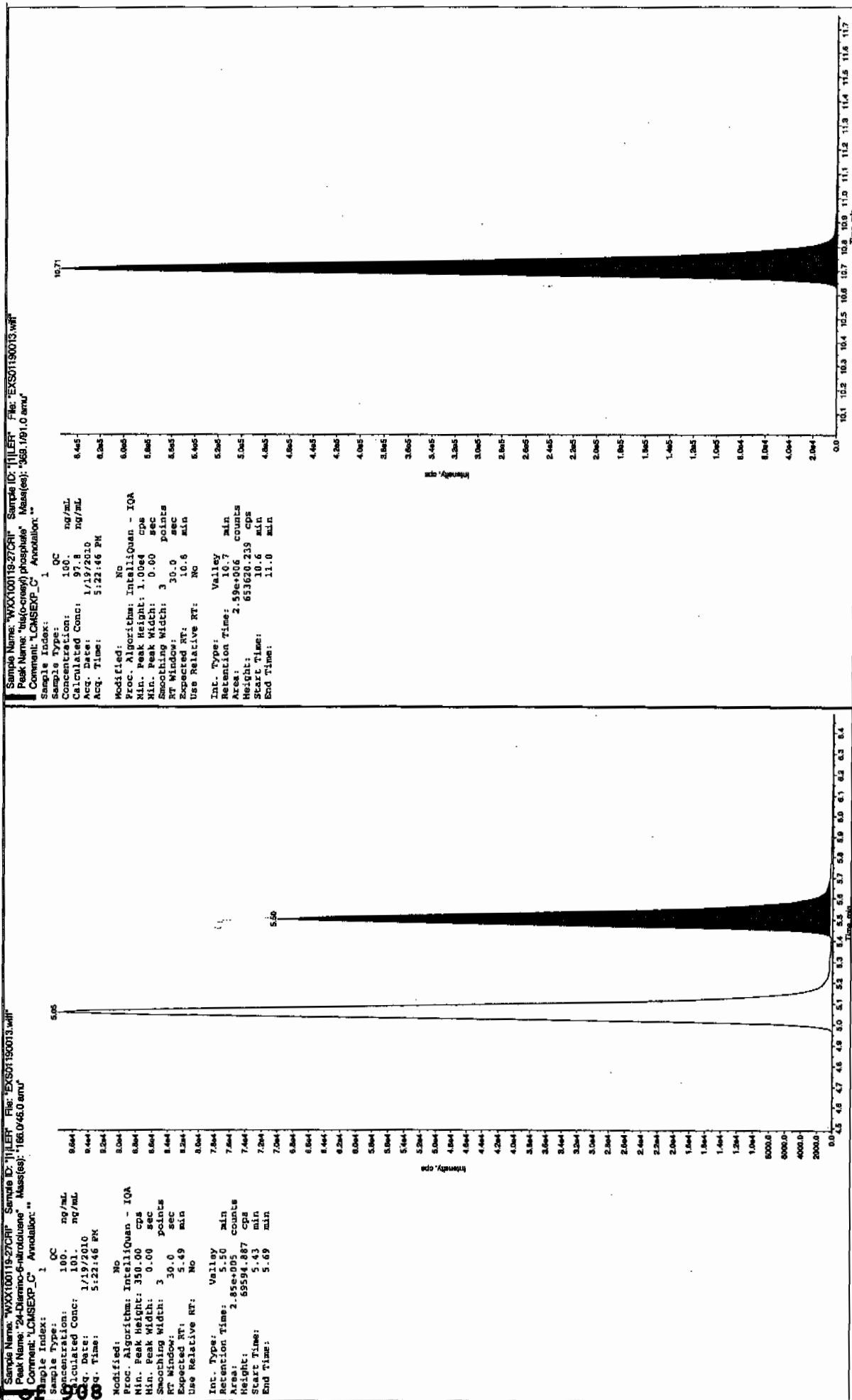


after dec 1/20/10



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





\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSEXP#4

7A

Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1160

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS01190023.wiff

Analysis Date: 19-JAN-10 19:59

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	496	99	
2,6-Diamino-4-nitrotoluene	500	488	98	
3,4-Dinitrotoluene	250	219	88	
3,5-Dinitroaniline	500	483	97	
TATB	500	497	100	
tris(o-cresyl) phosphate	500	479	96	

Recovery Limits:

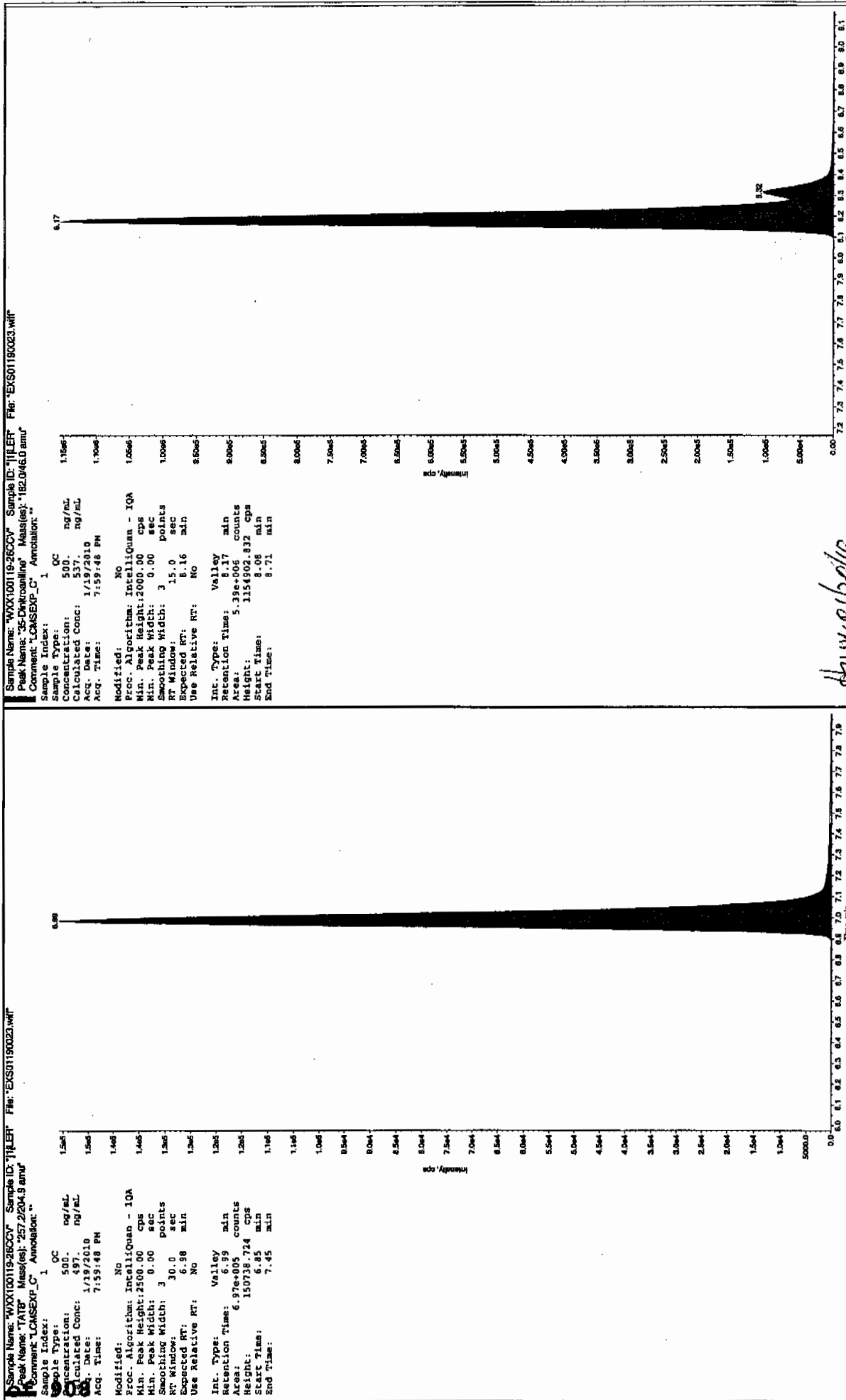
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

# Column used to flag Recovery outside of Limits

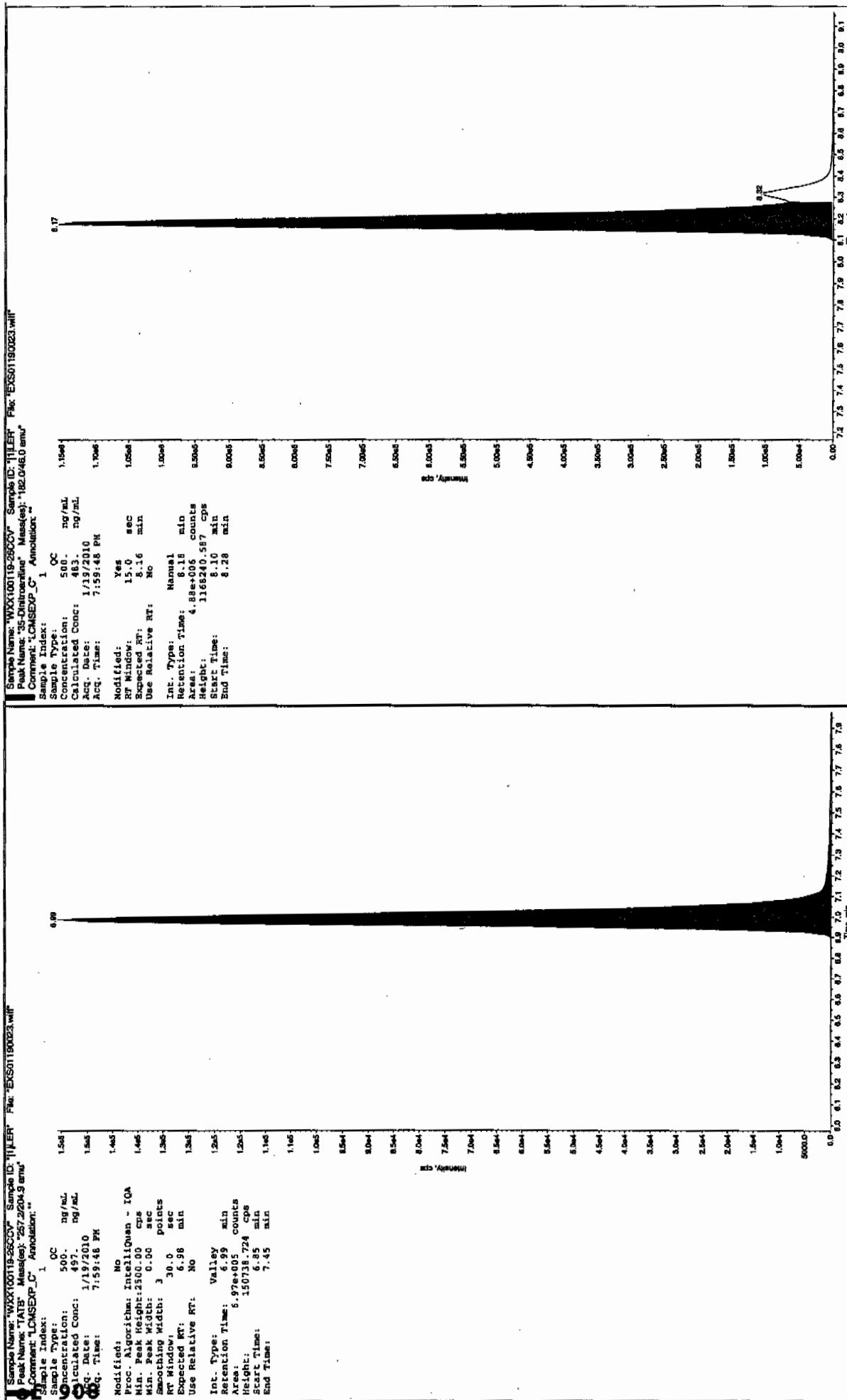
\* Value outside of Recovery Limits

*Bye  
Thello*

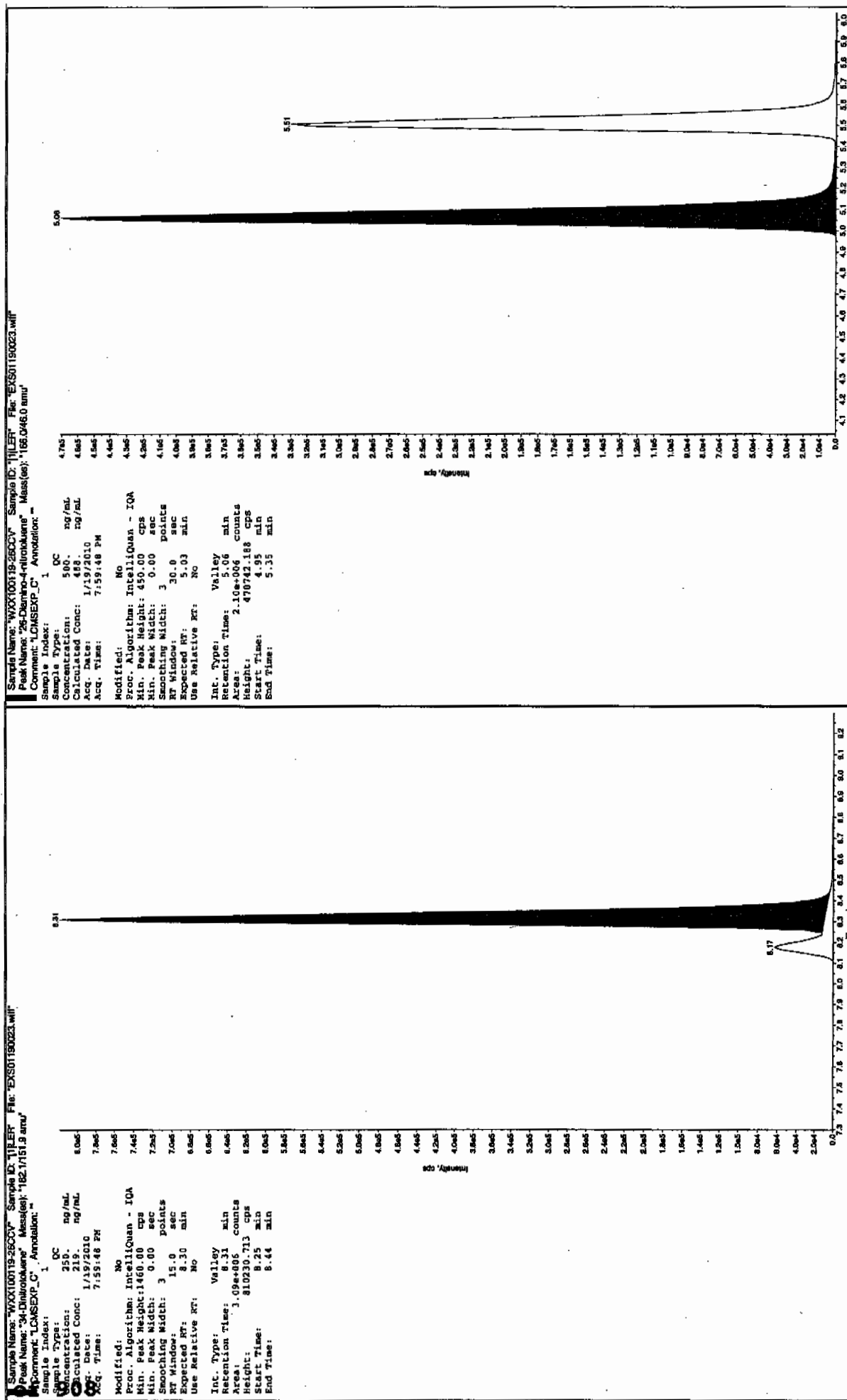


*Thello*

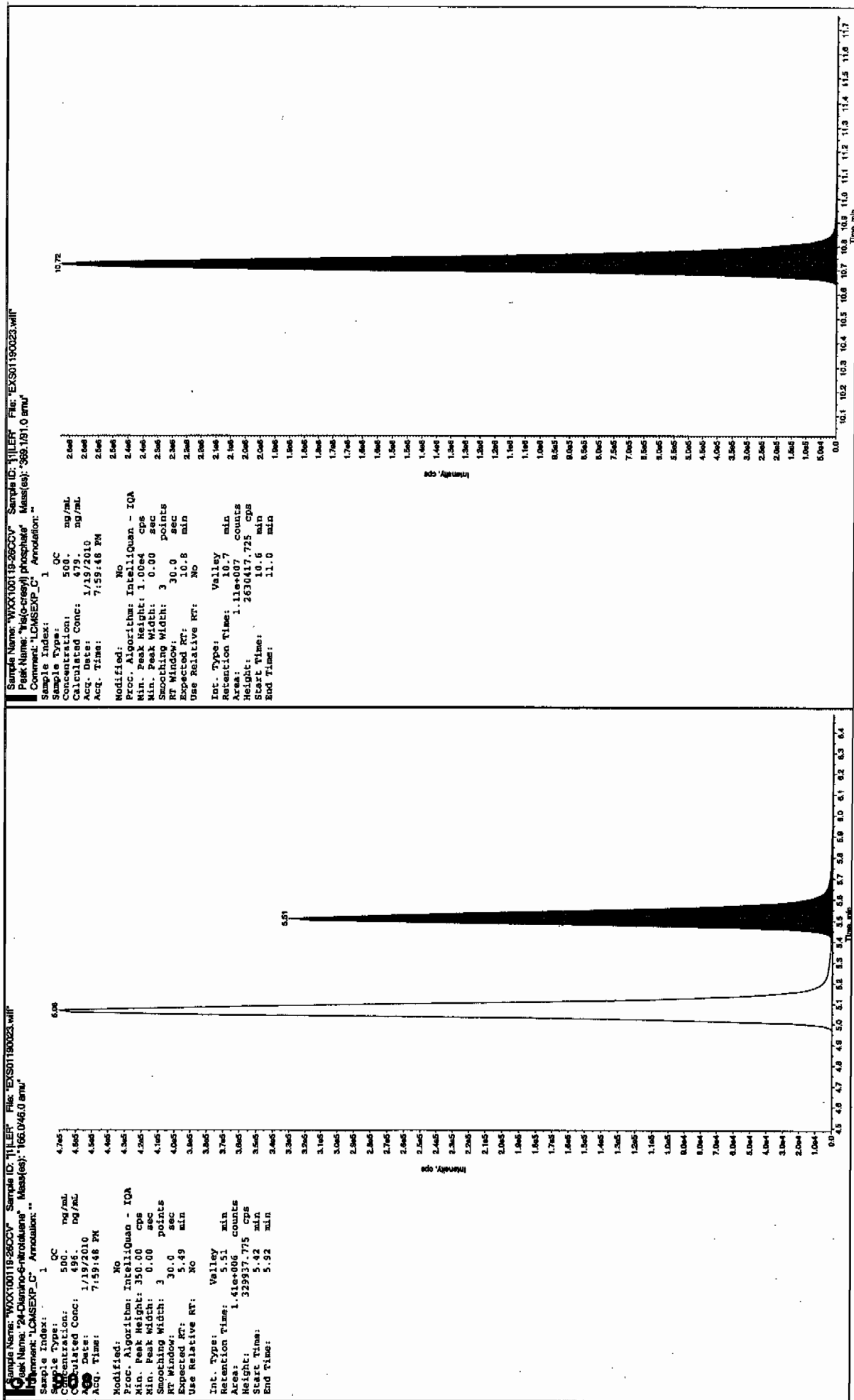
after scan 1/20/10



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



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





7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1160

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS01190025.wiff

Analysis Date: 19-JAN-10 20:31

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	103	103	
2,6-Diamino-4-nitrotoluene	100	106	106	
3,4-Dinitrotoluene	50	48.7	97	
3,5-Dinitroaniline	100	95.4	95	
TATB	100	97.2	97	
tris(o-cresyl) phosphate	100	91.8	92	

Recovery Limits:

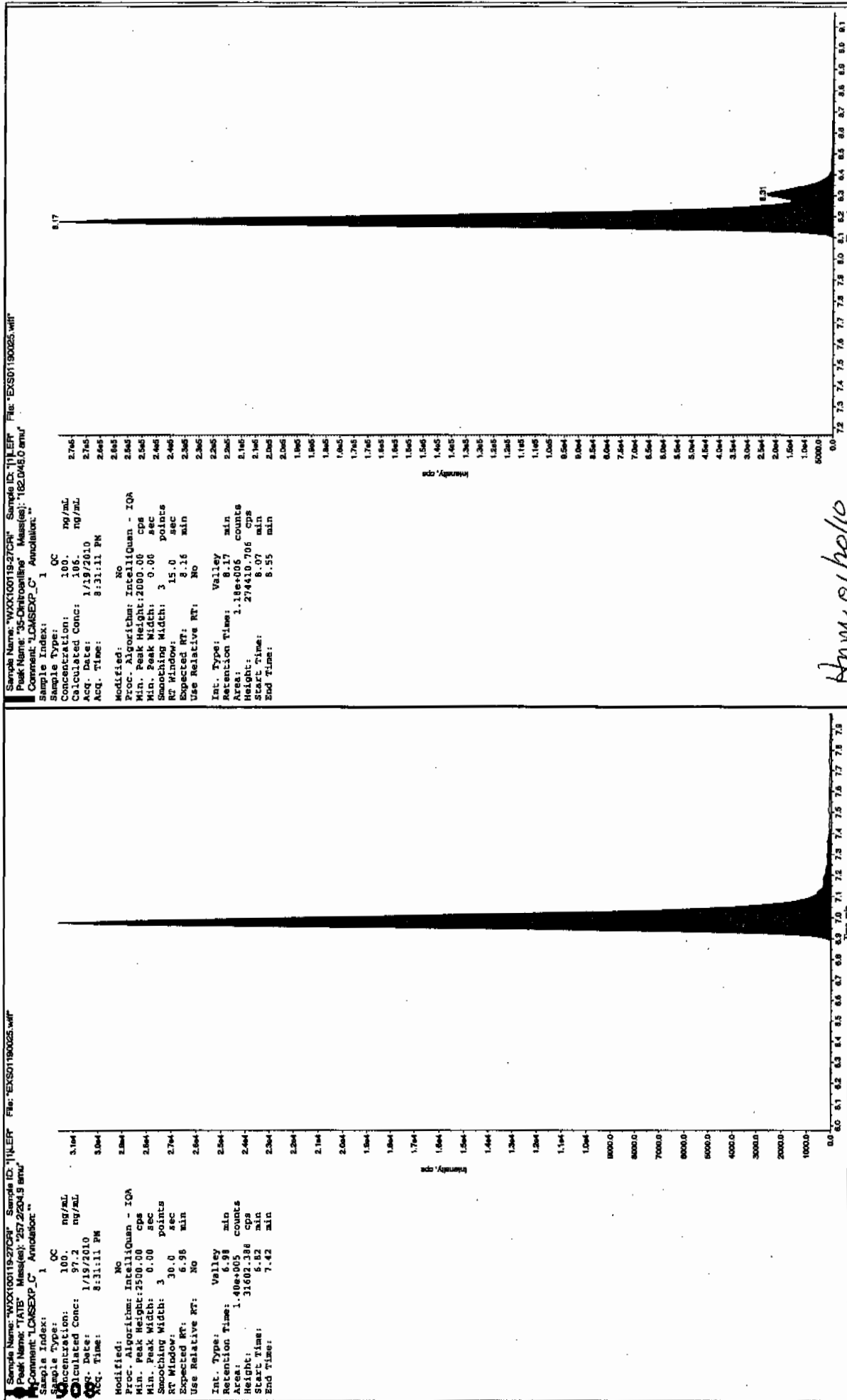
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

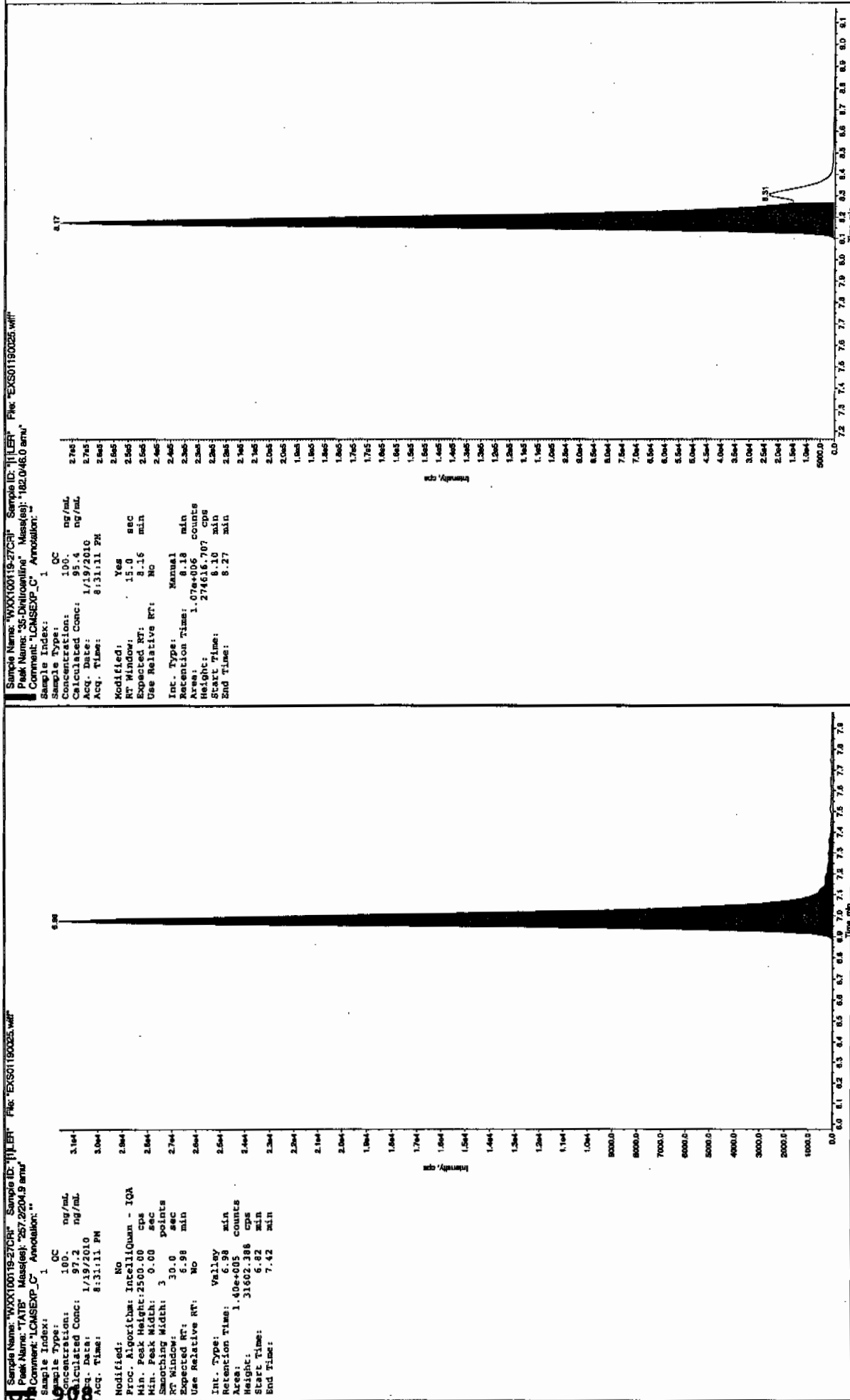
\* Value outside of Recovery Limits

01/10/10  
Data  
Bayer

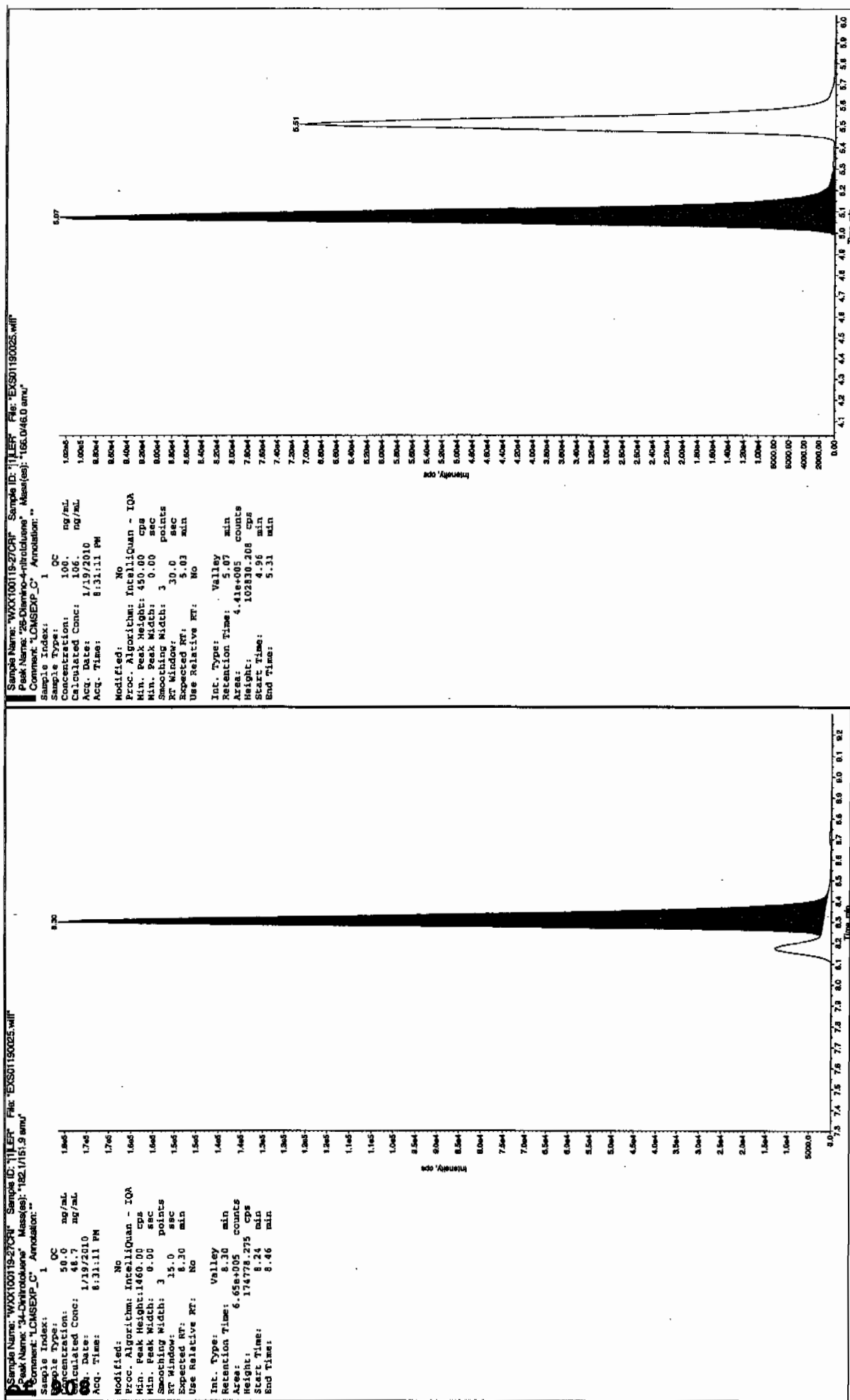


01/10/10  
Data  
Bayer

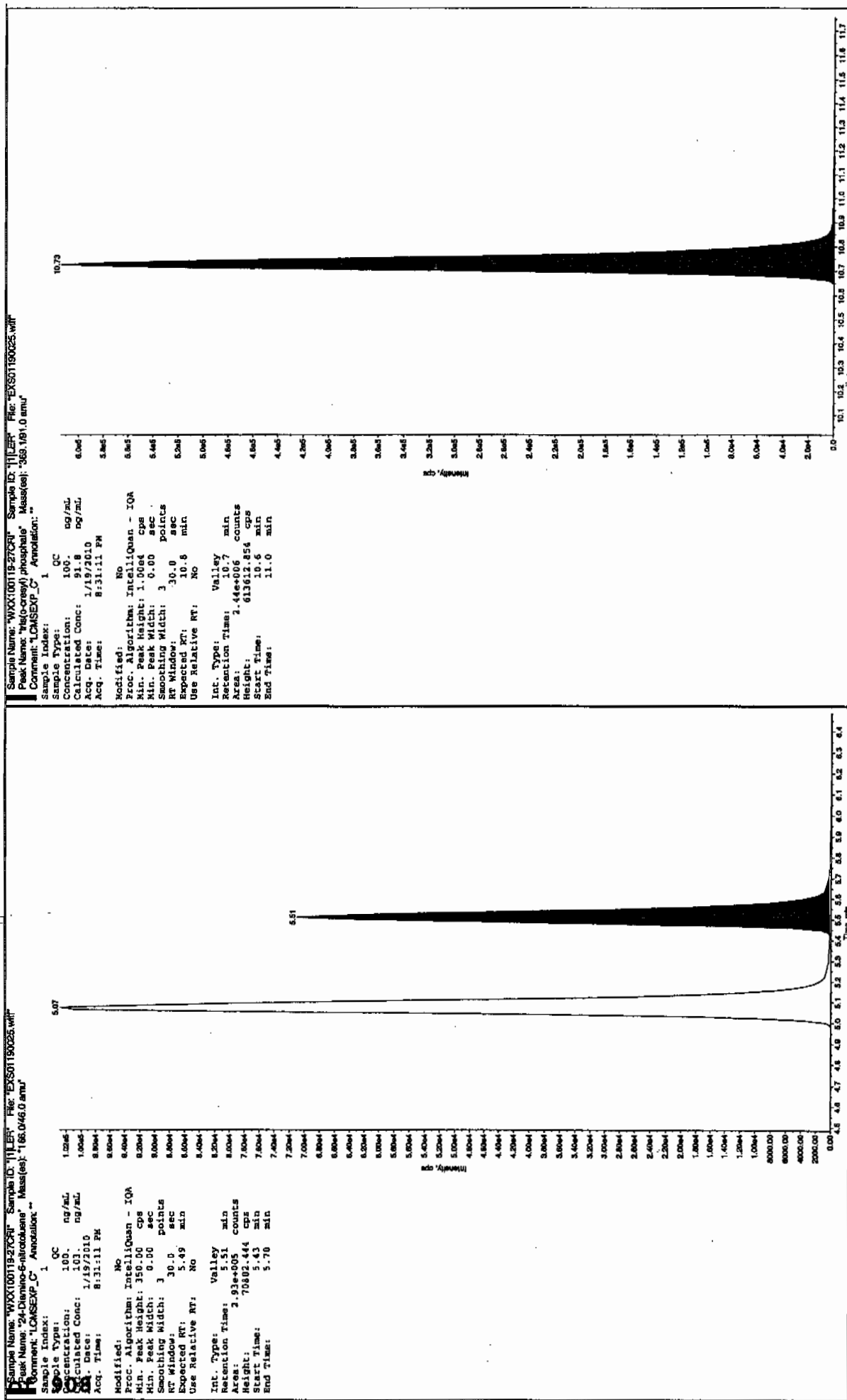
after seen 1/20/10



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



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



7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1160

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS01190036.wiff

Analysis Date: 19-JAN-10 23:23

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	515	103	
2,6-Diamino-4-nitrotoluene	500	495	99	
3,4-Dinitrotoluene	250	229	92	
3,5-Dinitroaniline	500	506	101	
TATB	500	502	100	
tris(o-cresyl) phosphate	500	476	95	

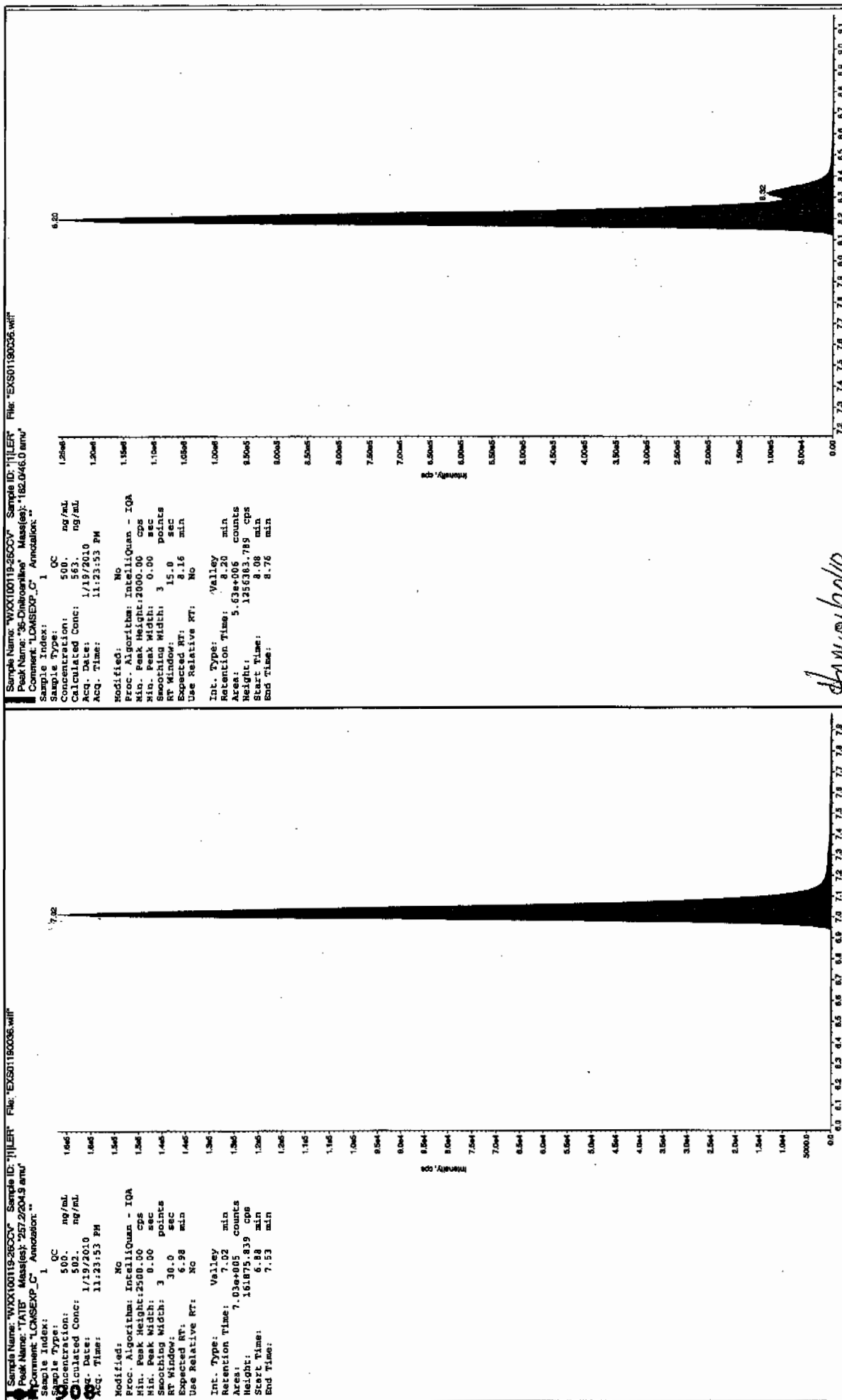
Recovery Limits:

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%

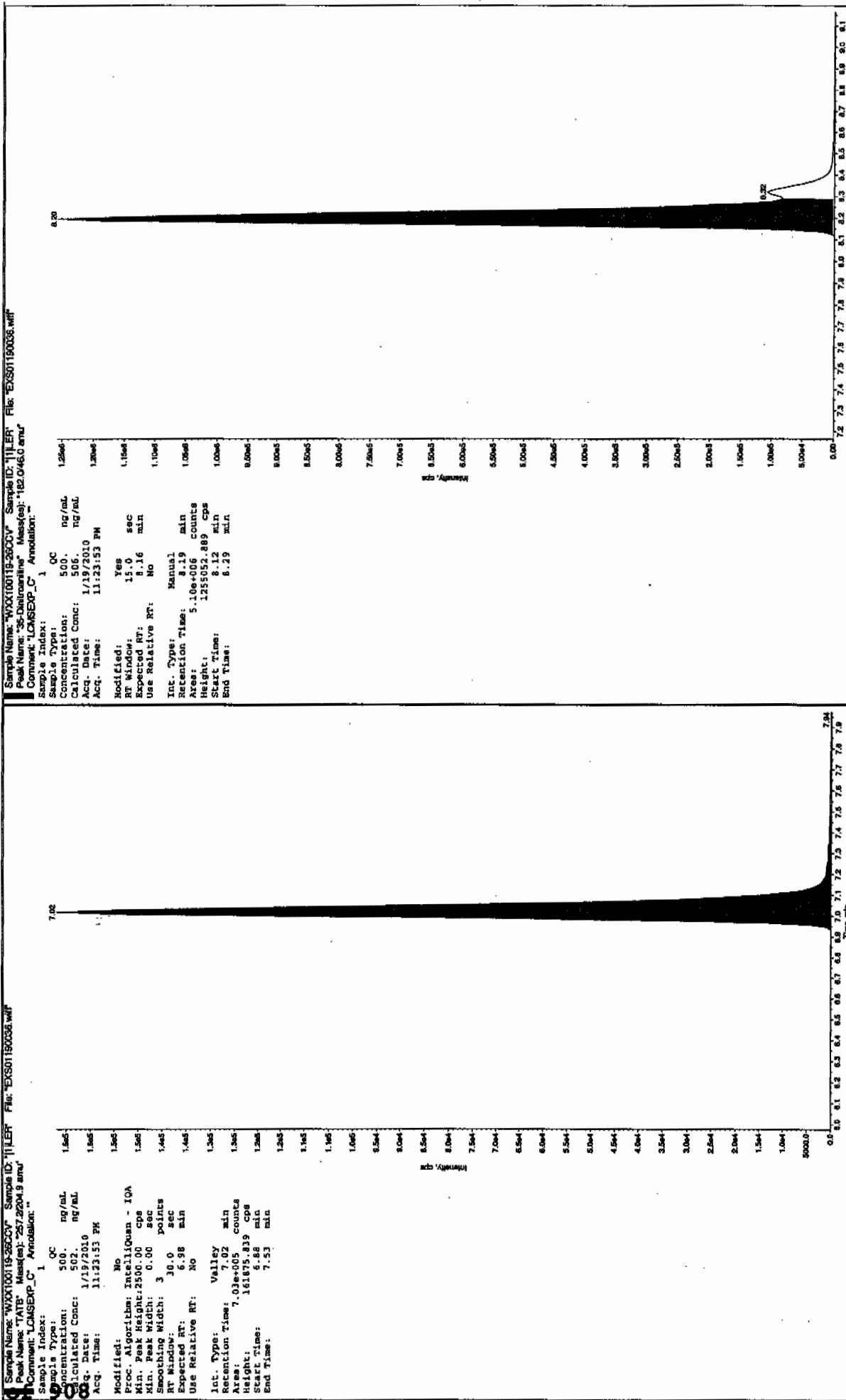
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits



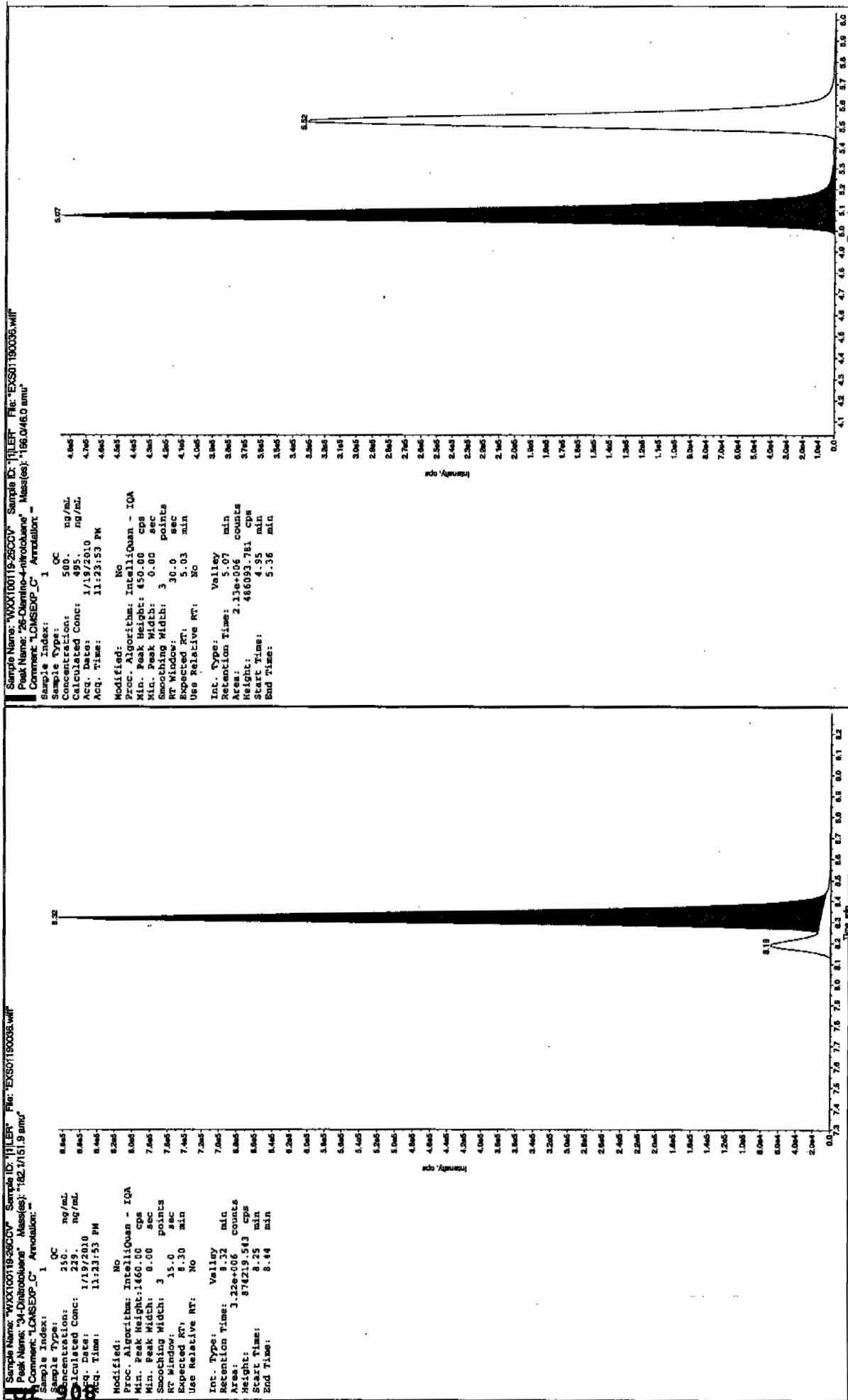
\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

after 170110

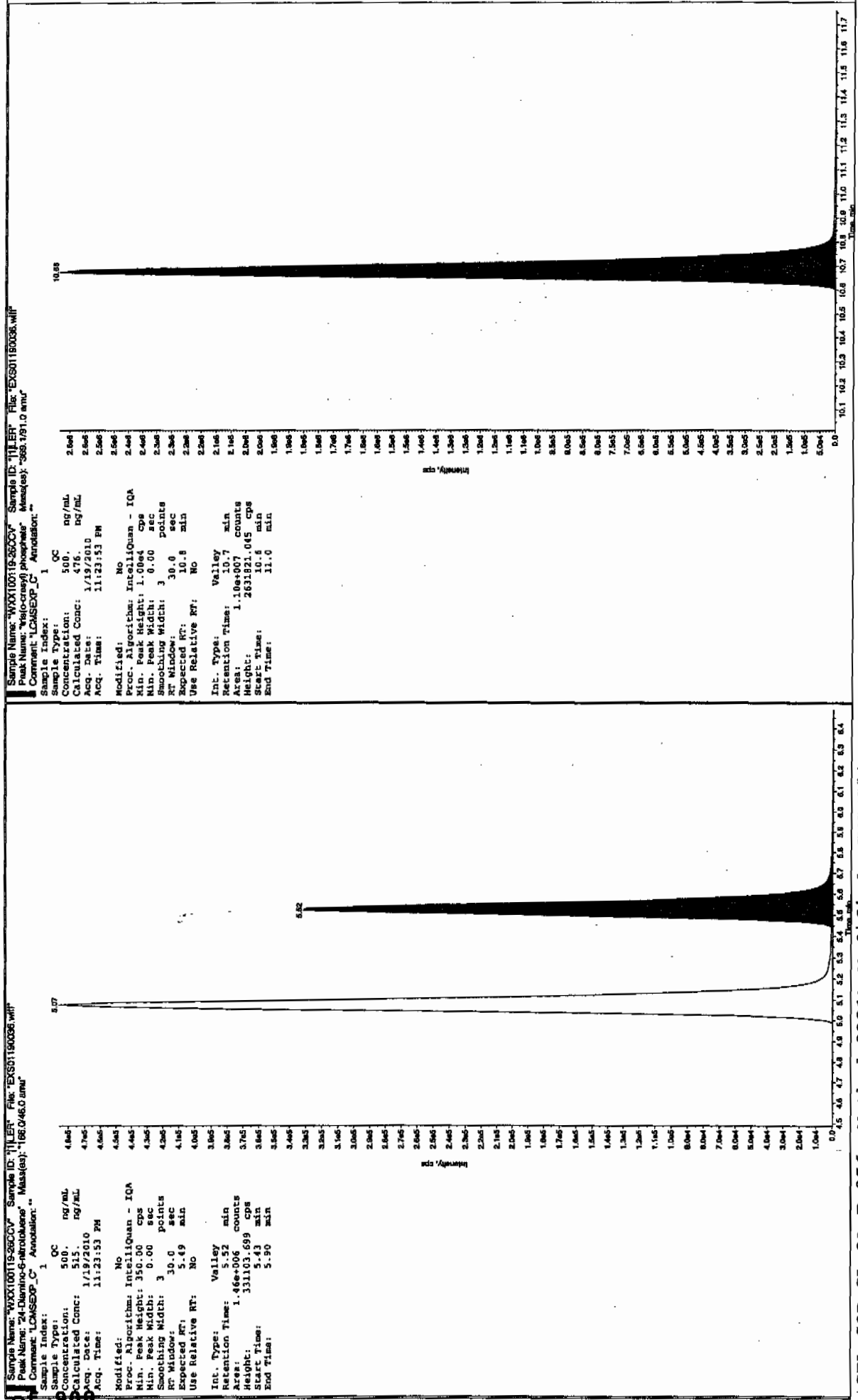


\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4





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



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

7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1160

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS01190038.wiff

Analysis Date: 19-JAN-10 23:55

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	103	103	
2,6-Diamino-4-nitrotoluene	100	107	107	
3,4-Dinitrotoluene	50	50	100	
3,5-Dinitroaniline	100	98.1	98	
TATB	100	95.4	95	
tris(o-cresyl) phosphate	100	95.1	95	

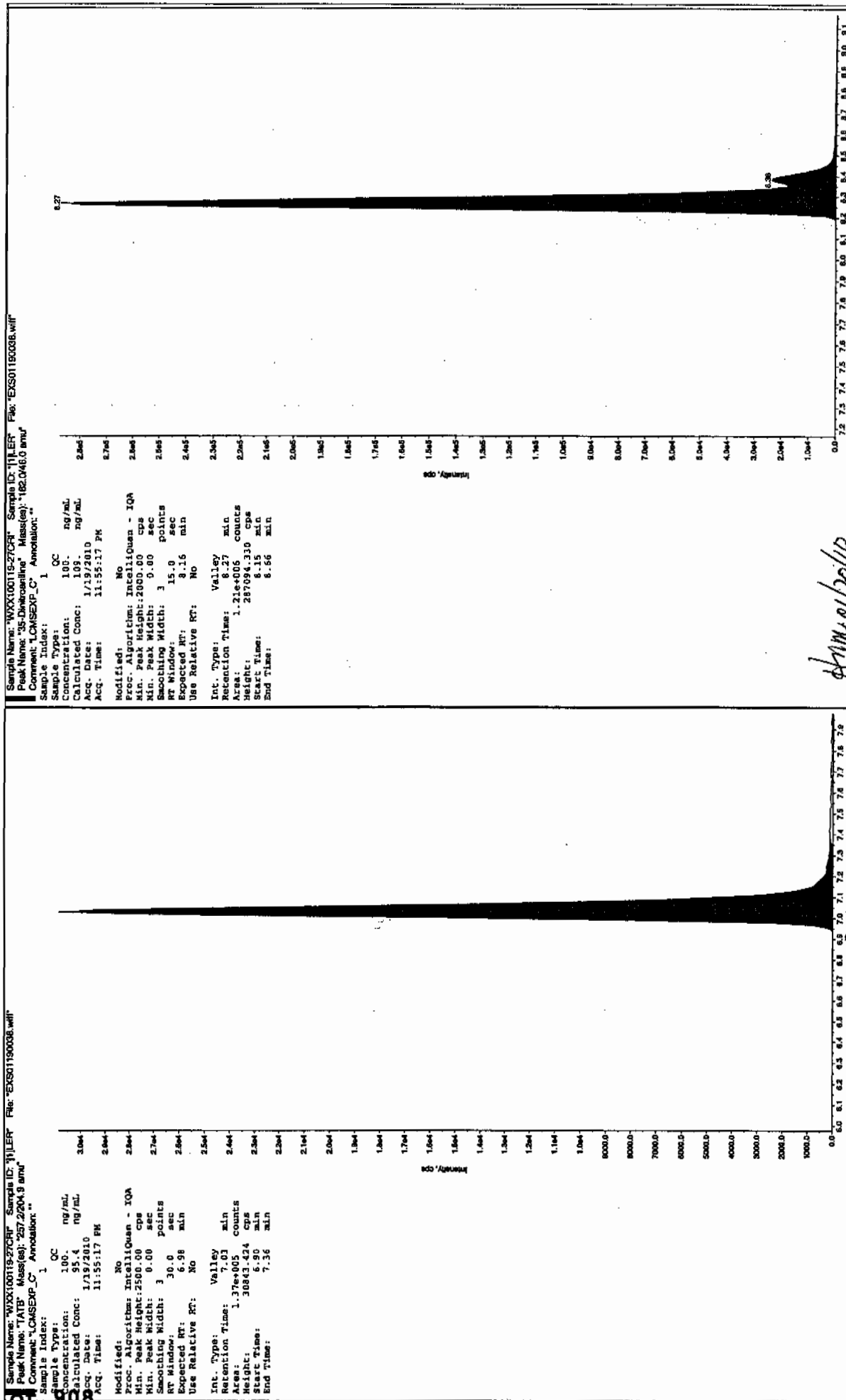
Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

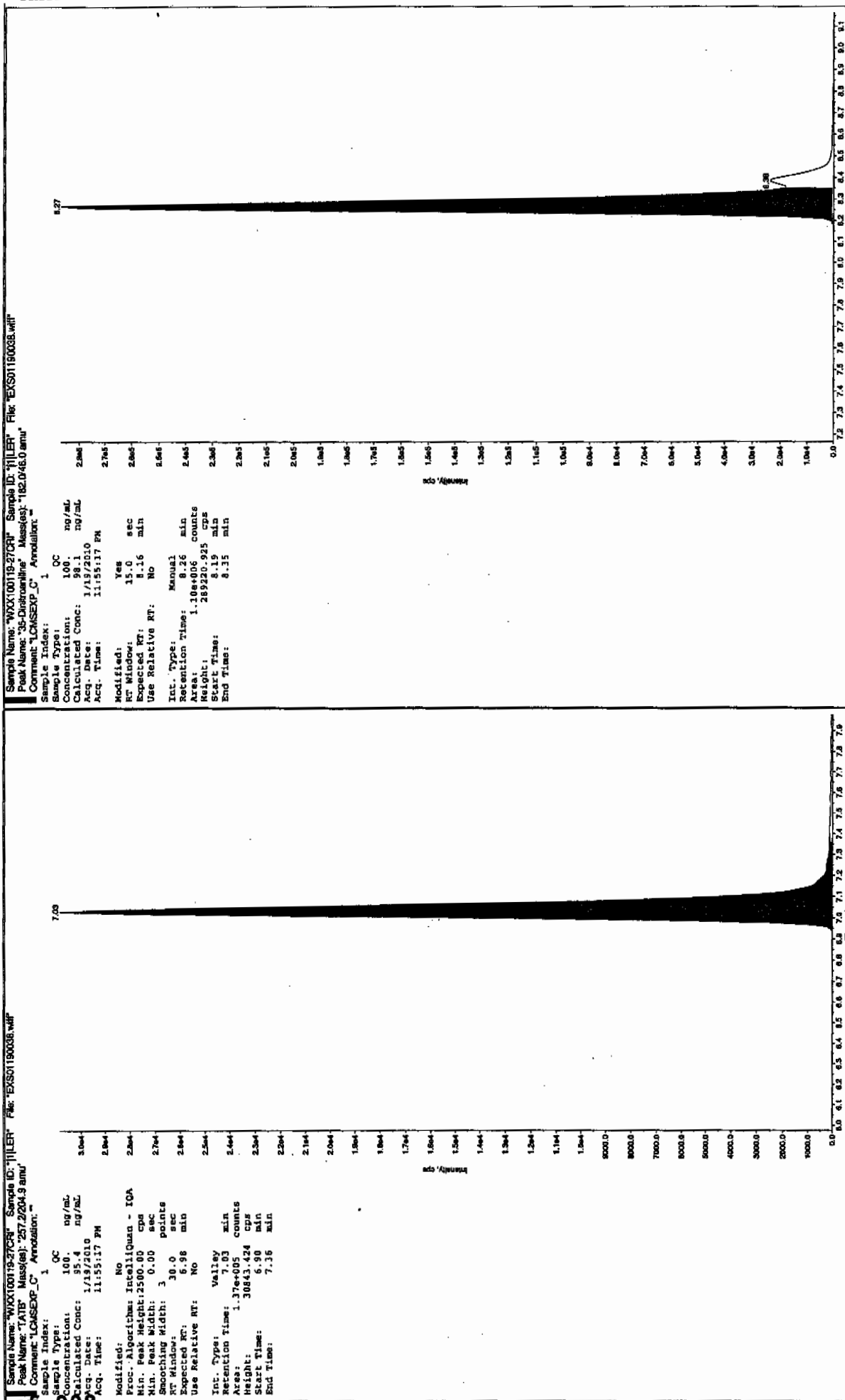
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

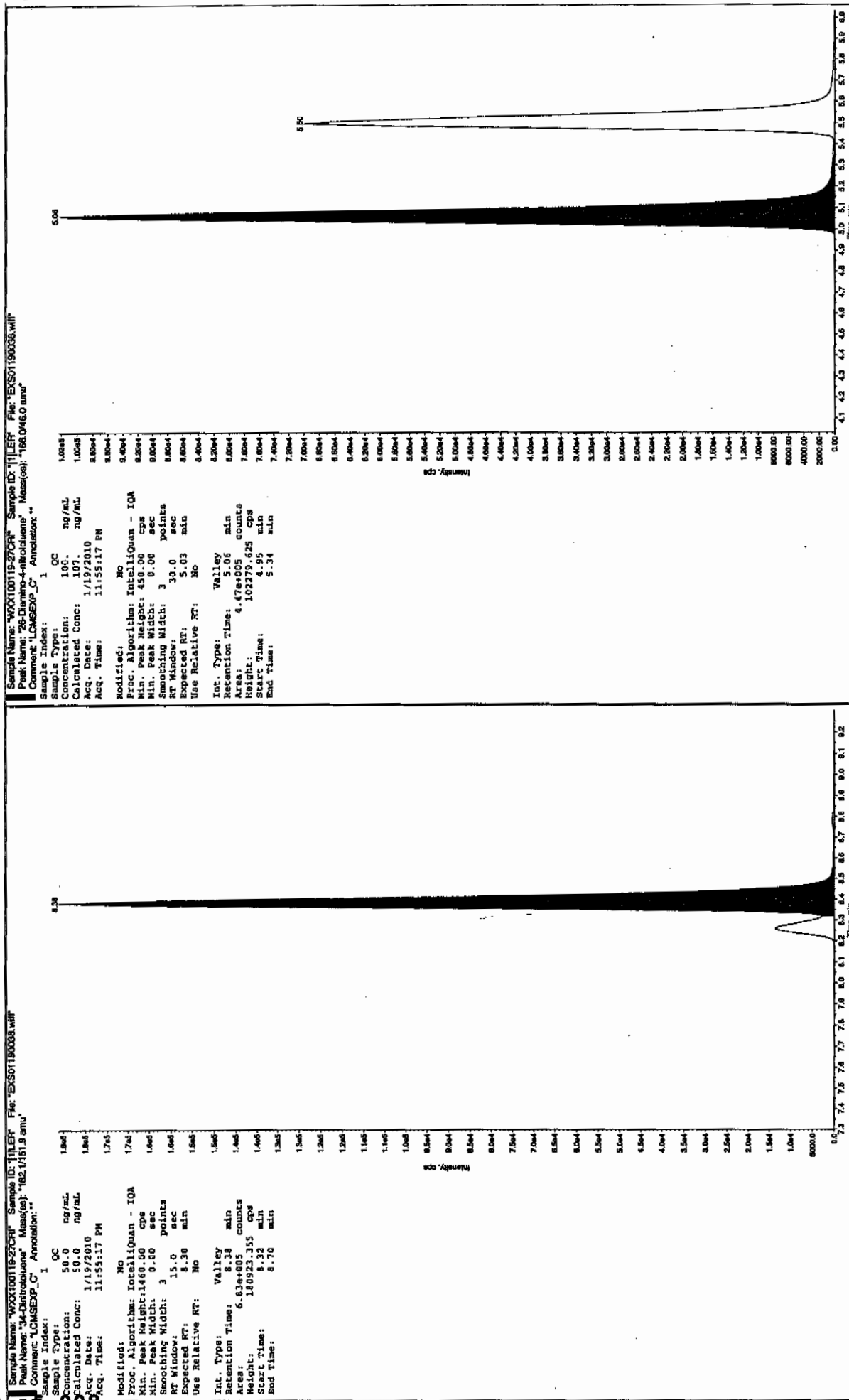


\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

after Jan 11/2010



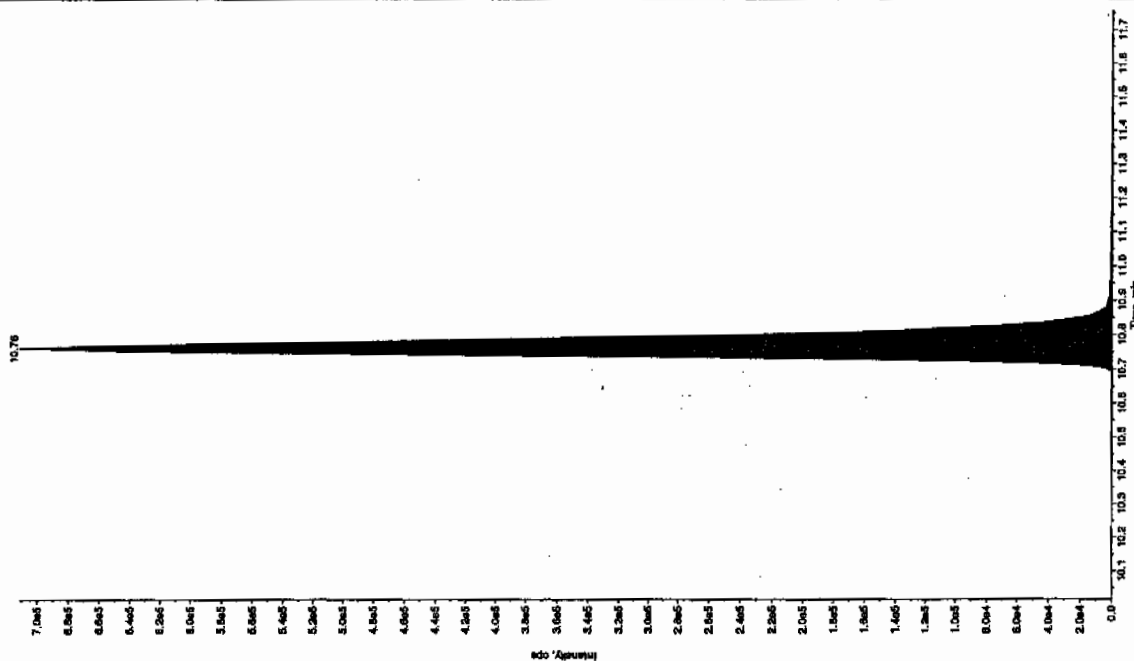
\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSEXP#4



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

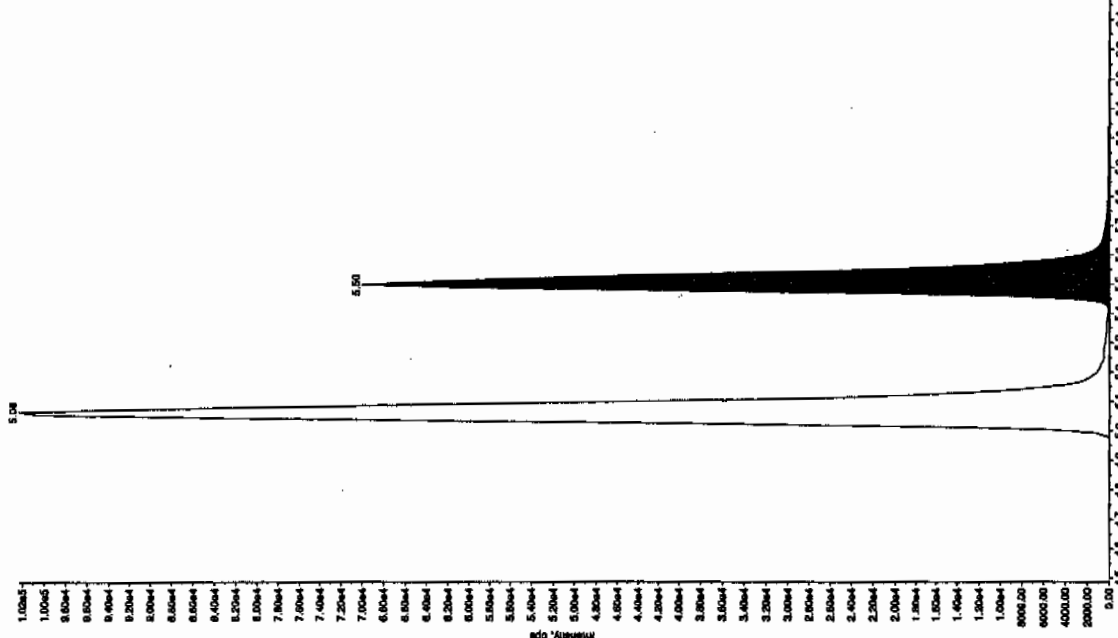
Sample Name: "WXX100119-2709" Sample ID: "11ER" File: "EX001190038.wif"  
 Peak Name: "24-Diamino-4-hydroxyphenyl" Mass(es): 325.1/310.0 amu  
 Comment: "LCMSXP\_C" Acquisition: "

Sample Index: 1  
 Sample Type: OC  
 Concentration: 100 ng/mL  
 Calculated Conc: 95.1 ng/mL  
 Acq. Date: 1/19/2010  
 Acq. Time: 11:55:17 PM  
 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: 10.8 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.8 min  
 Area: 2.52e+006 counts  
 Height: 710423.415 cps  
 Start Time: 10.7 min  
 End Time: 11.0 min



Sample Name: "WXX100119-2709" Sample ID: "11ER" File: "EX001190038.wif"  
 Peak Name: "24-Diamino-4-hydroxyphenyl" Mass(es): 325.1/310.0 amu  
 Comment: "LCMSXP\_C" Acquisition: "

Sample Index: 1  
 Sample Type: OC  
 Concentration: 100 ng/mL  
 Calculated Conc: 103 ng/mL  
 Acq. Date: 1/19/2010  
 Acq. Time: 11:55:17 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 350.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 5.49 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.50 min  
 Area: 2.93e+006 counts  
 Height: 69930.809 cps  
 Start Time: 5.41 min  
 End Time: 5.90 min



\*GEL 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 940104

Lab Code: GEL

GEL Job No (SDG) 10-1160

Matrix: SOIL

GEL Sample ID: 1202011756

Sample Amount 2

Moisture:

Amount Units g

Date Received: 11-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940104

Concentrated Extract Volume (mL) 10

Date Extracted: 14-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0118066a

Date Analyzed: 19-JAN-10 22:01

Units: ug/kg

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

\*Concentration =

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

Name: C:\MASSLYNX\NEW\_EXP.PRO\DATA\EXP0118066a

Date: 19-Jan-2010

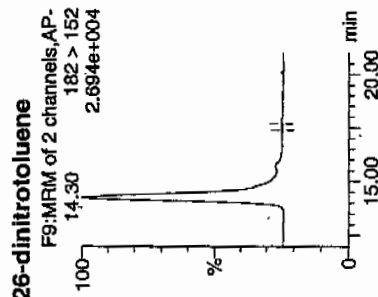
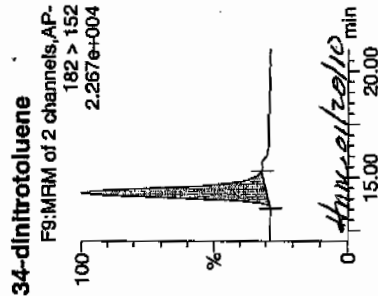
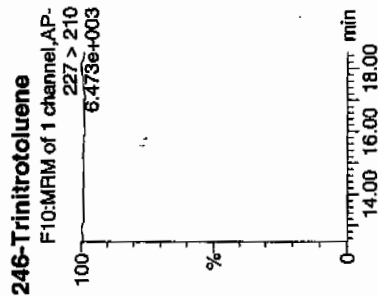
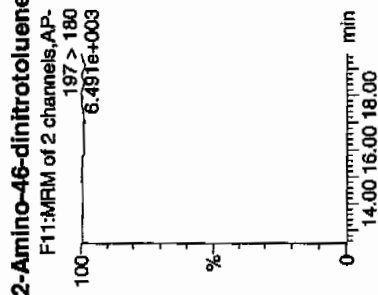
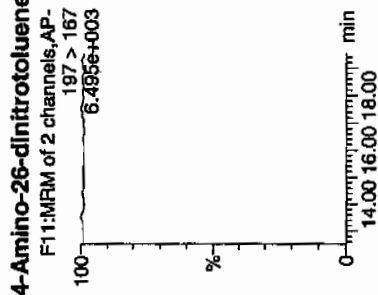
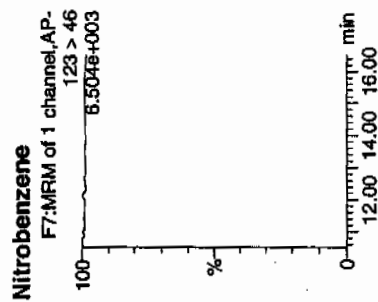
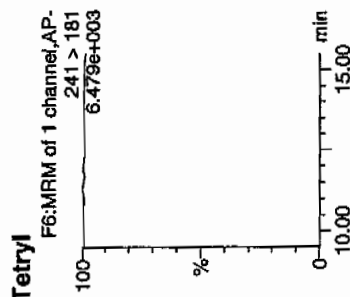
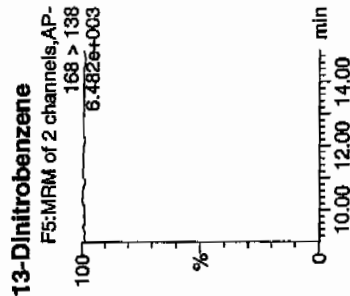
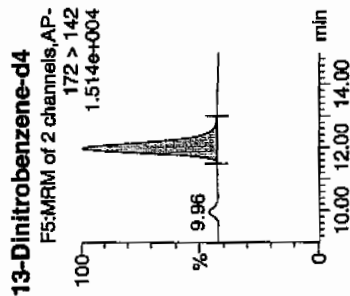
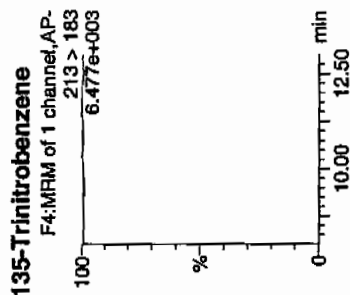
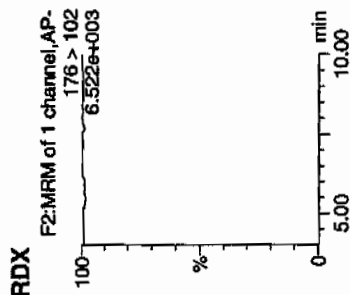
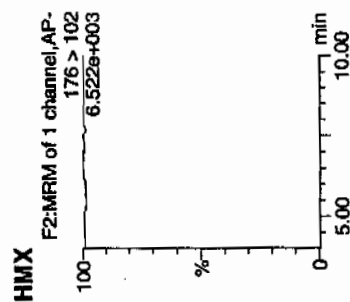
Time: 22:01:16

ID: 1202011756

**Vial: 3:1,A**

MA  
1/20/10

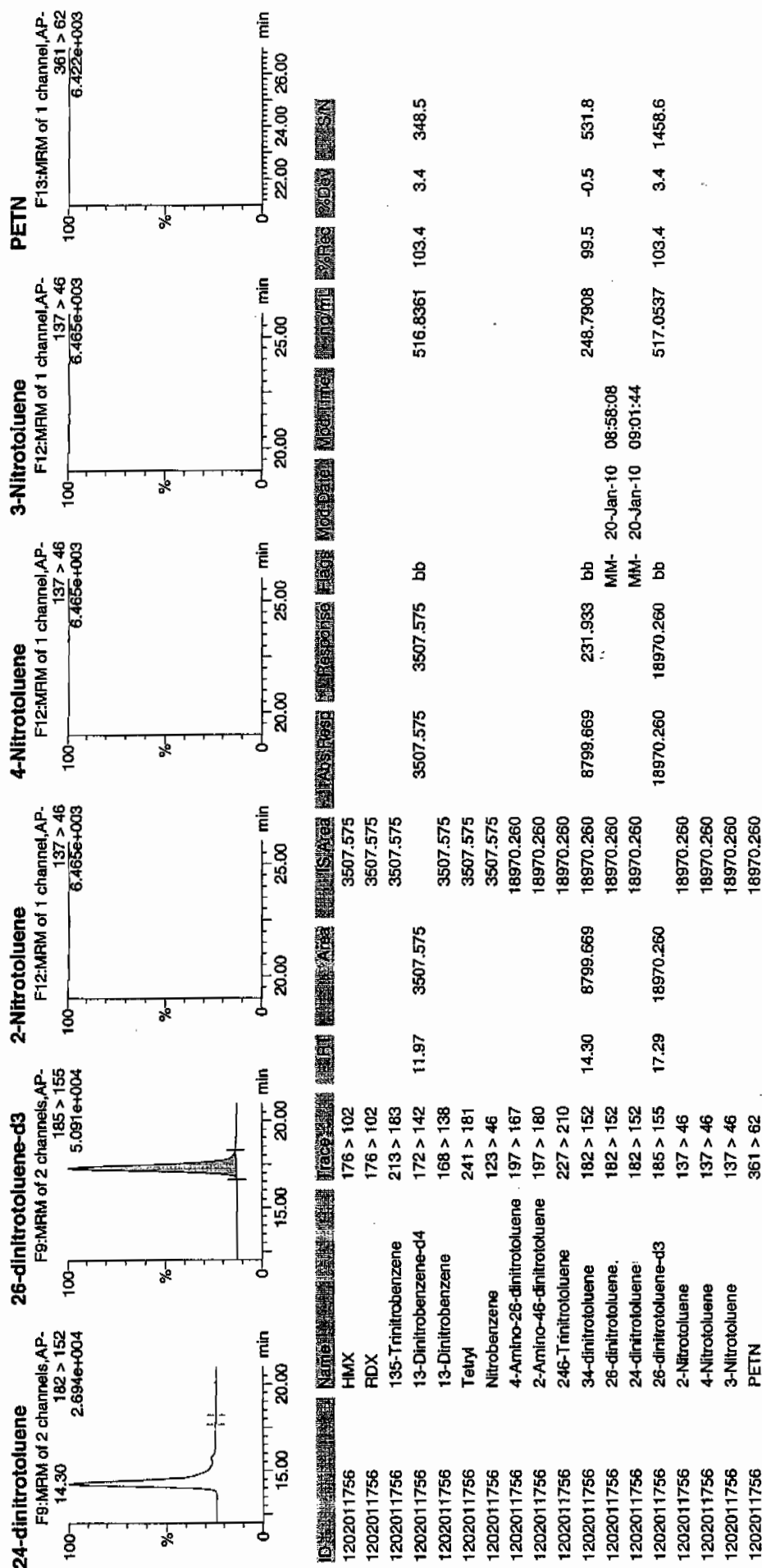
LAUT/940106/SGA/M3/21



### Quantify Sample Report

Quantity, Sample type  
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\011810expA1.qld, Time: Wed Jan 20 09:06:02 2010



1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: MB for batch 940104

Lab Code: GEL

GEL Job No (SDG) 10-1160

Matrix: SOIL

GEL Sample ID: 1202011756

Sample Amount 2

Moisture:

Amount Units g

Date Received: 11-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940104

Concentrated Extract Volume (mL) 10

Date Extracted: 14-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01190018.wiff

Date Analyzed: 19-JAN-10 18:41

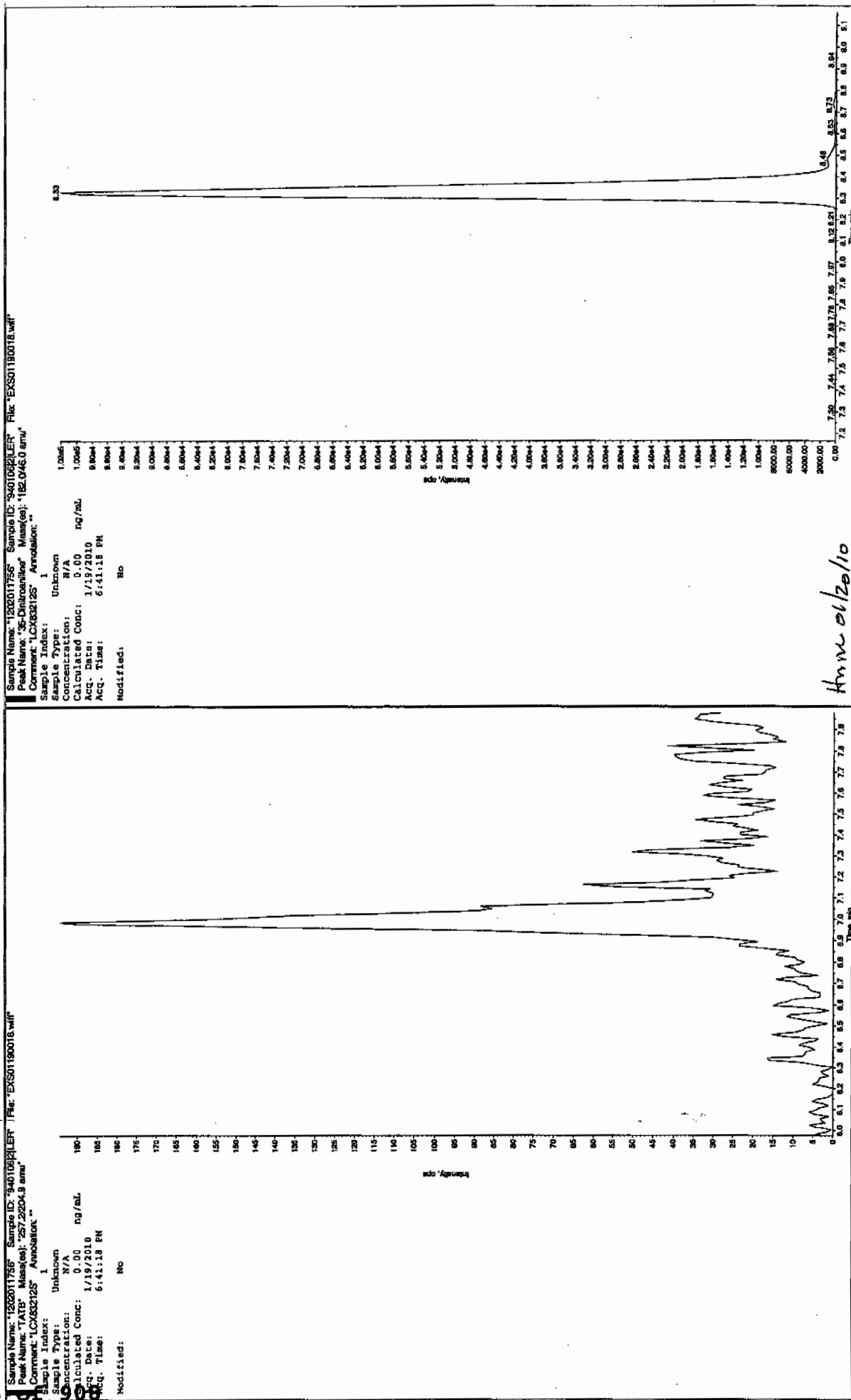
Units: ug/kg

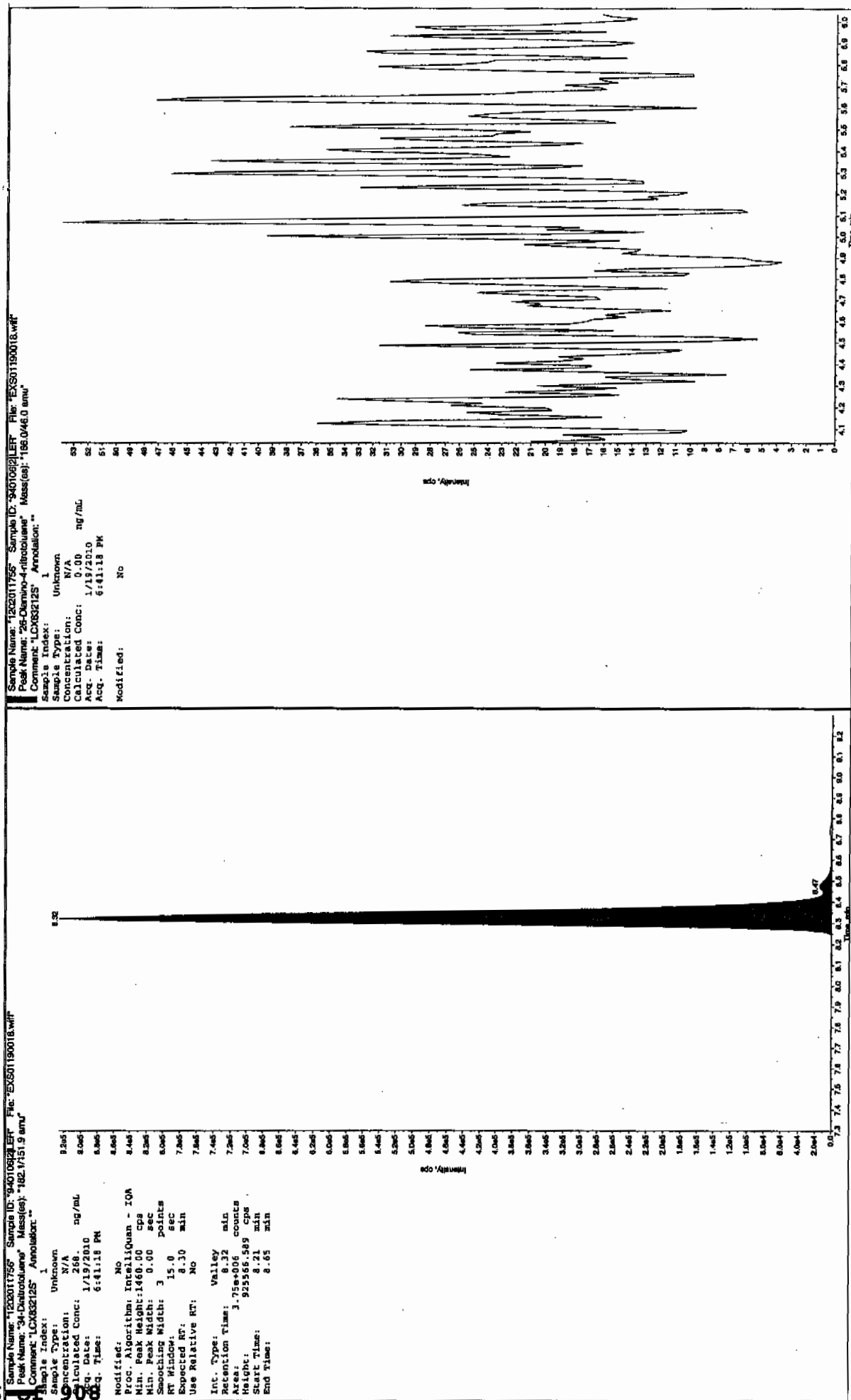
Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

\*Concentration =

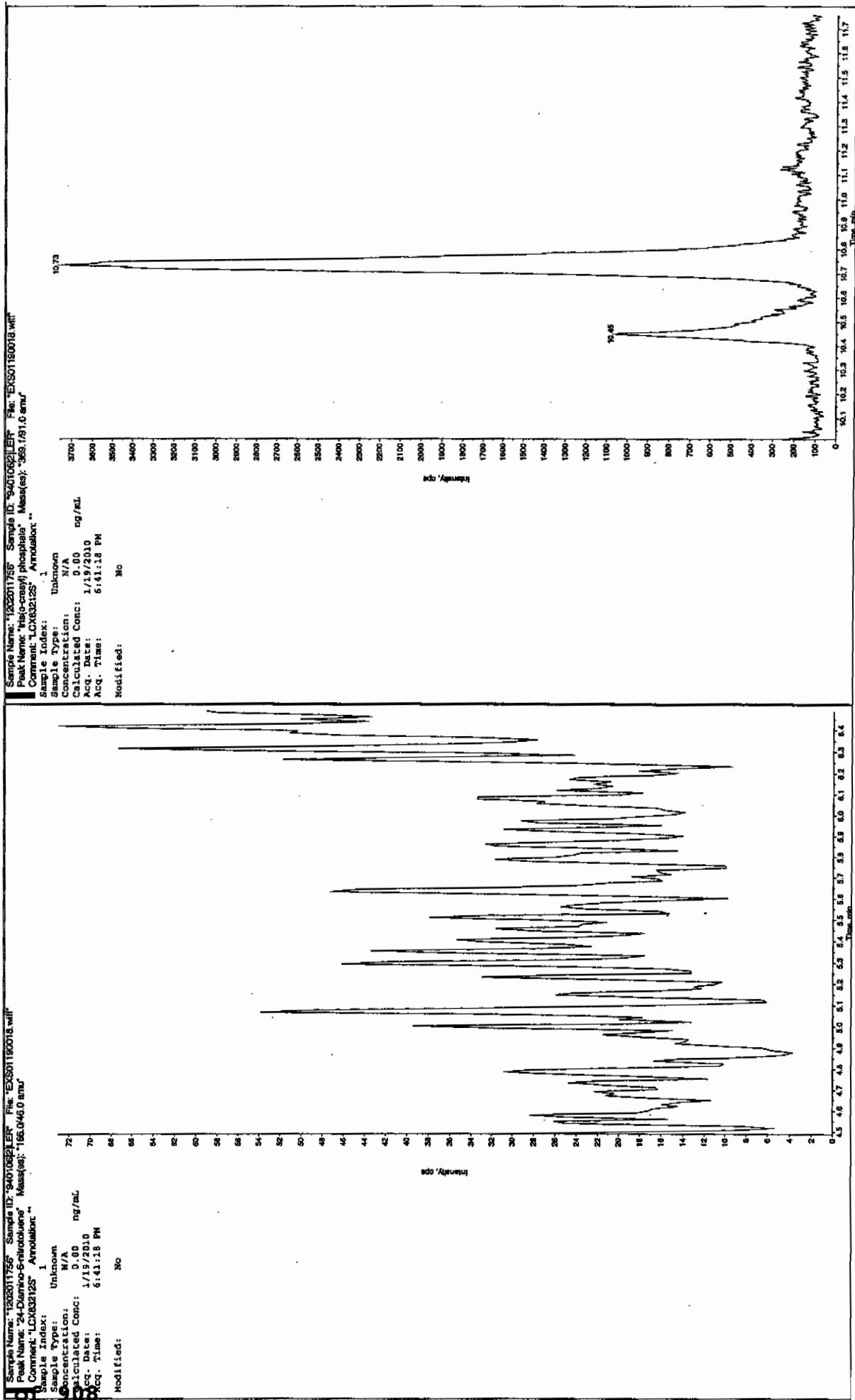
Instrument	X	<u>Concentrated Extract Volume</u>	X	Dilution
Value		<u>Sample Amount</u>		Factor

See 1/20/10





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



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

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: LCS for batch 940104

Lab Code: GEL

GEL Job No (SDG) 10-1160

Matrix: SOIL

GEL Sample ID: 1202011757

Sample Amount 2

Moisture:

Amount Units g

Date Received: 11-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940104

Concentrated Extract Volume (mL) 10

Date Extracted: 14-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0118067a

Date Analyzed: 19-JAN-10 22:30

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	4570	
121-14-2	2,4-Dinitrotoluene	4550	
121-82-4	RDX	5300	
19406-51-0	4-Amino-2,6-dinitrotoluene	5180	
2691-41-0	HMX	4900	
35572-78-2	2-Amino-4,6-dinitrotoluene	5060	
479-45-8	Tetryl	2580	
606-20-2	2,6-Dinitrotoluene	4740	
78-11-5	PETN	5170	
88-72-2	o-Nitrotoluene	4760	
98-95-3	Nitrobenzene	4730	
99-08-1	m-Nitrotoluene	4650	
99-35-4	1,3,5-Trinitrobenzene	4440	
99-65-0	m-Dinitrobenzene	4760	
99-99-0	p-Nitrotoluene	4790	

\*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\PROV011810expA1.qld, Time: Wed Jan 20 09:06:02 2010

Name: C:\MASSLYNX\NEW\_EXP\PROVData\EXP0118067a

Date: 19-Jan-2010

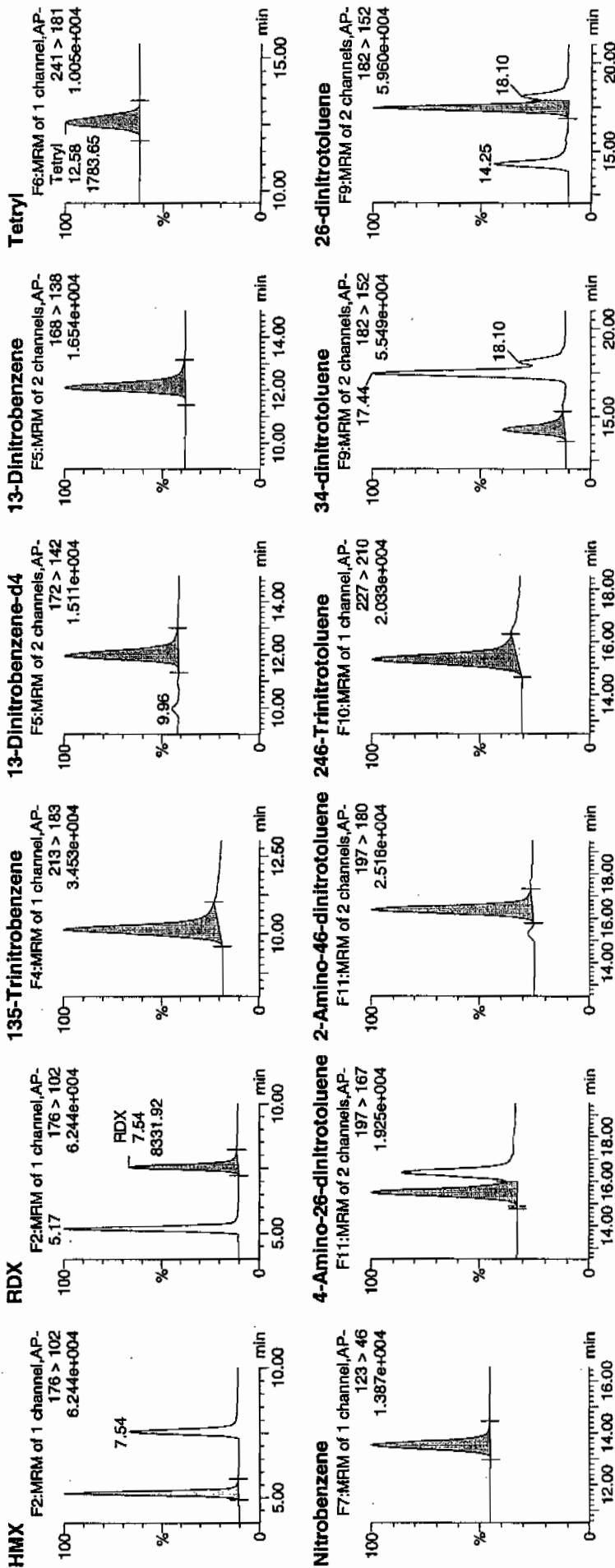
Time: 22:30:49

ID: 1202011757

Vial: 3:1,B

1/20/10

LAU (940106) [Signature] / 128/21

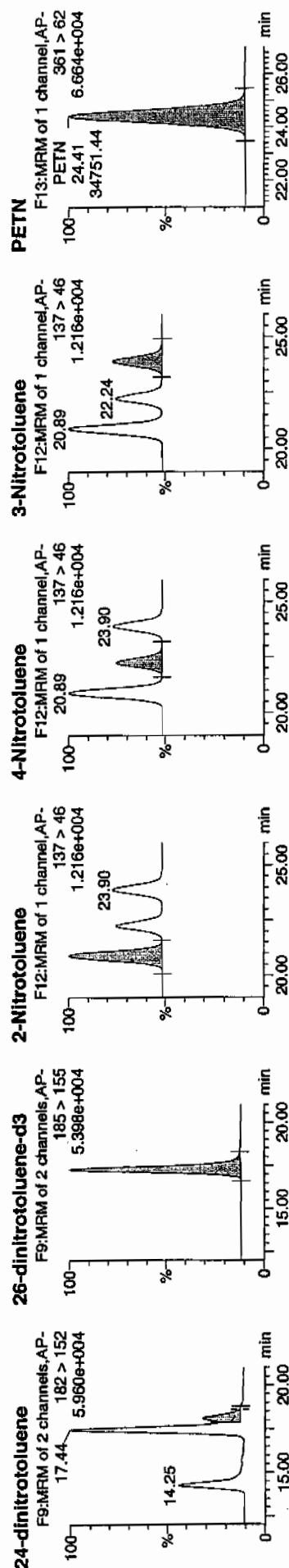


1/20/10

### Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\011810expA1.qld, Time: Wed Jan 20 09:06:02 2010



Name	ID	Trace	RT	Area	States	Abs.Press	Response	Flags	Mod.Date	Mode	Upper	Int.M	Reg	Dev	SN
HMx	1202011757	176 > 102	5.17	11172.722	3533.033	11172.722	1581.180	db			489.8218	98.0	-2.0	2241.3	
RDX	1202011757	176 > 102	7.54	8331.917	3533.033	8331.917	1179.145	bb			530.3036	106.1	6.1	1404.8	
135-Trinitrobenzene	1202011757	213 > 183	10.14	10453.820	3533.033	10453.820	1479.440	bb			444.0323	88.8	-11.2	879.6	
13-Dinitrobenzene-d4	1202011757	172 > 142	11.97	3533.033		3533.033	3533.033	bb			520.5873	104.1	4.1	687.7	
13-Dinitrobenzene	1202011757	168 > 138	12.10	3977.470	3533.033	3977.470	562.897	bb			476.3388	95.3	-4.7	538.9	
Tetryl	1202011757	241 > 181	12.58	1783.652	3533.033	1783.652	252.425	bb			258.4702	51.7	-48.3	121.6	
Nitrobenzene	1202011757	123 > 46	13.54	2797.904	3533.033	2797.904	395.963	bb			472.9696	94.6	-5.4	195.2	
4-Amino-26-dinitrotoluene	1202011757	197 > 167	15.49	5496.052	20109.059	5496.052	136.656	MM	20-Jan-10	08:54:12	517.6527	103.5	3.5	361.7	
2-Amino-46-dinitrotoluene	1202011757	197 > 180	16.37	7922.806	20109.059	7922.806	196.996	bb			505.6833	101.1	1.1	176.1	
246-Trinitrotoluene	1202011757	227 > 210	15.31	6471.454	20109.059	6471.454	160.909	bb			456.9857	91.4	-8.6	329.3	
34-dinitrotoluene	1202011757	182 > 152	14.30	8470.599	20109.059	8470.599	210.616	bb			225.9246	90.4	-9.6	197.0	
26-dinitrotoluene	1202011757	182 > 152	17.44	20818.982	20109.059	20818.982	517.652	MM	20-Jan-10	08:58:14	473.9204	94.8	-5.2	493.0	
24-dinitrotoluene	1202011757	182 > 152	18.10	4623.526	20109.059	4623.526	114.951	MM	20-Jan-10	09:01:38	454.6955	90.9	-9.1	105.7	
26-dinitrotoluene-d3	1202011757	185 > 155	17.29	20109.059		20109.059	20109.059	bb			548.0929	109.6	9.6	2552.0	
2-Nitrotoluene	1202011757	137 > 46	20.89	2874.609	20109.059	2874.609	71.475	bb			476.2602	95.3	-4.7	313.6	
4-Nitrotoluene	1202011757	137 > 46	22.24	1379.803	20109.059	1379.803	34.308	bb			479.1680	95.8	-4.2	155.2	
3-Nitrotoluene	1202011757	137 > 46	23.90	1593.982	20109.059	1593.982	39.633	bb			464.7440	92.9	-7.1	165.9	
PETN	1202011757	361 > 62	24.41	34751.438	20109.059	34751.438	864.074	bb			517.0961	103.4	3.4	2307.0	

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: LCS for batch 940104

Lab Code: GEL

GEL Job No (SDG) 10-1160

Matrix: SOIL

GEL Sample ID: 1202011757

Sample Amount 2

Moisture:

Amount Units g

Date Received: 11-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940104

Concentrated Extract Volume (mL) 10

Date Extracted: 14-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01190019.wiff

Date Analyzed: 19-JAN-10 18:57

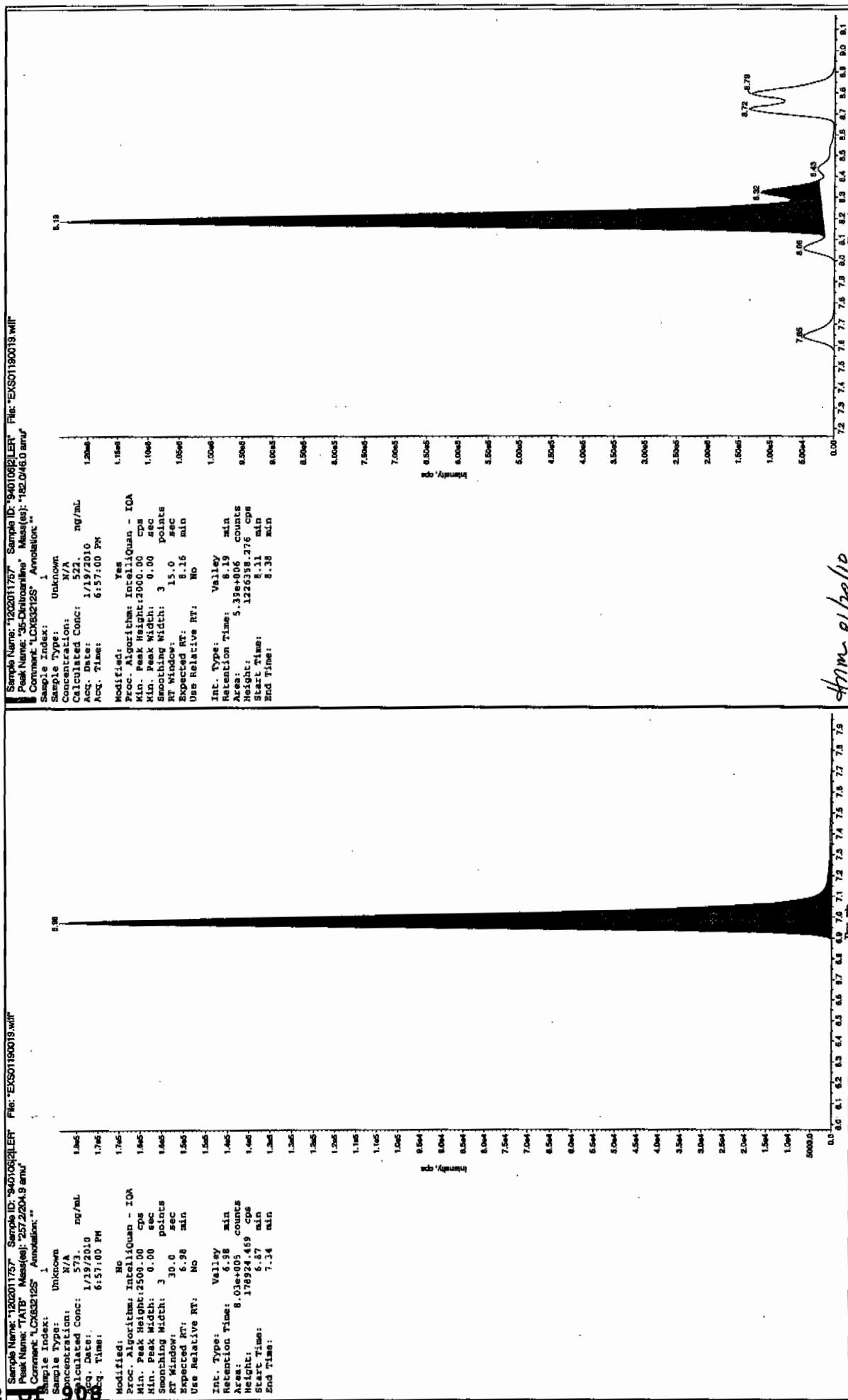
Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	5730	
59229-75-3	2,6-Diamino-4-nitrotoluene	5220	
618-87-1	3,5-Dinitroaniline	5220	
6629-29-4	2,4-Diamino-6-nitrotoluene	5020	
78-30-8	tris(o-cresyl) phosphate	5060	

\*Concentration =

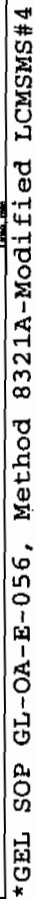
Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

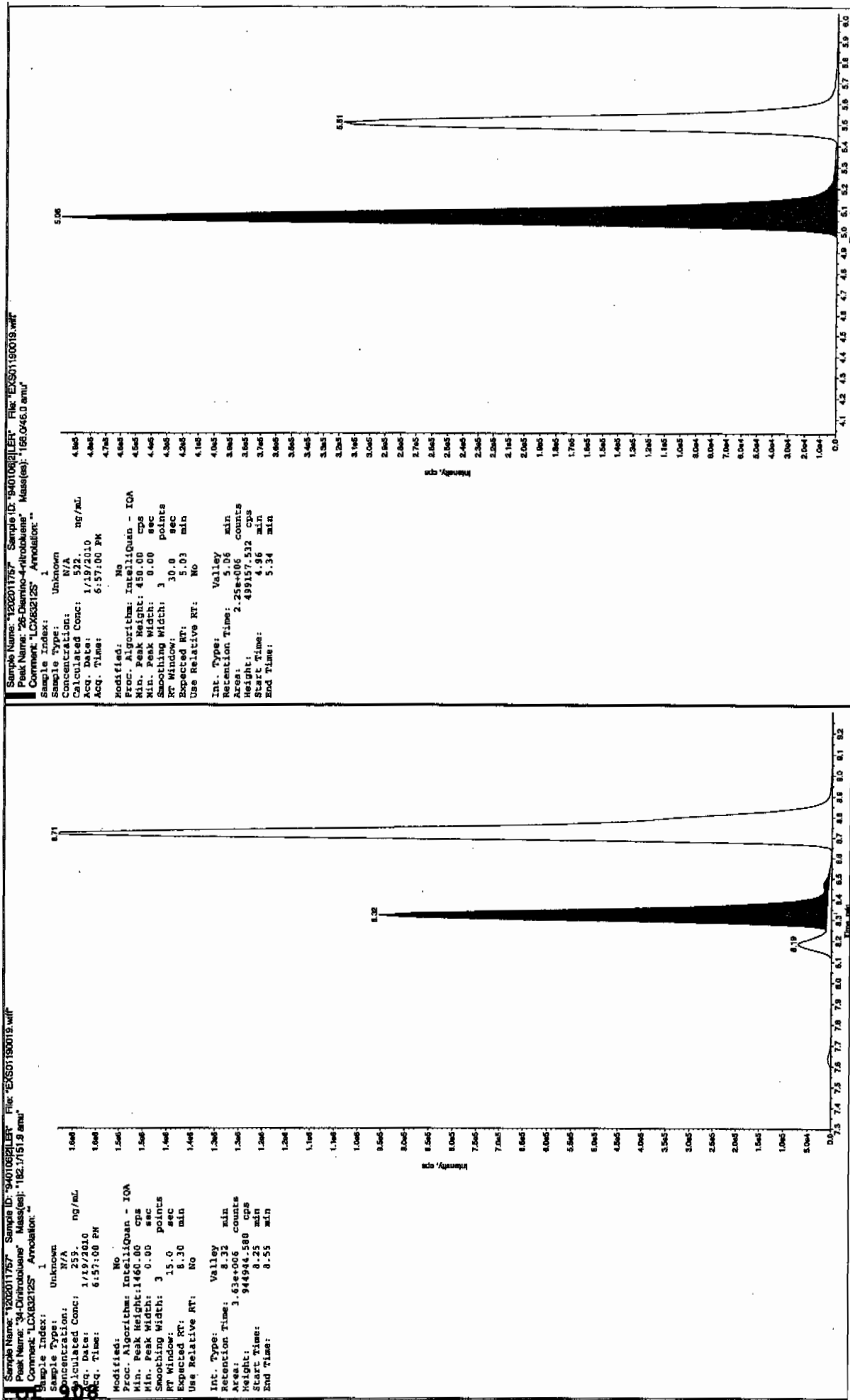
*8/26/10*



*8/26/10*

after Jan 1/20/10

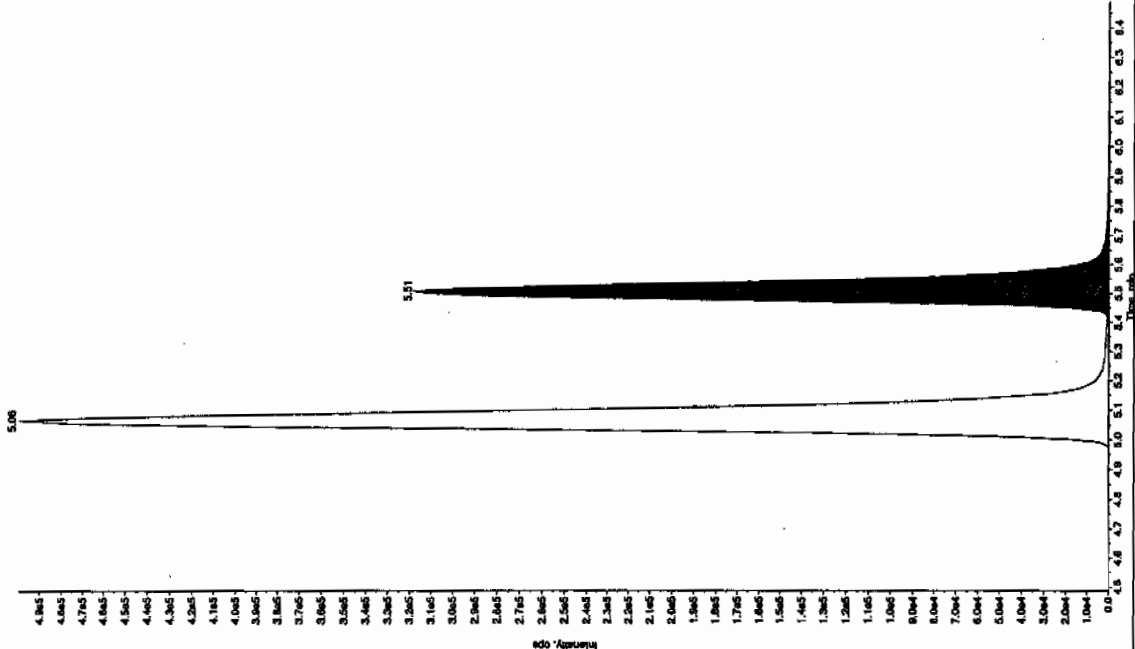




\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "122011757" Sample ID: "9401082157" File: "EX501190019.wrf"  
 Peak Name: "241-Deoxyphosphatide" Mass(es): 355.19.0 and  
 Comment: "LCX832125" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 506 ng/mL  
 Acq. Date: 1/19/2010  
 Acq. Time: 6:57:00 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 3.00e4 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 10.8 min  
 Use Relative RT: No  
 Inc. Type: Valley  
 Retention Time: 10.7 min  
 Peak Height: 1.17e+007 counts  
 Height: 2950254.395 cps  
 Start Time: 10.6 min  
 End Time: 11.0 min



Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 502 ng/mL  
 Acq. Date: 1/19/2010  
 Acq. Time: 6:57:00 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 350.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 5.49 min  
 Use Relative RT: No  
 Inc. Type: Valley  
 Retention Time: 5.51 min  
 Peak Height: 1.43e+006 counts  
 Height: 317813.513 cps  
 Start Time: 5.42 min  
 End Time: 6.03 min

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

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7734(244209001MS)

Lab Code: GEL

GEL Job No (SDG) 10-1160

Matrix: SOIL

GEL Sample ID: 1202011758

Sample Amount 2

Moisture: 6.5

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940104

Concentrated Extract Volume (mL) 10

Date Extracted: 14-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0118069a

Date Analyzed: 19-JAN-10 23:29

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	5090	
121-14-2	2,4-Dinitrotoluene	4560	
121-82-4	RDX	5630	
19406-51-0	4-Amino-2,6-dinitrotoluene	5460	
2691-41-0	HMX	5260	
35572-78-2	2-Amino-4,6-dinitrotoluene	5420	
479-45-8	Tetryl	3940	
606-20-2	2,6-Dinitrotoluene	4730	
78-11-5	PETN	4320	
88-72-2	o-Nitrotoluene	3610	
98-95-3	Nitrobenzene	4520	
99-08-1	m-Nitrotoluene	4670	
99-35-4	1,3,5-Trinitrobenzene	4880	
99-65-0	m-Dinitrobenzene	4980	
99-99-0	p-Nitrotoluene	4680	

\*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\011810expA1.qld, Time: Wed Jan 20 09:06:02 2010

Name: C:\MASSLYNX\NEW\_EXP\PRO\data\EXP0118069a

Date: 19-Jan-2010

Time: 23:29:46

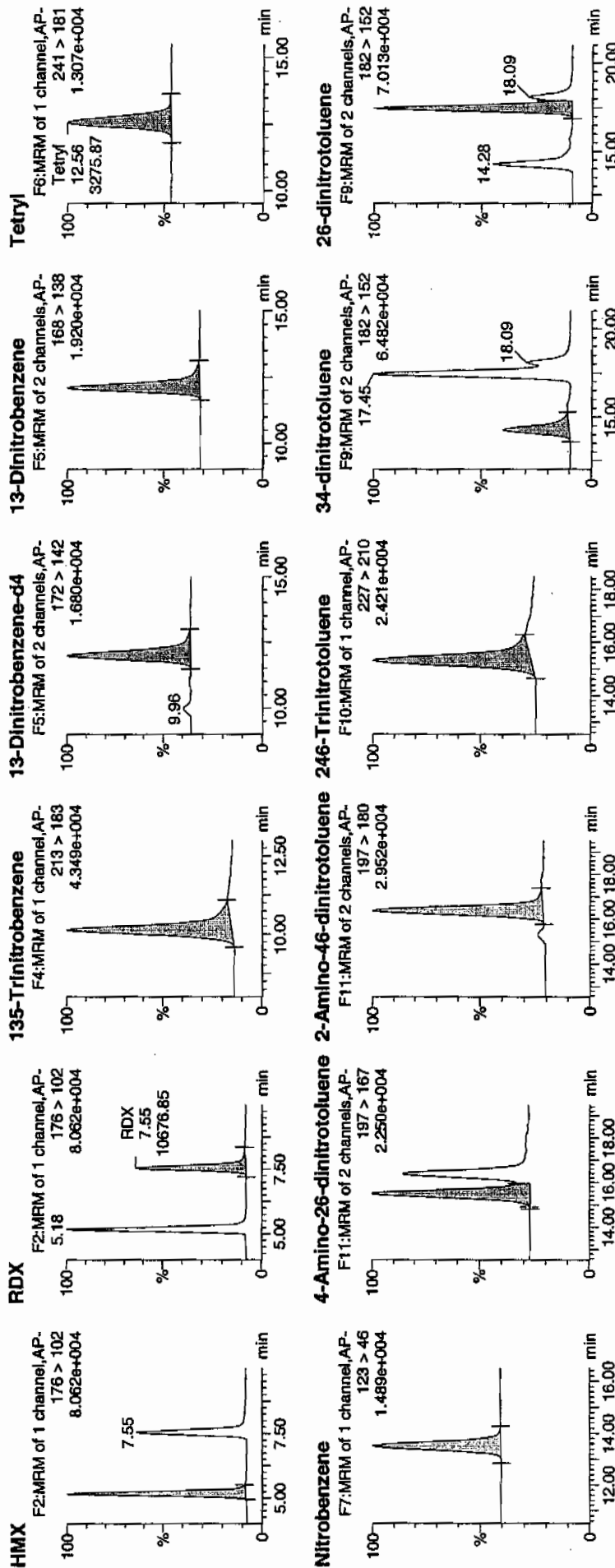
ID: 1202011758

Vial: 3:1,D

1/20/10

121

244209001 us

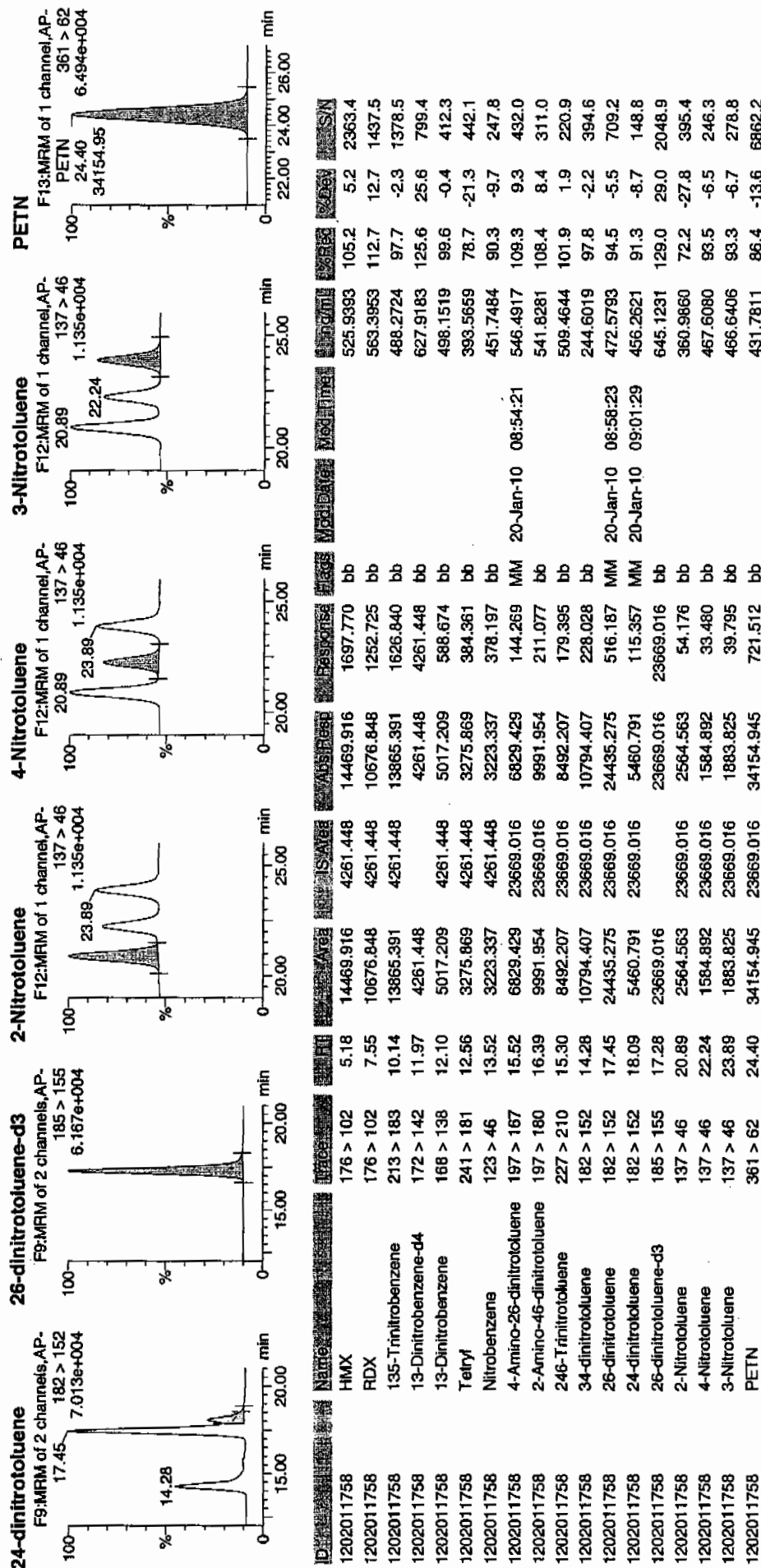


thm oil 1/20/10

Printed: Wed Jan 20 09:07:58 2010, Page 54 of 91

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

Dataset: C:\MASSLYNX\New\_Exp\PRO011810expA1.qld, Time: Wed Jan 20 09:06:02 2010



1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7734(244209001MS)

Lab Code: GEL

GEL Job No (SDG) 10-1160

Matrix: SOIL

GEL Sample ID: 1202011758

Sample Amount 2

Moisture: 6.5

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940104

Concentrated Extract Volume (mL) 10

Date Extracted: 14-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01190021.wiff

Date Analyzed: 19-JAN-10 19:28

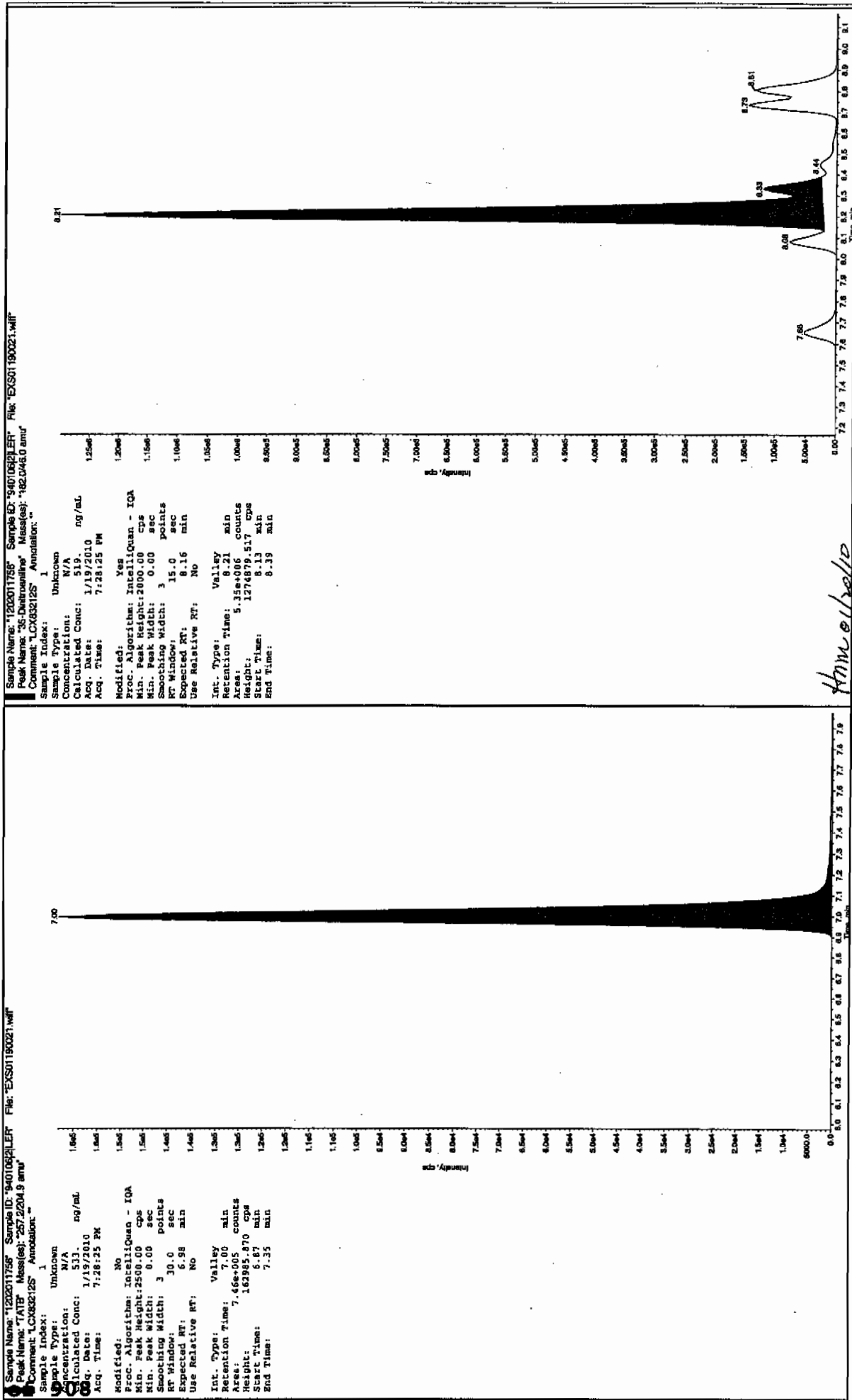
Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	5330	
59229-75-3	2,6-Diamino-4-nitrotoluene	5030	
618-87-1	3,5-Dinitroaniline	5190	
6629-29-4	2,4-Diamino-6-nitrotoluene	4790	
78-30-8	tris(o-cresyl) phosphate	4850	

\*Concentration =

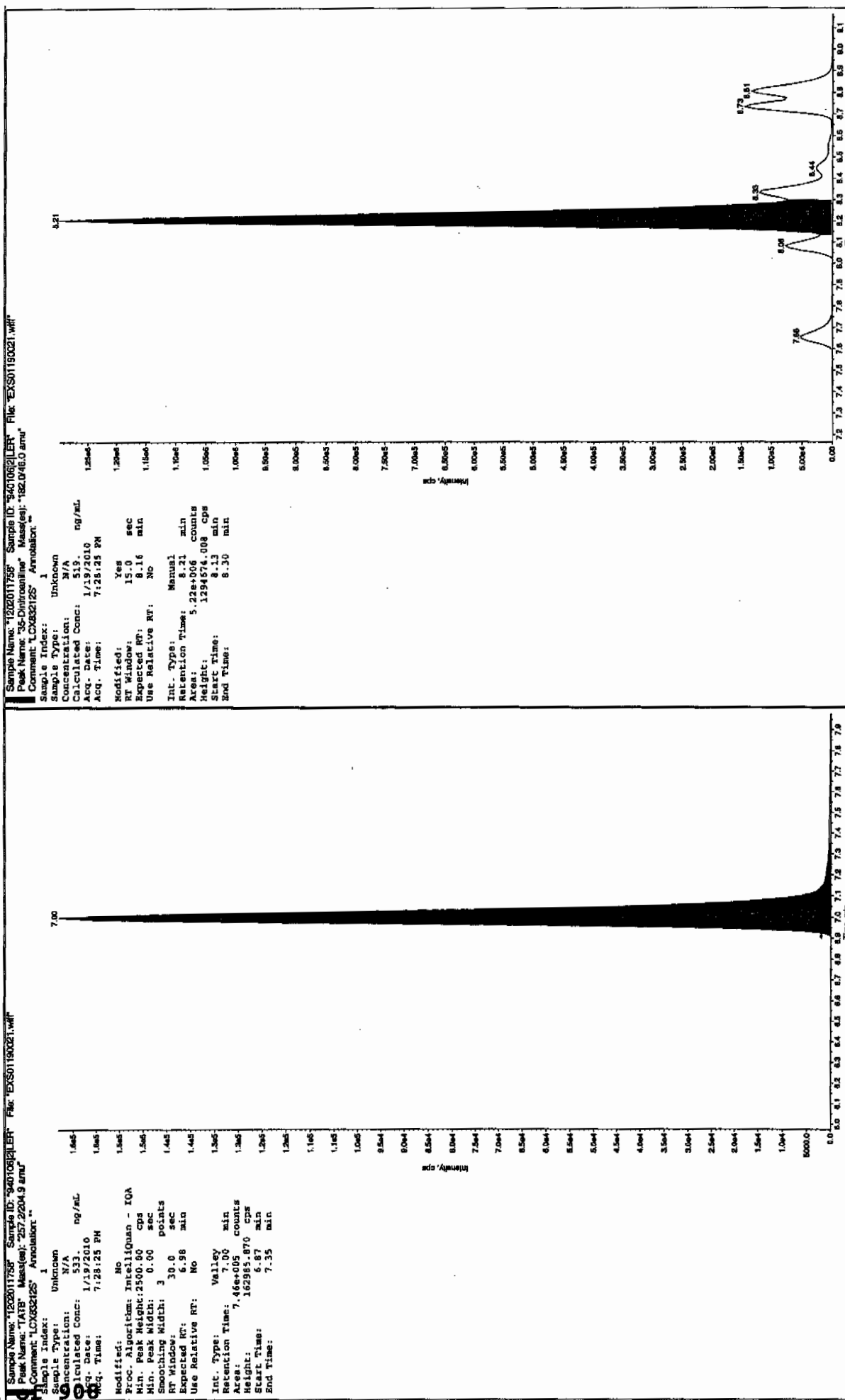
Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

*Peak at 8.21*

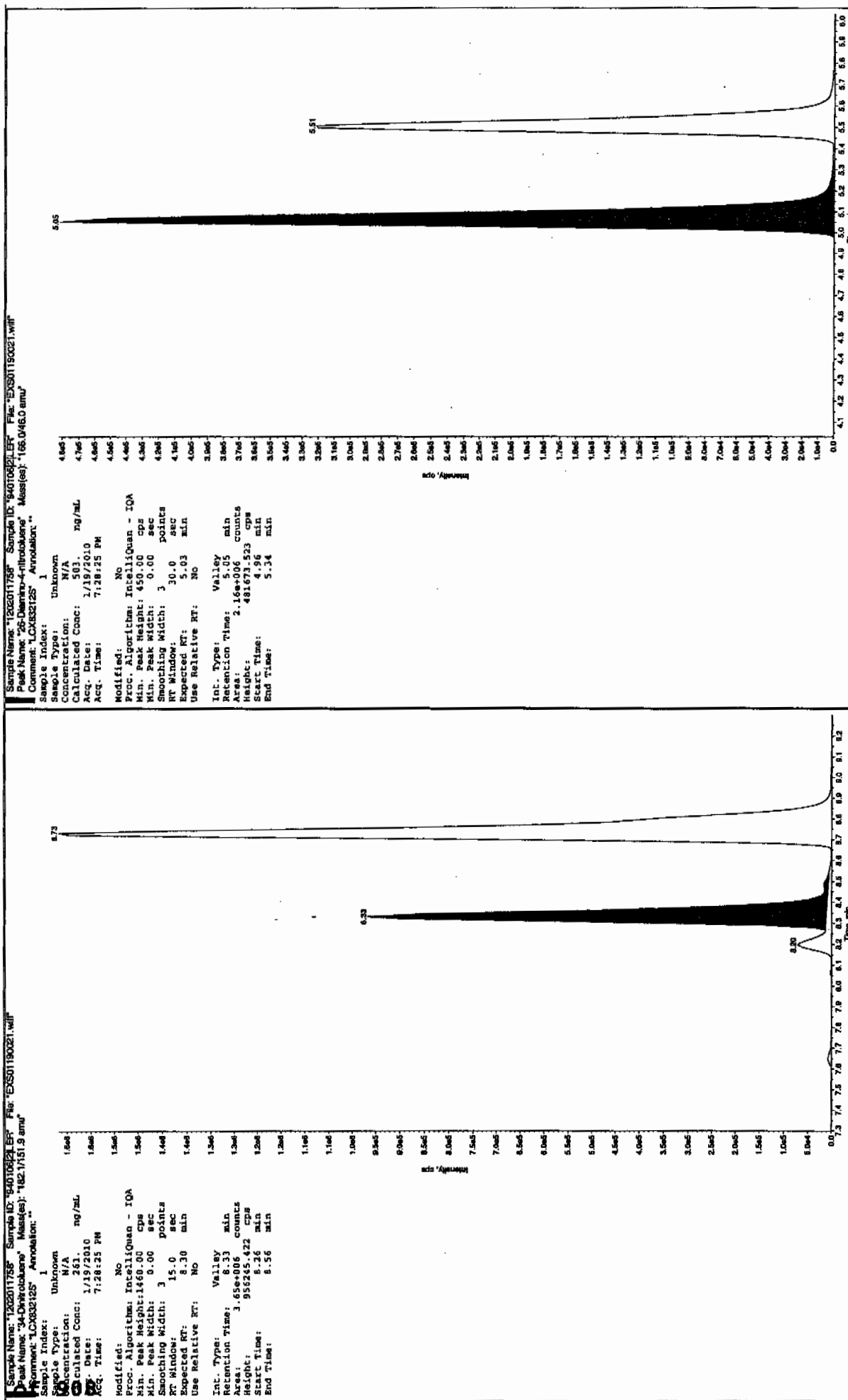


*Ameliorio*

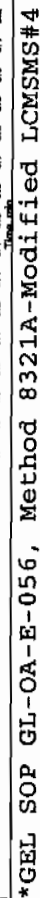
after Jan 120110



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



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



1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7734(244209001MSD)

Lab Code: GEL

GEL Job No (SDG) 10-1160

Matrix: SOIL

GEL Sample ID: 1202011759

Sample Amount 2

Moisture: 6.5

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940104

Concentrated Extract Volume (mL) 10

Date Extracted: 14-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0118070a

Date Analyzed: 19-JAN-10 23:59

Units: ng/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	5060	
121-14-2	2,4-Dinitrotoluene	4980	
121-82-4	RDX	5150	
19406-51-0	4-Amino-2,6-dinitrotoluene	5270	
2691-41-0	HMX	6060	
35572-78-2	2-Amino-4,6-dinitrotoluene	5010	
479-45-8	Tetryl	4020	
606-20-2	2,6-Dinitrotoluene	4810	
78-11-5	PETN	5470	
88-72-2	o-Nitrotoluene	4550	
98-95-3	Nitrobenzene	4740	
99-08-1	m-Nitrotoluene	4640	
99-35-4	1,3,5-Trinitrobenzene	5140	
99-65-0	m-Dinitrobenzene	4680	
99-99-0	p-Nitrotoluene	4770	

\*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\011810expA1.qld, Time: Wed Jan 20 09:06:02 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0118070a

Date: 19-Jan-2010

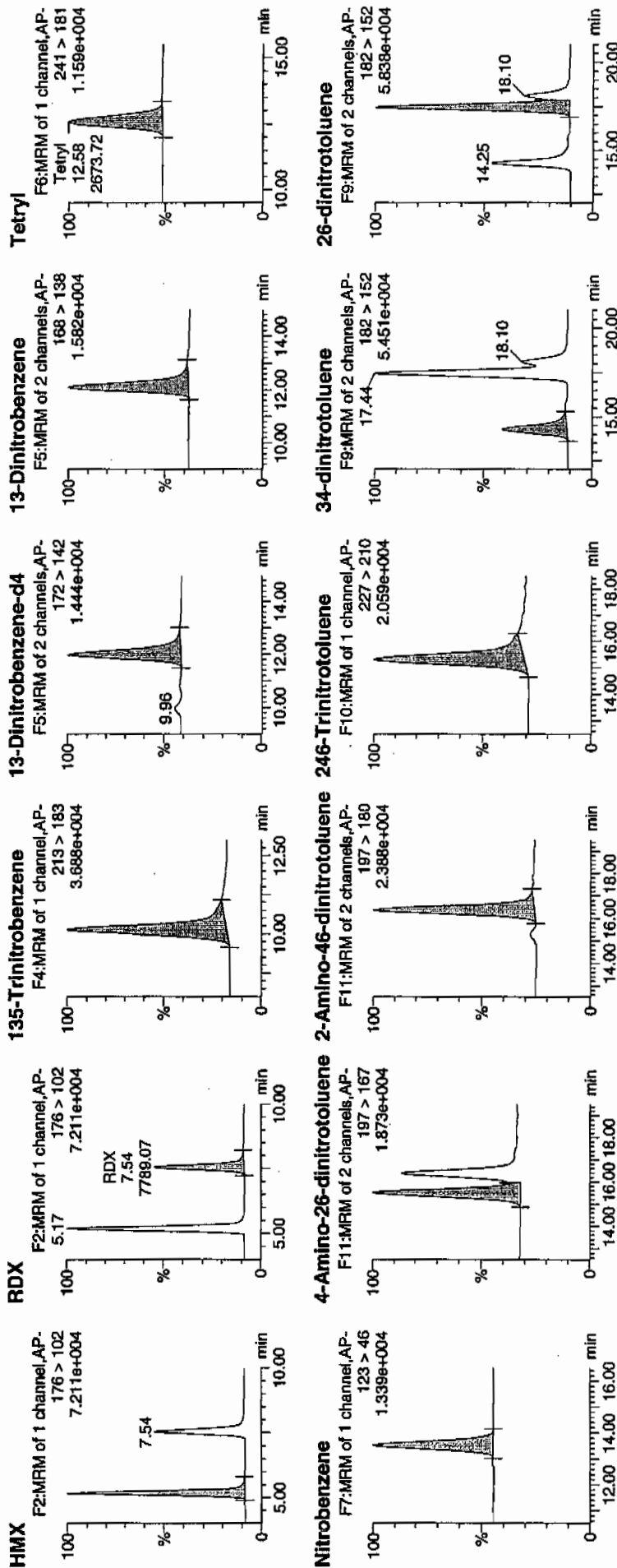
Time: 23:59:14

ID: 1202011759

Vial: 3:1,E

not  
1/20/10

WAV 940106 / 244259001 MSB / 21

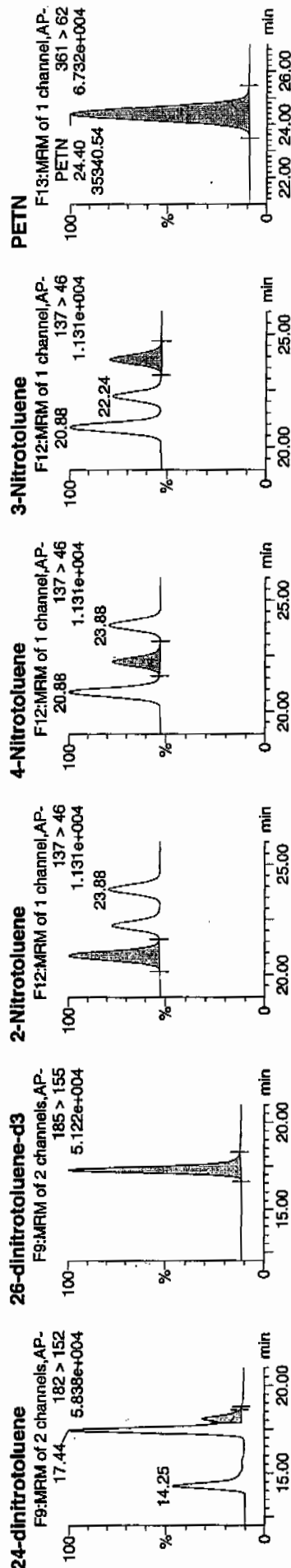


HW 01/20/10

## Quantify Sample Report

**GEL Laboratories, LLC / Analyst : Michael A. Penny**

Dataset: C:\MASSLYNX\New\_Exp.PRO\011810expA1.qld, Time: Wed Jan 20 09:06:02 2010



ID	Name	Trace	FL	IS Area	Assigned	Response	Flags	Mod Date	Mod Time	Volume	Spec	Dev	Person
1202011759	HMX	176 > 102	5.17	13298.564	3401.026	13298.564	1955.081	db		605.6498	121.1	21.1	1482.9
1202011759	FDX	176 > 102	7.54	7789.071	3401.026	7789.071	1145.106	bb		514.9950	103.0	3.0	744.1
1202011759	135-Trinitrobenzene	213 > 183	10.14	11651.754	3401.026	11651.754	1712.976	bb		514.1248	102.8	2.8	1991.5
1202011759	13-Dinitrobenzene-d4	172 > 142	11.97	3401.026		3401.026	3401.026	bb		501.1363	100.2	0.2	997.9
1202011759	13-Dinitrobenzene	168 > 138	12.10	3761.426	3401.026	3761.426	552.984	bb		487.9499	93.6	-6.4	493.9
1202011759	Tetryl	241 > 181	12.58	2673.724	3401.026	2673.724	393.076	bb		402.4896	80.5	-19.5	250.7
1202011759	Nitrobenzene	123 > 46	13.54	2700.938	3401.026	2700.938	397.077	bb		474.2996	94.9	-5.1	234.0
1202011759	4-Amino-26-dinitrotoluene	197 > 167	15.49	5375.316	19328.314	5375.316	139.053	MM	20-Jan-10 08:54:33	526.7316	105.3	5.3	167.3
1202011759	2-Amino-46-dinitrotoluene	197 > 180	16.37	7546.298	19328.314	7546.298	195.214	bb		501.1080	100.2	0.2	650.7
1202011759	246-Trinitrotoluene	227 > 210	15.31	6888.666	19328.314	6888.666	178.201	bb		506.0747	101.2	1.2	412.8
1202011759	34-dinitrotoluene	182 > 152	14.30	8941.428	19328.314	8941.428	231.304	bb		248.1156	99.2	-0.8	362.3
1202011759	26-dinitrotoluene	182 > 152	17.44	20297.994	19328.314	20297.994	525.084	MM	20-Jan-10 08:58:32	480.7251	96.1	-3.9	755.8
1202011759	24-dinitrotoluene	182 > 152	18.10	4862.932	19328.314	4862.932	125.798	MM	20-Jan-10 09:01:02	497.5575	99.5	-0.5	168.6
1202011759	26-dinitrotoluene-d3	185 > 155	17.29	19328.314		19328.314	18328.314	bb		526.8129	105.4	5.4	2171.6
1202011759	2-Nitrotoluene	137 > 46	20.86	2637.931	19328.314	2637.931	68.240	bb		454.7018	90.9	-9.1	287.5
1202011759	4-Nitrotoluene	137 > 46	22.24	1319.151	19328.314	1319.151	34.125	bb		476.6098	95.3	-4.7	150.5
1202011759	3-Nitrotoluene	137 > 46	23.88	1528.444	19328.314	1528.444	39.539	bb		463.6366	92.7	-7.3	162.0
1202011759	PETN	361 > 62	24.40	35340.539	19328.314	35340.539	914.217	bb		547.1034	109.4	9.4	6400.5

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7734(244209001MSD)

Lab Code: GEL

GEL Job No (SDG) 10-1160

Matrix: SOIL

GEL Sample ID: 1202011759

Sample Amount 2

Moisture: 6.5

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940104

Concentrated Extract Volume (mL) 10

Date Extracted: 14-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01190022.wiff

Date Analyzed: 19-JAN-10 19:44

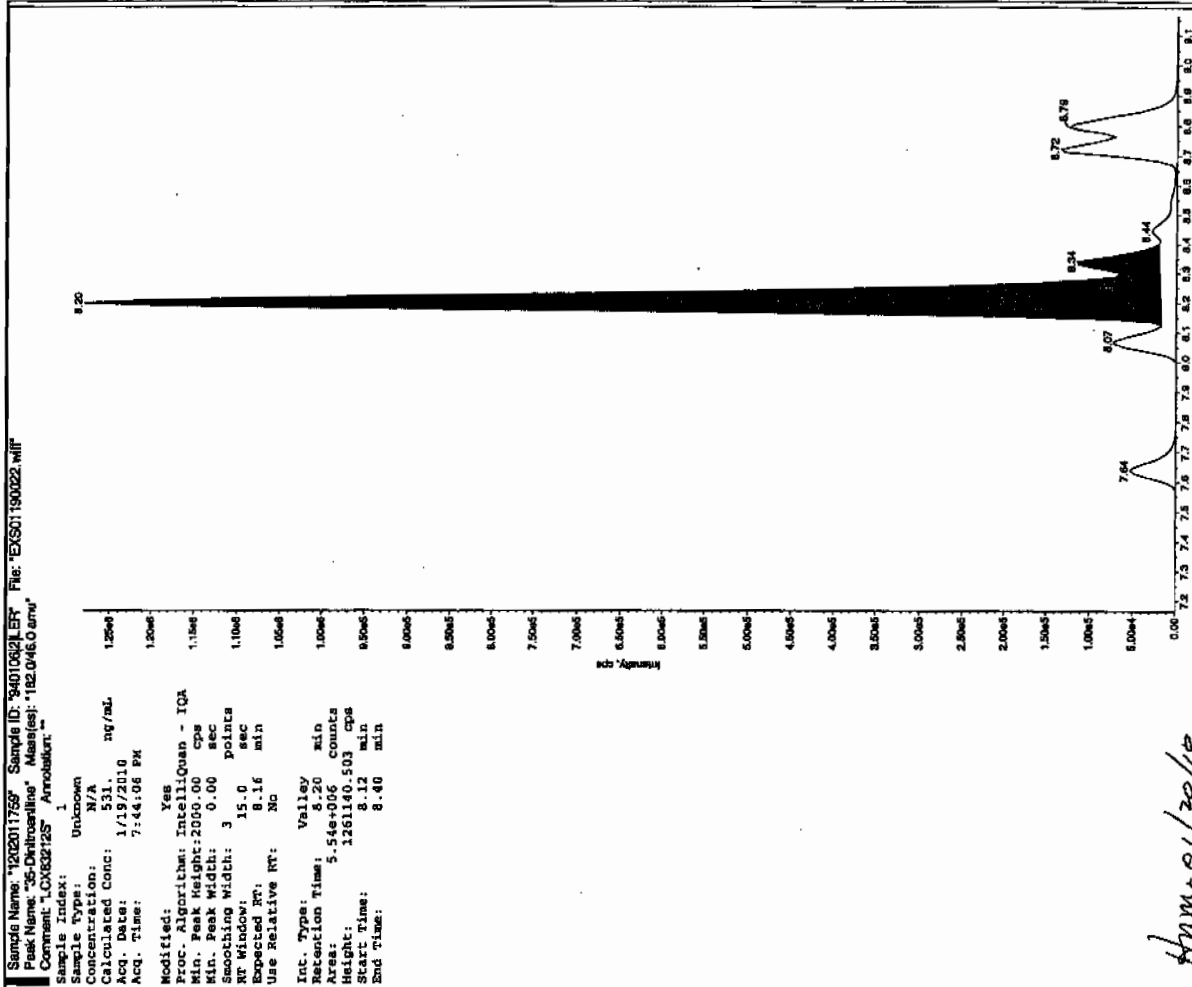
Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	7070	
59229-75-3	2,6-Diamino-4-nitrotoluene	5210	
618-87-1	3,5-Dinitroaniline	5310	
6629-29-4	2,4-Diamino-6-nitrotoluene	4730	
78-30-8	tris(o-cresyl) phosphate	4850	

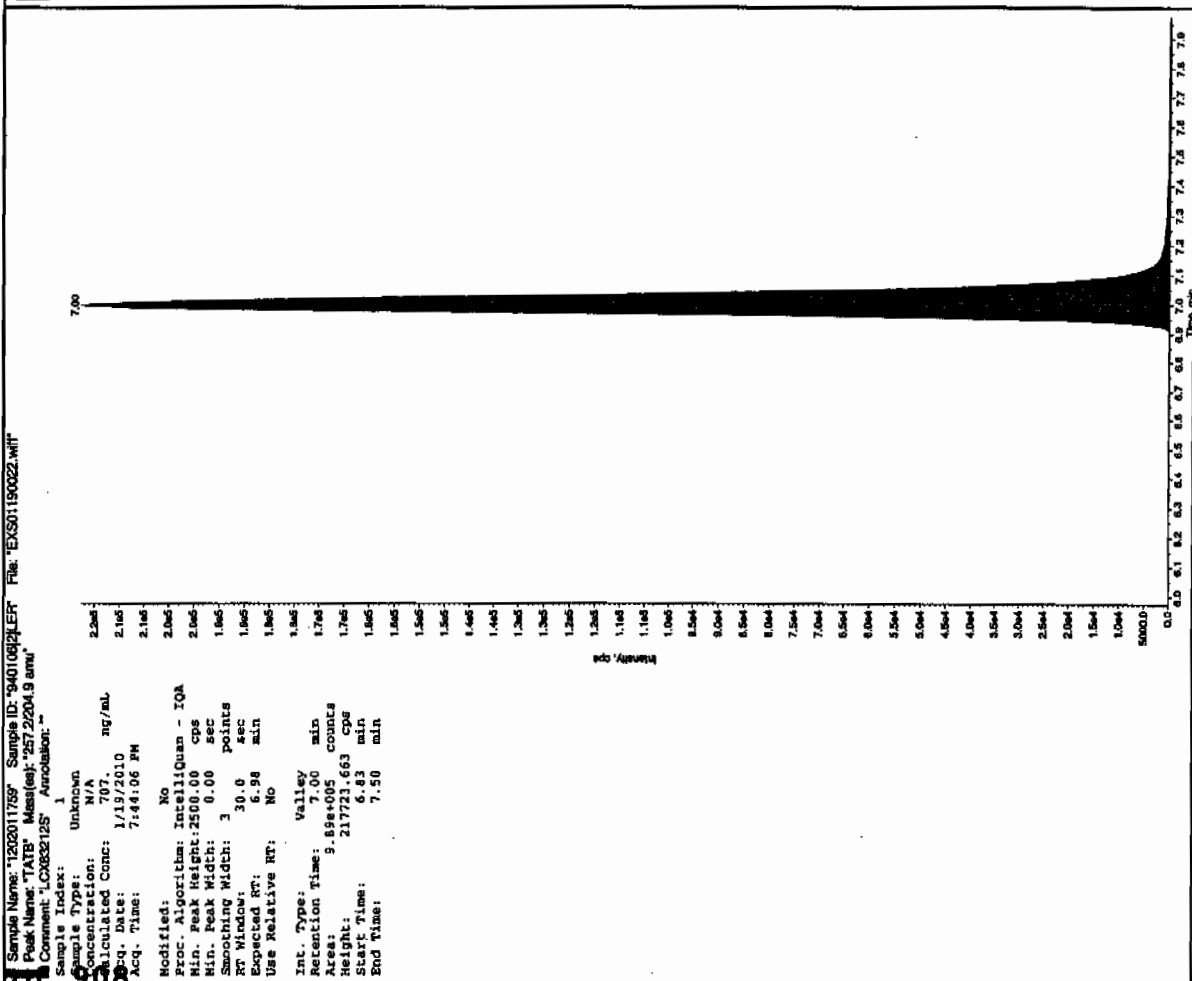
\*Concentration =

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

*Cholesterol*

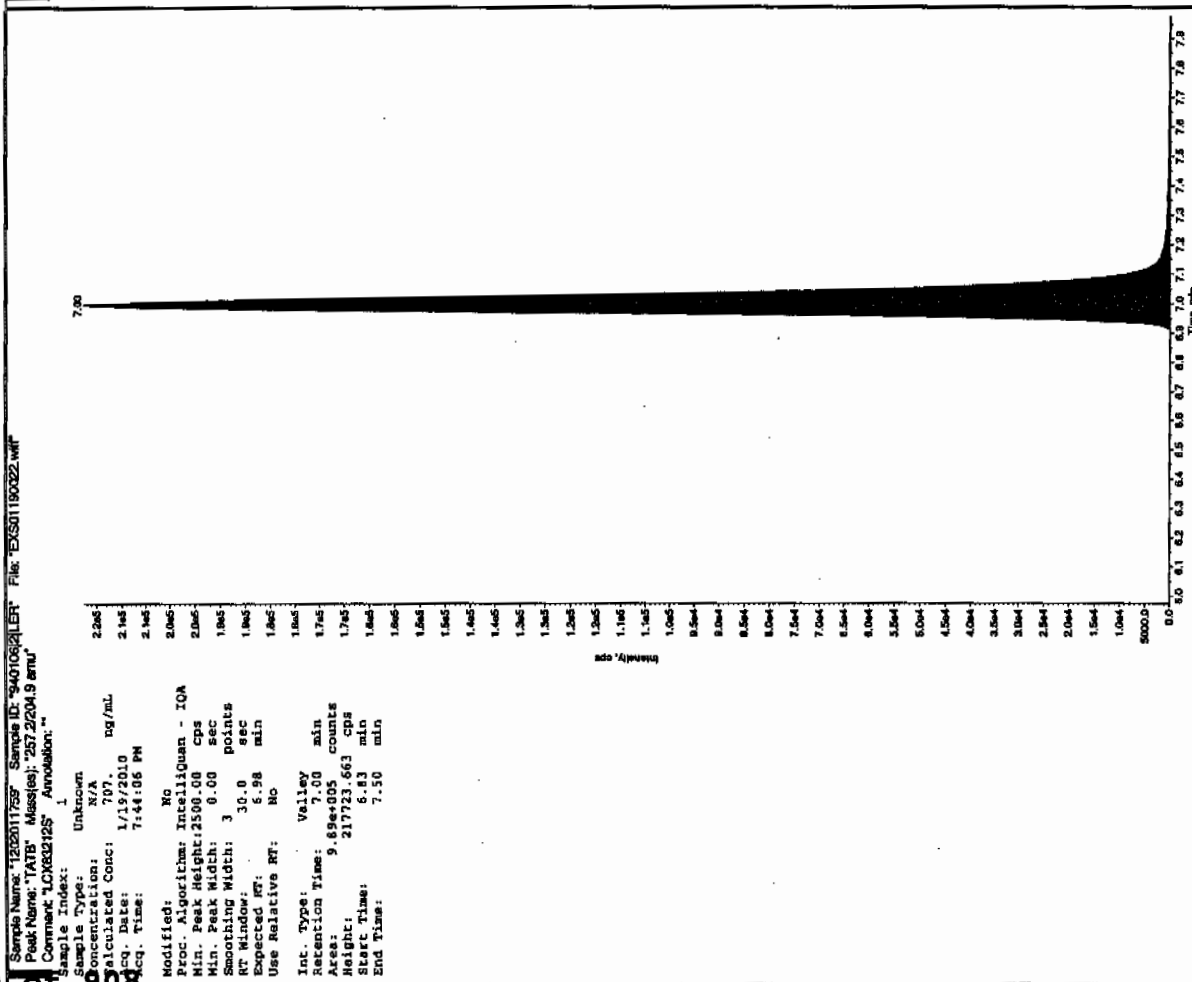
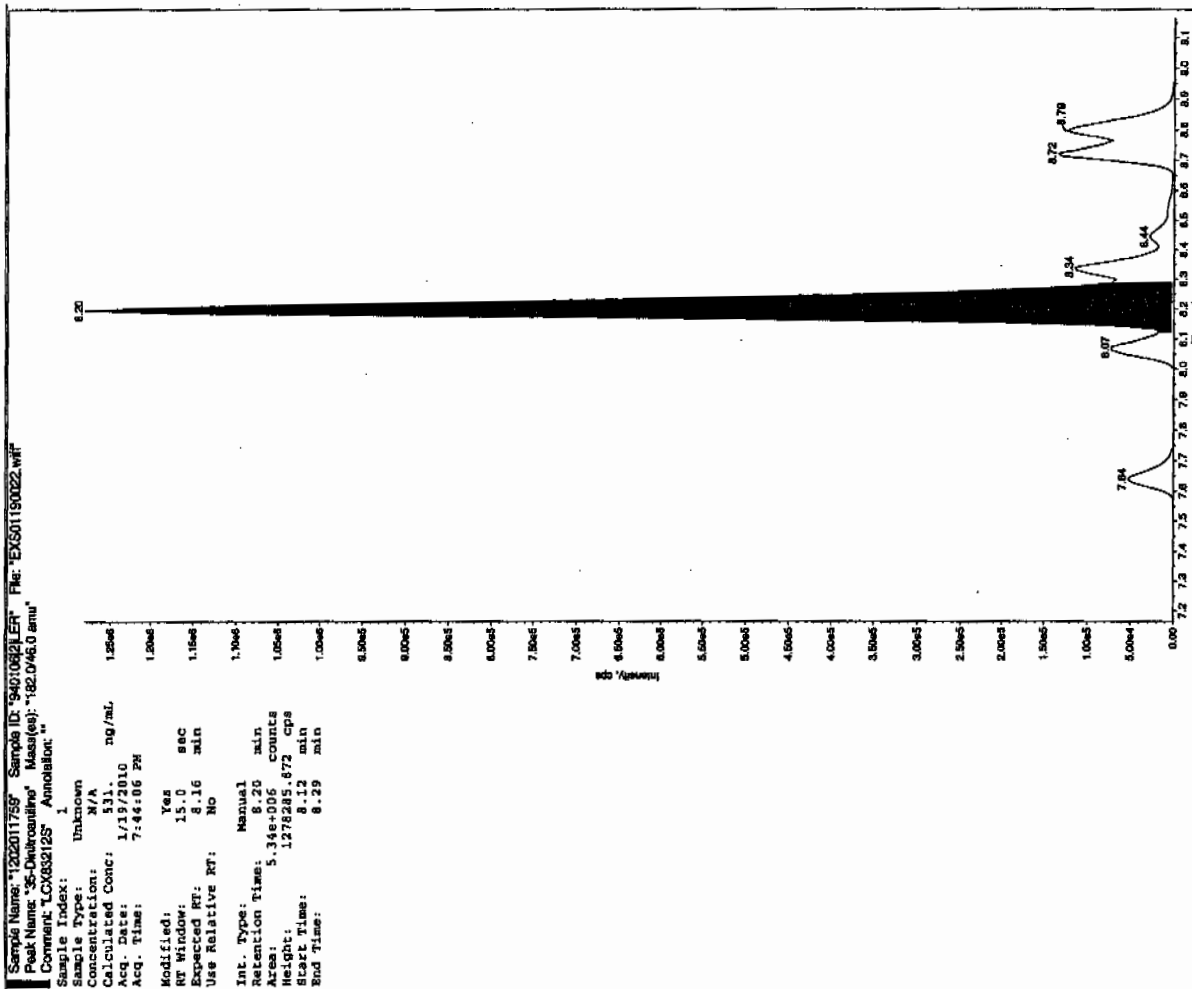


*Ammonia*

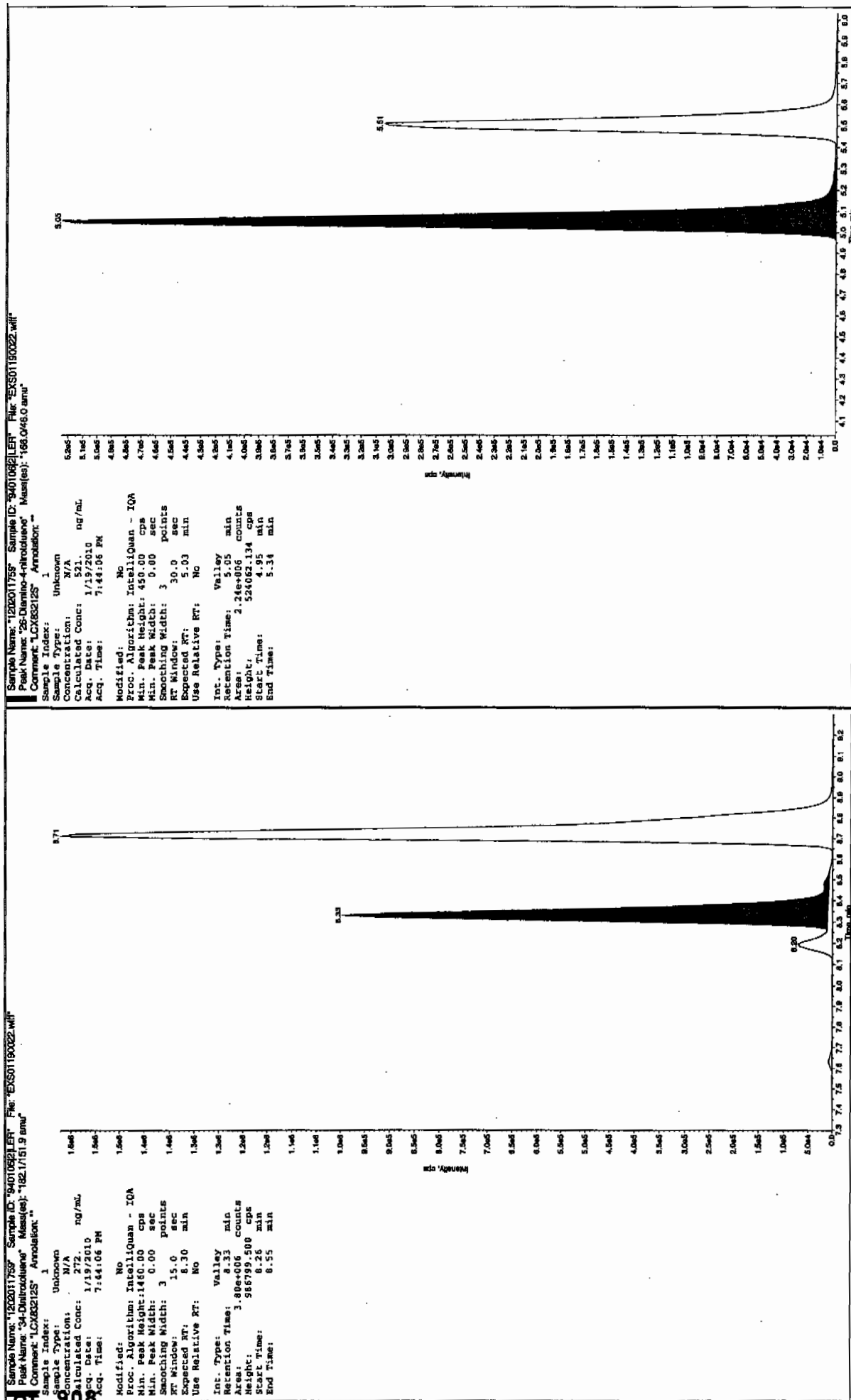


\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

after scan 1120110



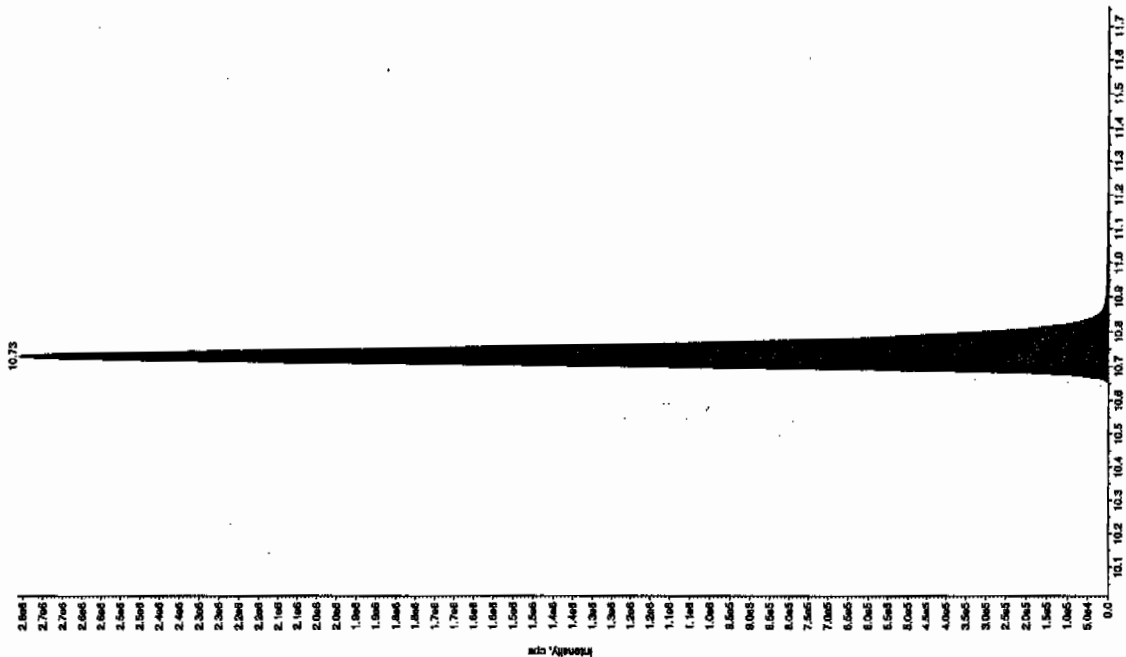
\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



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

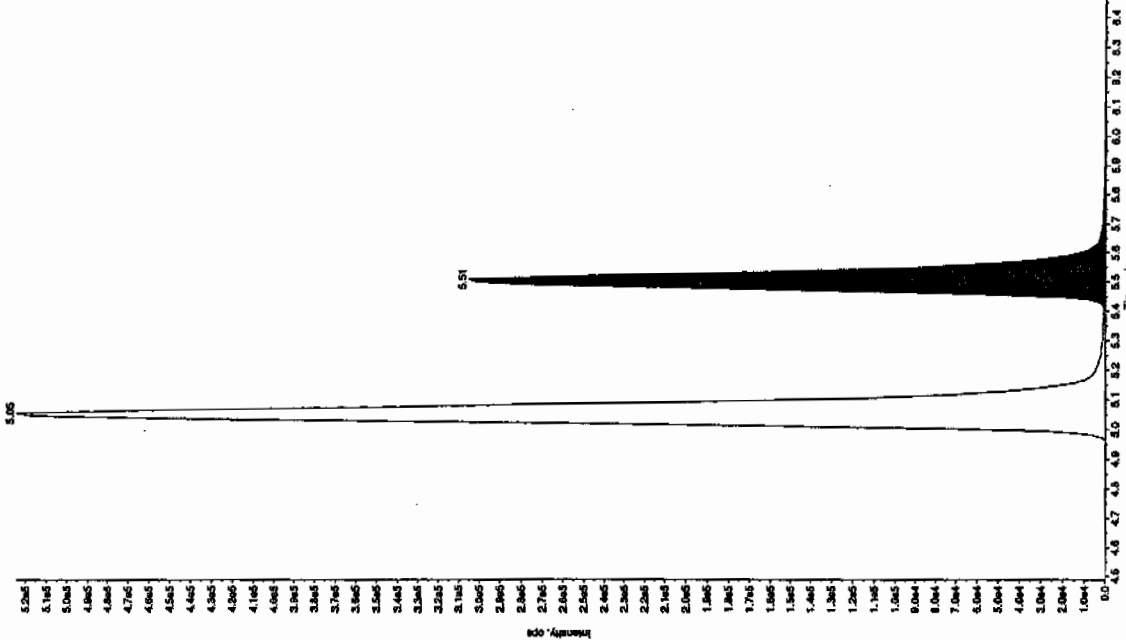
Sample Name: "1202011759" Sample ID: "94010621ER" File: "EXS01190022.wif"  
 Peak Name: "24-Diethyl-6-nitrofluorene" Mass(es): "359.191.0 amu"  
 Comment: "LCX632125" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 485. ng/mL  
 Acq. Date: 1/19/2010  
 Acq. Time: 7:44:06 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 1.084 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 10.8 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.7 min  
 Area: 1.12e+007 counts  
 Height: 2761437.256 cps  
 Start Time: 10.6 min  
 End Time: 11.0 min



Sample Name: "1202011759" Sample ID: "94010621ER" File: "EXS01190022.wif"  
 Peak Name: "24-Diethyl-6-nitrofluorene" Mass(es): "166.046.0 amu"  
 Comment: "LCX632125" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 473. ng/mL  
 Acq. Date: 1/19/2010  
 Acq. Time: 7:44:06 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 350.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 5.49 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.51 min  
 Area: 1.35e+006 counts  
 Height: 305159.912 cps  
 Start Time: 5.41 min  
 End Time: 5.61 min



\*GEL 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: 940104 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)
1202011756 MB	14-JAN-2010 17:26:43	2	10	5
1202011757 LCS	14-JAN-2010 17:26:43	2	10	5
244209001	14-JAN-2010 17:26:43	2	10	5
1202011758 MS (244209001)	14-JAN-2010 17:26:43	2	10	5
1202011759 MSD (244209001)	14-JAN-2010 17:26:43	2	10	5
244209002	14-JAN-2010 17:26:43	2	10	5
244209003	14-JAN-2010 17:26:43	2	10	5
244209004	14-JAN-2010 17:26:43	2	10	5
244209005	14-JAN-2010 17:26:43	2	10	5
244209006	14-JAN-2010 17:26:43	2	10	5
244211001	14-JAN-2010 17:26:43	2	10	5
244211002	14-JAN-2010 17:26:43	2	10	5
244211003	14-JAN-2010 17:26:43	2	10	5
244211004	14-JAN-2010 17:26:43	2	10	5
244211005	14-JAN-2010 17:26:43	2	10	5
244211006	14-JAN-2010 17:26:43	2	10	5

Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:
LCS	1202011757	8321 Explosives LCS	DX091230-03	.1	mL	Final Solvent: ACN
LCS	1202011757	8321 LANL Explosives Mix 10mg/L	UX091229-02.2	1	mL	
MS	1202011758	8321 Explosives LCS	DX091230-03	.1	mL	
MS	1202011758	8321 LANL Explosives Mix 10mg/L	UX091229-02.2	1	mL	
MSD	1202011759	8321 Explosives LCS	DX091230-03	.1	mL	
MSD	1202011759	8321 LANL Explosives Mix 10mg/L	UX091229-02.2	1	mL	
SURR	AI	3,4-Dinitrotoluene (8330 Sur.) 100ppm	DX100114-02	.05	mL	

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS #1

Date: 01/18/10  
 Extr. Injection Volume: 50uL  
 Sequence Number: 011810expA  
 Initial Calibration Date: 01/18/10  
 Method: SW846 8321A-Modified  
 Int. Std.: UXX091230-01.2  
 Mobile Phase Lot#: 1255172, 1236350  
 Standard-Samp Reagent Lot#: 1253092, 1246195  
 Reviewed BY: *WJ/KC*  
 Date: 01/20/10  
 SOP: GL-OA-E-056 Rev.12  
 Alt Check Std. ID: WXX100118-07

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
EXP0118001a	XIBLK01	MAP	1/18/10 14:03			1		USE	B
EXP0118002a	XIBLK01	MAP	1/18/10 14:33			1		USE	B
EXP0118003a	WXXICAL-01	MAP	1/18/10 15:02			1		USE	I
EXP0118004a	WXXICAL-02	MAP	1/18/10 15:32			1		USE	I
EXP0118005a	WXXICAL-03	MAP	1/18/10 16:01			1		USE	I
EXP0118006a	WXXICAL-04	MAP	1/18/10 16:31			1		USE	I
EXP0118007a	WXXICAL-05	MAP	1/18/10 17:00			1		USE	I
EXP0118008a	WXXICAL-06	MAP	1/18/10 17:29			1		USE	I
EXP0118009a	XIBLK02	MAP	1/18/10 17:59			1		USE	B
EXP0118010a	WXXICV	MAP	1/18/10 18:28			1		USE	C
EXP0118011a	XIBLK03	MAP	1/18/10 18:58			1		USE	B
EXP0118012a	WXXCRI	MAP	1/18/10 19:27			1		USE	C
EXP0118013a	1202003473	MAP	1/18/10 19:57	936340	10-1020	2	LANL	USE	S
EXP0118014a	1202003474	MAP	1/18/10 20:26	936340	10-1020	2	LANL	USE	S
EXP0118015a	243401006	MAP	1/18/10 20:56	936340	10-1020	2	LANL	USE	S
EXP0118016a	1202003475	MAP	1/18/10 21:25	936340	10-1020	2	LANL	USE	S
EXP0118017a	1202003476	MAP	1/18/10 21:55	936340	10-1020	2	LANL	USE	S
EXP0118018a	243401010	MAP	1/18/10 22:24	936340	10-1020	2	LANL	USE	S
EXP0118019a	WXXCCV	MAP	1/18/10 22:54			1		USE	C
EXP0118020a	XIBLK04	MAP	1/18/10 23:23			1		USE	B
EXP0118021a	WXXCRI	MAP	1/18/10 23:53			1		USE	C
EXP0118022a	1202006240	MAP	1/19/10 0:22	937564	10-1100	2	LANL	USE	S
EXP0118023a	1202006241	MAP	1/19/10 0:52	937564	10-1100	2	LANL	USE	S
EXP0118024a	243624001	MAP	1/19/10 1:21	937564	10-1100	2	LANL	USE	S
EXP0118025a	1202006242	MAP	1/19/10 1:51	937564	10-1100	2	LANL	USE	S
EXP0118026a	1202006243	MAP	1/19/10 2:20	937564	10-1100	2	LANL	USE	S
EXP0118027a	243624002	MAP	1/19/10 2:50	937564	10-1100	2	LANL	USE	S
EXP0118028a	243624003	MAP	1/19/10 3:19	937564	10-1100	2	LANL	USE	S
EXP0118029a	243624004	MAP	1/19/10 3:48	937564	10-1100	2	LANL	USE	S

EXP0118030a	243624005	MAP	1/19/10 4:18	937564	10-1100	2	LANL	USE	S
EXP0118031a	243624006	MAP	1/19/10 4:47	937564	10-1100	2	LANL	USE	S
EXP0118032a	WXXCCV	MAP	1/19/10 5:17			1		USE	C
EXP0118033a	XIBLK05	MAP	1/19/10 5:47			1		USE	B
EXP0118034a	WXXCRI	MAP	1/19/10 6:16			1		USE	C
EXP0118035a	243624007	MAP	1/19/10 6:46	937564	10-1100	2	LANL	USE	S
EXP0118036a	243624008	MAP	1/19/10 7:15	937564	10-1100	2	LANL	USE	S
EXP0118037a	243624009	MAP	1/19/10 7:45	937564	10-1100	2	LANL	USE	S
EXP0118038a	243624010	MAP	1/19/10 8:14	937564	10-1100	2	LANL	USE	S
EXP0118039a	243624011	MAP	1/19/10 8:44	937564	10-1100	2	LANL	USE	S
EXP0118040a	WXXCCV	MAP	1/19/10 9:13			1		USE	C
EXP0118041a	XIBLK06	MAP	1/19/10 9:43			1		USE	B
EXP0118042a	WXXCRI	MAP	1/19/10 10:12			1		USE	C
EXP0118043a	1202006244	MAP	1/19/10 10:42	937567	10-1102	2	LANL	USE	S
EXP0118044a	1202006245	MAP	1/19/10 11:12	937567	10-1102	2	LANL	USE	S
EXP0118045a	243630001	MAP	1/19/10 11:41	937567	10-1102	2	LANL	USE	S
EXP0118046a	1202006246	MAP	1/19/10 12:11	937567	10-1102	2	LANL	USE	S
EXP0118047a	1202006247	MAP	1/19/10 12:40	937567	10-1102	2	LANL	USE-RA	S
EXP0118048a	243630002	MAP	1/19/10 13:10	937567	10-1102	2	LANL	USE	S
EXP0118049a	243630003	MAP	1/19/10 13:39	937567	10-1102	2	LANL	USE-RA	S
EXP0118050a	243630004	MAP	1/19/10 14:08	937567	10-1102	2	LANL	USE	S
EXP0118051a	243630005	MAP	1/19/10 14:38	937567	10-1102	2	LANL	USE	S
EXP0118052a	243630006	MAP	1/19/10 15:08	937567	10-1102	2	LANL	USE	S
EXP0118053a	WXXCCV	MAP	1/19/10 15:37			1		USE	C
EXP0118054a	XIBLK07	MAP	1/19/10 16:07			1		USE	B
EXP0118055a	WXXCRI	MAP	1/19/10 16:36			1		USE	C
EXP0118056a	243630007	MAP	1/19/10 17:06	937567	10-1102	2	LANL	USE	S
EXP0118057a	243630008	MAP	1/19/10 17:35	937567	10-1102	2	LANL	USE	S
EXP0118058a	243630009	MAP	1/19/10 18:05	937567	10-1102	2	LANL	USE	S
EXP0118059a	243630010	MAP	1/19/10 18:34	937567	10-1102	2	LANL	USE	S
EXP0118060a	243630011	MAP	1/19/10 19:04	937567	10-1102	2	LANL	USE	S
EXP0118061a	1202006247	MAP	1/19/10 19:33	937567	10-1102	2	LANL	USE	S
EXP0118062a	243630003	MAP	1/19/10 20:03	937567	10-1102	2	LANL	USE	S
EXP0118063a	WXXCCV	MAP	1/19/10 20:32			1		USE	C
EXP0118064a	XIBLK08	MAP	1/19/10 21:02			1		USE	B
EXP0118065a	WXXCRI	MAP	1/19/10 21:31			1		USE	C
EXP0118066a	1202011756	MAP	1/19/10 22:01	940106	Various	2	LANL	USE	S

EXP0118067a	1202011757	MAP	1/19/10 22:30	940106	Various	2	LANL	USE	S
EXP0118068a	244209001	MAP	1/19/10 23:00	940106	10-1160	2	LANL	USE	S
EXP0118069a	1202011758	MAP	1/19/10 23:29	940106	10-1160	2	LANL	USE	S
EXP0118070a	1202011759	MAP	1/19/10 23:59	940106	10-1160	2	LANL	USE	S
EXP0118071a	244209002	MAP	1/20/10 0:28	940106	10-1160	2	LANL	USE	S
EXP0118072a	244209003	MAP	1/20/10 0:58	940106	10-1160	2	LANL	USE	S
EXP0118073a	244209004	MAP	1/20/10 1:27	940106	10-1160	2	LANL	USE	S
EXP0118074a	244209005	MAP	1/20/10 1:57	940106	10-1160	2	LANL	USE	S
EXP0118075a	244209006	MAP	1/20/10 2:26	940106	10-1160	2	LANL	USE	S
EXP0118076a	WXXCCV	MAP	1/20/10 2:56			1		USE	C
EXP0118077a	XIBLK09	MAP	1/20/10 3:25			1		USE	B
EXP0118078a	WXXCRI	MAP	1/20/10 3:55			1		USE	C
EXP0118079a	244211001	MAP	1/20/10 4:24	940106	10-1158	2	LANL	USE	S
EXP0118080a	244211002	MAP	1/20/10 4:54	940106	10-1158	2	LANL	USE	S
EXP0118081a	244211003	MAP	1/20/10 5:23	940106	10-1158	2	LANL	USE	S
EXP0118082a	244211004	MAP	1/20/10 5:53	940106	10-1158	2	LANL	USE	S
EXP0118083a	244211005	MAP	1/20/10 6:22	940106	10-1158	2	LANL	USE	S
EXP0118084a	244211006	MAP	1/20/10 6:52	940106	10-1158	2	LANL	USE	S
EXP0118085a	WXXCCV	MAP	1/20/10 7:21			1		USE	C
EXP0118086a	XIBLK10	MAP	1/20/10 7:51			1		USE	B
EXP0118087a	WXXCRI	MAP	1/20/10 8:20			1		USE	C

GEL ORGANIC RUN LOG INSTRUMENT ID: LCMSMS4

Date: 01/19/10  
 Extr. Injection Volume: 10uL  
 Sequence Number: 011910exs  
 Initial Calibration Date: 011910 Standard-Samp Reagent Lot#: 1246195, 1253092

Method: 8321A-Modified  
 Int. Std.: N/A

Reviewed By: *hmk*  
 Date: 01/20/10  
 SOP: GL-OA-E-056 Rev.12  
 Alt Check Std. ID: WXX100119-26

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC Flag
EXS01190001.wiff	XIBLK01	LER	1/19/2010 14:14			1		USE	B
EXS01190002.wiff	XIBLK01	LER	1/19/2010 14:30			1		USE	B
EXS01190003.wiff	WXXICAL-19	LER	1/19/2010 14:45			1		USE	I
EXS01190004.wiff	WXXICAL-20	LER	1/19/2010 15:01			1		USE	I
EXS01190005.wiff	WXXICAL-21	LER	1/19/2010 15:17			1		USE	I
EXS01190006.wiff	WXXICAL-22	LER	1/19/2010 15:32			1		USE	I
EXS01190007.wiff	WXXICAL-23	LER	1/19/2010 15:48			1		USE	I
EXS01190008.wiff	WXXICAL-24	LER	1/19/2010 16:04			1		USE	I
EXS01190009.wiff	WXXICAL-25	LER	1/19/2010 16:19			1		USE	I
EXS01190010.wiff	XIBLK02	LER	1/19/2010 16:35			1		USE	B
EXS01190011.wiff	WXXICV	LER	1/19/2010 16:51			1		USE	C
EXS01190012.wiff	XIBLK03	LER	1/19/2010 17:07			1		USE	B
EXS01190013.wiff	WXXCRI	LER	1/19/2010 17:22			1		USE	C
EXS01190014.wiff	244221003	LER	1/19/2010 17:38	940094	10-1149	2	LANL	USE	S
EXS01190015.wiff	244223016	LER	1/19/2010 17:54	940099	10-1155	2	LANL	USE	S
EXS01190016.wiff	244223015	LER	1/19/2010 18:09	940099	10-1155	10	LANL	USE	S
EXS01190017.wiff	XIBLK04	LER	1/19/2010 18:25			1		USE	B
EXS01190018.wiff	1202011756	LER	1/19/2010 18:41	940106	VARIOUS	2	LANL	USE	S
EXS01190019.wiff	1202011757	LER	1/19/2010 18:57	940106	VARIOUS	2	LANL	USE	S
EXS01190020.wiff	244209001	LER	1/19/2010 19:12	940106	10-1160	2	LANL	USE	S
EXS01190021.wiff	1202011758	LER	1/19/2010 19:28	940106	10-1160	2	LANL	USE	S
EXS01190022.wiff	1202011759	LER	1/19/2010 19:44	940106	10-1160	2	LANL	USE	S
EXS01190023.wiff	WXXCCV	LER	1/19/2010 19:59			1		USE	C
EXS01190024.wiff	XIBLK05	LER	1/19/2010 20:15			1		USE	B
EXS01190025.wiff	WXXCRI	LER	1/19/2010 20:31			1		USE	C
EXS01190026.wiff	244209002	LER	1/19/2010 20:46	940106	10-1160	2	LANL	USE	S
EXS01190027.wiff	244209003	LER	1/19/2010 21:02	940106	10-1160	2	LANL	USE	S
EXS01190028.wiff	244209004	LER	1/19/2010 21:18	940106	10-1160	2	LANL	USE	S
EXS01190029.wiff	244209005	LER	1/19/2010 21:33	940106	10-1160	2	LANL	USE	S

EXS01190030.wiff	244209006	LER	1/19/2010 21:49	940106	10-1160	2	LANL	USE	S
EXS01190031.wiff	244211001	LER	1/19/2010 22:05	940106	10-1158	2	LANL	USE	S
EXS01190032.wiff	244211002	LER	1/19/2010 22:21	940106	10-1158	2	LANL	USE	S
EXS01190033.wiff	244211003	LER	1/19/2010 22:36	940106	10-1158	2	LANL	USE	S
EXS01190034.wiff	244211004	LER	1/19/2010 22:52	940106	10-1158	2	LANL	USE	S
EXS01190035.wiff	244211005	LER	1/19/2010 23:08	940106	10-1158	2	LANL	USE	S
EXS01190036.wiff	WXXCCV	LER	1/19/2010 23:23			1		USE	C
EXS01190037.wiff	XIBLK06	LER	1/19/2010 23:39			1		USE	B
EXS01190038.wiff	WXXCRI	LER	1/19/2010 23:55			1		USE	C
EXS01190039.wiff	244211006	LER	1/20/2010 0:11	940106	10-1158	2	LANL	USE	S
EXS01190040.wiff	XIBLK07	LER	1/20/2010 0:26			1		USE	B
EXS01190041.wiff	1202011636	LER	1/20/2010 0:42	940049	10-1126	2	LANL	USE	S
EXS01190042.wiff	1202011639	LER	1/20/2010 0:58	940049	10-1126	2	LANL	USE	S
EXS01190043.wiff	244137001	LER	1/20/2010 1:13	940049	10-1126	2	LANL	USE	S
EXS01190044.wiff	244137002	LER	1/20/2010 1:29	940049	10-1126	2	LANL	USE	S
EXS01190045.wiff	244137003	LER	1/20/2010 1:45	940049	10-1126	2	LANL	USE	S
EXS01190046.wiff	244137004	LER	1/20/2010 2:00	940049	10-1126	2	LANL	USE	S
EXS01190047.wiff	244137005	LER	1/20/2010 2:16	940049	10-1126	2	LANL	USE	S
EXS01190048.wiff	WXXCCV	LER	1/20/2010 2:32			1		USE	C
EXS01190049.wiff	XIBLK08	LER	1/20/2010 2:48			1		USE	B
EXS01190050.wiff	WXXCRI	LER	1/20/2010 3:03			1		USE	C
EXS01190051.wiff	244137006	LER	1/20/2010 3:19	940049	10-1126	2	LANL	USE	S
EXS01190052.wiff	1202011637	LER	1/20/2010 3:35	940049	10-1126	2	LANL	USE	S
EXS01190053.wiff	1202011638	LER	1/20/2010 3:50	940049	10-1126	2	LANL	USE	S
EXS01190054.wiff	244137007	LER	1/20/2010 4:06	940049	10-1126	2	LANL	USE	S
EXS01190055.wiff	WXXCCV	LER	1/20/2010 4:22			1		USE	C
EXS01190056.wiff	XIBLK09	LER	1/20/2010 4:38			1		USE	B
EXS01190057.wiff	WXXCRI	LER	1/20/2010 4:53			1		USE	C

# LC/MS/MS EXPLOSIVES ANALYSIS

**LC/MS/MS Case Narrative  
Los Alamos National Laboratory (LANL)  
SDG 10-1160-1**

**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: 940579

Prep Batch Number: 940578

**Sample Analysis**

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

<b>Sample ID</b>	<b>Client ID</b>
244210001	RE12-10-7710
244210002	RE12-10-7715
244210003	RE12-10-7707
244210004	RE12-10-7719
244210005	RE12-10-7717
244210006	RE12-10-7708
244210007	RE12-10-7706
244210008	RE12-10-7714
244210009	RE12-10-7705
244210010	RE12-10-7709
244210011	RE12-10-7711
244210012	RE12-10-7712
244210013	RE12-10-7716

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244210014	RE12-10-7718
244210015	RE12-10-7713
1202012974	Method Blank (MB)
1202012975	Laboratory Control Sample (LCS)
1202012976	244210001(RE12-10-7710) Matrix Spike (MS)
1202012977	244210001(RE12-10-7710) 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 spike recoveries were within the established acceptance limits.

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**QC Sample Designation**

Sample 244210001 (RE12-10-7710) was chosen for matrix spike and matrix spike duplicate analysis.

**Matrix Spike (MS) Recovery Statement**

The MS spike recoveries were within the established acceptance limits.

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

The MSD spike recoveries were within the established acceptance limits.

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

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

**Internal Standard (ISTD) Acceptance**

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

**Technical Information****Holding Time Specifications**

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

**Preparation/Analytical Method Verification**

All procedures were performed as stated in the SOP.

**Sample Dilutions**

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

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

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

**Secondary Analyte Analysis****Calibration Information****Initial Calibration**

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

**Calibration Verification Standard Requirements**

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

**Calibration Blank Requirements**

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

**CRI Requirements**

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

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

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

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

#### **Surrogate Recoveries**

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

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

The LCS spike recoveries were within the established acceptance limits.

#### **QC Sample Designation**

Sample 244210001 (RE12-10-7710) was chosen for matrix spike and matrix spike duplicate analysis.

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

The MS spike recoveries were within the established acceptance limits.

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

The MSD spike recoveries were within the established acceptance limits.

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

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

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

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

### **Technical Information**

#### **Holding Time Specifications**

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

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

All procedures were performed as stated in the SOP.

#### **Sample Dilutions**

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

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

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

### **Miscellaneous Information**

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

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

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#### **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: Herbert N. Marez Date: 01/29/10

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# SAMPLE DATA SUMMARY

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7710

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210001

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125121a

Date Analyzed: 27-JAN-10 22:22

Units: ug/kg

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

\*Concentration =

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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7710

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210001

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01220047.wiff

Date Analyzed: 22-JAN-10 22:28

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: RE12-10-7715

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210002

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125124a

Date Analyzed: 27-JAN-10 23:50

Units: ug/kg

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

\*Concentration =

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



1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7715

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210002

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01220053.wiff

Date Analyzed: 23-JAN-10 00:02

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: RE12-10-7707

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210003

Sample Amount 2

Moisture: \*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125125a

Date Analyzed: 28-JAN-10 00:20

Units: ug/kg

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

\*Concentration =

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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7707

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210003

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01220054.wiff

Date Analyzed: 23-JAN-10 00:18

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: RE12-10-7719

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210004

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125126a

Date Analyzed: 28-JAN-10 00:49

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: RE12-10-7719

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210004

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01220055.wiff

Date Analyzed: 23-JAN-10 00:33

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: RE12-10-7717

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210005

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125127a

Date Analyzed: 28-JAN-10 01:19

Units: ug/kg

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

\*Concentration =

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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7717

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210005

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01220056.wiff

Date Analyzed: 23-JAN-10 00:49

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: RE12-10-7708

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210006

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125128a

Date Analyzed: 28-JAN-10 01:48

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: RE12-10-7708

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210006

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01220057.wiff

Date Analyzed: 23-JAN-10 01:05

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: RE12-10-7706

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210007

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125132a

Date Analyzed: 28-JAN-10 03:46

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: RE12-10-7706

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210007

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01220058.wiff

Date Analyzed: 23-JAN-10 01:20

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: RE12-10-7714

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210008

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125133a

Date Analyzed: 28-JAN-10 04:16

Units: ug/kg

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

\*Concentration =

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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7714

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210008

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01220059.wiff

Date Analyzed: 23-JAN-10 01:36

Units: ug/kg

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

\*Concentration =

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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7705

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210009

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125134a

Date Analyzed: 28-JAN-10 04:45

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: RE12-10-7705

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210009

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01220060.wiff

Date Analyzed: 23-JAN-10 01:52

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: RE12-10-7709

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210010

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125135a

Date Analyzed: 28-JAN-10 05:15

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: RE12-10-7709

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210010

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01220061.wiff

Date Analyzed: 23-JAN-10 02:07

Units: ug/kg

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

\*Concentration =

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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7711

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210011

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125136a

Date Analyzed: 28-JAN-10 05:44

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: RE12-10-7711

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210011

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01220062.wiff

Date Analyzed: 23-JAN-10 02:23

Units: ug/kg

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

\*Concentration =

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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7712

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210012

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125137a

Date Analyzed: 28-JAN-10 06:14

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: RE12-10-7712

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210012

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01220066.wiff

Date Analyzed: 23-JAN-10 03:26

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: RE12-10-7716

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210013

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125138a

Date Analyzed: 28-JAN-10 06:43

Units: ug/kg

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

\*Concentration =

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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7716

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210013

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01220067.wiff

Date Analyzed: 23-JAN-10 03:42

Units: ug/kg

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

\*Concentration =

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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7718

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210014

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125139a

Date Analyzed: 28-JAN-10 07:13

Units: ug/kg

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

\*Concentration =

Instrument Value X Concentrated Extract Volume X Dilution Factor  
Sample Amount



1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7718

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210014

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01220068.wiff

Date Analyzed: 23-JAN-10 03:57

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: RE12-10-7713

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210015

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125140a

Date Analyzed: 28-JAN-10 07:42

Units: ug/kg

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

\*Concentration =

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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7713

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210015

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01220069.wiff

Date Analyzed: 23-JAN-10 04:13

Units: ug/kg

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

\*Concentration =

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

# QUALITY CONTROL SUMMARY

# High Explosives Surrogate Recovery Summary

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1160-1

Lab Code: GEL

HPLC Column: Phenomenex Ultracarb 5u ODS(20)

Lab Sample ID	Client Sample ID	DNT	QC Limits	Flg
244210001	RE12-10-7710	110	73.7 - 133.3	
244210001	RE12-10-7710	122	73.7 - 133.3	
244210002	RE12-10-7715	107	73.7 - 133.3	
244210002	RE12-10-7715	124	73.7 - 133.3	
244210003	RE12-10-7707	103	73.7 - 133.3	
244210003	RE12-10-7707	126	73.7 - 133.3	
244210004	RE12-10-7719	108	73.7 - 133.3	
244210004	RE12-10-7719	121	73.7 - 133.3	
244210005	RE12-10-7717	105	73.7 - 133.3	
244210005	RE12-10-7717	126	73.7 - 133.3	
244210006	RE12-10-7708	104	73.7 - 133.3	
244210006	RE12-10-7708	125	73.7 - 133.3	
244210007	RE12-10-7706	104	73.7 - 133.3	
244210007	RE12-10-7706	120	73.7 - 133.3	
244210008	RE12-10-7714	102	73.7 - 133.3	
244210008	RE12-10-7714	120	73.7 - 133.3	
244210009	RE12-10-7705	105	73.7 - 133.3	
244210009	RE12-10-7705	116	73.7 - 133.3	
244210010	RE12-10-7709	103	73.7 - 133.3	
244210010	RE12-10-7709	121	73.7 - 133.3	
244210011	RE12-10-7711	100	73.7 - 133.3	
244210011	RE12-10-7711	117	73.7 - 133.3	
244210012	RE12-10-7712	106	73.7 - 133.3	
244210012	RE12-10-7712	120	73.7 - 133.3	
244210013	RE12-10-7716	113	73.7 - 133.3	
244210013	RE12-10-7716	118	73.7 - 133.3	
244210014	RE12-10-7718	103	73.7 - 133.3	
244210014	RE12-10-7718	127	73.7 - 133.3	
244210015	RE12-10-7713	102	73.7 - 133.3	
244210015	RE12-10-7713	117	73.7 - 133.3	
1202012974	MB for batch 940578	101	73.7 - 133.3	
1202012974	MB for batch 940578	112	73.7 - 133.3	
1202012975	LCS for batch 940578	128	73.7 - 133.3	
1202012975	LCS for batch 940578	115	73.7 - 133.3	
1202012976	RE12-10-7710(244210001MS)	104	73.7 - 133.3	
1202012976	RE12-10-7710(244210001MS)	112	73.7 - 133.3	
1202012977	RE12-10-7710(244210001MSD)	105	73.7 - 133.3	

High Explosives Surrogate Recovery Summary

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1160-1

Lab Code: GEL

HPLC Column: Phenomenex Ultracarb 5u ODS(20)

Lab Sample ID	Client Sample ID	DNT	QC Limits	Flg
1202012977	RE12-10-7710(244210001MSD)	126	73.7 - 133.3	

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) 10-1160-1

Extract Batch Code: 940578

Date Extracted: 19-JAN-10

GEL LCS ID: 1202012975

GEL LCSDUP ID:

Analysis Date/Time: 27-JAN-10 21:52

DUP Analysis Date/Time:

Reporting Units: ug/kg

QC Type: LCS/LCSD

Compound	Spike Added	LCS Conc	LCS Rec #	LCSD Conc	LCSD Rec #	RPD #	RPD	Recovery Limits
2,4-Dinitrotoluene	5000	4720	94.5					82.7 - 132
2,6-Dinitrotoluene	5000	4740	94.9					86.9 - 122
2-Amino-4,6-dinitrotoluene	5000	5360	107					84.2 - 149
4-Amino-2,6-dinitrotoluene	5000	5420	108					85.6 - 133
HMX	5000	4840	96.8					66.5 - 142
Nitrobenzene	5000	4290	85.8					71.8 - 126
2,4,6-Trinitrotoluene	5000	5520	110					78.3 - 132
1,3,5-Trinitrobenzene	5000	5500	110					62.1 - 124
PETN	5000	5580	112					64.6 - 147
RDX	5000	4840	96.7					78.7 - 144
Tetryl	5000	3610	72.3					31.2 - 119
m-Dinitrobenzene	5000	5060	101					80.9 - 127
m-Nitrotoluene	5000	4520	90.3					71.9 - 126
o-Nitrotoluene	5000	4110	82.2					75 - 123
p-Nitrotoluene	5000	4220	84.4					73.7 - 124

# 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) 10-1160-1

Extract Batch Code: 940578

Date Extracted: 19-JAN-10

GEL LCS ID: 1202012975

GEL LCSDUP ID:

Analysis Date/Time: 22-JAN-10 22:12

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	5030	101					64.8 - 128
2,6-Diamino-4-nitrotoluene	5000	5230	105					69.6 - 133
3,5-Dinitroaniline	5000	5910	118					77.3 - 123
tris(o-cresyl) phosphate	5000	5160	103					84.3 - 120
TATB	5000	5250	105					46.8 - 166

# 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: RE12-10-7710

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Extract Batch Code: 940578

Date Extracted: 19-JAN-10

GEL Spike ID: 1202012976

GEL SpikeDup ID: 1202012977

Analysis Date/Time: 27-JAN-10 22:51

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
1,3,5-Trinitrobenzene	5000	0	5610	112	5850	117	4.33	30	70.7 - 130
2,4,6-Trinitrotoluene	5000	0	5990	120	5660	113	5.64	30	83.4 - 138
2,4-Dinitrotoluene	5000	0	4740	94.7	5160	103	8.56	30	79.1 - 137
2,6-Dinitrotoluene	5000	0	4640	92.8	4890	97.7	5.19	30	85.4 - 125
2-Amino-4,6-dinitrotoluene	5000	0	5450	109	5840	117	6.98	30	77.4 - 154
4-Amino-2,6-dinitrotoluene	5000	0	5220	104	5700	114	8.71	30	77.3 - 140
HMX	5000	0	4970	99.4	5410	108	8.46	30	66.7 - 144
Nitrobenzene	5000	0	4770	95.4	4970	99.3	3.97	30	70.4 - 129
PETN	5000	0	4810	96.2	5590	112	15	30	61.9 - 153
RDX	5000	0	5070	101	5660	113	11.1	30	73 - 140
Tetryl	5000	0	4610	92.2	4600	92	.294	30	46.8 - 138
m-Dinitrobenzene	5000	0	4770	95.5	5130	103	7.31	30	83.5 - 126
m-Nitrotoluene	5000	0	4180	83.6	4720	94.4	12.1	30	68.6 - 135
o-Nitrotoluene	5000	0	4120	82.4	4280	85.7	3.9	30	71.2 - 131
p-Nitrotoluene	5000	0	4070	81.4	4510	90.2	10.1	30	69.3 - 133

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

3  
High Explosives MS/MSD Summary

Lab Name: GEL Laboratories LLC

Client ID: RE12-10-7710

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Extract Batch Code: 940578

Date Extracted: 19-JAN-10

GEL Spike ID: 1202012976

GEL SpikeDup ID: 1202012977

Analysis Date/Time: 22-JAN-10 22:43

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	5110	102	4770	95.4	6.88	30	51.6 - 127
2,6-Diamino-4-nitrotoluene	5000	0	5010	100	5330	107	6.19	30	58.9 - 135
3,5-Dinitroaniline	5000	0	5620	112	6050	121	7.37	30	72.8 - 125
tris(o-cresyl) phosphate	5000	0	4950	99	5030	101	1.6	30	79.1 - 124
TATB	5000	0	5370	107	6890	138	24.8	30	43.9 - 166

#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): 10-1160-1

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 25-JAN-10 11:20

GEL Data File: EXP0125001a

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	557.589
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	586.101
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA.qld, Time: Tue Jan 26 09:24:51 2010

Method: C:\MASSLYNX\New\_Exp.PRO\MethDB\012510expa.mdb, Time: Mon Jan 25 16:14:14 2010

Calibration: Untitled, Time: Tue Jan 26 09:24:51 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125001a

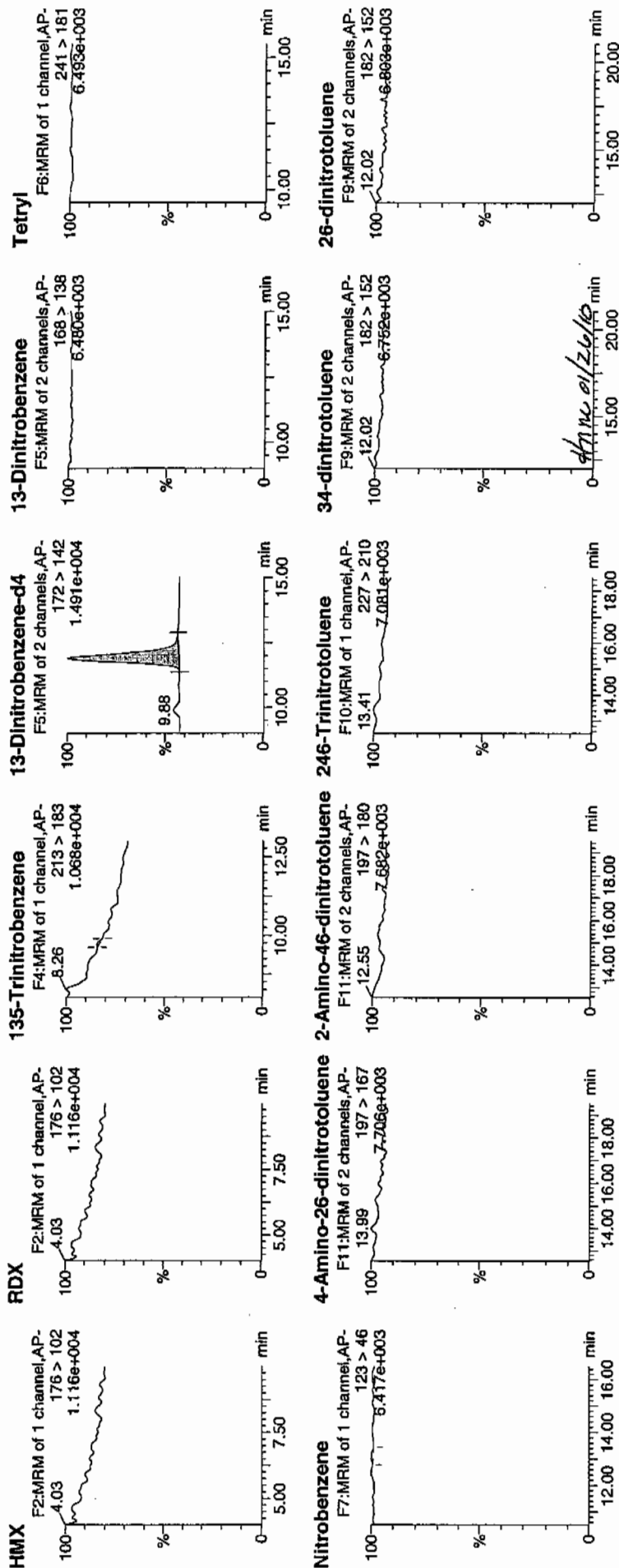
Date: 25-Jan-2010

Time: 11:20:43

ID: XIBLK01

Vial: 1:1,A

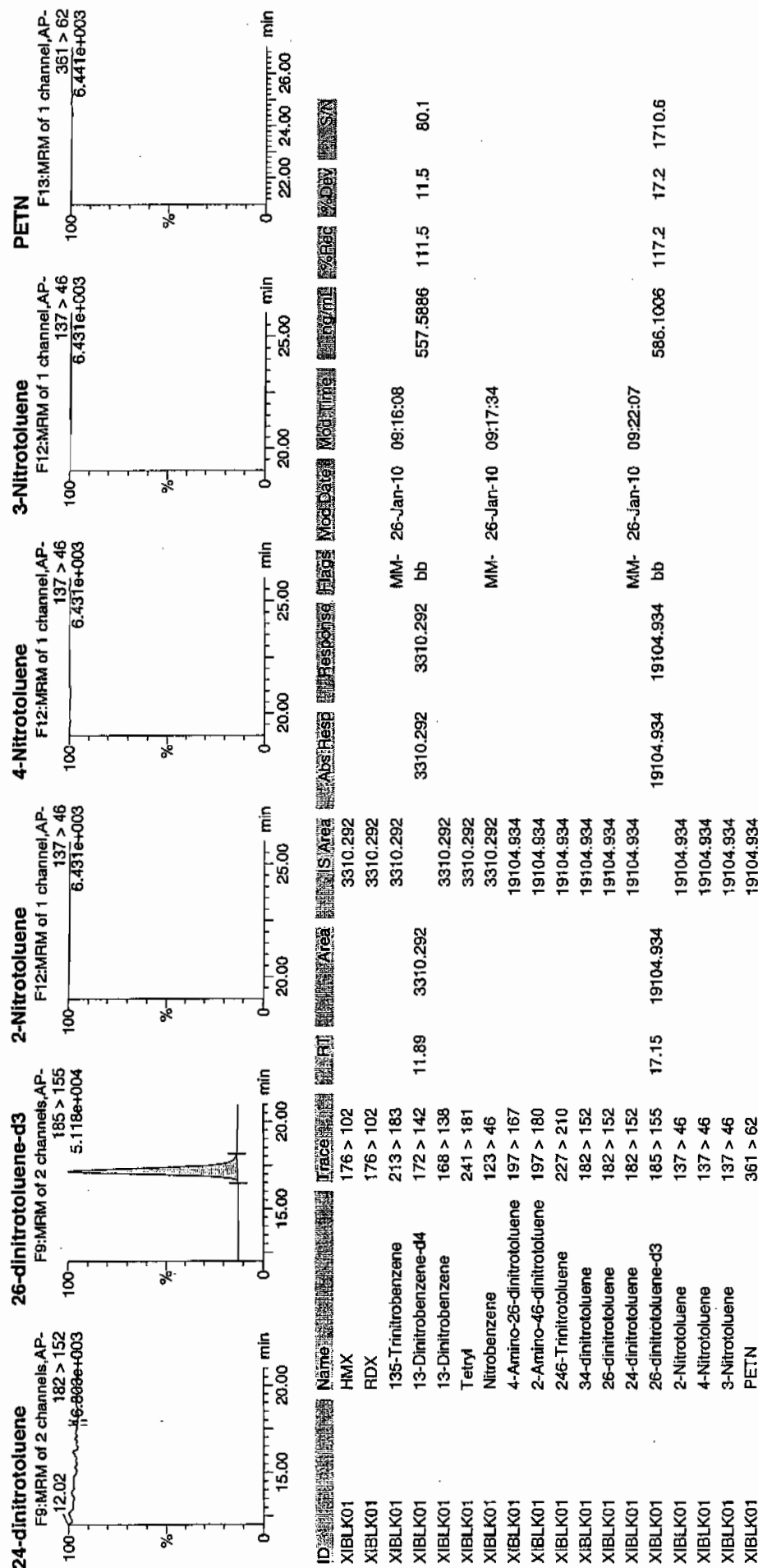
1/26/10  
11:20:43



## Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA.qld, Time: Tue Jan 26 09:24:51 2010



Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1160-1

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 25-JAN-10 11:50

GEL Data File: EXP0125002a

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	490.527
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	511.129
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\012510expA.qld, Time: Tue Jan 26 09:24:51 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125002a

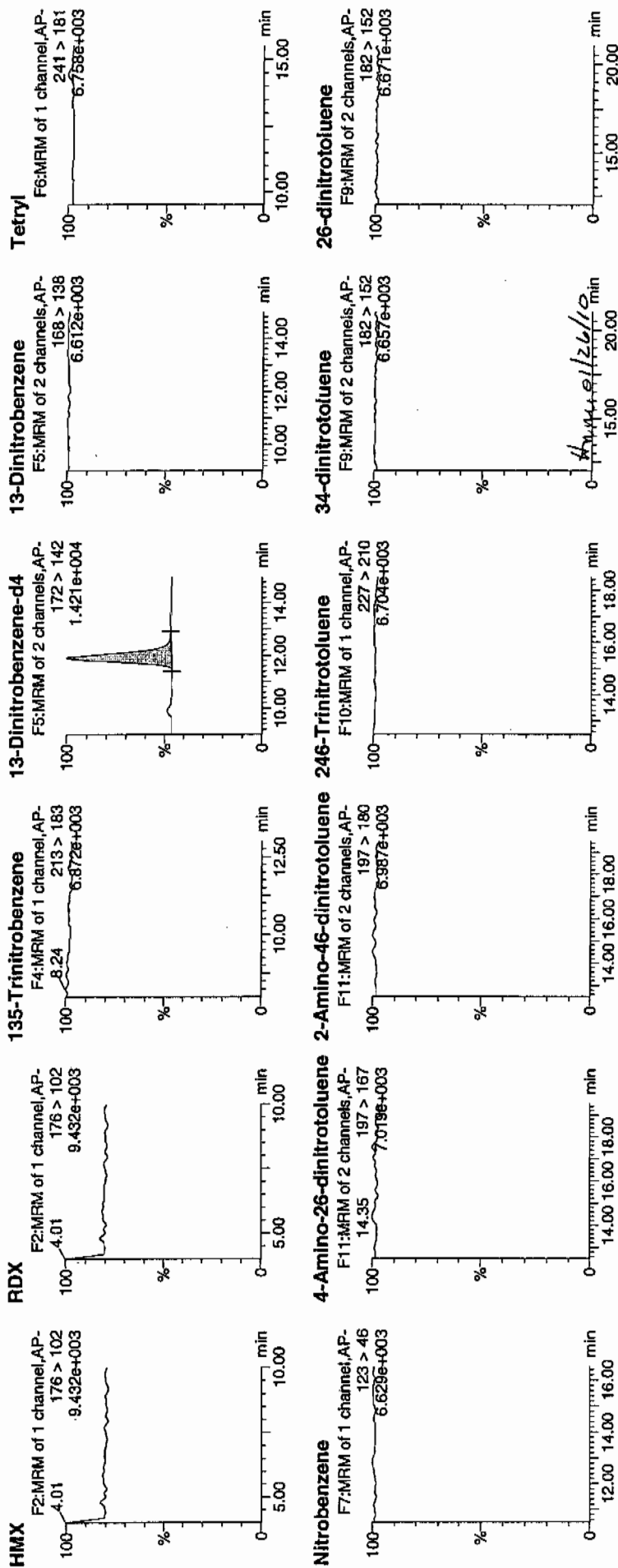
Date: 25-Jan-2010

Time: 11:50:16

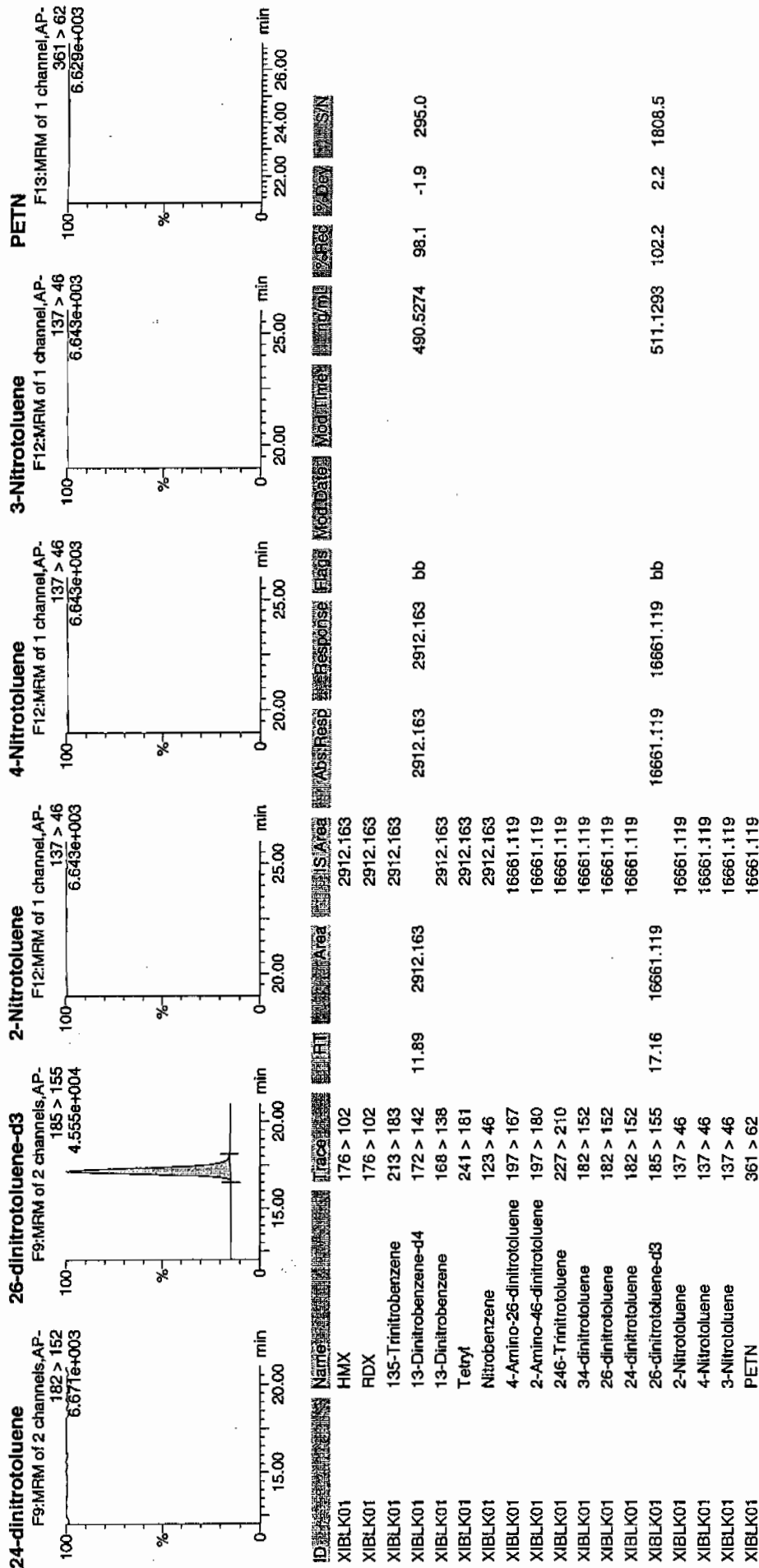
ID: XIBLK01

Vial: 1:1,A

12/13



Dataset: C:\MASSLYNX\New\_Exp\PRO1012510expA.qld, Time: Tue Jan 26 09:24:51 2010





Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1160-1

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 22-JAN-10 10:25

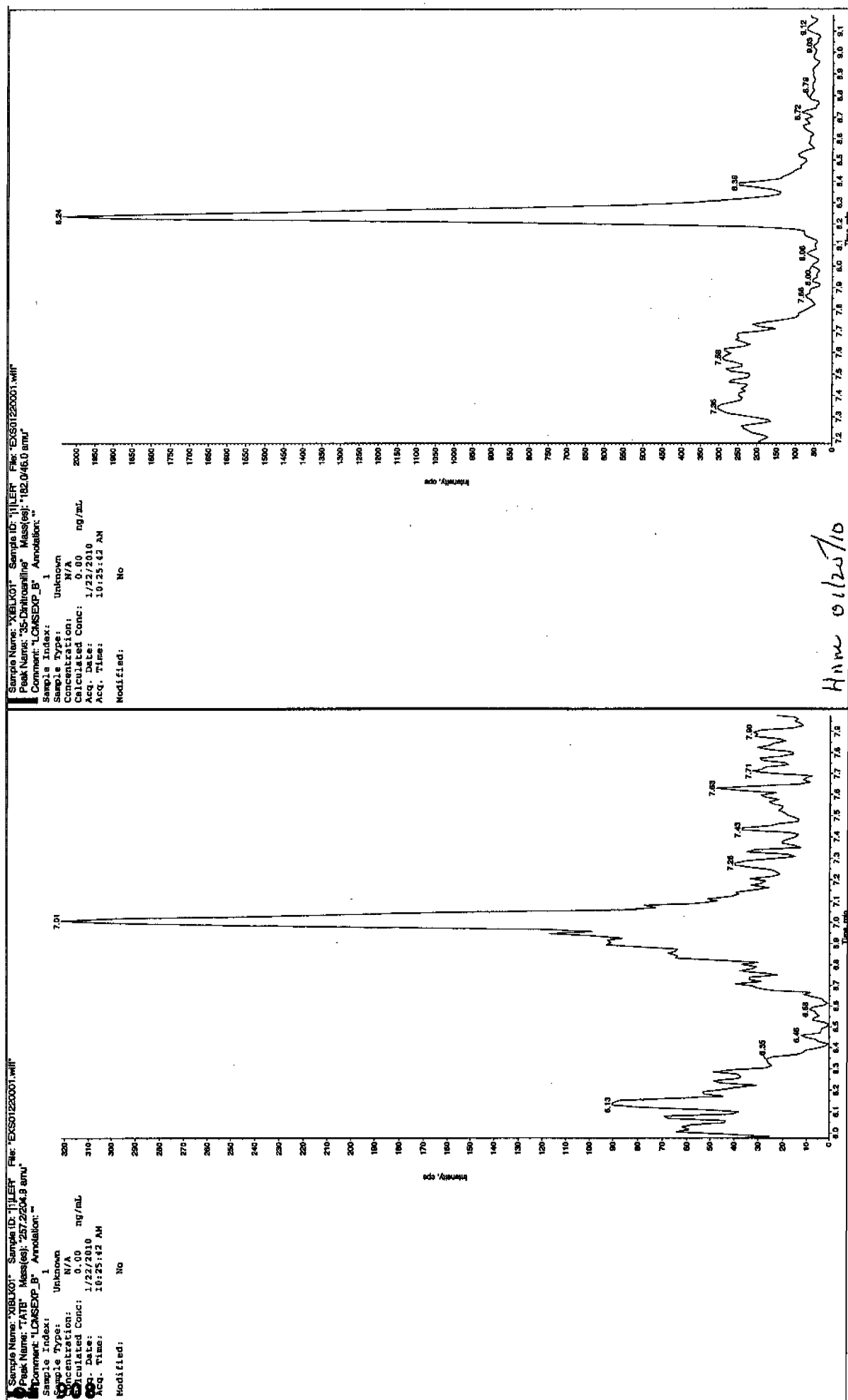
GEL Data File: EXS01220001.wiff

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

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

See 1b510

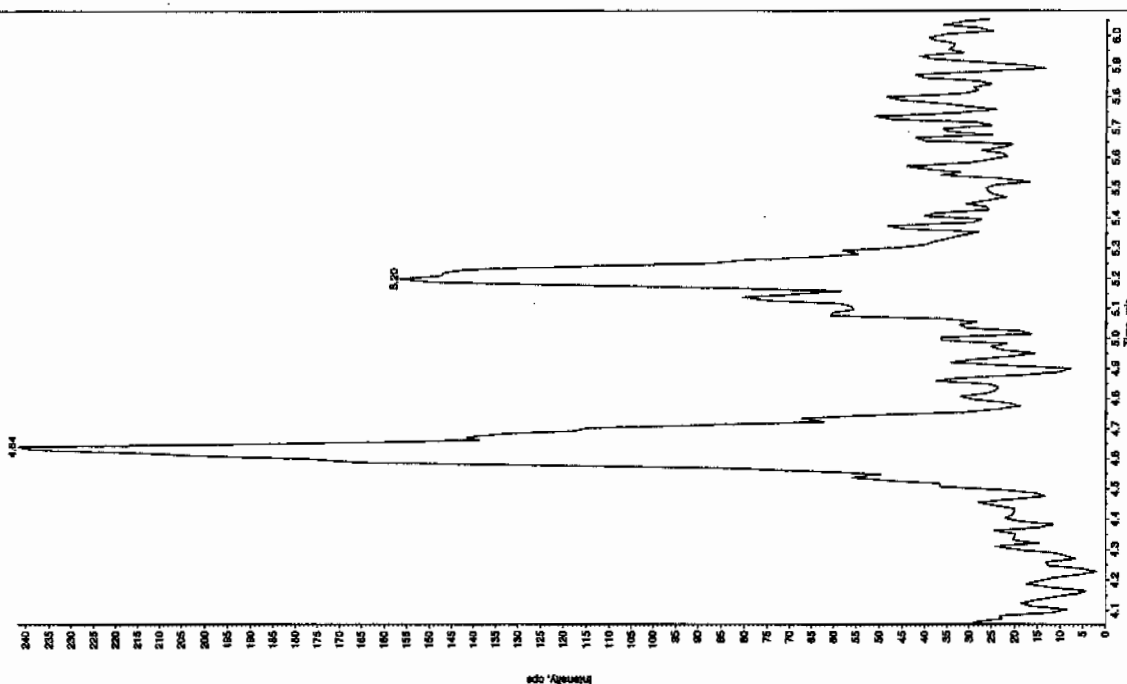


\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

HW 01/22/10

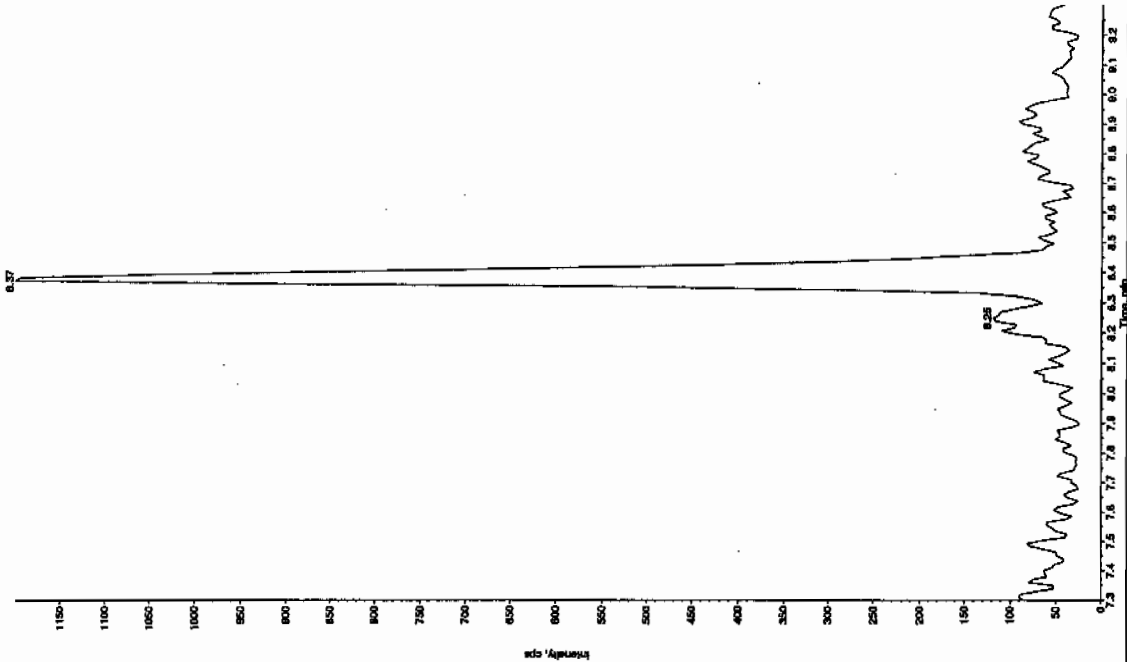
Sample Name: "XBLJ01" Sample ID: "111ER" File: "EX501220001.wif"  
 Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "156.046.9 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/22/2010  
 Acq. Time: 10:25:42 AM  
 Modified: No



