

Thursday, January 07, 2010

**LOS ALAMOS**  
**NATIONAL LABORATORY**

ATTN: Valerie Davis

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

These Samples are on:  
LANL Request Number: 10-1127  
Per Agreement Number: 126310011  
Project Cost Code: MR3A05529E00

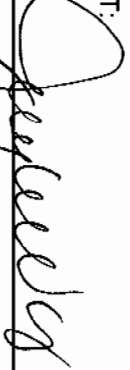
Please analyse the enclosed samples  
according to the schedule indicated:

SHIP DATE: 1/7/2010  
TURNAROUND/REPORT DUE: 2/6/2010  
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	RE12-10-7617	R	1/4/2010	
		1	RE12-10-7618	R	1/4/2010	
		1	RE12-10-7619	R	1/4/2010	
		1	RE12-10-7620	R	1/4/2010	
		1	RE12-10-7621	R	1/4/2010	
		1	RE12-10-7622	R	1/4/2010	
		1	RE12-10-7623	R	1/4/2010	
		1	RE12-10-7624	R	1/4/2010	
		1	RE12-10-7655	R	1/4/2010	

Thursday, January 07, 2010

Page 2 of 2

REQUEST NUMBER: 10-1127

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
SW-846:8321A_MOD		1	RE12-10-7656	R	1/4/2010	
		1	RE12-10-7617	R	1/4/2010	
		1	RE12-10-7618	R	1/4/2010	
		1	RE12-10-7619	R	1/4/2010	
		1	RE12-10-7620	R	1/4/2010	
		1	RE12-10-7621	R	1/4/2010	
		1	RE12-10-7622	R	1/4/2010	
		1	RE12-10-7623	R	1/4/2010	
		1	RE12-10-7624	R	1/4/2010	
		1	RE12-10-7625	R	1/4/2010	
		1	RE12-10-7626	R	1/4/2010	
		1	RE12-10-7627	R	1/4/2010	
		1	RE12-10-7628	R	1/4/2010	
		1	RE12-10-7629	R	1/4/2010	
		1	RE12-10-7630	R	1/4/2010	
		1	RE12-10-7631	R	1/4/2010	
		1	RE12-10-7632	R	1/4/2010	
		1	RE12-10-7655	R	1/4/2010	
		1	RE12-10-7656	R	1/4/2010	

Final Page of REQUEST NUMBER 10-1127

Thursday, January 07, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1127

**LOS ALAMOS**

REQUEST NUMBER: 10-1127

**NATIONAL LABORATORY**

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 2/6/2010

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
RE12-10-7619	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE12-10-7618	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE12-10-7623	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE12-10-7622	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE12-10-7621	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE12-10-7617	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE12-10-7620	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE12-10-7624	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE12-10-7630	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7628	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7632	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7629	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7626	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7631	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7627	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7625	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7656	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE12-10-7655	1	AMBER GLASS	8082+NMED-HEXP	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

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2490

EVENT NAME: 4th Qtr. FY09 - SWMU 12-001(b) of CU 12-001(a)-99 - Threemile Cyn.

SAMPLE ID: RE12-10-7617

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/04/2010		MEDIA:	QBT3		Allh
TIME COLLECTED (HH:MM)		10:51		SUB-MEDIA:	TUFF 1		NA
PRS ID:	12-001(b)	ok		SAMPLE TECH CODE:	HA		ok
LOCATION ID:	12-610639			FIELD QC TYPE:	NA		
LOCATION TYPE:	GENERIC			FIELD PREP:	NA		
TOP DEPTH:	0	0.0		SAMPLE USAGE:	INV		
BOTTOM DEPTH:	0	0.5		SCREEN/PORT DESC:		NA	
FIELD MATRIX:	R	S		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
				WATER FLOWING: YES/NO/NA			
BOREHOLE: YES/NO/NA				BOREHOLE DECLINATION:	NA		
				BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8082+NMED-HEXP	250 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY 12m 1/4/10	None	Y	
1		Met+U+CLO4+C N	1 GAL POLY 1 L	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Brown silty sand, some roots

SAMPLE COMMENTS:

NA

LOCATION DESC:

1a-8 north west of firing site

FIELD SCREENING/MEASUREMENT RESULTS:

$\alpha \leq 22$  dpm  
 $\beta \leq 1755$  dpm  
 PID reading ambient  $\frac{0.0}{0.0}$  ppm  
 HE negative

COLLECTED BY (PRINT)

TLMcFarland

REVIEWED BY (PRINT)

Rolando Saunders

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) TLMcFarland	01/04/10	(Printed Name) K. G. ...	1/4/10
(Signature) <i>TLMcFarland</i>	1600	(Signature) <i>K. G. ...</i>	4:00
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	



# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2490

EVENT NAME: 4th Qtr. FY09 - SWMU 12-001(b) of CU 12-001(a)-99 - Threemile Cyn.

SAMPLE ID: RE12-10-7618

WORK ORDER:

	<u>AS PLANNED</u>	<u>AS COLLECTED</u>		<u>AS PLANNED</u>	<u>AS COLLECTED</u>
DATE COLLECTED(MM/DD/YYYY):		01/04/2010	MEDIA:	QBT3	Allh
TIME COLLECTED (HH:MM)		11:21	SUB-MEDIA:	TUFF 1	NA
PRS ID:	12-001(b)	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	12-610639	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	2.0	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	3.0	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	R	S	EXCAVATED: YES/NO/NA		
COMPOSITE TYPE:	NA		COMPOSITE TIME INTERVAL:	NA	WATER FLOWING: YES/NO/NA
BOREHOLE: YES/NO/NA	NO		BOREHOLE DECLINATION:	NA	BOREHOLE DIRECTION:
				NA	

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8082+NMED-HEXP	250 ML AMBER GLASS	Ice	Y	
1	↓	AM241+GS+ISO PU+ISOU	1 LITER POLY 72m 1/4/10	None	Y	
1	↓	Met+U+CLO4+C N	1 GAL POLY 1 L	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: Brown sandy silt, few rocks

SAMPLE COMMENTS: NA

LOCATION DESC: 19-8, northwest of firing site

## FIELD SCREENING/MEASUREMENT RESULTS:

LE 38 dpm

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

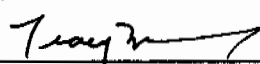
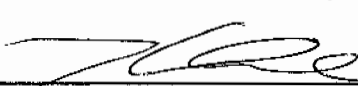
BY 7618 dpm

COLLECTED BY (PRINT)

REVIEWED BY (PRINT)

TL McFarland

Rhonda Saunders

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) TL McFarland	01/04/10	K. Bruce	1/4/10
(Signature) 	1600	(Signature) 	4:00
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2490

EVENT NAME: 4th Qtr. FY09 - SWMU 12-001(b) of CU 12-001(a)-99 - Threemile Cyn.

SAMPLE ID: RE12-10-7619

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/04/2010		MEDIA: QBT3		A11h	
TIME COLLECTED (HH:MM)		1243		SUB-MEDIA: TUFF 1		NA	
PRS ID: 12-001(b)		OK		SAMPLE TECH CODE: HA		OK	
LOCATION ID: 12-610640		↓		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: 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 73m 1/4/10	None	Y	
1	↓	Met+U+CLO4+C N	1 GAL POLY 1 L	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: Brown sandy silt, some roots, few rocks

SAMPLE COMMENTS: NA

LOCATION DESC: 1a-37, north of firing point

## FIELD SCREENING/MEASUREMENT RESULTS:

$\alpha \leq 66$  dpm  
 $\beta \leq 2010$  dpm  
 PID  $\frac{\text{ambient}}{\text{reading}} = \frac{0.0}{0.0}$  ppm  
 HE negative

COLLECTED BY (PRINT)  
TLMcFarland

REVIEWED BY (PRINT) Rebekah Saunders

RELINQUISHED BY (Printed Name) TLMcFarland (Signature) Tracy McFarland	Date/Time 01/04/10 1600	RECEIVED BY (Printed Name) K. Bruce (Signature) [Signature]	Date/Time 1/4/10 4:00
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2490

EVENT NAME: 4th Qtr. FY09 - SWMU 12-001(b) of CU 12-001(a)-99 - Threemile Cyn.

SAMPLE ID: RE12-10-7620

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/04/2010		MEDIA: QBT3		Allh	
TIME COLLECTED (HH:MM)		1252		SUB-MEDIA: TUFF 1		NA	
PRS ID: 12-001(b)		OK		SAMPLE TECH CODE: HA		OK	
LOCATION ID: 12-610640		↓		FIELD QC TYPE: NA		↓	
LOCATION TYPE: GENERIC		↓		FIELD PREP: NA		↓	
TOP DEPTH: 0		2.0		SAMPLE USAGE: INV		↓	
BOTTOM DEPTH: 0		2.8		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	8082+NMED-HEXP	250 ML AMBER GLASS	Ice	Y	
1	↓	AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1	↓	Met+U+CLO4+CN	1 GAL POLY	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: Brown sandy silt

SAMPLE COMMENTS: NA

LOCATION DESC: 1a-3Z north of firing point

## FIELD SCREENING/MEASUREMENT RESULTS:

$\alpha \pm 38$  dpm  
BY  $\pm 1707$  dpm

P10 ambient reading  $\frac{0.0}{0.0}$  ppm

COLLECTED BY (PRINT)

TLMcFarland

REVIEWED BY (PRINT)

Rolanda Saunders

RELINQUISHED BY (Printed Name) TLMcFarland (Signature) Tracy	Date/Time 01/04/10 1600	RECEIVED BY (Printed Name) K. Green (Signature) [Signature]	Date/Time 1/4/10 4:00
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2490

EVENT NAME: 4th Qtr. FY09 - SWMU 12-001(b) of CU 12-001(a)-99 - Threemile Cyn.

SAMPLE ID: RE12-10-7621

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/04/2010		MEDIA:	QBT3		Ally
TIME COLLECTED (HH:MM)		1300		SUB-MEDIA:	TUFF 1		NA
PRS ID:	12-001(b)	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	12-610641			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:	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 1/4/2010	None	Y	
1		Met+U+CLO4+C N	1 GAL POLY 1 L	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: Brown silty sand, some small rocks

FD: RE12-10-7656

SAMPLE COMMENTS: NA

LOCATION DESC: 1a-40, west of firing point

## FIELD SCREENING/MEASUREMENT RESULTS:

$\alpha \leq 38$  dpm  
 $\text{BY} \leq 2090$  dpm  
 PID  $\frac{\text{ambient reading}}{\text{reading}} = \frac{0.0}{0.0}$  ppm  
 HE negative

COLLECTED BY (PRINT)

TLMcFarland

REVIEWED BY (PRINT)

Rafenda Saunders

RELINQUISHED BY (Printed Name) TLMcFarland (Signature) Tracy Z...	Date/Time 01/04/10 1606	RECEIVED BY (Printed Name) K. Bruce (Signature) [Signature]	Date/Time 1/4/10 4:00
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2490

EVENT NAME: 4th Qtr. FY09 - SWMU 12-001(b) of CU 12-001(a)-99 - Threemile Cyn.

SAMPLE ID: RE12-10-7622

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/04/2010		MEDIA:	OBT3		
TIME COLLECTED (HH:MM)		1310		SUB-MEDIA:	TUFF 1		Alh
PRS ID:	12-001(b)	ok		SAMPLE TECH CODE:	HA		NA
LOCATION ID:	12-610641			FIELD QC TYPE:	NA		ok
LOCATION TYPE:	GENERIC	↓		FIELD PREP:	NA		↓
TOP DEPTH:	0	2.0		SAMPLE USAGE:	INV		
BOTTOM DEPTH:	0	3.2		SCREEN/PORT DESC:	NA		
FIELD MATRIX:	R	S		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		WATER FLOWING: YES/NO/NA
BOREHOLE: YES/NO/NA				BOREHOLE DECLINATION:	NA		BOREHOLE DIRECTION: NA

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

SAMPLE DESC: Brown sandy silt, some rocks  
FR RE12-10-7622

SAMPLE COMMENTS: NA

LOCATION DESC: 1a-40, west of firing pt

## FIELD SCREENING/MEASUREMENT RESULTS:

$\alpha \leq 38$  dpm  
 $\beta \leq 1990$  dpm

PID  $\frac{\text{ambient}}{\text{rem reading}}$   $\frac{0.0}{0.0}$  ppm  
7/4/2010

COLLECTED BY (PRINT)  
TL McFarland

REVIEWED BY (PRINT) Rolenda Saunders

RELINQUISHED BY (Printed Name) TLMcFarland (Signature)	Date/Time 01/04/10 1600	RECEIVED BY (Printed Name) L. G. ... (Signature)	Date/Time 1/4/10 4:00
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2490

EVENT NAME: 4th Qtr. FY09 - SWMU 12-001(b) of CU 12-001(a)-99 - Threemile Cyn.

SAMPLE ID: RE12-10-7623

WORK ORDER:

	<u>AS PLANNED</u>	<u>AS COLLECTED</u>	<u>AS PLANNED</u>	<u>AS COLLECTED</u>
DATE COLLECTED(MM/DD/YYYY):		01/04/2010	MEDIA:	OBT3
TIME COLLECTED (HH:MM)		1349	SUB-MEDIA:	TUFF 1
PRS ID:	12-001(b)	ok	SAMPLE TECH CODE:	HA
LOCATION ID:	12-610642	↓	FIELD QC TYPE:	NA
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA
TOP DEPTH:	0	0.0	SAMPLE USAGE:	INV
BOTTOM DEPTH:	0	0.5	SCREEN/PORT DESC:	NA
FIELD MATRIX:	R	S	EXCAVATED: YES/NO/NA	
COMPOSITE TYPE:	NA		COMPOSITE TIME INTERVAL:	NA
			WATER FLOWING: YES/NO/NA	
BOREHOLE: YES/NO/NA			BOREHOLE DECLINATION:	NA
			BOREHOLE DIRECTION:	NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8082+NMED-HEXP	250 ML AMBER GLASS	Ice	Y	
1	↓	AM241+GS+ISO PU+ISOU	1 LITER POLY 73m 01/04/2010	None	Y	
1	↓	Met+U+CLO4+C N	1 GAL POLY 1 L	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Brown sandy silt

SAMPLE COMMENTS:

NA

LOCATION DESC:

1a-41, spring pit

FIELD SCREENING/MEASUREMENT RESULTS:

 $\alpha \leq 66$  dpm $\beta \leq 1852$  dpm

PID ambient reading 0.0 ppm

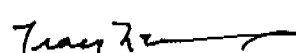
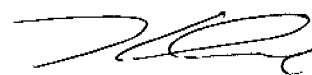
HE negative

COLLECTED BY (PRINT)

TLMcFarland

REVIEWED BY (PRINT)

Rolanda Saunders

RELINQUISHED BY (Printed Name) TLMcFarland (Signature) 	Date/Time 01/04/10 1600	RECEIVED BY (Printed Name) K. Bruce (Signature) 	Date/Time 1/4/10 4:00
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2490

EVENT NAME: 4th Qtr. FY09 - SWMU 12-001(b) of CU 12-001(a)-99 - Threemile Cyn.

SAMPLE ID: RE12-10-7624

WORK ORDER:

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		01/04/2010	MEDIA:	OBT3	ANh
TIME COLLECTED (HH:MM)		1409	SUB-MEDIA:	TUFF 1	NA
PRS ID:	12-001(b)	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	12-610642	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	2.0	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	2.6	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 1/04/2010	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:

Brown sandy silt

SAMPLE COMMENTS:

NA

LOCATION DESC:

16-41, firing pit

FIELD SCREENING/MEASUREMENT RESULTS:

$\alpha \leq 11$  dpm  
 $\beta \leq 2000$  dpm

PID ambient reading

0.0 ppm  
0.0

COLLECTED BY (PRINT)

TL McFarland

REVIEWED BY (PRINT)

R Saunders

RELINQUISHED BY (Printed Name) TLMcFarland (Signature) Tracy McFarland	Date/Time 01/04/10 1600	RECEIVED BY (Printed Name) K. Greene (Signature) K. Greene	Date/Time 1/4/10 4:00
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2490

EVENT NAME: 4th Qtr. FY09 - SWMU 12-001(b) of CU 12-001(a)-99 - Threemile Cyn.

SAMPLE ID: RE12-10-7625

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/04/10	2010	MEDIA:	OBT3		ALLH
TIME COLLECTED (HH:MM)		10:52		SUB-MEDIA:	TUFF 1		N/A
PRS ID:	12-001(b)		OK	SAMPLE TECH CODE:	HA		OK
LOCATION ID:	12-610643		OK	FIELD QC TYPE:	NA		
LOCATION TYPE:	GENERIC		OK	FIELD PREP:	NA		
TOP DEPTH:	0		0.0	SAMPLE USAGE:	INV		✓
BOTTOM DEPTH:	0		0.6	SCREEN/PORT DESC:			N/A
FIELD MATRIX:	R		S	EXCAVATED: YES/NO	NA		
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	N/A		
BOREHOLE: YES/NO	NA			BOREHOLE DECLINATION:	N/A		
				BOREHOLE DIRECTION:	N/A		

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

SAMPLE DESC: brown sandy silt, few Rocks

SAMPLE COMMENTS:

N/A

LOCATION DESC: 1a-42 west of firing site

FIELD SCREENING/MEASUREMENT RESULTS:

 $\alpha \leq 44$  dpm $\text{BY} \leq 1803$  dpmambient  
Reading 0.0 ppm HE Neg

COLLECTED BY (PRINT)

Robenda Saunders

REVIEWED BY (PRINT)

TLMcFarland

RELINQUISHED BY (Printed Name) TLMcFarland (Signature) Tracy M T	Date/Time 01/04/10 1600	RECEIVED BY (Printed Name) K. Green (Signature) [Signature]	Date/Time 1/4/10 4:00
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time



## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2490

EVENT NAME: 4th Qtr. FY09 - SWMU 12-001(b) of CU 12-001(a)-99 - Threemile Cyn.

SAMPLE ID: RE12-10-7626

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/04/2010		MEDIA:	OBT3		ALLH
TIME COLLECTED (HH:MM)		11:04		SUB-MEDIA:	TUFF 1		N/A
PRS ID:	12-001(b)	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	12-610643	OK		FIELD QC TYPE:	NA		
LOCATION TYPE:	GENERIC	OK		FIELD PREP:	NA		
TOP DEPTH:	0	2.0		SAMPLE USAGE:	INV		✓
BOTTOM DEPTH:	0	3.0		SCREEN/PORT DESC:			N/A
FIELD MATRIX:	R	S		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	N/A			COMPOSITE TIME INTERVAL:	N/A		
BOREHOLE: YES/NO/NA				BOREHOLE DECLINATION:	N/A		
				BOREHOLE DIRECTION:	N/A		

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

SAMPLE DESC: brown silt

FDJ 12-10-7655

SAMPLE COMMENTS:

N/A

LOCATION DESC: 1a-42 west of firing site

FIELD SCREENING/MEASUREMENT RESULTS:

 $\alpha \leq 27$  dpmPID ambient  $\frac{0.0}{0.0}$  ppm $\text{BY} \leq 1686$  dpm

COLLECTED BY (PRINT)

Roderica Saunders

REVIEWED BY (PRINT)

Th. McFarland

RELINQUISHED BY (Printed Name) Th. McFarland (Signature) <i>Th. McFarland</i>	Date/Time 01/04/10 1600	RECEIVED BY (Printed Name) K. Bruce (Signature) <i>K. Bruce</i>	Date/Time 1/4/10 4100
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

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

EVENT ID: 2490

EVENT NAME: 4th Qtr. FY09 - SWMU 12-001(b) of CU 12-001(a)-99 - Threemile Cyn.

SAMPLE ID: RE12-10-7627

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/04/2010		MEDIA:	QBT3		ALLH
TIME COLLECTED (HH:MM)		11:28		SUB-MEDIA:	TUFF 1		N/A
PRS ID:	12-001(b)	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	12-610644	↓		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:			N/A
FIELD MATRIX:	R	5		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	N/A			COMPOSITE TIME INTERVAL:	N/A		
BOREHOLE: YES/NO/NA				BOREHOLE DECLINATION:	N/A		
				BOREHOLE DIRECTION:	N/A		

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

SAMPLE DESC: Dark brown sandy silt  
Some clay, few rocks, few roots

SAMPLE COMMENTS:

N/A

LOCATION DESC: 1a-43  
north of firing site

FIELD SCREENING/MEASUREMENT RESULTS:

α ≤ 11 dpm

BY ≤ 1838 dpm

PID ambient 0.0 7pm  
reading 0.0  
HE Neg

COLLECTED BY (PRINT)

Kelenda Saunders

REVIEWED BY (PRINT) TLMcFarland

RELINQUISHED BY (Printed Name) TLMcFarland (Signature) TLMcFarland	Date/Time 01/04/10 1600	RECEIVED BY K. Greene (Printed Name) (Signature) K. Greene	Date/Time 1/4/10 4:00
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2490

EVENT NAME: 4th Qtr. FY09 - SWMU 12-001(b) of CU 12-001(a)-99 - Threemile Cyn.

SAMPLE ID: RE12-10-7628

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/04/2010		MEDIA:	QBT3		ALLH
TIME COLLECTED (HH:MM)		1230		SUB-MEDIA:	TUFF 1		N/A
PRS ID:	12-001(b)	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	12-610644	↓		FIELD QC TYPE:	NA		↓
LOCATION TYPE:	GENERIC	↓		FIELD PREP:	NA		↓
TOP DEPTH:	0	2.0		SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0	2.5		SCREEN/PORT DESC:			N/A
FIELD MATRIX:	B	S		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	N/A			COMPOSITE TIME INTERVAL:	N/A		WATER FLOWING: YES/NO/NA
BOREHOLE: YES/NO/NA				BOREHOLE DECLINATION:	N/A		BOREHOLE DIRECTION:
							N/A

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

SAMPLE DESC: Dark brown Sandy silt  
Some clay, few rocks, few roots

SAMPLE COMMENTS:

N/A

LOCATION DESC: 1a-43  
North of firing site

FIELD SCREENING/MEASUREMENT RESULTS:

α ≤ 60 dpm

PID

BY ≤ 1879 dpm

ambient  
reading 0.0  
0.0 ppm

COLLECTED BY (PRINT)

TL McFarland

REVIEWED BY (PRINT)

Rolenda Saunders

RELINQUISHED BY (Printed Name) TLMcFarland (Signature) Tray [Signature]	Date/Time 01/04/10 1600	RECEIVED BY (Printed Name) K. Gucce (Signature) [Signature]	Date/Time 1/4/10 4:00
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2490

EVENT NAME: 4th Qtr. FY09 - SWMU 12-001(b) of CU 12-001(a)-99 - Threemile Cyn.

SAMPLE ID: RE12-10-7629

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/04/2010		MEDIA:	QBT3		A/H
TIME COLLECTED (HH:MM)		1346		SUB-MEDIA:	TUFF 1		NA
PRS ID:	12-001(b)	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	12-610645			FIELD QC TYPE:	NA		
LOCATION TYPE:	GENERIC			FIELD PREP:	NA		
TOP DEPTH:	0	0.0		SAMPLE USAGE:	INV		
BOTTOM DEPTH:	0	0.4		SCREEN/PORT DESC:	NA		
FIELD MATRIX:	R	S		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
				WATER FLOWING: YES/NO/NA			
BOREHOLE: YES/NO/NA				BOREHOLE DECLINATION:	NA		
				BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	AM241+GS+ISO PU+ISOU	1 LITER POLY 12-01/04/2010	None	Y	
1		Met+U+CLO4+C N	1 GAL POLY 1 L	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

SAMPLE COMMENTS: NA

LOCATION DESC: 1a-39, south of firing pt

FIELD SCREENING/MEASUREMENT RESULTS:

 $\alpha \leq 33$  dpm $\beta \leq 2080$  dpmPID  $\frac{\text{ambient}}{\text{reading}} \frac{0.0}{0.0}$  ppm

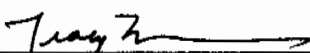
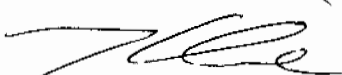
HE negative

COLLECTED BY (PRINT)

TL McFarland

REVIEWED BY (PRINT)

Rolanda Saunders

RELINQUISHED BY (Printed Name) TL McFarland (Signature) 	Date/Time 01/04/10 1600	RECEIVED BY (Printed Name) K. G. ... (Signature) 	Date/Time 1/4/10 4:00
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2490

EVENT NAME: 4th Qtr. FY09 - SWMU 12-001(b) of CU 12-001(a)-99 - Threemile Cyn.

SAMPLE ID: RE12-10-7630

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/04/2010		MEDIA:	OBT3		ALLH
TIME COLLECTED (HH:MM)		1406		SUB-MEDIA:	TUFF 1		NA
PRS ID:	12-001(b)	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	12-610645	↓		FIELD QC TYPE:	NA		↓
LOCATION TYPE:	GENERIC			FIELD PREP:	NA		
TOP DEPTH:	0	2.0		SAMPLE USAGE:	INV		
BOTTOM DEPTH:	0	2.7		SCREEN/PORT DESC:	NA		
FIELD MATRIX:	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 12 m 01/04/2010	None	Y	
1	↓	Met+U+CLO4+C N	1 GAL POLY 1 L	Ice	Y	
1	↓	NMED Explosives list	250 ML AMBER GLASS	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: Brown silty sand

SAMPLE COMMENTS: NA

LOCATION DESC: 1a-39, south of firing pt

## FIELD SCREENING/MEASUREMENT RESULTS:

 $\alpha \leq 88$  dpm $\beta \leq 2140$  dpmPID  $\frac{\text{ambient}}{\text{reading}} = \frac{0.0}{0.0}$  ppm

COLLECTED BY (PRINT)

TL McFarland

REVIEWED BY (PRINT)

Rolanda Saunders

RELINQUISHED BY (Printed Name) TL McFarland (Signature) <i>TL McFarland</i>	Date/Time 01/04/10 1600	RECEIVED BY <i>K. Bruce</i> (Printed Name) (Signature) <i>K. Bruce</i>	Date/Time 1/4/10 410
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2490

EVENT NAME: 4th Qtr. FY09 - SWMU 12-001(b) of CU 12-001(a)-99 - Threemile Cyn.

SAMPLE ID: RE12-10-7631

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/04/2010		MEDIA:	QBT3		Allh
TIME COLLECTED (HH:MM)		1445		SUB-MEDIA:	TUFF 1		NA
PRS ID:	12-001(b)	OK		SAMPLE TECH CODE:	HA		ok
LOCATION ID:	12-610646			FIELD QC TYPE:	NA		
LOCATION TYPE:	GENERIC			FIELD PREP:	NA		
TOP DEPTH:	0	0.0		SAMPLE USAGE:	INV		
BOTTOM DEPTH:	0	0.6		SCREEN/PORT DESC:	NA		
FIELD MATRIX:	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 <i>73m 01/04/2010</i>	None	Y	
1		Met+U+CLO4+C N	1 GAL POLY <i>1 Liter</i>	Ice	Y	
1		NMED Explosives list	250 ML AMBER GLASS	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

*Dark Brown moist silty sand, few roots and rocks 73m 01/04/2010*

SAMPLE COMMENTS: NA

LOCATION DESC: *1a-36, south of firing site*

FIELD SCREENING/MEASUREMENT RESULTS:

$\alpha$   $\pm$  16 dpm  
 BY  $\pm$  2030 dpm

PID *ambient*  $\frac{0.0}{0.0}$  ppm  
 reading  
 HE negative

COLLECTED BY (PRINT)

TL McFarland

REVIEWED BY (PRINT) *R Saunders*

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) TL McFarland	01/04/10	(Printed Name) K. Bucca	1/4/10
(Signature) <i>TL McFarland</i>	600	(Signature) <i>[Signature]</i>	4:00
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

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

EVENT ID: 2490

EVENT NAME: 4th Qtr. FY09 - SWMU 12-001(b) of CU 12-001(a)-99 - Threemile Cyn.

SAMPLE ID: RE12-10-7632

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/04/2010		MEDIA:	OBT3		Allh
TIME COLLECTED (HH:MM)		1455		SUB-MEDIA:	TUFF 1		NA
PRS ID:	12-001(b)	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	12-610646	↓		FIELD QC TYPE:	NA		↓
LOCATION TYPE:	GENERIC	↓		FIELD PREP:	NA		↓
TOP DEPTH:	0	2.0		SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0	3.0		SCREEN/PORT DESC:	NA		
FIELD MATRIX:	R	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 1/4/2010	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 Riley sand

SAMPLE COMMENTS:

NA

LOCATION DESC:

1a-36 South of firing Site

FIELD SCREENING/MEASUREMENT RESULTS:

$\alpha \pm 27$  dpm  
 $\beta \pm 2050$  dpm  
 PID  $\frac{\text{ambient}}{\text{reading}}$   $\frac{0.0}{0.0}$  ppm

COLLECTED BY (PRINT)

TL McFarland

REVIEWED BY (PRINT)

R Saunders

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) TLMcFarland	01/04/10	(Printed Name) K. Bruce	1/4/10
(Signature) Tracy M.	1600	(Signature) [Signature]	4100
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2490

EVENT NAME: 4th Qtr. FY09 - SWMU 12-001(b) of CU 12-001(a)-99 - Threemile Cyn.

SAMPLE ID: RE12-10-7655

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/04/2010		MEDIA:	OBT3		ALLH
TIME COLLECTED (HH:MM)		11:04		SUB-MEDIA:	TUFF 1		N/A
PRS ID:	12-001(b)	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	UNK	OK		FIELD QC TYPE:	ED		
LOCATION TYPE:	GENERIC	OK		FIELD PREP:	NA		
TOP DEPTH:	0	2.0		SAMPLE USAGE:	QC		✓
BOTTOM DEPTH:	0	3.0		SCREEN/PORT DESC:			N/A
FIELD MATRIX:	R	S		EXCAVATED: YES/NO/NA			N/A
COMPOSITE TYPE:	N/A			COMPOSITE TIME INTERVAL:	N/A		
BOREHOLE: YES/NO/NA	NO			BOREHOLE DECLINATION:	N/A		
BOREHOLE DIRECTION:	N/A			WATER FLOWING: YES/NO/NA	NO		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	normal	73m 1/4/10 8082+NMED-HEXP	250 ML AMBER GLASS	Ice	✓	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		Met+U+CLO4+C N	1 GAL POLY	Ice	Y	
1	✓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: QC Sample of brown silt

FD, REPS  
01/04/10 RE12-10-7626

SAMPLE COMMENTS:

NA

LOCATION DESC: 1a-42

West of firing site

FIELD SCREENING/MEASUREMENT RESULTS:

 $\alpha \leq 27$  dpmPID ambient  
reading 0.0 ppmBY  $\leq 1686$  dpm

COLLECTED BY (PRINT)

Rebecca Saunders

REVIEWED BY (PRINT)

TL McFarland

RELINQUISHED BY (Printed Name) TLMcFarland (Signature)	Date/Time 01/04/10 1600	RECEIVED BY (Printed Name) K. Grice (Signature)	Date/Time 1/4/10 4:00
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time



## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2490

EVENT NAME: 4th Qtr. FY09 - SWMU 12-001(b) of CU 12-001(a)-99 - Threemile Cyn.

SAMPLE ID: RE12-10-7656

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/04/2010		MEDIA:	QBT3		Allh
TIME COLLECTED (HH:MM)		1300		SUB-MEDIA:	TUFF 1		NA
PRS ID:	12-001(b)	OK		SAMPLE TECH CODE:	HA		ok
LOCATION ID:	UNK	12-610G41		FIELD QC TYPE:	FD		
LOCATION TYPE:	GENERIC	ok		FIELD PREP:	NA		
TOP DEPTH:	0	0.0		SAMPLE USAGE:	QC		
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 13m 1/04/2010	None	Y	
1		Met+U+CLO4+C N	1 GAL POLY 1 L	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: QC Sample of RE12-10-7621

Brown silty sand, some small rocks

SAMPLE COMMENTS: NA

LOCATION DESC: 1a-40. west of firing pt

## FIELD SCREENING/MEASUREMENT RESULTS:

α ≤ 38 dpm  
BY 2090 dpm

PID  $\frac{\text{ambient}}{\text{reading}}$   $\frac{0.0}{0.0}$  ppm  
HE negative

COLLECTED BY (PRINT)

TLMcFarland

REVIEWED BY (PRINT)

Rolenda Saunders

RELINQUISHED BY (Printed Name) TLMcFarland (Signature) <i>TLMcFarland</i>	Date/Time 01/04/10 1600	RECEIVED BY (Printed Name) K. Bruce (Signature) <i>K. Bruce</i>	Date/Time 1/4/10 4:00
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2490

EVENT NAME: 4th Qtr. FY09 - SWMU 12-001(b) of CU 12-001(a)-99 - Threemile Cyn.

SAMPLE ID: RE12-10-7662

WORK ORDER:

AS PLANNED	AS COLLECTED	AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):	01/04/2010	MEDIA:	NA
TIME COLLECTED (HH:MM)	1318	SUB-MEDIA:	OTHER
PRS ID: 12-001(b)	OK	SAMPLE TECH CODE: DC	
LOCATION ID: UNK	12-610641	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 RE12-10-7622

SAMPLE COMMENTS:

Ringside

LOCATION DESC:

1a-40 West of firing Point

FIELD SCREENING/MEASUREMENT RESULTS:

NA

COLLECTED BY (PRINT)

TL McFarlane

REVIEWED BY (PRINT)

Rokenda Saunders

RELINQUISHED BY (Printed Name) Th McFarlane (Signature) Tracy	Date/Time 01/04/10 1600	RECEIVED BY (Printed Name) K. Green (Signature) [Signature]	Date/Time 1/4/10 4:00
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):

RE12-10-7625  
7626  
7655  
7617  
7618  
7859  
7853  
7852  
7851  
7850  
7849

RE12-10-7848  
7627  
7622  
7656  
7621  
7620  
7619  
7628  
7624  
7629  
7630  
7623

RE12-10-7631  
7632

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):

RE12-10-7662

Reason: Rinsate

.....  
Print Last Name McFarland Signature Tracy Date 01/04/2010

## Rad Screening Data Release Form

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

RE12-10-7625  
7626  
7655  
7617  
7618  
7859  
7853  
7852  
7851  
7850  
7849

RE12-10-7848  
7627  
7622  
7656  
7621  
7620  
7619  
7628  
7624  
7629  
7630  
7623

RE12-10-7631  
7632

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.

.....

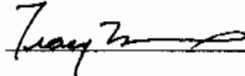
The following samples do not require rad screening data for the reasons stated (list sample numbers):

RE12-10-7662

Reason: Rinsate

.....

Print Last Name McFarland

Signature 

Date 01/04/2010



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00001

Client Sample ID: RE12-10-7617

Sample Collection Date: 01/04/10 10:56

Sample Matrix: Soil/Solid

Request or PO Number:

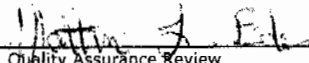
ARS Sample ID: ARS2-10-00001-001

Date Received: 01/05/10 00:00

Report Date: 01/06/10 08:16

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	36.05	22.17	27.01	22.60		pCi/g	EPA 900.0M	1/5/2010	ME	N/A
GROSS BETA	44.66	11.32	12.49	12.57		pCi/g	EPA 900.0M	1/5/2010	ME	N/A
NA-22	0.11	0.16	0.09	0.16		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
K-40	18.29	7.06	2.05	7.08		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
CO-60	0.04	0.08	0.10	0.08		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
CS-134	0.23	0.16	0.07	0.17		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
CS-137	0.08	0.20	0.10	0.20		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
EU-152	0.72	0.61	0.26	0.61		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
PB-212	1.72	0.54	0.18	0.55		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
RA-228	1.44	0.89	0.30	0.89		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
U-235	2.45	1.43	0.48	1.43		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
U-238	3.36	2.90	1.44	3.00		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
AM-241	0.77	0.50	0.17	0.50		pCi/g	EPA 901.1M	1/5/2010	ME	N/A

NOTES: % Moisture: 2.15

  
Quality Assurance Review

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LELAP Certificate# 30658

NELAP Certificate # E87558



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505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00001

Client Sample ID: RE12-10-7618

Sample Collection Date: 01/04/10 11:21

Sample Matrix: Soil/Solid

Request or PO Number:

ARS Sample ID: ARS2-10-00001-002

Date Received: 01/05/10 00:00

Report Date: 01/06/10 08:16

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	45.64	22.45	22.94	23.14		pCi/g	EPA 900.0M	1/5/2010	ME	N/A
GROSS BETA	41.64	11.31	12.66	12.41		pCi/g	EPA 900.0M	1/5/2010	ME	N/A
NA-22	0.00	0.00	0.12	0.00		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
K-40	-1.68	1009.50	2.26	1009.50		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
CO-60	0.00	12.24	0.12	12.24		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
CS-134	0.27	0.24	0.09	0.24		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
CS-137	-0.01	16.02	0.08	16.02		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
EU-152	0.00	12.73	0.14	12.73		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
PB-212	1.41	0.54	0.16	0.54		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
RA-228	2.34	1.17	0.33	1.18		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
U-235	0.81	0.91	0.33	0.91		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
U-238	4.91	2.76	1.07	2.98		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
AM-241	0.48	0.24	0.05	0.24		pCi/g	EPA 901.1M	1/5/2010	ME	N/A

NOTES: % Moisture: 1.06

*Matthew J. Foley*  
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: ARS2-10-00001

Client Sample ID: RE12-10-7619

Sample Collection Date: 01/04/10 12:43

Sample Matrix: Soil/Solid

Request or PO Number:

ARS Sample ID: ARS2-10-00001-003

Date Received: 01/05/10 00:00

Report Date: 01/06/10 08:16

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	57.35	24.29	19.32	25.28		pCi/g	EPA 900.0M	1/5/2010	ME	N/A
GROSS BETA	50.45	12.85	13.71	14.25		pCi/g	EPA 900.0M	1/5/2010	ME	N/A
NA-22	0.00	0.00	0.16	0.00		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
K-40	-1.95	-21.79	3.83	-21.79		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
CO-60	-0.01	16.82	0.17	16.82		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
CS-134	0.23	0.26	0.12	0.26		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
CS-137	-0.01	22.00	0.11	22.00		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
EU-152	0.00	17.49	0.20	17.49		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
PB-212	1.18	0.66	0.26	0.66		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
RA-228	0.83	0.55	0.45	0.55		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
U-235	2.33	1.65	0.50	1.65		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
U-238	-1.46	-12.70	1.50	-12.70		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
AM-241	0.29	0.31	0.12	0.31		pCi/g	EPA 901.1M	1/5/2010	ME	N/A

NOTES: % Moisture: 1.14

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ARS Sample Delivery Group: ARS2-10-00001

Client Sample ID: RE12-10-7620

Sample Collection Date: 01/04/10 12:52

Sample Matrix: Soil/Solid

Request or PO Number:

ARS Sample ID: ARS2-10-00001-004

Date Received: 01/05/10 00:00

Report Date: 01/06/10 08:16

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	53.25	24.13	23.98	25.00		pCi/g	EPA 900.0M	1/5/2010	ME	N/A
GROSS BETA	48.06	12.01	13.00	13.37		pCi/g	EPA 900.0M	1/5/2010	ME	N/A
NA-22	0.18	0.25	0.15	0.25		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
K-40	-1.61	-16.71	3.42	-16.71		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
CO-60	0.00	15.28	0.15	15.28		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
CS-134	0.15	0.21	0.11	0.21		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
CS-137	-0.01	19.99	0.10	19.99		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
EU-152	0.14	0.22	0.18	0.22		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
PB-212	1.82	0.76	0.28	0.76		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
RA-228	0.95	0.60	0.58	0.60		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
U-235	1.39	1.03	0.24	1.03		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
U-238	8.63	5.35	1.94	5.70		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
AM-241	0.39	0.33	0.10	0.33		pCi/g	EPA 901.1M	1/5/2010	ME	N/A

NOTES: % Moisture: 1.29

  
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: ARS2-10-00001

Client Sample ID: RE12-10-7621

Sample Collection Date: 01/04/10 13:00

Sample Matrix: Soil/Solid

Request or PO Number:

ARS Sample ID: ARS2-10-00001-005

Date Received: 01/05/10 00:00

Report Date: 01/06/10 08:16

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	80.59	30.26	27.01	31.83		pCi/g	EPA 900.0M	1/5/2010	ME	N/A
GROSS BETA	55.39	12.52	12.49	14.24		pCi/g	EPA 900.0M	1/5/2010	ME	N/A
NA-22	0.20	0.23	0.11	0.23		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
K-40	0.47	7.75	4.00	7.75		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
CO-60	0.00	11.47	0.12	11.47		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
CS-134	0.00	0.00	0.08	0.00		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
CS-137	0.39	0.26	0.07	0.26		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
EU-152	0.00	11.92	0.13	11.92		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
PB-212	1.72	0.56	0.15	0.57		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
RA-228	0.81	0.75	0.31	0.75		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
U-235	3.26	1.56	0.39	1.57		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
U-238	1.77	2.64	1.27	2.67		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
AM-241	0.05	0.14	0.07	0.14		pCi/g	EPA 901.1M	1/5/2010	ME	N/A

NOTES: % Moisture: 1.08

Quality Assurance Review

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505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00001

Request or PO Number:

Client Sample ID: RE12-10-7622

ARS Sample ID: ARS2-10-00001-006

Sample Collection Date: 01/04/10 13:10

Date Received: 01/05/10 00:00

Sample Matrix: Soil/Solid

Report Date: 01/06/10 08:16

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	68.71	26.62	22.94	27.92		pCi/g	EPA 900.0M	1/5/2010	ME	N/A
GROSS BETA	42.76	11.67	12.66	12.79		pCi/g	EPA 900.0M	1/5/2010	ME	N/A
NA-22	0.00	0.00	0.08	0.00		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
K-40	-1.01	-10.00	2.66	-10.00		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
CO-60	0.10	0.15	0.09	0.15		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
CS-134	0.57	0.31	0.06	0.31		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
CS-137	0.05	0.09	0.05	0.09		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
EU-152	0.00	92.99	0.10	92.99		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
PB-212	1.84	0.50	0.13	0.50		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
RA-228	0.79	0.71	0.57	0.71		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
U-235	0.52	0.64	0.43	0.64		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
U-238	2.25	2.99	1.50	3.03		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
AM-241	0.02	0.14	0.09	0.14		pCi/g	EPA 901.1M	1/5/2010	ME	N/A

NOTES: % Moisture: 1.00

  
Quality Assurance Review

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NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00001

Request or PO Number:

Client Sample ID: RE12-10-7623

ARS Sample ID: ARS2-10-00001-007

Sample Collection Date: 01/04/10 13:49

Date Received: 01/05/10 00:00

Sample Matrix: Soil/Solid

Report Date: 01/06/10 08:16

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	57.35	24.29	19.32	25.28		pCi/g	EPA 900.0M	1/5/2010	ME	N/A
GROSS BETA	50.92	12.88	13.71	14.31		pCi/g	EPA 900.0M	1/5/2010	ME	N/A
NA-22	0.08	0.15	0.13	0.15		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
K-40	-2.75	-55.98	4.74	-55.98		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
CO-60	-0.01	36.80	0.13	36.80		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
CS-134	0.00	0.00	0.10	0.00		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
CS-137	0.00	-0.06	0.09	-0.06		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
EU-152	0.52	0.52	0.19	0.52		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
PB-212	1.35	0.60	0.23	0.60		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
RA-228	2.67	1.35	0.41	1.36		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
U-235	3.28	1.45	0.23	1.46		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
U-238	0.27	3.37	2.06	3.37		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
AM-241	0.31	0.34	0.14	0.34		pCi/g	EPA 901.1M	1/5/2010	ME	N/A

NOTES: % Moisture: 1.21

*Matthew J. Eder*  
Quality Assurance Review

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NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87544

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ARS Sample Delivery Group: ARS2-10-00001

Request or PO Number:

Client Sample ID: RE12-10-7624

ARS Sample ID: ARS2-10-00001-008

Sample Collection Date: 01/04/10 14:09

Date Received: 01/05/10 00:00

Sample Matrix: Soil/Solid

Report Date: 01/06/10 08:16

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	62.44	25.76	23.98	26.87		pCi/g	EPA 900.0M	1/5/2010	ME	N/A
GROSS BETA	42.55	11.73	13.00	12.84		pCi/g	EPA 900.0M	1/5/2010	ME	N/A
NA-22	0.05	0.10	0.09	0.10		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
K-40	16.07	7.88	2.58	7.89		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
CO-60	0.02	0.06	0.09	0.06		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
CS-134	0.65	0.27	0.06	0.27		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
CS-137	0.22	0.18	0.06	0.18		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
EU-152	0.85	0.69	0.21	0.69		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
PB-212	1.65	0.53	0.18	0.53		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
RA-228	2.27	0.92	0.28	0.92		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
U-235	2.31	1.26	0.36	1.26		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
U-238	4.27	3.97	1.64	4.09		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
AM-241	0.14	0.25	0.12	0.25		pCi/g	EPA 901.1M	1/5/2010	ME	N/A

NOTES: % Moisture: 0.83

  
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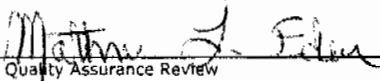
133 State Road 4, White Rock, NM 87544  
505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00001  
Client Sample ID: RE12-10-7625  
Sample Collection Date: 01/04/10 10:52  
Sample Matrix: Soil/Solid

Request or PO Number:  
ARS Sample ID: ARS2-10-00001-009  
Date Received: 01/05/10 00:00  
Report Date: 01/06/10 08:16

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	33.56	21.63	27.01	22.02		pCi/g	EPA 900.0M	1/5/2010	ME	N/A
GROSS BETA	47.42	11.49	12.49	12.87		pCi/g	EPA 900.0M	1/5/2010	ME	N/A
NA-22	0.00	0.00	0.10	0.00		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
K-40	-2.54	-59.31	4.16	-59.31		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
CO-60	0.06	0.12	0.10	0.12		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
CS-134	0.35	0.25	0.07	0.25		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
CS-137	0.01	0.09	0.08	0.09		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
EU-152	1.37	0.65	0.12	0.65		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
PB-212	1.55	0.63	0.27	0.63		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
RA-228	2.80	0.98	0.32	0.99		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
U-235	0.48	0.61	0.26	0.61		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
U-238	7.95	4.32	1.67	4.68		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
AM-241	0.28	0.31	0.13	0.31		pCi/g	EPA 901.1M	1/5/2010	ME	N/A

NOTES: % Moisture: 1.65

  
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ARS Sample Delivery Group: ARS2-10-00001

Client Sample ID: RE12-10-7626

Sample Collection Date: 01/04/10 11:04

Sample Matrix: Soil/Solid

Request or PO Number:

ARS Sample ID: ARS2-10-00001-010

Date Received: 01/05/10 00:00

Report Date: 01/06/10 08:16

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	43.33	21.99	22.94	22.62		pCi/g	EPA 900.0M	1/5/2010	ME	N/A
GROSS BETA	46.12	11.61	12.66	12.91		pCi/g	EPA 900.0M	1/5/2010	ME	N/A
NA-22	0.00	0.00	0.16	0.00		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
K-40	-1.58	-27.87	4.71	-27.87		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
CO-60	0.00	16.59	0.17	16.59		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
CS-134	0.34	0.25	0.12	0.26		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
CS-137	0.05	0.13	0.11	0.13		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
EU-152	0.00	17.25	0.19	17.25		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
PB-212	1.84	0.73	0.23	0.74		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
RA-228	3.11	1.31	0.44	1.32		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
U-235	1.96	0.98	0.26	0.98		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
U-238	6.71	4.65	1.80	4.90		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
AM-241	-0.01	34.60	0.08	34.60		pCi/g	EPA 901.1M	1/5/2010	ME	N/A

NOTES: % Moisture: 1.04

*Matthew J. Egan*  
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ARS Sample Delivery Group: ARS2-10-00001  
 Client Sample ID: RE12-10-7627  
 Sample Collection Date: 01/04/10 11:28  
 Sample Matrix: Soil/Solid

Request or PO Number:  
 ARS Sample ID: ARS2-10-00001-011  
 Date Received: 01/05/10 00:00  
 Report Date: 01/06/10 08:16

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	52.52	23.35	19.32	24.22		pCi/g	EPA 900.0M	1/5/2010	ME	N/A
GROSS BETA	36.50	11.76	13.71	12.58		pCi/g	EPA 900.0M	1/5/2010	ME	N/A
NA-22	0.00	0.00	0.10	0.00		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
K-40	23.77	8.31	2.23	8.34		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
CO-60	-0.01	29.14	0.10	29.14		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
CS-134	0.10	0.13	0.08	0.13		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
CS-137	0.26	0.21	0.07	0.21		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
EU-152	0.26	0.28	0.12	0.28		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
PB-212	0.87	0.55	0.26	0.55		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
RA-228	2.64	1.11	0.33	1.11		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
U-235	1.79	1.14	0.53	1.14		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
U-238	3.17	3.38	1.65	3.46		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
AM-241	0.24	0.35	0.15	0.35		pCi/g	EPA 901.1M	1/5/2010	ME	N/A

NOTES: % Moisture: 2.66

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ARS Sample Delivery Group: ARS2-10-00001

Request or PO Number:

Client Sample ID: RE12-10-7628

ARS Sample ID: ARS2-10-00001-012

Sample Collection Date: 01/04/10 12:30

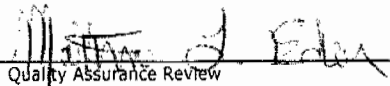
Date Received: 01/05/10 00:00

Sample Matrix: Soil/Solid

Report Date: 01/06/10 08:17

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	64.75	26.15	23.98	27.32		pCi/g	EPA 900.0M	1/5/2010	ME	N/A
GROSS BETA	35.47	11.25	13.00	12.06		pCi/g	EPA 900.0M	1/5/2010	ME	N/A
NA-22	0.00	0.00	0.13	0.00		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
K-40	12.83	8.35	2.89	8.36		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
CO-60	0.00	13.15	0.13	13.15		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
CS-134	0.36	0.29	0.10	0.29		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
CS-137	0.04	0.10	0.08	0.10		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
EU-152	0.53	0.47	0.15	0.47		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
PB-212	1.61	0.60	0.18	0.60		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
RA-228	2.79	1.11	0.35	1.11		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
U-235	1.40	0.89	0.31	0.89		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
U-238	2.42	4.69	2.03	4.72		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
AM-241	-0.01	36.44	0.08	36.44		pCi/g	EPA 901.1M	1/5/2010	ME	N/A

NOTES: % Moisture: 1.03

  
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ARS Sample Delivery Group: ARS2-10-00001

Client Sample ID: RE12-10-7629

Sample Collection Date: 01/04/10 13:46

Sample Matrix: Soil/Solid

Request or PO Number:

ARS Sample ID: ARS2-10-00001-013

Date Received: 01/05/10 00:00

Report Date: 01/06/10 08:17

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	18.71	18.07	27.01	18.21		pCi/g	EPA 900.0M	1/5/2010	ME	N/A
GROSS BETA	45.98	11.22	12.49	12.55		pCi/g	EPA 900.0M	1/5/2010	ME	N/A
NA-22	0.00	0.00	0.15	0.00		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
K-40	19.99	9.21	2.33	9.23		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
CO-60	0.09	0.19	0.15	0.19		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
CS-134	0.00	0.00	0.11	0.00		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
CS-137	0.01	0.05	0.10	0.05		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
EU-152	0.57	0.53	0.31	0.53		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
PB-212	1.40	0.56	0.13	0.56		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
RA-228	1.33	1.03	0.41	1.03		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
U-235	0.60	0.67	0.30	0.67		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
U-238	3.21	3.52	1.70	3.59		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
AM-241	0.78	0.61	0.20	0.61		pCi/g	EPA 901.1M	1/5/2010	ME	N/A

NOTES: % Moisture: 1.96

  
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ARS Sample Delivery Group: ARS2-10-00001

Client Sample ID: RE12-10-7630

Sample Collection Date: 01/04/10 14:06

Sample Matrix: Soil/Solid

Request or PO Number:

ARS Sample ID: ARS2-10-00001-014

Date Received: 01/05/10 00:00

Report Date: 01/06/10 08:17

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	41.04	21.52	22.94	22.10		pCi/g	EPA 900.0M	1/5/2010	ME	N/A
GROSS BETA	33.42	10.64	12.66	11.40		pCi/g	EPA 900.0M	1/5/2010	ME	N/A
NA-22	0.00	0.00	0.17	0.00		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
K-40	20.13	9.80	2.59	9.82		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
CO-60	-0.01	16.98	0.17	16.98		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
CS-134	0.00	0.00	0.13	0.00		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
CS-137	0.18	0.23	0.11	0.23		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
EU-152	0.49	0.57	0.20	0.57		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
PB-212	1.46	0.64	0.19	0.64		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
RA-228	2.07	1.19	0.45	1.19		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
U-235	0.65	0.90	0.43	0.90		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
U-238	4.60	5.15	2.27	5.26		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
AM-241	0.43	0.51	0.19	0.51		pCi/g	EPA 901.1M	1/5/2010	ME	N/A

NOTES: % Moisture: 1.18

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ARS Sample Delivery Group: ARS2-10-00001

Client Sample ID: RE12-10-7631

Sample Collection Date: 01/04/10 14:45

Sample Matrix: Soil/Solid

Request or PO Number:

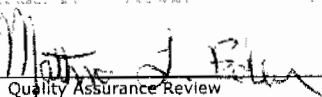
ARS Sample ID: ARS2-10-00001-015

Date Received: 01/05/10 00:00

Report Date: 01/06/10 08:17

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	38.03	20.27	19.32	20.80		pCi/g	EPA 900.0M	1/5/2010	ME	N/A
GROSS BETA	32.78	11.26	13.71	11.95		pCi/g	EPA 900.0M	1/5/2010	ME	N/A
NA-22	0.00	0.00	0.15	0.00		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
K-40	-1.18	-13.98	3.37	-13.98		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
CO-60	0.03	0.08	0.16	0.08		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
CS-134	0.14	0.17	0.13	0.17		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
CS-137	-0.01	20.81	0.10	20.81		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
EU-152	0.00	16.54	0.19	16.54		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
PB-212	1.46	0.65	0.22	0.65		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
RA-228	2.07	1.06	0.42	1.06		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
U-235	1.83	0.95	0.43	0.95		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
U-238	-1.16	-15.94	1.71	-15.94		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
AM-241	0.01	0.09	0.08	0.09		pCi/g	EPA 901.1M	1/5/2010	ME	N/A

NOTES: % Moisture: 1.82

  
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ARS Sample Delivery Group: ARS2-10-00001

Client Sample ID: RE12-10-7632

Sample Collection Date: 01/04/10 14:55

Sample Matrix: Soil/Solid

Request or PO Number:

ARS Sample ID: ARS2-10-00001-016

Date Received: 01/05/10 00:00

Report Date: 01/06/10 08:17

Analysis Description	Analysis Results	Analysis Error $\pm$ 2 s	MDC	TPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	34.89	20.50	23.98	20.94		pCi/g	EPA 900.0M	1/5/2010	ME	N/A
GROSS BETA	33.28	10.70	13.00	11.45		pCi/g	EPA 900.0M	1/5/2010	ME	N/A
NA-22	0.00	0.00	0.14	0.00		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
K-40	14.44	7.74	2.21	7.76		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
CO-60	0.00	14.50	0.15	14.50		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
CS-134	0.32	0.27	0.11	0.27		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
CS-137	-0.01	45.03	0.10	45.03		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
EU-152	0.71	0.54	0.17	0.54		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
PB-212	1.24	0.56	0.18	0.56		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
RA-228	2.22	1.05	0.39	1.06		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
U-235	1.19	1.02	0.37	1.02		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
U-238	2.52	3.66	1.68	3.71		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
AM-241	-0.01	30.24	0.07	30.24		pCi/g	EPA 901.1M	1/5/2010	ME	N/A

NOTES: % Moisture: 0.92

  
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ARS Sample Delivery Group: ARS2-10-00001

Request or PO Number:

Client Sample ID: RE12-10-7655

ARS Sample ID: ARS2-10-00001-017

Sample Collection Date: 01/04/10 11:04


Date Received: 01/05/10 00:00

Sample Matrix: Soil/Solid

Report Date: 01/06/10 08:17

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	45.95	24.20	27.01	24.84		pCi/g	EPA 900.0M	1/5/2010	ME	N/A
GROSS BETA	43.48	11.34	12.49	12.53		pCi/g	EPA 900.0M	1/5/2010	ME	N/A
NA-22	0.00	0.00	0.15	0.00		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
K-40	15.93	8.25	2.30	8.27		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
CO-60	0.09	0.18	0.15	0.18		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
CS-134	0.10	0.14	0.11	0.14		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
CS-137	0.05	0.12	0.09	0.12		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
EU-152	0.00	79.47	0.18	79.47		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
PB-212	2.51	0.79	0.23	0.80		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
RA-228	2.13	1.08	0.40	1.08		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
U-235	-0.09	169.73	0.38	169.73		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
U-238	7.09	3.72	1.36	4.06		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
AM-241	0.39	0.32	0.10	0.32		pCi/g	EPA 901.1M	1/5/2010	ME	N/A

NOTES: % Moisture: 0.99

  
Quality Assurance Review

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

LELAP Certificate# 30658

NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00001

Client Sample ID: RE12-10-7656

Sample Collection Date: 01/04/10 13:00

Sample Matrix: Soil/Solid

Request or PO Number:

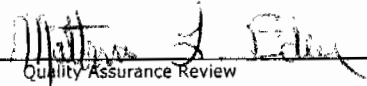
ARS Sample ID: ARS2-10-00001-018

Date Received: 01/05/10 00:00

Report Date: 01/06/10 08:17

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	43.34	21.99	22.94	22.62		pCi/g	EPA 900.0M	1/5/2010	ME	N/A
GROSS BETA	34.09	10.72	12.66	11.50		pCi/g	EPA 900.0M	1/5/2010	ME	N/A
NA-22	0.00	0.00	0.14	0.00		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
K-40	20.98	9.19	2.23	9.21		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
CO-60	0.00	14.59	0.15	14.59		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
CS-134	0.00	0.00	0.11	0.00		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
CS-137	0.21	0.22	0.09	0.22		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
EU-152	1.24	0.73	0.17	0.74		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
PB-212	1.44	0.66	0.24	0.66		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
RA-228	0.11	0.71	0.51	0.71		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
U-235	-0.09	82.03	0.23	82.03		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
U-238	4.30	4.22	1.76	4.34		pCi/g	EPA 901.1M	1/5/2010	ME	N/A
AM-241	0.13	0.18	0.07	0.18		pCi/g	EPA 901.1M	1/5/2010	ME	N/A


NOTES: % Moisture: 0.80

  
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

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

Section I.		
REQUEST NUMBER: <u>10-1127</u>	VALIDATION DATE: <u>2/16/10</u>	LAB CODE: <u>GEL</u>
CONTRACT LABORATORY NAME: <u>GEL Laboratories LLC</u>		
VALIDATOR: <u>Eyda Hergenreder</u> ORGANIZATION: <u>Analytical Quality Associates, Inc.</u>		
ANALYTICAL SUITE (CHECK ALL THAT APPLY):		
<input type="checkbox"/> TPH-GRO	<input type="checkbox"/> HIGH EXPLOSIVES	<input type="checkbox"/> DIOXIN FURANS
<input type="checkbox"/> TPH-DRO	<input type="checkbox"/> METALS	<input type="checkbox"/> PCB CONGENERS
<input type="checkbox"/> GENERAL CHEMISTRY	<input type="checkbox"/> RADIOCHEMISTRY	<input checked="" type="checkbox"/> LCMSMS HIGH EXPLOSIVES
		<input type="checkbox"/> LCMSMS PERCHLORATES
		<input type="checkbox"/> ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
<input type="checkbox"/> OTHER (DESCRIBE): _____		

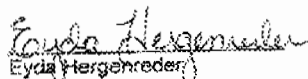
Section II. Completeness Check							
YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1. CHAIN-OF-CUSTODY FORM(S)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6. RAW/BSS DATA
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

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

1. The CCV %Ds for 2,4,6-trinitrotoluene and RDX associated with all samples and the CCV %Ds for HMX associated with all samples except samples RE12-10-7621, -7656 and -7655 were >20% with positive bias. The RDX and HMX results for samples -7619, -7623, -7622, -7620 and -7624, the RDX result for samples -7621, -7631, -7625 and -7656 and the 2,4,6-trinitrotoluene result for sample -7656 were detects and, thus, were qualified J,HE7c. All other associated sample results were NDs and, thus, were not qualified.
2. The MS/MSD RPDs for tetryl and TATB were > the laboratory acceptance limit. The tetryl result for sample -7621 was a detect and, thus, was qualified J,HE12g. All other associated sample results were NDs and, thus, were qualified UJ,IE12g.
3. It should be noted that the raw ICAL data from the instrument used for the secondary IIE 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: 02/17/10

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


  
Eyda Hergenreder
DATE: 2/16/10


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

Records Use only




Yes No N/A				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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	33. The MS/MSD relative percent difference was >30%.	UJ, HE12g	J, HE12g
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	34. The affected analytes are considered suspect because the sample was diluted without any target analytes identified due to matrix interference. (Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.)	UJ, R, HE15	R, HE15
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	35. The sample was diluted because target analytes were > the initial verification calibration.	UJ, HE15a	J, HE15a

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

Records Use only



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

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7619

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142001

Sample Amount 2

Moisture: 16.2

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125087a

Date Analyzed: 27-JAN-10 05:38

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX J,HE7c	239	J
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX J,HE7c	217	J
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl UJ,HE12g	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

EH  
2/16/10

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7619

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142001

Sample Amount 2

Moisture: 16.2

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01200016.wiff

Date Analyzed: 20-JAN-10 14:25

Units: ug/kg

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

\*Concentration =

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

EH  
2/16/10

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7618

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142002

Sample Amount 2

Moisture: 18.9

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125090a

Date Analyzed: 27-JAN-10 07:06

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl UJ,HE12g	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

EH  
2/16/10

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7618

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142002

Sample Amount 2

Moisture: 18.9

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01200019.wiff

Date Analyzed: 20-JAN-10 15:12

Units: ug/kg

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

\*Concentration =

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

EH  
2/16/10

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7623

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142003

Sample Amount 2

Moisture: 15.4

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125091a

Date Analyzed: 27-JAN-10 07:36

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX J,HE7c	246	J
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX J,HE7c	173	J
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl UJ,HE12g	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

EH  
2/16/10



1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7623

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142003

Sample Amount 2

Moisture: 15.4

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01200020.wiff

Date Analyzed: 20-JAN-10 15:28

Units: ug/kg

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

\*Concentration =

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

EH  
2/16/10

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7622

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142004

Sample Amount 2

Moisture: 9.0

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125092a

Date Analyzed: 27-JAN-10 08:06

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX J,HE7c	413	J
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX J,HE7c	2010	
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl UJ,HE12g	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

EH  
2/16/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7622

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142004

Sample Amount 2

Moisture: 9.0

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01200021.wiff

Date Analyzed: 20-JAN-10 15:43

Units: ug/kg

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

\*Concentration =

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

EH  
2/16/10

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7621

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142005

Sample Amount 2

Moisture: 7.6

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125093a

Date Analyzed: 27-JAN-10 08:35

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	127	J
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl J,HE12g	333	J
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	5820	
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

EH  
2/16/10

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7621

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142005

Sample Amount 2

Moisture: 7.6

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 25

Injection Volume (uL): 50

GEL data file: EXP0125113a

Date Analyzed: 27-JAN-10 18:26

Units: ug/kg

Cas No.	Compound	Concentration*	Q
121-82-4	RDX J,HE7c	49400	
2691-41-0	HMX	11400	

\*Concentration =

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

EH  
2/16/10

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7621

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142005

Sample Amount 2

Moisture: 7.6

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01200022.wiff

Date Analyzed: 20-JAN-10 15:59

Units: ug/kg

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

\*Concentration =

Instrument Value	X	Concentrated Extract Volume	X	Dilution Factor
		Sample Amount		

EH  
2/16/10

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7617

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142006

Sample Amount 2

Moisture: 2.2

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125094a

Date Analyzed: 27-JAN-10 09:05

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl UJ,HE12g	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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EH  
2/16/10

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7617

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142006

Sample Amount 2

Moisture: 9.2

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01200023.wiff

Date Analyzed: 20-JAN-10 16:15

Units: ug/kg

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

\*Concentration =

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

EH  
2/16/10



1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7620

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142007

Sample Amount 2

Moisture: 11.2

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125098a

Date Analyzed: 27-JAN-10 11:03

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 J,HE7c	277	J
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX J,HE7c	765	
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl UJ,HE12g	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

EH  
2/16/10

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7620

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142007

Sample Amount 2

Moisture: 11.2

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01200027.wiff

Date Analyzed: 20-JAN-10 17:18

Units: ug/kg

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

\*Concentration =

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

EH  
2/16/10

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7624

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142008

Sample Amount 2

Moisture: 8.4

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125099a

Date Analyzed: 27-JAN-10 11:33

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX J,HE7c	419	J
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX J,HE7c	487	J
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl UJ,HE12g	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  $\times$   $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$   $\times$  Dilution Factor

EH  
2/16/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7624

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142008

Sample Amount 2

Moisture: 8.4

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01200028.wiff

Date Analyzed: 20-JAN-10 17:33

Units: ug/kg

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

\*Concentration =

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

EH  
2/16/10

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7630

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142009

Sample Amount 2

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

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125100a

Date Analyzed: 27-JAN-10 12:02

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl UJ,HE12g	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

EH  
2/16/10

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7630

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142009

Sample Amount 2

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

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01200029.wiff

Date Analyzed: 20-JAN-10 17:49

Units: ug/kg

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

\*Concentration =

Instrument X Concentrated Extract Volume X Dilution  
Value Sample Amount Factor

EH  
2/16/10

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7628

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142010

Sample Amount 2

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

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125101a

Date Analyzed: 27-JAN-10 12:32

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl UJ,HE12g	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

EH  
2/16/10

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7628

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142010

Sample Amount 2

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

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01200030.wiff

Date Analyzed: 20-JAN-10 18:05

Units: ug/kg

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

\*Concentration =

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

EH  
2/16/10



1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7632

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142011

Sample Amount 2

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

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125102a

Date Analyzed: 27-JAN-10 13:01

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 UJ,HE12g	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

EH  
2/16/10

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7632

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142011

Sample Amount 2

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

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01200031.wiff

Date Analyzed: 20-JAN-10 18:20

Units: ug/kg

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

\*Concentration =

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

EH  
2/16/10

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7629

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142012

Sample Amount 2

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

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125103a

Date Analyzed: 27-JAN-10 13:31

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl UJ,HE12g	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

EH  
2/16/10

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7629

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142012

Sample Amount 2

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

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01200032.wiff

Date Analyzed: 20-JAN-10 18:36

Units: ug/kg

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

\*Concentration =

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

EH  
2/16/10

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7626

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142013

Sample Amount 2

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

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125104a

Date Analyzed: 27-JAN-10 14:00

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl UJ,HE12g	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  $\times$   $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$   $\times$  Dilution Factor

EH  
2/16/10

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7626

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142013

Sample Amount 2

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

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01200033.wiff

Date Analyzed: 20-JAN-10 18:52

Units: ug/kg

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

\*Concentration =

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

EH  
2/16/10

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7631

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142014

Sample Amount 2

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

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125105a

Date Analyzed: 27-JAN-10 14:30

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 J,HE7c	127	J
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl UJ,HE12g	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

EH  
2/16/10

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7631

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142014

Sample Amount 2

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

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01200034.wiff

Date Analyzed: 20-JAN-10 19:07

Units: ug/kg

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

\*Concentration =

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

EH  
2/16/10



1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7627

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142015

Sample Amount 2

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

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125106a

Date Analyzed: 27-JAN-10 14:59

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl UJ,HE12g	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

EH  
2/16/10

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7627

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142015

Sample Amount 2

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

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01200035.wiff

Date Analyzed: 20-JAN-10 19:23

Units: ug/kg

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

\*Concentration =

Instrument X Concentrated Extract Volume X Dilution  
Value Sample Amount Factor

EH  
2/16/10

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7625

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142016

Sample Amount 2

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

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125107a

Date Analyzed: 27-JAN-10 15:29

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX J,HE7c	113	J
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl UJ,HE12g	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

EH  
2/16/10

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7625

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142016

Sample Amount 2

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

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01200036.wiff

Date Analyzed: 20-JAN-10 19:39

Units: ug/kg

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

\*Concentration =

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

EH  
2/16/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7656

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142017

Sample Amount 2

Moisture: 7.6

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125111a

Date Analyzed: 27-JAN-10 17:27

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene J,HE7c	499	J
121-14-2	2,4-Dinitrotoluene	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	3310	
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl UJ,HE12g	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	2430	
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

EH  
2/16/10

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7656

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142017

Sample Amount 2

Moisture: 7.6

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 10

Injection Volume (uL): 50

GEL data file: EXP0125141a

Date Analyzed: 28-JAN-10 08:12

Units: ug/kg

Cas No.	Compound	Concentration*	Q
121-82-4	RDX J,HE7c	16700	

\*Concentration =

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

EH  
2/16/10

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7656

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142017

Sample Amount 2

Moisture: 7.6

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01200040.wiff

Date Analyzed: 20-JAN-10 20:42

Units: ug/kg

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

\*Concentration =

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

EH  
2/16/10

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7655

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142018

Sample Amount 2

Moisture: 9.9

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125112a

Date Analyzed: 27-JAN-10 17:56

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl UJ,HE12g	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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EH  
2/16/10



1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7655

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142018

Sample Amount 2

Molsture: 9.9

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01200041.wiff

Date Analyzed: 20-JAN-10 20:57

Units: ug/kg

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

\*Concentration =

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

EH  
2/16/10

## DATA VALIDATION COVER SHEET

5116-1

## Data Validation Cover Sheet

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



## Section I.

REQUEST NUMBER: 10-1127 VALIDATION DATE: 2/16/10 LAB CODE: GELCONTRACT LABORATORY NAME: GEL Laboratories LLCVALIDATOR: Eyda Hergenreder 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 sample from another LANL RN and the raw data for the parent sample was not included in the data package. Since MS/MSD analyses are not required for this method, no data were qualified as a result.

Reviewed by: Mary DonovanLevel: IDate: 02/17/10

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

A handwritten signature in cursive script that reads 'Eyda Hergenreder'.

DATE: 2/16/10

# **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				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, 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				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	32. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytes identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, P15	R, P15
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	33. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	34. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, P19	J, R, P19

## PCB

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Certificate of Analysis  
Sample SummarySDG Number: 10-1127  
Lab Sample ID: 244142006Date Collected: 01/04/2010 12:00  
Date Received: 01/08/2010 09:05  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.I  
Analyst: YS1  
Aliquot: 30.15 g  
Column: 1 CLP1  
2 CLP2Matrix: R  
%Moisture: 9.2  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.65	ug/kg	1.22	3.65	1
11104-28-2	Aroclor-1221	U	3.65	ug/kg	1.22	3.65	1
11141-16-5	Aroclor-1232	U	3.65	ug/kg	1.22	3.65	1
53469-21-9	Aroclor-1242	U	3.65	ug/kg	1.22	3.65	1
12672-29-6	Aroclor-1248	U	3.65	ug/kg	1.22	3.65	1
11097-69-1	Aroclor-1254	U	3.65	ug/kg	1.22	3.65	1
11096-82-5	Aroclor-1260	U	3.65	ug/kg	1.22	3.65	1

EH  
2/16/10

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

SDG Number: 10-1127  
Lab Sample ID: 244142002

Client ID: RE12-10-7618  
Batch ID: 940403  
Run Date: 01/12/2010 13:48  
Prep Date: 01/11/2010 19:04  
Data File: 033f3301.d  
033b3301.d

Date Collected: 01/04/2010 12:00  
Date Received: 01/08/2010 09:05  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.I  
Analyst: YS1  
Aliquot: 30.19 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
%Moisture: 18.9  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.08	ug/kg	1.36	4.08	1
11104-28-2	Aroclor-1221	U	4.08	ug/kg	1.36	4.08	1
11141-16-5	Aroclor-1232	U	4.08	ug/kg	1.36	4.08	1
53469-21-9	Aroclor-1242	U	4.08	ug/kg	1.36	4.08	1
12672-29-6	Aroclor-1248	U	4.08	ug/kg	1.36	4.08	1
11097-69-1	Aroclor-1254	U	4.08	ug/kg	1.36	4.08	1
11096-82-5	Aroclor-1260	U	4.08	ug/kg	1.36	4.08	1

EH  
2/16/10



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

SDG Number: 10-1127  
Lab Sample ID: 244142001

Date Collected: 01/04/2010 12:00  
Date Received: 01/08/2010 09:05  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.J  
Analyst: YS1  
Aliquot: 30.09 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
%Moisture: 16.2  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.97	ug/kg	1.32	3.97	1
11104-28-2	Aroclor-1221	U	3.97	ug/kg	1.32	3.97	1
11141-16-5	Aroclor-1232	U	3.97	ug/kg	1.32	3.97	1
53469-21-9	Aroclor-1242	U	3.97	ug/kg	1.32	3.97	1
12672-29-6	Aroclor-1248	U	3.97	ug/kg	1.32	3.97	1
11097-69-1	Aroclor-1254	U	3.97	ug/kg	1.32	3.97	1
11096-82-5	Aroclor-1260	U	3.97	ug/kg	1.32	3.97	1

EH  
2/16/10

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

SDG Number:	10-1127	Date Collected:	01/04/2010 12:00	Matrix:	R
Lab Sample ID:	244142007	Date Received:	01/08/2010 09:05	%Moisture:	11.2
		Client:	LANL010	Project:	LANL01004
Client ID:	RE12-10-7620	Method:	SW846 8082	SOP Ref:	GL-OA-E-040
Batch ID:	940403	Inst:	ECD1A.I	Dilution:	1
Run Date:	01/12/2010 14:51	Analyst:	YS1	Inj. Vol:	1 uL
Prep Date:	01/11/2010 19:04	Aliquot:	30.17 g	Final Volume:	1 mL
Data File:	038f3801.d	Column:	1 CLP1	Level:	LOW
	038b3801.d		2 CLP2		

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

EH  
2/16/10

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

SDG Number: 10-1127  
Lab Sample ID: 244142005

Client ID: RE12-10-7621  
Batch ID: 940403  
Run Date: 01/12/2010 14:25  
Prep Date: 01/11/2010 19:04  
Data File: 036f3601.d  
036b3601.d

Date Collected: 01/04/2010 12:00  
Date Received: 01/08/2010 09:05  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.1  
Analyst: YSI  
Aliquot: 30.17 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
%Moisture: 7.6  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.59	ug/kg	1.19	3.59	1
11104-28-2	Aroclor-1221	U	3.59	ug/kg	1.19	3.59	1
11141-16-5	Aroclor-1232	U	3.59	ug/kg	1.19	3.59	1
53469-21-9	Aroclor-1242	U	3.59	ug/kg	1.19	3.59	1
12672-29-6	Aroclor-1248	U	3.59	ug/kg	1.19	3.59	1
11097-69-1	Aroclor-1254	U	3.59	ug/kg	1.19	3.59	1
11096-82-5	Aroclor-1260	U	3.59	ug/kg	1.19	3.59	1

EH  
2/16/10

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

SDG Number: 10-1127  
Lab Sample ID: 244142004

Date Collected: 01/04/2010 12:00  
Date Received: 01/08/2010 09:05  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.J  
Analyst: YS1  
Aliquot: 30.05 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
%Moisture: 9  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

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

EH  
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## PCB

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Certificate of Analysis  
Sample SummarySDG Number: 10-1127  
Lab Sample ID: 244142003Date Collected: 01/04/2010 12:00  
Date Received: 01/08/2010 09:05  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.J  
Analyst: YS1  
Aliquot: 30.02 g  
Column: 1 CLP1  
2 CLP2Matrix: R  
% Moisture: 15.4  
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	3.94	ug/kg	1.31	3.94	1
11104-28-2	Aroclor-1221	U	3.94	ug/kg	1.31	3.94	1
11141-16-5	Aroclor-1232	U	3.94	ug/kg	1.31	3.94	1
53469-21-9	Aroclor-1242	U	3.94	ug/kg	1.31	3.94	1
12672-29-6	Aroclor-1248	U	3.94	ug/kg	1.31	3.94	1
11097-69-1	Aroclor-1254	U	3.94	ug/kg	1.31	3.94	1
11096-82-5	Aroclor-1260	U	3.94	ug/kg	1.31	3.94	1

EH  
2/16/10

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

SDG Number: 10-1127  
Lab Sample ID: 244142008

Date Collected: 01/04/2010 12:00  
Date Received: 01/08/2010 09:05  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.J  
Analyst: YS1  
Aliquot: 30.05 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
% Moisture: 8.4  
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	3.63	ug/kg	1.21	3.63	1
11104-28-2	Aroclor-1221	U	3.63	ug/kg	1.21	3.63	1
11141-16-5	Aroclor-1232	U	3.63	ug/kg	1.21	3.63	1
53469-21-9	Aroclor-1242	U	3.63	ug/kg	1.21	3.63	1
12672-29-6	Aroclor-1248	U	3.63	ug/kg	1.21	3.63	1
11097-69-1	Aroclor-1254	U	3.63	ug/kg	1.21	3.63	1
11096-82-5	Aroclor-1260	U	3.63	ug/kg	1.21	3.63	1

EH  
2/16/10

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

SDG Number:	10-1127	Date Collected:	01/04/2010 12:00	Matrix:	R
Lab Sample ID:	244142018	Date Received:	01/08/2010 09:05	%Moisture:	9.9
Client ID:	RE12-10-7655	Client:	LANL010	Project:	LANL01004
Batch ID:	940403	Method:	SW846 8082	SOP Ref:	GL-OA-E-040
Run Date:	01/12/2010 15:28	Inst:	ECD1A.I	Dilution:	1
Prep Date:	01/11/2010 19:04	Analyst:	YS1	Inj. Vol:	1 uL
Data File:	041f4101.d	Aliquot:	30.13 g	Final Volume:	1 mL
	041b4101.d	Column:	1 CLP1	Level:	LOW
			2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.68	ug/kg	1.23	3.68	1
11104-28-2	Aroclor-1221	U	3.68	ug/kg	1.23	3.68	1
11141-16-5	Aroclor-1232	U	3.68	ug/kg	1.23	3.68	1
53469-21-9	Aroclor-1242	U	3.68	ug/kg	1.23	3.68	1
12672-29-6	Aroclor-1248	U	3.68	ug/kg	1.23	3.68	1
11097-69-1	Aroclor-1254	U	3.68	ug/kg	1.23	3.68	1
11096-82-5	Aroclor-1260	U	3.68	ug/kg	1.23	3.68	1

EH  
2/16/10

## PCB

Page 1 of 1

## Certificate of Analysis

## Sample Summary

SDG Number:	10-1127	Date Collected:	01/04/2010 12:00	Matrix:	R
Lab Sample ID:	244142017	Date Received:	01/08/2010 09:05	%Moisture:	7.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE12-10-7656	Method:	SW846 8082	SOP Ref:	GL-OA-E-040
Batch ID:	940403	Inst:	ECD1A.J	Dilution:	1
Run Date:	01/12/2010 15:16	Analyst:	YS1	Inj. Vol:	1 uL
Prep Date:	01/11/2010 19:04	Aliquot:	30.08 g	Final Volume:	1 mL
Data File:	040f4001.d	Column:	1 CLP1	Level:	LOW
	040b4001.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.60	ug/kg	1.20	3.60	1
11104-28-2	Aroclor-1221	U	3.60	ug/kg	1.20	3.60	1
11141-16-5	Aroclor-1232	U	3.60	ug/kg	1.20	3.60	1
53469-21-9	Aroclor-1242	U	3.60	ug/kg	1.20	3.60	1
12672-29-6	Aroclor-1248	U	3.60	ug/kg	1.20	3.60	1
11097-69-1	Aroclor-1254	U	3.60	ug/kg	1.20	3.60	1
11096-82-5	Aroclor-1260	U	3.60	ug/kg	1.20	3.60	1

EH  
2/16/10



Thursday, January 07, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1127

**LOS ALAMOS**

REQUEST NUMBER: 10-1127

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 2/6/2010

General Engineering Laboratories, Inc.,  
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

2441421

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE12-10-7619	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE12-10-7618	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE12-10-7623	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE12-10-7622	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE12-10-7621	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE12-10-7617	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE12-10-7620	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE12-10-7624	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE12-10-7630	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7628	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7632	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7629	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7626	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7631	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7627	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7625	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7656	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE12-10-7655	1	AMBER GLASS	8082+NMED-HEXP	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

Thursday, January 07, 2010

**LOS ALAMOS**  
NATIONAL LABORATORY

ATTN: Valerie Davis

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

These Samples are on:  
LANL Request Number: 10-1127  
Per Agreement Number: 126310011  
Project Cost Code: MR3A05529E00

Please analyse the enclosed samples  
according to the schedule indicated:

SHIP DATE: 1/7/2010

TURNAROUND/REPORT DUE: 2/6/2010

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background

LAB REQUEST COMMENTS:

LANL SMO CONTACT:

Signature: 

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8082	1	RE12-10-7617	R	1/4/2010	
		1	RE12-10-7618	R	1/4/2010	
		1	RE12-10-7619	R	1/4/2010	
		1	RE12-10-7620	R	1/4/2010	
		1	RE12-10-7621	R	1/4/2010	
		1	RE12-10-7622	R	1/4/2010	
		1	RE12-10-7623	R	1/4/2010	
		1	RE12-10-7624	R	1/4/2010	
		1	RE12-10-7655	R	1/4/2010	

Thursday, January 07, 2010

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8082	1	RE12-10-7656	R	1/4/2010	
	SW-846:8321A_MOD	1	RE12-10-7617	R	1/4/2010	
		1	RE12-10-7618	R	1/4/2010	
		1	RE12-10-7619	R	1/4/2010	
		1	RE12-10-7620	R	1/4/2010	
		1	RE12-10-7621	R	1/4/2010	
		1	RE12-10-7622	R	1/4/2010	
		1	RE12-10-7623	R	1/4/2010	
		1	RE12-10-7624	R	1/4/2010	
		1	RE12-10-7625	R	1/4/2010	
		1	RE12-10-7626	R	1/4/2010	
		1	RE12-10-7627	R	1/4/2010	
		1	RE12-10-7628	R	1/4/2010	
		1	RE12-10-7629	R	1/4/2010	
		1	RE12-10-7630	R	1/4/2010	
		1	RE12-10-7631	R	1/4/2010	
		1	RE12-10-7632	R	1/4/2010	
		1	RE12-10-7655	R	1/4/2010	
		1	RE12-10-7656	R	1/4/2010	

Final Page of REQUEST NUMBER 10-1127



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 Order: 244142  
SDG: 10-1127

Dear Ms. Valdez:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on January 08, 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: 10-1127  
Enclosures

**Los Alamos National Laboratory (72733-001-09)**  
**LANL ER Project**  
**Work Order #: 244142**  
**SDG: 10-1127**

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# **Case Narrative**

**Case Narrative for  
Los Alamos National Laboratory (72733-001-09)  
LANL ER Project  
Workorder #: 244142  
SDG # : 10-1127**

**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 08, 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>
244142001	RE12-10-7619
244142002	RE12-10-7618
244142003	RE12-10-7623
244142004	RE12-10-7622
244142005	RE12-10-7621
244142006	RE12-10-7617
244142007	RE12-10-7620
244142008	RE12-10-7624
244142009	RE12-10-7630
244142010	RE12-10-7628
244142011	RE12-10-7632
244142012	RE12-10-7629
244142013	RE12-10-7626
244142014	RE12-10-7631
244142015	RE12-10-7627
244142016	RE12-10-7625
244142017	RE12-10-7656
244142018	RE12-10-7655



### 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.

  
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
Tennescce	TN 02934
Texas – NELAP	T104704235-07B-TX
U.S. Dept. of Agriculture	S-52597
Utah – NELAP	GEL
Vermont	VT87156
Virginia	00151
Washington	C1641

# **Chain of Custody and Supporting Documentation**

Thursday, January 07, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1127

LOS ALAMOS

REQUEST NUMBER: 10-1127

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 2/6/2010

General Engineering Laboratories, Inc.,  
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

2441421

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE12-10-7619	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE12-10-7618	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE12-10-7623	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE12-10-7622	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE12-10-7621	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE12-10-7617	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE12-10-7620	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE12-10-7624	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE12-10-7630	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7628	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7632	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7629	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7626	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7631	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7627	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7625	1	AMBER GLASS	NMED Explosives list	Ice	R
RE12-10-7656	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE12-10-7655	1	AMBER GLASS	8082+NMED-HEXP	Ice	R

Relinquished By:

Date Time

Received By:

Date Time

Printed Name

Signature

1/7/10 1400

Printed Name

Signature

Greg Tyler Greg Tyler 1-8-10 0905

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Received for DISPOSAL By:

Date Time

Remarks:

Printed Name

Signature

Thursday, January 07, 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: 1/7/2010

TURNAROUND/REPORT DUE: 2/6/2010

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature: 

These Samples are on:

LANL Request Number: 10-1127

Per Agreement Number: 126310011

Project Cost Code: MR3A05529E00

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846-8082	1	RE12-10-7617	R	1/4/2010	
		1	RE12-10-7618	R	1/4/2010	
		1	RE12-10-7619	R	1/4/2010	
		1	RE12-10-7620	R	1/4/2010	
		1	RE12-10-7621	R	1/4/2010	
		1	RE12-10-7622	R	1/4/2010	
		1	RE12-10-7623	R	1/4/2010	
		1	RE12-10-7624	R	1/4/2010	
		1	RE12-10-7655	R	1/4/2010	

Thursday, January 07, 2010

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REQUEST NUMBER: 10-1127

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8082	1	RE12-10-7656	R	1/4/2010	
	SW-846:8321A_MOD	1	RE12-10-7617	R	1/4/2010	
		1	RE12-10-7618	R	1/4/2010	
		1	RE12-10-7619	R	1/4/2010	
		1	RE12-10-7620	R	1/4/2010	
		1	RE12-10-7621	R	1/4/2010	
		1	RE12-10-7622	R	1/4/2010	
		1	RE12-10-7623	R	1/4/2010	
		1	RE12-10-7624	R	1/4/2010	
		1	RE12-10-7625	R	1/4/2010	
		1	RE12-10-7626	R	1/4/2010	
		1	RE12-10-7627	R	1/4/2010	
		1	RE12-10-7628	R	1/4/2010	
		1	RE12-10-7629	R	1/4/2010	
		1	RE12-10-7630	R	1/4/2010	
		1	RE12-10-7631	R	1/4/2010	
		1	RE12-10-7632	R	1/4/2010	
		1	RE12-10-7655	R	1/4/2010	
		1	RE12-10-7656	R	1/4/2010	

Final Page of REQUEST NUMBER 10-1127



## SAMPLE RECEIPT &amp; REVIEW FORM

Client: LANL			SDG/ARCO/Work Order: 10-1127		
Received By: Greg Tyler			Date Received: 1/08/10		
Suspected Hazard Information	Yes	No	*If Counts > x2 area background on samples not marked "radioactive", contact the Radiation Safety Group of further investigation.		
COC/Samples marked as radioactive?		X	Maximum Counts Observed*: 20cpm		
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 $0 \leq 6$ deg. C?	X			Preservation Method: ice bags    blue ice    dry ice    none    other 1, 2C    9, 13, 14C
3 Chain of custody documents included with shipment?	X			
4 Sample containers intact and sealed?	X			Circle Applicable: seals broken    damaged container    leaking container    other (describe)
5 Samples requiring chemical preservation at proper pH?		X		Sample ID's, containers affected and observed pH: If Preservation added, Lot#:
6 VOA vials free of headspace (defined as < 6mm bubble)?		X		Sample ID's and containers affected:
7 Are Encore containers present?			X	(If yes, immediately deliver to Volatiles laboratory)
8 Samples received within holding time?	X			Id's and tests affected:
9 Sample ID's on COC match ID's on bottles?	X			Sample ID's and containers affected:
10 Date & time on COC match date & time on bottles?		X		Sample ID's affected: <b>No time on Chain of Custody.</b>
11 Number of containers received match number indicated on COC?	X			Sample ID's affected:
12 COC form is properly signed in relinquished/received sections?	X			

**Comments:**  
**Fed Ex Tracking Numbers:**  
7209 7849 4203 1C    7209 7849 4133 13C  
7209 7849 4188 1C    7209 7849 4122 14C  
7209 7849 4166 2C  
7209 7849 4155 2C  
7209 7849 4199 2C  
7209 7849 4177 2C  
7209 7849 4144 9C







ORIGIN ID: SAFA (505) 665-9968 JOYLENE VALDEZ LOS ALAMOS NATL LAB TA00 BLDG 1237 DPU 03 LOS ALAMOS, NM 87545 UNITED STATES US		SHIP DATE: 07JAN18 WGT: 57.0 LB TKN 0014176/CAFE2440
TO VALERIE DAVIS GENERAL ENGINEERING LAB 2040 SAVAGE RD CHARLESTON SC 29 (843) 556-8171 REF: 68010AMR2A051E		WILL SENDER 14C
SYDO 		
NPSH 7209 3 0283 Matr-N 72 7849 4122 09 7849 4111 0281		FRI - 08JAN A1 PRIORITY OVERNIGHT 29407 CHS
XX CHSA 		

# **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<br>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<br>identification of the analyte (TIC). Quantitation is based on nearest internal standard<br>response factor |
| N/A | Spike recovery limits do not apply. Sample concentration exceeds spike concentration<br>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 10-1127**

**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:** 940057

**Prep Batch Number:** 940055

**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>
244142001	RE12-10-7619
244142002	RE12-10-7618
244142003	RE12-10-7623
244142004	RE12-10-7622
244142005	RE12-10-7621
244142006	RE12-10-7617
244142007	RE12-10-7620
244142008	RE12-10-7624
244142009	RE12-10-7630
244142010	RE12-10-7628
244142011	RE12-10-7632
244142012	RE12-10-7629
244142013	RE12-10-7626
244142014	RE12-10-7631

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244142015	RE12-10-7627
244142016	RE12-10-7625
244142017	RE12-10-7656
244142018	RE12-10-7655
1202011650	Method Blank (MB)
1202011651	Laboratory Control Sample (LCS)
1202011652	244142001(RE12-10-7619) Matrix Spike (MS)
1202011653	244142001(RE12-10-7619) 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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Page 2 of 6

**QC Sample Designation**

Sample 244142001 (RE12-10-7619) 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 MS/MSD RPD for Tetryl was 32.6%. The acceptance limits are 0-30%. Since all other RPD recoveries met acceptance criteria, the noted exceptions are attributed to vagaries in the extraction process. The data are reported. Please see data exception report 784350.

**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. Samples 244142005 (RE12-10-7621) and 244142017 (RE12-10-7656) were further diluted to bring the over range concentrations within the calibration range. The final dilution in each case takes the 1:1 v/v dilution into account.

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

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

**Secondary Analyte Analysis****Calibration Information****Initial Calibration**

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

**Calibration Verification Standard Requirements**

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

**Calibration Blank Requirements**

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



**CRI Requirements**

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

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

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

**Surrogate Recoveries**

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

**Laboratory Control Sample (LCS) Recovery**

The LCS spike recoveries were within the established acceptance limits.

**QC Sample Designation**

Sample 244142001 (RE12-10-7619) 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 MS/MSD RPD for TATB was 35.3%. The acceptance limits are 0-30%. Since all other RPD recoveries met acceptance criteria, the noted exceptions are attributed to vagaries in the extraction process. The data are reported. Please see data exception report 784350.

**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.

10-1127-EXPLCMS

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### Miscellaneous Information

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

Data exception report 784350 was generated for this SDG.

The MS/MSD RPD for Tetryl was 32.6%. The acceptance limits are 0-30%. The MS/MSD RPD for TATB was 35.3%. The acceptance limits are 0-30%. Since all other RPD recoveries met acceptance criteria, the noted exceptions are attributed to vagaries in the extraction process. The data are reported.

#### **Manual Integrations**

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

#### **Flagging Convention**

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

#### **Additional Comments**

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

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

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

### System Configuration

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

### Chromatographic Columns

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

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

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

YMC: Tsphere 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.

10-1127-EXPLCMS

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**Review Validation:**

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

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

Reviewer: Herbert M. Maurer Date: 01/29/10

10-1127-EXPLCMS

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# SAMPLE DATA SUMMARY

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7619

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142001

Sample Amount 2

Moisture: 16.2

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125087a

Date Analyzed: 27-JAN-10 05:38

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	239	J
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	217	J
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

\*Concentration =

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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7619

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142001

Sample Amount 2

Moisture: 16.2

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01200016.wiff

Date Analyzed: 20-JAN-10 14:25

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: RE12-10-7618

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142002

Sample Amount 2

Moisture: 18.9

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125090a

Date Analyzed: 27-JAN-10 07:06

Units: ug/kg

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

\*Concentration =

Instrument		Concentrated Extract Volume		Dilution
Value	X	Sample Amount	X	Factor

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7618

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142002

Sample Amount 2

Moisture: 18.9

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01200019.wiff

Date Analyzed: 20-JAN-10 15:12

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: RE12-10-7623

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142003

Sample Amount 2

Moisture: 15.4

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125091a

Date Analyzed: 27-JAN-10 07:36

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	246	J
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	173	J
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

\*Concentration =

Instrument Value	X	Concentrated Extract Volume	X	Dilution Factor
		Sample Amount		

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7623

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142003

Sample Amount 2

Moisture: 15.4

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01200020.wiff

Date Analyzed: 20-JAN-10 15:28

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: RE12-10-7622

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142004

Sample Amount 2

Moisture: 9.0

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125092a

Date Analyzed: 27-JAN-10 08:06

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	413	J
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	2010	
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: RE12-10-7622

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142004

Sample Amount 2

Moisture: 9.0

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01200021.wiff

Date Analyzed: 20-JAN-10 15:43

Units: ug/kg

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

\*Concentration =

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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7621

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142005

Sample Amount 2

Moisture: 7.6

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125093a

Date Analyzed: 27-JAN-10 08:35

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	127	J
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	333	J
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	5820	
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: RE12-10-7621

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142005

Sample Amount 2

Moisture: 7.6

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 25

Injection Volume (uL): 50

GEL data file: EXP0125113a

Date Analyzed: 27-JAN-10 18:26

Units: ug/kg

Cas No.	Compound	Concentration*	Q
121-82-4	RDX	49400	
2691-41-0	HMX	11400	

\*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: RE12-10-7621

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142005

Sample Amount 2

Moisture: 7.6

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01200022.wiff

Date Analyzed: 20-JAN-10 15:59

Units: ug/kg

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

\*Concentration =

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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7617

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142006

Sample Amount 2

Moisture: 9.2

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125094a

Date Analyzed: 27-JAN-10 09:05

Units: ug/kg

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

\*Concentration =

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



1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7617

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142006

Sample Amount 2

Moisture: 9.2

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01200023.wiff

Date Analyzed: 20-JAN-10 16:15

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: RE12-10-7620

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142007

Sample Amount 2

Moisture: 11.2

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125098a

Date Analyzed: 27-JAN-10 11:03

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	277	J
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	765	
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: RE12-10-7620

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142007

Sample Amount 2

Moisture: 11.2

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01200027.wiff

Date Analyzed: 20-JAN-10 17:18

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: RE12-10-7624

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142008

Sample Amount 2

Moisture: 8.4

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125099a

Date Analyzed: 27-JAN-10 11:33

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	419	J
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	487	J
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

\*Concentration =

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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7624

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142008

Sample Amount 2

Moisture: 8.4

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01200028.wiff

Date Analyzed: 20-JAN-10 17:33

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: RE12-10-7630

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142009

Sample Amount 2

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

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125100a

Date Analyzed: 27-JAN-10 12:02

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: RE12-10-7630

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142009

Sample Amount 2

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

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01200029.wiff

Date Analyzed: 20-JAN-10 17:49

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 Concentrated Extract Volume X Dilution Factor  
Sample Amount

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7628

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142010

Sample Amount 2

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

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125101a

Date Analyzed: 27-JAN-10 12:32

Units: ug/kg

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

\*Concentration =

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



1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7628

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142010

Sample Amount 2

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

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01200030.wiff

Date Analyzed: 20-JAN-10 18:05

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: RE12-10-7632

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142011

Sample Amount 2

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

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125102a

Date Analyzed: 27-JAN-10 13:01

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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7632

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142011

Sample Amount 2

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

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01200031.wiff

Date Analyzed: 20-JAN-10 18:20

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: RE12-10-7629

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142012

Sample Amount 2

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

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125103a

Date Analyzed: 27-JAN-10 13:31

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: RE12-10-7629

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142012

Sample Amount 2

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

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01200032.wiff

Date Analyzed: 20-JAN-10 18:36

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: RE12-10-7626

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142013

Sample Amount 2

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

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125104a

Date Analyzed: 27-JAN-10 14:00

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: RE12-10-7626

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142013

Sample Amount 2

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

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01200033.wiff

Date Analyzed: 20-JAN-10 18:52

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: RE12-10-7631

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142014

Sample Amount 2

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

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125105a

Date Analyzed: 27-JAN-10 14:30

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	127	J
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: RE12-10-7631

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142014

Sample Amount 2

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

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01200034.wiff

Date Analyzed: 20-JAN-10 19:07

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: RE12-10-7627

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142015

Sample Amount 2

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

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125106a

Date Analyzed: 27-JAN-10 14:59

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: RE12-10-7627

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142015

Sample Amount 2

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

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01200035.wiff

Date Analyzed: 20-JAN-10 19:23

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

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7625

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142016

Sample Amount 2

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

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125107a

Date Analyzed: 27-JAN-10 15:29

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	113	J
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: RE12-10-7625

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142016

Sample Amount 2

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

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01200036.wiff

Date Analyzed: 20-JAN-10 19:39

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: RE12-10-7656

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142017

Sample Amount 2

Moisture: 7.6

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125111a

Date Analyzed: 27-JAN-10 17:27

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	499	J
121-14-2	2,4-Dinitrotoluene	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	3310	
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	2430	
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: RE12-10-7656

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142017

Sample Amount 2

Moisture: 7.6

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 10

Injection Volume (uL): 50

GEL data file: EXP0125141a

Date Analyzed: 28-JAN-10 08:12

Units: ug/kg

Cas No.	Compound	Concentration*	Q
121-82-4	RDX	16700	

\*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: RE12-10-7656

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142017

Sample Amount 2

Moisture: 7.6

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01200040.wiff

Date Analyzed: 20-JAN-10 20:42

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: RE12-10-7655

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142018

Sample Amount 2

Moisture: 9.9

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125112a

Date Analyzed: 27-JAN-10 17:56

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	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: RE12-10-7655

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142018

Sample Amount 2

Moisture: 9.9

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01200041.wiff

Date Analyzed: 20-JAN-10 20:57

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

# QUALITY CONTROL SUMMARY

# High Explosives Surrogate Recovery Summary

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1127

Lab Code: GEL

HPLC Column: Phenomenex Ultracarb 5u ODS(20)

Lab Sample ID	Client Sample ID	DNT	QC Limits	Flg
244142001	RE12-10-7619	108	73.7 - 133.3	
244142001	RE12-10-7619	117	73.7 - 133.3	
244142002	RE12-10-7618	103	73.7 - 133.3	
244142002	RE12-10-7618	115	73.7 - 133.3	
244142003	RE12-10-7623	105	73.7 - 133.3	
244142003	RE12-10-7623	118	73.7 - 133.3	
244142004	RE12-10-7622	106	73.7 - 133.3	
244142004	RE12-10-7622	118	73.7 - 133.3	
244142005	RE12-10-7621	112	73.7 - 133.3	
244142005	RE12-10-7621	116	73.7 - 133.3	
244142005	RE12-10-7621	103	73.7 - 133.3	
244142006	RE12-10-7617	106	73.7 - 133.3	
244142006	RE12-10-7617	115	73.7 - 133.3	
244142007	RE12-10-7620	112	73.7 - 133.3	
244142007	RE12-10-7620	110	73.7 - 133.3	
244142008	RE12-10-7624	119	73.7 - 133.3	
244142008	RE12-10-7624	109	73.7 - 133.3	
244142009	RE12-10-7630	110	73.7 - 133.3	
244142009	RE12-10-7630	112	73.7 - 133.3	
244142010	RE12-10-7628	112	73.7 - 133.3	
244142010	RE12-10-7628	114	73.7 - 133.3	
244142011	RE12-10-7632	114	73.7 - 133.3	
244142011	RE12-10-7632	114	73.7 - 133.3	
244142012	RE12-10-7629	109	73.7 - 133.3	
244142012	RE12-10-7629	114	73.7 - 133.3	
244142013	RE12-10-7626	110	73.7 - 133.3	
244142013	RE12-10-7626	113	73.7 - 133.3	
244142014	RE12-10-7631	113	73.7 - 133.3	
244142014	RE12-10-7631	115	73.7 - 133.3	
244142015	RE12-10-7627	114	73.7 - 133.3	
244142015	RE12-10-7627	112	73.7 - 133.3	
244142016	RE12-10-7625	113	73.7 - 133.3	
244142016	RE12-10-7625	114	73.7 - 133.3	
244142017	RE12-10-7656	110	73.7 - 133.3	
244142017	RE12-10-7656	119	73.7 - 133.3	
244142017	RE12-10-7656	92.7	73.7 - 133.3	
244142018	RE12-10-7655	113	73.7 - 133.3	

# High Explosives Surrogate Recovery Summary

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1127

Lab Code: GEL

HPLC Column: Phenomenex Ultracarb 5u ODS(20)

Lab Sample ID	Client Sample ID	DNT	QC Limits	Flg
244142018	RE12-10-7655	114	73.7 - 133.3	
1202011650	MB for batch 940055	105	73.7 - 133.3	
1202011650	MB for batch 940055	116	73.7 - 133.3	
1202011651	LCS for batch 940055	110	73.7 - 133.3	
1202011651	LCS for batch 940055	113	73.7 - 133.3	
1202011652	RE12-10-7619(244142001MS)	102	73.7 - 133.3	
1202011652	RE12-10-7619(244142001MS)	120	73.7 - 133.3	
1202011653	RE12-10-7619(244142001MSD)	103	73.7 - 133.3	
1202011653	RE12-10-7619(244142001MSD)	115	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) 10-1127

Extract Batch Code: 940055

Date Extracted: 13-JAN-10

GEL LCS ID: 1202011651

GEL LCSDUP ID:

Analysis Date/Time: 27-JAN-10 05:08

DUP Analysis Date/Time:

Reporting Units: ug/kg

QC Type: LCS/LCSD

Compound	Spike Added	LCS Conc	LCS Rec #	LCSD Conc	LCSD Rec #	RPD #	RPD	Recovery Limits
1,3,5-Trinitrobenzene	5000	5030	101					62.1 - 124
2,4,6-Trinitrotoluene	5000	5400	108					78.3 - 132
2,4-Dinitrotoluene	5000	4900	98					82.7 - 132
2,6-Dinitrotoluene	5000	5010	100					86.9 - 122
2-Amino-4,6-dinitrotoluene	5000	5910	118					84.2 - 149
4-Amino-2,6-dinitrotoluene	5000	5980	120					85.6 - 133
HMX	5000	5170	103					66.5 - 142
Nitrobenzene	5000	5160	103					71.8 - 126
PETN	5000	5950	119					64.6 - 147
RDX	5000	5910	118					78.7 - 144
Tetryl	5000	3020	60.4					31.2 - 119
m-Dinitrobenzene	5000	4920	98.5					80.9 - 127
m-Nitrotoluene	5000	4980	99.6					71.9 - 126
o-Nitrotoluene	5000	4710	94.1					75 - 123
p-Nitrotoluene	5000	5090	102					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) 10-1127

Extract Batch Code: 940055

Date Extracted: 13-JAN-10

GEL LCS ID: 1202011651

GEL LCSDUP ID:

Analysis Date/Time: 20-JAN-10 14:09

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	4740	94.8					64.8 - 128
2,6-Diamino-4-nitrotoluene	5000	4980	99.6					69.6 - 133
3,5-Dinitroaniline	5000	5300	106					77.3 - 123
tris(o-cresyl) phosphate	5000	5600	112					84.3 - 120
TATB	5000	5420	108					46.8 - 166

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

\* Values outside of QC limits

3  
High Explosives MS/MSD Summary

Lab Name: GEL Laboratories LLC

Client ID: RE12-10-7619

Lab Code: GEL

GEL Job No (SDG) 10-1127

Extract Batch Code: 940055

Date Extracted: 13-JAN-10

GEL Spike ID: 1202011652

GEL SpikeDup ID: 1202011653

Analysis Date/Time: 27-JAN-10 06:07

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	5210	104	5350	107	2.56	30	70.7 - 130
2,4,6-Trinitrotoluene	5000	0	4900	98.1	5320	106	8.16	30	83.4 - 138
2,4-Dinitrotoluene	5000	0	4950	99	4910	98.1	.93	30	79.1 - 137
2,6-Dinitrotoluene	5000	0	4960	99.1	4830	96.7	2.5	30	85.4 - 125
2-Amino-4,6-dinitrotoluene	5000	0	5230	105	5330	107	2.02	30	77.4 - 154
4-Amino-2,6-dinitrotoluene	5000	0	5130	103	5470	109	6.51	30	77.3 - 140
HMX	5000	217	5470	105	6100	118	10.9	30	66.7 - 144
Nitrobenzene	5000	0	4570	91.3	4420	88.5	3.14	30	70.4 - 129
PETN	5000	0	5110	102	5500	110	7.36	30	61.9 - 153
RDX	5000	239	5530	106	5780	111	4.33	30	73 - 140
Tetryl	5000	0	2780	55.6	3860	77.3	32.6 *	30	46.8 - 138
m-Dinitrobenzene	5000	0	5020	100	4880	97.6	2.87	30	83.5 - 126
m-Nitrotoluene	5000	0	4380	87.5	4600	91.9	4.89	30	68.6 - 135
o-Nitrotoluene	5000	0	4200	83.9	4350	86.9	3.5	30	71.2 - 131
p-Nitrotoluene	5000	0	4300	86.1	4500	90.1	4.53	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: RE12-10-7619

Lab Code: GEL

GEL Job No (SDG) 10-1127

Extract Batch Code: 940055

Date Extracted: 13-JAN-10

GEL Spike ID: 1202011652

GEL SpikeDup ID: 1202011653

Analysis Date/Time: 20-JAN-10 14:41

MSD Analysis Date/Time:

Reporting Units: ug/kg

QC Type: MS/MSD

Compound	Spike Added	Sample Conc	MS Conc	MS Rec #	MSD Conc	MSD Rec #	RPD #	RPD Limit	Rec Limits
2,4-Diamino-6-nitrotoluene	5000	0	4060	81.2	4230	84.6	4.1	30	51.6 - 127
2,6-Diamino-4-nitrotoluene	5000	0	4360	87.2	4820	96.4	10	30	58.9 - 135
3,5-Dinitroaniline	5000	0	5550	111	5250	105	5.56	30	72.8 - 125
tris(o-cresyl) phosphate	5000	0	5390	108	5330	107	1.12	30	79.1 - 124
TATB	5000	0	7560	151	5290	106	35.3 *	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): 10-1127

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

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

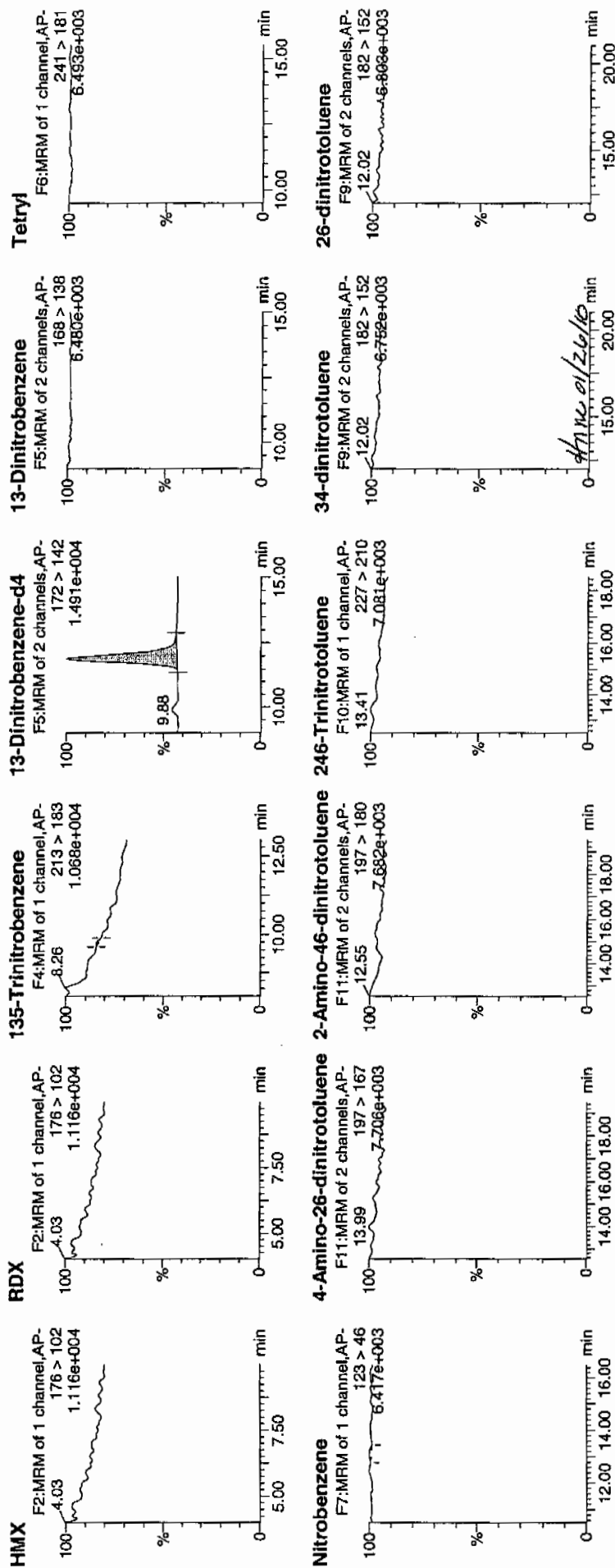
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Date: 25-Jan-2010

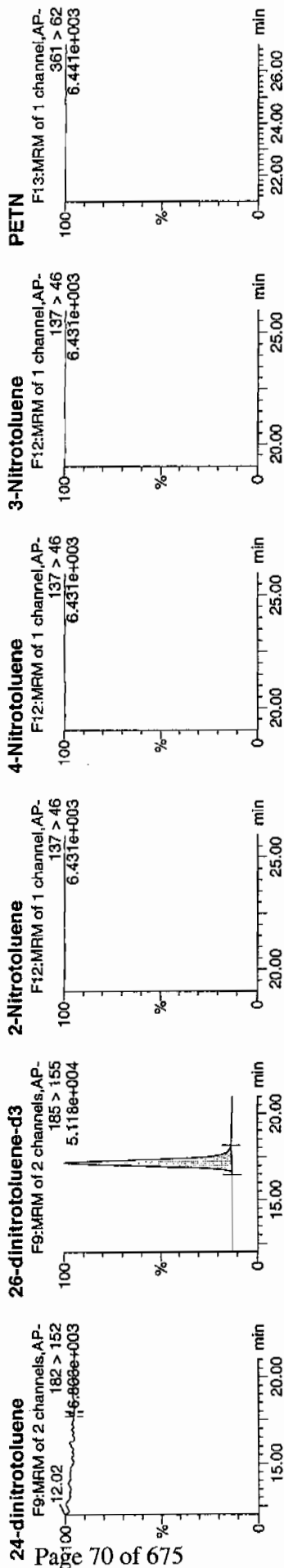
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ID: XIBLK01

Vial: 1:1,A



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	% Rec	% Dev	ISN
XIBLK01	HMX	176 > 102			3310.292								
XIBLK01	RDX	176 > 102			3310.292								
XIBLK01	135-Trinitrobenzene	213 > 183			3310.292				MM-	26-Jan-10	09:16:08		
XIBLK01	13-Dinitrobenzene-d4	172 > 142	11.89	3310.292			3310.292	bb			557.5886	111.5	80.1
XIBLK01	13-Dinitrobenzene	168 > 138			3310.292								
XIBLK01	Tetryl	241 > 181			3310.292								
XIBLK01	Nitrobenzene	123 > 46			3310.292				MM-	26-Jan-10	09:17:34		
XIBLK01	4-Amino-26-dinitrotoluene	197 > 167			19104.934								
XIBLK01	2-Amino-46-dinitrotoluene	197 > 180			19104.934								
XIBLK01	246-Trinitrotoluene	227 > 210			19104.934								
XIBLK01	34-dinitrotoluene	182 > 152			19104.934								
XIBLK01	26-dinitrotoluene	182 > 152			19104.934								
XIBLK01	24-dinitrotoluene	182 > 152			19104.934				MM-	26-Jan-10	09:22:07		
XIBLK01	26-dinitrotoluene-d3	185 > 155	17.15	19104.934			19104.934	bb			586.1006	117.2	1710.6
XIBLK01	2-Nitrotoluene	137 > 46			19104.934								
XIBLK01	4-Nitrotoluene	137 > 46			19104.934								
XIBLK01	3-Nitrotoluene	137 > 46			19104.934								
XIBLK01	PETN	361 > 62			19104.934								

Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1127

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

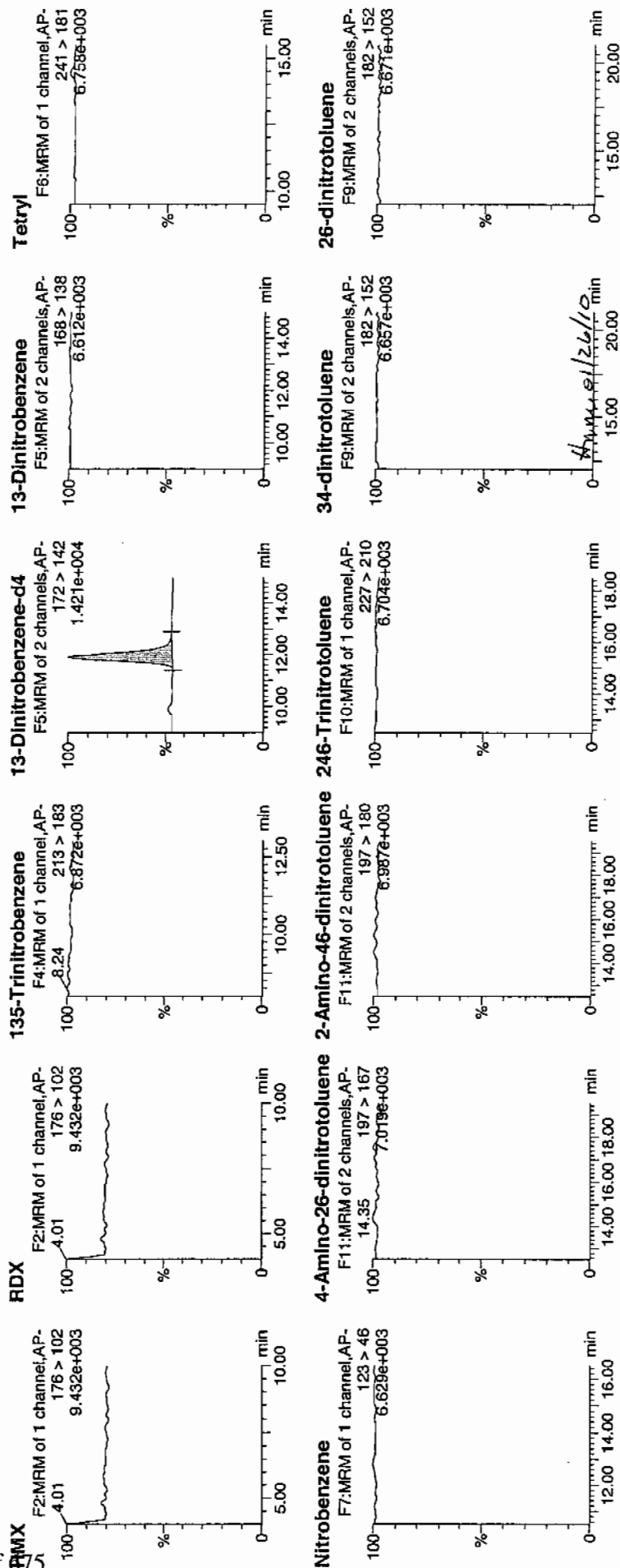
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Date: 25-Jan-2010

Time: 11:50:16

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Vial: 1:1,A

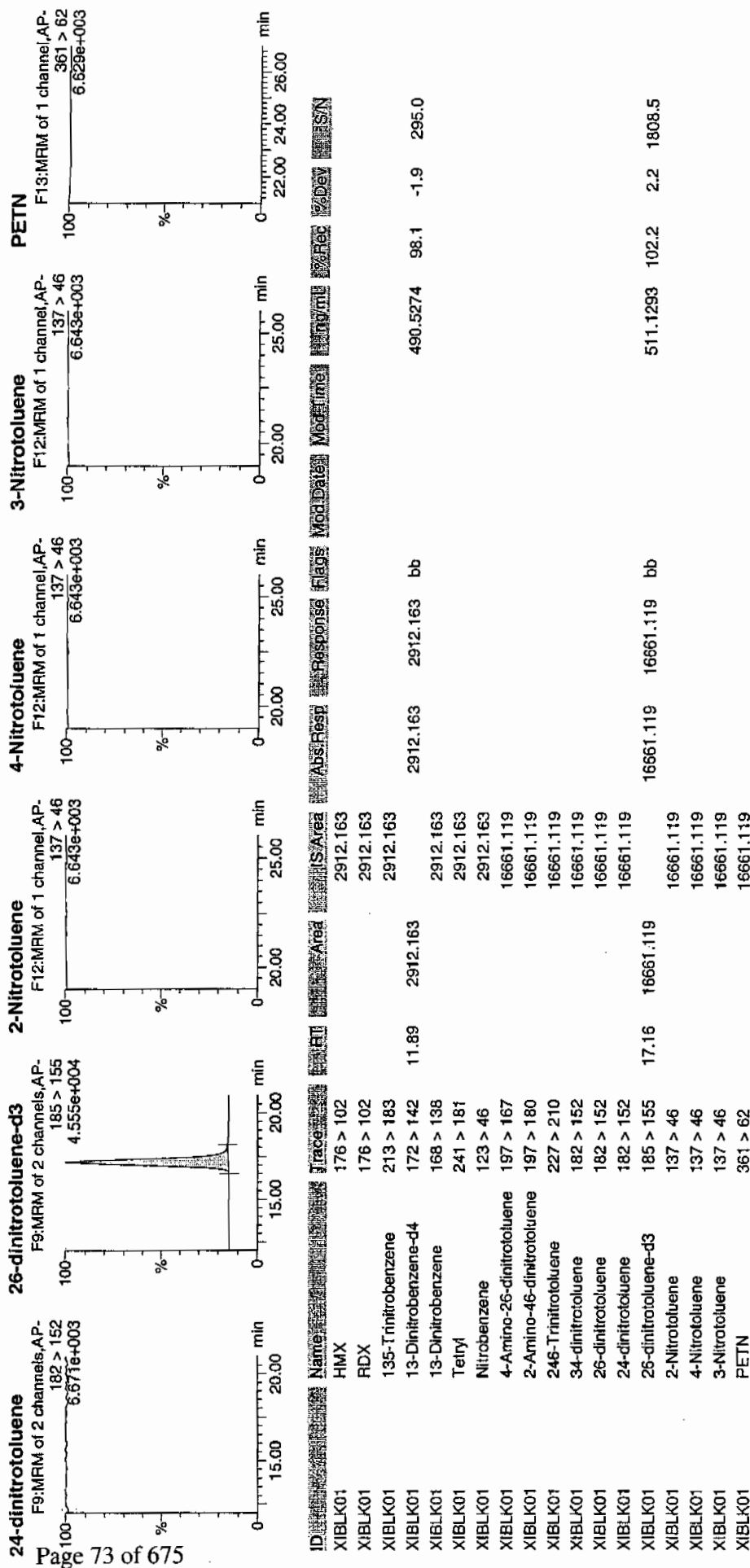


# Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Tue Jan 26 11:27:45 2010, Page 4 of 73

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA.qld, Time: Tue Jan 26 09:24:51 2010



Page 73 of 675

Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1127

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 20-JAN-10 10:28

GEL Data File: EXS01200001.wiff

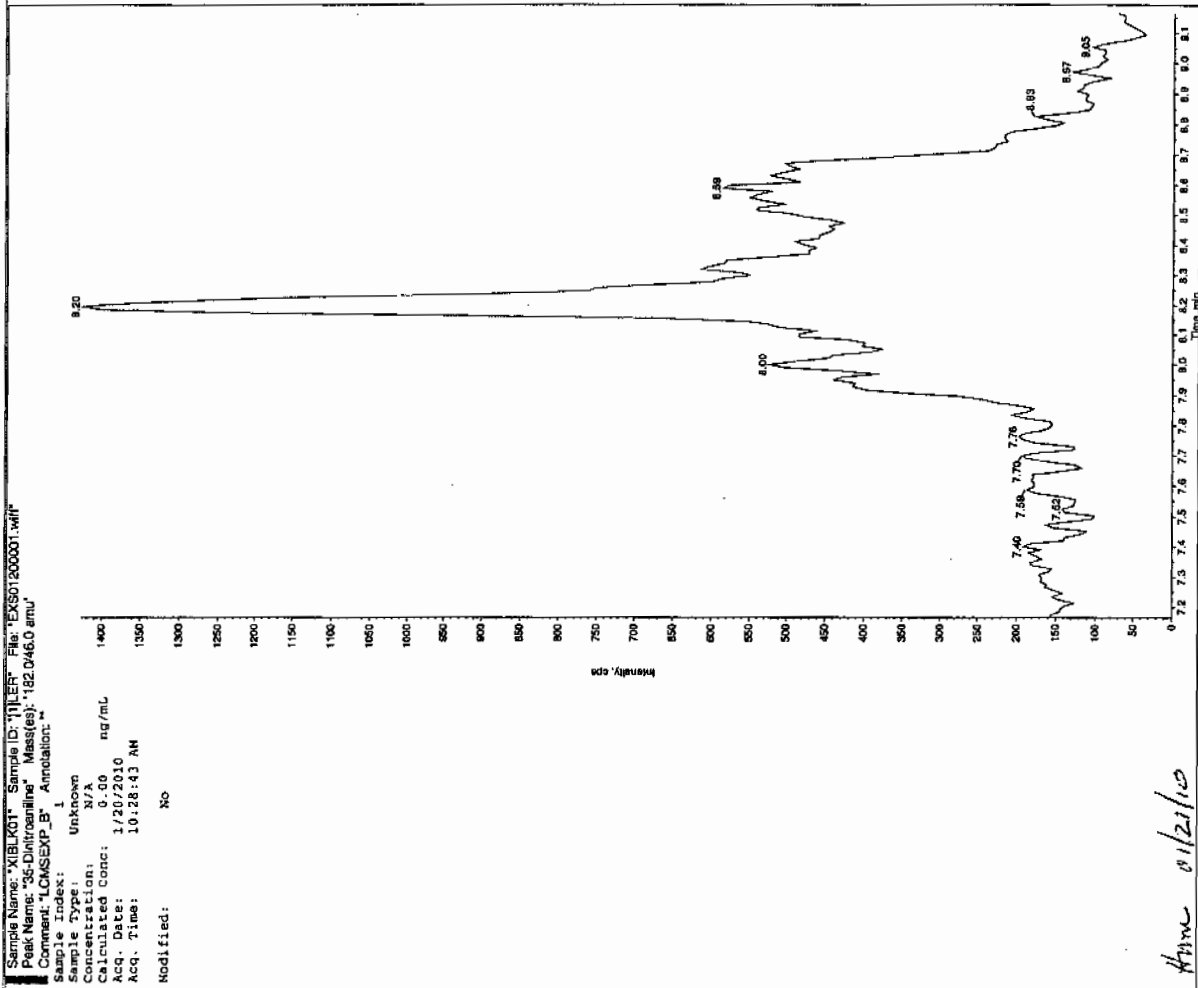
Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

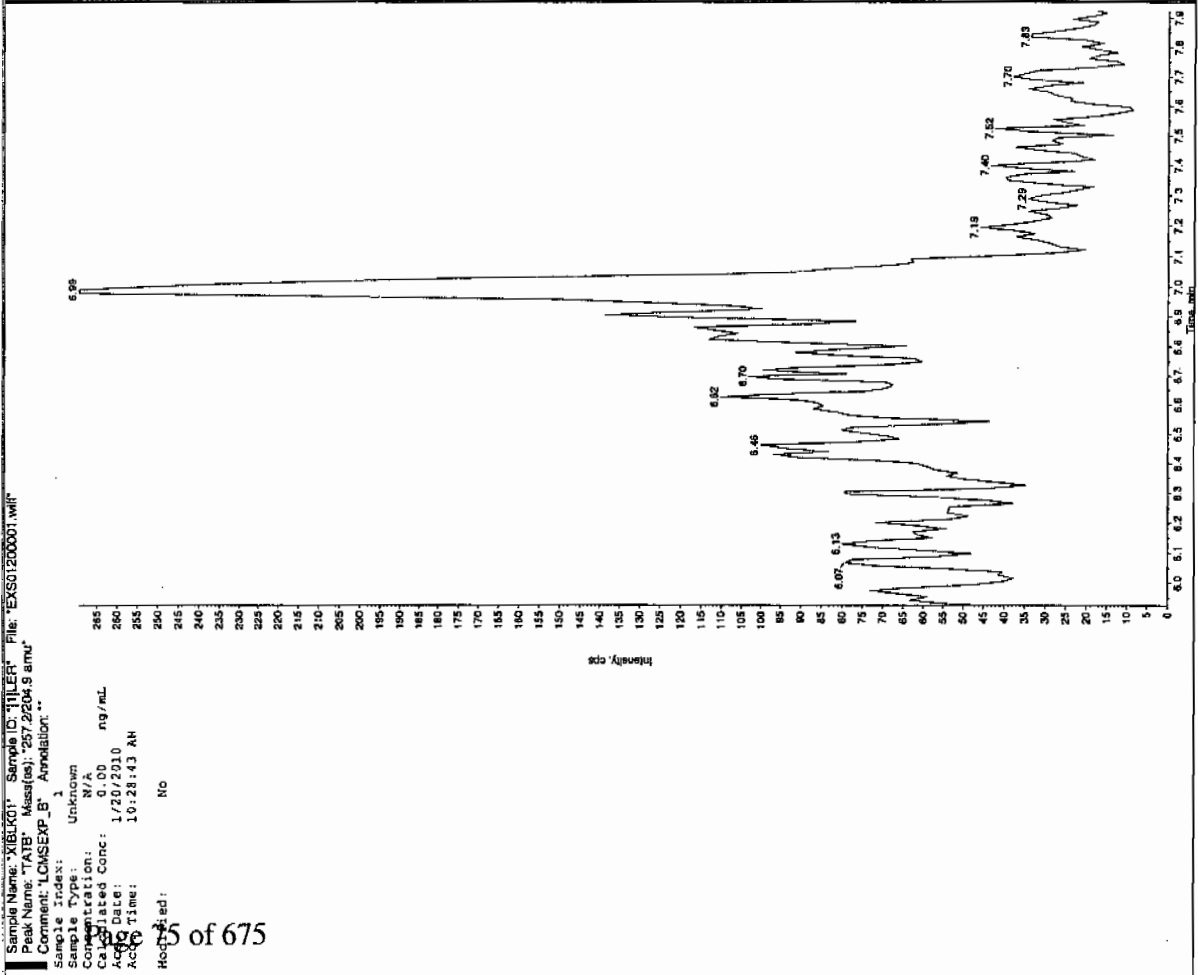
Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	1.15
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

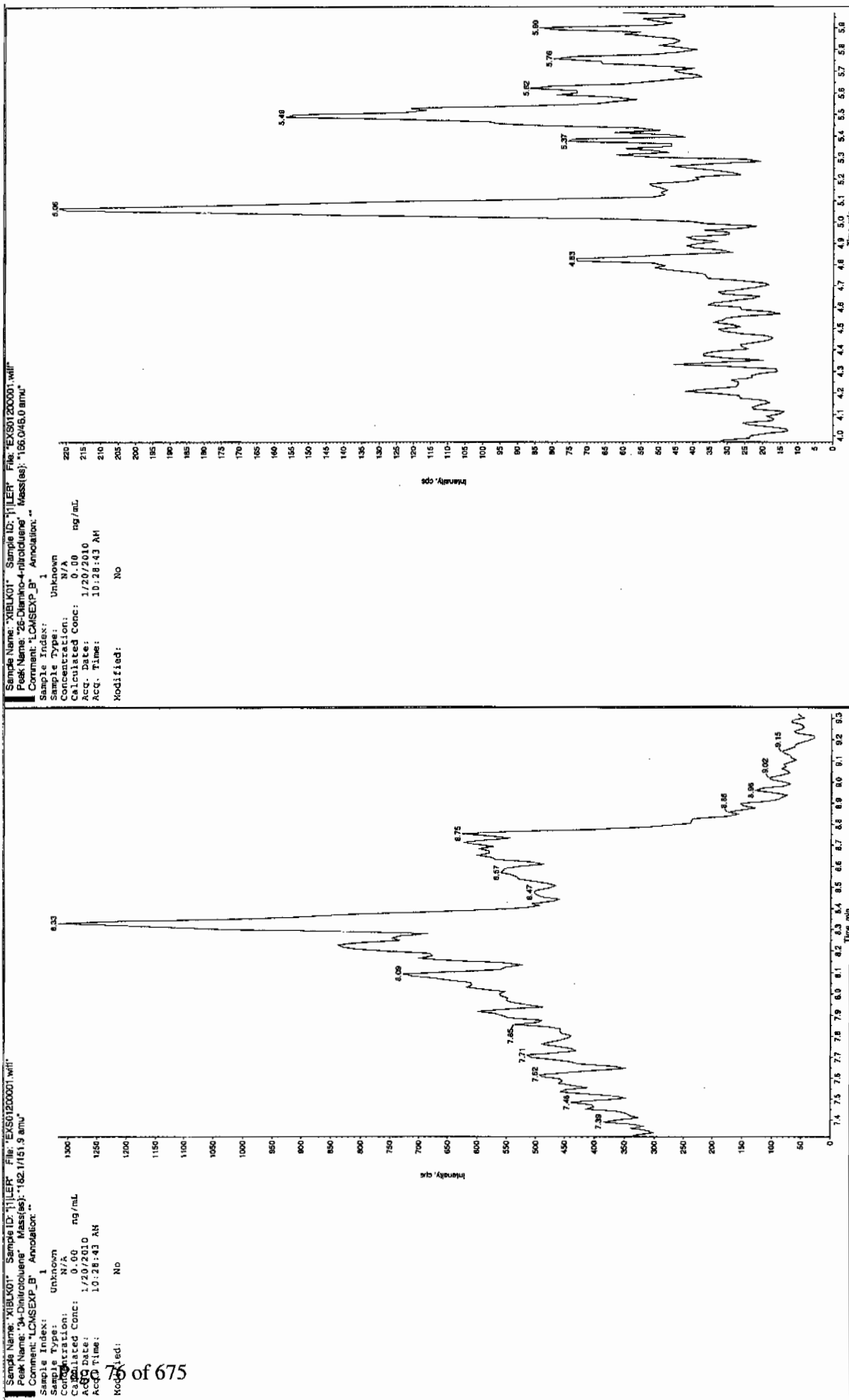


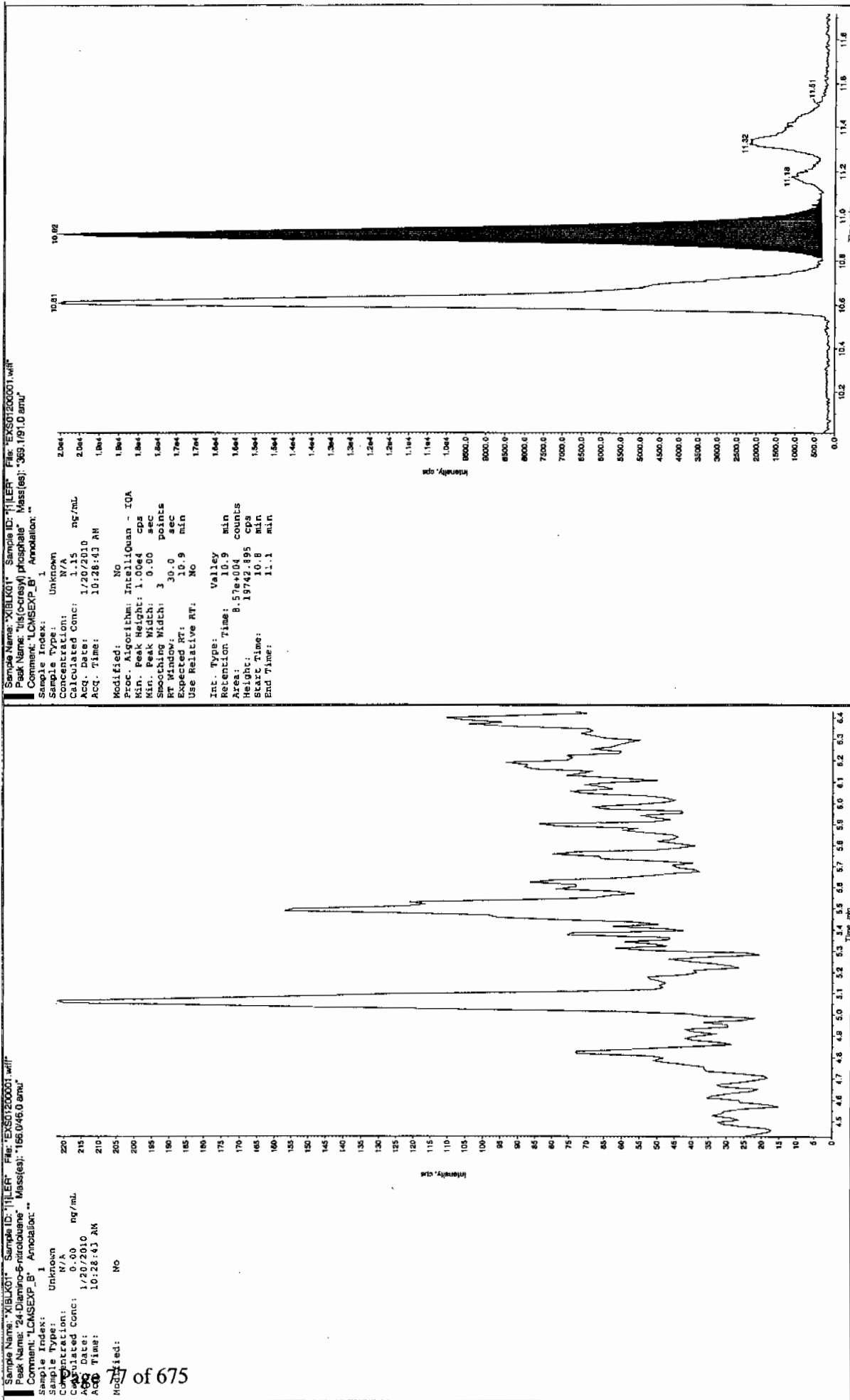
See 1/21/10



Ann 01/21/10







Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1127

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 20-JAN-10 10:45

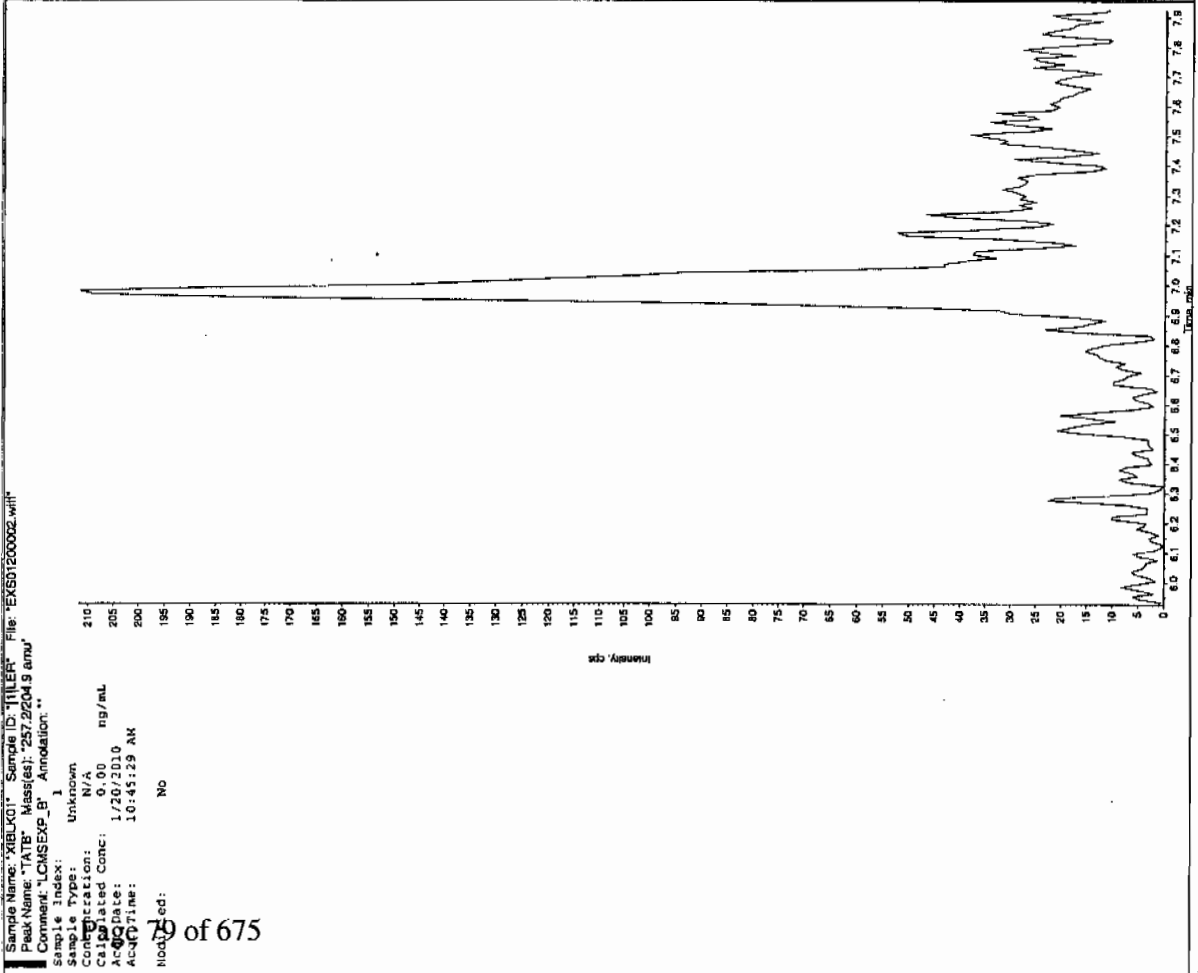
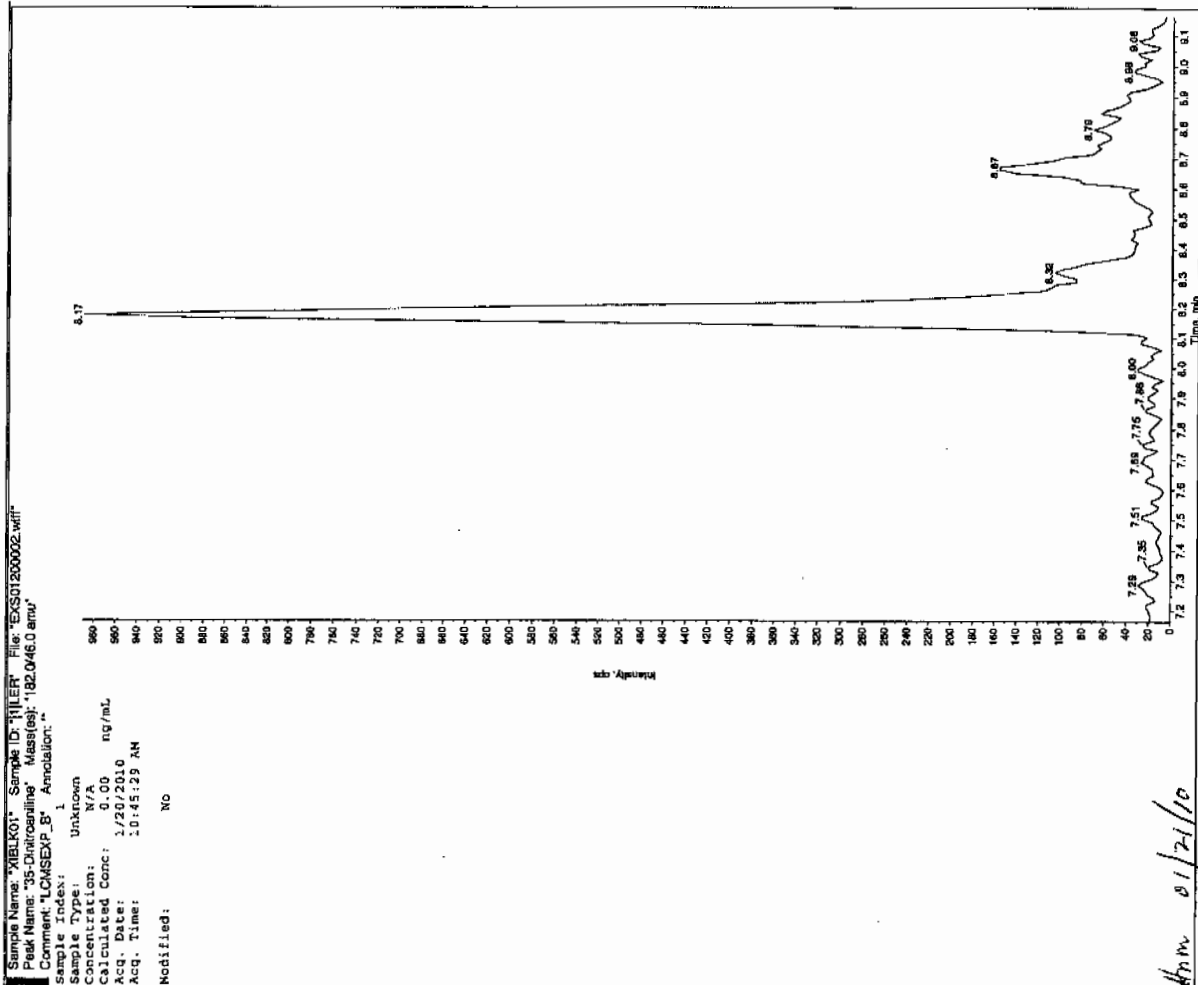
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Instrument ID: LCMSMS

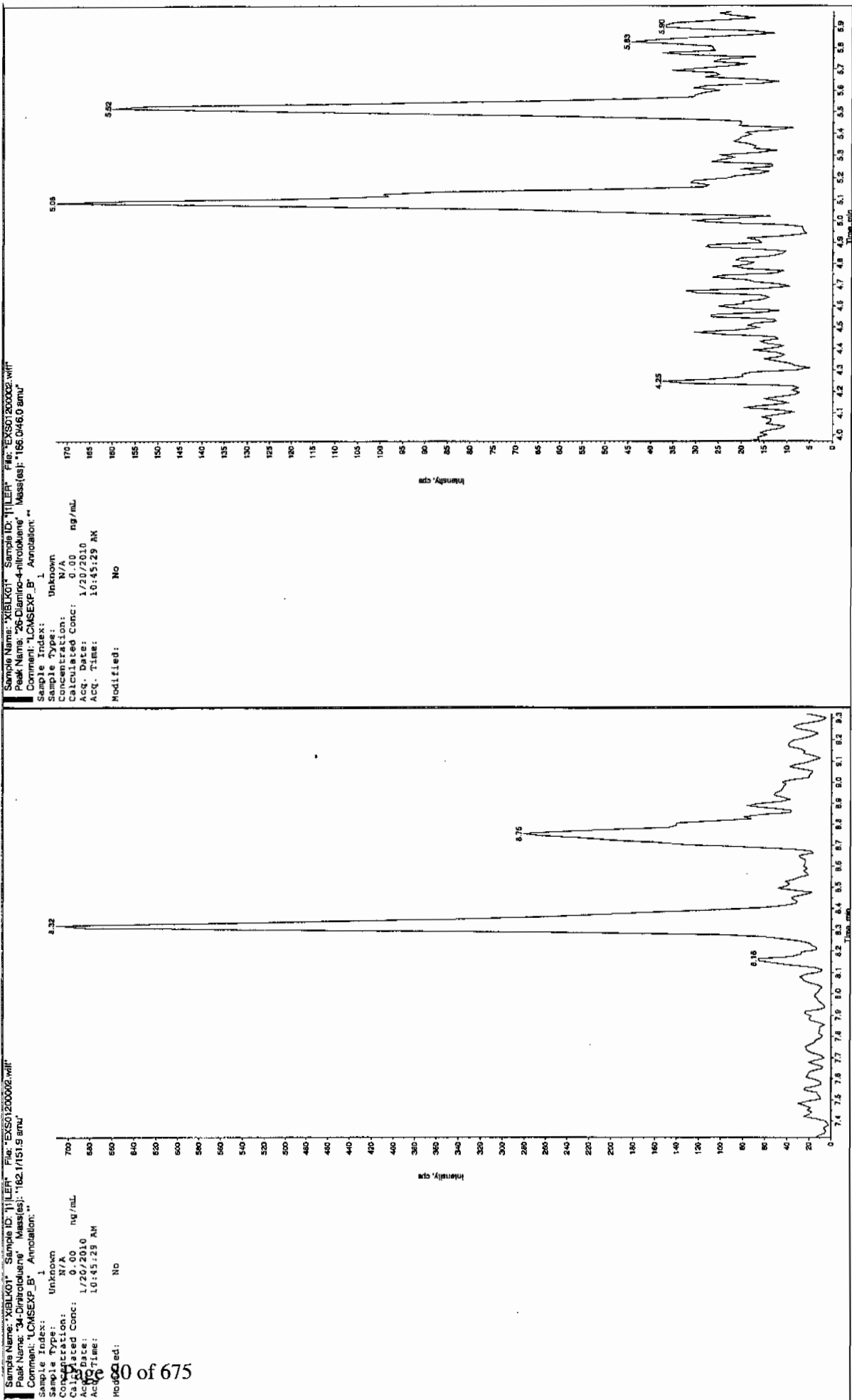
Column: Phenomenex Ultracarb 5u ODS(20)

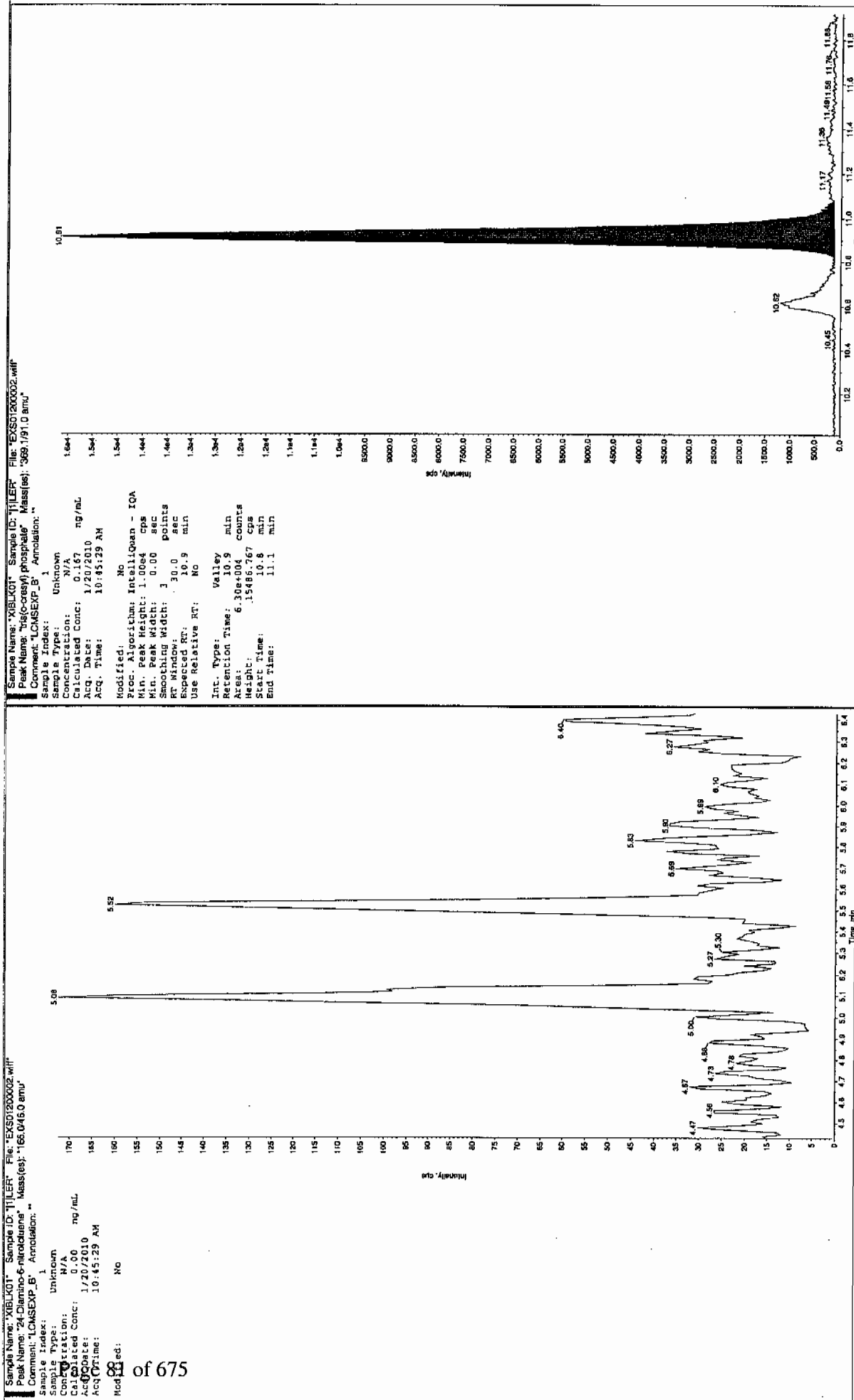
Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	.167
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

See 17/11/10



\*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): 10-1127

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-Dinitrobenzenc	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

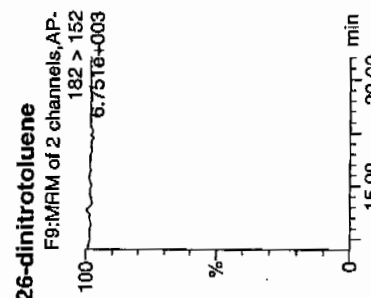
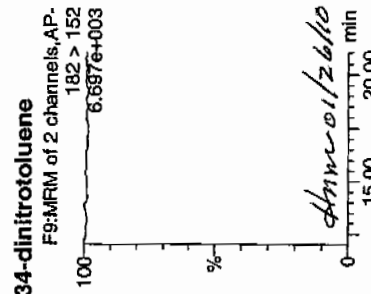
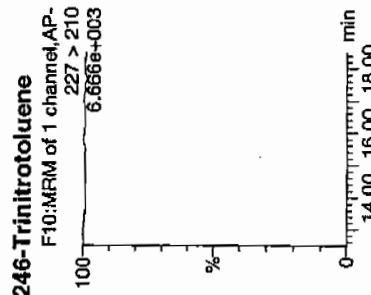
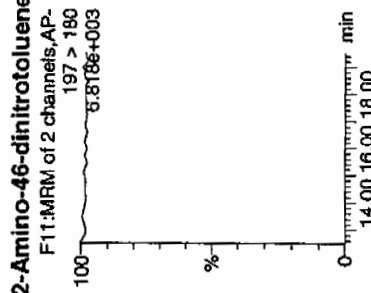
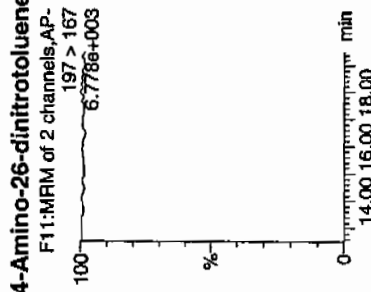
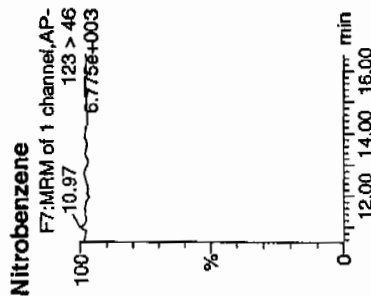
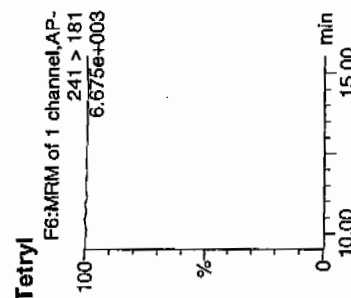
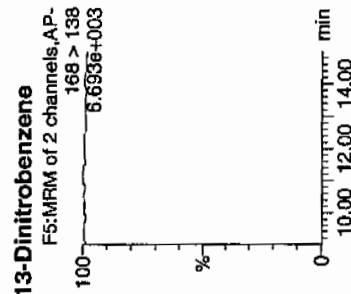
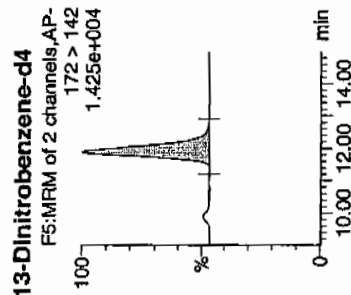
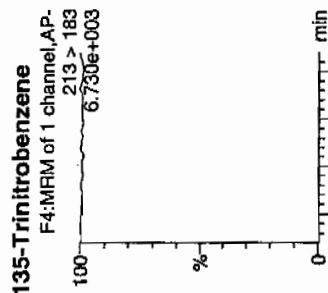
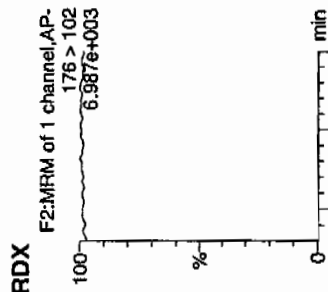
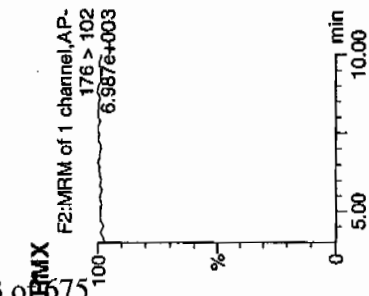
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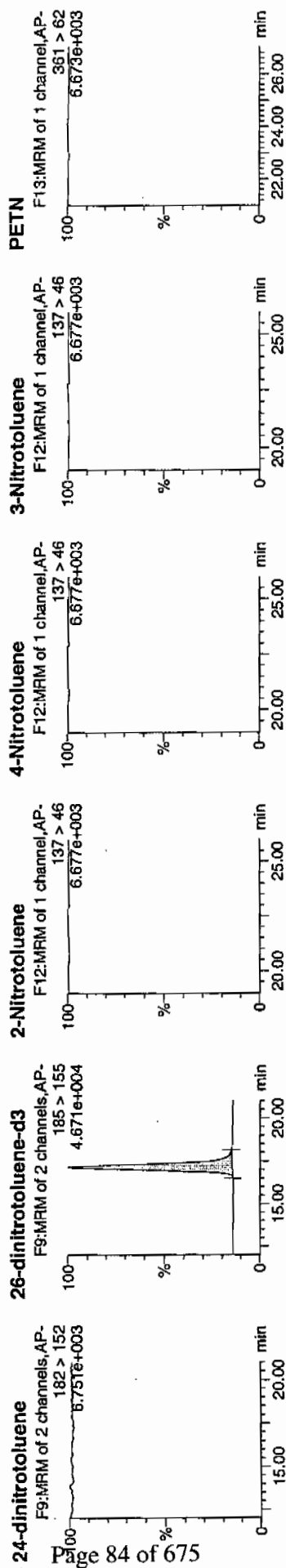
Date: 25-Jan-2010

Time: 15:16:35

id: XIBLK02

**Ratio: 1:1.A**



[illegible]

4A  
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1127

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

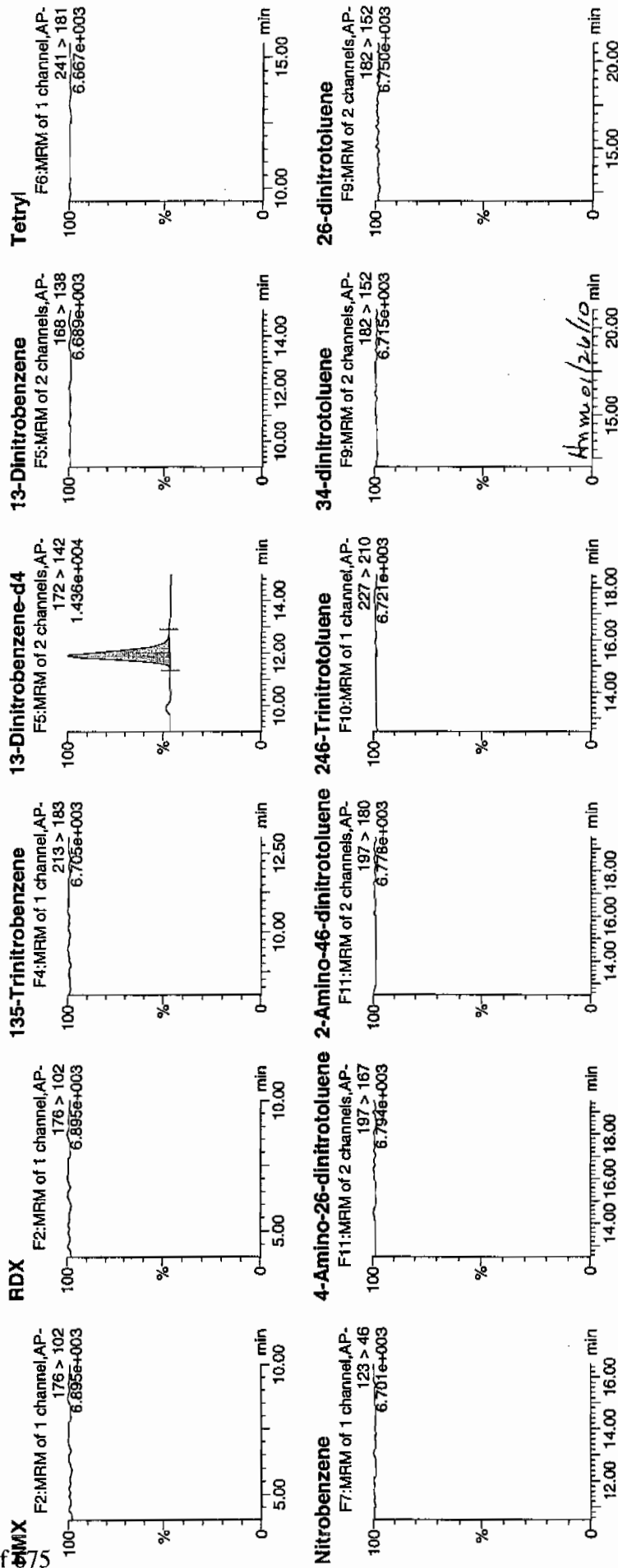
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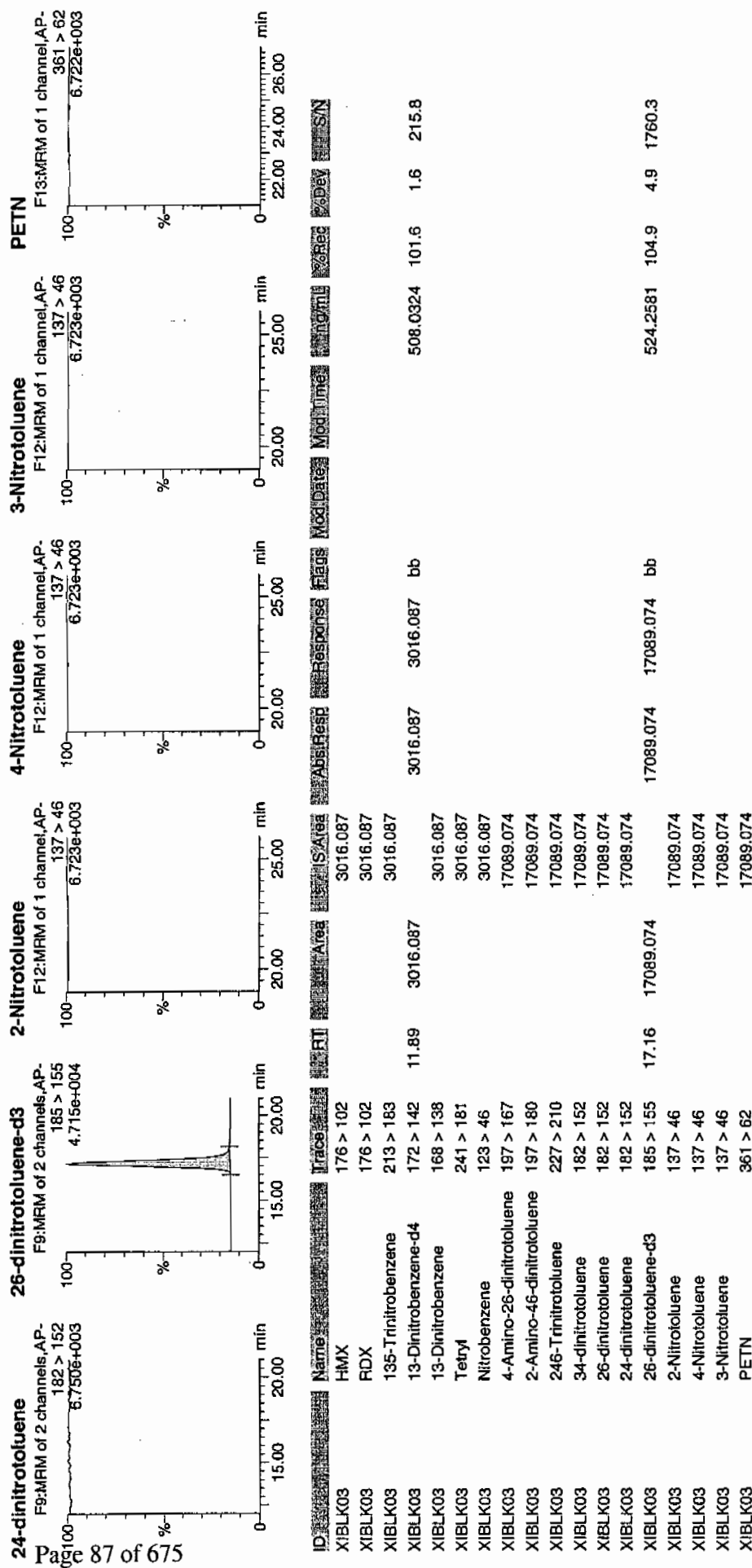
ID: XIBLK03

Mail: 1:1,A

1/26/10



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): 10-1127

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

Printed: Tue Jan 26 11:27:45 2010, Page 47 of 73

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA.qld, Time: Tue Jan 26 09:24:51 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125024a

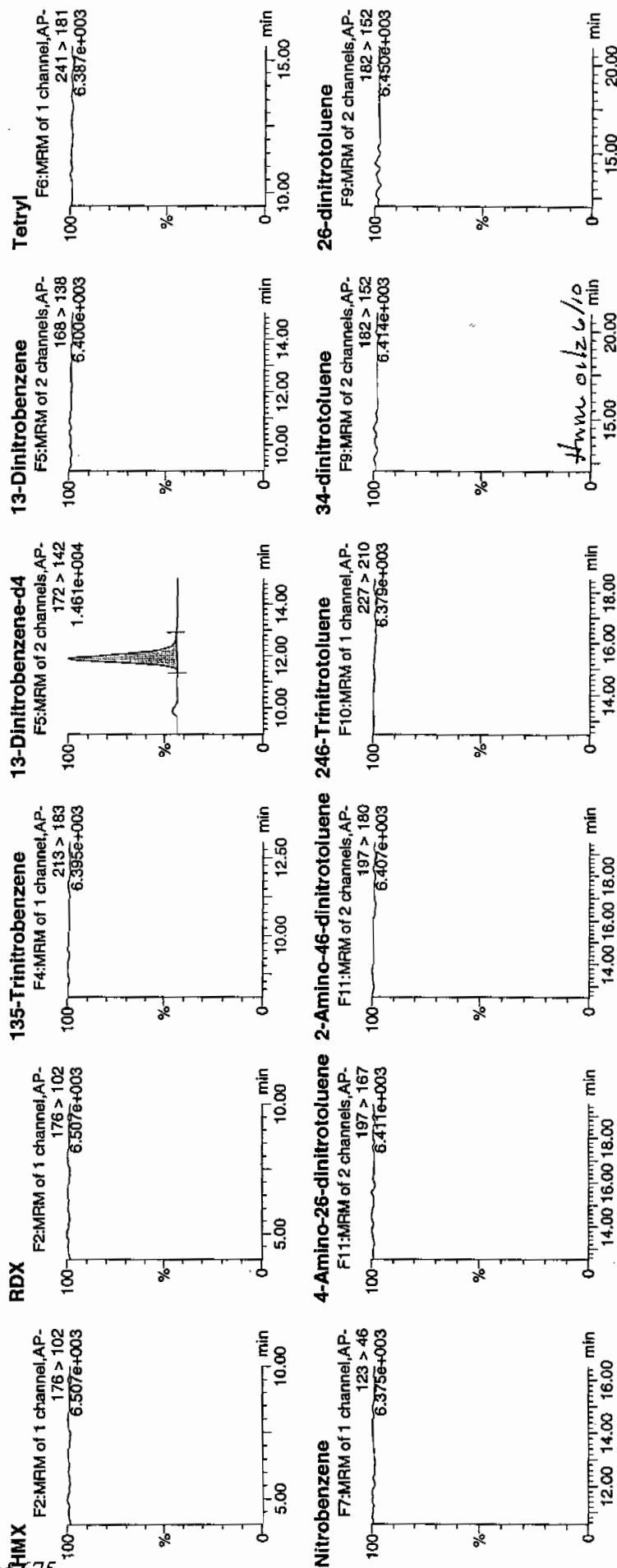
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Time: 22:39:19

ID: XIBLK04

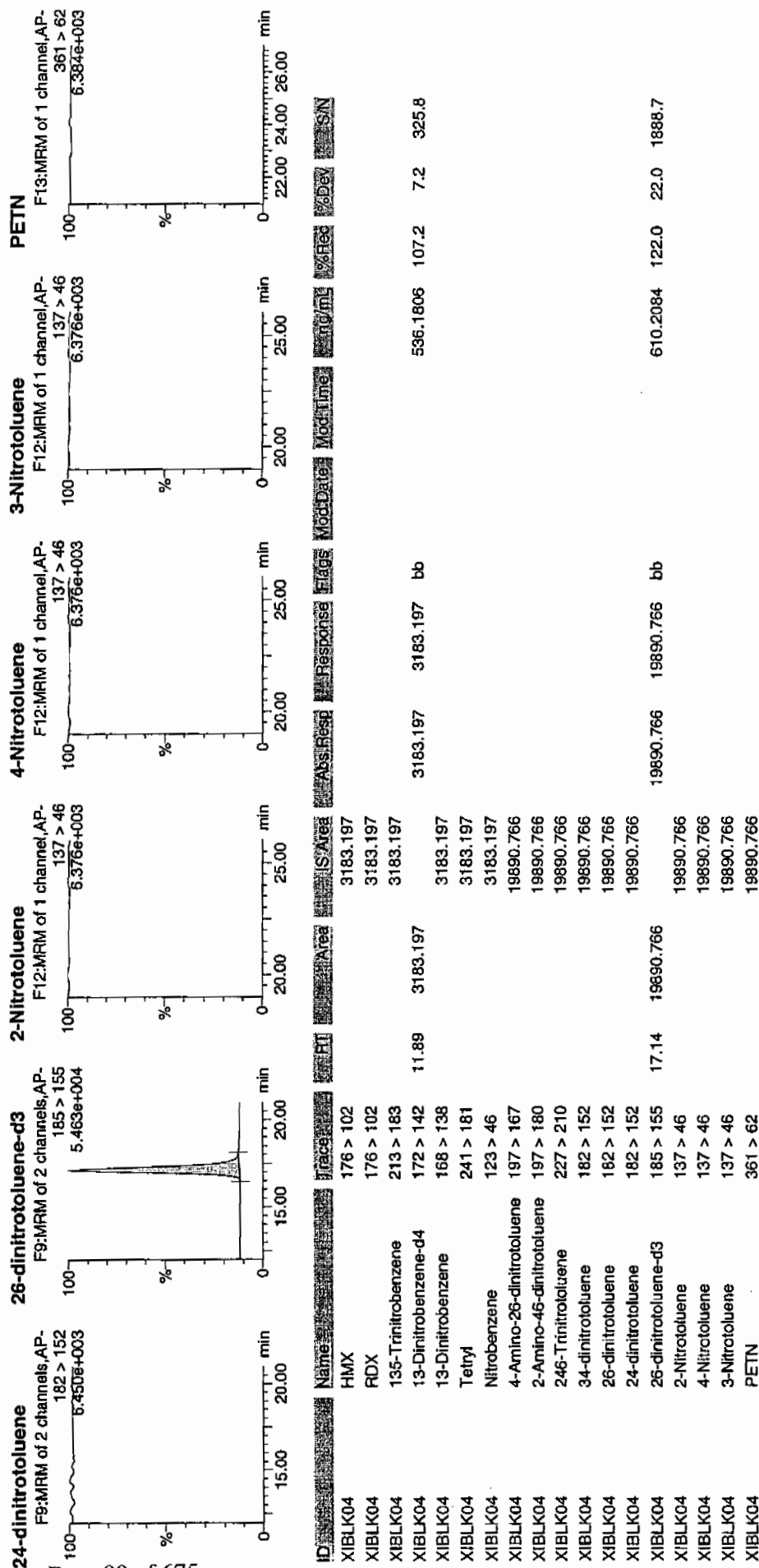
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*Handwritten:* 1/26/10



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

Dataset: C:\MASSLYN\New\_Exp\PRO012510expA.qld, Time: Tue Jan 26 09:24:51 2010





4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1127

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

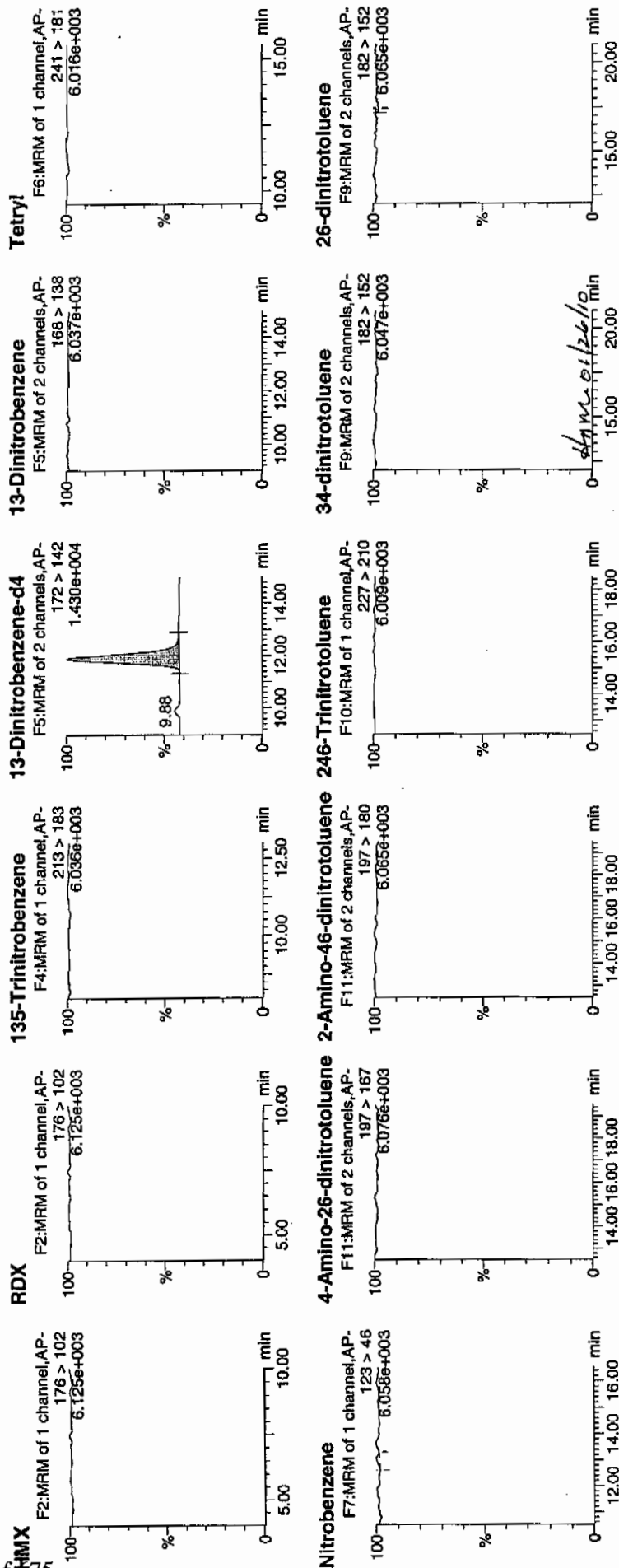
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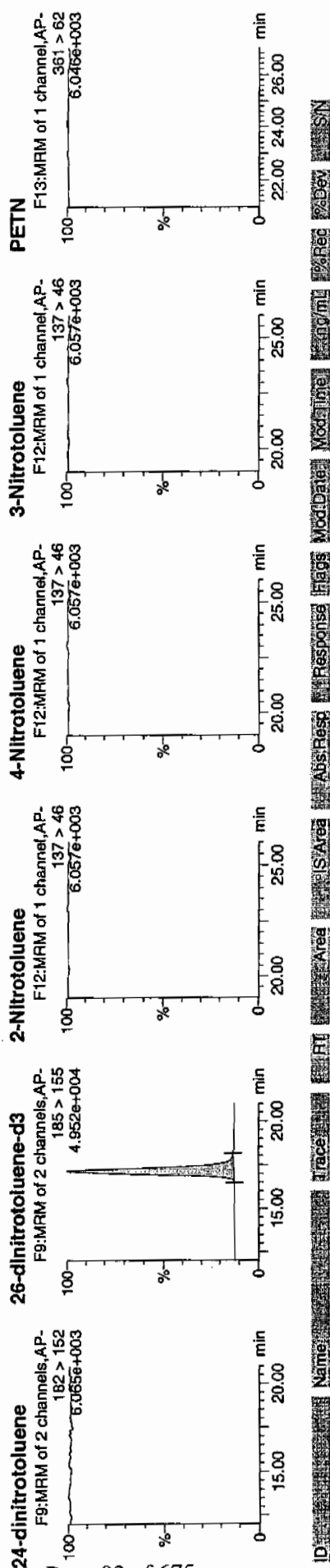
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ID: XIBLK05

Vial: 1:1,A

2 of 675



[illegible]

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1127

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

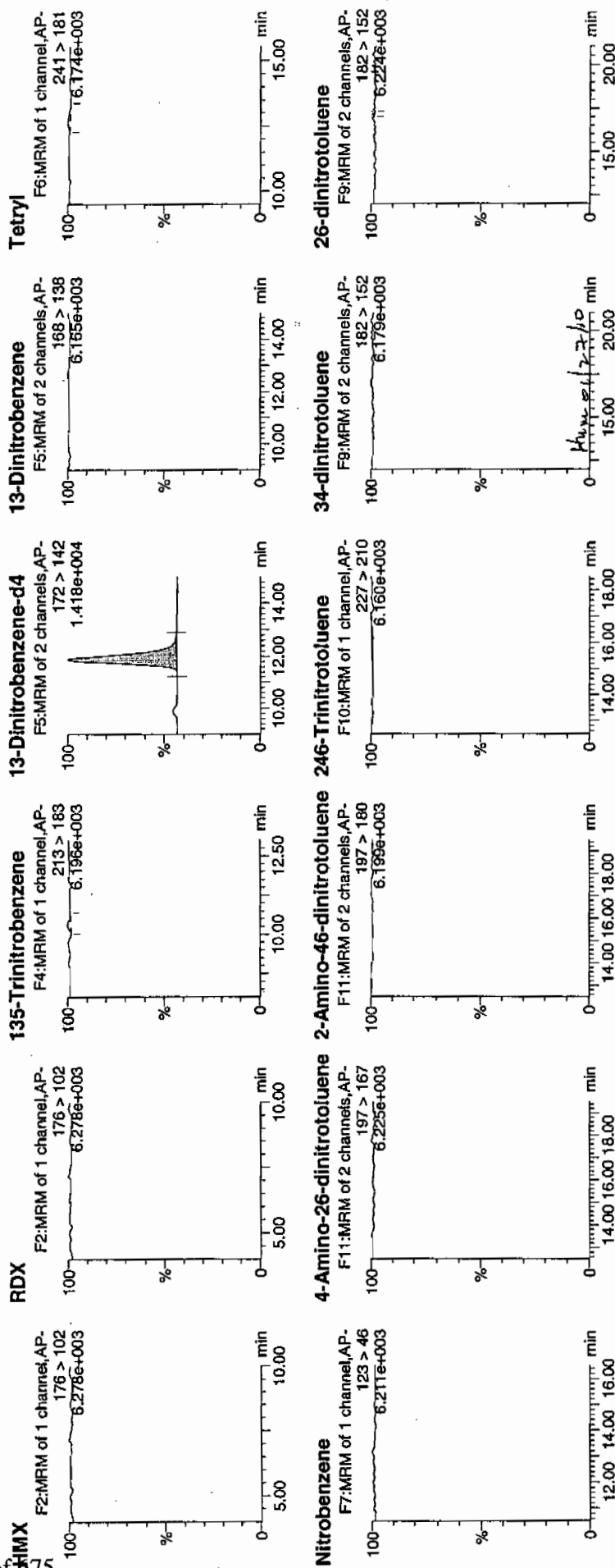
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ID: XIBLK06

Vial: 1:1,A

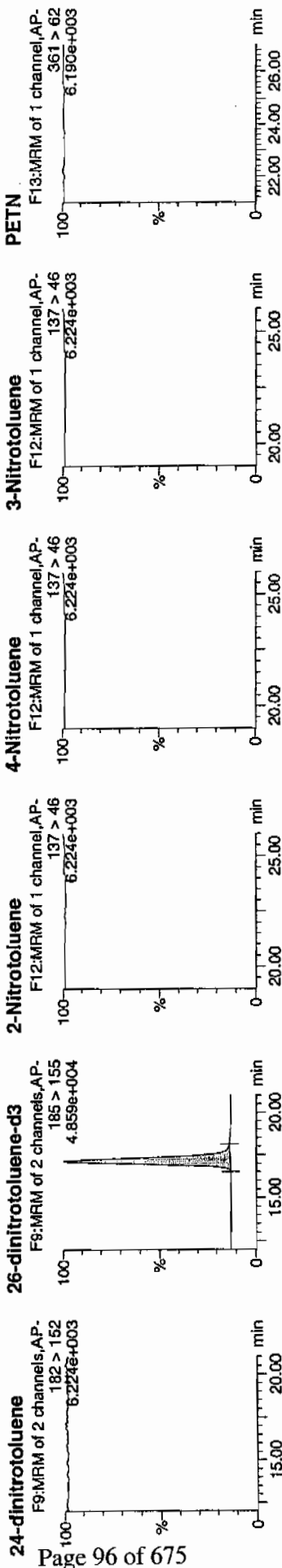
1 of 675

12/10



**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



ID	Name	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	% Rec	Conv	SN
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XIBLK06	RDX	176 > 102		3126.909								
XIBLK06	135-Trinitrobenzene	213 > 183		3126.909				MM- 27-Jan-10	09:08:39			
XIBLK06	13-Dinitrobenzene-d4	172 > 142	11.89	3126.909	3126.909	3126.909	bb		526.6994	105.3	5.3	413.0
XIBLK06	13-Dinitrobenzene	168 > 138		3126.909								
XIBLK06	Tetryl	241 > 181		3126.909				MM- 27-Jan-10	09:10:31			
XIBLK06	Nitrobenzene	123 > 46		17909.232								
XIBLK06	4-Amino-26-dinitrotoluene	197 > 167		17909.232								
XIBLK06	2-Amino-46-dinitrotoluene	197 > 180		17909.232								
XIBLK06	246-Trinitrotoluene	227 > 210		17909.232								
XIBLK06	34-dinitrotoluene	182 > 152		17909.232								
XIBLK06	26-dinitrotoluene	182 > 152		17909.232								
XIBLK06	24-dinitrotoluene	182 > 152		17909.232								
XIBLK06	26-dinitrotoluene-d3	185 > 155	17.14	17909.232	17909.232	17909.232	bb	MM- 27-Jan-10	09:15:19			
XIBLK06	2-Nitrotoluene	137 > 46		17909.232					549.4189	109.9	9.9	1335.7
XIBLK06	4-Nitrotoluene	137 > 46		17909.232								
XIBLK06	3-Nitrotoluene	137 > 46		17909.232								
XIBLK06	PETN	361 > 62		17909.232								

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1127

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

**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

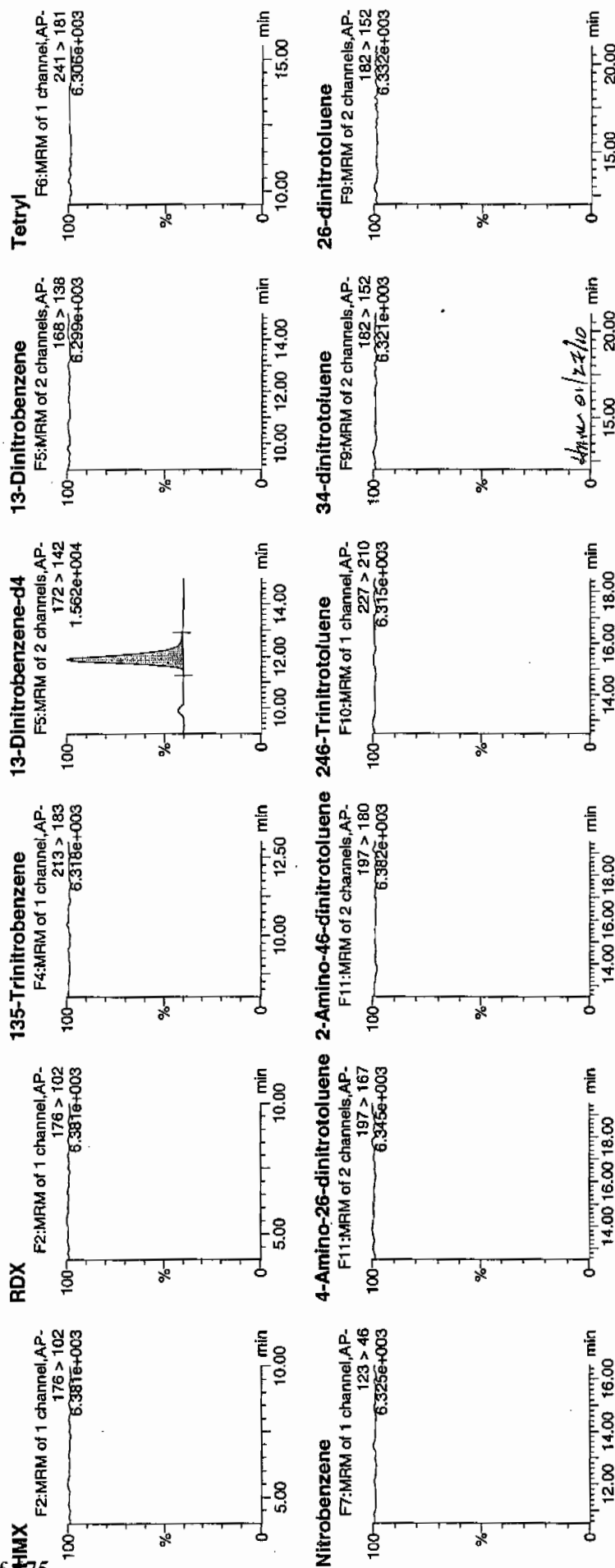
Date: 26-Jan-2010

Time: 16:50:59

ID: XIBLK07

Vial: 1:1,A

1/27/10







4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1127

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

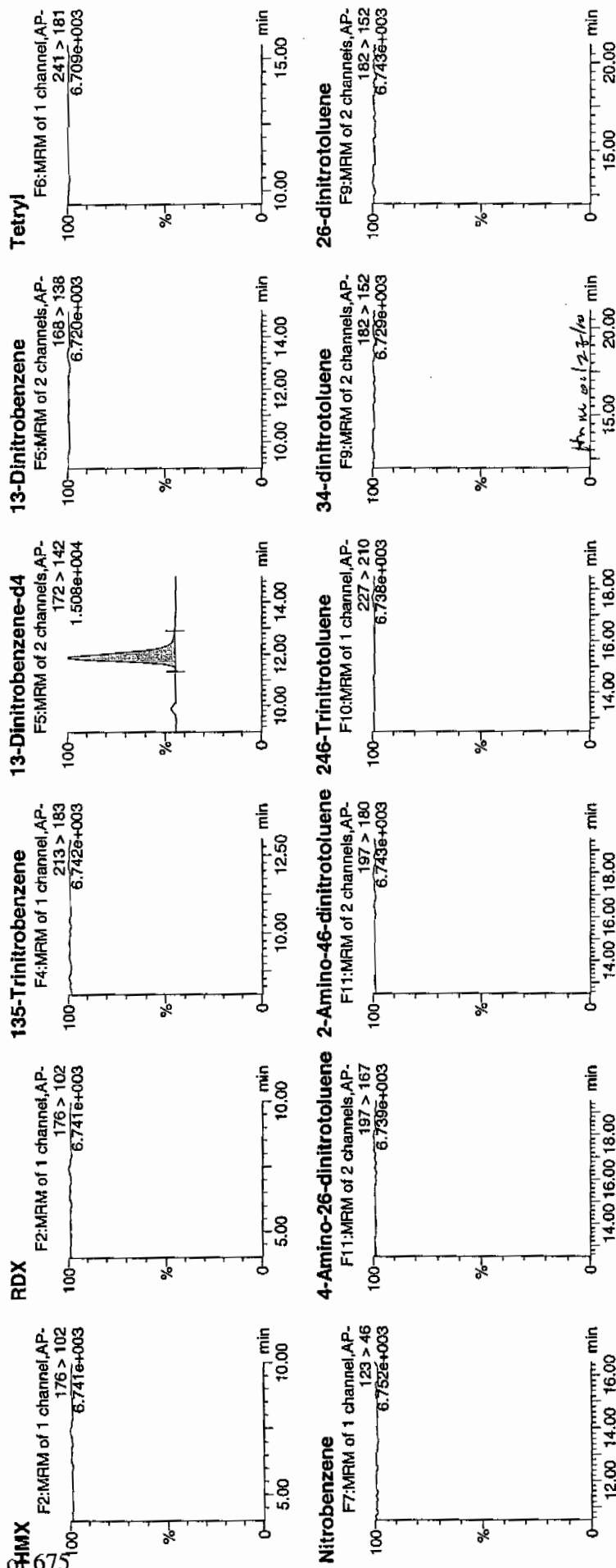
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Time: 19:48:13

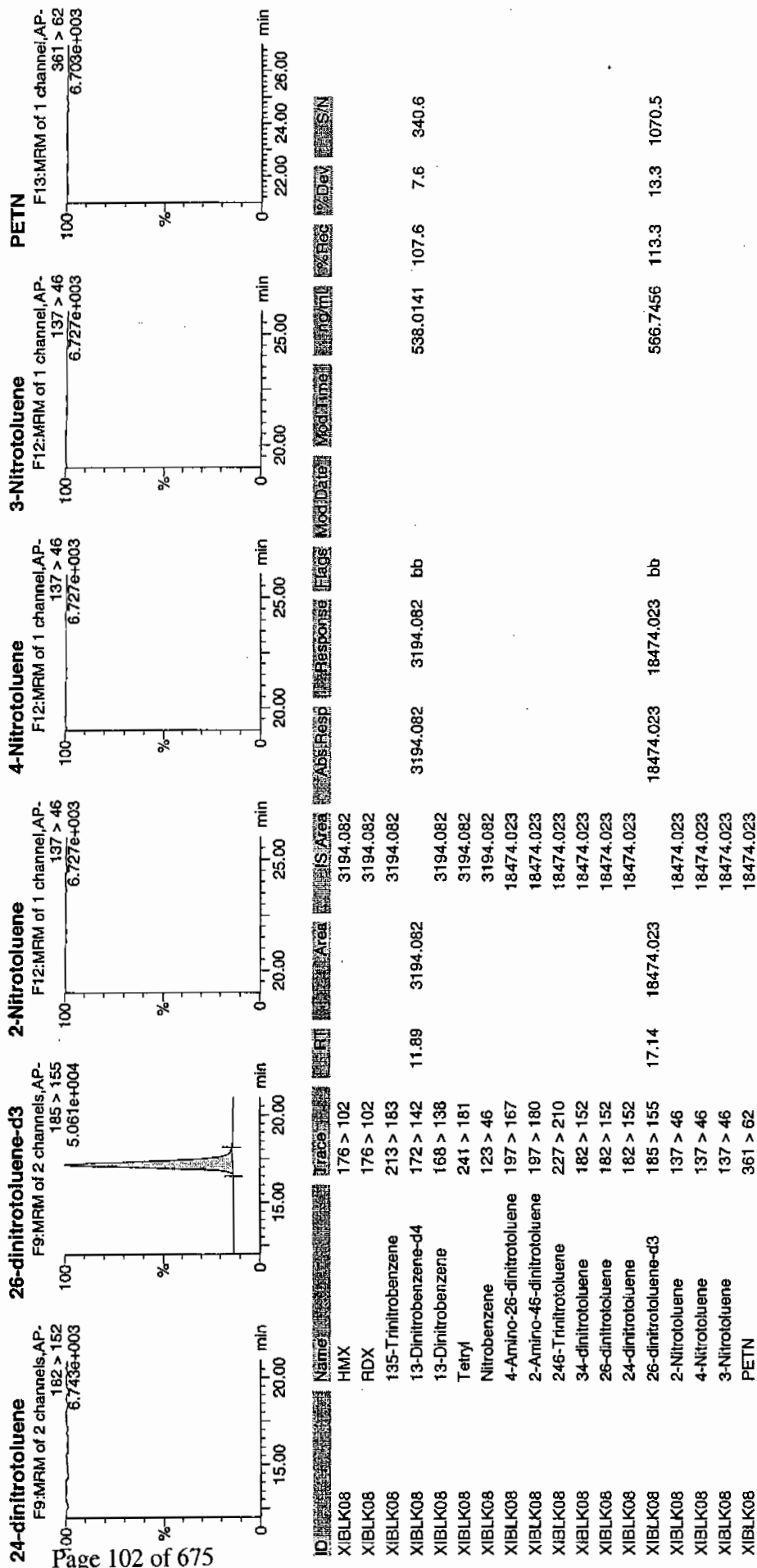
ID: XIBLK08

Vial: 1:1,A

1/27/10



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): 10-1127

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

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA1.qtd, Time: Wed Jan 27 09:20:42 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125074a

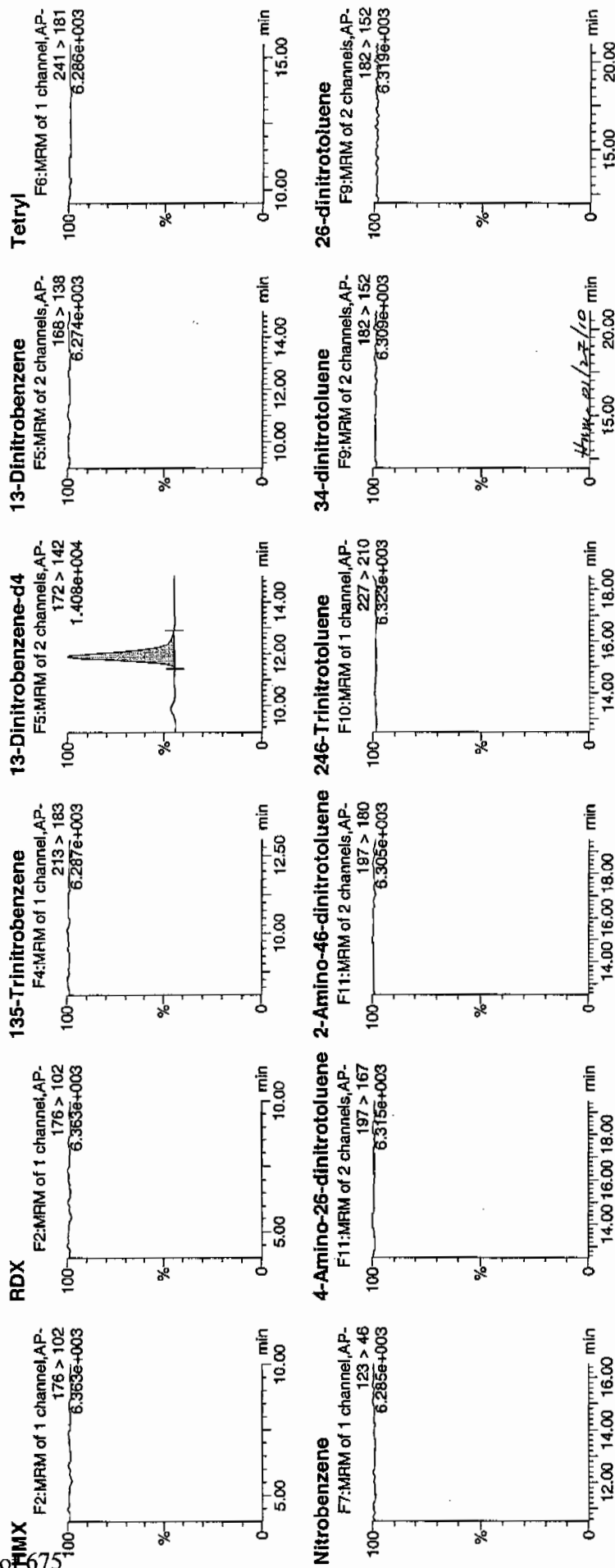
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Time: 23:14:40