Sample Name: "XBLJ01" Sample ID: "111ER" File: "EX501220001.wif"  
 Peak Name: "34-Dinitrotoluene" Mass(es): "182.151.9 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

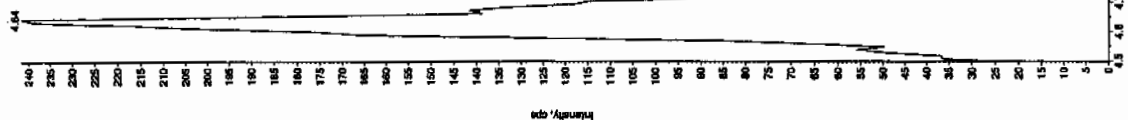
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/22/2010  
 Acq. Time: 10:25:42 AM  
 Modified: No



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

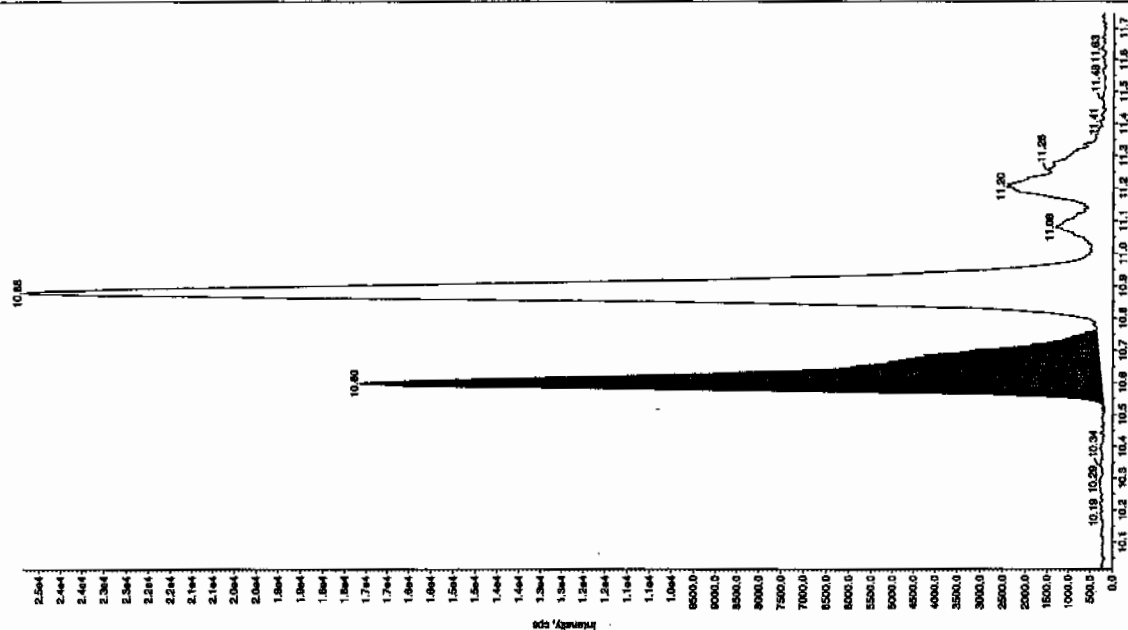
Sample Name: "XBLK01" Sample ID: "1111" File: "EX01220001.wif"  
 Peak Name: "24-Diamino-6-tertiolene" Mass(es): "165.046.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 1/22/2010  
 Acq. Date: 10:23:42 AM  
 Modified: No



Sample Name: "XBLK01" Sample ID: "1111" File: "EX01220001.wif"  
 Peak Name: "Tris(o-cresyl) phosphates" Mass(es): "359.191.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: No Intercept  
 Acq. Date: 1/22/2010  
 Acq. Time: 10:25:42 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 1.00e4 cps  
 Min. Peak Width: 0.00 points  
 Smoothing Width: 3.00 sec  
 RT Window: 30.0 sec  
 Expected RT: 10.7 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.6 min  
 Area: 7.50e-004 counts  
 Height: 16896.985 cps  
 Start Time: 10.5 min  
 End Time: 10.8 min



Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1160-1

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 22-JAN-10 10:41

GEL Data File: EXS01220002.wiff

Instrument ID: LCMSMS

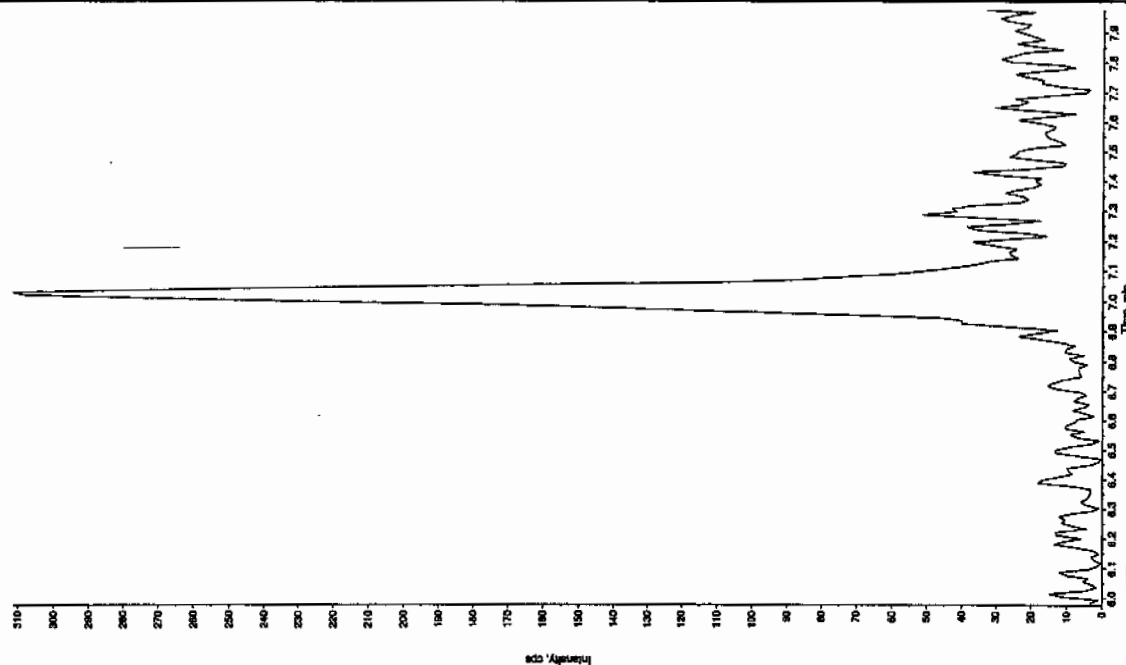
Column: Phenomenex Ultracarb 5u ODS(20)

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

dan 1/25/10

Sample Name: "XIBLK01" Sample ID: "TILER" File: "EX501220002.wif"  
 Peak Name: "TATB" Mass(es): 257.2204.9 amu  
 Comment: "LCMSXP\_B" Annotation: "

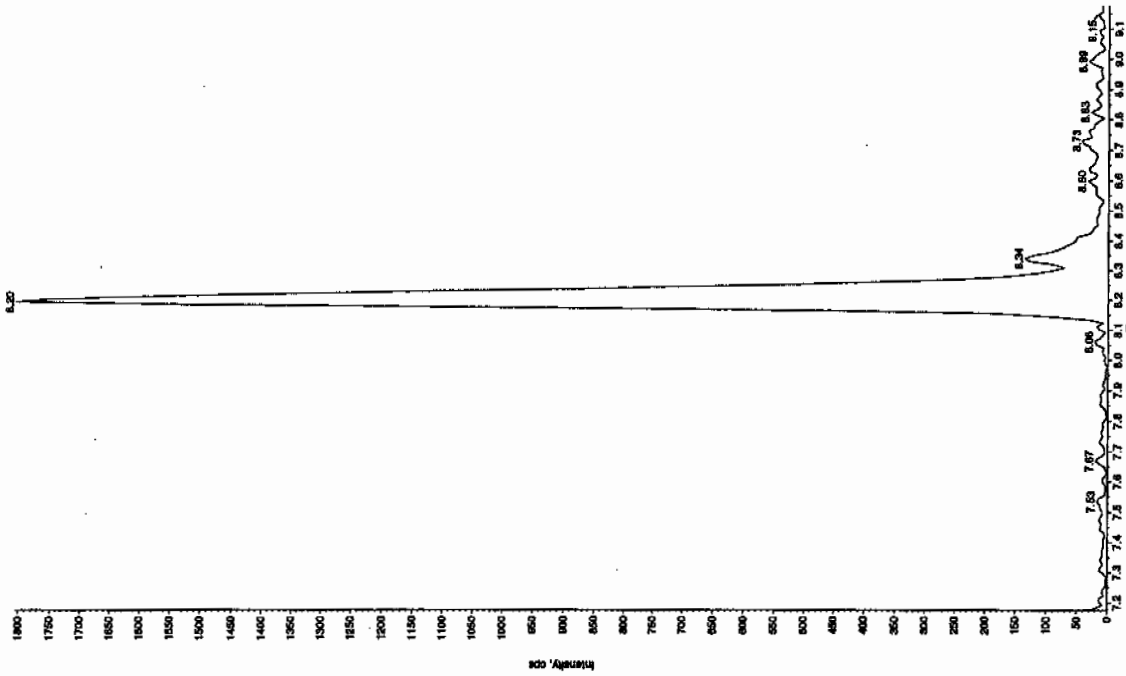
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 1/22/2010  
 Acq. Date: 10:41:30 AM  
 Modified: No



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

Sample Name: "XIBLK01" Sample ID: "TILER" File: "EX501220002.wif"  
 Peak Name: "3S-Dinitroaniline" Mass(es): 182.046.0 amu  
 Comment: "LCMSXP\_B" Annotation: "

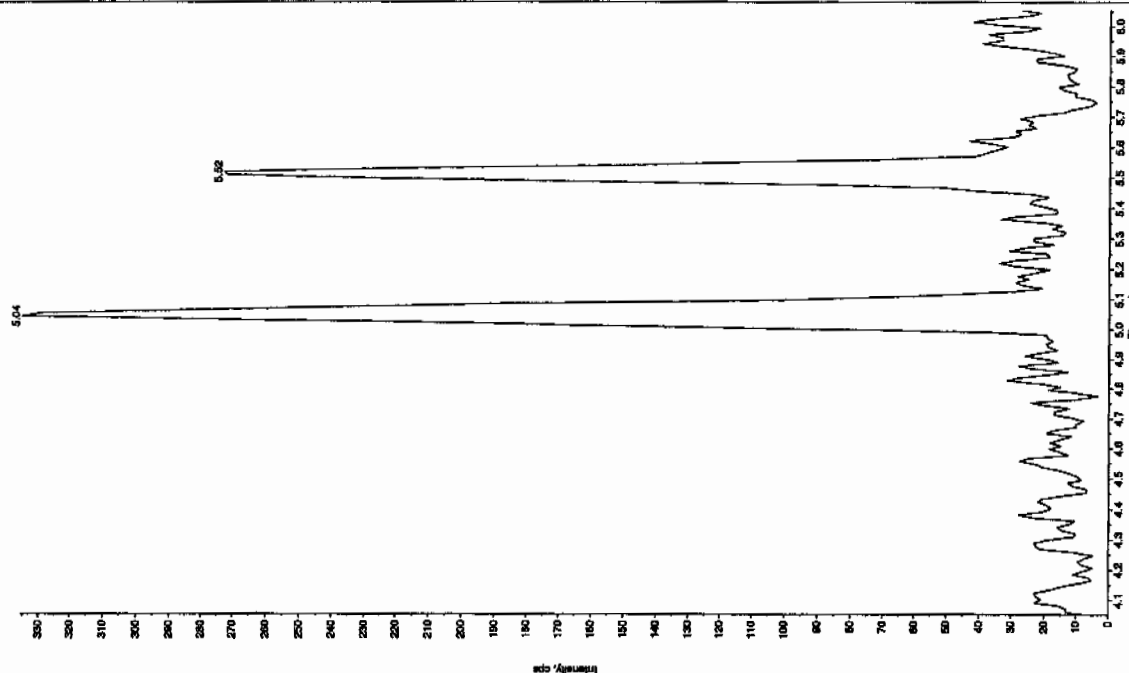
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 1/22/2010  
 Acq. Date: 10:41:30 AM  
 Modified: No



dan 1/25/10

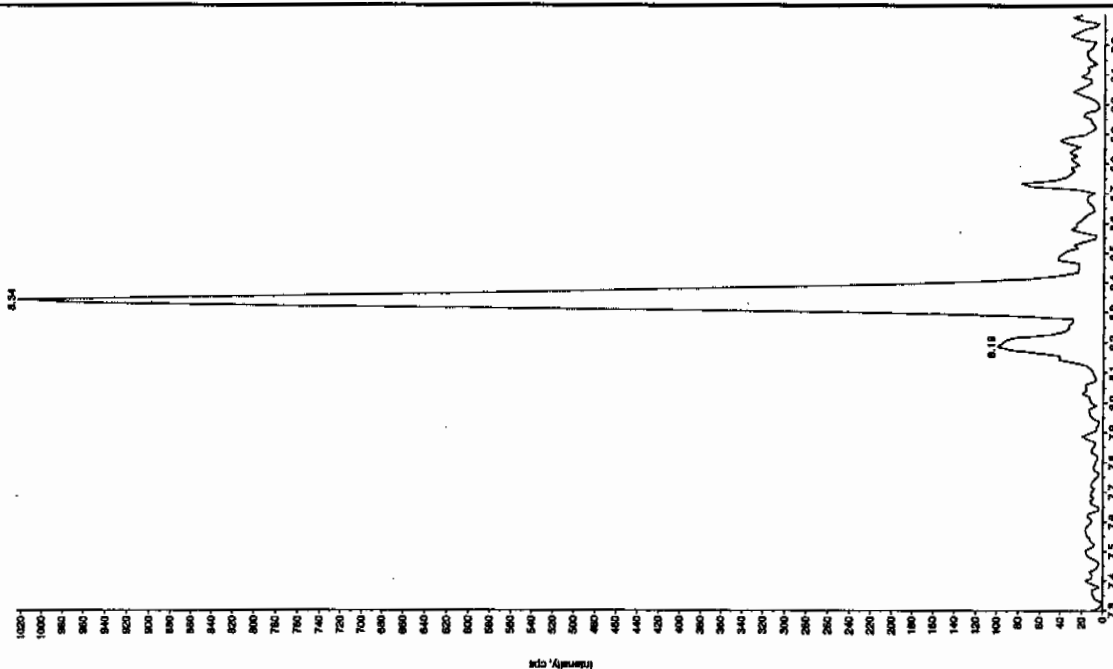
Sample Name: "XIBLX01" Sample ID: "TILER" File: "EXS01220002.wif"  
 Peak Name: "26-Diamino-4-nitrobenzene" Mass(es): "166.046.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Acq. Date: 1/22/2010  
 Acq. Time: 10:41:30 AM  
 Modified: No



Sample Name: "XIBLX01" Sample ID: "TILER" File: "EXS01220002.wif"  
 Peak Name: "34-Dinitrobenzene" Mass(es): "182.0151.9 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

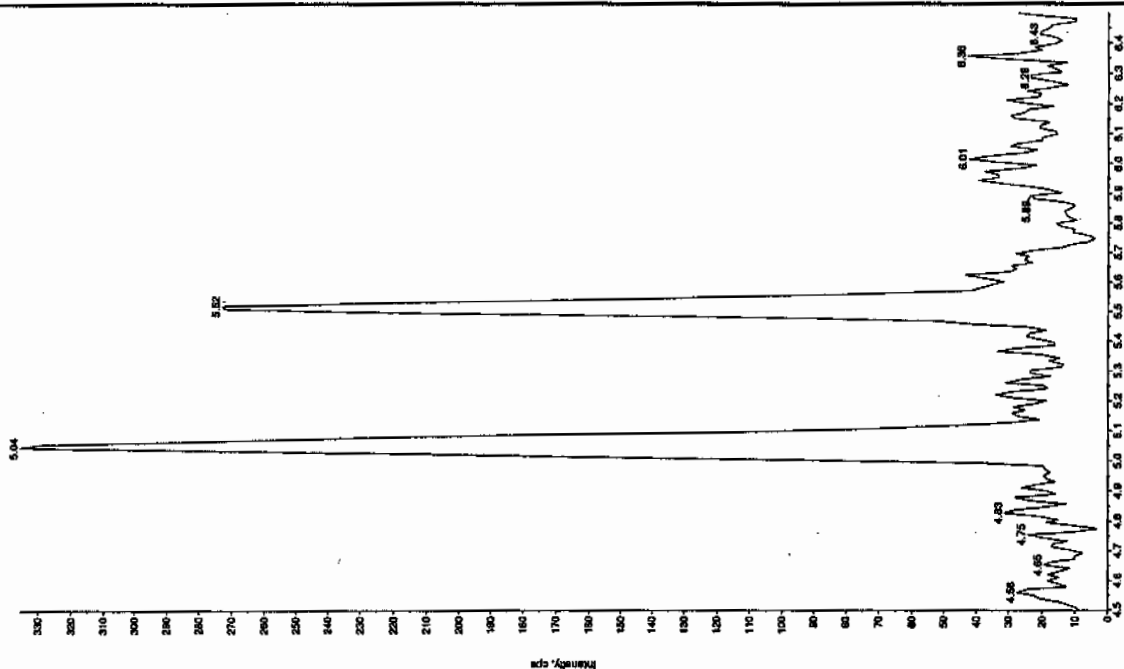
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Acq. Date: 1/22/2010  
 Acq. Time: 10:41:30 AM  
 Modified: No



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

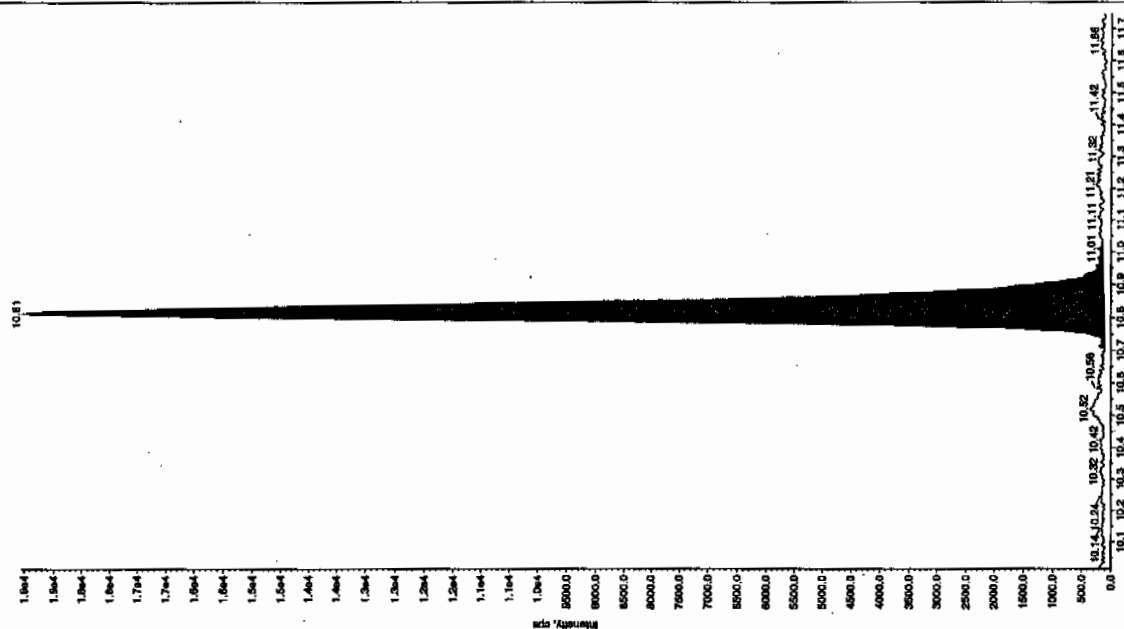
Sample Name: "XBLK01" Sample ID: "11111" File: "EX01220002.wif"  
 Peak Name: "24-Diamino-6-nitrofluorene" Mass(es): "166.046.0 amu"  
 Comment: "LCMS EXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ug/mL  
 Acq. Date: 1/22/2010  
 Acq. Time: 10:41:30 AM  
 Modified: No



Sample Name: "XBLK01" Sample ID: "11111" File: "EX01220002.wif"  
 Peak Name: "Nello-oxeyl phosphates" Mass(es): "368.161.0 amu"  
 Comment: "LCMS EXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: No Intercept  
 Acq. Date: 1/22/2010  
 Acq. Time: 10:41:30 AM  
 Modified: No  
 Proc. Algorithm: InCellQuan - IOA  
 Min. Peak Height: 1.00e4 cps  
 Min. Peak Width: 3.00 sec  
 Scan Rate: 30.0 points/sec  
 RT Window: 10.7 min  
 Expected RT: No  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.8 min  
 Area: 7.58e+004 counts  
 Height: 18923.517 cps  
 Start Time: 10.7 min  
 End Time: 11.0 min





4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1160-1

Lab Code: GEL

Lab Sample ID: XIBLK02

Analysis Date: 25-JAN-10 15:16

GEL Data File: EXP0125009a

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	502.66
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	519.883
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Printed: Tue Jan 26 11:27:45 2010, Page 17 of 73

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA.qld, Time: Tue Jan 26 09:24:51 2010

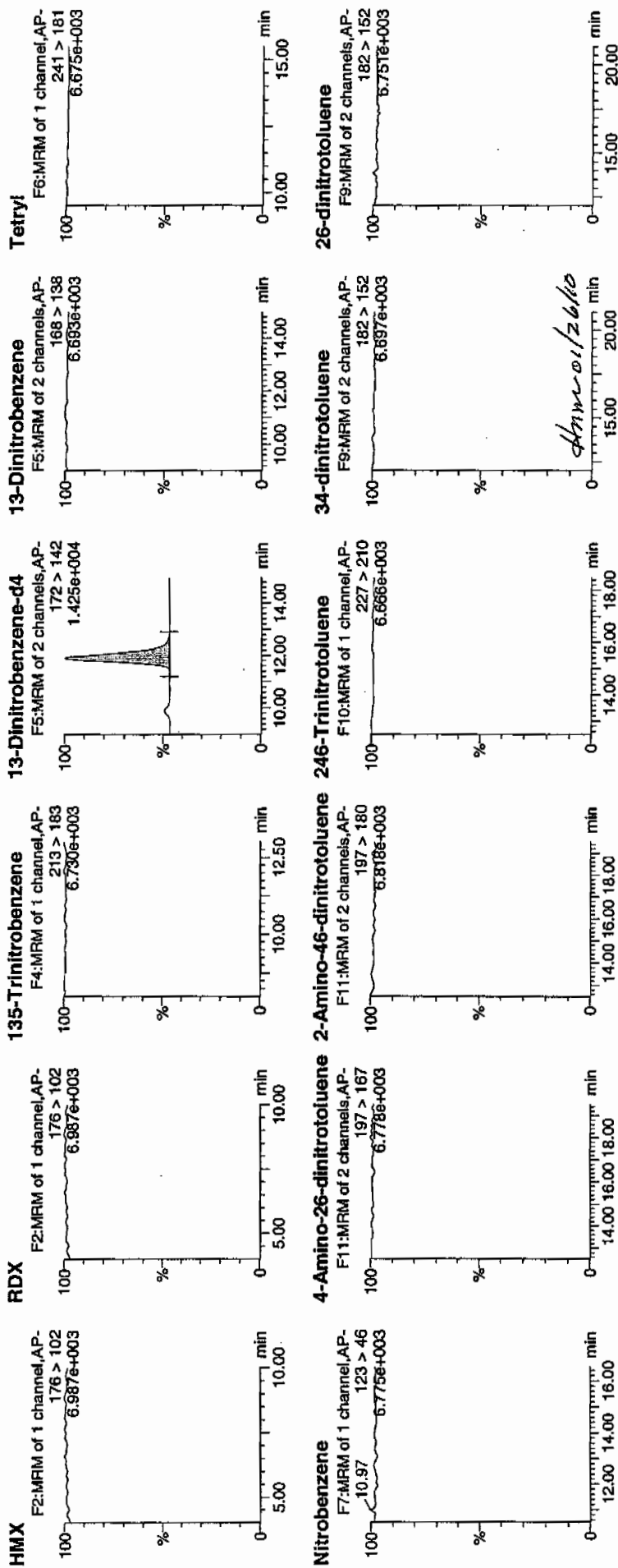
Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125009a

Date: 25-Jan-2010

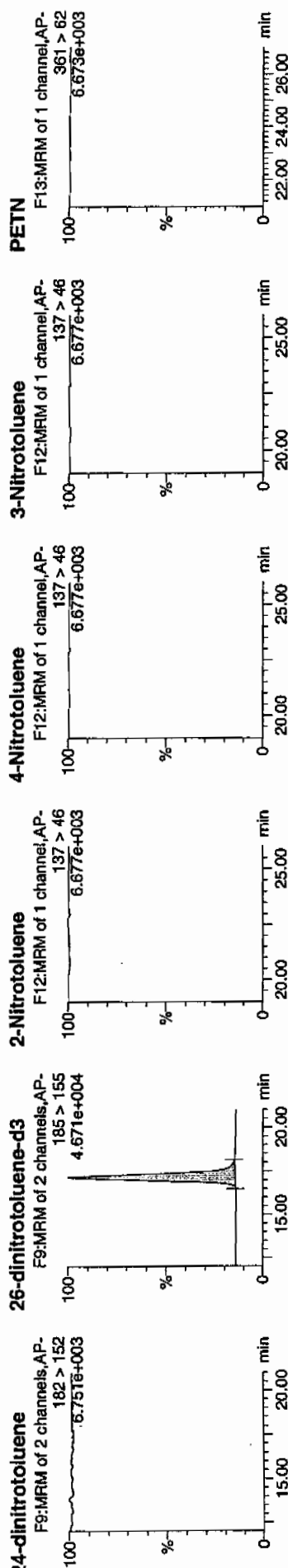
Time: 15:16:35

ID: XIBLK02

Vial: 1:1,A



Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA.qld, Time: Tue Jan 26 09:24:51 2010

[illegible]

**4A**  
**Explosives Continuing Calibration Blank**

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1160-1

Lab Code: GEL

Lab Sample ID: XIBLK03

Analysis Date: 25-JAN-10 16:15

GEL Data File: EXP0125011a

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	508.032
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	524.258
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\012510expA.qld, Time: Tue Jan 26 09:24:51 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125011a

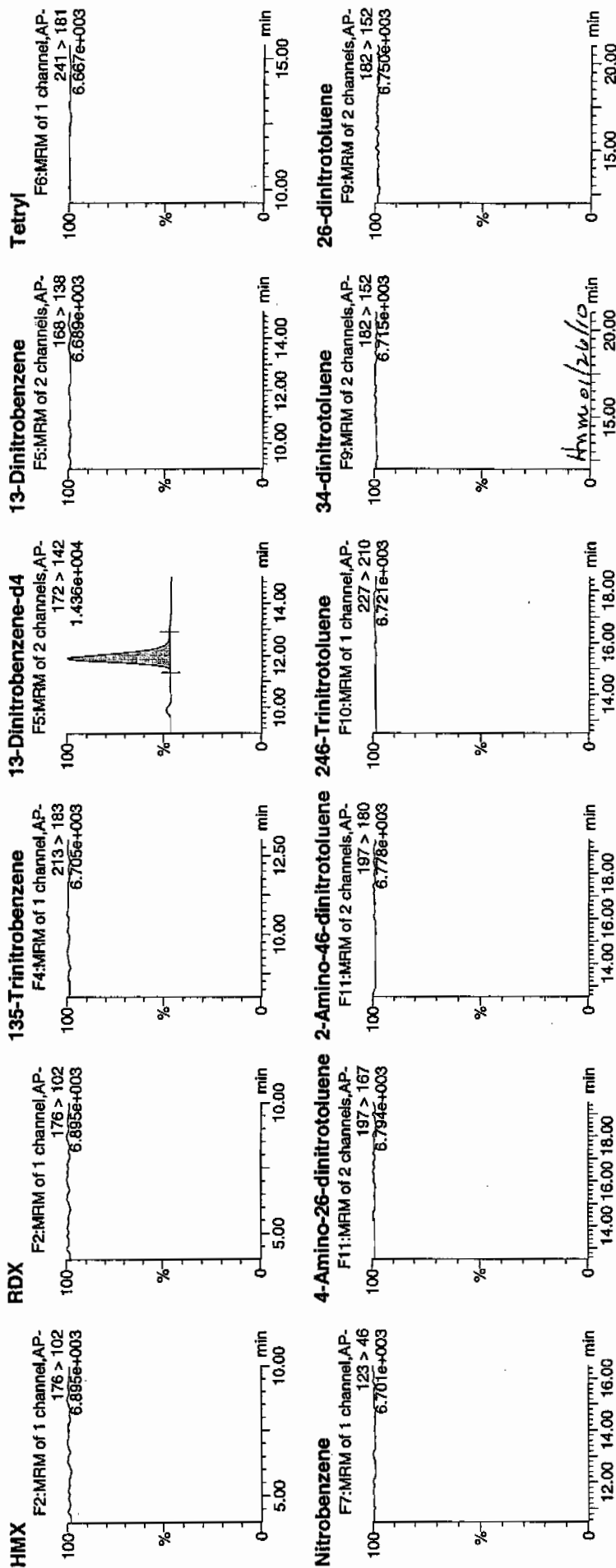
Date: 25-Jan-2010

Time: 16:15:32

ID: XIBLK03

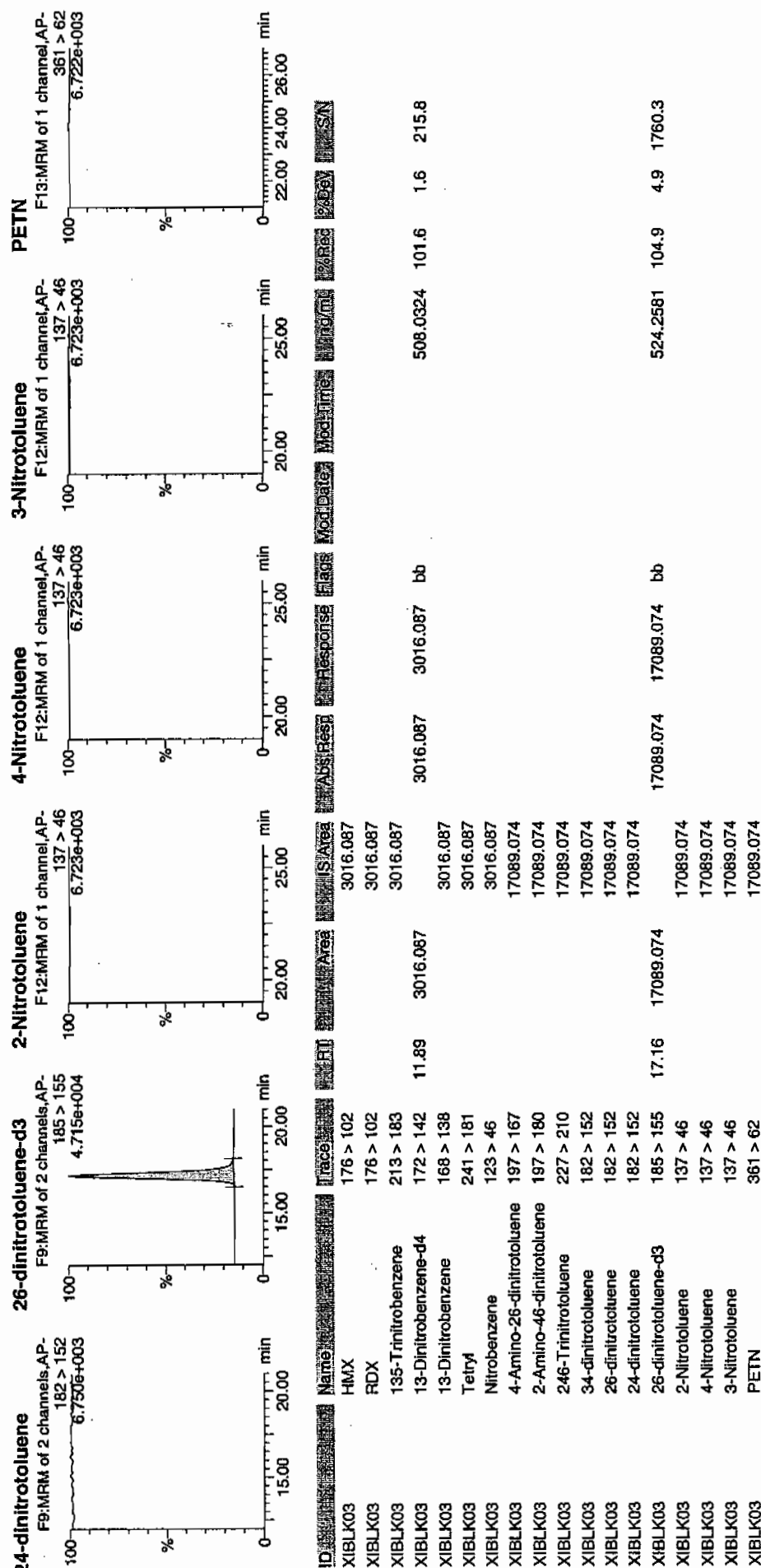
Vial: 1:1,A

1/26/10



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

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA.qld, Time: Tue Jan 26 09:24:51 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1160-1

Lab Code: GEL

Lab Sample ID: XIBLK04

Analysis Date: 25-JAN-10 22:39

GEL Data File: EXP0125024a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	536.181
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	610.208
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\012510expA.qld, Time: Tue Jan 26 09:24:51 2010

Name: C:\MASSLYNX\NEW\_EXP\_PRO\Data\EXP0125024a

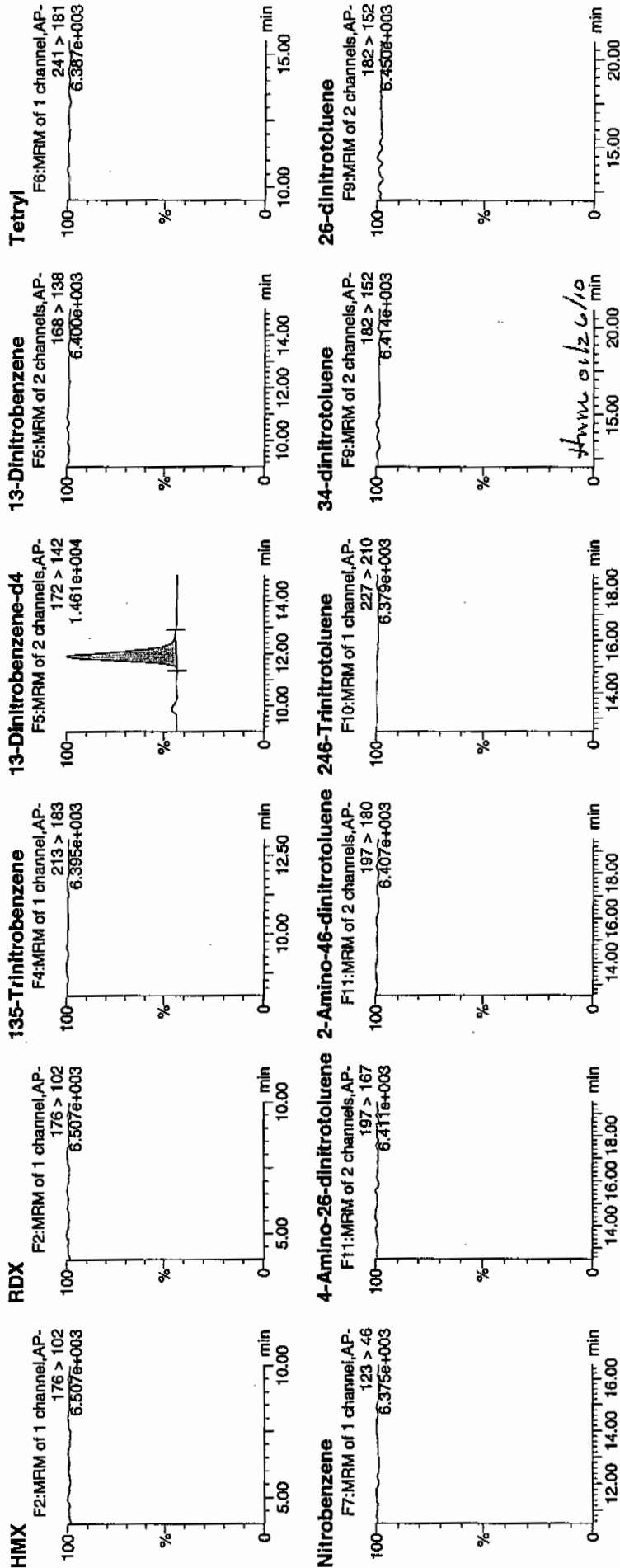
Date: 25-Jan-2010

Time: 22:39:19

ID: XIBLK04

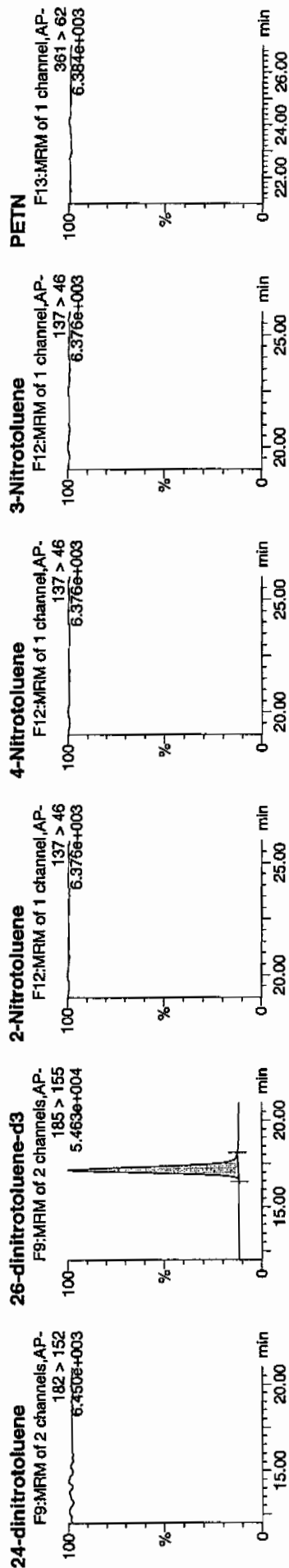
Vial: 1:1,A

1/26/10





Dataset: C:\MASSLYNX\New\_Exp\PRO\012510expA.qld, Time: Tue Jan 26 09:24:51 2010



ID	Name	Trace	RT	Area	IS Area	Response	Flag	Mod Date	Mod Time	Mod User	Mod Dev	Mod SN
XIBLK04	HMX	176 > 102		3183.197								
XIBLK04	RDX	176 > 102		3183.197								
XIBLK04	135-Trinitrobenzene	213 > 183		3183.197								
XIBLK04	13-Dinitrobenzene-d4	172 > 142	11.89	3183.197		3183.197	bb	536.1806	107.2	7.2	325.8	
XIBLK04	13-Dinitrobenzene	168 > 138		3183.197								
XIBLK04	Tetryl	241 > 181		3183.197								
XIBLK04	Nitrobenzene	123 > 46		3183.197								
XIBLK04	4-Amino-26-dinitrotoluene	197 > 167		19890.766								
XIBLK04	2-Amino-46-dinitrotoluene	197 > 180		19890.766								
XIBLK04	246-Trinitrotoluene	227 > 210		19890.766								
XIBLK04	34-dinitrotoluene	182 > 152		19890.766								
XIBLK04	26-dinitrotoluene	182 > 152		19890.766								
XIBLK04	24-dinitrotoluene	182 > 152		19890.766								
XIBLK04	26-dinitrotoluene-d3	185 > 155	17.14	19890.766		19890.766	bb	610.2084	122.0	22.0	1888.7	
XIBLK04	2-Nitrotoluene	137 > 46		19890.766								
XIBLK04	4-Nitrotoluene	137 > 46		19890.766								
XIBLK04	3-Nitrotoluene	137 > 46		19890.766								
XIBLK04	PETN	361 > 62										

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1160-1

Lab Code: GEL

Lab Sample ID: XIBLK05

Analysis Date: 26-JAN-10 04:03

GEL Data File: EXP0125035a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	530.31
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	567.52
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\012510expA.qld, Time: Tue Jan 26 09:24:51 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125035a

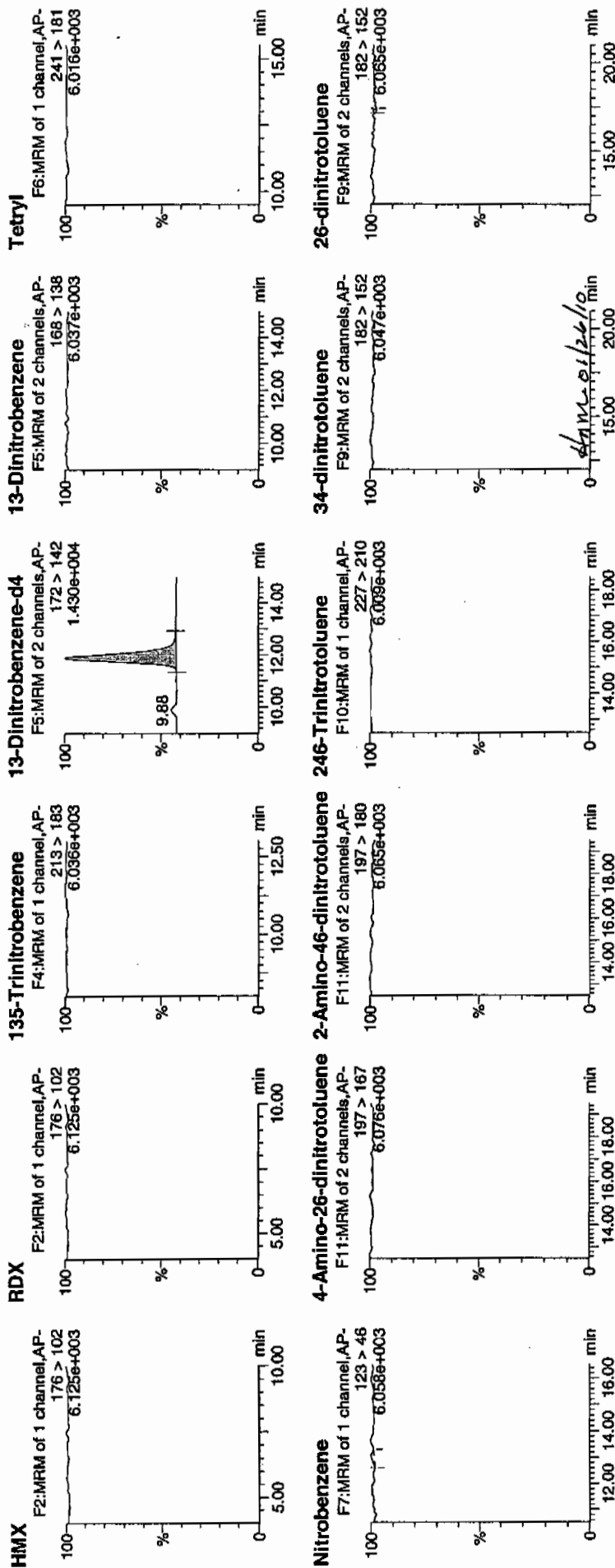
Date: 26-Jan-2010

Time: 04:03:54

ID: XIBLK05

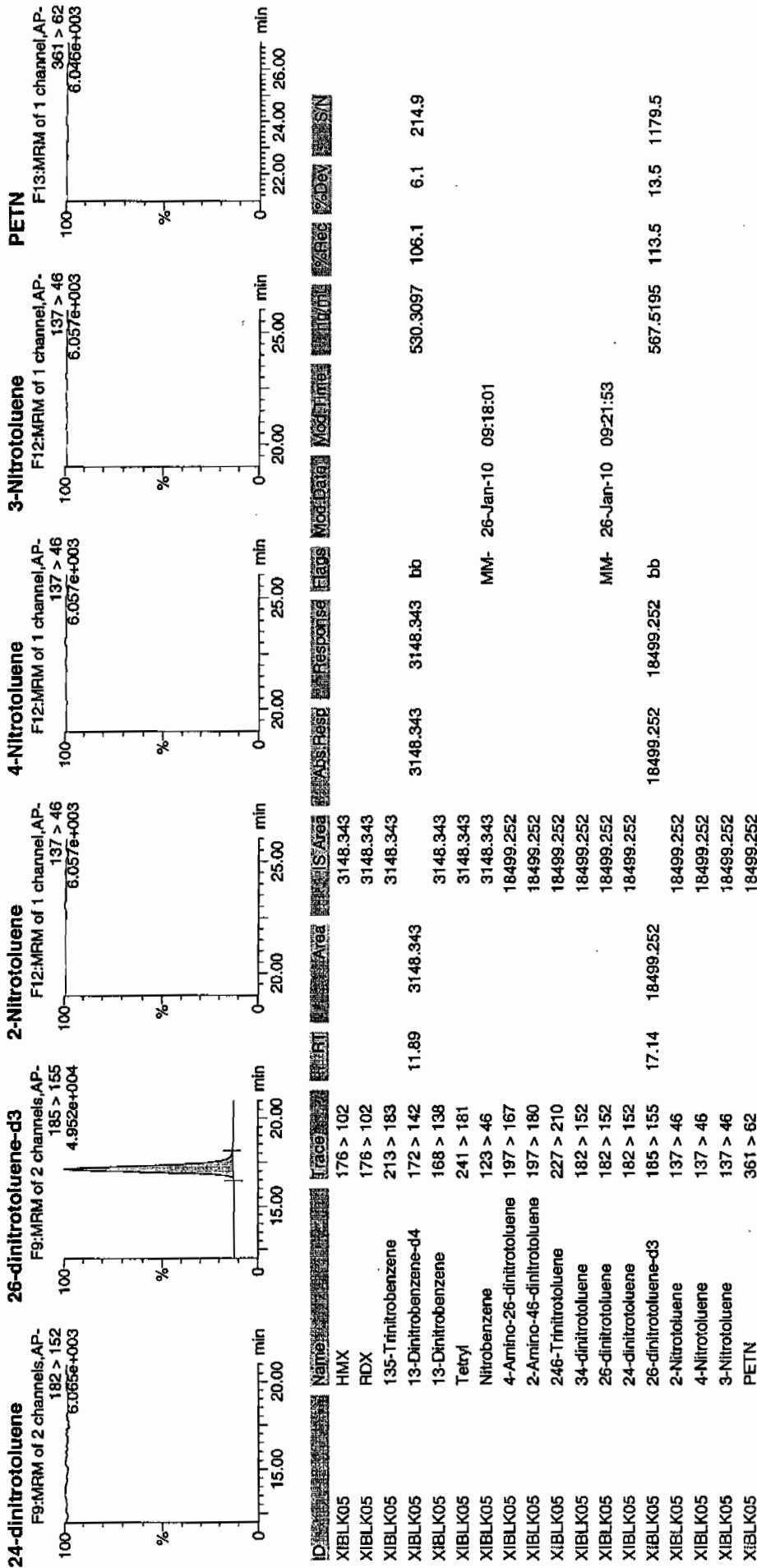
Vial: 1:1,A

1/26/10



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

Dataset: C:\MASSLYNX\New\_Exp\_PROV012510expA.qld, Time: Tue Jan 26 09:24:51 2010



4A  
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1160-1

Lab Code: GEL

Lab Sample ID: XIBLK06

Analysis Date: 26-JAN-10 10:27

GEL Data File: EXP0125048a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	526.699
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	549.419
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\012510expA1.qld, Time: Wed Jan 27 09:20:42 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125048a

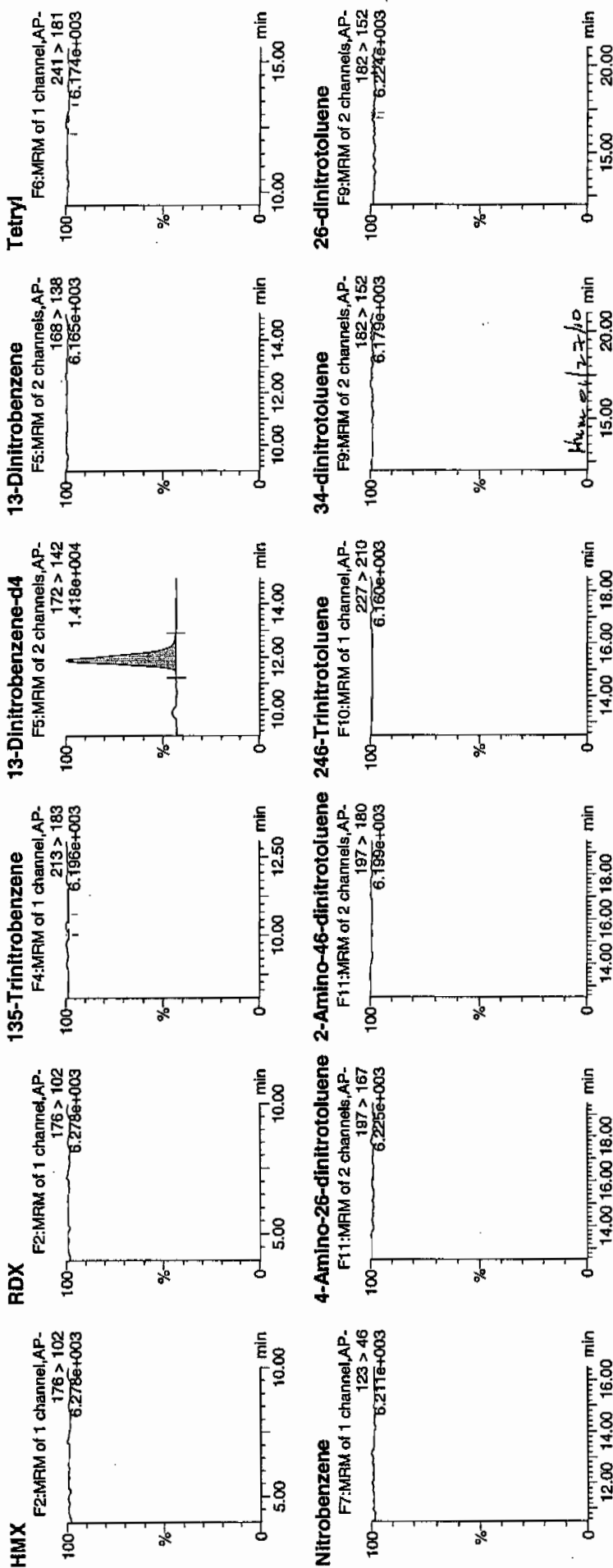
Date: 26-Jan-2010

Time: 10:27:39

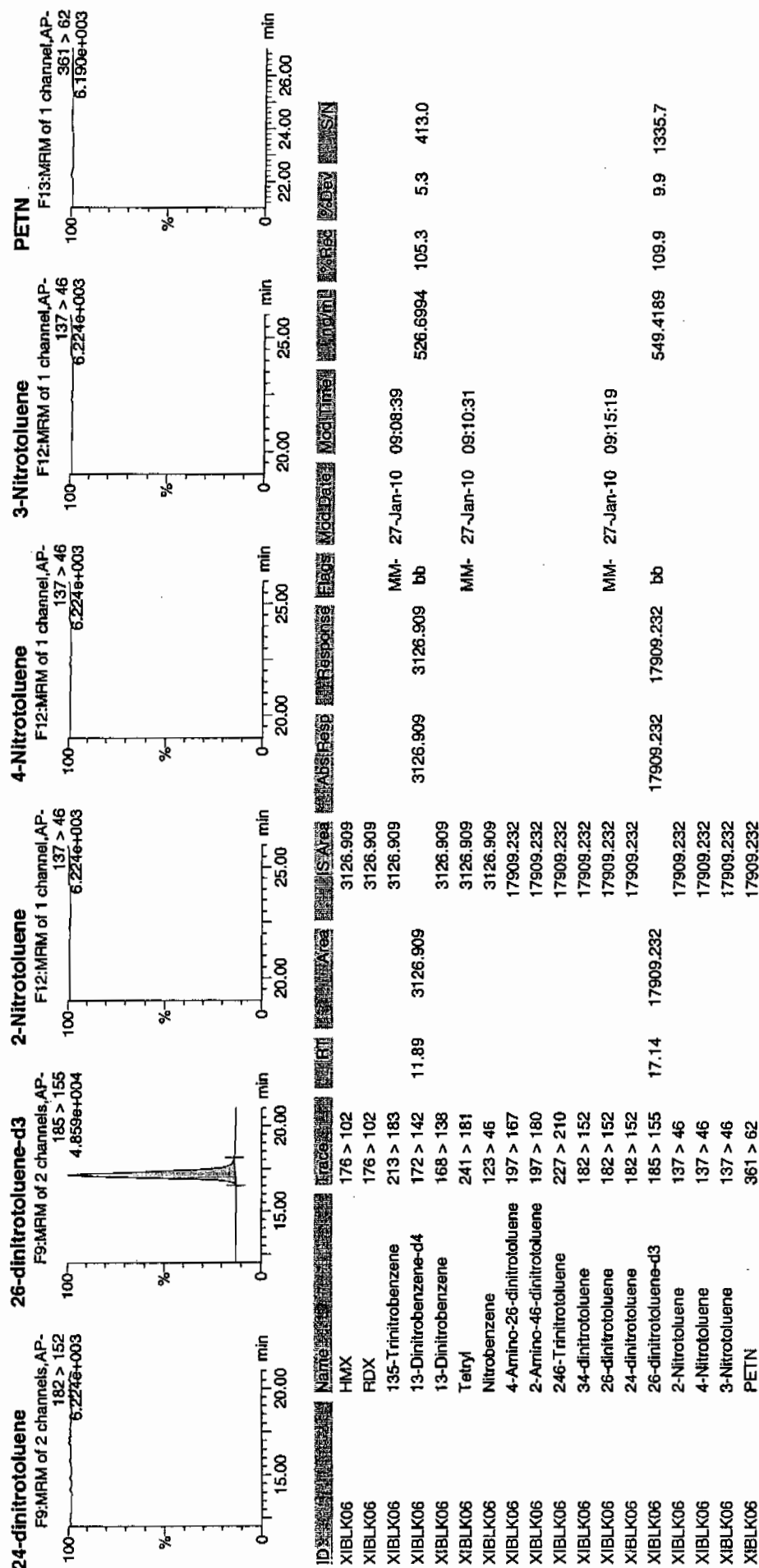
ID: XIBLK06

Vial: 1:1,A

12/10



Dataset: C:\MASSLYN\New\_Exp.PRO\012510expA1.qld, Time: Wed Jan 27 09:20:42 2010



4A  
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1160-1

Lab Code: GEL

Lab Sample ID: XIBLK07

Analysis Date: 26-JAN-10 16:50

GEL Data File: EXP0125061a

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	597.432
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	608.457
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0



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

Dataset: C:\MASSLYNX\New\_Exp\_PRO\012510expA1.qld, Time: Wed Jan 27 09:20:42 2010

Name: C:\MASSLYNX\NEW\_EXP\_PRO\Data\EXP0125061a

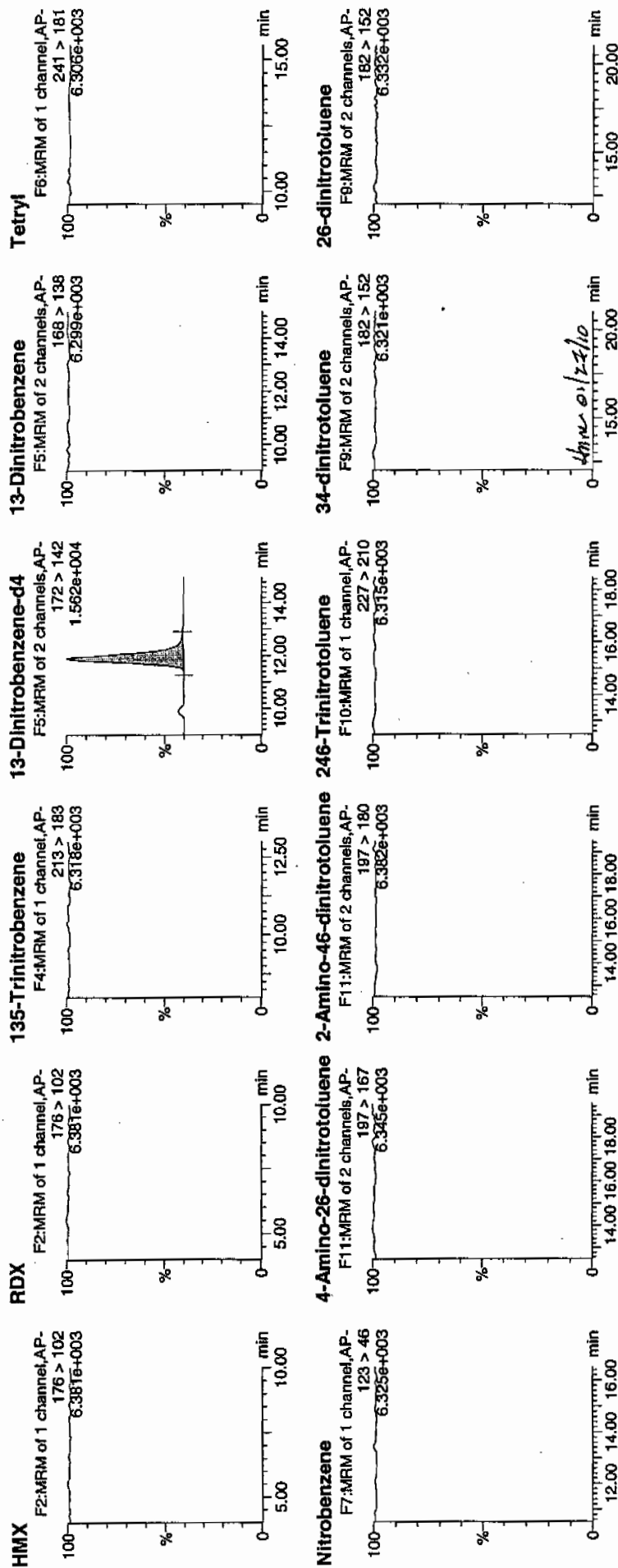
Date: 26-Jan-2010

Time: 16:50:59

ID: XIBLK07

Vial: 1:1,A

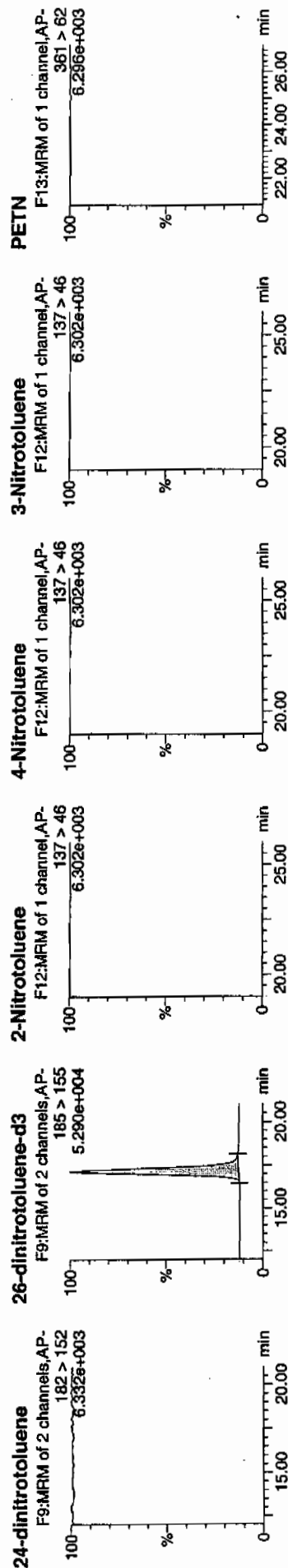
NOT  
1/27/10



## Quantify Sample Report

**GEL Laboratories, LLC / Analyst: Michael A. Penny**

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA1.qld, Time: Wed Jan 27 09:20:42 2010

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4A  
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1160-1

Lab Code: GEL

Lab Sample ID: XIBLK08

Analysis Date: 26-JAN-10 19:48

GEL Data File: EXP0125067a

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	538.014
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	566.746
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\012510expA1.qld, Time: Wed Jan 27 09:20:42 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125067a

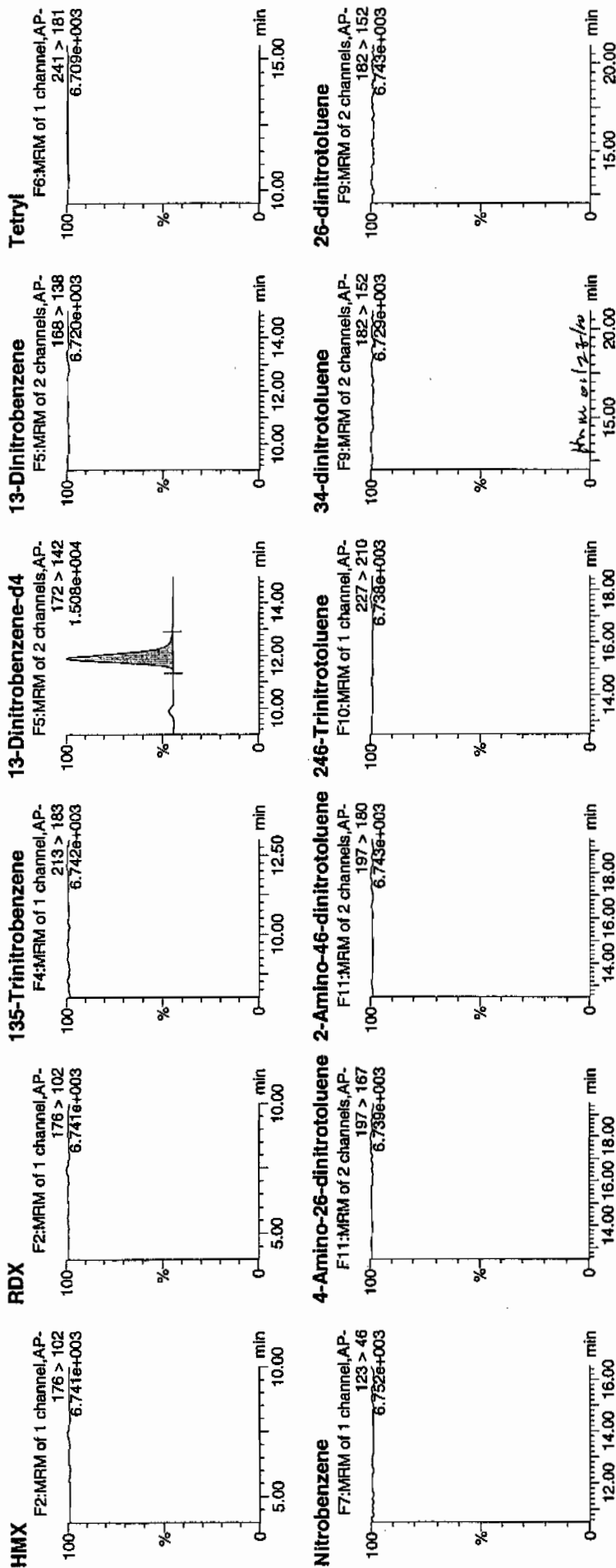
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Time: 19:48:13

ID: XIBLK08

Vial: 1:1,A

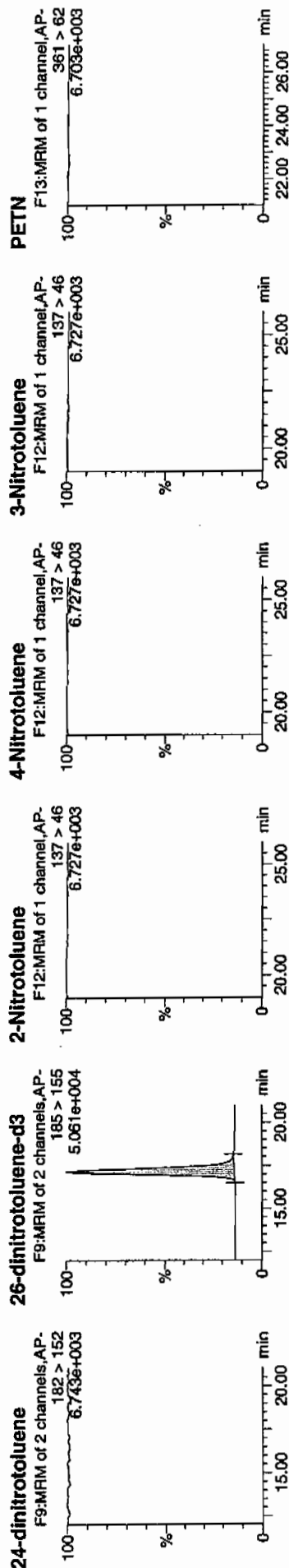
1/27/10



## Quantify Sample Report

**GEL Laboratories, LLC / Analyst : Michael A. Penny**

Dataset: C:\MASSLYN\New\_Exp.PRO\012510expA1.qld, Time: Wed Jan 27 09:20:42 2010



Name	Trace	RT	Area	Area	Abs. Resp	Response	Flags	ModDate	ModTime	ModUser	%Rec	%Dev	Johnson
HMx	XIBLK08	176 > 102			3194.082								
RDX	XIBLK08	176 > 102			3194.082								
135-Trinitrobenzene	XIBLK08	213 > 183			3194.082								
13-Dinitrobenzene-d4	XIBLK08	172 > 142	11.89	3194.082	3194.082	3194.082	bb				538.0141	107.6	7.6
13-Dinitrobenzene	XIBLK08	168 > 138			3194.082								340.6
Tetryl	XIBLK08	241 > 181			3194.082								
Nitrobenzene	XIBLK08	123 > 46			3194.082								
4-Amino-26-dinitrotoluene	XIBLK08	197 > 167			18474.023								
2-Amino-46-dinitrotoluene	XIBLK08	197 > 180			18474.023								
246-Trinitrotoluene	XIBLK08	227 > 210			18474.023								
34-dinitrotoluene	XIBLK08	182 > 152			18474.023								
28-dinitrotoluene	XIBLK08	182 > 152			18474.023								
24-dinitrotoluene	XIBLK08	182 > 152			18474.023								
26-dinitrotoluene-d3	XIBLK08	185 > 155	17.14	18474.023	18474.023	18474.023	bb				566.7456	113.3	13.3
2-Nitrotoluene	XIBLK08	137 > 46			18474.023								1070.5
4-Nitrotoluene	XIBLK08	137 > 46			18474.023								
3-Nitrotoluene	XIBLK08	137 > 46			18474.023								
PETN	XIBLK08	361 > 62			18474.023								

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1160-1

Lab Code: GEL

Lab Sample ID: XIBLK09

Analysis Date: 26-JAN-10 23:14

GEL Data File: EXP0125074a

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	524.417
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	524.016
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA1.qld, Time: Wed Jan 27 09:20:42 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125074a

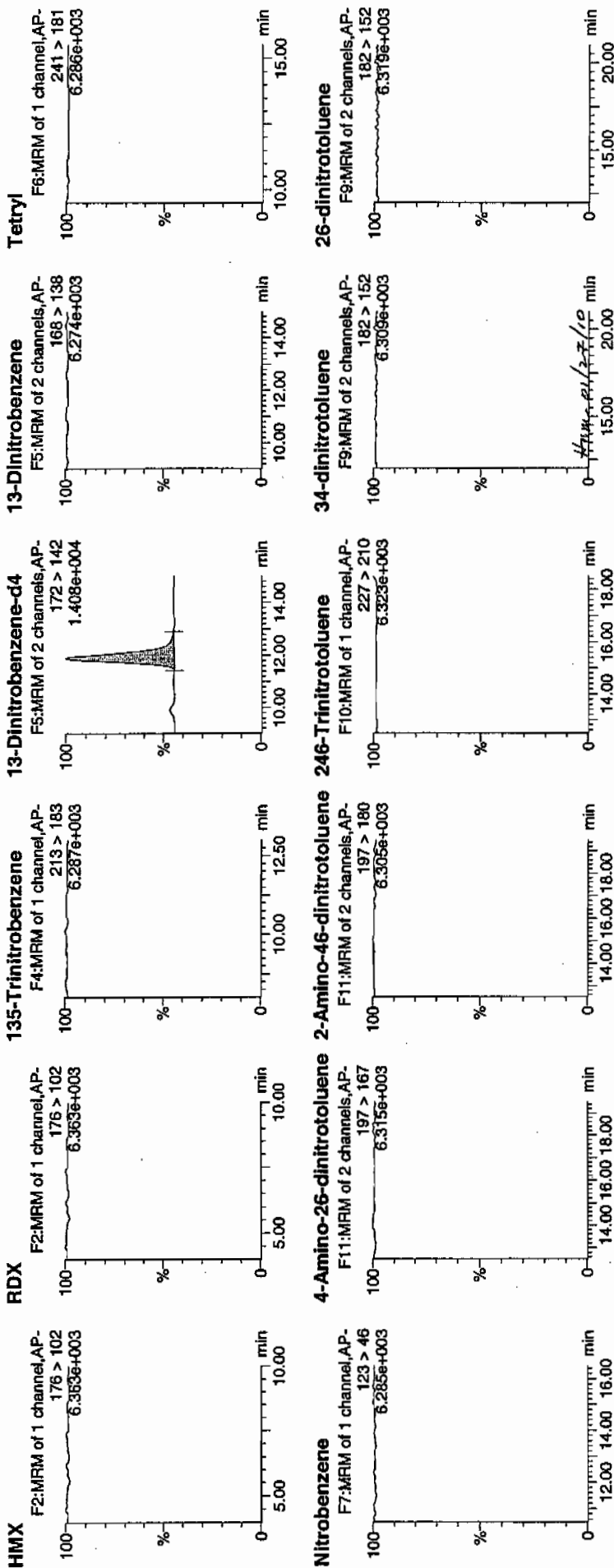
Date: 26-Jan-2010

Time: 23:14:40

ID: XIBLK09

Vial: 1:1,A

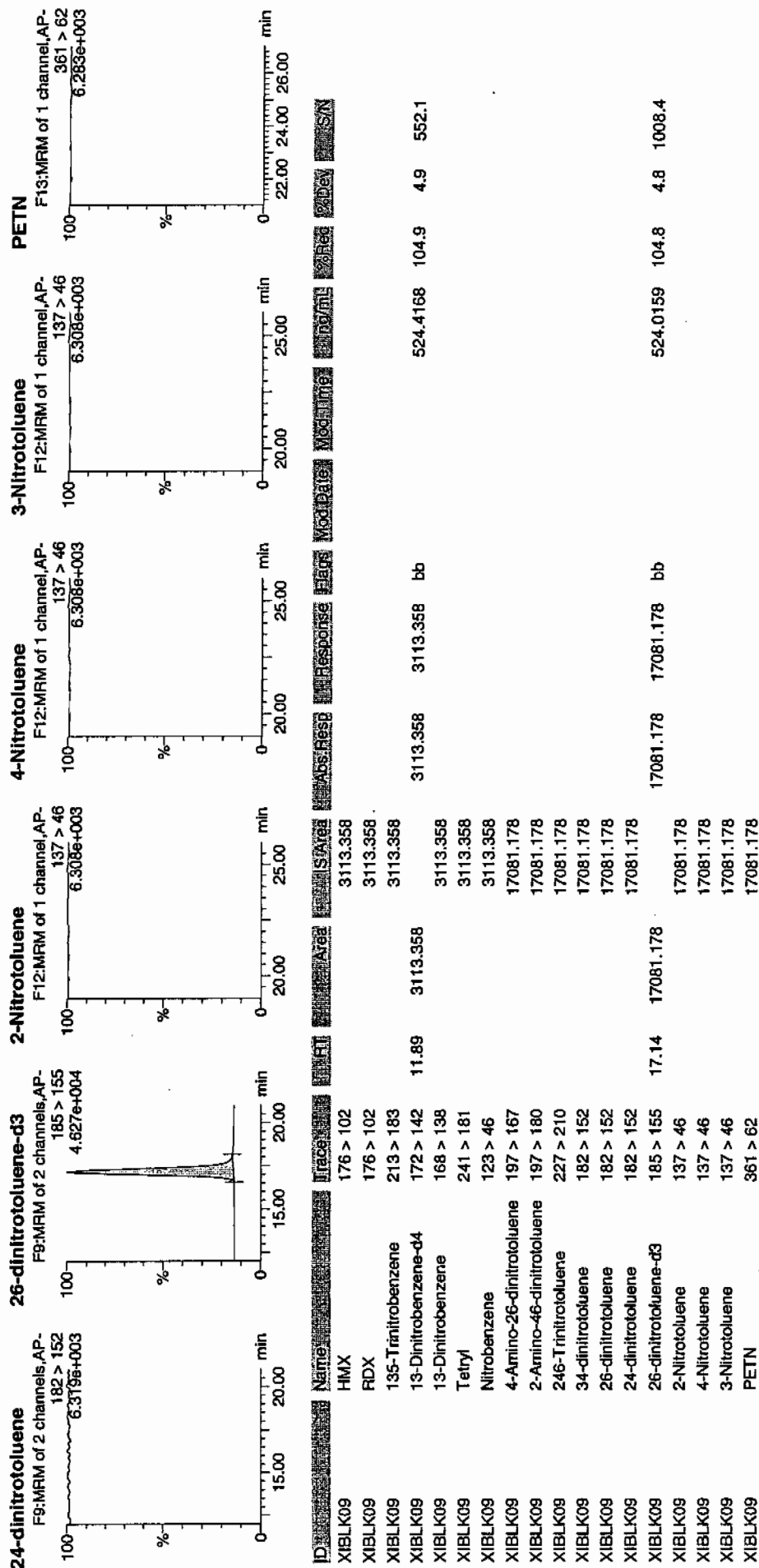
11/27/10



## Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYN\New\_Exp.PRO\012510expA1.qld, Time: Wed Jan 27 09:20:42 2010





4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1160-1

Lab Code: GEL

Lab Sample ID: XIBLK10

Analysis Date: 27-JAN-10 03:40

GEL Data File: EXP0125083a

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	574.551
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	599.188
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\012510expA1.qld, Time: Wed Jan 27 09:20:42 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125083a

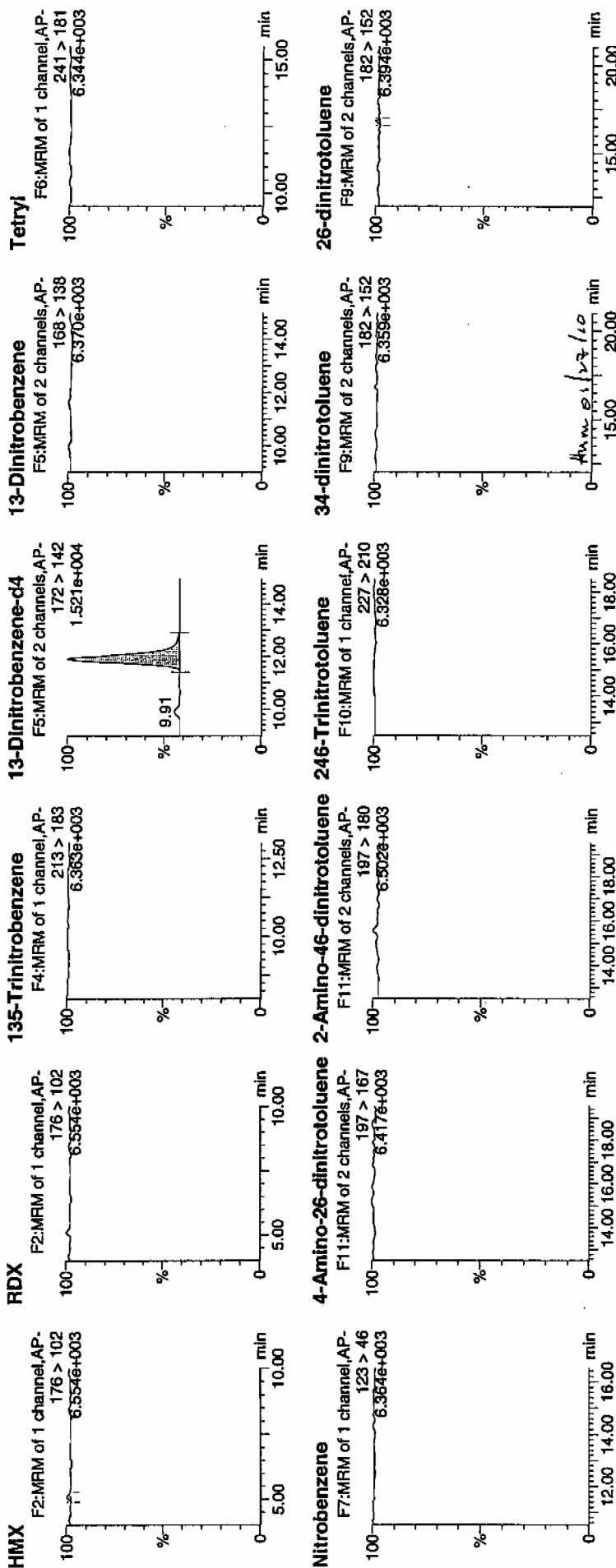
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Time: 03:40:01

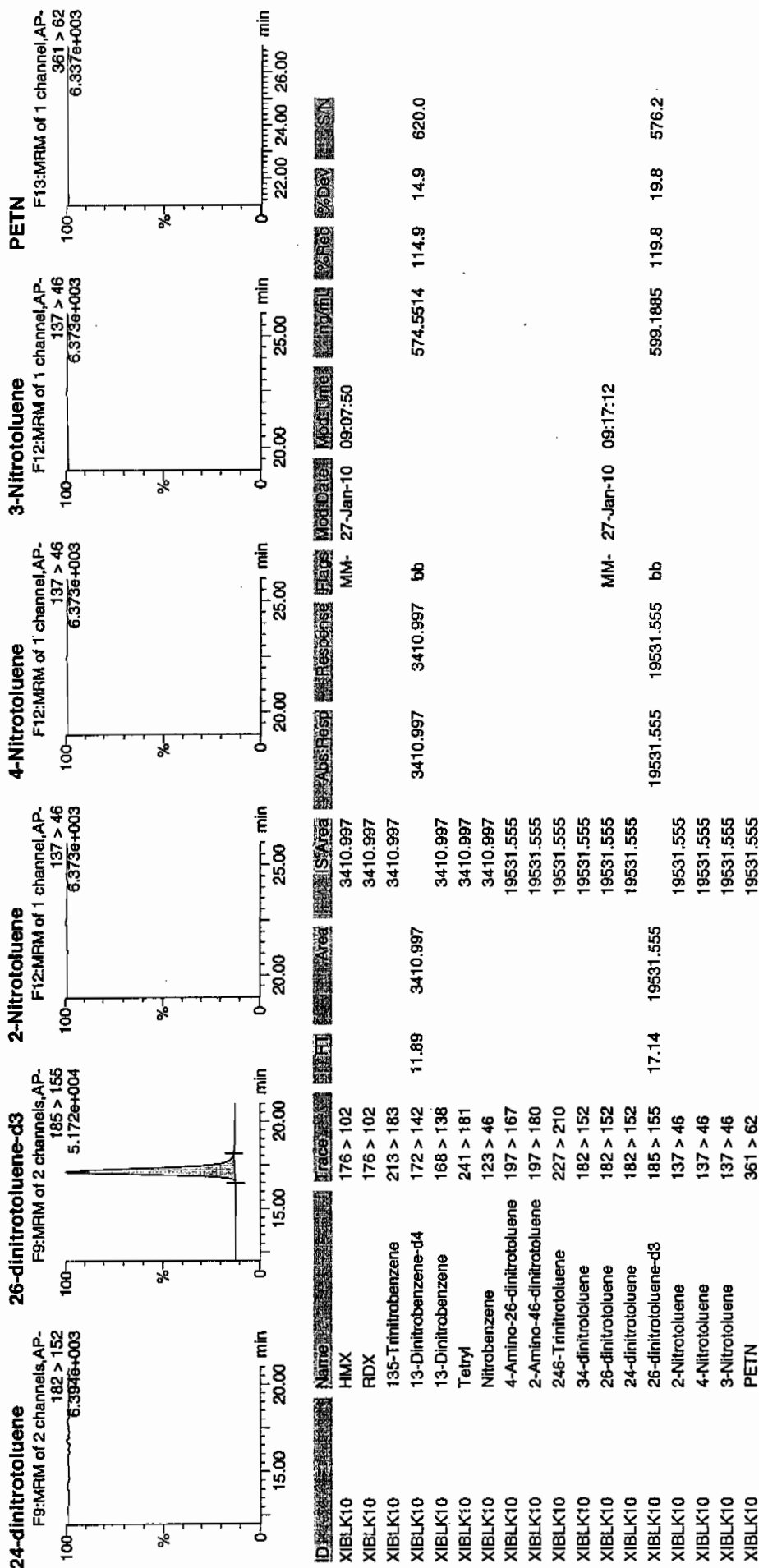
ID: XIBLK10

Vial: 1:1,A

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Dataset: C:\MASSLYNX\New\_Exp\_PRO\012510expA1.qld, Time: Wed Jan 27 09:20:42 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1160-1

Lab Code: GEL

Lab Sample ID: XTBLK11

Analysis Date: 27-JAN-10 10:04

GEL Data File: EXP0125096a

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	558.477
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	528.84
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125096a

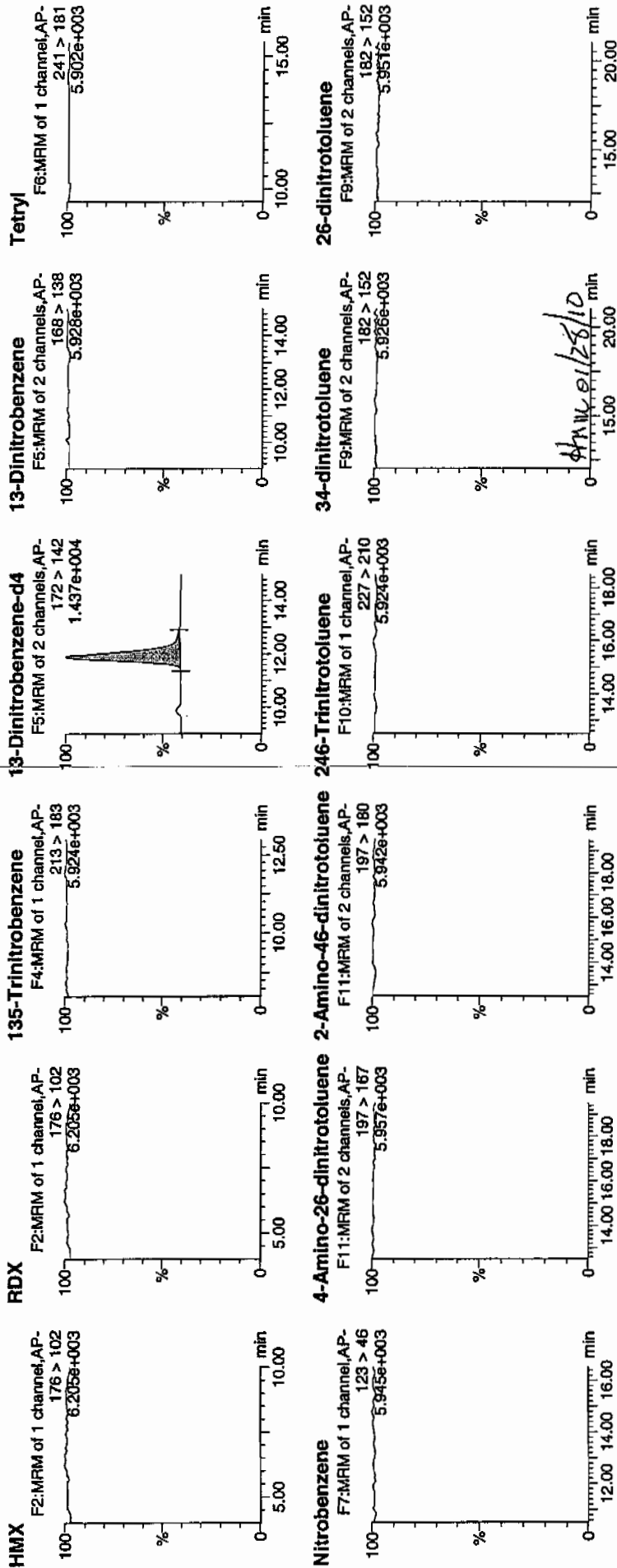
Date: 27-Jan-2010

Time: 10:04:30

ID: XIBLK11

Vial: 1:1,A

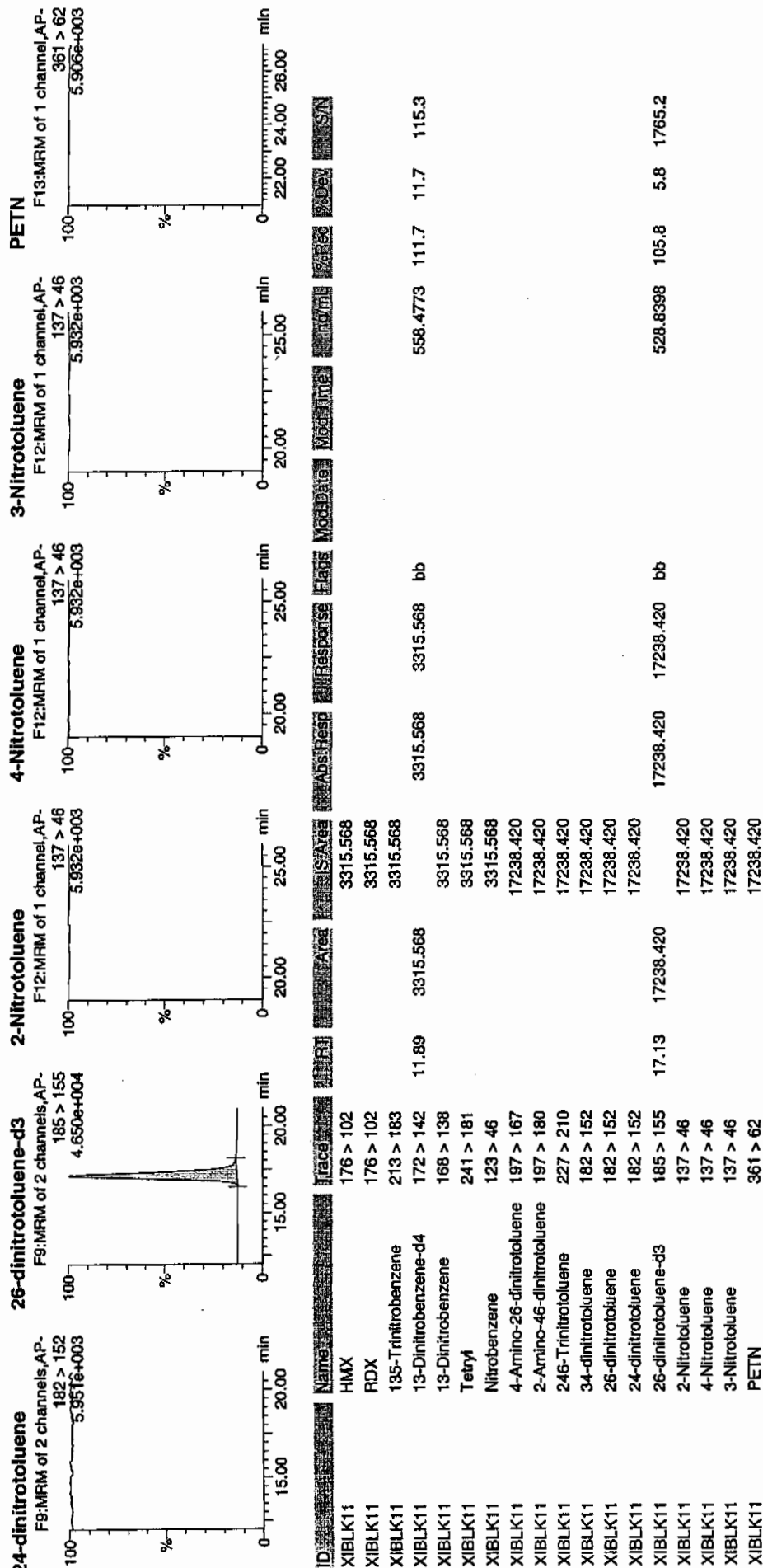
1/28/10



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

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1160-1

Lab Code: GEL

Lab Sample ID: XIBLK12

Analysis Date: 27-JAN-10 16:28

GEL Data File: EXP0125109a

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	568.05
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	575.906
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125109a

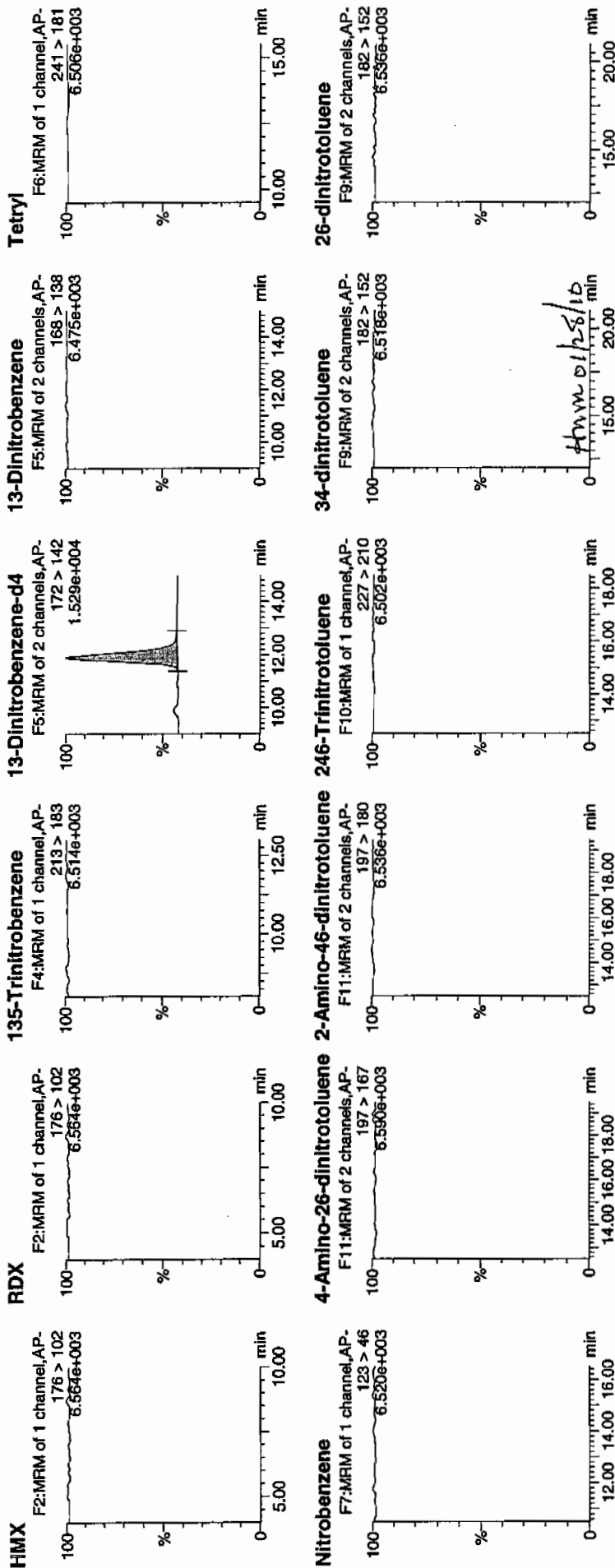
Date: 27-Jan-2010

Time: 16:28:07

ID: XIBLK12

Vial: 1:1,A

1/28/10

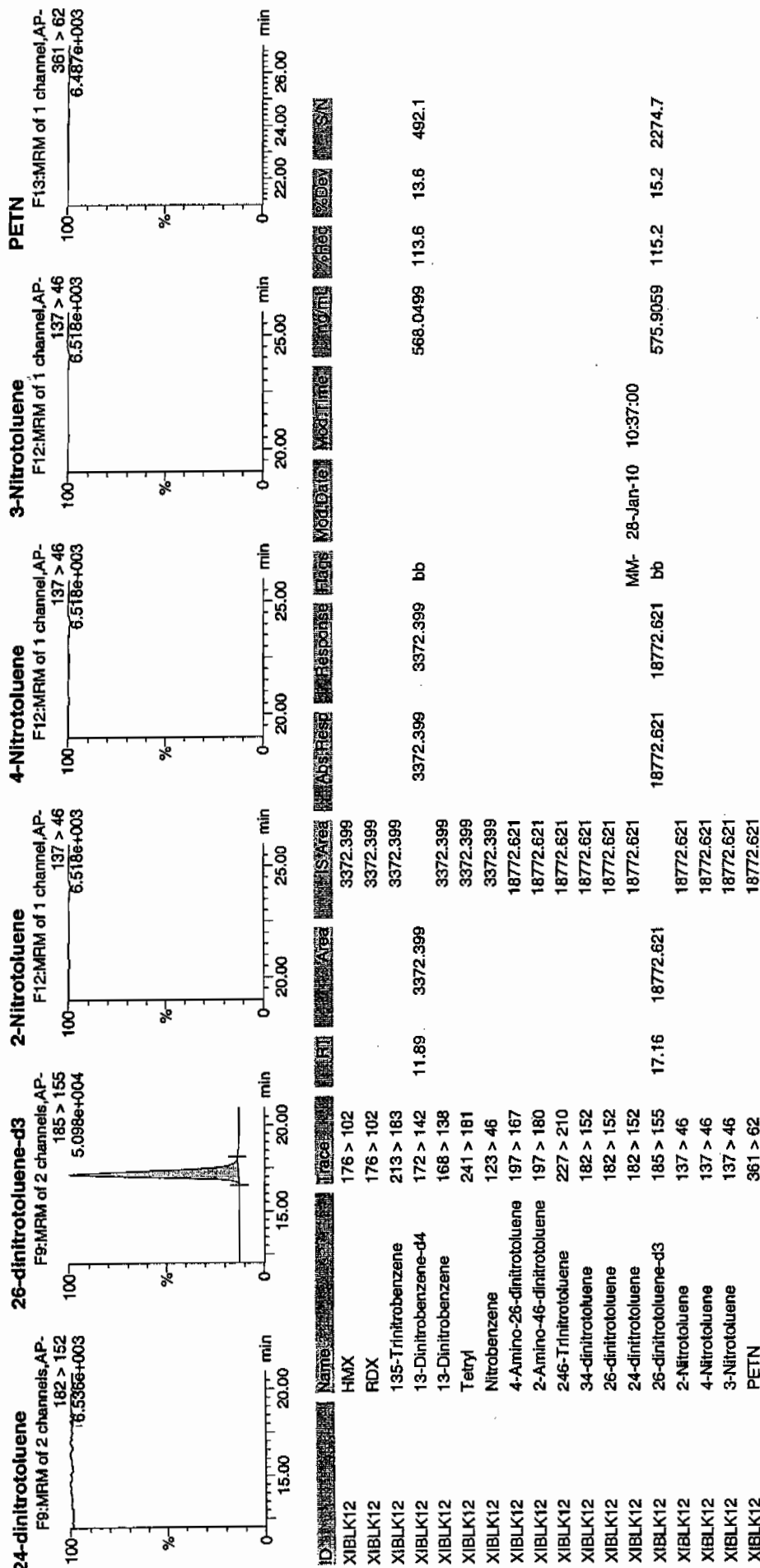




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Quantify Sample Report  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp\_PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010



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

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1160-1

Lab Code: GEL

Lab Sample ID: XIBLK13

Analysis Date: 27-JAN-10 18:55

GEL Data File: EXP0125114a

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	505.557
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	509.162
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\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

Name: C:\MASSLYNX\NEW\_EXP\_PRO\012510expA2.qld\EXP0125114a

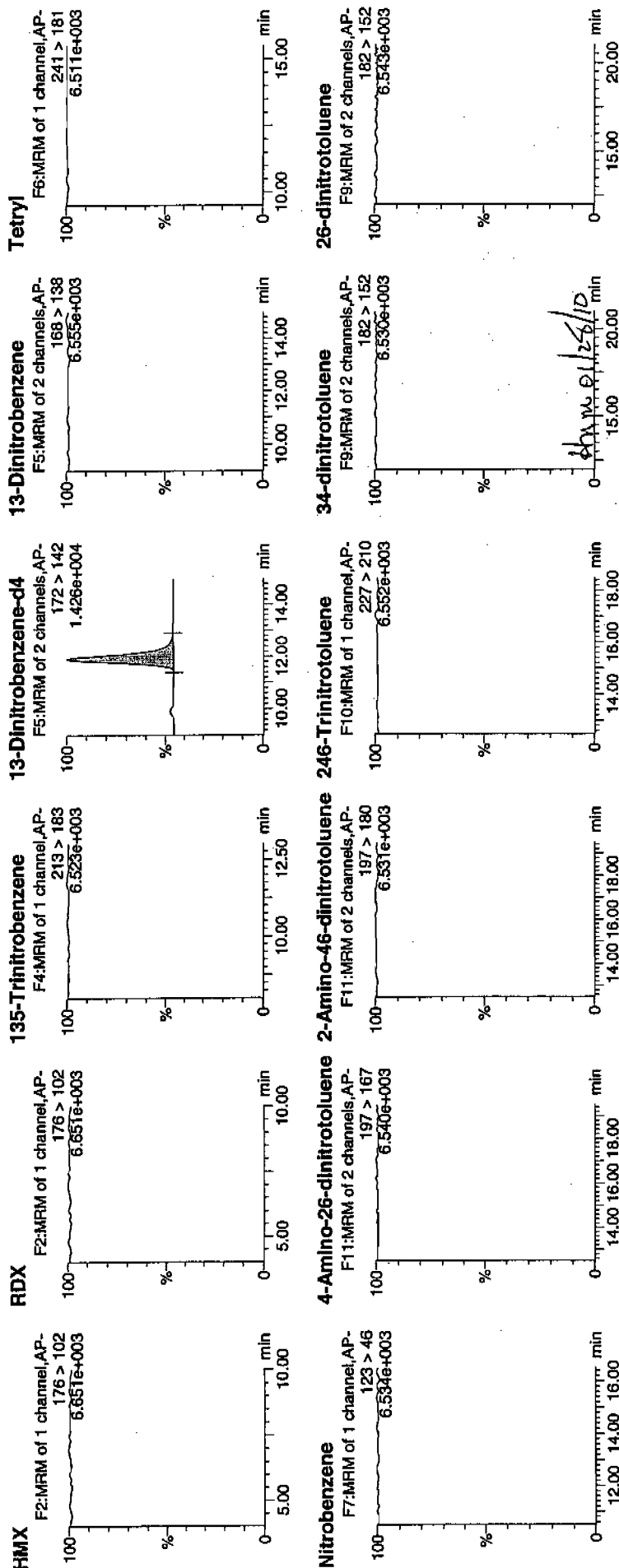
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Time: 18:55:56

ID: XIBLK13

Vial: 1:1,A

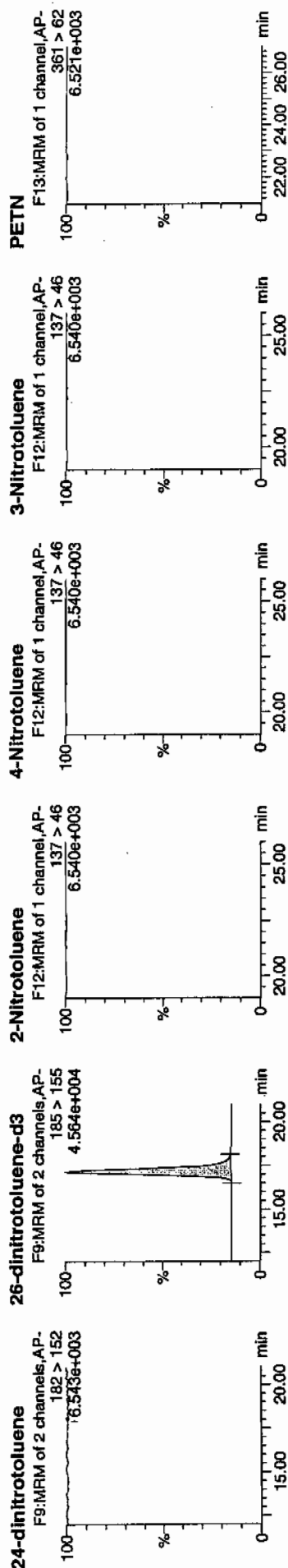
1/28/10



## Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

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4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1160-1

Lab Code: GEL

Lab Sample ID: XIBLK14

Analysis Date: 27-JAN-10 20:24

GEL Data File: EXP0125117a

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	487.356
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	507.261
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125117a

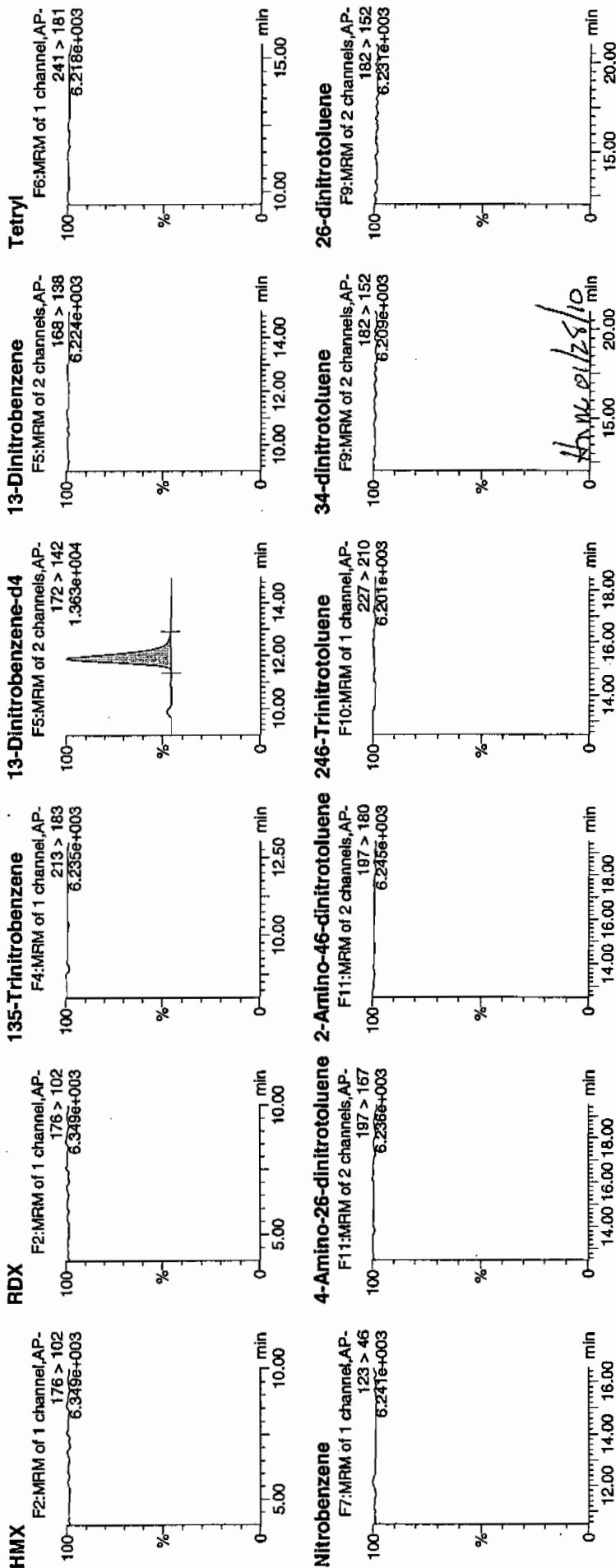
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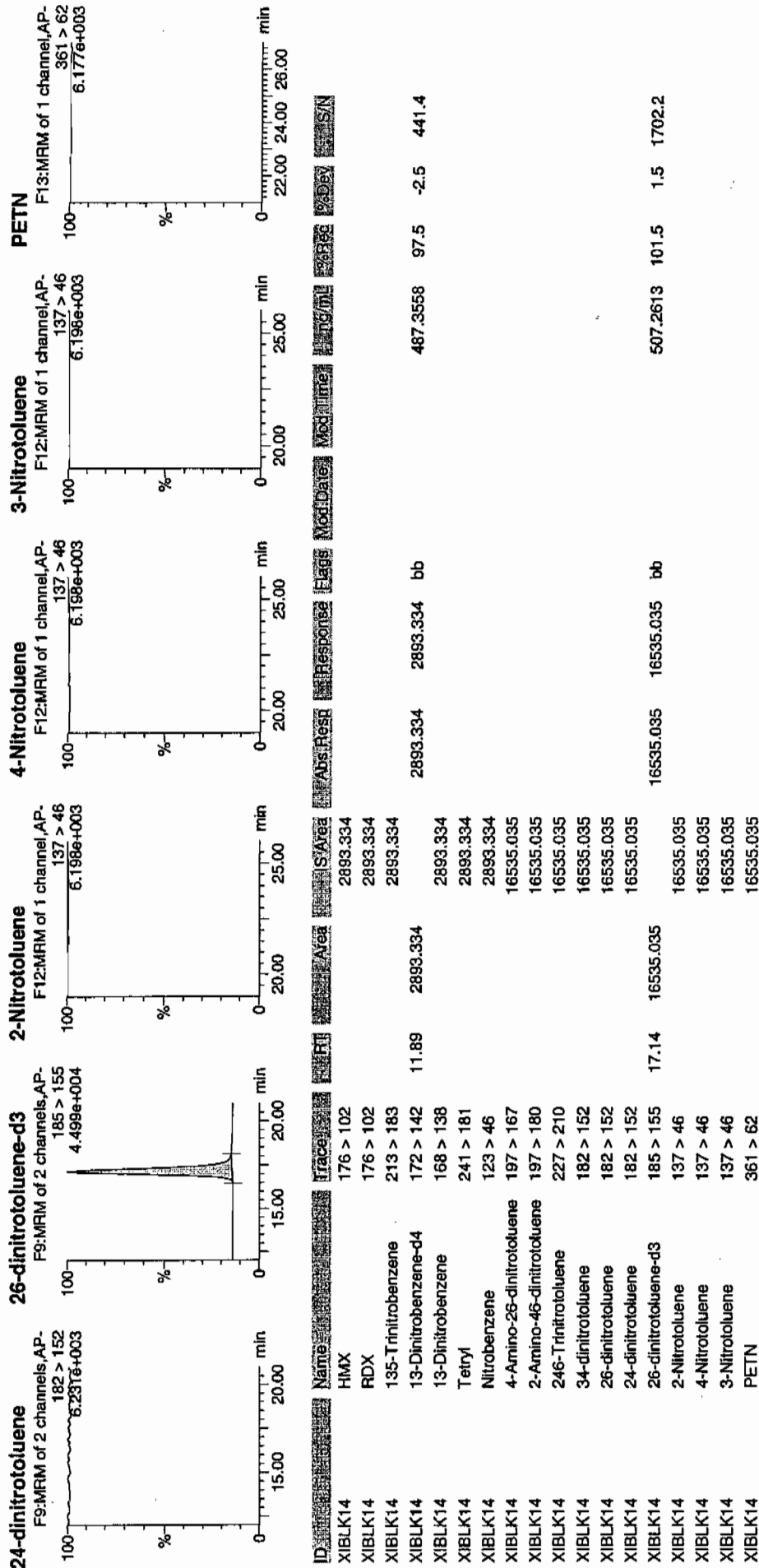
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Vial: 1:1,A

1/28/10



Dataset: C:\MASSLYNX\New\_Exp\PROV012510expA2.qld, Time: Thu Jan 28 10:42:53 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1160-1

Lab Code: GEL

Lab Sample ID: XIBLK15

Analysis Date: 28-JAN-10 02:47

GEL Data File: EXP0125130a

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	480.578
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	473.198
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\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125130a

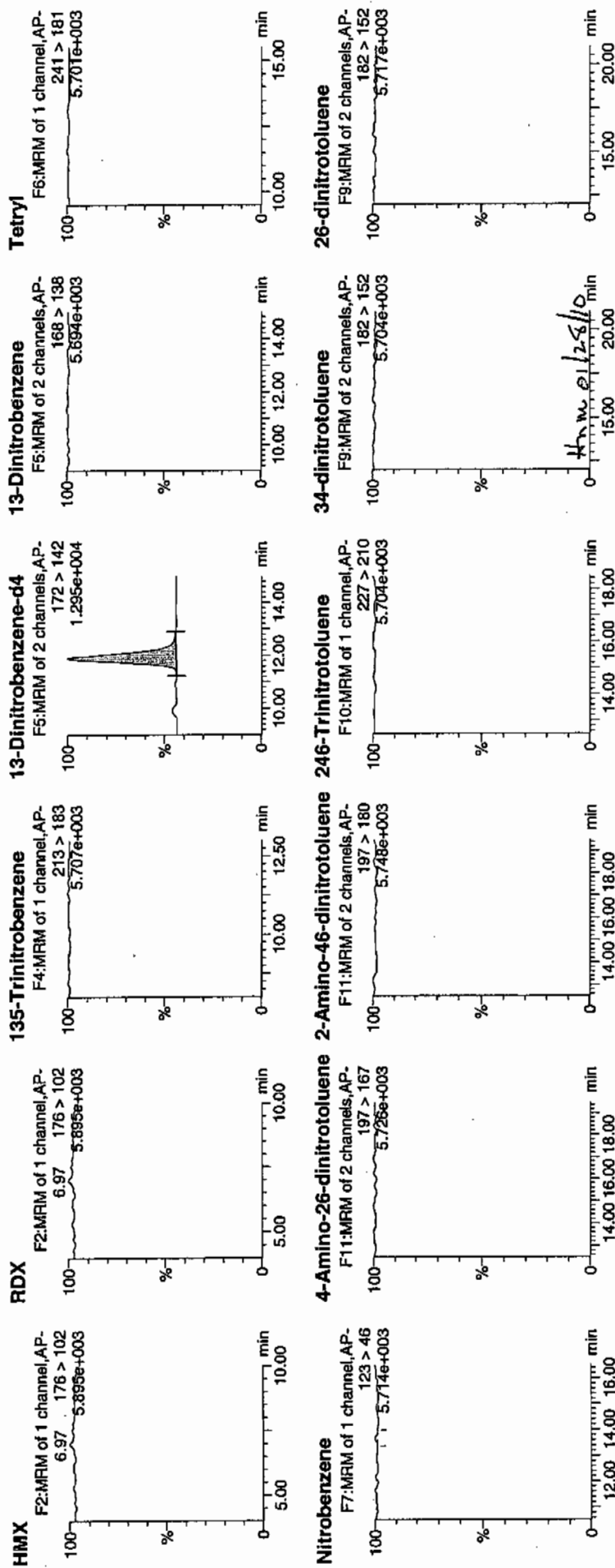
Date: 28-Jan-2010

Time: 02:47:46

ID: XIBLK15

Vial: 1:1,A

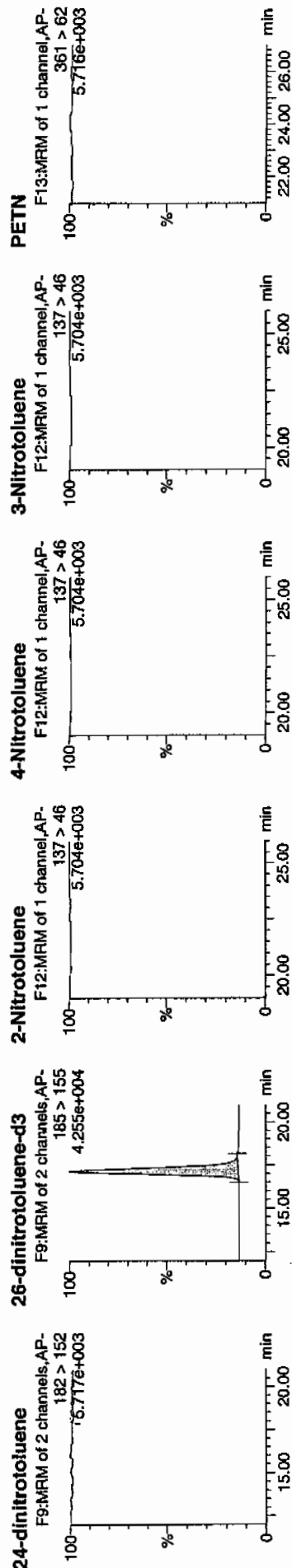
1/28/10



## Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYN\New\_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

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4A  
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1160-1

Lab Code: GEL

Lab Sample ID: XIBLK16

Analysis Date: 28-JAN-10 09:11

GEL Data File: EXP0125143a

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	519.151
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	494.217
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\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

Name: C:\MASSLYNX\NEW\_EXP\_PRO\Data\EXP0125143a

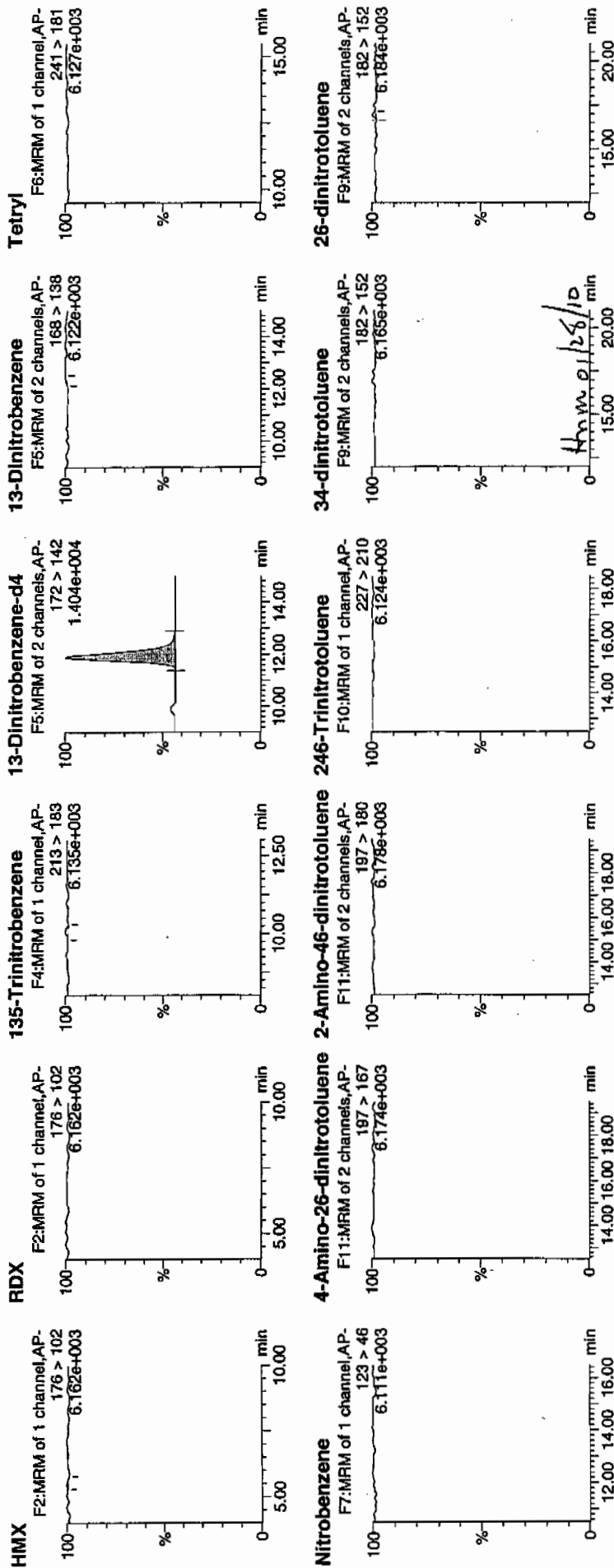
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Time: 09:11:19

ID: XIBLK16

Vial: 1:1,A

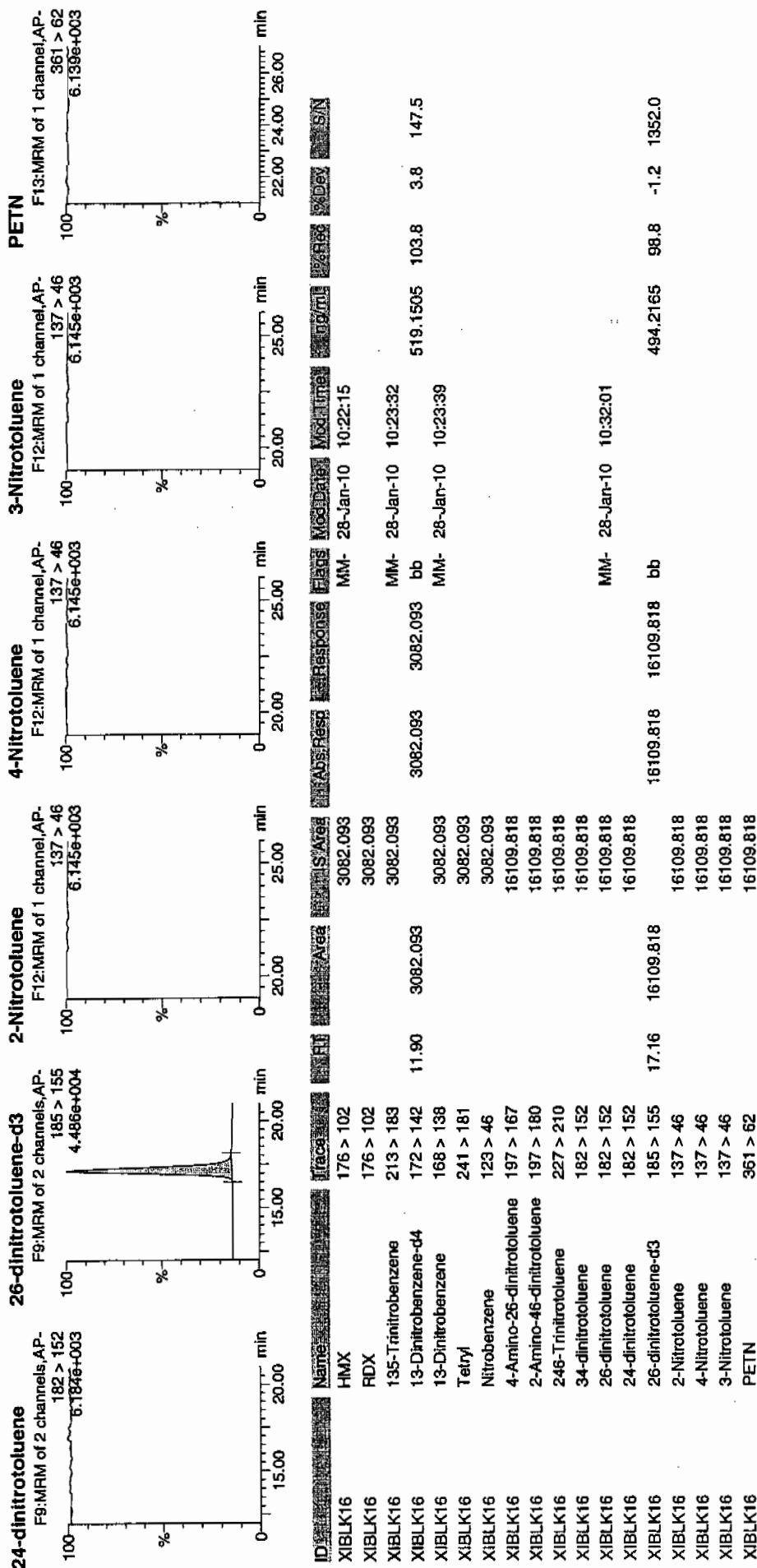
1/28/10



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

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1160-1

Lab Code: GEL

Lab Sample ID: XIBLK02

Analysis Date: 22-JAN-10 12:47

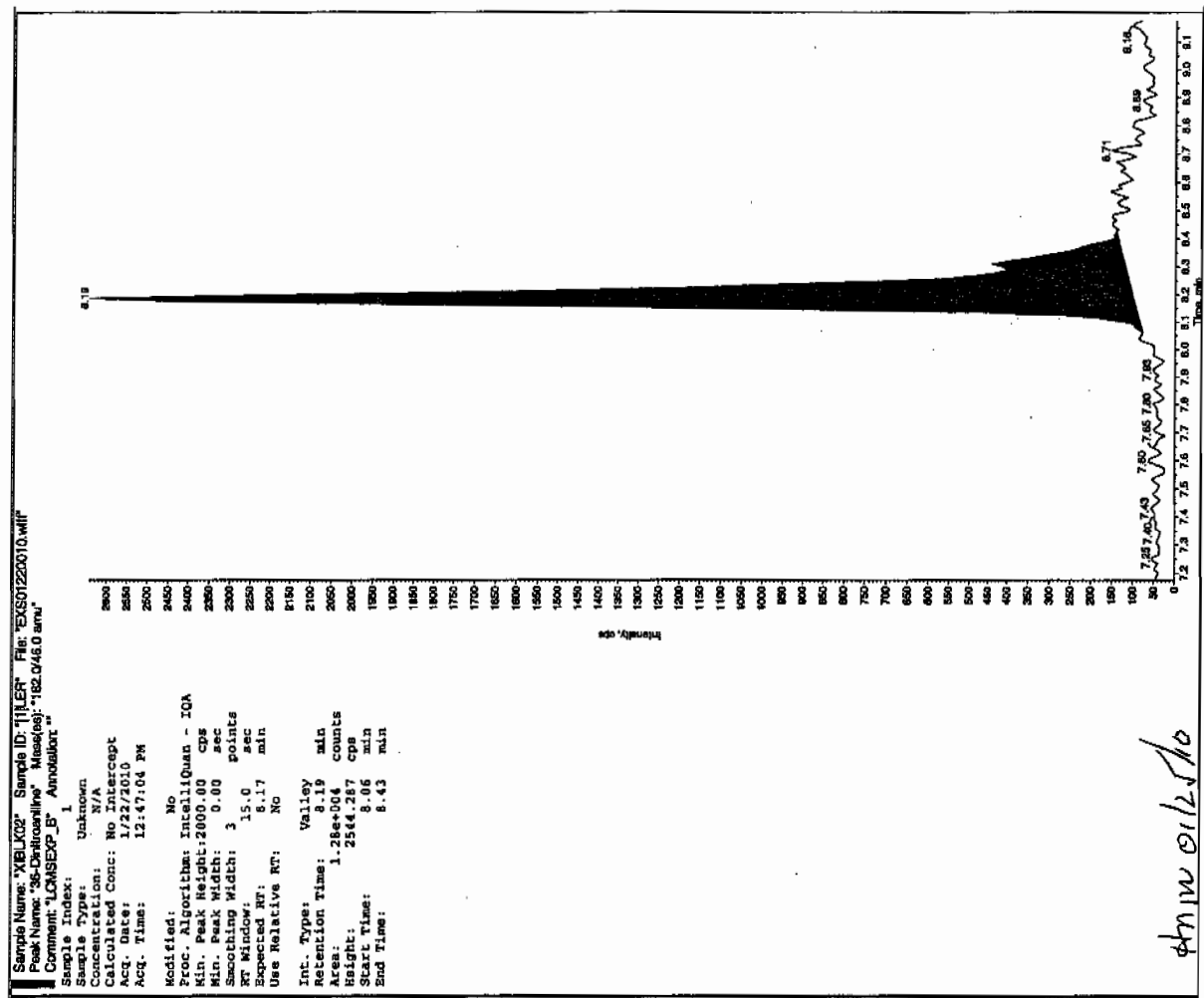
GEL Data File: EXS01220010.wiff

Instrument ID: LCMSMS

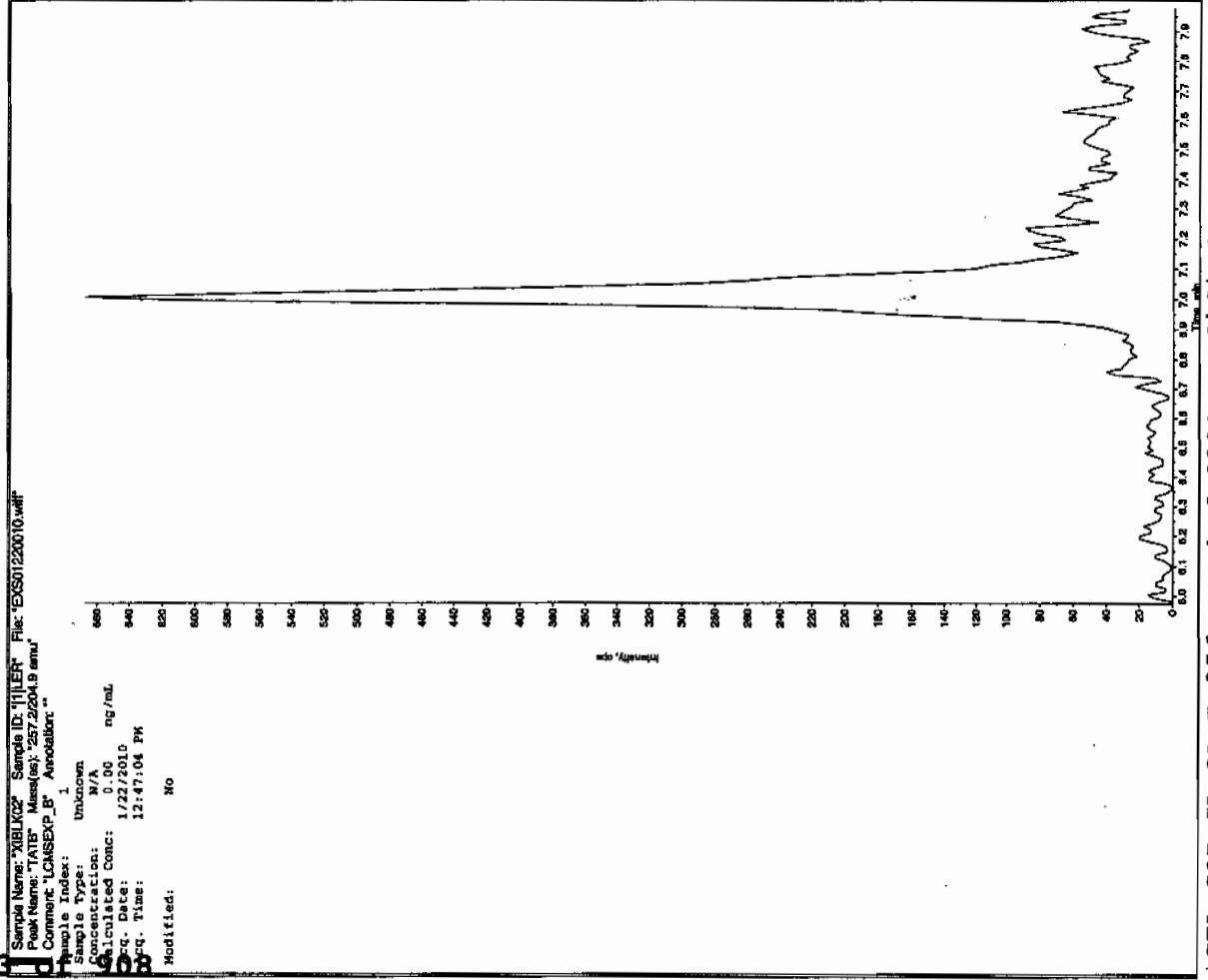
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	1.34
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

See 1/25/10



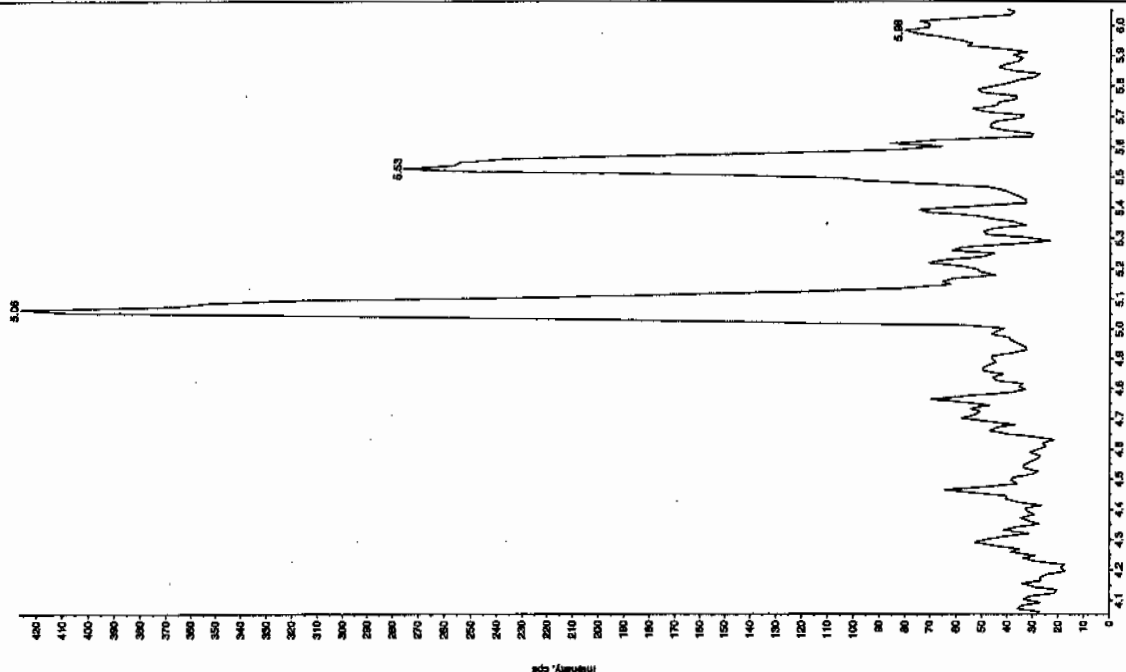
dmw 01/25/10



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

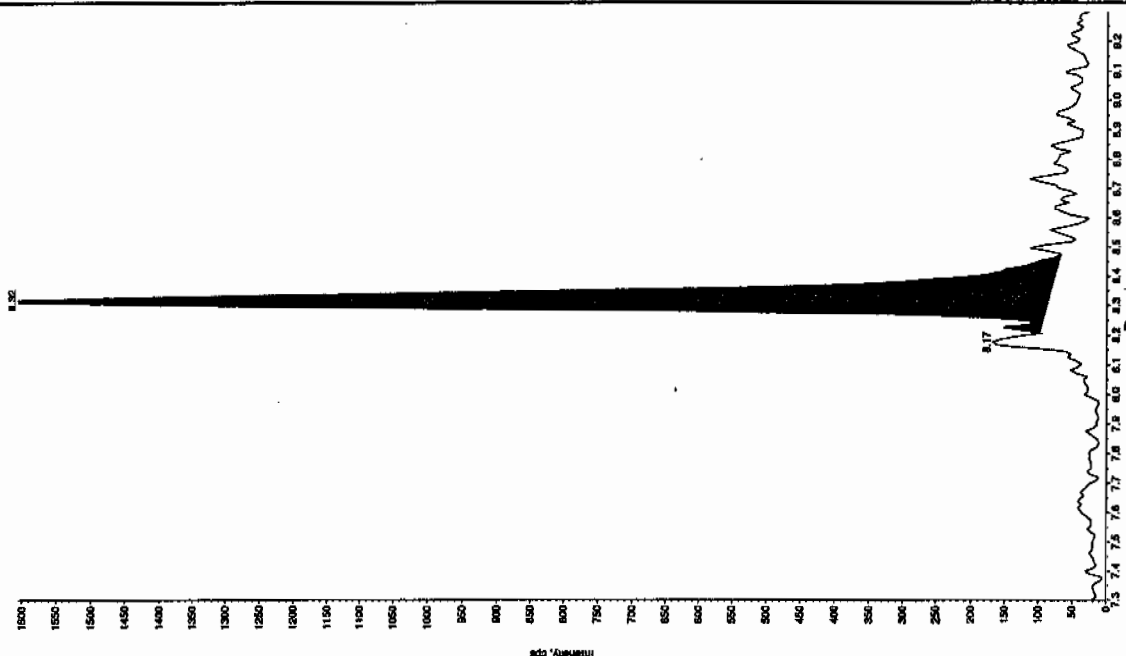
Sample Name: "XBLK02" Sample ID: "TILLER" File: "EXS01220010.wif"  
 Peak Name: "28-Dinitro-4-nitrofluorene" Mass(es): "166.045.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/22/2010  
 Acq. Time: 12:47:04 PM  
 Modified: No



Sample Name: "XBLK02" Sample ID: "TILLER" File: "EXS01220010.wif"  
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.151.9 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 1.34 ng/mL  
 Acq. Date: 1/22/2010  
 Acq. Time: 12:47:04 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 160.00 cps  
 Min. Peak Width: 3.00 points  
 RT Window: 15.0 sec  
 Expected RT: 8.30 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.32 min  
 Area: 6.57e+003 counts  
 Height: 1519.243 cps  
 Start Time: 8.21 min  
 End Time: 8.47 min

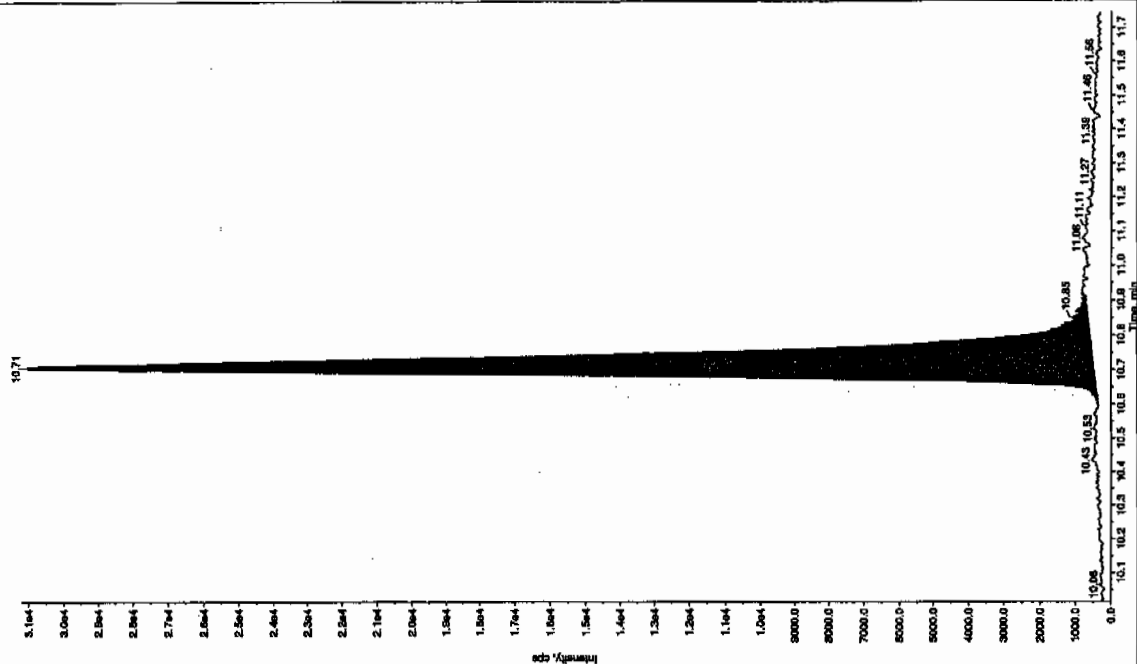


\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSEXP#4



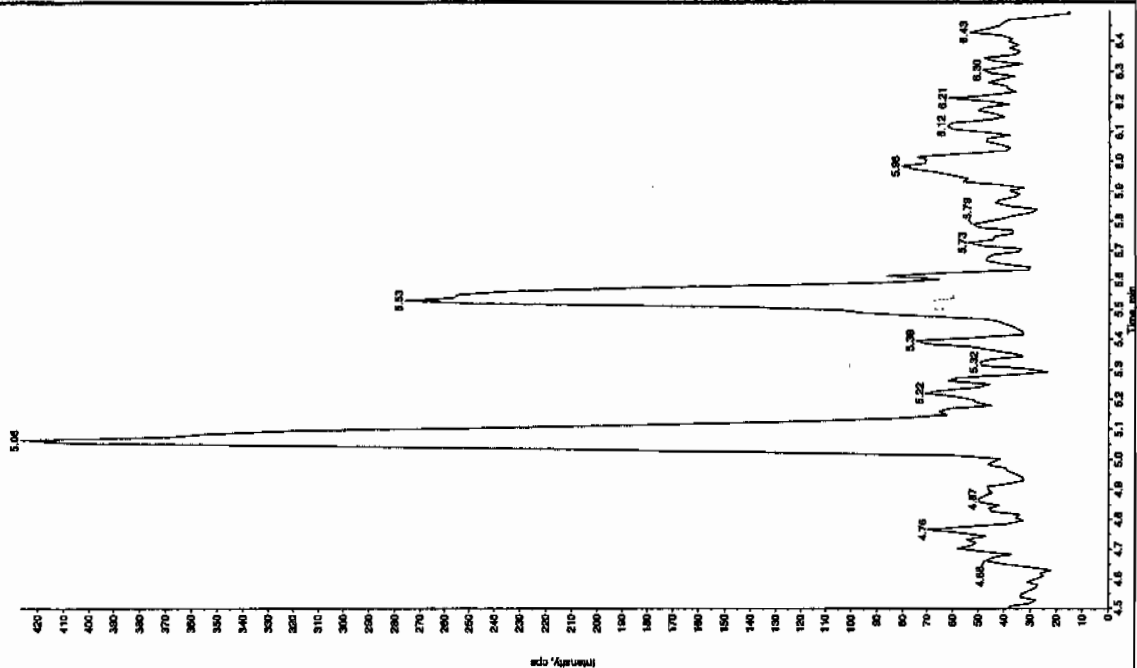
Sample Name: "XELK02" Sample ID: "111111" File: "EX501220010.wif"  
 Peak Name: "bis(o-cresyl) phosphate" Mass(es): "353.191.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: < 0  
 Acq. Date: 1/22/2010  
 Acq. Time: 12:47:04 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 1.00e4 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 10.7 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.7 min  
 Area: 1.25e+005 counts  
 Height: 30718.710 cps  
 Start Time: 10.6 min  
 End Time: 10.9 min



Sample Name: "XELK02" Sample ID: "111111" File: "EX501220010.wif"  
 Peak Name: "24-Diamino-6-ribose" Mass(es): "166.046.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/22/2010  
 Acq. Time: 12:47:04 PM  
 Modified: No



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

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1160-1

Lab Code: GEL

Lab Sample ID: XIBLK03

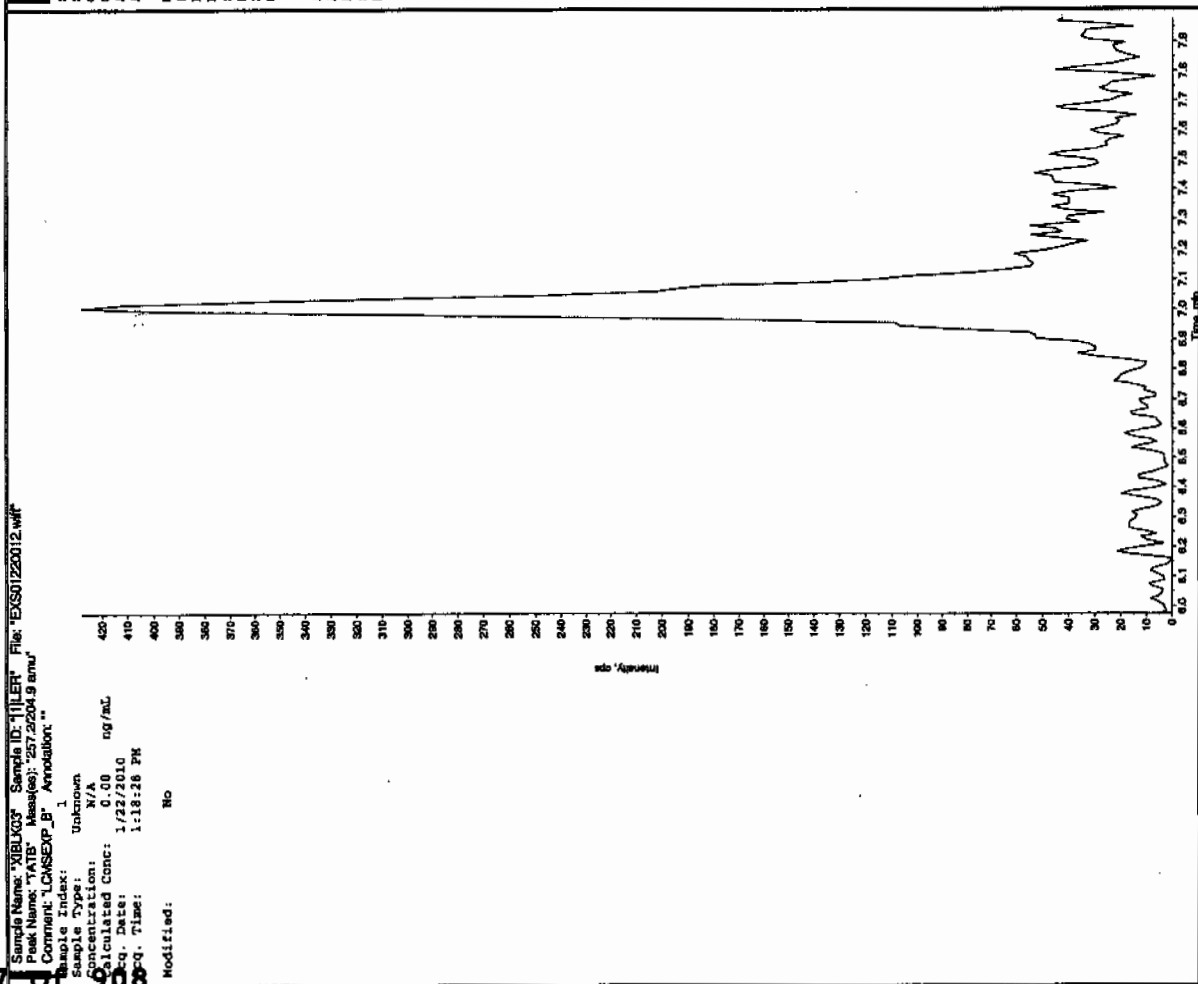
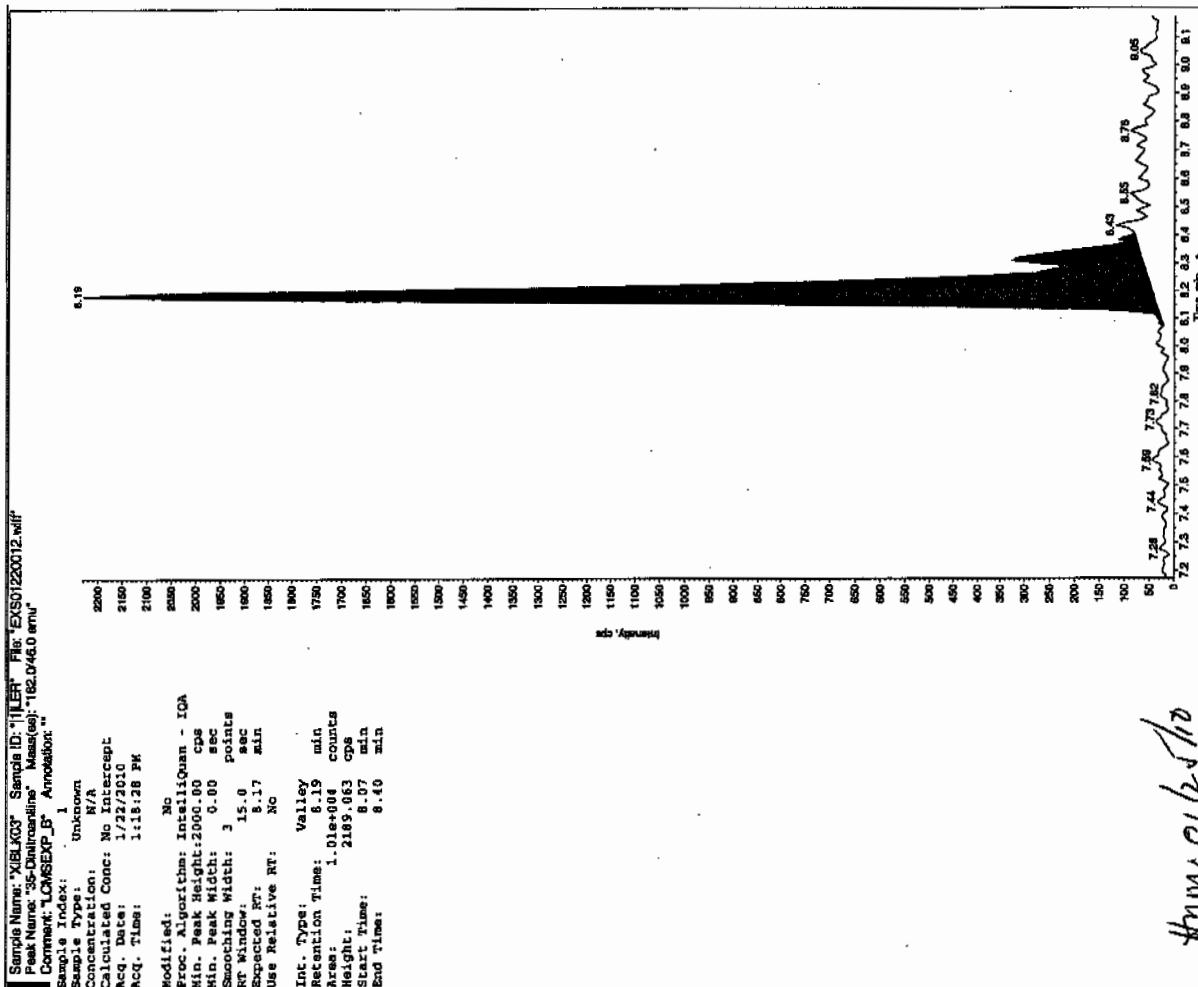
Analysis Date: 22-JAN-10 13:18

GEL Data File: EXS01220012.wiff

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

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



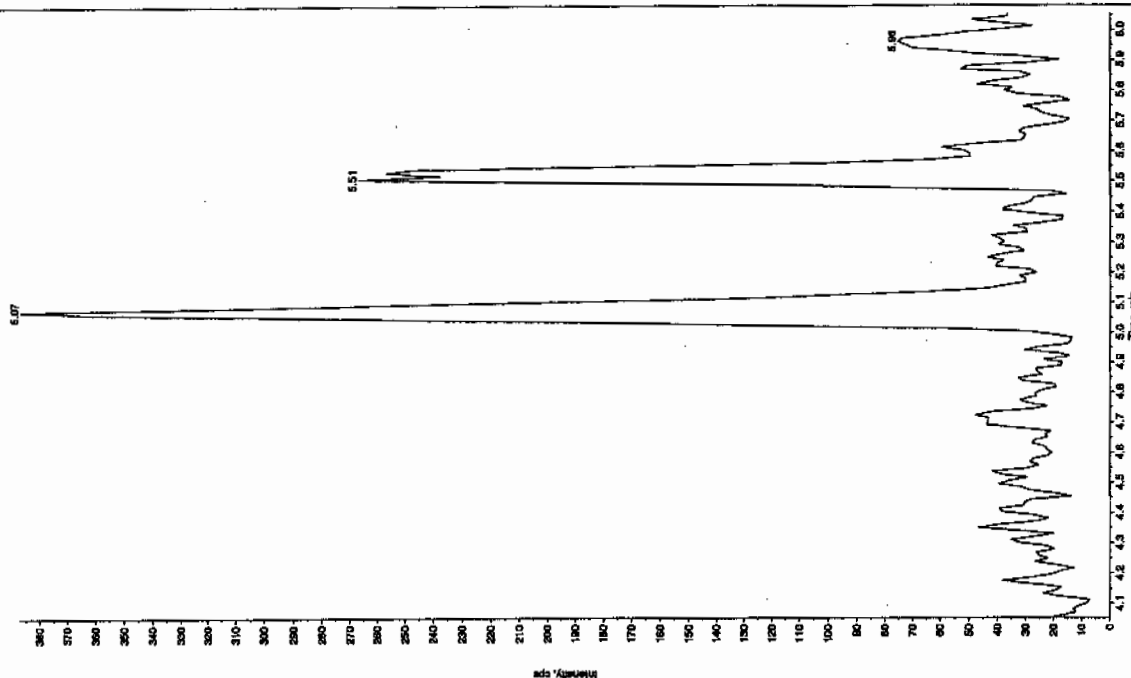
\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

See 1/25/10

Annex 1/25/10

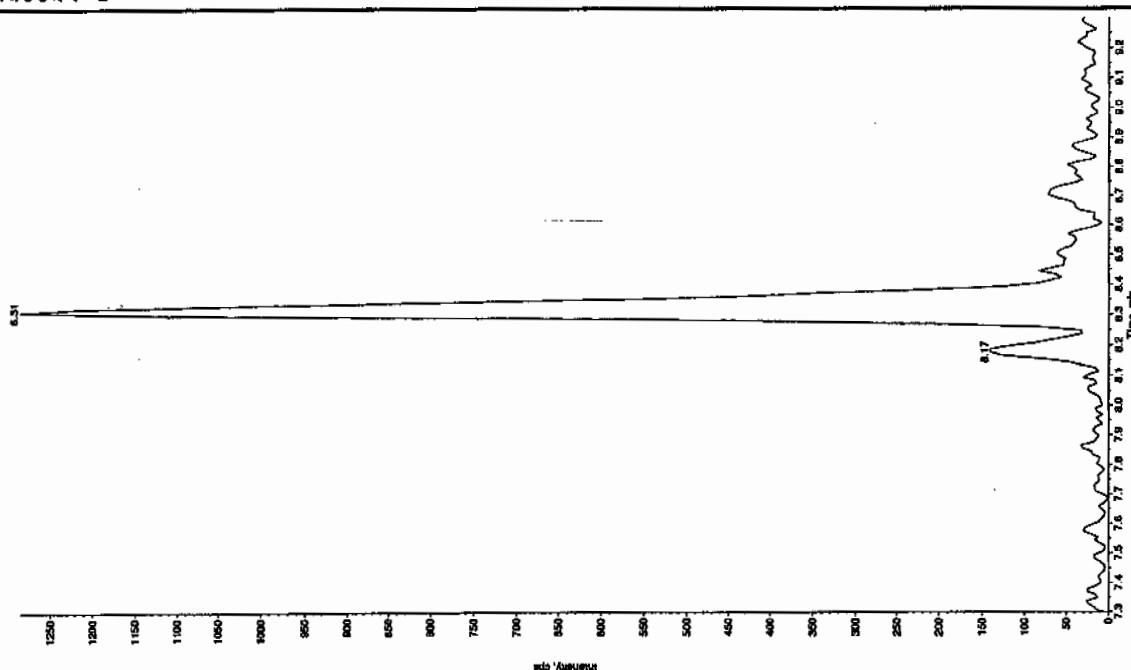
Sample Name: "XELK03" Sample ID: "J1LEF" File: "EX50120012.wif"  
 Peak Name: "25-Oxoteno-4-ylidene" Mass(es): "166.046.0 amu"  
 Comment: "LCMSXP\_B" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 1/22/2010  
 Acq. Date: 1:18:28 PM  
 Acq. Time: 1:18:28 PM  
 Modified: No

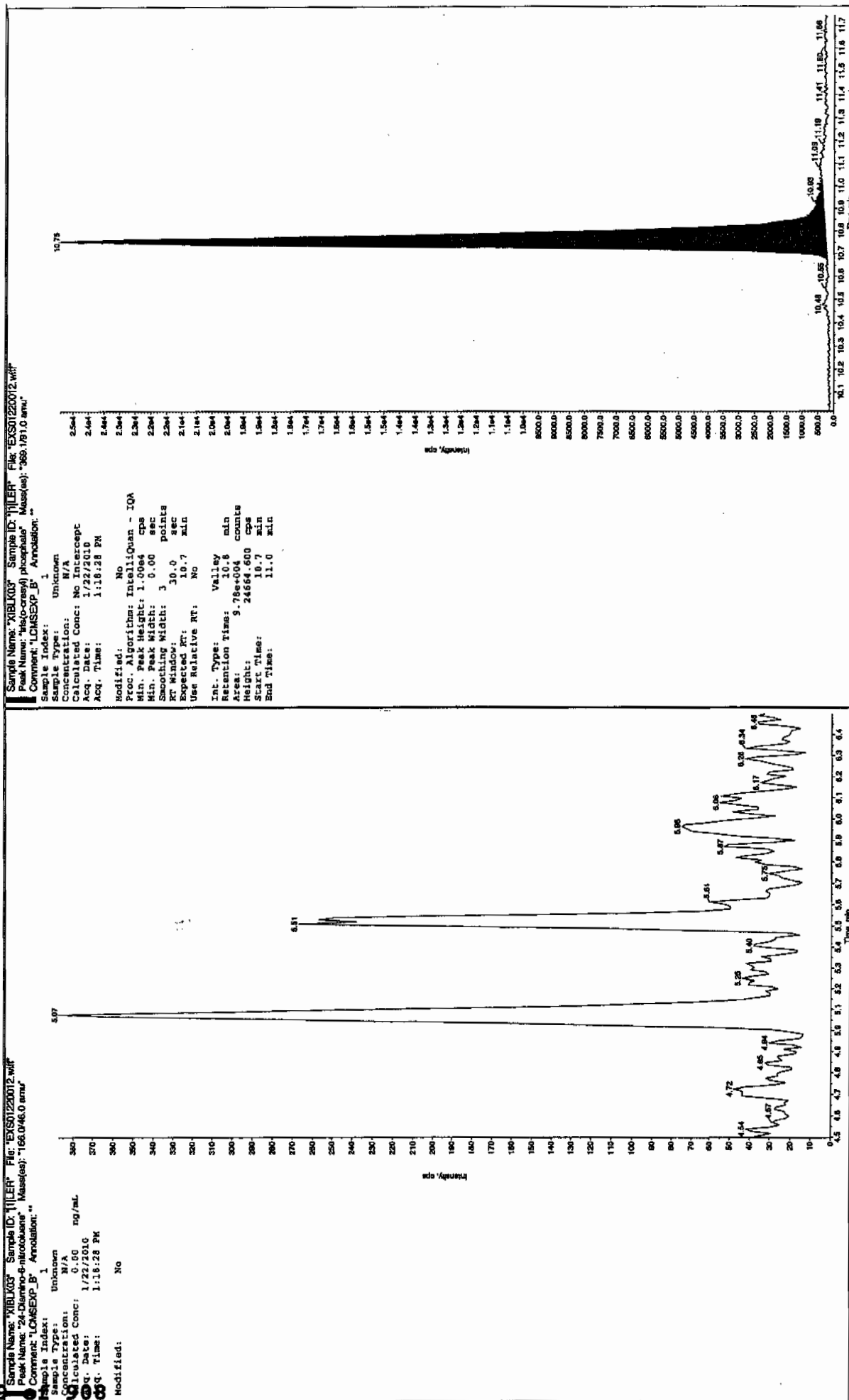


Sample Name: "XELK03" Sample ID: "J1LEF" File: "EX50120012.wif"  
 Peak Name: "25-Oxoteno-4-ylidene" Mass(es): "162.151.9 amu"  
 Comment: "LCMSXP\_B" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 1/22/2010  
 Acq. Date: 1:18:28 PM  
 Acq. Time: 1:18:28 PM  
 Modified: No



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



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

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1160-1

Lab Code: GEL

Lab Sample ID: XIBLK04

Analysis Date: 22-JAN-10 16:42

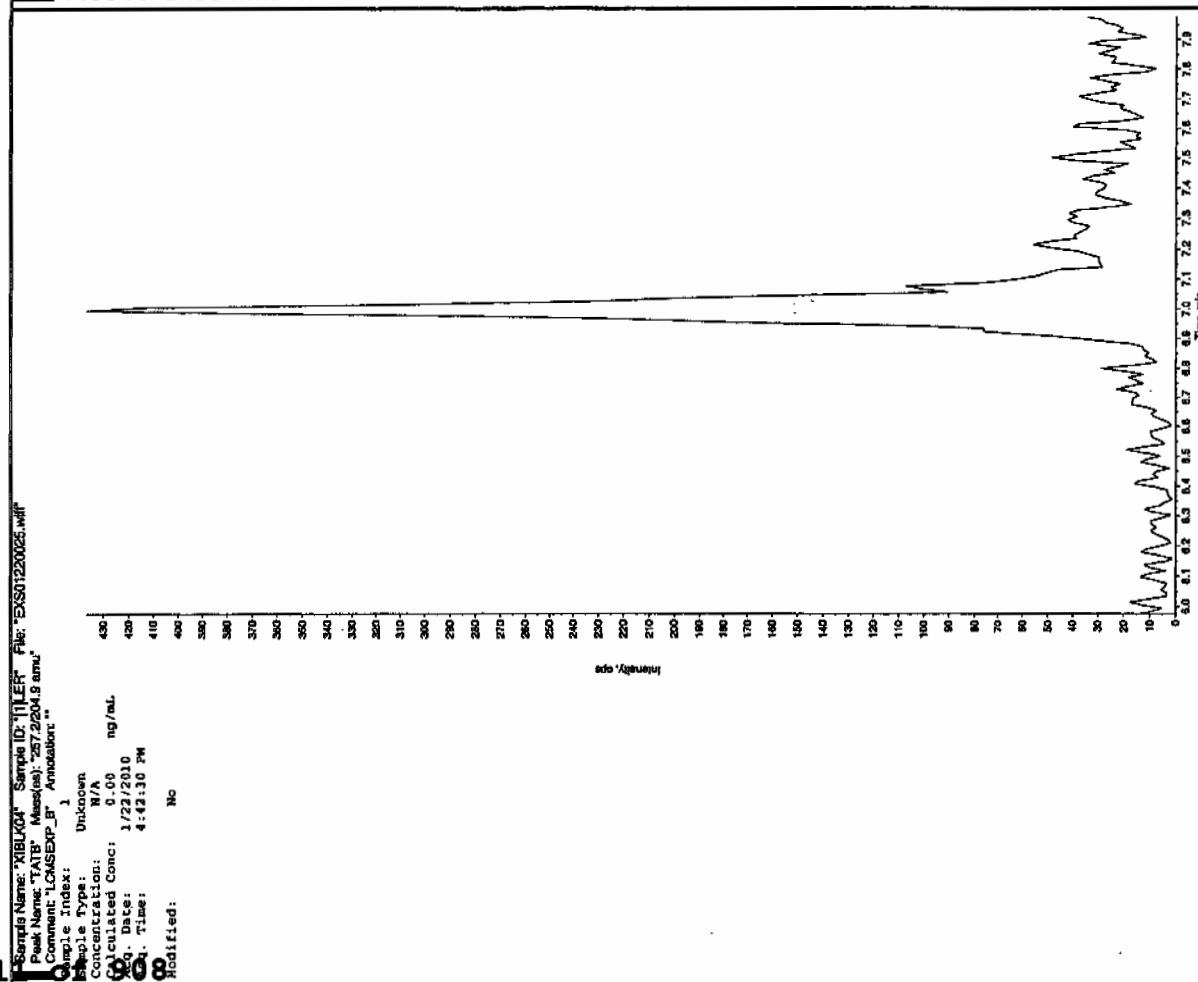
GEL Data File: EXS01220025.wiff

Instrument ID: LCMSMS

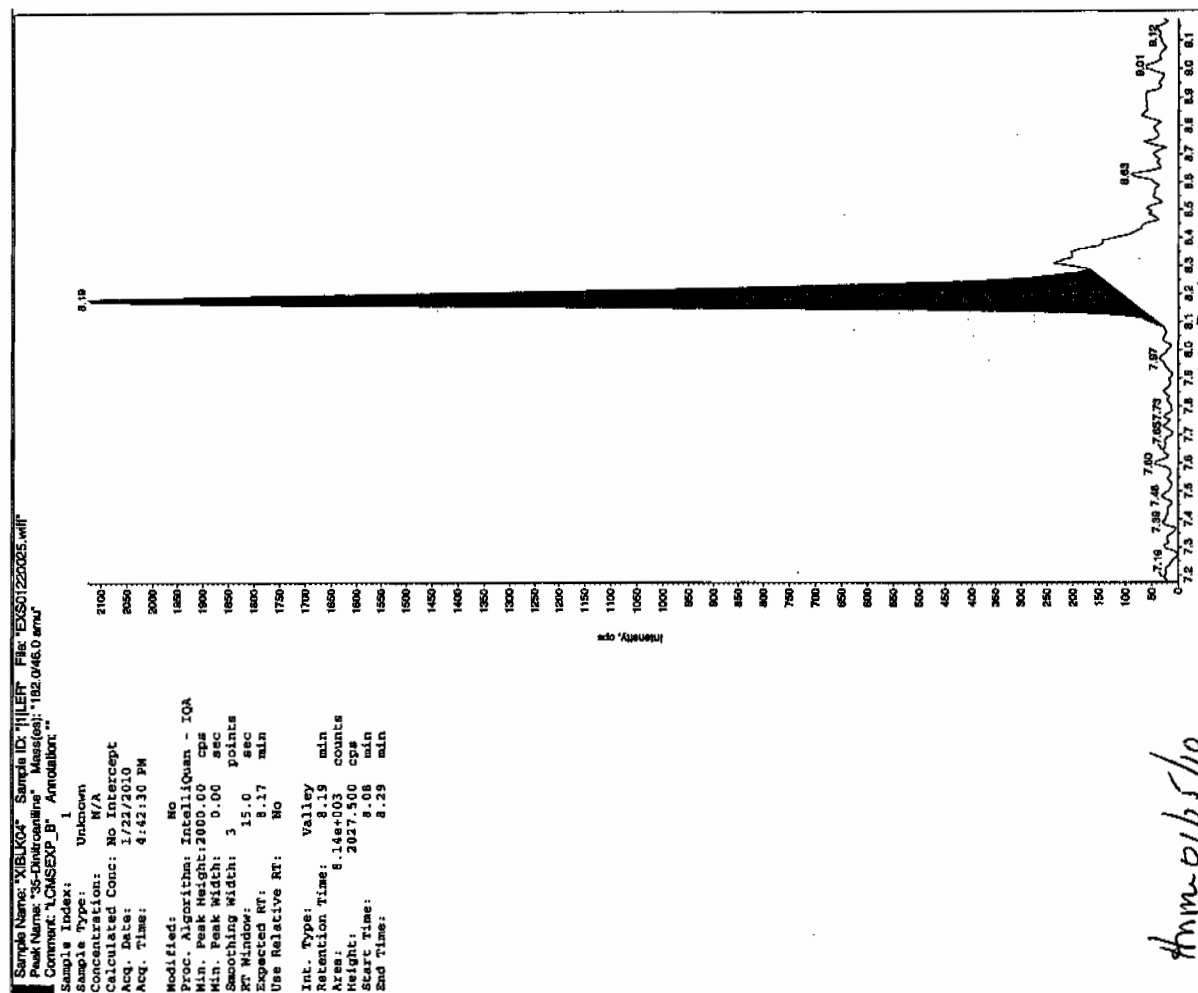
Column: Phenomenex Ultracarb 5u ODS(20)

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

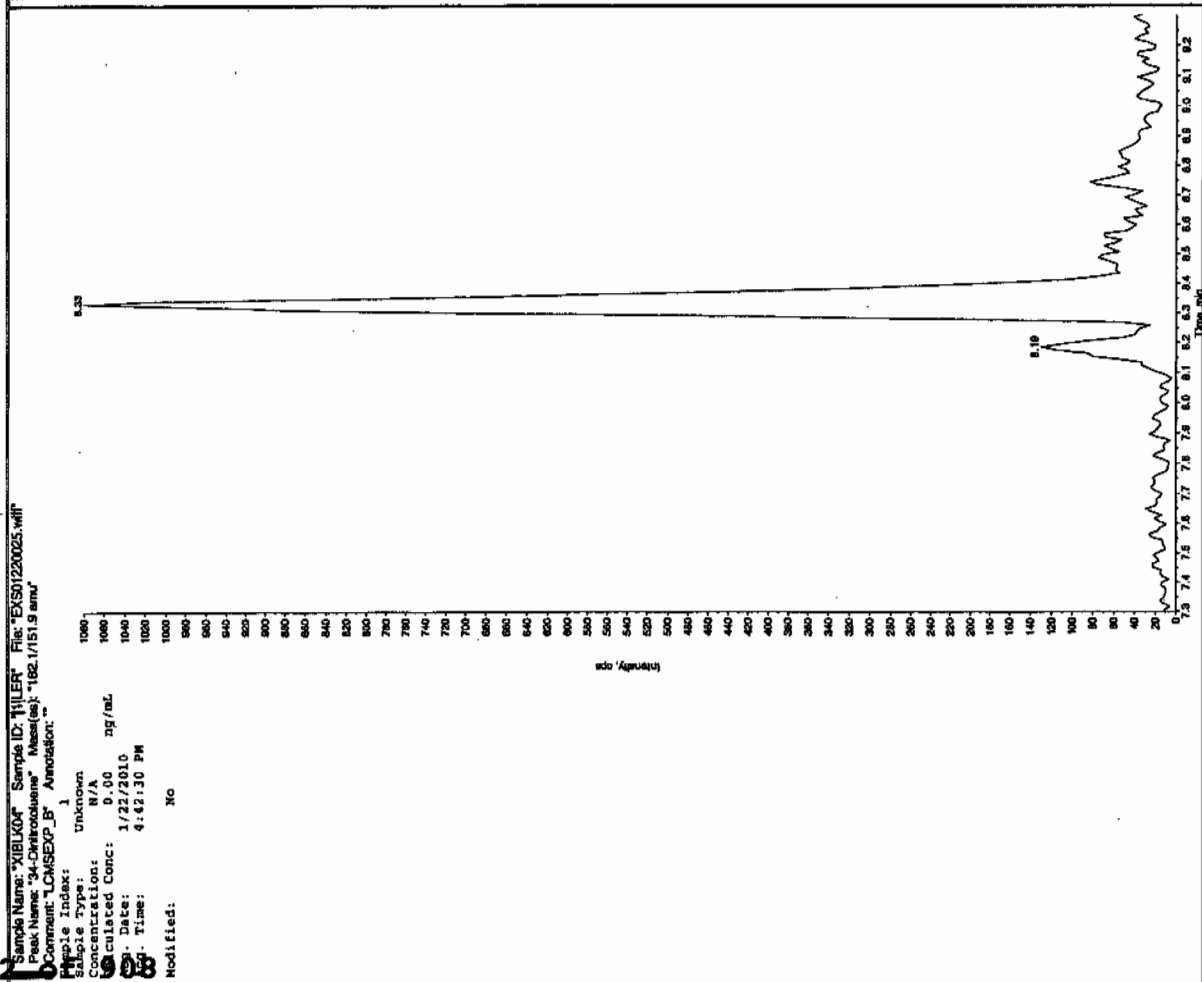
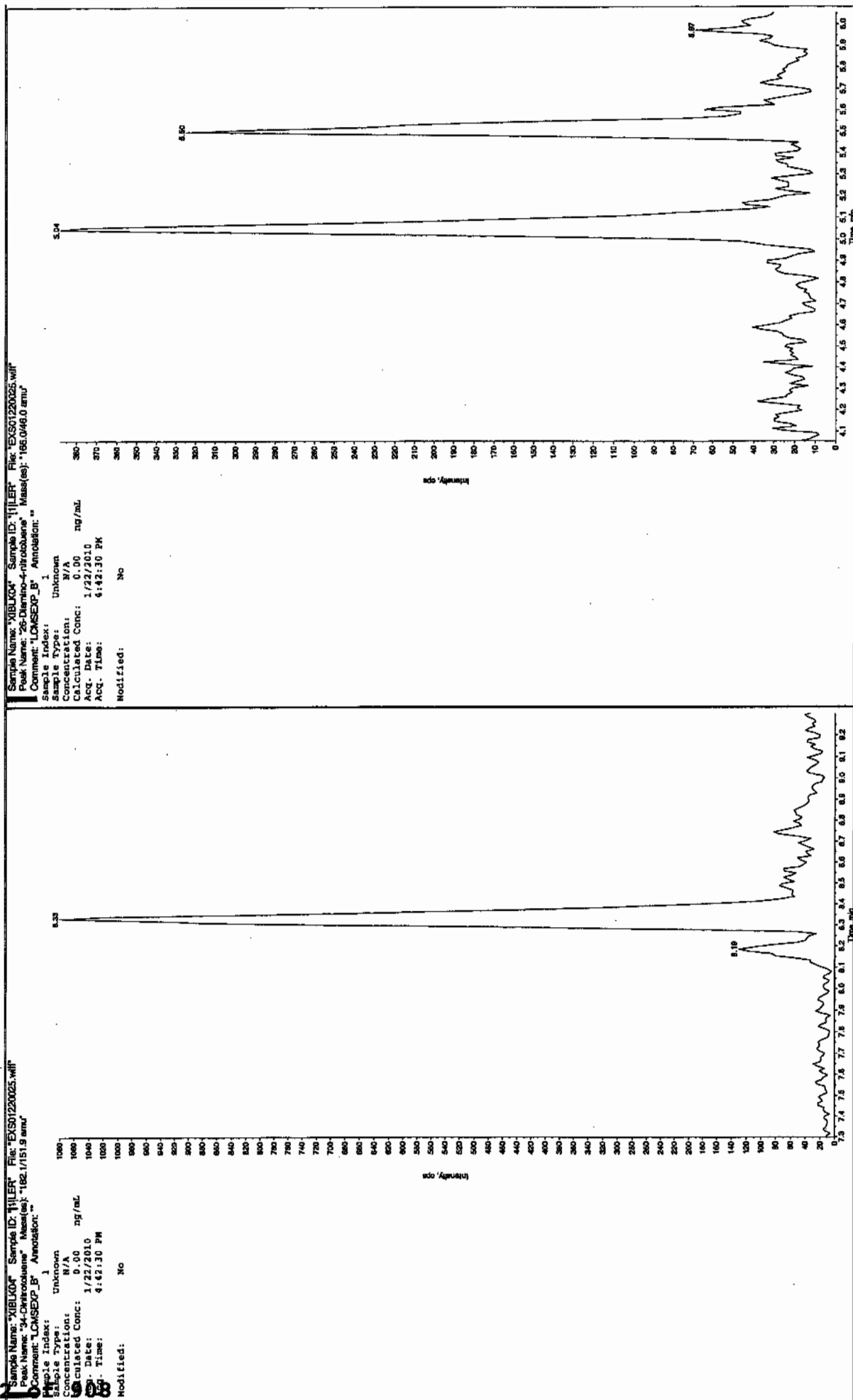
See 112510



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

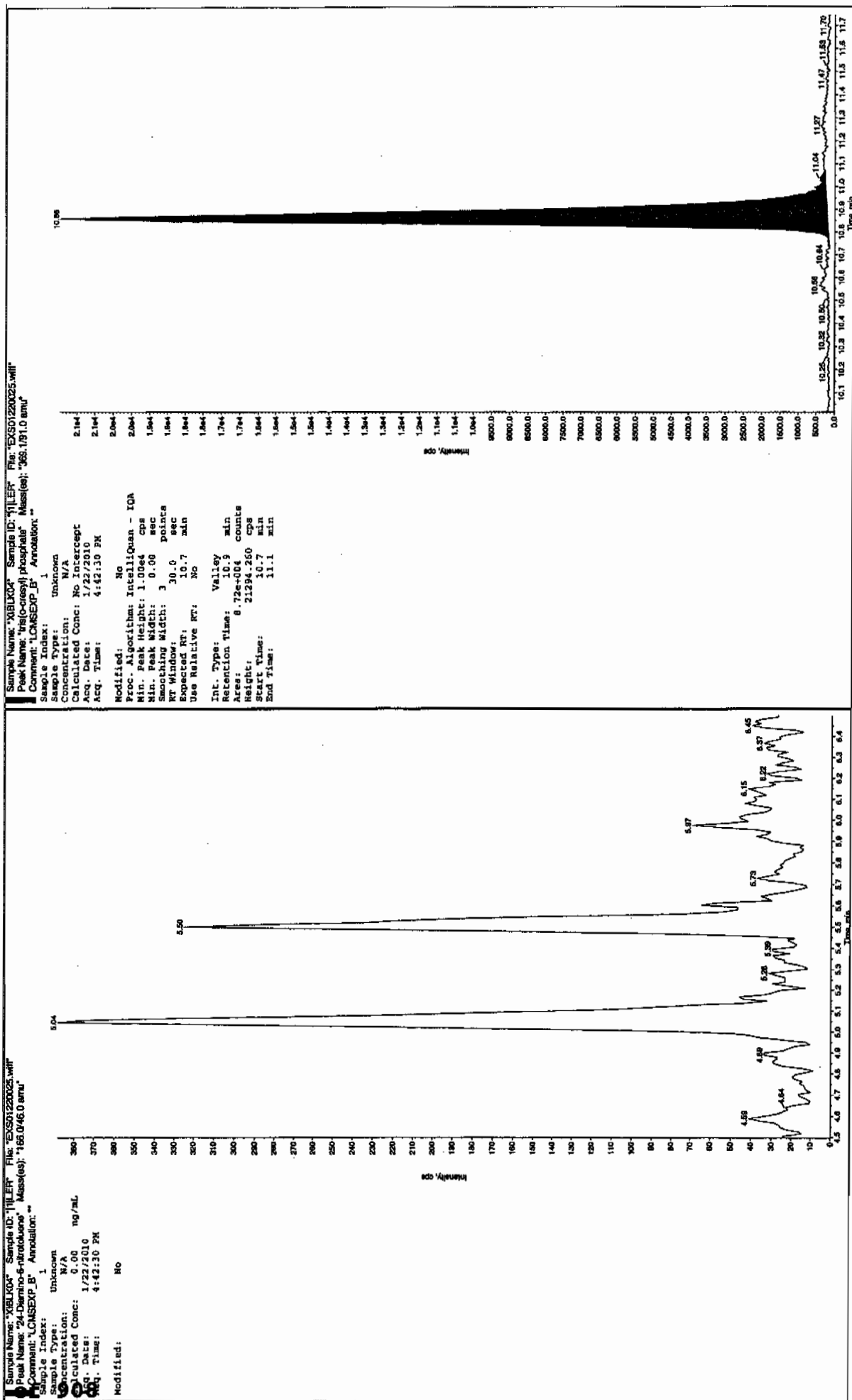


See 012510



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





\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSEXP#4

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1160-1

Lab Code: GEL

Lab Sample ID: XIBLK05

Analysis Date: 22-JAN-10 20:06

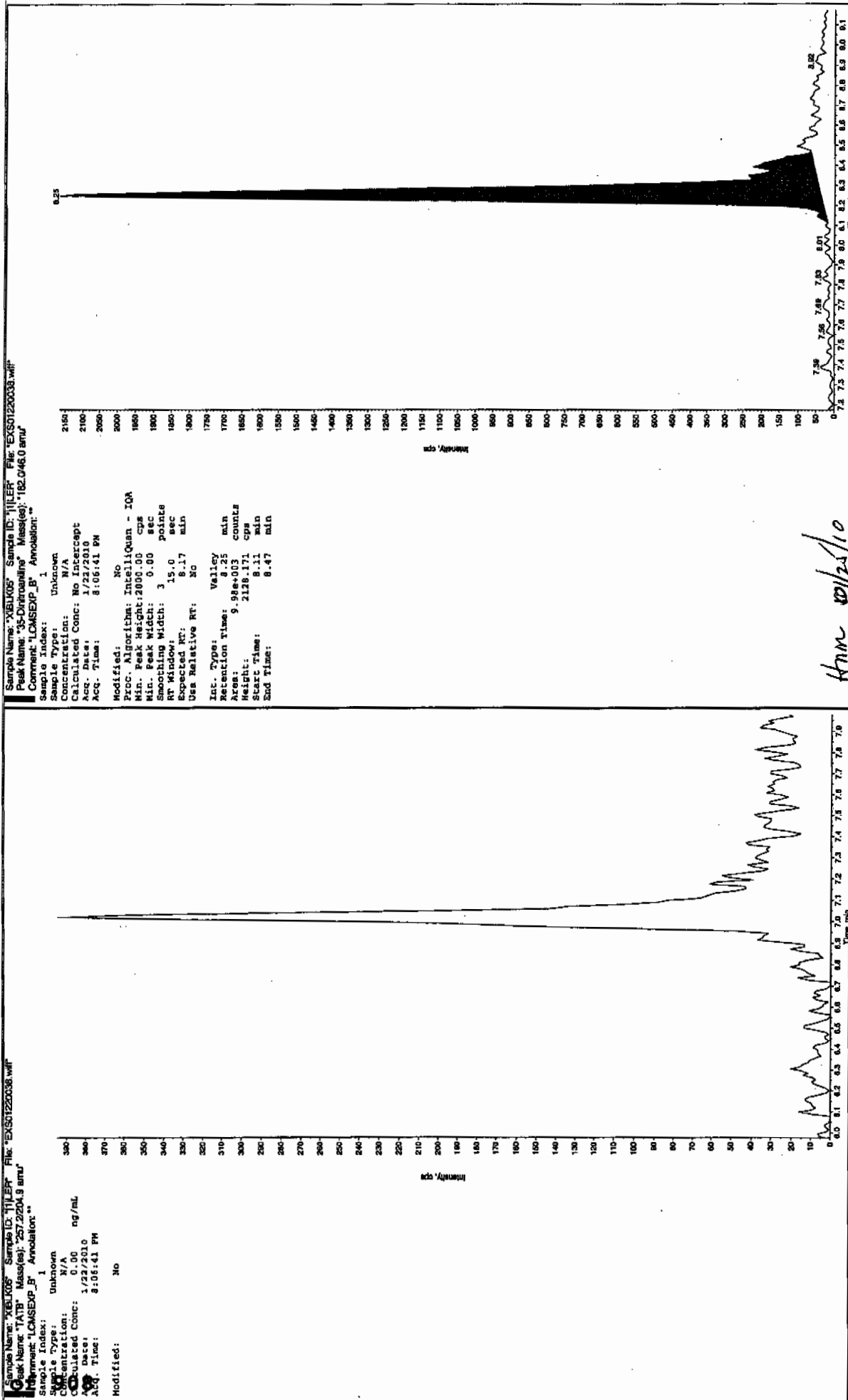
GEL Data File: EXS01220038.wiff

Instrument ID: LCMSMS

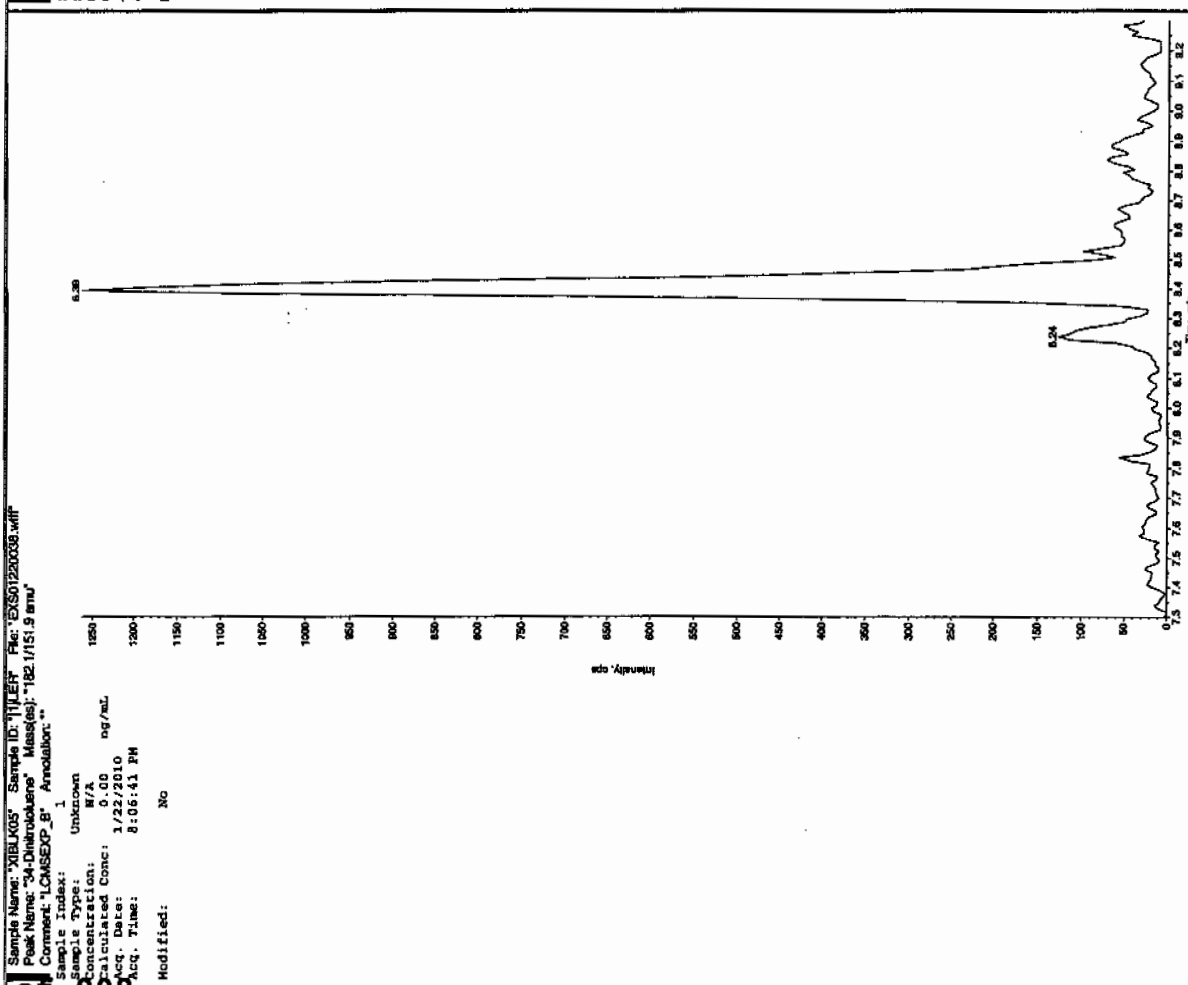
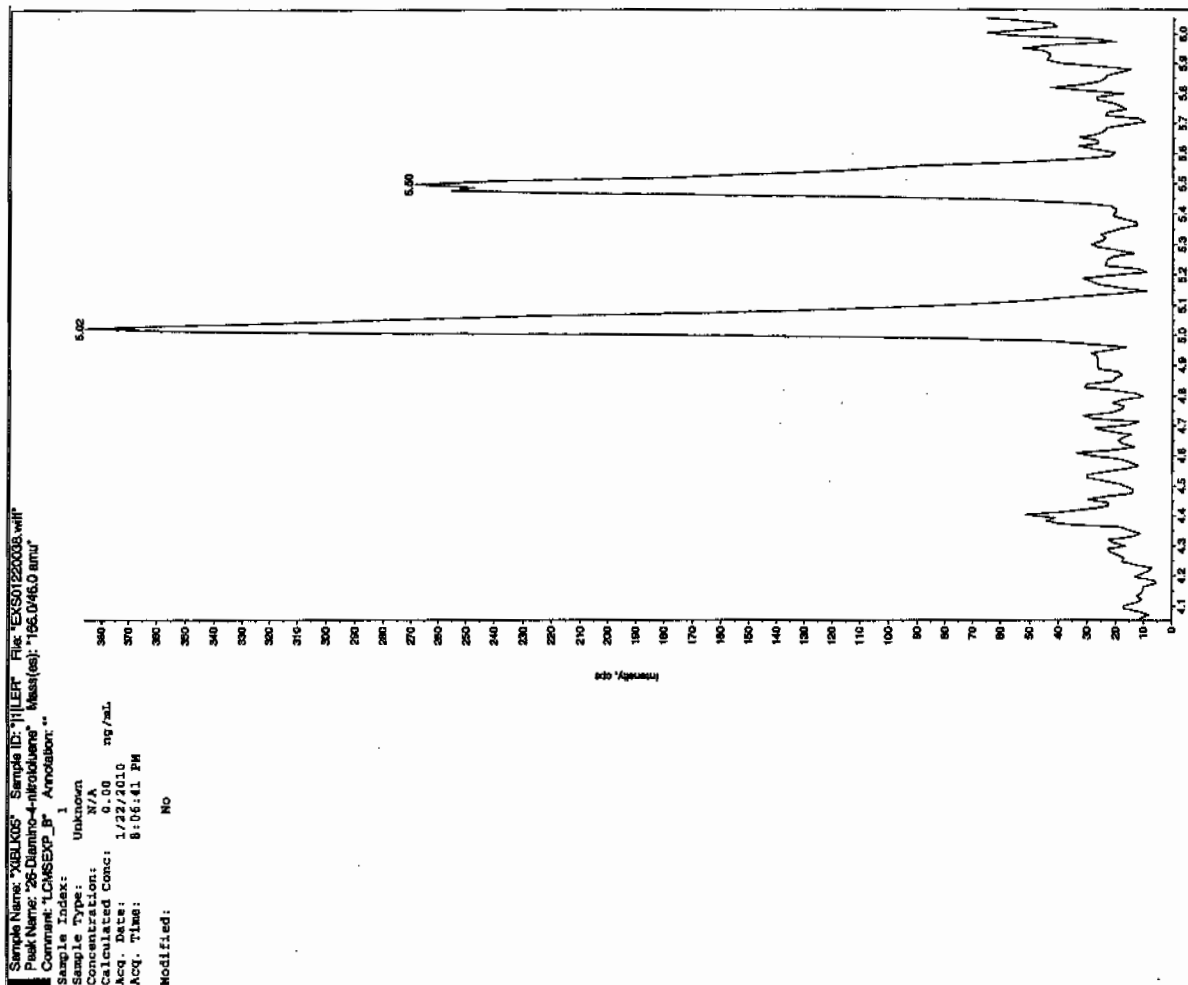
Column: Phenomenex Ultracarb 5u ODS(20)

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

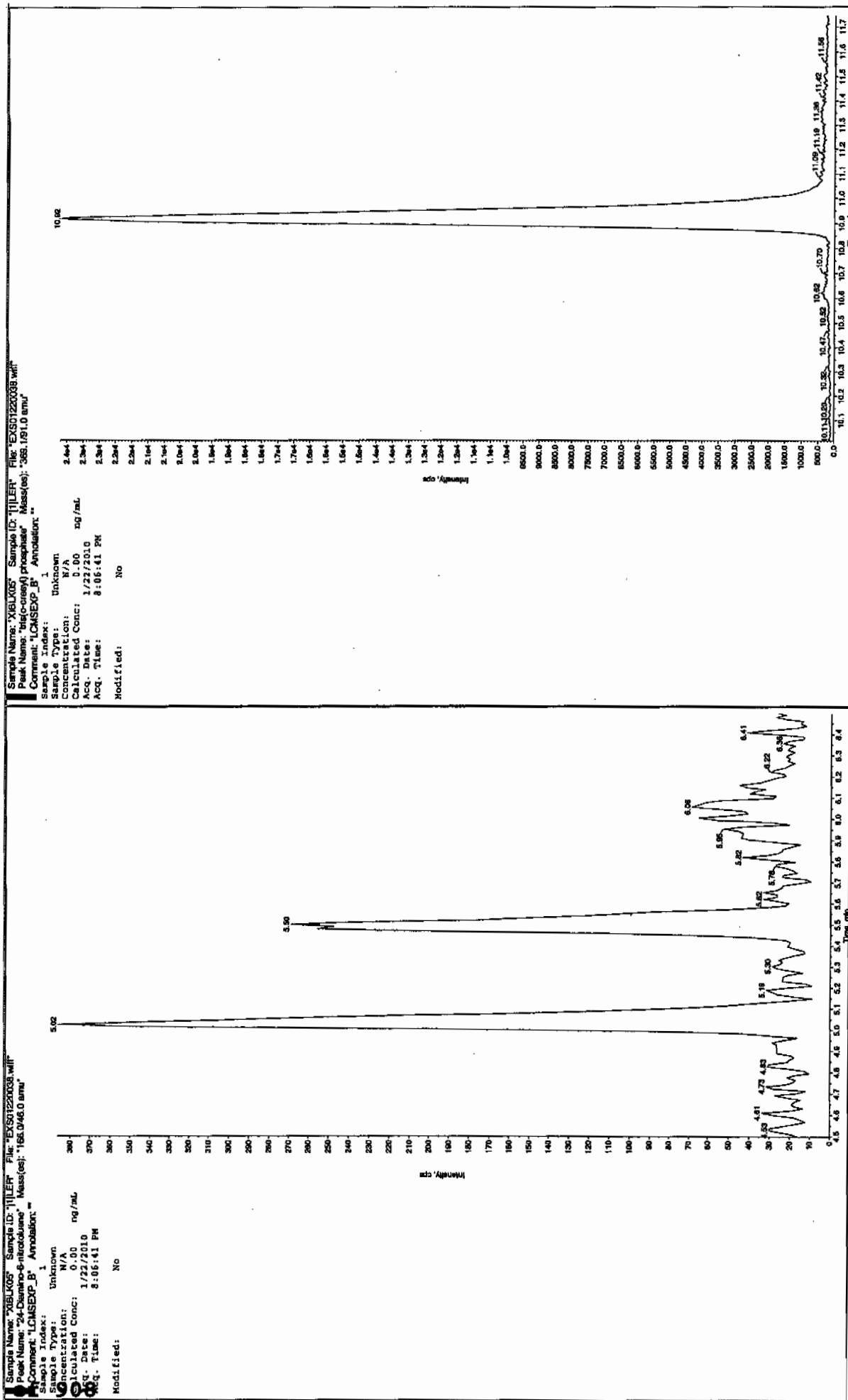
han 1/25/10



han 1/25/10



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



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

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1160-1

Lab Code: GEL

Lab Sample ID: XIBLK06

Analysis Date: 22-JAN-10 21:40

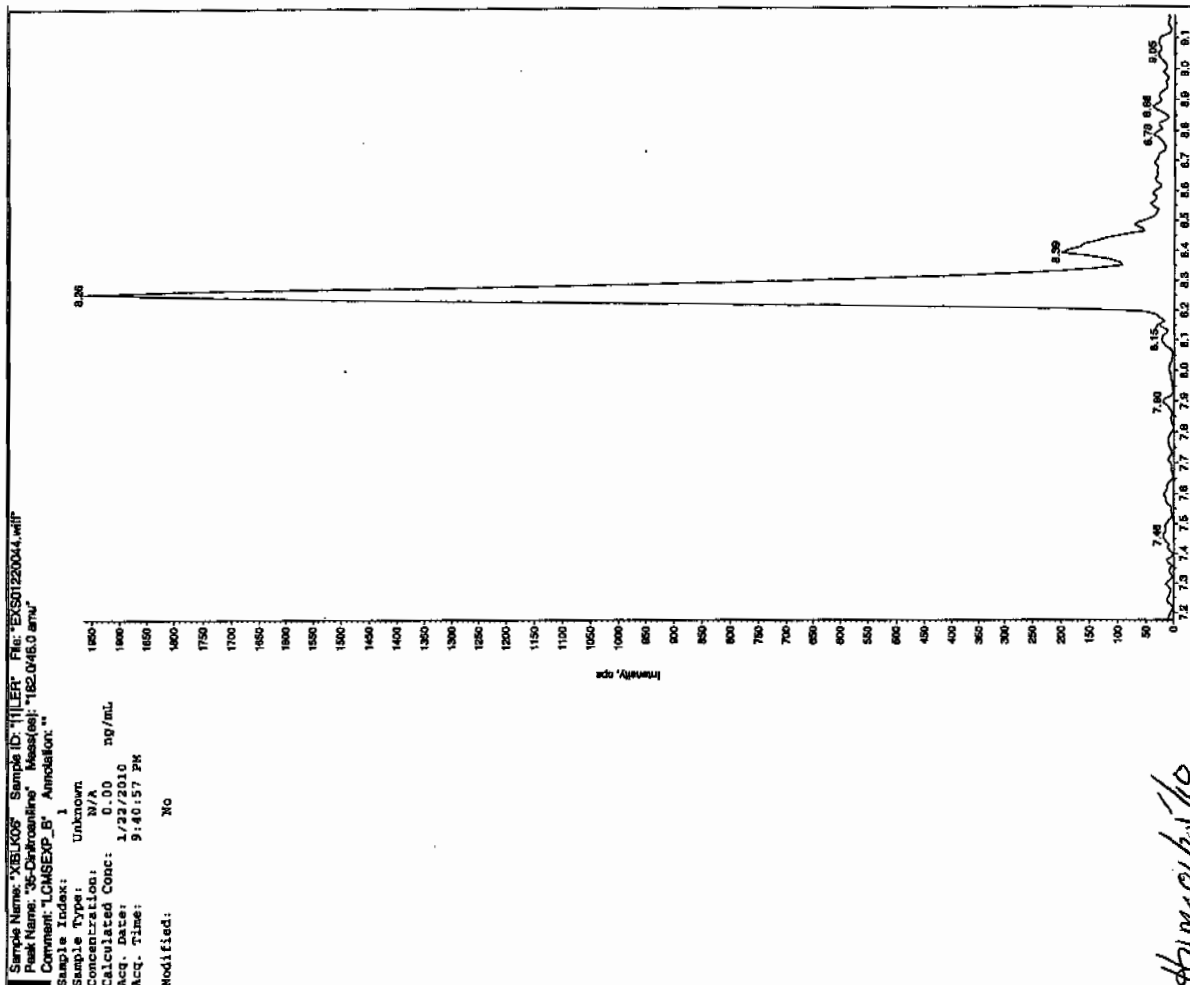
GEL Data File: EXS01220044.wiff

Instrument ID: LCMSMS

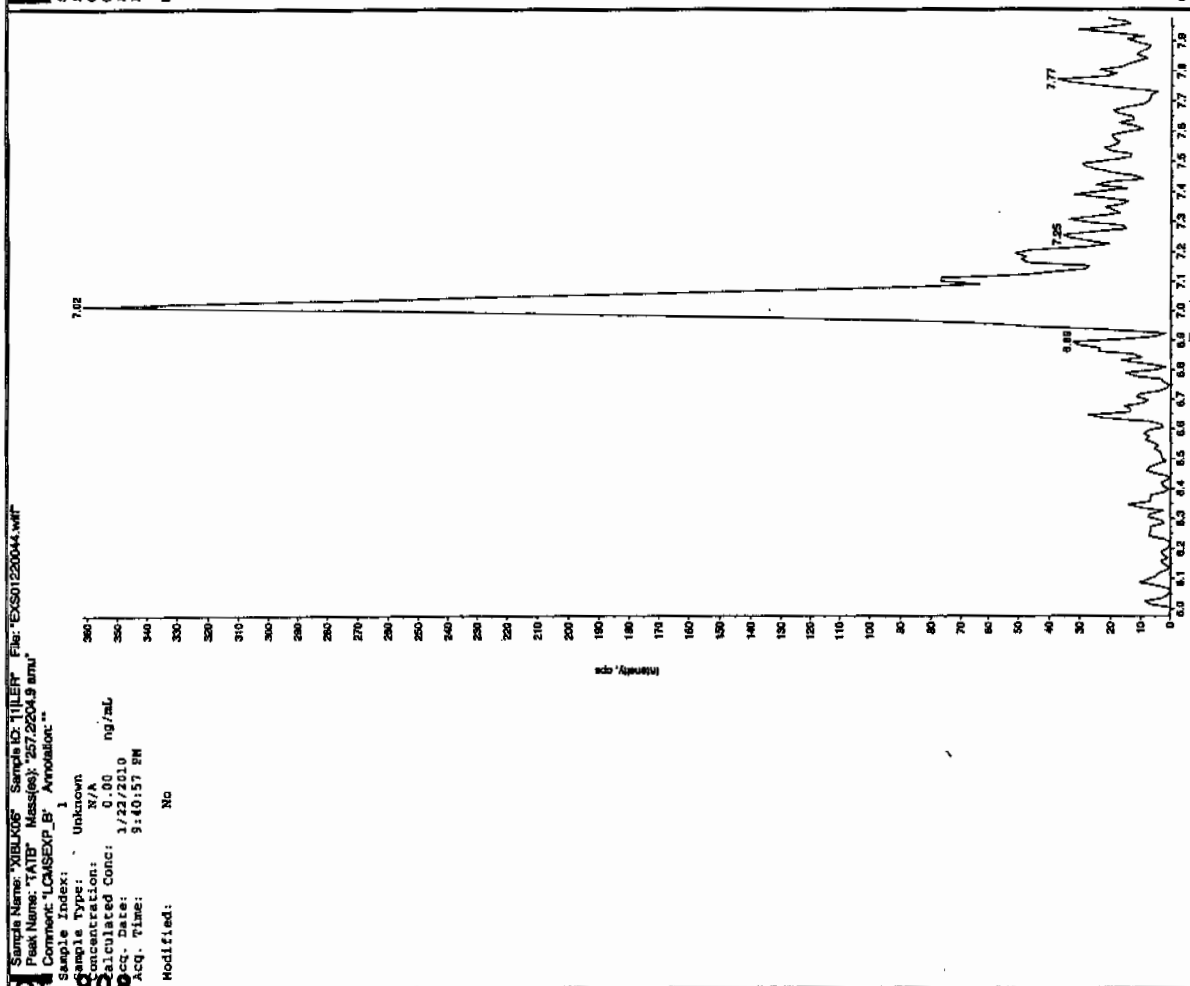
Column: Phenomenex Ultracarb 5u ODS(20)

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

See 1/25/10



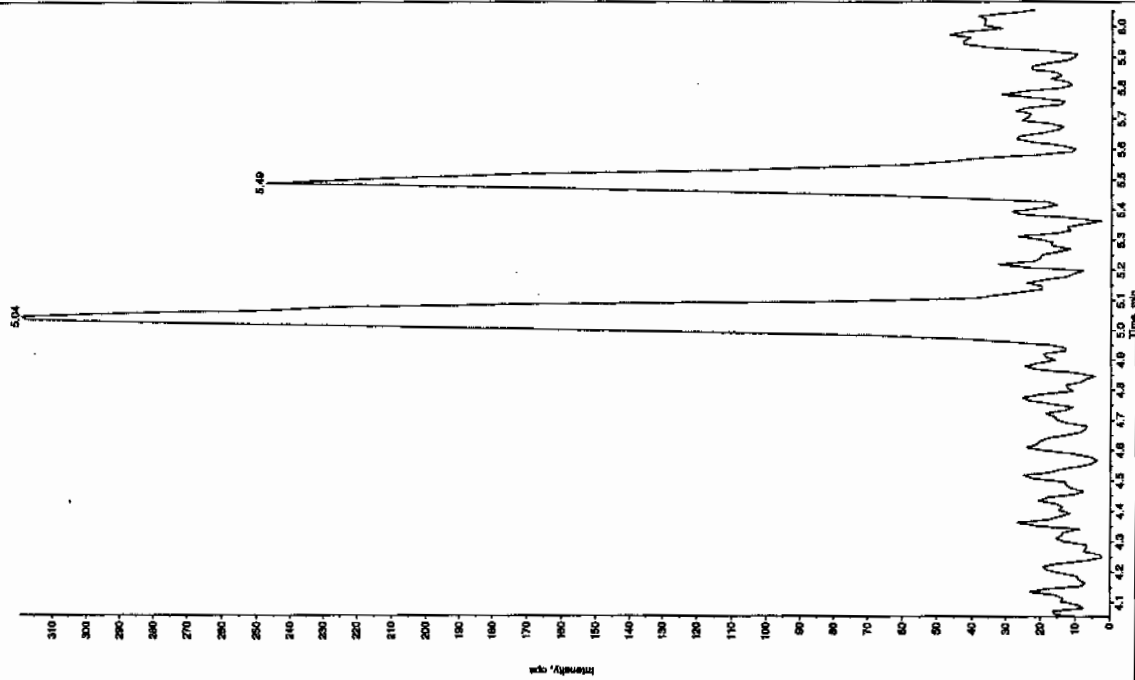
dim oils 10



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

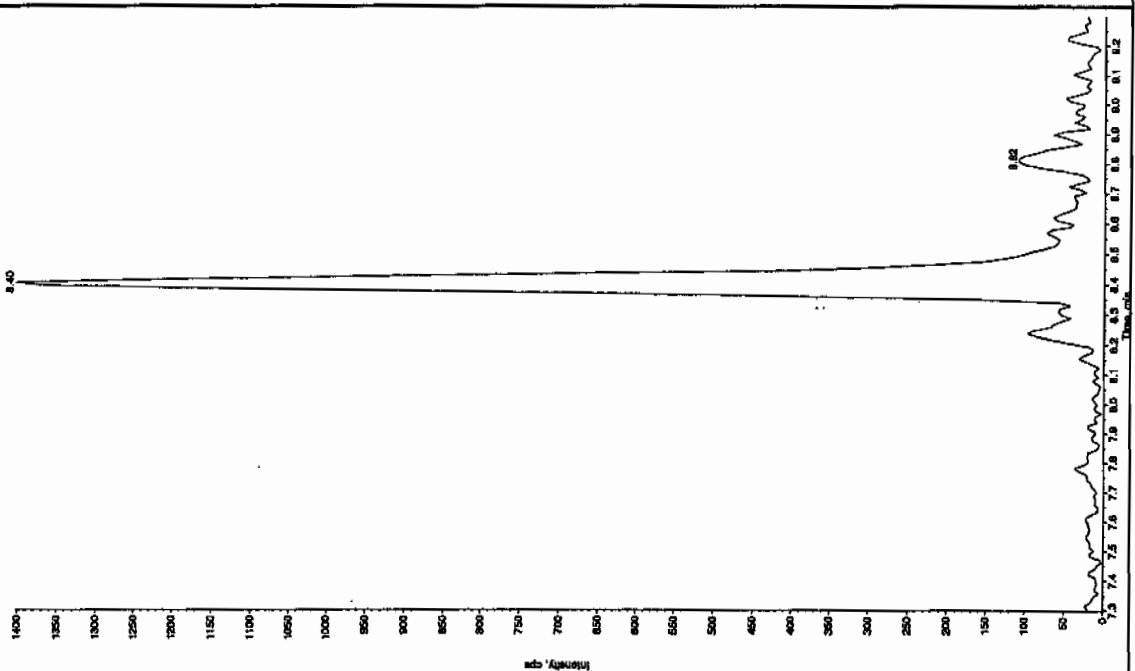
Sample Name: "XBLX06" Sample ID: "111ER" File: "EXS01220044.wit"  
 Peak Name: "26-Dinitro-4-nitrofluorene" Mass(es): "166.046.0 amu"  
 Comment: "LCMS EXP\_B" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/22/2010  
 Acq. Time: 9:40:57 PM  
 Modified: No



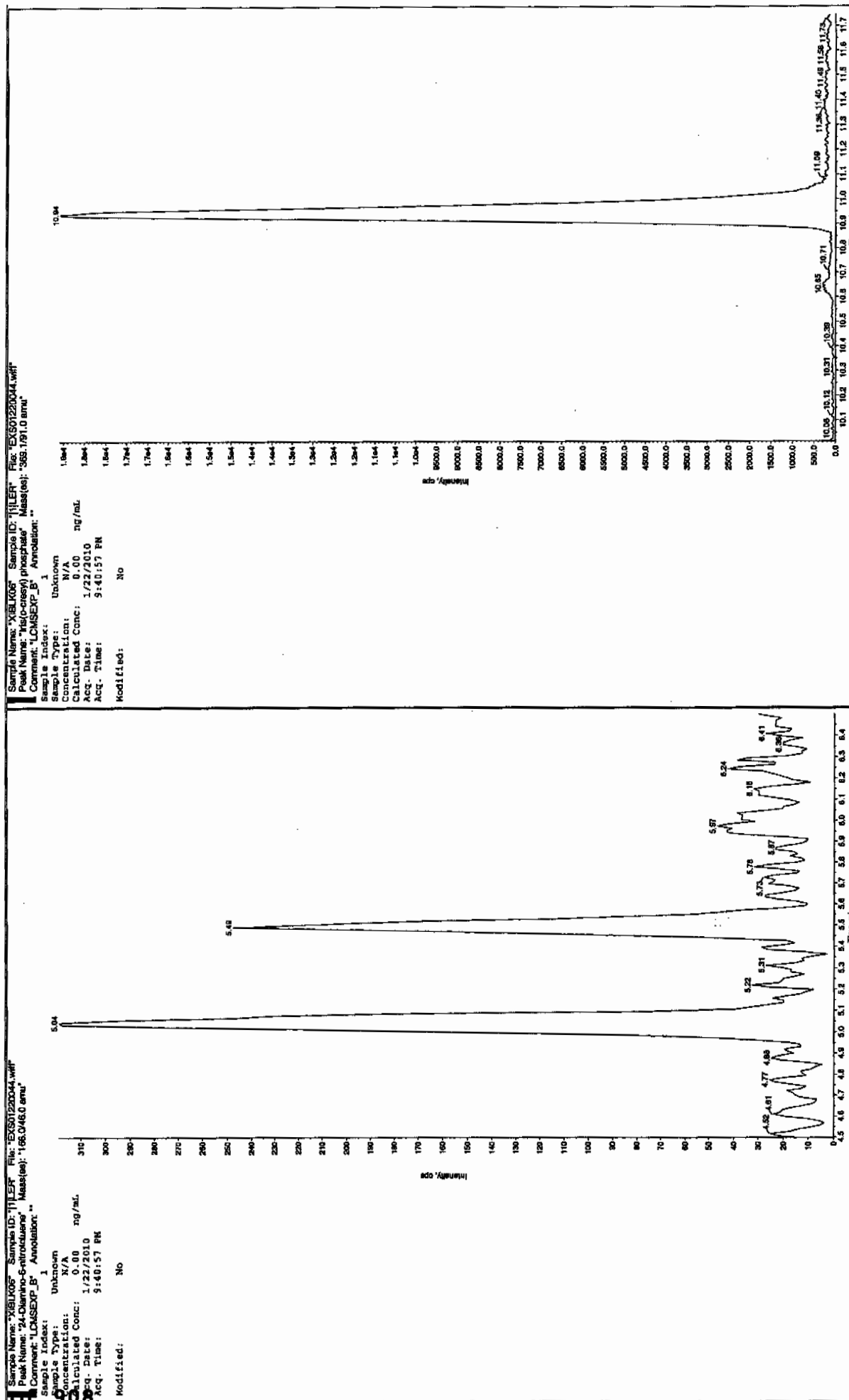
Sample Name: "XBLX06" Sample ID: "111ER" File: "EXS01220044.wit"  
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.1751.9 amu"  
 Comment: "LCMS EXP\_B" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/22/2010  
 Acq. Time: 9:40:57 PM  
 Modified: No



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





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

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1160-1

Lab Code: GEL

Lab Sample ID: XIBLK07

Analysis Date: 22-JAN-10 23:30

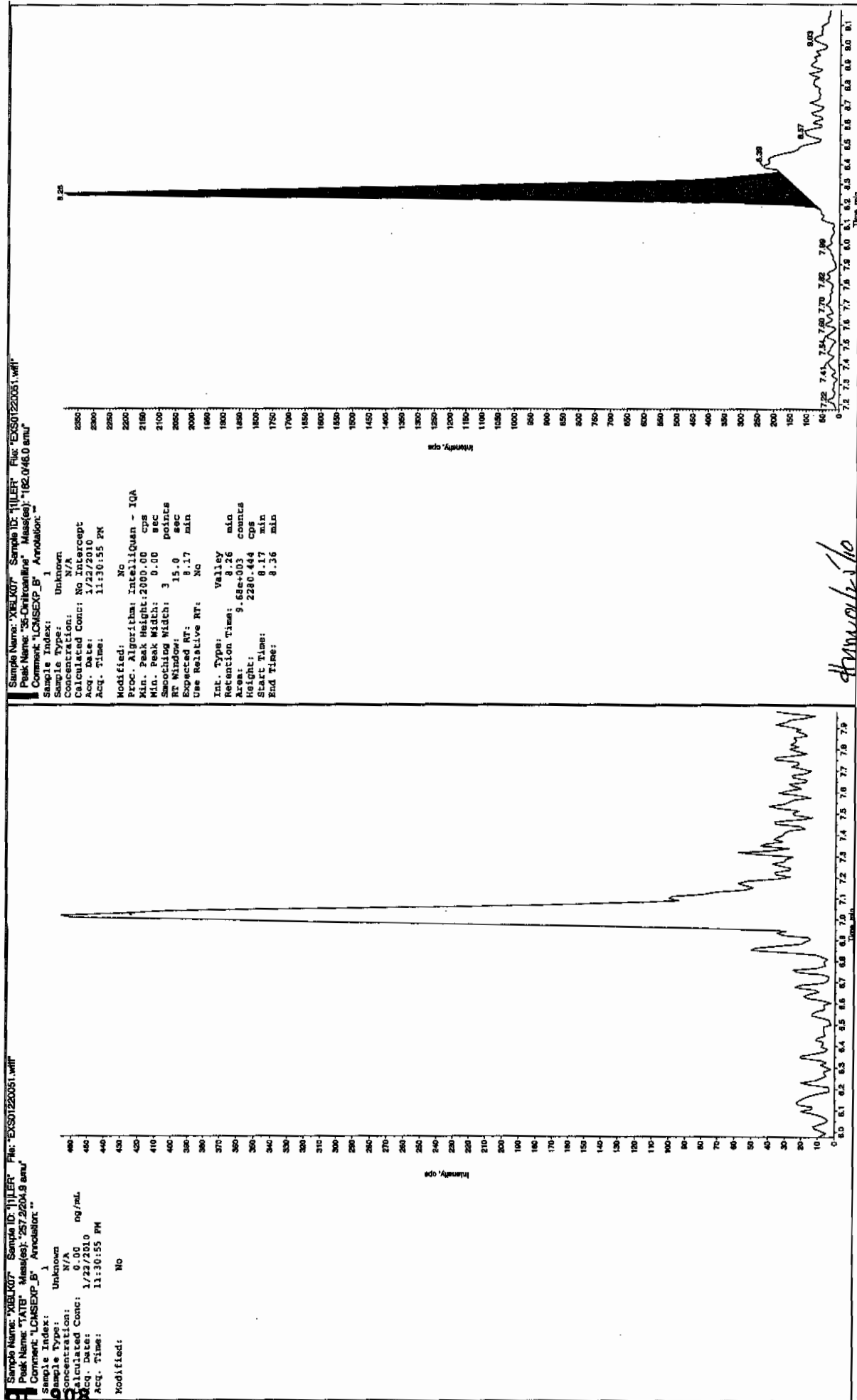
GEL Data File: EXS01220051.wiff

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

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

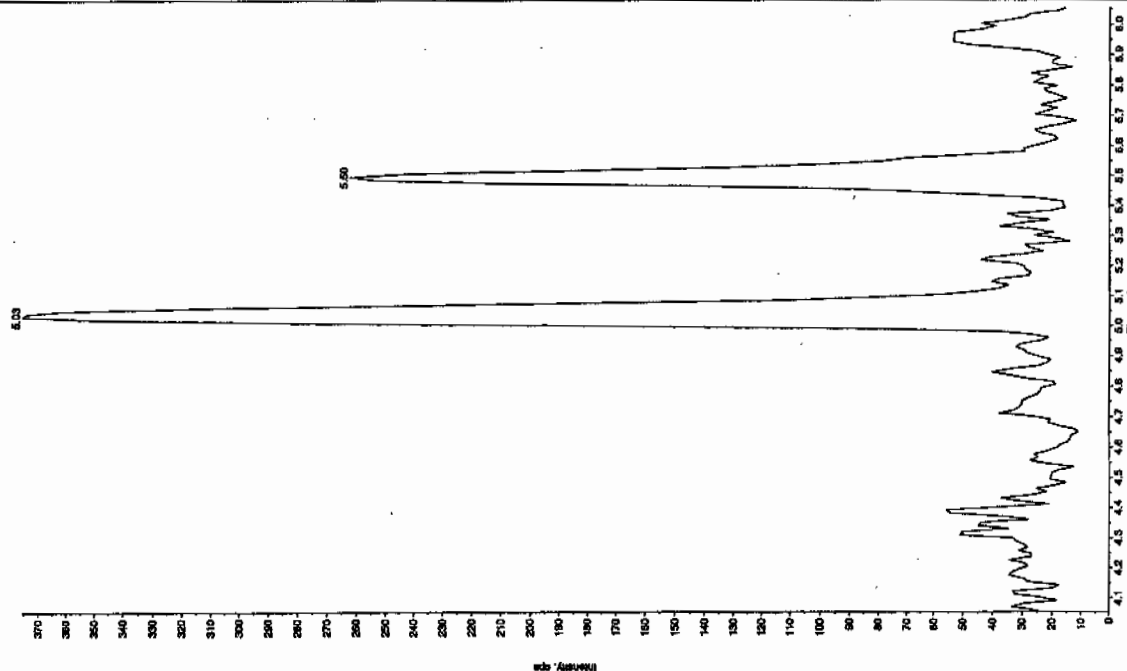
See 112510



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

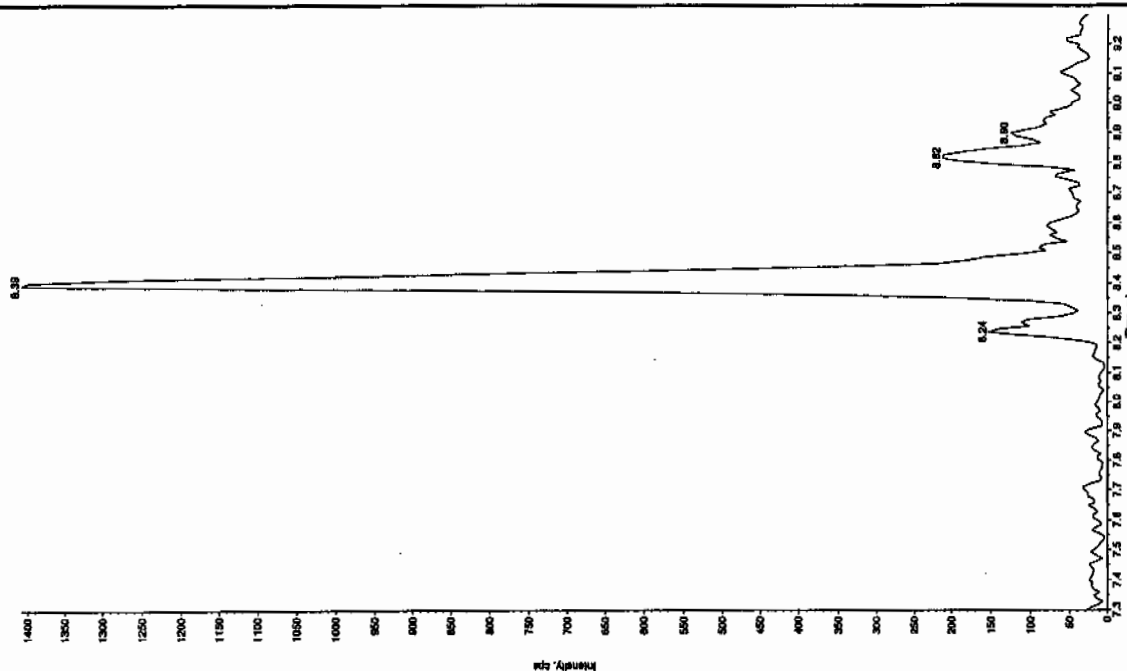
Sample Name: "XBLK07" Sample ID: "JILLER" File: "EX501220051.wif"  
 Peak Name: "26-Diamino-4-nitrofluorene" Mass(es): "166.046.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/22/2010  
 Acq. Time: 11:30:55 PM  
 Modified: No



Sample Name: "XBLK07" Sample ID: "JILLER" File: "EX501220051.wif"  
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.1751.9 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

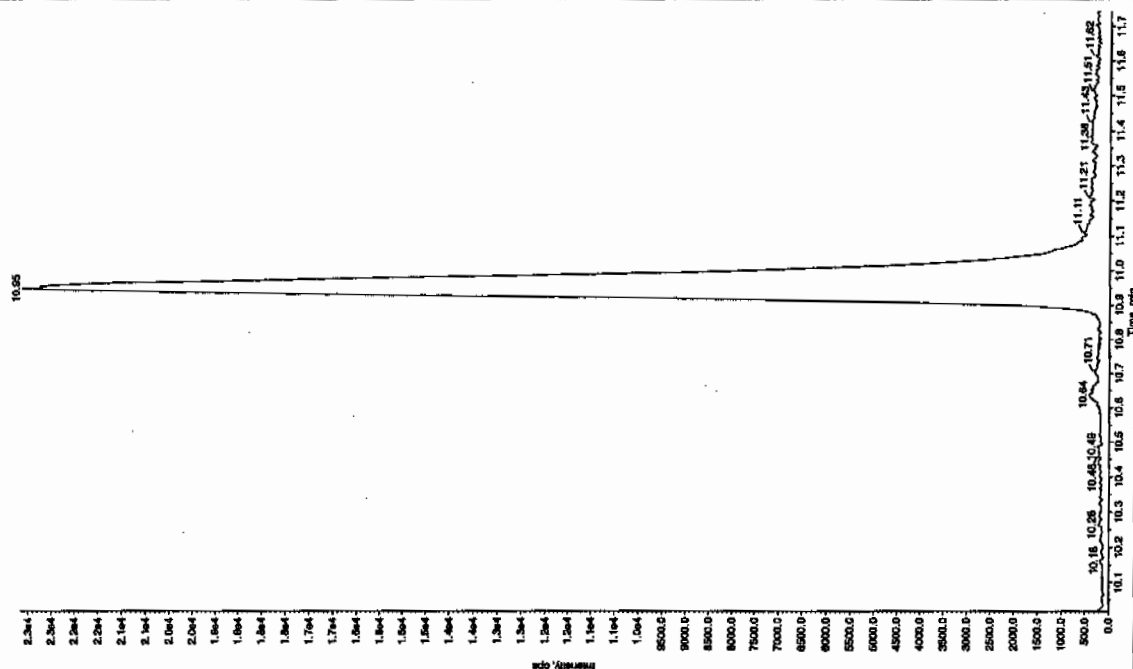
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/22/2010  
 Acq. Time: 11:30:55 PM  
 Modified: No



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

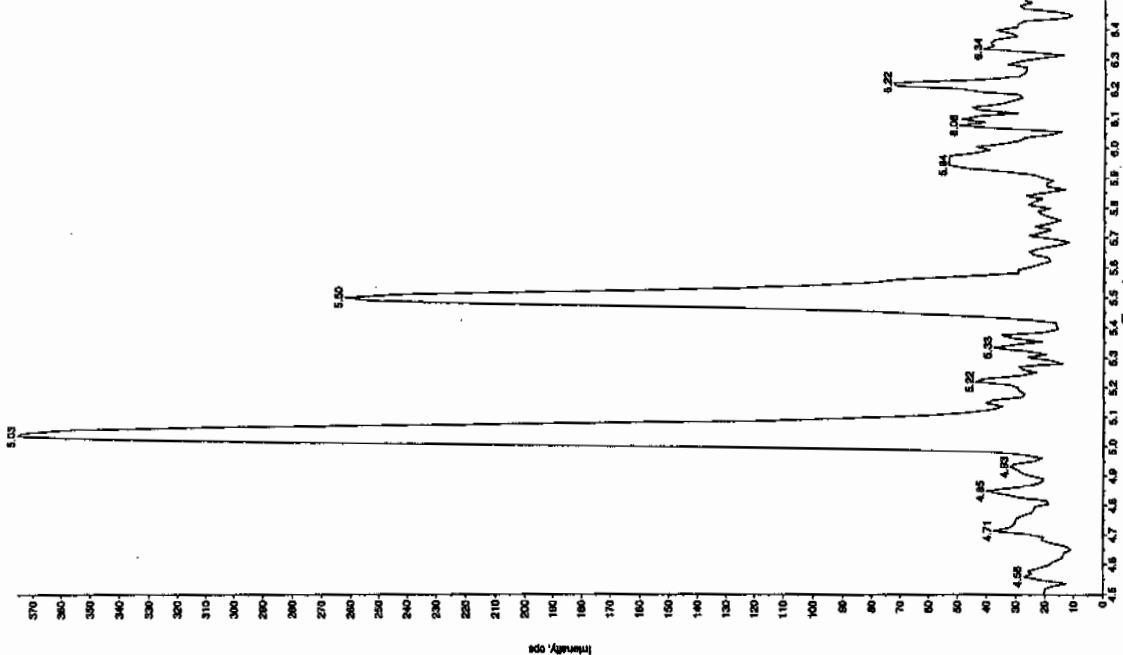
Sample Name: "XIEL007" Sample ID: "JLIER" File: "EXS0120051.wif"  
 Peak Name: "tricyclic antidepressant" Mass(es): "388.191.0 amu"  
 Comment: "LCMS-EXP\_B" Acquisition: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Acq. Date: 1/22/2010  
 Acq. Time: 11:30:55 PM  
 Modified: No



Sample Name: "XIEL007" Sample ID: "JLIER" File: "EXS0120051.wif"  
 Peak Name: "24-Diamino-6-phenylamine" Mass(es): "166.046.0 amu"  
 Comment: "LCMS-EXP\_B" Acquisition: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Acq. Date: 1/22/2010  
 Acq. Time: 11:30:55 PM  
 Modified: No



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

4A  
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1160-1

Lab Code: GEL

Lab Sample ID: XIBLK08

Analysis Date: 23-JAN-10 02:55

GEL Data File: EXS01220064.wiff

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

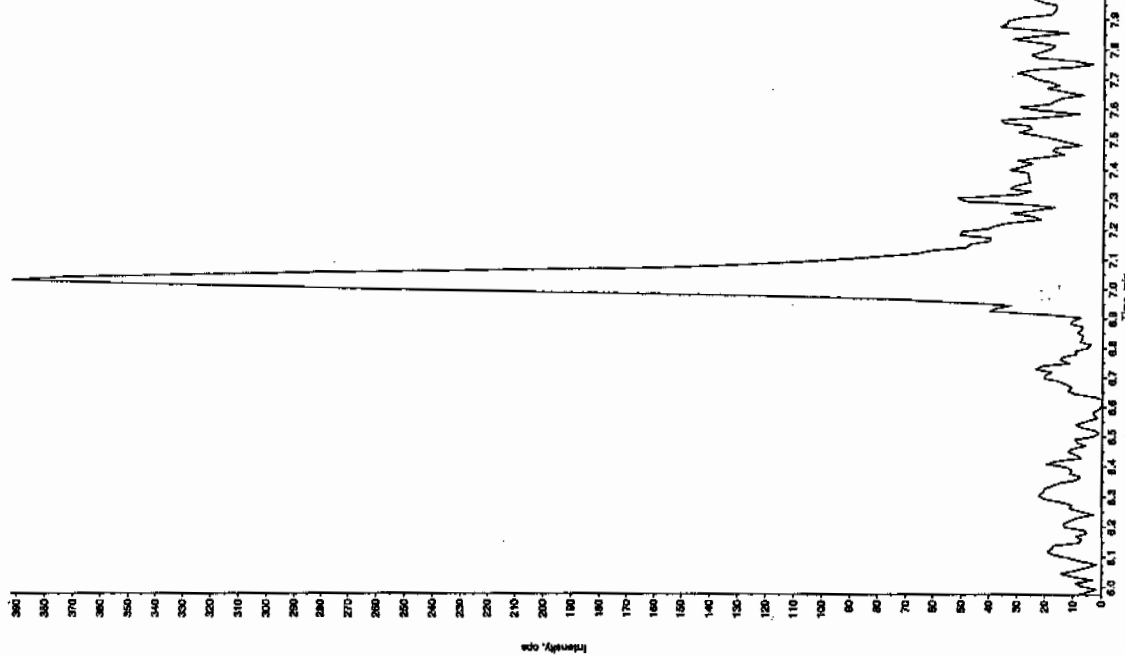
Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Scan 11/25/10

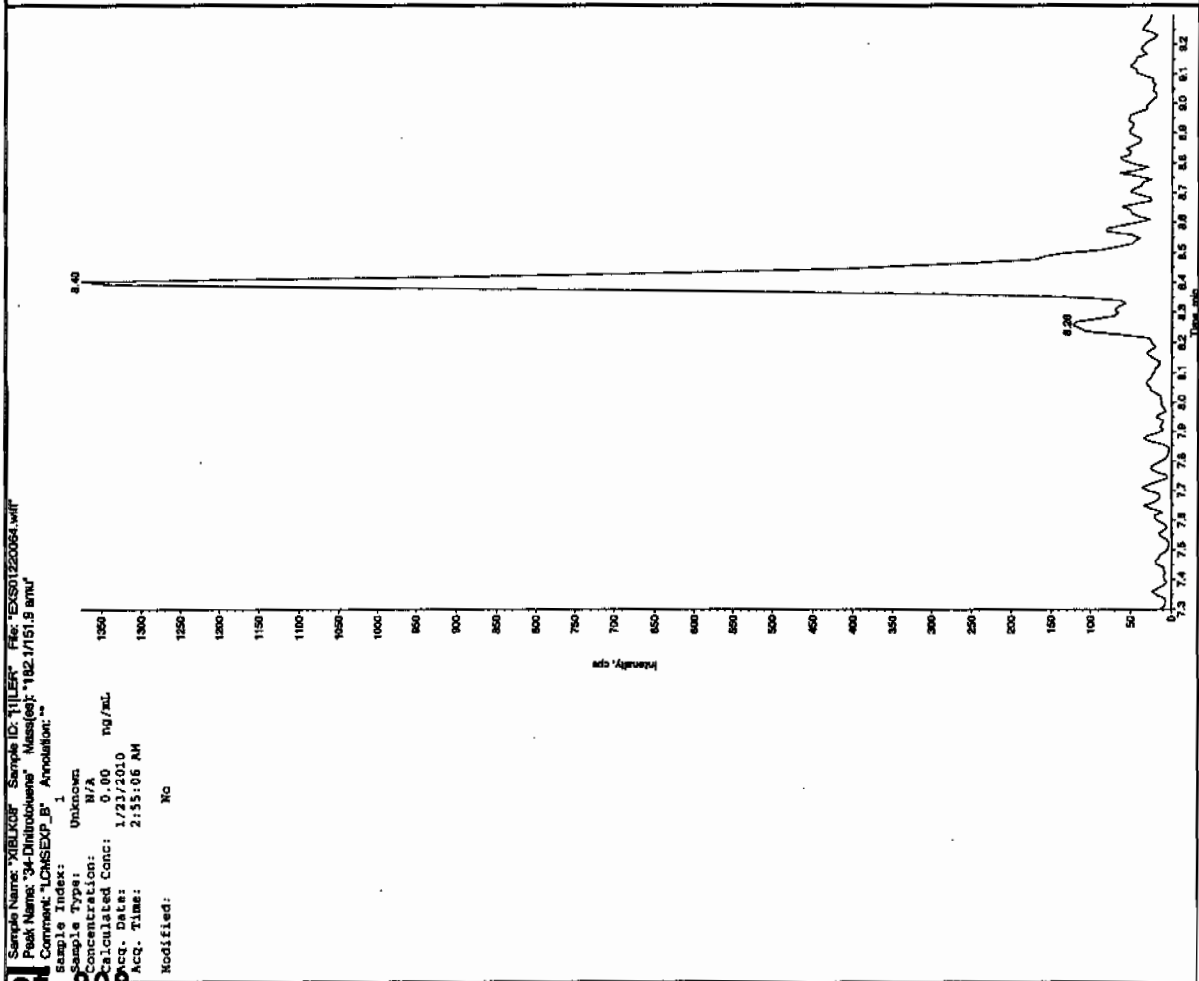
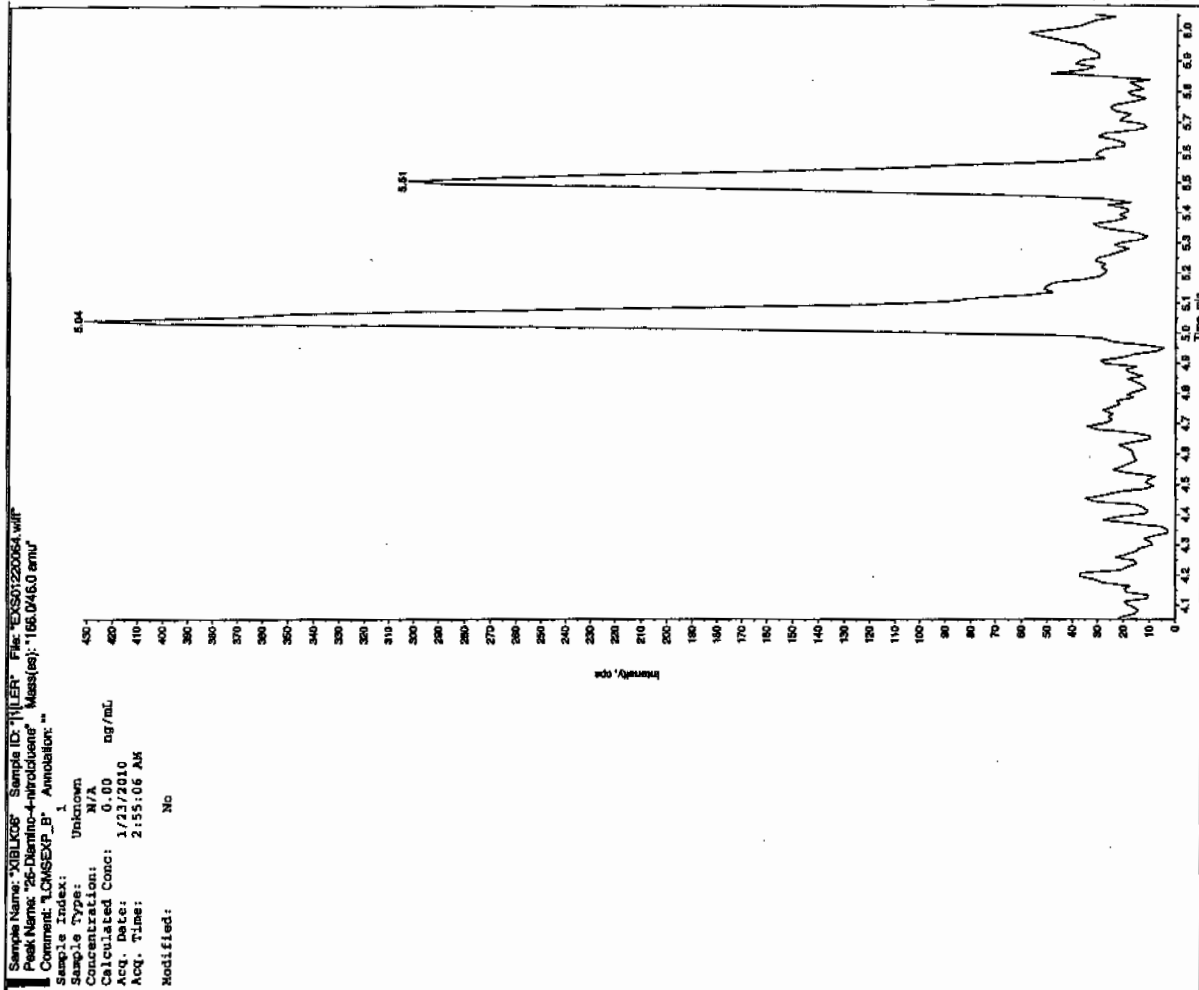
Sample Name: "XBLK08" Sample ID: "HILF" File: "EX501220064.wif"  
 Peak Name: "TATB" Mass(es): "257.2504.9 amu"  
 Comment: "LCMSEXP.B" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Acq. Date: 1/23/2010  
 Acq. Time: 2:55:06 AM  
 Modified: No

Proc. Algorithm: IntelliQuan - ICA  
 Min. Peak Height: 2000.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 15.0 sec  
 Expected RT: 8.17 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.26 min  
 Area: 8.38e+003 counts  
 Height: 2086.111 cps  
 Start Time: 8.17 min  
 End Time: 8.36 min



Time 8/12/10

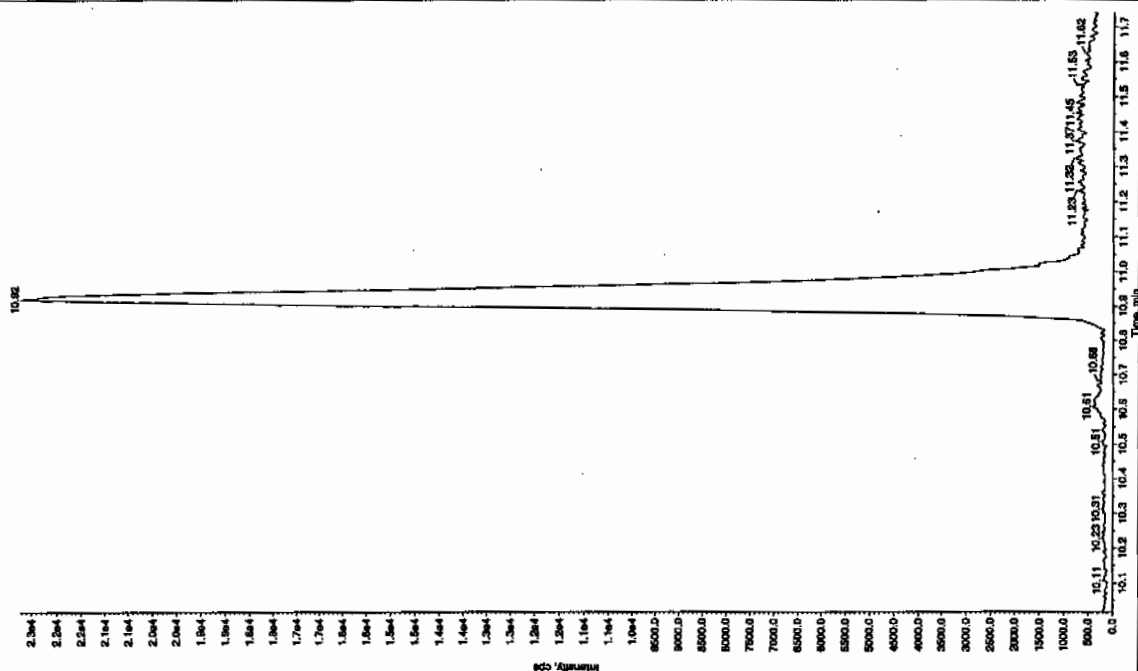


\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



Sample Name: "XIBLX08" Sample ID: "111111" File: "EX051220064.wif"  
 Peak Name: "1,3,5-tris(4-cresyl) phosphate" Mass(es): "359.191.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Acq. Date: 1/23/2010  
 Acq. Time: 2:55:06 AM  
 Modified: No



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1160-1

Lab Code: GEL

Lab Sample ID: XIBLK09

Analysis Date: 23-JAN-10 04:45

GEL Data File: EXS01220071.wiff

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	1.27
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

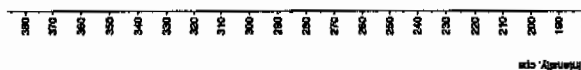
See 165110

Sample Name: "XBLK07" Sample ID: "HLEF" File: "EX50120071.wif"

Peak Name: "TATB" Mass(es): "257.2504.9 amu"

Comment: "LCMSXP\_B" Annotation: "

Sample Index: 1  
Sample Type: Unknown  
Concentration: 0.00 ng/mL  
Acq. Date: 1/23/2010  
Acq. Time: 4:45:01 AM  
Modified: No



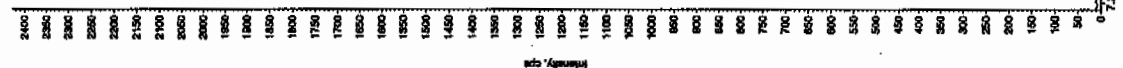
Sample Name: "XBLK07" Sample ID: "HLEF" File: "EX50120071.wif"

Peak Name: "LCMSXP\_B" Mass(es): "162.046.0 amu"

Comment: "LCMSXP\_B" Annotation: "

Sample Index: 1  
Sample Type: Unknown  
Concentration: N/A  
Acq. Date: 1/23/2010  
Acq. Time: 4:45:01 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: 8.17 min  
Use Relative RT: No  
Int. Type: Valley  
Retention Time: 8.26 min  
Area: 9.28e+003 counts  
Height: 2334.294 cps  
Start Time: 8.18 min  
End Time: 8.36 min



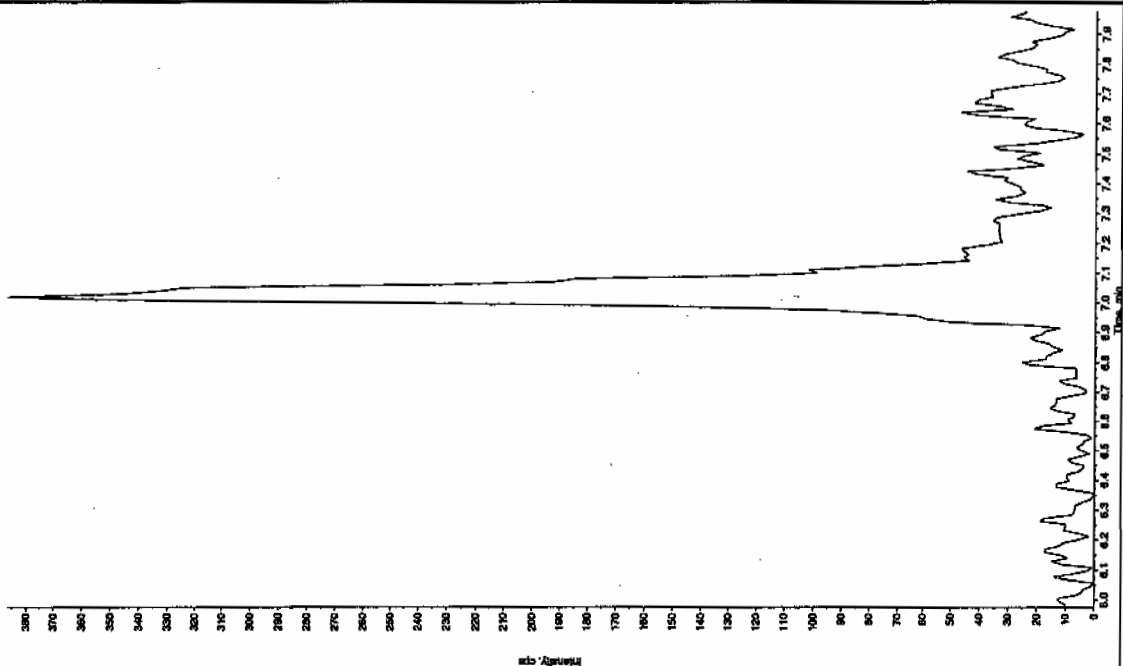
See 165110

Sample Name: "XBLK07" Sample ID: "HLEF" File: "EX50120071.wif"

Peak Name: "TATB" Mass(es): "257.2504.9 amu"

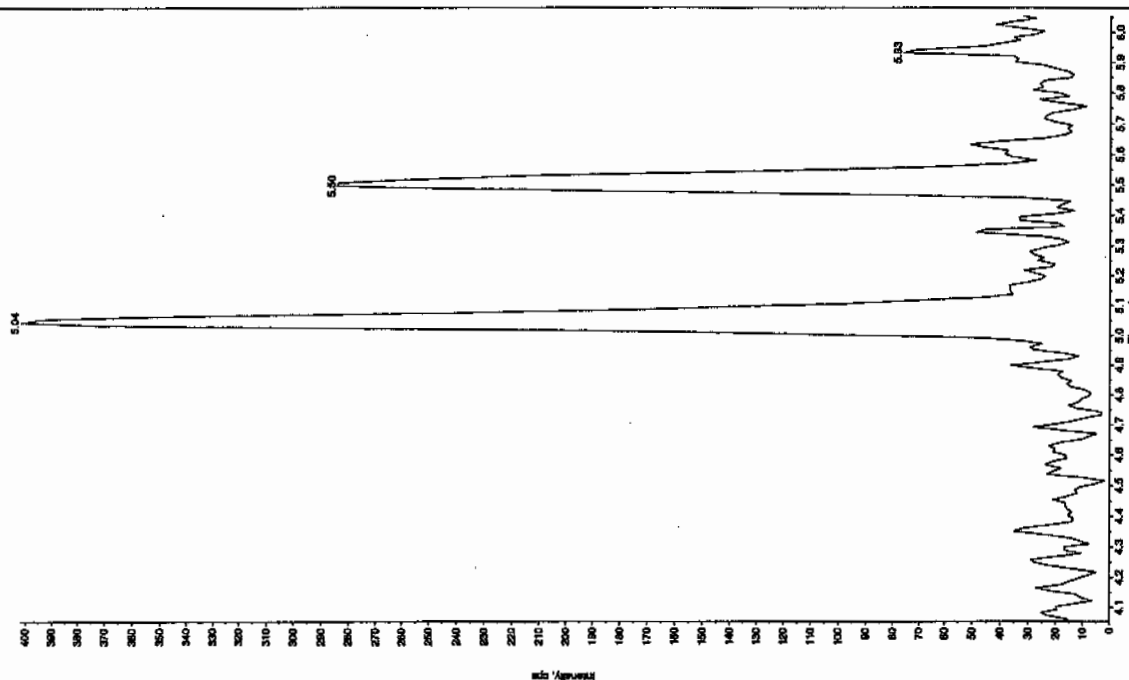
Comment: "LCMSXP\_B" Annotation: "

Sample Index: 1  
Sample Type: Unknown  
Concentration: 0.00 ng/mL  
Acq. Date: 1/23/2010  
Acq. Time: 4:45:01 AM  
Modified: No



Sample Name: "XBLK08" Sample ID: "TJL08" File: "EXS01220071.wif"  
 Peak Name: "28-Dienrino-4-nitrobenzene" Mass(es): "165.046.0 amu"  
 Comment: "LCMSXP\_B" Annotation: ""

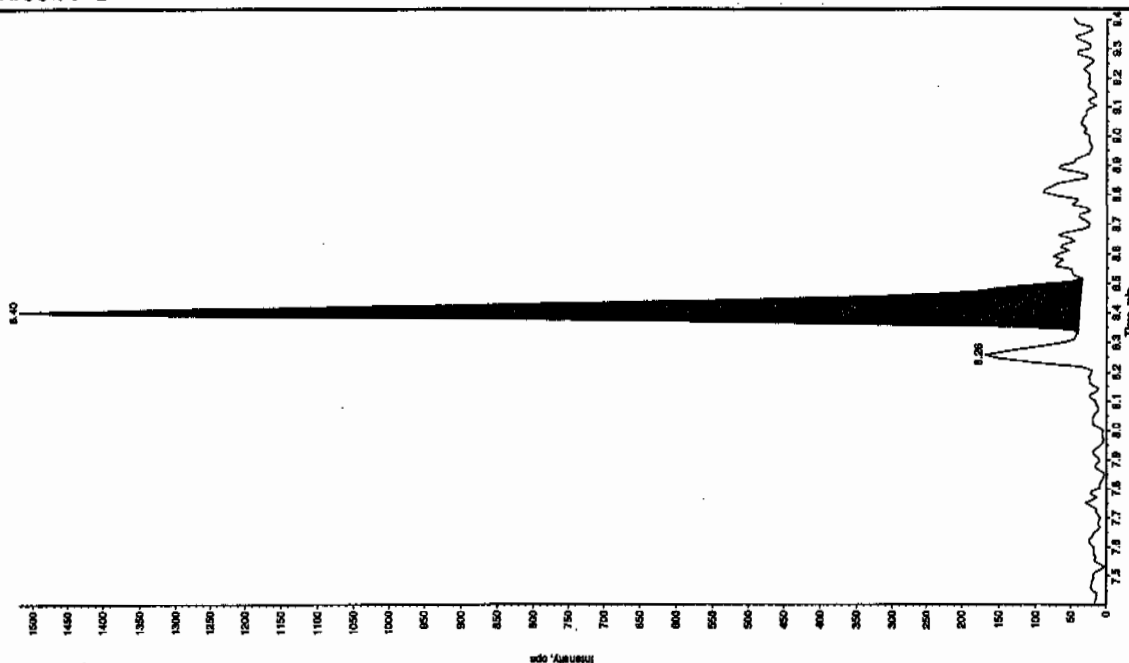
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/23/2010  
 Acq. Time: 4:45:01 AM  
 Modified: No



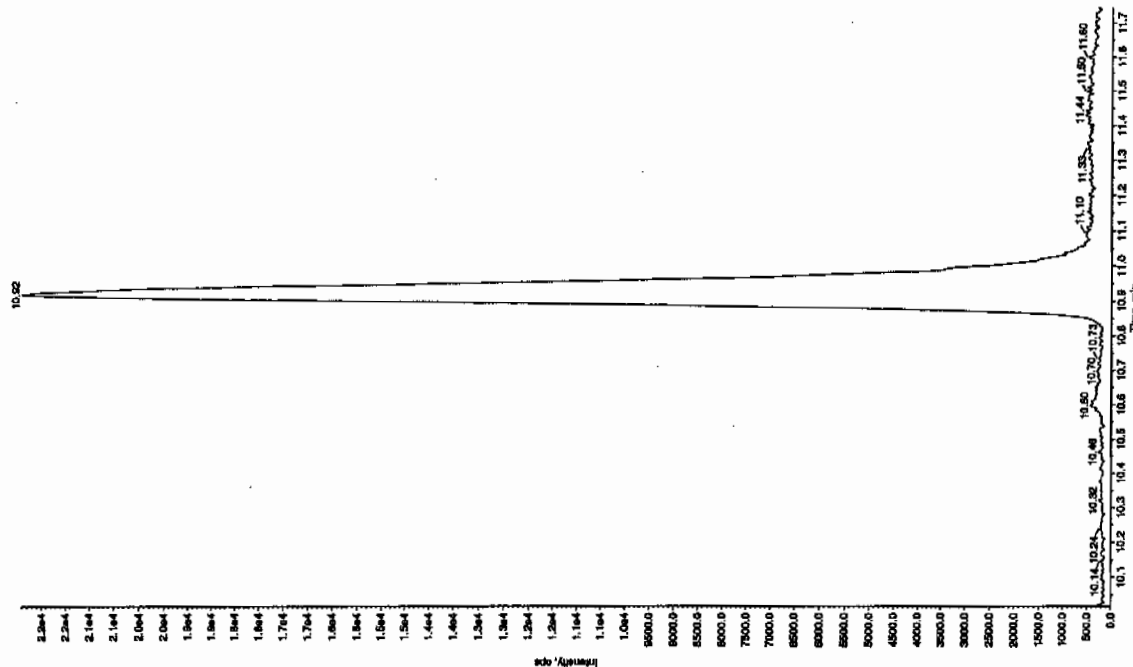
Sample Name: "XBLK08" Sample ID: "TJL08" File: "EXS01220071.wif"  
 Peak Name: "34-Dienrino-4-nitrobenzene" Mass(es): "182.1151.9 amu"  
 Comment: "LCMSXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 1.27 ng/mL  
 Acq. Date: 1/23/2010  
 Acq. Time: 4:43:01 AM  
 Modified: Yes

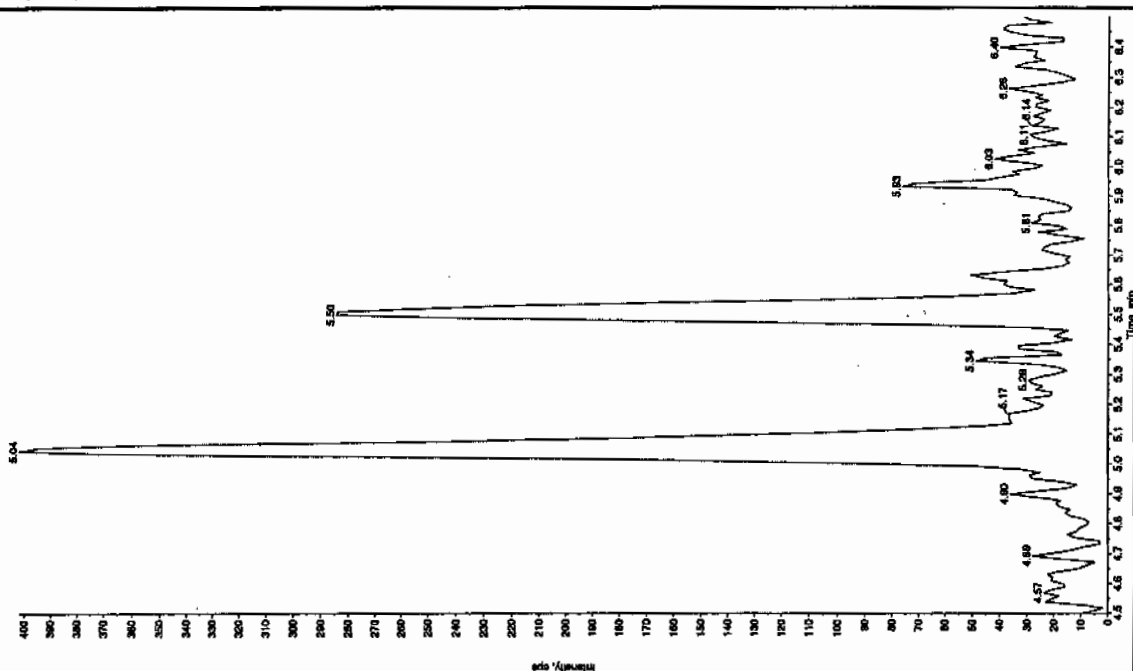
Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 1460.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 15.0 sec  
 Expected RT: 8.40 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.40 min  
 Area: 5.67e+003 counts  
 Height: 1460.722 cps  
 Start Time: 8.35 min  
 End Time: 8.52 min



Sample Name: "XIBLK09" Sample ID: "TILER" File: "EX501220071.wif"  
 Peak Name: "Tri(o-cresyl) phosphite" Mass(es): "388.1/91.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: "  
 Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A ng/mL  
 Calculated Conc: 0.00  
 Acq. Date: 1/23/2010  
 Acq. Time: 4:43:01 AM  
 Modified: No



Sample Name: "XIBLK09" Sample ID: "TILER" File: "EX501220071.wif"  
 Peak Name: "24-Diamino-6-nitrofluorene" Mass(es): "166.0/46.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: "  
 Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A ng/mL  
 Calculated Conc: 0.00  
 Acq. Date: 1/23/2010  
 Acq. Time: 4:43:01 AM  
 Modified: No



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

Nairb.ref

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

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

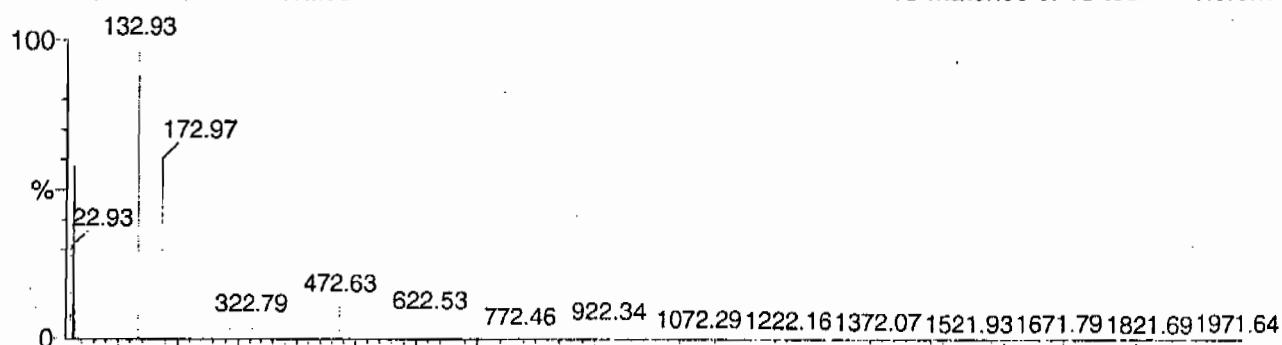
Calibration Report - MS1 Static

Page 1 of 1

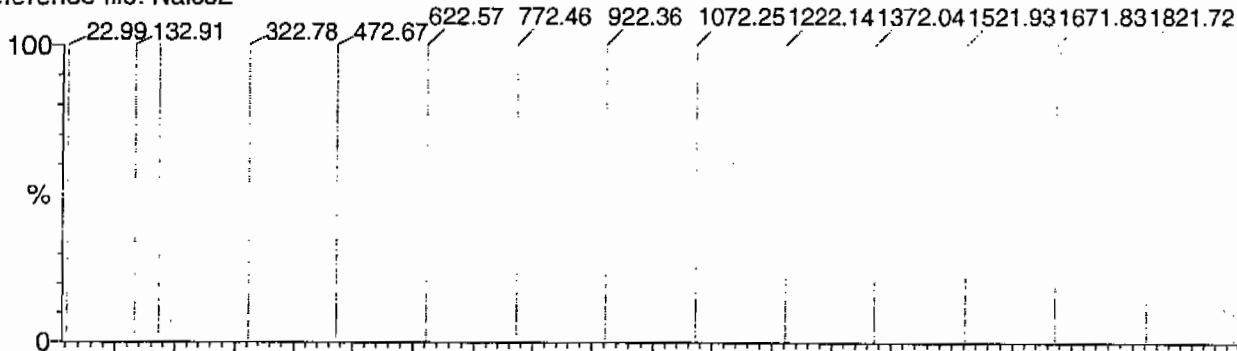
Printed: Fri Aug 25 10:50:01 2006

Data file: STATMS1 - Calibrated

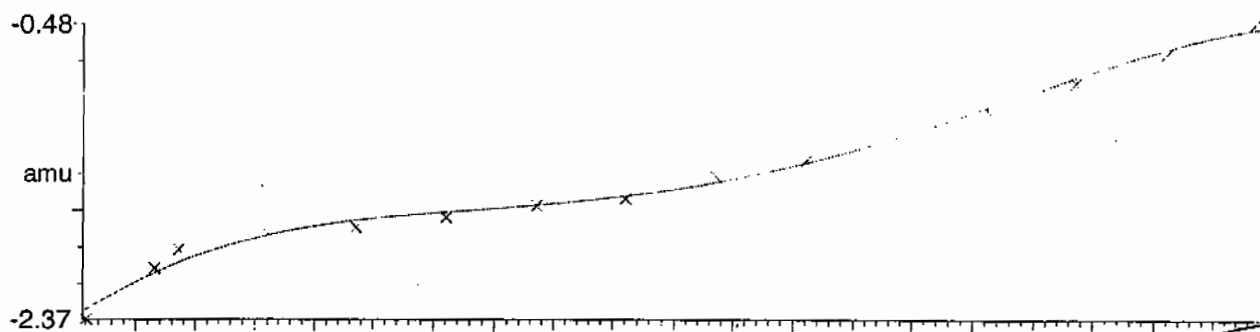
15 matches of 15 tested references



Reference file: Naics2

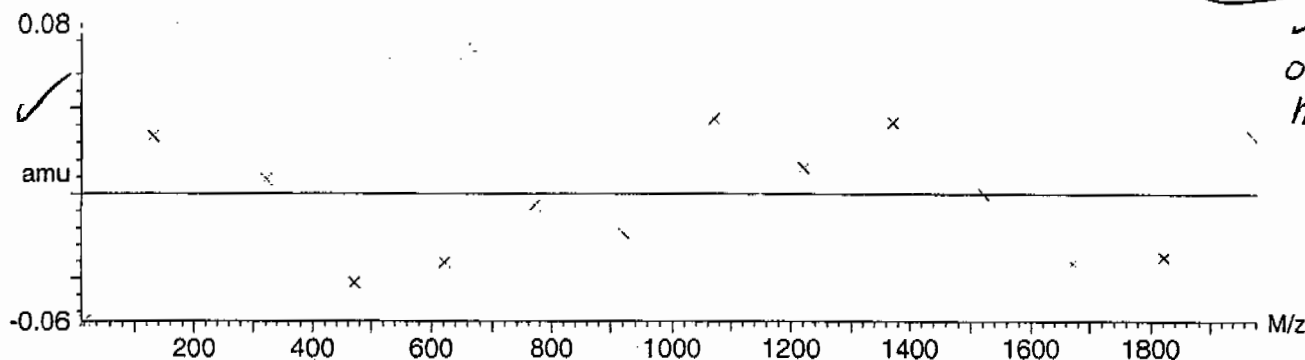


Mass difference (Raw - Ref mass)



Residuals

Mean residual =  $-1.673470 \times 10^{-9} \pm 0.036953$

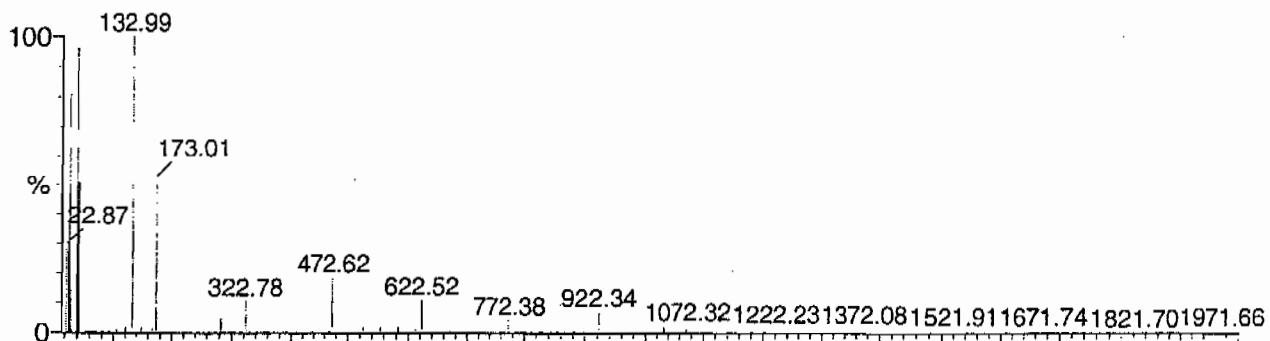


Calibration Report - MS1 Scanning

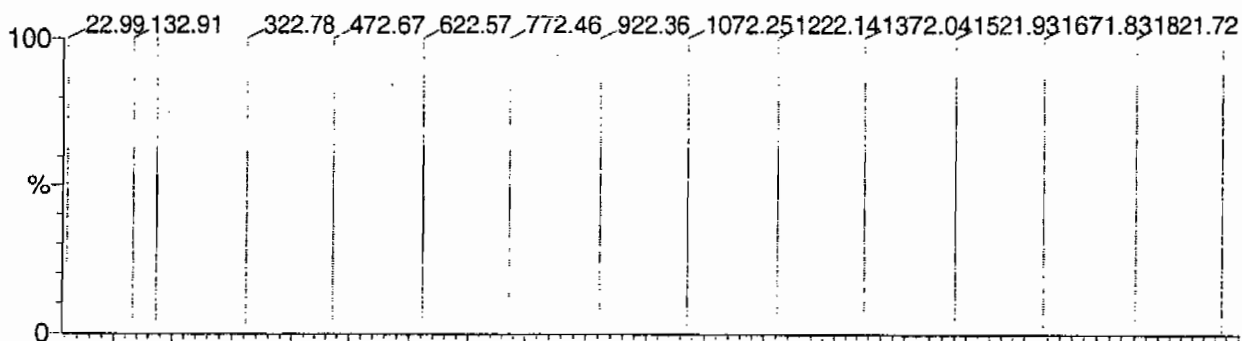
Page 1 of 1

Printed: Fri Aug 25 10:51:06 2006

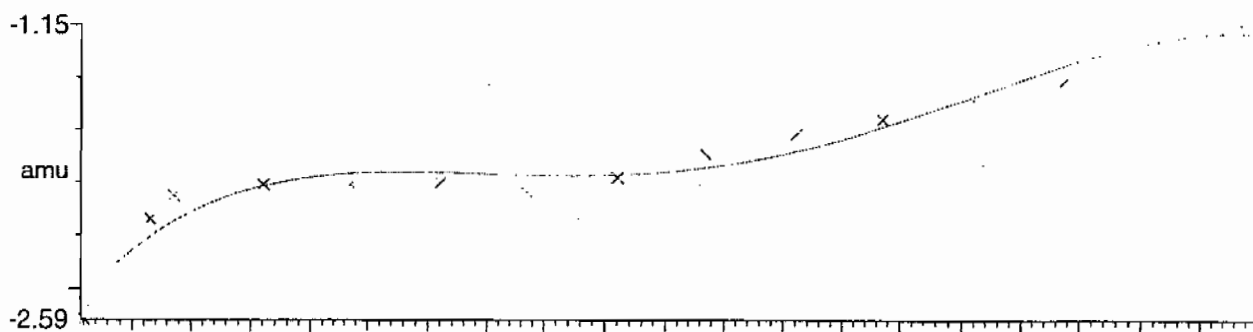
Data file: SCNMS1 - Calibrated 15 matches of 15 tested references



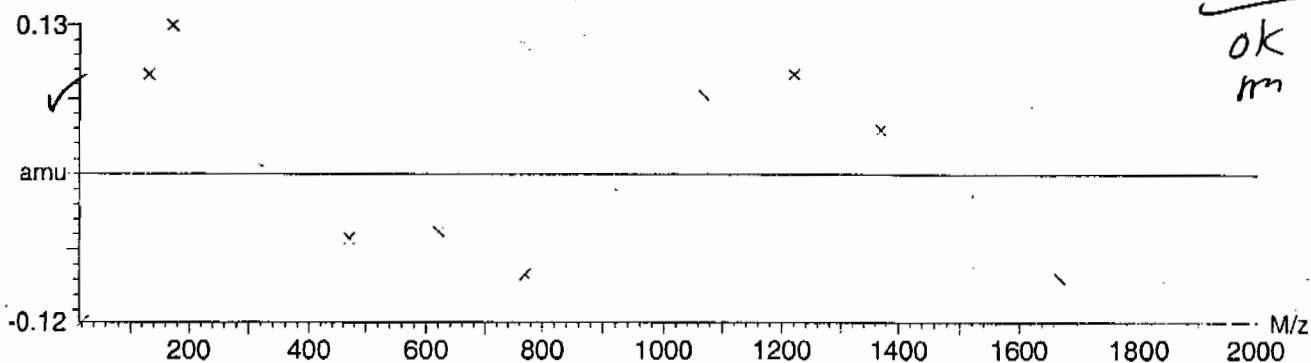
Reference file: Naics2



Mass difference (Raw - Ref mass)



Residuals





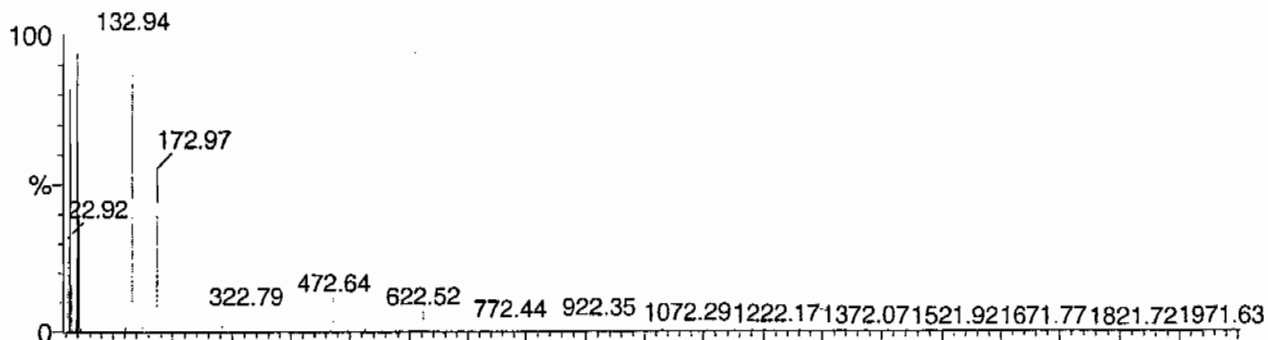
Calibration Report - MS1 Scan Speed Compensation

Page 1 of 1

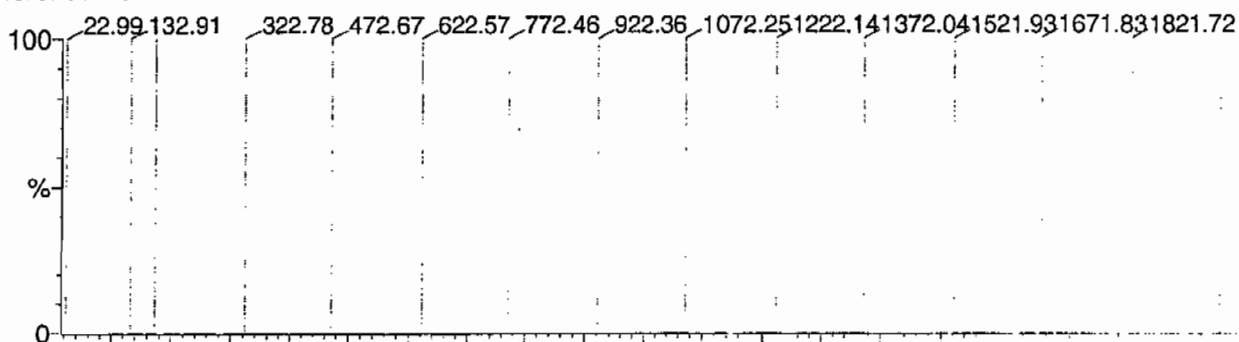
Printed: Fri Aug 25 10:52:01 2006

Data file: FASTMS1 - Calibrated

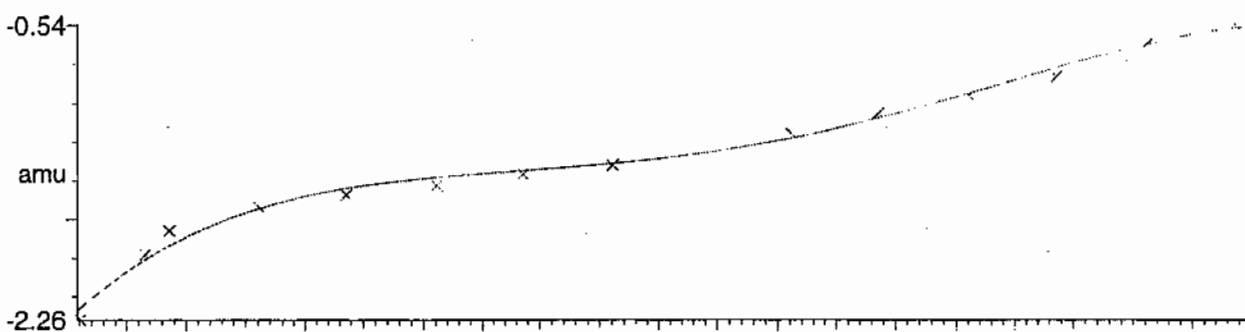
15 matches of 15 tested references



Reference file: Naics2

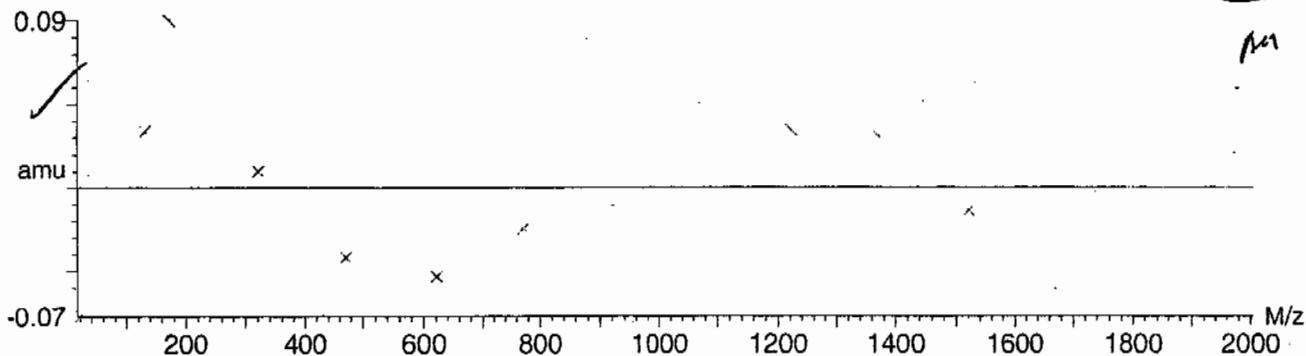


Mass difference (Raw - Ref mass)



Residuals

Mean residual =  $3.486639 \times 10^{-9} \pm 0.040487$

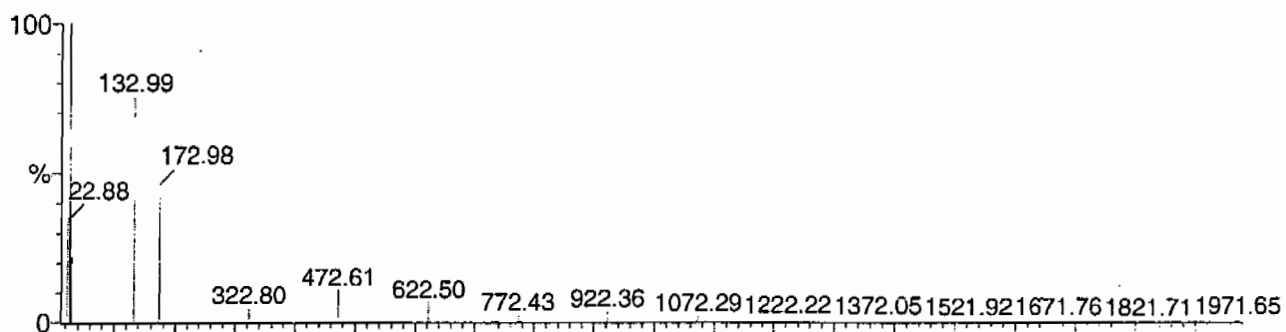


Calibration Report - MS2 Static

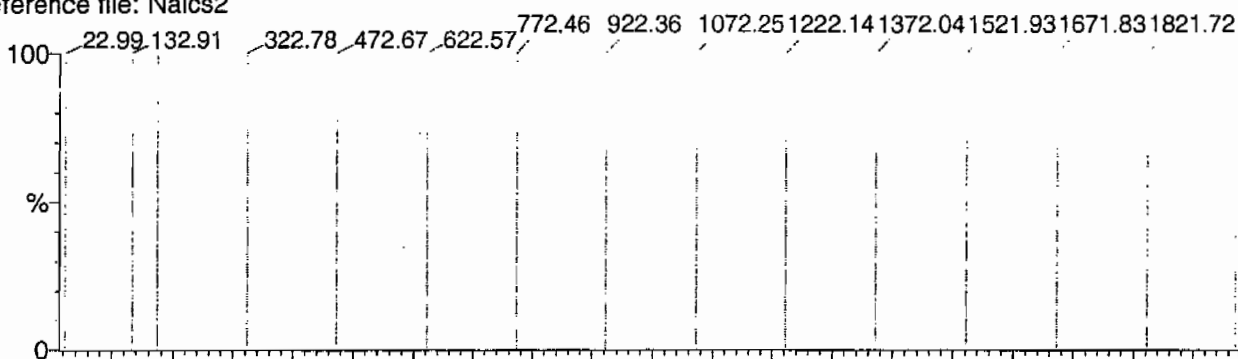
Page 1 of 1

Printed: Fri Aug 25 10:52:54 2006

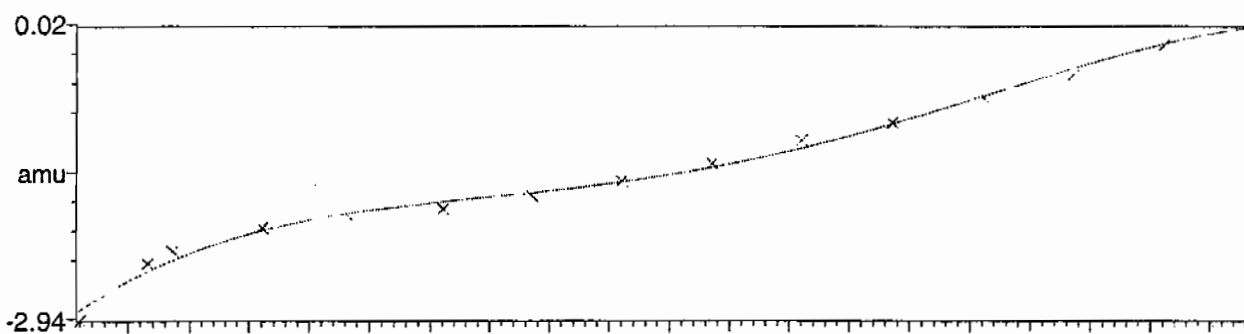
Data file: STATMS2 - Calibrated 15 matches of 15 tested references



Reference file: Naics2

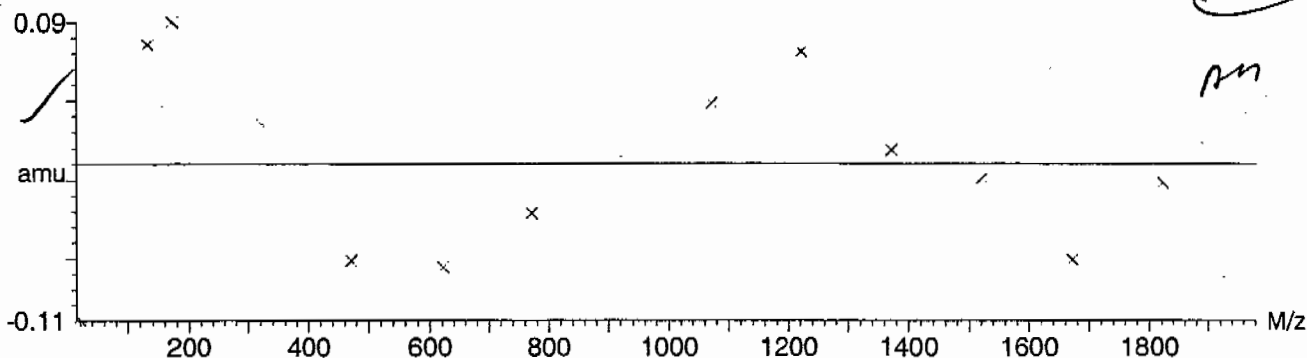


Mass difference (Raw - Ref mass)



Residuals

Mean residual =  $2.048910 \times 10^{-9} \pm 0.057803$



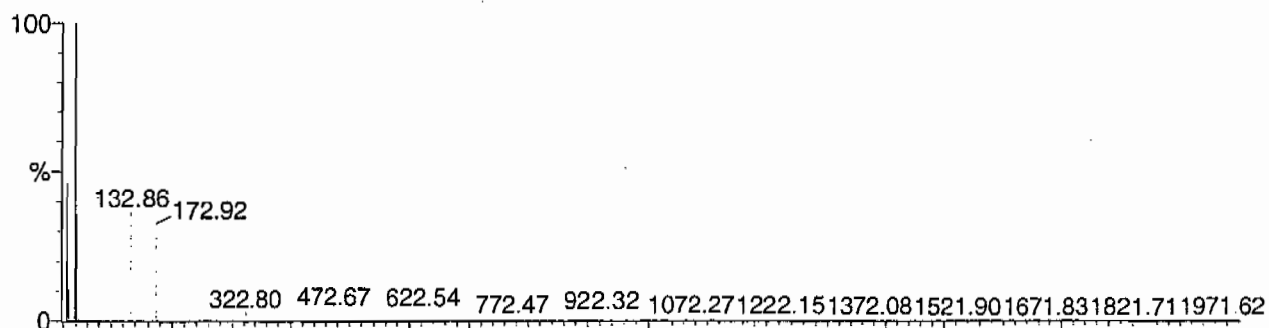
Calibration Report - MS2 Scanning

Page 1 of 1

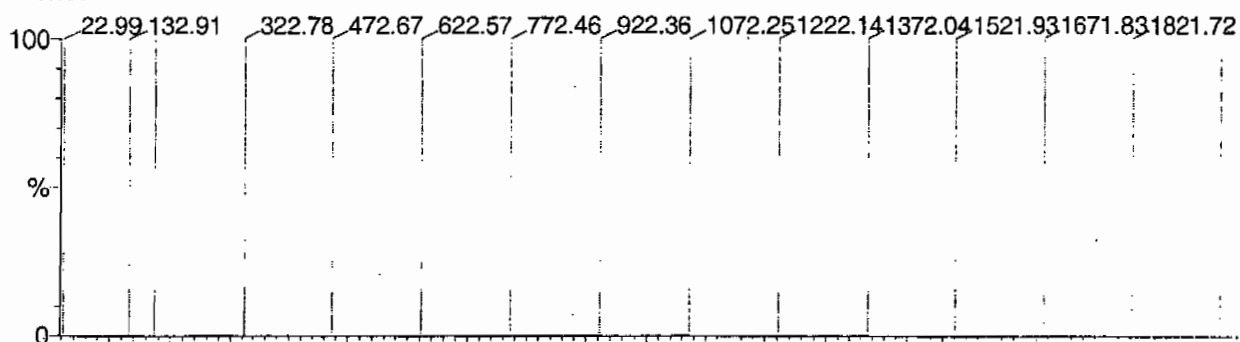
Printed: Fri Aug 25 10:54:00 2006

Data file: SCNMS2 - Calibrated

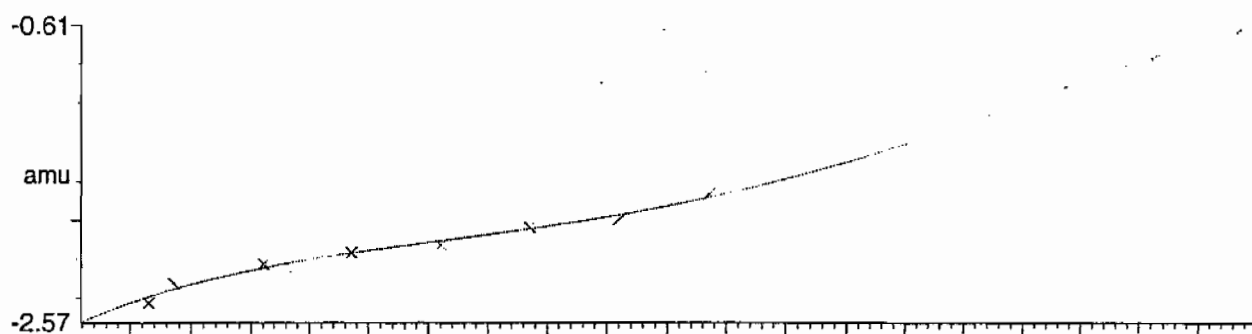
14 matches of 15 tested references



Reference file: Naics2

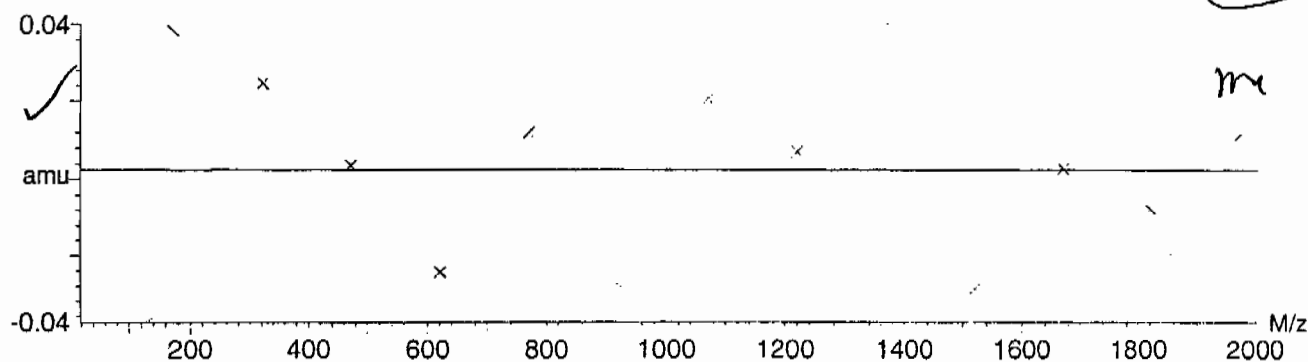


Mass difference (Raw - Ref mass)



Residuals

Mean residual =  $-2.623502 \times 10^{-9} \pm 0.025622$



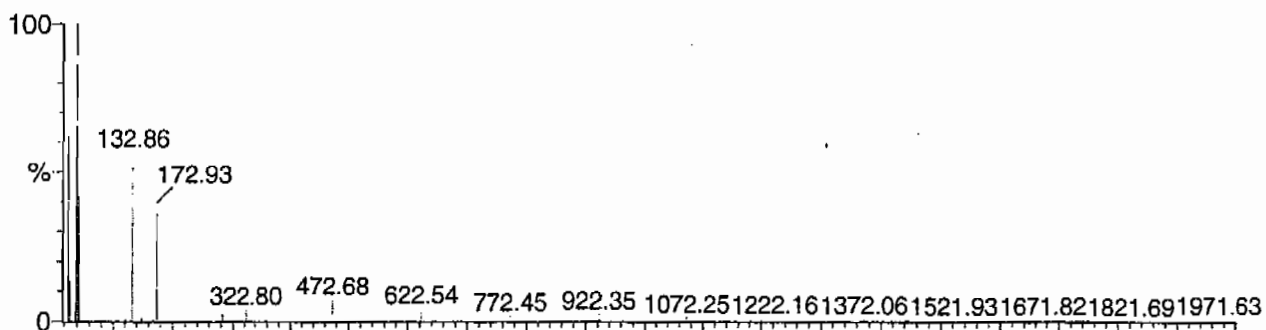
Calibration Report - MS2 Scan Speed Compensation

Page 1 of 1

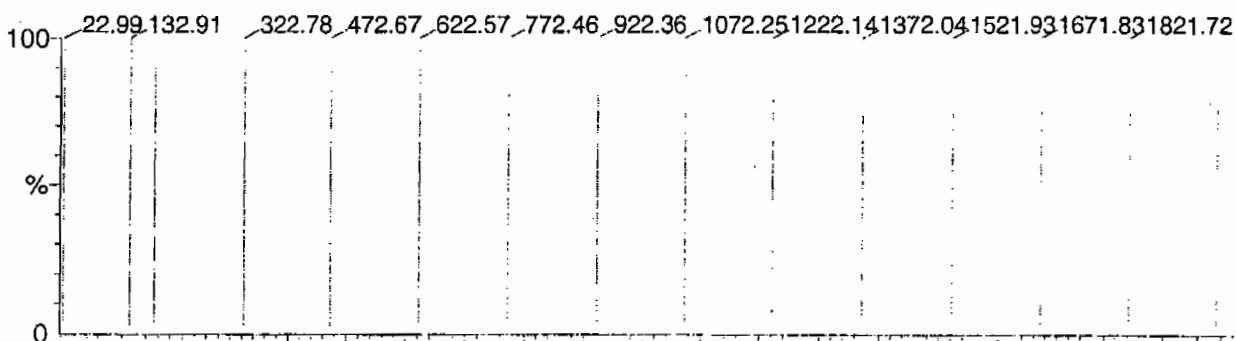
Printed: Fri Aug 25 10:54:54 2006

Data file: FASTMS2 - Calibrated

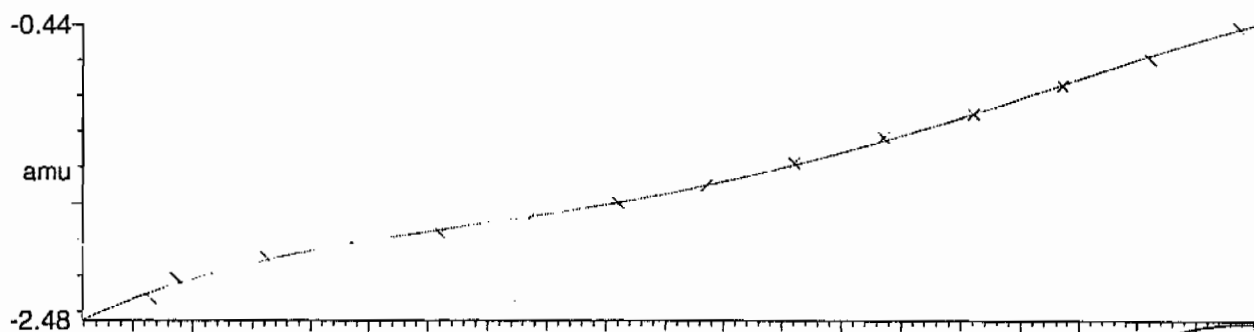
14 matches of 15 tested references



Reference file: Naics2

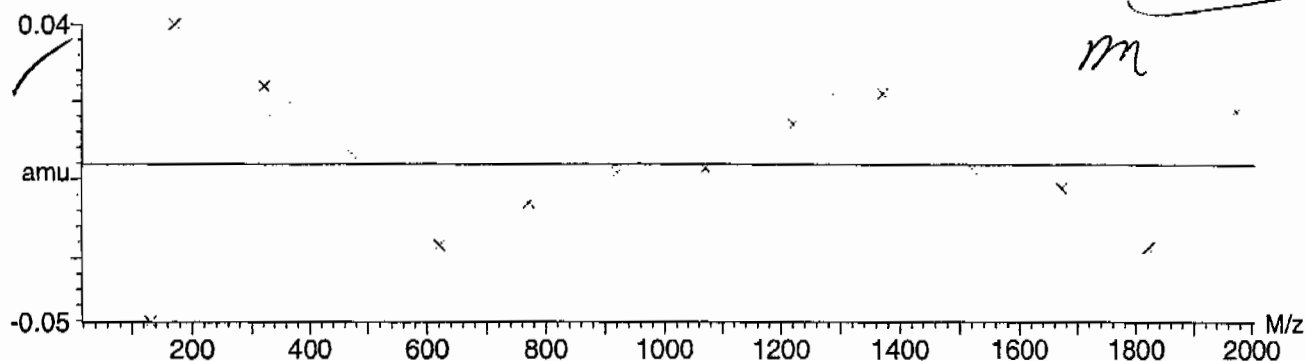


Mass difference (Raw - Ref mass)



Residuals

Mean residual =  $-6.785350 \times 10^{-9} \pm 0.023134$

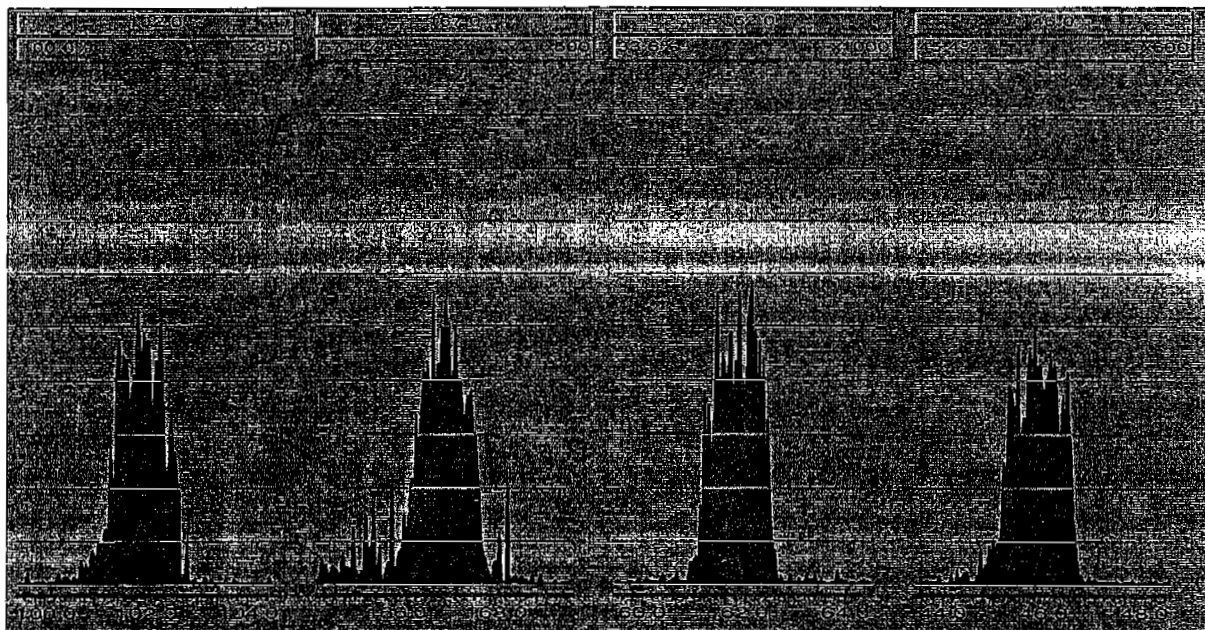


Quattro Micro Tune Parameters

Page 1

Parameter File: C:\MASSLYNX\NEW\_EXP.PRO\ACQUDB\explosives04.ipr

Printed : Mon Jan 25 11:18:26 2010



# High Explosives Internal Standard Summary

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1160-1

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) #
			2968.4	11.902	16298.333	17.149
Upper Limit			3858.92	12.402	21187.8329	17.649
Lower Limit			2077.88	11.402	11408.8331	16.649
MB for batch 940578	27-jan-10 21:23	EXP0125119a	2759.34	11.894	16010.3	17.139
LCS for batch 940578	27-jan-10 21:52	EXP0125120a	3486.6	11.895	16482	17.136
RE12-10-7710	27-jan-10 22:22	EXP0125121a	2992.84	11.895	16907.4	17.136
RE12-10-7710(244210001MS)	27-jan-10 22:51	EXP0125122a	2996.81	11.895	17887	17.136
RE12-10-7710(244210001MSD)	27-jan-10 23:21	EXP0125123a	2972.12	11.895	17140.3	17.131
RE12-10-7715	27-jan-10 23:50	EXP0125124a	2932.98	11.892	15919.3	17.138
RE12-10-7707	28-jan-10 00:20	EXP0125125a	2779.78	11.894	15497.2	17.135
RE12-10-7719	28-jan-10 00:49	EXP0125126a	2967	11.895	16233.3	17.132
RE12-10-7717	28-jan-10 01:19	EXP0125127a	2958.91	11.894	17048.3	17.136
RE12-10-7708	28-jan-10 01:48	EXP0125128a	3137.49	11.894	15532.1	17.136
RE12-10-7706	28-jan-10 03:46	EXP0125132a	2953.61	11.896	16664.3	17.133
RE12-10-7714	28-jan-10 04:16	EXP0125133a	2956.34	11.893	16890.4	17.138
RE12-10-7705	28-jan-10 04:45	EXP0125134a	2787.19	11.894	15194.1	17.135
RE12-10-7709	28-jan-10 05:15	EXP0125135a	2675.29	11.893	15264.7	17.139
RE12-10-7711	28-jan-10 05:44	EXP0125136a	2532.2	11.893	15194.2	17.139
RE12-10-7712	28-jan-10 06:14	EXP0125137a	2654.08	11.894	15378	17.136
RE12-10-7716	28-jan-10 06:43	EXP0125138a	2903.01	11.896	15423.5	17.155
RE12-10-7718	28-jan-10 07:13	EXP0125139a	2893.73	11.896	15769.8	17.133
RE12-10-7713	28-jan-10 07:42	EXP0125140a	2888.52	11.895	16979.8	17.154

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: RE12-10-7710

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210001

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125121a

Date Analyzed: 27-JAN-10 22:22

Units: ug/kg

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

\*Concentration =

Instrument				
Value	X	Concentrated Extract Volume	X	Dilution
		Sample Amount		Factor



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

Dataset: C:\MASSLYNX\New\_Exp\PROV012510\expA2.qld, Time: Thu Jan 28 10:42:53 2010

Name: C:\MASSLYNX\NEW\_EXP\PROV012510\expA2.qld

Date: 27-Jan-2010

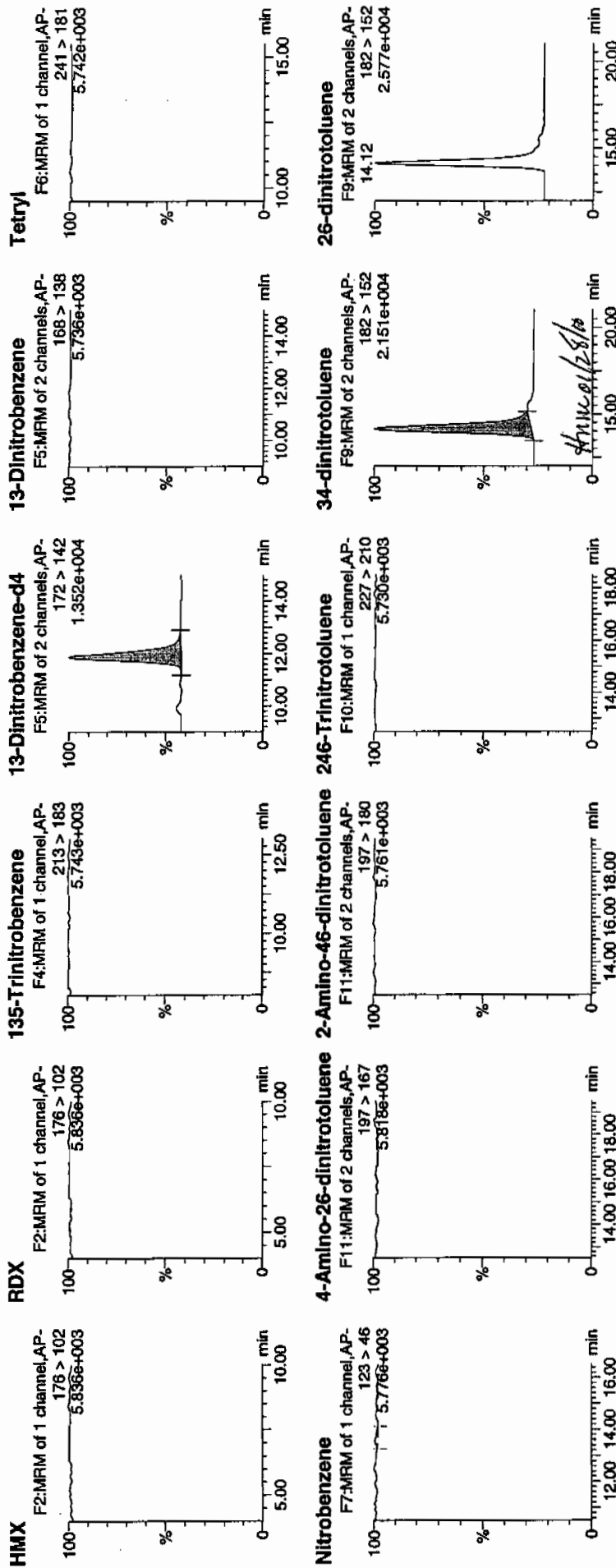
Time: 22:22:27

ID: 244210001

Vial: 2:1,C

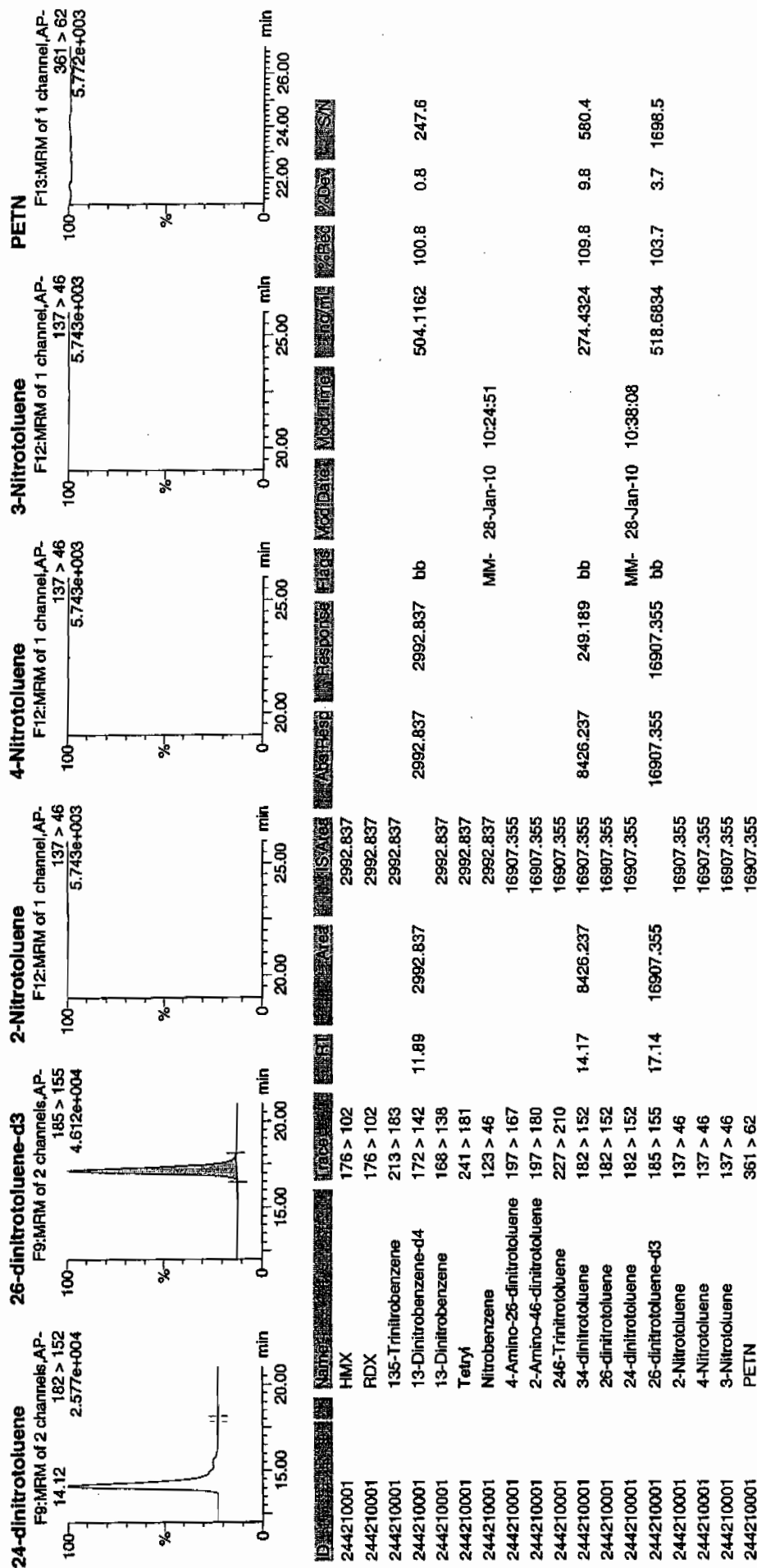
1/28/10

121



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

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010



1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7710

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210001

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01220047.wiff

Date Analyzed: 22-JAN-10 22:28

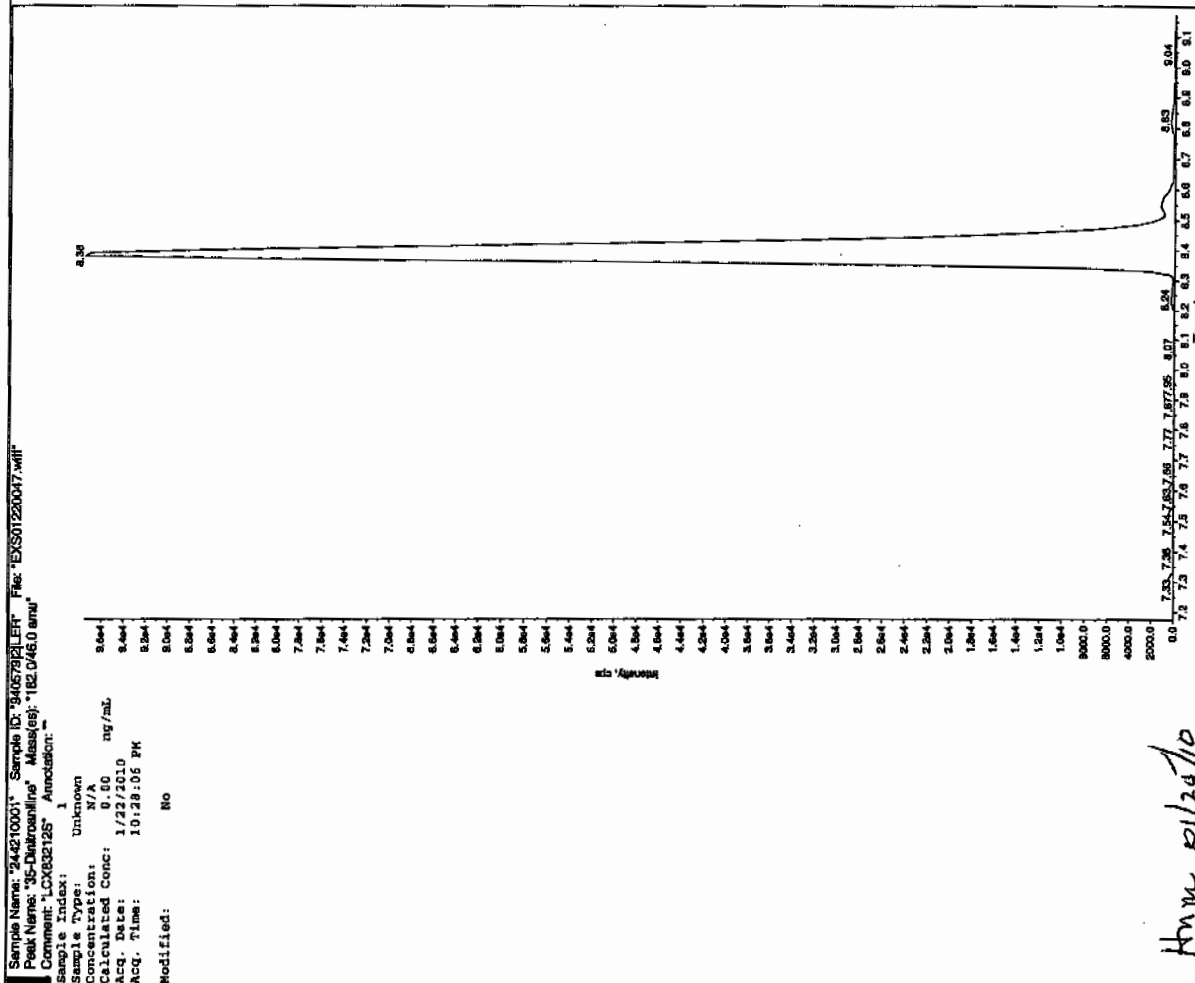
Units: ug/kg

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

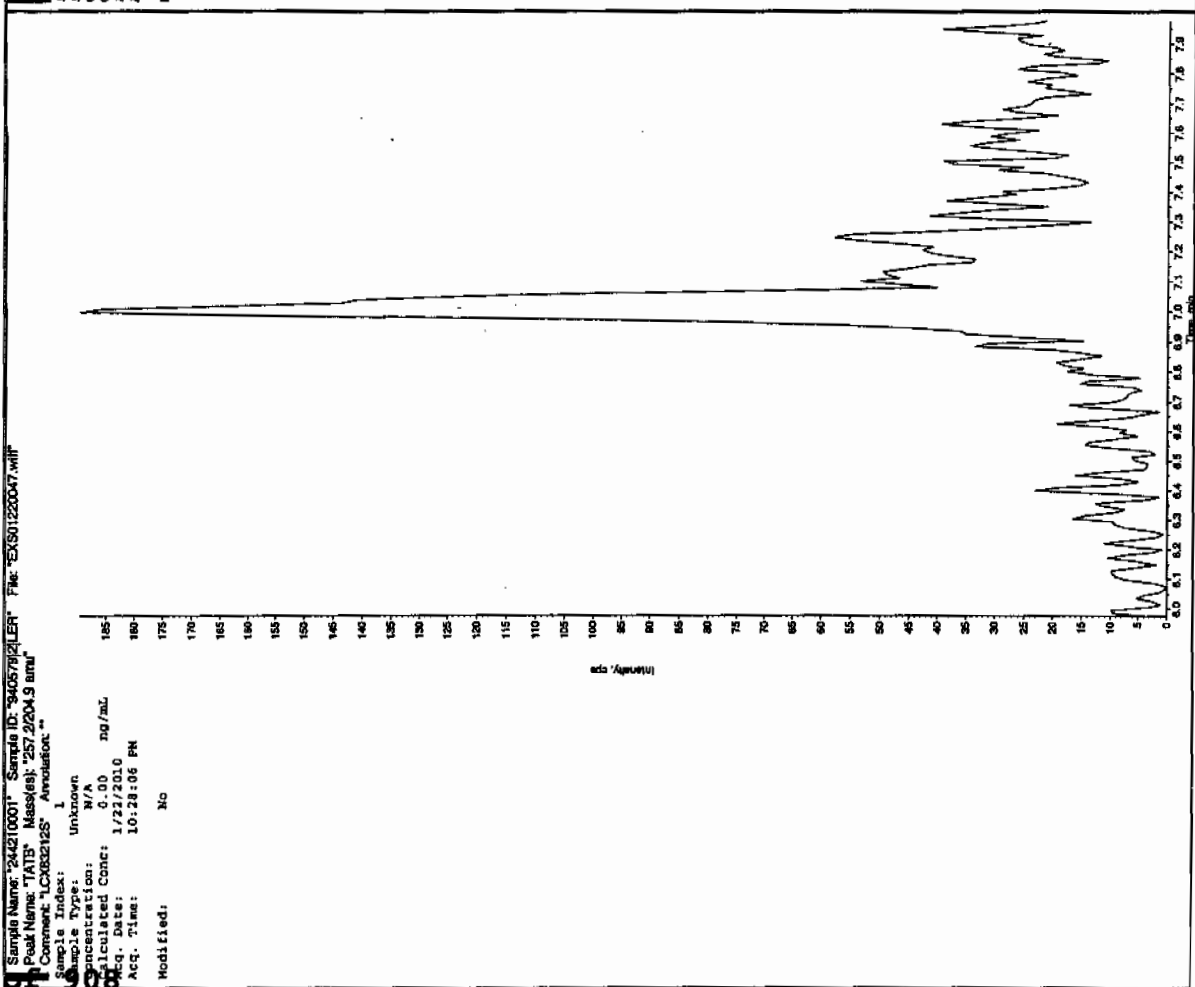
\*Concentration =

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

dan 1125110



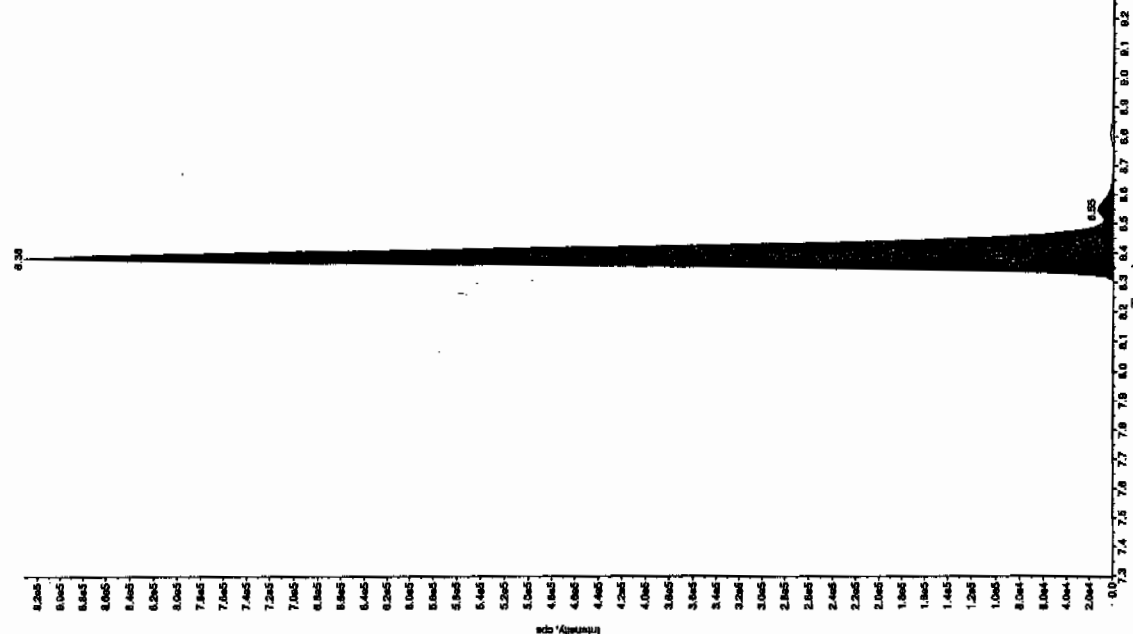
dan 1125110



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

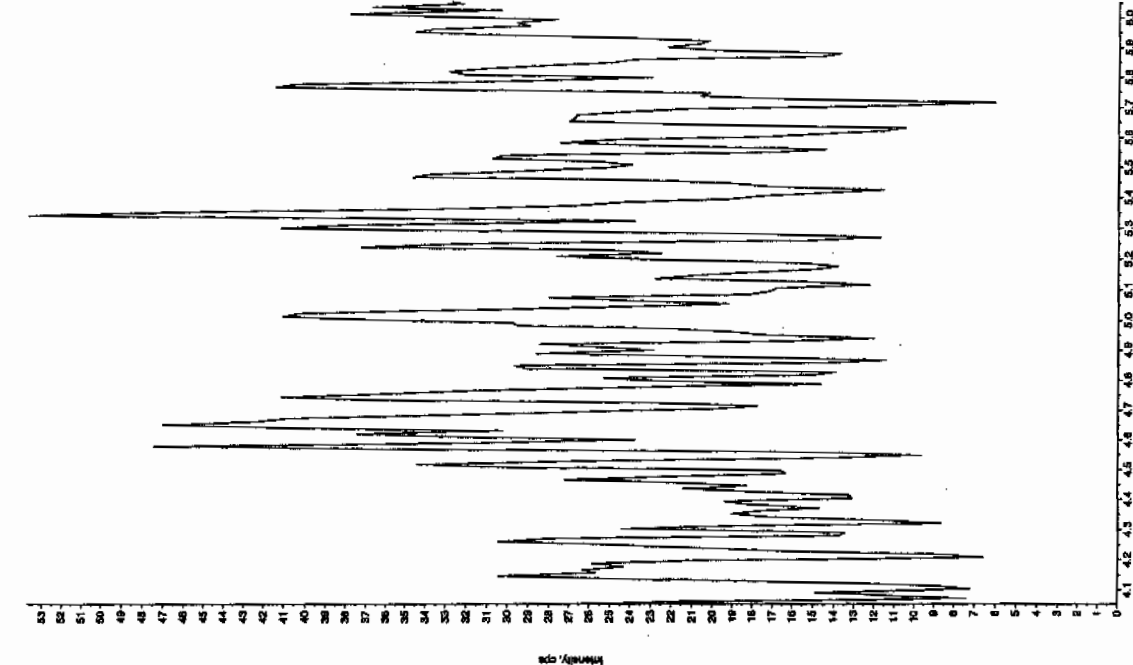
Sample Name: "244210001" Sample ID: "94057921ER" File: "EX501220047.wif"  
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.1/151.9 amu"  
 Comment: "LCX832125" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 1/22/2010 ng/mL  
 Acq. Date: 10:28:06 PM  
 Acq. Time: 10:28:06 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - TOA  
 Min. Peak Height: 1469.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 15.0 sec  
 Expected RT: 8.30 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.38 min  
 Area: 3.82e+006 counts  
 Height: 932125.427 cps  
 Start Time: 8.29 min  
 End Time: 8.70 min



Sample Name: "244210001" Sample ID: "94057921ER" File: "EX501220047.wif"  
 Peak Name: "26-Diamino-4-ethyltoluene" Mass(es): "166.0/46.0 amu"  
 Comment: "LCX832125" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 1/22/2010 ng/mL  
 Acq. Date: 10:28:06 PM  
 Acq. Time: 10:28:06 PM  
 Modified: No



Sample Name: "244210001" Sample ID: "940579121ER" File: "EXS01220047.will"

Peak Name: "tris(o-cresyl) phosphate" Mass(es): "353.191.0 amu"

Comment: "LCX632125" Annotation: ""

Sample Index: 1

Sample Type: Unknown

Concentration: N/A

Calculated Conc: 0.00 ng/mL

Acq. Date: 1/22/2010

Acq. Time: 10:28:06 PM

Modified: No

Sample Name: "244210001" Sample ID: "940579121ER" File: "EXS01220047.will"

Peak Name: "24-Dinitro-6-nitrofluorene" Mass(es): "165.046.0 amu"

Comment: "LCX632125" Annotation: ""

Sample Index: 1

Sample Type: Unknown

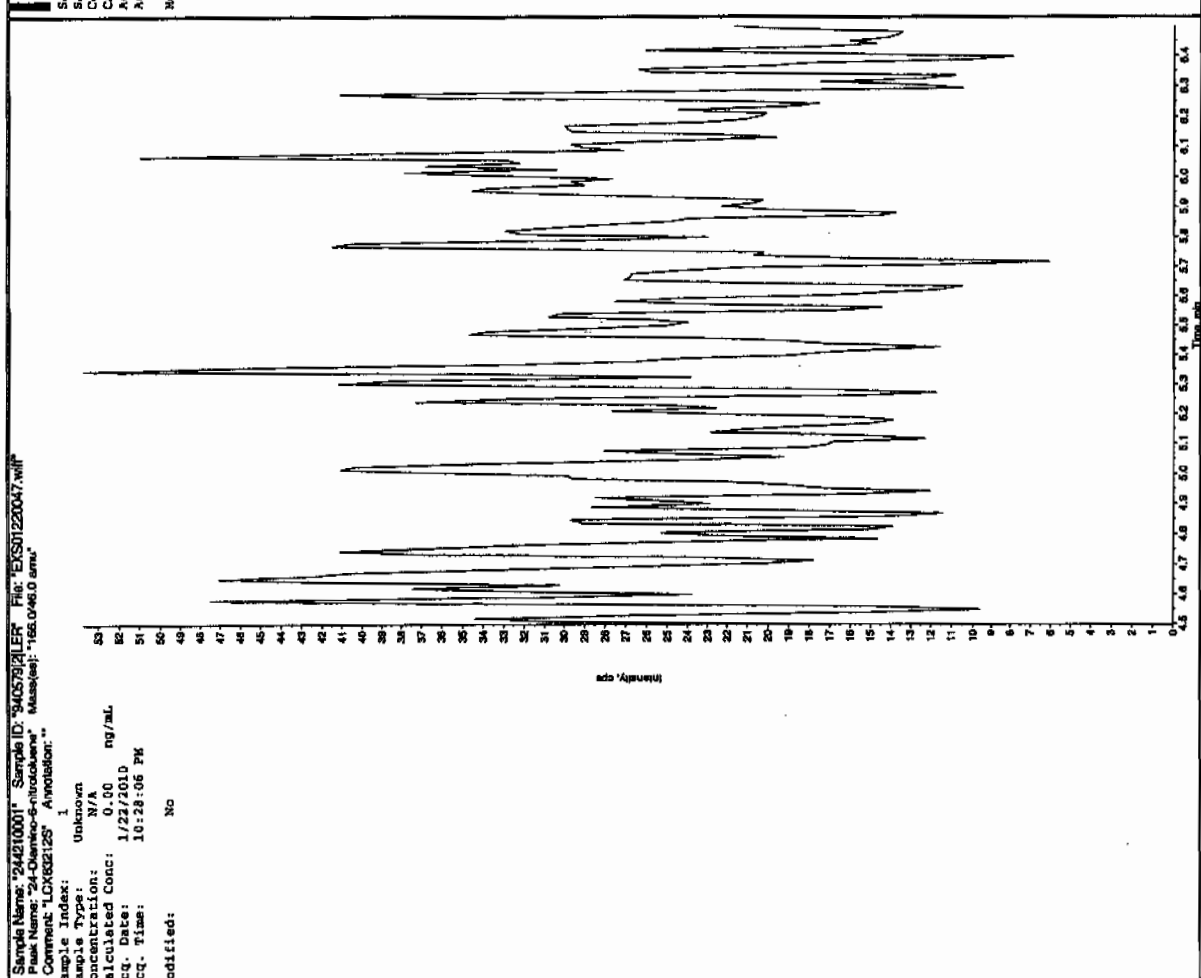
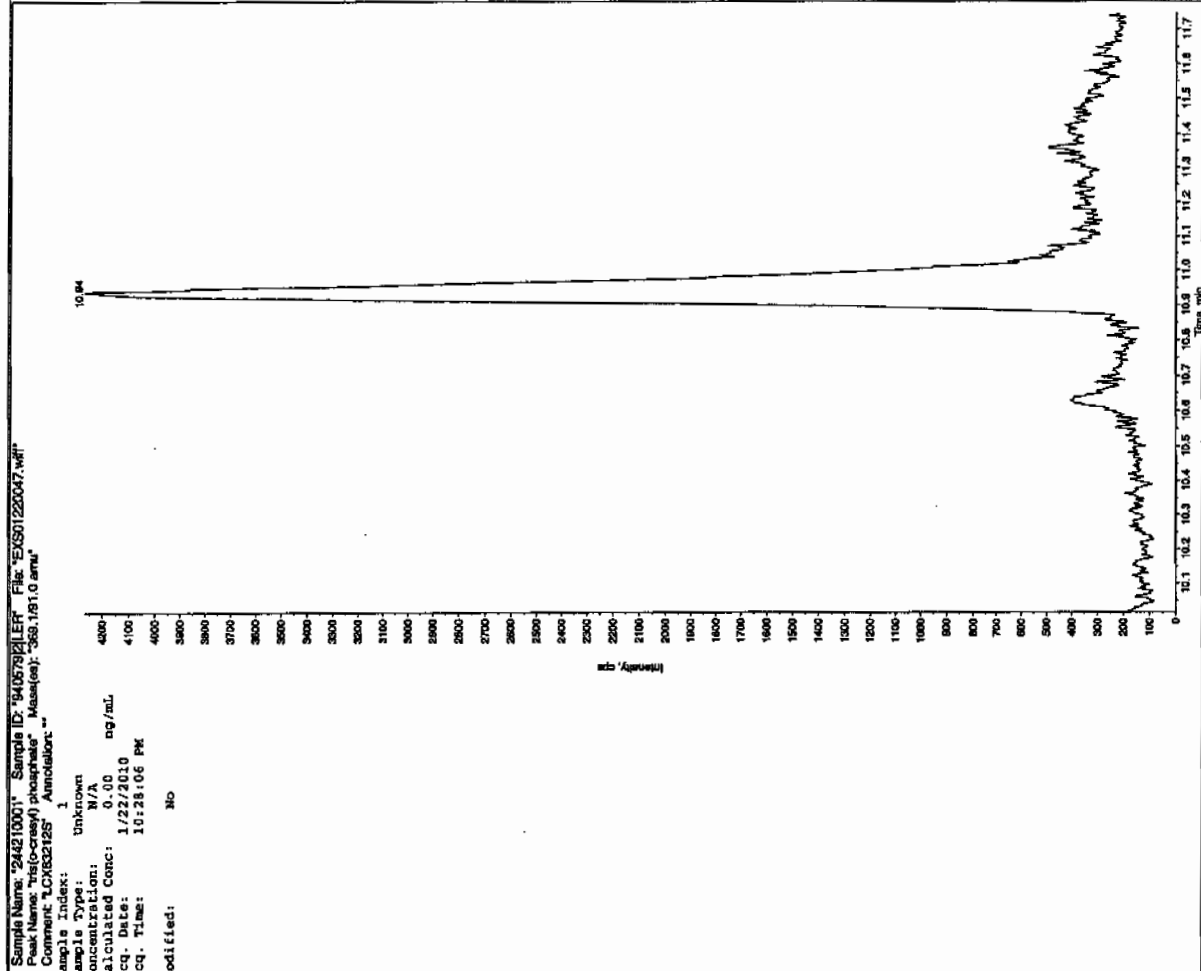
Concentration: N/A

Calculated Conc: 0.00 ng/mL

Acq. Date: 1/22/2010

Acq. Time: 10:28:06 PM

Modified: No



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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7715

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210002

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125124a

Date Analyzed: 27-JAN-10 23:50

Units: ug/kg

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

\*Concentration =

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

Printed: Thu Jan 28 10:43:32 2010, Page 79 of 121

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

Dataset: C:\MASSLYNX\New\_Exp\PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

Name: C:\MASSLYNX\NEW\_EXP\PRO\data\EXP0125124a

Date: 27-Jan-2010

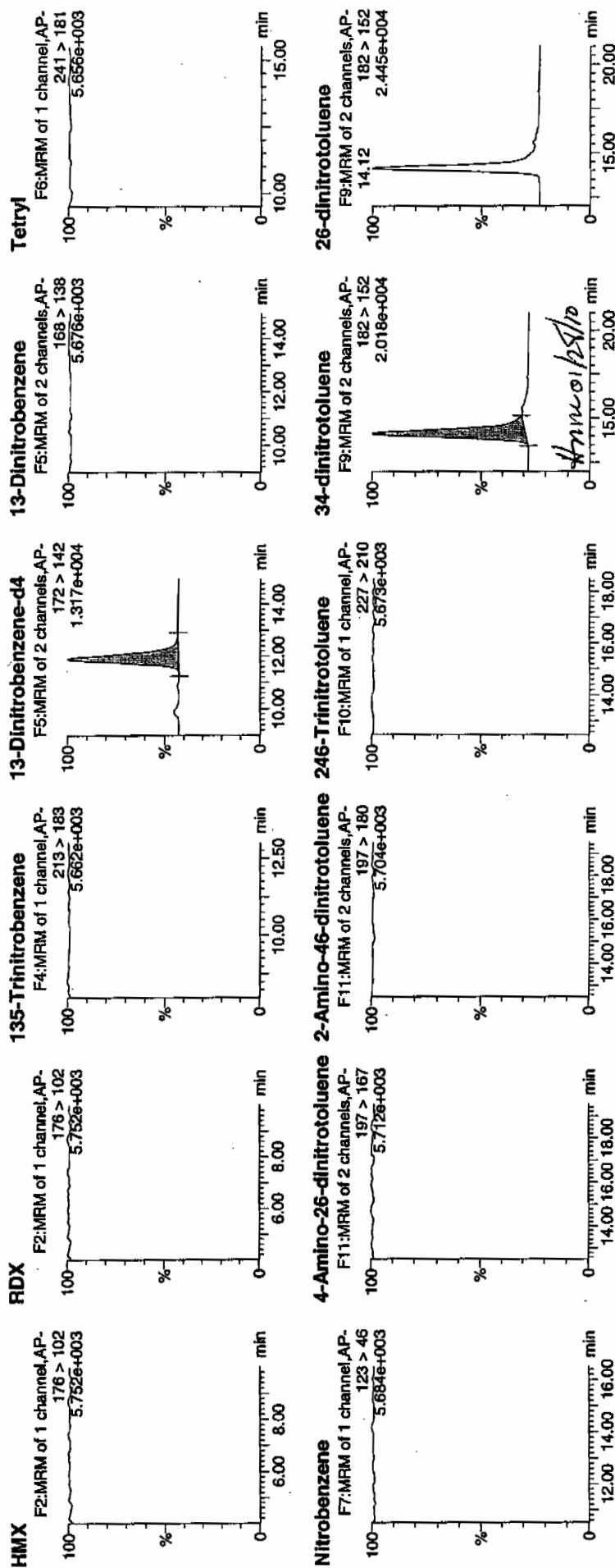
Time: 23:50:50

ID: 244210002

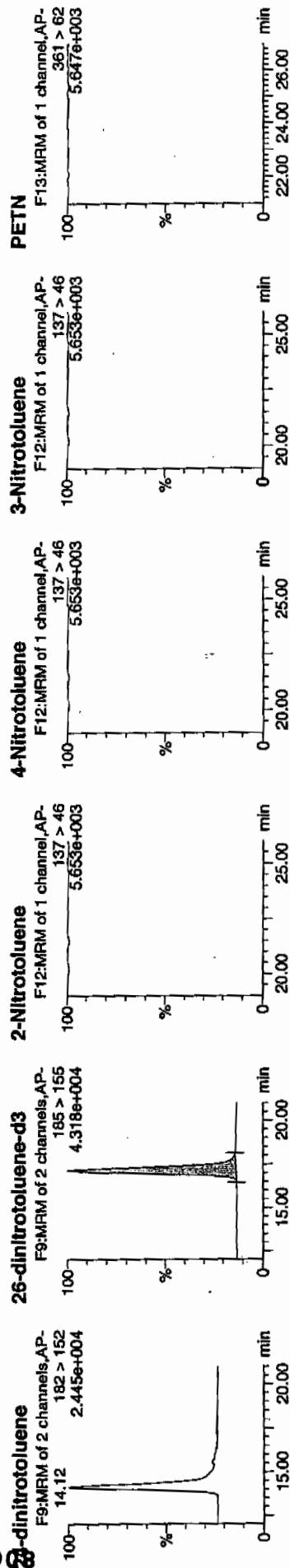
Vial: 2:1,F

11/28/10

940579 / 21







ID	Name	Trace	Area	IS Area	Response	Mass	Mod Date	Mod Time	Unit	MS/MS	SN
244210002	HMZ	176 > 102	2932.984	2932.984	2932.984	2932.984					
244210002	RDX	176 > 102	2932.984	2932.984	2932.984	2932.984					
244210002	135-Trinitrobenzene	213 > 183	2932.984	2932.984	2932.984	2932.984					
244210002	13-Dinitrobenzene-d4	172 > 142	11.89	2932.984	2932.984	2932.984					
244210002	13-Dinitrobenzene	168 > 138	2932.984	2932.984	2932.984	2932.984					
244210002	Tetryl	241 > 181	2932.984	2932.984	2932.984	2932.984					
244210002	Nitrobenzene	123 > 46	15919.262	15919.262	15919.262	15919.262					
244210002	4-Amino-26-dinitrotoluene	197 > 167	15919.262	15919.262	15919.262	15919.262					
244210002	2-Amino-46-dinitrotoluene	197 > 180	15919.262	15919.262	15919.262	15919.262					
244210002	246-Trinitrotoluene	227 > 210	15919.262	15919.262	15919.262	15919.262					
244210002	34-dinitrotoluene	182 > 152	14.16	7698.579	15919.262	15919.262					
244210002	26-dinitrotoluene	182 > 152	15919.262	15919.262	15919.262	15919.262					
244210002	24-dinitrotoluene	182 > 152	15919.262	15919.262	15919.262	15919.262					
244210002	26-dinitrotoluene-d3	185 > 155	17.14	15919.262	15919.262	15919.262					
244210002	2-Nitrotoluene	137 > 46	15919.262	15919.262	15919.262	15919.262					
244210002	4-Nitrotoluene	137 > 46	15919.262	15919.262	15919.262	15919.262					
244210002	3-Nitrotoluene	137 > 46	15919.262	15919.262	15919.262	15919.262					
244210002	PETN	361 > 82	15919.262	15919.262	15919.262	15919.262					

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7715

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210002

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01220053.wiff

Date Analyzed: 23-JAN-10 00:02

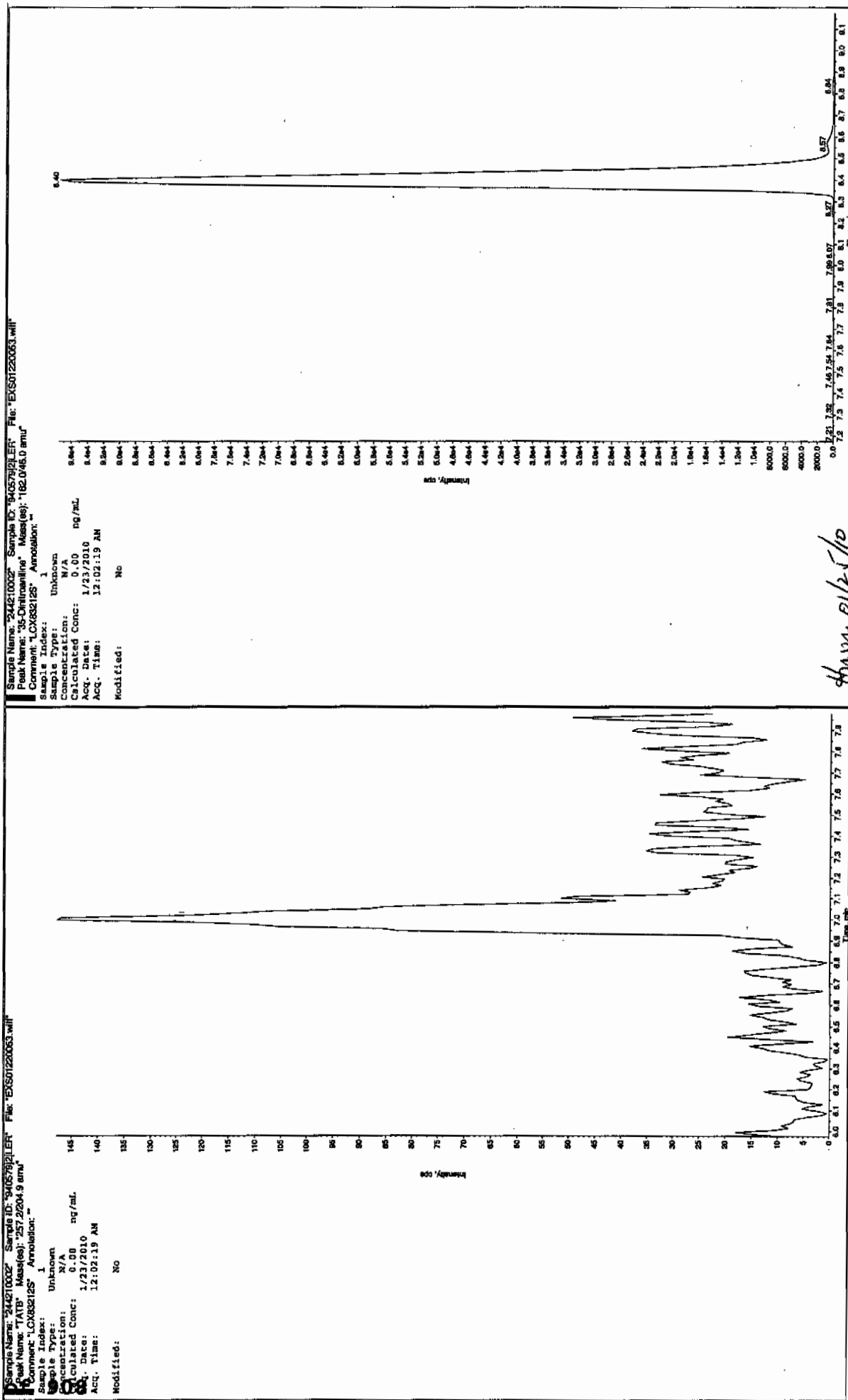
Units: ug/kg

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

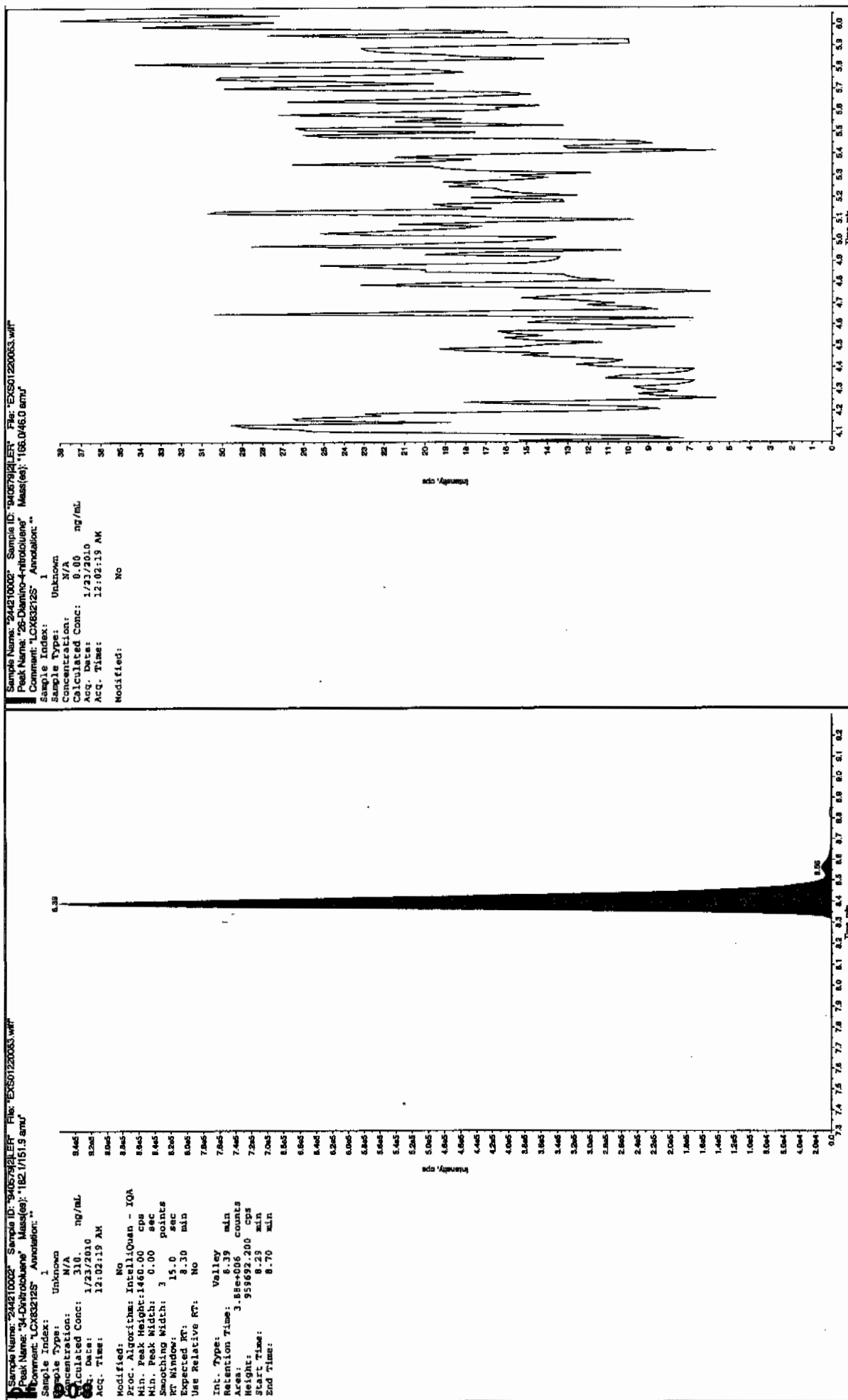
\*Concentration =

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

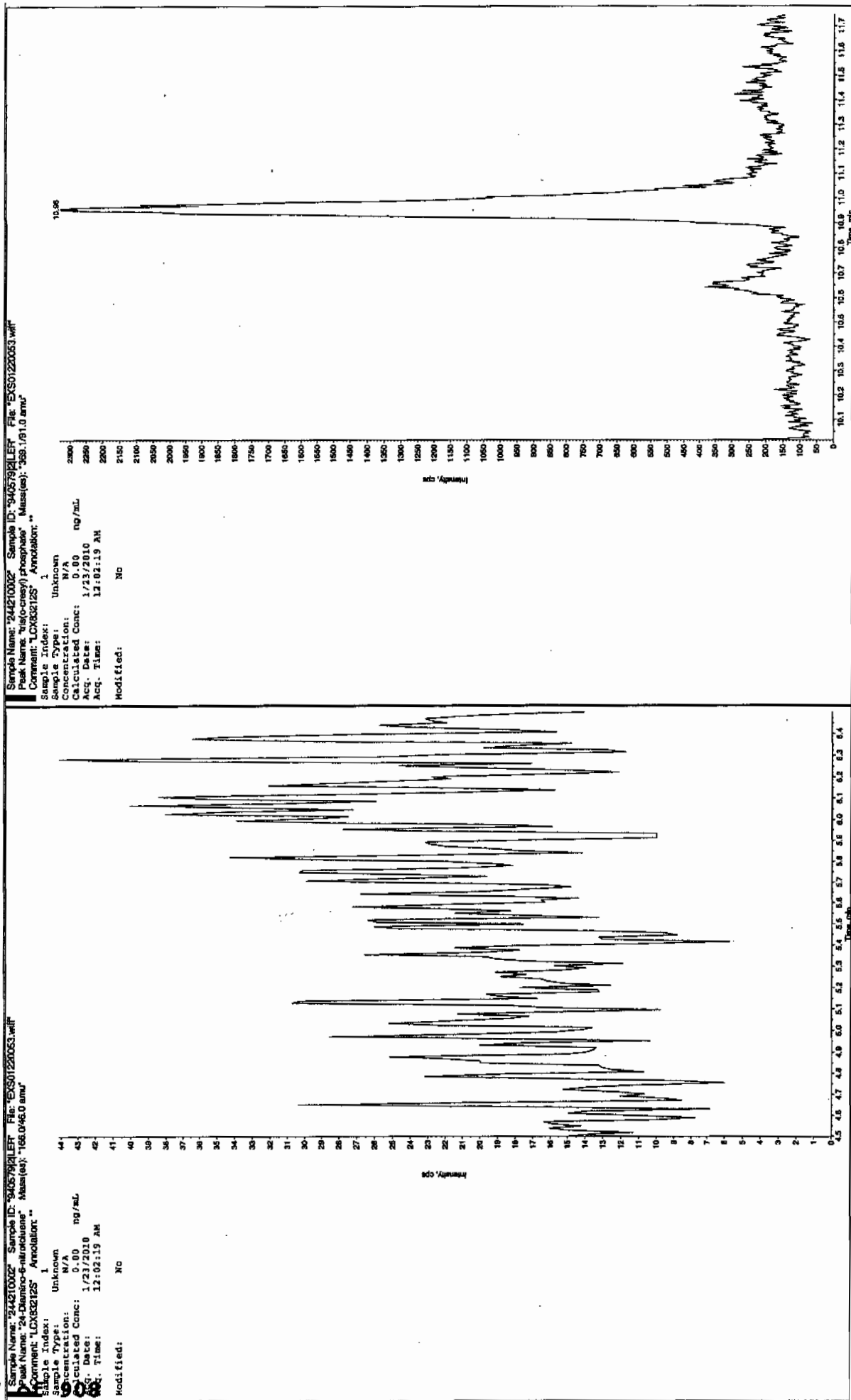
See 1/25/10



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



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



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

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7707

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210003

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125125a

Date Analyzed: 28-JAN-10 00:20

Units: ug/kg

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

\*Concentration =

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

Printed: Thu Jan 28 10:43:32 2010, Page 81 of 121

# Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\1012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\data\EXP0125125a

Date: 28-Jan-2010

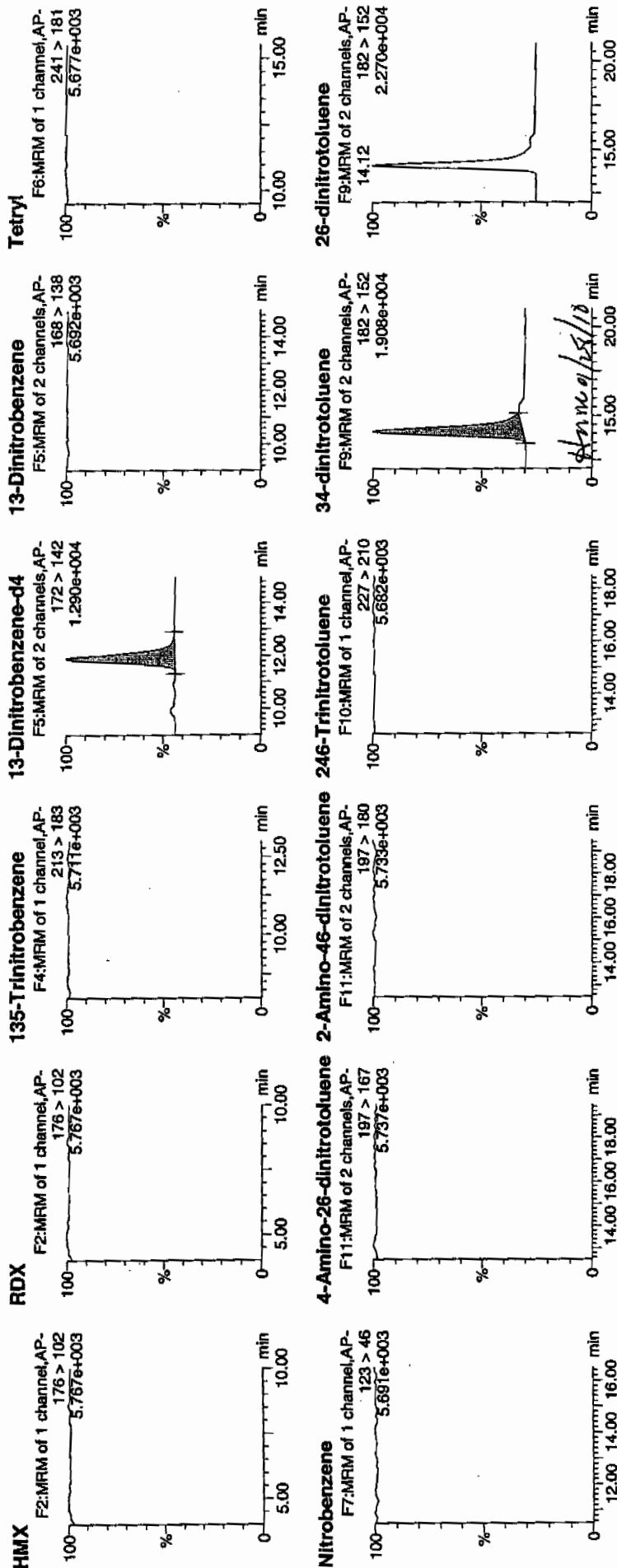
Time: 00:20:17

ID: 244210003

Vial: 2:2,A

10/17  
1/18/10

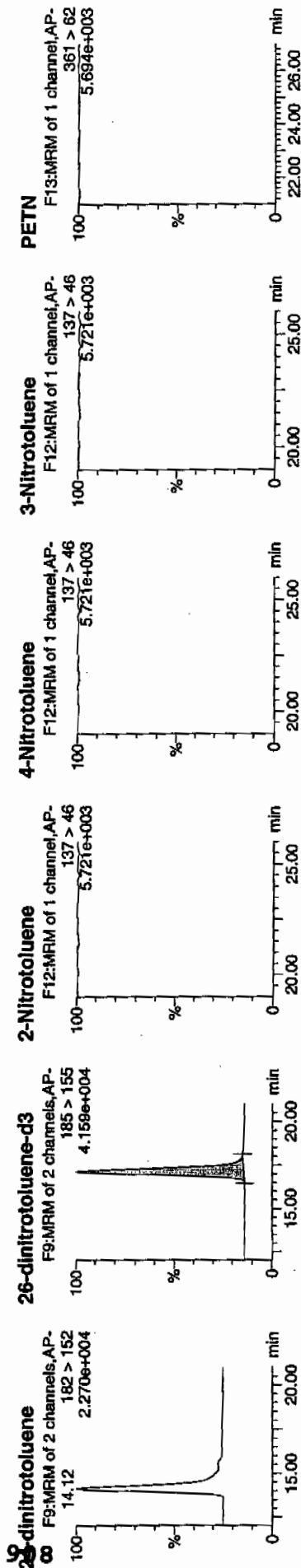
WAV 940579 / 2025 / 121



Printed: Thu Jan 28 10:43:32 2010, Page 82 of 121

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010



ID	Name	Area	Height	Response	Area	Height	Response	Area	Height	Response	Area	Height	Response	Area	Height	Response	Area	Height	Response
244210003	HMX	176 > 102	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785
244210003	RDX	176 > 102	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785
244210003	135-Trinitrobenzene	213 > 183	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785
244210003	13-Dinitrobenzene-d4	172 > 142	11.89	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785
244210003	13-Dinitrobenzene	168 > 138	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785
244210003	Tetryl	241 > 181	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785	2779.785
244210003	Nitrobenzene	123 > 46	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233
244210003	4-Amino-26-dinitrotoluene	197 > 167	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233
244210003	2-Amino-46-dinitrotoluene	197 > 180	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233
244210003	246-Trinitrotoluene	227 > 210	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233
244210003	34-Dinitrotoluene	182 > 152	14.17	7264.014	7264.014	7264.014	7264.014	7264.014	7264.014	7264.014	7264.014	7264.014	7264.014	7264.014	7264.014	7264.014	7264.014	7264.014	7264.014
244210003	26-dinitrotoluene	182 > 152	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233
244210003	24-dinitrotoluene	182 > 152	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233
244210003	26-dinitrotoluene-d3	185 > 155	17.14	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233
244210003	2-Nitrotoluene	137 > 46	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233
244210003	4-Nitrotoluene	137 > 46	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233
244210003	3-Nitrotoluene	137 > 46	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233
244210003	PETN	361 > 62	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233	15497.233



1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7707

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210003

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01220054.wiff

Date Analyzed: 23-JAN-10 00:18

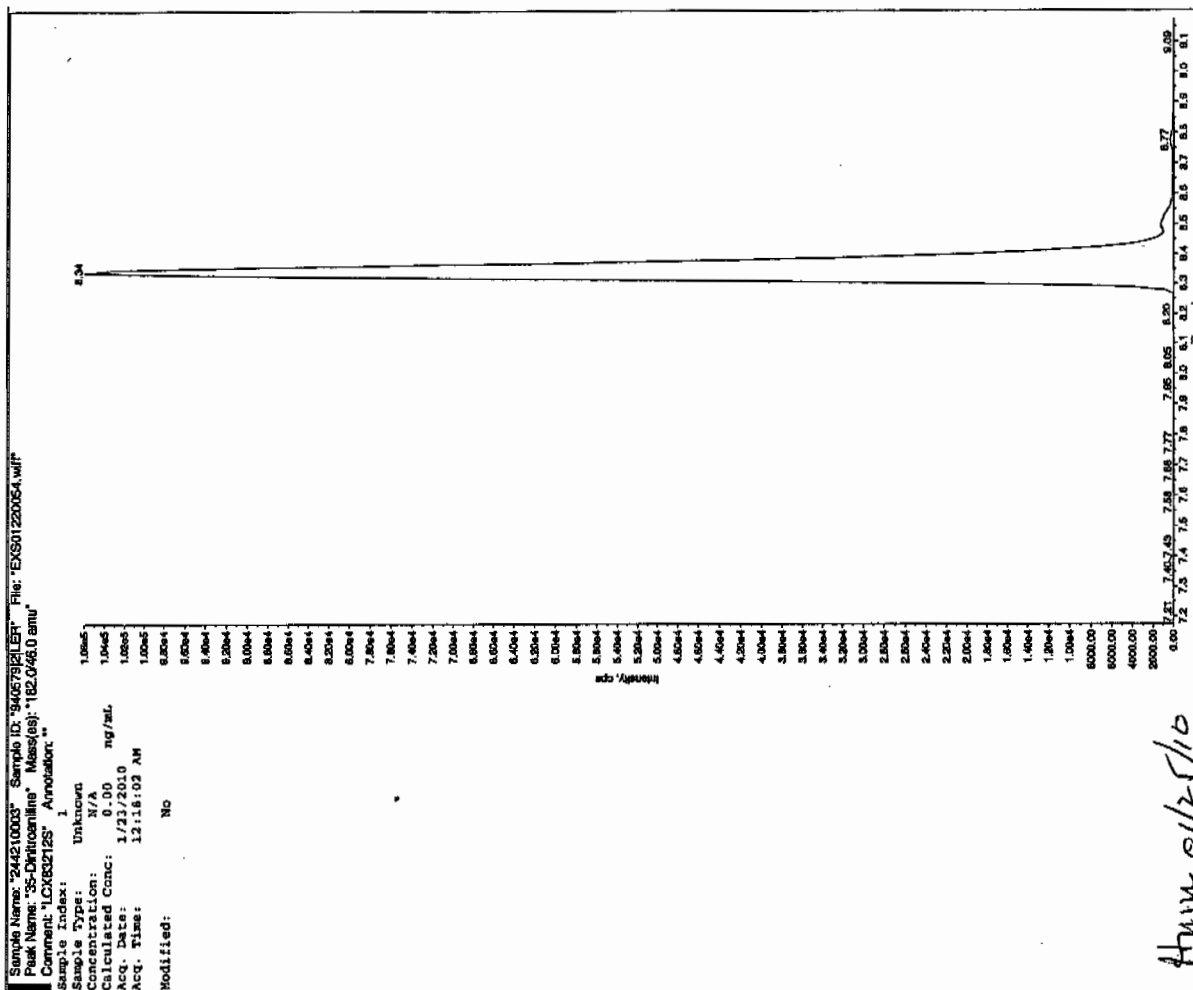
Units: ug/kg

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

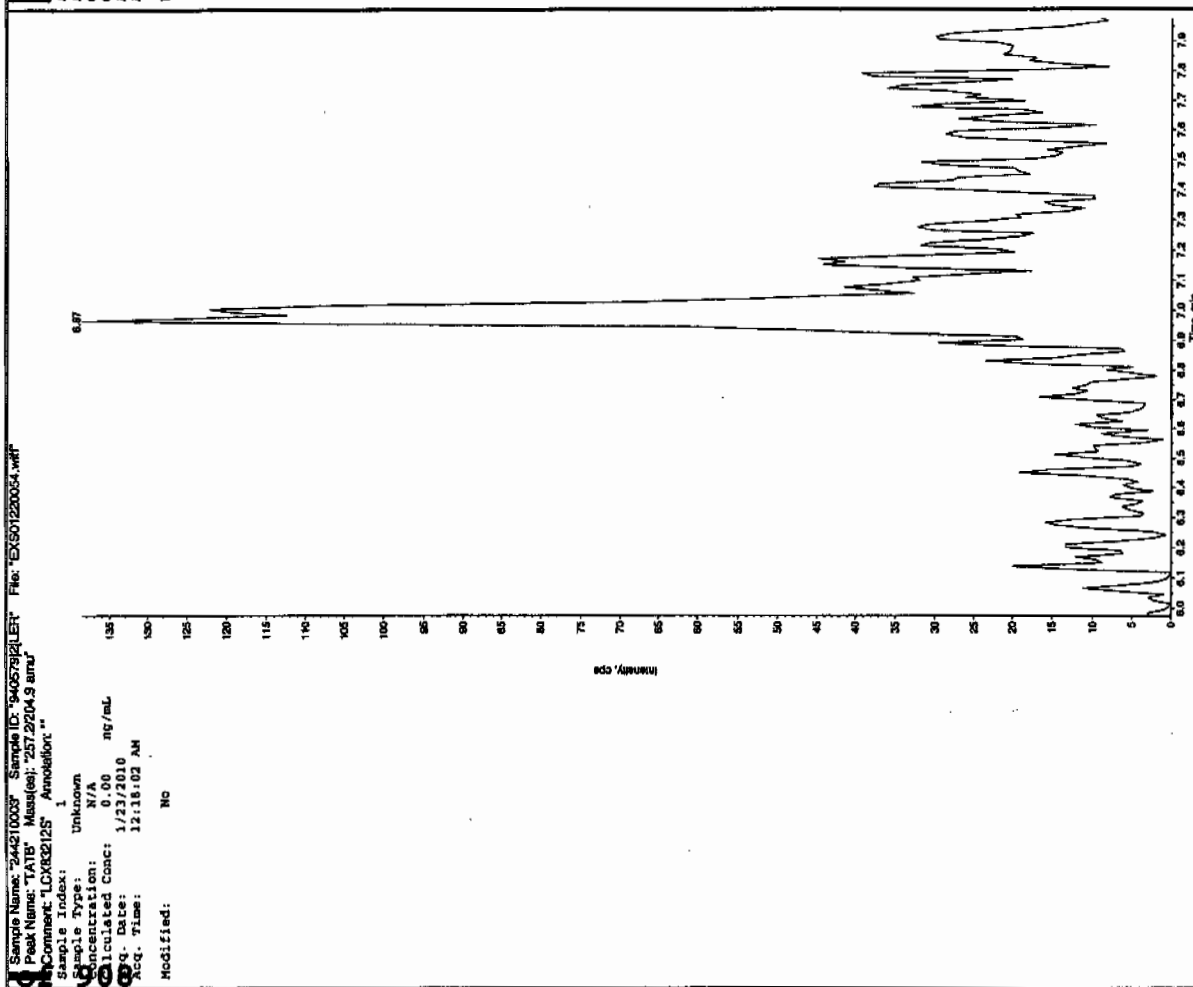
\*Concentration =

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

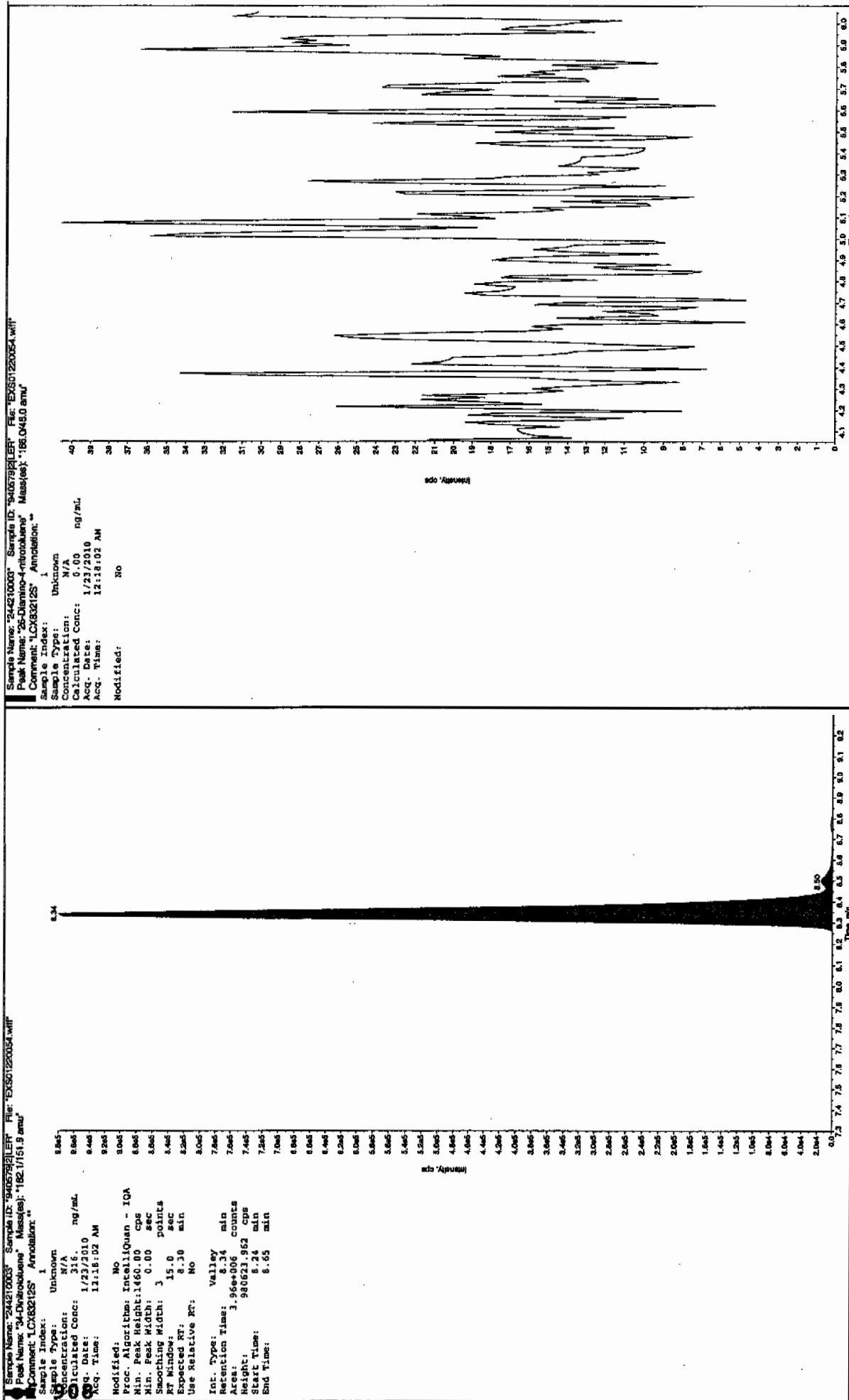
260 11/25/10



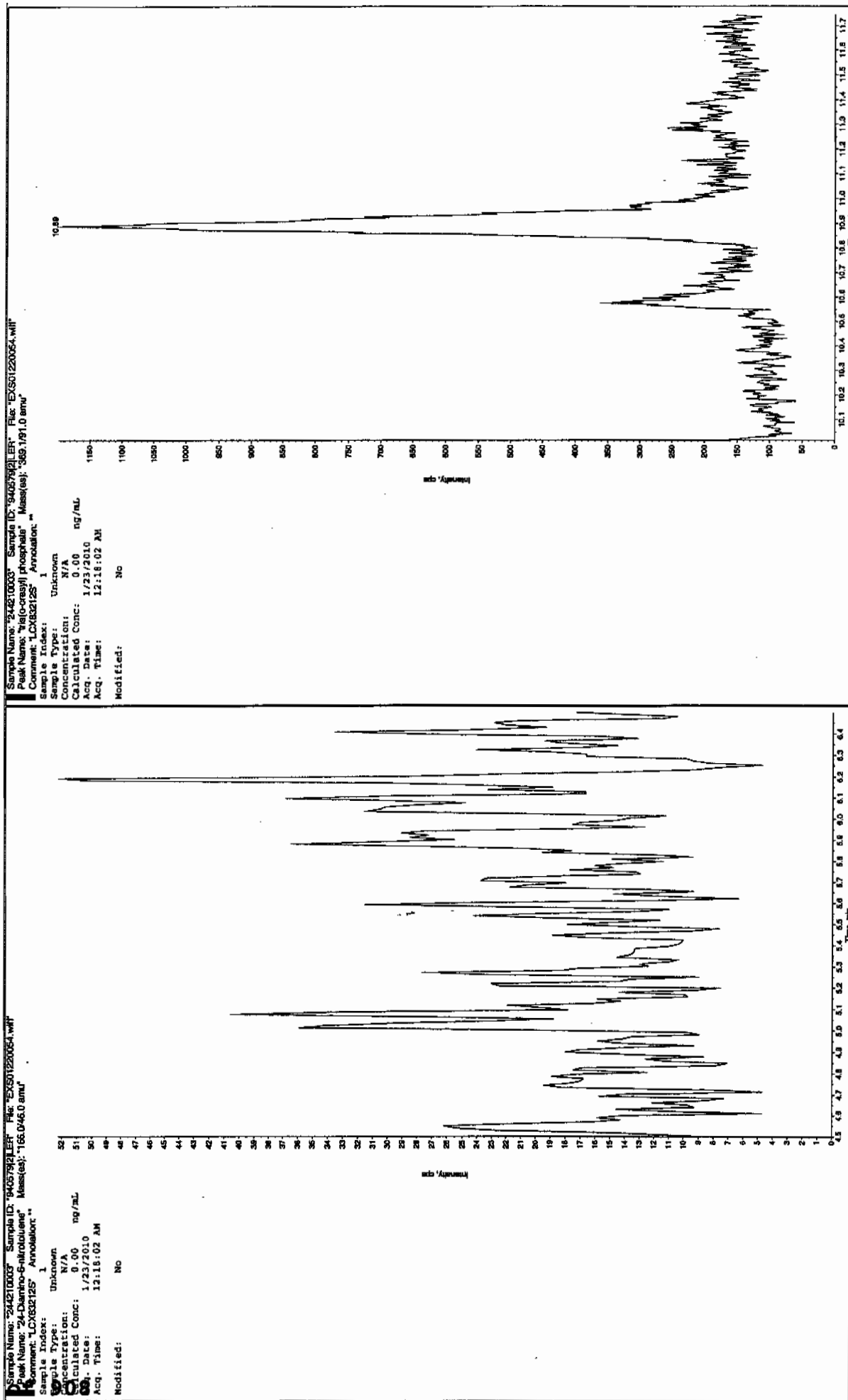
Hum 01/25/10



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



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



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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7719

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210004

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125126a

Date Analyzed: 28-JAN-10 00:49

Units: ug/kg

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

\*Concentration =

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

Printed: Thu Jan 28 10:43:32 2010, Page 83 of 121

# Identify Sample Report

383 Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125126a

Date: 28-Jan-2010

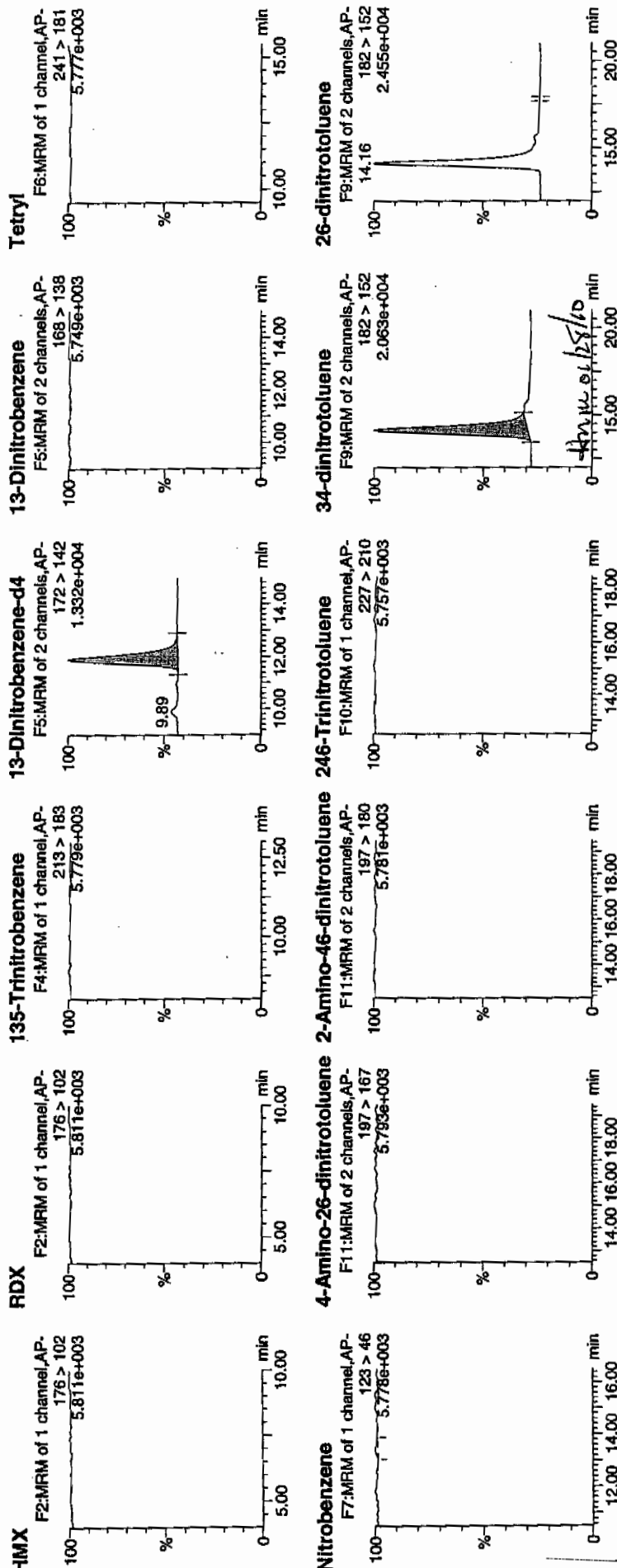
Time: 00:49:46

ID: 244210004

Vial: 2:2,B

μH  
1/28/10

Handwritten: 940579 / 8023 / 21





1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7719

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210004

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01220055.wiff

Date Analyzed: 23-JAN-10 00:33

Units: ug/kg

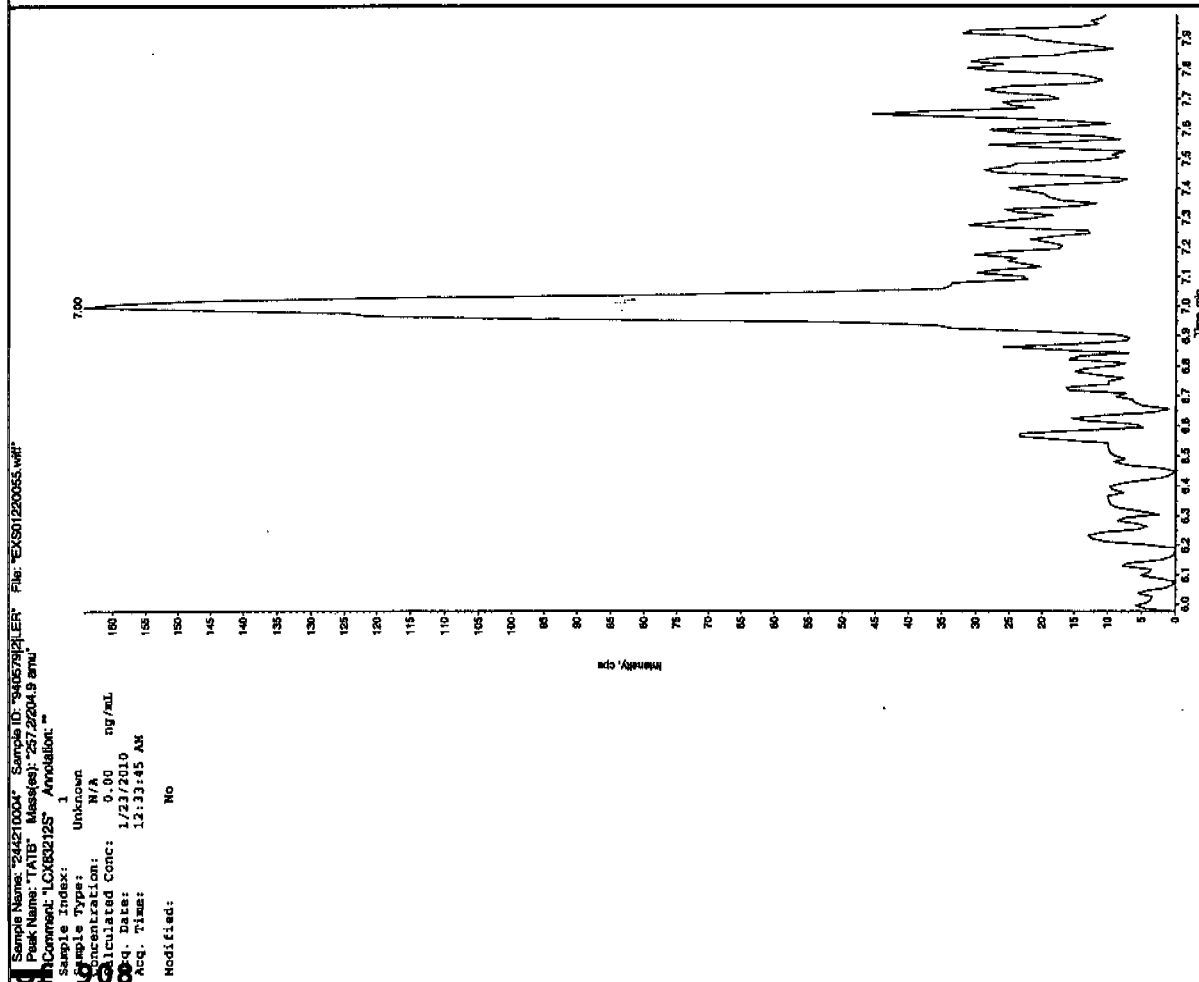
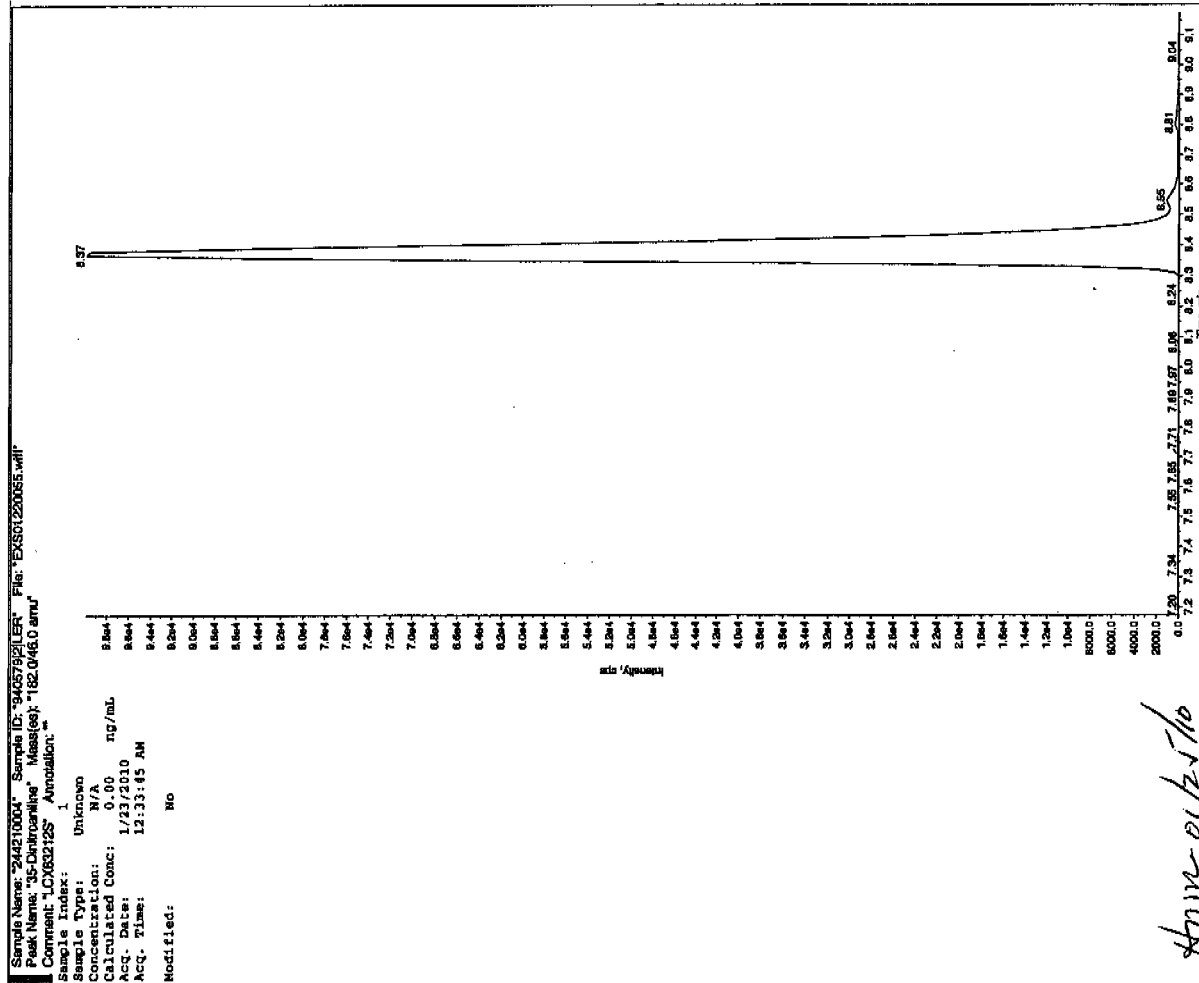
Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

\*Concentration =

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



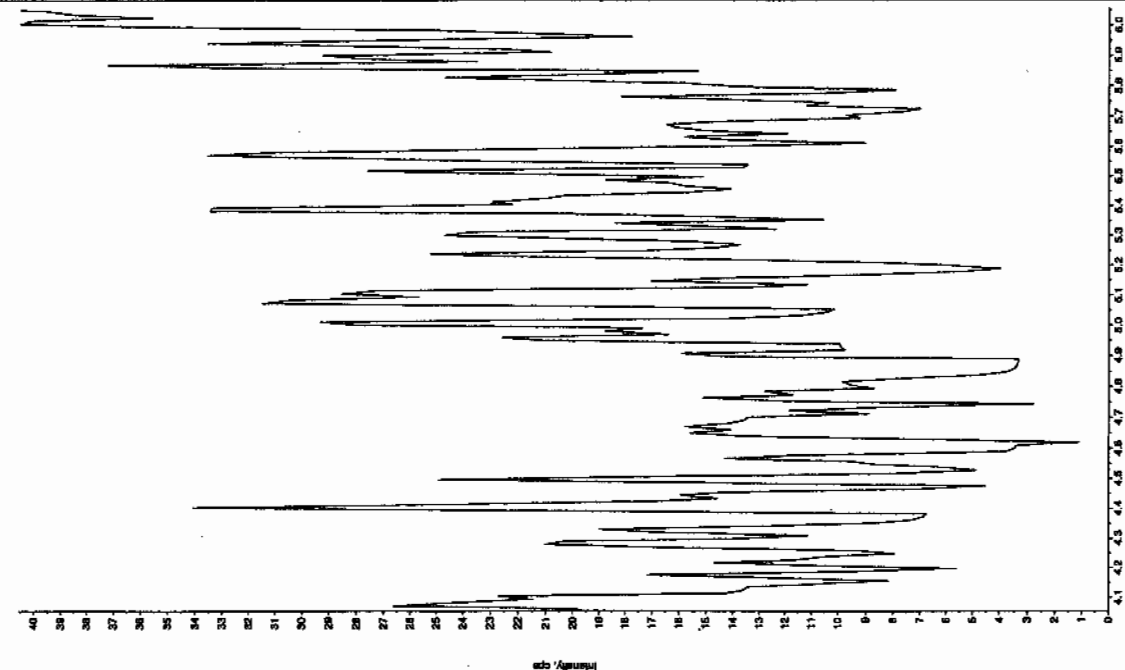
25710



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

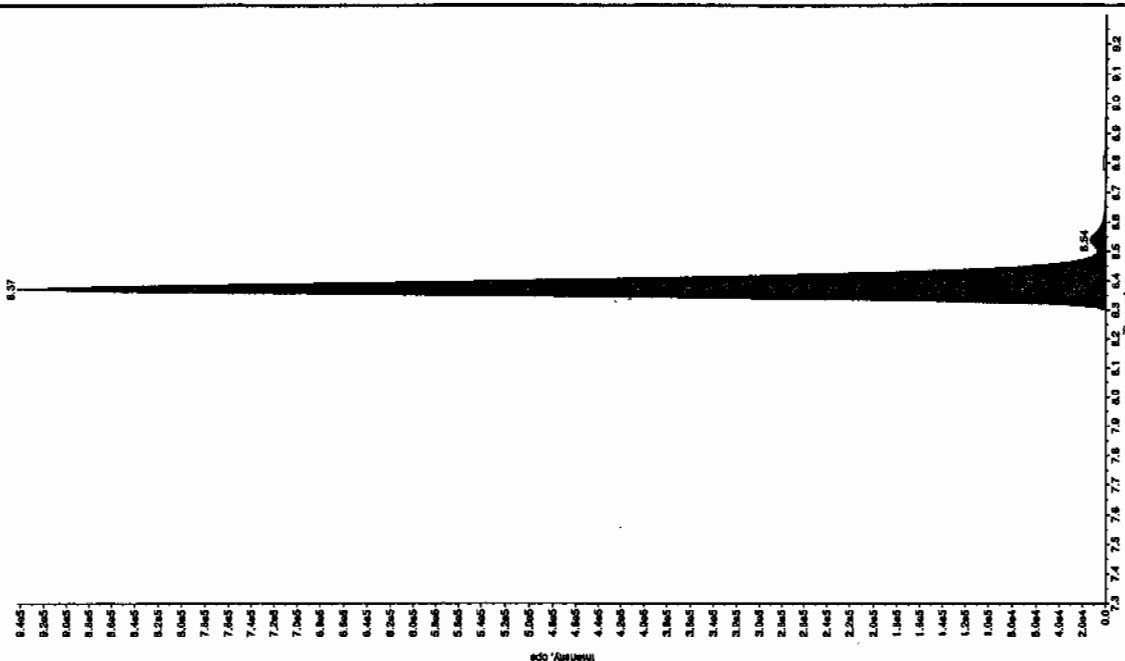
Sample Name: "244210004" Sample ID: "94057921.ER" File: "EX01220055.wif"  
 Peak Name: "28-Diamino-4-nitroindole" Mass(es): "188.043.0 amu"  
 Comment: "LCX832125" Annotation: "

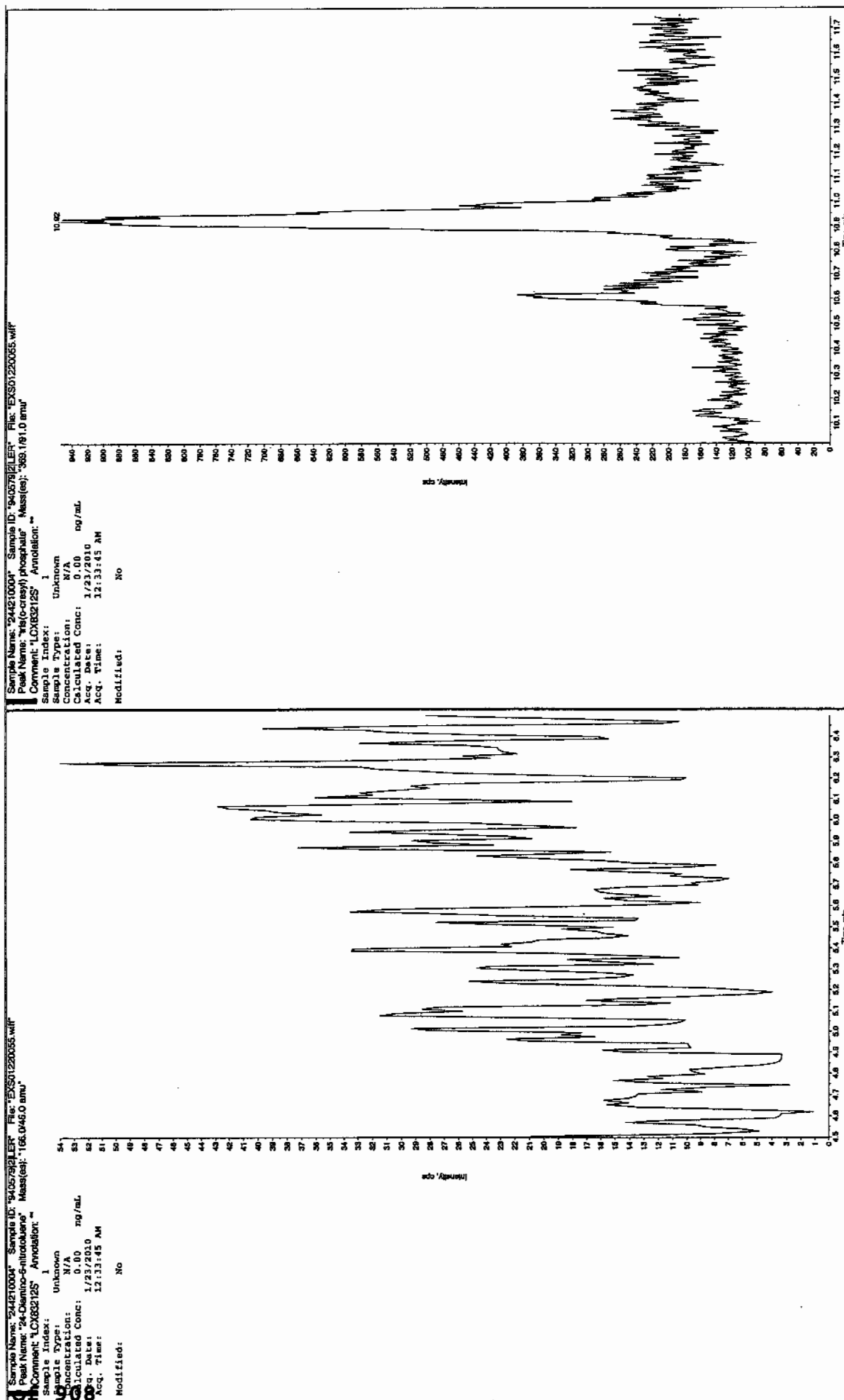
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 1/23/2010  
 Acq. Date: 12/31/45 AM  
 Acq. Time: 12:33:45 AM  
 Modified: No



Sample Name: "244210004" Sample ID: "94057921.ER" File: "EX01220055.wif"  
 Peak Name: "34-Diaminobenzene" Mass(es): "182.1715.9 amu"  
 Comment: "LCX832125" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 303 ng/mL  
 Calculated Conc: 1/23/2010  
 Acq. Date: 12/31/45 AM  
 Acq. Time: 12:33:45 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: 8.30 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.37 min  
 Area: 3.80e+5 counts  
 Height: 94056.274 cps  
 Start Time: 8.24 min  
 End Time: 8.71 min





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

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7717

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210005

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125127a

Date Analyzed: 28-JAN-10 01:19

Units: ug/kg

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

\*Concentration =

Instrument Value	X	Concentrated Extract Volume	X	Dilution Factor
		Sample Amount		

Printed: Thu Jan 28 10:43:32 2010, Page 85 of 121

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA2.qtd, Time: Thu Jan 28 10:42:53 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125127a

Date: 28-Jan-2010

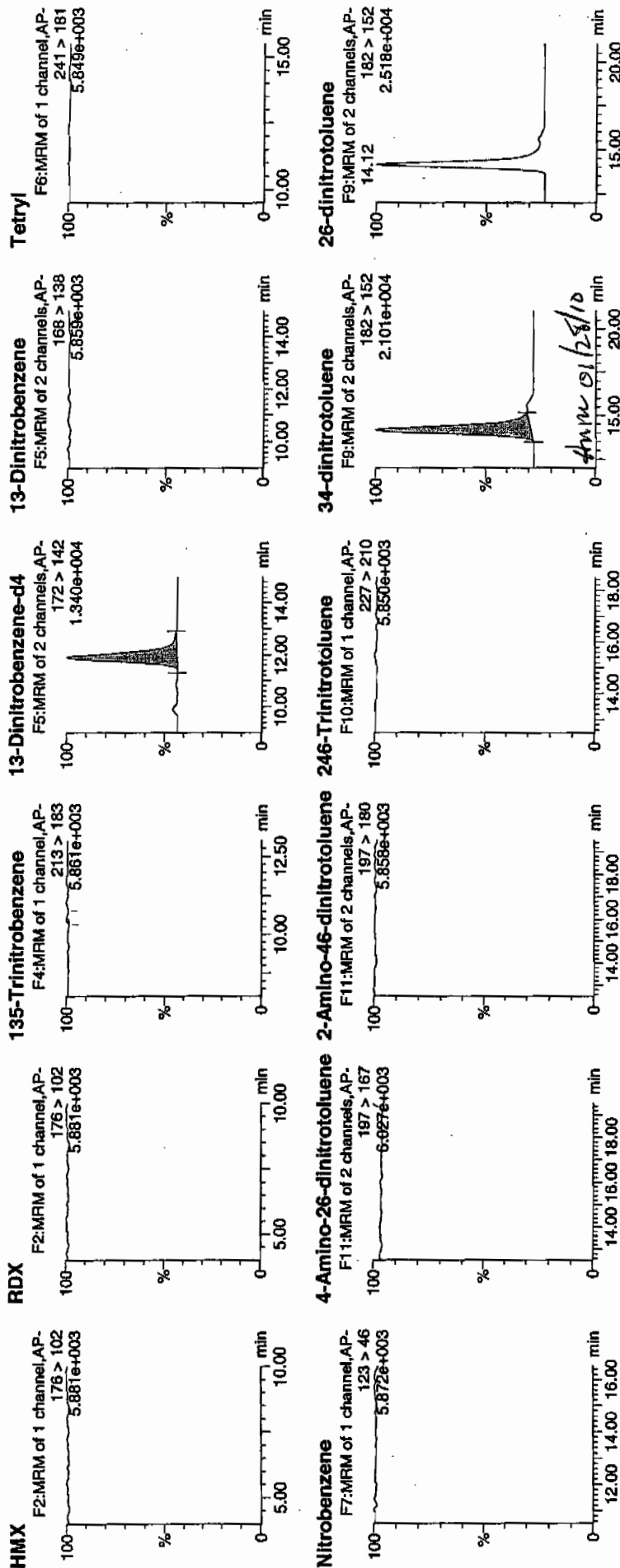
Time: 01:19:15

ID: 244210005

Vial: 2:2,C

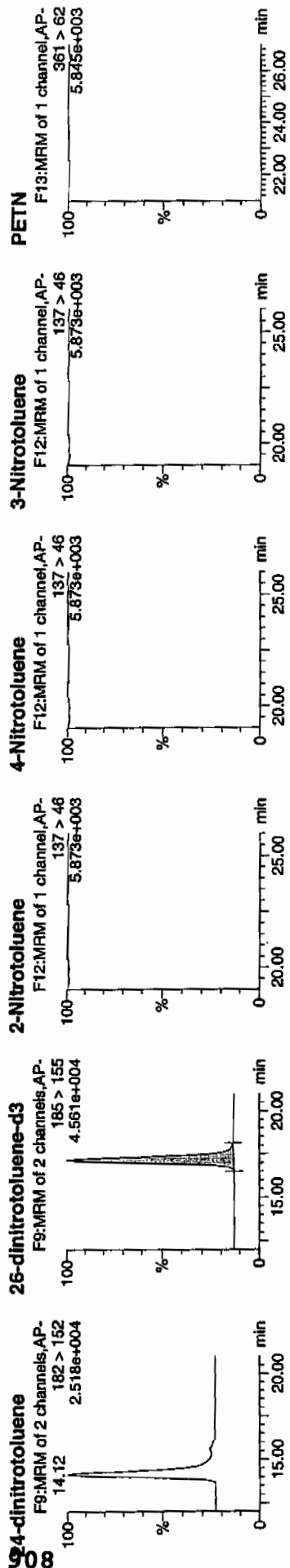
μg  
1/28/10

LAU 940579 / 8000 / 21



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

Dataset: C:\MASSLYNX\New\_Exp\PRO012510expA2.qtd, Time: Thu Jan 28 10:42:53 2010



ID	Name	Trace	Area	Height	Width	Retention	MM	Response	Flags	ModTime	ModUser	MM	Response	Flags	ModTime	ModUser
244210005	HMX		176 > 102			29.58.910										
244210005	RDX		176 > 102			29.58.910										
244210005	135-Trinitrobenzene		213 > 183			29.58.910										
244210005	13-Dinitrobenzene-d4		172 > 142	11.89		29.58.910										
244210005	13-Dinitrobenzene		168 > 138			29.58.910										
244210005	Tetryl		241 > 181			29.58.910										
244210005	Nitrobenzene		123 > 46			29.58.910										
244210005	4-Amino-2,6-dinitrotoluene		197 > 167			17048.262										
244210005	2-Amino-4,6-dinitrotoluene		197 > 180			17048.262										
244210005	246-Trinitrotoluene		227 > 210			17048.262										
244210005	34-dinitrotoluene		182 > 152	14.17		8147.700										
244210005	26-dinitrotoluene		182 > 152			17048.262										
244210005	24-dinitrotoluene		182 > 152			17048.262										
244210005	26-dinitrotoluene-d3		185 > 155	17.14		17048.262										
244210005	2-Nitrotoluene		137 > 46			17048.262										
244210005	4-Nitrotoluene		137 > 46			17048.262										
244210005	3-Nitrotoluene		137 > 46			17048.262										
244210005	PETN		361 > 62			17048.262										

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7717

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210005

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01220056.wiff

Date Analyzed: 23-JAN-10 00:49

Units: ug/kg

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

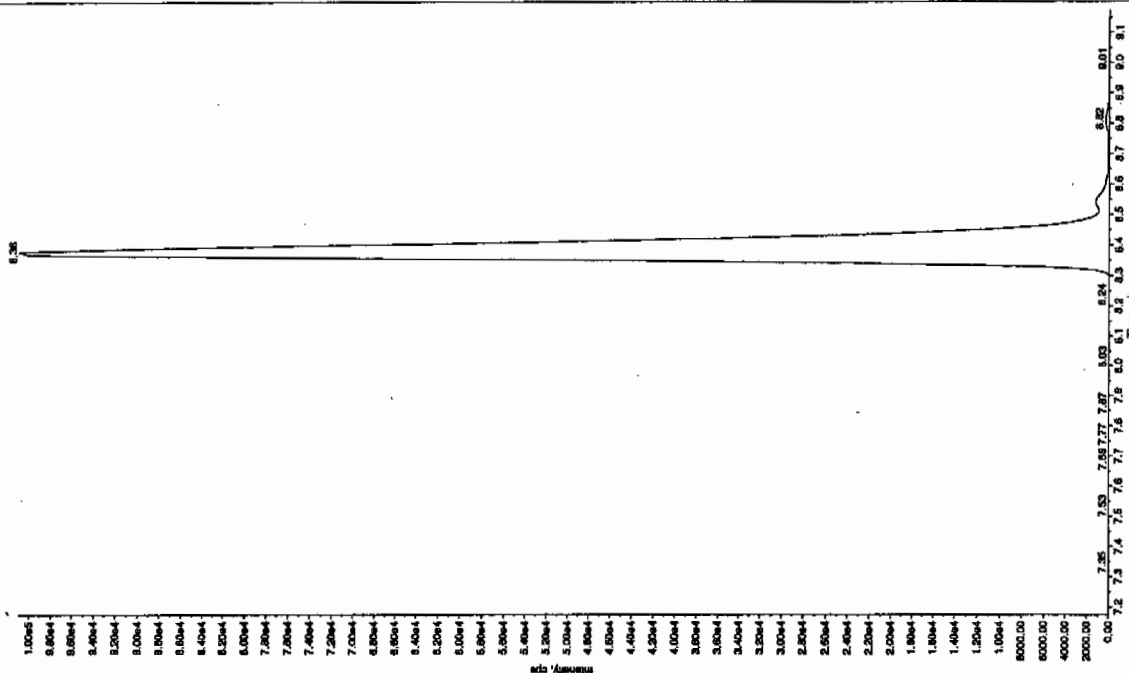
\*Concentration =

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

Jan 1/25/10

Sample Name: "244210005" Sample ID: "94057941.E" File: "EX501220056.wif"  
 Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"  
 Comment: "LCX83212S" Annotation: "

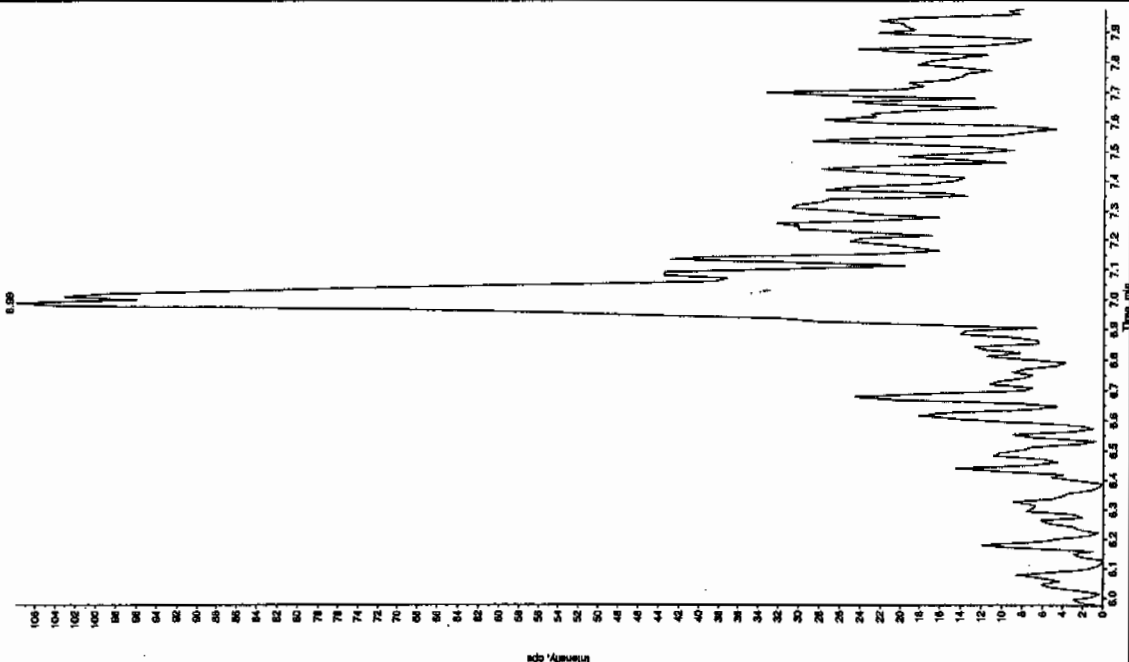
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/23/2010  
 Acq. Time: 12:49:28 AM  
 Modified: No



Jan 1/25/10

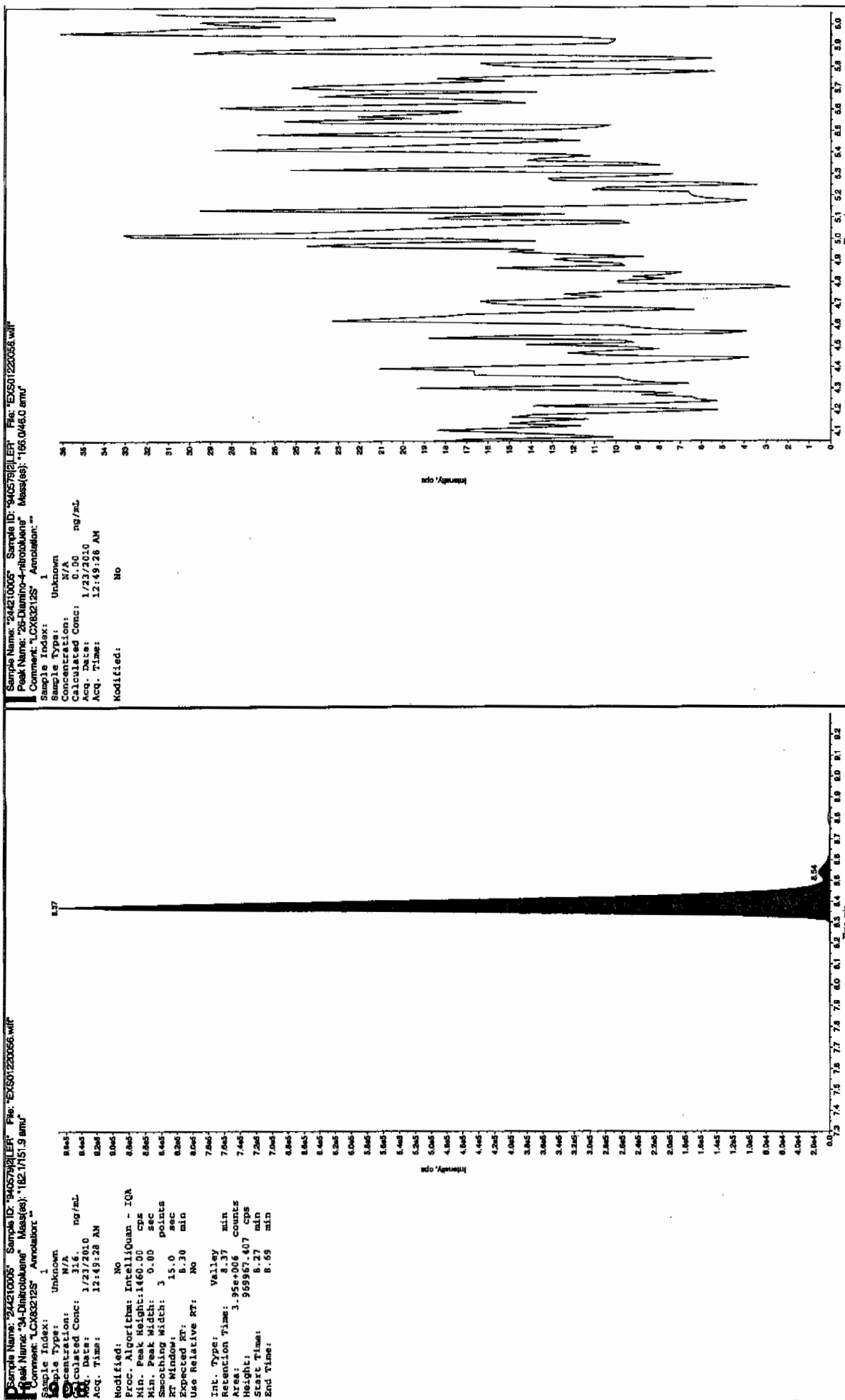
Sample Name: "244210005" Sample ID: "94057941.E" File: "EX501220056.wif"  
 Peak Name: "TATB" Mass(es): "257.2/204.9 amu"  
 Comment: "LCX83212S" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/23/2010  
 Acq. Time: 12:49:28 AM  
 Modified: No



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





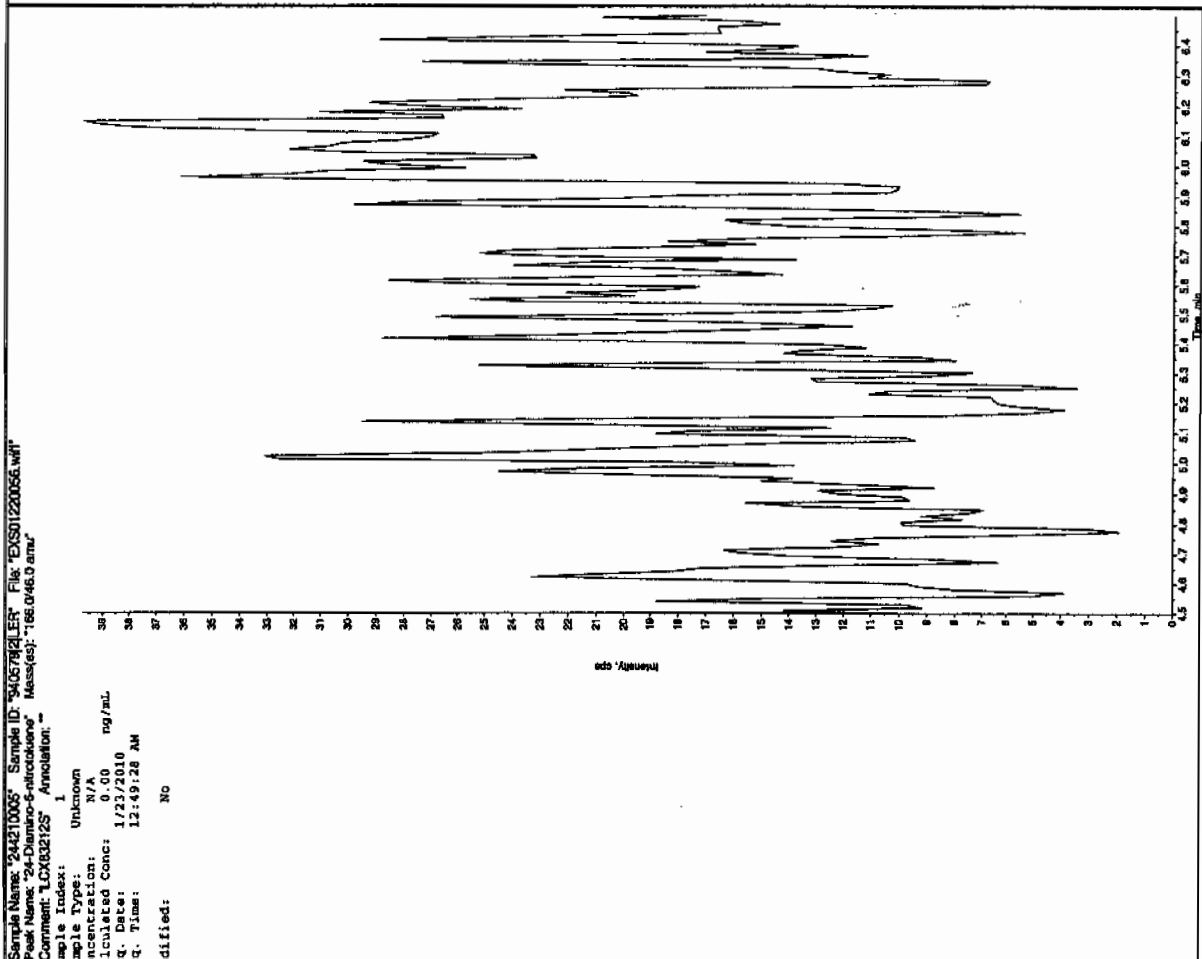
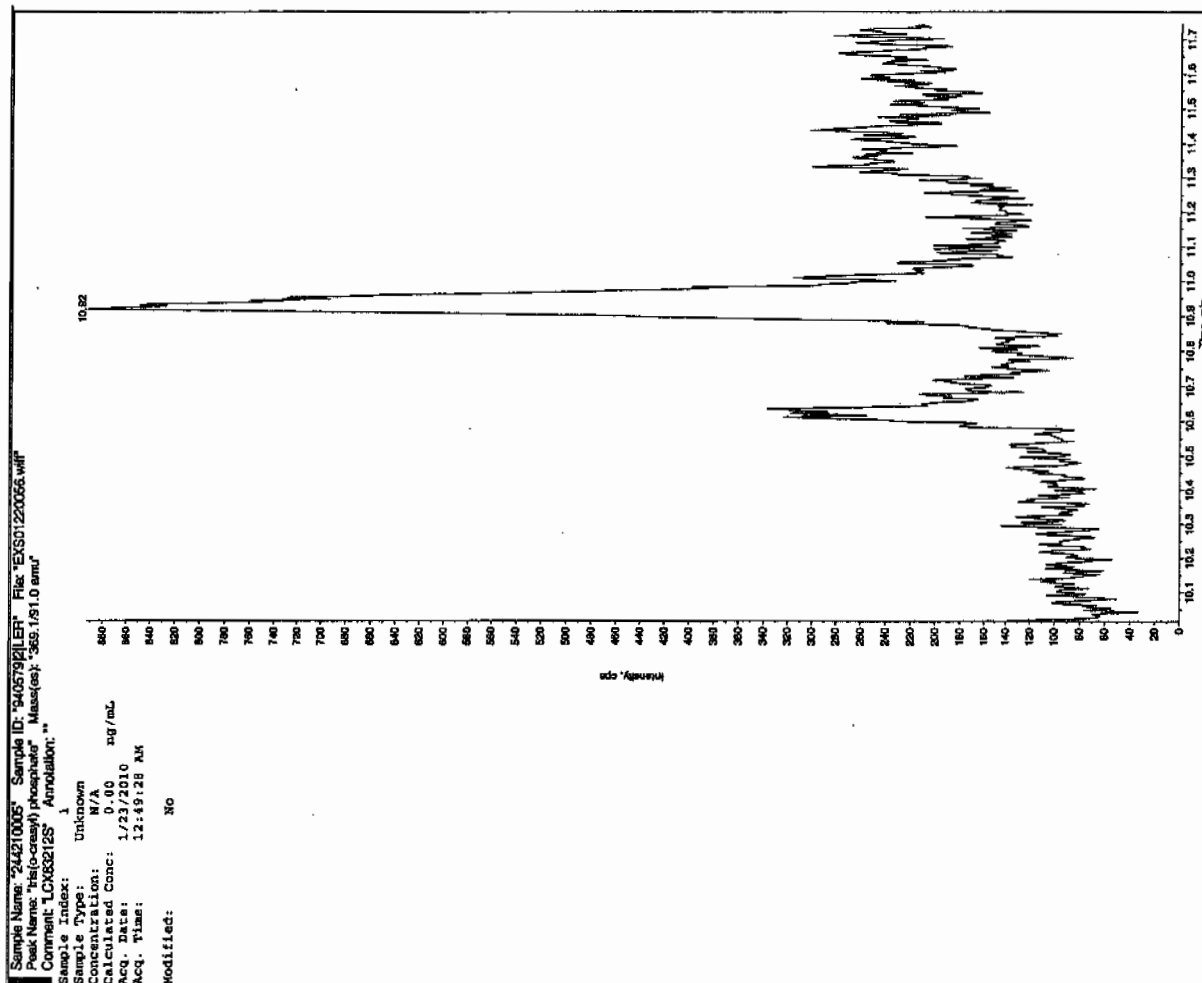
\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "244210005" Sample ID: "94057921ER" File: "EXS01220056.wif"  
 Peak Name: "Is(o-crotyl) phosphatidyl" Mass(es): "355.181.0 amu"  
 Comment: "LCX832125" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/23/2010  
 Acq. Time: 12:49:28 AM  
 Modified: No

Sample Name: "244210005" Sample ID: "94057921ER" File: "EXS01220056.wif"  
 Peak Name: "24-Diamino-5-nitrotoluene" Mass(es): "186.046.0 amu"  
 Comment: "LCX832125" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/23/2010  
 Acq. Time: 12:49:28 AM  
 Modified: No



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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7708

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210006

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125128a

Date Analyzed: 28-JAN-10 01:48

Units: ug/kg

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

\*Concentration =

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

Printed: Thu Jan 28 10:43:32 2010, Page 87 of 121

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

Dataset: C:\MASSLYNX\New\_Exp\_PROJ012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

Filename: C:\MASSLYNX\NEW\_EXP\_PROJ012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

Date: 28-Jan-2010

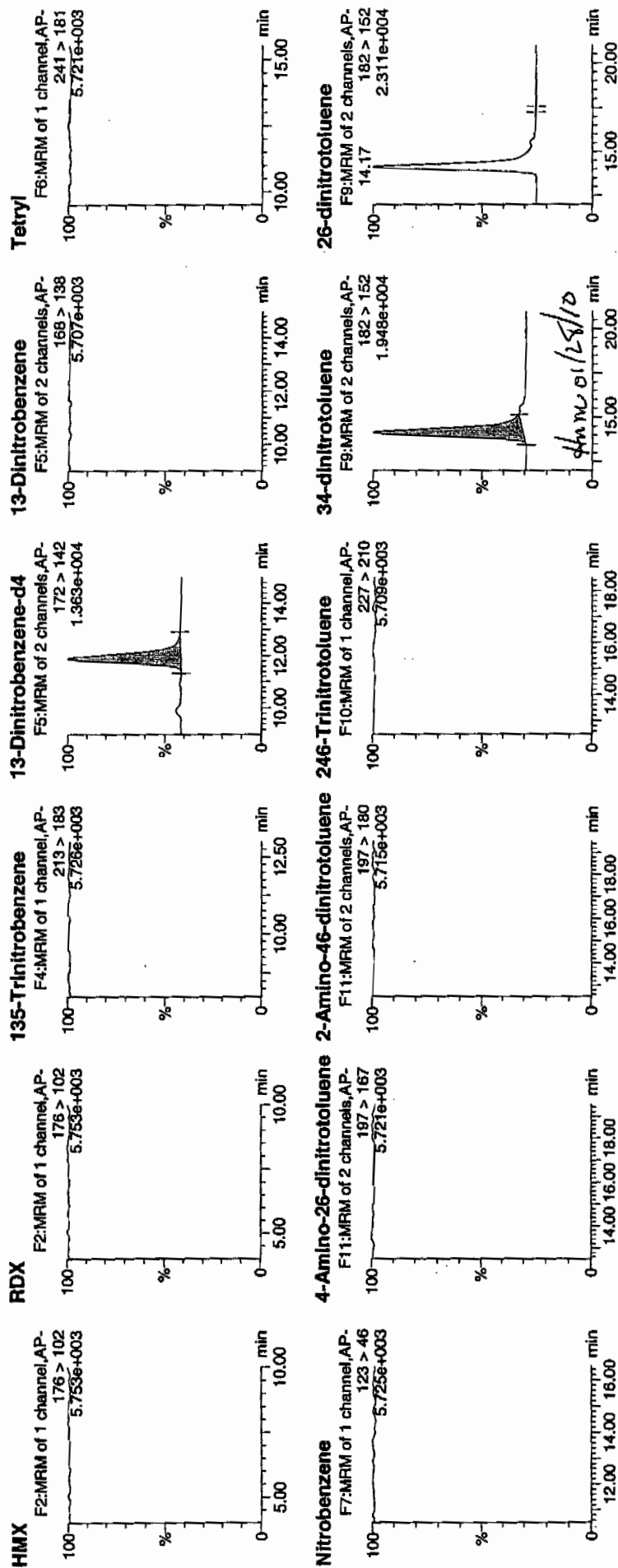
Time: 01:48:43

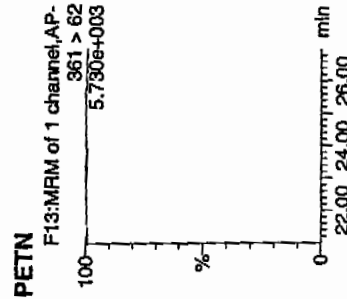
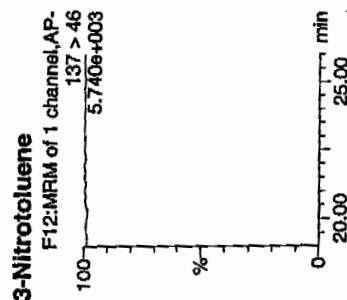
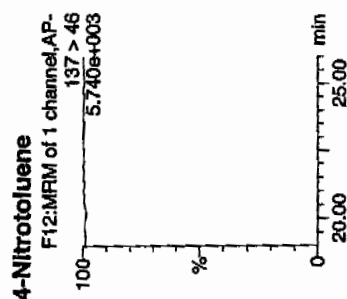
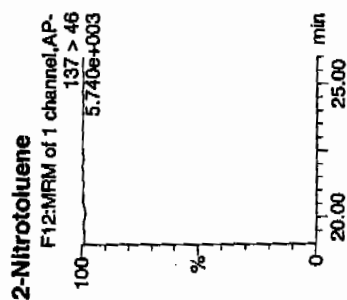
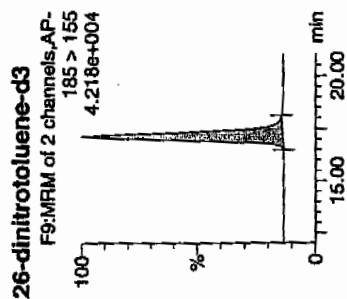
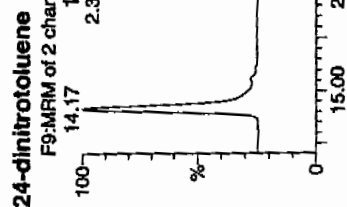
ID: 244210006

Vial: 2:2,D

1/28/10

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[illegible]

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7708

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210006

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01220057.wiff

Date Analyzed: 23-JAN-10 01:05

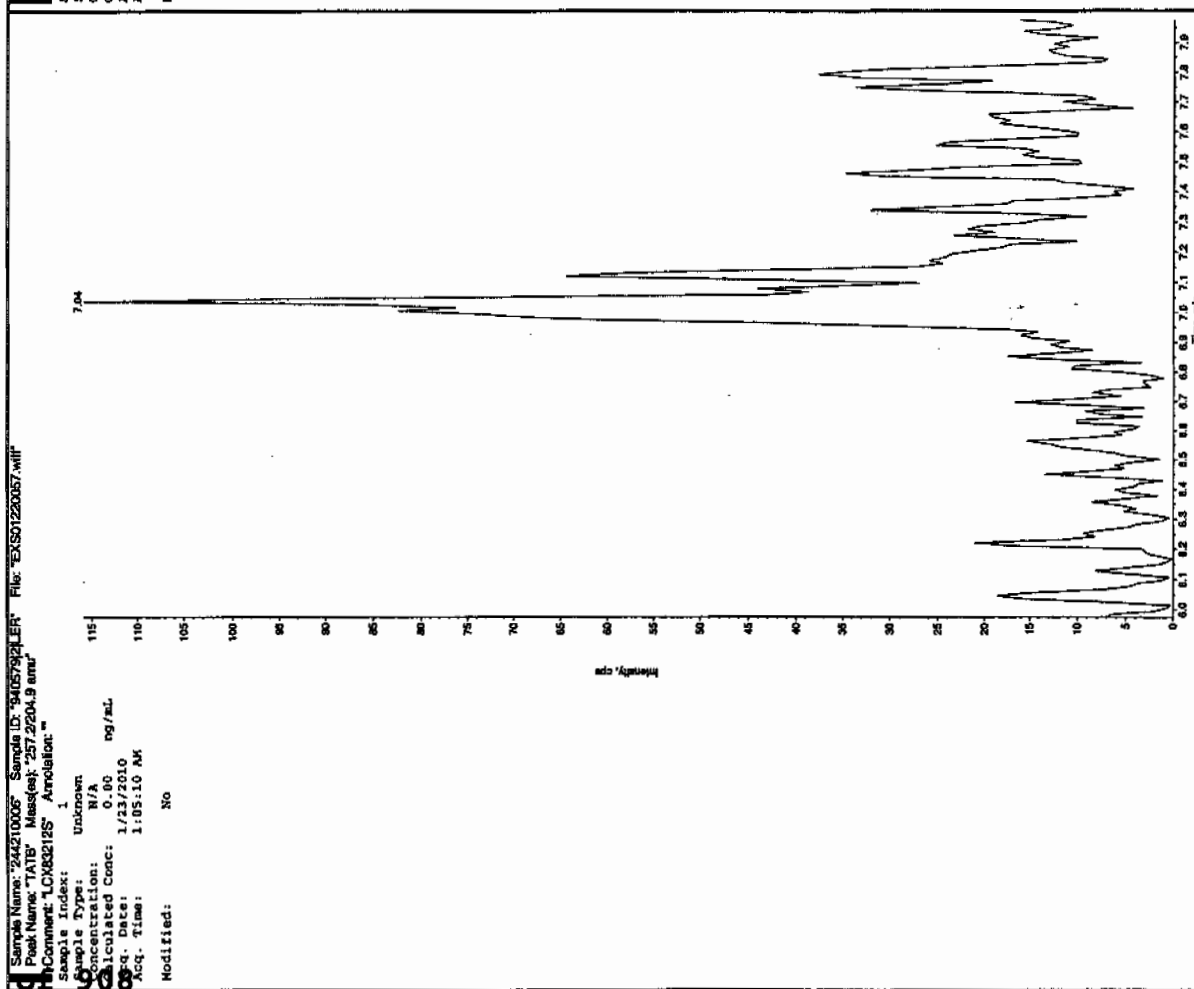
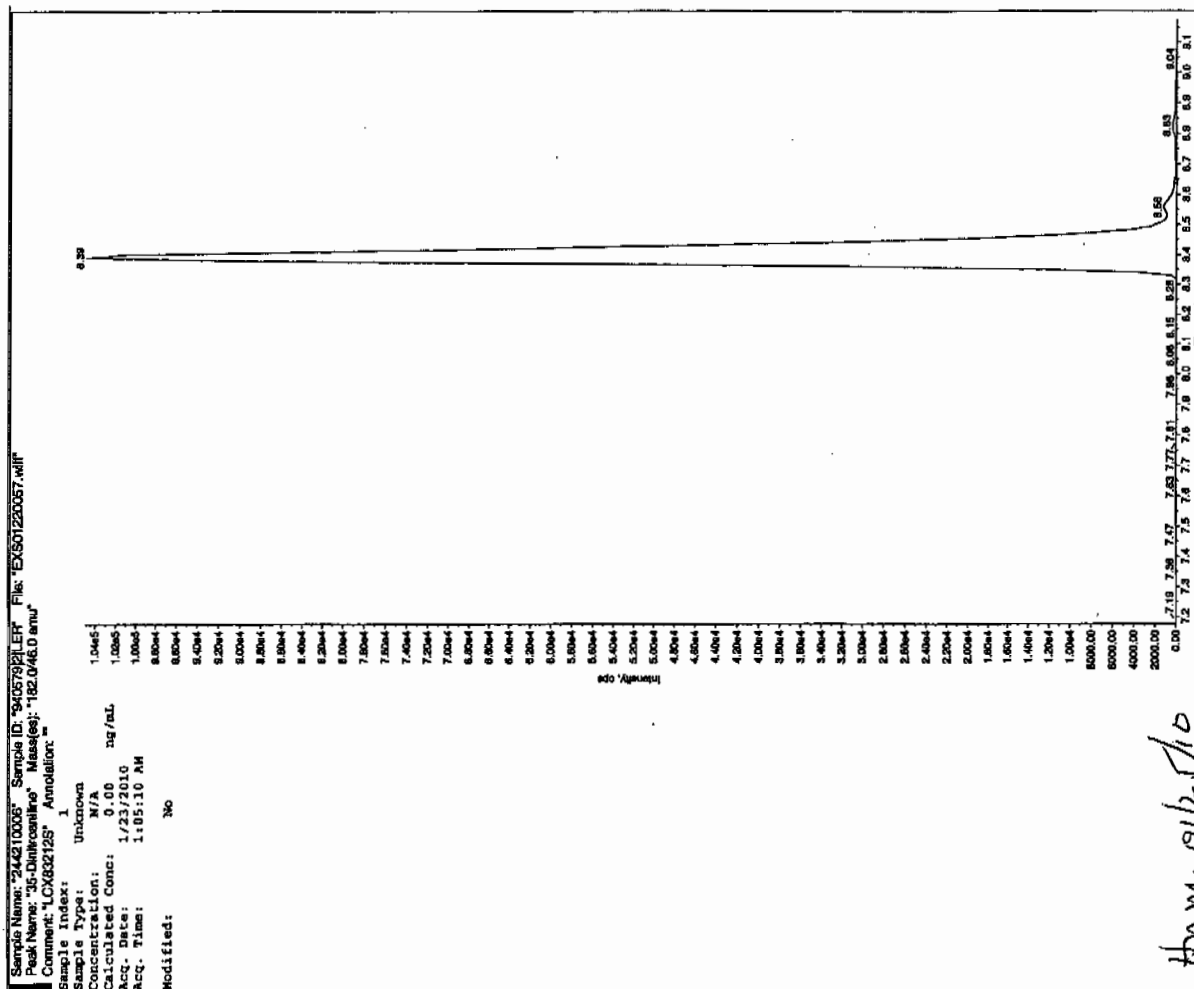
Units: ug/kg

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

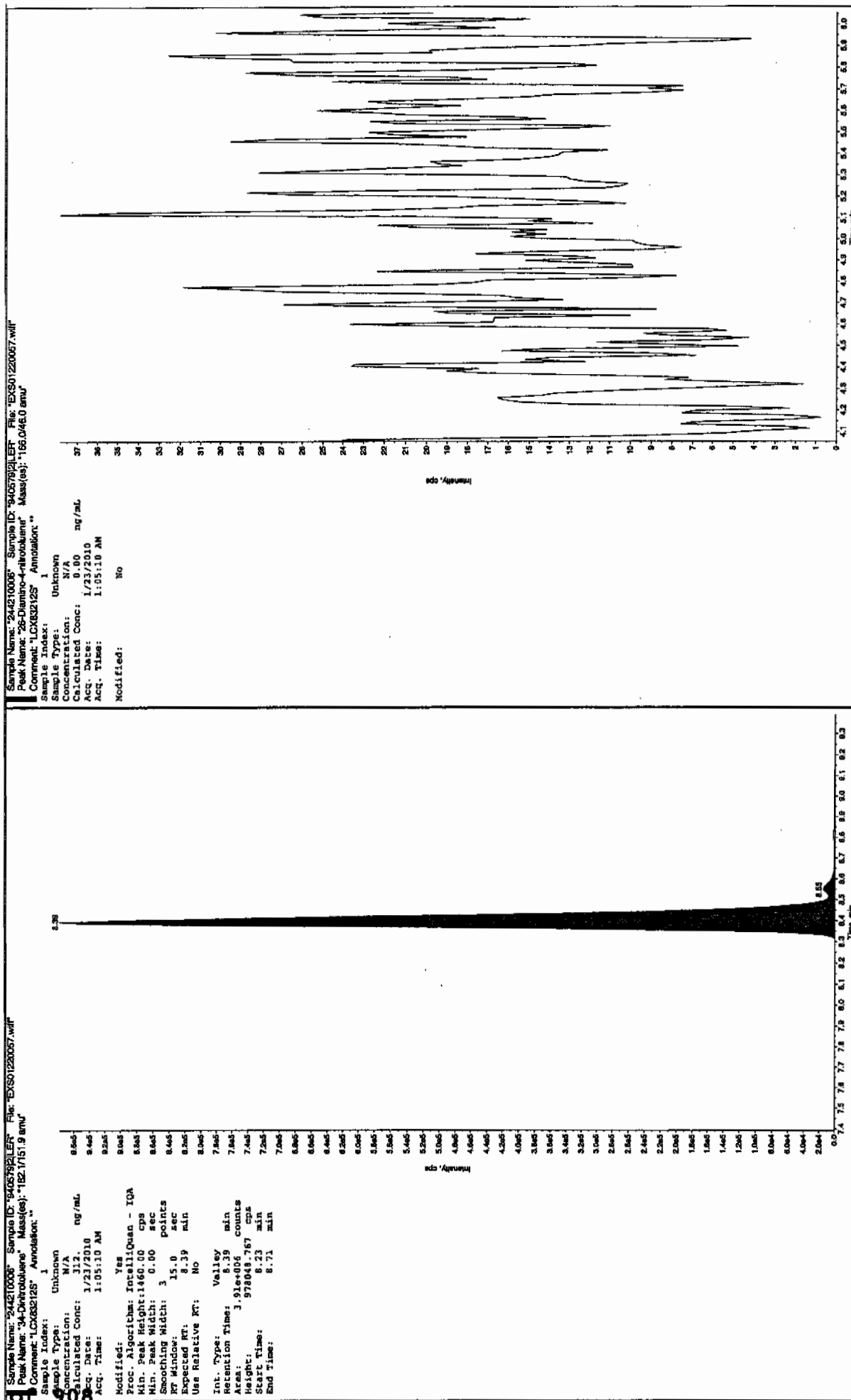
\*Concentration =

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

See 1125710



See 01125710

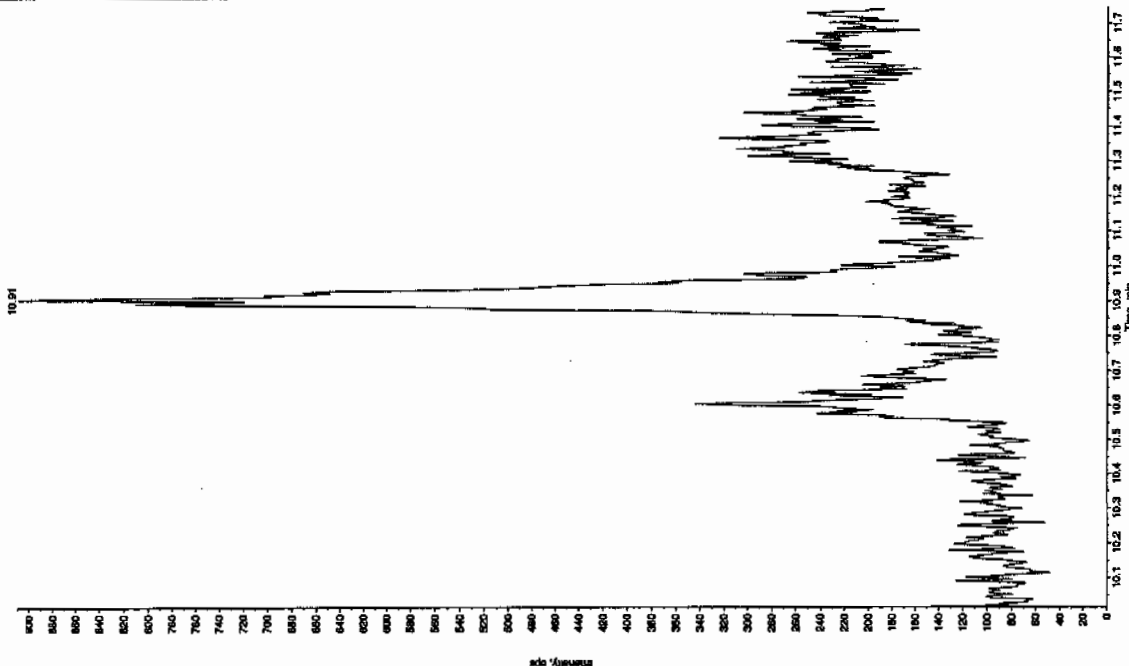


\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



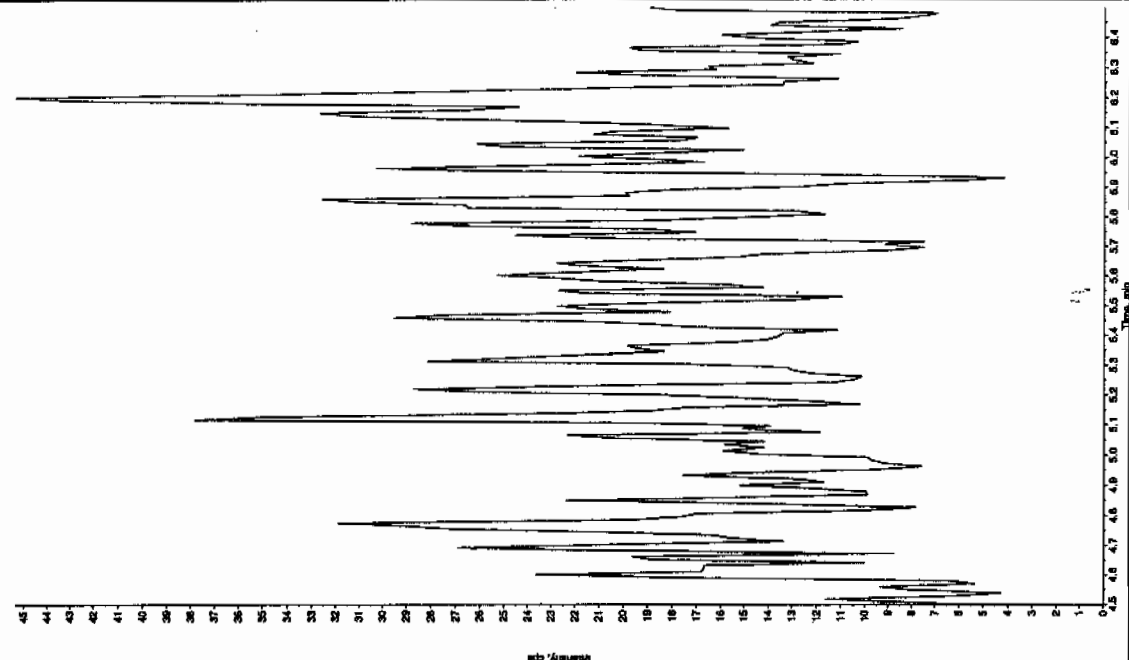
Sample Name: "244210035" Sample ID: "94057921ER" File: "EX501220057.wif"  
 Peak Name: "bis(ocresyl) phosphate" Mass(es): "368.181.0 amu"  
 Comment: "LCX832125" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/23/2010  
 Acq. Time: 1:05:10 AM  
 Modified: No



Sample Name: "244210035" Sample ID: "94057921ER" File: "EX501220057.wif"  
 Peak Name: "24-Diamino-6-nitrochloride" Mass(es): "186.046.0 amu"  
 Comment: "LCX832125" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/23/2010  
 Acq. Time: 1:05:10 AM  
 Modified: No



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

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7706

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210007

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125132a

Date Analyzed: 28-JAN-10 03:46

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

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125132a

Date: 28-Jan-2010

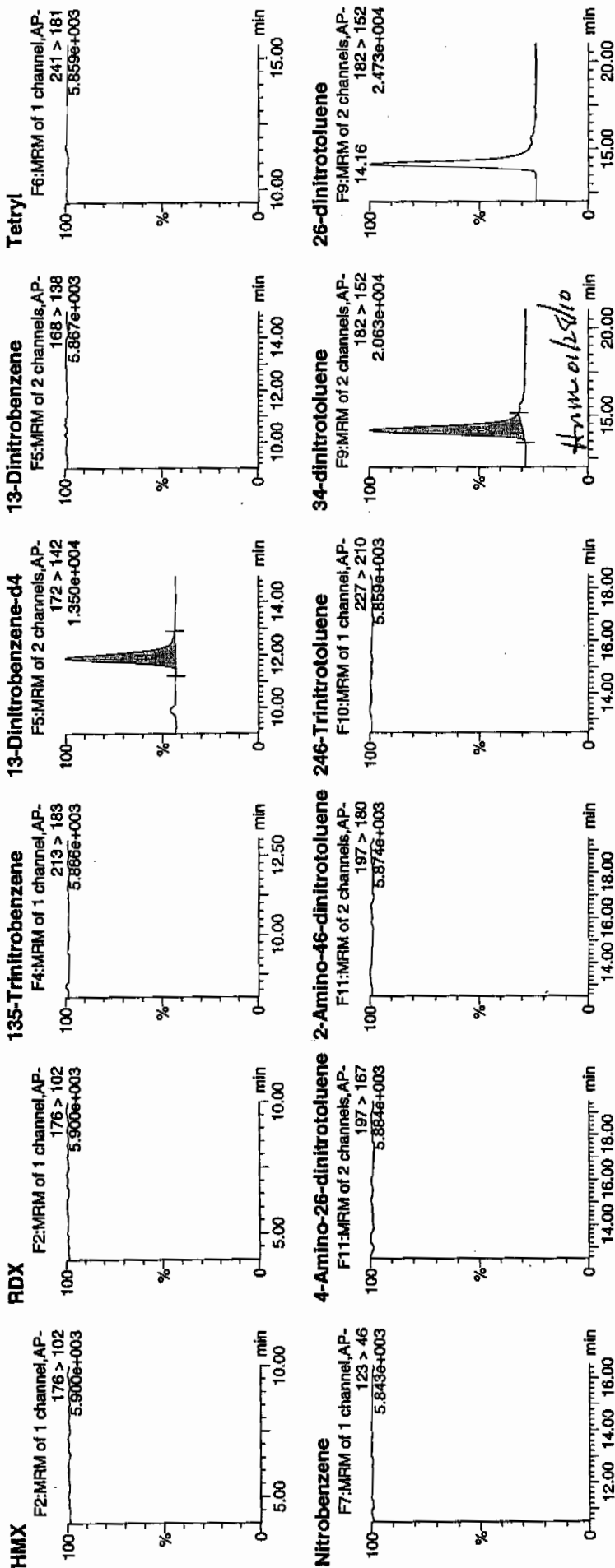
Time: 03:46:44

ID: 244210007

Vial: 2:2,E

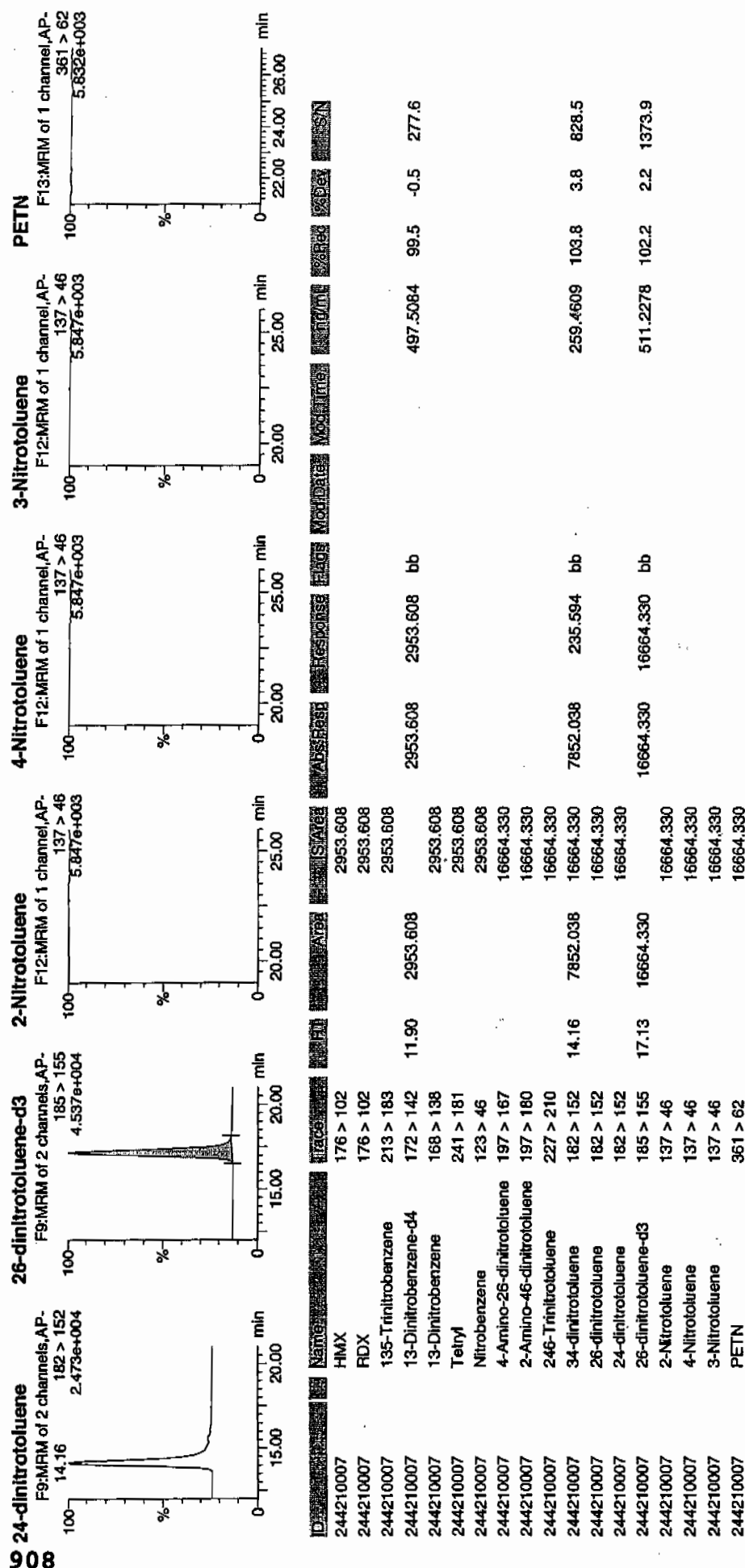
not  
1/28/10

WAV 940579 / Savas / 21



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

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010



1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7706

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210007

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01220058.wiff

Date Analyzed: 23-JAN-10 01:20

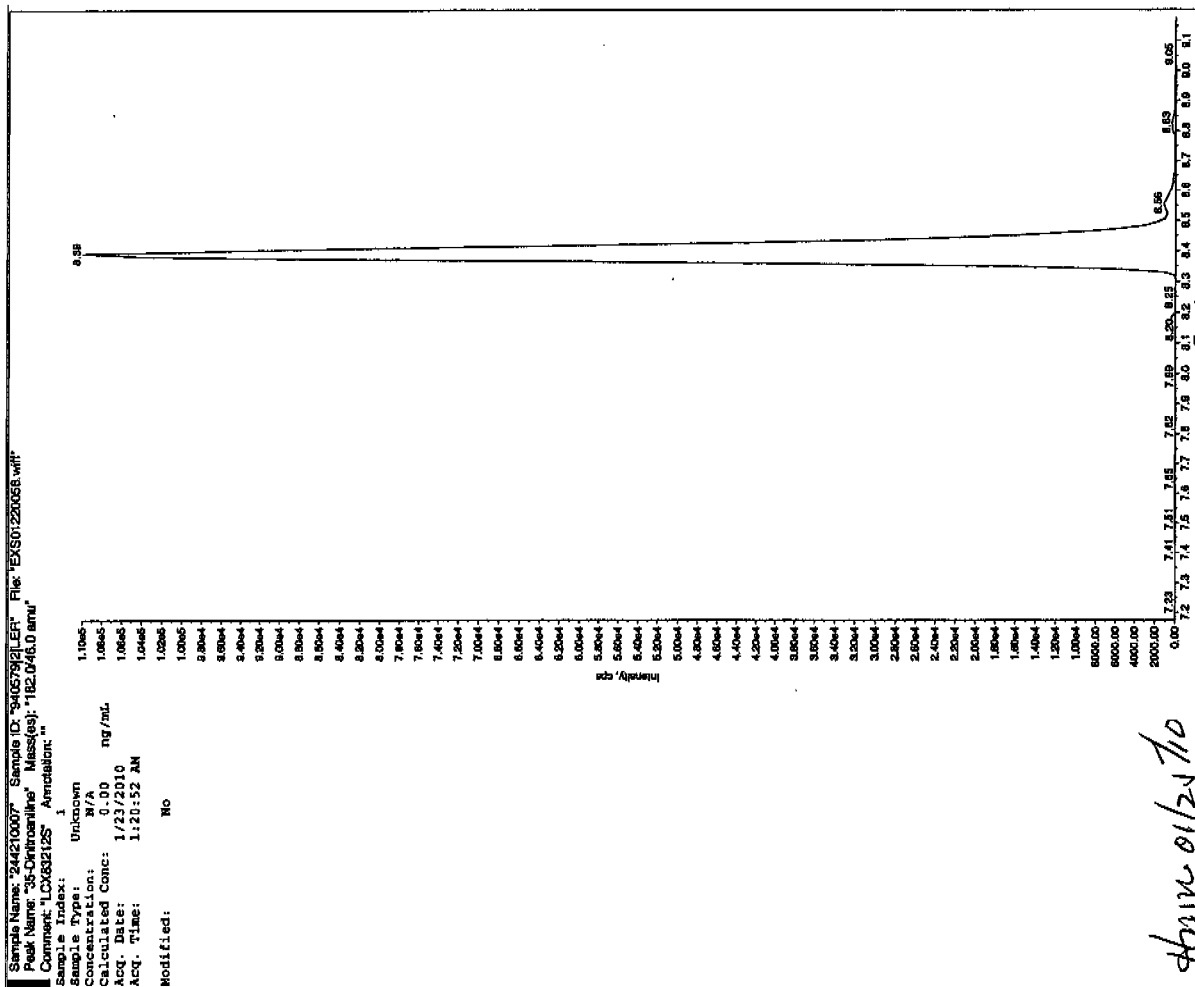
Units: ug/kg

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

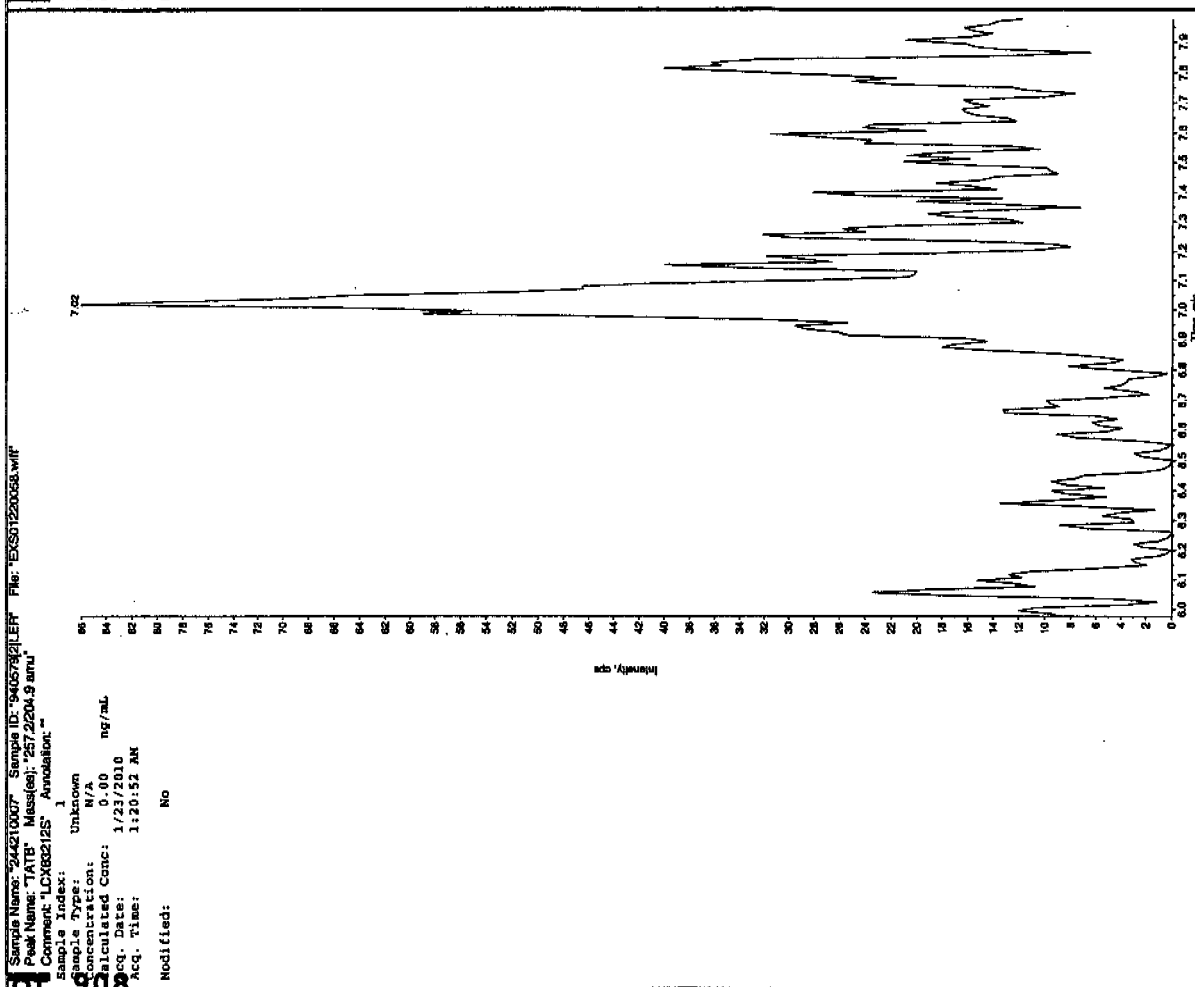
\*Concentration =

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

Gen 1125110



Gen 0125110

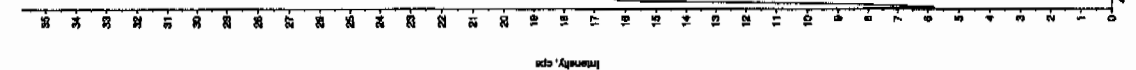


\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "244210007" Sample ID: "94057921.ER" File: "EXS01220058.wif"  
 Peak Name: "26-Diamino-4-nitrotoluene" 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: 1/23/2010  
 Acq. Time: 1:20:52 AM  
 Modified: No