ID: XIBLK09

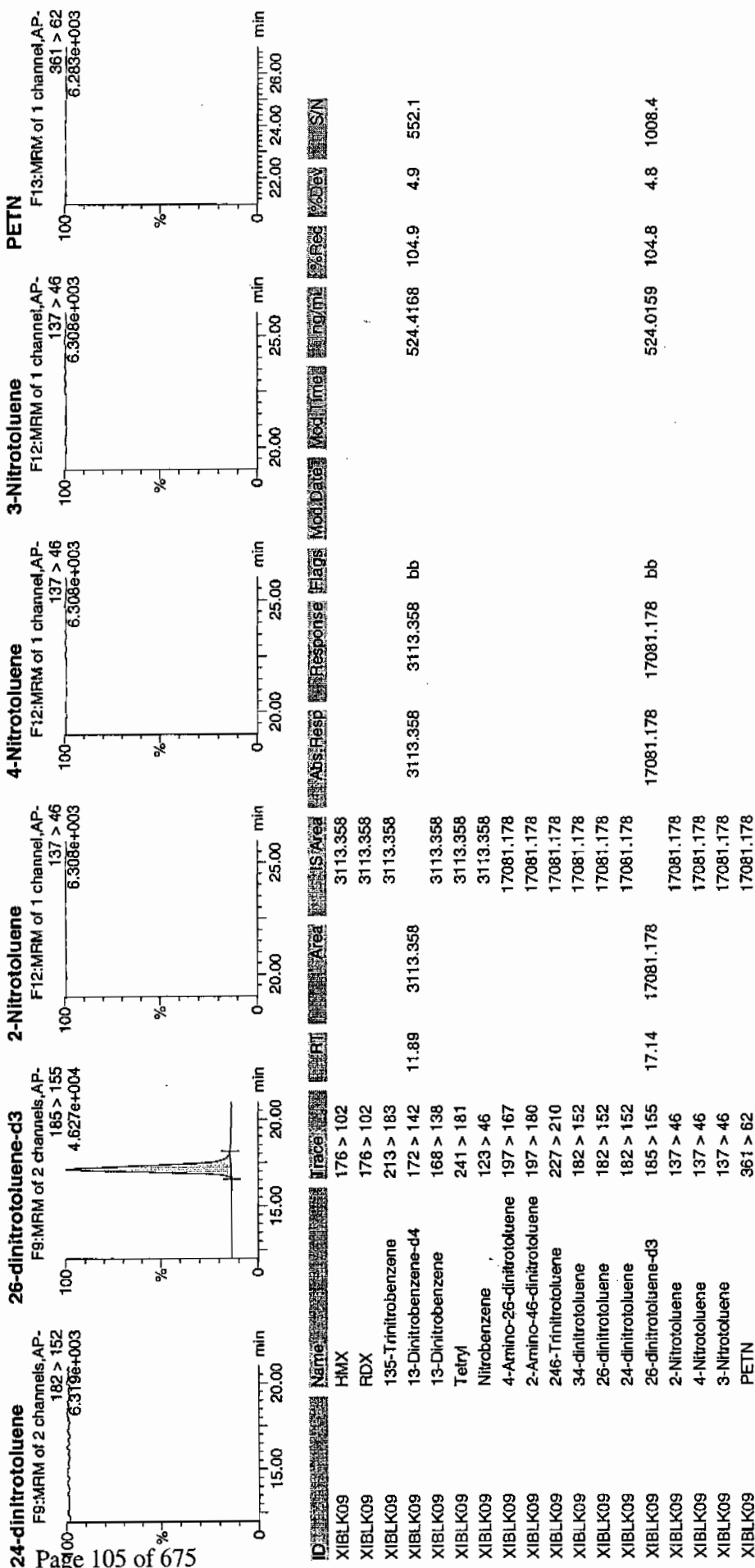
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11/24/10



**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



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1127

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

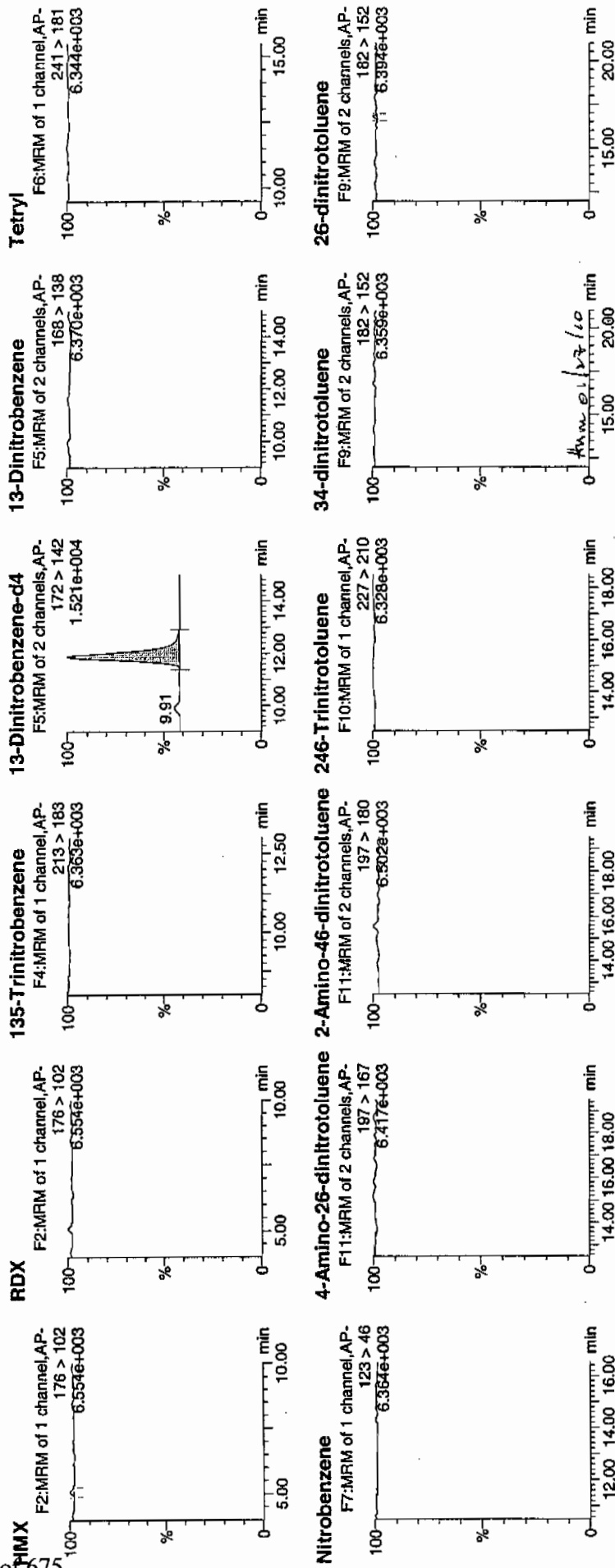
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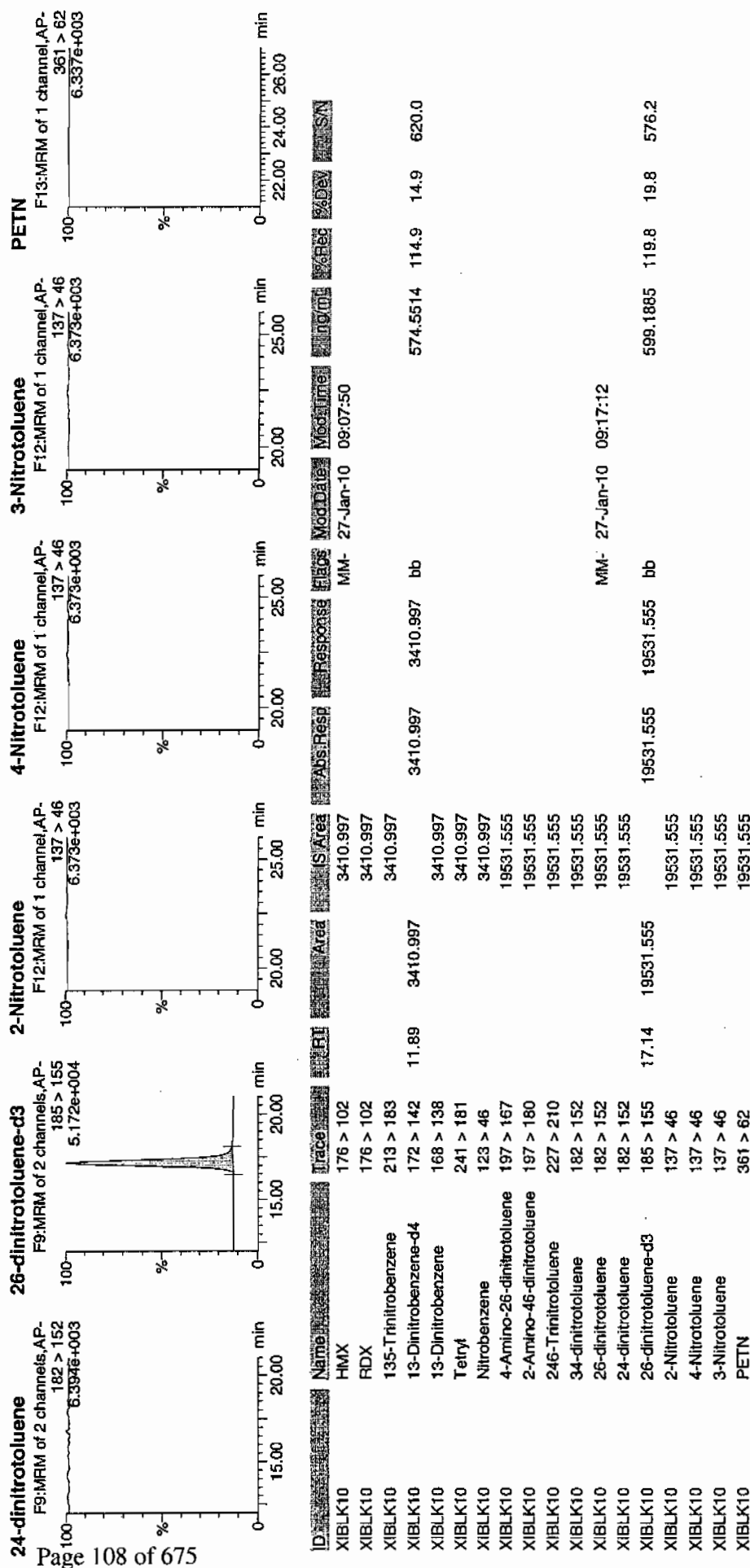
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12/2/10



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): 10-1127

Lab Code: GEL

Lab Sample ID: XIBLK11

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

**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\EXP0125096a

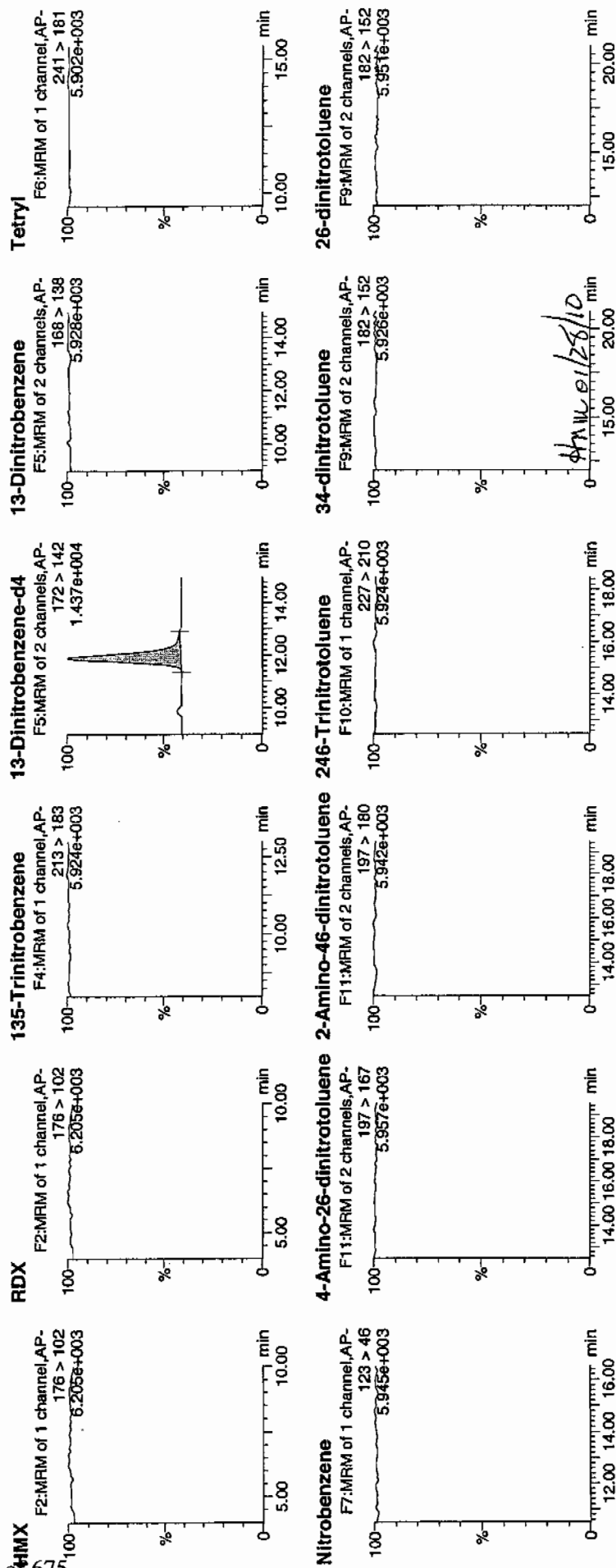
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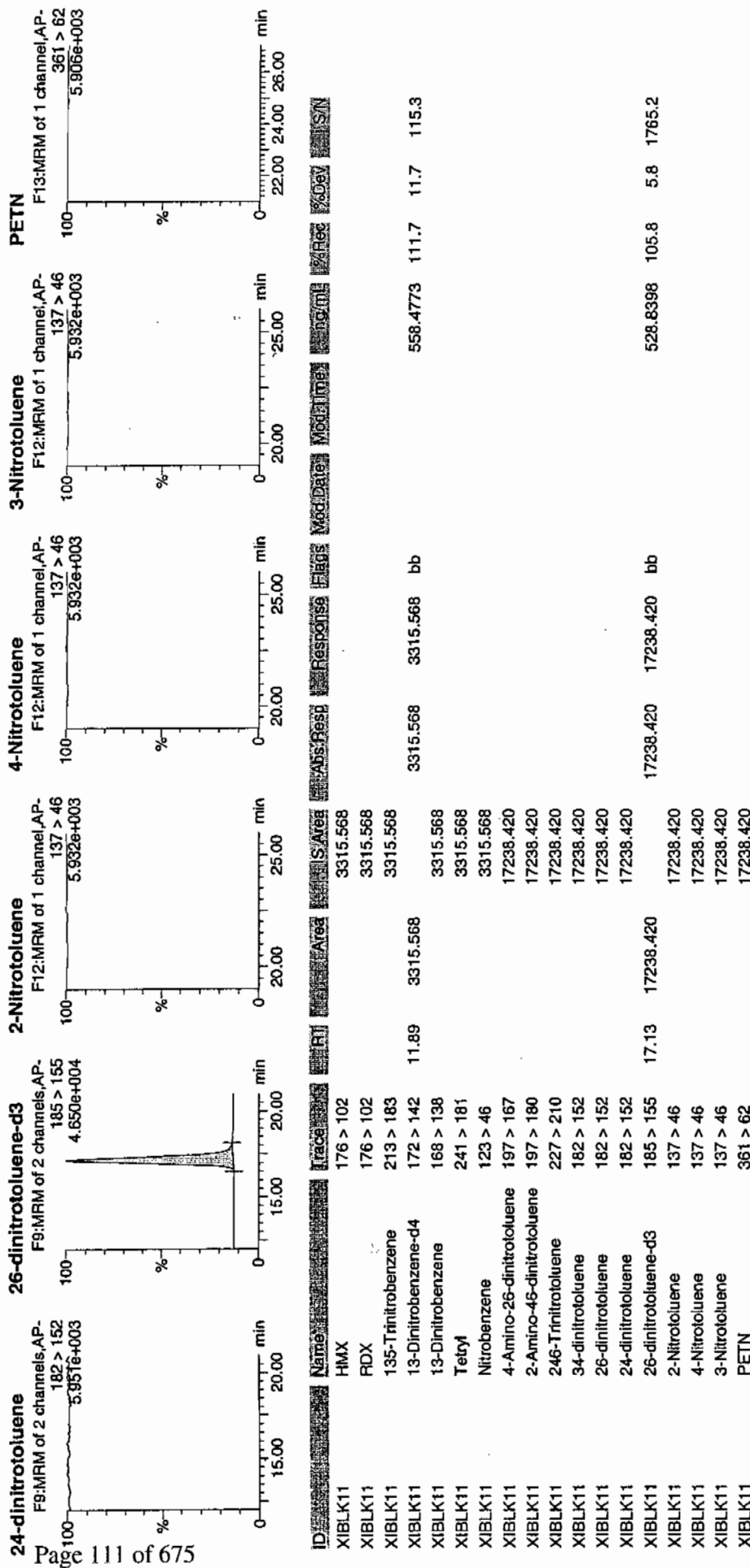
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1/28/10



**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



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1127

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

# Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

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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

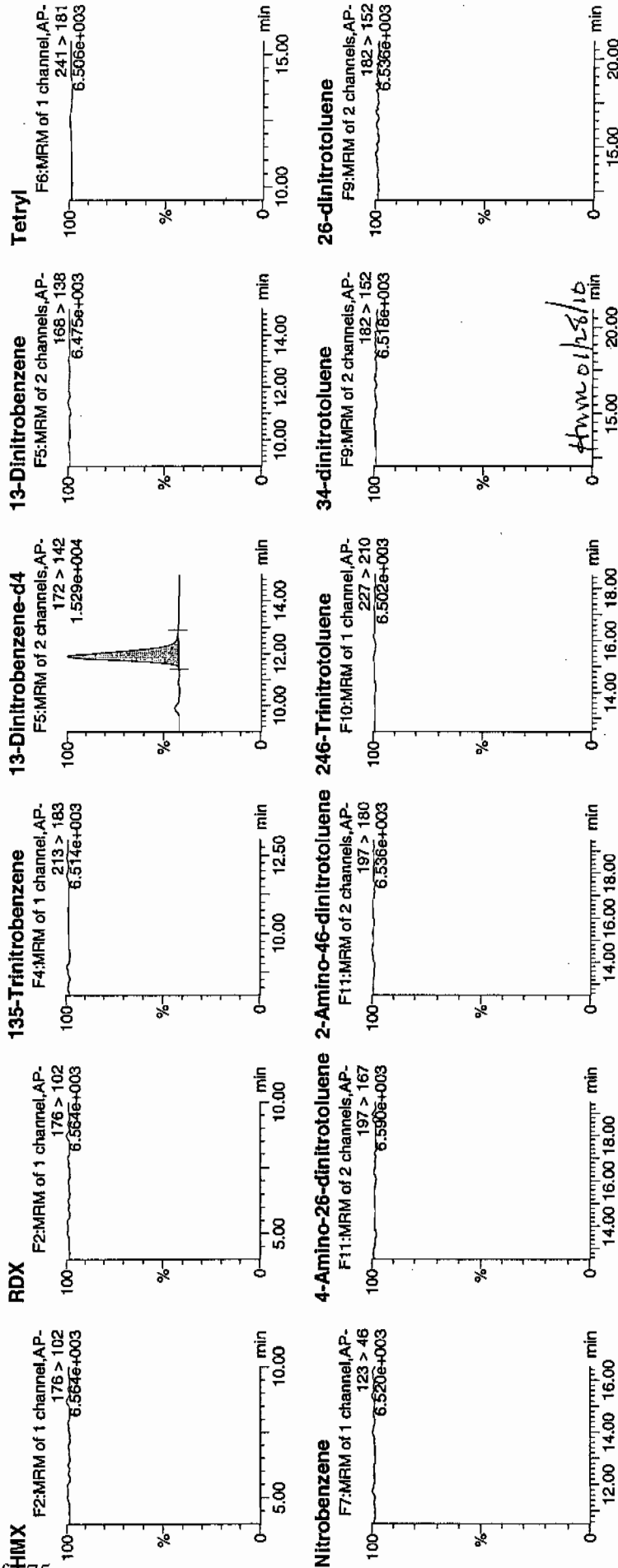
Time: 16:28:07

ID: XIBLK12

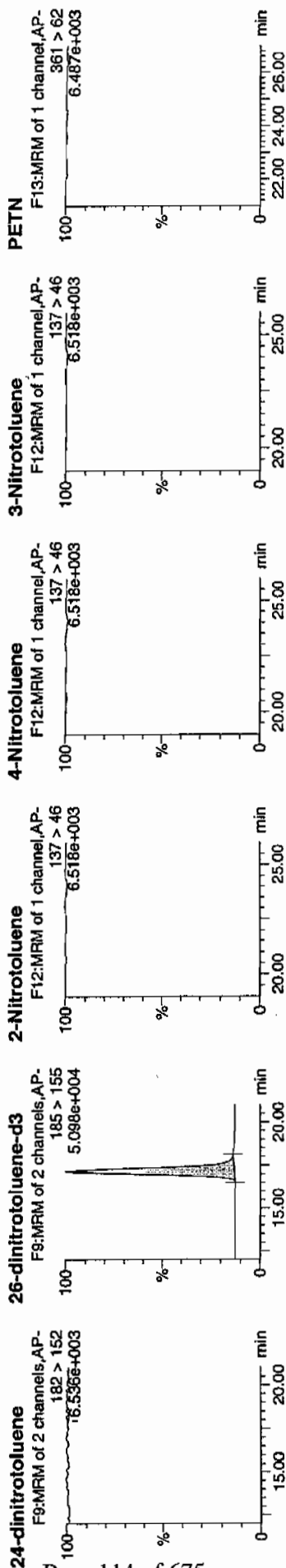
Vial: 1:1,A

1/28/10  
11:28/10

of 75



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): 10-1127

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125114a

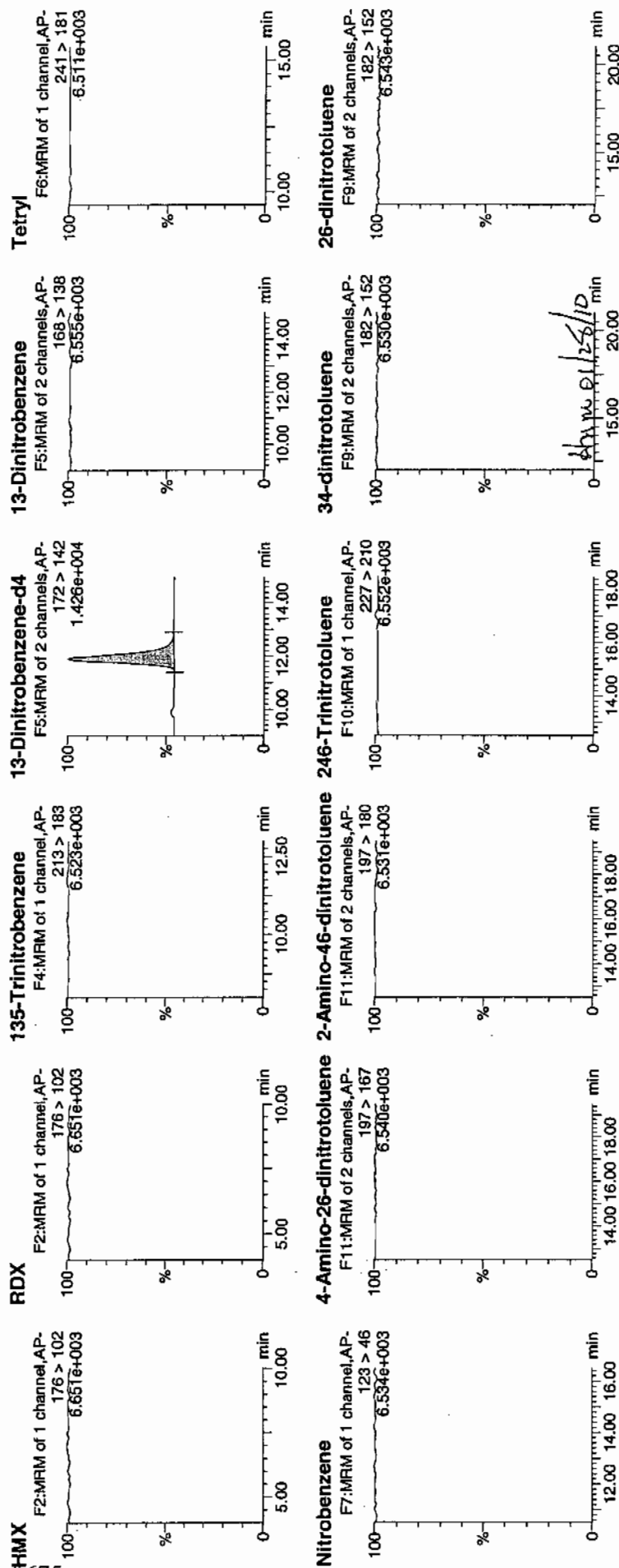
Date: 27-Jan-2010

Time: 18:55:56

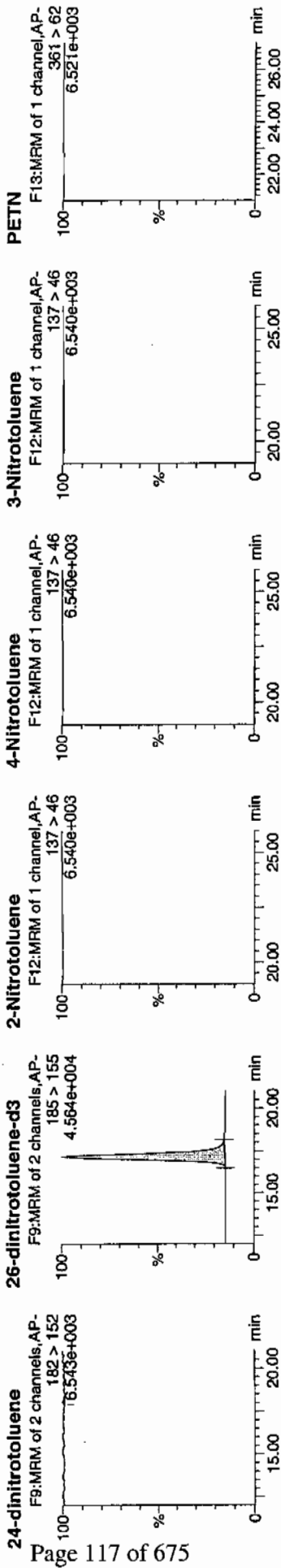
ID: XIBLK13

Vial: 1:1,A

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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	% Rec	% Day	S/N
XIBLK13	HMX	176 > 102			3001.392								
XIBLK13	RDX	176 > 102			3001.392								
XIBLK13	135-Trinitrobenzene	213 > 183			3001.392								
XIBLK13	13-Dinitrobenzene-d4	172 > 142	11.89	3001.392									
XIBLK13	13-Dinitrobenzene	168 > 138			3001.392								
XIBLK13	Tetryl	241 > 181			3001.392								
XIBLK13	Nitrobenzene	123 > 46			16596.992								
XIBLK13	4-Amino-26-dinitrotoluene	197 > 167			16596.992								
XIBLK13	2-Amino-46-dinitrotoluene	197 > 180			16596.992								
XIBLK13	246-Trinitrotoluene	227 > 210			16596.992								
XIBLK13	34-dinitrotoluene	182 > 152			16596.992								
XIBLK13	26-dinitrotoluene	182 > 152			16596.992								
XIBLK13	24-dinitrotoluene	182 > 152			16596.992								
XIBLK13	26-dinitrotoluene-d3	185 > 155	17.16	16596.992					MM- 28-Jan-10	10:37:17			
XIBLK13	2-Nitrotoluene	137 > 46			16596.992								
XIBLK13	4-Nitrotoluene	137 > 46			16596.992								
XIBLK13	3-Nitrotoluene	137 > 46			16596.992								
XIBLK13	PETN	361 > 62			16596.992								
						3001.392	3001.392	bb			101.1	1.1	321.3
						16596.992	16596.992	bb			101.8	1.8	599.9

**4A**  
**Explosives Continuing Calibration Blank**

**Lab Name:** GEL Laboratories LLC

**GEL Job No(SDG):** 10-1127

**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

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

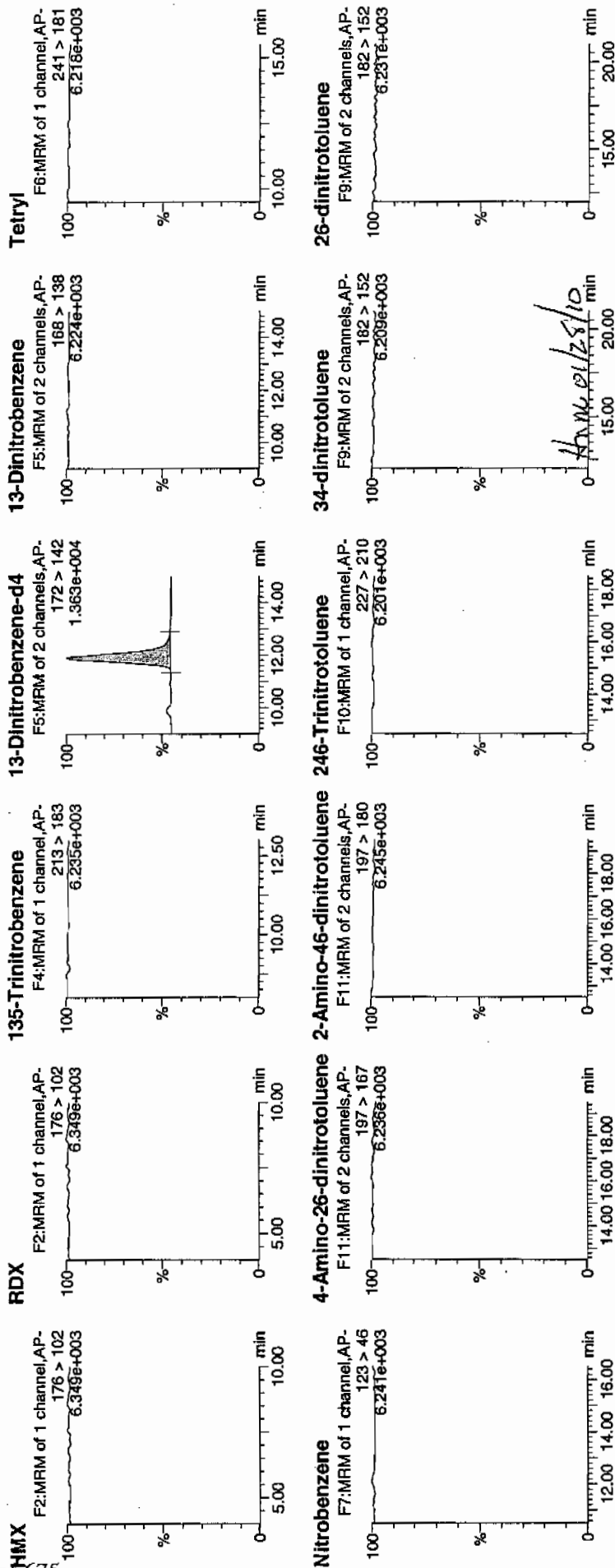
Date: 27-Jan-2010

Time: 20:24:27

ID: XIBLK14

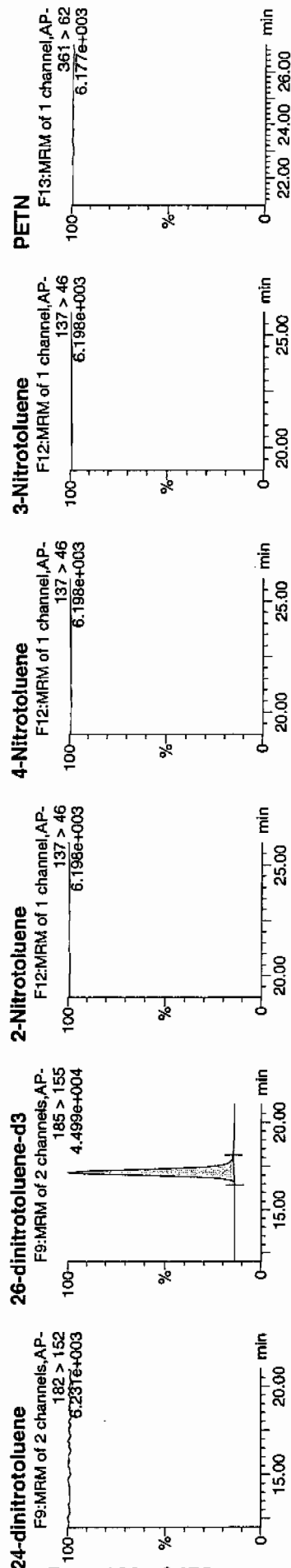
Vial: 1:1,A

1/28/10



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): 10-1127

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

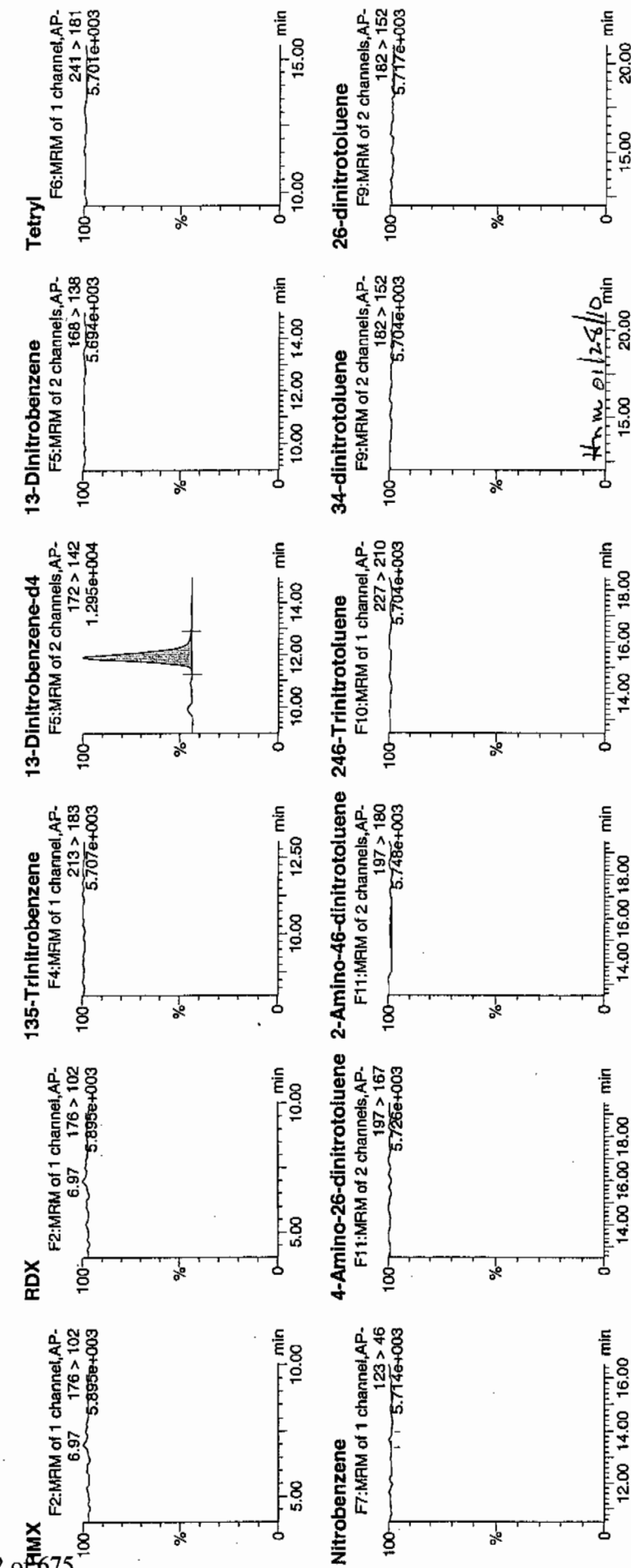
Name: C:\MASSLYNX\NEW\_EXP\_PRO\Data\EXP0125130a

Date: 28-Jan-2010

Time: 02:47:46

ID: XIBLK15

Vial: 1:1,A



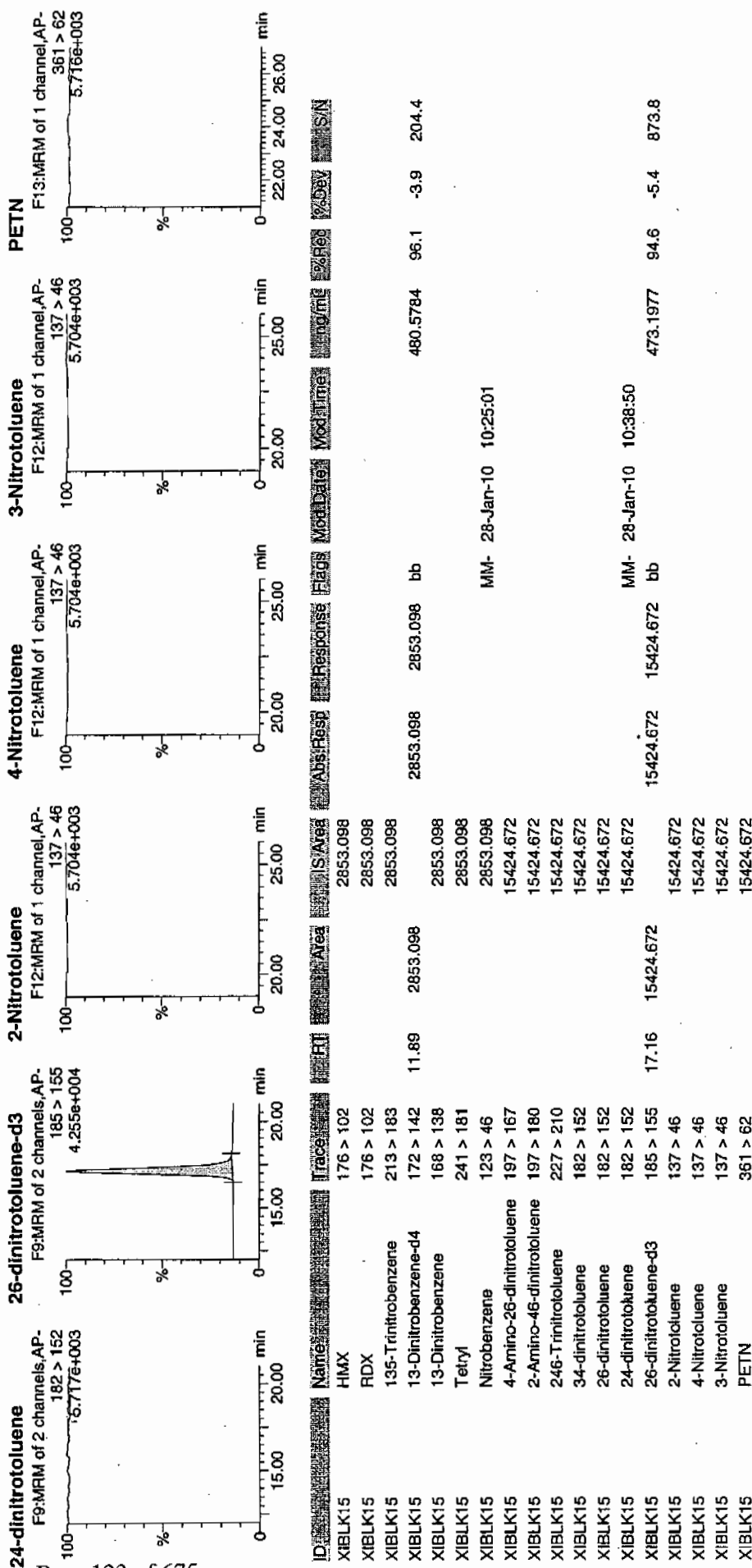


# Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

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Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010



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Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1127

Lab Code: GEL

Lab Sample ID: XIBLK16

Analysis Date: 28-JAN-10 09:11

GEL Data File: EXP0125143a

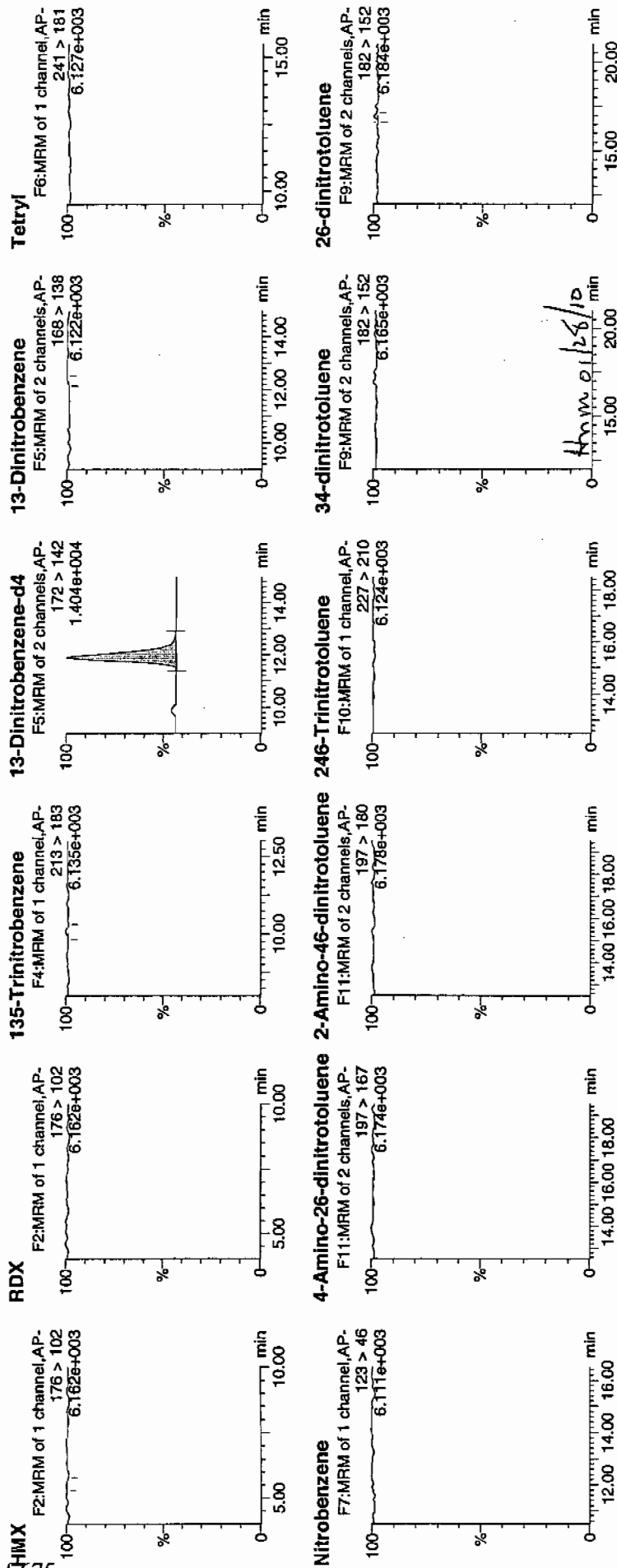
Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

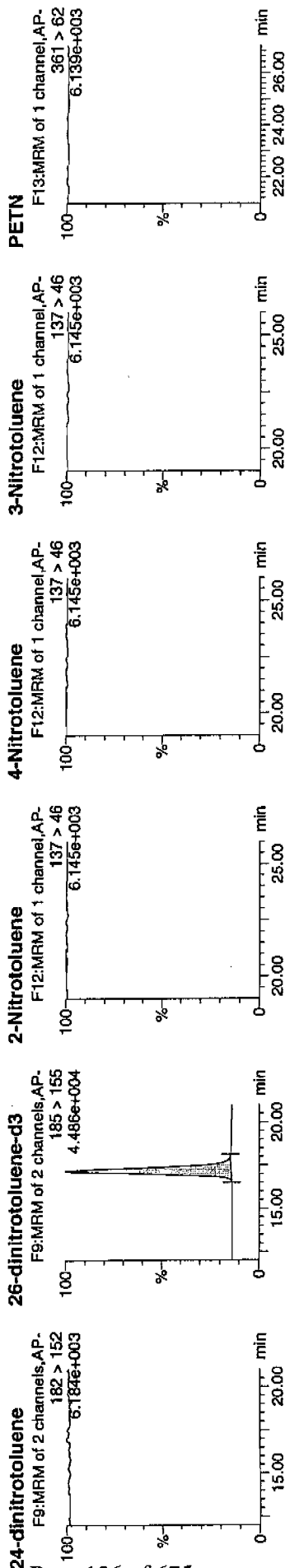
Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	519.151
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	494.217
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	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

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Dataset: C:\MASSLYNX\New\_Exp\PRO012510expA2.qld, Time: Thu Jan 28 10:42:53 2010



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	%Rec	%Dev
XIBLK16	HMx	176 > 102			3082.093				MM-	28-Jan-10	10:22:15	
XIBLK16	RDX	176 > 102			3082.093							
XIBLK16	135-Trinitrobenzene	213 > 183			3082.093				MM-	28-Jan-10	10:23:32	
XIBLK16	13-Dinitrobenzene-d4	172 > 142	11.90	3082.093		3082.093	3082.093	bb	MM-	28-Jan-10	10:23:39	
XIBLK16	13-Dinitrobenzene	168 > 138			3082.093							
XIBLK16	Tetryl	241 > 181			3082.093							
XIBLK16	Nitrobenzene	123 > 46			3082.093							
XIBLK16	4-Amino-26-dinitrotoluene	197 > 167			16109.818							
XIBLK16	2-Amino-46-dinitrotoluene	197 > 180			16109.818							
XIBLK16	246-Trinitrotoluene	227 > 210			16109.818							
XIBLK16	34-dinitrotoluene	182 > 152			16109.818							
XIBLK16	26-dinitrotoluene	182 > 152			16109.818				MM-	28-Jan-10	10:32:01	
XIBLK16	24-dinitrotoluene	182 > 152			16109.818							
XIBLK16	26-dinitrotoluene-d3	185 > 155	17.16	16109.818		16109.818	16109.818	bb				
XIBLK16	2-Nitrotoluene	137 > 46			16109.818							
XIBLK16	4-Nitrotoluene	137 > 46			16109.818							
XIBLK16	3-Nitrotoluene	137 > 46			16109.818							
XIBLK16	PETN	361 > 62			16109.818							

4A  
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1127

Lab Code: GEL

Lab Sample ID: XIBLK02

Analysis Date: 20-JAN-10 12:51

GEL Data File: EXS01200010.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	6.97
TATB	0	0
3,5-Dinitroaniline	0	2.92
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

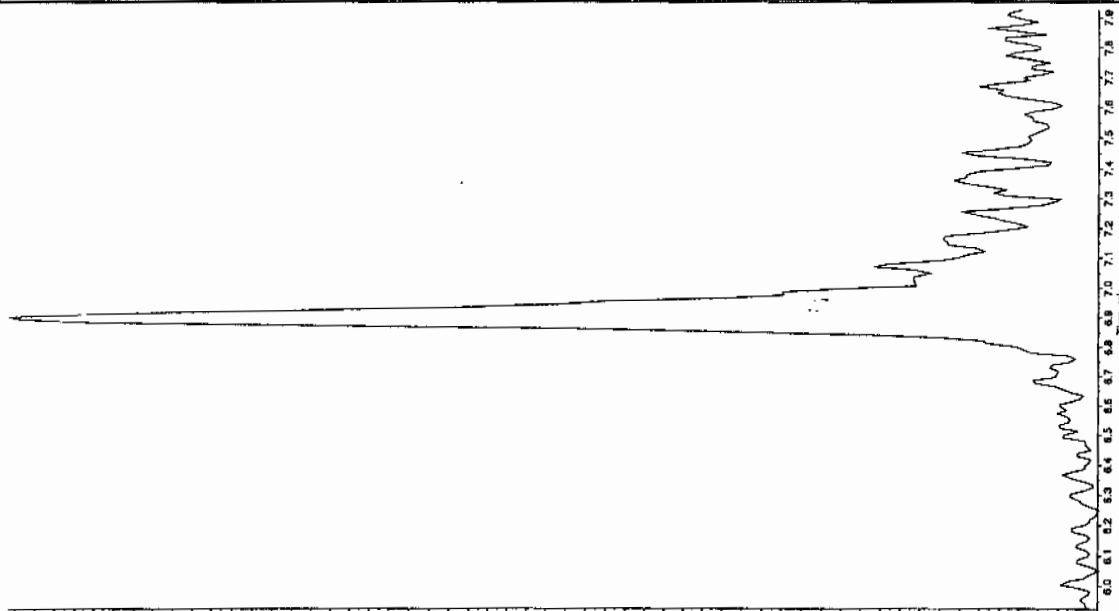
See 12/1/10

Sample Name: "XBLX02" Sample ID: "HILER" File: "EXS01200010.wif"  
 Peak Name: "TATB" Mass(es): "257.204.9 amu"  
 Comment: "LCMSEXP\_B" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Sample Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/26/2010  
 Acq. Time: 12:51:04 PM  
 Modified: No

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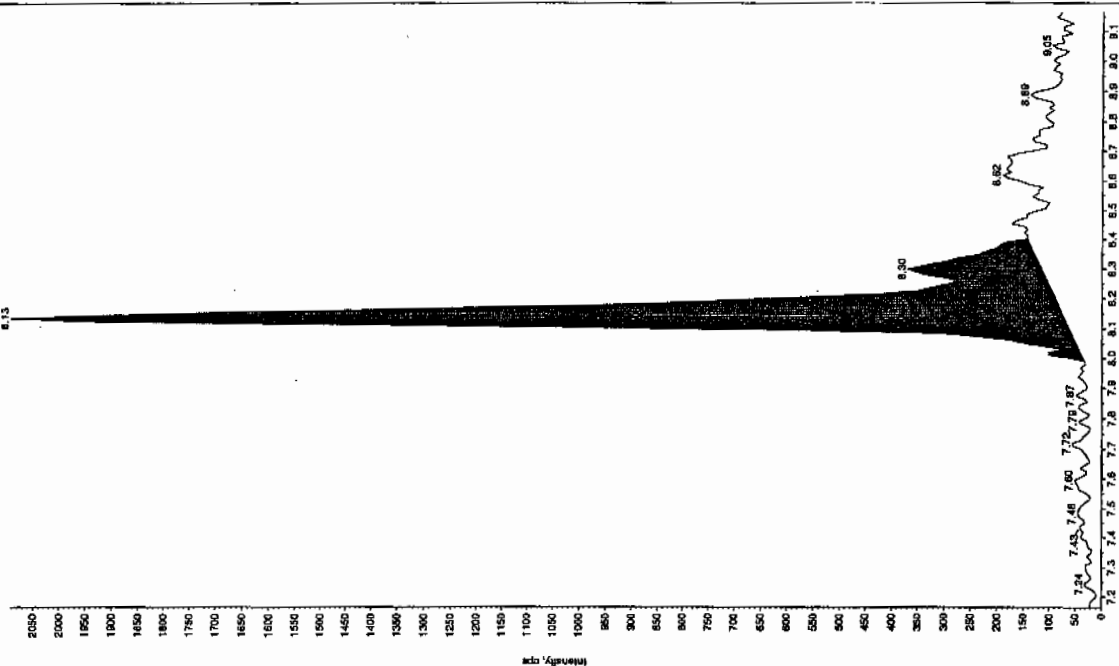
Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 2000.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 15.0 sec  
 Expected RT: 8.16 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.13 min  
 Area: 1.15e+004 counts  
 Height: 2022.150 cps  
 Start Time: 7.93 min  
 End Time: 8.40 min



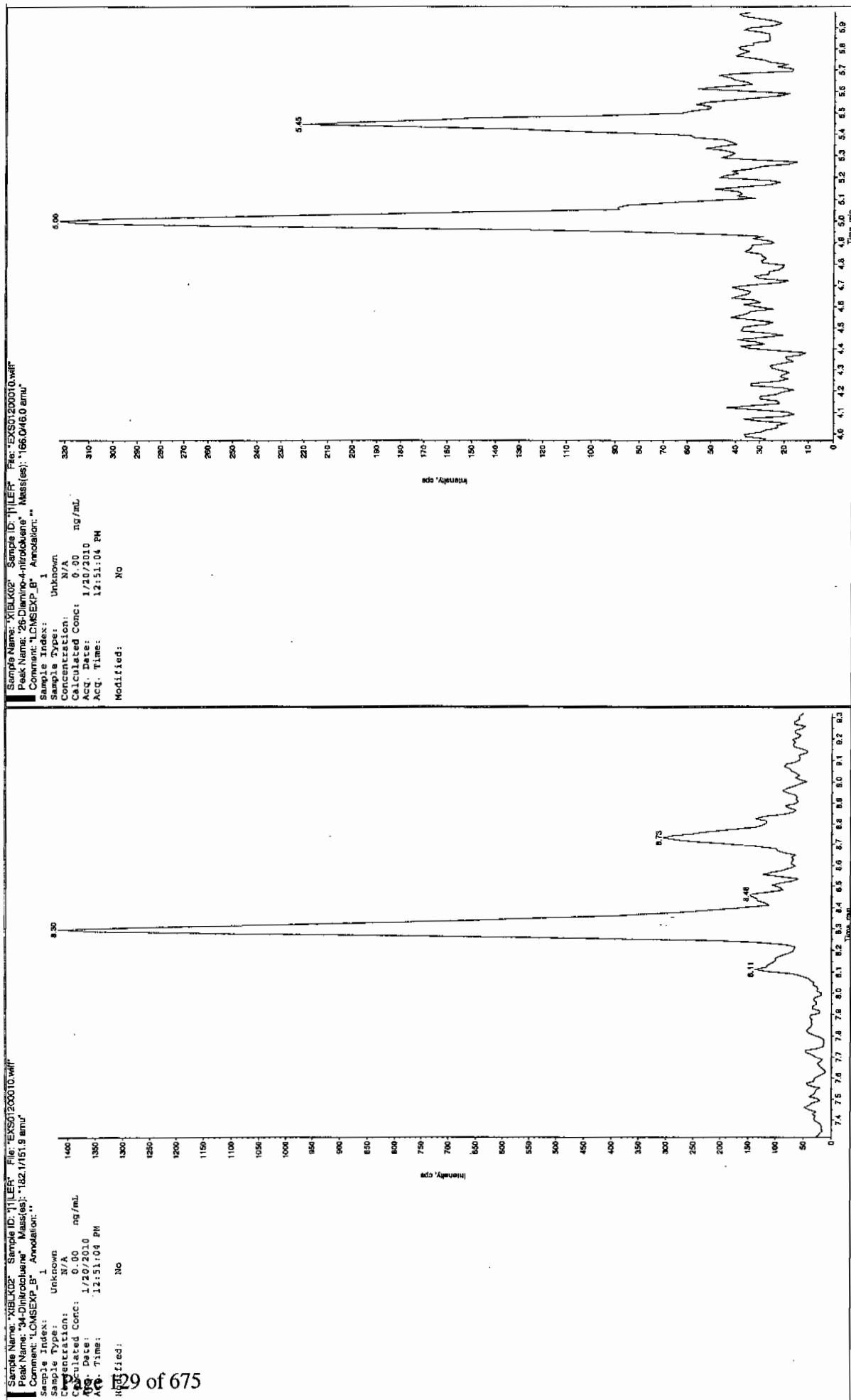
Sample Name: "XBLX02" Sample ID: "HILER" File: "EXS01200010.wif"  
 Peak Name: "35-Dinitroaniline" Mass(es): "192.046.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: "

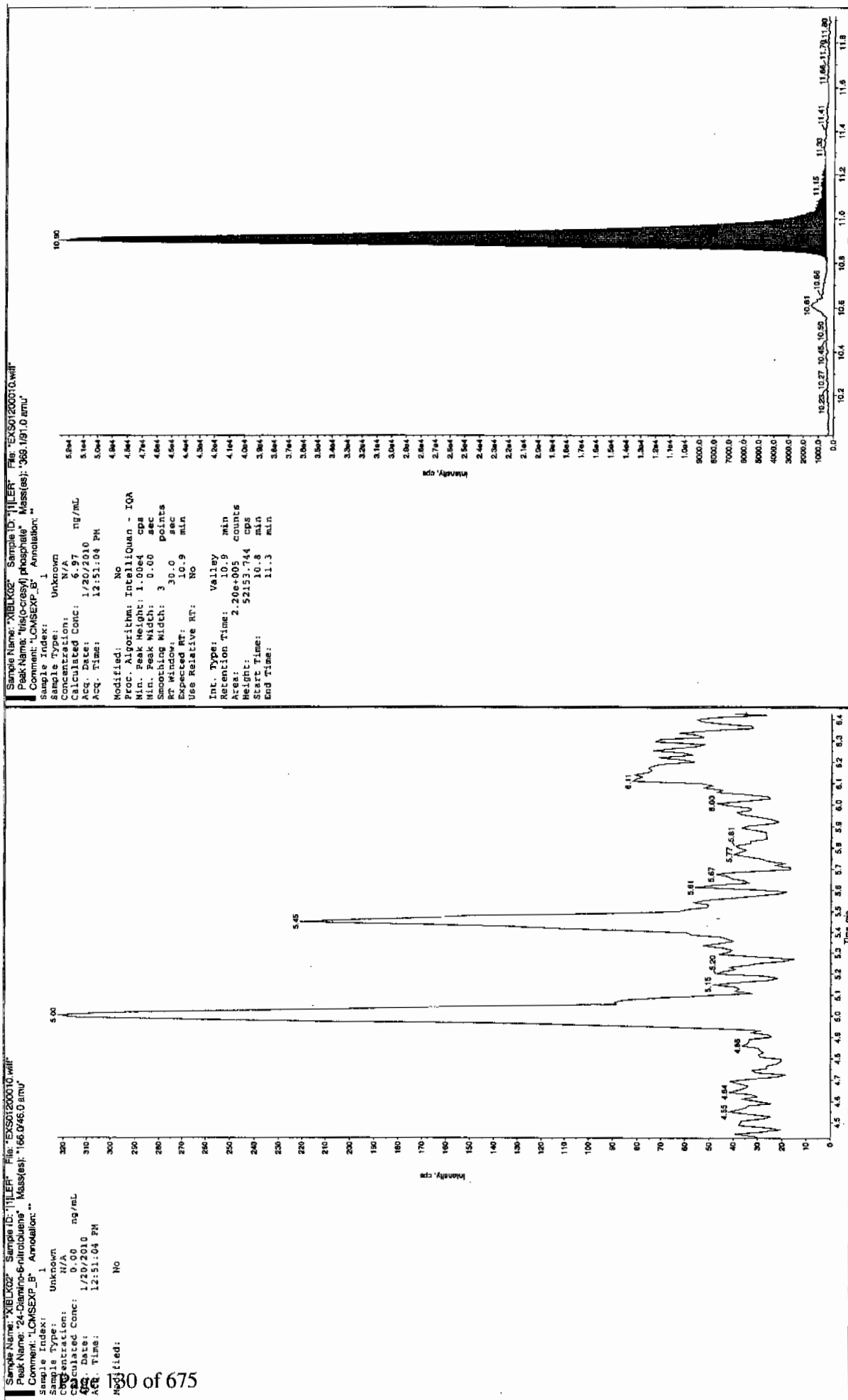
Sample Index: 1  
 Sample Type: Unknown  
 Sample Concentration: N/A  
 Calculated Conc: 2.92 ng/mL  
 Acq. Date: 1/20/2010  
 Acq. Time: 12:51:04 PM  
 Modified: No

Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 2000.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 15.0 sec  
 Expected RT: 8.16 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.13 min  
 Area: 1.15e+004 counts  
 Height: 2022.150 cps  
 Start Time: 7.93 min  
 End Time: 8.40 min



See 12/1/10







4A  
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1127

Lab Code: GEL

Lab Sample ID: XIBLK03

Analysis Date: 20-JAN-10 13:22

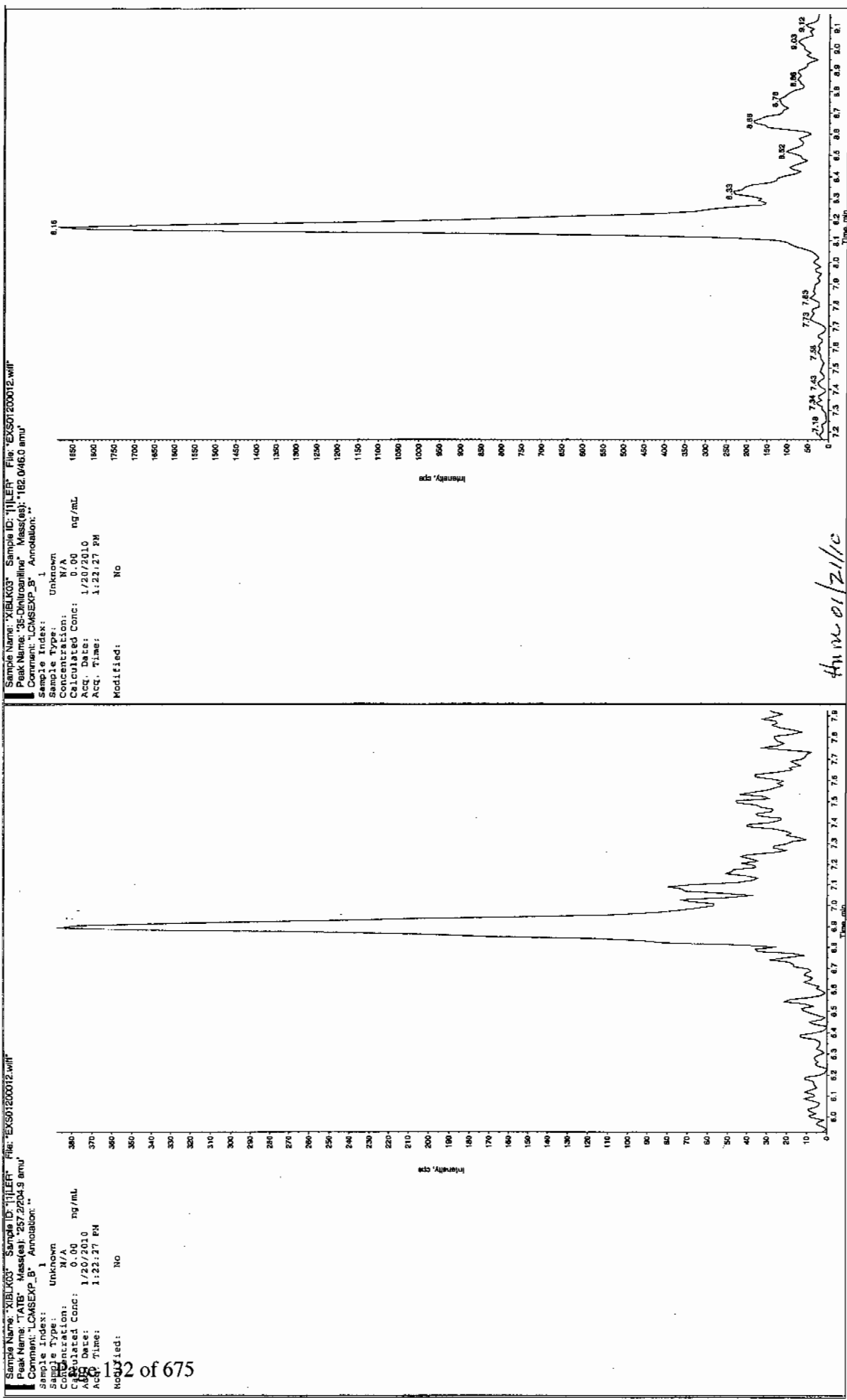
GEL Data File: EXS01200012.wiff

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	3.31
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

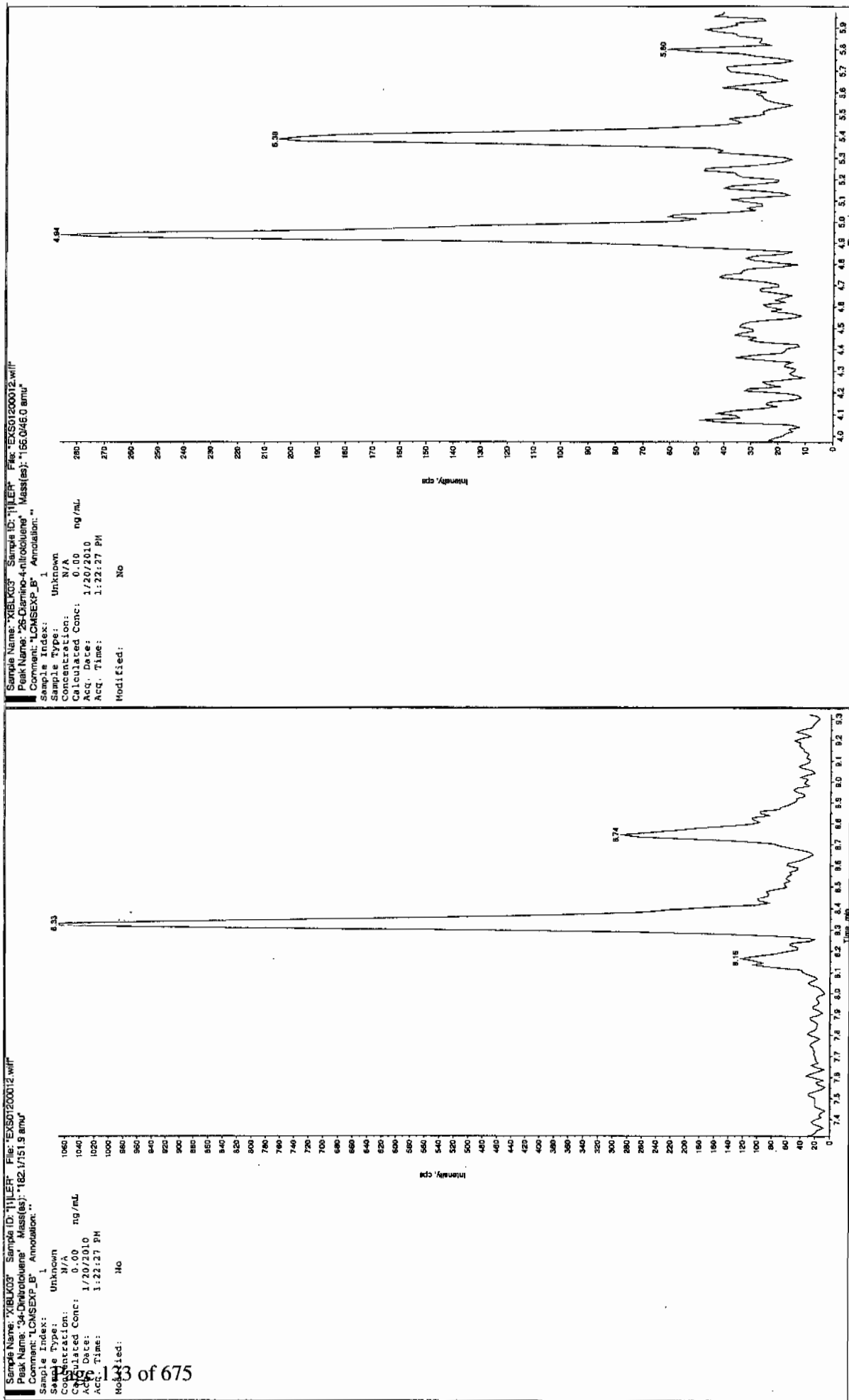
Don 12/1/10



Sample Name: XBLK03\* Sample ID: 1111ER\* File: EX501200012.wif  
 Peak Name: 35-CHLOROPHENOL\* Mass(es): 182.0460 amu  
 Comment: LCMSEXP\_B\* Annotation:  
 Sample Index: 1  
 Sample Type: Unknown  
 Concentrated Conc: 0.00 ng/mL  
 Acq. Date: 1/20/2010  
 Acq. Time: 1:22:27 PM  
 Modified: No

Sample Name: XBLK03\* Sample ID: 1111ER\* File: EX501200012.wif  
 Peak Name: 17ATB\* Mass(es): 237.22045 amu  
 Comment: LCMSEXP\_B\* Annotation:  
 Sample Index: 1  
 Sample Type: Unknown  
 Concentrated Conc: 0.00 ng/mL  
 Acq. Date: 1/20/2010  
 Acq. Time: 1:22:27 PM  
 Modified: No

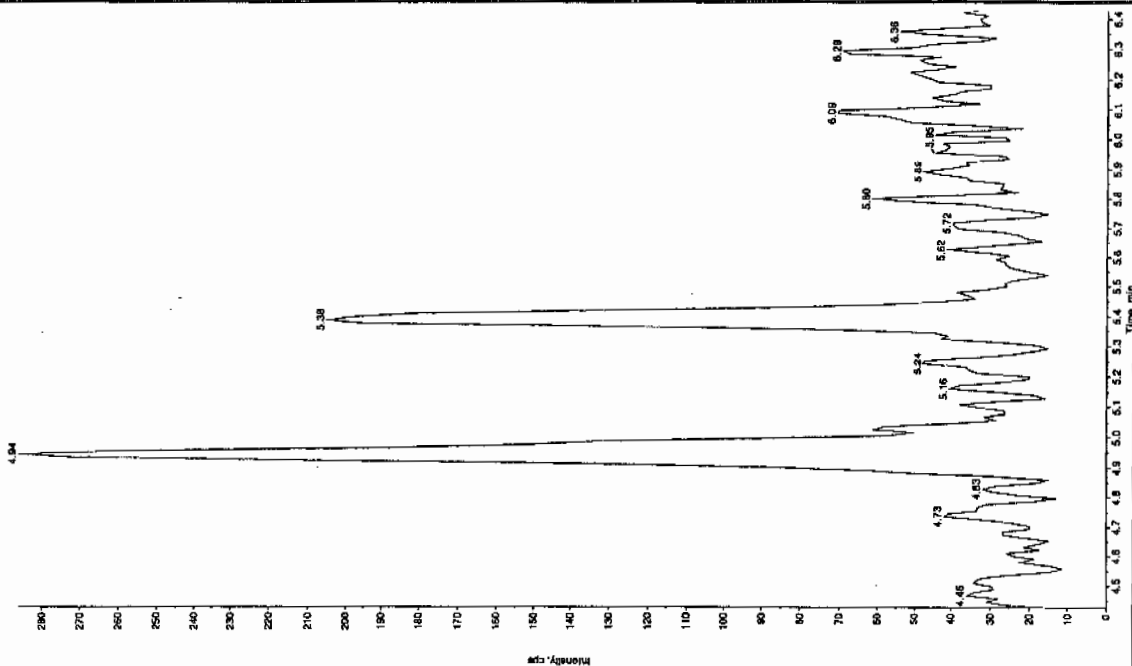
Don 01/21/10



Sample Name: "XBLX03" Sample ID: "JILLER" File: "EXS01200012.wif"  
 Peak Name: "24-Diamino-6-nitrocoucine" 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: 1/20/2010  
 Acq. Time: 1:22:27 PM  
 Modified: No

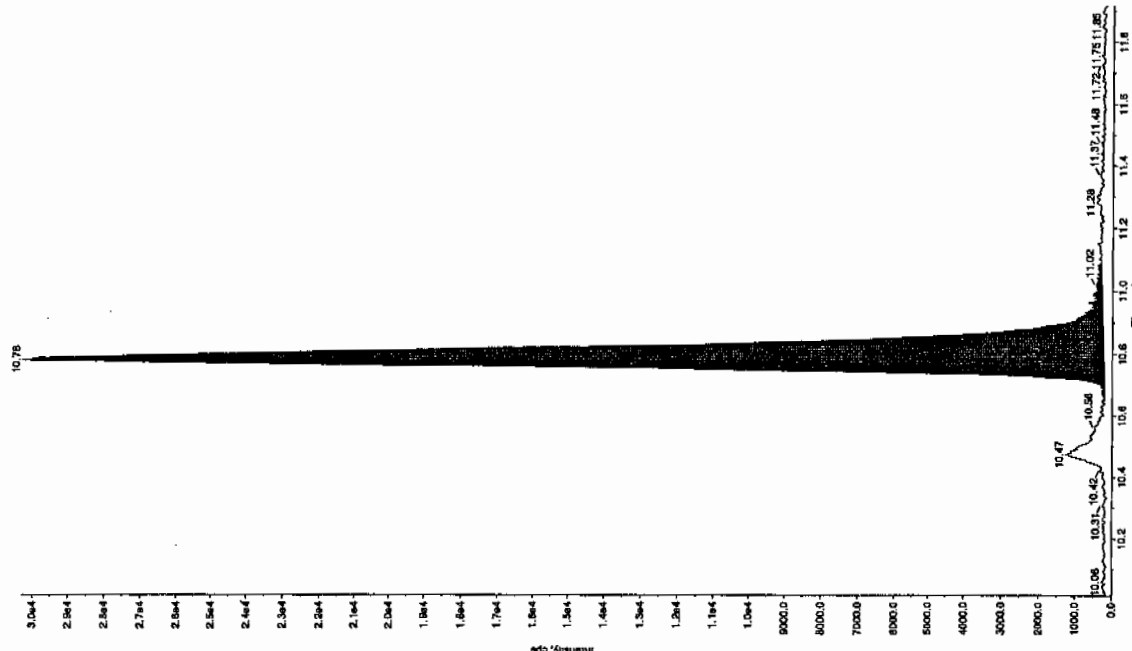
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Sample Name: "XBLX03" Sample ID: "JILLER" File: "EXS01200012.wif"  
 Peak Name: "bis(cresyl) phosphate" Mass(es): "388.191.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 3.21 ng/mL  
 Acq. Date: 1/20/2010  
 Acq. Time: 1:22:27 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: 16.9 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.8 min  
 Area: 1.35e4 counts  
 Height: 30000 cps  
 Start Time: 0.0 min  
 End Time: 11.1 min



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1127

Lab Code: GEL

Lab Sample ID: XIBLK04

Analysis Date: 20-JAN-10 16:46

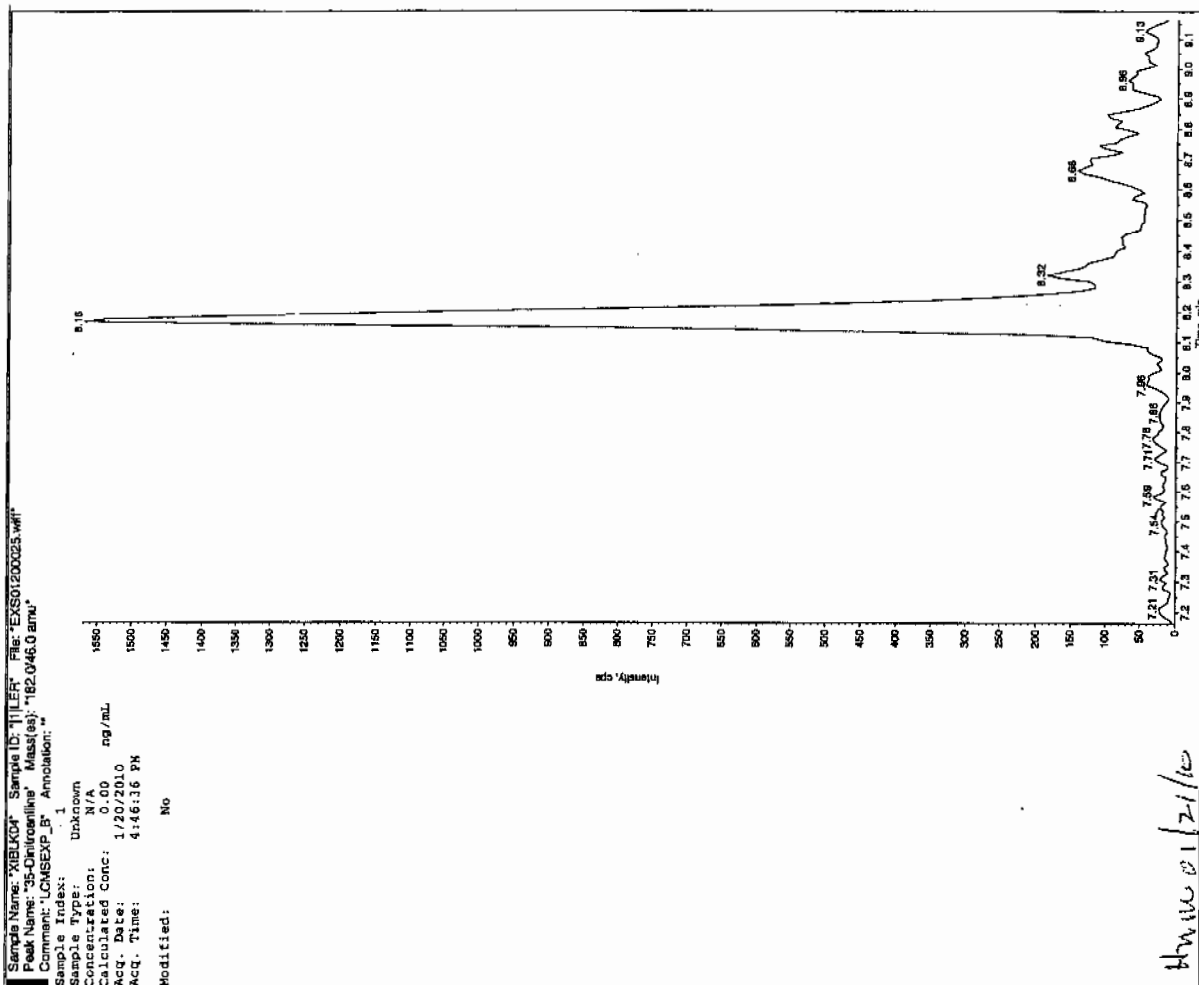
GEL Data File: EXS01200025.wiff

Instrument ID: LCMSMS

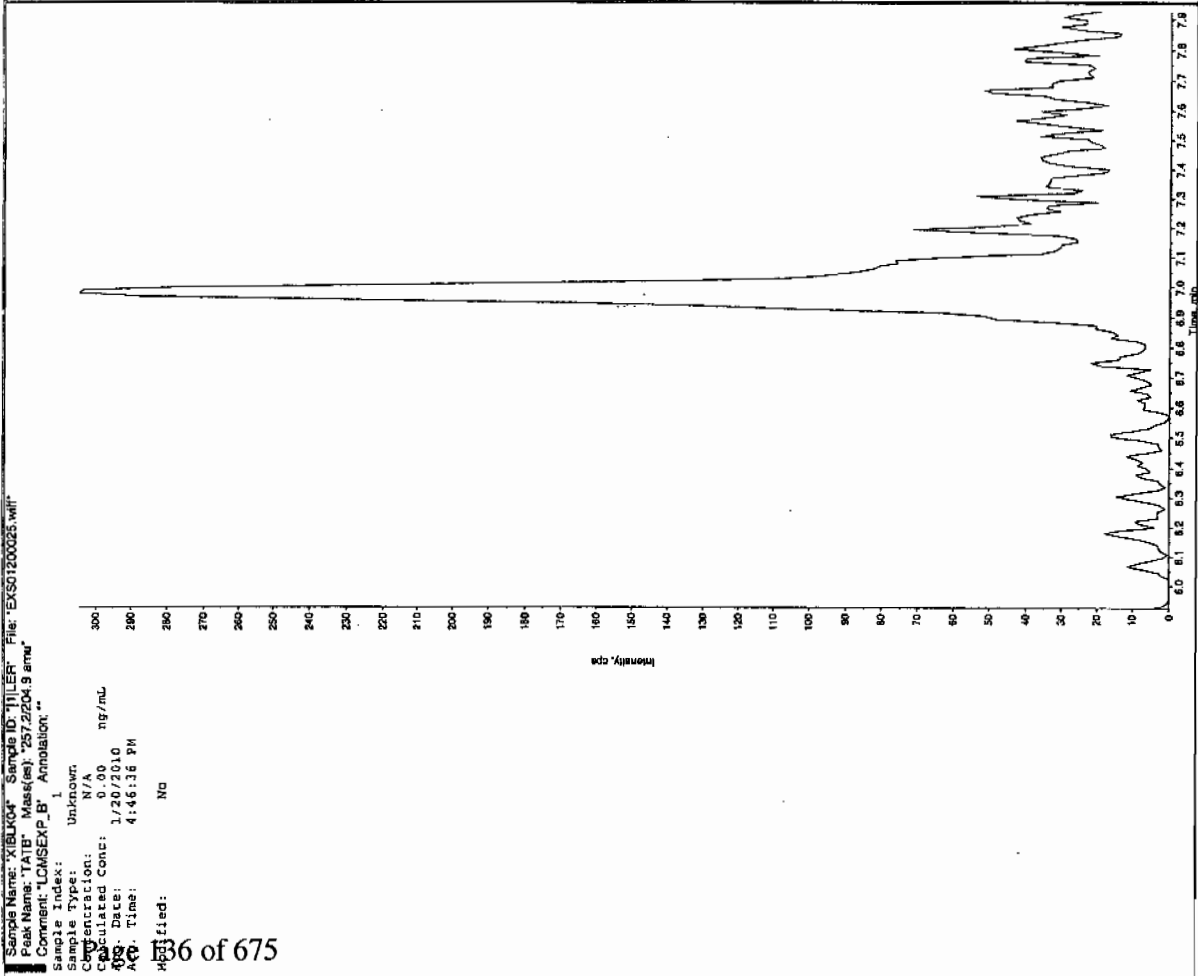
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	.915
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Scan 112110

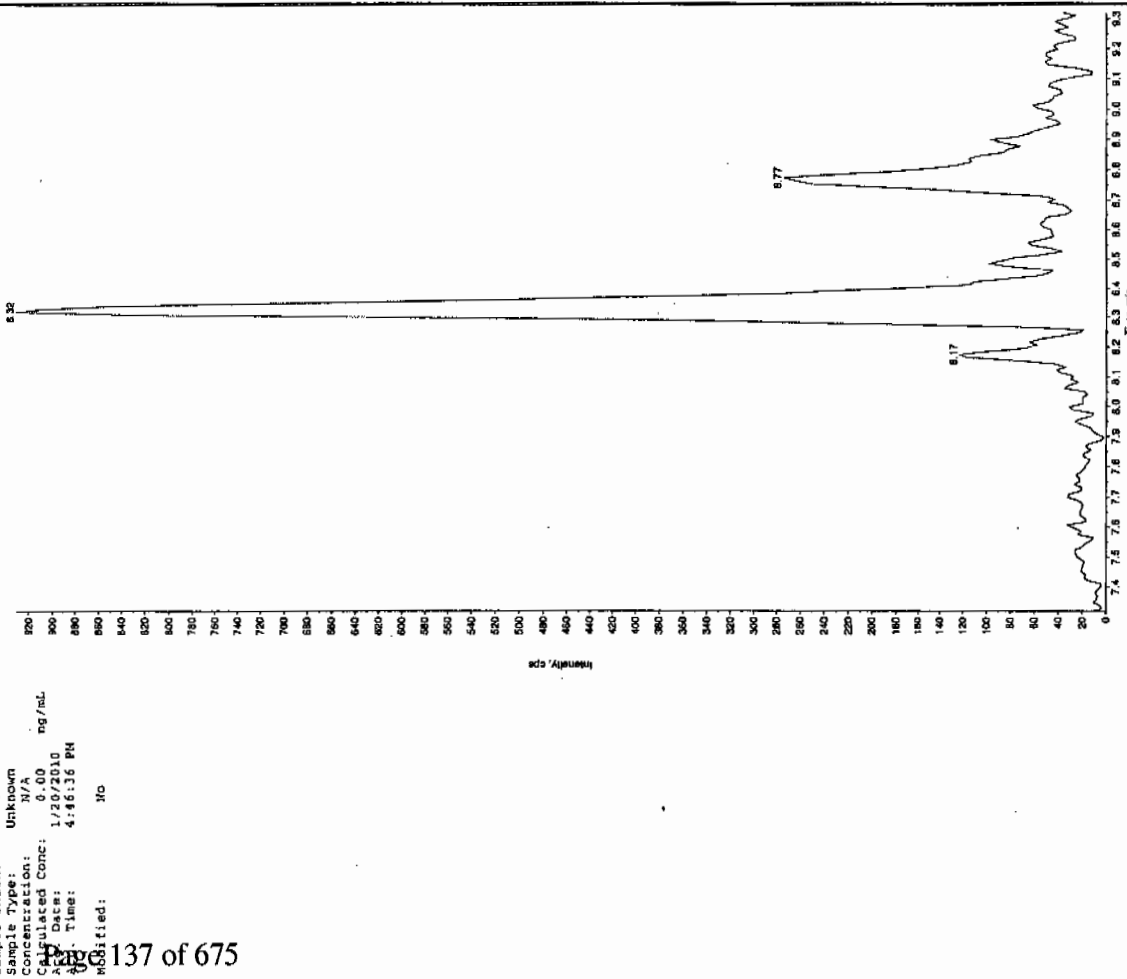


112110



Sample Name: "XBLK04" Sample ID: "J1LER" File: "EX50120025.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: 1/27/2010  
 Acq. Time: 4:46:36 PM  
 Modified: No



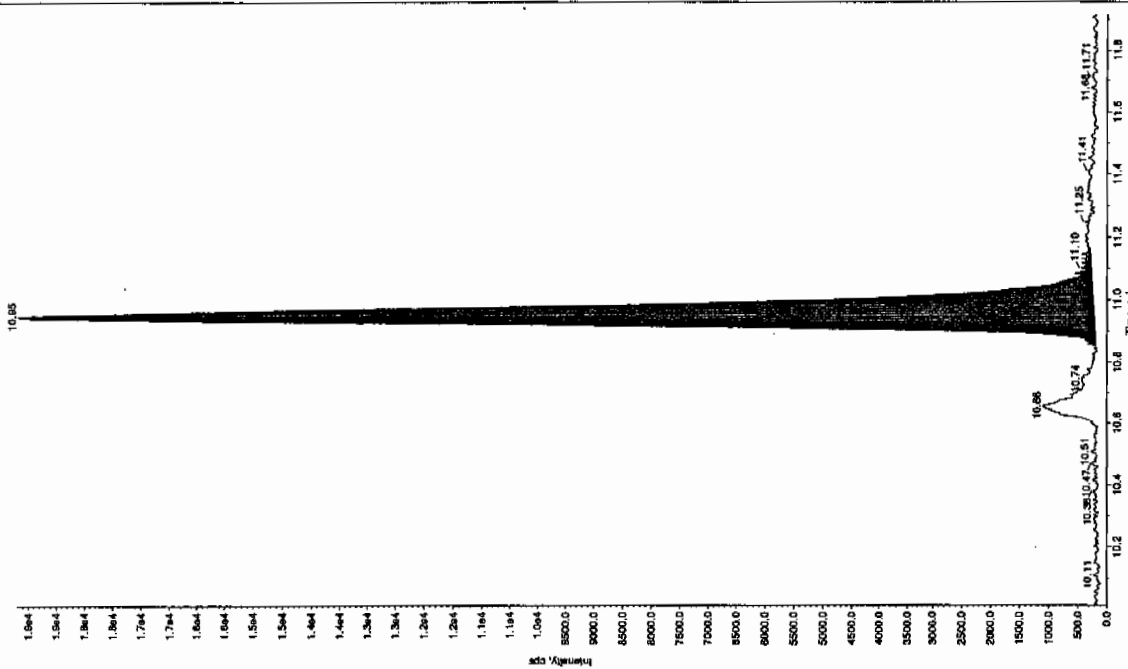
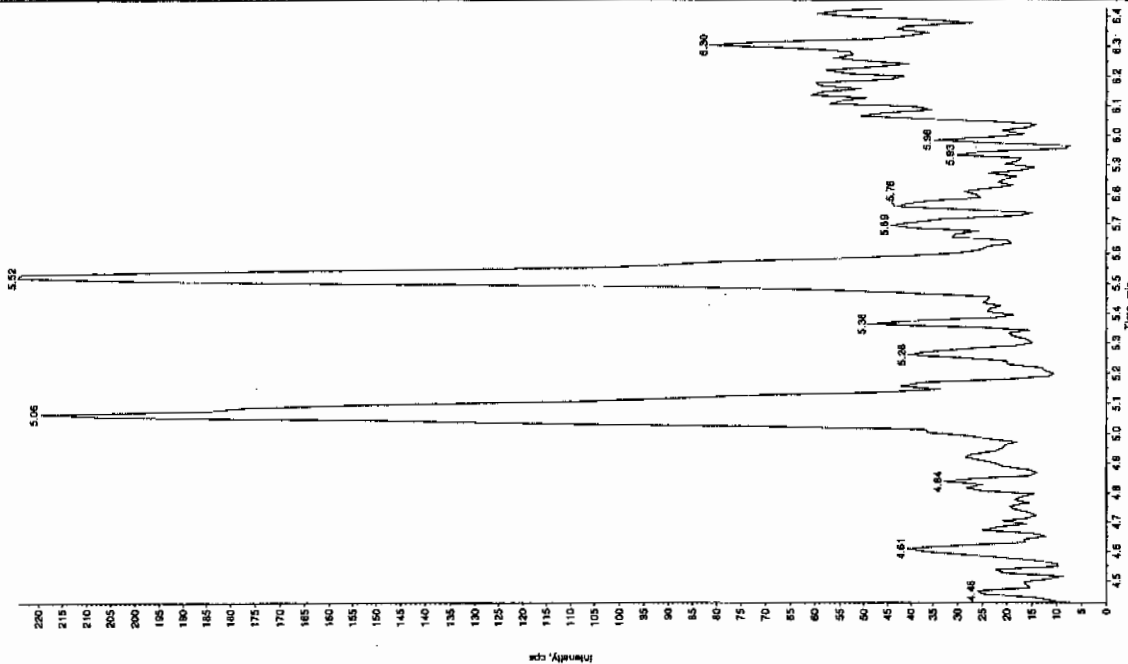
Sample Name: "XBLK04" Sample ID: "J1LER" File: "EX50120025.wif"  
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.17151 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/27/2010  
 Acq. Time: 4:46:36 PM  
 Modified: No

Sample Name: "XBLK04" Sample ID: "111ER" File: "EXS01200025.wit"  
 Peak Name: "24-Diamino-5-nitrofluorene" Mass(es): "156.046.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 1.2072010 ng/mL  
 Acq. Date: 1/20/2010  
 Acq. Time: 4:46:36 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: 10.9 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 11.0 min  
 Area: 8.03e+004 counts  
 Height: 18981.157 cps  
 Start Time: 10.5 min  
 End Time: 11.2 min





4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1127

Lab Code: GEL

Lab Sample ID: XIBLK05

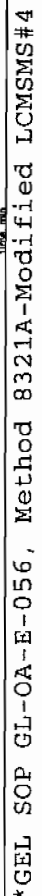
Analysis Date: 20-JAN-10 20:10

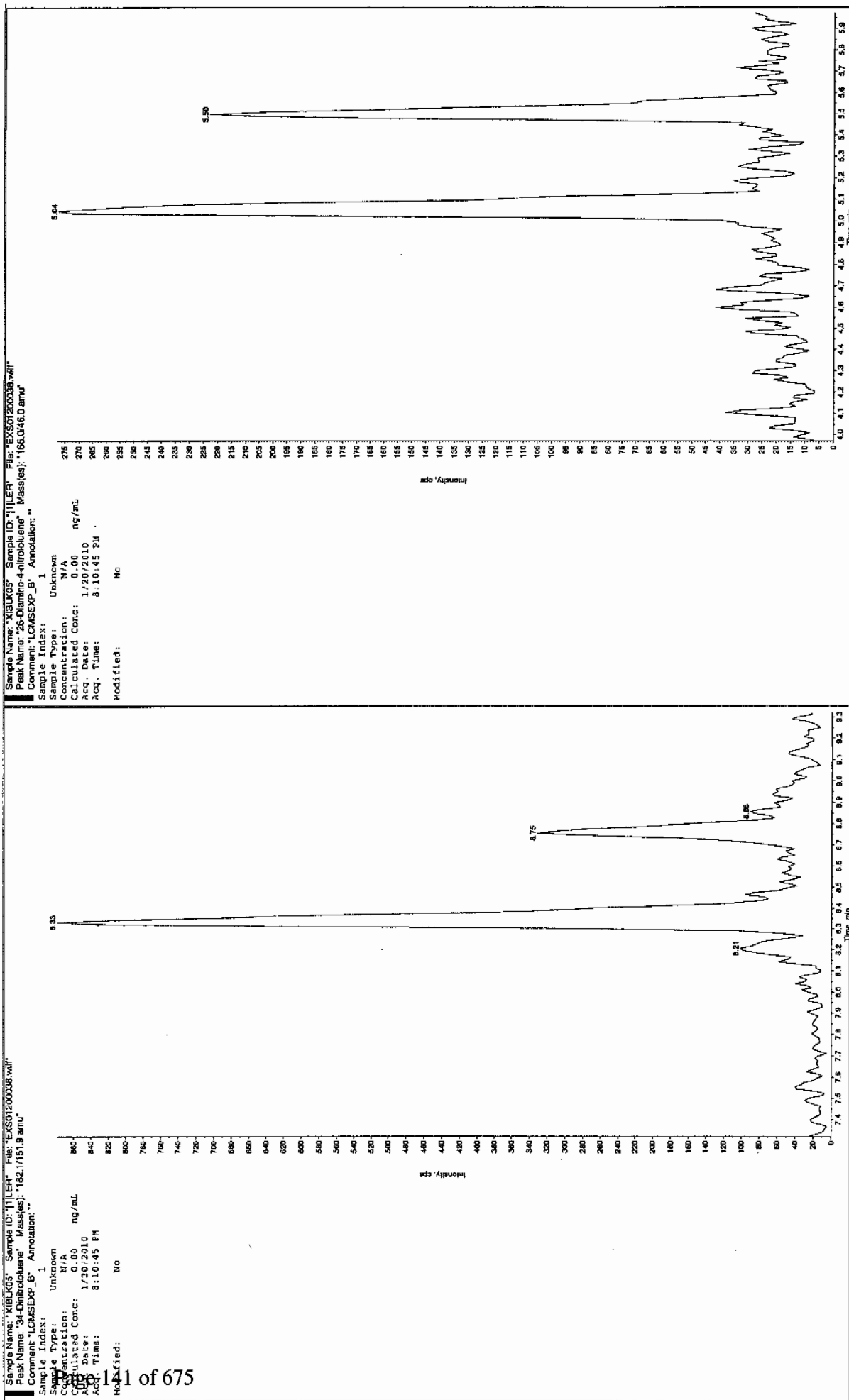
GEL Data File: EXS01200038.wiff

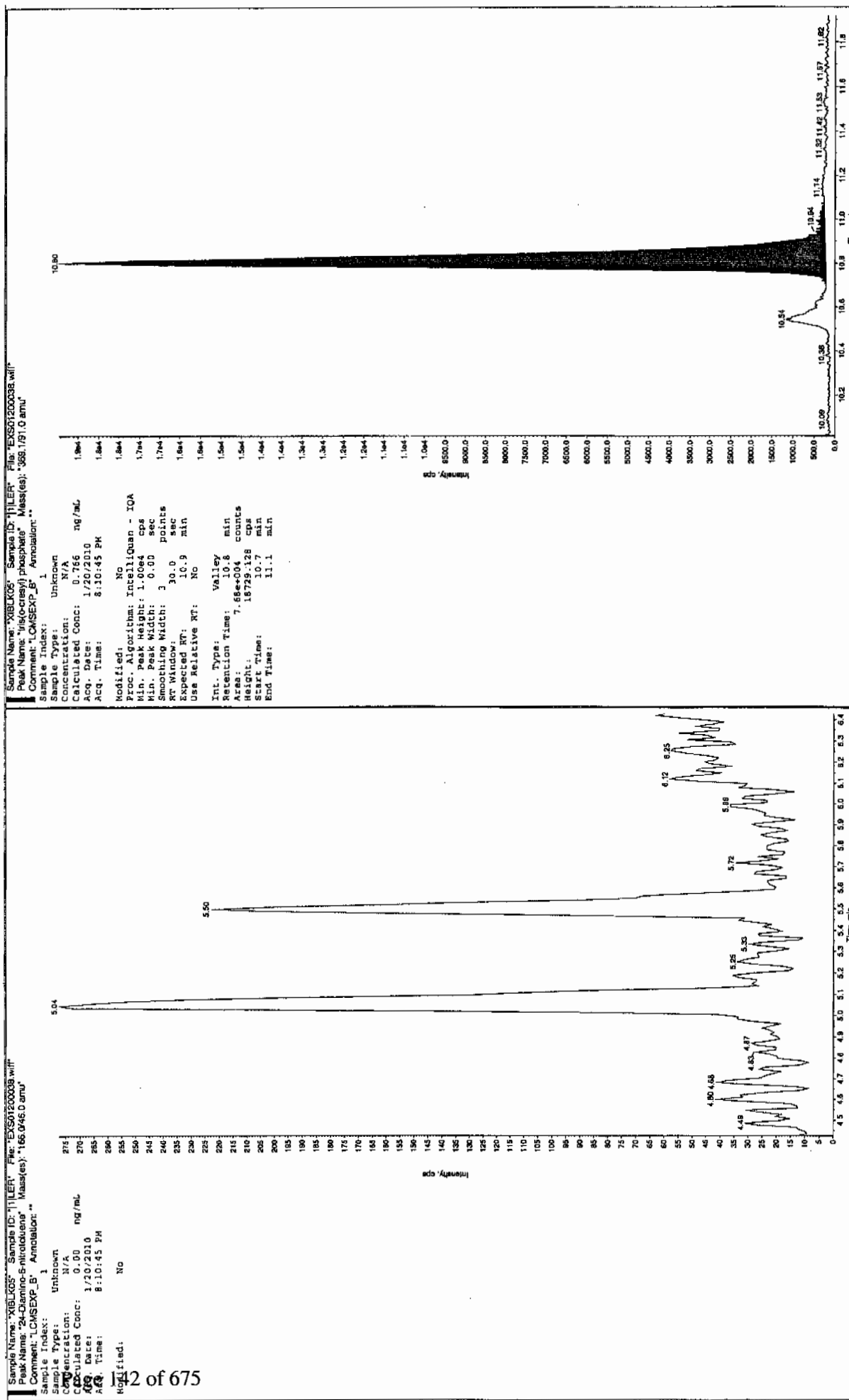
Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	.766
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0







4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1127

Lab Code: GEL

Lab Sample ID: XIBLK06

Analysis Date: 20-JAN-10 21:13

GEL Data File: EXS01200042.wiff

Instrument ID: LCMSMS

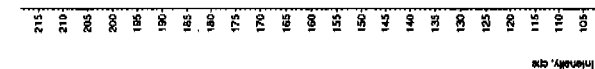
Column: Phenomenex Ultracarb 5u ODS(20)

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 12110

Sample Name: "XIBLK06" Sample ID: "111ER" File: "EX30120042.wiff"  
 Peak Name: "TATB" Mass(es): "237.2204.9 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 1/20/2010  
 Acq. Date: 9:13:33 PM  
 Acq. Time: 9:13:33 PM  
 Modified: No



Sample Name: "XIBLK06" Sample ID: "111ER" File: "EX30120042.wiff"  
 Peak Name: "35-Dinitroanthracene" Mass(es): "182.046.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

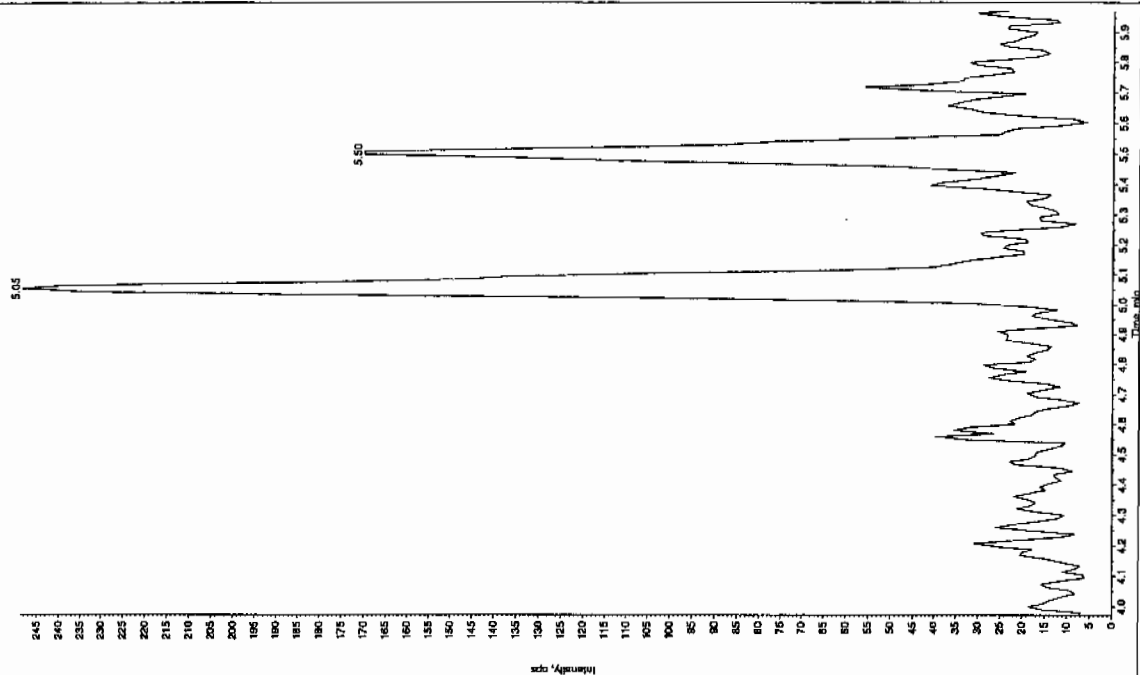
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 1/20/2010  
 Acq. Date: 9:13:33 PM  
 Acq. Time: 9:13:33 PM  
 Modified: No



Scan 01/21/10

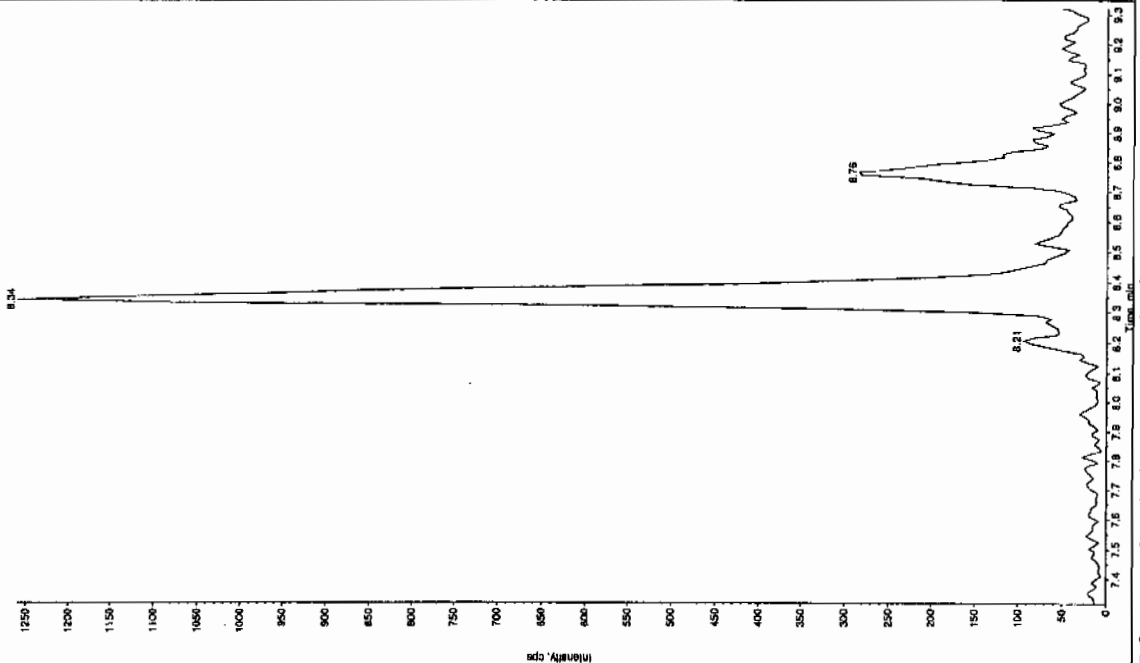
Sample Name: "XBLK06" Sample ID: "111ER" File: "EXS01200042.wif"  
 Peak Name: "26-Diamino-4-nitrofluorene" Mass(es): "186.046.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: "

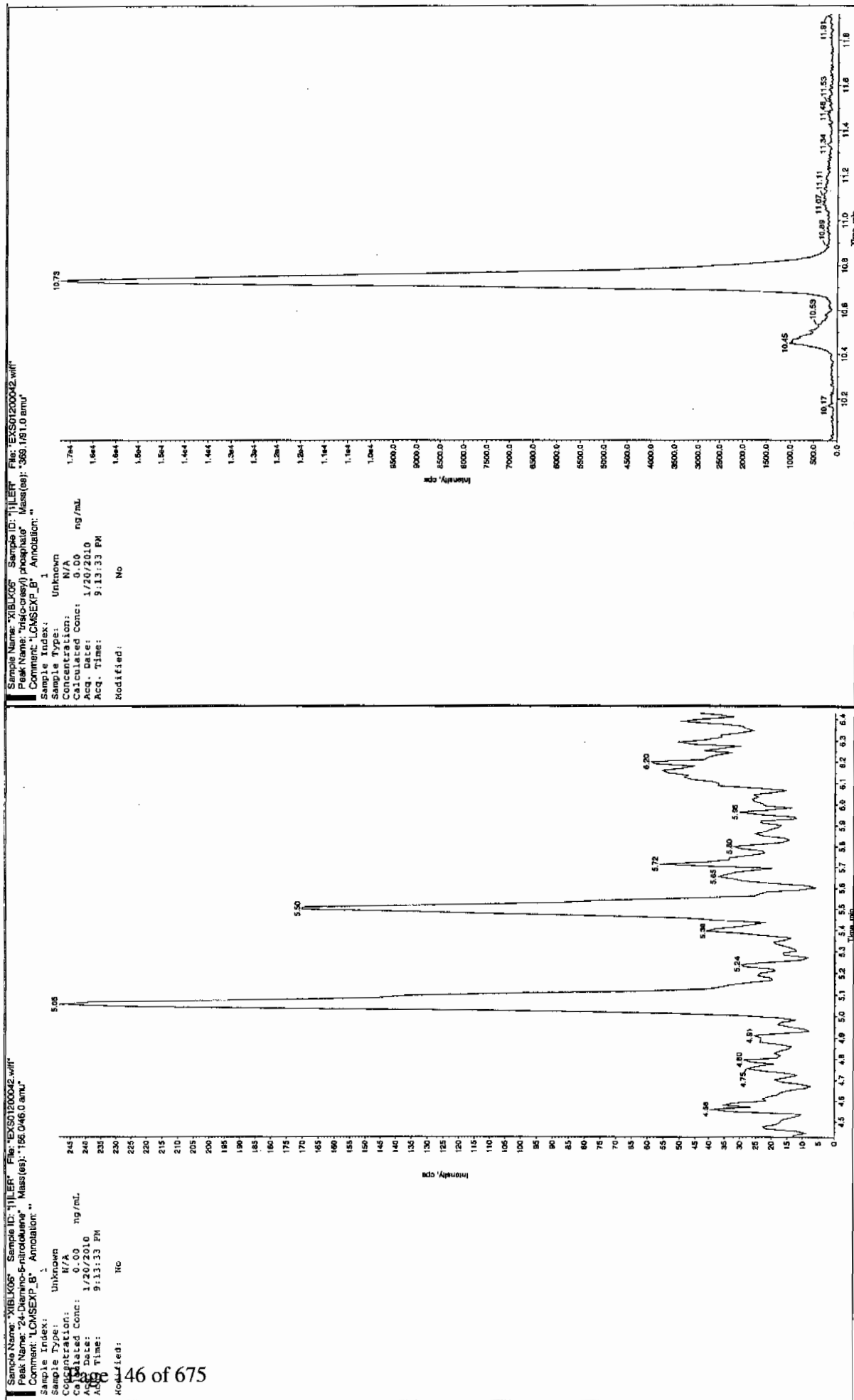
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/20/2010  
 Acq. Time: 9:13:33 PM  
 Modified: No



Sample Name: "XBLK06" Sample ID: "111ER" File: "EXS01200042.wif"  
 Peak Name: "34-Diamino-4-nitrofluorene" Mass(es): "182.1161.9 amu"  
 Comment: "LCMSEXP\_B" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/20/2010  
 Acq. Time: 9:13:33 PM  
 Modified: No







4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1127

Lab Code: GEL

Lab Sample ID: XIBLK07

Analysis Date: 20-JAN-10 23:03

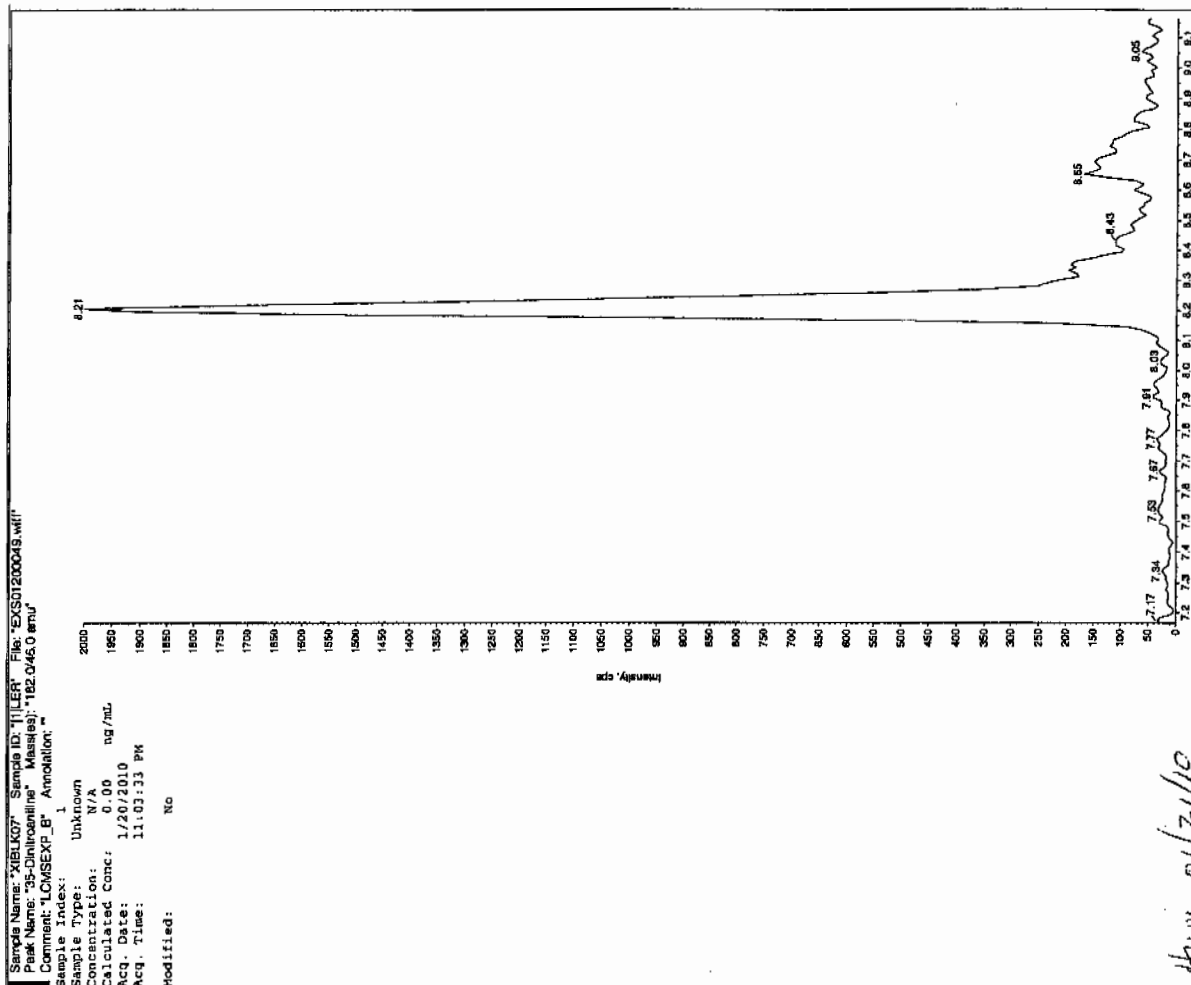
GEL Data File: EXS01200049.wiff

Instrument ID: LCMSMS

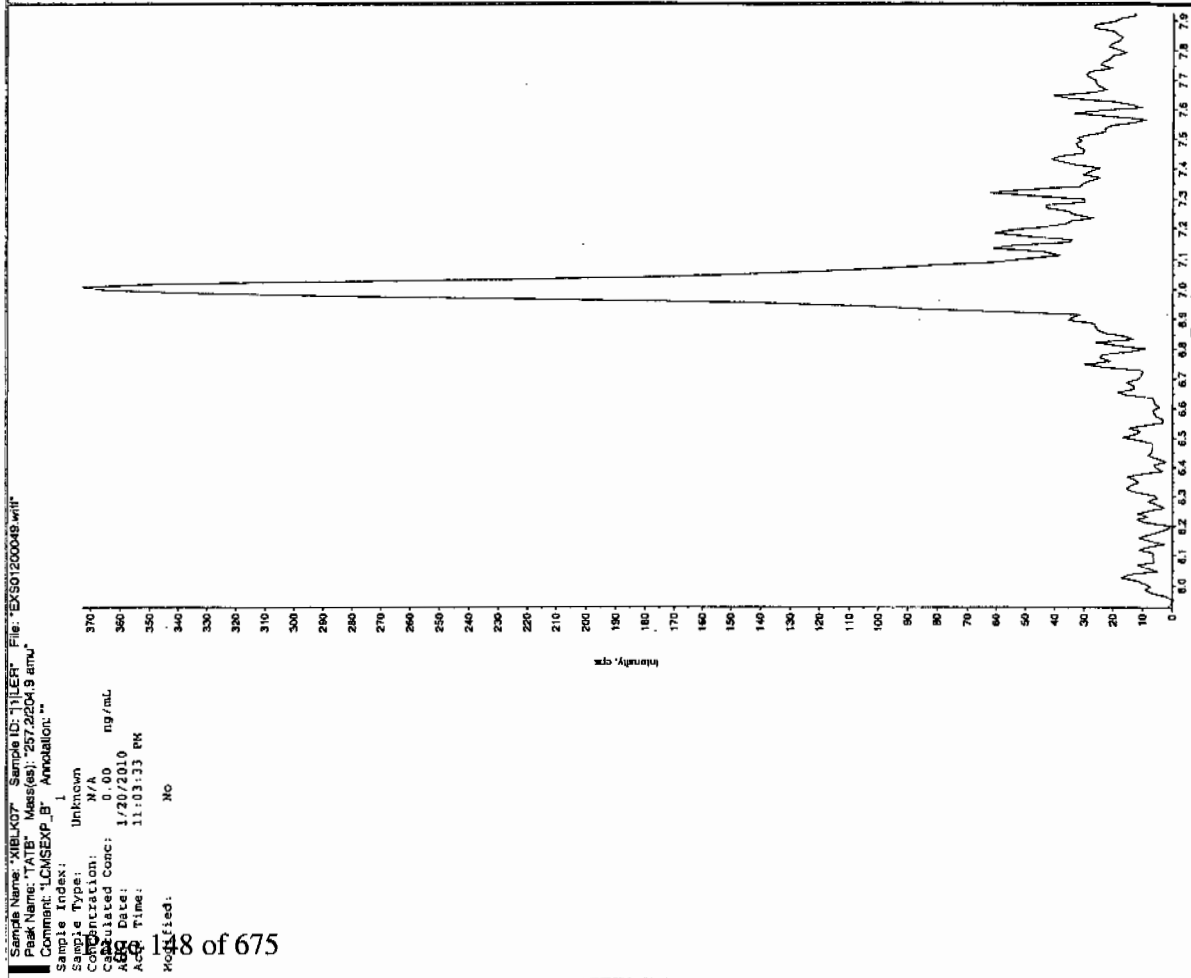
Column: Phenomenex Ultracarb 5u ODS(20)

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 1/21/10

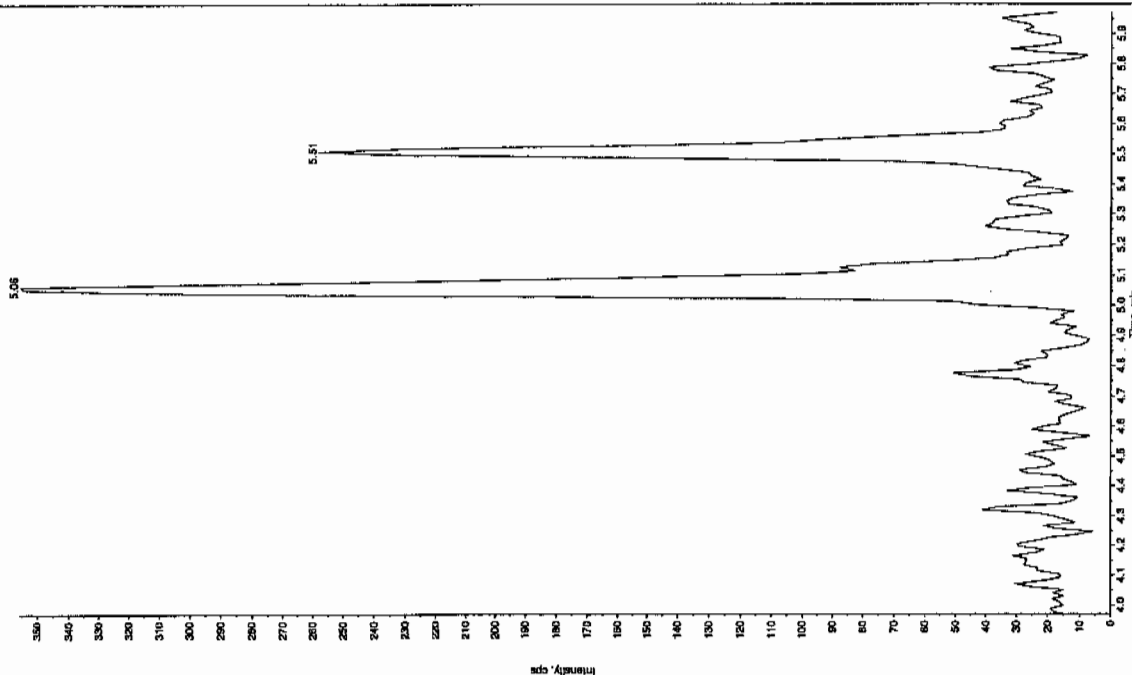


dan 01/21/10



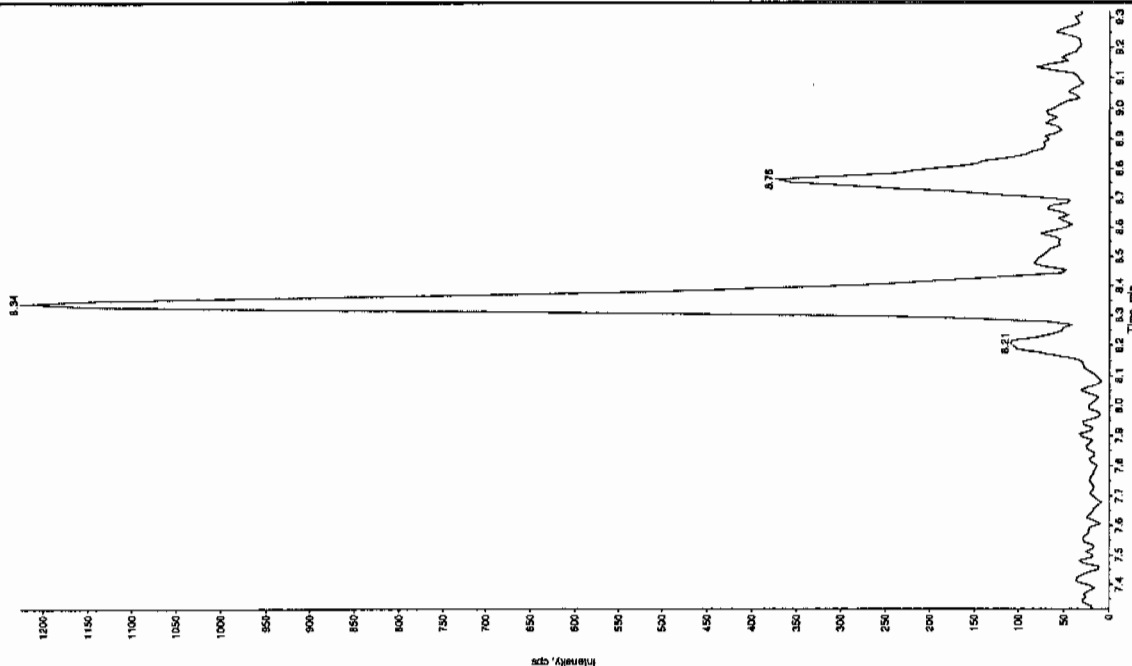
Sample Name: "XIBLK07" Sample ID: "HILER" File: "EXS01200049.will"  
 Peak Name: "26-Diamino-4-nitrobenzene" Mass(es): "166.046.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

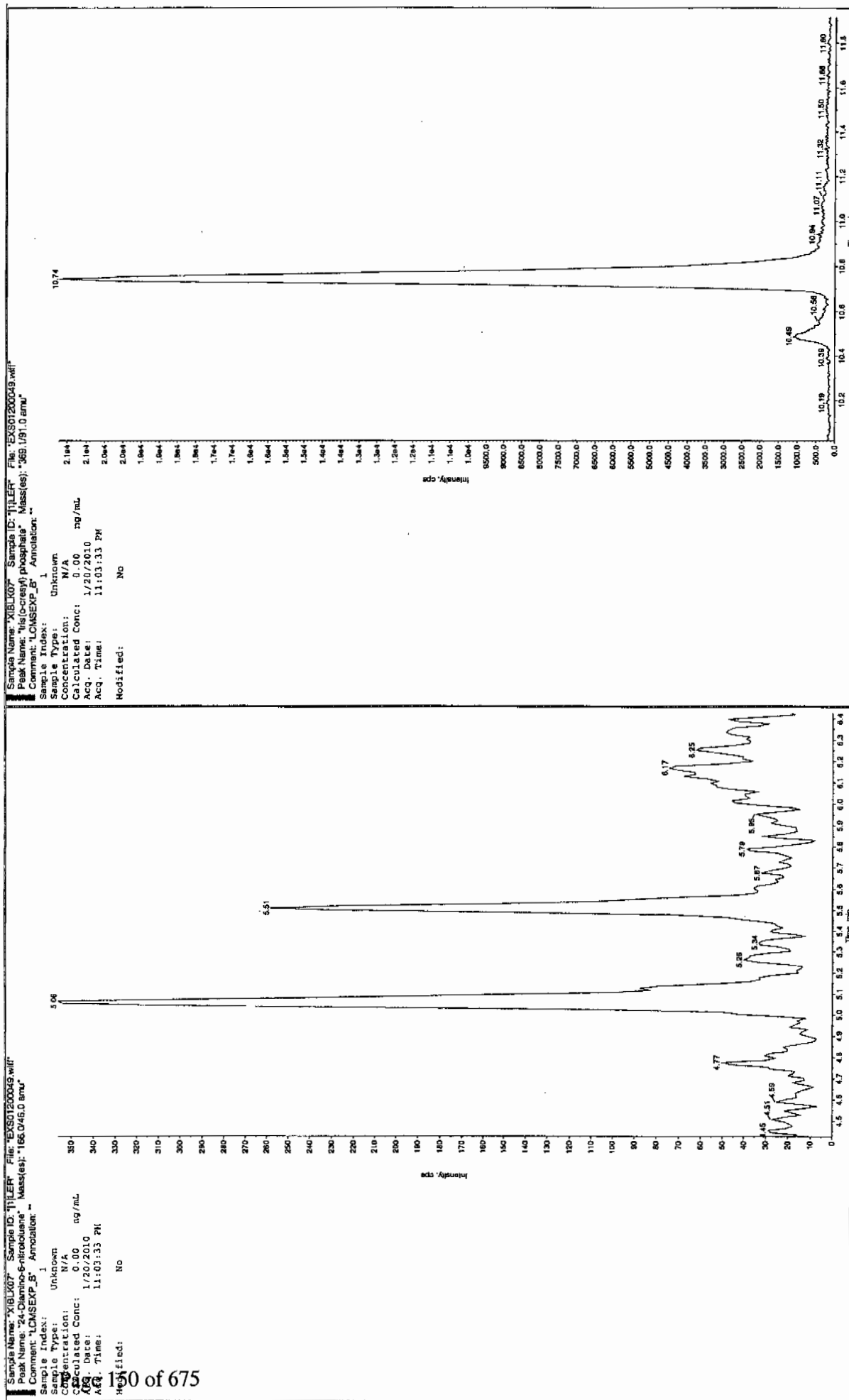
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/20/2010  
 Acq. Time: 11:03:33 PM  
 Modified: No



Sample Name: "XIBLK07" Sample ID: "HILER" File: "EXS01200049.will"  
 Peak Name: "34-Dinitrobenzene" 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: 1/20/2010  
 Acq. Time: 11:03:33 PM  
 Modified: No





Nairb.ref

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

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

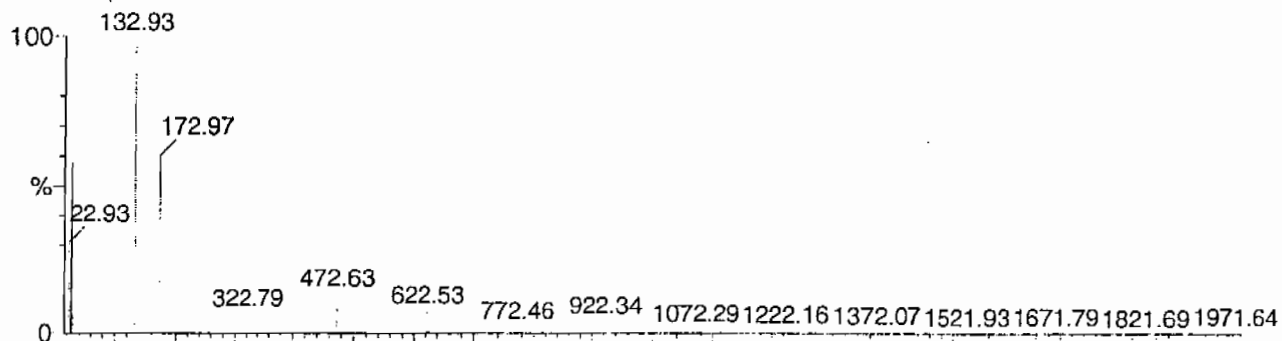
Calibration Report - MS1 Static

Page 1 of 1

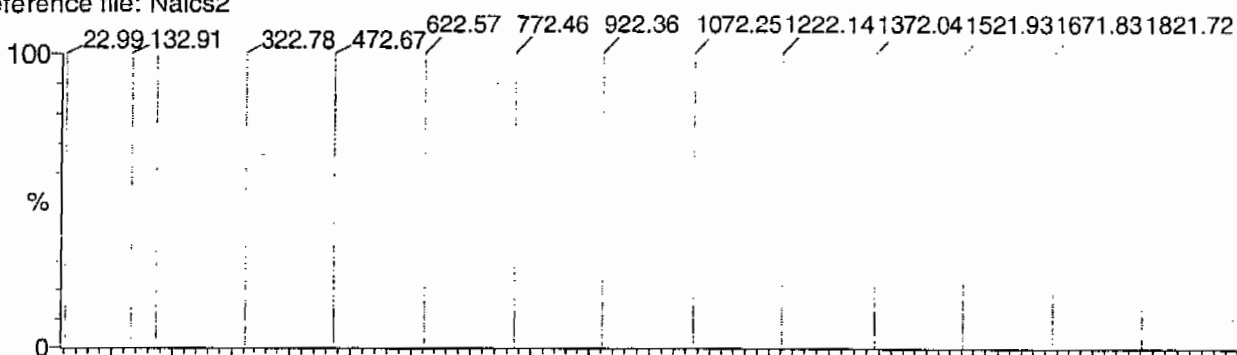
Printed: Fri Aug 25 10:50:01 2006

Data file: STATMS1 - Calibrated

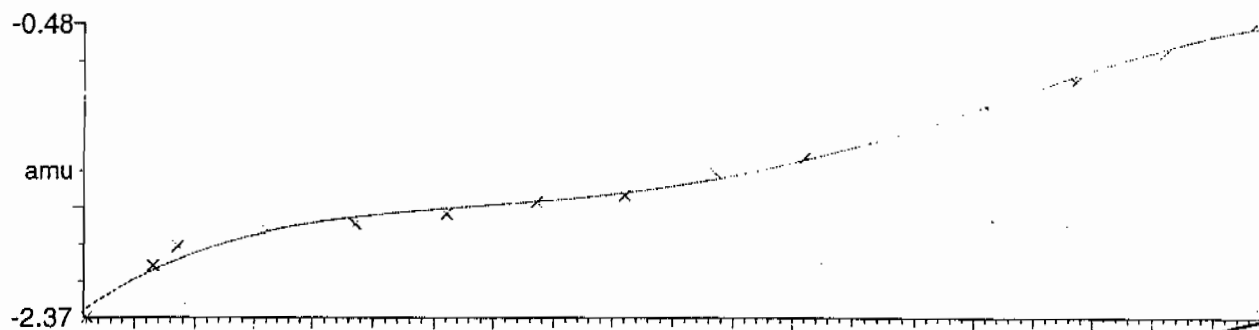
15 matches of 15 tested references



Reference file: Naics2

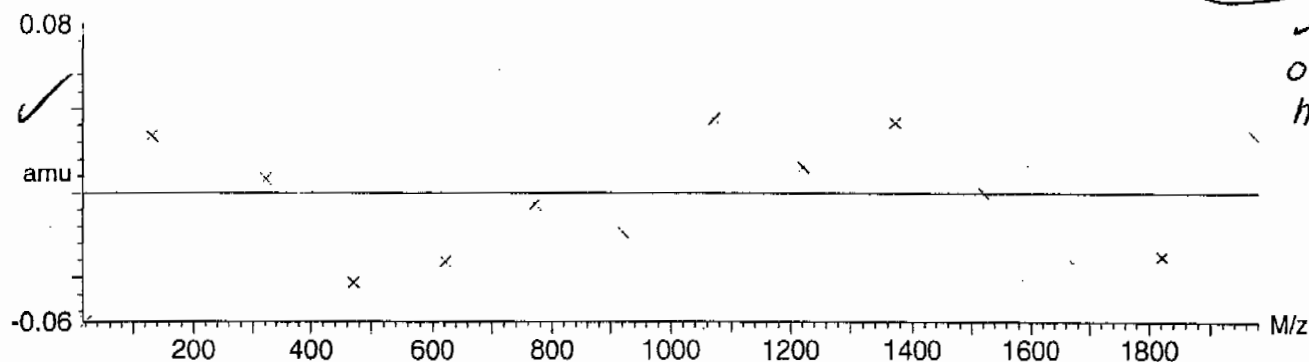


Mass difference (Raw - Ref mass)



Residuals

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



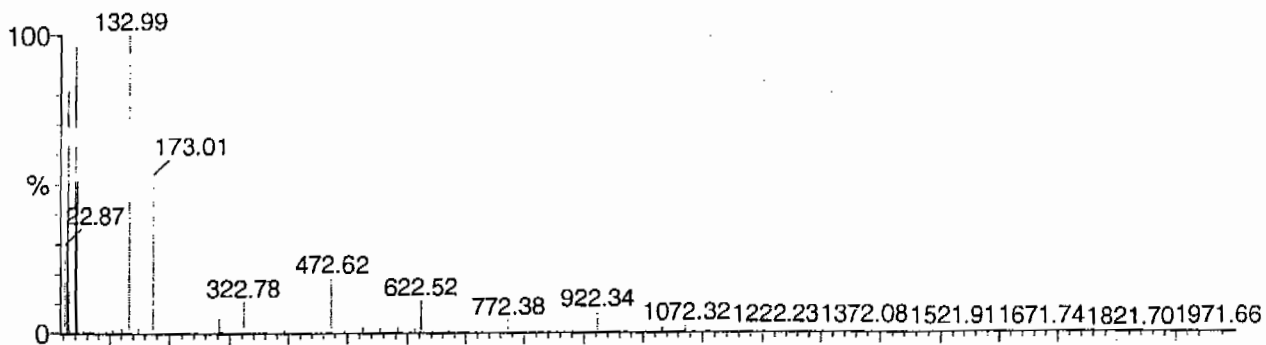
Calibration Report - MS1 Scanning

Page 1 of 1

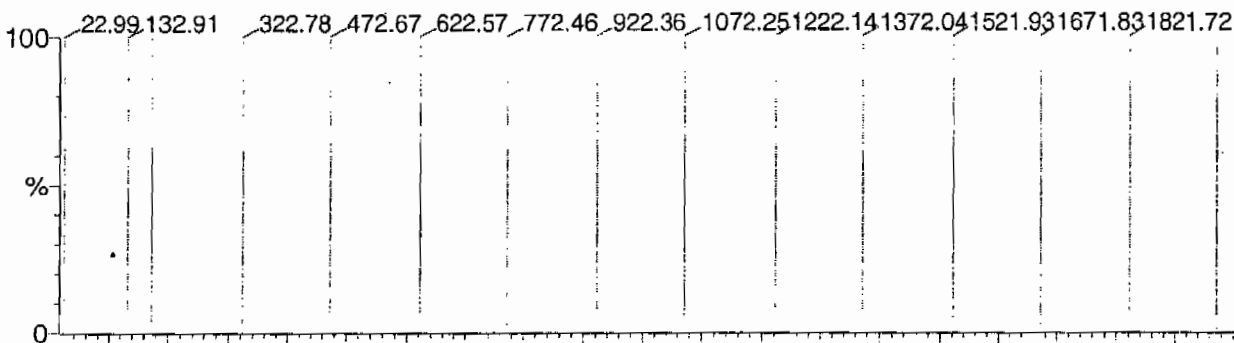
Printed: Fri Aug 25 10:51:06 2006

Data file: SCNMS1 - Calibrated

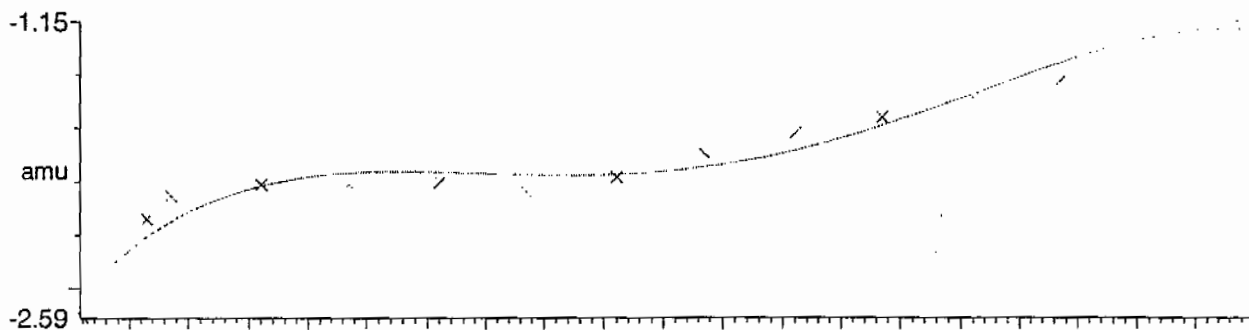
15 matches of 15 tested references



Reference file: Naics2

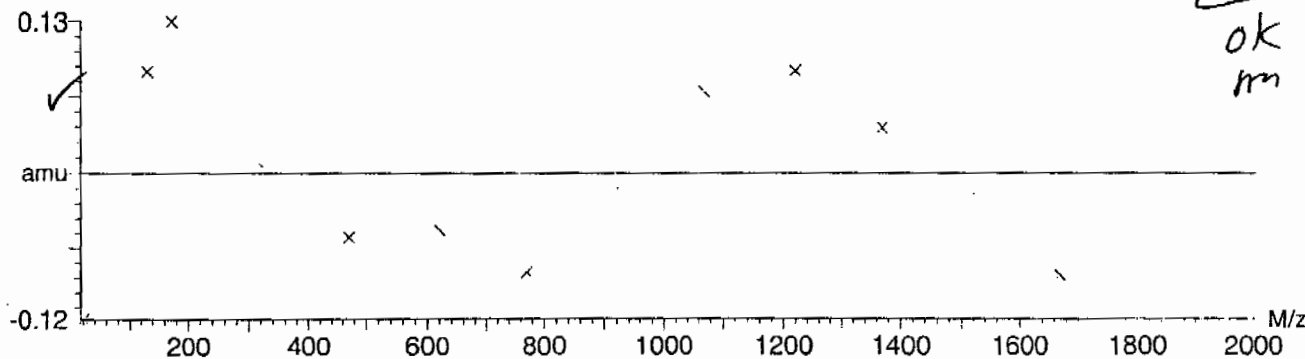


Mass difference (Raw - Ref mass)



Residuals

Mean residual =  $-5.432715 \times 10^{-9} \pm 0.069858$



ok  
m

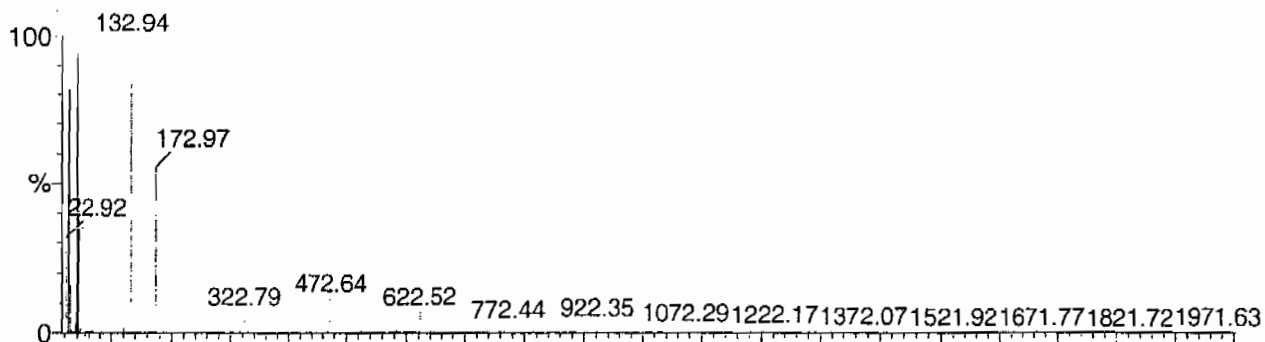
Calibration Report - MS1 Scan Speed Compensation

Page 1 of 1

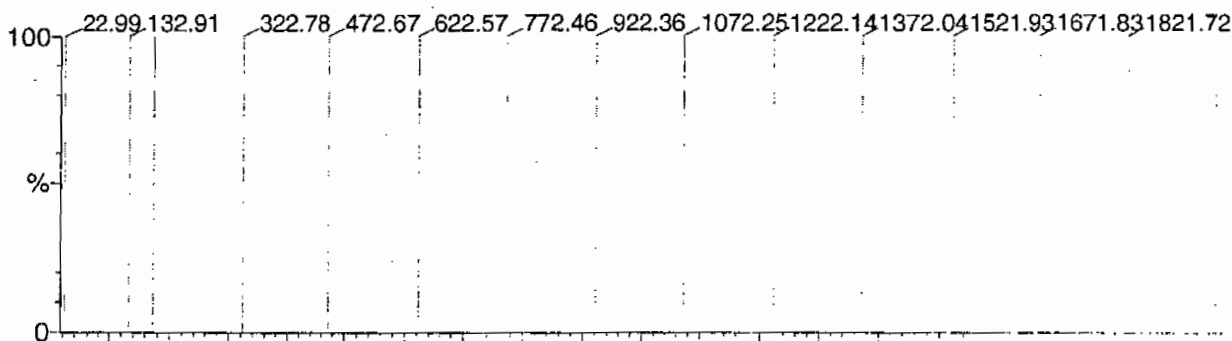
Printed: Fri Aug 25 10:52:01 2006

Data file: FASTMS1 - Calibrated

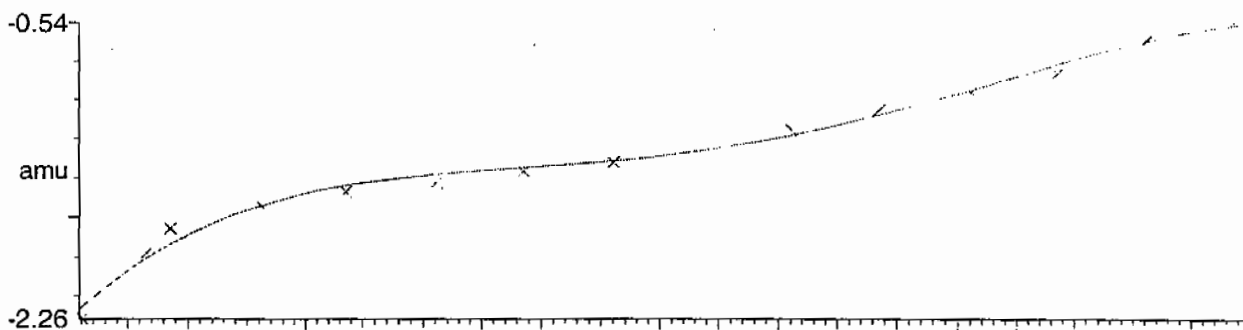
15 matches of 15 tested references



Reference file: Naics2

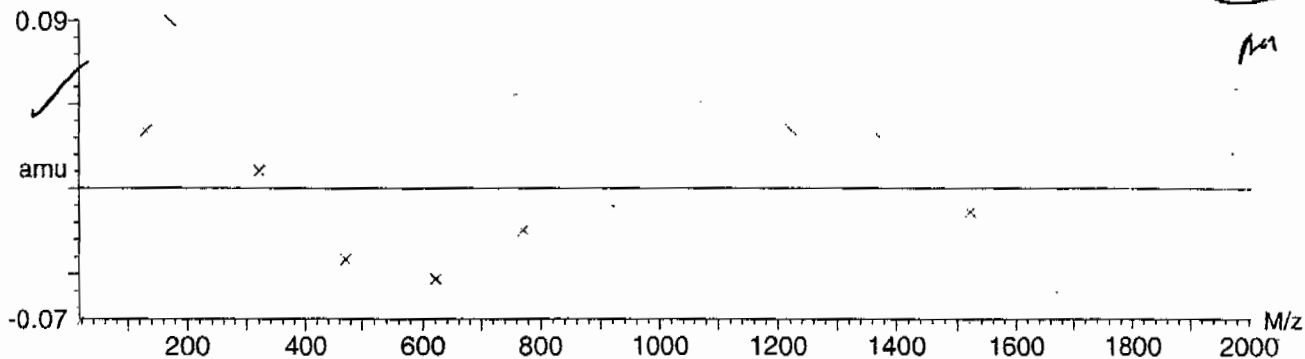


Mass difference (Raw - Ref mass)



Residuals

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





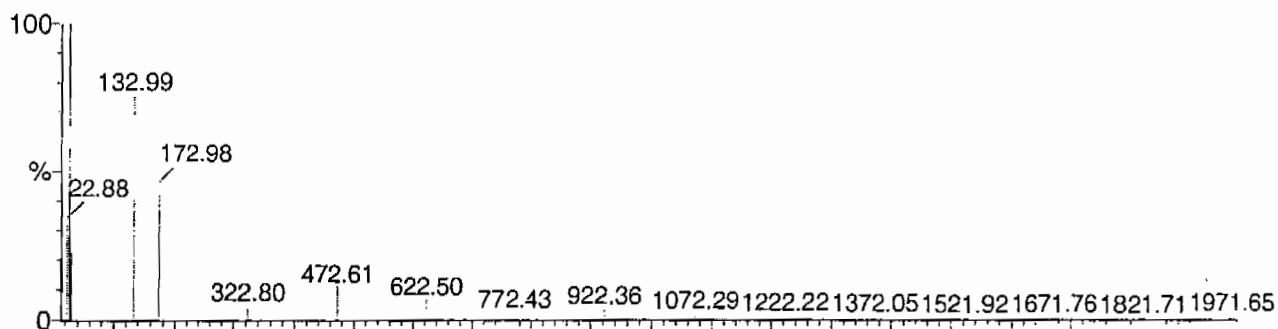
Calibration Report - MS2 Static

Page 1 of 1

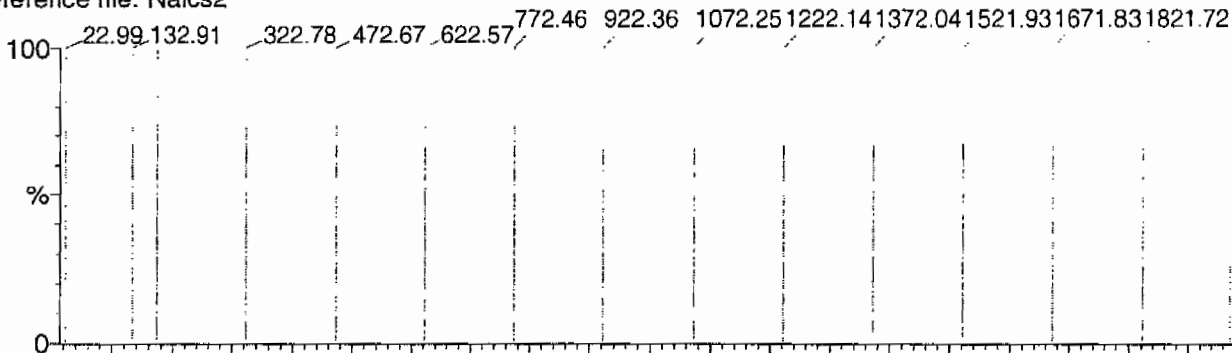
Printed: Fri Aug 25 10:52:54 2006

Data file: STATMS2 - Calibrated

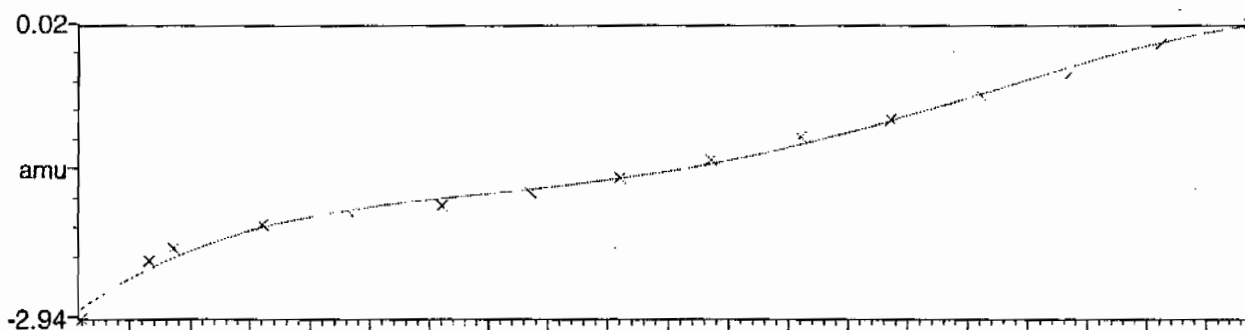
15 matches of 15 tested references



Reference file: Naics2

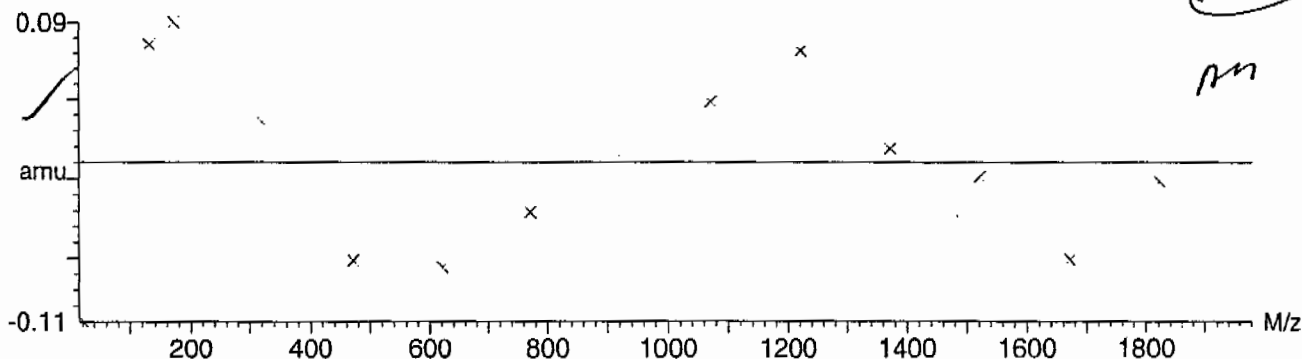


Mass difference (Raw - Ref mass)



Residuals

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



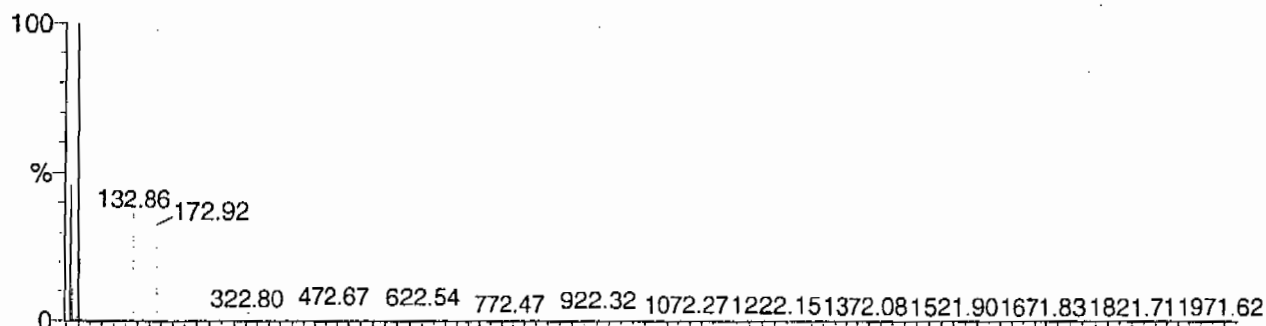
Calibration Report - MS2 Scanning

Page 1 of 1

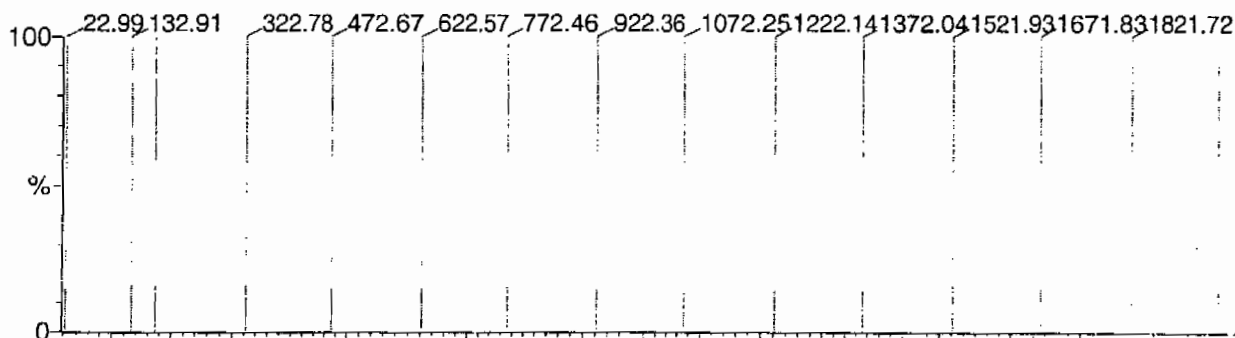
Printed: Fri Aug 25 10:54:00 2006

Data file: SCNMS2 - Calibrated

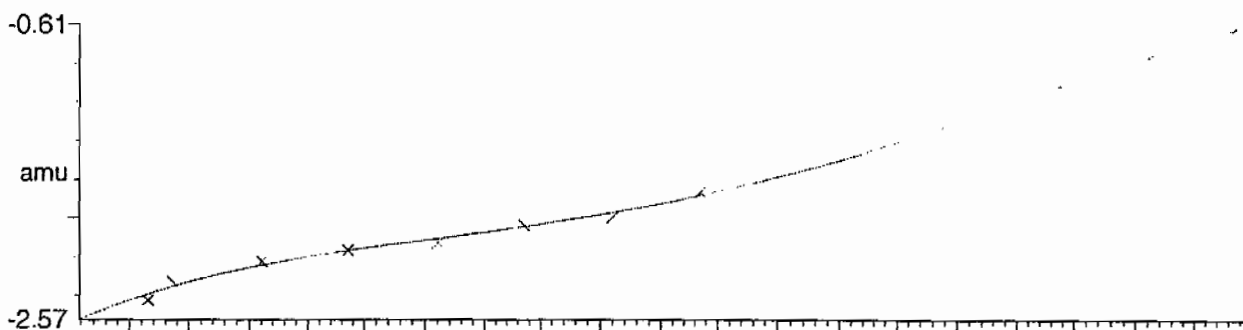
14 matches of 15 tested references



Reference file: Naics2

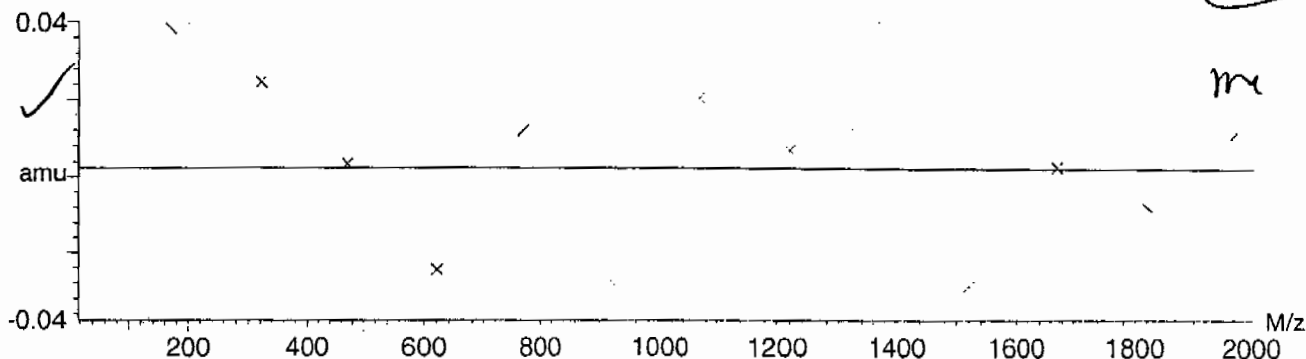


Mass difference (Raw - Ref mass)



Residuals

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



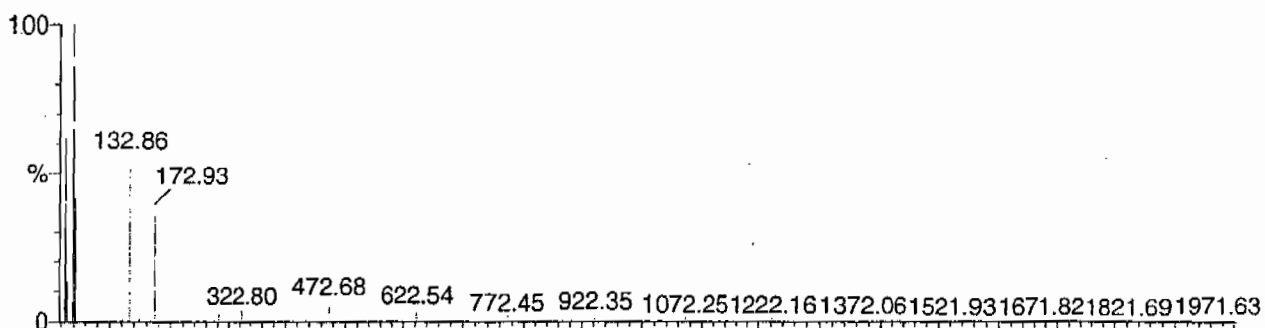
Calibration Report - MS2 Scan Speed Compensation

Page 1 of 1

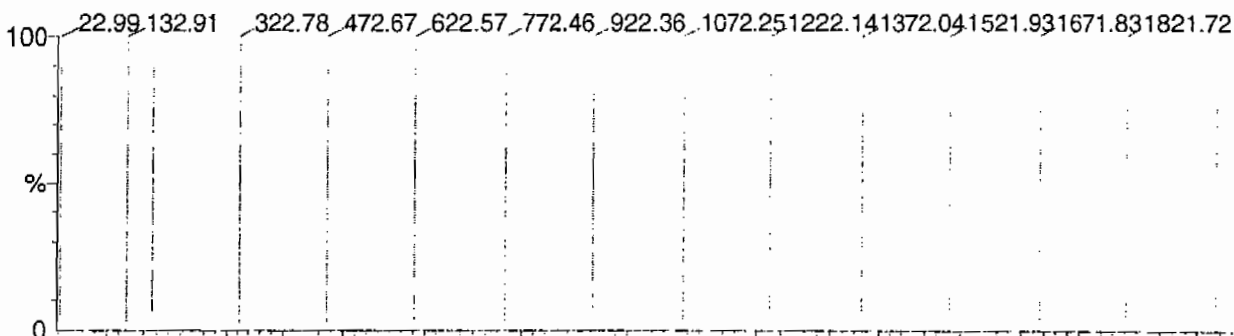
Printed: Fri Aug 25 10:54:54 2006

Data file: FASTMS2 - Calibrated

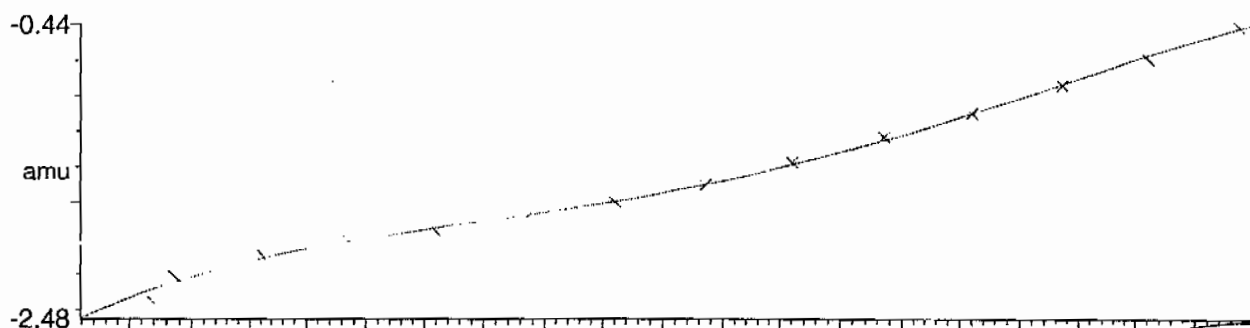
14 matches of 15 tested references



Reference file: Naics2

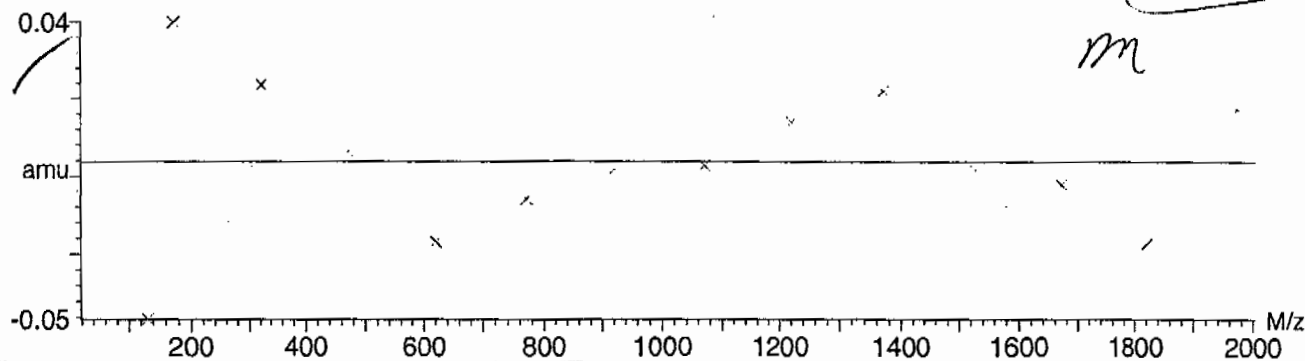


Mass difference (Raw - Ref mass)



Residuals

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

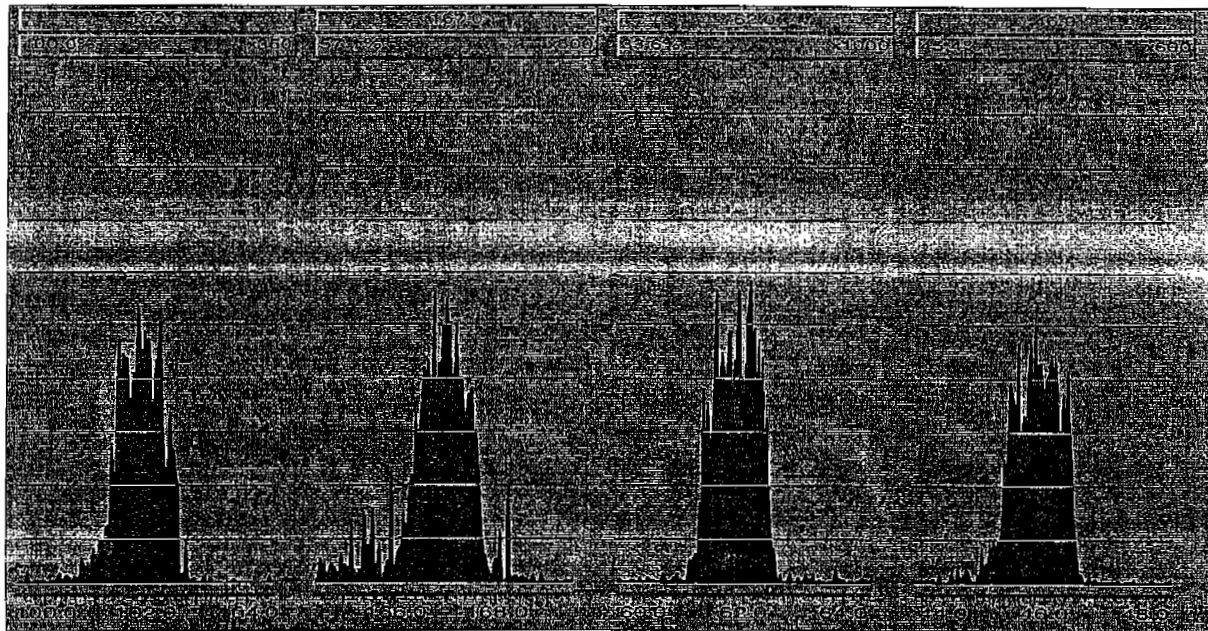


## Quattro Micro Tune Parameters

Page 1

Parameter File: C:\MASSLYNX\NEW\_EXP.PROVACQ\UDB\explosives04.ipr

Printed : Mon Jan 25 11:18:26 2010



# High Explosives Internal Standard Summary

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1127

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 940055	27-jan-10 04:39	EXP0125085a	3010.36	11.894	16264	17.138
LCS for batch 940055	27-jan-10 05:08	EXP0125086a	3131.25	11.894	17042.3	17.138
RE12-10-7619	27-jan-10 05:38	EXP0125087a	3191.11	11.894	18392.1	17.138
RE12-10-7619(244142001MS)	27-jan-10 06:07	EXP0125088a	3079.1	11.894	19155.7	17.138
RE12-10-7619(244142001MSD)	27-jan-10 06:37	EXP0125089a	3173.02	11.894	18452.4	17.138
RE12-10-7618	27-jan-10 07:06	EXP0125090a	3249.54	11.894	18896.6	17.138
RE12-10-7623	27-jan-10 07:36	EXP0125091a	3225.24	11.894	18725	17.138
RE12-10-7622	27-jan-10 08:06	EXP0125092a	2801.88	11.894	16735.8	17.138
RE12-10-7621	27-jan-10 08:35	EXP0125093a	3208.78	11.894	18995.6	17.138
RE12-10-7617	27-jan-10 09:05	EXP0125094a	3372.75	11.894	19585.2	17.139
RE12-10-7620	27-jan-10 11:03	EXP0125098a	3181.5	11.894	17783.2	17.138
RE12-10-7624	27-jan-10 11:33	EXP0125099a	3106.78	11.892	17385.8	17.149
RE12-10-7630	27-jan-10 12:02	EXP0125100a	3028.21	11.894	16673.4	17.161
RE12-10-7628	27-jan-10 12:32	EXP0125101a	3020.44	11.894	16548.7	17.16
RE12-10-7632	27-jan-10 13:01	EXP0125102a	3034.85	11.895	15669.5	17.157
RE12-10-7629	27-jan-10 13:31	EXP0125103a	3106.79	11.894	16434.8	17.161
RE12-10-7626	27-jan-10 14:00	EXP0125104a	3012	11.895	16550.6	17.157
RE12-10-7631	27-jan-10 14:30	EXP0125105a	3390.03	11.892	18621.7	17.159
RE12-10-7627	27-jan-10 14:59	EXP0125106a	3221.25	11.894	18218.9	17.157
RE12-10-7625	27-jan-10 15:29	EXP0125107a	3349.29	11.895	18106.9	17.157
RE12-10-7656	27-jan-10 17:27	EXP0125111a	3496.77	11.895	20224.3	17.153
RE12-10-7655	27-jan-10 17:56	EXP0125112a	3244.92	11.921	19076.5	17.158
RE12-10-7621	27-jan-10 18:26	EXP0125113a	2919.35	11.892	15654.2	17.159
RE12-10-7656	28-jan-10 08:12	EXP0125141a	2422.33	11.896	14647.8	17.155

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

High Explosives Internal Standard Summary

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1127

Lab Code: GEL

HPLC Column: Phenomenex Ultracarb 5u ODS(20)

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: RE12-10-7619

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142001

Sample Amount 2

Moisture: 16.2

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125087a

Date Analyzed: 27-JAN-10 05:38

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	239	J
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	217	J
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

\*Concentration =

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



Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125087a

Date: 27-Jan-2010

Time: 05:38:19

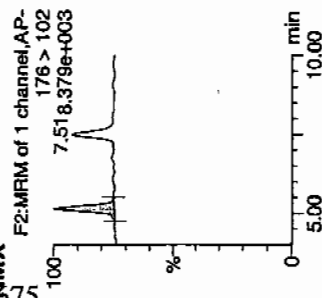
ID: 244142001

Trial: 3:5,C

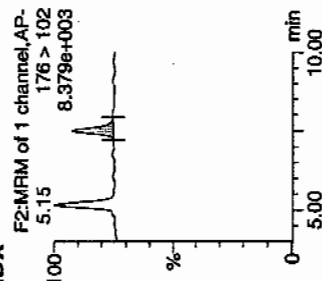
1447  
1/28/10

121  
94005718023

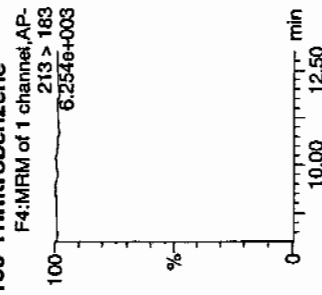
RMX



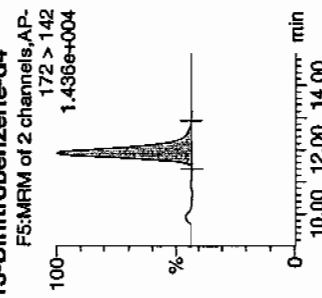
RDX



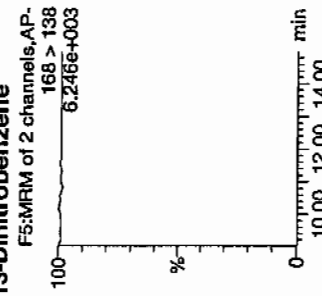
135-Trinitrobenzene



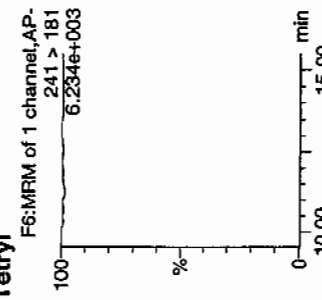
13-Dinitrobenzene-d4



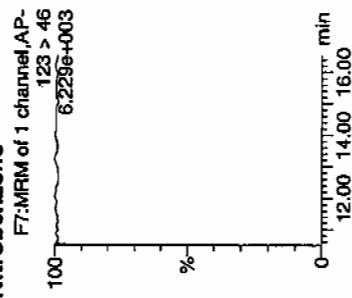
13-Dinitrobenzene



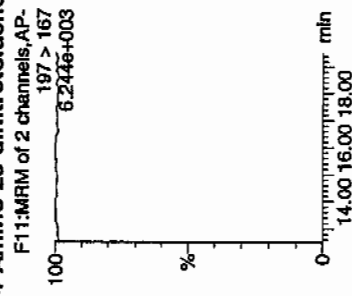
Tetryl



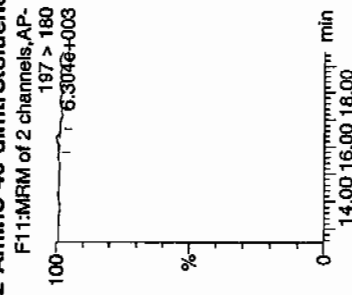
Nitrobenzene



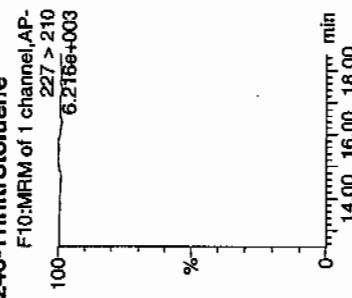
4-Amino-26-dinitrotoluene



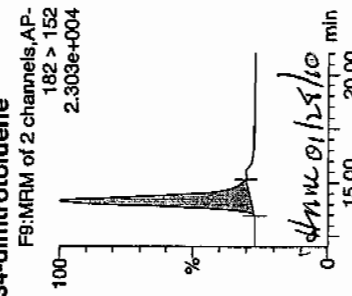
2-Amino-46-dinitrotoluene



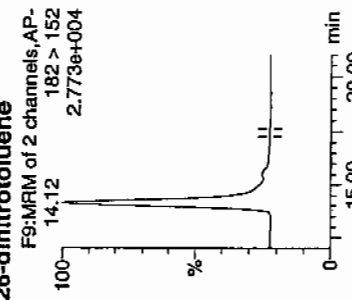
246-Trinitrotoluene



34-dinitrotoluene

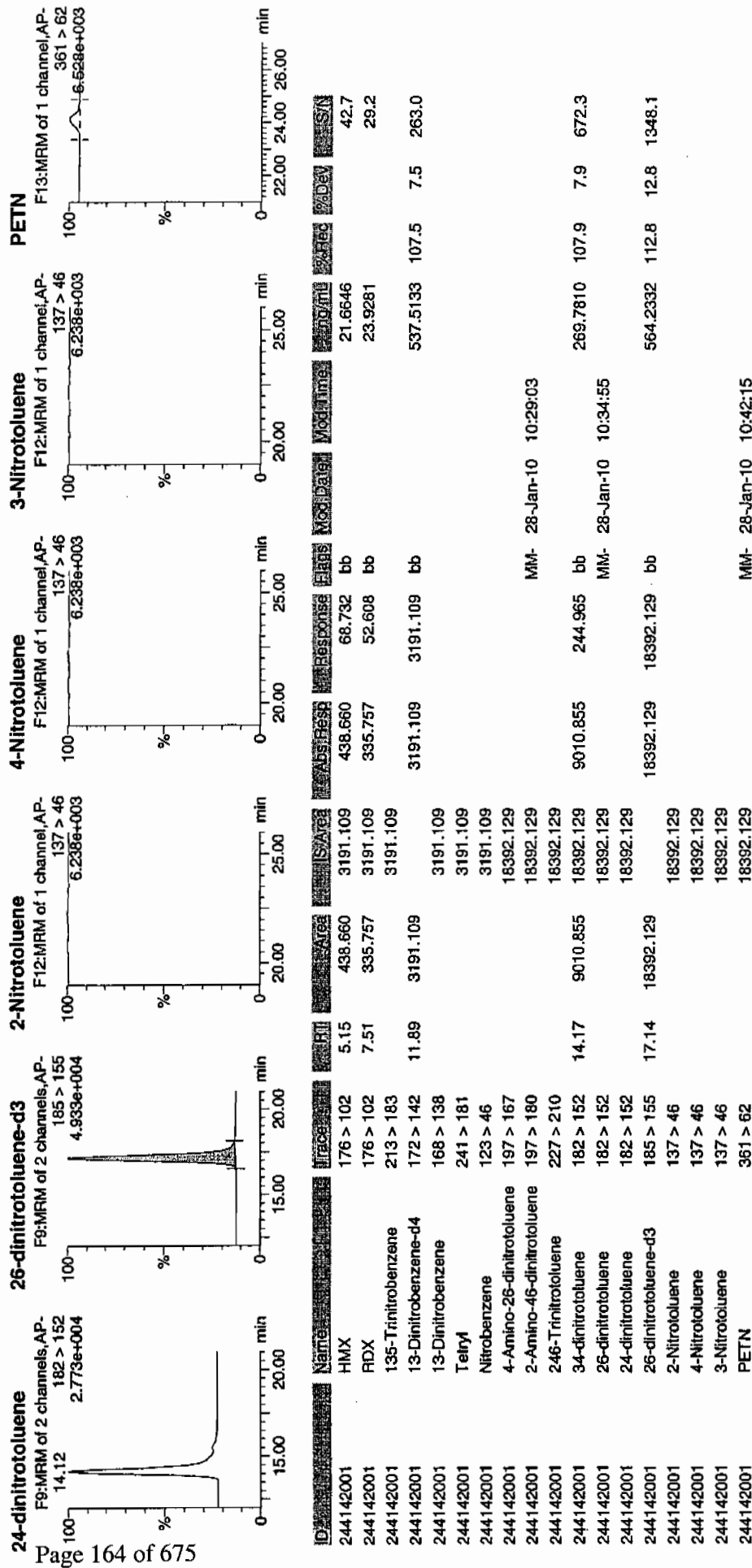


26-dinitrotoluene



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

Dataset: C:\MASSLYNX\New\_Exp\PROV012510expA2.qld, Time: Thu Jan 28 10:42:53 2010



1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7619

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142001

Sample Amount 2

Moisture: 16.2

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01200016.wiff

Date Analyzed: 20-JAN-10 14:25

Units: ug/kg

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

\*Concentration =

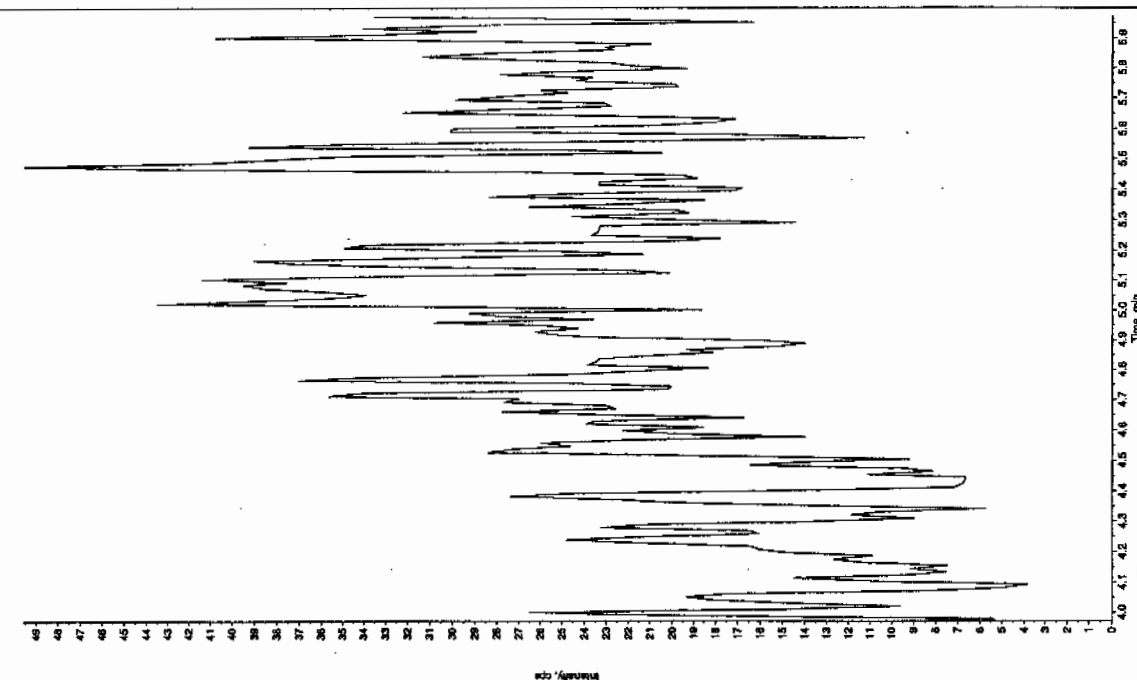
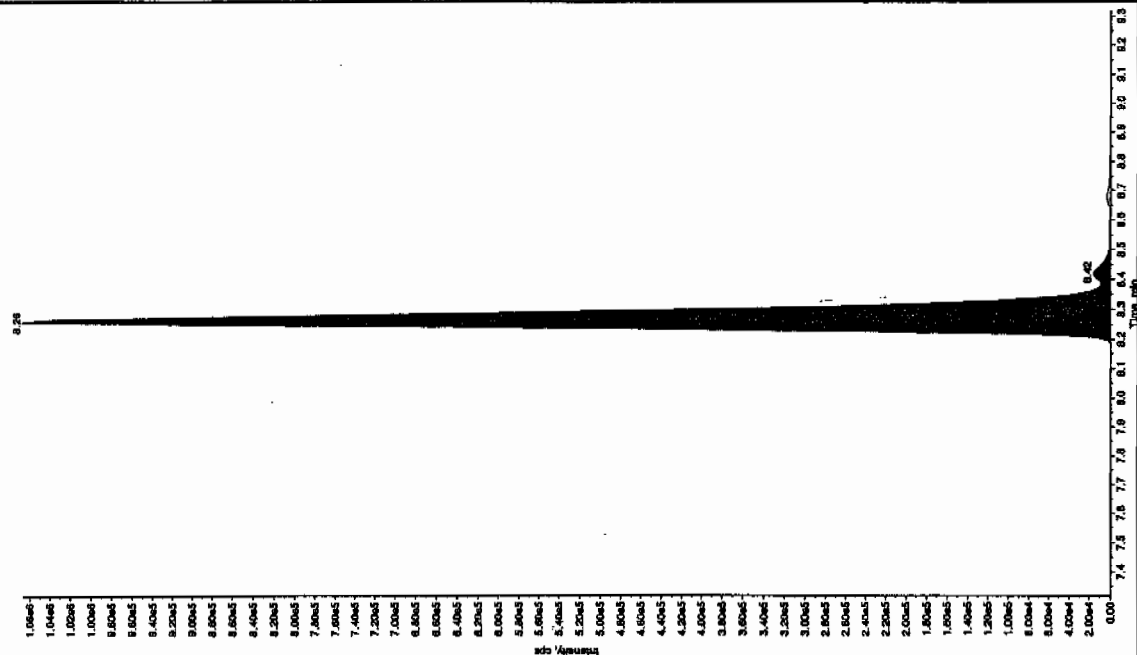
Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

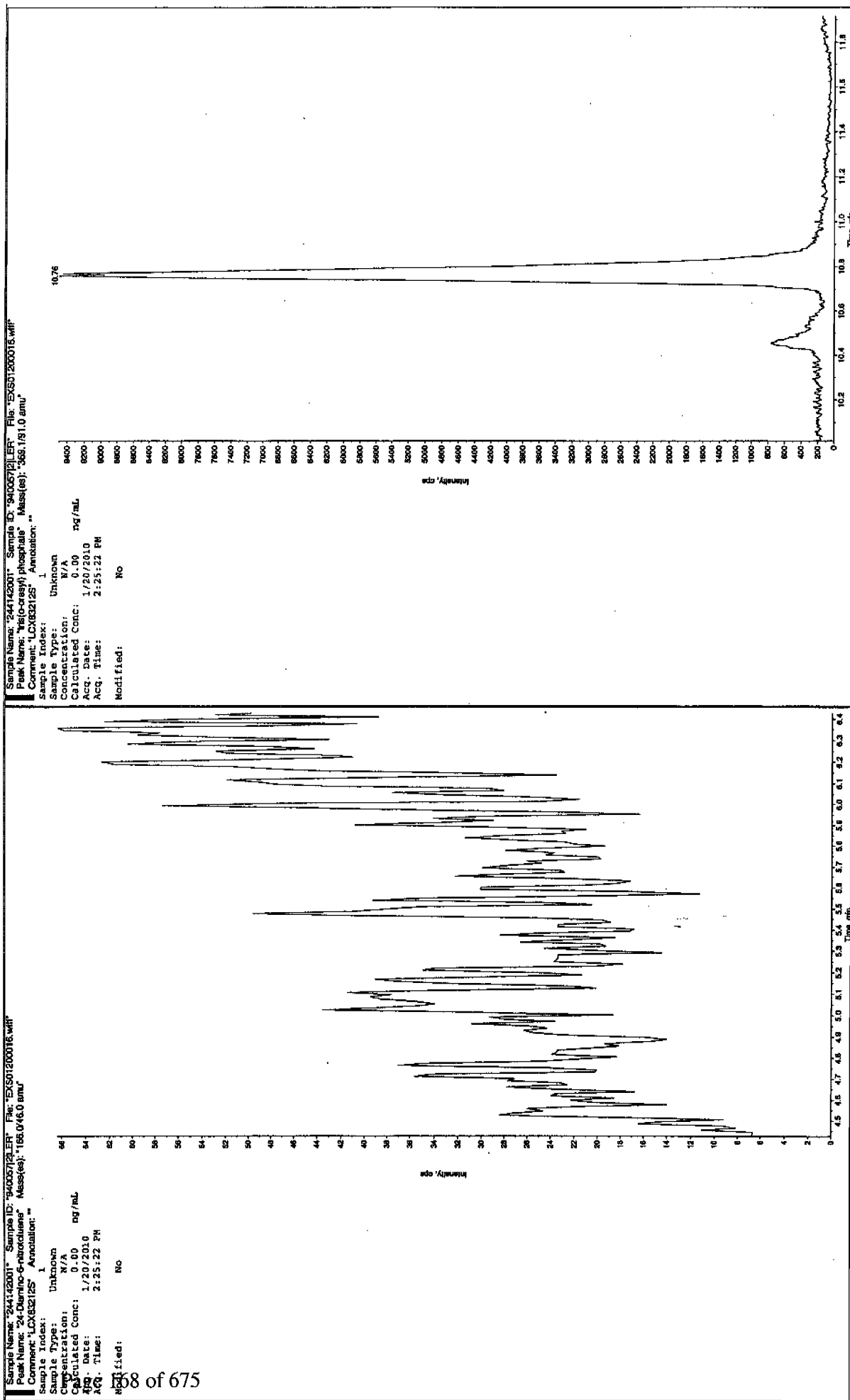


Sample Name: "24142001" Sample ID: "9400572|LER" File: "EXS0120016.wht"  
Peak Name: "34-Dinitrochloroene" Mass(es): "182.1/151.9 amu"

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/g
Acq. Date:	1/20/2010
Acq. Time:	2:25:42 PM
Modified:	No

Sample Index:	1	Annotation:	Concentr [CX532125]
Sample Type:	unknown		
Concentration:	252		ng/mL
Conc:	252		
Acq Date:	1/20/2010		
Acq Time:	2:25:22 PM		
Modified:	NO		
Algorithm:	IntelliQuan - IOA		
Peak Height:	1469.00		cps
Peak Width:	3.00		points
Window:	15.0		sec
Expected RT:	8.32		min
Relative RT:	NO		
Int. Type:	Valley		
Retention Time:	8.326		min
Height:	1465.966		cps
Start Time:	8.16		min
End Time:	8.58		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: RE12-10-7618

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142002

Sample Amount 2

Moisture: 18.9

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125090a

Date Analyzed: 27-JAN-10 07:06

Units: ug/kg

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

\*Concentration =

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

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125090a

Date: 27-Jan-2010

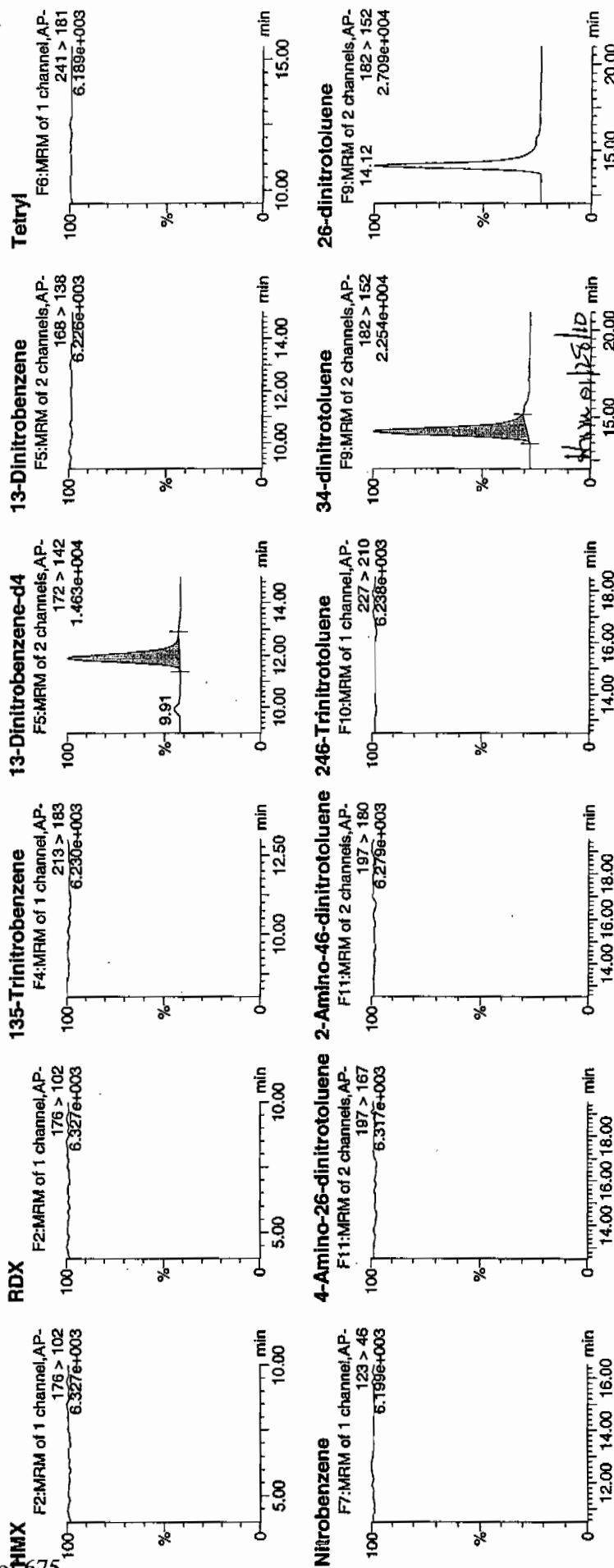
Time: 07:06:47

ID: 244142002

Vial: 3:5,F

1077  
1/28/10

Handwritten: *1077*  
*1/28/10*  
*1077*  
*1/28/10*





[illegible]

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7618

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142002

Sample Amount 2

Moisture: 18.9

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01200019.wiff

Date Analyzed: 20-JAN-10 15:12

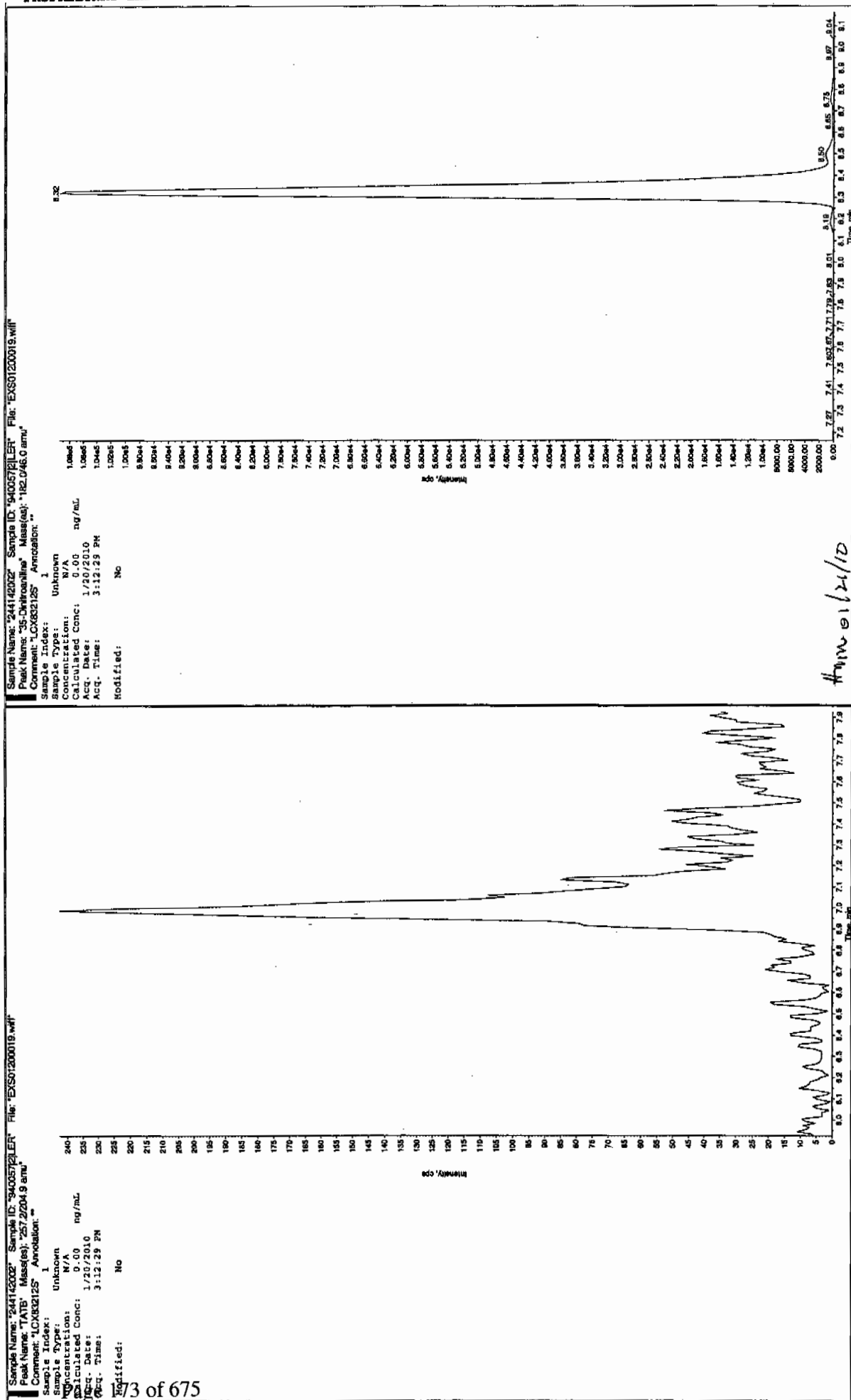
Units: ug/kg

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

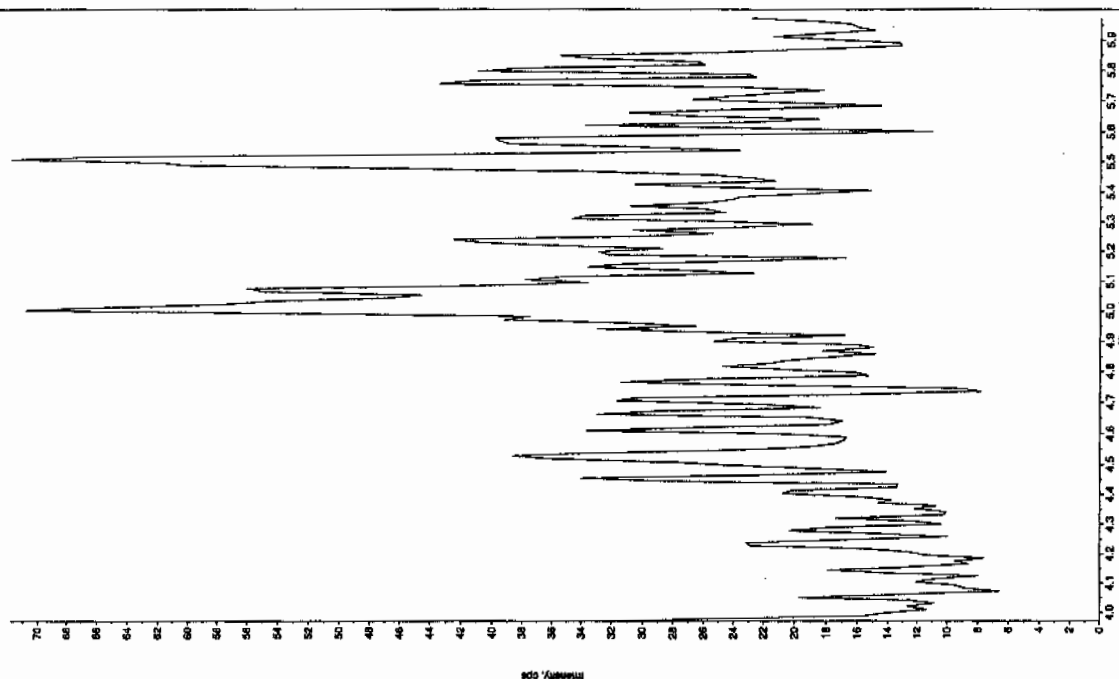
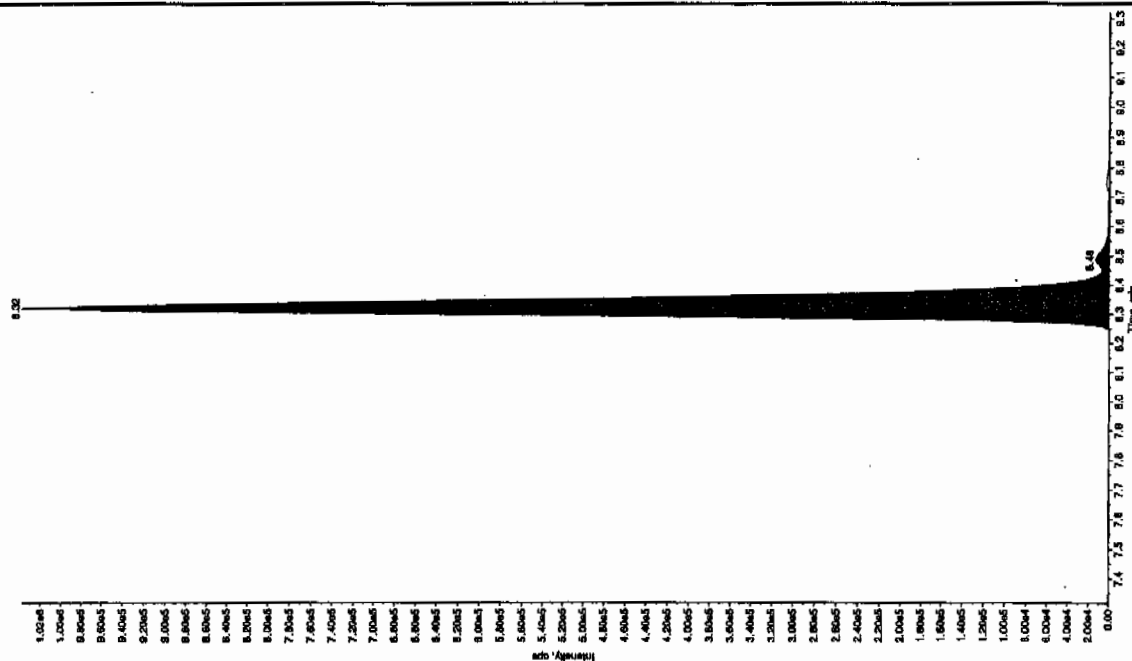
dan 1/24/10