Intensity, cps

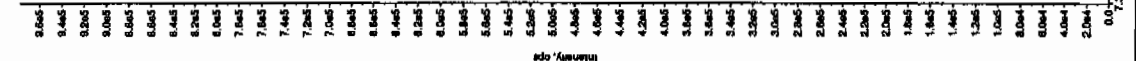


Sample Name: "244210007" Sample ID: "94057921.ER" File: "EXS01220058.wif"  
 Peak Name: "34-Dinitrotoluene" Mass(es): "182.1151.9 amu"  
 Comment: "LCX832125" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 300. ng/mL  
 Acq. Date: 1/23/2010  
 Acq. Time: 1:20:52 AM  
 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: 8.30 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.38 min  
 Area: 3.76e+006 counts  
 Height: 978307.861 cps  
 Start Time: 8.28 min  
 End Time: 8.52 min

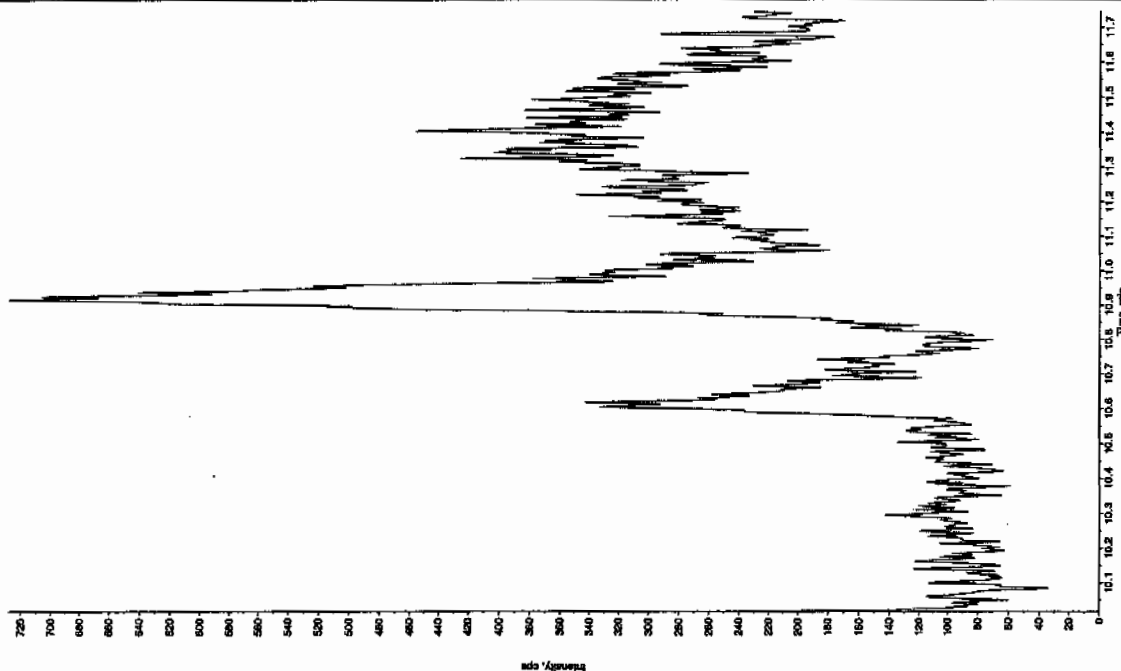
Intensity, cps



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

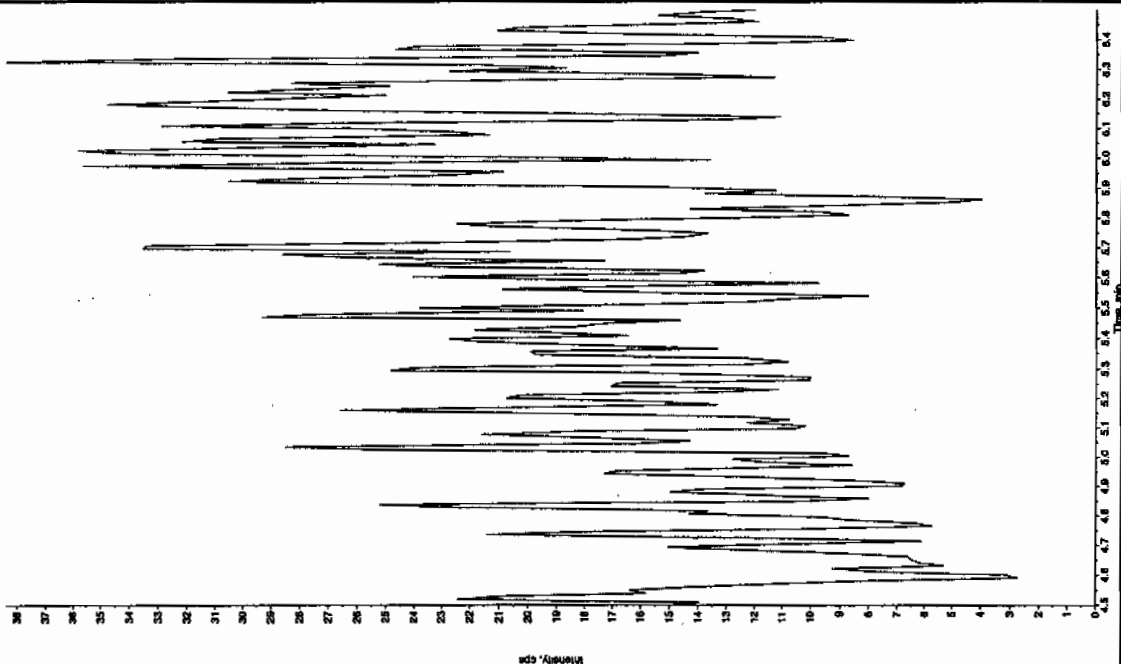
Sample Name: "244210007" Sample ID: "94057921.1" File: "EX501220058.wif"  
 Peak Name: "1,6-Diamino-6-nitro-2,4-dinitrophenol" Mass(es): "369.1791.0 amu"  
 Comment: "LCX832125" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/23/2010  
 Acq. Time: 1:20:52 AM  
 Modified: No



Sample Name: "244210007" Sample ID: "94057921.1" File: "EX501220058.wif"  
 Peak Name: "24-Diamino-6-nitro-2,4-dinitrophenol" 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: 1/23/2010  
 Acq. Time: 1:20:52 AM  
 Modified: No



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



1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7714

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210008

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125133a

Date Analyzed: 28-JAN-10 04:16

Units: ug/kg

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

\*Concentration =

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

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp\PRO1012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

Name: C:\MASSLYNX\NEW\_EXP\PROData\EXP0125133a

Date: 28-Jan-2010

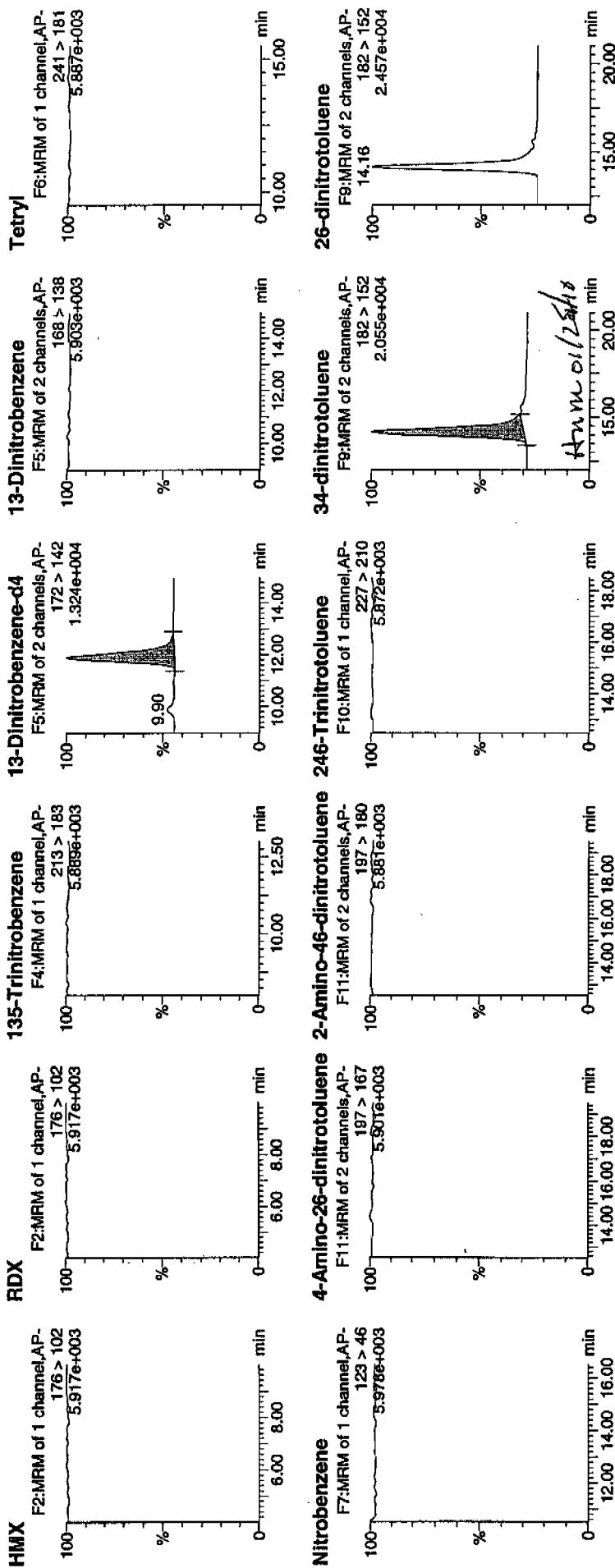
Time: 04:16:14

ID: 244210008

Vial: 2:2,F

1477  
1/28/10

LANU | 940579 | 80223 | 21

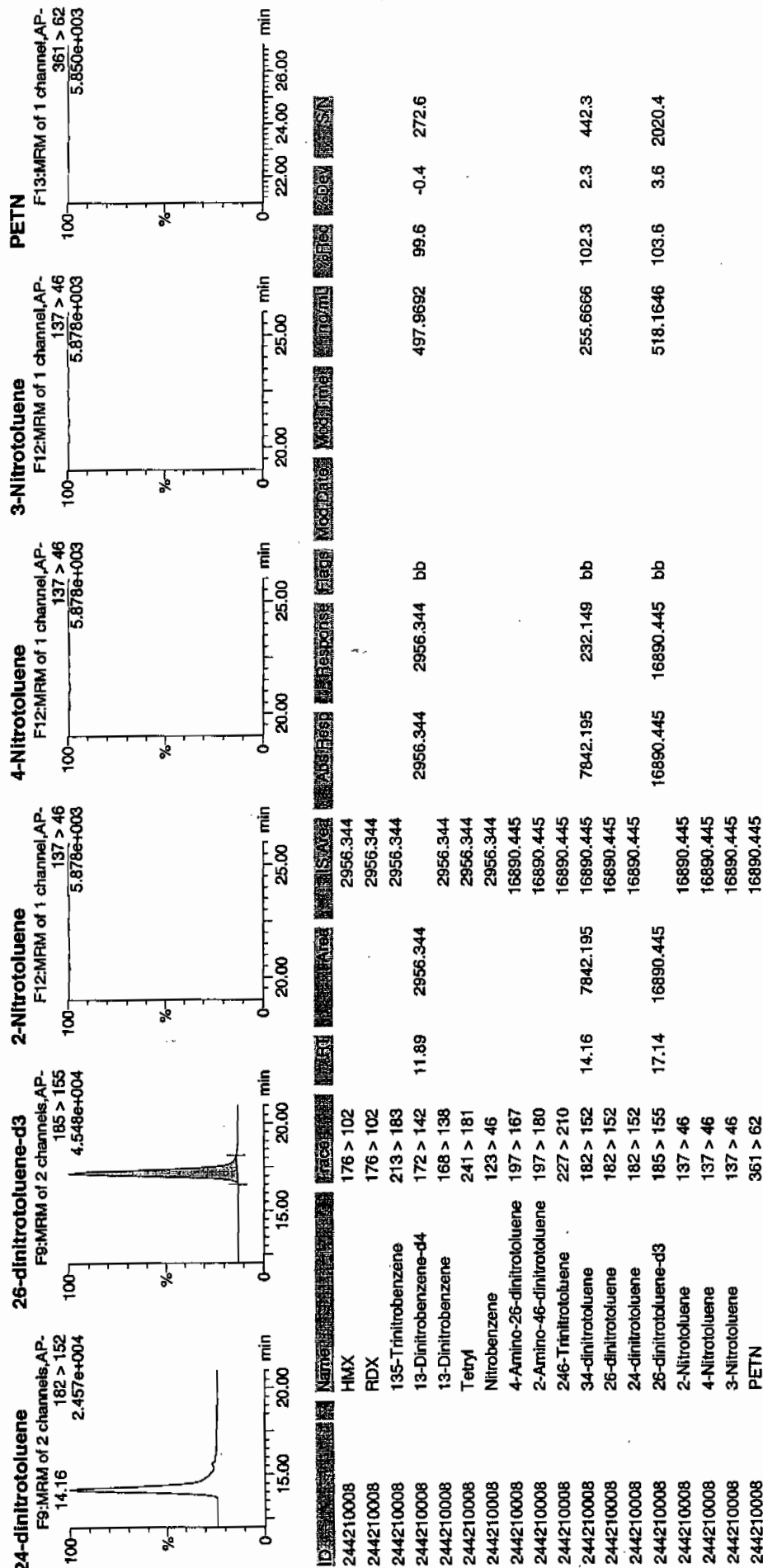


# Quantify Sample Report GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Thu Jan 28 10:43:32 2010, Page 98 of 121

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

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1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7714

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210008

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01220059.wiff

Date Analyzed: 23-JAN-10 01:36

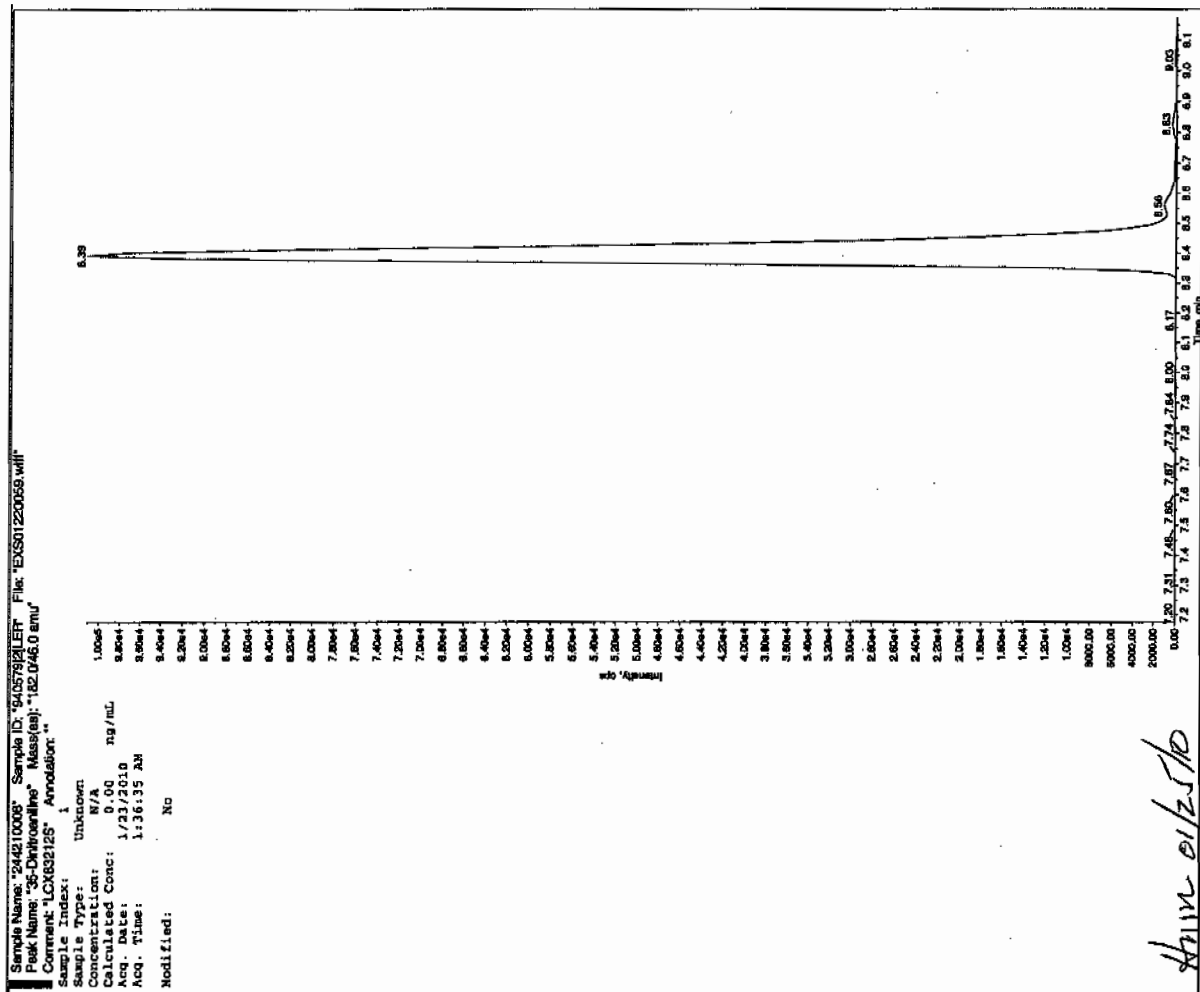
Units: ug/kg

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

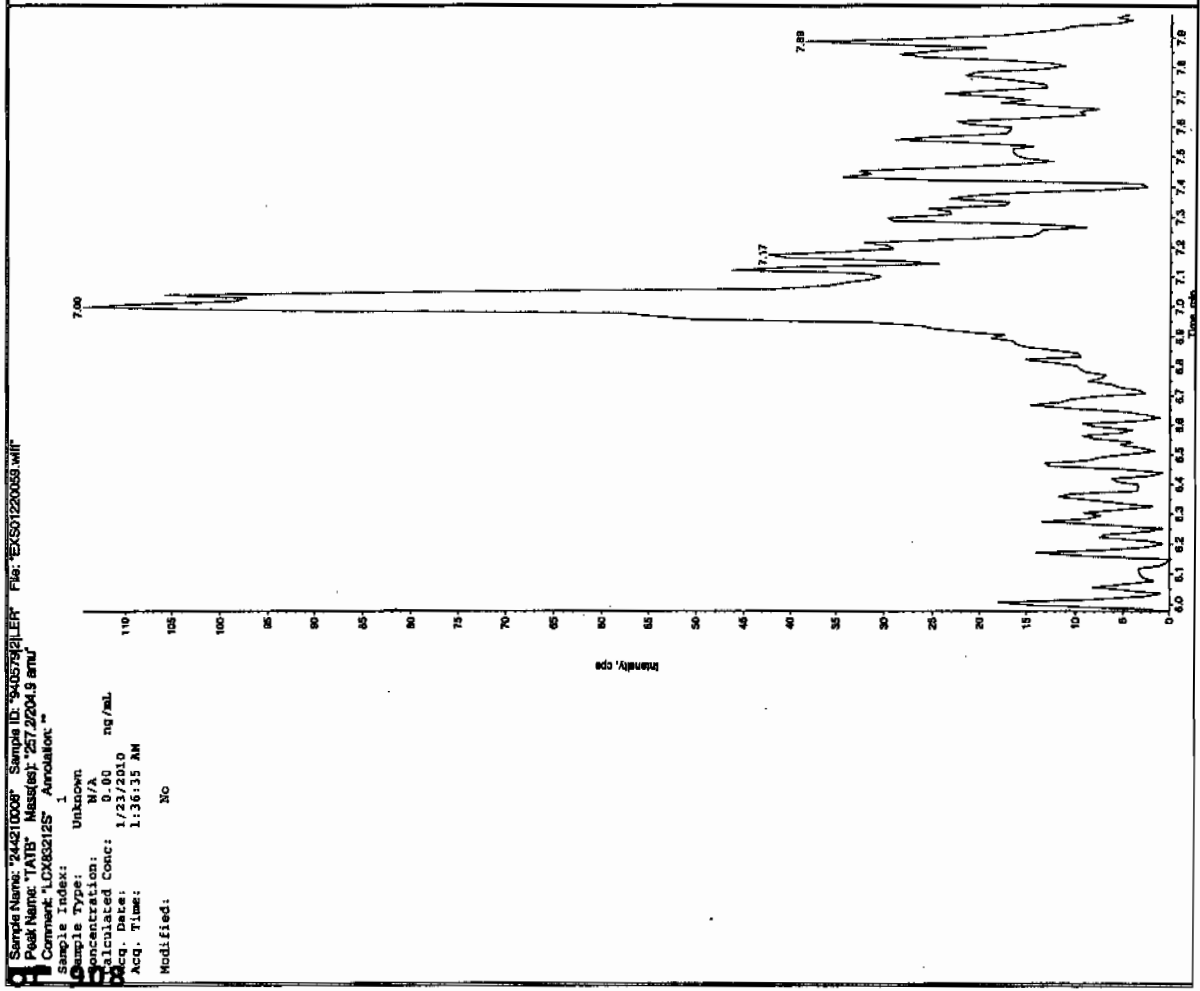
\*Concentration =

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

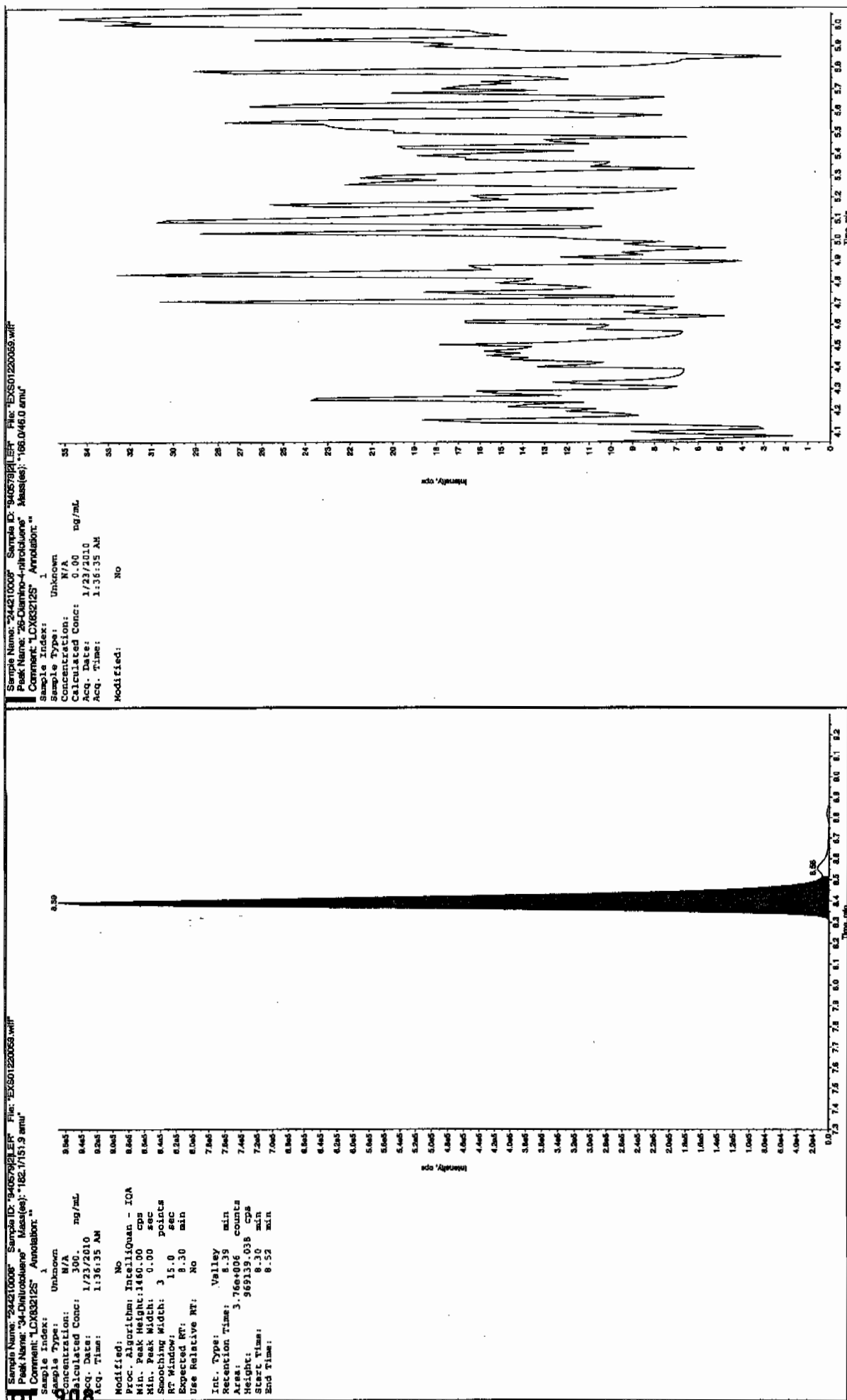
den 1/25/10



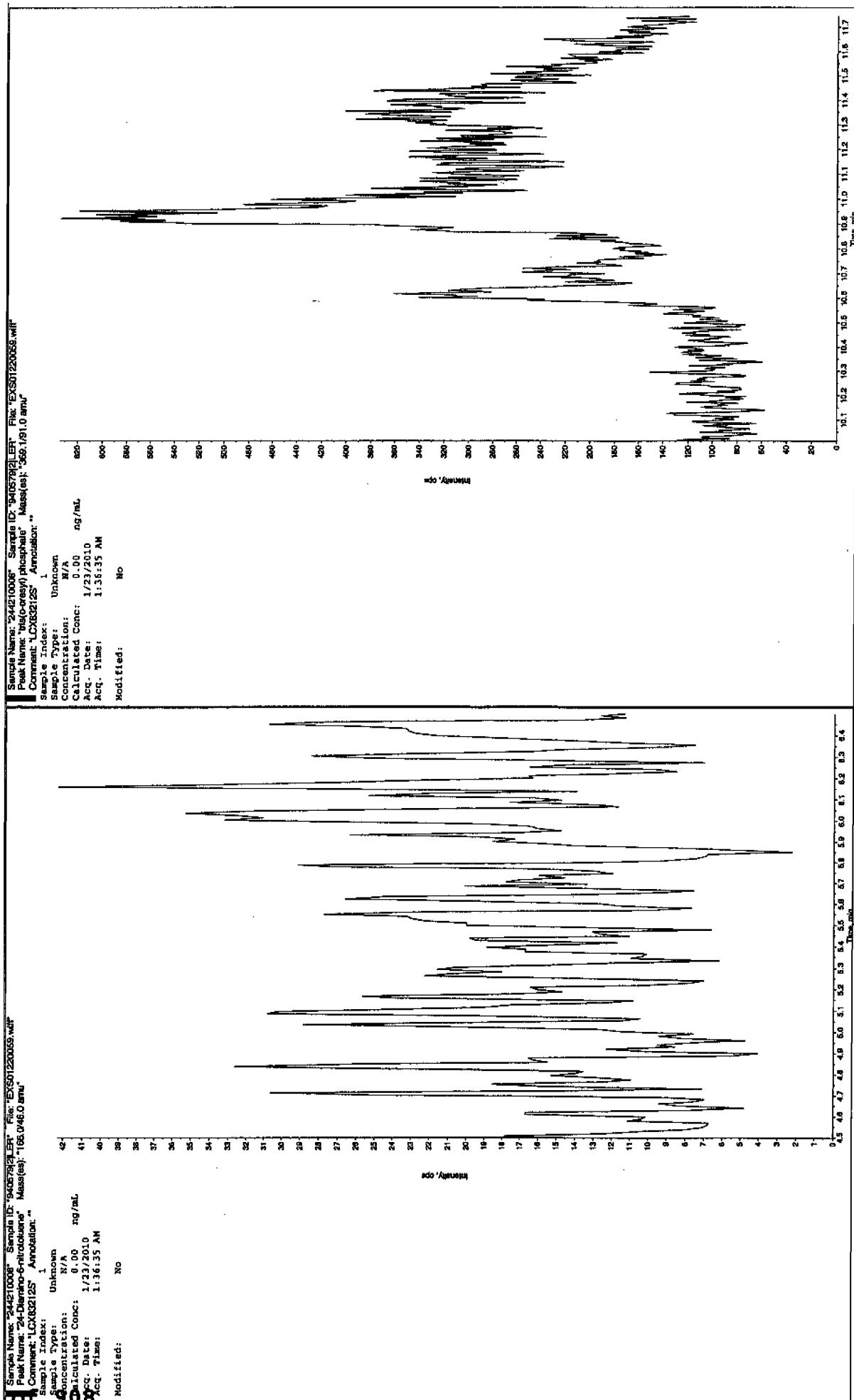
den 01/25/10



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



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



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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7705

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210009

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125134a

Date Analyzed: 28-JAN-10 04:45

Units: ug/kg

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

\*Concentration =

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



Printed: Thu Jan 28 10:43:32 2010, Page 99 of 121

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125134a

Date: 28-Jan-2010

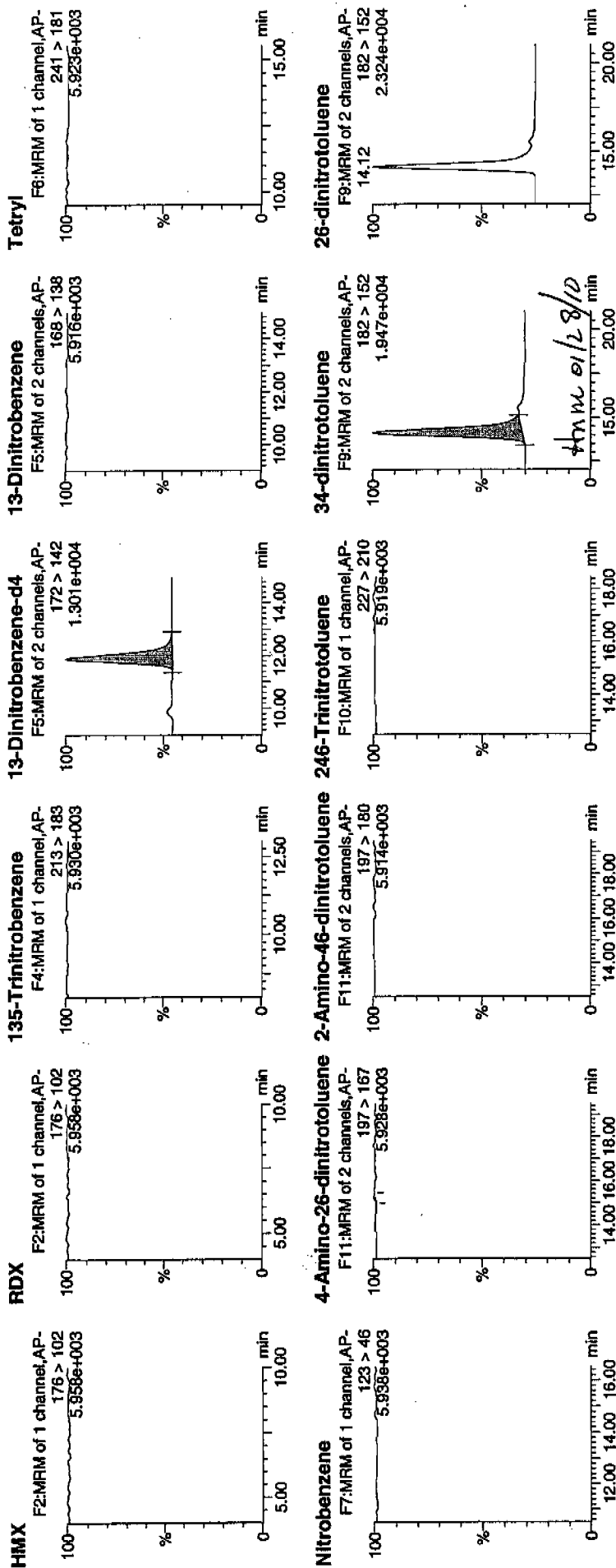
Time: 04:45:41

ID: 244210009

Vial: 2:3A

not  
1/28/10

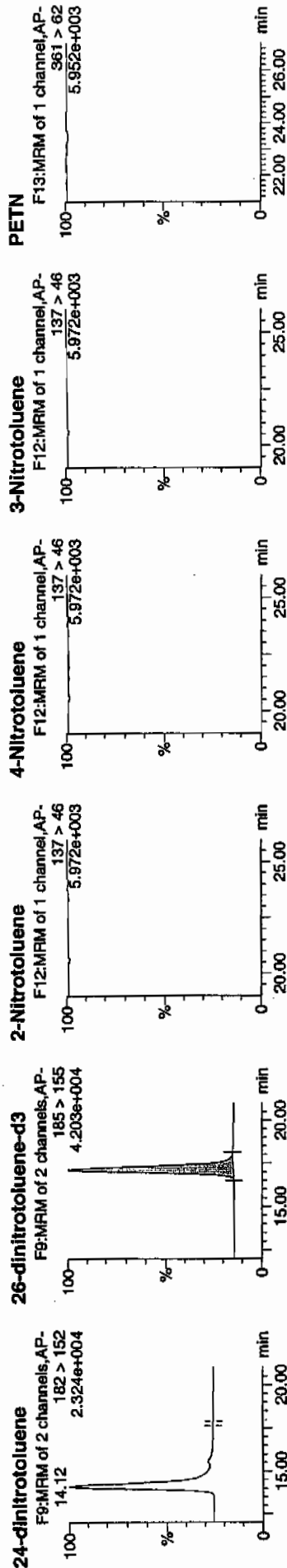
LANU 940579 / Souza / 21



Printed: Thu Jan 28 10:43:32 2010, Page 100 of 121

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

Dataset: C:\MASSLYNX\New\_Exp\_PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010



ID	Name	Trace	Area	Height	Width	Area%	Height%	Width%	Area	Height	Width	Area%	Height%	Width%
244210009	HMX	176 > 102	2787.193	2787.193	2787.193	2787.193	2787.193	2787.193	2787.193	2787.193	2787.193	2787.193	2787.193	2787.193
244210009	RDX	176 > 102	2787.193	2787.193	2787.193	2787.193	2787.193	2787.193	2787.193	2787.193	2787.193	2787.193	2787.193	2787.193
244210009	135-Trinitrobenzene	213 > 183	2787.193	2787.193	2787.193	2787.193	2787.193	2787.193	2787.193	2787.193	2787.193	2787.193	2787.193	2787.193
244210009	13-Dinitrobenzene-d4	172 > 142	11.89	2787.193	2787.193	2787.193	2787.193	2787.193	2787.193	2787.193	2787.193	2787.193	2787.193	2787.193
244210009	13-Dinitrobenzene	168 > 138	2787.193	2787.193	2787.193	2787.193	2787.193	2787.193	2787.193	2787.193	2787.193	2787.193	2787.193	2787.193
244210009	Tetryl	241 > 181	2787.193	2787.193	2787.193	2787.193	2787.193	2787.193	2787.193	2787.193	2787.193	2787.193	2787.193	2787.193
244210009	Nitrobenzene	123 > 46	2787.193	2787.193	2787.193	2787.193	2787.193	2787.193	2787.193	2787.193	2787.193	2787.193	2787.193	2787.193
244210009	4-Amino-26-dinitrotoluene	197 > 167	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144
244210009	2-Amino-46-dinitrotoluene	197 > 180	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144
244210009	246-Trinitrotoluene	227 > 210	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144
244210009	34-dinitrotoluene	182 > 152	7227.652	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144
244210009	26-dinitrotoluene	182 > 152	7227.652	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144
244210009	24-dinitrotoluene	182 > 152	7227.652	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144
244210009	26-dinitrotoluene-d3	185 > 155	17.13	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144
244210009	2-Nitrotoluene	137 > 46	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144
244210009	4-Nitrotoluene	137 > 46	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144
244210009	3-Nitrotoluene	137 > 46	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144
244210009	PETN	361 > 62	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144	15194.144

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7705

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210009

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01220060.wiff

Date Analyzed: 23-JAN-10 01:52

Units: ug/kg

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

\*Concentration =

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

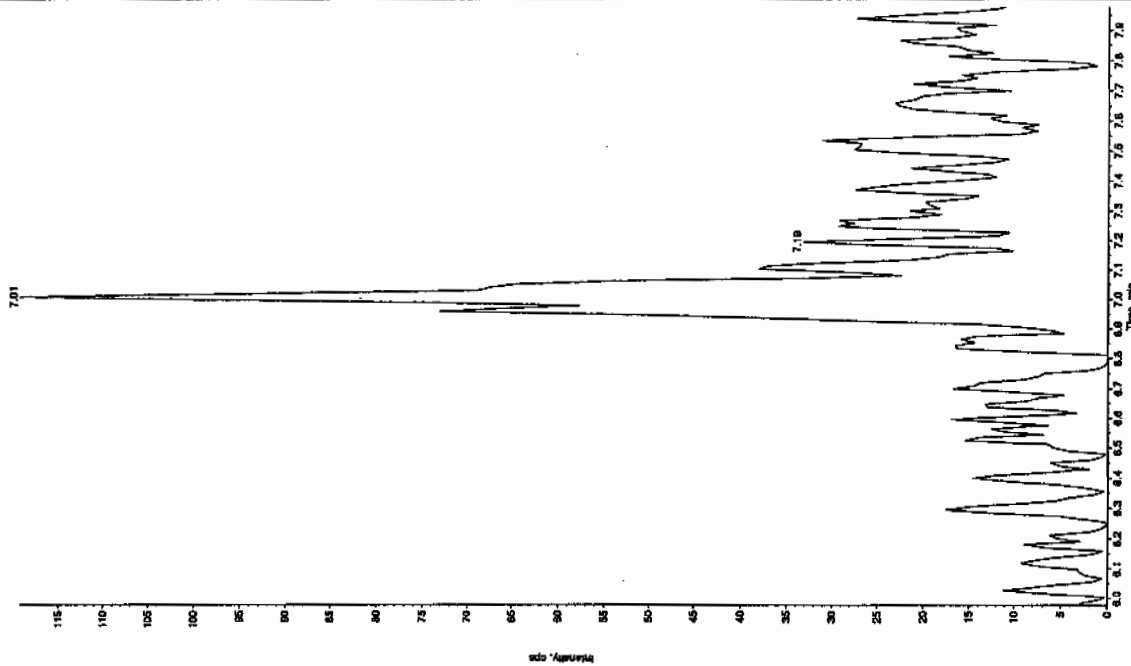
See 1128110

Sample Name: "244210009" Sample ID: "94057911.1" File: "EX807230650.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: 1/23/2010  
Acq. Time: 1:52:17 AM  
Modified: No

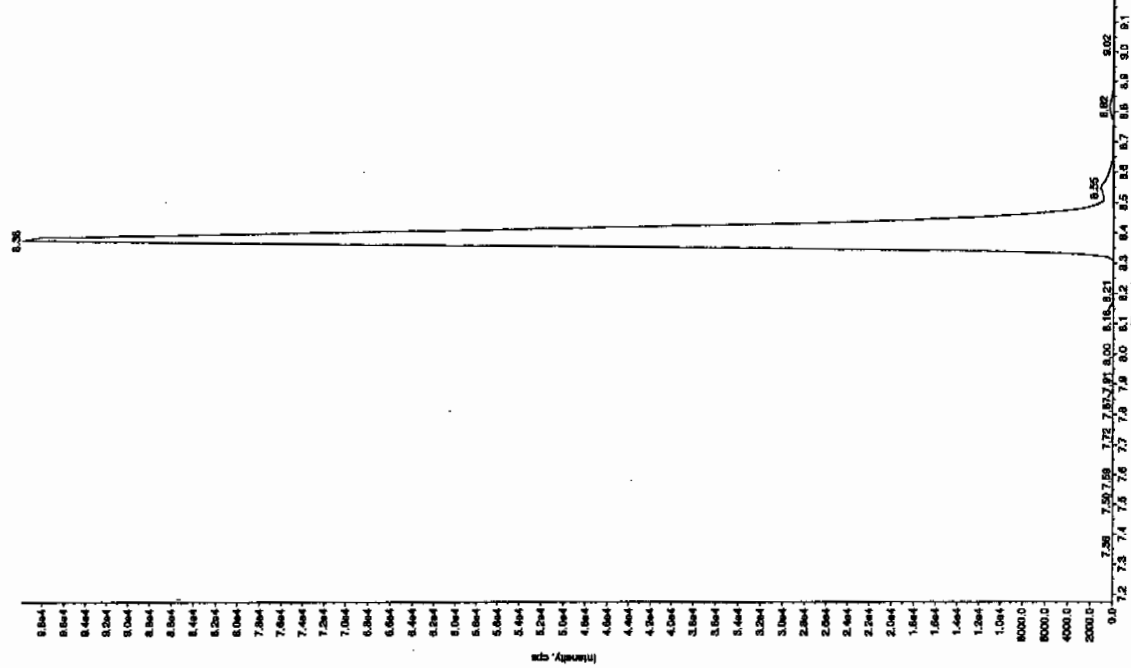


Sample Name: "244210009" Sample ID: "94057911.1" File: "EX807230650.wif"

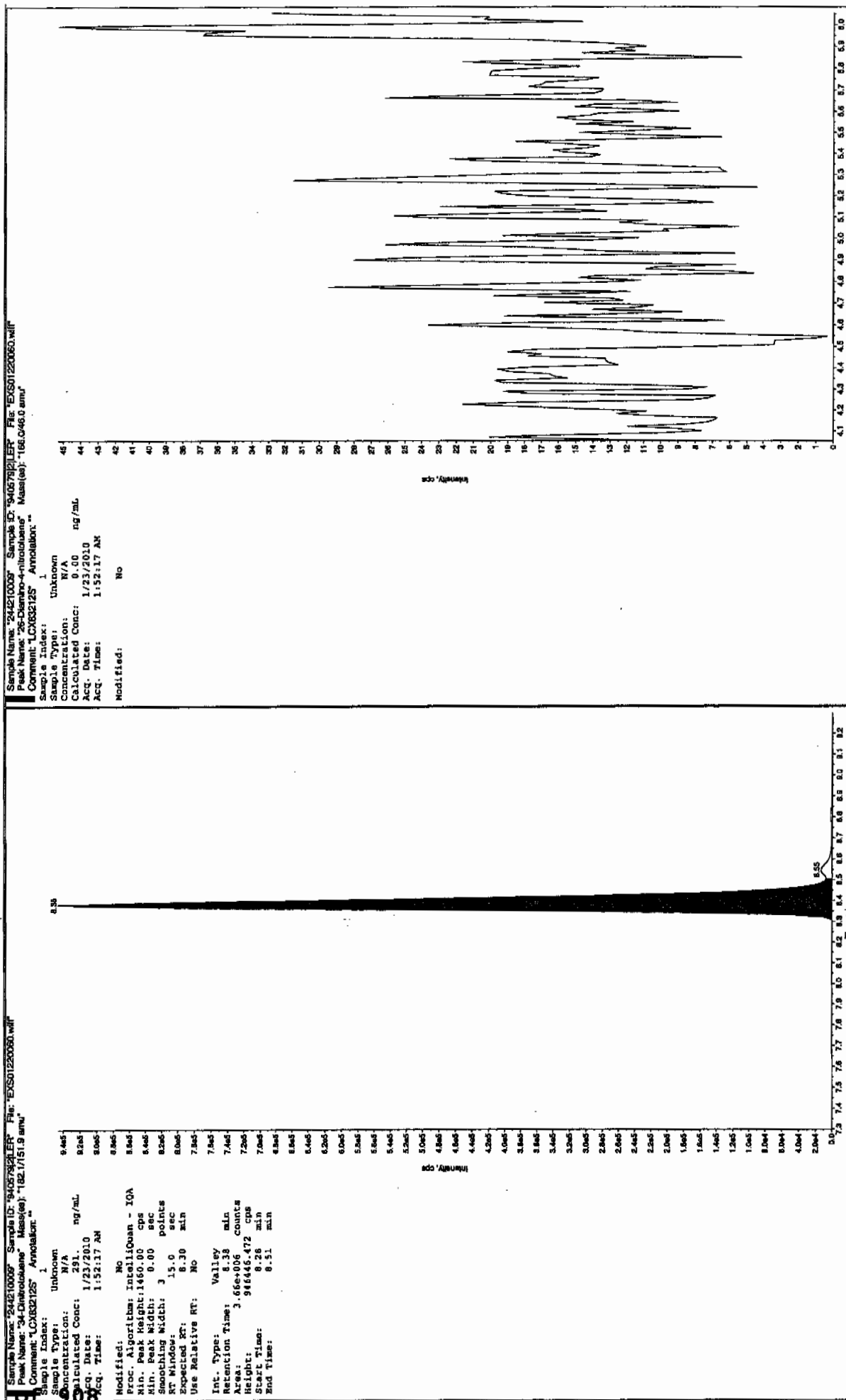
Peak Name: "35-Dihydroquinoline" Mass(es): "182.0/46.0 amu"

Comment: "LCX83212S" Annotation: ""

Sample Index: 1  
Sample Type: Unknown  
Concentration: N/A  
Calculated Conc: 0.00 ng/mL  
Acq. Date: 1/23/2010  
Acq. Time: 1:52:17 AM  
Modified: No



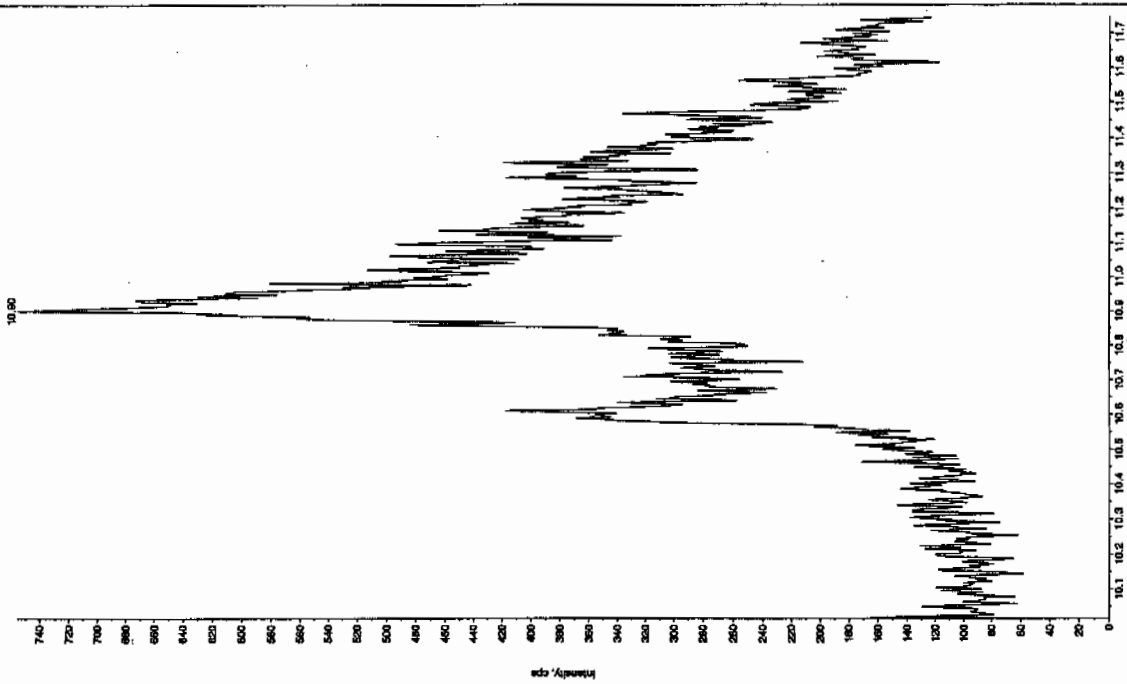
See 0125110



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

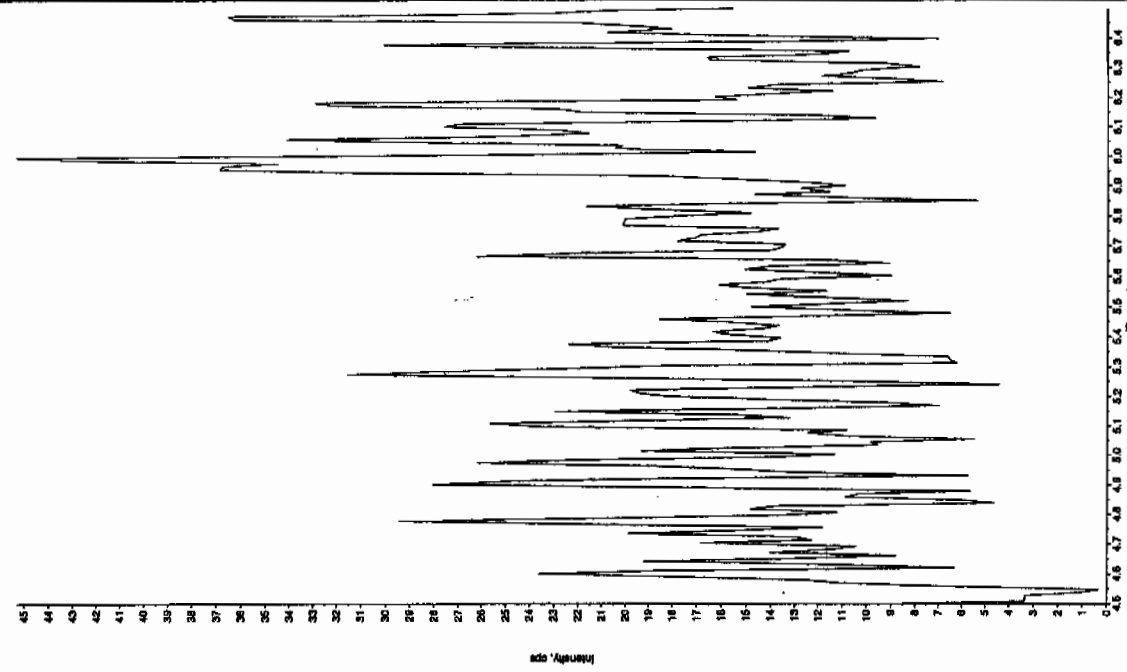
Sample Name: "244210005" Sample ID: "94057921ER" File: "EXS01220060.wiff"  
 Peak Name: "tris(o-cresyl) phosphite" Mass(es): "389.1910 amu"  
 Comment: "LCX832125" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/23/2010  
 Acq. Time: 1:52:17 AM  
 Modified: No



Sample Name: "244210005" Sample ID: "94057921ER" File: "EXS01220060.wiff"  
 Peak Name: "24-Dinitro-6-nitrofluorene" Mass(es): "166.0460 amu"  
 Comment: "LCX832125" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/23/2010  
 Acq. Time: 1:52:17 AM  
 Modified: No



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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7709

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210010

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125135a

Date Analyzed: 28-JAN-10 05:15

Units: ug/kg

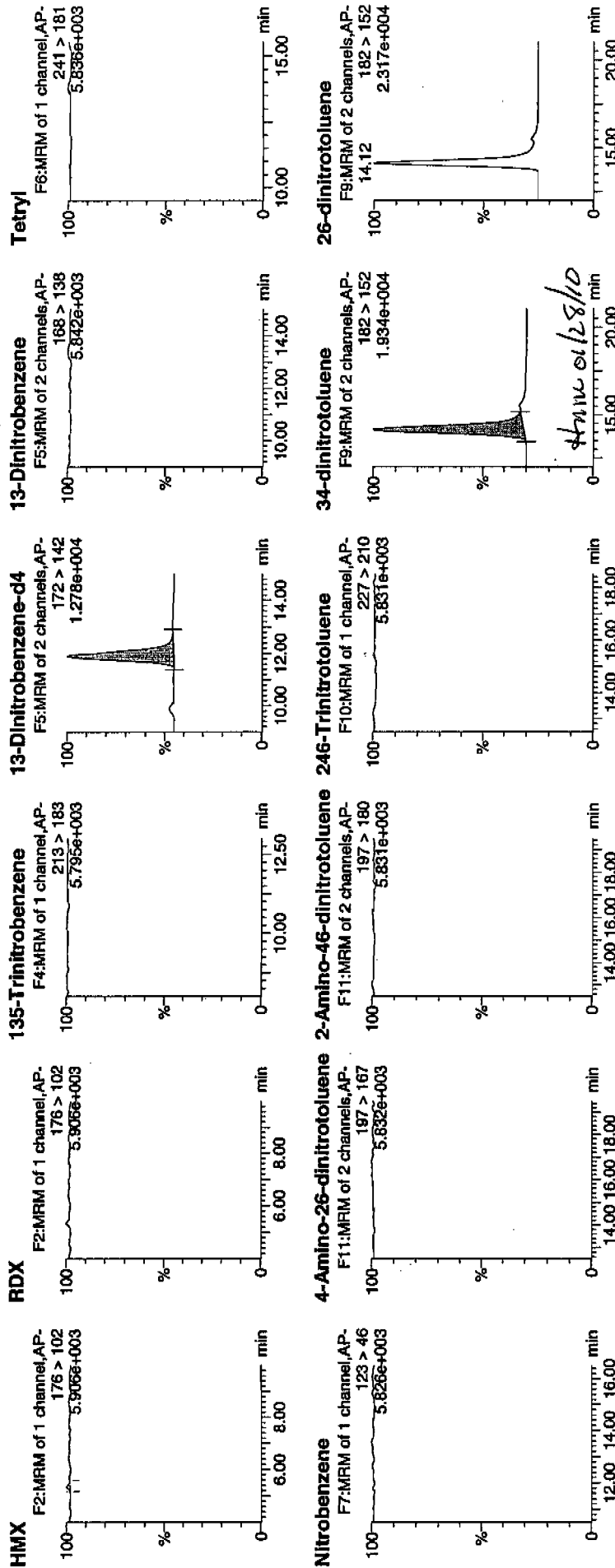
Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	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

100%  
 1/28/10

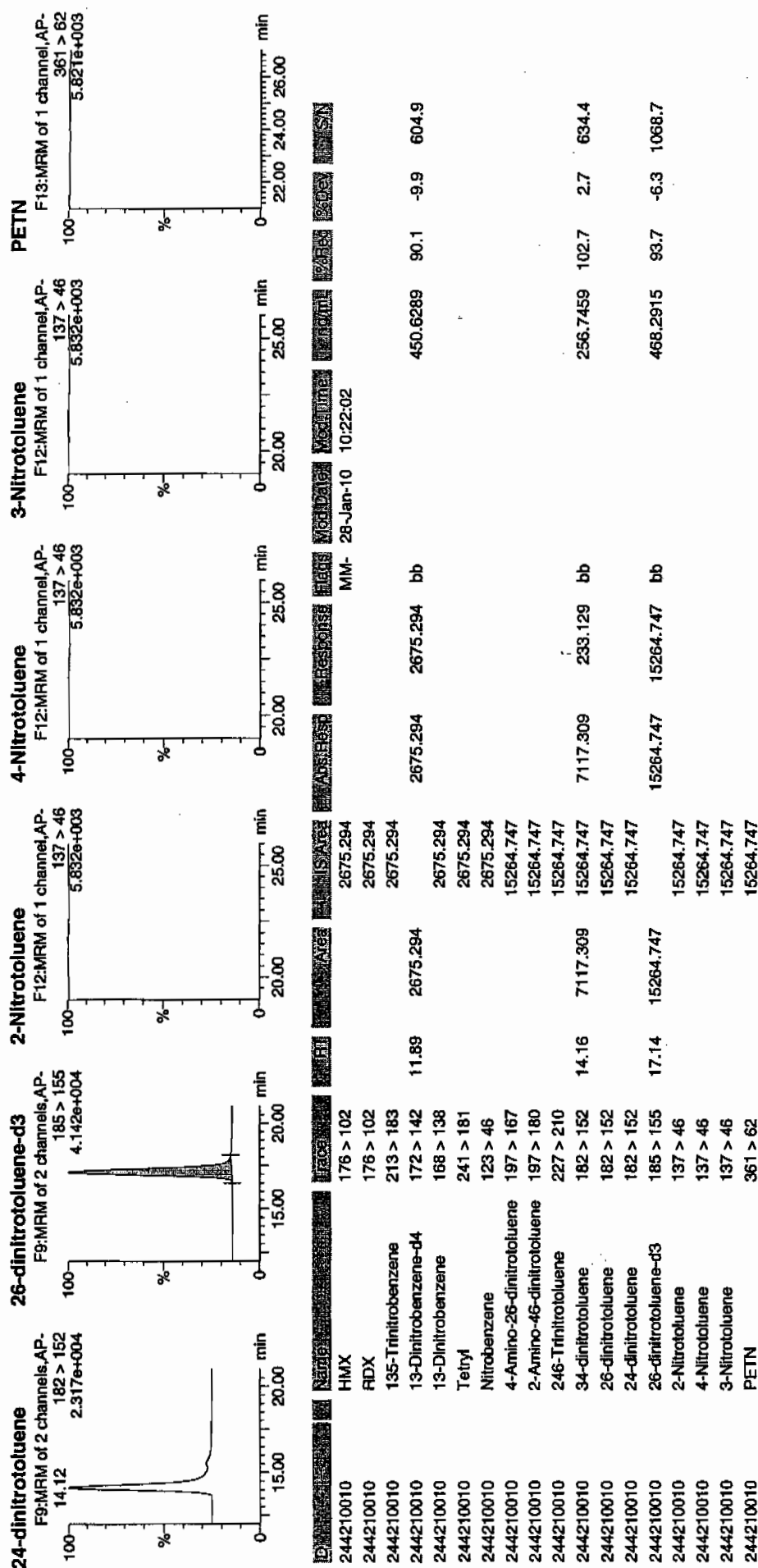
WAW 940579 / 8025 / 21





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

Dataset: C:\MASSLYNX\New\_Exp\_PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010



1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7709

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210010

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01220061.wiff

Date Analyzed: 23-JAN-10 02:07

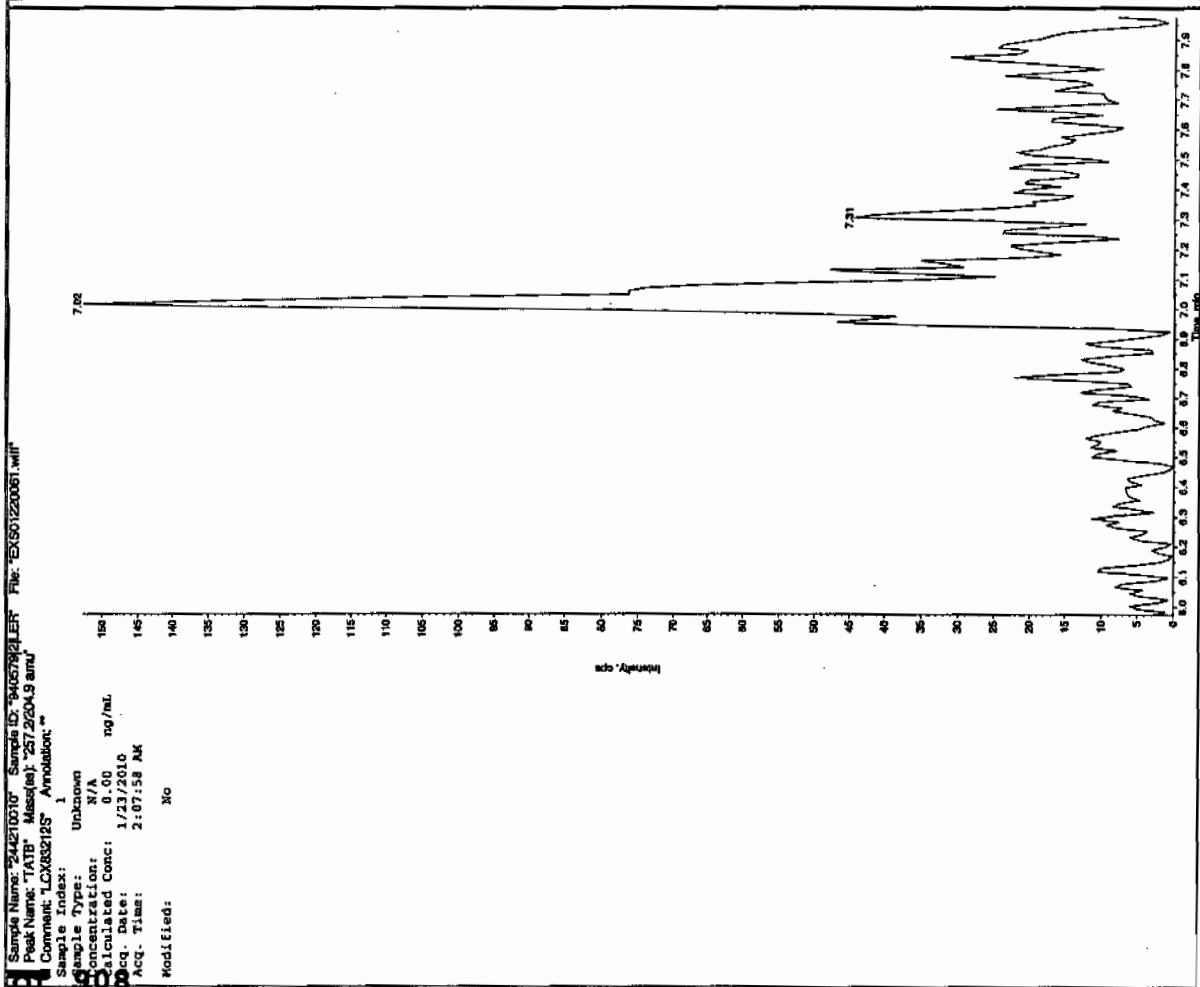
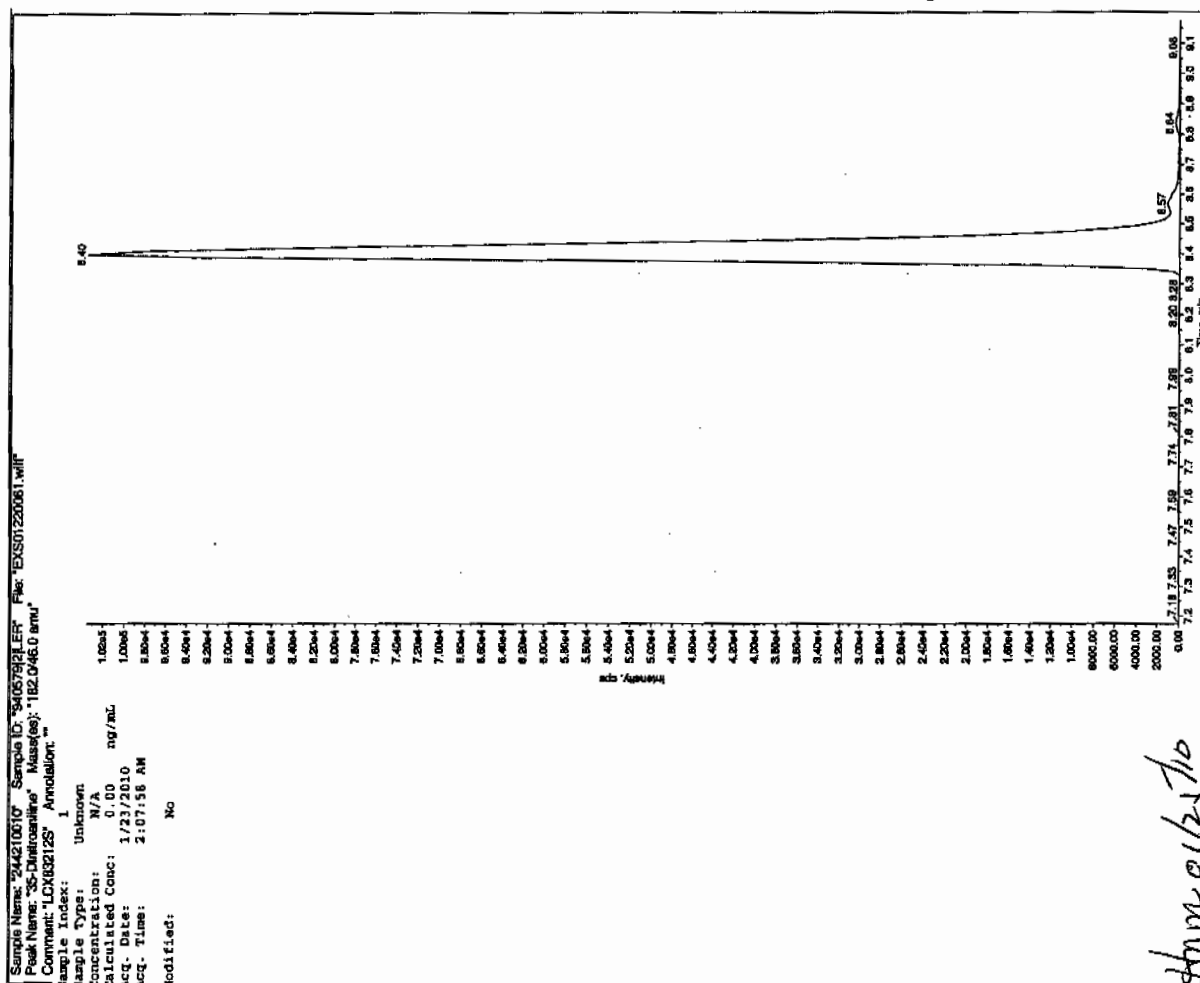
Units: ug/kg

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

\*Concentration =

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

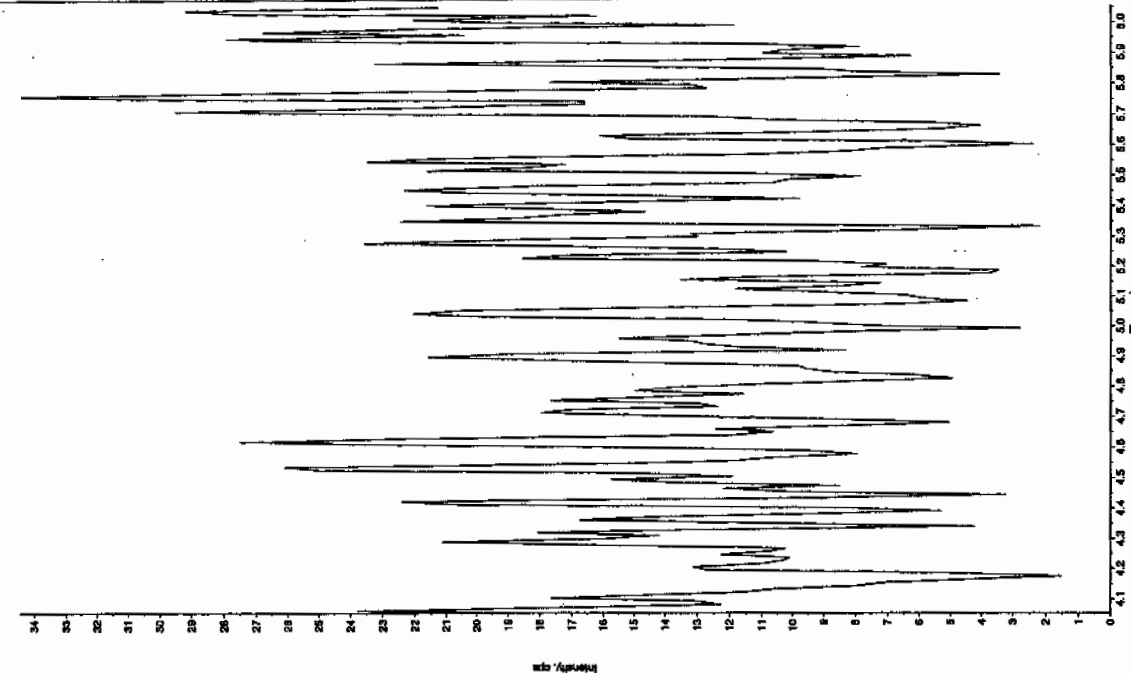
See 1125110



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

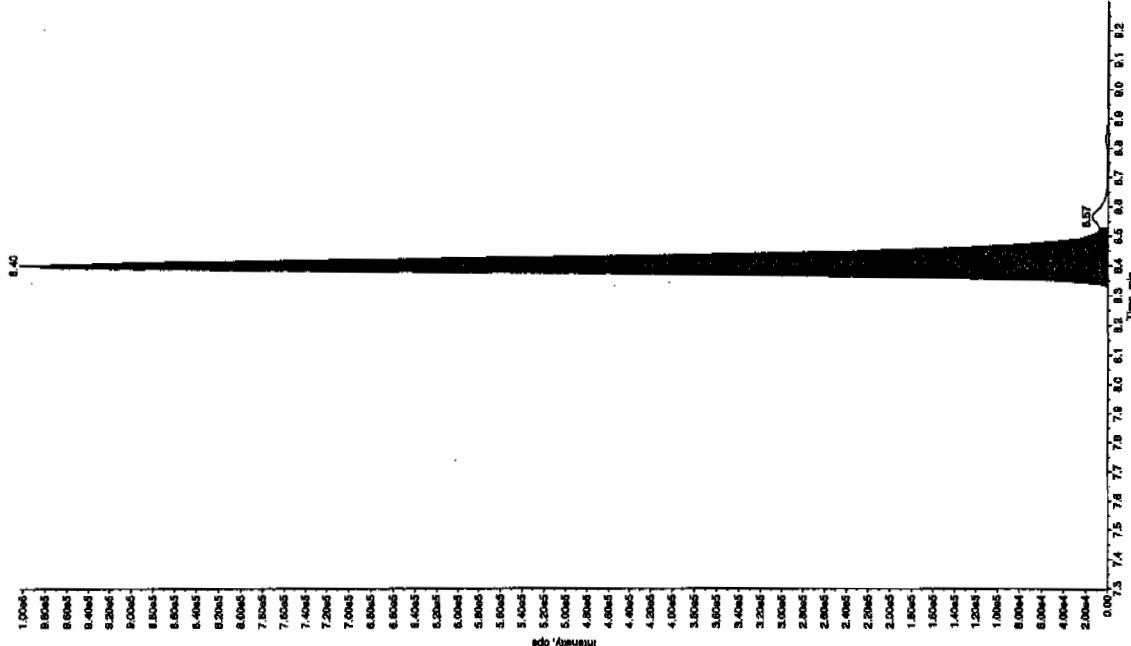
Sample Name: "244210010" Sample ID: "94057921LEF" File: "EX501220061.wif"  
 Peak Name: "25-Diamino-4-nitrofluorene" Mass(es): "166.046.0 amu"  
 Comment: "LCX832125" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A ng/mL  
 Calculated Conc: 0.00  
 Acq. Date: 1/23/2010  
 Acq. Time: 2:07:58 AM  
 Modified: No



Sample Name: "244210010" Sample ID: "94057921LEF" File: "EX501220061.wif"  
 Peak Name: "34-Diamino-4-nitrofluorene" Mass(es): "162.151.9 amu"  
 Comment: "LCX832125" Annotation: "

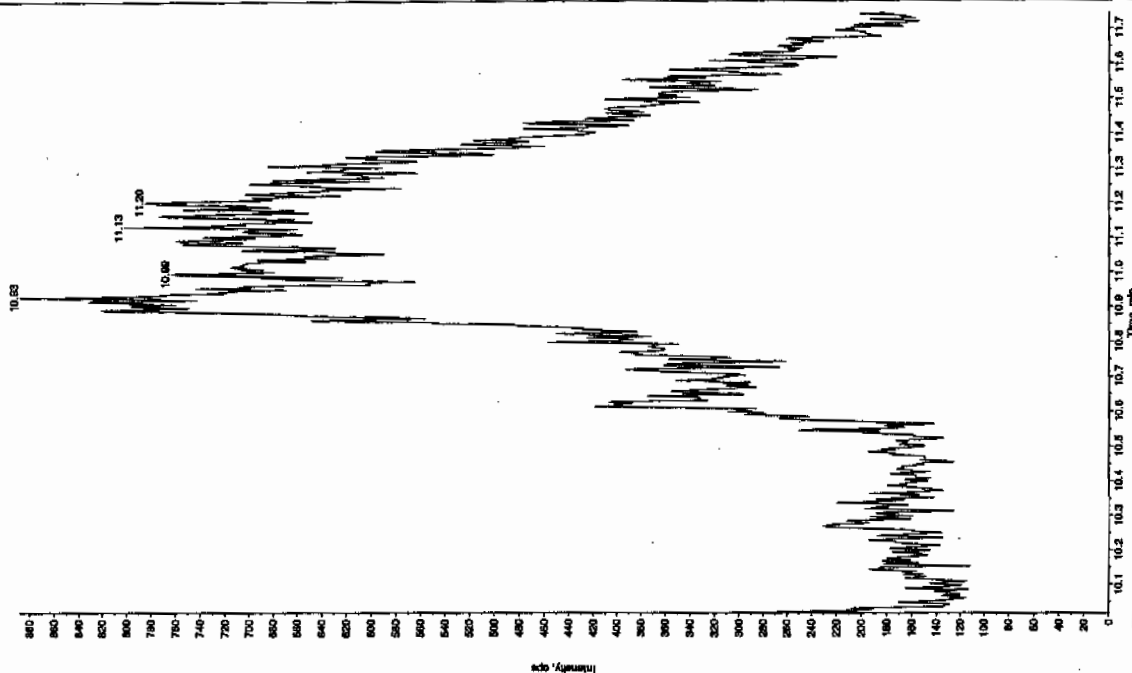
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A ng/mL  
 Calculated Conc: 1/23/2010  
 Acq. Date: 1/23/2010  
 Acq. Time: 2:07:58 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - 10A  
 Min. Peak Height: 1460.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 15.0 sec  
 Expected RT: 8.30 min  
 Use Relative RT: No  
 Idt. Type: Valley  
 Retention Time: 8.40 min  
 Area: 3.79e+006 counts  
 Height: 1002903.748 cps  
 Start Time: 8.30 min  
 End Time: 8.53 min



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

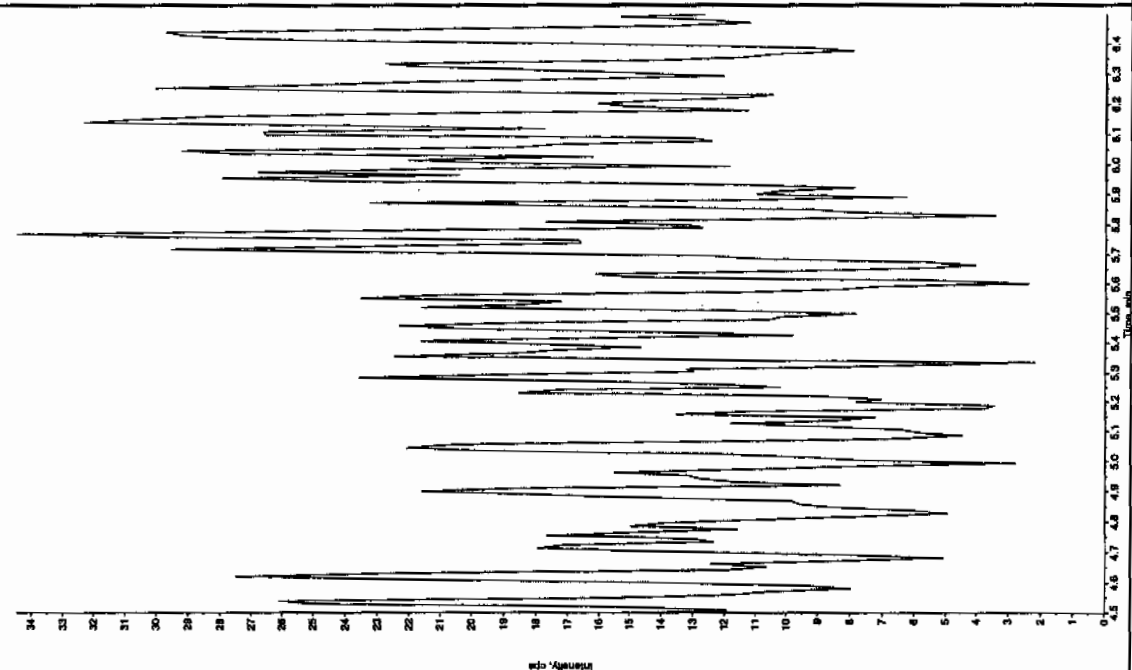
Sample Name: "244210010" Sample ID: "94057921.ER" File: "EXS01220061.will"  
 Peak Name: "tris(o-methyl) phosphate" Mass(es): "369.191.0 amu"  
 Comment: "LCX832125" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/23/2010  
 Acq. Time: 2:07:58 AM  
 Modified: No



Sample Name: "244210010" Sample ID: "94057921.ER" File: "EXS01220061.will"  
 Peak Name: "24-Diamino-6-nitrotoluene" 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: 1/23/2010  
 Acq. Time: 2:07:58 AM  
 Modified: No



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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7711

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210011

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125136a

Date Analyzed: 28-JAN-10 05:44

Units: ug/kg

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

\*Concentration =

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

Printed: Thu Jan 28 10:43:32 2010, Page 103 of 121

# Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp\_PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

Name: C:\MASSLYNX\NEW\_EXP\_PRO\Data\EXP0125136a

Date: 28-Jan-2010

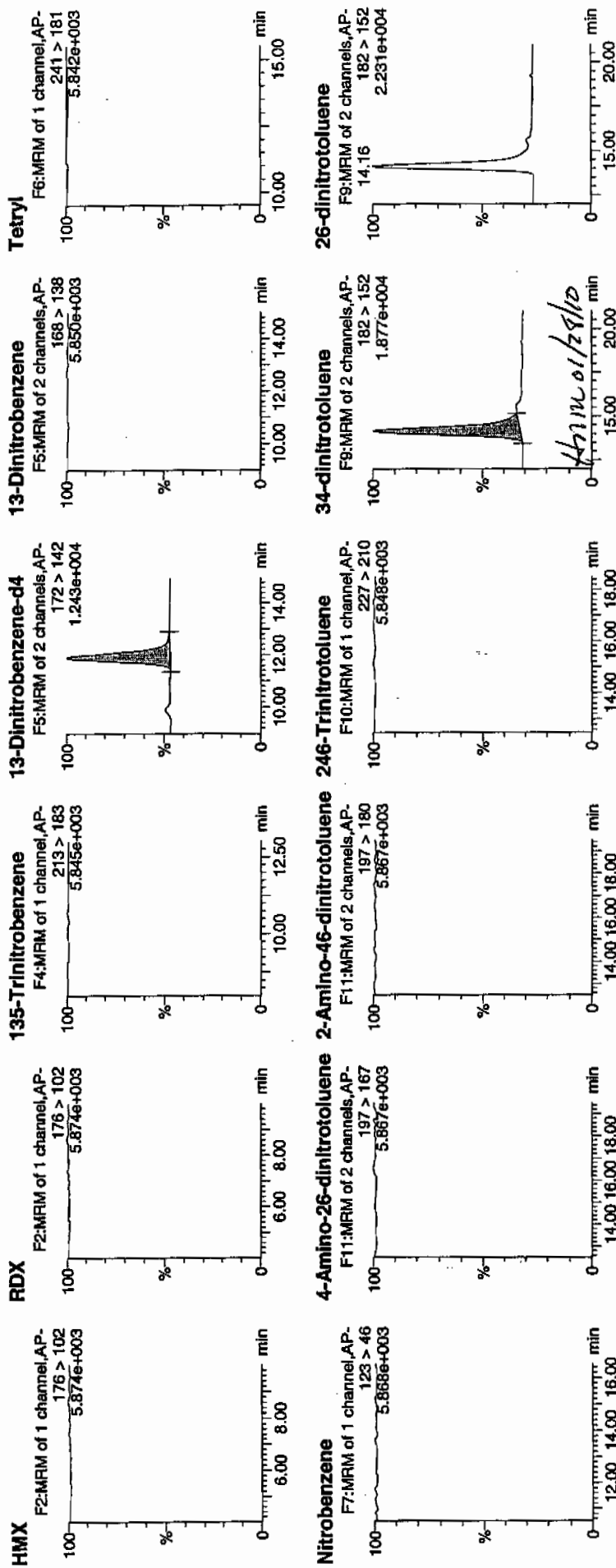
Time: 05:44:40

ID: 244210011

Vial: 2:3.C

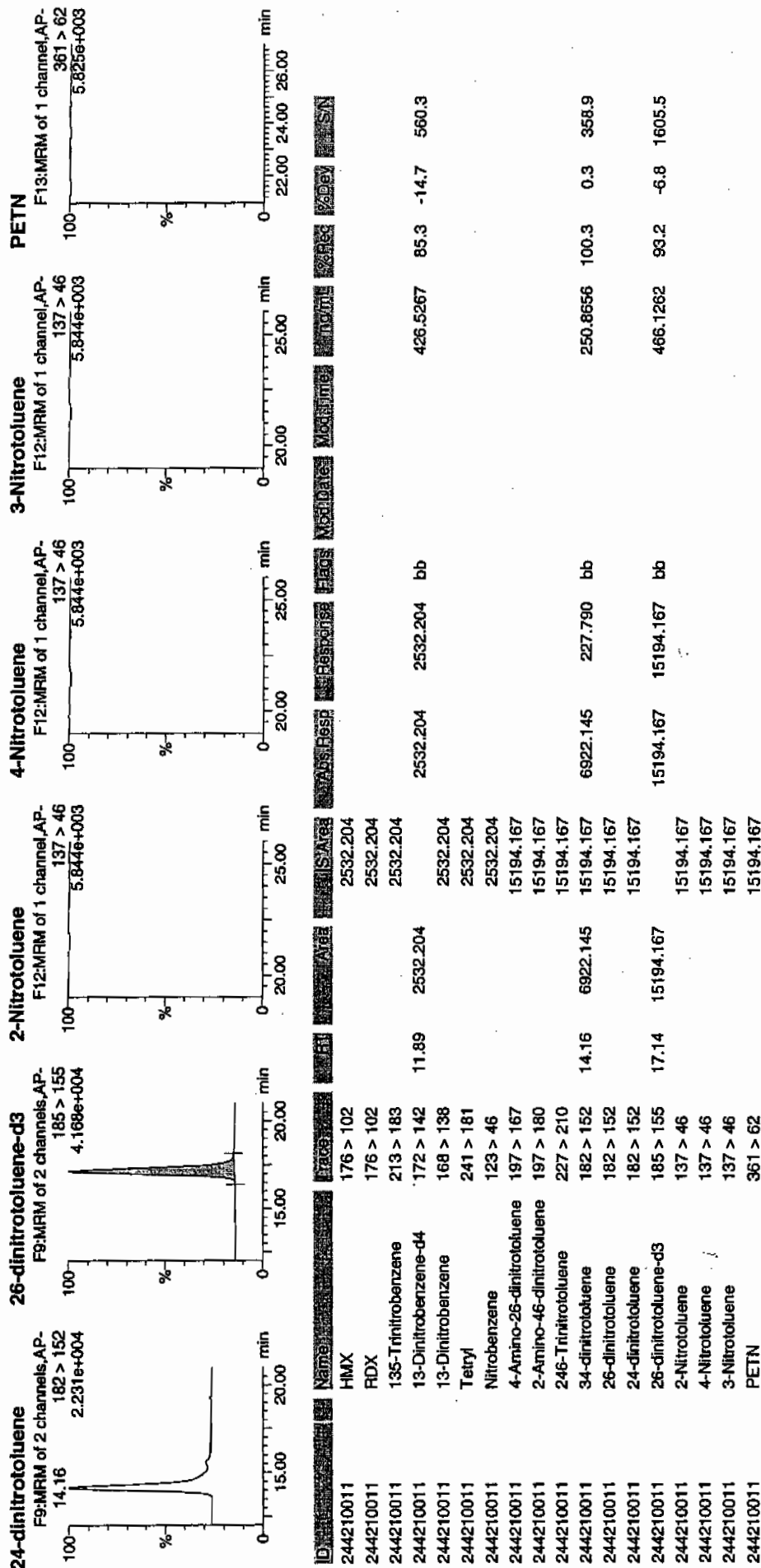
1077  
1/28/10

100/940579 / 8043 / 21



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

Dataset: C:\MASSLYNX\New\_Exp\PRO1012510expA2.qld, Time: Thu Jan 28 10:42:53 2010





1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7711

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210011

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01220062.wiff

Date Analyzed: 23-JAN-10 02:23

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 1/25/10

Sample Name: "244210011" Sample ID: "94057921ER" File: "EXS01220062.will"

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

Comment: "LCX83212S" Annotation: "

Sample Index: 1

Sample Type: unknown

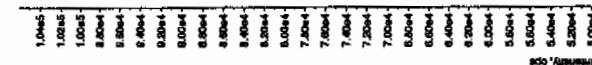
Concentration: N/A

Calculated Conc: 0.00 ng/mL

Acq. Date: 1/23/2010

Acq. Time: 2:23:41 AM

Modified: No



Sample Name: "244210011" Sample ID: "94057921ER" File: "EXS01220062.will"

Peak Name: "TATB" Mass(es): "257.2004.9 amu"

Comment: "LCX83212S" Annotation: "

Sample Index: 1

Sample Type: unknown

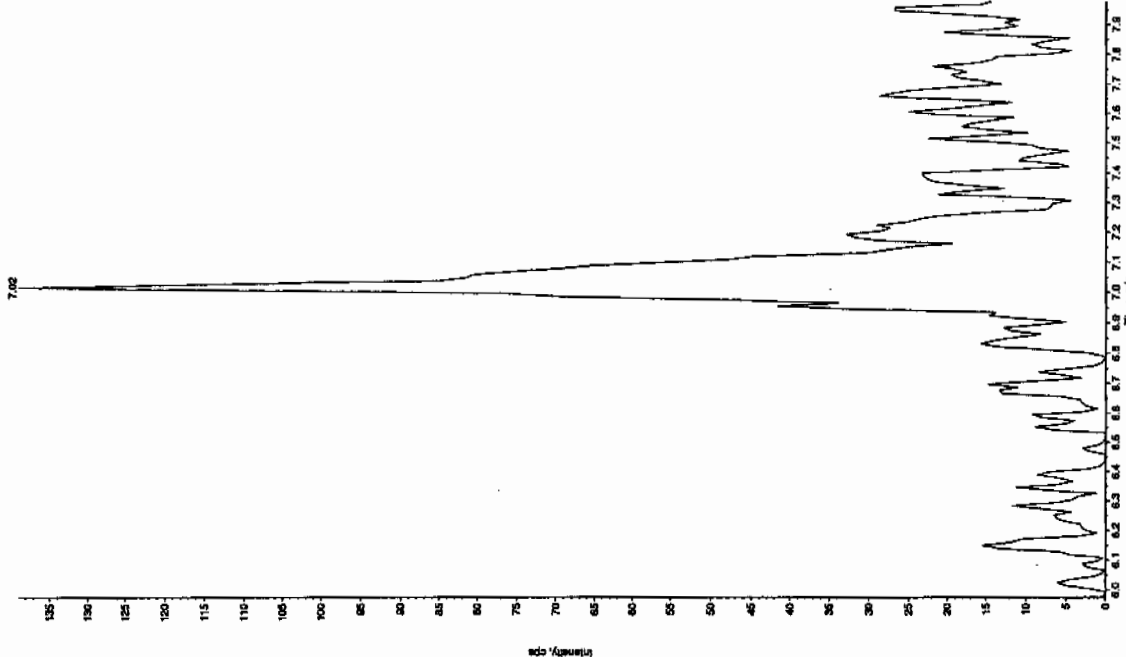
Concentration: N/A

Calculated Conc: 0.00 ng/mL

Acq. Date: 1/23/2010

Acq. Time: 2:23:41 AM

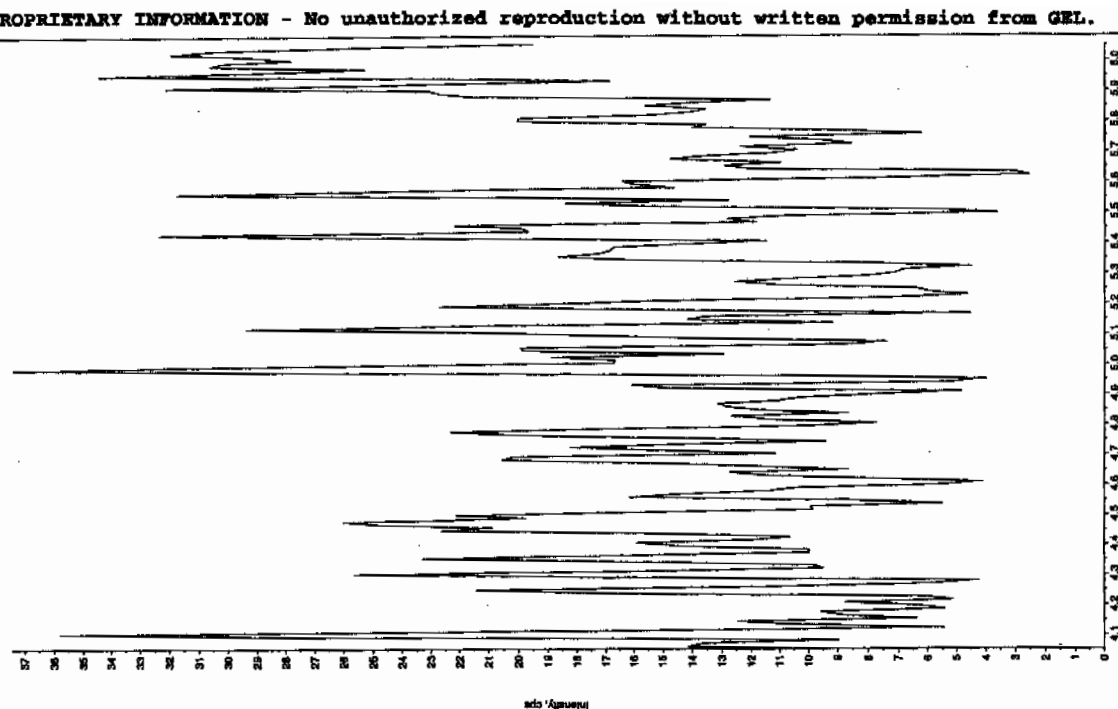
Modified: No



See 01/25/10

Sample Name: "244210011" Sample ID: "94057921LRF" File: "EXS01220062.wif"  
 Peak Name: "26-Diamino-4-nitrofluorene" Mass(es): "166.046.0 amu"  
 Comment: "LCX832125" Annotation: "

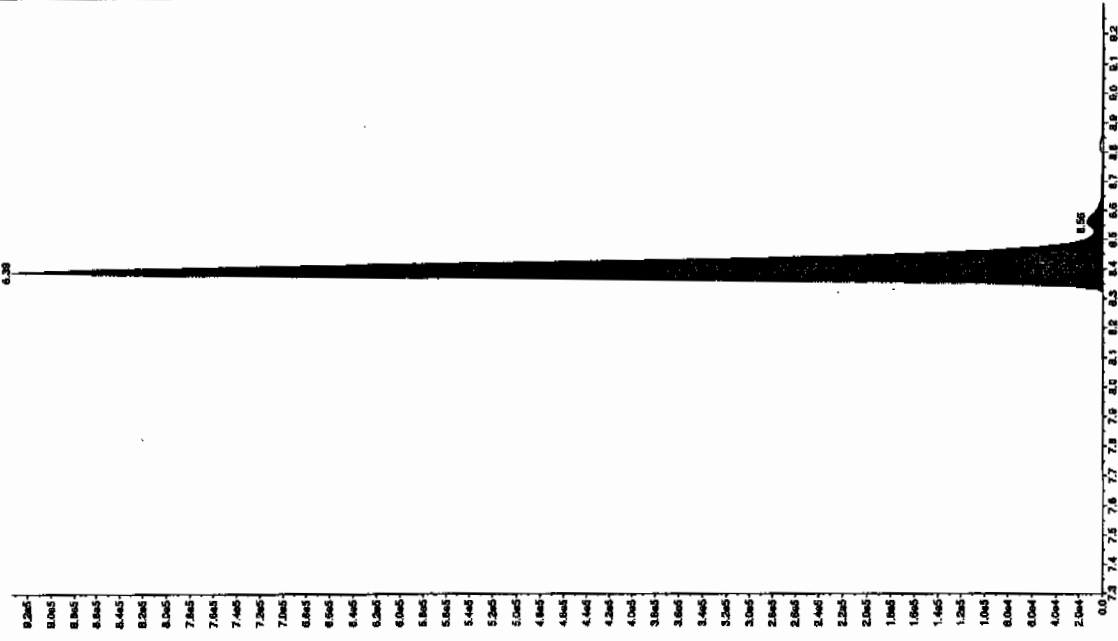
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 1/23/2010  
 Acq. Date: 2:23:41 AM  
 Acq. Time: 2:23:41 AM  
 Modified: No



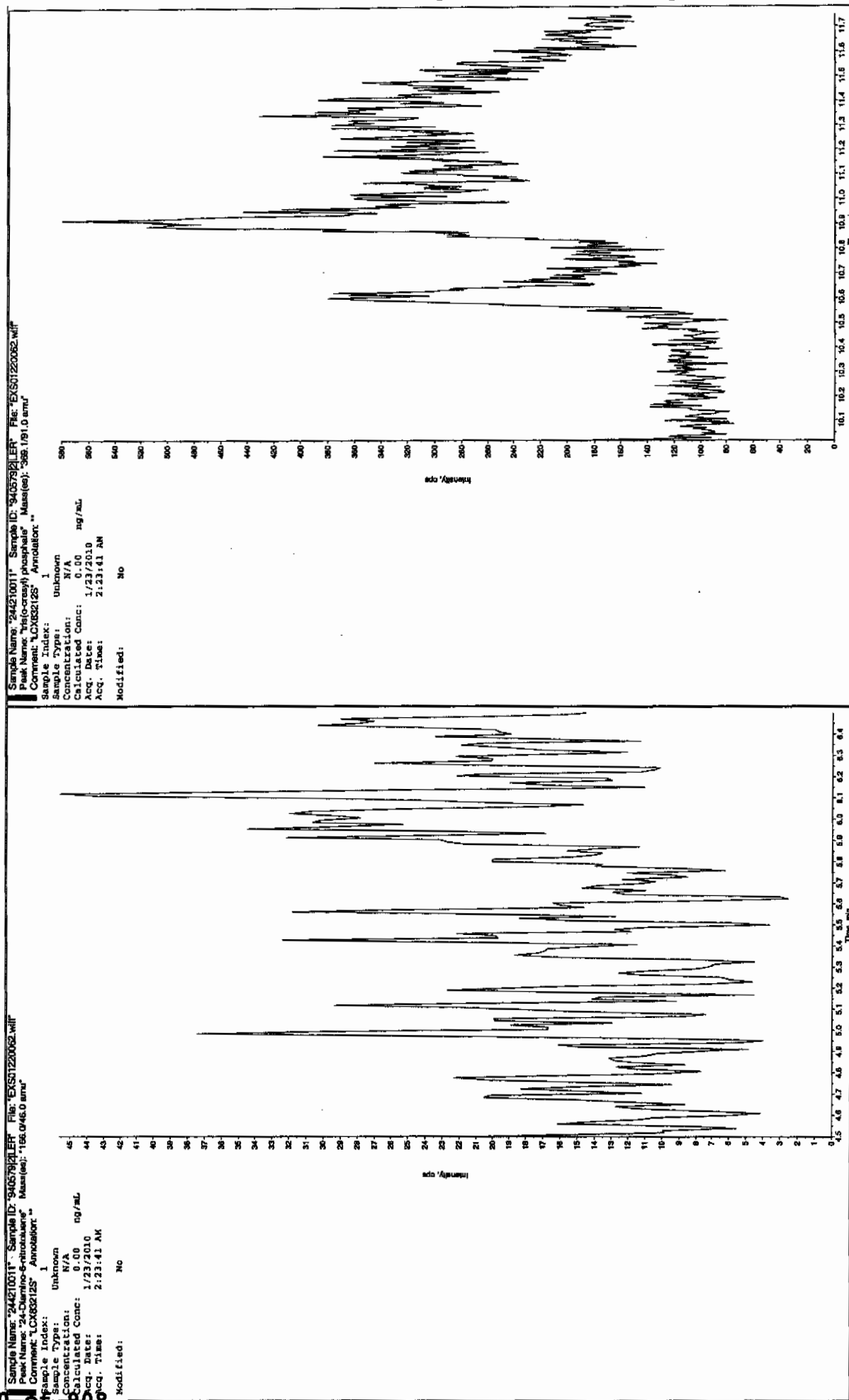
Sample Name: "244210011" Sample ID: "94057921LRF" File: "EXS01220062.wif"  
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.1751.9 amu"  
 Comment: "LCX832125" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 292.00 ng/mL  
 Calculated Conc: 1/23/2010  
 Acq. Date: 2:23:41 AM  
 Acq. Time: 2:23:41 AM  
 Modified: No

Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 1460.00 cps  
 Peak Width: 3.00 points  
 Smoothing Width: 3.00 points  
 RT Window: 15.0 sec  
 Expected RT: 8.30 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.39 min  
 Area: 3.67e+006 counts  
 Height: 532663.025 cps  
 Start Time: 8.29 min  
 End Time: 8.70 min



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



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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7712

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210012

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125137a

Date Analyzed: 28-JAN-10 06:14

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\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125137a

Date: 28-Jan-2010

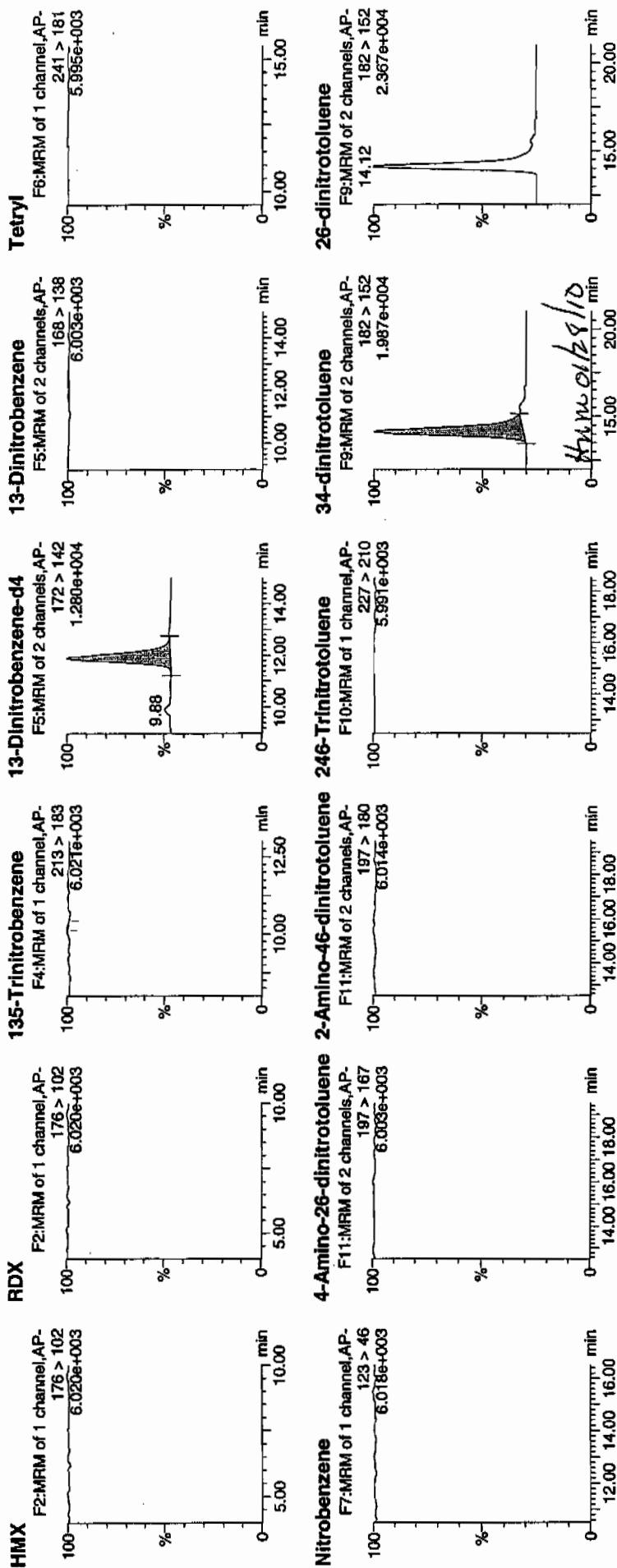
Time: 06:14:08

ID: 244210012

Vial: 2:3,D

1477  
1/28/10

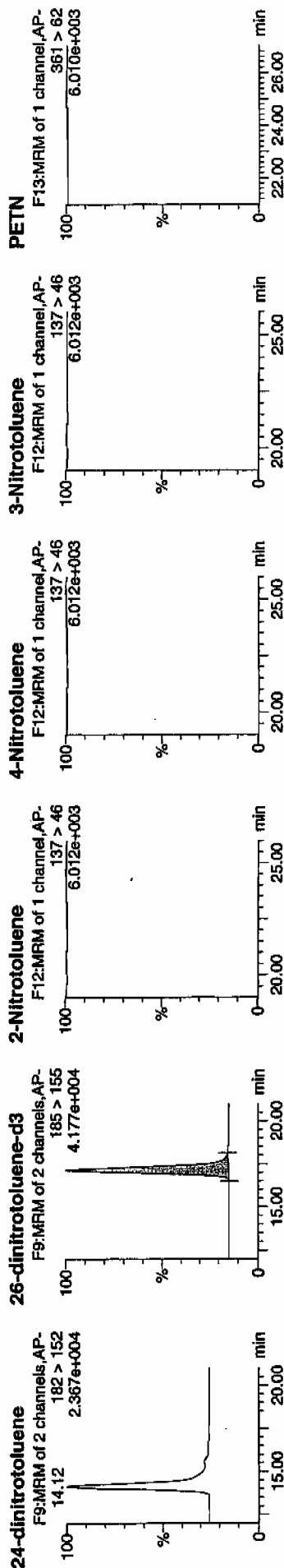
LAUW 940579 / 80225 / 21



Printed: Thu Jan 28 10:43:32 2010, Page 106 of 121

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010



ID	Name	Trace	RT	Area	ISAvg	Abs Resp	Response	Flags	ModDate	ModTime	Height	Area%	%Dev	SN
244210012	HMZ	176 > 102			2654.080									
244210012	RDX	176 > 102			2654.080									
244210012	135-Trinitrobenzene	213 > 183			2654.080									
244210012	13-Dinitrobenzene-d4	172 > 142	11.89	2654.080		2654.080	2654.080	bb	MM- 28-Jan-10	10:23:23				
244210012	13-Dinitrobenzene	168 > 138			2654.080							447.0556	89.4	333.2
244210012	Tetryl	241 > 181			2654.080									
244210012	Nitrobenzene	123 > 46			2654.080									
244210012	4-Amino-26-dinitrotoluene	197 > 167			15377.979									
244210012	2-Amino-46-dinitrotoluene	197 > 180			15377.979									
244210012	246-Trinitrotoluene	227 > 210			15377.979									
244210012	34-dinitrotoluene	182 > 152	14.17	7417.415		7417.415	241.170	bb				265.6016	106.2	313.1
244210012	26-dinitrotoluene	182 > 152			15377.979									
244210012	24-dinitrotoluene	182 > 152			15377.979									
244210012	26-dinitrotoluene-d3	185 > 155	17.14	15377.979		15377.979	15377.979	bb				471.7652	94.4	1289.7
244210012	2-Nitrotoluene	137 > 46			15377.979									
244210012	4-Nitrotoluene	137 > 46			15377.979									
244210012	3-Nitrotoluene	137 > 46			15377.979									
244210012	PETN	361 > 62			15377.979									

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7712

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210012

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01220066.wiff

Date Analyzed: 23-JAN-10 03:26

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 =

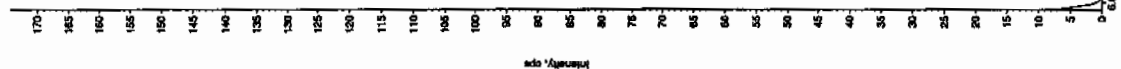
Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor



See 1/25/10

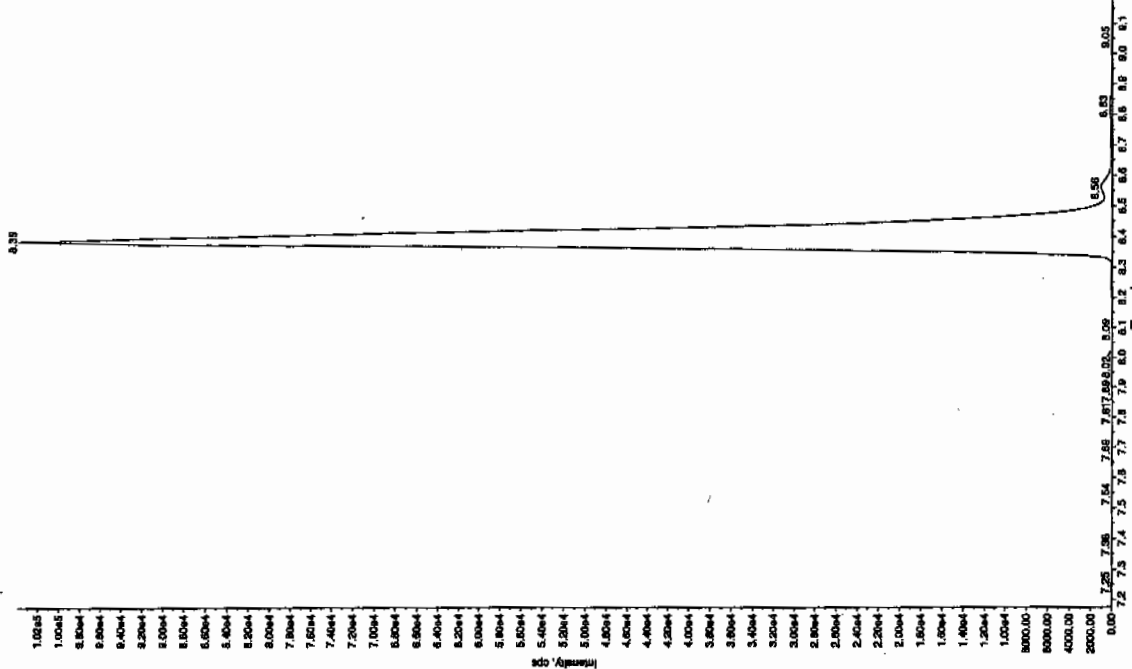
Sample Name: 24421012 Sample ID: 94057921.ER File: EX501220066.wif  
Peak Name: TAT3 Mass(es): 257.2204.9 amu  
Comment: LCX83212S Annotation: 1

Sample Index: 1  
Sample Type: Unknown  
Concentration: 0.00 ng/mL  
Calculated Conc: 1/23/2010  
Acq. Date: 3:26:30 AM  
Acq. Time: 3:26:30 AM  
Modified: No



Sample Name: 24421012 Sample ID: 94057921.ER File: EX501220066.wif  
Peak Name: 35-Deoxyribose Mass(es): 162.046.0 amu  
Comment: LCX83212S Annotation: 1

Sample Index: 1  
Sample Type: Unknown  
Concentration: 0.00 ng/mL  
Calculated Conc: 1/23/2010  
Acq. Date: 3:26:30 AM  
Acq. Time: 3:26:30 AM  
Modified: No

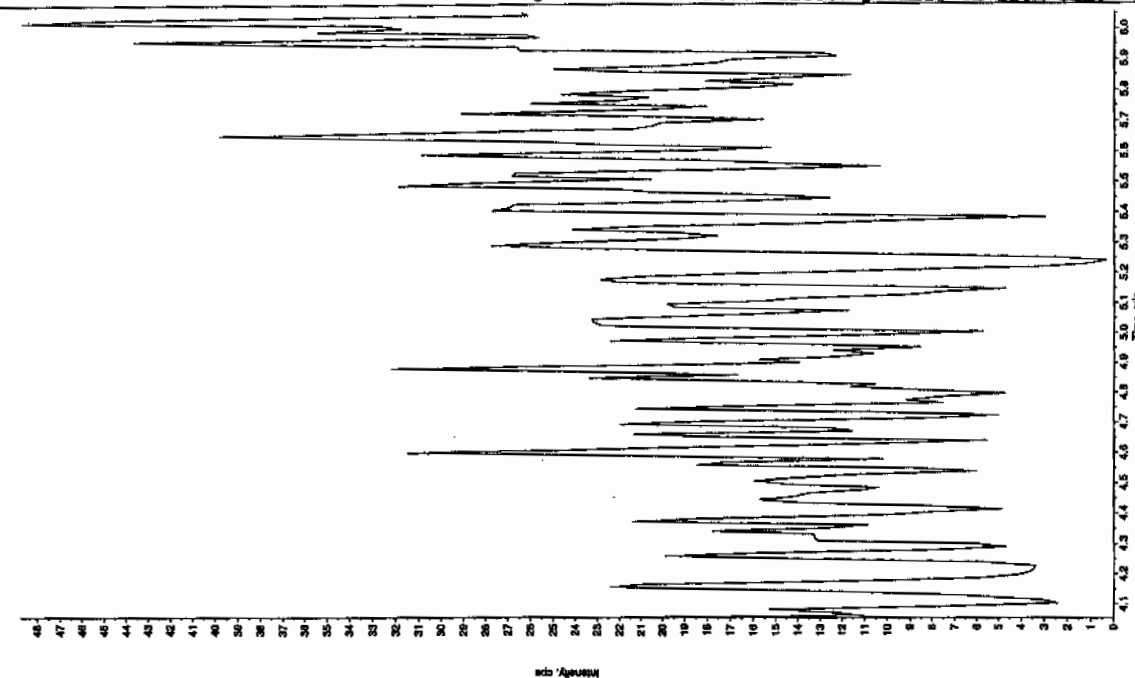


See 01/25/10

Sample Name: "244210012" Sample ID: "94057921EF" File: "EXS01220066.wif"  
 Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.046.0 amu"  
 Comment: "LDX632125" Annotation: "

Sample Index: 1

Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/23/2010  
 Acq. Time: 3:26:30 AM  
 Modified: No

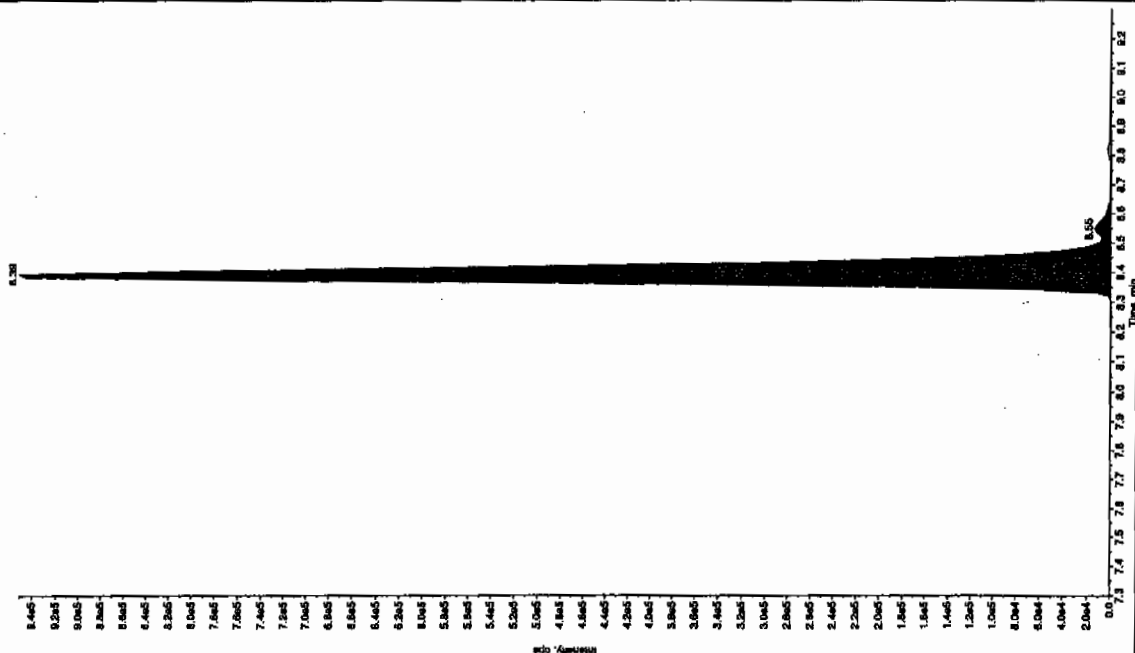


Sample Name: "244210012" Sample ID: "94057921EF" File: "EXS01220066.wif"  
 Peak Name: "34-Dinitrotoluene" Mass(es): "182.151.3 amu"  
 Comment: "LDX632125" Annotation: "

Sample Index: 1

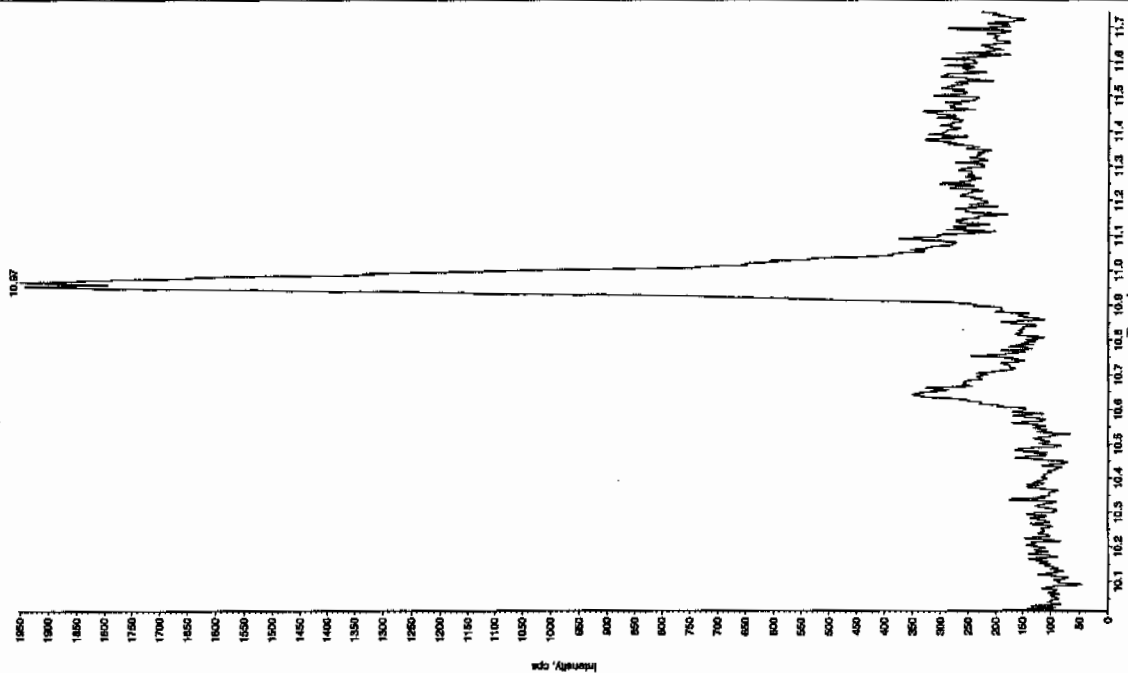
Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 301. ng/mL  
 Acq. Date: 1/23/2010  
 Acq. Time: 3:25:30 AM

Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Win. Peak Height: 140.00 cps  
 Win. Peak Width: 3.00 points  
 RT Window: 15.0 sec  
 Expected RT: 8.30 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.39 min  
 Area: 3.77e+006 counts  
 Weight: 950339.966 cps  
 Start Time: 8.29 min  
 End Time: 8.71 min



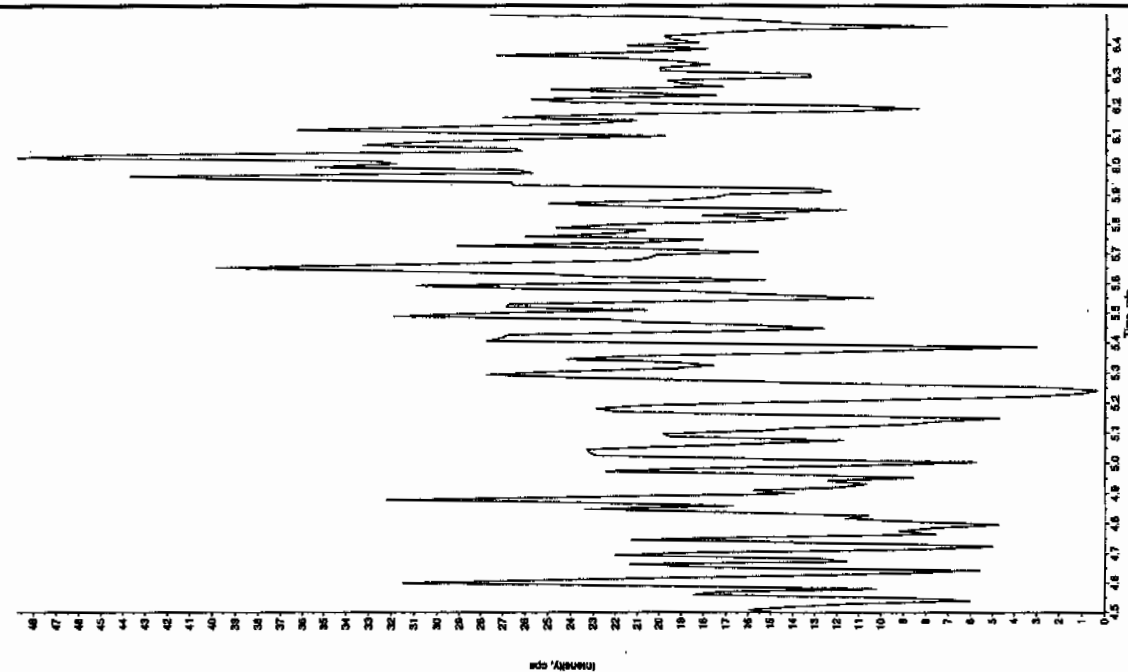
Sample Name: "244210012" Sample ID: "94057921ER" File: "EXS01220068.wif"  
 Peak Name: "bis(2-ethyl phosphite)" Mass(es): "989.181.0 amu"  
 Comment: "LC832125" Annotation: "1"

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 1.00 ng/mL  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/23/2010  
 Acq. Time: 3:26:30 AM  
 Modified: No



Sample Name: "244210012" Sample ID: "94057921ER" File: "EXS01220068.wif"  
 Peak Name: "24-Olefin-6-nitrobenzene" Mass(es): "160.046.0 amu"  
 Comment: "LC832125" Annotation: "1"

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 1.00 ng/mL  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/23/2010  
 Acq. Time: 3:26:30 AM  
 Modified: No



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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7716

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210013

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125138a

Date Analyzed: 28-JAN-10 06:43

Units: ug/kg

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

\*Concentration =

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

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA2.qtd, Time: Thu Jan 28 10:42:53 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\data\EXP0125138a

Date: 28-Jan-2010

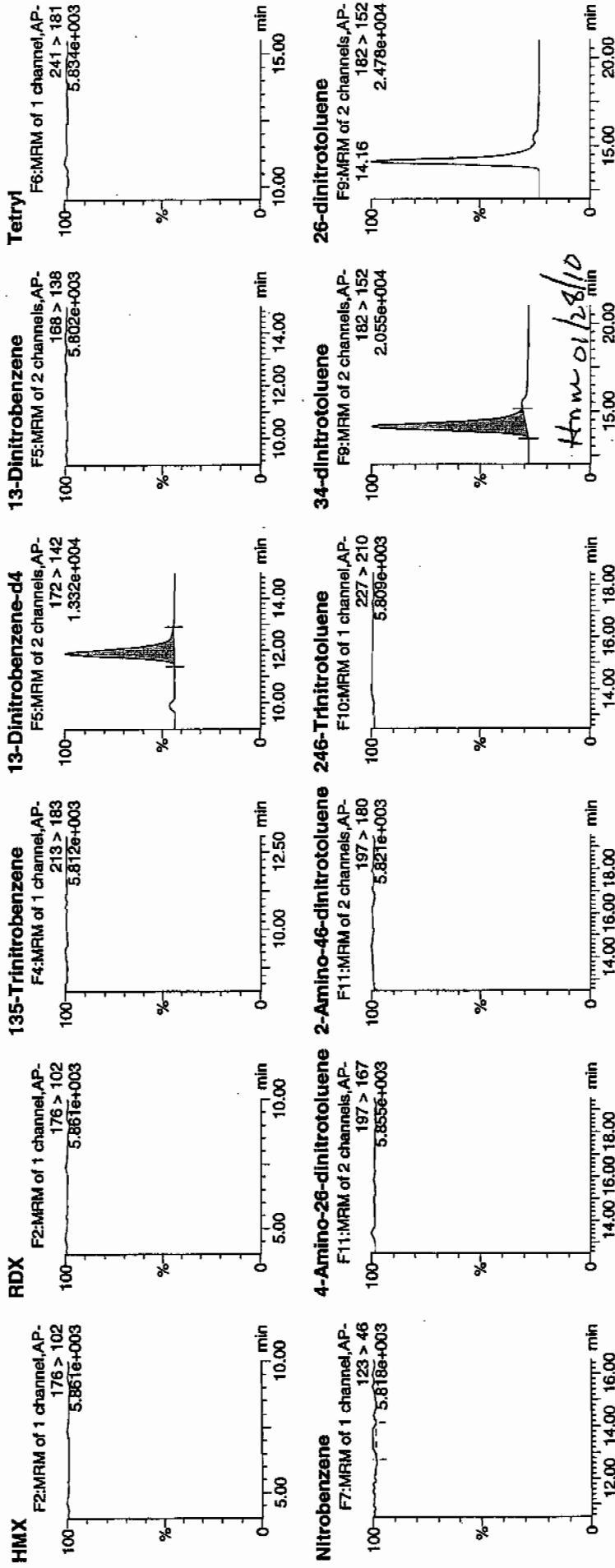
Time: 06:43:37

ID: 244210013

Vial: 2:3,E

WAF  
1/28/10

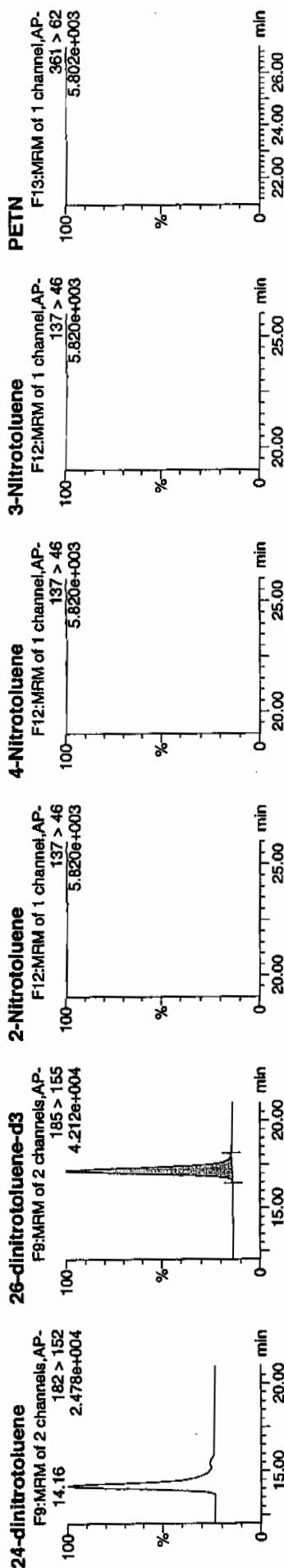
WAF 940579 / 21  
SOL 2



### Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYN\New\_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

[illegible]

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7716

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210013

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01220067.wiff

Date Analyzed: 23-JAN-10 03:42

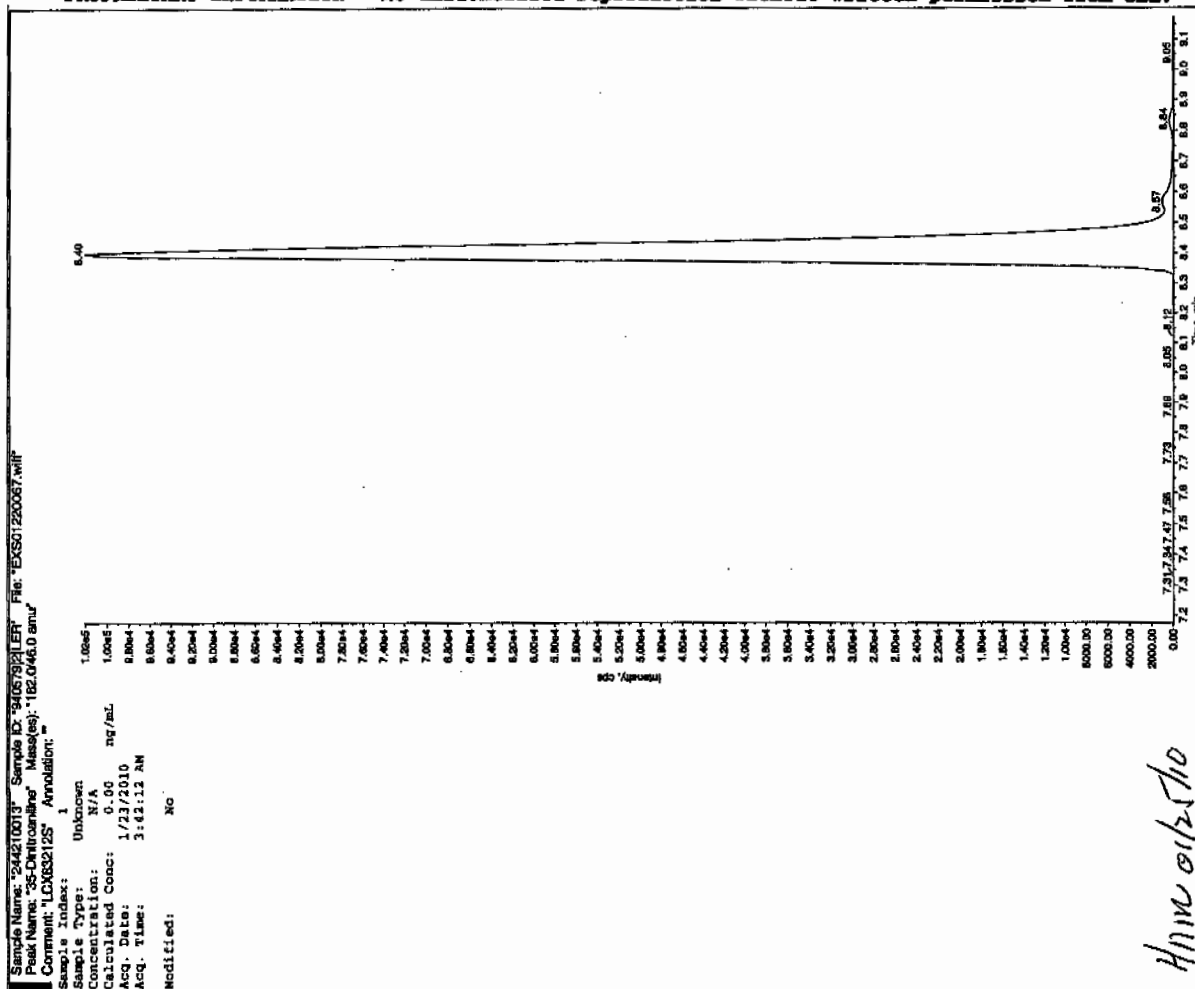
Units: ug/kg

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

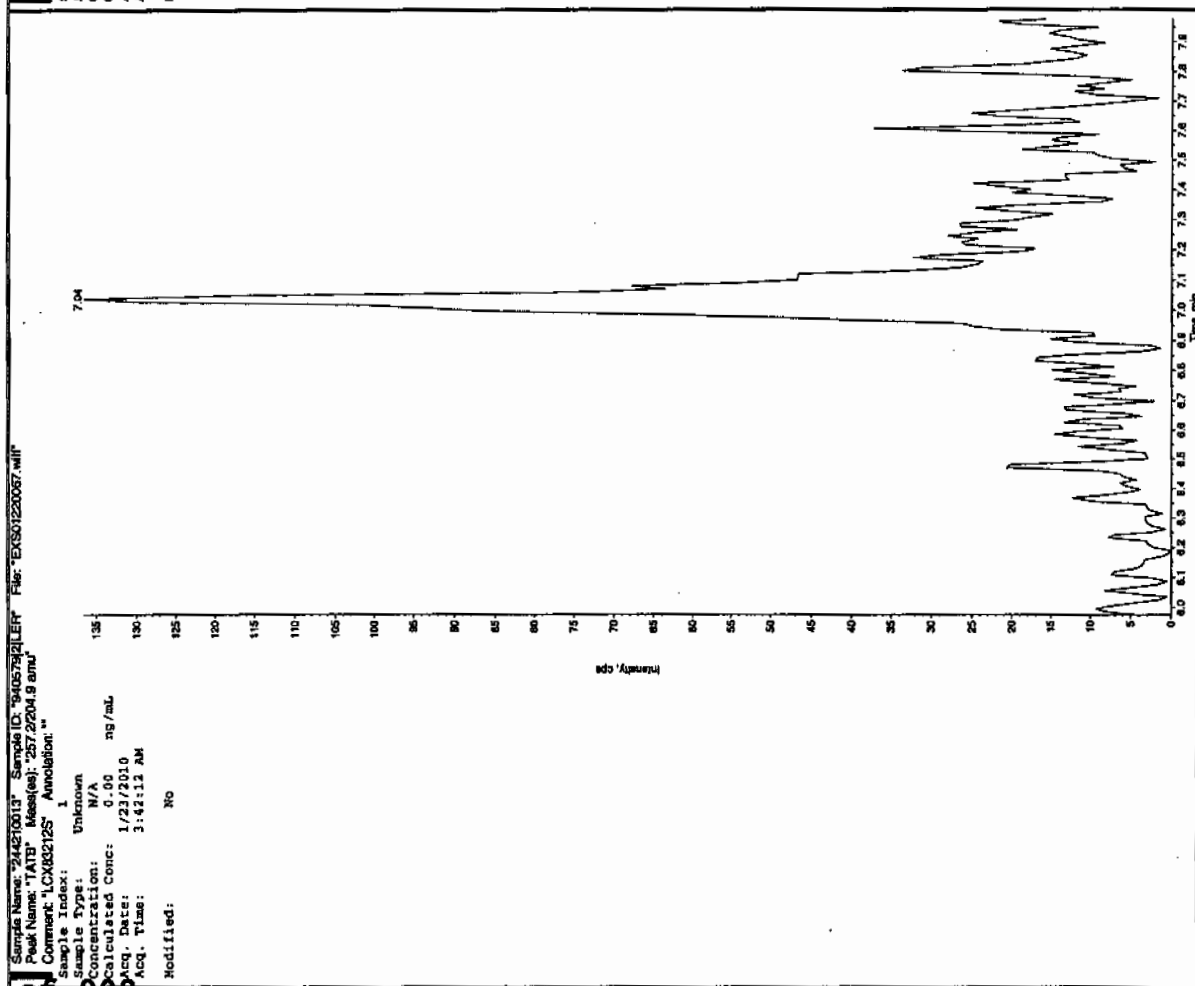
\*Concentration =

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

San 1/25/10



HM 01/25/10

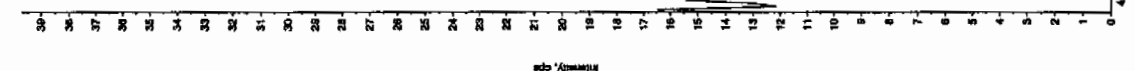


\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



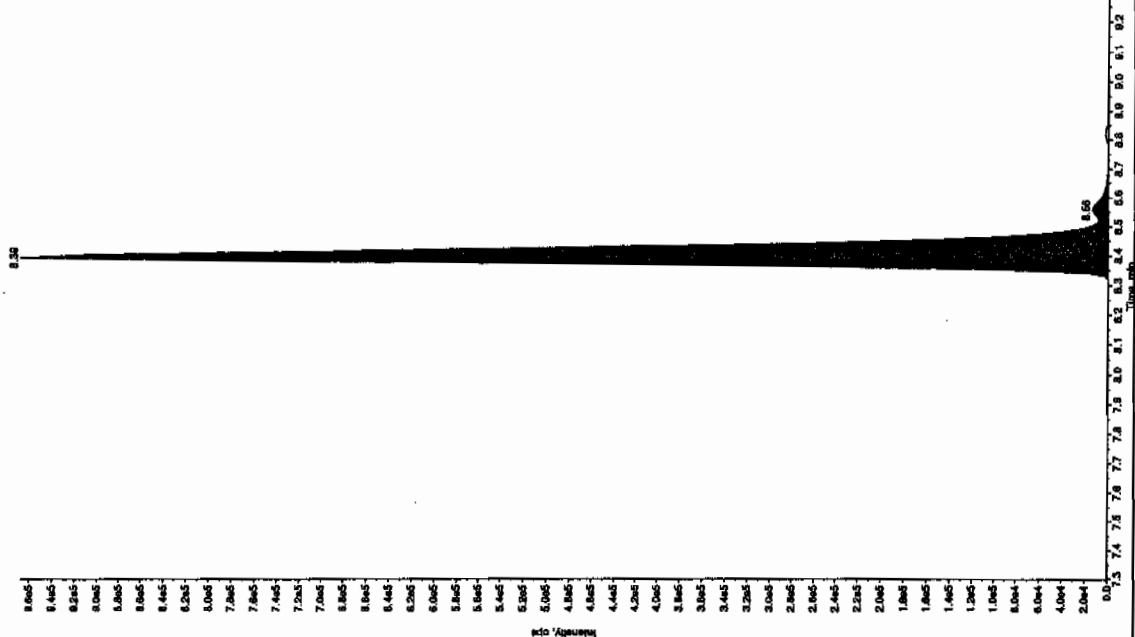
Sample Name: 244210013 Sample ID: 94057821LEF File: EXS01220057.wif  
 Peak Name: 26-Chloro-4-nitrobenzene Mass(es): 186.046.0 amu  
 Comment: LCMS832125 Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: W/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/23/2010  
 Acq. Time: 3:42:12 AM  
 Modified: No



Sample Name: 244210013 Sample ID: 94057821LEF File: EXS01220057.wif  
 Peak Name: 34-Dinitrobenzene Mass(es): 182.0161.0 amu  
 Comment: LCMS832125 Annotation: "

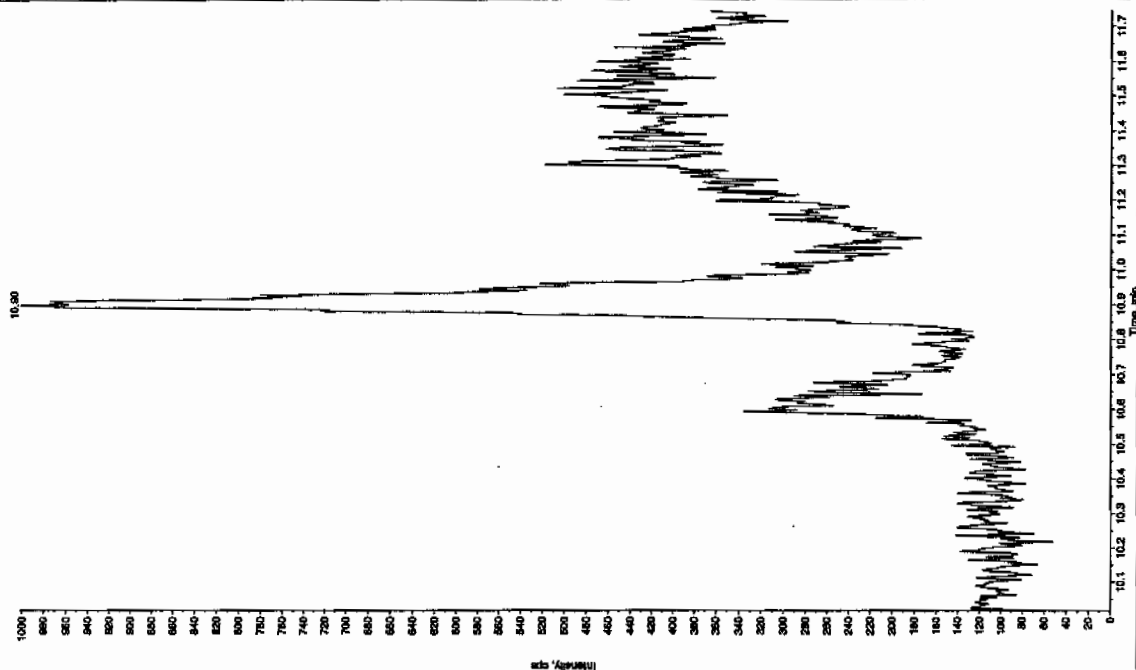
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 296. ng/mL  
 Acq. Date: 1/23/2010  
 Acq. Time: 3:42:12 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 1460.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 15.0 sec  
 Expected RT: 8.30 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.39 min  
 Peak Height: 3.71e+006 counts  
 Height: 967570.190 cps  
 Start Time: 8.28 min  
 End Time: 8.72 min



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

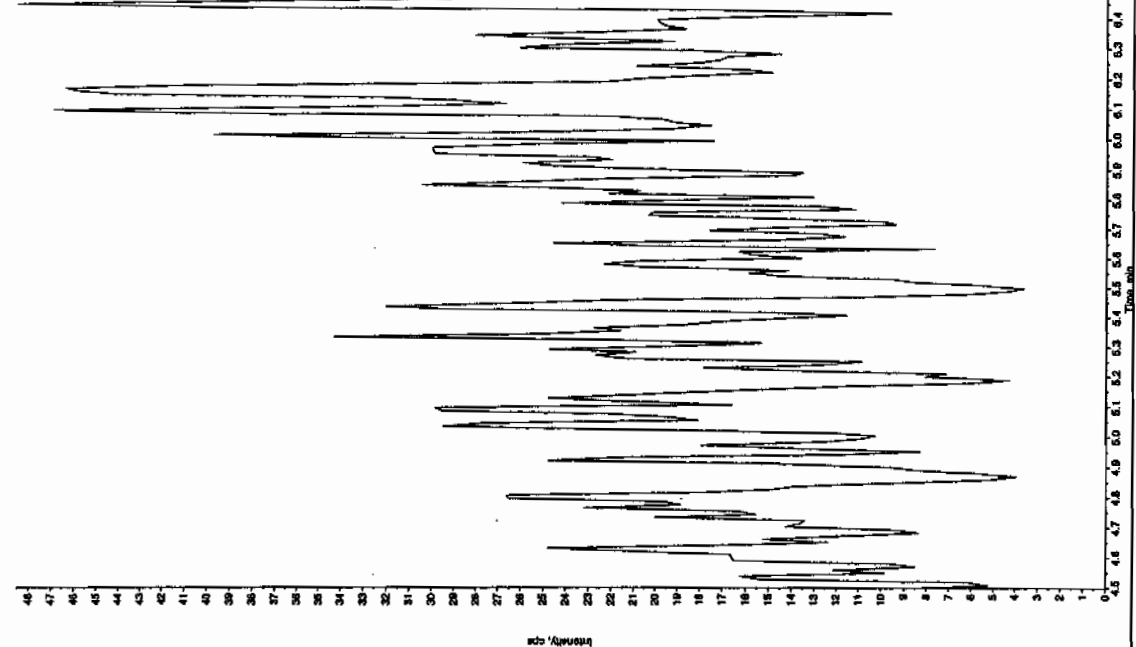
Sample Name: "244210013" Sample ID: "94057921.ER" File: "EXS01220067.will"  
 Peak Name: "bis(o-cresyl) phosphate" Mass(es): "369.181.0 amu"  
 Comment: "LCX832125" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/23/2010  
 Acq. Time: 3:42:12 AM  
 Modified: No



Sample Name: "244210013" Sample ID: "94057921.ER" File: "EXS01220067.will"  
 Peak Name: "24-Diamino-6-nitrofolate" 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: 1/23/2010  
 Acq. Time: 3:42:12 AM  
 Modified: No



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

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7718

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210014

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125139a

Date Analyzed: 28-JAN-10 07:13

Units: ug/kg

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

\*Concentration =

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

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125139a

Date: 28-Jan-2010

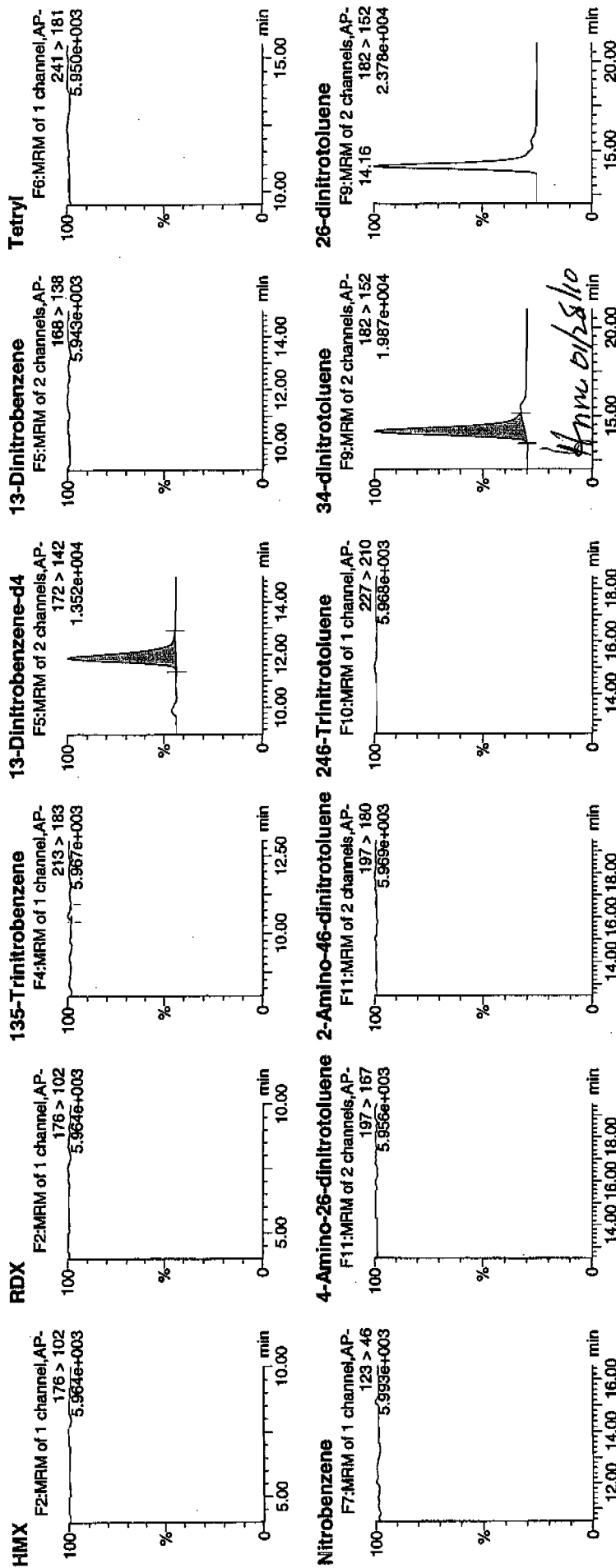
Time: 07:13:05

ID: 244210014

Vial: 2:3,F

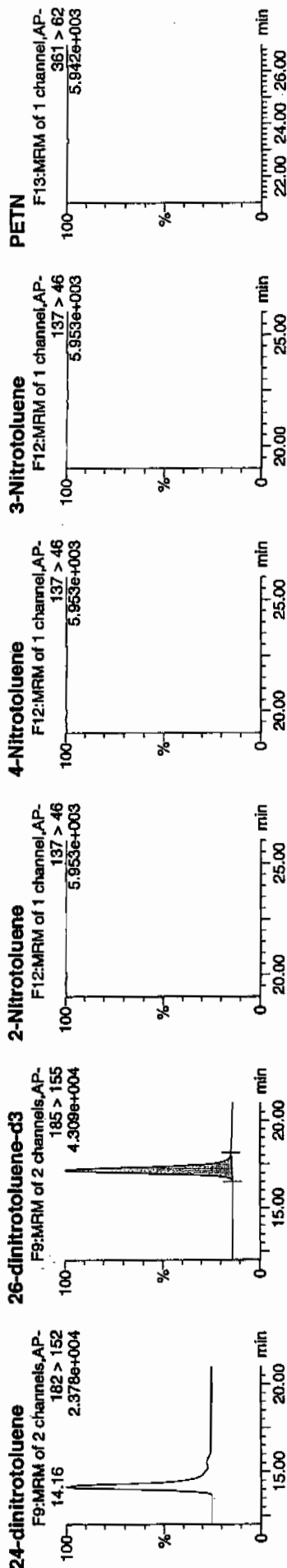
1477  
1/28/10

WAVE 940579 | 21



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

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010



ID	Name	Mass	Area	Height	Width	Retention	MM	28-Jan-10	10:23:26
244210014	HMX	176 > 102	2893.729						
244210014	RDX	176 > 102	2893.729						
244210014	135-Trinitrobenzene	213 > 183	2893.729						
244210014	13-Dinitrobenzene-d4	172 > 142	11.90	2893.729					
244210014	13-Dinitrobenzene	168 > 138	2893.729						
244210014	Tetryl	241 > 181	2893.729						
244210014	Nitrobenzene	123 > 46	15769.822						
244210014	4-Amino-26-dinitrotoluene	197 > 167	15769.822						
244210014	2-Amino-46-dinitrotoluene	197 > 180	15769.822						
244210014	246-Trinitrotoluene	227 > 210	15769.822						
244210014	34-dinitrotoluene	182 > 152	7384.618	14.16					
244210014	26-dinitrotoluene	182 > 152	15769.822						
244210014	24-dinitrotoluene	182 > 152	15769.822						
244210014	26-dinitrotoluene-d3	185 > 155	15769.822	17.13					
244210014	2-Nitrotoluene	137 > 46	15769.822						
244210014	4-Nitrotoluene	137 > 46	15769.822						
244210014	3-Nitrotoluene	137 > 46	15769.822						
244210014	PETN	361 > 62	15769.822						

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7718

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210014

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01220068.wiff

Date Analyzed: 23-JAN-10 03:57

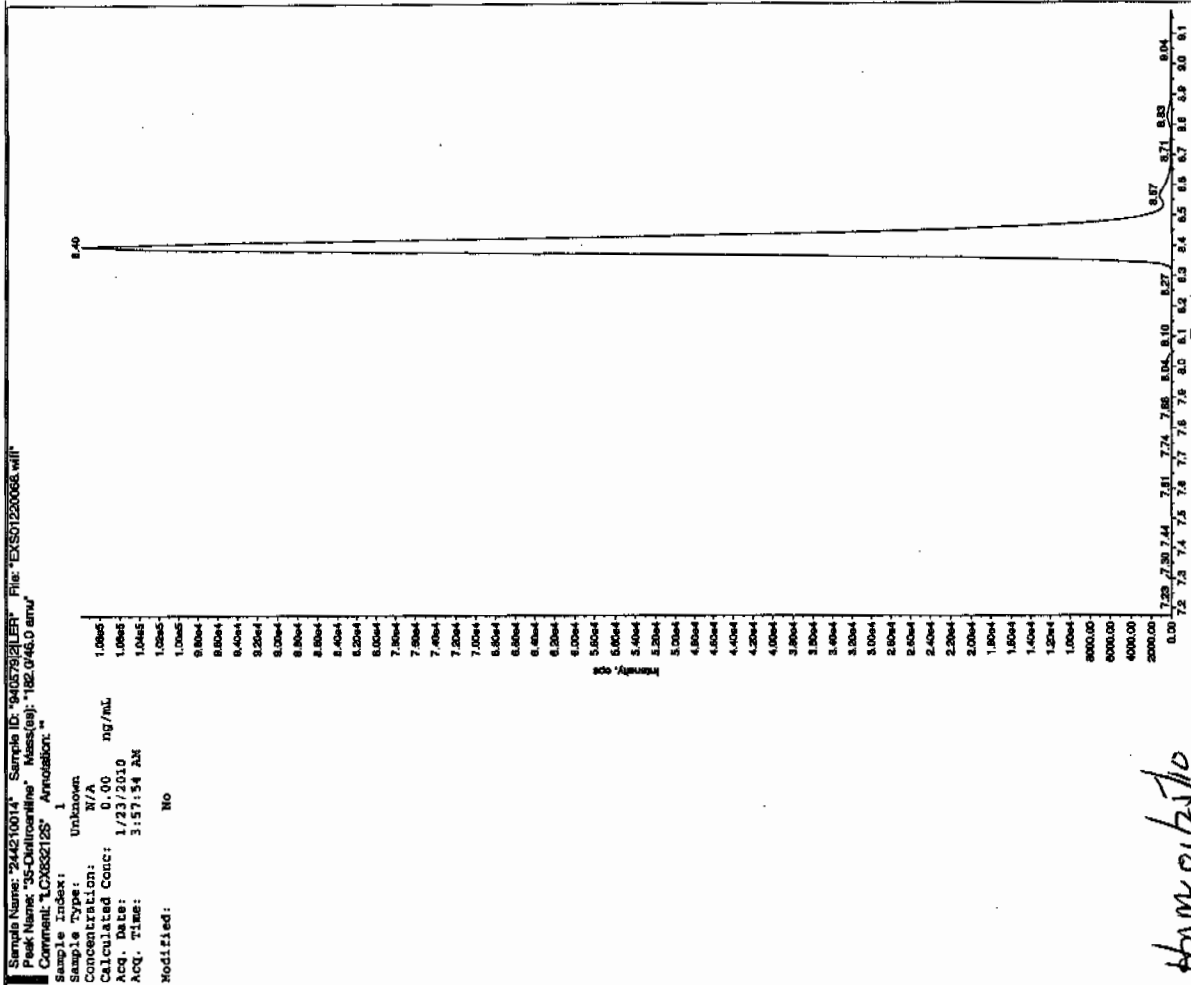
Units: ug/kg

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

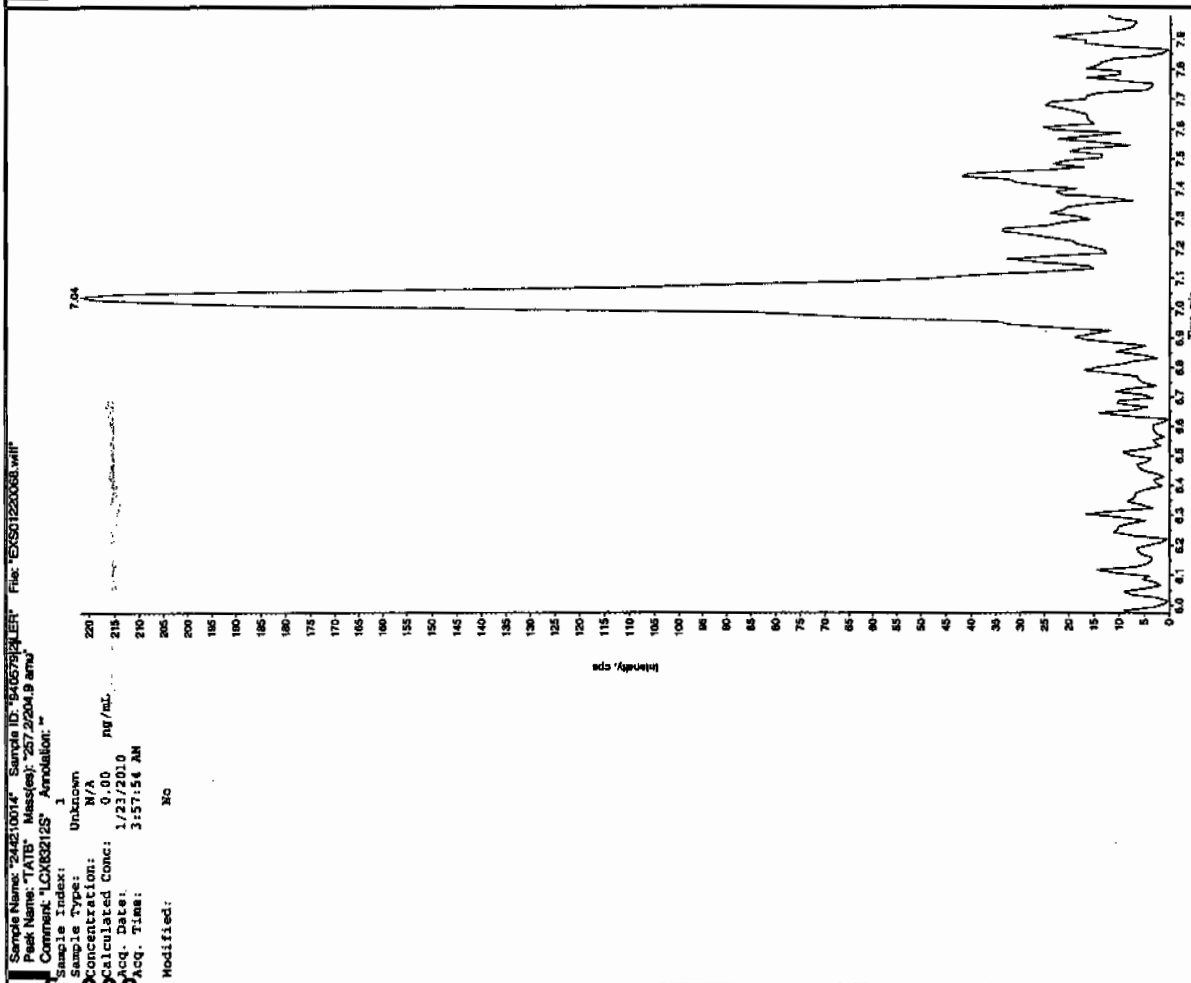
\*Concentration =

Instrument Value	X	$\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$	X	Dilution Factor
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dan 1/25/10



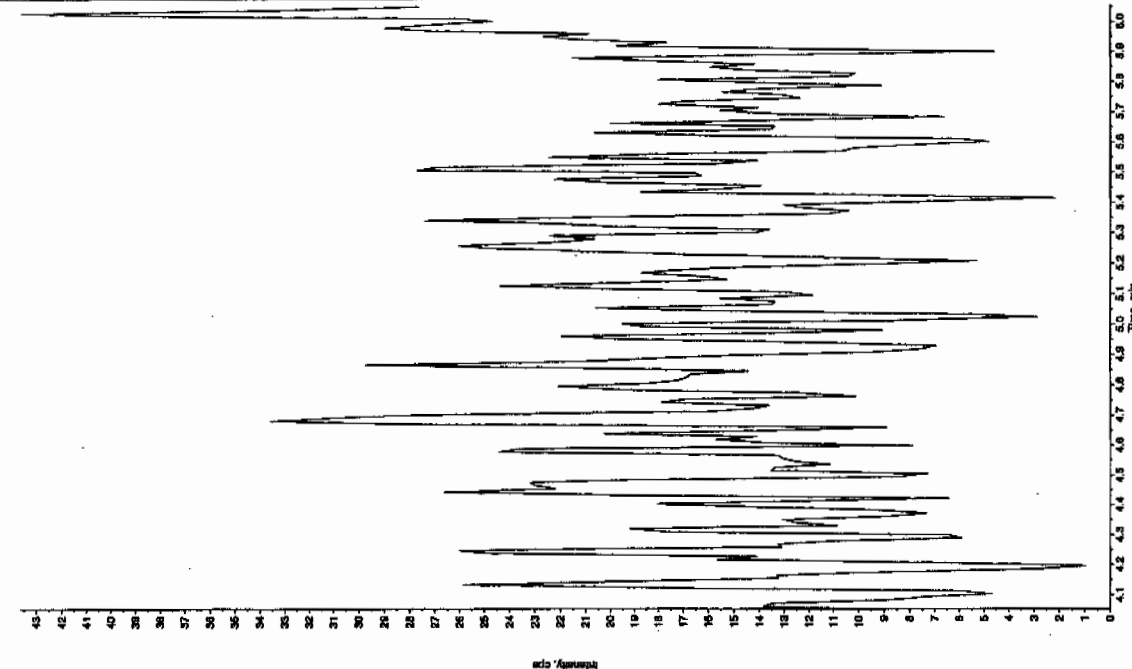
Amc 01/25/10



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

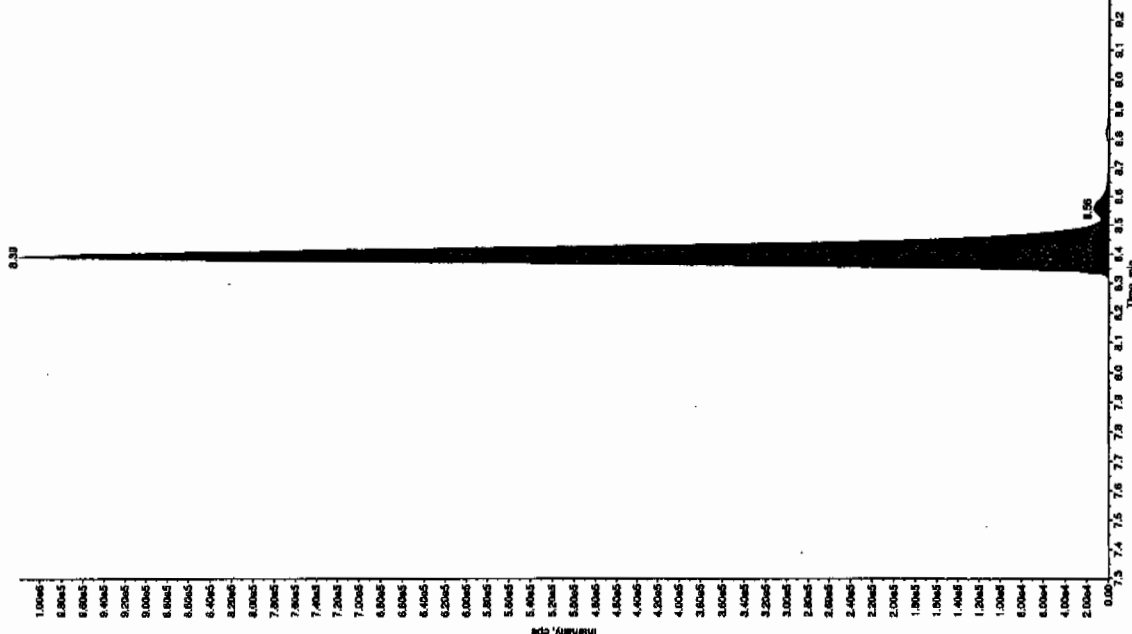
Sample Name: 24421014 Sample ID: 24421014 File: EX50122008.wif  
 Peak Name: 105.000000 Mass(es): 105.046.0 amu  
 Comment: LCX832125 /Amidation

Sample Index: 1  
 Sample Type: Unknown  
 Calculation: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/23/2010  
 Acq. Time: 3:57:54 AM  
 Modified: No



Sample Name: 24421014 Sample ID: 24421014 File: EX50122008.wif  
 Peak Name: 105.000000 Mass(es): 105.046.0 amu  
 Comment: LCX832125 /Amidation

Sample Index: 1  
 Sample Type: Unknown  
 Calculation: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/23/2010  
 Acq. Time: 3:57:54 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 1450.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 15.0 sec  
 Expected RT: 8.30 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.39 min  
 Area: 3.96e+006 counts  
 Height: 1018713.623 cps  
 Start Time: 8.27 min  
 End Time: 8.72 min

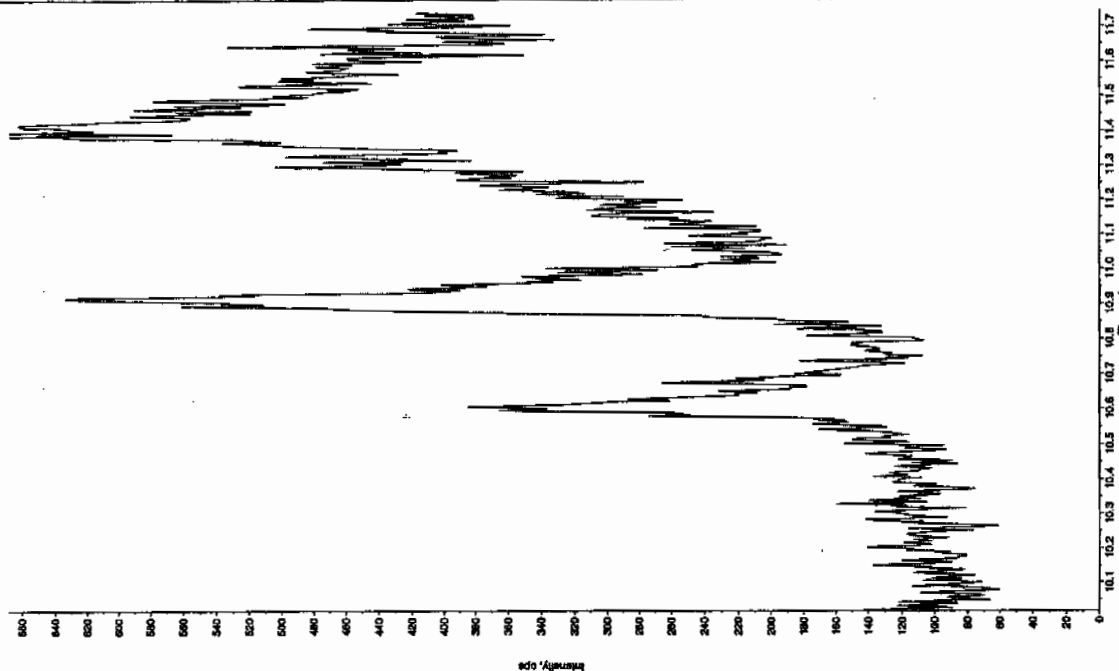


\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



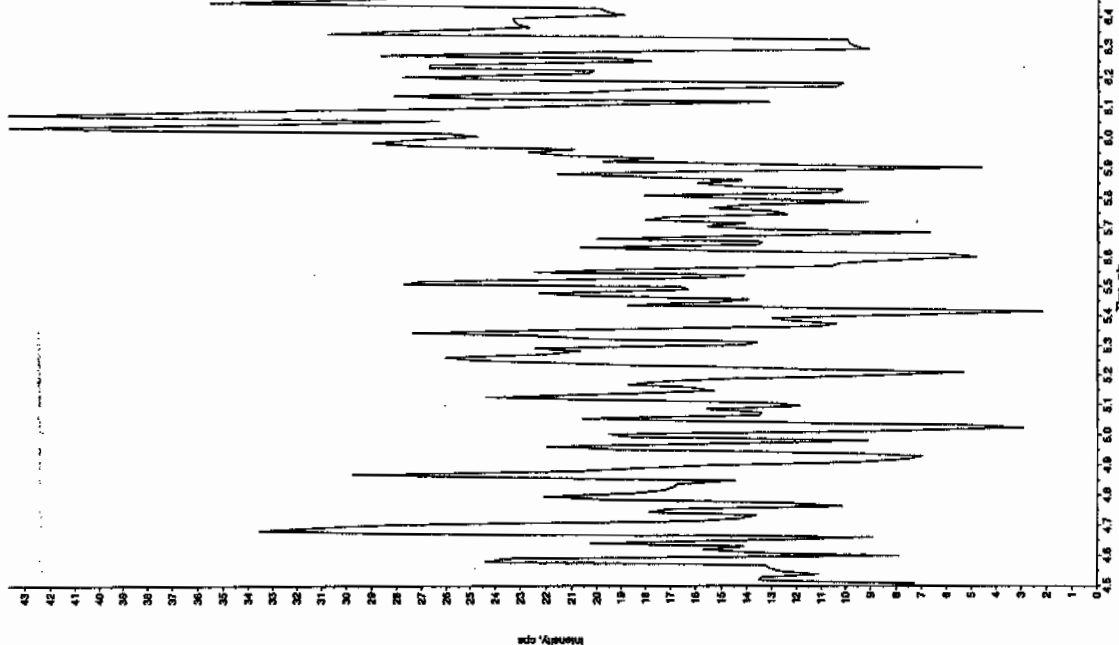
Sample Name: "244210014" Sample ID: "940579121" File: "EXS01220063.wif"  
 Peak Name: "193(o-cresyl) phosphate" Mass(es): "353.191.0 amu"  
 Comment: "LCX832125" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/23/2010  
 Acq. Time: 3:57:54 AM  
 Modified: No



Sample Name: "244210014" Sample ID: "940579121" File: "EXS01220063.wif"  
 Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "186.046.0 amu"  
 Comment: "LCX832125" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/23/2010  
 Acq. Time: 3:57:54 AM  
 Modified: No



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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7713

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210015

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125140a

Date Analyzed: 28-JAN-10 07:42

Units: ug/kg

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

\*Concentration =

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

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125140a

Date: 28-Jan-2010

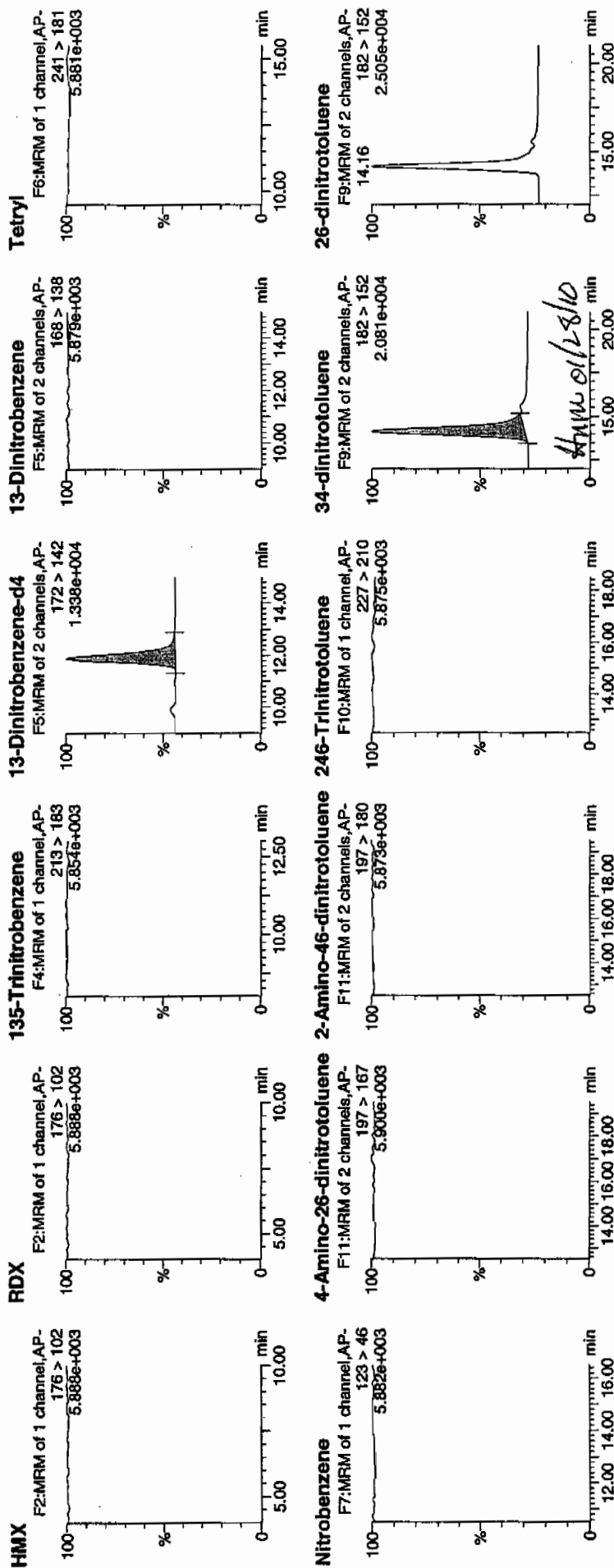
Time: 07:42:33

ID: 244210015

Vial: 2:4,A

1077  
1/28/10

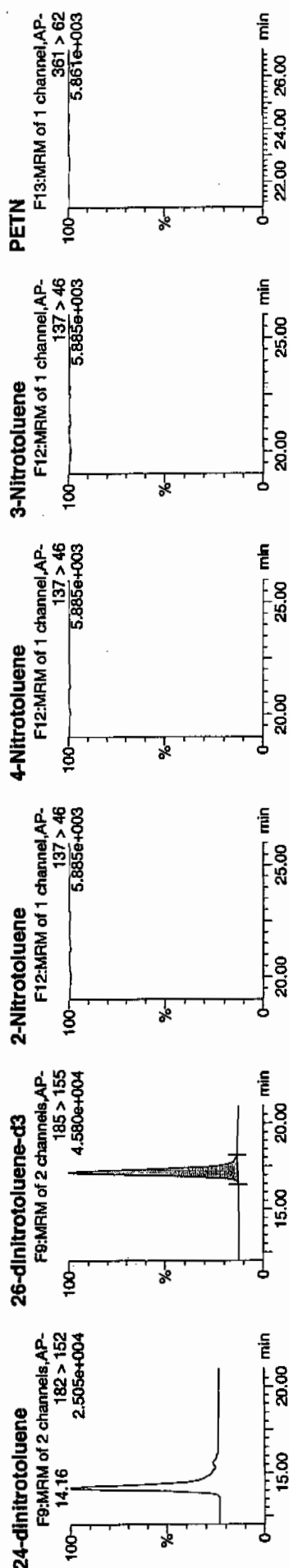
1940579 / 8022 / 21



### Quantify Sample Report

**GEL Laboratories, LLC / Analyst : Michael A. Penny**

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010



ID	Name	Trace	Area	Area %	Area Std	Abs Peak	Response	Peak	Mod Date	Mod Time	Amount	% Rec	% Dev	SIN
244210015	HMX	176 > 102			2888.518									
244210015	RDX	176 > 102			2888.518									
244210015	135-Trinitrobenzene	213 > 183			2888.518									
244210015	13-Dinitrobenzene-d4	172 > 142	11.90	2888.518		2888.518	bb	2888.518			486.5446	97.3	-2.7	529.5
244210015	13-Dinitrobenzene	168 > 138			2888.518									
244210015	Tetryl	241 > 181			2888.518									
244210015	Nitrobenzene	123 > 46			2888.518									
244210015	4-Amino-26-dinitrotoluene	197 > 167			16979.809									
244210015	2-Amino-46-dinitrotoluene	197 > 180			16979.809									
244210015	246-Trinitrotoluene	227 > 210			16979.809									
244210015	34-dinitrotoluene	182 > 152	14.16	7881.951	16979.809	7881.951	bb	232.098			255.6103	102.2	2.2	595.5
244210015	26-dinitrotoluene	182 > 152			16979.809									
244210015	24-dinitrotoluene	182 > 152			16979.809									
244210015	26-dinitrotoluene-d3	185 > 155	17.15	16979.809		16979.809	bb				520.9061	104.2	4.2	1461.2
244210015	2-Nitrotoluene	137 > 46			16979.809									
244210015	4-Nitrotoluene	137 > 46			16979.809									
244210015	3-Nitrotoluene	137 > 46			16979.809									
244210015	PETN	361 > 62			16979.809									

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7713

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 244210015

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01220069.wiff

Date Analyzed: 23-JAN-10 04:13

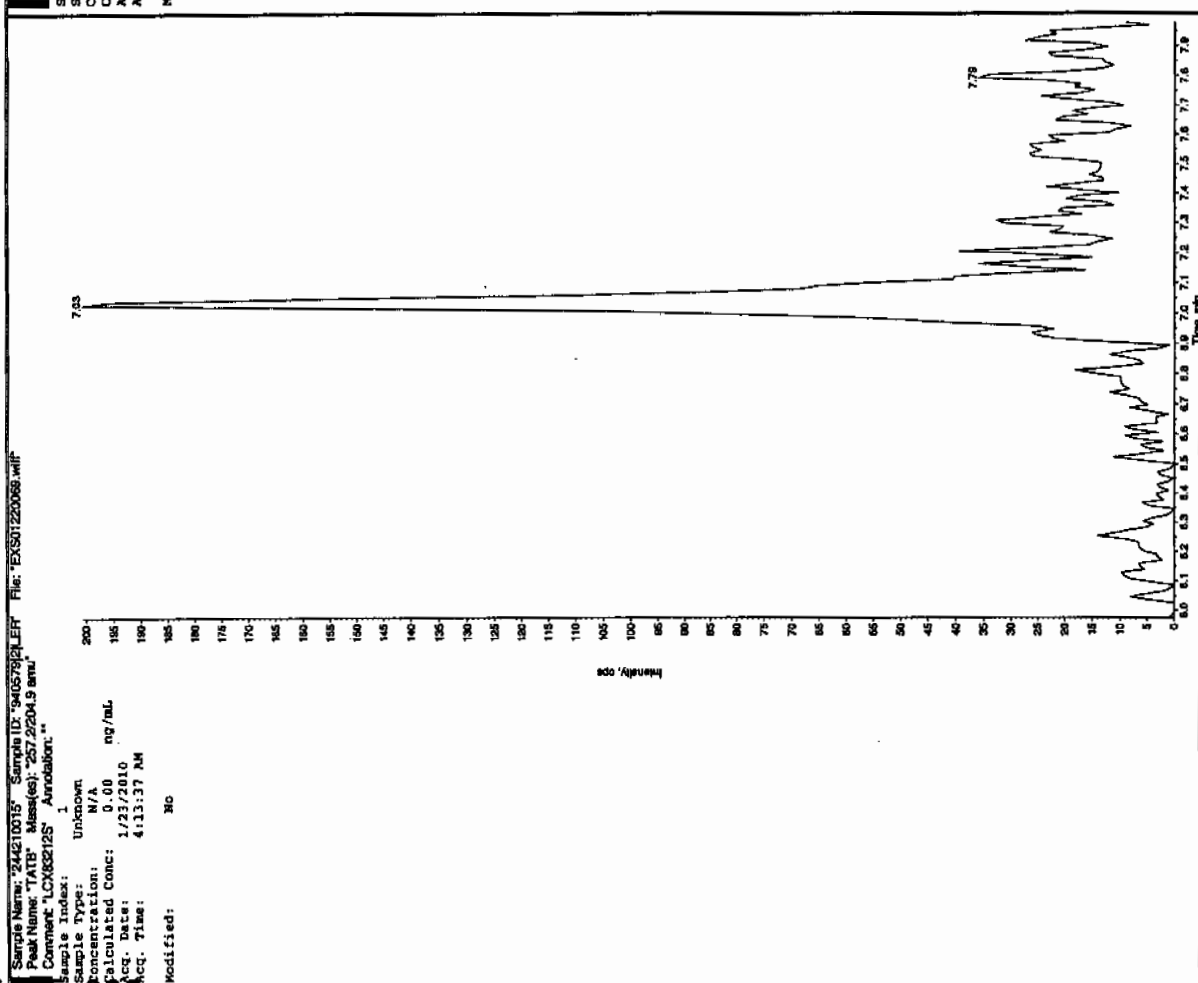
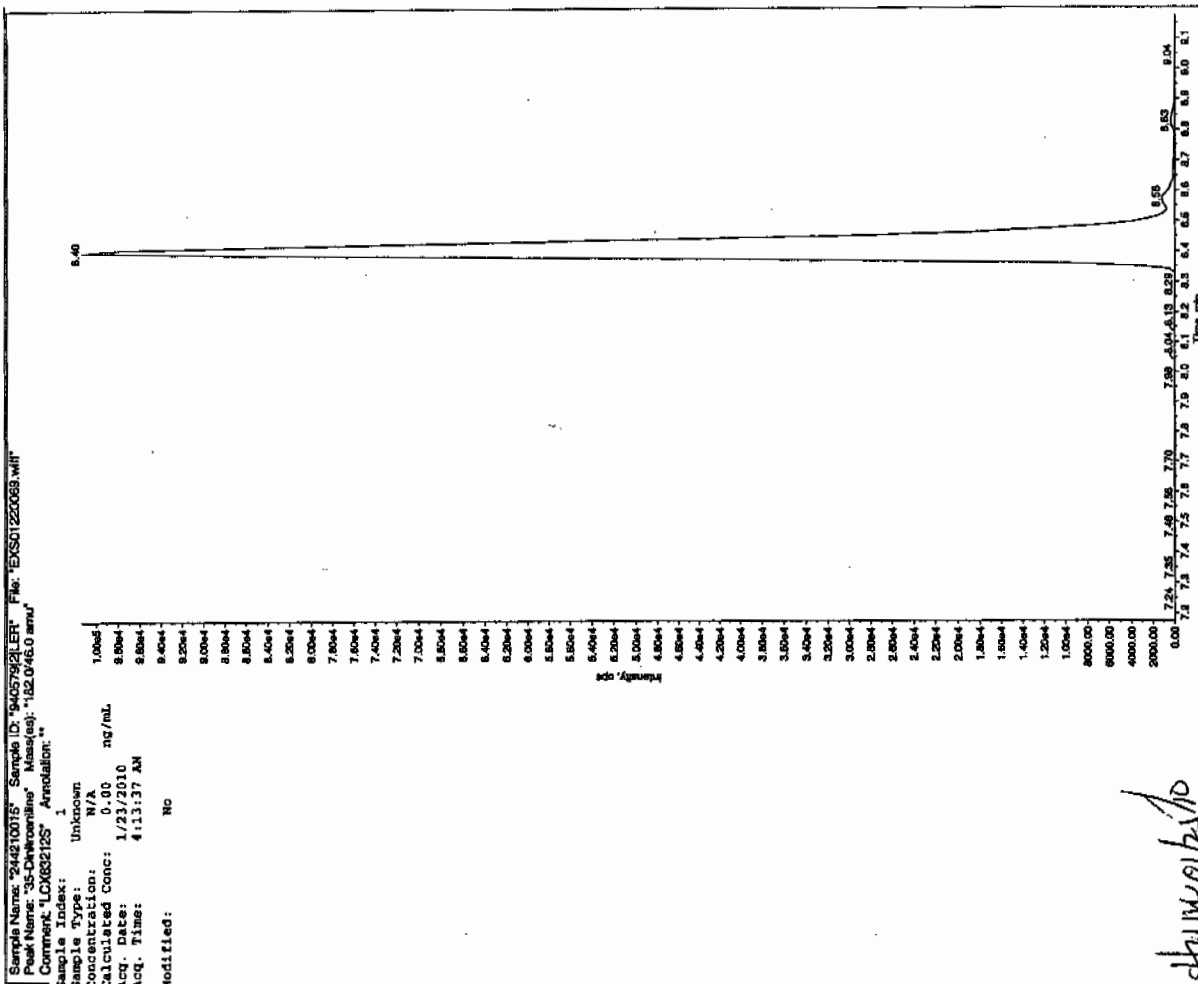
Units: ug/kg

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

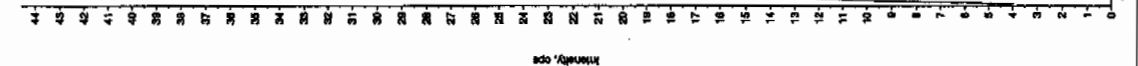
Raw 1128110



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

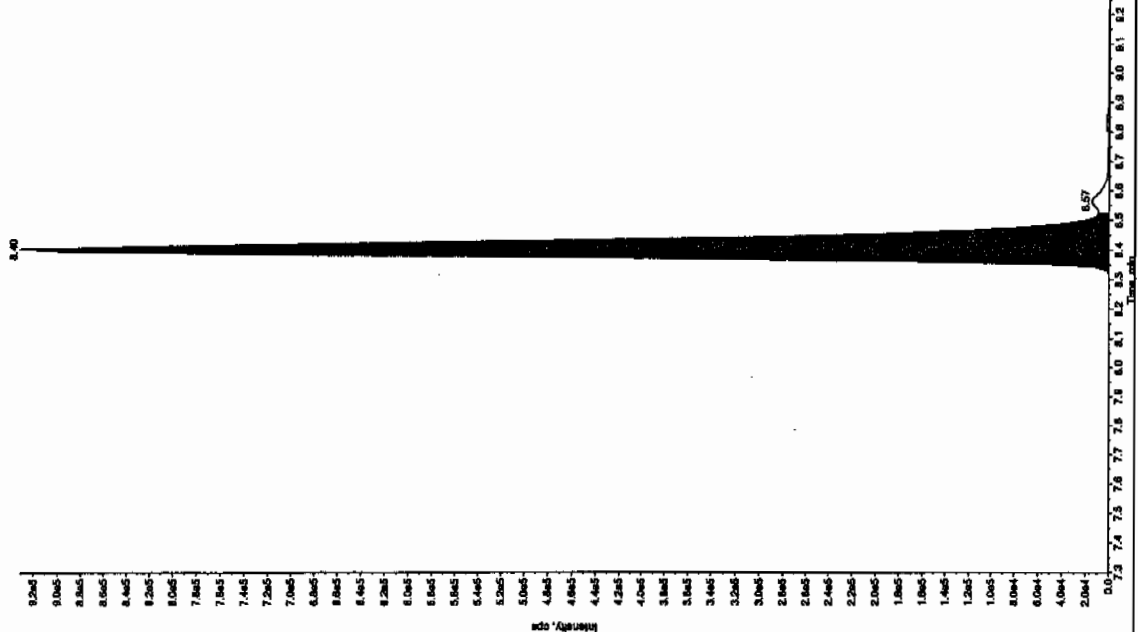
Sample Name: "244210015" Sample ID: "94057921ER" File: "EX501220068.wif"  
 Peak Name: "28-Diuretic-4-nitrofluorene" Mass(es): "166.046.0 amu"  
 Comment: "LCX832125" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/23/2010  
 Acq. Time: 4:13:37 AM  
 Modified: No



Sample Name: "244210015" Sample ID: "94057921ER" File: "EX501220068.wif"  
 Peak Name: "34-Diuretic-4-nitrofluorene" Mass(es): "182.171.9 amu"  
 Comment: "LCX832125" Annotation: "

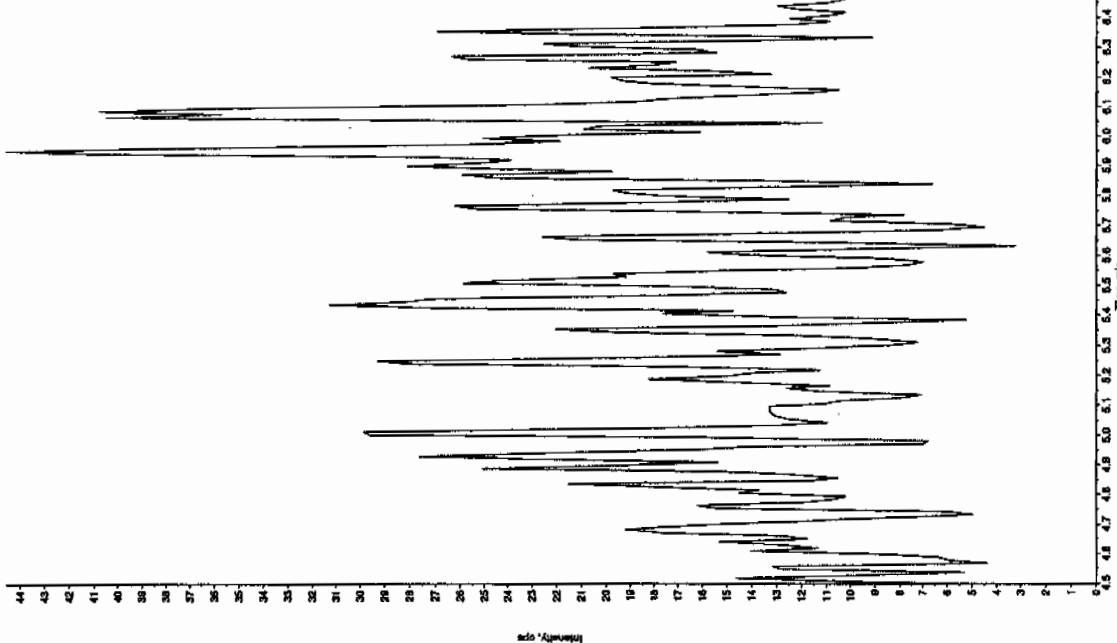
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 292. ng/mL  
 Acq. Date: 1/23/2010  
 Acq. Time: 4:13:37 AM  
 Modified: No  
 Proc. Algorithm: Total Ion - IQA  
 Min. Peak Height: 1460.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 15.0 sec  
 Expected RT: 8.30 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.40 min  
 Area: 3.67e+006 counts  
 Height: 93150.132 cps  
 Start Time: 8.29 min  
 End Time: 8.53 min



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

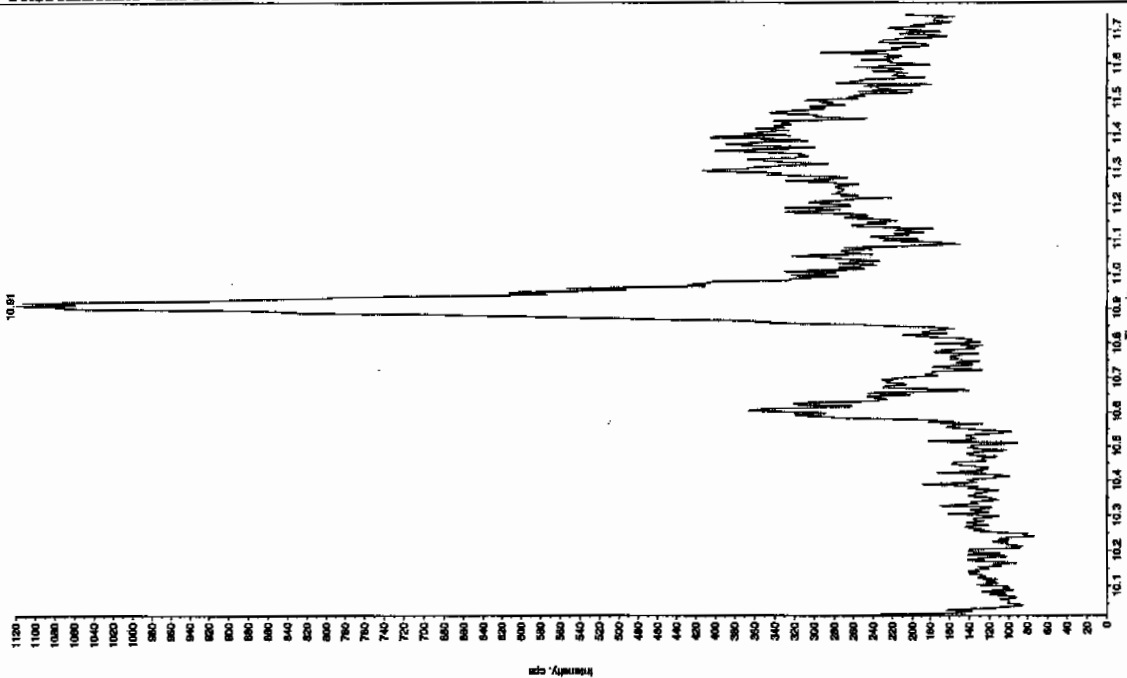
Sample Name: "244210015" Sample ID: "940579121ER" File: "EX501220068.wif"  
 Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "186.046.0 amu"  
 Comment: "LCX032125" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.010 ng/mL  
 Acq. Date: 1/23/2010  
 Acq. Time: 4:13:37 AM  
 Modified: No



Sample Name: "244210015" Sample ID: "940579121ER" File: "EX501220068.wif"  
 Peak Name: "bis(o-cresyl) phosphate" Mass(es): "369.181.0 amu"  
 Comment: "LCX032125" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.010 ng/mL  
 Acq. Date: 1/23/2010  
 Acq. Time: 4:13:37 AM  
 Modified: No



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



# STANDARDS DATA

SW846 8321A Modified-Explosives  
Calibration Standard Concentration Levels

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	CCV
3,4-Dinitrotoluene (Surrogate)	12.5	25	100	200	400	500		300
<b>Primary Analytes</b>								
HMX	25	50	200	400	800	1000	na	600
RDX	25	50	200	400	800	1000	na	600
DNX	25	50	200	400	800	1000	na	600
MXN	25	50	200	400	800	1000	na	600
TNX	25	50	200	400	800	1000	na	600
1,3,5-Trinitrobenzene	25	50	200	400	800	1000	na	600
1,3-Dinitrobenzene	25	50	200	400	800	1000	na	600
Nitrobenzene	25	50	200	400	800	1000	na	600
Tetryl	25	50	200	400	800	1000	na	600
Nitroglycerin	50	100	200	400	800	1000	na	600
2,4,6-Trinitrotoluene	25	50	200	400	800	1000	na	600
2-Amino-4,6-dinitrotoluene	25	50	200	400	800	1000	na	600
4-Amino-2,6-dinitrotoluene	25	50	200	400	800	1000	na	600
2,4-Dinitrotoluene	25	50	200	400	800	1000	na	600
2,6-Dinitrotoluene	25	50	200	400	800	1000	na	600
2-Nitrotoluene	25	50	200	400	800	1000	na	600
4-Nitrotoluene	25	50	200	400	800	1000	na	600
3-Nitrotoluene	25	50	200	400	800	1000	na	600
PETN	25	50	200	400	800	1000	na	600
Picric Acid	200	400	1600	3200	6400	8000	na	4800
3,4-Dinitrotoluene (Surrogate)	25	50	125	250	375	500	1000	250
<b>Secondary Analytes</b>								
2,4-Diamino-6-nitrotoluene	50	100	250	500	750	1000	2000	500
2,6-Diamino-4-nitrotoluene	50	100	250	500	750	1000	2000	500
3,5-Dinitroaniline	50	100	250	500	750	1000	2000	500
TATB	50	100	250	500	750	1000	2000	500
Tris(o-Cresyl)phosphate	50	100	250	500	750	1000	2000	500

All values are ug/L without the prep factor

Calibration Levels 8321A-Modified-EXPL.xls (08/09A)

Calibration Levels 8321A-Modified-EXPL.xls

Explosives Initial Calibration

Lab Name: GEL Laboratories LLC

GEL Job No: 10-1160-1

Lab Code: GEL

Run Date: 22-JAN-10.25-JAN-10

LCMSMS Instrument ID: LCMSMS

Method: 8321A Modified

HPLC Column: Phenomenex Ultracarb 5 ODS(20)

Calibration Type: Average RF

Parname	1	2	3	4	5	6	Ave RF	RSD	Q
Data File:	EXP0125003a	EXP0125004a	EXP0125005a	EXP0125006a	EXP0125007a	EXP0125008a			
1,3-Dinitrobenzene-d4	5.832	5.787	6.227	6.458	5.56	5.758	5.937	5.651	
2,4,6-Trinitrotoluene	.291	.314	.307	.33	.315	.35	0.318	6.37	
2,4-Dinitrotoluene	.266	.236	.248	.257	.257	.261	0.254	4.281	
2,6-Dinitrotoluene	1.098	1.063	1.109	1.102	1.101	1.136	1.102	2.135	
2,6-Dinitrotoluene-d3	32.788	34.124	32.326	33.697	32.571	30.074	32.597	4.342	
2-Amino-4,6-dinitrotoluene	.357	.34	.36	.395	.383	.411	0.374	7.093	
3,4-Dinitrotoluene	.897	.857	.859	.974	.897	.964	0.908	5.56	
4-Amino-2,6-dinitrotoluene	.224	.204	.265	.278	.276	.315	0.260	15.398	
HMX	3.197	3.208	2.918	3.261	3.211	3.241	3.173	4.004	
Nitrobenzene	.797	.997	.799	.806	.871	.858	0.855	8.992	
RDX	2.287	2.428	1.935	2.024	2.303	2.216	2.199	8.428	
Tetryl	.914	.973	.905	.866	.809	.744	0.869	9.411	
m-Dinitrobenzene	1.053	1.14	1.161	1.232	1.185	1.188	1.160	5.223	
m-Nitrotoluene	.087	.096	.092	.097	.091	.099	0.094	4.837	
o-Nitrotoluene	.167	.176	.171	.158	.159	.167	0.166	4.11	
p-Nitrotoluene	.087	.091	.082	.08	.076	.081	0.083	6.385	

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: 10-1160-1

Lab Code: GEL

Run Date: 22-JAN-10.25-JAN-10

LCMSMS Instrument ID: LCMSMS

Method: 8321A Modified

HPLC Column: Phenomenex Ultracarb 5 ODS(20)

Calibration Type: Linear

	1	2	3	4	5	6	Slope	Intercept	COD	Q
Calibration Level:										
Data File:	EXP0125003a	EXP0125004a	EXP0125005a	EXP0125006a	EXP0125007a	EXP0125008a				
Parname										
1,3,5-Trinitrobenzene	651.953	1067.5	3665.01	7077.27	12962.6	16285.9	2.817	28.102	.999	

Linear fit:  $Y=mx +b$   
where b is intercept and m is slope

COD is Coefficient of Determination

Q column used to flag COD values outside of Limit (<0.990)

\* Values outside of QC Limit

# Explosives Initial Calibration

Lab Name: GEL Laboratories LLC

GEL Job No: 10-1160-I

Lab Code: GEL

Run Date: 22-JAN-10.25-JAN-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:	EXP0125003a	EXP0125004a	EXP0125005a	EXP0125006a	EXP0125007a	EXP0125008a					
Paranname:											
PETN	2319.71	4827.48	15533.2	25594.2	42172.6	47290	2	-0004964	47.5	.9972	

Quadratic Fit:  $y = Ax^2 + Bx + C$   
 where  $X^2$  column above is coefficient A  
 X column above is coefficient B  
 intercept is C

COD is Coefficient of Determination

Q column used to flag COD outside of Limit (<0.990)

\* Values outside of QC Limit

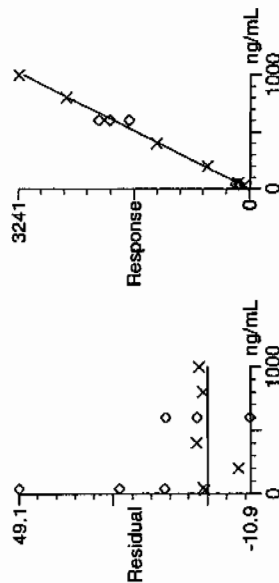
# Quantify Calibration Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

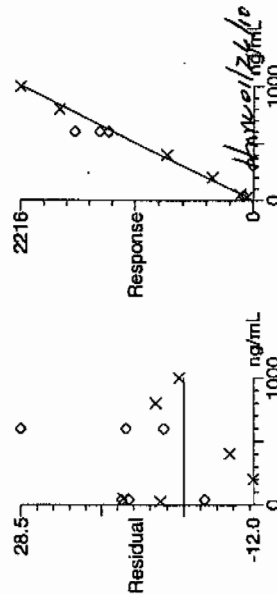
Dataset: C:\MASSLYNX\New\_Exp\PRO\012510expA.qld, Time: Tue Jan 26 09:24:51 2010

Method: C:\MASSLYNX\New\_Exp\PRO\MethDB\012510expa.mdb, Time: Mon Jan 25 16:14:14 2010  
Calibration: Untitled, Time: Tue Jan 26 09:24:51 2010

Compound name: HMX  
Response Factor: 3.17253  
RRF SD: 0.127021, % Relative SD: 4.00378  
Response type: Internal Std ( Ref 4 ), Area \* ( IS Conc. / IS Area )  
Curve type: RF



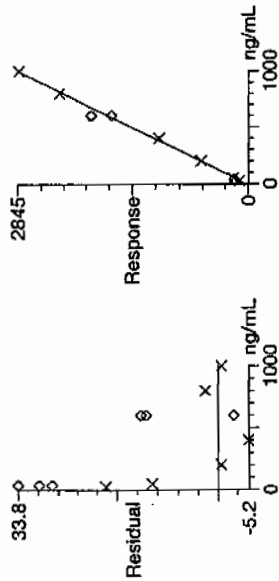
Compound name: RDX  
Response Factor: 2.1986  
RRF SD: 0.185302, % Relative SD: 8.42817  
Response type: Internal Std ( Ref 4 ), Area \* ( IS Conc. / IS Area )  
Curve type: RF



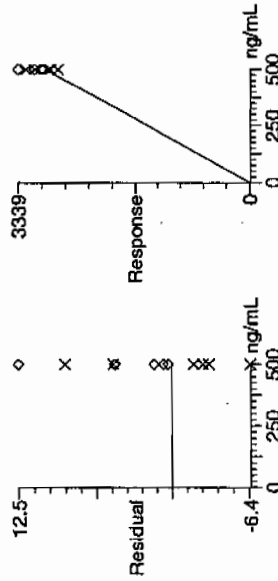
**Quantify Calibration Report**  
 GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA.qld, Time: Tue Jan 26 09:24:51 2010

Compound name: 135-Trinitrobenzene  
 Correlation coefficient:  $r = 0.999489$ ,  $r^2 = 0.998979$   
 Calibration curve:  $2.81694 \cdot x + 28.1015$   
 Response type: Internal Std (Ref 4), Area \* (IS Conc. / IS Area)  
 Curve type: Linear, Origin: Exclude, Weighting: Null, Axis trans: None



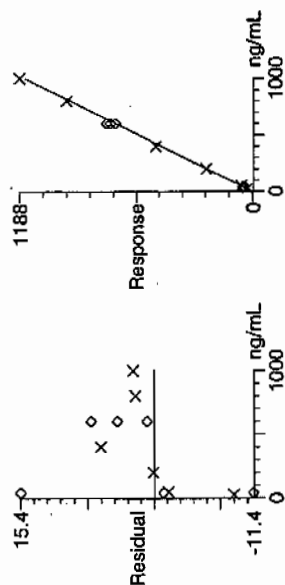
Compound name: 13-Dinitrobenzene-d4  
 Response Factor: 5.9368  
 RRF SD: 0.335509, % Relative SD: 5.65134  
 Response type: External Std, Area  
 Curve type: RF



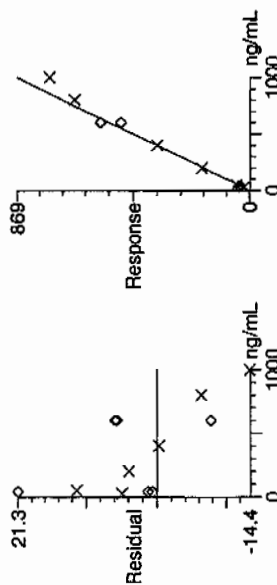
# Quantify Calibration Report GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA.qld, Time: Tue Jan 26 09:24:51 2010

Compound name: 13-Dinitrobenzene  
Response Factor: 1.15998  
RRF SD: 0.0605914, % Relative SD: 5.22347  
Response type: Internal Std (Ref 4), Area \* (IS Conc. / IS Area)  
Curve type: RF



Compound name: Tetra  
Response Factor: 0.868613  
RRF SD: 0.0817457, % Relative SD: 9.41106  
Response type: Internal Std (Ref 4), Area \* (IS Conc. / IS Area)  
Curve type: RF



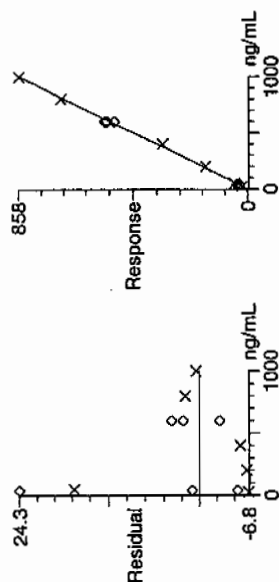


# Quantify Calibration Report

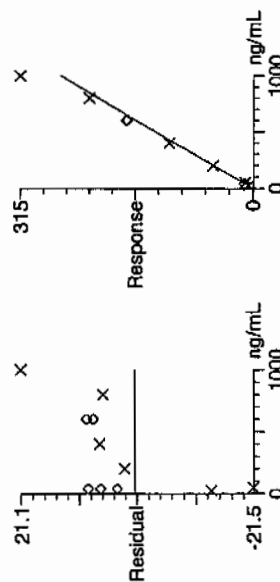
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA.qld, Time: Tue Jan 26 09:24:51 2010

Compound name: Nitrobenzene  
 Response Factor: 0.854595  
 RRF SD: 0.076847, % Relative SD: 8.99222  
 Response type: Internal Std ( Ref 4 ), Area \* ( IS Conc. / IS Area )  
 Curve type: RF



Compound name: 4-Amino-26-dinitrotoluene  
 Response Factor: 0.260514  
 RRF SD: 0.040113, % Relative SD: 15.3977  
 Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )  
 Curve type: RF

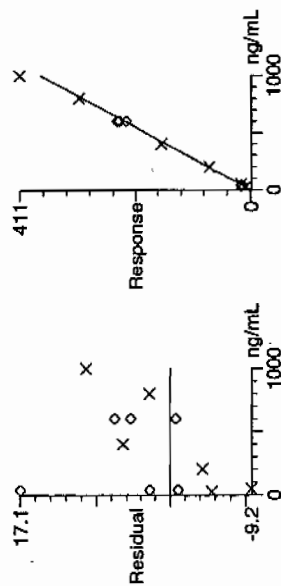


Printed: Tue Jan 26 11:27:45 2010, Page 5 of 9

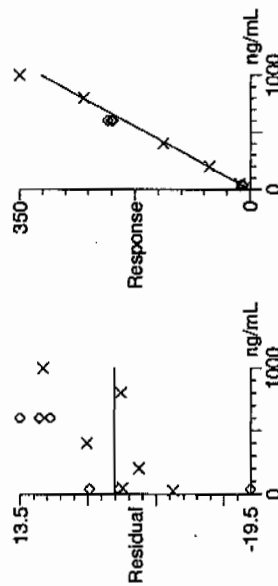
Quantify Calibration Report  
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PROV012510expA.qld, Time: Tue Jan 26 09:24:51 2010

Compound name: 2-Amino-46-dinitrotoluene  
Response Factor: 0.374285  
RRF SD: 0.0265466, % Relative SD: 7.09263  
Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )  
Curve type: RF



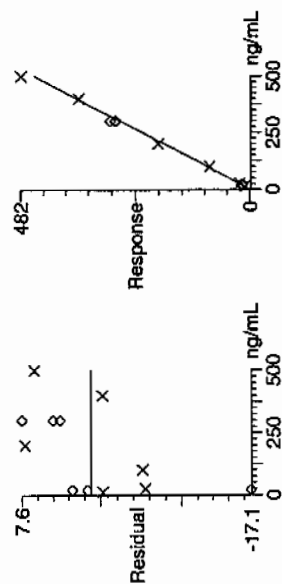
Compound name: 246-Trinitrotoluene  
Response Factor: 0.318064  
RRF SD: 0.020262, % Relative SD: 6.37043  
Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )  
Curve type: RF



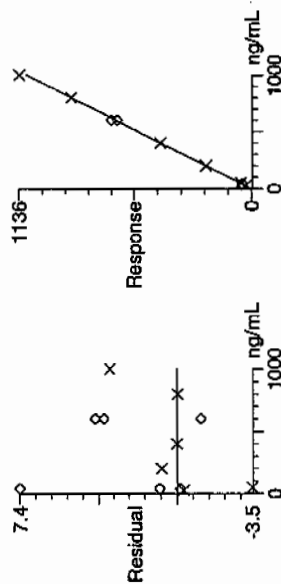
# Quantify Calibration Report GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp\PRO\012510expA.qld, Time: Tue Jan 26 09:24:51 2010

Compound name: 34-dinitrotoluene  
Response Factor: 0.908014  
RRF SD: 0.0504831, % Relative SD: 5.55973  
Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )  
Curve type: RF



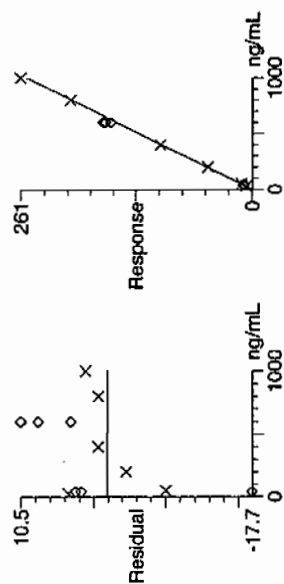
Compound name: 26-dinitrotoluene  
Response Factor: 1.10154  
RRF SD: 0.0235225, % Relative SD: 2.13541  
Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )  
Curve type: RF



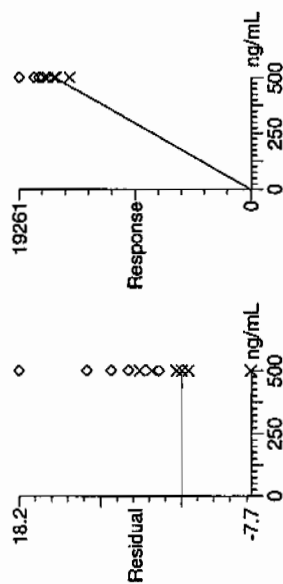
Quantify Calibration Report  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp\PRO\012510expA.qld, Time: Tue Jan 26 09:24:51 2010

Compound name: 24-dinitrotoluene  
Response Factor: 0.254063  
RRF SD: 0.0108762, % Relative SD: 4.28092  
Response type: Internal Std (Ref 14), Area \* (IS Conc. / IS Area)  
Curve type: RF



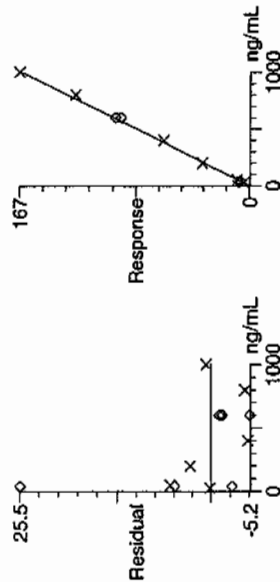
Compound name: 26-dinitrotoluene-d3  
Response Factor: 32.5967  
RRF SD: 1.41533, % Relative SD: 4.34194  
Response type: External Std, Area  
Curve type: RF



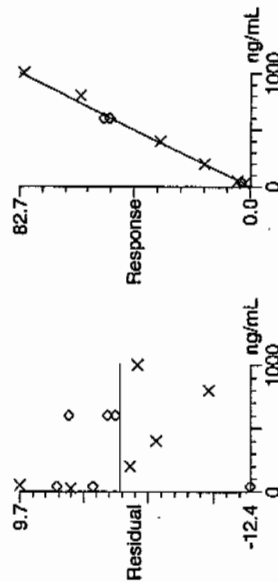
**Quantify Calibration Report**  
 GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp\PRO1012510expA.qld, Time: Tue Jan 26 09:24:51 2010

Compound name: 2-Nitrotoluene  
 Response Factor: 0.166303  
 RRF SD: 0.00683474, % Relative SD: 4.10981  
 Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )  
 Curve type: RF



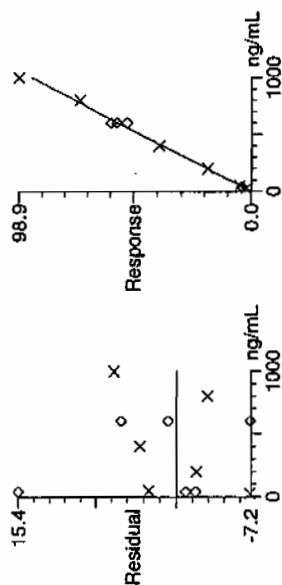
Compound name: 4-Nitrotoluene  
 Response Factor: 0.0826798  
 RRF SD: 0.00527876, % Relative SD: 6.38459  
 Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )  
 Curve type: RF



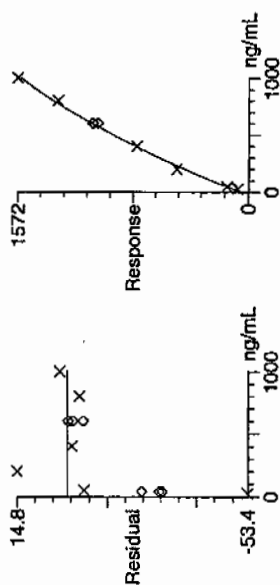
**Quantify Calibration Report**  
 GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA.qld, Time: Tue Jan 26 09:24:51 2010

Compound name: 3-Nitrotoluene  
 Response Factor: 0.0933598  
 RRF SD: 0.00451572, % Relative SD: 4.83691  
 Response type: Internal Std (Ref 14), Area \* (IS Conc. / IS Area)  
 Curve type: RF



Compound name: PETN  
 Coefficient of Determination: 0.997185  
 Calibration curve:  $-0.000496352 * x^2 + 1.99974 * x + 47.5002$   
 Response type: Internal Std (Ref 14), Area \* (IS Conc. / IS Area)  
 Curve type: 2nd Order, Origin: Exclude, Weighting: Null, Axis trans: None



Explosives Initial Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1160-1

Lab Code: GEL

GEL Sample ID: WXXICV

GEL Data File EXP0125010a

Analysis Date: 25-JAN-10 15:46

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	584.029	97	
1,3-Dinitrobenzene-d4	500	523.981	105	
2,4,6-Trinitrotoluene	600	654.852	109	
2,4-Dinitrotoluene	600	662.983	110	
2,6-Dinitrotoluene	600	623.146	104	
2,6-Dinitrotoluene-d3	500	512.68	103	
2-Amino-4,6-dinitrotoluene	600	596.059	99	
3,4-Dinitrotoluene	300	322.78	108	
4-Amino-2,6-dinitrotoluene	600	646.592	108	
HMX	600	534.345	89	
Nitrobenzene	600	582.675	97	
PETN	600	572.063	95	
RDX	600	620.495	103	
Tetryl	600	550.312	92	
m-Dinitrobenzene	600	604.886	101	
m-Nitrotoluene	600	631.363	105	
o-Nitrotoluene	600	591.123	99	
p-Nitrotoluene	600	630.068	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

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Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA.qld, Time: Tue Jan 26 09:24:51 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125010a

Date: 25-Jan-2010

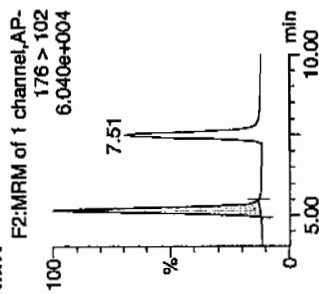
Time: 15:46:04

ID: WXX100125-07ICV

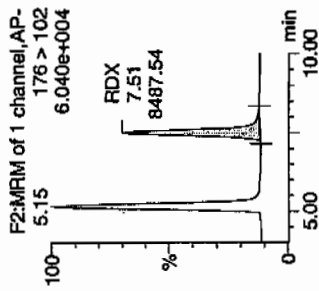
Vial: 1:1,B

WAT  
1/26/10

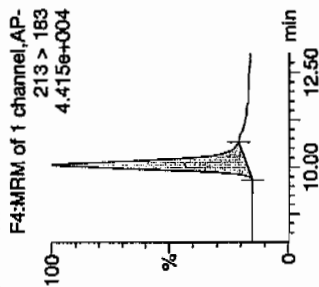
## HMX



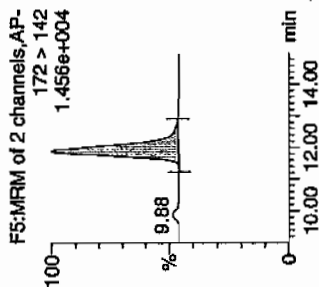
## RDX



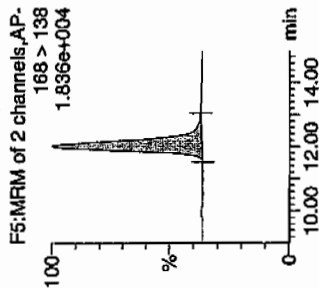
## 135-Trinitrobenzene



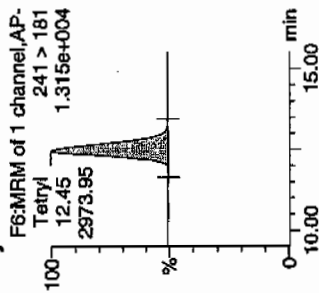
## 13-Dinitrobenzene-d4



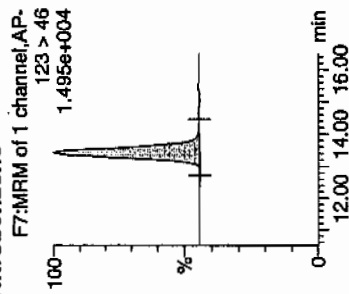
## 13-Dinitrobenzene



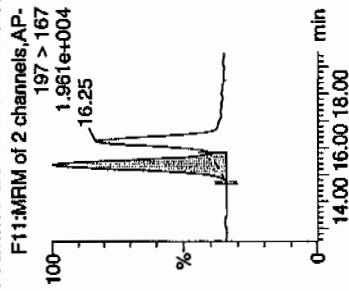
## Tetryl



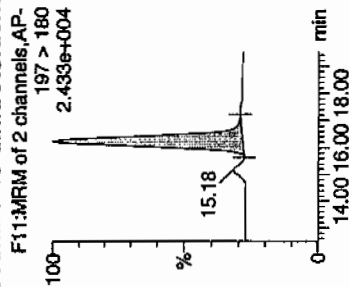
## Nitrobenzene



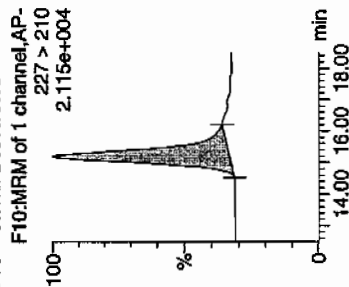
## 4-Amino-26-dinitrotoluene



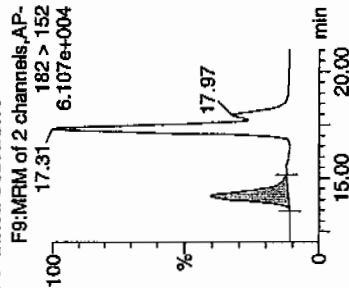
## 2-Amino-46-dinitrotoluene



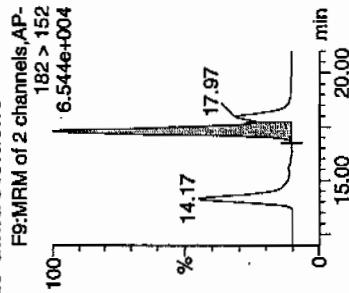
## 246-Trinitrotoluene



## 34-dinitrotoluene



## 26-dinitrotoluene

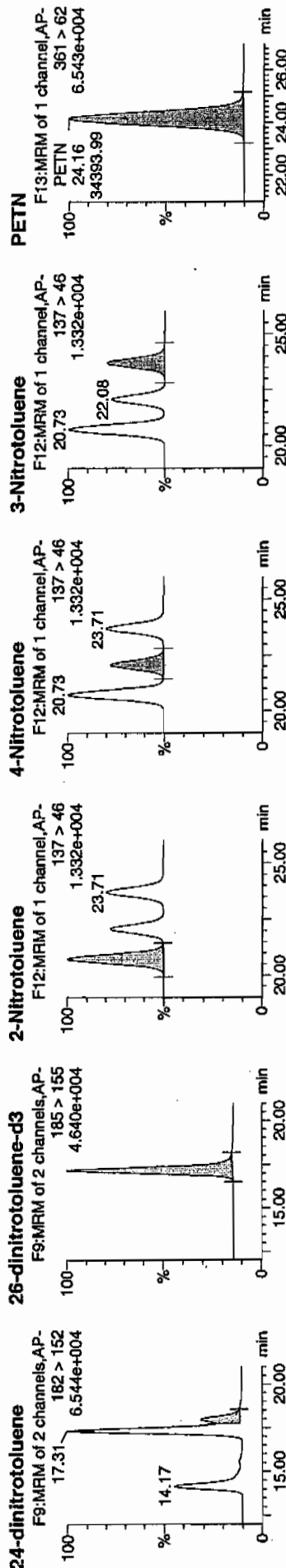




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Quantify Sample Report  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp\PRO\012510expA.qld, Time: Tue Jan 26 09:24:51 2010



ID	Name	Trace	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	%Rec	%Dev	ISN
WXX100125-07ICV	HMZ	176 > 102	5.15	10546.914	3110.769	10546.914	1695.226	bb	534.3448	89.1	-10.9	1064.1
WXX100125-07ICV	RDX	176 > 102	7.51	8487.540	3110.769	8487.540	1364.219	bb	620.4949	103.4	3.4	702.9
WXX100125-07ICV	135-Trinitrobenzene	213 > 183	10.07	10410.370	3110.769	10410.370	1673.279	bb	584.0293	97.3	-2.7	558.3
WXX100125-07ICV	13-Dinitrobenzene-d4	172 > 142	11.89	3110.769	3110.769	3110.769	3110.769	bb	523.9807	104.8	4.8	490.9
WXX100125-07ICV	13-Dinitrobenzene	168 > 138	12.03	4365.390	3110.769	4365.390	701.658	bb	604.8864	100.8	0.8	348.2
WXX100125-07ICV	Tetryl	241 > 181	12.45	2973.947	3110.769	2973.947	478.008	bb	550.3123	91.7	-8.3	262.3
WXX100125-07ICV	Nitrobenzene	123 > 46	13.45	3098.019	3110.769	3098.019	497.951	bb	582.6747	97.1	-2.9	191.2
WXX100125-07ICV	4-Amino-26-dinitrotoluene	197 > 167	15.35	5630.028	16711.664	5630.028	168.446	MM	646.5922	107.8	7.8	151.7
WXX100125-07ICV	2-Amino-46-dinitrotoluene	197 > 180	16.25	7456.607	16711.664	7456.607	223.096	bb	596.0593	99.3	-0.7	535.5
WXX100125-07ICV	246-Trinitrotoluene	227 > 210	15.21	6961.575	16711.664	6961.575	208.285	bb	654.8523	109.1	9.1	360.8
WXX100125-07ICV	34-dinitrotoluene	182 > 152	14.17	9795.994	16711.664	9795.994	293.089	bb	322.7797	107.6	7.6	214.3
WXX100125-07ICV	26-dinitrotoluene	182 > 152	17.31	22942.564	16711.664	22942.564	686.424	MM	623.1464	103.9	3.9	662.7
WXX100125-07ICV	24-dinitrotoluene	182 > 152	17.97	5629.797	16711.664	5629.797	168.439	MM	682.9825	110.5	10.5	148.9
WXX100125-07ICV	26-dinitrotoluene-d3	185 > 155	17.16	16711.664	16711.664	16711.664	16711.664	bb	512.6800	102.5	2.5	842.3
WXX100125-07ICV	2-Nitrotoluene	137 > 46	20.73	3285.697	16711.664	3285.697	98.306	bb	591.1230	98.5	-1.5	432.4
WXX100125-07ICV	4-Nitrotoluene	137 > 46	22.08	1741.151	16711.664	1741.151	52.094	bb	630.0677	105.0	5.0	238.5
WXX100125-07ICV	3-Nitrotoluene	137 > 46	23.71	1970.103	16711.664	1970.103	58.944	bb	631.3634	105.2	5.2	258.3
WXX100125-07ICV	PETN	361 > 62	24.16	34393.992	16711.664	34393.992	1029.042	bb	572.0632	95.3	-4.7	9765.3

GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis: 01/25/10  
 Time of Injection: 1546  
 Standard Number: WXX100125-07ICV  
 Data File: EXP0125010a

HMX	89.1
RDX	103.4
135-TNB	97.3
13-DNB	100.8
Tetryl	91.7
Nitrobenzene	97.1
4A-26-DNT	107.8
2A-46-DNT	99.3
246-TNT	109.1
34-DNT(surr)	107.6
26-DNT	103.9
24-DNT	110.5
2-NT	98.5
4-NT	105.0
3-NT	105.2
PETN	95.3

*not  
1/26/10*

Total 1621.6

Average

101.4

*from 01/26/10*

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: 10-1160-1  
 Lab Code: GEL Run Date: 22-JAN-10 25-JAN-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:	EXS01220003.wiff	EXS01220004.wiff	EXS01220005.wiff	EXS01220006.wiff	EXS01220007.wiff	EXS01220008.wiff	EXS01220009.wiff					
Parname:												
2,4-Diamino-6-nitrotoluene	124000	258000	661000	1310000	1950000	2550000	5330000	15600	2500	.077	.9999	
2,6-Diamino-4-nitrotoluene	186000	406000	951000	1950000	2910000	3940000	7760000	-11400	3950	-.032	1	
3,4-Dinitrotoluene	309000	625000	1570000	2960000	4570000	5790000	11100000	-11100	13200	-2.07	.9978	
3,5-Dinitroaniline	489000	956000	2410000	4600000	6490000	7980000	14700000	134000	8980	-.867	.9995	
TATB	68400	140000	352000	695000	1040000	1380000	2730000	954	1400	-.017	1	
tris(o-cresyl) phosphate	1260000	2610000	6150000	11500000	16300000	20600000	32800000	148000	24700	-4.21	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

012210ICAL

Peak Name: TATB  
No Internal Standard  
Q1/Q3 Masses: 257.20/204.90 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	954			
a1	1.4e+003			
a2	-0.017			
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	1.34e+005			
a1	8.98e+003			
a2	-0.867			
Correlation coefficient 0.9995				
Use Area				

Peak Name: 34-Dinitrotoluene  
No Internal Standard  
Q1/Q3 Masses: 182.08/151.90 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	-1.11e+004			
a1	1.32e+004			
a2	-2.07			
Correlation coefficient 0.9978				
Use Area				

Peak Name: 26-Diamino-4-nitrotoluene  
No Internal Standard  
Q1/Q3 Masses: 165.97/46.00 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	-1.14e+004			
a1	3.95e+003			
a2	-0.032			
Correlation coefficient 1.0000				
Use Area				

Peak Name: 24-Diamino-6-nitrotoluene  
No Internal Standard  
Q1/Q3 Masses: 165.97/46.00 amu

*Alan*  
*1/25/10*

*HW*  
*01/25/10*

012210ICAL

Iterate No

None

Weighting

Quadratic

a0 1.56e+004

a1 2.5e+003

a2 0.0771

Correlation coefficient 0.9999

Use Area

Peak Name: tris(o-cresyl) phosphate

No Internal Standard

Q1/Q3 Masses: 369.15/91.00 amu

Iterate No

None

Weighting

Quadratic

a0 1.48e+005

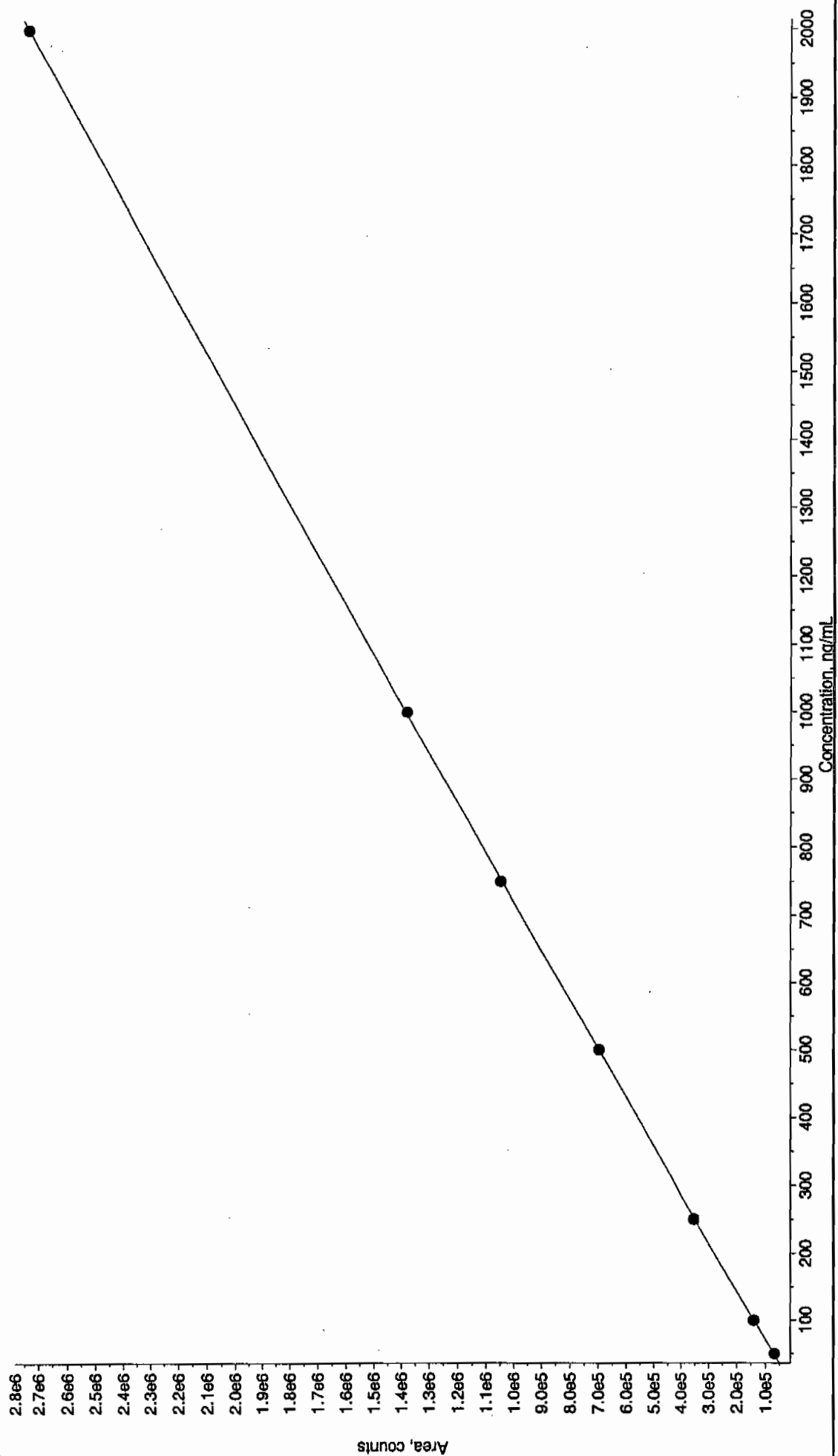
a1 2.47e+004

a2 -4.21

Correlation coefficient 1.0000

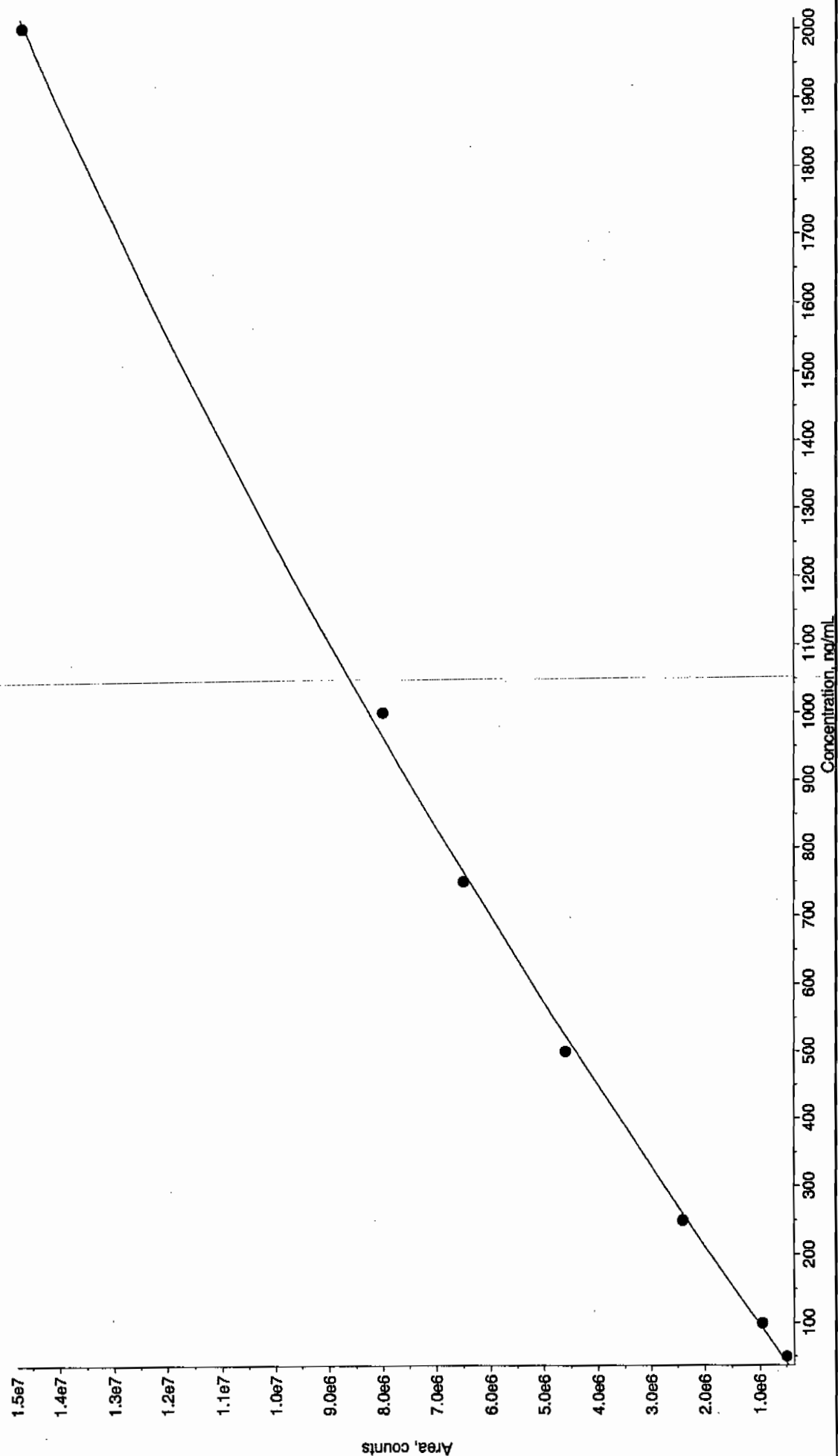
Use Area

012210.rdb (TATB): "Quadratic" Regression ("No" weighting):  $y = -0.017 x^2 + 1.4e+003 x + 954$  ( $r = 1.0000$ )



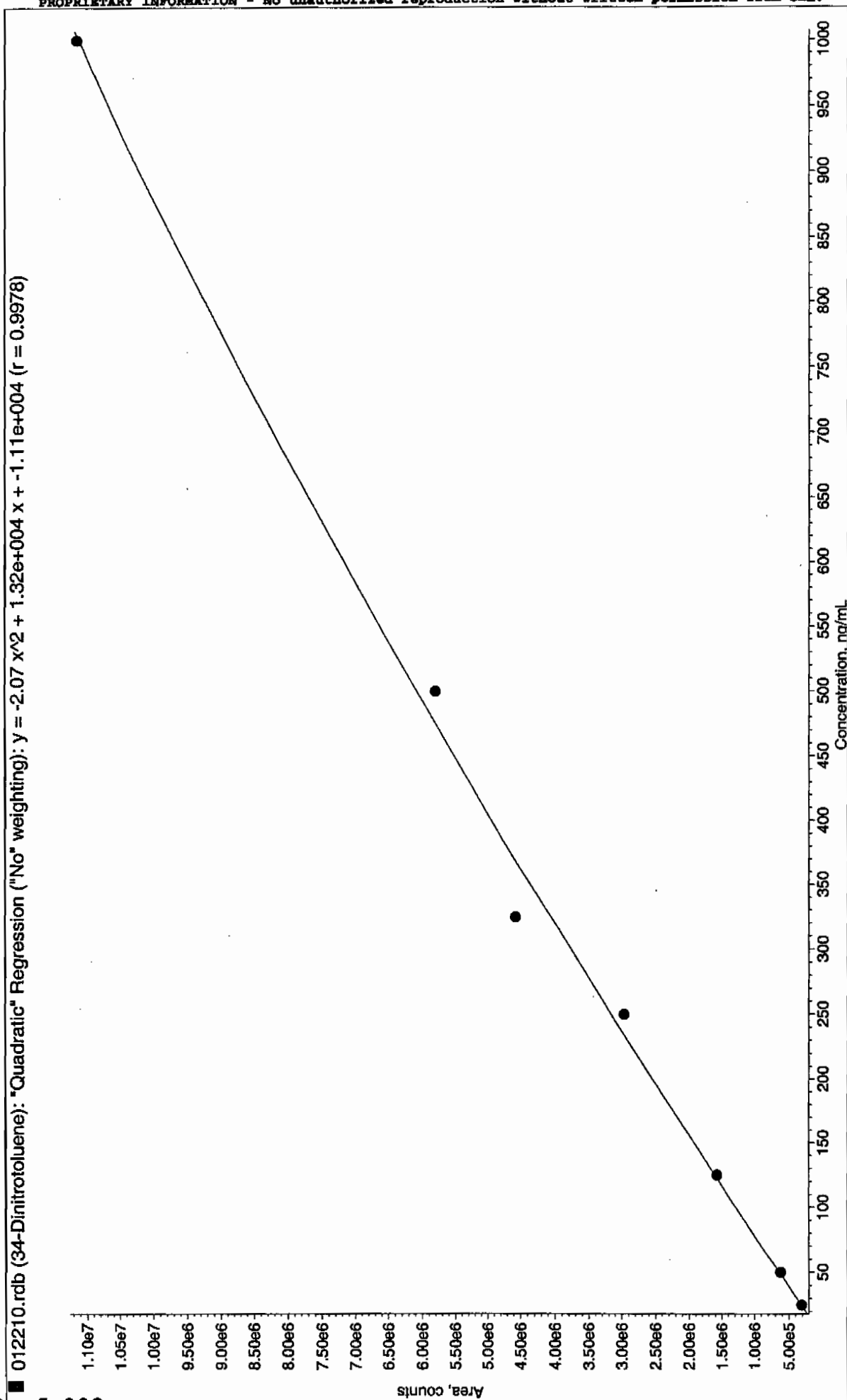
\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

012210.rdb (35-Dinitroaniline): "Quadratic" Regression ("No" weighting):  $y = -0.867 x^2 + 8.98e+003 x + 1.34e+005$  ( $r = 0.9995$ )



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

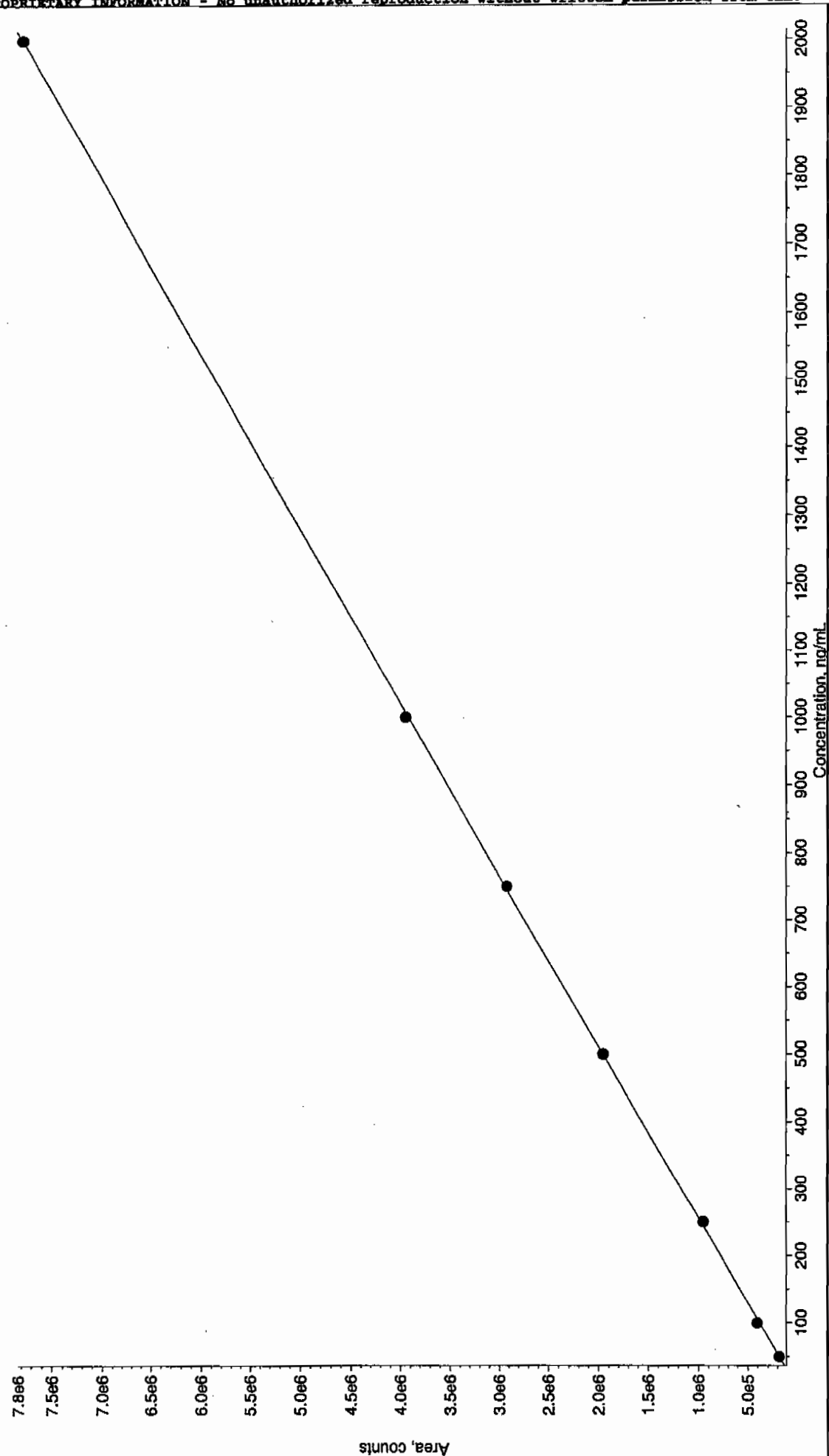
012210.rdb (34-Dinitrotoluene): "Quadratic" Regression ("No" weighting):  $y = -2.07 x^2 + 1.32e+004 x + -1.11e+004$  ( $r = 0.9978$ )



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

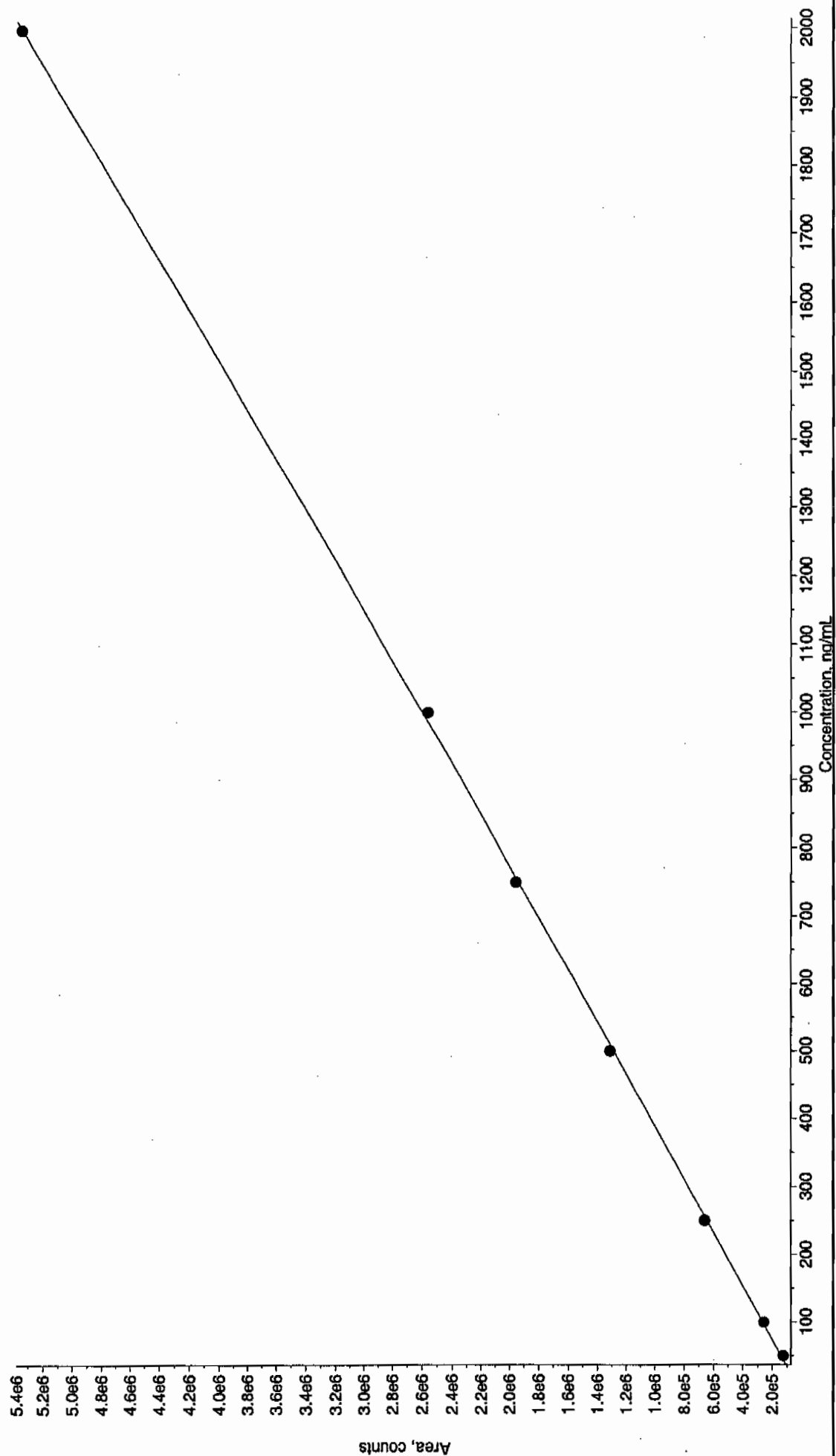


012210.rdb (26-Diamino-4-nitrotoluene): "Quadratic" Regression ("No" weighting):  $y = -0.032x^2 + 3.95e+003x + -1.14e+004$  ( $r = 1.0000$ )



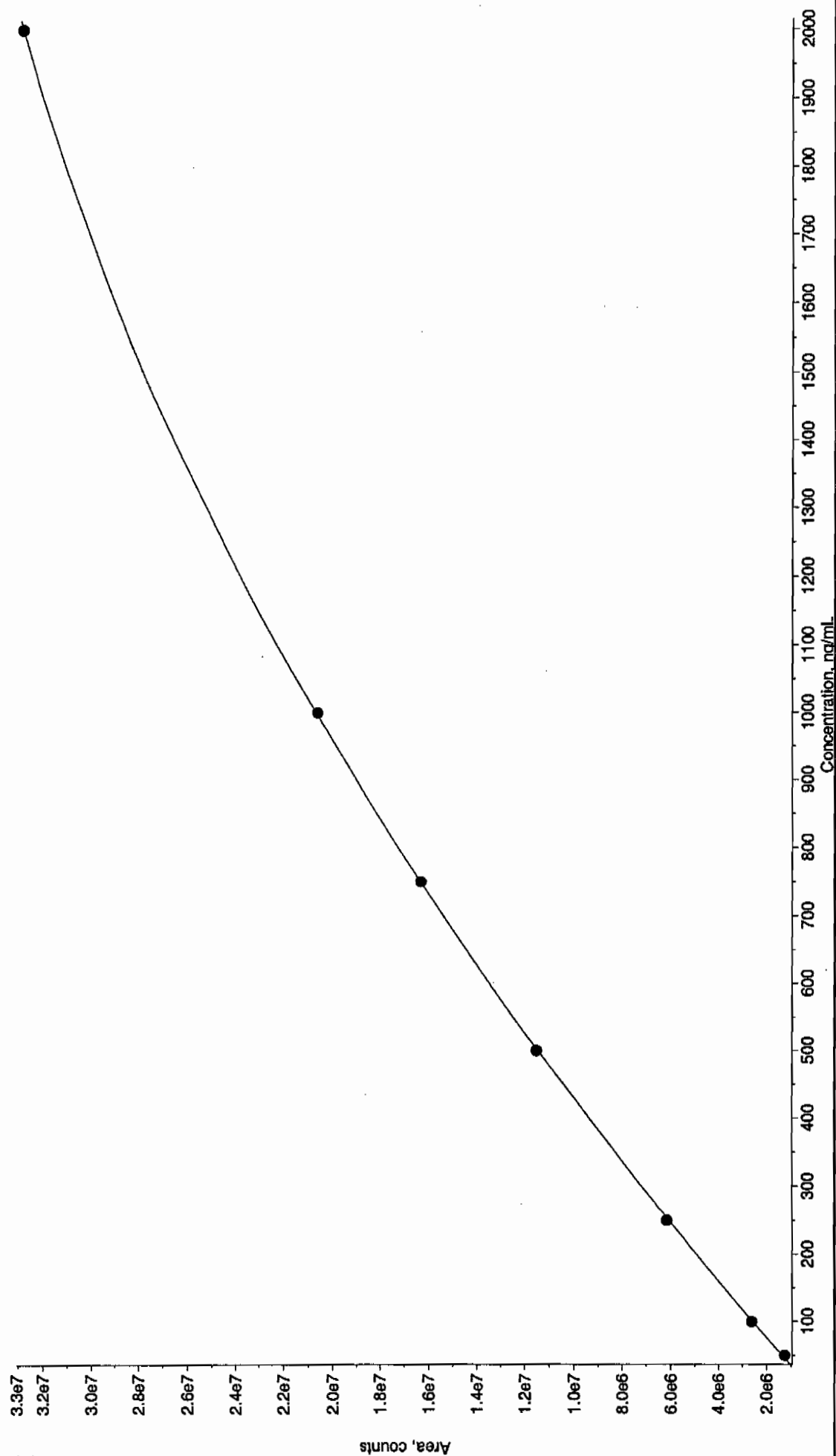
\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

012210.rdb (24-Diamino-6-nitrotoluene): "Quadratic" Regression ("No" weighting):  $y = 0.0771 x^2 + 2.5e+003 x + 1.56e+004$  ( $r = 0.9999$ )



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

012210.rdb (tris(o-cresyl) phosphate): "Quadratic" Regression ("No" weighting):  $y = -4.21 x^2 + 2.47e+004 x + 1.48e+005$  ( $r = 1.0000$ )



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

7

Explosives Initial Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1160-1

Lab Code: GEL

GEL Sample ID: WXXICV

GEL Data File EXS01220011.wiff

Analysis Date: 22-JAN-10 13:02

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	493	99	
2,6-Diamino-4-nitrotoluene	500	496	99	
3,4-Dinitrotoluene	250	226	90	
3,5-Dinitroaniline	500	507	101	
TATB	500	492	99	
tris(o-cresyl) phosphate	500	495	99	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 70-130%

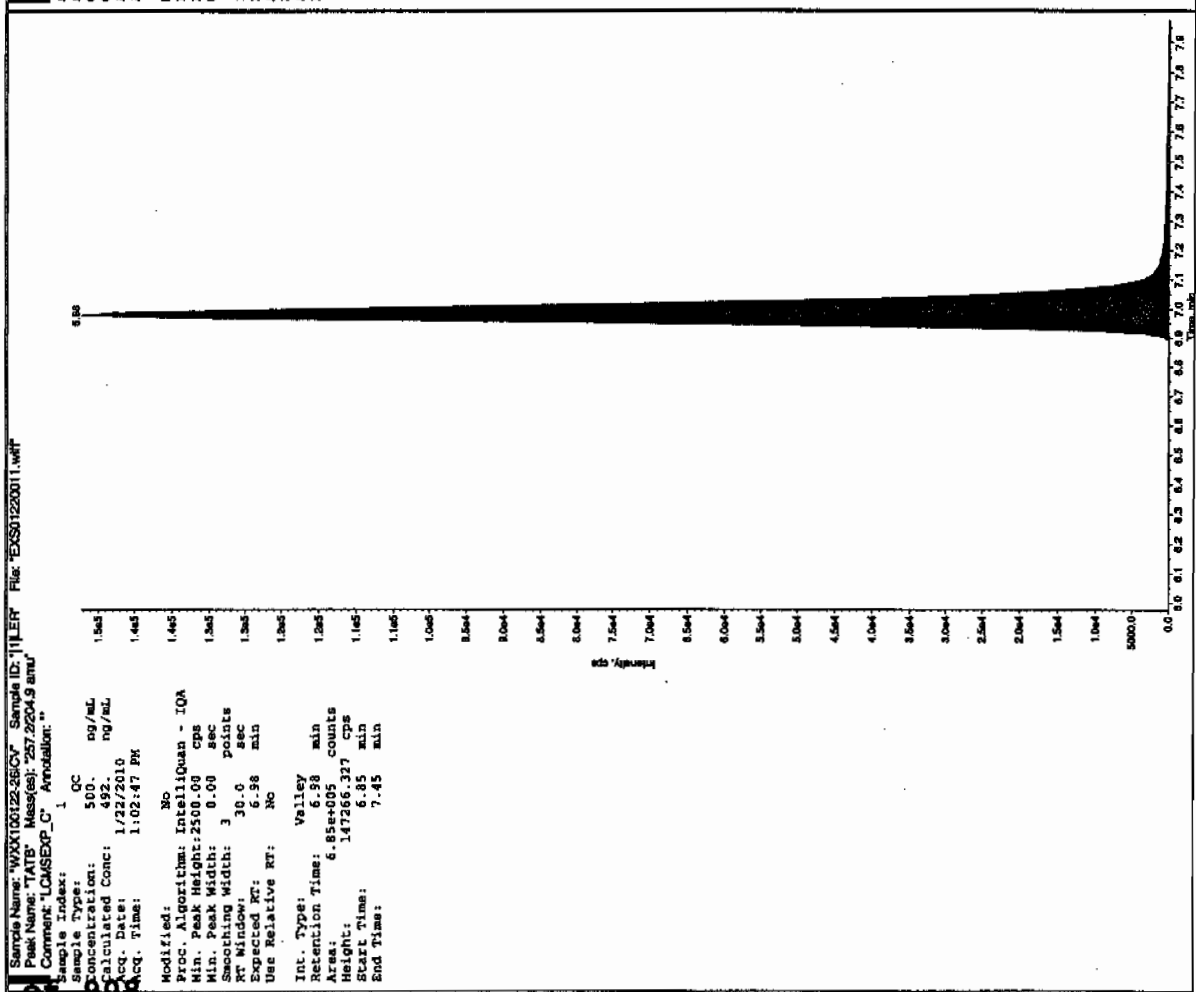
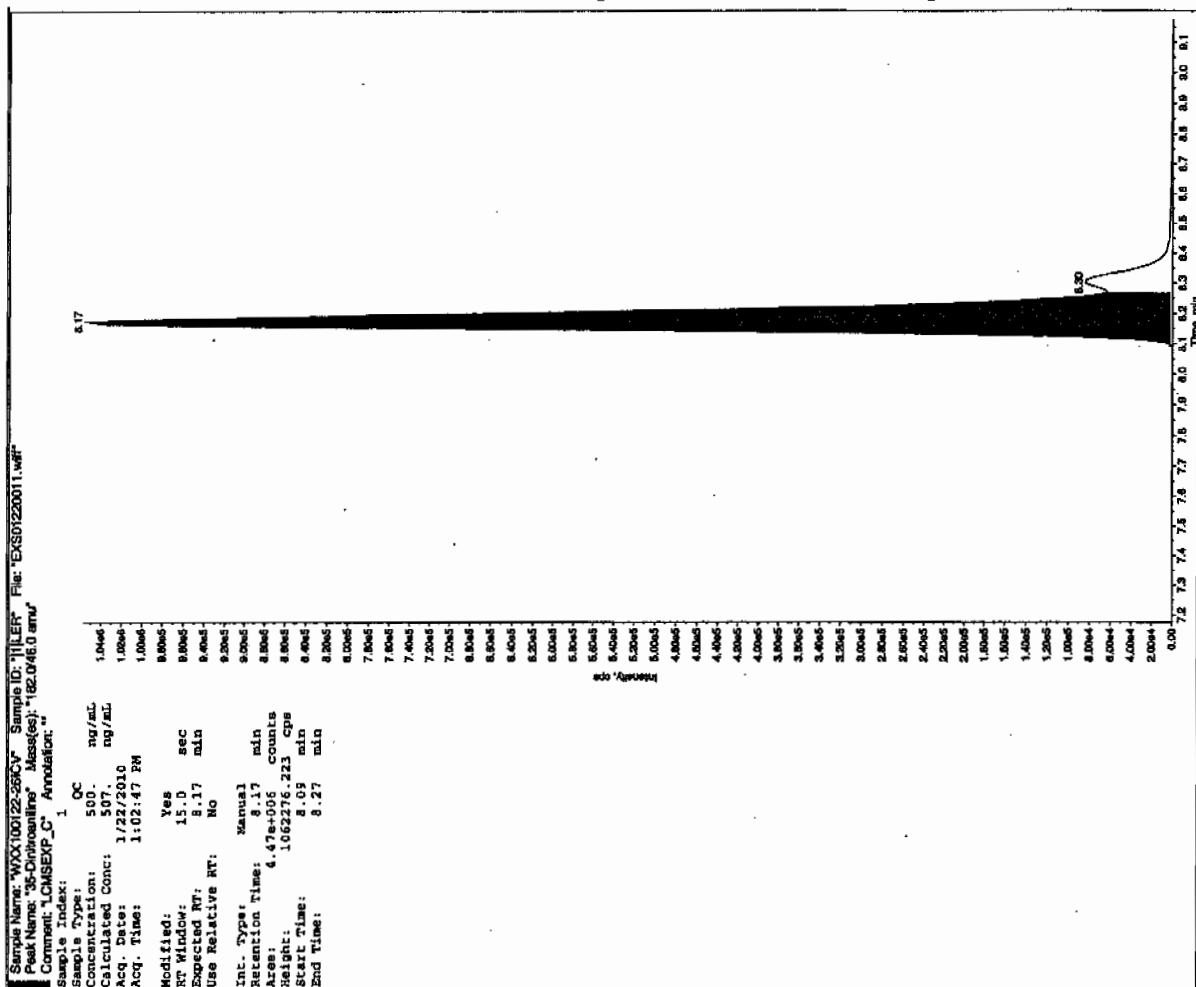
Other Target Analytes 80-120%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits



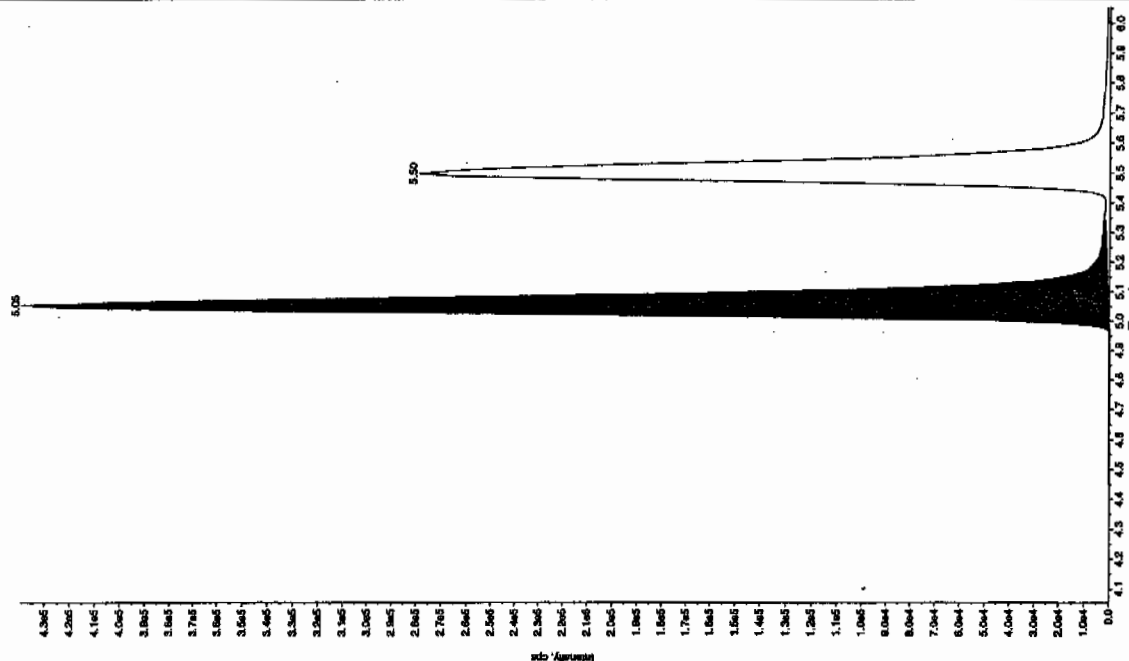
After Scan 1125110



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

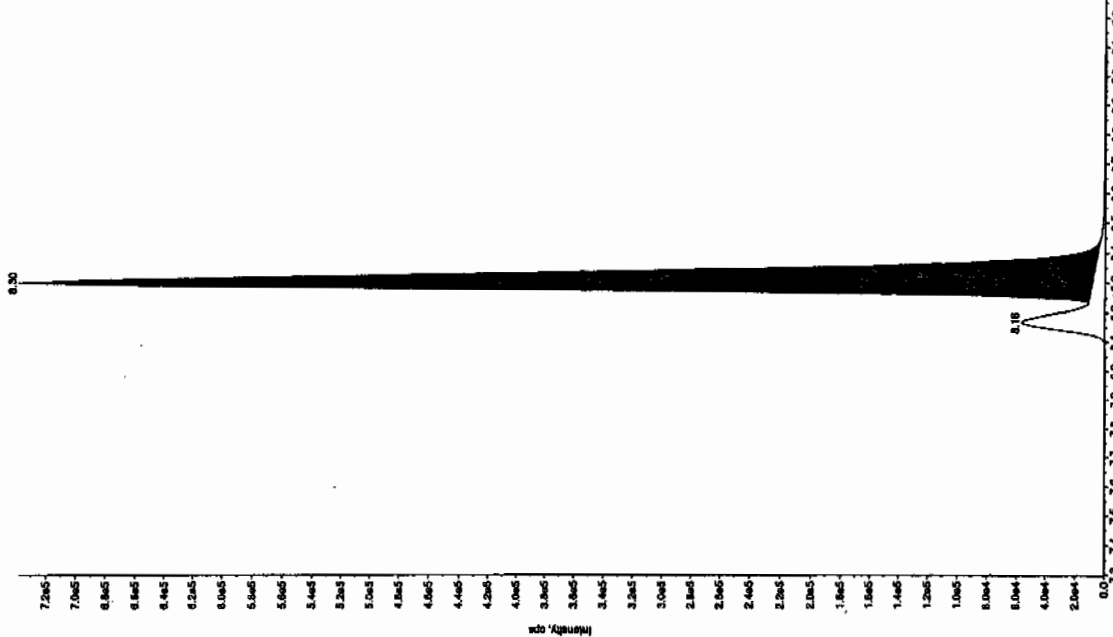
Sample Name: "WXX100122-28CV" Sample ID: "J1LER" File: "EX501220011.wif"  
 Peak Name: "26-Diamino-4-nitrofluorene" Mass(es): "166.046.0 amu"  
 Comment: "LCMS-EXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500. ng/mL  
 Calculated Conc: 495. ng/mL  
 Acq. Date: 1/22/2010  
 Acq. Time: 1:02:47 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - ION  
 Min. Peak Height: 450.00 cps  
 Min. Peak Width: 0.60 points  
 Smoothing Width: 30.0 points  
 RT Window: 5.05 min  
 Expected RT: 5.05 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.05 min  
 Area: 1.94e+006 counts  
 Height: 439347.626 cps  
 Start Time: 4.95 min  
 End Time: 5.34 min

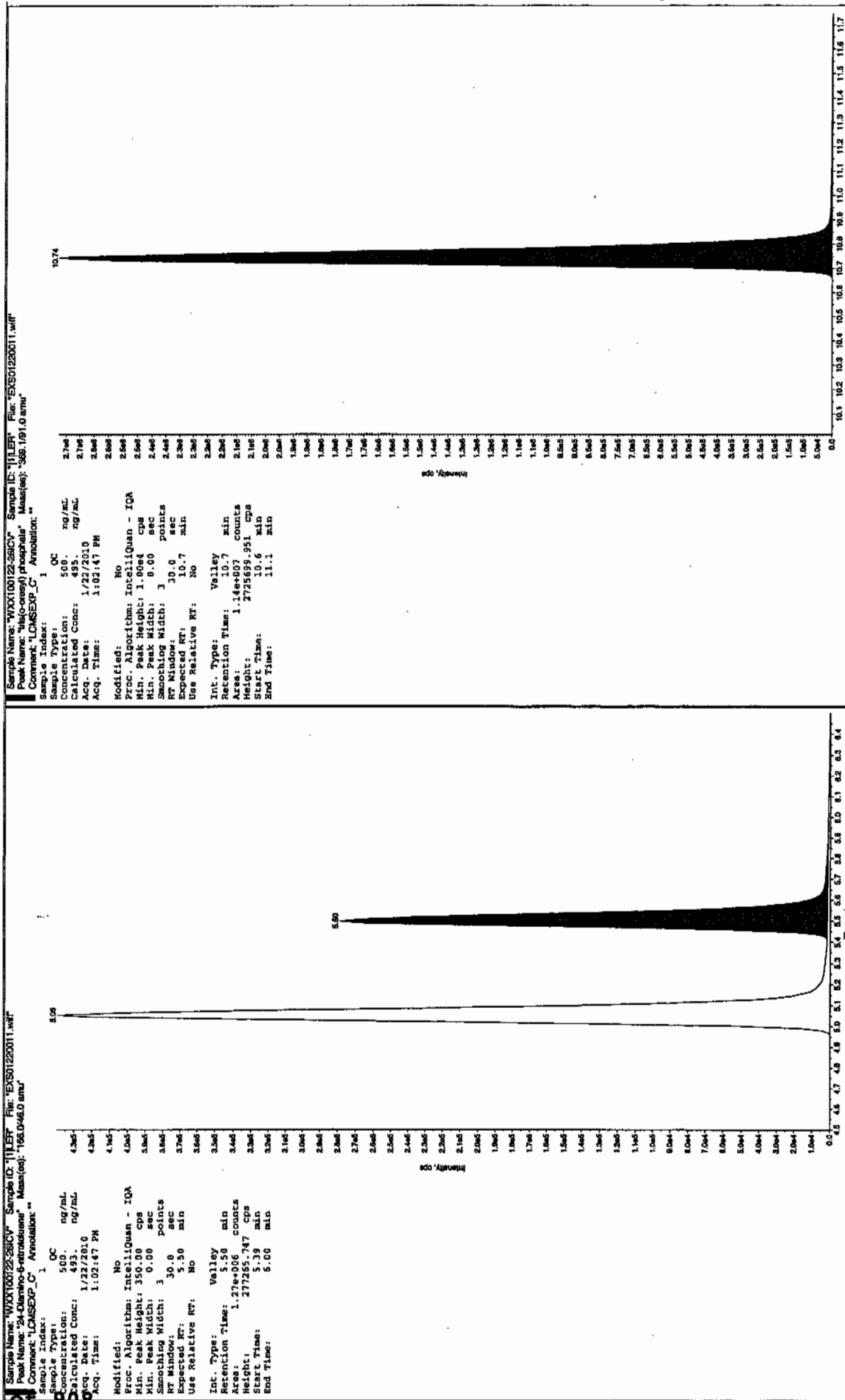


Sample Name: "WXX100122-28CV" Sample ID: "J1LER" File: "EX501220011.wif"  
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.161.9 amu"  
 Comment: "LCMS-EXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 250. ng/mL  
 Calculated Conc: 228. ng/mL  
 Acq. Date: 1/22/2010  
 Acq. Time: 1:02:47 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - ION  
 Min. Peak Height: 1460.00 cps  
 Min. Peak Width: 3.00 points  
 Smoothing Width: 15.0 points  
 RT Window: 8.30 min  
 Expected RT: 8.30 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.30 min  
 Area: 2.87e+006 counts  
 Height: 730260.681 cps  
 Start Time: 8.24 min  
 End Time: 8.44 min



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



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



7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1160-1

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0125012a

Analysis Date: 25-JAN-10 16:45

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	53.525	134	*
1,3-Dinitrobenzene-d4	500	523.569	105	
2,4,6-Trinitrotoluene	40	32.202	81	
2,4-Dinitrotoluene	40	32.904	82	
2,6-Dinitrotoluene	40	42.96	107	
2,6-Dinitrotoluene-d3	500	553.084	111	
2-Amino-4,6-dinitrotoluene	40	46.855	117	
3,4-Dinitrotoluene	20	16.575	83	
4-Amino-2,6-dinitrotoluene	40	41.308	103	
HMX	40	44.507	111	
Nitrobenzene	40	37.891	95	
PETN	40	31.16	78	
RDX	40	38.595	96	
Tetryl	40	40.286	101	
m-Dinitrobenzene	40	39.556	99	
m-Nitrotoluene	40	39.269	98	
o-Nitrotoluene	40	42.003	105	
p-Nitrotoluene	40	41.044	103	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

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

Dataset: C:\MASSLYNX\New\_Exp\_PRO\012510expA.qld, Time: Tue Jan 26 09:24:51 2010

Name: C:\MASSLYNX\NEW\_EXP\_PRO\Data\EXP0125012a

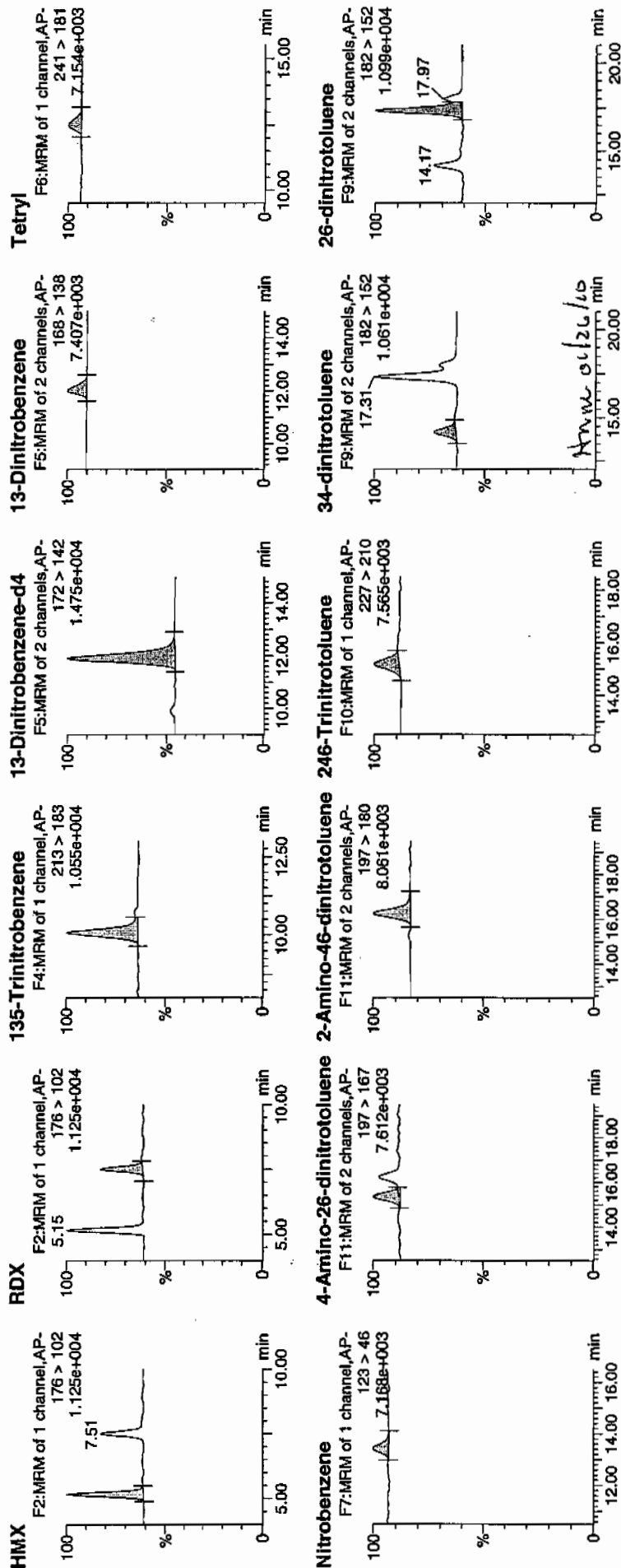
Date: 25-Jan-2010

Time: 16:45:01

ID: WXX100125-08CRI

Vial: 1:1,C

1/26/10  
10:11

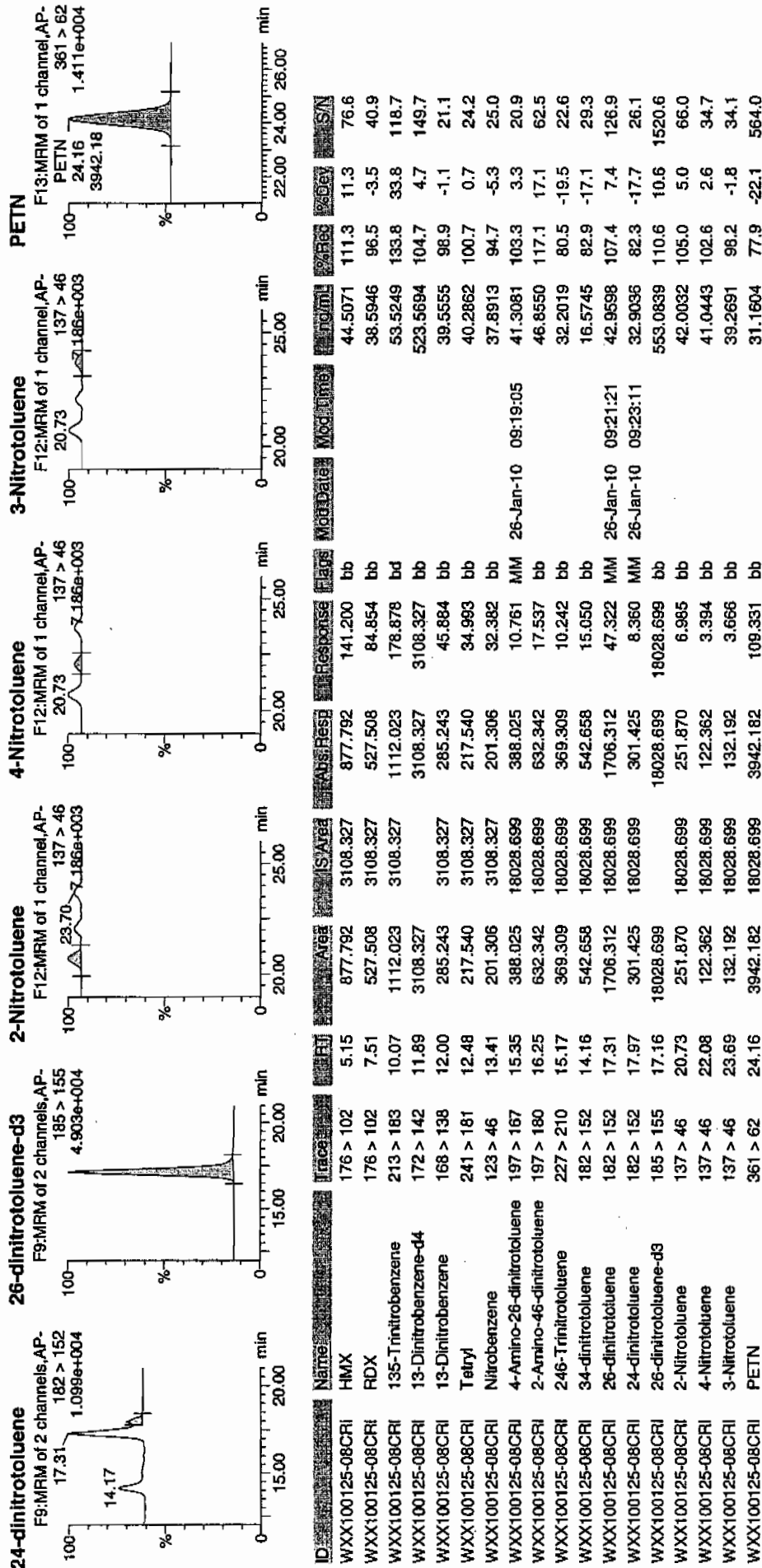


## Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Tue Jan 26 11:27:45 2010, Page 24 of 73

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA.qld, Time: Tue Jan 26 09:24:51 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific  
 Date of Analysis 01/25/10  
 Time of Injection 1645  
 Standard Number WXX100125-08CRI  
 Data File EXP0125012a

HMX	111.3
RDX	96.5
135-TNB	133.8
13-DNB	98.9
Tetryl	100.7
Nitrobenzene	94.7
4A-26-DNT	103.3
2A-46-DNT	117.1
246-TNT	80.5
34-DNT(surr)	82.9
26-DNT	107.4
24-DNT	82.3
2-NT	105.0
4-NT	102.6
3-NT	98.2
PETN	77.9

*not  
1/26/10*

Total 1593.1

Average 99.6

*HMM 01/26/10*

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): 10-1160-1

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0125023a

Analysis Date: 25-JAN-10 22:09

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	671.995	112	
1,3-Dinitrobenzene-d4	500	501.648	100	
2,4,6-Trinitrotoluene	600	681.012	114	
2,4-Dinitrotoluene	600	650.509	108	
2,6-Dinitrotoluene	600	620.709	103	
2,6-Dinitrotoluene-d3	500	529.849	106	
2-Amino-4,6-dinitrotoluene	600	638.815	106	
3,4-Dinitrotoluene	300	312.536	104	
4-Amino-2,6-dinitrotoluene	600	654.415	109	
HMX	600	616.521	103	
Nitrobenzene	600	622.507	104	
PETN	600	590.603	98	
RDX	600	659.536	110	
Tetryl	600	635.812	106	
m-Dinitrobenzene	600	625.794	104	
m-Nitrotoluene	600	604.626	101	
o-Nitrotoluene	600	593.315	99	
p-Nitrotoluene	600	607.304	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

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

Dataset: C:\MASSLYNX\New\_Exp\_PRO\012510expA.qld, Time: Tue Jan 26 09:24:51 2010

Name: C:\MASSLYNX\NEW\_EXP\_PRO\Data\EXP0125023a

Date: 25-Jan-2010

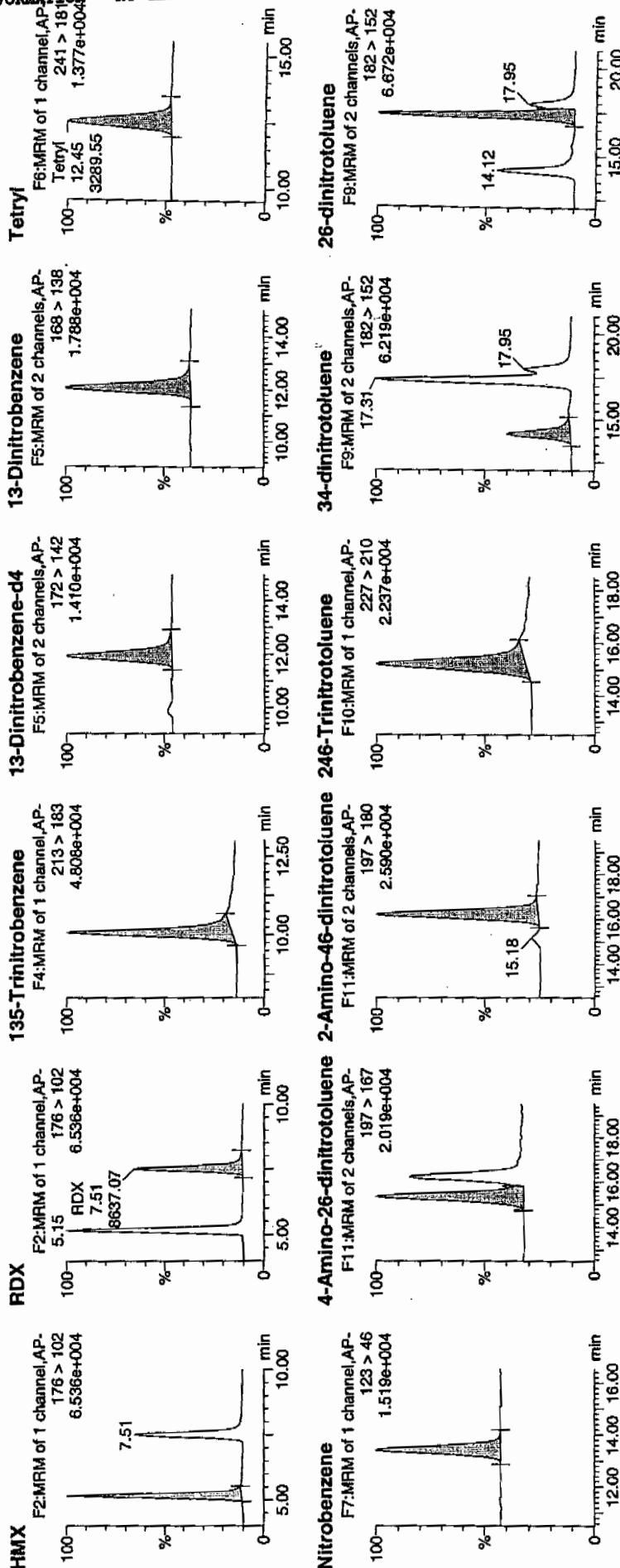
Time: 22:09:44

ID: WXX100125-07CCV

Vial: 1:1,B

MM  
1/26/10

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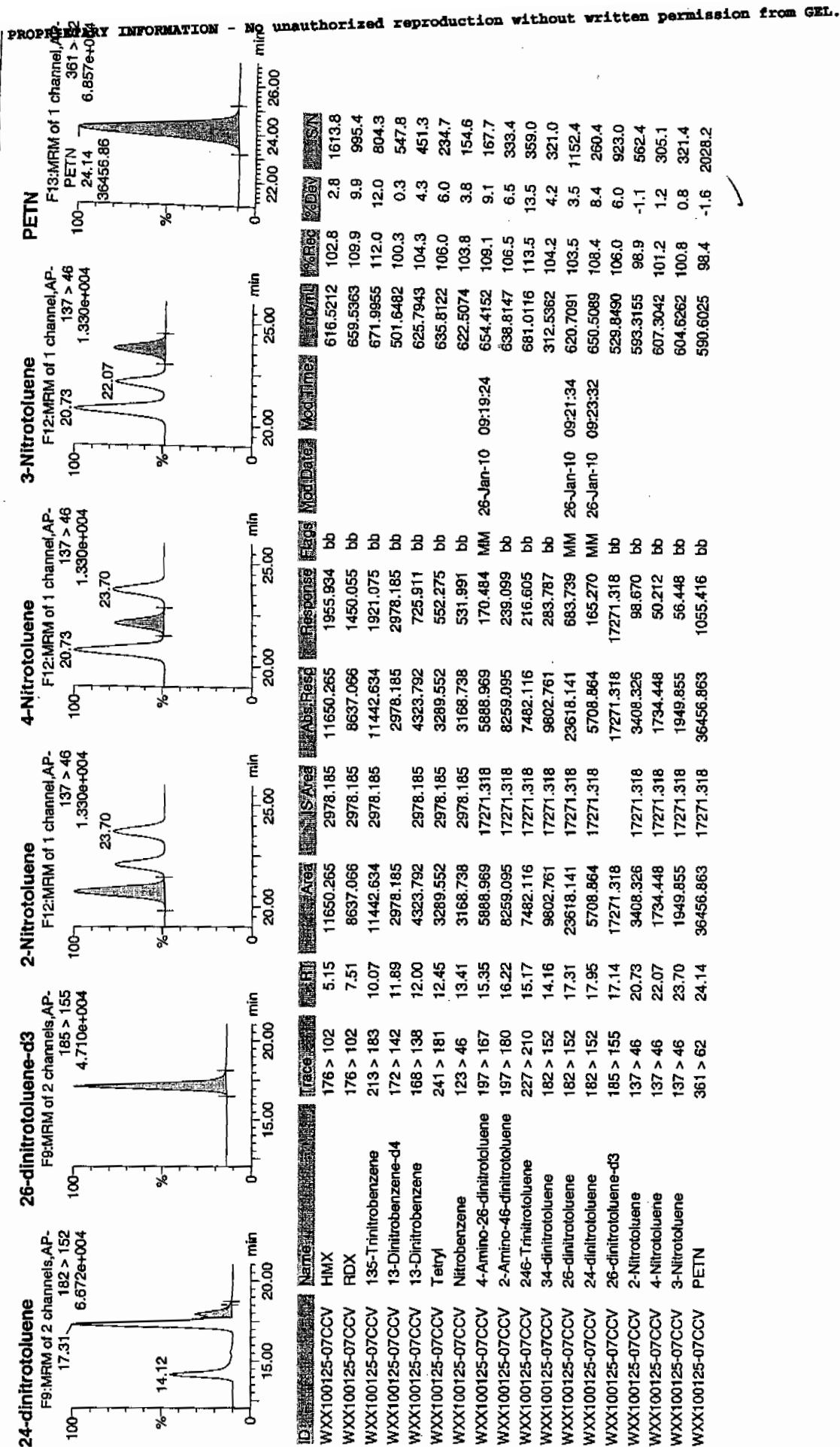
MM  
01/26/10

## Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Tue Jan 26 11:27:45 2010, Page 46 of 73

Dataset: C:\MASSLYN\New\_Exp\PROV012510expA.qld, Time: Tue Jan 26 09:24:51 2010



# GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis: 01/25/10  
 Time of Injection: 2209  
 Standard Number: WXX100125-07CCV  
 Data File: EXP0125023a

HMX	102.8
RDX	109.9
135-TNB	112.0
13-DNB	104.3
Tetryl	106.0
Nitrobenzene	103.8
4A-26-DNT	109.1
2A-46-DNT	106.5
246-TNT	113.5
34-DNT(surr)	104.2
26-DNT	103.5
24-DNT	108.4
2-NT	98.9
4-NT	101.2
3-NT	100.8
PETN	98.4

*100%*  
*1/26/10*

Total 1683.3

Average 105.2

*Ann 01/26/10*

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): 10-1160-1

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0125025a

Analysis Date: 25-JAN-10 23:08

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	51.275	128	
1,3-Dinitrobenzene-d4	500	562.36	112	
2,4,6-Trinitrotoluene	40	41.402	104	
2,4-Dinitrotoluene	40	41.568	104	
2,6-Dinitrotoluene	40	40.317	101	
2,6-Dinitrotoluene-d3	500	590.895	118	
2-Amino-4,6-dinitrotoluene	40	40.944	102	
3,4-Dinitrotoluene	20	20.089	100	
4-Amino-2,6-dinitrotoluene	40	43.494	109	
HMX	40	59.635	149	*
Nitrobenzene	40	49.71	124	
PETN	40	28.625	72	
RDX	40	43.744	109	
Tetryl	40	40.54	101	
m-Dinitrobenzene	40	46.142	115	
m-Nitrotoluene	40	46.171	115	
o-Nitrotoluene	40	38.888	97	
p-Nitrotoluene	40	35.04	88	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

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

Dataset: C:\MASSLYNX\New\_Exp\PRO\012510expA.qld, Time: Tue Jan 26 09:24:51 2010

Name: C:\MASSLYNX\NEW\_EXP\PRO\Data\EXP0125025a

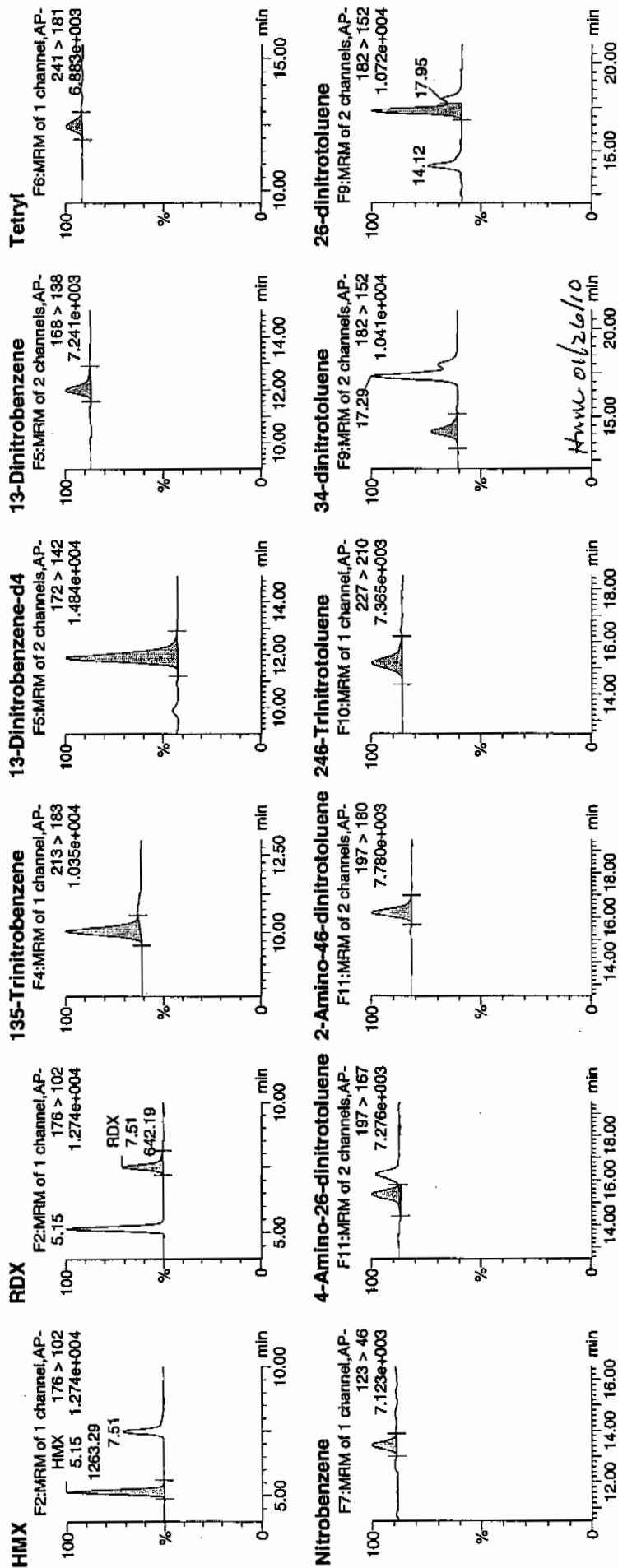
Date: 25-Jan-2010

Time: 23:08:48

ID: WXX100125-08CRI

Vial: 1:1,C

1/26/10

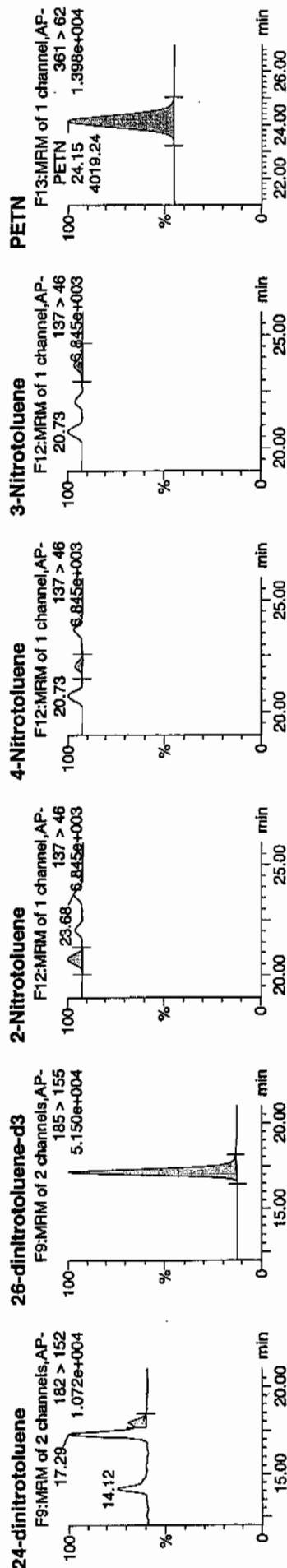


## Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Tue Jan 26 11:27:45 2010, Page 50 of 73

Dataset: C:\MASSLYNX\New\_Exp\_PRO\012510expA.qld, Time: Tue Jan 26 09:24:51 2010



ID	Name	Trace	RT	Area	IS:Area	Abs:Resp	Response	Flags	Mod	Date	Mod	Time	Mod	Time	%Rec	%Dev	SN
WXX100125-08CRI	HMX	176 > 102	5.15	1263.285	3338.619	1263.285	189.193	bb							59.6346	149.1	338.5
WXX100125-08CRI	RDX	176 > 102	7.51	642.190	3338.619	642.190	96.176	bb							43.7442	109.4	141.4
WXX100125-08CRI	135-Trinitrobenzene	213 > 183	10.07	1152.094	3338.619	1152.094	172.541	bb							51.2751	128.2	28.2
WXX100125-08CRI	13-Dinitrobenzene-d4	172 > 142	11.89	3338.619	3338.619	3338.619	3338.619	bb							562.3600	112.5	430.5
WXX100125-08CRI	13-Dinitrobenzene	168 > 138	12.00	357.395	3338.619	357.395	53.524	bb							46.1424	115.4	27.5
WXX100125-08CRI	Tetryl	241 > 181	12.45	235.130	3338.619	235.130	35.214	bb							40.5401	101.4	19.3
WXX100125-08CRI	Nitrobenzene	123 > 46	13.41	283.661	3338.619	283.661	42.482	bb							49.7099	124.3	33.4
WXX100125-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.35	436.484	19261.230	436.484	11.331	MM	26-Jan-10	09:19:33					43.4935	108.7	8.7
WXX100125-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.22	590.352	19261.230	590.352	15.325	bb							40.9444	102.4	2.4
WXX100125-08CRI	246-Trinitrotoluene	227 > 210	15.21	507.277	19261.230	507.277	13.168	bb							41.4016	103.5	3.5
WXX100125-08CRI	34-dinitrotoluene	182 > 152	14.16	702.684	19261.230	702.684	18.241	bb							20.0888	100.4	0.4
WXX100125-08CRI	26-dinitrotoluene	182 > 152	17.29	1710.801	19261.230	1710.801	44.410	MM	26-Jan-10	09:21:41					40.3165	100.8	0.8
WXX100125-08CRI	24-dinitrotoluene	182 > 152	17.95	406.830	19261.230	406.830	10.561	MM	26-Jan-10	09:23:39					41.5679	103.9	3.9
WXX100125-08CRI	26-dinitrotoluene-d3	185 > 155	17.14	19261.230	19261.230	19261.230	19261.230	bb							590.8955	118.2	18.2
WXX100125-08CRI	2-Nitrotoluene	137 > 46	20.73	249.133	19261.230	249.133	6.467	bb							38.8881	97.2	-2.8
WXX100125-08CRI	4-Nitrotoluene	137 > 46	22.04	111.602	19261.230	111.602	2.897	bb							35.0395	87.6	-12.4
WXX100125-08CRI	3-Nitrotoluene	137 > 46	23.68	166.053	19261.230	166.053	4.311	bb							46.1714	115.4	15.4
WXX100125-08CRI	PETN	361 > 62	24.15	4019.243	19261.230	4019.243	104.335	bb							28.6246	71.6	-28.4

GRAND MEAN AVERAGE

Vendor: UltraScientific  
 Date of Analysis 01/25/10  
 Time of Injection 2308  
 Standard Number WXX100125-08CRI  
 Data File EXP0125025a

HMX	149.1
RDX	109.4
135-TNB	128.2
13-DNB	115.4
Tetryl	101.4
Nitrobenzene	124.3
4A-26-DNT	108.7
2A-46-DNT	102.4
246-TNT	103.5
34-DNT(surr)	100.4
26-DNT	100.8
24-DNT	103.9
2-NT	97.2
4-NT	87.6
3-NT	115.4
PETN	71.6

*MTT*  
*1/26/10*

Total 1719.3

*477m 01/26/10*

Average 107.5

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): 10-1160-1

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0125034a

Analysis Date: 26-JAN-10 03:34

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	677.094	113	
1,3-Dinitrobenzene-d4	500	507.421	101	
2,4,6-Trinitrotoluene	600	664.277	111	
2,4-Dinitrotoluene	600	626.592	104	
2,6-Dinitrotoluene	600	593.375	99	
2,6-Dinitrotoluene-d3	500	552.887	111	
2-Amino-4,6-dinitrotoluene	600	628.043	105	
3,4-Dinitrotoluene	300	310.216	103	
4-Amino-2,6-dinitrotoluene	600	653.794	109	
HMX	600	665.852	111	
Nitrobenzene	600	612.948	102	
PETN	600	598.099	100	
RDX	600	771.215	129	*
Tetryl	600	637.72	106	
m-Dinitrobenzene	600	643.843	107	
m-Nitrotoluene	600	557.007	93	
o-Nitrotoluene	600	568.991	95	
p-Nitrotoluene	600	602.81	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

Printed: Tue Jan 26 11:27:45 2010, Page 67 of 73

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA.qld, Time: Tue Jan 26 09:24:51 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\data\EXP0125034a

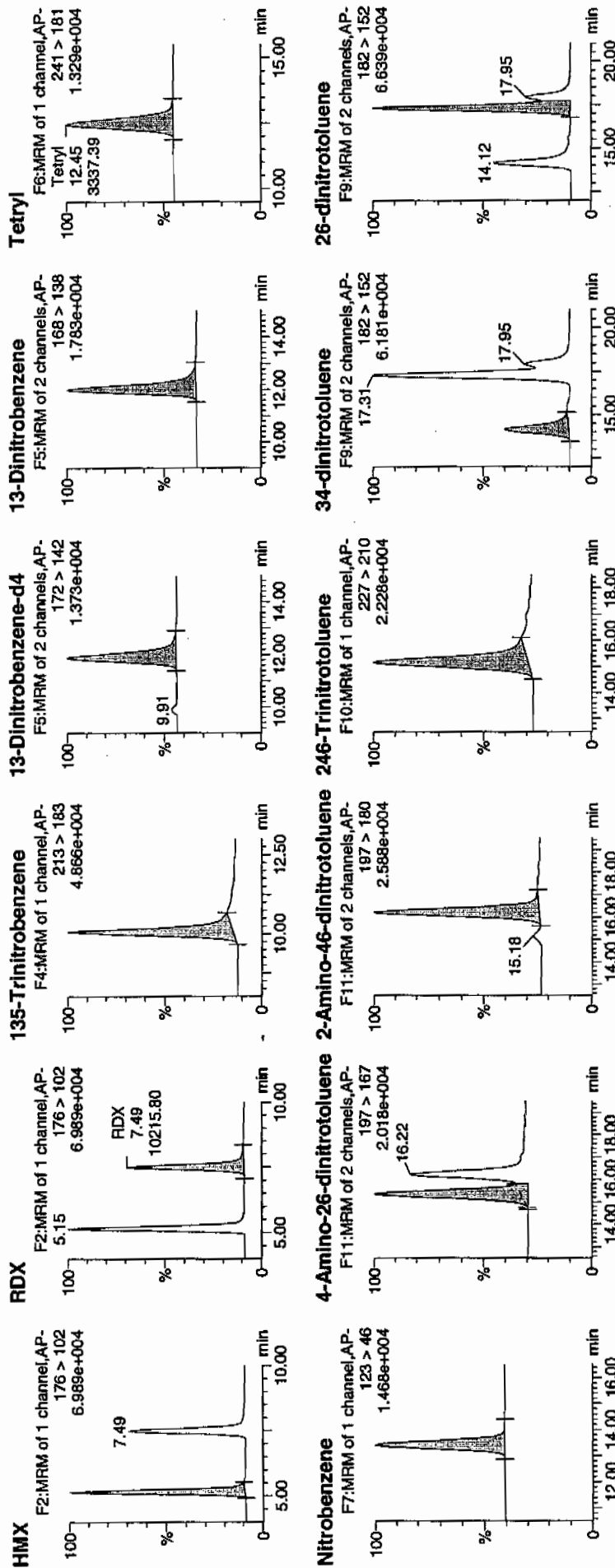
Date: 26-Jan-2010

Time: 03:34:18

ID: WXX100125-07CCV

Vial: 1:1,B

1/26/10  
MJP

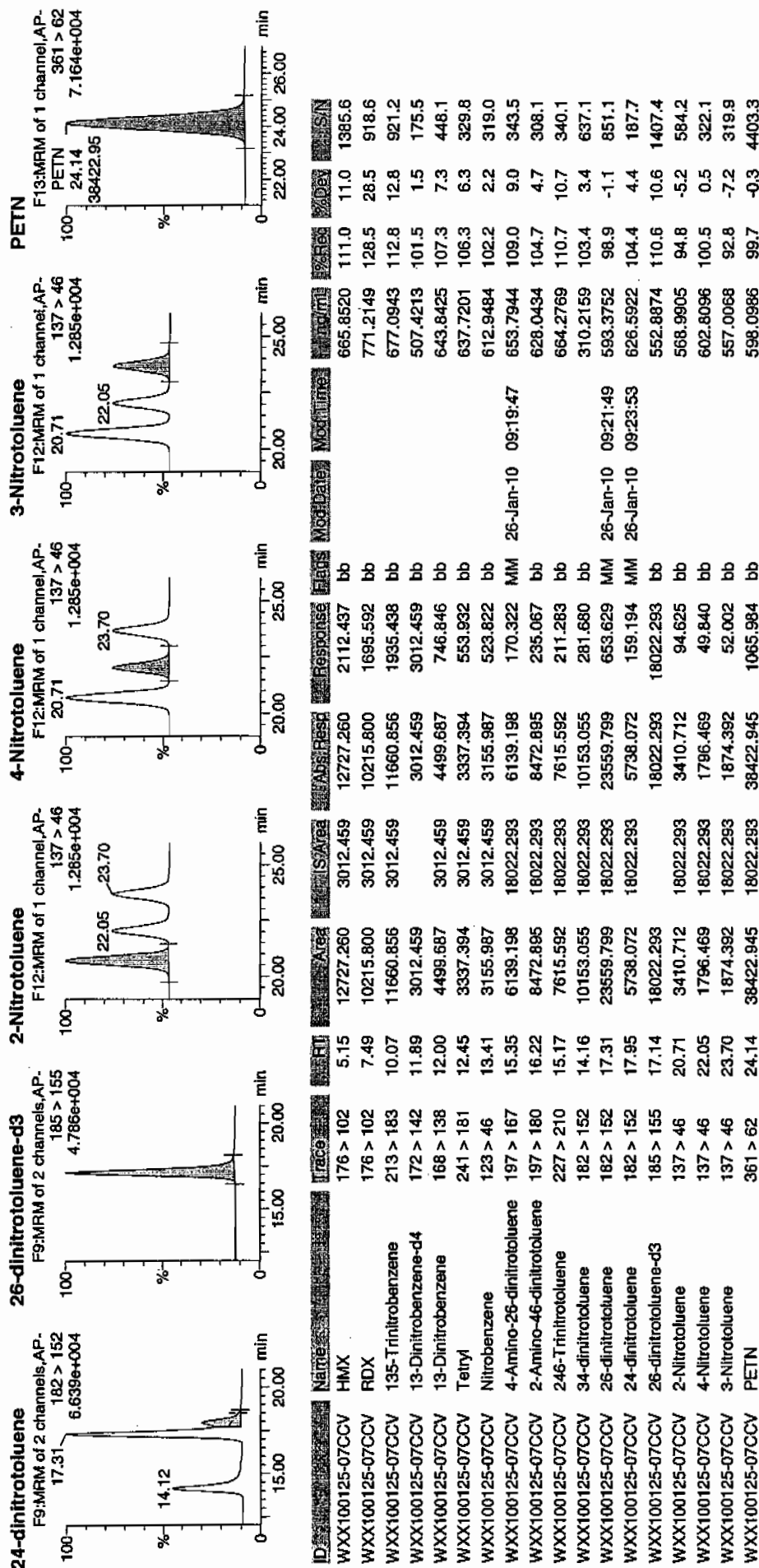


8mm 01/26/10

Printed: Tue Jan 26 11:27:45 2010, Page 68 of 73

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

Dataset: C:\MASSLYNX\New\_Exp\PRO012510expA.qld, Time: Tue Jan 26 09:24:51 2010



# GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis: 01/26/10  
 Time of Injection: 0334  
 Standard Number: WXX100125-07CCV  
 Data File: EXP0125034a

HMX	111.0
RDX	128.5
135-TNB	112.8
13-DNB	107.3
Tetryl	106.3
Nitrobenzene	102.2
4A-26-DNT	109.0
2A-46-DNT	104.7
246-TNT	110.7
34-DNT(surr)	103.4
26-DNT	98.9
24-DNT	104.4
2-NT	94.8
4-NT	100.5
3-NT	92.8
PETN	99.7

*not  
1/26/10*

Total 1687.0

Average 105.4

*sum 01/26/10*

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): 10-1160-1

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0125036a

Analysis Date: 26-JAN-10 04:33

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	52.11	130	*
1,3-Dinitrobenzene-d4	500	503.562	101	
2,4,6-Trinitrotoluene	40	39.74	99	
2,4-Dinitrotoluene	40	41.295	103	
2,6-Dinitrotoluene	40	39.945	100	
2,6-Dinitrotoluene-d3	500	539.662	108	
2-Amino-4,6-dinitrotoluene	40	39.655	99	
3,4-Dinitrotoluene	20	20.419	102	
4-Amino-2,6-dinitrotoluene	40	42.579	106	
HMX	40	49.197	123	
Nitrobenzene	40	40.413	101	
PETN	40	28.993	72	
RDX	40	44.285	111	
Tetryl	40	48.534	121	
m-Dinitrobenzene	40	35.432	89	
m-Nitrotoluene	40	39.652	99	
o-Nitrotoluene	40	50.193	125	
p-Nitrotoluene	40	42.49	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  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA.qld, Time: Tue Jan 26 09:24:51 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125036a

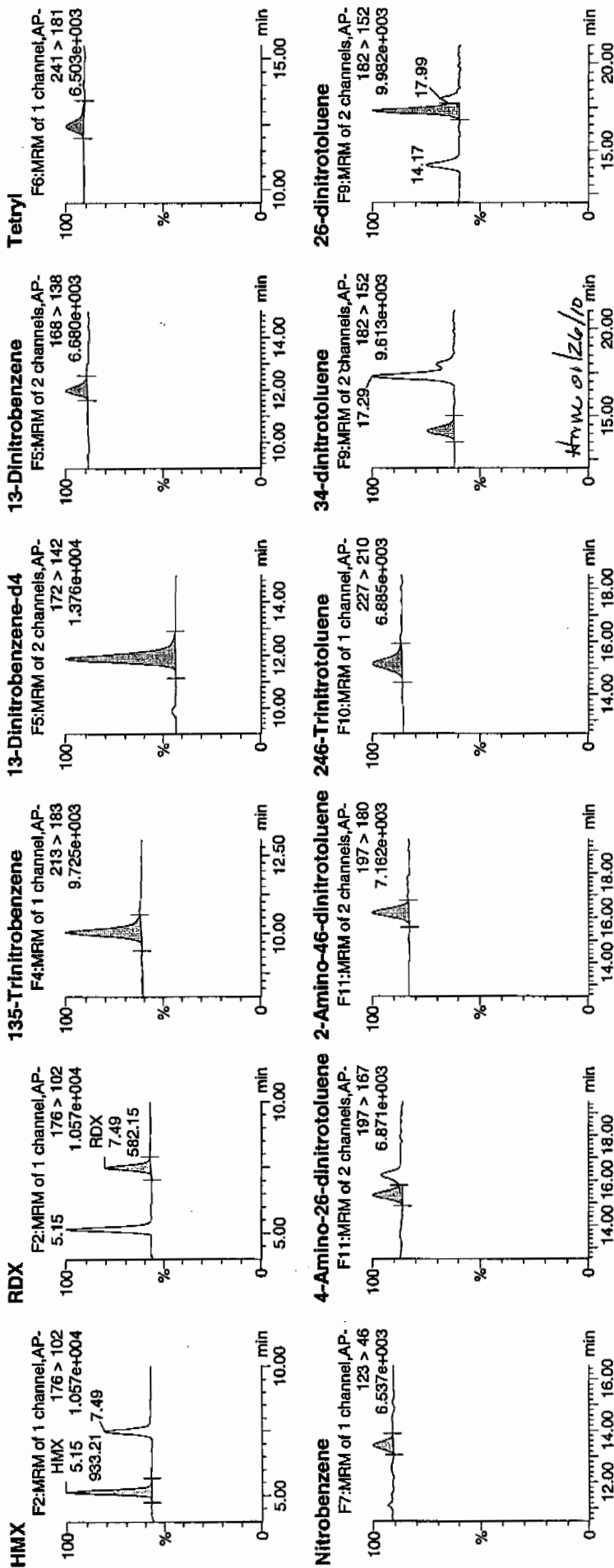
Date: 26-Jan-2010

Time: 04:33:23

ID: WXX100125-08CRI

Vial: 1:1,C

1/26/10

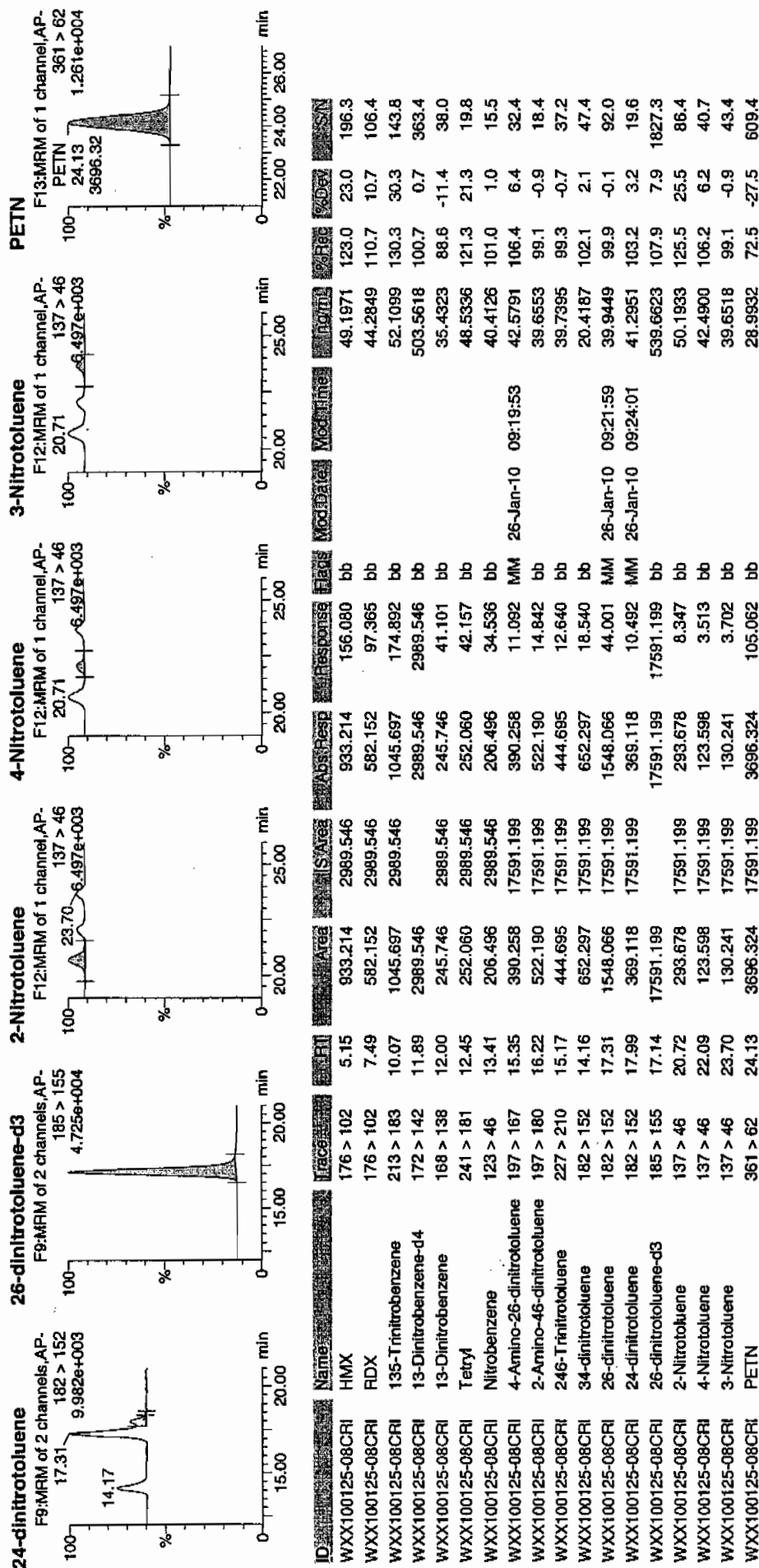


## Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Tue Jan 26 11:27:45 2010, Page 72 of 73

Dataset: C:\MASSLYNX\New\_Exp\PRO012510expA.qld, Time: Tue Jan 26 09:24:51 2010



# GRAND MEAN AVERAGE

Vendor: UltraScientific  
 Date of Analysis 01/26/10  
 Time of Injection 0433  
 Standard Number WXX100125-08CRI  
 Data File EXP0125036a

HMX	123.0
RDX	110.7
135-TNB	130.3
13-DNB	88.6
Tetryl	121.3
Nitrobenzene	101.0
4A-26-DNT	106.4
2A-46-DNT	99.1
246-TNT	99.3
34-DNT(surr)	102.1
26-DNT	99.9
24-DNT	103.2
2-NT	125.5
4-NT	106.2
3-NT	99.1
PETN	72.5

WXX  
1/26/10

Total 1688.2

Average 105.5

Ann-01/26/10

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): 10-1160-1

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0125047a

Analysis Date: 26-JAN-10 09:58

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	646.04	108	
1,3-Dinitrobenzene-d4	500	528.635	106	
2,4,6-Trinitrotoluene	600	844.315	141	*
2,4-Dinitrotoluene	600	601.657	100	
2,6-Dinitrotoluene	600	607.414	101	
2,6-Dinitrotoluene-d3	500	552.683	111	
2-Amino-4,6-dinitrotoluene	600	622.543	104	
3,4-Dinitrotoluene	300	327.234	109	
4-Amino-2,6-dinitrotoluene	600	623.75	104	
HMX	600	662.143	110	
Nitrobenzene	600	629.393	105	
PETN	600	593.682	99	
RDX	600	700.33	117	
Tetryl	600	658.895	110	
m-Dinitrobenzene	600	616.464	103	
m-Nitrotoluene	600	578.165	96	
o-Nitrotoluene	600	560.785	93	
p-Nitrotoluene	600	573.922	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

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125047a

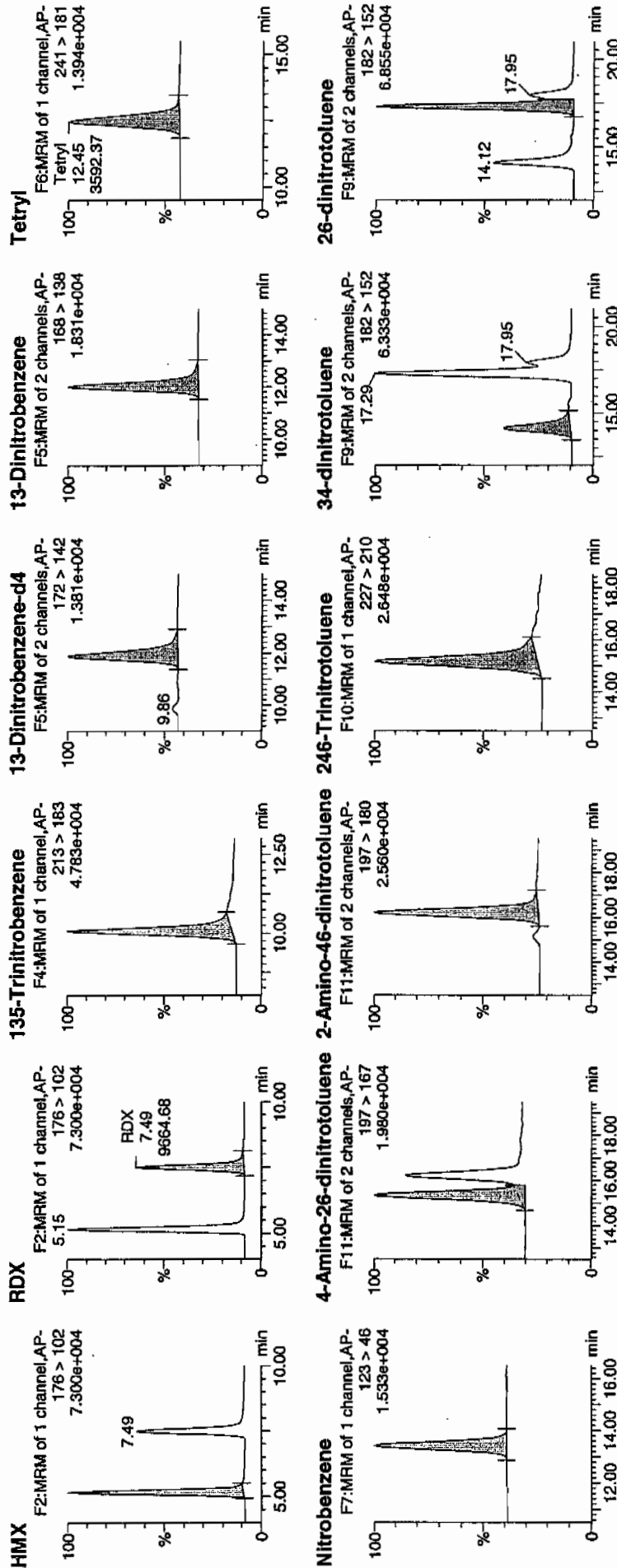
Date: 26-Jan-2010

Time: 09:58:05

ID: WXX100125-07CCV

Vial: 1:1,B

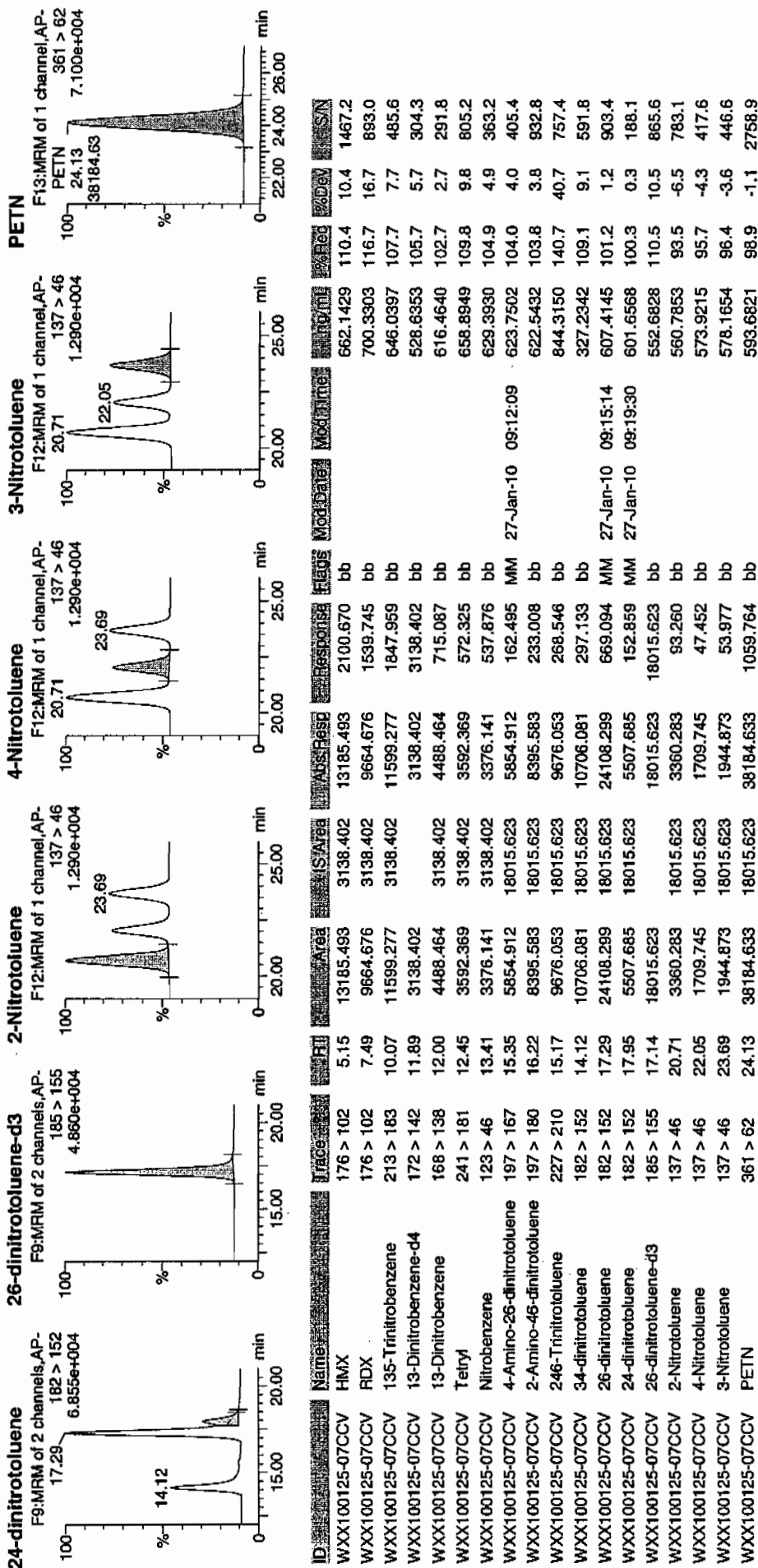
103/10



103/10

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA1.qld, Time: Wed Jan 27 09:20:42 2010



# GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis: 01/26/10  
 Time of Injection: 0958  
 Standard Number: WXX100125-07CCV  
 Data File: EXP0125047a

HMX	110.4
RDX	116.7
135-TNB	107.7
13-DNB	102.7
Tetryl	109.8
Nitrobenzene	104.9
4A-26-DNT	104.0
2A-46-DNT	103.8
246-TNT	140.7
34-DNT(surr)	109.1
26-DNT	101.2
24-DNT	100.3
2-NT	93.5
4-NT	95.7
3-NT	96.4
PETN	98.9

*Handwritten:*  
1/27/10

Total 1695.8

Average 106.0

*Handwritten:* Hgme 01/27/10

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): 10-1160-1

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0125049a

Analysis Date: 26-JAN-10 10:57

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	44.638	112	
1,3-Dinitrobenzene-d4	500	604.504	121	
2,4,6-Trinitrotoluene	40	37.616	94	
2,4-Dinitrotoluene	40	40.509	101	
2,6-Dinitrotoluene	40	39.422	99	
2,6-Dinitrotoluene-d3	500	574.489	115	
2-Amino-4,6-dinitrotoluene	40	46.027	115	
3,4-Dinitrotoluene	20	22.575	113	
4-Amino-2,6-dinitrotoluene	40	43.635	109	
HMX	40	41.294	103	
Nitrobenzene	40	37.127	93	
PETN	40	31.781	79	
RDX	40	41.493	104	
Tetryl	40	40.973	102	
m-Dinitrobenzene	40	33.859	85	
m-Nitrotoluene	40	49.924	125	
o-Nitrotoluene	40	42.014	105	
p-Nitrotoluene	40	42.378	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  
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA1.qld, Time: Wed Jan 27 09:20:42 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\data\EXP0125049a

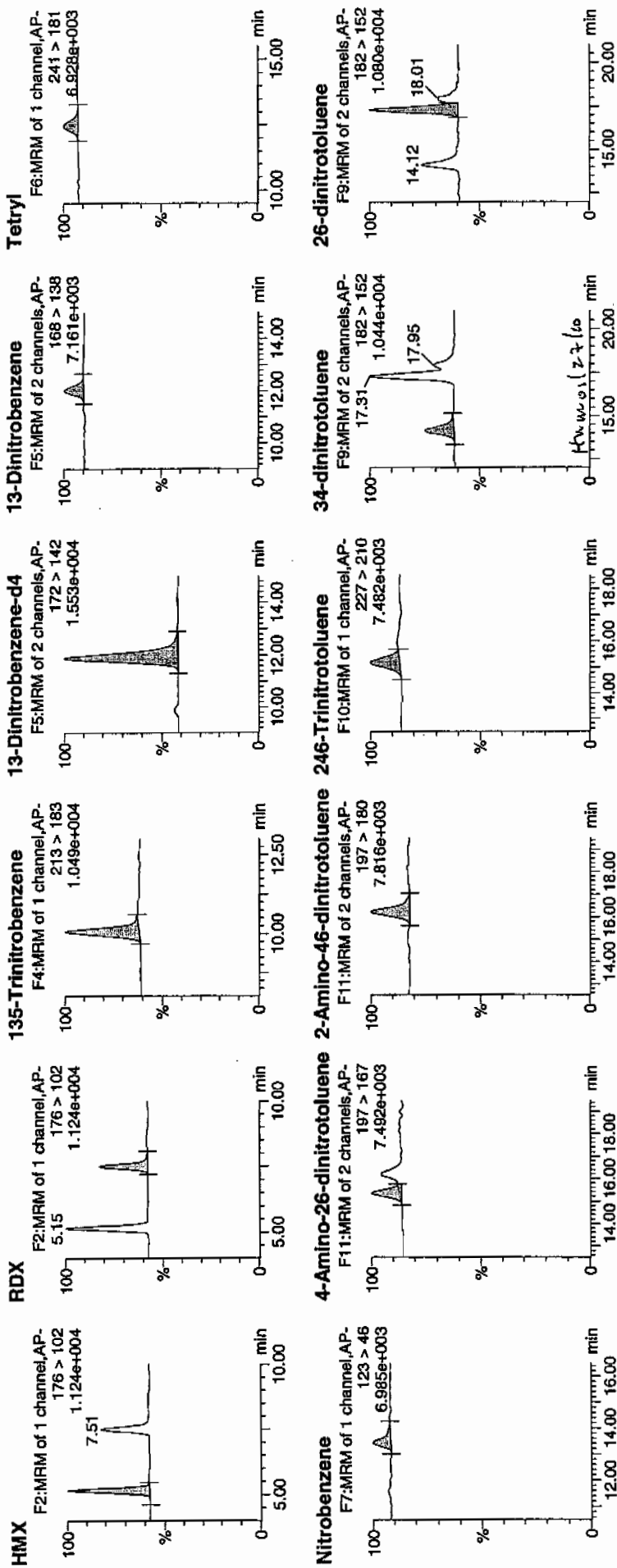
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Time: 10:57:07

ID: WXX100125-08CRI

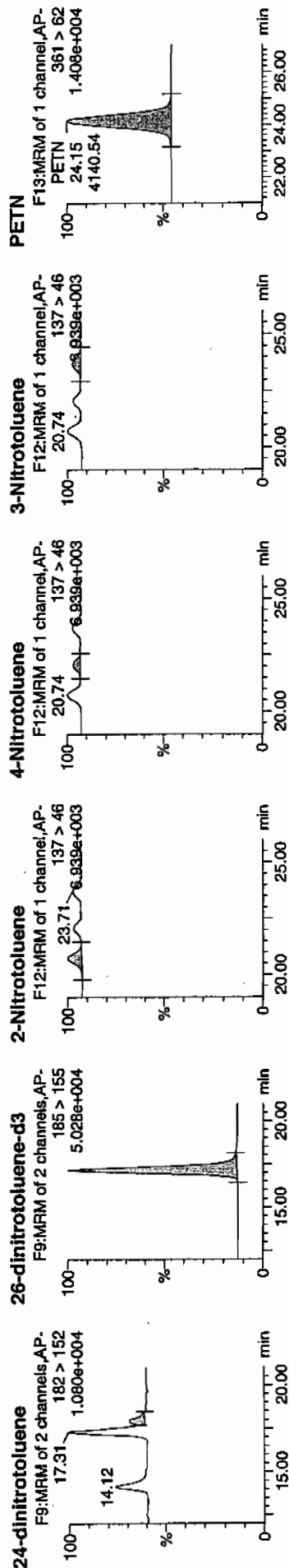
Vial: 1:1,C

1/27/10



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

Dataset: C:\MASSLYNX\New\_Exp\_PRO\1012510expA1.qld, Time: Wed Jan 27 09:20:42 2010



ID	Name	Trace	Area	IS Area	Abs Resp	Response	Flag	Mod Date	Mod Time	Norm	Rec	Day	SN
WXX100125-08CRI	HMZ	176 > 102	5.15	940.323	3588.820	131.007	bb			41.2942	103.2	3.2	113.1
WXX100125-08CRI	RDX	176 > 102	7.51	654.783	3588.820	91.225	bb			41.4925	103.7	3.7	66.1
WXX100125-08CRI	135-Trinitrobenzene	213 > 183	10.07	1104.246	3588.820	153.845	bb			44.6384	111.6	11.6	145.1
WXX100125-08CRI	13-Dinitrobenzene-d4	172 > 142	11.89	3588.820	3588.820	3588.820	bb			604.5041	120.9	20.9	191.6
WXX100125-08CRI	13-Dinitrobenzene	168 > 138	12.03	281.911	3588.820	39.276	bb			33.8594	84.6	-15.4	32.1
WXX100125-08CRI	Tetryl	241 > 181	12.45	255.450	3588.820	35.590	bb			40.9730	102.4	2.4	13.0
WXX100125-08CRI	Nitrobenzene	123 > 46	13.45	227.737	3588.820	31.729	bb			37.1272	92.8	-7.2	18.7
WXX100125-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.35	425.744	18726.447	11.367	MM	27-Jan-10	09:12:17	43.6348	109.1	9.1	23.7
WXX100125-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.22	645.214	18726.447	17.227	bb			46.0274	115.1	15.1	51.8
WXX100125-08CRI	246-Trinitrotoluene	227 > 210	15.17	448.097	18726.447	11.964	bb			37.6160	94.0	-6.0	23.5
WXX100125-08CRI	34-dinitrotoluene	182 > 152	14.17	767.709	18726.447	20.498	bb			22.5745	112.9	12.9	30.5
WXX100125-08CRI	26-dinitrotoluene	182 > 152	17.31	1626.381	18726.447	43.425	MM	27-Jan-10	09:15:27	38.4216	98.6	-1.4	95.8
WXX100125-08CRI	24-dinitrotoluene	182 > 152	18.01	385.462	18726.447	10.292	MM	27-Jan-10	09:19:17	40.5093	101.3	1.3	19.4
WXX100125-08CRI	26-dinitrotoluene-d3	185 > 155	17.14	18726.447	18726.447	18726.447	bb			574.4894	114.9	14.9	1389.2
WXX100125-08CRI	2-Nitrotoluene	137 > 46	20.74	261.684	18726.447	6.987	bb			42.0138	105.0	5.0	60.2
WXX100125-08CRI	4-Nitrotoluene	137 > 46	22.06	131.227	18726.447	3.504	bb			42.3778	105.9	5.9	31.3
WXX100125-08CRI	3-Nitrotoluene	137 > 46	23.71	174.564	18726.447	4.661	bb			49.9240	124.8	24.8	37.1
WXX100125-08CRI	PETN	361 > 62	24.15	4140.537	18726.447	110.553	bb			31.7814	79.5	-20.5	450.9

GRAND MEAN AVERAGE

Vendor: UltraScientific  
 Date of Analysis 01/26/10  
 Time of Injection 1057  
 Standard Number WXX100125-08CRI  
 Data File EXP0125049a

HMX	103.2
RDX	103.7
135-TNB	111.6
13-DNB	84.6
Tetryl	102.4
Nitrobenzene	92.8
4A-26-DNT	109.1
2A-46-DNT	115.1
246-TNT	94.0
34-DNT(surr)	112.9
26-DNT	98.6
24-DNT	101.3
2-NT	105.0
4-NT	105.9
3-NT	124.8
PETN	79.5

*Handwritten:* 102.8  
1/27/10

Total 1644.5

Average 102.8

*Handwritten:* 102.8  
1/27/10

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): 10-1160-1

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0125060a

Analysis Date: 26-JAN-10 16:21

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	682.994	114	
1,3-Dinitrobenzene-d4	500	545.605	109	
2,4,6-Trinitrotoluene	600	697.867	116	
2,4-Dinitrotoluene	600	608.207	101	
2,6-Dinitrotoluene	600	595.1	99	
2,6-Dinitrotoluene-d3	500	562.286	112	
2-Amino-4,6-dinitrotoluene	600	657.831	110	
3,4-Dinitrotoluene	300	337.629	113	
4-Amino-2,6-dinitrotoluene	600	664.072	111	
HMX	600	707.84	118	
Nitrobenzene	600	600.429	100	
PETN	600	601.346	100	
RDX	600	753.08	126	*
Tetryl	600	642.934	107	
m-Dinitrobenzene	600	616.028	103	
m-Nitrotoluene	600	554.466	92	
o-Nitrotoluene	600	538.809	90	
p-Nitrotoluene	600	558.692	93	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene, 2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

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

Dataset: C:\MASSLYNX\New\_Exp\_PRO\1012510expA1.qld, Time: Wed Jan 27 09:20:42 2010

Name: C:\MASSLYNX\NEW\_EXP\_PRO\Data\EXP0125060a

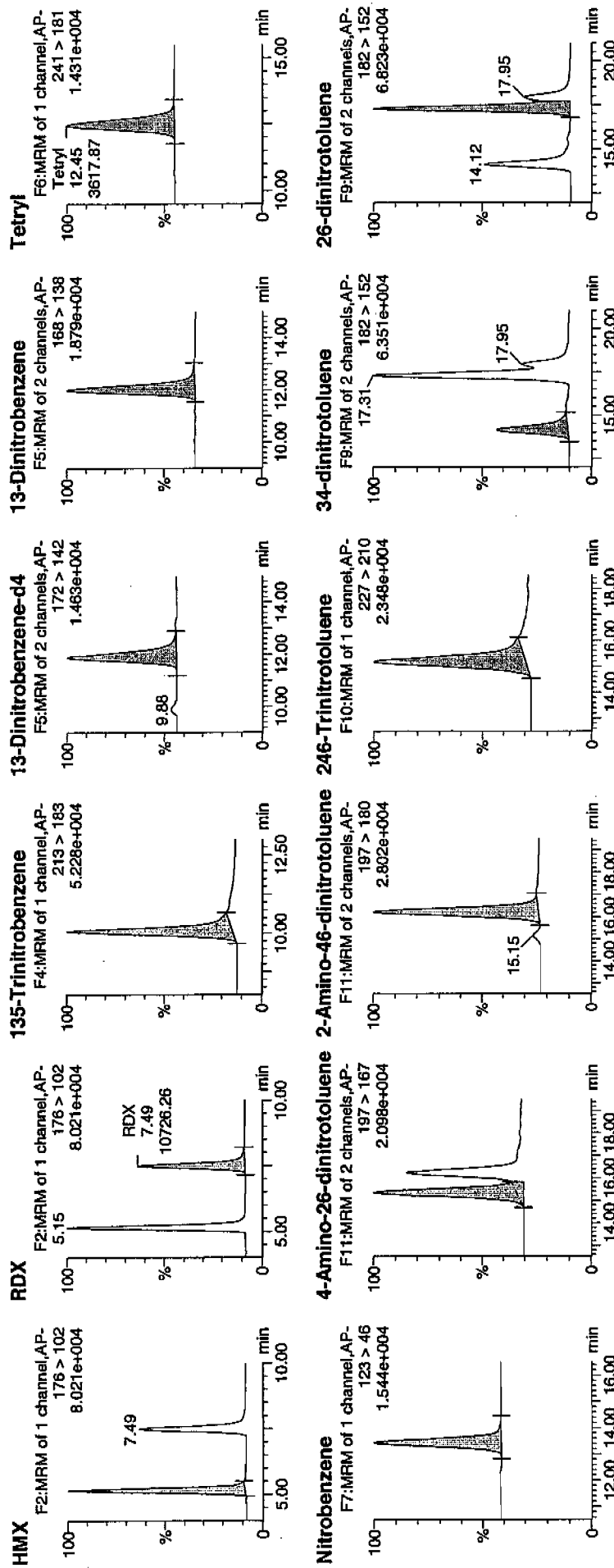
Date: 26-Jan-2010

Time: 16:21:27

ID: WXX100125-07CCV

Vial: 1:1,B

1/27/10



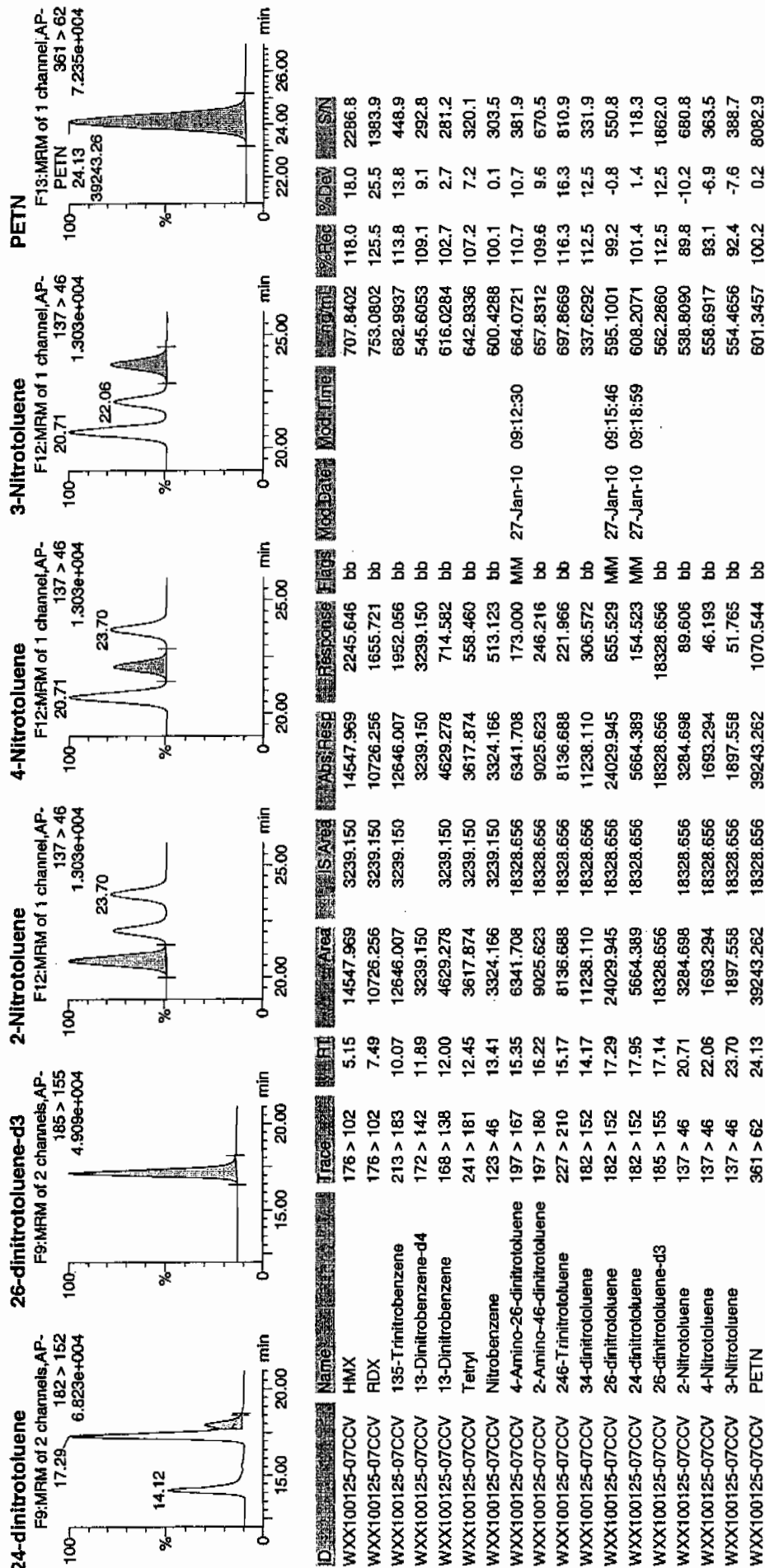
471 m/z 10

## Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Wed Jan 27 09:26:20 2010, Page 48 of 97

Dataset: C:\MASSLYN\New\_Exp.PRO\012510expA1.qld, Time: Wed Jan 27 09:20:42 2010



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

# GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis: 01/26/10  
 Time of Injection: 1621  
 Standard Number: WXX100125-07CCV  
 Data File: EXP0125060a

HMX	118.0
RDX	125.5
135-TNB	113.8
13-DNB	102.7
Tetryl	107.2
Nitrobenzene	100.1
4A-26-DNT	110.7
2A-46-DNT	109.6
246-TNT	116.3
34-DNT(surr)	112.5
26-DNT	99.2
24-DNT	101.4
2-NT	89.8
4-NT	93.1
3-NT	92.4
PETN	100.2

*mtt  
1/27/10*

Total 1692.5

Average 105.8

*mtt-01/27/10*

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): 10-1160-1

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0125062a

Analysis Date: 26-JAN-10 17:20

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	51.696	129	
1,3-Dinitrobenzene-d4	500	614.783	123	
2,4,6-Trinitrotoluene	40	49.225	123	
2,4-Dinitrotoluene	40	34.729	87	
2,6-Dinitrotoluene	40	39.808	100	
2,6-Dinitrotoluene-d3	500	614.638	123	
2-Amino-4,6-dinitrotoluene	40	45.735	114	
3,4-Dinitrotoluene	20	24.671	123	
4-Amino-2,6-dinitrotoluene	40	51.11	128	
HMX	40	52.738	132	*
Nitrobenzene	40	40.221	101	
PETN	40	28.447	71	
RDX	40	50.85	127	
Tetryl	40	57.694	144	*
m-Dinitrobenzene	40	44.101	110	
m-Nitrotoluene	40	43.112	108	
o-Nitrotoluene	40	44.615	112	
p-Nitrotoluene	40	46.759	117	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene, 2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA1.qld, Time: Wed Jan 27 09:20:42 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125062a

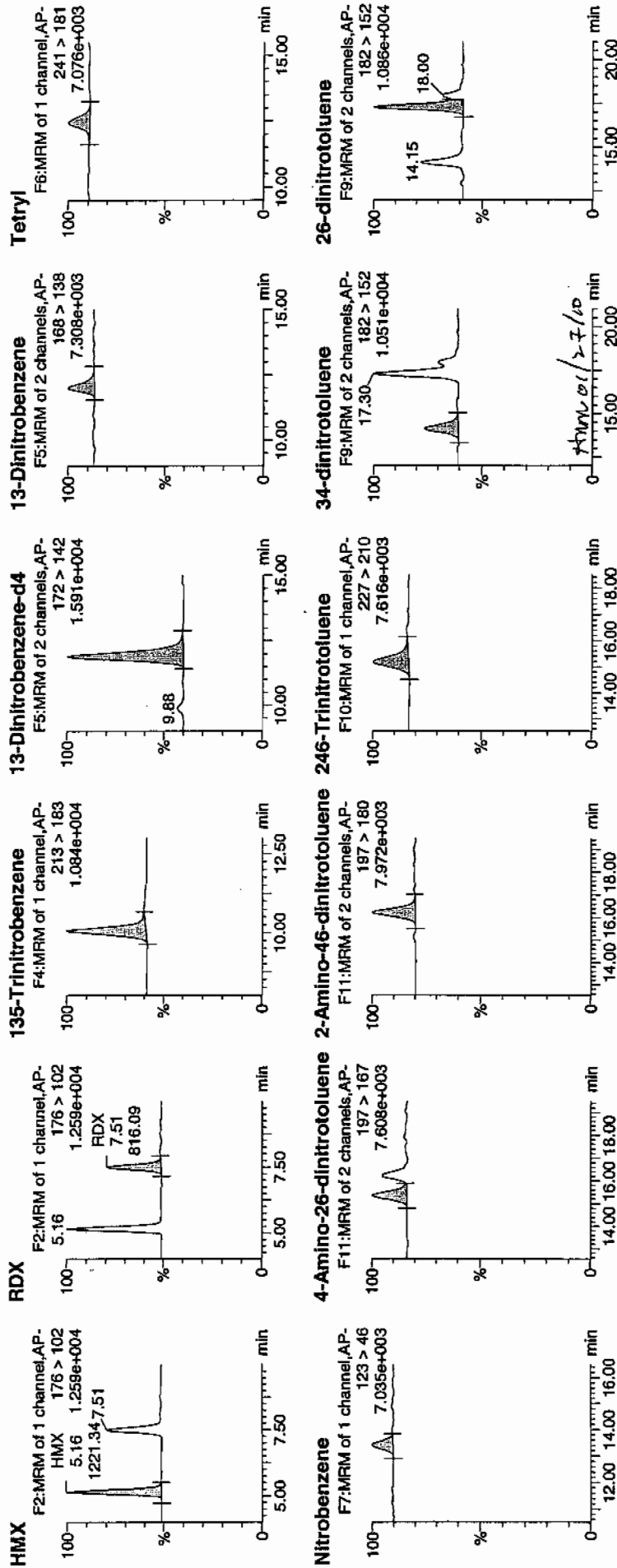
Date: 26-Jan-2010

Time: 17:20:28

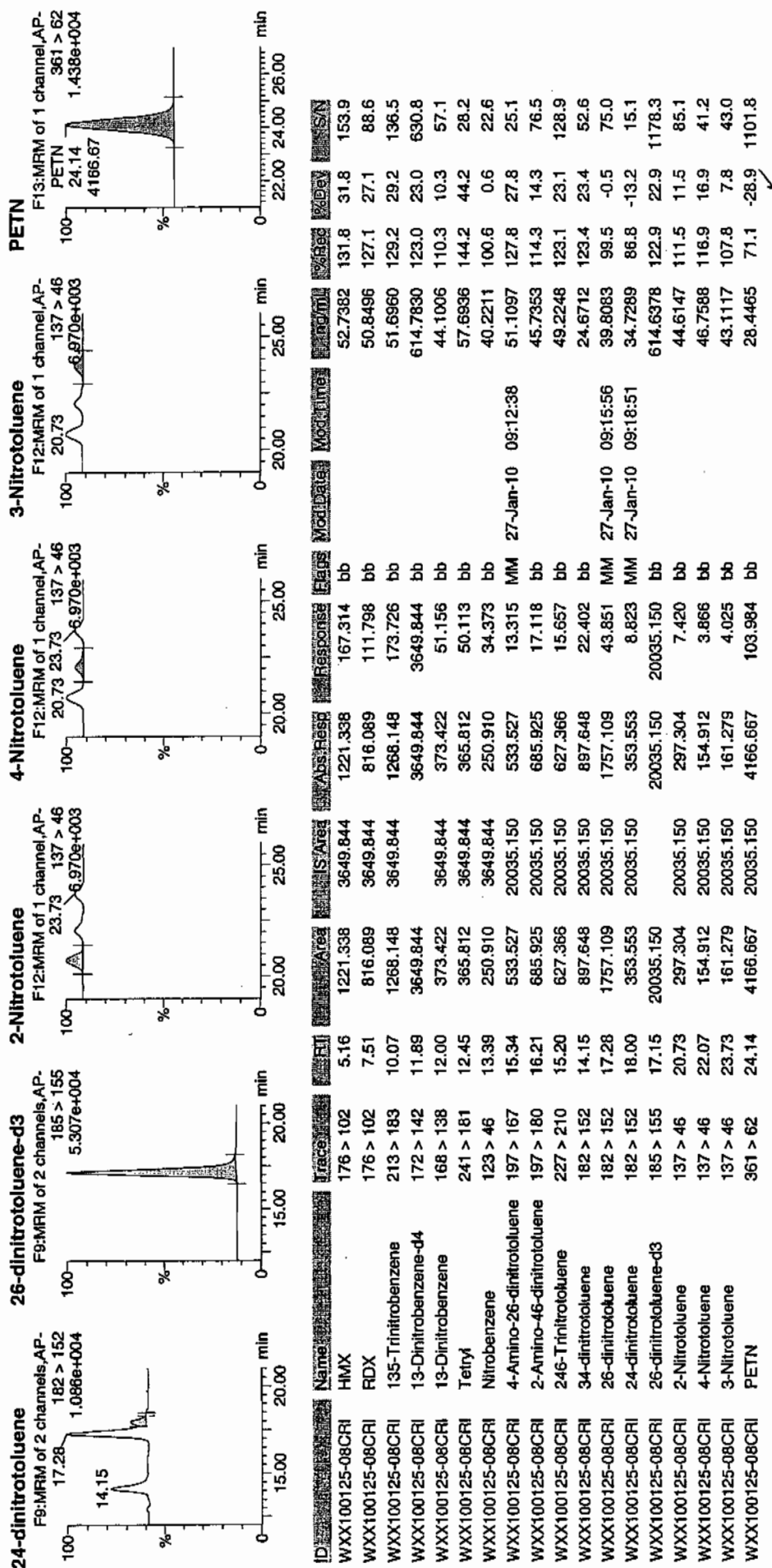
ID: WXX100125-08CRI

Vial: 1:1,C

10/10  
1/21/10



Dataset: C:\MASSLYN\New\_Exp.PRO\012510expA1.qld, Time: Wed Jan 27 09:20:42 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific  
 Date of Analysis 01/26/10  
 Time of Injection 1720  
 Standard Number WXX100125-08CRI  
 Data File EXP0125062a

HMX	131.8
RDX	127.1
135-TNB	129.2
13-DNB	110.3
Tetryl	144.2
Nitrobenzene	100.6
4A-26-DNT	127.8
2A-46-DNT	114.3
246-TNT	123.1
34-DNT(surr)	123.4
26-DNT	99.5
24-DNT	86.8
2-NT	111.5
4-NT	116.9
3-NT	107.8
PETN	71.1

*114.1  
1/27/10*

Total 1825.4

Average 114.1

*114.1 01/27/10*

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): 10-1160-1

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0125073a

Analysis Date: 26-JAN-10 22:45

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	671.694	112	
1,3-Dinitrobenzene-d4	500	508.961	102	
2,4,6-Trinitrotoluene	600	706.753	118	
2,4-Dinitrotoluene	600	643.877	107	
2,6-Dinitrotoluene	600	596.244	99	
2,6-Dinitrotoluene-d3	500	475.276	95	
2-Amino-4,6-dinitrotoluene	600	688.37	115	
3,4-Dinitrotoluene	300	342.191	114	
4-Amino-2,6-dinitrotoluene	600	691.558	115	
HMX	600	652.718	109	
Nitrobenzene	600	550.739	92	
PETN	600	648.299	108	
RDX	600	649.867	108	
Tetryl	600	631.484	105	
m-Dinitrobenzene	600	592.419	99	
m-Nitrotoluene	600	650.365	108	
o-Nitrotoluene	600	610.997	102	
p-Nitrotoluene	600	618.438	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

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\1012510expA1.qld, Time: Wed Jan 27 09:20:42 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125073a

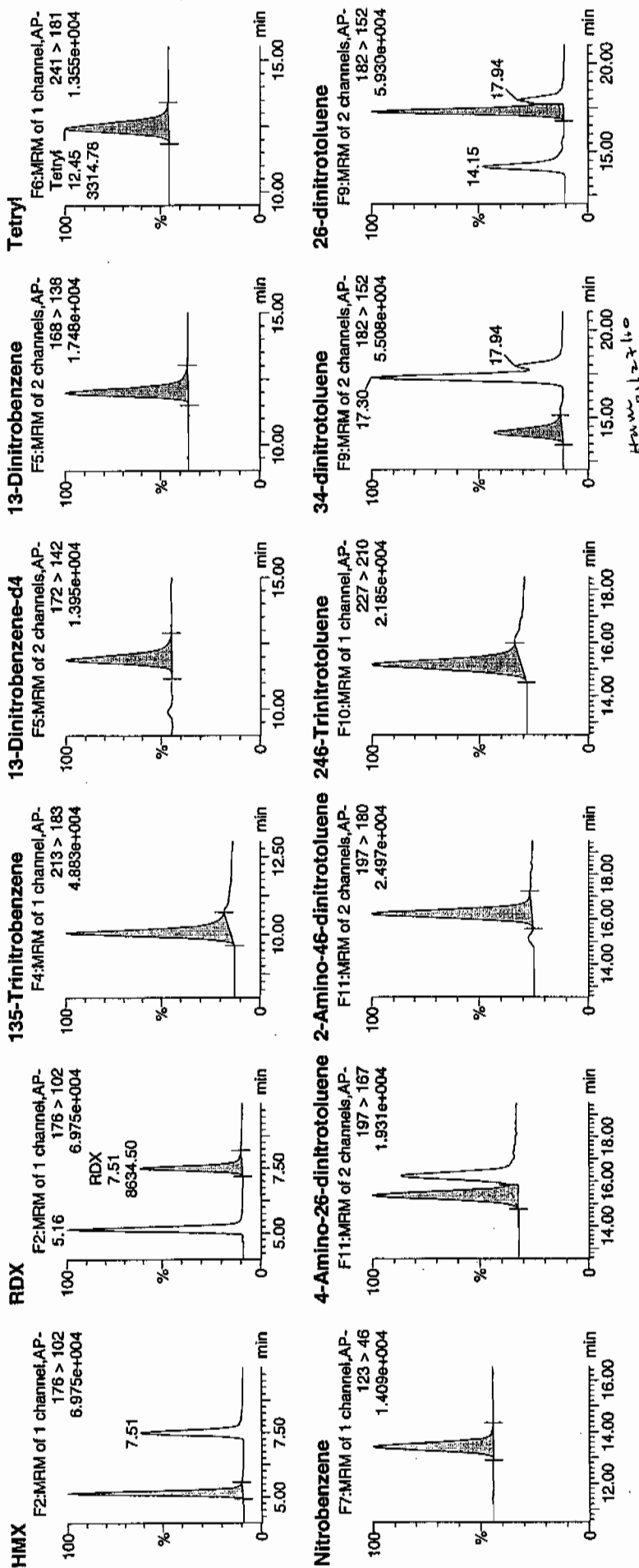
Date: 26-Jan-2010

Time: 22:45:12

ID: WXX100125-07CCV

Vial: 1:1,B

107  
1/27/10

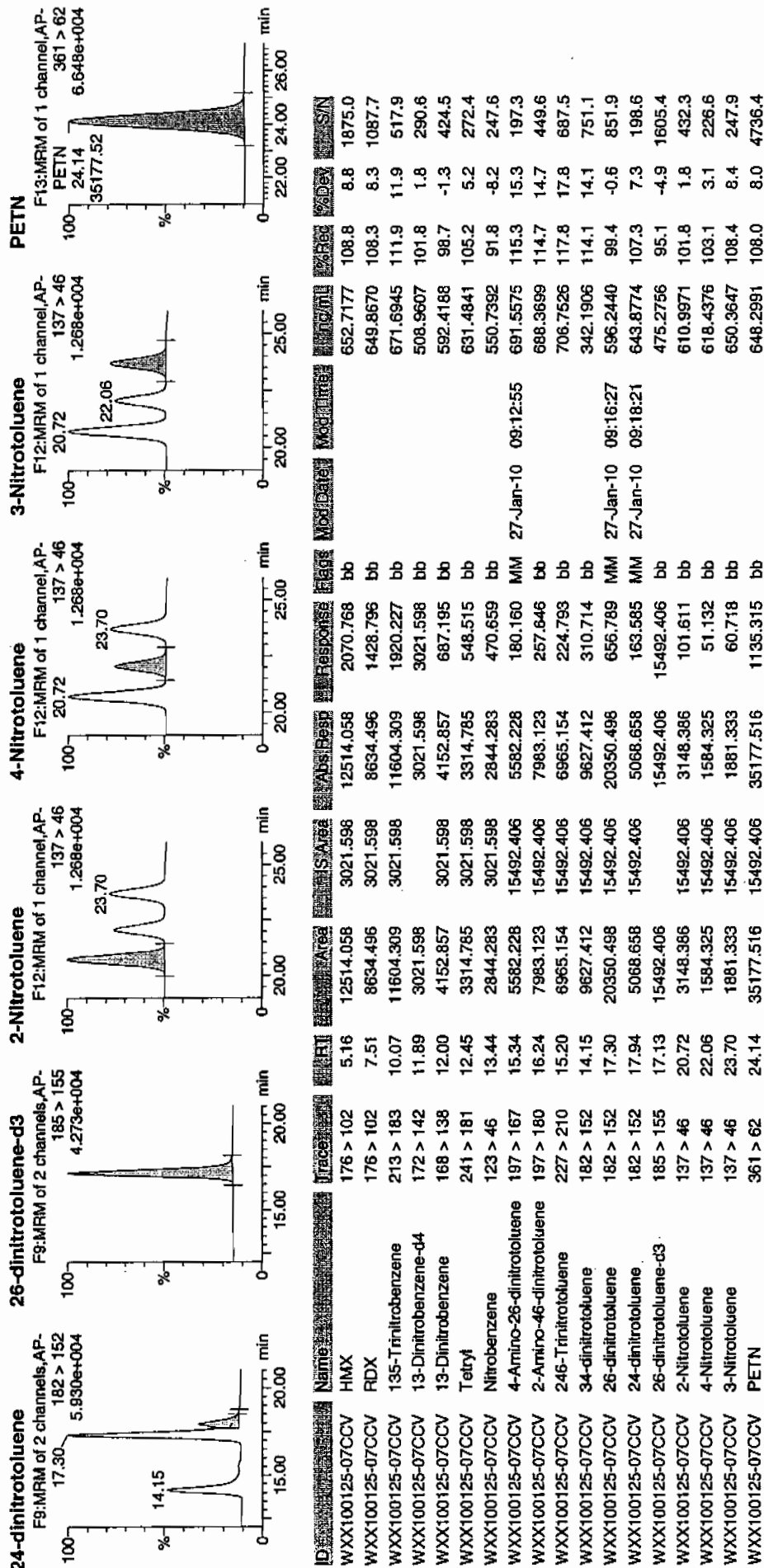


## Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Wed Jan 27 09:26:20 2010, Page 74 of 97

Dataset: C:\MASSLYNX\New\_Exp\PRO\012510expA1.qld, Time: Wed Jan 27 09:20:42 2010



GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis: 01/26/10  
 Time of Injection: 2245  
 Standard Number: WXX100125-07CCV  
 Data File: EXP0125073a

HMX	108.8
RDX	108.3
135-TNB	111.9
13-DNB	98.7
Tetryl	105.2
Nitrobenzene	91.8
4A-26-DNT	115.3
2A-46-DNT	114.7
246-TNT	117.8
34-DNT(surr)	114.1
26-DNT	99.4
24-DNT	107.3
2-NT	101.8
4-NT	103.1
3-NT	108.4
PETN	108.0

Total 1714.6

Average 107.2

*Handwritten: 1/27/10*

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): 10-1160-1

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0125075a

Analysis Date: 26-JAN-10 23:44

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	56.169	140	*
1,3-Dinitrobenzene-d4	500	483.992	97	
2,4,6-Trinitrotoluene	40	40.766	102	
2,4-Dinitrotoluene	40	35.006	88	
2,6-Dinitrotoluene	40	40.845	102	
2,6-Dinitrotoluene-d3	500	507.7	102	
2-Amino-4,6-dinitrotoluene	40	44.774	112	
3,4-Dinitrotoluene	20	23.523	118	
4-Amino-2,6-dinitrotoluene	40	43.317	108	
HMX	40	49.659	124	
Nitrobenzene	40	38.296	96	
PETN	40	36.274	91	
RDX	40	46.372	116	
Tetryl	40	44.916	112	
m-Dinitrobenzene	40	38.172	95	
m-Nitrotoluene	40	37.685	94	
o-Nitrotoluene	40	39.419	99	
p-Nitrotoluene	40	40.939	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  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp\_PRO\012510expA1.qld, Time: Wed Jan 27 09:20:42 2010

Name: C:\MASSLYNX\NEW\_EXP\_PRO\Data\EXP0125075a

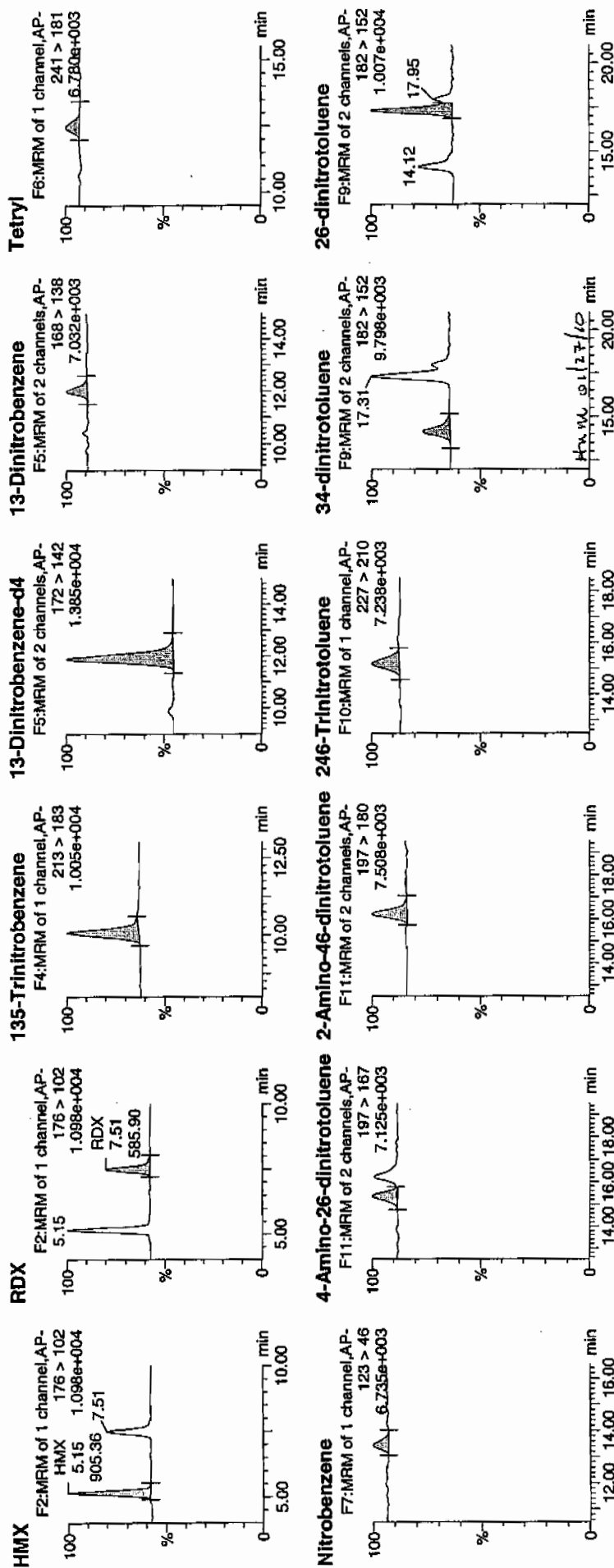
Date: 26-Jan-2010

Time: 23:44:10

ID: WXX100125-08CRI

Vial: 1:1,C

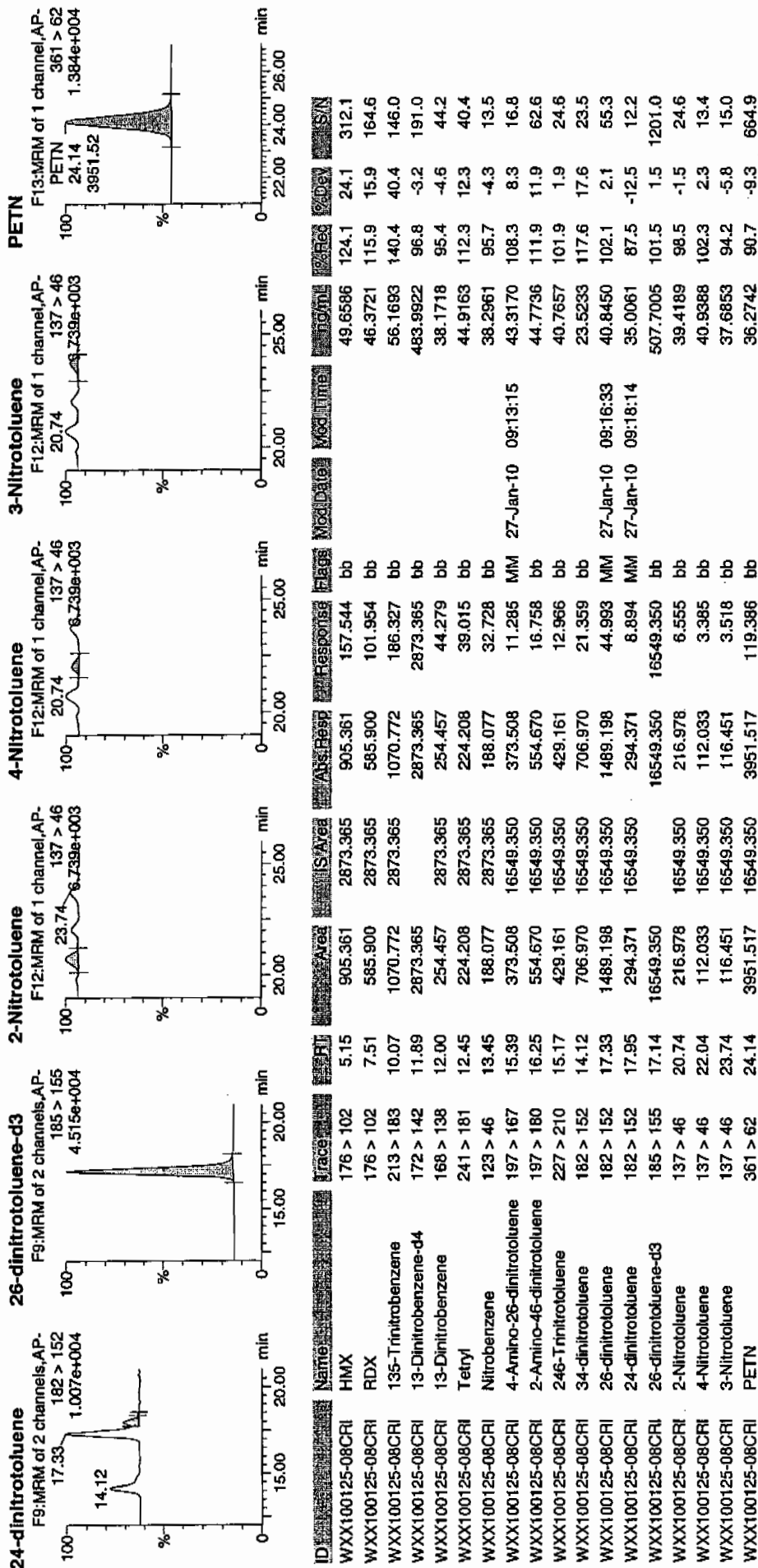
10/17  
1/27/10



Printed: Wed Jan 27 09:26:20 2010, Page 78 of 97

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

Dataset: C:\MASSLYNX\New\_Exp\PRO\012510expA1.qld, Time: Wed Jan 27 09:20:42 2010



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

GRAND MEAN AVERAGE

Vendor: UltraScientific  
 Date of Analysis 01/26/10  
 Time of Injection 2344  
 Standard Number WXX100125-08CRI  
 Data File EXP0125075a

HMX	124.1
RDX	115.9
135-TNB	140.4
13-DNB	95.4
Tetryl	112.3
Nitrobenzene	95.7
4A-26-DNT	108.3
2A-46-DNT	111.9
246-TNT	101.9
34-DNT(surr)	117.6
26-DNT	102.1
24-DNT	87.5
2-NT	98.5
4-NT	102.3
3-NT	94.2
PETN	90.7

*MTT  
1/27/10*

Total 1698.8

Average 106.2

*from 01/27/10*

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): 10-1160-1

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0125082a

Analysis Date: 27-JAN-10 03:10

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	646.231	108	
1,3-Dinitrobenzene-d4	500	533.587	107	
2,4,6-Trinitrotoluene	600	729.079	122	*
2,4-Dinitrotoluene	600	544.593	91	
2,6-Dinitrotoluene	600	604.575	101	
2,6-Dinitrotoluene-d3	500	492.902	99	
2-Amino-4,6-dinitrotoluene	600	713.723	119	
3,4-Dinitrotoluene	300	321.614	107	
4-Amino-2,6-dinitrotoluene	600	641.942	107	
HMX	600	657.246	110	
Nitrobenzene	600	546.972	91	
PETN	600	662.902	110	
RDX	600	625.04	104	
Tetryl	600	618.034	103	
m-Dinitrobenzene	600	604.712	101	
m-Nitrotoluene	600	620.723	103	
o-Nitrotoluene	600	528.487	88	
p-Nitrotoluene	600	627.285	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

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125082a

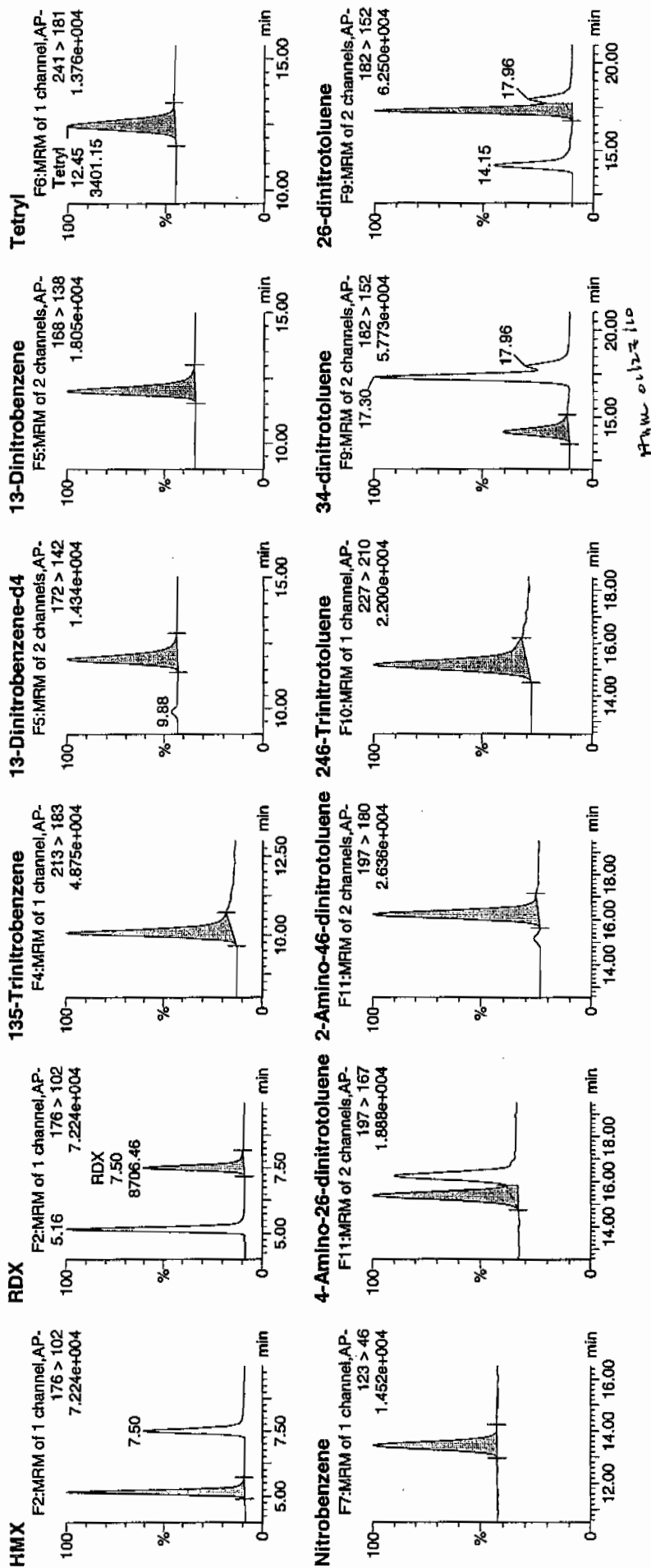
Date: 27-Jan-2010

Time: 03:10:33

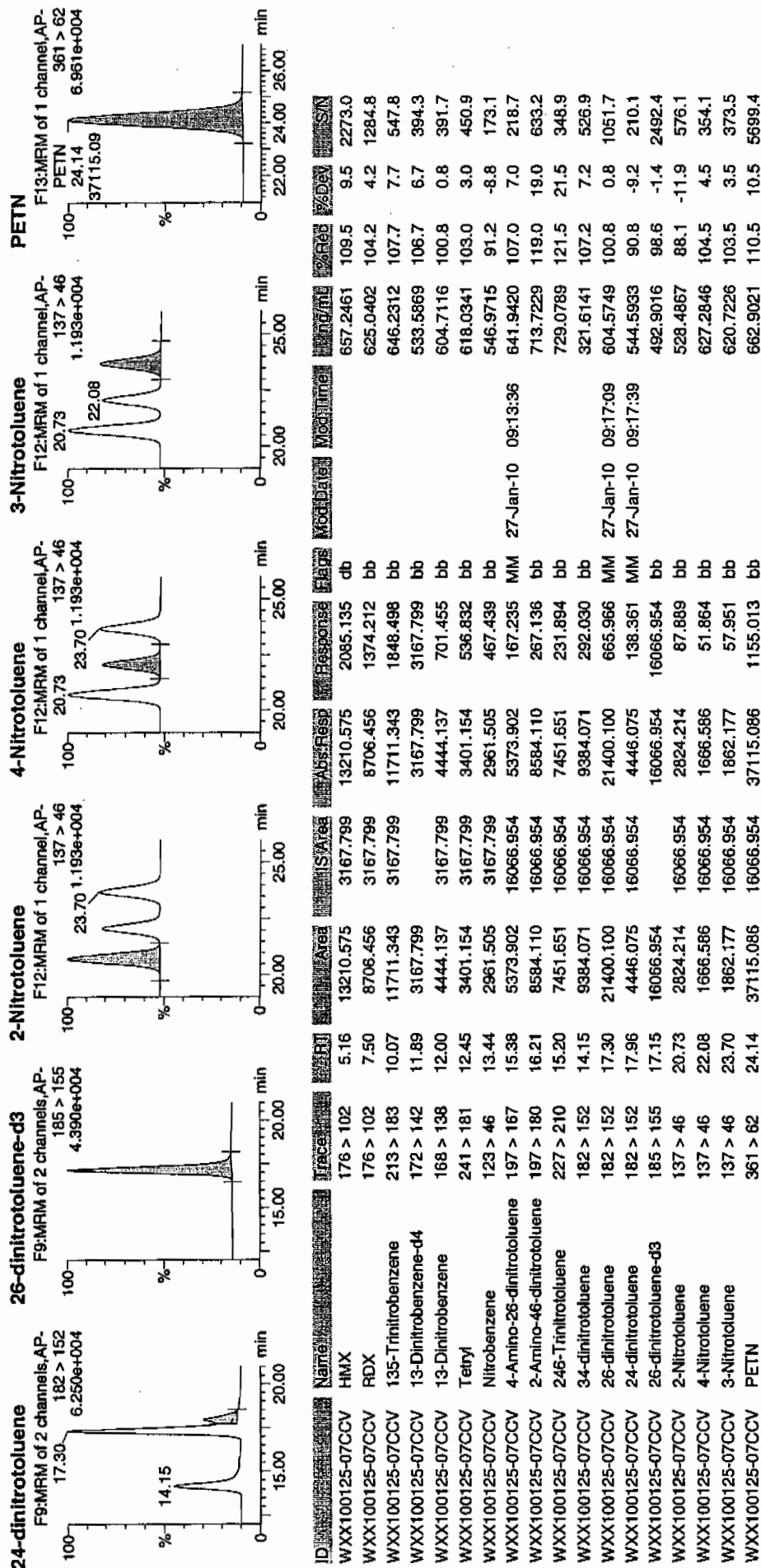
ID: WXX100125-07CCV

Vial: 1:1,B

WAP  
1/27/10



Dataset: C:\MASSLYNX\New\_Exp\PRO1012510expA1.qld, Time: Wed Jan 27 09:20:42 2010



GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis: 01/27/10  
 Time of Injection: 0310  
 Standard Number: WXX100125-07CCV  
 Data File: EXP0125082a

HMX	109.5
RDX	104.2
135-TNB	107.7
13-DNB	100.8
Tetryl	103.0
Nitrobenzene	91.2
4A-26-DNT	107.0
2A-46-DNT	119.0
246-TNT	121.5
34-DNT(surr)	107.2
26-DNT	100.8
24-DNT	90.8
2-NT	88.1
4-NT	104.5
3-NT	103.5
PETN	110.5

*WAT  
1/27/10*

Total 1669.3

Average 104.3

*WAT 01/27/10*

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): 10-1160-1

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0125084a

Analysis Date: 27-JAN-10 04:09

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	52.216	131	*
1,3-Dinitrobenzene-d4	500	509.03	102	
2,4,6-Trinitrotoluene	40	49.421	124	
2,4-Dinitrotoluene	40	37.395	93	
2,6-Dinitrotoluene	40	41.302	103	
2,6-Dinitrotoluene-d3	500	549.582	110	
2-Amino-4,6-dinitrotoluene	40	41.118	103	
3,4-Dinitrotoluene	20	22.594	113	
4-Amino-2,6-dinitrotoluene	40	41.47	104	
HMX	40	49.161	123	
Nitrobenzene	40	52.118	130	*
PETN	40	34.241	86	
RDX	40	46.475	116	
Tetryl	40	57.554	144	*
m-Dinitrobenzene	40	37.685	94	
m-Nitrotoluene	40	42.967	107	
o-Nitrotoluene	40	44.801	112	
p-Nitrotoluene	40	41.318	103	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene, 2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA1.qld, Time: Wed Jan 27 09:20:42 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125084a

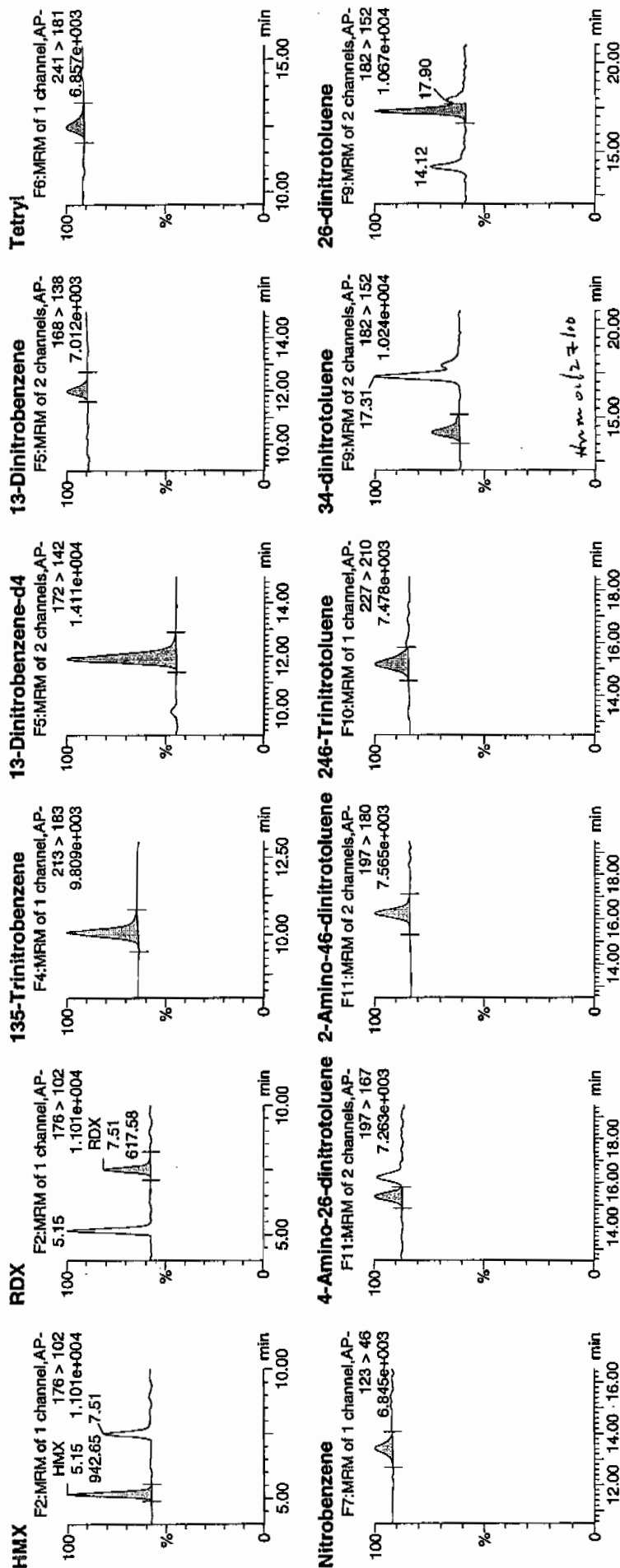
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Time: 04:09:30

ID: WXX100125-08CRI

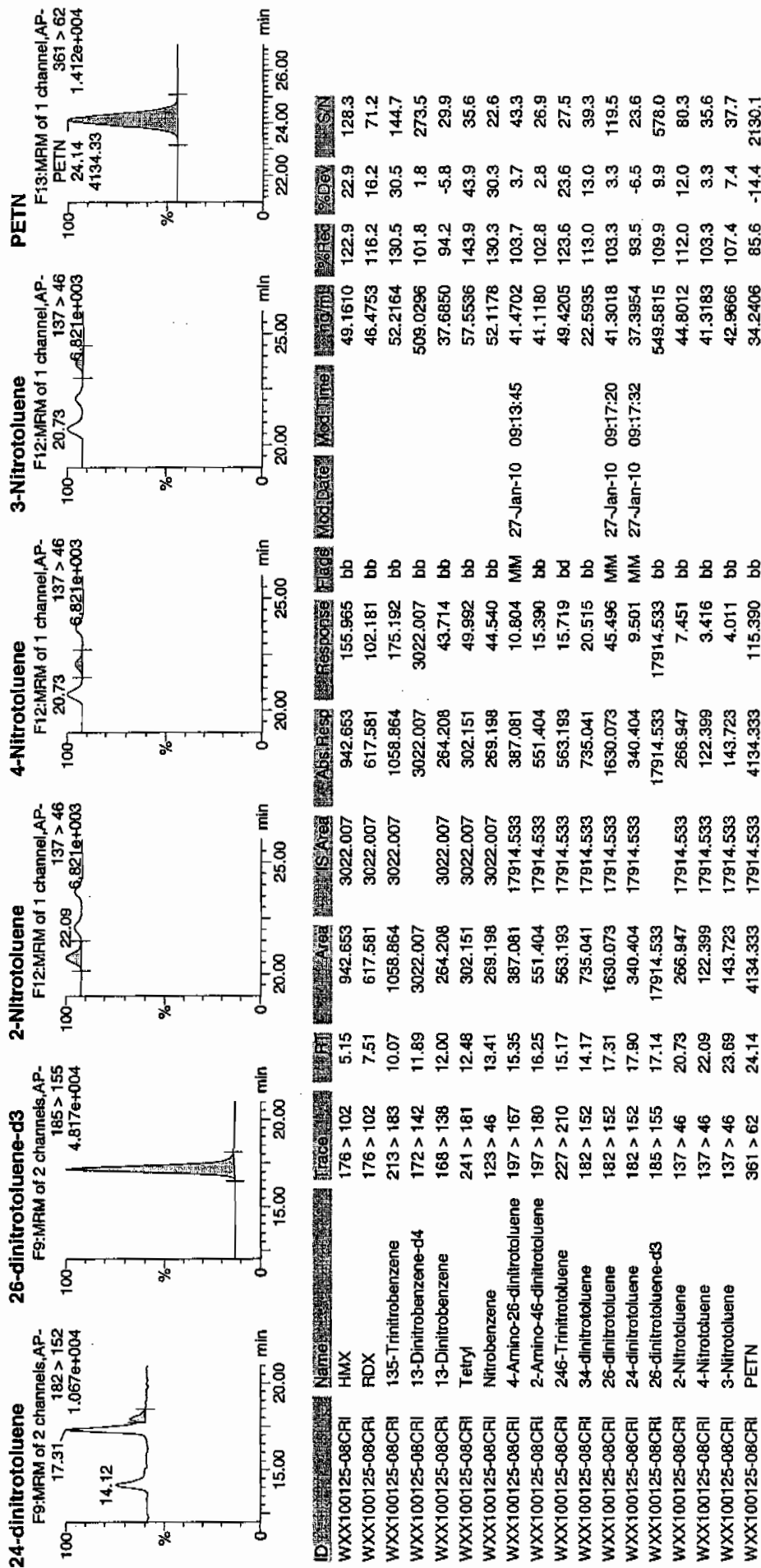
Vial: 1:1,C

WXX  
1/27/10



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

Dataset: C:\WASSLYN\New\_Exp\PRO1012510expA1.qld, Time: Wed Jan 27 09:20:42 2010



# GRAND MEAN AVERAGE

Vendor: UltraScientific  
 Date of Analysis 01/27/10  
 Time of Injection 0409  
 Standard Number WXX100125-08CRI  
 Data File EXP0125084a

HMX	122.9
RDX	116.2
135-TNB	130.5
13-DNB	94.2
Tetryl	143.9
Nitrobenzene	130.3
4A-26-DNT	103.7
2A-46-DNT	102.8
246-TNT	123.6
34-DNT(surr)	113.0
26-DNT	103.3
24-DNT	93.5
2-NT	112.0
4-NT	103.3
3-NT	107.4
PETN	85.6

Total 1786.2

Average 111.6

WAT  
1/27/10

Sum 01/27/10

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): 10-1160-1

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0125095a

Analysis Date: 27-JAN-10 09:34

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	690.785	115	
1,3-Dinitrobenzene-d4	500	557.852	112	
2,4,6-Trinitrotoluene	600	694.988	116	
2,4-Dinitrotoluene	600	594.759	99	
2,6-Dinitrotoluene	600	598.981	100	
2,6-Dinitrotoluene-d3	500	502.328	100	
2-Amino-4,6-dinitrotoluene	600	696.342	116	
3,4-Dinitrotoluene	300	322.957	108	
4-Amino-2,6-dinitrotoluene	600	690.103	115	
HMX	600	748.841	125	*
Nitrobenzene	600	539.735	90	
PETN	600	692.59	115	
RDX	600	801.044	134	*
Tetryl	600	639.631	107	
m-Dinitrobenzene	600	610.103	102	
m-Nitrotoluene	600	630.246	105	
o-Nitrotoluene	600	599.552	100	
p-Nitrotoluene	600	647.051	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

GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125095a

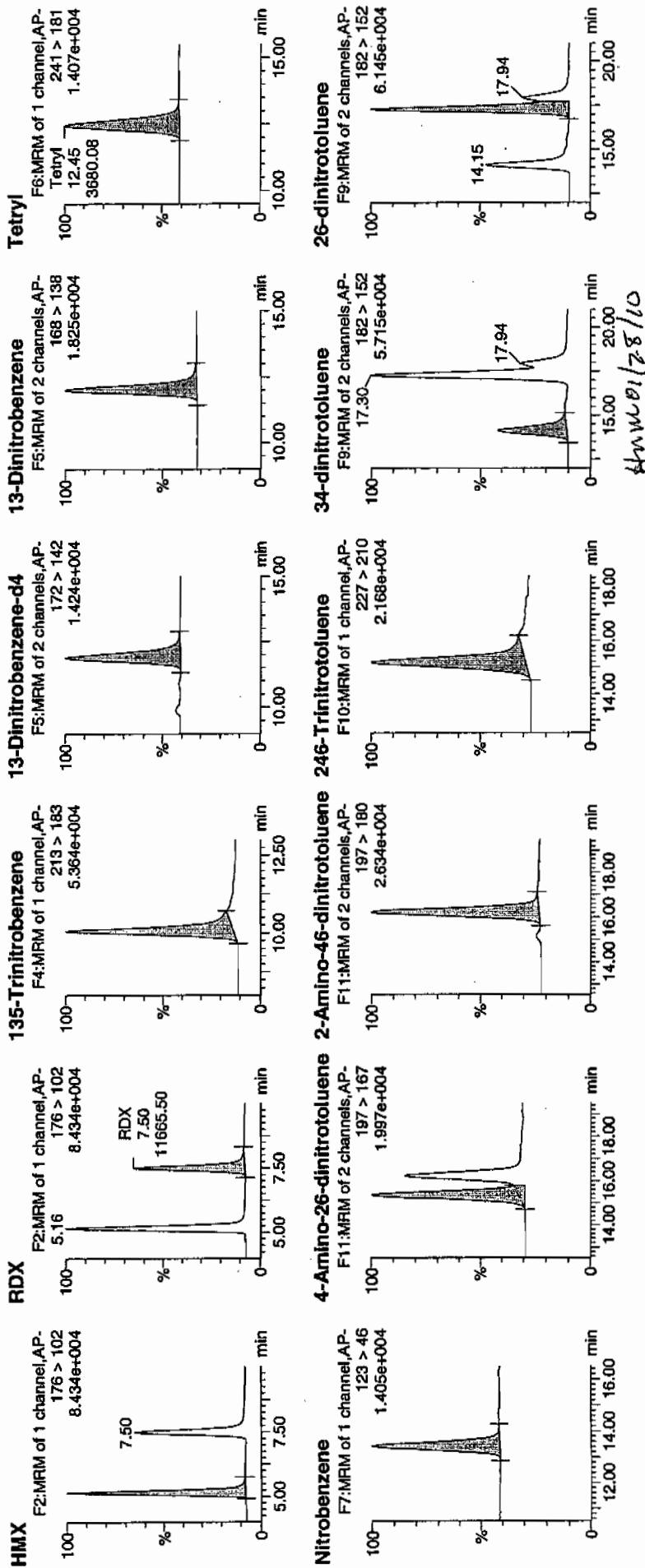
Date: 27-Jan-2010

Time: 09:34:49

ID: WXX100125-07CCV

Vial: 1:1,B

1/28/10

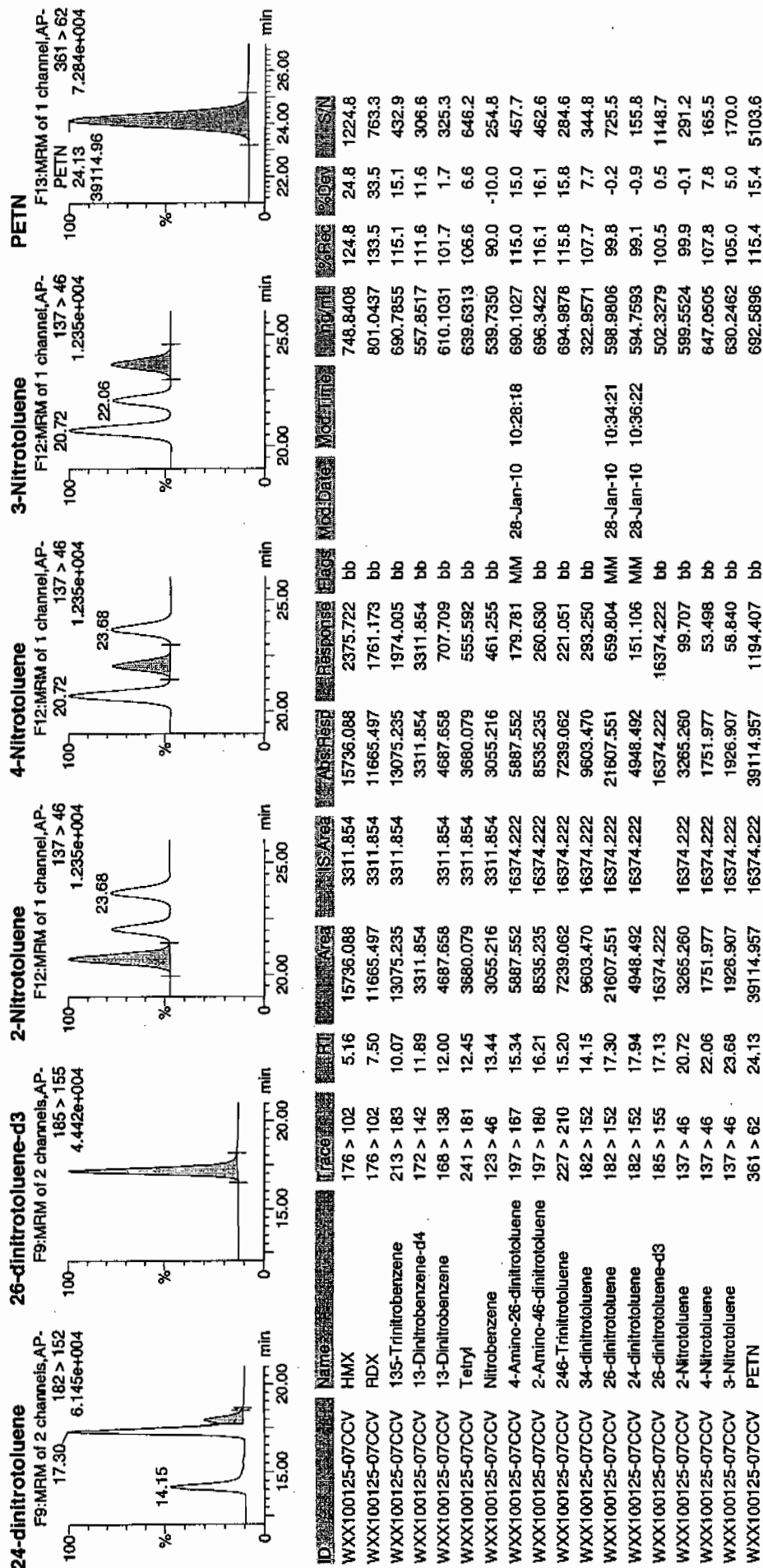


## Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Thu Jan 28 10:43:32 2010, Page 22 of 121

Dataset: C:\MASSLYNX\New\_Exp\_PROV012510expA2.qld, Time: Thu Jan 28 10:42:53 2010



# GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis: 01/27/10  
 Time of Injection: 0934  
 Standard Number: WXX100125-07CCV  
 Data File: EXP0125095a

HMX	124.8
RDX	133.5
135-TNB	115.1
13-DNB	101.7
Tetryl	106.6
Nitrobenzene	90.0
4A-26-DNT	115.0
2A-46-DNT	116.1
246-TNT	115.8
34-DNT(surr)	107.7
26-DNT	99.8
24-DNT	99.1
2-NT	99.9
4-NT	107.8
3-NT	105.0
PETN	115.4

*mtt  
1/28/10*

Total 1753.3

*done 01/28/10*

Average 109.6

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%



7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1160-1

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0125097a

Analysis Date: 27-JAN-10 10:33

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	50.948	127	
1,3-Dinitrobenzene-d4	500	494.315	99	
2,4,6-Trinitrotoluene	40	36.387	91	
2,4-Dinitrotoluene	40	43.297	108	
2,6-Dinitrotoluene	40	40.794	102	
2,6-Dinitrotoluene-d3	500	507.664	102	
2-Amino-4,6-dinitrotoluene	40	41.899	105	
3,4-Dinitrotoluene	20	21.498	107	
4-Amino-2,6-dinitrotoluene	40	50.75	127	
HMX	40	63.85	160	*
Nitrobenzene	40	44.243	111	
PETN	40	40.486	101	
RDX	40	46.52	116	
Tetryl	40	48.725	122	
m-Dinitrobenzene	40	39.009	98	
m-Nitrotoluene	40	44.324	111	
o-Nitrotoluene	40	38.885	97	
p-Nitrotoluene	40	39.287	98	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125097a

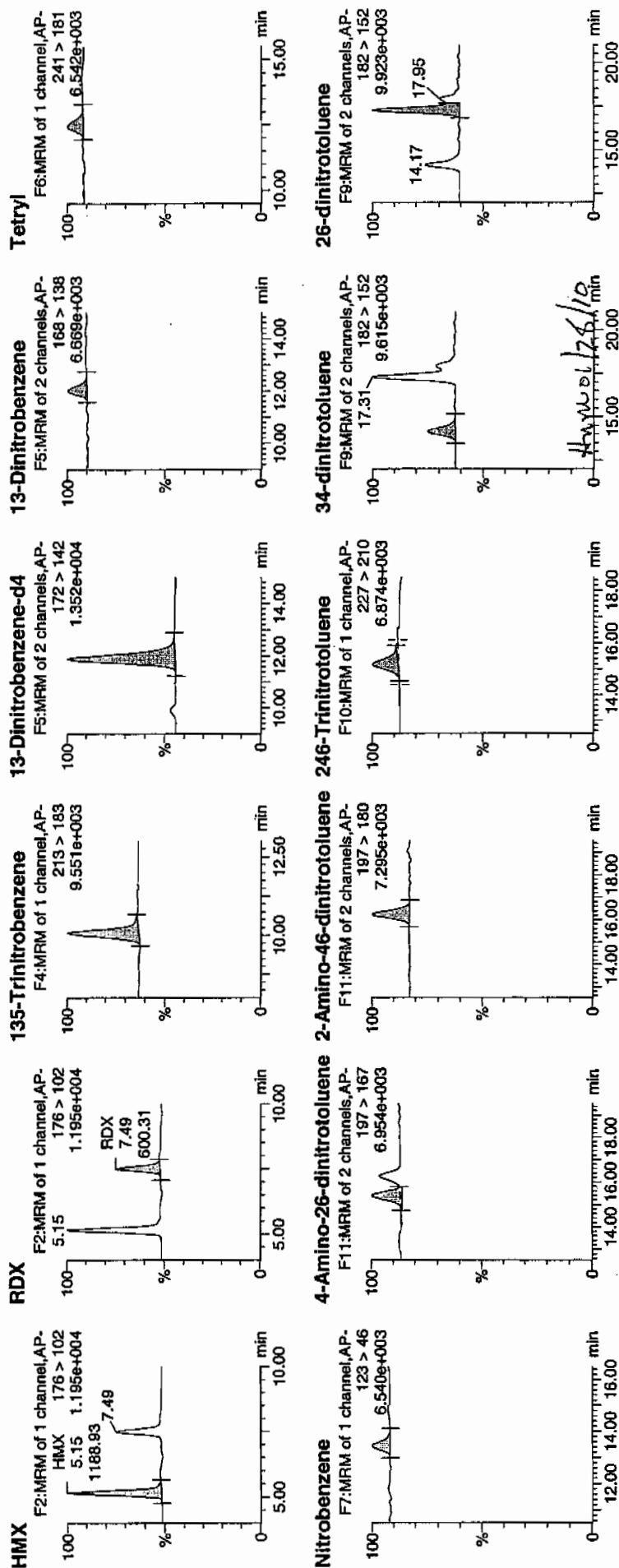
Date: 27-Jan-2010

Time: 10:33:58

ID: WXX100125-08CRI

Vial: 1:1,C

108/10

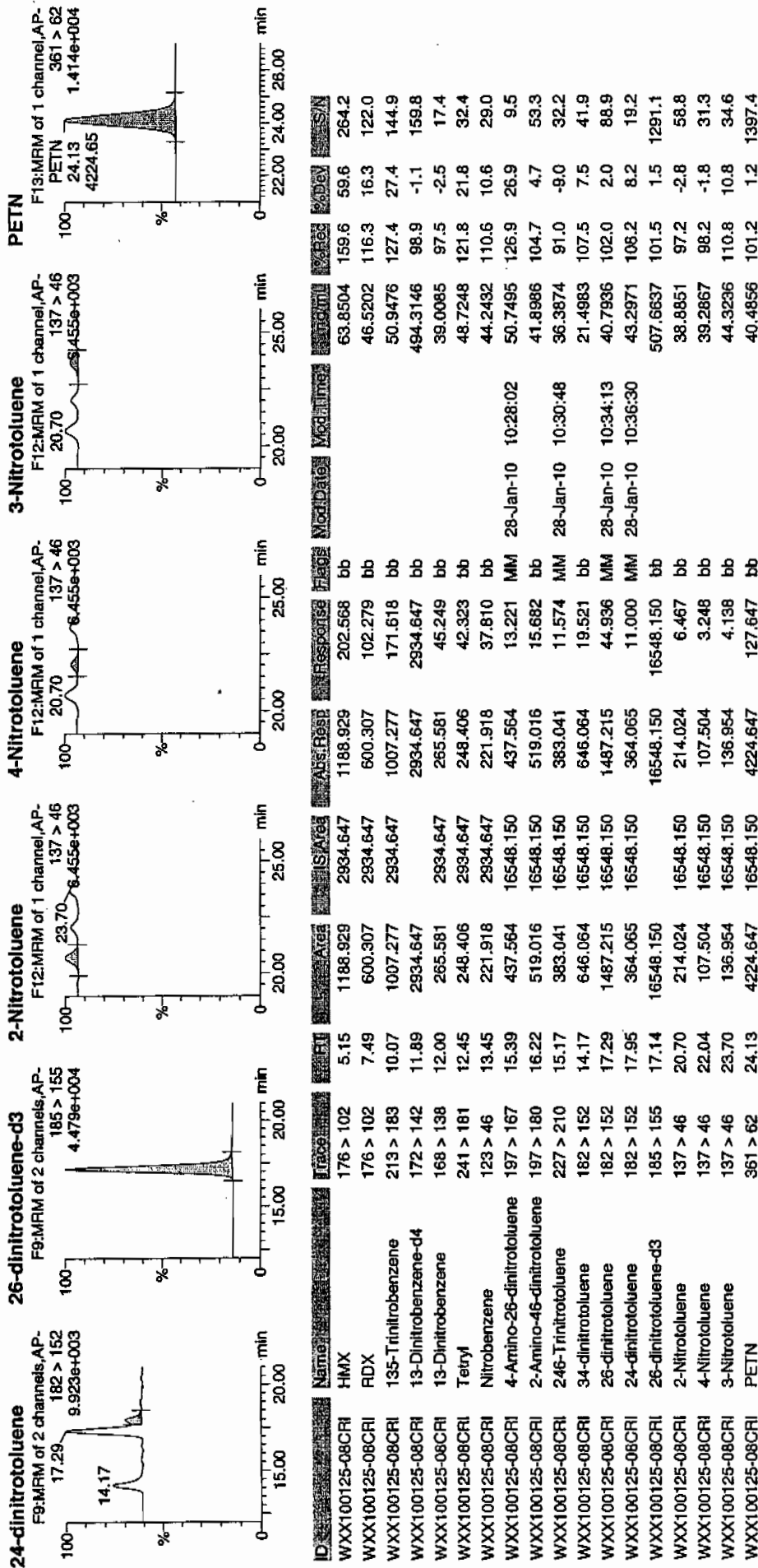


## Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Thu Jan 28 10:43:32 2010, Page 26 of 121

Dataset: C:\MASSLYNX\New\_Exp\PRO012510expA2.qld, Time: Thu Jan 28 10:42:53 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific  
 Date of Analysis 01/27/10  
 Time of Injection 1033  
 Standard Number WXX100125-08CRI  
 Data File EXP0125097a

HMX	159.6
RDX	116.3
135-TNB	127.4
13-DNB	97.5
Tetryl	121.8
Nitrobenzene	110.6
4A-26-DNT	126.9
2A-46-DNT	104.7
246-TNT	91.0
34-DNT(surr)	107.5
26-DNT	102.0
24-DNT	108.2
2-NT	97.2
4-NT	98.2
3-NT	110.8
PETN	101.2

*NOT  
1/28/10*

Total 1780.9

Average 111.3

*Hum 01/28/10*

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): 10-1160-1

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0125108a

Analysis Date: 27-JAN-10 15:58

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	680.256	113	
1,3-Dinitrobenzene-d4	500	550.639	110	
2,4,6-Trinitrotoluene	600	793.623	132	*
2,4-Dinitrotoluene	600	605.077	101	
2,6-Dinitrotoluene	600	604.019	101	
2,6-Dinitrotoluene-d3	500	530.816	106	
2-Amino-4,6-dinitrotoluene	600	658.199	110	
3,4-Dinitrotoluene	300	339.185	113	
4-Amino-2,6-dinitrotoluene	600	669.192	112	
HMX	600	600.388	100	
Nitrobenzene	600	537.876	90	
PETN	600	537.246	90	
RDX	600	628.942	105	
Tetryl	600	594.999	99	
m-Dinitrobenzene	600	600.852	100	
m-Nitrotoluene	600	545.465	91	
o-Nitrotoluene	600	500.166	83	
p-Nitrotoluene	600	523.635	87	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

Printed: Thu Jan 28 10:43:32 2010, Page 47 of 121

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

Dataset: C:\MASSLYNX\New\_Exp\PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

Name: C:\MASSLYNX\NEW\_EXP\PRO\Data\EXP0125108a

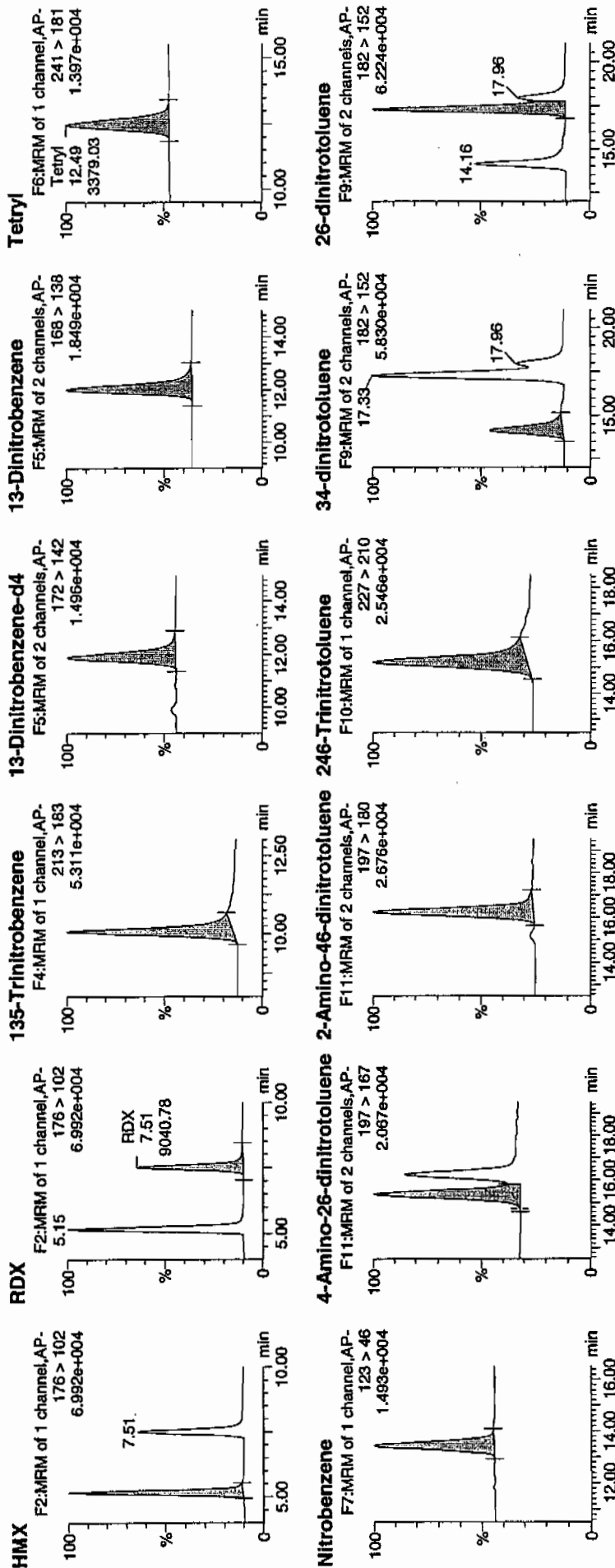
Date: 27-Jan-2010

Time: 15:58:33

ID: WXX100125-07CCV

Vial: 1:1,B

1/28/10

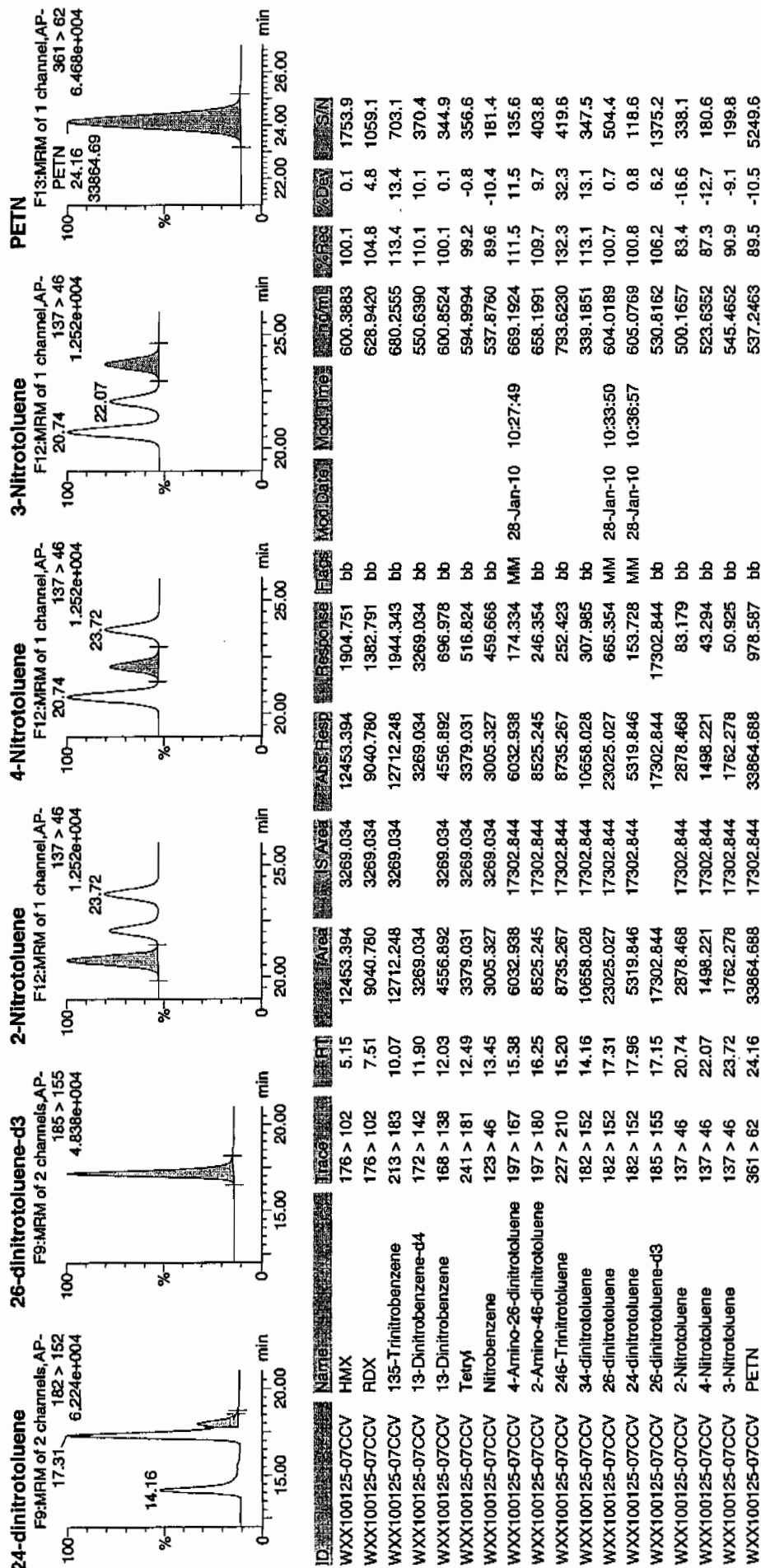


Ames/28/10

# Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010



# GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis: 01/27/10  
 Time of Injection: 1558  
 Standard Number: WXX100125-07CCV  
 Data File: EXP0125108a

HMX	100.1
RDX	104.8
135-TNB	113.4
13-DNB	100.1
Tetryl	99.2
Nitrobenzene	89.6
4A-26-DNT	111.5
2A-46-DNT	109.7
246-TNT	132.3
34-DNT(surr)	113.1
26-DNT	100.7
24-DNT	100.8
2-NT	83.4
4-NT	87.3
3-NT	90.9
PETN	89.5

*not  
1/28/10*

Total 1626.4

*Hmm 01/28/10*

Average 101.7

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%



7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1160-1

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0125110a

Analysis Date: 27-JAN-10 16:57

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	52.299	131	*
1,3-Dinitrobenzene-d4	500	559.774	112	
2,4,6-Trinitrotoluene	40	62.349	156	*
2,4-Dinitrotoluene	40	40.315	101	
2,6-Dinitrotoluene	40	40.693	102	
2,6-Dinitrotoluene-d3	500	553.757	111	
2-Amino-4,6-dinitrotoluene	40	40.05	100	
3,4-Dinitrotoluene	20	21.774	109	
4-Amino-2,6-dinitrotoluene	40	44.776	112	
HMX	40	41.328	103	
Nitrobenzene	40	35.669	89	
PETN	40	28.542	71	
RDX	40	39.292	98	
Tetryl	40	37.065	93	
m-Dinitrobenzene	40	33.575	84	
m-Nitrotoluene	40	41.171	103	
o-Nitrotoluene	40	32.917	82	
p-Nitrotoluene	40	36.803	92	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene, 2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125110a

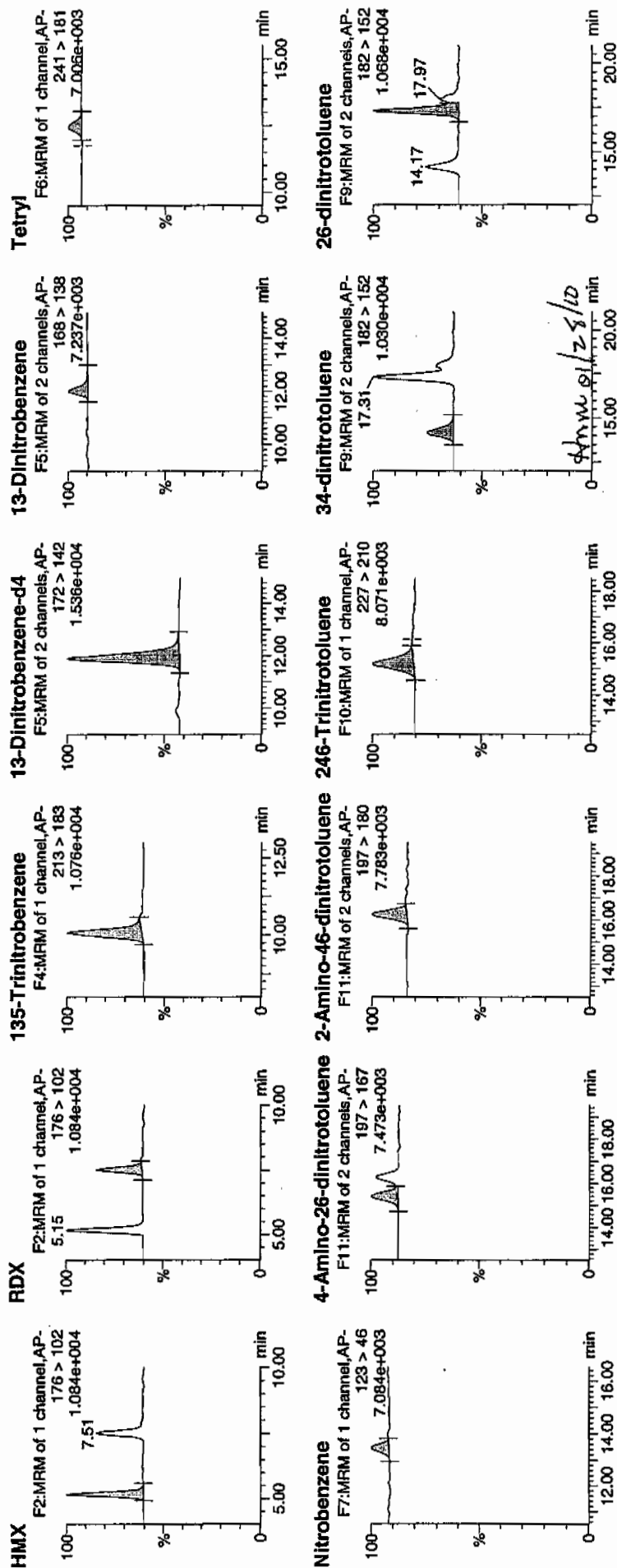
Date: 27-Jan-2010

Time: 16:57:36

ID: WXX100125-08CRI

Vial: 1:1,C

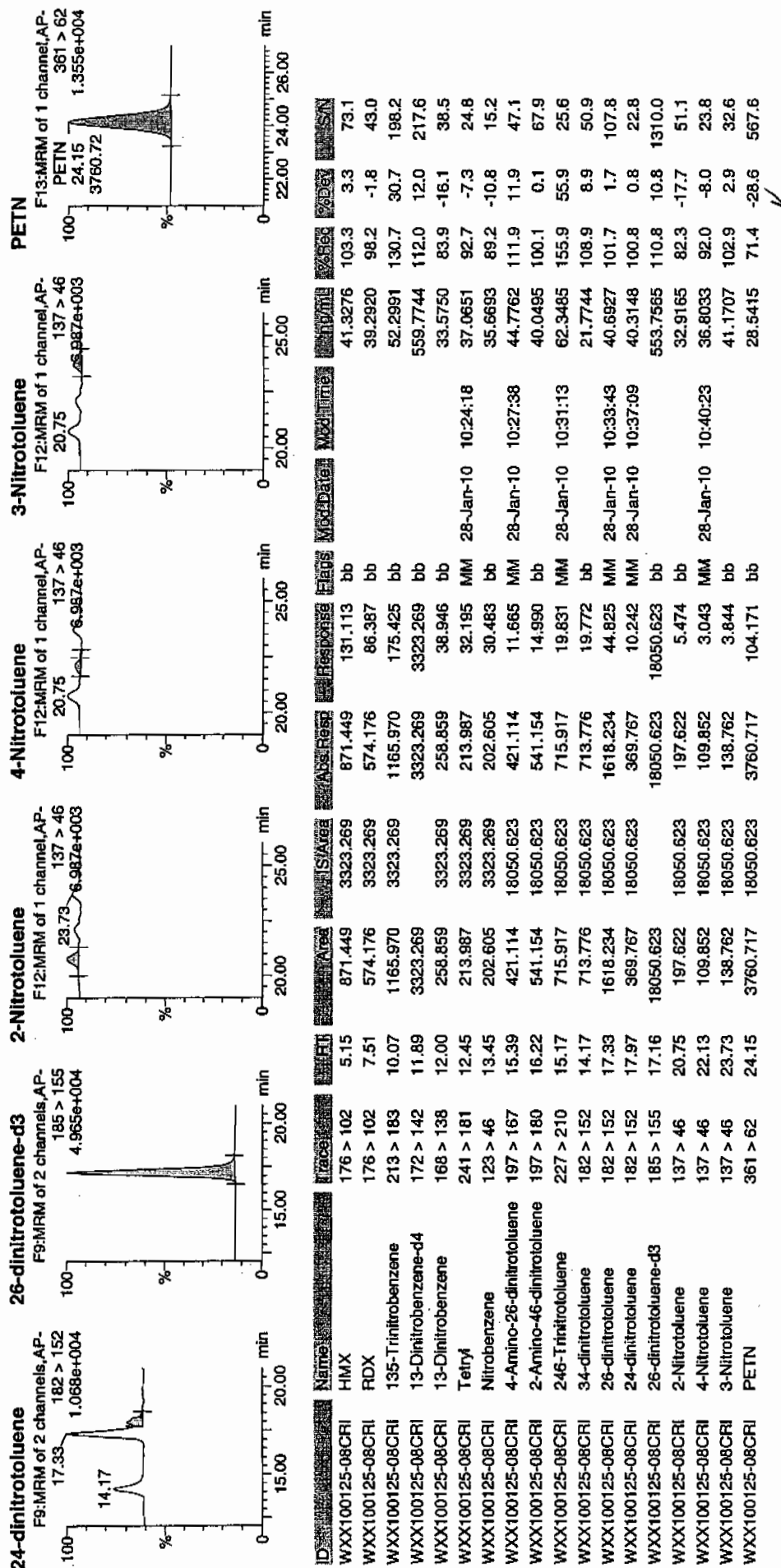
1/28/10



Printed: Thu Jan 28 10:43:32 2010, Page 52 of 121

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010



# GRAND MEAN AVERAGE

Vendor: UltraScientific  
 Date of Analysis 01/27/10  
 Time of Injection 1657  
 Standard Number WXX100125-08CRI  
 Data File EXP0125110a

HMX	103.3
RDX	98.2
135-TNB	130.7
13-DNB	83.9
Tetryl	92.7
Nitrobenzene	89.2
4A-26-DNT	111.9
2A-46-DNT	100.1
246-TNT	155.9
34-DNT(surr)	108.9
26-DNT	101.7
24-DNT	100.8
2-NT	82.3
4-NT	92.0
3-NT	102.9
PETN	71.4

Total 1625.9

Average 101.6

*Handwritten:* 101.6  
1/28/10

*Handwritten:* HMM 01/28/10

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): 10-1160-1

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0125116a

Analysis Date: 27-JAN-10 19:54

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	631.041	105	
1,3-Dinitrobenzene-d4	500	529.487	106	
2,4,6-Trinitrotoluene	600	716.58	119	
2,4-Dinitrotoluene	600	651.975	109	
2,6-Dinitrotoluene	600	619.509	103	
2,6-Dinitrotoluene-d3	500	468.187	94	
2-Amino-4,6-dinitrotoluene	600	700.462	117	
3,4-Dinitrotoluene	300	334.393	111	
4-Amino-2,6-dinitrotoluene	600	684.091	114	
HMX	600	616.785	103	
Nitrobenzene	600	533.559	89	
PETN	600	660.7	110	
RDX	600	635.793	106	
Tetryl	600	651.276	109	
m-Dinitrobenzene	600	592.514	99	
m-Nitrotoluene	600	522.524	87	
o-Nitrotoluene	600	557.564	93	
p-Nitrotoluene	600	549.542	92	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene, 2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125116a

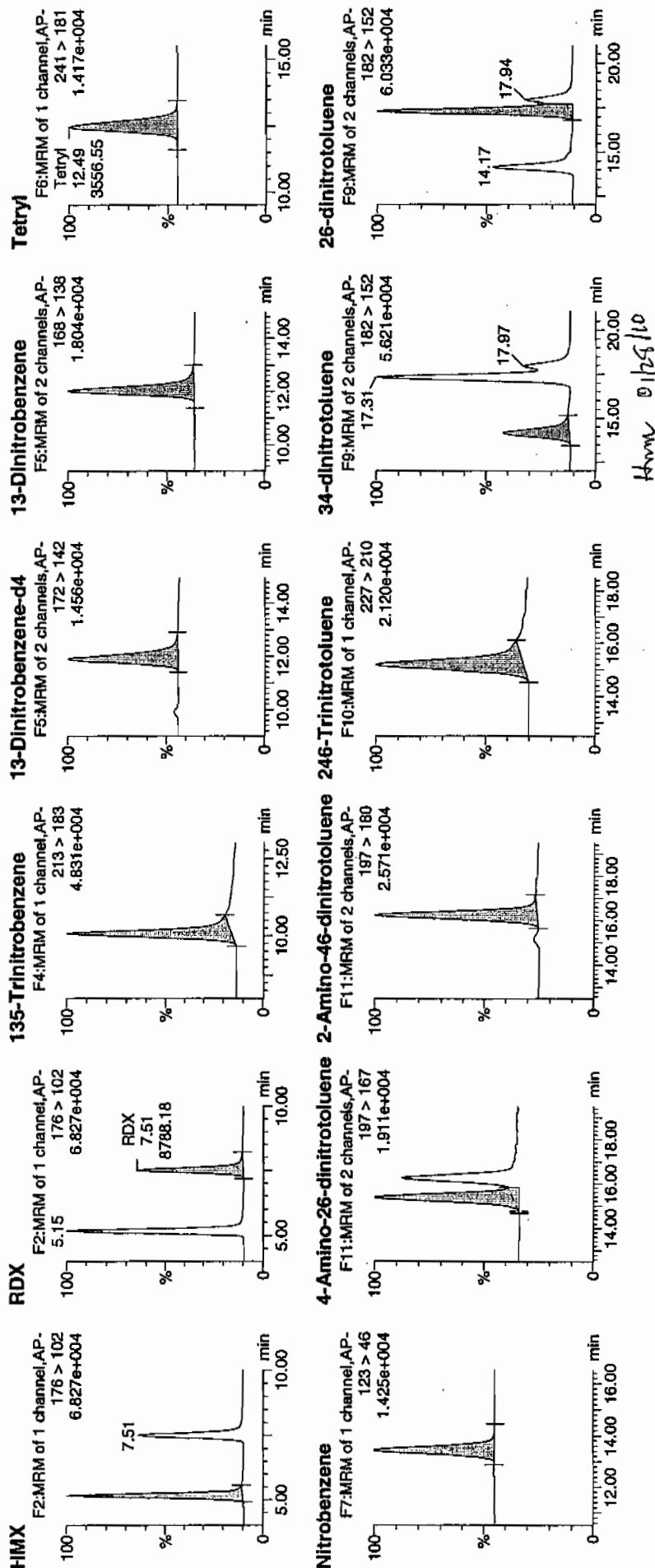
Date: 27-Jan-2010

Time: 19:54:59

ID: WXX100125-07CCV

Vial: 1:1,B

1/28/10

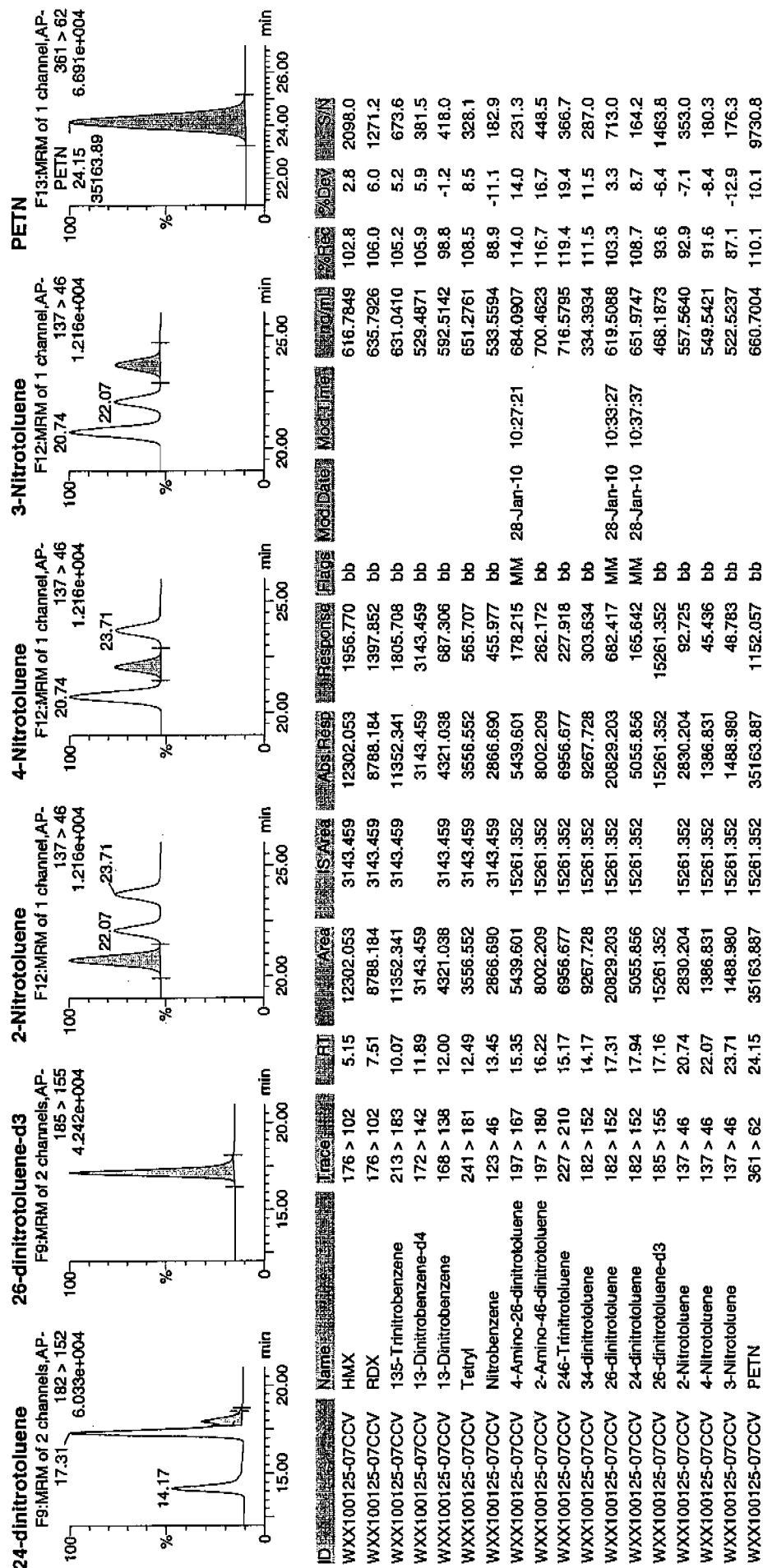


## Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Thu Jan 28 10:43:32 2010, Page 64 of 121

Dataset: C:\MASSLYNX\New\_Exp\_PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010



GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis: 01/27/10  
 Time of Injection: 1954  
 Standard Number: WXX100125-07CCV  
 Data File: EXP0125116a

HMX	102.8
RDX	106.0
135-TNB	105.2
13-DNB	98.8
Tetryl	108.5
Nitrobenzene	88.9
4A-26-DNT	114.0
2A-46-DNT	116.7
246-TNT	119.4
34-DNT(surr)	111.5
26-DNT	103.3
24-DNT	108.7
2-NT	92.9
4-NT	91.6
3-NT	87.1
PETN	110.1

*WTT  
1/28/10*

Total 1665.5

Average 104.1

*47116 01/28/10*

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): 10-1160-1

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0125118a

Analysis Date: 27-JAN-10 20:53

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	59.135	148	*
1,3-Dinitrobenzene-d4	500	488.735	98	
2,4,6-Trinitrotoluene	40	44.307	111	
2,4-Dinitrotoluene	40	35.195	88	
2,6-Dinitrotoluene	40	41.434	104	
2,6-Dinitrotoluene-d3	500	505.851	101	
2-Amino-4,6-dinitrotoluene	40	53.643	134	*
3,4-Dinitrotoluene	20	21.876	109	
4-Amino-2,6-dinitrotoluene	40	48.557	121	
HMX	40	51.45	129	
Nitrobenzene	40	35.236	88	
PETN	40	35.671	89	
RDX	40	41.584	104	
Tetryl	40	46.813	117	
m-Dinitrobenzene	40	46.88	117	
m-Nitrotoluene	40	36.119	90	
o-Nitrotoluene	40	38.379	96	
p-Nitrotoluene	40	42.922	107	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene, 2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125118a