Sample Name: "24142002" Sample ID: "94005721EF" File: "EXS01200019.wiff"  
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"  
Comment: "LCX832125" Annotation: ""

Sample ID:	Unknown	1
Sample Type:	N/A	
Concentration:	0.00	ng/mL
Calculated Conc:	1/20/2010	
Acq. Date:	3:12:29 PM	
Acq. Time:	No	
Modified:		

Sample Index:	Unknown	
Sample Type:	N/A	
Concentration:	288.	ng/mL
Calculated Conc:	1/20/2010	
Run Date:	3:12:29 PM	
Run Time:		
Method:		
Acquisition:		
Integration:		
Report:		
Sample Index:	1	
Sample Type:	Unknown	
Concentration:		
Calculated Conc:		
Run Date:		
Run Time:		
Method:		
Acquisition:		
Integration:		
Report:		

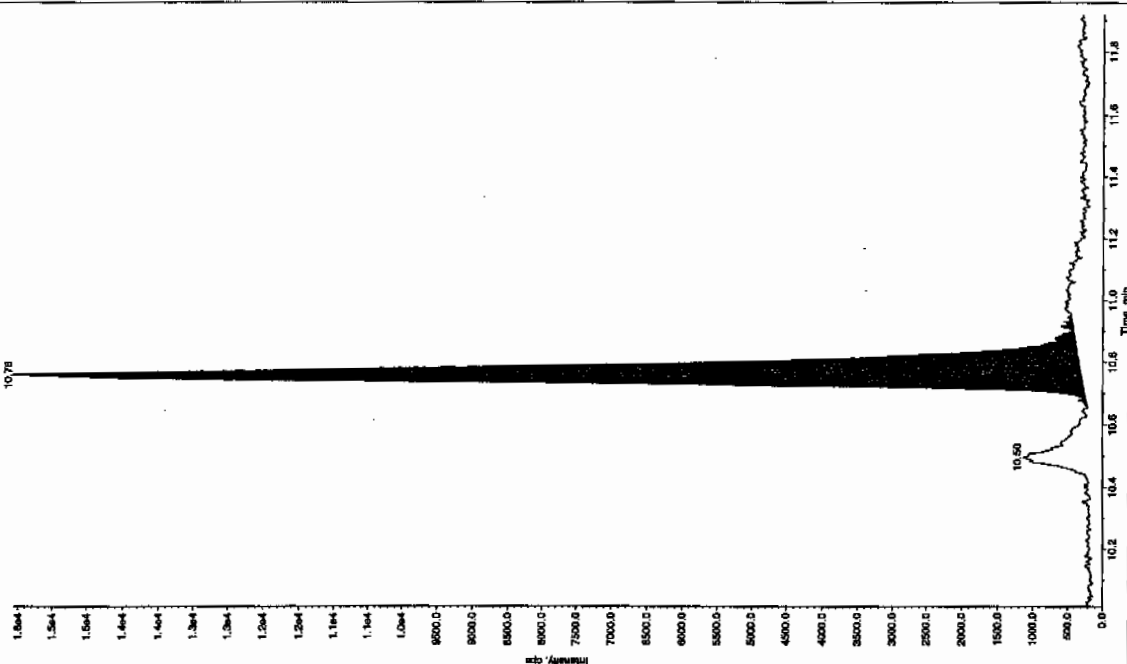
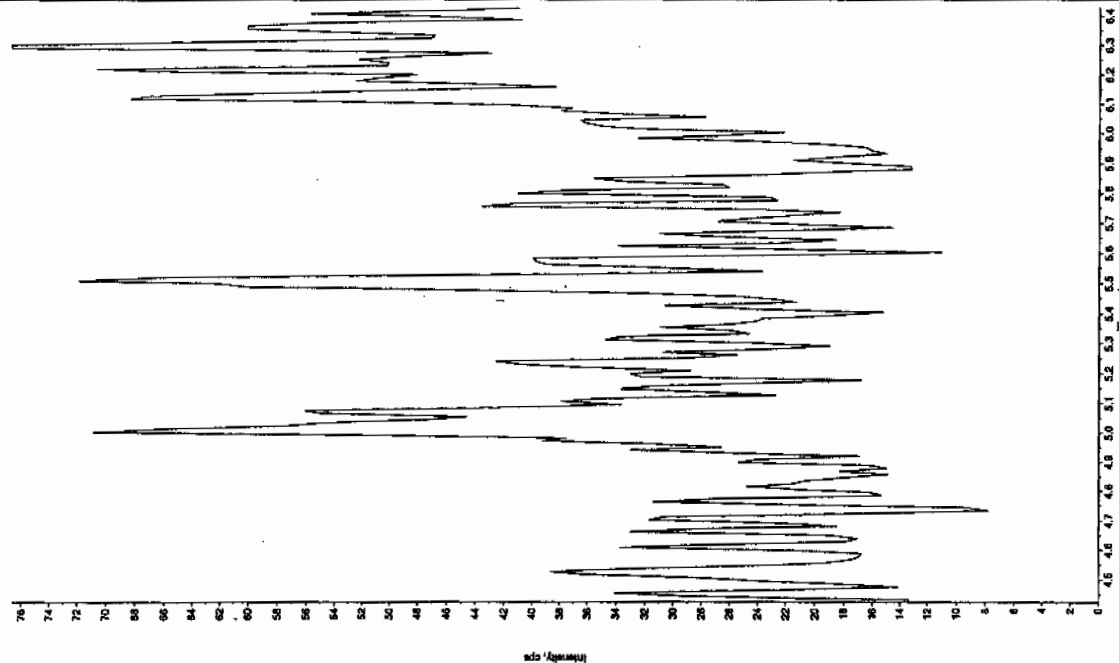


Sample Name: "24412002" Sample ID: "94005721EFF" File: "EXS01200019.wif"  
 Peak Name: "24-Diamino-6-nitrofluorene" Mass(es): "166.046.0 amu"  
 Comment: "LCX532125" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/20/2010  
 Acq. Time: 3:12:29 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: 10.9 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.8 min  
 Area: 5.95e+004 counts  
 Height: 15266.664 cps  
 Start Time: 10.7 min  
 End Time: 11.0 min



1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7623

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142003

Sample Amount 2

Moisture: 15.4

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125091a

Date Analyzed: 27-JAN-10 07:36

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	246	J
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	173	J
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

\*Concentration =

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

Quantify Sample Report  
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\EXP0125091a

Date: 27-Jan-2010

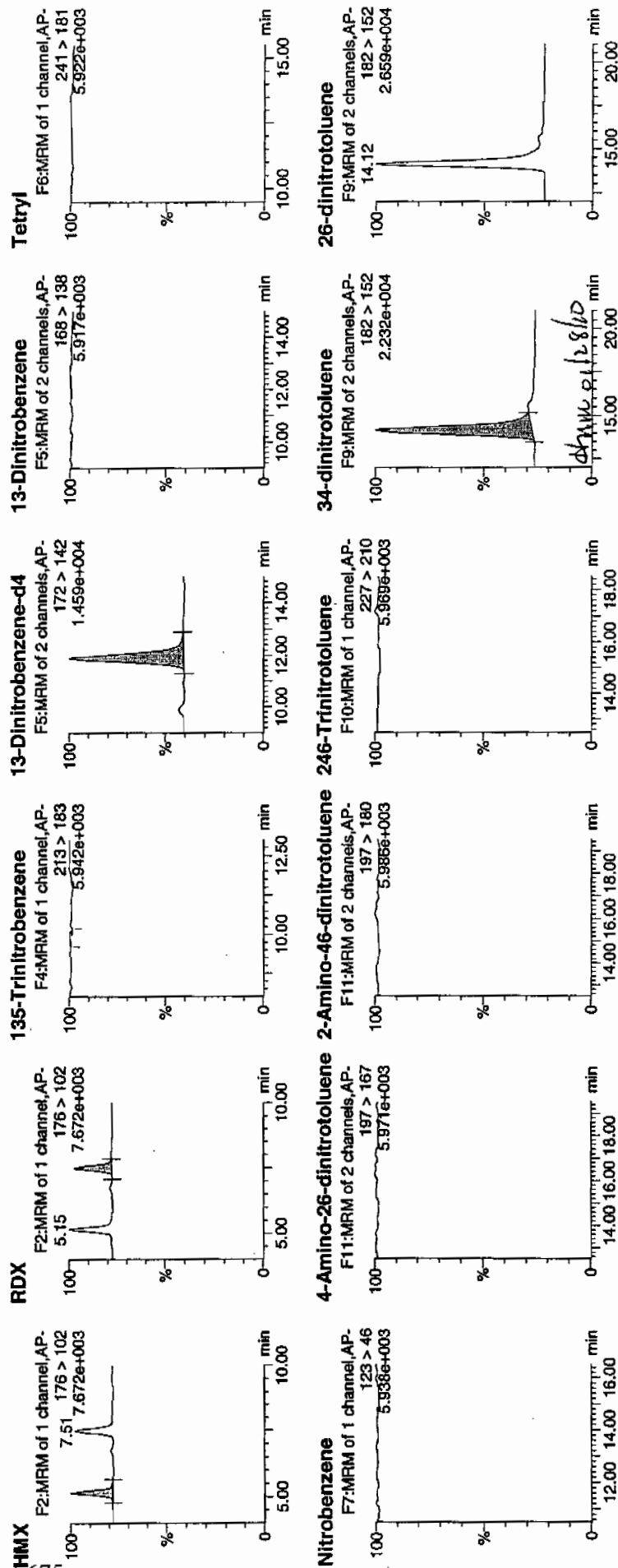
Time: 07:36:30

ID: 244142003

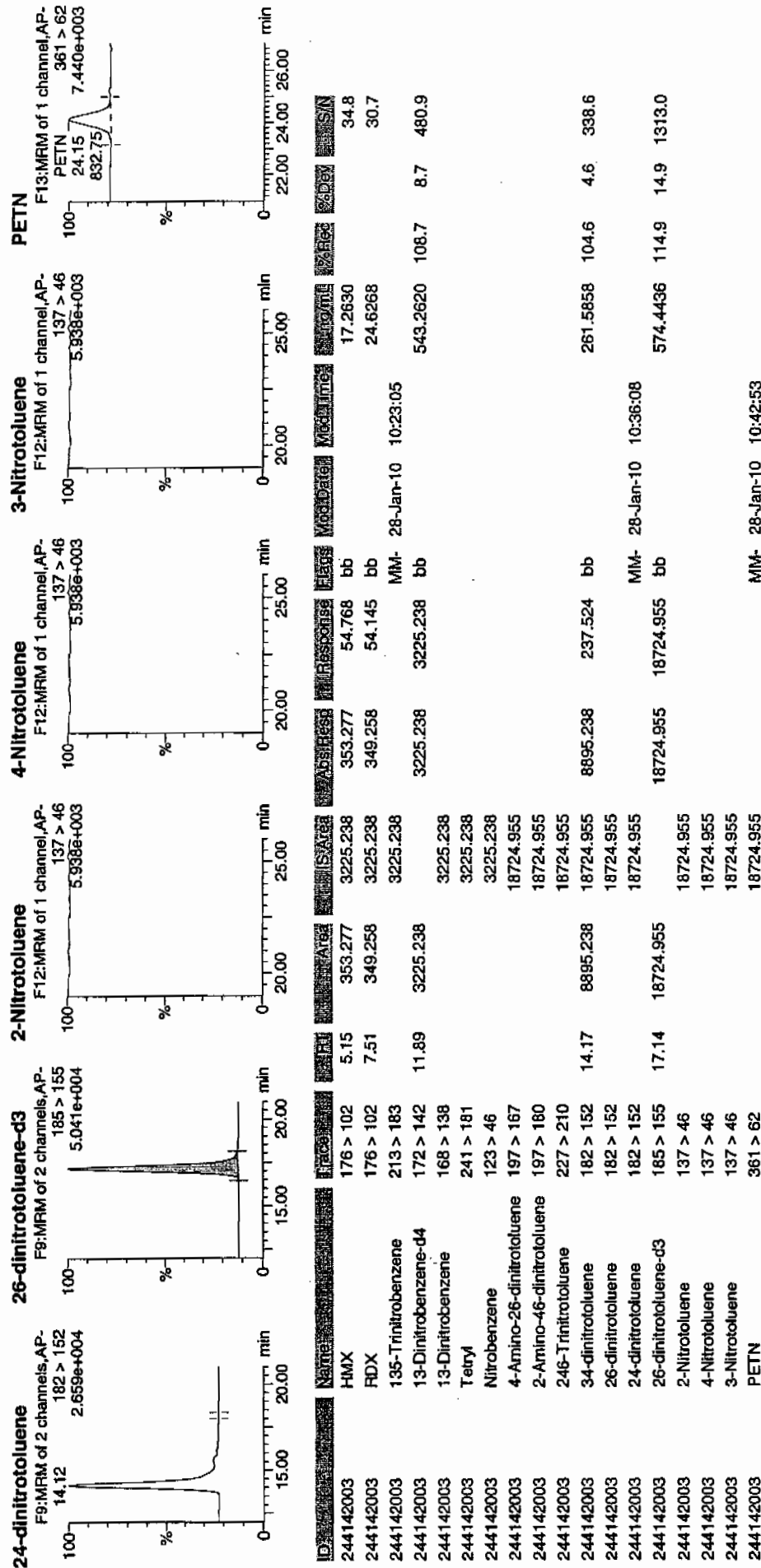
Vial: 3:6,A

12/28/10

WAV 94005718022 121



Dataset: C:\MASSLYNX\New\_Exp\PROV012510expA2.qld, Time: Thu Jan 28 10:42:53 2010





1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7623

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142003

Sample Amount 2

Moisture: 15.4

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01200020.wiff

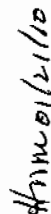
Date Analyzed: 20-JAN-10 15:28

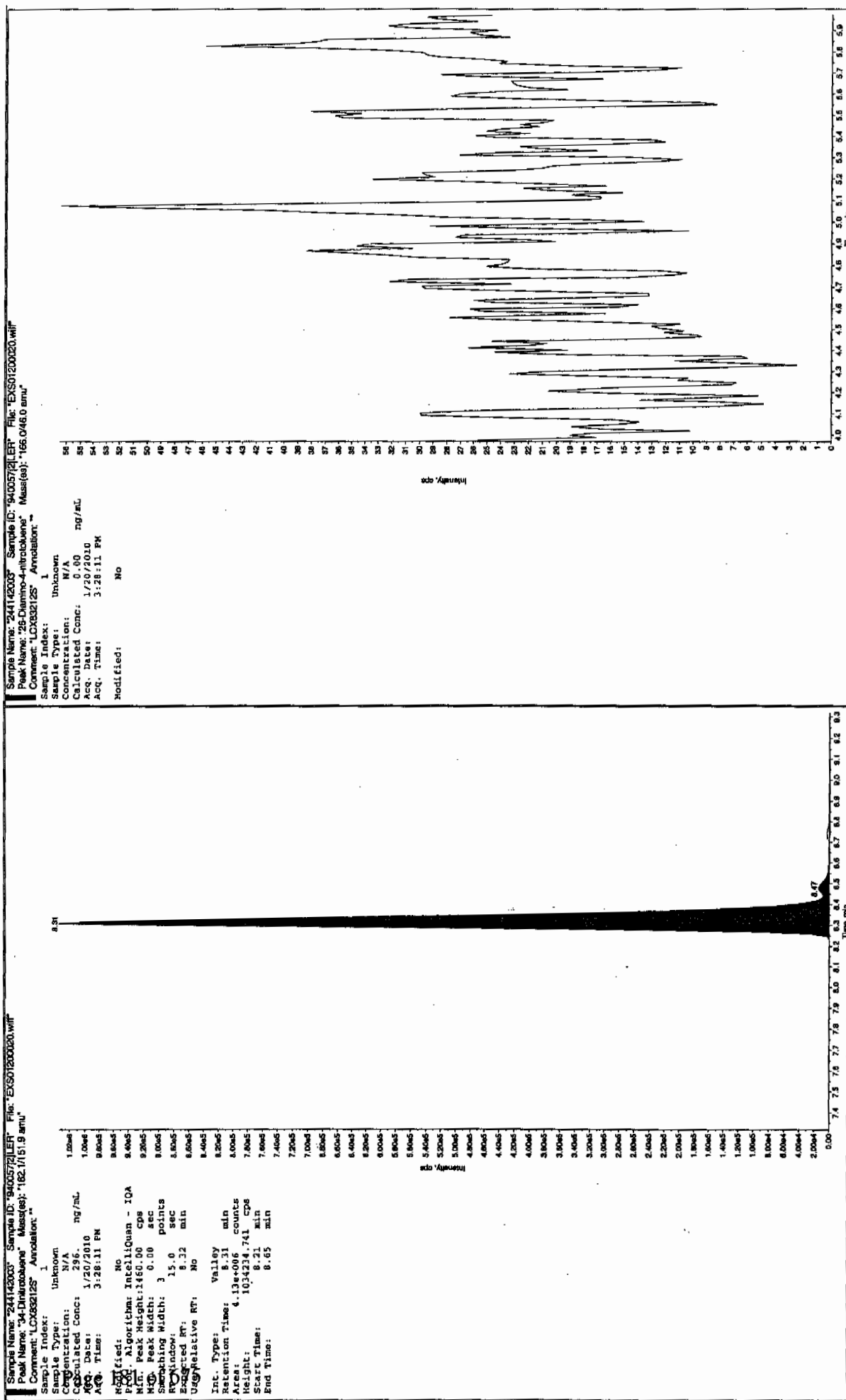
Units: ug/kg

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

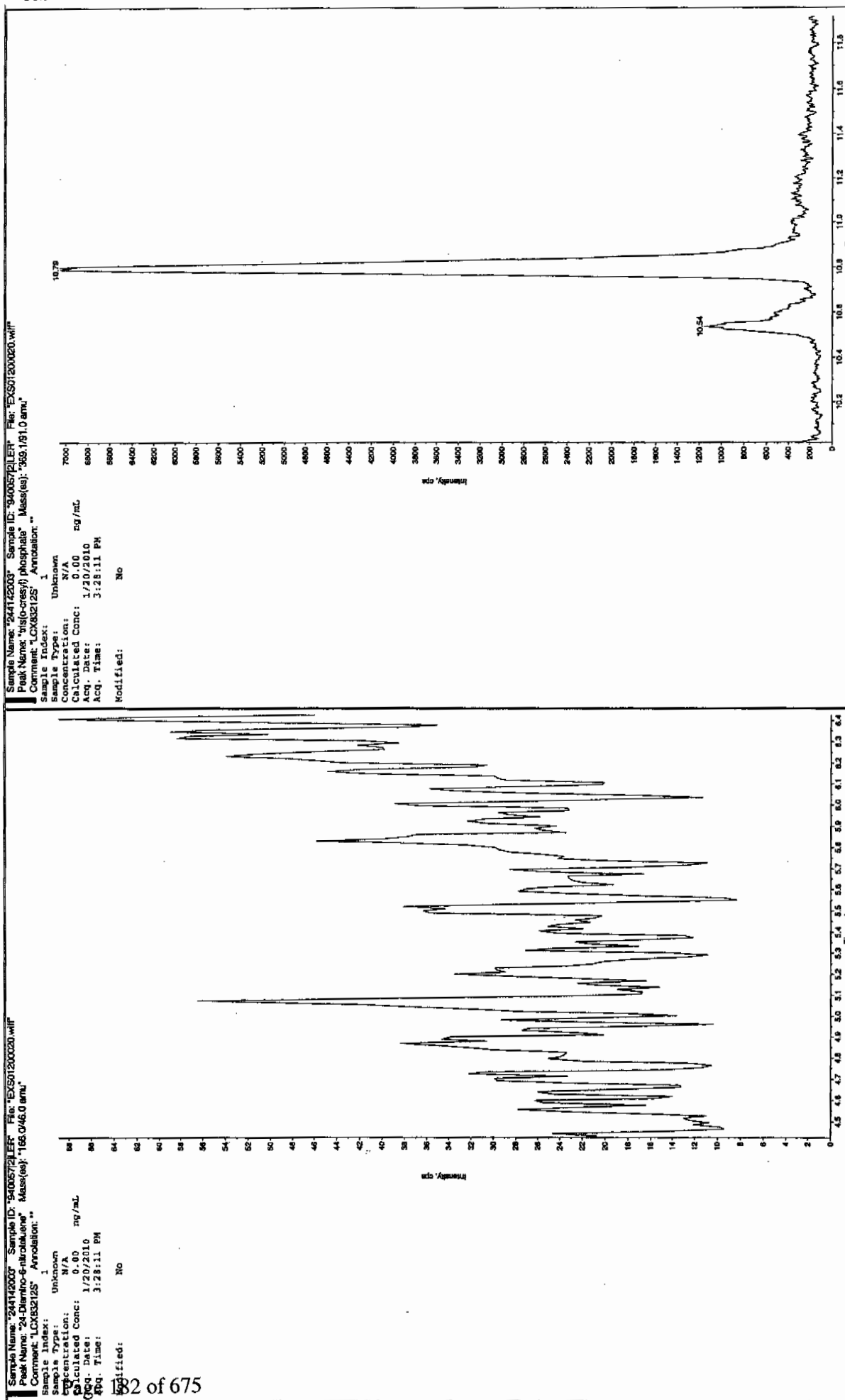
\*Concentration =

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





\*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: RE12-10-7622

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142004

Sample Amount 2

Moisture: 9.0

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125092a

Date Analyzed: 27-JAN-10 08:06

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	413	J
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	2010	
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

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125092a

Date: 27-Jan-2010

Time: 08:06:00

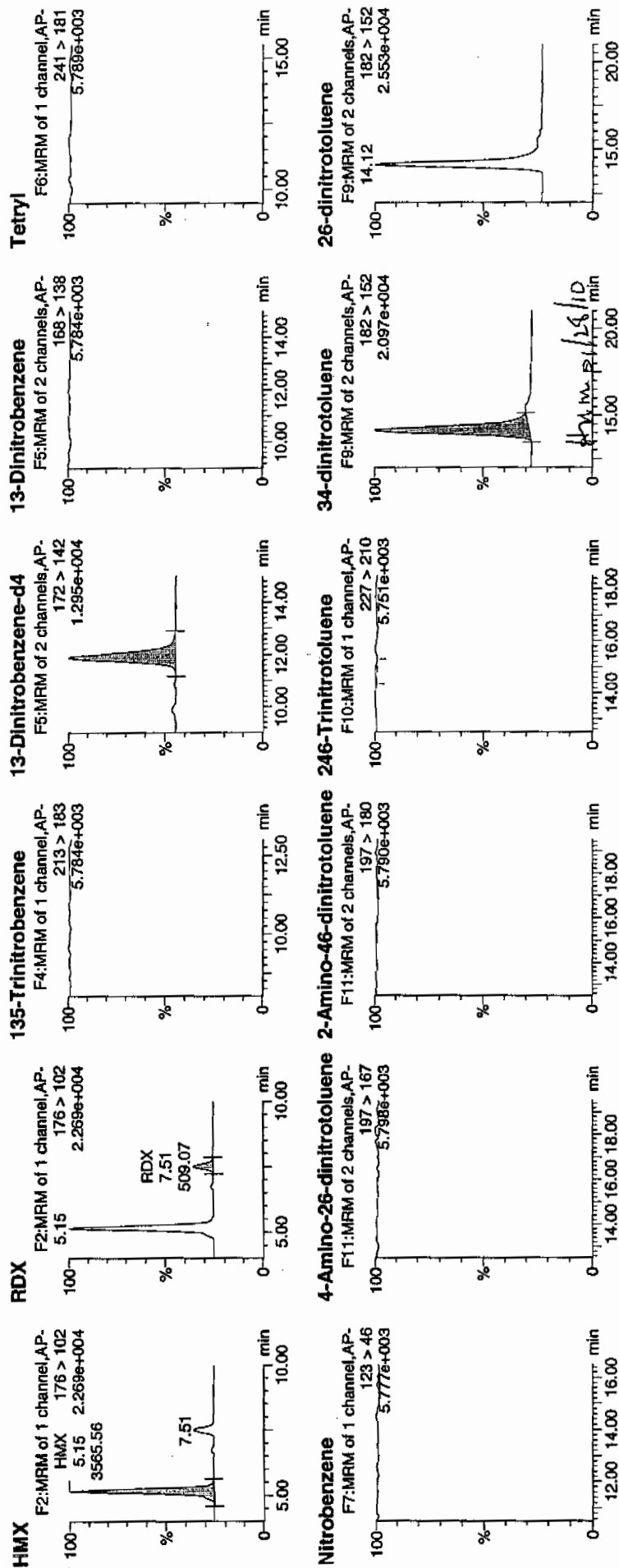
ID: 244142004

Vial: 3:6,B

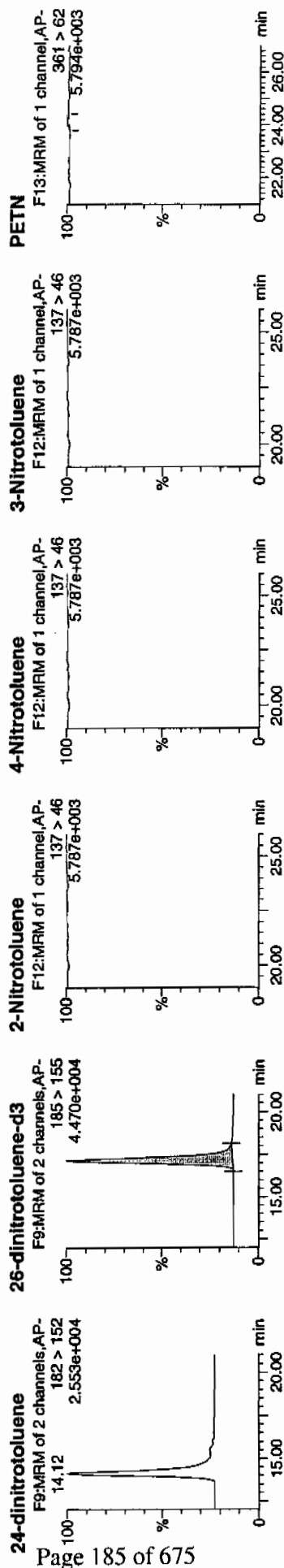
1/28/10

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ID	Name	Trace	F1	Area	Area	Abs Resp	Response	Flags	Mod Date	Mod Time	In time	% Rec	23 Dec	MSIN
244142004	HMx	176 > 102	5.15	3565.560	2801.881	3565.560	636.280	bb			200.5589			432.8
244142004	RDX	176 > 102	7.51	509.071	2801.881	509.071	90.845	bb			41.3193			58.4
244142004	135-Trinitrobenzene	213 > 183			2801.881									
244142004	13-Dinitrobenzene-d4	172 > 142	11.89	2801.881		2801.881	2801.881	bb			471.9514	94.4	-5.6	224.2
244142004	13-Dinitrobenzene	168 > 138			2801.881									
244142004	Tetryl	241 > 181			2801.881									
244142004	Nitrobenzene	123 > 46			2801.881									
244142004	4-Amino-26-dinitrotoluene	197 > 167			16735.816									
244142004	2-Amino-46-dinitrotoluene	197 > 180			16735.816									
244142004	246-Trinitrotoluene	227 > 210			16735.816			MM-	28-Jan-10	10:30:09				
244142004	34-dinitrotoluene	182 > 152	14.17	8029.493	16735.816	8029.493	239.889	bb			264.1914	105.7	5.7	499.2
244142004	26-dinitrotoluene	182 > 152			16735.816									
244142004	24-dinitrotoluene	182 > 152			16735.816									
244142004	26-dinitrotoluene-d3	185 > 155	17.14	16735.816		16735.816	16735.816	bb			513.4209	102.7	2.7	1625.8
244142004	2-Nitrotoluene	137 > 46			16735.816									
244142004	4-Nitrotoluene	137 > 46			16735.816									
244142004	3-Nitrotoluene	137 > 46			16735.816									
244142004	PETN	361 > 62			16735.816			MM-	28-Jan-10	10:41:45				

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7622

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142004

Sample Amount 2

Moisture: 9.0

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01200021.wiff

Date Analyzed: 20-JAN-10 15:43

Units: ug/kg

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

\*Concentration =

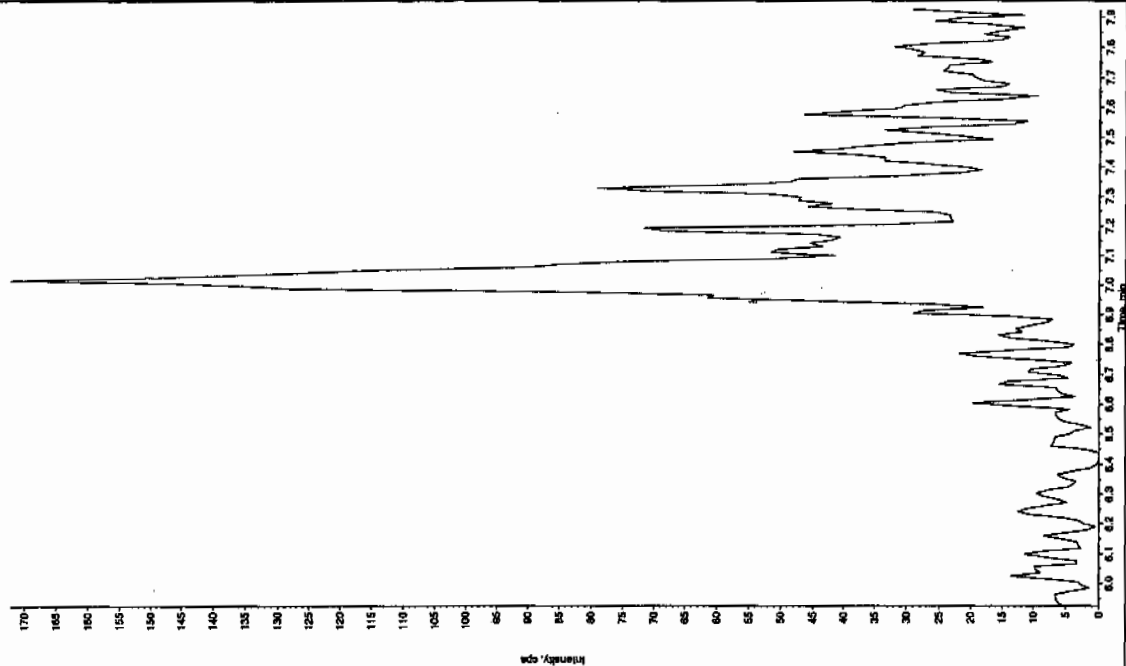
Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor



See 112110

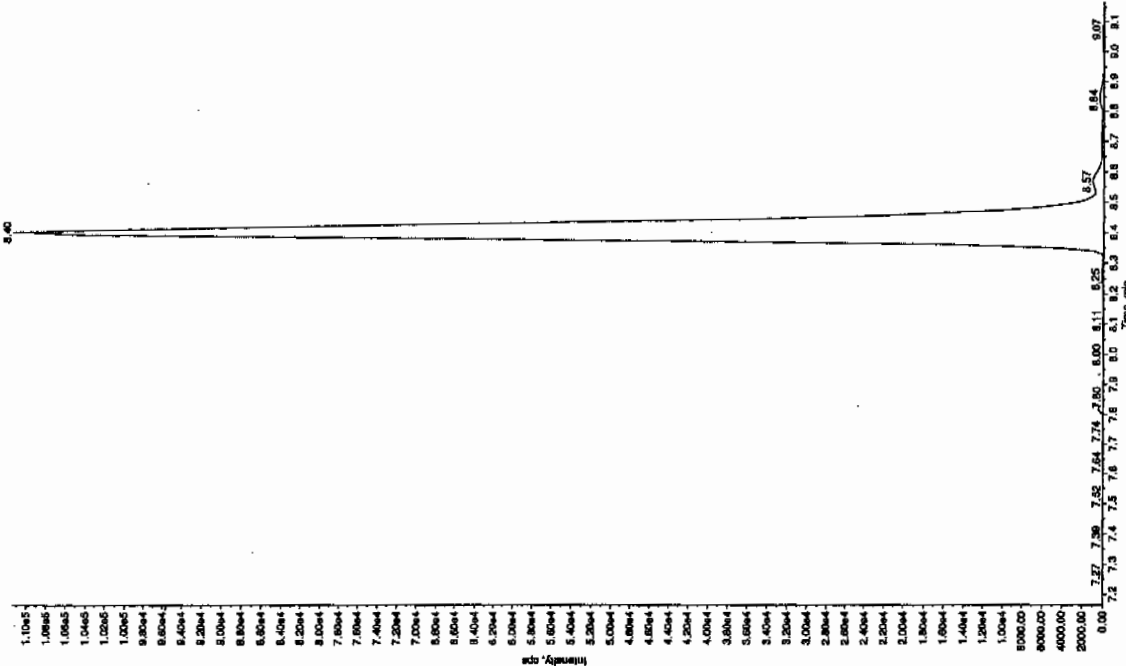
Sample Name: "244142004" Sample ID: "94003721LER" File: "EX501200021.will"  
 Peak Name: "TATB" Mass(es): "257.2204.9 amu"  
 Comment: "LCX632125" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Sample Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/20/2010  
 Acq. Time: 3:43:53 PM  
 Modified: No



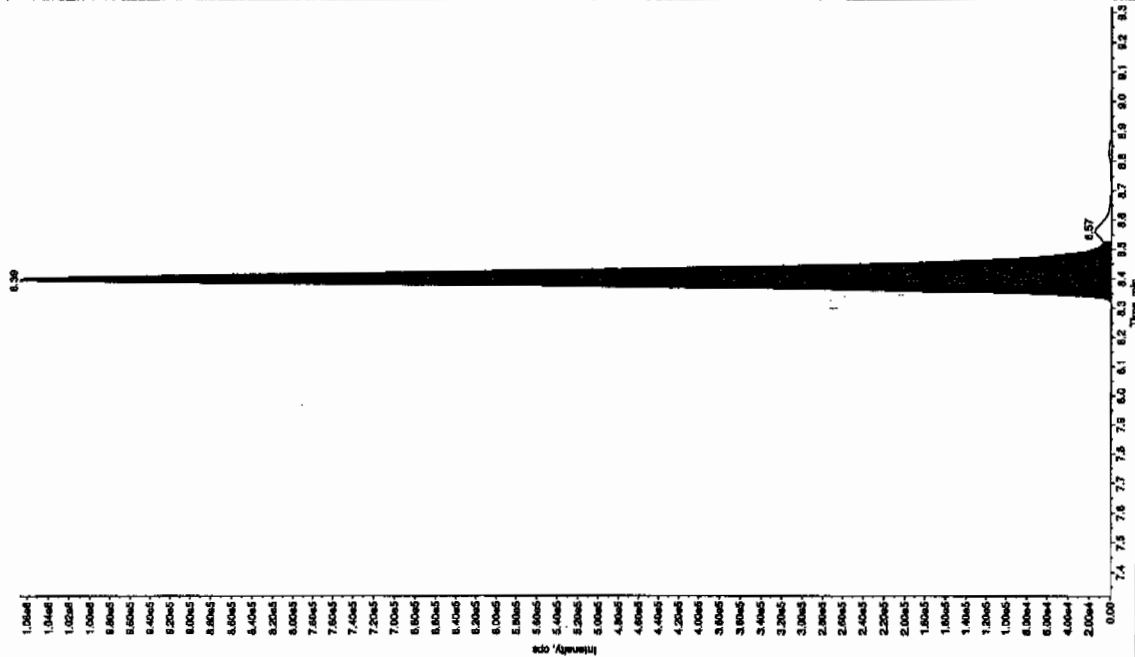
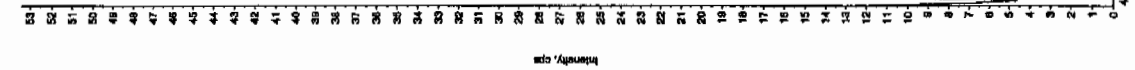
Sample Name: "244142004" Sample ID: "94003721LER" File: "EX501200021.will"  
 Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"  
 Comment: "LCX632125" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Sample Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/20/2010  
 Acq. Time: 3:43:53 PM  
 Modified: No

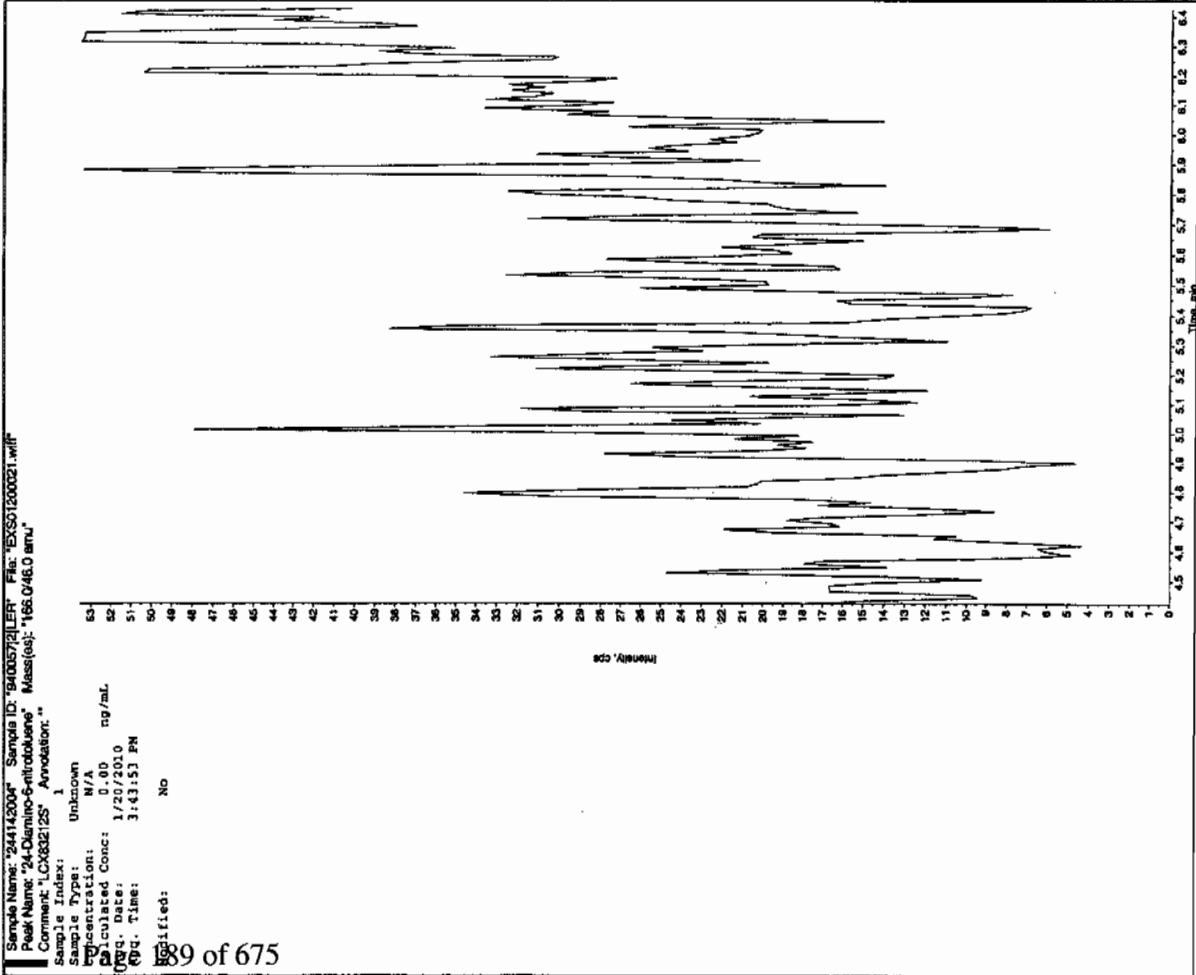
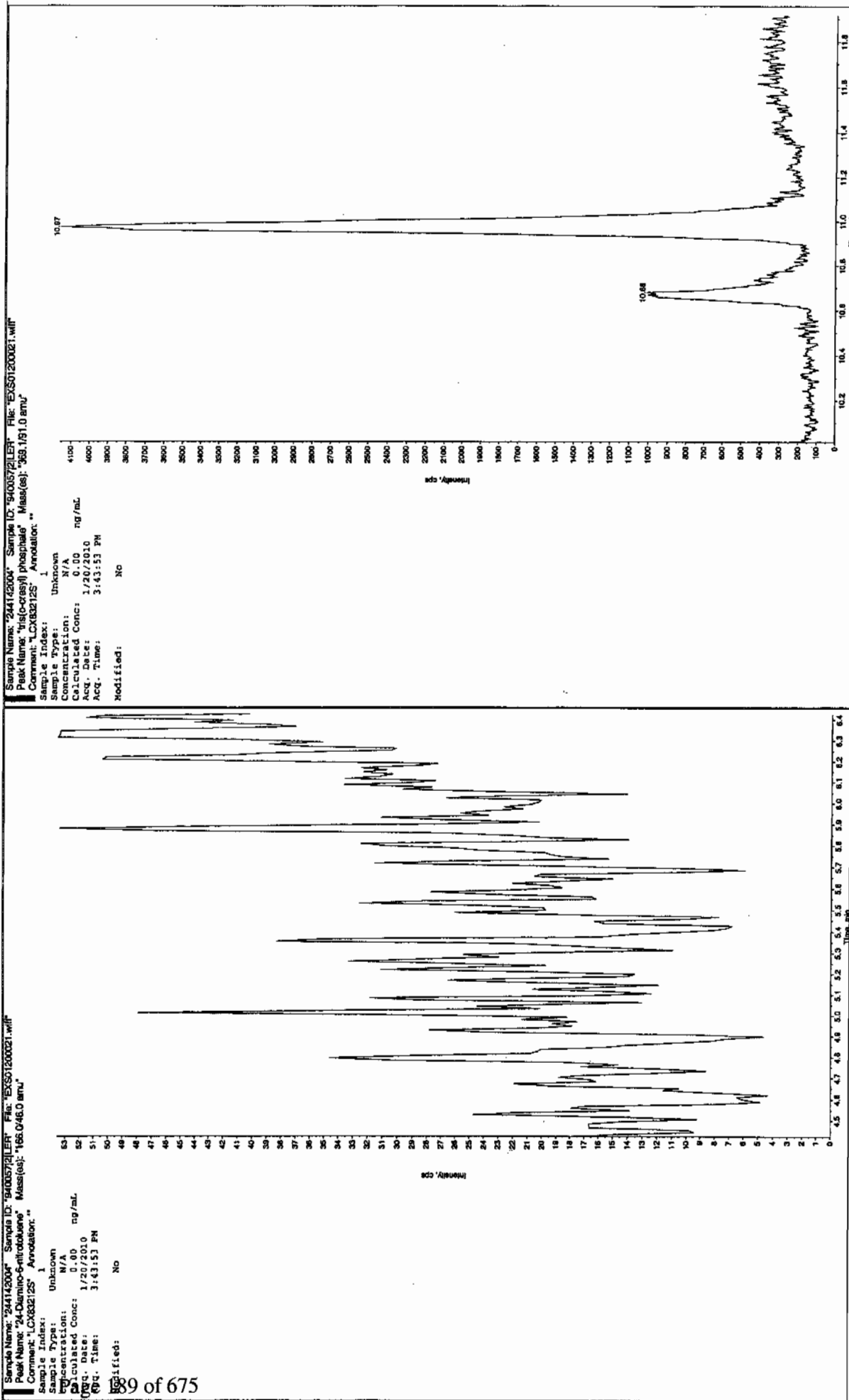


HW 01/21/10

Sample Name: "24142004" Sample ID: "34005721.ER" File: "EXS0120021.wiff"  
Peak Name: "34-Dinitrotoluene" Mass(es): "162.1/151.9 amu"



Sample Name:	"24112004"	Sample ID:	"904"
Peak Name:	"34-Dirichlet"	Mass(es):	"1"
Comment:	LCX83253	Annotation:	
Sample Index:	1		
Sample Type:	Unknown		
Concentration:	N/A		
Calculated Conc:	296		
Acq. Date:	1/20/2010		
Acq. Time:	3:43:53 PM		
Modified:	No		
Spec. Algorithm:	IntelliQuan - IQA		
Min. Peak Height:	1460.00 cps		
Min. Peak Width:	0.00 sec		
Smoothing Width:	15.0 points		
Window:	15.0 sec		
Expected RT:	6.32 min		
Obs. Relative RT:	6.32 min		
Int. Type:	Valley		
Retention Time:	8.19 min		
Area:	4,146,006 counts		
Height:	1066520, 752 counts		
Start Time:	8.31 min		
End Time:	8.53 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: RE12-10-7621

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142005

Sample Amount 2

Moisture: 7.6

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125093a

Date Analyzed: 27-JAN-10 08:35

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	127	J
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	333	J
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	5820	
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\EXP0125093a

Date: 27-Jan-2010

Time: 08:35:31

ID: 244142005

Vial: 3:6,C

LC 25x For 44x & 24x

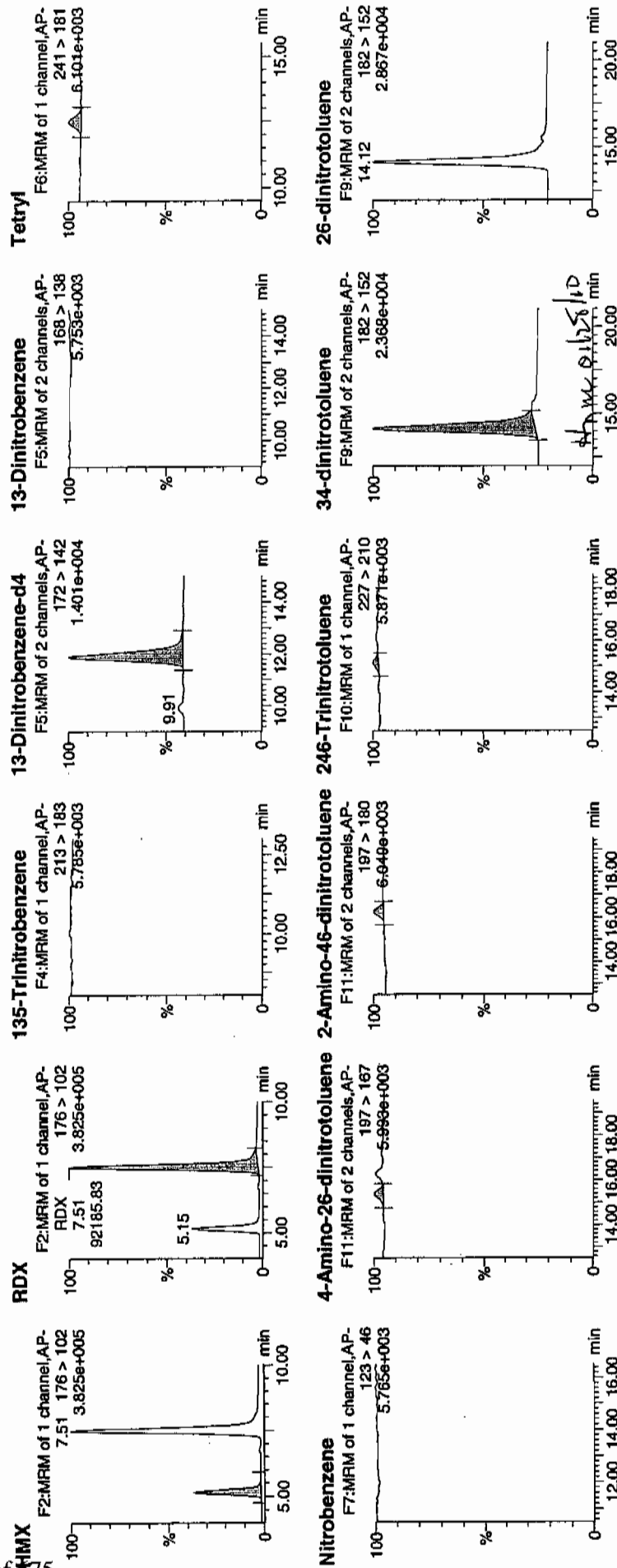
855 2470125113a

1447

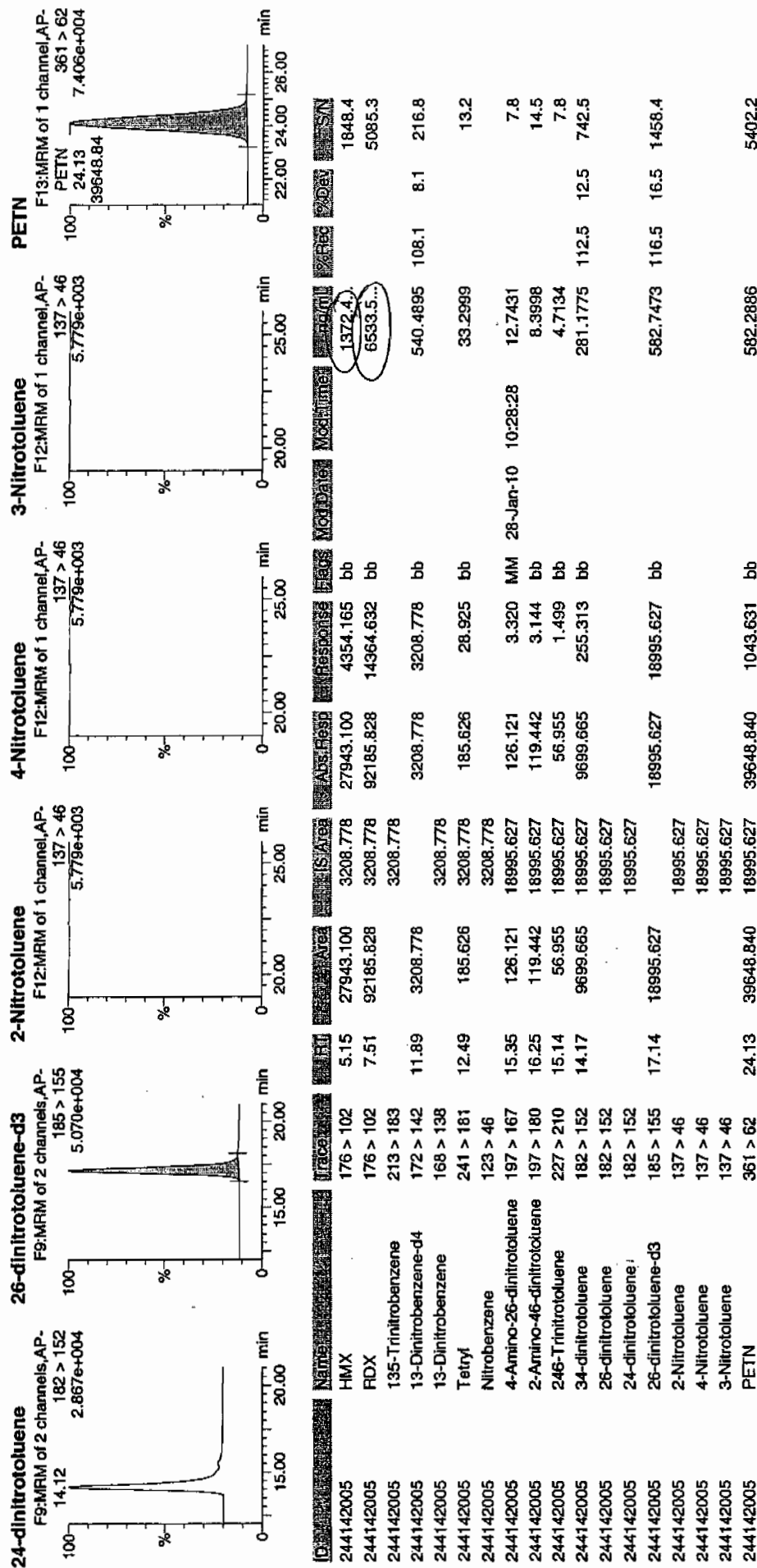
1/28/10

940057 (800) 21

of 75



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: RE12-10-7621

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142005

Sample Amount 2

Moisture: 7.6

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 25

Injection Volume (uL): 50

GEL data file: EXP0125113a

Date Analyzed: 27-JAN-10 18:26

Units: ug/kg

Cas No.	Compound	Concentration*	Q
121-82-4	RDX	49400	
2691-41-0	HMX	11400	

\*Concentration =

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

# Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Thu Jan 28 10:43:32 2010, Page 57 of 121

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125113a

Date: 27-Jan-2010

Time: 18:26:26

ID: 244142005

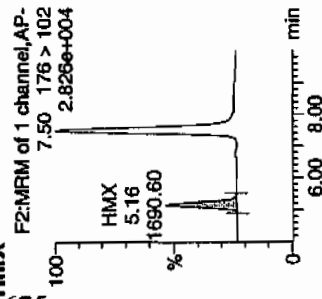
Vial: 3:8,E

REPORT HUK & RDX w/ EXP0125093a

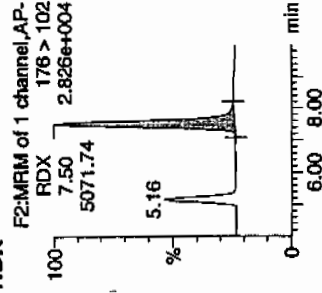
1/28/10

WAW 940057 / 25 / 25

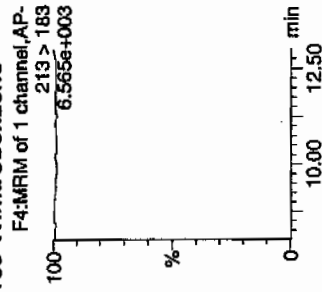
HMX



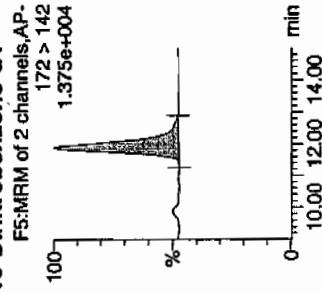
RDX



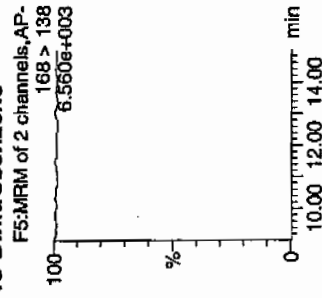
135-Trinitrobenzene



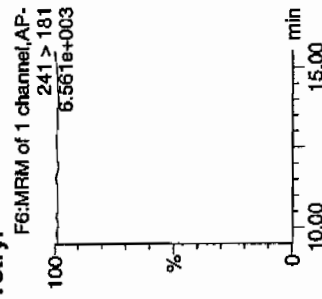
13-Dinitrobenzene-d4



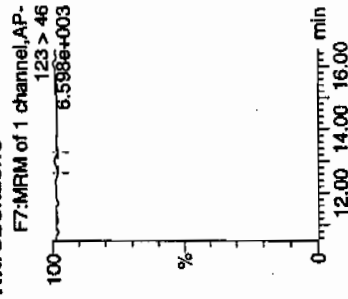
13-Dinitrobenzene



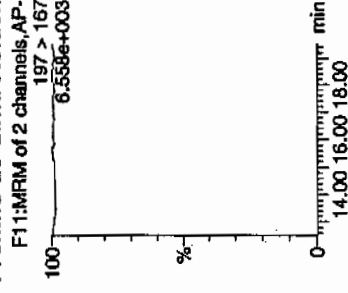
Tetryl



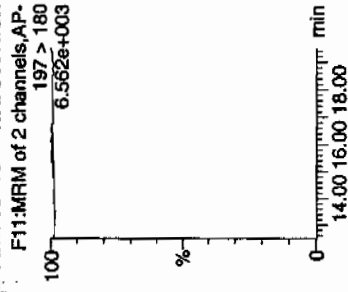
Nitrobenzene



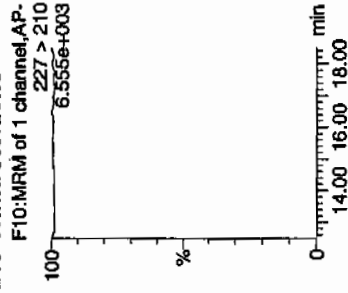
4-Amino-26-dinitrotoluene



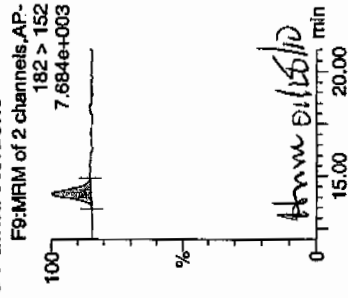
2-Amino-46-dinitrotoluene



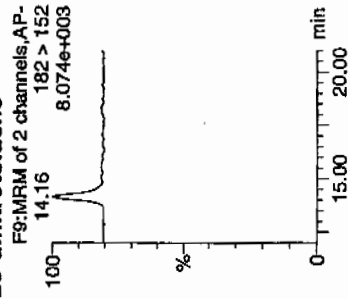
246-Trinitrotoluene



34-dinitrotoluene



26-dinitrotoluene





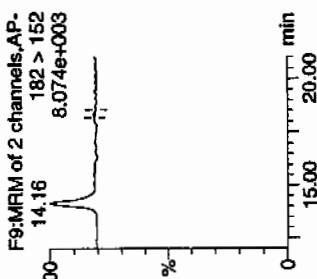
# Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

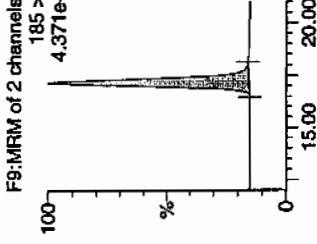
Printed: Thu Jan 28 10:43:32 2010, Page 58 of 121

Dataset: C:\MASSLYNX\New\_Exp\PRO1012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

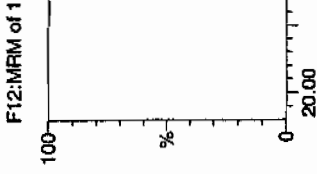
## 24-dinitrotoluene



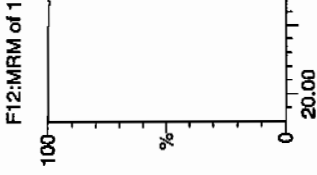
## 26-dinitrotoluene-d3



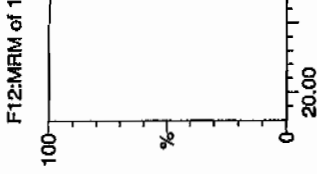
## 2-Nitrotoluene



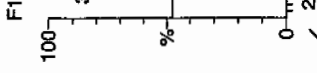
## 4-Nitrotoluene



## 3-Nitrotoluene



## PETN



ID	Name	Trace	RT	Area	IS	Response	Peak	Mod	Date	Mod	Time	Mod	Time	Mod	Time	Mod	Time
244142005	HMX	176 > 102	5.16	1690.600	2919.346	1690.600	289.551	bb									
244142005	RDX	176 > 102	7.50	5071.741	2919.346	5071.741	868.643	bb									
244142005	135-Trinitrobenzene	213 > 183	11.89	2919.346	2919.346	2919.346	2919.346	bb									
244142005	13-Dinitrobenzene-d4	172 > 142															
244142005	13-Dinitrobenzene	168 > 138															
244142005	Tetryl	241 > 181															
244142005	Nitrobenzene	123 > 46															
244142005	4-Amino-26-dinitrotoluene	197 > 167															
244142005	2-Amino-46-dinitrotoluene	197 > 180															
244142005	246-Trinitrotoluene	227 > 210															
244142005	34-dinitrotoluene	182 > 152	14.16	583.753	15654.174	583.753	18.645	bb									
244142005	26-dinitrotoluene	182 > 152															
244142005	24-dinitrotoluene	182 > 152															
244142005	26-dinitrotoluene-d3	185 > 155	17.16	15654.174	15654.174	15654.174	15654.174	bb									
244142005	2-Nitrotoluene	137 > 46															
244142005	4-Nitrotoluene	137 > 46															
244142005	3-Nitrotoluene	137 > 46															
244142005	PETN	361 > 62	24.16	3729.686	15654.174	3729.686	119.128	bb									

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7621

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142005

Sample Amount 2

Moisture: 7.6

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01200022.wiff

Date Analyzed: 20-JAN-10 15:59

Units: ug/kg

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

\*Concentration =

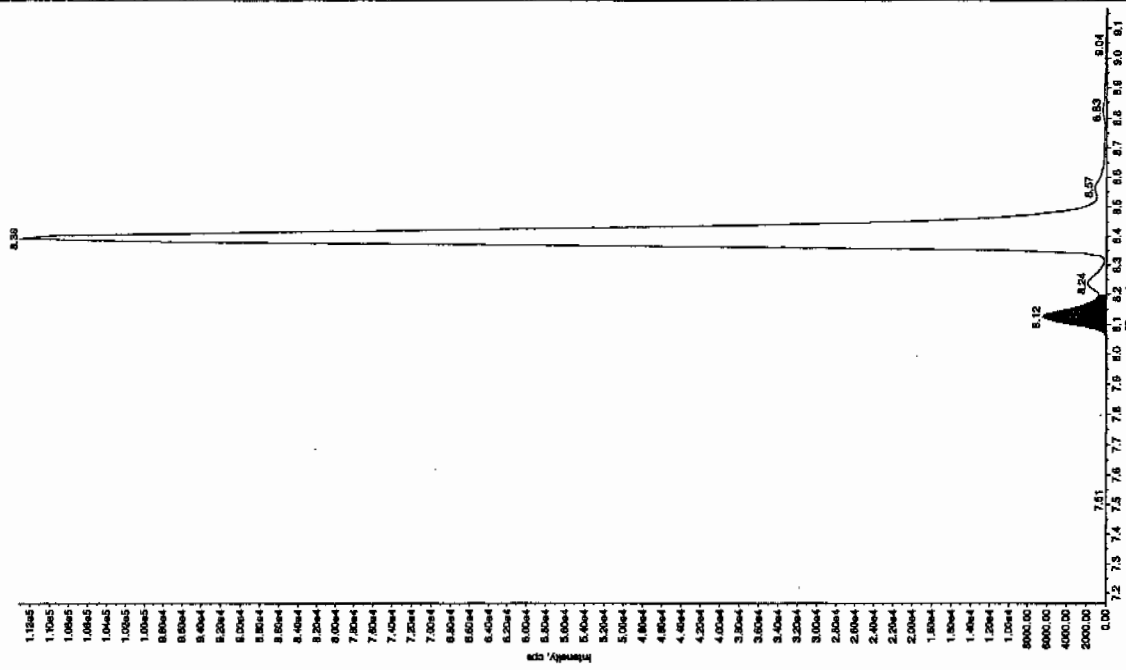
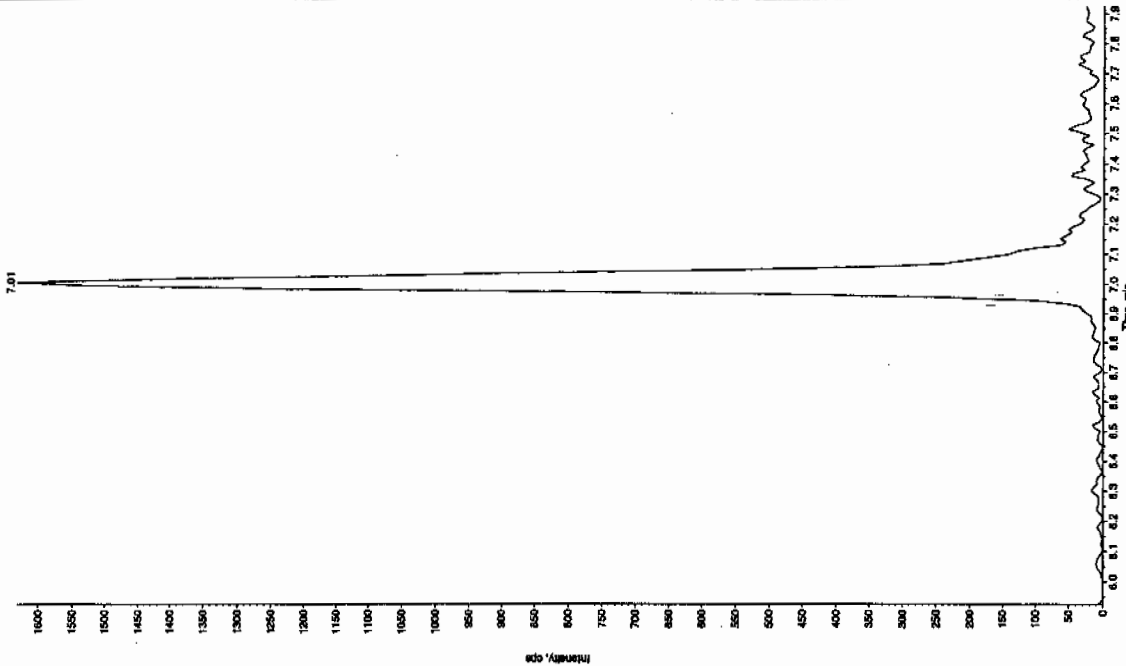
Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

See 12/1/10

Sample Name: 244142005 Sample ID: 94005721ER File: EX501200022.will  
Peak Name: TRATE Mass(es): 257.2204.9 amu  
Comment: LC832125 Annotation: "

Sample Index: 1  
Sample Type: Unknown  
Concentration: N/A  
Calculated Conc: 0.00 ng/mL  
Acq. Date: 1/20/2010  
Acq. Time: 3:59:33 PM  
Modified: No

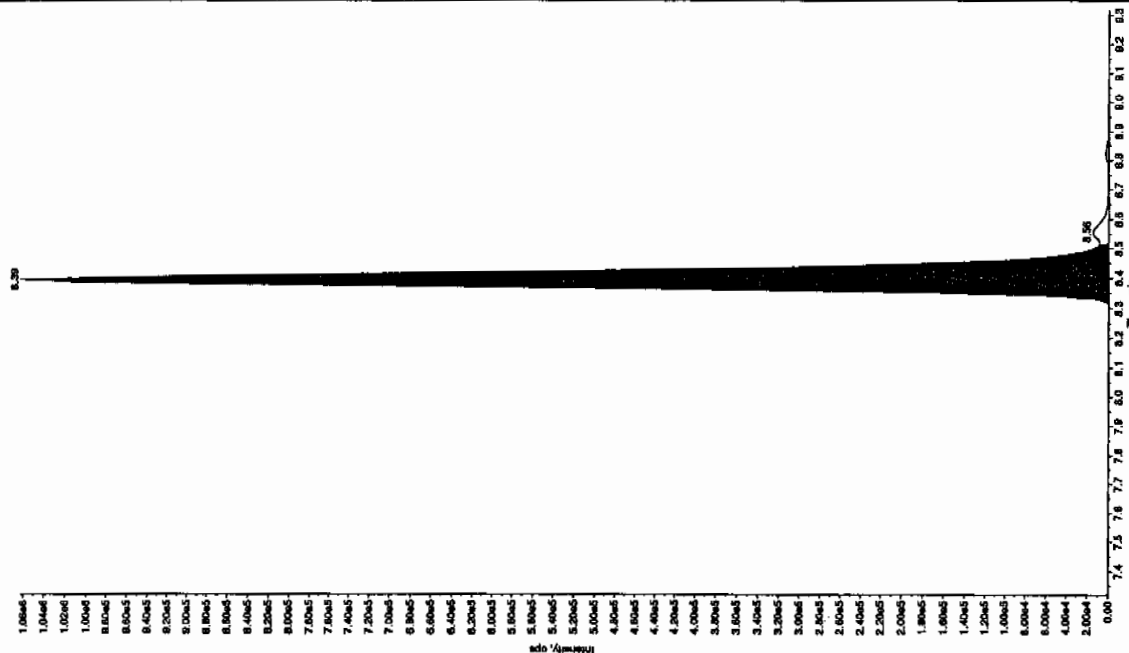
Proc. Algorithm: IntelliQuan - IQA  
Min. Peak Height: 2000.00 cps  
Min. Peak Width: 0.00 sec  
Smoothing Width: 3 points  
RT Window: 15.0 sec  
Expected RT: 8.16 min  
Use Relative RT: No  
Int. Type: Valley  
Retention Time: 8.12 min  
Height: 2.48e+012 counts  
Start Time: 8.05 min  
End Time: 8.20 min



4/11/10 12/1/10

Sample Name: "24142005" Sample ID: "94005701ER" File: "EXS0120022.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 ng/mL  
 Acq. Date: 1/20/2010  
 Acq. Time: 3:59:33 PM  
 Modified: No

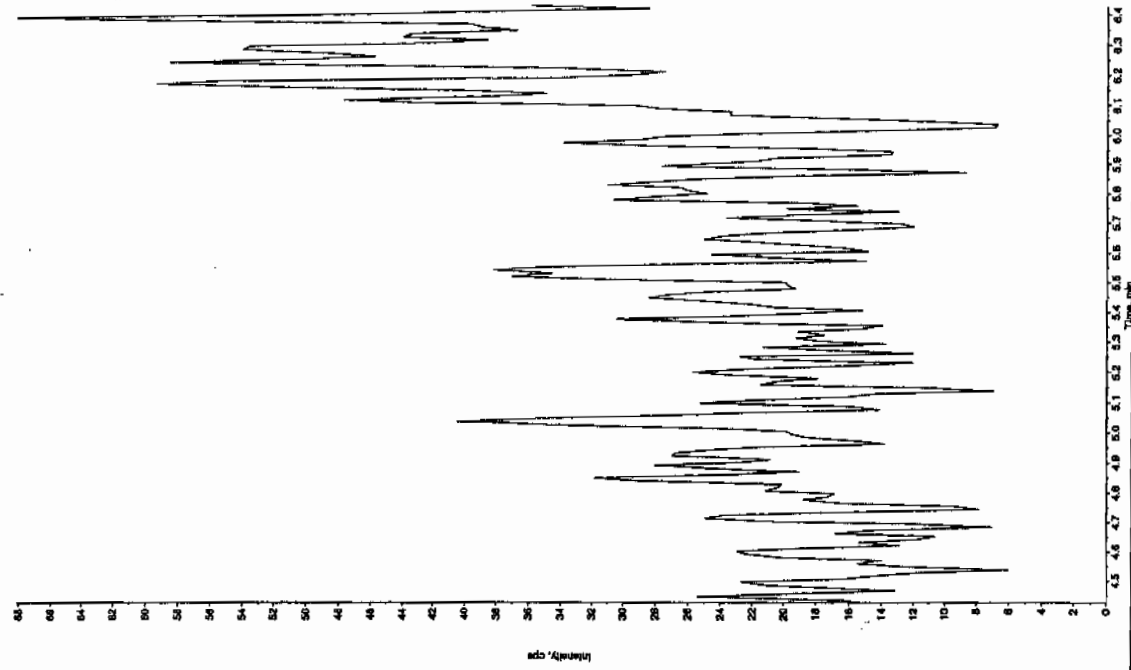


Sample Name: "24142005" Sample ID: "94005701ER" File: "EXS0120022.wif"  
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.17151.9 amu"  
 Comment: "LCX832125" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 290 ng/mL  
 Acq. Date: 1/20/2010  
 Acq. Time: 3:59:33 PM  
 Modified: No  
 Int. Type: Valley  
 Retention Time: 8.39 min  
 Area: 4.06e+006 counts  
 Height: 1062719.727 cps  
 Start Time: 8.30 min  
 End Time: 8.52 min  
 Algorithm: Interpolated  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 Window: 15.0 sec  
 Selected RT: 8.32 min  
 Use Relative RT: No

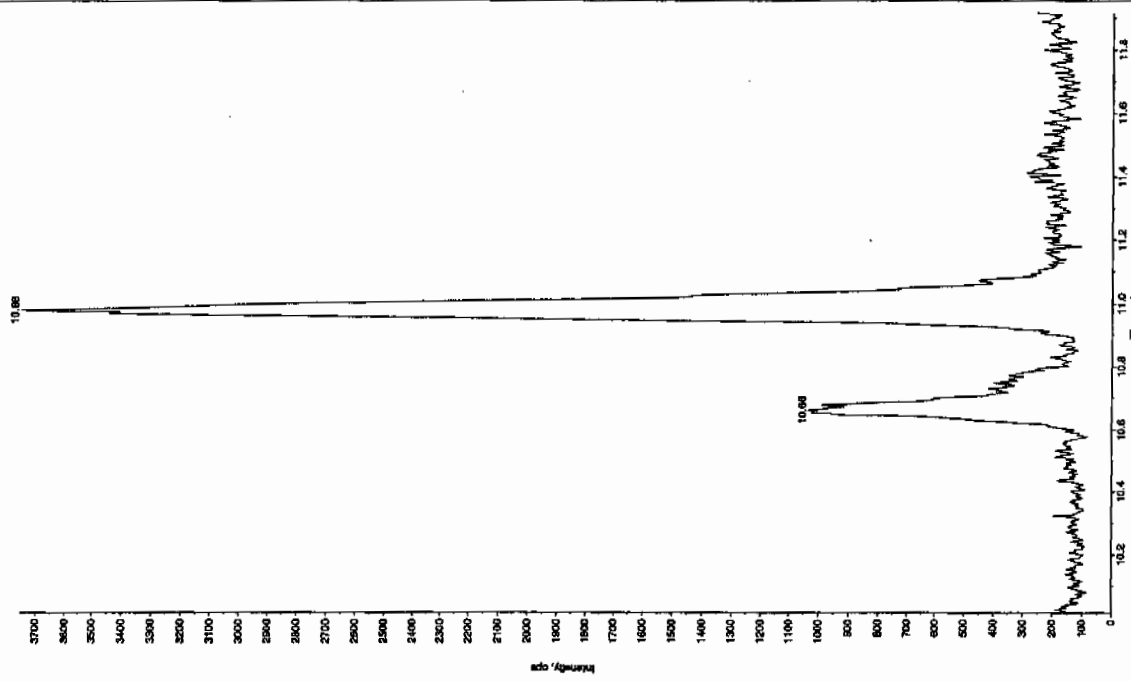
Sample Name: "244142005" Sample ID: "94005721ER" File: "EXS01200022.wif"  
 Peak Name: "24-Dinitro-6-nitrofluorene" Mass(es): "166.0/46.0 amu"  
 Comment: "LCX83212S" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/20/2010  
 Acq. Time: 3:59:33 PM  
 Modified: No



Sample Name: "244142005" Sample ID: "94005721ER" File: "EXS01200022.wif"  
 Peak Name: "tri(o-cresyl phosphate)" Mass(es): "389.1/91.0 amu"  
 Comment: "LCX83212S" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/20/2010  
 Acq. Time: 3:58:33 PM  
 Modified: No



1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7617

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142006

Sample Amount 2

Moisture: 9.2

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125094a

Date Analyzed: 27-JAN-10 09:05

Units: ug/kg

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

\*Concentration =

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

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\EXP0125094a

Date: 27-Jan-2010

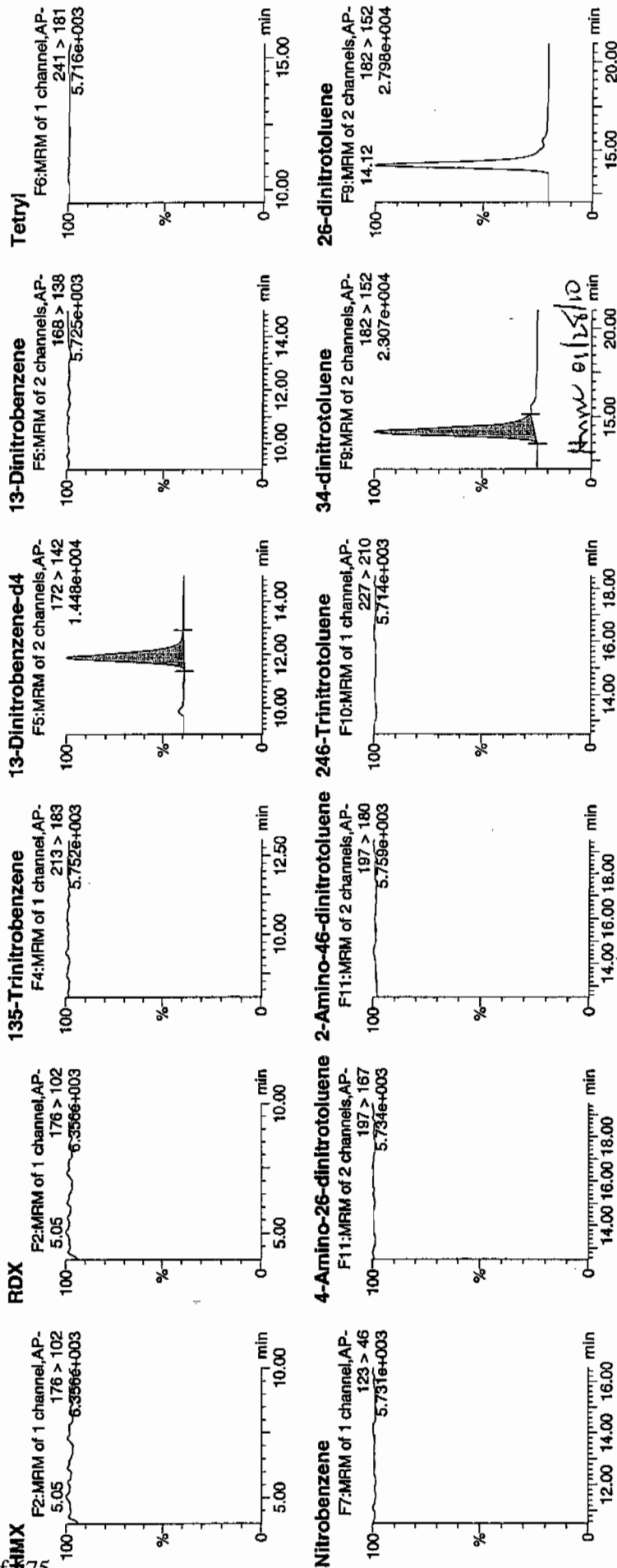
Time: 09:05:16

ID: 244142006

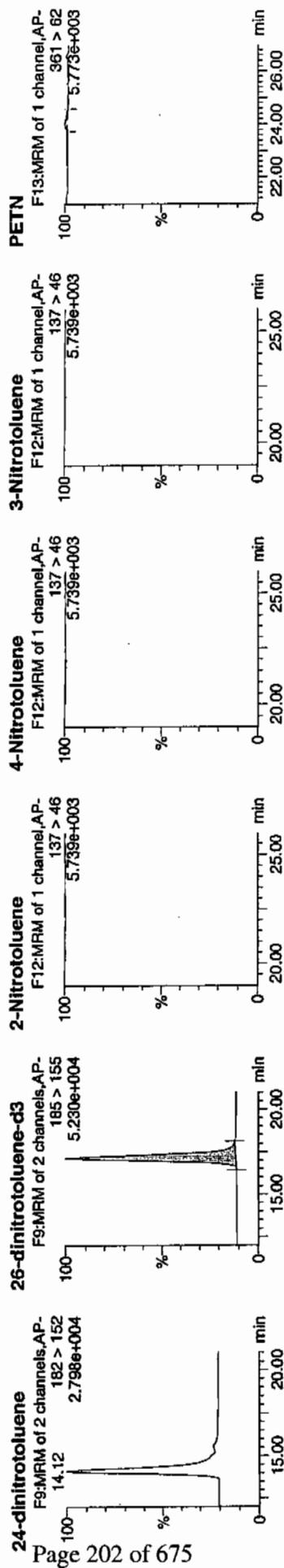
Vial: 3:6,D

1/28/10

1940057/2022/21



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	24 Dec	25 Jan
244142006	HMX	176 > 102			3372.751							
244142006	RDX	176 > 102			3372.751							
244142006	135-Trinitrobenzene	213 > 183			3372.751							
244142006	13-Dinitrobenzene-d4	172 > 142	11.89	3372.751				3372.751	3372.751	bb	568.1092	113.6
244142006	13-Dinitrobenzene	168 > 138			3372.751							
244142006	Tetryl	241 > 181			3372.751							
244142006	Nitrobenzene	123 > 46			3372.751							
244142006	4-Amino-26-dinitrotoluene	197 > 167			19585.227							
244142006	2-Amino-46-dinitrotoluene	197 > 180			19585.227							
244142006	246-Trinitrotoluene	227 > 210			19585.227							
244142006	34-dinitrotoluene	182 > 152	14.17	9431.713	19585.227			9431.713	240.786	bb	265.1791	106.1
244142006	26-dinitrotoluene	182 > 152			19585.227							
244142006	24-dinitrotoluene	182 > 152			19585.227							
244142006	26-dinitrotoluene-d3	185 > 155	17.14	19585.227				19585.227	19585.227	bb	600.8350	120.2
244142006	2-Nitrotoluene	137 > 46			19585.227							
244142006	4-Nitrotoluene	137 > 46			19585.227							
244142006	3-Nitrotoluene	137 > 46			19585.227							
244142006	PETN	361 > 62										

MM- 28-Jan-10 10:41:34



1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7617

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142006

Sample Amount 2

Moisture: 9.2

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01200023.wiff

Date Analyzed: 20-JAN-10 16:15

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 1/24/10

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Sample Name: "244142006" Sample ID: "94005721ER" File: "EX50120023.wif"

Peak Name: "35-Dinitrobenzyl" 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: 1/20/2010

Acq. Time: 4:15:14 PM

Modified: No

Sample Name: "244142006" Sample ID: "94005721ER" File: "EX50120023.wif"

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

Comment: "LCX832125" Annotation: ""

Sample Index: 1

Sample Type: Unknown

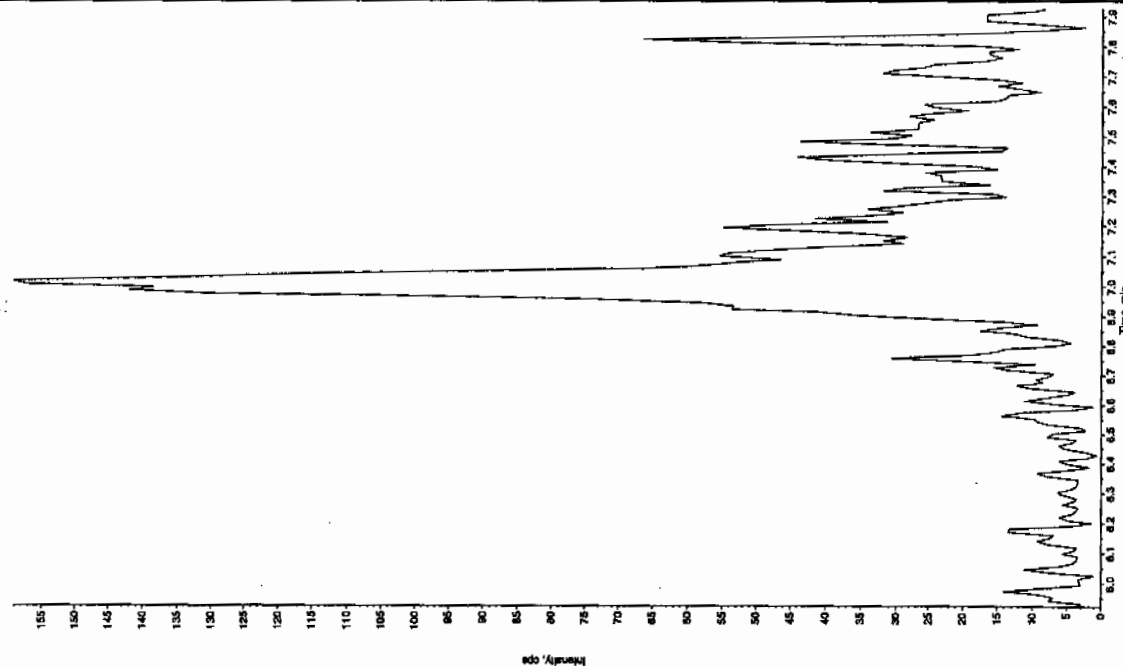
Concentration: N/A

Calculated Conc: 0.00 ng/mL

Acq. Date: 1/20/2010

Acq. Time: 4:15:14 PM

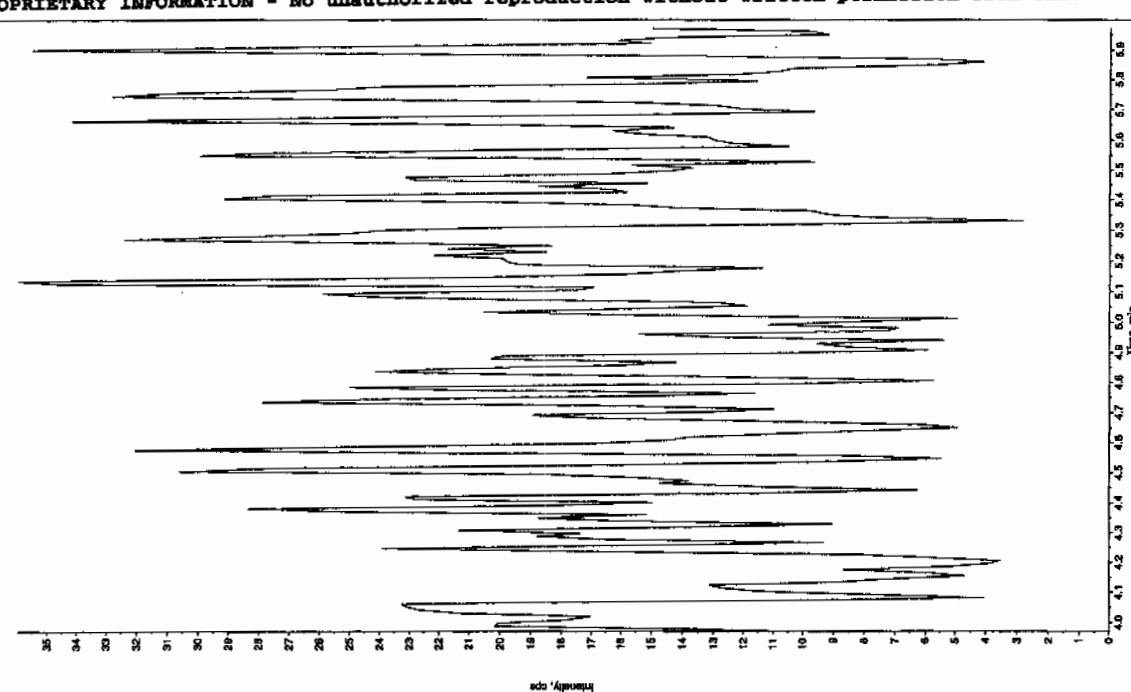
Modified: No



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

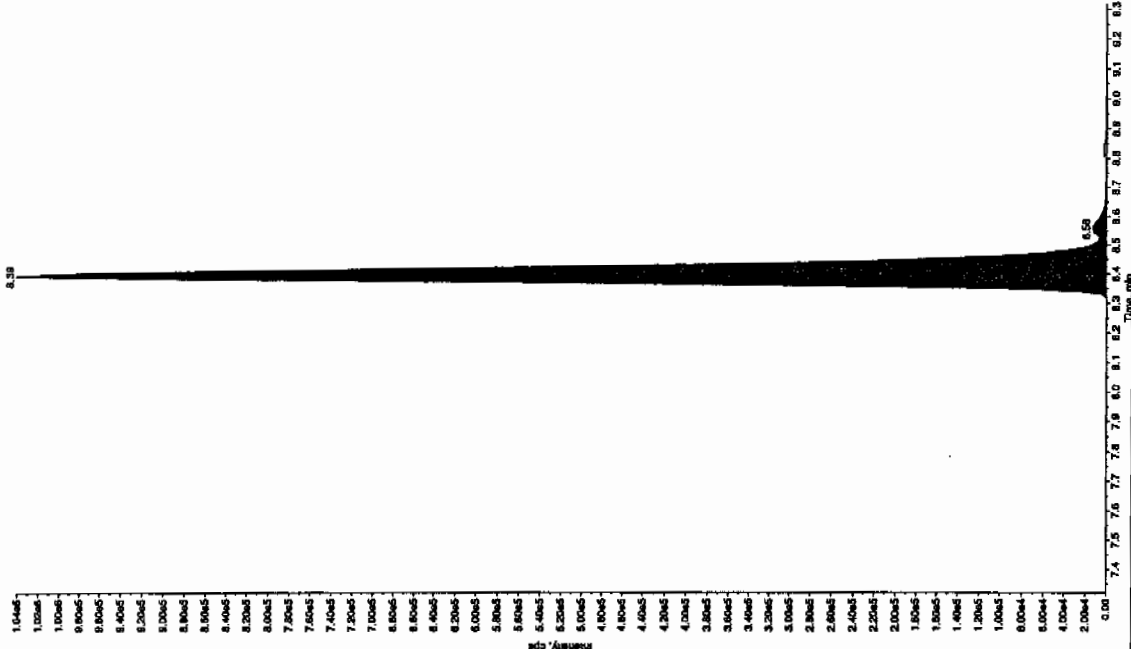
Sample Name: "24142005" Sample ID: "94005721.ER" File: "EX50120023.wif"  
 Peak Name: "25-Dimino-4-nitrotoluene" Mass(es): "165.046.0 amu"  
 Comment: "LCX50125" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 1/20/2010  
 Acq. Date: 4:15:14 PM  
 Acq. Time: 4:15:14 PM  
 Modified: No



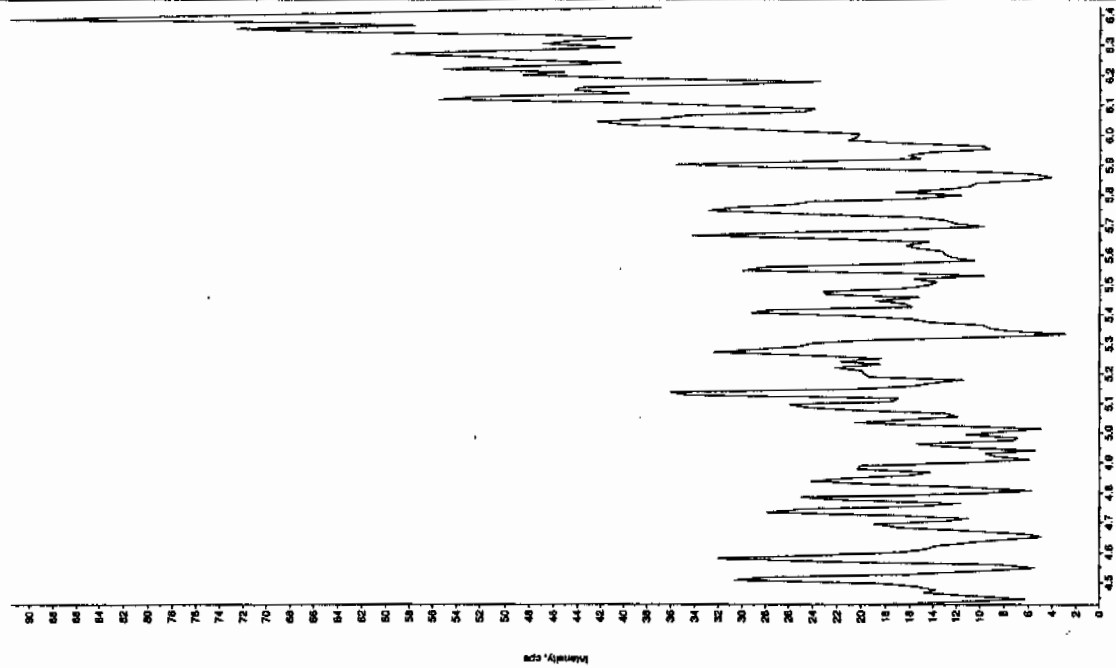
Sample Name: "24142005" Sample ID: "94005721.ER" File: "EX50120023.wif"  
 Peak Name: "34-Oxotoluene" Mass(es): "182.1751.6 amu"  
 Comment: "LCX50125" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 288 ng/mL  
 Calculated Conc: 1/20/2010  
 Acq. Date: 4:15:14 PM  
 Acq. Time: 4:15:14 PM  
 Modified: No  
 Spec. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 1450.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 Window: 15.0 sec  
 Detected RT: 8.32 min  
 Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.32 min  
 Area: 4.03e+05 counts  
 Height: 104947.146 cps  
 Start Time: 8.29 min  
 End Time: 8.72 min



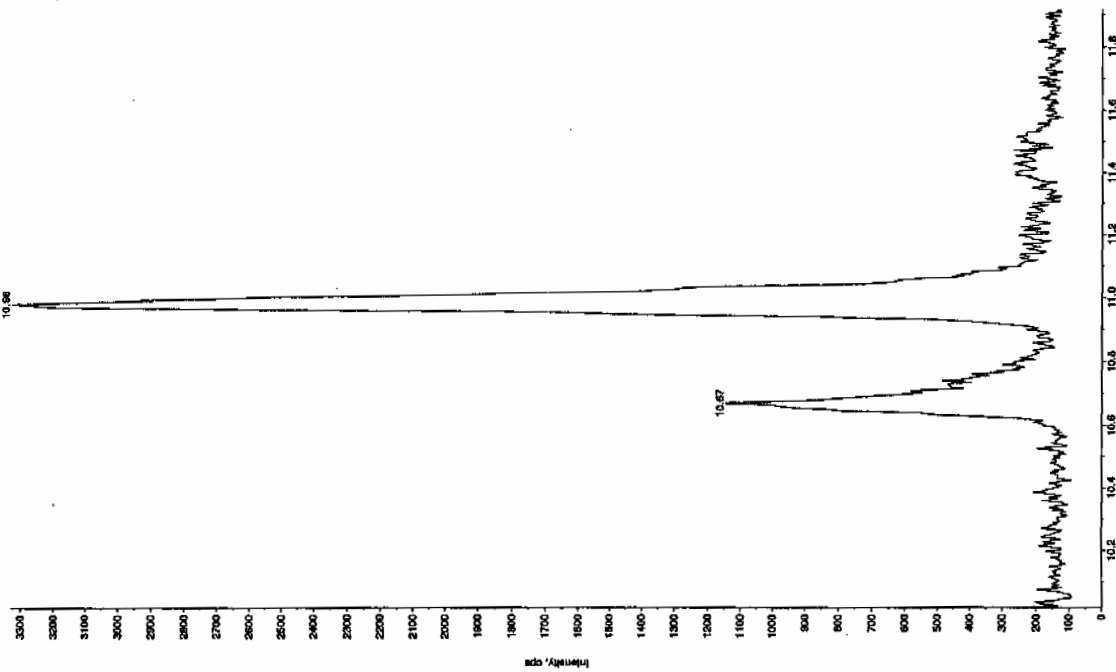
Sample Name: "244142006" Sample ID: "940057121ER" File: "EXS01200023.wif"  
 Peak Name: "24-Diamino-6-nitrobenzene" Mass(es): "166.046.0 amu"  
 Comment: "LCX832125" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/20/2010  
 Acq. Time: 4:15:14 PM  
 Modified: No



Sample Name: "244142006" Sample ID: "940057121ER" File: "EXS01200023.wif"  
 Peak Name: "Tri(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: 1/20/2010  
 Acq. Time: 4:15:14 PM  
 Modified: No



1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7620

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142007

Sample Amount 2

Moisture: 11.2

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125098a

Date Analyzed: 27-JAN-10 11:03

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	277	J
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	765	
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\EXP0125098a

Date: 27-Jan-2010

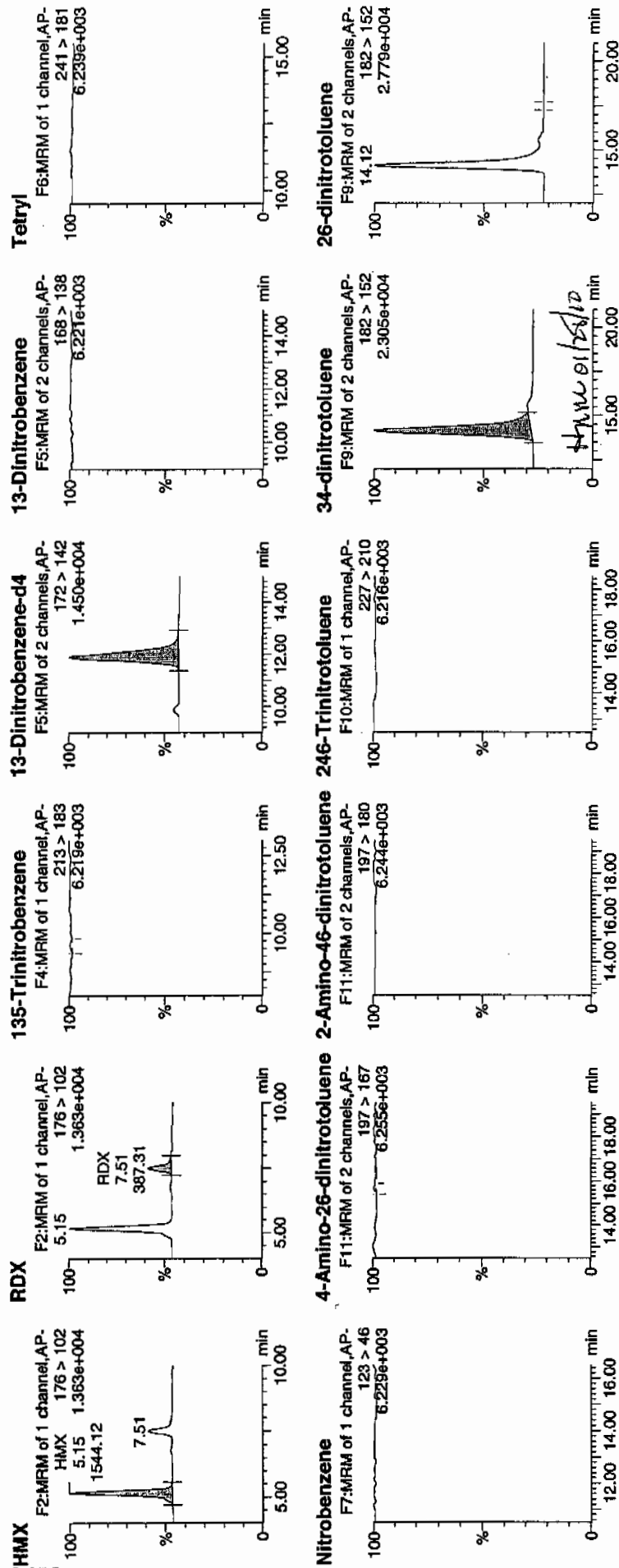
Time: 11:03:26

ID: 244142007

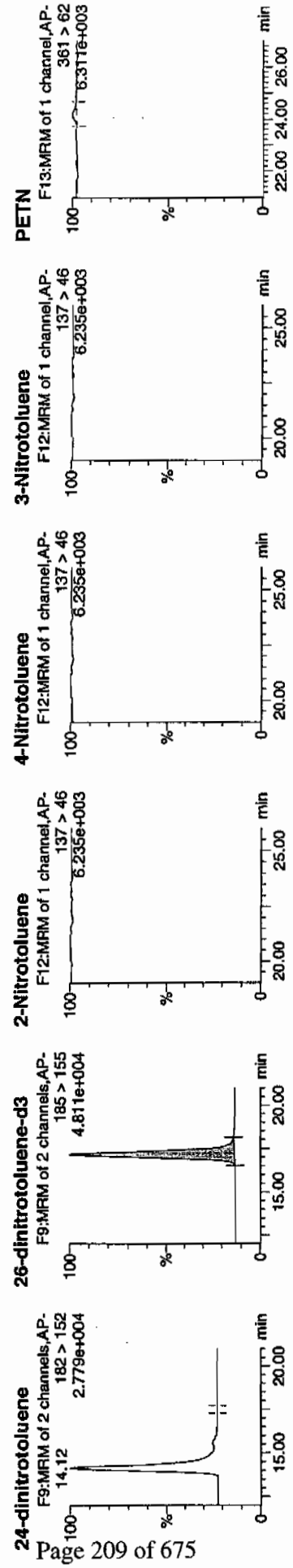
Vial: 3:6,E

*1/28/10*

*940057 / 8022 / 21*



Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010



ID	Name	Time	Area	Height	Width	Area%	Height%	Width%	Time	Area	Height	Width	Area%	Height%	Width%
244142007	HMZ	176 > 102	5.15	1544.123	3181.496	1544.123	242.672	bb	76.4917	150.3					
244142007	RDX	176 > 102	7.51	3181.496	3181.496	387.308	60.869	bb	27.6853	33.6					
244142007	135-Trinitrobenzene	213 > 183	11.89	3181.496	3181.496	3181.496	3181.496	bb	535.8941	107.2	7.2	339.2			
244142007	13-Dinitrobenzene-d4	172 > 142		3181.496	3181.496										
244142007	13-Dinitrobenzene	168 > 138		3181.496	3181.496										
244142007	Tetryl	241 > 181		3181.496	3181.496										
244142007	Nitrobenzene	123 > 46		17783.209	17783.209										
244142007	4-Amino-26-dinitrotoluene	197 > 167		17783.209	17783.209										
244142007	2-Amino-46-dinitrotoluene	197 > 180		17783.209	17783.209										
244142007	246-Trinitrotoluene	227 > 210		17783.209	17783.209										
244142007	34-dinitrotoluene	182 > 152	14.17	9007.680	17783.209	9007.680	253.264	bb	278.9204	111.6	11.6	551.2			
244142007	26-dinitrotoluene	182 > 152		17783.209	17783.209										
244142007	24-dinitrotoluene	182 > 152		17783.209	17783.209										
244142007	26-dinitrotoluene-d3	185 > 155	17.14	17783.209	17783.209	17783.209	17783.209	bb	545.5528	109.1	9.1	1132.8			
244142007	2-Nitrotoluene	137 > 46		17783.209	17783.209										
244142007	4-Nitrotoluene	137 > 46		17783.209	17783.209										
244142007	3-Nitrotoluene	137 > 46		17783.209	17783.209										
244142007	PETN	361 > 62		17783.209	17783.209										

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7620

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142007

Sample Amount 2

Moisture: 11.2

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01200027.wiff

Date Analyzed: 20-JAN-10 17:18

Units: ug/kg

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

\*Concentration =

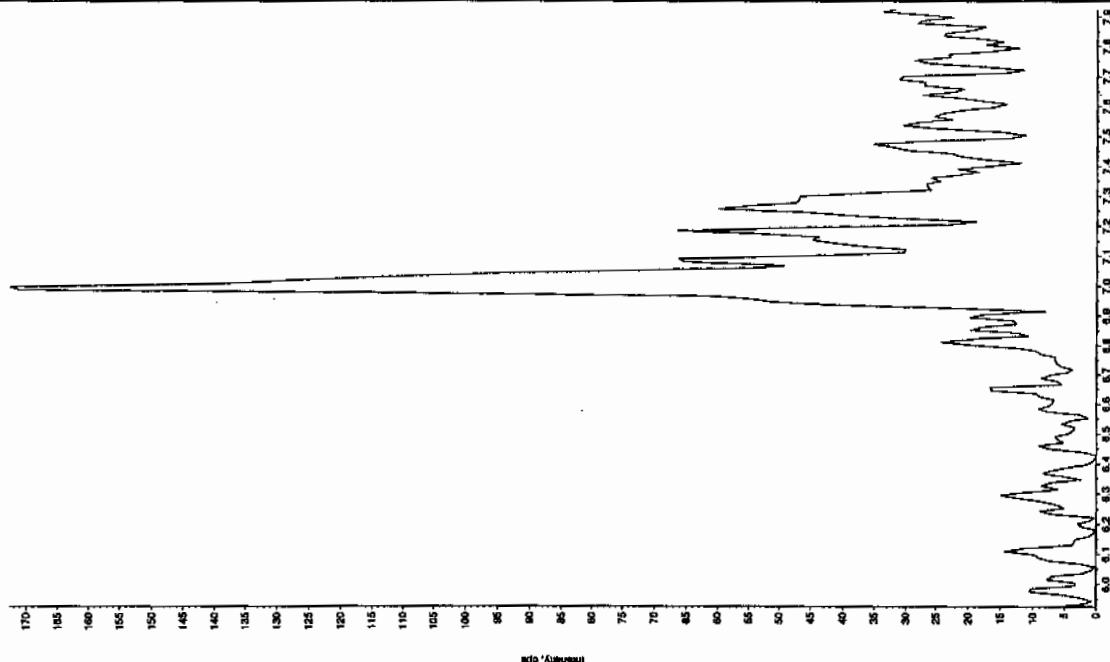
Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor



See 1/21/10

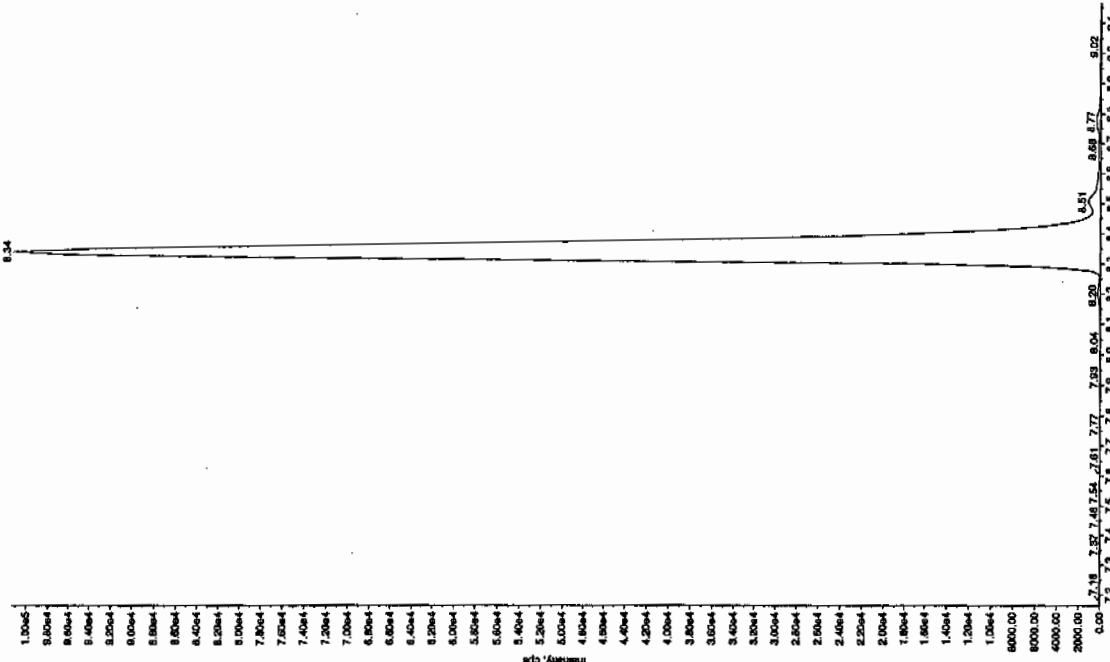
Sample Name: "24112007" Sample ID: "9405721ER" File: "EXS0120027.wif"  
 Peak Name: "T1A1B" Mass(es): "257.2204.9 amu"  
 Comment: "LCX832125" Annotation:

Sample Index: Unknown  
 Sample Type: N/A  
 Concentration: 0.00 ng/mL  
 Acq. Date: 1/20/2010  
 Acq. Time: 5:18:00 PM  
 Modified: No



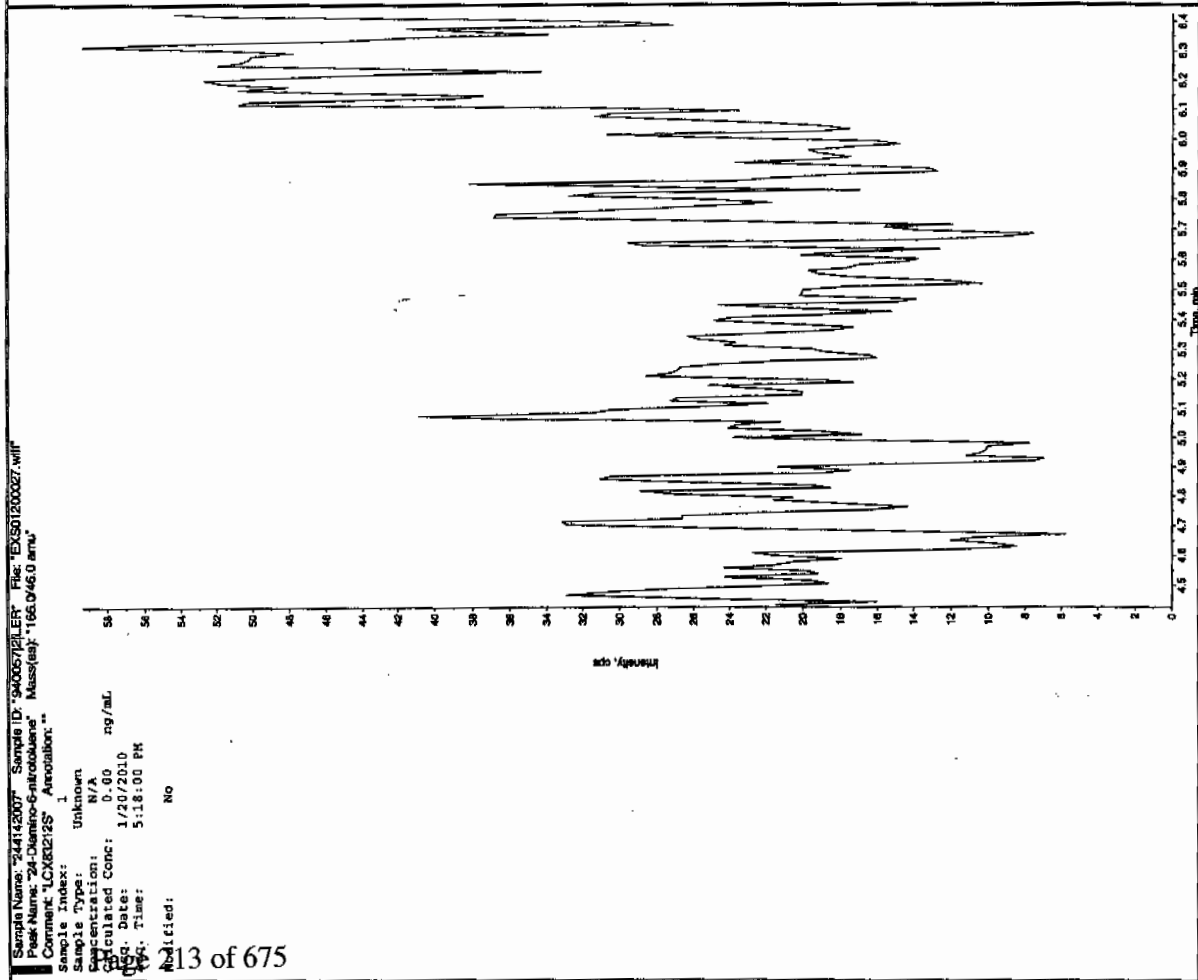
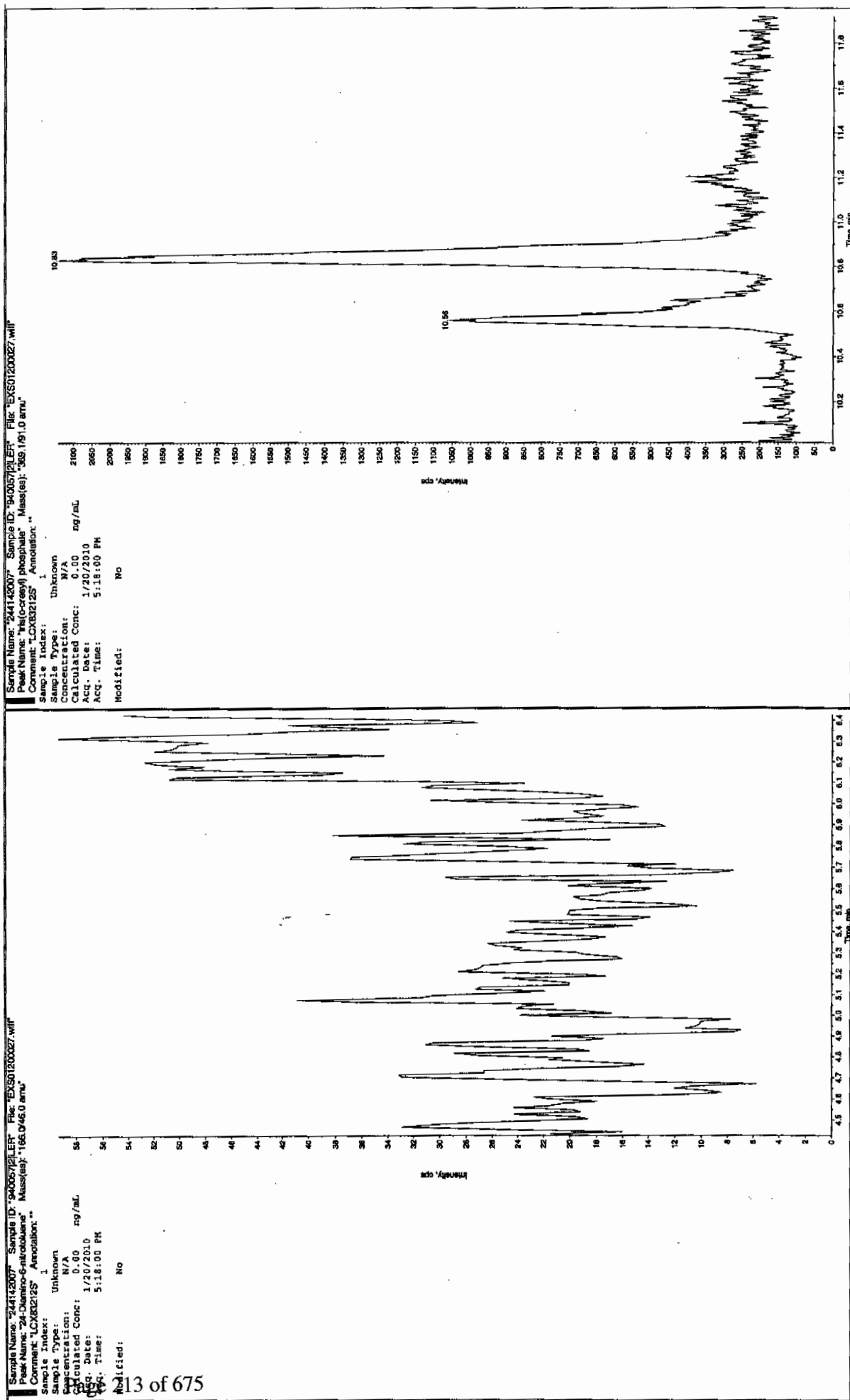
Sample Name: "24112007" Sample ID: "9405721ER" File: "EXS0120027.wif"  
 Peak Name: "35-Dinitrocellulose" Mass(es): "182.046.0 amu"  
 Comment: "LCX832125" Annotation:

Sample Index: Unknown  
 Sample Type: N/A  
 Concentration: 0.00 ng/mL  
 Acq. Date: 1/20/2010  
 Acq. Time: 5:18:00 PM  
 Modified: No



See 1/21/10





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

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7624

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142008

Sample Amount 2

Moisture: 8.4

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125099a

Date Analyzed: 27-JAN-10 11:33

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	419	J
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	487	J
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

\*Concentration =

Instrument Value	X	Concentrated Extract Volume	X	Dilution Factor
		Sample Amount		

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125099a

Date: 27-Jan-2010

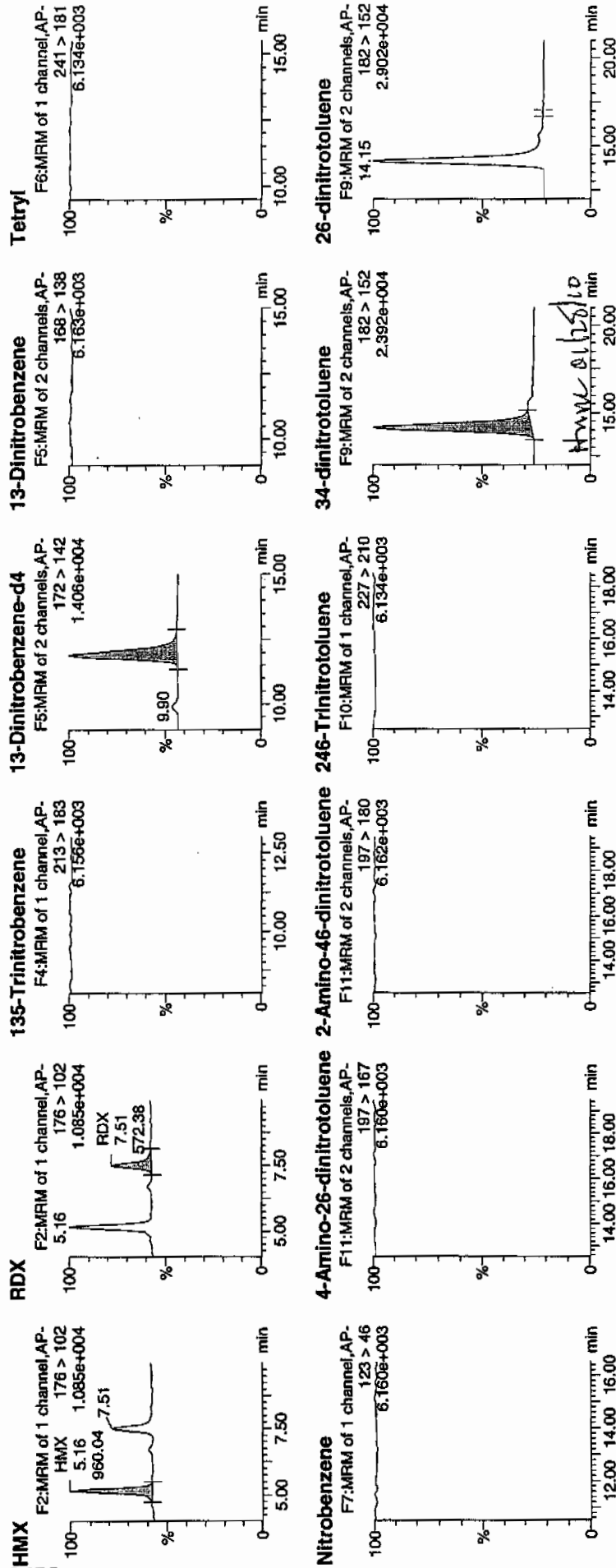
Time: 11:33:01

ID: 244142008

Vial: 3:6,F

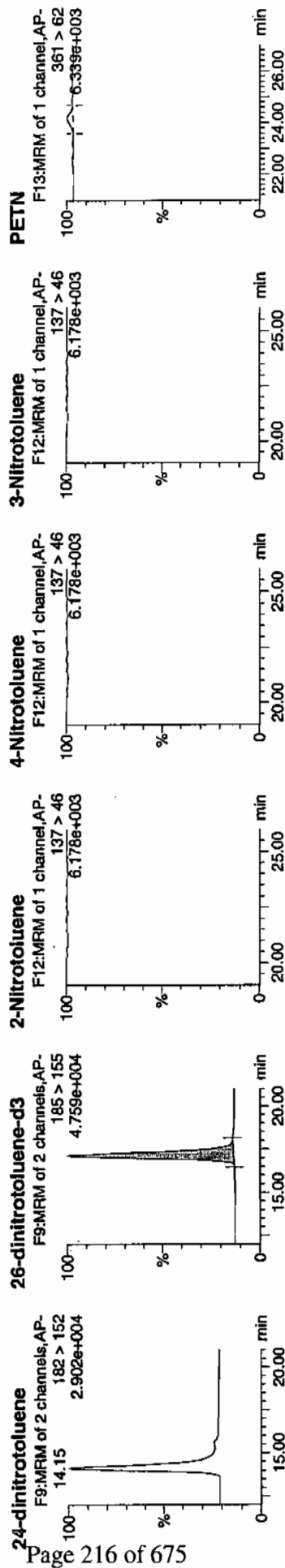
NOT  
1/28/10

WAV 940057 (8000) 12



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	IS Area	Abst Resp	Response	Flags	Mod Date	Mod Time	1st Peak	2nd Peak	3rd Peak	4th Peak	5th Peak
244142008	HM-X	176 > 102	5.16	960.039	3106.782	960.039	154.507	bb			48.7015			140.6	
244142008	RDX	176 > 102	7.51	572.383	3106.782	572.383	92.118	bb			41.8987			69.0	
244142008	135-Trinitrobenzene	213 > 183			3106.782										
244142008	13-Dinitrobenzene-d4	172 > 142	11.89	3106.782		3106.782	3106.782	bb			523.3092	104.7	4.7	188.5	
244142008	13-Dinitrobenzene	168 > 138			3106.782										
244142008	Tetryl	241 > 181			3106.782										
244142008	Nitrobenzene	123 > 46			3106.782										
244142008	4-Amino-26-dinitrotoluene	197 > 167			17385.787										
244142008	2-Amino-46-dinitrotoluene	197 > 180			17385.787										
244142008	246-Trinitrotoluene	227 > 210			17385.787										
244142008	34-dinitrotoluene	182 > 152	14.15	9389.007	17385.787	9389.007	270.020	bb			297.3738	118.9	18.9	663.9	
244142008	26-dinitrotoluene	182 > 152			17385.787				MM-	28-Jan-10 10:34:00					
244142008	24-dinitrotoluene	182 > 152			17385.787										
244142008	26-dinitrotoluene-d3	185 > 155	17.15	17385.787		17385.787	17385.787	bb			533.3607	106.7	6.7	1487.6	
244142008	2-Nitrotoluene	137 > 46			17385.787										
244142008	4-Nitrotoluene	137 > 46			17385.787										
244142008	3-Nitrotoluene	137 > 46			17385.787										
244142008	PETN	361 > 62			17385.787				MM-	28-Jan-10 10:41:41					

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7624

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142008

Sample Amount 2

Moisture: 8.4

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01200028.wiff

Date Analyzed: 20-JAN-10 17:33

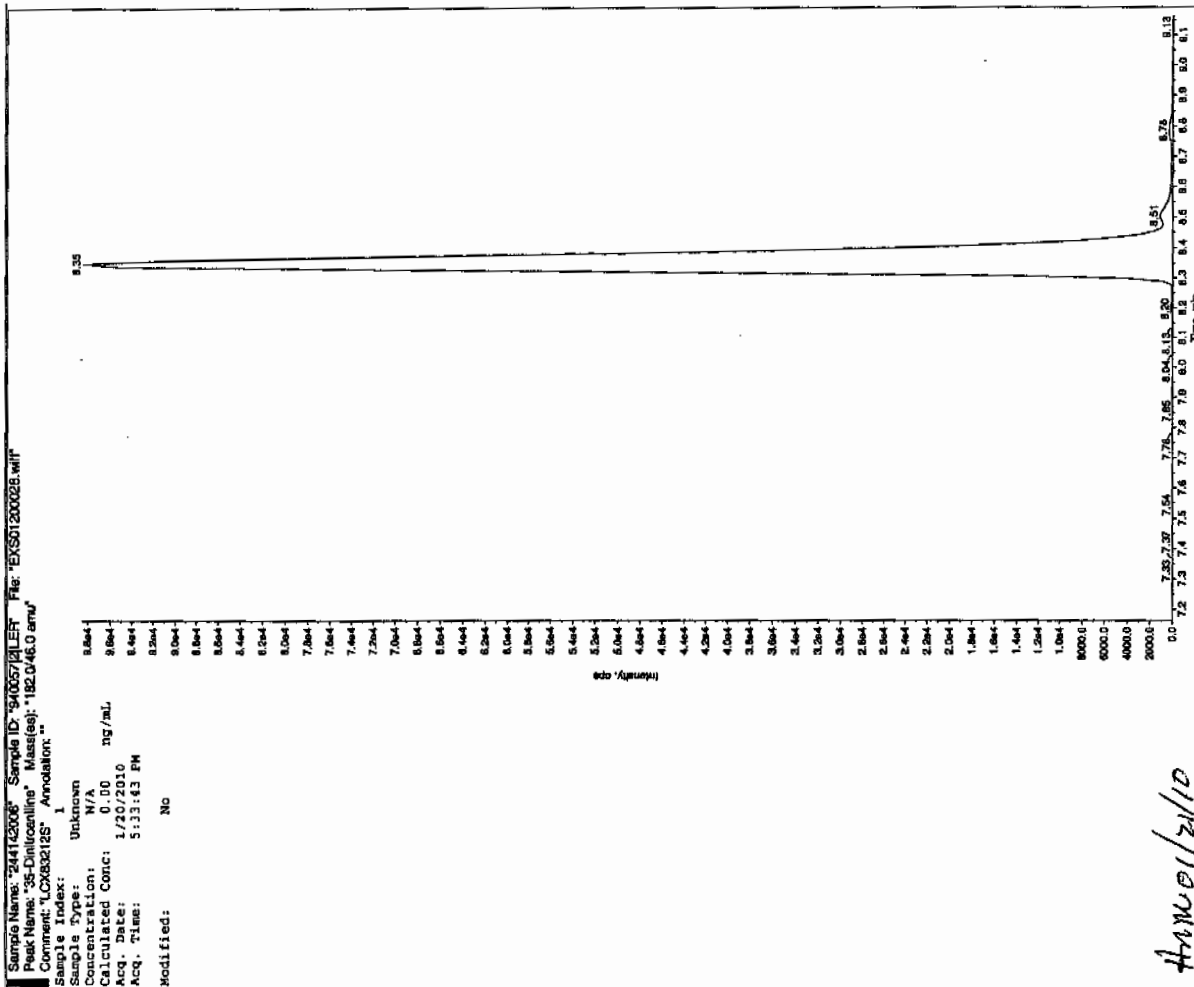
Units: ug/kg

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

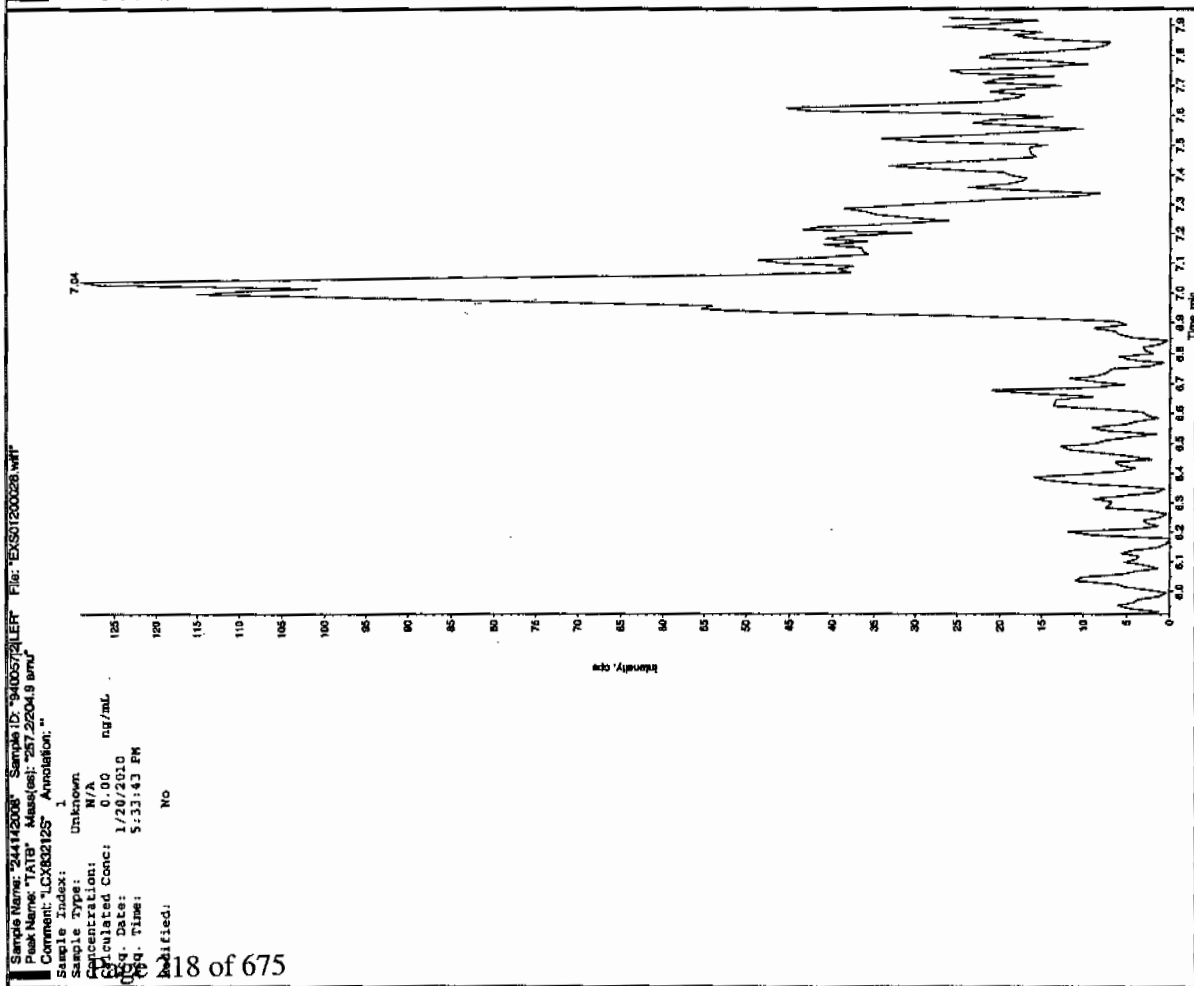
\*Concentration =

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

See 1b110

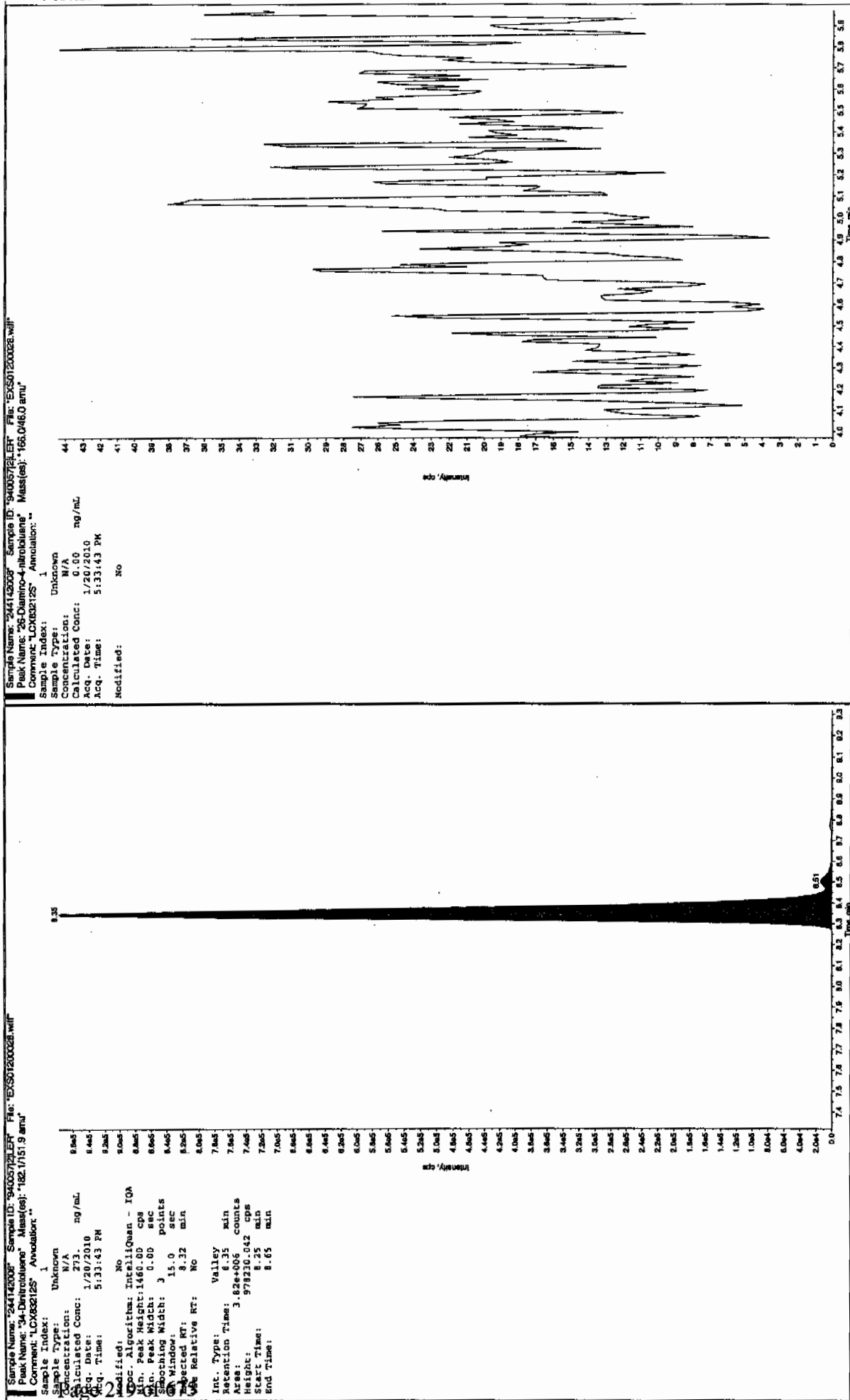


Handwritten: 1b110



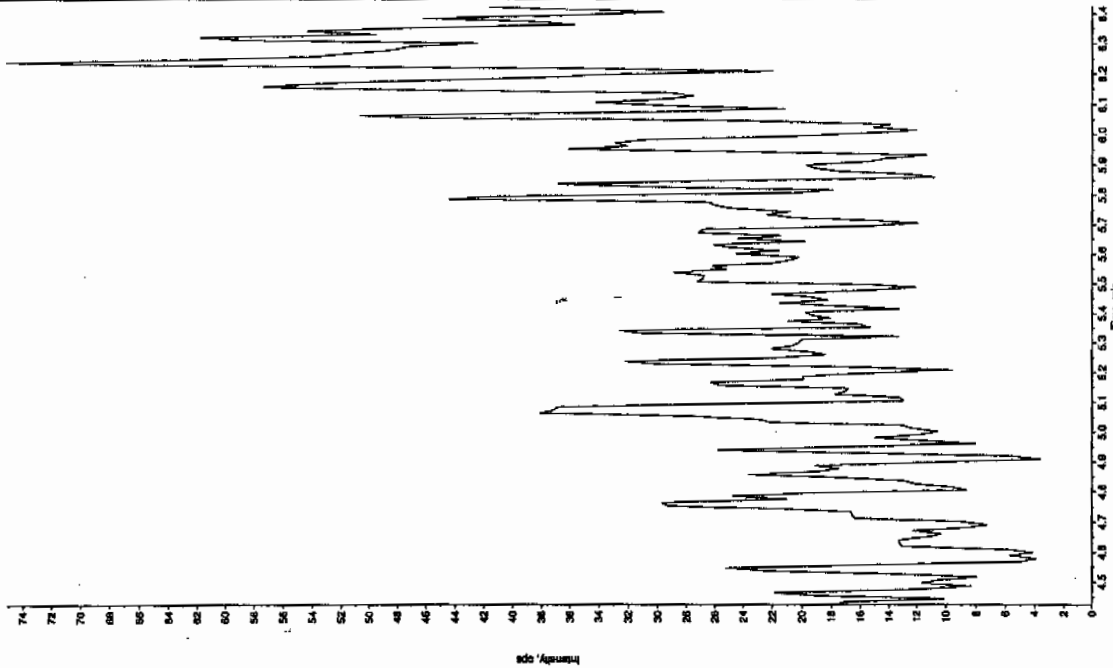
\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4





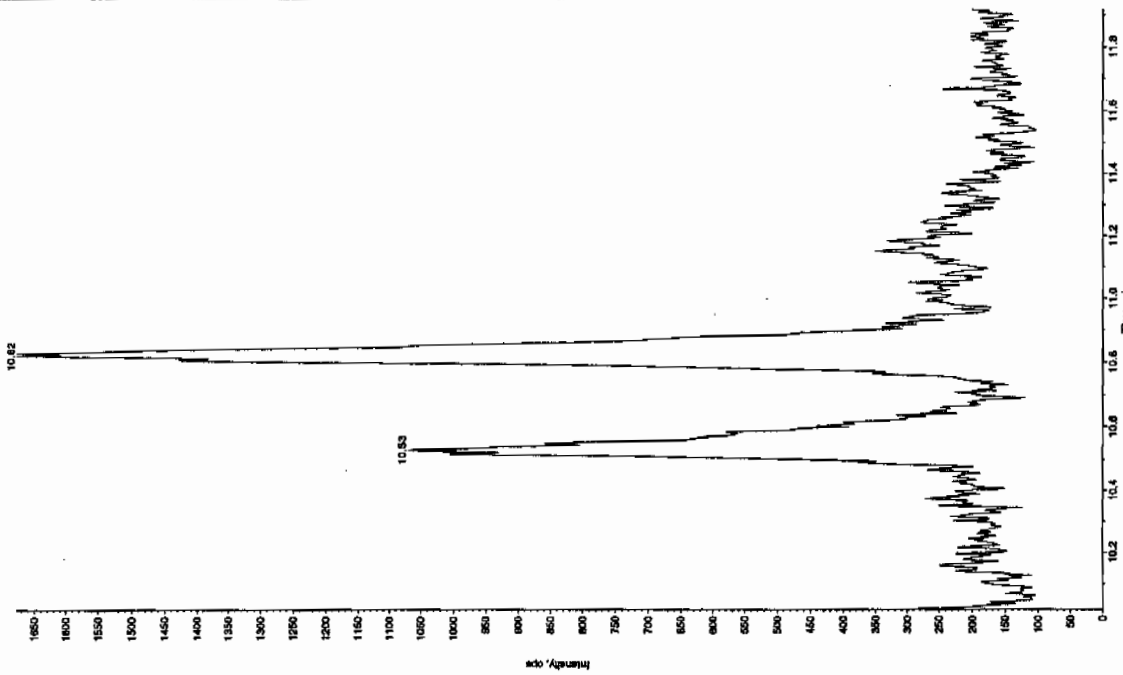
Sample Name: "24142008" Sample ID: "94005731EP" File: "EX50120028.wif"  
 Peak Name: "24-Diamino-6-nitrofluorene" Mass(es): "166.046.0 amu"  
 Comment: "LCX832125" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/20/2010  
 Acq. Time: 5:33:43 PM  
 Modified: NO



Sample Name: "24142008" Sample ID: "94005731EP" File: "EX50120028.wif"  
 Peak Name: "trifluoromethyl phosphite" 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: 1/20/2010  
 Acq. Time: 5:33:43 PM  
 Modified: NO



1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7630

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142009

Sample Amount 2

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

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125100a

Date Analyzed: 27-JAN-10 12:02

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\EXP0125100a

Date: 27-Jan-2010

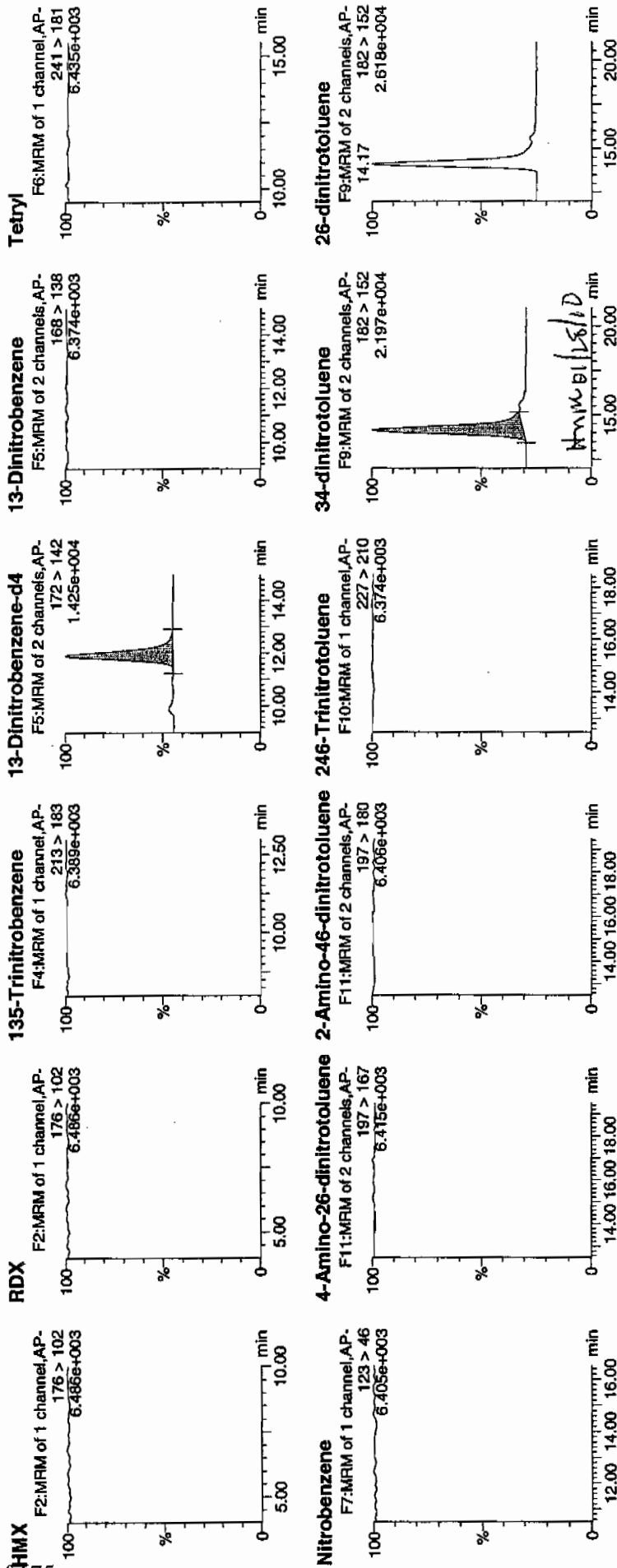
Time: 12:02:30

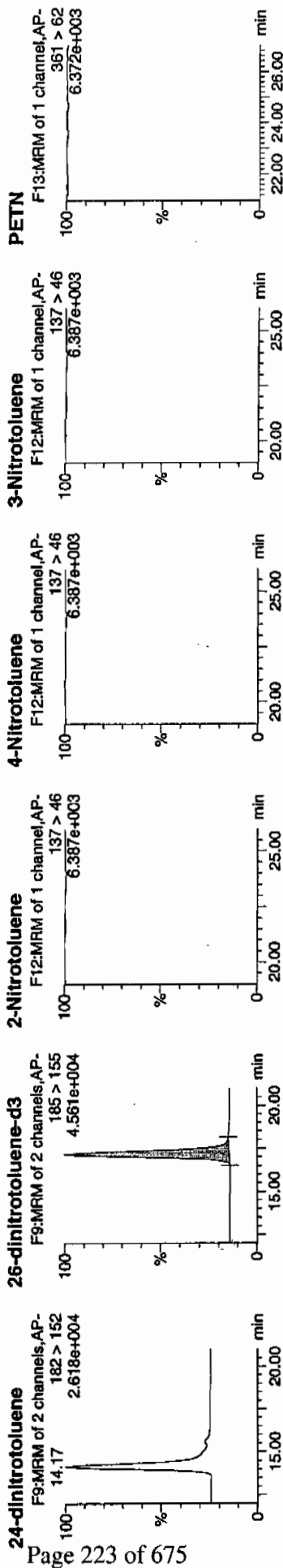
ID: 244142009

Vial: 3:7,A

1077  
1/28/10

WAV | 940057 | 8033 | 21





Name	ID	Trace	PI	Area	Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Income	% Rec	% Dev	SN
HMx	244142009	176 > 102				3028.209								
RDX	244142009	176 > 102				3028.209								
135-Trinitrobenzene	244142009	213 > 183				3028.209								
13-Dinitrobenzene-d4	244142009	172 > 142	11.89	3028.209		3028.209	3028.209	bb			510.0743	102.0	2.0	821.7
13-Dinitrobenzene	244142009	168 > 138				3028.209								
Tetryl	244142009	241 > 181				3028.209								
Nitrobenzene	244142009	123 > 46				3028.209								
4-Amino-26-dinitrotoluene	244142009	197 > 167				16673.387								
2-Amino-46-dinitrotoluene	244142009	197 > 180				16673.387								
246- Trinitrotoluene	244142009	227 > 210				16673.387								
34-dinitrotoluene	244142009	182 > 152	14.17	8291.885		16673.387	8291.885	bb			273.8483	109.5	9.5	263.6
26-dinitrotoluene	244142009	182 > 152				16673.387								
24-dinitrotoluene	244142009	182 > 152				16673.387								
26-dinitrotoluene-d3	244142009	185 > 155	17.16	16673.387		16673.387	16673.387	bb			511.5057	102.3	2.3	1254.9
2-Nitrotoluene	244142009	137 > 46				16673.387								
4-Nitrotoluene	244142009	137 > 46				16673.387								
3-Nitrotoluene	244142009	137 > 46				16673.387								
PETN	244142009	361 > 62				16673.387								

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7630

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142009

Sample Amount 2

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

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01200029.wiff

Date Analyzed: 20-JAN-10 17:49

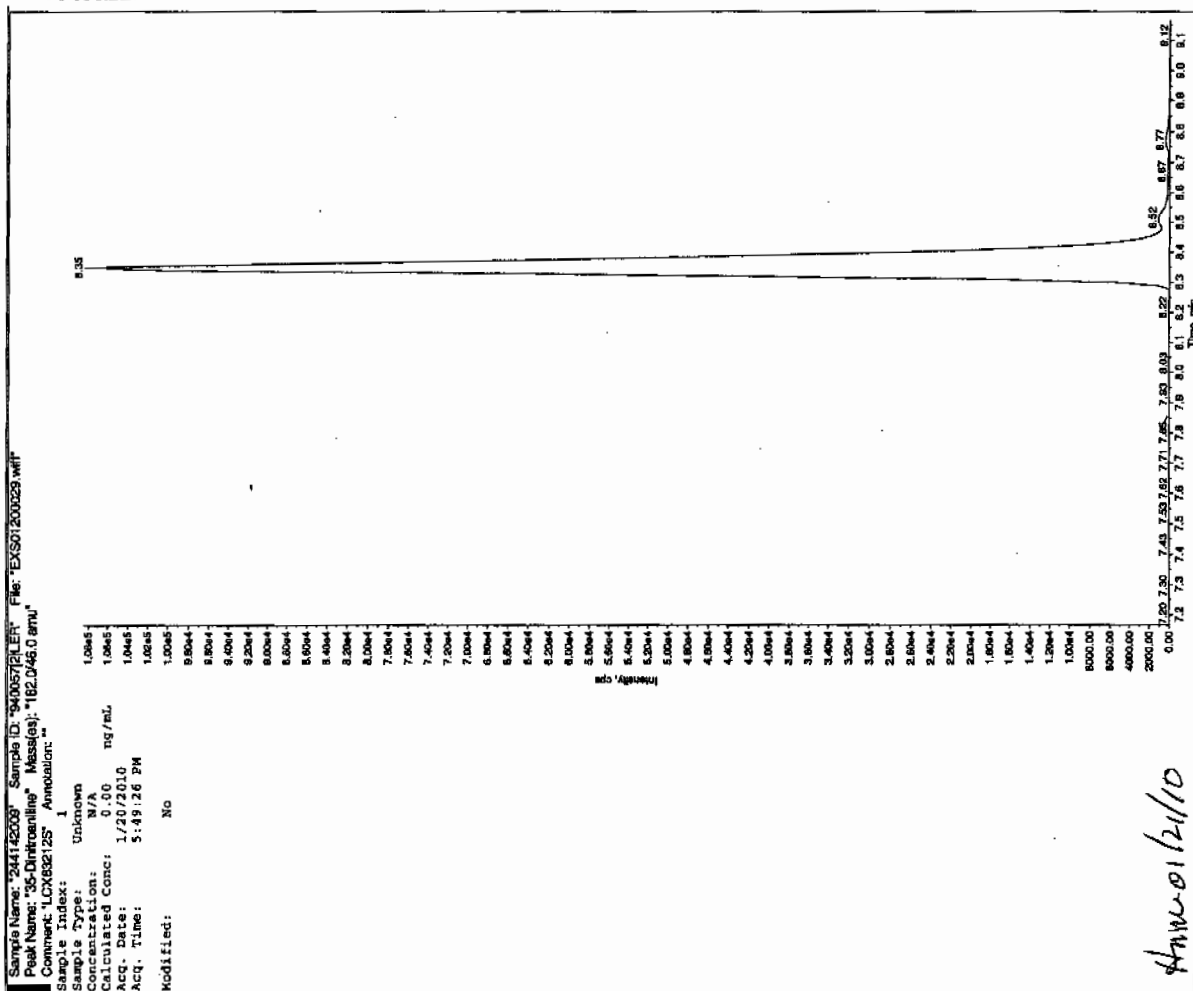
Units: ug/kg

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

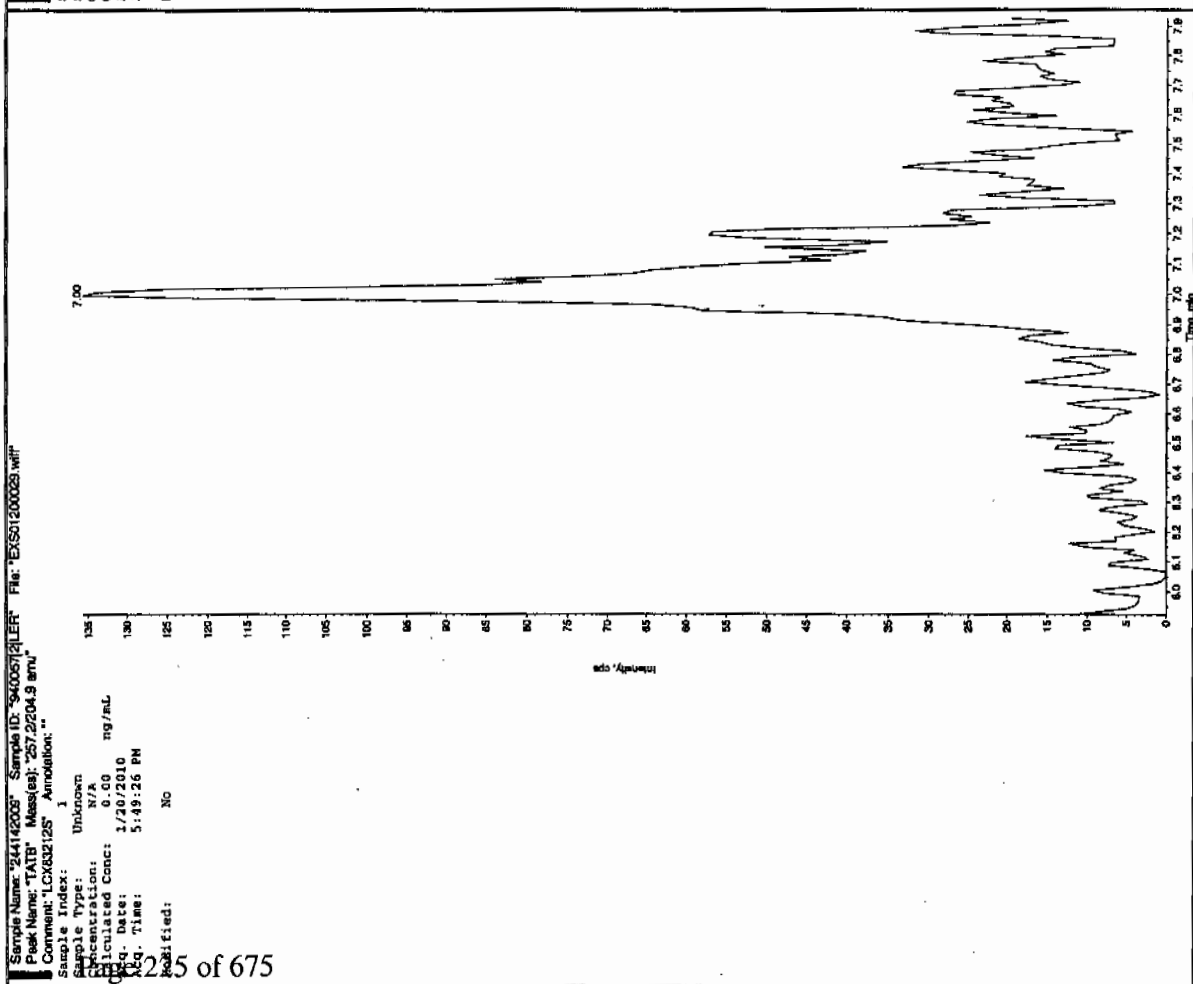
\*Concentration =

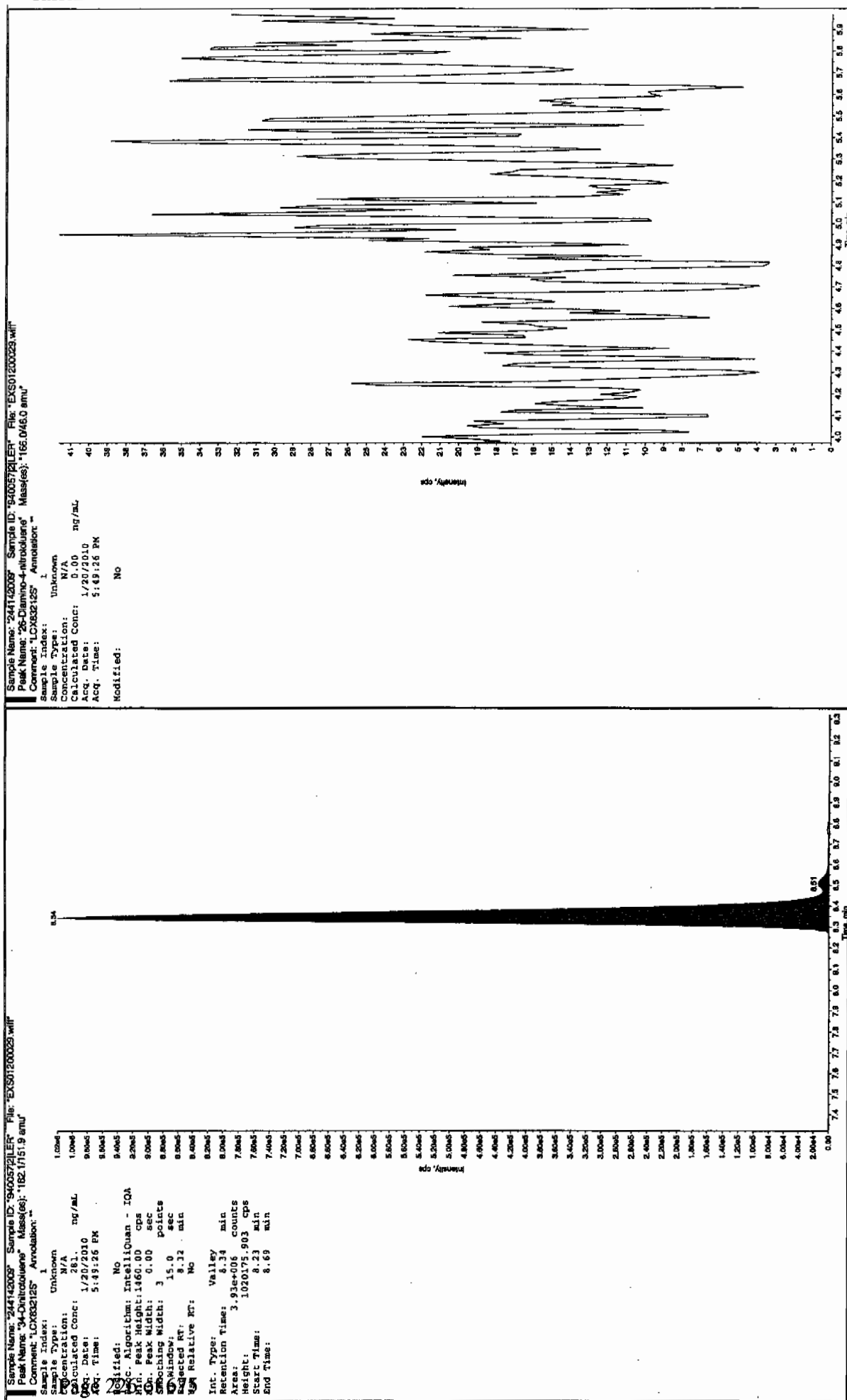
Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

See 12/1/10

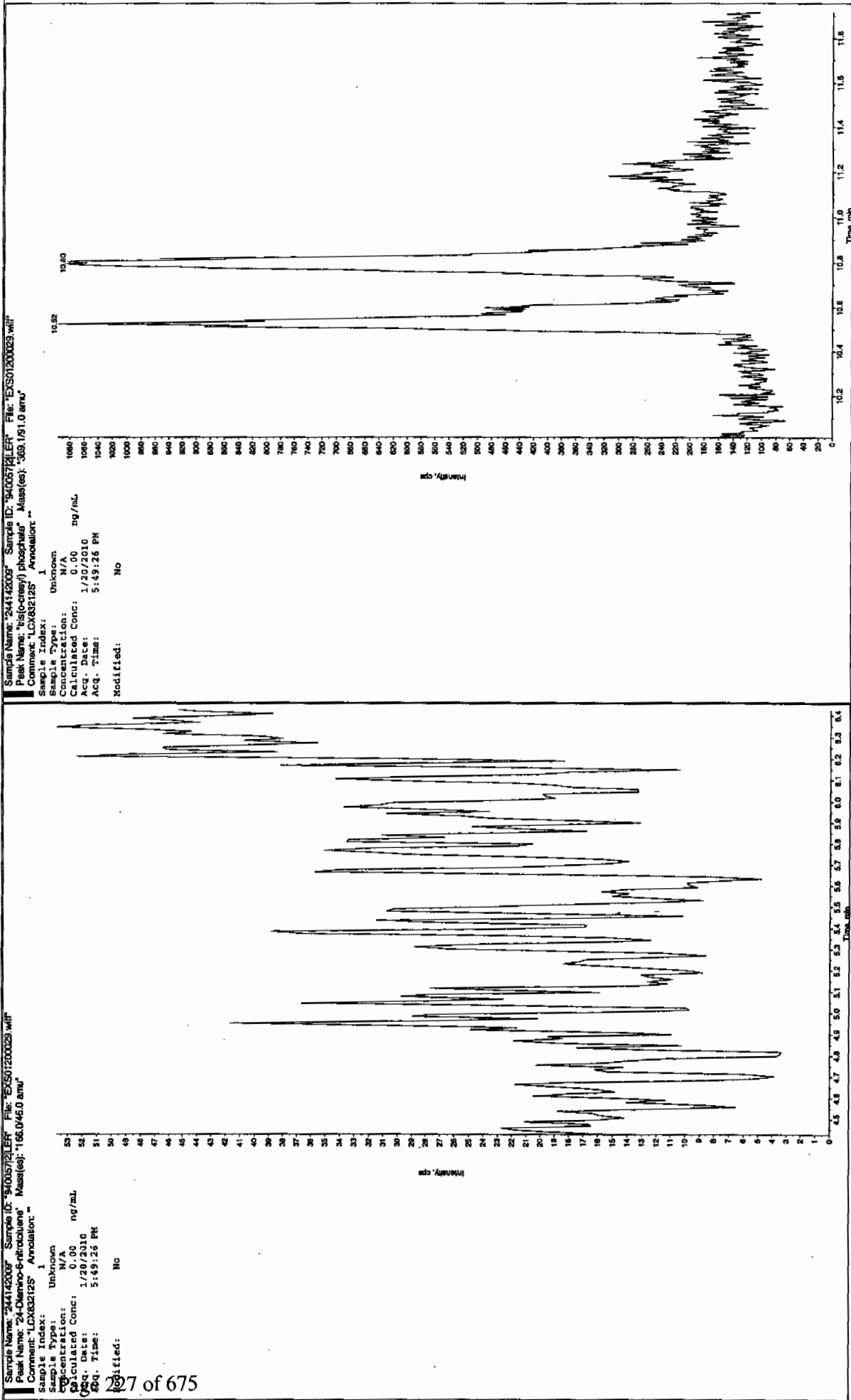


Amw-012/10









1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7628

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142010

Sample Amount 2

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

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125101a

Date Analyzed: 27-JAN-10 12:32

Units: ug/kg

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

\*Concentration =

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA2.qtd, Time: Thu Jan 28 10:42:53 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125101a

Date: 27-Jan-2010

Time: 12:32:01

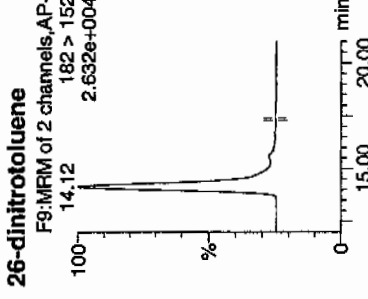
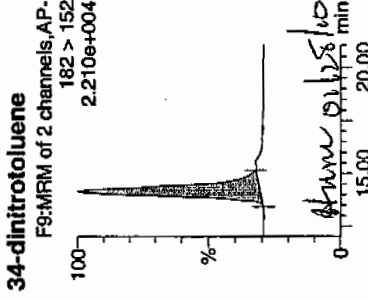
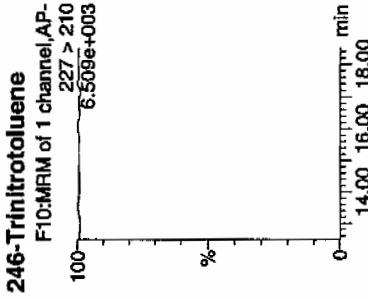
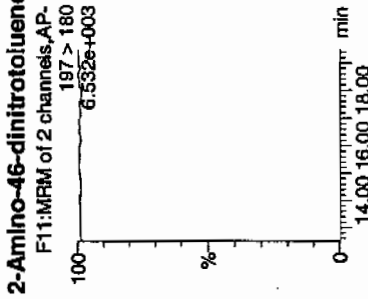
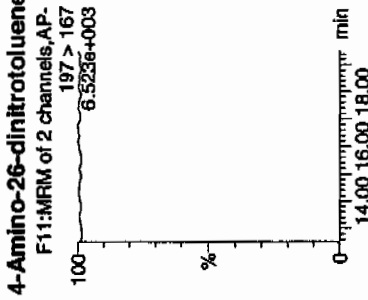
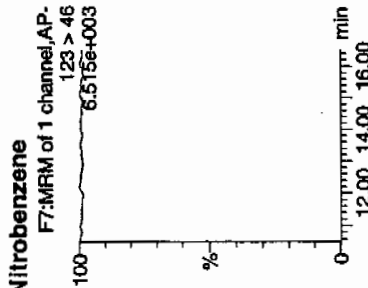
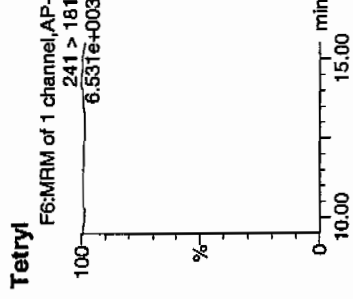
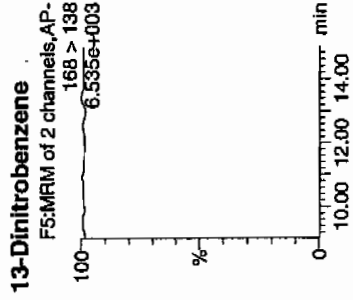
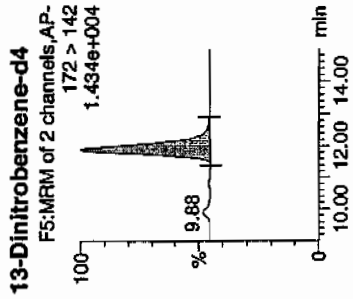
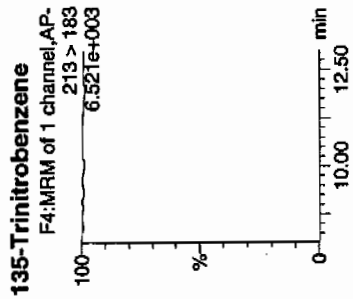
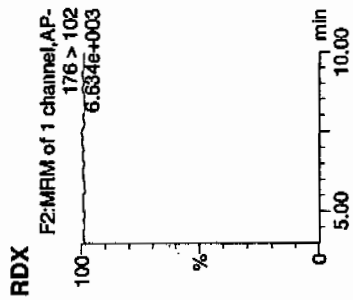
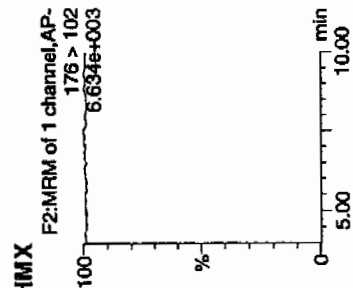
ID: 244142010

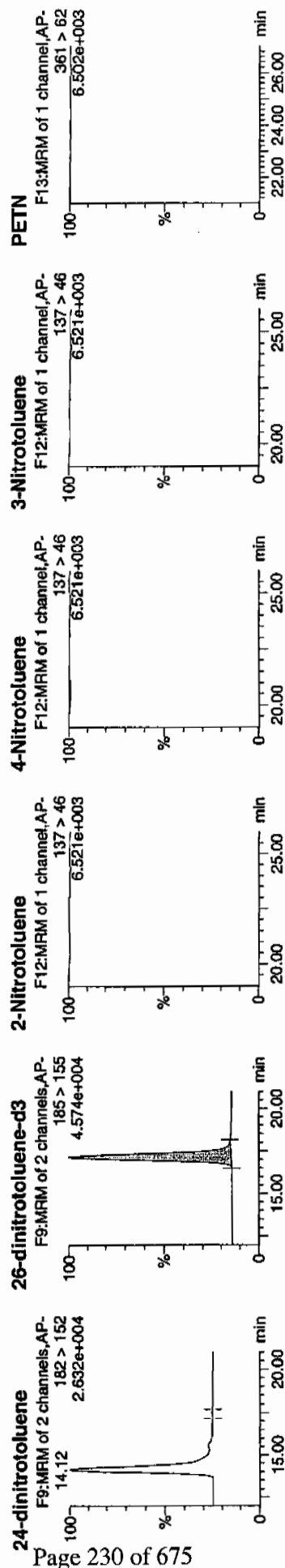
Vial: 3:7,B

MA  
1/28/10

WAV 9400571 21

HM  
X  
675



[illegible]

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7628

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142010

Sample Amount 2

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

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01200030.wiff

Date Analyzed: 20-JAN-10 18:05

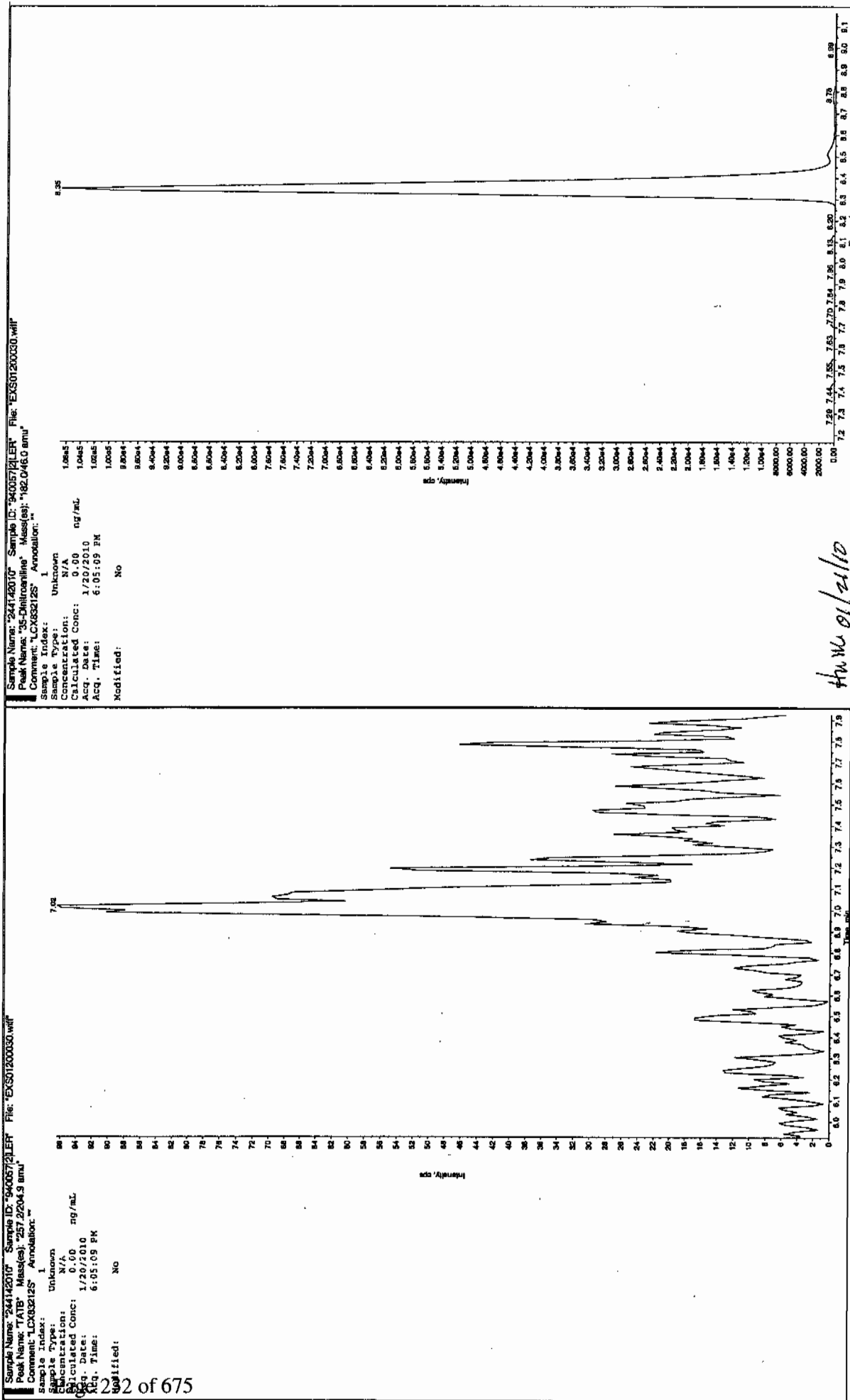
Units: ug/kg

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 12/1/10



See 01/21/10

Sample Name: "244142010" Sample ID: "9400572LER" File: "EXS01200030.wif"  
 Peak Name: "28-Diamino-4-nitrofluorene" Mass(es): "166.046.0 amu"  
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A ng/mL  
 Calculated Conc: 1/20/2010  
 Acq. Date: 6:05:09 PM  
 Acq. Time: 6:05:09 PM  
 Modified: No

Intensity, cps

33  
32  
31  
30  
29  
28  
27  
26  
25  
24  
23  
22  
21  
20  
19  
18  
17  
16  
15  
14  
13  
12  
11  
10  
9  
8  
7  
6  
5  
4  
3  
2  
1  
0



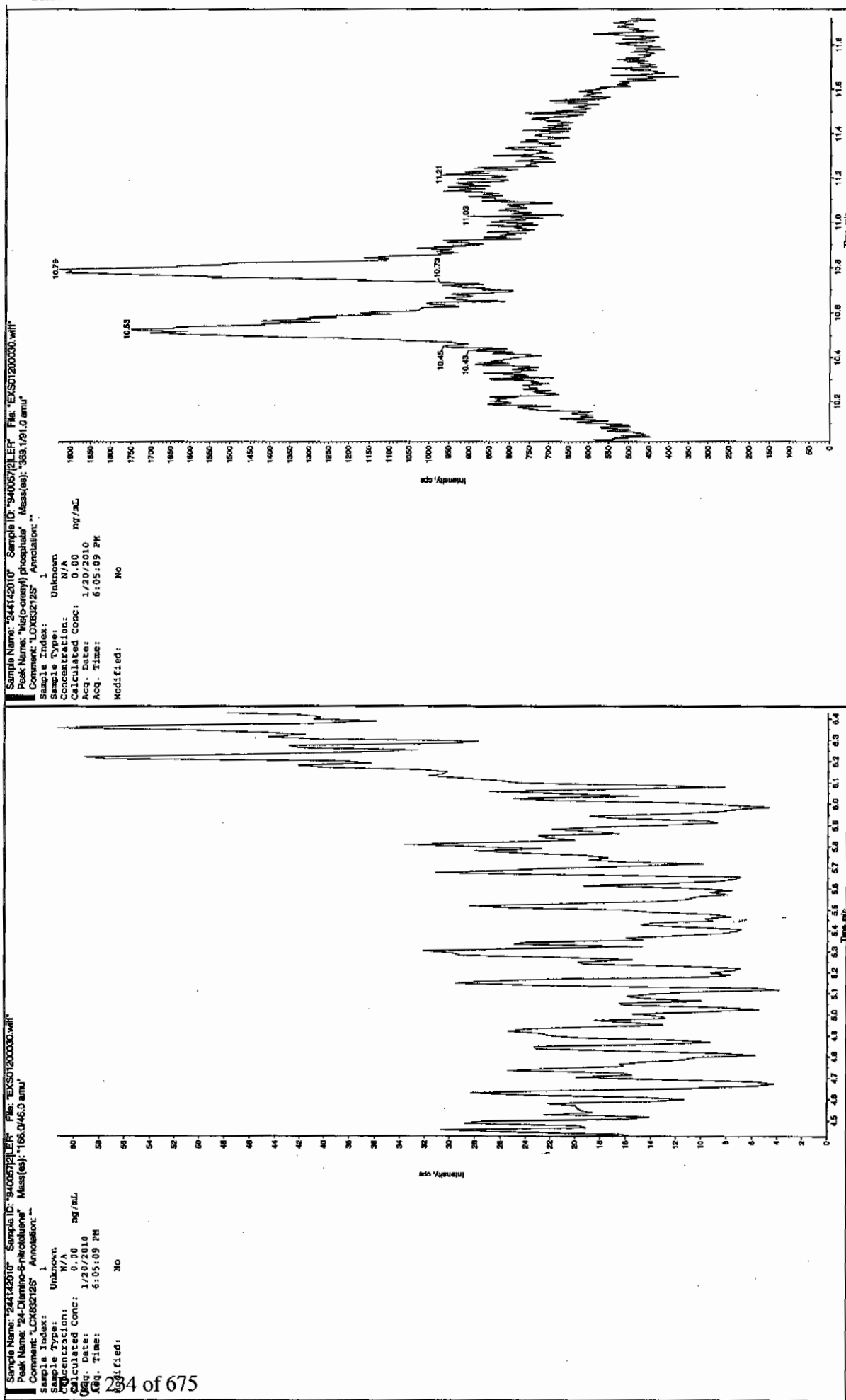
Sample Name: "244142010" Sample ID: "9400572LER" File: "EXS01200030.wif"  
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.1151.9 amu"  
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A ng/mL  
 Calculated Conc: 284  
 Acq. Date: 1/20/2010  
 Acq. Time: 6:05:09 PM  
 Modified: No  
 b2bc Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 1450.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 Scan Window: 15.0 sec  
 Detected RT: 5.12 min  
 Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.14 min  
 Area: 3.98e006 counts  
 Height: 1018595.947 cps  
 Start Time: 4.75 min  
 End Time: 5.69 min

Intensity, cps

10000  
9000  
8000  
7000  
6000  
5000  
4000  
3000  
2000  
1000  
0







1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7632

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142011

Sample Amount 2

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

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125102a

Date Analyzed: 27-JAN-10 13:01

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		X	<u>Concentrated Extract Volume</u>		X	Dilution
Value			<u>Sample Amount</u>			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\012510expA2.qtd

Date: 27-Jan-2010

Time: 13:01:32

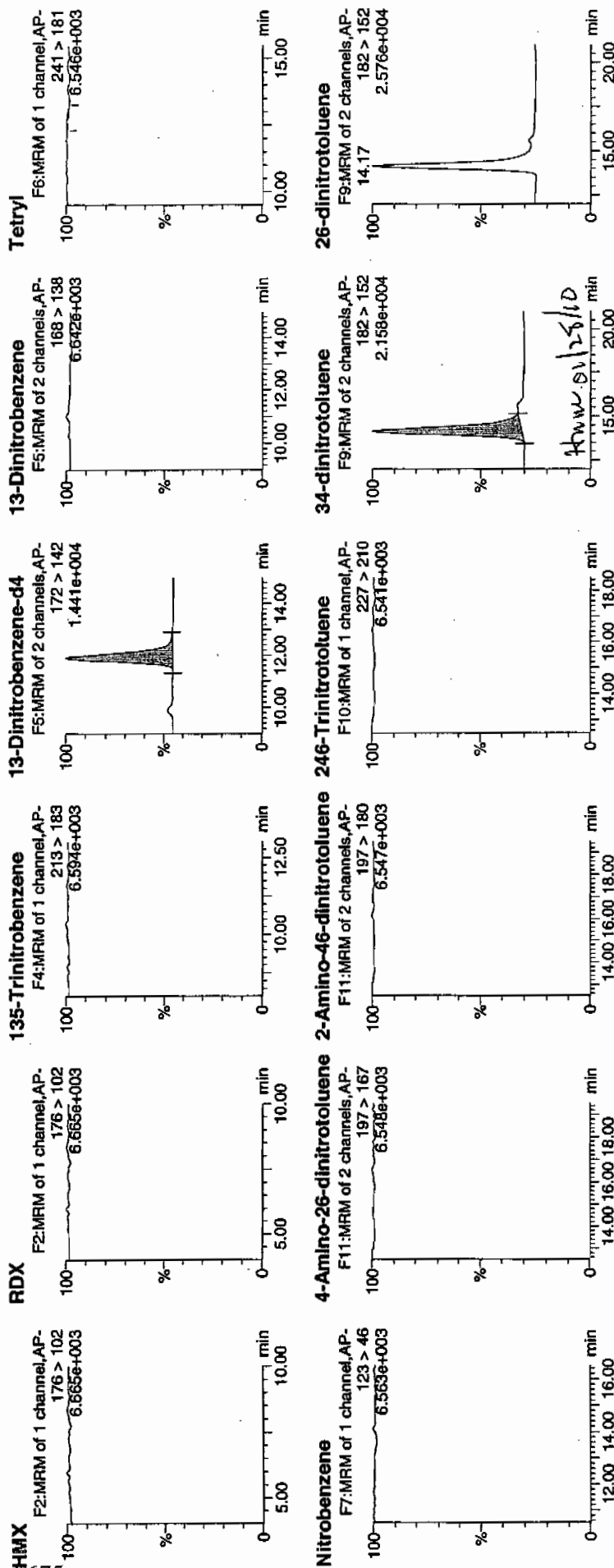
ID: 244142011

Vial: 3:7,C

μAP  
1/28/10

LANC | 940057 | 21

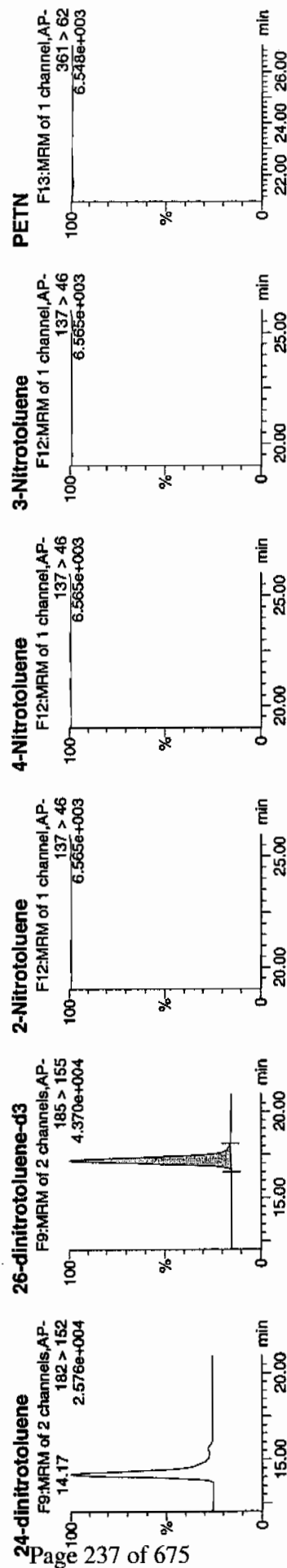
Page 236 of 675



## Quantify Sample Report

**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: RE12-10-7632

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142011

Sample Amount 2

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

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01200031.wiff

Date Analyzed: 20-JAN-10 18:20

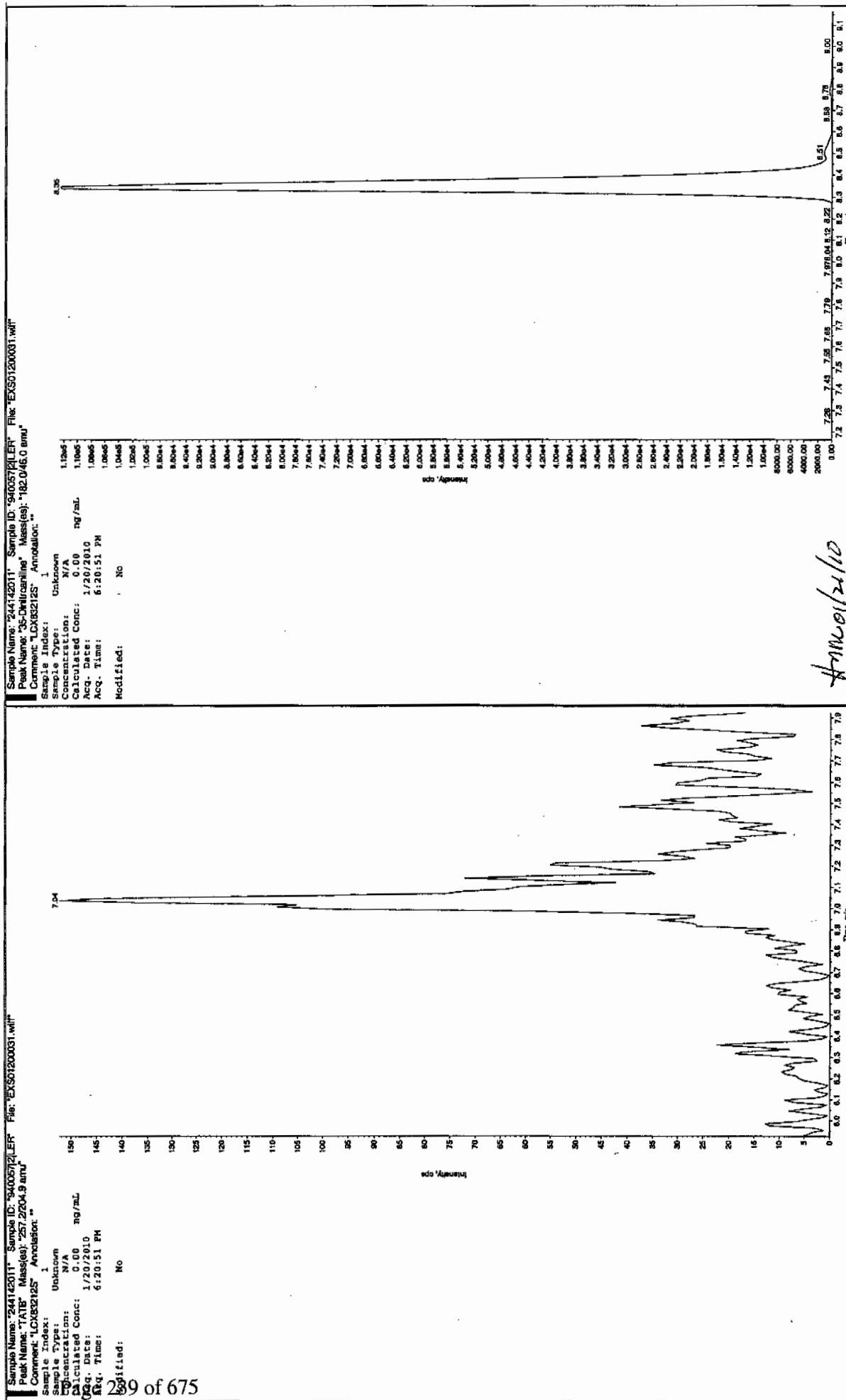
Units: ug/kg

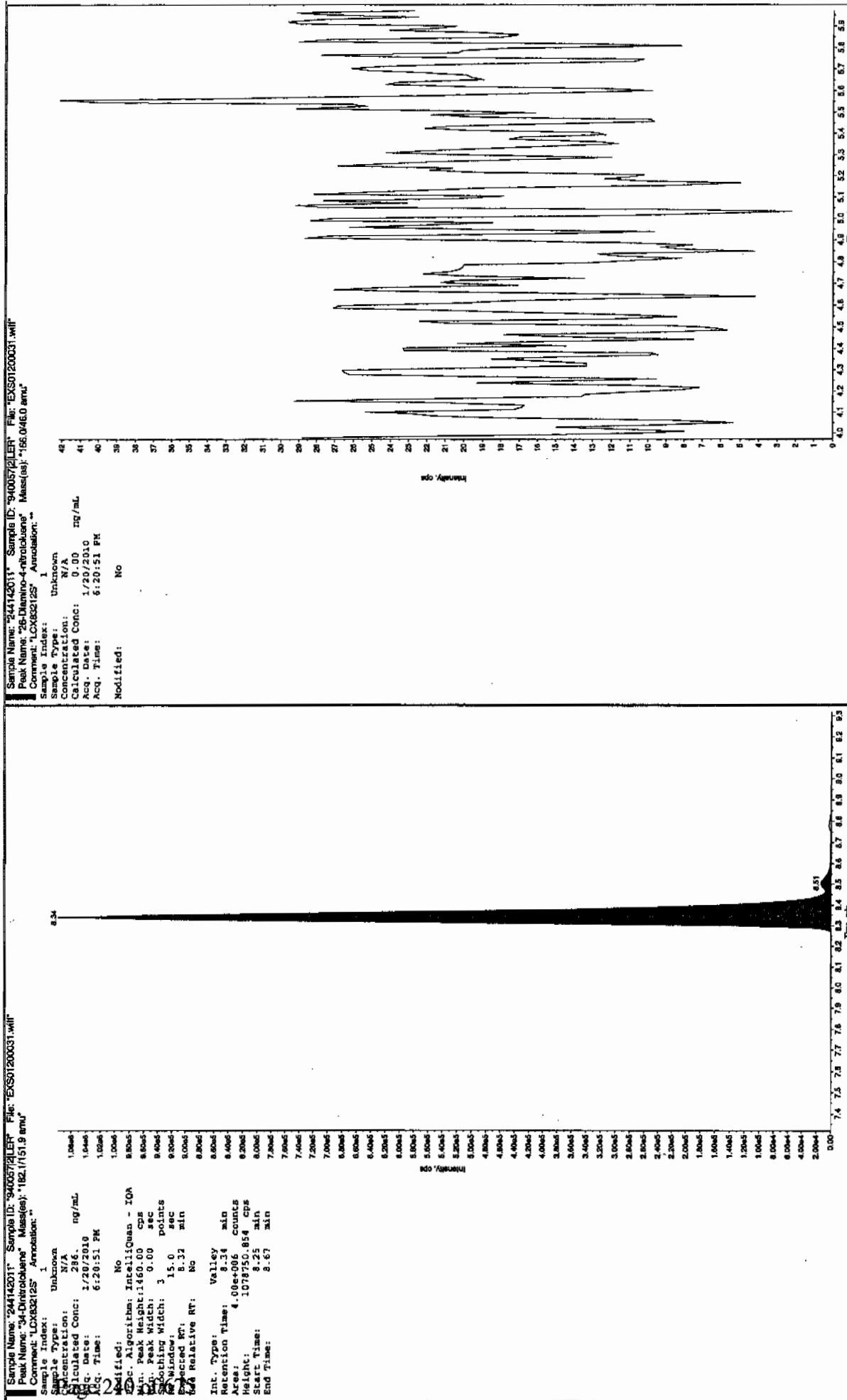
Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

\*Concentration =

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

Jan 11/21/10

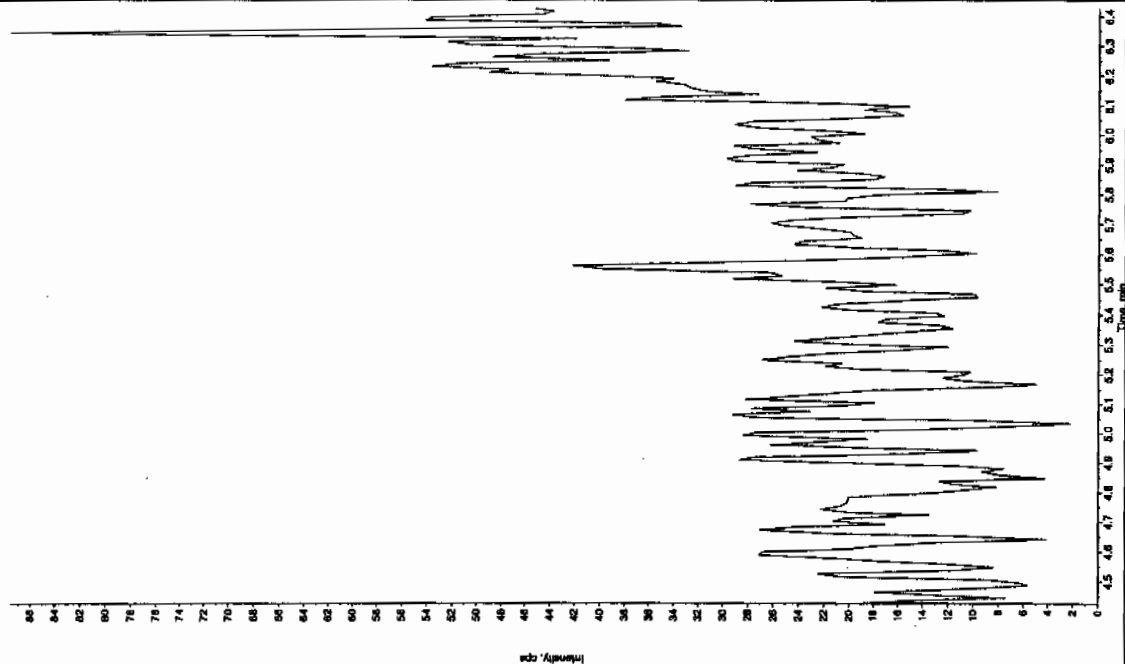




\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

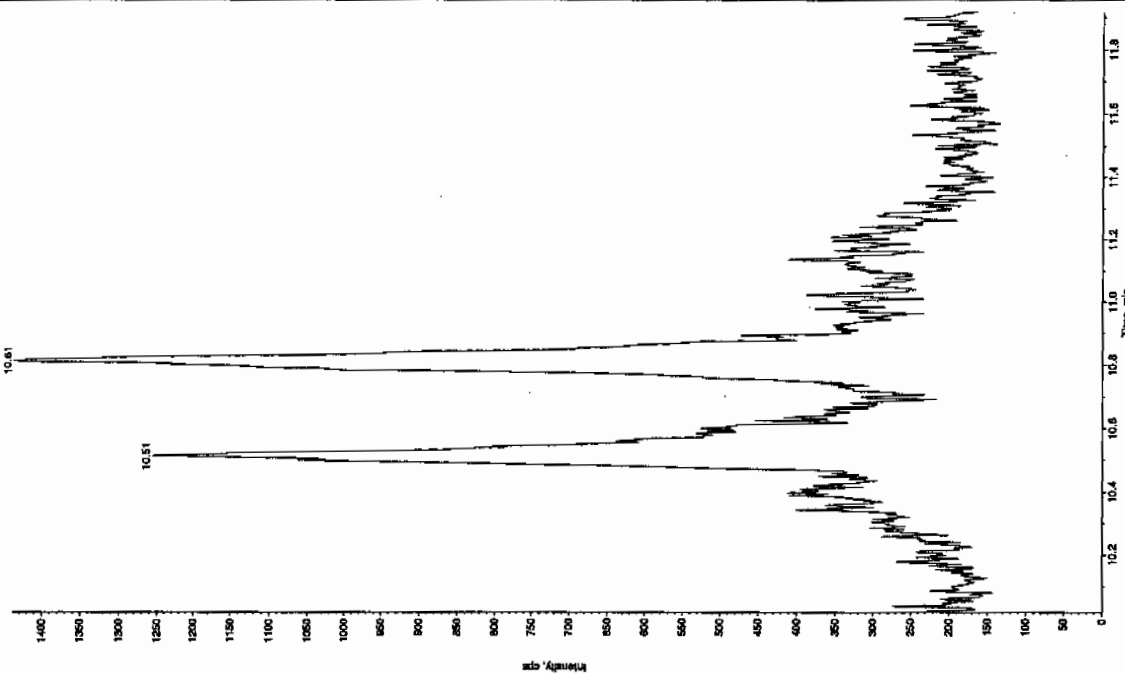
Sample Name: "244142011" Sample ID: "94005721ER" File: "EXS01200031.wif"  
 Peak Name: "24-Diamino-6-nitroindane" Mass(es): "166.046.0 amu"  
 Comment: "LCX032125" Annotation: "1"

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/20/2010  
 Acq. Time: 6:20:51 PM  
 Modified: No



Sample Name: "244142011" Sample ID: "94005721ER" File: "EXS01200031.wif"  
 Peak Name: "bis(o-cresyl) phosphate" Mass(es): "368.1911.0 amu"  
 Comment: "LCX032125" Annotation: "1"

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/20/2010  
 Acq. Time: 6:20:51 PM  
 Modified: No



1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7629

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142012

Sample Amount 2

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

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125103a

Date Analyzed: 27-JAN-10 13:31

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\EXP0125103a

Date: 27-Jan-2010

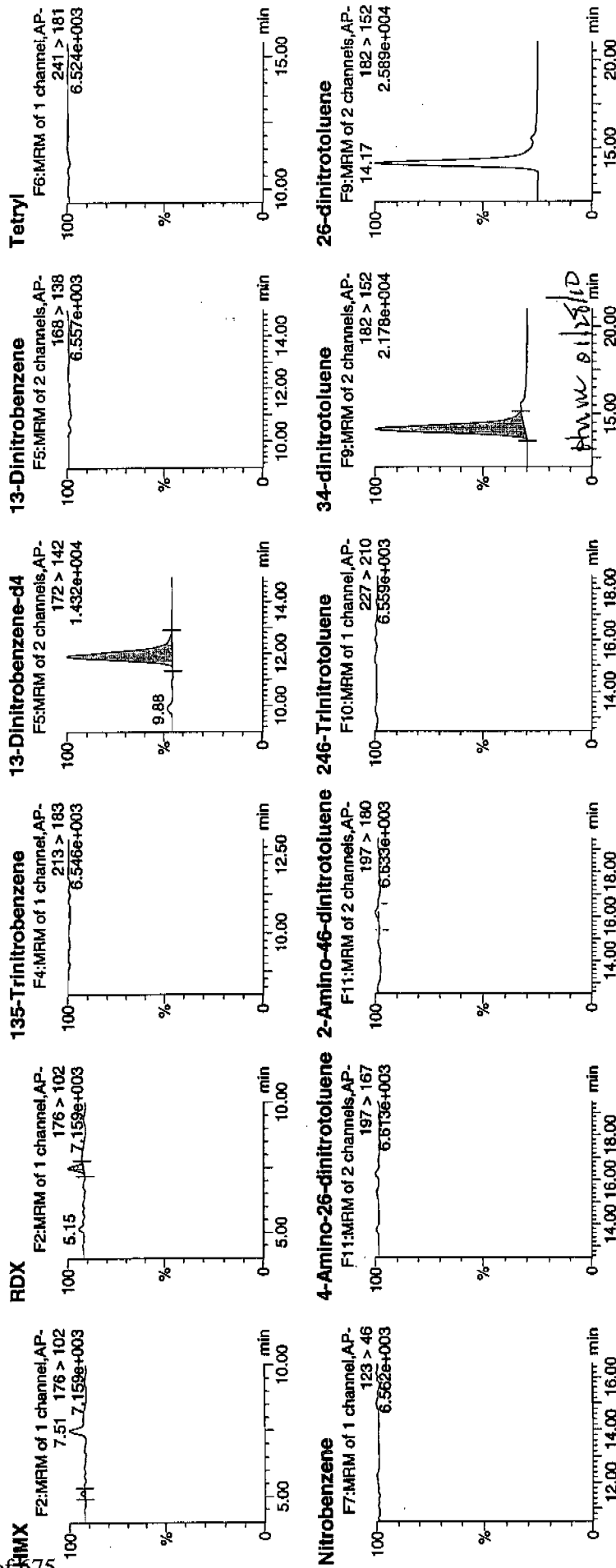
Time: 13:31:02

ID: 244142012

Vial: 3:7,D

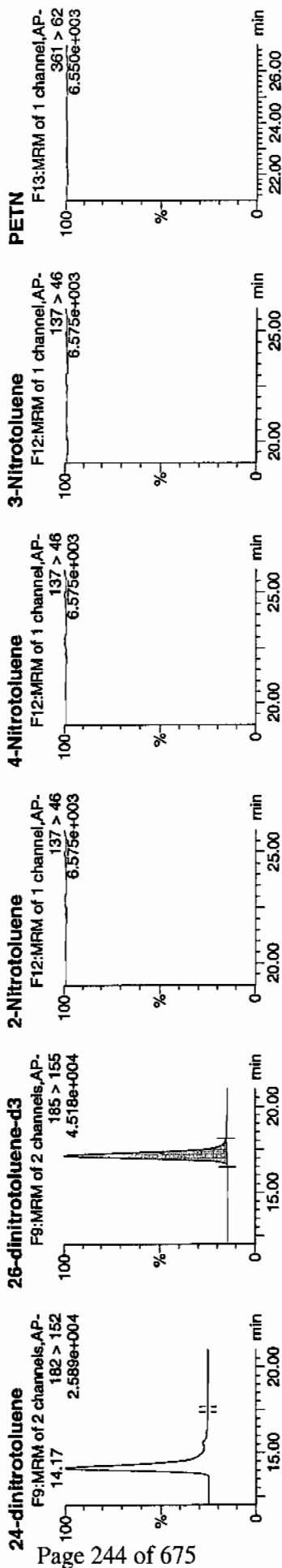
11/28/10

WAVE 940057 | 8022 | 21



Dataset: C:\MASSLYN\New\_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

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ID	Name	Trace	RFI	Area	SA Area	Abs Res	Response	Page	Mol Weight	Mol Time	Imp Pct	2-Rec	9-Dev	SN
244142012	HMX	176 > 102	5.15	31.109	3106.789	31.109	5.007	bb			1.5781		5.4	
244142012	RDX	176 > 102	7.51	121.673	3106.789	121.673	19.582	bb			8.9065		17.4	
244142012	135-Trinitrobenzene	213 > 183			3106.789									
244142012	13-Dinitrobenzene-d4	172 > 142	11.89	3106.789		3106.789	3106.789	bb			523.3103	104.7	4.7	398.8
244142012	13-Dinitrobenzene	168 > 138			3106.789									
244142012	Tetryl	241 > 181			3106.789									
244142012	Nitrobenzene	123 > 46			3106.789									
244142012	4-Amino-26-dinitrotoluene	197 > 167			16434.771									
244142012	2-Amino-46-dinitrotoluene	197 > 180			16434.771				MM-	28-Jan-10	10:29:11			
244142012	246-Trinitrotoluene	227 > 210			16434.771									
244142012	34-dinitrotoluene	182 > 152	14.17	8160.337	16434.771	8160.337	248.264	bb			273.4147	109.4	9.4	646.8
244142012	26-dinitrotoluene	182 > 152			16434.771									
244142012	24-dinitrotoluene	182 > 152			16434.771									
244142012	26-dinitrotoluene-d3	185 > 155	17.16	16434.771		16434.771	16434.771	bb	MM-	28-Jan-10	10:36:48			
244142012	2-Nitrotoluene	137 > 46			16434.771						504.1854	100.8	0.8	985.1
244142012	4-Nitrotoluene	137 > 46			16434.771									
244142012	3-Nitrotoluene	137 > 46			16434.771									
244142012	PETN	361 > 62			16434.771									

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7629

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142012

Sample Amount 2

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

Amount Units g

Date Received: 08--JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01200032.wiff

Date Analyzed: 20-JAN-10 18:36

Units: ug/kg

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

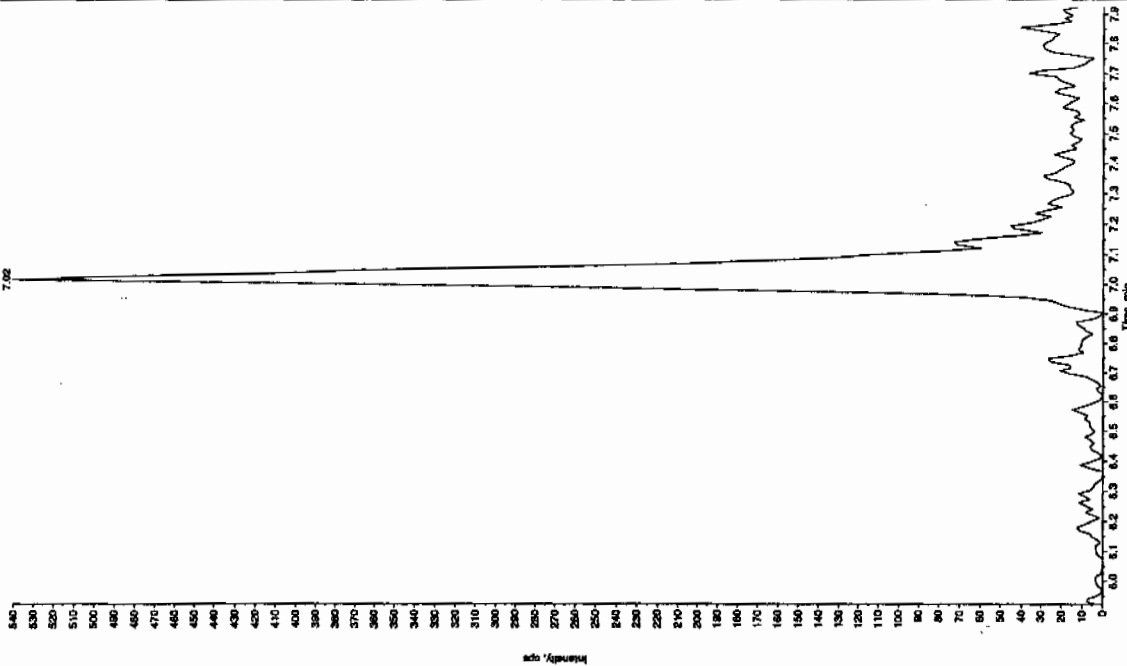
\*Concentration =

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

See 1/24/10

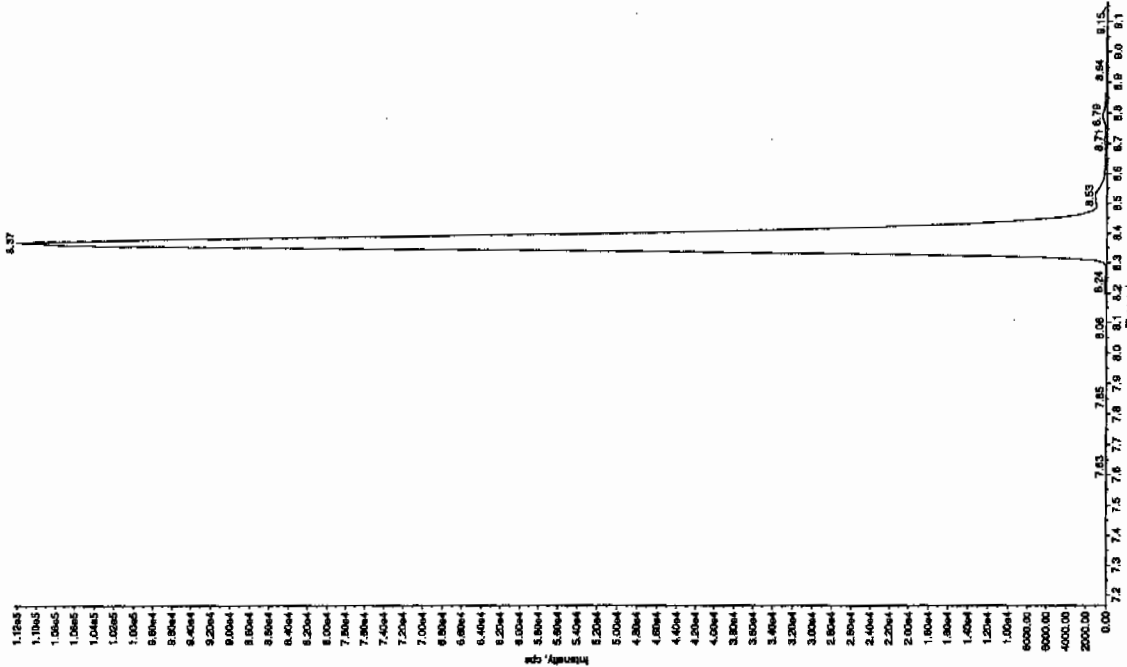
Sample Name: "244142012" Sample ID: "94065721ER" File: "EX50120032.wif"  
 Peak Name: "TATB" Mass(es): "257.2/204.9 amu"  
 Comment: "LCX83212S" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Acquisition Date: 1/20/2010  
 Acquisition Time: 6:36:34 PM  
 Modified: No

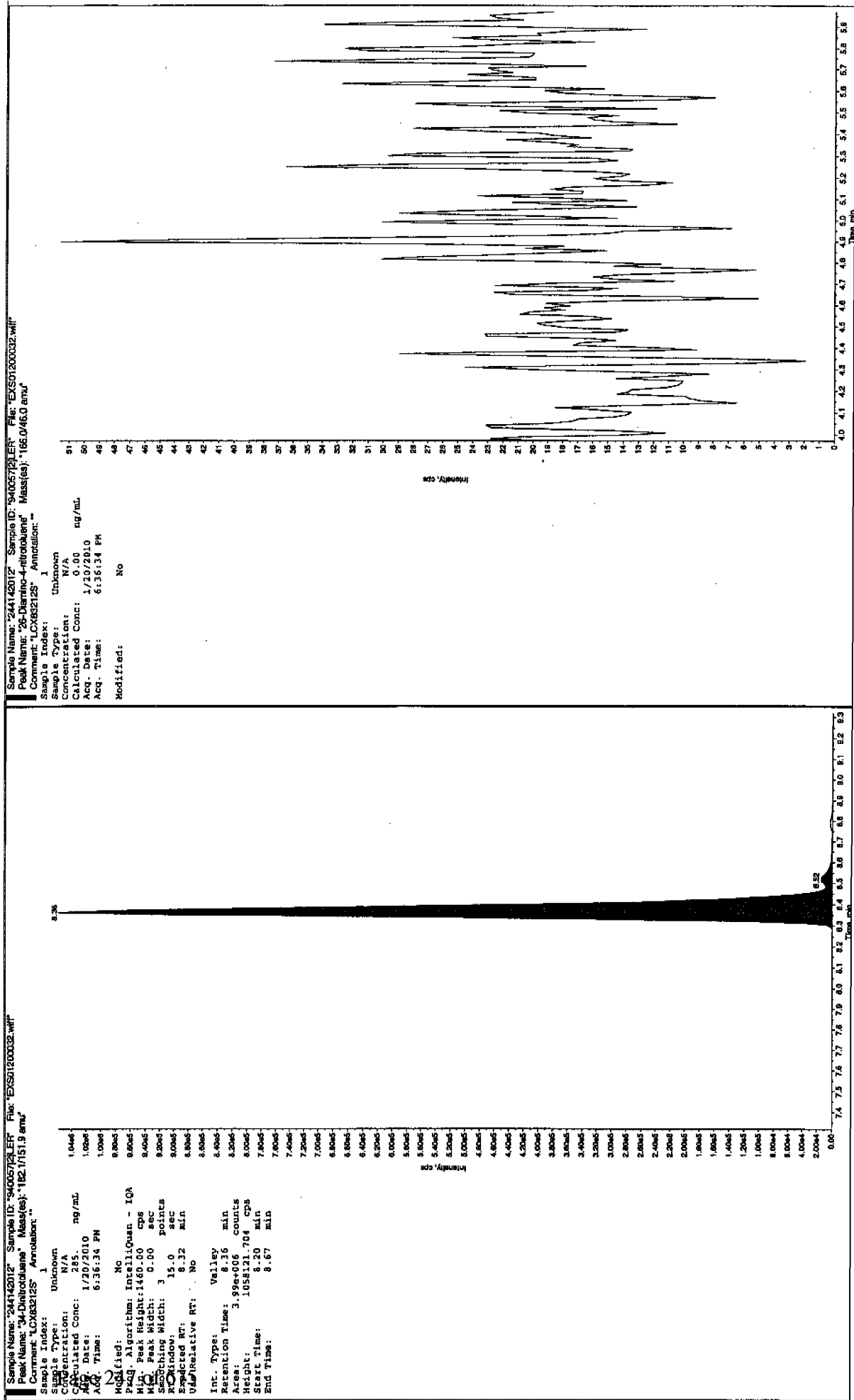


Sample Name: "244142012" Sample ID: "9405721ER" File: "EX50120032.wif"  
 Peak Name: "3,5-Dinitroaniline" Mass(es): "182.0/46.0 amu"  
 Comment: "LCX83212S" Annotation: "

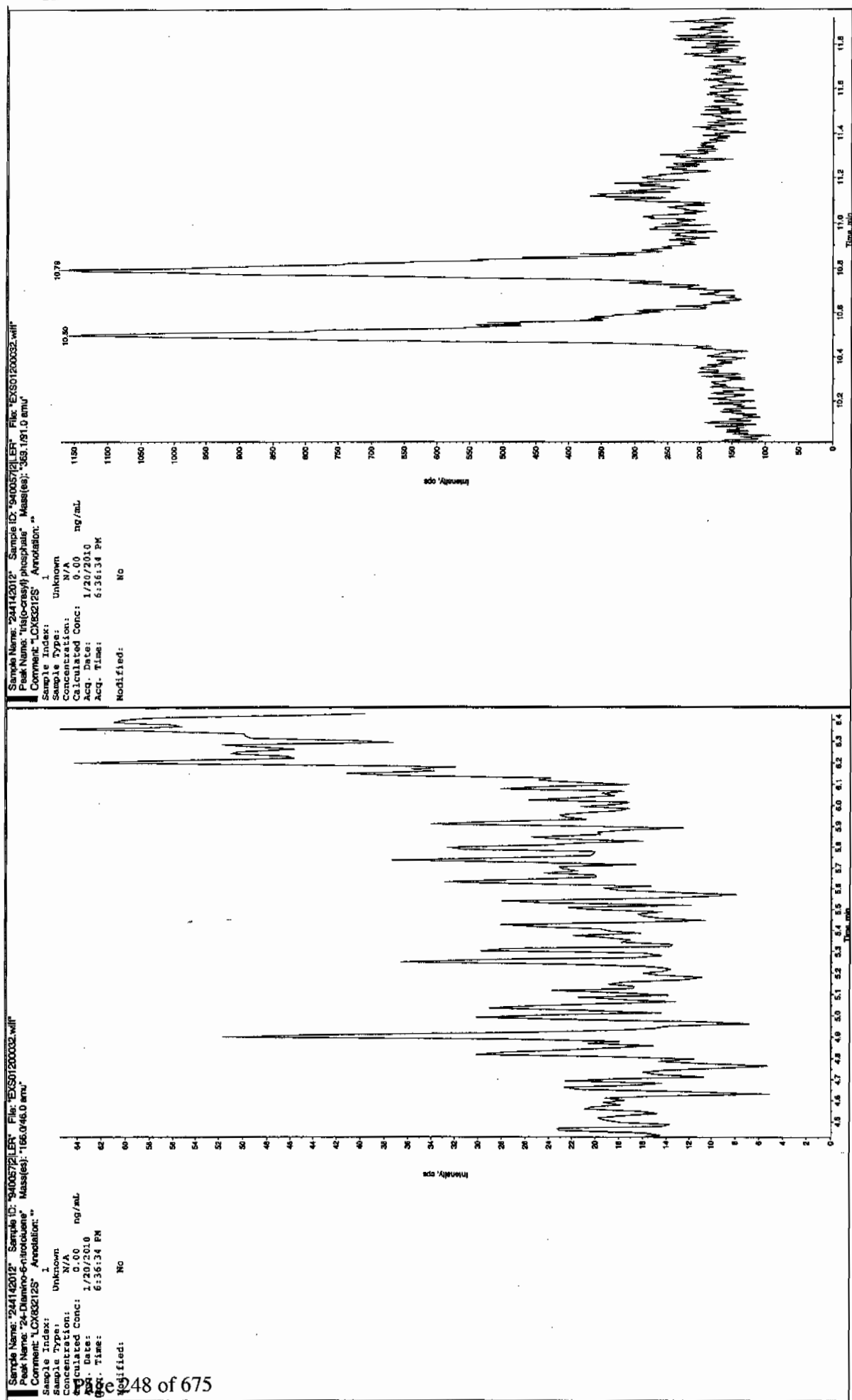
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Acquisition Date: 1/20/2010  
 Acquisition Time: 6:36:34 PM  
 Modified: No



See 1/24/10



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



1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7626

Lab Code: GEL

GEL Job No (SDG): 10-1127

Matrix: SOIL

GEL Sample ID: 244142013

Sample Amount 2

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

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125104a

Date Analyzed: 27-JAN-10 14:00

Units: ug/kg

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

\*Concentration =

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

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125104a

Date: 27-Jan-2010

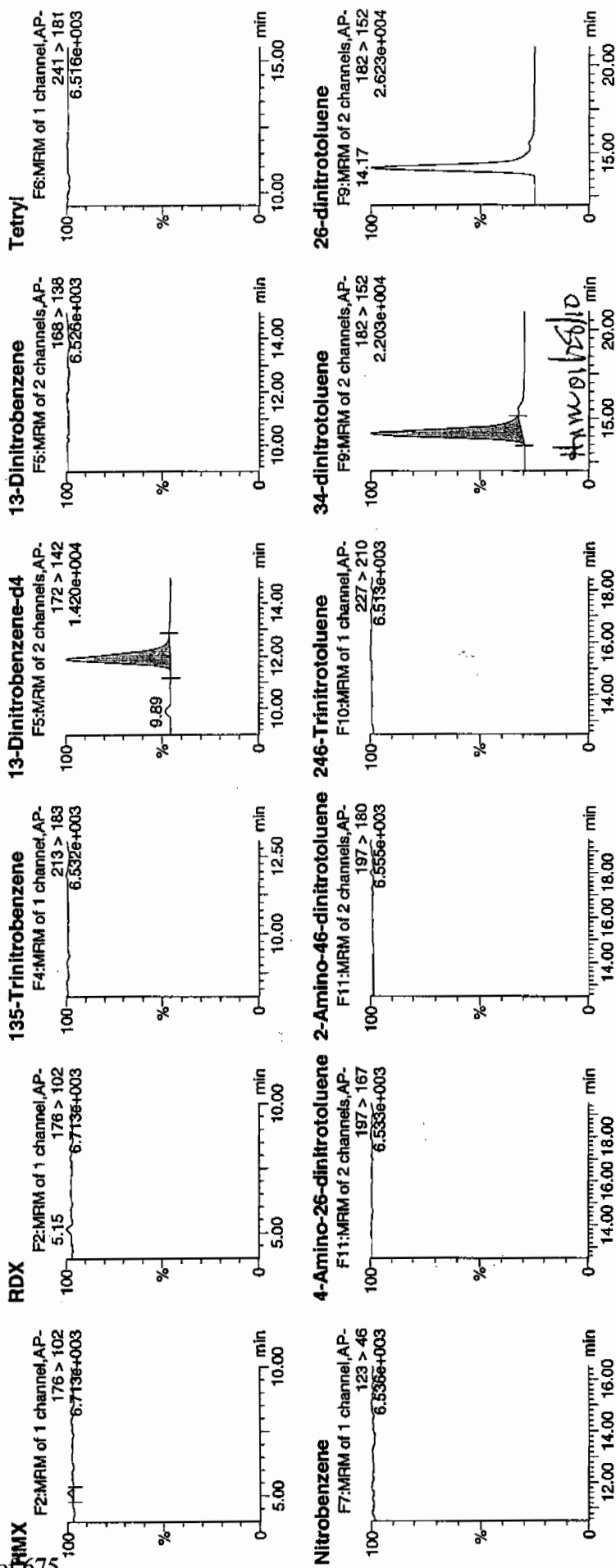
Time: 14:00:31

ID: 244142013

Vial: 3:7,E

1477  
1/28/10

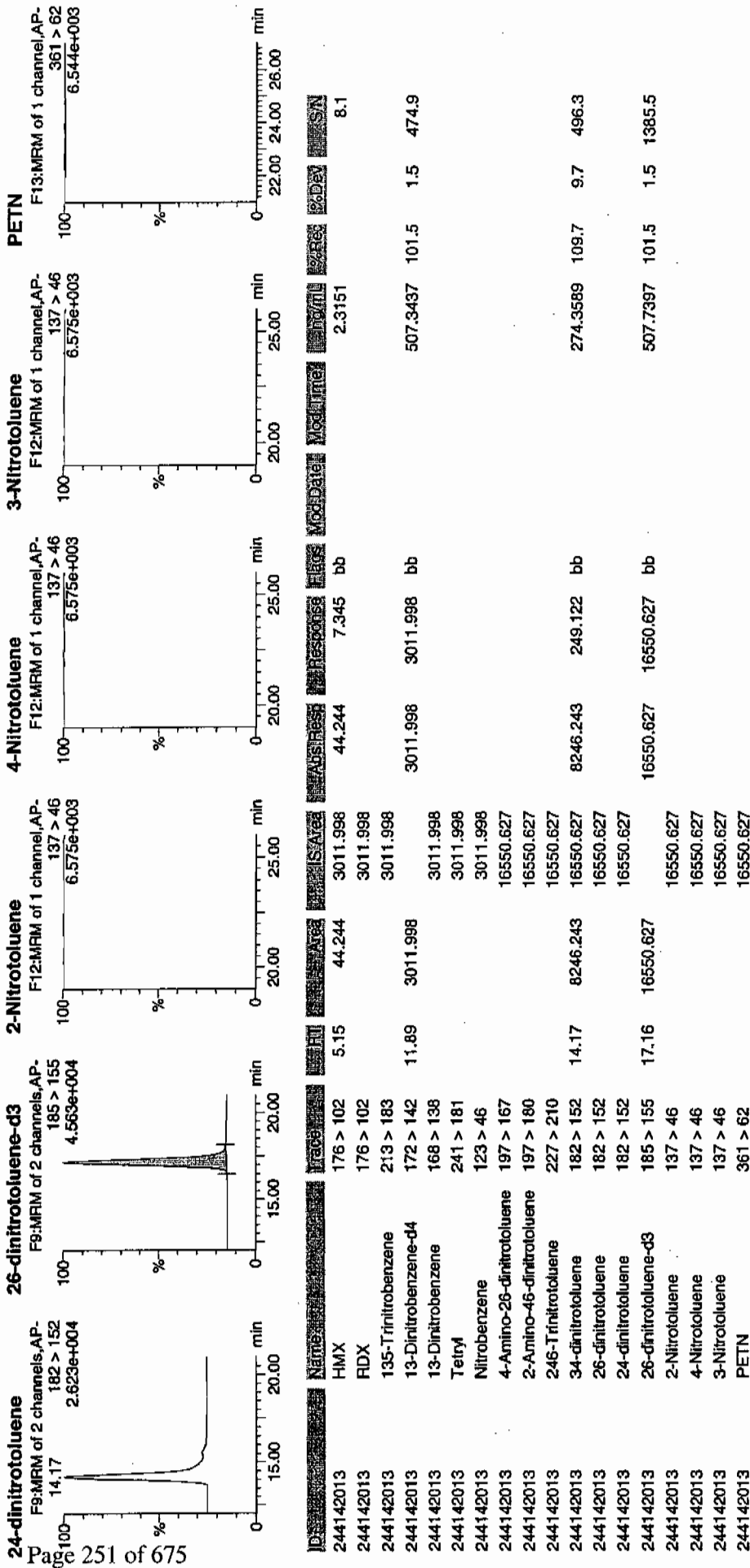
WAV 940057 (Sons) 121





**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: RE12-10-7626

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142013

Sample Amount 2

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

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01200033.wiff

Date Analyzed: 20-JAN-10 18:52

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

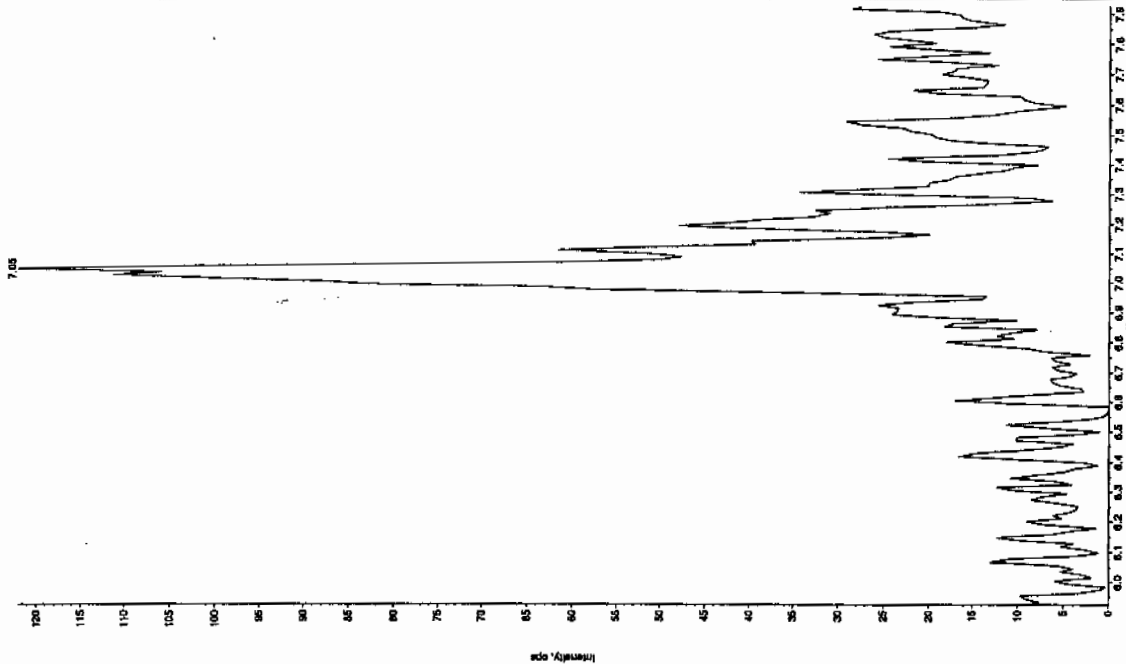
Jan 12/1/10

Sample Name: "24142013" Sample ID: "940057121.ER" File: "EX501200333.wif"

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

Comment: "LCX832125" Annotation: "

Sample Index: 1  
Sample Type: Unknown  
Concentration: 0.00 ng/mL  
Acq. Date: 1/20/2010  
Acq. Time: 6:52:16 PM  
Modified: No

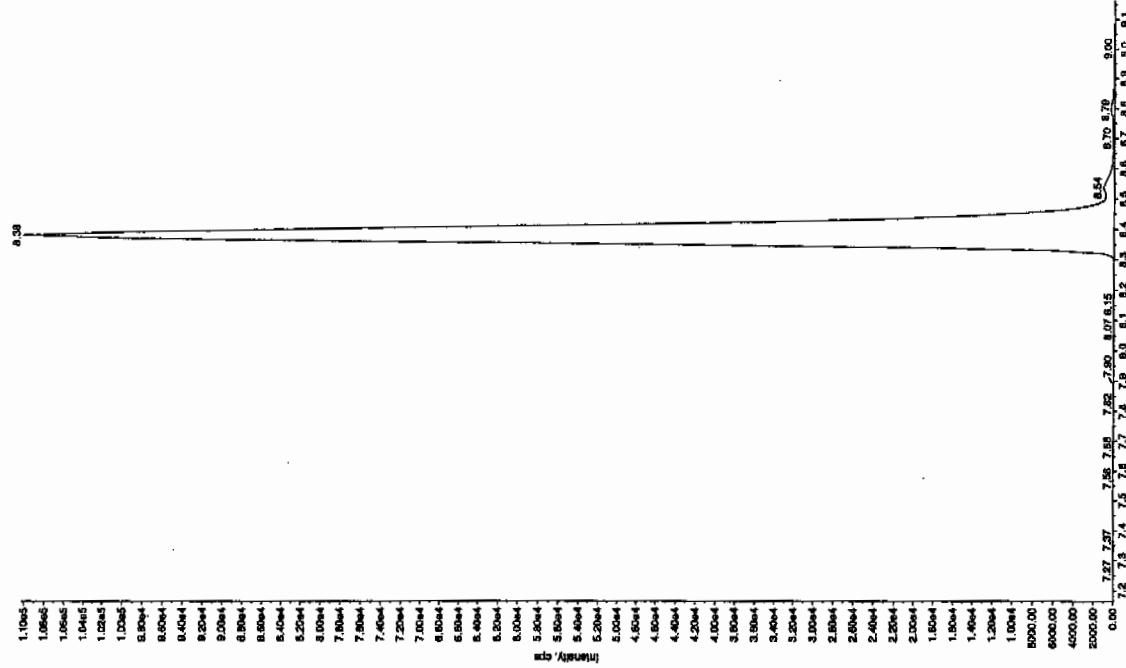


Sample Name: "24142013" Sample ID: "940057121.ER" File: "EX501200333.wif"

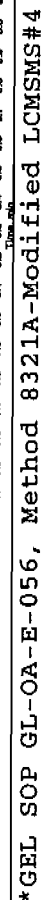
Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"

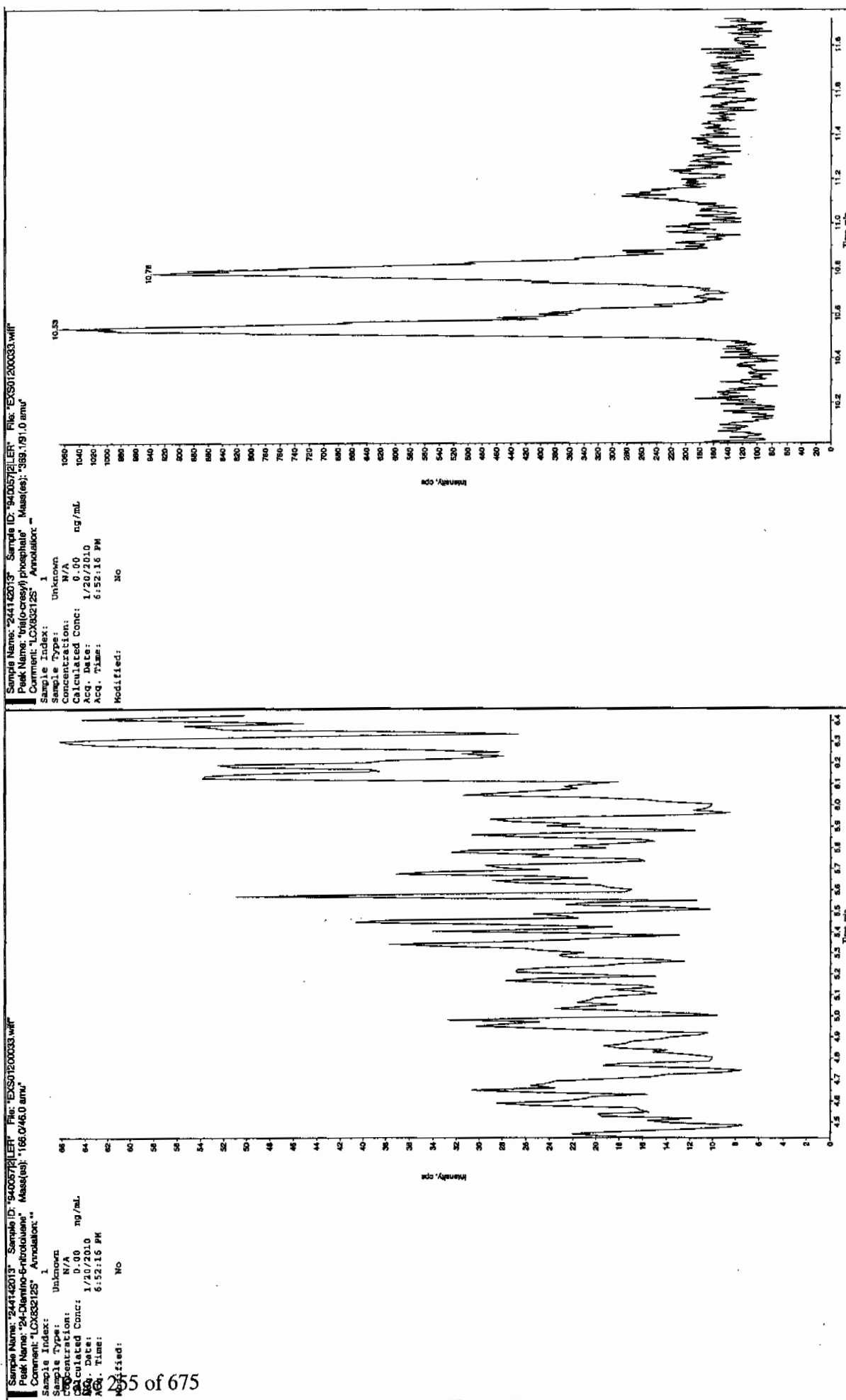
Comment: "LCX832125" Annotation: "

Sample Index: 1  
Sample Type: Unknown  
Concentration: 0.00 ng/mL  
Acq. Date: 1/20/2010  
Acq. Time: 6:52:16 PM  
Modified: No



Jan 12/1/10





1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7631

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142014

Sample Amount 2

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

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125105a

Date Analyzed: 27-JAN-10 14:30

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	127	J
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\EXP0125105a

Date: 27-Jan-2010

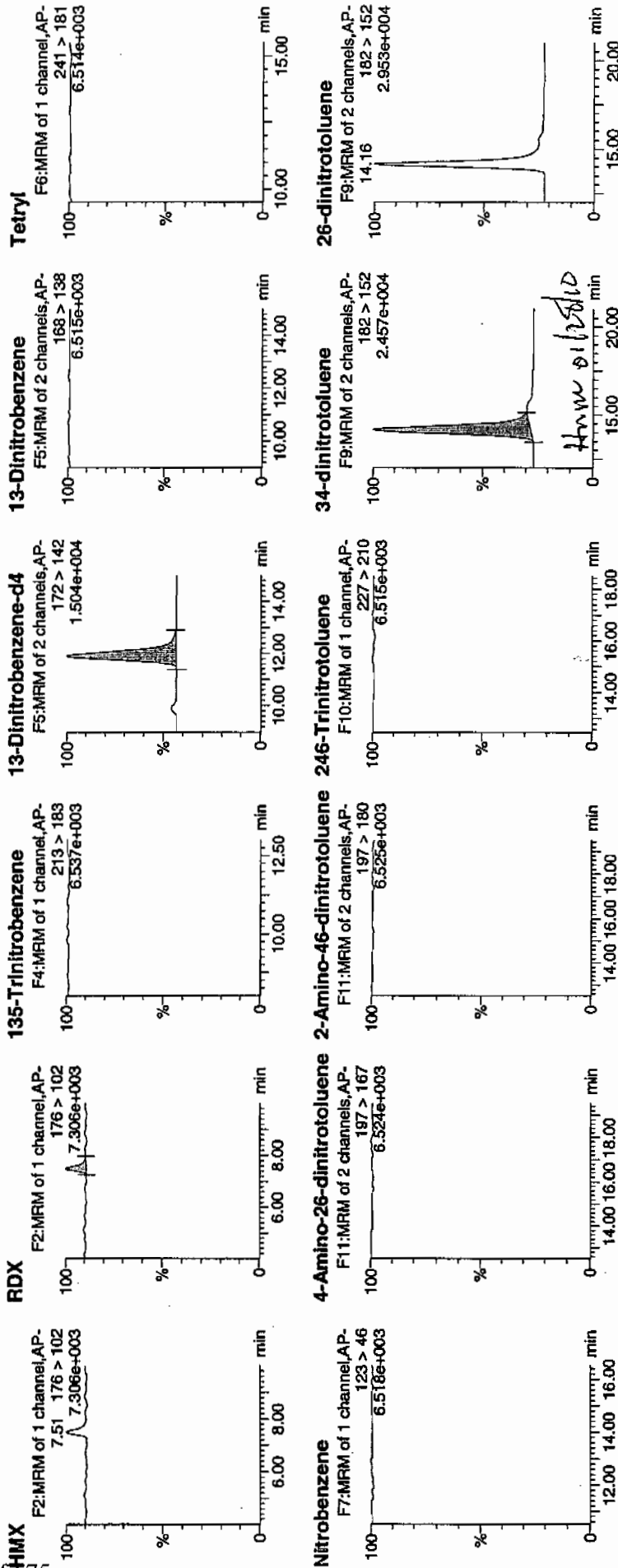
Time: 14:30:01

ID: 244142014

Vial: 3:7,F

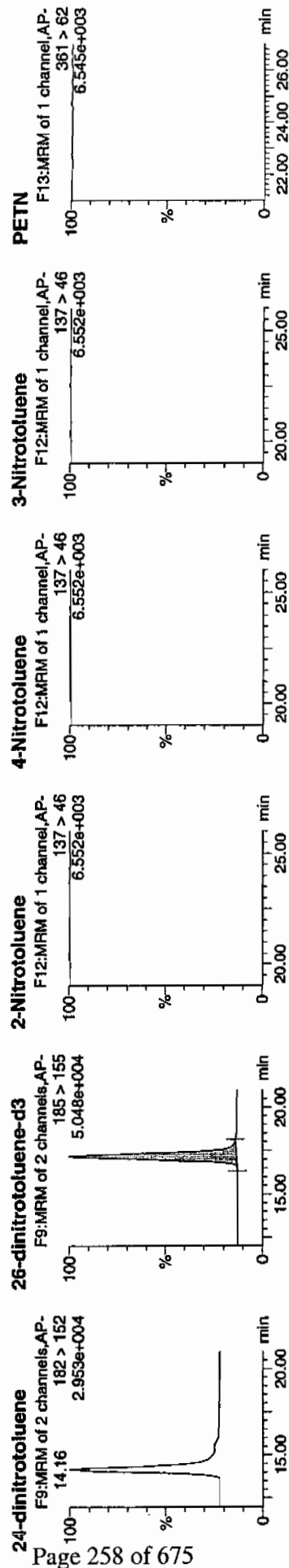
1/28/10

940057 | 8000 | 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



ID	Name	Trace	RT	Area	SI Area	Abs Resp	Response	Flags	Mod Date	Mod Time	% Conc	% Dev	% Rec	SIN
244142014	HMX	176 > 102	7.51	189.359	3390.027	189.359	27.929	bb			12.7030	32.2		
244142014	RDX	176 > 102	7.51	189.359	3390.027	189.359	27.929	bb			12.7030	32.2		
244142014	135-Trinitrobenzene	213 > 183	11.89	3390.027	3390.027	3390.027	3390.027	bb			571.0192	114.2	14.2	386.4
244142014	13-Dinitrobenzene-d4	172 > 142	11.89	3390.027	3390.027	3390.027	3390.027	bb			571.0192	114.2	14.2	386.4
244142014	13-Dinitrobenzene	168 > 138	11.89	3390.027	3390.027	3390.027	3390.027	bb			571.0192	114.2	14.2	386.4
244142014	Tetryl	241 > 181	14.16	9559.541	18621.676	9559.541	256.678	bb			282.6804	113.1	13.1	539.6
244142014	Nitrobenzene	123 > 46	14.16	9559.541	18621.676	9559.541	256.678	bb			282.6804	113.1	13.1	539.6
244142014	4-Amino-26-dinitrotoluene	197 > 167	17.16	18621.676	18621.676	18621.676	18621.676	bb			571.2753	114.3	14.3	2012.5
244142014	2-Amino-46-dinitrotoluene	197 > 180	17.16	18621.676	18621.676	18621.676	18621.676	bb			571.2753	114.3	14.3	2012.5
244142014	246-Trinitrotoluene	227 > 210	17.16	18621.676	18621.676	18621.676	18621.676	bb			571.2753	114.3	14.3	2012.5
244142014	34-dinitrotoluene	182 > 152	17.16	18621.676	18621.676	18621.676	18621.676	bb			571.2753	114.3	14.3	2012.5
244142014	26-dinitrotoluene	182 > 152	17.16	18621.676	18621.676	18621.676	18621.676	bb			571.2753	114.3	14.3	2012.5
244142014	24-dinitrotoluene	182 > 152	17.16	18621.676	18621.676	18621.676	18621.676	bb			571.2753	114.3	14.3	2012.5
244142014	26-dinitrotoluene-d3	185 > 155	17.16	18621.676	18621.676	18621.676	18621.676	bb			571.2753	114.3	14.3	2012.5
244142014	2-Nitrotoluene	137 > 46	17.16	18621.676	18621.676	18621.676	18621.676	bb			571.2753	114.3	14.3	2012.5
244142014	4-Nitrotoluene	137 > 46	17.16	18621.676	18621.676	18621.676	18621.676	bb			571.2753	114.3	14.3	2012.5
244142014	3-Nitrotoluene	137 > 46	17.16	18621.676	18621.676	18621.676	18621.676	bb			571.2753	114.3	14.3	2012.5
244142014	PETN	361 > 62	17.16	18621.676	18621.676	18621.676	18621.676	bb			571.2753	114.3	14.3	2012.5



1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7631

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142014

Sample Amount 2

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

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01200034.wiff

Date Analyzed: 20-JAN-10 19:07

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

San 12/1/10

Sample Name: "244142014" Sample ID: "94005721ER" File: "EX50120034.wif"

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

Comment: "LCX832125" Annotation: ""

Sample Index: 1

Sample Type: Unknown

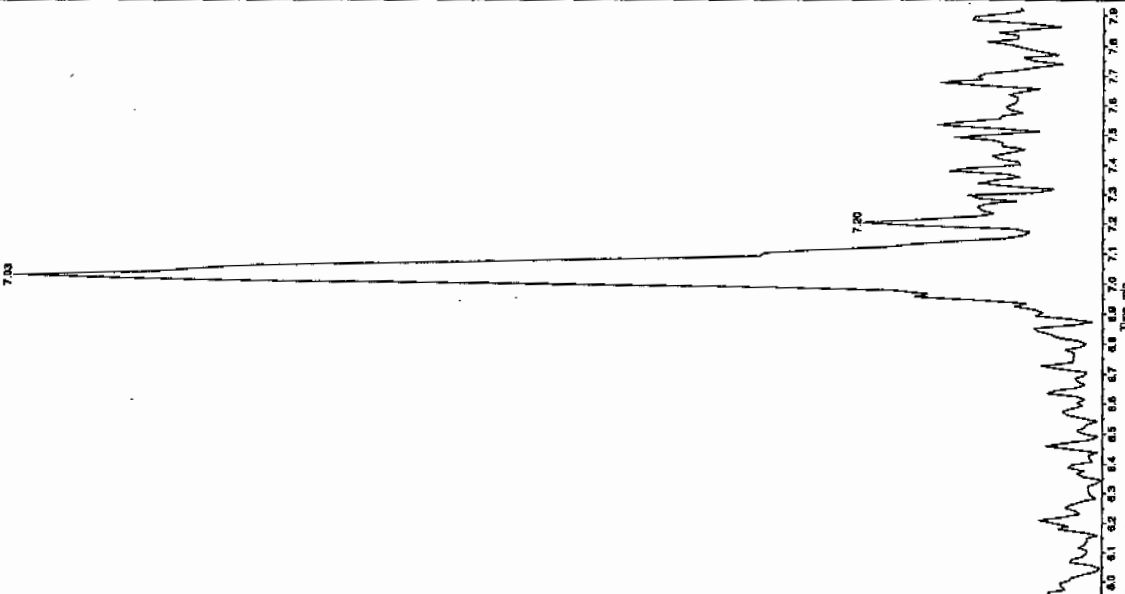
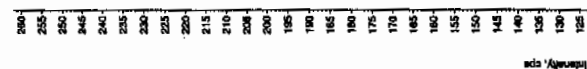
Concentration: 0.00 ng/mL

Calculated Conc: 0.00

Acq. Date: 1/20/2010

Acq. Time: 7:07:58 PM

Modified: No



Sample Name: "244142014" Sample ID: "94005721ER" File: "EX50120034.wif"

Peak Name: "3S-Dinitroaniline" Mass(es): "182.0463.0 amu"

Comment: "LCX832125" Annotation: ""

Sample Index: 1

Sample Type: Unknown

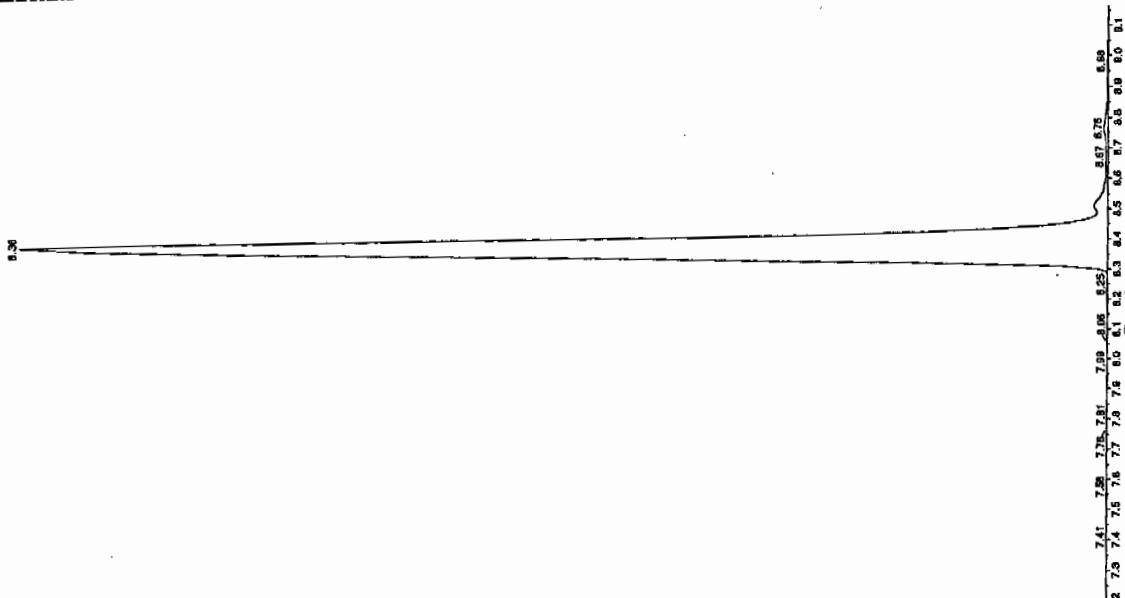
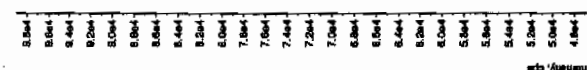
Concentration: 0.00 ng/mL

Calculated Conc: 0.00

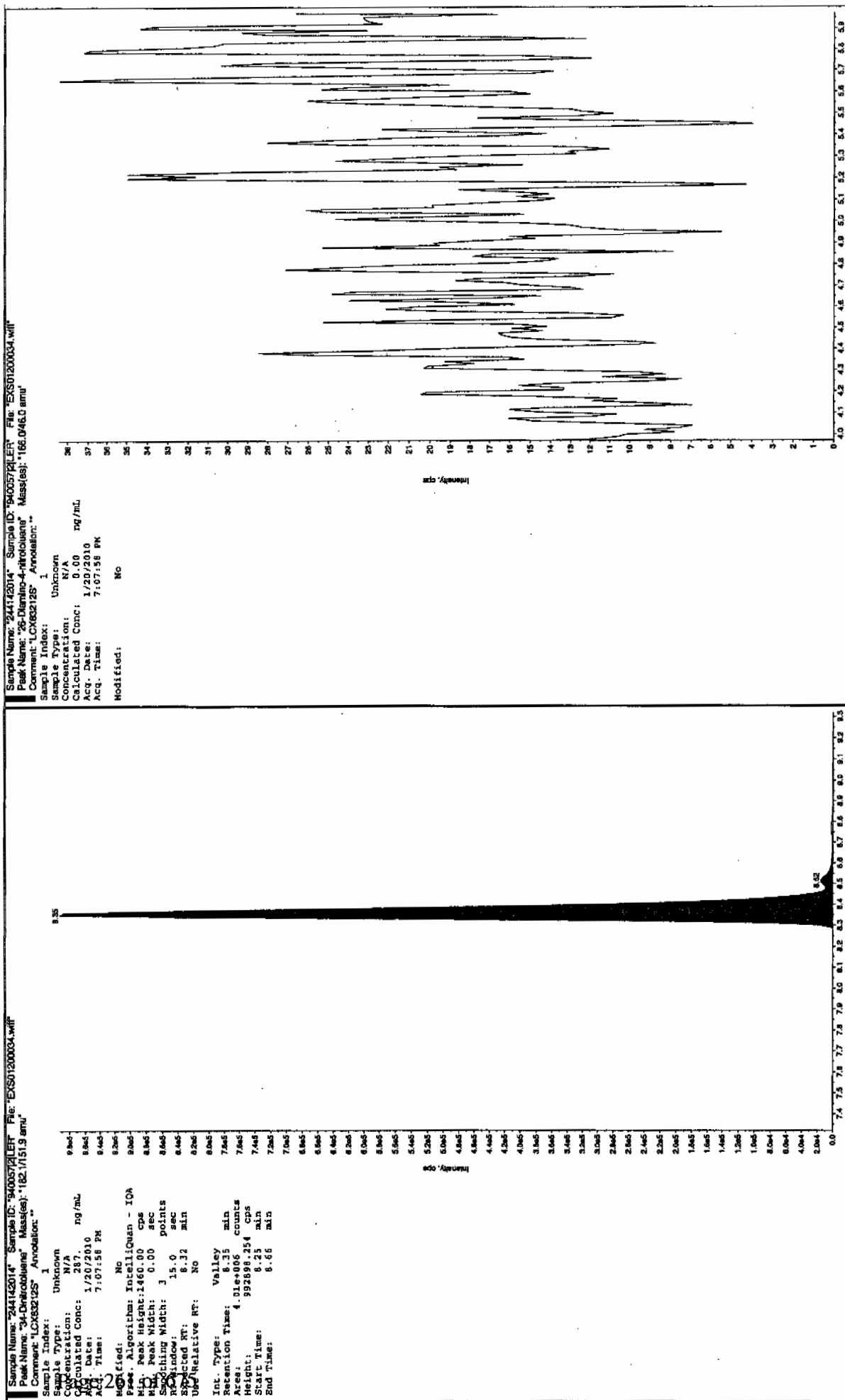
Acq. Date: 1/20/2010

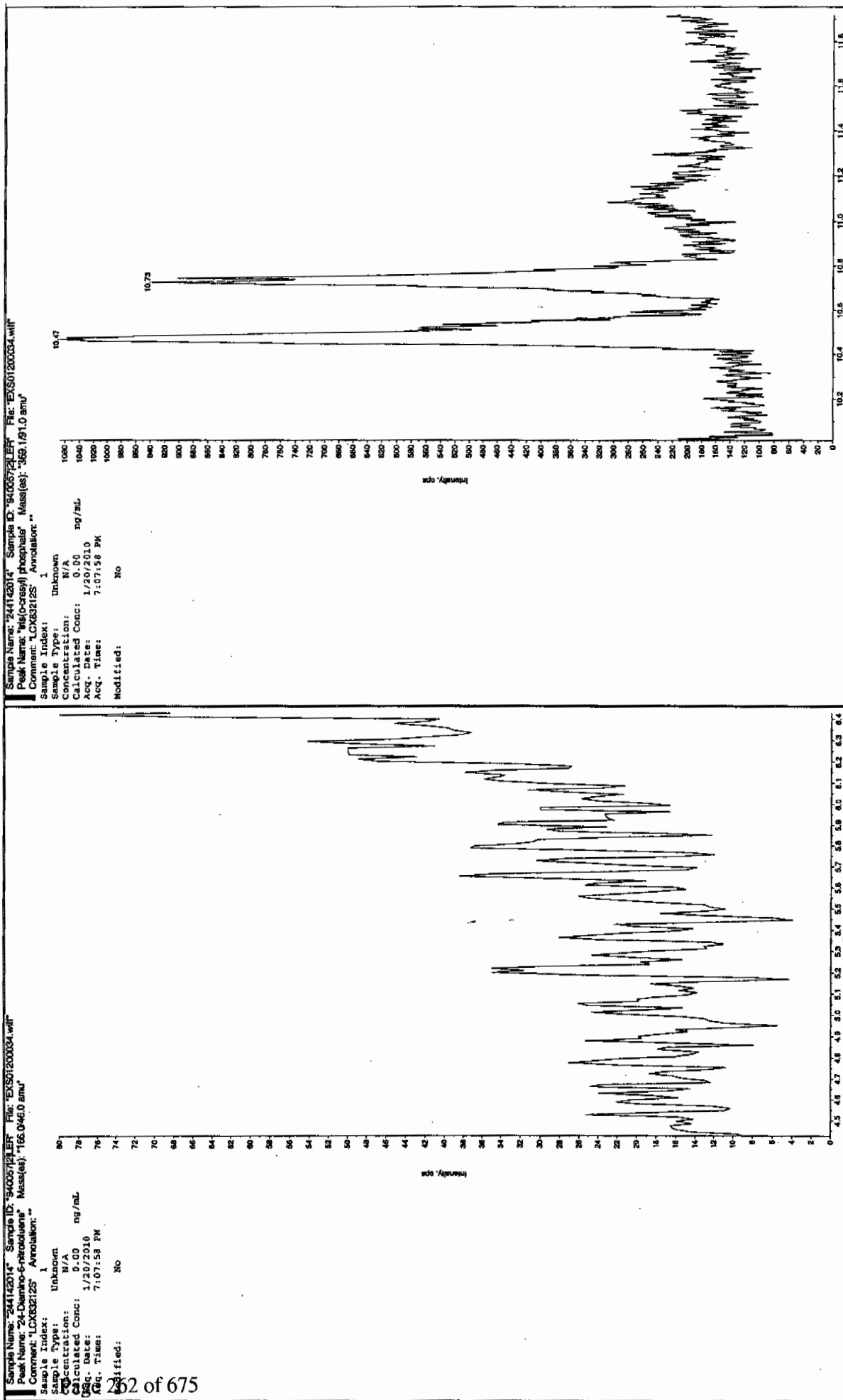
Acq. Time: 7:07:58 PM

Modified: No



San 01/21/10





1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7627

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142015

Sample Amount 2

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

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125106a

Date Analyzed: 27-JAN-10 14:59

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\EXP0125106a

Date: 27-Jan-2010

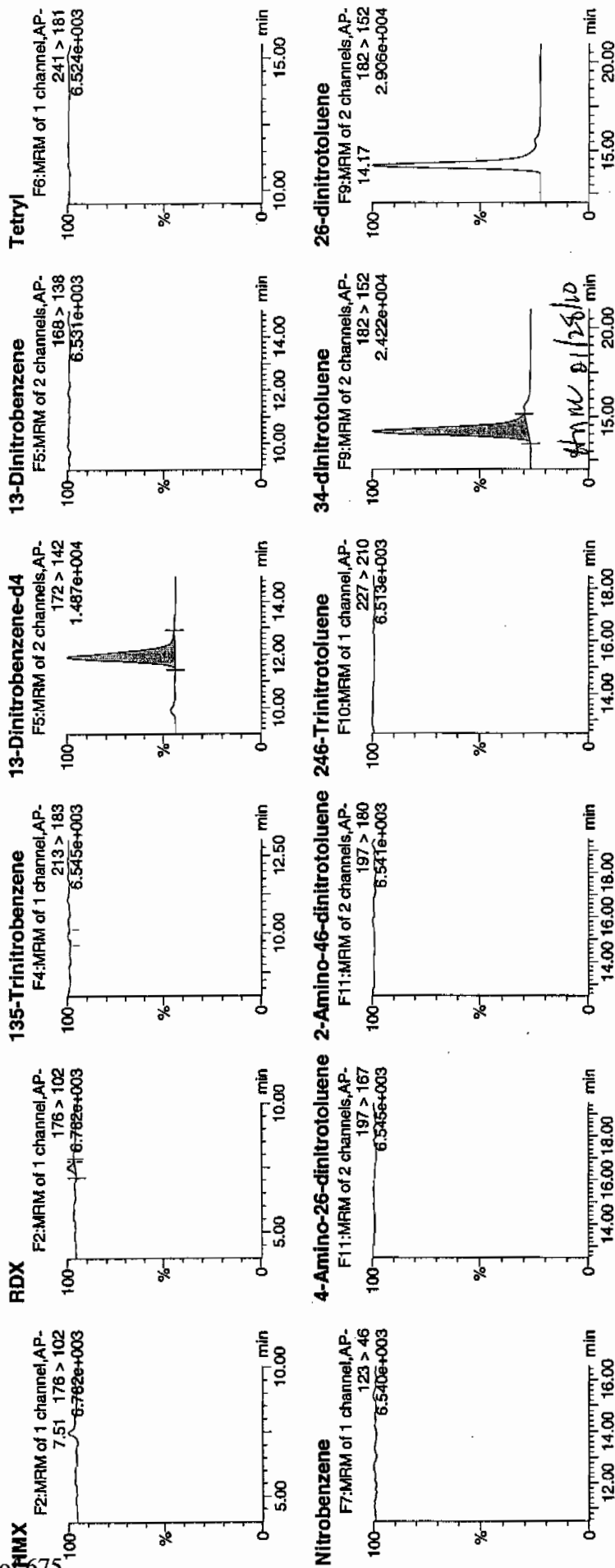
Time: 14:59:30

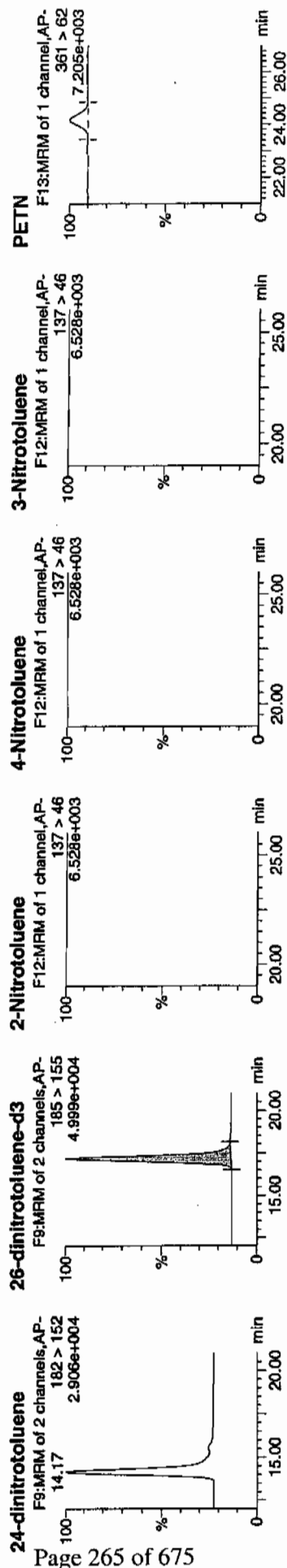
ID: 244142015

Vial: 3:8,A

1/28/10

121





Name	ID	Trace	El	Area	SA	Abs Resp	Response	Flags	Mod Date	Mod Time	In ml	% Rec	9 Day	SN
HMXX	244142015	176 > 102			3221.251									
RDX	244142015	176 > 102	7.51	74.670	3221.251	74.670	11.590	MM	28-Jan-10	10:22:33	5.2716			11.6
135-Trinitrobenzene	244142015	213 > 183			3221.251									
13-Dinitrobenzene-d4	244142015	172 > 142	11.89	3221.251		3221.251	3221.251	bb	28-Jan-10	10:23:14				
13-Dinitrobenzene	244142015	168 > 138			3221.251						542.5904	108.5	8.5	1026.9
Teiry	244142015	241 > 181			3221.251									
Nitrobenzene	244142015	123 > 46			3221.251									
4-Amino-26-dinitrotoluene	244142015	197 > 167			18218.881									
2-Amino-46-dinitrotoluene	244142015	197 > 180			18218.881									
246-Trinitrotoluene	244142015	227 > 210			18218.881									
34-dinitrotoluene	244142015	182 > 152	14.17	9439.120	18218.881	9439.120	259.048	bb			285.2904	114.1	14.1	442.1
26-dinitrotoluene	244142015	182 > 152			18218.881									
24-dinitrotoluene	244142015	182 > 152			18218.881									
26-dinitrotoluene-d3	244142015	185 > 155	17.16	18218.881		18218.881	18218.881	bb			558.9183	111.8	11.8	1607.2
2-Nitrotoluene	244142015	137 > 46			18218.881									
4-Nitrotoluene	244142015	137 > 46			18218.881									
3-Nitrotoluene	244142015	137 > 46			18218.881									
PETN	244142015	361 > 62			18218.881				MM-	28-Jan-10	10:42:04			

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7627

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142015

Sample Amount 2

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

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01200035.wiff

Date Analyzed: 20-JAN-10 19:23

Units: ug/kg

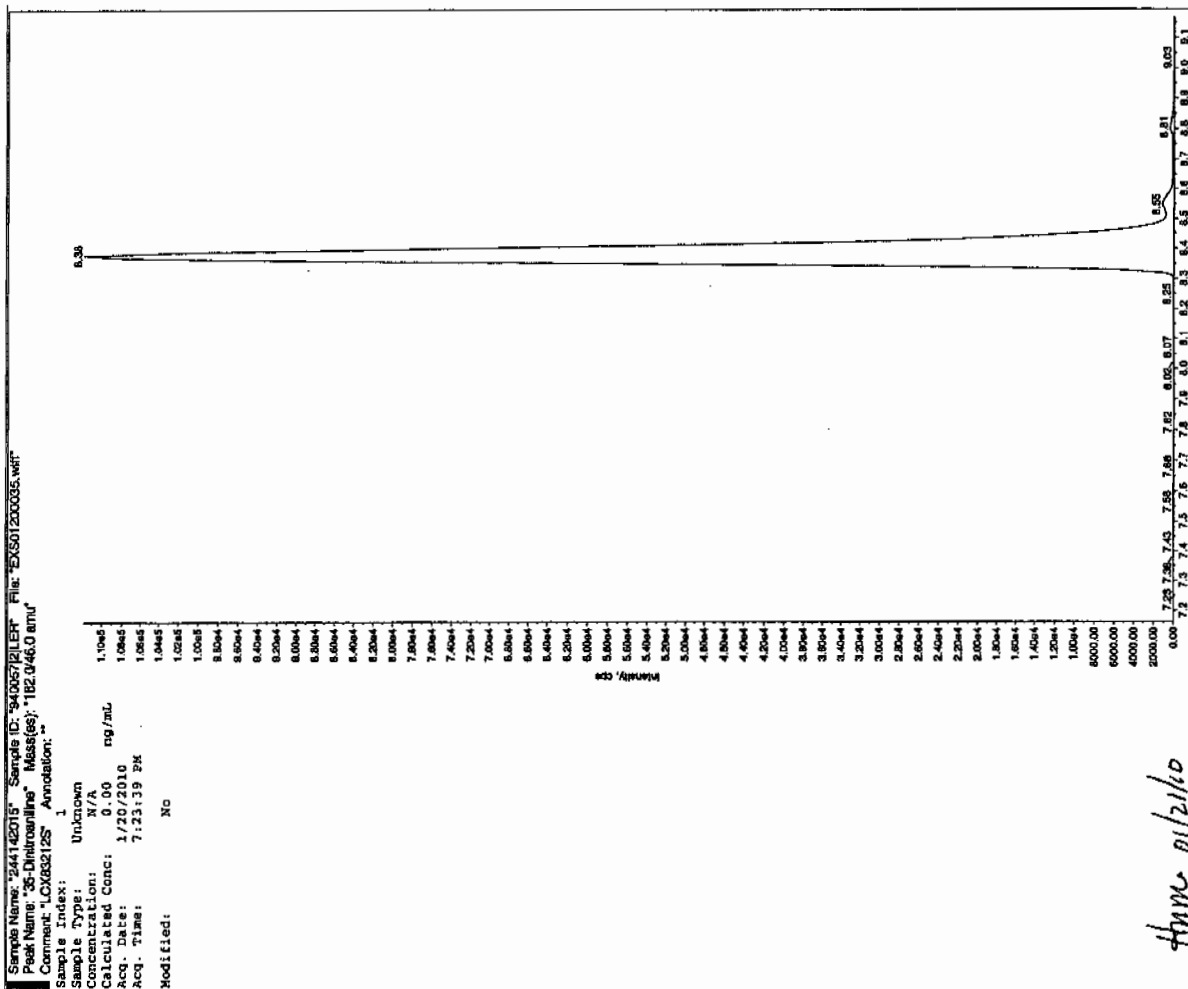
Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

\*Concentration =

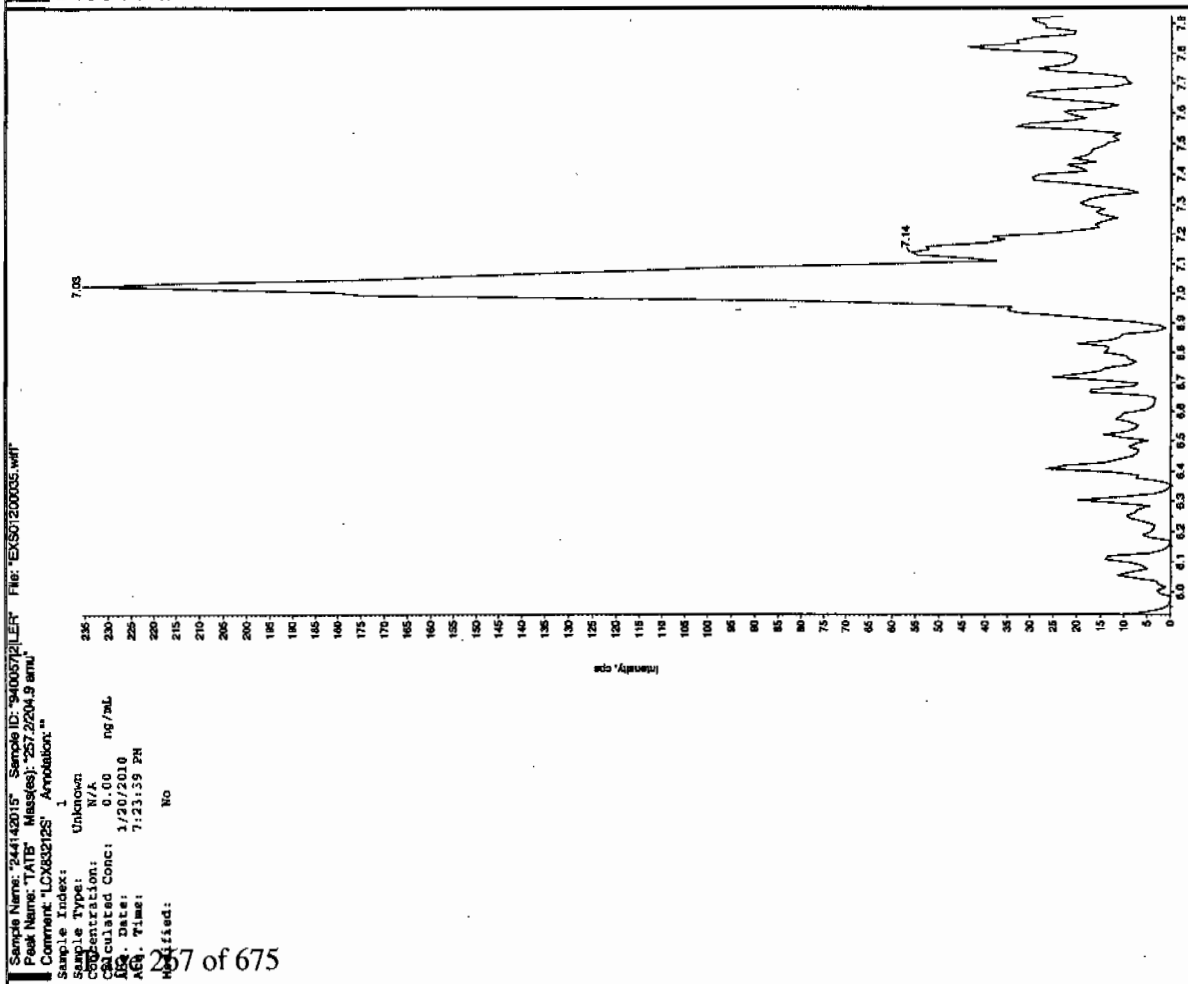
Instrument	X	<u>Concentrated Extract Volume</u>	X	Dilution
Value		<u>Sample Amount</u>		Factor

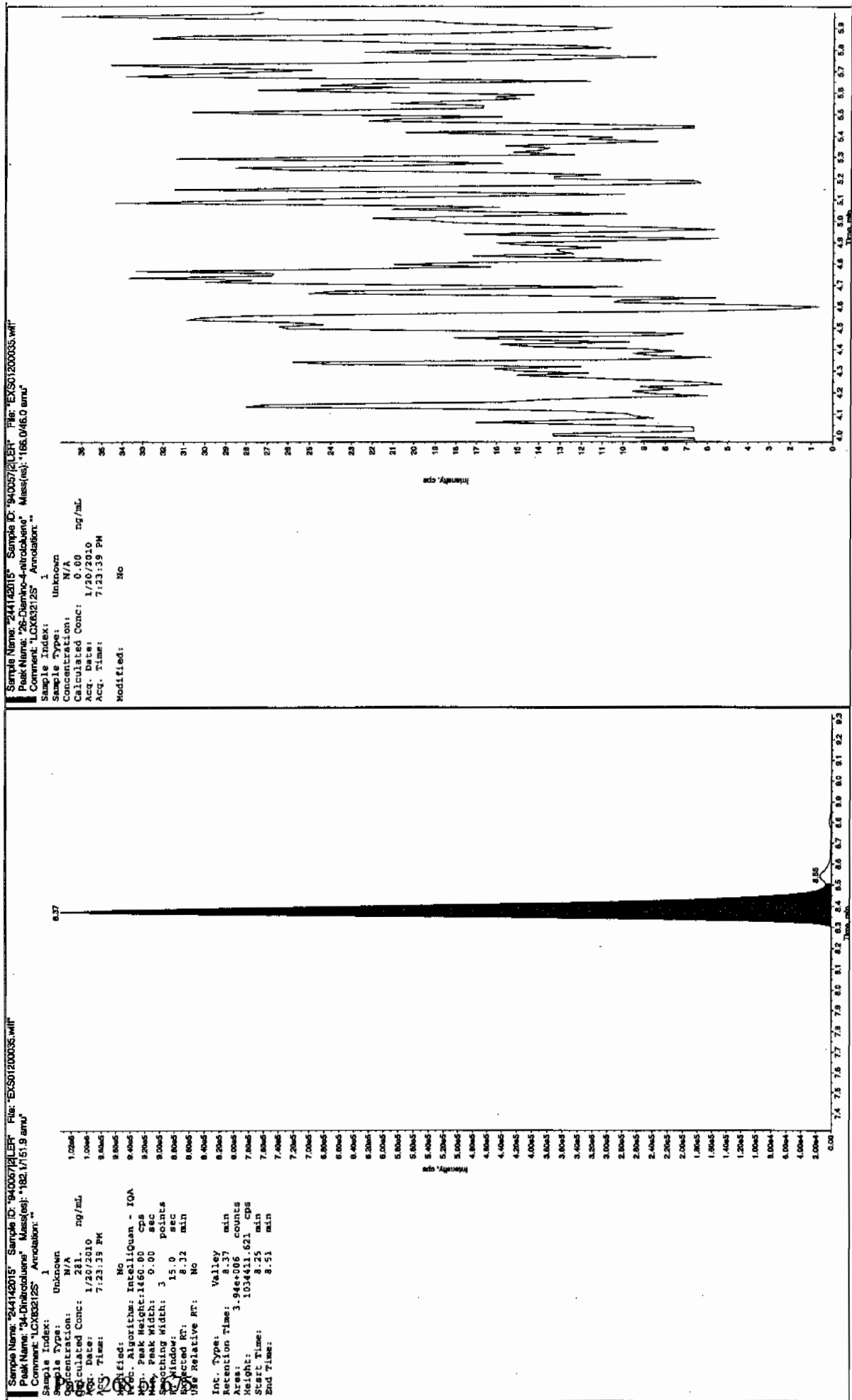


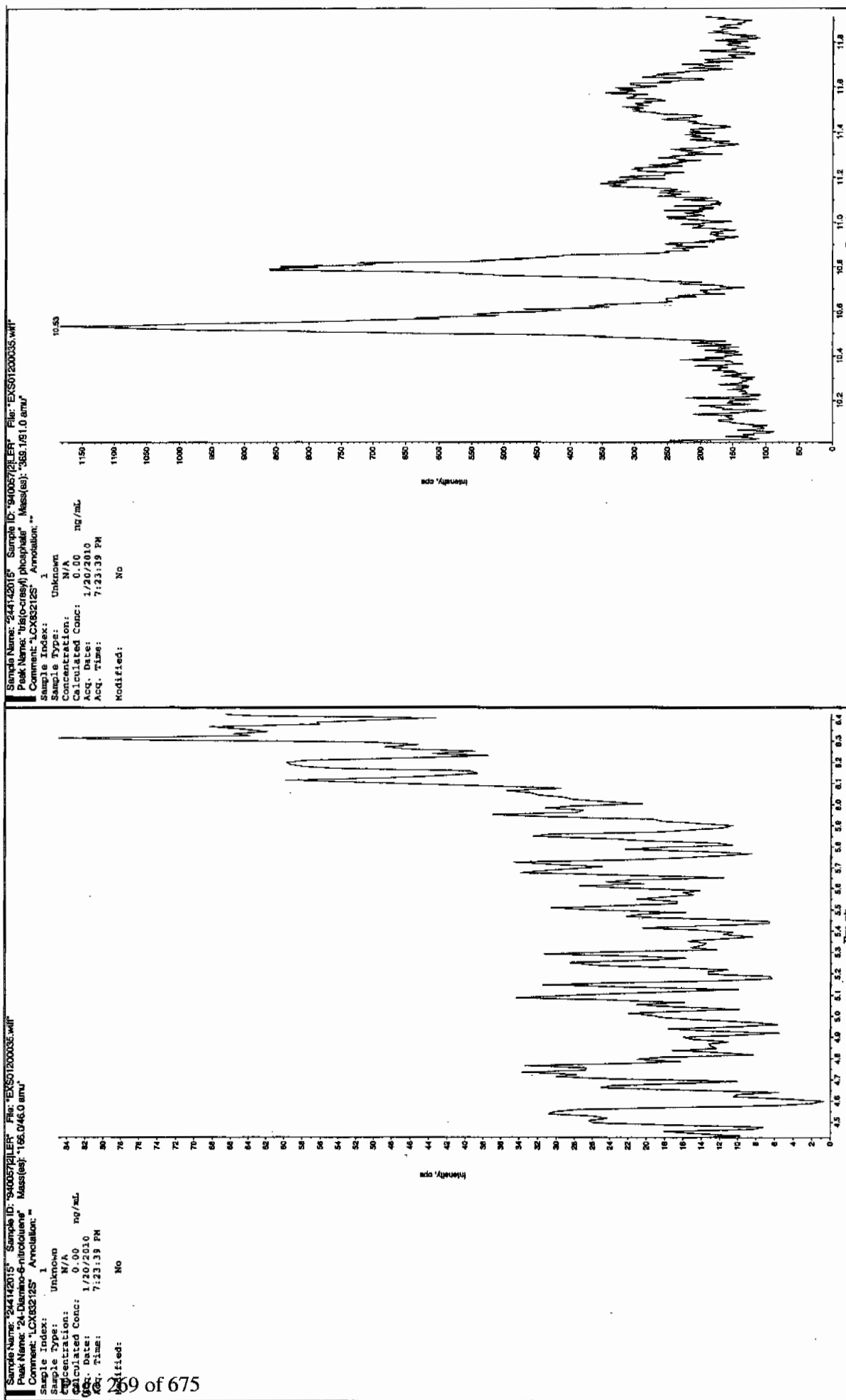
Jan 1/26/10



Jan 01/26/10







1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7625

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142016

Sample Amount 2

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

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125107a

Date Analyzed: 27-JAN-10 15:29

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	113	J
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\EXP0125107a

Date: 27-Jan-2010

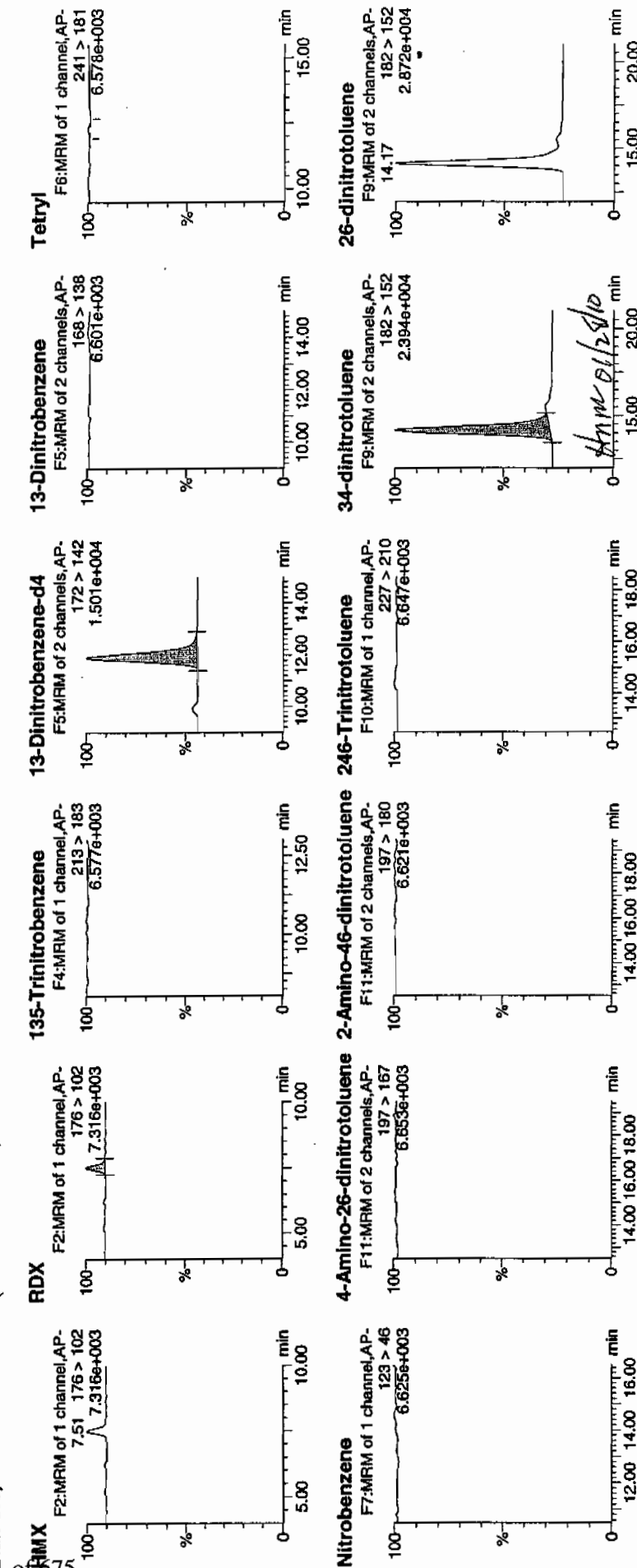
Time: 15:29:02

ID: 244142016

Vial: 3:8,B

1447  
1/28/10

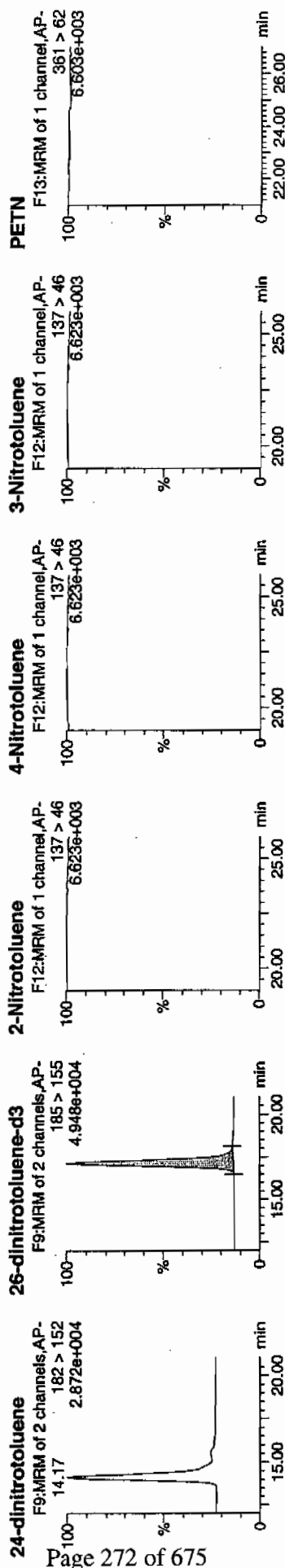
Case 940057 | 8000 | 121



## Quantify Sample Report

Analyst: Michael A. Penny

Dataset: C:\MASSLYN\New\_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010



Name	ID	Trace	Area	Area	Status	Abs Resp	Response	Frag	Mod Date	Mod Time	Exp/m	% Dev	S/N
HMX	244142016	176 > 102			3349.293								
RDX	244142016	176 > 102	7.51	166.640	3349.293	166.640	24.877	bb			11.3149		36.8
135-Trinitrobenzene	244142016	213 > 183			3349.293								
13-Dinitrobenzene-d4	244142016	172 > 142	11.89	3349.293	3349.293	3349.293	3349.293	bb			564.1579	112.8	220.9
13-Dinitrobenzene	244142016	168 > 138			3349.293								
Tetryl	244142016	241 > 181			3349.293								
Nitrobenzene	244142016	123 > 46			3349.293				MM-	28-Jan-10	10:24:26		
4-Amino-26-dinitrotoluene	244142016	197 > 167			18106.852								
2-Amino-46-dinitrotoluene	244142016	197 > 180			18106.852								
246-Trinitrotoluene	244142016	227 > 210			18106.852								
34-dinitrotoluene	244142016	182 > 152	14.17	9251.400	18106.852	9251.400	255.467	bb			281.3467	112.5	879.5
26-dinitrotoluene	244142016	182 > 152			18106.852								
24-dinitrotoluene	244142016	182 > 152			18106.852								
26-dinitrotoluene-d3	244142016	185 > 155	17.16	18106.852	18106.852	18106.852	18106.852	bb			555.4815	111.1	1761.4
2-Nitrotoluene	244142016	137 > 46			18106.852								
4-Nitrotoluene	244142016	137 > 46			18106.852								
3-Nitrotoluene	244142016	137 > 46			18106.852								
PETN	244142016	361 > 62			18106.852								

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7625

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142016

Sample Amount 2

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

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01200036.wiff

Date Analyzed: 20-JAN-10 19:39

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

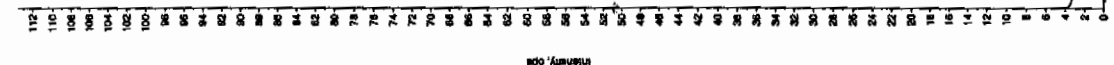
\*Concentration =

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

San 1/21/10

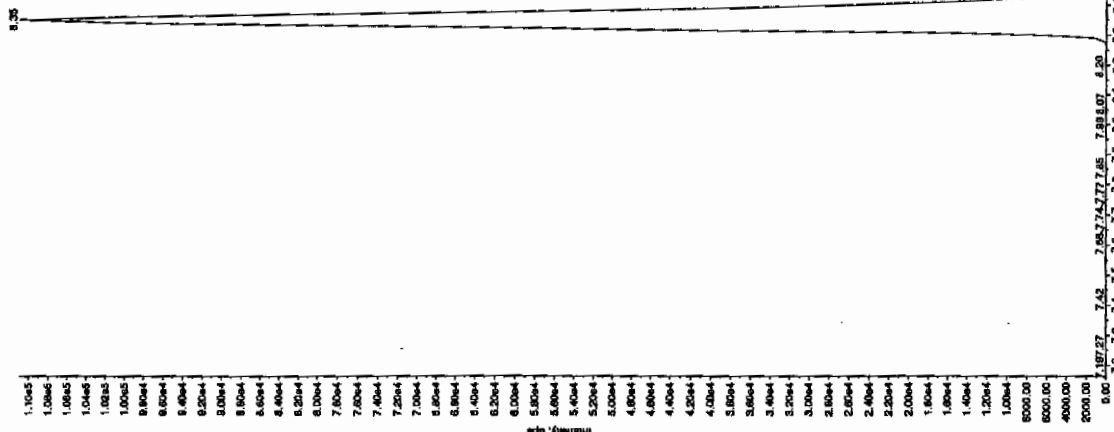
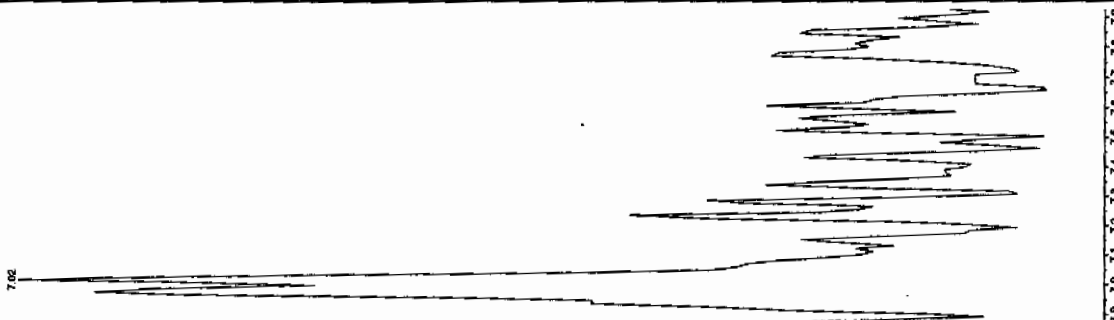
Sample Name: "24142016" Sample ID: "94005721ER" File: "EX501200036.wif"  
 Peak Name: "TA1B" Mass(es): "257.2204.9 amu"  
 Comment: "LCX832125" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ug/mL  
 Acq. Date: 1/20/2010  
 Acq. Time: 7:39:20 PM  
 Modified: No



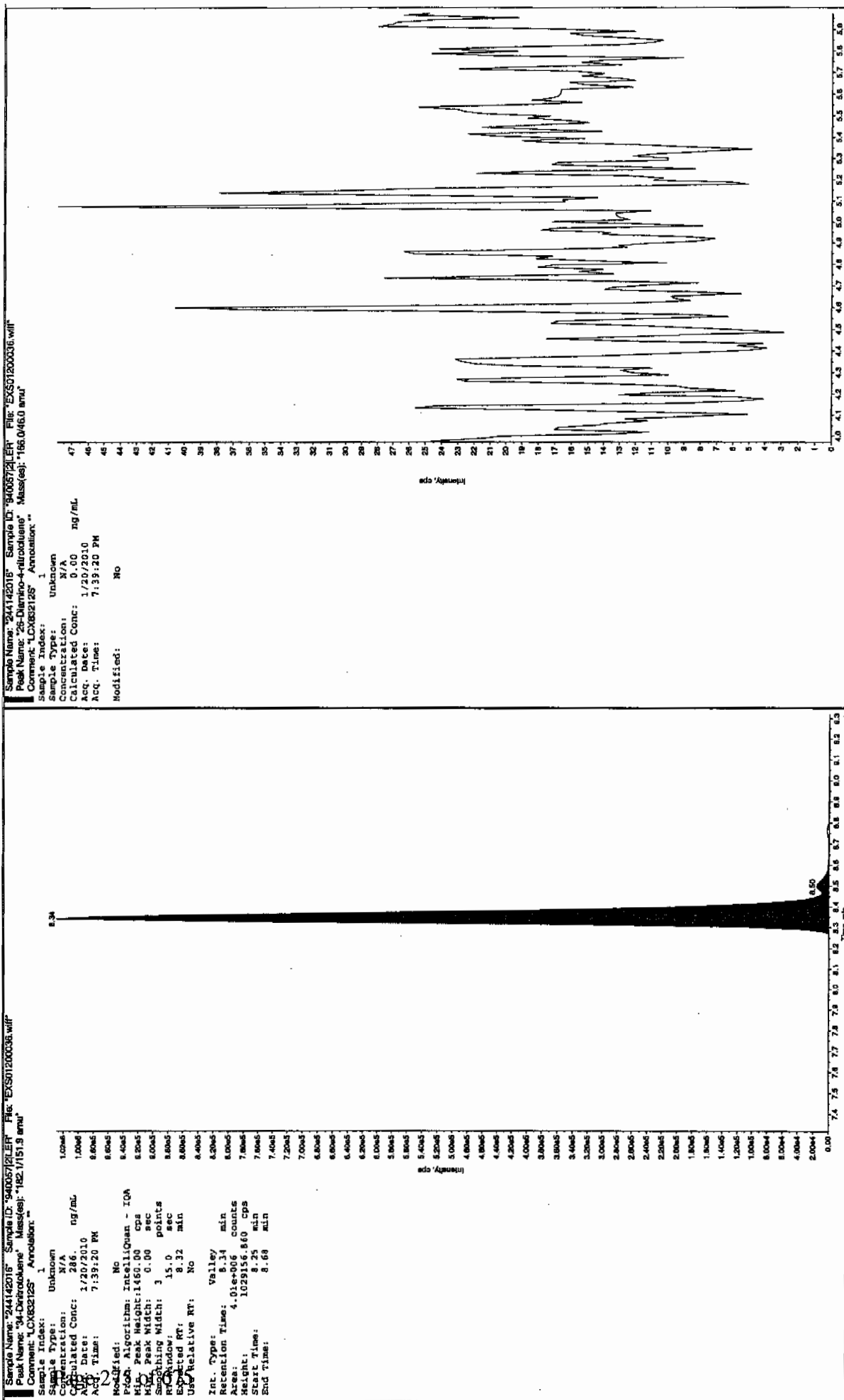
Sample Name: "24142016" Sample ID: "94005721ER" File: "EX501200036.wif"  
 Peak Name: "95-Dinitroanthra" Mass(es): "182.046.0 amu"  
 Comment: "LCX832125" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ug/mL  
 Acq. Date: 1/20/2010  
 Acq. Time: 7:39:20 PM  
 Modified: No

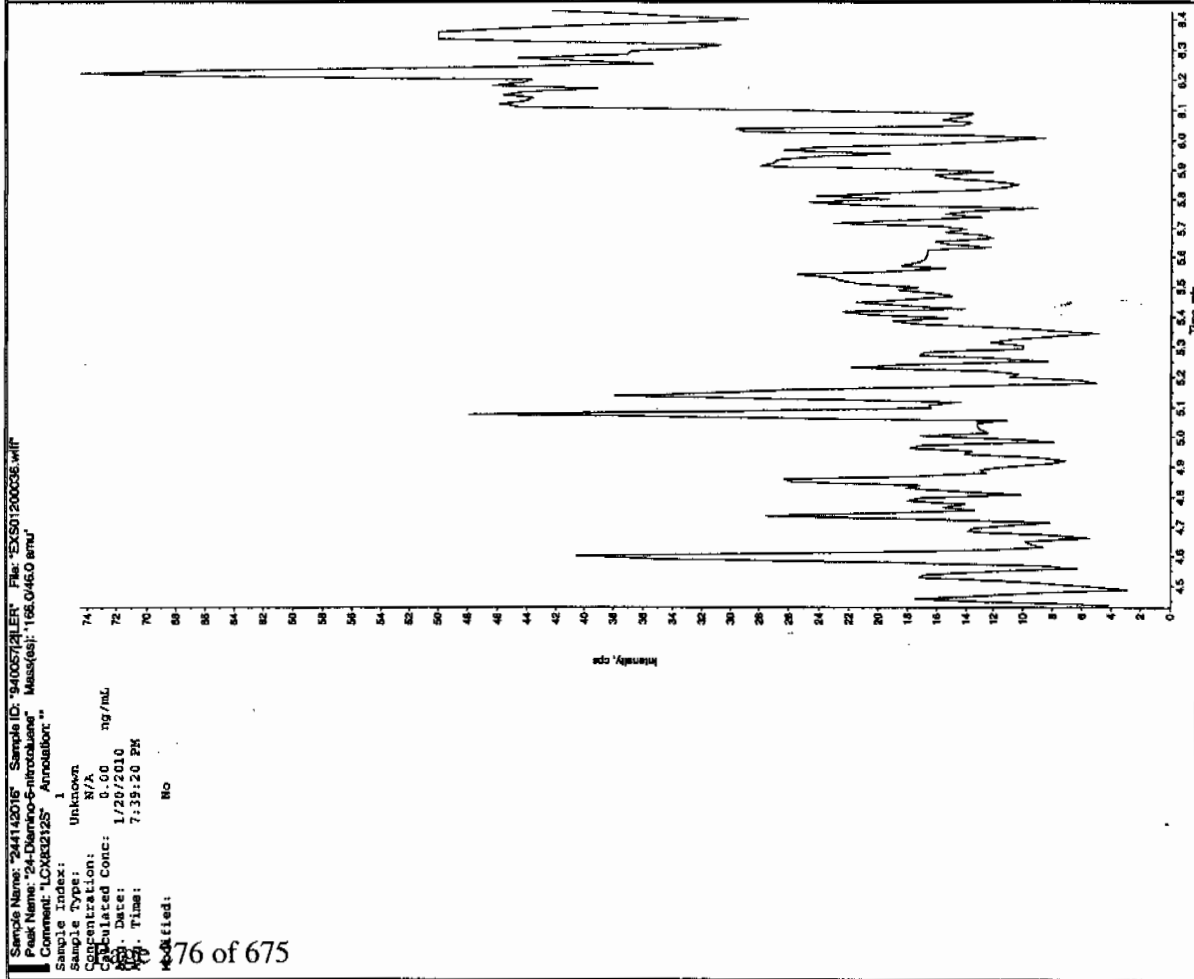
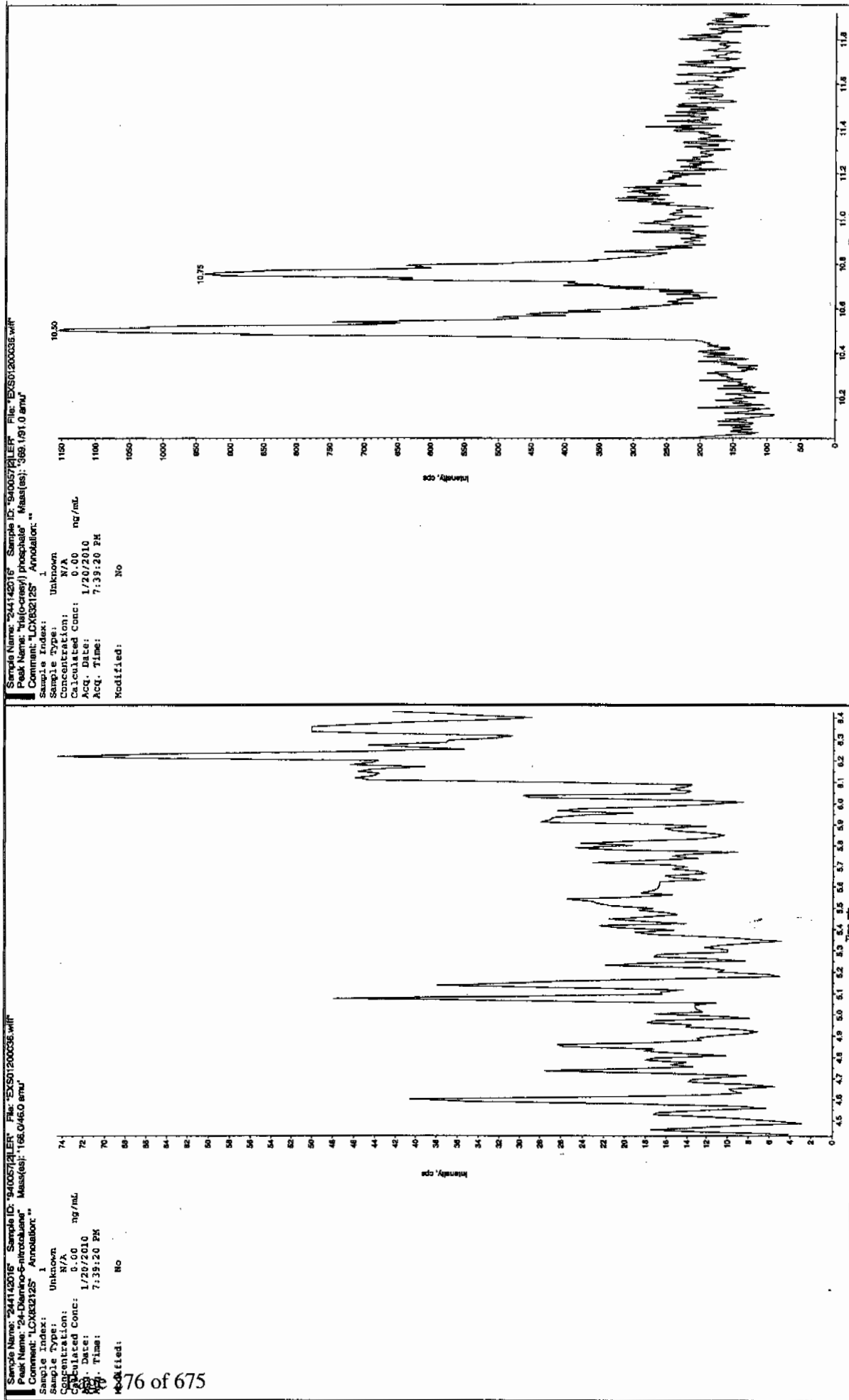


San 01/21/10





\*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: RE12-10-7656

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142017

Sample Amount 2

Moisture: 7.6

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125111a

Date Analyzed: 27-JAN-10 17:27

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	499	J
121-14-2	2,4-Dinitrotoluene	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	3310	
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	2430	
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

\*Concentration =

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

# Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Thu Jan 28 10:43:32 2010, Page 53 of 121

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125111a

Date: 27-Jan-2010

Time: 17:27:20

ID: 244142017

Vial: 3:8,C

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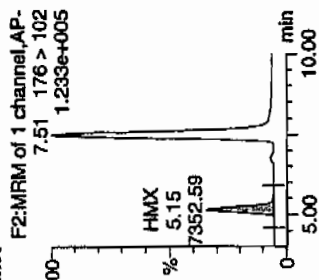
see 0125141a

see 0125141a

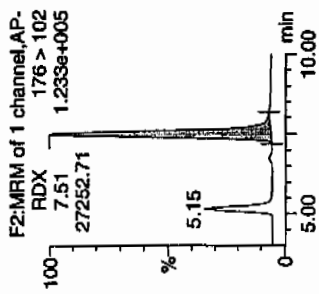
not

1/28/10

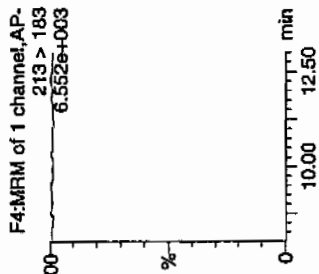
## HMX



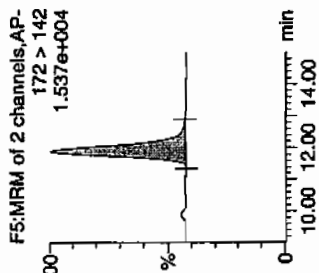
## RDX



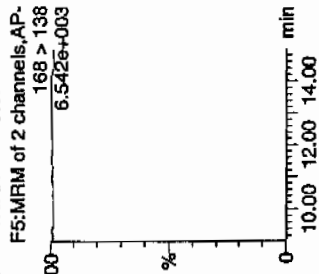
## 135-Trinitrobenzene



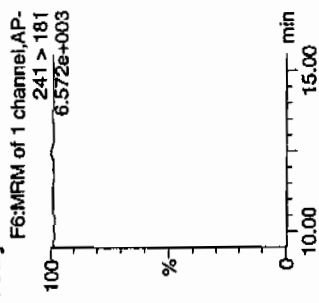
## 13-Dinitrobenzene-d4



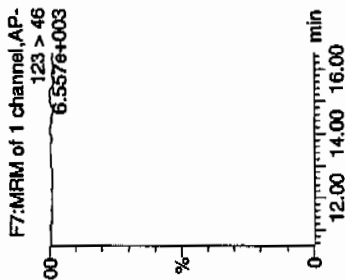
## 13-Dinitrobenzene



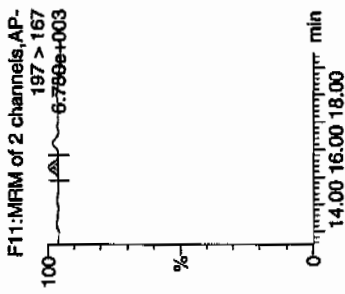
## Tetryl



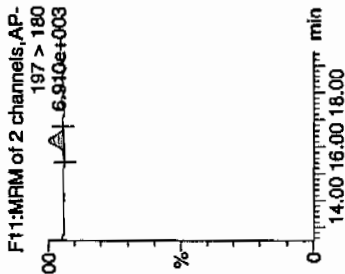
## Nitrobenzene



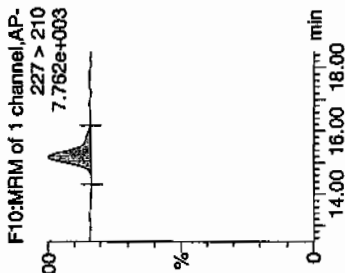
## 4-Amino-26-dinitrotoluene



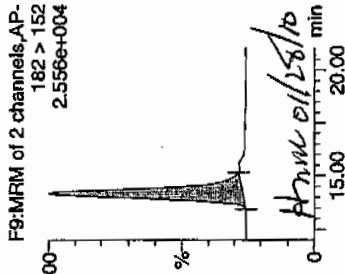
## 2-Amino-46-dinitrotoluene



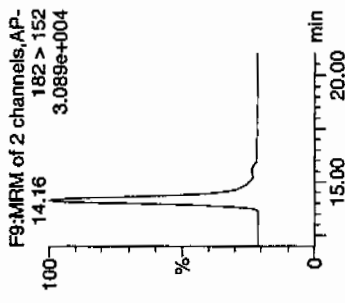
## 246-Trinitrotoluene



## 34-dinitrotoluene



## 26-dinitrotoluene



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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7656

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142017

Sample Amount 2

Moisture: 7.6

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 10

Injection Volume (uL): 50

GEL data file: EXP0125141a

Date Analyzed: 28-JAN-10 08:12

Units: ug/kg

Cas No.	Compound	Concentration*	Q
121-82-4	RDX	16700	

\*Concentration =

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

Printed: Thu Jan 28 10:43:32 2010, Page 113 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\012510expA2.qld

Date: 28-Jan-2010

Time: 08:12:13

ID: 244142017

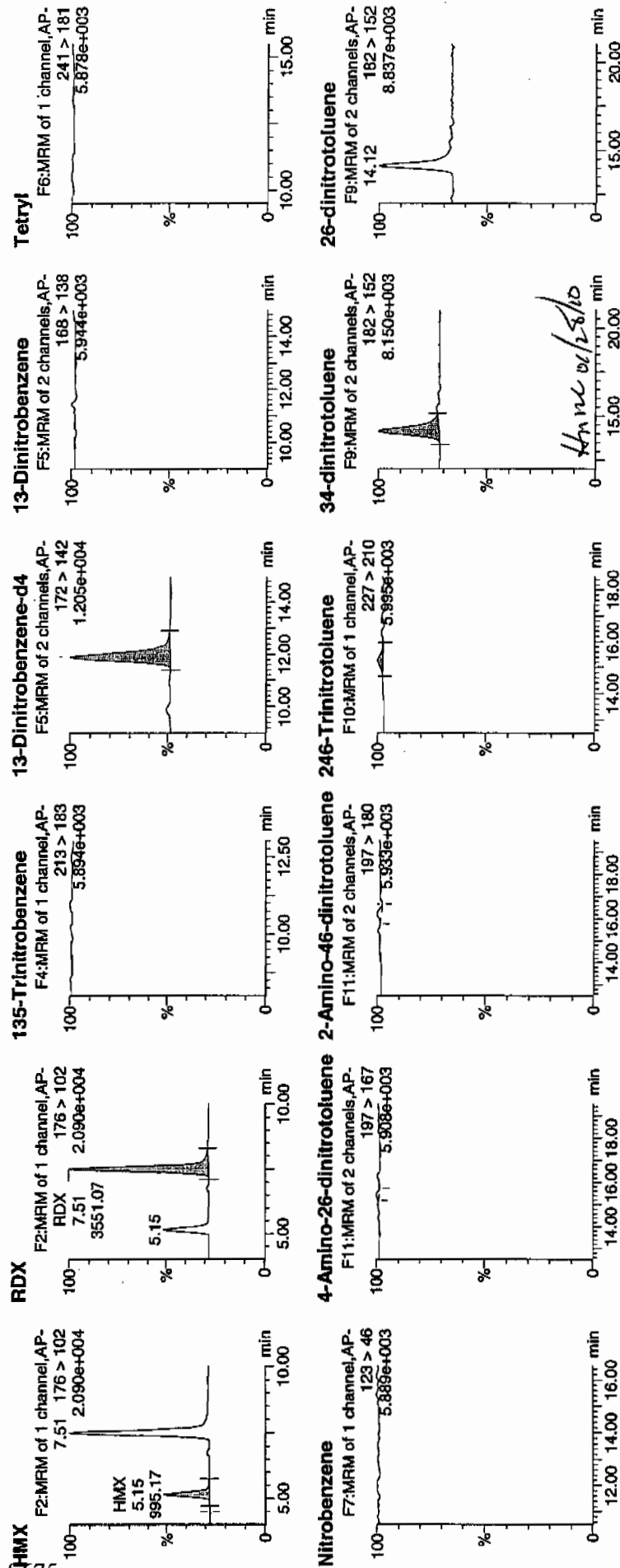
Vial: 3:8,F

RDX 2010/01/28/1169

147

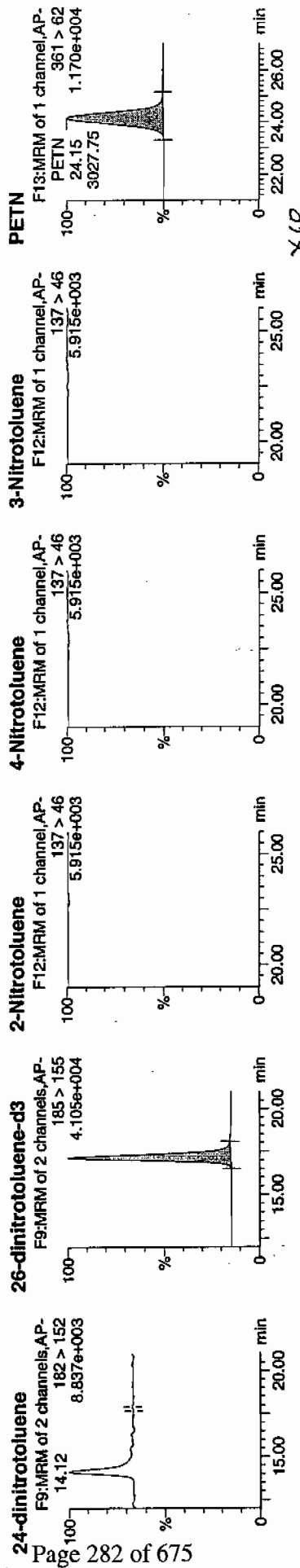
1/28/10

ANU 940057 | 8022 | 10 | 10



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

Dataset: C:\MASSLYNX\New\_Exp\PROV012510expA2.qld, Time: Thu Jan 28 10:42:53 2010



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Amount	%Rec	%Dev	SN
244142017	HMX	176 > 102	5.15	995.172	2422.330	995.172	205.416	MM	28-Jan-10	10:22:11	64.7484	16.2		253.0
244142017	RDX	176 > 102	7.51	3551.073	2422.330	3551.073	732.987	bb			333.3884			766.9
244142017	135-Trinitrobenzene	213 > 183			2422.330									
244142017	13-Dinitrobenzene-d4	172 > 142	11.90	2422.330		2422.330	2422.330	bb			408.0194	81.6	-18.4	170.4
244142017	13-Dinitrobenzene	168 > 138			2422.330									
244142017	Tetryl	241 > 181			2422.330									
244142017	Nitrobenzene	123 > 46			2422.330									
244142017	4-Amino-26-dinitrotoluene	197 > 167			14647.798			MM-	28-Jan-10	10:26:04				
244142017	2-Amino-46-dinitrotoluene	197 > 180			14647.798			MM-	28-Jan-10	10:29:29				
244142017	246-Trinitrotoluene	227 > 210	15.27	77.932	14647.798	77.932	2.660	bb			8.3637			7.1
244142017	34-dinitrotoluene	182 > 152	14.16	1232.903	14647.798	1232.903	42.085	bb			46.3483	18.5	-81.5	83.9
244142017	26-dinitrotoluene	182 > 152			14647.798									
244142017	24-dinitrotoluene	182 > 152			14647.798									
244142017	26-dinitrotoluene-d3	185 > 155	17.15	14647.798		14647.798	14647.798	MM-	28-Jan-10	10:39:13	449.3647	89.9	-10.1	1160.7
244142017	2-Nitrotoluene	137 > 46			14647.798									
244142017	4-Nitrotoluene	137 > 46			14647.798									
244142017	3-Nitrotoluene	137 > 46			14647.798									
244142017	PETN	361 > 62	24.15	3027.754	14647.798	3027.754	103.352	bb			28.1259			666.5



1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7656

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142017

Sample Amount 2

Moisture: 7.6

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01200040.wiff

Date Analyzed: 20-JAN-10 20:42

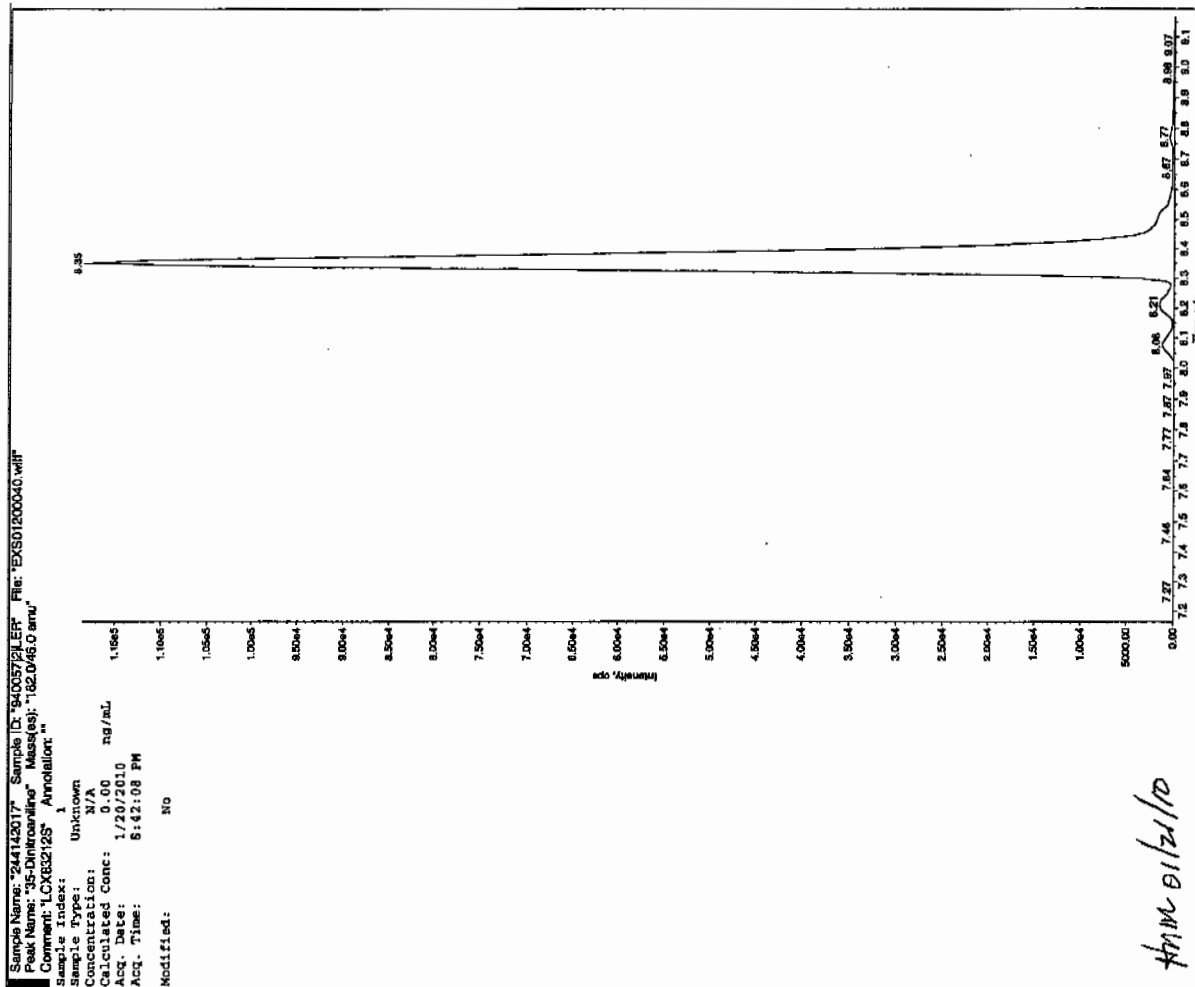
Units: ug/kg

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

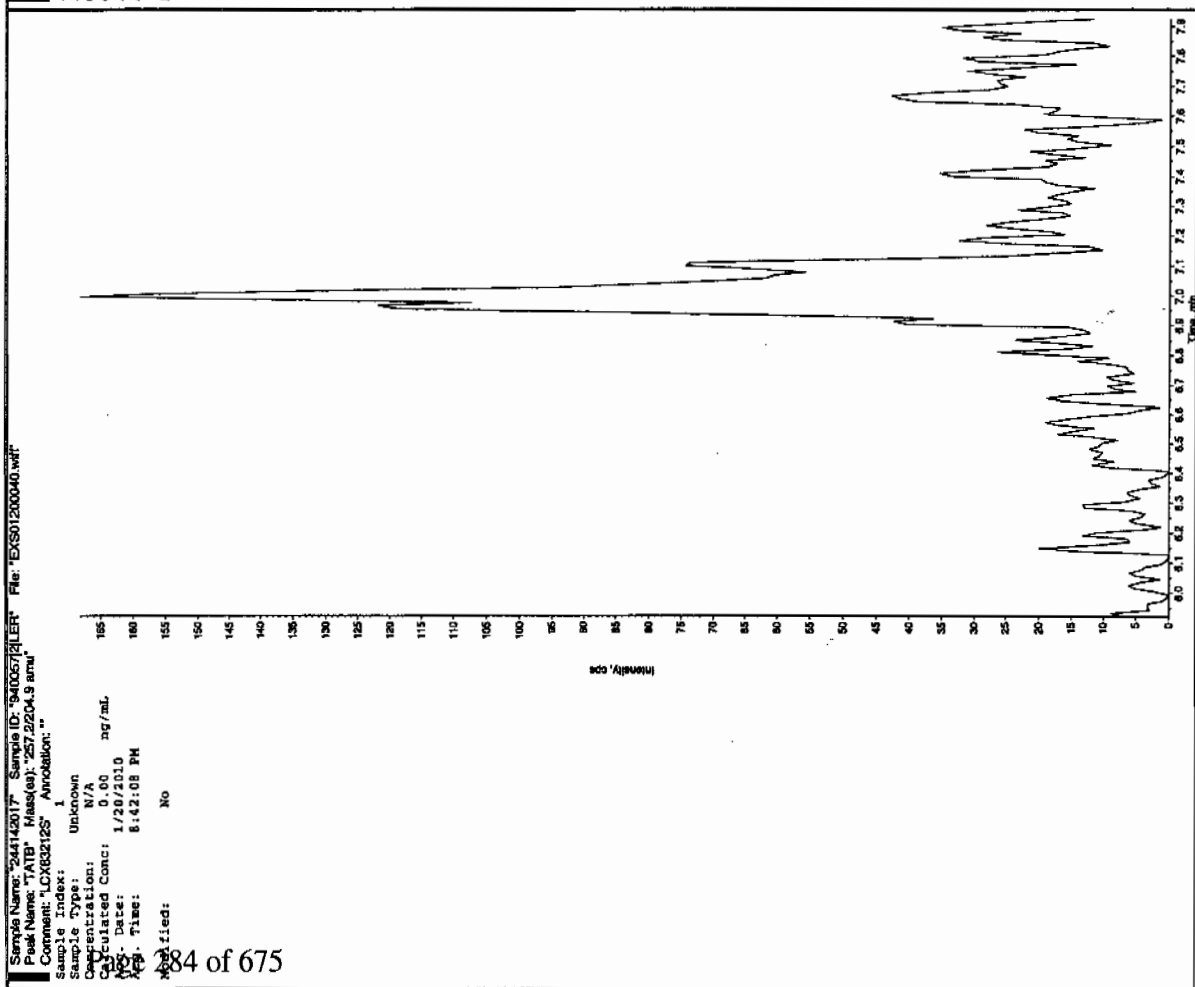
\*Concentration =

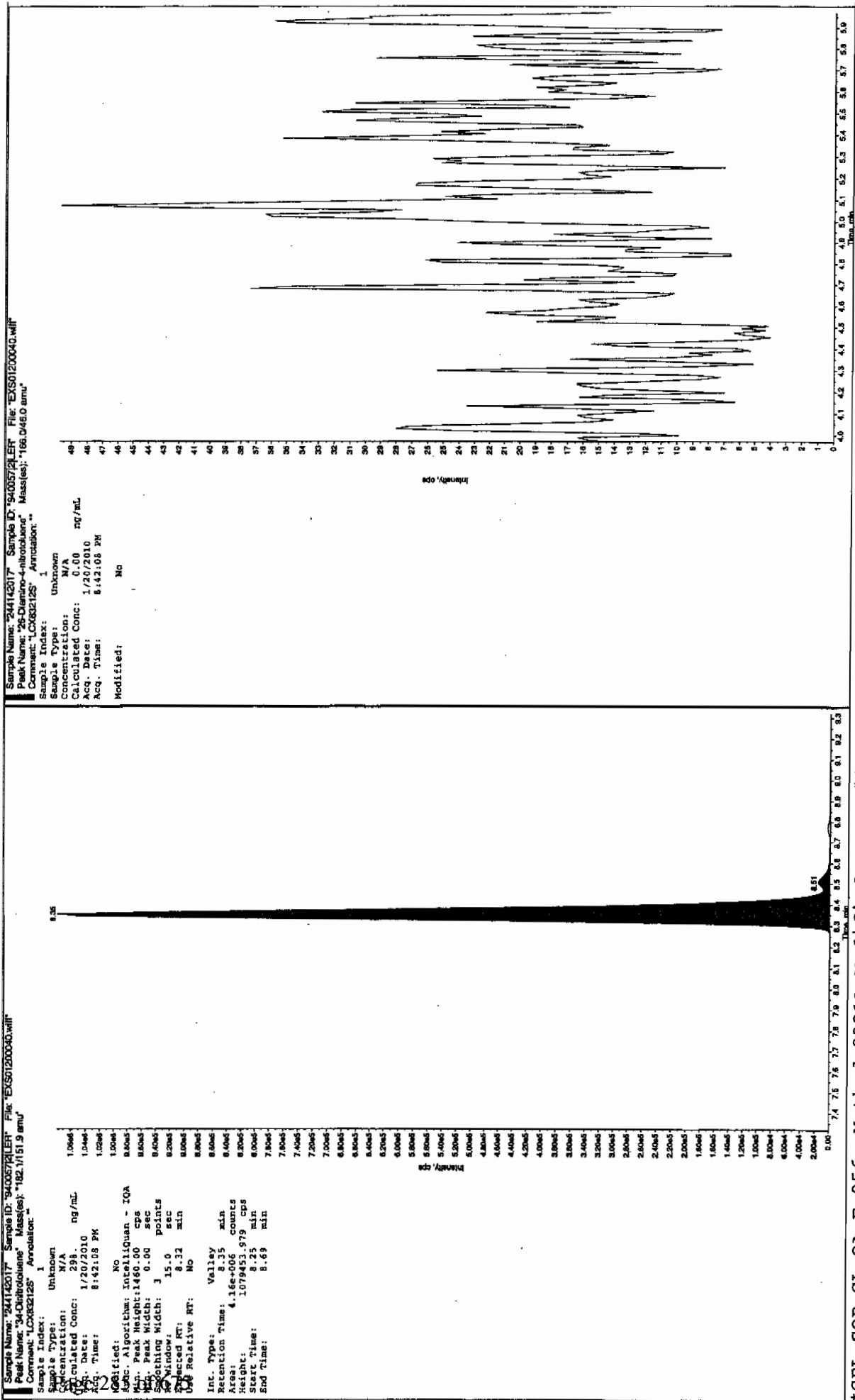
Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

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Sample Name: "244142017" Sample ID: "940057121" File: "EXS01200040.wif"

Peak Name: "bis(o-cresyl) phosphine" Mass(es): "369.191.0 amu"

Comment: "LCX832125" Annotation: "

Sample Index: 1

Sample Type: Unknown

Concentration: 0.00 ng/mL

Calculated Conc: 0.00

Acq. Date: 1/20/2010

Acq. Time: 8:42:08 PM

Modified: No

Sample Name: "244142017" Sample ID: "940057121" File: "EXS01200040.wif"

Peak Name: "24-Diamino-6-nicotolone" Mass(es): "166.046.0 amu"

Comment: "LCX832125" Annotation: "

Sample Index: 1

Sample Type: Unknown

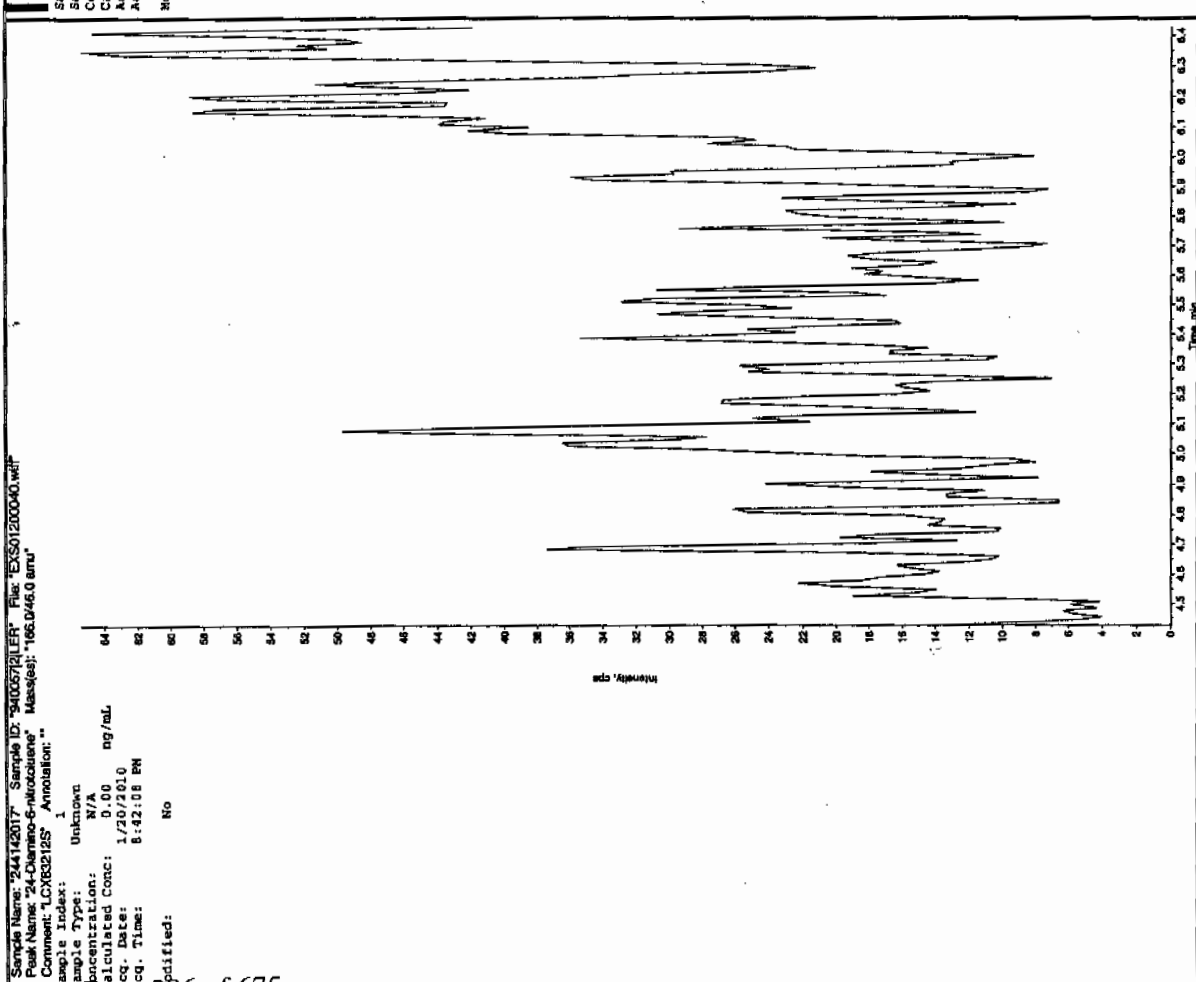
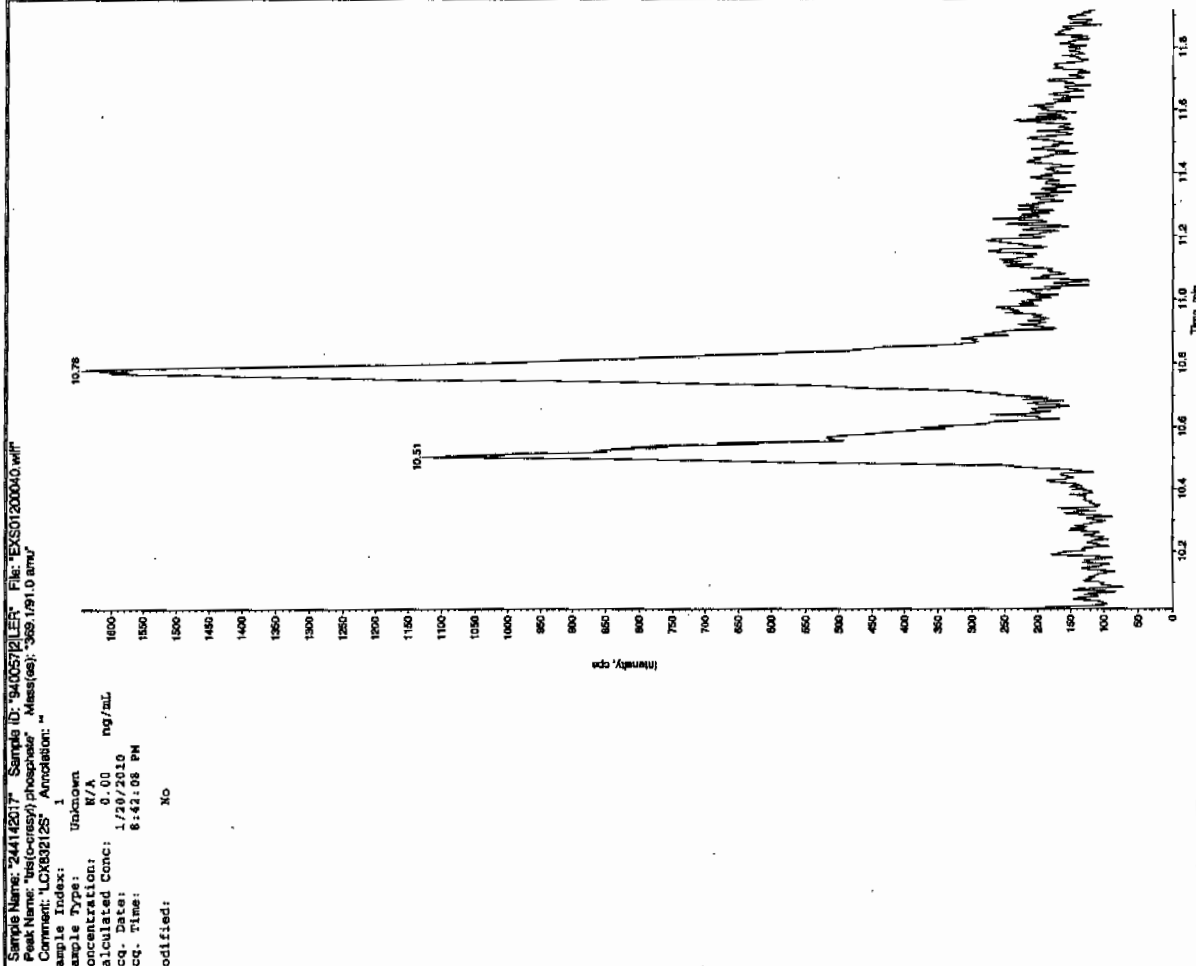
Concentration: 0.00 ng/mL

Calculated Conc: 0.00

Acq. Date: 1/20/2010

Acq. Time: 8:42:08 PM

Modified: No



1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7655

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142018

Sample Amount 2

Moisture: 9.9

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125112a

Date Analyzed: 27-JAN-10 17:56

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	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\EXP0125112a

Date: 27-Jan-2010

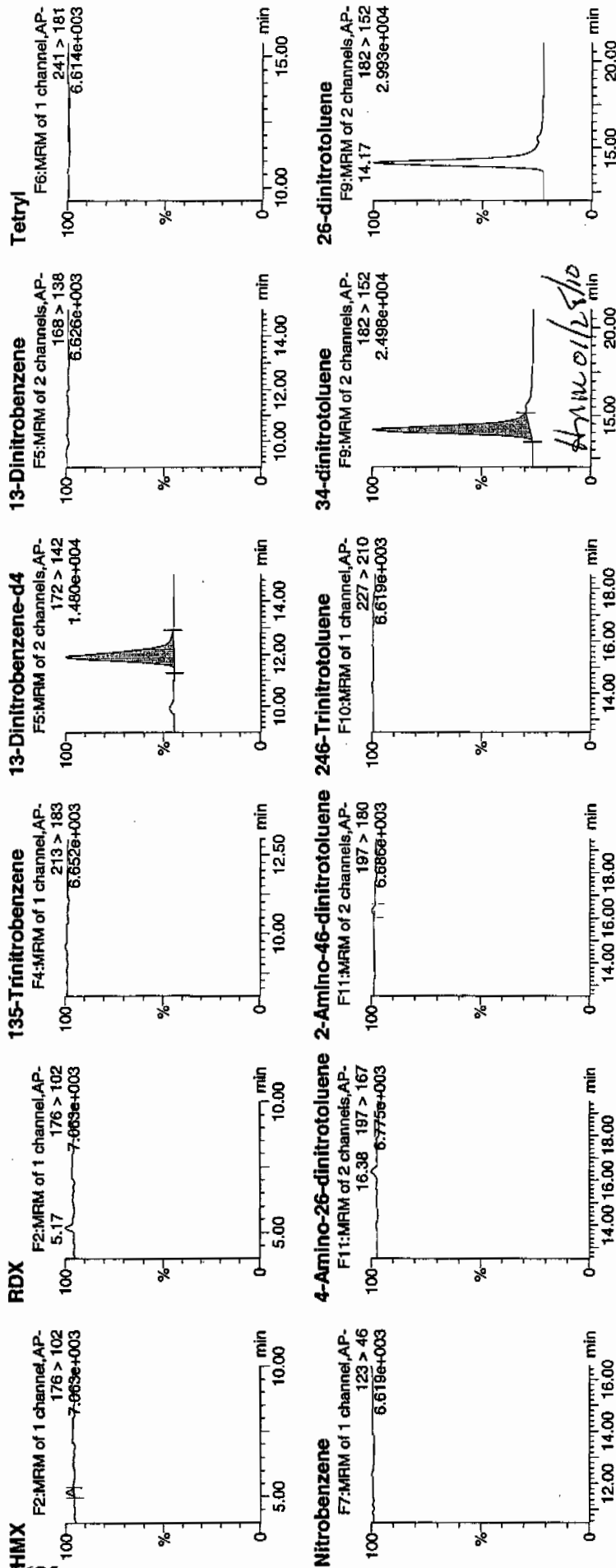
Time: 17:56:56

ID: 244142018

Vial: 3:8,D

1/28/10

WAV 940057 / 8032 / 21



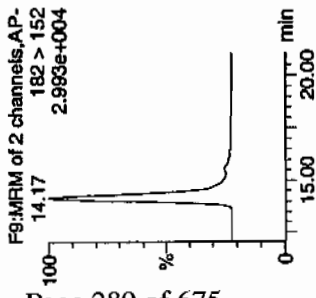
# Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

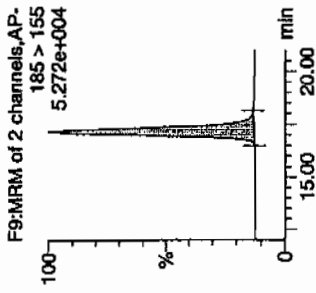
Printed: Thu Jan 28 10:43:32 2010, Page 56 of 121

Dataset: C:\MASSLYNX\New\_Exp\_PROV012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

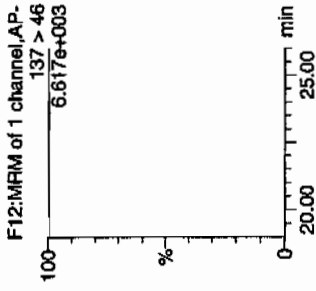
## 24-dinitrotoluene



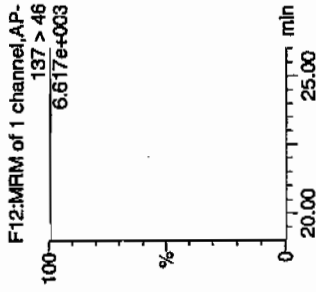
## 26-dinitrotoluene-d3



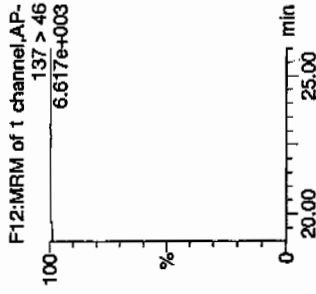
## 2-Nitrotoluene



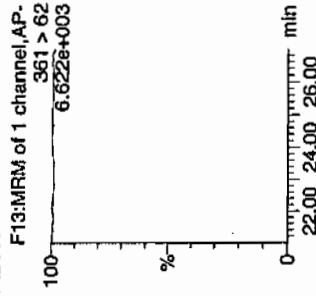
## 4-Nitrotoluene



## 3-Nitrotoluene



## PETN



ID	Name	Trace	RT	Area	Ratio	Response	Flags	Mod Date	Mod Time	Mod User	%Rec	%Obs	SN
244142018	HMX		176 > 102	5.17	54.157	3244.922	54.157	8.345	bb				7.3
244142018	RDX		176 > 102			3244.922							
244142018	135-Trinitrobenzene		213 > 183			3244.922							
244142018	13-Dinitrobenzene-d4		172 > 142	11.92	3244.922		3244.922	3244.922	bb		546.5776	109.3	261.3
244142018	13-Dinitrobenzene		168 > 138			3244.922							
244142018	Tetryl		241 > 181			3244.922							
244142018	Nitrobenzene		123 > 46			3244.922							
244142018	4-Amino-26-dinitrotoluene		197 > 167			19076.510							
244142018	2-Amino-46-dinitrotoluene		197 > 180			19076.510							
244142018	246-Trinitrotoluene		227 > 210			19076.510							
244142018	34-dinitrotoluene		182 > 152	14.17	9772.916	19076.510	9772.916	256.151	bb		282.0997	112.8	435.4
244142018	26-dinitrotoluene		182 > 152			19076.510							
244142018	24-dinitrotoluene		182 > 152			19076.510							
244142018	26-dinitrotoluene-d3		185 > 155	17.16	19076.510		19076.510	19076.510	bb		585.2286	117.0	1350.3
244142018	2-Nitrotoluene		137 > 46			19076.510							
244142018	4-Nitrotoluene		137 > 46			19076.510							
244142018	3-Nitrotoluene		137 > 46			19076.510							
244142018	PETN		361 > 62			19076.510							

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7655

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 244142018

Sample Amount 2

Moisture: 9.9

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01200041.wiff

Date Analyzed: 20-JAN-10 20:57

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



dan 1/21/10

Sample Name: "244142018" Sample ID: "9400572121" File: "EX501200041.wif"

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

Comment: "LCX83212S" Annotation: "

Sample Index: 1

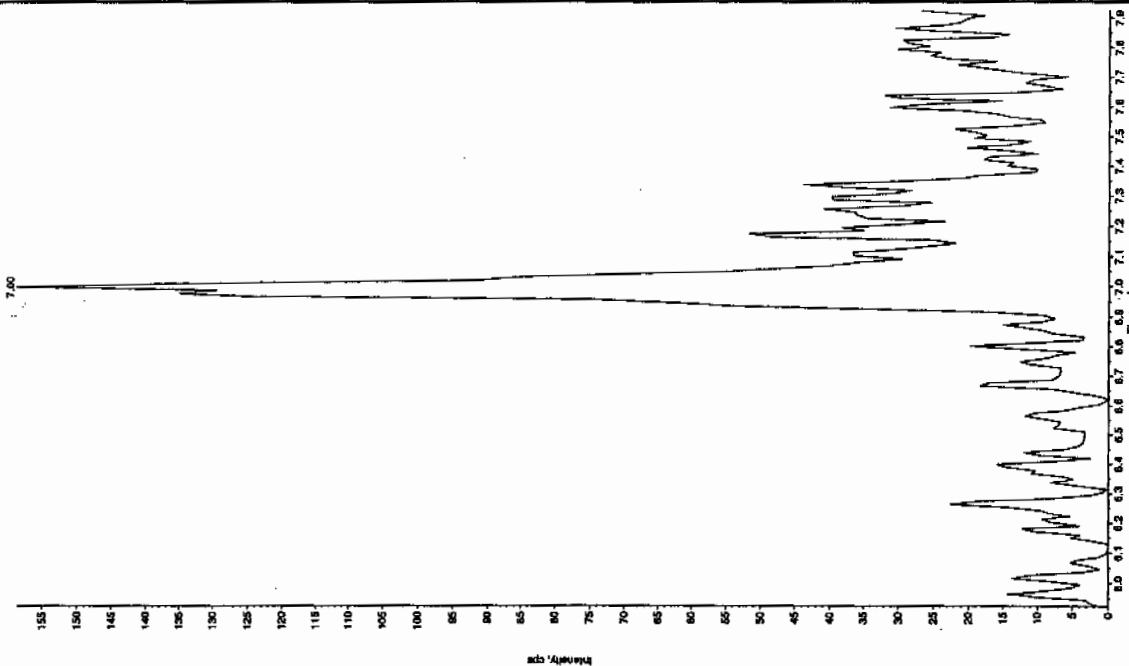
Sample Type: Unknown

Concentration: 0.00 ng/mL

Acq. Date: 1/20/2010

Acq. Time: 8:57:51 PM

Modified: No



Sample Name: "244142018" Sample ID: "9400572121" File: "EX501200041.wif"

Peak Name: "35-Dinitroaniline" Mass(es): "182.04610 amu"

Comment: "LCX83212S" Annotation: "

Sample Index: 1

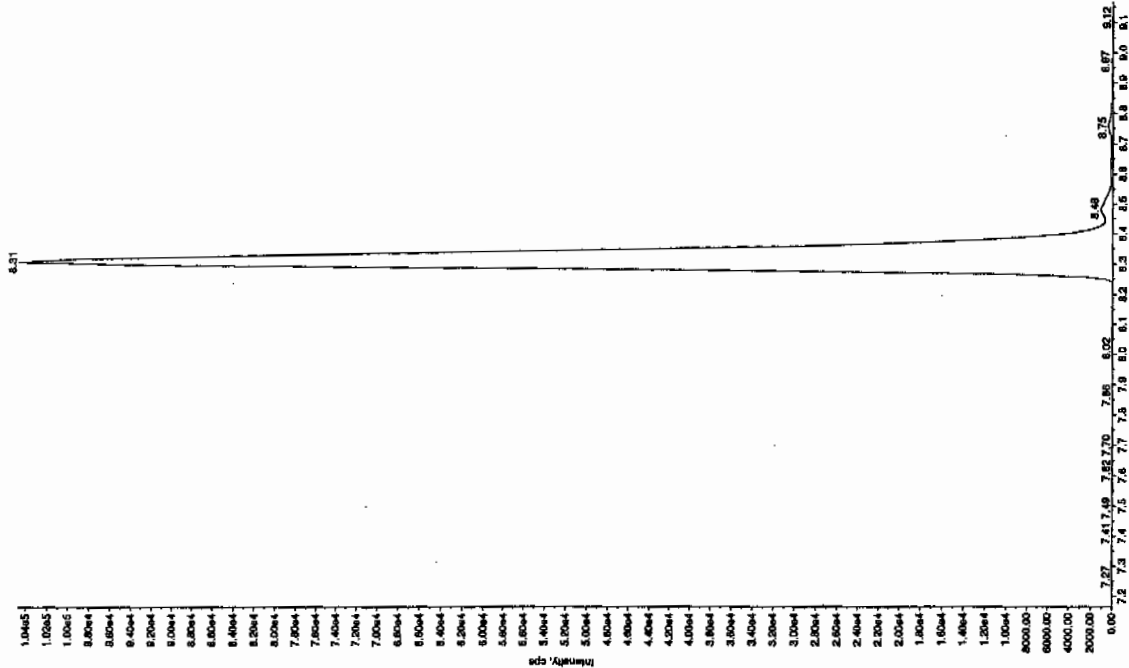
Sample Type: Unknown

Concentration: 0.00 ng/mL

Acq. Date: 1/20/2010

Acq. Time: 8:57:51 PM

Modified: No



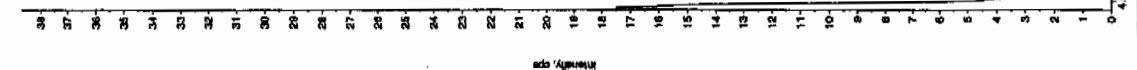
AMW 01/21/10

Sample Name: "244142018" Sample ID: "9400572" File: "EXS0120041.wif"

Peak Name: "24-Diamino-4-nitrochlorine" Mass(es): "186.048.0 amu"

Comment: "LCX83212S" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/20/2010  
 Acq. Time: 8:57:51 PM  
 Modified: No



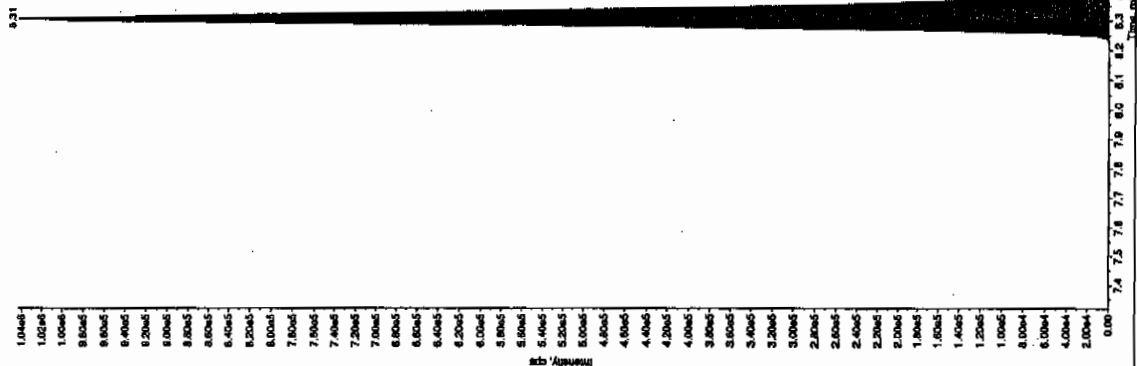
Sample Name: "244142018" Sample ID: "9400572" File: "EXS0120041.wif"

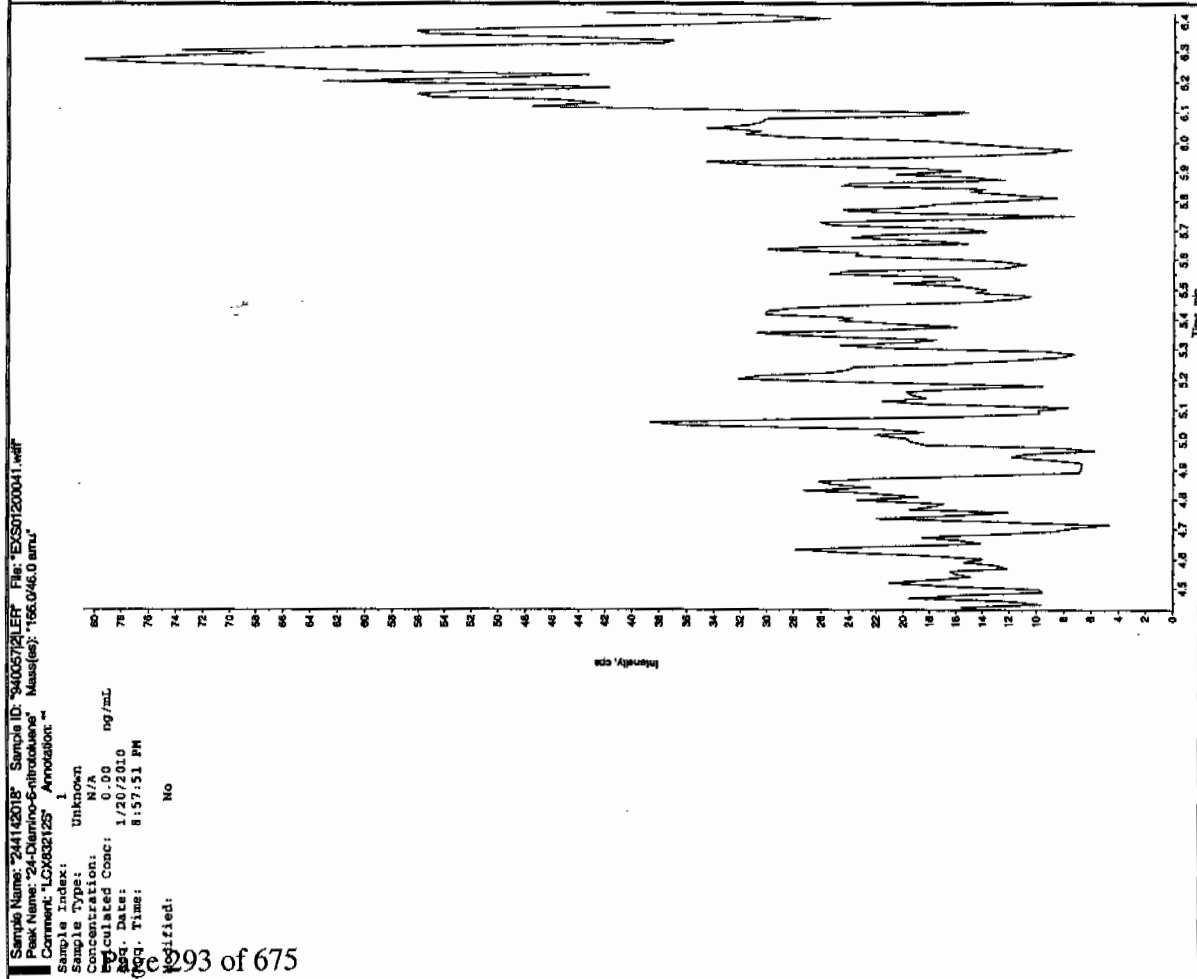
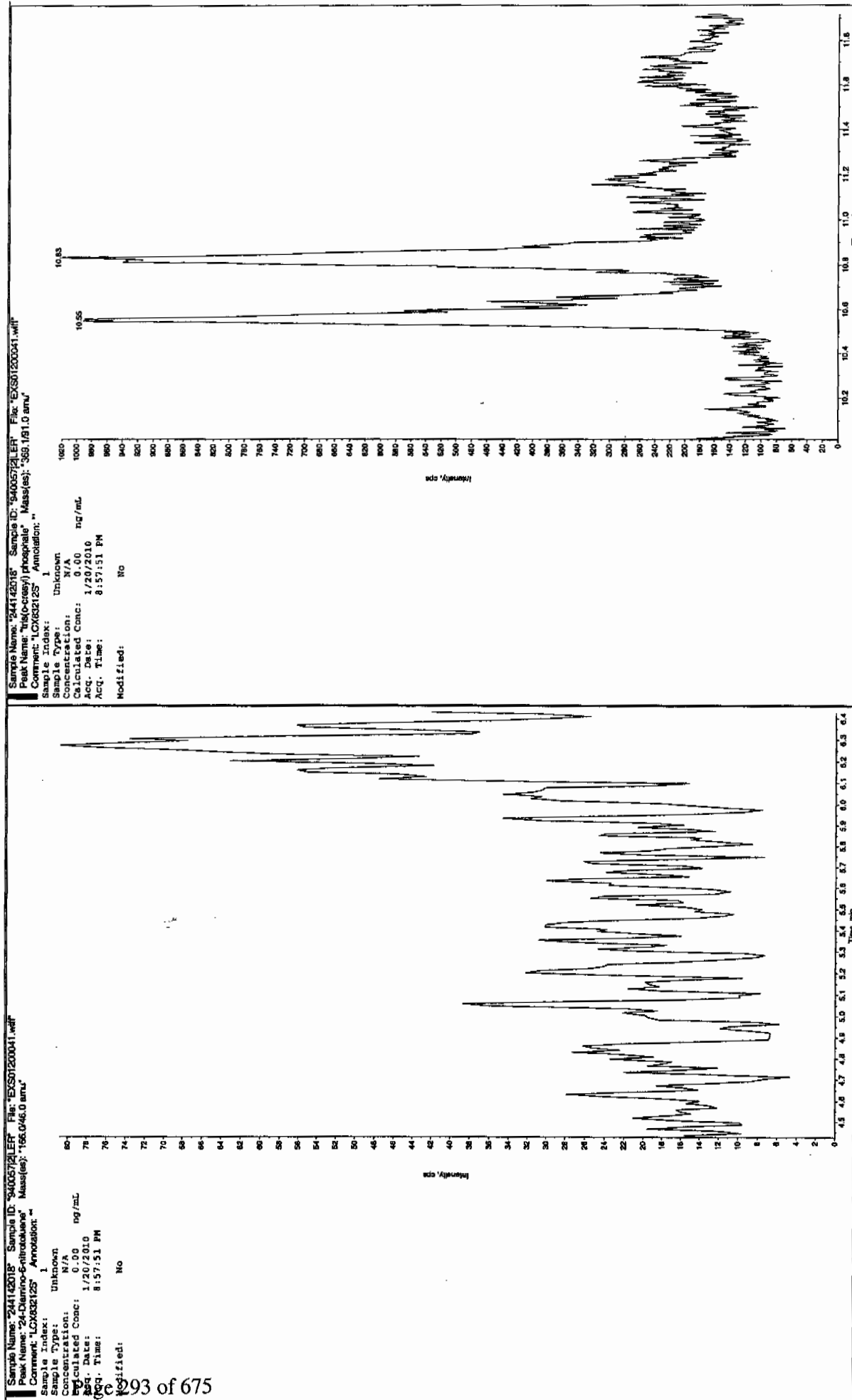
Peak Name: "24-Diamino-4-nitrochlorine" Mass(es): "186.048.0 amu"

Comment: "LCX83212S" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/20/2010  
 Acq. Time: 8:57:51 PM  
 Modified: No

Proc. Algorithm: IntelliQuan - IQA  
 Peak Height: 1460.00 cps  
 Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 Window: 15.0 sec  
 Expected RT: 8.32 min  
 Relative RT: No  
 Ret. Type: Valley  
 Retention Time: 8.31 min  
 Area: 4.00e+006 counts  
 Height: 104358.496 cps  
 Start Time: 8.19 min  
 End Time: 8.66 min





# 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
MNX	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: 10-1127

Lab Code: GEL

Run Date: 20-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
Calibration Level:	EXP0125003a	EXP0125004a	EXP0125005a	EXP0125006a	EXP0125007a	EXP0125008a			
Data File:									
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: 10-1127

Lab Code: GEL

Run Date: 20-JAN-10.25-JAN-10

LCMSMS Instrument ID: LCMSMS

Method: 8321A Modified

HPLC Column: Phenomenex Ultracarb 5 ODS(20)

Calibration Type: Linear

Calibration Level:		1	2	3	4	5	6	Slope	Intercept	COD	Q
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

Form 6

# Explosives Initial Calibration

Lab Name: GEL Laboratories LLC

GEL Job No: 10-1127

Lab Code: GEL

Run Date: 20-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					
Parname:											
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

Page 1 of 5

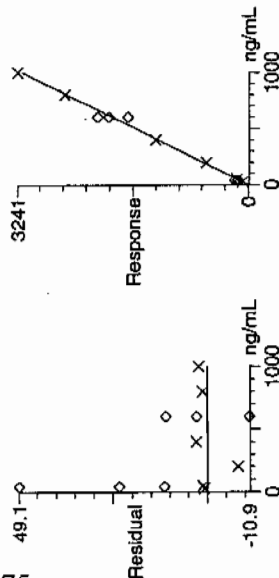
Compound name: HMX

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



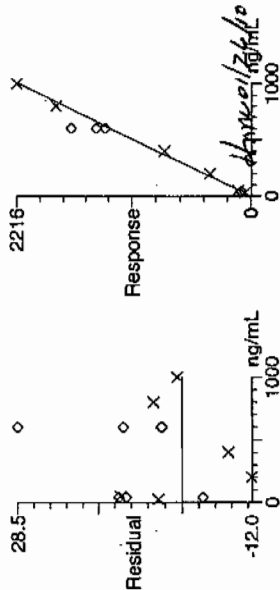
Compound name: RDX

Response Factor: 2.1986

RRF SD: 0.185302, % Relative SD: 8.42817

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

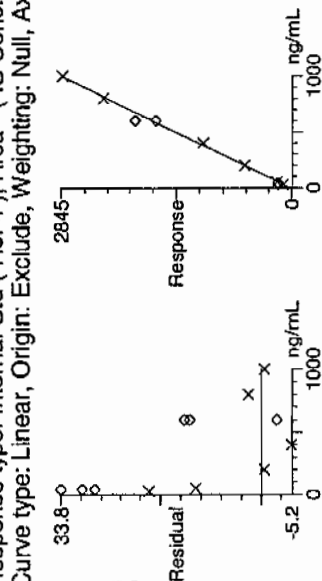
Curve type: RF



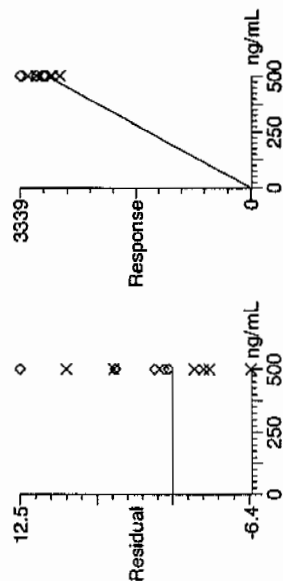
# Quantify Calibration Report GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA.qtd, Time: Tue Jan 26 09:24:51 2010

Compound name: 135-Trinitrobenzene  
Correlation coefficient:  $r = 0.999489$ ,  $r^2 = 0.998979$   
Calibration curve:  $2.81694 * x + 28.1015$   
Response type: Internal Std ( Ref 4 ), Area \* ( IS Conc. / IS Area )  
Curve type: Linear, Origin: Exclude, Weighting: Null, Axis trans: None



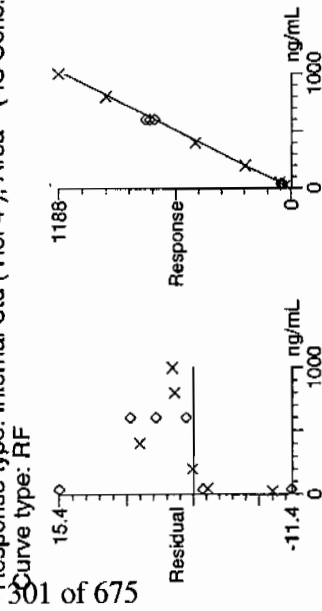
Compound name: 13-Dinitrobenzene-d4  
Response Factor: 5.9368  
RRF SD: 0.335509, % Relative SD: 5.65134  
Response type: External Std, Area  
Curve type: RF



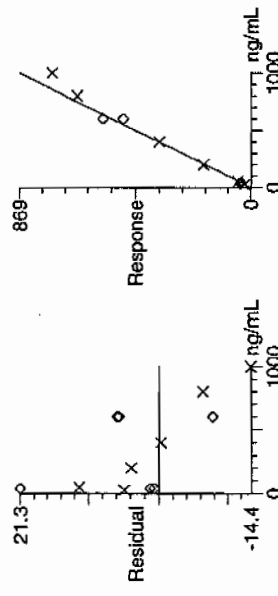
**Quantify Calibration Report**  
 GEL Laboratories, LLC / Analyst : Michael A. Penny

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: Tetraol  
 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\1012510expA.qld, Time: Tue Jan 26 09:24:51 2010

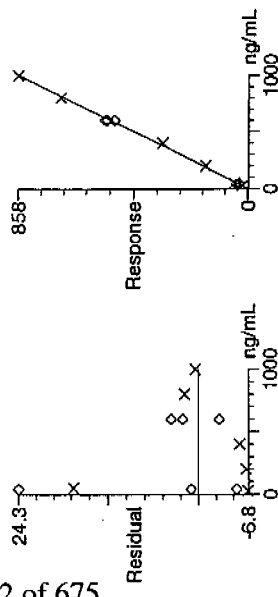
Compound name: Nitrobenzene

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



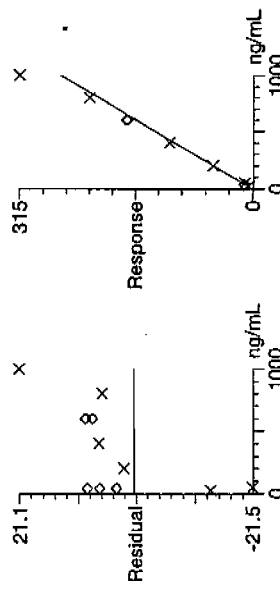
Compound name: 4-Amino-26-dinitrotoluene

Response Factor: 0.260514

RRF SD: 0.040113, % Relative SD: 15.3977

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

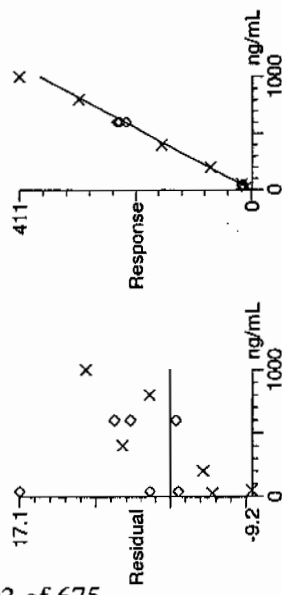
Curve type: RF



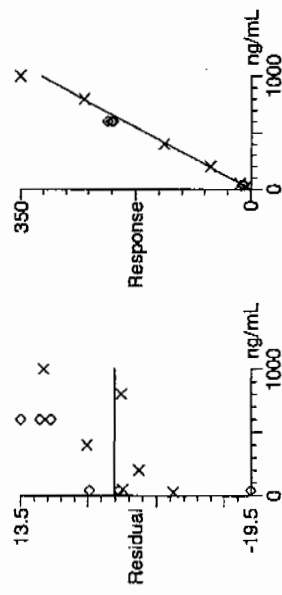
# Quantify Calibration Report GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA.qld, Time: Tue Jan 26 09:24:51 2010

Compound name: 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: RIF



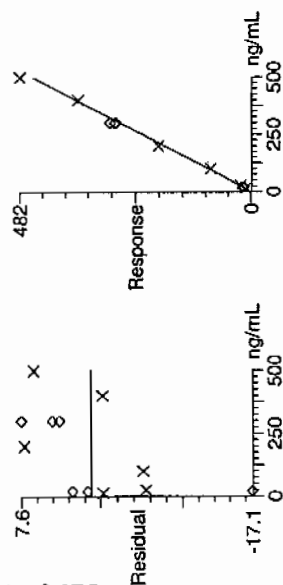
Compound name: 246-Trinitrotoluene  
Response Factor: 0.318064  
RRF SD: 0.020262, % Relative SD: 6.37043  
Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )  
Curve type: RIF



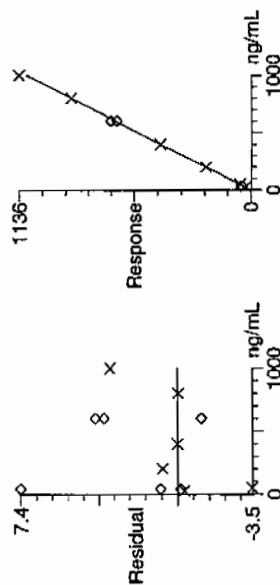
**Quantify Calibration Report**  
 GEL Laboratories, LLC / Analyst : Michael A. Penny

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



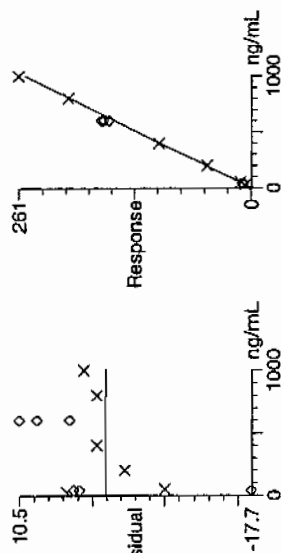
Compound name: 26-dinitrotoluene  
 Response Factor: 1.10154  
 RRF SD: 0.0235225, % Relative SD: 2.13541  
 Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )  
 Curve type: RF



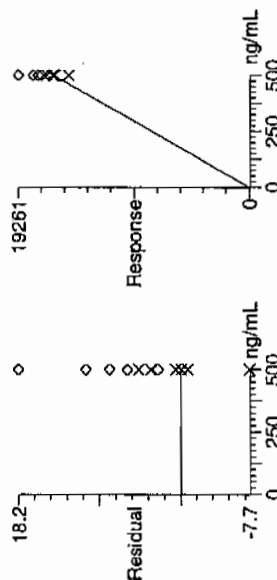
**Quantify Calibration Report**  
GEL Laboratories, LLC / Analyst : Michael A. Penny

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



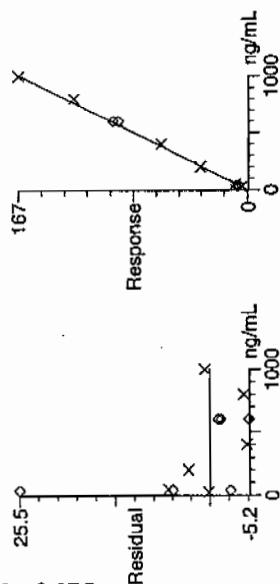
Compound name: 26-dinitrotoluene-d3  
Response Factor: 32.5967  
RRF SD: 1.41533, % Relative SD: 4.34194  
Response type: External Std, Area  
Curve type: RF



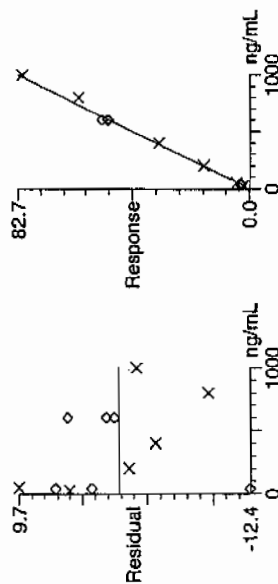
# Quantify Calibration Report GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA.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

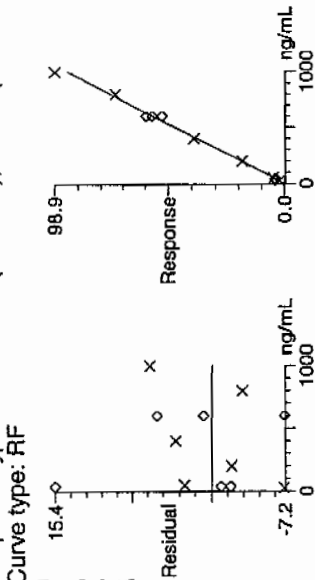




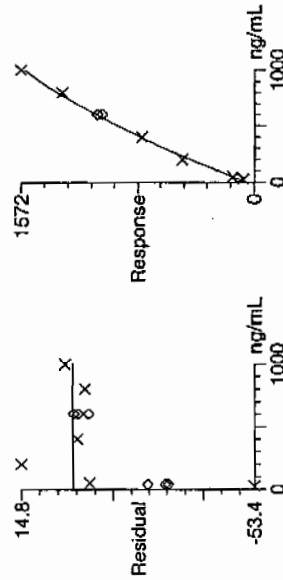
# Quantify Calibration Report GEL Laboratories, LLC / Analyst : Michael A. Penny

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:  $-0.000496352 \cdot x^2 + 1.99974 \cdot x + 47.5002$   
Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )  
Curve type: 2nd Order, Origin: Exclude, Weighting: Null, Axis trans: None



7

# Explosives Initial Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1127

Lab Code: GEL

GEL Sample ID: WXXICV

GEL Data File EXS01200011.wiff

Analysis Date: 20-JAN-10 13:06

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	488	98	
2,6-Diamino-4-nitrotoluene	500	471	94	
3,4-Dinitrotoluene	250	228	91	
3,5-Dinitroaniline	500	499	100	
TATB	500	484	97	
tris(o-cresyl) phosphate	500	521	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

Printed: Tue Jan 26 11:27:45 2010, Page 19 of 73

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

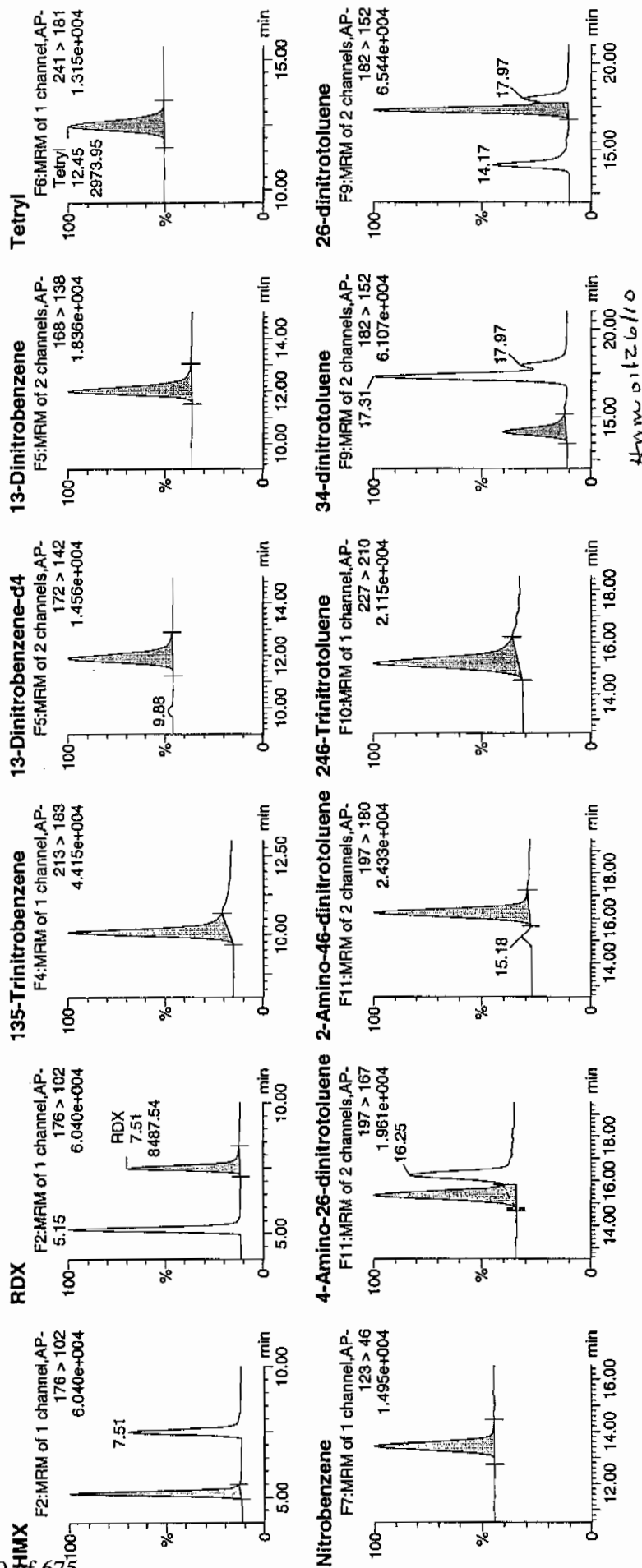
Time: 15:46:04

ID: WXX100125-07ICV

Vial: 1:1,B

1/26/10

309 of 675

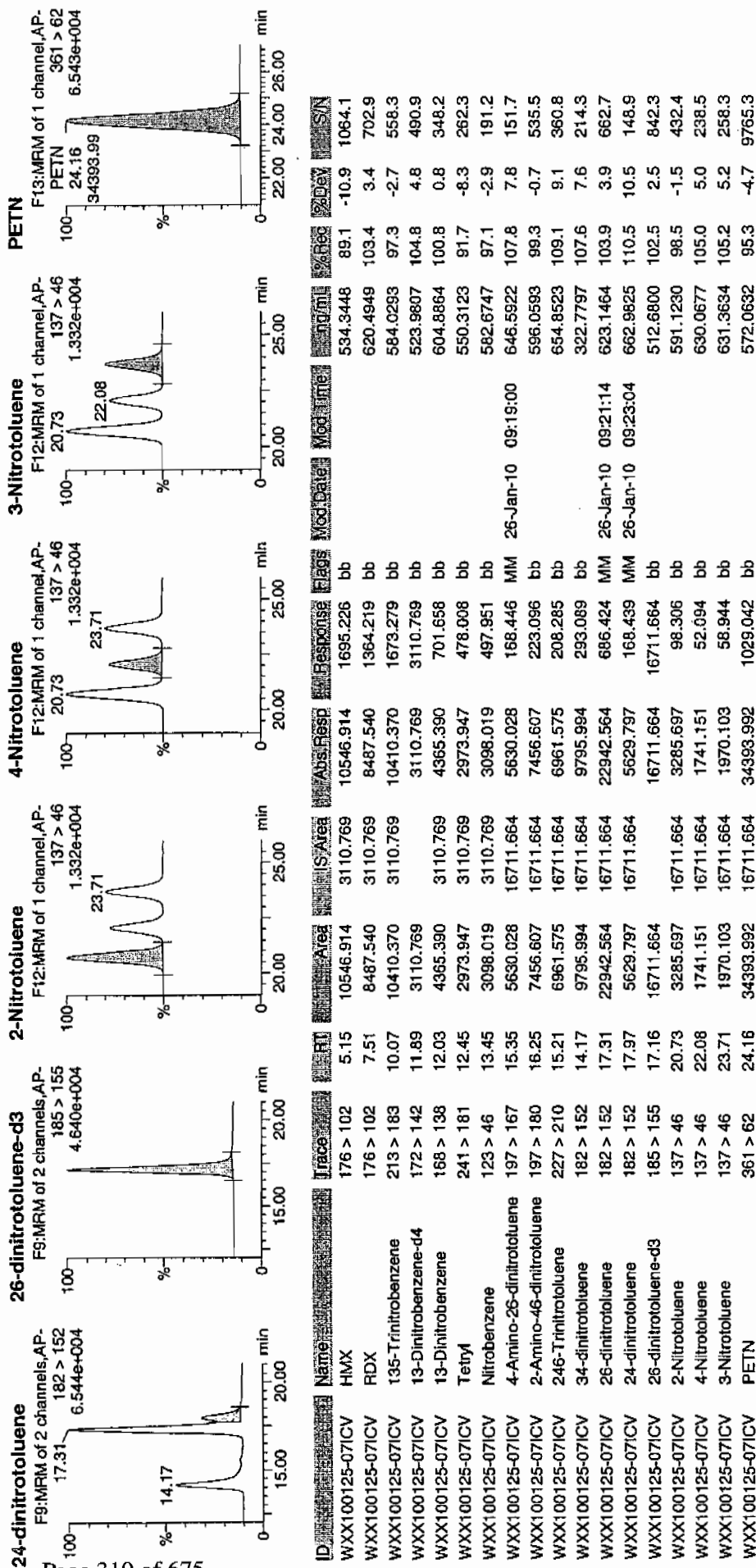


# Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Tue Jan 26 11:27:45 2010, Page 20 of 73

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA.qld, Time: Tue Jan 26 09:24:51 2010



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
Total	1621.6

*12/26/10*

Average

101.4

*Home 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: 10-1127

Lab Code: GEL

Run Date: 20-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:	EXS01200003.wif	EXS01200004.wif	EXS01200005.wif	EXS01200006.wif	EXS01200007.wif	EXS01200008.wif	EXS01200009.wif					
Paraname:												
2,4-Diamino-6-nitrotoluene	143000	312000	782000	1520000	2180000	2880000	5850000	33900	2850	.025	.9999	
2,6-Diamino-4-nitrotoluene	231000	439000	1170000	2260000	3470000	4470000	8810000	-2160	4620	-.107	.9999	
3,4-Dinitrotoluene	343000	661000	1660000	3400000	5040000	6400000	12000000	-56000	15100	-3.05	.998	
3,5-Dinitroaniline	541000	1060000	2380000	4890000	7490000	9240000	15800000	-20000	10800	-1.47	.9998	
TATB	70100	137000	341000	668000	1070000	1430000	2710000	-17300	1480	-.056	.9998	
tris(o-cresyl) phosphate	1300000	2540000	6130000	8810000	16000000	20200000	32000000	59200	23100	-3.51	.9968	

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

012010ICAL

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

Fit	Quadratic	weighting	None	Iterate No
a0	-1.73e+004			
a1	1.48e+003			
a2	-0.056			
Correlation coefficient 0.9998				
Use Area				

Peak Name: 35-Dinitroaniline  
No Internal Standard  
Q1/Q3 Masses: 182.00/46.00 amu

Fit	Quadratic	weighting	None	Iterate No
a0	-2e+004			
a1	1.08e+004			
a2	-1.47			
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	-5.6e+004			
a1	1.51e+004			
a2	-3.05			
Correlation coefficient 0.9980				
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	-2.16e+003			
a1	4.62e+003			
a2	-0.107			
Correlation coefficient 0.9999				
Use Area				

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

*Sten*  
1/21/10

*Sten*  
01/21/10

012010ICAL

Iterate No

None

Weighting

Quadratic

Fit

a0 3.39e+004

a1 2.85e+003

a2 0.0247

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

Fit

a0 5.92e+004

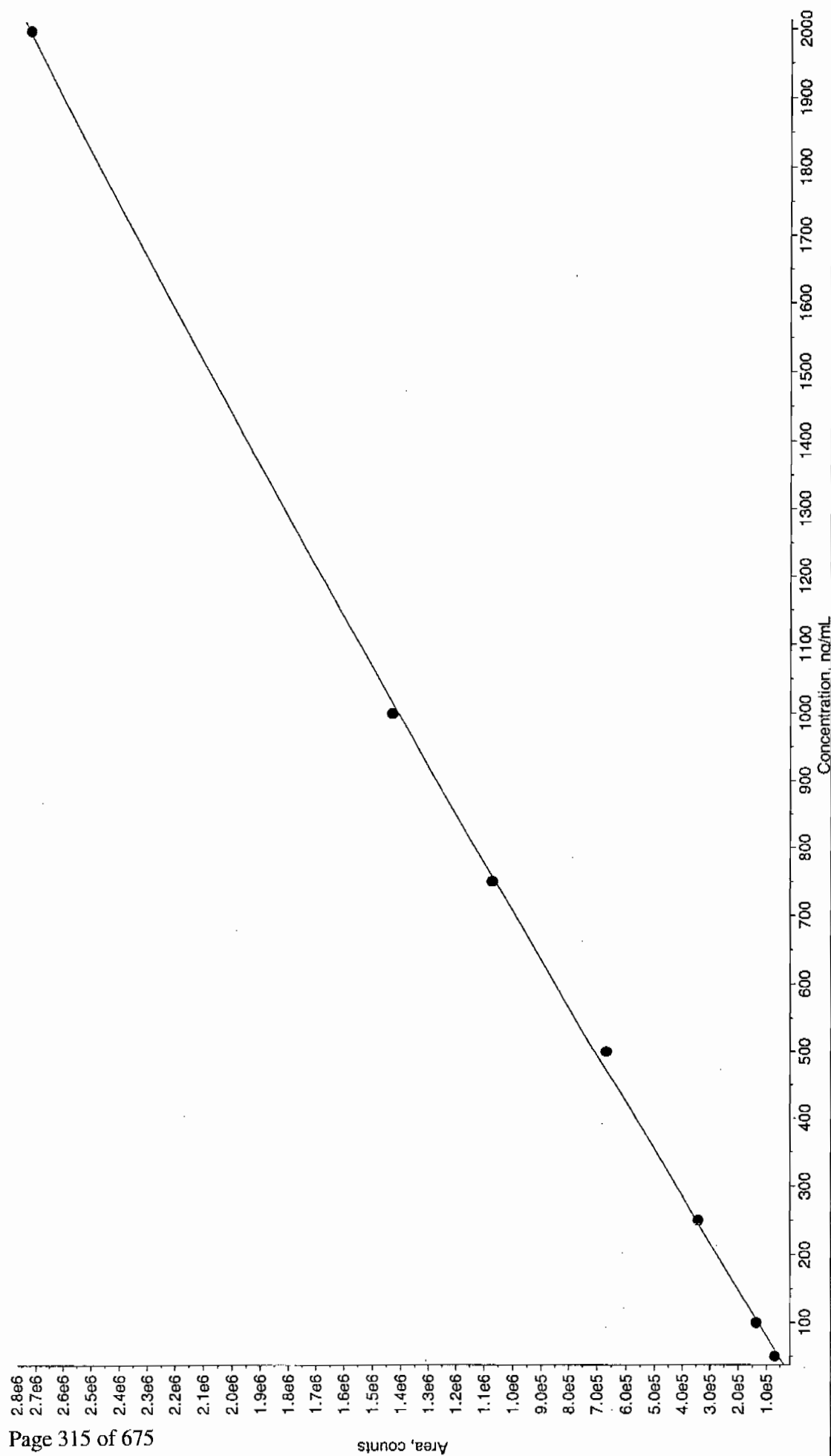
a1 2.31e+004

a2 -3.51

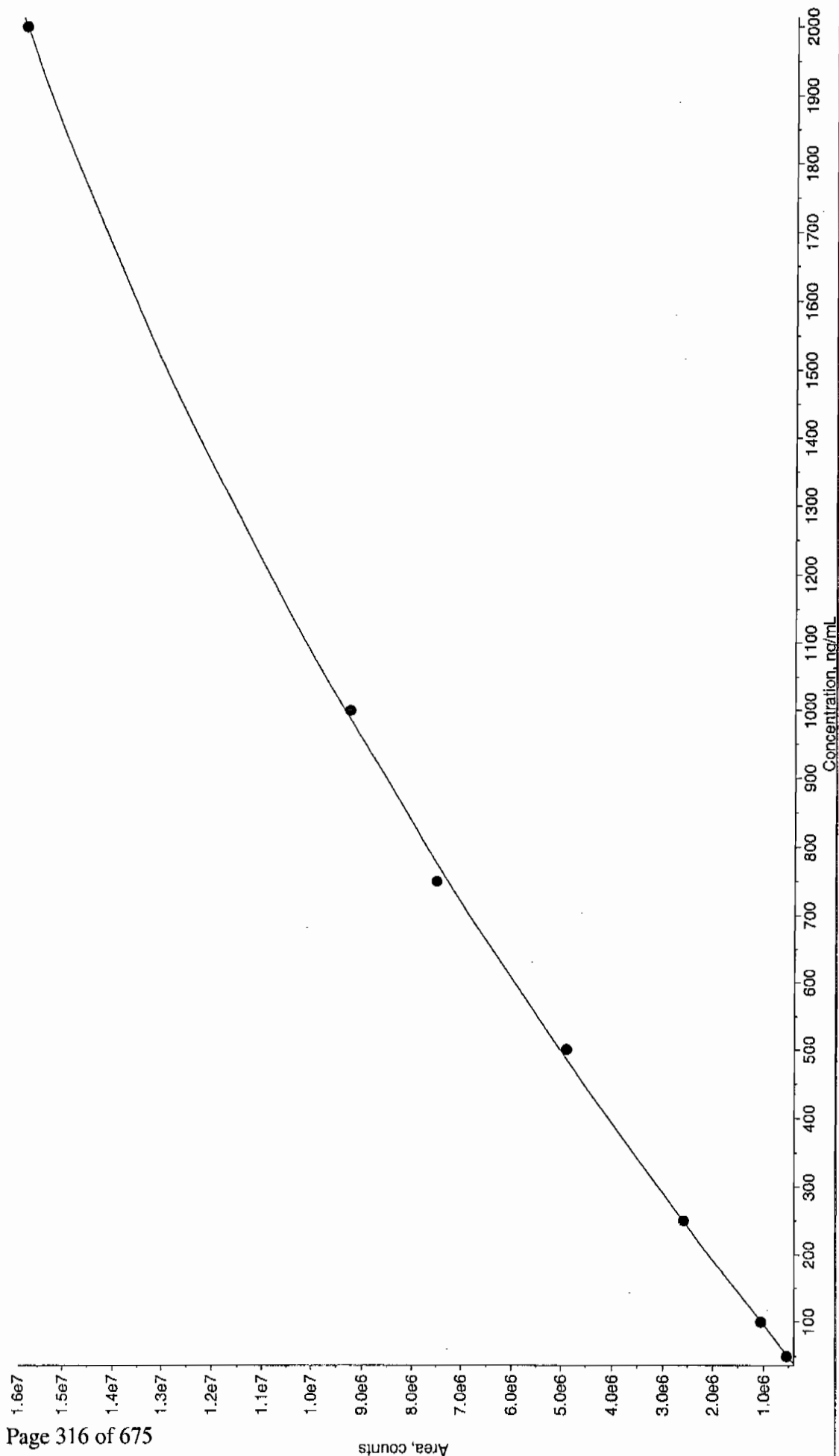
Correlation coefficient 0.9968  
Use Area



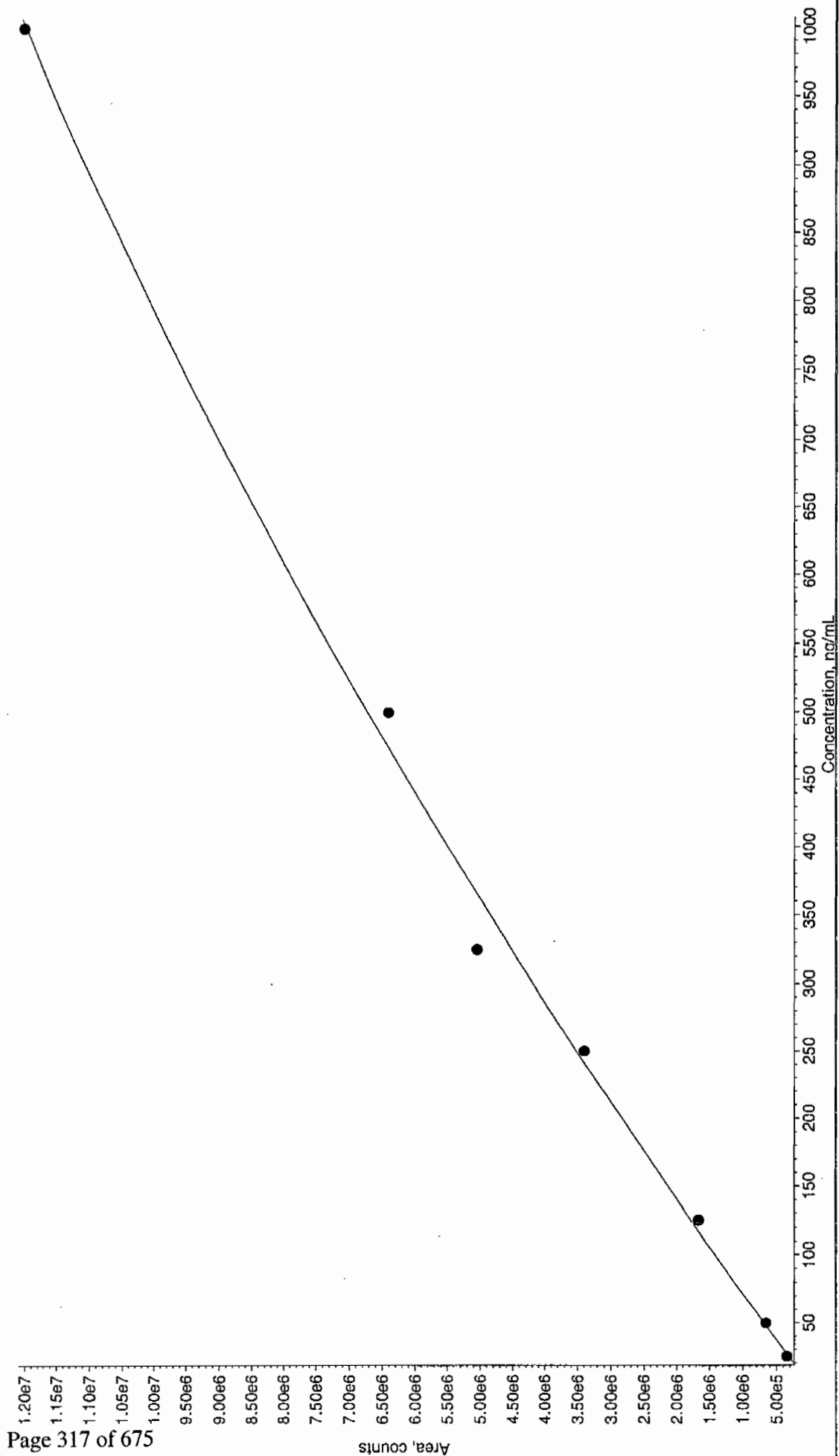
012010.rdb (TATB): "Quadratic" Regression ("No" weighting):  $y = -0.056 x^2 + 1.48e+003 x + -1.73e+004$  ( $r = 0.9998$ )



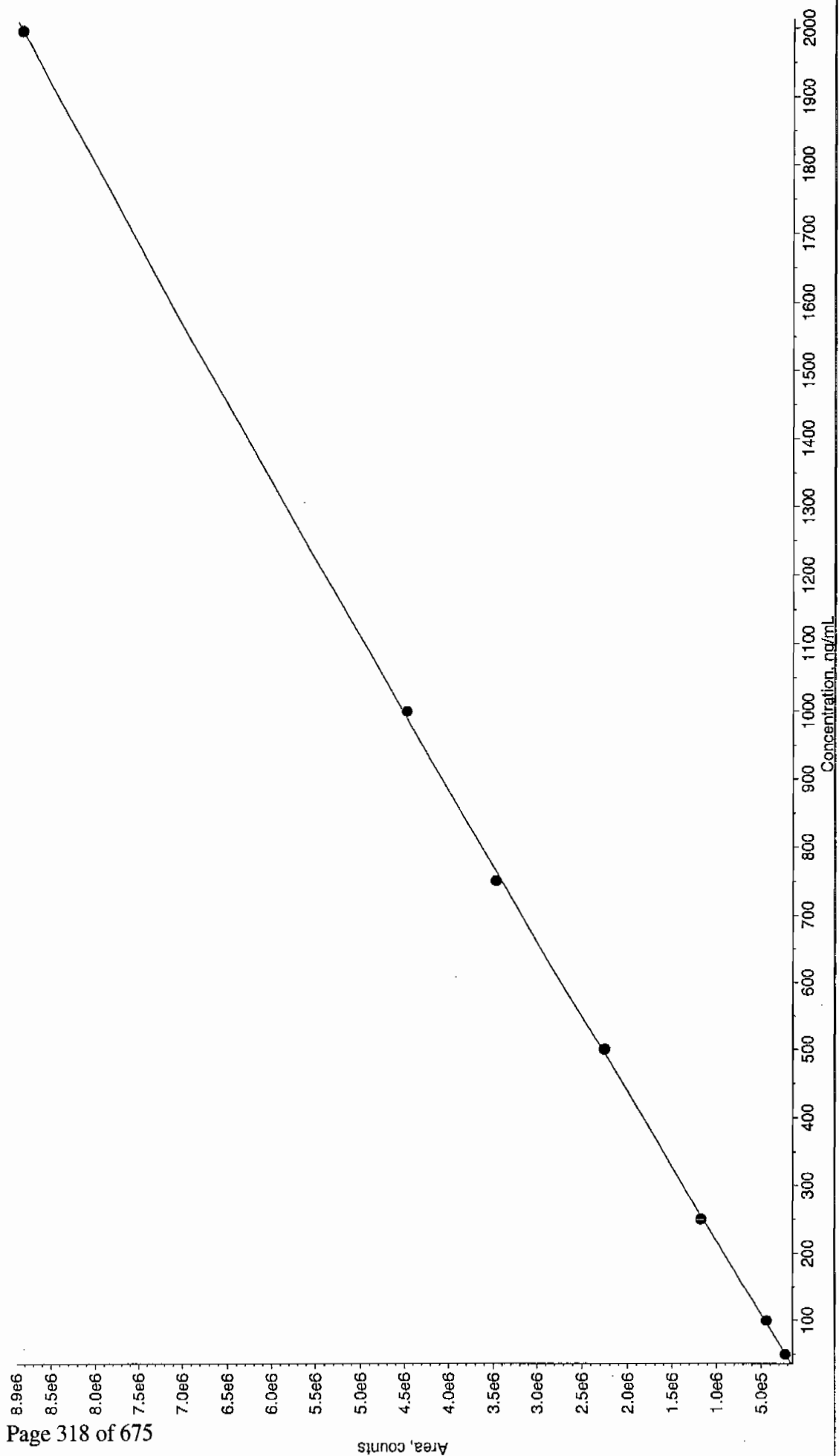
012010.rdb (35-Dinitroaniline): "Quadratic" Regression ("No" weighting):  $y = -1.47 x^2 + 1.08e+004 x + -2e+004$  ( $r = 0.9998$ )



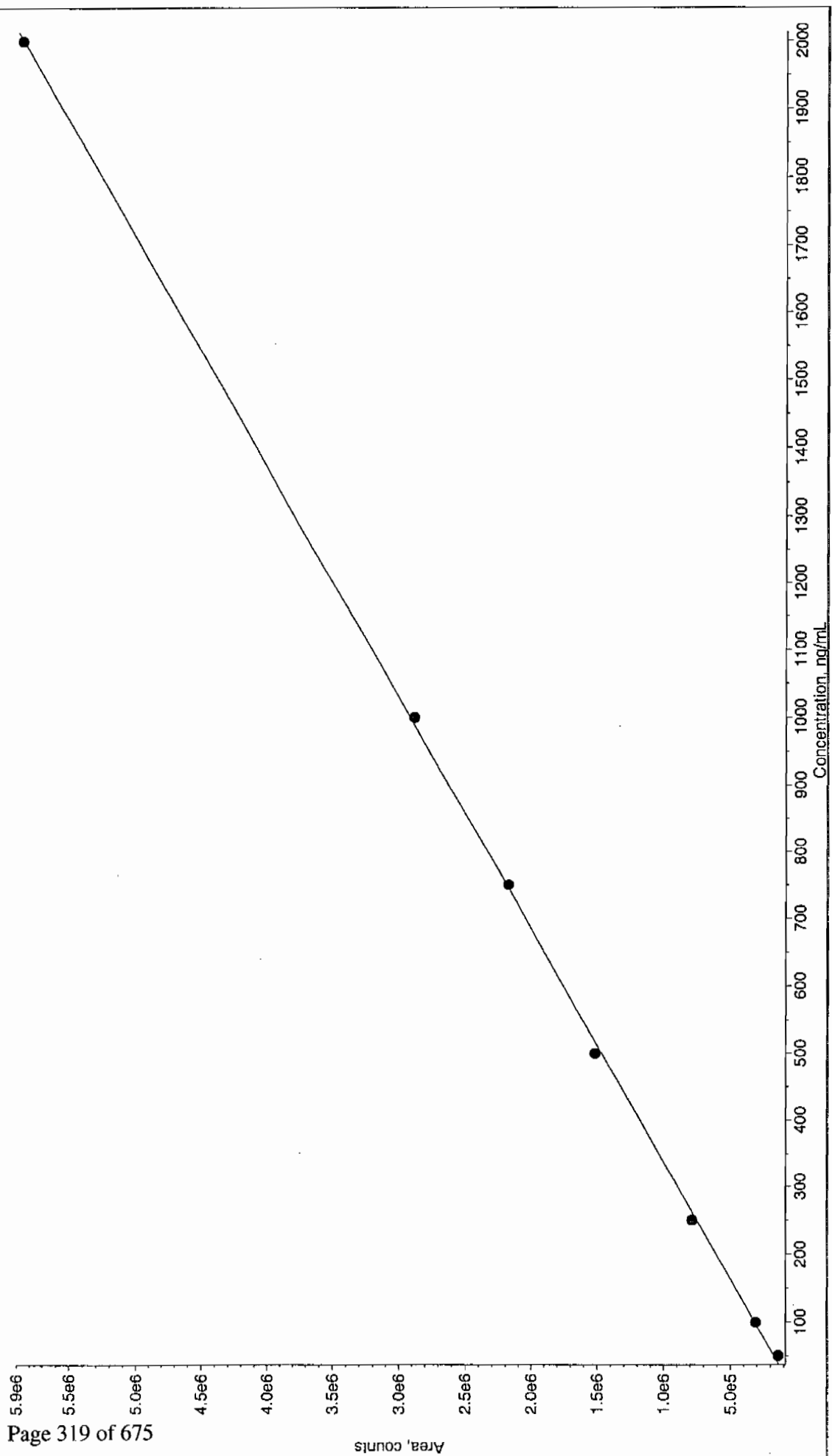
012010.rdb (34-Dinitrotoluene): "Quadratic" Regression ("No" weighting):  $y = -3.05 \times 10^{-4} x^2 + 1.51 \times 10^{-4} x + 5.6 \times 10^4$  ( $r = 0.9980$ )



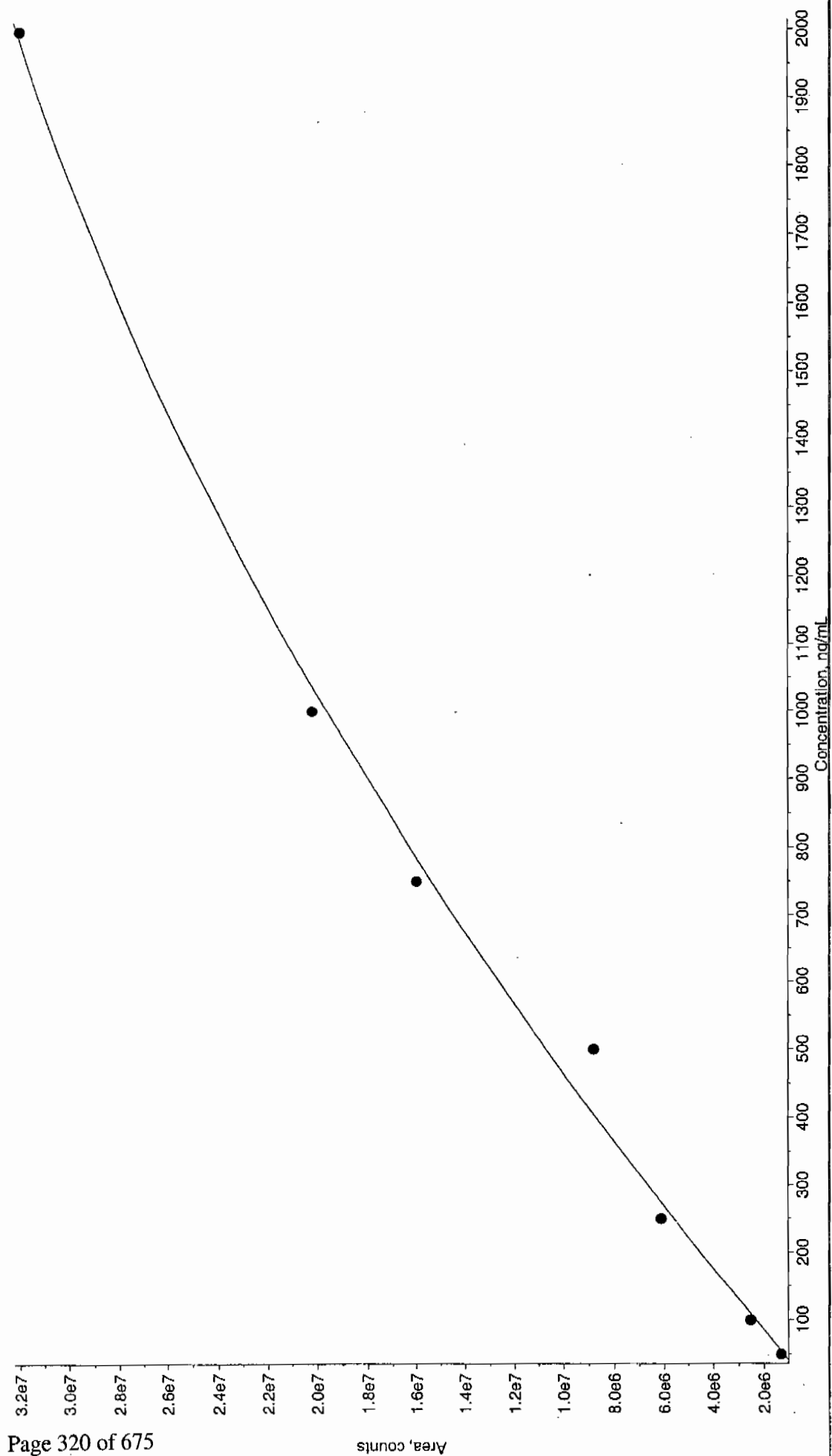
012010.rdb (26-Diamino-4-nitrotoluene): "Quadratic" Regression ("No" weighting):  $y = -0.107 x^2 + 4.62e+003 x + -2.16e+003$  ( $r = 0.9999$ )



012010.rdb (24-Diamino-6-nitrotoluene): "Quadratic" Regression ("No" weighting):  $y = 0.0247 x^2 + 2.85e+003 x + 3.39e+004$  ( $r = 0.9999$ )



012010.rdb (tris(o-cresyl) phosphate): "Quadratic" Regression ("No" weighting):  $y = -3.51 x^2 + 2.31e+004 x + 5.92e+004$  ( $r = 0.9968$ )



# Explosives Initial Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1127

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	

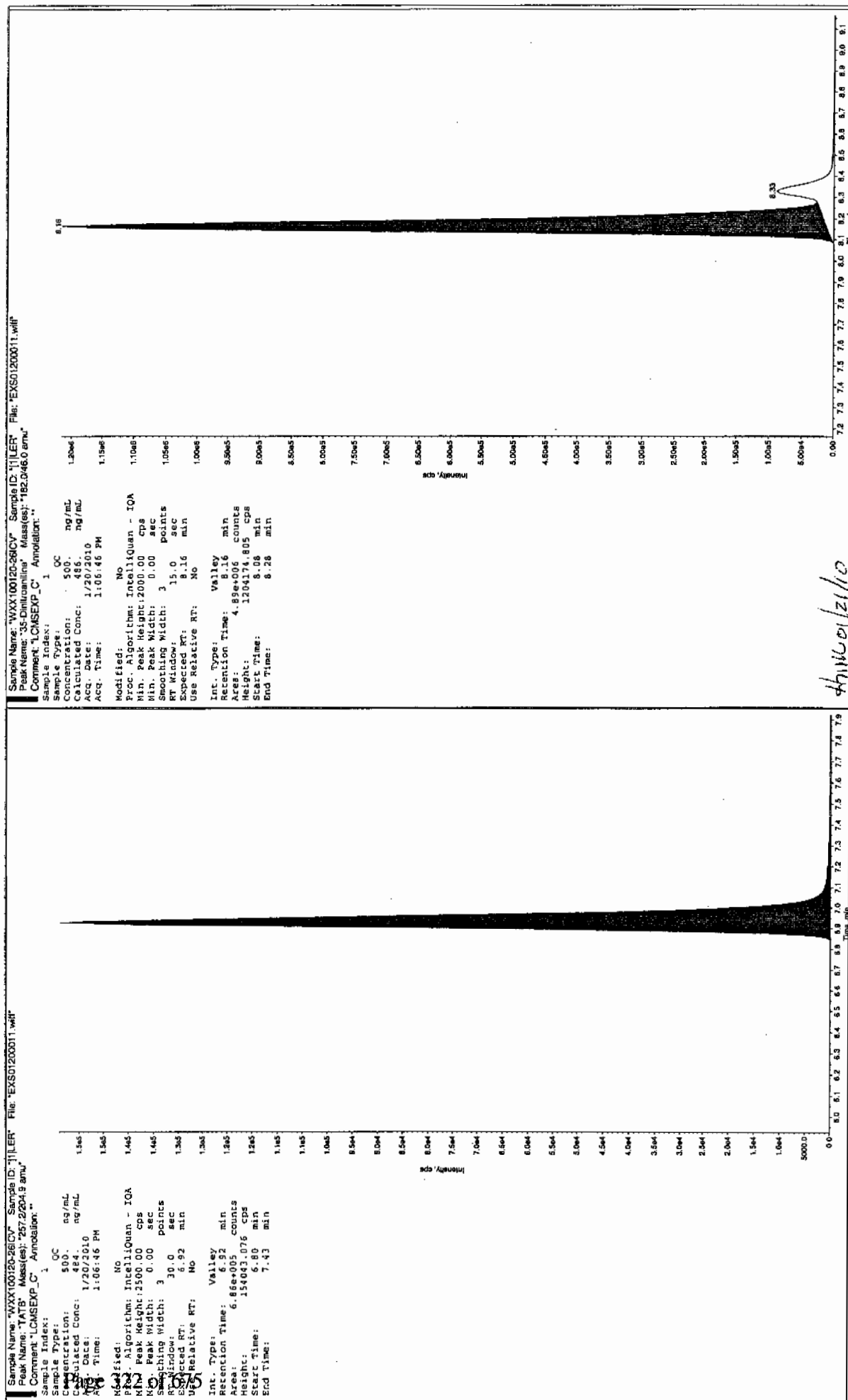
## Recovery Limits:

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

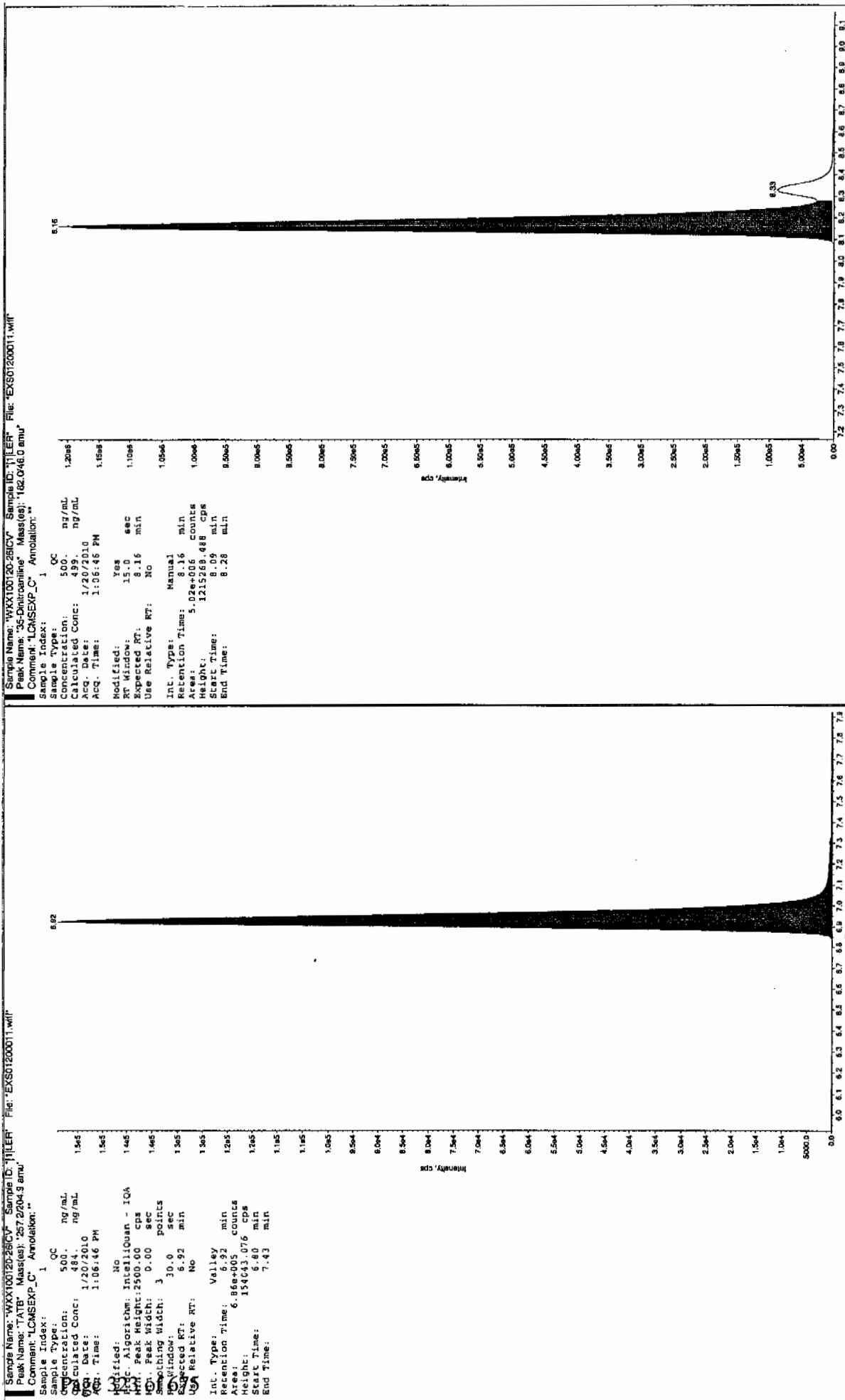


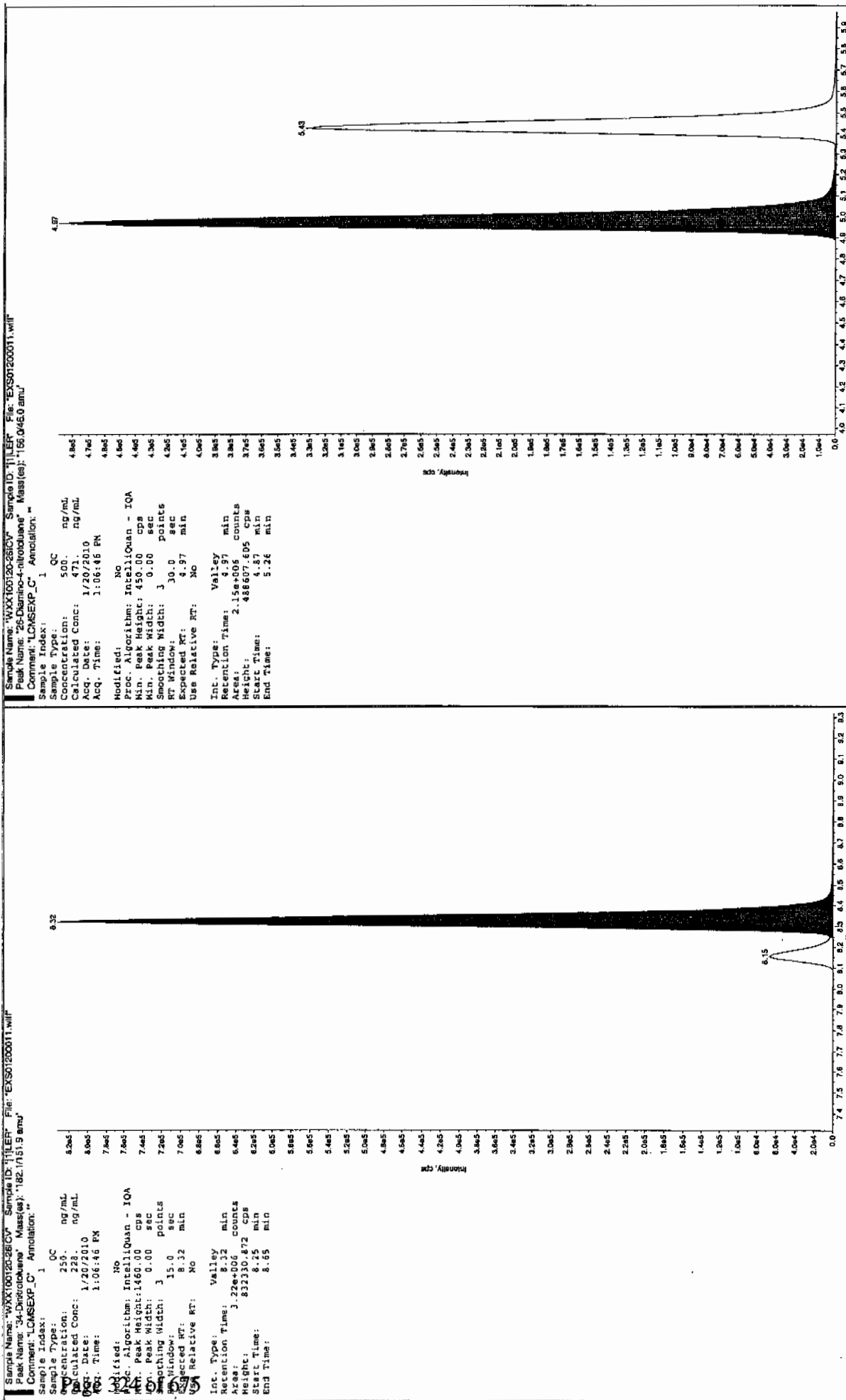
\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

01/20/10  
J. J. J.