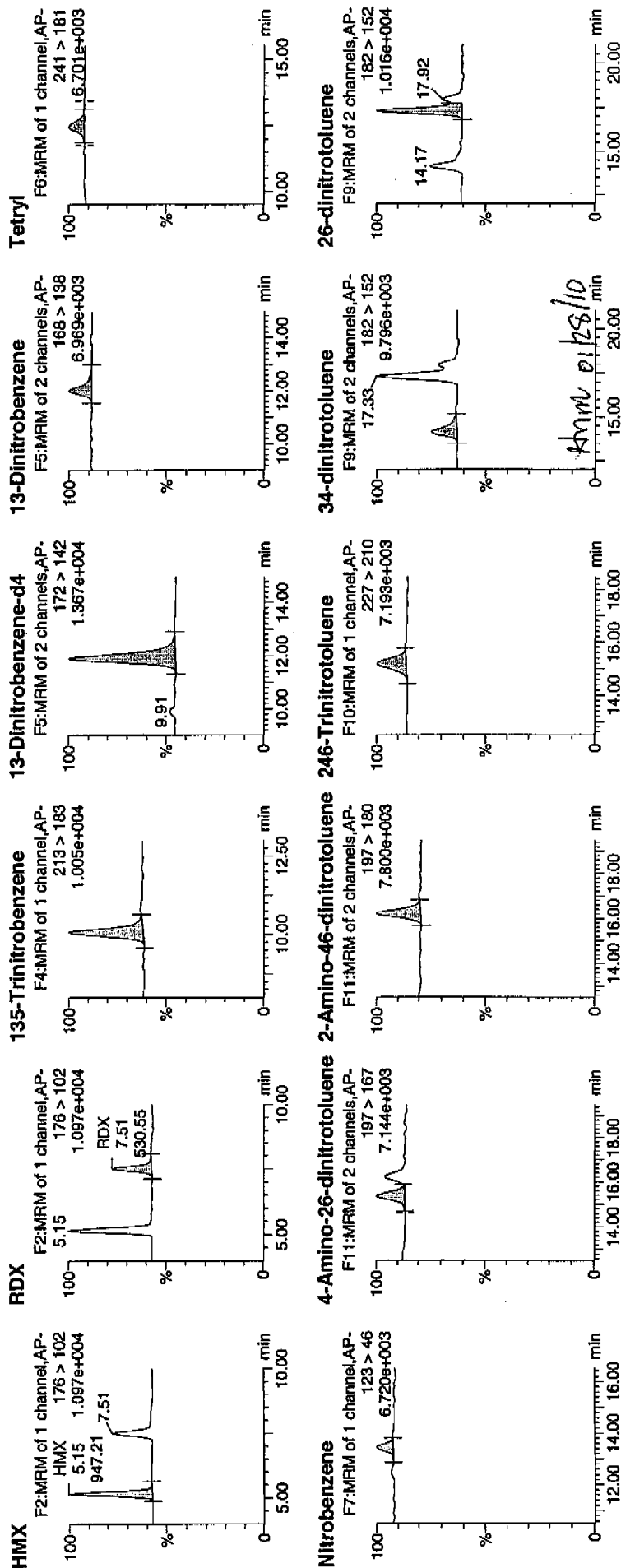
Date: 27-Jan-2010

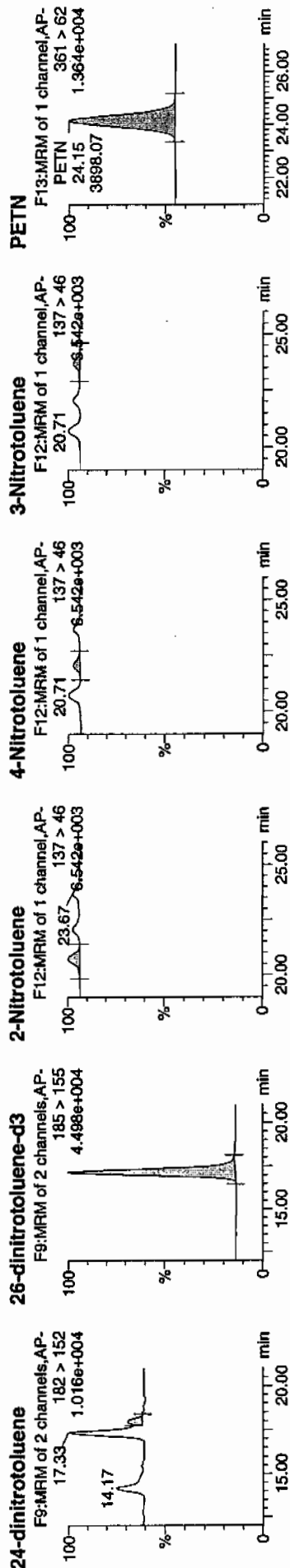
Time: 20:53:56

ID: WXX100125-08CRI

Vial: 1:1,C

1/28/10  
1/28/10





Name	ID	Trace	Flt	Area	SA Reg	Abs Resp	Response	Mod Date	Mod Time	Int Time	% Reg	% Dev	SN
HMx	WXX100125-08CRI	176 > 102	5.15	947.212	2901.522	947.212	163.227	bb		51.4500	128.6	28.6	284.0
RDX	WXX100125-08CRI	176 > 102	7.51	530.551	2901.522	530.551	91.426	bb		41.5939	104.0	4.0	132.8
135-Trinitrobenzene	WXX100125-08CRI	213 > 183	10.07	1129.748	2901.522	1129.748	194.682	bb		59.1352	147.8	47.8	266.4
13-Dinitrobenzene-d4	WXX100125-08CRI	172 > 142	11.89	2901.522	2901.522	2901.522	2901.522	bb		488.7350	97.7	-2.3	692.4
13-Dinitrobenzene	WXX100125-08CRI	168 > 138	12.00	315.570	2901.522	315.570	54.380	bb		46.8801	117.2	17.2	32.0
Tetryl	WXX100125-08CRI	241 > 181	12.45	235.963	2901.522	235.963	40.662	MM	28-Jan-10 10:24:03	46.8125	117.0	17.0	27.0
Nitrobenzene	WXX100125-08CRI	123 > 46	13.45	174.742	2901.522	174.742	30.112	bb		35.2356	88.1	-11.9	14.4
4-Amino-26-dinitrotoluene	WXX100125-08CRI	197 > 167	15.36	417.165	16489.053	417.165	12.650	MM	28-Jan-10 10:27:09	48.5570	121.4	21.4	15.3
2-Amino-46-dinitrotoluene	WXX100125-08CRI	197 > 180	16.22	662.126	16489.053	662.126	20.078	bb		53.6430	134.1	34.1	24.3
246-Trinitrotoluene	WXX100125-08CRI	227 > 210	15.21	464.743	16489.053	464.743	14.092	bb		44.3070	110.8	10.8	33.5
34-dinitrotoluene	WXX100125-08CRI	182 > 152	14.17	655.064	16489.053	655.064	19.864	bb		21.8759	109.4	9.4	52.6
26-dinitrotoluene	WXX100125-08CRI	182 > 152	17.33	1505.167	16489.053	1505.167	45.641	MM	28-Jan-10 10:33:21	41.4340	103.6	3.6	82.0
24-dinitrotoluene	WXX100125-08CRI	182 > 152	17.92	294.878	16489.053	294.878	8.942	MM	28-Jan-10 10:37:49	35.1946	88.0	-12.0	15.8
26-dinitrotoluene-d3	WXX100125-08CRI	185 > 155	17.16	16489.053	16489.053	16489.053	16489.053	bb		505.8507	101.2	1.2	251.4
2-Nitrotoluene	WXX100125-08CRI	137 > 46	20.71	210.484	16489.053	210.484	6.383	bb		38.3790	95.9	-4.1	43.2
4-Nitrotoluene	WXX100125-08CRI	137 > 46	22.05	117.032	16489.053	117.032	3.549	bb		42.9219	107.3	7.3	25.0
3-Nitrotoluene	WXX100125-08CRI	137 > 46	23.67	111.204	16489.053	111.204	3.372	bb		36.1189	90.3	-8.7	24.1
PETN	WXX100125-08CRI	361 > 62	24.15	3998.075	16489.053	3998.075	118.202	bb		35.6714	89.2	-10.8	960.7

GRAND MEAN AVERAGE

Vendor: UltraScientific  
 Date of Analysis 01/27/10  
 Time of Injection 2053  
 Standard Number WXX100125-08CRI  
 Data File EXP0125118a

HMX	128.6	✓
RDX	104.0	✓
135-TNB	147.8	✓
13-DNB	117.2	
Tetryl	117.0	
Nitrobenzene	88.1	
4A-26-DNT	121.4	
2A-46-DNT	134.1	
246-TNT	110.8	
34-DNT(surr)	109.4	
26-DNT	103.6	
24-DNT	88.0	
2-NT	95.9	
4-NT	107.3	
3-NT	90.3	
PETN	89.2	

*Auth  
1/28/10*

Total 1752.7

Average 109.5

*Hmm 01/28/10*

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): 10-1160-1

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0125129a

Analysis Date: 28-JAN-10 02:18

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	689.575	115	
1,3-Dinitrobenzene-d4	500	518.18	104	
2,4,6-Trinitrotoluene	600	645.918	108	
2,4-Dinitrotoluene	600	613.752	102	
2,6-Dinitrotoluene	600	606.783	101	
2,6-Dinitrotoluene-d3	500	513.396	103	
2-Amino-4,6-dinitrotoluene	600	630.102	105	
3,4-Dinitrotoluene	300	312.169	104	
4-Amino-2,6-dinitrotoluene	600	617.083	103	
HMX	600	648.898	108	
Nitrobenzene	600	524.48	87	
PETN	600	597.663	100	
RDX	600	756.637	126	*
Tetryl	600	672.089	112	
m-Dinitrobenzene	600	611.428	102	
m-Nitrotoluene	600	529.309	88	
o-Nitrotoluene	600	510.736	85	
p-Nitrotoluene	600	506.539	84	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 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\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125129a

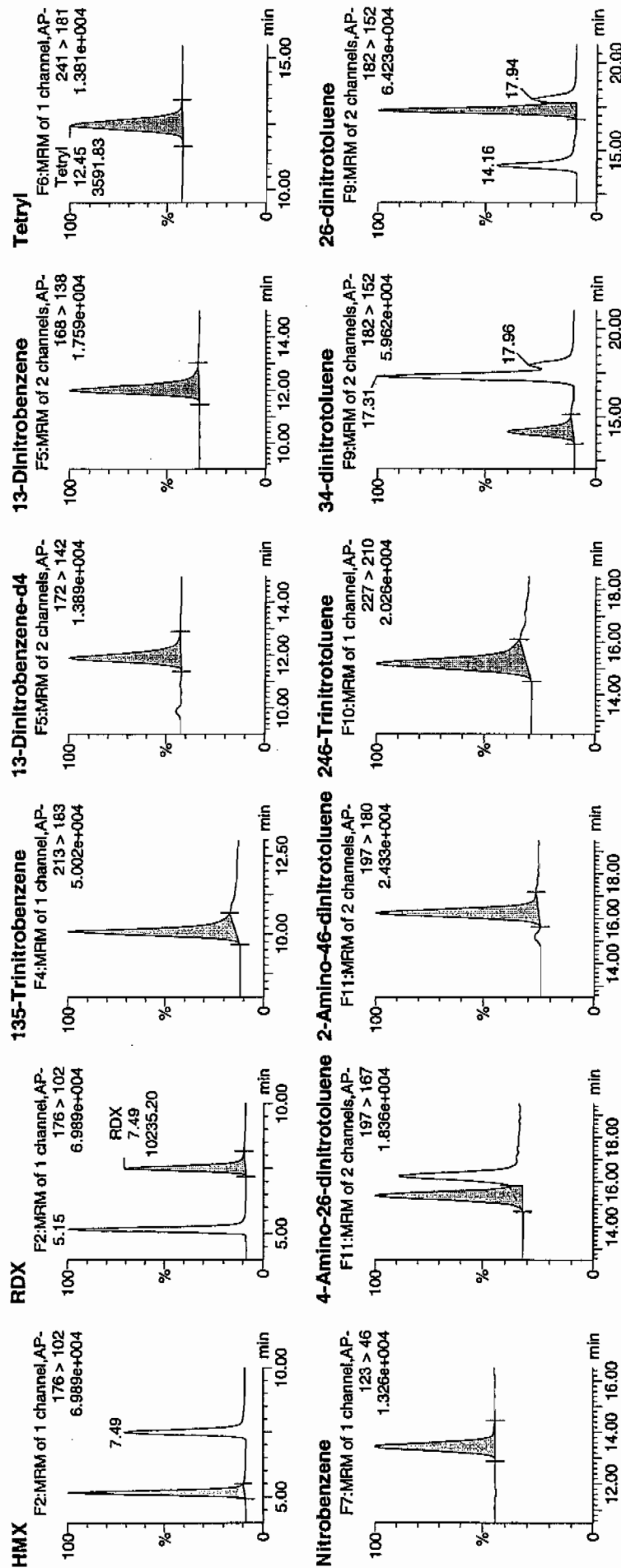
Date: 28-Jan-2010

Time: 02:18:11

ID: WXX100125-07CCV

Vial: 1:1,B

Not  
1/28/10



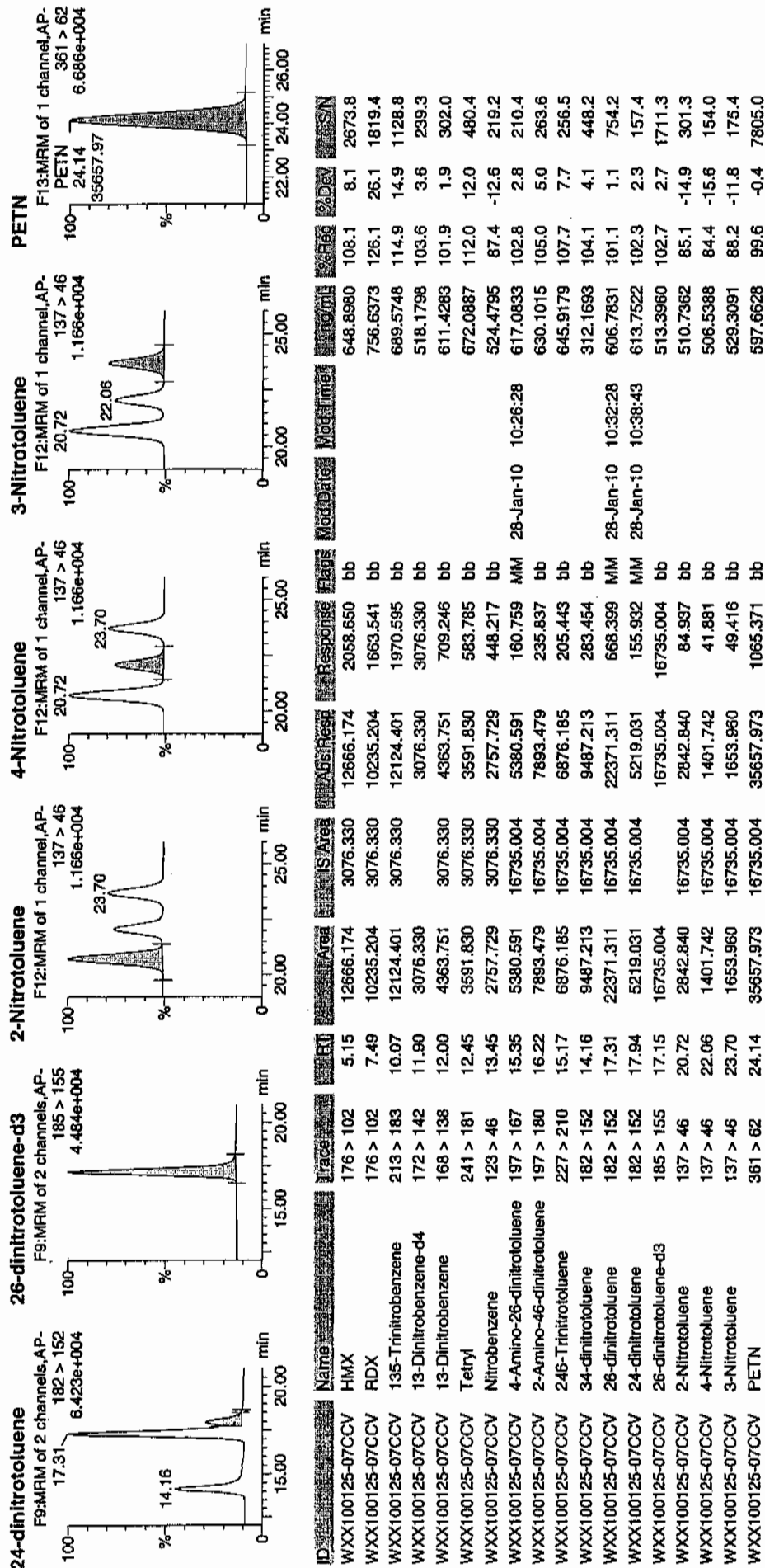
Time 8/12/8/10

# Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Thu Jan 28 10:43:32 2010, Page 90 of 121

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010



GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis: 01/28/10  
 Time of Injection: 0218  
 Standard Number: WXX100125-07CCV  
 Data File: EXP0125129a

HMX	108.1
RDX	126.1
135-TNB	114.9
13-DNB	101.9
Tetryl	112.0
Nitrobenzene	87.4
4A-26-DNT	102.8
2A-46-DNT	105.0
246-TNT	107.7
34-DNT(surr)	104.1
26-DNT	101.1
24-DNT	102.3
2-NT	85.1
4-NT	84.4
3-NT	88.2
PETN	99.6

*MTT  
1/28/10*

Total 1630.7

Average 101.9

*HMC 01/28/10*

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): 10-1160-1

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0125131a

Analysis Date: 28-JAN-10 03:17

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	57.612	144	*
1,3-Dinitrobenzene-d4	500	504.225	101	
2,4,6-Trinitrotoluene	40	41.133	103	
2,4-Dinitrotoluene	40	36.314	91	
2,6-Dinitrotoluene	40	40.973	102	
2,6-Dinitrotoluene-d3	500	527.33	105	
2-Amino-4,6-dinitrotoluene	40	46.164	115	
3,4-Dinitrotoluene	20	19.933	100	
4-Amino-2,6-dinitrotoluene	40	41.338	103	
HMX	40	53.421	134	*
Nitrobenzene	40	45.023	113	
PETN	40	35.323	88	
RDX	40	41.603	104	
Tetryl	40	51.008	128	
m-Dinitrobenzene	40	39.957	100	
m-Nitrotoluene	40	40.221	101	
o-Nitrotoluene	40	38.017	95	
p-Nitrotoluene	40	33.311	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 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\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125131a

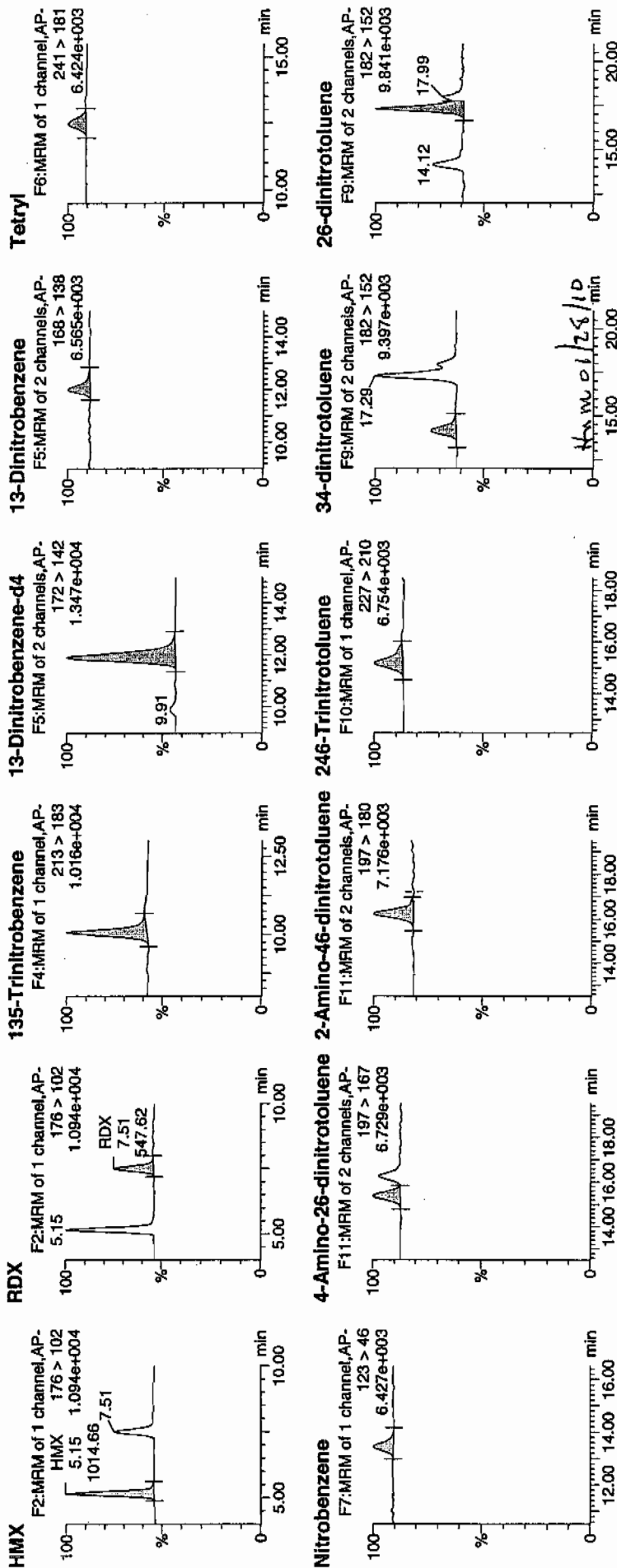
Date: 28-Jan-2010

Time: 03:17:15

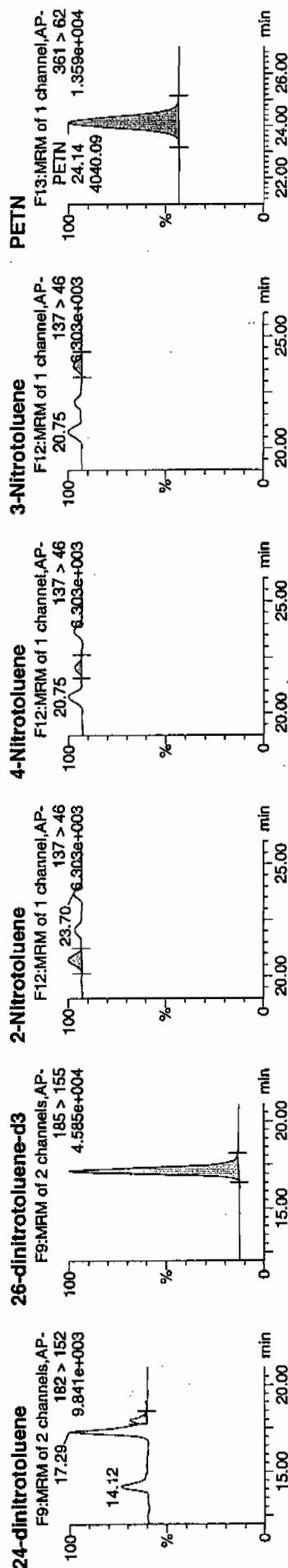
ID: WXX100125-08CRI

Vial: 1:1,C

1/28/10



Dataset: C:\MASSLYN\New\_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010



ID	Name	Trace	RT	Area	IS Area	Abs. Resp	Response	Flags	Mod. Date	Mod. Time	Inj. Vol	2% Rec	3% Dev	TSN
WXX100125-08CRI	HMx	176 > 102	5.15	1014.660	2993.482	1014.660	169.478	bb			53.4205	133.6	33.6	253.2
WXX100125-08CRI	RDX	176 > 102	7.51	547.618	2993.482	547.618	91.468	bb			41.6031	104.0	4.0	114.7
WXX100125-08CRI	135-Trinitrobenzene	213 > 183	10.07	1139.861	2993.482	1139.861	190.390	bb			57.6117	144.0	44.0	182.2
WXX100125-08CRI	13-Dinitrobenzene-d4	172 > 142	11.89	2993.482	2993.482	2993.482	2993.482	bb			504.2248	100.8	0.8	131.0
WXX100125-08CRI	13-Dinitrobenzene	168 > 138	12.00	277.495	2993.482	277.495	46.350	bb			39.9574	99.9	-0.1	28.5
WXX100125-08CRI	Tetryl	241 > 181	12.49	265.257	2993.482	265.257	44.306	bb			51.0075	127.5	27.5	22.1
WXX100125-08CRI	Nitrobenzene	123 > 46	13.41	230.358	2993.482	230.358	38.477	bb			45.0232	112.6	12.6	24.6
WXX100125-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.36	370.223	17189.207	370.223	10.769	MM	28-Jan-10	10:26:15	41.3378	103.3	3.3	26.2
WXX100125-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.25	594.012	17189.207	594.012	17.279	MM	28-Jan-10	10:29:52	46.1644	115.4	15.4	42.2
WXX100125-08CRI	246-Trinitrotoluene	227 > 210	15.17	449.768	17189.207	449.768	13.083	bb			41.1328	102.8	2.8	50.9
WXX100125-08CRI	34-dinitrotoluene	182 > 152	14.17	622.242	17189.207	622.242	18.100	bb			19.9334	99.7	-0.3	35.8
WXX100125-08CRI	26-dinitrotoluene	182 > 152	17.29	1551.636	17189.207	1551.636	45.134	MM	28-Jan-10	10:32:16	40.9734	102.4	2.4	97.2
WXX100125-08CRI	24-dinitrotoluene	182 > 152	17.99	317.172	17189.207	317.172	9.226	MM	28-Jan-10	10:39:01	36.3135	90.8	-9.2	21.0
WXX100125-08CRI	26-dinitrotoluene-d3	185 > 155	17.14	17189.207	17189.207	17189.207	17189.207	bb			527.3300	105.5	5.5	1034.7
WXX100125-08CRI	2-Nitrotoluene	137 > 46	20.75	217.353	17189.207	217.353	6.322	bb			38.0172	95.0	-5.0	33.5
WXX100125-08CRI	4-Nitrotoluene	137 > 46	22.10	94.684	17189.207	94.684	2.754	bb			33.3113	83.3	-16.7	15.7
WXX100125-08CRI	3-Nitrotoluene	137 > 46	23.70	129.091	17189.207	129.091	3.755	bb			40.2208	100.6	0.6	20.0
WXX100125-08CRI	PETN	361 > 62	24.14	4040.085	17189.207	4040.085	117.518	bb			35.3233	88.3	-11.7	867.0

# GRAND MEAN AVERAGE

Vendor: UltraScientific  
 Date of Analysis 01/28/10  
 Time of Injection 0317  
 Standard Number WXX100125-08CRI  
 Data File EXP0125131a

HMX	133.6
RDX	104.0
135-TNB	144.0
13-DNB	99.9
Tetryl	127.5
Nitrobenzene	112.6
4A-26-DNT	103.3
2A-46-DNT	115.4
246-TNT	102.8
34-DNT(surr)	99.7
26-DNT	102.4
24-DNT	90.8
2-NT	95.0
4-NT	83.3
3-NT	100.6
PETN	88.3

*MTT  
1/28/10*

Total 1703.2

Average 106.5

*Hum-01/28/10*

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): 10-1160-1

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0125142a

Analysis Date: 28-JAN-10 08:41

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	784.323	131	*
1,3-Dinitrobenzene-d4	500	464.389	93	
2,4,6-Trinitrotoluene	600	865.486	144	*
2,4-Dinitrotoluene	600	635.609	106	
2,6-Dinitrotoluene	600	585.132	98	
2,6-Dinitrotoluene-d3	500	523.158	105	
2-Amino-4,6-dinitrotoluene	600	577.839	96	
3,4-Dinitrotoluene	300	294.928	98	
4-Amino-2,6-dinitrotoluene	600	591.279	99	
HMX	600	672.053	112	
Nitrobenzene	600	572.628	95	
PETN	600	477.341	80	*
RDX	600	583.83	97	
Tetryl	600	717.697	120	
m-Dinitrobenzene	600	626.426	104	
m-Nitrotoluene	600	536.142	89	
o-Nitrotoluene	600	479.542	80	*
p-Nitrotoluene	600	491.628	82	

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\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125142a

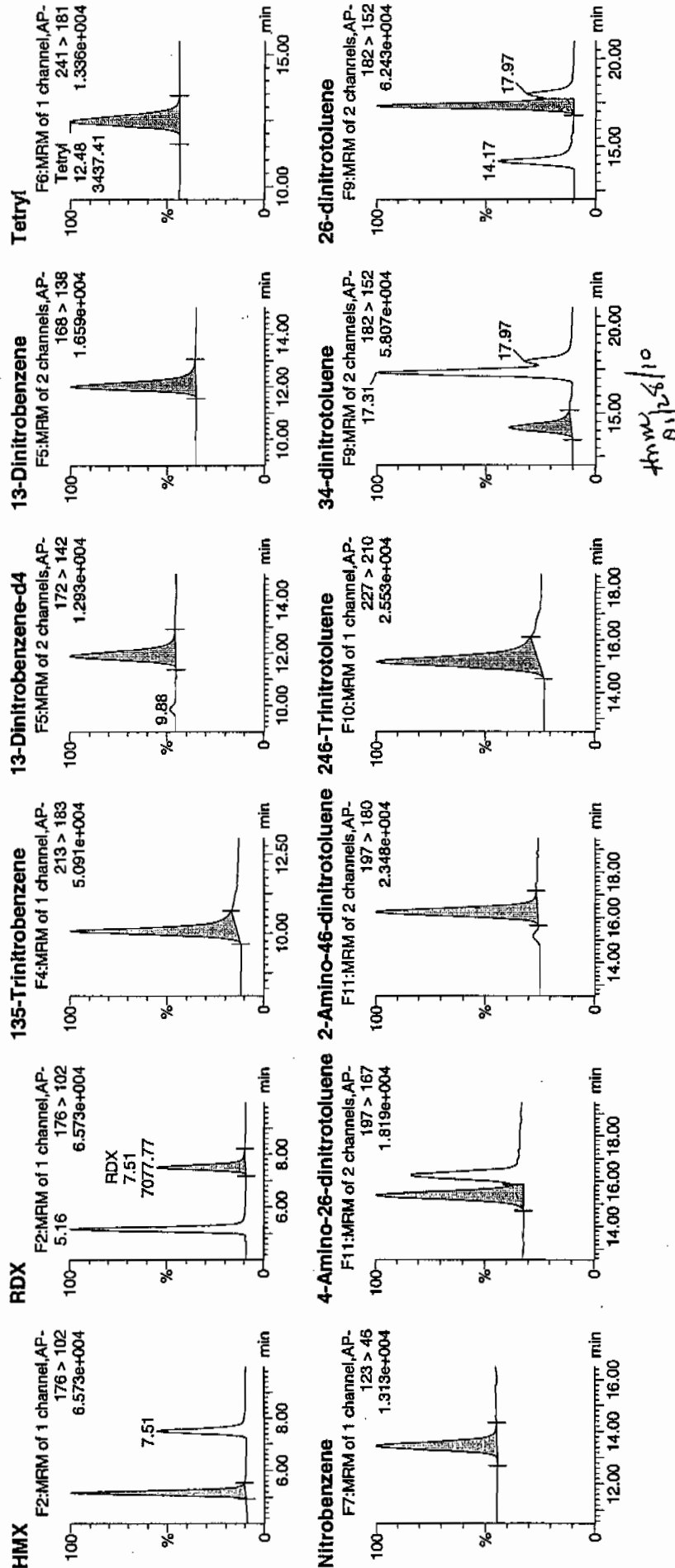
Date: 28-Jan-2010

Time: 08:41:46

ID: WXX100125-07CCV

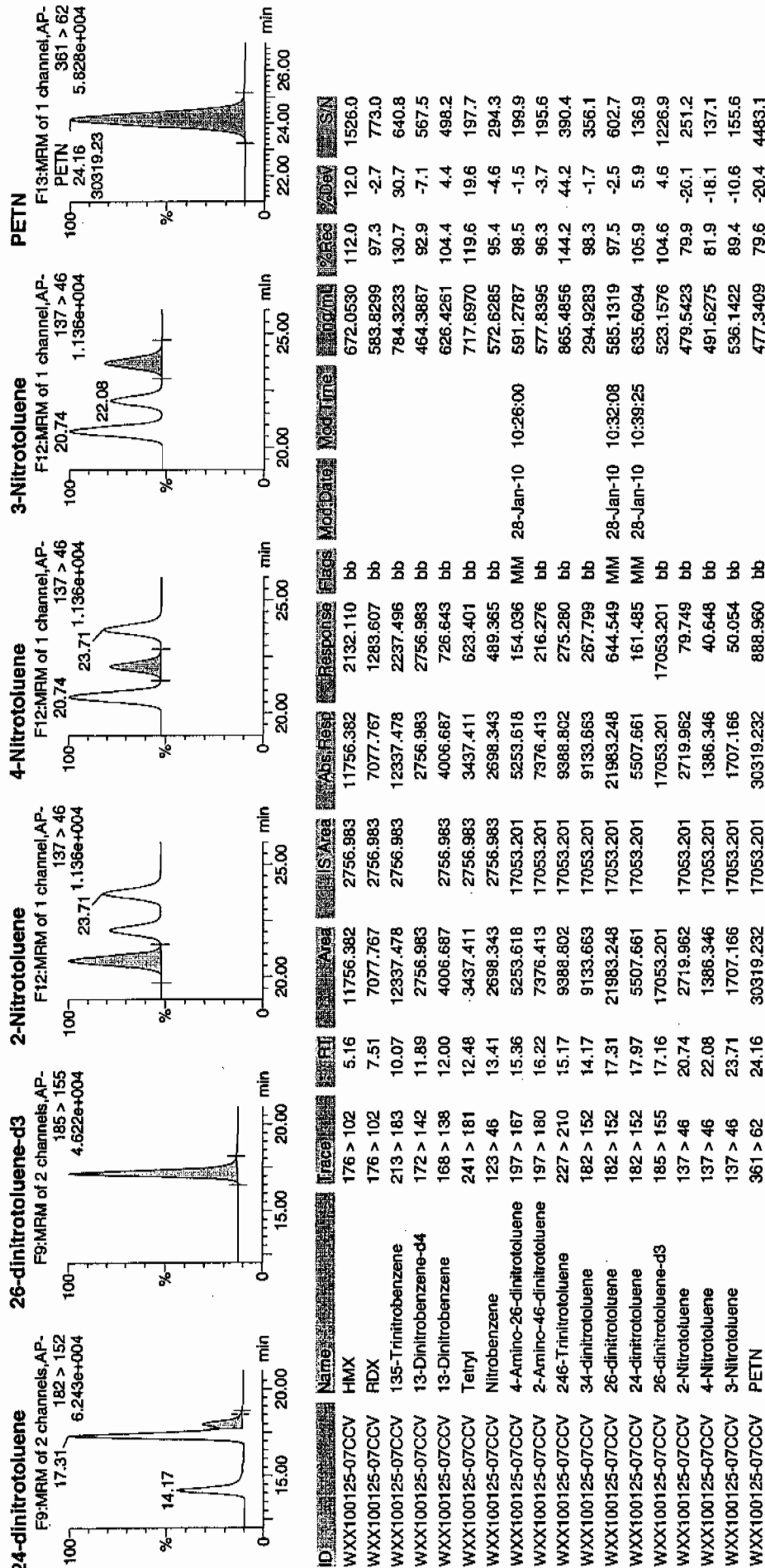
Vial: 1:1,B

1/28/10



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

Dataset: C:\WASSLYN\New\_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010



# GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis: 01/28/10  
 Time of Injection: 0841  
 Standard Number: WXX100125-07CCV  
 Data File: EXP0125142a

HMX	112.0
RDX	97.3
135-TNB	130.7
13-DNB	104.4
Tetryl	119.6
Nitrobenzene	95.4
4A-26-DNT	98.5
2A-46-DNT	96.3
246-TNT	144.2
34-DNT(surr)	98.3
26-DNT	97.5
24-DNT	105.9
2-NT	79.9
4-NT	81.9
3-NT	89.4
PETN	79.6

*Handwritten:* 11/28/10

Total 1630.9

Average 101.9

*Handwritten:* Hnm 01/28/10

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): 10-1160-1

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0125144a

Analysis Date: 28-JAN-10 09:40

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	61.574	154	*
1,3-Dinitrobenzene-d4	500	461.719	92	
2,4,6-Trinitrotoluene	40	45.81	115	
2,4-Dinitrotoluene	40	42.881	107	
2,6-Dinitrotoluene	40	40.235	101	
2,6-Dinitrotoluene-d3	500	522.309	104	
2-Amino-4,6-dinitrotoluene	40	47.484	119	
3,4-Dinitrotoluene	20	20.079	100	
4-Amino-2,6-dinitrotoluene	40	44.024	110	
HMX	40	48.62	122	
Nitrobenzene	40	34.836	87	
PETN	40	27.753	69	*
RDX	40	35.534	89	
Tetryl	40	62.477	156	*
m-Dinitrobenzene	40	42.805	107	
m-Nitrotoluene	40	30.675	77	
o-Nitrotoluene	40	30.694	77	
p-Nitrotoluene	40	31.002	78	

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\1012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125144a

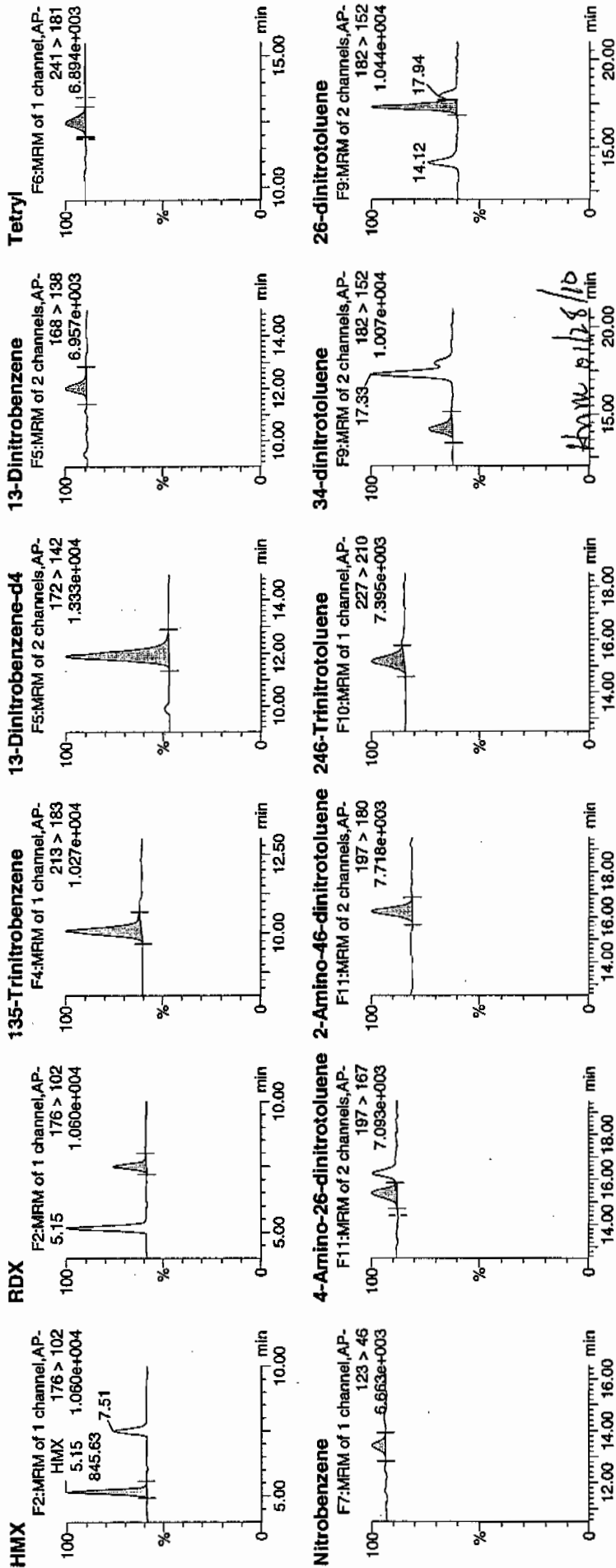
Date: 28-Jan-2010

Time: 09:40:48

ID: WXX100125-08CRI

Vial: 1:1,C

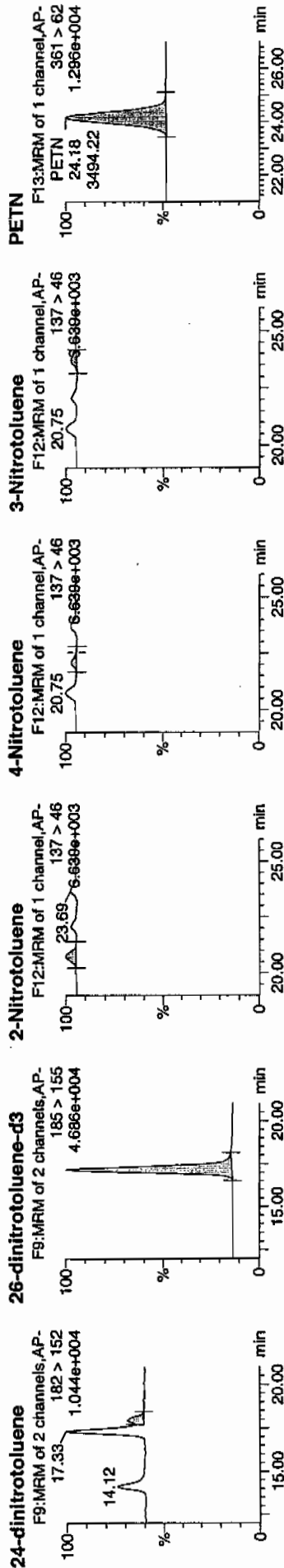
11/28/10



Printed: Thu Jan 28 10:43:32 2010, Page 120 of 121

Quantity Sample Report  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Norm	Rec	%Dev	SN
WXX100125-08CRI	HMIX	176 > 102	5.15	845.635	2741.132	845.635	154.249	bb			48.6202	121.6	21.6	163.8
WXX100125-08CRI	RDX	176 > 102	7.51	428.303	2741.132	428.303	78.125	bb			35.5341	88.8	-11.2	69.4
WXX100125-08CRI	135-Trinitrobenzene	213 > 183	10.07	1104.962	2741.132	1104.962	201.552	bb			61.5740	153.9	53.9	92.5
WXX100125-08CRI	13-Dinitrobenzene-d4	172 > 142	11.89	2741.132	2741.132	2741.132	2741.132	bb			461.7187	92.3	-7.7	203.3
WXX100125-08CRI	13-Dinitrobenzene	168 > 138	12.03	272.211	2741.132	272.211	49.653	bb			42.8050	107.0	7.0	12.9
WXX100125-08CRI	Tetryl	241 > 181	12.49	297.514	2741.132	297.514	54.268	MM	28-Jan-10	10:19:53	62.4772	156.2	56.2	22.3
WXX100125-08CRI	Nitrobenzene	123 > 46	13.45	163.212	2741.132	163.212	29.771	bb			34.8363	87.1	-12.9	16.3
WXX100125-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.39	390.526	17025.545	390.526	11.469	MM	28-Jan-10	10:25:52	44.0239	110.1	10.1	16.2
WXX100125-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.25	605.168	17025.545	605.168	17.772	bb			47.4835	118.7	18.7	51.1
WXX100125-08CRI	246-Trinitrotoluene	227 > 210	15.21	496.146	17025.545	496.146	14.571	bb			45.8104	114.5	14.5	41.5
WXX100125-08CRI	34-dinitrotoluene	182 > 152	14.17	620.833	17025.545	620.833	18.232	bb			20.0794	100.4	0.4	32.5
WXX100125-08CRI	26-dinitrotoluene	182 > 152	17.33	1509.168	17025.545	1509.168	44.321	MM	28-Jan-10	10:31:58	40.2350	100.6	0.6	88.9
WXX100125-08CRI	24-dinitrotoluene	182 > 152	17.94	370.969	17025.545	370.969	10.894	MM	28-Jan-10	10:39:38	42.8811	107.2	7.2	19.3
WXX100125-08CRI	26-dinitrotoluene-d3	185 > 155	17.16	17025.545	17025.545	17025.545	17025.545	bb			522.3092	104.5	4.5	866.4
WXX100125-08CRI	2-Nitrotoluene	137 > 46	20.75	173.812	17025.545	173.812	5.104	bb			30.6937	76.7	-23.3	38.8
WXX100125-08CRI	4-Nitrotoluene	137 > 46	22.08	87.281	17025.545	87.281	2.563	MM	28-Jan-10	10:40:45	31.0020	77.5	-22.5	20.5
WXX100125-08CRI	3-Nitrotoluene	137 > 46	23.69	97.515	17025.545	97.515	2.864	bb			30.6747	76.7	-23.3	22.0
WXX100125-08CRI	PETN	361 > 62	24.18	3494.220	17025.545	3494.220	102.617	bb			27.7532	69.4	-30.6	580.4

# GRAND MEAN AVERAGE

Vendor: UltraScientific  
 Date of Analysis 01/28/10  
 Time of Injection 0940  
 Standard Number WXX100125-08CRI  
 Data File EXP0125144a

HMX	121.6
RDX	88.8
135-TNB	153.9
13-DNB	107.0
Tetryl	156.2
Nitrobenzene	87.1
4A-26-DNT	110.1
2A-46-DNT	118.7
246-TNT	114.5
34-DNT(surr)	100.4
26-DNT	100.6
24-DNT	107.2
2-NT	76.7
4-NT	77.5
3-NT	76.7
PETN	69.4

ADP  
1/28/10

Total 1666.4

Average 104.2

ADP 01/28/10

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): 10-1160-1

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS01220013.wiff

Analysis Date: 22-JAN-10 13:34

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	102	102	
2,6-Diamino-4-nitrotoluene	100	99.1	99	
3,4-Dinitrotoluene	50	48.9	98	
3,5-Dinitroaniline	100	94.6	95	
TATB	100	99.6	100	
tris(o-cresyl) phosphate	100	100	100	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

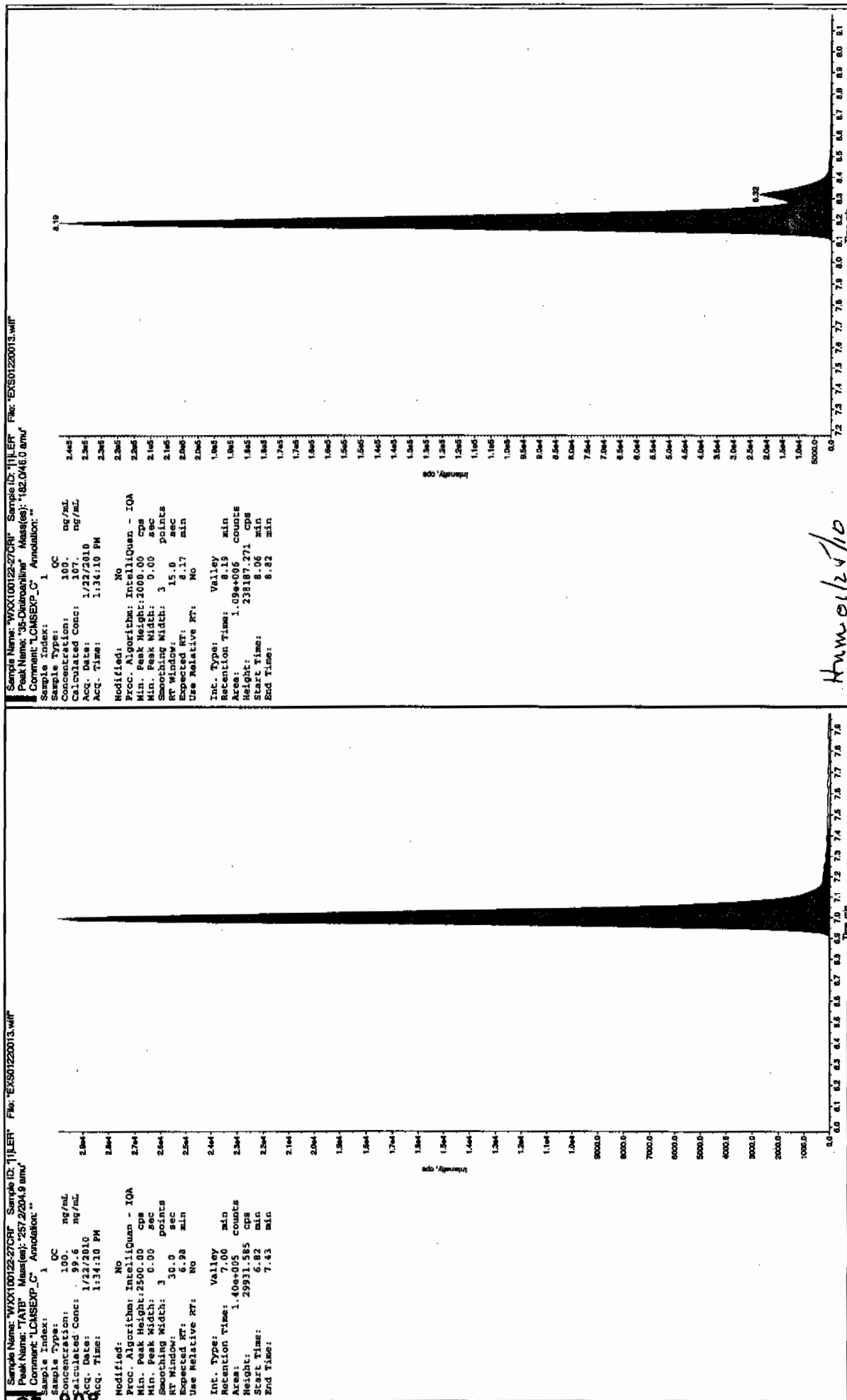
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

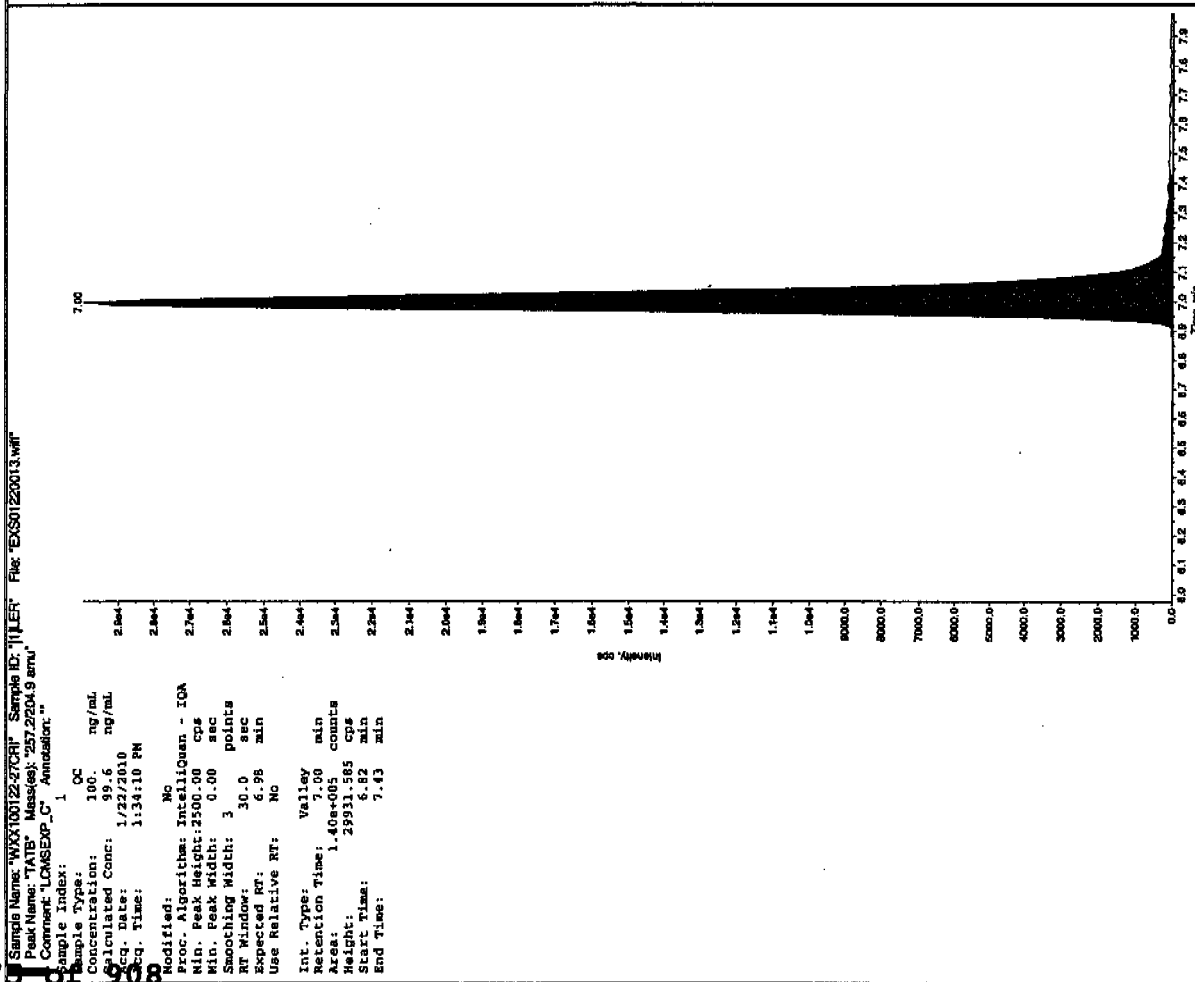
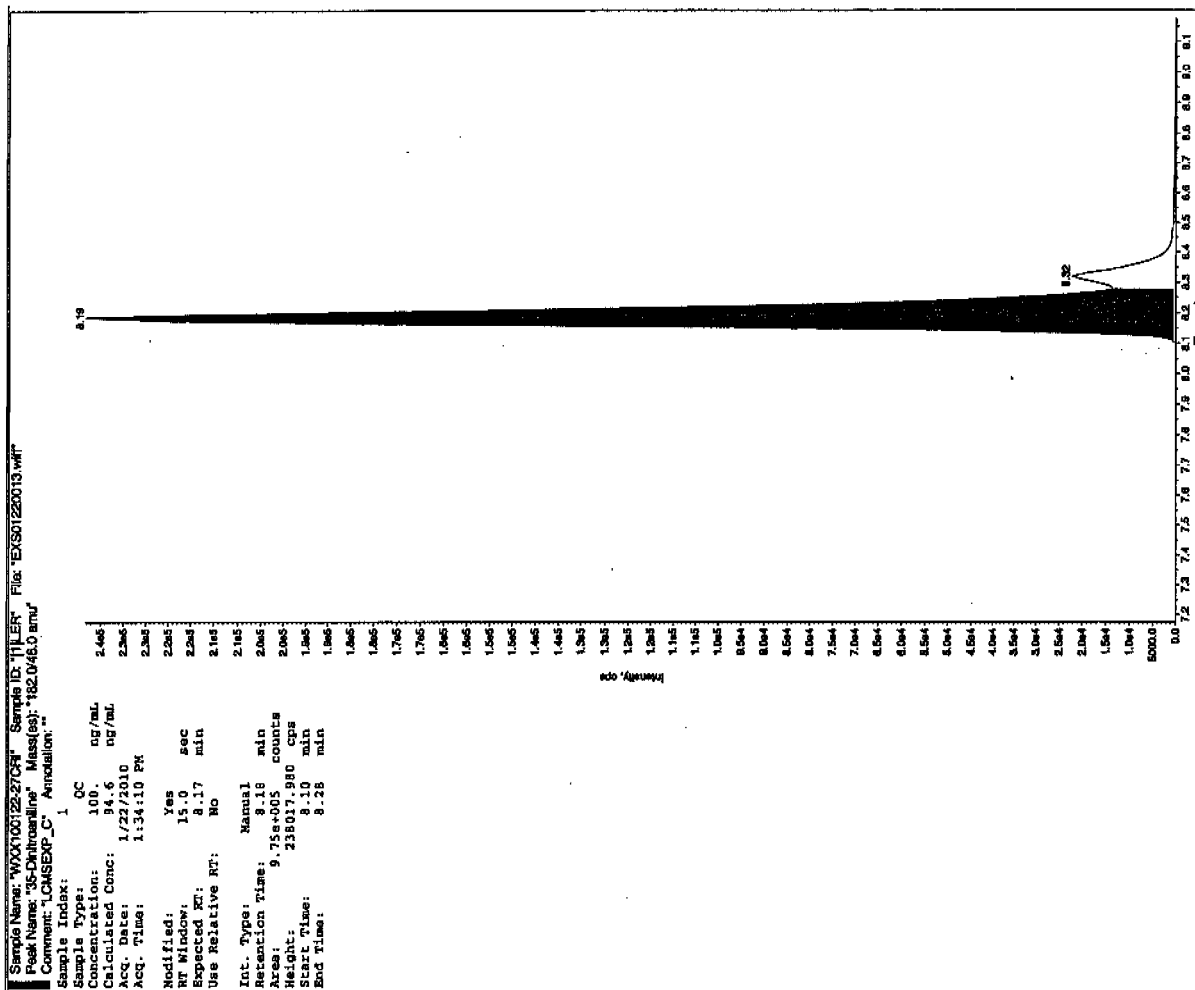
\* Value outside of Recovery Limits

Before Jan 11/25/10

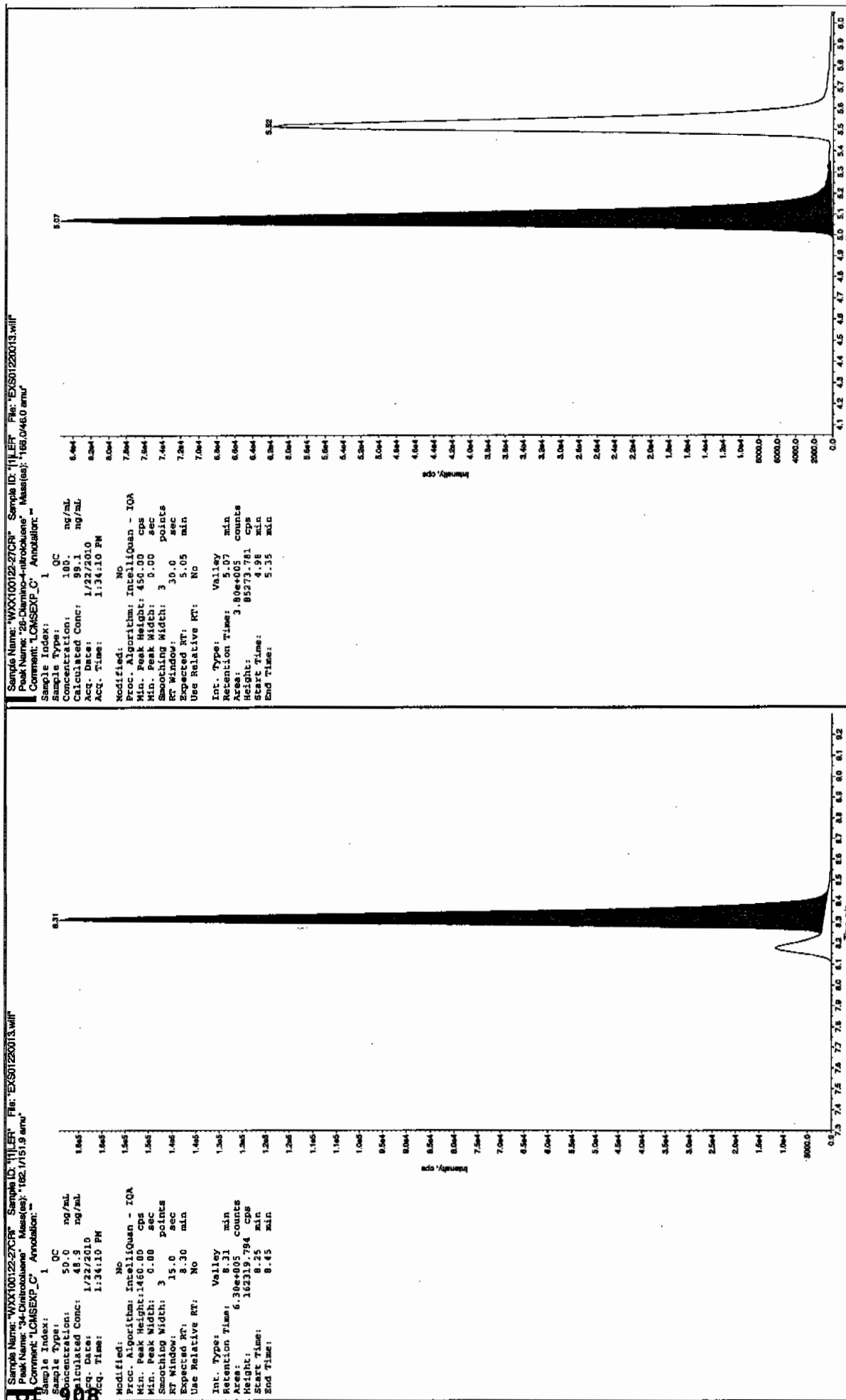


Hum 01/24/10

after den 1125710

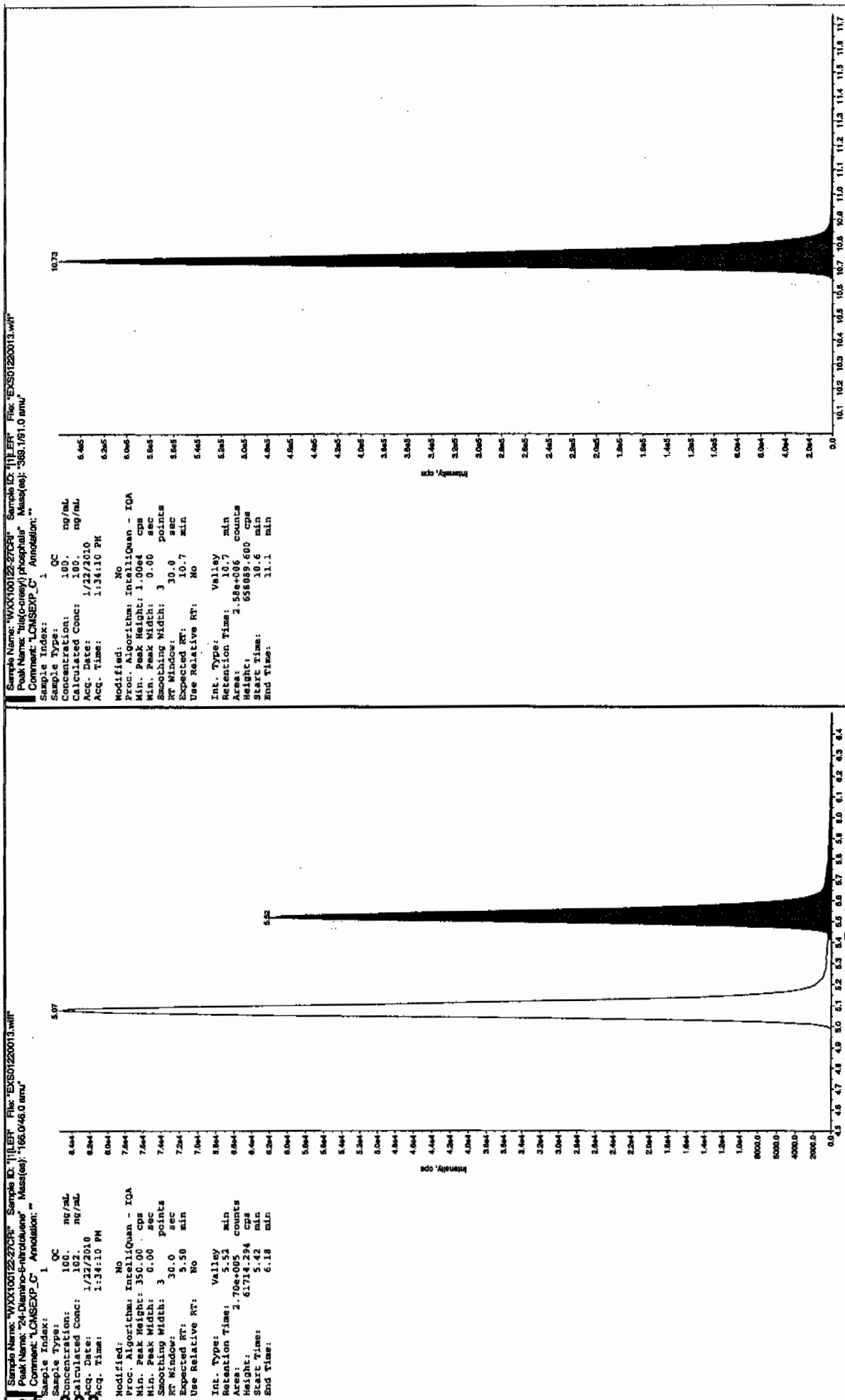


\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



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





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

7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1160-1

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS01220024.wiff

Analysis Date: 22-JAN-10 16:26

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	462	92	
2,6-Diamino-4-nitrotoluene	500	483	97	
3,4-Dinitrotoluene	250	240	96	
3,5-Dinitroaniline	500	523	105	
TATB	500	490	98	
tris(o-cresyl) phosphate	500	494	99	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

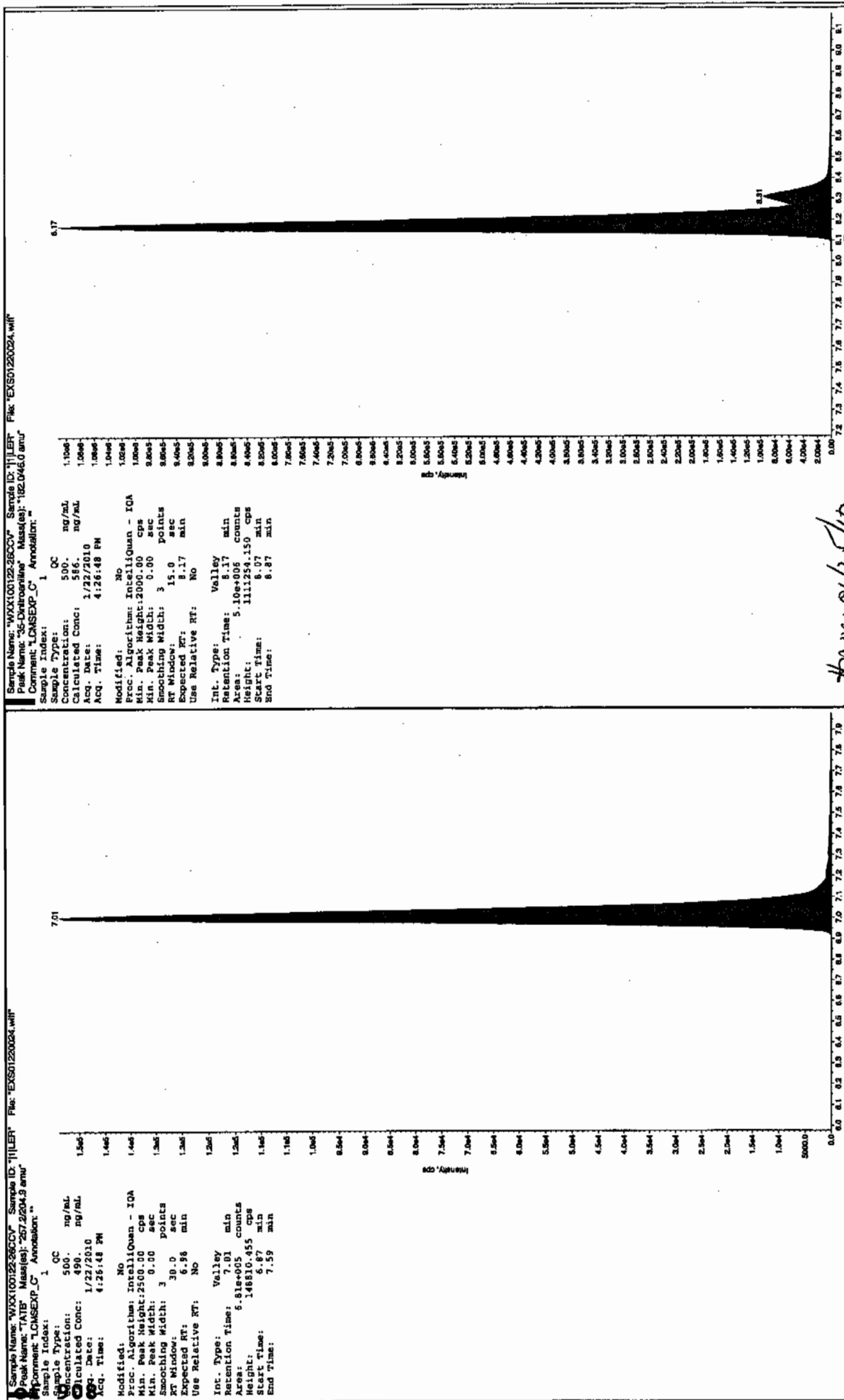
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

# Column used to flag Recovery outside of Limits

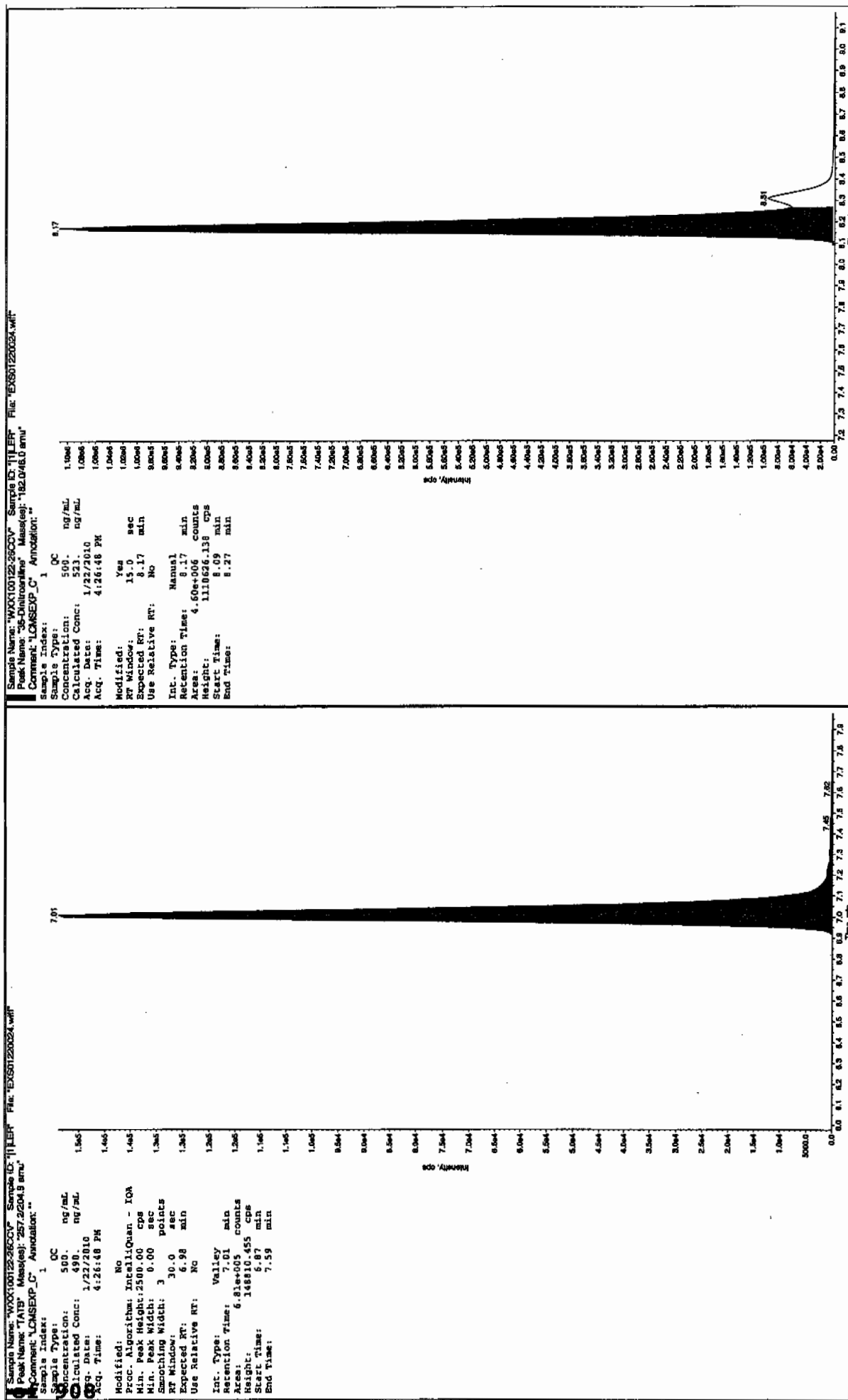
\* Value outside of Recovery Limits

Before Jan 1/25/10

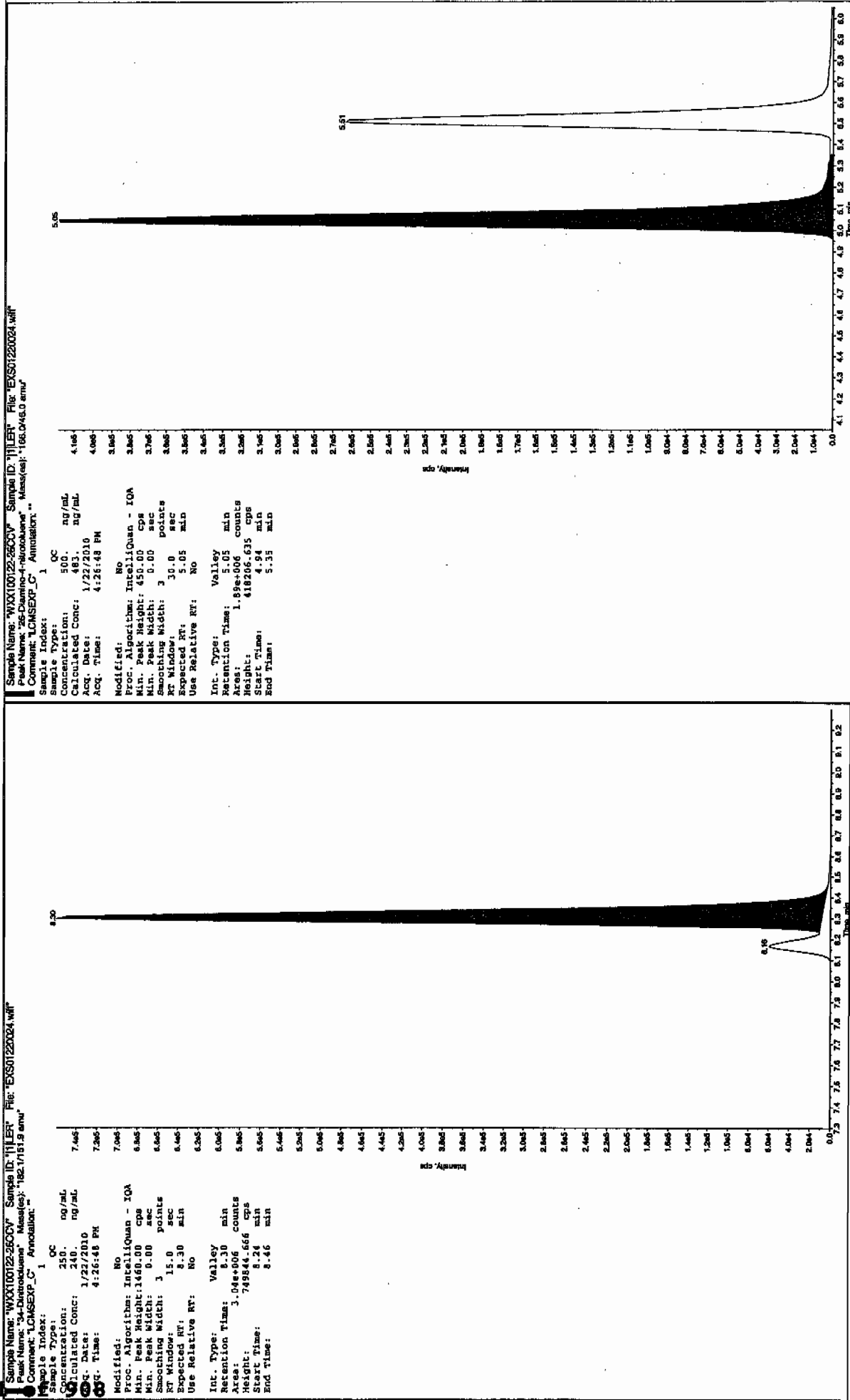


\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

after Jan 112510

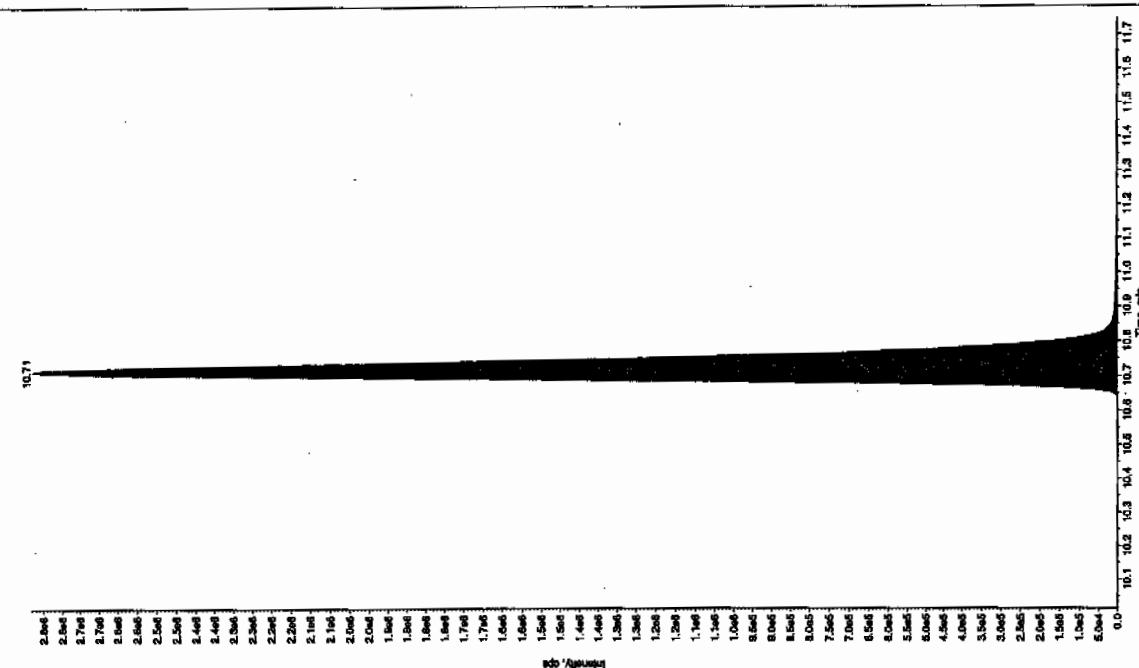


\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



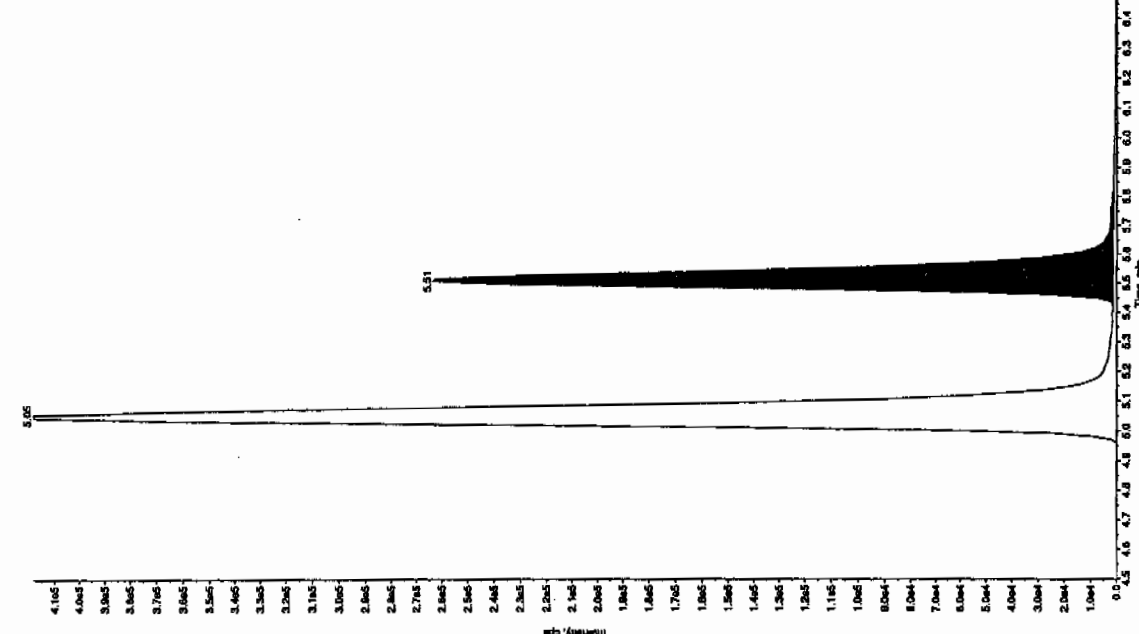
Sample Name: "WXX100122-26CCY" Sample ID: "11ER" File: "EX50120024.wdf"  
 Peak Name: "24-Diamino-6-nitroindole" Mass(es): "365.191.0 and"  
 Comment: "LCMSDEP\_C" Annotation: "

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500.00 ng/mL  
 Calculated Conc: 494.00 ng/mL  
 Acq. Date: 1/22/2010  
 Acq. Time: 4:26:48 PM  
 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: 10.7 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.7 min  
 Area: 1.13e+007 counts  
 Height: 2829809.814 cps  
 Start Time: 10.6 min  
 End Time: 11.1 min



Sample Name: "WXX100122-26CCY" Sample ID: "11ER" File: "EX50120024.wdf"  
 Peak Name: "24-Diamino-6-nitroindole" Mass(es): "160.046.0 and"  
 Comment: "LCMSDEP\_C" Annotation: "

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500.00 ng/mL  
 Calculated Conc: 482.00 ng/mL  
 Acq. Date: 1/22/2010  
 Acq. Time: 4:26:48 PM  
 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: 5.50 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.51 min  
 Area: 1.19e+006 counts  
 Height: 261911.591 cps  
 Start Time: 5.43 min  
 End Time: 5.89 min



7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1160-1

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS01220026.wiff

Analysis Date: 22-JAN-10 16:58

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	92.1	92	
2,6-Diamino-4-nitrotoluene	100	95.1	95	
3,4-Dinitrotoluene	50	51	102	
3,5-Dinitroaniline	100	99.3	99	
TATB	100	102	102	
tris(o-cresyl) phosphate	100	97.1	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

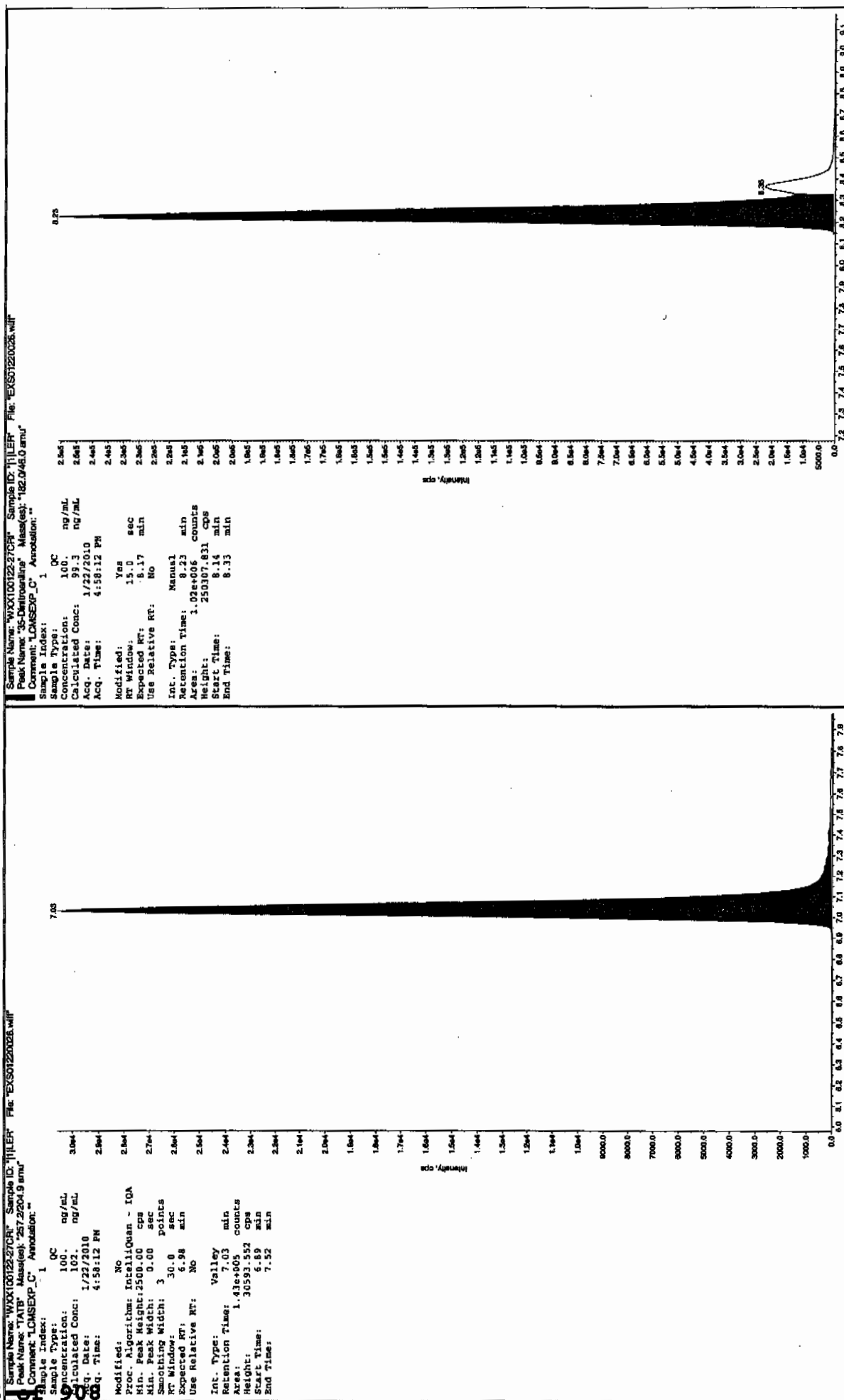
Before Jan 11/25/10



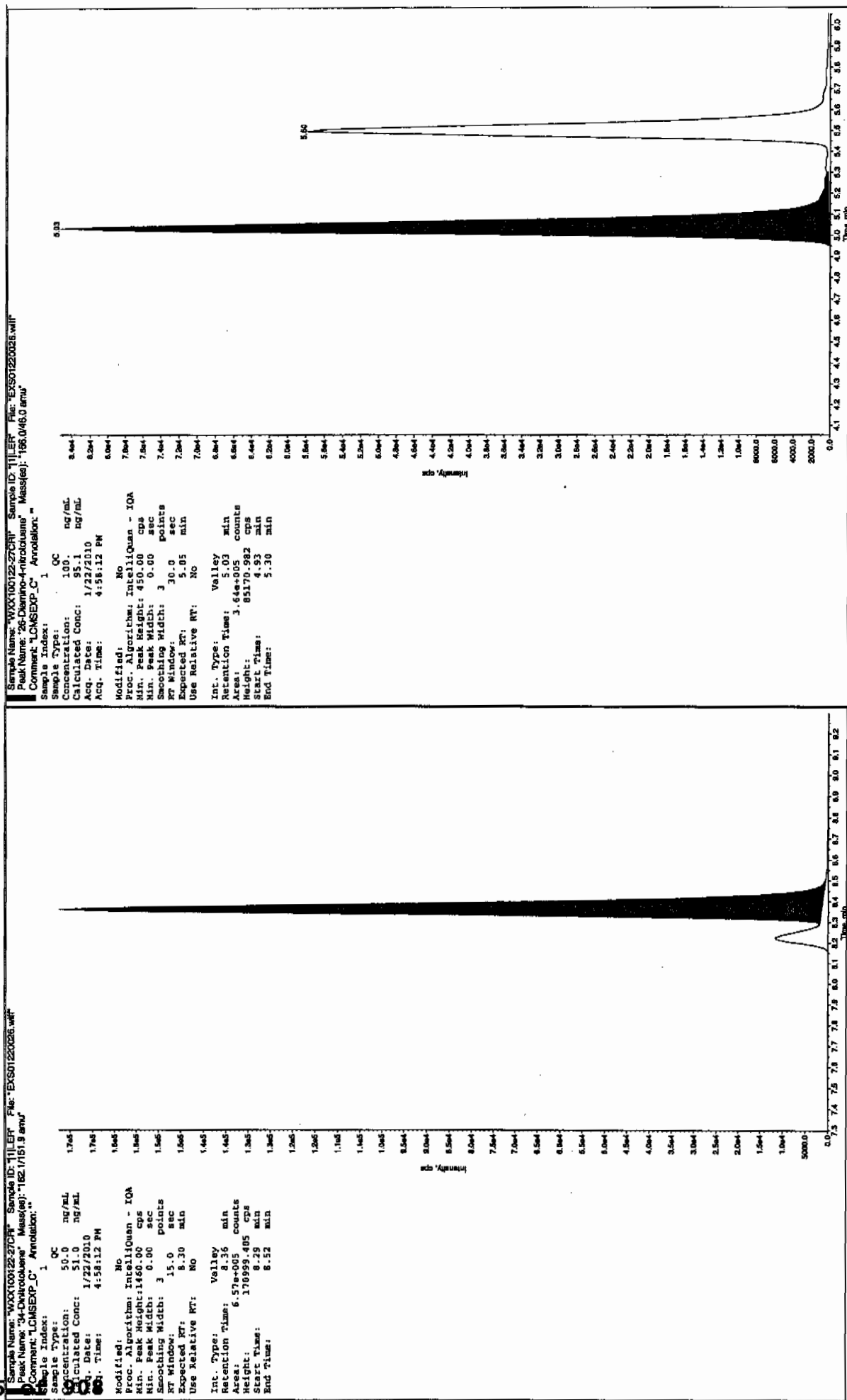
\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



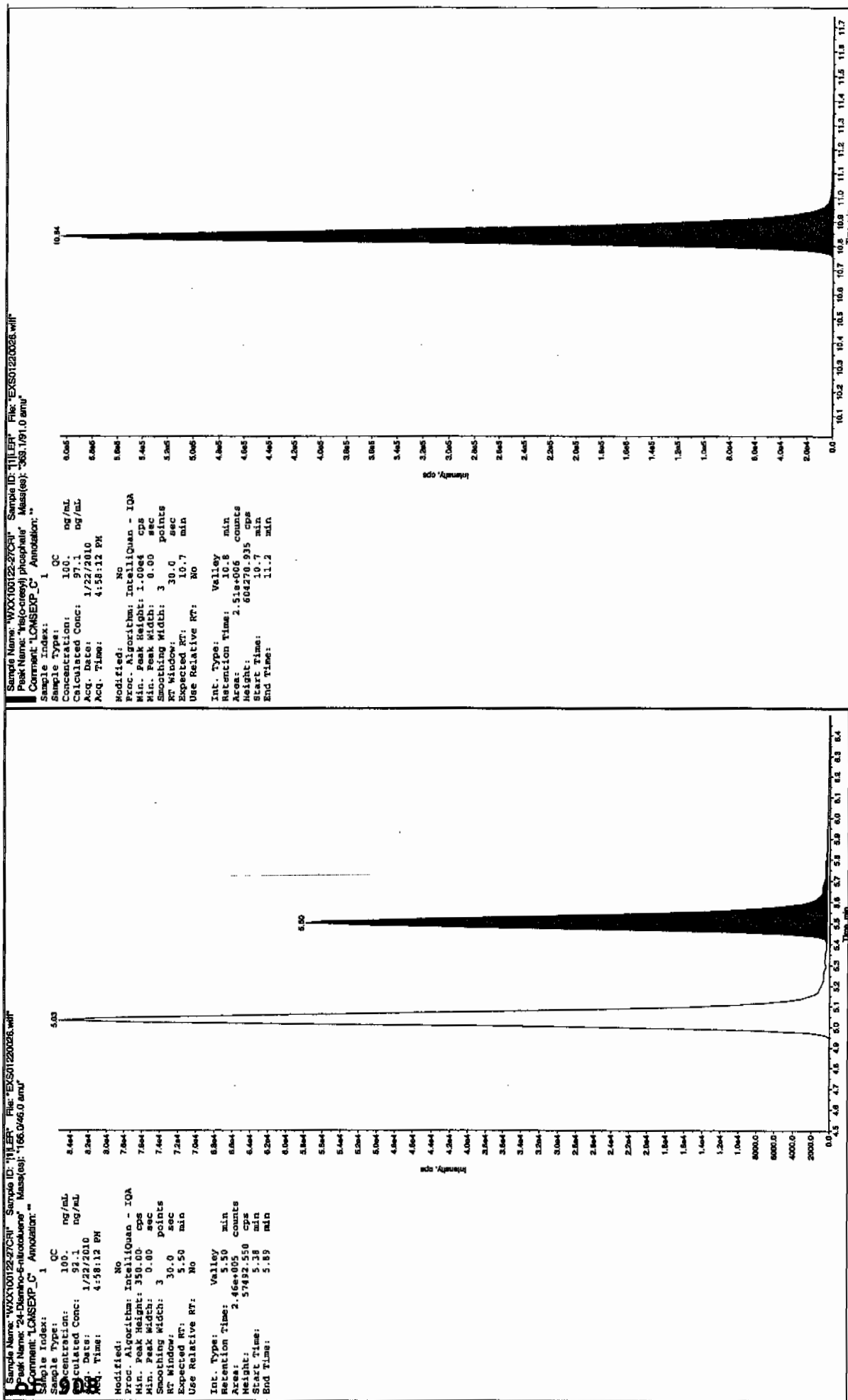
after Jan 11/25/10



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



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



7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1160-1

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS01220037.wiff

Analysis Date: 22-JAN-10 19:50

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	504	101	
2,6-Diamino-4-nitrotoluene	500	510	102	
3,4-Dinitrotoluene	250	244	98	
3,5-Dinitroaniline	500	578	116	
TATB	500	512	102	
tris(o-cresyl) phosphate	500	499	100	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

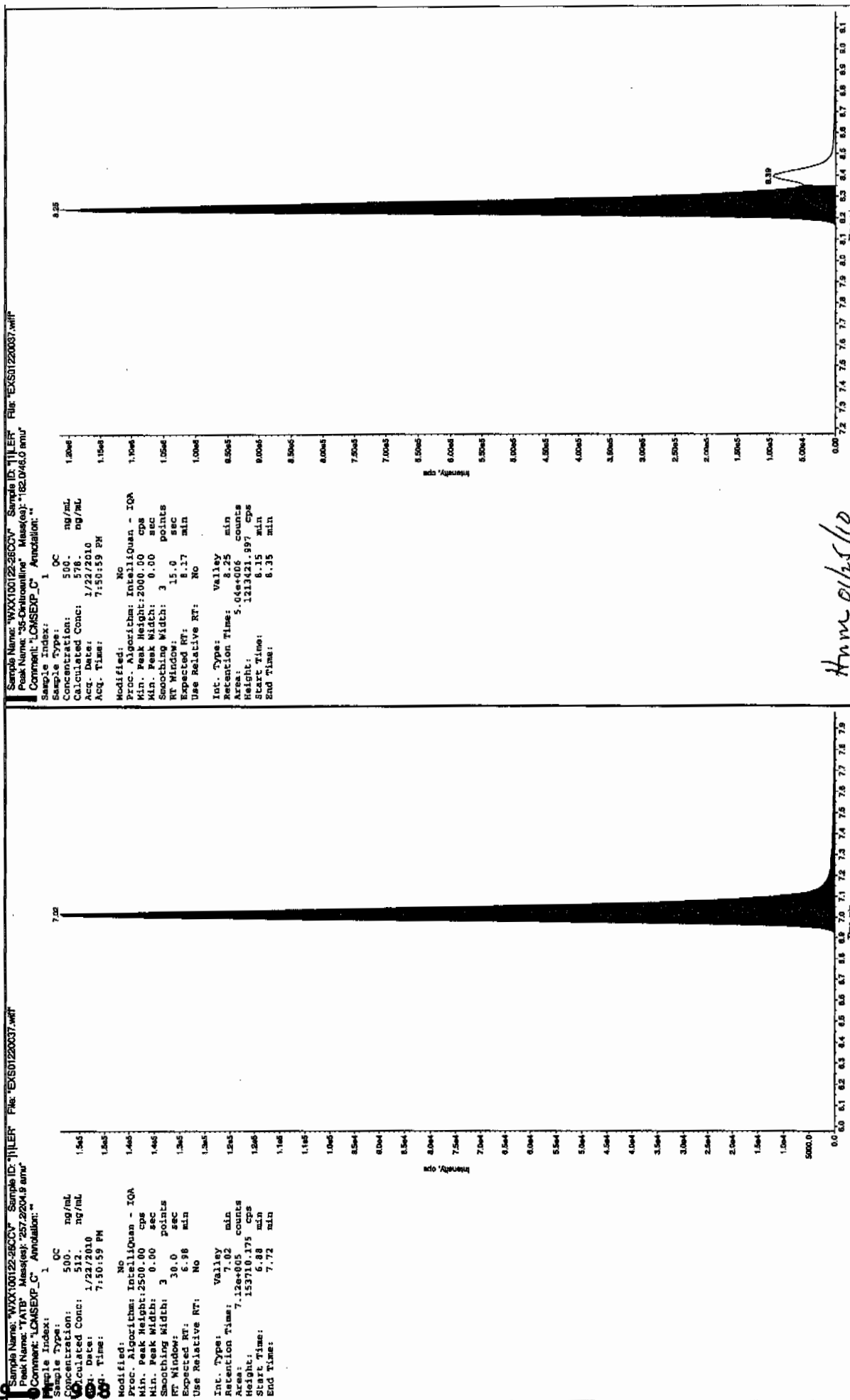
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

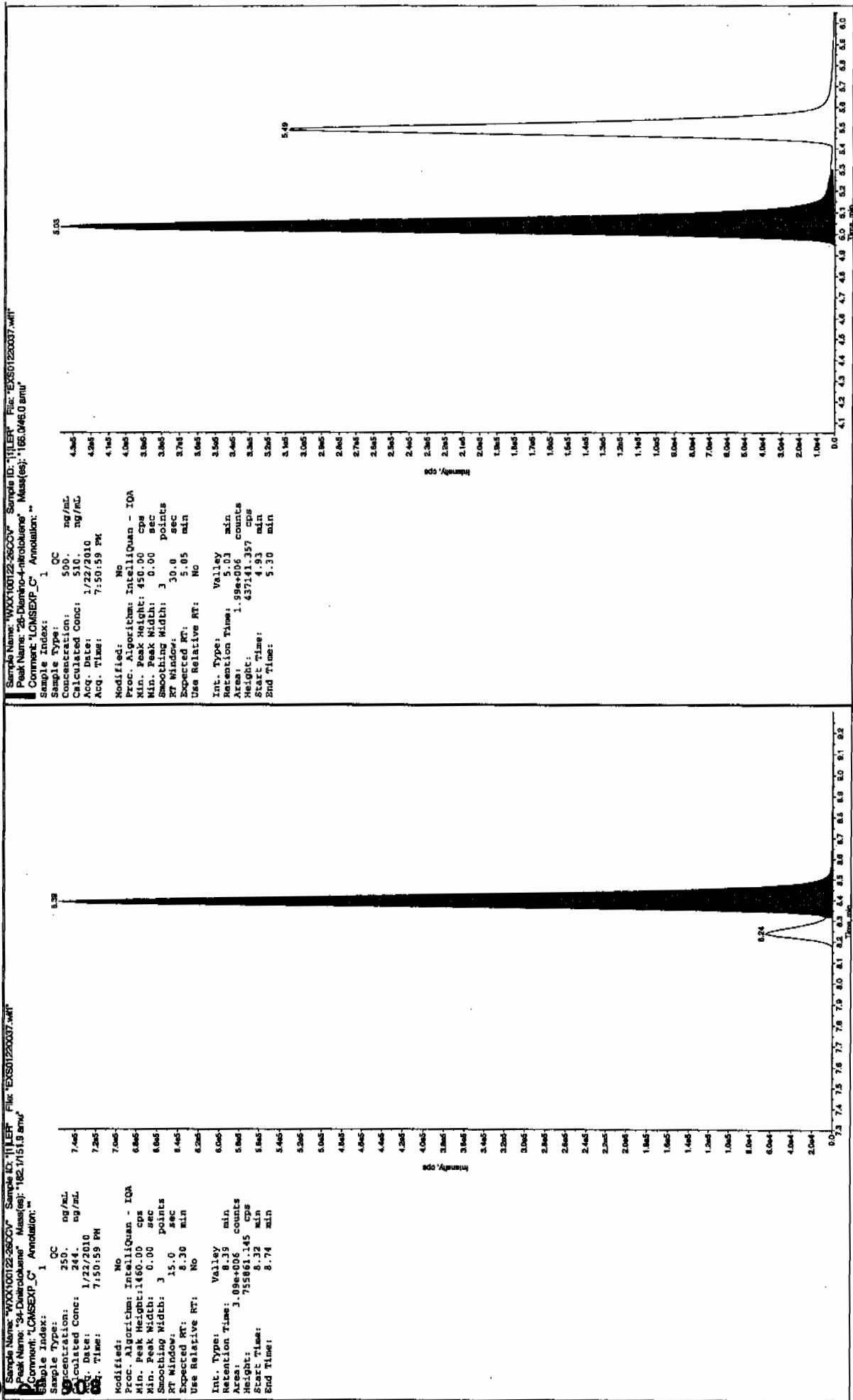
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

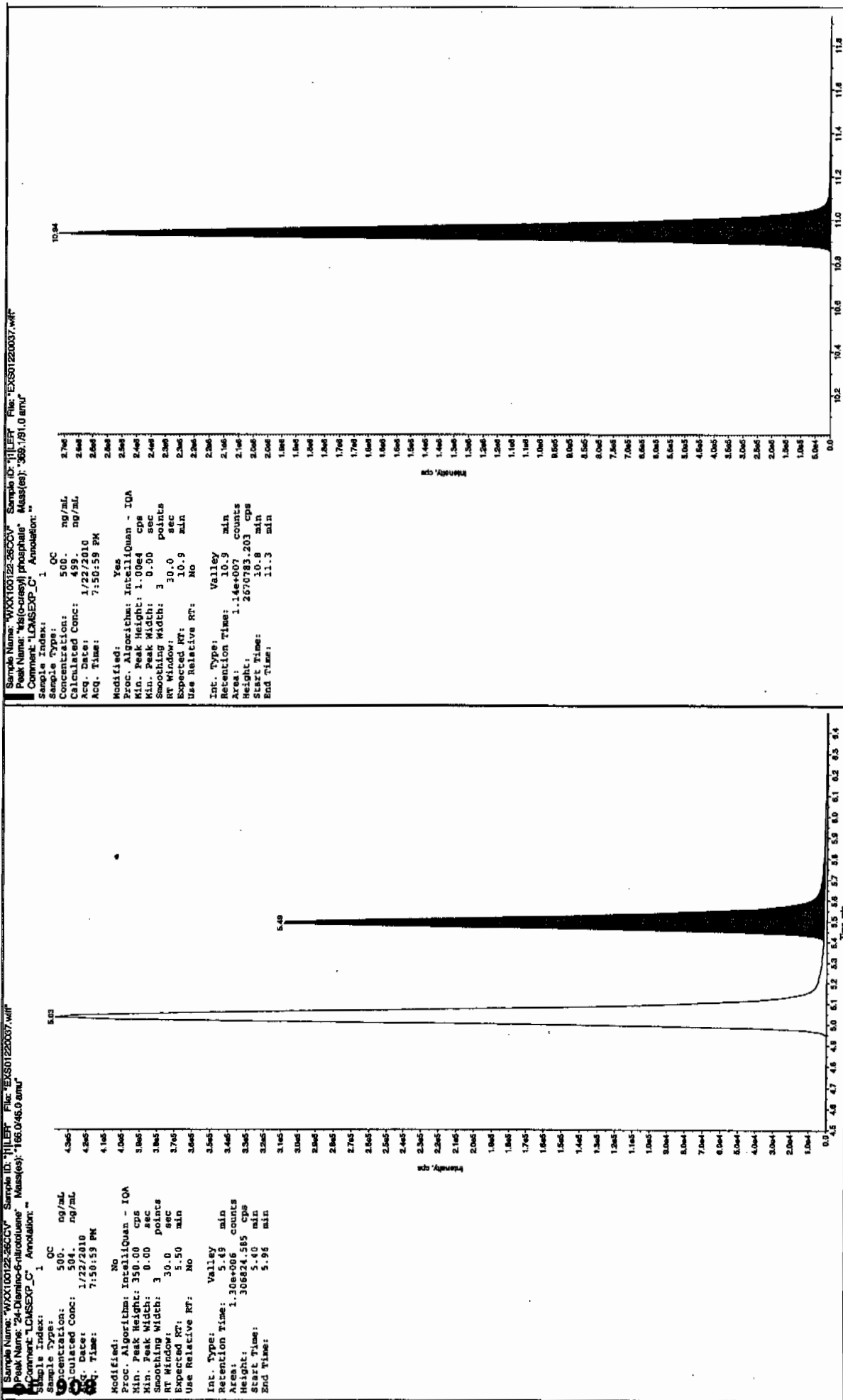
See 125110



See 0125110



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



7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1160-1

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS01220039.wiff

Analysis Date: 22-JAN-10 20:22

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	96.4	96	
2,6-Diamino-4-nitrotoluene	100	108	108	
3,4-Dinitrotoluene	50	50.1	100	
3,5-Dinitroaniline	100	102	102	
TATB	100	104	104	
tris(o-cresyl) phosphate	100	100	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%

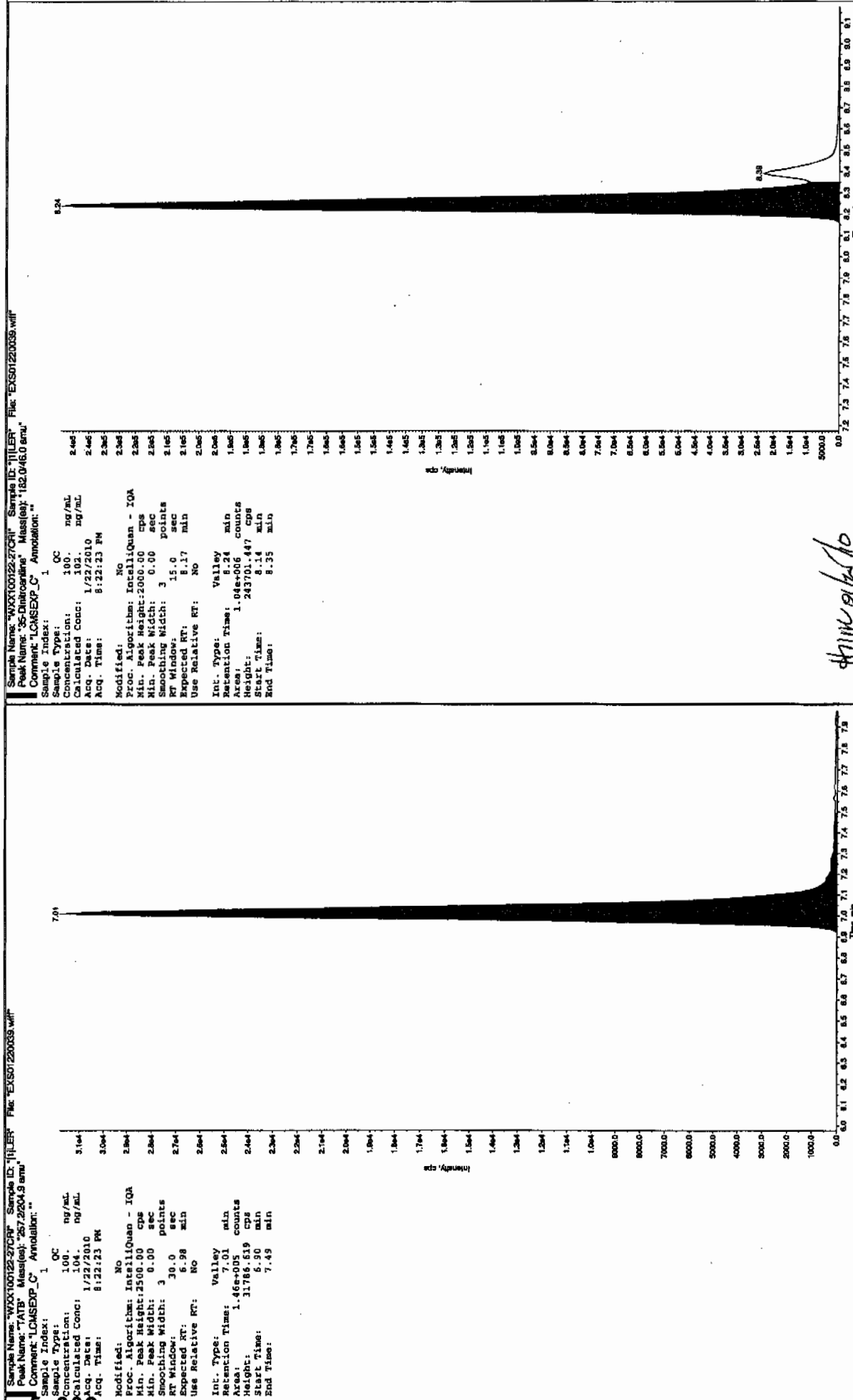
Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

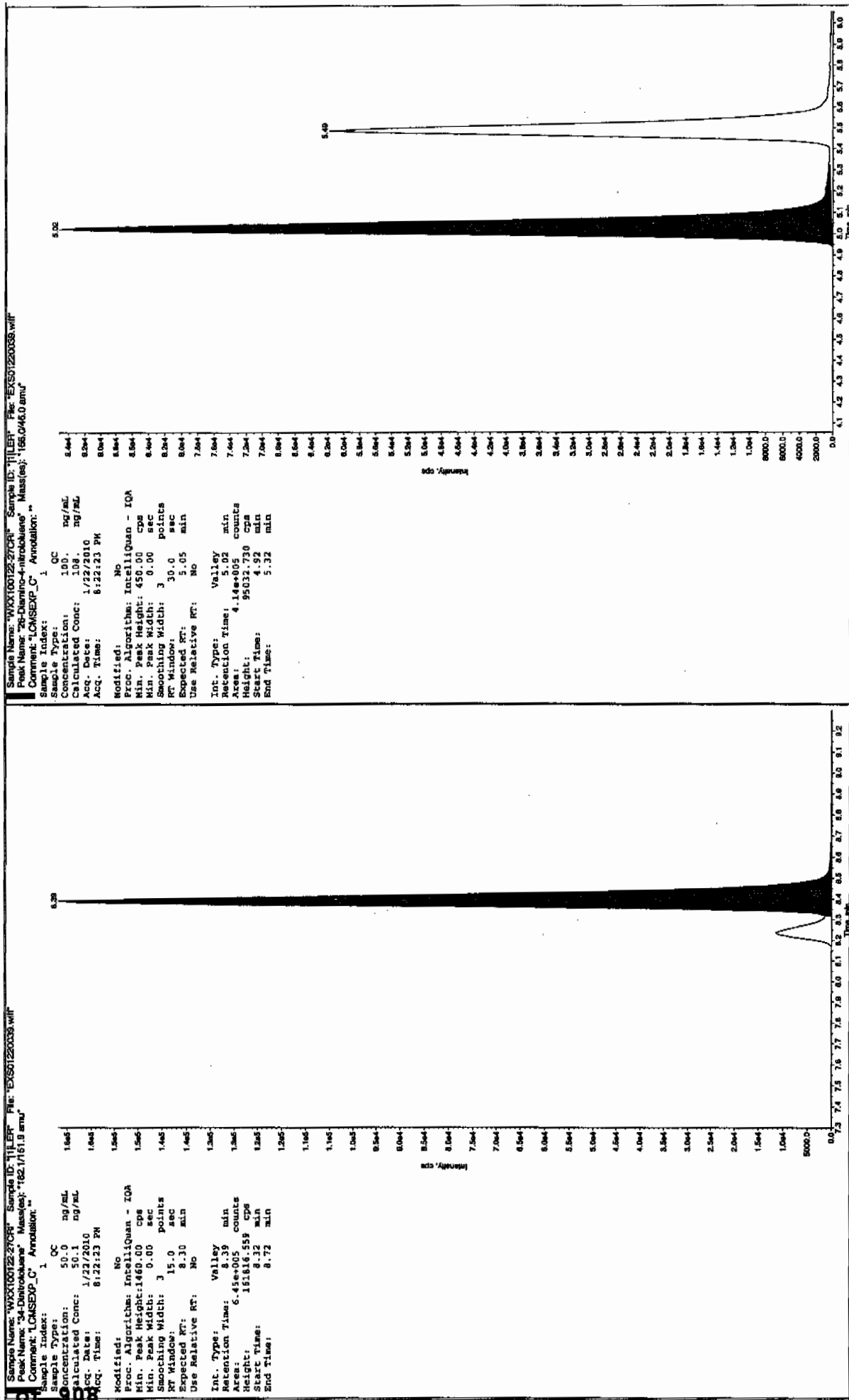
\* Value outside of Recovery Limits



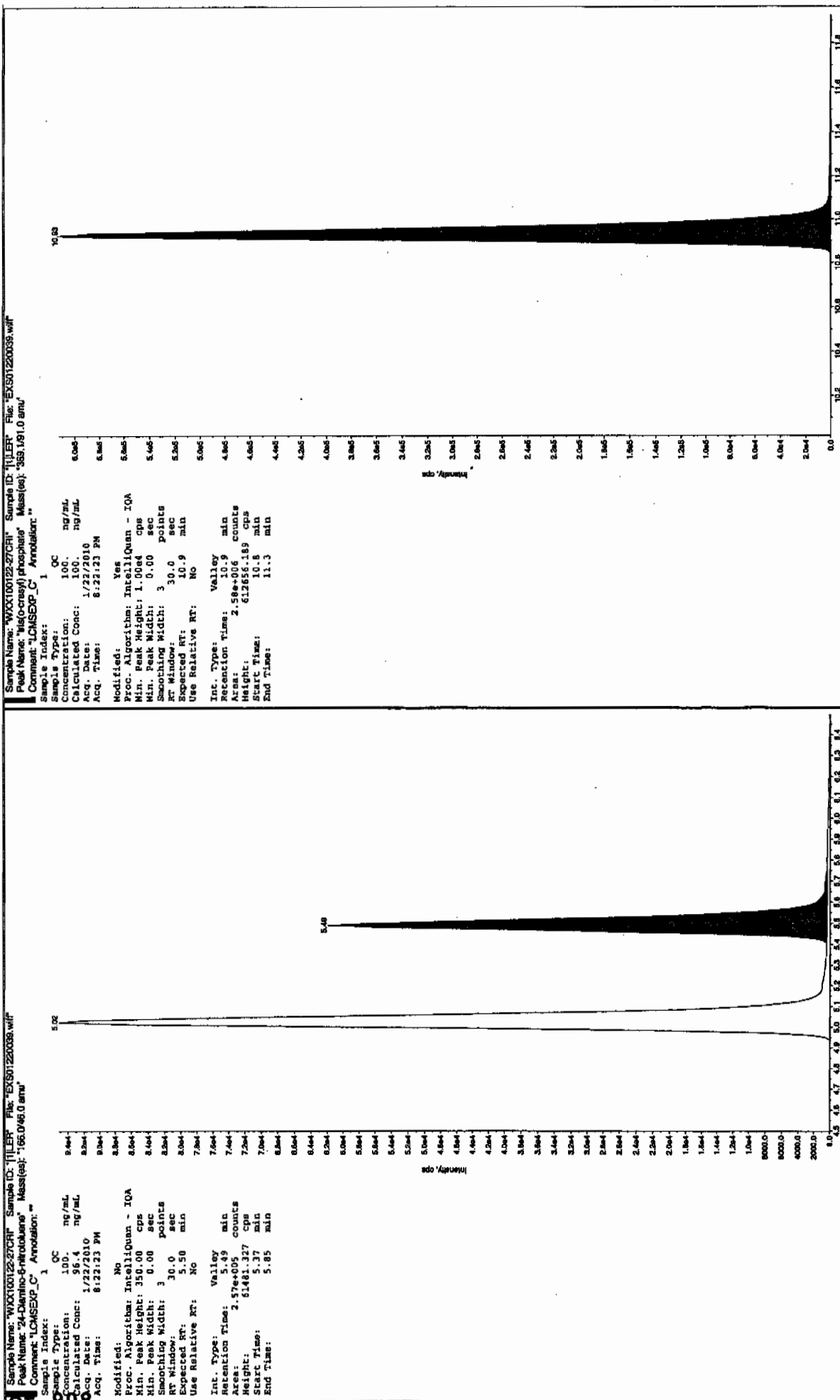
Ken 1/25/10



4/11/10



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



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

7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1160-1

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS01220050.wiff

Analysis Date: 22-JAN-10 23:15

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	531	106	
2,6-Diamino-4-nitrotoluene	500	513	103	
3,4-Dinitrotoluene	250	253	101	
3,5-Dinitroaniline	500	568	114	
TATB	500	514	103	
tris(o-cresyl) phosphate	500	501	100	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

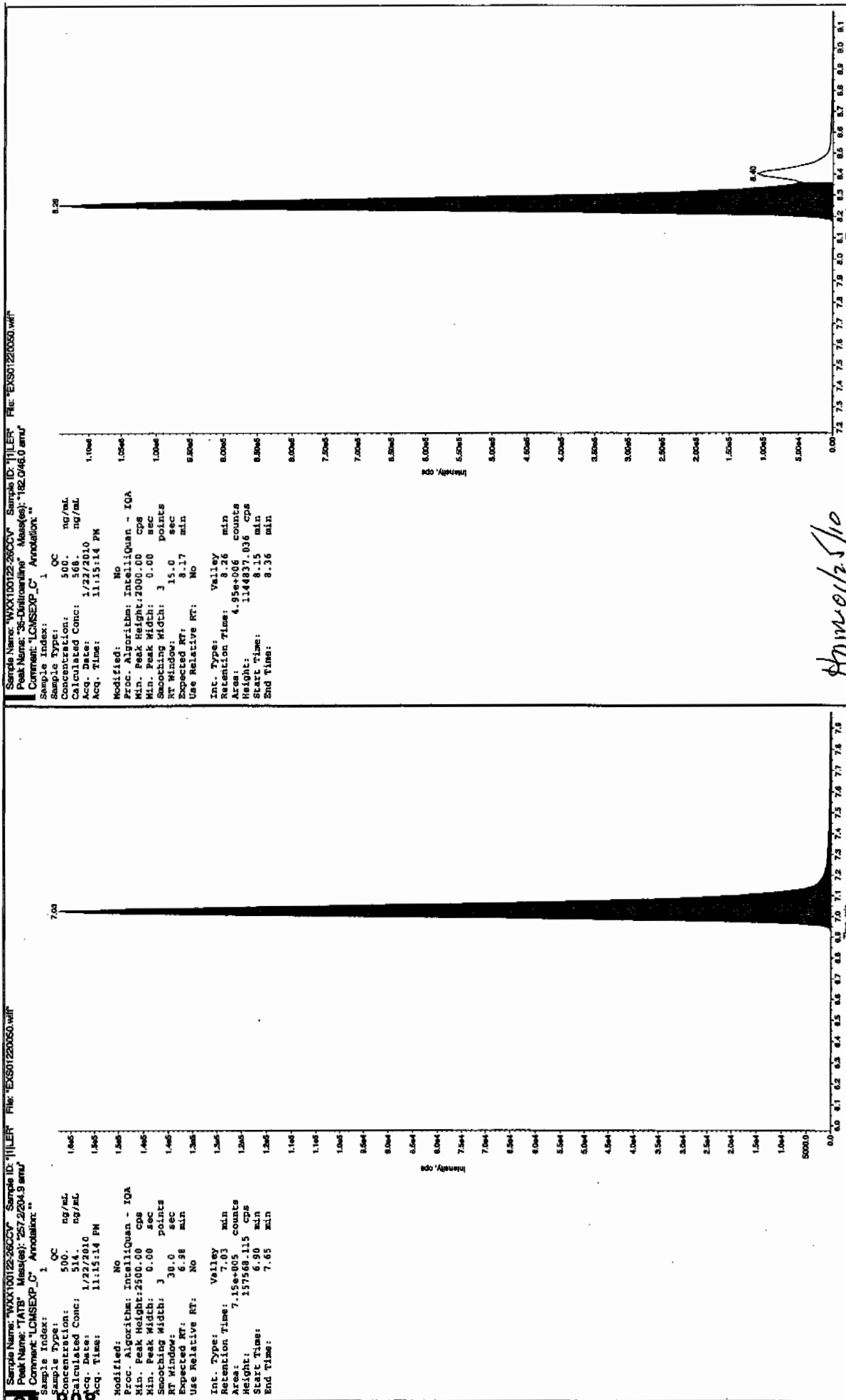
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

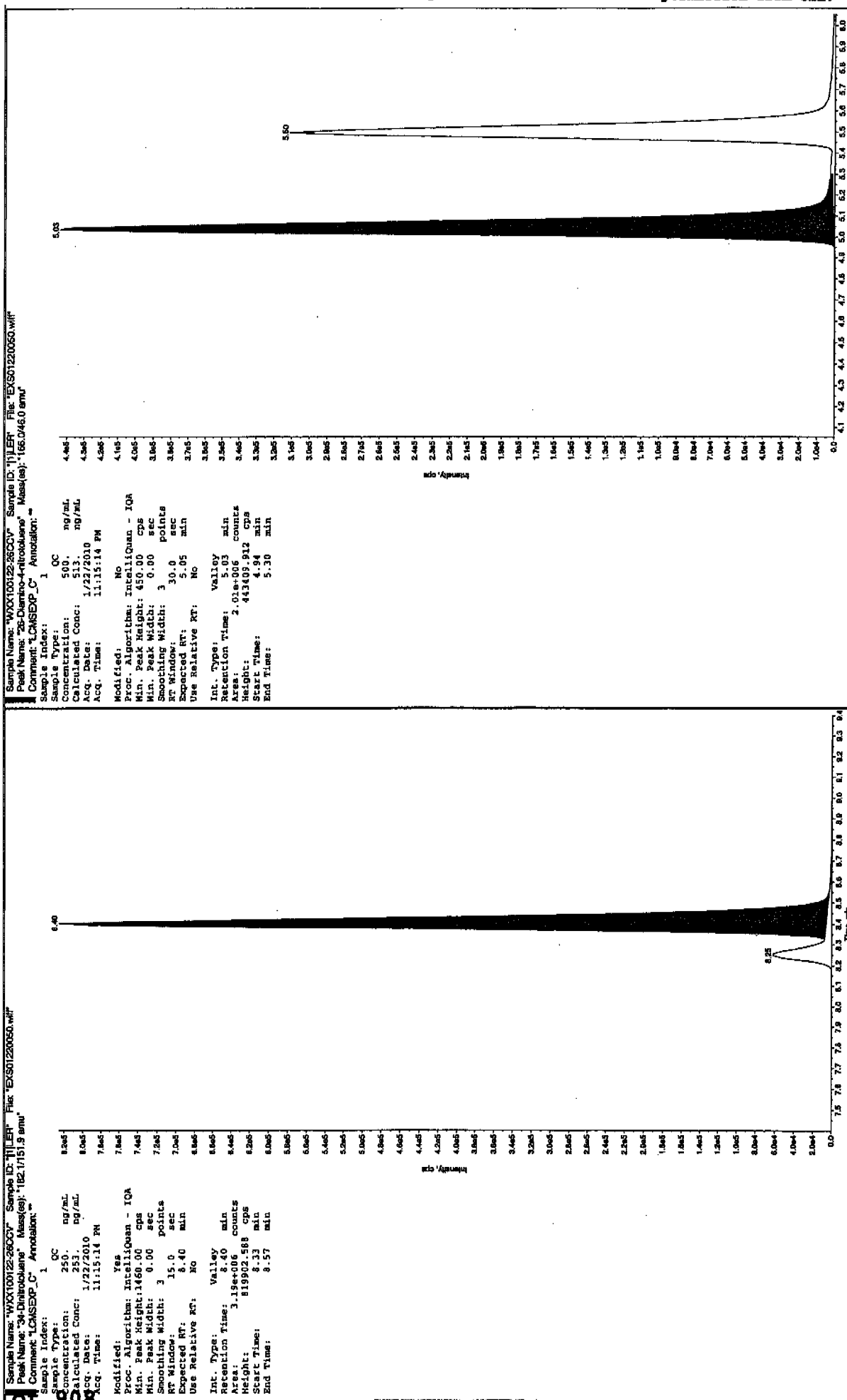
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

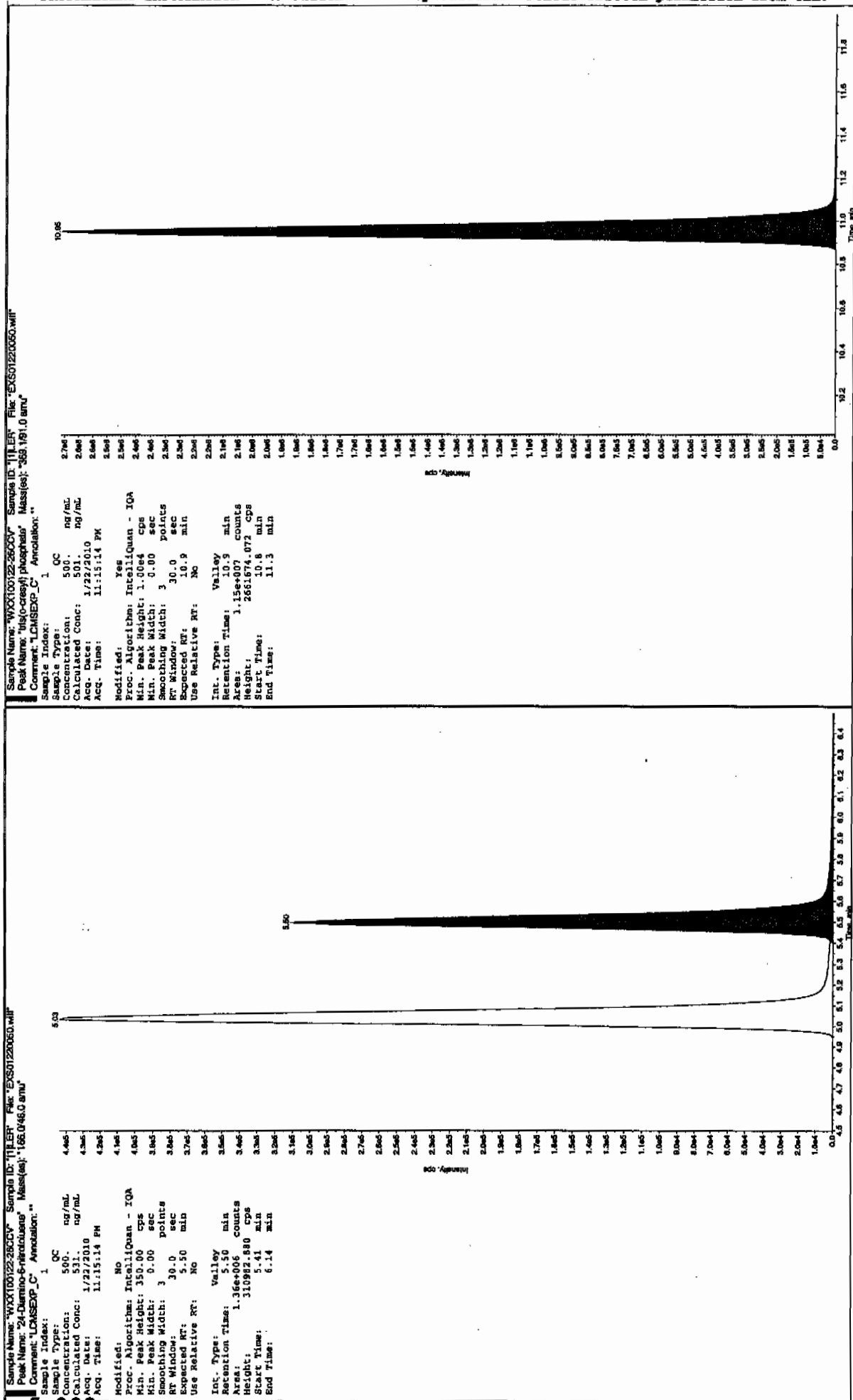
after Lax 1/25/10



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



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



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCM SMS#4

7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1160-1

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS01220052.wiff

Analysis Date: 22-JAN-10 23:46

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	99.1	99	
2,6-Diamino-4-nitrotoluene	100	109	109	
3,4-Dinitrotoluene	50	50	100	
3,5-Dinitroaniline	100	108	108	
TATB	100	105	105	
tris(o-cresyl) phosphate	100	101	101	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

2,4-Diamino-6-nitrotoluene 50-150%

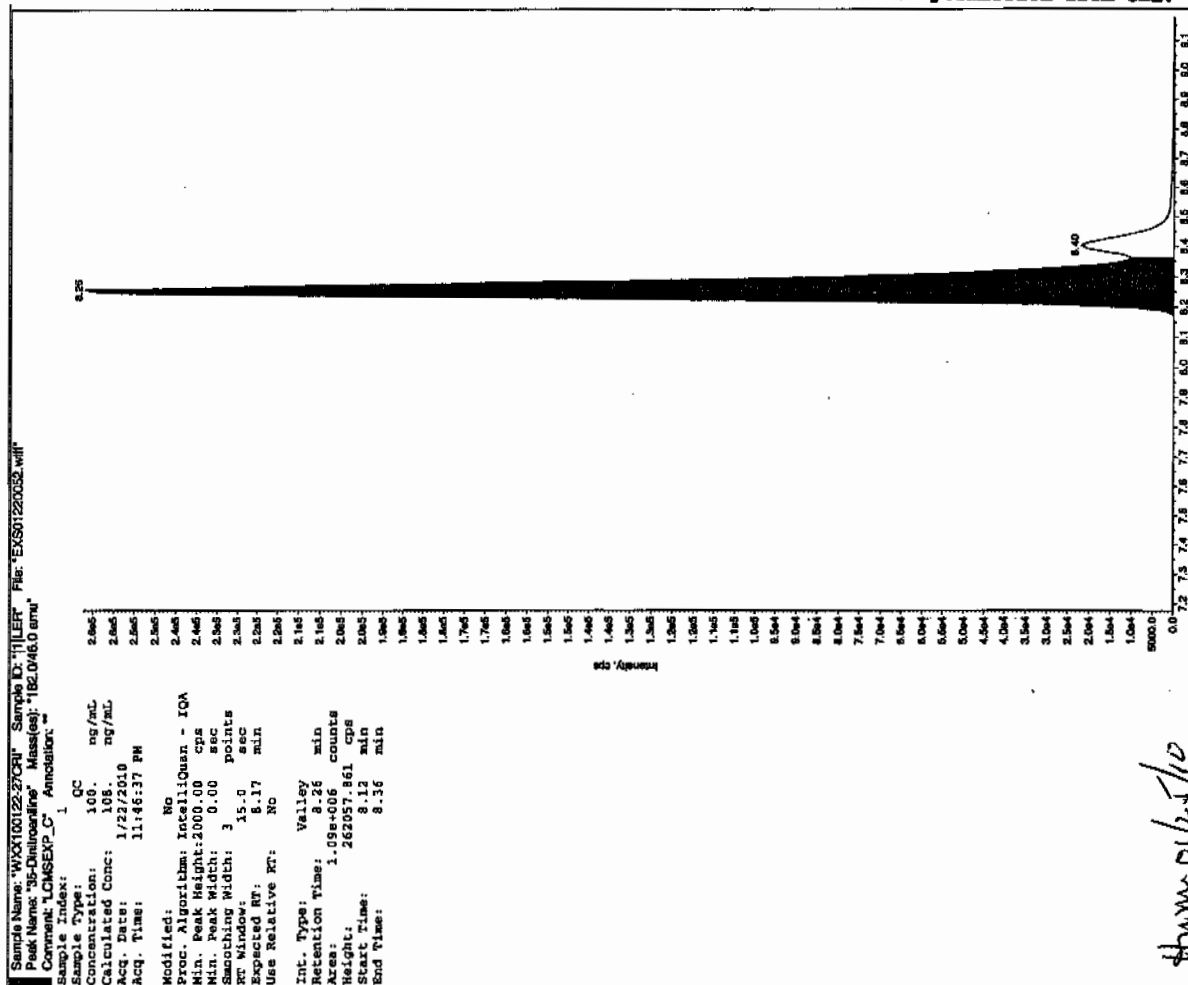
Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

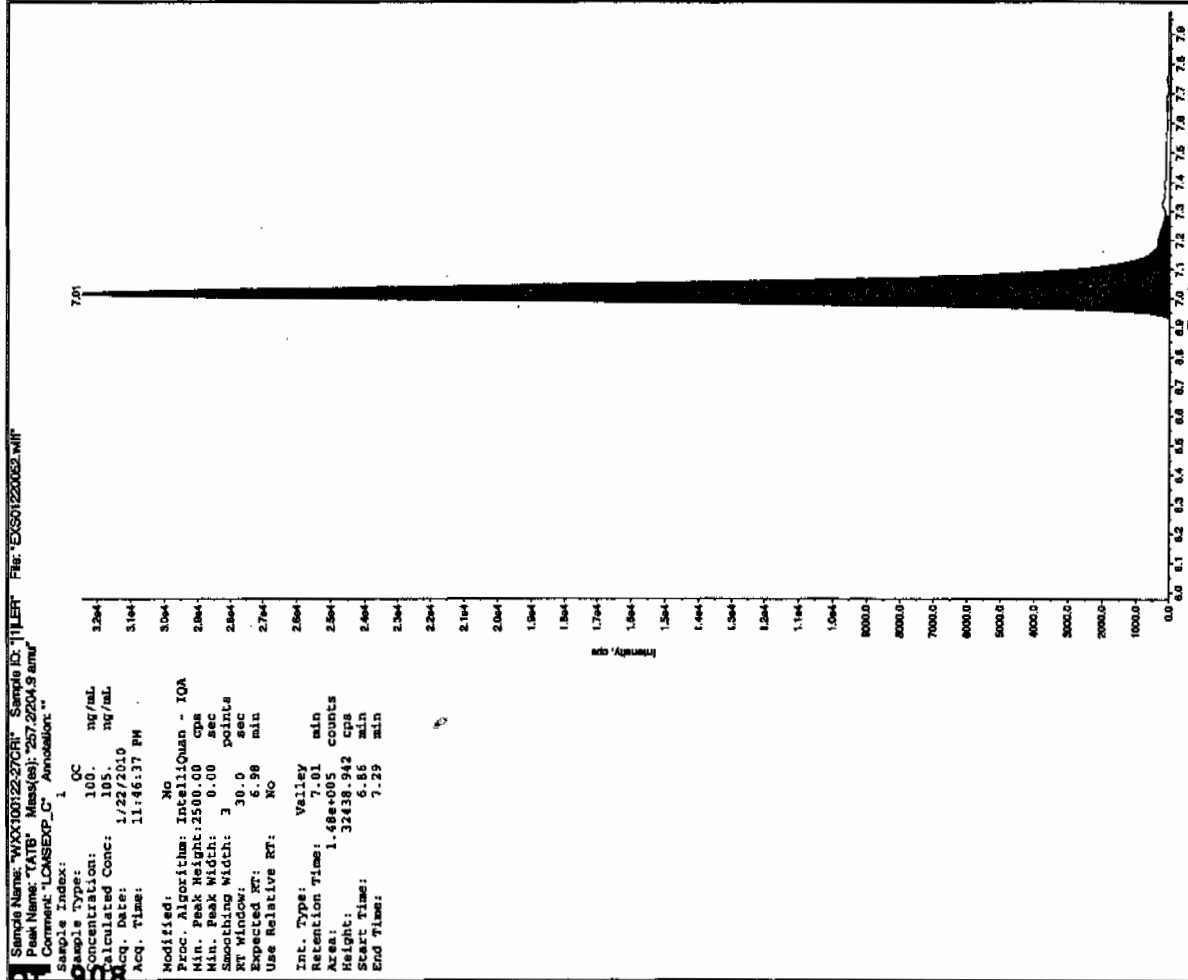
\* Value outside of Recovery Limits



See 1125110



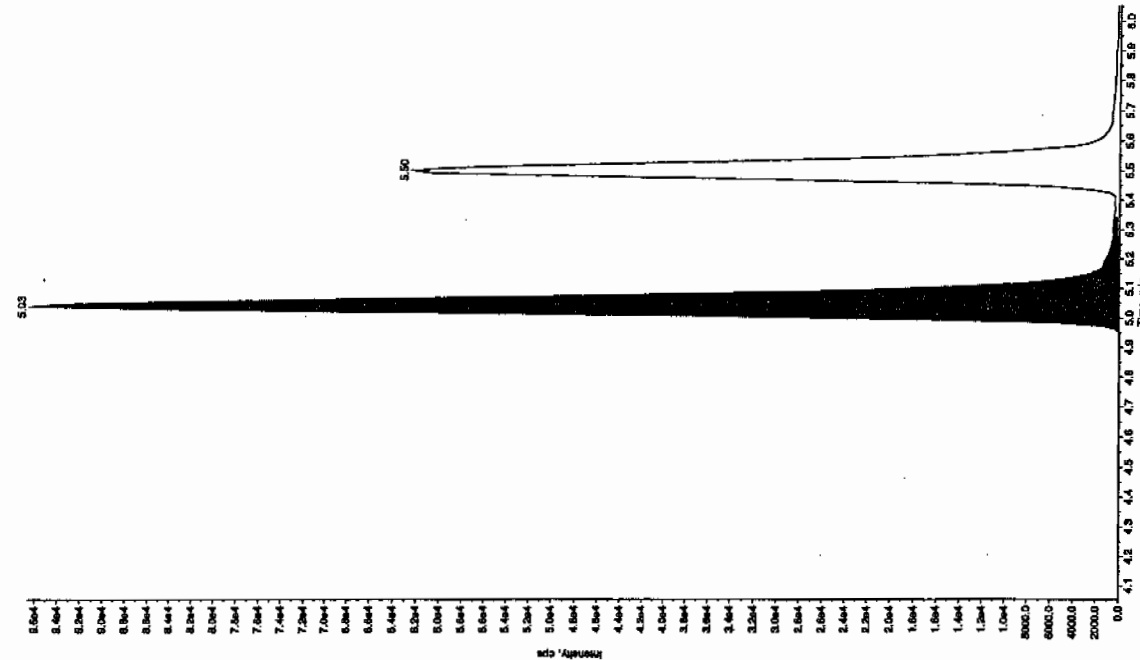
thru 01/25/10



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

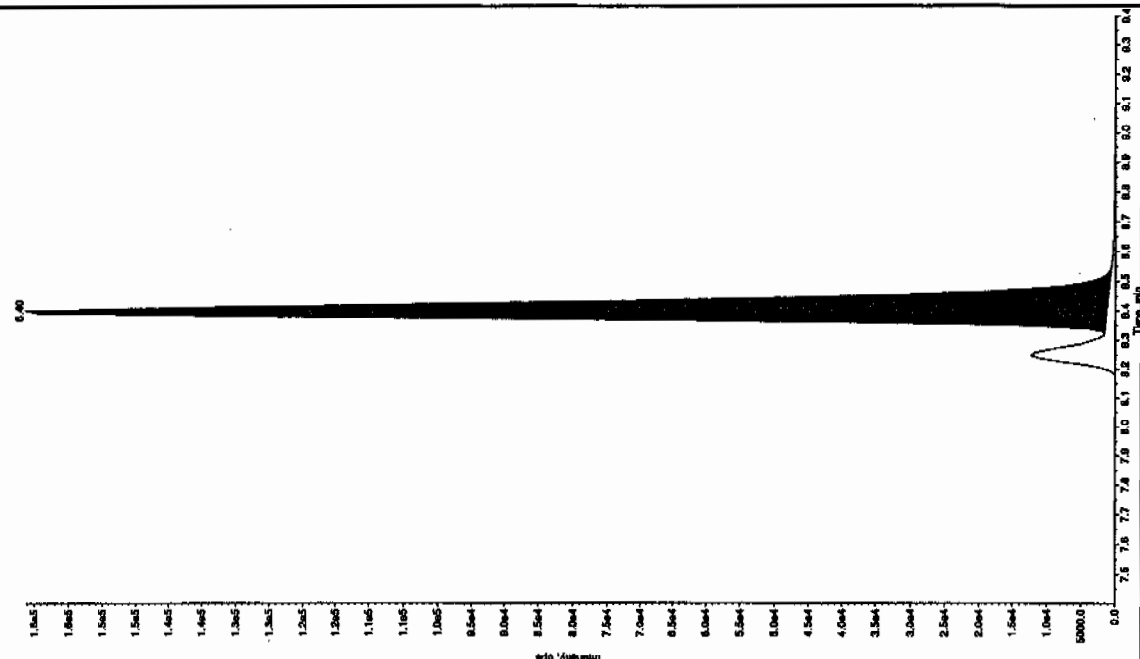
Sample Name: "WXX100122-2709" Sample ID: "11157" File: "EX501220052.wif"  
 Peak Name: "25-Chloro-4-methylphenol" Mass(es): "166.046.0 amu"  
 Comment: "LCMSXP\_C" Annotation: ""

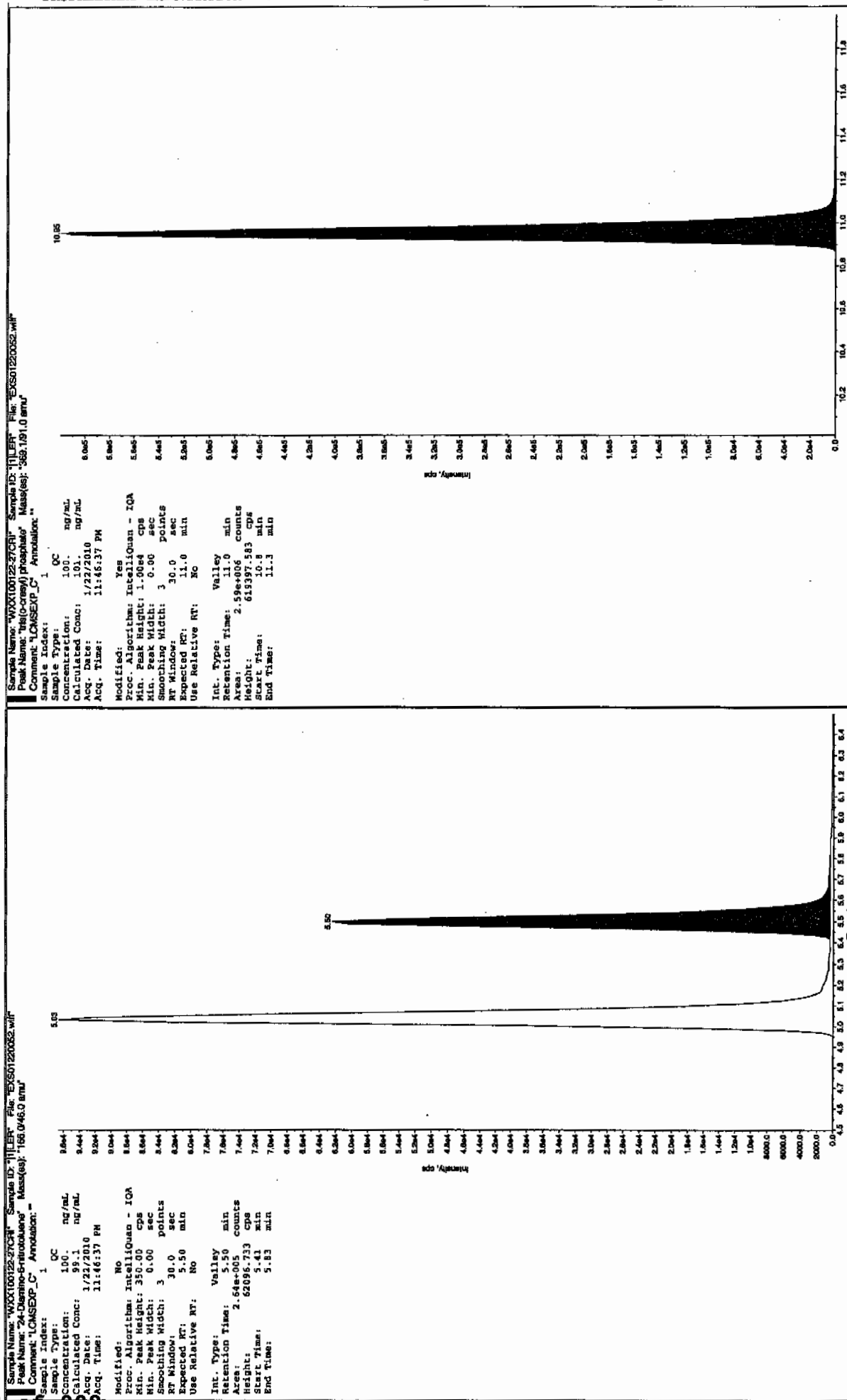
Sample Index: 1  
 Sample Type: QC  
 Concentration: 100.00 ng/mL  
 Calculated Conc: 109.00 ng/mL  
 Acq. Date: 1/22/2010  
 Acq. Time: 11:46:37 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 450.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 5.05 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.03 min  
 Peak Height: 4212.0087 counts  
 Peak Area: 96524.93 cps  
 Start Time: 4.93 min  
 End Time: 5.14 min



Sample Name: "WXX100122-2709" Sample ID: "11157" File: "EX501220052.wif"  
 Peak Name: "34-Dibromophenol" Mass(es): "182.1751.9 amu"  
 Comment: "LCMSXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 50.00 ng/mL  
 Calculated Conc: 50.00 ng/mL  
 Acq. Date: 1/22/2010  
 Acq. Time: 11:46:37 PM  
 Modified: Yes  
 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: 8.40 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.37 min  
 Peak Height: 6446.605 counts  
 Peak Area: 159969.482 cps  
 Start Time: 8.37 min  
 End Time: 8.56 min





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

7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1160-1

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS01220063.wiff

Analysis Date: 23-JAN-10 02:39

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	539	108	
2,6-Diamino-4-nitrotoluene	500	542	108	
3,4-Dinitrotoluene	250	239	96	
3,5-Dinitroaniline	500	556	111	
TATB	500	499	100	
tris(o-cresyl) phosphate	500	496	99	

Recovery Limits:

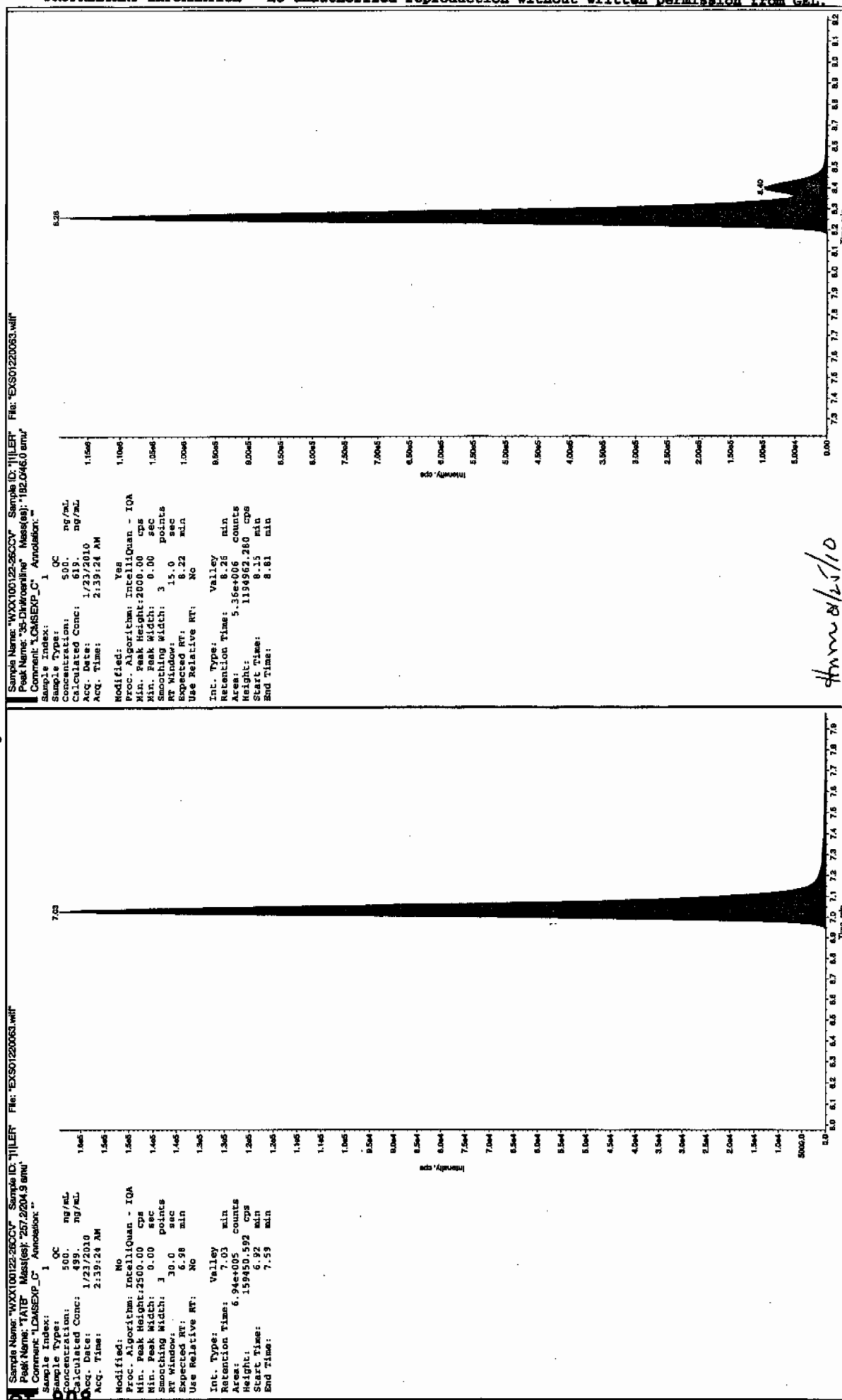
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

# Column used to flag Recovery outside of Limits

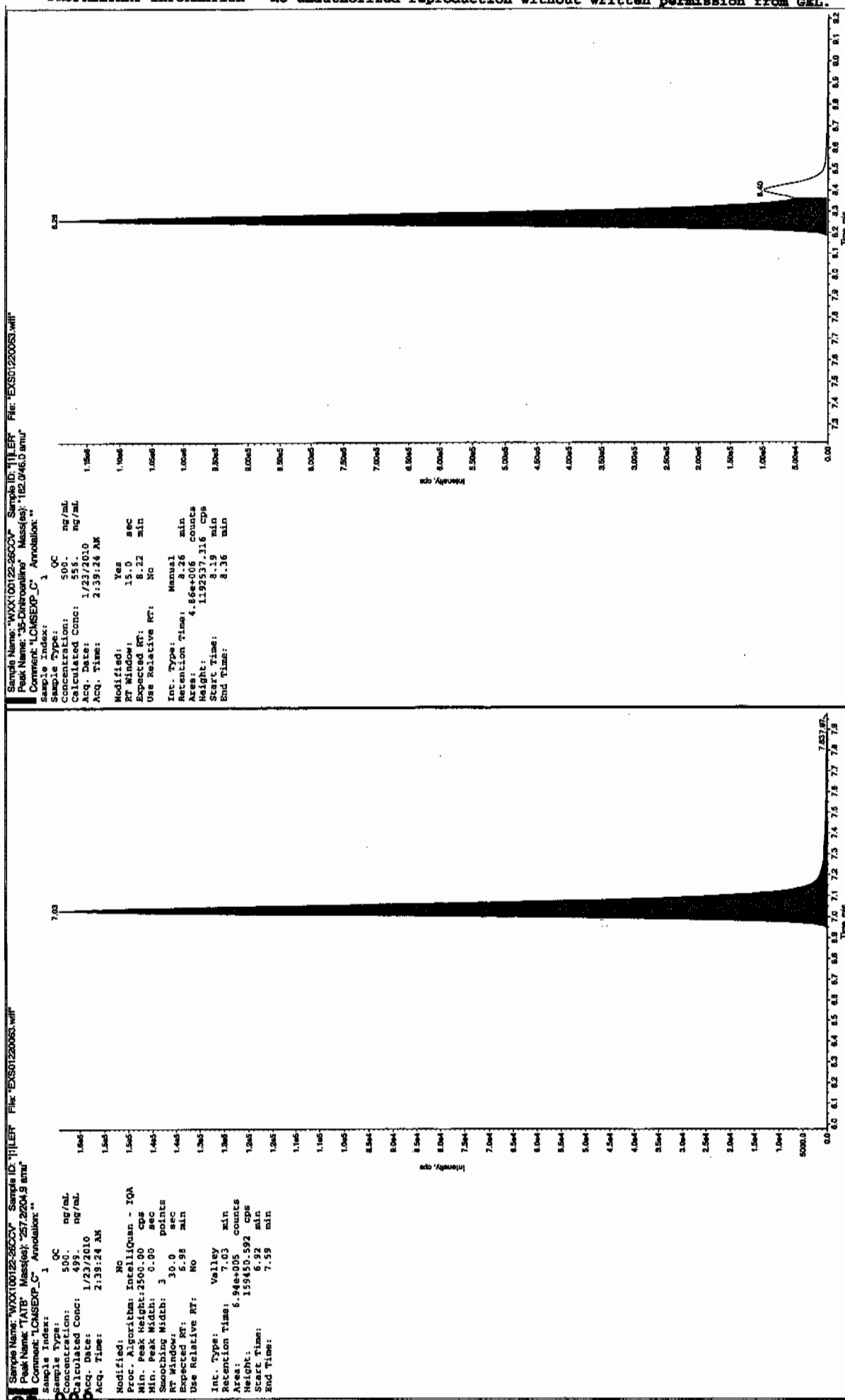
\* Value outside of Recovery Limits

Before Saw 1/25/10



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

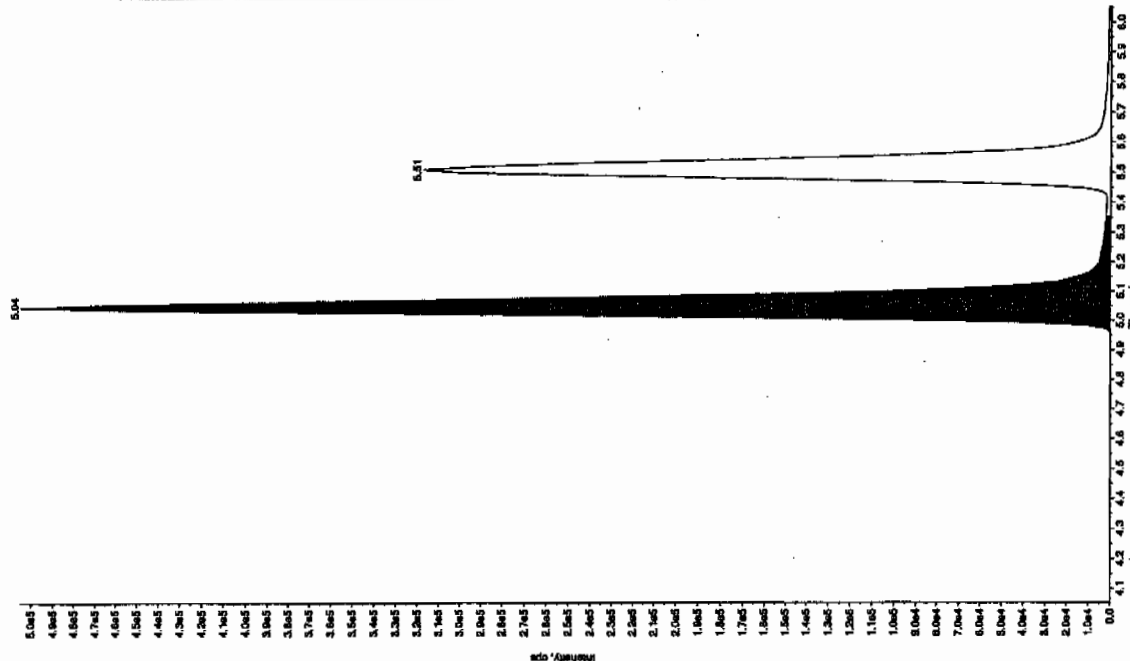
after 11/25/10



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

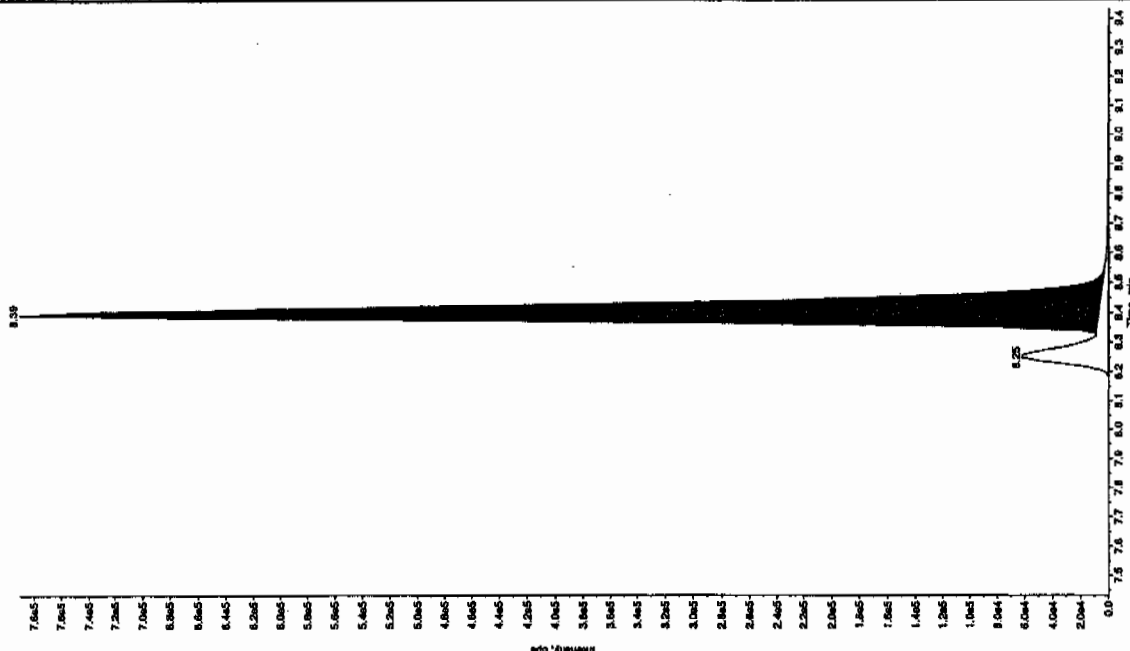
Sample Name: "WXX100122-250CV" Sample ID: "111ER" File: "EX01220083.wif"  
 Peak Name: "34-Dinitrobenzene" Mass(es): "182.1715.9 amu"  
 Comment: "LONSEXP\_C" Annotation: "

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500. ng/mL  
 Calculated Conc: 500. ng/mL  
 Acq. Date: 1/23/2010  
 Acq. Time: 2:39:24 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: 5.05 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.04 min  
 Area: 2.12e+006 counts  
 Height: 50465.637 cps  
 Start Time: 4.94 min  
 End Time: 5.35 min



Sample Name: "WXX100122-250CV" Sample ID: "111ER" File: "EX01220083.wif"  
 Peak Name: "34-Dinitrobenzene" Mass(es): "182.1715.9 amu"  
 Comment: "LONSEXP\_C" Annotation: "

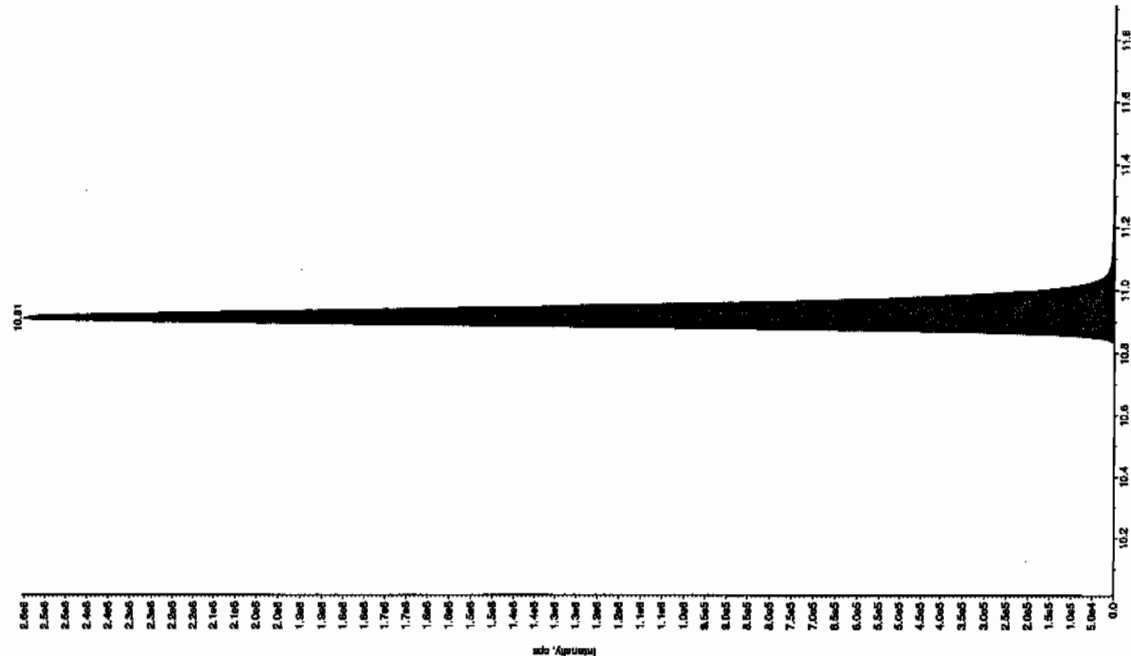
Sample Index: 1  
 Sample Type: QC  
 Concentration: 250. ng/mL  
 Calculated Conc: 239. ng/mL  
 Acq. Date: 1/23/2010  
 Acq. Time: 2:39:24 AM  
 Modified: Yes  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 1460.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 15.0 sec  
 Expected RT: 8.43 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.39 min  
 Area: 3.02e+006 counts  
 Height: 78260.461 cps  
 Start Time: 8.33 min  
 End Time: 8.57 min



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

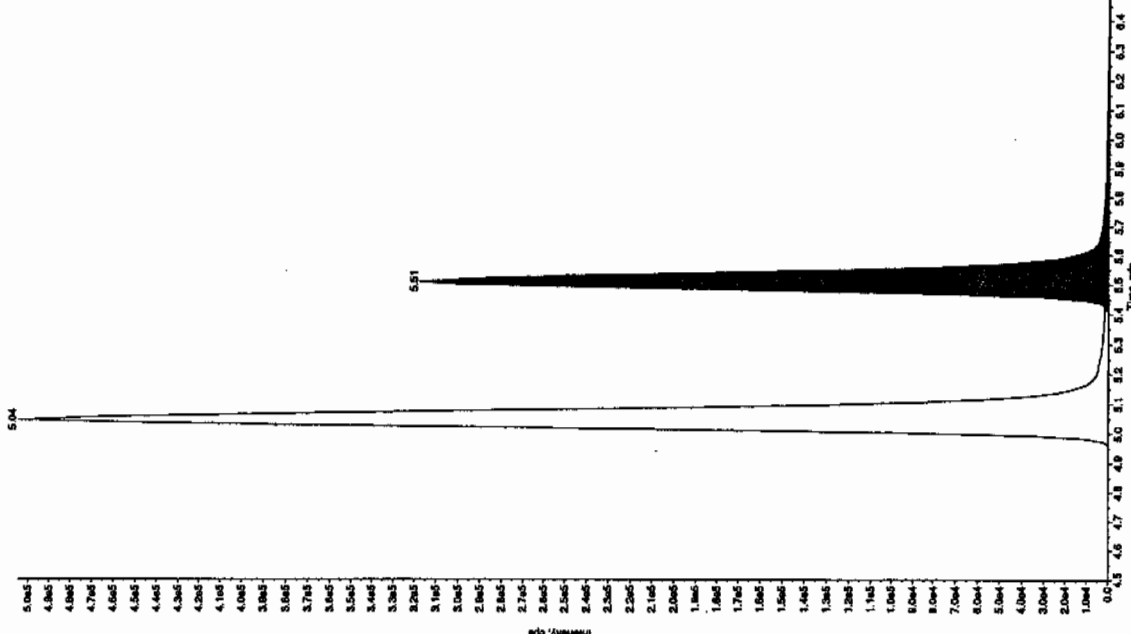
Sample Name: "WXX100122-2500Y" Sample ID: "111EF" File: "EXS0122063.wif"  
 Peak Name: "bis(cisep) phosphate" Mass(es): "368.1810 amu"  
 Comment: "LCMS EXP\_C" Annotation: "

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500. ng/mL  
 Calculated Conc: 496. ng/mL  
 Acq. Date: 1/23/2010  
 Acq. Time: 2:39:24 AM  
 Modified: Yes  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 1.00e4 cps  
 Min. Peak Width: 0.50 sec  
 Smoothing Width: 3.00 points  
 RT Window: 30.0 min  
 Expected RT: 10.9 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.9 min  
 Area: 1.14e+007 counts  
 Height: 2554684.082 cps  
 Start Time: 10.8 min  
 End Time: 11.3 min



Sample Name: "WXX100122-2500Y" Sample ID: "111EF" File: "EXS0122063.wif"  
 Peak Name: "24-Diamino-6-nitroklutene" Mass(es): "166.046.0 amu"  
 Comment: "LCMS EXP\_C" Annotation: "

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500. ng/mL  
 Calculated Conc: 539. ng/mL  
 Acq. Date: 1/23/2010  
 Acq. Time: 2:39:24 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 350.00 cps  
 Min. Peak Width: 0.50 sec  
 Smoothing Width: 3.00 points  
 RT Window: 30.0 min  
 Expected RT: 5.50 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.51 min  
 Area: 1.38e+006 counts  
 Height: 317188.141 cps  
 Start Time: 5.42 min  
 End Time: 6.11 min



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



7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1160-1

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS01220065.wiff

Analysis Date: 23-JAN-10 03:10

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	107	107	
2,6-Diamino-4-nitrotoluene	100	115	115	
3,4-Dinitrotoluene	50	51.7	103	
3,5-Dinitroaniline	100	109	109	
TATB	100	102	102	
tris(o-cresyl) phosphate	100	99.9	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%

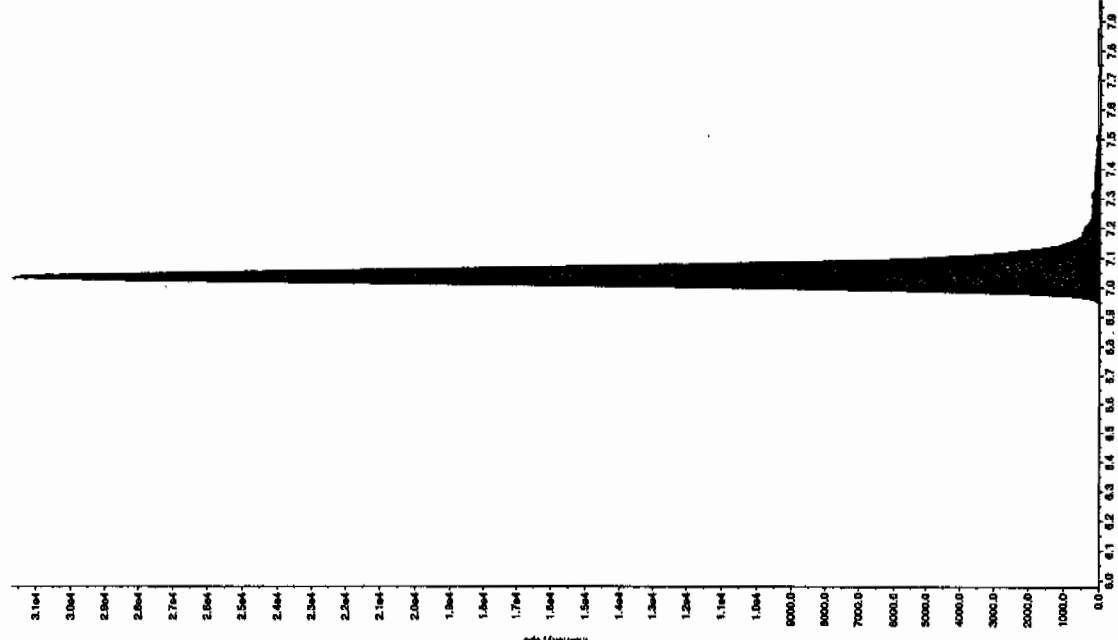
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

Before Raw 1/25/10

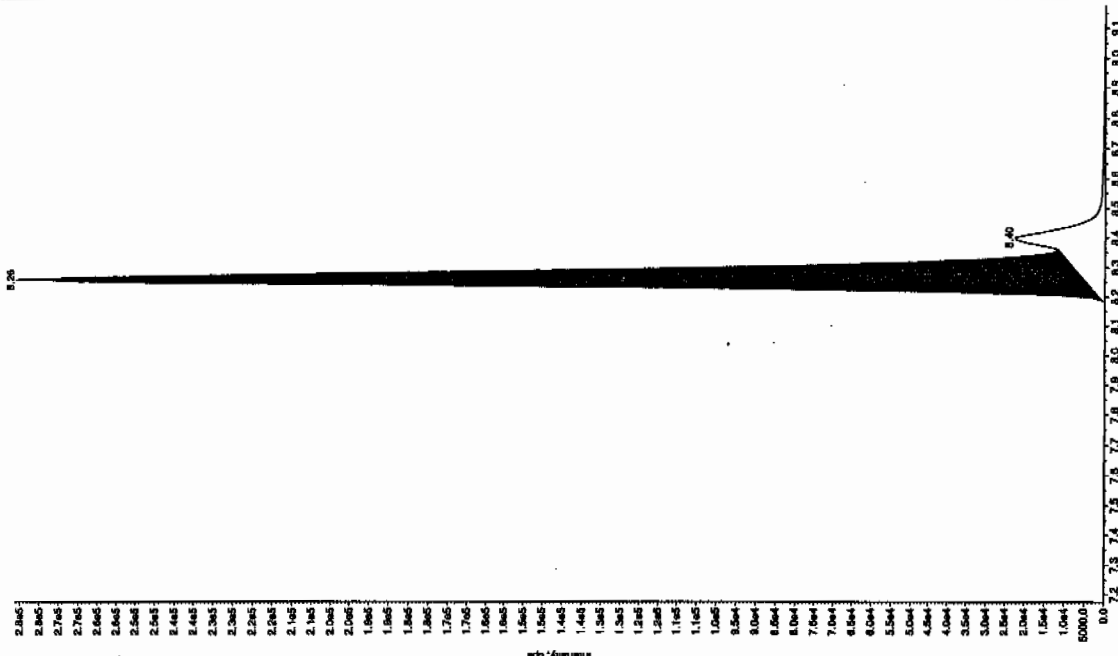
Sample Name: "WXX100122-27CR" Sample ID: "J1LER" File: "EXS01200065.wif"  
 Peak Name: "TATP" Mass(es): "257.2204.9 amu"  
 Comment: "LCMSEXP\_C" Annotation: "

Sample Index: 1  
 Sample Type: QC  
 Concentration: 100. ng/mL  
 Calculated Conc: 103. ng/mL  
 Acq. Date: 1/23/2010  
 Acq. Time: 3:10:49 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: 6.58 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 7.03 min  
 Area: 1.43e+005 counts  
 Height: 31684.078 cps  
 Start Time: 6.58 min  
 End Time: 7.53 min



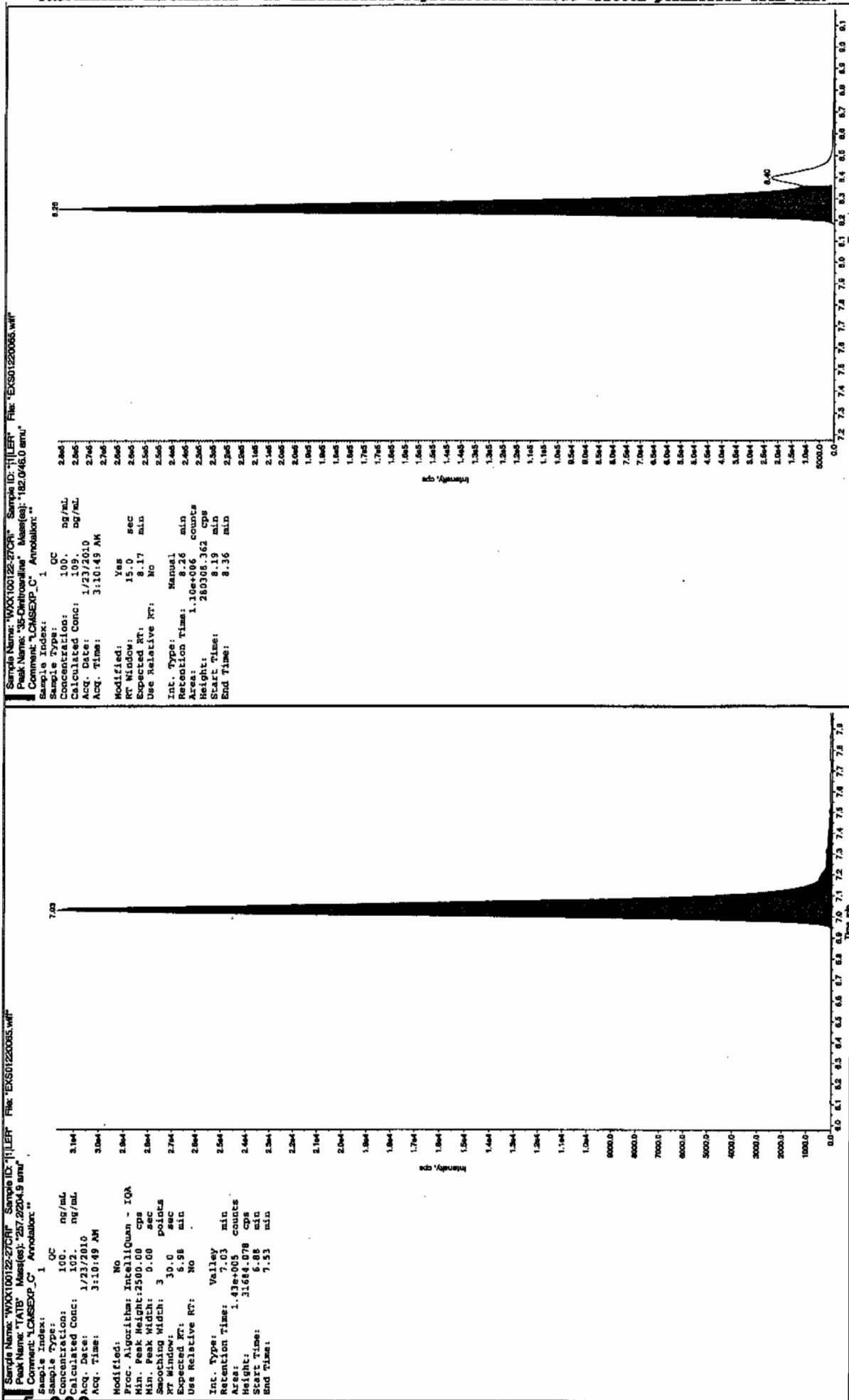
Sample Name: "WXX100122-27CR" Sample ID: "J1LER" File: "EXS01200065.wif"  
 Peak Name: "3S-Dinitroaniline" Mass(es): "182.046.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: "

Sample Index: 1  
 Sample Type: QC  
 Concentration: 100. ng/mL  
 Calculated Conc: 103. ng/mL  
 Acq. Date: 1/23/2010  
 Acq. Time: 3:10:49 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: 8.17 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.26 min  
 Area: 1.05e+006 counts  
 Height: 276063.080 cps  
 Start Time: 8.18 min  
 End Time: 8.36 min



After 1/25/10

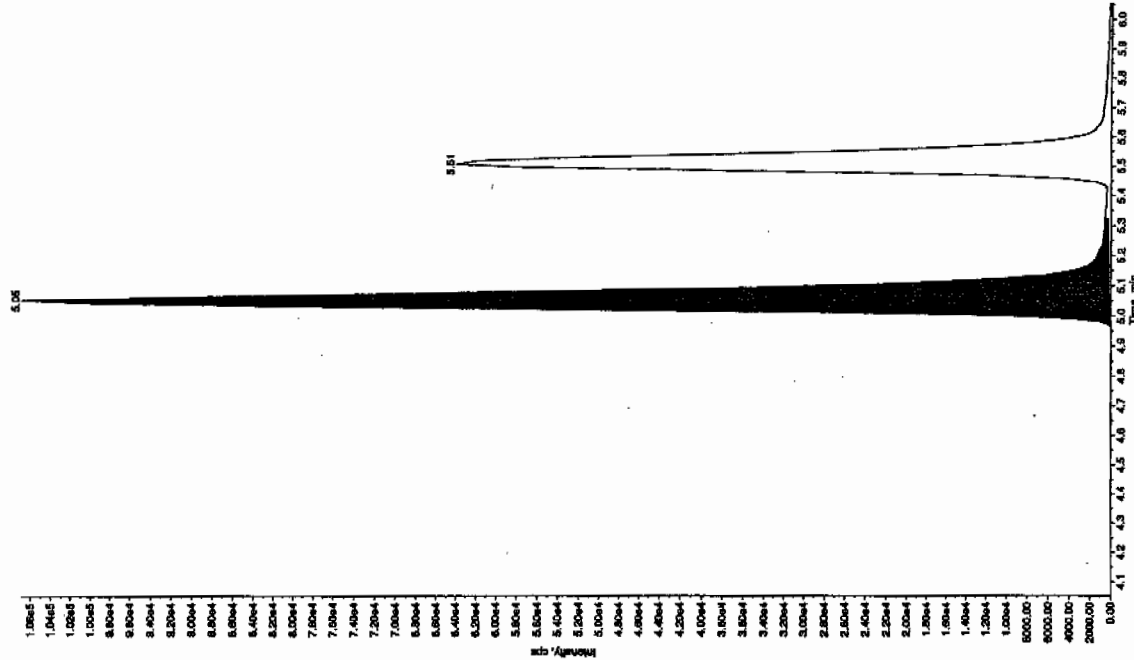
after Jan 11/25/10



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

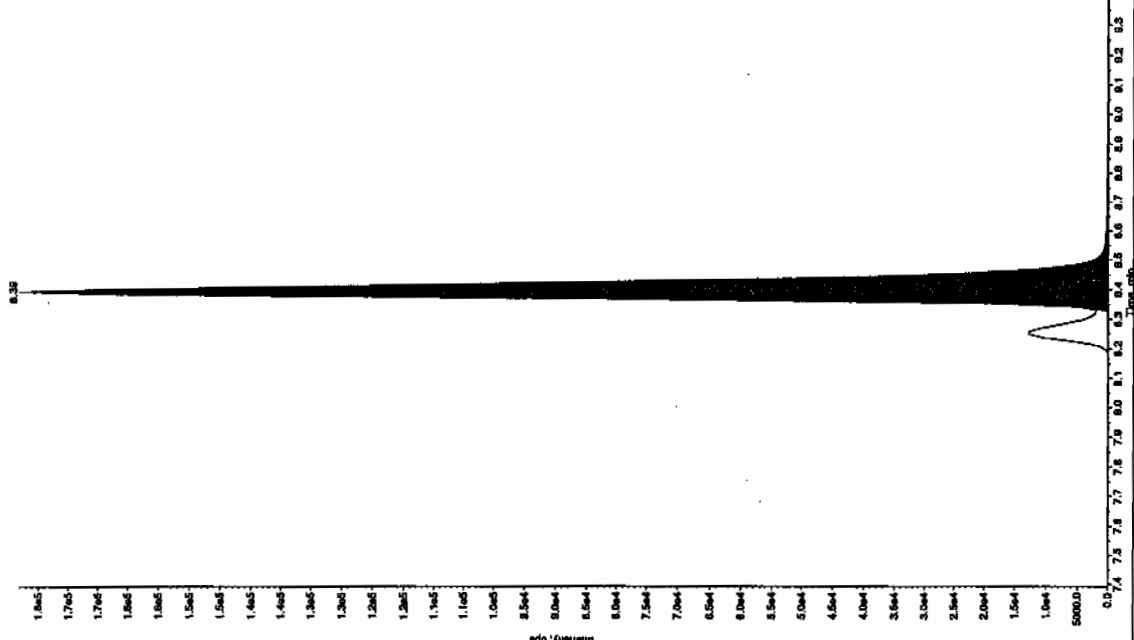
Sample Name: "VXX100122-27CR" Sample ID: "111111" File: "EX30122005.wif"  
 Peak Name: "311.0460" Mass(es): "166.0460 amu"  
 Comment: "LORSEP\_C" Annotation: ""

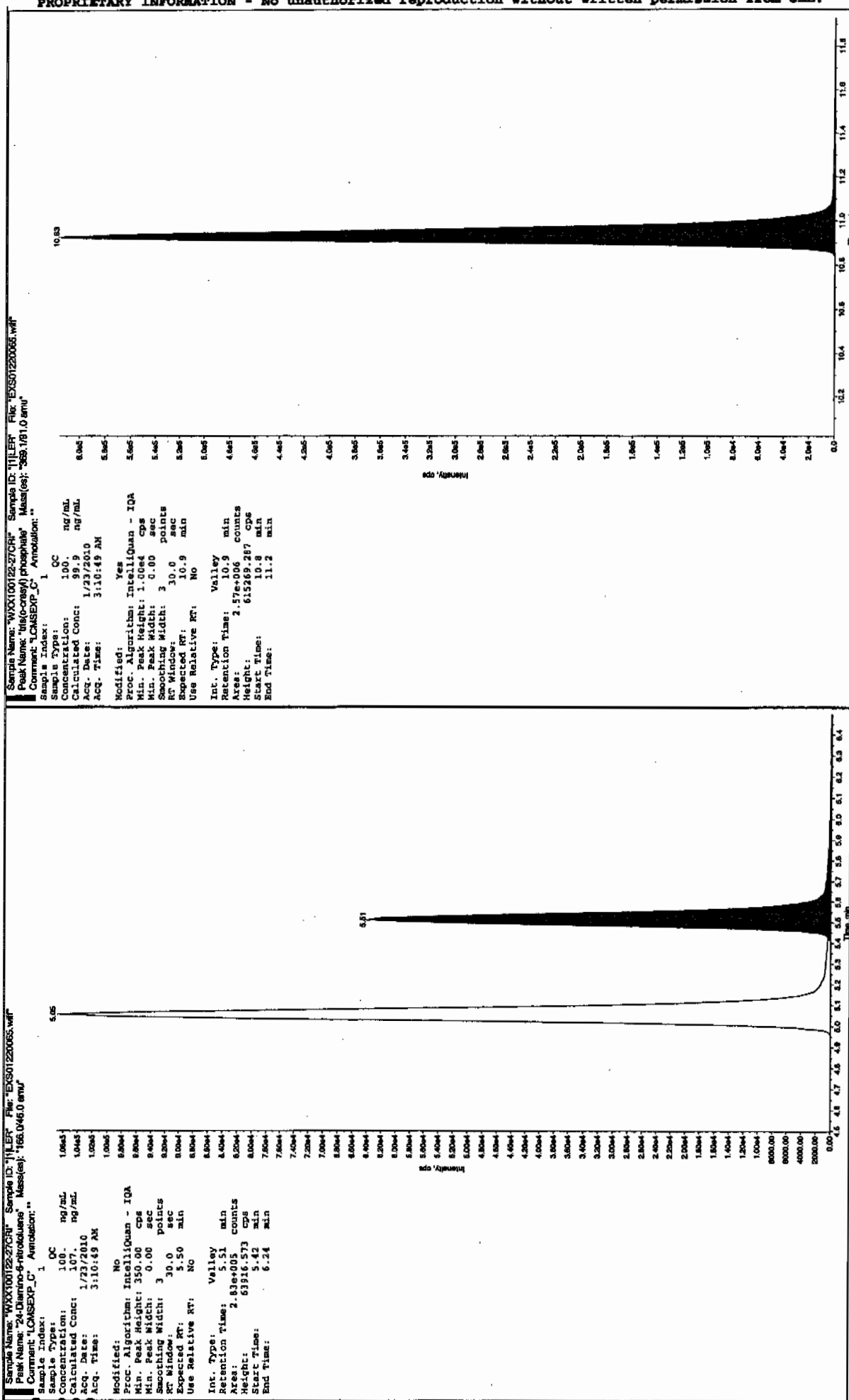
Sample Index: 1  
 Sample Type: 100  
 Concentration: 100 ng/mL  
 Calculated Conc: 115 ng/mL  
 Acq. Date: 1/23/2010  
 Acq. Time: 3:10:49 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 450.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 5.05 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.05 min  
 Area: 4.44e+005 counts  
 Height: 106770.317 cps  
 Peak Time: 4.95 min  
 End Time: 5.34 min



Sample Name: "VXX100122-27CR" Sample ID: "111111" File: "EX30122005.wif"  
 Peak Name: "311.0460" Mass(es): "166.0460 amu"  
 Comment: "LORSEP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: 50.0  
 Concentration: 51.7 ng/mL  
 Calculated Conc: 51.7 ng/mL  
 Acq. Date: 1/23/2010  
 Acq. Time: 3:10:49 AM  
 Modified: Yes  
 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: 8.39 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.39 min  
 Area: 6.66e+005 counts  
 Height: 177935.843 cps  
 Peak Time: 8.33 min  
 End Time: 8.73 min





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

7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1160-1

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS01220070.wiff

Analysis Date: 23-JAN-10 04:29

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	536	107	
2,6-Diamino-4-nitrotoluene	500	522	104	
3,4-Dinitrotoluene	250	243	97	
3,5-Dinitroaniline	500	562	112	
TATB	500	510	102	
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 ,

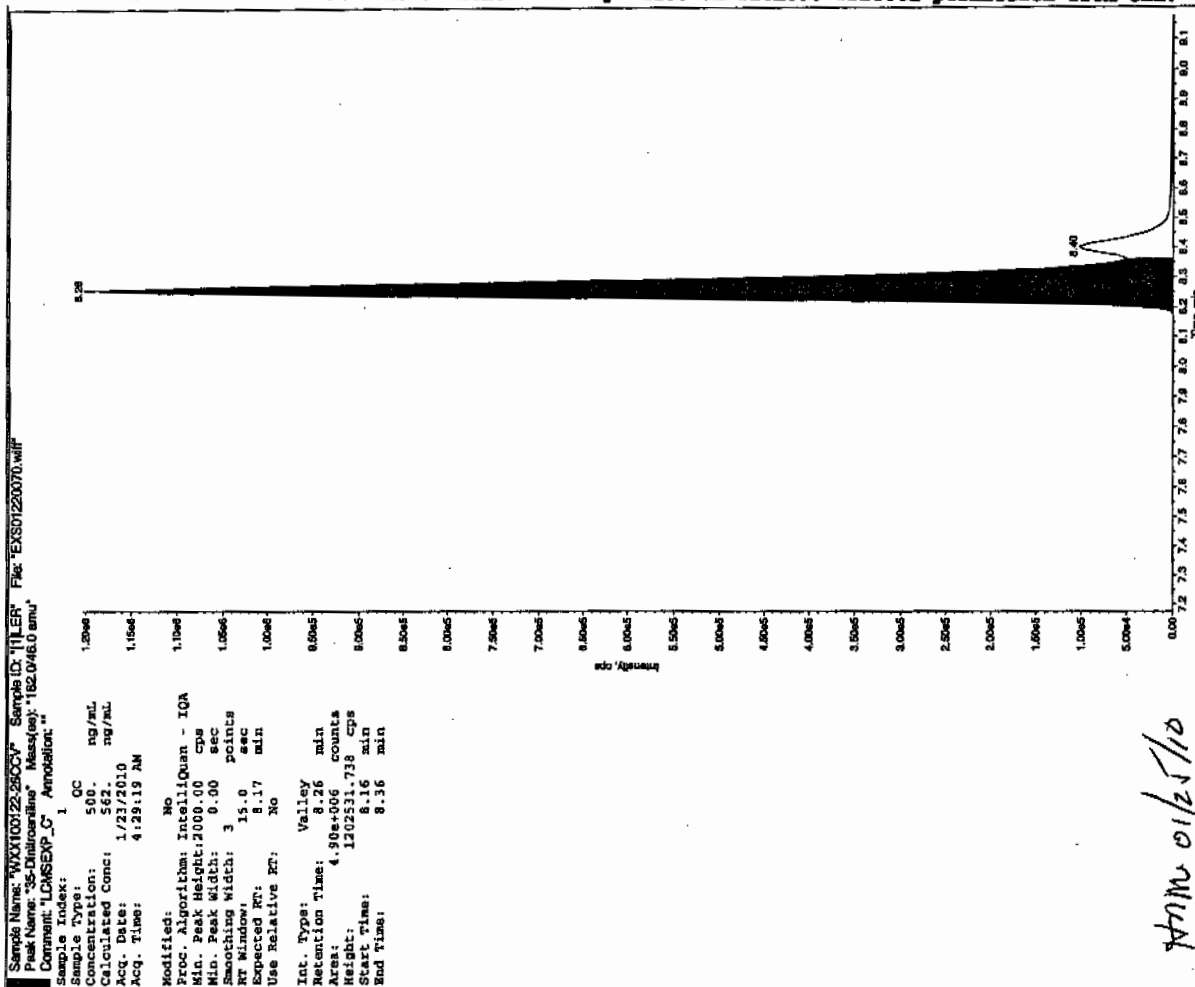
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

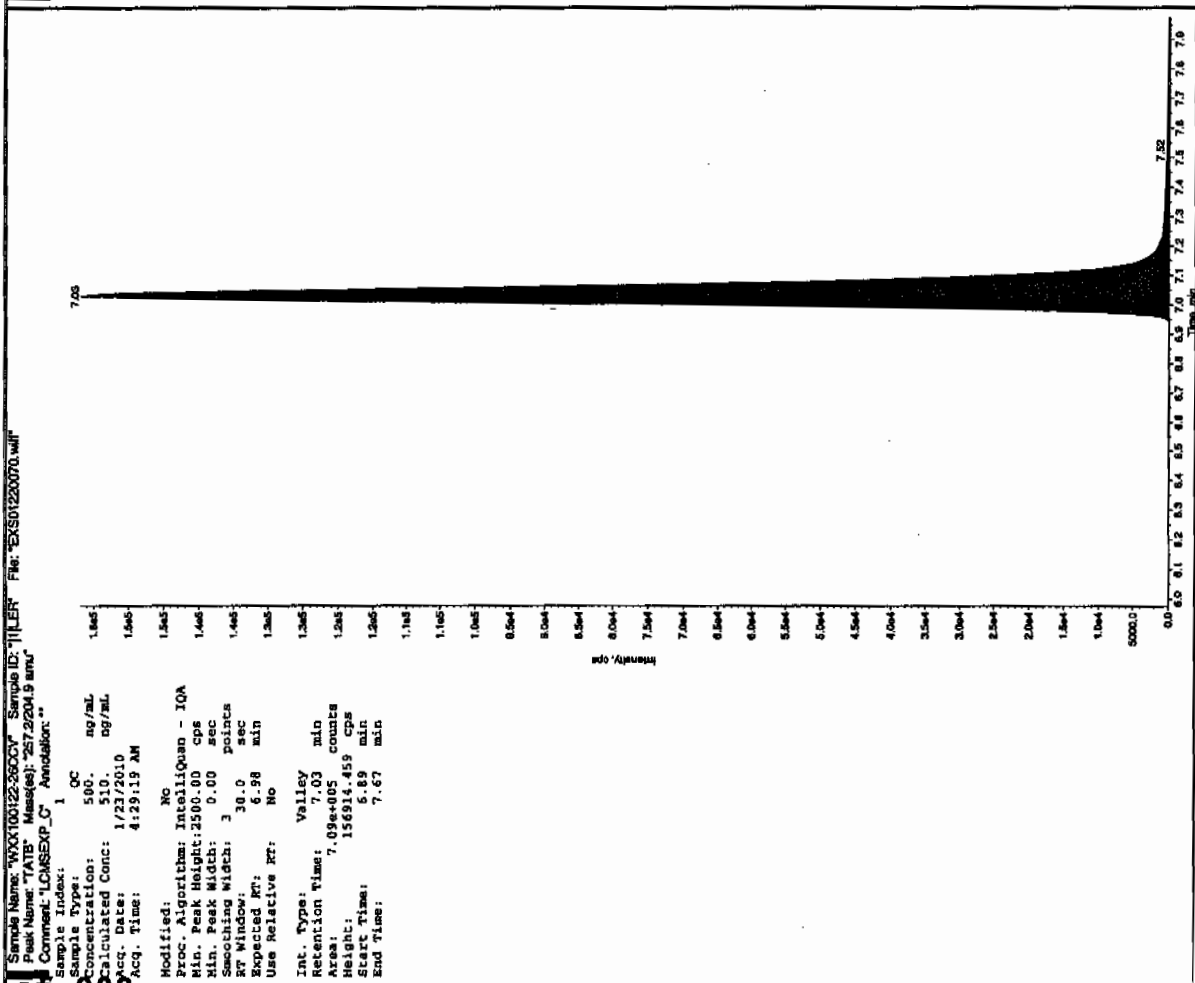
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

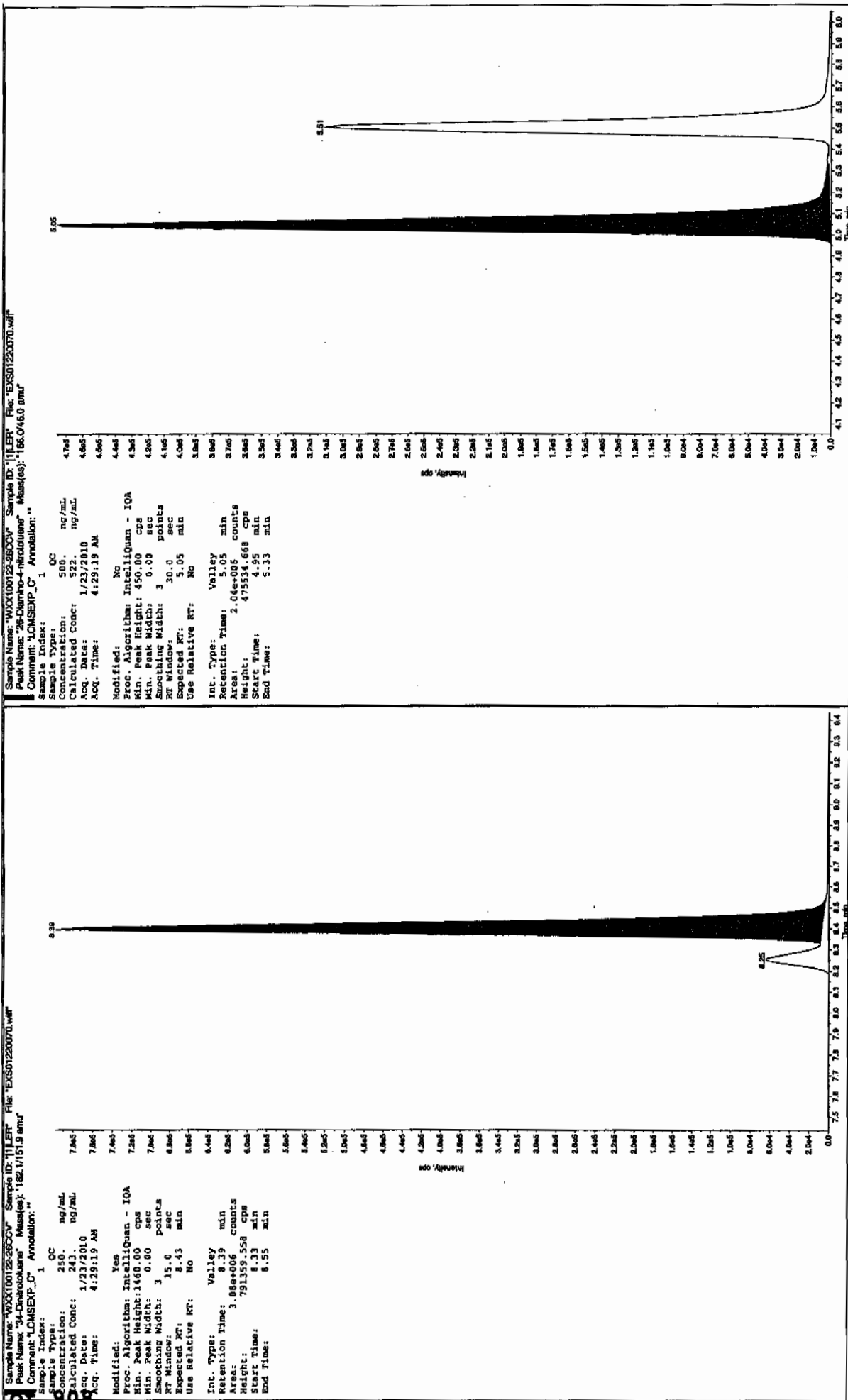
Len 1/25/10



ARM 01/25/10



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

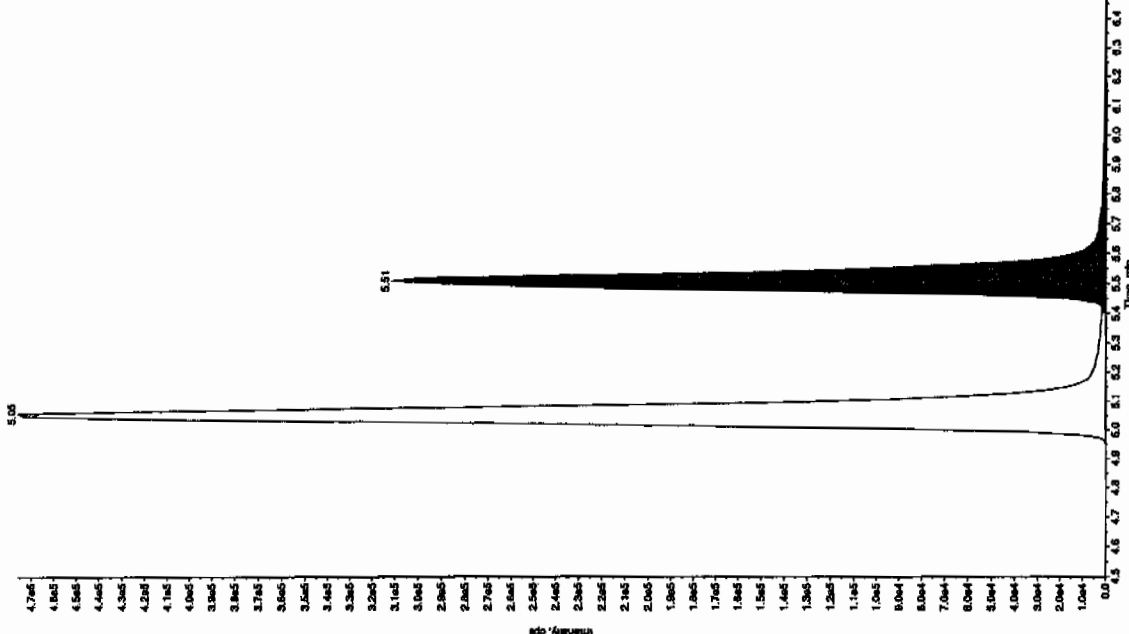


\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



Sample Name: "WXX100122-2500V" Sample ID: "11111" File: "EXS01220070.wif"  
 Peak Name: "160-046.0 umu" Mass(es): "160.046.0 umu"  
 Comment: "LCMSXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500. ng/mL  
 Calculated Conc: 501. ng/mL  
 Acq. Date: 1/23/2010  
 Acq. Time: 4:29:19 AM  
 Modified: Yes  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 1.00e3 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 30.0 points  
 Expected RT: 10.9 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.9 min  
 Area: 1.15e+007 counts  
 Height: 2558947.754 cps  
 Start Time: 10.8 min  
 End Time: 11.3 min



Sample Name: "WXX100122-2500V" Sample ID: "11111" File: "EXS01220070.wif"  
 Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.046.0 umu"  
 Comment: "LCMSXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500. ng/mL  
 Calculated Conc: 536. ng/mL  
 Acq. Date: 1/23/2010  
 Acq. Time: 4:29:19 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 350.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 30.0 points  
 Expected RT: 5.50 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.51 min  
 Area: 1.38e+005 counts  
 Height: 311348.145 cps  
 Start Time: 5.41 min  
 End Time: 5.63 min

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

7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1160-1

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS01220072.wiff

Analysis Date: 23-JAN-10 05:00

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	108	108	
2,6-Diamino-4-nitrotoluene	100	114	114	
3,4-Dinitrotoluene	50	51.3	103	
3,5-Dinitroaniline	100	103	103	
TATB	100	103	103	
tris(o-cresyl) phosphate	100	99.5	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%

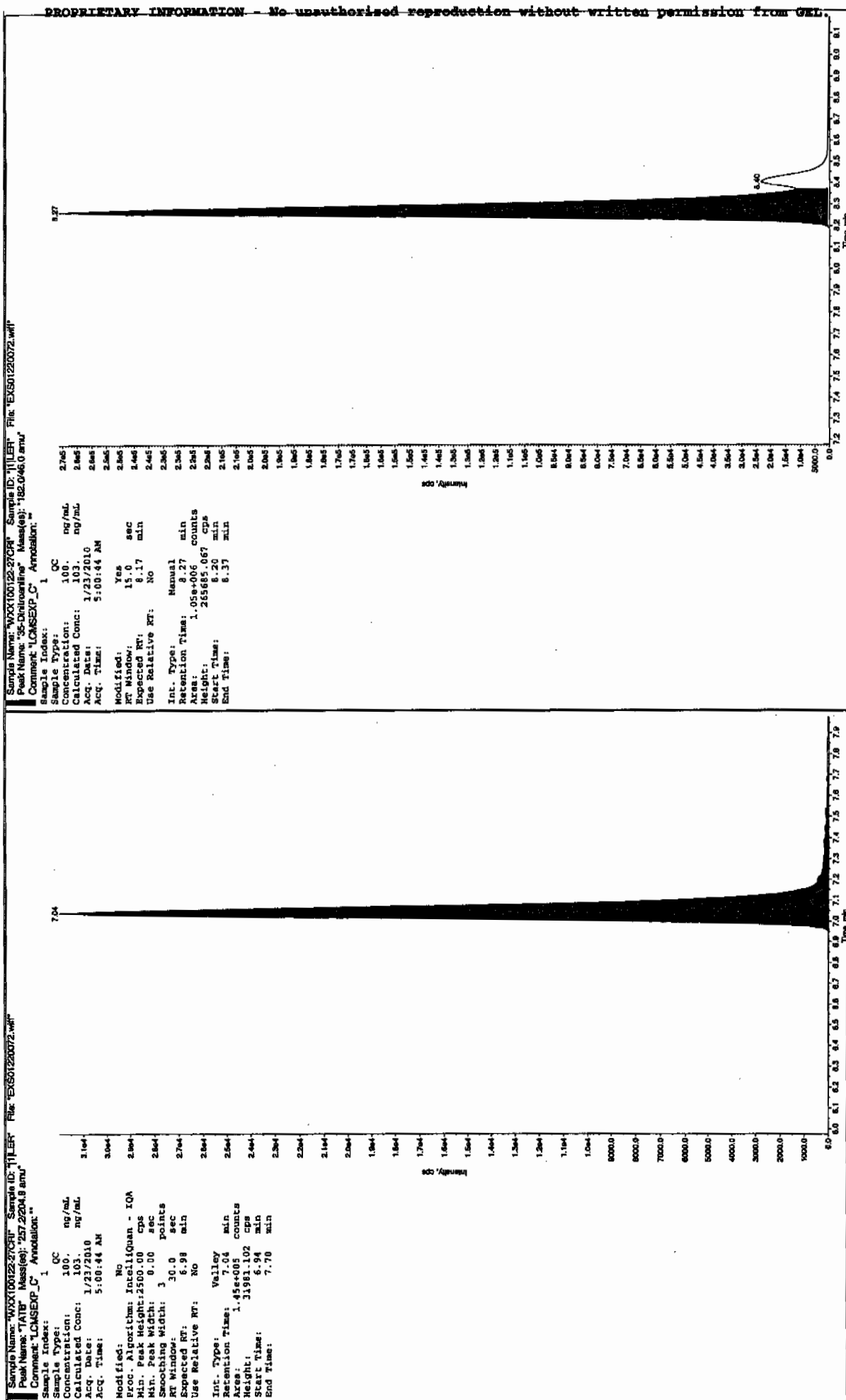
Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits



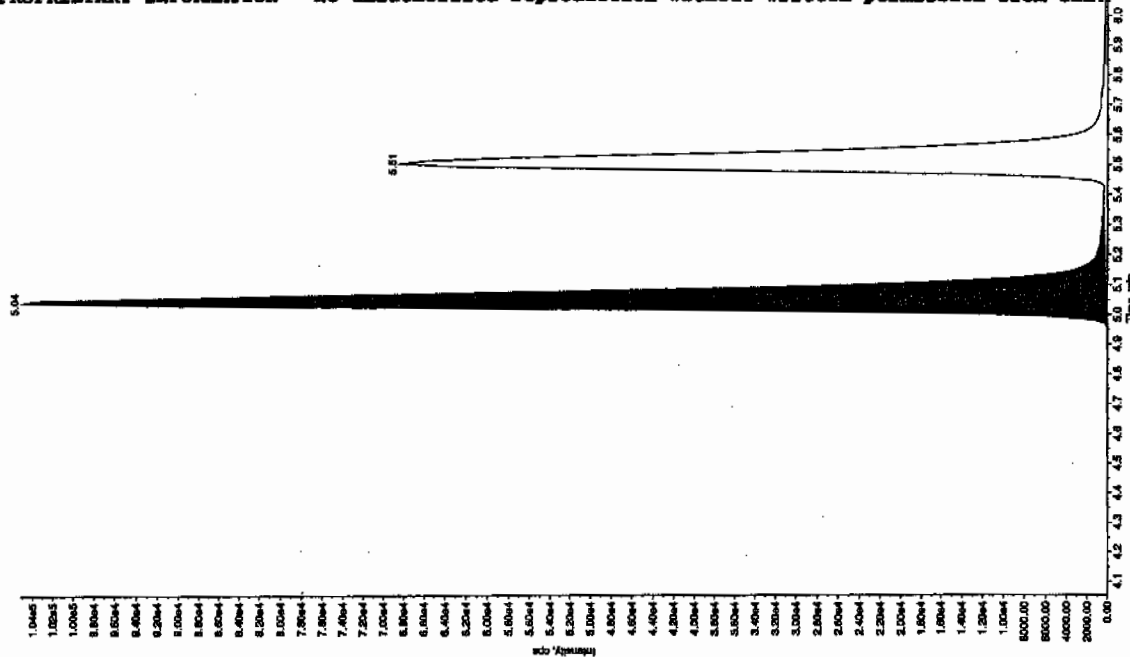
after Dec 11/25/10



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

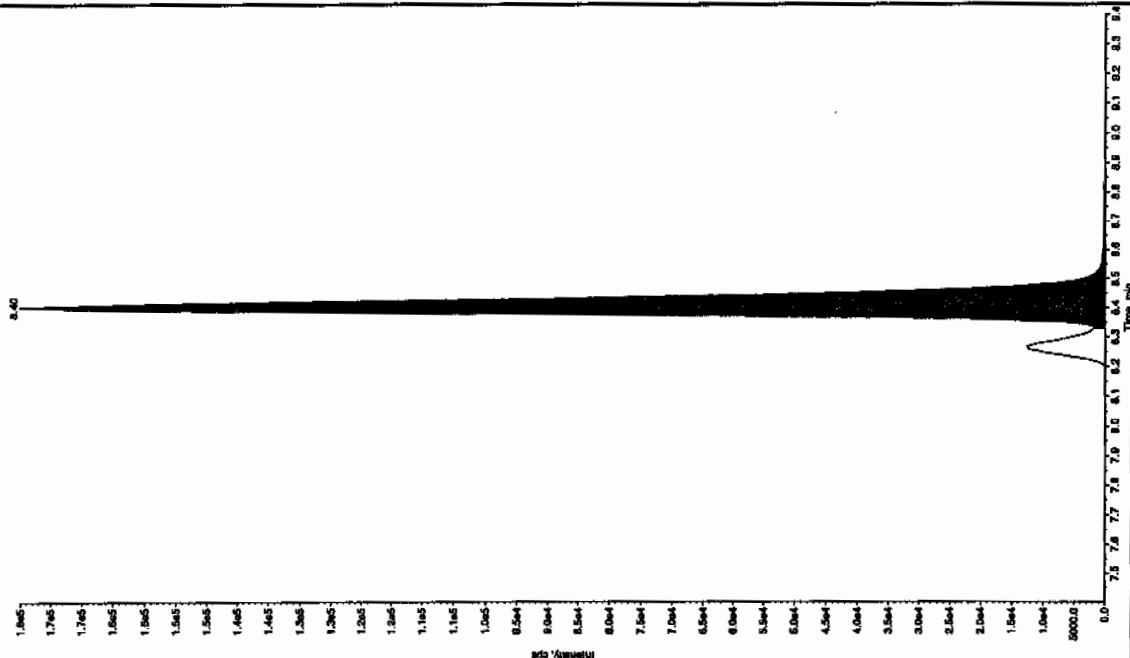
Sample Name: WXX100122-27CR Sample ID: 111EP File: EX501220072.wif  
 Peak Name: 26-Dimethyl-4-methylbenzyl Mes(es): 182.046.0 amu  
 Comment: LCMSEXP\_C Annotation:

Sample Index: 1  
 Sample Type: 100 OC  
 Concentration: 114.00 mg/mL  
 Calculated Conc: 114.00 mg/mL  
 Acq. Date: 1/23/2010  
 Acq. Time: 5:00:44 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 450.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 5.05 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.04 min  
 Area: 4.38e+005 counts  
 Height: 105134.884 cps  
 Start Time: 4.95 min  
 End Time: 5.35 min



Sample Name: WXX100122-27CR Sample ID: 111EP File: EX501220072.wif  
 Peak Name: 34-Dimethyl-4-methylbenzyl Mes(es): 182.171.9 amu  
 Comment: LCMSEXP\_C Annotation:

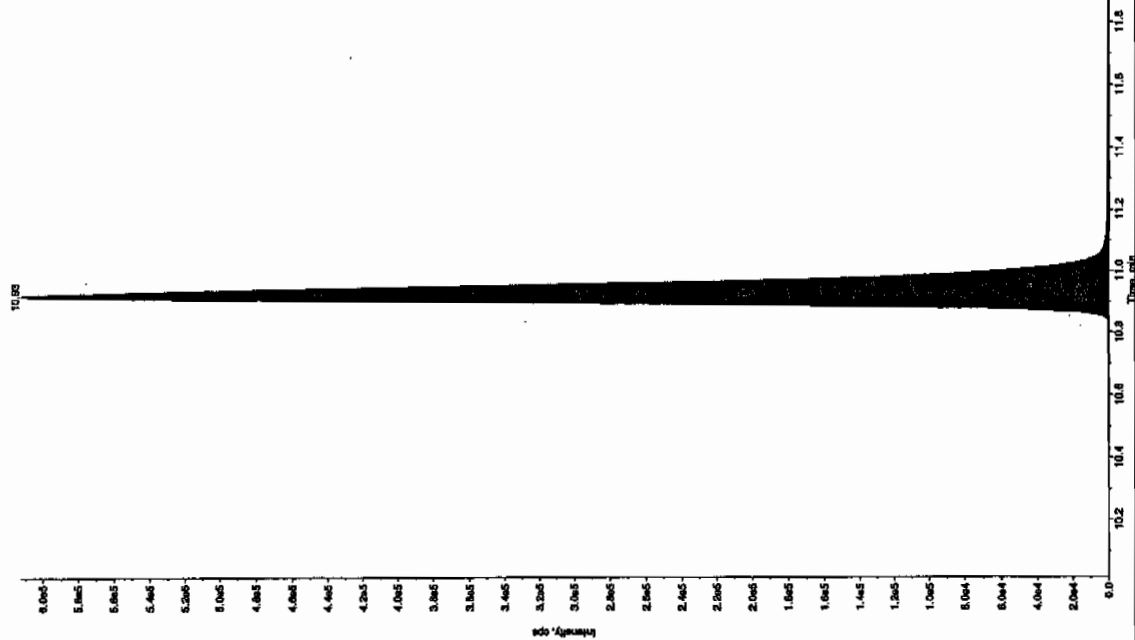
Sample Index: 1  
 Sample Type: 100 OC  
 Concentration: 51.30 mg/mL  
 Calculated Conc: 51.30 mg/mL  
 Acq. Date: 2/23/2010  
 Acq. Time: 5:00:44 AM  
 Modified: Yes  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 1460.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 15.0 sec  
 Expected RT: 8.40 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.40 min  
 Area: 5.61e+005 counts  
 Height: 175012.024 cps  
 Start Time: 8.33 min  
 End Time: 8.72 min



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

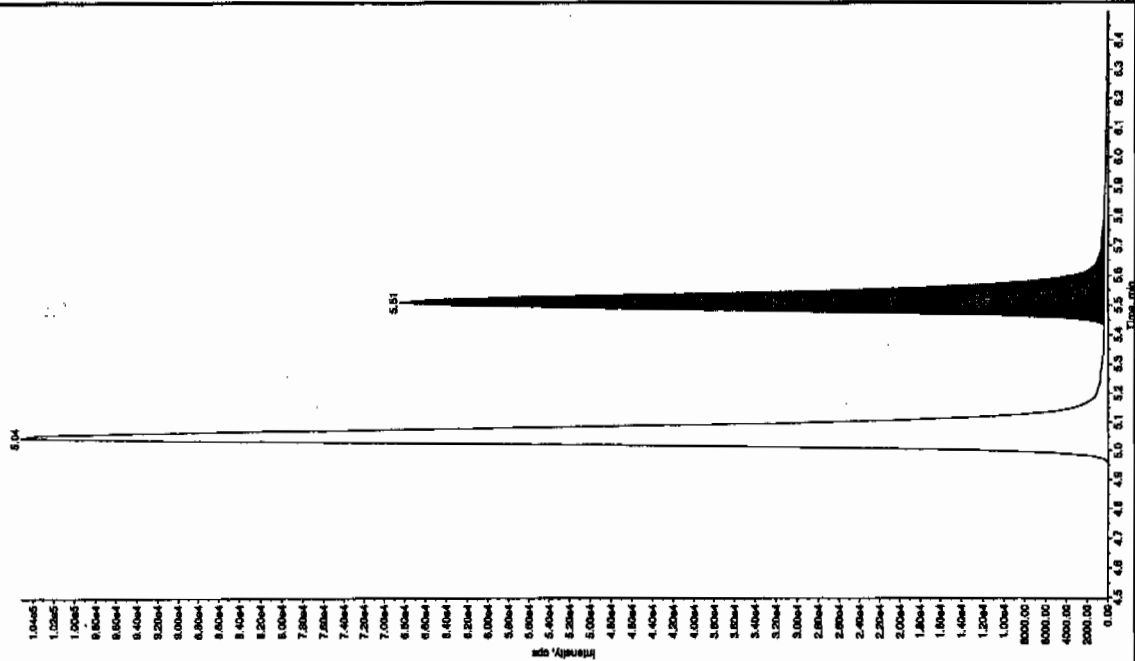
Sample Name: "WXX100122-270R" Sample ID: "HLEP" File: "EXS01220072.wif"  
 Peak Name: "24-Ethynyl-estradiol" Mass(es): 156.046.0 amu  
 Concentration: "LCMSXP\_C" Annotation: "1"

Sample Index: 1  
 Sample Type: QC  
 Concentration: 100 ng/mL  
 Calculated Conc: 99.5 ng/mL  
 Acq. Date: 1/23/2010  
 Acq. Time: 5:00:44 AM  
 Modified: Yes  
 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: 10.9 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.9 min  
 Area: 2.56e+08 counts  
 Height: 612713.196 cps  
 Start Time: 10.8 min  
 End Time: 11.3 min



Sample Name: "WXX100122-270R" Sample ID: "HLEP" File: "EXS01220072.wif"  
 Peak Name: "24-Ethynyl-estradiol" Mass(es): 156.046.0 amu  
 Concentration: "LCMSXP\_C" Annotation: "1"

Sample Index: 1  
 Sample Type: QC  
 Concentration: 100 ng/mL  
 Calculated Conc: 108 ng/mL  
 Acq. Date: 1/23/2010  
 Acq. Time: 5:00:44 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: 5.50 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.51 min  
 Area: 2.86e+05 counts  
 Height: 68171.767 cps  
 Start Time: 5.43 min  
 End Time: 5.83 min



# QUALITY CONTROL DATA

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: MB for batch 940578

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 1202012974

Sample Amount 2

Moisture:

Amount Units g

Date Received: 11-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125119a

Date Analyzed: 27-JAN-10 21:23

Units: ug/kg

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

\*Concentration =

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



Printed: Thu Jan 28 10:43:32 2010, Page 69 of 121

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\12510expA2.qld, Time: Thu Jan 28 10:42:53 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\data\EXP0125119a

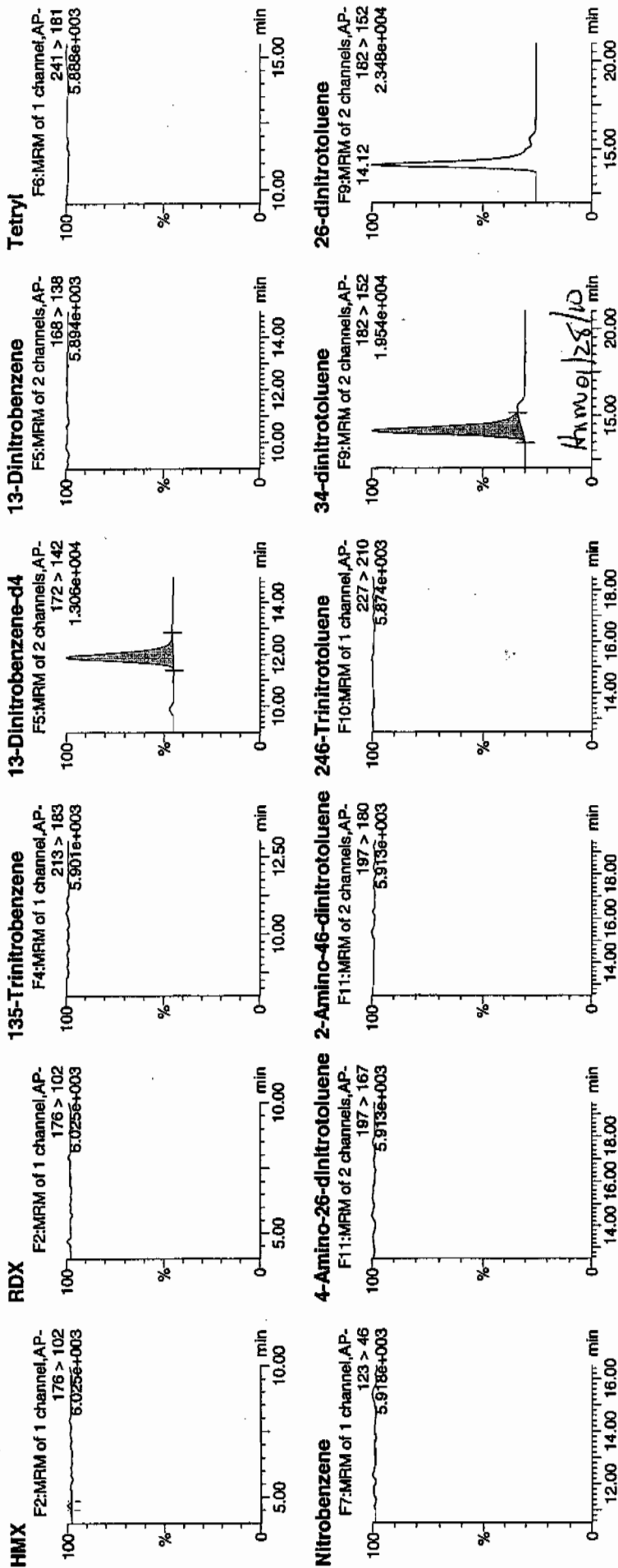
Date: 27-Jan-2010

Time: 21:23:25

ID: 1202045506

Vial: 2:1,A

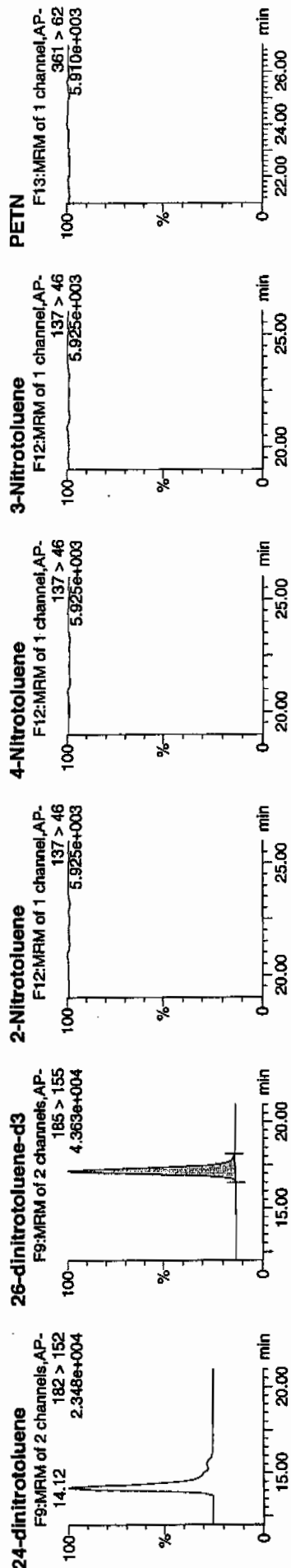
1202012974 | 1202012974 | 8022 | 123 | 21  
1/23/10