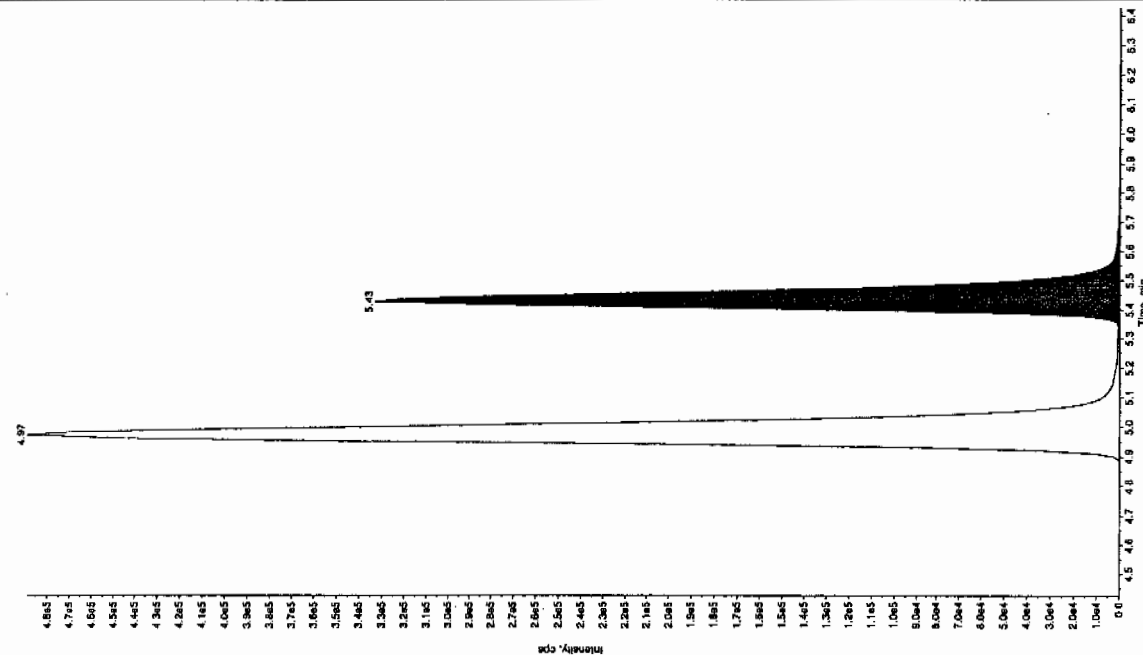
after scan 12/11/10





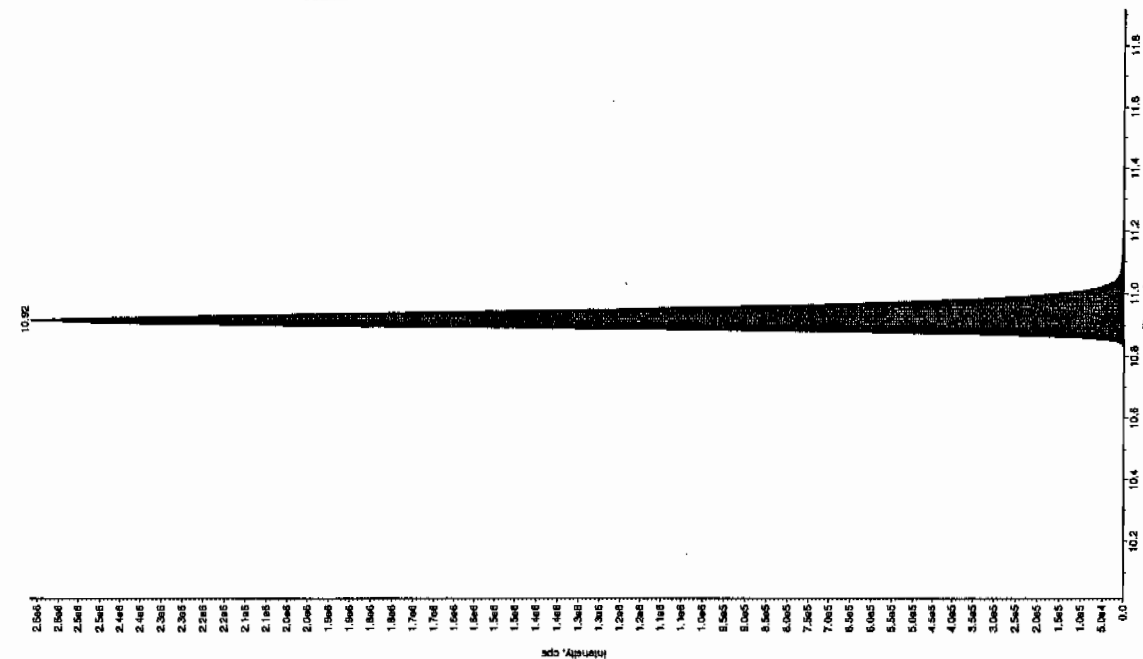
Sample Name: WXX100120-26(CV) Sample ID: T1LER File: EXS01200011.will  
 Peak Name: 24-Diamino-6-nitrotoluene Mass(es): 166.046.0 amu  
 Comment: LCMSEXP\_G Annotator: "

Sample Index: 1 QC  
 Sample Type: 500 ng/mL  
 Concentration: 488 ng/mL  
 Calculated Conc: 1/20/2010  
 Acq. Date: 1:06:46 PM  
 Acq. Time: 4.86  
 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: 5.43 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.43 min  
 Area: 1.43e+06 counts  
 Height: 33264.968 cps  
 Start Time: 5.33 min  
 End Time: 5.81 min



Sample Name: WXX100120-26(CV) Sample ID: T1LER File: EXS01200011.will  
 Peak Name: tri(o-cresyl) phosphate Mass(es): 369.191.0 amu  
 Comment: LCMSEXP\_G Annotator: "

Sample Index: 1 QC  
 Sample Type: 500 ng/mL  
 Concentration: 501 ng/mL  
 Calculated Conc: 1/20/2010  
 Acq. Date: 1:06:46 PM  
 Acq. Time: 2.56  
 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: 10.9 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.9 min  
 Area: 1.11e+007 counts  
 Height: 2617385.873 cps  
 Start Time: 10.6 min  
 End Time: 11.2 min



7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1127

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

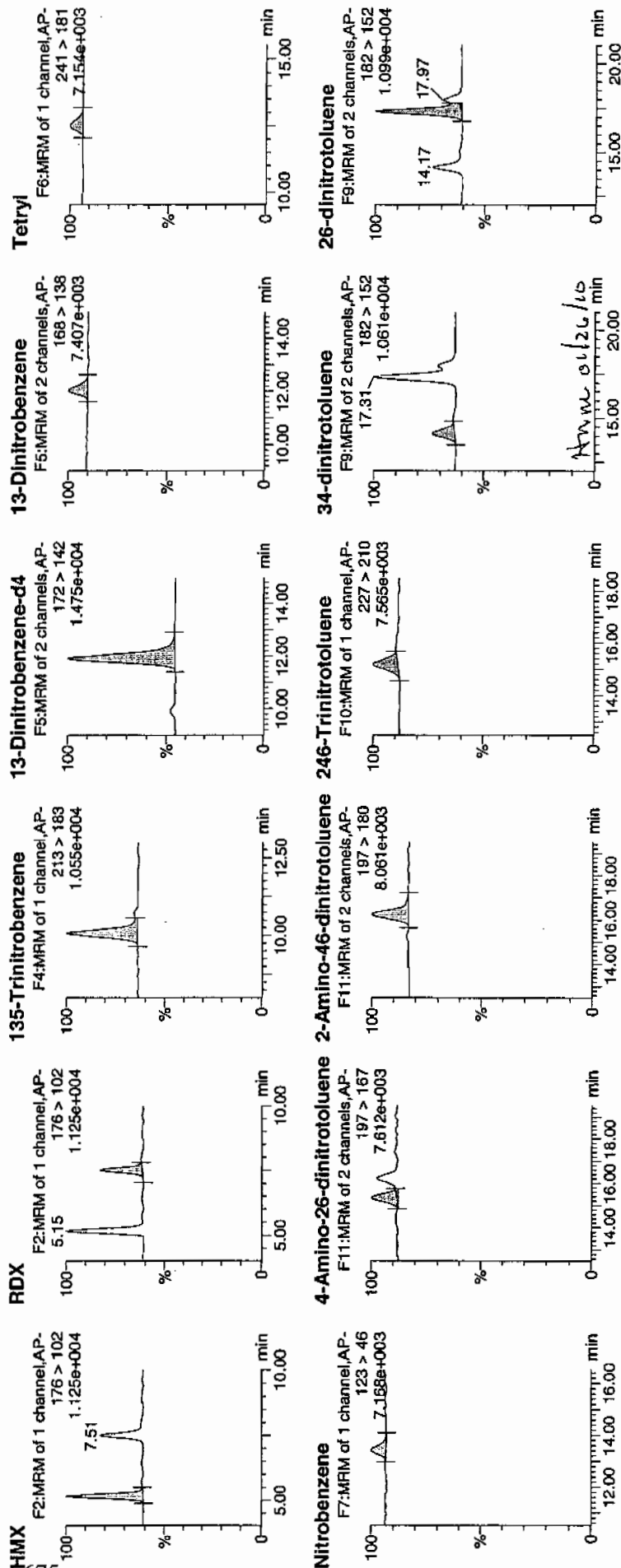
Date: 25-Jan-2010

Time: 16:45:01

ID: WXX100125-08CRI

Vial: 1:1,C

327 of 675

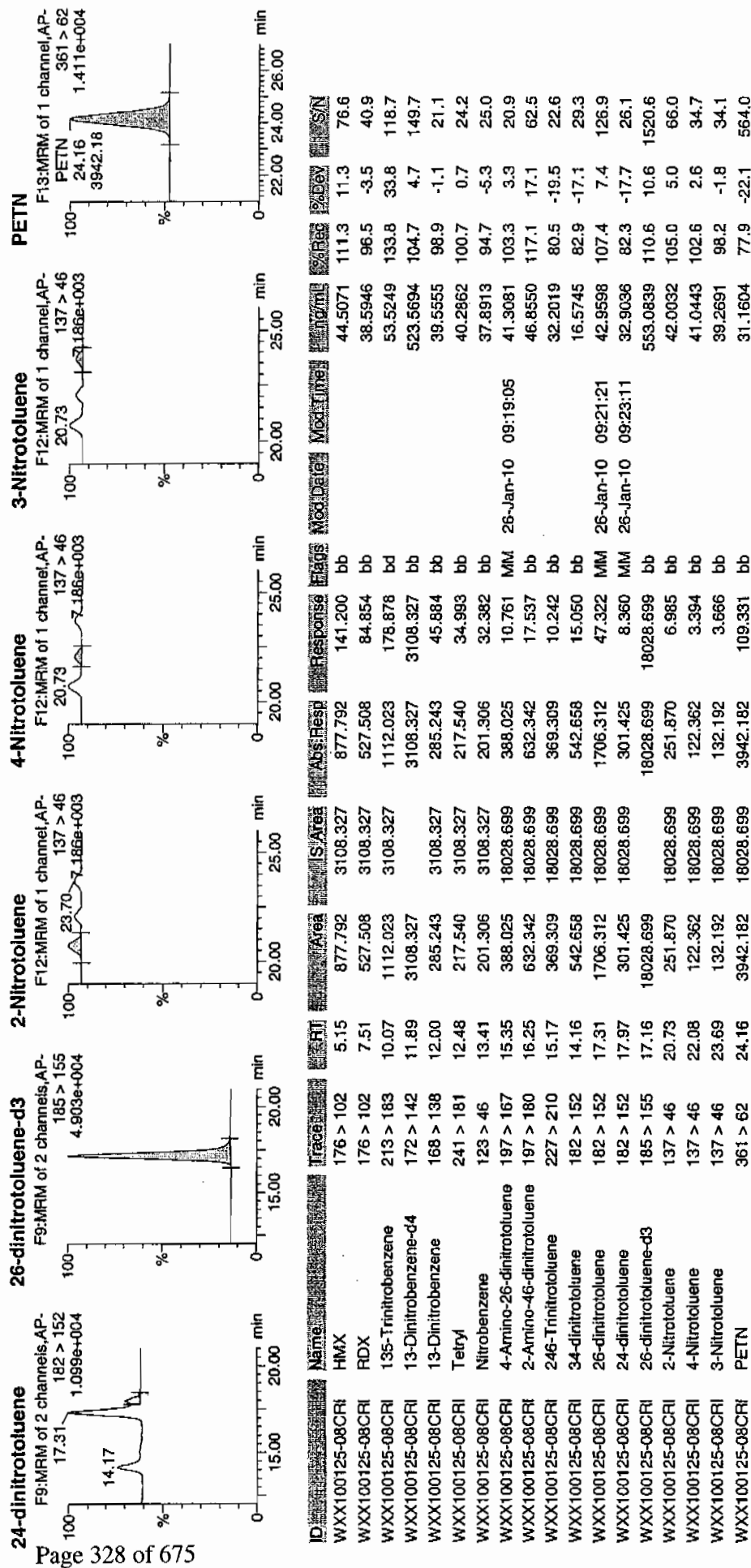


# Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Tue Jan 26 11:27:45 2010, Page 24 of 73

Dataset: C:\MASSLYNX\New\_Exp\PRO1012510expA.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

Total 1593.1

Average 99.6

MTT  
1/26/10

471M 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): 10-1127

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



Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA.qld, Time: Tue Jan 26 09:24:51 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125023a

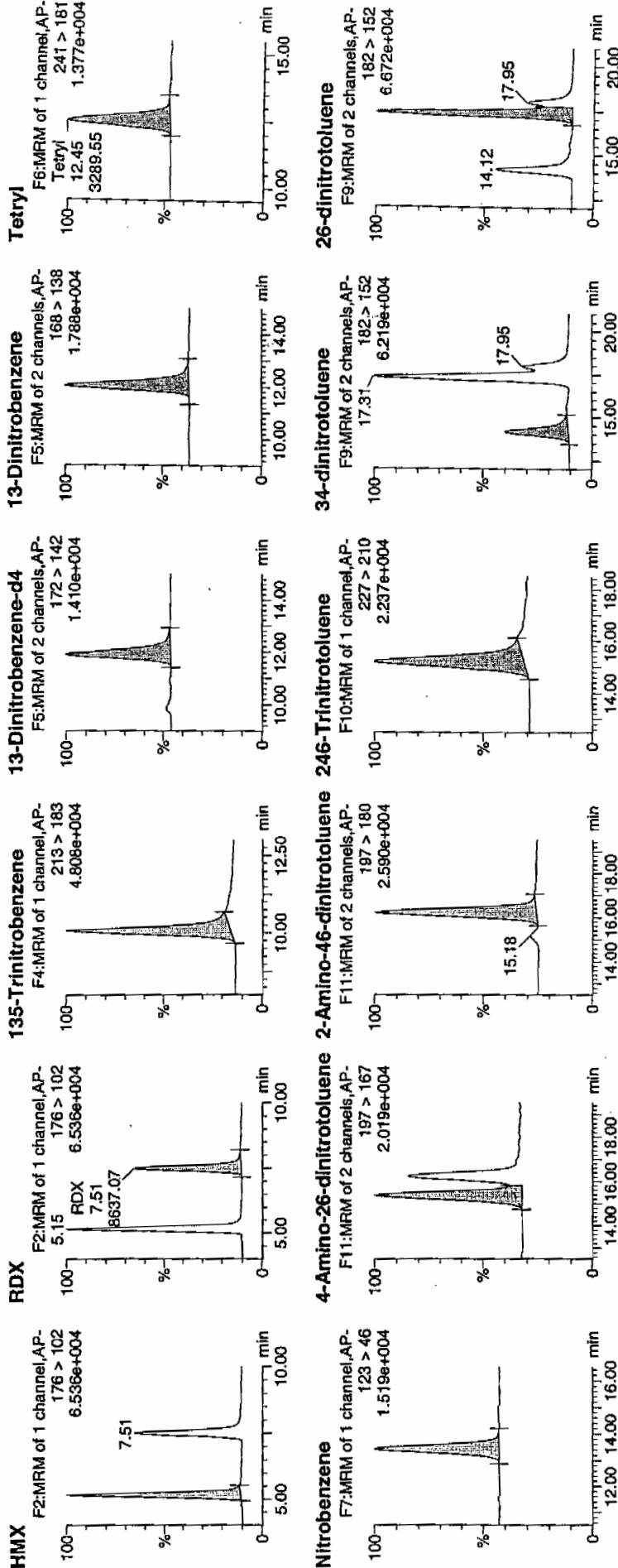
Date: 25-Jan-2010

Time: 22:09:44

ID: WXX100125-07CCV

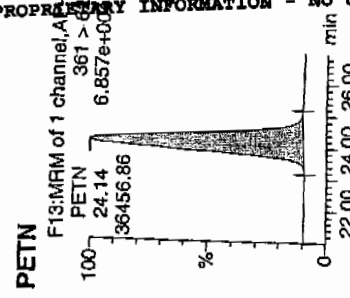
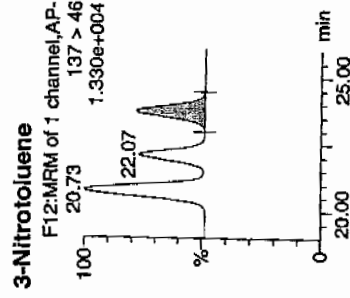
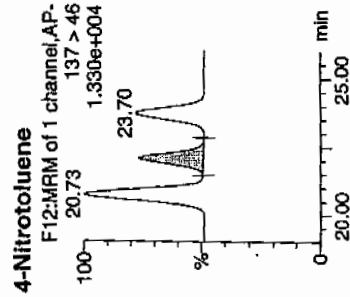
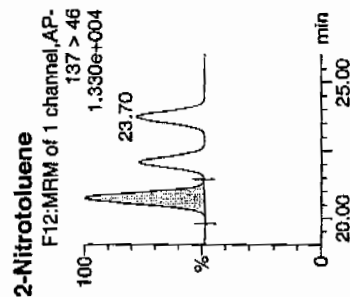
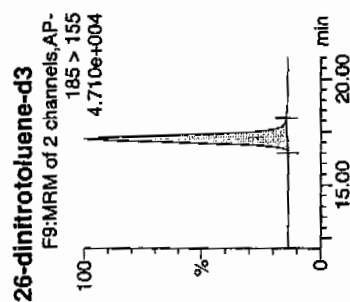
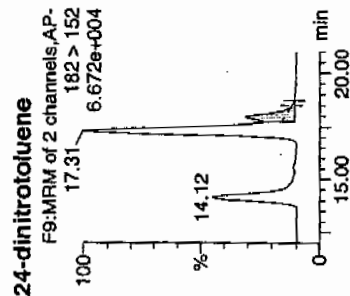
Vial: 1:1,B

not  
1/26/10



Handwritten note: 1/26/10

Dataset: C:\MASSLYN\New\_Exp.PRO\012510expA.qld, Time: Tue Jan 26 09:24:51 2010



ID	Name	Trace	RT	Area	S Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Int/Ext	% Rec	% Dev	SN
WXX100125-07CCV	HMX	176 > 102	5.15	11650.265	2978.185	11650.265	1955.934	bb			616.5212	102.8	2.8	1613.8
WXX100125-07CCV	RDX	176 > 102	7.51	8637.066	2978.185	8637.066	1450.055	bb			559.5363	109.9	9.9	995.4
WXX100125-07CCV	135-Tinitrobenzene	213 > 183	10.07	11442.634	2978.185	11442.634	1921.075	bb			571.9955	112.0	12.0	804.3
WXX100125-07CCV	13-Dinitrobenzene-d4	172 > 142	11.89	2978.185		2978.185	2978.185	bb			501.6482	100.3	0.3	547.8
WXX100125-07CCV	13-Dinitrobenzene	168 > 138	12.00	4323.792	2978.185	4323.792	725.911	bb			625.7943	104.3	4.3	451.3
WXX100125-07CCV	Tetryl	241 > 181	12.45	3289.552	2978.185	3289.552	552.275	bb			635.8122	106.0	6.0	234.7
WXX100125-07CCV	Nitrobenzene	123 > 46	13.41	3168.738	2978.185	3168.738	531.991	bb			622.5074	103.8	3.8	154.6
WXX100125-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.35	5888.969	17271.318	5888.969	170.484	MM	26-Jan-10	09:19:24	654.4152	109.1	9.1	167.7
WXX100125-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.22	8259.095	17271.318	8259.095	239.099	bb			638.8147	106.5	6.5	333.4
WXX100125-07CCV	246-Tinitrotoluene	227 > 210	15.17	7482.116	17271.318	7482.116	216.605	bb			681.0116	113.5	13.5	359.0
WXX100125-07CCV	34-dinitrotoluene	182 > 152	14.16	9802.761	17271.318	9802.761	283.787	bb			312.5362	104.2	4.2	321.0
WXX100125-07CCV	26-dinitrotoluene	182 > 152	17.31	23618.141	17271.318	23618.141	683.739	MM	26-Jan-10	09:21:34	620.7091	103.5	3.5	1152.4
WXX100125-07CCV	24-dinitrotoluene	182 > 152	17.95	5708.864	17271.318	5708.864	165.270	MM	26-Jan-10	09:23:32	550.5089	108.4	8.4	260.4
WXX100125-07CCV	26-dinitrotoluene-d3	185 > 155	17.14	17271.318		17271.318	17271.318	bb			529.8490	106.0	6.0	923.0
WXX100125-07CCV	2-Nitrotoluene	137 > 46	20.73	3408.326	17271.318	3408.326	98.670	bb			593.3155	98.9	-1.1	562.4
WXX100125-07CCV	4-Nitrotoluene	137 > 46	22.07	1734.448	17271.318	1734.448	50.212	bb			607.3042	101.2	1.2	305.1
WXX100125-07CCV	3-Nitrotoluene	137 > 46	23.70	1949.855	17271.318	1949.855	56.448	bb			604.6262	100.8	0.8	321.4
WXX100125-07CCV	PETN	361 > 62	24.14	36456.863	17271.318	36456.863	1055.416	bb			590.6025	98.4	-1.6	2028.2

# 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

1007  
1/26/10

Total 1683.3

Average 105.2

Handwritten: 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): 10-1127

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

Printed: Tue Jan 26 11:27:45 2010, Page 49 of 73

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA.qld, Time: Tue Jan 26 09:24:51 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125025a

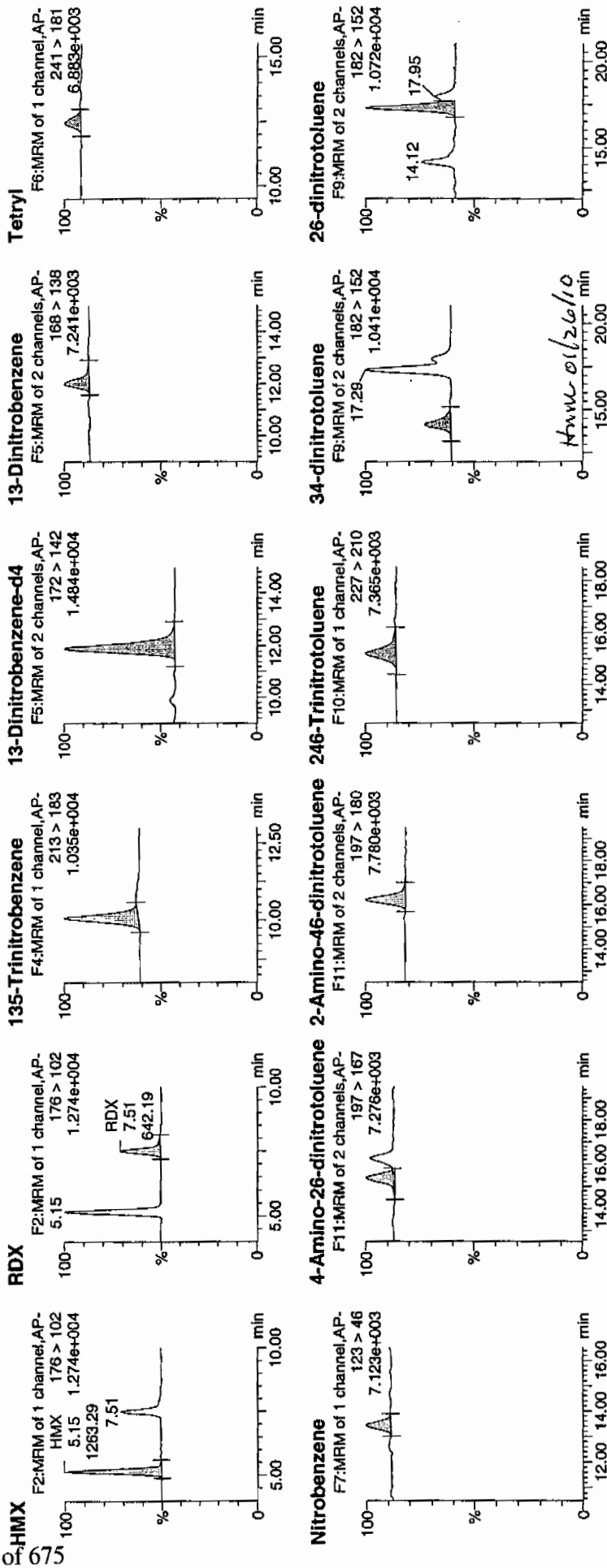
Date: 25-Jan-2010

Time: 23:08:48

ID: WXX100125-08CRI

Vial: 1:1,C

WXX  
1/26/10

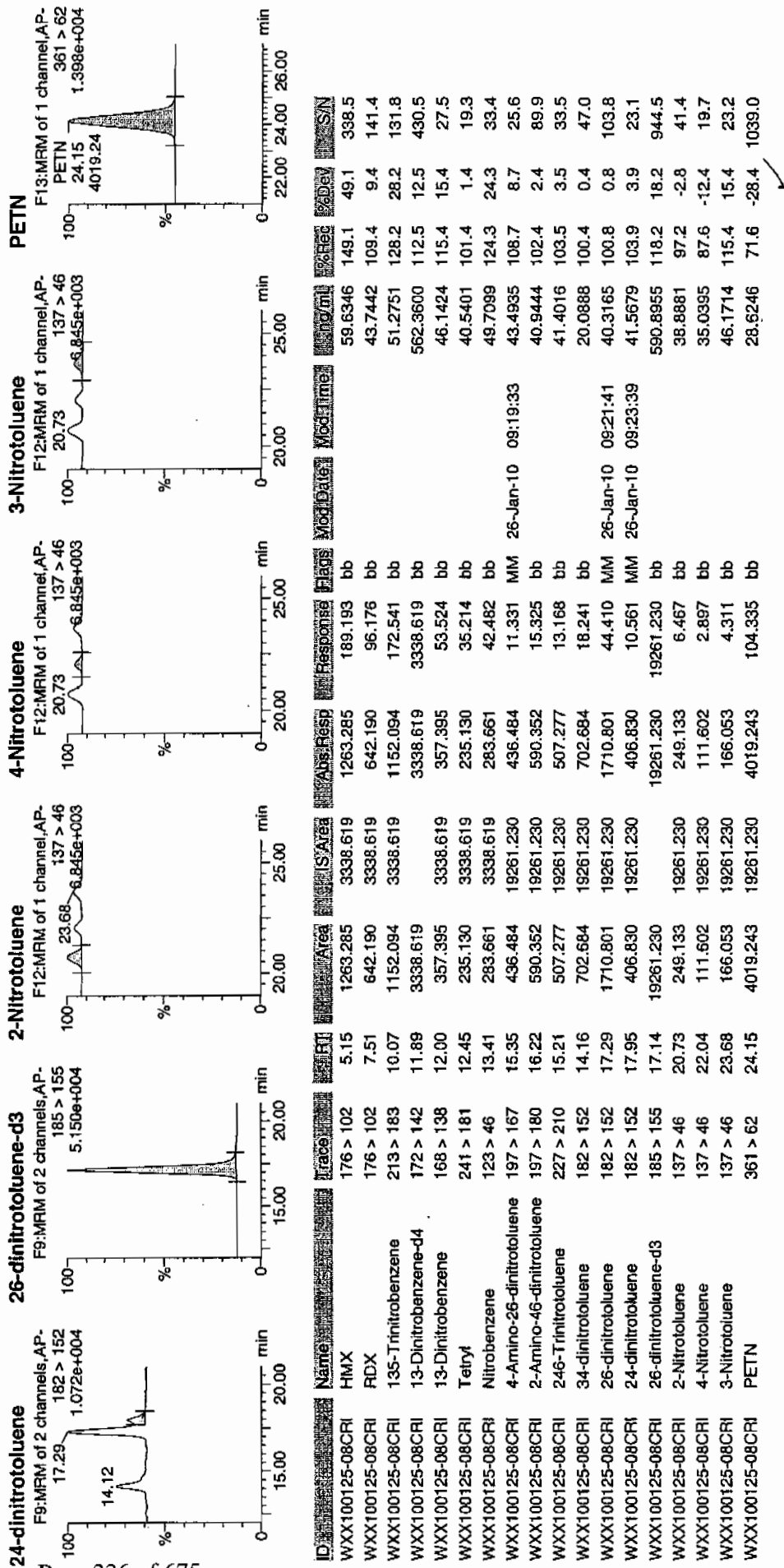


# Quantify Sample Report

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



# 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

Average 107.5

477m 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): 10-1127

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



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

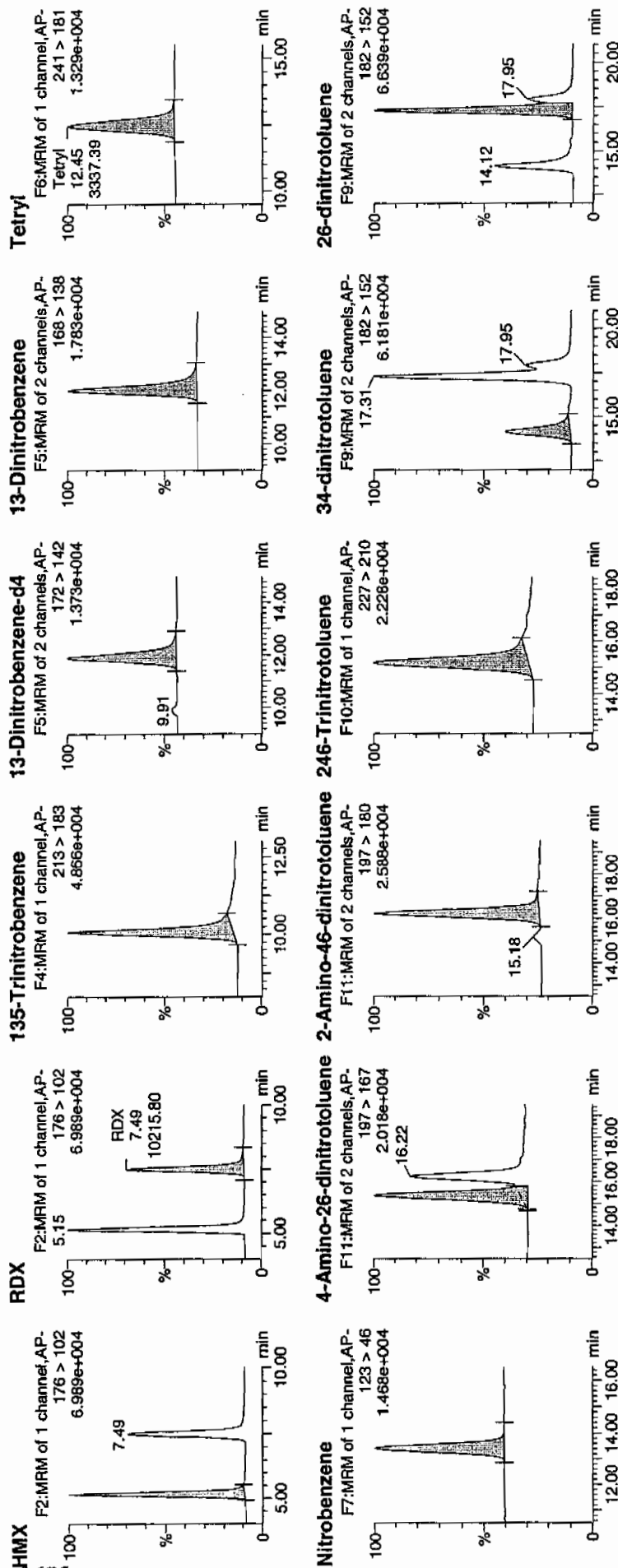
Date: 26-Jan-2010

Time: 03:34:18

ID: WXX100125-07CCV

Vial: 1:1,B

11/26/10



11/26/10

# Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Tue Jan 26 11:27:45 2010, Page 68 of 73

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA.qld, Time: Tue Jan 26 09:24:51 2010

## 24-dinitrotoluene

F9:MRM of 2 channels, AP-

182 > 152

6.639e+004

17.31

14.12

min

20.00

min

15.00

0

100

%

min

20.00

min

15.00

0

100

%

min

20.00

min

15.00

0

100

%

min

20.00

min

15.00

0

100

%

min

20.00

min

15.00

0

100

%

min

20.00

min

15.00

## 26-dinitrotoluene-d3

F9:MRM of 2 channels, AP-

185 > 155

4.786e+004

17.31

14.12

min

20.00

min

15.00

0

100

%

min

20.00

min

15.00

0

100

%

min

20.00

min

15.00

0

100

%

min

20.00

min

15.00

0

100

%

min

20.00

min

15.00

0

100

%

min

20.00

min

15.00

## 2-Nitrotoluene

F12:MRM of 1 channel, AP-

137 > 46

1.285e+004

23.70

22.05

min

25.00

min

20.00

0

100

%

min

25.00

min

20.00

0

100

%

min

25.00

min

20.00

0

100

%

min

25.00

min

20.00

0

100

%

min

25.00

min

20.00

0

100

%

min

25.00

min

20.00

## 4-Nitrotoluene

F12:MRM of 1 channel, AP-

137 > 46

1.285e+004

23.70

22.05

min

25.00

min

20.00

0

100

%

min

25.00

min

20.00

0

100

%

min

25.00

min

20.00

0

100

%

min

25.00

min

20.00

0

100

%

min

25.00

min

20.00

0

100

%

min

25.00

min

20.00

## 3-Nitrotoluene

F12:MRM of 1 channel, AP-

137 > 46

1.285e+004

23.70

22.05

min

25.00

min

20.00

0

100

%

min

25.00

min

20.00

0

100

%

min

25.00

min

20.00

0

100

%

min

25.00

min

20.00

0

100

%

min

25.00

min

20.00

0

100

%

min

25.00

min

20.00

## PETN

F13:MRM of 1 channel, AP-

361 > 62

7.164e+004

24.14

38422.95

min

22.00

min

24.00

26.00

min

22.00

min

24.00

min

26.00

min

22.00

min

24.00

min

26.00

min

22.00

min

24.00

min

26.00

min

22.00

min

24.00

min

26.00

min

22.00

min

24.00

min

26.00

min

22.00

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

*1/26/10*

Total 1687.0

Average 105.4

*1/26/10*

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): 10-1127

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

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125036a

Date: 26-Jan-2010

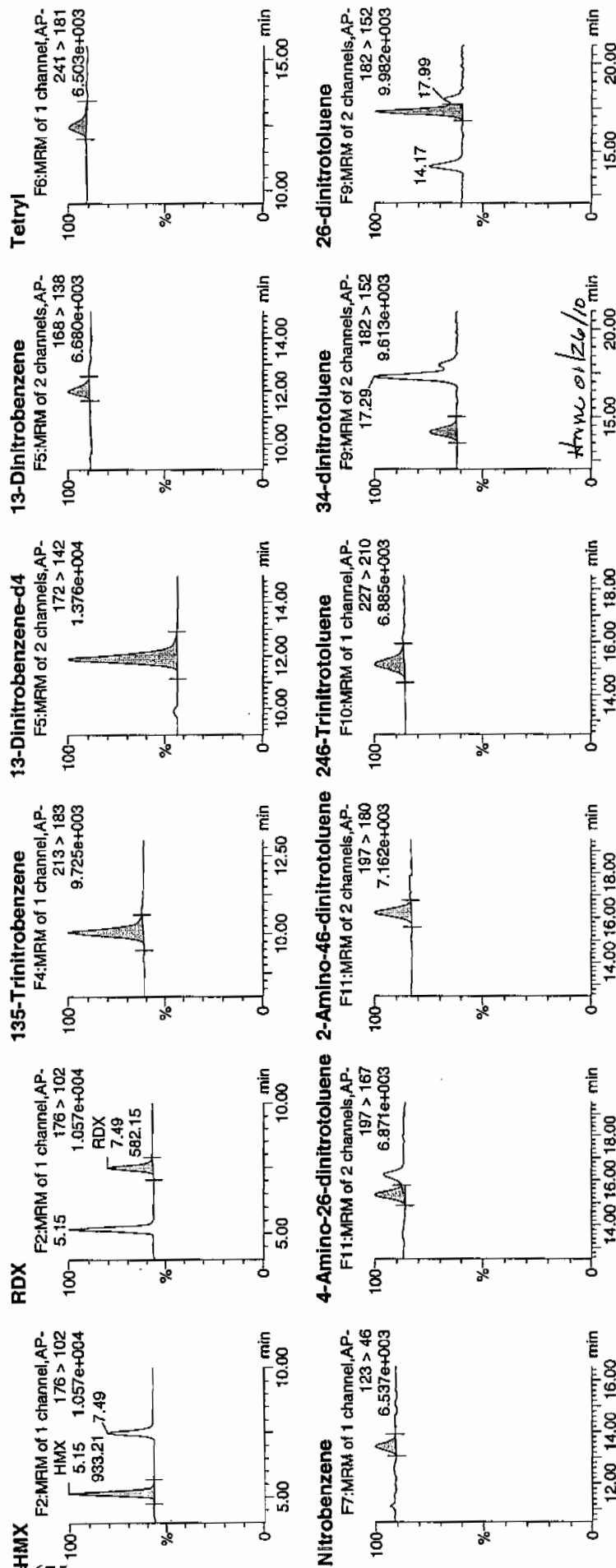
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ID: WXX100125-08CRI

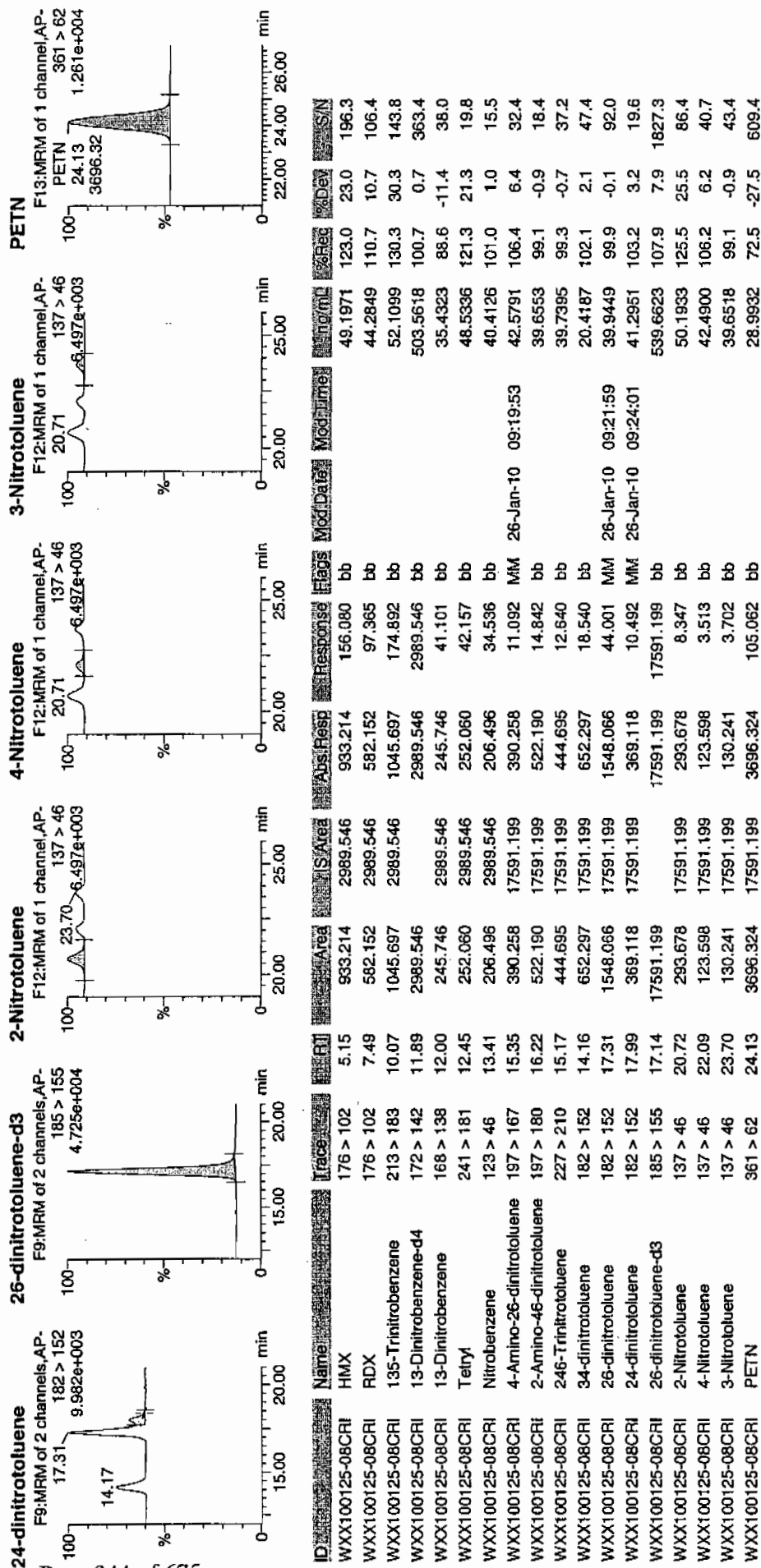
Vial: 1:1,C

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA.qld, Time: Tue Jan 26 09:24:51 2010

*Handwritten:* 1/26/10



Dataset: C:\MASSLYNX\New\_Exp\_PRO\012510expA.qld, Time: Tue Jan 26 09:24:51 2010



# GRAND MEAN AVERAGE

Vendor: UltraScientific  
 Date of Analysis 01/26/10  
 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

100%  
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): 10-1127

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



# 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\EXP0125047a

Date: 26-Jan-2010

Time: 09:58:05

ID: WXX100125-07CCV

Vial: 1:1,B

CHMX

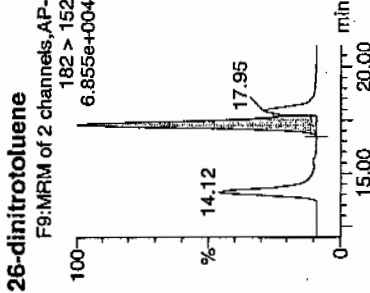
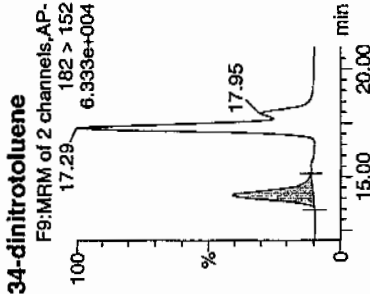
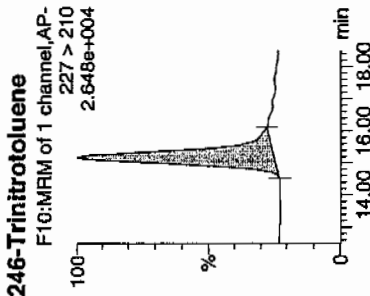
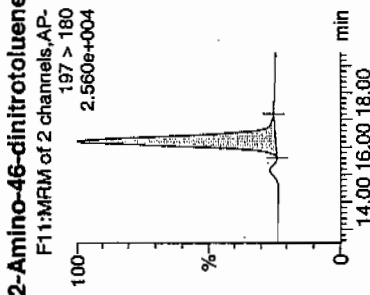
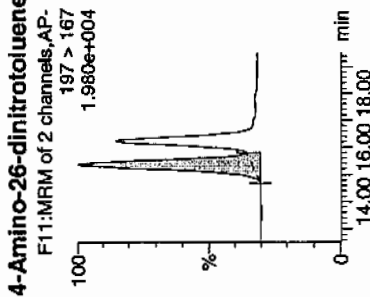
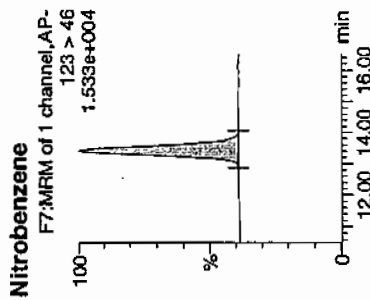
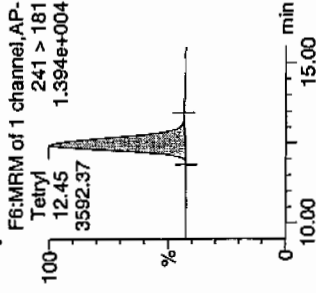
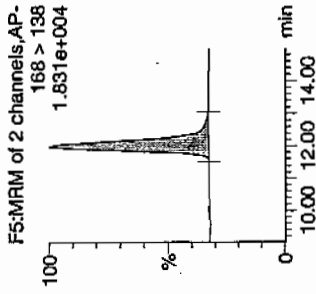
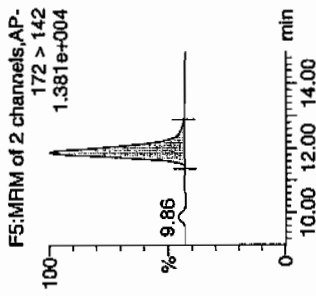
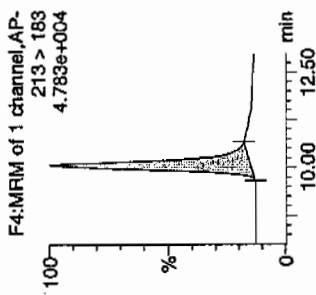
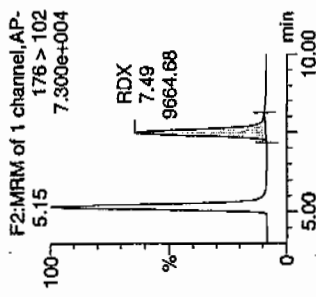
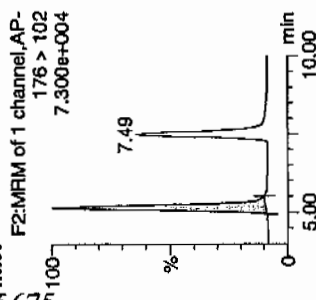
RDX

135-Trinitrobenzene

13-Dinitrobenzene-d4

13-Dinitrobenzene

Tetryl



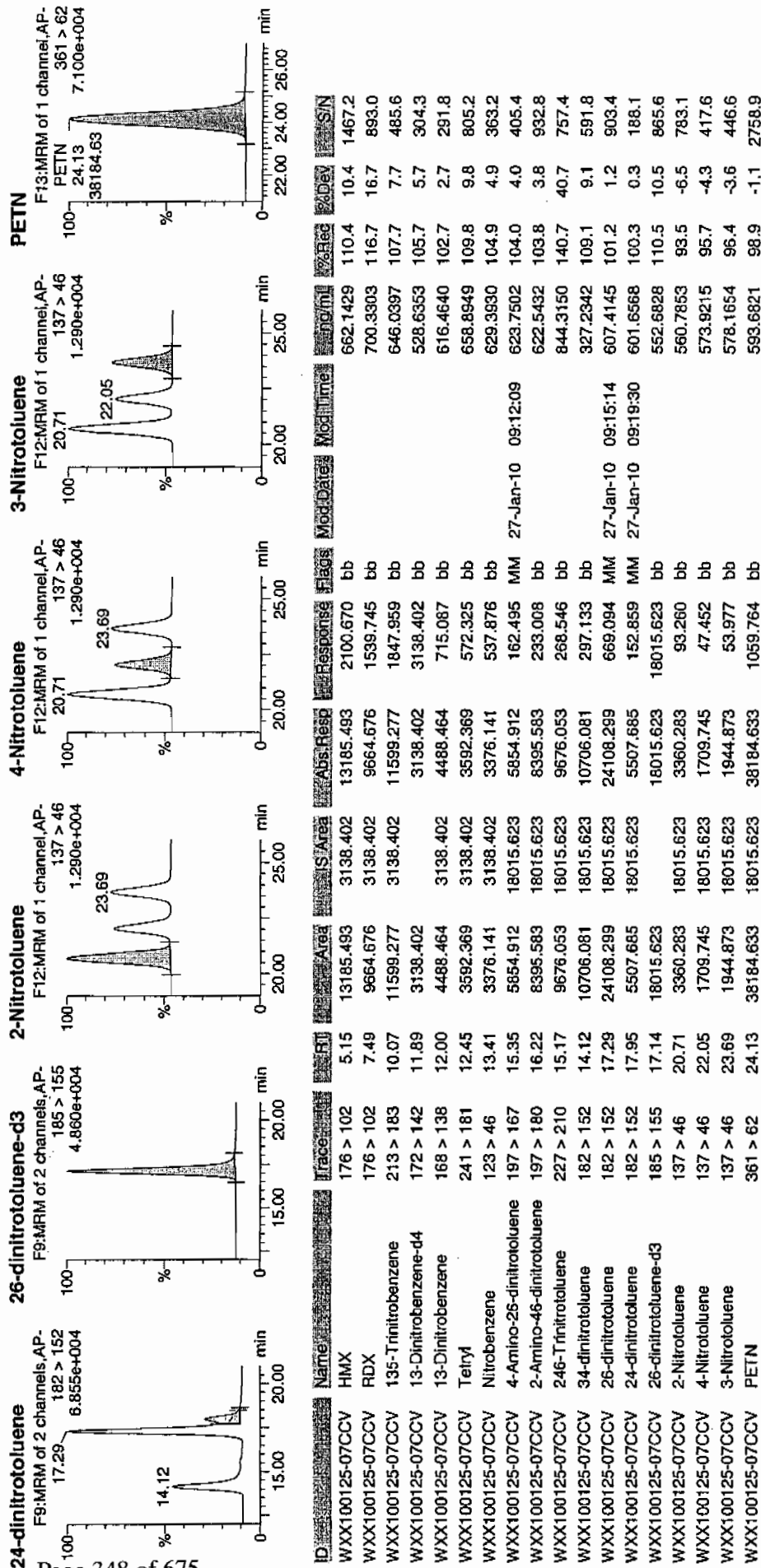
4/10/10

# Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Wed Jan 27 09:26:20 2010, Page 22 of 97

Dataset: C:\MASSLYNX\New\_Exp\PRO1012510expA1.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:*  
 11/27/10

Total 1695.8

Average 106.0

*Handwritten:* HAW 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): 10-1127

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\1012510expA1.qld, Time: Wed Jan 27 09:20:42 2010

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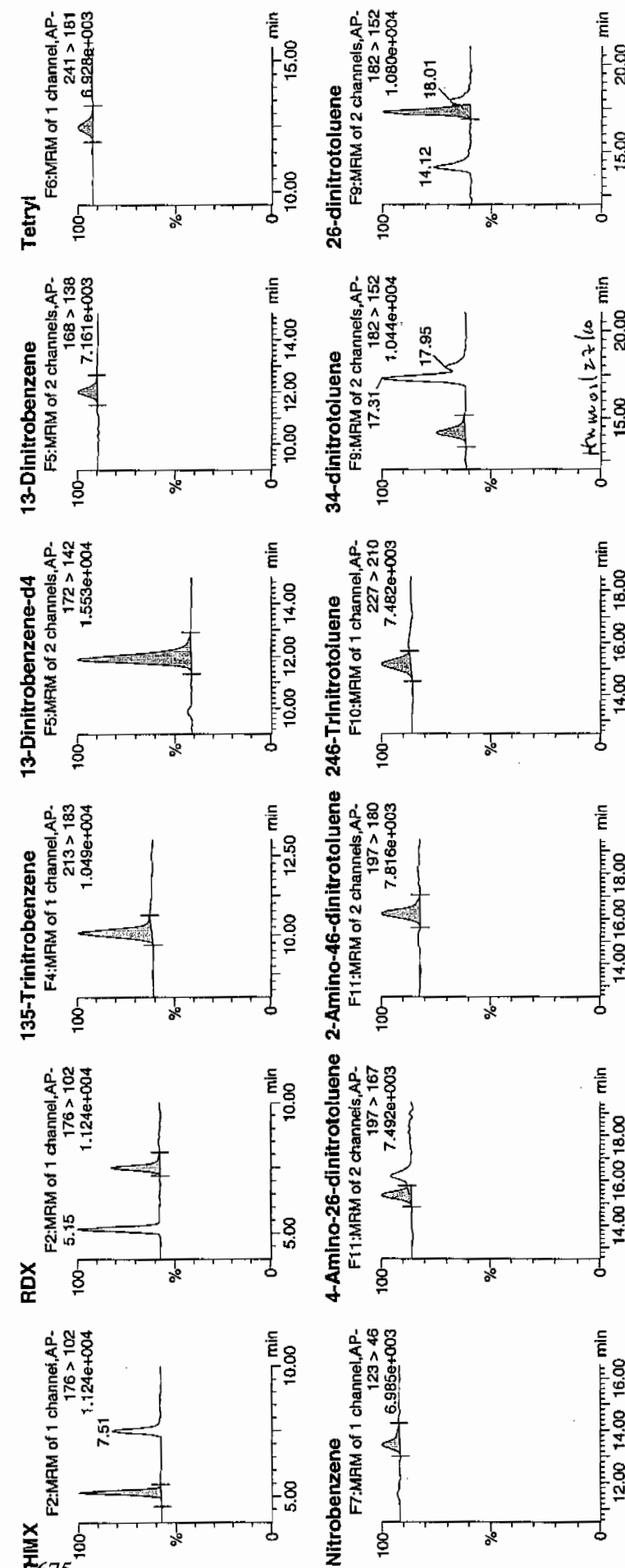
Date: 26-Jan-2010

Time: 10:57:07

ID: WXX100125-08CRI

Vial: 1:1,C

1/23/10  
MATT

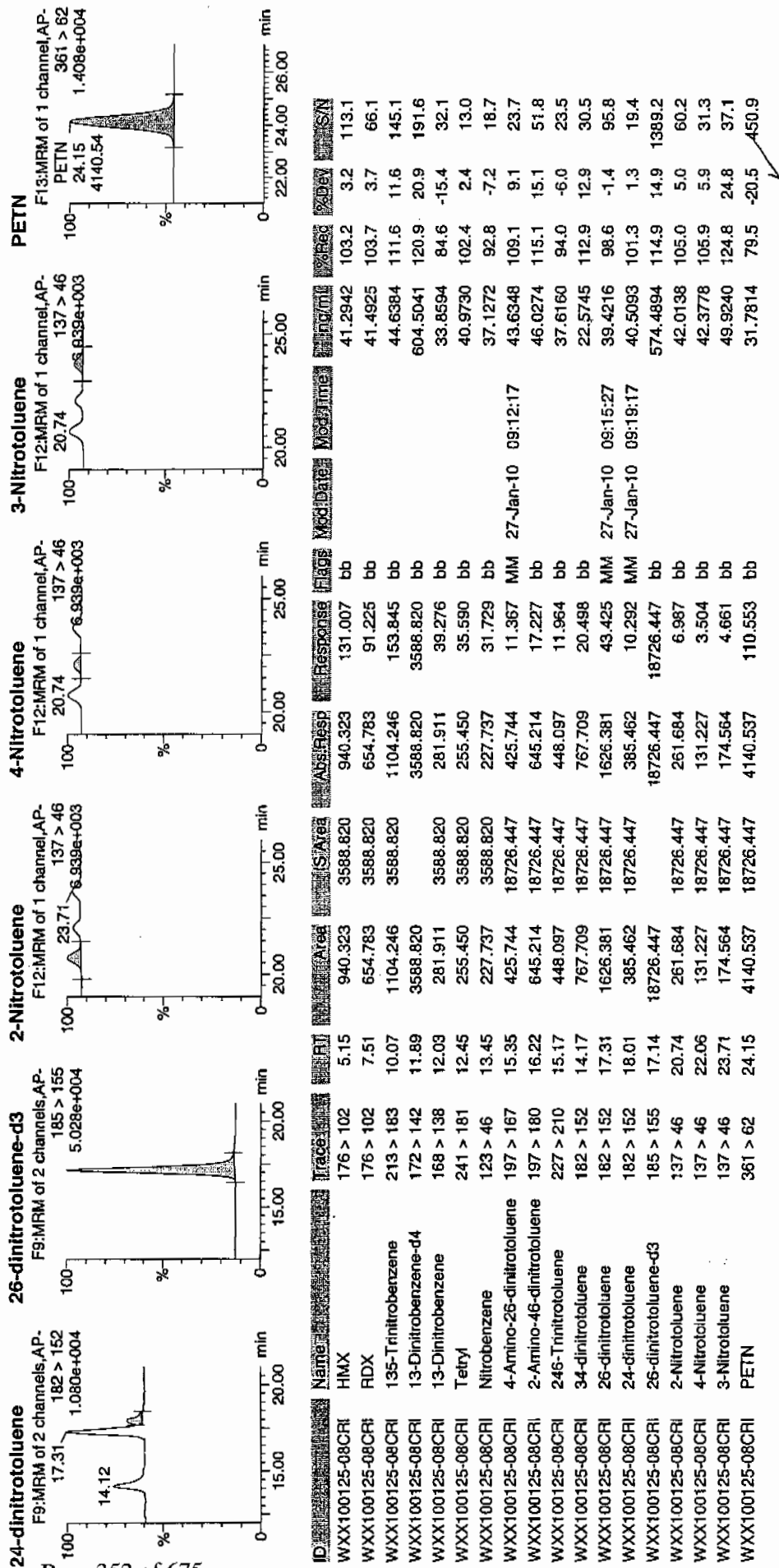


# Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Wed Jan 27 09:26:20 2010, Page 26 of 97

Dataset: C:\MASSLYNX\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 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

*MTT  
1/27/10*

Total 1644.5

Average 102.8

*thru 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): 10-1127

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\012510expA1.qld, Time: Wed Jan 27 09:20:42 2010

Name: C:\MASSLYNX\NEW\_EXP\PRO\Data\EXP0125060a

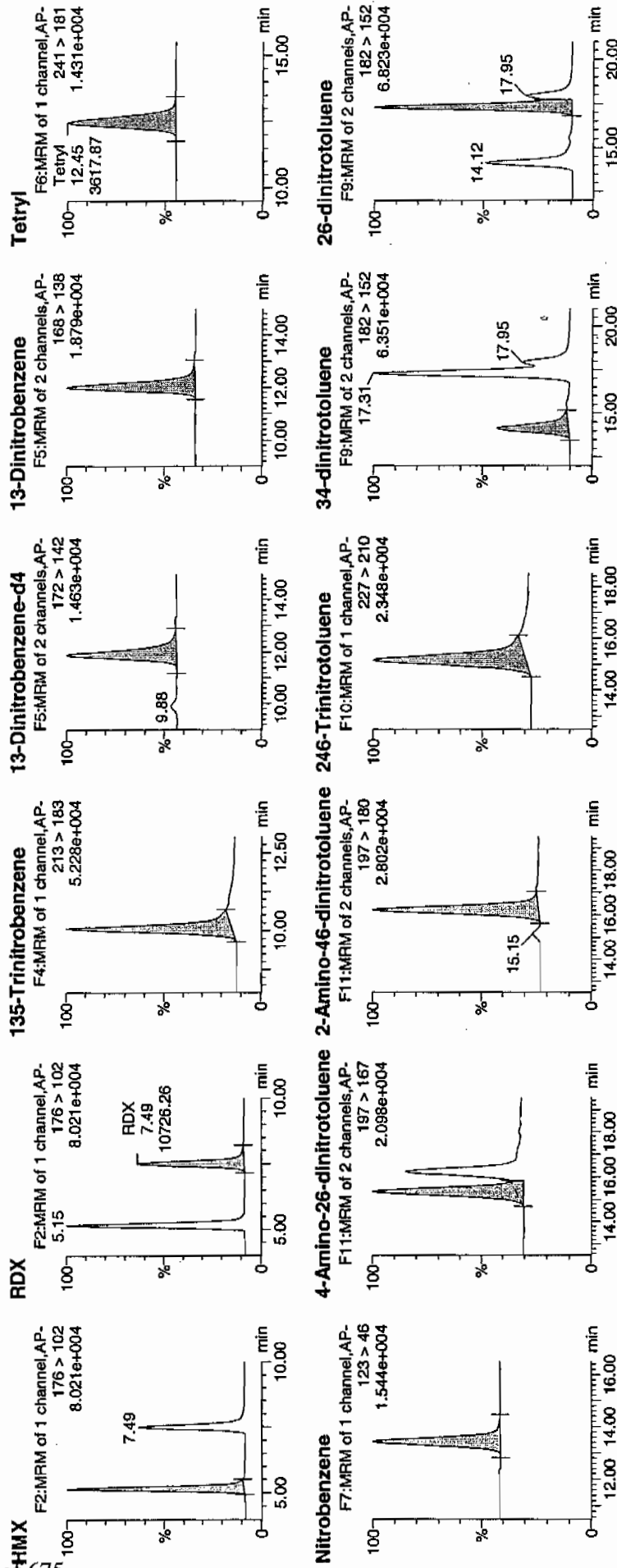
Date: 26-Jan-2010

Time: 16:21:27

ID: WXX100125-07CCV

Vial: 1:1,B

11/27/10



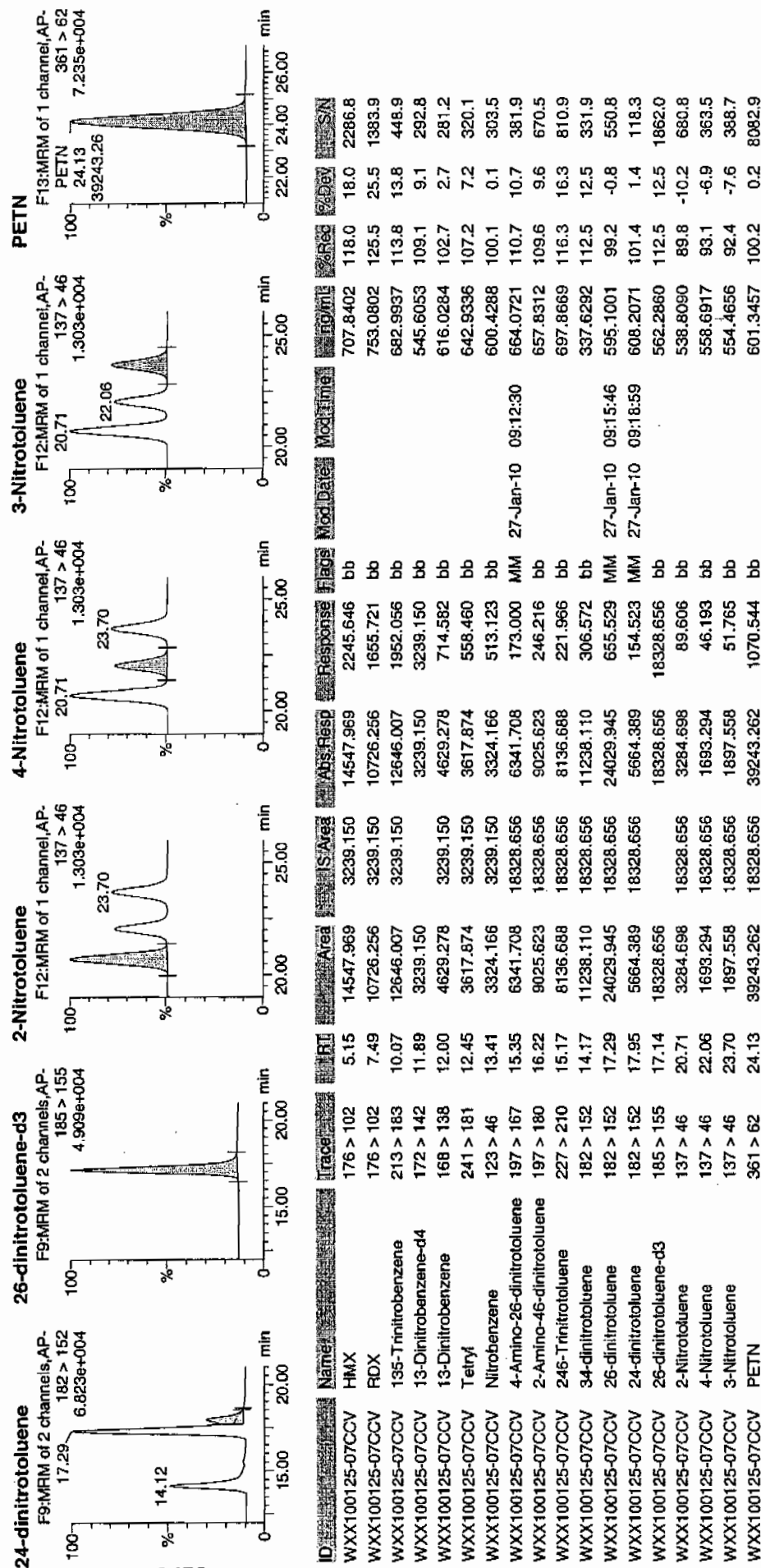
4740 0.12 ± 1.10

# Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Wed Jan 27 09:26:20 2010, Page 48 of 97

Dataset: C:\MASSLYNX\New\_Exp\_PROV012510expA1.qld, Time: Wed Jan 27 09:20:42 2010



# 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

WAT  
1/27/10

Total 1692.5

Average 105.8

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): 10-1127

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

Printed: Wed Jan 27 09:26:20 2010, Page 51 of 97

Dataset: C:\MASSLYNX\New\_Exp\PRO\012510expA1.qld, Time: Wed Jan 27 09:20:42 2010

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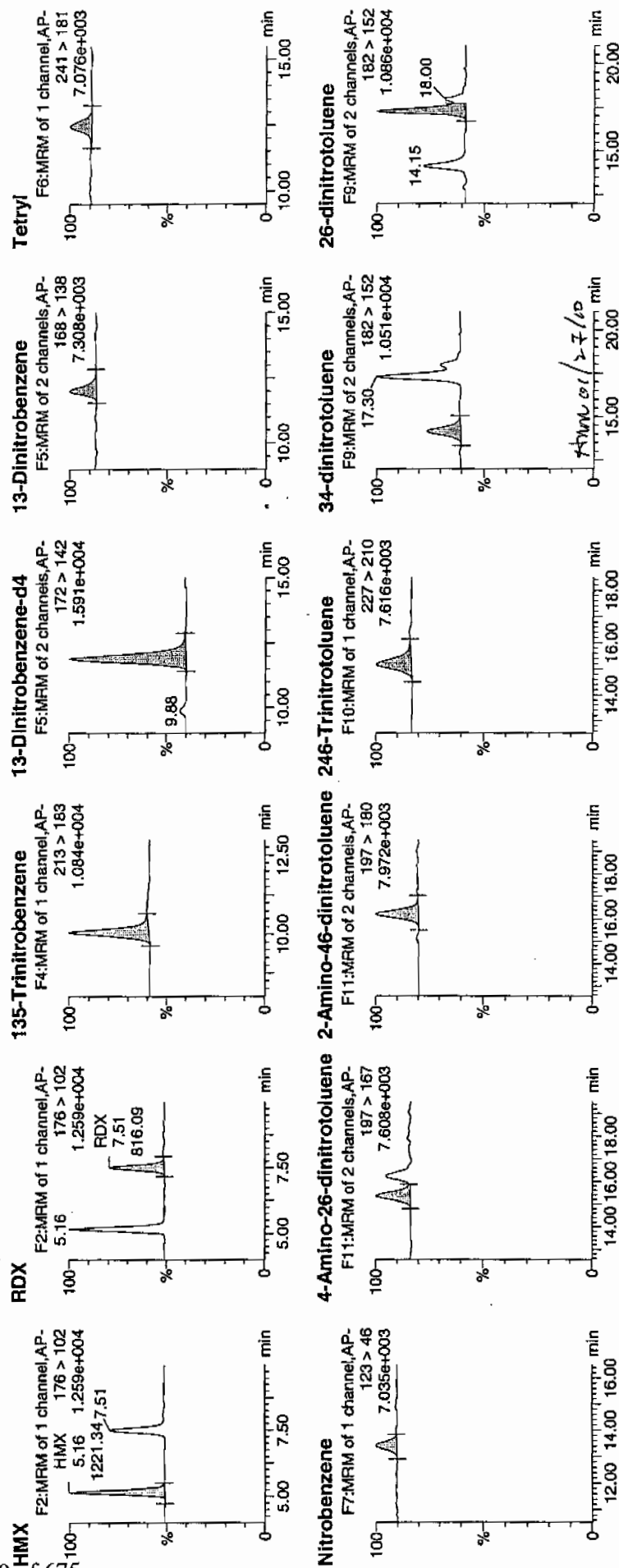
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Time: 17:20:28

ID: WXX100125-08CRI

Vial: 1:1,C

1/27/10  
MPT

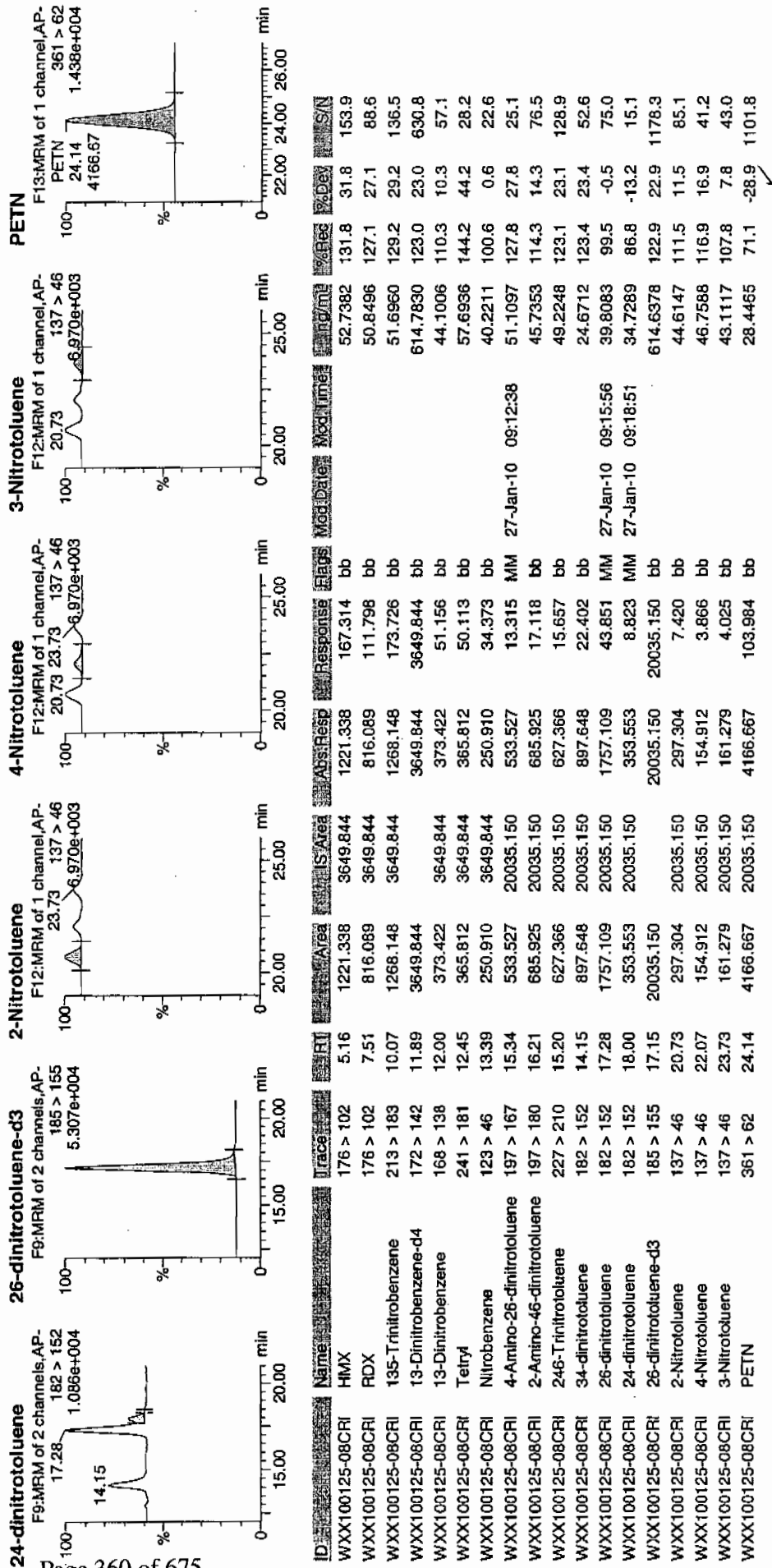


# Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Wed Jan 27 09:26:20 2010, Page 52 of 97

Dataset: C:\MASSLYNX\New\_Exp.PRO\1012510expA1.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

Total 1825.4

Average 114.1

*Handwritten:* 114.1  
1/27/10

*Handwritten:* 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): 10-1127

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\012510expA1.qld, Time: Wed Jan 27 09:20:42 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125073a

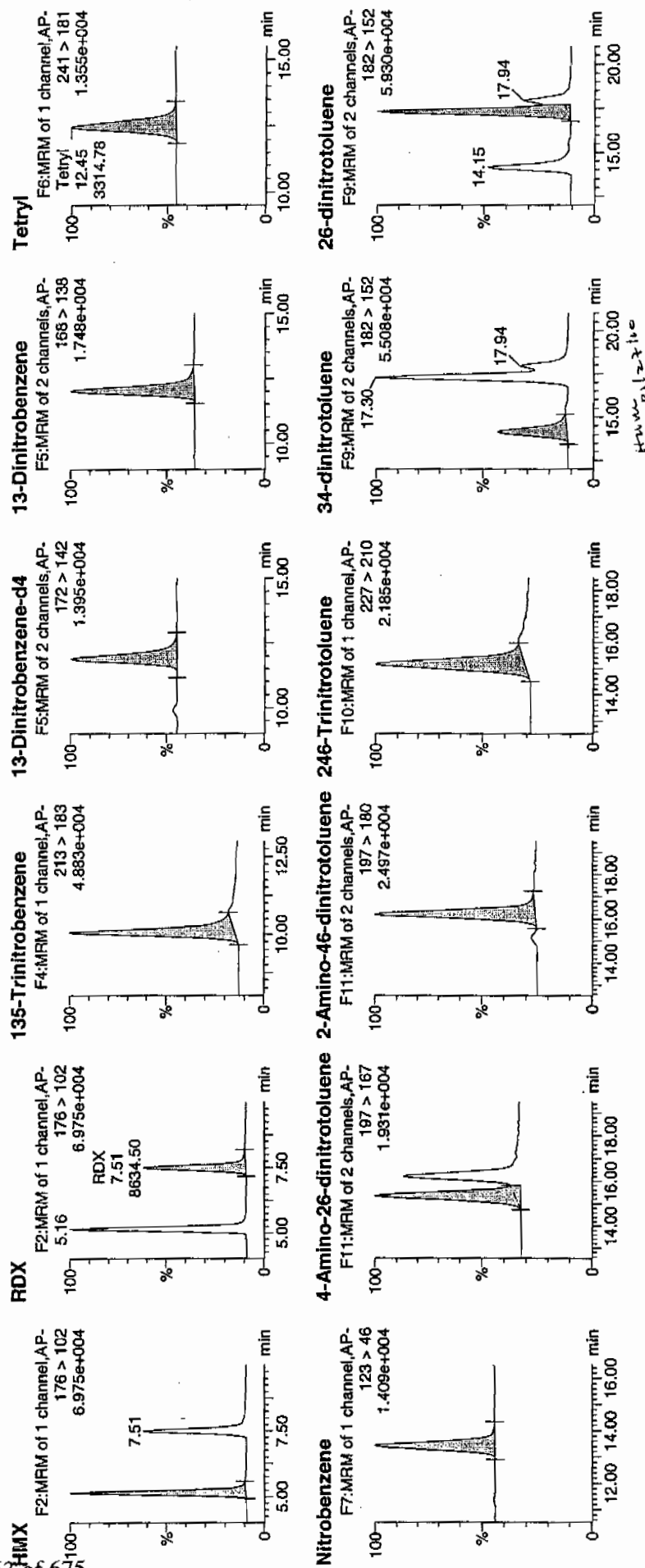
Date: 26-Jan-2010

Time: 22:45:12

ID: WXX100125-07CCV

Vial: 1:1,B

WXX  
1/27/10

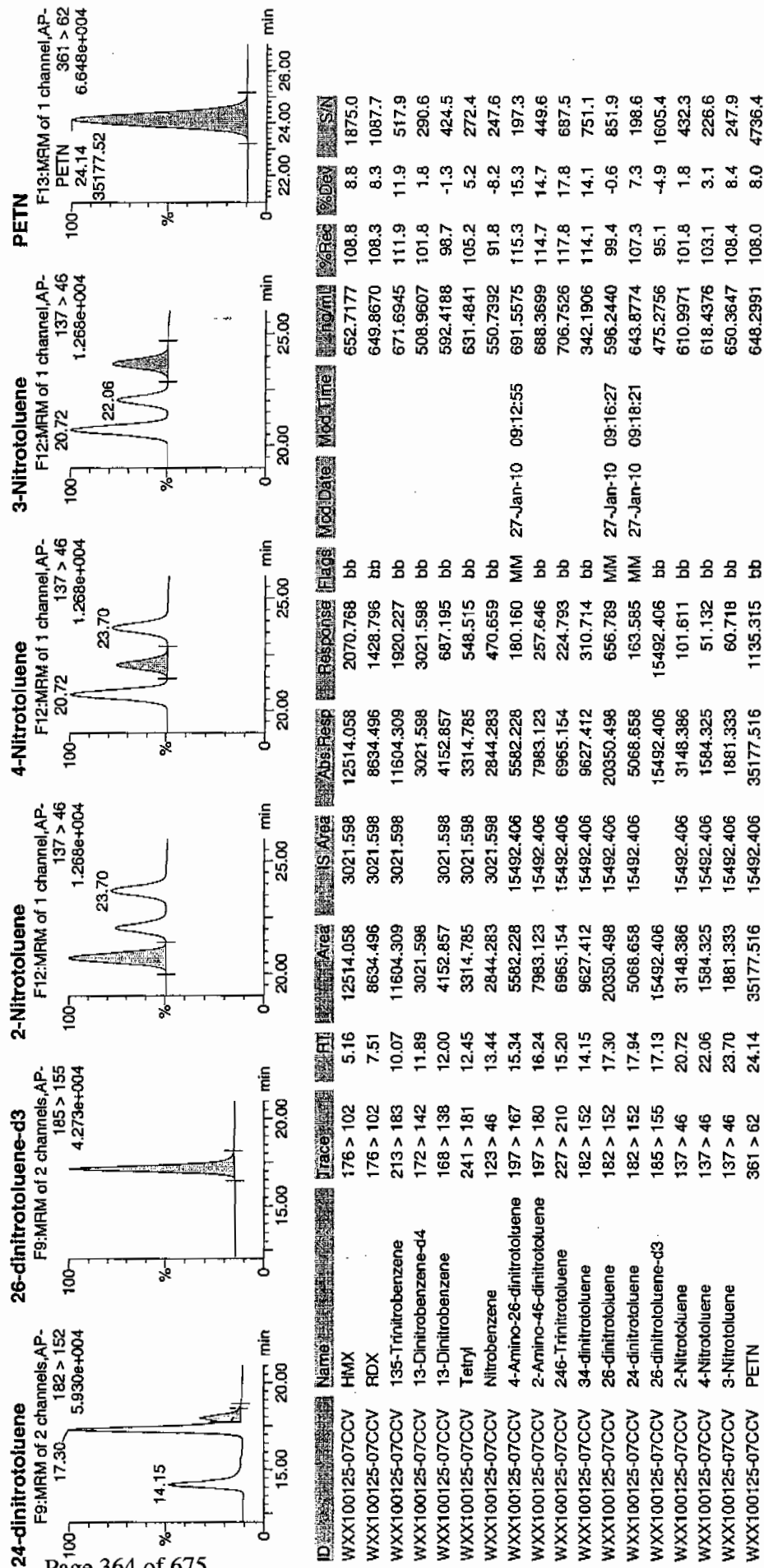


# Quantify Sample Report

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: 107.2*

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): 10-1127

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

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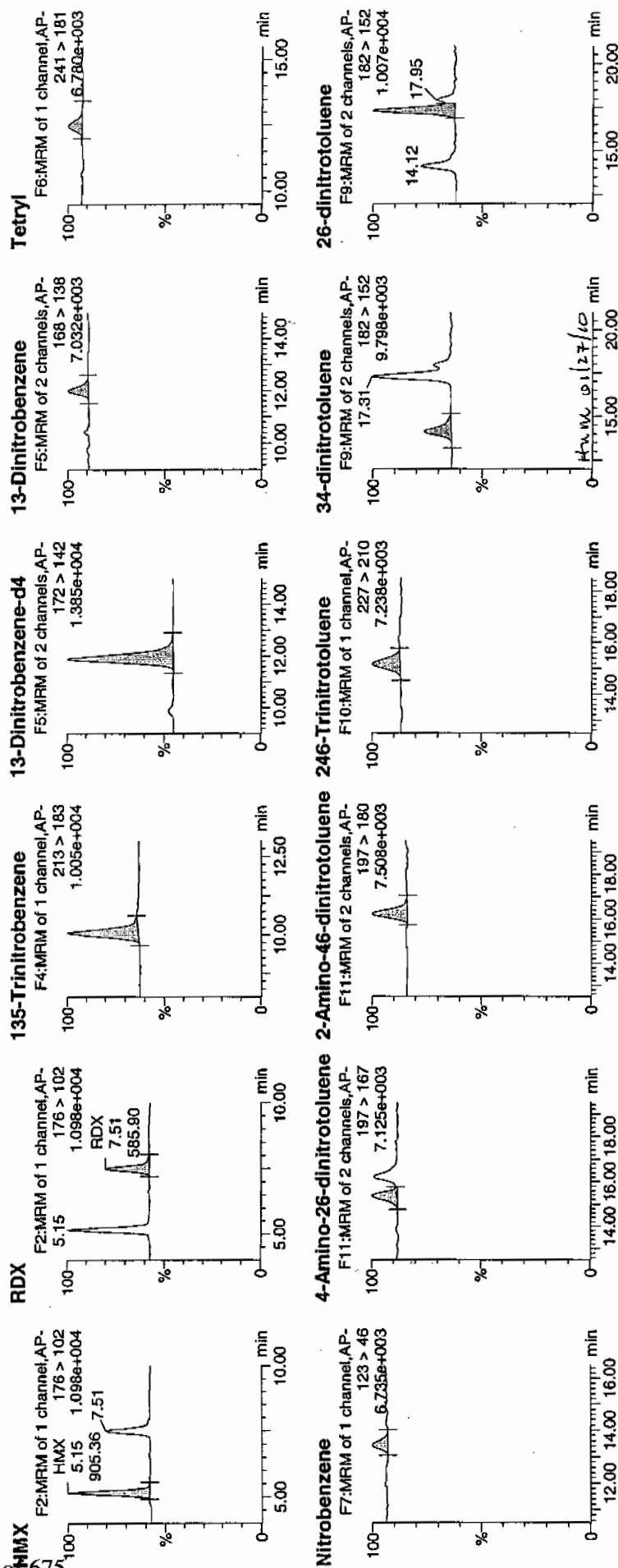
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Time: 23:44:10

ID: WXX100125-08CRI

Vial: 1:1,C

107  
12/10

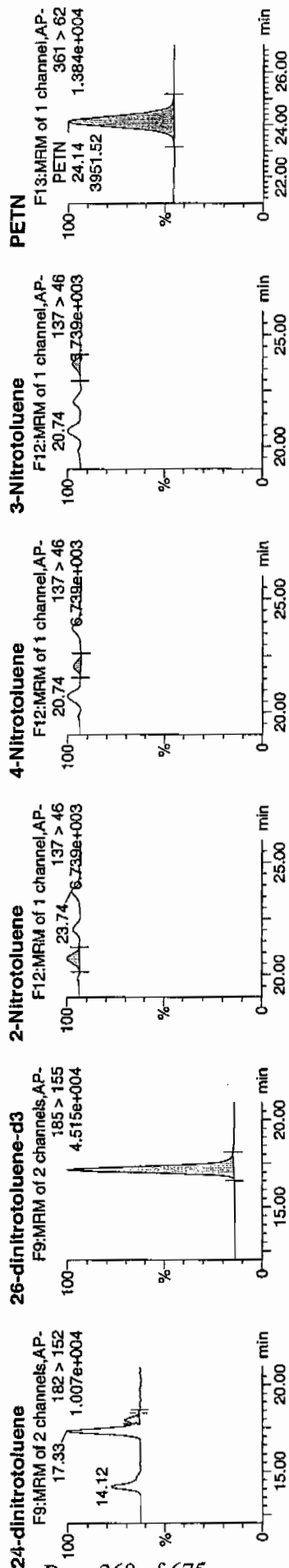


# Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Wed Jan 27 09:26:20 2010, Page 78 of 97

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA1.qtd, Time: Wed Jan 27 09:20:42 2010



Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flag	Mod Date	Mod Time	Int (m1)	%Req	%Dev	S/N
HMX	176 > 102	5.15	905.361	2873.365	905.361	157.544	bb			49.6586	124.1	24.1	312.1
RDX	176 > 102	7.51	585.900	2873.365	585.900	101.954	bb			46.3721	115.9	15.9	164.6
135-Trinitrobenzene	213 > 183	10.07	1070.772	2873.365	1070.772	186.327	bb			56.1693	140.4	40.4	146.0
13-Dinitrobenzene-d4	172 > 142	11.89	2873.365	2873.365	2873.365	2873.365	bb			483.9922	96.8	-3.2	191.0
13-Dinitrobenzene	168 > 138	12.00	254.457	2873.365	254.457	44.279	bb			38.1718	95.4	-4.6	44.2
Tetryl	241 > 181	12.45	224.208	2873.365	224.208	39.015	bb			44.9163	112.3	12.3	40.4
Nitrobenzene	123 > 46	13.45	188.077	2873.365	188.077	32.728	bb			38.2961	95.7	-4.3	13.5
4-Amino-26-dinitrotoluene	197 > 167	15.39	373.508	16549.350	373.508	11.285	MM	27-Jan-10	09:13:15	43.3170	108.3	8.3	16.8
2-Amino-46-dinitrotoluene	197 > 180	16.25	554.670	16549.350	554.670	16.758	bb			44.7736	111.9	11.9	62.6
246-Trinitrotoluene	227 > 210	15.17	429.161	16549.350	429.161	12.966	bb			40.7657	101.9	1.9	24.6
34-dinitrotoluene	182 > 152	14.12	706.970	16549.350	706.970	21.359	bb			23.5233	117.6	17.6	23.5
26-dinitrotoluene	182 > 152	17.33	1489.198	16549.350	1489.198	44.993	MM	27-Jan-10	09:16:33	40.8450	102.1	2.1	55.3
24-dinitrotoluene	182 > 152	17.95	294.371	16549.350	294.371	8.894	MM	27-Jan-10	09:18:14	35.0061	87.5	-12.5	12.2
26-dinitrotoluene-d3	185 > 155	17.14	16549.350	16549.350	16549.350	16549.350	bb			507.7005	101.5	1.5	1201.0
2-Nitrotoluene	137 > 46	20.74	216.978	16549.350	216.978	6.555	bb			39.4189	98.5	-1.5	24.6
4-Nitrotoluene	137 > 46	22.04	112.033	16549.350	112.033	3.385	bb			40.9388	102.3	2.3	13.4
3-Nitrotoluene	137 > 46	23.74	116.451	16549.350	116.451	3.518	bb			37.6853	94.2	-5.8	15.0
PETN	361 > 62	24.14	3951.517	16549.350	3951.517	119.386	bb			36.2742	90.7	-9.3	664.9

# 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

MAF  
1/27/10

Total 1698.8

Average 106.2

MAF 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): 10-1127

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



# Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Wed Jan 27 09:26:20 2010, Page 91 of 97

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA1.qtd, Time: Wed Jan 27 09:20:42 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125082a

Date: 27-Jan-2010

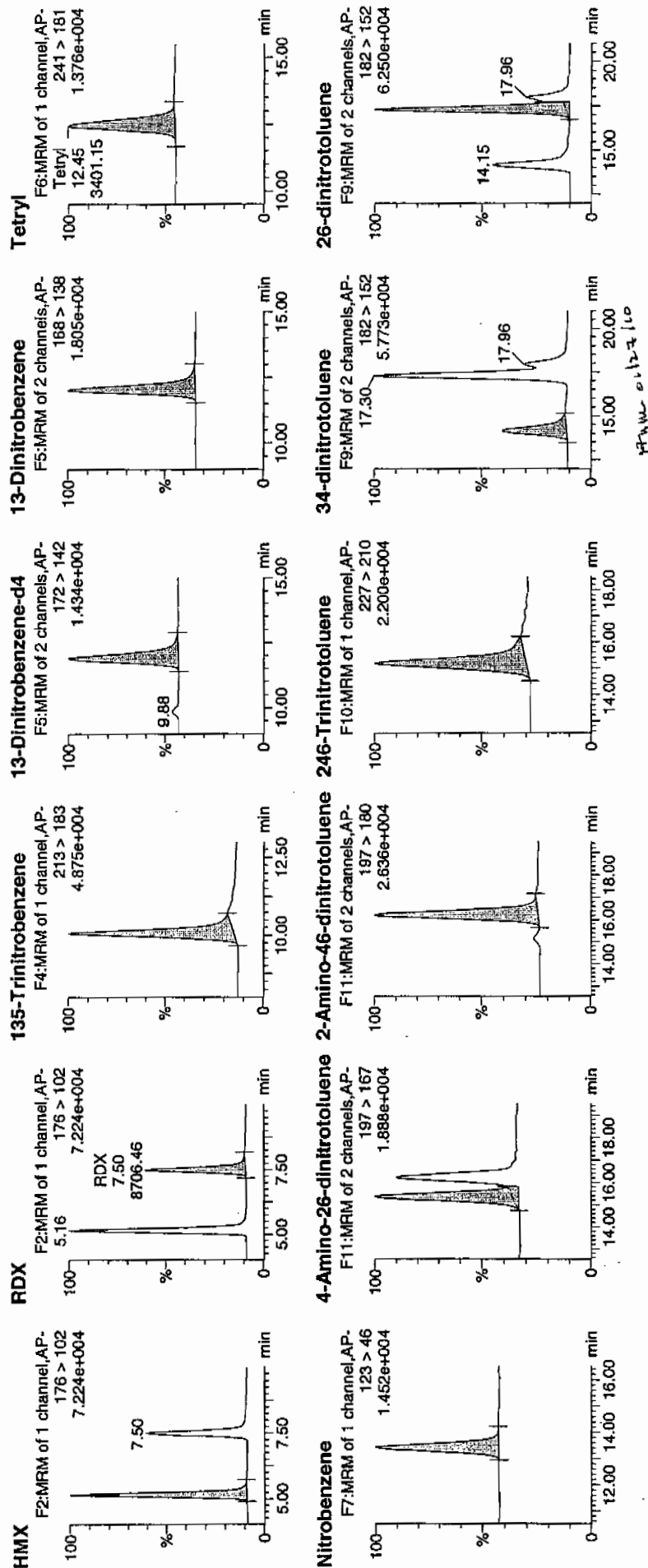
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ID: WXX100125-07CCV

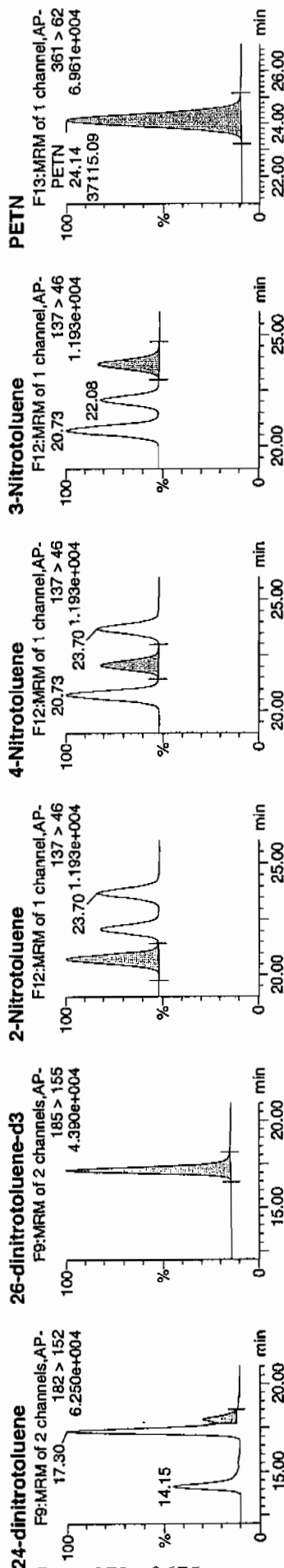
Vial: 1:1,B

WAT  
1/27/10

Page 371 of 675



Dataset: C:\MASSLYNX\New\_Exp\_PRO\012510expA1.qld, Time: Wed Jan 27 09:20:42 2010



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod	Date	Mod	Time	Area	%Red	%Dev	SN
WXX100125-07CCV	HMX	176 > 102	5.16	13210.575	3167.799	13210.575	2085.135	db					657.2461	109.5	9.5	2279.0
WXX100125-07CCV	RDX	176 > 102	7.50	8706.456	3167.799	8706.456	1374.212	bb					525.0402	104.2	4.2	1284.8
WXX100125-07CCV	135-Trinitrobenzene	213 > 183	10.07	11711.343	3167.799	11711.343	1848.498	bb					646.2312	107.7	7.7	547.8
WXX100125-07CCV	13-Dinitrobenzene-d4	172 > 142	11.89	3167.799	3167.799	3167.799	3167.799	bb					533.5869	106.7	6.7	394.3
WXX100125-07CCV	13-Dinitrobenzene	168 > 138	12.00	4444.137	3167.799	4444.137	701.455	bb					604.7116	100.8	0.8	391.7
WXX100125-07CCV	Tetryl	241 > 181	12.45	3401.154	3167.799	3401.154	536.832	bb					618.0341	103.0	3.0	450.9
WXX100125-07CCV	Nitrobenzene	123 > 46	13.44	2961.505	3167.799	2961.505	467.439	bb					546.9715	91.2	-8.8	173.1
WXX100125-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.38	5373.902	16066.954	5373.902	167.235	MM	27-Jan-10	09:13:36			641.9420	107.0	7.0	218.7
WXX100125-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.21	8584.110	16066.954	8584.110	267.136	bb					713.7229	119.0	18.0	633.2
WXX100125-07CCV	246-Trinitrotoluene	227 > 210	15.20	7451.651	16066.954	7451.651	231.894	bb					729.0789	121.5	21.5	348.9
WXX100125-07CCV	34-dinitrotoluene	182 > 152	14.15	9384.071	16066.954	9384.071	292.030	bb					321.6141	107.2	7.2	526.9
WXX100125-07CCV	26-dinitrotoluene	182 > 152	17.30	21400.100	16066.954	21400.100	665.966	MM	27-Jan-10	09:17:09			604.5749	100.8	0.8	1051.7
WXX100125-07CCV	24-dinitrotoluene	182 > 152	17.96	4446.075	16066.954	4446.075	138.361	MM	27-Jan-10	09:17:39			544.5933	90.8	-9.2	210.1
WXX100125-07CCV	26-dinitrotoluene-d3	185 > 155	17.15	16066.954	16066.954	16066.954	16066.954	bb					492.9016	98.6	-1.4	2492.4
WXX100125-07CCV	2-Nitrotoluene	137 > 46	20.73	2824.214	16066.954	2824.214	87.889	bb					528.4867	88.1	-11.9	576.1
WXX100125-07CCV	4-Nitrotoluene	137 > 46	22.08	1666.586	16066.954	1666.586	51.864	bb					627.2846	104.5	4.5	354.1
WXX100125-07CCV	3-Nitrotoluene	137 > 46	23.70	1862.177	16066.954	1862.177	57.951	bb					620.7226	103.5	3.5	373.5
WXX100125-07CCV	PETN	361 > 62	24.14	37115.086	16066.954	37115.086	1155.013	bb					662.9021	110.5	10.5	5699.4

# 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

done 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): 10-1127

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\12510expA1.qld, Time: Wed Jan 27 09:20:42 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125084a

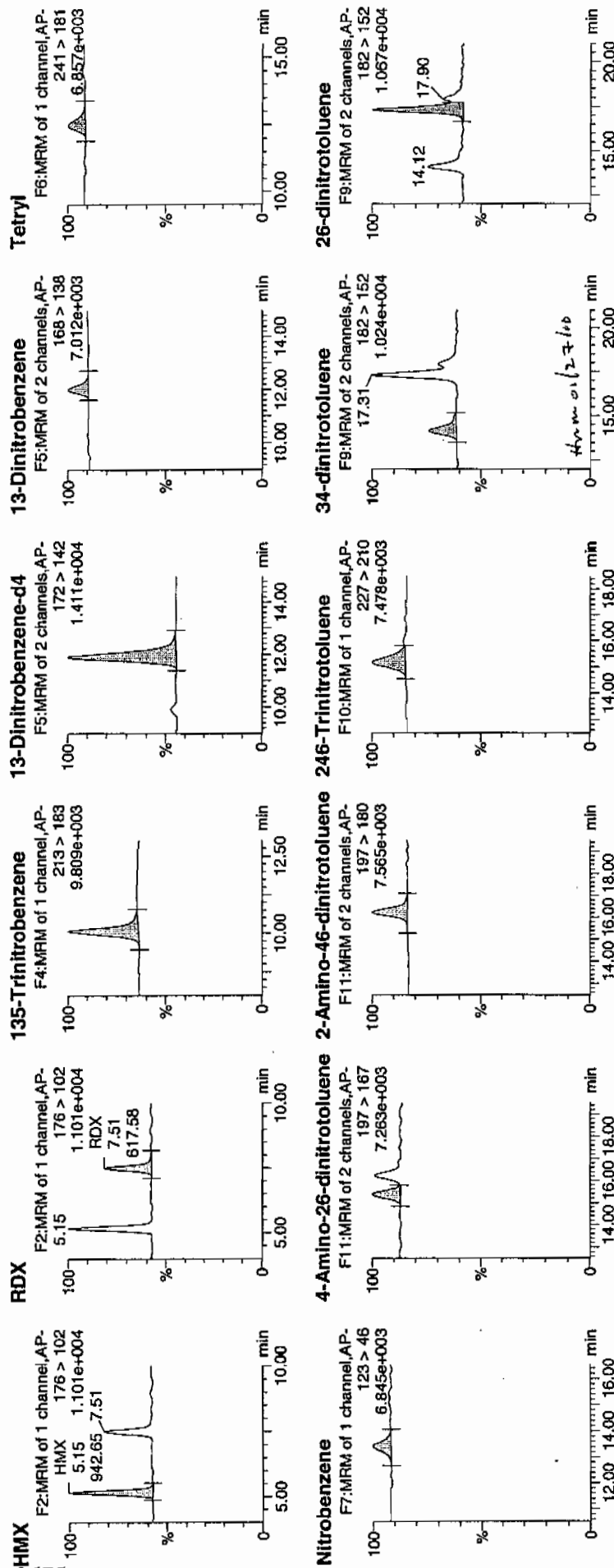
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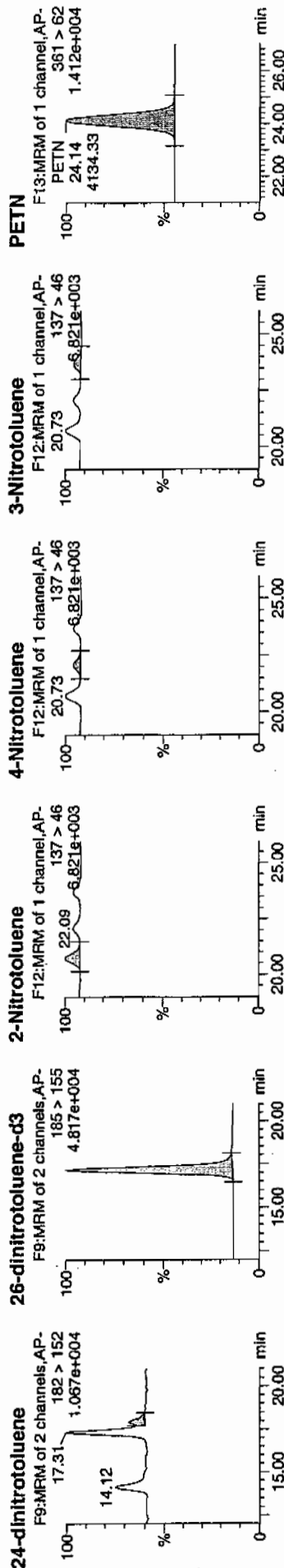
ID: WXX100125-08CRI

Vial: 1:1,C

12/10



Dataset: C:\MASSLYNX\New\_Exp\_PRO\012510expA1.qld, Time: Wed Jan 27 09:20:42 2010



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Conc (ng/ml)	% Rec	% Dev	IS/N
WXX100125-08CRI	HMX	176 > 102	5.15	942.653	3022.007	942.653	155.965	bb			49.1610	122.9	22.9	128.3
WXX100125-08CRI	RDX	176 > 102	7.51	617.581	3022.007	617.581	102.181	bb			46.4753	116.2	16.2	71.2
WXX100125-08CRI	135-Trinitrobenzene	213 > 183	10.07	1058.864	3022.007	1058.864	175.192	bb			52.2164	130.5	30.5	144.7
WXX100125-08CRI	13-Dinitrobenzene-d4	172 > 142	11.89	3022.007	3022.007	3022.007	3022.007	bb			509.0296	101.8	1.8	273.5
WXX100125-08CRI	13-Dinitrobenzene	168 > 138	12.00	264.208	3022.007	264.208	43.714	bb			37.6850	94.2	-5.8	29.9
WXX100125-08CRI	Tetryl	241 > 181	12.48	302.151	3022.007	302.151	49.992	bb			57.5536	143.9	43.9	35.6
WXX100125-08CRI	Nitrobenzene	123 > 46	13.41	269.198	3022.007	269.198	44.540	bb			52.1178	130.3	30.3	22.6
WXX100125-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.35	387.081	17914.533	387.081	10.804	MM	27-Jan-10	09:13:45	41.4702	103.7	3.7	43.3
WXX100125-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.25	551.404	17914.533	551.404	15.390	bb			41.1180	102.8	2.8	26.9
WXX100125-08CRI	246-Trinitrotoluene	227 > 210	15.17	563.193	17914.533	563.193	15.719	bd			49.4205	123.6	23.6	27.5
WXX100125-08CRI	34-dinitrotoluene	182 > 152	14.17	735.041	17914.533	735.041	20.515	bb			22.5935	113.0	13.0	39.3
WXX100125-08CRI	26-dinitrotoluene	182 > 152	17.31	1630.073	17914.533	1630.073	45.496	MM	27-Jan-10	09:17:20	41.3018	103.3	3.3	119.5
WXX100125-08CRI	24-dinitrotoluene	182 > 152	17.90	340.404	17914.533	340.404	9.501	MM	27-Jan-10	09:17:32	37.3954	93.5	-6.5	23.6
WXX100125-08CRI	26-dinitrotoluene-d3	185 > 155	17.14	17914.533	17914.533	17914.533	17914.533	bb			549.5815	109.9	9.9	578.0
WXX100125-08CRI	2-Nitrotoluene	137 > 46	20.73	266.947	17914.533	266.947	7.451	bb			44.8012	112.0	12.0	80.3
WXX100125-08CRI	4-Nitrotoluene	137 > 46	22.09	122.399	17914.533	122.399	3.416	bb			41.3183	103.3	3.3	35.6
WXX100125-08CRI	3-Nitrotoluene	137 > 46	23.69	143.723	17914.533	143.723	4.011	bb			42.9666	107.4	7.4	37.7
WXX100125-08CRI	PETN	361 > 62	24.14	4134.333	17914.533	4134.333	115.390	bb			34.2406	85.6	-14.4	2130.1

# 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	

*MTT*  
*1/27/10*

Total 1786.2

*sum 01/27/10*

Average 111.6 ✓

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1127

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



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

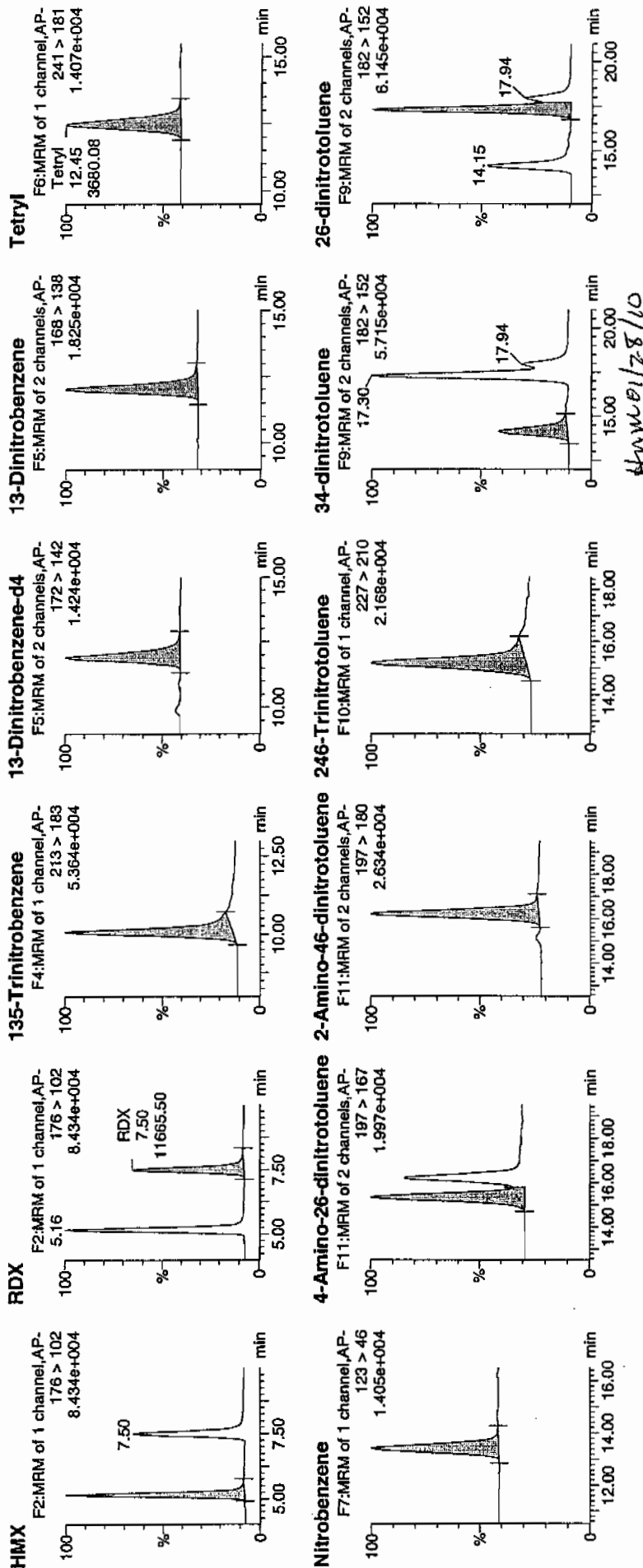
ID: WXX100125-07CCV

Vial: 1:1,B

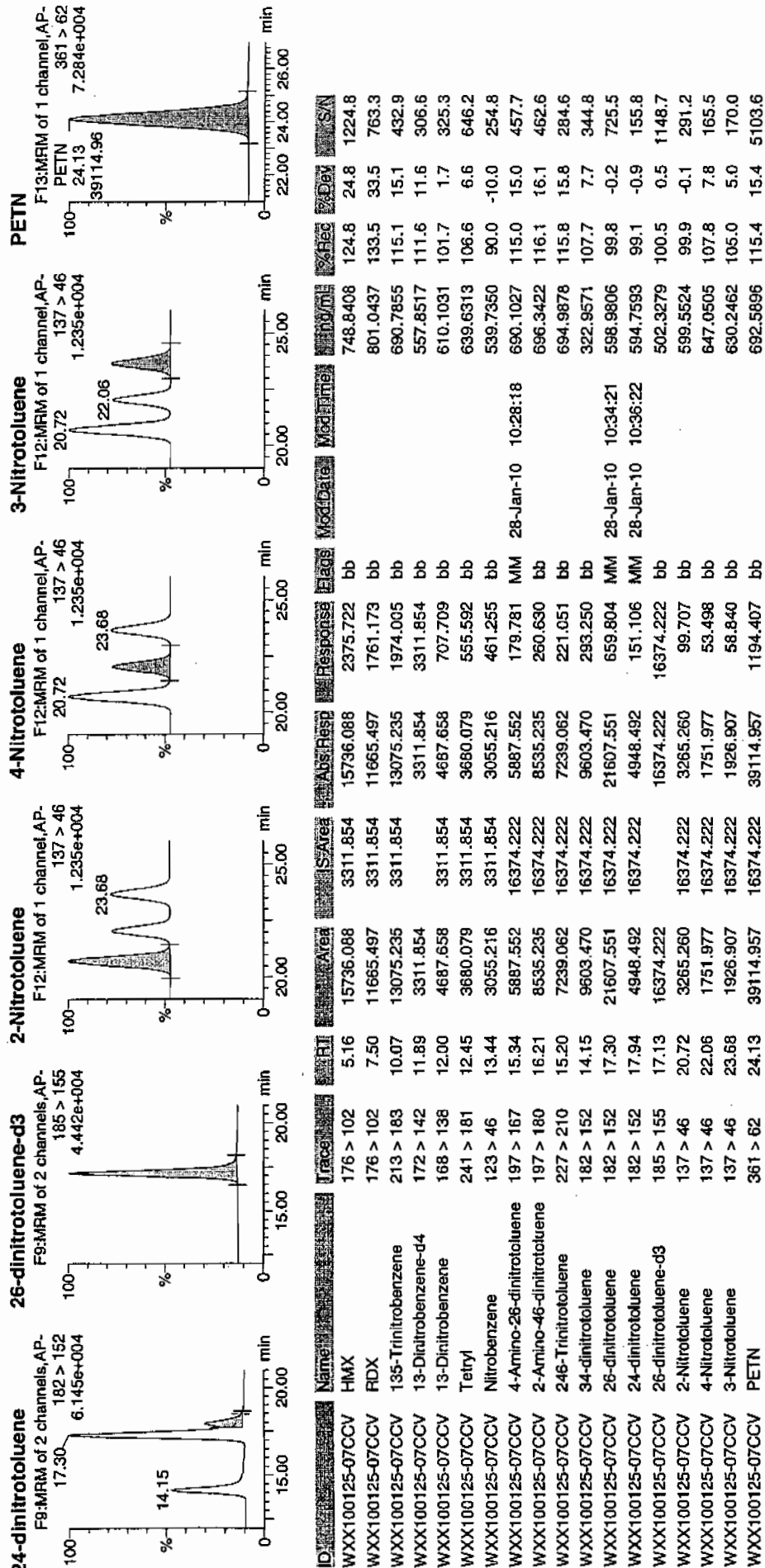
1/28/10

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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: 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

*mtt 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): 10-1127

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

Printed: Thu Jan 28 10:43:32 2010, Page 25 of 121

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

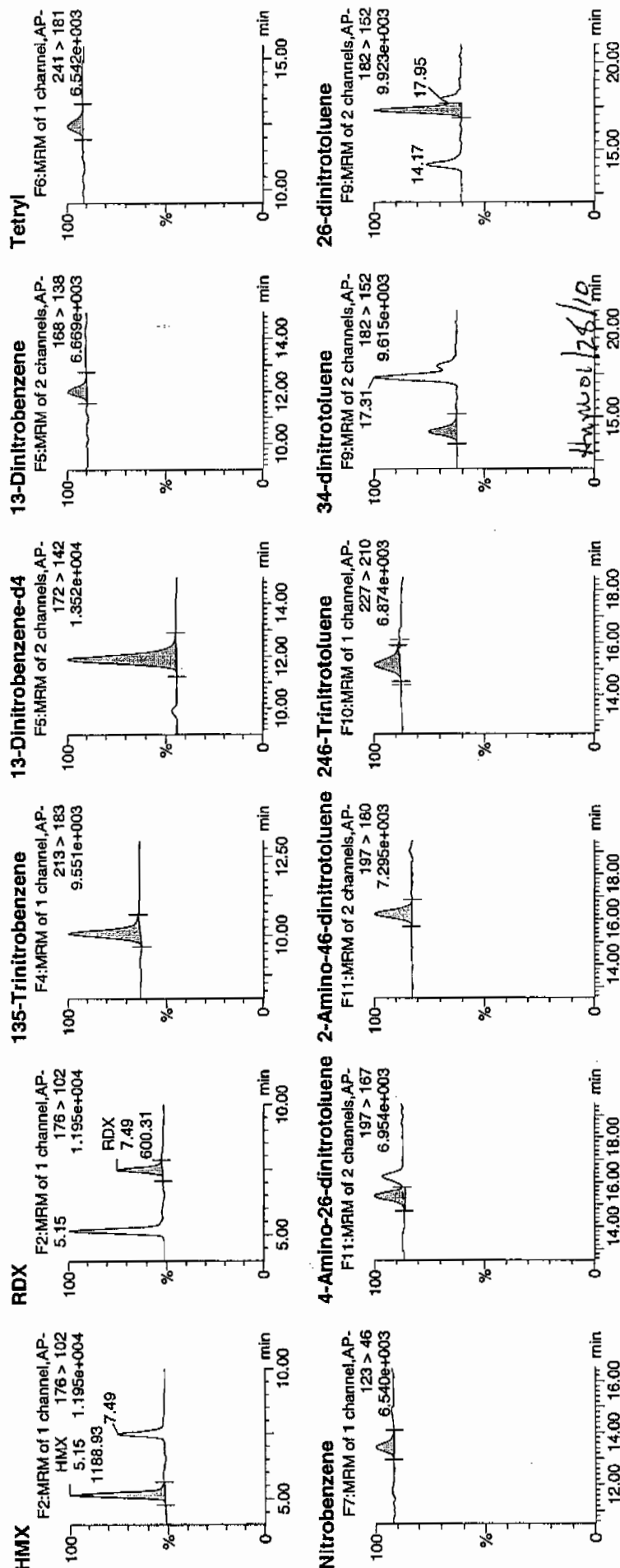
ID: WXX100125-08CRI

Vial: 1:1,C

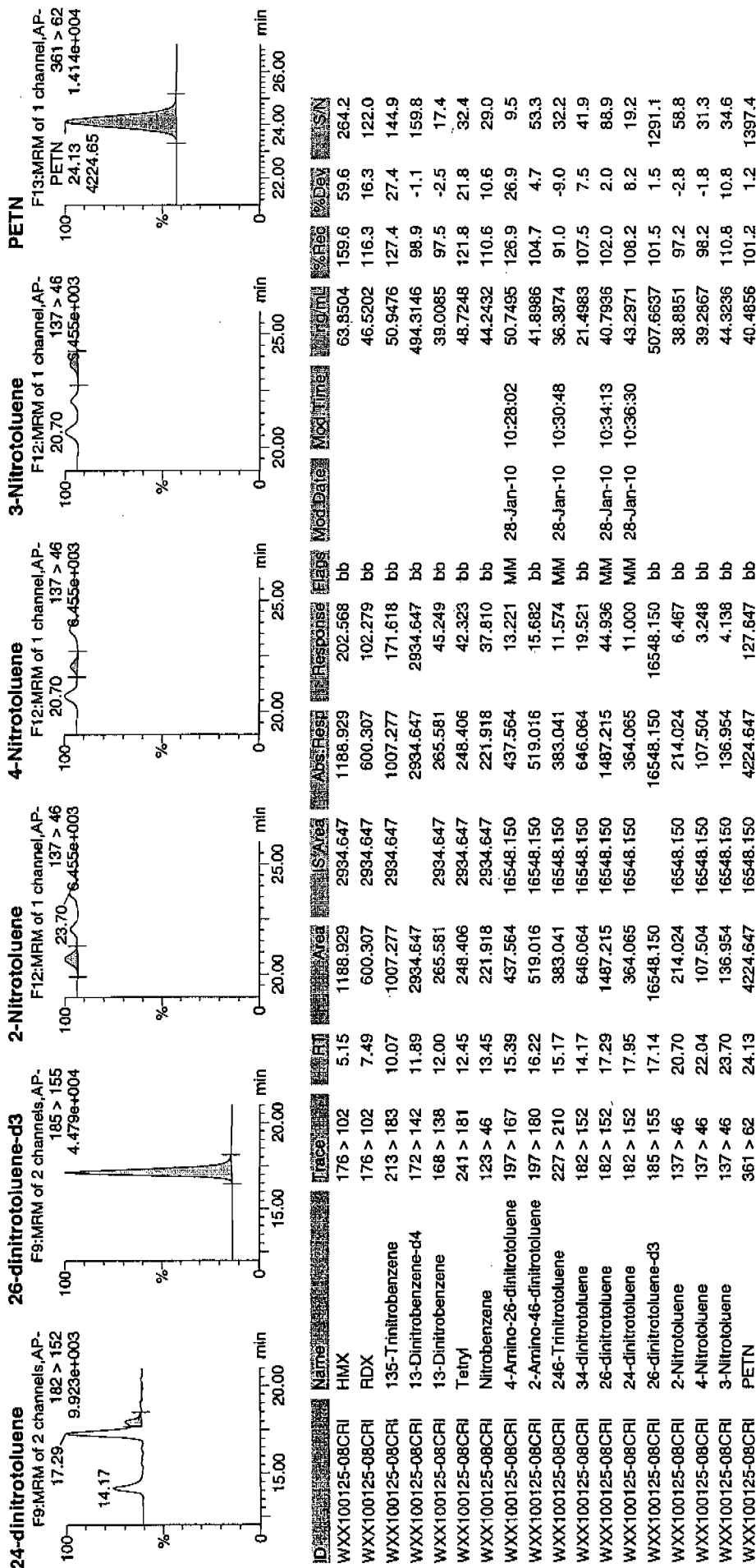
1/18/10  
MPT

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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 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

*MTT  
1/28/10*

Total 1780.9

Average 111.3

*done 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): 10-1127

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



# Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Thu Jan 28 10:43:32 2010, Page 47 of 121

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

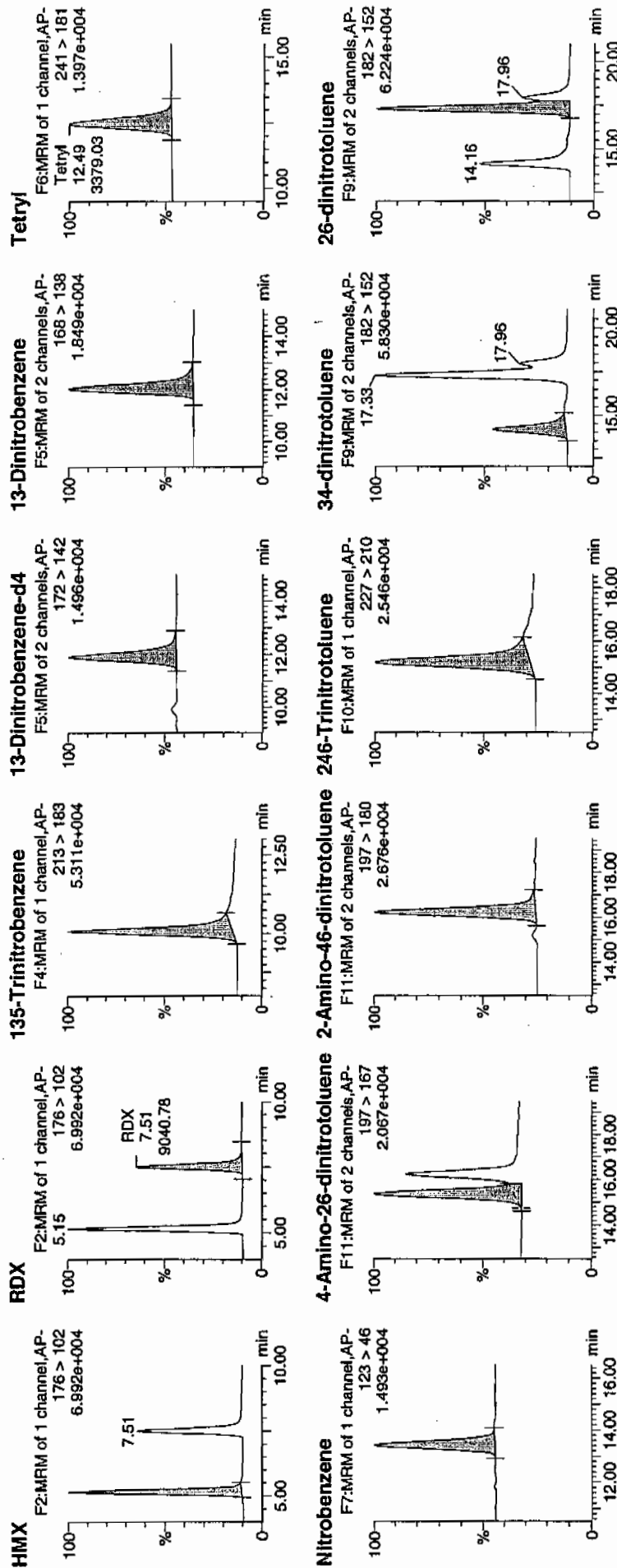
Time: 15:58:33

ID: WXX100125-07CCV

Vial: 1:1,B

1/28/10

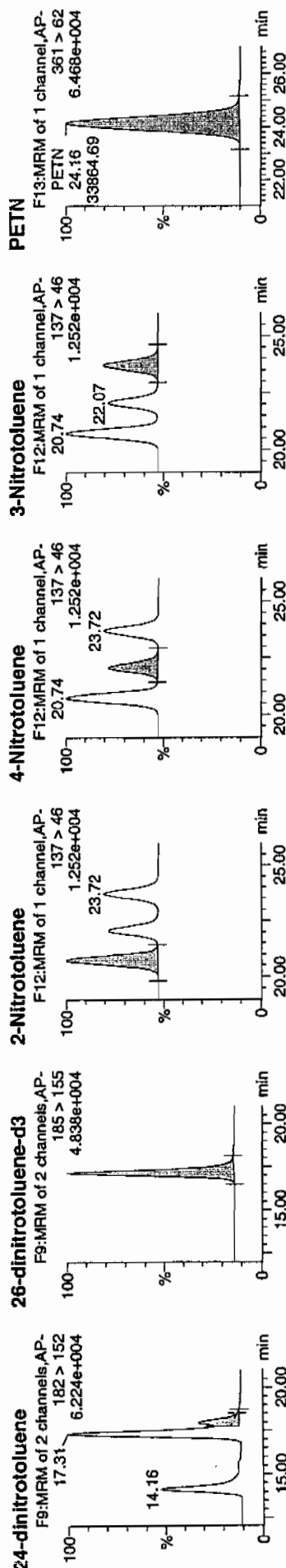
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Amo/28/10

Dataset: C:\MASSLYNX\New Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

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ID	Name	Trace	RT	Area	S Area	Abs. Resp	Response	Flags	Mod Date	Mod Time	IntMn	Exp Rec	Dev	SN
WVXX100125-07CCV	HMx	176 > 102	5.15	12453.394	3269.034	12453.394	1904.751	bb			600.3883	100.1	0.1	1753.9
WVXX100125-07CCV	ROX	176 > 102	7.51	9040.780	3269.034	9040.780	1382.791	bb			528.9420	104.8	4.8	1059.1
WVXX100125-07CCV	135-Trinitrobenzene	213 > 183	10.07	12712.248	3269.034	12712.248	1944.343	bb			680.2555	113.4	13.4	703.1
WVXX100125-07CCV	13-Dinitrobenzene-d4	172 > 142	11.90	3269.034		3269.034	3269.034	bb			550.6390	110.1	10.1	370.4
WVXX100125-07CCV	13-Dinitrobenzene	188 > 138	12.03	4556.892	3269.034	4556.892	696.978	bb			600.8524	100.1	0.1	344.9
WVXX100125-07CCV	Tetryl	241 > 181	12.49	3379.031	3269.034	3379.031	516.824	bb			594.9994	99.2	-0.8	356.6
WVXX100125-07CCV	Nitrobenzene	123 > 46	13.45	3005.327	3269.034	3005.327	459.666	bb			537.8760	89.6	-10.4	181.4
WVXX100125-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.38	6032.938	17302.844	6032.938	174.334	MM	28-Jan-10	10:27:49	669.1924	111.5	11.5	135.6
WVXX100125-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.25	8525.245	17302.844	8525.245	246.354	bb			658.1991	109.7	9.7	403.8
WVXX100125-07CCV	246-Trinitrotoluene	227 > 210	15.20	8735.267	17302.844	8735.267	252.423	bb			793.6230	132.3	32.3	419.6
WVXX100125-07CCV	34-dinitrotoluene	182 > 152	14.16	10658.028	17302.844	10658.028	307.985	bb			339.1851	113.1	13.1	347.5
WVXX100125-07CCV	26-dinitrotoluene	182 > 152	17.31	23025.027	17302.844	23025.027	665.354	MM	28-Jan-10	10:33:50	604.0189	100.7	0.7	504.4
WVXX100125-07CCV	24-dinitrotoluene	182 > 152	17.96	5319.846	17302.844	5319.846	153.728	MM	28-Jan-10	10:36:57	605.0769	100.8	0.8	118.6
WVXX100125-07CCV	26-dinitrotoluene-d3	185 > 155	17.15	17302.844		17302.844	17302.844	bb			530.8162	106.2	6.2	1375.2
WVXX100125-07CCV	2-Nitrotoluene	137 > 46	20.74	2878.468	17302.844	2878.468	83.179	bb			500.1657	83.4	-16.6	338.1
WVXX100125-07CCV	4-Nitrotoluene	137 > 46	22.07	1498.221	17302.844	1498.221	43.294	bb			523.6352	87.3	-12.7	180.6
WVXX100125-07CCV	3-Nitrotoluene	137 > 46	23.72	1762.278	17302.844	1762.278	50.925	bb			545.4652	90.9	-9.1	199.8
WVXX100125-07CCV	PETN	361 > 62	24.16	33864.688	17302.844	33864.688	978.587	bb			537.2463	89.5	-10.5	5249.6

# 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

Total 1626.4

Average 101.7

101.7  
1/28/10

101.7  
1/28/10

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): 10-1127

Lab Code: GEI

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

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

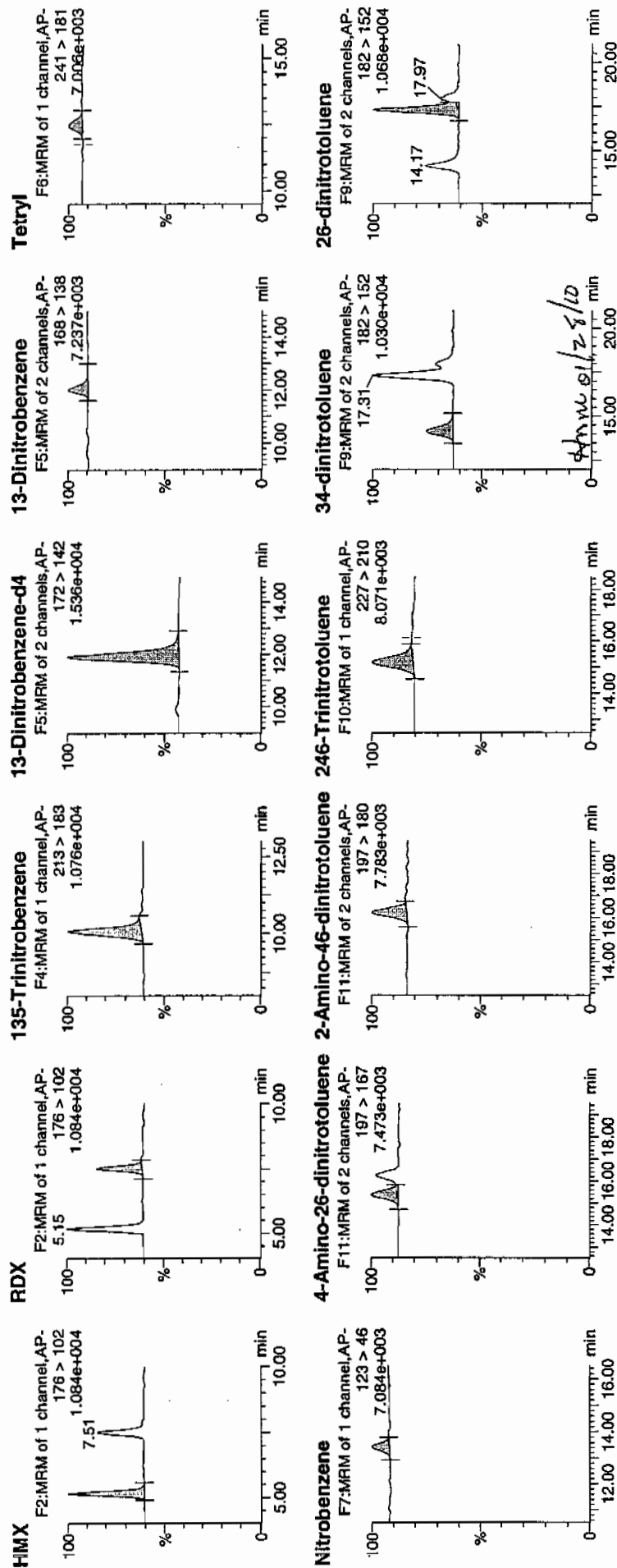
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ID: WXX100125-08CRI

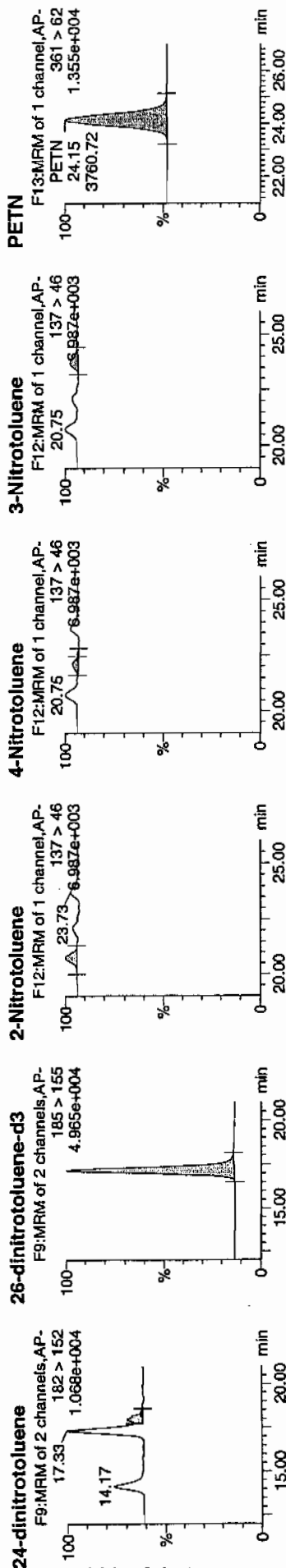
Vial: 1:1,C

1/28/10

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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	Area	%Area	Dev	SN
WXX100125-08CRI	HMX	176 > 102	5.15	871.449	3323.269	871.449	131.113	bb			41.3276	103.3	3.3	73.1
WXX100125-08CRI	ROX	176 > 102	7.51	574.176	3323.269	574.176	86.387	bb			39.2920	98.2	-1.8	43.0
WXX100125-08CRI	135-Trinitrobenzene	213 > 183	10.07	1165.970	3323.269	1165.970	175.425	bb			52.2991	130.7	30.7	198.2
WXX100125-08CRI	13-Dinitrobenzene	172 > 142	11.89	3323.269	3323.269	3323.269	3323.269	bb			559.7744	112.0	12.0	217.6
WXX100125-08CRI	13-Dinitrobenzene	168 > 138	12.00	258.859	3323.269	258.859	38.946	bb			33.5750	83.9	-16.1	38.5
WXX100125-08CRI	Tetryl	241 > 181	12.45	213.987	3323.269	213.987	32.195	MM	28-Jan-10	10:24:18	37.0651	92.7	-7.3	24.8
WXX100125-08CRI	Nitrobenzene	123 > 46	13.45	202.605	3323.269	202.605	30.483	bb			35.6693	89.2	-10.8	15.2
WXX100125-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.39	421.114	18050.623	421.114	11.665	MM	28-Jan-10	10:27:38	44.7762	111.9	11.9	47.1
WXX100125-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.22	541.154	18050.623	541.154	14.990	bb			40.0495	100.1	0.1	67.9
WXX100125-08CRI	246-Trinitrotoluene	227 > 210	15.17	713.776	18050.623	713.776	19.772	bb			62.3485	155.9	55.9	25.6
WXX100125-08CRI	34-dinitrotoluene	182 > 152	14.17	713.776	18050.623	713.776	19.772	bb			21.7744	108.9	8.9	50.9
WXX100125-08CRI	26-dinitrotoluene	182 > 152	17.33	1618.234	18050.623	1618.234	44.825	MM	28-Jan-10	10:33:43	40.6927	101.7	1.7	107.8
WXX100125-08CRI	24-dinitrotoluene	182 > 152	17.97	369.767	18050.623	369.767	10.242	MM	28-Jan-10	10:37:09	40.3148	100.8	0.8	22.8
WXX100125-08CRI	26-dinitrotoluene-d3	185 > 155	17.16	18050.623	18050.623	18050.623	18050.623	bb			553.7565	110.8	10.8	1310.0
WXX100125-08CRI	2-Nitrotoluene	137 > 46	20.75	197.622	18050.623	197.622	5.474	bb			32.9165	82.3	-17.7	51.1
WXX100125-08CRI	4-Nitrotoluene	137 > 46	22.13	109.852	18050.623	109.852	3.043	MM	28-Jan-10	10:40:23	36.8033	92.0	-8.0	23.8
WXX100125-08CRI	3-Nitrotoluene	137 > 46	23.73	138.762	18050.623	138.762	3.844	bb			41.1707	102.9	2.9	32.6
WXX100125-08CRI	PETN	361 > 62	24.15	3760.717	18050.623	3760.717	104.171	bb			28.5415	71.4	-28.6	567.6

# 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:* 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): 10-1127

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

Printed: Thu Jan 28 10:43:32 2010, Page 63 of 121

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

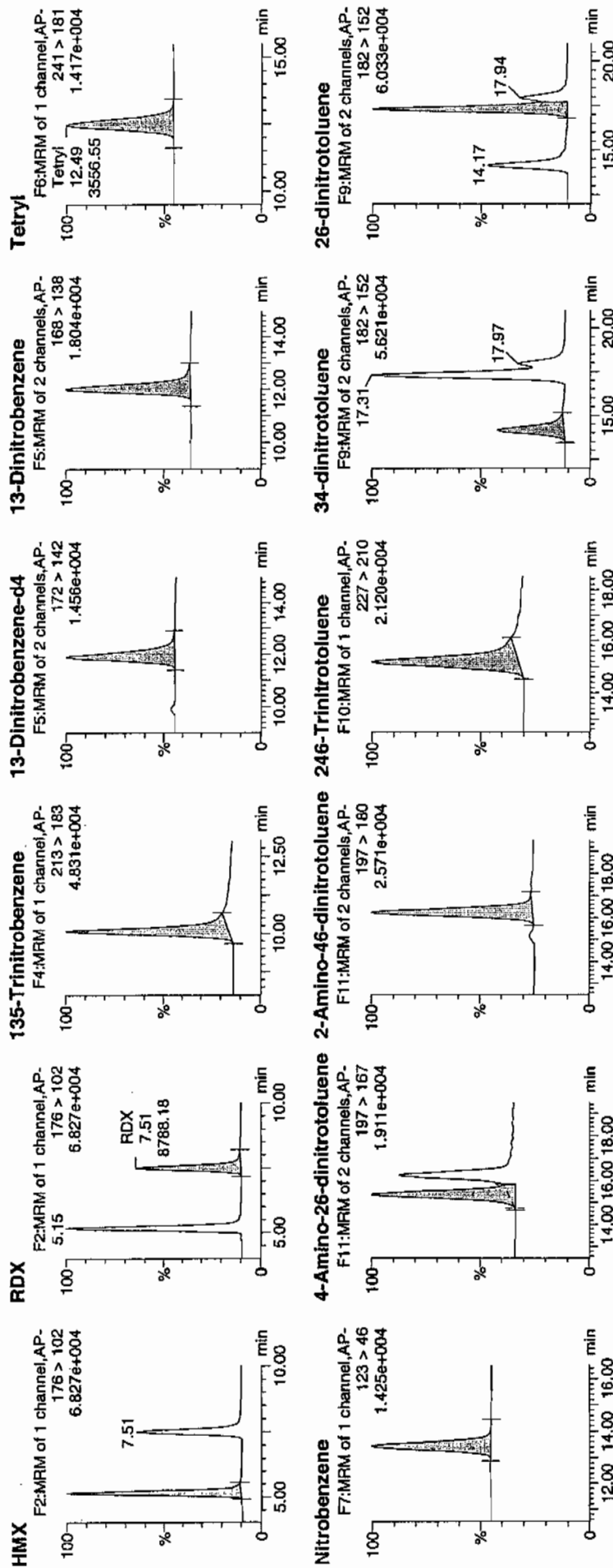
Time: 19:54:59

ID: WXX100125-07CCV

Vial: 1:1,B

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1/28/10



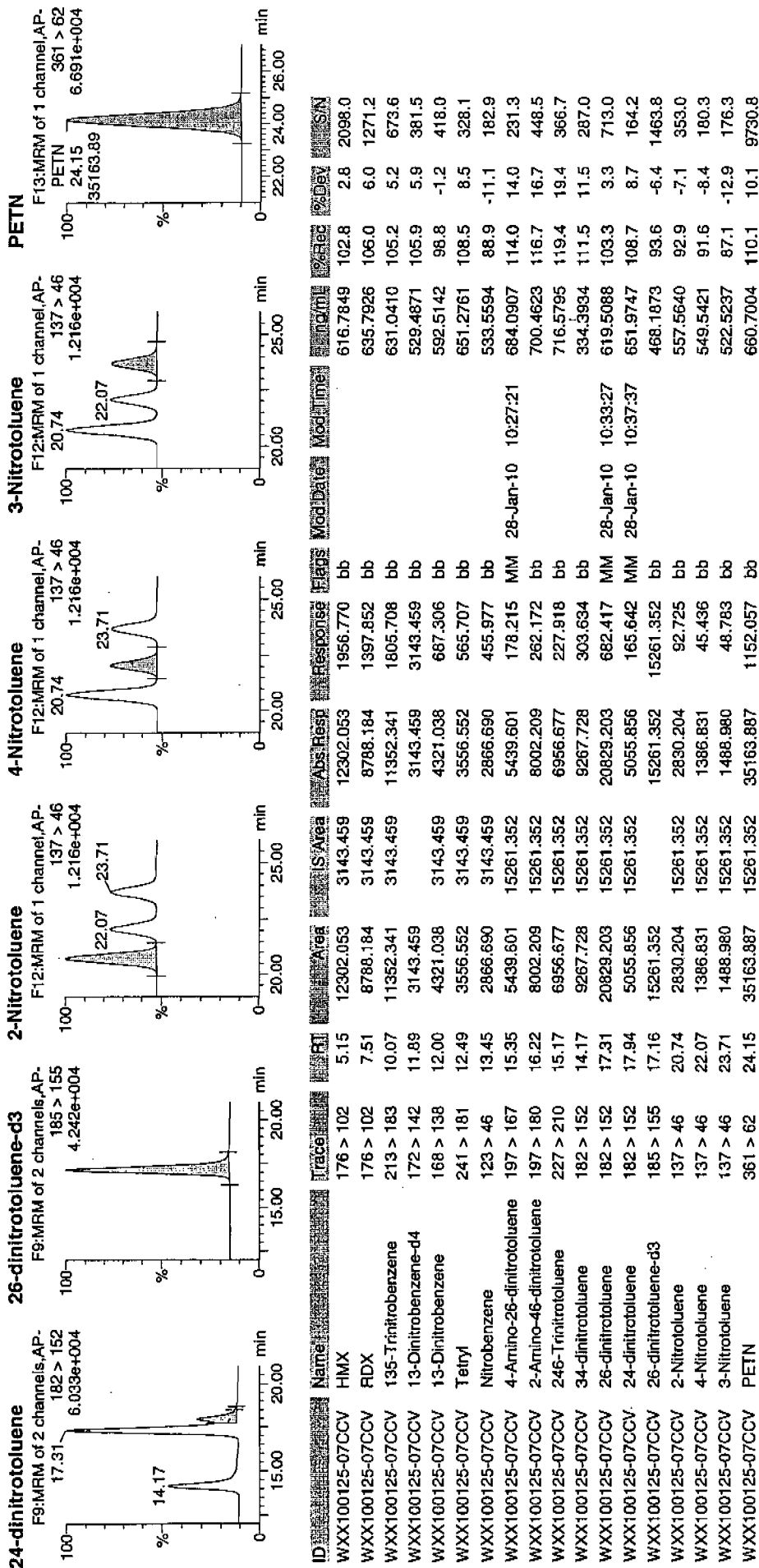
how 01/28/10

# 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

MTT  
1/28/10

Total 1665.5

Average 104.1

done 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): 10-1127

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

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Date: 27-Jan-2010

Time: 20:53:56

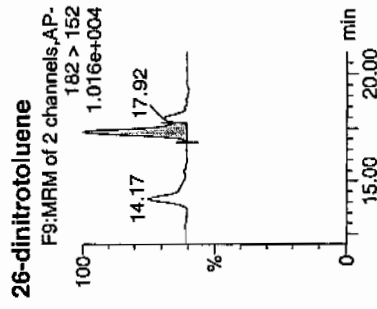
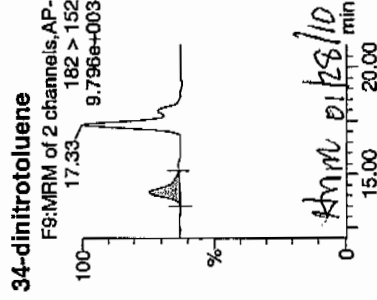
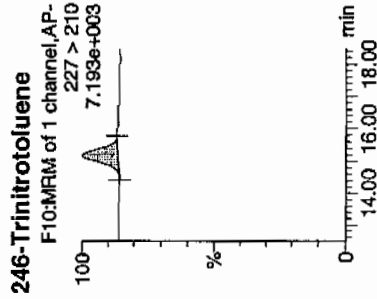
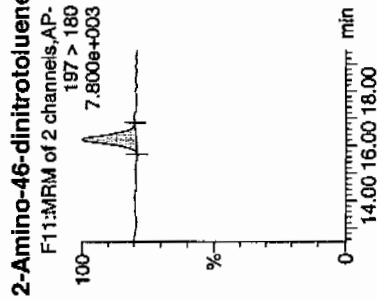
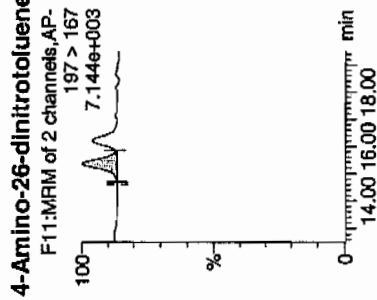
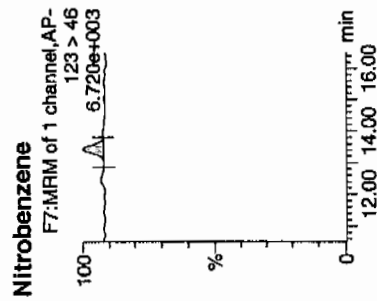
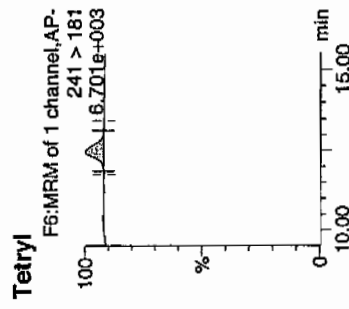
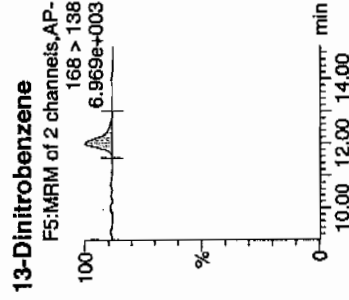
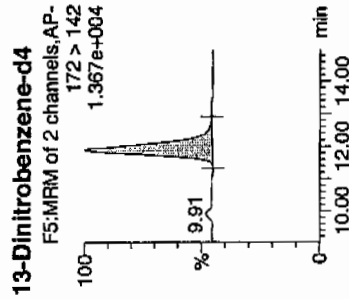
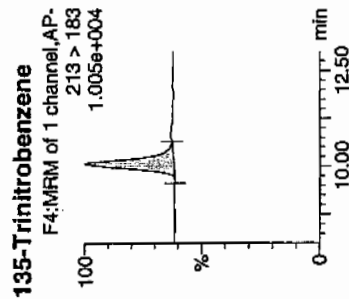
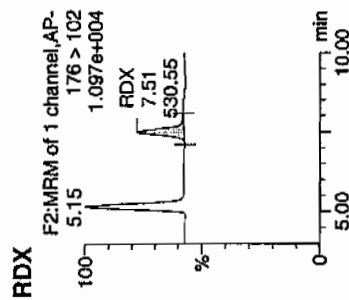
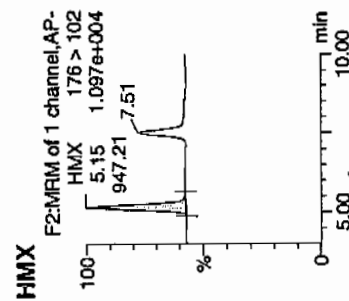
ID: WXX100125-08CRI

Vial: 1:1,C

1/28/10

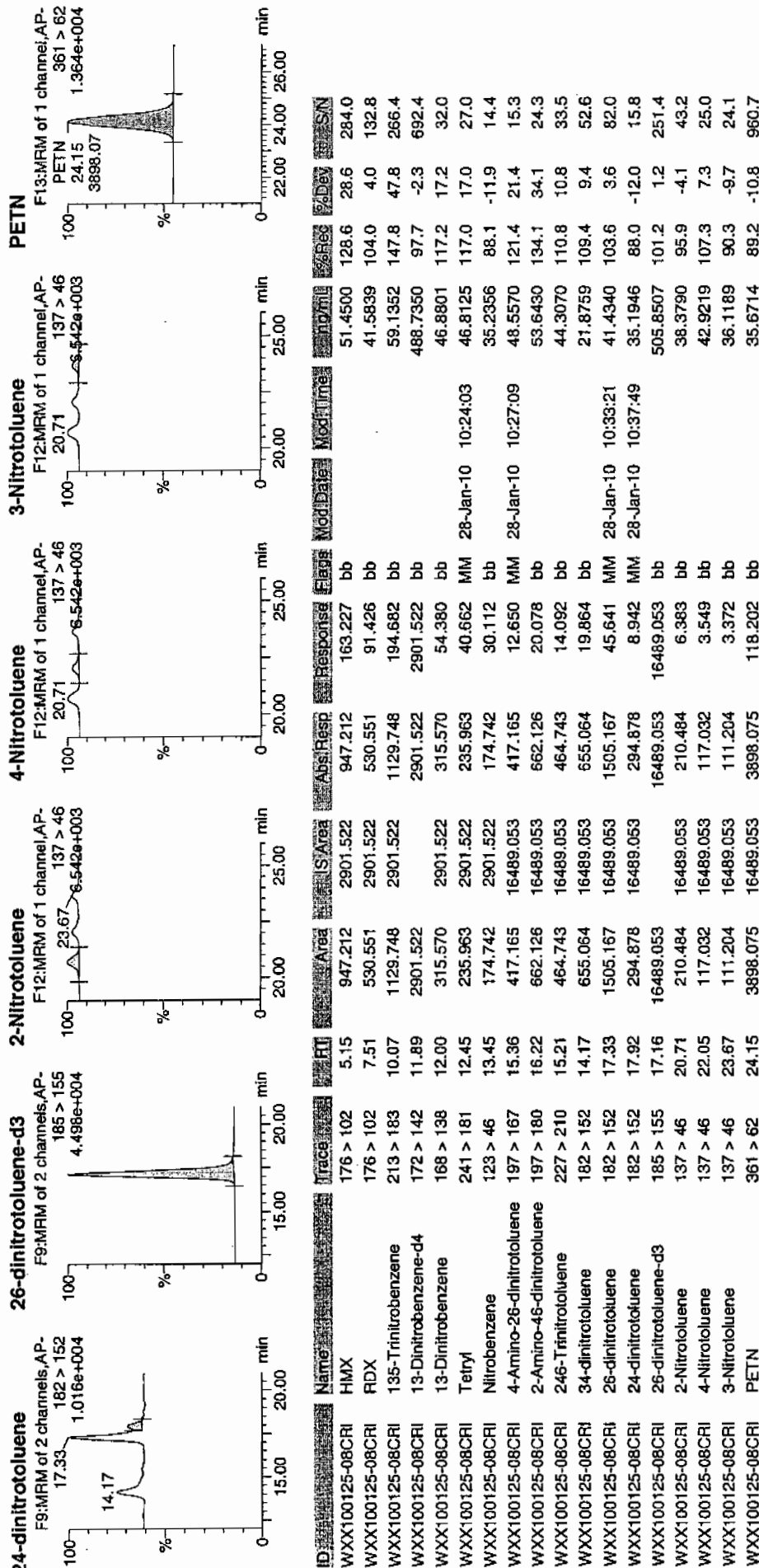
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**Quantify Sample Report**  
 GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010



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	

*not  
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): 10-1127

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\1012510expA2.qtd, Time: Thu Jan 28 10:42:53 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125129a

Date: 28-Jan-2010

Time: 02:18:11

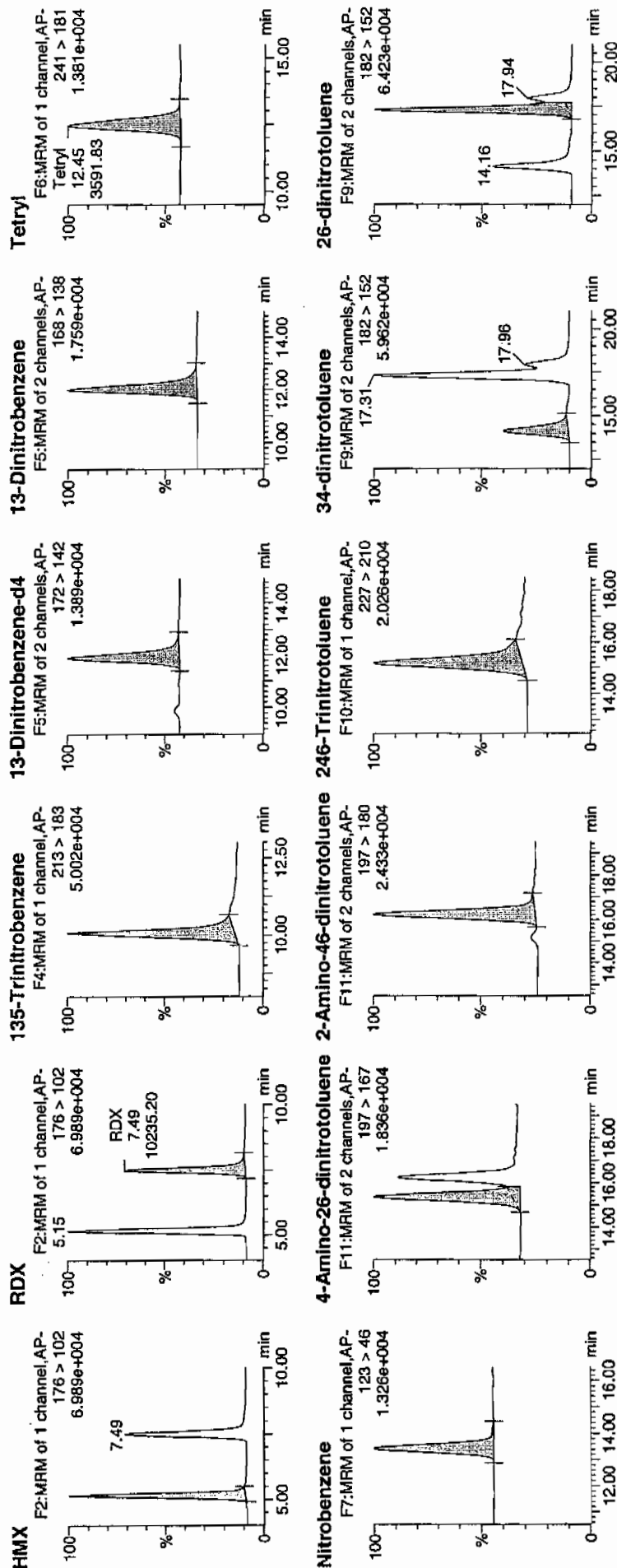
ID: WXX100125-07CCV

Vial: 1:1,B

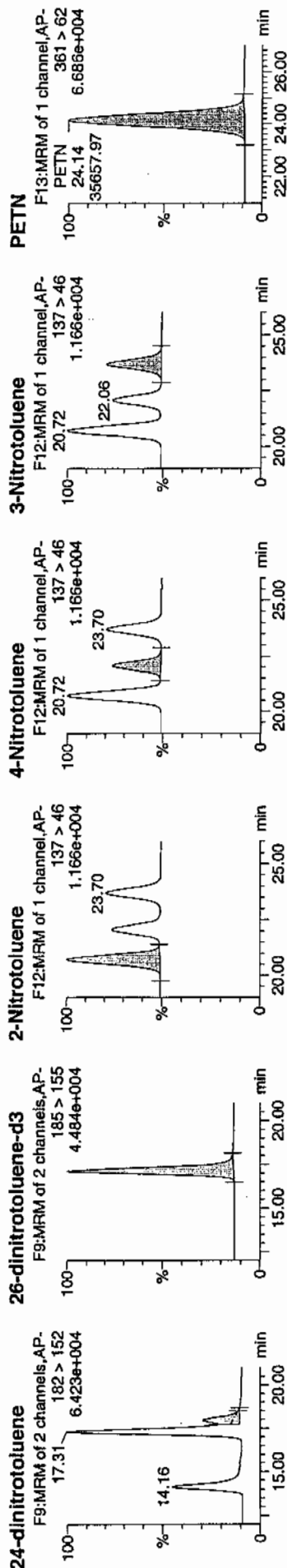
1/28/10

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HW 8129/10



Name	Trace	RT	Area	IS Area	Abs Resp	Response	Class	Mod Date	Mod Time	Ing/mL	% Rec	% Dev	SN
135-Trinitrobenzene	176 > 102	5.15	12666.174	3076.330	12666.174	2058.650	bb			648.8960	108.1	8.1	2673.8
13-Dinitrobenzene-d4	176 > 102	7.49	10235.204	3076.330	10235.204	1663.541	bb			756.6373	126.1	26.1	1819.4
13-Dinitrobenzene	213 > 183	10.07	12124.401	3076.330	12124.401	1970.595	bb			689.5748	114.9	14.9	1128.8
13-Dinitrobenzene	172 > 142	11.90	3076.330		3076.330	3076.330	bb			518.1798	103.6	3.6	239.3
13-Dinitrobenzene	168 > 138	12.00	4363.751	3076.330	4363.751	709.246	bb			611.4283	101.9	1.9	302.0
Tetryl	241 > 181	12.45	3591.830	3076.330	3591.830	583.785	bb			672.0887	112.0	12.0	480.4
Nitrobenzene	123 > 46	13.45	2757.729	3076.330	2757.729	448.217	bb			524.4795	87.4	-12.6	219.2
4-Amino-26-dinitrotoluene	197 > 167	15.35	5380.591	16735.004	5380.591	160.759	MM	28-Jan-10	10:26:28	617.0833	102.8	2.8	210.4
2-Amino-46-dinitrotoluene	197 > 180	16.22	7893.479	16735.004	7893.479	235.837	bb			630.1015	105.0	5.0	263.6
246-Tinitrotoluene	227 > 210	15.17	6876.185	16735.004	6876.185	205.443	bb			645.9179	107.7	7.7	256.5
34-dinitrotoluene	182 > 152	14.16	9487.213	16735.004	9487.213	283.454	bb			312.1693	104.1	4.1	448.2
26-dinitrotoluene	182 > 152	17.31	22371.311	16735.004	22371.311	668.399	MM	28-Jan-10	10:32:28	606.7831	101.1	1.1	754.2
24-dinitrotoluene	182 > 152	17.94	5219.031	16735.004	5219.031	155.932	MM	28-Jan-10	10:38:43	613.7522	102.3	2.3	157.4
26-dinitrotoluene-d3	185 > 155	17.15	16735.004		16735.004	16735.004	bb			513.3960	102.7	2.7	1711.3
2-Nitrotoluene	137 > 46	20.72	2842.840	16735.004	2842.840	84.937	bb			510.7362	85.1	-14.9	301.3
4-Nitrotoluene	137 > 46	22.08	1401.742	16735.004	1401.742	41.881	bb			506.5388	84.4	-15.6	154.0
3-Nitrotoluene	137 > 46	23.70	1653.960	16735.004	1653.960	49.416	bb			529.3091	88.2	-11.8	175.4
PETN	361 > 62	24.14	35657.973	16735.004	35657.973	1065.371	bb			597.6628	99.6	-0.4	7805.0

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

*101.9  
1/28/10*

Total 1630.7

Average 101.9

*Hmm 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): 10-1127

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125131a

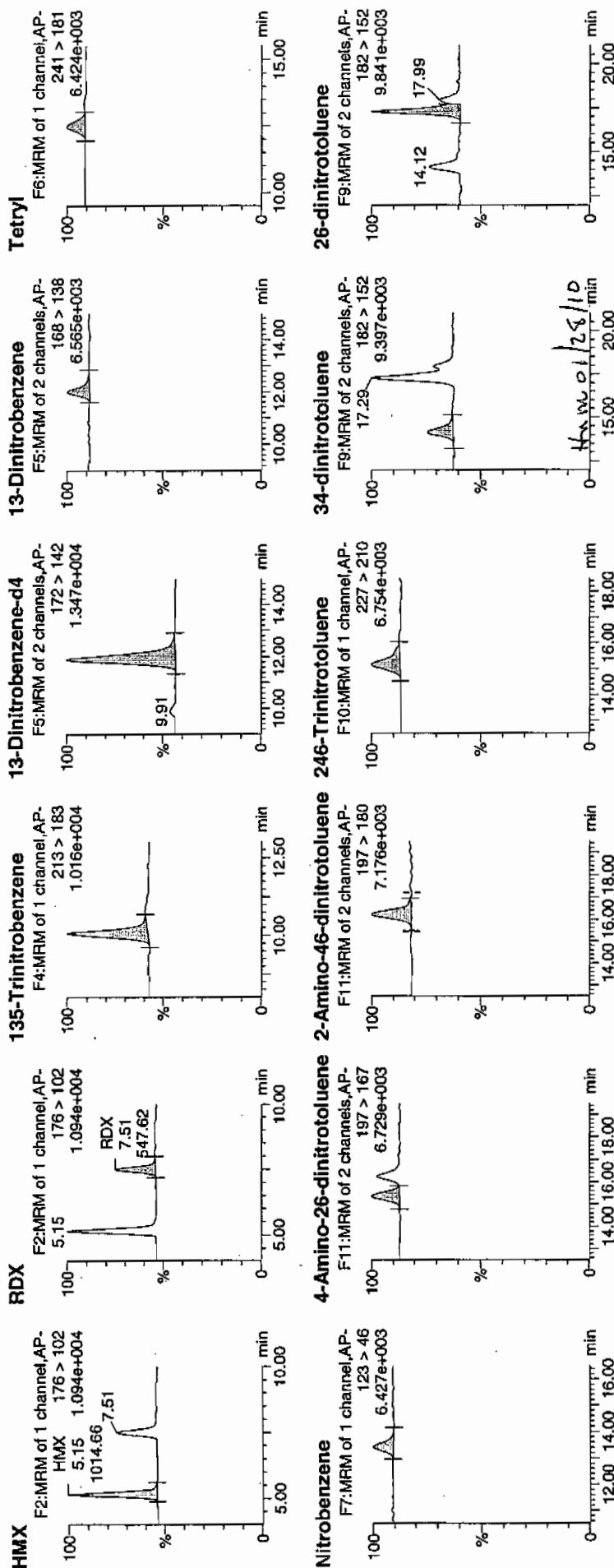
Date: 28-Jan-2010

Time: 03:17:15

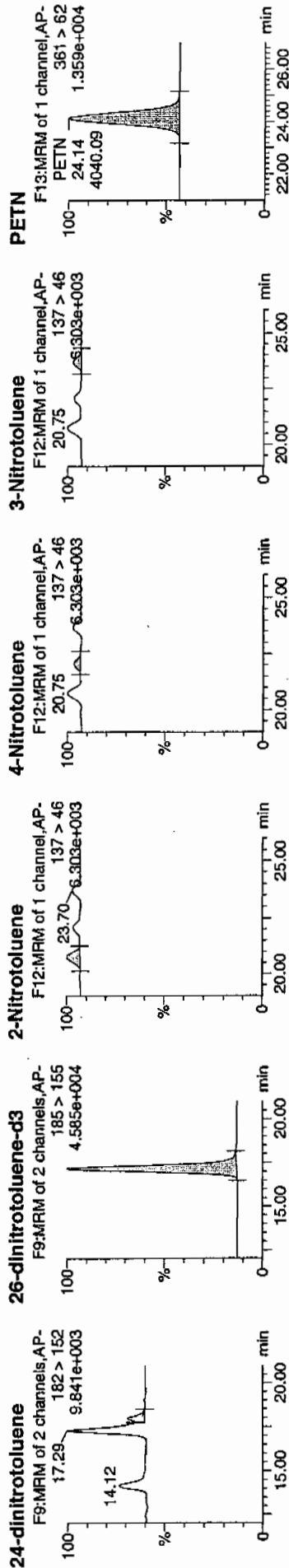
ID: WXX100125-08CRI

Vial: 1:1,C

1/28/10



Dataset: C:\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	Conc	Reg	Dev	SN
WXX100125-08CRI	HMV	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	10:28:15	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

Total 1703.2

Average 106.5

*mtf  
1/28/10*

*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): 10-1127

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

Printed: Thu Jan 28 10:43:32 2010, Page 115 of 121

Dataset: C:\MASSLYNX\New\_Exp\PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

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Date: 28-Jan-2010

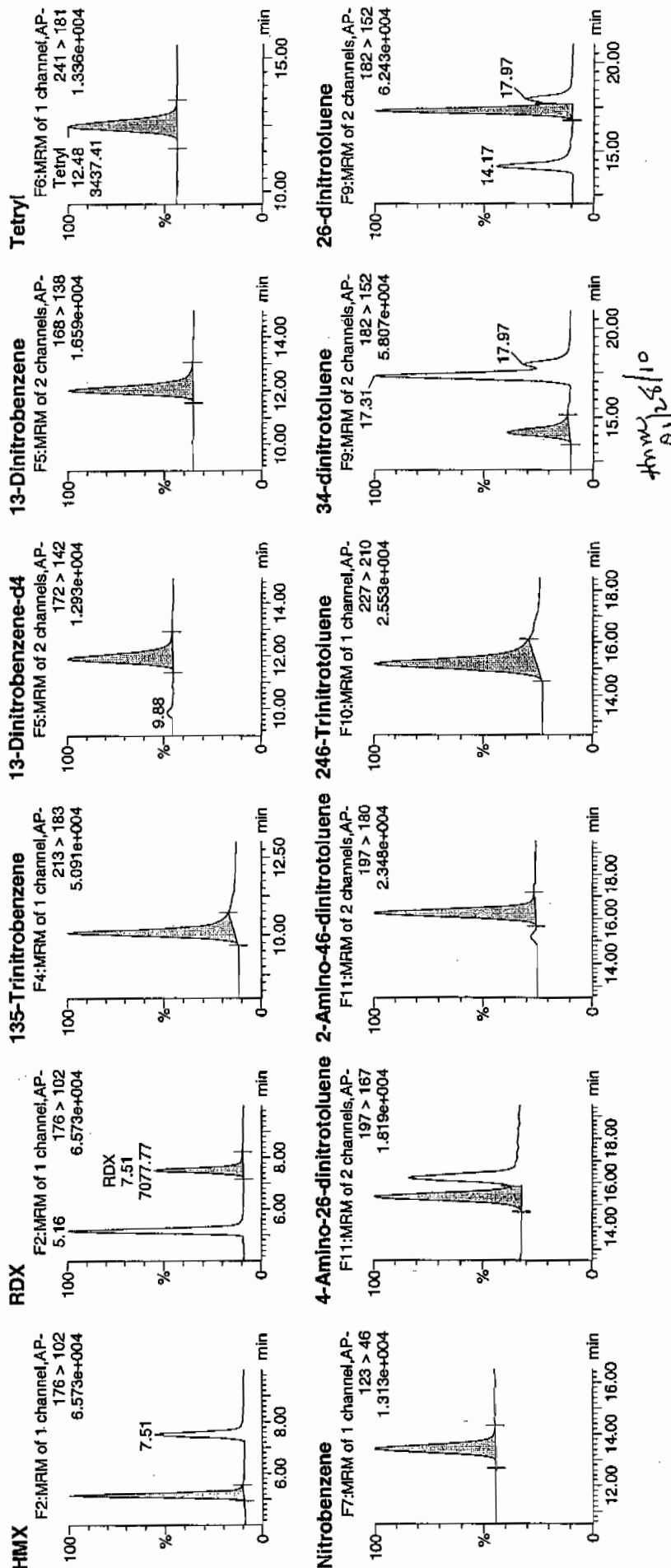
Time: 08:41:46

ID: WXX100125-07CCV

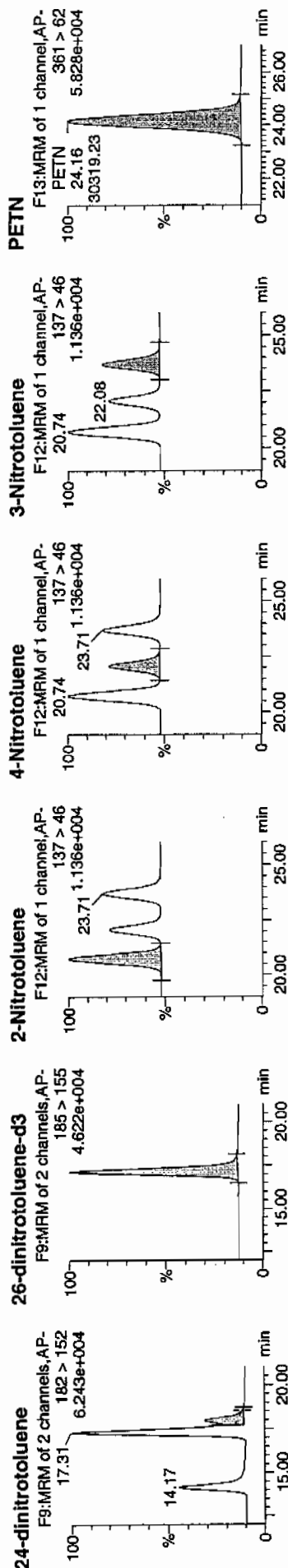
Vial: 1:1,B

12/10

Page 411 of 675



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	Int. (mV)	Ref	Dev	SN
WXX100125-07CCV	HMZ	176 > 102	5.16	11756.382	2756.983	11756.382	2132.110	bb			672.0530	112.0	12.0	1526.0
WXX100125-07CCV	RDX	176 > 102	7.51	7077.767	2756.983	7077.767	1283.607	bb			583.8299	97.3	-2.7	773.0
WXX100125-07CCV	135-Trinitrobenzene	213 > 183	10.07	12337.478	2756.983	12337.478	2237.496	bb			784.3233	130.7	30.7	640.8
WXX100125-07CCV	13-Dinitrobenzene-d4	172 > 142	11.89	2756.983		2756.983	2756.983	bb			464.3887	92.9	-7.1	567.5
WXX100125-07CCV	13-Dinitrobenzene	168 > 138	12.00	4006.687	2756.983	4006.687	726.643	bb			626.4261	104.4	4.4	488.2
WXX100125-07CCV	Tetryl	241 > 181	12.48	3437.411	2756.983	3437.411	623.401	bb			717.6970	119.6	19.6	197.7
WXX100125-07CCV	Nitrobenzene	123 > 46	13.41	2698.343	2756.983	2698.343	489.365	bb			572.6285	95.4	-4.6	294.3
WXX100125-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.36	5253.618	17053.201	5253.618	154.036	MM	28-Jan-10	10:26:00	591.2787	98.5	-1.5	193.9
WXX100125-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.22	7376.413	17053.201	7376.413	216.276	bb			577.8395	96.3	-3.7	195.6
WXX100125-07CCV	246-Trinitrotoluene	227 > 210	15.17	9388.802	17053.201	9388.802	275.280	bb			865.4856	144.2	44.2	390.4
WXX100125-07CCV	34-dinitrotoluene	182 > 152	14.17	9133.663	17053.201	9133.663	267.799	bb			294.9283	98.3	-1.7	356.1
WXX100125-07CCV	26-dinitrotoluene	182 > 152	17.31	21983.248	17053.201	21983.248	644.549	MM	28-Jan-10	10:32:08	585.1319	97.5	-2.5	602.7
WXX100125-07CCV	24-dinitrotoluene	182 > 152	17.97	5507.661	17053.201	5507.661	161.485	MM	28-Jan-10	10:39:25	635.6094	105.9	5.9	136.9
WXX100125-07CCV	26-dinitrotoluene-d3	185 > 155	17.16	17053.201		17053.201	17053.201	bb			523.1576	104.6	4.6	1226.9
WXX100125-07CCV	2-Nitrotoluene	137 > 46	20.74	2719.962	17053.201	2719.962	79.749	bb			479.5423	79.9	-20.1	251.2
WXX100125-07CCV	4-Nitrotoluene	137 > 46	22.08	1386.346	17053.201	1386.346	40.648	bb			491.6275	81.9	-18.1	137.1
WXX100125-07CCV	3-Nitrotoluene	137 > 46	23.71	1707.166	17053.201	1707.166	50.054	bb			536.1422	89.4	-10.6	155.6
WXX100125-07CCV	PETN	361 > 62	24.16	30319.232	17053.201	30319.232	888.960	bb			477.3409	79.6	-20.4	4483.1

# 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:* Hmx 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): 10-1127

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

Printed: Thu Jan 28 10:43:32 2010, Page 119 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\EXP0125144a

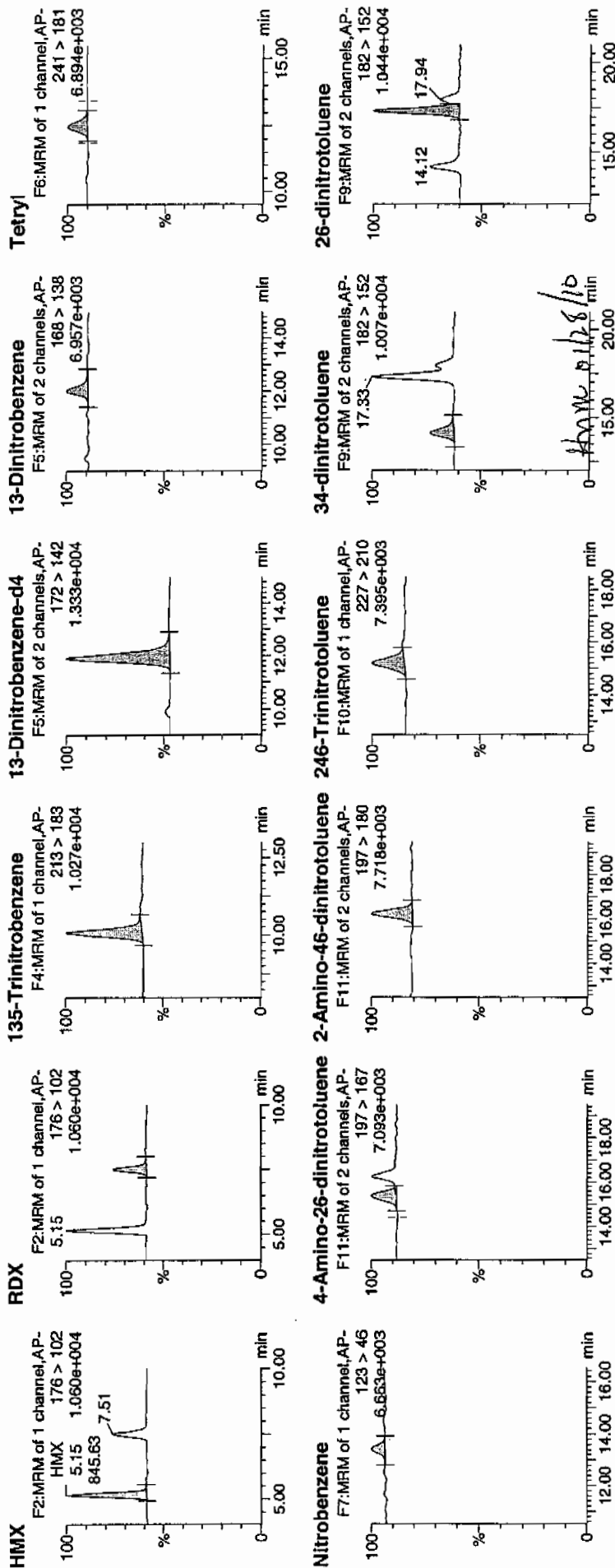
Date: 28-Jan-2010

Time: 09:40:48

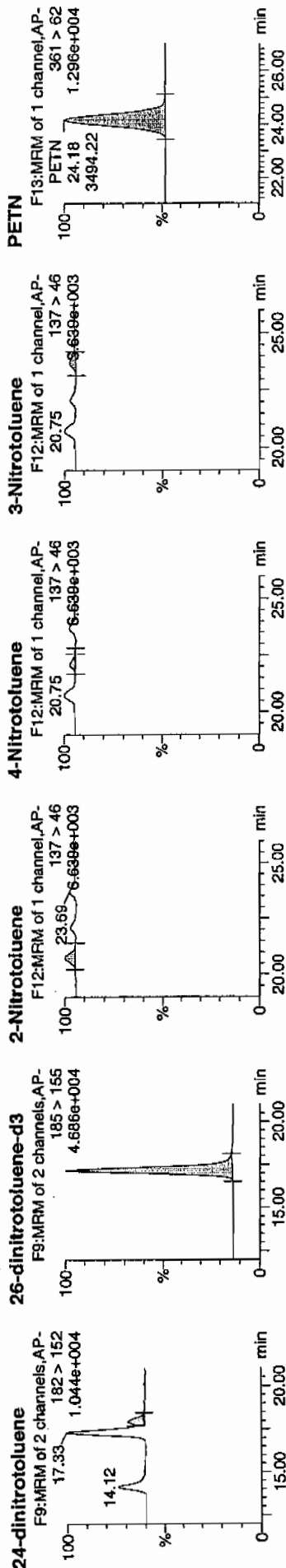
ID: WXX100125-08CRI

Vial: 1:1,C

1/28/10



Dataset: C:\MASSLYNX\New\_Exp\_PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010



ID	Name	Trace	RT	Area	S:Area	Abs:Resp	Response	Flags	Mod	Date	Mod	Time	Area	%Rec	%Dev	S/N
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	54.288	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

*Handwritten:* 1/28/10

Total 1666.4

Average 104.2

*Handwritten:* HMM 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): 10-1127

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS01200013.wiff

Analysis Date: 20-JAN-10 13:38

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	85.3	85	
2,6-Diamino-4-nitrotoluene	100	88.9	89	
3,4-Dinitrotoluene	50	47	94	
3,5-Dinitroaniline	100	97.6	98	
TATB	100	107	107	
tris(o-cresyl) phosphate	100	86.4	86	

Recovery Limits:

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

2,4-Diamino-6-nitrotoluene 50-150%

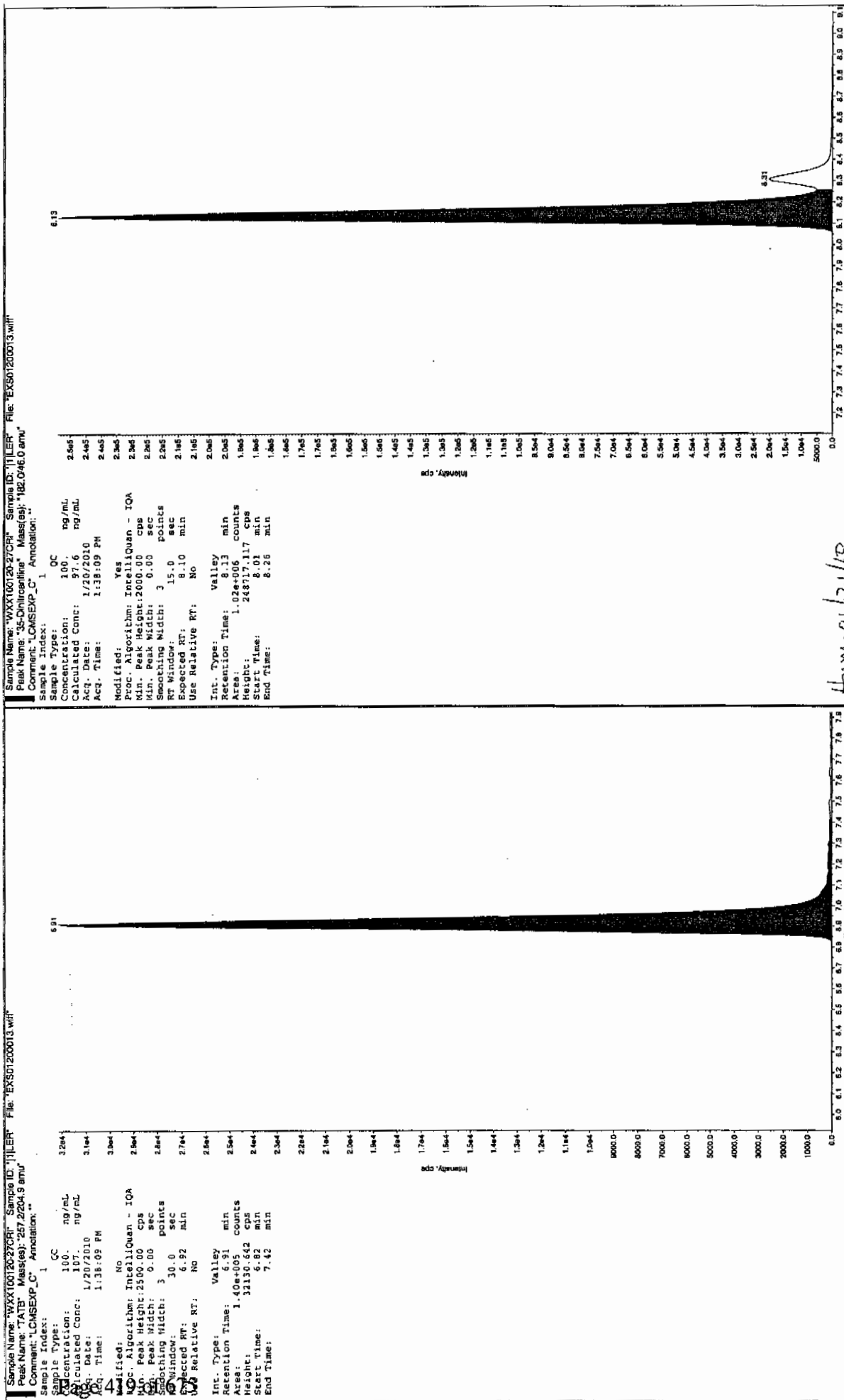
Other Target Analytes 70-130%

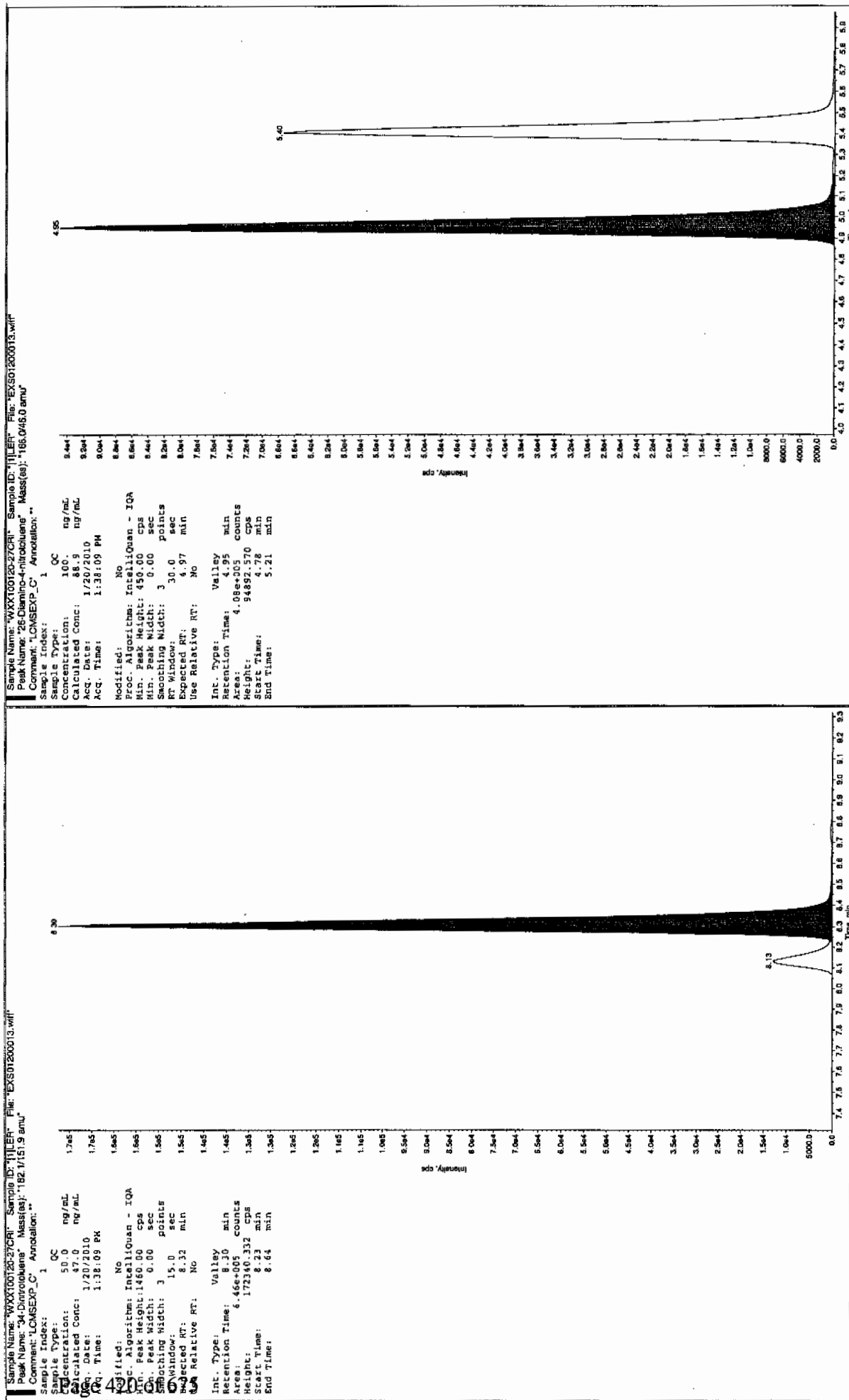
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

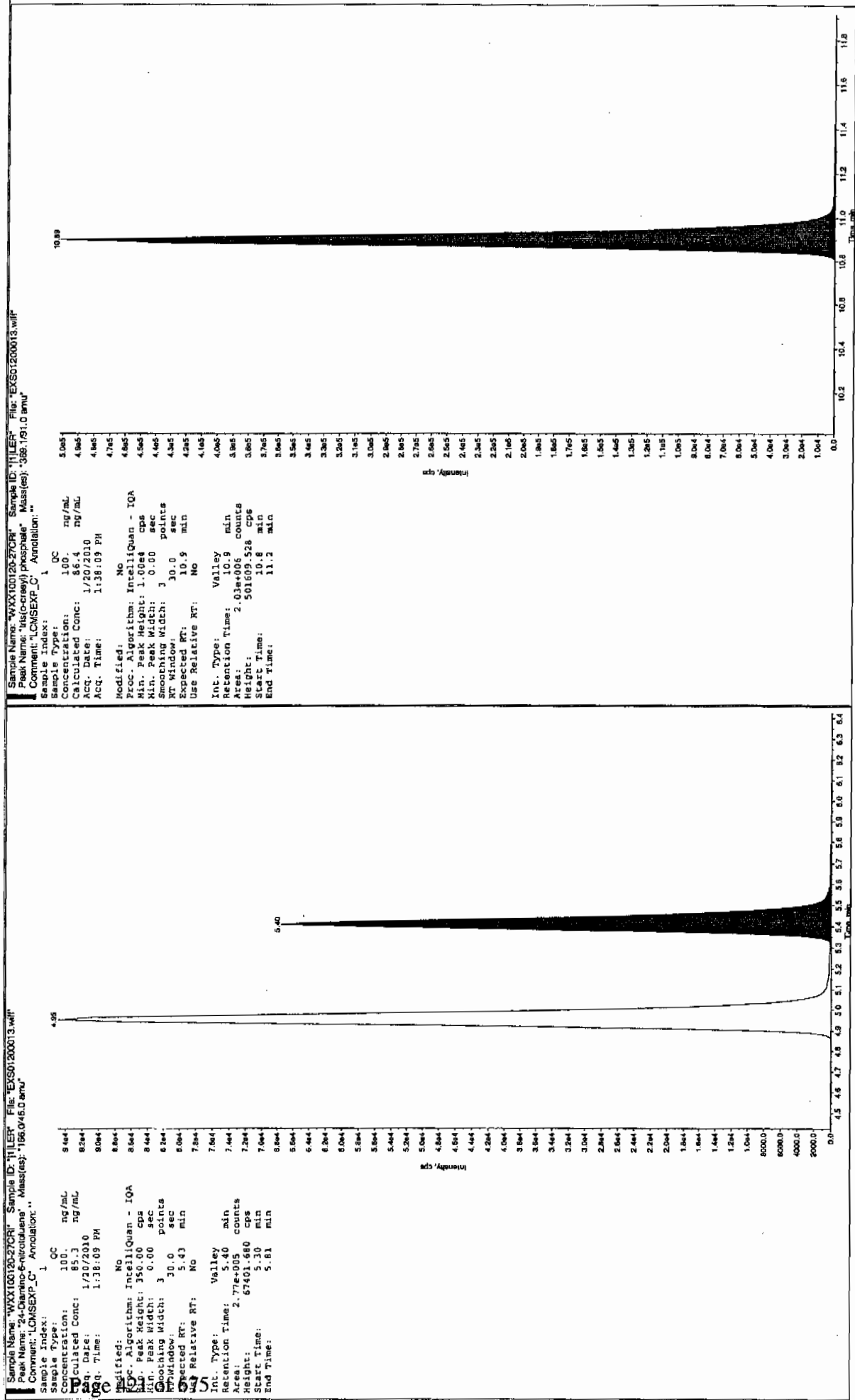


San 1/24/10





\*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): 10-1127

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS01200024.wiff

Analysis Date: 20-JAN-10 16:30

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	461	92	
2,6-Diamino-4-nitrotoluene	500	472	94	
3,4-Dinitrotoluene	250	221	88	
3,5-Dinitroaniline	500	477	95	
TATB	500	484	97	
tris(o-cresyl) phosphate	500	498	100	

Recovery Limits:

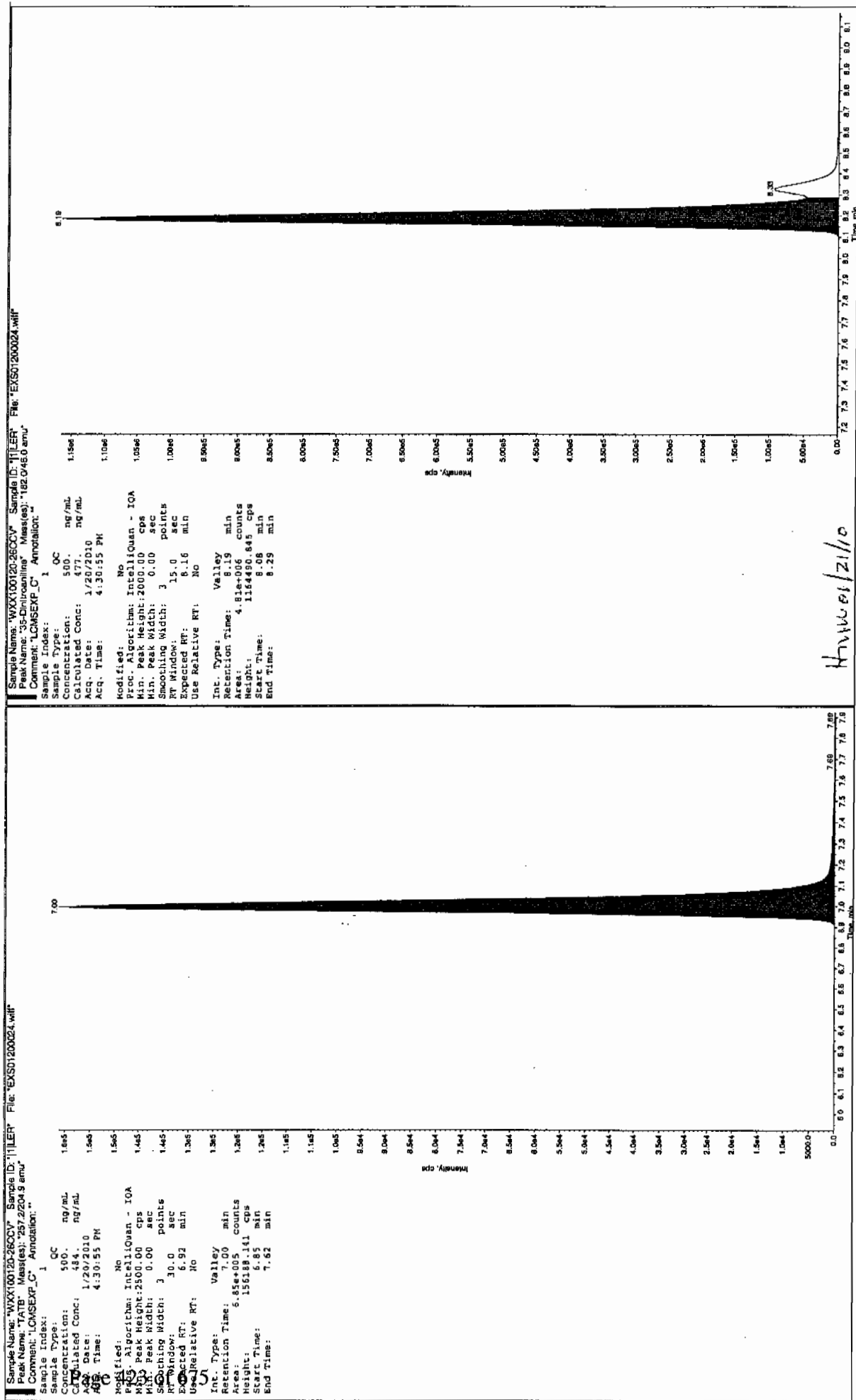
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

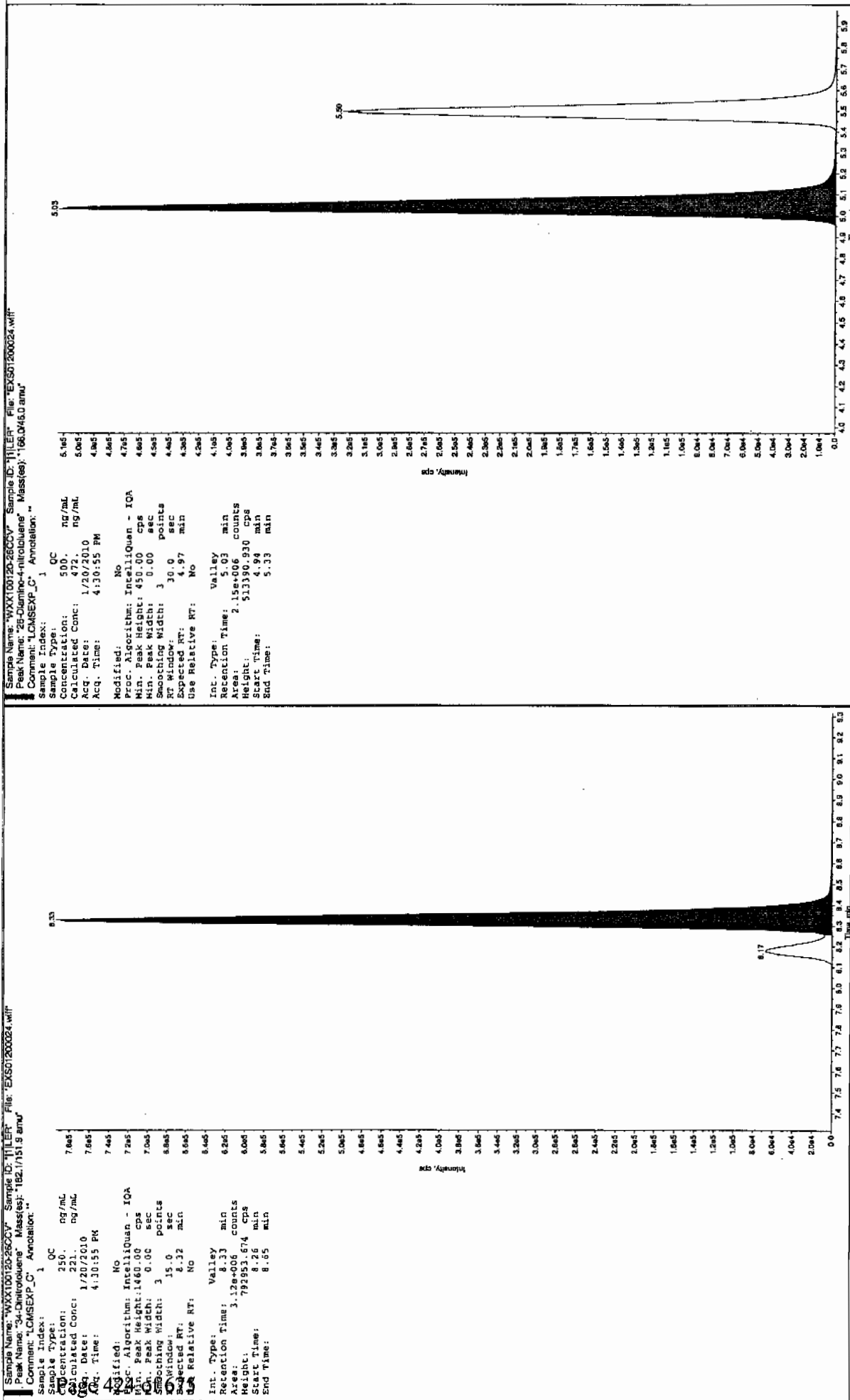
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

dan 1/21/10



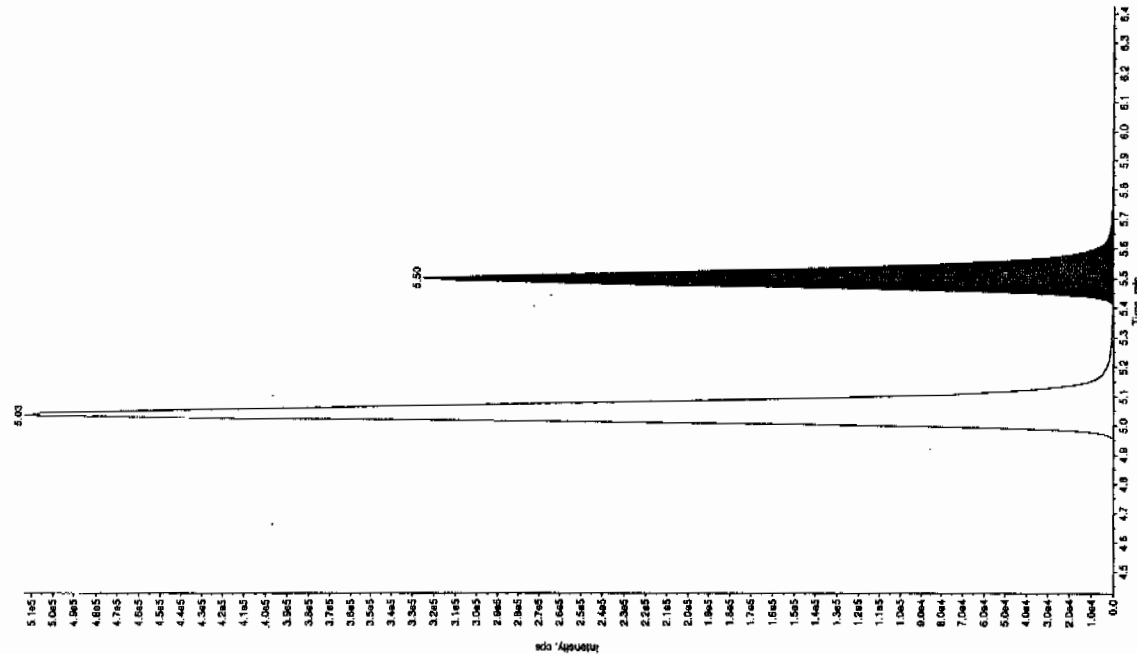
1/21/10



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

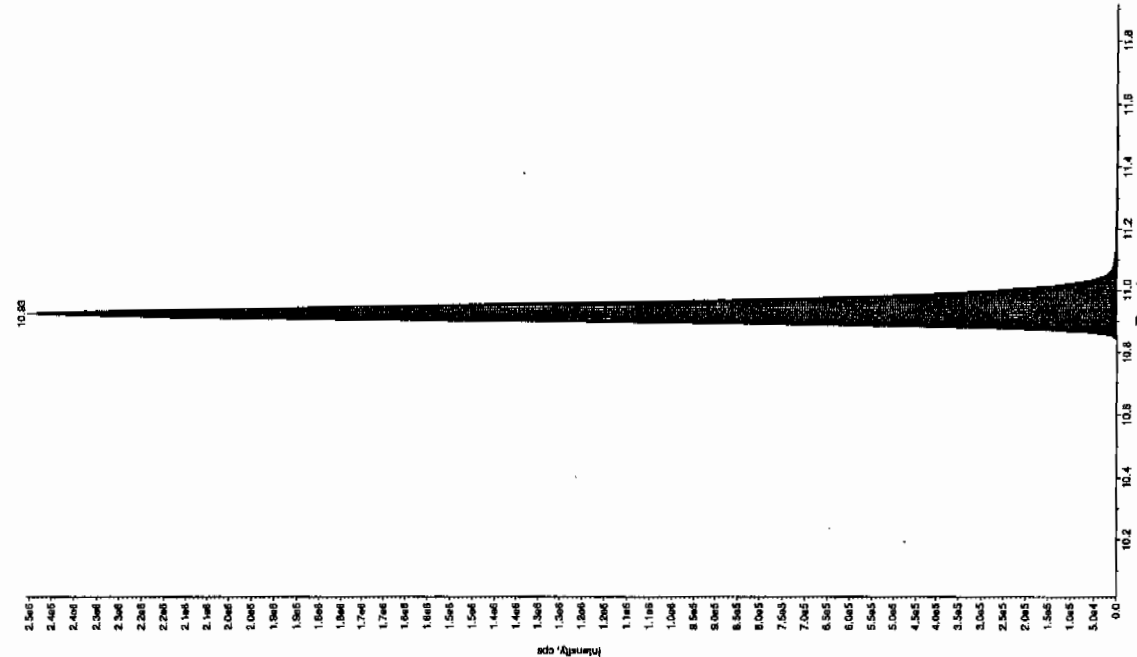
Sample Name: "WXX100120-260CV" Sample ID: "TLER" File: "EXS01200024.wif"  
 Peak Name: "24-Diethyl-6-nitrofluorene" Mass(es): "156.045.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: "

Sample Index: 1  
 Sample Type: OC  
 Concentration: 500 ng/mL  
 Calculated Conc: 431 ng/mL  
 Date: 1/20/2010  
 Acq. Time: 4:30:55 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: 5.43 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.50 min  
 Area: 1.35e+005 counts  
 Height: 324394.806 cps  
 Start Time: 5.39 min  
 End Time: 5.92 min



Sample Name: "WXX100120-260CV" Sample ID: "TLER" File: "EXS01200024.wif"  
 Peak Name: "1,3-bis(4-ethylphenyl)phosphazene" Mass(es): "368.191.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: "

Sample Index: 1  
 Sample Type: OC  
 Concentration: 500 ng/mL  
 Calculated Conc: 499 ng/mL  
 Date: 1/20/2010  
 Acq. Time: 4:30:55 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: 10.9 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.9 min  
 Area: 1.07e+007 counts  
 Height: 245601.074 cps  
 Start Time: 10.6 min  
 End Time: 11.2 min



7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1127

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS01200026.wiff

Analysis Date: 20-JAN-10 17:02

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	83.9	84	
2,6-Diamino-4-nitrotoluene	100	93.5	94	
3,4-Dinitrotoluene	50	46.5	93	
3,5-Dinitroaniline	100	98.3	98	
TATB	100	106	106	
tris(o-cresyl) phosphate	100	103	103	

Recovery Limits:

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

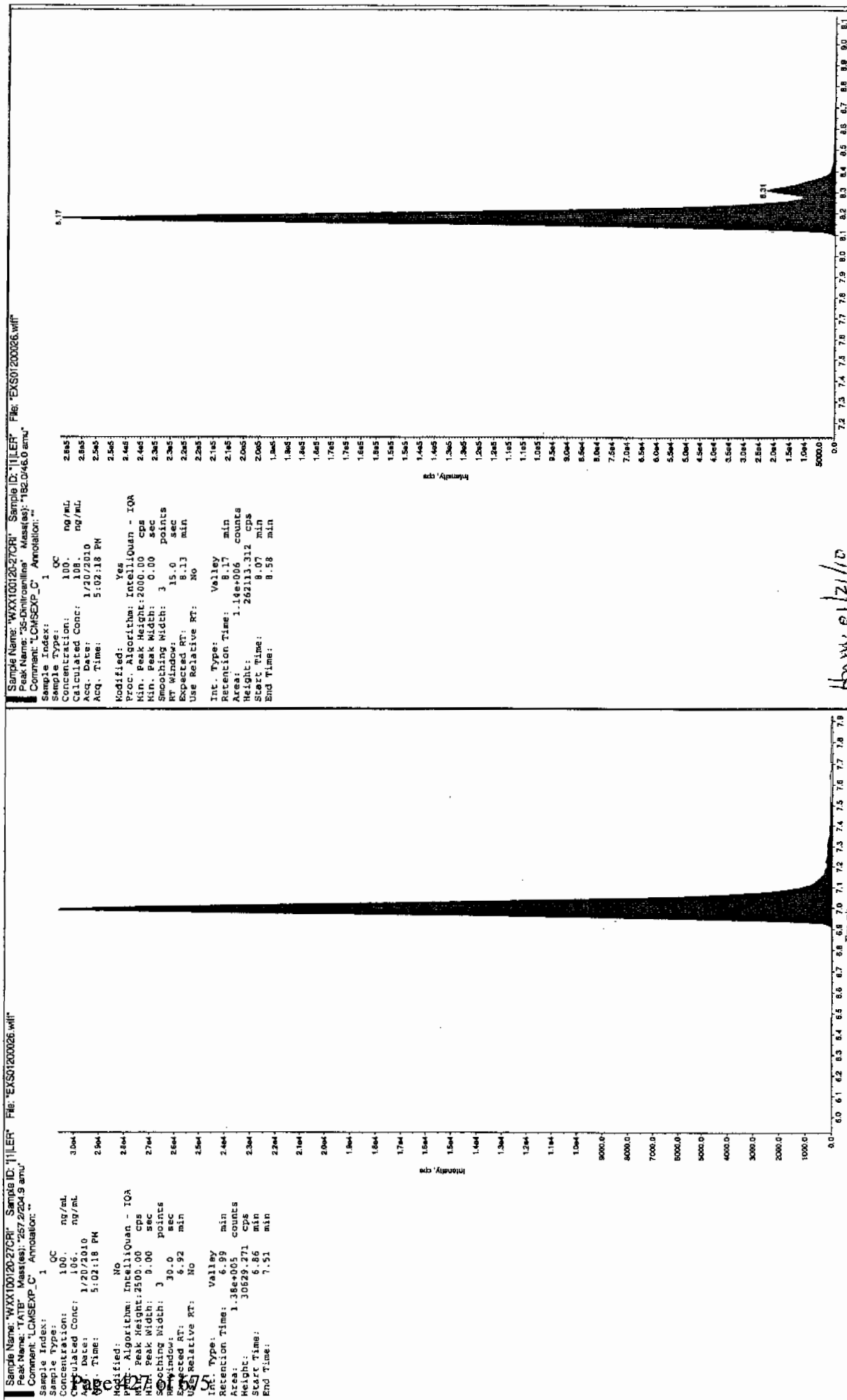
Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

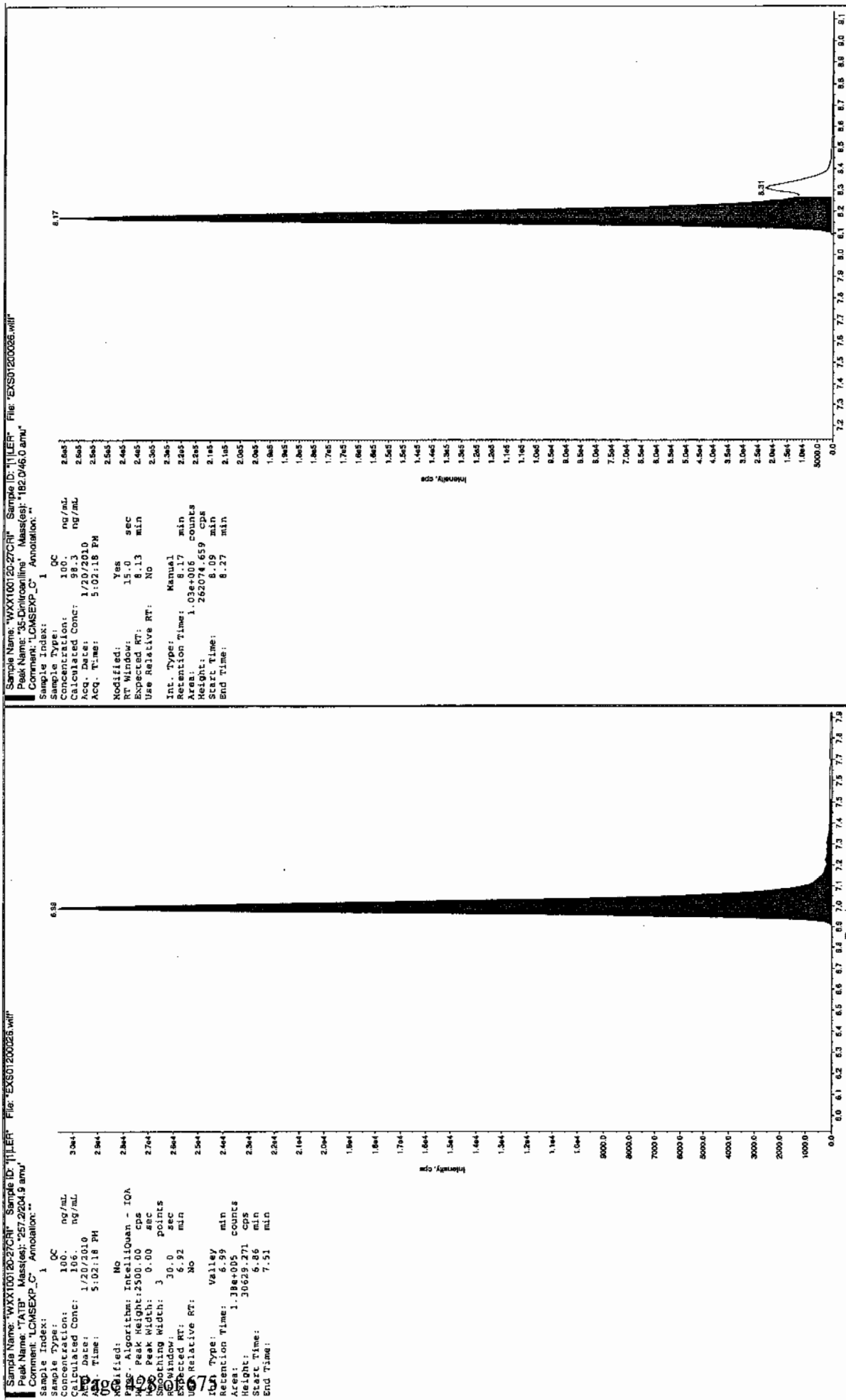


Before Jan 11/21/10

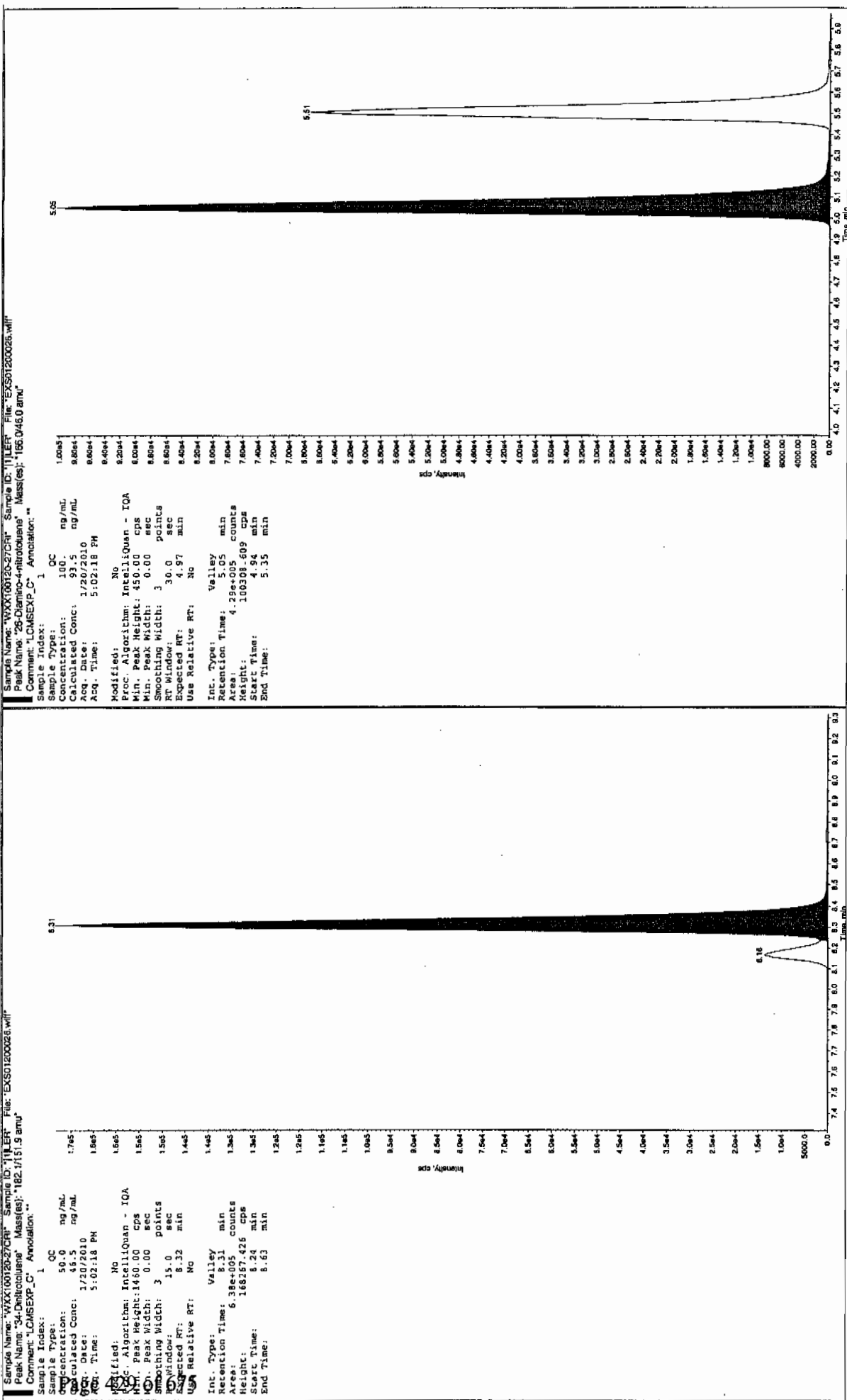


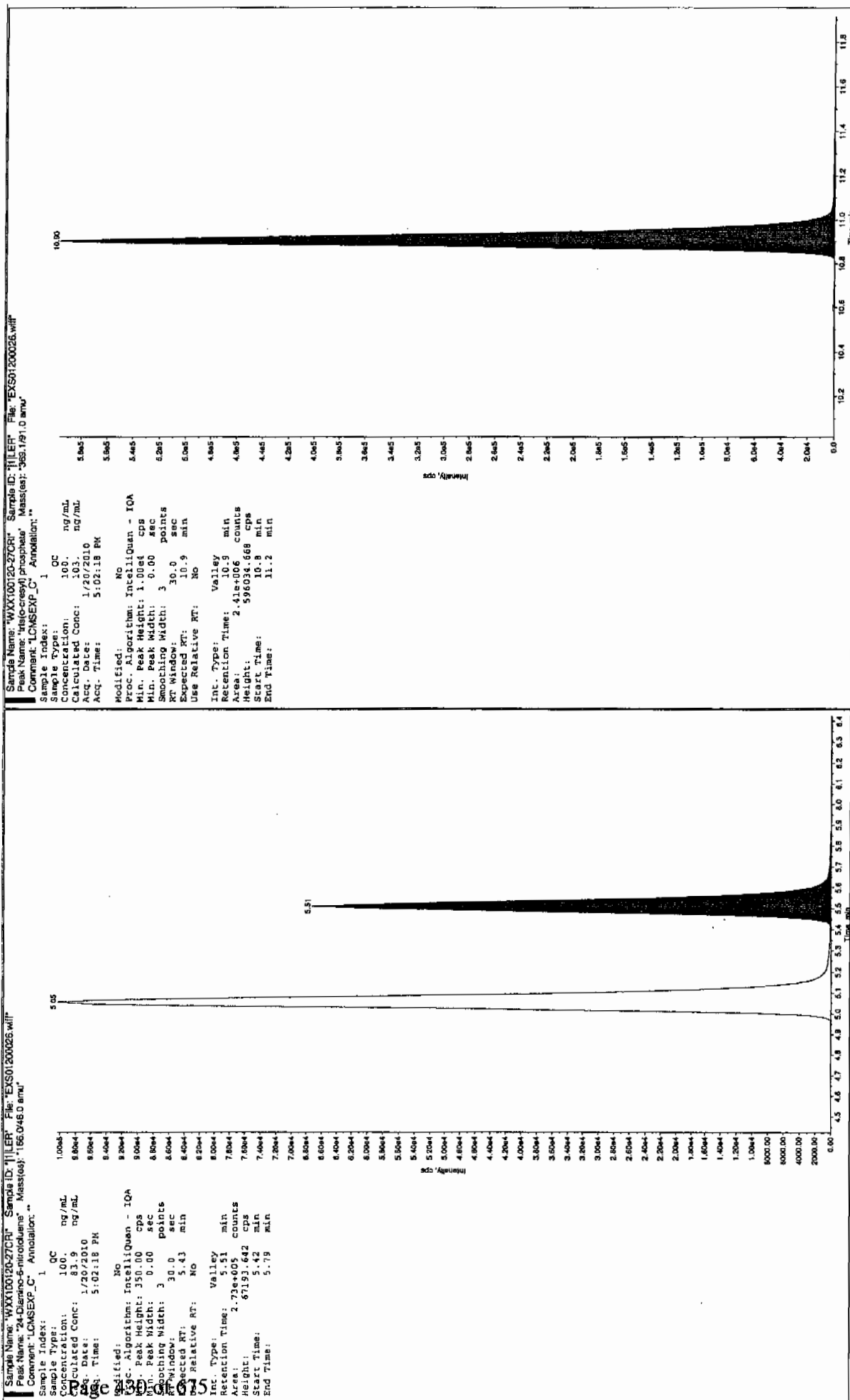
How 01/21/10

after dan 12/10



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





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

7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1127

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS01200037.wiff

Analysis Date: 20-JAN-10 19:55

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	458	92	
2,6-Diamino-4-nitrotoluene	500	473	95	
3,4-Dinitrotoluene	250	228	91	
3,5-Dinitroaniline	500	473	95	
TATB	500	508	102	
tris(o-cresyl) phosphate	500	507	101	

Recovery Limits:

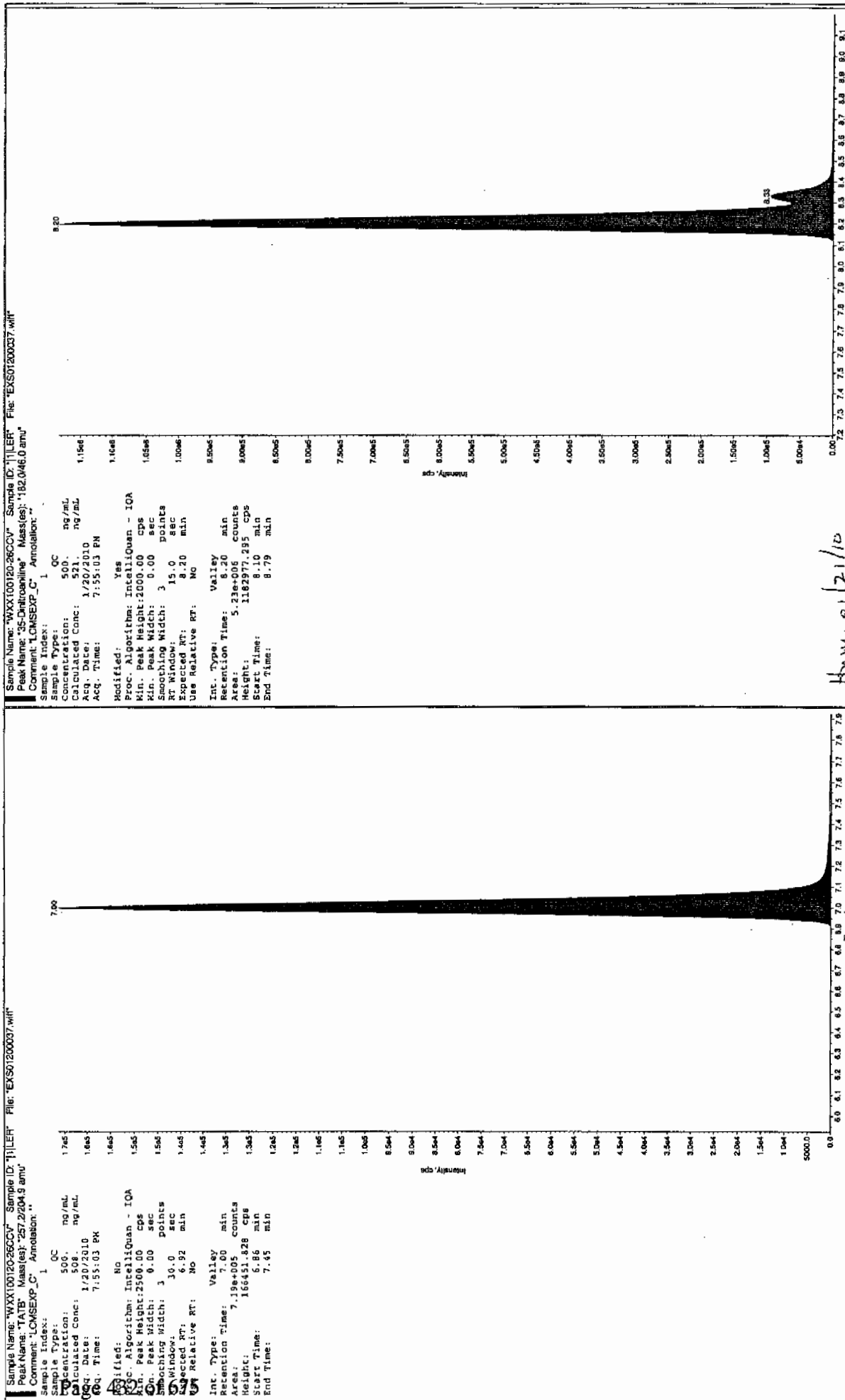
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

# Column used to flag Recovery outside of Limits

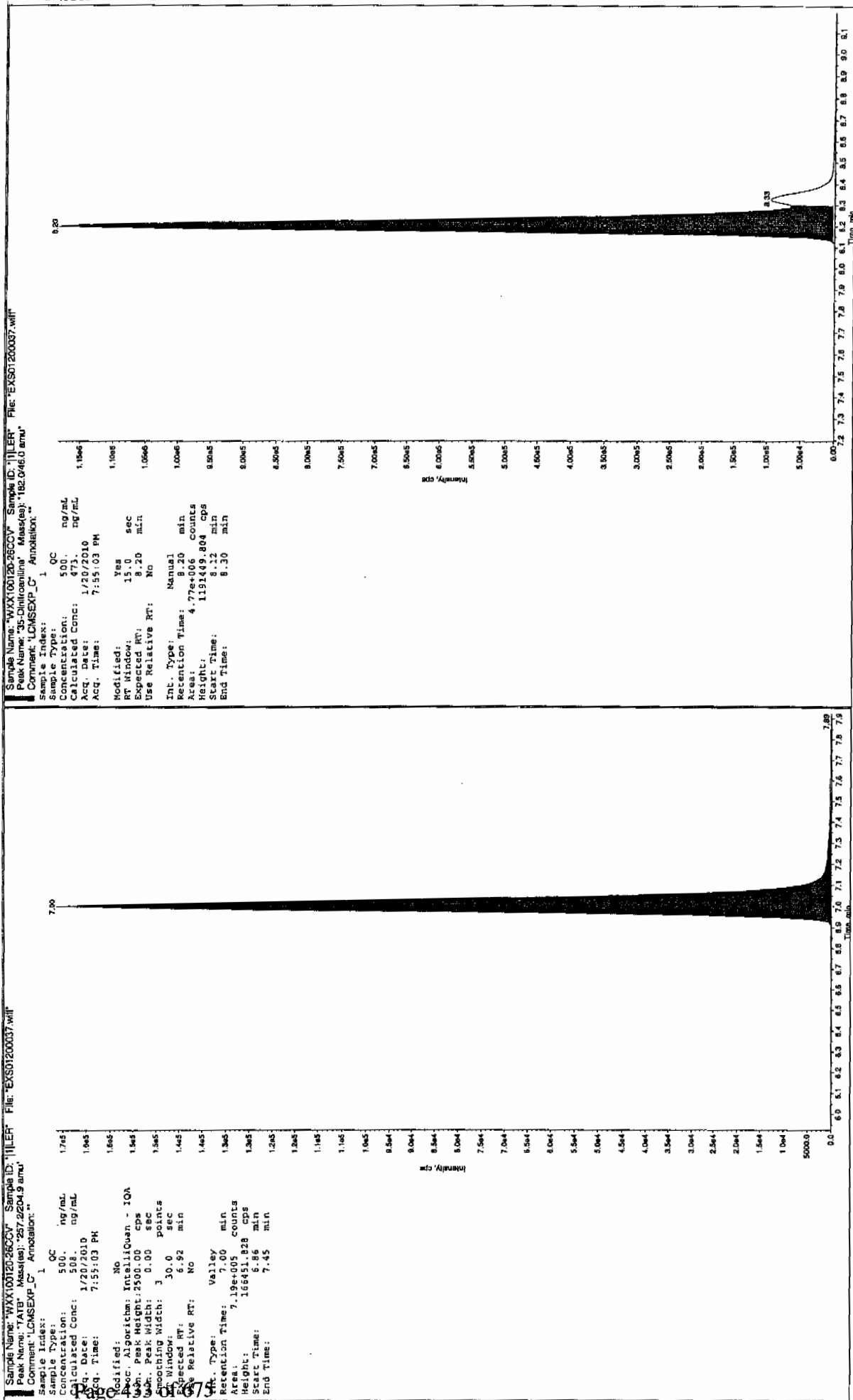
\* Value outside of Recovery Limits

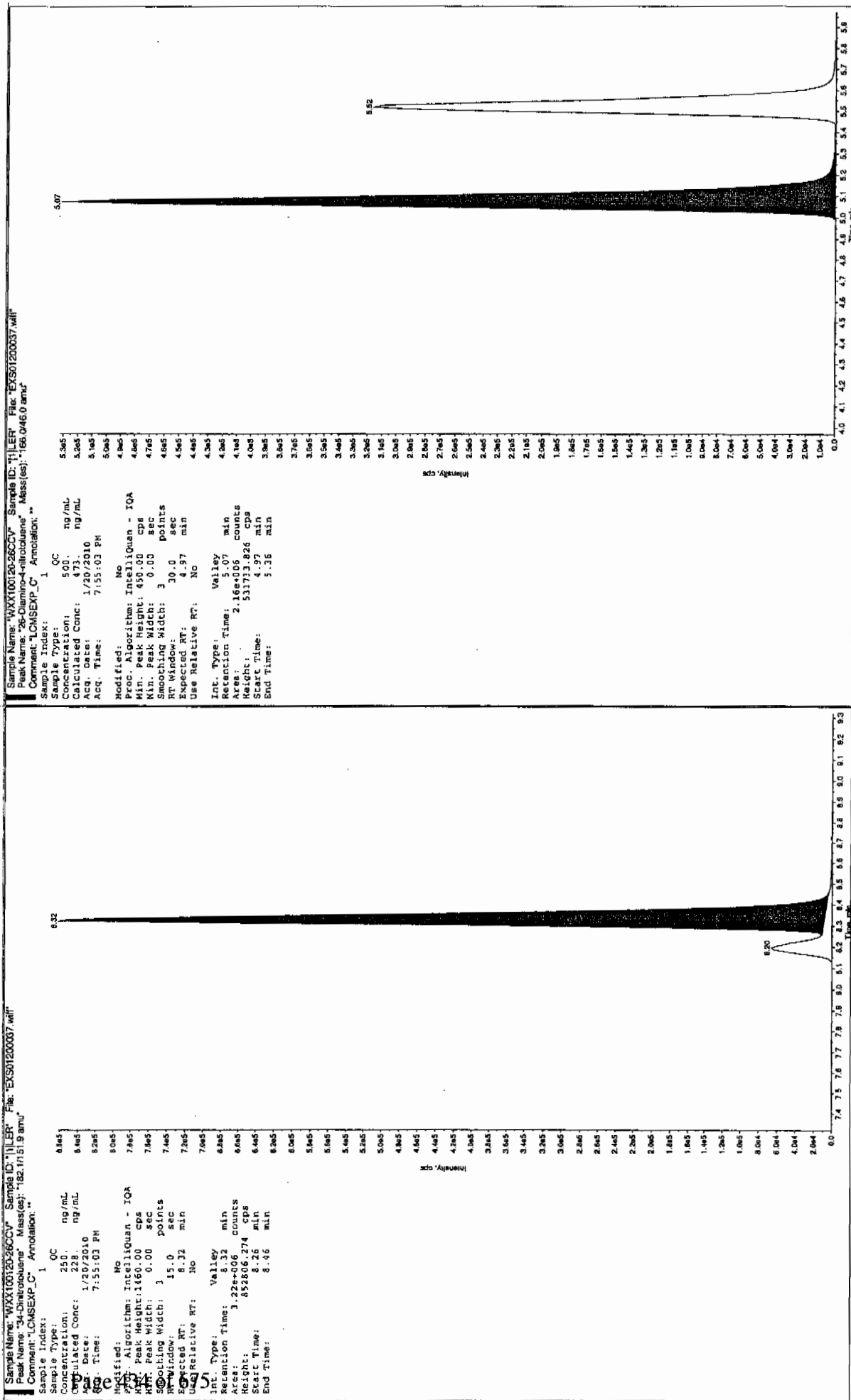
Byron Sat 1/21/10



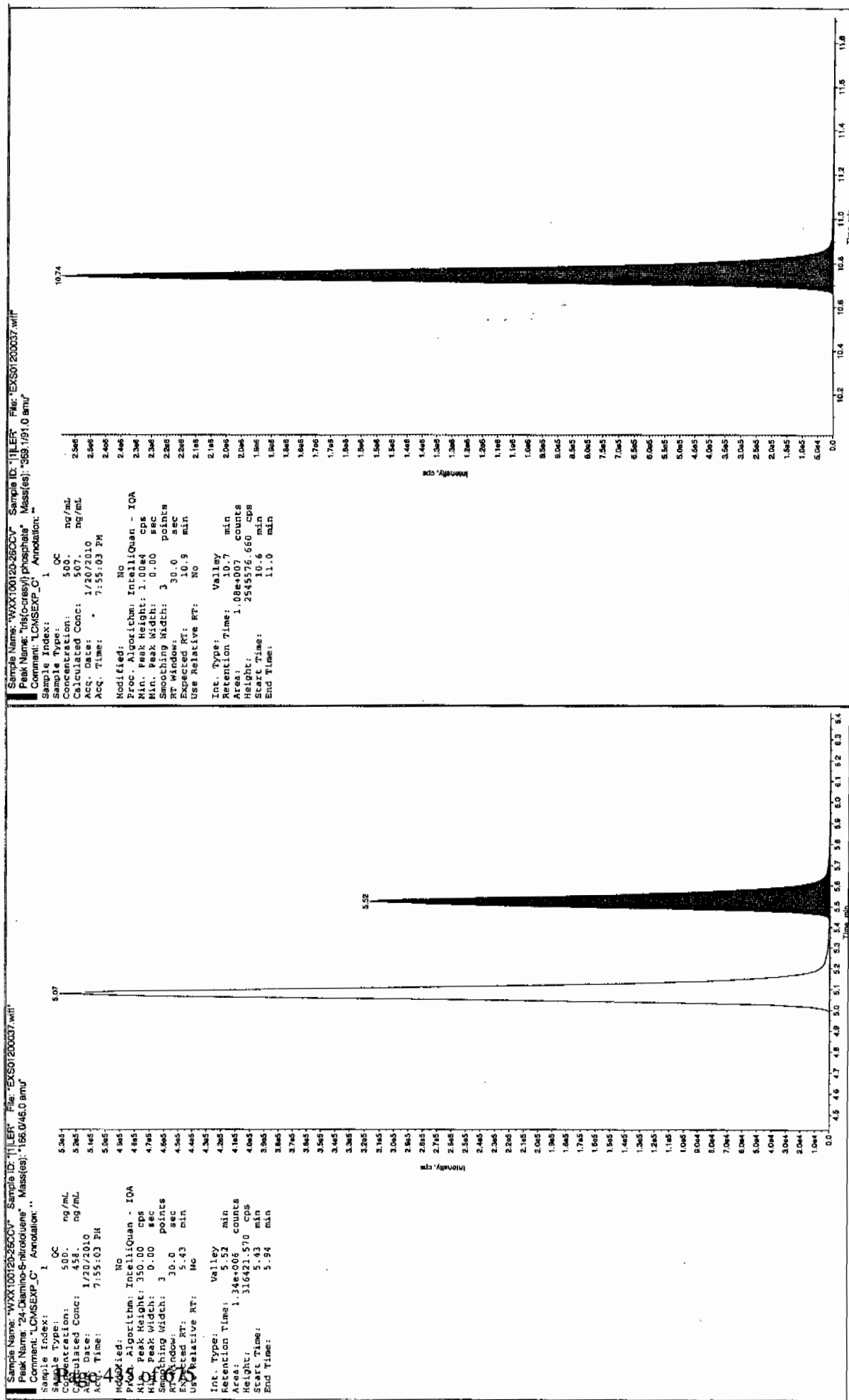
\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

after dex 1/21/10









7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1127

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS01200039.wiff

Analysis Date: 20-JAN-10 20:26

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	88.8	89	
2,6-Diamino-4-nitrotoluene	100	95.8	96	
3,4-Dinitrotoluene	50	49.5	99	
3,5-Dinitroaniline	100	102	102	
TATB	100	112	112	
tris(o-cresyl) phosphate	100	104	104	

Recovery Limits:

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

2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

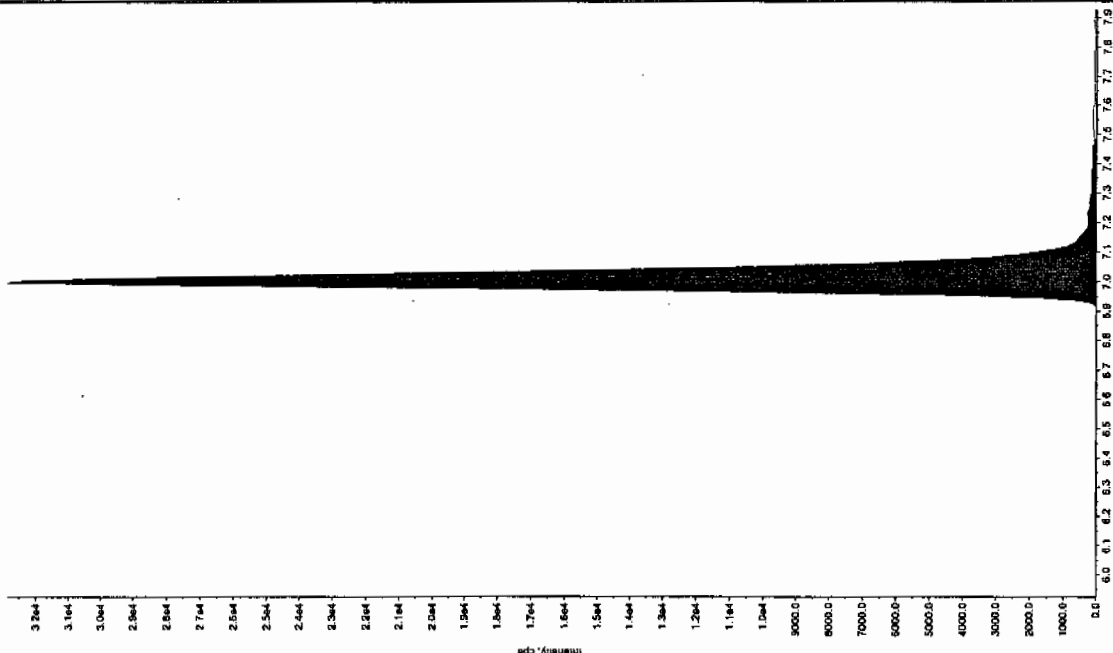
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

Before Star 12/1/10

Sample Name: "WXX100120-27GR" Sample ID: "11ER" File: "EX50120039.wif"  
 Peak Name: "TATB" Mass(es): "257.2204.9 amu"  
 Comment: "LCMSEXP\_C" Annotation: "

Sample Index: 1 QC  
 Sample Type: 100 ng/mL  
 Concentrated Conc: 112 ng/mL  
 Acq. Date: 1/20/2010  
 Acq. Time: 8:26:27 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 250.00 cps  
 Min. Peak Width: 3.00 sec  
 Smoothing Width: 30.0 points  
 Expected RT: 6.92 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 7.00 min  
 Area: 1.48e+005 counts  
 Height: 32852.653 cps  
 Start Time: 6.85 min  
 End Time: 7.48 min



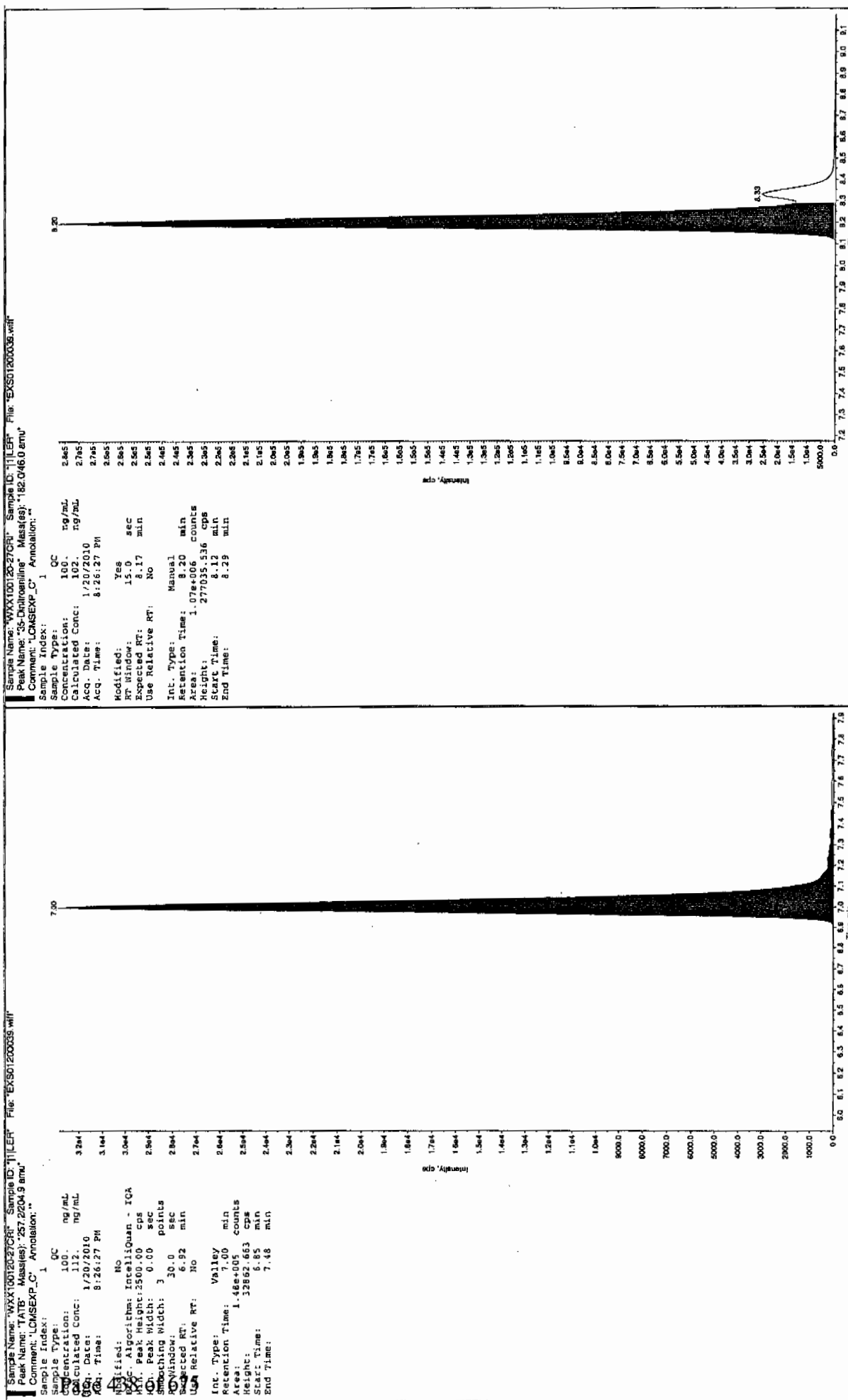
Sample Name: "WXX100120-27GR" Sample ID: "11ER" File: "EX50120039.wif"  
 Peak Name: "35-Orlistat" Mass(es): "182.046.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: "

Sample Index: 1 QC  
 Sample Type: 100 ng/mL  
 Concentrated Conc: 113 ng/mL  
 Acq. Date: 1/20/2010  
 Acq. Time: 8:26:27 PM  
 Modified: Yes  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 2000.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 315.0 points  
 Expected RT: 8.17 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.20 min  
 Area: 1.18e+006 counts  
 Height: 277372.589 cps  
 Start Time: 8.10 min  
 End Time: 8.59 min

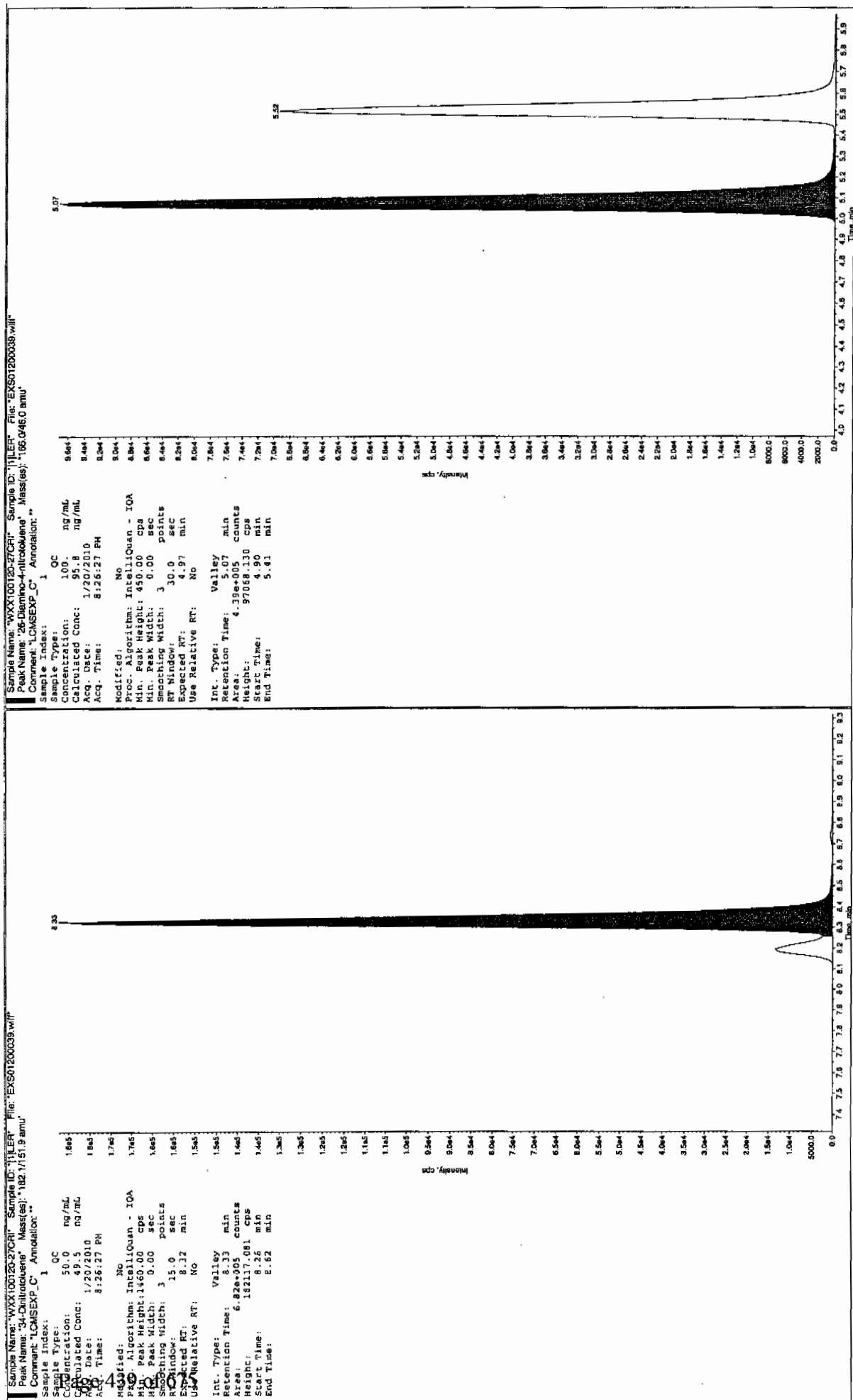


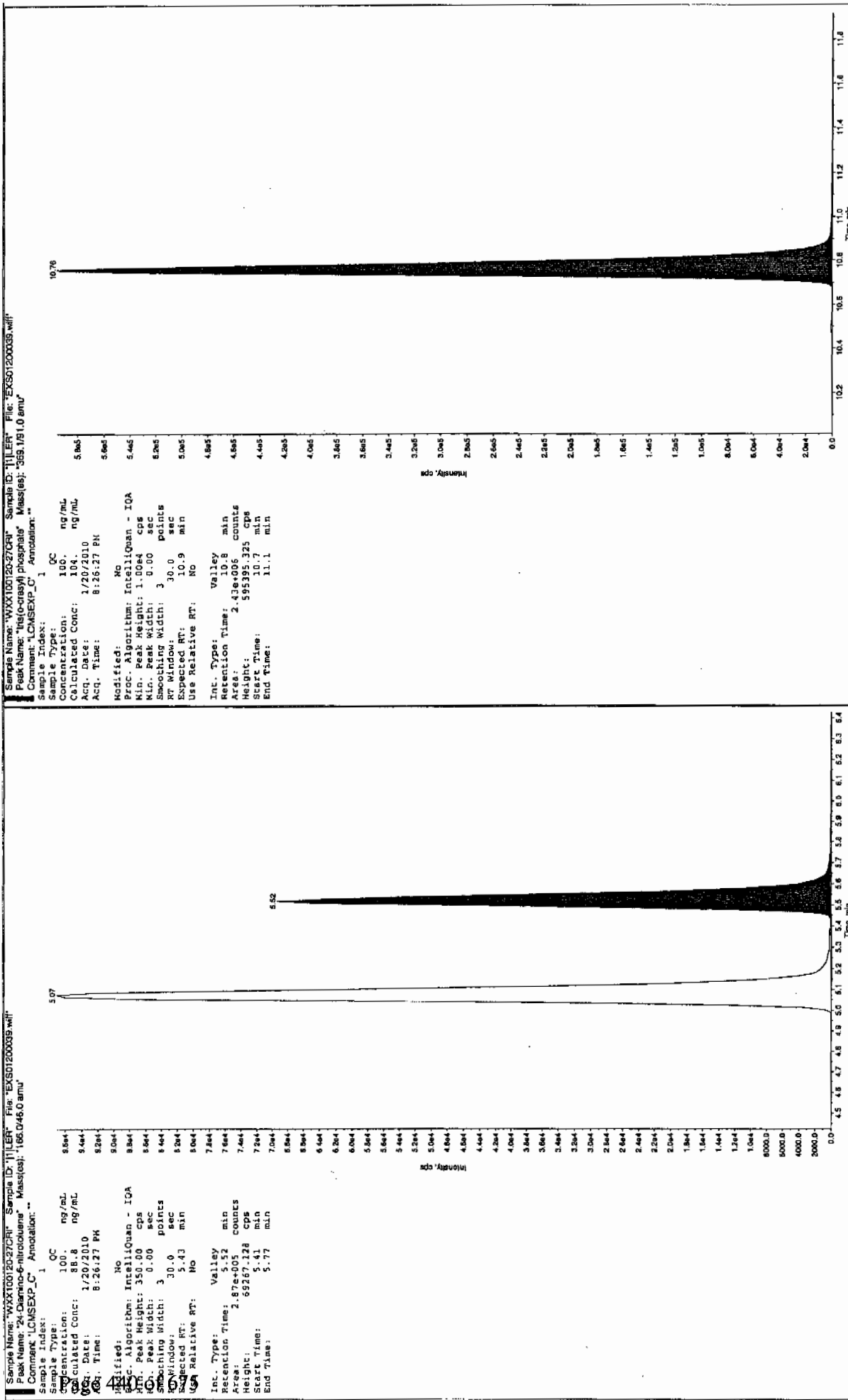
After Star 12/1/10

After Scan 12110



\*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): 10-1127

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS01200048.wiff

Analysis Date: 20-JAN-10 22:47

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	465	93	
2,6-Diamino-4-nitrotoluene	500	473	95	
3,4-Dinitrotoluene	250	223	89	
3,5-Dinitroaniline	500	491	98	
TATB	500	505	101	
tris(o-cresyl) phosphate	500	516	103	

Recovery Limits:

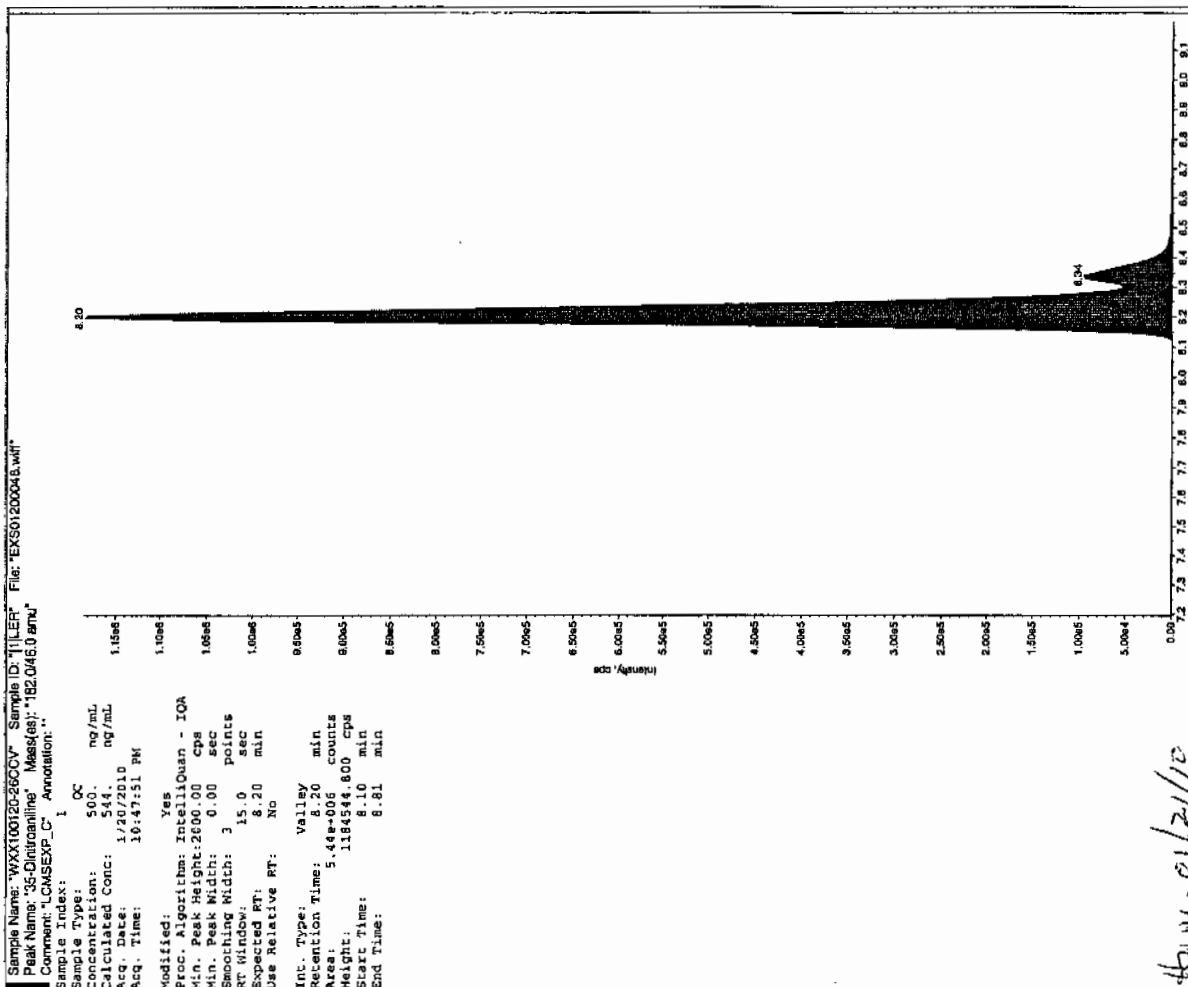
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

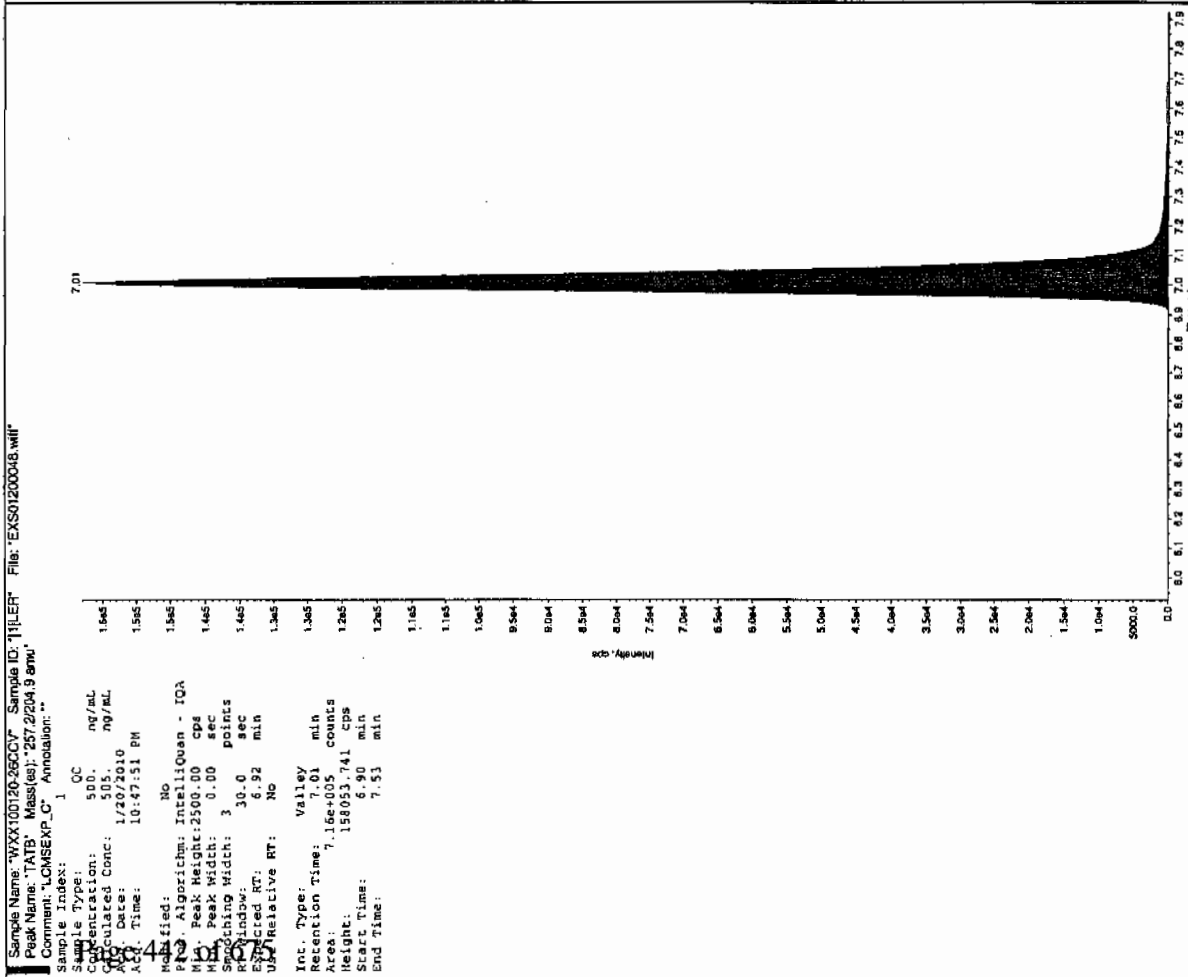
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

Before Jan 16/10



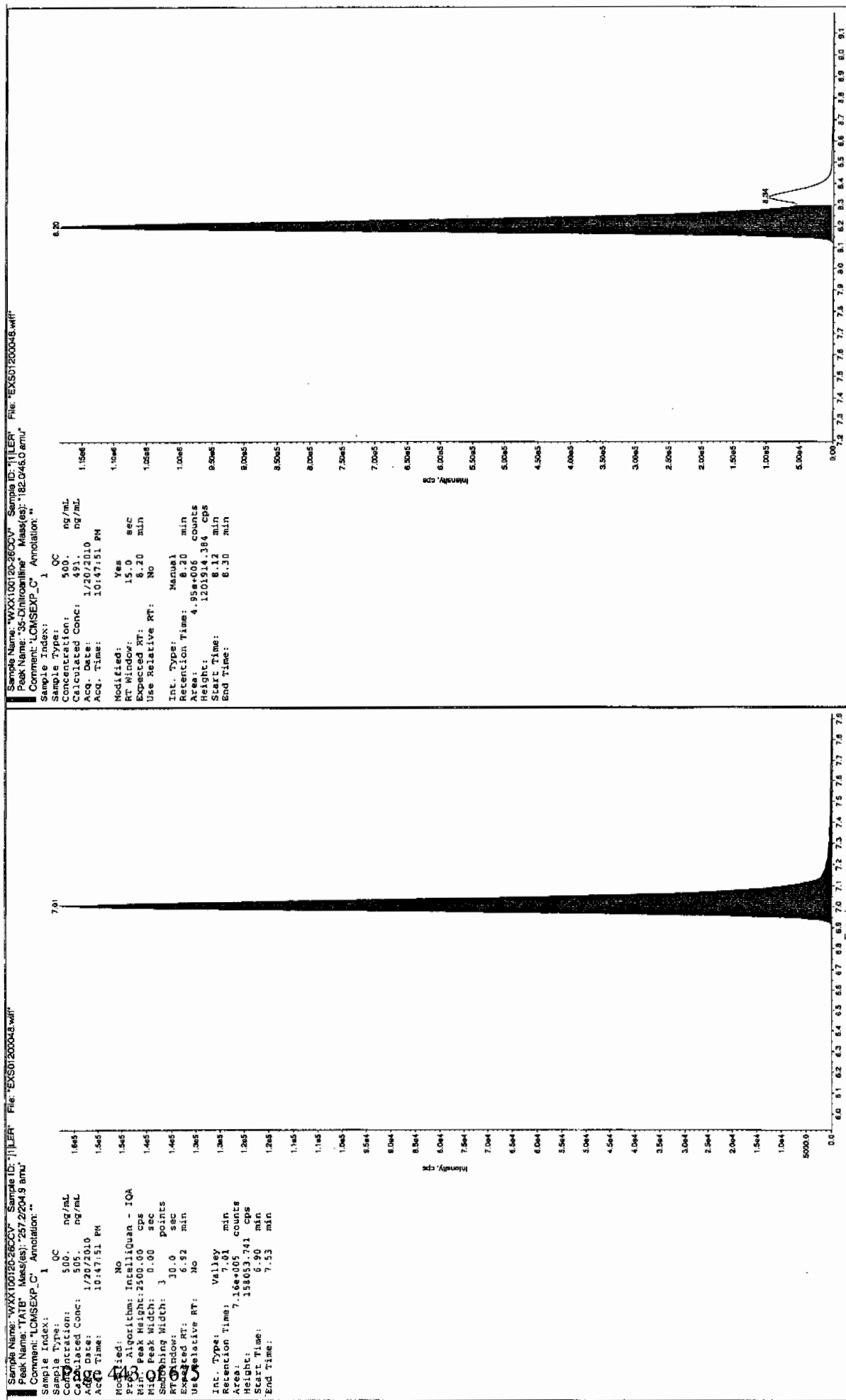
After 01/21/10



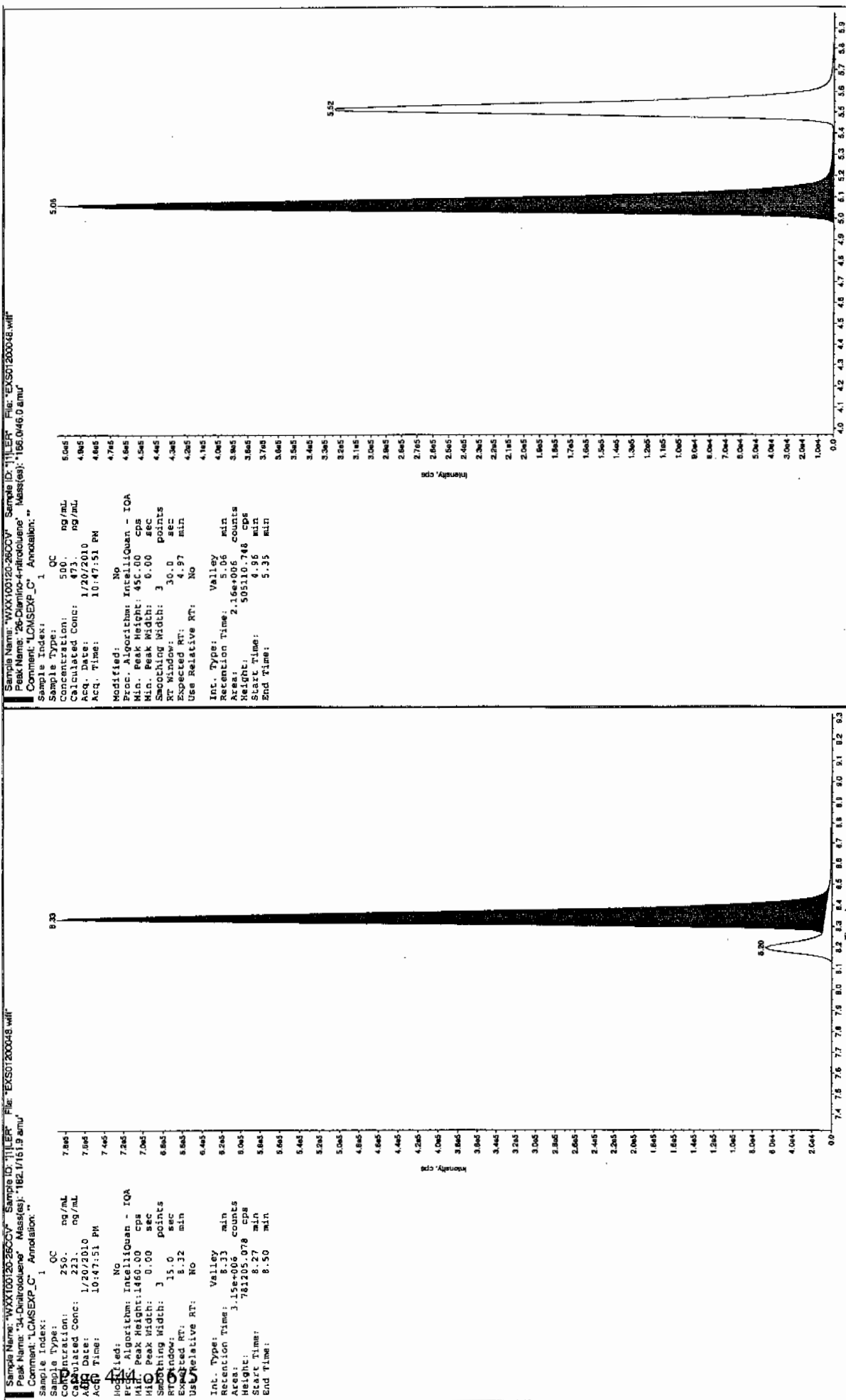
\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



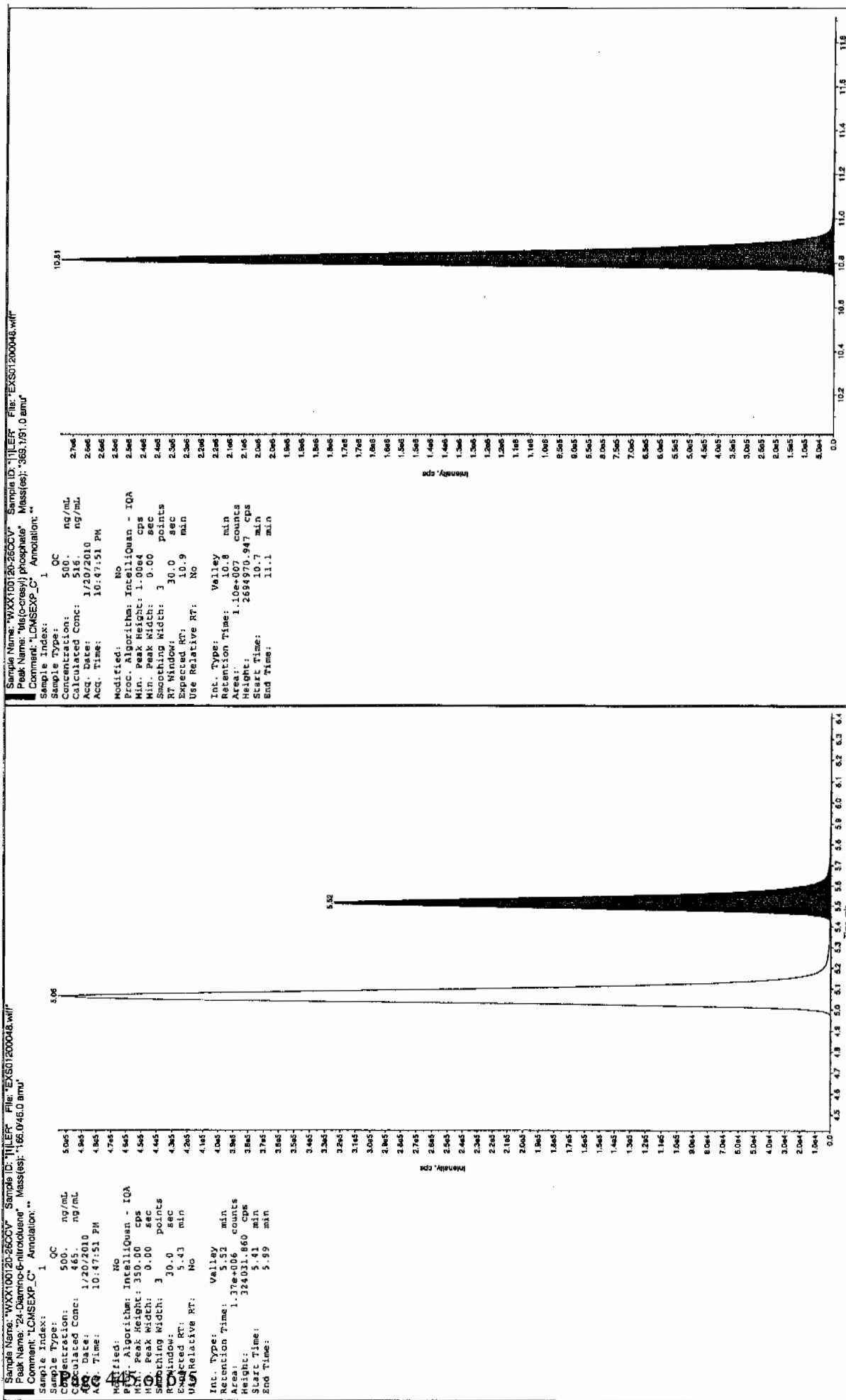
after Scan 1124110



\*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): 10-1127

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS01200050.wiff

Analysis Date: 20-JAN-10 23:19

LCMSMS ID: 1358

Column ID: JSphere ODS--H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	90.2	90	
2,6-Diamino-4-nitrotoluene	100	91.9	92	
3,4-Dinitrotoluene	50	50.6	101	
3,5-Dinitroaniline	100	101	101	
TATB	100	112	112	
tris(o-cresyl) phosphate	100	106	106	

Recovery Limits:

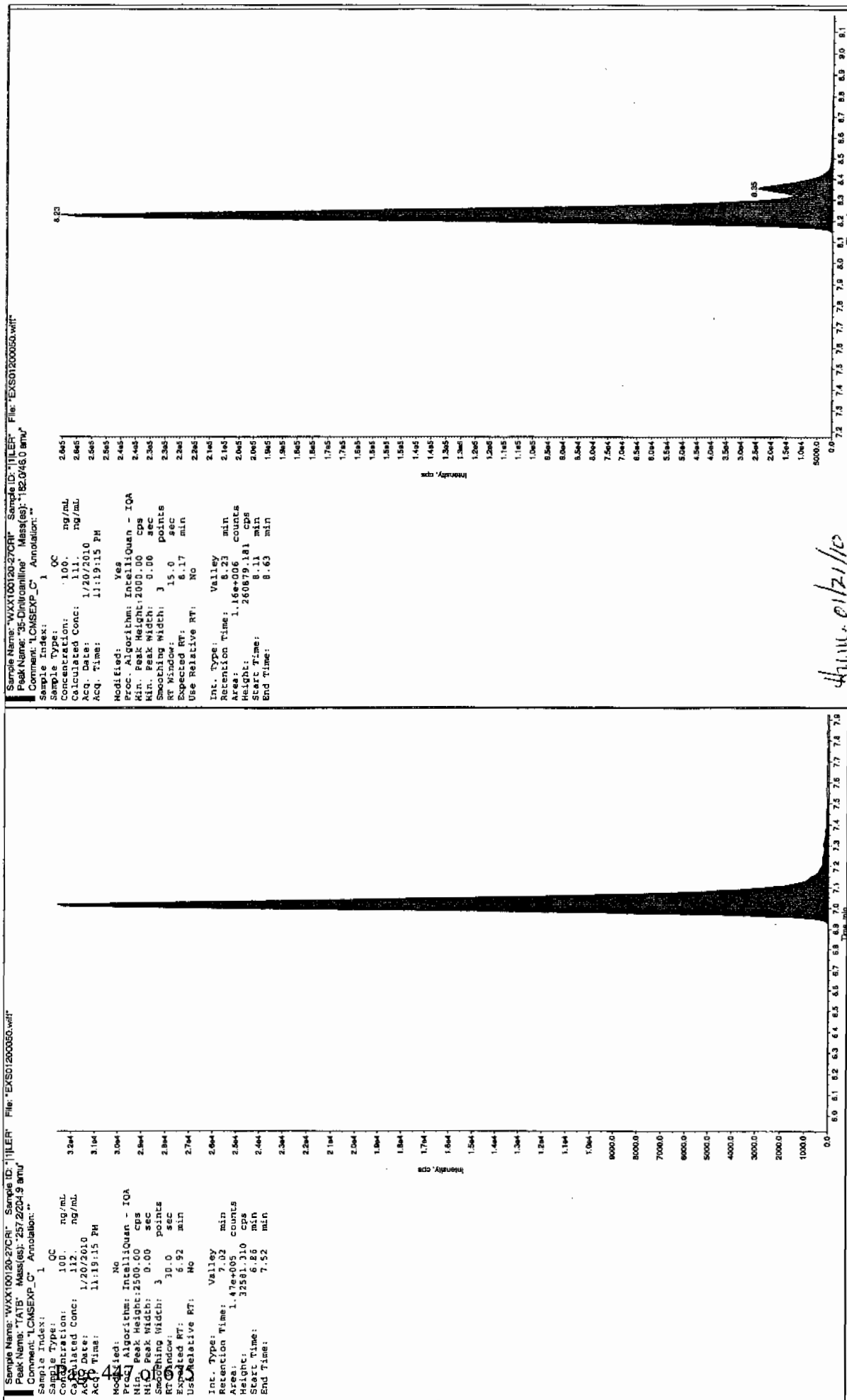
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

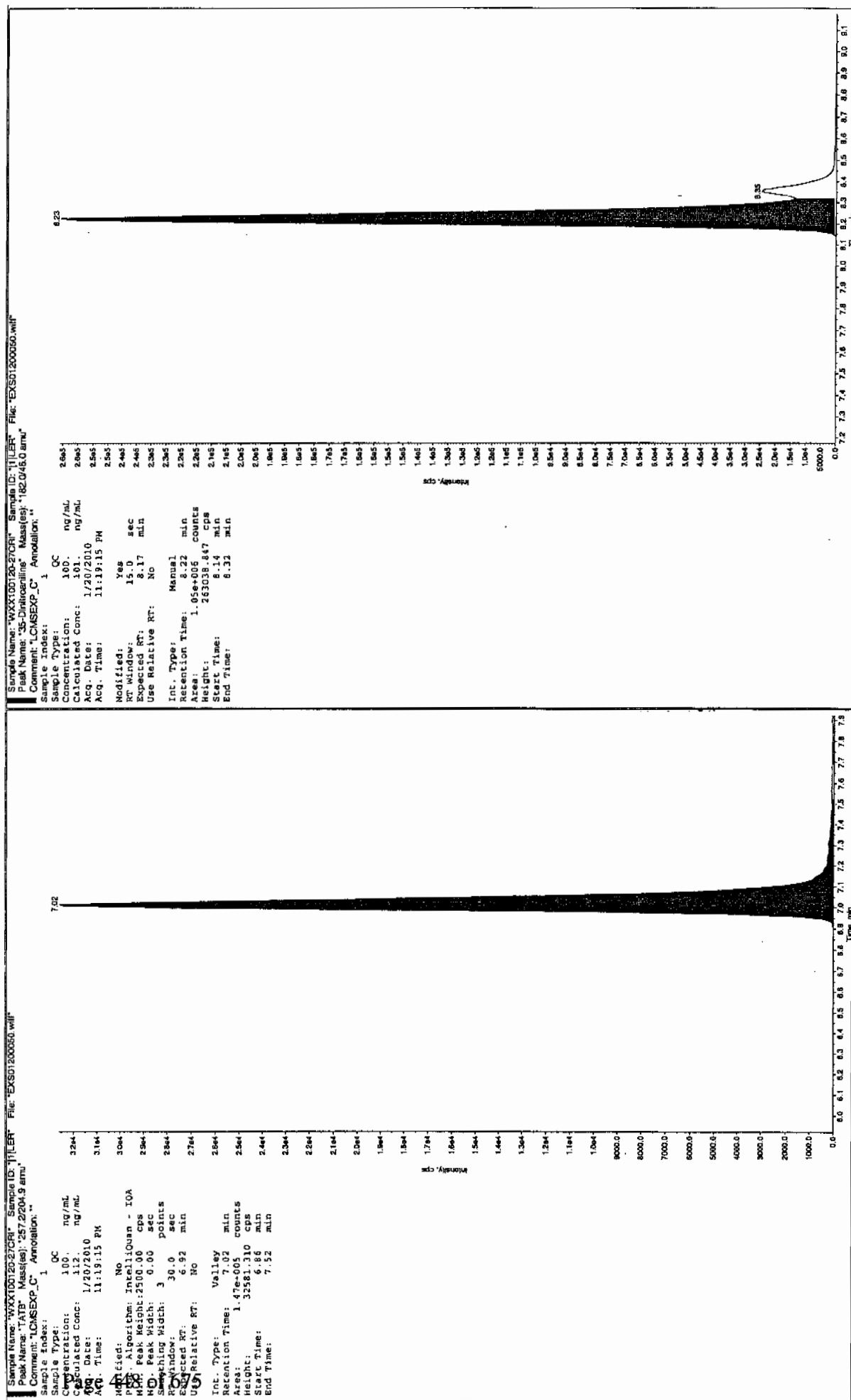
\* Value outside of Recovery Limits

*Bye Star 12/10*

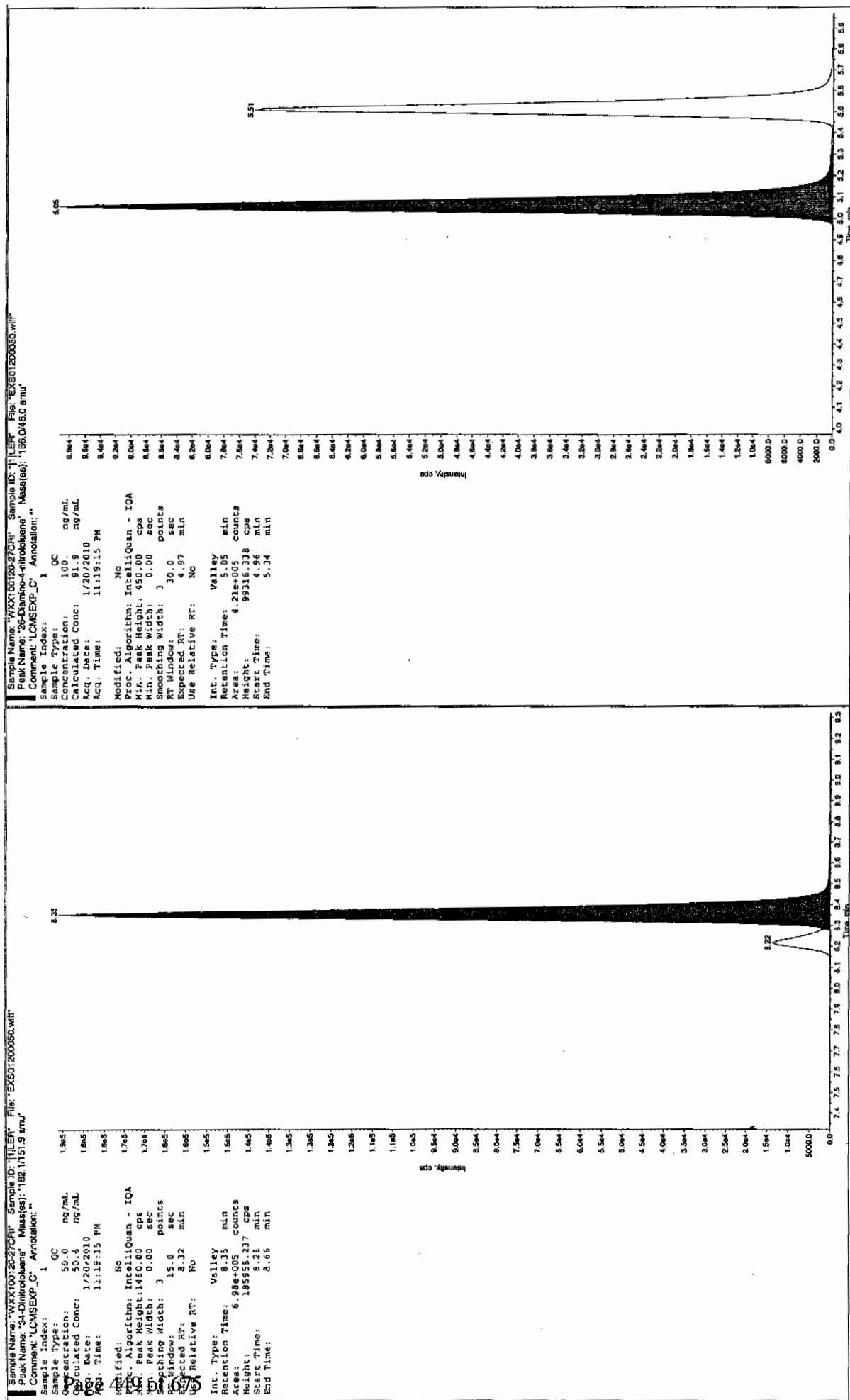


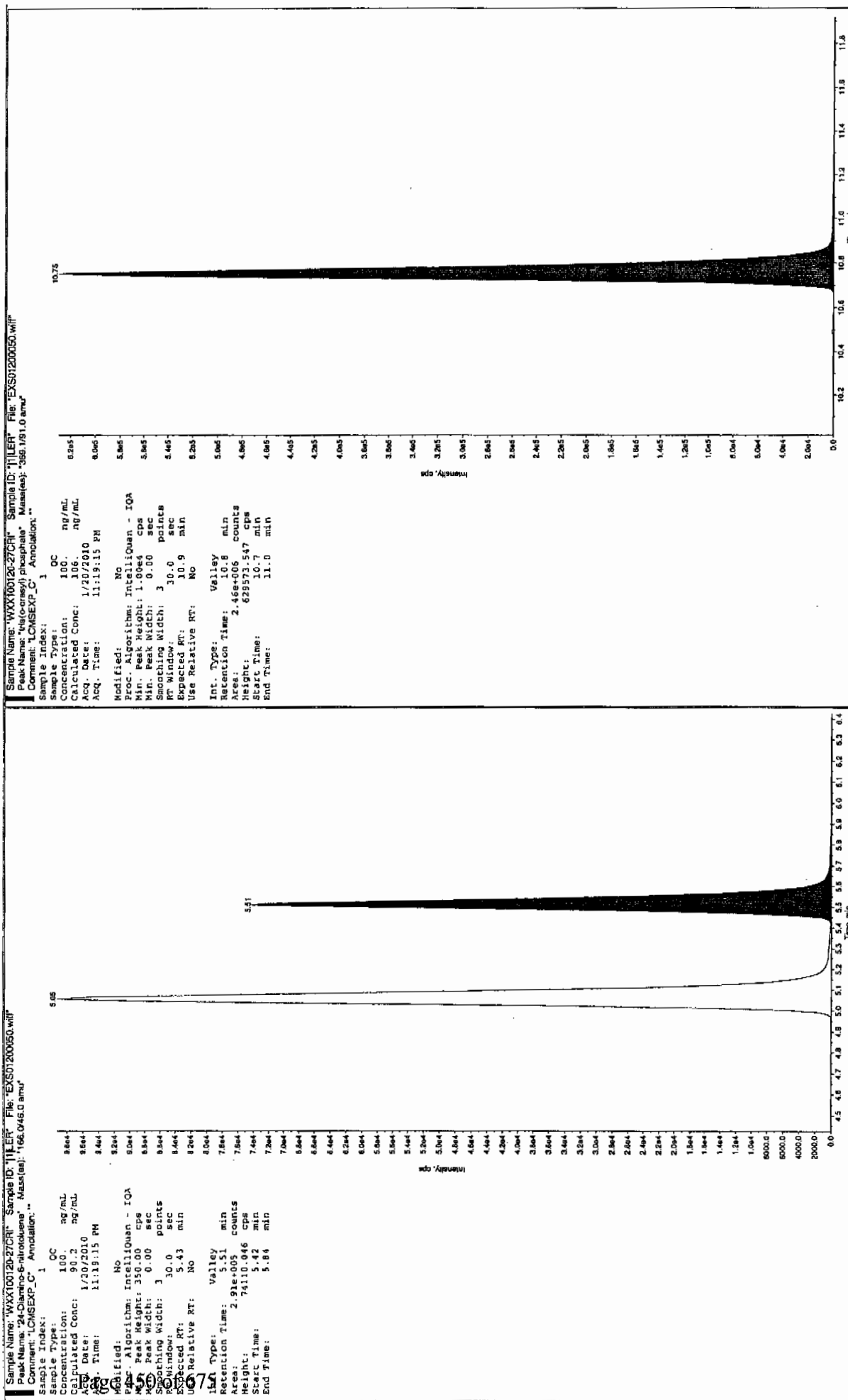
*4/11/10 12/10*

after Sea 1/21/10



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







# QUALITY CONTROL DATA

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: MB for batch 940055

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 1202011650

Sample Amount 2

Moisture:

Amount Units g

Date Received: 11-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125085a

Date Analyzed: 27-JAN-10 04:39

Units: ug/kg

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

\*Concentration =

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

Printed: Thu Jan 28 10:43:32 2010, Page 1 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

Method: C:\MASSLYNX\New\_Exp\PRO\MethDB\12510expa.mdb, Time: Mon Jan 25 16:14:14 2010  
Calibration: C:\MASSLYNX\New\_Exp\PRO\CurveDB\12510expa.cdb, Time: Tue Jan 26 09:24:52 2010

Name: C:\MASSLYNX\NEW\_EXP\PRO\Data\EXP0125085a

Date: 27-Jan-2010

Time: 04:39:14

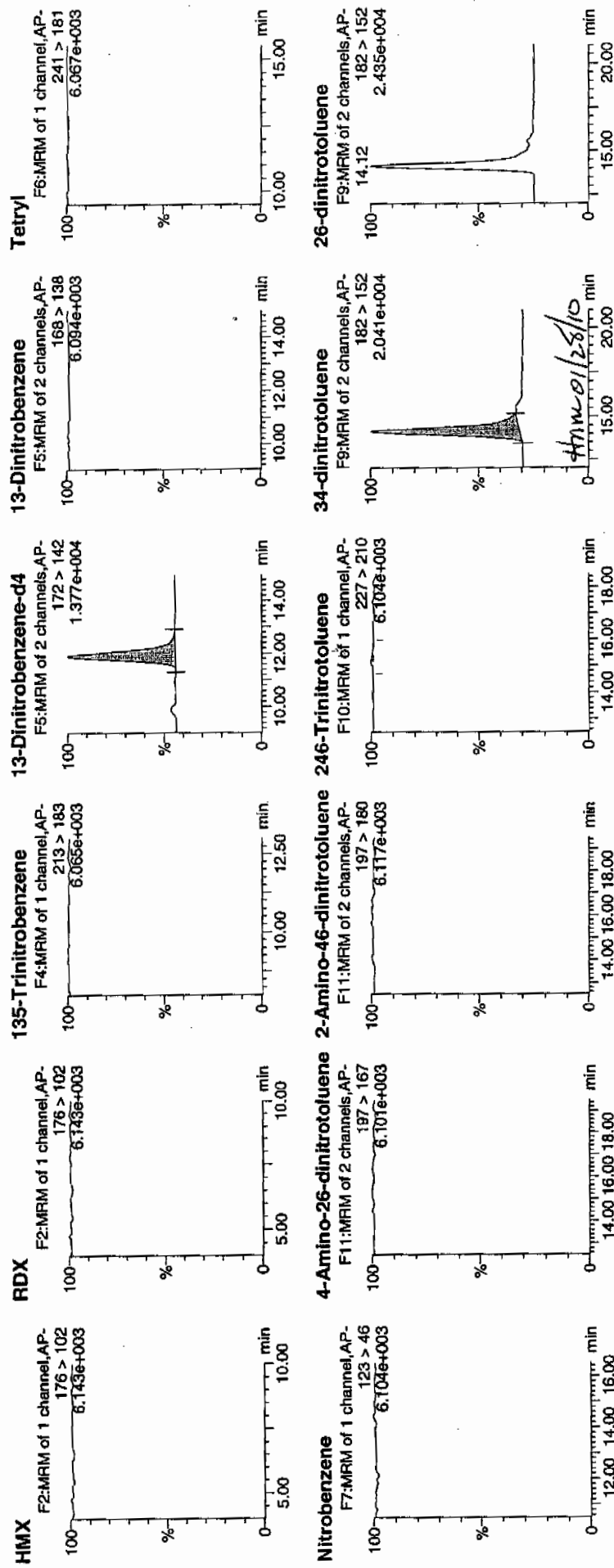
ID: 1202011650

Vial: 3:5,A

12/28/10

MS/21

WAV/940057/Solvent

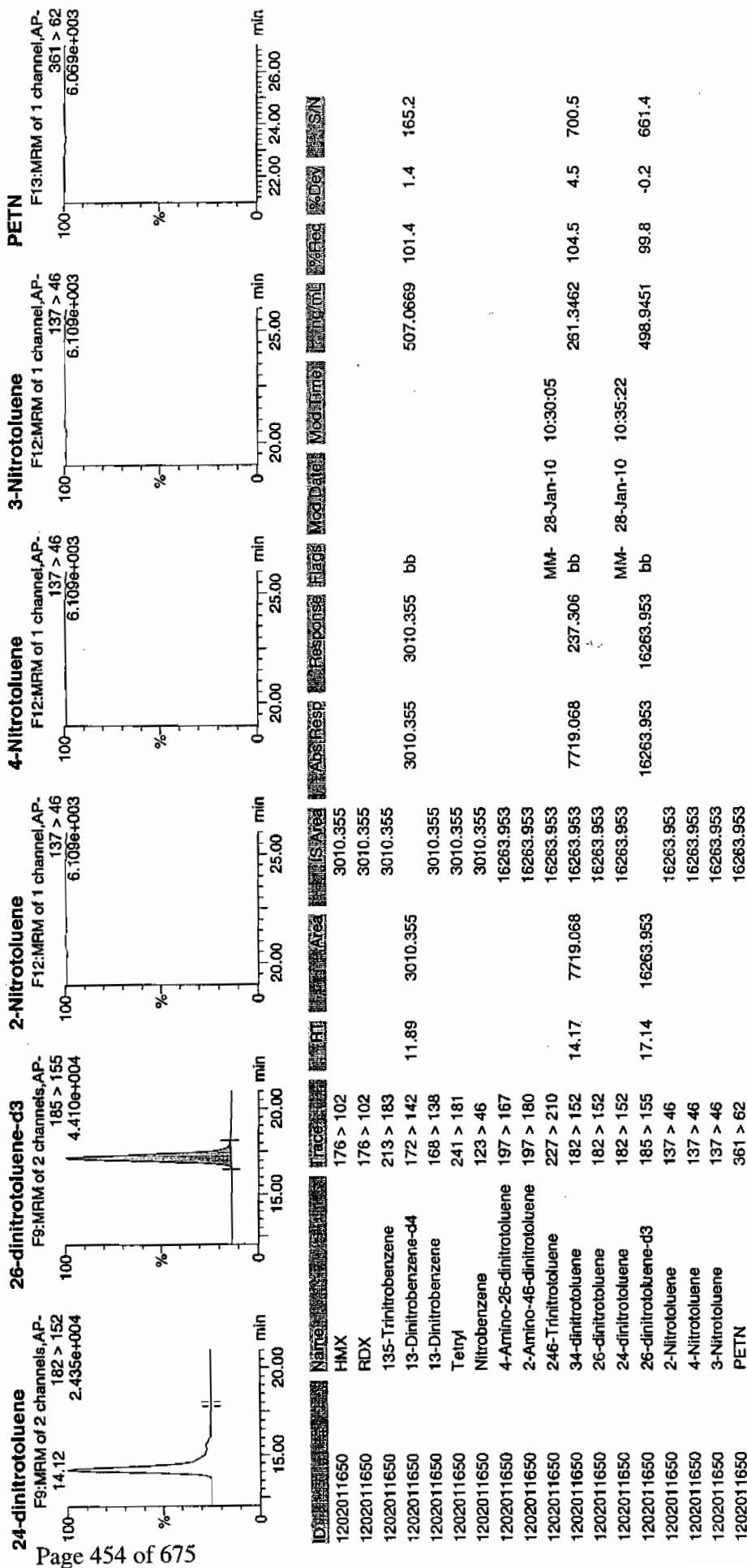


# Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Thu Jan 28 10:43:32 2010, Page 2 of 121

Dataset: C:\MASSL\YINXNew\_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: MB for batch 940055

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 1202011650

Sample Amount 2

Moisture:

Amount Units g

Date Received: 11-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXSQ1200014.wiff

Date Analyzed: 20-JAN-10 13:53

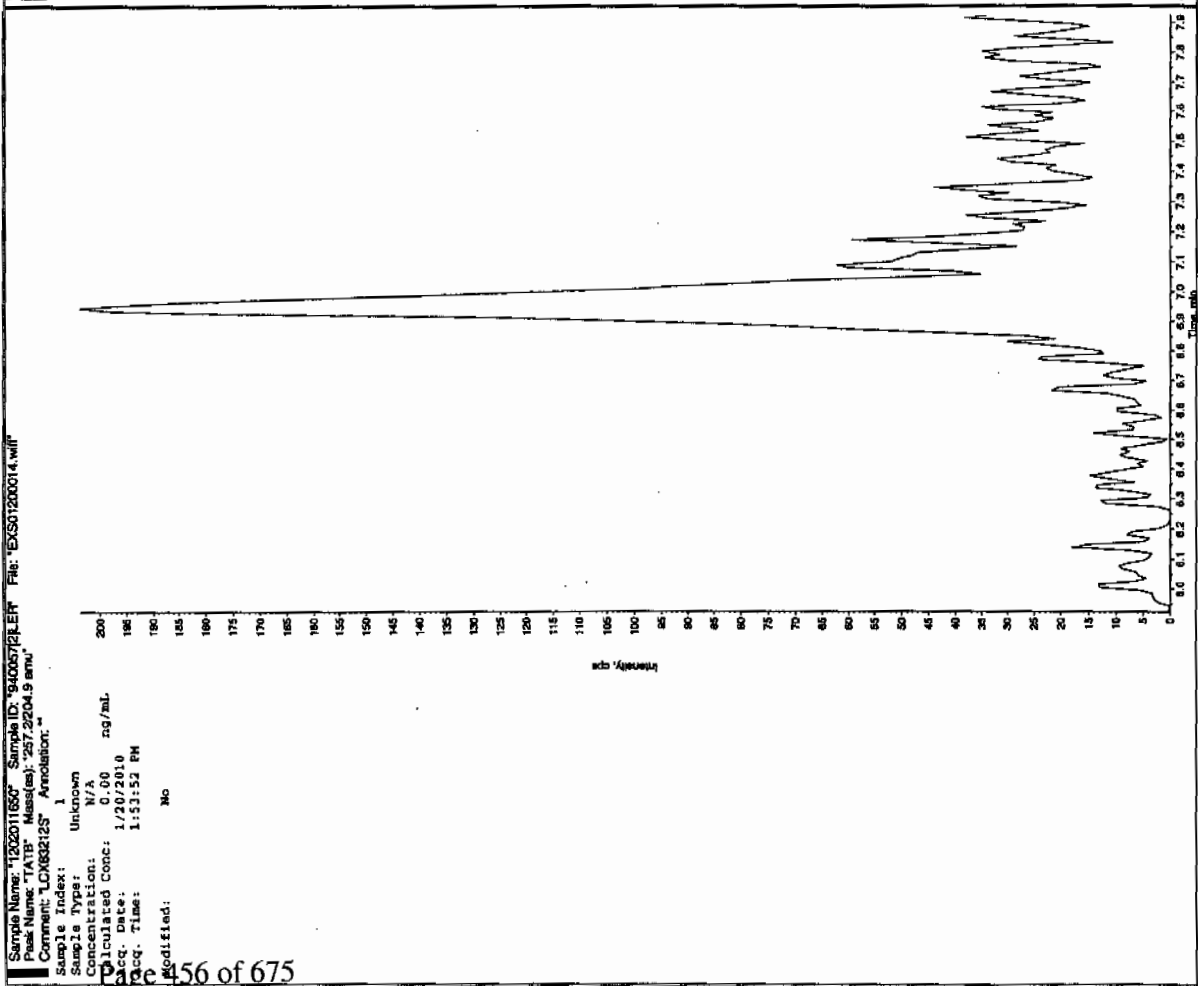
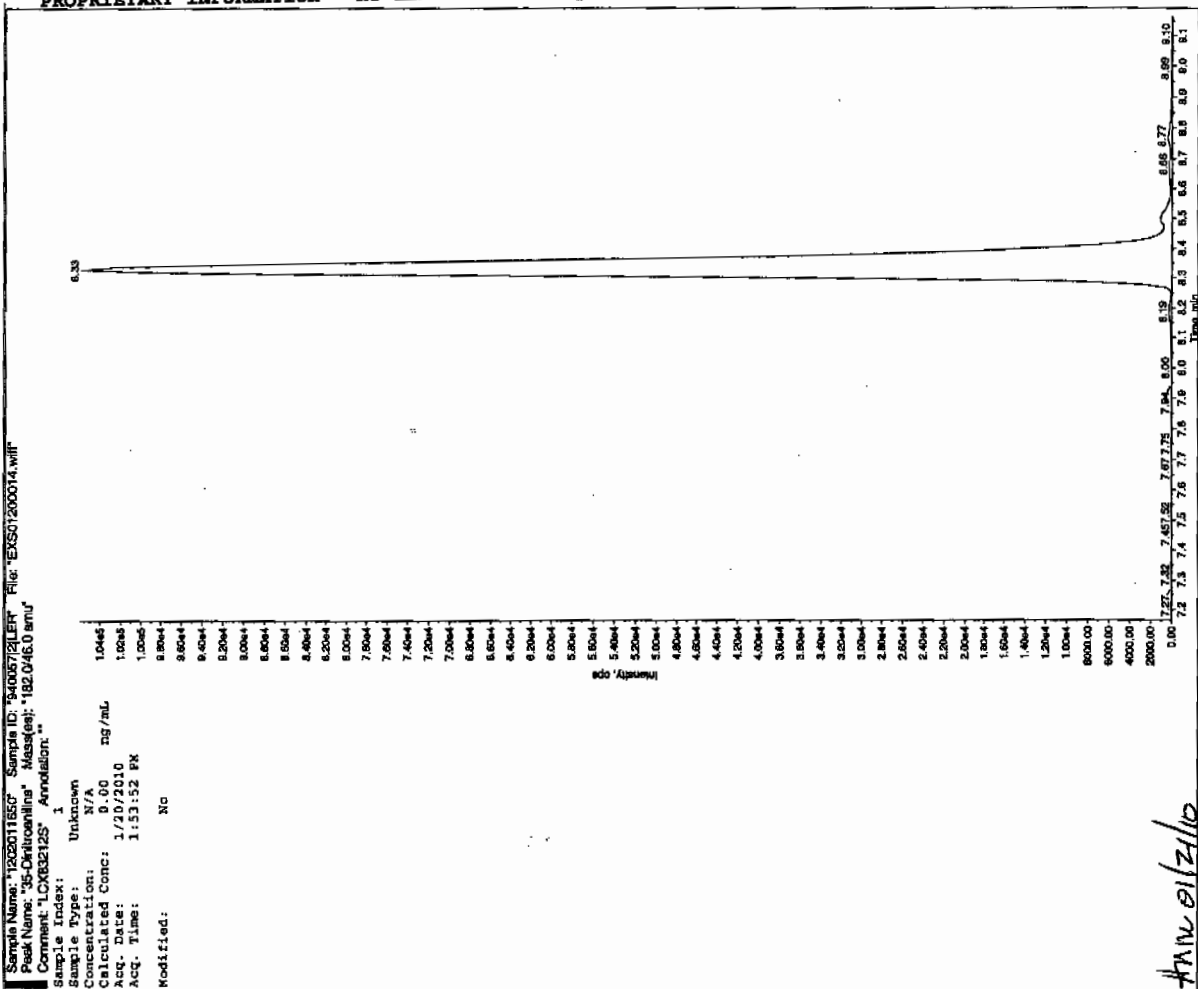
Units: ug/kg

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

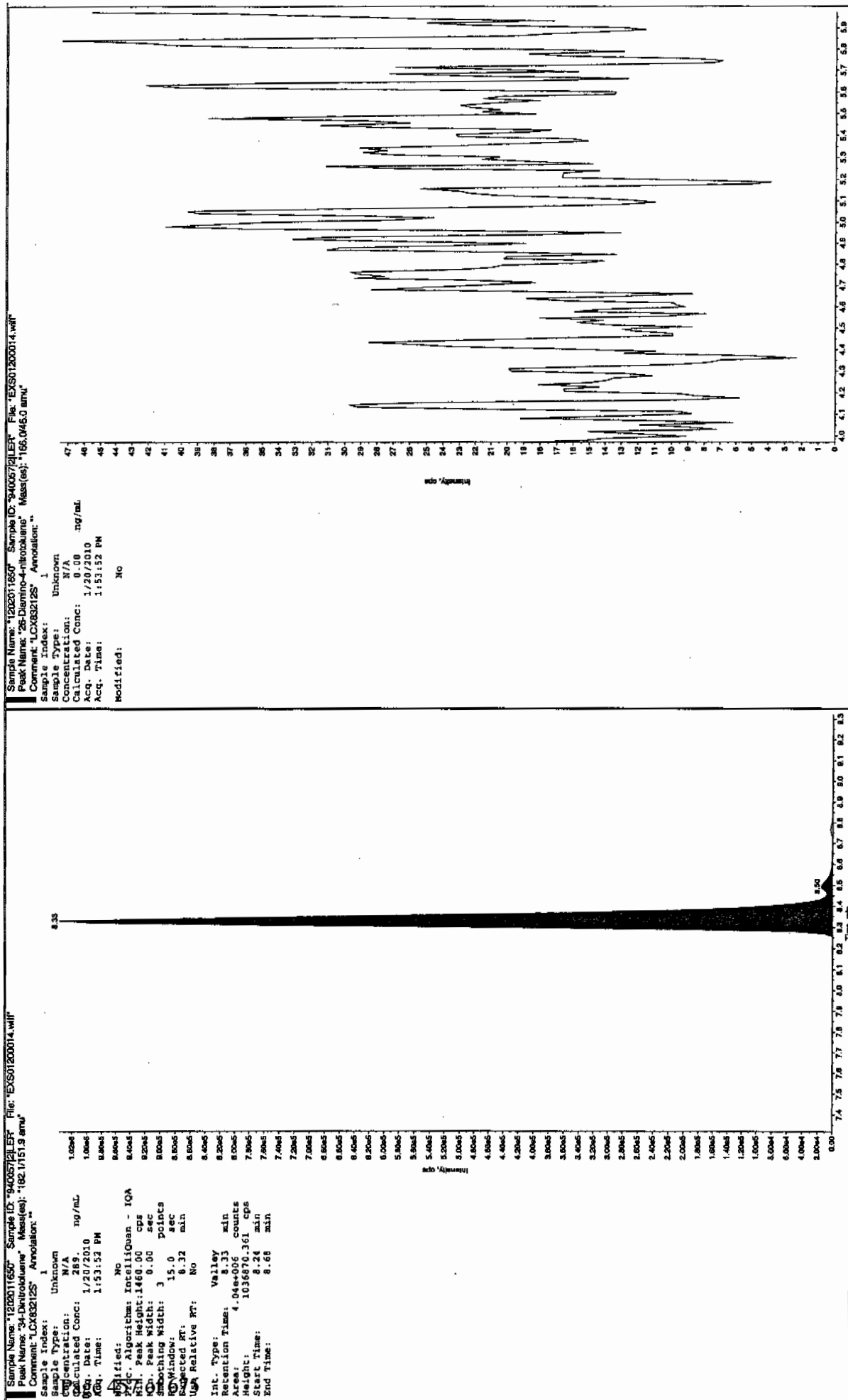
\*Concentration =

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

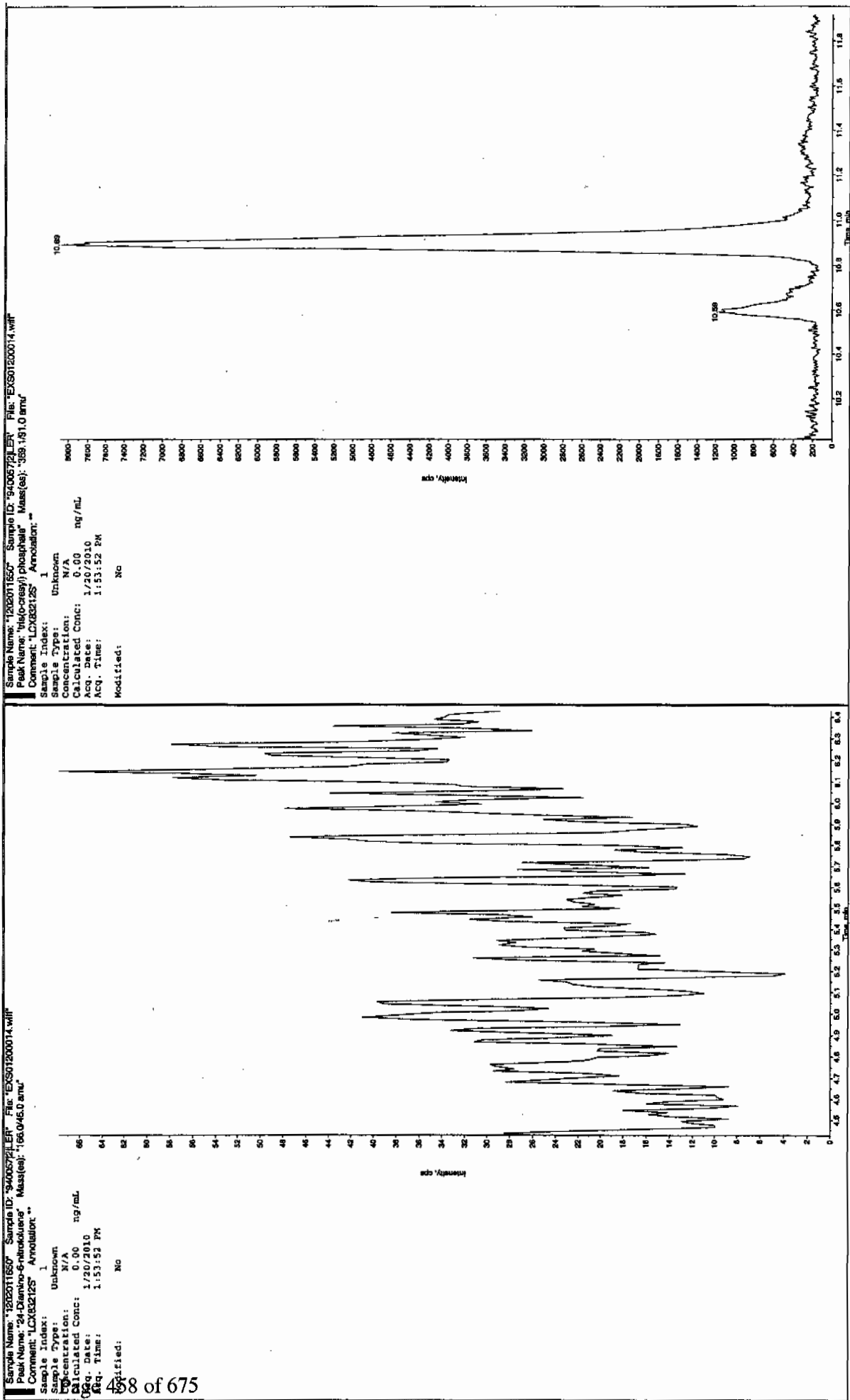
Jan 1/21/10



Jan 01/21/10



\*GEL SOP GL-OA-E-056, Method 8321A-Modified ICMSMS#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 940055

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 1202011651

Sample Amount 2

Moisture:

Amount Units g

Date Received: 11-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125086a

Date Analyzed: 27-JAN-10 05:08

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	5400	
121-14-2	2,4-Dinitrotoluene	4900	
121-82-4	RDX	5910	
19406-51-0	4-Amino-2,6-dinitrotoluene	5980	
2691-41-0	HMX	5170	
35572-78-2	2-Amino-4,6-dinitrotoluene	5910	
479-45-8	Tetryl	3020	
606-20-2	2,6-Dinitrotoluene	5010	
78-11-5	PETN	5950	
88-72-2	o-Nitrotoluene	4710	
98-95-3	Nitrobenzene	5160	
99-08-1	m-Nitrotoluene	4980	
99-35-4	1,3,5-Trinitrobenzene	5030	
99-65-0	m-Dinitrobenzene	4920	
99-99-0	p-Nitrotoluene	5090	

\*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:\MASSLYN\New\_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

Name: C:\MASSLYN\NEW\_EXP.PRO\PRO\EXP0125086a

Date: 27-Jan-2010

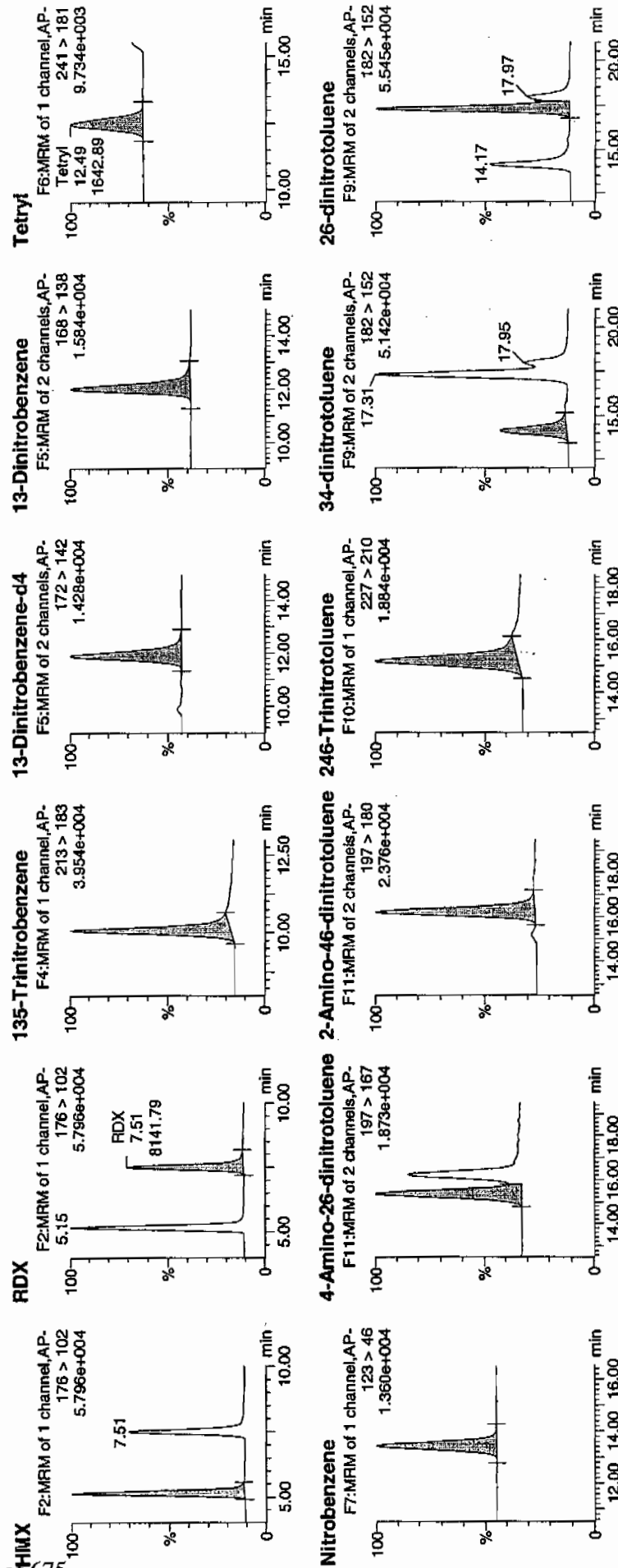
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Pub. 00:00:43  
ID: 1202011651

Vial: 3:5,B

10/28/10

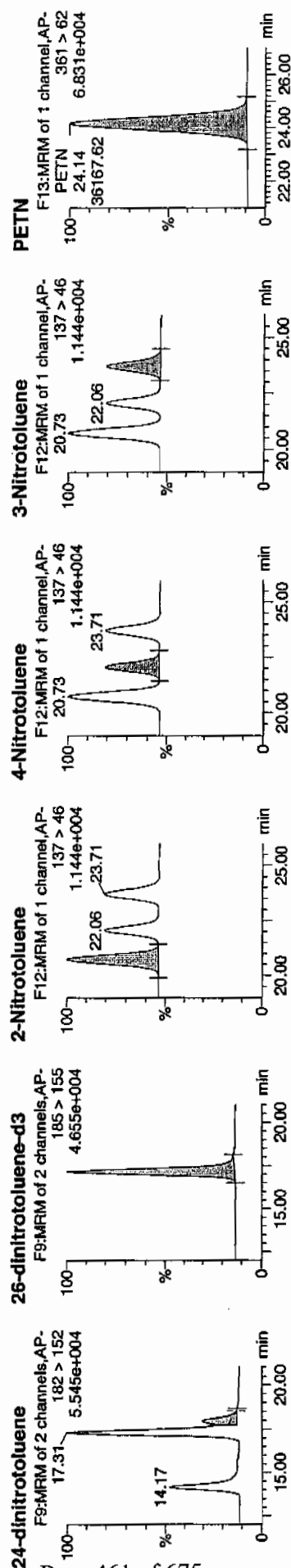
12/28/2014 9:40:57 AM



01/22/10 MHP

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

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ID	Name	Trace	RT	Area	ISArea	Abs Resp	Response	Plan	Mod Date	Mod Time	Info	Spec	Lab	SN
1202011651	HMX	176 > 102	5.15	10268.414	3131.254	10268.414	1639.665	bb			516.8315	103.4	3.4	1001.5
1202011651	RDX	176 > 102	7.51	8141.792	3131.254	8141.792	1300.085	bb			591.3245	118.3	18.3	668.7
1202011651	135-Trinitrobenzene	213 > 183	10.07	9053.604	3131.254	9053.604	1445.683	bb			503.2340	100.6	0.6	545.7
1202011651	13-Dinitrobenzene-d4	172 > 142	11.89	3131.254		3131.254	3131.254	bb			527.4312	105.5	5.5	898.6
1202011651	13-Dinitrobenzene	168 > 138	12.00	3577.184	3131.254	3577.184	571.205	bb			492.4266	98.5	-1.5	284.6
1202011651	Tetryl	241 > 181	12.49	1642.892	3131.254	1642.892	262.338	bb			302.0191	60.4	-39.6	142.9
1202011651	Nitrobenzene	123 > 46	13.41	2762.400	3131.254	2762.400	441.101	bb			516.1526	103.2	3.2	185.3
1202011651	4-Amino-26-dinitrotoluene	197 > 167	15.35	5308.388	17042.330	5308.388	155.741	MM	28-Jan-10	10:28:55	597.8240	119.6	19.6	176.7
1202011651	2-Amino-46-dinitrotoluene	197 > 180	16.22	7544.342	17042.330	7544.342	221.341	bb			591.3714	118.3	18.3	1237.9
1202011651	246-Trinitrotoluene	227 > 210	15.17	5849.245	17042.330	5849.245	171.609	bb			539.5434	107.9	7.9	681.2
1202011651	34-dinitrotoluene	182 > 152	14.17	8523.426	17042.330	8523.426	250.066	bb			275.3992	110.2	10.2	142.3
1202011651	26-dinitrotoluene	182 > 152	17.31	18802.613	17042.330	18802.613	551.644	MM	28-Jan-10	10:35:09	500.7917	100.2	0.2	943.2
1202011651	24-dinitrotoluene	182 > 152	17.97	4245.332	17042.330	4245.332	124.553	MM	28-Jan-10	10:35:40	490.2434	98.0	-2.0	193.1
1202011651	26-dinitrotoluene-d3	185 > 155	17.14	17042.330		17042.330	17042.330	bb			522.8241	104.6	4.6	2219.2
1202011651	2-Nitrotoluene	137 > 46	20.73	2667.892	17042.330	2667.892	78.273	bb			470.6622	94.1	-5.9	687.2
1202011651	4-Nitrotoluene	137 > 46	22.06	1435.281	17042.330	1435.281	42.109	bb			509.3056	101.9	1.9	399.6
1202011651	3-Nitrotoluene	137 > 46	23.71	1585.255	17042.330	1585.255	46.509	bb			498.1731	99.6	-0.4	401.8
1202011651	PETN	361 > 62	24.14	36167.621	17042.330	36167.621	1061.111	bb			594.6374	118.9	18.9	5297.3

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: LCS for batch 940055

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 1202011651

Sample Amount 2

Moisture:

Amount Units g

Date Received: 11-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01200015.wiff

Date Analyzed: 20-JAN-10 14:09

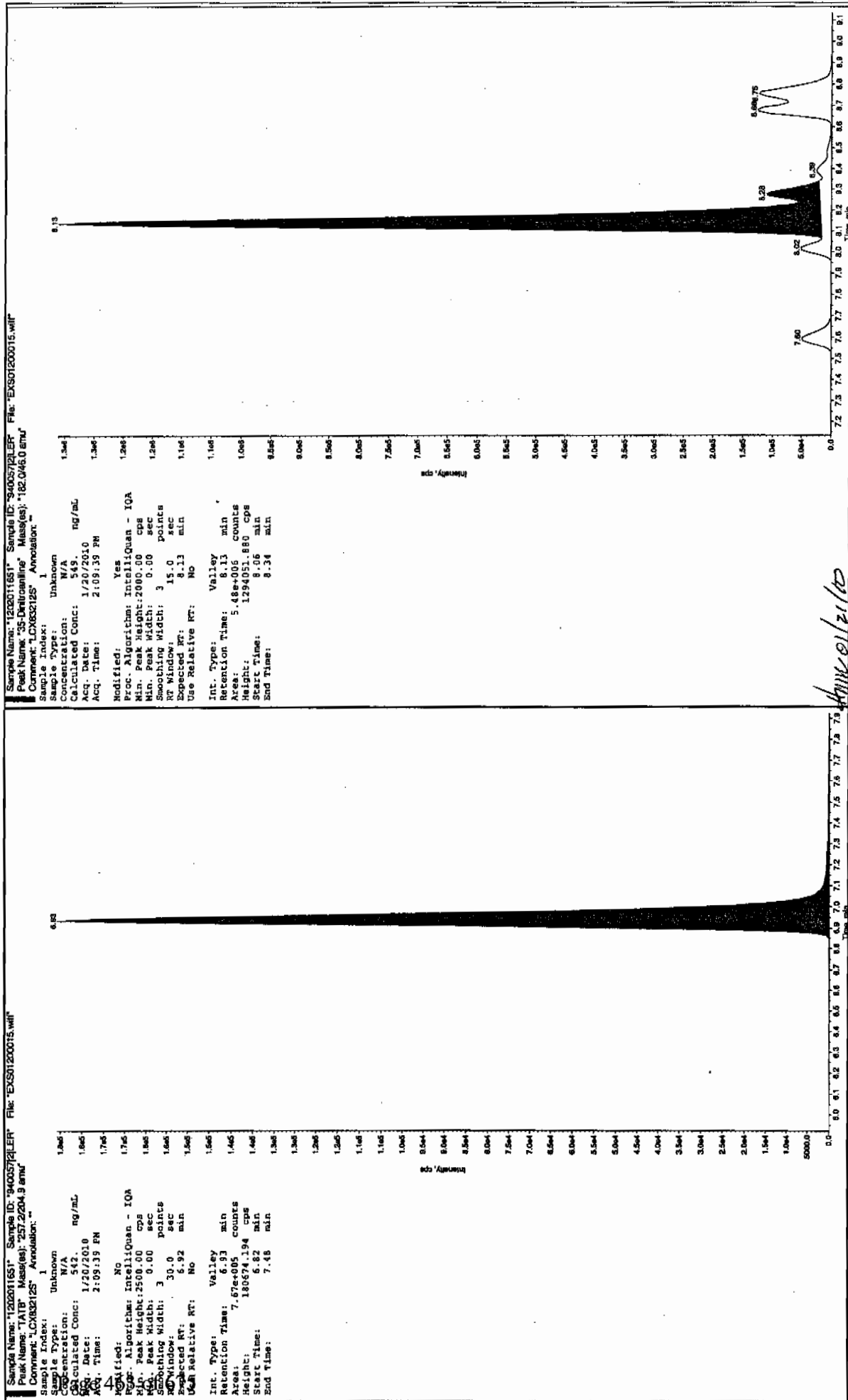
Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	5420	
59229-75-3	2,6-Diamino-4-nitrotoluene	4980	
618-87-1	3,5-Dinitroaniline	5300	
6629-29-4	2,4-Diamino-6-nitrotoluene	4740	
78-30-8	tris(o-cresyl) phosphate	5600	

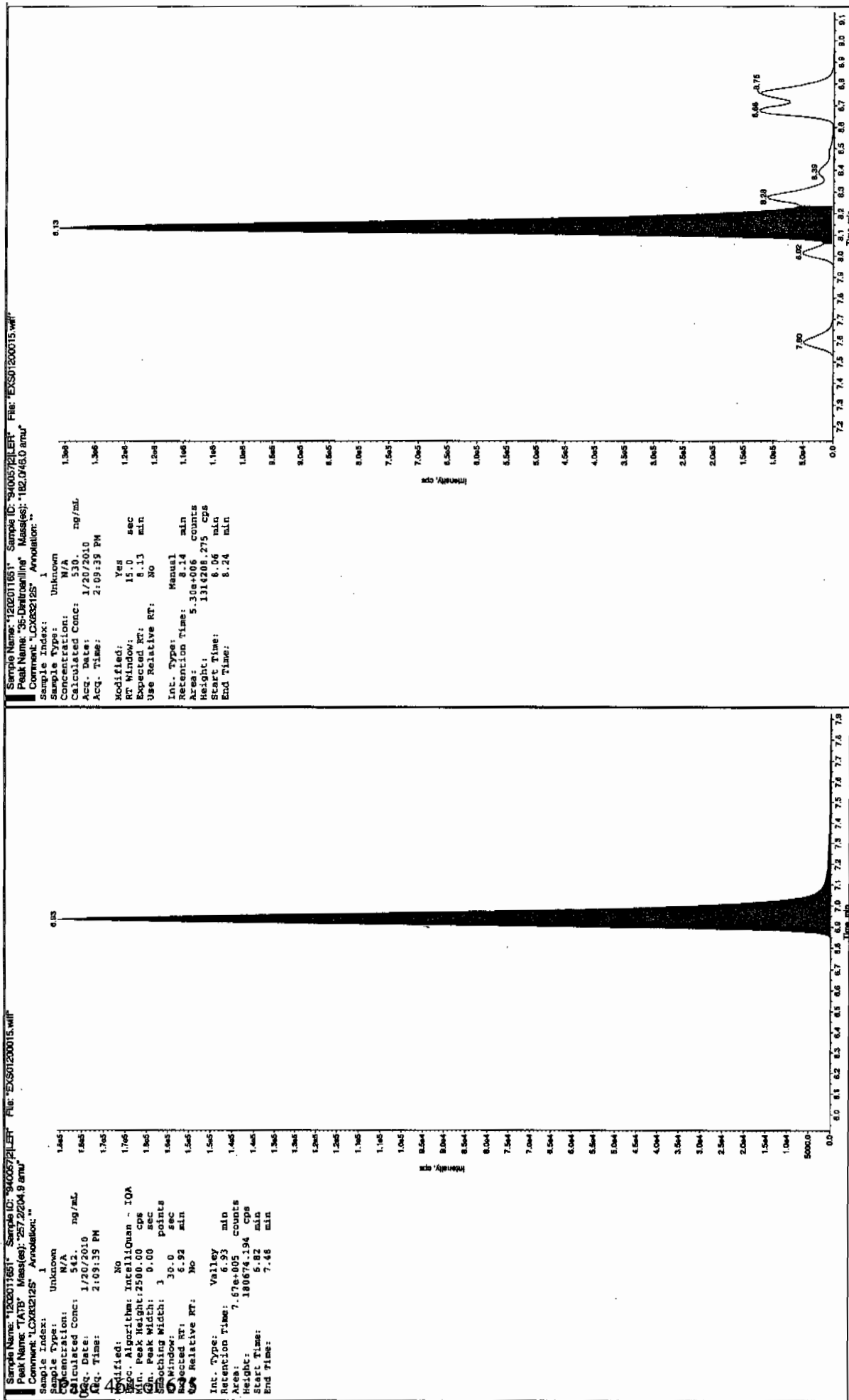
\*Concentration =

Instrument Value	X	$\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$	X	Dilution Factor
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1/21/10  
D. J. G. J.



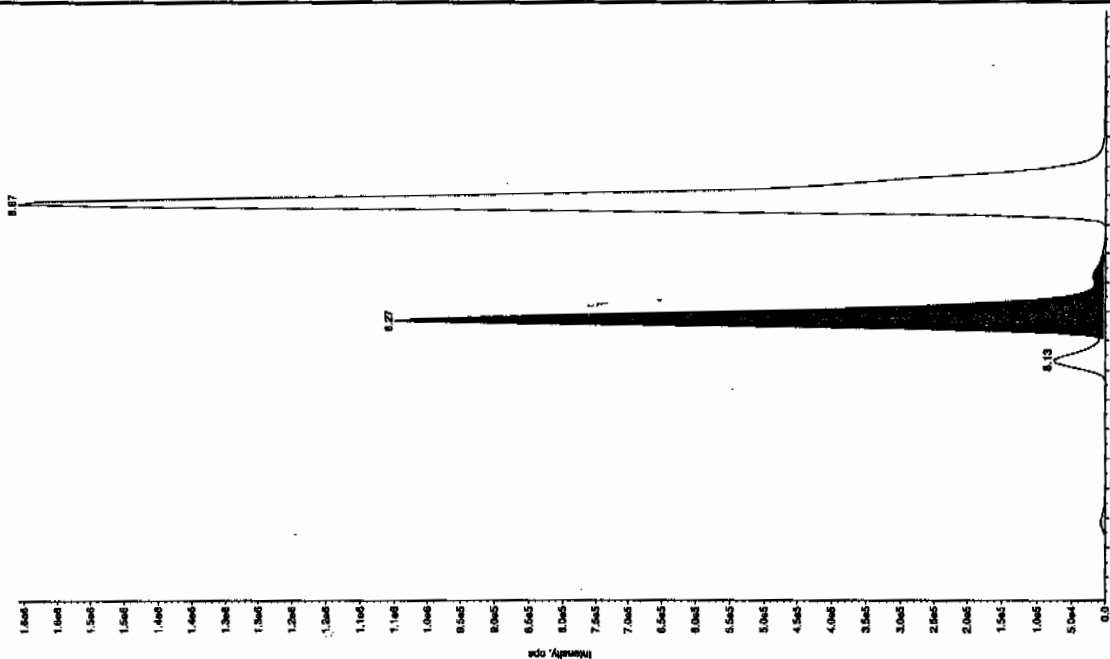
after scan  
1/21/10



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

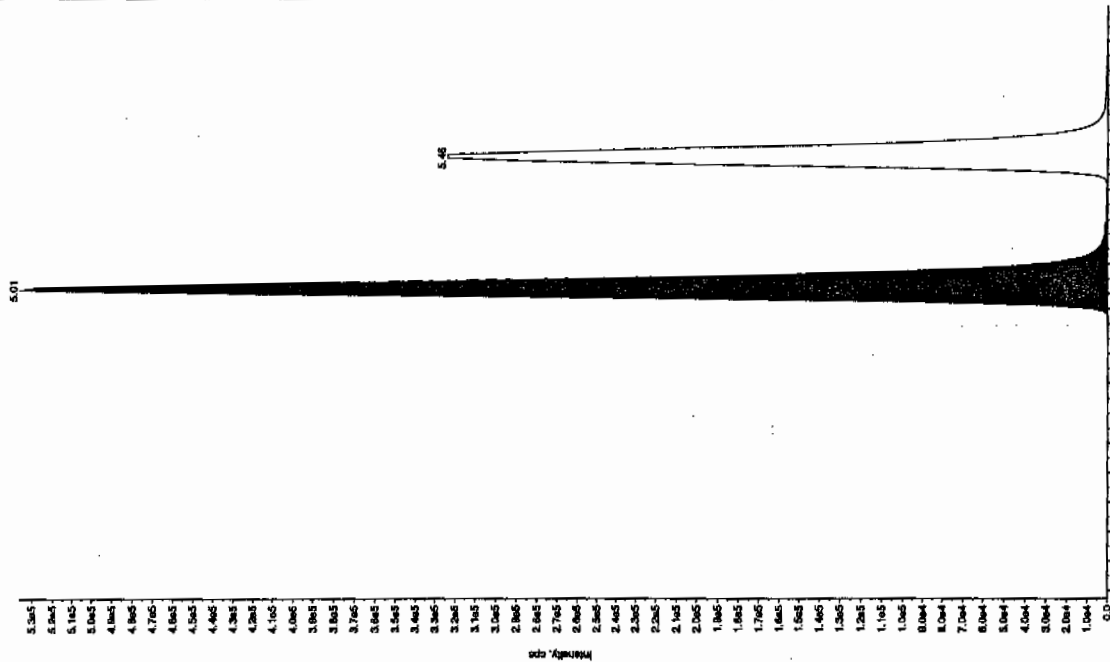
Sample Name: "12201155" Sample ID: "9406721.ER" File: "EX01200015.wif"  
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.1/151.9 amu"  
 Comment: "LCX632125" Annotation: ""

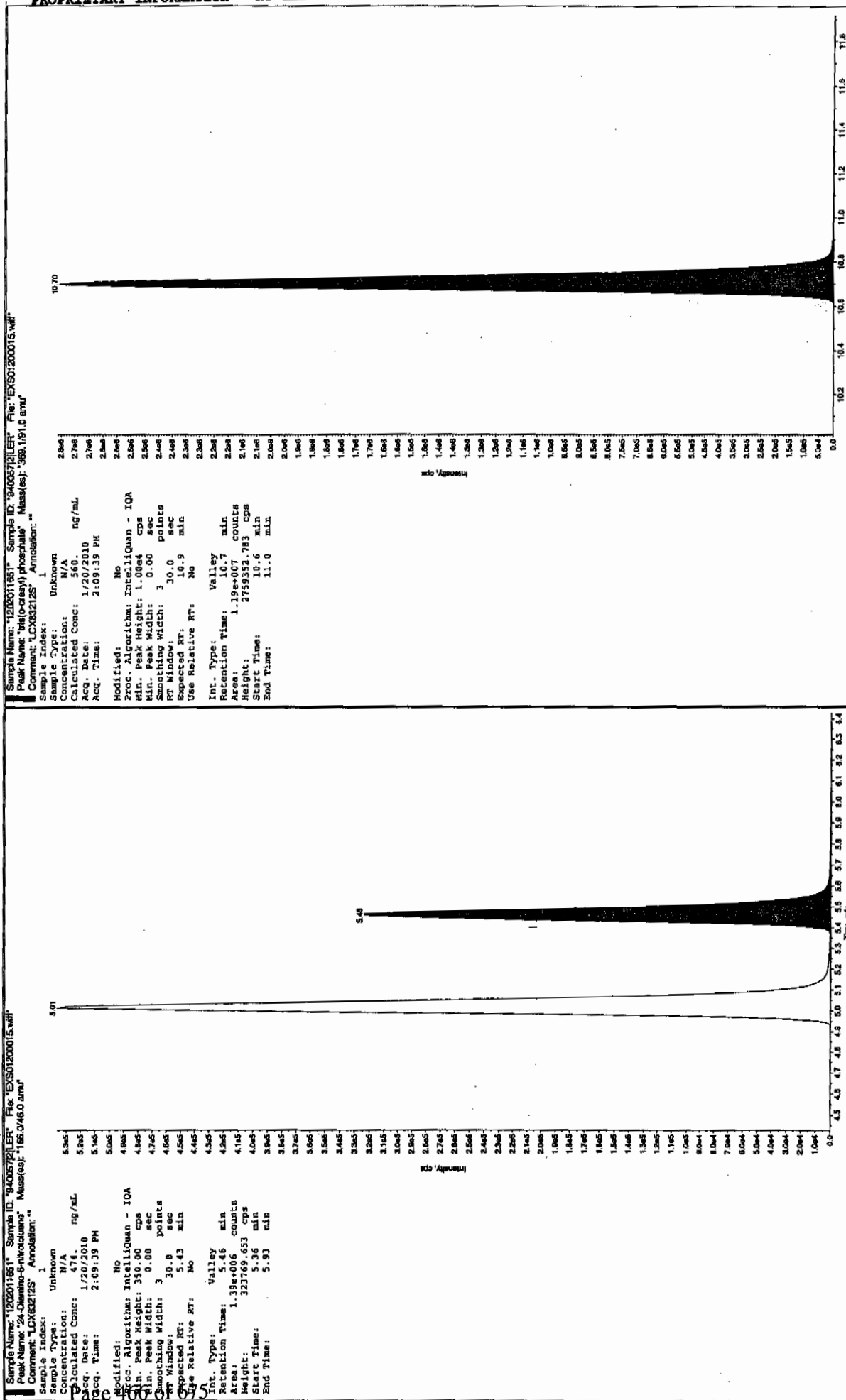
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 262 ng/mL  
 Calculated Conc: 1/20/2010  
 Acq. Date: 2:09:39 PM  
 Acq. Time: 2:09:39 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 1450.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 15.0 sec  
 Expected RT: 8.32 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.27 min  
 Acquisition Time: 3.95e+006 counts  
 Height: 3.1045811.035 cps  
 Start Time: 8.21 min  
 End Time: 8.52 min



Sample Name: "12201155" Sample ID: "9406721.ER" File: "EX01200015.wif"  
 Peak Name: "26-Dinitro-4-nitrofluorene" Mass(es): "186.046.0 amu"  
 Comment: "LCX632125" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 488 ng/mL  
 Calculated Conc: 1/20/2010  
 Acq. Date: 2:09:39 PM  
 Acq. Time: 2:09:39 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: 4.97 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 2.27e+003 counts  
 Acquisition Time: 536100.233 cps  
 Height: 4.91 min  
 Start Time: 5.30 min  
 End Time: 5.30 min







1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7619(244142001MS)

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 1202011652

Sample Amount 2

Moisture: 16.2

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125088a

Date Analyzed: 27-JAN-10 06:07

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	4900	
121-14-2	2,4-Dinitrotoluene	4950	
121-82-4	RDX	5530	
19406-51-0	4-Amino-2,6-dinitrotoluene	5130	
2691-41-0	HMX	5470	
35572-78-2	2-Amino-4,6-dinitrotoluene	5230	
479-45-8	Tetryl	2780	
606-20-2	2,6-Dinitrotoluene	4960	
78-11-5	PETN	5110	
88-72-2	o-Nitrotoluene	4200	
98-95-3	Nitrobenzene	4570	
99-08-1	m-Nitrotoluene	4380	
99-35-4	1,3,5-Trinitrobenzene	5210	
99-65-0	m-Dinitrobenzene	5020	
99-99-0	p-Nitrotoluene	4300	

\*Concentration =

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

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125088a

Date: 27-Jan-2010

Time: 06:07:48

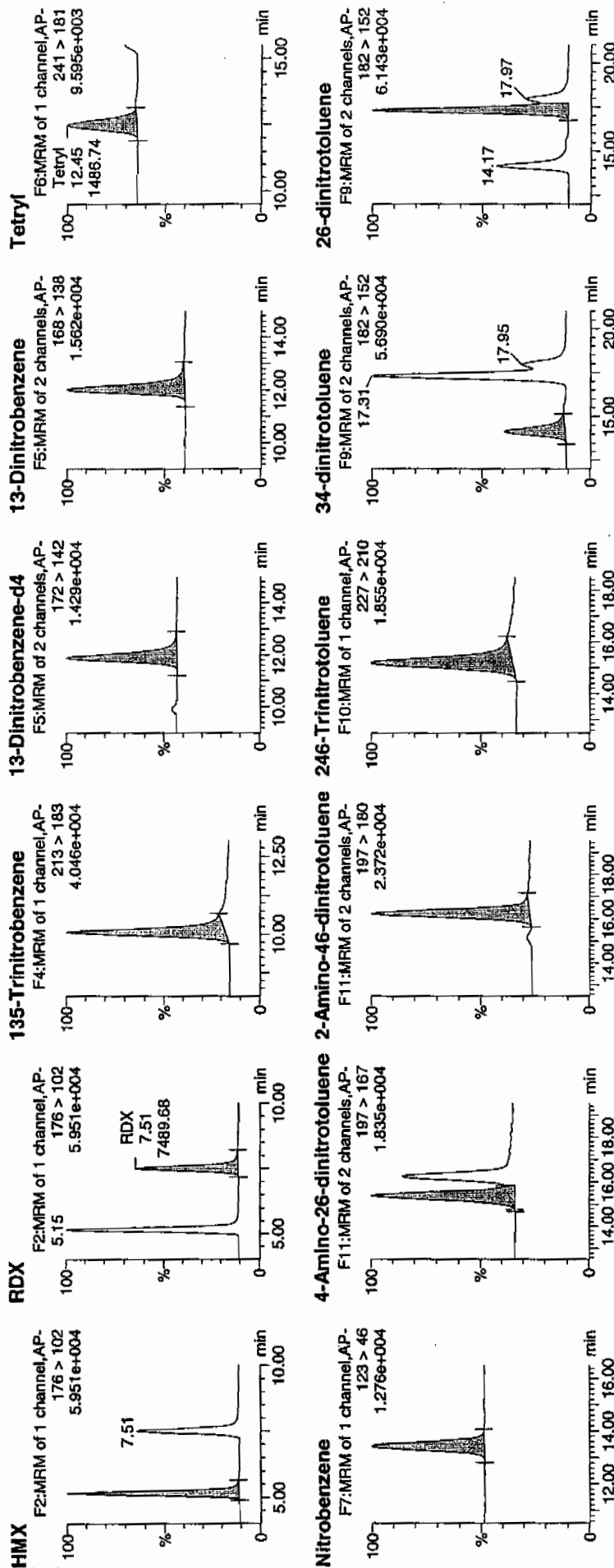
ID: 1202011652

Vial: 3:5,D

1/28/10

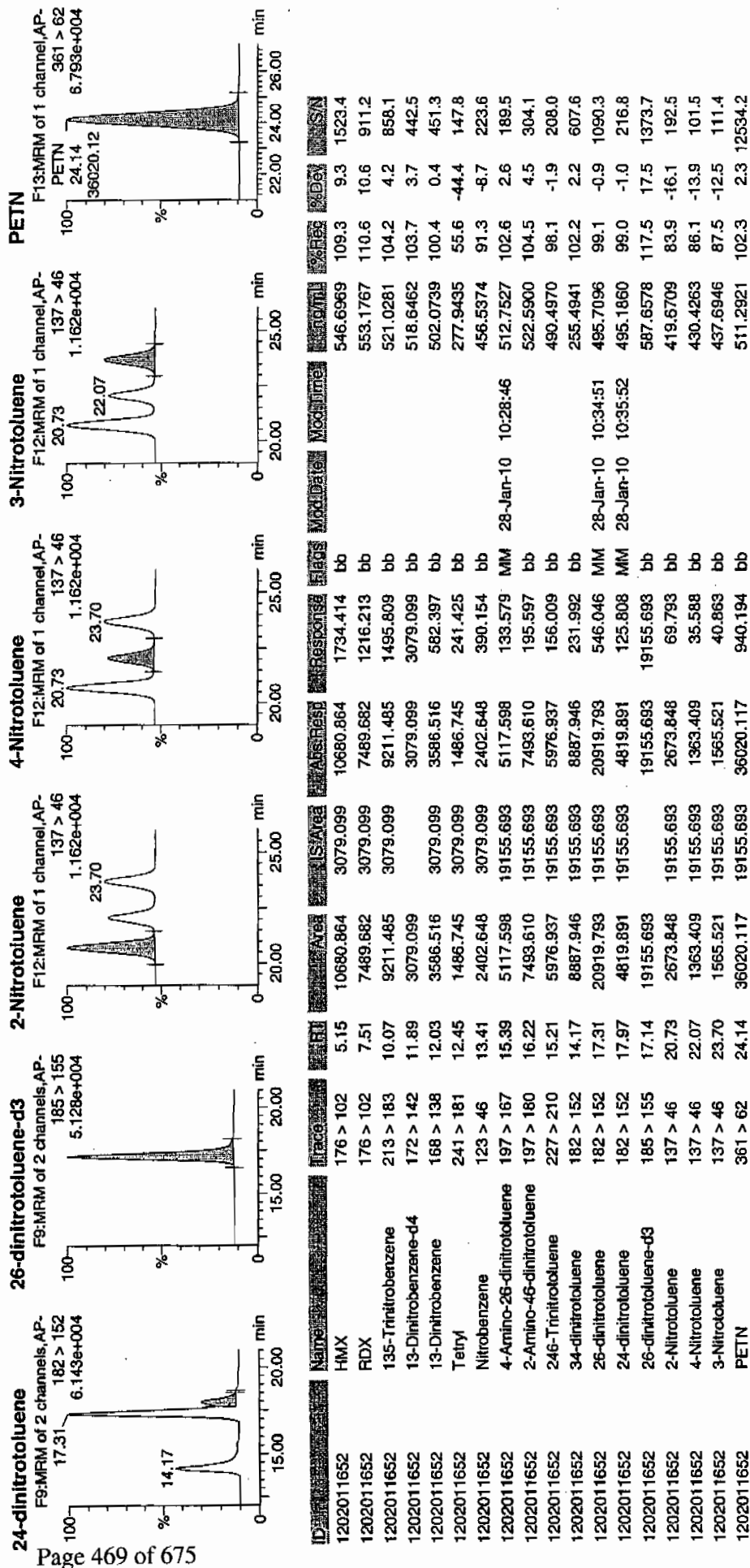
244142001 us 2/

740057/ 822



1/28/10

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: RE12-10-7619(244142001MS)

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 1202011652

Sample Amount 2

Moisture: 16.2

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01200017.wiff

Date Analyzed: 20-JAN-10 14:41

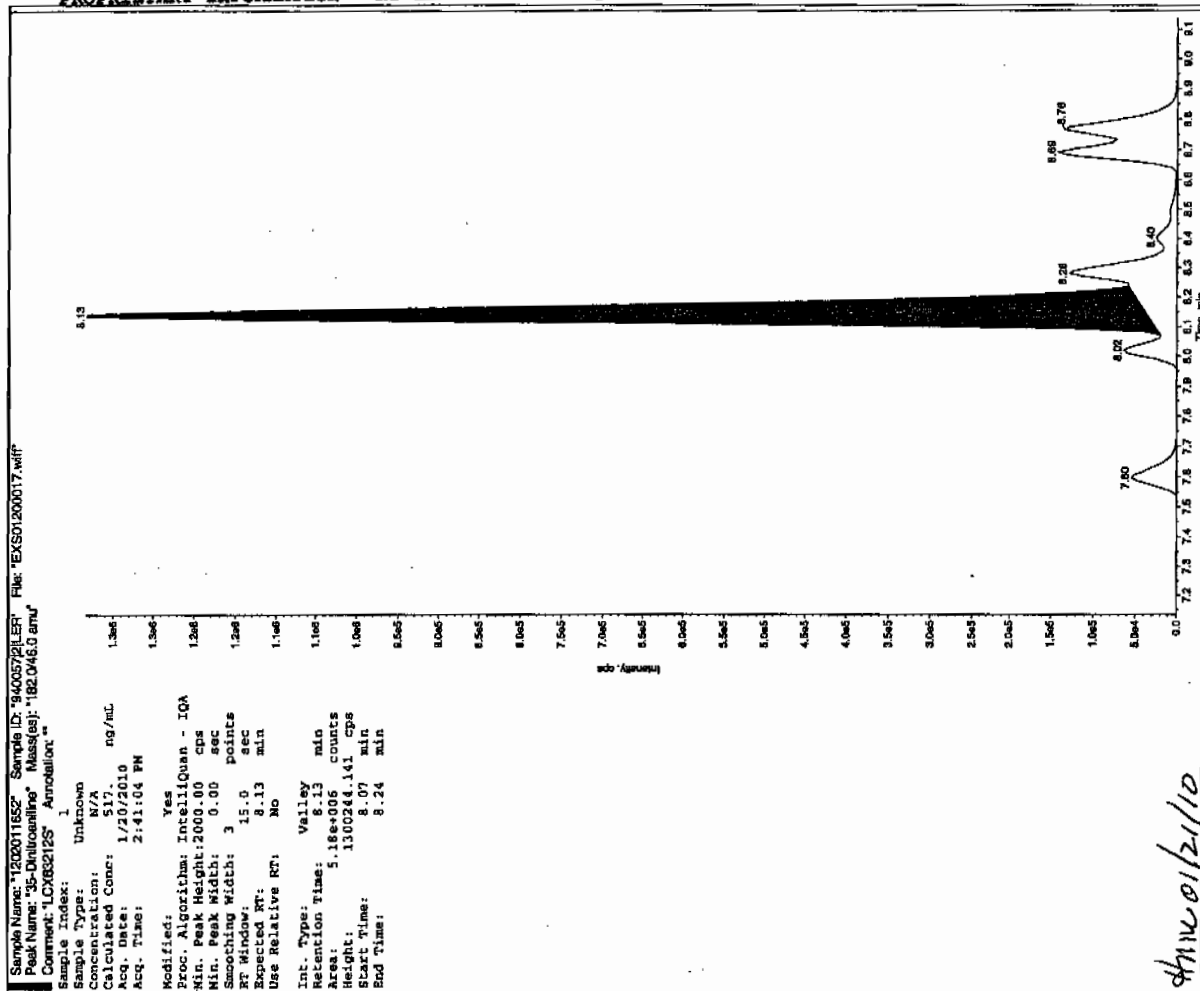
Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	7560	
59229-75-3	2,6-Diamino-4-nitrotoluene	4360	
618-87-1	3,5-Dinitroaniline	5550	
6629-29-4	2,4-Diamino-6-nitrotoluene	4060	
78-30-8	tris(o-cresyl) phosphate	5390	

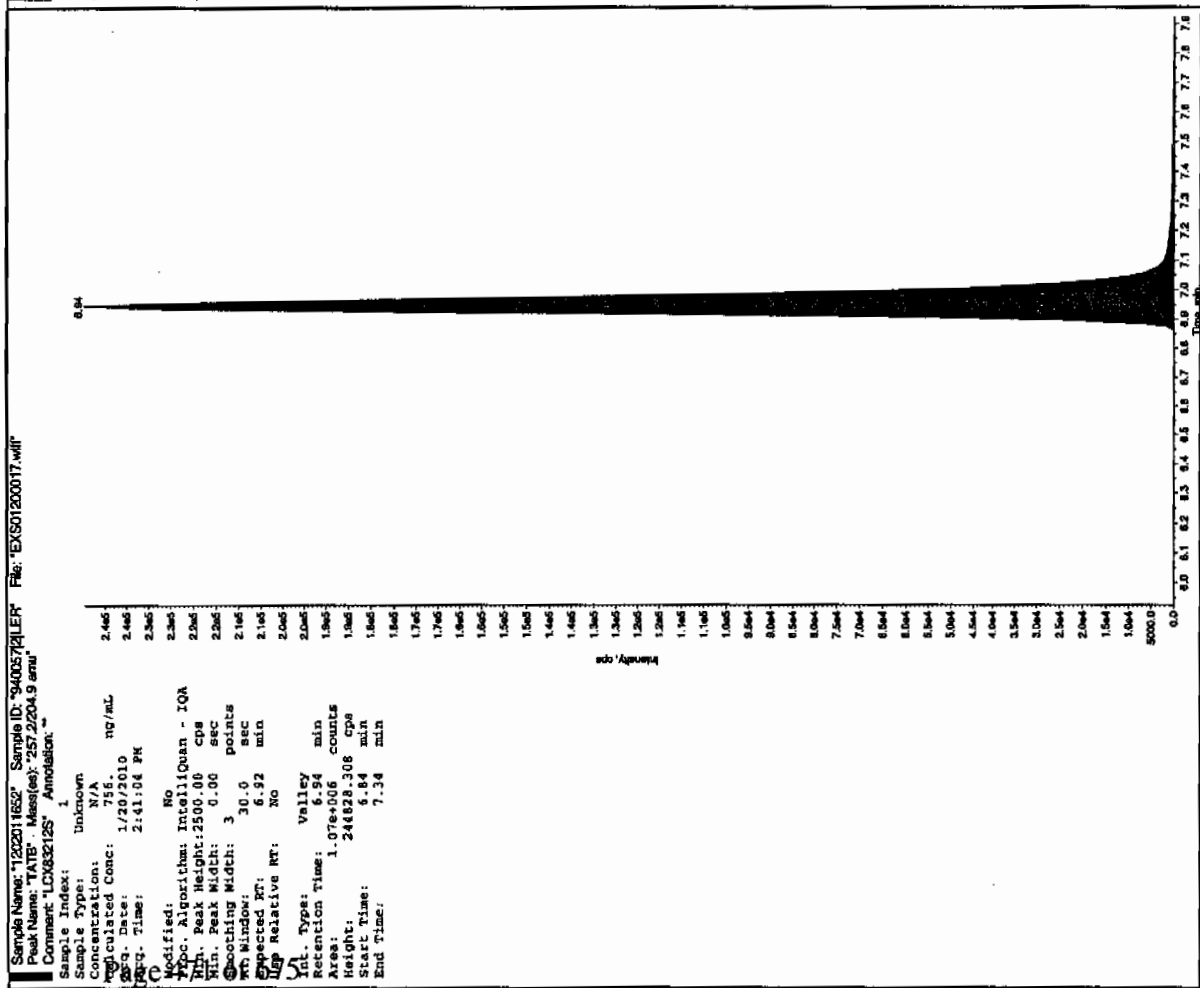
\*Concentration =

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

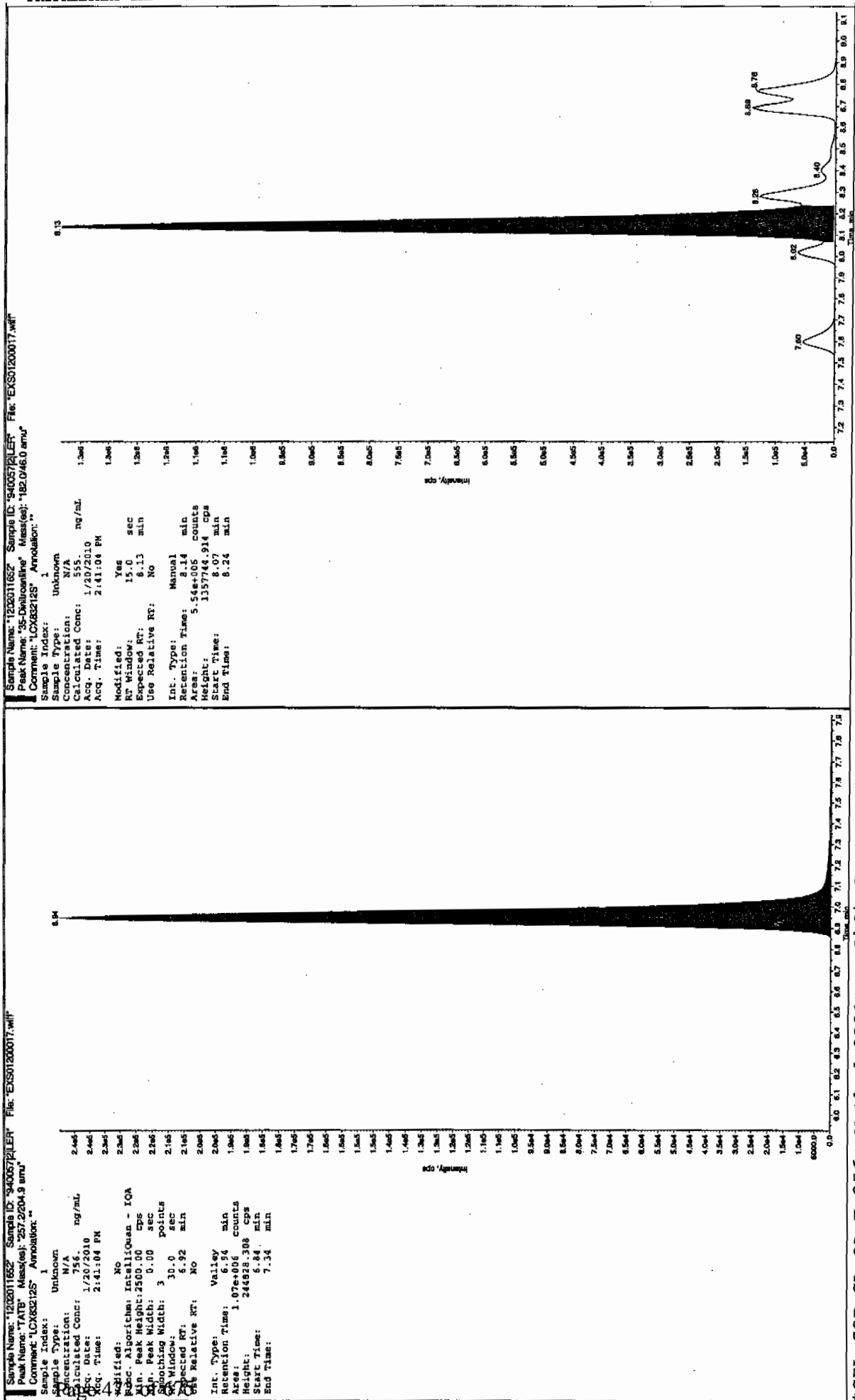
Byline  
01/11/10

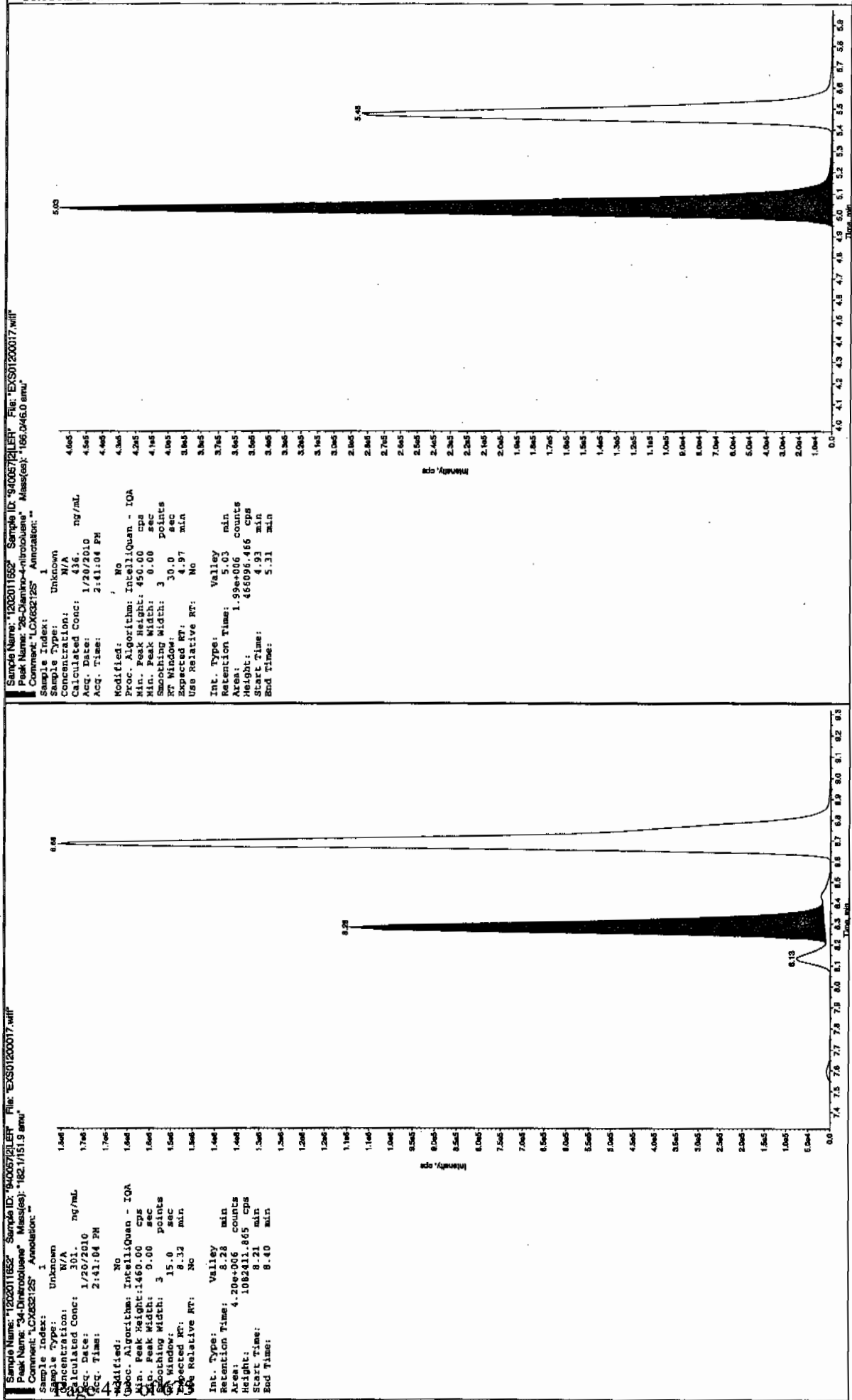


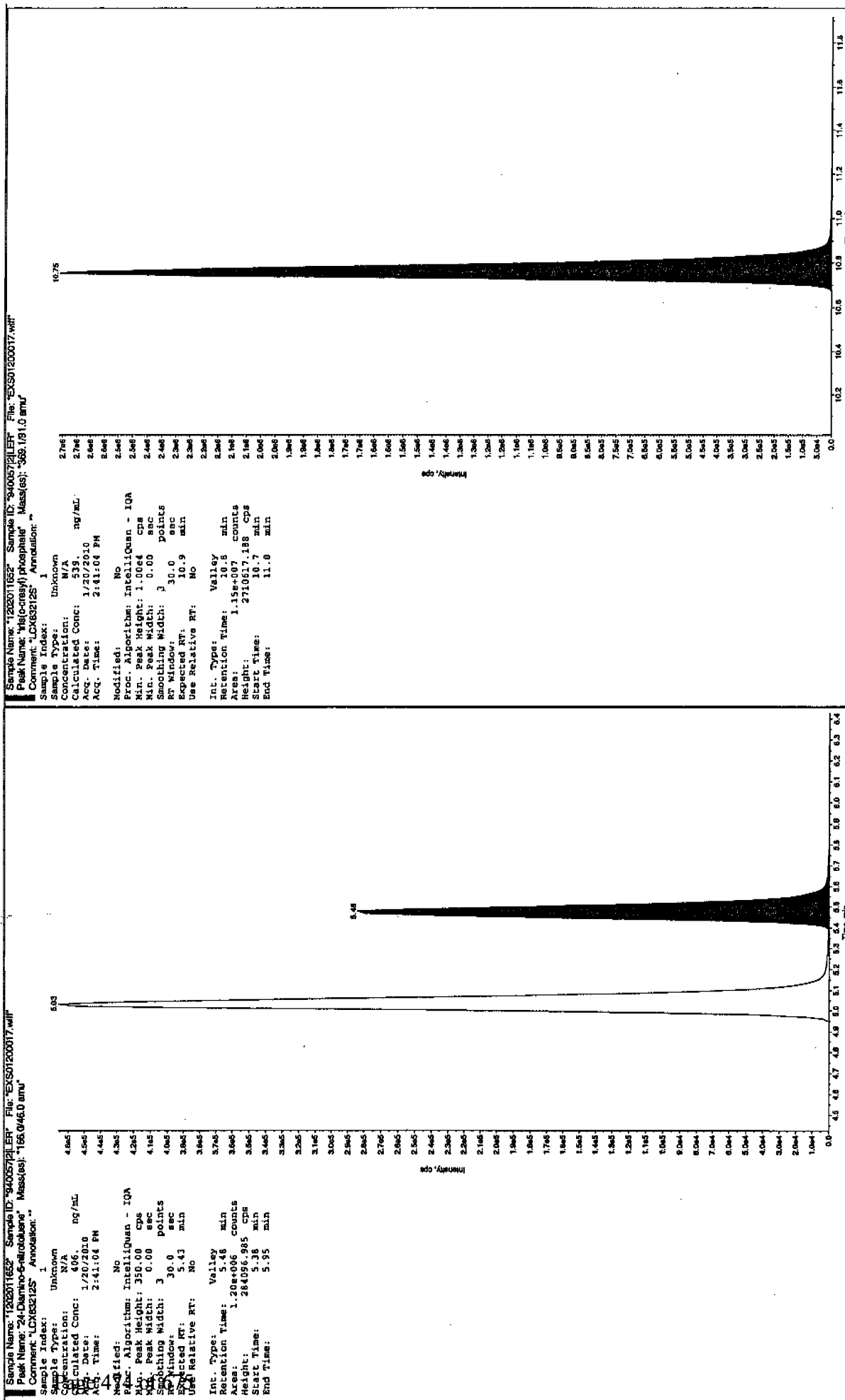
dnw 01/21/10



after Jan 12/110









1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7619(244142001MSD)

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 1202011653

Sample Amount 2

Moisture: 16.2

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125089a

Date Analyzed: 27-JAN-10 06:37

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	5320	
121-14-2	2,4-Dinitrotoluene	4910	
121-82-4	RDX	5780	
19406-51-0	4-Amino-2,6-dinitrotoluene	5470	
2691-41-0	HMX	6100	
35572-78-2	2-Amino-4,6-dinitrotoluene	5330	
479-45-8	Tetryl	3860	
606-20-2	2,6-Dinitrotoluene	4830	
78-11-5	PETN	5500	
88-72-2	o-Nitrotoluene	4350	
98-95-3	Nitrobenzene	4420	
99-08-1	m-Nitrotoluene	4600	
99-35-4	1,3,5-Trinitrobenzene	5350	
99-65-0	m-Dinitrobenzene	4880	
99-99-0	p-Nitrotoluene	4500	

\*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\EXP0125089a

Date: 27-Jan-2010

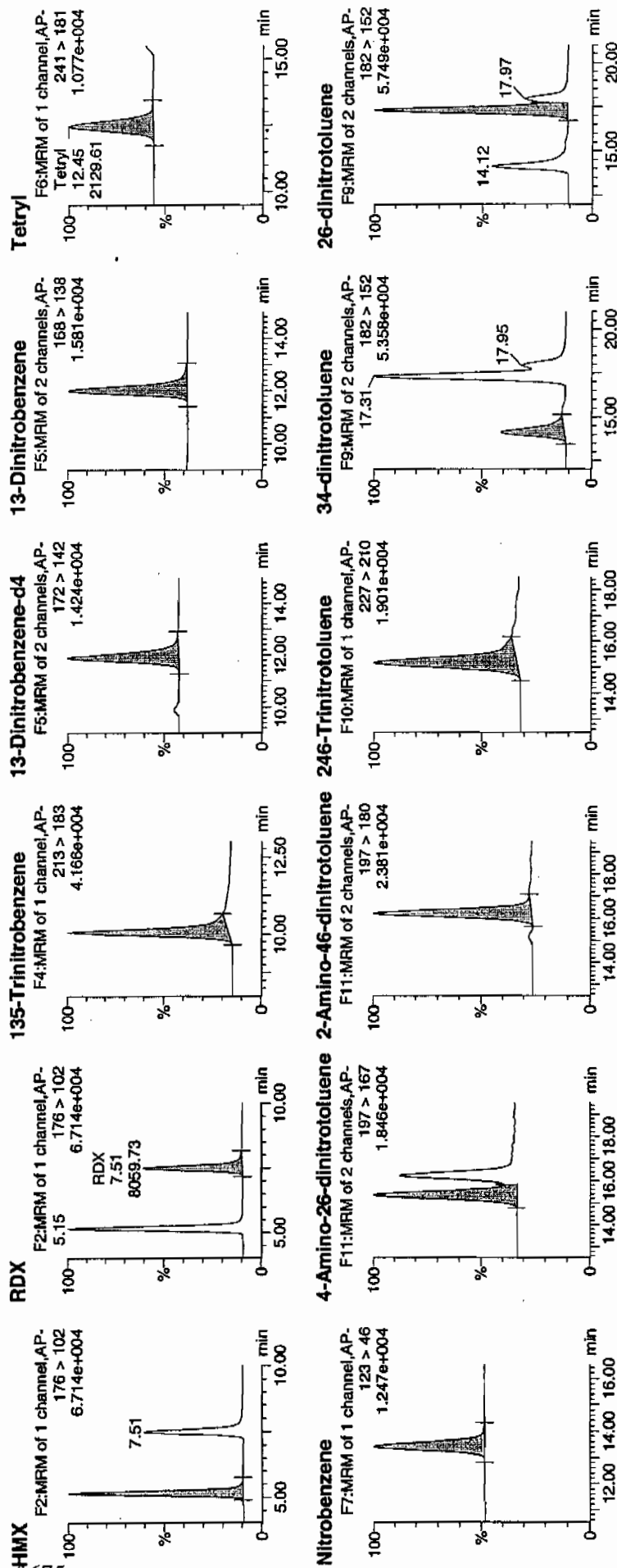
Time: 06:37:18

ID: 1202011653

Vial: 3:5,E

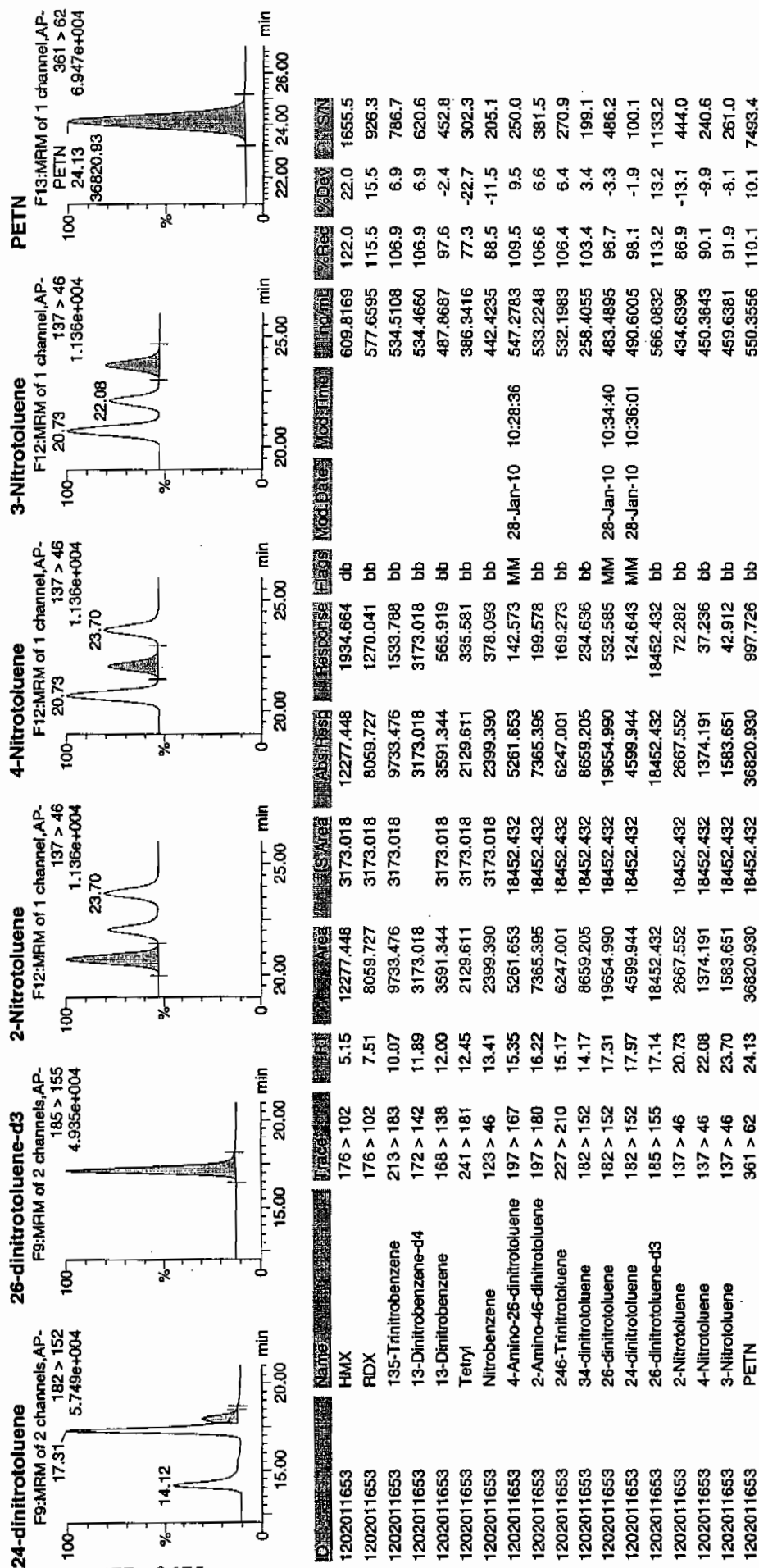
11/28/10

24414201 usd / 21



done 01/28/10

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: RE12-10-7619(244142001MSD)