Printed: Thu Jan 28 10:43:32 2010, Page 70 of 121

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

Dataset: C:\MASSLYNX\New\_Exp\_PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010



ID	Name	Area	Height	Response	Flag	ModTime	ModTime	%Area	%Dec	%Dev	SSN
1202015506	HMX	176 > 102	2759.341			MM- 28-Jan-10	10:21:54				
1202015506	RDX	176 > 102	2759.341								
1202015506	135-Trinitrobenzene	213 > 183	2759.341								
1202015506	13-Dinitrobenzene-d4	172 > 142	11.89	2759.341	bb			2759.341	2759.341	93.0	-7.0
1202015506	13-Dinitrobenzene	168 > 138	2759.341					464.7859	93.0	-7.0	129.8
1202015506	Tetryl	241 > 181	2759.341								
1202015506	Nitrobenzene	123 > 46	2759.341								
1202015506	4-Amino-26-dinitrotoluene	197 > 167	16010.344								
1202015506	2-Amino-46-dinitrotoluene	197 > 180	16010.344								
1202015506	246-Trinitrotoluene	227 > 210	16010.344								
1202015506	34-dinitrotoluene	182 > 152	7369.797	16010.344	bb			7369.797	230.157	bb	253.4733
1202015506	26-dinitrotoluene	182 > 152	16010.344								1.4
1202015506	24-dinitrotoluene	182 > 152	16010.344								432.1
1202015506	26-dinitrotoluene-d3	185 > 155	16010.344								
1202015506	2-Nitrotoluene	137 > 46	16010.344					16010.344	16010.344	98.2	-1.8
1202015506	4-Nitrotoluene	137 > 46	16010.344								371.2
1202015506	3-Nitrotoluene	137 > 46	16010.344								
1202015506	PETN	361 > 62	16010.344								

1202012974

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: MB for batch 940578

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 1202012974

Sample Amount 2

Moisture:

Amount Units g

Date Received: 11-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01220045.wiff

Date Analyzed: 22-JAN-10 21:56

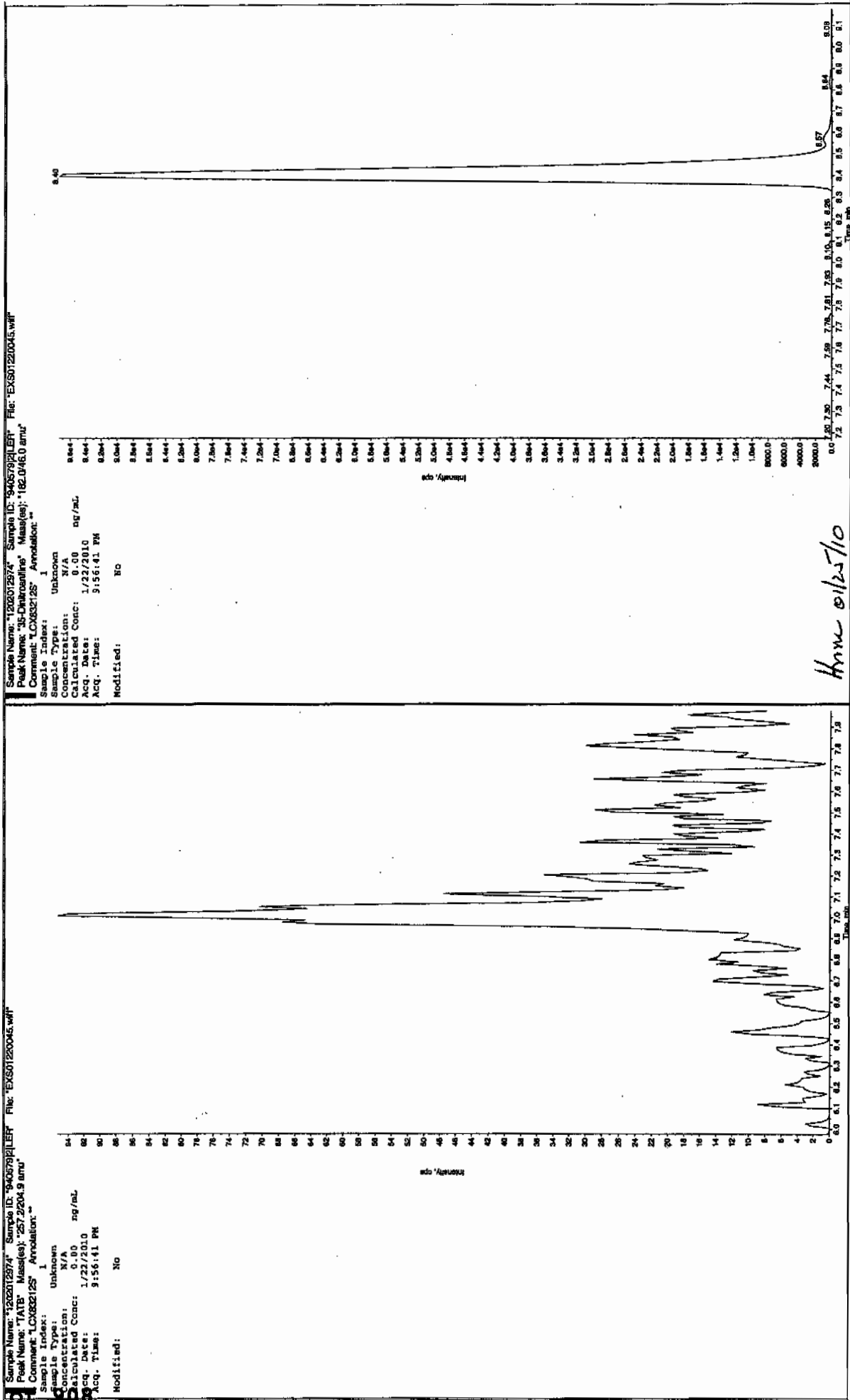
Units: ug/kg

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

OK 1/25/10



OK 01/25/10

Sample Name: "1202012574" Sample ID: "94057912574" File: "EX501220045.wif"  
 Peak Name: "35-Dihydroquinone" Mass(es): "182.0460 amu"  
 Comment: "LCX632125" Annotation: ""  
 Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/22/2010  
 Acq. Time: 9:56:41 PM  
 Modified: No

Sample Name: "1202012574" Sample ID: "94057912574" File: "EX501220045.wif"  
 Peak Name: "TATB" Mass(es): "257.22049 amu"  
 Comment: "LCX632125" Annotation: ""  
 Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/22/2010  
 Acq. Time: 9:56:41 PM  
 Modified: No

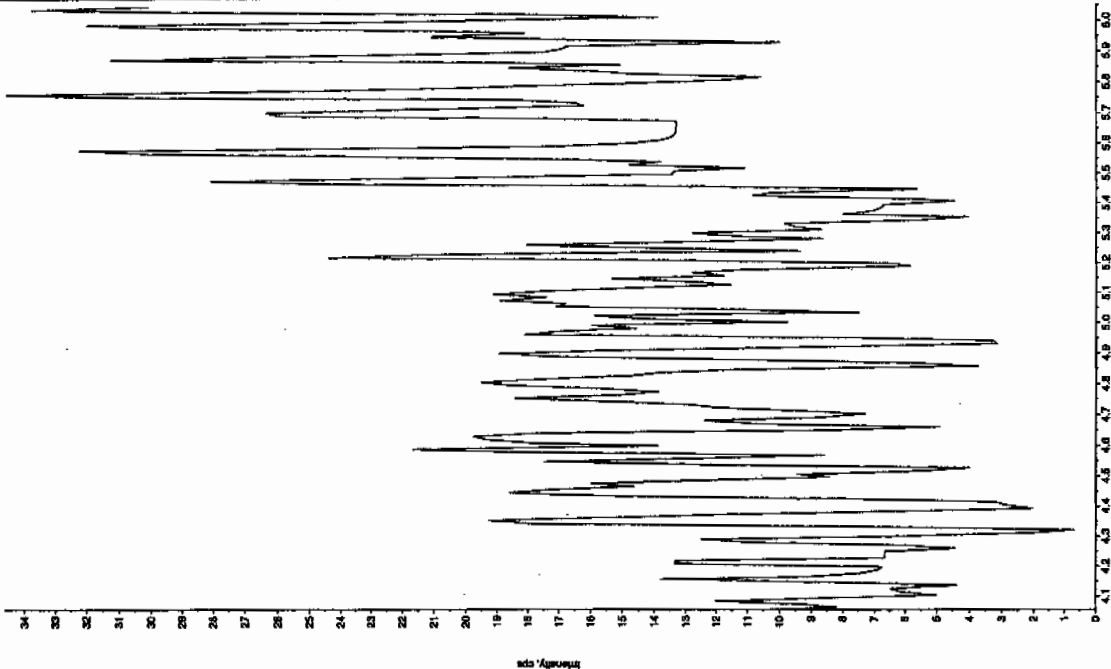
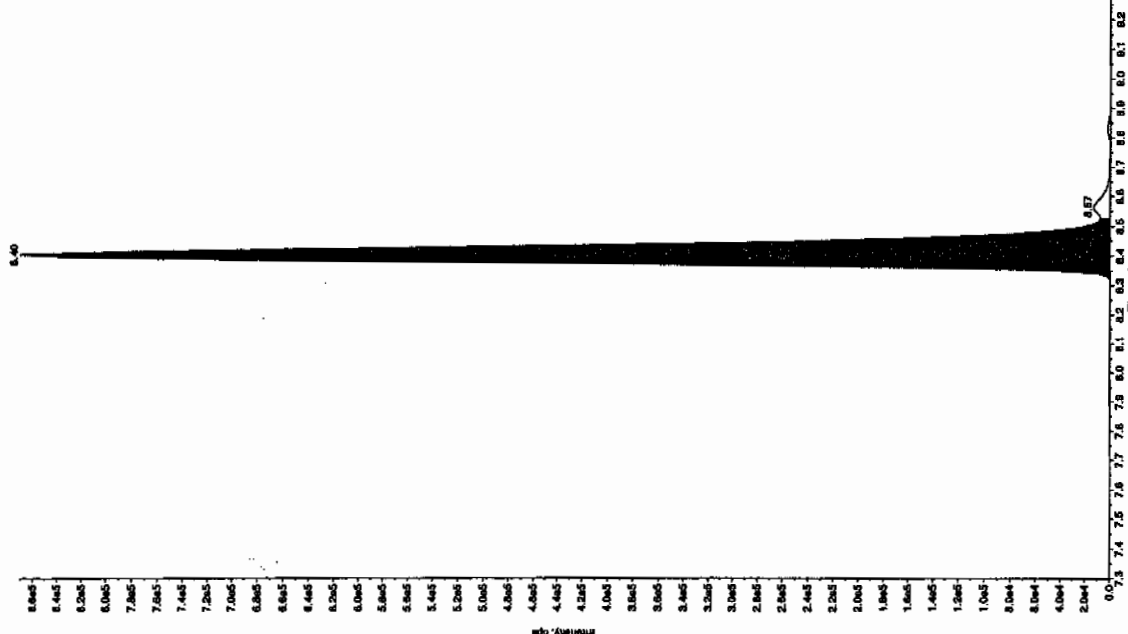
\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "1202012574" Sample ID: "94057921ER" File: "EXS01220045.wif"  
 Peak Name: "28-Diamino-4-nitrofluorene" Mass(es): "166.04650 amu"  
 Comment: "LCX832125" Annotation: "

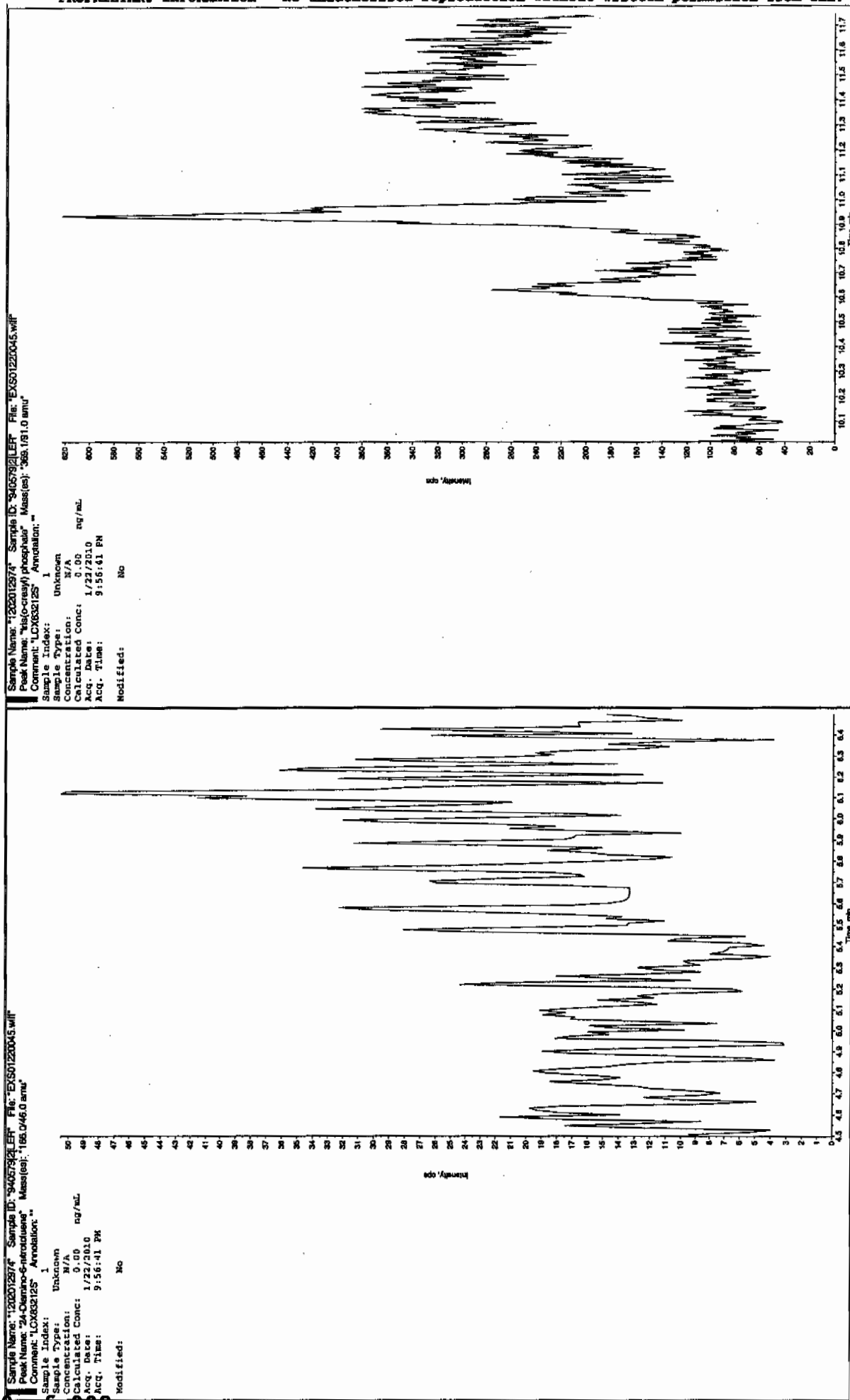
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: M/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/22/2010  
 Acq. Time: 9:56:41 PM  
 Modified: No

Sample Name: "1202012574" Sample ID: "94057921ER" File: "EXS01220045.wif"  
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.11519 amu"  
 Comment: "LCX832125" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 1/22/2010  
 Acq. Date: 9:56:41 PM  
 Acq. Time: 9:56:41 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 1460.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 15.0 sec  
 Expected RT: 8.30 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.60 min  
 Area: 3.51e+006 counts  
 Height: 870437.856 cps  
 Start Time: 8.30 min  
 End Time: 8.53 min



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



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

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: LCS for batch 940578

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 1202012975

Sample Amount 2

Moisture:

Amount Units g

Date Received: 11-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125120a

Date Analyzed: 27-JAN-10 21:52

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	5520	
121-14-2	2,4-Dinitrotoluene	4720	
121-82-4	RDX	4840	
19406-51-0	4-Amino-2,6-dinitrotoluene	5420	
2691-41-0	HMX	4840	
35572-78-2	2-Amino-4,6-dinitrotoluene	5360	
479-45-8	Tetryl	3610	
606-20-2	2,6-Dinitrotoluene	4740	
78-11-5	PETN	5580	
88-72-2	o-Nitrotoluene	4110	
98-95-3	Nitrobenzene	4290	
99-08-1	m-Nitrotoluene	4520	
99-35-4	1,3,5-Trinitrobenzene	5500	
99-65-0	m-Dinitrobenzene	5060	
99-99-0	p-Nitrotoluene	4220	

\*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\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125120a

Date: 27-Jan-2010

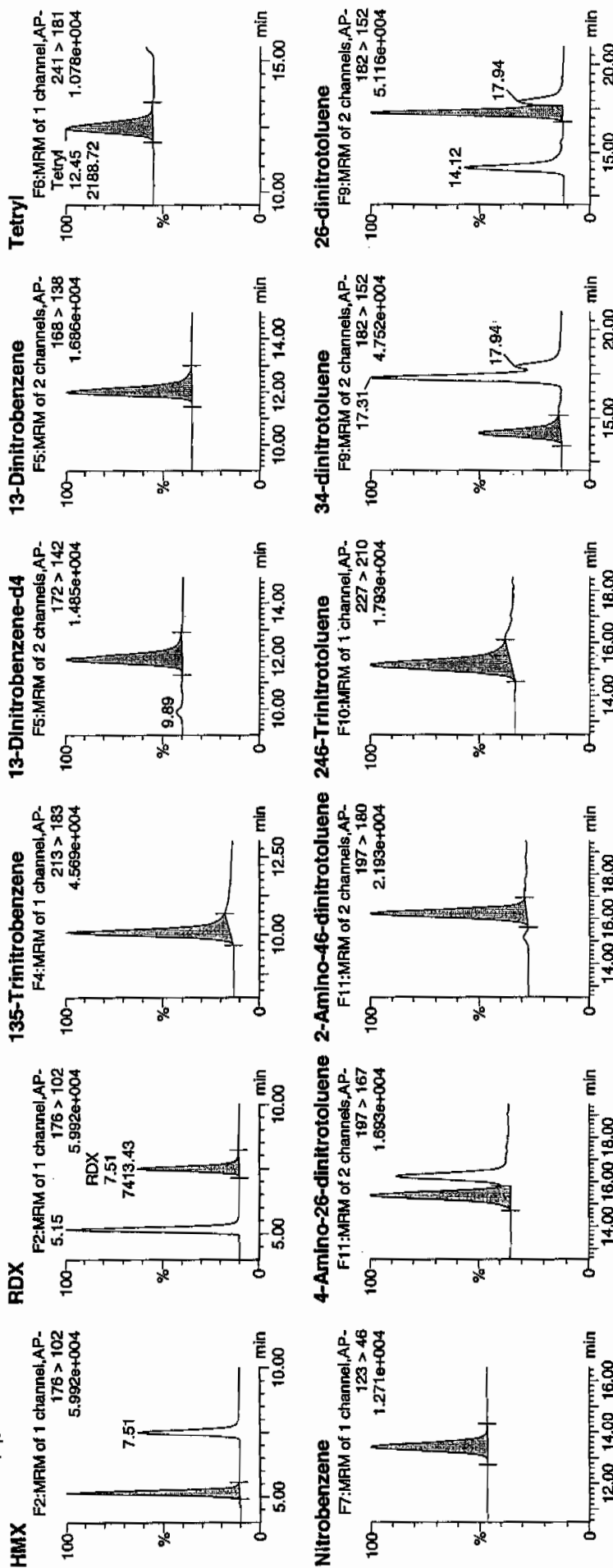
Time: 21:52:57

ID: 1202015507

Vial: 2:1,B

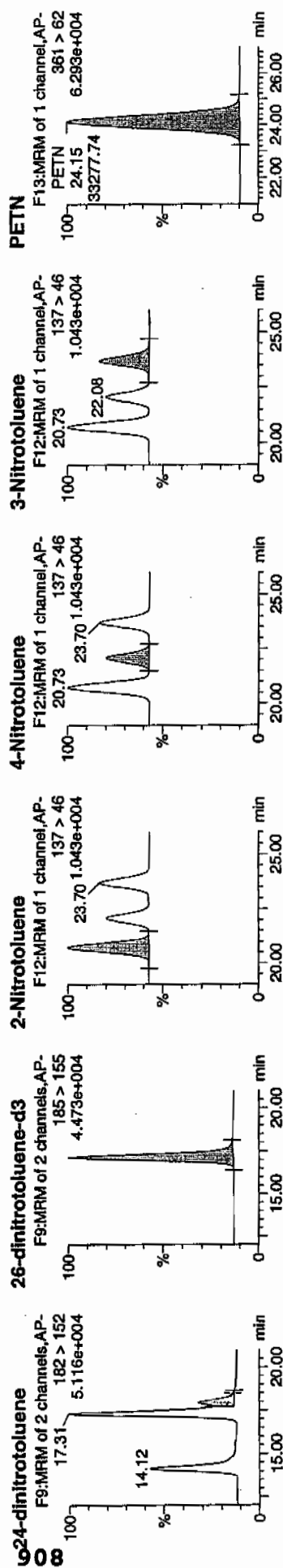
1202012975 / Lave / 940579 / 8022 / 128 / 21

1477  
1/28/10



done 01/28/10





ID	Name	Trace	FID	Area	St Area	Peak's Resp	Response	Flags	Mod Date	Mod Time	Tot Int	% Rec	Z-Score	S/N
1202015507	HMX	176 > 102	5.15	10706.709	3486.603	10706.709	1535.407	bb			483.9688	96.8	-3.2	2069.1
1202015507	RDX	176 > 102	7.51	7413.434	3486.603	7413.434	1063.131	bb			483.5497	96.7	-3.3	1210.9
1202015507	135-Trinitrobenzene	213 > 183	10.07	10997.988	3486.603	10997.988	1577.178	bb			549.9139	110.0	10.0	1056.7
1202015507	13-Dinitrobenzene-d4	172 > 142	11.89	3486.603		3486.603	3486.603	bb			587.2866	117.5	17.5	331.6
1202015507	13-Dinitrobenzene	168 > 138	12.00	4091.110	3486.603	4091.110	586.690	bb			505.7748	101.2	1.2	422.0
1202015507	Tetryl	241 > 181	12.45	2188.720	3486.603	2188.720	313.876	bb			361.3528	72.3	-27.7	428.1
1202015507	Nitrobenzene	123 > 46	13.41	2555.960	3486.603	2555.960	366.540	bb			428.9053	85.8	-14.2	200.0
1202015507	4-Amino-26-dinitrotoluene	197 > 167	15.39	4655.990	16482.037	4655.990	141.244	MM	28-Jan-10	10:26:57	542.1766	108.4	8.4	196.4
1202015507	2-Amino-46-dinitrotoluene	197 > 180	16.22	6617.681	16482.037	6617.681	200.754	bb			536.3680	107.3	7.3	134.0
1202015507	246-Trinitrotoluene	227 > 210	15.17	5790.287	16482.037	5790.287	175.654	bb			552.2615	110.5	10.5	109.8
1202015507	34-dinitrotoluene	182 > 152	14.17	9597.014	16482.037	9597.014	291.196	bb			320.6289	128.3	28.3	358.6
1202015507	26-dinitrotoluene	182 > 152	17.31	17225.350	16482.037	17225.350	522.549	MM	28-Jan-10	10:33:14	474.3785	94.9	-5.1	678.3
1202015507	24-dinitrotoluene	182 > 152	17.94	3956.314	16482.037	3956.314	120.019	MM	28-Jan-10	10:38:04	472.3989	94.5	-5.5	146.9
1202015507	26-dinitrotoluene-d3	185 > 155	17.14	16482.037		16482.037	16482.037	bb			505.6355	101.1	1.1	1035.7
1202015507	2-Nitrotoluene	137 > 46	20.73	2254.110	16482.037	2254.110	68.381	bb			411.1822	82.2	-17.8	100.5
1202015507	4-Nitrotoluene	137 > 46	22.08	1150.101	16482.037	1150.101	34.890	bb			421.9836	84.4	-15.6	53.5
1202015507	3-Nitrotoluene	137 > 46	23.70	1389.750	16482.037	1389.750	42.160	bb			451.5813	90.3	-9.7	61.7
1202015507	PETN	361 > 62	24.15	33277.742	16482.037	33277.742	1009.515	bb			558.4901	111.7	11.7	12120.2

5462102021

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: LCS for batch 940578

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 1202012975

Sample Amount 2

Moisture:

Amount Units g

Date Received: 11-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01220046.wiff

Date Analyzed: 22-JAN-10 22:12

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	5250	
59229-75-3	2,6-Diamino-4-nitrotoluene	5230	
618-87-1	3,5-Dinitroaniline	5910	
6629-29-4	2,4-Diamino-6-nitrotoluene	5030	
78-30-8	tris(o-cresyl) phosphate	5160	

\*Concentration =

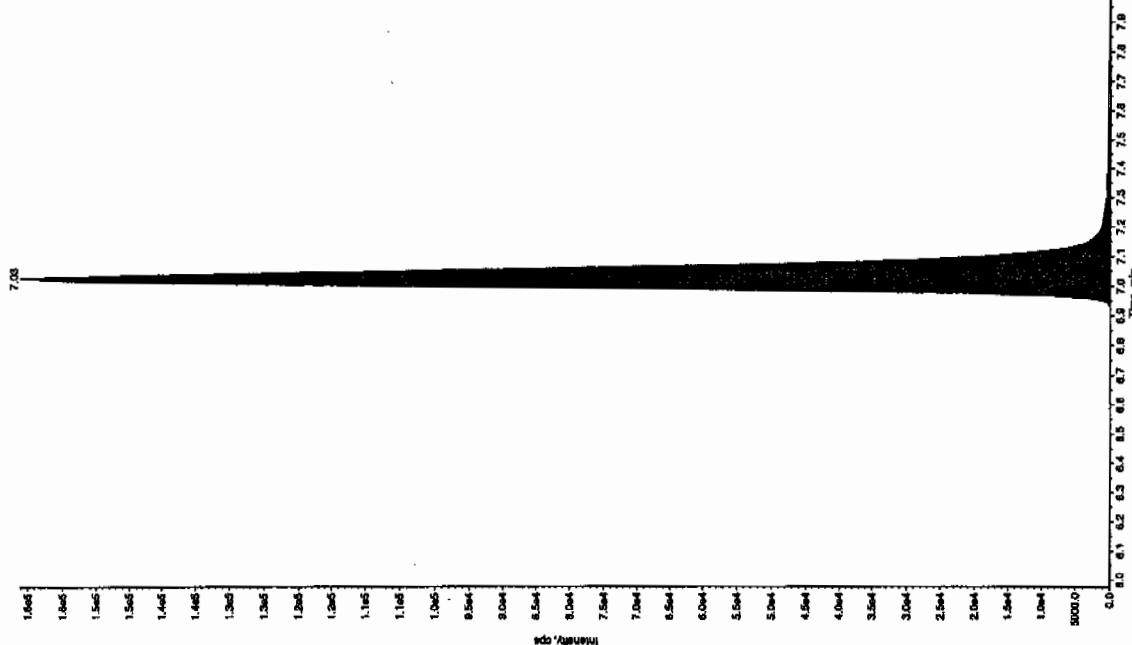
Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

Before Run 1125110

Sample Name: "1020012975" Sample ID: "1020012975" File: "EX01220046.wif"  
 Peak Name: "1A1B" Mass(es): "257.200.9 and"  
 Comment: "LCMS212S" Acquisition

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 525 ug/mL  
 Acq. Date: 1/22/2010  
 Acq. Time: 10:12:23 PM

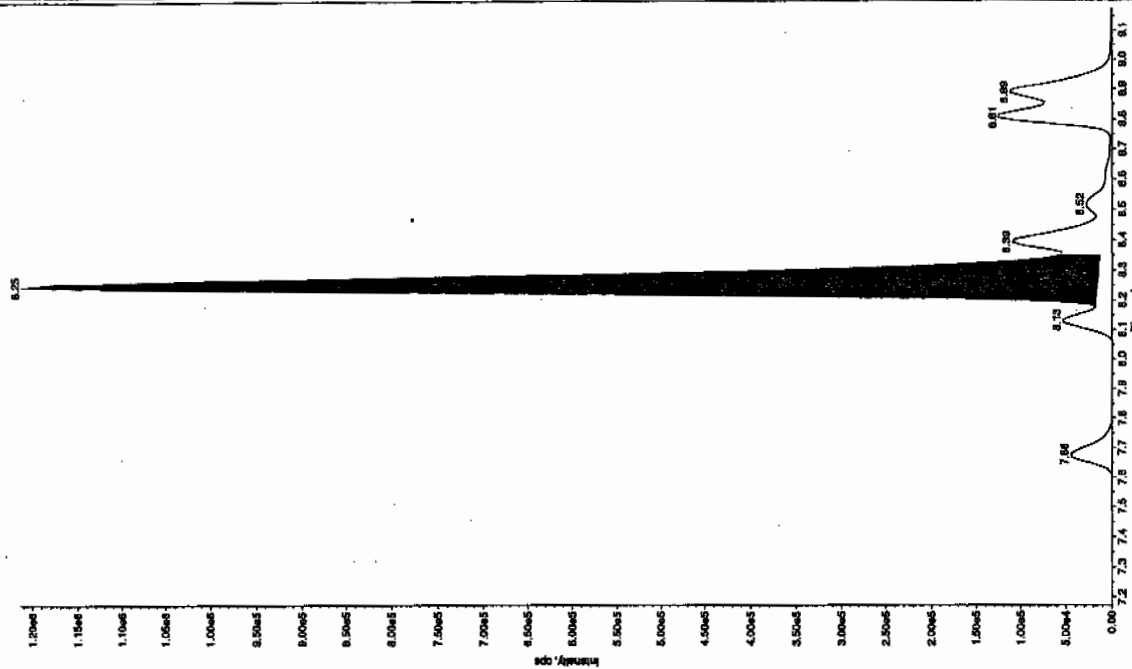
Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 2500.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 6.98 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 7.03 min  
 Area: 7.29e+005 counts  
 Height: 16166.260 cps  
 Start Time: 6.91 min  
 End Time: 7.55 min



Sample Name: "1020012975" Sample ID: "1020012975" File: "EX01220046.wif"  
 Peak Name: "1A1B" Mass(es): "257.200.9 and"  
 Comment: "LCMS212S" Acquisition

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 525 ug/mL  
 Acq. Date: 1/22/2010  
 Acq. Time: 10:12:23 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: 15.0 sec  
 Expected RT: 8.17 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.25 min  
 Area: 5.01e+005 counts  
 Height: 1197356.763 cps  
 Start Time: 8.17 min  
 End Time: 8.35 min

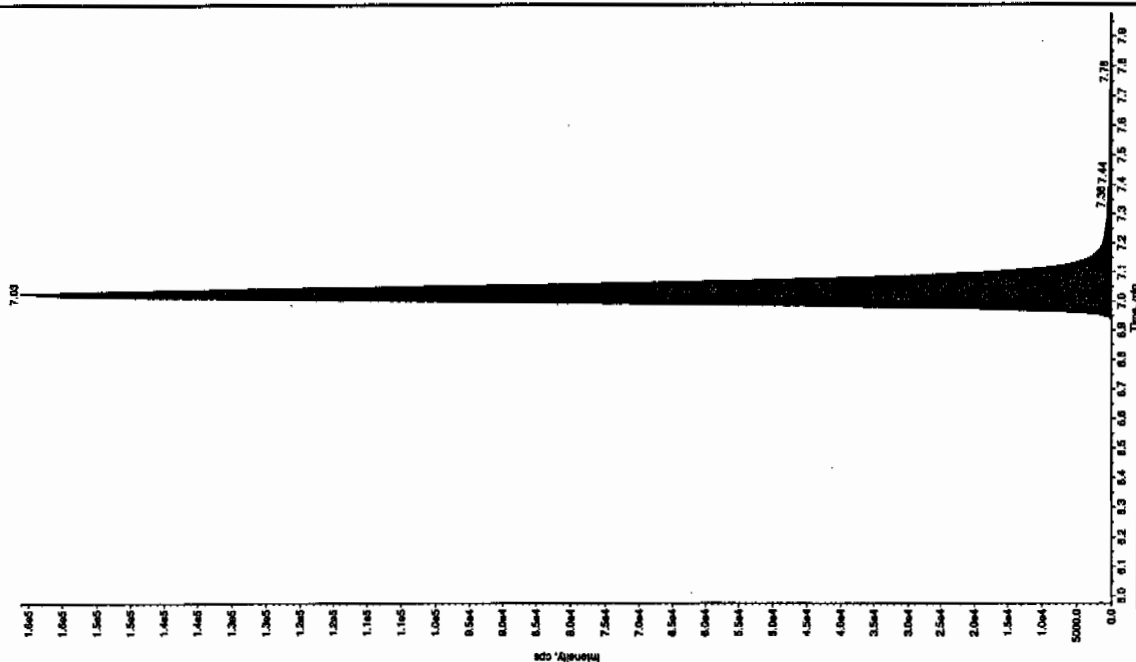


Run 1125110

after dec 1125110

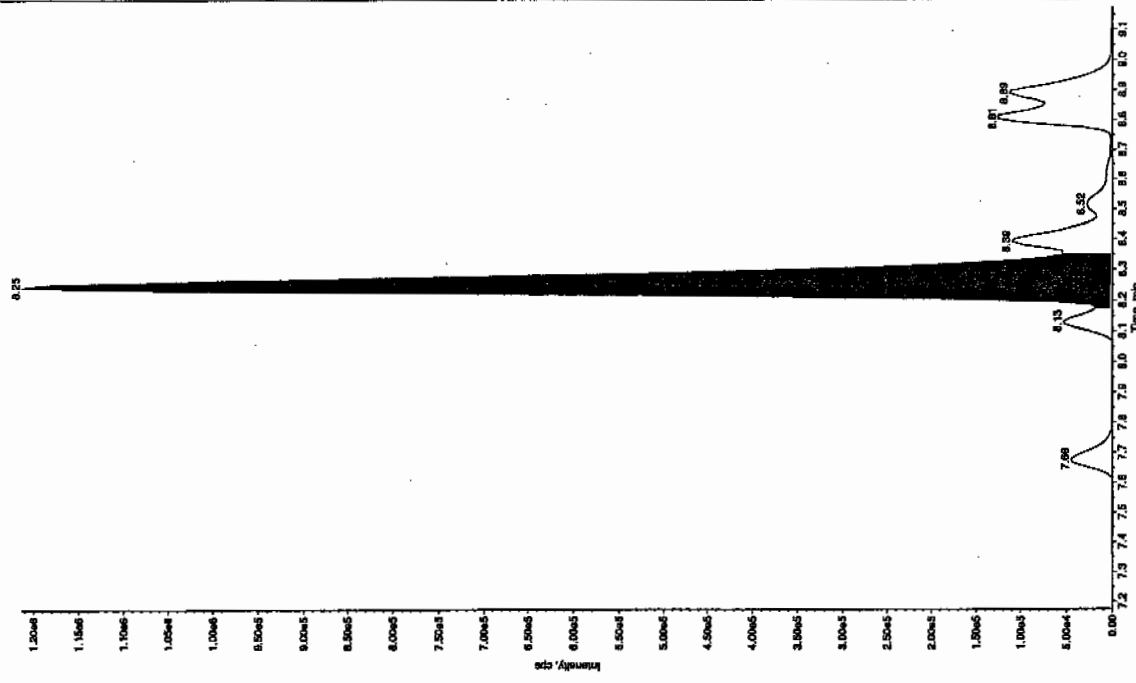
Sample Name: "1202012975" Sample ID: "940579121" File: "EXS01220046.wif"  
 Peak Name: "TATB" Mass(es): "257.2204.9 amu"  
 Comment: "LCX832125" Annotation: ""

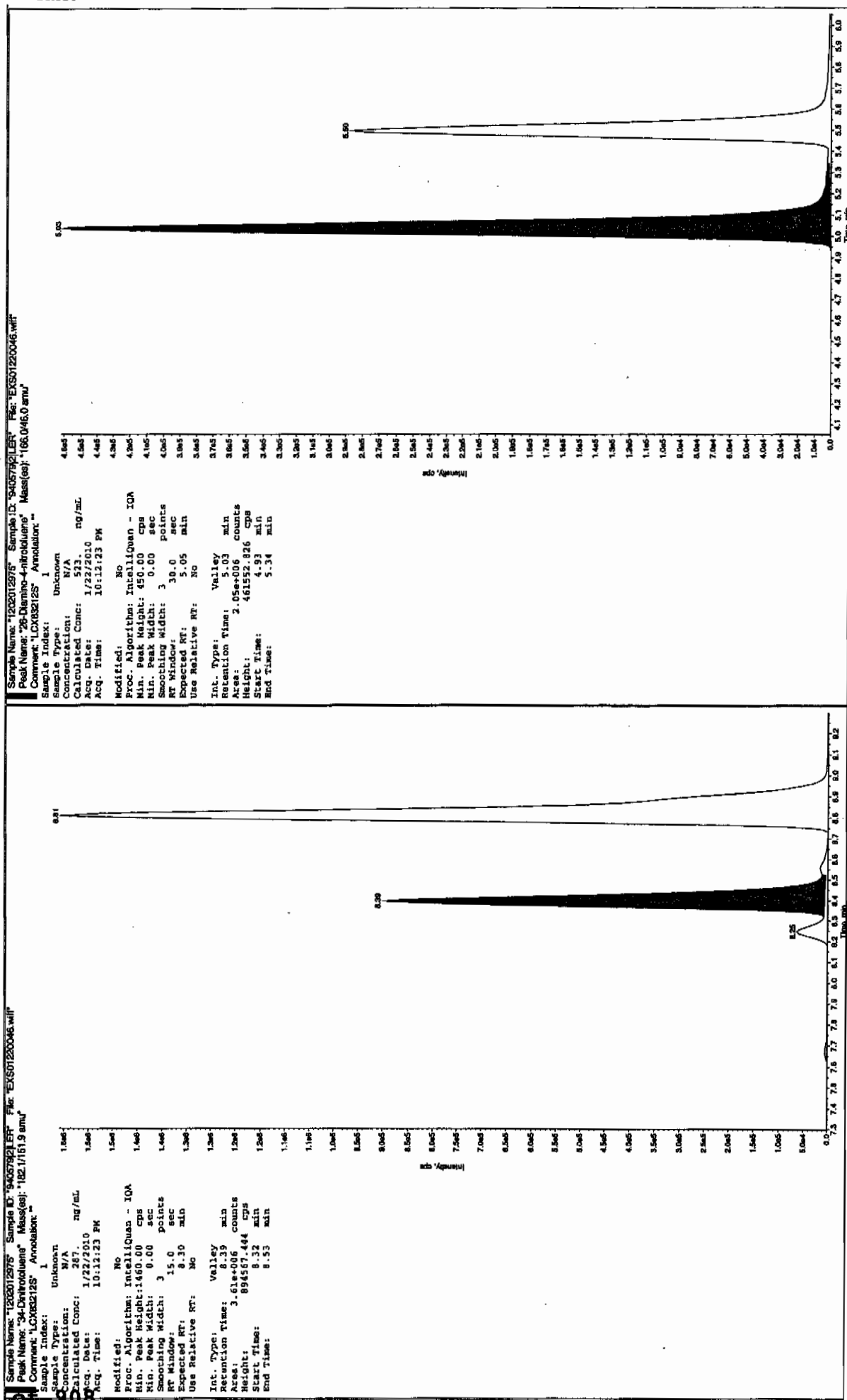
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 57A ng/mL  
 Calculated Conc: 1.22172010  
 Acq. Rate: 10:12:23 PM  
 Acq. Time: 10:12:23 PM  
 Modified: No  
 Proc. Algorithm: IntaliQuan - IQA  
 Min. Peak Height: 2500.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 36.0 sec  
 Expected RT: 6.38 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 7.03 min  
 Area: 7.29e+005 counts  
 Height: 161166.260 cps  
 Start Time: 6.91 min  
 End Time: 7.35 min



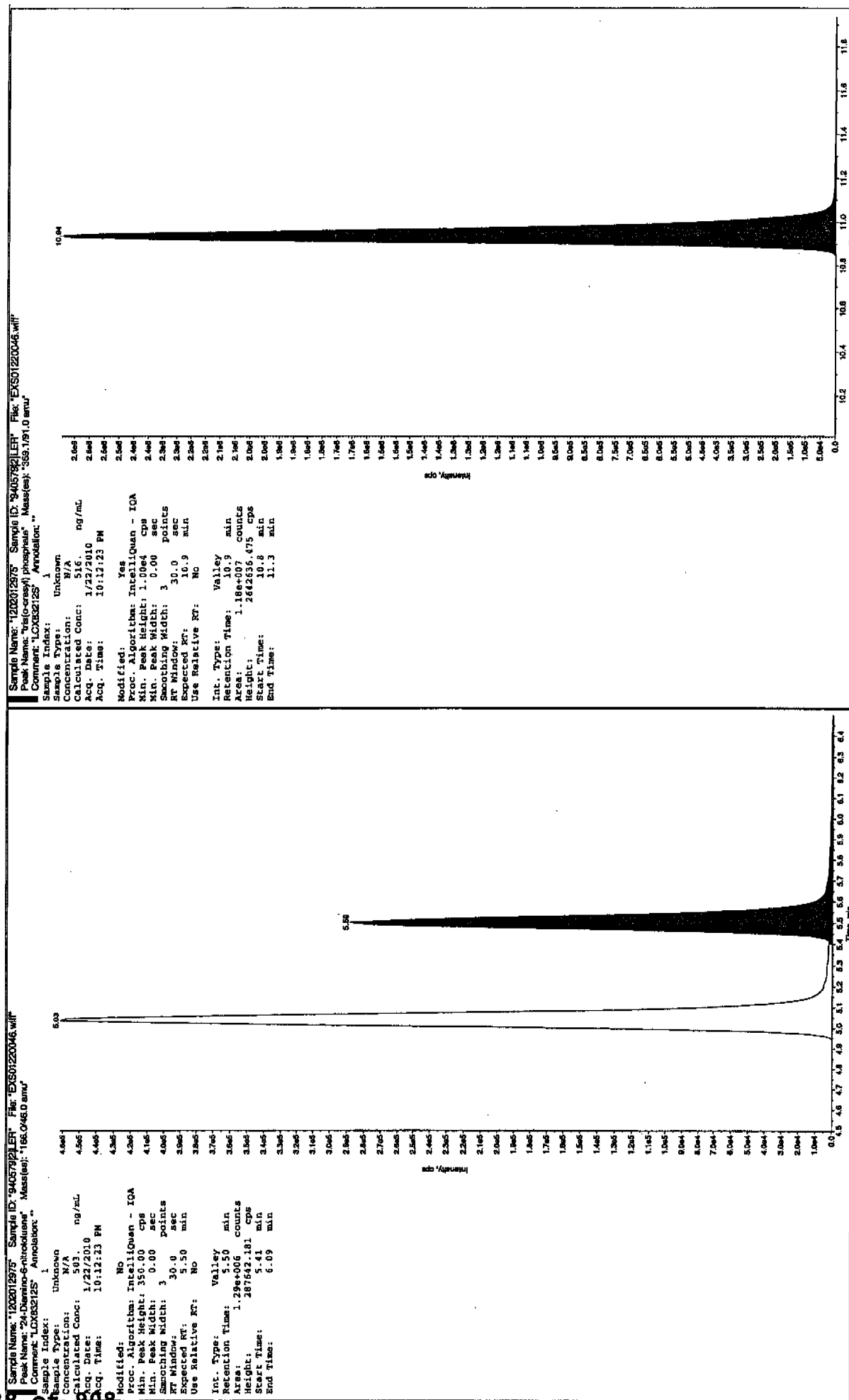
Sample Name: "1202012975" Sample ID: "940579121" File: "EXS01220046.wif"  
 Peak Name: "35-Dikroenline" Mass(es): "182.046.0 amu"  
 Comment: "LCX832125" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 57A ng/mL  
 Calculated Conc: 1.22172010  
 Acq. Rate: 10:12:23 PM  
 Acq. Time: 10:12:23 PM  
 Modified: Yes  
 RT Window: 15.0 sec  
 Expected RT: 8.17 min  
 Use Relative RT: No  
 Int. Type: Manual  
 Retention Time: 8.25 min  
 Area: 5.13e+006 counts  
 Height: 1221715.443 cps  
 Start Time: 8.17 min  
 End Time: 8.35 min





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



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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7710(244210001MS)

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 1202012976

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125122a

Date Analyzed: 27-JAN-10 22:51

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	5990	
121-14-2	2,4-Dinitrotoluene	4740	
121-82-4	RDX	5070	
19406-51-0	4-Amino-2,6-dinitrotoluene	5220	
2691-41-0	HMX	4970	
35572-78-2	2-Amino-4,6-dinitrotoluene	5450	
479-45-8	Tetryl	4610	
606-20-2	2,6-Dinitrotoluene	4640	
78-11-5	PETN	4810	
88-72-2	o-Nitrotoluene	4120	
98-95-3	Nitrobenzene	4770	
99-08-1	m-Nitrotoluene	4180	
99-35-4	1,3,5-Trinitrobenzene	5610	
99-65-0	m-Dinitrobenzene	4770	
99-99-0	p-Nitrotoluene	4070	

\*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\1012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\data\EXP0125122a

Date: 27-Jan-2010

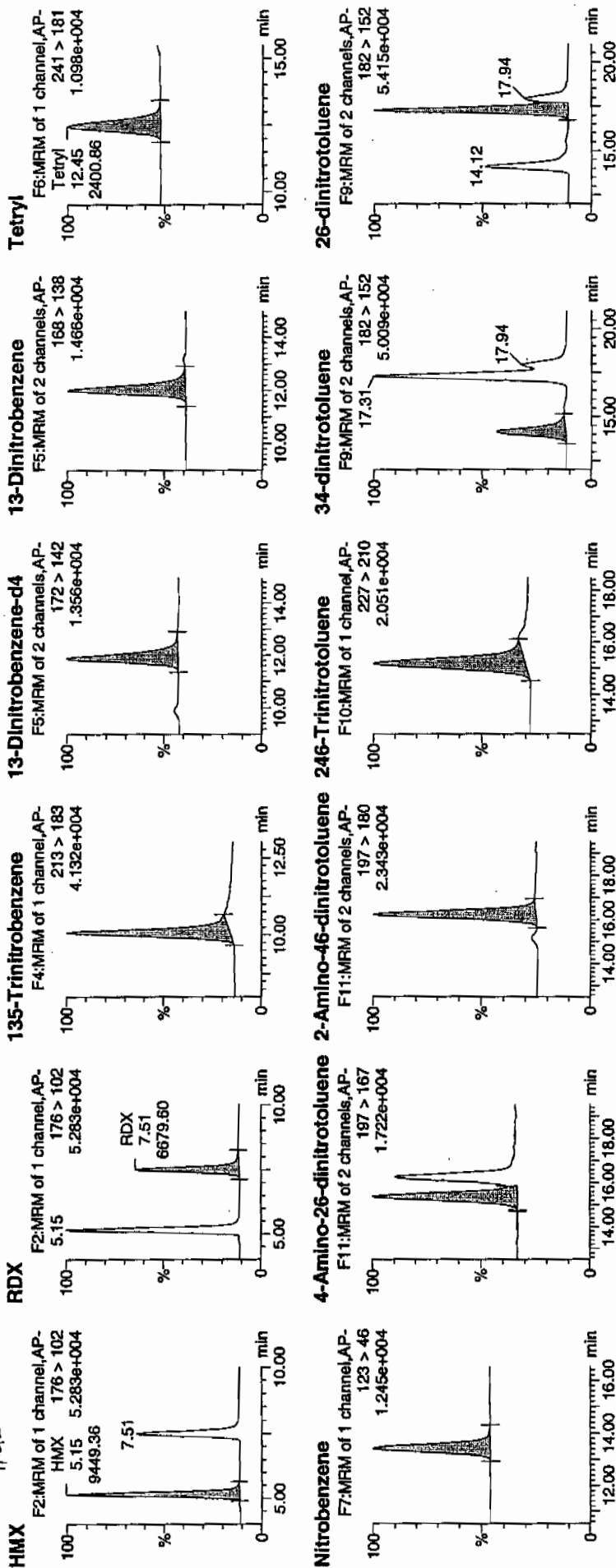
Time: 22:51:55

ID: 1202015508

Vial: 2:1,D

1202012976 | LAW | 940579 | 2442000143 | 21

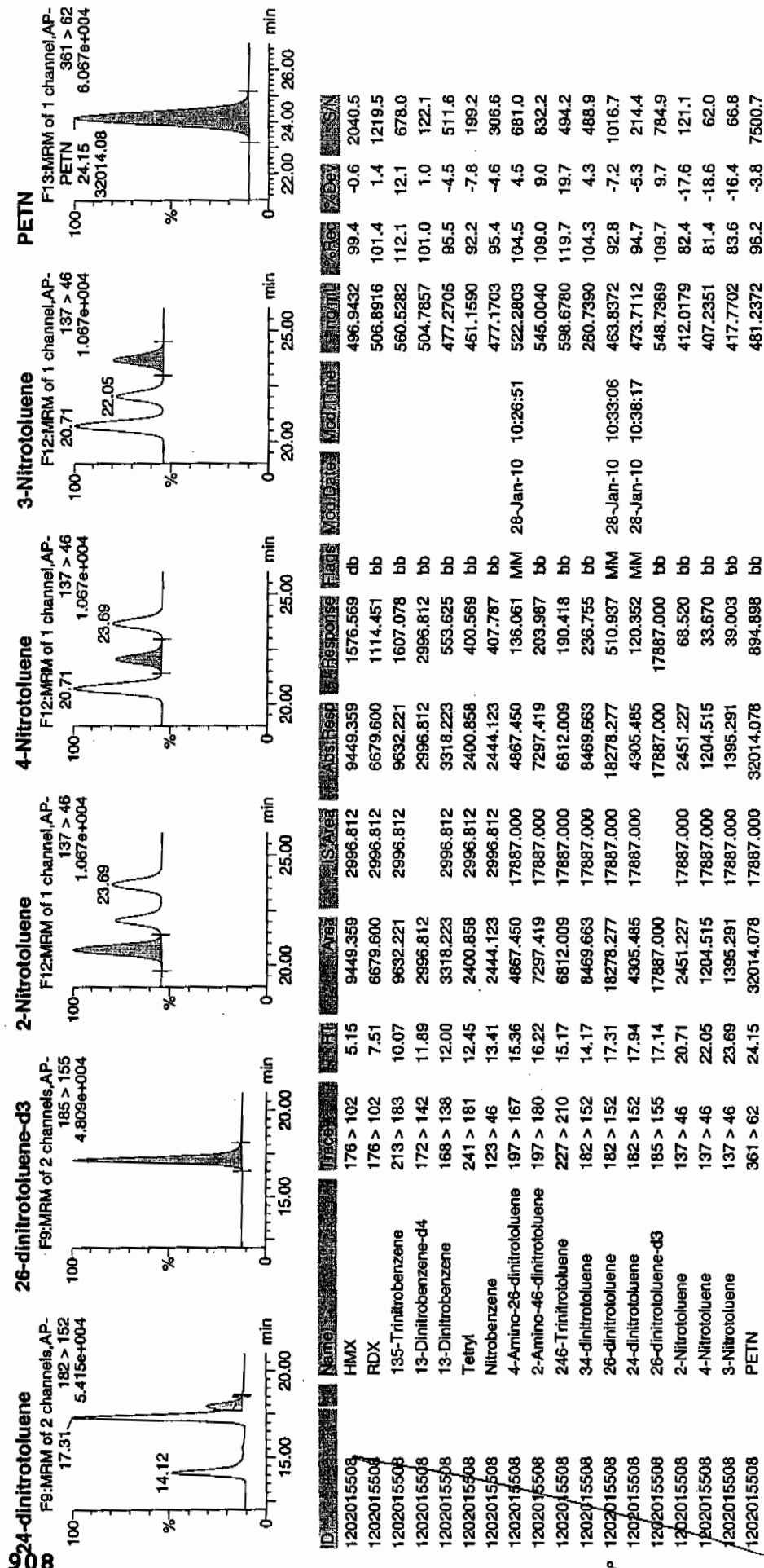
11/28/10



4mm  
11/29/10



Dataset: C:\MASSLYNX\New\_Exp\PRO012510expA2.qld, Time: Thu Jan 28 10:42:53 2010



1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7710(244210001MS)

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 1202012976

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01220048.wiff

Date Analyzed: 22-JAN-10 22:43

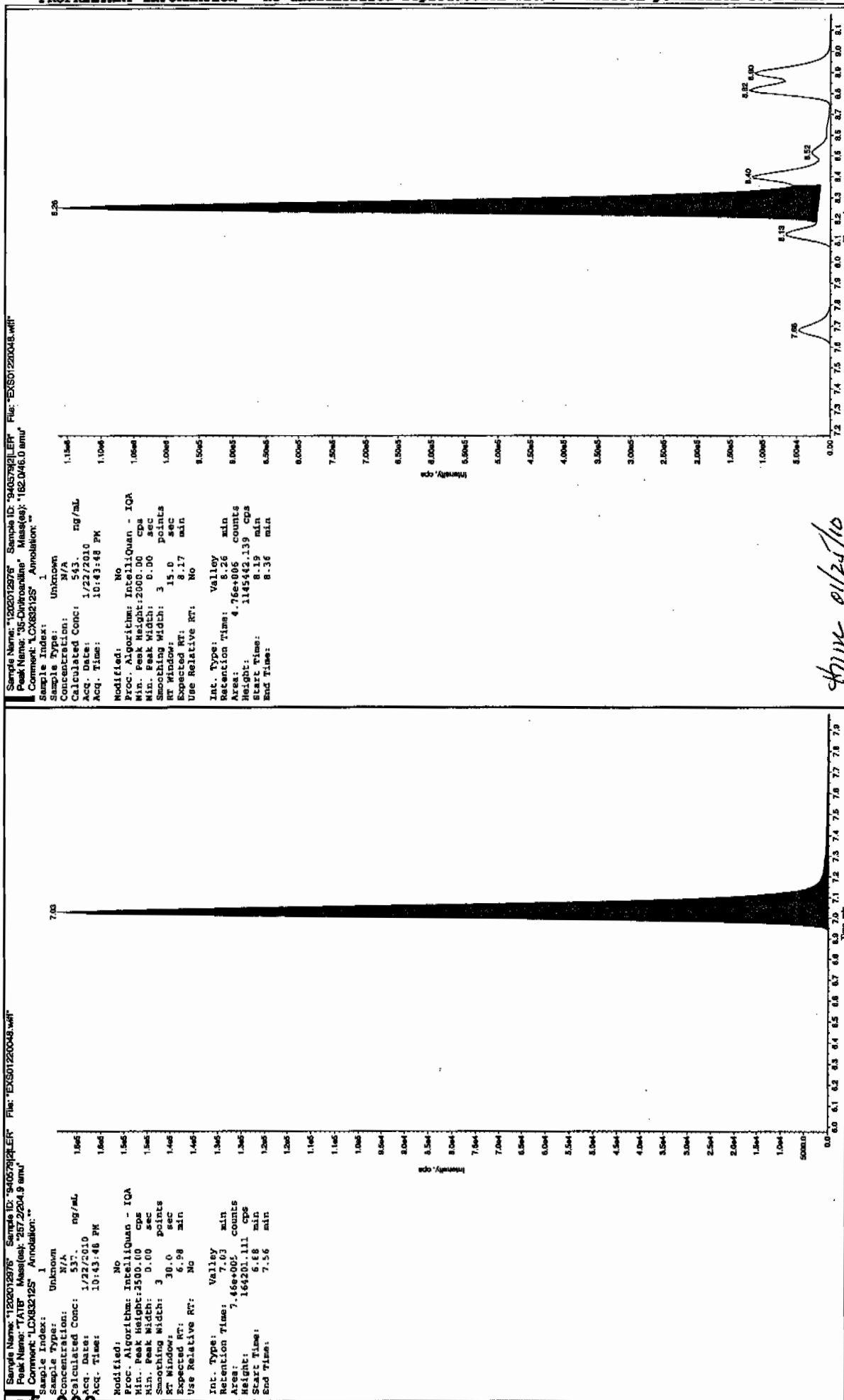
Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	5370	
59229-75-3	2,6-Diamino-4-nitrotoluene	5010	
618-87-1	3,5-Dinitroaniline	5620	
6629-29-4	2,4-Diamino-6-nitrotoluene	5110	
78-30-8	tris(o-cresyl) phosphate	4950	

\*Concentration =

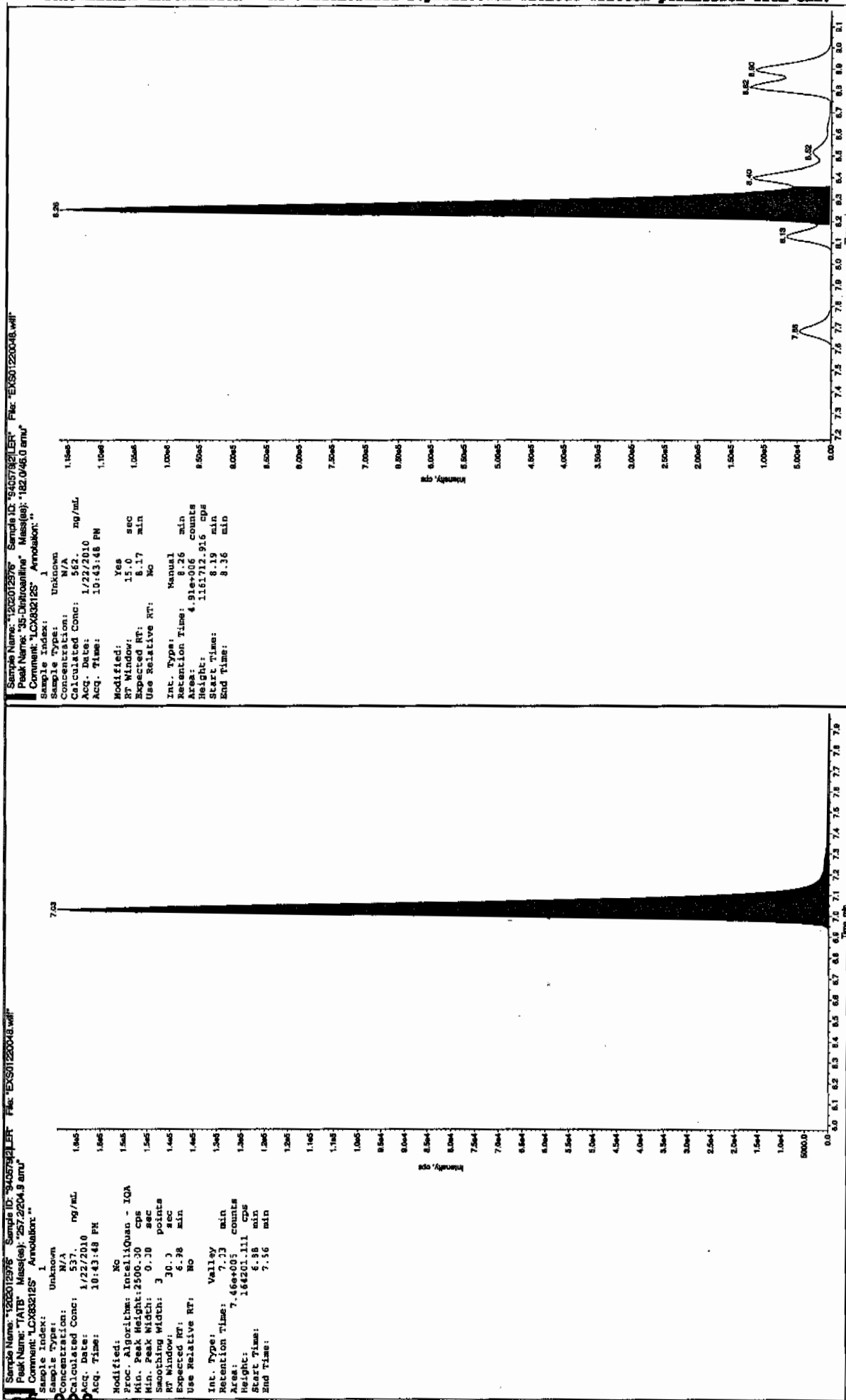
Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

Before Jan 11/25/10

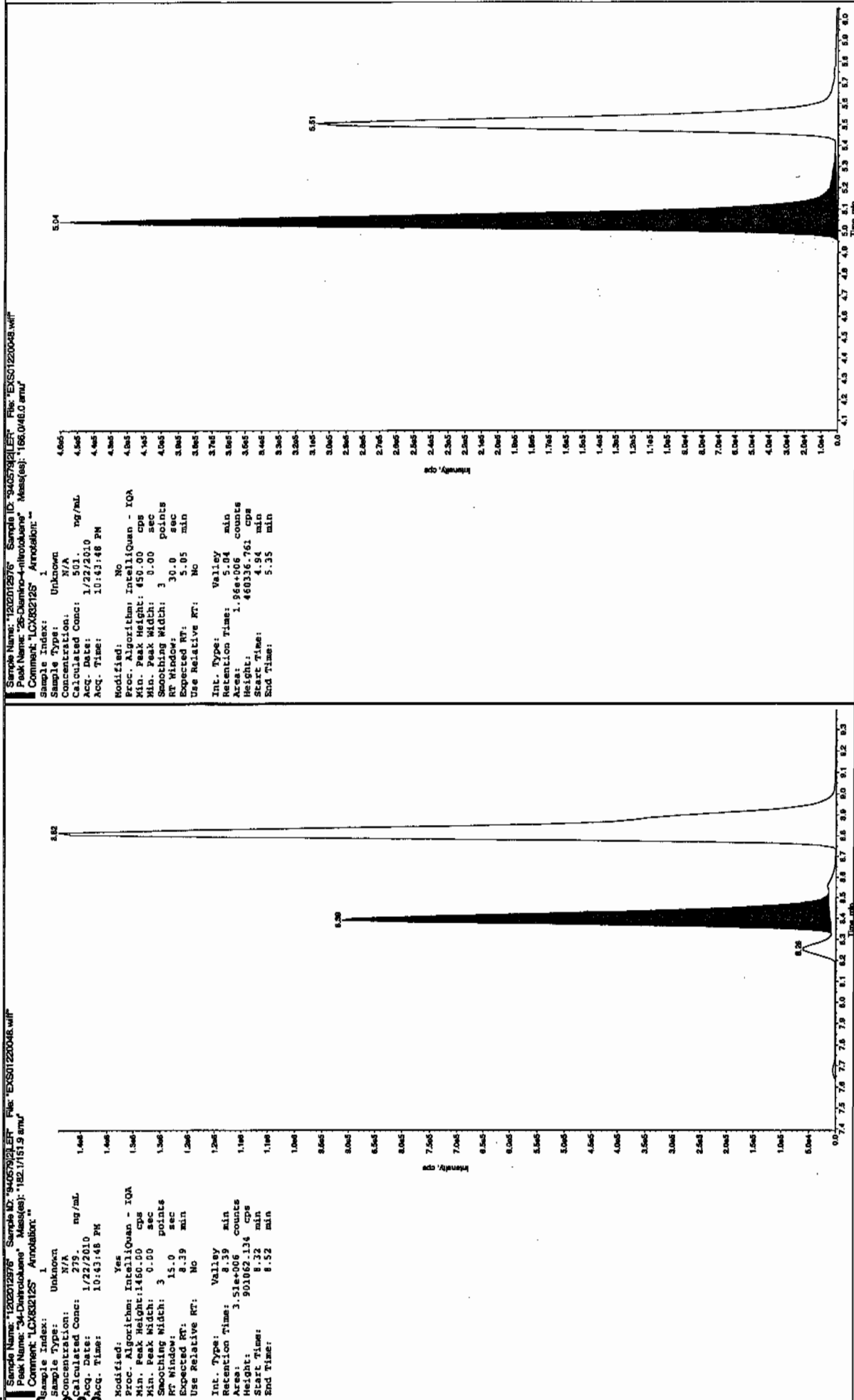


Time 01/25/10

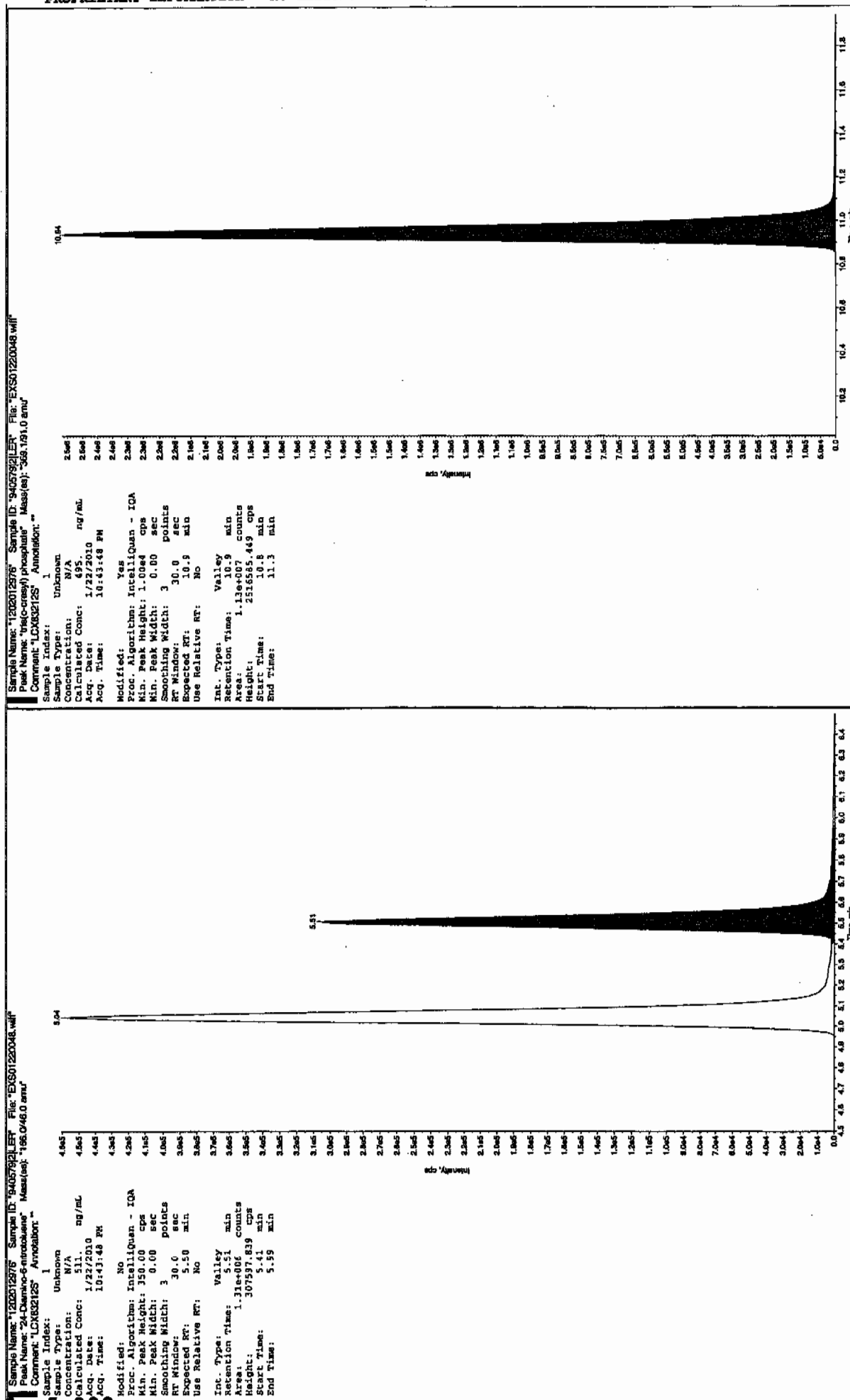
after 1/28/10



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



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



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

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7710(244210001MSD)

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 1202012977

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125123a

Date Analyzed: 27-JAN-10 23:21

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	5660	
121-14-2	2,4-Dinitrotoluene	5160	
121-82-4	RDX	5660	
19406-51-0	4-Amino-2,6-dinitrotoluene	5700	
2691-41-0	HMX	5410	
35572-78-2	2-Amino-4,6-dinitrotoluene	5840	
479-45-8	Tetryl	4600	
606-20-2	2,6-Dinitrotoluene	4890	
78-11-5	PETN	5590	
88-72-2	o-Nitrotoluene	4280	
98-95-3	Nitrobenzene	4970	
99-08-1	m-Nitrotoluene	4720	
99-35-4	1,3,5-Trinitrobenzene	5850	
99-65-0	m-Dinitrobenzene	5130	
99-99-0	p-Nitrotoluene	4510	

\*Concentration =

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

Printed: Thu Jan 28 10:43:32 2010, Page 77 of 121

# Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125123a

Date: 27-Jan-2010

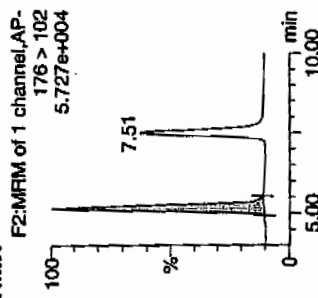
Time: 23:21:23

ID: 1202015609

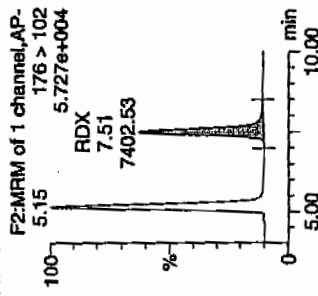
Vial: 2:1,E

1/25/10

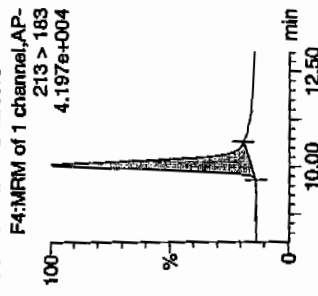
HMX



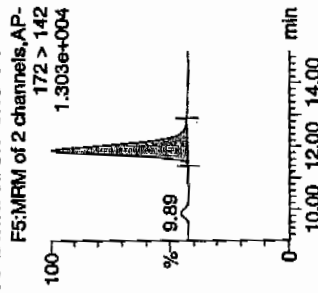
RDX



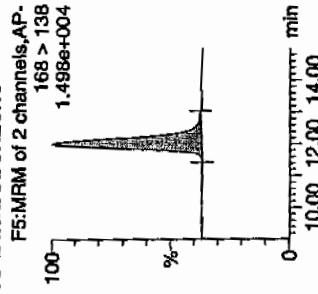
135-Trinitrobenzene



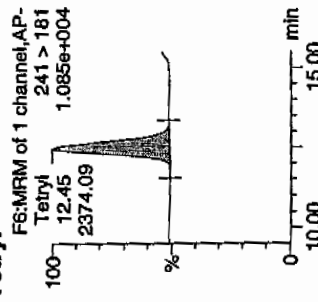
13-Dinitrobenzene-d4



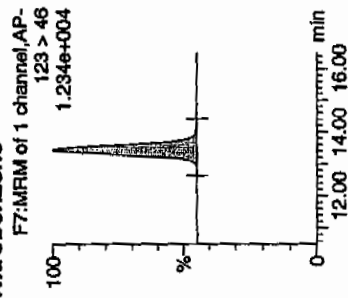
13-Dinitrobenzene



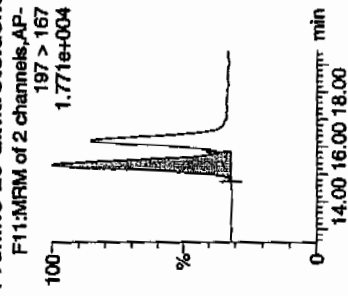
Tetryl



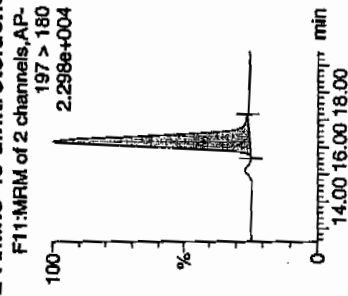
Nitrobenzene



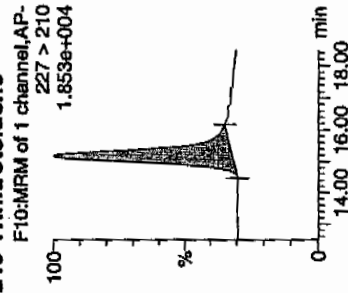
4-Amino-26-dinitrotoluene



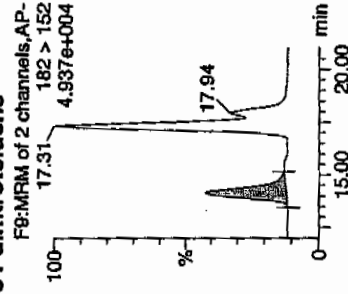
2-Amino-46-dinitrotoluene



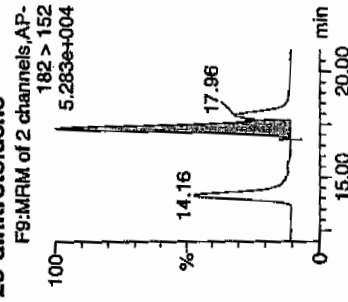
246-Trinitrotoluene



34-dinitrotoluene

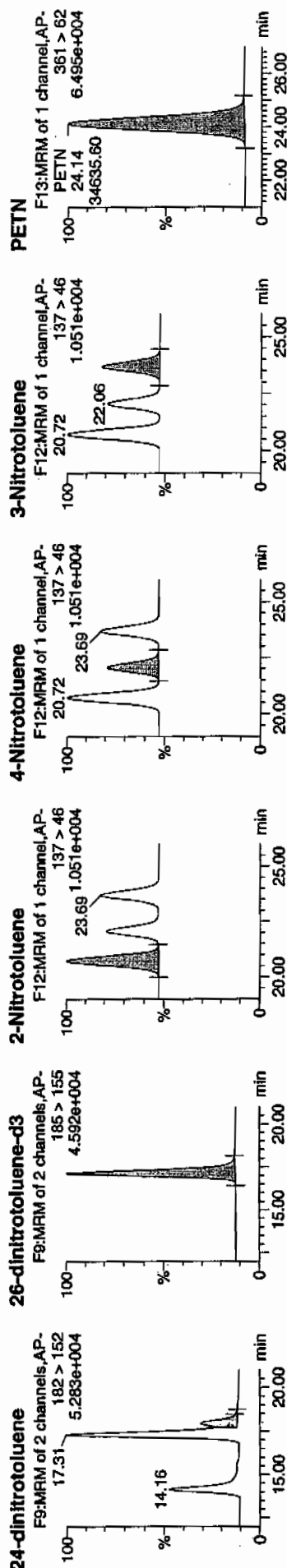


26-dinitrotoluene



Handwritten note: 01/28/10





ID	Name	Trace	Area	Area %	Abundance	Phase	Mod Date	Mod Time	Int. Total	% Rec	% Dev	SN
1202015509	HMX	176 > 102	5.15	10199.551	2972.122	1715.870	bb		540.8519	108.2	8.2	1123.3
1202015509	RDX	176 > 102	7.51	7402.534	2972.122	1245.328	bb		566.4192	113.3	13.3	682.4
1202015509	135-Trinitrobenzene	213 > 183	10.07	9967.797	2972.122	1676.882	bb		585.3083	117.1	17.1	444.2
1202015509	13-Dinitrobenzene-d4	172 > 142	11.90	2972.122		2972.122	bb		500.6269	100.1	0.1	106.9
1202015509	13-Dinitrobenzene	168 > 138	12.00	3540.649	2972.122	595.643	bb		513.4933	102.7	2.7	363.7
1202015509	Tetryl	241 > 181	12.45	2374.091	2972.122	399.393	bb		459.8058	92.0	-8.0	328.8
1202015509	Nitrobenzene	123 > 46	13.45	2522.179	2972.122	424.306	bb		496.4999	99.3	-0.7	212.8
1202015509	4-Amino-26-dinitrotoluene	197 > 167	15.35	5089.228	17140.309	148.458	MM	28-Jan-10	569.8662	114.0	14.0	315.6
1202015509	2-Amino-46-dinitrotoluene	197 > 180	16.22	7498.762	17140.309	218.746	bb		584.4385	116.9	16.9	336.6
1202015509	246-Trinitrotoluene	227 > 210	15.17	6169.372	17140.309	6169.372	bb		565.8194	113.2	13.2	319.3
1202015509	34-dinitrotoluene	182 > 152	14.16	8206.736	17140.309	8206.736	bb		263.6509	105.5	5.5	216.0
1202015509	26-dinitrotoluene	182 > 152	17.31	18447.648	17140.309	18447.648	MM	28-Jan-10	488.5288	97.7	-2.3	300.0
1202015509	24-dinitrotoluene	182 > 152	17.96	4494.477	17140.309	4494.477	MM	28-Jan-10	516.0474	103.2	3.2	67.0
1202015509	26-dinitrotoluene-d3	185 > 155	17.13	17140.309		17140.309	bb		525.8299	105.2	5.2	385.3
1202015509	2-Nitrotoluene	137 > 46	20.72	2442.384	17140.309	2442.384	bb		428.4157	85.7	-14.3	385.3
1202015509	4-Nitrotoluene	137 > 46	22.06	1277.603	17140.309	37.269	bb		450.7625	90.2	-9.8	211.6
1202015509	3-Nitrotoluene	137 > 46	23.69	1509.853	17140.309	1509.853	bb		471.7655	94.4	-5.6	238.7
1202015509	PETN	361 > 62	24.14	34635.598	17140.309	1010.355	bb		559.0712	111.8	11.8	5165.1

1202012977

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7710(244210001MSD)

Lab Code: GEL

GEL Job No (SDG) 10-1160-1

Matrix: SOIL

GEL Sample ID: 1202012977

Sample Amount 2

Moisture: \*\*\*\*\*

Amount Units g

Date Received: 09-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940578

Concentrated Extract Volume (mL) 10

Date Extracted: 19-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01220049.wiff

Date Analyzed: 22-JAN-10 22:59

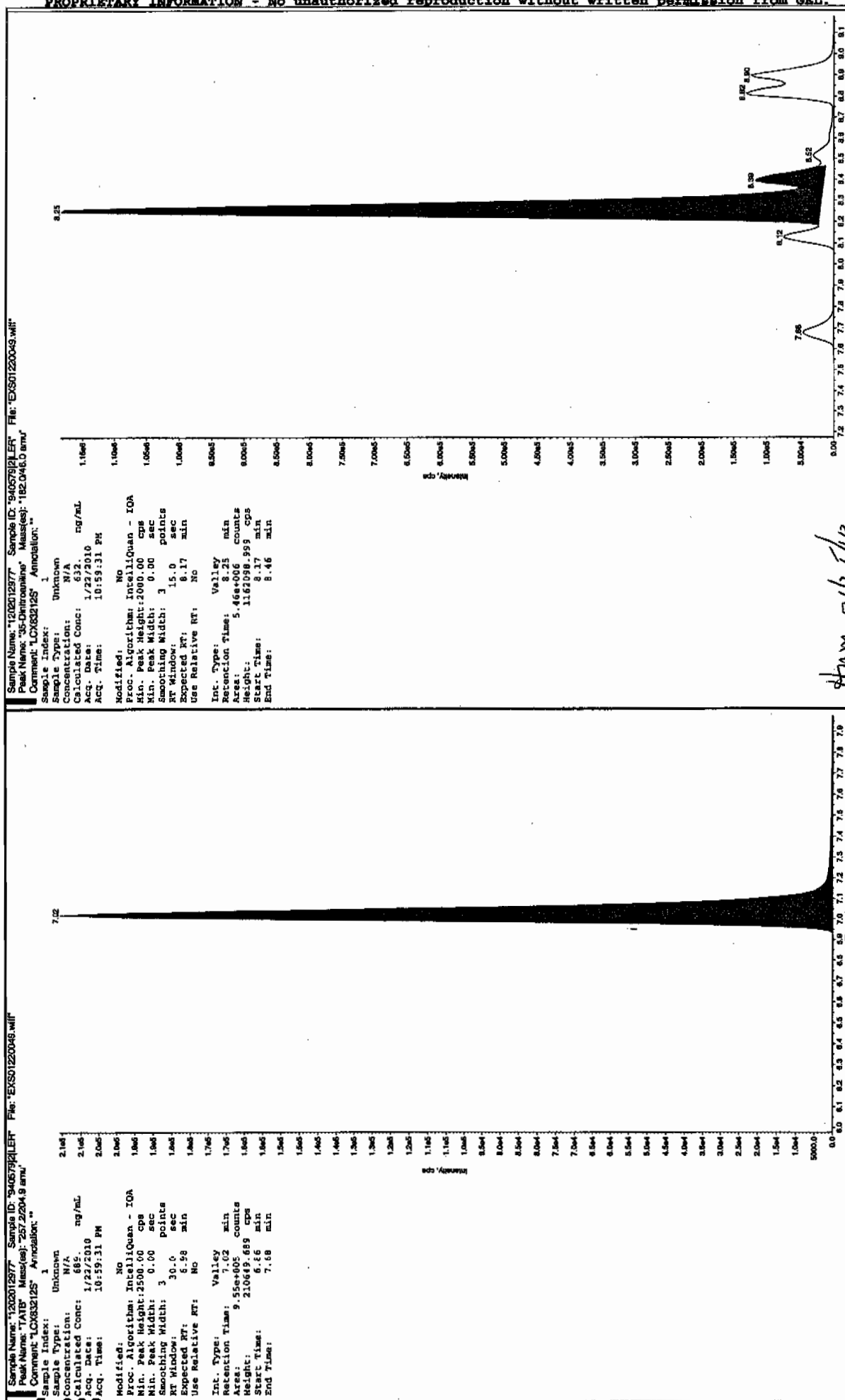
Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	6890	
59229-75-3	2,6-Diamino-4-nitrotoluene	5330	
618-87-1	3,5-Dinitroaniline	6050	
6629-29-4	2,4-Diamino-6-nitrotoluene	4770	
78-30-8	tris(o-cresyl) phosphate	5030	

\*Concentration =

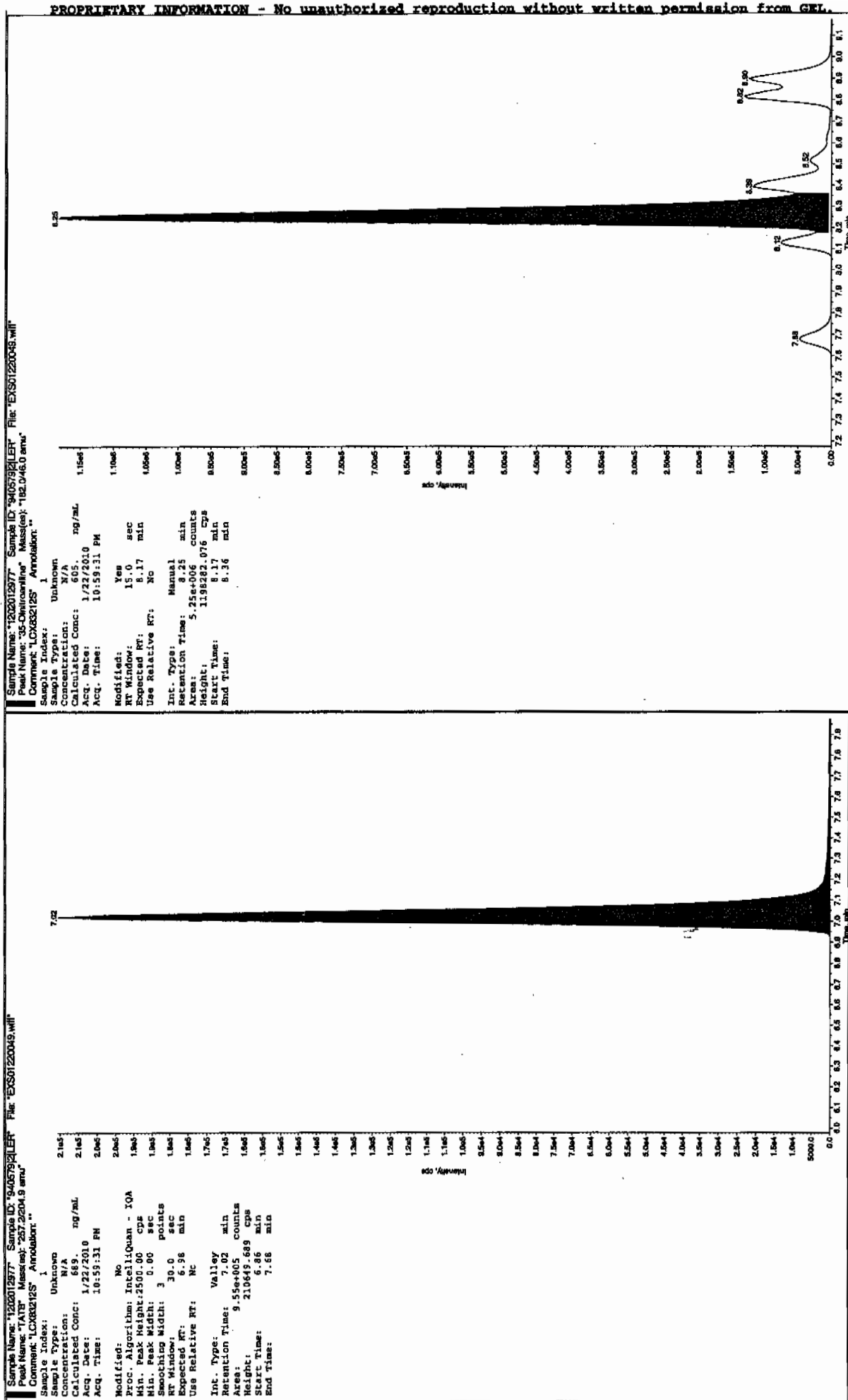
Instrument	X	<u>Concentrated Extract Volume</u>	X	Dilution
Value		<u>Sample Amount</u>		Factor

Before Jan 11/25/10

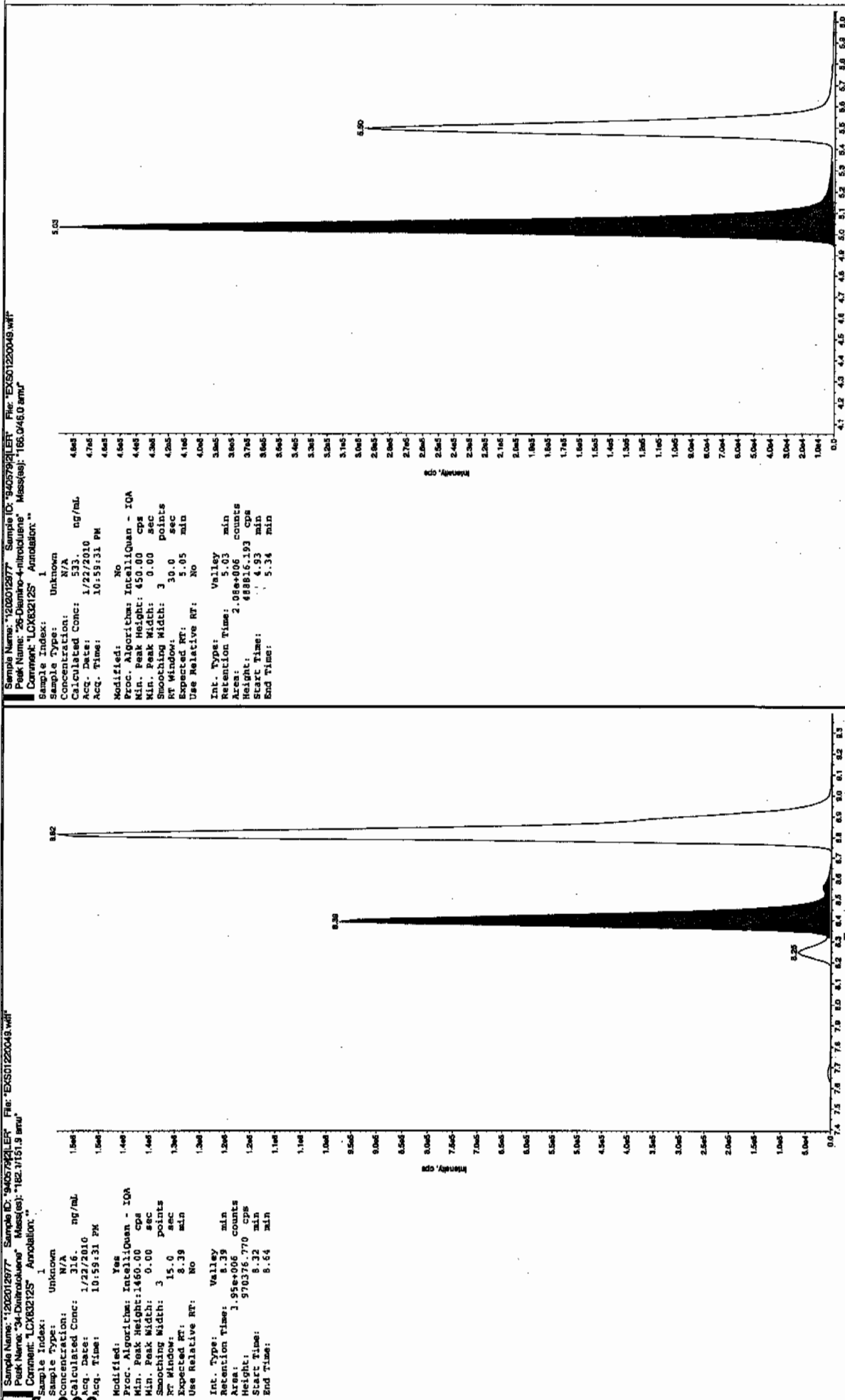


\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

after clear 1/25/10



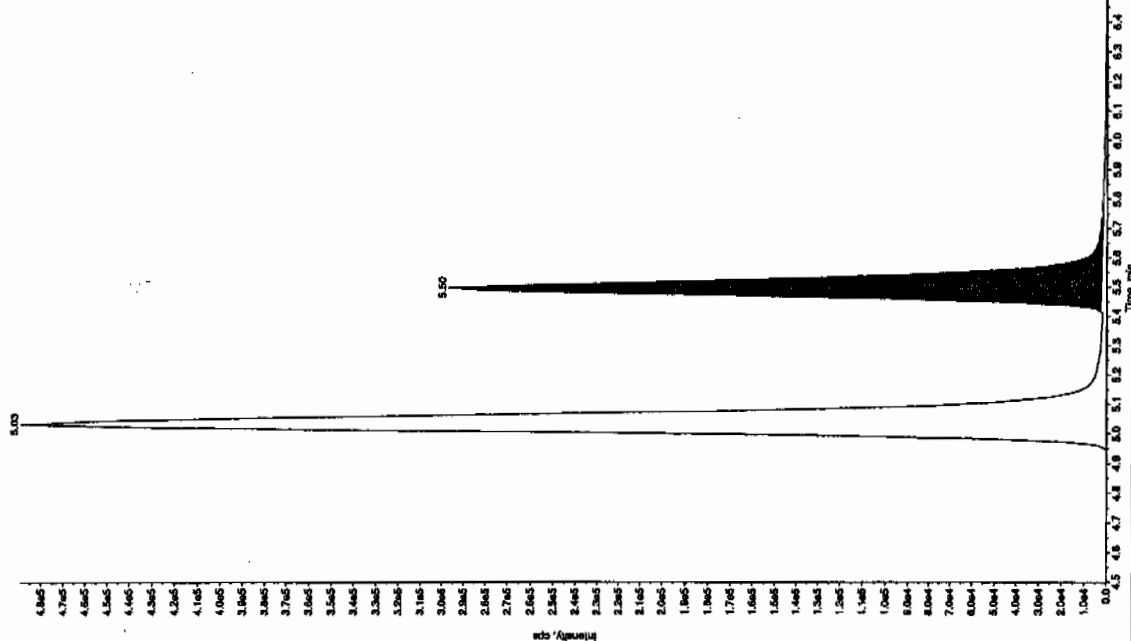
\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



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

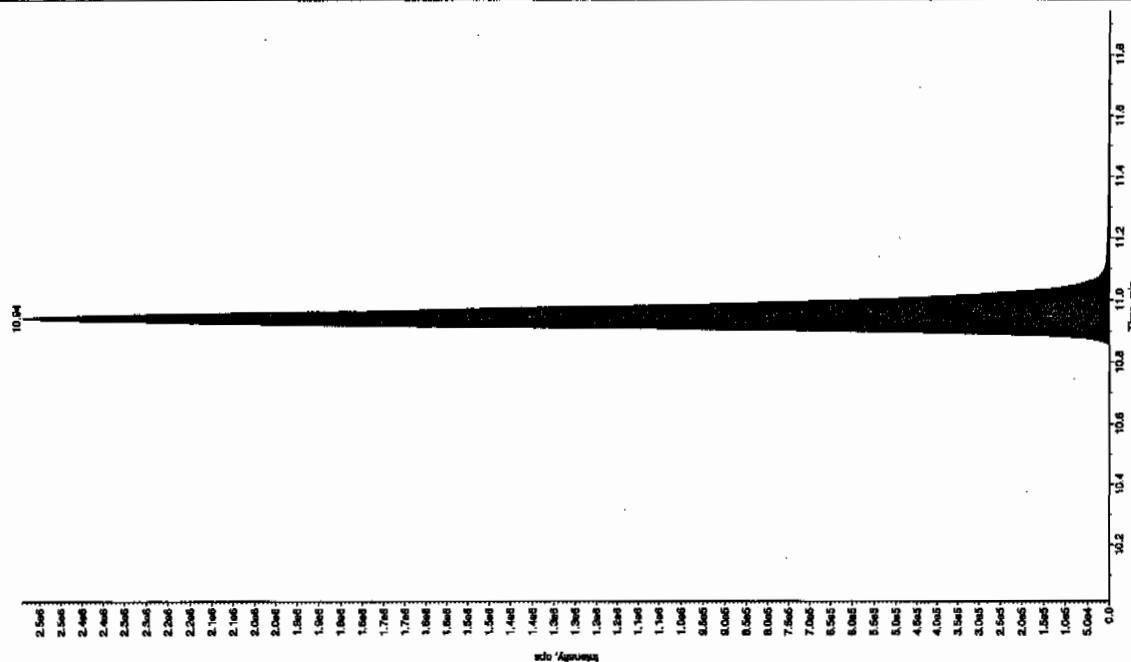
Sample Name: 1202012977 Sample ID: 94057921.ER File: EX501220049.wif  
 Peak Name: 24-Dimethyl-5-hydroxyacetone Mass(es): 168.046.Damu  
 Comment: LCX832125 Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 477. ng/mL  
 Acq. Date: 1/22/2010  
 Acq. Time: 10:59:31 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 350.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 30.0 points  
 RT Window: 30.0 sec  
 Expected RT: 5.50 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.50 min  
 Area: 1.22e+006 counts  
 Height: 294437.958 cps  
 Start Time: 5.42 min  
 End Time: 5.61 min



Sample Name: 1202012977 Sample ID: 94057921.ER File: EX501220049.wif  
 Peak Name: 24-Dimethyl-5-hydroxyacetone Mass(es): 303.191.0amu  
 Comment: LCX832125 Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 503. ng/mL  
 Acq. Date: 1/22/2010  
 Acq. Time: 10:59:31 PM  
 Modified: Yes  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 1.00e4 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 30.0 points  
 RT Window: 30.0 sec  
 Expected RT: 10.9 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.9 min  
 Area: 1.15e+007 counts  
 Height: 2541556.748 cps  
 Start Time: 10.8 min  
 End Time: 11.3 min



\*GEL 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: 940578 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)
1202012974 MB	19-JAN-2010 17:13:19	2	10	5
1202012975 LCS	19-JAN-2010 17:13:19	2	10	5
244210001	19-JAN-2010 17:13:19	2	10	5
1202012976 MS (244210001)	19-JAN-2010 17:13:19	2	10	5
1202012977 MSD (244210001)	19-JAN-2010 17:13:19	2	10	5
244210002	19-JAN-2010 17:13:19	2	10	5
244210003	19-JAN-2010 17:13:19	2	10	5
244210004	19-JAN-2010 17:13:19	2	10	5
244210005	19-JAN-2010 17:13:19	2	10	5
244210006	19-JAN-2010 17:13:19	2	10	5
244210007	19-JAN-2010 17:13:19	2	10	5
244210008	19-JAN-2010 17:13:19	2	10	5
244210009	19-JAN-2010 17:13:19	2	10	5
244210010	19-JAN-2010 17:13:19	2	10	5
244210011	19-JAN-2010 17:13:19	2	10	5
244210012	19-JAN-2010 17:13:19	2	10	5
244210013	19-JAN-2010 17:13:19	2	10	5
244210014	19-JAN-2010 17:13:19	2	10	5
244210015	19-JAN-2010 17:13:19	2	10	5

Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:
LCS	1202012975	8321 Explosives LCS	DX091230-03	.1	mL	Final Solvent: ACN
LCS	1202012975	8321 LANL Explosives Mix 10mg/L	UX091229-02.2	1	mL	
MS	1202012976	8321 Explosives LCS	DX091230-03	.1	mL	
MS	1202012976	8321 LANL Explosives Mix 10mg/L	UX091229-02.2	1	mL	
MSD	1202012977	8321 Explosives LCS	DX091230-03	.1	mL	
MSD	1202012977	8321 LANL Explosives Mix 10mg/L	UX091229-02.2	1	mL	
SURR	All	3,4-Dinitrotoluene (8330 Sur.) 100ppm	DXP00114-02	.05	mL	



GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS #1

Date: 01/25/10  
 Extr. Injection Volume: 50ul  
 Sequence Number: 012510expA  
 Initial Calibration Date: 01/25/10  
 Method: SW846 8321A-Modified  
 Int. Std.: UXX091230-01.3  
 Mobile Phase Lot#: 1258263, 1236350  
 Standard-Samp Reagent Lot#: 1253092, 1246195  
 Reviewed BY: *Amc*  
 Date: *01/28/10*  
 SOP: GL-OA-E-056 Rev.12  
 Alt Check Std. ID: WXX100125-07

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
EXP0125001a	XIBLK01	MAP	1/25/10 11:20			1		USE	B
EXP0125002a	XIBLK01	MAP	1/25/10 11:50			1		USE	B
EXP0125003a	WXXICAL-01	MAP	1/25/10 12:19			1		USE	I
EXP0125004a	WXXICAL-02	MAP	1/25/10 12:49			1		USE	I
EXP0125005a	WXXICAL-03	MAP	1/25/10 13:18			1		USE	I
EXP0125006a	WXXICAL-04	MAP	1/25/10 13:48			1		USE	I
EXP0125007a	WXXICAL-05	MAP	1/25/10 14:17			1		USE	I
EXP0125008a	WXXICAL-06	MAP	1/25/10 14:47			1		USE	I
EXP0125009a	XIBLK02	MAP	1/25/10 15:16			1		USE	B
EXP0125010a	WXXICV	MAP	1/25/10 15:46			1		USE	C
EXP0125011a	XIBLK03	MAP	1/25/10 16:15			1		USE	B
EXP0125012a	WXXCRI	MAP	1/25/10 16:45			1		USE	C
EXP0125013a	244613001	MAP	1/25/10 17:14	941662	10-1218	2	LANL	USE	S
EXP0125014a	244616002	MAP	1/25/10 17:44	941662	10-1219	2	LANL	USE	S
EXP0125015a	244616003	MAP	1/25/10 18:13	941662	10-1219	2	LANL	USE	S
EXP0125016a	244616004	MAP	1/25/10 18:43	941662	10-1219	2	LANL	USE	S
EXP0125017a	244616005	MAP	1/25/10 19:12	941662	10-1219	2	LANL	USE	S
EXP0125018a	244616006	MAP	1/25/10 19:42	941662	10-1219	2	LANL	USE	S
EXP0125019a	244620001	MAP	1/25/10 20:11	941662	10-1221	2	LANL	USE	S
EXP0125020a	244620002	MAP	1/25/10 20:41	941662	10-1221	2	LANL	USE	S
EXP0125021a	244620003	MAP	1/25/10 21:10	941662	10-1221	2	LANL	USE	S
EXP0125022a	244620004	MAP	1/25/10 21:40	941662	10-1221	2	LANL	USE	S
EXP0125023a	WXXCCV	MAP	1/25/10 22:09			1		USE	C
EXP0125024a	XIBLK04	MAP	1/25/10 22:39			1		USE	B
EXP0125025a	WXXCRI	MAP	1/25/10 23:08			1		USE	C
EXP0125026a	244620005	MAP	1/25/10 23:38	941662	10-1221	2	LANL	USE	S
EXP0125027a	244620006	MAP	1/26/10 0:07	941662	10-1221	2	LANL	USE	S
EXP0125028a	244623001	MAP	1/26/10 0:37	941662	10-1223	2	LANL	USE	S
EXP0125029a	244623002	MAP	1/26/10 1:06	941662	10-1223	2	LANL	USE	S

EXP0125030a	244623003	MAP	1/26/10 1:36	941662	10-1223	2	LANL	USE	S
EXP0125031a	244623004	MAP	1/26/10 2:05	941662	10-1223	2	LANL	USE	S
EXP0125032a	244623005	MAP	1/26/10 2:35	941662	10-1223	2	LANL	USE	S
EXP0125033a	244623006	MAP	1/26/10 3:04	941662	10-1223	2	LANL	USE	S
EXP0125034a	WXXCCV	MAP	1/26/10 3:34			1		USE	C
EXP0125035a	XIBLK05	MAP	1/26/10 4:03			1		USE	B
EXP0125036a	WXXCRI	MAP	1/26/10 4:33			1		USE	C
EXP0125037a	1202011683	MAP	1/26/10 5:02	940071	10-1131	2	LANL	USE	S
EXP0125038a	1202011684	MAP	1/26/10 5:32	940071	10-1131	2	LANL	USE	S
EXP0125039a	244126001	MAP	1/26/10 6:01	940071	10-1131	2	LANL	USE	S
EXP0125040a	1202011685	MAP	1/26/10 6:31	940071	10-1131	2	LANL	USE	S
EXP0125041a	1202011686	MAP	1/26/10 7:01	940071	10-1131	2	LANL	USE	S
EXP0125042a	244126002	MAP	1/26/10 7:30	940071	10-1131	2	LANL	USE	S
EXP0125043a	244126003	MAP	1/26/10 7:59	940071	10-1131	2	LANL	USE	S
EXP0125044a	244126004	MAP	1/26/10 8:29	940071	10-1131	2	LANL	USE	S
EXP0125045a	244126005	MAP	1/26/10 8:58	940071	10-1131	2	LANL	USE	S
EXP0125046a	244126006	MAP	1/26/10 9:28	940071	10-1131	2	LANL	USE	S
EXP0125047a	WXXCCV	MAP	1/26/10 9:58			1		USE	C
EXP0125048a	XIBLK06	MAP	1/26/10 10:27			1		USE	B
EXP0125049a	WXXCRI	MAP	1/26/10 10:57			1		USE	C
EXP0125050a	244126007	MAP	1/26/10 11:26	940071	10-1131	2	LANL	USE	S
EXP0125051a	244126008	MAP	1/26/10 11:56	940071	10-1131	2	LANL	USE	S
EXP0125052a	244126009	MAP	1/26/10 12:25	940071	10-1131	2	LANL	USE	S
EXP0125053a	244126010	MAP	1/26/10 12:55	940071	10-1131	2	LANL	USE	S
EXP0125054a	244126011	MAP	1/26/10 13:24	940071	10-1131	2	LANL	USE	S
EXP0125055a	244126012	MAP	1/26/10 13:54	940071	10-1131	2	LANL	USE	S
EXP0125056a	244126013	MAP	1/26/10 14:23	940071	10-1131	2	LANL	USE	S
EXP0125057a	244126014	MAP	1/26/10 14:53	940071	10-1131	2	LANL	USE	S
EXP0125058a	244126015	MAP	1/26/10 15:22	940071	10-1131	2	LANL	USE	S
EXP0125059a	244126016	MAP	1/26/10 15:51	940071	10-1131	2	LANL	USE	S
EXP0125060a	WXXCCV	MAP	1/26/10 16:21			1		USE	C
EXP0125061a	XIBLK07	MAP	1/26/10 16:50			1		USE	B
EXP0125062a	WXXCRI	MAP	1/26/10 17:20			1		USE	C
EXP0125063a	244126017	MAP	1/26/10 17:49	940071	10-1131	2	LANL	USE	S
EXP0125064a	244126018	MAP	1/26/10 18:19	940071	10-1131	2	LANL	USE	S
EXP0125065a	244126019	MAP	1/26/10 18:49	940071	10-1131	2	LANL	USE	S
EXP0125066a	244126020	MAP	1/26/10 19:18	940071	10-1131	2	LANL	USE	S

EXP0125067a	XIBLK08	MAP	1/26/10 19:48	940049	10-1126	1	LANL	USE	B
EXP0125068a	1202011636	MAP	1/26/10 20:17	940049	10-1126	2	LANL	USE	S
EXP0125069a	1202011639	MAP	1/26/10 20:47	940049	10-1126	2	LANL	USE	S
EXP0125070a	244137001	MAP	1/26/10 21:16	940049	10-1126	2	LANL	USE	S
EXP0125071a	244137002	MAP	1/26/10 21:46	940049	10-1126	2	LANL	USE	S
EXP0125072a	244137003	MAP	1/26/10 22:15	940049	10-1126	2	LANL	USE	S
EXP0125073a	WXXCVC	MAP	1/26/10 22:45			1		USE	C
EXP0125074a	XIBLK09	MAP	1/26/10 23:14			1		USE	B
EXP0125075a	WXXCRI	MAP	1/26/10 23:44			1		USE	C
EXP0125076a	244137004	MAP	1/27/10 0:13	940049	10-1126	2	LANL	USE	S
EXP0125077a	244137005	MAP	1/27/10 0:43	940049	10-1126	2	LANL	USE	S
EXP0125078a	244137006	MAP	1/27/10 1:12	940049	10-1126	2	LANL	USE	S
EXP0125079a	1202011637	MAP	1/27/10 1:42	940049	10-1126	2	LANL	USE	S
EXP0125080a	1202011638	MAP	1/27/10 2:11	940049	10-1126	2	LANL	USE	S
EXP0125081a	244137007	MAP	1/27/10 2:41	940049	10-1126	2	LANL	USE	S
EXP0125082a	WXXCVC	MAP	1/27/10 3:10			1		USE	C
EXP0125083a	XIBLK10	MAP	1/27/10 3:40			1		USE	B
EXP0125084a	WXXCRI	MAP	1/27/10 4:09			1		USE	C
EXP0125085a	1202011650	MAP	1/27/10 4:39	940057	10-1127	2	LANL	USE	S
EXP0125086a	1202011651	MAP	1/27/10 5:08	940057	10-1127	2	LANL	USE	S
EXP0125087a	244142001	MAP	1/27/10 5:38	940057	10-1127	2	LANL	USE	S
EXP0125088a	1202011652	MAP	1/27/10 6:07	940057	10-1127	2	LANL	USE	S
EXP0125089a	1202011653	MAP	1/27/10 6:37	940057	10-1127	2	LANL	USE	S
EXP0125090a	244142002	MAP	1/27/10 7:06	940057	10-1127	2	LANL	USE	S
EXP0125091a	244142003	MAP	1/27/10 7:36	940057	10-1127	2	LANL	USE	S
EXP0125092a	244142004	MAP	1/27/10 8:06	940057	10-1127	2	LANL	USE	S
EXP0125093a	244142005	MAP	1/27/10 8:35	940057	10-1127	2	LANL	USE	S
EXP0125094a	244142006	MAP	1/27/10 9:05	940057	10-1127	2	LANL	USE	S
EXP0125095a	WXXCVC	MAP	1/27/10 9:34			1		USE	C
EXP0125096a	XIBLK11	MAP	1/27/10 10:04			1		USE	B
EXP0125097a	WXXCRI	MAP	1/27/10 10:33			1		USE	C
EXP0125098a	244142007	MAP	1/27/10 11:03	940057	10-1127	2	LANL	USE	S
EXP0125099a	244142008	MAP	1/27/10 11:33	940057	10-1127	2	LANL	USE	S
EXP0125100a	244142009	MAP	1/27/10 12:02	940057	10-1127	2	LANL	USE	S
EXP0125101a	244142010	MAP	1/27/10 12:32	940057	10-1127	2	LANL	USE	S
EXP0125102a	244142011	MAP	1/27/10 13:01	940057	10-1127	2	LANL	USE	S
EXP0125103a	244142012	MAP	1/27/10 13:31	940057	10-1127	2	LANL	USE	S

EXP0125104a	244142013	MAP	1/27/10 14:00	940057	10-1127	2	LANL	USE	S
EXP0125105a	244142014	MAP	1/27/10 14:30	940057	10-1127	2	LANL	USE	S
EXP0125106a	244142015	MAP	1/27/10 14:59	940057	10-1127	2	LANL	USE	S
EXP0125107a	244142016	MAP	1/27/10 15:29	940057	10-1127	2	LANL	USE	S
EXP0125108a	WXCCV	MAP	1/27/10 15:58			1		USE	C
EXP0125109a	XIBLK12	MAP	1/27/10 16:28			1		USE	B
EXP0125110a	WXCCRI	MAP	1/27/10 16:57			1		USE	C
EXP0125111a	244142017	MAP	1/27/10 17:27	940057	10-1127	2	LANL	USE	S
EXP0125112a	244142018	MAP	1/27/10 17:56	940057	10-1127	2	LANL	USE	S
EXP0125113a	244142005	MAP	1/27/10 18:26	940057	10-1127	25	LANL	USE	S
EXP0125114a	XIBLK13	MAP	1/27/10 18:55			1		USE	B
EXP0125115a	1202011638	MAP	1/27/10 19:25	940049	10-1126	2	LANL	USE	S
EXP0125116a	WXCCV	MAP	1/27/10 19:54			1		USE	C
EXP0125117a	XIBLK14	MAP	1/27/10 20:24			1		USE	B
EXP0125118a	WXCCRI	MAP	1/27/10 20:53			1		USE	C
EXP0125119a	1202012974	MAP	1/27/10 21:23	940579	10-1160-1	2	LANL	USE	S
EXP0125120a	1202012975	MAP	1/27/10 21:52	940579	10-1160-1	2	LANL	USE	S
EXP0125121a	244210001	MAP	1/27/10 22:22	940579	10-1160-1	2	LANL	USE	S
EXP0125122a	1202012976	MAP	1/27/10 22:51	940579	10-1160-1	2	LANL	USE	S
EXP0125123a	1202012977	MAP	1/27/10 23:21	940579	10-1160-1	2	LANL	USE	S
EXP0125124a	244210002	MAP	1/27/10 23:50	940579	10-1160-1	2	LANL	USE	S
EXP0125125a	244210003	MAP	1/28/10 0:20	940579	10-1160-1	2	LANL	USE	S
EXP0125126a	244210004	MAP	1/28/10 0:49	940579	10-1160-1	2	LANL	USE	S
EXP0125127a	244210005	MAP	1/28/10 1:19	940579	10-1160-1	2	LANL	USE	S
EXP0125128a	244210006	MAP	1/28/10 1:48	940579	10-1160-1	2	LANL	USE	S
EXP0125129a	WXCCV	MAP	1/28/10 2:18			1		USE	C
EXP0125130a	XIBLK15	MAP	1/28/10 2:47			1		USE	B
EXP0125131a	WXCCRI	MAP	1/28/10 3:17			1		USE	C
EXP0125132a	244210007	MAP	1/28/10 3:46	940579	10-1160-1	2	LANL	USE	S
EXP0125133a	244210008	MAP	1/28/10 4:16	940579	10-1160-1	2	LANL	USE	S
EXP0125134a	244210009	MAP	1/28/10 4:45	940579	10-1160-1	2	LANL	USE	S
EXP0125135a	244210010	MAP	1/28/10 5:15	940579	10-1160-1	2	LANL	USE	S
EXP0125136a	244210011	MAP	1/28/10 5:44	940579	10-1160-1	2	LANL	USE	S
EXP0125137a	244210012	MAP	1/28/10 6:14	940579	10-1160-1	2	LANL	USE	S
EXP0125138a	244210013	MAP	1/28/10 6:43	940579	10-1160-1	2	LANL	USE	S
EXP0125139a	244210014	MAP	1/28/10 7:13	940579	10-1160-1	2	LANL	USE	S
EXP0125140a	244210015	MAP	1/28/10 7:42	940579	10-1160-1	2	LANL	USE	S

EXP0125141a	244142017	MAP	1/28/10 8:12	940057	10-1127	10	LANL	USE	S
EXP0125142a	WXCCV	MAP	1/28/10 8:41			1		USE	C
EXP0125143a	XIBLK16	MAP	1/28/10 9:11			1		USE	B
EXP0125144a	WXXCRI	MAP	1/28/10 9:40			1		USE	C

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS4

Date: 01/22/10  
 Extr. Injection Volume: 10uL  
 Sequence Number: 012210exs  
 Initial Calibration Date: 012210  
 Method: 8321A-Modified  
 Int. Std.: N/A  
 Mobile Phase Lot#: 1236350, 1246467  
 Standard-Samp Reagent Lot#: 1246195, 1253092  
 Reviewed By: *thm*  
 Date: *01/25/10*  
 SOP: GL-OA-E-056 Rev.12  
 Alt Check Std. ID: WXX100122-26

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC Flag
EXS01220001.wiff	XIBLK01	LER	1/22/2010 10:25			1		USE	B
EXS01220002.wiff	XIBLK01	LER	1/22/2010 10:41			1		USE	B
EXS01220003.wiff	WXXICAL-19	LER	1/22/2010 10:57			1		USE	I
EXS01220004.wiff	WXXICAL-20	LER	1/22/2010 11:12			1		USE	I
EXS01220005.wiff	WXXICAL-21	LER	1/22/2010 11:28			1		USE	I
EXS01220006.wiff	WXXICAL-22	LER	1/22/2010 11:44			1		USE	I
EXS01220007.wiff	WXXICAL-23	LER	1/22/2010 12:00			1		USE	I
EXS01220008.wiff	WXXICAL-24	LER	1/22/2010 12:15			1		USE	I
EXS01220009.wiff	WXXICAL-25	LER	1/22/2010 12:31			1		USE	I
EXS01220010.wiff	XIBLK02	LER	1/22/2010 12:47			1		USE	B
EXS01220011.wiff	WXXICV	LER	1/22/2010 13:02			1		USE	C
EXS01220012.wiff	XIBLK03	LER	1/22/2010 13:18			1		USE	B
EXS01220013.wiff	WXXCRI	LER	1/22/2010 13:34			1		USE	C
EXS01220014.wiff	1202011683	LER	1/22/2010 13:49	940071	10-1131	2	LANL	USE	S
EXS01220015.wiff	1202011684	LER	1/22/2010 14:05	940071	10-1131	2	LANL	USE	S
EXS01220016.wiff	244126001	LER	1/22/2010 14:21	940071	10-1131	2	LANL	USE	S
EXS01220017.wiff	1202011685	LER	1/22/2010 14:36	940071	10-1131	2	LANL	USE	S
EXS01220018.wiff	1202011686	LER	1/22/2010 14:52	940071	10-1131	2	LANL	USE	S
EXS01220019.wiff	244126002	LER	1/22/2010 15:08	940071	10-1131	2	LANL	USE	S
EXS01220020.wiff	244126003	LER	1/22/2010 15:24	940071	10-1131	2	LANL	USE	S
EXS01220021.wiff	244126004	LER	1/22/2010 15:39	940071	10-1131	2	LANL	USE	S
EXS01220022.wiff	244126005	LER	1/22/2010 15:55	940071	10-1131	2	LANL	USE	S
EXS01220023.wiff	244126006	LER	1/22/2010 16:11	940071	10-1131	2	LANL	USE	S
EXS01220024.wiff	WXXCCV	LER	1/22/2010 16:26			1		USE	C
EXS01220025.wiff	XIBLK04	LER	1/22/2010 16:42			1		USE	B
EXS01220026.wiff	WXXCRI	LER	1/22/2010 16:58			1		USE	C
EXS01220027.wiff	244126007	LER	1/22/2010 17:13	940071	10-1131	2	LANL	USE	S
EXS01220028.wiff	244126008	LER	1/22/2010 17:29	940071	10-1131	2	LANL	USE	S
EXS01220029.wiff	244126009	LER	1/22/2010 17:45	940071	10-1131	2	LANL	USE	S
EXS01220030.wiff	244126010	LER	1/22/2010 18:01	940071	10-1131	2	LANL	USE	S

EXS01220031.wiff	244126011	LER	1/22/2010 18:16	940071	10-1131	2	LANL	USE	S
EXS01220032.wiff	244126012	LER	1/22/2010 18:32	940071	10-1131	2	LANL	USE	S
EXS01220033.wiff	244126013	LER	1/22/2010 18:48	940071	10-1131	2	LANL	USE	S
EXS01220034.wiff	244126014	LER	1/22/2010 19:03	940071	10-1131	2	LANL	USE	S
EXS01220035.wiff	244126015	LER	1/22/2010 19:19	940071	10-1131	2	LANL	USE	S
EXS01220036.wiff	244126016	LER	1/22/2010 19:35	940071	10-1131	2	LANL	USE	S
EXS01220037.wiff	WXXCCV	LER	1/22/2010 19:50			1		USE	C
EXS01220038.wiff	XIBLK05	LER	1/22/2010 20:06			1		USE	B
EXS01220039.wiff	WXXCRI	LER	1/22/2010 20:22			1		USE	C
EXS01220040.wiff	244126017	LER	1/22/2010 20:38	940071	10-1131	2	LANL	USE	S
EXS01220041.wiff	244126018	LER	1/22/2010 20:53	940071	10-1131	2	LANL	USE	S
EXS01220042.wiff	244126019	LER	1/22/2010 21:09	940071	10-1131	2	LANL	USE	S
EXS01220043.wiff	244126020	LER	1/22/2010 21:25	940071	10-1131	2	LANL	USE	S
EXS01220044.wiff	XIBLK06	LER	1/22/2010 21:40			1		USE	B
EXS01220045.wiff	1202012974	LER	1/22/2010 21:56	940579	10-1160-1	2	LANL	USE	S
EXS01220046.wiff	1202012975	LER	1/22/2010 22:12	940579	10-1160-1	2	LANL	USE	S
EXS01220047.wiff	244210001	LER	1/22/2010 22:28	940579	10-1160-1	2	LANL	USE	S
EXS01220048.wiff	1202012976	LER	1/22/2010 22:43	940579	10-1160-1	2	LANL	USE	S
EXS01220049.wiff	1202012977	LER	1/22/2010 22:59	940579	10-1160-1	2	LANL	USE	S
EXS01220050.wiff	WXXCCV	LER	1/22/2010 23:15			1		USE	C
EXS01220051.wiff	XIBLK07	LER	1/22/2010 23:30			1		USE	B
EXS01220052.wiff	WXXCRI	LER	1/22/2010 23:46			1		USE	C
EXS01220053.wiff	244210002	LER	1/23/2010 0:02	940579	10-1160-1	2	LANL	USE	S
EXS01220054.wiff	244210003	LER	1/23/2010 0:18	940579	10-1160-1	2	LANL	USE	S
EXS01220055.wiff	244210004	LER	1/23/2010 0:33	940579	10-1160-1	2	LANL	USE	S
EXS01220056.wiff	244210005	LER	1/23/2010 0:49	940579	10-1160-1	2	LANL	USE	S
EXS01220057.wiff	244210006	LER	1/23/2010 1:05	940579	10-1160-1	2	LANL	USE	S
EXS01220058.wiff	244210007	LER	1/23/2010 1:20	940579	10-1160-1	2	LANL	USE	S
EXS01220059.wiff	244210008	LER	1/23/2010 1:36	940579	10-1160-1	2	LANL	USE	S
EXS01220060.wiff	244210009	LER	1/23/2010 1:52	940579	10-1160-1	2	LANL	USE	S
EXS01220061.wiff	244210010	LER	1/23/2010 2:07	940579	10-1160-1	2	LANL	USE	S
EXS01220062.wiff	244210011	LER	1/23/2010 2:23	940579	10-1160-1	2	LANL	USE	S
EXS01220063.wiff	WXXCCV	LER	1/23/2010 2:39			1		USE	C
EXS01220064.wiff	XIBLK08	LER	1/23/2010 2:55			1		USE	B
EXS01220065.wiff	WXXCRI	LER	1/23/2010 3:10			1		USE	C
EXS01220066.wiff	244210012	LER	1/23/2010 3:26	940579	10-1160-1	2	LANL	USE	S
EXS01220067.wiff	244210013	LER	1/23/2010 3:42	940579	10-1160-1	2	LANL	USE	S

EXS01220068.wiff	244210014	LER	1/23/2010 3:57	940579	10-1160-1	2	LANL	USE	S
EXS01220069.wiff	244210015	LER	1/23/2010 4:13	940579	10-1160-1	2	LANL	USE	S
EXS01220070.wiff	WXXCCV	LER	1/23/2010 4:29			1		USE	C
EXS01220071.wiff	XIBLK09	LER	1/23/2010 4:45			1		USE	B
EXS01220072.wiff	WXXCRI	LER	1/23/2010 5:00			1		USE	C
EXS01220073.wiff	1202015506	LER	1/23/2010 5:16	941662	VARIOUS	2	LANL	USE	S
EXS01220074.wiff	1202015507	LER	1/23/2010 5:32	941662	VARIOUS	2	LANL	USE	S
EXS01220075.wiff	244612001	LER	1/23/2010 5:47	941662	10-1216	2	LANL	USE	S
EXS01220076.wiff	1202015508	LER	1/23/2010 6:03	941662	10-1216	2	LANL	USE	S
EXS01220077.wiff	1202015509	LER	1/23/2010 6:19	941662	10-1216	2	LANL	USE	S
EXS01220078.wiff	244613001	LER	1/23/2010 6:35	941662	10-1218	2	LANL	USE	S
EXS01220079.wiff	244616002	LER	1/23/2010 6:50	941662	10-1219	2	LANL	USE	S
EXS01220080.wiff	244616003	LER	1/23/2010 7:06	941662	10-1219	2	LANL	USE	S
EXS01220081.wiff	244616004	LER	1/23/2010 7:22	941662	10-1219	2	LANL	USE	S
EXS01220082.wiff	244616005	LER	1/23/2010 7:37	941662	10-1219	2	LANL	USE	S
EXS01220083.wiff	WXXCCV	LER	1/23/2010 7:53			1		USE	C
EXS01220084.wiff	XIBLK10	LER	1/23/2010 8:09			1		USE	B
EXS01220085.wiff	WXXCRI	LER	1/23/2010 8:24			1		USE	C
EXS01220086.wiff	244616006	LER	1/23/2010 8:40	941662	10-1219	2	LANL	USE	S
EXS01220087.wiff	244620001	LER	1/23/2010 8:56	941662	10-1221	2	LANL	USE	S
EXS01220088.wiff	244620002	LER	1/23/2010 9:11	941662	10-1221	2	LANL	USE	S
EXS01220089.wiff	244620003	LER	1/23/2010 9:27	941662	10-1221	2	LANL	USE	S
EXS01220090.wiff	244620004	LER	1/23/2010 9:43	941662	10-1221	2	LANL	USE	S
EXS01220091.wiff	244620005	LER	1/23/2010 9:59	941662	10-1221	2	LANL	USE	S
EXS01220092.wiff	244620006	LER	1/23/2010 10:14	941662	10-1221	2	LANL	USE	S
EXS01220093.wiff	244623001	LER	1/23/2010 10:30	941662	10-1223	2	LANL	USE	S
EXS01220094.wiff	244623002	LER	1/23/2010 10:46	941662	10-1223	2	LANL	USE	S
EXS01220095.wiff	244623003	LER	1/23/2010 11:01	941662	10-1223	2	LANL	USE	S
EXS01220096.wiff	WXXCCV	LER	1/23/2010 11:17			1		USE	C
EXS01220097.wiff	XIBLK11	LER	1/23/2010 11:33			1		USE	B
EXS01220098.wiff	WXXCRI	LER	1/23/2010 11:48			1		USE	C
EXS01220099.wiff	244623004	LER	1/23/2010 12:04	941662	10-1223	2	LANL	USE	S
EXS01220100.wiff	244623005	LER	1/23/2010 12:20	941662	10-1223	2	LANL	USE	S
EXS01220101.wiff	244623006	LER	1/23/2010 12:36	941662	10-1223	2	LANL	USE	S
EXS01220102.wiff	WXXCCV	LER	1/23/2010 12:51			1		USE	C
EXS01220103.wiff	XIBLK12	LER	1/23/2010 13:07			1		USE	B
EXS01220104.wiff	WXXCRI	LER	1/23/2010 13:23			1		USE	C



GC  
SEMIVOLATILE  
PCB  
ANALYSIS

**PCB Case Narrative  
Los Alamos National Laboratory (LANL)  
SDG 10-1160**

**Method/Analysis Information**

**Procedure:** Analysis of Polychlorinated Biphenyls by ECD  
**Analytical Method:** SW846 8082  
**Prep Method:** SW846 3550B  
**Analytical Batch Number:** 941128  
**Prep Batch Number:** 941127

**Sample Analysis**

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

<b>Sample ID</b>	<b>Client ID</b>
244209001	RE12-10-7734
244209002	RE12-10-7701
244209003	RE12-10-7702
244209004	RE12-10-7700
244209005	RE12-10-7699
244209006	RE12-10-7727
1202014259	Method Blank (MB)
1202014260	Laboratory Control Sample (LCS)
1202014261	244241003(RE46-10-10030) Matrix Spike (MS)
1202014262	244241003(RE46-10-10030) Matrix Spike Duplicate (MSD)

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

**Preparation/Analytical Method Verification**

**SOP Reference**

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-040 REV# 14.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 23.0.

**Calibration Information**

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package.

**Initial Calibration**

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

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the

concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

#### **Continuing Calibration Verification (CCV) Requirements**

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

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

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

The MB analyzed with this SDG met the acceptance criteria.

##### **Surrogate Recoveries**

All surrogate recoveries were within the established acceptance criteria for this SDG.

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

The LCS spike recoveries met the acceptance limits.

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

A LANL sample of similar matrix associated with another SDG (#10-1173) was selected for the matrix spike and matrix spike duplicate analysis. A Form III and QC raw data are included in the package summarizing the results.

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

The MS recoveries were within the established acceptance limits.

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

The MSD recoveries were within the established acceptance limits.

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

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

#### **Technical Information**

##### **Holding Time Specifications**

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

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

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

##### **Sample Dilutions**

The samples in this SDG did not require dilutions.

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

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

#### **Miscellaneous Information**

##### **Electronic Package Comment**

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

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

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

Data exception report (DER) is for documentation of any procedural anomalies that may deviate from referenced SOP or contractual document. A DER was not required for this SDG.

#### **Manual Integration**

Certain standards and samples may have required manual integration to correctly position the baseline as set in the calibration standard injections. If manual integration was performed, copies of all manual integration peak profiles are included in the raw data section of this PCB fraction.

#### **Additional Comments**

The additional comments field is used to address special issues associated with each analysis, clarify method/contractual issues pertaining to the analysis, and to list any report documents generated as a result of sample analysis or review. The following additional comments were required:

The higher results from either column have been chosen and reported in the data package for the client samples, MB and LCS.

The data reported on the form I and III may differ slightly from the data reported on the form X. This is due to software limitations in rounding differences between the forms.

Aroclors quantitated on the raw data report by the Target data system do not necessarily represent positive Aroclor identification. In order for positive identification to be made, the Aroclor must match in pattern and retention time; as well as quantitate relatively close between the primary and confirmation columns, as specified in SW846 method 8000. When these conditions are not met, the Aroclor is reported as a non-detect on the data report. These situations will be noted on the raw data as DMP, representing does not match pattern, or DNC does not confirm.

Due to software limitation, the Form VIIs will display the results either in the % difference or % drift depending on the type of the calibration curve. If the curve of all analytes is generated using an average response factor (RF), the Form VII will display results using the %difference calculation (RF). If the curve of one or more analytes is generated using a linear curve, the Form VII will display results using the % drift calculation (by concentration) for all analytes.

#### **System Configuration**

The Semi-Volatiles-PCB analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
ECD1A.I_1	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP I	30m x 0.25mm, 0.25um (Rtx-CLPesticide)
ECD1A.I_2	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP II	30m x 0.25mm, 0.20um (Rtx-CLPesticideII)

#### **Certification Statement**

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

**Review Validation**

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

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

Reviewer: Jimmy Cao

Date: 2/3/10

## Roadmap for LANL 10-1160 PCB

This roadmap was analyzed by yip00818 on 01-14-2010, 14:35.

This roadmap was reviewed by rob01090 on 01-21-2010, 15:44.

This roadmap was packaged by yml on 02-02-2010, 15:16.

This roadmap was validated by jim01140 on 02-03-2010, 13:38.

Front Sample Column

exclude	manual	datafile	smplid	sampletype	injdte	injtime	sublist	clientid	dilution	prepbathid	comment
<input type="checkbox"/>	N	/chem/ecdlia/011410.b/014f1401.d	244209001	sample	14-JAN-2010	11:06	10-1160.sub	RE12-10-7734	1.00000	941128	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecdlia/011410.b/015f1501.d	244209002	sample	14-JAN-2010	11:19	10-1160.sub	RE12-10-7701	1.00000	941128	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecdlia/011410.b/016f1601.d	244209003	sample	14-JAN-2010	11:31	10-1160.sub	RE12-10-7702	1.00000	941128	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecdlia/011410.b/017f1701.d	244209004	sample	14-JAN-2010	11:44	10-1160.sub	RE12-10-7700	1.00000	941128	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecdlia/011410.b/018f1801.d	244209005	sample	14-JAN-2010	11:56	10-1160.sub	RE12-10-7699	1.00000	941128	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecdlia/011410.b/019f1901.d	244209006	sample	14-JAN-2010	12:09	10-1160.sub	RE12-10-7727	1.00000	941128	UPLOAD BOTH COLUMNS, USE HIGHER

Back Sample Column

exclude	manual	datafile	smplid	sampletype	injdte	injtime	sublist	clientid	dilution	prepbathid	comment
<input type="checkbox"/>	N	/chem/ecdlia/011410.b/014b1401.d	244209001	sample	14-JAN-2010	11:06	10-1160.sub	RE12-10-7734	1.00000	941128	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecdlia/011410.b/015b1501.d	244209002	sample	14-JAN-2010	11:19	10-1160.sub	RE12-10-7701	1.00000	941128	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecdlia/011410.b/016b1601.d	244209003	sample	14-JAN-2010	11:31	10-1160.sub	RE12-10-7702	1.00000	941128	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecdlia/011410.b/017b1701.d	244209004	sample	14-JAN-2010	11:44	10-1160.sub	RE12-10-7700	1.00000	941128	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecdlia/011410.b/018b1801.d	244209005	sample	14-JAN-2010	11:56	10-1160.sub	RE12-10-7699	1.00000	941128	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecdlia/011410.b/019b1901.d	244209006	sample	14-JAN-2010	12:09	10-1160.sub	RE12-10-7727	1.00000	941128	UPLOAD BOTH COLUMNS, USE HIGHER

Front QC Sample Column

exclude	manual	datafile	smplid	sampletype	injdte	injtime	sublist	clientid	dilution	prepbathid	comment
<input type="checkbox"/>	N	/chem/ecdlia/011410.b/012f1201.d	1202014259	mb	14-JAN-2010	10:45	10-1160.sub	PBLK01	1.00000	941128	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecdlia/011410.b/013f1301.d	1202014260	lcs	14-JAN-2010	10:56	10-1160.sub	PBLK01LCS	1.00000	941128	UPLOAD BOTH COLUMNS, USE HIGHER

Back QC Sample Column

exclude	manual	datafile	smplid	sampletype	injdte	injtime	sublist	clientid	dilution	prepbathid	comment
<input type="checkbox"/>	N	/chem/ecdlia/011410.b/012b1201.d	1202014259	mb	14-JAN-2010	10:45	10-1160.sub	PBLK01	1.00000	941128	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecdlia/011410.b/013b1301.d	1202014260	lcs	14-JAN-2010	10:56	10-1160.sub	PBLK01LCS	1.00000	941128	UPLOAD BOTH COLUMNS, USE HIGHER

# SAMPLE DATA SUMMARY

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

SDG Number: 10-1160  
Lab Sample ID: 244209005

Date Collected: 01/06/2010 12:00  
Date Received: 01/09/2010 09:30  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.I  
Analyst: YS1  
Aliquot: 30.12 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
%Moisture: 20.4  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE12-10-7699  
Batch ID: 941128  
Run Date: 01/14/2010 11:56  
Prep Date: 01/13/2010 19:31  
Data File: 018f1801.d  
018b1801.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.17	ug/kg	1.39	4.17	1
11104-28-2	Aroclor-1221	U	4.17	ug/kg	1.39	4.17	1
11141-16-5	Aroclor-1232	U	4.17	ug/kg	1.39	4.17	1
53469-21-9	Aroclor-1242	U	4.17	ug/kg	1.39	4.17	1
12672-29-6	Aroclor-1248	U	4.17	ug/kg	1.39	4.17	1
11097-69-1	Aroclor-1254	U	4.17	ug/kg	1.39	4.17	1
11096-82-5	Aroclor-1260	U	4.17	ug/kg	1.39	4.17	1



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

SDG Number: 10-1160  
Lab Sample ID: 244209004

Date Collected: 01/06/2010 12:00  
Date Received: 01/09/2010 09:30  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.I  
Analyst: YS1  
Aliquot: 30.02 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
%Moisture: 6.3  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE12-10-7700  
Batch ID: 941128  
Run Date: 01/14/2010 11:44  
Prep Date: 01/13/2010 19:31  
Data File: 017f1701.d  
017b1701.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.56	ug/kg	1.18	3.56	1
11104-28-2	Aroclor-1221	U	3.56	ug/kg	1.18	3.56	1
11141-16-5	Aroclor-1232	U	3.56	ug/kg	1.18	3.56	1
53469-21-9	Aroclor-1242	U	3.56	ug/kg	1.18	3.56	1
12672-29-6	Aroclor-1248	U	3.56	ug/kg	1.18	3.56	1
11097-69-1	Aroclor-1254	U	3.56	ug/kg	1.18	3.56	1
11096-82-5	Aroclor-1260	U	3.56	ug/kg	1.18	3.56	1

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

SDG Number: 10-1160  
Lab Sample ID: 244209002

Client ID: RE12-10-7701  
Batch ID: 941128  
Run Date: 01/14/2010 11:19  
Prep Date: 01/13/2010 19:31  
Data File: 015f1501.d  
015b1501.d

Date Collected: 01/06/2010 12:00  
Date Received: 01/09/2010 09:30  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.I  
Analyst: YS1  
Aliquot: 30.18 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
%Moisture: 25.6  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.45	ug/kg	1.48	4.45	1
11104-28-2	Aroclor-1221	U	4.45	ug/kg	1.48	4.45	1
11141-16-5	Aroclor-1232	U	4.45	ug/kg	1.48	4.45	1
53469-21-9	Aroclor-1242	U	4.45	ug/kg	1.48	4.45	1
12672-29-6	Aroclor-1248	U	4.45	ug/kg	1.48	4.45	1
11097-69-1	Aroclor-1254	U	4.45	ug/kg	1.48	4.45	1
11096-82-5	Aroclor-1260	U	4.45	ug/kg	1.48	4.45	1

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

SDG Number: 10-1160  
Lab Sample ID: 244209003

Date Collected: 01/06/2010 12:00  
Date Received: 01/09/2010 09:30  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.1  
Analyst: YS1  
Aliquot: 30.15 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
%Moisture: 15  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE12-10-7702  
Batch ID: 941128  
Run Date: 01/14/2010 11:31  
Prep Date: 01/13/2010 19:31  
Data File: 016f1601.d  
016b1601.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.90	ug/kg	1.30	3.90	1
11104-28-2	Aroclor-1221	U	3.90	ug/kg	1.30	3.90	1
11141-16-5	Aroclor-1232	U	3.90	ug/kg	1.30	3.90	1
53469-21-9	Aroclor-1242	U	3.90	ug/kg	1.30	3.90	1
12672-29-6	Aroclor-1248	U	3.90	ug/kg	1.30	3.90	1
11097-69-1	Aroclor-1254	U	3.90	ug/kg	1.30	3.90	1
11096-82-5	Aroclor-1260	U	3.90	ug/kg	1.30	3.90	1

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

SDG Number: 10-1160  
Lab Sample ID: 244209006

Client ID: RE12-10-7727  
Batch ID: 941128  
Run Date: 01/14/2010 12:09  
Prep Date: 01/13/2010 19:31  
Data File: 019f1901.d  
019b1901.d

Date Collected: 01/06/2010 12:00  
Date Received: 01/09/2010 09:30  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.I  
Analyst: YS1  
Aliquot: 30.05 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
%Moisture: 25.3  
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	4.45	ug/kg	1.48	4.45	1
11104-28-2	Aroclor-1221	U	4.45	ug/kg	1.48	4.45	1
11141-16-5	Aroclor-1232	U	4.45	ug/kg	1.48	4.45	1
53469-21-9	Aroclor-1242	U	4.45	ug/kg	1.48	4.45	1
12672-29-6	Aroclor-1248	U	4.45	ug/kg	1.48	4.45	1
11097-69-1	Aroclor-1254	U	4.45	ug/kg	1.48	4.45	1
11096-82-5	Aroclor-1260	U	4.45	ug/kg	1.48	4.45	1

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

SDG Number: 10-1160  
Lab Sample ID: 244209001

Client ID: RE12-10-7734  
Batch ID: 941128  
Run Date: 01/14/2010 11:06  
Prep Date: 01/13/2010 19:31  
Data File: 014f1401.d  
014b1401.d

Date Collected: 01/06/2010 12:00  
Date Received: 01/09/2010 09:30  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.I  
Analyst: YS1  
Aliquot: 30.04 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
%Moisture: 6.5  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.56	ug/kg	1.19	3.56	1
11104-28-2	Aroclor-1221	U	3.56	ug/kg	1.19	3.56	1
11141-16-5	Aroclor-1232	U	3.56	ug/kg	1.19	3.56	1
53469-21-9	Aroclor-1242	U	3.56	ug/kg	1.19	3.56	1
12672-29-6	Aroclor-1248	U	3.56	ug/kg	1.19	3.56	1
11097-69-1	Aroclor-1254	U	3.56	ug/kg	1.19	3.56	1
11096-82-5	Aroclor-1260	U	3.56	ug/kg	1.19	3.56	1

# QUALITY CONTROL SUMMARY

PCB  
Surrogate Recovery Report

Page 1 of 1

SDG Number: 10-1160

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 #
1202014259	MB for batch 941127	64	60	65	62
1202014260	LCS for batch 941127	68	63	69	67
244209001	RE12-10-7734	66	61	66	68
244209002	RE12-10-7701	62	58	68	65
244209003	RE12-10-7702	67	63	53	71
244209004	RE12-10-7700	61	57	65	62
244209005	RE12-10-7699	59	47	66	61
244209006	RE12-10-7727	62	58	66	62

**Surrogate**

4CMX = 4cmx

DCB = Decachlorobiphenyl

**Acceptance Limits**

(34%-105%)

(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: 10-1160

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 941127

Matrix: SOIL

Lab Sample ID:1202014260

Instrument: ECD1A.I

Analysis Date: 01/14/2010 10:56

Dilution: 1

Analyst: YS1

Prep Batch ID: 941127

Inj. Vol: 1 uL

Batch ID: 941128

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	22.3	67	41-110
11096-82-5	LCS Aroclor-1260	33.3	0.0	25.2	76	48-110



PCB

Page 1 of 2

Quality Control Summary  
Spike Recovery Report

SDG Number: 10-1173

Sample Type: Matrix Spike

Client ID: RE46-10-10030MS

Matrix: S

Lab Sample ID:1202014261

%Moisture: 7.3

Instrument: ECD1A.I

Analysis Date: 01/14/2010 13:20

Dilution: 5

Analyst: YS1

Pren Batch ID 941127

Inj. Vol: 1 uL

Batch ID: 941128

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
12674-11-2	MS Aroclor-1016	35.8	0.00	U 25.0	70	23-117
11096-82-5	MS Aroclor-1260	35.8	8.90	J 36.7	78	27-116

PCB  
Quality Control Summary  
Spike Recovery Report

Page 2 of 2

SDG Number: 10-1173

Sample Type: Matrix Spike Duplicate

Client ID: RE46-10-10030MSD

Matrix: S

Lab Sample ID:1202014262

%Moisture: 7.3

Instrument: ECD1A.I

Analysis Date: 01/14/2010 13:33

Dilution: 5

Analyst: YS1

Prep Batch ID: 941127

Inj. Vol: 1 uL

Batch ID: 941128

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	35.8	0.00	U	24.8	69	23-117	1 0-30
11096-82-5	MSD Aroclor-1260	35.8	8.90	J	36.6	77	27-116	0 0-30

## Method Blank Summary

Page 1 of 1

SDG Number:	10-1160	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 941127	Instrument ID:	ECD1A.I_2	Data File:	012b1201-1.d
Lab Sample ID:	1202014259		ECD1A.I_1		012f1201-1.d
Column:	CLP2	Prep Date:	01/13/2010 19:31	Analyzed:	01/14/10 10:45
	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 941127	1202014260	013f1301-1.d 013b1301-1.d	01/14/10	1056
02 RE12-10-7734	244209001	014f1401.d 014b1401.d	01/14/10	1106
03 RE12-10-7701	244209002	015f1501.d 015b1501.d	01/14/10	1119
04 RE12-10-7702	244209003	016f1601.d 016b1601.d	01/14/10	1131
05 RE12-10-7700	244209004	017f1701.d 017b1701.d	01/14/10	1144
06 RE12-10-7699	244209005	018f1801.d 018b1801.d	01/14/10	1156
07 RE12-10-7727	244209006	019f1901.d 019b1901.d	01/14/10	1209

# SAMPLE DATA

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

Page 1 of 1

SDG Number: 10-1160  
Lab Sample ID: 244209005

Date Collected: 01/06/2010 12:00  
Date Received: 01/09/2010 09:30  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.I  
Analyst: YS1  
Aliquot: 30.12 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
%Moisture: 20.4  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE12-10-7699  
Batch ID: 941128  
Run Date: 01/14/2010 11:56  
Prep Date: 01/13/2010 19:31  
Data File: 018f1801.d  
018b1801.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.17	ug/kg	1.39	4.17	1
11104-28-2	Aroclor-1221	U	4.17	ug/kg	1.39	4.17	1
11141-16-5	Aroclor-1232	U	4.17	ug/kg	1.39	4.17	1
53469-21-9	Aroclor-1242	U	4.17	ug/kg	1.39	4.17	1
12672-29-6	Aroclor-1248	U	4.17	ug/kg	1.39	4.17	1
11097-69-1	Aroclor-1254	U	4.17	ug/kg	1.39	4.17	1
11096-82-5	Aroclor-1260	U	4.17	ug/kg	1.39	4.17	1

Data File: /chem/ecdl1a.i/011410.b/018f1801.d  
Report Date: 23-Jan-2010 12:02

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011410.b/018f1801.d  
Lab Smp Id: 244209005 Client Smp ID: RE12-10-7699  
Inj Date : 14-JAN-2010 11:56  
Operator : YS1 Inst ID: ecdl1a.i  
Smp Info : |244209005|1|  
Misc Info : |ECD82P\_1S|941128|SVA|LANL|SOIL|RE12-10-7699|||  
Comment :  
Method : /chem/ecdl1a.i/011410.b/ECD1-F-8082-121409.m  
Meth Date : 23-Jan-2010 11:59 yip00818 Quant Type: ESTD  
Cal Date : 14-DEC-2009 11:34 Cal File: 040f4001.d  
Als bottle: 18  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1160.sub  
Target Version: 3.50 Sample Matrix: Soil  
Processing Host: hpclp1

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

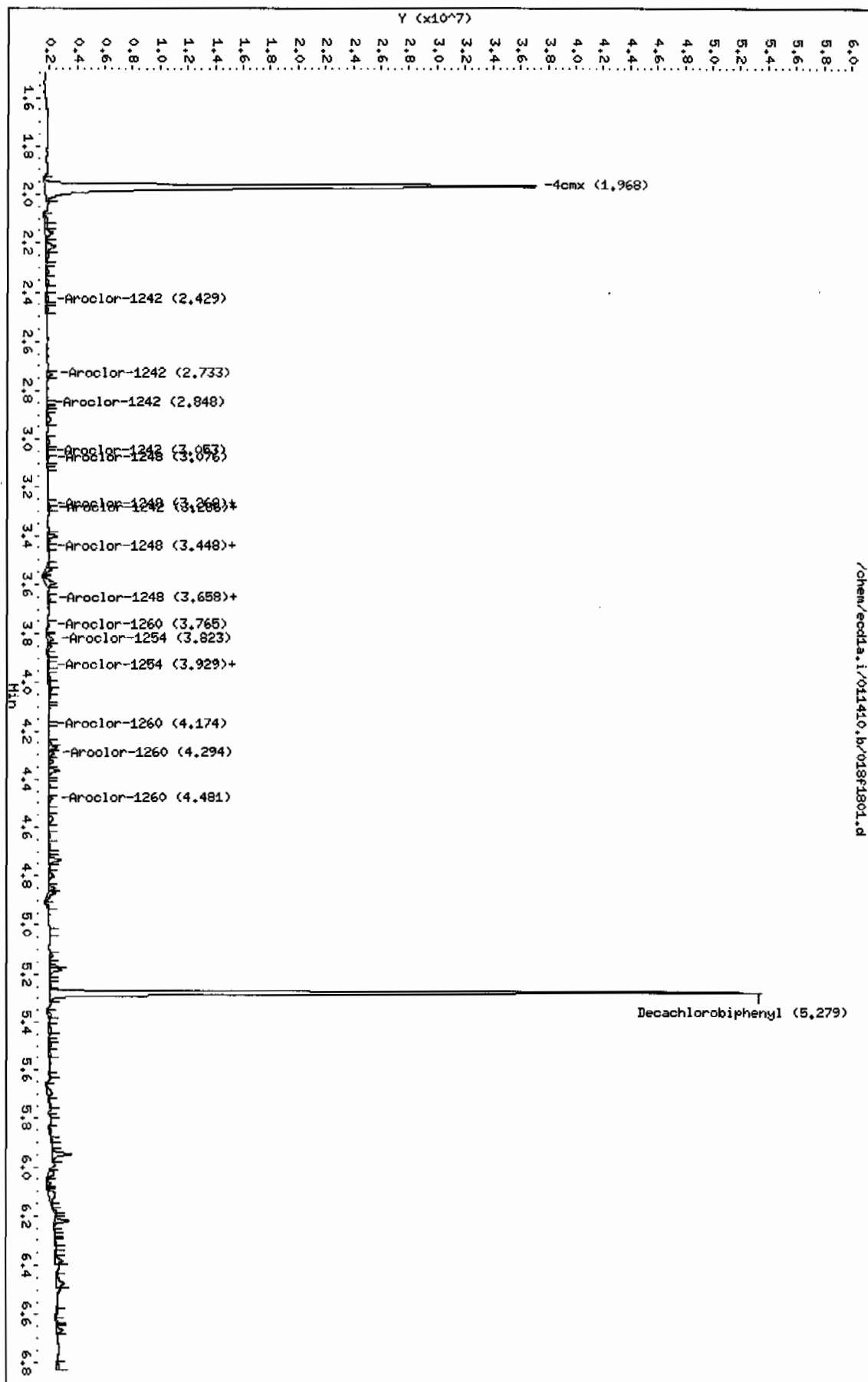
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.12000	Weight of sample extracted (g)
M	20.44340	% Moisture

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						
1.968	1.968	0.000	42485126	118.845	5.0 80.00- 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl CAS #: 2051-24-3						
5.279	5.280	-0.001	39730290	131.553	5.5 80.00- 120.00	100.00
-----						

Data File: /chem/eodda.i/011410.b/018F1801.d  
Date: 14-JAN-2010 11:56  
Client ID: RE12-10-7639  
Sample Info: 124420900511  
Volume Injected (uL): 1.0  
Column phase: CLP1

Instrument: eodda.i  
Operator: YS1  
Column diameter: 0.25



Data File: /chem/ecdl1a.i/011410.b/018b1801.d  
Report Date: 23-Jan-2010 12:02

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL  
Data file : /chem/ecdl1a.i/011410.b/018b1801.d  
Lab Smp Id: 244209005 Client Smp ID: RE12-10-7699  
Inj Date : 14-JAN-2010 11:56  
Operator : YS1 Inst ID: ecd1a.i  
Smp Info : |244209005|1|  
Misc Info : |ECD82P\_1S|941128|SVA|LANL|SOIL|RE12-10-7699|||  
Comment :  
Method : /chem/ecdl1a.i/011410.b/ECD1-B-8082-121409.m  
Meth Date : 23-Jan-2010 11:59 yip00818 Quant Type: ESTD  
Cal Date : 14-DEC-2009 12:16 Cal File: 044b4401.d  
Als bottle: 18  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1160.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	30.12000	Weight of sample extracted (g)
M	20.44340	% 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						
2.299	2.298	0.001	26733233	93.6891	3.9 80.00~ 120.00	100.00
CAS #: 2051-24-3						
5.942	5.943	-0.001	27035528	121.899	5.1 80.00~ 120.00	100.00



Data File: /chem/ecdl.a.i/011410.b/01801801.d

Date: 14-JAN-2010 11:56

Client ID: REL2-10-7699

Sample Info: 1244209005111

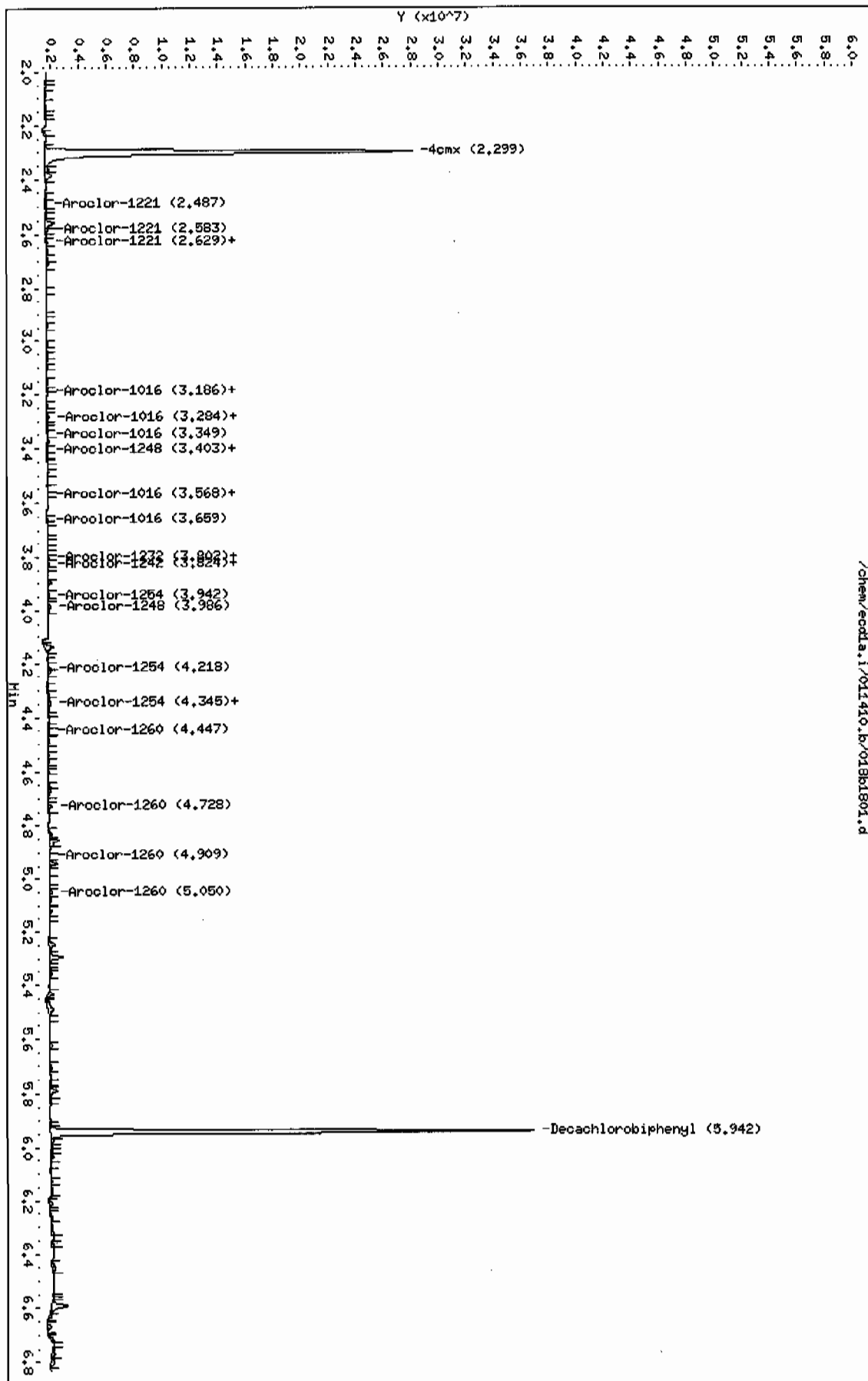
Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: ecdl.a.i

Operator: YSL

Column diameter: 0.25



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

SDG Number: 10-1160  
Lab Sample ID: 244209004

Date Collected: 01/06/2010 12:00  
Date Received: 01/09/2010 09:30  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.I  
Analyst: YS1  
Aliquot: 30.02 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
%Moisture: 6.3  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.56	ug/kg	1.18	3.56	1
11104-28-2	Aroclor-1221	U	3.56	ug/kg	1.18	3.56	1
11141-16-5	Aroclor-1232	U	3.56	ug/kg	1.18	3.56	1
53469-21-9	Aroclor-1242	U	3.56	ug/kg	1.18	3.56	1
12672-29-6	Aroclor-1248	U	3.56	ug/kg	1.18	3.56	1
11097-69-1	Aroclor-1254	U	3.56	ug/kg	1.18	3.56	1
11096-82-5	Aroclor-1260	U	3.56	ug/kg	1.18	3.56	1

Data File: /chem/ecdl1a.i/011410.b/017f1701.d  
Report Date: 23-Jan-2010 12:02

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL  
Data file : /chem/ecdl1a.i/011410.b/017f1701.d  
Lab Smp Id: 244209004 Client Smp ID: RE12-10-7700  
Inj Date : 14-JAN-2010 11:44  
Operator : YS1 Inst ID: ecd1a.i  
Smp Info : |244209004|1|  
Misc Info : |ECD82P\_1S|941128|SVA|LANL|SOIL|RE12-10-7700|||  
Comment :  
Method : /chem/ecdl1a.i/011410.b/ECD1-F-8082-121409.m  
Meth Date : 23-Jan-2010 11:59 yip00818 Quant Type: ESTD  
Cal Date : 14-DEC-2009 11:34 Cal File: 040f4001.d  
Als bottle: 17  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1160.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	30.02000	Weight of sample extracted (g)
M	6.33660	% Moisture

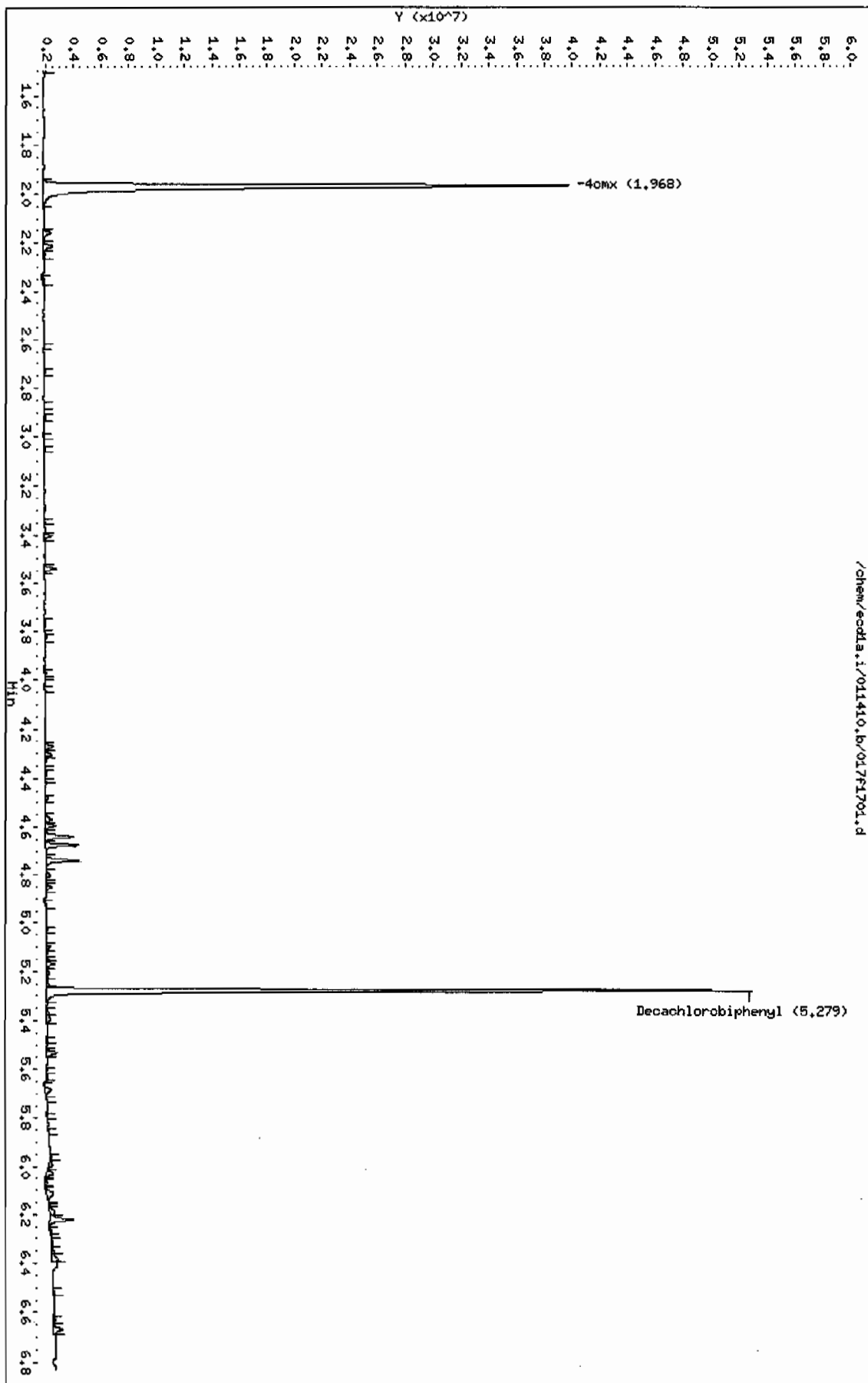
Cpnd Variable Local Compound Variable

CONCENTRATIONS							
		ON-COL		FINAL			
RT	EXP RT	DLT RT	RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
---	---	---	---	---	---	---	---
\$ 11 4cmx				CAS #: 877-09-8			
1.968	1.968	0.000	43445121	121.531	4.3	80.00- 120.00	100.00
-----							
\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3			
5.279	5.280	-0.001	39027897	129.227	4.6	80.00- 120.00	100.00
-----							

Data File: /chem/ecdl1a.i/011410.b/017F1701.d  
Date: 14-JAN-2010 11:44  
Client ID: RE12-10-7700  
Sample Info: 1244209004111  
Volume Injected (uL): 1.0  
Column phase: CLP1

Instrument: ecdl1a.i  
Operator: YS1  
Column diameter: 0.25

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Data File: /chem/ecdl1a.i/011410.b/017b1701.d  
Report Date: 23-Jan-2010 12:02

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011410.b/017b1701.d  
Lab Smp Id: 244209004 Client Smp ID: RE12-10-7700  
Inj Date : 14-JAN-2010 11:44  
Operator : YS1 Inst ID: ecd1a.i  
Smp Info : |244209004|1|  
Misc Info : |ECD82P\_1S|941128|SVA|LANL|SOIL|RE12-10-7700|||  
Comment :  
Method : /chem/ecdl1a.i/011410.b/ECD1-B-8082-121409.m  
Meth Date : 23-Jan-2010 11:59 yip00818 Quant Type: ESTD  
Cal Date : 14-DEC-2009 12:16 Cal File: 044b4401.d  
Als bottle: 17  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1160.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	30.02000	Weight of sample extracted (g)
M	6.33660	% Moisture

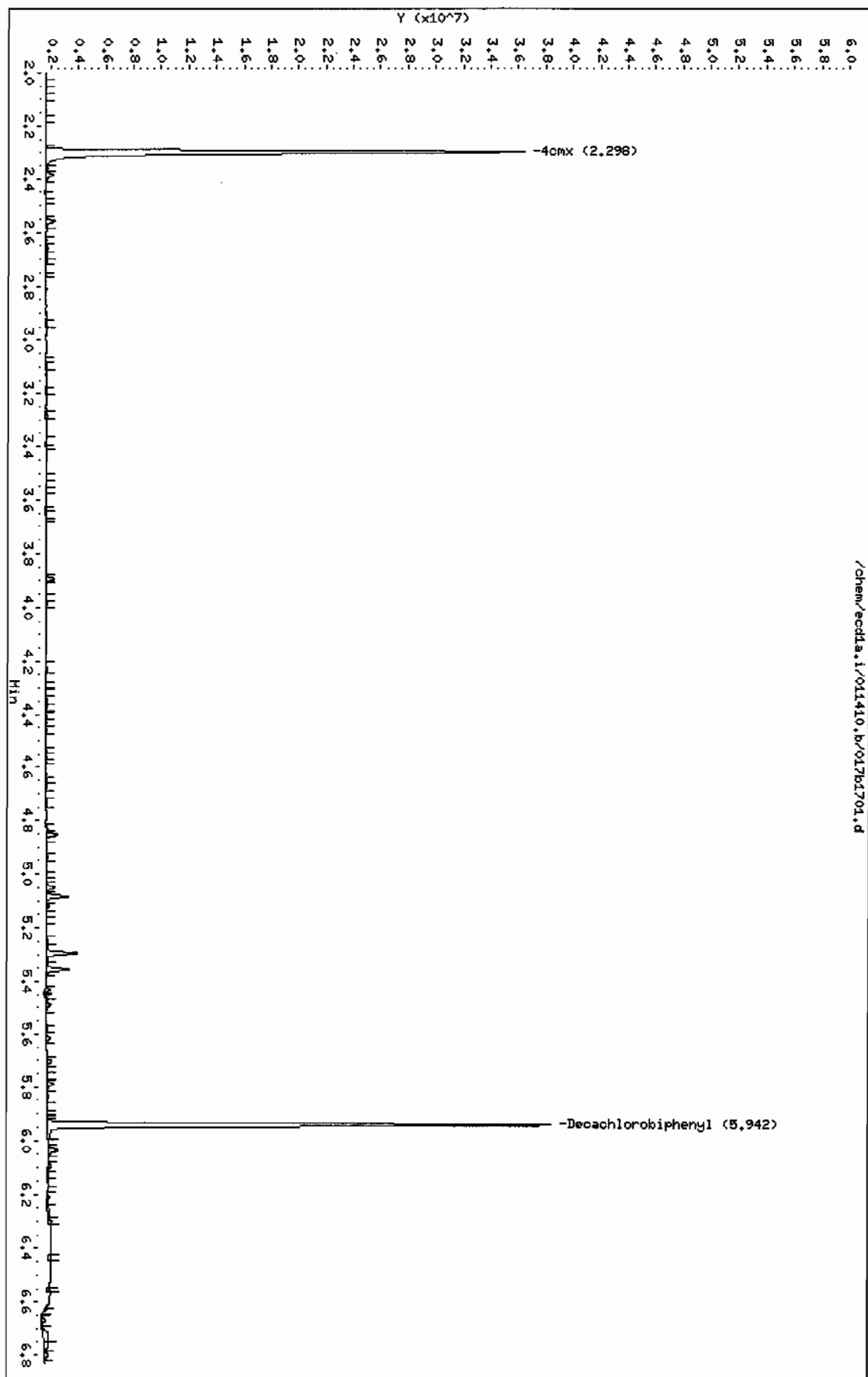
Cpnd Variable Local Compound Variable

CONCENTRATIONS						
			ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
\$ 11 4cmx				CAS #: 877-09-8		
2.298	2.298	0.000	32360467 113.410	4.0	80.00- 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3		
5.942	5.943	-0.001	27705917 124.921	4.4	80.00- 120.00	100.00
-----						

Data File: /chem/ecdda.i/011410.b/017b1701.d  
Date: 14-JAN-2010 11:44  
Client ID: RE12-10-7700  
Sample Info: 124420900411  
Volume Injected (uL): 1.0  
Column Phase: CLP2

Instrument: ecdda.i  
Operator: YSL  
Column diameter: 0.25

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

SDG Number: 10-1160  
Lab Sample ID: 244209002

Date Collected: 01/06/2010 12:00  
Date Received: 01/09/2010 09:30  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.I  
Analyst: YS1  
Aliquot: 30.18 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
% Moisture: 25.6  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE12-10-7701  
Batch ID: 941128  
Run Date: 01/14/2010 11:19  
Prep Date: 01/13/2010 19:31  
Data File: 015f1501.d  
015b1501.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.45	ug/kg	1.48	4.45	1
11104-28-2	Aroclor-1221	U	4.45	ug/kg	1.48	4.45	1
11141-16-5	Aroclor-1232	U	4.45	ug/kg	1.48	4.45	1
53469-21-9	Aroclor-1242	U	4.45	ug/kg	1.48	4.45	1
12672-29-6	Aroclor-1248	U	4.45	ug/kg	1.48	4.45	1
11097-69-1	Aroclor-1254	U	4.45	ug/kg	1.48	4.45	1
11096-82-5	Aroclor-1260	U	4.45	ug/kg	1.48	4.45	1

Data File: /chem/ecd1a.i/011410.b/015f1501.d  
Report Date: 23-Jan-2010 12:01

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/011410.b/015f1501.d

Lab Smp Id: 244209002

Client Smp ID: RE12-10-7701

Inj Date : 14-JAN-2010 11:19

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |244209002|1|

Misc Info : |ECD82P\_1S|941128|SVA|LANL|SOIL|RE12-10-7701|||

Comment :

Method : /chem/ecd1a.i/011410.b/ECD1-F-8082-121409.m

Meth Date : 23-Jan-2010 11:59 yip00818 Quant Type: ESTD

Cal Date : 14-DEC-2009 11:34

Cal File: 040f4001.d

Als bottle: 15

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: 10-1160.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	30.18000	Weight of sample extracted (g)
M	25.60030	% Moisture

Cpnd Variable

Local Compound Variable

CONCENTRATIONS

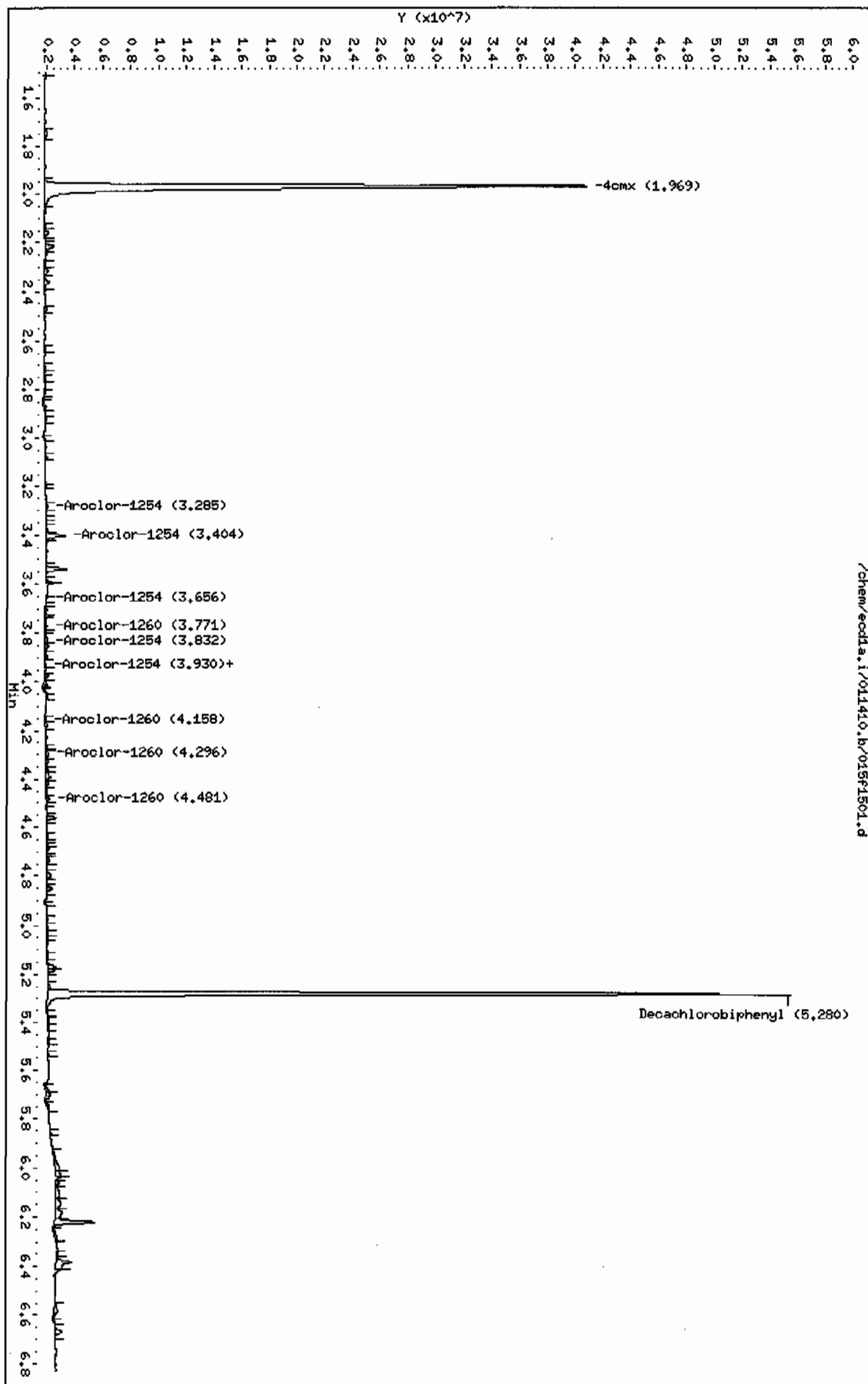
ON-COL FINAL

RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
\$ 11 4cmx					CAS #: 877-09-8	
1.969	1.968	0.001	44564051 124.661	5.6	80.00- 120.00	100.00
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3	
5.280	5.280	0.000	41185969 136.373	6.1	80.00- 120.00	100.00



Data File: /chem/ecdda.i/011410.b/015f1501.d  
Date: 14-JAN-2010 11:19  
Client ID: RE12-10-7701  
Sample Info: 1244209002111  
Volume Injected (uL): 1.0  
Column phase: CLP1

Instrument: ecdda.i  
Operator: YSL  
Column diameter: 0.25



Data File: /chem/ecdl1a.i/011410.b/015b1501.d  
Report Date: 23-Jan-2010 12:01

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL  
Data file : /chem/ecdl1a.i/011410.b/015b1501.d  
Lab Smp Id: 244209002 Client Smp ID: RE12-10-7701  
Inj Date : 14-JAN-2010 11:19  
Operator : YS1 Inst ID: ecd1a.i  
Smp Info : |244209002|1|  
Misc Info : |ECD82P\_1S|941128|SVA|LANL|SOIL|RE12-10-7701|||  
Comment :  
Method : /chem/ecdl1a.i/011410.b/ECD1-B-8082-121409.m  
Meth Date : 23-Jan-2010 11:59 yip00818 Quant Type: ESTD  
Cal Date : 14-DEC-2009 12:16 Cal File: 044b4401.d  
Als bottle: 15  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1160.sub  
Target Version: 3.50 Sample Matrix: Soil  
Processing Host: hpc1p1

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

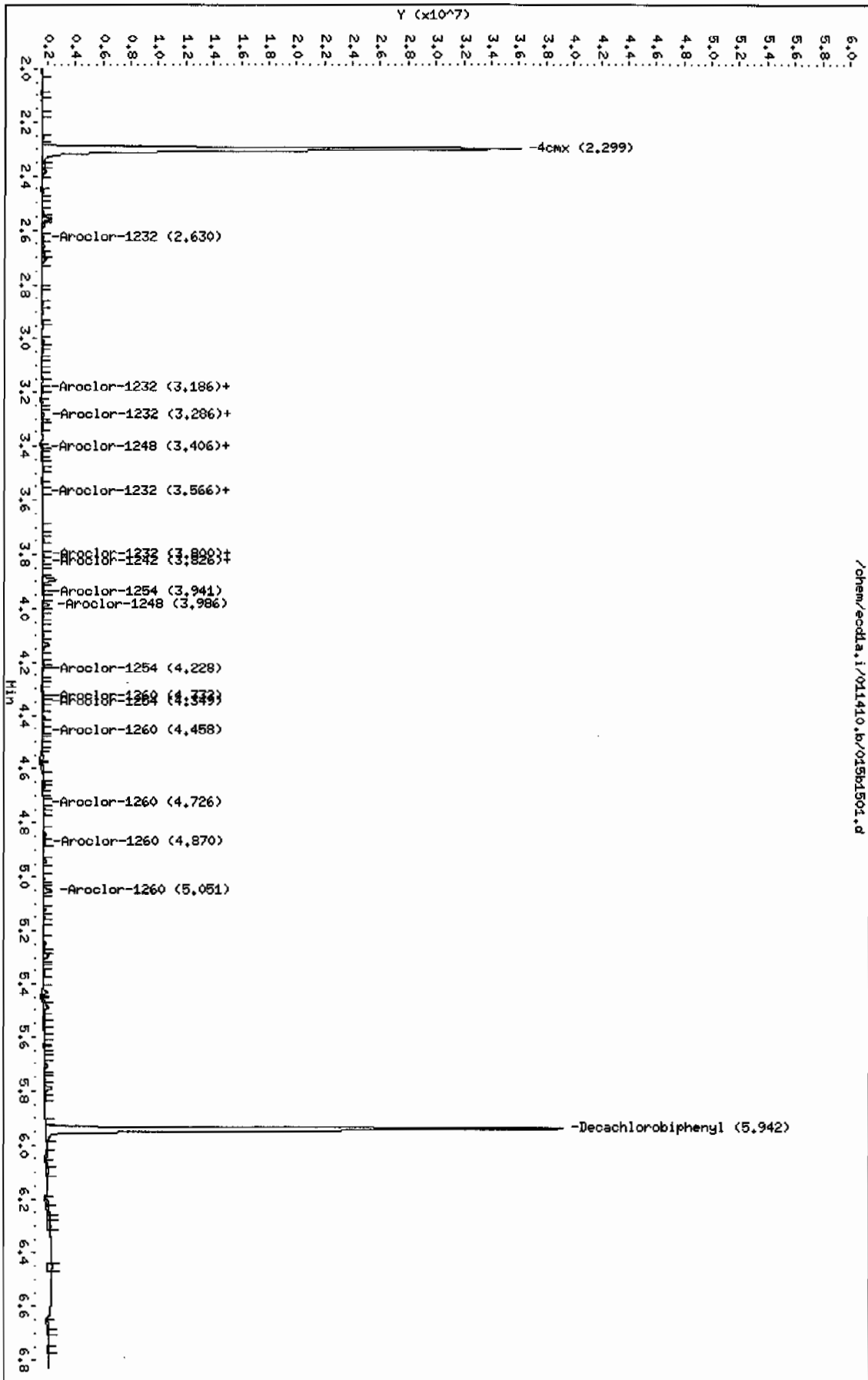
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.18000	Weight of sample extracted (g)
M	25.60030	% Moisture

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	
2.299	2.298	0.001	32854471	115.141	5.1 80.00~ 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3	
5.942	5.943	-0.001	28717546	129.483	5.8 80.00~ 120.00	100.00
-----						

Data File: /chem/ecdl.a.i/011410.b/015b1501.d  
 Date: 14-JUN-2010 11:19  
 Client ID: RE12-10-7701  
 Sample Info: 124420900211  
 Volume Injected (ul): 1.0  
 Column phase: CLP2

Instrument: ecdl.a.i  
 Operator: YS1  
 Column diameter: 0.25



## PCB

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Certificate of Analysis  
Sample SummarySDG Number: 10-1160  
Lab Sample ID: 244209003Client ID: RE12-10-7702  
Batch ID: 941128  
Run Date: 01/14/2010 11:31  
Prep Date: 01/13/2010 19:31  
Data File: 016f1601.d  
016b1601.dDate Collected: 01/06/2010 12:00  
Date Received: 01/09/2010 09:30  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.I  
Analyst: YS1  
Aliquot: 30.15 g  
Column: 1 CLP1  
2 CLP2Matrix: R  
%Moisture: 15  
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	3.90	ug/kg	1.30	3.90	1
11104-28-2	Aroclor-1221	U	3.90	ug/kg	1.30	3.90	1
11141-16-5	Aroclor-1232	U	3.90	ug/kg	1.30	3.90	1
53469-21-9	Aroclor-1242	U	3.90	ug/kg	1.30	3.90	1
12672-29-6	Aroclor-1248	U	3.90	ug/kg	1.30	3.90	1
11097-69-1	Aroclor-1254	U	3.90	ug/kg	1.30	3.90	1
11096-82-5	Aroclor-1260	U	3.90	ug/kg	1.30	3.90	1

Data File: /chem/ecd1a.i/011410.b/016f1601.d  
Report Date: 23-Jan-2010 12:01

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/011410.b/016f1601.d  
Lab Smp Id: 244209003 Client Smp ID: RE12-10-7702  
Inj Date : 14-JAN-2010 11:31  
Operator : YS1 Inst ID: ecd1a.i  
Smp Info : |244209003|1|  
Misc Info : |ECD82P\_1S|941128|SVA|LANL|SOIL|RE12-10-7702|||  
Comment :  
Method : /chem/ecd1a.i/011410.b/ECD1-F-8082-121409.m  
Meth Date : 23-Jan-2010 11:59 yip00818 Quant Type: ESTD  
Cal Date : 14-DEC-2009 11:34 Cal File: 040f4001.d  
Als bottle: 16  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1160.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	30.15000	Weight of sample extracted (g)
M	15.00810	% Moisture

Cpnd Variable Local Compound Variable

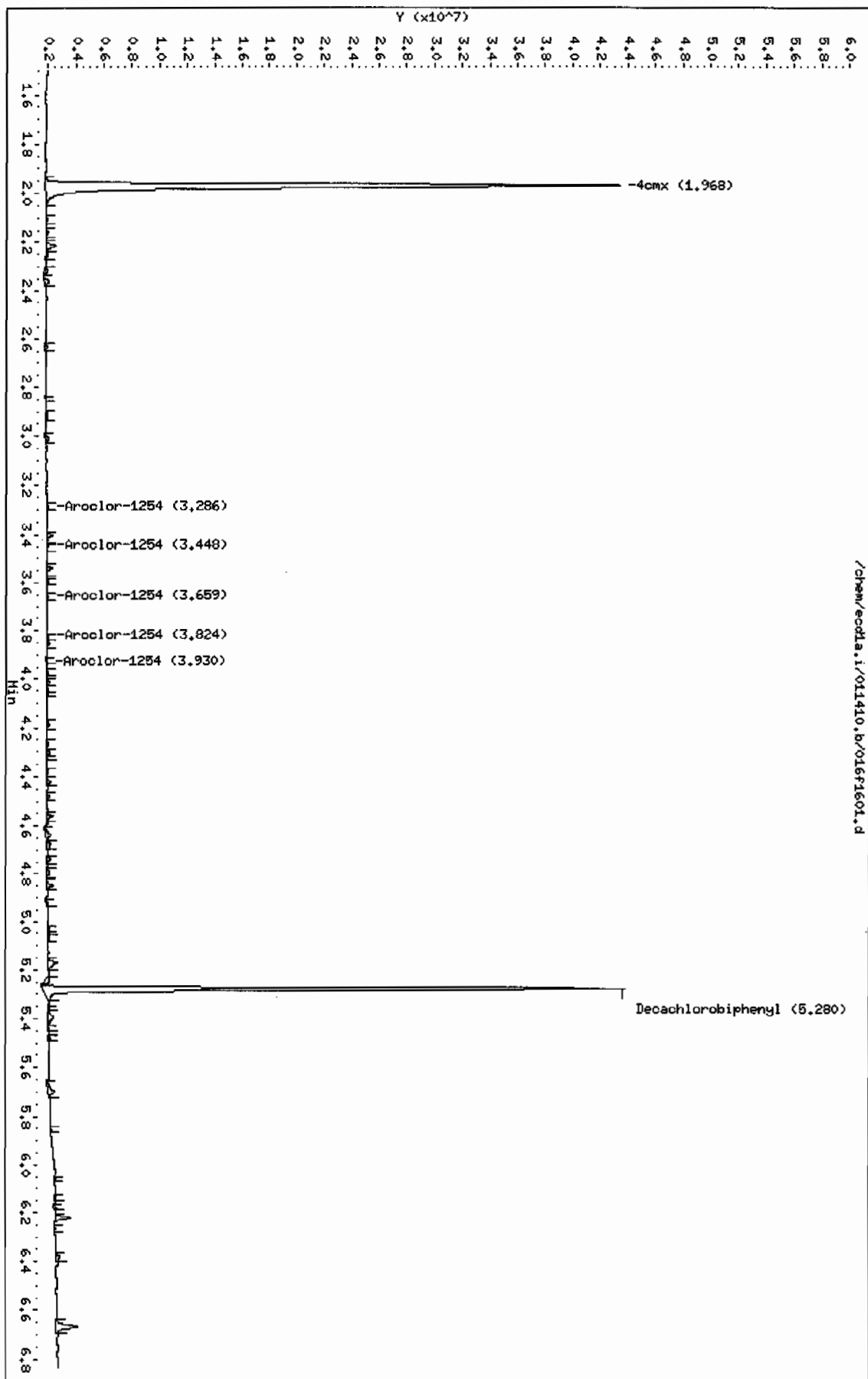
CONCENTRATIONS

RT	EXP RT	DLT RT	RESPONSE ( ug/L)	ON-COL	FINAL	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====	=====
\$ 11 4cmx					CAS #: 877-09-8		
1.968	1.968	0.000	47891890 133.970	5.2	80.00- 120.00	100.00	
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.280	5.280	0.000	32290151 106.917	4.2	80.00- 120.00	100.00	

Data File: /chem/ecdda.i/011410.b/016f1601.d  
Date: 14-JUN-2010 11:31  
Client ID: RE12-10-7702  
Sample Info: 1244209003111  
Volume Injected (uL): 1.0  
Column phase: CLP1

Instrument: ecdda.i  
Operator: YSL  
Column diameter: 0.25

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Data File: /chem/ecdla.i/011410.b/016b1601.d  
 Report Date: 23-Jan-2010 12:02

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL  
 Data file : /chem/ecdla.i/011410.b/016b1601.d  
 Lab Smp Id: 244209003 Client Smp ID: RE12-10-7702  
 Inj Date : 14-JAN-2010 11:31  
 Operator : YS1 Inst ID: ecdla.i  
 Smp Info : |244209003|1|  
 Misc Info : |ECD82P\_1S|941128|SVA|LANL|SOIL|RE12-10-7702|||  
 Comment :  
 Method : /chem/ecdla.i/011410.b/ECD1-B-8082-121409.m  
 Meth Date : 23-Jan-2010 11:59 yip00818 Quant Type: ESTD  
 Cal Date : 14-DEC-2009 12:16 Cal File: 044b4401.d  
 Als bottle: 16  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: 10-1160.sub  
 Target Version: 3.50 Sample Matrix: Soil  
 Processing Host: hpc1p1

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

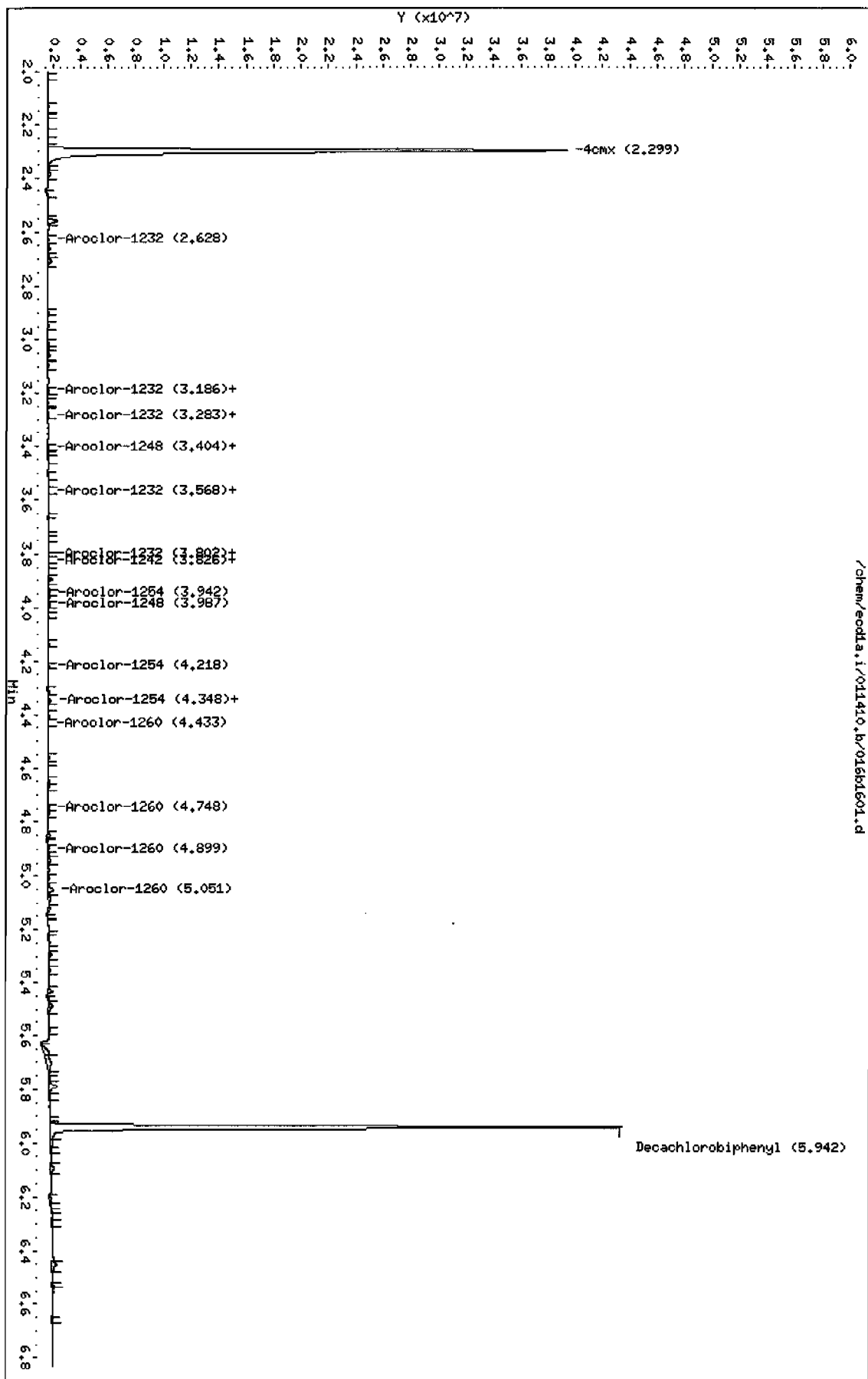
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.15000	Weight of sample extracted (g)
M	15.00810	% Moisture

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	
2.299	2.298	0.001	35708176	125.143	4.9 80.00~ 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3	
5.942	5.943	-0.001	31357298	141.385	5.5 80.00~ 120.00	100.00
-----						

Data File: /chem/ecdl.a.i/011410.b/016b1601.d  
 Date: 14-JUN-2010 11:34  
 Client ID: RE12-10-7702  
 Sample Info: 1244209003111  
 Volume Injected (uL): 1.0  
 Column phase: CLP2

Instrument: ecdl.a.i  
 Operator: YSL  
 Column diameter: 0.25





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

SDG Number: 10-1160  
Lab Sample ID: 244209006

Date Collected: 01/06/2010 12:00  
Date Received: 01/09/2010 09:30  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.I  
Analyst: YS1  
Aliquot: 30.05 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
%Moisture: 25.3  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE12-10-7727  
Batch ID: 941128  
Run Date: 01/14/2010 12:09  
Prep Date: 01/13/2010 19:31  
Data File: 019f1901.d  
019b1901.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.45	ug/kg	1.48	4.45	1
11104-28-2	Aroclor-1221	U	4.45	ug/kg	1.48	4.45	1
11141-16-5	Aroclor-1232	U	4.45	ug/kg	1.48	4.45	1
53469-21-9	Aroclor-1242	U	4.45	ug/kg	1.48	4.45	1
12672-29-6	Aroclor-1248	U	4.45	ug/kg	1.48	4.45	1
11097-69-1	Aroclor-1254	U	4.45	ug/kg	1.48	4.45	1
11096-82-5	Aroclor-1260	U	4.45	ug/kg	1.48	4.45	1

Data File: /chem/ecdl1a.i/011410.b/019f1901.d  
Report Date: 23-Jan-2010 12:02

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL  
Data file : /chem/ecdl1a.i/011410.b/019f1901.d  
Lab Smp Id: 244209006 Client Smp ID: RE12-10-7727  
Inj Date : 14-JAN-2010 12:09  
Operator : YS1 Inst ID: ecd1a.i  
Smp Info : |244209006|1|  
Misc Info : |ECD82P\_1S|941128|SVA|LANL|SOIL|RE12-10-7727|||  
Comment :  
Method : /chem/ecdl1a.i/011410.b/ECD1-F-8082-121409.m  
Meth Date : 23-Jan-2010 11:59 yip00818 Quant Type: ESTD  
Cal Date : 14-DEC-2009 11:34 Cal File: 040f4001.d  
Als bottle: 19  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1160.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	30.05000	Weight of sample extracted (g)
M	25.27240	% Moisture

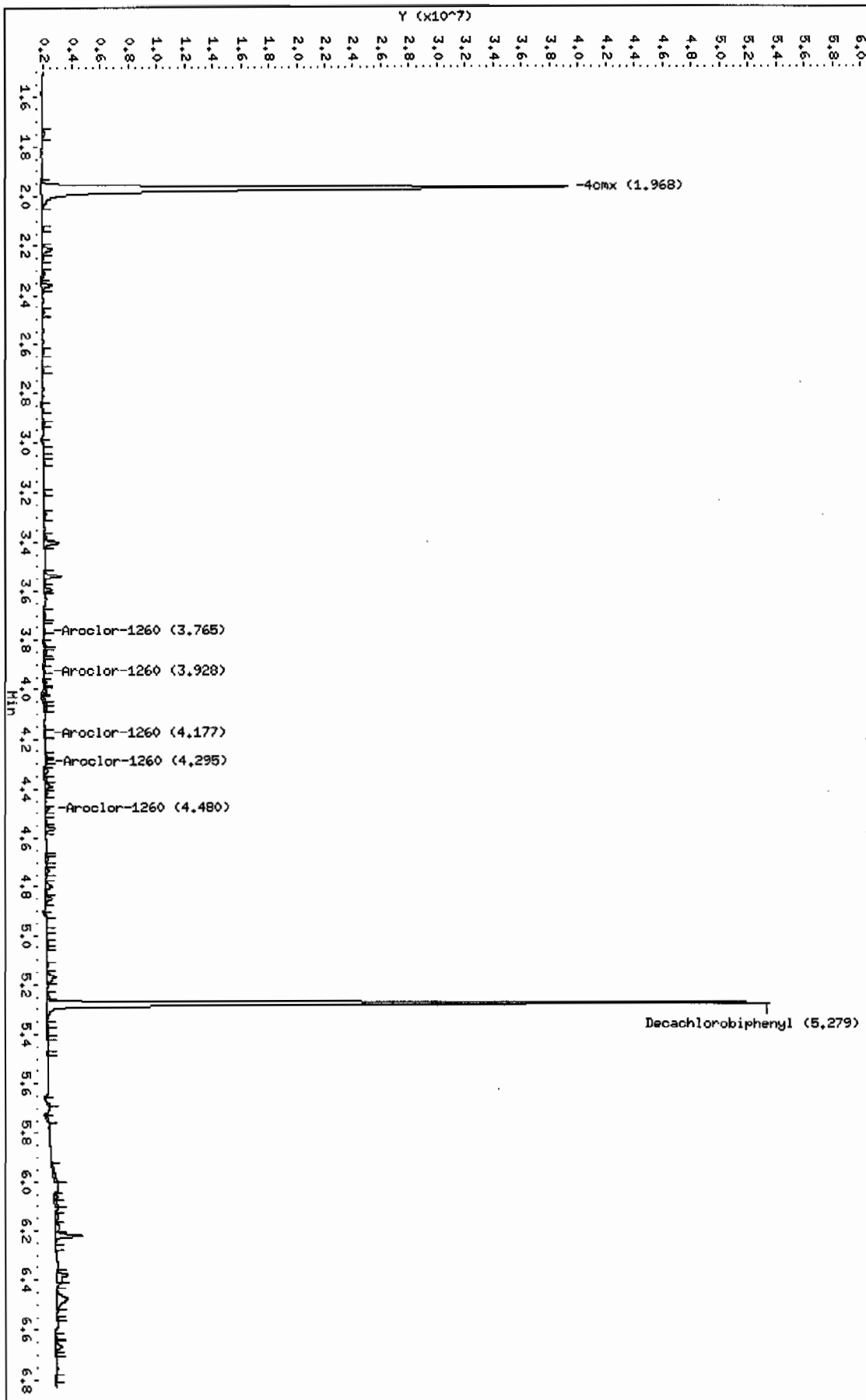
Cpnd Variable Local Compound Variable

CONCENTRATIONS							
			ON-COL	FINAL			
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	
					CAS #: 877-09-8		
\$ 11 4cmx	1.968	1.968	0.000	44380057 124.146	5.5 80.00- 120.00	100.00	
-----							
					CAS #: 2051-24-3		
\$ 12 Decachlorobiphenyl	5.279	5.280	-0.001	39772803 131.694	5.9 80.00- 120.00	100.00	
-----							

Data File: /chem/eodla.i/011410.b/019f1901.d  
Date: 14-JAN-2010 12:09  
Client ID: REA2-10-7727  
Sample Info: 124420900611  
Volume Injected (uL): 1.0  
Column phase: CLP1

Instrument: eodla.i  
Operator: YS1  
Column diameter: 0.25

/chem/eodla.i/011410.b/019f1901.d



Data File: /chem/ecdl1a.i/011410.b/019b1901.d  
Report Date: 23-Jan-2010 12:02

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011410.b/019b1901.d  
Lab Smp Id: 244209006 Client Smp ID: RE12-10-7727  
Inj Date : 14-JAN-2010 12:09  
Operator : YS1 Inst ID: ecd1a.i  
Smp Info : |244209006|1|  
Misc Info : |ECD82P\_1S|941128|SVA|LANL|SOIL|RE12-10-7727|  
Comment :  
Method : /chem/ecdl1a.i/011410.b/ECD1-B-8082-121409.m  
Meth Date : 23-Jan-2010 11:59 yip00818 Quant Type: ESTD  
Cal Date : 14-DEC-2009 12:16 Cal File: 044b4401.d  
Als bottle: 19  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1160.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	30.05000	Weight of sample extracted (g)
M	25.27240	% Moisture

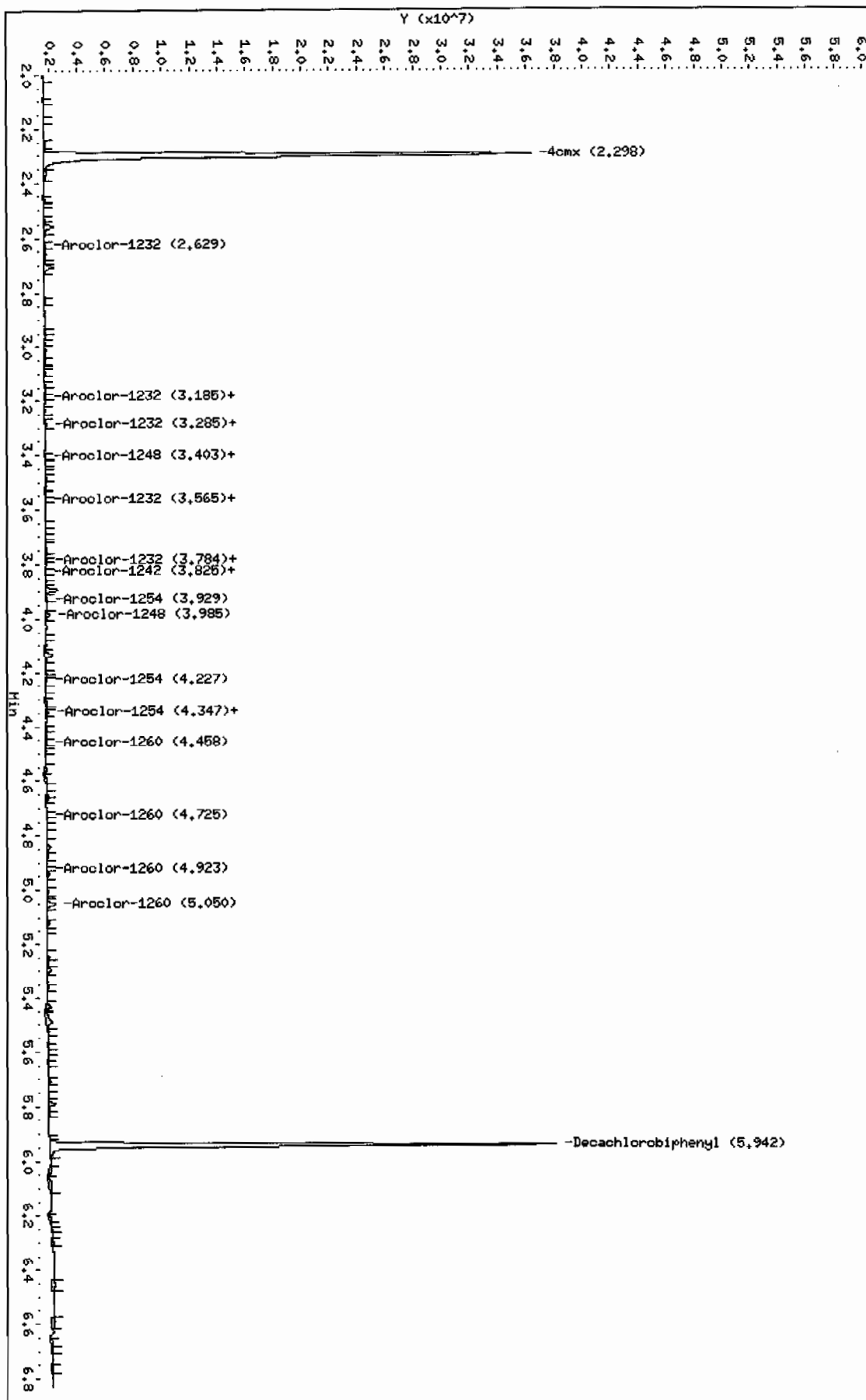
Cpnd Variable Local Compound Variable

CONCENTRATIONS						
			ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
\$ 11 4cmx CAS #: 877-09-8						
2.298	2.298	0.000	32939214	115.438	5.1 80.00- 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl CAS #: 2051-24-3						
5.942	5.943	-0.001	27384797	123.474	5.5 80.00- 120.00	100.00
-----						

Data File: /chem/eodla.i/011410.b/019b1901.d  
 Date : 14-JAN-2010 12:09  
 Client ID: REL2-10-7727  
 Sample Info: 12442090611  
 Volume Injected (uL): 1.0  
 Column phase: CLP2

Instrument: eodla.i  
 Operator: YSL  
 Column diameter: 0.25

/chem/eodla.i/011410.b/019b1901.d



## PCB

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Certificate of Analysis  
Sample SummarySDG Number: 10-1160  
Lab Sample ID: 244209001Date Collected: 01/06/2010 12:00  
Date Received: 01/09/2010 09:30  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.I  
Analyst: YS1  
Aliquot: 30.04 g  
Column: 1 CLP1  
2 CLP2Matrix: R  
%Moisture: 6.5  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.56	ug/kg	1.19	3.56	1
11104-28-2	Aroclor-1221	U	3.56	ug/kg	1.19	3.56	1
11141-16-5	Aroclor-1232	U	3.56	ug/kg	1.19	3.56	1
53469-21-9	Aroclor-1242	U	3.56	ug/kg	1.19	3.56	1
12672-29-6	Aroclor-1248	U	3.56	ug/kg	1.19	3.56	1
11097-69-1	Aroclor-1254	U	3.56	ug/kg	1.19	3.56	1
11096-82-5	Aroclor-1260	U	3.56	ug/kg	1.19	3.56	1

Data File: /chem/ecdla.i/011410.b/014f1401.d  
 Report Date: 23-Jan-2010 12:01

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/011410.b/014f1401.d

Lab Smp Id: 244209001

Client Smp ID: RE12-10-7734

Inj Date : 14-JAN-2010 11:06

Operator : YS1

Inst ID: ecdla.i

Smp Info : |244209001|1|

Misc Info : |ECD82P\_1S|941128|SVA|LANL|SOIL|RE12-10-7734|||

Comment :

Method : /chem/ecdla.i/011410.b/ECD1-F-8082-121409.m

Meth Date : 23-Jan-2010 11:59 yip00818 Quant Type: ESTD

Cal Date : 14-DEC-2009 11:34

Cal File: 040f4001.d

Als bottle: 14

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: 10-1160.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	30.04000	Weight of sample extracted (g)
M	6.54660	% Moisture

Cpnd Variable

Local Compound Variable

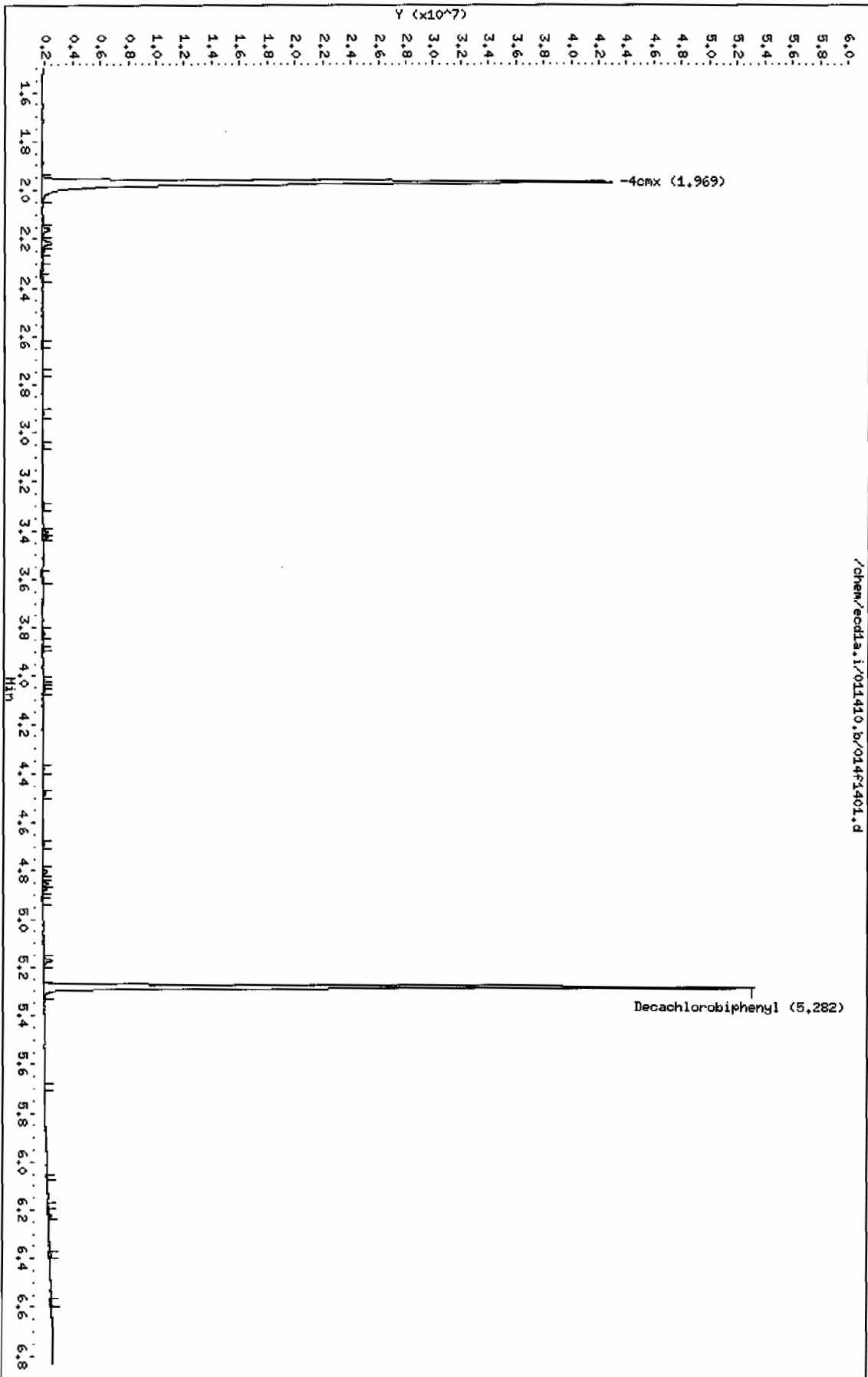
CONCENTRATIONS

RT	EXP RT	DLT RT	ON-COL RESPONSE ( ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
\$ 11 4cmx				CAS #: 877-09-8		
1.969	1.968	0.001	47030597 131.561	4.7	80.00- 120.00	100.00
\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3		
5.282	5.280	0.002	40047141 132.602	4.7	80.00- 120.00	100.00

Data File: /chem/ecdl1.i/011410.b/014f1401.d  
Date: 14-JUN-2010 11:06  
Client ID: RE12-10-7734  
Sample Info: 124420900111  
Volume Injected (uL): 1.0  
Column phase: CLP1

Instrument: ecdl1.i  
Operator: YSL  
Column diameter: 0.25

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Data File: /chem/ecdl1a.i/011410.b/014b1401.d  
Report Date: 23-Jan-2010 12:01

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011410.b/014b1401.d

Lab Smp Id: 244209001

Client Smp ID: RE12-10-7734

Inj Date : 14-JAN-2010 11:06

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |244209001|1|

Misc Info : |ECD82P\_1S|941128|SVA|LANL|SOIL|RE12-10-7734|1|1|

Comment :

Method : /chem/ecdl1a.i/011410.b/ECD1-B-8082-121409.m

Meth Date : 23-Jan-2010 11:59 yip00818

Quant Type: ESTD

Cal Date : 14-DEC-2009 12:16

Cal File: 044b4401.d

Als bottle: 14

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: 10-1160.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	30.04000	Weight of sample extracted (g)
M	6.54660	% Moisture

Cpnd Variable

Local Compound Variable

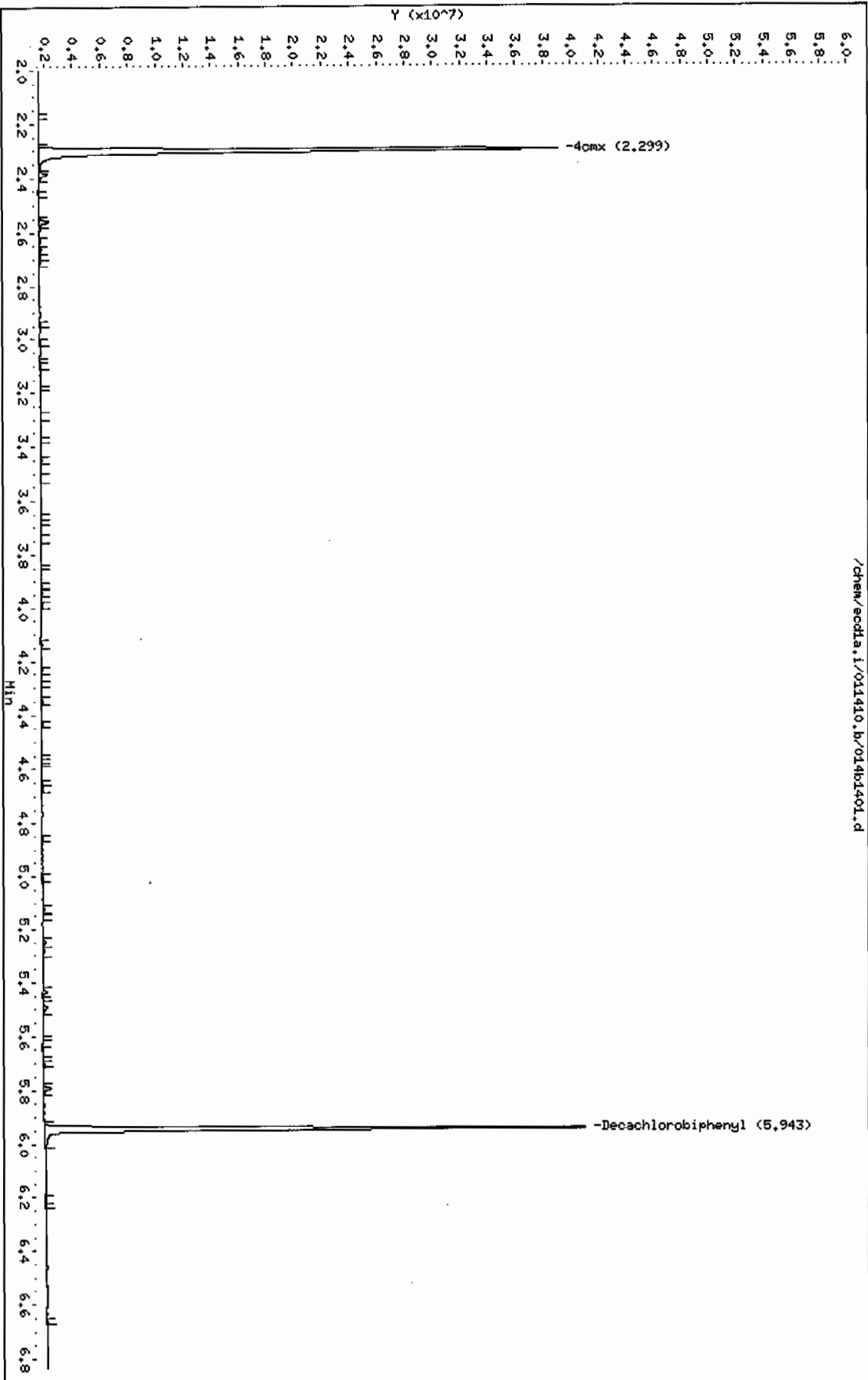
CONCENTRATIONS

RT	EXP RT	DLT RT	ON-COL	FINAL	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
\$ 11 4cmx							CAS #: 877-09-8	
2.299	2.298	0.001	34947224	122.476	4.4	80.00- 120.00	100.00	
\$ 12 Decachlorobiphenyl							CAS #: 2051-24-3	
5.943	5.943	0.000	30181305	136.083	4.8	80.00- 120.00	100.00	

Data File: /chem/ecdda.i/011410.b/014b1401.d  
Date: 14-JUN-2010 11:06  
Client ID: RE12-10-7734  
Sample Info: 124420900111  
Volume Injected (uL): 1.0  
Column phase: CLP2

Instrument: ecdda.i  
Operator: YSL  
Column diameter: 0.25

/chem/ecdda.i/011410.b/014b1401.d



# STANDARDS DATA

Report Date: 15-Jan-2010 08:23

### Calibration History

Method : /chem/ecd1a.i/011410.b/ECD1-F-8082-121409.m  
Start Cal Date: 14-DEC-2009 05:36  
End Cal Date : 14-DEC-2009 12:37

#### Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
14-DEC-2009 11:34	AR1268	/chem/ecd1a.i/121409.b/040f4001.d
14-DEC-2009 09:28	AR1248	/chem/ecd1a.i/121409.b/028f2801.d
14-DEC-2009 08:25	AR1242	/chem/ecd1a.i/121409.b/022f2201.d
14-DEC-2009 07:22	AR1254	/chem/ecd1a.i/121409.b/016f1601.d
14-DEC-2009 10:31	AR1660	/chem/ecd1a.i/121409.b/034f3401.d
Cal Level: 2 , Cal Amount: 200.00000		
14-DEC-2009 11:44	AR1268	/chem/ecd1a.i/121409.b/041f4101.d
14-DEC-2009 09:38	AR1248	/chem/ecd1a.i/121409.b/029f2901.d
14-DEC-2009 08:35	AR1242	/chem/ecd1a.i/121409.b/023f2301.d
14-DEC-2009 07:32	AR1254	/chem/ecd1a.i/121409.b/017f1701.d
14-DEC-2009 10:41	AR1660	/chem/ecd1a.i/121409.b/035f3501.d
Cal Level: 3 , Cal Amount: 500.00000		
14-DEC-2009 11:55	AR1268	/chem/ecd1a.i/121409.b/042f4201.d
14-DEC-2009 09:49	AR1248	/chem/ecd1a.i/121409.b/030f3001.d
14-DEC-2009 08:46	AR1242	/chem/ecd1a.i/121409.b/024f2401.d
14-DEC-2009 07:43	AR1254	/chem/ecd1a.i/121409.b/018f1801.d
14-DEC-2009 10:52	AR1660	/chem/ecd1a.i/121409.b/036f3601.d
Cal Level: 4 , Cal Amount: 1000.00000		
14-DEC-2009 12:37	DDTANALOGSTD	/chem/ecd1a.i/121409.b/046f4601.d
14-DEC-2009 09:59	AR1248	/chem/ecd1a.i/121409.b/031f3101.d
14-DEC-2009 08:56	AR1242	/chem/ecd1a.i/121409.b/025f2501.d
14-DEC-2009 07:53	AR1254	/chem/ecd1a.i/121409.b/019f1901.d
14-DEC-2009 11:02	AR1660	/chem/ecd1a.i/121409.b/037f3701.d
14-DEC-2009 12:06	AR1268	/chem/ecd1a.i/121409.b/043f4301.d
14-DEC-2009 05:58	AR1262	/chem/ecd1a.i/121409.b/008f0801.d
14-DEC-2009 05:47	AR1221	/chem/ecd1a.i/121409.b/007f0701.d
14-DEC-2009 05:36	AR1232	/chem/ecd1a.i/121409.b/006f0601.d
Cal Level: 5 , Cal Amount: 4000.00000		
14-DEC-2009 12:16	AR1268	/chem/ecd1a.i/121409.b/044f4401.d
14-DEC-2009 10:10	AR1248	/chem/ecd1a.i/121409.b/032f3201.d
14-DEC-2009 09:07	AR1242	/chem/ecd1a.i/121409.b/026f2601.d
14-DEC-2009 08:04	AR1254	/chem/ecd1a.i/121409.b/020f2001.d
14-DEC-2009 11:13	AR1660	/chem/ecd1a.i/121409.b/038f3801.d

Continuing Calibration  
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 1000		
14-JAN-2010 21:53	AR1660	/chem/ecd1a.i/011410.b/067f6701.d
Ccal Level: 4 , Ccal Amount: 1000		
14-JAN-2010 20:54	AR1660	/chem/ecd1a.i/011410.b/062f6201.d
Ccal Level: 4 , Ccal Amount: 1000		
14-JAN-2010 18:52	AR1660	/chem/ecd1a.i/011410.b/052f5201.d
Ccal Level: 4 , Ccal Amount: 1000		
14-JAN-2010 16:25	AR1660	/chem/ecd1a.i/011410.b/040f4001.d
Ccal Level: 4 , Ccal Amount: 1000		
14-JAN-2010 14:49	AR1660	/chem/ecd1a.i/011410.b/032f3201.d
Ccal Level: 4 , Ccal Amount: 1000		
14-JAN-2010 12:22	AR1660	/chem/ecd1a.i/011410.b/020f2001.d
Ccal Level: 4 , Ccal Amount: 1000		
14-JAN-2010 10:00	AR1268	/chem/ecd1a.i/011410.b/009f0901.d
Ccal Level: 4 , Ccal Amount: 1000		
14-JAN-2010 09:50	AR1262	/chem/ecd1a.i/011410.b/008f0801.d
Ccal Level: 4 , Ccal Amount: 1000		
14-JAN-2010 09:39	AR1221	/chem/ecd1a.i/011410.b/007f0701.d
Ccal Level: 4 , Ccal Amount: 1000		
14-JAN-2010 09:29	AR1232	/chem/ecd1a.i/011410.b/006f0601.d
Ccal Level: 4 , Ccal Amount: 1000		
14-JAN-2010 09:18	AR1248	/chem/ecd1a.i/011410.b/005f0501.d
Ccal Level: 4 , Ccal Amount: 1000		
14-JAN-2010 09:08	AR1242	/chem/ecd1a.i/011410.b/004f0401.d
Ccal Level: 4 , Ccal Amount: 1000		
14-JAN-2010 08:57	AR1254	/chem/ecd1a.i/011410.b/003f0301.d
Ccal Level: 4 , Ccal Amount: 1000		
14-JAN-2010 08:47	AR1660	/chem/ecd1a.i/011410.b/002f0201.d