Lab Code: GEL

GEL Job No (SDG) 10-1127

Matrix: SOIL

GEL Sample ID: 1202011653

Sample Amount 2

Moisture: 16.2

Amount Units g

Date Received: 08-JAN-10

Extraction Type Sonication

Extraction Batch ID: 940055

Concentrated Extract Volume (mL) 10

Date Extracted: 13-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01200018.wiff

Date Analyzed: 20-JAN-10 14:56

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	5290	
59229-75-3	2,6-Diamino-4-nitrotoluene	4820	
618-87-1	3,5-Dinitroaniline	5250	
6629-29-4	2,4-Diamino-6-nitrotoluene	4230	
78-30-8	tris(o-cresyl) phosphate	5330	

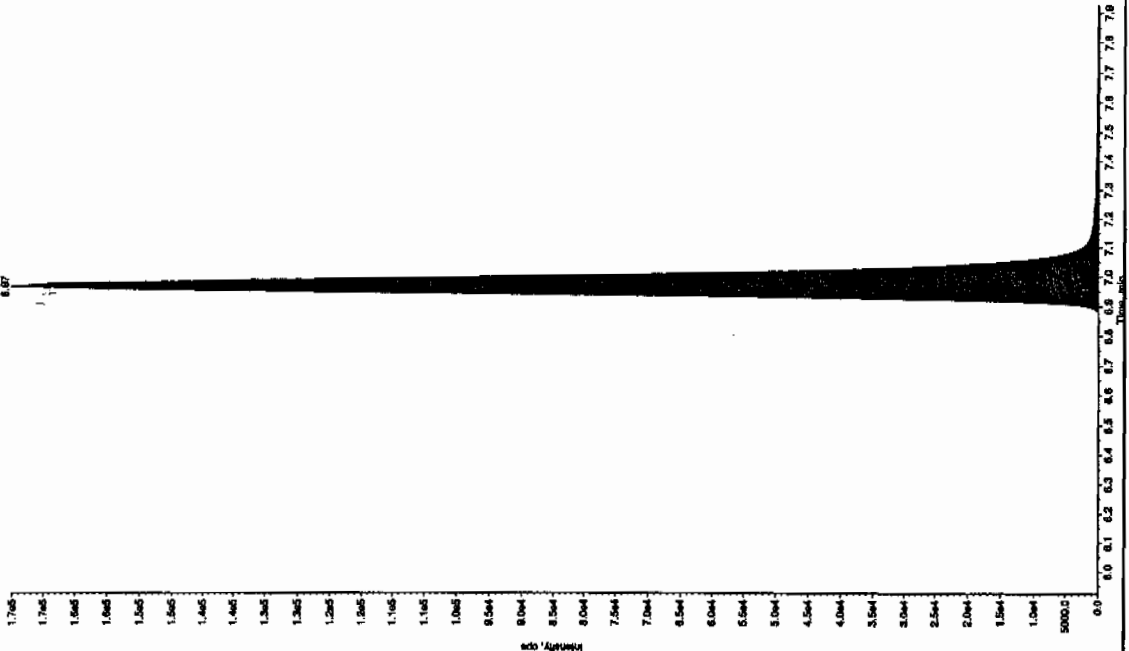
\*Concentration =

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

Before  
12/11/10

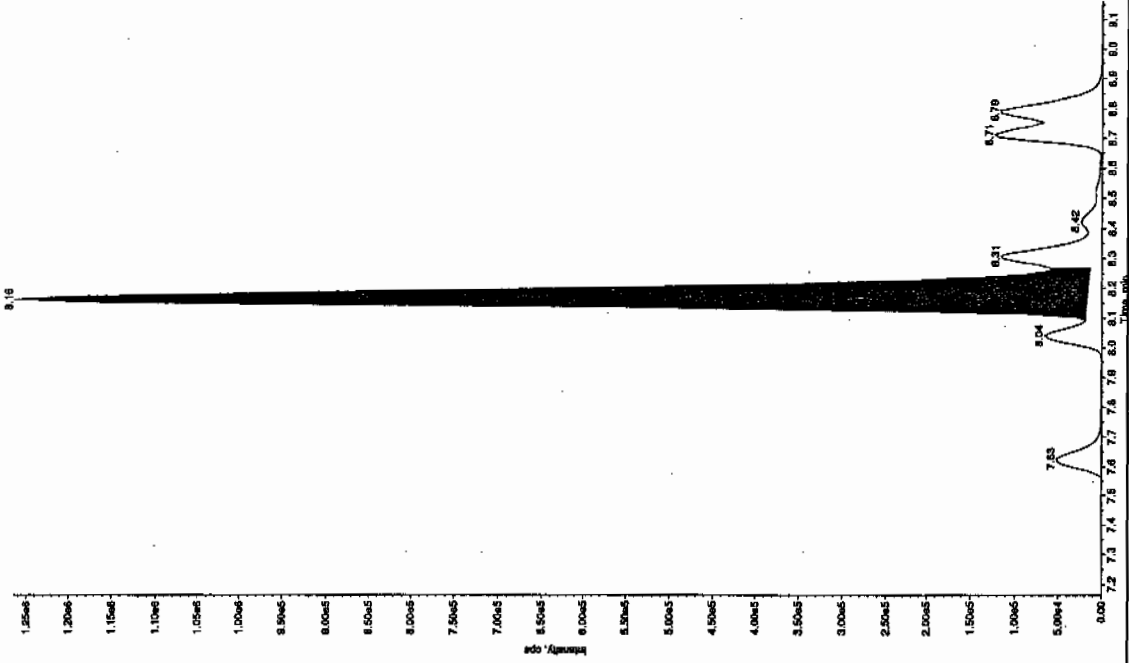
Sample Name: "1202011653" Sample ID: "94006721ER" File: "EX50120018.wif"  
Peak Name: "1A7B" Mass(es): "257.204.9 and  
Comment: "LC832125" Annotation: "

Sample Index: 1  
Sample Type: Unknown  
Acquisition: N/A  
Concentration: 529 ng/mL  
Acq. Date: 1/20/2010  
Acq. Time: 2:56:46 PM  
Modified: No  
Proc. Algorithm: IntelliQuan - IQA  
Min. Peak Height: 2500.00 cps  
Min. Peak Width: 0.00 sec  
Smoother Width: 3 points  
RT Window: 30.0 sec  
Expected RT: 6.92 min  
Use Relative RT: No  
Int. Type: Valley  
Retention Time: 6.97 min  
Area: 7.49e+005 counts  
Height: 170164.032 cps  
Start Time: 6.83 min  
End Time: 7.52 min



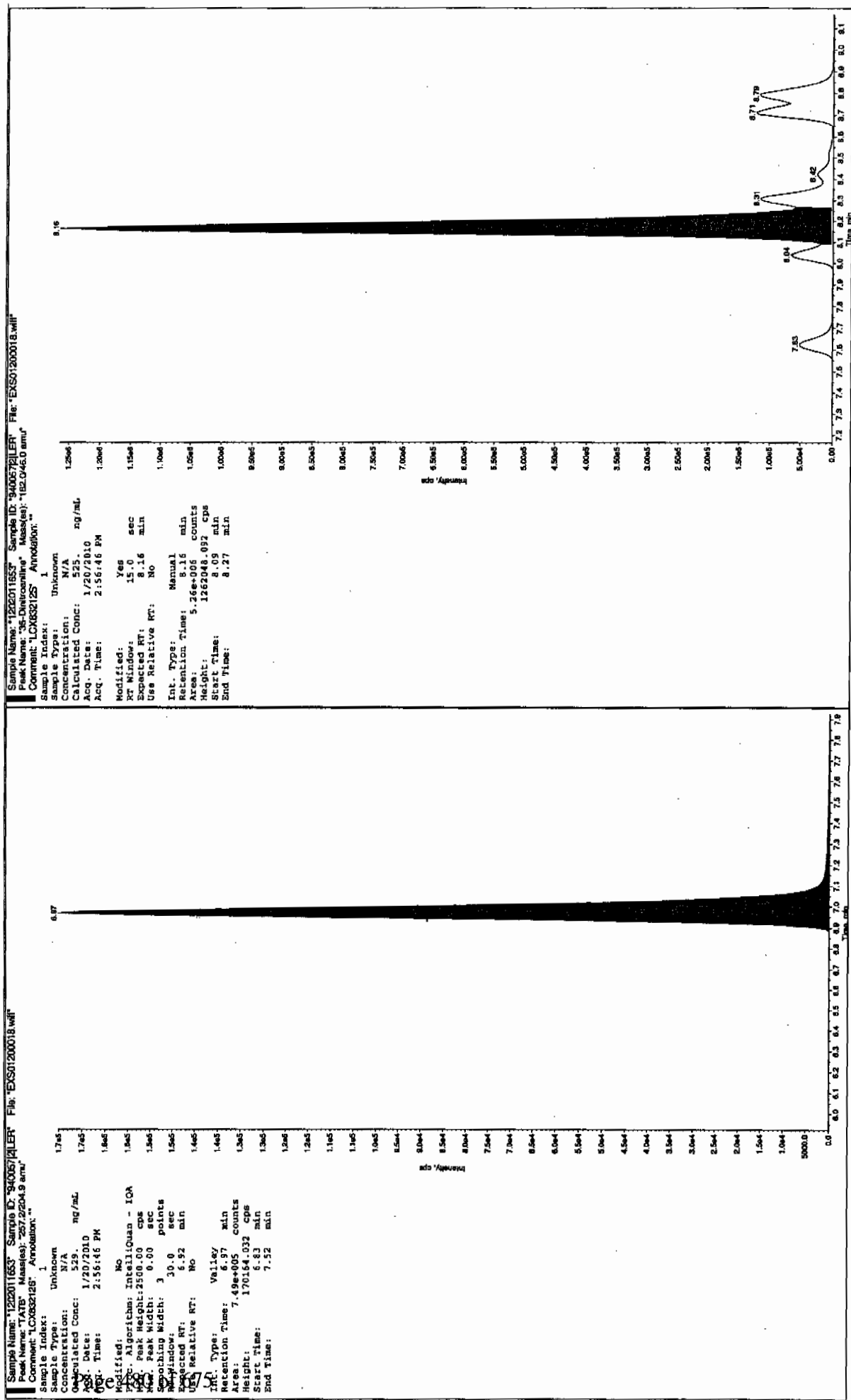
Sample Name: "1202011653" Sample ID: "94006721ER" File: "EX50120018.wif"  
Peak Name: "3C-Dantrolene" Mass(es): "182.046.0 amu"  
Comment: "LC832125" Annotation: "

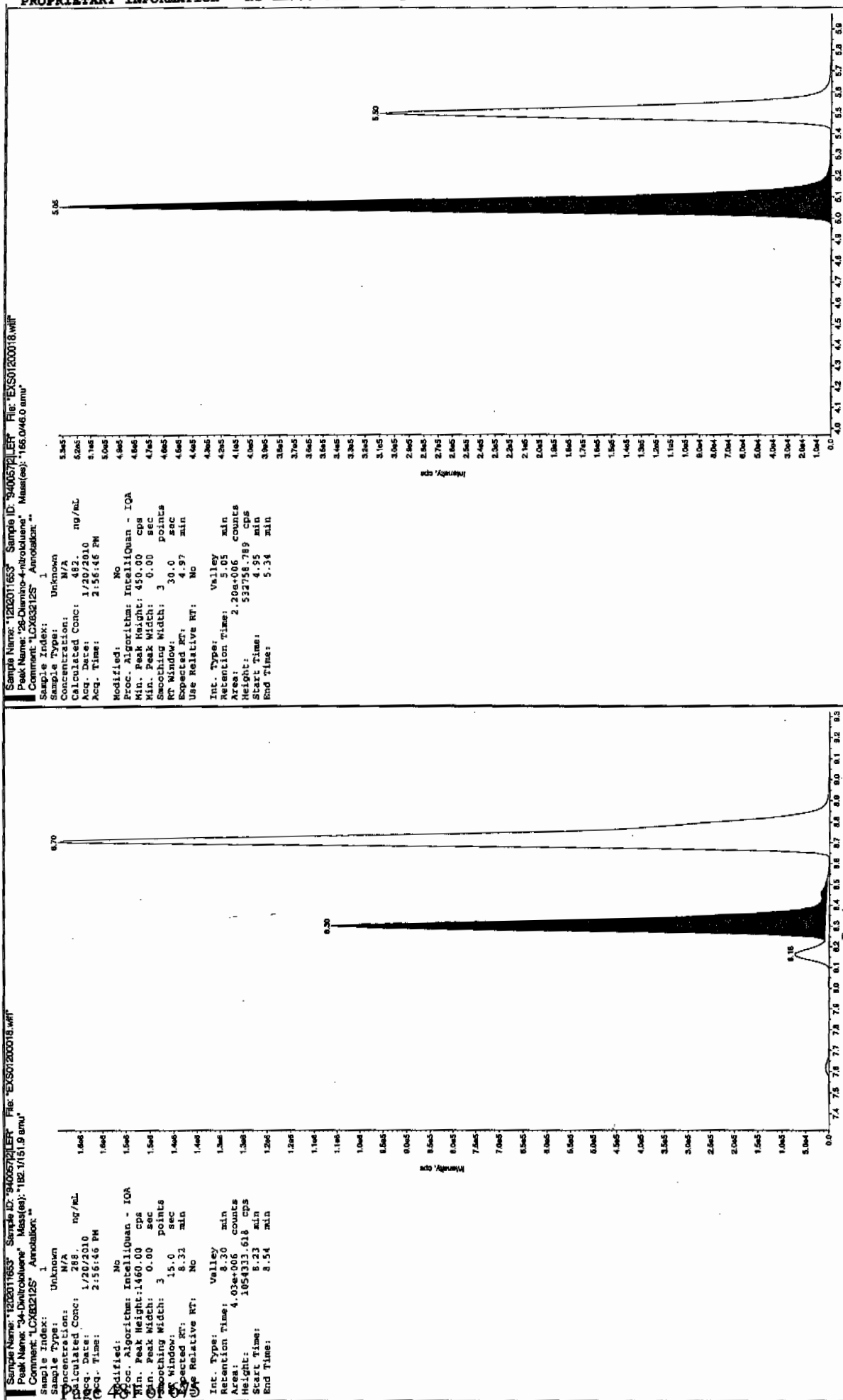
Sample Index: 1  
Sample Type: Unknown  
Acquisition: N/A  
Concentration: 510 ng/mL  
Acq. Date: 1/20/2010  
Acq. Time: 2:56:46 PM  
Modified: No  
Proc. Algorithm: IntelliQuan - IQA  
Min. Peak Height: 2000.00 cps  
Min. Peak Width: 0.00 sec  
Smoother Width: 3 points  
RT Window: 15.0 sec  
Expected RT: 8.16 min  
Use Relative RT: No  
Int. Type: Valley  
Retention Time: 8.16 min  
Area: 5.12e+005 counts  
Height: 1247184.814 cps  
Start Time: 8.03 min  
End Time: 8.27 min



After 01/21/10

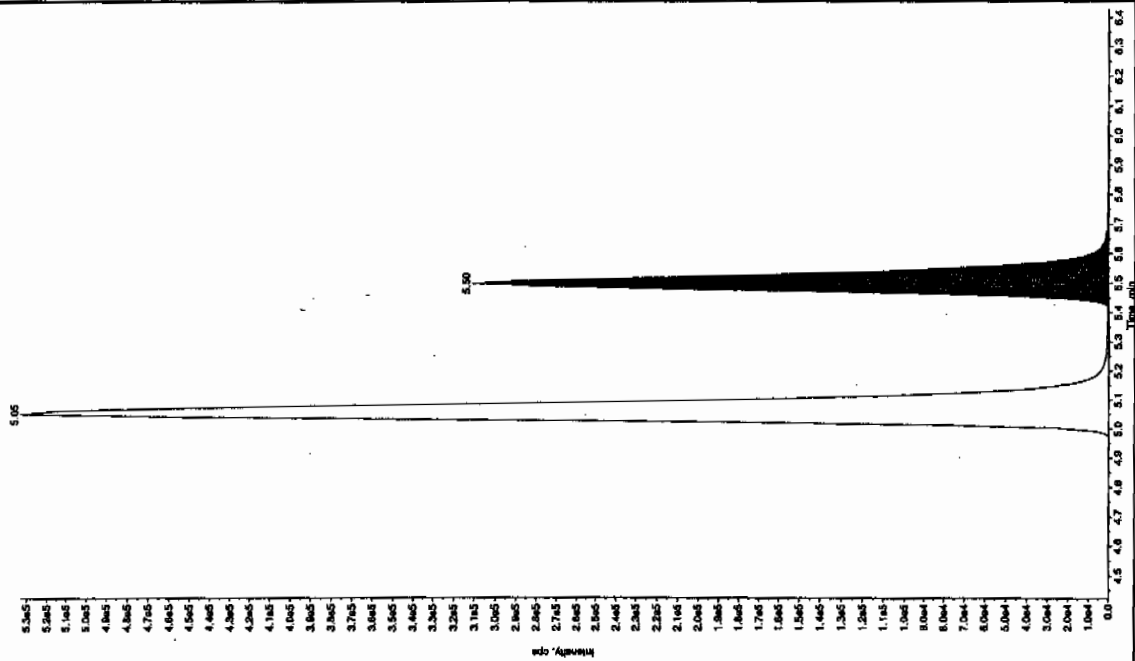
after Jan 11/21/10





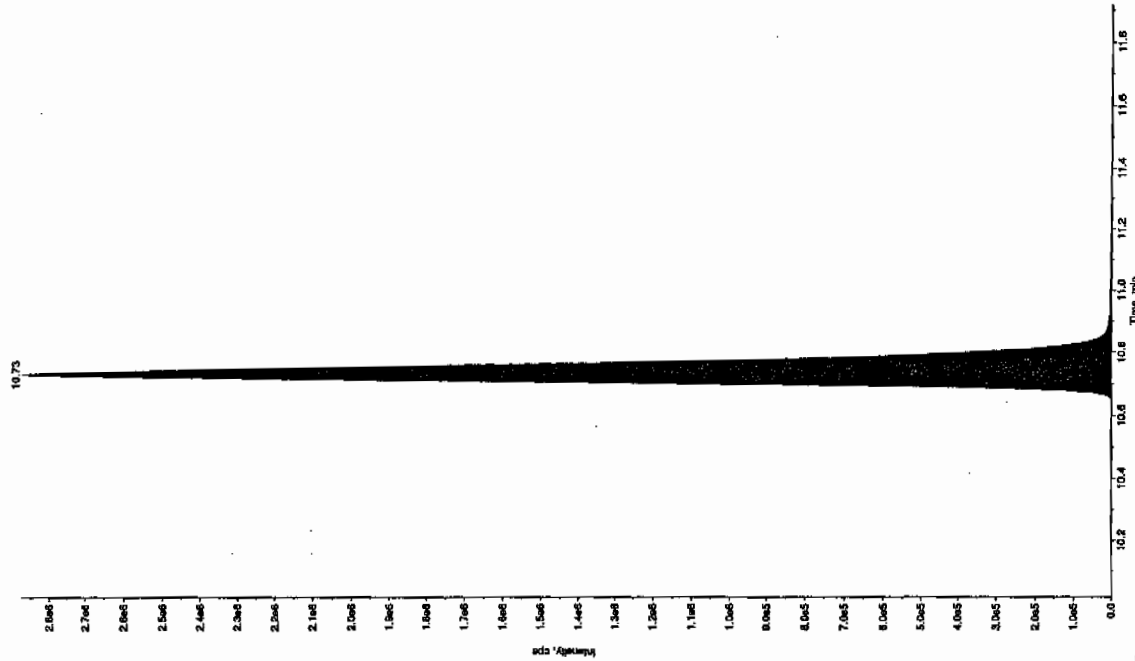
Sample Name: "1202011653" Sample ID: "94006721ER" File: "EXS01200018.wif"  
 Peak Name: "24-Diamino-6-nikotoluene" Mass(es): "168.046.0 amu"  
 Comment: "LCX832125" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 423. ng/mL  
 Acq. Date: 1/20/2010  
 Acq. Time: 2:56:46 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: 5.43 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.50 min  
 Area: 1.25e+006 counts  
 Height: 310425.446 cps  
 Start Time: 5.39 min  
 End Time: 5.94 min



Sample Name: "1202011653" Sample ID: "94006721ER" File: "EXS01200018.wif"  
 Peak Name: "tris(o-cresyl) phosphate" Mass(es): "359.179.0 amu"  
 Comment: "LCX832125" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 533. ng/mL  
 Acq. Date: 1/20/2010  
 Acq. Time: 2:56:46 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: 10.9 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.7 min  
 Area: 1.14e+007 counts  
 Height: 2873519.531 cps  
 Start Time: 10.6 min  
 End Time: 11.1 min





# MISCELLANEOUS DATA

# Prep Logbook Nitroaromatics and Nitramines by High Performance Liquid Chromatography (HPLC)

Batch ID: 940055 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)
1202011650 MB	13-JAN-2010 14:09:46	2	10	5
1202011651 LCS	13-JAN-2010 14:09:46	2	10	5
244142001	13-JAN-2010 14:09:46	2	10	5
1202011652 MS (244142001)	13-JAN-2010 14:09:46	2	10	5
1202011653 MSD (244142001)	13-JAN-2010 14:09:46	2	10	5
244142002	13-JAN-2010 14:09:46	2	10	5
244142003	13-JAN-2010 14:09:46	2	10	5
244142004	13-JAN-2010 14:09:46	2	10	5
244142005	13-JAN-2010 14:09:46	2	10	5
244142006	13-JAN-2010 14:09:46	2	10	5
244142007	13-JAN-2010 14:09:46	2	10	5
244142008	13-JAN-2010 14:09:46	2	10	5
244142009	13-JAN-2010 14:09:46	2	10	5
244142010	13-JAN-2010 14:09:46	2	10	5
244142011	13-JAN-2010 14:09:46	2	10	5
244142012	13-JAN-2010 14:09:46	2	10	5
244142013	13-JAN-2010 14:09:46	2	10	5
244142014	13-JAN-2010 14:09:46	2	10	5
244142015	13-JAN-2010 14:09:46	2	10	5
244142016	13-JAN-2010 14:09:46	2	10	5
244142017	13-JAN-2010 14:09:46	2	10	5
244142018	13-JAN-2010 14:09:46	2	10	5

Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:
LCS	1202011651	8321 Explosives LCS	DXX091230-03	.1	mL	Final Solvent: ACN
LCS	1202011651	8321 LANL Explosives Mix 10mg/L	UXX091229-02.1	.1	mL	
MS	1202011652	8321 Explosives LCS	DXX091230-03	.1	mL	
MS	1202011652	8321 LANL Explosives Mix 10mg/L	UXX091229-02.1	.1	mL	
MSD	1202011653	8321 Explosives LCS	DXX091230-03	.1	mL	
MSD	1202011653	8321 LANL Explosives Mix 10mg/L	UXX091229-02.1	.1	mL	
SURR	All	3,4-Dinitrotoluene (8330 Sur.) 100ppm	DXF091230-02	.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: *Ampl*  
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	WXXCCV	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	WXXCCV	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	WXXCCV	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	WXXCRI	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	WXXCRI	MAP	1/27/10 20:53			1		USE	C
EXP0125119a	1202015506	MAP	1/27/10 21:23	940579	10-1160-1	2	LANL	USE	S
EXP0125120a	1202015507	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	1202015508	MAP	1/27/10 22:51	940579	10-1160-1	2	LANL	USE	S
EXP0125123a	1202015509	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	WXXCRI	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	WXXCCV	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: 01/20/10  
 Extr. Injection Volume: 10uL  
 Sequence Number: 012010exs  
 Initial Calibration Date: 012010  
 Method: 8321A-Modified  
 Int. Std.: N/A  
 Mobile Phase Lot#: 1236350, 1246467  
 Standard-Samp Reagent Lot#: 1246195, 1253092  
 Reviewed By: *Handwritten signature*  
 Date: 01/21/10  
 SOP: GL-OA-E-056 Rev.12  
 Alt Check Std. ID: WXX100120-26

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC Flag
EXS01200001.wiff	XIBLK01	LER	1/20/2010 10:28			1		USE	B
EXS01200002.wiff	XIBLK01	LER	1/20/2010 10:45			1		USE	B
EXS01200003.wiff	WXXICAL-19	LER	1/20/2010 11:01			1		USE	I
EXS01200004.wiff	WXXICAL-20	LER	1/20/2010 11:16			1		USE	I
EXS01200005.wiff	WXXICAL-21	LER	1/20/2010 11:32			1		USE	I
EXS01200006.wiff	WXXICAL-22	LER	1/20/2010 11:48			1		USE	I
EXS01200007.wiff	WXXICAL-23	LER	1/20/2010 12:04			1		USE	I
EXS01200008.wiff	WXXICAL-24	LER	1/20/2010 12:19			1		USE	I
EXS01200009.wiff	WXXICAL-25	LER	1/20/2010 12:35			1		USE	I
EXS01200010.wiff	XIBLK02	LER	1/20/2010 12:51			1		USE	B
EXS01200011.wiff	WXXICV	LER	1/20/2010 13:06			1		USE	C
EXS01200012.wiff	XIBLK03	LER	1/20/2010 13:22			1		USE	B
EXS01200013.wiff	WXXCRI	LER	1/20/2010 13:38			1		USE	C
EXS01200014.wiff	1202011650	LER	1/20/2010 13:53	940057	10-1127	2	LANL	USE	S
EXS01200015.wiff	1202011651	LER	1/20/2010 14:09	940057	10-1127	2	LANL	USE	S
EXS01200016.wiff	244142001	LER	1/20/2010 14:25	940057	10-1127	2	LANL	USE	S
EXS01200017.wiff	1202011652	LER	1/20/2010 14:41	940057	10-1127	2	LANL	USE	S
EXS01200018.wiff	1202011653	LER	1/20/2010 14:56	940057	10-1127	2	LANL	USE	S
EXS01200019.wiff	244142002	LER	1/20/2010 15:12	940057	10-1127	2	LANL	USE	S
EXS01200020.wiff	244142003	LER	1/20/2010 15:28	940057	10-1127	2	LANL	USE	S
EXS01200021.wiff	244142004	LER	1/20/2010 15:43	940057	10-1127	2	LANL	USE	S
EXS01200022.wiff	244142005	LER	1/20/2010 15:59	940057	10-1127	2	LANL	USE	S
EXS01200023.wiff	244142006	LER	1/20/2010 16:15	940057	10-1127	2	LANL	USE	S
EXS01200024.wiff	WXXCCV	LER	1/20/2010 16:30			1		USE	C
EXS01200025.wiff	XIBLK04	LER	1/20/2010 16:46			1		USE	B
EXS01200026.wiff	WXXCRI	LER	1/20/2010 17:02			1		USE	C
EXS01200027.wiff	244142007	LER	1/20/2010 17:18	940057	10-1127	2	LANL	USE	S
EXS01200028.wiff	244142008	LER	1/20/2010 17:33	940057	10-1127	2	LANL	USE	S
EXS01200029.wiff	244142009	LER	1/20/2010 17:49	940057	10-1127	2	LANL	USE	S



EXS01200030.wiff	244142010	LER	1/20/2010 18:05	940057	10-1127	2	LANL	USE	S
EXS01200031.wiff	244142011	LER	1/20/2010 18:20	940057	10-1127	2	LANL	USE	S
EXS01200032.wiff	244142012	LER	1/20/2010 18:36	940057	10-1127	2	LANL	USE	S
EXS01200033.wiff	244142013	LER	1/20/2010 18:52	940057	10-1127	2	LANL	USE	S
EXS01200034.wiff	244142014	LER	1/20/2010 19:07	940057	10-1127	2	LANL	USE	S
EXS01200035.wiff	244142015	LER	1/20/2010 19:23	940057	10-1127	2	LANL	USE	S
EXS01200036.wiff	244142016	LER	1/20/2010 19:39	940057	10-1127	2	LANL	USE	S
EXS01200037.wiff	WXXCCV	LER	1/20/2010 19:55	940057	10-1127	1		USE	C
EXS01200038.wiff	XIBLK05	LER	1/20/2010 20:10			1		USE	B
EXS01200039.wiff	WXXCRI	LER	1/20/2010 20:26			1		USE	C
EXS01200040.wiff	244142017	LER	1/20/2010 20:42	940057	10-1127	2	LANL	USE	S
EXS01200041.wiff	244142018	LER	1/20/2010 20:57	940057	10-1127	2	LANL	USE	S
EXS01200042.wiff	XIBLK06	LER	1/20/2010 21:13			1		USE	B
EXS01200043.wiff	1202014483	LER	1/20/2010 21:29	941226	VARIOUS	2	LANL	USE	S
EXS01200044.wiff	1202014484	LER	1/20/2010 21:44	941226	VARIOUS	2	LANL	USE	S
EXS01200045.wiff	1202014487	LER	1/20/2010 22:00	941226	VARIOUS	2	LANL	USE	S
EXS01200046.wiff	244509007	LER	1/20/2010 22:16	941226	10-1187	2	LANL	USE	S
EXS01200047.wiff	244524007	LER	1/20/2010 22:32	941226	10-1184	2	LANL	USE	S
EXS01200048.wiff	WXXCCV	LER	1/20/2010 22:47			1		USE	C
EXS01200049.wiff	XIBLK07	LER	1/20/2010 23:03			1		USE	B
EXS01200050.wiff	WXXCRI	LER	1/20/2010 23:19			1		USE	C
EXS01200051.wiff	1202011699	LER	1/20/2010 23:34	940080	VARIOUS	2	LANL	USE	S
EXS01200052.wiff	1202011700	LER	1/20/2010 23:50	940080	VARIOUS	2	LANL	USE	S
EXS01200053.wiff	244125001	LER	1/21/2010 0:06	940080	10-1130	2	LANL	USE	S
EXS01200054.wiff	1202011701	LER	1/21/2010 0:22	940080	10-1130	2	LANL	USE	S
EXS01200055.wiff	1202011702	LER	1/21/2010 0:37	940080	10-1130	2	LANL	USE	S
EXS01200056.wiff	244125002	LER	1/21/2010 0:53	940080	10-1130	2	LANL	USE	S
EXS01200057.wiff	244125003	LER	1/21/2010 1:09	940080	10-1130	2	LANL	USE	S
EXS01200058.wiff	244125004	LER	1/21/2010 1:24	940080	10-1130	2	LANL	USE	S
EXS01200059.wiff	244215002	LER	1/21/2010 1:40	940080	10-1153	2	LANL	USE	S
EXS01200060.wiff	244215003	LER	1/21/2010 1:56	940080	10-1153	2	LANL	USE	S
EXS01200061.wiff	WXXCCV	LER	1/21/2010 2:12			1		USE	C
EXS01200062.wiff	XIBLK08	LER	1/21/2010 2:27			1		USE	B
EXS01200063.wiff	WXXCRI	LER	1/21/2010 2:43			1		USE	C
EXS01200064.wiff	244215004	LER	1/21/2010 2:59	940080	10-1153	2	LANL	USE	S
EXS01200065.wiff	244215005	LER	1/21/2010 3:14	940080	10-1153	2	LANL	USE	S
EXS01200066.wiff	244215006	LER	1/21/2010 3:30	940080	10-1153	2	LANL	USE	S

EXS01200067.wiff	244215007	LER	1/21/2010 3:46	940080	10-1153	2	LANL	USE	S
EXS01200068.wiff	WXXCCV	LER	1/21/2010 4:02			1		USE	C
EXS01200069.wiff	XIBLK09	LER	1/21/2010 4:17			1		USE	B
EXS01200070.wiff	WXXCRI	LER	1/21/2010 4:33			1		USE	C

GEL Laboratories LLC  
Form GEL-DER

DER Report No.: 784350

Revision No.:

### DATA EXCEPTION REPORT

<b>Mo. Day Yr.</b> 28-JAN-10	<b>Division:</b> Industrial	<b>Quality Criteria:</b> Specifications	<b>Type:</b> Process
<b>Instrument Type:</b> LC-MS/MS	<b>Test / Method:</b> SW846 8321A Modified	<b>Matrix Type:</b> Solid	<b>Client Code:</b> LANL
<b>Batch ID:</b> 940057	<b>Sample Numbers:</b> See Below		
<b>Potentially affected work order(s)(SDG):</b> 244142(10-1127) <b>Application Issues:</b> Failed RPD for MS/MSD, or PS/PSD			
<b>Specification and Requirements</b>		<b>DER Disposition:</b>	
<b>Exception Description:</b>			
1. The MS/MSD pair (1202011652/3) did not meet RPD acceptance limits for Tetra at 32.6% and TATB at 35.3%. The acceptance limits are 0-30%.		1. Since all other RPD recoveries met acceptance criteria, the noted exceptions are attributed to vagaries in the extraction process. The data are reported with the appropriate DER. The discrepancies are noted in the case narrative.	

**Originator's Name:**

Michael Penny 28-JAN-10

**Data Validator/Group Leader:**

Herbert Maier 28-JAN-10

GC  
SEMIVOLATILE  
PCB  
ANALYSIS

**PCB Case Narrative**  
**Los Alamos National Laboratory (LANL)**  
**SDG 10-1127**

**Method/Analysis Information**

**Procedure:** Analysis of Polychlorinated Biphenyls by ECD  
**Analytical Method:** SW846 8082  
**Prep Method:** SW846 3550B  
**Analytical Batch Number:** 940403  
**Prep Batch Number:** 940402

**Sample Analysis**

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

<b>Sample ID</b>	<b>Client ID</b>
244142001	RE12-10-7619
244142002	RE12-10-7618
244142003	RE12-10-7623
244142004	RE12-10-7622
244142005	RE12-10-7621
244142006	RE12-10-7617
244142007	RE12-10-7620
244142008	RE12-10-7624
244142017	RE12-10-7656
244142018	RE12-10-7655
1202012544	Method Blank (MB)
1202012545	Laboratory Control Sample (LCS)
1202012546	244126019(RE12-10-7657) Matrix Spike (MS)
1202012547	244126019(RE12-10-7657) 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 inverted 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(s) 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 (#10-1131) 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 for this SDG were within the established acceptance limits.

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

The MSD recoveries for this SDG were within the established acceptance limits.

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

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

#### **Technical Information**

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

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

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

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

##### **Sample Dilutions**

The samples in this SDG did not require dilutions.

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

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

## **Miscellaneous Information**

### **Electronic Package Comment**

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

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

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

Data exception reports (DERs) are for documentation of any procedural anomalies that may deviate from referenced SOP or contractual document. A DER was not required for this SDG.

### **Manual Integrations**

Certain standards and samples may have required manual integration to correctly position the baseline as set in the calibration standard injections. If manual integration was performed, copies of all manual integration peak profiles are included in the raw data section of this PCB fraction.

### **Additional Comments**

The additional comments field is used to address special issues associated with each analysis, clarify method/contractual issues pertaining to the analysis, and to list any report documents generated as a result of sample analysis or review. The following additional comments were required:

The higher results from either column have been chosen and reported in the data package for the client samples, MB and LCS.

The data reported on the form I and III may differ slightly from the data reported on the form X. This is due to software limitations in rounding differences between the forms.

Aroclors quantitated on the raw data report by the Target data system do not necessarily represent positive Aroclor identification. In order for positive identification to be made, the Aroclor must match in pattern and retention time; as well as quantitate relatively close between the primary and confirmation columns, as specified in SW846 method 8000. When these conditions are not met, the Aroclor is reported as a non-detect on the data report. These situations will be noted on the raw data as DMP, representing does not match pattern, or DNC does not confirm.

Due to software limitation, the Form 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: Andy Whitlock

Date: 2-2-2010

## Roadmap for LANL 10-1127 PCB

This roadmap was analyzed by yip00818 on 01-13-2010, 08:07.

This roadmap was reviewed by rob01090 on 01-19-2010, 15:38.

This roadmap was packaged by yml on 02-02-2010, 14:48.

This roadmap was validated by rob01090 on 02-02-2010, 21:19.

Front Sample Column

exclude	manual	datafile	smid	sampletype	injdte	injtime	sublist	clientid	dilution	prebatchid	comment
<input type="checkbox"/>	N	/chem/ecd1a.i/011210.b/030f3001.d	244142001	sample	12-JAN-2010	13:14	10-1127.sub	RE12-10-7619	1.00000	940403	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/011210.b/033f3301.d	244142002	sample	12-JAN-2010	13:48	10-1127.sub	RE12-10-7618	1.00000	940403	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/011210.b/034f3401.d	244142003	sample	12-JAN-2010	14:00	10-1127.sub	RE12-10-7623	1.00000	940403	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/011210.b/035f3501.d	244142004	sample	12-JAN-2010	14:13	10-1127.sub	RE12-10-7622	1.00000	940403	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/011210.b/036f3601.d	244142005	sample	12-JAN-2010	14:25	10-1127.sub	RE12-10-7621	1.00000	940403	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/011210.b/037f3701.d	244142006	sample	12-JAN-2010	14:38	10-1127.sub	RE12-10-7617	1.00000	940403	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/011210.b/038f3801.d	244142007	sample	12-JAN-2010	14:51	10-1127.sub	RE12-10-7620	1.00000	940403	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/011210.b/039f3901.d	244142008	sample	12-JAN-2010	15:03	10-1127.sub	RE12-10-7624	1.00000	940403	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/011210.b/040f4001.d	244142017	sample	12-JAN-2010	15:16	10-1127.sub	RE12-10-7656	1.00000	940403	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/011210.b/041f4101.d	244142018	sample	12-JAN-2010	15:28	10-1127.sub	RE12-10-7655	1.00000	940403	UPLOAD BOTH COLUMNS, USE HIGHER

Back Sample Column

exclude	manual	datafile	smid	sampletype	injdte	injtime	sublist	clientid	dilution	prebatchid	comment
<input type="checkbox"/>	N	/chem/ecd1a.i/011210.b/030b3001.d	244142001	sample	12-JAN-2010	13:14	10-1127.sub	RE12-10-7619	1.00000	940403	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/011210.b/033b3301.d	244142002	sample	12-JAN-2010	13:48	10-1127.sub	RE12-10-7618	1.00000	940403	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/011210.b/034b3401.d	244142003	sample	12-JAN-2010	14:00	10-1127.sub	RE12-10-7623	1.00000	940403	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/011210.b/035b3501.d	244142004	sample	12-JAN-2010	14:13	10-1127.sub	RE12-10-7622	1.00000	940403	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/011210.b/036b3601.d	244142005	sample	12-JAN-2010	14:25	10-1127.sub	RE12-10-7621	1.00000	940403	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/011210.b/037b3701.d	244142006	sample	12-JAN-2010	14:38	10-1127.sub	RE12-10-7617	1.00000	940403	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/011210.b/038b3801.d	244142007	sample	12-JAN-2010	14:51	10-1127.sub	RE12-10-7620	1.00000	940403	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/011210.b/039b3901.d	244142008	sample	12-JAN-2010	15:03	10-1127.sub	RE12-10-7624	1.00000	940403	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/011210.b/040b4001.d	244142017	sample	12-JAN-2010	15:16	10-1127.sub	RE12-10-7656	1.00000	940403	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/011210.b/041b4101.d	244142018	sample	12-JAN-2010	15:28	10-1127.sub	RE12-10-7655	1.00000	940403	UPLOAD BOTH COLUMNS, USE HIGHER

Front QC Sample Column

exclude	manual	datafile	smid	sampletype	injdte	injtime	sublist	clientid	dilution	prebatchid	comment
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<input type="checkbox"/>	N	/chem/ecd1a.i/011210.b/021f2101-1.d	1202012544	mb	12-JAN-2010	11:24	10-1127.sub	PBLK01	1.00000	940403	<input type="checkbox"/>
<input type="checkbox"/>	N	/chem/ecd1a.i/011210.b/022f2201-1.d	1202012545	lcs	12-JAN-2010	11:35	10-1127.sub	PBLK01LCS	1.00000	940403	<input type="checkbox"/>

Back QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prephatchid	comment
<input type="checkbox"/>	N	/chem/ecd1a.i/011210.b/021b2101-1.d	1202012544	mb	12-JAN-2010	11:24	10-1127.sub	PBLK01	1.00000	940403	<input type="checkbox"/>
<input type="checkbox"/>	N	/chem/ecd1a.i/011210.b/022b2201-1.d	1202012545	lcs	12-JAN-2010	11:35	10-1127.sub	PBLK01LCS	1.00000	940403	<input type="checkbox"/>

# SAMPLE DATA SUMMARY

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

Page 1 of 1

SDG Number: 10-1127  
Lab Sample ID: 244142006

Date Collected: 01/04/2010 12:00  
Date Received: 01/08/2010 09:05  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.1  
Analyst: YS1  
Aliquot: 30.15 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
%Moisture: 9.2  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE12-10-7617  
Batch ID: 940403  
Run Date: 01/12/2010 14:38  
Prep Date: 01/11/2010 19:04  
Data File: 037f3701.d  
037b3701.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.65	ug/kg	1.22	3.65	1
11104-28-2	Aroclor-1221	U	3.65	ug/kg	1.22	3.65	1
11141-16-5	Aroclor-1232	U	3.65	ug/kg	1.22	3.65	1
53469-21-9	Aroclor-1242	U	3.65	ug/kg	1.22	3.65	1
12672-29-6	Aroclor-1248	U	3.65	ug/kg	1.22	3.65	1
11097-69-1	Aroclor-1254	U	3.65	ug/kg	1.22	3.65	1
11096-82-5	Aroclor-1260	U	3.65	ug/kg	1.22	3.65	1

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

SDG Number: 10-1127

Lab Sample ID: 244142002

Client ID: RE12-10-7618

Batch ID: 940403

Run Date: 01/12/2010 13:48

Prep Date: 01/11/2010 19:04

Data File: 033f3301.d

033b3301.d

Date Collected: 01/04/2010 12:00

Date Received: 01/08/2010 09:05

Client: LANL010

Method: SW846 8082

Inst: ECD1A.I

Analyst: YS1

Aliquot: 30.19 g

Column: 1 CLP1

2 CLP2

Matrix: R

%Moisture: 18.9

Project: LANL01004

SOP Ref: GI-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	4.08	ug/kg	1.36	4.08	1
11104-28-2	Aroclor-1221	U	4.08	ug/kg	1.36	4.08	1
11141-16-5	Aroclor-1232	U	4.08	ug/kg	1.36	4.08	1
53469-21-9	Aroclor-1242	U	4.08	ug/kg	1.36	4.08	1
12672-29-6	Aroclor-1248	U	4.08	ug/kg	1.36	4.08	1
11097-69-1	Aroclor-1254	U	4.08	ug/kg	1.36	4.08	1
11096-82-5	Aroclor-1260	U	4.08	ug/kg	1.36	4.08	1

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

SDG Number: 10-1127  
Lab Sample ID: 244142001

Date Collected: 01/04/2010 12:00  
Date Received: 01/08/2010 09:05  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.I  
Analyst: YS1  
Aliquot: 30.09 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
%Moisture: 16.2  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE12-10-7619  
Batch ID: 940403  
Run Date: 01/12/2010 13:14  
Prep Date: 01/11/2010 19:04  
Data File: 030f3001.d  
030b3001.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.97	ug/kg	1.32	3.97	1
11104-28-2	Aroclor-1221	U	3.97	ug/kg	1.32	3.97	1
11141-16-5	Aroclor-1232	U	3.97	ug/kg	1.32	3.97	1
53469-21-9	Aroclor-1242	U	3.97	ug/kg	1.32	3.97	1
12672-29-6	Aroclor-1248	U	3.97	ug/kg	1.32	3.97	1
11097-69-1	Aroclor-1254	U	3.97	ug/kg	1.32	3.97	1
11096-82-5	Aroclor-1260	U	3.97	ug/kg	1.32	3.97	1

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

SDG Number: 10-1127  
Lab Sample ID: 244142007

Client ID: RE12-10-7620  
Batch ID: 940403  
Run Date: 01/12/2010 14:51  
Prep Date: 01/11/2010 19:04  
Data File: 038f3801.d  
038b3801.d

Date Collected: 01/04/2010 12:00  
Date Received: 01/08/2010 09:05  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.I  
Analyst: YS1  
Aliquot: 30.17 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
%Moisture: 11.2  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

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



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

SDG Number: 10-1127  
Lab Sample ID: 244142005

Client ID: RE12-10-7621  
Batch ID: 940403  
Run Date: 01/12/2010 14:25  
Prep Date: 01/11/2010 19:04  
Data File: 036f3601.d  
036b3601.d

Date Collected: 01/04/2010 12:00  
Date Received: 01/08/2010 09:05  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.1  
Analyst: YS1  
Aliquot: 30.17 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
%Moisture: 7.6  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.59	ug/kg	1.19	3.59	1
11104-28-2	Aroclor-1221	U	3.59	ug/kg	1.19	3.59	1
11141-16-5	Aroclor-1232	U	3.59	ug/kg	1.19	3.59	1
53469-21-9	Aroclor-1242	U	3.59	ug/kg	1.19	3.59	1
12672-29-6	Aroclor-1248	U	3.59	ug/kg	1.19	3.59	1
11097-69-1	Aroclor-1254	U	3.59	ug/kg	1.19	3.59	1
11096-82-5	Aroclor-1260	U	3.59	ug/kg	1.19	3.59	1

## PCB

Page 1 of 1

Certificate of Analysis  
Sample Summary

SDG Number: 10-1127

Lab Sample ID: 244142004

Client ID: RE12-10-7622

Batch ID: 940403

Run Date: 01/12/2010 14:13

Prep Date: 01/11/2010 19:04

Data File: 035f3501.d

035b3501.d

Date Collected: 01/04/2010 12:00

Date Received: 01/08/2010 09:05

Client: LANL010

Method: SW846 8082

Inst: ECD1A.I

Analyst: YS1

Aliquot: 30.05 g

Column: 1 CLP1

2 CLP2

Matrix: R

%Moisture: 9

Project: LANL01004

SOP Ref: GL-OA-E-040

Dilution: 1

Inj. Vol: 1 uL

Final Volume: 1 mL

Level: LOW

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

## PCB

Page 1 of 1

Certificate of Analysis  
Sample SummarySDG Number: 10-1127  
Lab Sample ID: 244142003Date Collected: 01/04/2010 12:00  
Date Received: 01/08/2010 09:05  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.I  
Analyst: YS1  
Aliquot: 30.02 g  
Column: 1 CLP1  
2 CLP2Matrix: R  
%Moisture: 15.4  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOWClient ID: RE12-10-7623  
Batch ID: 940403  
Run Date: 01/12/2010 14:00  
Prep Date: 01/11/2010 19:04  
Data File: 034f3401.d  
034b3401.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.94	ug/kg	1.31	3.94	1
11104-28-2	Aroclor-1221	U	3.94	ug/kg	1.31	3.94	1
11141-16-5	Aroclor-1232	U	3.94	ug/kg	1.31	3.94	1
53469-21-9	Aroclor-1242	U	3.94	ug/kg	1.31	3.94	1
12672-29-6	Aroclor-1248	U	3.94	ug/kg	1.31	3.94	1
11097-69-1	Aroclor-1254	U	3.94	ug/kg	1.31	3.94	1
11096-82-5	Aroclor-1260	U	3.94	ug/kg	1.31	3.94	1

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

Page 1 of 1

SDG Number: 10-1127  
Lab Sample ID: 244142008

Date Collected: 01/04/2010 12:00  
Date Received: 01/08/2010 09:05  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.I  
Analyst: YS1  
Aliquot: 30.05 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
%Moisture: 8.4  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE12-10-7624  
Batch ID: 940403  
Run Date: 01/12/2010 15:03  
Prep Date: 01/11/2010 19:04  
Data File: 039f3901.d  
039b3901.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.63	ug/kg	1.21	3.63	1
11104-28-2	Aroclor-1221	U	3.63	ug/kg	1.21	3.63	1
11141-16-5	Aroclor-1232	U	3.63	ug/kg	1.21	3.63	1
53469-21-9	Aroclor-1242	U	3.63	ug/kg	1.21	3.63	1
12672-29-6	Aroclor-1248	U	3.63	ug/kg	1.21	3.63	1
11097-69-1	Aroclor-1254	U	3.63	ug/kg	1.21	3.63	1
11096-82-5	Aroclor-1260	U	3.63	ug/kg	1.21	3.63	1

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

SDG Number: 10-1127

Lab Sample ID: 244142018

Client ID: RE12-10-7655

Batch ID: 940403

Run Date: 01/12/2010 15:28

Prep Date: 01/11/2010 19:04

Data File: 041f4101.d

041b4101.d

Date Collected: 01/04/2010 12:00

Date Received: 01/08/2010 09:05

Client: LANL010

Method: SW846 8082

Inst: ECD1A.I

Analyst: YS1

Aliquot: 30.13 g

Column: 1 CLP1

2 CLP2

Matrix: R

%Moisture: 9.9

Project: LANL01004

SOP Ref: GL-OA-E-040

Dilution: 1

Inj. Vol: 1 uL

Final Volume: 1 mL

Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.68	ug/kg	1.23	3.68	1
11104-28-2	Aroclor-1221	U	3.68	ug/kg	1.23	3.68	1
11141-16-5	Aroclor-1232	U	3.68	ug/kg	1.23	3.68	1
53469-21-9	Aroclor-1242	U	3.68	ug/kg	1.23	3.68	1
12672-29-6	Aroclor-1248	U	3.68	ug/kg	1.23	3.68	1
11097-69-1	Aroclor-1254	U	3.68	ug/kg	1.23	3.68	1
11096-82-5	Aroclor-1260	U	3.68	ug/kg	1.23	3.68	1

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

SDG Number: 10-1127

Lab Sample ID: 244142017

Client ID: RE12-10-7656

Batch ID: 940403

Run Date: 01/12/2010 15:16

Prep Date: 01/11/2010 19:04

Data File: 040f4001.d

040b4001.d

Date Collected: 01/04/2010 12:00

Date Received: 01/08/2010 09:05

Client: LANL010

Method: SW846 8082

Inst: ECD1A.I

Analyst: YS1

Aliquot: 30.08 g

Column: 1 CLP1

2 CLP2

Matrix: R

%Moisture: 7.6

Project: LANL01004

SOP Ref: GL-OA-E-040

Dilution: 1

Inj. Vol: 1 uL

Final Volume: 1 mL

Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.60	ug/kg	1.20	3.60	1
11104-28-2	Aroclor-1221	U	3.60	ug/kg	1.20	3.60	1
11141-16-5	Aroclor-1232	U	3.60	ug/kg	1.20	3.60	1
53469-21-9	Aroclor-1242	U	3.60	ug/kg	1.20	3.60	1
12672-29-6	Aroclor-1248	U	3.60	ug/kg	1.20	3.60	1
11097-69-1	Aroclor-1254	U	3.60	ug/kg	1.20	3.60	1
11096-82-5	Aroclor-1260	U	3.60	ug/kg	1.20	3.60	1

# QUALITY CONTROL SUMMARY

PCB  
Surrogate Recovery Report

Page 1 of 1

SDG Number: 10-1127

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 #
1202012544	MB for batch 940402	66	61	67	66
1202012545	LCS for batch 940402	66	61	63	64
244142001	RE12-10-7619	63	58	60	62
244142002	RE12-10-7618	67	63	66	67
244142003	RE12-10-7623	60	57	64	61
244142004	RE12-10-7622	70	66	71	75
244142005	RE12-10-7621	60	57	62	63
244142006	RE12-10-7617	63	59	52	59
244142007	RE12-10-7620	64	59	69	67
244142008	RE12-10-7624	68	63	64	68
244142017	RE12-10-7656	51	48	54	56
244142018	RE12-10-7655	47	44	52	51

**Surrogate**

4CMX = 4cmx

DCB = Decachlorobiphenyl

\* Recovery outside Acceptance Limits

# Column to be used to flag recovery values

D Sample Diluted

**Acceptance Limits**

(34%-105%)

(33%-115%)



PCB

Page 1 of 1

Quality Control Summary  
Spike Recovery Report

SDG Number: 10-1127

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 940402

Matrix: SOIL

Lab Sample ID:1202012545

Instrument: ECD1A.I

Analysis Date: 01/12/2010 11:35

Dilution: 1

Analyst: YS1

Pre Batch ID 940402

Inj. Vol: 1 uL

Batch ID: 940403

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
12674-11-2	LCS Aroclor-1016	33.3	0.0	21.1	63	41-110
11096-82-5	LCS Aroclor-1260	33.3	0.0	24.0	72	48-110

PCB

Page 1 of 2

Quality Control Summary  
Spike Recovery Report

SDG Number: 10-1131

Sample Type: Matrix Spike

Client ID: RE12-10-7657MS

Matrix: R

Lab Sample ID:1202012546

%Moisture: 10.1

Instrument: ECD1A.I

Analysis Date: 01/12/2010 12:23

Dilution: 1

Analyst: YS1

Prep Batch II 940402

Inj. Vol: 1 uL

Batch ID: 940403

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
12674-11-2	MS Aroclor-1016	37.0	0.00 U	23.1	62	23-117
11096-82-5	MS Aroclor-1260	37.0	0.00 U	28.9	78	27-116

PCB

Page 2 of 2

Quality Control Summary  
Spike Recovery Report

SDG Number: 10-1131

Sample Type: Matrix Spike Duplicate

Client ID: RE12-10-7657MSD

Matrix: R

Lab Sample ID:1202012547

%Moisture: 10.1

Instrument: ECD1A.I

Analysis Date: 01/12/2010 12:36

Dilution: 1

Analyst: YS1

Prep Batch II 940402

Inj. Vol: 1 uL

Batch ID: 940403

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	37.1	0.00 U	23.5	63	23-117	2	0-30
11096-82-5	MSD Aroclor-1260	37.1	0.00 U	30.7	83	27-116	6	0-30

## Method Blank Summary

Page 1 of 1

SDG Number:	10-1127	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 940402	Instrument ID:	ECD1A.J_2	Data File:	021b2101-1.d
Lab Sample ID:	1202012544		ECD1A.J_1		021f2101-1.d
Column:	CLP2	Prep Date:	01/11/2010 19:04	Analyzed:	01/12/10 11:24
	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 940402	1202012545	022f2201-1.d 022b2201-1.d	01/12/10	1135
04 RE12-10-7619	244142001	030f3001.d 030b3001.d	01/12/10	1314
05 RE12-10-7618	244142002	033f3301.d 033b3301.d	01/12/10	1348
06 RE12-10-7623	244142003	034f3401.d 034b3401.d	01/12/10	1400
07 RE12-10-7622	244142004	035f3501.d 035b3501.d	01/12/10	1413
08 RE12-10-7621	244142005	036f3601.d 036b3601.d	01/12/10	1425
09 RE12-10-7617	244142006	037f3701.d 037b3701.d	01/12/10	1438
10 RE12-10-7620	244142007	038f3801.d 038b3801.d	01/12/10	1451
11 RE12-10-7624	244142008	039f3901.d 039b3901.d	01/12/10	1503
12 RE12-10-7656	244142017	040f4001.d 040b4001.d	01/12/10	1516
13 RE12-10-7655	244142018	041f4101.d 041b4101.d	01/12/10	1528

# SAMPLE DATA

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

SDG Number: 10-1127

Lab Sample ID: 244142006

Client ID: RE12-10-7617

Batch ID: 940403

Run Date: 01/12/2010 14:38

Prep Date: 01/11/2010 19:04

Data File: 037f3701.d  
037b3701.d

Date Collected: 01/04/2010 12:00

Date Received: 01/08/2010 09:05

Client: LANL010

Method: SW846 8082

Inst: ECD1A.I

Analyst: YS1

Aliquot: 30.15 g

Column: 1 CLP1  
2 CLP2

Matrix: R

%Moisture: 9.2

Project: LANL01004

SOP Ref: GL-OA-E-040

Dilution: 1

Inj. Vol: 1 uL

Final Volume: 1 mL

Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.65	ug/kg	1.22	3.65	1
11104-28-2	Aroclor-1221	U	3.65	ug/kg	1.22	3.65	1
11141-16-5	Aroclor-1232	U	3.65	ug/kg	1.22	3.65	1
53469-21-9	Aroclor-1242	U	3.65	ug/kg	1.22	3.65	1
12672-29-6	Aroclor-1248	U	3.65	ug/kg	1.22	3.65	1
11097-69-1	Aroclor-1254	U	3.65	ug/kg	1.22	3.65	1
11096-82-5	Aroclor-1260	U	3.65	ug/kg	1.22	3.65	1

Data File: /chem/ecdl1a.i/011210.b/037f3701.d  
Report Date: 23-Jan-2010 10:52

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011210.b/037f3701.d

Lab Smp Id: 244142006

Client Smp ID: RE12-10-7617

Inj Date : 12-JAN-2010 14:38

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |244142006|1|

Misc Info : |ECD82P\_1S|940403|SVA|LANL|SOIL|RE12-10-7617|||

Comment :

Method : /chem/ecdl1a.i/011210.b/ECD1-F-8082-121409.m

Meth Date : 23-Jan-2010 10:51 yip00818 Quant Type: ESTD

Cal Date : 14-DEC-2009 11:34

Cal File: 040f4001.d

Als bottle: 37

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: 10-1127.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	9.23710	% Moisture

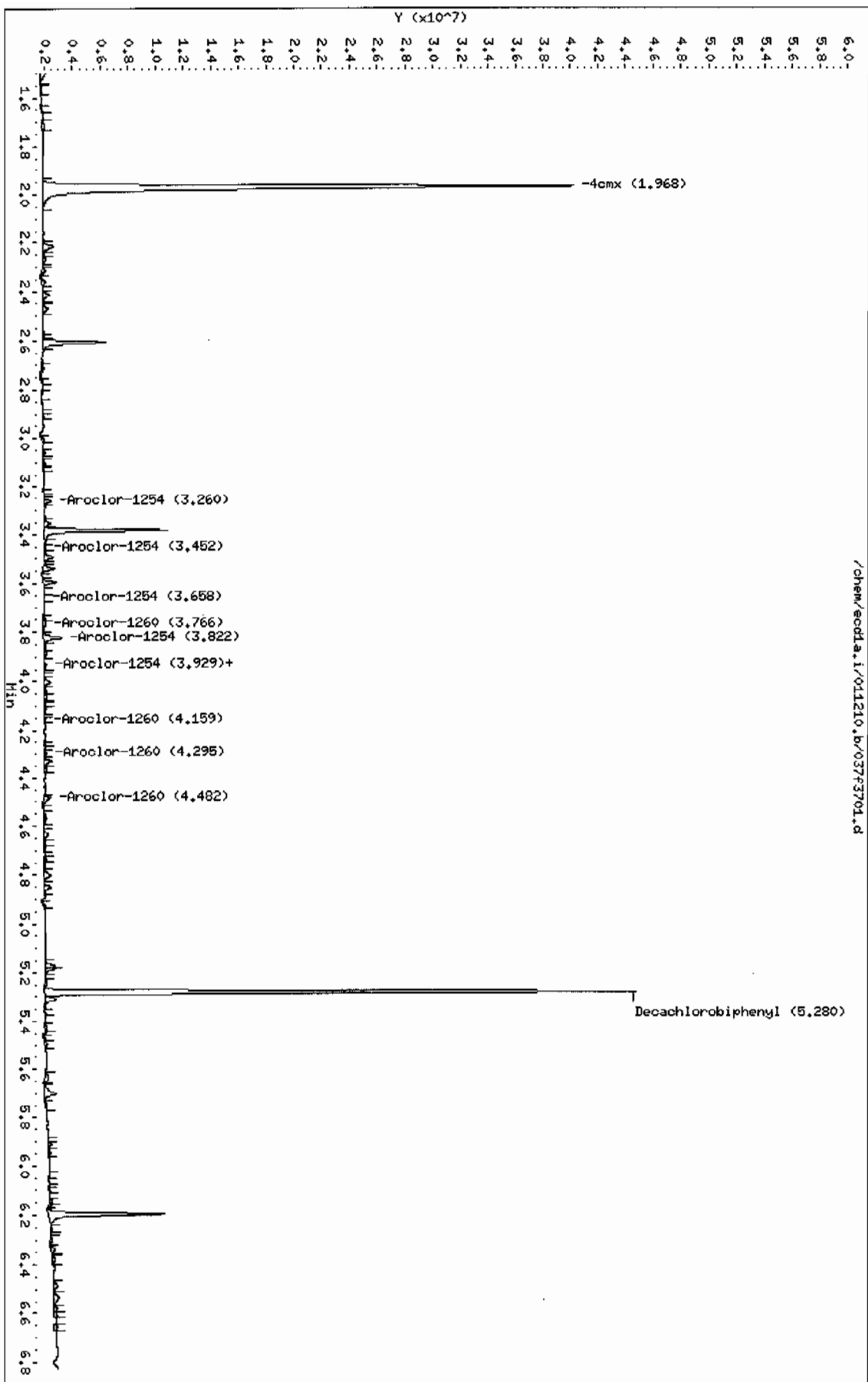
Cpnd Variable

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	1.969	-0.001	45246351	126.569	4.6	80.00- 120.00	100.00	
-----								
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3			
5.280	5.283	-0.003	31283005	103.583	3.8	80.00- 120.00	100.00	
-----								

Data File: /chem/ecdl1a.i/011210.b/037F3701.d  
Date: 12-JAN-2010 14:38  
Client ID: RE12-10-7617  
Sample Info: 124414200611  
Volume Injected (uL): 1.0  
Column phase: CLP1

Instrument: ecdl1a.i  
Operator: YS1  
Column diameter: 0.25





GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/011210.b/037b3701.d  
 Lab Smp Id: 244142006 Client Smp ID: RE12-10-7617  
 Inj Date : 12-JAN-2010 14:38  
 Operator : YS1 Inst ID: ecdla.i  
 Smp Info : |244142006|1|  
 Misc Info : |ECD82P\_1S|940403|SVA|LANL|SOIL|RE12-10-7617|||  
 Comment :  
 Method : /chem/ecdla.i/011210.b/ECD1-B-8082-121409.m  
 Meth Date : 23-Jan-2010 10:51 yip00818 Quant Type: ESTD  
 Cal Date : 14-DEC-2009 12:16 Cal File: 044b4401.d  
 Als bottle: 37  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: 10-1127.sub  
 Target Version: 3.50 Sample Matrix: Soil  
 Processing Host: hpclp1

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

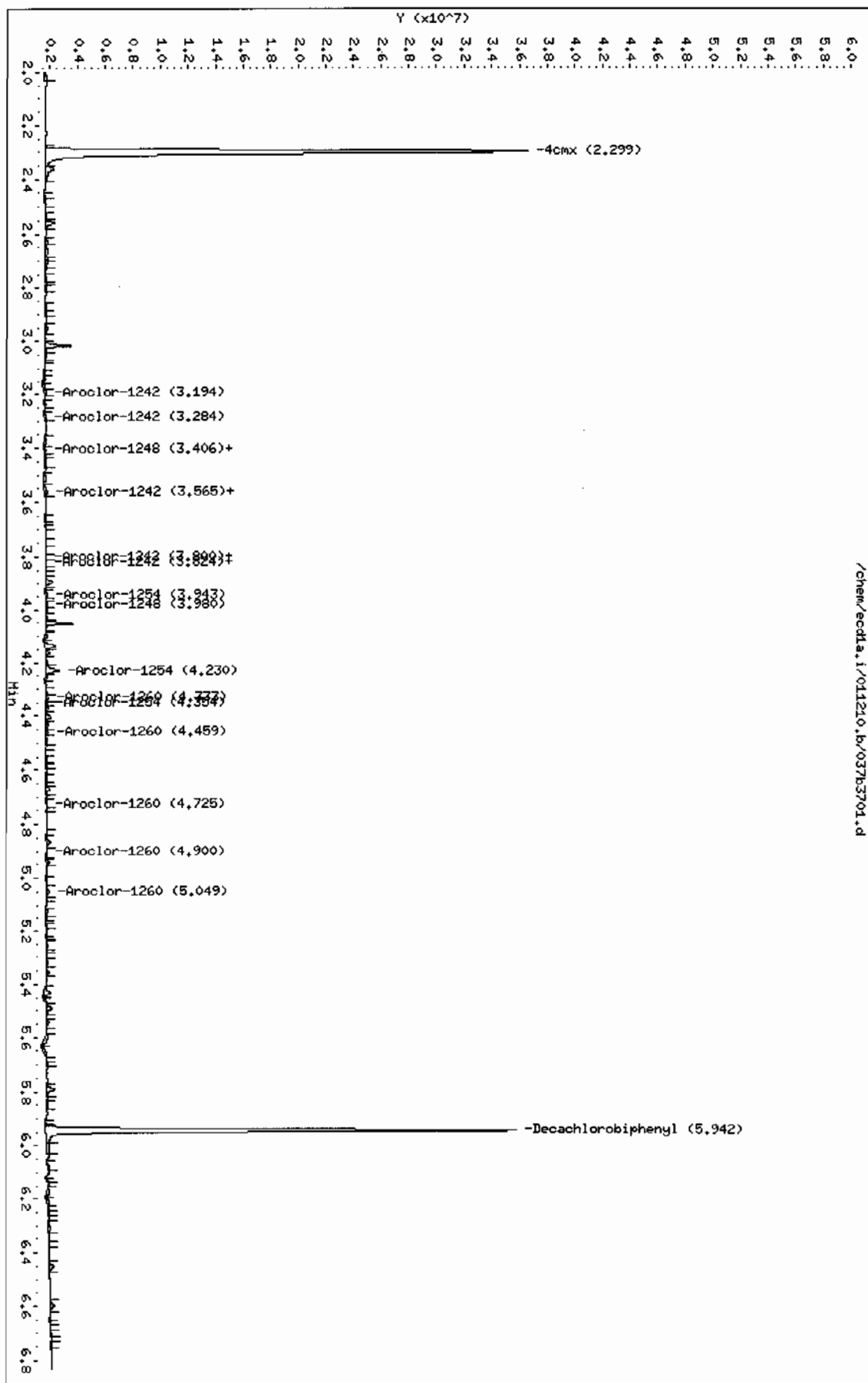
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.15000	Weight of sample extracted (g)
M	9.23710	% Moisture

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	2.299	0.000	33522390	117.482	4.3 80.00- 120.00	100.00		
-----								
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3			
5.942	5.945	-0.003	25950483	117.007	4.3 80.00- 120.00	100.00		

Data File: /chem/ecdda.i/011210.b/037b3701.d  
 Date: 12-JAN-2010 14:38  
 Client ID: RE12-10-7617  
 Sample Info: 124414200611  
 Volume Injected (uL): 1.0  
 Column Phase: CLP2

Instrument: ecdda.i  
 Operator: YS1  
 Column diameter: 0.25



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

SDG Number: 10-1127  
Lab Sample ID: 244142002

Client ID: RE12-10-7618  
Batch ID: 940403  
Run Date: 01/12/2010 13:48  
Prep Date: 01/11/2010 19:04  
Data File: 033f3301.d  
033b3301.d

Date Collected: 01/04/2010 12:00  
Date Received: 01/08/2010 09:05  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.J  
Analyst: YS1  
Aliquot: 30.19 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
%Moisture: 18.9  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.08	ug/kg	1.36	4.08	1
11104-28-2	Aroclor-1221	U	4.08	ug/kg	1.36	4.08	1
11141-16-5	Aroclor-1232	U	4.08	ug/kg	1.36	4.08	1
53469-21-9	Aroclor-1242	U	4.08	ug/kg	1.36	4.08	1
12672-29-6	Aroclor-1248	U	4.08	ug/kg	1.36	4.08	1
11097-69-1	Aroclor-1254	U	4.08	ug/kg	1.36	4.08	1
11096-82-5	Aroclor-1260	U	4.08	ug/kg	1.36	4.08	1

Data File: /chem/ecdl1a.i/011210.b/033f3301.d  
Report Date: 23-Jan-2010 10:51

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL  
Data file : /chem/ecdl1a.i/011210.b/033f3301.d  
Lab Smp Id: 244142002 Client Smp ID: RE12-10-7618  
Inj Date : 12-JAN-2010 13:48  
Operator : YS1 Inst ID: ecd1a.i  
Smp Info : |244142002|1|  
Misc Info : |ECD82P\_1S|940403|SVA|LANL|SOIL|RE12-10-7618|||  
Comment :  
Method : /chem/ecdl1a.i/011210.b/ECD1-F-8082-121409.m  
Meth Date : 23-Jan-2010 10:51 yip00818 Quant Type: ESTD  
Cal Date : 14-DEC-2009 11:34 Cal File: 040f4001.d  
Als bottle: 33  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1127.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	30.19000	Weight of sample extracted (g)
M	18.91140	% Moisture

Cpnd Variable Local Compound Variable

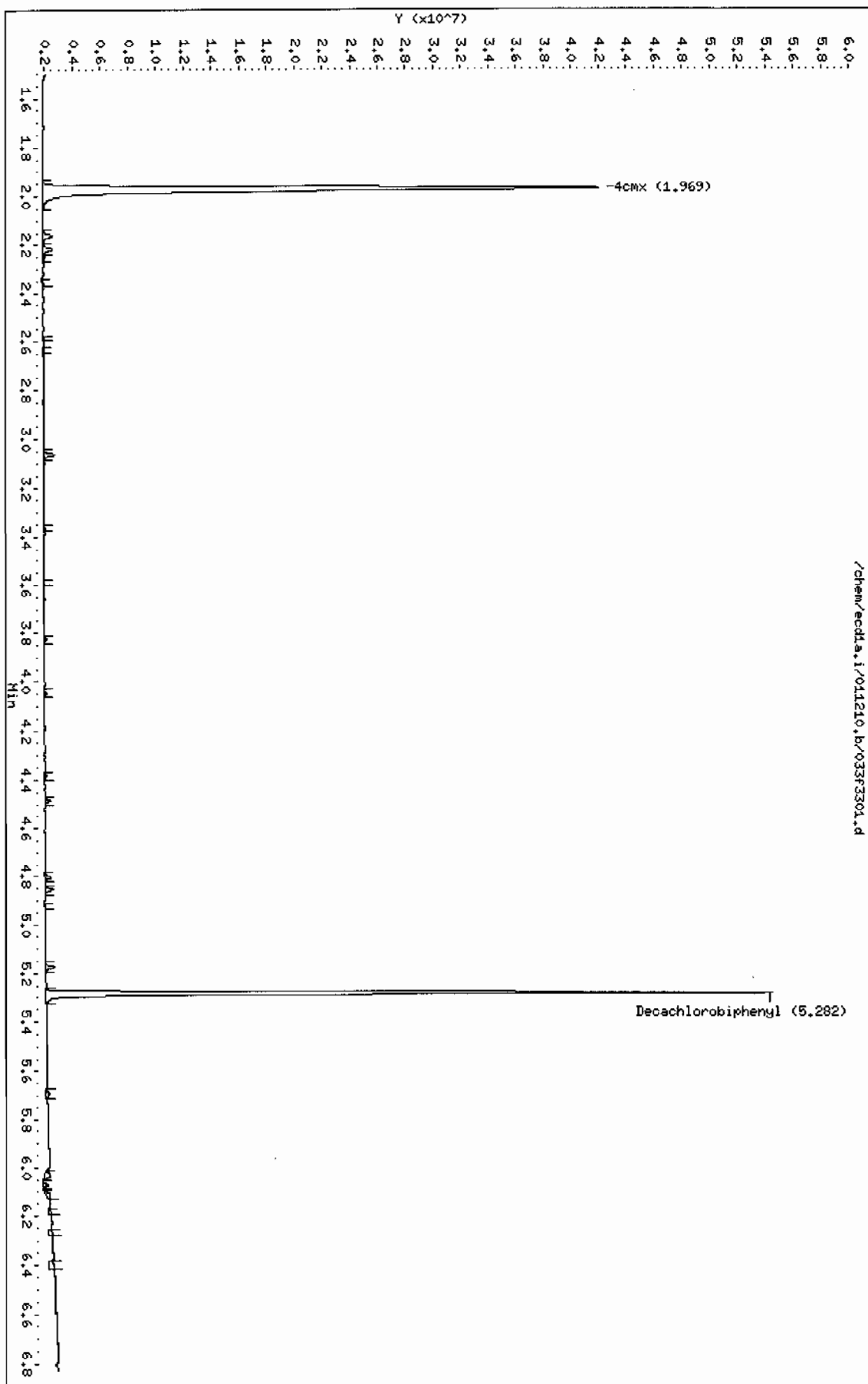
CONCENTRATIONS

RT	EXP RT	DLT RT	RESPONSE ( ug/L)	ON-COL	FINAL	TARGET RANGE	RATIO
11	4cmx						
1.969	1.969	0.000	47892556	133.972	5.5	80.00- 120.00	100.00
12	Decachlorobiphenyl						
5.282	5.283	-0.001	39846189	131.937	5.4	80.00- 120.00	100.00

Data File: /chem/ecdda.i/011210.b/033F3301.d  
Date: 12-JAN-2010 13:48  
Client ID: RE12-10-7618  
Sample Info: 124414200211  
Volume Injected (uL): 1.0  
Column Phase: CLP1

Instrument: ecdda.i  
Operator: YSL  
Column diameter: 0.25

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Data File: /chem/ecdl1a.i/011210.b/033b3301.d  
 Report Date: 23-Jan-2010 10:51

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011210.b/033b3301.d  
 Lab Smp Id: 244142002 Client Smp ID: RE12-10-7618  
 Inj Date : 12-JAN-2010 13:48  
 Operator : YSl Inst ID: ecd1a.i  
 Smp Info : |244142002|1|  
 Misc Info : |ECD82P\_1S|940403|SVA|LANL|SOIL|RE12-10-7618|||  
 Comment :  
 Method : /chem/ecdl1a.i/011210.b/ECD1-B-8082-121409.m  
 Meth Date : 23-Jan-2010 10:51 yip00818 Quant Type: ESTD  
 Cal Date : 14-DEC-2009 12:16 Cal File: 044b4401.d  
 Als bottle: 33  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: 10-1127.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	30.19000	Weight of sample extracted (g)
M	18.91140	% Moisture

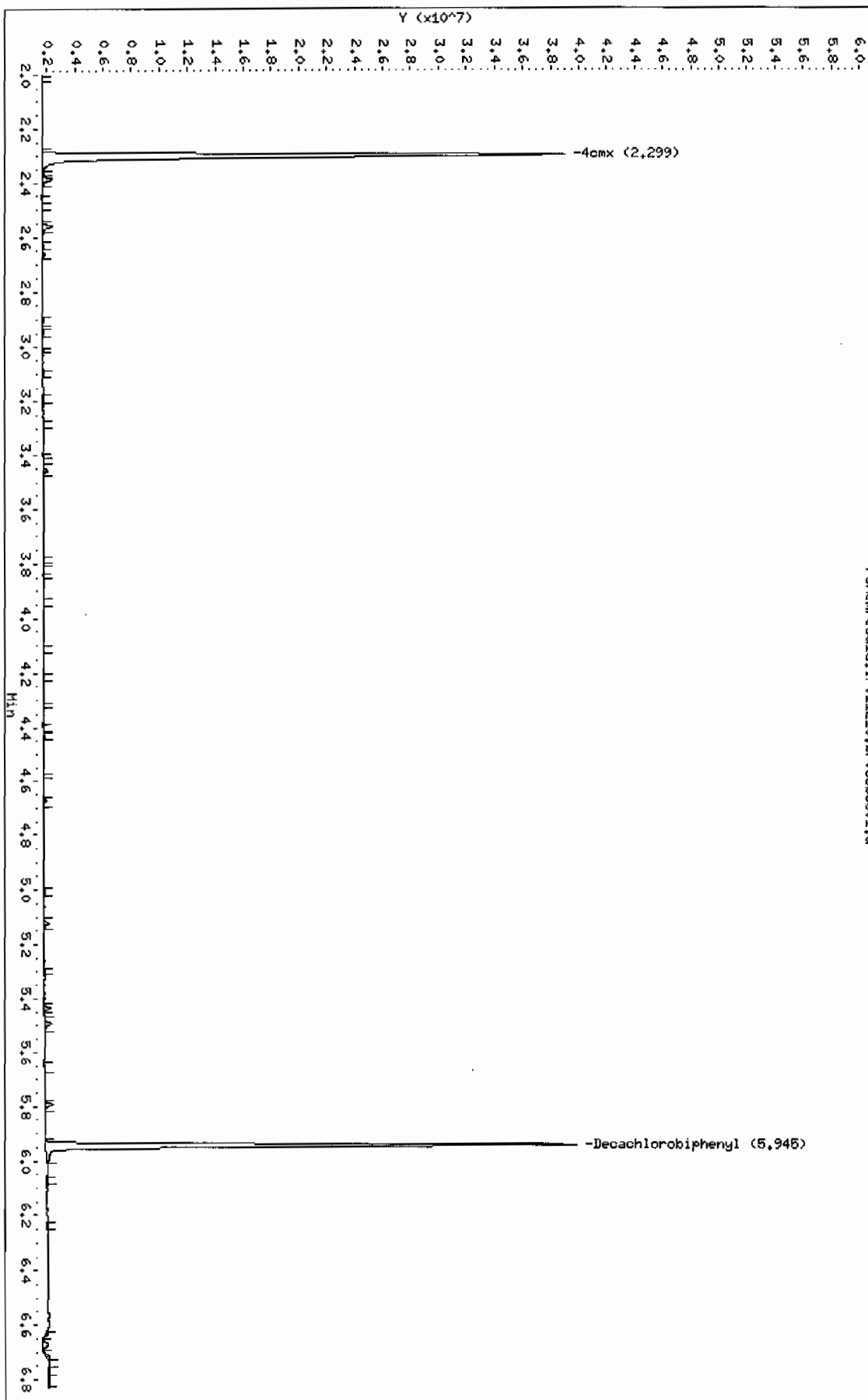
Cpnd Variable Local Compound Variable

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	2.299	0.000	35748855	125.285	5.1 80.00- 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3	
5.945	5.945	0.000	29530721	133.149	5.4 80.00- 120.00	100.00
-----						

Data File: /chem/ecdl.a.i/011210.b/03363301.d  
Date: 12-JAN-2010 13:49  
Client ID: RE12-10-7618  
Sample Info: 1244142002111  
Volume Injected (uL): 1.0  
Column phase: CLP2

Instrument: ecdl.a.i  
Operator: YSL  
Column diameter: 0.25

/chem/ecdl.a.i/011210.b/03363301.d



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

SDG Number: 10-1127  
Lab Sample ID: 244142001

Date Collected: 01/04/2010 12:00  
Date Received: 01/08/2010 09:05  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.I  
Analyst: YS1  
Aliquot: 30.09 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
%Moisture: 16.2  
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	3.97	ug/kg	1.32	3.97	1
11104-28-2	Aroclor-1221	U	3.97	ug/kg	1.32	3.97	1
11141-16-5	Aroclor-1232	U	3.97	ug/kg	1.32	3.97	1
53469-21-9	Aroclor-1242	U	3.97	ug/kg	1.32	3.97	1
12672-29-6	Aroclor-1248	U	3.97	ug/kg	1.32	3.97	1
11097-69-1	Aroclor-1254	U	3.97	ug/kg	1.32	3.97	1
11096-82-5	Aroclor-1260	U	3.97	ug/kg	1.32	3.97	1



Data File: /chem/ecdl1a.i/011210.b/030f3001.d  
 Report Date: 23-Jan-2010 10:51

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL  
 Data file : /chem/ecdl1a.i/011210.b/030f3001.d  
 Lab Smp Id: 244142001 Client Smp ID: RE12-10-7619  
 Inj Date : 12-JAN-2010 13:14  
 Operator : YSl Inst ID: ecd1a.i  
 Smp Info : |244142001|1|  
 Misc Info : |ECD82P\_1S|940403|SVA|LANL|SOIL|RE12-10-7619|||  
 Comment :  
 Method : /chem/ecdl1a.i/011210.b/ECD1-F-8082-121409.m  
 Meth Date : 23-Jan-2010 10:48 yip00818 Quant Type: ESTD  
 Cal Date : 14-DEC-2009 11:34 Cal File: 040f4001.d  
 Als bottle: 30  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: 10-1127.sub  
 Target Version: 3.50 Sample Matrix: Soil  
 Processing Host: hpclp1

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

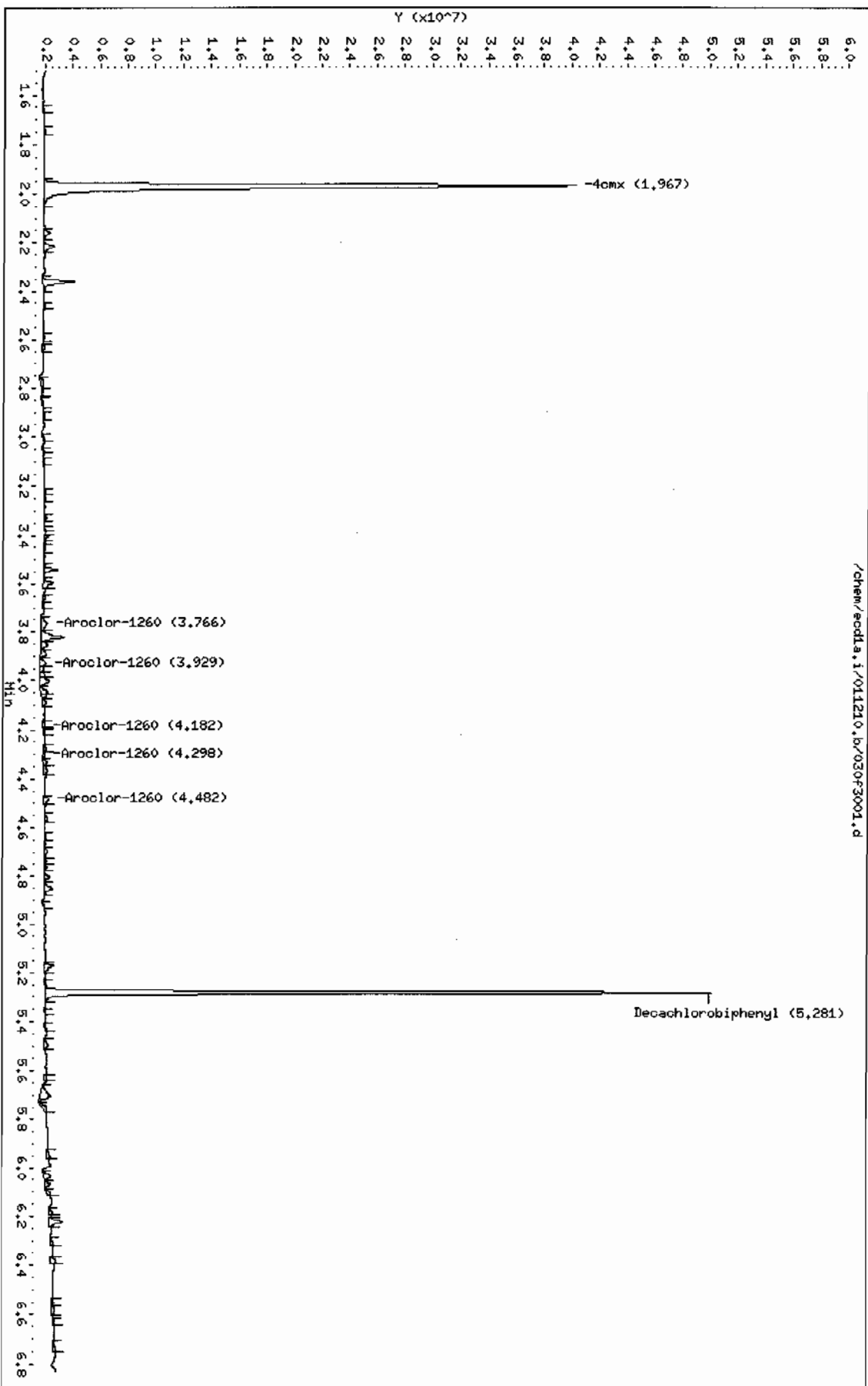
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.09000	Weight of sample extracted (g)
M	16.19470	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS							
RT	EXP RT	DLT RT	RESPONSE	ON-COL ( ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
\$ 11 4cmx						CAS #: 877-09-8	
1.967	1.969	-0.002	44814552	125.362	5.0	80.00- 120.00	100.00
\$ 12 Decachlorobiphenyl						CAS #: 2051-24-3	
5.281	5.283	-0.002	36386745	120.482	4.8	80.00- 120.00	100.00

Data File: /chem/ecdl.a.i/011210.b/030f3001.d  
Date : 12-JAN-2010 13:14  
Client ID: REL2-10-7619  
Sample Info: 124414200111  
Volume Injected (uL): 1.0  
Column phase: CLP1

Instrument: ecdl.a.i  
Operator: YSL  
Column diameter: 0.25



Data File: /chem/ecdl1a.i/011210.b/030b3001.d  
Report Date: 23-Jan-2010 10:51

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011210.b/030b3001.d  
Lab Smp Id: 244142001 Client Smp ID: RE12-10-7619  
Inj Date : 12-JAN-2010 13:14  
Operator : YS1 Inst ID: ecd1a.i  
Smp Info : |244142001|1|  
Misc Info : |ECD82P\_1S|940403|SVA|LANL|SOIL|RE12-10-7619|||  
Comment :  
Method : /chem/ecdl1a.i/011210.b/ECD1-B-8082-121409.m  
Meth Date : 23-Jan-2010 10:48 yip00818 Quant Type: ESTD  
Cal Date : 14-DEC-2009 12:16 Cal File: 044b4401.d  
Als bottle: 30  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1127.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	30.09000	Weight of sample extracted (g)
M	16.19470	% Moisture

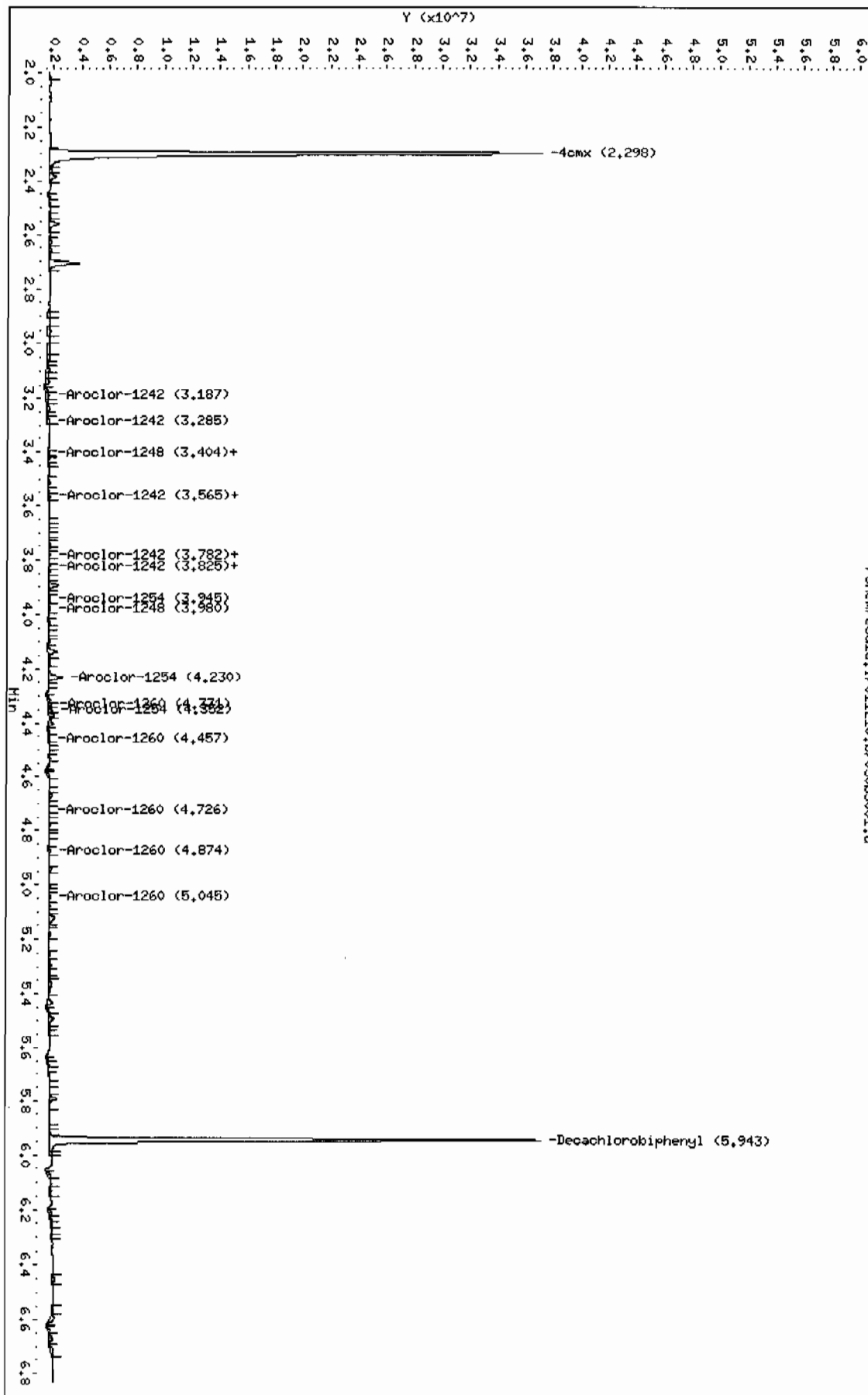
Cpnd Variable Local Compound Variable

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	2.299	-0.001	33366549	116.936	4.6 80.00- 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3	
5.943	5.945	-0.002	27348036	123.308	4.9 80.00- 120.00	100.00
-----						

Data File: /chem/eodla.i/011210.b/030b3001.d  
Date: 12-JUN-2010 13:14  
Client ID: RE12-10-7619  
Sample Info: 124414200111  
Volume Injected (uL): 1.0  
Column phase: CLP2

Instrument: eodla.i  
Operator: YSL  
Column diameter: 0.25

/chem/eodla.i/011210.b/030b3001.d



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

SDG Number: 10-1127  
Lab Sample ID: 244142007

Client ID: RE12-10-7620  
Batch ID: 940403  
Run Date: 01/12/2010 14:51  
Prep Date: 01/11/2010 19:04  
Data File: 038f3801.d  
038b3801.d

Date Collected: 01/04/2010 12:00  
Date Received: 01/08/2010 09:05  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.I  
Analyst: YS1  
Aliquot: 30.17 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
%Moisture: 11.2  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

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

Data File: /chem/ecdl1a.i/011210.b/038f3801.d  
Report Date: 23-Jan-2010 10:52

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011210.b/038f3801.d

Lab Smp Id: 244142007

Client Smp ID: RE12-10-7620

Inj Date : 12-JAN-2010 14:51

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |244142007|1|

Misc Info : |ECD82P\_1S|940403|SVA|LANL|SOIL|RE12-10-7620|||

Comment :

Method : /chem/ecdl1a.i/011210.b/ECD1-F-8082-121409.m

Meth Date : 23-Jan-2010 10:51 yip00818 Quant Type: ESTD

Cal Date : 14-DEC-2009 11:34

Cal File: 040f4001.d

Als bottle: 38

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: 10-1127.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	30.17000	Weight of sample extracted (g)
M	11.21230	% Moisture

Cpnd Variable

Local Compound Variable

CONCENTRATIONS

RT	EXP RT	DLT RT	RESPONSE ( ug/L)	ON-COL	FINAL	TARGET RANGE	RATIO
11	4cmx						
1.968	1.969	-0.001	45594392	127.543	4.8	80.00- 120.00	100.00
12	Decachlorobiphenyl						
5.280	5.283	-0.003	41765913	138.293	5.2	80.00- 120.00	100.00

Data File: /chem/ecdl1.i/011210.b/038f3801.d

Date: 12-JAN-2010 14:51

Client ID: REL2-10-7620

Sample Info: 1244142007111

Volume Injected (uL): 1.0

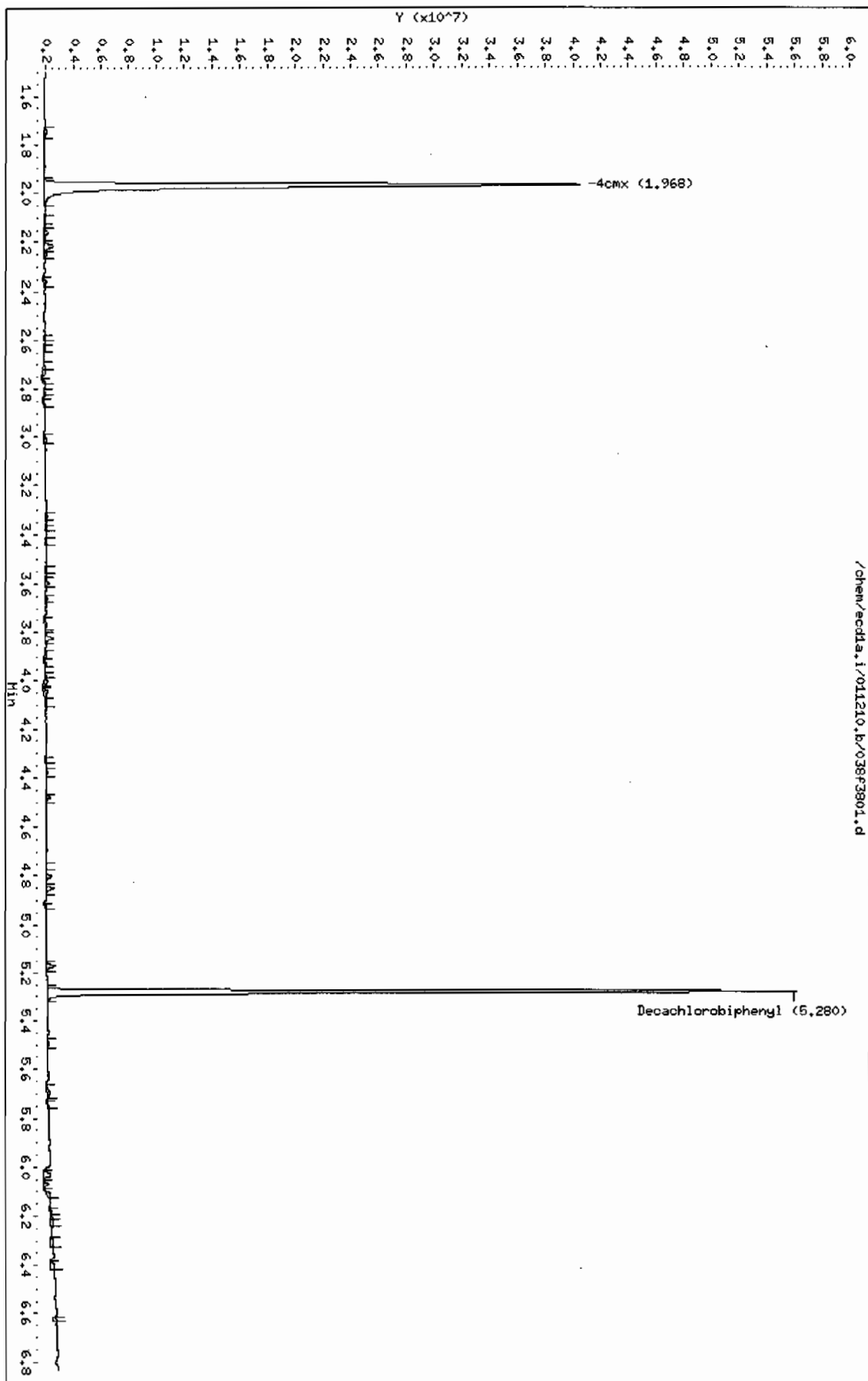
Column phase: CLP1

Instrument: ecdl1.i

Operator: YSL

Column diameter: 0.25

/chem/ecdl1.i/011210.b/038f3801.d



Data File: /chem/ecdl1a.i/011210.b/038b3801.d  
Report Date: 23-Jan-2010 10:52

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011210.b/038b3801.d  
Lab Smp Id: 244142007 Client Smp ID: RE12-10-7620  
Inj Date : 12-JAN-2010 14:51  
Operator : YS1 Inst ID: ecd1a.i  
Smp Info : |244142007|1|  
Misc Info : |ECD82P\_1S|940403|SVA|LANL|SOIL|RE12-10-7620|1|  
Comment :  
Method : /chem/ecdl1a.i/011210.b/ECD1-B-8082-121409.m  
Meth Date : 23-Jan-2010 10:51 yip00818 Quant Type: ESTD  
Cal Date : 14-DEC-2009 12:16 Cal File: 044b4401.d  
Als bottle: 38  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1127.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	30.17000	Weight of sample extracted (g)
M	11.21230	% Moisture

Cpnd Variable Local Compound Variable

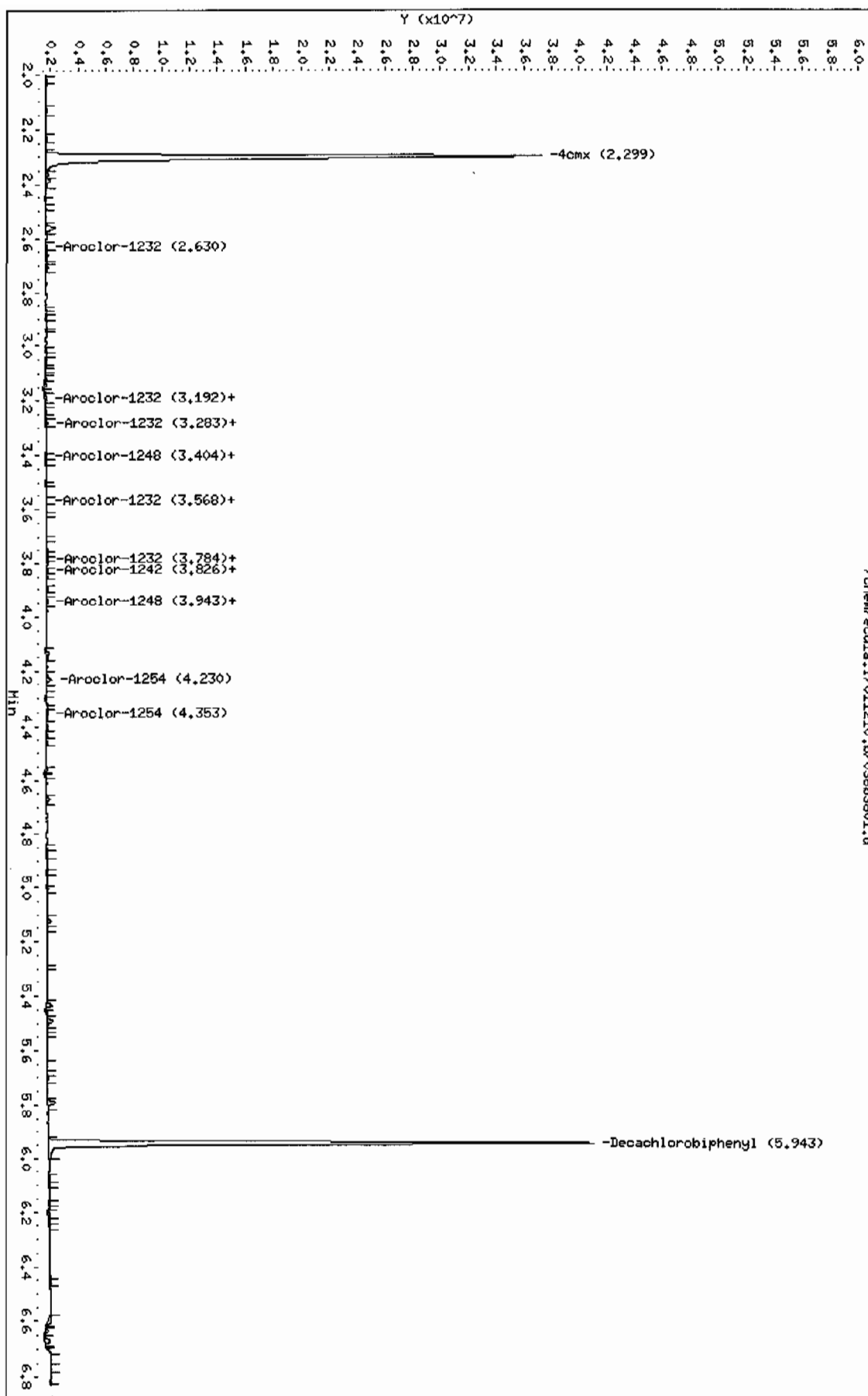
CONCENTRATIONS						
			ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
			=====	=====	=====	=====
CAS #: 877-09-8						
\$ 11 4cmx						
2.299	2.299	0.000	33924504 118.892	4.4	80.00- 120.00	100.00
-----						
CAS #: 2051-24-3						
\$ 12 Decachlorobiphenyl						
5.943	5.945	-0.002	29939734 134.993	5.0	80.00- 120.00	100.00
-----						



Data File: /chem/ecdl1a.i/011210.b/03863801.d  
 Date: 12-JAN-2010 14:51  
 Client ID: RE12-10-7620  
 Sample Info: 124414200711  
 Volume Injected (uL): 1.0  
 Column phase: CLP2

Instrument: ecdl1a.i  
 Operator: YSL  
 Column diameter: 0.25

/chem/ecdl1a.i/011210.b/03863801.d



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

SDG Number: 10-1127  
Lab Sample ID: 244142005

Date Collected: 01/04/2010 12:00  
Date Received: 01/08/2010 09:05  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.I  
Analyst: YS1  
Aliquot: 30.17 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
% Moisture: 7.6  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE12-10-7621  
Batch ID: 940403  
Run Date: 01/12/2010 14:25  
Prep Date: 01/11/2010 19:04  
Data File: 036f3601.d  
036b3601.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.59	ug/kg	1.19	3.59	1
11104-28-2	Aroclor-1221	U	3.59	ug/kg	1.19	3.59	1
11141-16-5	Aroclor-1232	U	3.59	ug/kg	1.19	3.59	1
53469-21-9	Aroclor-1242	U	3.59	ug/kg	1.19	3.59	1
12672-29-6	Aroclor-1248	U	3.59	ug/kg	1.19	3.59	1
11097-69-1	Aroclor-1254	U	3.59	ug/kg	1.19	3.59	1
11096-82-5	Aroclor-1260	U	3.59	ug/kg	1.19	3.59	1

Data File: /chem/ecdla.i/011210.b/036f3601.d  
Report Date: 23-Jan-2010 10:52

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/011210.b/036f3601.d  
Lab Smp Id: 244142005 Client Smp ID: RE12-10-7621  
Inj Date : 12-JAN-2010 14:25  
Operator : YS1 Inst ID: ecdla.i  
Smp Info : |244142005|1|  
Misc Info : |ECD82P\_1S|940403|SVA|LANL|SOIL|RE12-10-7621|||  
Comment :  
Method : /chem/ecdla.i/011210.b/ECD1-F-8082-121409.m  
Meth Date : 23-Jan-2010 10:51 yip00818 Quant Type: ESTD  
Cal Date : 14-DEC-2009 11:34 Cal File: 040f4001.d  
Als bottle: 36  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1127.sub  
Target Version: 3.50 Sample Matrix: Soil  
Processing Host: hpc1pl

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.17000	Weight of sample extracted (g)
M	7.56790	% Moisture

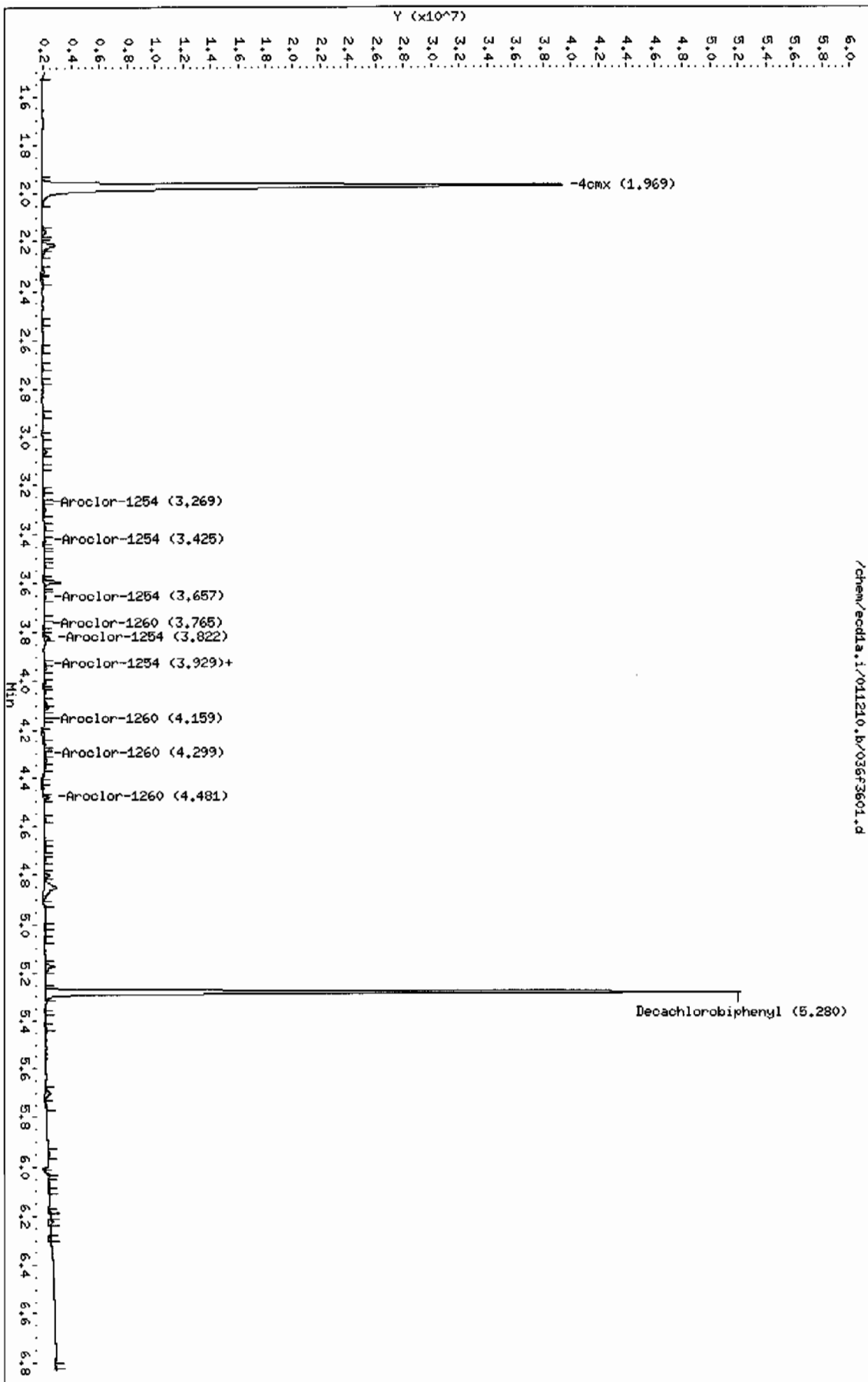
Cpnd Variable Local Compound Variable

CONCENTRATIONS

RT	EXP RT	DLT RT	RESPONSE ( ug/L)	ON-COL	FINAL	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====	=====
\$ 11 4cmx					CAS #: 877-09-8		
1.969	1.969	0.000	43089140	120.535	4.3	80.00- 120.00	100.00
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.280	5.283	-0.003	37364040	123.718	4.4	80.00- 120.00	100.00

Data File: /chem/ecdl1a.i/011210.b/036f3601.d  
Date : 12-JAN-2010 14:25  
Client ID: REL2-10-7621  
Sample Info: 124414200511  
Volume Injected (uL): 1.0  
Column phase: CLP1

Instrument: ecdl1a.i  
Operator: YSI  
Column diameter: 0.25



Data File: /chem/ecdla.i/011210.b/036b3601.d  
Report Date: 23-Jan-2010 10:52

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/011210.b/036b3601.d  
Lab Smp Id: 244142005 Client Smp ID: RE12-10-7621  
Inj Date : 12-JAN-2010 14:25  
Operator : YS1 Inst ID: ecdla.i  
Smp Info : |244142005|1|  
Misc Info : |ECD82P\_1S|940403|SVA|LANL|SOIL|RE12-10-7621|||  
Comment :  
Method : /chem/ecdla.i/011210.b/ECD1-B-8082-121409.m  
Meth Date : 23-Jan-2010 10:51 yip00818 Quant Type: ESTD  
Cal Date : 14-DEC-2009 12:16 Cal File: 044b4401.d  
Als bottle: 36  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1127.sub  
Target Version: 3.50 Sample Matrix: Soil  
Processing Host: hpc1pl

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.17000	Weight of sample extracted (g)
M	7.56790	% Moisture

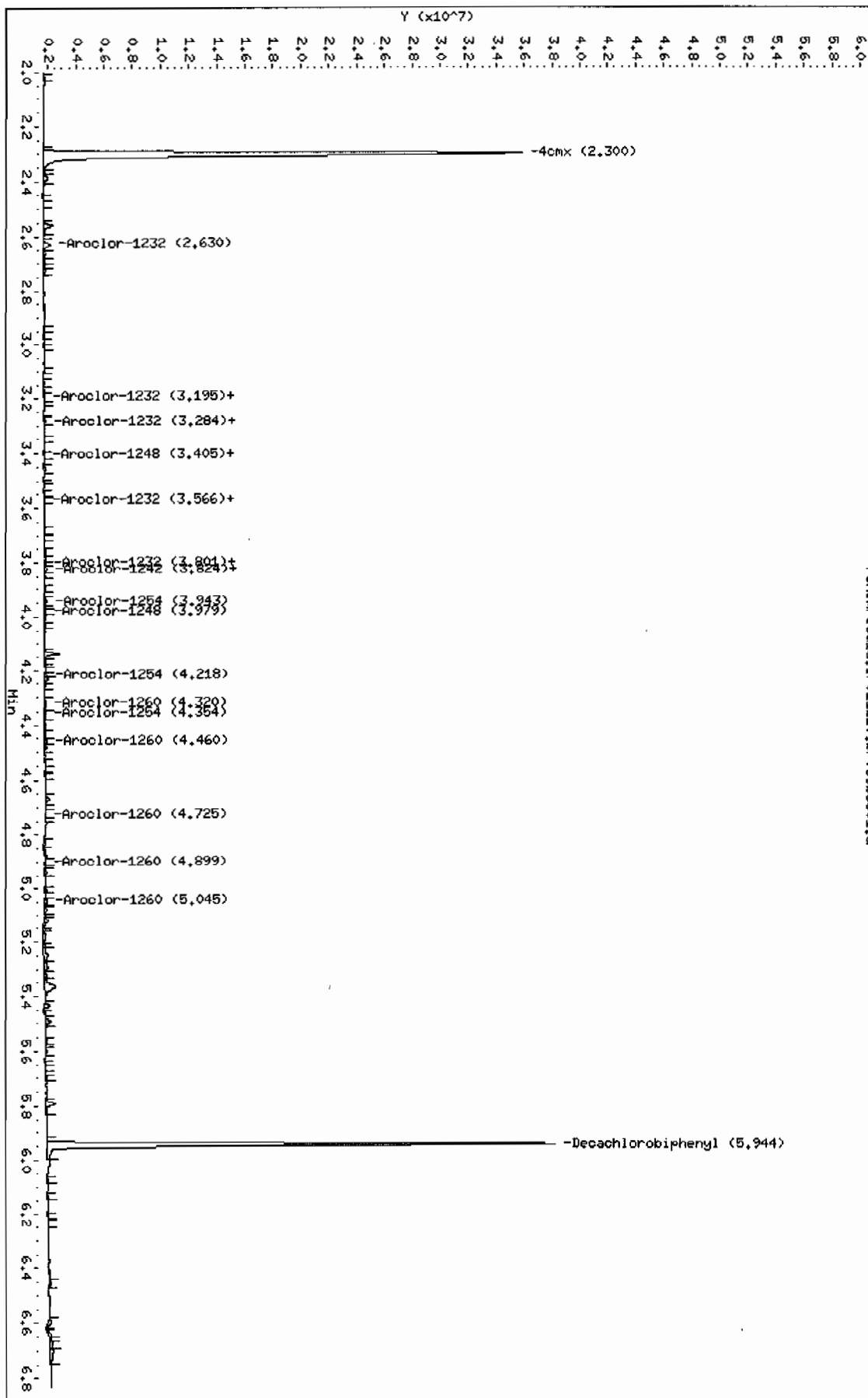
Cpnd Variable Local Compound Variable

CONCENTRATIONS						
			ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
\$ 11 4cmx CAS #: 877-09-8						
2.300	2.299	0.001	32321720	113.274	4.1 80.00- 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl CAS #: 2051-24-3						
5.944	5.945	-0.001	27929471	125.929	4.5 80.00- 120.00	100.00
-----						

Data File: /chem/eod1a.i/011210.b/036b3601.d  
 Date : 12-JAN-2010 14:25  
 Client ID: REL2-10-7621  
 Sample Info: 124414200511  
 Volume Injected (uL): 1.0  
 Column phase: CLP2

Instrument: eod1a.i  
 Operator: YSL  
 Column diameter: 0.25

/chem/eod1a.i/011210.b/036b3601.d



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

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SDG Number: 10-1127

Lab Sample ID: 244142004

Client ID: RE12-10-7622

Batch ID: 940403

Run Date: 01/12/2010 14:13

Prep Date: 01/11/2010 19:04

Data File: 035f3501.d

035b3501.d

Date Collected: 01/04/2010 12:00

Date Received: 01/08/2010 09:05

Client: LANL010

Method: SW846 8082

Inst: ECD1A.1

Analyst: YS1

Aliquot: 30.05 g

Column: 1 CLP1

2 CLP2

Matrix: R

% Moisture: 9

Project: LANL01004

SOP Ref: GL-OA-E-040

Dilution: 1

Inj. Vol: 1 uL

Final Volume: 1 mL

Level: LOW

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

Data File: /chem/ecd1a.i/011210.b/035f3501.d  
Report Date: 23-Jan-2010 10:52

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/011210.b/035f3501.d  
Lab Smp Id: 244142004 Client Smp ID: RE12-10-7622  
Inj Date : 12-JAN-2010 14:13  
Operator : YS1 Inst ID: ecd1a.i  
Smp Info : |244142004|1|  
Misc Info : |ECD82P\_1S|940403|SVA|LANL|SOIL|RE12-10-7622|||  
Comment :  
Method : /chem/ecd1a.i/011210.b/ECD1-F-8082-121409.m  
Meth Date : 23-Jan-2010 10:51 yip00818 Quant Type: ESTD  
Cal Date : 14-DEC-2009 11:34 Cal File: 040f4001.d  
Als bottle: 35  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1127.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	8.98510	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS

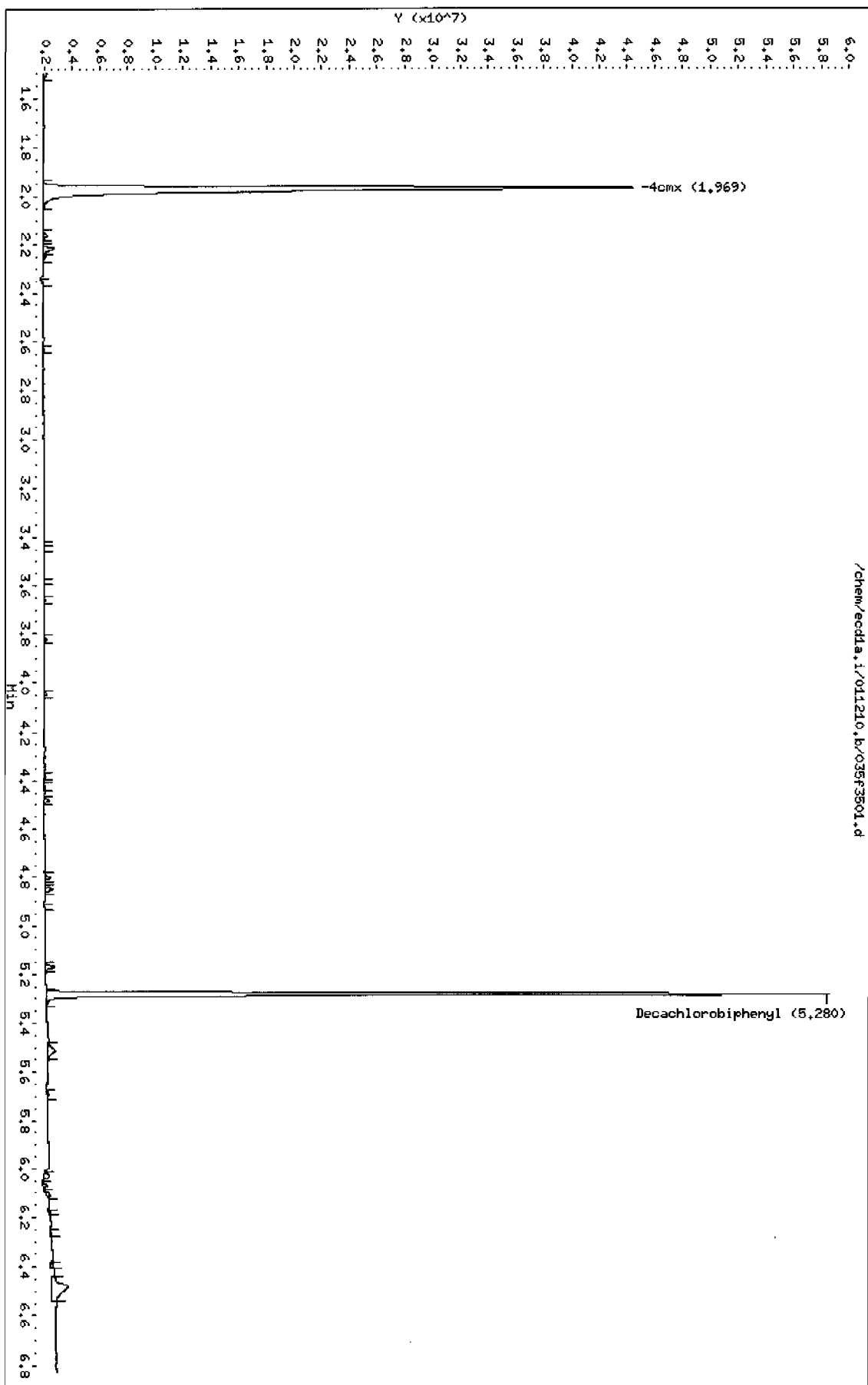
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	ON-COL	FINAL	TARGET RANGE	RATIO
\$ 11 4cmx					CAS #: 877-09-8		
1.969	1.969	0.000	50376654	140.921	5.2	80.00- 120.00	100.00
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.280	5.283	-0.003	42870563	141.951	5.2	80.00- 120.00	100.00



Data File: /chem/ecdl1a.i/011210.b/035f3501.d  
Date: 12-JAN-2010 14:13  
Client ID: RE12-10-7622  
Sample Info: 12444200411  
Volume Injected (uL): 1.0  
Column phase: CLP1

Instrument: ecdl1a.i  
Operator: YSL  
Column diameter: 0.25

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011210.b/035b3501.d

Lab Smp Id: 244142004

Client Smp ID: RE12-10-7622

Inj Date : 12-JAN-2010 14:13

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |244142004|1|

Misc Info : |ECD82P\_1S|940403|SVA|LANL|SOIL|RE12-10-7622|||

Comment :

Method : /chem/ecdl1a.i/011210.b/ECD1-B-8082-121409.m

Meth Date : 23-Jan-2010 10:51 yip00818 Quant Type: ESTD

Cal Date : 14-DEC-2009 12:16

Cal File: 044b4401.d

Als bottle: 35

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: 10-1127.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	8.98510	% Moisture

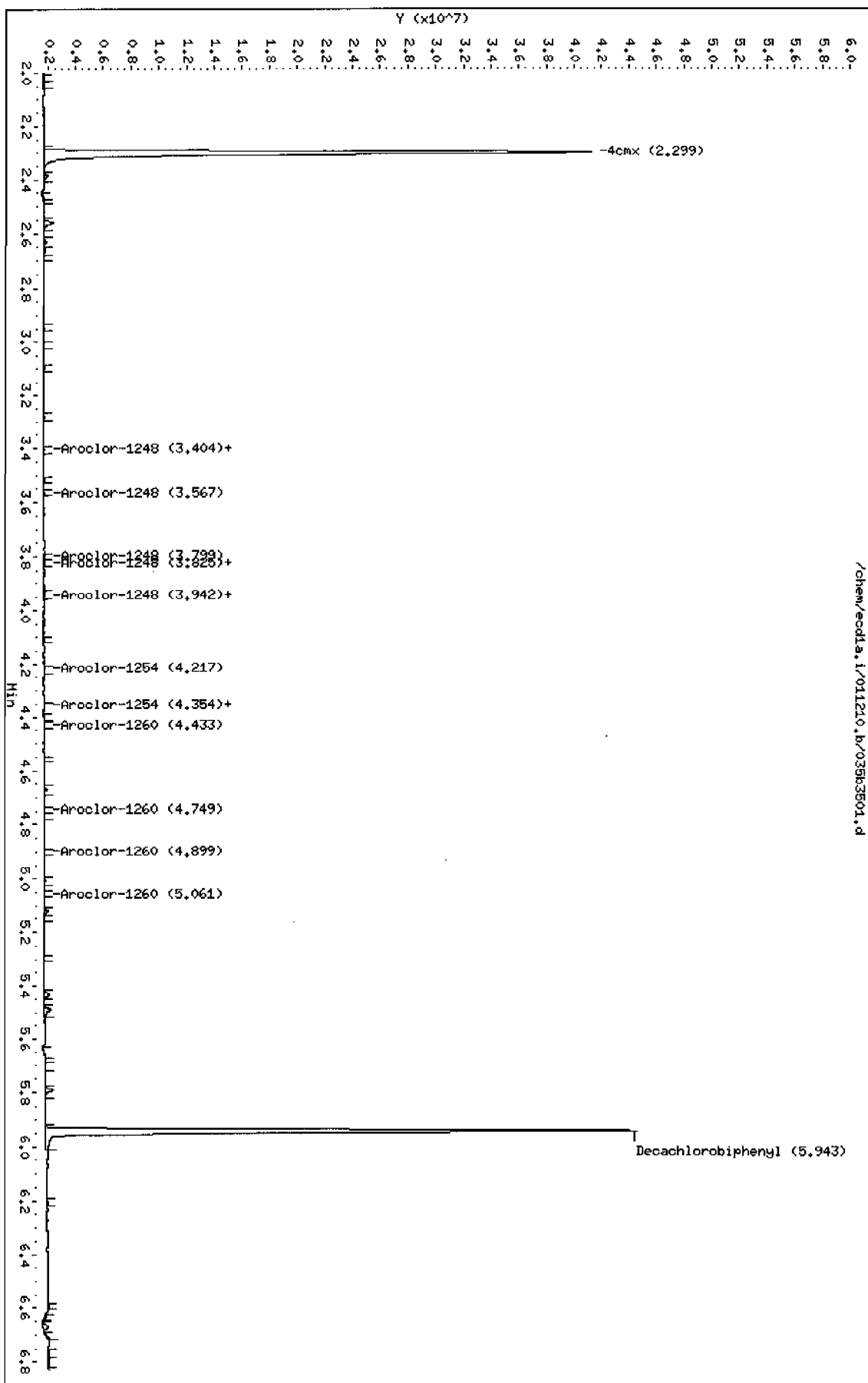
Cpnd Variable

Local Compound Variable

CONCENTRATIONS						
			ON-COL		FINAL	
RT	EXP RT	DLT RT	RESPONSE ( ug/L)		TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
\$ 11 4cmx			CAS #: 877-09-8			
2.299	2.299	0.000	37739494	132.262	4.8 80.00- 120.00	100.00
\$ 12 Decachlorobiphenyl			CAS #: 2051-24-3			
5.943	5.945	-0.002	33183861	149.621	5.5 80.00- 120.00	100.00

Data File: /chem/ecdl1a.i/011210.b/035b3501.d  
 Date: 12-JAN-2010 14:13  
 Client ID: RE12-10-7622  
 Sample Info: 124414200411  
 Volume Injected (uL): 1.0  
 Column phase: CLP2

Instrument: ecdl1a.i  
 Operator: YSL  
 Column diameter: 0.25



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

SDG Number: 10-1127  
Lab Sample ID: 244142003

Date Collected: 01/04/2010 12:00  
Date Received: 01/08/2010 09:05  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.I  
Analyst: YS1  
Aliquot: 30.02 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
%Moisture: 15.4  
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	3.94	ug/kg	1.31	3.94	1
11104-28-2	Aroclor-1221	U	3.94	ug/kg	1.31	3.94	1
11141-16-5	Aroclor-1232	U	3.94	ug/kg	1.31	3.94	1
53469-21-9	Aroclor-1242	U	3.94	ug/kg	1.31	3.94	1
12672-29-6	Aroclor-1248	U	3.94	ug/kg	1.31	3.94	1
11097-69-1	Aroclor-1254	U	3.94	ug/kg	1.31	3.94	1
11096-82-5	Aroclor-1260	U	3.94	ug/kg	1.31	3.94	1

Data File: /chem/ecd1a.i/011210.b/034f3401.d  
Report Date: 23-Jan-2010 10:52

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL  
Data file : /chem/ecd1a.i/011210.b/034f3401.d  
Lab Smp Id: 244142003 Client Smp ID: RE12-10-7623  
Inj Date : 12-JAN-2010 14:00  
Operator : YS1 Inst ID: ecd1a.i  
Smp Info : |244142003|1|  
Misc Info : |ECD82P\_1S|940403|SVA|LANL|SOIL|RE12-10-7623|||  
Comment :  
Method : /chem/ecd1a.i/011210.b/ECD1-F-8082-121409.m  
Meth Date : 23-Jan-2010 10:51 yip00818 Quant Type: ESTD  
Cal Date : 14-DEC-2009 11:34 Cal File: 040f4001.d  
Als bottle: 34  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1127.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	15.36480	% Moisture

Cpnd Variable Local Compound Variable

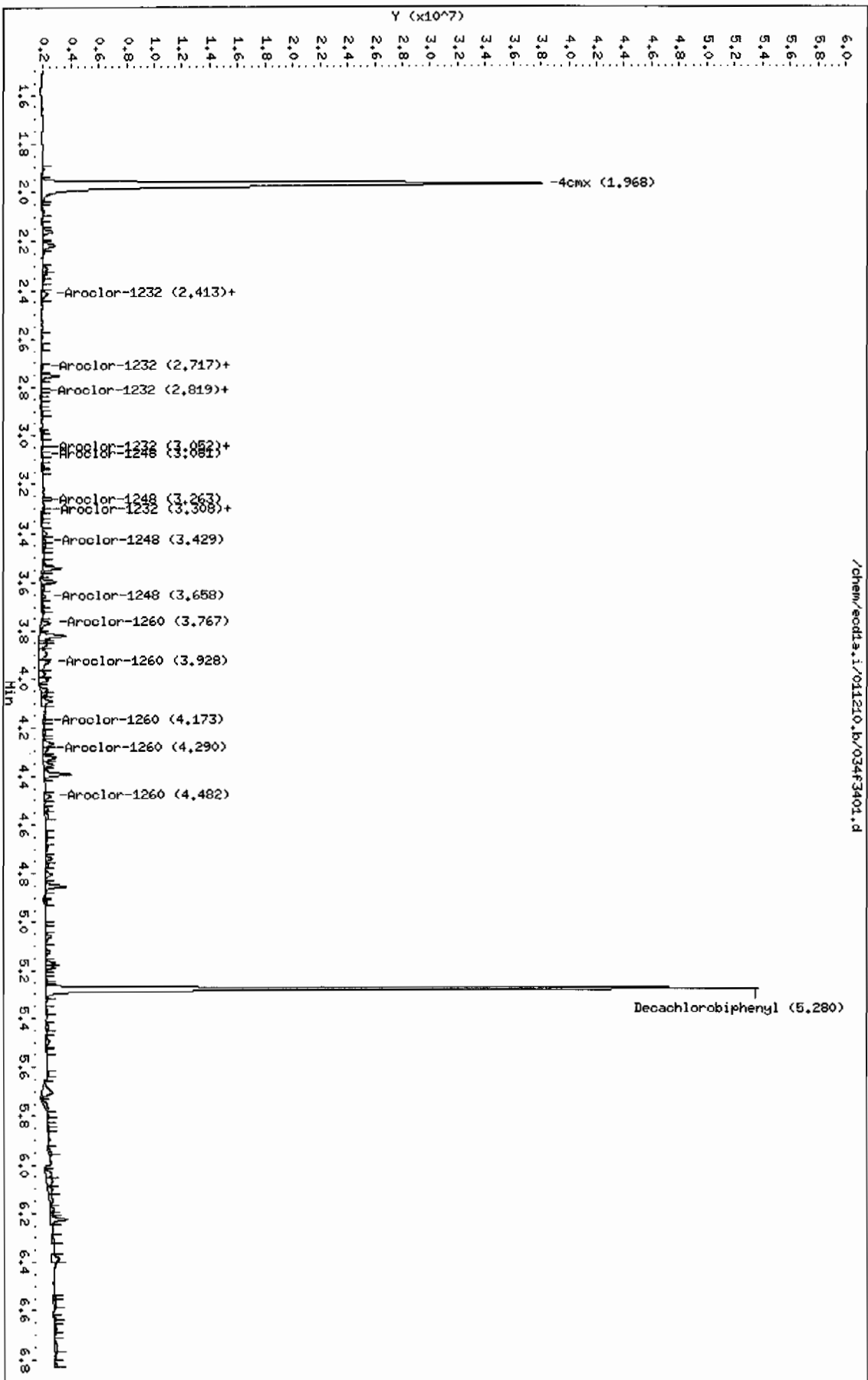
CONCENTRATIONS							
			ON-COL	FINAL			
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
--	=====	=====	=====	=====	=====	=====	
CAS #: 877-09-8							
\$ 11 4cmx	1.968	1.969	-0.001	42973241 120.211	4.7 80.00- 120.00	100.00 (M)	
-----							
CAS #: 2051-24-3							
\$ 12 Decachlorobiphenyl	5.280	5.283	-0.003	38760172 128.341	5.0 80.00- 120.00	100.00	
-----							

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/eod1a.i/011210.b/034f3401.d  
Date: 12-JAN-2010 14:00  
Client ID: RE12-10-7623  
Sample Info: 124414200311  
Volume Injected (uL): 1.0  
Column Phase: CLP1

Instrument: eod1a.i  
Operator: YSL  
Column diameter: 0.25

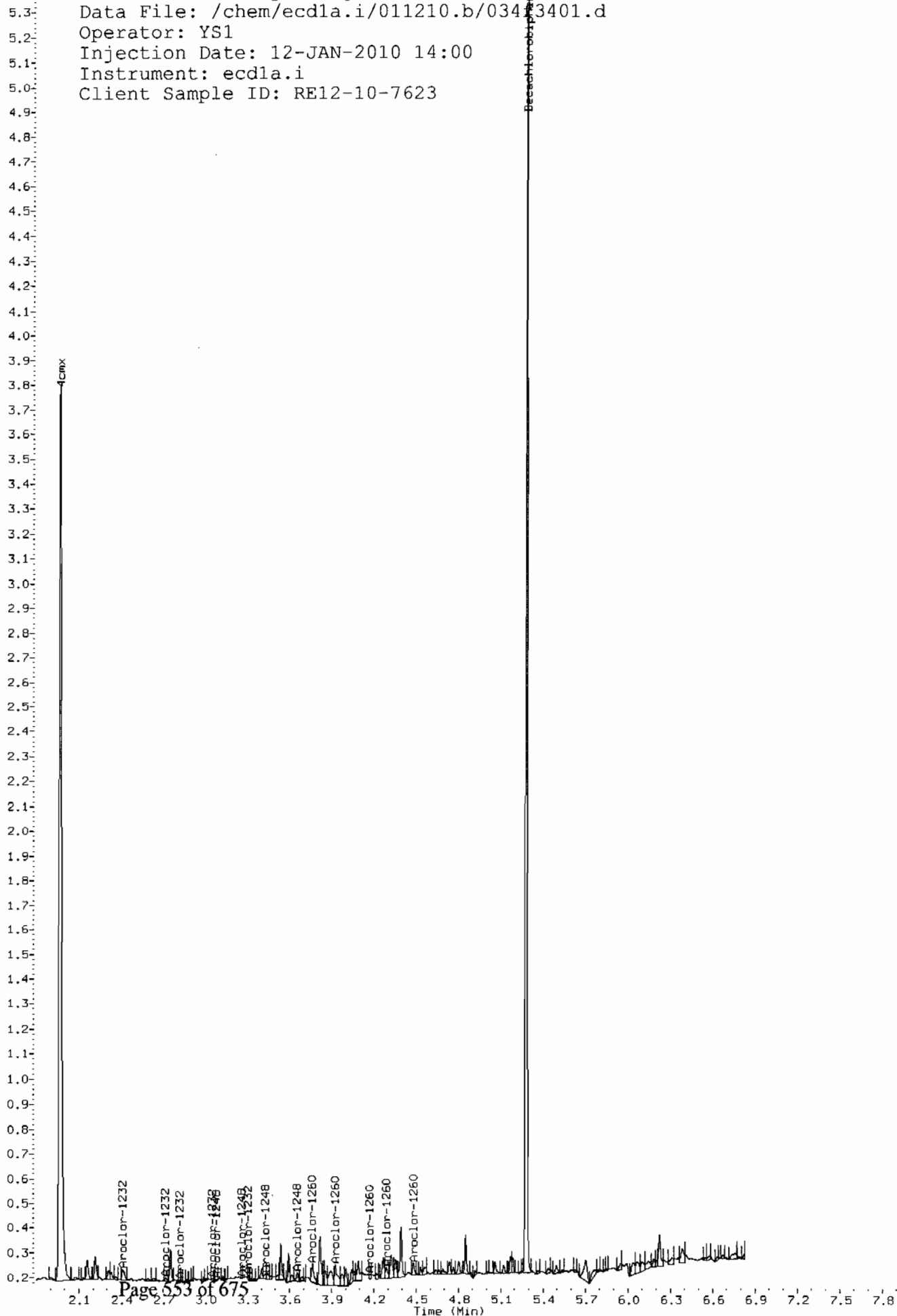


Comment: Manually Integrated  
Data File: /chem/ecdla.i/011210.b/03413401.d  
Operator: YS1  
Injection Date: 12-JAN-2010 14:00  
Instrument: ecdla.i  
Client Sample ID: RE12-10-7623

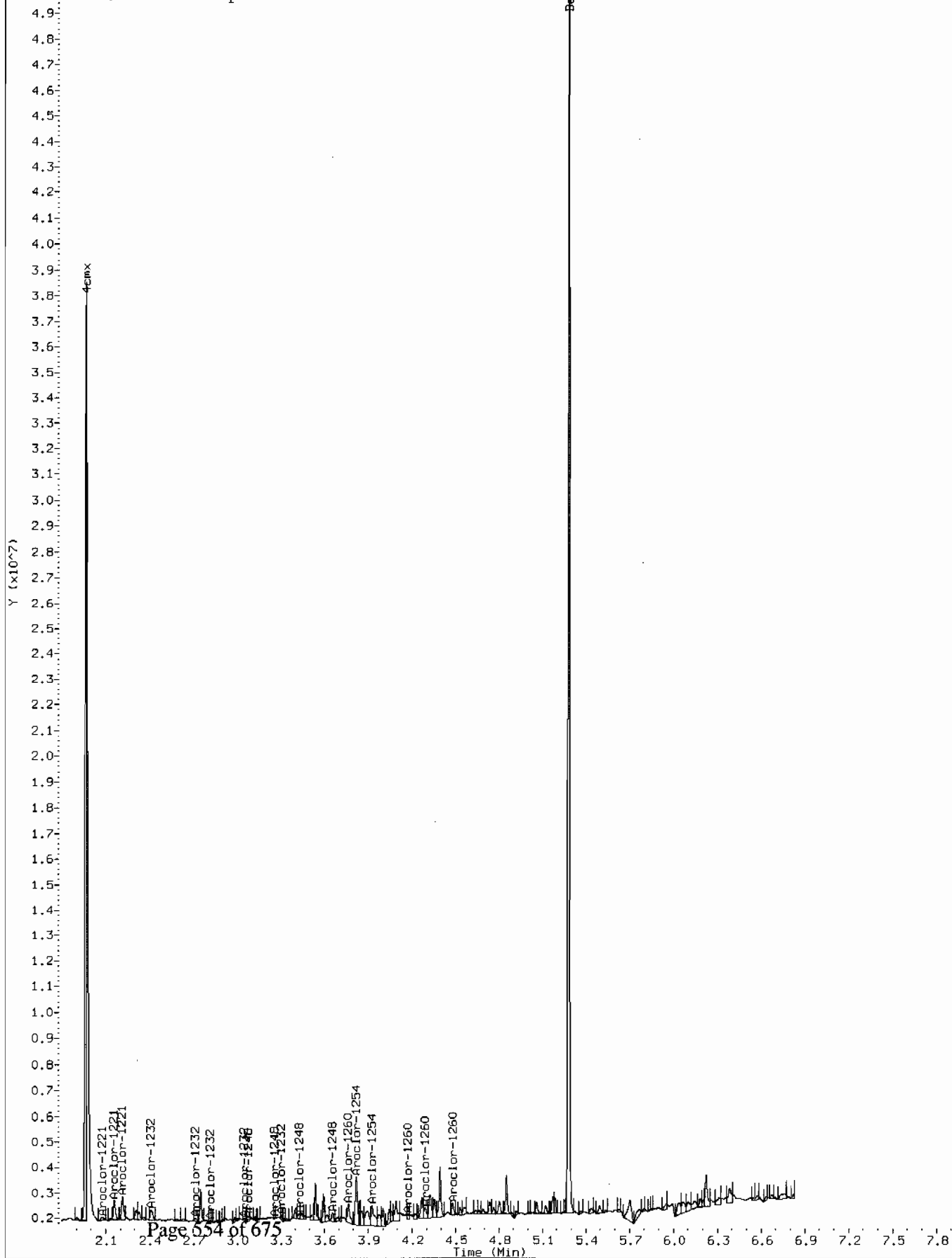
Y (x10<sup>-7</sup>)

1cmx

Besachlorobiphenyl



Comment: Before manual integration  
Data File: /chem/ecdl1a.i/011210.b/ori034f3401.d  
Operator: YS1  
Injection Date: 12-JAN-2010 14:00  
Instrument: ecd1a.i  
Client Sample ID: RE12-10-7623





Data File: /chem/ecdl1a.i/011210.b/034b3401.d  
Report Date: 23-Jan-2010 10:51

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011210.b/034b3401.d

Lab Smp Id: 244142003

Client Smp ID: RE12-10-7623

Inj Date : 12-JAN-2010 14:00

Operator : YSl

Inst ID: ecd1a.i

Smp Info : |244142003|1|

Misc Info : |ECD82P\_1S|940403|SVA|LANL|SOIL|RE12-10-7623|

Comment :

Method : /chem/ecdl1a.i/011210.b/ECD1-B-8082-121409.m

Meth Date : 23-Jan-2010 10:51 yip00818 Quant Type: ESTD

Cal Date : 14-DEC-2009 12:16

Cal File: 044b4401.d

Als bottle: 34

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: 10-1127.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	15.36480	% Moisture

Cpnd Variable

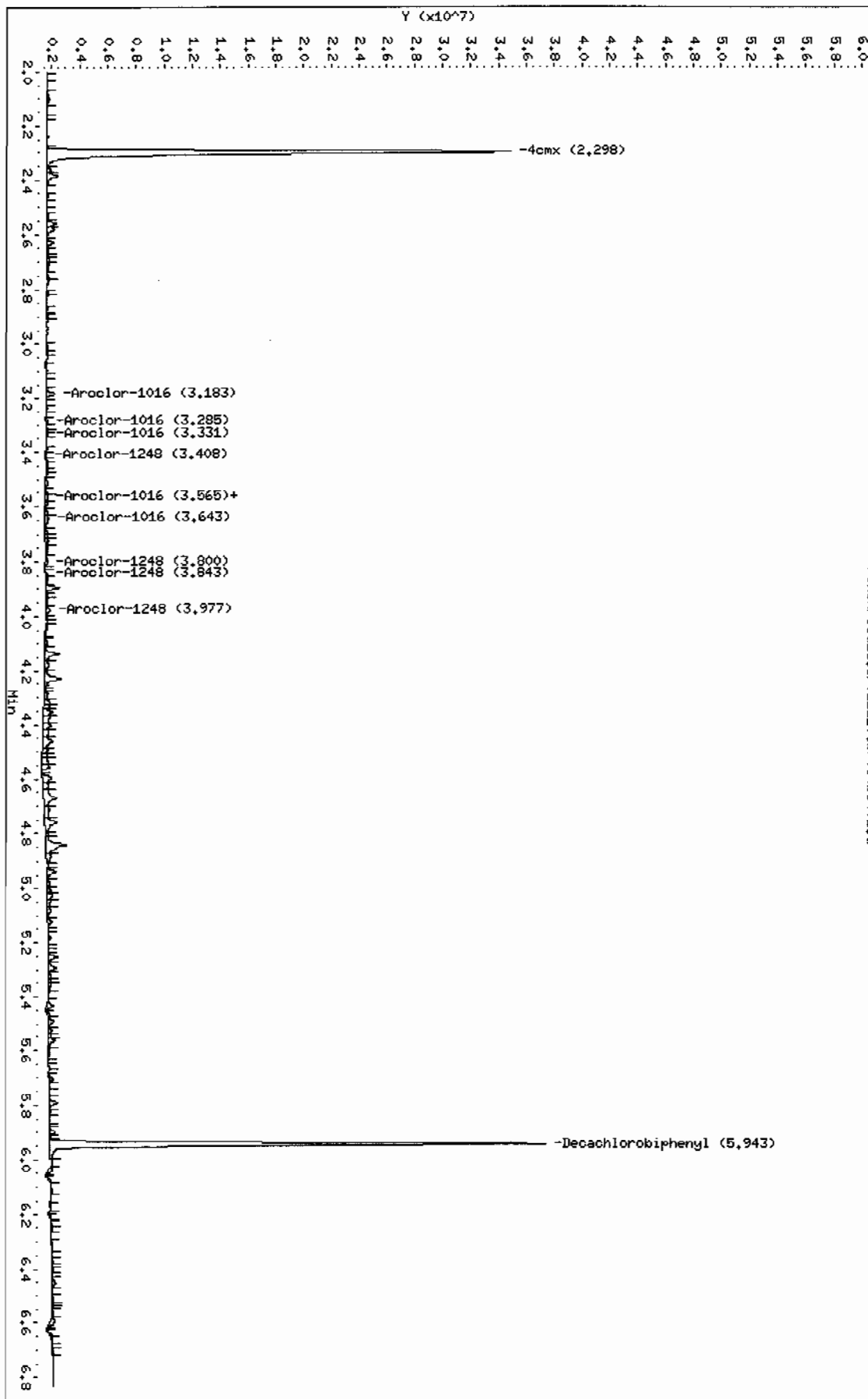
Local Compound Variable

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	2.299	-0.001	32322016	113.275	4.4 80.00- 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3	
5.943	5.945	-0.002	27179151	122.546	4.8 80.00- 120.00	100.00
-----						

Data File: /chem/ecdl1.i/011210.b/034b3401.d  
Date: 12-JAN-2010 14:00  
Client ID: REL2-10-7623  
Sample Info: 1244142003111  
Volume Injected (uL): 1.0  
Column phase: CLP2

Instrument: ecdl1.i  
Operator: YS1  
Column diameter: 0.25

/chem/ecdl1.i/011210.b/034b3401.d



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

SDG Number: 10-1127  
Lab Sample ID: 244142008

Date Collected: 01/04/2010 12:00  
Date Received: 01/08/2010 09:05  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.I  
Analyst: YS1  
Aliquot: 30.05 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
%Moisture: 8.4  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE12-10-7624  
Batch ID: 940403  
Run Date: 01/12/2010 15:03  
Prep Date: 01/11/2010 19:04  
Data File: 039f3901.d  
039b3901.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.63	ug/kg	1.21	3.63	1
11104-28-2	Aroclor-1221	U	3.63	ug/kg	1.21	3.63	1
11141-16-5	Aroclor-1232	U	3.63	ug/kg	1.21	3.63	1
53469-21-9	Aroclor-1242	U	3.63	ug/kg	1.21	3.63	1
12672-29-6	Aroclor-1248	U	3.63	ug/kg	1.21	3.63	1
11097-69-1	Aroclor-1254	U	3.63	ug/kg	1.21	3.63	1
11096-82-5	Aroclor-1260	U	3.63	ug/kg	1.21	3.63	1

Data File: /chem/ecdl1a.i/011210.b/039f3901.d  
Report Date: 23-Jan-2010 10:52

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011210.b/039f3901.d

Lab Smp Id: 244142008

Client Smp ID: RE12-10-7624

Inj Date : 12-JAN-2010 15:03

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |244142008|1|

Misc Info : |ECD82P\_1S|940403|SVA|LANL|SOIL|RE12-10-7624|

Comment :

Method : /chem/ecdl1a.i/011210.b/ECD1-F-8082-121409.m

Meth Date : 23-Jan-2010 10:51 yip00818 Quant Type: ESTD

Cal Date : 14-DEC-2009 11:34

Cal File: 040f4001.d

Als bottle: 39

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: 10-1127.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	8.44020	% Moisture

Cpnd Variable                      Local Compound Variable

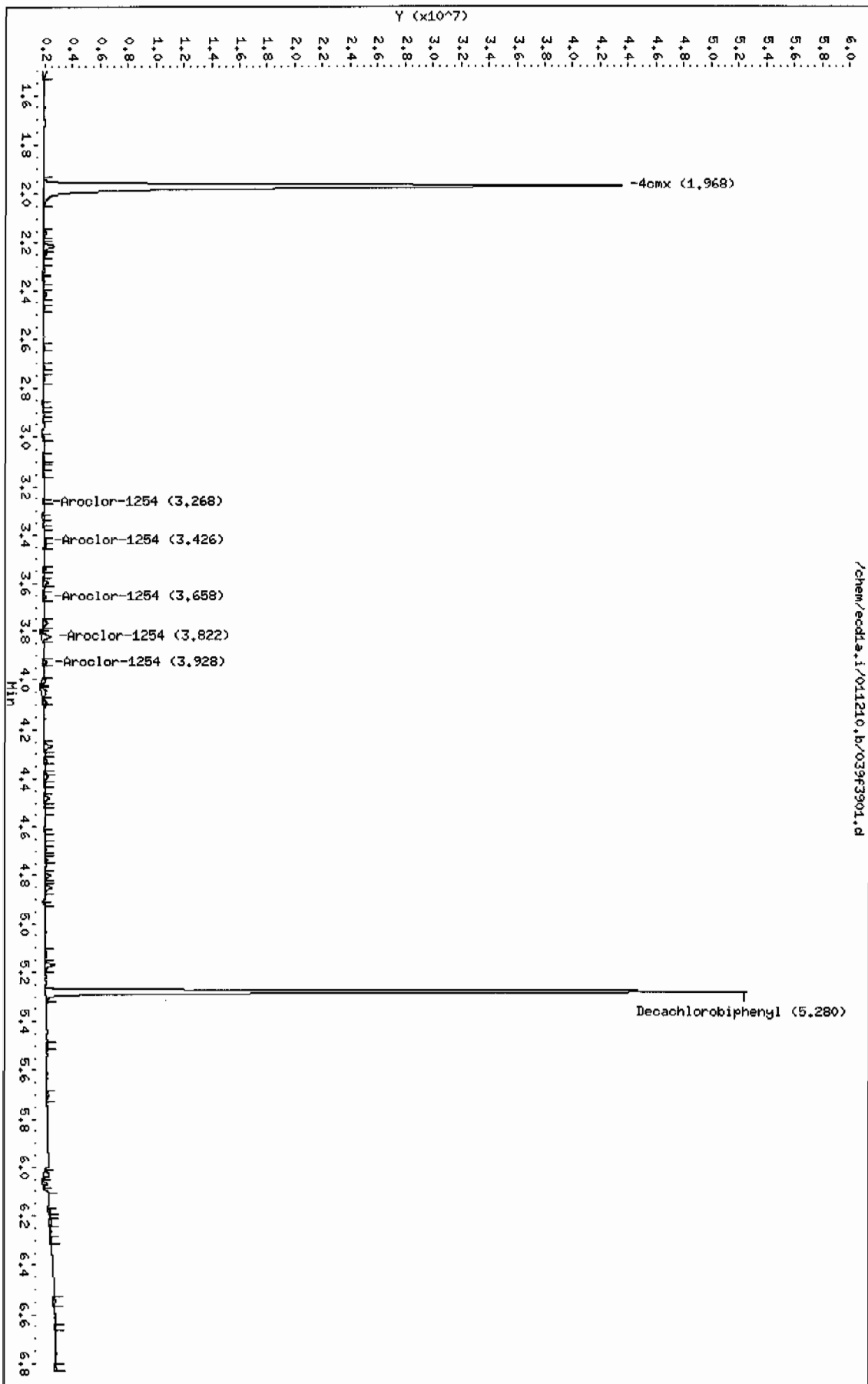
CONCENTRATIONS

ON-COL      FINAL

RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
\$ 11 4cmx					CAS #: 877-09-8	
1.968	1.969	-0.001	48367446	135.300	4.9 80.00- 120.00	100.00
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3	
5.280	5.283	-0.003	38477627	127.405	4.6 80.00- 120.00	100.00

Data File: /chem/eod1a.i/011210.b/039F3901.d  
Date: 12-JAN-2010 15:03  
Client ID: REL2-10-7624  
Sample Info: 124414200811  
Volume Injected (uL): 1.0  
Column Phase: CLP1

Instrument: eod1a.i  
Operator: YSL  
Column diameter: 0.25



Data File: /chem/ecdl1a.i/011210.b/039b3901.d  
 Report Date: 23-Jan-2010 10:52

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011210.b/039b3901.d

Lab Smp Id: 244142008

Client Smp ID: RE12-10-7624

Inj Date : 12-JAN-2010 15:03

Operator : YSl

Inst ID: ecd1a.i

Smp Info : |244142008|1|

Misc Info : |ECD82P\_1S|940403|SVA|LANL|SOIL|RE12-10-7624|

Comment :

Method : /chem/ecdl1a.i/011210.b/ECD1-B-8082-121409.m

Meth Date : 23-Jan-2010 10:51 yip00818

Quant Type: ESTD

Cal Date : 14-DEC-2009 12:16

Cal File: 044b4401.d

Als bottle: 39

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: 10-1127.sub

Target Version: 3.50

Sample Matrix: Soil

Processing Host: hpc1pl

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.05000	Weight of sample extracted (g)
M	8.44020	% Moisture

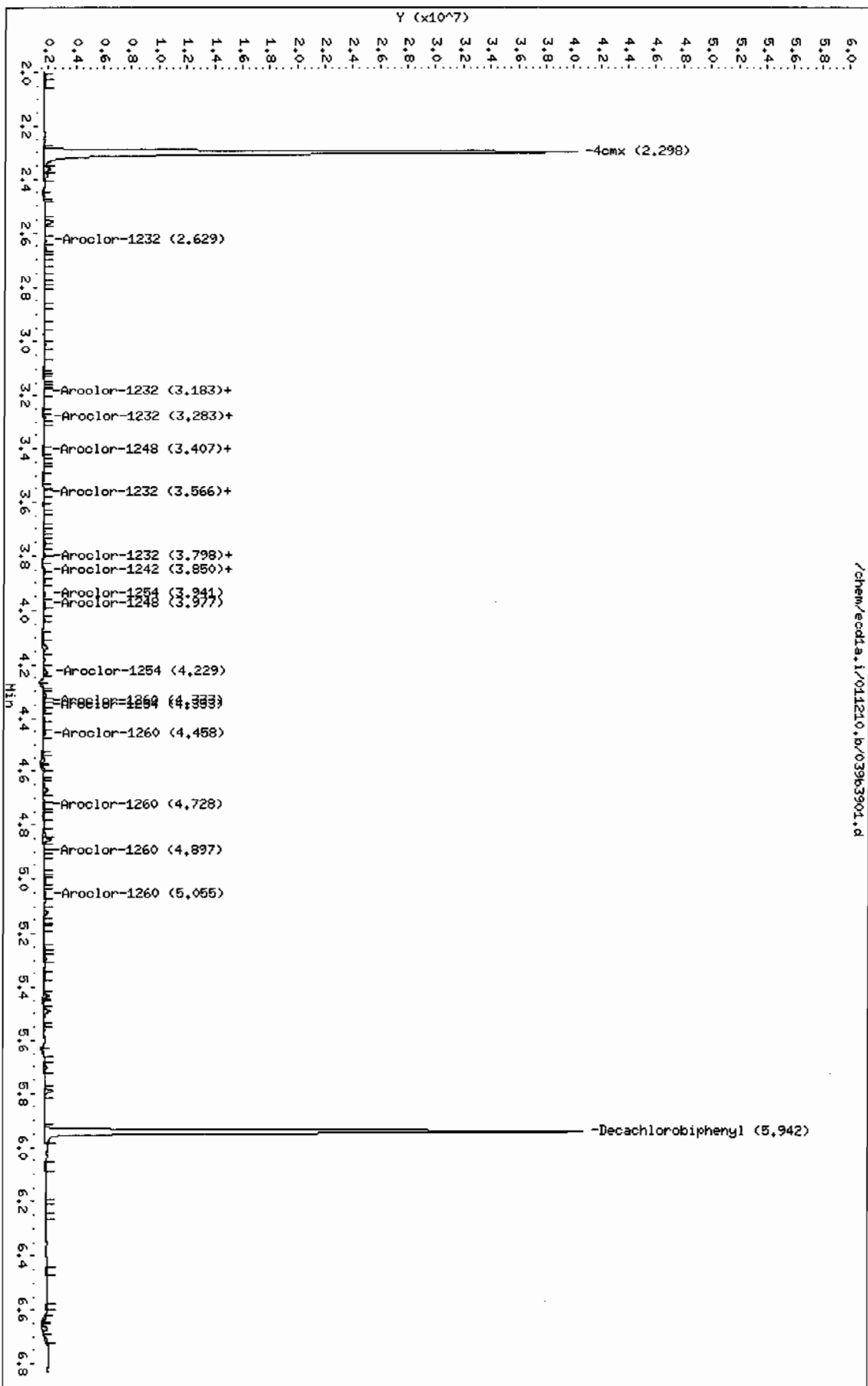
Cpnd Variable

Local Compound Variable

CONCENTRATIONS						
			ON-COL		FINAL	
RT	EXP RT	DLT RT	RESPONSE ( ug/L)		TARGET RANGE	RATIO
	=====	=====	=====	=====	=====	=====
\$ 11 4cmx					CAS #: 877-09-8	
2.298	2.299	-0.001	36017058	126.225	4.6 80.00- 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3	
5.942	5.945	-0.003	30054873	135.513	4.9 80.00- 120.00	100.00
-----						

Data File: /chem/ecdl1a.i/011210.b/039b3901.d  
Date: 12-JAN-2010 15:03  
Client ID: RE12-10-7624  
Sample Info: 1244142008111  
Volume Injected (uL): 1.0  
Column phase: CLP2

Instrument: ecdl1a.i  
Operator: YSL  
Column diameter: 0.25



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

SDG Number: 10-1127

Lab Sample ID: 244142018

Client ID: RE12-10-7655

Batch ID: 940403

Run Date: 01/12/2010 15:28

Prep Date: 01/11/2010 19:04

Data File: 041f4101.d

041b4101.d

Date Collected: 01/04/2010 12:00

Date Received: 01/08/2010 09:05

Client: LANL010

Method: SW846 8082

Inst: ECD1A.I

Analyst: YS1

Aliquot: 30.13 g

Column: 1 CLP1

2 CLP2

Matrix: R

%Moisture: 9.9

Project: LANL01004

SOP Ref: GL-OA-E-040

Dilution: 1

Inj. Vol: 1 uL

Final Volume: 1 mL

Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.68	ug/kg	1.23	3.68	1
11104-28-2	Aroclor-1221	U	3.68	ug/kg	1.23	3.68	1
11141-16-5	Aroclor-1232	U	3.68	ug/kg	1.23	3.68	1
53469-21-9	Aroclor-1242	U	3.68	ug/kg	1.23	3.68	1
12672-29-6	Aroclor-1248	U	3.68	ug/kg	1.23	3.68	1
11097-69-1	Aroclor-1254	U	3.68	ug/kg	1.23	3.68	1
11096-82-5	Aroclor-1260	U	3.68	ug/kg	1.23	3.68	1



Data File: /chem/ecdl1a.i/011210.b/041f4101.d  
Report Date: 23-Jan-2010 10:53

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL  
Data file : /chem/ecdl1a.i/011210.b/041f4101.d  
Lab Smp Id: 244142018 Client Smp ID: RE12-10-7655  
Inj Date : 12-JAN-2010 15:28  
Operator : YS1 Inst ID: ecd1a.i  
Smp Info : |244142018|1|  
Misc Info : |ECD82P\_1S|940403|SVA|LANL|SOIL|RE12-10-7655|||  
Comment :  
Method : /chem/ecdl1a.i/011210.b/ECD1-F-8082-121409.m  
Meth Date : 23-Jan-2010 10:51 yip00818 Quant Type: ESTD  
Cal Date : 14-DEC-2009 11:34 Cal File: 040f4001.d  
Als bottle: 41  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1127.sub  
Target Version: 3.50 Sample Matrix: Soil  
Processing Host: hpc1pl

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

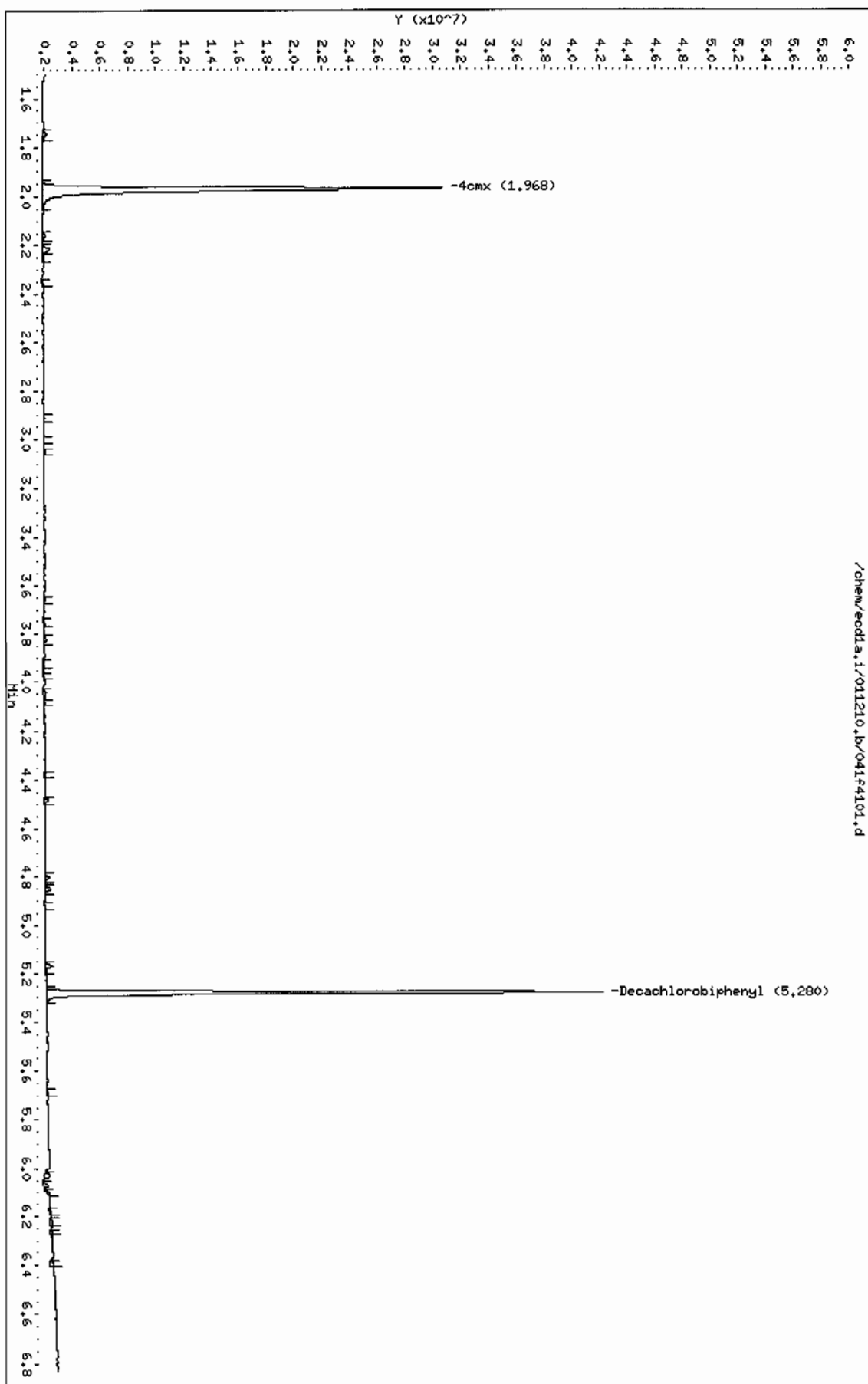
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.13000	Weight of sample extracted (g)
M	9.90890	% Moisture

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	1.969	-0.001	33519907	93.7666	3.4 80.00- 120.00	100.00	
-----							
\$ 12 Decachlorobiphenyl			CAS #: 2051-24-3				
5.280	5.283	-0.003	31308907	103.668	3.8 80.00- 120.00	100.00	
-----							

Data File: /chem/eod1a.i/011210.b/041f4101.d  
Date : 12-JAN-2010 15:28  
Client ID: REL2-10-7695  
Sample Info: 124414201811  
Volume Injected (uL): 1.0  
Column phase: CLP1

Instrument: eod1a.i  
Operator: YS1  
Column diameter: 0.25



Data File: /chem/ecdl1a.i/011210.b/041b4101.d  
Report Date: 23-Jan-2010 10:52

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011210.b/041b4101.d  
Lab Smp Id: 244142018 Client Smp ID: RE12-10-7655  
Inj Date : 12-JAN-2010 15:28  
Operator : YS1 Inst ID: ecd1a.i  
Smp Info : |244142018|1|  
Misc Info : |ECD82P\_1S|940403|SVA|LANL|SOIL|RE12-10-7655|||  
Comment :  
Method : /chem/ecdl1a.i/011210.b/ECD1-B-8082-121409.m  
Meth Date : 23-Jan-2010 10:51 yip00818 Quant Type: ESTD  
Cal Date : 14-DEC-2009 12:16 Cal File: 044b4401.d  
Als bottle: 41  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1127.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	30.13000	Weight of sample extracted (g)
M	9.90890	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS

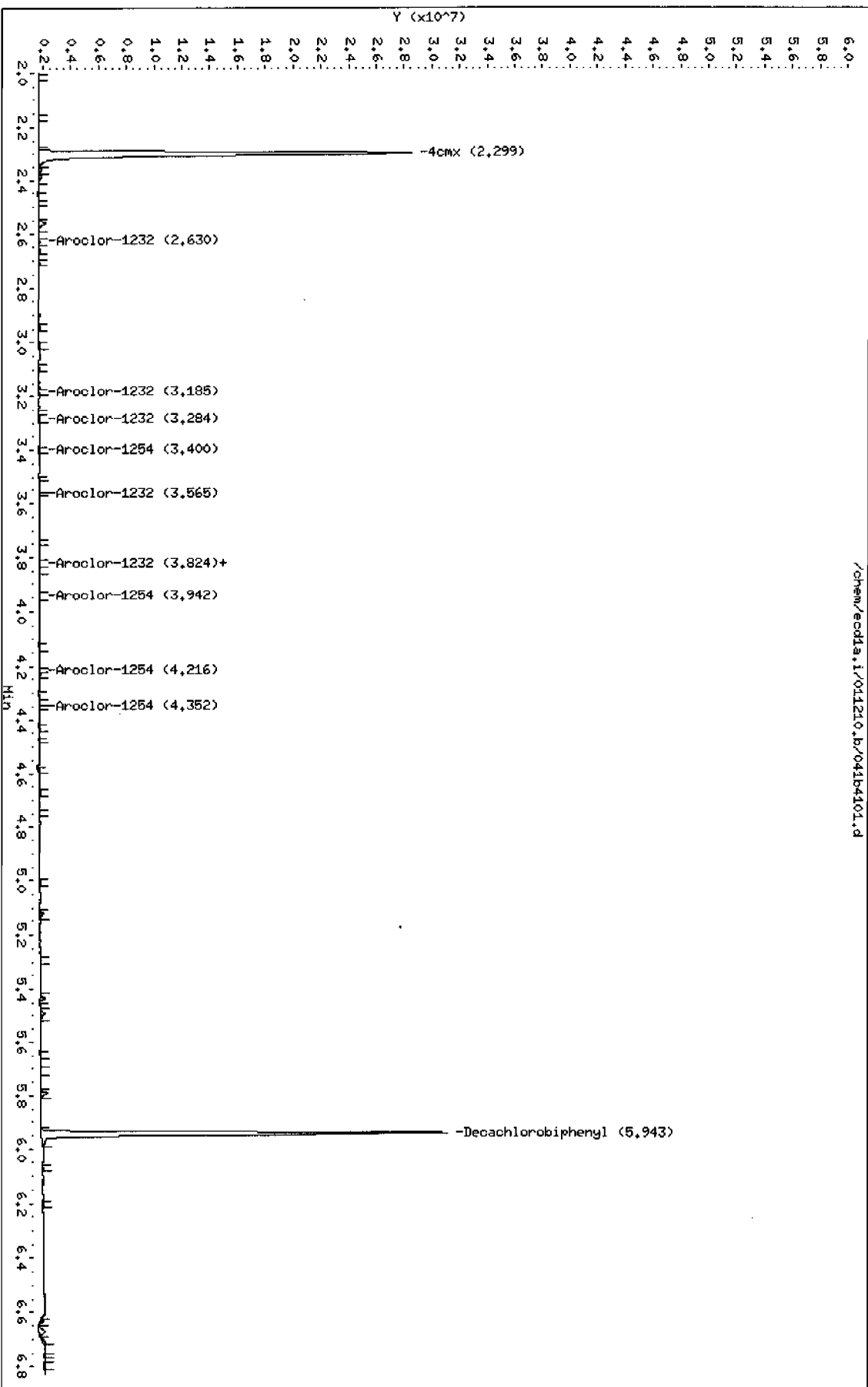
RT	EXP RT	DLT RT	ON-COL	FINAL	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
----	--------	--------	--------	-------	------------------	---------	--------------	-------

\$ 11 4cmx							CAS #: 877-09-8	
2.299	2.299	0.000	25319066	88.7330	3.3	80.00- 120.00	100.00	

\$ 12 Decachlorobiphenyl							CAS #: 2051-24-3	
5.943	5.945	-0.002	22593827	101.872	3.8	80.00- 120.00	100.00	

Data File: /chem/ecdda.i/011210.b/041b4101.d  
Date : 12-JAN-2010 15:28  
Client ID: RE12-10-7655  
Sample Info: 124414201811  
Volume Injected (uL): 1.0  
Column phase: CLP2

Instrument: ecdda.i  
Operator: YSL  
Column diameter: 0.25



## PCB

Page 1 of 1

Certificate of Analysis  
Sample SummarySDG Number: 10-1127  
Lab Sample ID: 244142017Date Collected: 01/04/2010 12:00  
Date Received: 01/08/2010 09:05  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.I  
Analyst: YS1  
Aliquot: 30.08 g  
Column: 1 CLP1  
2 CLP2Matrix: R  
% Moisture: 7.6  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOWClient ID: RE12-10-7656  
Batch ID: 940403  
Run Date: 01/12/2010 15:16  
Prep Date: 01/11/2010 19:04  
Data File: 040f4001.d  
040b4001.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.60	ug/kg	1.20	3.60	1
11104-28-2	Aroclor-1221	U	3.60	ug/kg	1.20	3.60	1
11141-16-5	Aroclor-1232	U	3.60	ug/kg	1.20	3.60	1
53469-21-9	Aroclor-1242	U	3.60	ug/kg	1.20	3.60	1
12672-29-6	Aroclor-1248	U	3.60	ug/kg	1.20	3.60	1
11097-69-1	Aroclor-1254	U	3.60	ug/kg	1.20	3.60	1
11096-82-5	Aroclor-1260	U	3.60	ug/kg	1.20	3.60	1

Data File: /chem/ecdla.i/011210.b/040f4001.d  
Report Date: 23-Jan-2010 10:52

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/011210.b/040f4001.d

Lab Smp Id: 244142017

Client Smp ID: RE12-10-7656

Inj Date : 12-JAN-2010 15:16

Operator : YSl

Inst ID: ecdla.i

Smp Info : |244142017|1|

Misc Info : |ECD82P\_1S|940403|SVA|LANL|SOIL|RE12-10-7656|

Comment :

Method : /chem/ecdla.i/011210.b/ECD1-F-8082-121409.m

Meth Date : 23-Jan-2010 10:51 yip00818 Quant Type: ESTD

Cal Date : 14-DEC-2009 11:34

Cal File: 040f4001.d

Als bottle: 40

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: 10-1127.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	30.08000	Weight of sample extracted (g)
M	7.58010	% Moisture

Cpnd Variable

Local Compound Variable

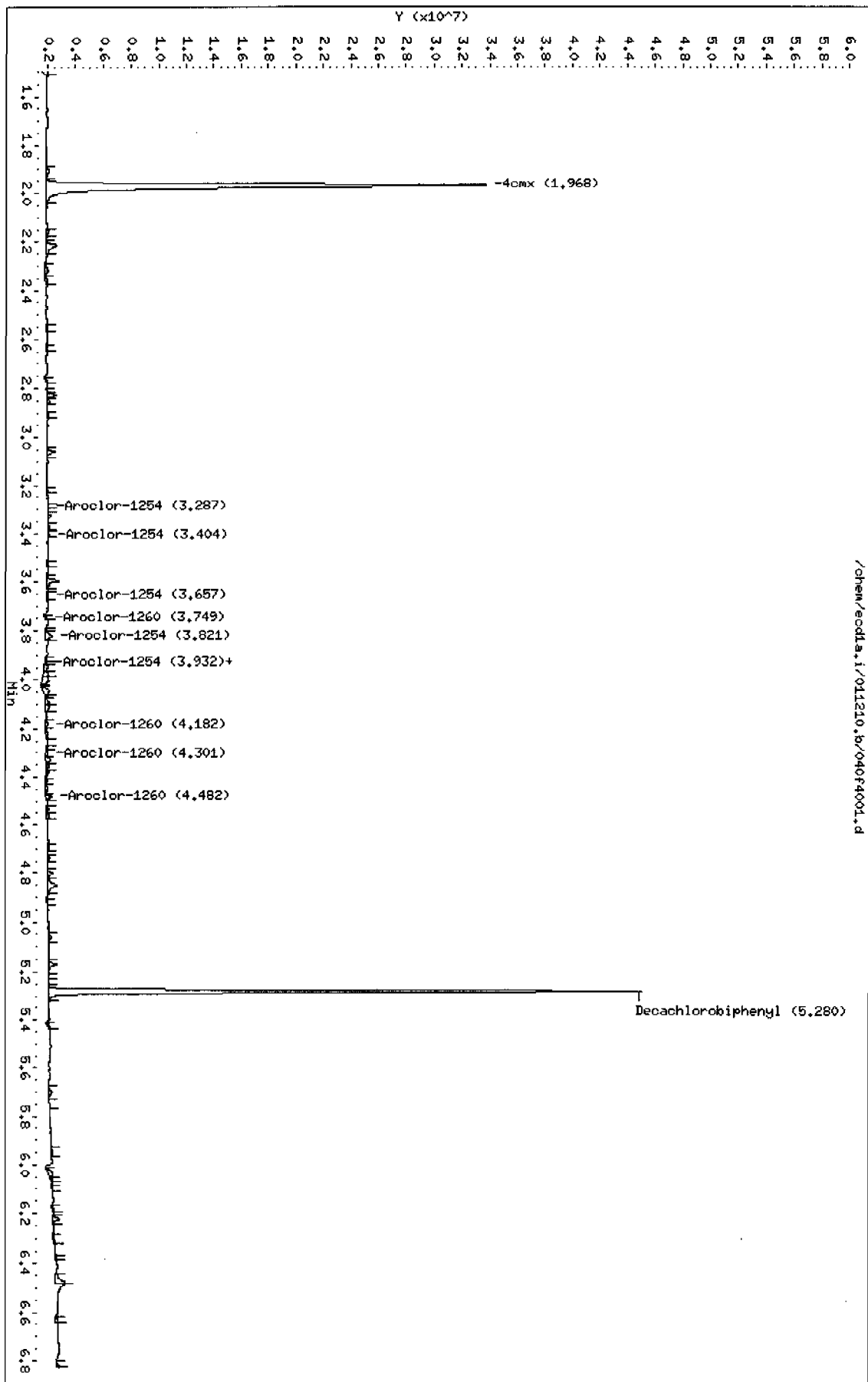
CONCENTRATIONS

ON-COL FINAL

RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
\$ 11 4cmx					CAS #: 877-09-8	
1.968	1.969	-0.001	36527872 102.181	3.7	80.00- 120.00	100.00
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3	
5.280	5.283	-0.003	32569385 107.842	3.9	80.00- 120.00	100.00

Data File: /chem/eod1a.i/011210.b/040f4001.d  
Date : 12-JAN-2010 15:16  
Client ID: RE12-10-7656  
Sample Info: 124414201711  
Volume Injected (uL): 1.0  
Column phase: CLP1

Instrument: eod1a.i  
Operator: YSL  
Column diameter: 0.25



Data File: /chem/ecdl1a.i/011210.b/040b4001.d  
Report Date: 23-Jan-2010 10:52

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011210.b/040b4001.d  
Lab Smp Id: 244142017 Client Smp ID: RE12-10-7656  
Inj Date : 12-JAN-2010 15:16  
Operator : YS1 Inst ID: ecd1a.i  
Smp Info : |244142017|1|  
Misc Info : |ECD82P\_1S|940403|SVA|LANL|SOIL|RE12-10-7656|1|1|  
Comment :  
Method : /chem/ecdl1a.i/011210.b/ECD1-B-8082-121409.m  
Meth Date : 23-Jan-2010 10:51 yip00818 Quant Type: ESTD  
Cal Date : 14-DEC-2009 12:16 Cal File: 044b4401.d  
Als bottle: 40  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1127.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	30.08000	Weight of sample extracted (g)
M	7.58010	% Moisture

Cpnd Variable Local Compound Variable

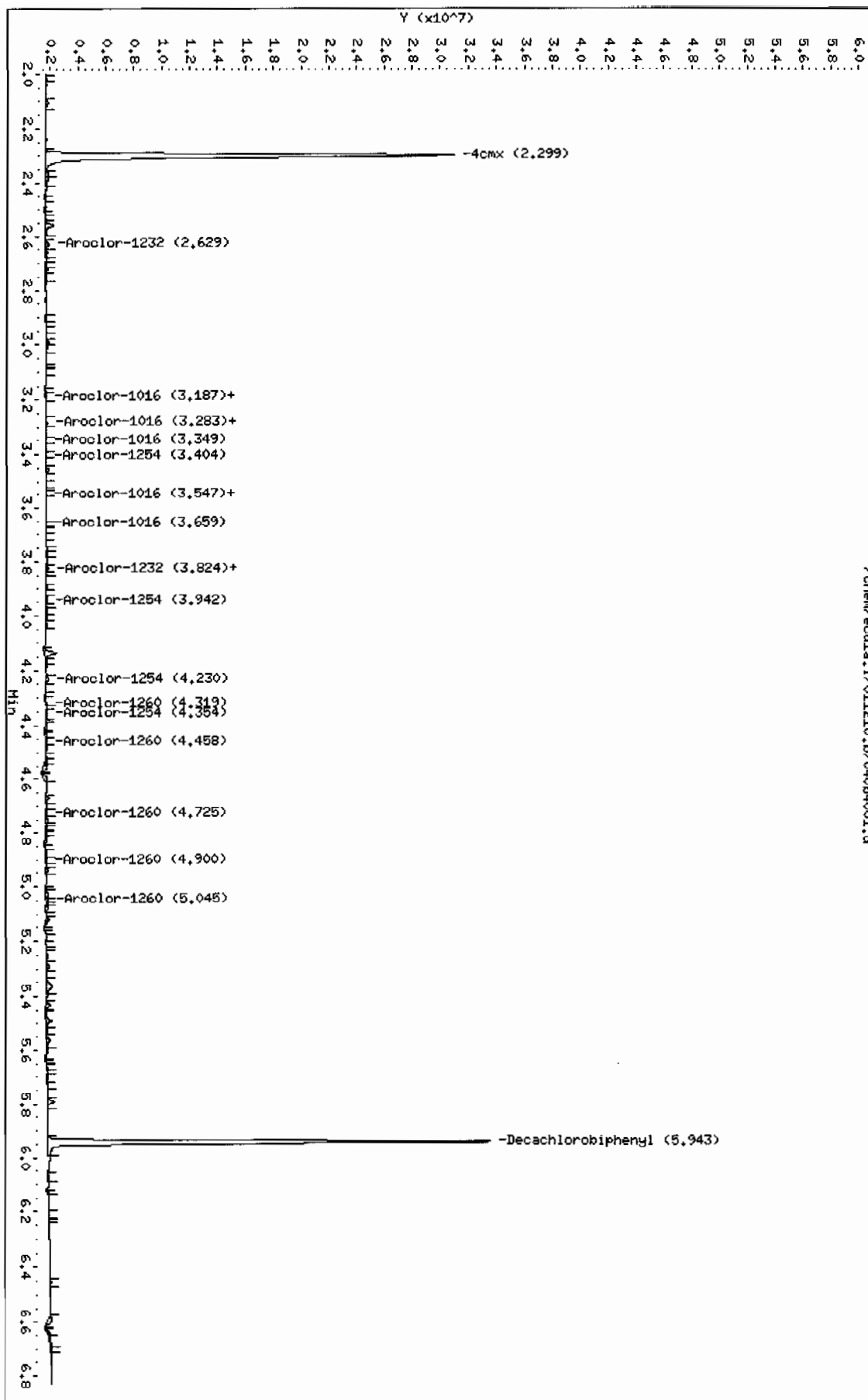
CONCENTRATIONS						
			ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
CAS #: 877-09-8						
\$ 11 4cmx						
2.299	2.299	0.000	27638692	96.8623	3.5 80.00- 120.00	100.00
CAS #: 2051-24-3						
\$ 12 Decachlorobiphenyl						
5.943	5.945	-0.002	24624801	111.029	4.0 80.00- 120.00	100.00



Data File: /chem/ecdda.i/011210.b/040b4001.d  
Date: 12-JAN-2010 15:16  
Client ID: RE12-10-7666  
Sample Info: 124414201711  
Volume Injected (uL): 1.0  
Column phase: CLP2

Instrument: ecdda.i  
Operator: YSL  
Column diameter: 0.25

/chem/ecdda.i/011210.b/040b4001.d



# STANDARDS DATA

Report Date: 13-Jan-2010 08:03

### Calibration History

Method : /chem/ecdla.i/011210.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/ecdla.i/121409.b/040f4001.d
14-DEC-2009 09:28	AR1248	/chem/ecdla.i/121409.b/028f2801.d
14-DEC-2009 08:25	AR1242	/chem/ecdla.i/121409.b/022f2201.d
14-DEC-2009 07:22	AR1254	/chem/ecdla.i/121409.b/016f1601.d
14-DEC-2009 10:31	AR1660	/chem/ecdla.i/121409.b/034f3401.d

Cal Level: 2 , Cal Amount: 200.00000		
14-DEC-2009 11:44	AR1268	/chem/ecdla.i/121409.b/041f4101.d
14-DEC-2009 09:38	AR1248	/chem/ecdla.i/121409.b/029f2901.d
14-DEC-2009 08:35	AR1242	/chem/ecdla.i/121409.b/023f2301.d
14-DEC-2009 07:32	AR1254	/chem/ecdla.i/121409.b/017f1701.d
14-DEC-2009 10:41	AR1660	/chem/ecdla.i/121409.b/035f3501.d

Cal Level: 3 , Cal Amount: 500.00000		
14-DEC-2009 11:55	AR1268	/chem/ecdla.i/121409.b/042f4201.d
14-DEC-2009 09:49	AR1248	/chem/ecdla.i/121409.b/030f3001.d
14-DEC-2009 08:46	AR1242	/chem/ecdla.i/121409.b/024f2401.d
14-DEC-2009 07:43	AR1254	/chem/ecdla.i/121409.b/018f1801.d
14-DEC-2009 10:52	AR1660	/chem/ecdla.i/121409.b/036f3601.d

Cal Level: 4 , Cal Amount: 1000.00000		
14-DEC-2009 12:37	DDTANALOGSTD	/chem/ecdla.i/121409.b/046f4601.d
14-DEC-2009 09:59	AR1248	/chem/ecdla.i/121409.b/031f3101.d
14-DEC-2009 08:56	AR1242	/chem/ecdla.i/121409.b/025f2501.d
14-DEC-2009 07:53	AR1254	/chem/ecdla.i/121409.b/019f1901.d
14-DEC-2009 11:02	AR1660	/chem/ecdla.i/121409.b/037f3701.d
14-DEC-2009 12:06	AR1268	/chem/ecdla.i/121409.b/043f4301.d
14-DEC-2009 05:58	AR1262	/chem/ecdla.i/121409.b/008f0801.d
14-DEC-2009 05:47	AR1221	/chem/ecdla.i/121409.b/007f0701.d
14-DEC-2009 05:36	AR1232	/chem/ecdla.i/121409.b/006f0601.d

Cal Level: 5 , Cal Amount: 4000.00000		
14-DEC-2009 12:16	AR1268	/chem/ecdla.i/121409.b/044f4401.d
14-DEC-2009 10:10	AR1248	/chem/ecdla.i/121409.b/032f3201.d
14-DEC-2009 09:07	AR1242	/chem/ecdla.i/121409.b/026f2601.d
14-DEC-2009 08:04	AR1254	/chem/ecdla.i/121409.b/020f2001.d
14-DEC-2009 11:13	AR1660	/chem/ecdla.i/121409.b/038f3801.d

Continuing Calibration  
Ccal Level Mode: GLOBAL LEVEL 4

+-----+  
| Ccal Level: 4 , Ccal Amount: 1000 |

+=====+  
|12-JAN-2010 15:41 |AR1660 |/chem/ecd1a.i/011210.b/042f4201.d |

+-----+  
| Ccal Level: 4 , Ccal Amount: 1000 |

+=====+  
|12-JAN-2010 13:27 |AR1660 |/chem/ecd1a.i/011210.b/031f3101.d |

+-----+  
| Ccal Level: 4 , Ccal Amount: 1000 |

+=====+  
|12-JAN-2010 11:03 |AR1660 |/chem/ecd1a.i/011210.b/019f1901.d |

+-----+  
| Ccal Level: 4 , Ccal Amount: 1000 |

+=====+  
|12-JAN-2010 09:33 |AR1268 |/chem/ecd1a.i/011210.b/011f1101.d |

+-----+  
| Ccal Level: 4 , Ccal Amount: 1000 |

+=====+  
|12-JAN-2010 09:23 |AR1262 |/chem/ecd1a.i/011210.b/010f1001.d |

+-----+  
| Ccal Level: 4 , Ccal Amount: 1000 |

+=====+  
|12-JAN-2010 09:12 |AR1242 |/chem/ecd1a.i/011210.b/009f0901.d |

+-----+  
| Ccal Level: 4 , Ccal Amount: 1000 |

+=====+  
|12-JAN-2010 09:02 |AR1660 |/chem/ecd1a.i/011210.b/008f0801.d |

+-----+  
| Ccal Level: 4 , Ccal Amount: 1000 |

+=====+  
|12-JAN-2010 08:51 |AR1221 |/chem/ecd1a.i/011210.b/007f0701.d |

+-----+  
| Ccal Level: 4 , Ccal Amount: 1000 |

+=====+  
|12-JAN-2010 08:41 |AR1232 |/chem/ecd1a.i/011210.b/006f0601.d |

+-----+  
| Ccal Level: 4 , Ccal Amount: 1000 |

+=====+  
|12-JAN-2010 08:30 |AR1248 |/chem/ecd1a.i/011210.b/005f0501.d |

+-----+  
| Ccal Level: 4 , Ccal Amount: 1000 |

+=====+  
|12-JAN-2010 08:09 |AR1254 |/chem/ecd1a.i/011210.b/003f0301.d |

+-----+  
| Ccal Level: 4 , Ccal Amount: 1000 |

Report Date: 13-Jan-2010 08:03

### Calibration History

Method : /chem/ecdla.i/011210.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/ecdla.i/121409.b/040b4001.d
14-DEC-2009 09:28	AR1248	/chem/ecdla.i/121409.b/028b2801.d
14-DEC-2009 08:25	AR1242	/chem/ecdla.i/121409.b/022b2201.d
14-DEC-2009 07:22	AR1254	/chem/ecdla.i/121409.b/016b1601.d
14-DEC-2009 10:31	AR1660	/chem/ecdla.i/121409.b/034b3401.d

Cal Level: 2 , Cal Amount: 200.00000		
14-DEC-2009 11:44	AR1268	/chem/ecdla.i/121409.b/041b4101.d
14-DEC-2009 09:38	AR1248	/chem/ecdla.i/121409.b/029b2901.d
14-DEC-2009 08:35	AR1242	/chem/ecdla.i/121409.b/023b2301.d
14-DEC-2009 07:32	AR1254	/chem/ecdla.i/121409.b/017b1701.d
14-DEC-2009 10:41	AR1660	/chem/ecdla.i/121409.b/035b3501.d

Cal Level: 3 , Cal Amount: 500.00000		
14-DEC-2009 11:55	AR1268	/chem/ecdla.i/121409.b/042b4201.d
14-DEC-2009 09:49	AR1248	/chem/ecdla.i/121409.b/030b3001.d
14-DEC-2009 08:46	AR1242	/chem/ecdla.i/121409.b/024b2401.d
14-DEC-2009 07:43	AR1254	/chem/ecdla.i/121409.b/018b1801.d
14-DEC-2009 10:52	AR1660	/chem/ecdla.i/121409.b/036b3601.d

Cal Level: 4 , Cal Amount: 1000.00000		
14-DEC-2009 12:37	DDTANALOGSTD	/chem/ecdla.i/121409.b/046b4601.d
14-DEC-2009 12:06	AR1268	/chem/ecdla.i/121409.b/043b4301.d
14-DEC-2009 05:58	AR1262	/chem/ecdla.i/121409.b/008b0801.d
14-DEC-2009 05:47	AR1221	/chem/ecdla.i/121409.b/007b0701.d
14-DEC-2009 05:36	AR1232	/chem/ecdla.i/121409.b/006b0601.d
14-DEC-2009 09:59	AR1248	/chem/ecdla.i/121409.b/031b3101.d
14-DEC-2009 08:56	AR1242	/chem/ecdla.i/121409.b/025b2501.d
14-DEC-2009 07:53	AR1254	/chem/ecdla.i/121409.b/019b1901.d
14-DEC-2009 11:02	AR1660	/chem/ecdla.i/121409.b/037b3701.d

Cal Level: 5 , Cal Amount: 4000.00000		
14-DEC-2009 12:16	AR1268	/chem/ecdla.i/121409.b/044b4401.d
14-DEC-2009 10:10	AR1248	/chem/ecdla.i/121409.b/032b3201.d
14-DEC-2009 09:07	AR1242	/chem/ecdla.i/121409.b/026b2601.d
14-DEC-2009 08:04	AR1254	/chem/ecdla.i/121409.b/020b2001.d
14-DEC-2009 11:13	AR1660	/chem/ecdla.i/121409.b/038b3801.d

Continuing Calibration  
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 1000		
12-JAN-2010 15:41	AR1660	/chem/ecdla.i/011210.b/042b4201.d
+-----+		
Ccal Level: 4 , Ccal Amount: 1000		
12-JAN-2010 13:27	AR1660	/chem/ecdla.i/011210.b/031b3101.d
+-----+		
Ccal Level: 4 , Ccal Amount: 1000		
12-JAN-2010 11:03	AR1660	/chem/ecdla.i/011210.b/019b1901.d
+-----+		
Ccal Level: 4 , Ccal Amount: 1000		
12-JAN-2010 09:33	AR1268	/chem/ecdla.i/011210.b/011b1101.d
+-----+		
Ccal Level: 4 , Ccal Amount: 1000		
12-JAN-2010 09:23	AR1262	/chem/ecdla.i/011210.b/010b1001.d
+-----+		
Ccal Level: 4 , Ccal Amount: 1000		
12-JAN-2010 09:12	AR1242	/chem/ecdla.i/011210.b/009b0901.d
+-----+		
Ccal Level: 4 , Ccal Amount: 1000		
12-JAN-2010 09:02	AR1660	/chem/ecdla.i/011210.b/008b0801.d
+-----+		
Ccal Level: 4 , Ccal Amount: 1000		
12-JAN-2010 08:51	AR1221	/chem/ecdla.i/011210.b/007b0701.d
+-----+		
Ccal Level: 4 , Ccal Amount: 1000		
12-JAN-2010 08:41	AR1232	/chem/ecdla.i/011210.b/006b0601.d
+-----+		
Ccal Level: 4 , Ccal Amount: 1000		
12-JAN-2010 08:30	AR1248	/chem/ecdla.i/011210.b/005b0501.d
+-----+		
Ccal Level: 4 , Ccal Amount: 1000		
12-JAN-2010 08:09	AR1254	/chem/ecdla.i/011210.b/003b0301.d
+-----+		

## GEL Laboratories LLC

## COMPOUND LISTING

Method file : /chem/ecdla.i/011210.b/ECD1-F-8082-121409.m  
 Quant Method : ESTD Target Version : 3.50  
 Last Update : 13-Jan-2010 07:57 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	2.424	2.394-2.454	1.387e+04
	2.702	2.672-2.732	1.010e+04
	2.794	2.764-2.824	1.176e+04
	2.832	2.802-2.862	6.599e+03
	3.043	3.013-3.073	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	2.081	2.051-2.111	4.301e+03
	2.174	2.144-2.204	2.440e+03
	2.200	2.170-2.230	1.027e+04
3 Aroclor-1232	2.425	2.395-2.455	6.717e+03
	2.714	2.684-2.744	8.157e+03
	2.795	2.765-2.825	5.751e+03
	3.043	3.013-3.073	3.954e+03
4 Aroclor-1242	3.296	3.266-3.326	3.533e+03
	2.425	2.395-2.455	1.166e+04
	2.714	2.684-2.744	1.345e+04
	2.832	2.802-2.862	5.506e+03
	3.043	3.013-3.073	7.245e+03
	3.297	3.267-3.327	6.811e+03

## GEL Laboratories LLC

## COMPOUND LISTING

Method file : /chem/ecdla.i/011210.b/ECD1-F-8082-121409.m

Compound	RT	RT Window	RF
5 Aroclor-1248	3.093	3.063-3.123	7.848e+03
	3.245	3.215-3.275	6.870e+03
	3.295	3.265-3.325	1.331e+04
	3.428	3.398-3.458	1.101e+04
	3.660	3.630-3.690	7.455e+03
6 Aroclor-1254	3.271	3.241-3.301	1.249e+04
	3.426	3.396-3.456	1.672e+04
	3.660	3.630-3.690	2.071e+04
	3.823	3.793-3.853	1.569e+04
	3.932	3.902-3.962	1.517e+04
7 Aroclor-1260	3.769	3.739-3.799	1.675e+04
	3.932	3.902-3.962	2.474e+04
	4.163	4.133-4.193	1.469e+04
	4.305	4.275-4.335	1.518e+04
	4.484	4.454-4.514	3.435e+04
8 Aroclor-1262	3.769	3.739-3.799	1.402e+04
	3.931	3.901-3.961	1.841e+04
	4.162	4.132-4.192	2.251e+04
	4.305	4.275-4.335	2.033e+04
	4.484	4.454-4.514	4.317e+04
9 Aroclor-1268	4.669	4.639-4.699	5.438e+04
	4.692	4.662-4.722	5.419e+04
	4.805	4.775-4.835	4.052e+04
	5.008	4.978-5.038	1.833e+04
	5.173	5.143-5.203	1.233e+05
M 10 Aroclor-Total	1.000	0.980-1.020	
\$ 11 4cmx	1.969	1.939-1.999	3.757e+05
\$ 12 Decachlorobiphenyl	5.283	5.253-5.313	3.175e+05



## GEL Laboratories LLC

## COMPOUND LISTING

Method file : /chem/ecdl1a.i/011210.b/ECD1-B-8082-121409.m  
 Quant Method : ESTD Target Version : 3.50  
 Last Update : 13-Jan-2010 07:57 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
	3.279	3.249-3.309	9.328e+03
	3.342	3.312-3.372	5.411e+03
	3.569	3.539-3.599	7.052e+03
	3.645	3.615-3.675	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	2.495	2.465-2.525	3.640e+03
	2.590	2.560-2.620	2.329e+03
	2.631	2.601-2.661	8.119e+03
3 Aroclor-1232	2.631	2.601-2.661	6.156e+03
	3.196	3.166-3.226	6.302e+03
	3.280	3.250-3.310	4.701e+03
	3.570	3.540-3.600	3.243e+03
4 Aroclor-1242	3.803	3.773-3.833	3.151e+03
	3.197	3.167-3.227	1.059e+04
	3.279	3.249-3.309	8.054e+03
	3.570	3.540-3.600	5.962e+03
	3.803	3.773-3.833	6.057e+03
	3.831	3.801-3.861	6.701e+03