Report Date: 15-Jan-2010 08:21

### Calibration History

Method : /chem/ecdl1a.i/011410.b/ECD1-B-8082-121409.m  
Start Cal Date: 11-DEC-2009 10:17  
End Cal Date : 14-DEC-2009 12:37

#### Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
14-DEC-2009 11:34	AR1268	/chem/ecdl1a.i/121409.b/040b4001.d
14-DEC-2009 09:28	AR1248	/chem/ecdl1a.i/121409.b/028b2801.d
14-DEC-2009 08:25	AR1242	/chem/ecdl1a.i/121409.b/022b2201.d
14-DEC-2009 07:22	AR1254	/chem/ecdl1a.i/121409.b/016b1601.d
14-DEC-2009 10:31	AR1660	/chem/ecdl1a.i/121409.b/034b3401.d

Cal Level: 2 , Cal Amount: 200.00000		
14-DEC-2009 11:44	AR1268	/chem/ecdl1a.i/121409.b/041b4101.d
14-DEC-2009 09:38	AR1248	/chem/ecdl1a.i/121409.b/029b2901.d
14-DEC-2009 08:35	AR1242	/chem/ecdl1a.i/121409.b/023b2301.d
14-DEC-2009 07:32	AR1254	/chem/ecdl1a.i/121409.b/017b1701.d
14-DEC-2009 10:41	AR1660	/chem/ecdl1a.i/121409.b/035b3501.d

Cal Level: 3 , Cal Amount: 500.00000		
14-DEC-2009 11:55	AR1268	/chem/ecdl1a.i/121409.b/042b4201.d
14-DEC-2009 09:49	AR1248	/chem/ecdl1a.i/121409.b/030b3001.d
14-DEC-2009 08:46	AR1242	/chem/ecdl1a.i/121409.b/024b2401.d
14-DEC-2009 07:43	AR1254	/chem/ecdl1a.i/121409.b/018b1801.d
14-DEC-2009 10:52	AR1660	/chem/ecdl1a.i/121409.b/036b3601.d

Cal Level: 4 , Cal Amount: 1000.00000		
14-DEC-2009 12:37	DDTANALOGSTD	/chem/ecdl1a.i/121409.b/046b4601.d
14-DEC-2009 12:06	AR1268	/chem/ecdl1a.i/121409.b/043b4301.d
14-DEC-2009 05:58	AR1262	/chem/ecdl1a.i/121409.b/008b0801.d
14-DEC-2009 05:47	AR1221	/chem/ecdl1a.i/121409.b/007b0701.d
14-DEC-2009 05:36	AR1232	/chem/ecdl1a.i/121409.b/006b0601.d
14-DEC-2009 09:59	AR1248	/chem/ecdl1a.i/121409.b/031b3101.d
14-DEC-2009 08:56	AR1242	/chem/ecdl1a.i/121409.b/025b2501.d
14-DEC-2009 07:53	AR1254	/chem/ecdl1a.i/121409.b/019b1901.d
14-DEC-2009 11:02	AR1660	/chem/ecdl1a.i/121409.b/037b3701.d

Cal Level: 5 , Cal Amount: 4000.00000		
14-DEC-2009 12:16	AR1268	/chem/ecdl1a.i/121409.b/044b4401.d
14-DEC-2009 10:10	AR1248	/chem/ecdl1a.i/121409.b/032b3201.d
14-DEC-2009 09:07	AR1242	/chem/ecdl1a.i/121409.b/026b2601.d
14-DEC-2009 08:04	AR1254	/chem/ecdl1a.i/121409.b/020b2001.d
14-DEC-2009 11:13	AR1660	/chem/ecdl1a.i/121409.b/038b3801.d

Continuing Calibration  
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 1000	
14-JAN-2010 20:54  AR1660	/chem/ecdl1a.i/011410.b/062b6201.d
Ccal Level: 4 , Ccal Amount: 1000	
14-JAN-2010 18:52  AR1660	/chem/ecdl1a.i/011410.b/052b5201.d
Ccal Level: 4 , Ccal Amount: 1000	
14-JAN-2010 21:53  AR1660	/chem/ecdl1a.i/011410.b/067b6701.d
Ccal Level: 4 , Ccal Amount: 1000	
14-JAN-2010 16:25  AR1660	/chem/ecdl1a.i/011410.b/040b4001.d
Ccal Level: 4 , Ccal Amount: 1000	
14-JAN-2010 14:49  AR1660	/chem/ecdl1a.i/011410.b/032b3201.d
Ccal Level: 4 , Ccal Amount: 1000	
14-JAN-2010 12:22  AR1660	/chem/ecdl1a.i/011410.b/020b2001.d
Ccal Level: 4 , Ccal Amount: 1000	
14-JAN-2010 10:00  AR1268	/chem/ecdl1a.i/011410.b/009b0901.d
Ccal Level: 4 , Ccal Amount: 1000	
14-JAN-2010 09:50  AR1262	/chem/ecdl1a.i/011410.b/008b0801.d
Ccal Level: 4 , Ccal Amount: 1000	
14-JAN-2010 09:39  AR1221	/chem/ecdl1a.i/011410.b/007b0701.d
Ccal Level: 4 , Ccal Amount: 1000	
14-JAN-2010 09:29  AR1232	/chem/ecdl1a.i/011410.b/006b0601.d
Ccal Level: 4 , Ccal Amount: 1000	
14-JAN-2010 09:18  AR1248	/chem/ecdl1a.i/011410.b/005b0501.d
Ccal Level: 4 , Ccal Amount: 1000	
14-JAN-2010 09:08  AR1242	/chem/ecdl1a.i/011410.b/004b0401.d
Ccal Level: 4 , Ccal Amount: 1000	
14-JAN-2010 08:57  AR1254	/chem/ecdl1a.i/011410.b/003b0301.d
Ccal Level: 4 , Ccal Amount: 1000	
14-JAN-2010 08:47  AR1660	/chem/ecdl1a.i/011410.b/002b0201.d

## GEL Laboratories LLC

## COMPOUND LISTING

Method file : /chem/ecdla.i/011410.b/ECD1-F-8082-121409.m  
 Quant Method : ESTD Target Version : 3.50  
 Last Update : 15-Jan-2010 06:51 Number of Cpnds : 15  
 Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	12031.000000
Initial:End Threshold	6015.500000
Initial:Area Threshold	15489.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	2.000000
Initial:Negative Peaks	OFF
Initial:Tension	0.500000

Compound	RT	RT Window	RF
1 Aroclor-1016	2.423	2.393-2.453	1.387e+04
	2.700	2.670-2.730	1.010e+04
	2.793	2.763-2.823	1.176e+04
	2.830	2.800-2.860	6.599e+03
	3.041	3.011-3.071	8.673e+03
63 4,4-DDD	3.953	3.933-3.973	3.938e+05
64 4,4-DDE	3.603	3.583-3.623	4.795e+05
62 4,4-DDT	4.118	4.098-4.138	3.238e+05
2 Aroclor-1221	2.082	2.052-2.112	4.301e+03
	2.175	2.145-2.205	2.440e+03
	2.201	2.171-2.231	1.027e+04
3 Aroclor-1232	2.424	2.394-2.454	6.717e+03
	2.714	2.684-2.744	8.157e+03
	2.794	2.764-2.824	5.751e+03
	3.042	3.012-3.072	3.954e+03
	3.296	3.266-3.326	3.533e+03
4 Aroclor-1242	2.423	2.393-2.453	1.166e+04
	2.713	2.683-2.743	1.345e+04
	2.831	2.801-2.861	5.506e+03
	3.042	3.012-3.072	7.245e+03
	3.295	3.265-3.325	6.811e+03



## GEL Laboratories LLC

## COMPOUND LISTING

Method file : /chem/ecdl1a.i/011410.b/ECD1-F-8082-121409.m

Compound	RT	RT Window	RF
5 Aroclor-1248	3.094	3.064-3.124	7.848e+03
	3.244	3.214-3.274	6.870e+03
	3.295	3.265-3.325	1.331e+04
	3.427	3.397-3.457	1.101e+04
	3.659	3.629-3.689	7.455e+03
6 Aroclor-1254	3.270	3.240-3.300	1.249e+04
	3.426	3.396-3.456	1.672e+04
	3.659	3.629-3.689	2.071e+04
	3.823	3.793-3.853	1.569e+04
	3.931	3.901-3.961	1.517e+04
7 Aroclor-1260	3.767	3.737-3.797	1.675e+04
	3.929	3.899-3.959	2.474e+04
	4.160	4.130-4.190	1.469e+04
	4.303	4.273-4.333	1.518e+04
	4.482	4.452-4.512	3.435e+04
8 Aroclor-1262	3.768	3.738-3.798	1.402e+04
	3.930	3.900-3.960	1.841e+04
	4.160	4.130-4.190	2.251e+04
	4.304	4.274-4.334	2.033e+04
	4.483	4.453-4.513	4.317e+04
9 Aroclor-1268	4.667	4.637-4.697	5.438e+04
	4.691	4.661-4.721	5.419e+04
	4.803	4.773-4.833	4.052e+04
	5.006	4.976-5.036	1.833e+04
	5.171	5.141-5.201	1.233e+05
M 10 Aroclor-Total	1.000	0.980-1.020	
\$ 11 4cmx	1.968	1.938-1.998	3.757e+05
\$ 12 Decachlorobiphenyl	5.280	5.250-5.310	3.175e+05

## GEL Laboratories LLC

## COMPOUND LISTING

Method file : /chem/ecdl1a.i/011410.b/ECD1-B-8082-121409.m  
 Quant Method : ESTD Target Version : 3.50  
 Last Update : 15-Jan-2010 07:12 Number of Cpnds : 15  
 Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	7222.000000
Initial:End Threshold	3611.000000
Initial:Area Threshold	6833.000000
Initial:P-P Resolution	0.000000
Initial:Bunch Factor	2.000000
Initial:Negative Peaks	OFF
Initial:Tension	0.500000

Compound	RT	RT Window	RF
1 Aroclor-1016	3.195	3.165-3.225	1.261e+04
	3.278	3.248-3.308	9.328e+03
	3.342	3.312-3.372	5.411e+03
	3.568	3.538-3.598	7.052e+03
	3.644	3.614-3.674	6.551e+03
62 4,4-DDT	4.670	4.650-4.690	2.436e+05
63 4,4-DDE	4.139	4.119-4.159	3.580e+05
64 4,4-DDD	4.483	4.463-4.503	2.893e+05
2 Aroclor-1221	2.496	2.466-2.526	3.640e+03
	2.591	2.561-2.621	2.329e+03
	2.632	2.602-2.662	8.119e+03
3 Aroclor-1232	2.631	2.601-2.661	6.156e+03
	3.196	3.166-3.226	6.302e+03
	3.279	3.249-3.309	4.701e+03
	3.569	3.539-3.599	3.243e+03
4 Aroclor-1242	3.803	3.773-3.833	3.151e+03
	3.195	3.165-3.225	1.059e+04
	3.278	3.248-3.308	8.054e+03
	3.569	3.539-3.599	5.962e+03
	3.803	3.773-3.833	6.057e+03
	3.830	3.800-3.860	6.701e+03

## GEL Laboratories LLC

## COMPOUND LISTING

Method file : /chem/ecdla.i/011410.b/ECD1-B-8082-121409.m

Compound	RT	RT Window	RF
5 Aroclor-1248	3.404	3.374-3.434	8.054e+03
	3.569	3.539-3.599	9.874e+03
	3.802	3.772-3.832	1.122e+04
	3.830	3.800-3.860	1.248e+04
	3.967	3.937-3.997	1.210e+04
6 Aroclor-1254	3.403	3.373-3.433	6.435e+03
	3.825	3.795-3.855	1.156e+04
	3.942	3.912-3.972	1.243e+04
	4.218	4.188-4.248	1.688e+04
	4.353	4.323-4.383	1.244e+04
7 Aroclor-1260	4.333	4.303-4.363	1.368e+04
	4.458	4.428-4.488	1.603e+04
	4.724	4.694-4.754	1.256e+04
	4.898	4.868-4.928	1.281e+04
	5.044	5.014-5.074	2.790e+04
8 Aroclor-1262	4.459	4.429-4.489	1.292e+04
	4.724	4.694-4.754	1.831e+04
	4.899	4.869-4.929	1.658e+04
	5.045	5.015-5.075	3.329e+04
	5.258	5.228-5.288	2.297e+04
9 Aroclor-1268	5.257	5.227-5.287	4.358e+04
	5.284	5.254-5.314	4.039e+04
	5.434	5.404-5.464	3.144e+04
	5.598	5.568-5.628	1.427e+04
	5.792	5.762-5.822	8.886e+04
M 10 Aroclor-Total	1.000	0.980-1.020	
\$ 11 4cmx	2.298	2.268-2.328	3.000e+05
\$ 12 Decachlorobiphenyl	5.943	5.913-5.973	2.332e+05

GEL Laboratories LLC  
INITIAL CALIBRATION DATA

Start Cal Date : 14-DEC-2009 05:36  
 End Cal Date : 14-DEC-2009 12:37  
 Quant Method : ESTD  
 Origin : Disabled  
 Target Version : 3.50  
 Integrator : Falcon  
 Method file : /chem/ecdla.i/011410.b/ECD1-F-8082-121409.m  
 Cal Date : 15-Jan-2010 06:51 yip00818  
 Curve Type : Average

## Calibration File Names:

Level 1: /chem/ecdla.i/121409.b/040f4001.d  
 Level 2: /chem/ecdla.i/121409.b/041f4101.d  
 Level 3: /chem/ecdla.i/121409.b/042f4201.d  
 Level 4: /chem/ecdla.i/121409.b/046f4601.d  
 Level 5: /chem/ecdla.i/121409.b/044f4401.d

Compound	100.000	200.000	500.000	1000.000	4000.000	RRF	% RSD
Level 1	Level 2	Level 3	Level 4	Level 5			
1 Aroclor-1016(1)	15975	14641	13829	13236	11653	13867	11.596
(2)	10801	10349	9832	9922	9584	10098	4.757
(3)	13242	12280	11732	11291	10240	11757	9.507
(4)	7178	6867	6609	6421	5920	6599	7.183
(5)	9710	9021	8649	8224	7763	8673	8.604
63 4,4-DDD	+++++	+++++	+++++	393799	+++++	393799	0.000
64 4,4-DDE	+++++	+++++	+++++	479509	+++++	479509	0.000
62 4,4-DDT	+++++	+++++	+++++	323817	+++++	323817	0.000
2 Aroclor-1221(1)	+++++	+++++	+++++	4301	+++++	4301	0.000
(2)	+++++	+++++	+++++	2440	+++++	2440	0.000
(3)	+++++	+++++	+++++	10272	+++++	10272	0.000
3 Aroclor-1232(1)	+++++	+++++	+++++	6717	+++++	6717	0.000
(2)	+++++	+++++	+++++	8157	+++++	8157	0.000
(3)	+++++	+++++	+++++	5751	+++++	5751	0.000
(4)	+++++	+++++	+++++	3954	+++++	3954	0.000
(5)	+++++	+++++	+++++	3533	+++++	3533	0.000
4 Aroclor-1242(1)	13692	12467	11522	10819	9798	11660	12.846
(2)	14782	14429	13236	12555	12263	13453	8.301
(3)	6076	5890	5423	5191	4949	5506	8.563
(4)	8395	7578	7079	6747	6426	7245	10.645
(5)	7587	7189	6604	6378	6296	6811	8.178
5 Aroclor-1248(1)	9070	8103	7743	7247	7078	7848	10.119
(2)	7785	7181	6827	6444	6114	6870	9.456
(3)	15108	13267	13037	12915	12225	13310	8.094
(4)	12682	11331	10815	10392	9852	11015	9.799
(5)	8605	7806	7405	7124	6336	7455	11.244

GEL Laboratories LLC  
INITIAL CALIBRATION DATA

Start Cal Date : 14-DEC-2009 05:36  
 End Cal Date : 14-DEC-2009 12:37  
 Quant Method : ESTD  
 Origin : Disabled  
 Target Version : 3.50  
 Integrator : Falcon  
 Method file : /chem/ecdl1a.i/011410.b/ECD1-F-8082-121409.m  
 Cal Date : 15-Jan-2010 06:51 yip00818  
 Curve Type : Average

	100.000	200.000	500.000	1000.000	4000.000		
Compound	Level 1	Level 2	Level 3	Level 4	Level 5	RRF	% RSD
6 Aroclor-1254(1)	14281	12975	12313	11911	10947	12485	9.963
(2)	18803	17181	16666	15949	15010	16722	8.494
(3)	22492	20906	20786	20326	19059	20714	5.957
(4)	16753	15627	15809	15513	14770	15694	4.535
(5)	16595	15169	15433	15075	13591	15172	7.071
7 Aroclor-1260(1)	18145	17177	16842	16407	15189	16752	6.464
(2)	26410	24871	24973	24571	22887	24743	5.081
(3)	16099	14386	14855	14472	13625	14687	6.171
(4)	16517	14719	15311	15032	14343	15185	5.451
(5)	35425	33953	34899	34487	32987	34350	2.719
8 Aroclor-1262(1)	++++	++++	++++	14019	++++	14019	0.000
(2)	++++	++++	++++	18406	++++	18406	0.000
(3)	++++	++++	++++	22511	++++	22511	0.000
(4)	++++	++++	++++	20327	++++	20327	0.000
(5)	++++	++++	++++	43170	++++	43170	0.000
9 Aroclor-1268(1)	56914	55996	53872	52565	52528	54375	3.680
(2)	57500	55307	54092	52376	51697	54194	4.300
(3)	43006	41368	40020	38976	39247	40524	4.120
(4)	19620	18932	18085	17425	17569	18326	5.094
(5)	128350	126812	122798	118830	119599	123278	3.436
M 10 Aroclor-Total	++++	++++	++++	++++	++++	++++	++++
\$ 11 4cmx	367897	454677	359986	359846	335942	375669	12.182
\$ 12 Decachlorobiphenyl	316645	388263	307193	296602	278999	317541	13.206

GEL Laboratories LLC  
INITIAL CALIBRATION DATA

Start Cal Date : 11-DEC-2009 10:17  
 End Cal Date : 14-DEC-2009 12:37  
 Quant Method : ESTD  
 Origin : Disabled  
 Target Version : 3.50  
 Integrator : Falcon  
 Method file : /chem/ecdla.i/011410.b/ECD1-B-8082-121409.m  
 Cal Date : 15-Jan-2010 07:12 yip00818  
 Curve Type : Average

## Calibration File Names:

Level 1: /chem/ecdla.i/121409.b/040b4001.d  
 Level 2: /chem/ecdla.i/121409.b/041b4101.d  
 Level 3: /chem/ecdla.i/121409.b/042b4201.d  
 Level 4: /chem/ecdla.i/121409.b/046b4601.d  
 Level 5: /chem/ecdla.i/121409.b/044b4401.d

Compound	100.000	200.000	500.000	1000.000	4000.000	RRF	% RSD
Level 1	Level 2	Level 3	Level 4	Level 5			
1 Aroclor-1016(1)	14281	12734	12848	12156	11039	12612	9.333
(2)	10954	9913	9256	8806	7710	9328	13.003
(3)	6310	5679	5380	5089	4598	5411	11.852
(4)	8214	7430	6981	6696	5938	7052	12.003
(5)	7754	6843	6481	6115	5561	6551	12.561
62 4,4-DDT	++++	++++	++++	243613	++++	243613	0.000
63 4,4-DDE	++++	++++	++++	357996	++++	357996	0.000
64 4,4-DDD	++++	++++	++++	289343	++++	289343	0.000
2 Aroclor-1221(1)	++++	++++	++++	3640	++++	3640	0.000
(2)	++++	++++	++++	2329	++++	2329	0.000
(3)	++++	++++	++++	8119	++++	8119	0.000
3 Aroclor-1232(1)	++++	++++	++++	6156	++++	6156	0.000
(2)	++++	++++	++++	6302	++++	6302	0.000
(3)	++++	++++	++++	4701	++++	4701	0.000
(4)	++++	++++	++++	3243	++++	3243	0.000
(5)	++++	++++	++++	3151	++++	3151	0.000
4 Aroclor-1242(1)	12348	11309	9989	9755	9542	10589	11.338
(2)	9730	8628	7875	7358	6677	8054	14.627
(3)	7163	6326	5763	5452	5107	5962	13.534
(4)	7183	6468	5900	5548	5185	6057	12.997
(5)	7820	7123	6589	6229	5746	6701	11.977
5 Aroclor-1248(1)	9914	8542	7972	7289	6553	8054	15.880
(2)	11996	10356	9798	9046	8173	9874	14.605
(3)	13306	11756	11119	10365	9555	11220	12.723
(4)	14720	13121	12480	11577	10516	12483	12.732
(5)	14361	12633	11977	11210	10342	12104	12.596

## GEL Laboratories LLC

## INITIAL CALIBRATION DATA

Start Cal Date : 11-DEC-2009 10:17  
 End Cal Date : 14-DEC-2009 12:37  
 Quant Method : ESTD  
 Origin : Disabled  
 Target Version : 3.50  
 Integrator : Falcon  
 Method file : /chem/ecdl1a.i/011410.b/ECD1-B-8082-121409.m  
 Cal Date : 15-Jan-2010 07:12 yip00818  
 Curve Type : Average

Compound	100.000 Level 1	200.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
6 Aroclor-1254 (1)	7857	6938	6317	5878	5185	6435	15.850
(2)	13759	12316	11389	10708	9625	11559	13.615
(3)	14674	13172	12243	11576	10492	12431	12.786
(4)	19102	17554	16808	16165	14771	16880	9.533
(5)	14276	12708	12612	11843	10739	12435	10.425
7 Aroclor-1260 (1)	15678	14232	13583	13177	11731	13680	10.567
(2)	18142	16574	16035	15527	13867	16029	9.709
(3)	14298	13064	12524	12030	10903	12564	9.989
(4)	14593	13310	12766	12230	11150	12810	9.970
(5)	30553	28626	28257	27276	24777	27898	7.569
8 Aroclor-1262 (1)	++++	++++	++++	12922	++++	12922	0.000
(2)	++++	++++	++++	18311	++++	18311	0.000
(3)	++++	++++	++++	16579	++++	16579	0.000
(4)	++++	++++	++++	33287	++++	33287	0.000
(5)	++++	++++	++++	22972	++++	22972	0.000
9 Aroclor-1268 (1)	48327	45655	43354	41349	39206	43578	8.193
(2)	44968	41865	39872	38249	36983	40388	7.790
(3)	35350	32573	30975	29630	28674	31440	8.372
(4)	16410	14977	13894	13214	12876	14274	10.077
(5)	96769	92419	87897	84047	83161	88859	6.460
10 Aroclor-Total	++++	++++	++++	++++	++++	++++	++++
11 4cmx	307069	367145	286931	282899	256086	300026	13.893
12 Decachlorobiphenyl	248884	286011	224119	212175	194946	233227	15.194

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.: 10-1160  
 Instrument ID: ECD1A Calibration Date: 01/14/10 Time: 0847  
 Lab File ID: 002F0201 Init. Calib. Date(s): 12/14/09 12/14/09  
 Heated Purge: (Y/N) N Init. Calib. Times: 1031 1113  
 GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	13866.870	13587.809	0.01	-2.0	15.0
(2)	10097.726	10697.988	0.01	5.9	15.0
(3)	11757.020	11548.310	0.01	-1.8	15.0
(4)	6599.010	6940.701	0.01	5.2	15.0
(5)	8673.402	9023.626	0.01	4.0	15.0
Aroclor-1260	16752.150	17584.978	0.01	5.0	15.0
(2)	24742.603	26848.706	0.01	8.5	15.0
(3)	14687.346	16026.742	0.01	9.1	15.0
(4)	15184.529	16754.501	0.01	10.3	15.0
(5)	34350.443	38191.088	0.01	11.2	15.0
4cmx	357482.34	375271.42	0.01	5.0	15.0
Decachlorobiphenyl	302009.99	313519.47	0.01	3.8	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.: 10-1160  
 Instrument ID: ECD1A Calibration Date: 01/14/10 Time: 0847  
 Lab File ID: 002B0201 Init. Calib. Date(s): 12/14/09 12/14/09  
 Heated Purge: (Y/N) N Init. Calib. Times: 1031 1113  
 GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	12611.539	12730.333	0.01	0.9	15.0
(2)	9327.875	8547.247	0.01	-8.4	15.0
(3)	5411.316	5294.934	0.01	-2.2	15.0
(4)	7051.879	6729.494	0.01	-4.6	15.0
(5)	6550.733	6362.664	0.01	-2.9	15.0
Aroclor-1260	13680.027	13058.738	0.01	-4.5	15.0
(2)	16029.019	15894.420	0.01	-0.8	15.0
(3)	12563.933	12126.353	0.01	-3.5	15.0
(4)	12810.076	12497.600	0.01	-2.4	15.0
(5)	27897.674	28068.144	0.01	0.6	15.0
4cmx	285339.98	281391.13	0.01	-1.4	15.0
Decachlorobiphenyl	221786.62	222352.95	0.01	0.2	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.: 10-1160  
 Instrument ID: ECD1A Calibration Date: 01/14/10 Time: 1222  
 Lab File ID: 020F2001 Init. Calib. Date(s): 12/14/09 12/14/09  
 Heated Purge: (Y/N) N Init. Calib. Times: 1031 1113  
 GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	13866.870	13990.804	0.01	0.9	15.0
(2)	10097.726	11241.845	0.01	11.3	15.0
(3)	11757.020	11892.777	0.01	1.2	15.0
(4)	6599.010	7119.055	0.01	7.9	15.0
(5)	8673.402	9196.233	0.01	6.0	15.0
Aroclor-1260	16752.150	17919.505	0.01	7.0	15.0
(2)	24742.603	27314.637	0.01	10.4	15.0
(3)	14687.346	16227.007	0.01	10.5	15.0
(4)	15184.529	16985.692	0.01	11.9	15.0
(5)	34350.443	38637.402	0.01	12.5	15.0
4cmx	357482.34	385789.94	0.01	7.9	15.0
Decachlorobiphenyl	302009.99	316292.82	0.01	4.7	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.: 10-1160  
 Instrument ID: ECD1A Calibration Date: 01/14/10 Time: 1222  
 Lab File ID: 020B2001 Init. Calib. Date(s): 12/14/09 12/14/09  
 Heated Purge: (Y/N) N Init. Calib. Times: 1031 1113  
 GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	12611.539	13260.191	0.01	5.1	15.0
(2)	9327.875	8697.132	0.01	-6.8	15.0
(3)	5411.316	5356.526	0.01	-1.0	15.0
(4)	7051.879	6824.332	0.01	-3.2	15.0
(5)	6550.733	6329.312	0.01	-3.4	15.0
Aroclor-1260	13680.027	13225.790	0.01	-3.3	15.0
(2)	16029.019	16055.650	0.01	0.2	15.0
(3)	12563.933	12306.075	0.01	-2.0	15.0
(4)	12810.076	12621.313	0.01	-1.5	15.0
(5)	27897.674	28043.476	0.01	0.5	15.0
4cmx	285339.98	286578.95	0.01	0.4	15.0
Decachlorobiphenyl	221786.62	222296.83	0.01	0.2	15.0

FORM VII PEST

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011410.b/002f0201.d

Lab Smp Id: WAR100104-60 01

Client Smp ID: AR166001

Inj Date : 14-JAN-2010 08:47

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR100104-60 01

Misc Info :

Comment :

Method : /chem/ecdl1a.i/011410.b/ECD1-F-8082-121409.m

Meth Date : 23-Jan-2010 11:57 yip00818

Quant Type: ESTD

Cal Date : 14-DEC-2009 11:34

Cal File: 040f4001.d

Als bottle: 2

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1660.sub

Target Version: 3.50

Sample Matrix: None

Processing Host: hpc1p1

AMOUNTS

			CAL-AMT		ON-COL			
RT	EXP RT	DLT RT	RESPONSE ( ug/L)		( ug/L)	TARGET RANGE		RATIO
==	=====	=====	=====	=====	=====	=====	=====	
\$ 11 4cmx					CAS #: 877-09-8			
1.968	1.968	0.000	37527142	100.000	105	80.00-	120.00	100.00
-----								
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3			
5.280	5.280	0.000	31351947	100.000	104	80.00-	120.00	100.00
-----								
1 Aroclor-1016					CAS #: 12674-11-2			
2.423	2.423	0.000	13587809	1000.00	980	80.00-	120.00	100.00
2.700	2.700	0.000	10697988	1000.00	1060	58.73-	98.73	78.73
2.793	2.793	0.000	11548310	1000.00	982	64.99-	104.99	84.99
2.830	2.830	0.000	6940701	1000.00	1050	31.08-	71.08	51.08
3.041	3.041	0.000	9023626	1000.00	1040	46.41-	86.41	66.41
Average of Peak Amounts =					1.02e+03			
-----								
7 Aroclor-1260					CAS #: 11096-82-5			
3.767	3.767	0.000	17584978	1000.00	1050	80.00-	120.00	100.00
3.929	3.929	0.000	26848706	1000.00	1080	132.68-	172.68	152.68
4.160	4.160	0.000	16026742	1000.00	1090	71.14-	111.14	91.14
4.303	4.303	0.000	16754501	1000.00	1100	75.28-	115.28	95.28
4.482	4.482	0.000	38191088	1000.00	1110	197.18-	237.18	217.18
Average of Peak Amounts =					1.09e+03			

Data File: /chem/ecda.i/011410.b/002f0201.d

Date: 14-JAN-2010 08:47

Client ID: AR16001

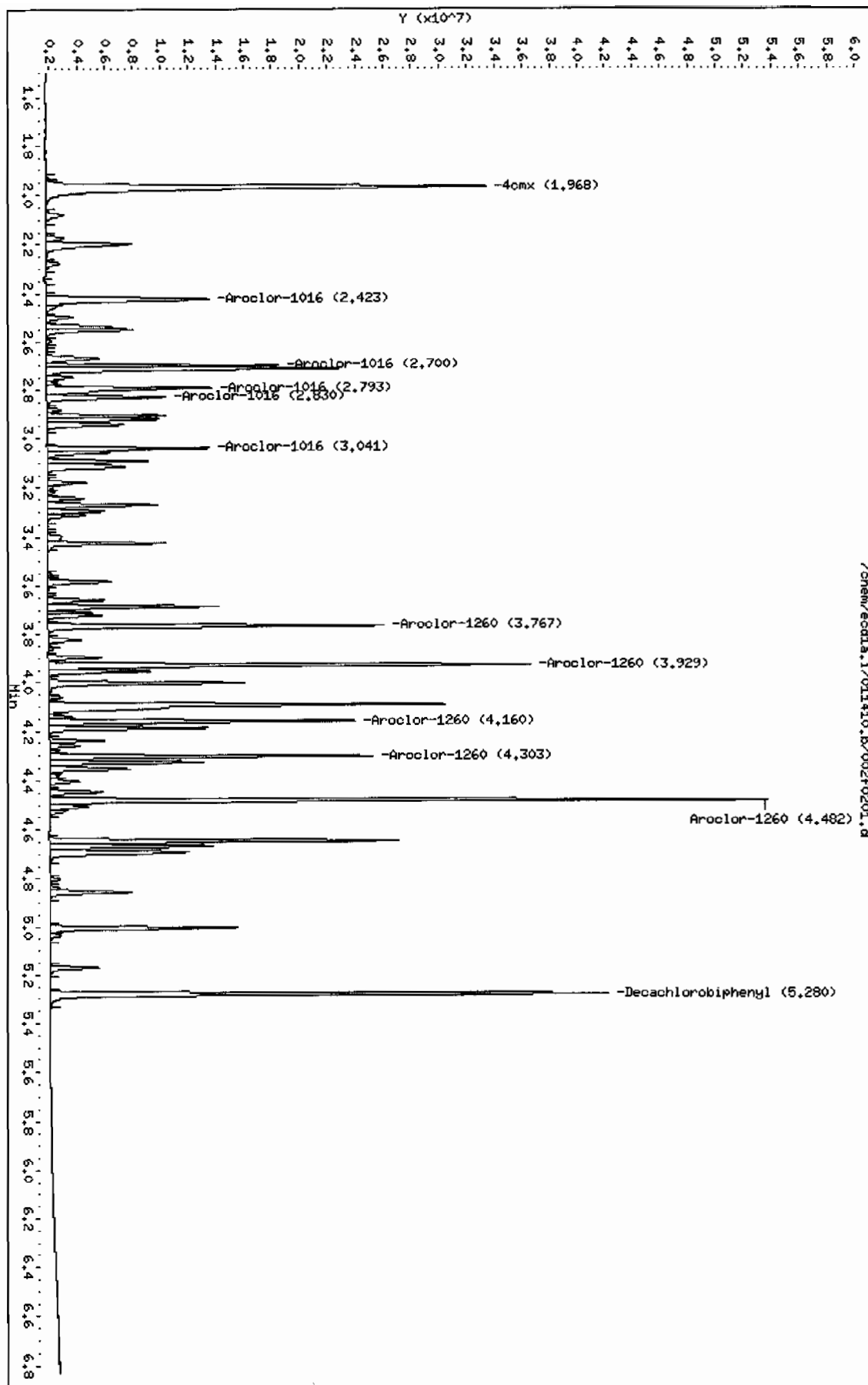
Sample Info: IWR100104-60 01

Column phase: CLP1

Instrument: ecda.i

Operator: YSI

Column diameter: 0.25



Data File: /chem/ecdl1a.i/011410.b/002b0201.d  
 Report Date: 02-Feb-2010 15:01

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011410.b/002b0201.d

Lab Smp Id: WAR100104-60 01

Client Smp ID: AR166001

Inj Date : 14-JAN-2010 08:47

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR100104-60 01

Misc Info :

Comment :

Method : /chem/ecdl1a.i/011410.b/ECD1-B-8082-121409.m

Meth Date : 02-Feb-2010 15:01 yml

Quant Type: ESTD

Cal Date : 14-DEC-2009 12:16

Cal File: 044b4401.d

Als bottle: 2

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1660.sub

Target Version: 3.50

Sample Matrix: None

Processing Host: kilroy

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			
2.298	2.298	0.000	28139113	100.000	98.6	80.00-	120.00	100.00
<hr/>								
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3			
5.943	5.943	0.000	22235295	100.000	100	80.00-	120.00	100.00
<hr/>								
1 Aroclor-1016					CAS #: 12674-11-2			
3.195	3.195	0.000	12730333	1000.00	1010	80.00-	120.00	100.00 (M)
3.278	3.278	0.000	8547247	1000.00	916	47.14-	87.14	67.14
3.342	3.342	0.000	5294934	1000.00	978	21.59-	61.59	41.59
3.568	3.568	0.000	6729494	1000.00	954	32.86-	72.86	52.86
3.644	3.644	0.000	6362664	1000.00	971	29.98-	69.98	49.98
Average of Peak Amounts =					966			
<hr/>								
7 Aroclor-1260					CAS #: 11096-82-5			
4.333	4.333	0.000	13058738	1000.00	954	80.00-	120.00	100.00
4.458	4.458	0.000	15894420	1000.00	992	101.71-	141.71	121.71
4.724	4.724	0.000	12126353	1000.00	965	72.86-	112.86	92.86
4.898	4.898	0.000	12497600	1000.00	976	75.70-	115.70	95.70
5.044	5.044	0.000	28068144	1000.00	1010	194.94-	234.94	214.94
Average of Peak Amounts =					979			

QC Flag Legend

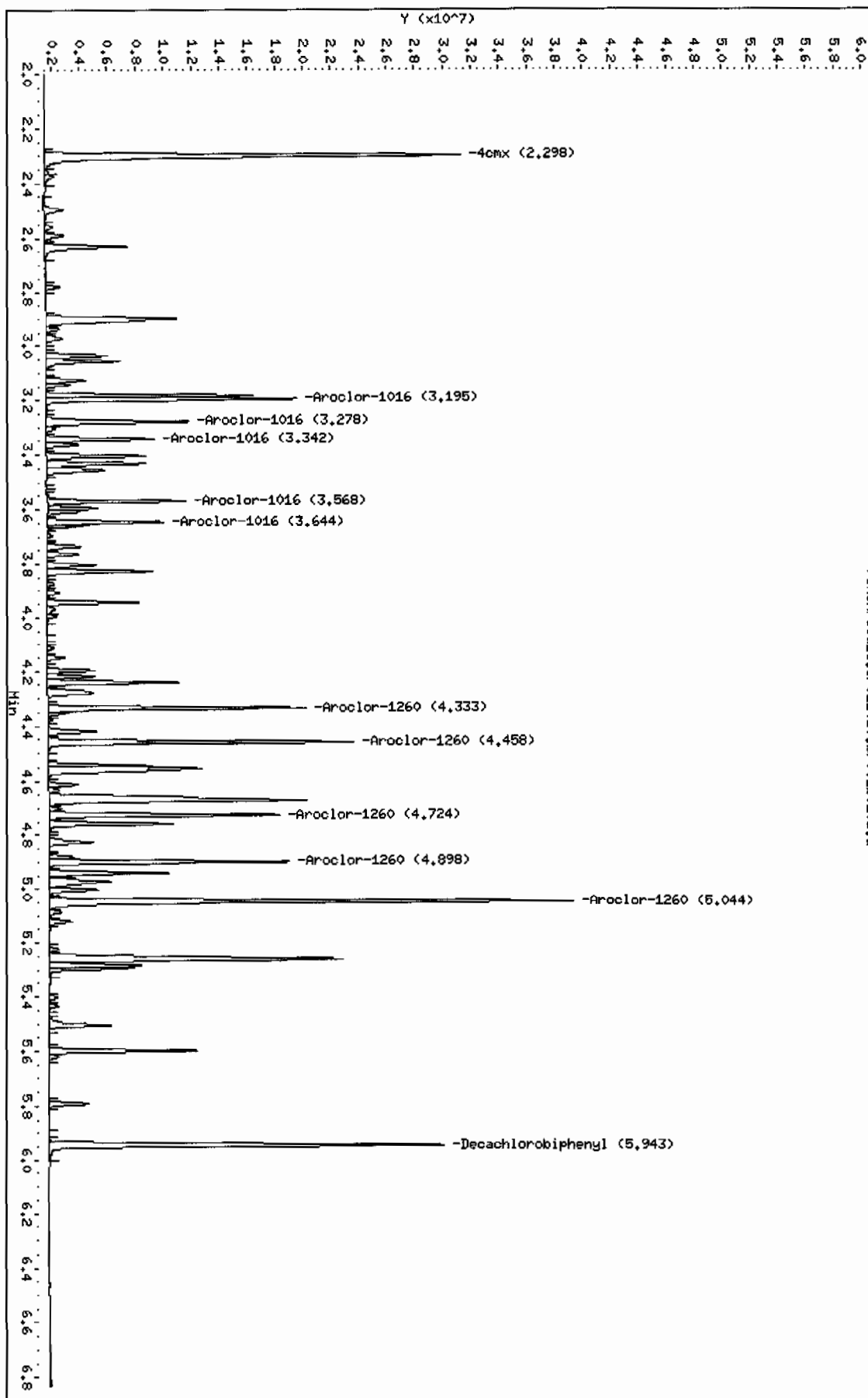
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Data File: /chem/ecdl1.1/011410.b/002b0201.d  
Date: 14-JAN-2010 08:47  
Client ID: AR166001  
Sample Info: 1MR100104-60 01

Column phase: CLP2

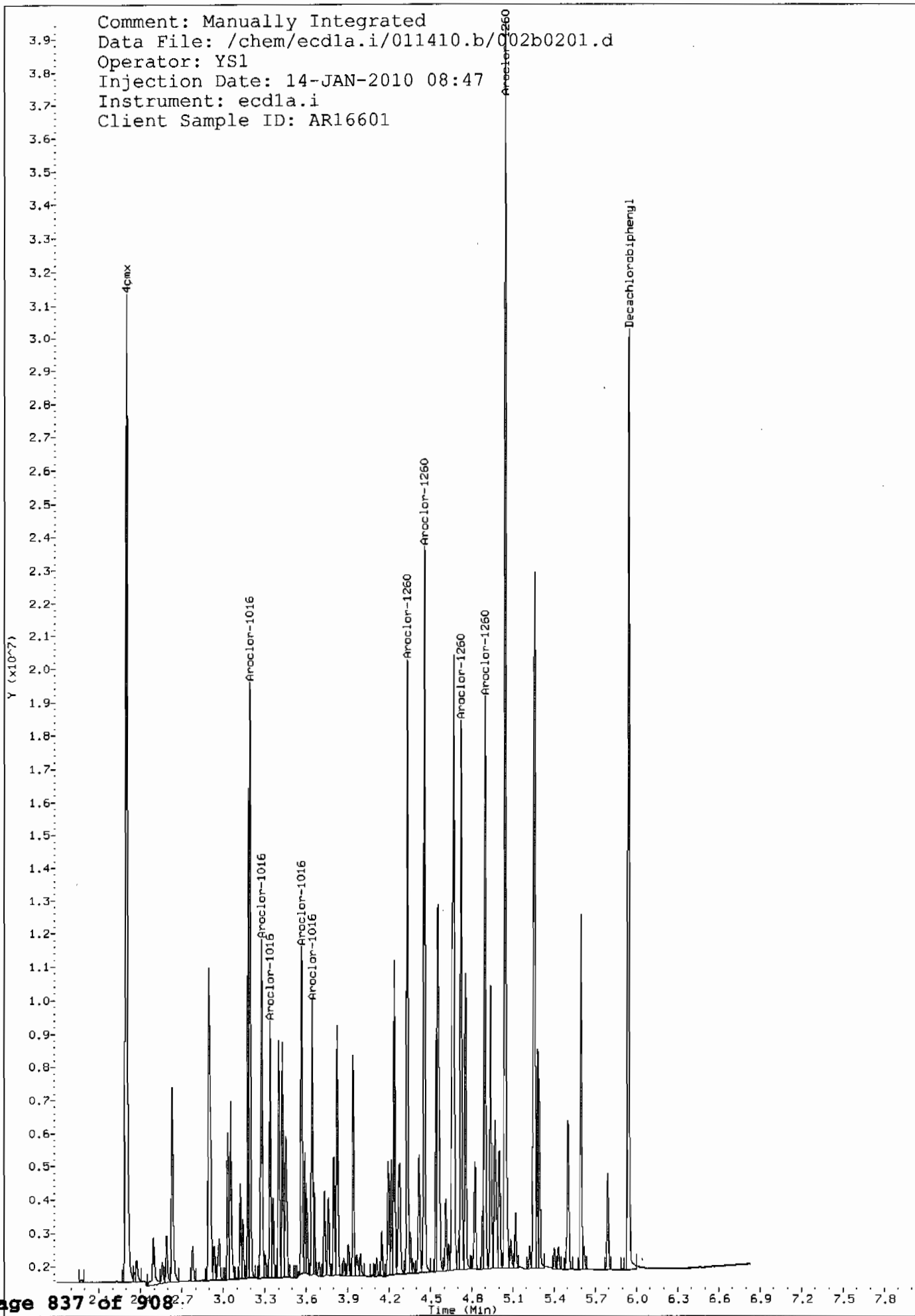
Instrument: ecdl1.1  
Operator: YSL  
Column diameter: 0.25

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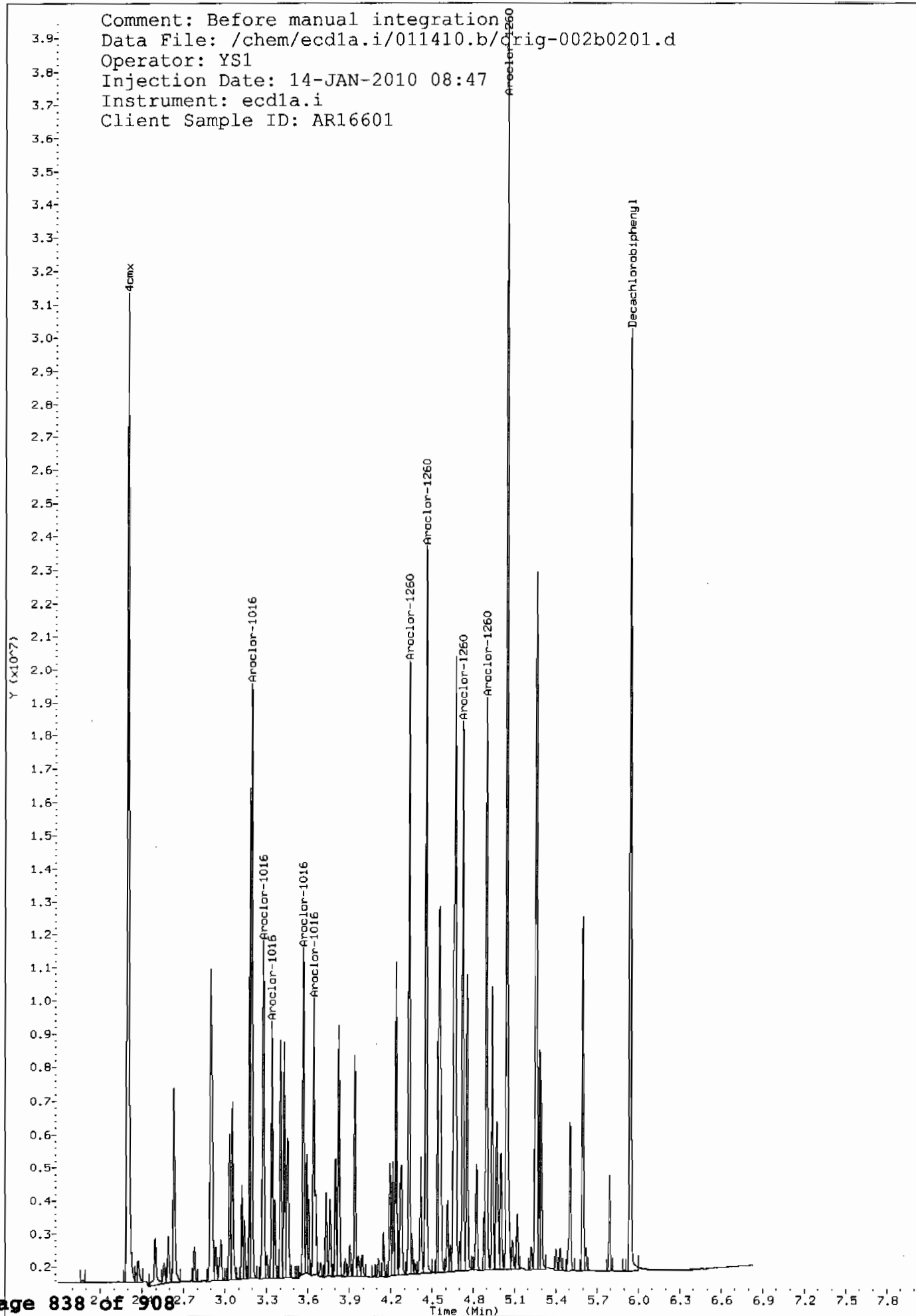




Comment: Manually Integrated  
Data File: /chem/ecdla.i/011410.b/002b0201.d  
Operator: YS1  
Injection Date: 14-JAN-2010 08:47  
Instrument: ecdla.i  
Client Sample ID: AR16601



Comment: Before manual integration  
Data File: /chem/ecdla.i/011410.b/orig-002b0201.d  
Operator: YS1  
Injection Date: 14-JAN-2010 08:47  
Instrument: ecdla.i  
Client Sample ID: AR16601



Data File: /chem/ecdl1a.i/011410.b/003f0301.d  
Report Date: 23-Jan-2010 11:58

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011410.b/003f0301.d

Lab Smp Id: WAR091216-54

Client Smp ID: AR125401

Inj Date : 14-JAN-2010 08:57

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR091216-54

Misc Info :

Comment :

Method : /chem/ecdl1a.i/011410.b/ECD1-F-8082-121409.m

Meth Date : 23-Jan-2010 11:58 yip00818 Quant Type: ESTD

Cal Date : 14-DEC-2009 11:34 Cal File: 040f4001.d

Als bottle: 3 Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1254.sub

Target Version: 3.50

Sample Matrix: None

Processing Host: hpc1p1

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ug/L)	ON-COL ( ug/L)	TARGET RANGE	RATIO
3.270	3.270	0.000	12284811 1000.00	984 80.00- 120.00	100.00	
3.426	3.426	0.000	16752744 1000.00	1000 116.37- 156.37	136.37	
3.659	3.659	0.000	21990439 1000.00	1060 159.01- 199.01	179.01	
3.823	3.823	0.000	16686469 1000.00	1060 115.83- 155.83	135.83	
3.931	3.931	0.000	15906016 1000.00	1050 109.48- 149.48	129.48	

Average of Peak Amounts = 1.03e+03

Data File: /chem/ecdda.i/011410.b/003f0301.d

Date: 14-JAN-2010 08:57

Client ID: AR125401

Sample Info: 14AR091216-54

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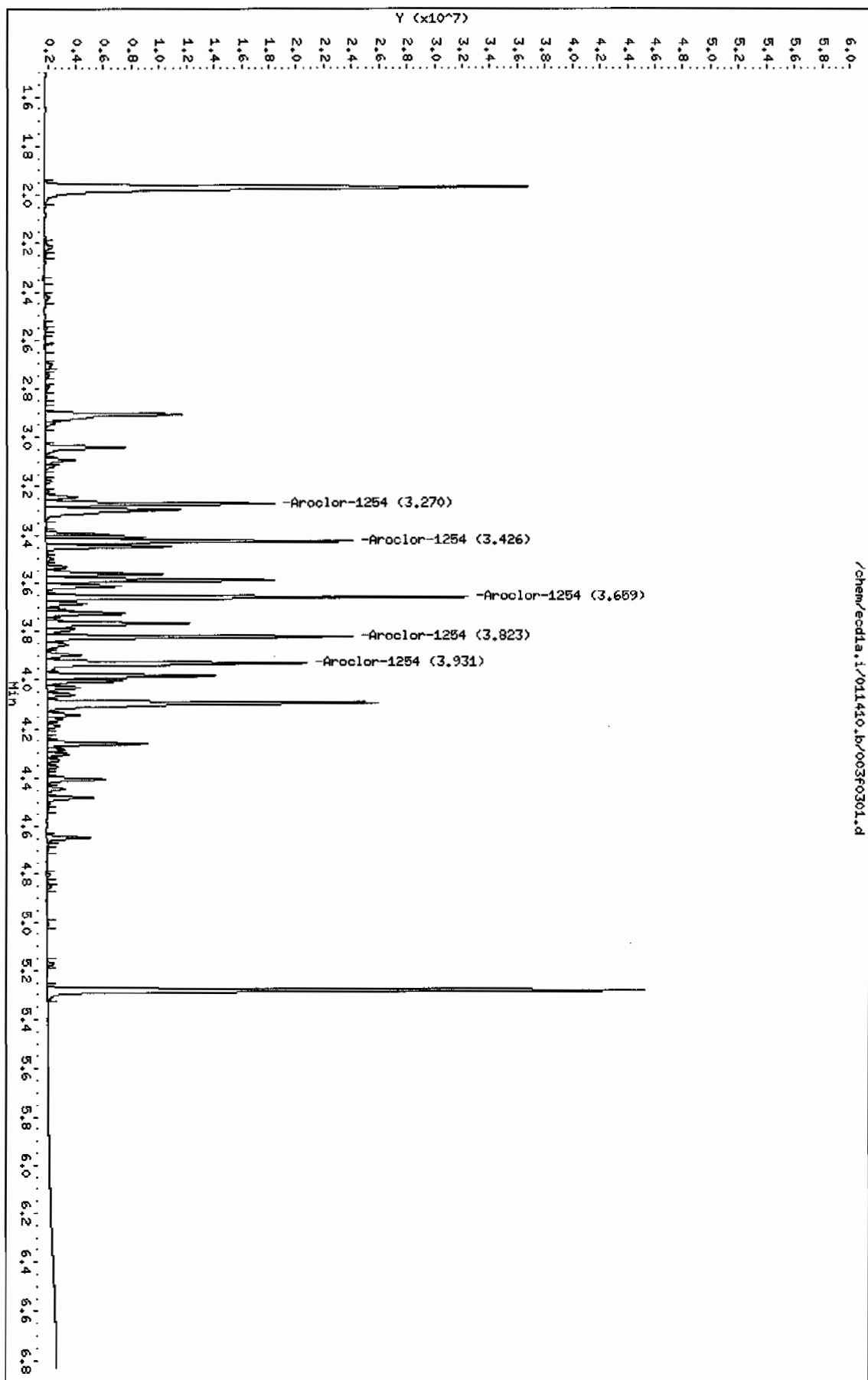
Instrument: ecdda.i

Operator: YSL

Column diameter: 0.25

Column phase: CLP1

/chem/ecdda.i/011410.b/003f0301.d



Data File: /chem/ecdl1a.i/011410.b/003b0301.d  
Report Date: 23-Jan-2010 11:58

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011410.b/003b0301.d  
Lab Smp Id: WAR091216-54 Client Smp ID: AR125401  
Inj Date : 14-JAN-2010 08:57  
Operator : YS1 Inst ID: ecd1a.i  
Smp Info : |WAR091216-54  
Misc Info :  
Comment :  
Method : /chem/ecdl1a.i/011410.b/ECD1-B-8082-121409.m  
Meth Date : 23-Jan-2010 11:58 yip00818 Quant Type: ESTD  
Cal Date : 14-DEC-2009 12:16 Cal File: 044b4401.d  
Als bottle: 3 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: AR1254.sub  
Target Version: 3.50 Sample Matrix: None  
Processing Host: hpclp1

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ug/L)	ON-COL ( ug/L)	TARGET RANGE	RATIO
6 Aroclor-1254					CAS #: 11097-69-1	
3.403	3.403	0.000	5839899 1000.00	907	80.00- 120.00	100.00
3.825	3.825	0.000	10451193 1000.00	904	158.96- 198.96	178.96
3.942	3.942	0.000	11668940 1000.00	939	179.81- 219.81	199.81
4.218	4.218	0.000	16334714 1000.00	968	259.71- 299.71	279.71
4.353	4.353	0.000	11869403 1000.00	954	183.25- 223.25	203.25
Average of Peak Amounts -				934		

Data File: /chem/ecdl.a.i/011410.b/003b0301.d

Date : 14-JAN-2010 08:57

Client ID: AR125401

Sample Info: 1MAR091216-54

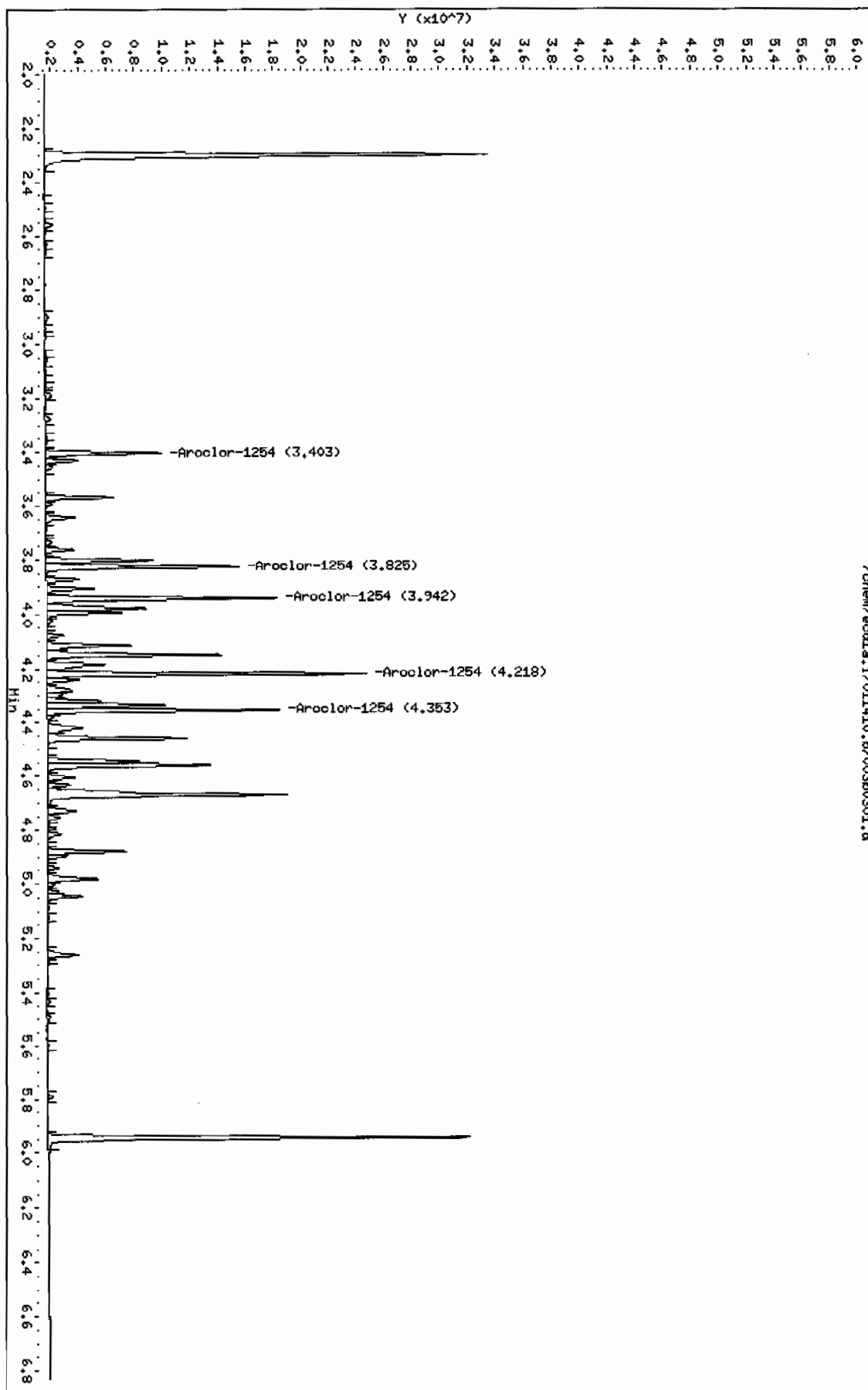
Column phase: CLP2

Instrument: ecdl.a.i

Operator: YS1

Column diameter: 0.25

/chem/ecdl.a.i/011410.b/003b0301.d



Data File: /chem/ecdl1a.i/011410.b/004f0401.d  
Report Date: 23-Jan-2010 11:58

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011410.b/004f0401.d

Lab Smp Id: WAR091217-42

Client Smp ID: AR124201

Inj Date : 14-JAN-2010 09:08

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR091217-42

Misc Info :

Comment :

Method : /chem/ecdl1a.i/011410.b/ECD1-F-8082-121409.m

Meth Date : 23-Jan-2010 11:58 yip00818

Quant Type: ESTD

Cal Date : 14-DEC-2009 11:34

Cal File: 040f4001.d

Als bottle: 4

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1242.sub

Target Version: 3.50

Sample Matrix: None

Processing Host: hpc1p1

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ug/L)	ON-COL ( ug/L)	TARGET RANGE	RATIO
2.423	2.423	0.000	11177946 1000.00	959	80.00- 120.00	100.00
2.713	2.713	0.000	14592666 1000.00	1080	110.55- 150.55	130.55
2.831	2.831	0.000	5600513 1000.00	1020	30.10- 70.10	50.10
3.042	3.042	0.000	7329642 1000.00	1010	45.57- 85.57	65.57
3.295	3.295	0.000	7205995 1000.00	1060	44.47- 84.47	64.47

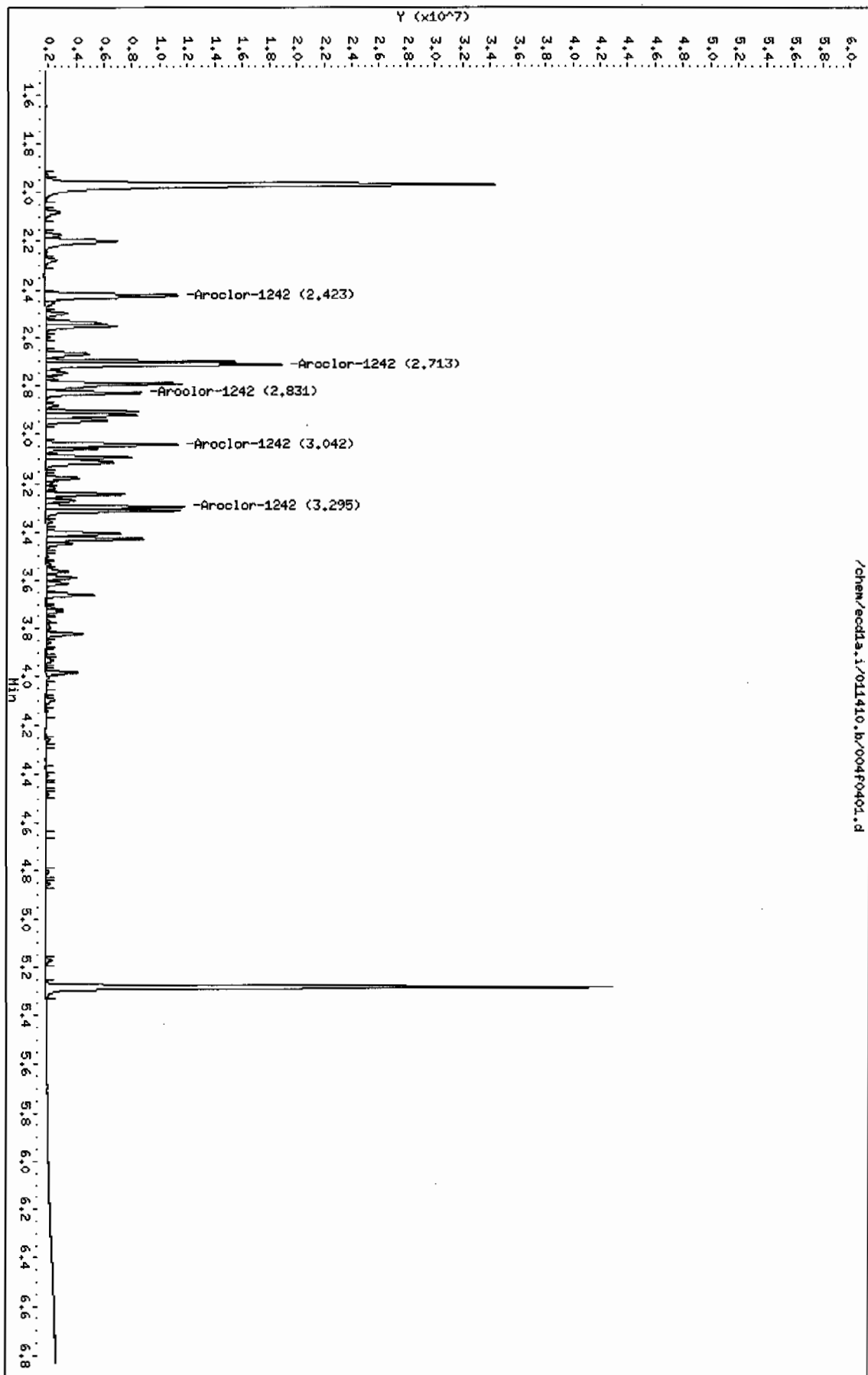
Average of Peak Amounts = 1.03e+03

Data File: /chem/ecdl1a.i/011410.b/004f0401.d  
Date: 14-JAN-2010 09:08  
Client ID: AR124201  
Sample Info: 14AR091217-42

Column phase: CLP1

Instrument: ecdl1a.i  
Operator: YSL  
Column diameter: 0.25

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Data File: /chem/ecdl1a.i/011410.b/004b0401.d  
Report Date: 23-Jan-2010 11:58

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RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011410.b/004b0401.d

Lab Smp Id: WAR091217-42

Client Smp ID: AR124201

Inj Date : 14-JAN-2010 09:08

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR091217-42

Misc Info :

Comment :

Method : /chem/ecdl1a.i/011410.b/ECD1-B-8082-121409.m

Meth Date : 23-Jan-2010 11:58 yip00818

Quant Type: ESTD

Cal Date : 14-DEC-2009 12:16

Cal File: 044b4401.d

Als bottle: 4

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1242.sub

Target Version: 3.50

Sample Matrix: None

Processing Host: hpclp1

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ug/L)	ON-COL ( ug/L)	TARGET RANGE	RATIO
4 Aroclor-1242					CAS #: 53469-21-9	
3.195	3.195	0.000	10052502 1000.00	949	80.00- 120.00	100.00
3.278	3.278	0.000	6998211 1000.00	869	49.62- 89.62	69.62
3.569	3.569	0.000	5705818 1000.00	957	36.76- 76.76	56.76
3.803	3.803	0.000	5794898 1000.00	957	37.65- 77.65	57.65
3.830	3.830	0.000	6515740 1000.00	972	44.82- 84.82	64.82
Average of Peak Amounts				941		

Data File: /chem/ecda.i/011410.b/004b0401.d

Date: 14-JAN-2010 09:08

Client ID: AR124201

Sample Info: 1MAR091217-42

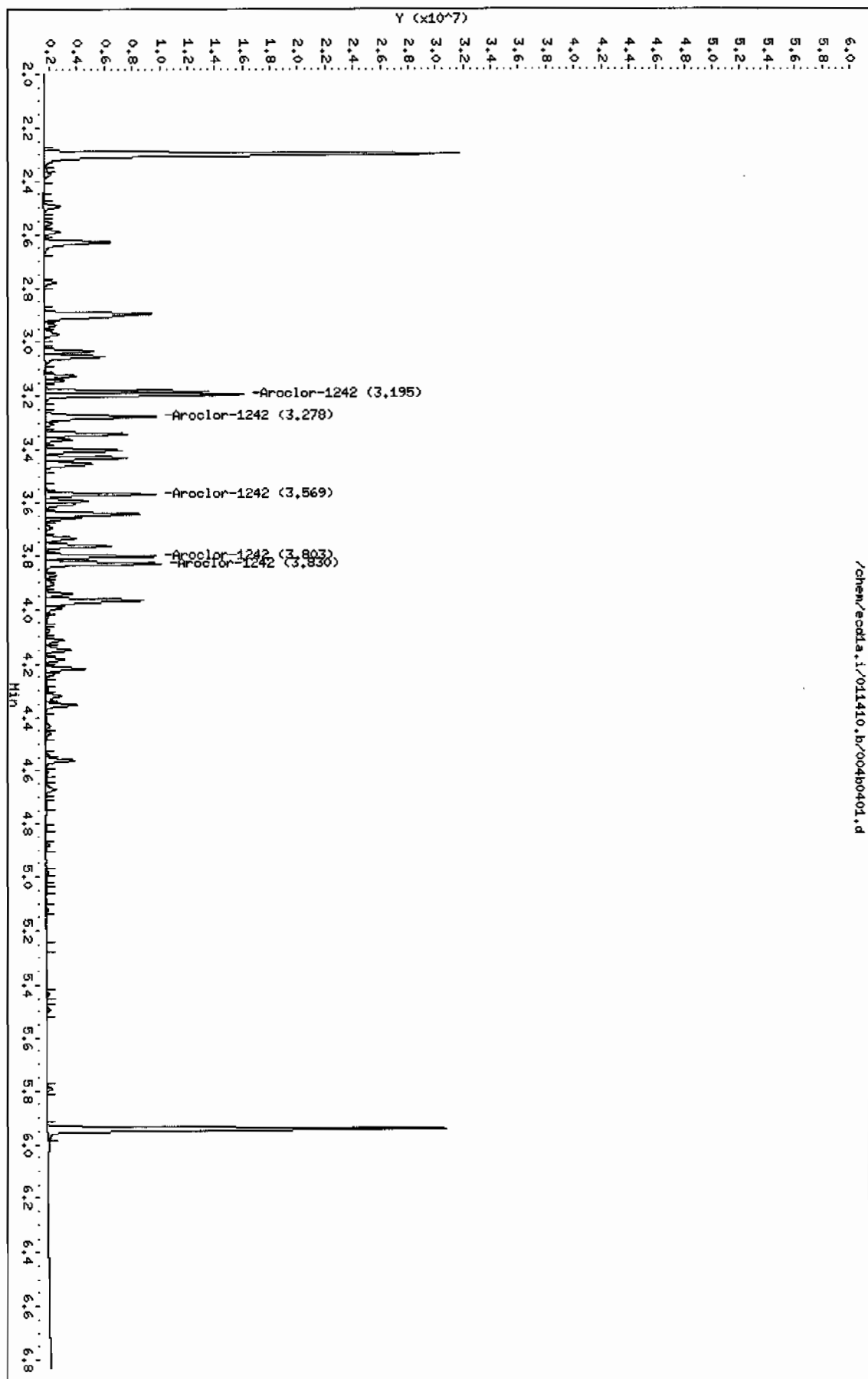
Column phase: CLP2

Instrument: ecda.i

Operator: YSA

Column diameter: 0.25

/chem/ecda.i/011410.b/004b0401.d



Data File: /chem/ecdl1a.i/011410.b/005f0501.d  
Report Date: 23-Jan-2010 11:58

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RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011410.b/005f0501.d  
Lab Smp Id: WAR091217-48 Client Smp ID: AR124801  
Inj Date : 14-JAN-2010 09:18  
Operator : YS1 Inst ID: ecd1a.i  
Smp Info : |WAR091217-48  
Misc Info :  
Comment :  
Method : /chem/ecdl1a.i/011410.b/ECD1-F-8082-121409.m  
Meth Date : 23-Jan-2010 11:58 yip00818 Quant Type: ESTD  
Cal Date : 14-DEC-2009 11:34 Cal File: 040f4001.d  
Als bottle: 5 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: AR1248.sub  
Target Version: 3.50 Sample Matrix: None  
Processing Host: hpclp1

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ug/L)	ON-COL ( ug/L)	TARGET RANGE	RATIO
3.094	3.094	0.000	7788004 1000.00	992	80.00- 120.00	100.00
3.244	3.244	0.000	6879703 1000.00	1000	68.34- 108.34	88.34
3.295	3.295	0.000	13442739 1000.00	1010	152.61- 192.61	172.61
3.427	3.427	0.000	10865496 1000.00	986	119.52- 159.52	139.52
3.659	3.659	0.000	6977173 1000.00	936	69.59- 109.59	89.59
Average of Peak Amounts =				985		

Data File: /chem/ecdl1a.i/011410.b/005f0501.d

Date: 14-JAN-2010 09:18

Client ID: AR124801

Sample Info: 1MAR091217-48

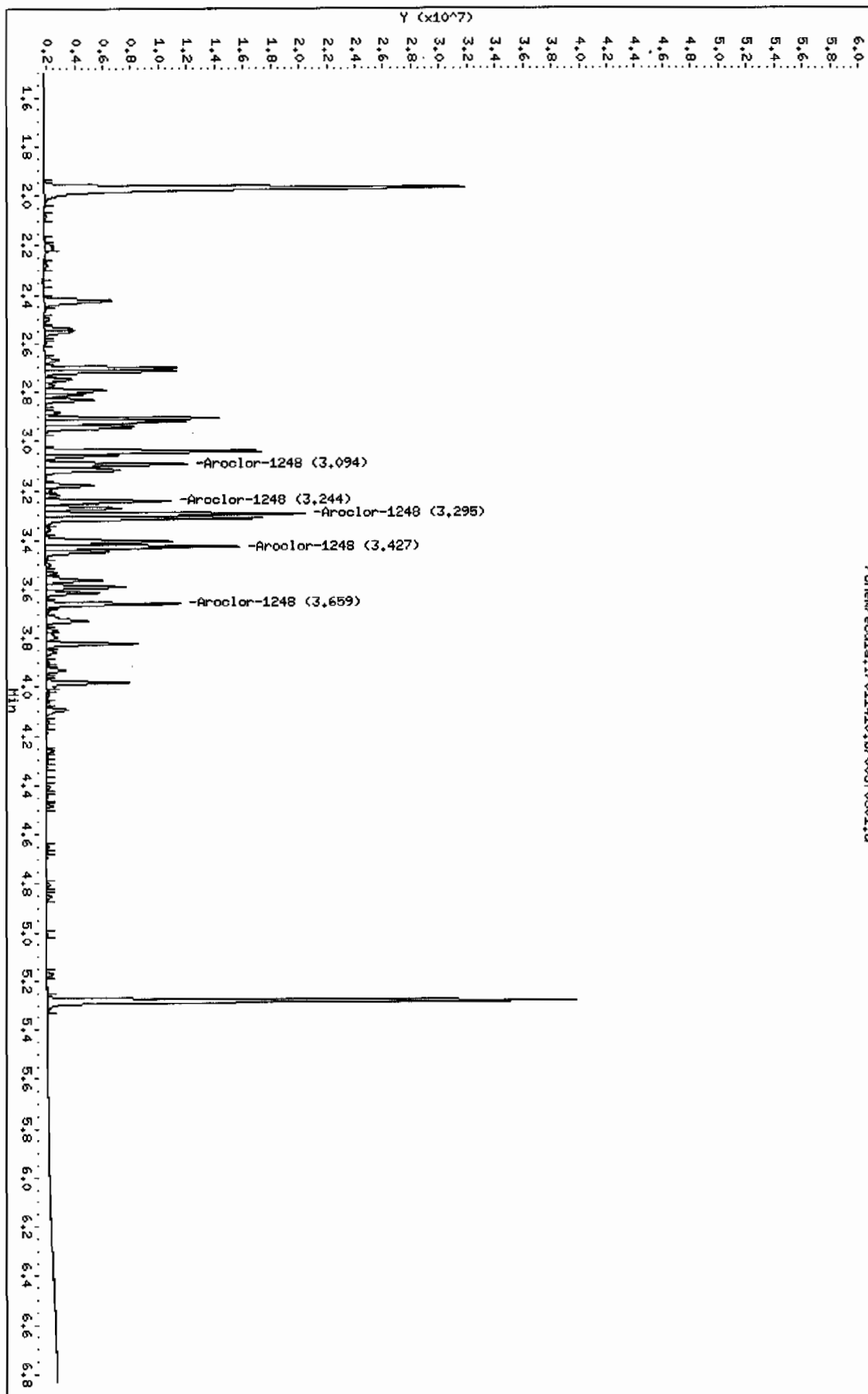
Column phase: CLP1

Instrument: ecdl1a.i

Operator: YSL

Column diameter: 0.25

/chem/ecdl1a.i/011410.b/005f0501.d



Data File: /chem/ecdl1a.i/011410.b/005b0501.d  
Report Date: 23-Jan-2010 11:58

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RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011410.b/005b0501.d

Lab Smp Id: WAR091217-48

Client Smp ID: AR124801

Inj Date : 14-JAN-2010 09:18

Operator : YSl

Inst ID: ecd1a.i

Smp Info : |WAR091217-48

Misc Info :

Comment :

Method : /chem/ecdl1a.i/011410.b/ECD1-B-8082-121409.m

Meth Date : 23-Jan-2010 11:58 yip00818

Quant Type: ESTD

Cal Date : 14-DEC-2009 12:16

Cal File: 044b4401.d

Als bottle: 5

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1248.sub

Target Version: 3.50

Sample Matrix: None

Processing Host: hpclp1

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ug/L)	ON-COL ( ug/L)	TARGET RANGE	RATIO
3.404	3.404	0.000	7103519 1000.00	882 80.00- 120.00	100.00	
3.569	3.569	0.000	8912915 1000.00	903 105.47- 145.47	125.47	
3.802	3.802	0.000	10131522 1000.00	903 122.63- 162.63	142.63	
3.830	3.830	0.000	11304587 1000.00	906 139.14- 179.14	159.14	
3.967	3.967	0.000	10820341 1000.00	894 132.32- 172.32	152.32	
Average of Peak Amounts =				897		

Data File: /chem/ecdl.a.i/011410.b/005b0501.d

Date : 14-JAN-2010 09:18

Client ID: AR124801

Sample Info: 14AR091217-48

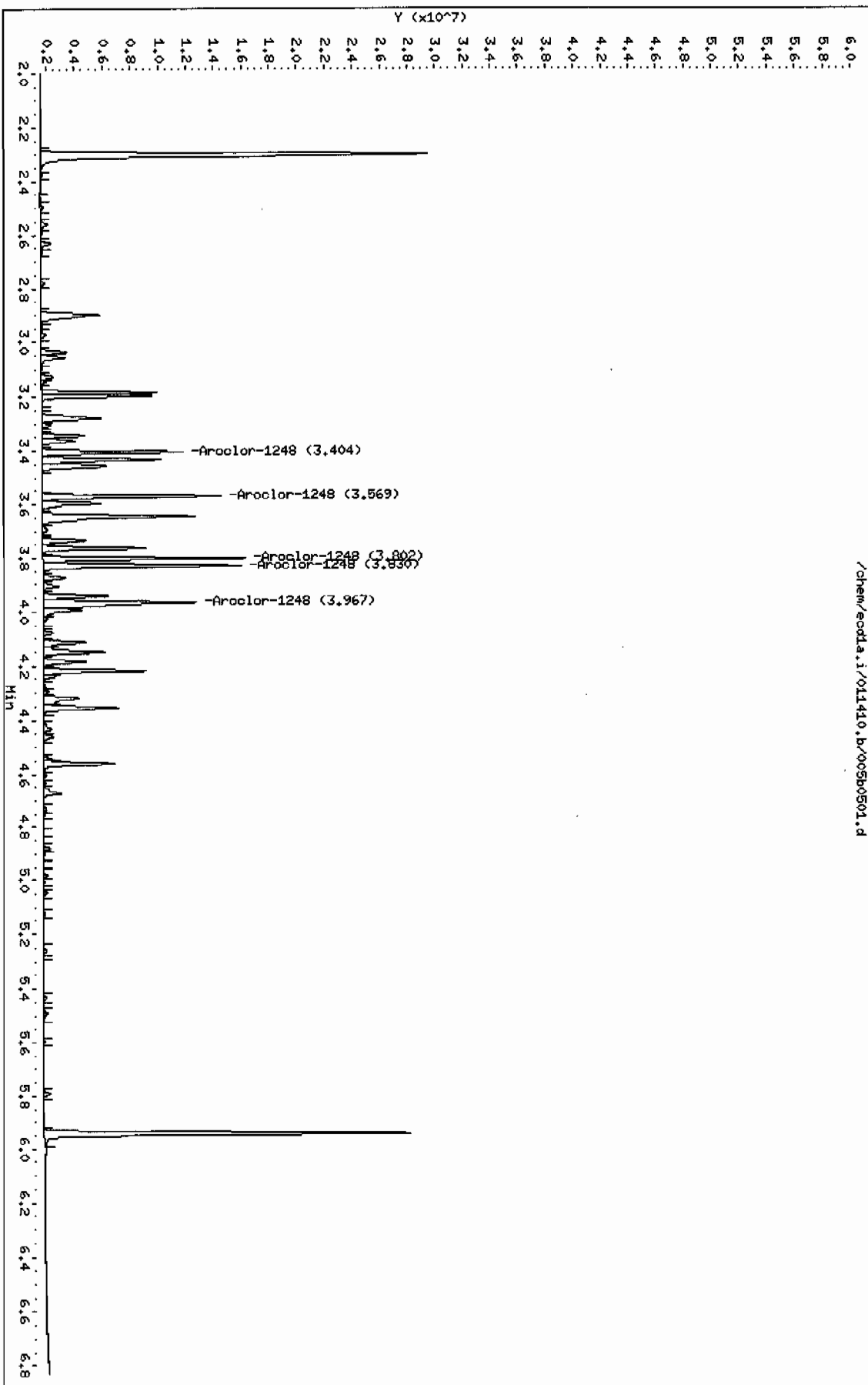
Column phase: CLP2

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Instrument: ecdl.a.i

Operator: YSL

Column diameter: 0.25



Data File: /chem/ecdl1a.i/011410.b/006f0601.d  
Report Date: 23-Jan-2010 11:58

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011410.b/006f0601.d  
Lab Smp Id: WAR100104-32 Client Smp ID: AR123201  
Inj Date : 14-JAN-2010 09:29  
Operator : YS1 Inst ID: ecd1a.i  
Smp Info : |WAR100104-32  
Misc Info :  
Comment :  
Method : /chem/ecdl1a.i/011410.b/ECD1-F-8082-121409.m  
Meth Date : 23-Jan-2010 11:58 yip00818 Quant Type: ESTD  
Cal Date : 14-DEC-2009 11:34 Cal File: 040f4001.d  
Als bottle: 6 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: AR1232.sub  
Target Version: 3.50 Sample Matrix: None  
Processing Host: hpclp1

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ug/L)	ON-COL ( ug/L)	TARGET RANGE	RATIO
3 Aroclor-1232					CAS #: 11141-16-5	
2.424	2.424	0.000	6178718 1000.00	920	80.00- 120.00	100.00
2.714	2.714	0.000	7888069 1000.00	967	107.67- 147.67	127.67
2.794	2.794	0.000	5279984 1000.00	918	65.45- 105.45	85.45
3.042	3.042	0.000	3873490 1000.00	980	42.69- 82.69	62.69
3.296	3.296	0.000	3673799 1000.00	1040	39.46- 79.46	59.46
Average of Peak Amounts =				965		

Data File: /chem/eod4a.i/011410.b/006f0601.d

Date: 14-JAN-2010 09:29

Client ID: AR123201

Sample Info: 1MAR00104-32

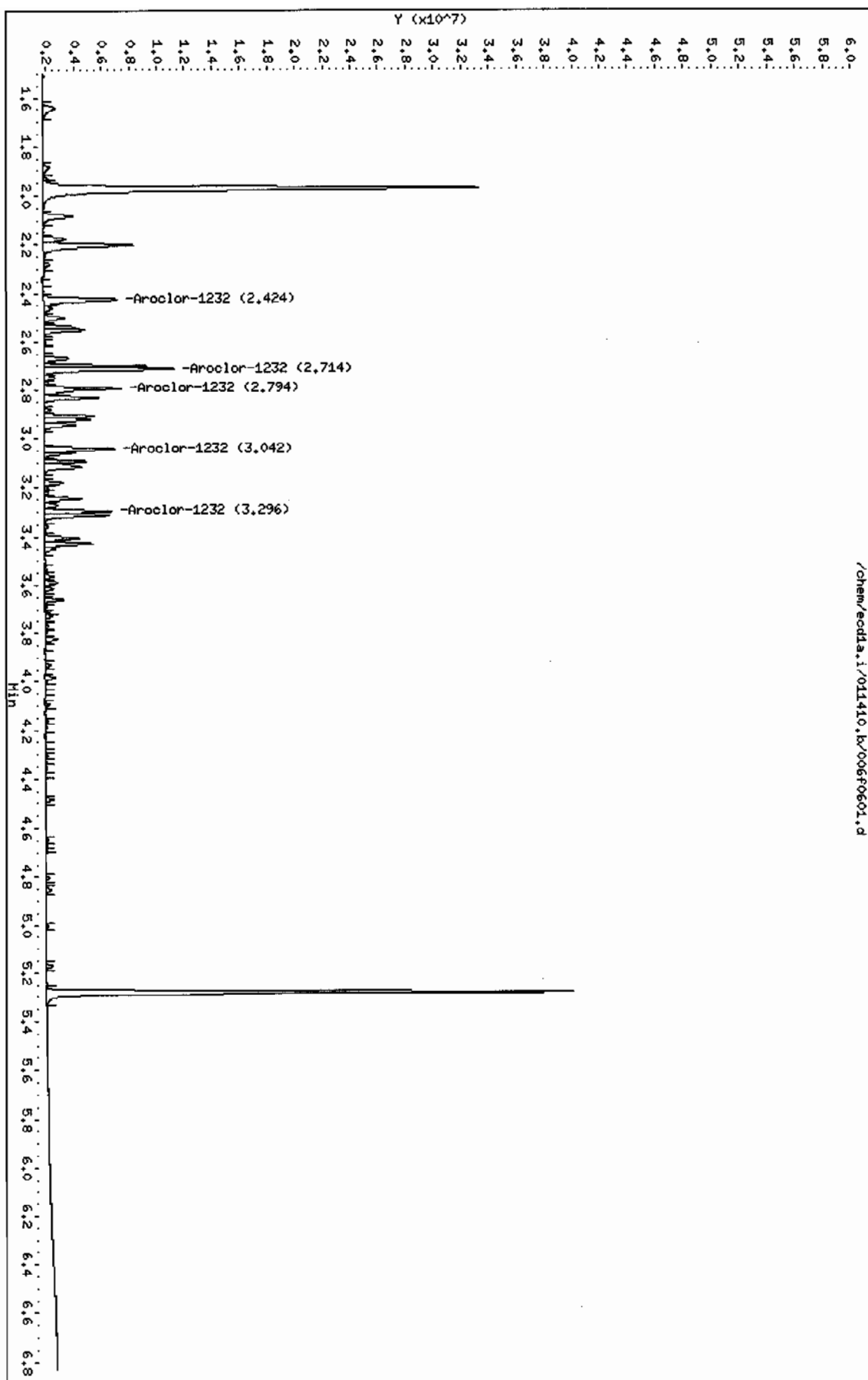
Column phase: CLP1

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Instrument: eod4a.i

Operator: YSL

Column diameter: 0.25





Data File: /chem/ecdl1a.i/011410.b/006b0601.d  
Report Date: 23-Jan-2010 11:59

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011410.b/006b0601.d  
Lab Smp Id: WAR100104-32 Client Smp ID: AR123201  
Inj Date : 14-JAN-2010 09:29  
Operator : YS1 Inst ID: ecd1a.i  
Smp Info : |WAR100104-32  
Misc Info :  
Comment :  
Method : /chem/ecdl1a.i/011410.b/ECD1-B-8082-121409.m  
Meth Date : 23-Jan-2010 11:58 yip00818 Quant Type: ESTD  
Cal Date : 14-DEC-2009 12:16 Cal File: 044b4401.d  
Als bottle: 6 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: AR1232.sub  
Target Version: 3.50 Sample Matrix: None  
Processing Host: hpclp1

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ug/L)	ON-COL ( ug/L)	TARGET RANGE	RATIO
2.631	2.631	0.000	5439572 1000.00	884	80.00- 120.00	100.00
3.196	3.196	0.000	5737499 1000.00	910	85.48- 125.48	105.48
3.279	3.279	0.000	4040563 1000.00	860	54.28- 94.28	74.28
3.569	3.569	0.000	2989897 1000.00	922	34.97- 74.97	54.97
3.803	3.803	0.000	2965744 1000.00	941	34.52- 74.52	54.52

Average of Peak Amounts =

903

Data File: /chem/ecdl1a.i/011410.b/0060601.d  
Date : 14-JAN-2010 09:29  
Client ID: AR123204  
Sample Info: IMPT00104-32

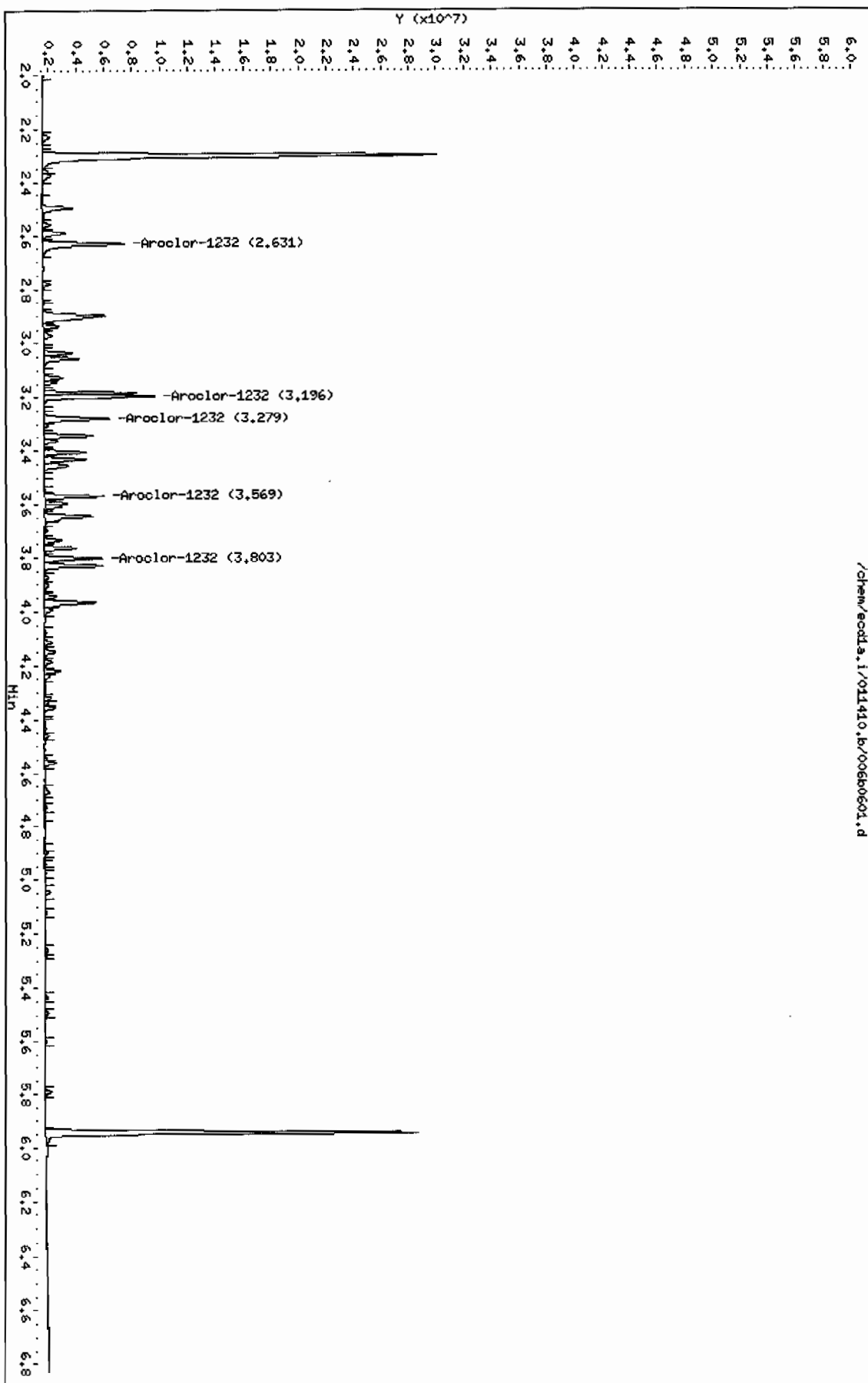
Instrument: ecdl1a.i

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Column phase: CLP2

Operator: YSL  
Column diameter: 0.25

/chem/ecdl1a.i/011410.b/0060601.d



Data File: /chem/ecdl1a.i/011410.b/007f0701.d  
Report Date: 23-Jan-2010 11:59

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RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011410.b/007f0701.d  
Lab Smp Id: WAR100104-21 Client Smp ID: AR122101  
Inj Date : 14-JAN-2010 09:39  
Operator : YS1 Inst ID: ecd1a.i  
Smp Info : |WAR100104-21  
Misc Info :  
Comment :  
Method : /chem/ecdl1a.i/011410.b/ECD1-F-8082-121409.m  
Meth Date : 23-Jan-2010 11:59 yip00818 Quant Type: ESTD  
Cal Date : 14-DEC-2009 11:34 Cal File: 040f4001.d  
Als bottle: 7 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: AR1221.sub  
Target Version: 3.50 Sample Matrix: None  
Processing Host: hpc1p1

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ug/L)	ON-COL ( ug/L)	TARGET RANGE	RATIO
2.082	2.082	0.000	3861712 1000.00	898	80.00- 120.00	100.00
2.175	2.175	0.000	2158718 1000.00	884	35.90- 75.90	55.90
2.201	2.201	0.000	9313972 1000.00	907	221.19- 261.19	241.19
Average of Peak Amounts =				896		

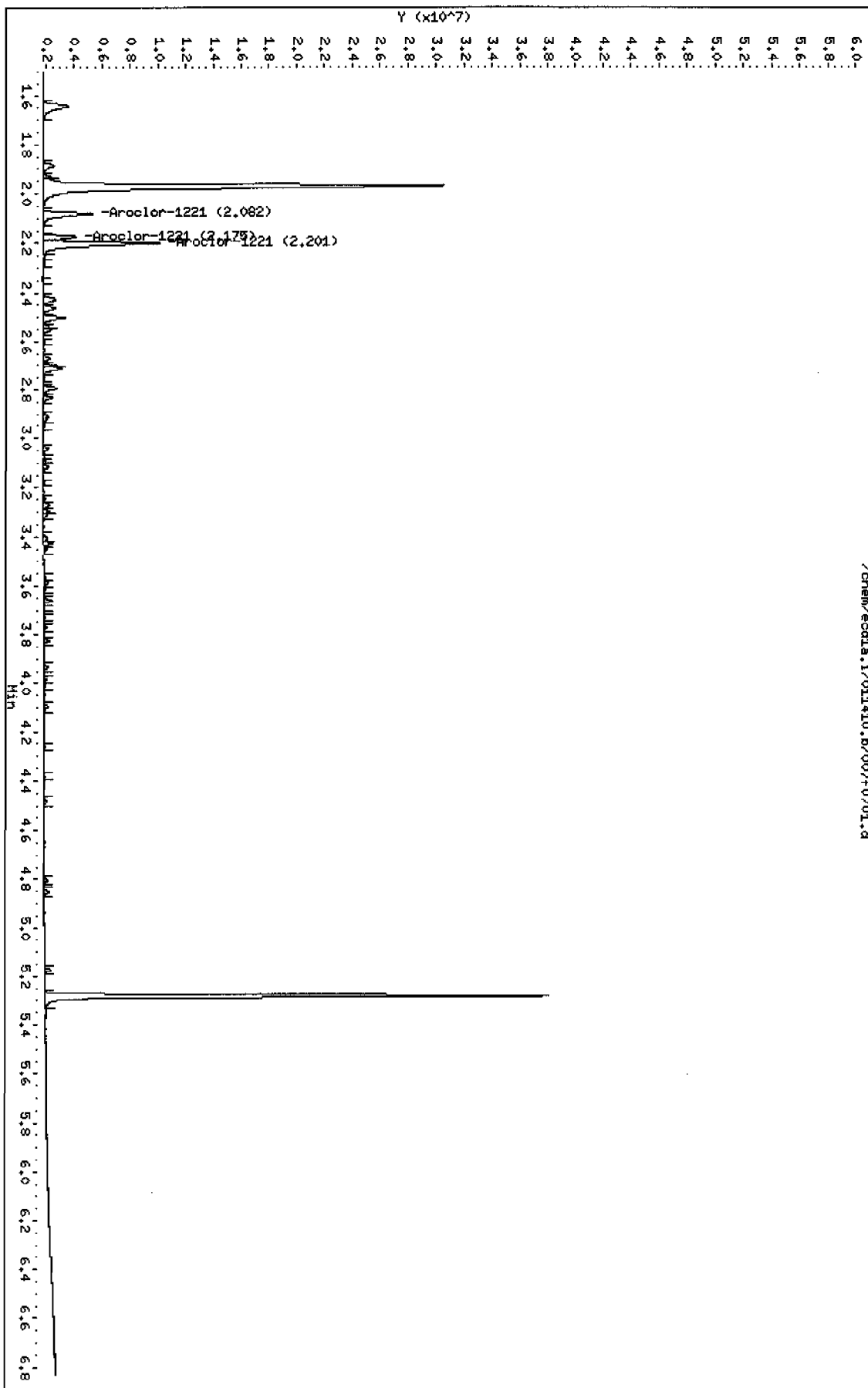
Data File: /chem/ecdda.i/011410.b/0070701.d  
Date: 14-JAN-2010 09:39  
Client ID: AR122101  
Sample Info: 14AR100104-21

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Column phase: CLP1

Instrument: ecdda.i  
Operator: YSL  
Column diameter: 0.25

/chem/ecdda.i/011410.b/0070701.d



Data File: /chem/ecdl1a.i/011410.b/007b0701.d  
Report Date: 23-Jan-2010 11:59

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RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011410.b/007b0701.d

Lab Smp Id: WAR100104-21

Client Smp ID: AR122101

Inj Date : 14-JAN-2010 09:39

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR100104-21

Misc Info :

Comment :

Method : /chem/ecdl1a.i/011410.b/ECD1-B-8082-121409.m

Meth Date : 23-Jan-2010 11:59 yip00818

Quant Type: ESTD

Cal Date : 14-DEC-2009 12:16

Cal File: 044b4401.d

Als bottle: 7

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1221.sub

Target Version: 3.50

Sample Matrix: None

Processing Host: hpc1p1

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ug/L)	ON-COL ( ug/L)	TARGET RANGE	RATIO
2.496	2.496	0.000	3400338 1000.00	934	80.00- 120.00	100.00
2.591	2.591	0.000	2095878 1000.00	900	41.64- 81.64	61.64
2.632	2.632	0.000	7056195 1000.00	869	187.51- 227.51	207.51
Average of Peak Amounts =				901		

Data File: /chem/ecdda.i/011410.b/007b0701.d

Date: 14-JAN-2010 09:39

Client ID: AR122101

Sample Info: 1MAR100104-21

Column phase: CLP2

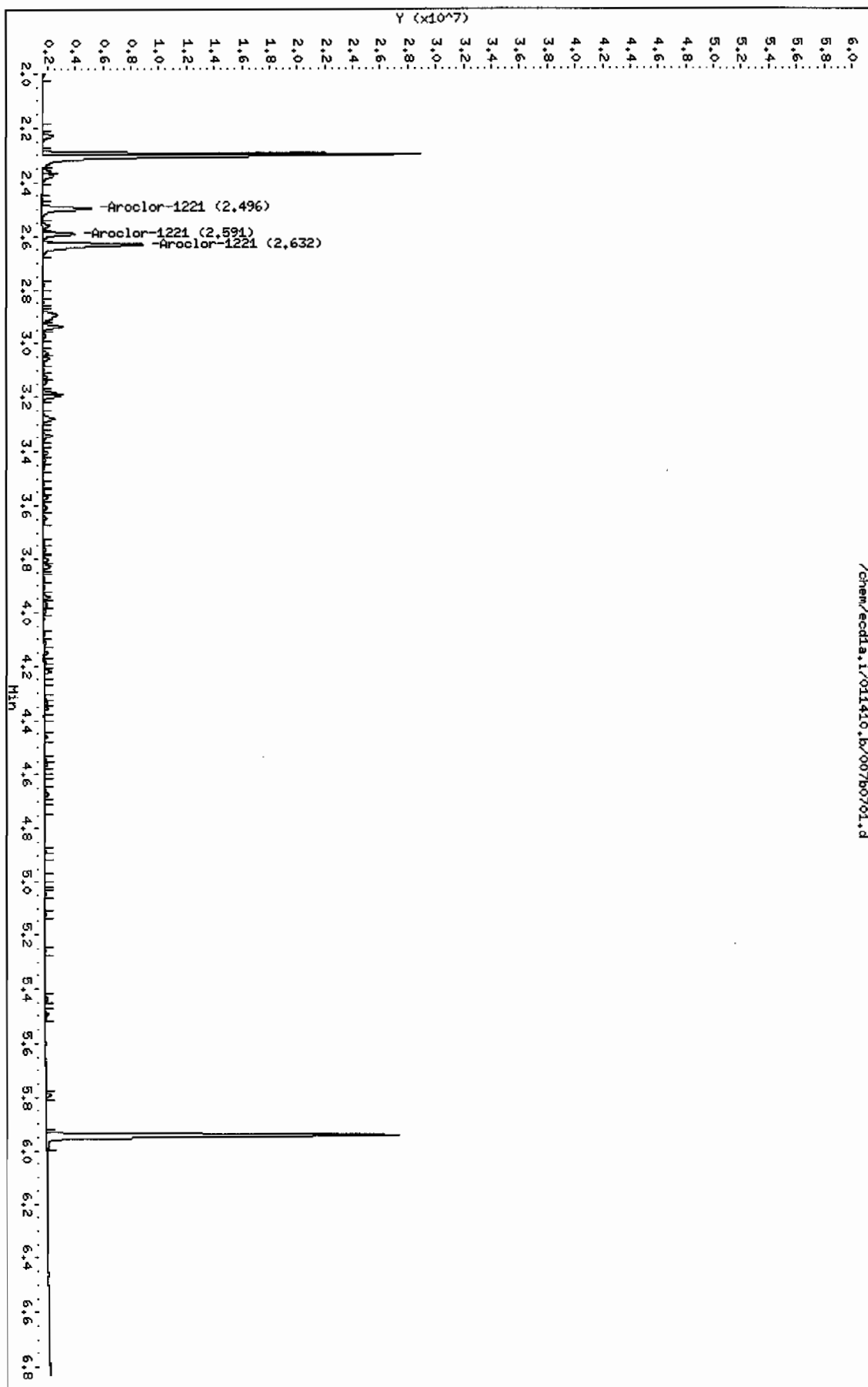
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Instrument: ecdda.i

Operator: YSL

Column diameter: 0.25

/chem/ecdda.i/011410.b/007b0701.d



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/011410.b/020f2001.d  
Lab Smp Id: WAR100104-60 02 Client Smp ID: AR166002  
Inj Date : 14-JAN-2010 12:22  
Operator : YS1 Inst ID: ecdla.i  
Smp Info : |WAR100104-60 02  
Misc Info :  
Comment :  
Method : /chem/ecdla.i/011410.b/ECD1-F-8082-121409.m  
Meth Date : 23-Jan-2010 12:02 yip00818 Quant Type: ESTD  
Cal Date : 14-DEC-2009 11:34 Cal File: 040f4001.d  
Als bottle: 20 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: AR1660.sub  
Target Version: 3.50 Sample Matrix: None  
Processing Host: hpc1p1

AMOUNTS						
			CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	( ug/L)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
\$ 11 4cmx				CAS #: 877-09-8		
1.967	1.968	-0.001	38578994 100.000	108	80.00- 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3		
5.279	5.280	-0.001	31629282 100.000	105	80.00- 120.00	100.00
-----						
1 Aroclor-1016				CAS #: 12674-11-2		
2.423	2.423	0.000	13990804 1000.00	1010	80.00- 120.00	100.00
2.700	2.700	0.000	11241845 1000.00	1110	60.35- 100.35	80.35
2.791	2.793	-0.002	11892777 1000.00	1010	65.00- 105.00	85.00
2.830	2.830	0.000	7119055 1000.00	1080	30.88- 70.88	50.88
3.040	3.041	-0.001	9196233 1000.00	1060	45.73- 85.73	65.73
Average of Peak Amounts =				1.05e+03		
-----						
7 Aroclor-1260				CAS #: 11096-82-5		
3.766	3.767	-0.001	17919505 1000.00	1070	80.00- 120.00	100.00
3.928	3.929	-0.001	27314637 1000.00	1100	132.43- 172.43	152.43
4.158	4.160	-0.002	16227007 1000.00	1100	70.55- 110.55	90.55
4.301	4.303	-0.002	16985692 1000.00	1120	74.79- 114.79	94.79
4.481	4.482	-0.001	38637402 1000.00	1120	195.62- 235.62	215.62
Average of Peak Amounts =				1.1e+03		

Data File: /chem/ecdda.i/011410.b/020f2001.d

Date: 14-JUN-2010 12:22

Client ID: AR16002

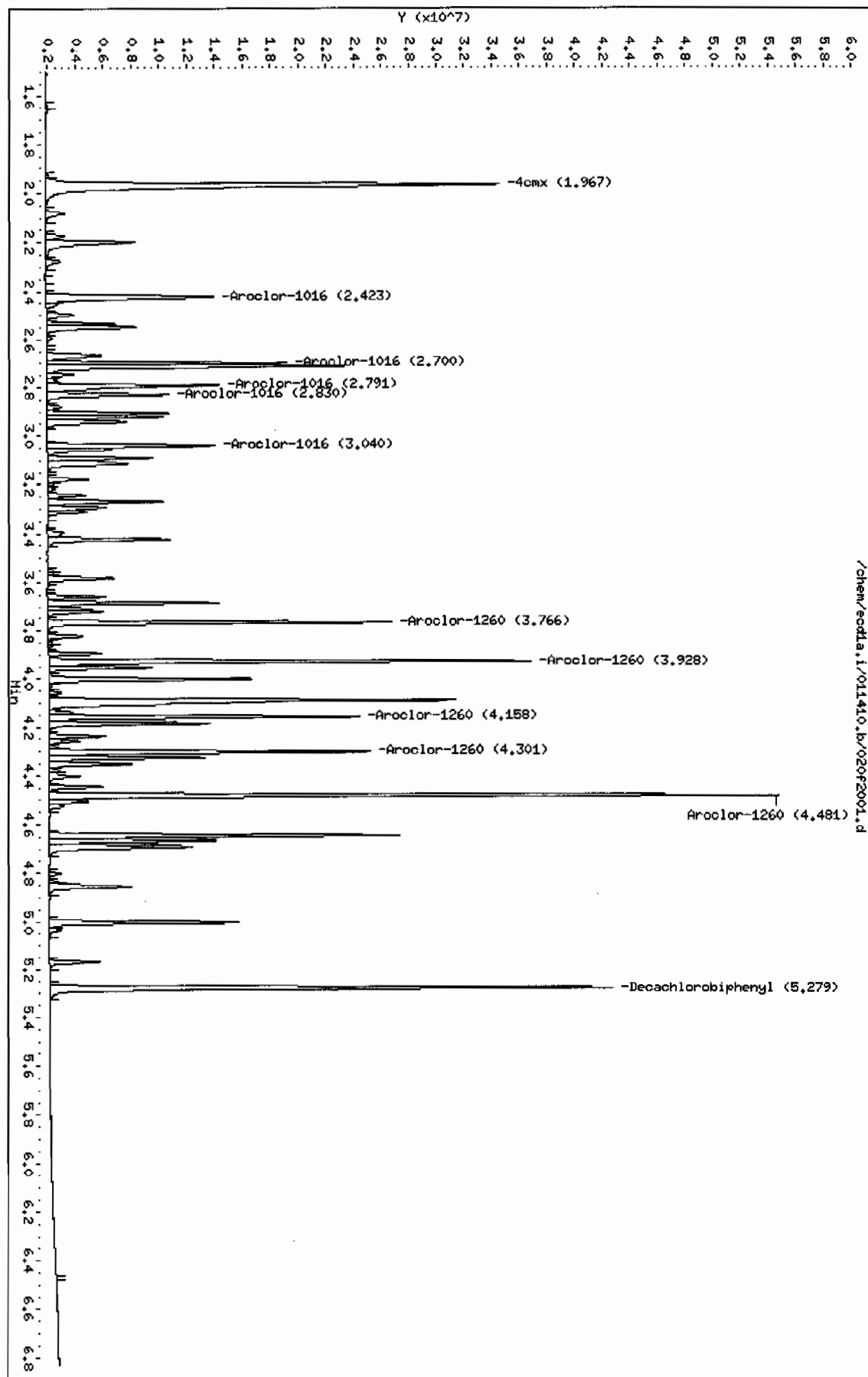
Sample Info: IWR100104-60 02

Column phase: CLP1

Instrument: ecdda.i

Operator: YSL

Column diameter: 0.25





GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011410.b/020b2001.d  
 Lab Smp Id: WAR100104-60 02 Client Smp ID: AR166002  
 Inj Date : 14-JAN-2010 12:22  
 Operator : YSl Inst ID: ecd1a.i  
 Smp Info : |WAR100104-60 02  
 Misc Info :  
 Comment :  
 Method : /chem/ecdl1a.i/011410.b/ECD1-B-8082-121409.m  
 Meth Date : 23-Jan-2010 12:03 yip00818 Quant Type: ESTD  
 Cal Date : 14-DEC-2009 12:16 Cal File: 044b4401.d  
 Als bottle: 20 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: AR1660.sub  
 Target Version: 3.50 Sample Matrix: None  
 Processing Host: hpc1p1

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ug/L)	ON-COL ( ug/L)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
\$ 11 4cmx			CAS #: 877-09-8			
2.298	2.298	0.000	28657895 100.000	100	80.00- 120.00	100.00
\$ 12 Decachlorobiphenyl			CAS #: 2051-24-3			
5.941	5.943	-0.002	22229683 100.000	100	80.00- 120.00	100.00
1 Aroclor-1016			CAS #: 12674-11-2			
3.194	3.195	-0.001	13260191 1000.00	1050	80.00- 120.00	100.00(M)
3.277	3.278	-0.001	8697132 1000.00	932	45.59- 85.59	65.59
3.341	3.342	-0.001	5356526 1000.00	990	20.40- 60.40	40.40
3.567	3.568	-0.001	6824332 1000.00	968	31.46- 71.46	51.46
3.643	3.644	-0.001	6329312 1000.00	966	27.73- 67.73	47.73
Average of Peak Amounts =			982			
7 Aroclor-1260			CAS #: 11096-82-5			
4.332	4.333	-0.001	13225790 1000.00	967	80.00- 120.00	100.00
4.457	4.458	-0.001	16055650 1000.00	1000	101.40- 141.40	121.40
4.723	4.724	-0.001	12306075 1000.00	979	73.05- 113.05	93.05
4.896	4.898	-0.002	12621313 1000.00	985	75.43- 115.43	95.43
5.043	5.044	-0.001	28043476 1000.00	1000	192.04- 232.04	212.04
Average of Peak Amounts =			988			

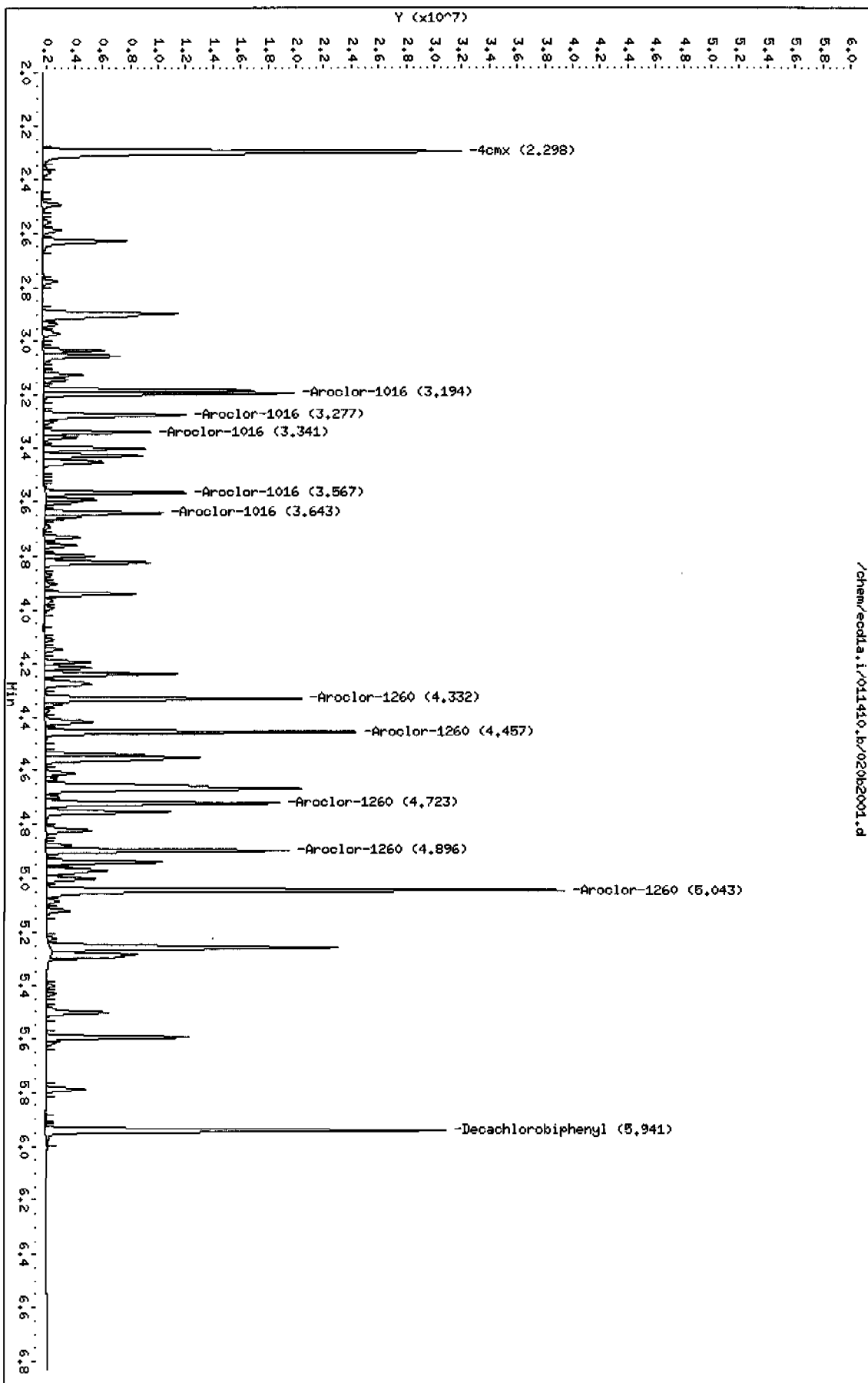
QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecdl.a.i/011410.b/020b2001.d  
Date: 14-JAN-2010 12:22  
Client ID: AR166002  
Sample Info: IAR100104-60 02

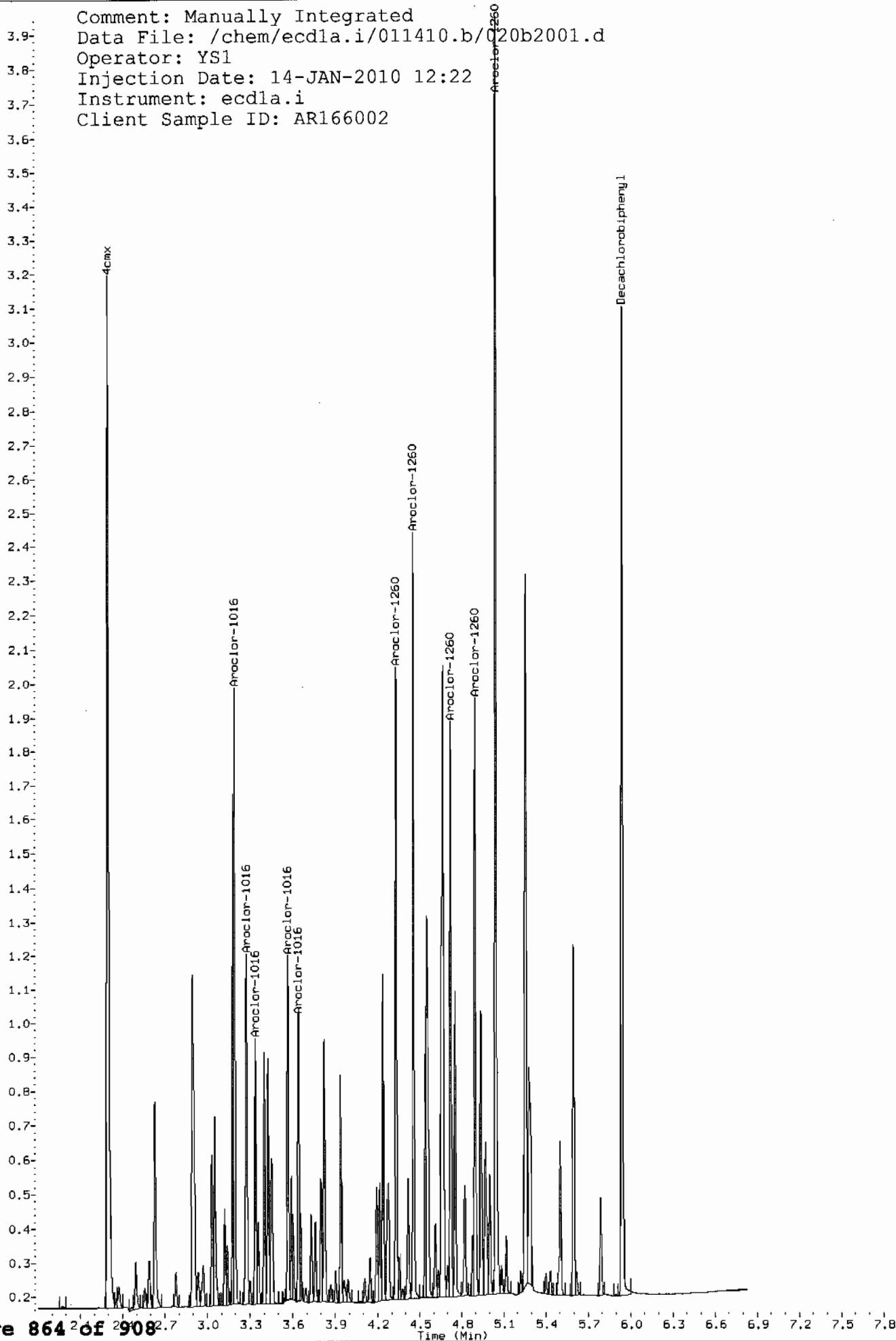
Column phase: CLP2

Instrument: ecdl.a.i  
Operator: YSL  
Column diameter: 0.25

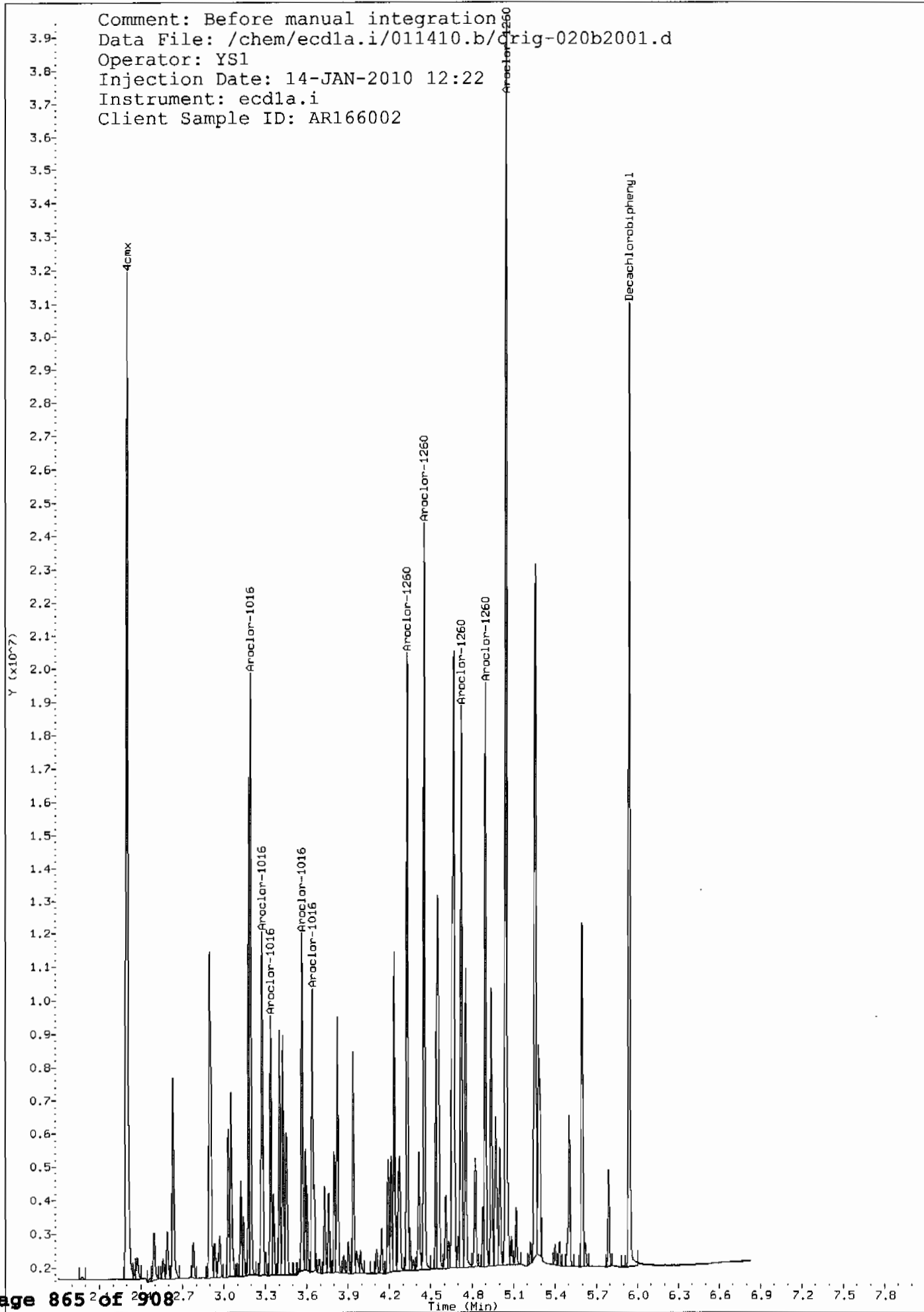


Comment: Manually Integrated  
Data File: /chem/ecdl1.i/011410.b/020b2001.d  
Operator: YS1  
Injection Date: 14-JAN-2010 12:22  
Instrument: ecd1a.i  
Client Sample ID: AR166002

Y (x10<sup>-7</sup>)



Comment: Before manual integration  
Data File: /chem/ecdla.i/011410.b/orig-020b2001.d  
Operator: YS1  
Injection Date: 14-JAN-2010 12:22  
Instrument: ecdla.i  
Client Sample ID: AR166002



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.: 10-1160

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 12/14/09 12/14/09

Instrument ID: ECD1A

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION						
S1 : 1.97			DCB: 5.29			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #	
01	PIBLK01	WAR091130-99	12/14/09	0444	1.97	5.29
02	ZZZZZ	ZZZZZ	12/14/09	0454	1.97	5.29
03	ZZZZZ	ZZZZZ	12/14/09	0505	1.97	5.29
04	ZZZZZ	ZZZZZ	12/14/09	0515	1.97	5.29
05	ZZZZZ	ZZZZZ	12/14/09	0526	1.97	5.29
06	AR123201	WAR090930-32	12/14/09	0536	1.97	5.29
07	AR122101	WAR090803-21	12/14/09	0547	1.97	5.29
08	AR126201	WAR090803-62	12/14/09	0558	1.97	5.29
09	ZZZZZ	ZZZZZ	12/14/09	0608	1.97	5.29
10	ZZZZZ	ZZZZZ	12/14/09	0619	1.97	5.29
11	ZZZZZ	ZZZZZ	12/14/09	0629	1.97	5.29
12	ZZZZZ	ZZZZZ	12/14/09	0640	1.97	5.29
13	ZZZZZ	ZZZZZ	12/14/09	0650	1.97	5.29
14	ZZZZZ	ZZZZZ	12/14/09	0701	1.97	5.29
15	ZZZZZ	ZZZZZ	12/14/09	0711	1.97	5.29
16	AR125401	WAR091214-05	12/14/09	0722	1.97	5.29
17	AR125402	WAR091214-06	12/14/09	0732	1.97	5.29
18	AR125403	WAR091214-07	12/14/09	0743	1.97	5.29
19	AR125404	WAR091214-08	12/14/09	0753	1.97	5.29
20	AR125405	IAR091027-01	12/14/09	0804	1.97	5.29
21	AR125401	WAR091102-54	12/14/09	0814	1.97	5.29
22	AR124201	WAR091214-09	12/14/09	0825	1.97	5.29
23	AR124202	WAR091214-10	12/14/09	0835	1.97	5.29
24	AR124203	WAR091214-11	12/14/09	0846	1.97	5.29
25	AR124204	WAR091214-12	12/14/09	0856	1.97	5.29
26	AR124205	IAR0911111-0	12/14/09	0907	1.97	5.29
27	AR124201	WAR091102-42	12/14/09	0917	1.97	5.29
28	AR124801	WAR091214-13	12/14/09	0928	1.97	5.29
29	AR124802	WAR091214-14	12/14/09	0938	1.97	5.29
30	AR124803	WAR091214-15	12/14/09	0949	1.97	5.29
31	AR124804	WAR091214-16	12/14/09	0959	1.97	5.29
32	AR124805	IAR091027-02	12/14/09	1010	1.97	5.29

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.: 10-1160

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 12/14/09 12/14/09

Instrument ID: ECD1A

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION						
S1 : 1.97			DCB: 5.29			
	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	AR124801	WAR091027-48	12/14/09	1020	1.97	5.29
02	AR166001	WAR091214-01	12/14/09	1031	1.97	5.29
03	AR166002	WAR091214-02	12/14/09	1041	1.97	5.29
04	AR166003	WAR091214-03	12/14/09	1052	1.97	5.29
05	AR166004	WAR091214-04	12/14/09	1102	1.97	5.29
06	AR166005	IAR091102-01	12/14/09	1113	1.97	5.29
07	AR166001	WAR091211-60	12/14/09	1123	1.97	5.29
08	AR126801	WAR091214-17	12/14/09	1134	1.97	5.29
09	AR126802	WAR091214-18	12/14/09	1144	1.97	5.29
10	AR126803	WAR091214-19	12/14/09	1155	1.97	5.29
11	AR126804	WAR091214-20	12/14/09	1206	1.97	5.29
12	AR126805	IAR090817-02	12/14/09	1216	1.97	5.29
13	AR126801	WAR091106-68	12/14/09	1227	1.97	5.29
14	DDTANALOGSTD	WAR091020-DD	12/14/09	1237		
15	P1BLK02	WAR091130-99	12/14/09	1248	1.97	5.29
16	ZZZZZ	ZZZZZ	12/14/09	1258	1.97	5.29
17	ZZZZZ	ZZZZZ	12/14/09	1309	1.97	5.29
18	ZZZZZ	ZZZZZ	12/14/09	1319	1.97	5.29
19	ZZZZZ	ZZZZZ	12/14/09	1330	1.97	5.29
20	ZZZZZ	ZZZZZ	12/14/09	1340	1.97	5.29
21	ZZZZZ	ZZZZZ	12/14/09	1351	1.97	5.29
22	ZZZZZ	ZZZZZ	12/14/09	1403	1.97	5.29
23	ZZZZZ	ZZZZZ	12/14/09	1416	1.97	5.29
24	ZZZZZ	ZZZZZ	12/14/09	1429	1.97	5.29
25	ZZZZZ	ZZZZZ	12/14/09	1441	1.97	5.29
26	AR166002	WAR091211-60	12/14/09	1452	1.97	5.29
27	P1BLK03	WAR091130-99	12/14/09	1502	1.97	5.29
28	ZZZZZ	ZZZZZ	12/14/09	1513	1.97	5.29
29	ZZZZZ	ZZZZZ	12/14/09	1525	1.97	5.29
30	ZZZZZ	ZZZZZ	12/14/09	1538	1.97	5.29
31	ZZZZZ	ZZZZZ	12/14/09	1551	1.97	5.29
32	ZZZZZ	ZZZZZ	12/14/09	1603	1.97	5.27

QC LIMITS

S1 = 4cmx (+/- 0.03 MINUTES)

DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

# Column used to flag retention time values with an asterisk.  
\* Values outside of QC limits.

page 2 of 2

FORM VIII PEST

OLM03.0

8D  
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1160

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 12/14/09 12/14/09

Instrument ID: ECD1A

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION						
S1 : 2.30			DCB: 5.94			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #	
01	PIBLK01	WAR091130-99	12/14/09	0444	2.30	5.95
02	ZZZZZ	ZZZZZ	12/14/09	0454	2.30	5.94
03	ZZZZZ	ZZZZZ	12/14/09	0505	2.30	5.95
04	ZZZZZ	ZZZZZ	12/14/09	0515	2.30	5.95
05	ZZZZZ	ZZZZZ	12/14/09	0526	2.30	5.95
06	AR123201	WAR090930-32	12/14/09	0536	2.30	5.95
07	AR122101	WAR090803-21	12/14/09	0547	2.30	5.95
08	AR126201	WAR090803-62	12/14/09	0558	2.30	5.94
09	ZZZZZ	ZZZZZ	12/14/09	0608	2.30	5.94
10	ZZZZZ	ZZZZZ	12/14/09	0619	2.30	5.95
11	ZZZZZ	ZZZZZ	12/14/09	0629	2.30	5.94
12	ZZZZZ	ZZZZZ	12/14/09	0640	2.30	5.94
13	ZZZZZ	ZZZZZ	12/14/09	0650	2.30	5.95
14	ZZZZZ	ZZZZZ	12/14/09	0701	2.30	5.94
15	ZZZZZ	ZZZZZ	12/14/09	0711	2.30	5.95
16	AR125401	WAR091214-05	12/14/09	0722	2.30	5.94
17	AR125402	WAR091214-06	12/14/09	0732	2.30	5.94
18	AR125403	WAR091214-07	12/14/09	0743	2.30	5.94
19	AR125404	WAR091214-08	12/14/09	0753	2.30	5.94
20	AR125405	IAR091027-01	12/14/09	0804	2.30	5.95
21	AR125401	WAR091102-54	12/14/09	0814	2.30	5.94
22	AR124201	WAR091214-09	12/14/09	0825	2.30	5.94
23	AR124202	WAR091214-10	12/14/09	0835	2.30	5.94
24	AR124203	WAR091214-11	12/14/09	0846	2.30	5.94
25	AR124204	WAR091214-12	12/14/09	0856	2.30	5.94
26	AR124205	IAR0911111-0	12/14/09	0907	2.30	5.94
27	AR124201	WAR091102-42	12/14/09	0917	2.30	5.94
28	AR124801	WAR091214-13	12/14/09	0928	2.30	5.94
29	AR124802	WAR091214-14	12/14/09	0938	2.30	5.94
30	AR124803	WAR091214-15	12/14/09	0949	2.30	5.94
31	AR124804	WAR091214-16	12/14/09	0959	2.30	5.94
32	AR124805	IAR091027-02	12/14/09	1010	2.30	5.94

QC LIMITS  
S1 = 4cmx (+/- 0.03 MINUTES)  
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

# Column used to flag retention time values with an asterisk.  
\* Values outside of QC limits.



8D  
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1160

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 12/14/09 12/14/09

Instrument ID: ECD1A

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION						
S1 : 2.30			DCB: 5.94			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT	#	DCB RT
						#
01	AR124801	WAR091027-48	12/14/09	1020	2.30	5.95
02	AR166001	WAR091214-01	12/14/09	1031	2.30	5.94
03	AR166002	WAR091214-02	12/14/09	1041	2.30	5.94
04	AR166003	WAR091214-03	12/14/09	1052	2.30	5.94
05	AR166004	WAR091214-04	12/14/09	1102	2.30	5.94
06	AR166005	IAR091102-01	12/14/09	1113	2.30	5.94
07	AR166001	WAR091211-60	12/14/09	1123	2.30	5.94
08	AR126801	WAR091214-17	12/14/09	1134	2.30	5.95
09	AR126802	WAR091214-18	12/14/09	1144	2.30	5.94
10	AR126803	WAR091214-19	12/14/09	1155	2.30	5.94
11	AR126804	WAR091214-20	12/14/09	1206	2.30	5.94
12	AR126805	IAR090817-02	12/14/09	1216	2.30	5.94
13	AR126801	WAR091106-68	12/14/09	1227	2.30	5.94
14	DDTANALOGSTD	WAR091020-DD	12/14/09	1237		
15	PIBLK02	WAR091130-99	12/14/09	1248	2.30	5.94
16	ZZZZZ	ZZZZZ	12/14/09	1258	2.30	5.94
17	ZZZZZ	ZZZZZ	12/14/09	1309	2.30	5.94
18	ZZZZZ	ZZZZZ	12/14/09	1319	2.30	5.94
19	ZZZZZ	ZZZZZ	12/14/09	1330	2.30	5.94
20	ZZZZZ	ZZZZZ	12/14/09	1340	2.30	5.94
21	ZZZZZ	ZZZZZ	12/14/09	1351	2.30	5.94
22	ZZZZZ	ZZZZZ	12/14/09	1403	2.30	5.94
23	ZZZZZ	ZZZZZ	12/14/09	1416	2.30	5.94
24	ZZZZZ	ZZZZZ	12/14/09	1429	2.30	5.94
25	ZZZZZ	ZZZZZ	12/14/09	1441	2.30	5.94
26	AR166002	WAR091211-60	12/14/09	1452	2.30	5.94
27	PIBLK03	WAR091130-99	12/14/09	1502	2.30	5.94
28	ZZZZZ	ZZZZZ	12/14/09	1513	2.30	5.94
29	ZZZZZ	ZZZZZ	12/14/09	1525	2.30	5.94
30	ZZZZZ	ZZZZZ	12/14/09	1538	2.30	5.94
31	ZZZZZ	ZZZZZ	12/14/09	1551	2.30	5.94
32	ZZZZZ	ZZZZZ	12/14/09	1603	2.30	5.94

QC LIMITS

S1 = 4cmx (+/- 0.03 MINUTES)

DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

# Column used to flag retention time values with an asterisk.  
\* Values outside of QC limits.

8D  
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1160

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 12/14/09 12/14/09

Instrument ID: ECD1A

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION						
S1 : 1.97			DCB: 5.28			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #	
01	PIBLK01	WAR100105-99	01/14/10	0836	1.96	5.28
02	AR166001	WAR100104-60	01/14/10	0847	1.97	5.28
03	AR125401	WAR091216-54	01/14/10	0857		
04	AR124201	WAR091217-42	01/14/10	0908		
05	AR124801	WAR091217-48	01/14/10	0918		
06	AR123201	WAR100104-32	01/14/10	0929		
07	AR122101	WAR100104-21	01/14/10	0939		
08	AR126201	WAR100104-62	01/14/10	0950		
09	AR126801	WAR100111-68	01/14/10	1000		
10	DDTANALOGSTD	WAR091219-DD	01/14/10	1011		
11	PIBLK02	WAR100105-99	01/14/10	1035	1.97	5.29
12	PBLK01	1202014259	01/14/10	1045	1.97	5.28
13	PBLK01LCS	1202014260	01/14/10	1056	1.97	5.28
14	RE12-10-7734	244209001	01/14/10	1106	1.97	5.28
15	RE12-10-7701	244209002	01/14/10	1119	1.97	5.28
16	RE12-10-7702	244209003	01/14/10	1131	1.97	5.28
17	RE12-10-7700	244209004	01/14/10	1144	1.97	5.28
18	RE12-10-7699	244209005	01/14/10	1156	1.97	5.28
19	RE12-10-7727	244209006	01/14/10	1209	1.97	5.28
20	AR166002	WAR100104-60	01/14/10	1222	1.97	5.28
21	PIBLK03	WAR100105-99	01/14/10	1232	1.97	5.28
22	ZZZZZ	ZZZZZ	01/14/10	1243	1.97	5.28
23	ZZZZZ	ZZZZZ	01/14/10	1255	1.97	5.28
24	ZZZZZ	ZZZZZ	01/14/10	1308	1.97	5.28
25	ZZZZZ	ZZZZZ	01/14/10	1320	1.97	5.28
26	ZZZZZ	ZZZZZ	01/14/10	1333	1.97	5.28
27	ZZZZZ	ZZZZZ	01/14/10	1346	1.97	5.28
28	ZZZZZ	ZZZZZ	01/14/10	1358	1.97	5.28
29	ZZZZZ	ZZZZZ	01/14/10	1411	1.97	5.28
30	ZZZZZ	ZZZZZ	01/14/10	1423	1.97	5.28
31	ZZZZZ	ZZZZZ	01/14/10	1436	1.97	5.28
32	AR166003	WAR100104-60	01/14/10	1449	1.97	5.28

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.: 10-1160

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 12/11/09 12/14/09

Instrument ID: ECD1A

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION					
S1 : 2.30			DCB: 5.94		
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01 PIBLK01	WAR100105-99	01/14/10	0836	2.30	5.94
02 AR166001	WAR100104-60	01/14/10	0847	2.30	5.94
03 AR125401	WAR091216-54	01/14/10	0857		
04 AR124201	WAR091217-42	01/14/10	0908		
05 AR124801	WAR091217-48	01/14/10	0918		
06 AR123201	WAR100104-32	01/14/10	0929		
07 AR122101	WAR100104-21	01/14/10	0939		
08 AR126201	WAR100104-62	01/14/10	0950		
09 AR126801	WAR100111-68	01/14/10	1000		
10 DDTANALOGSTD	WAR091219-DD	01/14/10	1011		
11 PIBLK02	WAR100105-99	01/14/10	1035	2.30	5.95
12 PBLK01	1202014259	01/14/10	1045	2.30	5.94
13 PBLK01LCS	1202014260	01/14/10	1056	2.30	5.94
14 RE12-10-7734	244209001	01/14/10	1106	2.30	5.94
15 RE12-10-7701	244209002	01/14/10	1119	2.30	5.94
16 RE12-10-7702	244209003	01/14/10	1131	2.30	5.94
17 RE12-10-7700	244209004	01/14/10	1144	2.30	5.94
18 RE12-10-7699	244209005	01/14/10	1156	2.30	5.94
19 RE12-10-7727	244209006	01/14/10	1209	2.30	5.94
20 AR166002	WAR100104-60	01/14/10	1222	2.30	5.94
21 PIBLK02	WAR100105-99	01/14/10	1232	2.30	5.94
22 ZZZZZ	ZZZZZ	01/14/10	1243	2.30	5.94
23 ZZZZZ	ZZZZZ	01/14/10	1255	2.30	5.94
24 ZZZZZ	ZZZZZ	01/14/10	1308	2.30	5.94
25 ZZZZZ	ZZZZZ	01/14/10	1320	2.30	5.94
26 ZZZZZ	ZZZZZ	01/14/10	1333	2.30	5.94
27 ZZZZZ	ZZZZZ	01/14/10	1346	2.30	5.94
28 ZZZZZ	ZZZZZ	01/14/10	1358	2.30	5.94
29 ZZZZZ	ZZZZZ	01/14/10	1411	2.30	5.94
30 ZZZZZ	ZZZZZ	01/14/10	1423	2.30	5.94
31 ZZZZZ	ZZZZZ	01/14/10	1436	2.30	5.94
32 AR166003	WAR100104-60	01/14/10	1449	2.30	5.94

QC LIMITS  
S1 = 4cmx (+/- 0.03 MINUTES)  
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

# Column used to flag retention time values with an asterisk.  
\* Values outside of QC limits.

## Identification Summary

Page 1 of 1

SDG Number: 10-1160

Client ID: LCS for batch 941127

Lab Sample ID: 1202014260

Data File: 013f1301.d

Data File: 013b1301.d

Inst: ECD1A.I\_1

Inst: ECD1A.I\_2

Column: CLP1

Column: CLP2

Analyzed: 14-JAN-10 10:56

Analyzed: 14-JAN-10 10:56

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
<b>Aroclor-1016</b>							8.34
<i>Column 1</i>	1	2.42	2.39 – 2.45	21.3		ug/kg	
	2	2.7	2.67 – 2.73	23.8		ug/kg	
	3	2.79	2.76 – 2.82	21.5		ug/kg	
	4	2.83	2.8 – 2.86	22.6		ug/kg	
	5	3.04	3.01 – 3.07	22.2		ug/kg	
					22.3		
<i>Column 2</i>	1	3.2	3.17 – 3.23	21.8		ug/kg	
	2	3.28	3.25 – 3.31	19.6		ug/kg	
	3	3.34	3.31 – 3.37	19.8		ug/kg	
	4	3.57	3.54 – 3.6	20.4		ug/kg	
	5	3.64	3.61 – 3.67	20.9		ug/kg	
					20.5		
<b>Aroclor-1260</b>							7.45
<i>Column 1</i>	1	3.77	3.74 – 3.8	24.7		ug/kg	
	2	3.93	3.9 – 3.96	25.6		ug/kg	
	3	4.16	4.13 – 4.19	25.8		ug/kg	
	4	4.3	4.27 – 4.33	23		ug/kg	
	5	4.48	4.45 – 4.51	26.8		ug/kg	
					25.2		
<i>Column 2</i>	1	4.33	4.3 – 4.36	22.5		ug/kg	
	2	4.46	4.43 – 4.49	23.5		ug/kg	
	3	4.73	4.69 – 4.75	23		ug/kg	
	4	4.9	4.87 – 4.93	23.5		ug/kg	
	5	5.05	5.01 – 5.07	24.3		ug/kg	
					23.4		

# QUALITY CONTROL DATA

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

Page 1 of 1

SDG Number: 10-1160

Lab Sample ID: 1202014259

Client Sample: QC for batch 941127

Client ID: MB for batch 941127

Batch ID: 941128

Run Date: 01/14/2010 10:45

Prep Date: 01/13/2010 19:31

Data File: 012f1201-1.d

012b1201-1.d

Client: LANL010

Method: SW846 8082

Inst: ECD1A.I

Analyst: YS1

Aliquot: 30 g

Column: 1 CLP1

2 CLP2

Matrix: SOIL

Project: QC

SOP Ref: GL-OA-E-040

Dilution: 1

Inj. Vol: 1 uL

Final Volume: 1 mL

Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.33	ug/kg	1.11	3.33	1
11104-28-2	Aroclor-1221	U	3.33	ug/kg	1.11	3.33	1
11141-16-5	Aroclor-1232	U	3.33	ug/kg	1.11	3.33	1
53469-21-9	Aroclor-1242	U	3.33	ug/kg	1.11	3.33	1
12672-29-6	Aroclor-1248	U	3.33	ug/kg	1.11	3.33	1
11097-69-1	Aroclor-1254	U	3.33	ug/kg	1.11	3.33	1
11096-82-5	Aroclor-1260	U	3.33	ug/kg	1.11	3.33	1

Data File: /chem/ecdla.i/011410.b/012f1201.d  
Report Date: 23-Jan-2010 12:00

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/011410.b/012f1201.d  
Lab Smp Id: 1202014259 Client Smp ID: PBLK01  
Inj Date : 14-JAN-2010 10:45  
Operator : YS1 Inst ID: ecdla.i  
Smp Info : |1202014259|1|  
Misc Info : |ECD82P\_1S|941128|SVA|QC A|SOIL|MB|||  
Comment :  
Method : /chem/ecdla.i/011410.b/ECD1-F-8082-121409.m  
Meth Date : 23-Jan-2010 11:59 yip00818 Quant Type: ESTD  
Cal Date : 14-DEC-2009 11:34 Cal File: 040f4001.d  
Als bottle: 12 QC Sample: BLANK  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1160.sub  
Target Version: 3.50 Sample Matrix: Soil  
Processing Host: hpclp1

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

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

Cpnd Variable Local Compound Variable

		CONCENTRATIONS					
		ON-COL	FINAL				
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	
\$ 11 4cmx				CAS #: 977-09-8			
1.968	1.968	0.000	45832862	128.210	4.3 80.00- 120.00	100.00	
\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3			
5.283	5.280	0.003	39244705	129.945	4.3 80.00- 120.00	100.00	

Data File: /chem/eod1a.i/011410.b/012f1201.d

Date: 14-JUN-2010 10:45

Client ID: PBLK01

Sample Info: 1120201425911

Volume Injected (uL): 1.0

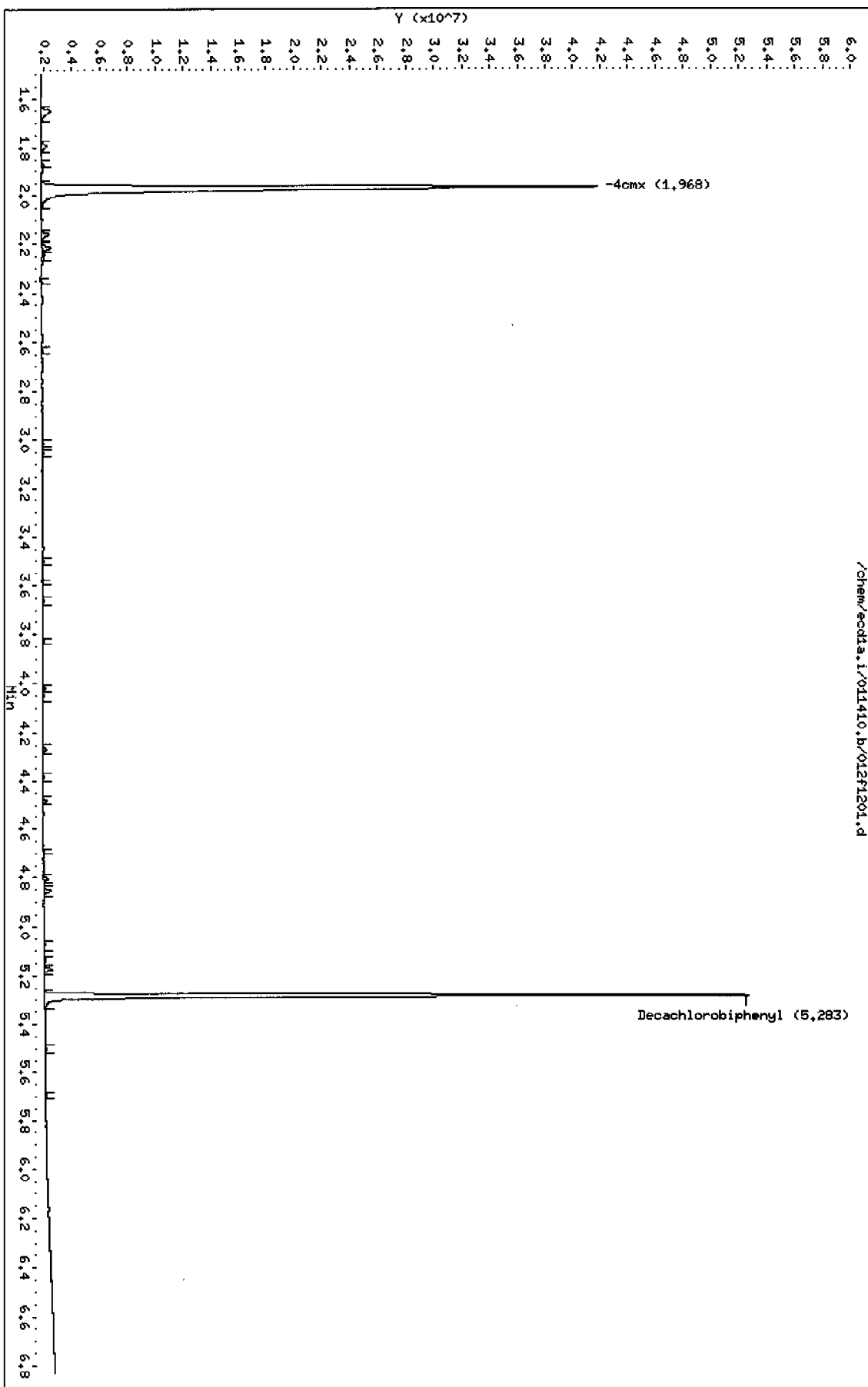
Column phase: CLP1

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Instrument: eod1a.i

Operator: YSL

Column diameter: 0.25





Data File: /chem/ecdl1a.i/011410.b/012b1201.d  
Report Date: 23-Jan-2010 12:00

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL  
Data file : /chem/ecdl1a.i/011410.b/012b1201.d  
Lab Smp Id: 1202014259 Client Smp ID: PBLK01  
Inj Date : 14-JAN-2010 10:45  
Operator : YS1 Inst ID: ecd1a.i  
Smp Info : |1202014259|1|  
Misc Info : |ECD82P\_1S|941128|SVA|QC A|SOIL|MB|||  
Comment :  
Method : /chem/ecdl1a.i/011410.b/ECD1-B-8082-121409.m  
Meth Date : 23-Jan-2010 11:59 yip00818 Quant Type: ESTD  
Cal Date : 14-DEC-2009 12:16 Cal File: 044b4401.d  
Als bottle: 12 QC Sample: BLANK  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1160.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

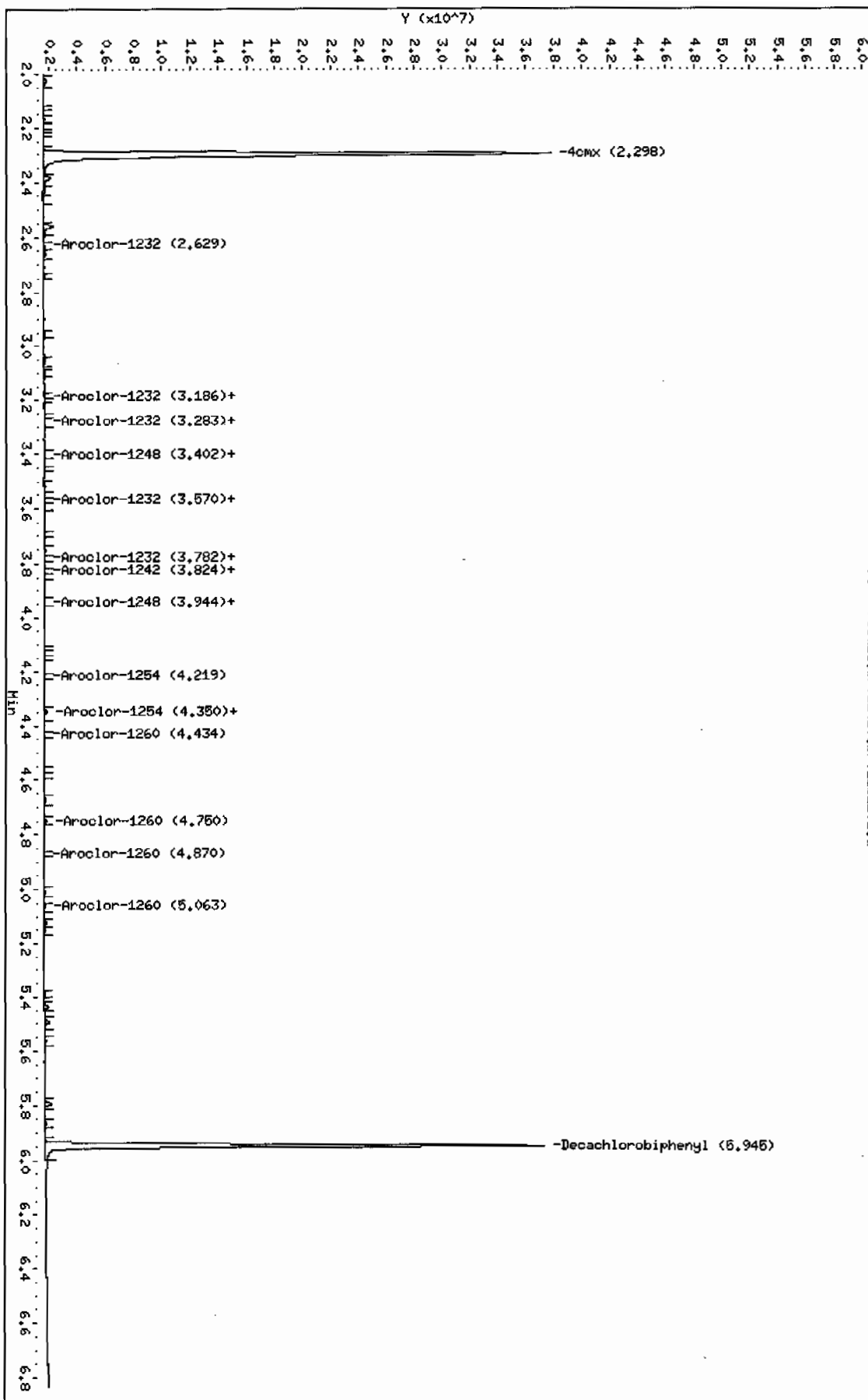
Cpnd Variable Local Compound Variable

CONCENTRATIONS						
			ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
\$ 11 4cmx CAS #: 877-09-8						
2.298	2.298	0.000	34183175	119.798	4.0 80.00- 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl CAS #: 2051-24-3						
5.945	5.943	0.002	27652327	124.680	4.2 80.00- 120.00	100.00
-----						

Data File: /chem/ecdl1a.i/011410.b/012b1201.d  
Date: 14-JAN-2010 10:45  
Client ID: PBLK01  
Sample Info: 1120201425911  
Volume Injected (uL): 1.0  
Column phase: CLP2

Instrument: ecdl1a.i  
Operator: YSL  
Column diameter: 0.25

/chem/ecdl1a.i/011410.b/012b1201.d



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

SDG Number: 10-1160

Lab Sample ID: 1202014260

Client Sample: QC for batch 941127

Client ID: LCS for batch 941127

Batch ID: 941128

Run Date: 01/14/2010 10:56

Prep Date: 01/13/2010 19:31

Data File: 013f1301-1.d

013b1301-1.d

Client: LANL010

Method: SW846 8082

Inst: ECD1A.I

Analyst: YS1

Aliquot: 30 g

Column: 1 CLP1

2 CLP2

Matrix: SOIL

Project: QC

SOP Ref: GL-OA-E-040

Dilution: 1

Inj. Vol: 1 uL

Final Volume: 1 mL

Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016		22.3	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		25.2	ug/kg	1.11	3.33	1

Data File: /chem/ecdl1a.i/011410.b/013f1301.d  
 Report Date: 23-Jan-2010 12:01

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011410.b/013f1301.d  
 Lab Smp Id: 1202014260 Client Smp ID: PBLK01LCS  
 Inj Date : 14-JAN-2010 10:56  
 Operator : YS1 Inst ID: ecdl1a.i  
 Smp Info : |1202014260|1|  
 Misc Info : |ECD82P\_1S|941128|SVA|QC A|SOIL|LCS|||  
 Comment :  
 Method : /chem/ecdl1a.i/011410.b/ECD1-F-8082-121409.m  
 Meth Date : 23-Jan-2010 11:59 yip00818 Quant Type: ESTD  
 Cal Date : 14-DEC-2009 11:34 Cal File: 040f4001.d  
 Als bottle: 13 QC Sample: LCS  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: 10-1160.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

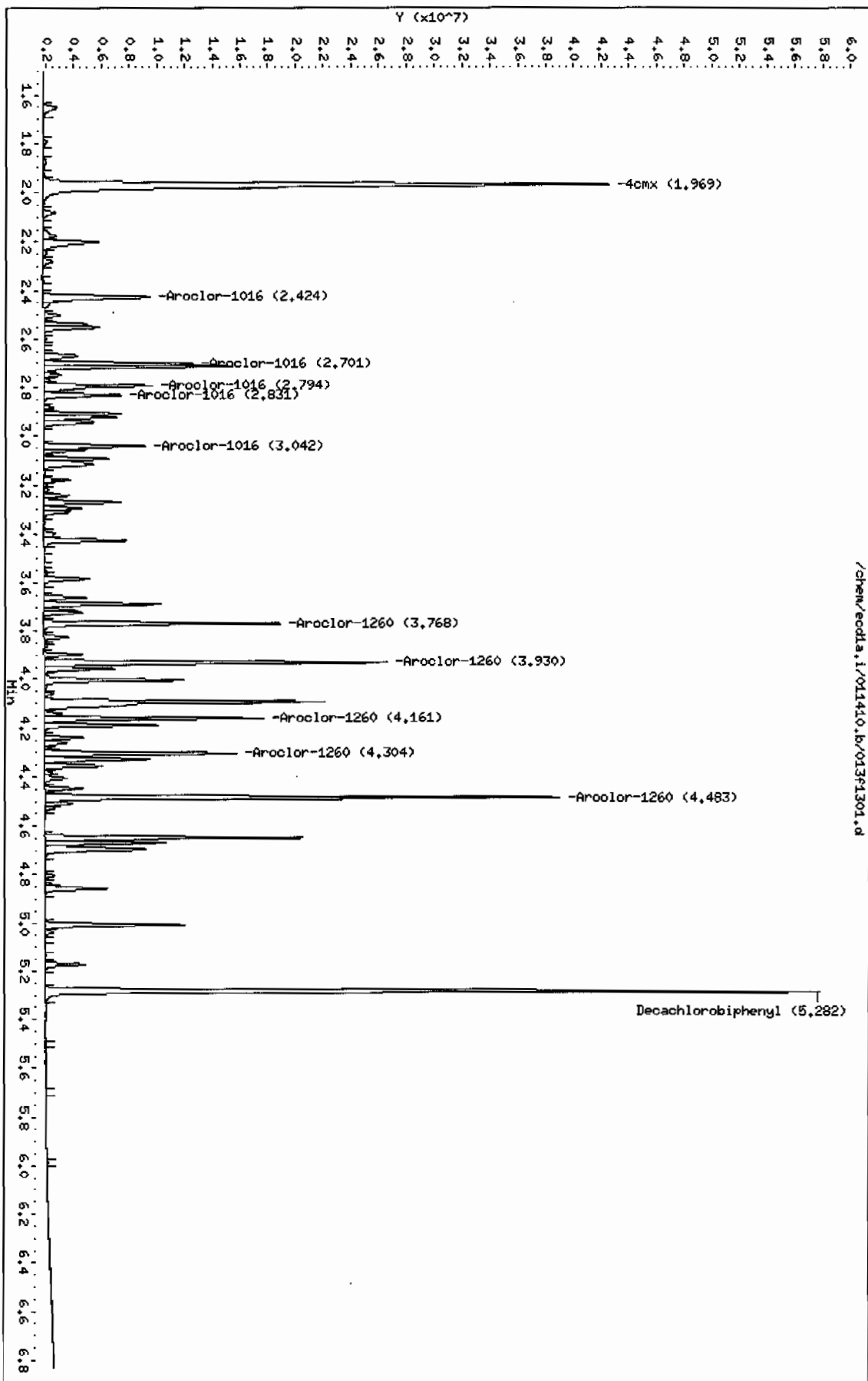
Cpnd Variable Local Compound Variable

CONCENTRATIONS									
			ON-COL		FINAL				
RT	EXP RT	DLT RT	RESPONSE	( ug/L)	(ug/Kg)	TARGET	RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	=====	=====	
\$ 11 4cmx					CAS #: 877-09-8				
1.969	1.968	0.001	48582779	135.903	4.5	80.00-	120.00	100.00	
-----									
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3				
5.282	5.280	0.002	41830314	138.506	4.6	80.00-	120.00	100.00	
-----									
1 Aroclor-1016					CAS #: 12674-11-2				
2.424	2.423	0.001	8882312	640.542	21.4	80.00-	120.00	100.00	
2.701	2.700	0.001	7203383	713.367	23.8	58.73-	98.73	81.10	
2.794	2.793	0.001	7579014	644.637	21.5	64.99-	104.99	85.33	
2.831	2.830	0.001	4477674	678.537	22.6	31.08-	71.08	50.41	

CONCENTRATIONS									
			ON-COL		FINAL				
RT	EXP RT	DLT RT	RESPONSE	( ug/L)	(ug/Kg)	TARGET	RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	=====	=====	
1 Aroclor-1016 (continued)									
3.042	3.041	0.001	5766787	664.882	22.2	46.41-	86.41	64.92	
Average of Peak Concentrations =					22.3				
-----									
7 Aroclor-1260					CAS #: 11096-82-5				
3.768	3.767	0.001	12426813	741.804	24.7	80.00-	120.00	100.00	
3.930	3.929	0.001	18999662	767.893	25.6	132.68-	172.68	152.89	
4.161	4.160	0.001	11355616	773.156	25.8	71.14-	111.14	91.38	
4.304	4.303	0.001	10478462	690.075	23.0	75.28-	115.28	84.32	
4.483	4.482	0.001	27606338	803.668	26.8	197.18-	237.18	222.15	
Average of Peak Concentrations =					25.2				
-----									

Data File: /chem/ecdda.i/01410.b/013f1301.d  
Date: 14-Jan-2010 10:56  
Client ID: PBLK01LCS  
Sample Info: 1120201426011  
Volume Injected (uL): 1.0  
Column phase: CLP1

Instrument: ecdda.i  
Operator: YS1  
Column diameter: 0.25



Data File: /chem/ecdl1a.i/011410.b/013b1301.d  
Report Date: 23-Jan-2010 12:01

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL  
Data file : /chem/ecdl1a.i/011410.b/013b1301.d  
Lab Smp Id: 1202014260 Client Smp ID: PBLK01LCS  
Inj Date : 14-JAN-2010 10:56  
Operator : YS1 Inst ID: ecd1a.i  
Smp Info : |1202014260|1|  
Misc Info : |ECD82P\_1S|941128|SVA|QC A|SOIL|LCS|||  
Comment :  
Method : /chem/ecdl1a.i/011410.b/ECD1-B-8082-121409.m  
Meth Date : 23-Jan-2010 11:59 yip00818 Quant Type: ESTD  
Cal Date : 14-DEC-2009 12:16 Cal File: 044b4401.d  
Als bottle: 13 QC Sample: LCS  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1160.sub  
Target Version: 3.50 Sample Matrix: Soil  
Processing Host: hpc1p1

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

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

Cpnd Variable Local Compound Variable

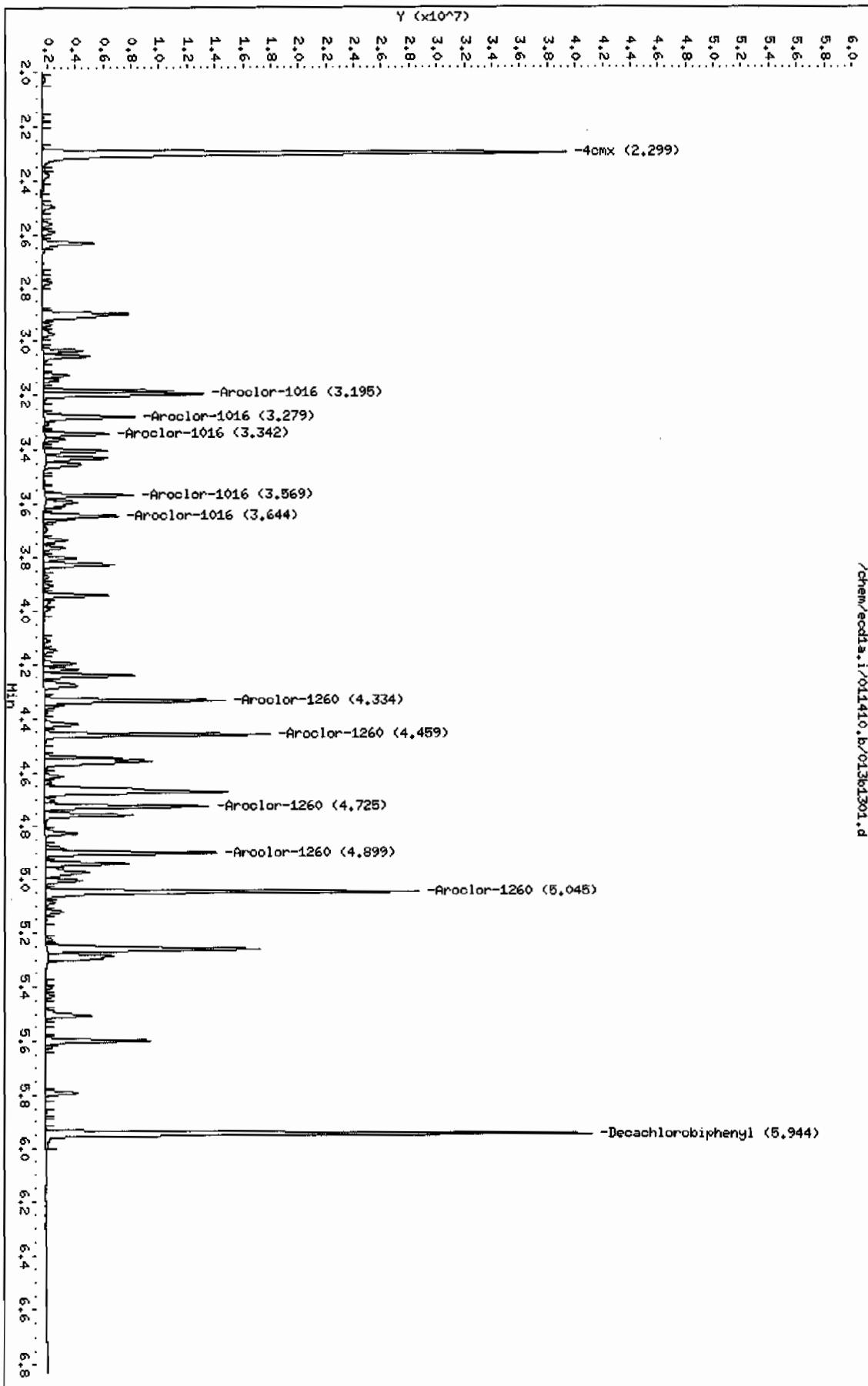
CONCENTRATIONS						
			ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
\$ 11 4cmx CAS #: 877-09-8						
2.299	2.298	0.001	35864810	125.691	4.2 80.00- 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl CAS #: 2051-24-3						
5.944	5.943	0.001	29574540	133.347	4.4 80.00- 120.00	100.00
-----						
1 Aroclor-1016 CAS #: 12674-11-2						
3.195	3.195	0.000	8241493	653.488	21.8 80.00- 120.00	100.00
3.279	3.278	0.001	5496252	589.229	19.6 47.14- 87.14	66.69
3.342	3.342	0.000	3207739	592.784	19.8 21.59- 61.59	38.92
3.569	3.568	0.001	4314380	611.806	20.4 32.86- 72.86	52.35

CONCENTRATIONS						
			ON-COL		FINAL	
RT	EXP RT	DLT RT	RESPONSE ( ug/L)		(ug/Kg)	TARGET RANGE RATIO
==	=====	=====	=====	=====	=====	=====
1 Aroclor-1016 (continued)						
3.644	3.644	0.000	4108174	627.132	20.9	29.98- 69.98 49.85
Average of Peak Concentrations =					20.5	
-----						
7 Aroclor-1260			CAS #: 11096-82-5			
4.334	4.333	0.001	9252248	676.333	22.5	80.00- 120.00 100.00
4.459	4.458	0.001	11306144	705.355	23.5	101.71- 141.71 122.20
4.725	4.724	0.001	8682287	691.049	23.0	72.86- 112.86 93.84
4.899	4.898	0.001	9014039	703.668	23.4	75.70- 115.70 97.43
5.045	5.044	0.001	20336481	728.967	24.3	194.94- 234.94 219.80
Average of Peak Concentrations =					23.3	
-----						



Data File: /chem/ecdl.a.i/011410.b/01361301.d  
Date: 14-JAN-2010 10:56  
Client ID: PBLK01LCS  
Sample Info: 1120201426011  
Volume Injected (uL): 1.0  
Column phase: CLP2

Instrument: ecdl.a.i  
Operator: YSL  
Column diameter: 0.25



# MISCELLANEOUS DATA

## GEL ORGANIC RUN LOG

INSTRUMENT ID: ECD1

DATE: 12/15/2009 METHOD: ECD1-F-8082-121409.m OPERATOR: YS1 REVIEWED BY: \_\_\_\_\_  
HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT DA385  
ALUMINA LOT 1230997-A  
COPPER LOT 236547-A

Calibration & QC Information  
Initial Calibration Dates: See Calibration History and Standard Logbook.  
Initial Calibration Std ID's: See Calibration History and Standard Logbook.  
GEL SOP GL-OA-E-040 Polychlorinated Biphenyl: EPA 8082  
Chromatogram Abbreviation Legend: AB-Assign Baseline, AP-Assign Peak,  
DNC-Do Not Call, DMP-Doesn't Match Pattern, NC-Not Confirmed, RT-Retention Time,  
BF-Before, AF-After.

Sequence Number: /chem/ecdla.i/121409.b

Injection Volume: 0.5 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
1001f0101.d	1WAR091130-99 01	YS1	14-DEC-2009 04:44		121409	1.01		CLEAN
1002f0201.d	1WAR091211-60 01	YS1	14-DEC-2009 04:54		121409	1.01		DUSE RE-ICAL
1003f0301.d	1WAR091102-54	YS1	14-DEC-2009 05:05		121409	1.01		DUSE RE-ICAL
1004f0401.d	1WAR091102-42	YS1	14-DEC-2009 05:15		121409	1.01		DUSE RE-ICAL
1005f0501.d	1WAR091027-48	YS1	14-DEC-2009 05:26		121409	1.01		DUSE RE-ICAL
1006f0601.d	1WAR090930-32	YS1	14-DEC-2009 05:36		121409	1.01		PATTERN ONLY
1007f0701.d	1WAR090803-21	YS1	14-DEC-2009 05:47		121409	1.01		PATTERN ONLY
1008f0801.d	1WAR090803-62	YS1	14-DEC-2009 05:58		121409	1.01		PATTERN ONLY
1009f0901.d	1WAR091106-68	YS1	14-DEC-2009 06:08		121409	1.01		DUSE RE-ICAL
1010f1001.d	11660-1	YS1	14-DEC-2009 06:19		121409	1.01		DUSE
1011f1101.d	11660-2	YS1	14-DEC-2009 06:29		121409	1.01		DUSE
1012f1201.d	11660-3	YS1	14-DEC-2009 06:40		121409	1.01		DUSE
1013f1301.d	11660-4	YS1	14-DEC-2009 06:50		121409	1.01		DUSE
1014f1401.d	11AR091102-01	YS1	14-DEC-2009 07:01		121409	1.01		DUSE
1015f1501.d	1WAR091211-60 01	YS1	14-DEC-2009 07:11		121409	1.01		DUSE

Instrument Batch: /chem/ecdla.i/121409.b

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Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
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016f1601.d	WAR091214-05 54	YS1	14-DEC-2009 07:22		121409		1.01		AR1254 I-CAL LEVEL 1
017f1701.d	WAR091214-06 54	YS1	14-DEC-2009 07:32		121409		1.01		AR1254 I-CAL LEVEL 2
018f1801.d	WAR091214-07 54	YS1	14-DEC-2009 07:43		121409		1.01		AR1254 I-CAL LEVEL 3
019f1901.d	WAR091214-08 54	YS1	14-DEC-2009 07:53		121409		1.01		AR1254 I-CAL LEVEL 4
020f2001.d	IAR091027-01	YS1	14-DEC-2009 08:04		121409		1.01		AR1254 I-CAL LEVEL 5
021f2101.d	WAR091102-54	YS1	14-DEC-2009 08:14		121409		1.01		PASSED ON BOTH COLUMNS
022f2201.d	WAR091214-09 42	YS1	14-DEC-2009 08:25		121409		1.01		AR1242 I-CAL LEVEL 1
023f2301.d	WAR091214-10 42	YS1	14-DEC-2009 08:35		121409		1.01		AR1242 I-CAL LEVEL 2
024f2401.d	WAR091214-11 42	YS1	14-DEC-2009 08:46		121409		1.01		AR1242 I-CAL LEVEL 3
025f2501.d	WAR091214-12 42	YS1	14-DEC-2009 08:56		121409		1.01		AR1242 I-CAL LEVEL 4
026f2601.d	IAR091111-01	YS1	14-DEC-2009 09:07		121409		1.01		AR1242 I-CAL LEVEL 5
027f2701.d	WAR091132-42	YS1	14-DEC-2009 09:17		121409		1.01		PASSED ON BOTH COLUMNS
028f2801.d	WAR091214-13 48	YS1	14-DEC-2009 09:28		121409		1.01		AR1248 I-CAL LEVEL 1
029f2901.d	WAR091214-14 48	YS1	14-DEC-2009 09:38		121409		1.01		AR1248 I-CAL LEVEL 2
030f3001.d	WAR091214-15 48	YS1	14-DEC-2009 09:49		121409		1.01		AR1248 I-CAL LEVEL 3
031f3101.d	WAR091214-16 48	YS1	14-DEC-2009 09:59		121409		1.01		AR1248 I-CAL LEVEL 4
032f3201.d	IAR091027-02	YS1	14-DEC-2009 10:10		121409		1.01		AR1248 I-CAL LEVEL 5
033f3301.d	WAR091027-48	YS1	14-DEC-2009 10:20		121409		1.01		PASSED ON BOTH COLUMNS
034f3401.d	WAR091214-01 60	YS1	14-DEC-2009 10:31		121409		1.01		AR1660 I-CAL LEVEL 1
035f3501.d	WAR091214-02 60	YS1	14-DEC-2009 10:41		121409		1.01		AR1660 I-CAL LEVEL 2

Instrument Batch: /chem/ecdl.a.i/121409.b

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Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	WAR091214-03 60	YS1	14-DEC-2009 10:52		121409		1.01	AR1660 I-CAL LEVEL 3
037f3701.d	WAR091214-04 60	YS1	14-DEC-2009 11:02		121409		1.01	AR1660 I-CAL LEVEL 4
038f3801.d	IAR091102-01	YS1	14-DEC-2009 11:13		121409		1.01	AR1660 I-CAL LEVEL 5
039f3901.d	WAR091211-60 01	YS1	14-DEC-2009 11:23		121409		1.01	PASSED ON BOTH COLUMNS
040f4001.d	WAR091214-17 68	YS1	14-DEC-2009 11:34		121409		1.01	AR1268 I-CAL LEVEL 1

041f4101.d	WAR091214-18 68	YS1	14-DEC-2009 11:44	121409	1.01	ARI268 I-CAL LEVEL 2
042f4201.d	WAR091214-19 68	YS1	14-DEC-2009 11:55	121409	1.01	ARI268 I-CAL LEVEL 3
043f4301.d	WAR091214-20 68	YS1	14-DEC-2009 12:06	121409	1.01	ARI268 I-CAL LEVEL 4
044f4401.d	WAR090817-02	YS1	14-DEC-2009 12:16	121409	1.01	ARI268 I-CAL LEVEL 5
045f4501.d	WAR091106-68	YS1	14-DEC-2009 12:27	121409	1.01	PASSED ON BOTH COLUMNS
046f4601.d	WAR091020-DDT	YS1	14-DEC-2009 12:37	121409	1.01	DDT ANALOG STANDARD
047f4701.d	WAR091130-99 02	YS1	14-DEC-2009 12:48	121409	1.01	CLEAN
048f4801.d	1201991693	YS1	14-DEC-2009 12:58	931140 110-782	1.01QC A	UPLOAD BOTH COLUMNS, USE HIGHER
049f4901.d	1201991694	YS1	14-DEC-2009 13:09	931140 110-782	1.01QC A	UPLOAD BOTH COLUMNS, USE HIGHER
050f5001.d	1242297001	YS1	14-DEC-2009 13:19	931140 110-782	1.01LANL	UPLOAD BOTH COLUMNS, USE HIGHER
051f5101.d	1242297002	YS1	14-DEC-2009 13:30	931140 110-782	10.01LANL	UPLOAD BOTH COLUMNS, USE HIGHER
052f5201.d	1242297003	YS1	14-DEC-2009 13:40	931140 110-782	1.01LANL	UPLOAD BOTH COLUMNS, USE HIGHER
053f5301.d	1242297004	YS1	14-DEC-2009 13:51	931140 110-782	5.01LANL	UPLOAD BOTH COLUMNS, USE HIGHER
054f5401.d	1242297005	YS1	14-DEC-2009 14:03	931140 110-782	5.01LANL	UPLOAD BOTH COLUMNS, USE HIGHER
055f5501.d	1242297006	YS1	14-DEC-2009 14:16	931140 110-782	10.01LANL	UPLOAD BOTH COLUMNS, USE HIGHER
056f5601.d	1242297007	YS1	14-DEC-2009 14:29	931140 110-782	5.01LANL	UPLOAD BOTH COLUMNS, USE HIGHER
057f5701.d	1242297008	YS1	14-DEC-2009 14:41	931140 110-782	25.01LANL	UPLOAD BOTH COLUMNS, USE HIGHER
058f5801.d	WAR091211-60 02	YS1	14-DEC-2009 14:52	121409	1.01	PASSED ON BOTH COLUMNS
059f5901.d	WAR091130-99 03	YS1	14-DEC-2009 15:02	121409	1.01	CLEAN
060f6001.d	1242297009	YS1	14-DEC-2009 15:13	931140 110-782	1.01LANL	UPLOAD BOTH COLUMNS, USE HIGHER
061f6101.d	1242297010	YS1	14-DEC-2009 15:25	931140 110-782	1.01LANL	DCB LOW RE
062f6201.d	1242297011	YS1	14-DEC-2009 15:38	931140 110-782	5.01LANL	UPLOAD BOTH COLUMNS, USE HIGHER
063f6301.d	1242297012	YS1	14-DEC-2009 15:51	931140 110-782	5.01LANL	UPLOAD BOTH COLUMNS, USE HIGHER
064f6401.d	1242297013	YS1	14-DEC-2009 16:03	931140 110-782	10.01LANL	UPLOAD BOTH COLUMNS, USE HIGHER

Instrument Batch: /chem/ecdla.i/121409.b

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1065f6501.d	1242305004	YS1	14-DEC-2009 16:16	931140	10-786	5.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
1066f6601.d	1201991695	YS1	14-DEC-2009 16:28	931140	10-786	5.0 QC A	UPLOAD BOTH COLUMNS, USE HIGHER
1067f6701.d	1201991696	YS1	14-DEC-2009 16:41	931140	10-786	5.0 QC A	UPLOAD BOTH COLUMNS, USE HIGHER
1068f6801.d	1242305005	YS1	14-DEC-2009 16:53	931140	10-786	5.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
1069f6901.d	1242305006	YS1	14-DEC-2009 17:06	931140	10-786	5.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
1070f7001.d	14-DEC-2009 17:19	YS1	14-DEC-2009 17:19	121409	1.0	PASSED ON BOTH COLUMNS	
1071f7101.d	14-DEC-2009 17:31	YS1	14-DEC-2009 17:31	121409	1.0	CLEAN	
1072f7201.d	1201992645	YS1	14-DEC-2009 17:44	931553	1242521	1.0 QC A	UPLOAD BOTH COLUMNS, USE HIGHER
1073f7301.d	1201992646	YS1	14-DEC-2009 17:57	931553	1242521	1.0 QC A	UPLOAD BOTH COLUMNS, USE HIGHER
1074f7401.d	1242264001	YS1	14-DEC-2009 18:09	931553	1242264	5.0 ENRG	UPLOAD BOTH COLUMNS, USE HIGHER
1075f7501.d	1242521001	YS1	14-DEC-2009 18:22	931553	1242521	5.0 EMSC	UPLOAD BOTH COLUMNS, USE HIGHER

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Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
1076f7601.d	1201992647	YS1	14-DEC-2009 18:35	931553	1242521	5.0 QC A	UPLOAD BOTH COLUMNS, USE HIGHER	
1077f7701.d	1201992648	YS1	14-DEC-2009 18:47	931553	1242521	5.0 QC A	UPLOAD BOTH COLUMNS, USE HIGHER	
1078f7801.d	1242521002	YS1	14-DEC-2009 19:00	931553	1242521	5.0 EMSC	UPLOAD BOTH COLUMNS, USE HIGHER	
1079f7901.d	1242521003	YS1	14-DEC-2009 19:12	931553	1242521	5.0 EMSC	UPLOAD BOTH COLUMNS, USE HIGHER	
1080f8001.d	1242521004	YS1	14-DEC-2009 19:25	931553	1242521	5.0 EMSC	UPLOAD BOTH COLUMNS, USE HIGHER	
1081f8101.d	1242521005	YS1	14-DEC-2009 19:38	931553	1242521	5.0 EMSC	UPLOAD BOTH COLUMNS, USE HIGHER	
1082f8201.d	14-DEC-2009 19:50	YS1	14-DEC-2009 19:50	121409	1.0	PASSED ON BOTH COLUMNS		
1083f8301.d	14-DEC-2009 20:05	YS1	14-DEC-2009 20:03	121409	1.0	CLEAN		
1084f8401.d	1242521006	YS1	14-DEC-2009 20:15	931553	1242521	5.0 EMSC	UPLOAD BOTH COLUMNS, USE HIGHER	
1085f8501.d	1242521007	YS1	14-DEC-2009 20:28	931553	1242521	5.0 EMSC	UPLOAD BOTH COLUMNS, USE HIGHER	
1086f8601.d	1242521008	YS1	14-DEC-2009 20:41	931553	1242521	5.0 EMSC	UPLOAD BOTH COLUMNS, USE HIGHER	
1087f8701.d	14-DEC-2009 20:53	YS1	14-DEC-2009 20:53	121409	1.0	PASSED ON BOTH COLUMNS		
1088f8801.d	14-DEC-2009 21:06	YS1	14-DEC-2009 21:06	121409	1.0	CLEAN		
1089f8901.d	1242297010	YS1	14-DEC-2009 21:19	931140	10-782	1.0 LANL		

090f9001.d	WAR091211-60 06	YS1	14-DEC-2009 21:31		121409		1.0	PASSED ON BOTH COLUMNS	
091f9101.d	WAR091130-99 07	YS1	14-DEC-2009 21:44		121409		1.0	CLEAN	
092f9201.d	1660	YS1	14-DEC-2009 21:56		121409		1.0	screen	
093f9301.d	1660	YS1	14-DEC-2009 22:09		121409		1.0	screen	
094f9401.d	1660	YS1	14-DEC-2009 22:22		121409		1.0	screen	

Instrument Batch: /chem/ecdl1a.i/121409.b

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## GEL ORGANIC RUN LOG

INSTRUMENT ID: ECD1

DATE: 01/15/2010 METHOD: ECD1-F-8082-121409.m OPERATOR: YS1 REVIEWED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

HARDWARE CONFIGURATION &amp; METHOD SUMMARY: No. 1 on pg. 1

SOLVENT LOT DA699  
ALUMINA LOT 1240553-A  
COPPER LOT 236547-A

## Calibration &amp; QC Information

Initial Calibration Dates: See Calibration History and Standard Logbook.

Initial Calibration Std ID's: See Calibration History and Standard Logbook.

GEL SOP GL-OA-E-040 Polychlorinated Biphenyl: EPA 8082

Chromatogram Abbreviation Legend: AB-Assign Baseline, AP-Assign Peak,  
DNC-Do Not Call, DMP-Doesn't Match Pattern, NC-Not Confirmed, RT-Retention Time,  
BF-Before, AF-After.

Sequence Number: /chem/ecdla.i/011410.b

Injection Volume: 0.5 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WAR100105-99 01	YS1	14-JAN-2010 08:36		011410	1.0		CLEAN
002f0201.d	WAR100104-60 01	YS1	14-JAN-2010 08:47		011410	1.0		PASSED ON BOTH COLUMNS
003f0301.d	WAR091216-54	YS1	14-JAN-2010 08:57		011410	1.0		PASSED ON BOTH COLUMNS
004f0401.d	WAR091217-42	YS1	14-JAN-2010 09:08		011410	1.0		PASSED ON BOTH COLUMNS
005f0501.d	WAR091217-48	YS1	14-JAN-2010 09:18		011410	1.0		PASSED ON BOTH COLUMNS
006f0601.d	WAR100104-32	YS1	14-JAN-2010 09:29		011410	1.0		PATTERN ONLY
007f0701.d	WAR100104-21	YS1	14-JAN-2010 09:39		011410	1.0		PATTERN ONLY
008f0801.d	WAR100104-62	YS1	14-JAN-2010 09:50		011410	1.0		PATTERN ONLY
009f0901.d	WAR100111-68	YS1	14-JAN-2010 10:00		011410	1.0		PATTERN ONLY
010f1001.d	WAR091219-DDT	YS1	14-JAN-2010 10:11		011410	1.0		DDT ANALOG STANDARD
011f1101.d	WAR100105-99 02	YS1	14-JAN-2010 10:35		011410	1.0		CLEAN
012f1201.d	1202014259	YS1	14-JAN-2010 10:45	941128	10-1160	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
013f1301.d	11202014260	YS1	14-JAN-2010 10:56	941128	10-1160	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
014f1401.d	1244209001	YS1	14-JAN-2010 11:06	941128	10-1160	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
015f1501.d	1244209002	YS1	14-JAN-2010 11:19	941128	10-1160	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER

Instrument Batch: /chem/ecdla.i/011410.b

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Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
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016f1601.d	244209003	YS1	14-JAN-2010 11:31	941128	10-1160	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
017f1701.d	244209004	YS1	14-JAN-2010 13:44	941128	10-1160	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
018f1801.d	244209005	YS1	14-JAN-2010 11:56	941128	10-1160	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
019f1901.d	244209006	YS1	14-JAN-2010 12:09	941128	10-1160	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
020f2001.d	WAR100104-60 02	YS1	14-JAN-2010 22:22		0111410	1.0	PASSED ON BOTH COLUMNS
021f2101.d	WAR100105-99 03	YS1	14-JAN-2010 12:32		0111410	1.0	CLEAN
022f2201.d	244241001	YS1	14-JAN-2010 12:43	941128	10-1173	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
023f2301.d	244241002	YS1	14-JAN-2010 12:55	941128	10-1173	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
024f2401.d	244241003	YS1	14-JAN-2010 13:08	941128	10-1173	5.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
025f2501.d	1202014261	YS1	14-JAN-2010 13:20	941128	10-1173	5.0 QC A	UPLOAD BOTH COLUMNS, USE HIGHER
026f2601.d	1202014262	YS1	14-JAN-2010 13:33	941128	10-1173	5.0 QC A	UPLOAD BOTH COLUMNS, USE HIGHER
027f2701.d	244241004	YS1	14-JAN-2010 13:46	941128	10-1173	5.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
028f2801.d	244241005	YS1	14-JAN-2010 13:58	941128	10-1173	5.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
029f2901.d	244241006	YS1	14-JAN-2010 14:11	941128	10-1173	5.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
030f3001.d	244241007	YS1	14-JAN-2010 14:23	941128	10-1173	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
031f3101.d	244241008	YS1	14-JAN-2010 14:36		10-1173	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
032f3201.d	WAR100104-60 03	YS1	14-JAN-2010 14:49		0111410	1.0	PASSED ON BOTH COLUMNS
033f3301.d	WAR100105-99 04	YS1	14-JAN-2010 14:59		0111410	1.0	CLEAN
034f3401.d	244241009	YS1	14-JAN-2010 15:10	941128	10-1173	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
035f3501.d	244241010	YS1	14-JAN-2010 15:22	941128	10-1173	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
036f3601.d	244241011	YS1	14-JAN-2010 15:35	941128	10-1173	5.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
037f3701.d	244241012	YS1	14-JAN-2010 15:47	941128	10-1173	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
038f3801.d	244241013	YS1	14-JAN-2010 16:00	941128	10-1173	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
039f3901.d	244241014	YS1	14-JAN-2010 16:13	941128	10-1173	5.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
040f4001.d	WAR100104-60 04	YS1	14-JAN-2010 16:25		0111410	1.0	PASSED ON BOTH COLUMNS

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1041f4101.d	WAR100105-99 05	YS1	14-JAN-2010 16:36	1011410	1.01	CLEAN	
1042f4201.d	1202014615	YS1	14-JAN-2010 16:46	941281	EUI-7467	1.01QC A	UPLOAD BOTH COLUMNS, USE HIGHER
1043f4301.d	1202014616	YS1	14-JAN-2010 16:59	941281	EUI-7467	1.01QC A	UPLOAD BOTH COLUMNS, USE HIGHER
1044f4401.d	1202014619	YS1	14-JAN-2010 17:11	941281	EUI-7467	1.01QC A	UPLOAD BOTH COLUMNS, USE HIGHER
1045f4501.d	244501001	YS1	14-JAN-2010 17:24	941281	EUI-7467	1.01CARE	UPLOAD BOTH COLUMNS, USE HIGHER
1046f4601.d	244504001	YS1	14-JAN-2010 17:37	941281	EUI-7468	5.01CARE	UPLOAD BOTH COLUMNS, USE HIGHER
1047f4701.d	244576001	YS1	14-JAN-2010 17:49	941281	EUI-7469	1.01CARE	UPLOAD BOTH COLUMNS, USE HIGHER
1048f4801.d	1202014617	YS1	14-JAN-2010 18:02	941281	EUI-7469	1.01QC A	UPLOAD BOTH COLUMNS, USE HIGHER
1049f4901.d	1202014618	YS1	14-JAN-2010 18:14	941281	EUI-7469	1.01QC A	UPLOAD BOTH COLUMNS, USE HIGHER
1050f5001.d	244576002	YS1	14-JAN-2010 18:27	941281	EUI-7469	1.01CARE	UPLOAD BOTH COLUMNS, USE HIGHER
1051f5101.d	244576003	YS1	14-JAN-2010 18:40	941281	EUI-7469	1.01CARE	UPLOAD BOTH COLUMNS, USE HIGHER
1052f5201.d	WAR100104-60 05	YS1	14-JAN-2010 18:52	1011410	1.01	PASSED ON BOTH COLUMNS	
1053f5301.d	WAR100105-99 06	YS1	14-JAN-2010 19:03	1011410	1.01	CLEAN	
1054f5401.d	1202012243	YS1	14-JAN-2010 19:13	941271	1244105	1.01QC A	UPLOAD BOTH COLUMNS, USE HIGHER
1055f5501.d	1202014578	YS1	14-JAN-2010 19:26	941271	1244105	1.01QC A	UPLOAD BOTH COLUMNS, USE HIGHER

Instrument Batch: /chem/ecdla.i/011410.b

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Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056f5601.d	1202014579	YS1	14-JAN-2010 19:38	941271	1244105	1.01QC A	UPLOAD BOTH COLUMNS, USE HIGHER	
057f5701.d	244105001	YS1	14-JAN-2010 19:51	941271	1244105	1.01BBES	UPLOAD BOTH COLUMNS, USE HIGHER	
058f5801.d	1202014580	YS1	14-JAN-2010 20:04	941271	1244105	1.01QC A	UPLOAD BOTH COLUMNS, USE HIGHER	
059f5901.d	1202014581	YS1	14-JAN-2010 20:16	941271	1244105	1.01QC A	UPLOAD BOTH COLUMNS, USE HIGHER	
060f6001.d	244105002	YS1	14-JAN-2010 20:29	941271	1244105	1.01BBES	UPLOAD BOTH COLUMNS, USE HIGHER	
061f6101.d	244105003	YS1	14-JAN-2010 20:41	941271	1244105	1.01BBES	UPLOAD BOTH COLUMNS, USE HIGHER	
062f6201.d	WAR100104-60 06	YS1	14-JAN-2010 20:54	1011410	1.01	PASSED ON BOTH COLUMNS		
063f6301.d	WAR100105-99 07	YS1	14-JAN-2010 21:05	1011410	1.01	CLEAN		
064f6401.d	244110001	YS1	14-JAN-2010 21:15	941271	1244110	1.01BBES	UPLOAD BOTH COLUMNS, USE HIGHER	

065f6501.d  244110002	YS1  14-JAN-2010 21:28	941271  244110		1.0 BBES	UPLOAD BOTH COLUMNS, USE HIGHER	
066f6601.d  244110003	YS1  14-JAN-2010 21:40	941271  244110		1.0 BBES	UPLOAD BOTH COLUMNS, USE HIGHER	
067f6701.d  WAR100104-60 07	YS1  14-JAN-2010 21:53		011410	1.0	PASSED ON BOTH COLUMNS	
068f6801.d  WAR100105-99 08	YS1  14-JAN-2010 22:03		011410	1.0	CLEAN	

\* An error was found in the initial calibration level 2 for surrogate 4cmx and DCB. The concentration for I.cal. level 2 was changed from 20ppb to 25ppb on both columns for surrogate 4cmx and DCB in the method to correct the mistake after the data were originally processed. All files in this sequence were re-processed using the corrected method on 01/22/10, and the surrogate concentration was changed slightly. Therefore, the data in Target are slightly different from the ones documented in the original folder.

Instrument Batch: /chem/ecdl1a.i/011410.b

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# **Prep Logbook** **Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples**

**Batch ID:** 941127      **Verified by:** \_\_\_\_\_  
**Analyst:** Andrew Schwenin  
**Method:** SW846 3550B  
**Lab SOP:** GL-OA-E-010 REV# 18  
**Instrument:** Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Clean Up	Prior to Clean up (mL)	Amount Cleaned (mL)	After Clean up (mL)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1202014259 MB	13-JAN-2010 19:31:25	30	H2SO4/KM2	2	9	1	0.03333	
1202014260 LCS	13-JAN-2010 19:31:25	30	H2SO4/KM2	2	9	1	0.03333	
244209001	13-JAN-2010 19:31:25	30.04	H2SO4/KM2	2	9	1	0.03329	
244209002	13-JAN-2010 19:31:25	30.18	H2SO4/KM2	2	9	1	0.03313	
244209003	13-JAN-2010 19:31:25	30.15	H2SO4/KM2	2	9	1	0.03317	
244209004	13-JAN-2010 19:31:25	30.02	H2SO4/KM2	2	9	1	0.03331	
244209005	13-JAN-2010 19:31:25	30.12	H2SO4/KM2	2	9	1	0.0332	
244209006	13-JAN-2010 19:31:25	30.05	H2SO4/KM2	2	9	1	0.03328	
244241001	13-JAN-2010 19:31:25	30.04	H2SO4/KM2	2	9	1	0.03329	
244241002	13-JAN-2010 19:31:25	30.14	H2SO4/KM2	2	9	1	0.03317	
244241003	13-JAN-2010 19:31:25	30.15	H2SO4/KM2	2	9	1	0.03318	
1202014261 MS (244241003)	13-JAN-2010 19:31:25	30.16	H2SO4/KM2	2	9	1	0.03316	
1202014262 MSD (244241003)	13-JAN-2010 19:31:25	30.12	H2SO4/KM2	2	9	1	0.0332	
244241004	13-JAN-2010 19:31:25	30.04	H2SO4/KM2	2	9	1	0.03329	
244241005	13-JAN-2010 19:31:25	30.05	H2SO4/KM2	2	9	1	0.03328	
244241006	13-JAN-2010 19:31:25	30.03	H2SO4/KM2	2	9	1	0.0333	
244241007	13-JAN-2010 19:31:25	30.03	H2SO4/KM2	2	9	1	0.0333	
244241008	13-JAN-2010 19:31:25	30.09	H2SO4/KM2	2	9	1	0.03323	
244241009	13-JAN-2010 19:31:25	30.06	H2SO4/KM2	2	9	1	0.03327	
244241010	13-JAN-2010 19:31:25	30.14	H2SO4/KM2	2	9	1	0.03318	
244241011	13-JAN-2010 19:31:25	30.14	H2SO4/KM2	2	9	1	0.03318	
244241012	13-JAN-2010 19:31:25	30.11	H2SO4/KM2	2	9	1	0.03321	
244241013	13-JAN-2010 19:31:25	30.11	H2SO4/KM2	2	9	1	0.03321	
244241014	13-JAN-2010 19:31:25	30.11	H2SO4/KM2	2	9	1	0.03321	

Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:
LCS	1202014260	PCB Laboratory Control	WE100105-07	1	mL	Clean up Date: 01/13/10
MS	1202014261	PCB Laboratory Control	WE100105-07	1	mL	Clean up Initials: AJS
MSD	1202014262	PCB Laboratory Control	WE100105-07	1	mL	Verified By: AV
STUR	All	PEST LOW LEVEL SURROGATE 200 UG/L	UT091229-15	1	mL	Final Solvent: Hexane
REGNT	All	1:1 sulfuric acid	1133264a	5	mL	Clean Up SOP: GL-OA-E-037
REGNT	All	Acetone	1233927	150	mL	
REGNT	All	Hexane	1241300-B2	150	mL	
REGNT	All	5% Potassium Permanganate	B1202457-F	5	mL	
SOURC	All	SODIUM SULFATE	1248200	30	g	

Data File: /chem/ecdl1a.i/011410.b/025f2501.d  
 Report Date: 23-Jan-2010 12:05

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011410.b/025f2501.d  
 Lab Smp Id: 1202014261 Client Smp ID: RE46-10-10030MS  
 Inj Date : 14-JAN-2010 13:20  
 Operator : YS1 Inst ID: ecd1a.i  
 Smp Info : |1202014261|5|  
 Misc Info : |ECD82P\_1S|941128|SVA|QC A|SOIL|MS|||  
 Comment :  
 Method : /chem/ecdl1a.i/011410.b/ECD1-F-8082-121409.m  
 Meth Date : 23-Jan-2010 12:02 yip00818 Quant Type: ESTD  
 Cal Date : 14-DEC-2009 11:34 Cal File: 040f4001.d  
 Als bottle: 25 QC Sample: MS  
 Dil Factor: 5.00000  
 Integrator: Falcon Compound Sublist: 10-1173.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	5.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.14000	Weight of sample extracted (g)
M	7.30700	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS

RT	EXP RT	DLT RT	ON-COL	FINAL	TARGET RANGE	RATIO
==	=====	=====	RESPONSE ( ug/L)	(ug/Kg)	=====	=====
<p>\$ 11 4cmx CAS #: 877-09-8</p>						
1.969	1.968	0.001	9006142 25.1933	4.5	80.00- 120.00	100.00
<p>\$ 12 Decachlorobiphenyl CAS #: 2051-24-3</p>						
5.280	5.280	0.000	6990257 23.1458	4.1	80.00- 120.00	100.00
<p>1 Aroclor-1016 CAS #: 12674-11-2</p>						
2.424	2.423	0.001	1979690 142.764	25.6	80.00- 120.00	100.00
2.701	2.700	0.001	1469784 145.556	26.0	60.35- 100.35	74.24
2.792	2.793	-0.001	1540198 131.002	23.4	65.00- 105.00	77.80
2.830	2.830	0.000	915213 138.689	24.8	30.88- 70.88	46.23

CONCENTRATIONS								
			ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE	( ug/L)	(ug/Kg)	TARGET	RANGE	RATIO
==	=====	=====	=====	=====	=====	=====	=====	=====
1 Aroclor-1016 (continued)								
3.041	3.041	0.000	1218805	140.522	25.1	45.73-	85.73	61.57
Average of Peak Concentrations =					25.0			
-----								
7 Aroclor-1260					CAS #: 11096-82-5			
3.766	3.767	-0.001	3824854	228.320	40.9	80.00-	120.00	100.00
3.928	3.929	-0.001	4902442	198.138	35.5	132.43-	172.43	128.17
4.158	4.160	-0.002	2933848	199.753	35.7	70.55-	110.55	76.70
4.302	4.303	-0.001	3074727	202.491	36.2	74.79-	114.79	80.39
4.481	4.482	-0.001	6764149	196.916	35.2	195.62-	235.62	176.85
Average of Peak Concentrations =					36.7			

Data File: /chem/ecdda.i/011410.b/025f2501.d

Date: 14-JAN-2010 13:20

Client ID: RE46-10-10030HS

Sample Info: 11202014261151

Volume Injected (uL): 1.0

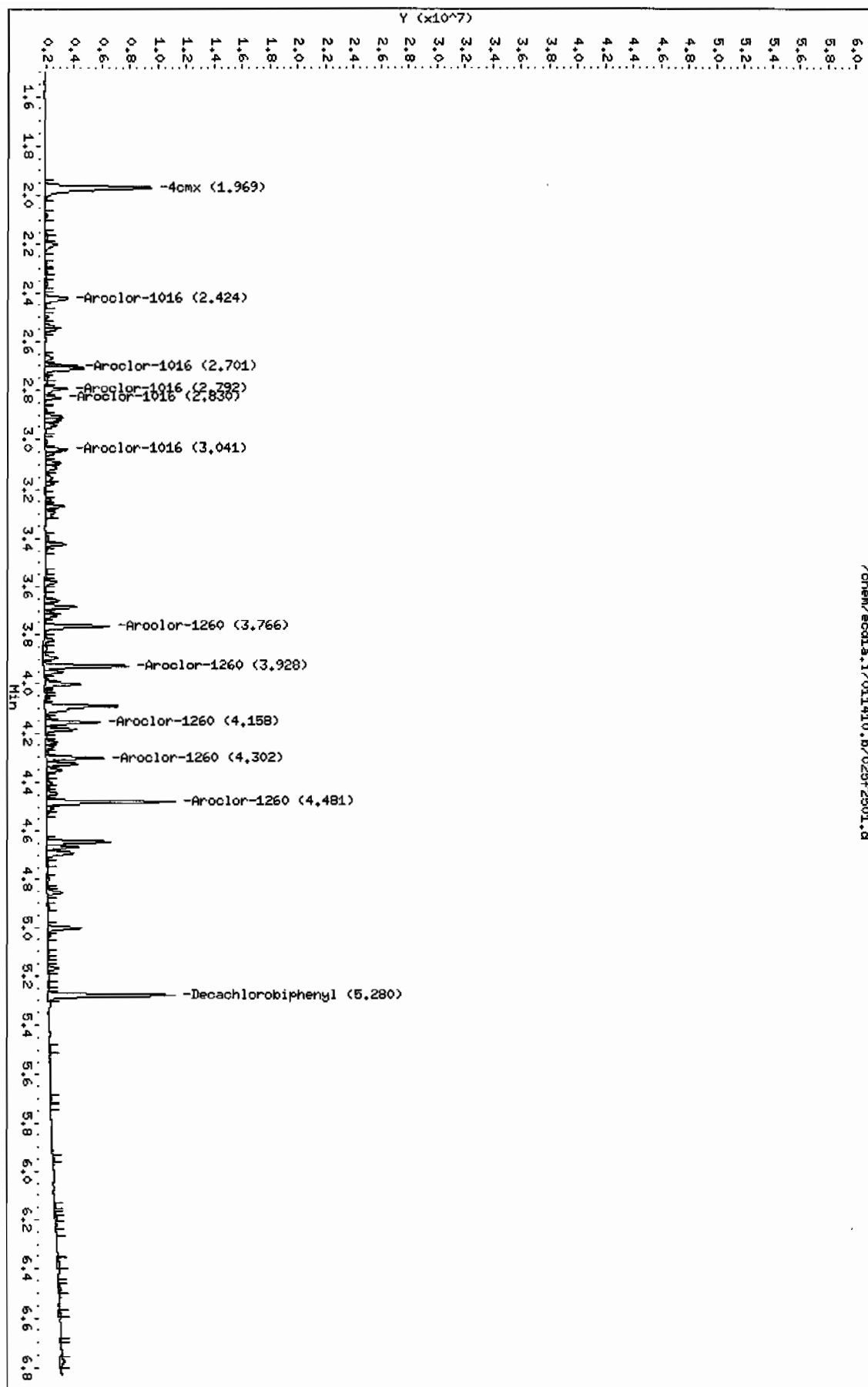
Column phase: CLP1

Instrument: ecdda.i

Operator: YSL

Column diameter: 0.25

/chem/ecdda.i/011410.b/025f2501.d



Data File: /chem/ecdl1a.i/011410.b/025b2501.d  
 Report Date: 23-Jan-2010 12:04

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# GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL  
 Data file : /chem/ecdl1a.i/011410.b/025b2501.d  
 Lab Smp Id: 1202014261 Client Smp ID: RE46-10-10030MS  
 Inj Date : 14-JAN-2010 13:20  
 Operator : YS1 Inst ID: ecd1a.i  
 Smp Info : |1202014261|5|  
 Misc Info : |ECD82P\_1S|941128|SVA|QC A|SOIL|MS|||  
 Comment :  
 Method : /chem/ecdl1a.i/011410.b/ECD1-B-8082-121409.m  
 Meth Date : 23-Jan-2010 12:03 yip00818 Quant Type: ESTD  
 Cal Date : 14-DEC-2009 12:16 Cal File: 044b4401.d  
 Als bottle: 25 QC Sample: MS  
 Dil Factor: 5.00000  
 Integrator: Falcon Compound Sublist: 10-1173.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	5.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.14000	Weight of sample extracted (g)
M	7.30700	% 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						
2.299	2.298	0.001	7036726 24.6608	4.4	80.00- 120.00	100.00
CAS #: 2051-24-3						
\$ 12 Decachlorobiphenyl						
5.942	5.943	-0.001	5522277 24.8991	4.4	80.00- 120.00	100.00
CAS #: 12674-11-2						
1 Aroclor-1016						
3.195	3.195	0.000	1832624 145.313	26.0	80.00- 120.00	100.00 (M)
3.277	3.278	-0.001	1347153 144.422	25.8	45.59- 85.59	73.51
3.342	3.342	0.000	764737 141.322	25.3	20.40- 60.40	41.73
3.568	3.568	0.000	1006677 142.753	25.5	31.46- 71.46	54.93



CONCENTRATIONS								
			ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE	( ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	=====	=====
1 Aroclor-1016 (continued)								
3.643	3.644	-0.001	908181	138.638	24.8	27.73-	67.73	49.56
Average of Peak Concentrations =					25.5			
-----								
7 Aroclor-1260					CAS #: 11096-82-5			
4.333	4.333	0.000	2802032	204.826	36.6	80.00-	120.00	100.00
4.457	4.458	-0.001	2959549	184.637	33.0	101.40-	141.40	105.62
4.723	4.724	-0.001	2386201	189.925	34.0	73.05-	113.05	85.16
4.897	4.898	-0.001	2355213	183.856	32.9	75.43-	115.43	84.05
5.044	5.044	0.000	5127186	183.785	32.9	192.04-	232.04	182.98
Average of Peak Concentrations =					33.9			
-----								

#### QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecdda.i/011410.b/02562501.d

Date: 14-JAN-2010 13:20

Client ID: RE46-10-10030MS

Sample Info: 11202014261151

Volume Injected (uL): 1.0

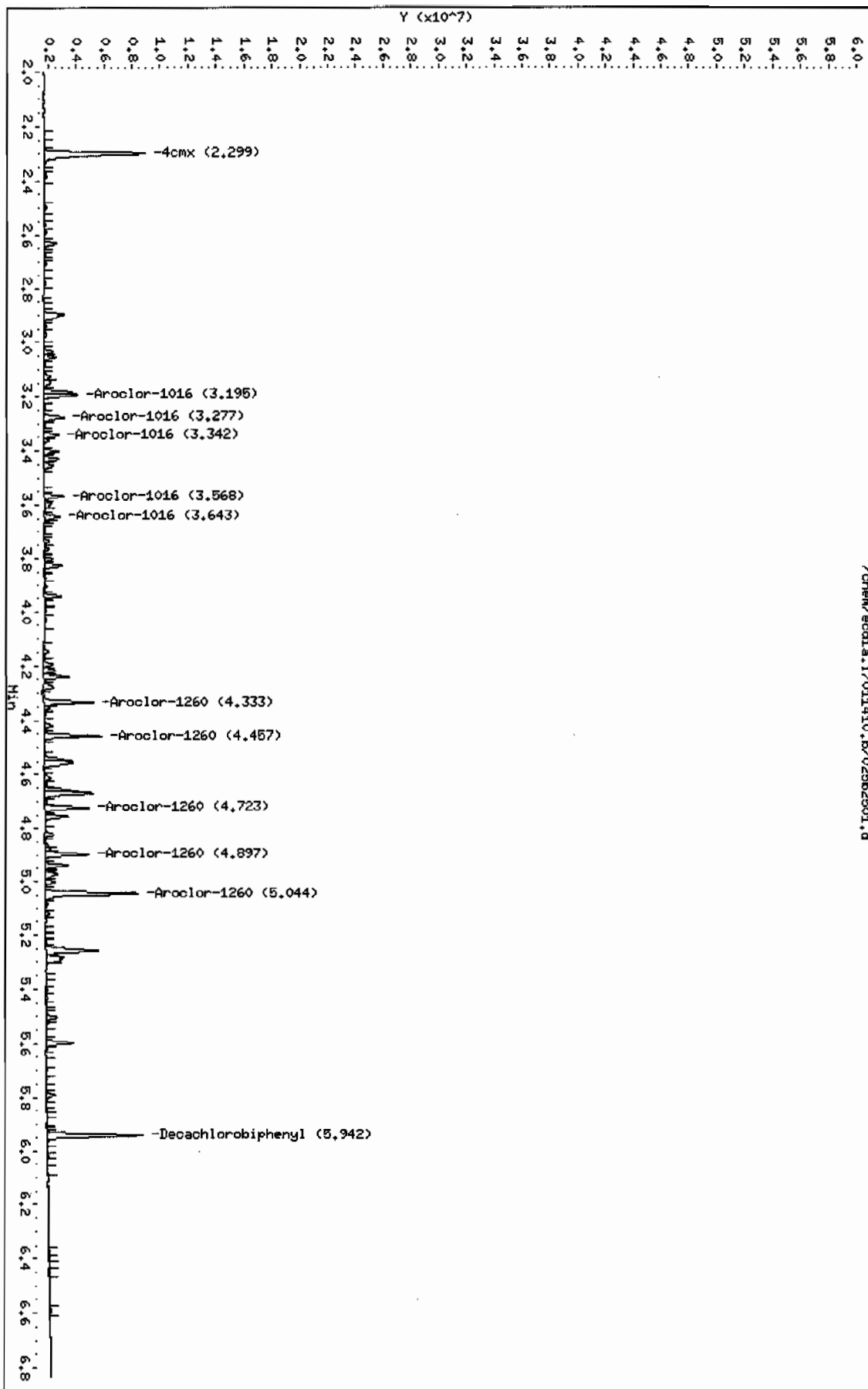
Column phase: CLP2

Instrument: ecdda.i

Operator: YS1

Column diameter: 0.25

/chem/ecdda.i/011410.b/02562501.d



Data File: /chem/ecdl1a.i/011410.b/026f2601.d  
 Report Date: 23-Jan-2010 12:05

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# GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011410.b/026f2601.d  
 Lab Smp Id: 1202014262 Client Smp ID: RE46-10-10030MSD  
 Inj Date : 14-JAN-2010 13:33  
 Operator : YS1 Inst ID: ecd1a.i  
 Smp Info : |1202014262|5|  
 Misc Info : |ECD82P\_1S|941128|SVA|QC A|SOIL|MSD|  
 Comment :  
 Method : /chem/ecdl1a.i/011410.b/ECD1-F-8082-121409.m  
 Meth Date : 23-Jan-2010 12:02 yip00818 Quant Type: ESTD  
 Cal Date : 14-DEC-2009 11:34 Cal File: 040f4001.d  
 Als bottle: 26 QC Sample: MSD  
 Dil Factor: 5.00000  
 Integrator: Falcon Compound Sublist: 10-1173.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	5.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.16000	Weight of sample extracted (g)
M	7.30700	% Moisture

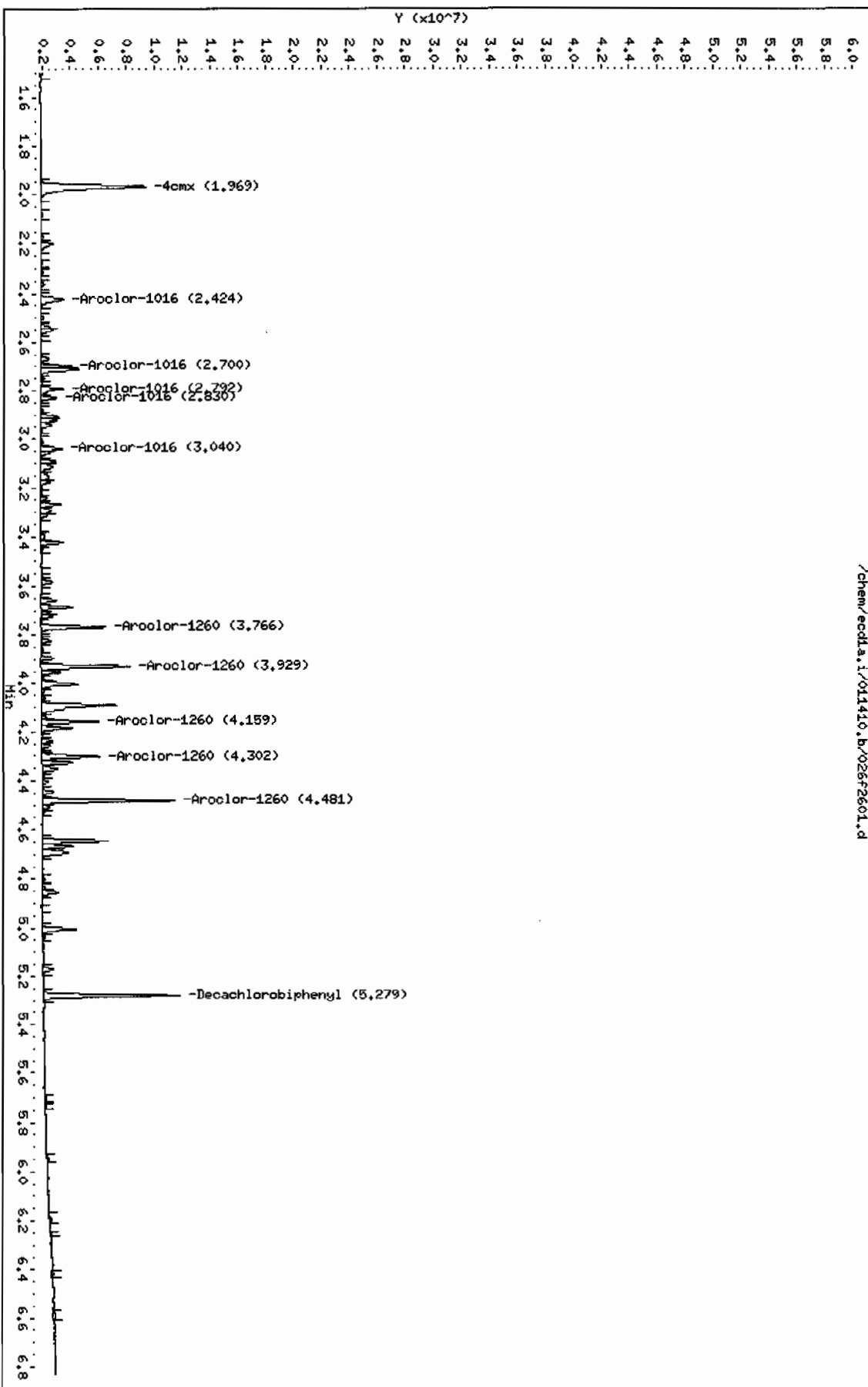
Cpnd Variable Local Compound Variable

CONCENTRATIONS						
			ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
S 11 4cmx CAS #: 877-09-8						
1.969	1.968	0.001	8910437 24.9255	4.4	80.00- 120.00	100.00
-----						
S 12 Decachlorobiphenyl CAS #: 2051-24-3						
5.279	5.280	-0.001	7831121 25.9300	4.6	80.00- 120.00	100.00
-----						
1 Aroclor-1016 CAS #: 12674-11-2						
2.424	2.423	0.001	1902678 137.210	24.5	80.00- 120.00	100.00
2.700	2.700	0.000	1473384 145.912	26.1	60.35- 100.35	77.44
2.792	2.793	-0.001	1526553 129.842	23.2	65.00- 105.00	80.23
2.830	2.830	0.000	894037 135.480	24.2	30.88- 70.88	46.99

CONCENTRATIONS									
			ON-COL		FINAL				
RT	EXP RT	DLT RT	RESPONSE ( ug/L)		(ug/Kg)	TARGET RANGE		RATIO	
==	=====	=====	=====	=====	=====	=====		=====	
1 Aroclor-1016 (continued)									
3.040	3.041	-0.001	1261656	145.463	26.0	45.73-	85.73	66.31	
Average of Peak Concentrations =					24.8				
-----									
7 Aroclor-1260					CAS #: 11096-82-5				
3.766	3.767	-0.001	3549355	211.875	37.9	80.00-	120.00	100.00	
3.929	3.929	0.000	4997648	201.986	36.1	132.43-	172.43	140.80	
4.159	4.160	-0.001	3007085	204.740	36.6	70.55-	110.55	84.72	
4.302	4.303	-0.001	3105892	204.543	36.6	74.79-	114.79	87.51	
4.481	4.482	-0.001	6898108	200.816	35.9	195.62-	235.62	194.35	
Average of Peak Concentrations =					36.6				
-----									

Data File: /chem/ecdl1.i/011410.b/026f2601.d  
Date: 14-JUN-2010 13:33  
Client ID: RE46-10-10030MSD  
Sample Info: 11202014262151  
Volume Injected (uL): 1.0  
Column phase: CLP1

Instrument: ecdl1.i  
Operator: YS1  
Column diameter: 0.25



Data File: /chem/ecdl1a.i/011410.b/026b2601.d  
Report Date: 23-Jan-2010 12:05

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011410.b/026b2601.d  
Lab Smp Id: 1202014262 Client Smp ID: RE46-10-10030MSD  
Inj Date : 14-JAN-2010 13:33  
Operator : YS1 Inst ID: ecd1a.i  
Smp Info : |1202014262|5|  
Misc Info : |ECD82P\_1S|941128|SVA|QC A|SOIL|MSD|  
Comment :  
Method : /chem/ecdl1a.i/011410.b/ECD1-B-8082-121409.m  
Meth Date : 23-Jan-2010 12:03 yip00818 Quant Type: ESTD  
Cal Date : 14-DEC-2009 12:16 Cal File: 044b4401.d  
Als bottle: 26 QC Sample: MSD  
Dil Factor: 5.00000  
Integrator: Falcon Compound Sublist: 10-1173.sub  
Target Version: 3.50 Sample Matrix: Soil  
Processing Host: hpclpl1

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	30.16000	Weight of sample extracted (g)
M	7.30700	% 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	2.299	2.298	0.001	6980282	24.4630	4.4 80.00- 120.00	100.00
CAS #: 2051-24-3							
\$ 12 Decachlorobiphenyl	5.942	5.943	-0.001	5652534	25.4864	4.6 80.00- 120.00	100.00
CAS #: 12674-11-2							
1 Aroclor-1016	3.194	3.195	-0.001	1758518	139.437	24.9 80.00- 120.00	100.00 (M)
	3.278	3.278	0.000	1336838	143.316	25.6 45.59- 85.59	76.02
	3.342	3.342	0.000	764310	141.243	25.3 20.40- 60.40	43.46
	3.568	3.568	0.000	1013783	143.761	25.7 31.46- 71.46	57.65

CONCENTRATIONS								
			ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE ( ug/L)		(ug/Kg)	TARGET RANGE		RATIO
==	=====	=====	=====	=====	=====	=====	=====	=====
1 Aroclor-1016 (continued)								
3.644	3.644	0.000	918920	140.277	25.1	27.73-	67.73	52.26
Average of Peak Concentrations =					25.3			
-----								
7 Aroclor-1260					CAS #: 11096-82-5			
4.333	4.333	0.000	2668986	195.101	34.9	80.00-	120.00	100.00
4.457	4.458	-0.001	3088229	192.665	34.4	101.40-	141.40	115.71
4.723	4.724	-0.001	2443410	194.478	34.8	73.05-	113.05	91.55
4.897	4.898	-0.001	2405667	187.795	33.6	75.43-	115.43	90.13
5.044	5.044	0.000	5375356	192.681	34.5	192.04-	232.04	201.40
Average of Peak Concentrations =					34.4			
-----								

#### QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecdl1.i/011410.b/026b2601.d  
Date: 14-JUN-2010 13:33  
Client ID: RE46-10-10030HSD  
Sample Info: 11202014262151  
Volume Injected (uL): 1.0  
Column phase: CLP2

Instrument: ecdl1.i  
Operator: YSI  
Column diameter: 0.25

/chem/ecdl1.i/011410.b/026b2601.d