## GEL Laboratories LLC

## COMPOUND LISTING

Method file : /chem/ecdla.i/011210.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
	3.826	3.796-3.856	1.156e+04
	3.942	3.912-3.972	1.243e+04
	4.218	4.188-4.248	1.688e+04
	4.355	4.325-4.385	1.244e+04
7 Aroclor-1260	4.335	4.305-4.365	1.368e+04
	4.459	4.429-4.489	1.603e+04
	4.726	4.696-4.756	1.256e+04
	4.899	4.869-4.929	1.281e+04
	5.046	5.016-5.076	2.790e+04
8 Aroclor-1262	4.460	4.430-4.490	1.292e+04
	4.726	4.696-4.756	1.831e+04
	4.900	4.870-4.930	1.658e+04
	5.047	5.017-5.077	3.329e+04
	5.260	5.230-5.290	2.297e+04
9 Aroclor-1268	5.258	5.228-5.288	4.358e+04
	5.285	5.255-5.315	4.039e+04
	5.435	5.405-5.465	3.144e+04
	5.599	5.569-5.629	1.427e+04
	5.792	5.762-5.822	8.886e+04
M 10 Aroclor-Total	1.000	0.980-1.020	
\$ 11 4cmx	2.299	2.269-2.329	3.000e+05
\$ 12 Decachlorobiphenyl	5.945	5.915-5.975	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/011210.b/ECD1-F-8082-121409.m  
 Cal Date : 13-Jan-2010 07:57 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 Level 1	200.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
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/ecdl1.i/011210.b/ECD1-F-8082-121409.m  
 Cal Date : 13-Jan-2010 07:57 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)	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
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/011210.b/ECD1-B-8082-121409.m  
 Cal Date : 13-Jan-2010 07:57 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 Level 1	200.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
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/011210.b/ECD1-B-8082-121409.m  
 Cal Date : 13-Jan-2010 07:57 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
M 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.: 10-1127  
 Instrument ID: ECD1A Calibration Date: 01/12/10 Time: 0902  
 Lab File ID: 008F0801 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	13485.876	0.01	-2.7	15.0
(2)	10097.726	10723.493	0.01	6.2	15.0
(3)	11757.020	11460.019	0.01	-2.5	15.0
(4)	6599.010	6856.400	0.01	3.9	15.0
(5)	8673.402	8914.101	0.01	2.8	15.0
Aroclor-1260	16752.150	17526.056	0.01	4.6	15.0
(2)	24742.603	26588.446	0.01	7.5	15.0
(3)	14687.346	15728.241	0.01	7.1	15.0
(4)	15184.529	16552.699	0.01	9.0	15.0
(5)	34350.443	37633.318	0.01	9.6	15.0
4cmx	357482.34	370322.48	0.01	3.6	15.0
Decachlorobiphenyl	302009.99	307865.06	0.01	1.9	15.0

FORM VII PEST

FORM 7  
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1127  
 Instrument ID: ECD1A Calibration Date: 01/12/10 Time: 0902  
 Lab File ID: 008B0801 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	12467.792	0.01	-1.1	15.0
(2)	9327.875	8419.719	0.01	-9.7	15.0
(3)	5411.316	5218.830	0.01	-3.6	15.0
(4)	7051.879	6829.739	0.01	-3.2	15.0
(5)	6550.733	6310.818	0.01	-3.7	15.0
Aroclor-1260	13680.027	12787.808	0.01	-6.5	15.0
(2)	16029.019	15544.463	0.01	-3.0	15.0
(3)	12563.933	11912.459	0.01	-5.2	15.0
(4)	12810.076	12233.996	0.01	-4.5	15.0
(5)	27897.674	27319.408	0.01	-2.1	15.0
4cmx	285339.98	275724.17	0.01	-3.4	15.0
Decachlorobiphenyl	221786.62	214390.79	0.01	-3.3	15.0

FORM VII PEST



FORM 7  
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1127  
 Instrument ID: ECD1A Calibration Date: 01/12/10 Time: 1103  
 Lab File ID: 019F1901 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	13310.670	0.01	-4.0	15.0
(2)	10097.726	10242.811	0.01	1.4	15.0
(3)	11757.020	11285.268	0.01	-4.0	15.0
(4)	6599.010	6765.072	0.01	2.5	15.0
(5)	8673.402	8738.943	0.01	0.8	15.0
Aroclor-1260	16752.150	17036.620	0.01	1.7	15.0
(2)	24742.603	25904.092	0.01	4.7	15.0
(3)	14687.346	15393.580	0.01	4.8	15.0
(4)	15184.529	16083.121	0.01	5.9	15.0
(5)	34350.443	36752.784	0.01	7.0	15.0
4cmx	357482.34	363951.48	0.01	1.8	15.0
Decachlorobiphenyl	302009.99	302177.43	0.01	0.0	15.0

FORM VII PEST

FORM 7  
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1127  
 Instrument ID: ECD1A Calibration Date: 01/12/10 Time: 1103  
 Lab File ID: 019B1901 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	12578.862	0.01	-0.2	15.0
(2)	9327.875	8317.700	0.01	-10.8	15.0
(3)	5411.316	5139.316	0.01	-5.0	15.0
(4)	7051.879	6728.760	0.01	-4.6	15.0
(5)	6550.733	6209.908	0.01	-5.2	15.0
Aroclor-1260	13680.027	12600.351	0.01	-7.9	15.0
(2)	16029.019	15305.012	0.01	-4.5	15.0
(3)	12563.933	11700.179	0.01	-6.9	15.0
(4)	12810.076	12037.919	0.01	-6.0	15.0
(5)	27897.674	26844.001	0.01	-3.8	15.0
4cmx	285339.98	272373.06	0.01	-4.5	15.0
Decachlorobiphenyl	221786.62	209659.97	0.01	-5.5	15.0

FORM VII PEST

FORM 7  
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1127  
 Instrument ID: ECD1A Calibration Date: 01/12/10 Time: 1327  
 Lab File ID: 031F3101 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	13975.254	0.01	0.8	15.0
(2)	10097.726	11118.675	0.01	10.1	15.0
(3)	11757.020	11874.482	0.01	1.0	15.0
(4)	6599.010	7065.924	0.01	7.1	15.0
(5)	8673.402	9128.367	0.01	5.2	15.0
Aroclor-1260	16752.150	17811.470	0.01	6.3	15.0
(2)	24742.603	27097.503	0.01	9.5	15.0
(3)	14687.346	16042.757	0.01	9.2	15.0
(4)	15184.529	16822.381	0.01	10.8	15.0
(5)	34350.443	38270.168	0.01	11.4	15.0
4cmx	357482.34	384339.66	0.01	7.5	15.0
Decachlorobiphenyl	302009.99	312466.13	0.01	3.5	15.0

FORM VII PEST

FORM 7  
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1127  
 Instrument ID: ECD1A Calibration Date: 01/12/10 Time: 1327  
 Lab File ID: 031B3101 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	13074.814	0.01	3.7	15.0
(2)	9327.875	8777.811	0.01	-5.9	15.0
(3)	5411.316	5413.636	0.01	0.0	15.0
(4)	7051.879	6892.457	0.01	-2.3	15.0
(5)	6550.733	6412.928	0.01	-2.1	15.0
Aroclor-1260	13680.027	13295.972	0.01	-2.8	15.0
(2)	16029.019	16138.030	0.01	0.7	15.0
(3)	12563.933	12348.659	0.01	-1.7	15.0
(4)	12810.076	12683.793	0.01	-1.0	15.0
(5)	27897.674	28029.483	0.01	0.5	15.0
4cmx	285339.98	286277.34	0.01	0.3	15.0
Decachlorobiphenyl	221786.62	219603.59	0.01	-1.0	15.0

FORM VII PEST

FORM 7  
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1127  
 Instrument ID: ECD1A Calibration Date: 01/12/10 Time: 1541  
 Lab File ID: 042F4201 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	13907.110	0.01	0.3	15.0
(2)	10097.726	11061.418	0.01	9.5	15.0
(3)	11757.020	11880.339	0.01	1.0	15.0
(4)	6599.010	7106.069	0.01	7.7	15.0
(5)	8673.402	9155.263	0.01	5.6	15.0
Aroclor-1260	16752.150	18000.993	0.01	7.4	15.0
(2)	24742.603	27272.686	0.01	10.2	15.0
(3)	14687.346	16195.879	0.01	10.3	15.0
(4)	15184.529	16967.452	0.01	11.7	15.0
(5)	34350.443	38454.942	0.01	11.9	15.0
4cmx	357482.34	382914.87	0.01	7.1	15.0
Decachlorobiphenyl	302009.99	305727.50	0.01	1.2	15.0

FORM VII PEST

FORM 7  
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1127  
 Instrument ID: ECD1A Calibration Date: 01/12/10 Time: 1541  
 Lab File ID: 042B4201 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	13225.779	0.01	4.9	15.0
(2)	9327.875	8707.295	0.01	-6.6	15.0
(3)	5411.316	5364.897	0.01	-0.8	15.0
(4)	7051.879	6845.828	0.01	-2.9	15.0
(5)	6550.733	6460.528	0.01	-1.4	15.0
Aroclor-1260	13680.027	13271.096	0.01	-3.0	15.0
(2)	16029.019	16113.038	0.01	0.5	15.0
(3)	12563.933	12330.115	0.01	-1.9	15.0
(4)	12810.076	12677.075	0.01	-1.0	15.0
(5)	27897.674	28235.768	0.01	1.2	15.0
4cmx	285339.98	286081.32	0.01	0.2	15.0
Decachlorobiphenyl	221786.62	221069.47	0.01	-0.3	15.0

FORM VII PEST

Data File: /chem/ecdla.i/011210.b/003f0301.d  
Report Date: 23-Jan-2010 10:45

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/011210.b/003f0301.d

Lab Smp Id: WAR091216-54

Client Smp ID: AR125401

Inj Date : 12-JAN-2010 08:09

Operator : YS1

Inst ID: ecdla.i

Smp Info : |WAR091216-54

Misc Info :

Comment :

Method : /chem/ecdla.i/011210.b/ECD1-F-8082-121409.m

Meth Date : 23-Jan-2010 10:45 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: hpclpl

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	
3.271	3.271	0.000	12037540 1000.00	964	80.00- 120.00	100.00
3.426	3.426	0.000	16646305 1000.00	995	118.29- 158.29	138.29
3.660	3.660	0.000	21499049 1000.00	1040	158.60- 198.60	178.60
3.823	3.823	0.000	16291323 1000.00	1040	115.34- 155.34	135.34
3.932	3.932	0.000	15561834 1000.00	1020	109.28- 149.28	129.28

Average of Peak Amounts = 1.01e+03

Data File: /chem/ecdl1a.i/011210.b/003f0301.d

Date: 12-Jan-2010 08:09

Client ID: AR125401

Sample Info: 11AR091216-54

Column phase: CLP1

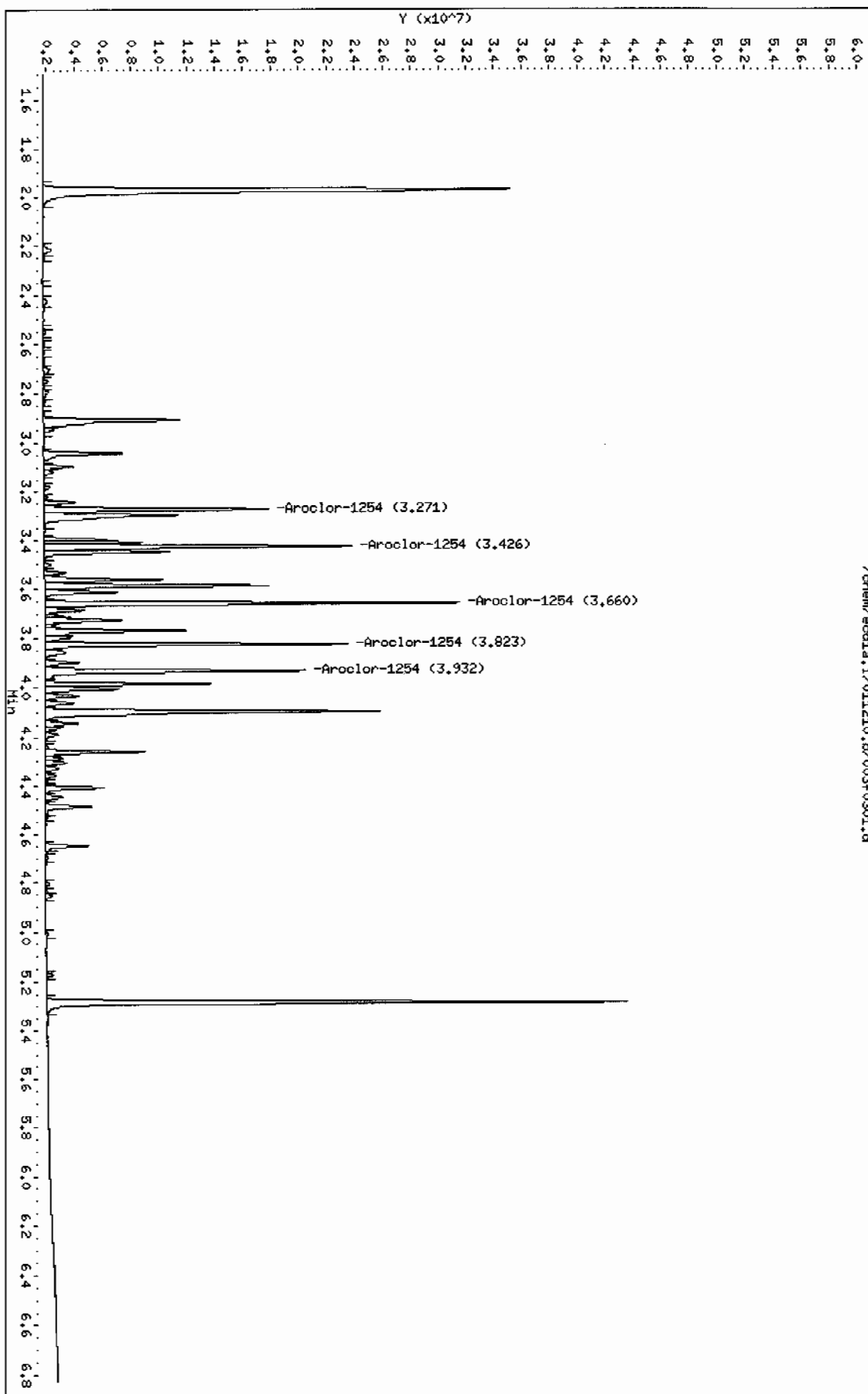
Page 1

Instrument: ecdl1a.i

Operator: YSL

Column diameter: 0.25

/chem/ecdl1a.i/011210.b/003f0301.d





Data File: /chem/ecdl1a.i/011210.b/003b0301.d  
Report Date: 23-Jan-2010 10:45

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011210.b/003b0301.d

Lab Smp Id: WAR091216-54

Client Smp ID: AR125401

Inj Date : 12-JAN-2010 08:09

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR091216-54

Misc Info :

Comment :

Method : /chem/ecdl1a.i/011210.b/ECD1-B-8082-121409.m

Meth Date : 23-Jan-2010 10:45 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: hpc1p1

AMOUNTS

CAL-AMT ON-COL

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

6 Aroclor-1254			CAS #: 11097-69-1			
3.403	3.403	0.000	5736608 1000.00	891 80.00- 120.00	100.00	
3.826	3.826	0.000	10322492 1000.00	893 159.94- 199.94	179.94	
3.942	3.942	0.000	11402181 1000.00	917 178.76- 218.76	198.76	
4.218	4.218	0.000	15866334 1000.00	940 256.58- 296.58	276.58	
4.355	4.355	0.000	11536355 1000.00	928 181.10- 221.10	201.10	

Average of Peak Amounts =

914

Data File: /chem/ecdda.i/011210.b/003b0301.d

Date : 12-JAN-2010 08:09

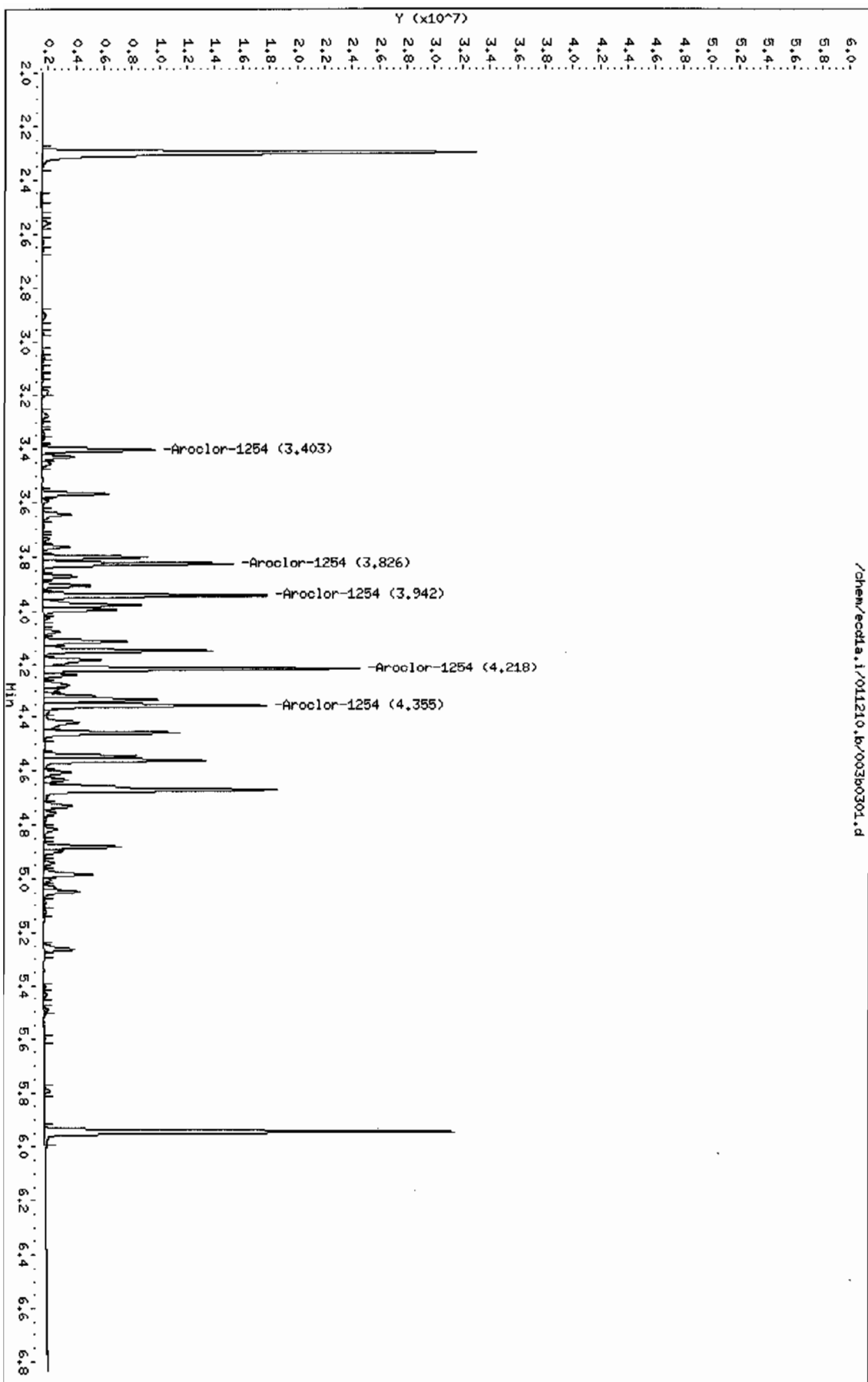
Client ID: AR125401

Sample Info: 11AR091216-54

Page 1

Column phase: CLP2

Instrument: ecdda.i  
Operator: YSL  
Column diameter: 0.25



Data File: /chem/ecdl1a.i/011210.b/005f0501.d  
Report Date: 23-Jan-2010 10:45

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011210.b/005f0501.d  
Lab Smp Id: WAR091217-48 Client Smp ID: AR124801  
Inj Date : 12-JAN-2010 08:30  
Operator : YS1 Inst ID: ecd1a.i  
Smp Info : |WAR091217-48  
Misc Info :  
Comment :  
Method : /chem/ecdl1a.i/011210.b/ECD1-F-8082-121409.m  
Meth Date : 23-Jan-2010 10:45 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: hpclpl

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ug/L)	ON-COL ( ug/L)	TARGET RANGE	RATIO
5 Aroclor-1248					CAS #: 12672-29-6	
3.093	3.093	0.000	7744080 1000.00	987	80.00- 120.00	100.00
3.245	3.245	0.000	6860341 1000.00	998	68.59- 108.59	88.59
3.295	3.295	0.000	13763918 1000.00	1030	157.73- 197.73	177.73
3.428	3.428	0.000	10860022 1000.00	986	120.24- 160.24	140.24
3.660	3.660	0.000	6934632 1000.00	930	69.55- 109.55	89.55
Average of Peak Amounts =				987		

Data File: /chem/ecdl1a.i/011210.b/005f0501.d

Date: 12-JAN-2010 08:30

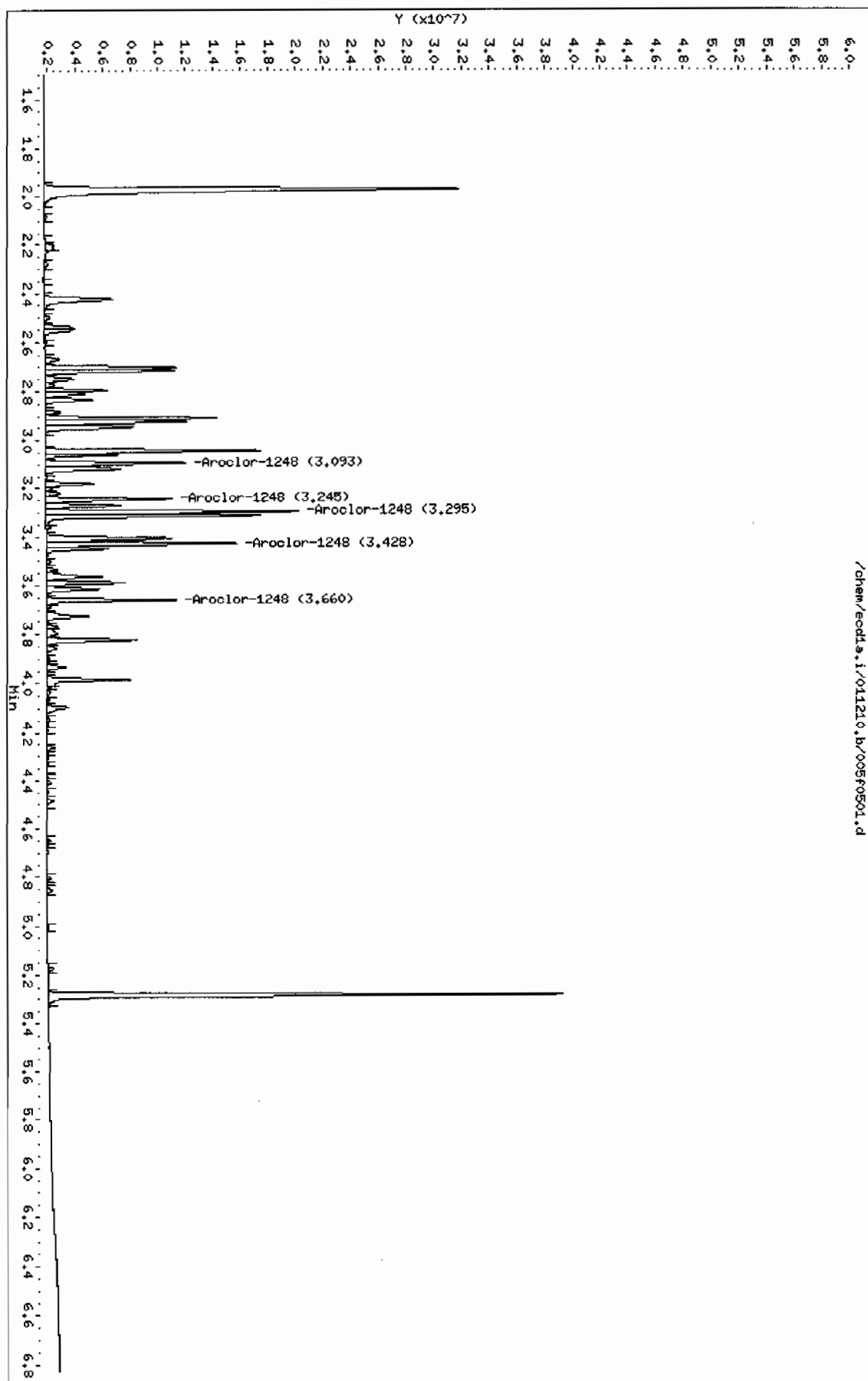
Client ID: AR124801

Sample Info: IMR091217-48

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Column phase: CLP1

Instrument: ecdl1a.i  
Operator: YSL  
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/011210.b/005b0501.d

Lab Smp Id: WAR091217-48

Client Smp ID: AR124801

Inj Date : 12-JAN-2010 08:30

Operator : YSl

Inst ID: ecdla.i

Smp Info : |WAR091217-48

Misc Info :

Comment :

Method : /chem/ecdla.i/011210.b/ECD1-B-8082-121409.m

Meth Date : 23-Jan-2010 10:45 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

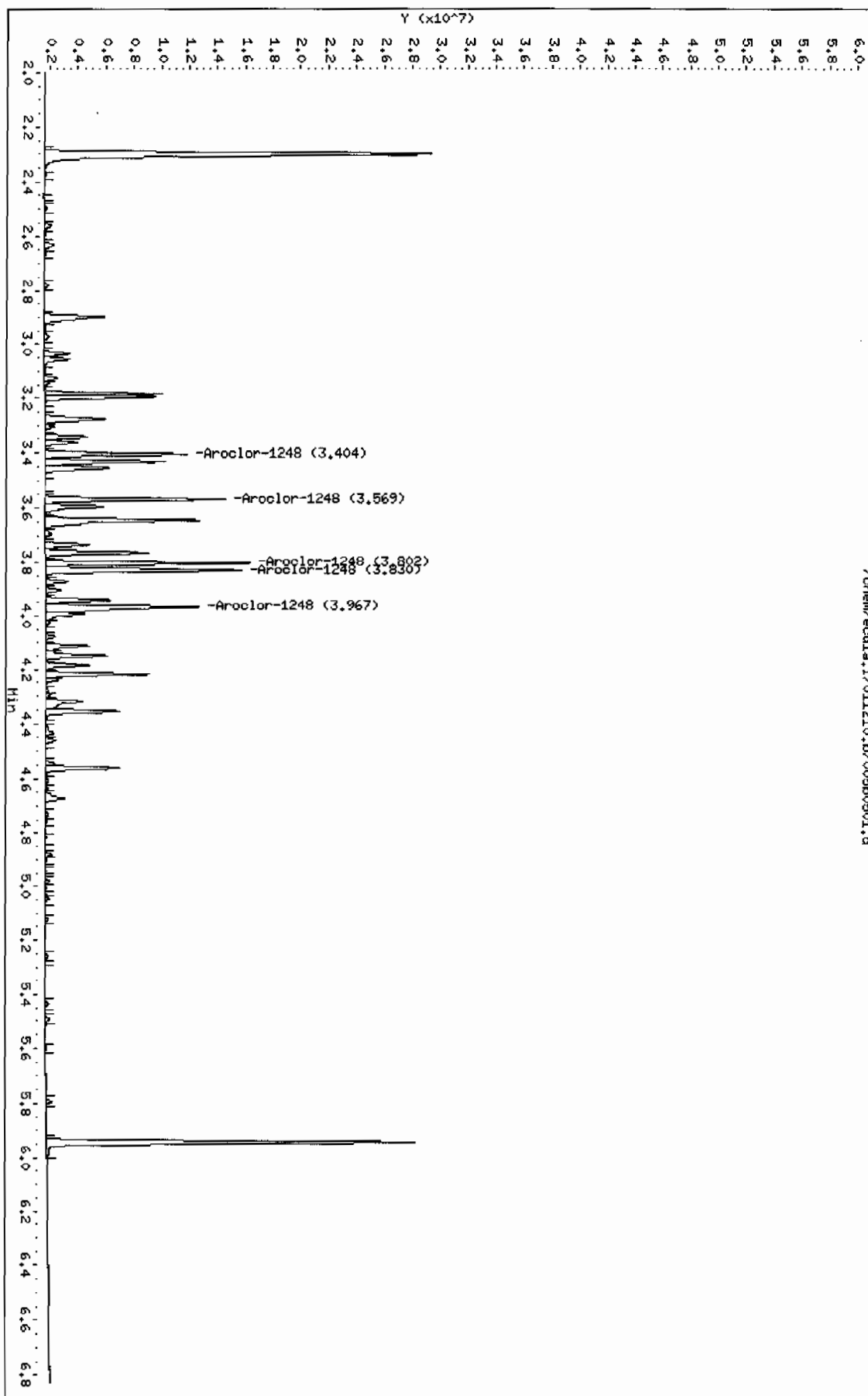
RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ug/L)	ON-COL ( ug/L)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
5 Aroclor-1248			CAS #: 12672-29-6			
3.404	3.404	0.000	7175864 1000.00	891	80.00- 120.00	100.00
3.569	3.569	0.000	8975948 1000.00	909	105.09- 145.09	125.09
3.802	3.802	0.000	10195525 1000.00	909	122.08- 162.08	142.08
3.830	3.830	0.000	11296712 1000.00	905	137.43- 177.43	157.43
3.967	3.967	0.000	10909666 1000.00	901	132.03- 172.03	152.03
Average of Peak Amounts ..			903			

Data File: /chem/ecdl1.i/011210.b/005b0501.d  
Date: 12-JAN-2010 08:30  
Client ID: AR124801  
Sample Info: 1MRO91217-48

Column phase: CLP2

Instrument: ecdl1.i  
Operator: YSL  
Column diameter: 0.25

/chem/ecdl1.i/011210.b/005b0501.d



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/011210.b/006f0601.d

Lab Smp Id: WAR100104-32

Client Smp ID: AR123201

Inj Date : 12-JAN-2010 08:41

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR100104-32

Misc Info :

Comment :

Method : /chem/ecd1a.i/011210.b/ECD1-F-8082-121409.m

Meth Date : 23-Jan-2010 10:45 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: hpc1p1

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ug/L)	ON-COL ( ug/L)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
3 Aroclor-1232			CAS #: 11141-16-5			
2.425	2.425	0.000	6216352 1000.00	925	80.00- 120.00	100.00
2.714	2.714	0.000	8111036 1000.00	994	110.48- 150.48	130.48
2.795	2.795	0.000	5312389 1000.00	924	65.46- 105.46	85.46
3.043	3.043	0.000	3927160 1000.00	993	43.17- 83.17	63.17
3.296	3.296	0.000	3710292 1000.00	1050	39.69- 79.69	59.69
Average of Peak Amounts -			977			

Data File: /chem/ecdl1.i/011210.b/006f0601.d

Date : 12-JAN-2010 08:41

Client ID: AR123201

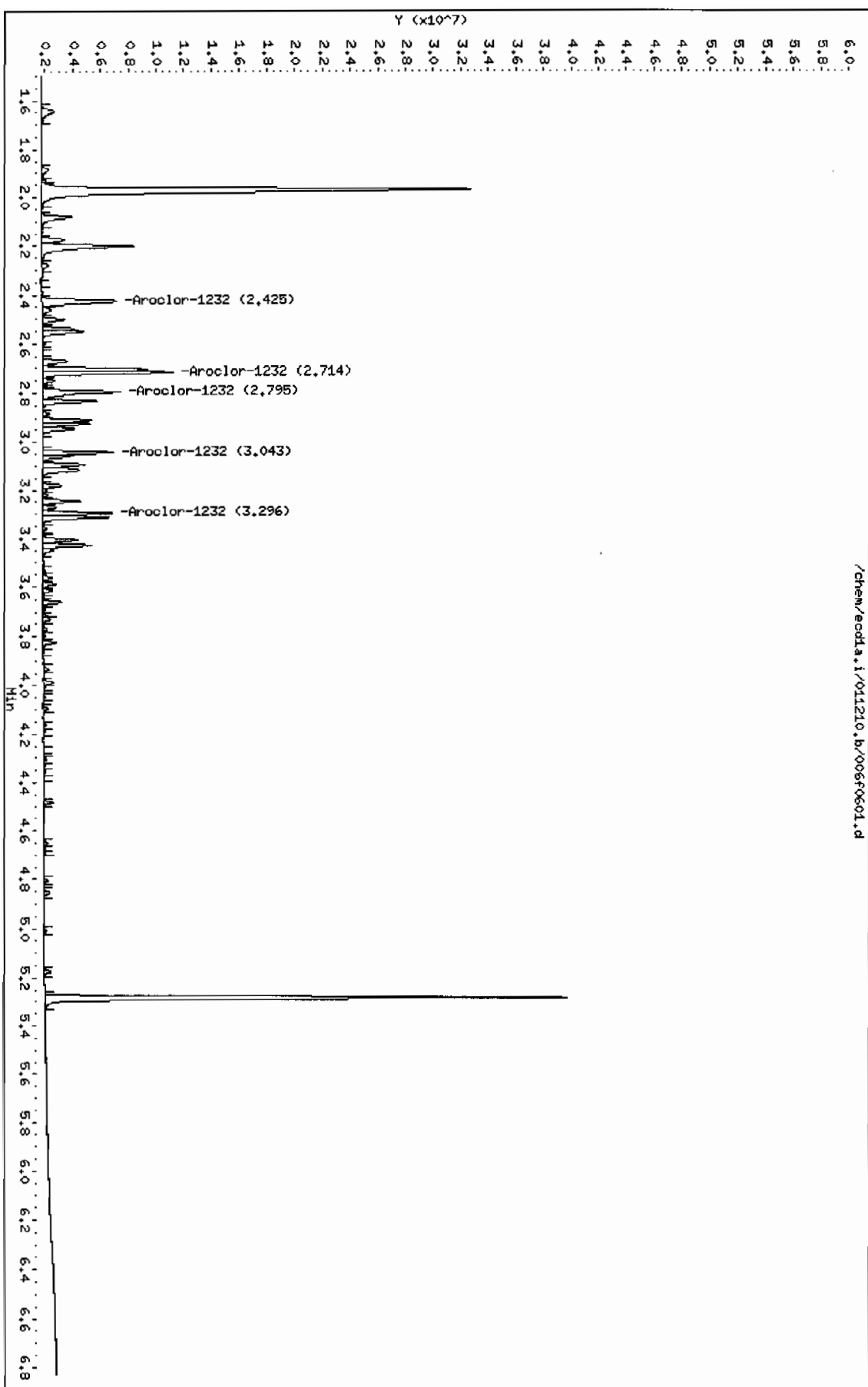
Sample Info: 1MAR100104-32

Column phase: CLP1

Instrument: ecdl1.i

Operator: YSL

Column diameter: 0.25





Data File: /chem/ecdl1a.i/011210.b/006b0601.d  
Report Date: 23-Jan-2010 10:45

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011210.b/006b0601.d

Lab Smp Id: WAR100104-32

Client Smp ID: AR123201

Inj Date : 12-JAN-2010 08:41

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR100104-32

Misc Info :

Comment :

Method : /chem/ecdl1a.i/011210.b/ECD1-B-8082-121409.m

Meth Date : 23-Jan-2010 10:45 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: hpc1p1

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ug/L)	ON-COL ( ug/L)	TARGET RANGE	RATIO
2.631	2.631	0.000	5454142 1000.00	886	80.00- 120.00	100.00
3.196	3.196	0.000	5887460 1000.00	934	87.94- 127.94	107.94
3.280	3.280	0.000	4094285 1000.00	871	55.07- 95.07	75.07
3.570	3.570	0.000	3125770 1000.00	964	37.31- 77.31	57.31
3.803	3.803	0.000	3007054 1000.00	954	35.13- 75.13	55.13
Average of Peak Amounts =				922		

Data File: /chem/ecdl1a.i/011210.b/006b0601.d  
Date : 12-JAN-2010 08:41  
Client ID: AR123201  
Sample Info: IMR100104-32

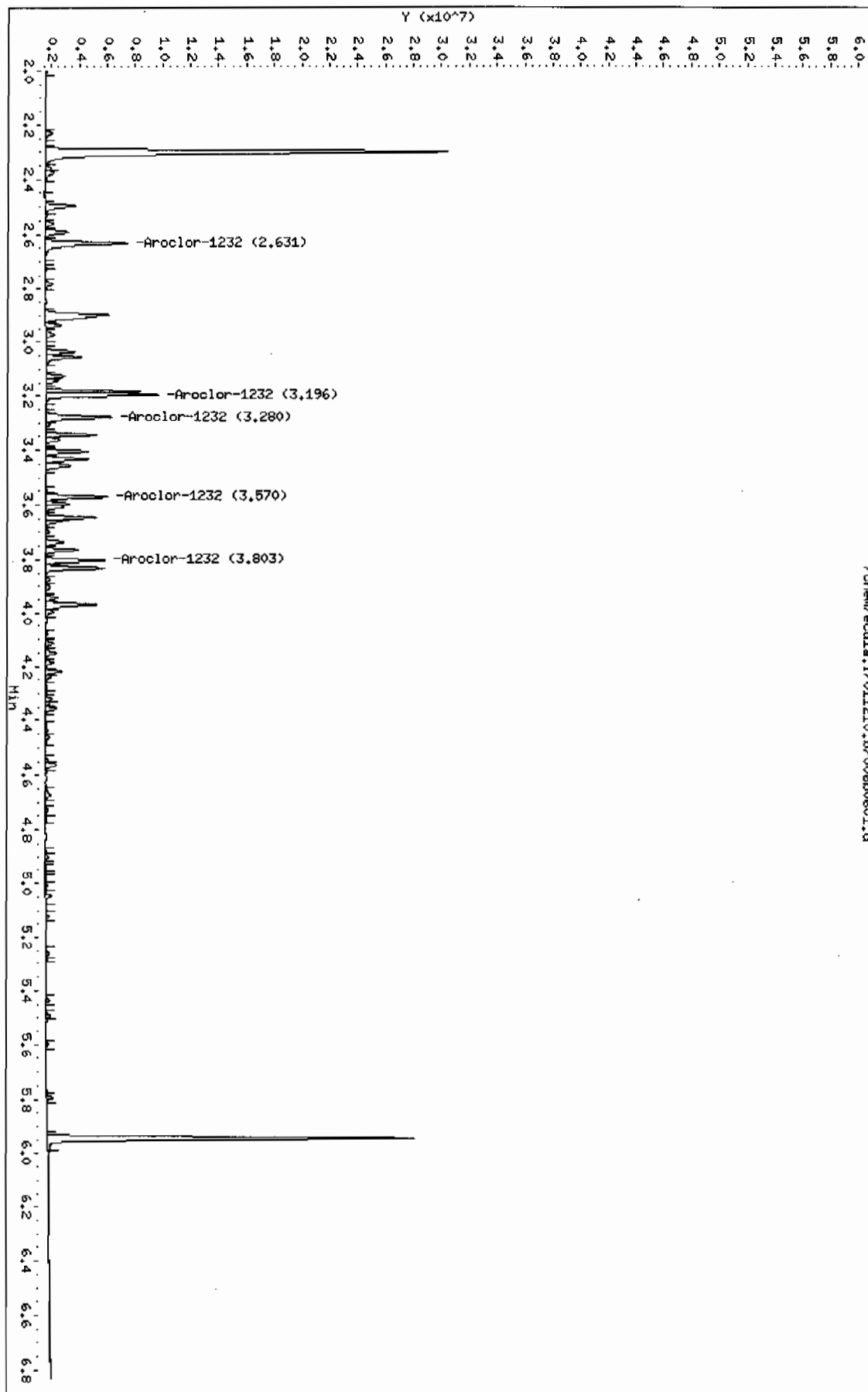
Instrument: ecdl1a.i

Page 1

Column phase: CLP2

Operator: YSL  
Column diameter: 0.25

/chem/ecdl1a.i/011210.b/006b0601.d



Data File: /chem/ecdla.i/011210.b/007f0701.d  
Report Date: 23-Jan-2010 10:45

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/011210.b/007f0701.d

Lab Smp Id: WAR100104-21

Client Smp ID: AR122101

Inj Date : 12-JAN-2010 08:51

Operator : YSl

Inst ID: ecdla.i

Smp Info : |WAR100104-21

Misc Info :

Comment :

Method : /chem/ecdla.i/011210.b/ECD1-F-8082-121409.m

Meth Date : 23-Jan-2010 10:45 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
2.081	2.081	0.000	3977249 1000.00	925	80.00- 120.00	100.00
2.174	2.174	0.000	2228631 1000.00	913	36.03- 76.03	56.03
2.200	2.200	0.000	9517642 1000.00	926	219.30- 259.30	239.30
Average of Peak Amounts				921		

Data File: /chem/ecdda.1/011210.b/007f0701.d  
Date: 12-JAN-2010 08:51  
Client ID: AR122101  
Sample Info: 1MAR100104-21

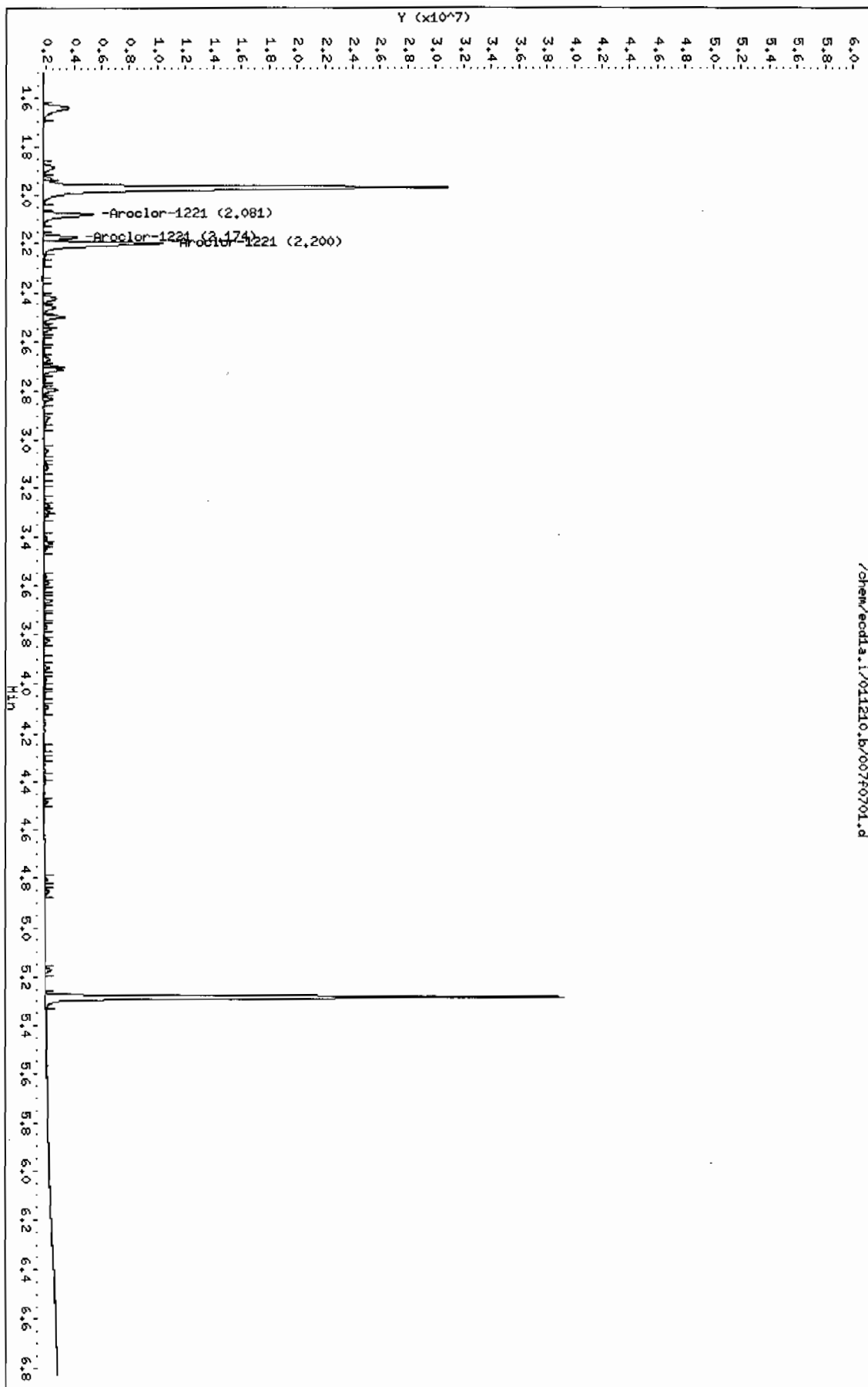
Instrument: ecdda.1

Page 1

Column phase: CLP1

Operator: YSL  
Column diameter: 0.25

/chem/ecdda.1/011210.b/007f0701.d



Data File: /chem/ecdla.i/011210.b/007b0701.d  
Report Date: 23-Jan-2010 10:45

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/011210.b/007b0701.d  
Lab Smp Id: WAR100104-21 Client Smp ID: AR122101  
Inj Date : 12-JAN-2010 08:51  
Operator : YS1 Inst ID: ecdla.i  
Smp Info : |WAR100104-21  
Misc Info :  
Comment :  
Method : /chem/ecdla.i/011210.b/ECD1-B-8082-121409.m  
Meth Date : 23-Jan-2010 10:45 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

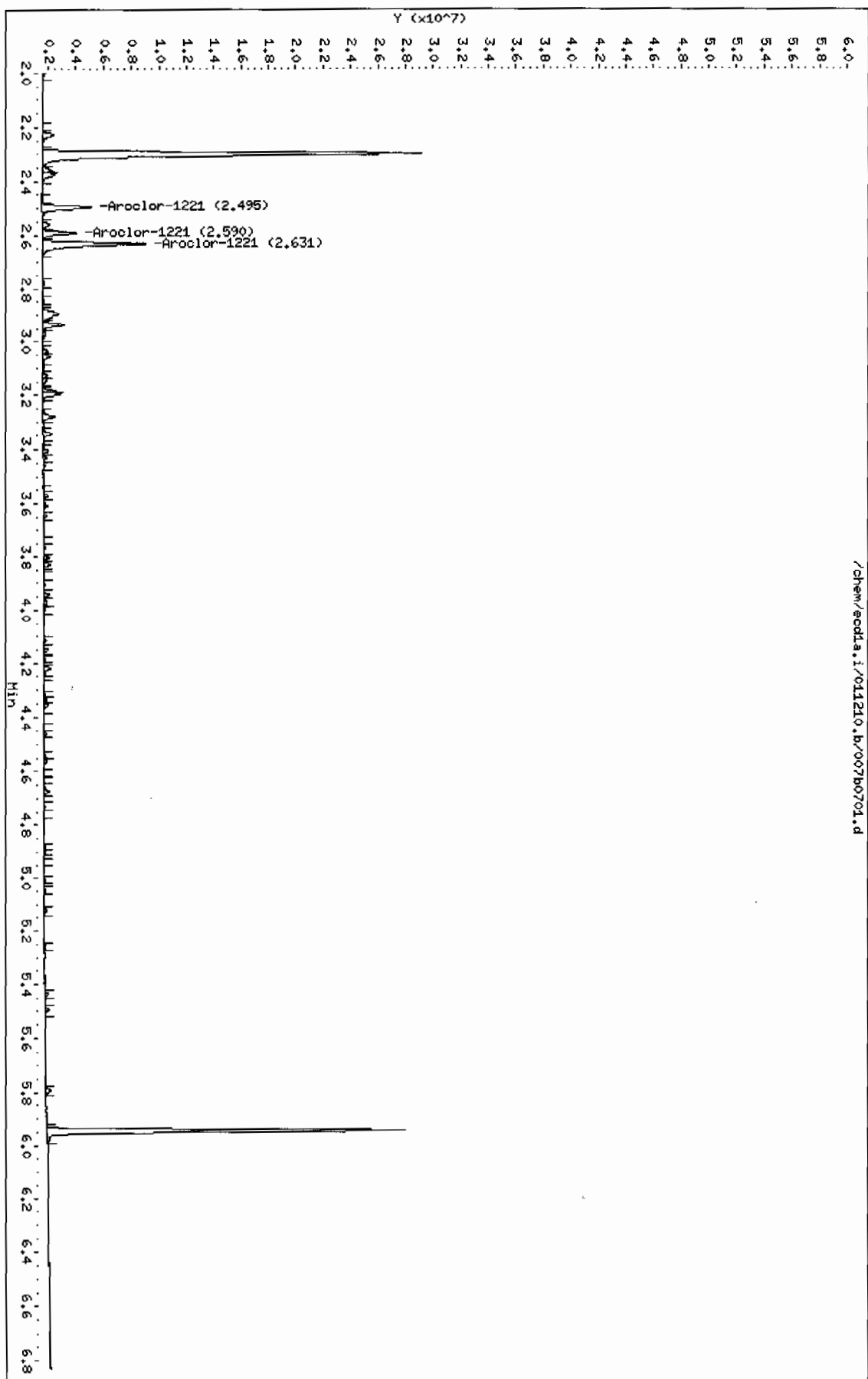
RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ug/L)	ON-COL ( ug/L)	TARGET RANGE	RATIO
2 Aroclor-1221 CAS #: 11104-28-2						
2.495	2.495	0.000	3505686 1000.00	963	80.00- 120.00	100.00
2.590	2.590	0.000	2164005 1000.00	929	41.73- 81.73	61.73
2.631	2.631	0.000	7278336 1000.00	896	187.62- 227.62	207.62
Average of Peak Amounts =				930		

Data File: /chem/ecdl.a.i/011210.b/007b0701.d  
Date : 12-JAN-2010 08:51  
Client ID: AR122101  
Sample Info: IMR100104-21

Column Phase: CLP2

Instrument: ecdl.a.i  
Operator: YSL  
Column diameter: 0.25

/chem/ecdl.a.i/011210.b/007b0701.d



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011210.b/008f0801.d

Lab Smp Id: WAR100104-60 01

Client Smp ID: AR166001

Inj Date : 12-JAN-2010 09:02

Operator : YSl

Inst ID: ecd1a.i

Smp Info : |WAR100104-60 01

Misc Info :

Comment :

Method : /chem/ecdl1a.i/011210.b/ECD1-F-8082-121409.m

Meth Date : 23-Jan-2010 10:46 yip00818 Quant Type: ESTD

Cal Date : 14-DEC-2009 11:34 Cal File: 040f4001.d

Als bottle: 8 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		
1.969	1.969	0.000	37032248 100.000	104	80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3		
5.283	5.283	0.000	30786506 100.000	102	80.00- 120.00	100.00

1 Aroclor-1016				CAS #: 12674-11-2		
2.424	2.424	0.000	13485876 1000.00	972	80.00- 120.00	100.00
2.702	2.702	0.000	10723493 1000.00	1060	59.52- 99.52	79.52
2.794	2.794	0.000	11460019 1000.00	975	64.98- 104.98	84.98
2.832	2.832	0.000	6856400 1000.00	1040	30.84- 70.84	50.84
3.043	3.043	0.000	8914101 1000.00	1030	46.10- 86.10	66.10

Average of Peak Amounts = 1.02e+03

7 Aroclor-1260				CAS #: 11096-82-5		
3.769	3.769	0.000	17526056 1000.00	1050	80.00- 120.00	100.00
3.932	3.932	0.000	26588446 1000.00	1070	131.71- 171.71	151.71
4.163	4.163	0.000	15728241 1000.00	1070	69.74- 109.74	89.74
4.305	4.305	0.000	16552699 1000.00	1090	74.45- 114.45	94.45
4.484	4.484	0.000	37633318 1000.00	1100	194.73- 234.73	214.73

Average of Peak Amounts = 1.08e+03

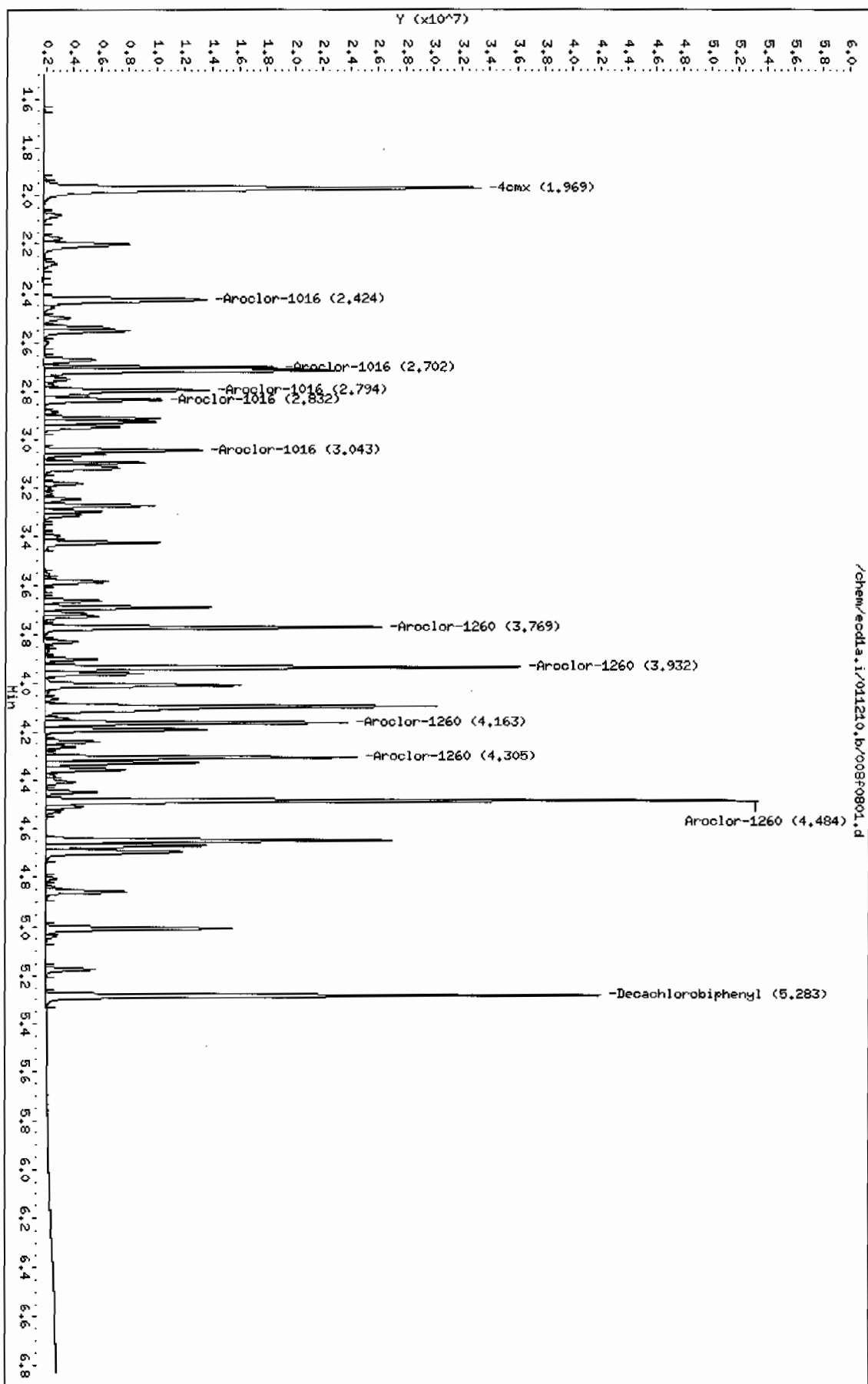
Data File: /chem/ecdda.i/011210.b/008f0801.d  
Date: 12-JAN-2010 09:02  
Client ID: AR166001  
Sample Info: WMR100104-60 01

Instrument: ecdda.i

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Column phase: CLP1

Operator: YSI  
Column diameter: 0.25





GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011210.b/008b0801.d

Lab Smp Id: WAR100104-60 01

Client Smp ID: AR166001

Inj Date : 12-JAN-2010 09:02

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR100104-60 01

Misc Info :

Comment :

Method : /chem/ecdl1a.i/011210.b/ECD1-B-8082-121409.m

Meth Date : 23-Jan-2010 10:45 yip00818

Quant Type: ESTD

Cal Date : 14-DEC-2009 12:16

Cal File: 044b4401.d

Als bottle: 8

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		
2.299	2.299	0.000	27572417 100.000	96.6	80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3		
5.945	5.945	0.000	21439079 100.000	96.7	80.00- 120.00	100.00

1 Aroclor-1016				CAS #: 12674-11-2		
3.195	3.195	0.000	12467792 1000.00	989	80.00- 120.00	100.00
3.279	3.279	0.000	8419719 1000.00	903	47.53- 87.53	67.53
3.342	3.342	0.000	5218830 1000.00	964	21.86- 61.86	41.86
3.569	3.569	0.000	6829739 1000.00	968	34.78- 74.78	54.78
3.645	3.645	0.000	6310818 1000.00	963	30.62- 70.62	50.62
Average of Peak Amounts =				958		

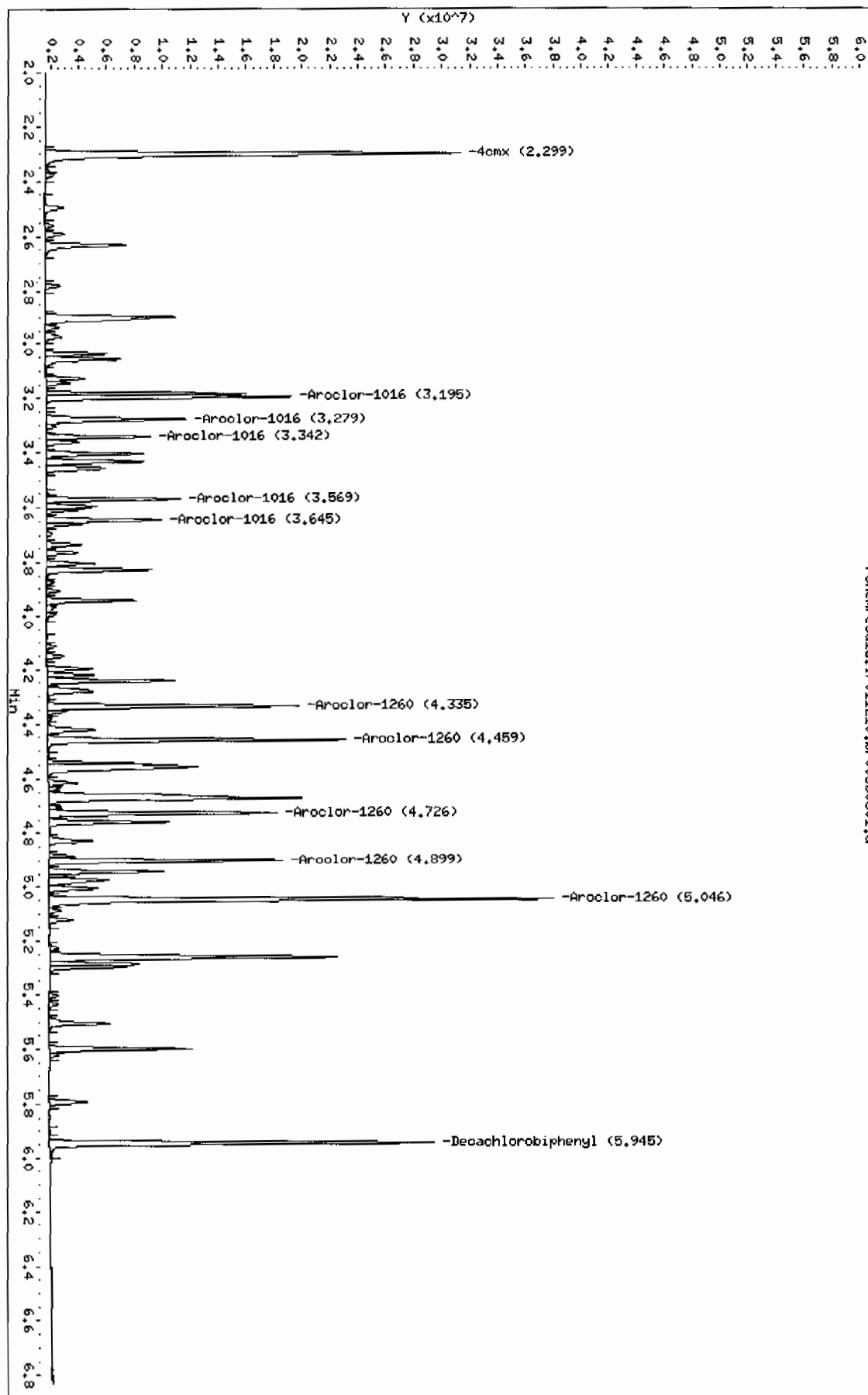
7 Aroclor-1260				CAS #: 11096-82-5		
4.335	4.335	0.000	12787808 1000.00	935	80.00- 120.00	100.00
4.459	4.459	0.000	15544463 1000.00	970	101.56- 141.56	121.56
4.726	4.726	0.000	11912459 1000.00	948	73.15- 113.15	93.15
4.899	4.899	0.000	12233996 1000.00	955	75.67- 115.67	95.67
5.046	5.046	0.000	27319408 1000.00	979	193.64- 233.64	213.64
Average of Peak Amounts =				957		

Data File: /chem/ecdl1a.i/011210.b/008b0801.d  
Date: 12-JAN-2010 09:02  
Client ID: AR166001  
Sample Info: IMAR100104-60 01

Column phase: CLP2

Instrument: ecdl1a.i  
Operator: YS1  
Column diameter: 0.25

/chem/ecdl1a.i/011210.b/008b0801.d



Data File: /chem/ecdla.i/011210.b/009f0901.d  
Report Date: 23-Jan-2010 10:46

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/011210.b/009f0901.d

Lab Smp Id: WAR091217-42

Client Smp ID: AR124201

Inj Date : 12-JAN-2010 09:12

Operator : YS1

Inst ID: ecdla.i

Smp Info : |WAR091217-42

Misc Info :

Comment :

Method : /chem/ecdla.i/011210.b/ECD1-F-8082-121409.m

Meth Date : 23-Jan-2010 10:46 yip00818 Quant Type: ESTD

Cal Date : 14-DEC-2009 11:34 Cal File: 040f4001.d

Als bottle: 9 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
2.425	2.425	0.000	11081560	950	80.00- 120.00	100.00
2.714	2.714	0.000	14162445	1050	107.80- 147.80	127.80
2.832	2.832	0.000	5547704	1010	30.06- 70.06	50.06
3.043	3.043	0.000	7181018	991	44.80- 84.80	64.80
3.297	3.297	0.000	7294617	1070	45.83- 85.83	65.83

Average of Peak Amounts = 1.01e+03

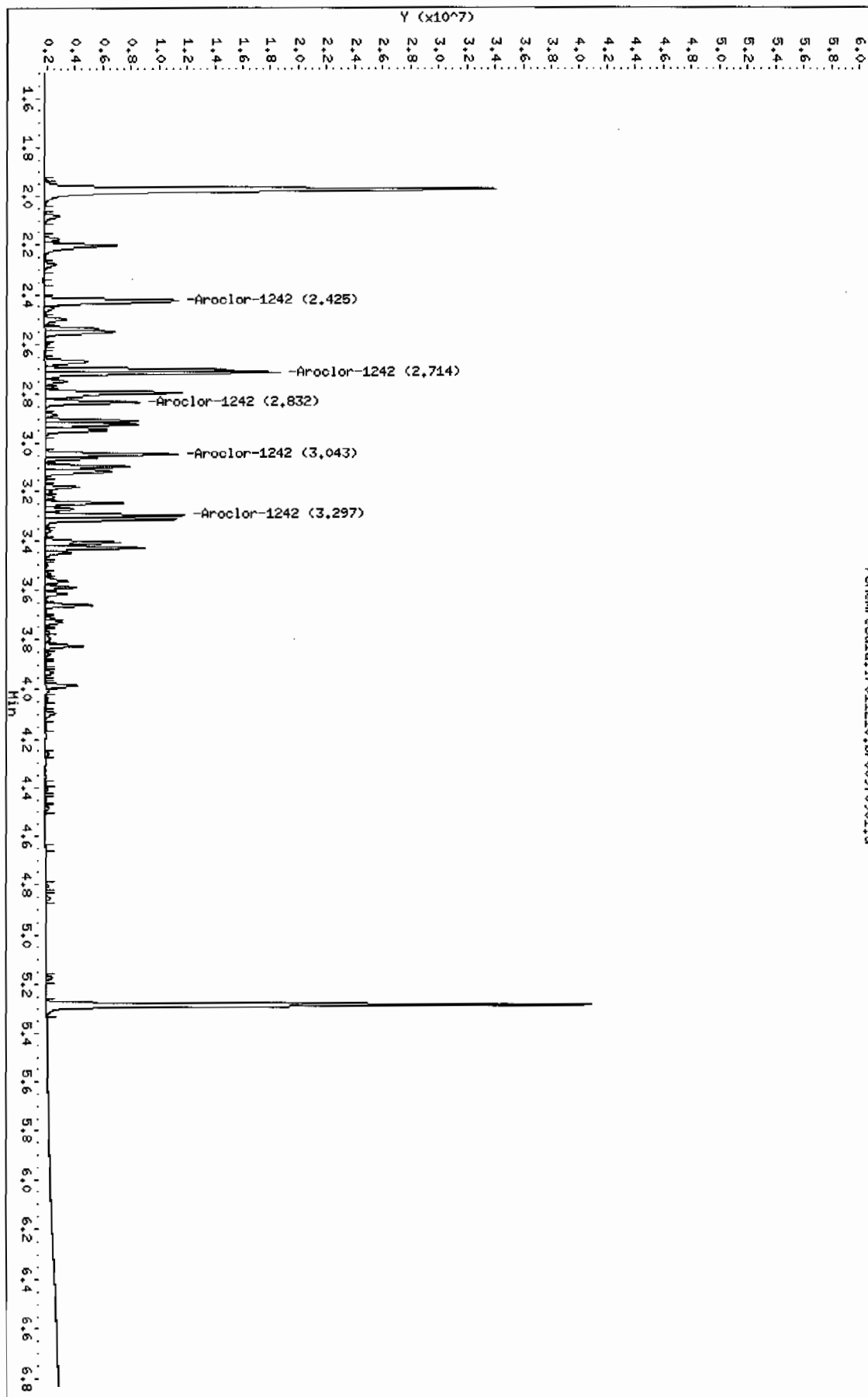
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Date: 12-JAN-2010 09:12  
Client ID: AR124201  
Sample Info: 1UAR091217-42

Page 1

Column Phase: CLP1

Instrument: ecda.i  
Operator: YSL  
Column diameter: 0.25

/chem/ecda.i/011210.b/009f0301.d



Data File: /chem/ecdl1a.i/011210.b/009b0901.d  
Report Date: 23-Jan-2010 10:46

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011210.b/009b0901.d

Lab Smp Id: WAR091217-42

Client Smp ID: AR124201

Inj Date : 12-JAN-2010 09:12

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR091217-42

Misc Info :

Comment :

Method : /chem/ecdl1a.i/011210.b/ECD1-B-8082-121409.m

Meth Date : 23-Jan-2010 10:46 yip00818 Quant Type: ESTD

Cal Date : 14-DEC-2009 12:16

Cal File: 044b4401.d

Als bottle: 9

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1242.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
----	--------	--------	------------------	---------	--------------	-------

4 Aroclor-1242			CAS #: 53469-21-9			
3.197	3.197	0.000	10071737	1000.00	951 80.00- 120.00	100.00
3.279	3.279	0.000	6944935	1000.00	862 48.95- 88.95	68.95
3.570	3.570	0.000	5469377	1000.00	917 34.30- 74.30	54.30
3.803	3.803	0.000	5657077	1000.00	934 36.17- 76.17	56.17
3.831	3.831	0.000	6282902	1000.00	938 42.38- 82.38	62.38

Average of Peak Amounts = 920

Data File: /chem/eod1a.i/011210.b/009b0901.d

Date: 12-JAN-2010 09:12

Client ID: AR124201

Sample Info: 1MAR091217-42

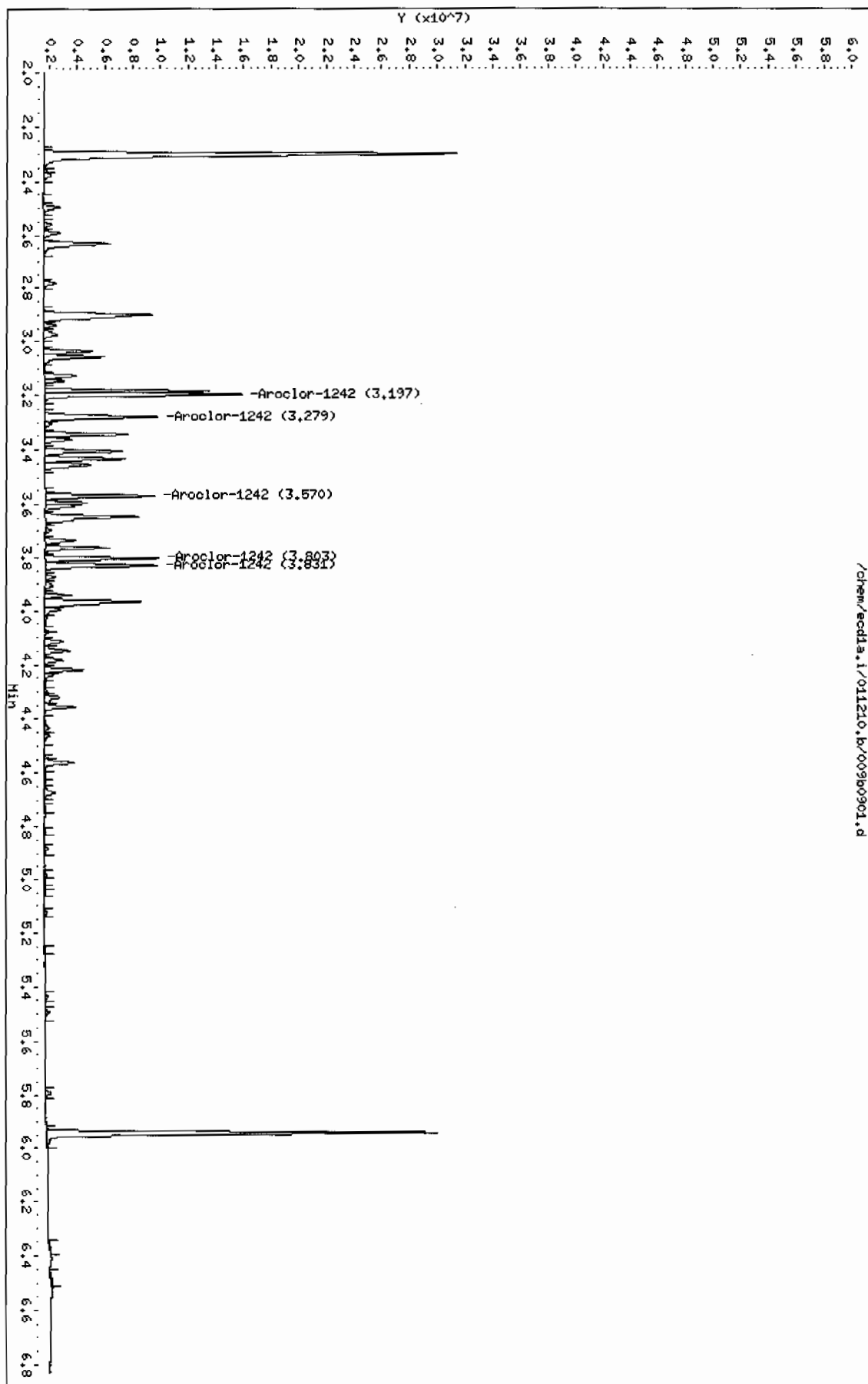
Column Phase: CLP2

Instrument: eod1a.i

Operator: YSI

Column diameter: 0.25

/chem/eod1a.i/011210.b/009b0901.d



Data File: /chem/ecdl1.i/011210.b/019f1901.d  
 Report Date: 23-Jan-2010 10:48

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

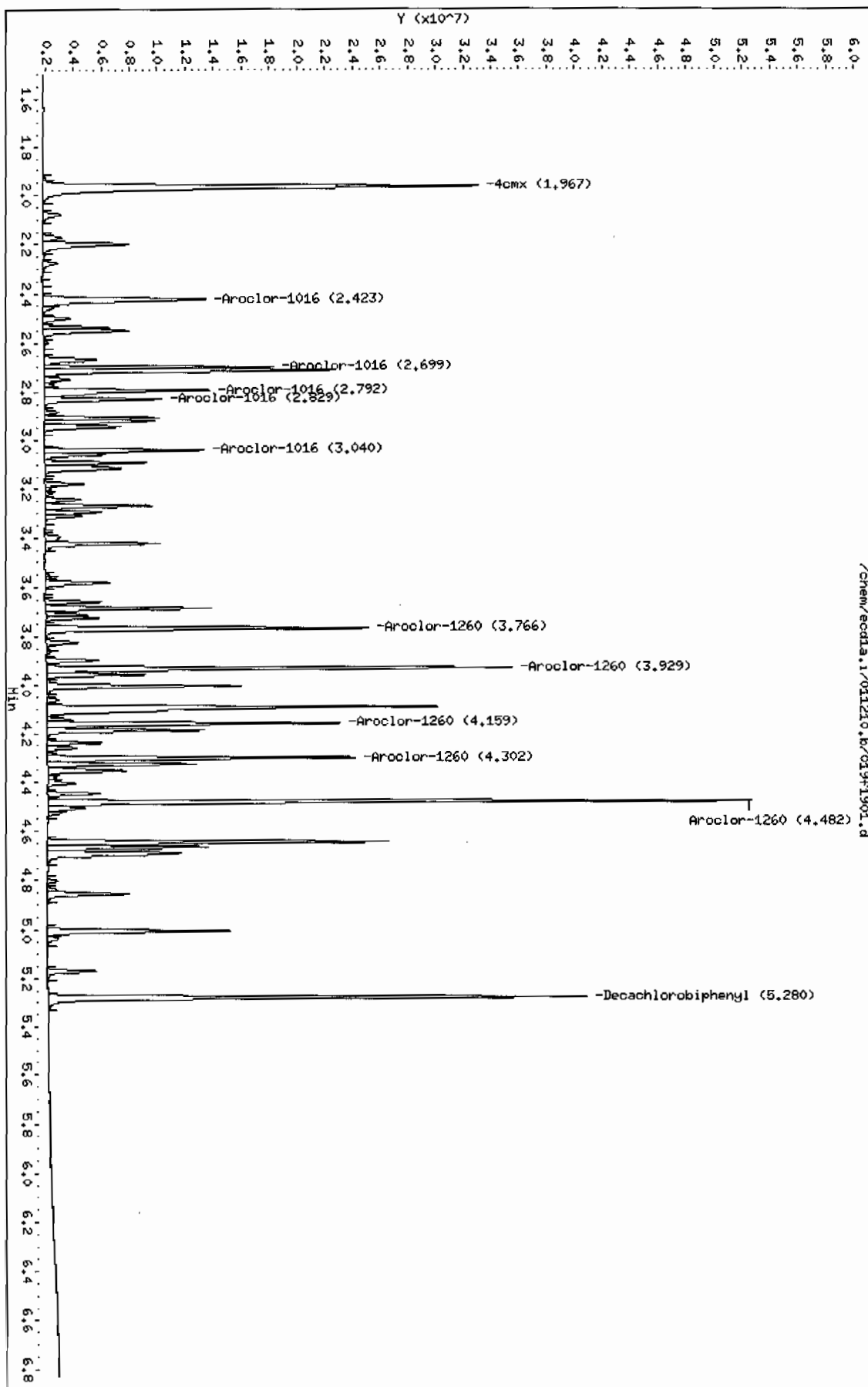
Data file : /chem/ecdl1.i/011210.b/019f1901.d  
 Lab Smp Id: WAR100104-60 02 Client Smp ID: AR166002  
 Inj Date : 12-JAN-2010 11:03  
 Operator : YS1 Inst ID: ecd1.i  
 Smp Info : |WAR100104-60 02  
 Misc Info :  
 Comment :  
 Method : /chem/ecdl1.i/011210.b/ECD1-F-8082-121409.m  
 Meth Date : 23-Jan-2010 10:48 yip00818 Quant Type: ESTD  
 Cal Date : 14-DEC-2009 11:34 Cal File: 040f4001.d  
 Als bottle: 19 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: AR1660.sub  
 Target Version: 3.50 Sample Matrix: None  
 Processing Host: hpclp1

AMOUNTS

			CAL-AMT		ON-COL			
RT	EXP RT	DLT RT	RT	RESPONSE ( ug/L)	( ug/L)	TARGET RANGE	RATIO	
==	=====	=====		=====	=====	=====	=====	
\$ 11 4cmx					CAS #: 877-09-8			
1.967	1.969	-0.002	36395148	100.000	102	80.00- 120.00	100.00	
-----								
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3			
5.280	5.283	-0.003	30217743	100.000	100	80.00- 120.00	100.00	
-----								
1 Aroclor-1016					CAS #: 12674-11-2			
2.423	2.424	-0.001	13310670	1000.00	960	80.00- 120.00	100.00	
2.699	2.702	-0.003	10242811	1000.00	1010	56.95- 96.95	76.95	
2.792	2.794	-0.002	11285268	1000.00	960	64.78- 104.78	84.78	
2.829	2.832	-0.003	6765072	1000.00	1020	30.82- 70.82	50.82	
3.040	3.043	-0.003	8738943	1000.00	1010	45.65- 85.65	65.65	
Average of Peak Amounts =					993			
-----								
7 Aroclor-1260					CAS #: 11096-82-5			
3.766	3.769	-0.003	17036620	1000.00	1020	80.00- 120.00	100.00	
3.929	3.932	-0.003	25904092	1000.00	1050	132.05- 172.05	152.05	
4.159	4.163	-0.004	15393580	1000.00	1050	70.36- 110.36	90.36	
4.302	4.305	-0.003	16083121	1000.00	1060	74.40- 114.40	94.40	
4.482	4.484	-0.002	36752784	1000.00	1070	195.73- 235.73	215.73	
Average of Peak Amounts =					1.05e+03			
-----								

Data File: /chem/ecdl1a.i/011210.b/019f1901.d  
Date: 12-JAN-2010 11:03  
Client ID: AR166002  
Sample Info: HMR100104-60 02  
Column Phase: CLP1

Instrument: ecdl1a.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/011210.b/019b1901.d

Lab Smp Id: WAR100104-60 02

Client Smp ID: AR166002

Inj Date : 12-JAN-2010 11:03

Operator : YSl

Inst ID: ecd1a.i

Smp Info : |WAR100104-60 02

Misc Info :

Comment :

Method : /chem/ecdl1a.i/011210.b/ECD1-B-8082-121409.m

Meth Date : 23-Jan-2010 10:48 yip00818 Quant Type: ESTD

Cal Date : 14-DEC-2009 12:16

Cal File: 044b4401.d

Als bottle: 19

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1660.sub

Target Version: 3.50

Sample Matrix: None

Processing Host: hpclp1

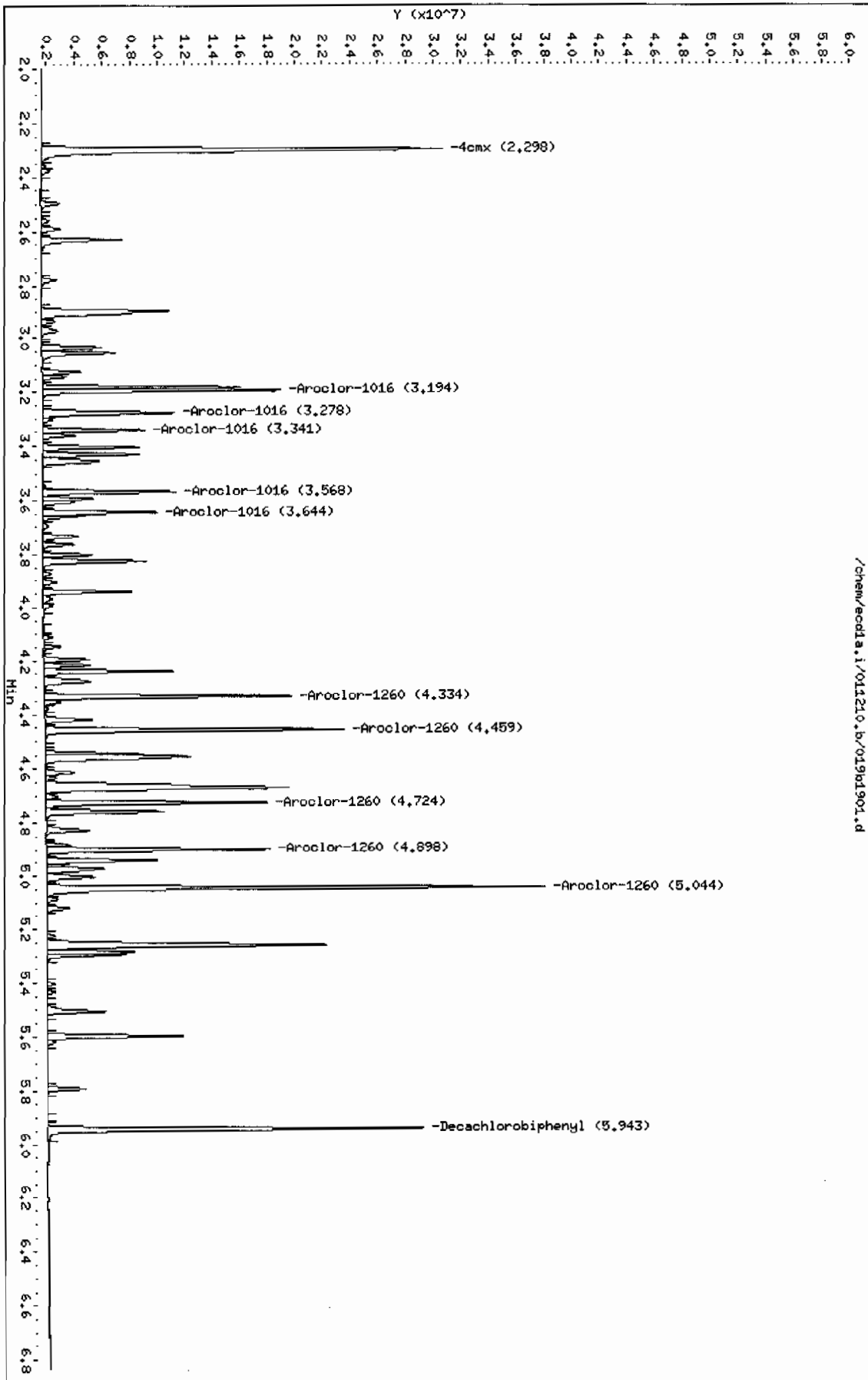
AMOUNTS

			CAL-AMT		ON-COL			
RT	EXP RT	DLT RT	RESPONSE ( ug/L)		( ug/L)	TARGET RANGE		RATIO
=====								
\$ 11 4cmx					CAS #: 877-09-8			
2.298	2.299	-0.001	27237306	100.000	95.4	80.00-	120.00	100.00
-----								
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3			
5.943	5.945	-0.002	20965997	100.000	94.5	80.00-	120.00	100.00
-----								
1 Aroclor-1016					CAS #: 12674-11-2			
3.194	3.195	-0.001	12578862	1000.00	997	80.00-	120.00	100.00
3.278	3.279	-0.001	8317700	1000.00	892	46.12-	86.12	66.12
3.341	3.342	-0.001	5139316	1000.00	950	20.86-	60.86	40.86
3.568	3.569	-0.001	6728760	1000.00	954	33.49-	73.49	53.49
3.644	3.645	-0.001	6209908	1000.00	948	29.37-	69.37	49.37
Average of Peak Amounts =					948			
-----								
7 Aroclor-1260					CAS #: 11096-82-5			
4.334	4.335	-0.001	12600351	1000.00	921	80.00-	120.00	100.00
4.459	4.459	0.000	15305012	1000.00	955	101.46-	141.46	121.46
4.724	4.726	-0.002	11700179	1000.00	931	72.86-	112.86	92.86
4.898	4.899	-0.001	12037919	1000.00	940	75.54-	115.54	95.54
5.044	5.046	-0.002	26844001	1000.00	962	193.04-	233.04	213.04
Average of Peak Amounts =					942			

Data File: /chem/eodla.i/011210.b/019b1901.d  
Date: 12-JUN-2010 11:03  
Client ID: PR166002  
Sample Info: 11MR100104-60 02

Column phase: CLP2

Instrument: eodla.i  
Operator: YS1  
Column diameter: 0.25



Data File: /chem/ecdla.i/011210.b/031f3101.d  
Report Date: 23-Jan-2010 10:51

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/011210.b/031f3101.d

Lab Smp Id: WAR100104-60 03

Client Smp ID: AR166003

Inj Date : 12-JAN-2010 13:27

Operator : YS1

Inst ID: ecdla.i

Smp Info : |WAR100104-60 03

Misc Info :

Comment :

Method : /chem/ecdla.i/011210.b/ECD1-F-8082-121409.m

Meth Date : 23-Jan-2010 10:51 yip00818 Quant Type: ESTD

Cal Date : 14-DEC-2009 11:34

Cal File: 040f4001.d

Als bottle: 31

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		
1.968	1.969	-0.001	38433966 100.000	108	80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3		
5.280	5.283	-0.003	31246613 100.000	103	80.00- 120.00	100.00

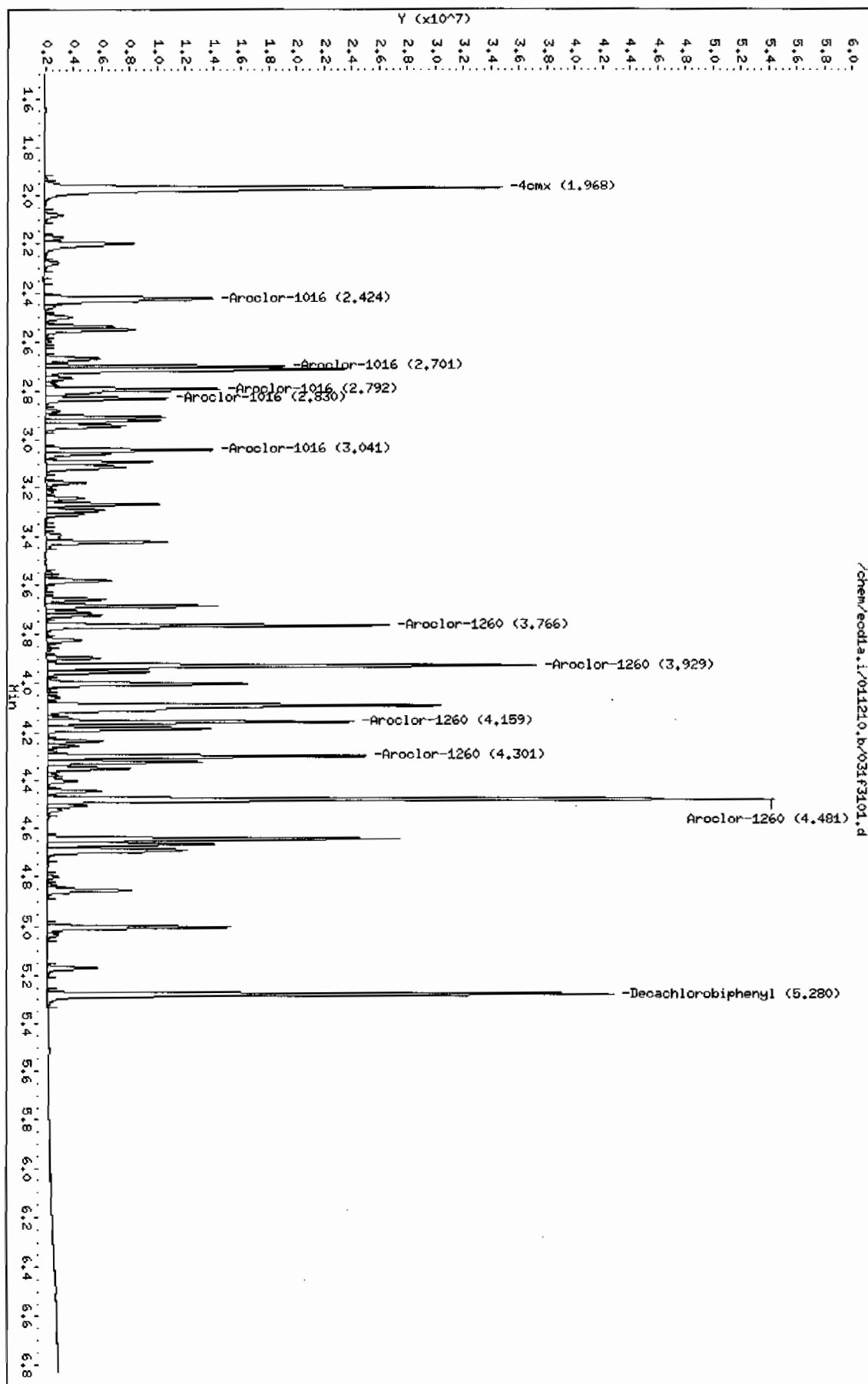
1 Aroclor-1016				CAS #: 12674-11-2		
2.424	2.424	0.000	13975254 1000.00	1010	80.00- 120.00	100.00
2.701	2.702	-0.001	11118675 1000.00	1100	59.56- 99.56	79.56
2.792	2.794	-0.002	11874482 1000.00	1010	64.97- 104.97	84.97
2.830	2.832	-0.002	7065924 1000.00	1070	30.56- 70.56	50.56
3.041	3.043	-0.002	9128367 1000.00	1050	45.32- 85.32	65.32
Average of Peak Amounts =				1.05e+03		

7 Aroclor-1260				CAS #: 11096-82-5		
3.766	3.769	-0.003	17811470 1000.00	1060	80.00- 120.00	100.00
3.929	3.932	-0.003	27097503 1000.00	1100	132.14- 172.14	152.14
4.159	4.163	-0.004	16042757 1000.00	1090	70.07- 110.07	90.07
4.301	4.305	-0.004	16822381 1000.00	1110	74.45- 114.45	94.45
4.481	4.484	-0.003	38270168 1000.00	1110	194.86- 234.86	214.86
Average of Peak Amounts =				1.09e+03		

Data File: /chem/eodla.i/011210.b/031f3101.d  
Date: 12-JAN-2010 13:27  
Client ID: AR166003  
Sample Info: 14AR100104-60 03

Column phase: CLP1

Instrument: eodla.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/011210.b/031b3101.d

Lab Smp Id: WAR100104-60 03

Client Smp ID: AR166003

Inj Date : 12-JAN-2010 13:27

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR100104-60 03

Misc Info :

Comment :

Method : /chem/ecdl1a.i/011210.b/ECD1-B-8082-121409.m

Meth Date : 23-Jan-2010 10:51 yip00818 Quant Type: ESTD

Cal Date : 14-DEC-2009 12:16

Cal File: 044b4401.d

Als bottle: 31

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1660.sub

Target Version: 3.50

Sample Matrix: None

Processing Host: hpc1p1

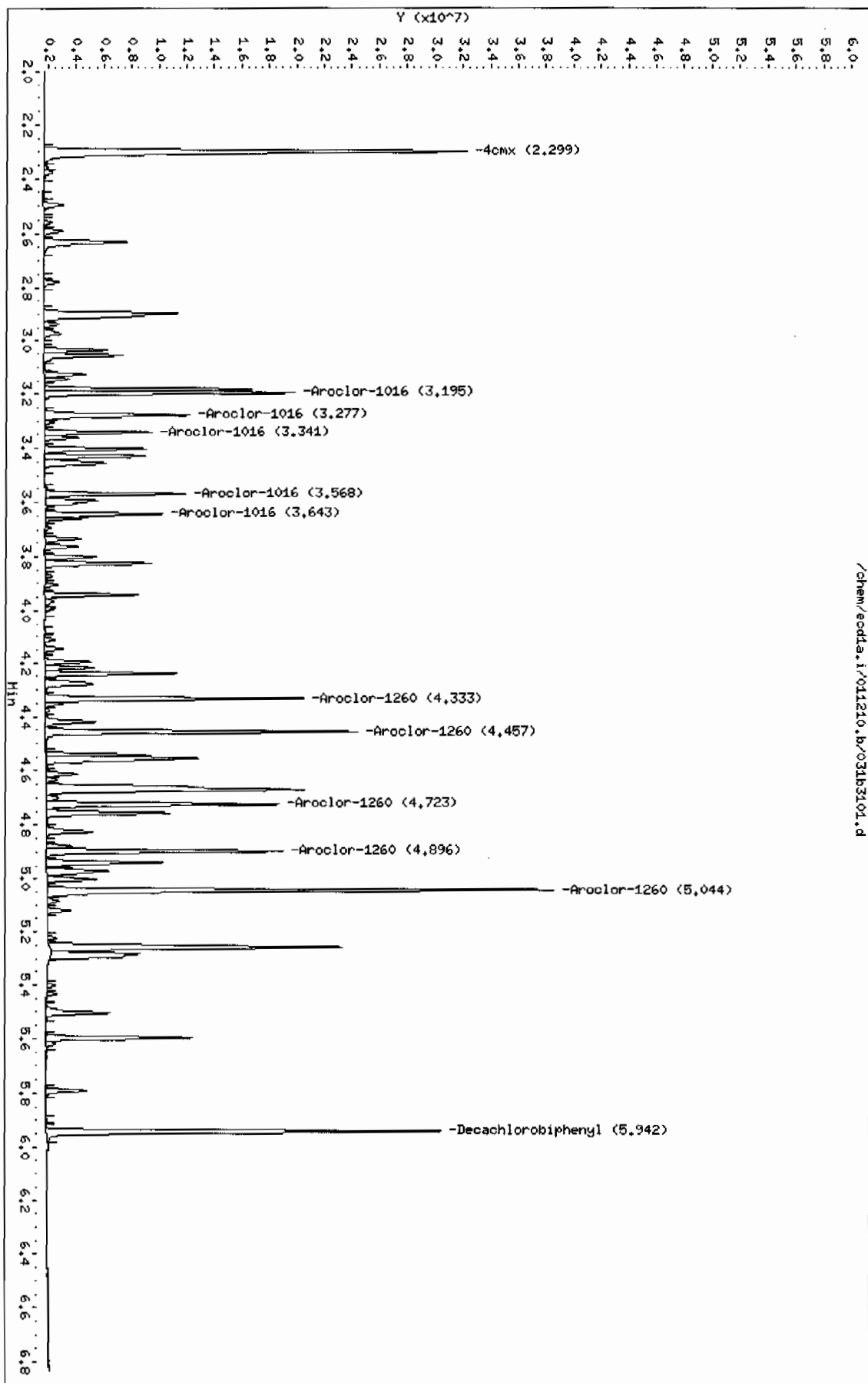
AMOUNTS

			CAL-AMT		ON-COL			
RT	EXP RT	DLT RT	RESPONSE ( ug/L)		( ug/L)	TARGET RANGE	RATIO	
---	-----	----	-----	-----	-----	-----	-----	-----
\$ 11 4cmx					CAS #: 877-09-8			
2.299	2.299	0.000	28627734	100.000	100	80.00- 120.00	100.00	
-----								
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3			
5.942	5.945	-0.003	21960359	100.000	99.0	80.00- 120.00	100.00	
-----								
1 Aroclor-1016					CAS #: 12674-11-2			
3.195	3.195	0.000	13074814	1000.00	1040	80.00- 120.00	100.00	
3.277	3.279	-0.002	8777811	1000.00	941	47.14- 87.14	67.14	
3.341	3.342	-0.001	5413636	1000.00	1000	21.41- 61.41	41.41	
3.568	3.569	-0.001	6892457	1000.00	977	32.72- 72.72	52.72	
3.643	3.645	-0.002	6412928	1000.00	979	29.05- 69.05	49.05	
Average of Peak Amounts =					987			
-----								
7 Aroclor-1260					CAS #: 11096-82-5			
4.333	4.335	-0.002	13295972	1000.00	972	80.00- 120.00	100.00	
4.457	4.459	-0.002	16138030	1000.00	1010	101.38- 141.38	121.38	
4.723	4.726	-0.003	12348659	1000.00	983	72.88- 112.88	92.88	
4.896	4.899	-0.003	12683793	1000.00	990	75.40- 115.40	95.40	
5.044	5.046	-0.002	28029483	1000.00	1000	190.81- 230.81	210.81	
Average of Peak Amounts =					991			

Data File: /chem/ecdda.i/011210.b/031b3101.d  
Date: 12-JUN-2010 13:27  
Client ID: AR166003  
Sample Info: IHR100104-60 03

Column phase: CLP2

Instrument: ecdda.i  
Operator: YS1  
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011210.b/042f4201.d

Lab Smp Id: WAR100104-60 04

Client Smp ID: AR166004

Inj Date : 12-JAN-2010 15:41

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR100104-60 04

Misc Info :

Comment :

Method : /chem/ecdl1a.i/011210.b/ECD1-F-8082-121409.m

Meth Date : 23-Jan-2010 10:53 yip00818 Quant Type: ESTD

Cal Date : 14-DEC-2009 11:34

Cal File: 040f4001.d

Als bottle: 42

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		
1.969	1.969	0.000	38291487 100.000	107	80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3		
5.280	5.283	-0.003	30572750 100.000	101	80.00- 120.00	100.00

1 Aroclor-1016				CAS #: 12674-11-2		
2.424	2.424	0.000	13907110 1000.00	1000	80.00- 120.00	100.00
2.700	2.702	-0.002	11061418 1000.00	1100	59.54- 99.54	79.54
2.792	2.794	-0.002	11880339 1000.00	1010	65.43- 105.43	85.43
2.830	2.832	-0.002	7106069 1000.00	1080	31.10- 71.10	51.10
3.040	3.043	-0.003	9155263 1000.00	1060	45.83- 85.83	65.83

Average of Peak Amounts = 1.05e+03

7 Aroclor-1260				CAS #: 11096-82-5		
3.767	3.769	-0.002	18000993 1000.00	1070	80.00- 120.00	100.00
3.929	3.932	-0.003	27272686 1000.00	1100	131.51- 171.51	151.51
4.159	4.163	-0.004	16195879 1000.00	1100	69.97- 109.97	89.97
4.303	4.305	-0.002	16967452 1000.00	1120	74.26- 114.26	94.26
4.482	4.484	-0.002	38454942 1000.00	1120	193.63- 233.63	213.63

Average of Peak Amounts = 1.1e+03

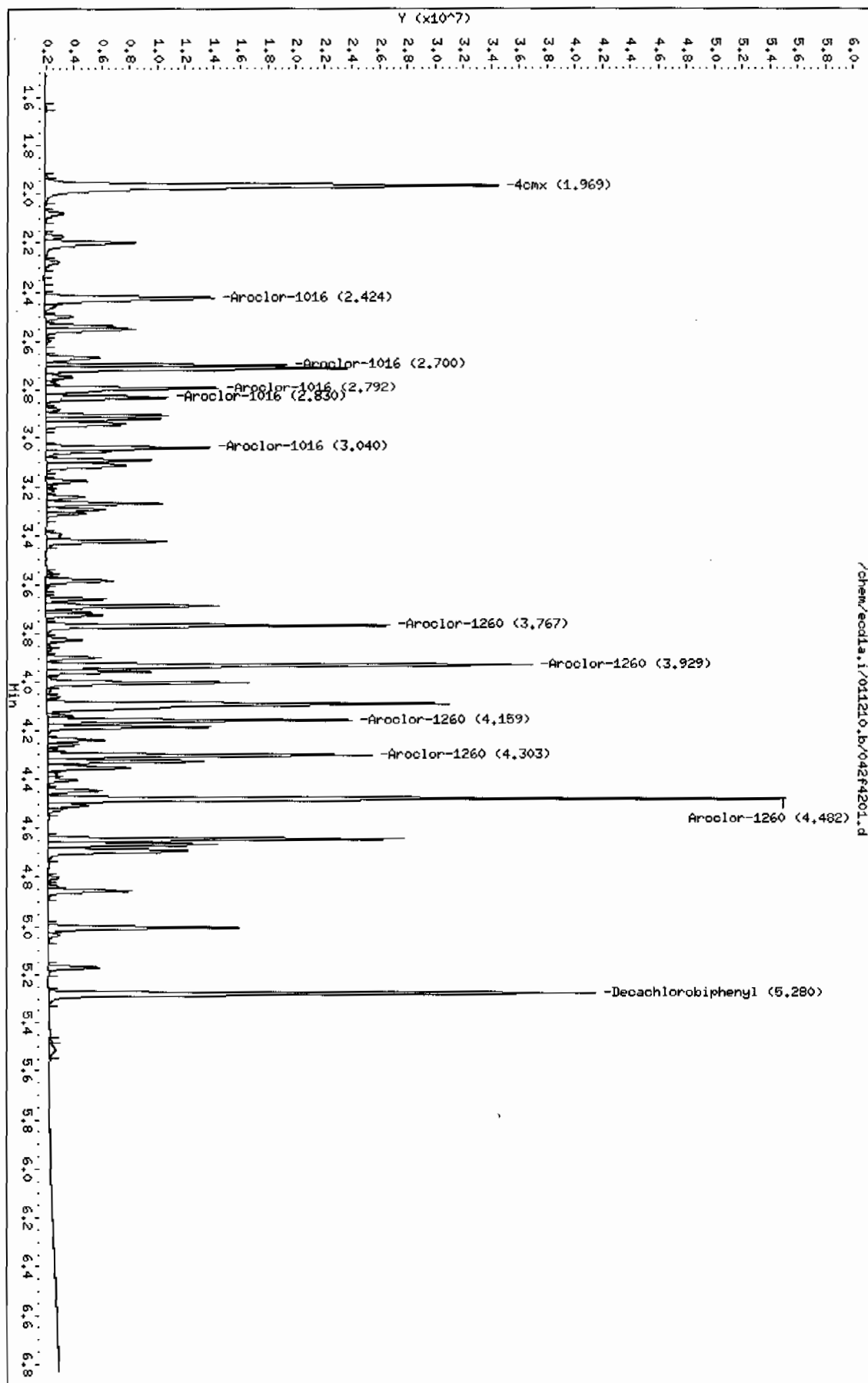
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Date: 12-JAN-2010 15:41  
Client ID: AR16004  
Sample Info: IMA100104-60 04

Instrument: eodla.i

Page 1

Column phase: CLP1

Operator: YS1  
Column diameter: 0.25





GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011210.b/042b4201.d

Lab Smp Id: WAR100104-60 04

Client Smp ID: AR166004

Inj Date : 12-JAN-2010 15:41

Operator : YSl

Inst ID: ecd1a.i

Smp Info : |WAR100104-60 04

Misc Info :

Comment :

Method : /chem/ecdl1a.i/011210.b/ECD1-B-8082-121409.m

Meth Date : 23-Jan-2010 10:53 yip00818 Quant Type: ESTD

Cal Date : 14-DEC-2009 12:16

Cal File: 044b4401.d

Als bottle: 42

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1660.sub

Target Version: 3.50

Sample Matrix: None

Processing Host: hpc1p1

AMOUNTS

			CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	( ug/L)	TARGET RANGE	RATIO
==	==	==	=====	=====	=====	=====
\$ 11 4cmx				CAS #: 877-09-8		
2.299	2.299	0.000	28608132 100.000	100	80.00- 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3		
5.943	5.945	-0.002	22106947 100.000	99.7	80.00- 120.00	100.00
-----						
1 Aroclor-1016				CAS #: 12674-11-2		
3.194	3.195	-0.001	13225779 1000.00	1050	80.00- 120.00	100.00 (M)
3.278	3.279	-0.001	8707295 1000.00	933	45.84- 85.84	65.84
3.341	3.342	-0.001	5364897 1000.00	991	20.56- 60.56	40.56
3.568	3.569	-0.001	6845828 1000.00	971	31.76- 71.76	51.76
3.644	3.645	-0.001	6460528 1000.00	986	28.85- 68.85	48.85
Average of Peak Amounts =				986		
-----						
7 Aroclor-1260				CAS #: 11096-82-5		
4.334	4.335	-0.001	13271096 1000.00	970	80.00- 120.00	100.00
4.459	4.459	0.000	16113038 1000.00	1000	101.41- 141.41	121.41
4.724	4.726	-0.002	12330115 1000.00	981	72.91- 112.91	92.91
4.899	4.899	0.000	12677075 1000.00	990	75.52- 115.52	95.52
5.044	5.046	-0.002	28235768 1000.00	1010	192.76- 232.76	212.76
Average of Peak Amounts =				992		

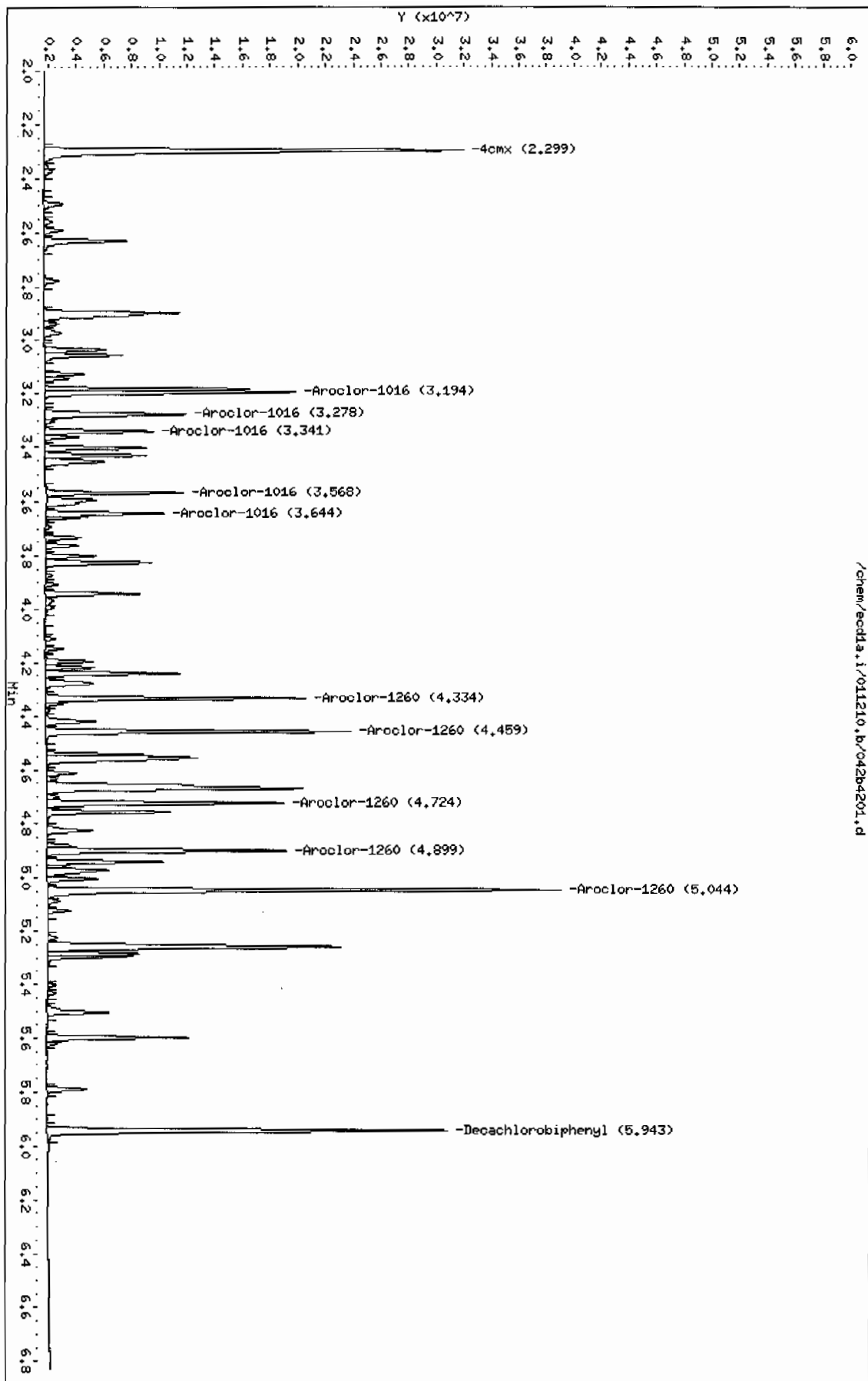
QC Flag Legend

M - Compound response manually integrated.

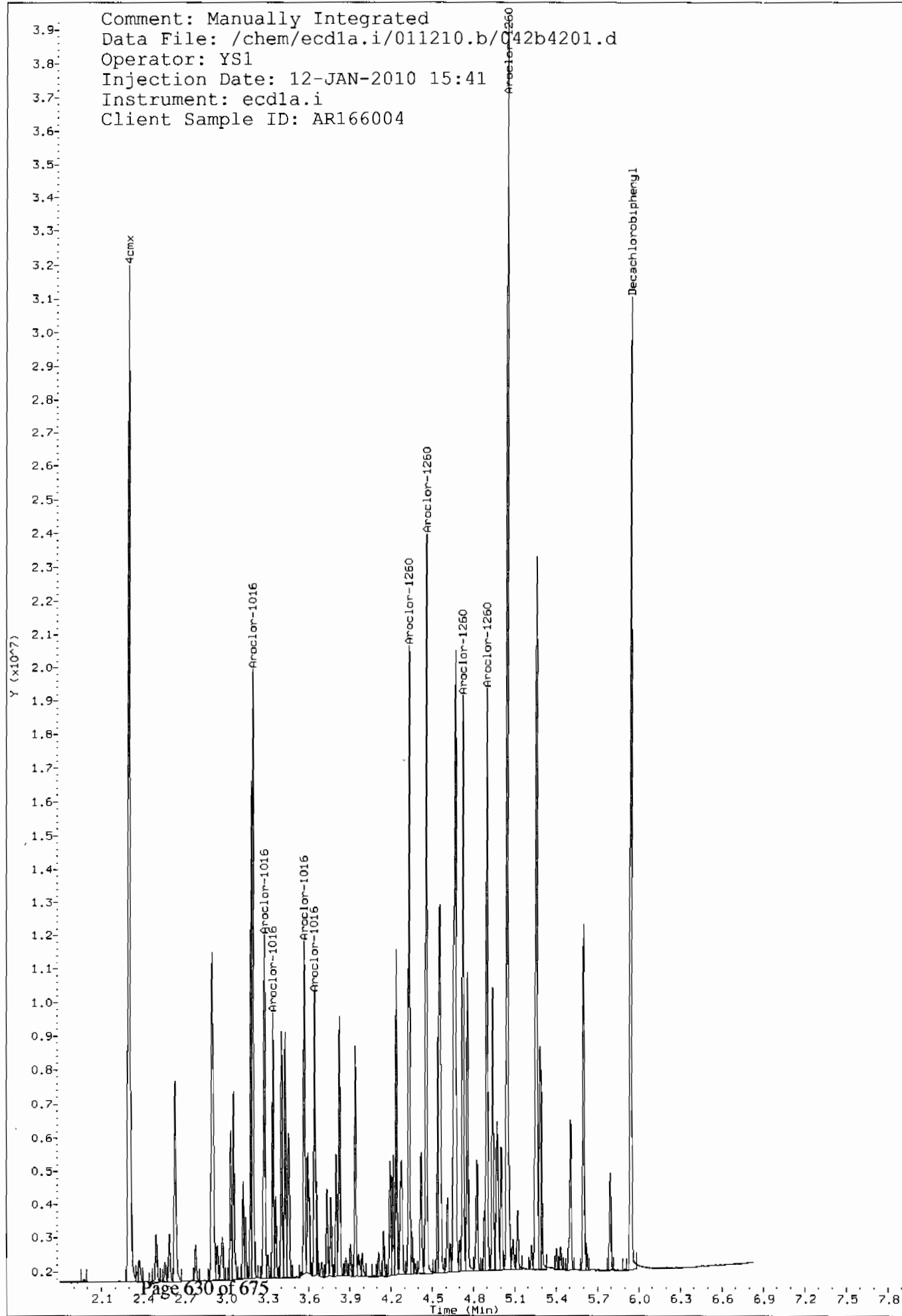
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Date: 12-JAN-2010 15:41  
Client ID: AR166004  
Sample Info: INAR100104-60 04

Column phase: CLP2

Instrument: ecdd1a.i  
Operator: YSL  
Column diameter: 0.25

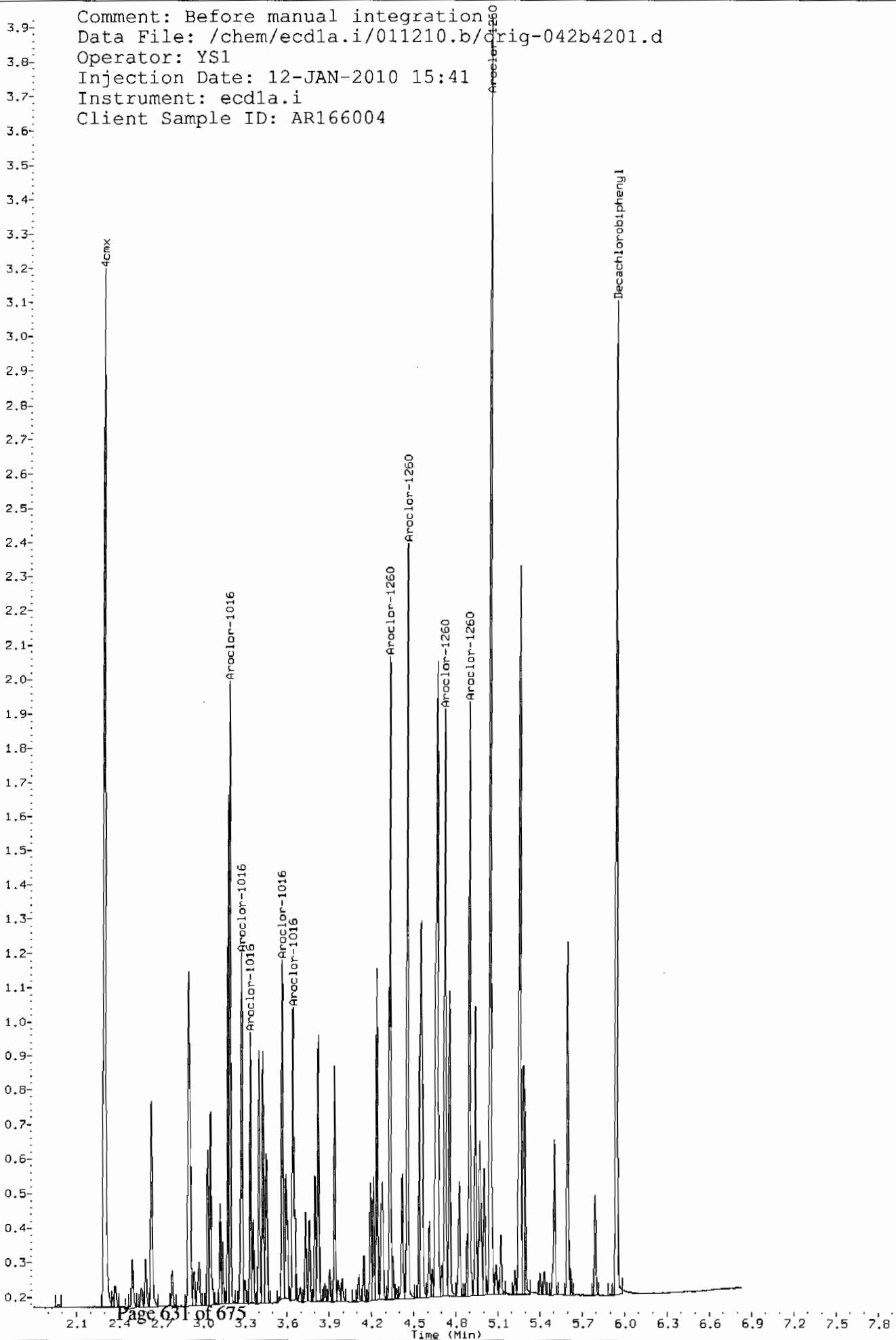


Comment: Manually Integrated  
Data File: /chem/ecdl1a.i/011210.b/042b4201.d  
Operator: YS1  
Injection Date: 12-JAN-2010 15:41  
Instrument: ecd1a.i  
Client Sample ID: AR166004



Comment: Before manual integration  
Data File: /chem/ecdl1.i/011210.b/orig-042b4201.d  
Operator: YS1  
Injection Date: 12-JAN-2010 15:41  
Instrument: ecd1a.i  
Client Sample ID: AR166004

Y (x10<sup>7</sup>)



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.: 10-1127

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

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 1 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.: 10-1127

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	SI 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	PIBLK02	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	PIBLK03	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.

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.: 10-1127

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	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	

S1 = 4cmx  
DCB = Decachlorobiphenyl

QC LIMITS  
(+/- 0.03 MINUTES)  
(+/- 0.03 MINUTES)

# Column used to flag retention time values with an asterisk.  
\* Values outside of QC limits.



8D  
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1127

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	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

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  
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GEL LABORATORIES LLC      Contract: N/A  
 Lab Code: N/A      Case No.: N/A      SAS No.: N/A      SDG No.: 10-1127  
 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	01/12/10	0748	1.97	5.28
02	ZZZZZ	ZZZZZ	01/12/10	0759	1.97	5.28
03	AR125401	WAR091216-54	01/12/10	0809		
04	ZZZZZ	ZZZZZ	01/12/10	0820		
05	AR124801	WAR091217-48	01/12/10	0830		
06	AR123201	WAR100104-32	01/12/10	0841		
07	AR122101	WAR100104-21	01/12/10	0851		
08	AR166001	WAR100104-60	01/12/10	0902	1.97	5.28
09	AR124201	WAR091217-42	01/12/10	0912		
10	AR126201	WAR100104-62	01/12/10	0923		
11	AR126801	WAR100111-68	01/12/10	0933		
12	DDTANALOGSTD	WAR091219-DD	01/12/10	0944		
13	PIBLK02	WAR100105-99	01/12/10	0954	1.97	5.28
14	ZZZZZ	ZZZZZ	01/12/10	1005	1.97	5.28
15	ZZZZZ	ZZZZZ	01/12/10	1015	1.97	5.28
16	ZZZZZ	ZZZZZ	01/12/10	1026	1.98	5.28
17	ZZZZZ	ZZZZZ	01/12/10	1038	1.98	5.28
18	ZZZZZ	ZZZZZ	01/12/10	1051	1.98	5.28
19	AR166002	WAR100104-60	01/12/10	1103	1.97	5.28
20	PIBLK03	WAR100105-99	01/12/10	1114	1.97	5.28
21	PBLK01	1202012544	01/12/10	1124	1.97	5.28
22	PBLK01LCS	1202012545	01/12/10	1135	1.97	5.28
23	ZZZZZ	ZZZZZ	01/12/10	1146	1.97	5.28
24	ZZZZZ	ZZZZZ	01/12/10	1158	1.97	5.28
25	ZZZZZ	ZZZZZ	01/12/10	1211	1.97	5.28
26	ZZZZZ	ZZZZZ	01/12/10	1223	1.97	5.28
27	ZZZZZ	ZZZZZ	01/12/10	1236	1.97	5.28
28	ZZZZZ	ZZZZZ	01/12/10	1249	1.97	5.28
29	ZZZZZ	ZZZZZ	01/12/10	1301	1.97	5.28
30	RE12-10-7619	244142001	01/12/10	1314	1.97	5.28
31	AR166003	WAR100104-60	01/12/10	1327	1.97	5.28
32	PIBLK04	WAR100105-99	01/12/10	1337	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  
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GEL LABORATORIES LLC      Contract: N/A  
 Lab Code: N/A      Case No.: N/A      SAS No.: N/A      SDG No.: 10-1127  
 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	RE12-10-7618	244142002	01/12/10	1348	1.97
02	RE12-10-7623	244142003	01/12/10	1400	1.97
03	RE12-10-7622	244142004	01/12/10	1413	1.97
04	RE12-10-7621	244142005	01/12/10	1425	1.97
05	RE12-10-7617	244142006	01/12/10	1438	1.97
06	RE12-10-7620	244142007	01/12/10	1451	1.97
07	RE12-10-7624	244142008	01/12/10	1503	1.97
08	RE12-10-7656	244142017	01/12/10	1516	1.97
09	RE12-10-7655	244142018	01/12/10	1528	1.97
10	AR166004	WAR100104-60	01/12/10	1541	1.97
11	PIBLK05	WAR100105-99	01/12/10	1551	1.97
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					

QC LIMITS  
 S1 = 4cmx      (+/- 0.03 MINUTES)  
 DCB = Decachlorobiphenyl      (+/- 0.03 MINUTES)

# Column used to flag retention time values with an asterisk.  
 \* Values outside of QC limits.

8D  
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GEL LABORATORIES LLC      Contract: N/A  
 Lab Code: N/A      Case No.: N/A      SAS No.: N/A      SDG No.: 10-1127  
 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: 5.95			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #	
01	PIBLK01	WAR100105-99	01/12/10	0748	2.30	5.94
02	ZZZZZ	ZZZZZ	01/12/10	0759	2.30	5.94
03	AR125401	WAR091216-54	01/12/10	0809		
04	ZZZZZ	ZZZZZ	01/12/10	0820		
05	AR124801	WAR091217-48	01/12/10	0830		
06	AR123201	WAR100104-32	01/12/10	0841		
07	AR122101	WAR100104-21	01/12/10	0851		
08	AR166001	WAR100104-60	01/12/10	0902	2.30	5.95
09	AR124201	WAR091217-42	01/12/10	0912		
10	AR126201	WAR100104-62	01/12/10	0923		
11	AR126801	WAR100111-68	01/12/10	0933		
12	DDTANALOGSTD	WAR091219-DD	01/12/10	0944		
13	PIBLK02	WAR100105-99	01/12/10	0954	2.30	5.95
14	ZZZZZ	ZZZZZ	01/12/10	1005	2.30	5.94
15	ZZZZZ	ZZZZZ	01/12/10	1015	2.30	5.94
16	ZZZZZ	ZZZZZ	01/12/10	1026	2.31	5.95
17	ZZZZZ	ZZZZZ	01/12/10	1038	2.31	5.95
18	ZZZZZ	ZZZZZ	01/12/10	1051	2.31	5.94
19	AR166002	WAR100104-60	01/12/10	1103	2.30	5.94
20	PIBLK03	WAR100105-99	01/12/10	1114	2.30	5.94
21	PBLK01	1202012544	01/12/10	1124	2.30	5.94
22	PBLK01LCS	1202012545	01/12/10	1135	2.30	5.94
23	ZZZZZ	ZZZZZ	01/12/10	1146	2.30	5.94
24	ZZZZZ	ZZZZZ	01/12/10	1158	2.30	5.94
25	ZZZZZ	ZZZZZ	01/12/10	1211	2.30	5.94
26	ZZZZZ	ZZZZZ	01/12/10	1223	2.30	5.94
27	ZZZZZ	ZZZZZ	01/12/10	1236	2.30	5.94
28	ZZZZZ	ZZZZZ	01/12/10	1249	2.30	5.94
29	ZZZZZ	ZZZZZ	01/12/10	1301	2.30	5.94
30	RE12-10-7619	244142001	01/12/10	1314	2.30	5.94
31	AR166003	WAR100104-60	01/12/10	1327	2.30	5.94
32	PIBLK04	WAR100105-99	01/12/10	1337	2.30	5.94

S1 = 4cmx      QC LIMITS  
 (+/- 0.03 MINUTES)  
 DCB = Decachlorobiphenyl      (+/- 0.03 MINUTES)

# Column used to flag retention time values with an asterisk.  
 \* Values outside of QC limits.

8D  
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GEL LABORATORIES LLC      Contract: N/A  
 Lab Code: N/A      Case No.: N/A      SAS No.: N/A      SDG No.: 10-1127  
 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: 5.95		
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	RE12-10-7618	244142002	01/12/10	1348	2.30
02	RE12-10-7623	244142003	01/12/10	1400	2.30
03	RE12-10-7622	244142004	01/12/10	1413	2.30
04	RE12-10-7621	244142005	01/12/10	1425	2.30
05	RE12-10-7617	244142006	01/12/10	1438	2.30
06	RE12-10-7620	244142007	01/12/10	1451	2.30
07	RE12-10-7624	244142008	01/12/10	1503	2.30
08	RE12-10-7656	244142017	01/12/10	1516	2.30
09	RE12-10-7655	244142018	01/12/10	1528	2.30
10	AR166004	WAR100104-60	01/12/10	1541	2.30
11	PIBLK05	WAR100105-99	01/12/10	1551	2.30
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					

QC LIMITS

S1 = 4cmx      (+/- 0.03 MINUTES)  
 DCB = Decachlorobiphenyl      (+/- 0.03 MINUTES)

# Column used to flag retention time values with an asterisk.  
 \* Values outside of QC limits.

## Identification Summary

Page 1 of 1

SDG Number: 10-1127

Client ID: LCS for batch 940402

Lab Sample ID: 1202012545

Data File: 022f2201.d

Data File: 022b2201.d

Inst: ECD1A.I\_1

Inst: ECD1A.I\_2

Column: CLP1

Column: CLP2

Analyzed: 12-JAN-10 11:35

Analyzed: 12-JAN-10 11:35

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
<b>Aroclor-1016</b>							3.82
Column 1	1	2.42	2.39 - 2.45	20.4		ug/kg	
	2	2.7	2.67 - 2.73	21.5		ug/kg	
	3	2.79	2.76 - 2.82	20.5		ug/kg	
	4	2.83	2.8 - 2.86	21.4		ug/kg	
	5	3.04	3.01 - 3.07	21.5		ug/kg	
					21.1		
Column 2	1	3.2	3.17 - 3.23	20.9		ug/kg	
	2	3.28	3.25 - 3.31	19.4		ug/kg	
	3	3.34	3.31 - 3.37	20.3		ug/kg	
	4	3.57	3.54 - 3.6	20.6		ug/kg	
	5	3.64	3.62 - 3.68	20.3		ug/kg	
					20.3		
<b>Aroclor-1260</b>							7.73
Column 1	1	3.77	3.74 - 3.8	23.2		ug/kg	
	2	3.93	3.9 - 3.96	22.9		ug/kg	
	3	4.16	4.13 - 4.19	24		ug/kg	
	4	4.3	4.28 - 4.34	24.7		ug/kg	
	5	4.48	4.45 - 4.51	25.3		ug/kg	
					24		
Column 2	1	4.33	4.31 - 4.37	21.6		ug/kg	
	2	4.46	4.43 - 4.49	22.4		ug/kg	
	3	4.72	4.7 - 4.76	22		ug/kg	
	4	4.9	4.87 - 4.93	22.2		ug/kg	
	5	5.05	5.02 - 5.08	23		ug/kg	
					22.2		

# QUALITY CONTROL DATA

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

SDG Number: 10-1127  
Lab Sample ID: 1202012544  
Client Sample: QC for batch 940402  
Client ID: MB for batch 940402  
Batch ID: 940403  
Run Date: 01/12/2010 11:24  
Prep Date: 01/11/2010 19:04  
Data File: 021f2101-1.d  
021b2101-1.d

Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.I  
Analyst: YSI  
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/011210.b/021f2101-1.d  
Report Date: 23-Jan-2010 10:49

Page 1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/011210.b/021f2101-1.d  
Lab Smp Id: 1202012544 Client Smp ID: PBLK01  
Inj Date : 12-JAN-2010 11:24  
Operator : YS1 Inst ID: ecdla.i  
Smp Info : |1202012544|1|  
Misc Info : |ECD82P\_1S|940403|SVA|QC A|SOIL|MB|||  
Comment :  
Method : /chem/ecdla.i/011210.b/ECD1-F-8082-121409.m  
Meth Date : 23-Jan-2010 10:48 yip00818 Quant Type: ESTD  
Cal Date : 14-DEC-2009 11:34 Cal File: 040f4001.d  
Als bottle: 21 QC Sample: BLANK  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1127.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

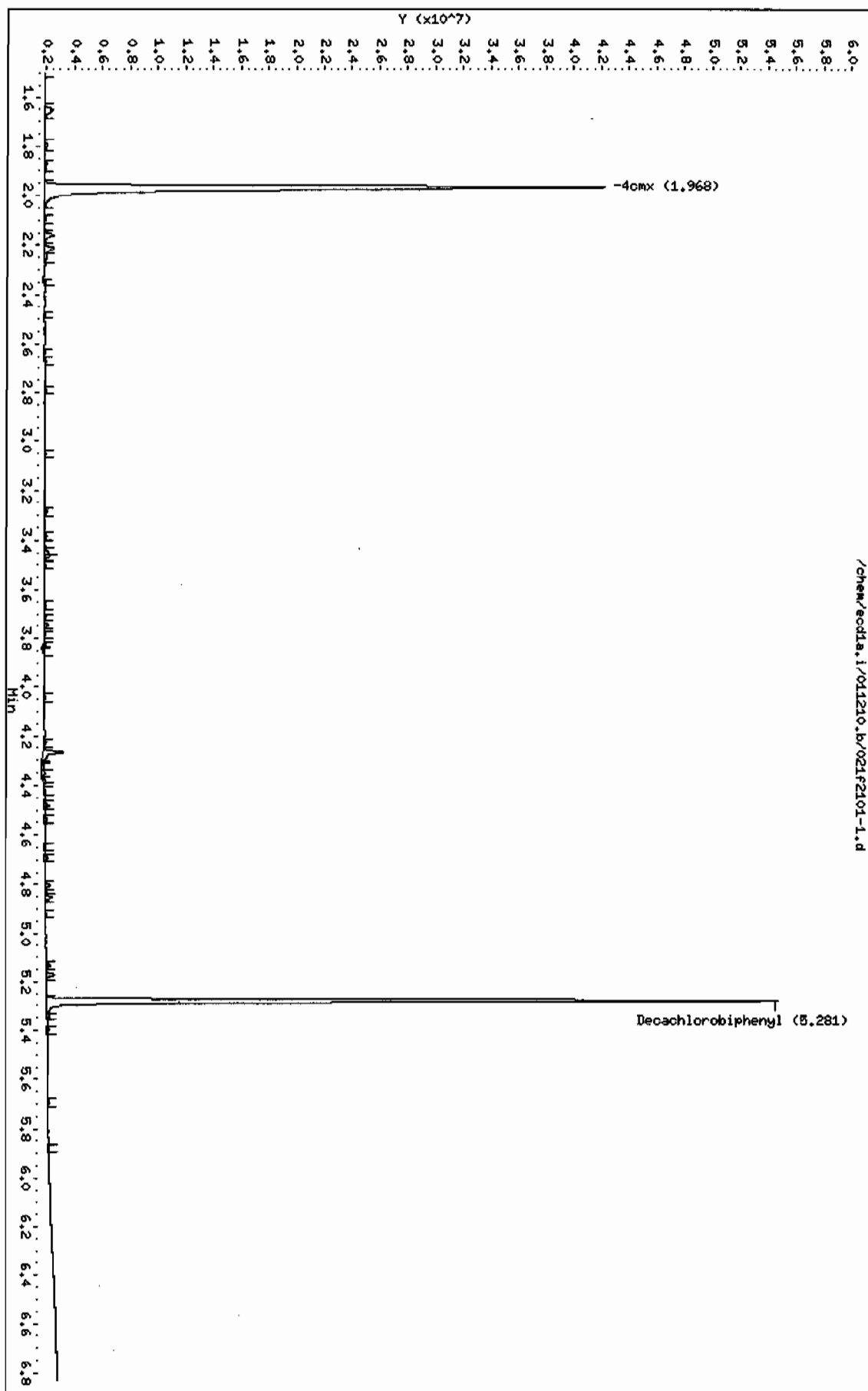
CONCENTRATIONS

RT	EXP RT	DLT RT	ON-COL	FINAL	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
=====								
CAS #: 877-09-8								
1.968	1.969	-0.001	46967099	131.383	4.4	80.00- 120.00	100.00	
-----								
CAS #: 2051-24-3								
5.281	5.283	-0.002	40527430	134.192	4.5	80.00- 120.00	100.00	
-----								

Data File: /chem/ecdda.i/011210.b/021f2101-1.d  
Date: 12-JUN-2010 11:24  
Client ID: PELK01  
Sample Info: 1120201254111  
Volume Injected (uL): 1.0  
Column phase: CLP1

Instrument: ecdda.i  
Operator: YS1  
Column diameter: 0.25

Page 1



Data File: /chem/ecdl1a.i/011210.b/021b2101-1.d  
 Report Date: 23-Jan-2010 10:49

Page 1

# GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011210.b/021b2101-1.d  
 Lab Smp Id: 1202012544 Client Smp ID: PBLK01  
 Inj Date : 12-JAN-2010 11:24  
 Operator : YS1 Inst ID: ecdl1a.i  
 Smp Info : |1202012544|1|  
 Misc Info : |ECD82P\_1S|940403|SVA|QC A|SOIL|MB|||  
 Comment :  
 Method : /chem/ecdl1a.i/011210.b/ECD1-B-8082-121409.m  
 Meth Date : 23-Jan-2010 10:48 yip00818 Quant Type: ESTD  
 Cal Date : 14-DEC-2009 12:16 Cal File: 044b4401.d  
 Als bottle: 21 QC Sample: BLANK  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: 10-1127.sub  
 Target Version: 3.50 Sample Matrix: Soil  
 Processing Host: hpclp1

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

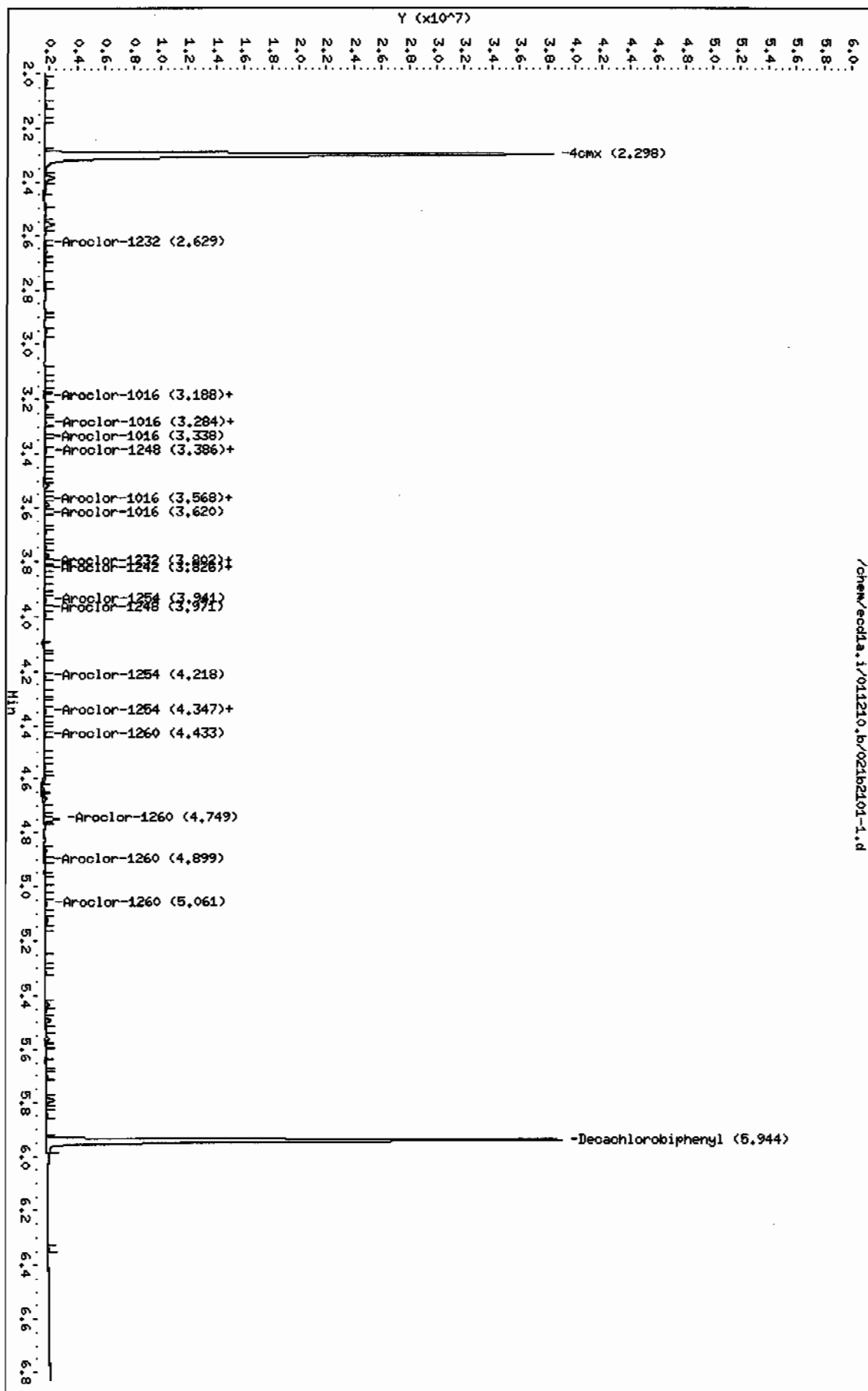
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS						
		ON-COL		FINAL		
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
\$ 11 4cmx					CAS #: 877-09-8	
2.298	2.299	-0.001	34773482	121.867	4.1 80.00- 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3	
5.944	5.945	-0.001	29068897	131.067	4.4 80.00- 120.00	100.00

Data File: /chem/ecdda.i/011210.b/021b2101-1.d  
 Date: 12-JAN-2010 11:24  
 Client ID: PBLK01  
 Sample Info: 11202012544111  
 Volume Injected (uL): 1.0  
 Column phase: CLP2

Instrument: ecdda.i  
 Operator: YS1  
 Column diameter: 0.25



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

SDG Number: 10-1127

Lab Sample ID: 1202012545

Client Sample: QC for batch 940402

Client ID: LCS for batch 940402

Batch ID: 940403

Run Date: 01/12/2010 11:35

Prep Date: 01/11/2010 19:04

Data File: 022f2201-1.d

022b2201-1.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		21.1	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		24.0	ug/kg	1.11	3.33	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL  
Data file : /chem/ecdla.i/011210.b/022f2201-1.d  
Lab Smp Id: 1202012545 Client Smp ID: PBLK01LCS  
Inj Date : 12-JAN-2010 11:35  
Operator : YS1 Inst ID: ecdla.i  
Smp Info : |1202012545|1|  
Misc Info : |ECD82P\_1S|940403|SVA|QC A|SOIL|LCS|||  
Comment :  
Method : /chem/ecdla.i/011210.b/ECD1-F-8082-121409.m  
Meth Date : 23-Jan-2010 10:48 yip00818 Quant Type: ESTD  
Cal Date : 14-DEC-2009 11:34 Cal File: 040f4001.d  
Als bottle: 22 QC Sample: LCS  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1127.sub  
Target Version: 3.50 Sample Matrix: Soil  
Processing Host: hpcipl

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

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

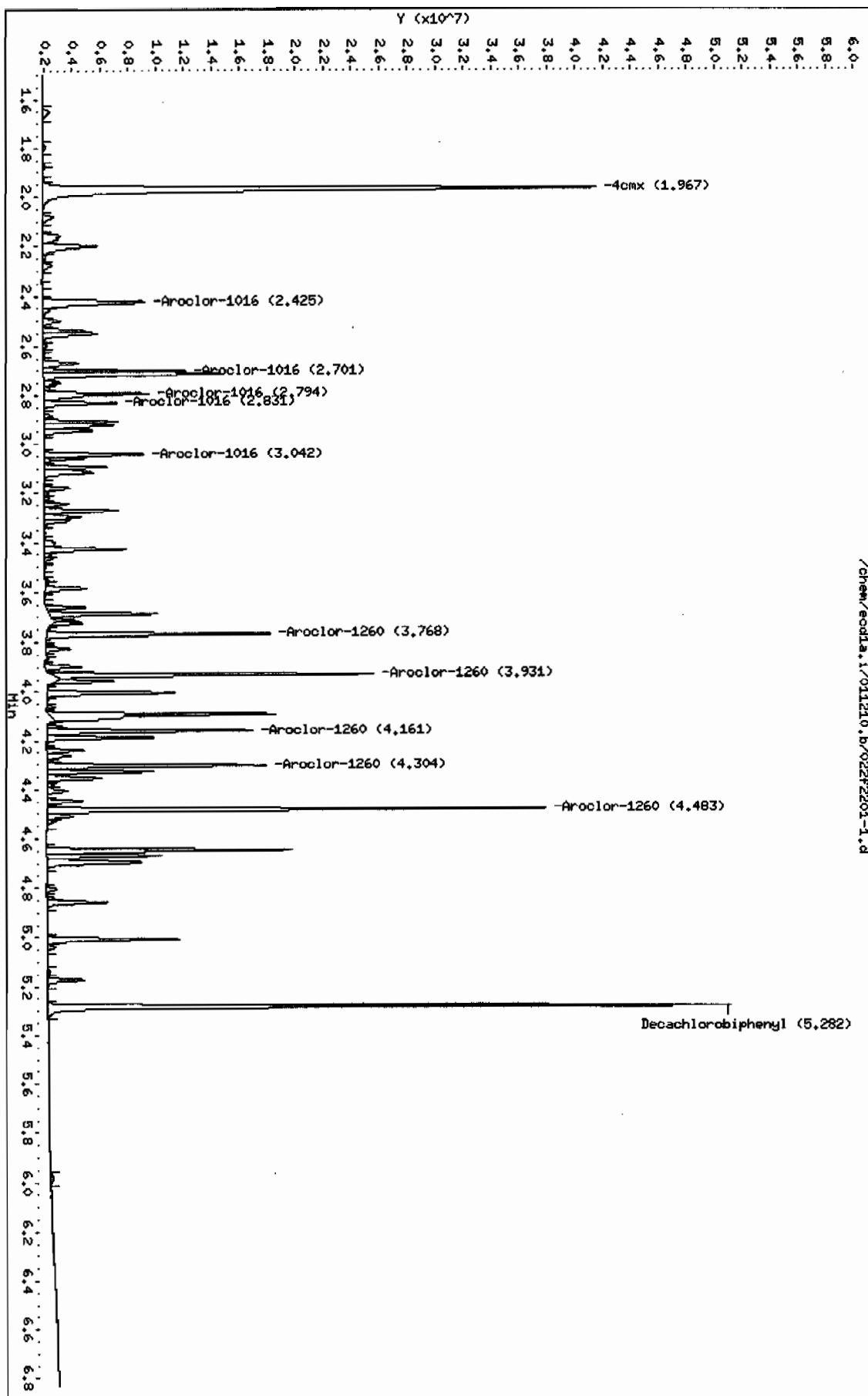
Cpnd Variable Local Compound Variable

CONCENTRATIONS							
RT	EXP RT	DLT RT	RESPONSE	ON-COL ( ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
11	4cmx						
1.967	1.969	-0.002	46854408	131.068	4.4	80.00- 120.00	100.00
12	Decachlorobiphenyl						
5.282	5.283	-0.001	37971519	125.729	4.2	80.00- 120.00	100.00
1	Aroclor-1016						
2.425	2.424	0.001	8504367	613.287	20.4	80.00- 120.00	100.00
2.701	2.702	-0.001	6527683	646.451	21.5	56.95- 96.95	76.76
2.794	2.794	0.000	7247117	616.408	20.5	64.78- 104.78	85.22
2.831	2.832	-0.001	4232148	641.331	21.4	30.82- 70.82	49.76

			CONCENTRATIONS					
			ON-COL	FINAL				
RT	EXP RT	DLT RT	RESPONSE	( ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	=====	
1 Aroclor-1016 (continued)								
3.042	3.043	-0.001	5584300	643.842	21.5	45.65- 85.65	65.66	
Average of Peak Concentrations =					21.1			
-----								
7 Aroclor-1260					CAS #: 11096-82-5			
3.768	3.769	-0.001	11662396	696.173	23.2	80.00- 120.00	100.00	
3.931	3.932	-0.001	16976594	686.128	22.9	132.05- 172.05	145.57	
4.161	4.163	-0.002	10582860	720.543	24.0	70.36- 110.36	90.74	
4.304	4.305	-0.001	11236423	739.992	24.7	74.40- 114.40	96.35	
4.483	4.484	-0.001	26113549	760.210	25.3	195.73- 235.73	223.91	
Average of Peak Concentrations =					24.0			

Data File: /chem/ecdl.a.i/011210.b/022f2201-1.d  
 Date: 12-JUN-2010 11:35  
 Client ID: PRLK01LCS  
 Sample Info: 1120201254511  
 Volume Injected (uL): 1.0  
 Column Phase: CLP1

Instrument: ecdl.a.i  
 Operator: YSA  
 Column diameter: 0.25





GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011210.b/022b2201-1.d  
 Lab Smp Id: 1202012545 Client Smp ID: PBLK01LCS  
 Inj Date : 12-JAN-2010 11:35  
 Operator : YS1 Inst ID: ecd1a.i  
 Smp Info : |1202012545|1|  
 Misc Info : |ECD82P\_1S|940403|SVA|QC A|SOIL|LCS|||  
 Comment :  
 Method : /chem/ecdl1a.i/011210.b/ECD1-B-8082-121409.m  
 Meth Date : 23-Jan-2010 10:48 yip00818 Quant Type: ESTD  
 Cal Date : 14-DEC-2009 12:16 Cal File: 044b4401.d  
 Als bottle: 22 QC Sample: LCS  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: 10-1127.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

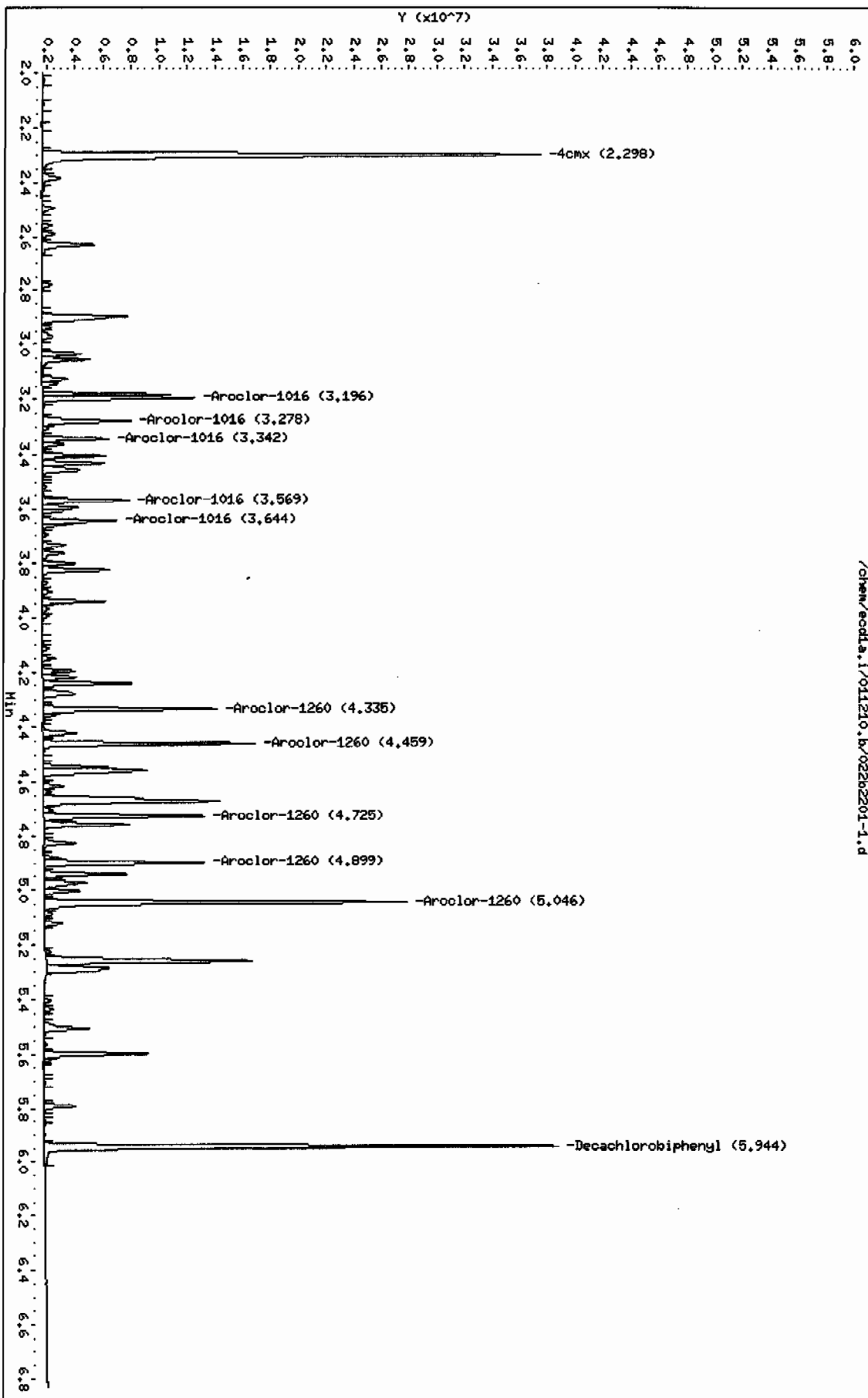
Cpnd Variable Local Compound Variable

CONCENTRATIONS						
		ON-COL		FINAL		
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
=====						
\$ 11 4cmx				CAS #: 877-09-8		
2.298	2.299	-0.001	34638630 121.394	4.0	80.00- 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3		
5.944	5.945	-0.001	28530665 128.640	4.3	80.00- 120.00	100.00
-----						
1 Aroclor-1016				CAS #: 12674-11-2		
3.196	3.195	0.001	7903170 626.662	20.9	80.00- 120.00	100.00
3.278	3.279	-0.001	5435868 582.755	19.4	46.12- 86.12	68.78
3.342	3.342	0.000	3292343 608.418	20.3	20.86- 60.86	41.66
3.569	3.569	0.000	4351150 617.020	20.6	33.49- 73.49	55.06

CONCENTRATIONS									
			ON-COL		FINAL				
RT	EXP RT	DLT RT	RESPONSE	( ug/L)	(ug/Kg)	TARGET	RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	=====	=====	
1 Aroclor-1016 (continued)									
3.644	3.645	-0.001	3983564	608.110	20.3	29.37-	69.37	50.40	
Average of Peak Concentrations =					20.3				
-----									
7 Aroclor-1260					CAS #: 11096-82-5				
4.335	4.335	0.000	8864669	648.001	21.6	80.00-	120.00	100.00	
4.459	4.459	0.000	10750422	670.685	22.4	101.46-	141.46	121.27	
4.725	4.726	-0.001	8290666	659.878	22.0	72.86-	112.86	93.52	
4.899	4.899	0.000	8542315	666.843	22.2	75.54-	115.54	96.36	
5.046	5.046	0.000	19238490	689.609	23.0	193.04-	233.04	217.02	
Average of Peak Concentrations =					22.2				

Data File: /chem/ecdt1a.i/011210.b/02262201-1.d  
Date: 12-JAN-2010 11:35  
Client ID: PBLK01LCS  
Sample Info: 1120201254511  
Volume Injected (uL): 1.0  
Column Phase: CLP2

Instrument: ecdt1a.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 DATE: \_\_\_\_\_  
SOLVENT LOT DA385  
ALUMINA LOT 1230997-A  
COPPER LOT 236547-A

## Calibration &amp; QC Information

Initial Calibration Dates: See Calibration History and Standard Logbook.

Initial Calibration Std ID's: See Calibration History and Standard Logbook.

GEL SOP GL-OA-E-040 Polychlorinated Biphenyl: EPA 8082

Chromatogram Abbreviation Legend: AB-Assign Baseline, AP-Assign Peak,  
DNC-Do Not Call, DMP-Doesn't Match Pattern, NC-Not Confirmed, RT-Retention Time,  
BF-Before, AF-After.

Sequence Number: /chem/ecd1a.i/121409.b

Injection Volume: 0.5 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WAR091130-99 01	YS1	14-DEC-2009 04:44	1	121409	1.0	1	CLEAN
002f0201.d	WAR091211-60 01	YS1	14-DEC-2009 04:54	1	121409	1.0	1	IDUSE RE-ICAL
003f0301.d	WAR091102-54	YS1	14-DEC-2009 05:05	1	121409	1.0	1	IDUSE RE-ICAL
004f0401.d	WAR091102-42	YS1	14-DEC-2009 05:15	1	121409	1.0	1	IDUSE RE-ICAL
005f0501.d	WAR091027-48	YS1	14-DEC-2009 05:26	1	121409	1.0	1	IDUSE RE-ICAL
006f0601.d	WAR090930-32	YS1	14-DEC-2009 05:36	1	121409	1.0	1	PATTERN ONLY
007f0701.d	WAR090803-21	YS1	14-DEC-2009 05:47	1	121409	1.0	1	PATTERN ONLY
008f0801.d	WAR090803-62	YS1	14-DEC-2009 05:58	1	121409	1.0	1	PATTERN ONLY
009f0901.d	WAR091106-68	YS1	14-DEC-2009 06:08	1	121409	1.0	1	IDUSE RE-ICAL
010f1001.d	11660-1	YS1	14-DEC-2009 06:19	1	121409	1.0	1	IDUSE
011f1101.d	11660-2	YS1	14-DEC-2009 06:29	1	121409	1.0	1	IDUSE
012f1201.d	11660-3	YS1	14-DEC-2009 06:40	1	121409	1.0	1	IDUSE
013f1301.d	11660-4	YS1	14-DEC-2009 06:50	1	121409	1.0	1	IDUSE
014f1401.d	11660-5	YS1	14-DEC-2009 07:01	1	121409	1.0	1	IDUSE
015f1501.d	WAR091211-60 01	YS1	14-DEC-2009 07:11	1	121409	1.0	1	IDUSE

Instrument Batch: /chem/ecd1a.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		1.0		AR1254 I-CAL LEVEL 1	
017f1701.d	WAR091214-06 54	YS1	14-DEC-2009 07:32		121409		1.0		AR1254 I-CAL LEVEL 2	
018f1801.d	WAR091214-07 54	YS1	14-DEC-2009 07:43		121409		1.0		AR1254 I-CAL LEVEL 3	
019f1901.d	WAR091214-08 54	YS1	14-DEC-2009 07:53		121409		1.0		AR1254 I-CAL LEVEL 4	
020f2001.d	IAR091027-01	YS1	14-DEC-2009 08:04		121409		1.0		AR1254 I-CAL LEVEL 5	
021f2101.d	WAR091102-54	YS1	14-DEC-2009 08:14		121409		1.0		PASSED ON BOTH COLUMNS	
022f2201.d	WAR091214-09 42	YS1	14-DEC-2009 08:25		121409		1.0		AR1242 I-CAL LEVEL 1	
023f2301.d	WAR091214-10 42	YS1	14-DEC-2009 08:35		121409		1.0		AR1242 I-CAL LEVEL 2	
024f2401.d	WAR091214-11 42	YS1	14-DEC-2009 08:46		121409		1.0		AR1242 I-CAL LEVEL 3	
025f2501.d	WAR091214-12 42	YS1	14-DEC-2009 08:56		121409		1.0		AR1242 I-CAL LEVEL 4	
026f2601.d	IAR091111-01	YS1	14-DEC-2009 09:07		121409		1.0		AR1242 I-CAL LEVEL 5	
027f2701.d	WAR091102-42	YS1	14-DEC-2009 09:17		121409		1.0		PASSED ON BOTH COLUMNS	
028f2801.d	WAR091214-13 48	YS1	14-DEC-2009 09:28		121409		1.0		AR1248 I-CAL LEVEL 1	
029f2901.d	WAR091214-14 48	YS1	14-DEC-2009 09:38		121409		1.0		AR1248 I-CAL LEVEL 2	
030f3001.d	WAR091214-15 48	YS1	14-DEC-2009 09:49		121409		1.0		AR1248 I-CAL LEVEL 3	
031f3101.d	WAR091214-16 48	YS1	14-DEC-2009 09:59		121409		1.0		AR1248 I-CAL LEVEL 4	
032f3201.d	IAR091027-02	YS1	14-DEC-2009 10:10		121409		1.0		AR1248 I-CAL LEVEL 5	
033f3301.d	WAR091027-48	YS1	14-DEC-2009 10:20		121409		1.0		PASSED ON BOTH COLUMNS	
034f3401.d	WAR091214-01 60	YS1	14-DEC-2009 10:31		121409		1.0		AR1660 I-CAL LEVEL 1	
035f3501.d	WAR091214-02 60	YS1	14-DEC-2009 10:41		121409		1.0		AR1660 I-CAL LEVEL 2	
036f3601.d	WAR091214-03 60	YS1	14-DEC-2009 10:52		121409		1.0		AR1660 I-CAL LEVEL 3	
037f3701.d	WAR091214-04 60	YS1	14-DEC-2009 11:02		121409		1.0		AR1660 I-CAL LEVEL 4	
038f3801.d	IAR091102-01	YS1	14-DEC-2009 11:13		121409		1.0		AR1660 I-CAL LEVEL 5	
039f3901.d	WAR091211-60 01	YS1	14-DEC-2009 11:23		121409		1.0		PASSED ON BOTH COLUMNS	
040f4001.d	WAR091214-17 68	YS1	14-DEC-2009 11:34		121409		1.0		AR1268 I-CAL LEVEL 1	

Instrument Batch: /chem/ecdl1.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		1.0		AR1660 I-CAL LEVEL 3		
037f3701.d		WAR091214-04 60		YS1		14-DEC-2009 11:02				121409		1.0		AR1660 I-CAL LEVEL 4		
038f3801.d		IAR091102-01		YS1		14-DEC-2009 11:13				121409		1.0		AR1660 I-CAL LEVEL 5		
039f3901.d		WAR091211-60 01		YS1		14-DEC-2009 11:23				121409		1.0		PASSED ON BOTH COLUMNS		
040f4001.d		WAR091214-17 68		YS1		14-DEC-2009 11:34				121409		1.0		AR1268 I-CAL LEVEL 1		

041f4101.d	WAR091214-18 68	YS1	14-DEC-2009 11:44		121409		1.0		ARI268 I-CAL LEVEL 2
042f4201.d	WAR091214-19 68	YS1	14-DEC-2009 11:55		121409		1.0		ARI268 I-CAL LEVEL 3
043f4301.d	WAR091214-20 68	YS1	14-DEC-2009 12:06		121409		1.0		ARI268 I-CAL LEVEL 4
044f4401.d	IAR090817-02	YS1	14-DEC-2009 12:16		121409		1.0		ARI268 I-CAL LEVEL 5
045f4501.d	WAR091106-68	YS1	14-DEC-2009 12:27		121409		1.0		PASSED ON BOTH COLUMNS
046f4601.d	WAR091020-DDT	YS1	14-DEC-2009 12:37		121409		1.0		DDT ANALOG STANDARD
047f4701.d	WAR091130-99 02	YS1	14-DEC-2009 12:48		121409		1.0		CLEAN
048f4801.d	1201991693	YS1	14-DEC-2009 12:58		931140	10-782		1.0 QC A	UPLOAD BOTH COLUMNS, USE HIGHER
049f4901.d	1201991694	YS1	14-DEC-2009 13:09		931140	10-782		1.0 QC A	UPLOAD BOTH COLUMNS, USE HIGHER
050f5001.d	242297001	YS1	14-DEC-2009 13:19		931140	10-782		1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
051f5101.d	242297002	YS1	14-DEC-2009 13:30		931140	10-782		10.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
052f5201.d	242297003	YS1	14-DEC-2009 13:40		931140	10-782		1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
053f5301.d	242297004	YS1	14-DEC-2009 13:51		931140	10-782		5.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
054f5401.d	242297005	YS1	14-DEC-2009 14:03		931140	10-782		5.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
055f5501.d	242297006	YS1	14-DEC-2009 14:16		931140	10-782		10.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER

Instrument Batch: /chem/ecd1a.i/121409.b

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Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056f5601.d	242297007	YS1	14-DEC-2009 14:29	931140	10-782		5.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
057f5701.d	242297008	YS1	14-DEC-2009 14:41	931140	10-782		25.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
058f5801.d	WAR091211-60 02	YS1	14-DEC-2009 14:52		121409		1.0	PASSED ON BOTH COLUMNS
059f5901.d	WAR091130-99 03	YS1	14-DEC-2009 15:02		121409		1.0	CLEAN
060f6001.d	242297009	YS1	14-DEC-2009 15:13	931140	10-782		1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
061f6101.d	242297010	YS1	14-DEC-2009 15:25	931140	10-782		1.0 LANL	DCB LOW RE
062f6201.d	242297011	YS1	14-DEC-2009 15:38	931140	10-782		5.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
063f6301.d	242297012	YS1	14-DEC-2009 15:51	931140	10-782		5.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
064f6401.d	242297013	YS1	14-DEC-2009 16:03	931140	10-782		10.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER

1065f6501.d	1242305004	YS1	14-DEC-2009 16:16	931140	110-786	5.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
1066f6601.d	1201991695	YS1	14-DEC-2009 16:28	931140	110-786	5.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
1067f6701.d	1201991696	YS1	14-DEC-2009 16:41	931140	110-786	5.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
1068f6801.d	1242305005	YS1	14-DEC-2009 16:53	931140	110-786	5.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
1069f6901.d	1242305006	YS1	14-DEC-2009 17:06	931140	110-786	5.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
1070f7001.d	14091211-60 03	YS1	14-DEC-2009 17:19	121409	121409	1.0		PASSED ON BOTH COLUMNS
1071f7101.d	14091130-99 04	YS1	14-DEC-2009 17:31	121409	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

Instrument Batch: /chem/ecd1a.i/121409.b

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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	14091211-60 04	YS1	14-DEC-2009 19:50	121409	121409	1.0		PASSED ON BOTH COLUMNS
1083f8301.d	14091130-99 05	YS1	14-DEC-2009 20:03	121409	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	14091211-60 05	YS1	14-DEC-2009 20:53	121409	121409	1.0		PASSED ON BOTH COLUMNS
1088f8801.d	14091130-99 06	YS1	14-DEC-2009 21:06	121409	121409	1.0		CLEAN
1089f8901.d	1242297010	YS1	14-DEC-2009 21:19	931140	110-782	1.0	LANL	





## GEL ORGANIC RUN LOG

INSTRUMENT ID: ECD1

DATE: 01/13/2010 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/ecd1a.i/011210.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	112-JAN-2010 07:48	1	011210	1.0l	ICLEAN	
002f0201.d	WAR100104-60 01	YS1	112-JAN-2010 07:59	1	011210	1.0l	IDUSE RR FILE 8	
003f0301.d	WAR091216-54	YS1	112-JAN-2010 08:09	1	011210	1.0l	PASSED ON BOTH COLUMNS	
004f0401.d	WAR091217-42	YS1	112-JAN-2010 08:20	1	011210	1.0l	IDUSE RR FILE 9	
005f0501.d	WAR091217-48	YS1	112-JAN-2010 08:30	1	011210	1.0l	PASSED ON BOTH COLUMNS	
006f0601.d	WAR100104-32	YS1	112-JAN-2010 08:41	1	011210	1.0l	PATTERN ONLY	
007f0701.d	WAR100104-21	YS1	112-JAN-2010 08:51	1	011210	1.0l	PATTERN ONLY	
008f0801.d	WAR100104-60 01	YS1	112-JAN-2010 09:02	1	011210	1.0l	PASSED ON BOTH COLUMNS	
009f0901.d	WAR091217-42	YS1	112-JAN-2010 09:12	1	011210	1.0l	PASSED ON BOTH COLUMNS	
010f1001.d	WAR100104-62	YS1	112-JAN-2010 09:23	1	011210	1.0l	PATTERN ONLY	
011f1101.d	WAR100111-68	YS1	112-JAN-2010 09:33	1	011210	1.0l	PATTERN ONLY	
012f1201.d	WAR091219-DDT	YS1	112-JAN-2010 09:44	1	011210	1.0l	DDT ANALOG STANDARD	
013f1301.d	WAR100105-99 02	YS1	112-JAN-2010 09:54	1	011210	1.0l	ICLEAN	
014f1401.d	1202012930	YS1	112-JAN-2010 10:05	1940561	1244363	1.0l	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
015f1501.d	1202012931	YS1	112-JAN-2010 10:15	1940561	1244363	1.0l	QC A	UPLOAD BOTH COLUMNS, USE HIGHER

Instrument Batch: /chem/ecd1a.i/011210.b

Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
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016f1601.d   1244363001	YS1	12-JAN-2010 10:26	940561	244363	5.0 SCEG		UPLOAD BOTH COLUMNS, USE HIGHER
017f1701.d   1202012932	YS1	12-JAN-2010 10:38	940561	244363	5.0 QC A		UPLOAD BOTH COLUMNS, USE HIGHER
018f1801.d   1202012933	YS1	12-JAN-2010 10:51	940561	244363	5.0 QC A		UPLOAD BOTH COLUMNS, USE HIGHER
019f1901.d   WARI00104-60 02	YS1	12-JAN-2010 11:03		011210	1.0		PASSED ON BOTH COLUMNS
020f2001.d   WARI00105-99 03	YS1	12-JAN-2010 11:14		011210	1.0		CLEAN
021f2101.d   1202012544	YS1	12-JAN-2010 11:24	940403	110-1126	1.0 QC A		UPLOAD BOTH COLUMNS, USE HIGHER
022f2201.d   1202012545	YS1	12-JAN-2010 11:35	940403	110-1126	1.0 QC A		UPLOAD BOTH COLUMNS, USE HIGHER
023f2301.d   1244125001	YS1	12-JAN-2010 11:46	940403	110-1130	1.0 LANL		UPLOAD BOTH COLUMNS, USE HIGHER
024f2401.d   1244125002	YS1	12-JAN-2010 11:58	940403	110-1130	1.0 LANL		UPLOAD BOTH COLUMNS, USE HIGHER
025f2501.d   1244126019	YS1	12-JAN-2010 12:11	940403	110-1131	1.0 LANL		UPLOAD BOTH COLUMNS, USE HIGHER
026f2601.d   1202012546	YS1	12-JAN-2010 12:23	940403	110-1131	1.0 QC A		UPLOAD BOTH COLUMNS, USE HIGHER
027f2701.d   1202012547	YS1	12-JAN-2010 12:36	940403	110-1131	1.0 QC A		UPLOAD BOTH COLUMNS, USE HIGHER
028f2801.d   1244126020	YS1	12-JAN-2010 12:49	940403	110-1131	1.0 LANL		UPLOAD BOTH COLUMNS, USE HIGHER
029f2901.d   1244137001	YS1	12-JAN-2010 13:01	940403	110-1126	1.0 LANL		UPLOAD BOTH COLUMNS, USE HIGHER
030f3001.d   1244142001	YS1	12-JAN-2010 13:14	940403	110-1127	1.0 LANL		UPLOAD BOTH COLUMNS, USE HIGHER
031f3101.d   WARI00104-60 03	YS1	12-JAN-2010 13:27		011210	1.0		PASSED ON BOTH COLUMNS
032f3201.d   WARI00105-99 04	YS1	12-JAN-2010 13:37		011210	1.0		CLEAN
033f3301.d   1244142002	YS1	12-JAN-2010 13:48	940403	110-1127	1.0 LANL		UPLOAD BOTH COLUMNS, USE HIGHER
034f3401.d   1244142003	YS1	12-JAN-2010 14:00	940403	110-1127	1.0 LANL		UPLOAD BOTH COLUMNS, USE HIGHER
035f3501.d   1244142004	YS1	12-JAN-2010 14:13	940403	110-1127	1.0 LANL		UPLOAD BOTH COLUMNS, USE HIGHER

Page: 2

Instrument Batch: /chem/ecdla.i/011210.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d   1244142005	YS1	12-JAN-2010 14:25	940403	110-1127	1.0 LANL			UPLOAD BOTH COLUMNS, USE HIGHER
037f3701.d   1244142006	YS1	12-JAN-2010 14:38	940403	110-1127	1.0 LANL			UPLOAD BOTH COLUMNS, USE HIGHER
038f3801.d   1244142007	YS1	12-JAN-2010 14:51	940403	110-1127	1.0 LANL			UPLOAD BOTH COLUMNS, USE HIGHER
039f3901.d   1244142008	YS1	12-JAN-2010 15:03	940403	110-1127	1.0 LANL			UPLOAD BOTH COLUMNS, USE HIGHER
040f4001.d   1244142017	YS1	12-JAN-2010 15:16	940403	110-1127	1.0 LANL			UPLOAD BOTH COLUMNS, USE HIGHER

041f4101.d	244142018	YS1	12-JAN-2010 15:28	1940403	10-1127	1.01	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
042f4201.d	WARI00104-60 04	YS1	12-JAN-2010 15:41		1011210	1.01		PASSED ON BOTH COLUMNS
043f4301.d	WARI00105-99 05	YS1	12-JAN-2010 15:51		1011210	1.01		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.

Data File: /chem/ecdl1a.i/011210.b/026b2601.d  
Report Date: 23-Jan-2010 10:50

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011210.b/026b2601.d  
Lab Smp Id: 1202012546 Client Smp ID: RE12-10-7657MS  
Inj Date : 12-JAN-2010 12:23  
Operator : YS1 Inst ID: ecd1a.i  
Smp Info : |1202012546|1|  
Misc Info : |ECD82P\_1S|940403|SVA|QC A|SOIL|MS|||  
Comment :  
Method : /chem/ecdl1a.i/011210.b/ECD1-B-8082-121409.m  
Meth Date : 23-Jan-2010 10:48 yip00818 Quant Type: ESTD  
Cal Date : 14-DEC-2009 12:16 Cal File: 044b4401.d  
Als bottle: 26 QC Sample: MS  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1131.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	10.13920	% 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	2.299	0.000	33867293 118.691	4.4	80.00- 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl CAS #: 2051-24-3						
5.943	5.945	-0.002	27330329 123.228	4.6	80.00- 120.00	100.00
-----						
1 Aroclor-1016 CAS #: 12674-11-2						
3.195	3.195	0.000	7876825 624.573	23.1	80.00- 120.00	100.00(M)
3.278	3.279	-0.001	5344778 572.990	21.2	46.12- 86.12	67.85
3.342	3.342	0.000	3207830 592.800	22.0	20.86- 60.86	40.72
3.568	3.569	-0.001	4248114 602.409	22.3	33.49- 73.49	53.93

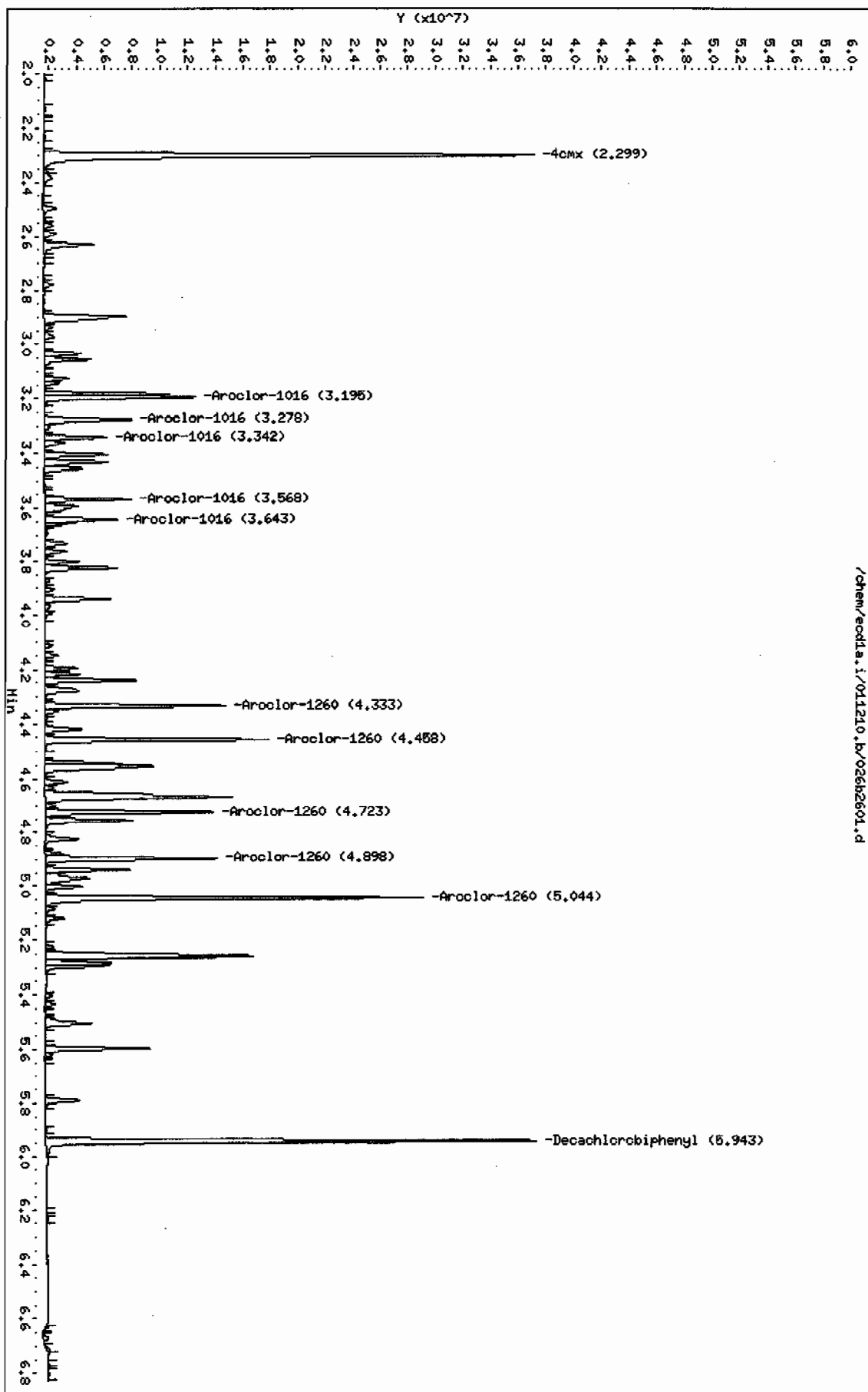
CONCENTRATIONS									
			ON-COL	FINAL					
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO			
==	=====	=====	=====	=====	=====	=====	=====		
1 Aroclor-1016 (continued)									
3.643	3.645	-0.002	3970304	606.085	22.4	29.37-	69.37	50.40	
Average of Peak Concentrations =					22.2				
-----									
7 Aroclor-1260					CAS #: 11096-82-5				
4.333	4.335	-0.002	9316110	681.001	25.2	80.00-	120.00	100.00	
4.458	4.459	-0.001	11534402	719.595	26.6	101.46-	141.46	123.81	
4.723	4.726	-0.003	8924159	710.300	26.3	72.86-	112.86	95.79	
4.898	4.899	-0.001	8987562	701.601	26.0	75.54-	115.54	96.47	
5.044	5.046	-0.002	20370694	730.193	27.0	193.04-	233.04	218.66	
Average of Peak Concentrations =					26.2				

#### QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/eod1a.i/011210.b/026b2601.d  
Date: 12-JAN-2010 12:23  
Client ID: RE12-10-7657MS  
Sample Info: 11202012546111  
Volume Injected (uL): 1.0  
Column Phase: CLP2

Instrument: eod1a.i  
Operator: YS1  
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011210.b/026f2601.d

Lab Smp Id: 1202012546

Client Smp ID: RE12-10-7657MS

Inj Date : 12-JAN-2010 12:23

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |1202012546|1|

Misc Info : |ECD82P\_1S|940403|SVA|QC A|SOIL|MS|||

Comment :

Method : /chem/ecdl1a.i/011210.b/ECD1-F-8082-121409.m

Meth Date : 23-Jan-2010 10:48 yip00818 Quant Type: ESTD

Cal Date : 14-DEC-2009 11:34

Cal File: 040f4001.d

Als bottle: 26

QC Sample: MS

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: 10-1131.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	10.13920	% Moisture

Cpnd Variable Local Compound Variable

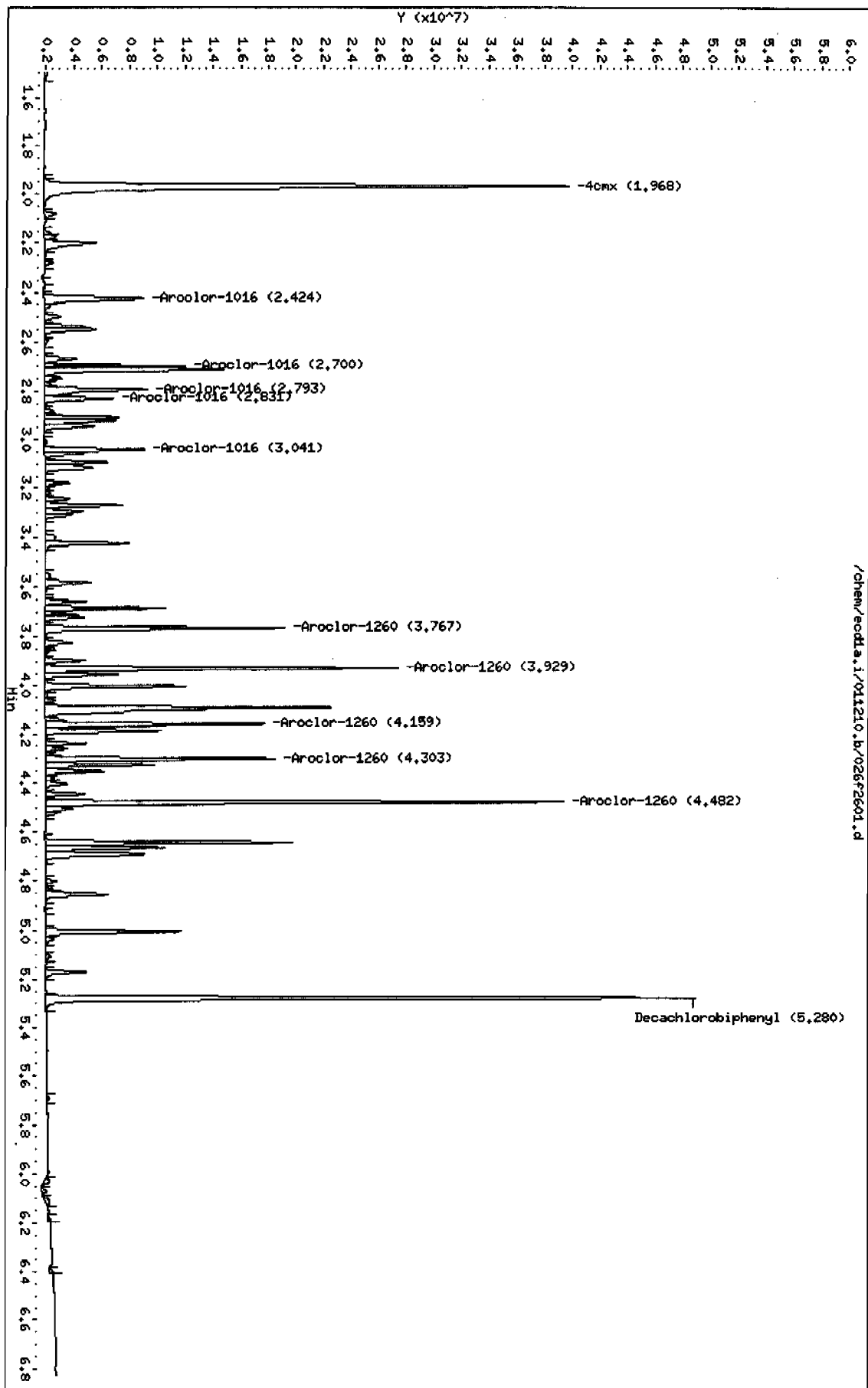
CONCENTRATIONS						
			ON-COL		FINAL	
RT	EXP RT	DLT RT	RESPONSE ( ug/L)		TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
\$ 11 4cmx			CAS #: 877-09-8			
1.968	1.969	-0.001	45139410	126.270	4.7 80.00- 120.00	100.00
\$ 12 Decachlorobiphenyl			CAS #: 2051-24-3			
5.280	5.283	-0.003	36214649	119.912	4.4 80.00- 120.00	100.00
1 Aroclor-1016			CAS #: 12674-11-2			
2.424	2.424	0.000	8371359	603.695	22.4 80.00- 120.00	100.00
2.700	2.702	-0.002	6649092	658.474	24.4 56.95- 96.95	79.43
2.793	2.794	-0.001	7098099	603.733	22.4 64.78- 104.78	84.79
2.831	2.832	-0.001	4019549	609.114	22.6 30.82- 70.82	48.02



CONCENTRATIONS								
			ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE ( ug/L)		(ug/Kg)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	=====	
1 Aroclor-1016 (continued)								
3.041	3.043	-0.002	5566390	641.777	23.8	45.65~ 85.65	66.49	
Average of Peak Concentrations =					23.1			
-----								
7 Aroclor-1260					CAS #: 11096-82-5			
3.767	3.769	-0.002	12513128	746.957	27.7	80.00~ 120.00	100.00	
3.929	3.932	-0.003	19192433	775.684	28.7	132.05~ 172.05	153.38	
4.159	4.163	-0.004	11535253	785.387	29.1	70.36~ 110.36	92.19	
4.303	4.305	-0.002	11935980	786.062	29.1	74.40~ 114.40	95.39	
4.482	4.484	-0.002	27577879	802.839	29.7	195.73~ 235.73	220.39	
Average of Peak Concentrations =					28.9			

Data File: /chem/ecdda.i/011210.b/026f2601.d  
Date: 12-JUN-2010 12:23  
Client ID: RE12-10-7657MS  
Sample Info: 11202012546111  
Volume Injected (uL): 1.0  
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/011210.b/027b2701.d  
 Lab Smp Id: 1202012547 Client Smp ID: RE12-10-7657MSD  
 Inj Date : 12-JAN-2010 12:36  
 Operator : YS1 Inst ID: ecd1a.i  
 Smp Info : |1202012547|1|  
 Misc Info : |ECD82P\_1S|940403|SVA|QC A|SOIL|MSD|1|1|  
 Comment :  
 Method : /chem/ecdl1a.i/011210.b/ECD1-B-8082-121409.m  
 Meth Date : 23-Jan-2010 10:48 yip00818 Quant Type: ESTD  
 Cal Date : 14-DEC-2009 12:16 Cal File: 044b4401.d  
 Als bottle: 27 QC Sample: MSD  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: 10-1131.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	30.03000	Weight of sample extracted (g)
M	10.13920	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS

RT	EXP RT	DLT RT	ON-COL	FINAL	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
CAS #:								
\$ 11 4cmx								
2.299	2.299	0.000	34007105	119.181	4.4	80.00- 120.00	100.00	
\$ 12 Decachlorobiphenyl								
5.943	5.945	-0.002	28959137	130.572	4.8	80.00- 120.00	100.00	
1 Aroclor-1016								
3.195	3.195	0.000	8066275	639.595	23.7	80.00- 120.00	100.00(M)	
3.278	3.279	-0.001	5586744	598.930	22.2	46.12- 86.12	69.26	
3.342	3.342	0.000	3374212	623.547	23.1	20.86- 60.86	41.83	
3.568	3.569	-0.001	4424468	627.417	23.2	33.49- 73.49	54.85	

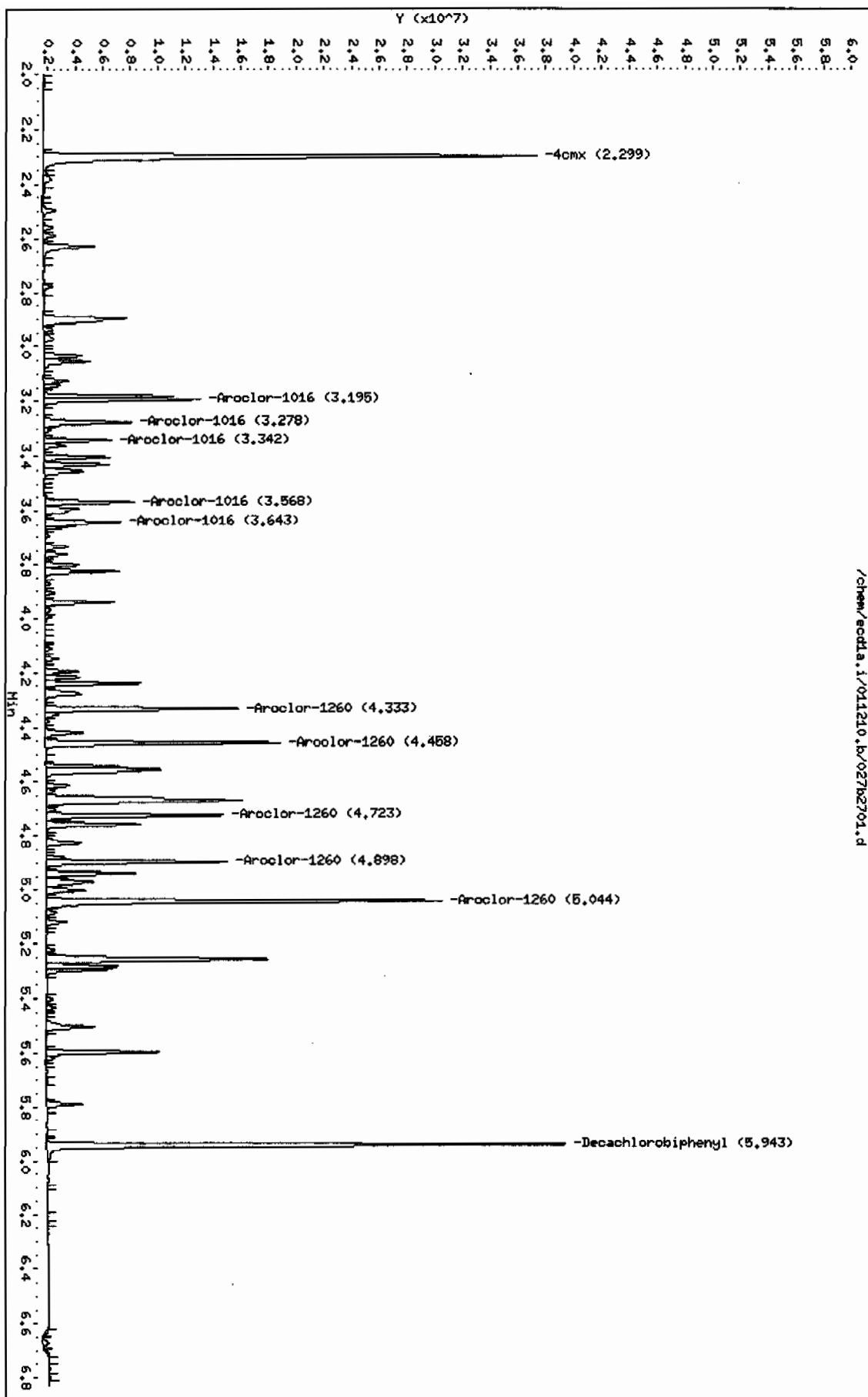
CONCENTRATIONS									
			ON-COL		FINAL				
RT	EXP RT	DLT RT	RESPONSE ( ug/L)		(ug/Kg)	TARGET RANGE		RATIO	
==	=====	=====	=====	=====	=====	=====	=====	=====	=====
1 Aroclor-1016 (continued)									
3.643	3.645	-0.002	4156734	634.545	23.5	29.37~	69.37	51.53	
Average of Peak Concentrations =					23.2				
-----									
7 Aroclor-1260					CAS #: 11096-82-5				
4.333	4.335	-0.002	9844873	719.653	26.7	80.00~	120.00	100.00	
4.458	4.459	-0.001	12247415	764.078	28.3	101.46~	141.46	124.40	
4.723	4.726	-0.003	9461291	753.052	27.9	72.86~	112.86	96.10	
4.898	4.899	-0.001	9608711	750.090	27.8	75.54~	115.54	97.60	
5.044	5.046	-0.002	21793597	781.198	28.9	193.04~	233.04	221.37	
Average of Peak Concentrations =					27.9				
-----									

#### QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecdda.i/011210.b/027b2701.d  
Date: 12-JUN-2010 12:36  
Client ID: RE12-10-7657MSD  
Sample Info: 1120201254711  
Volume Injected (uL): 1.0  
Column phase: CLP2

Instrument: ecdda.i  
Operator: YSL  
Column diameter: 0.25



Data File: /chem/ecdl1a.i/011210.b/027f2701.d  
 Report Date: 23-Jan-2010 10:50

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011210.b/027f2701.d  
 Lab Smp Id: 1202012547 Client Smp ID: RE12-10-7657MSD  
 Inj Date : 12-JAN-2010 12:36  
 Operator : YS1 Inst ID: ecd1a.i  
 Smp Info : |1202012547|1|  
 Misc Info : |ECD82P\_1S|940403|SVA|QC A|SOIL|MSD|||  
 Comment :  
 Method : /chem/ecdl1a.i/011210.b/ECD1-F-8082-121409.m  
 Meth Date : 23-Jan-2010 10:48 yip00818 Quant Type: ESTD  
 Cal Date : 14-DEC-2009 11:34 Cal File: 040f4001.d  
 Als bottle: 27 QC Sample: MSD  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: 10-1131.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	30.03000	Weight of sample extracted (g)
M	10.13920	% Moisture

Cpnd Variable Local Compound Variable

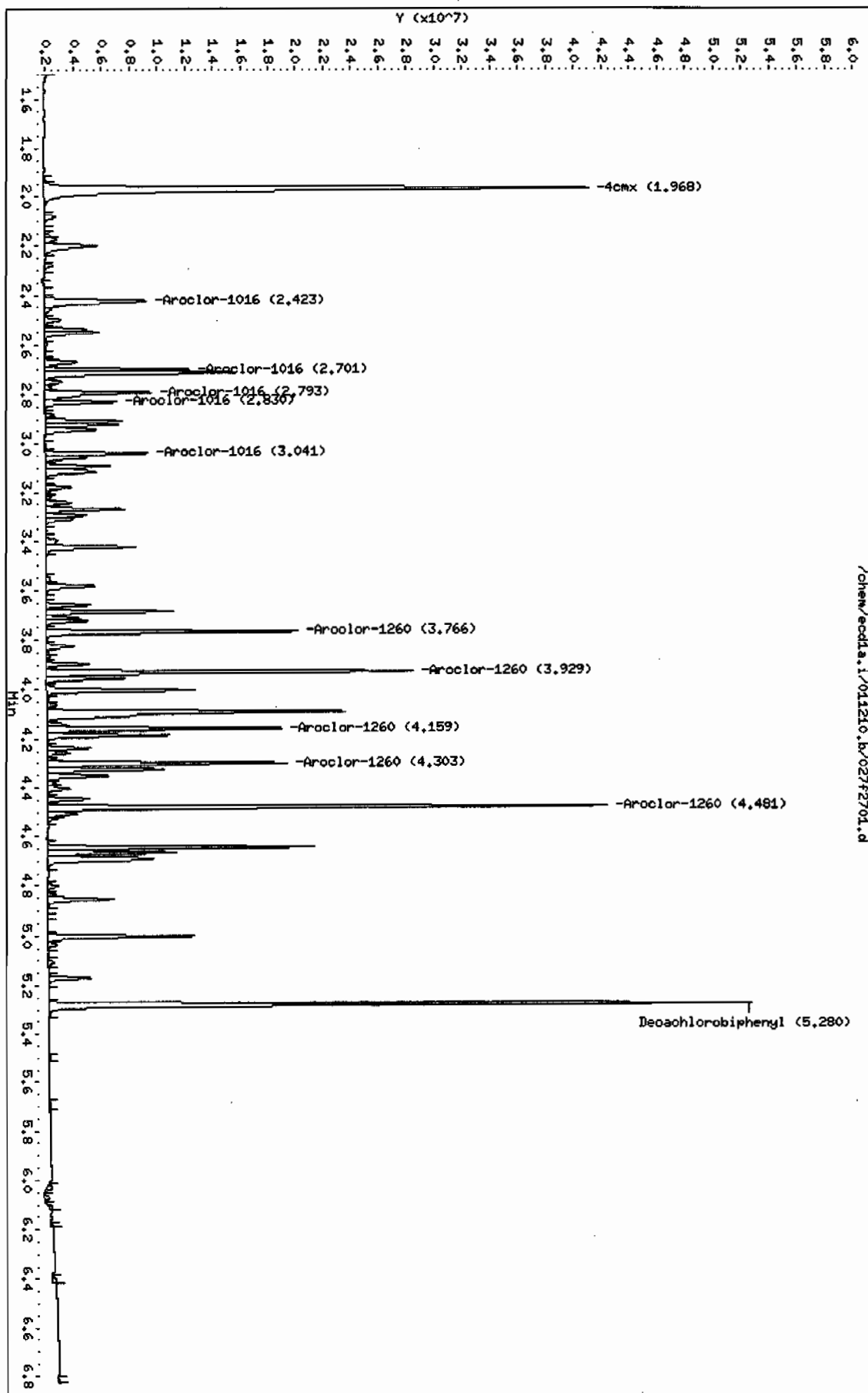
CONCENTRATIONS  
 ON-COL FINAL

RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
\$ 11 4cmx			CAS #: 877-09-8			
1.968	1.969	-0.001	46082141	128.907	4.8 80.00- 120.00	100.00
\$ 12 Decachlorobiphenyl			CAS #: 2051-24-3			
5.280	5.283	-0.003	39080955	129.403	4.8 80.00- 120.00	100.00
1 Aroclor-1016			CAS #: 12674-11-2			
2.423	2.424	-0.001	8552901	616.787	22.8 80.00- 120.00	100.00
2.701	2.702	-0.001	6740986	667.575	24.7 56.95- 96.95	78.82
2.793	2.794	-0.001	7284909	619.622	23.0 64.78- 104.78	85.17
2.830	2.832	-0.002	4032218	611.034	22.6 30.82- 70.82	47.14

CONCENTRATIONS									
			ON-COL		FINAL				
RT	EXP RT	DLT RT	RESPONSE ( ug/L)		(ug/Kg)	TARGET RANGE	RATIO		
==	=====	=====	=====	=====	=====	=====	=====		=====
1 Aroclor-1016 (continued)									
3.041	3.043	-0.002	5718071	659.265	24.4	45.65~	85.65	66.86	
Average of Peak Concentrations =					23.5				
-----									
7 Aroclor-1260					CAS #: 11096-82-5				
3.766	3.769	-0.003	13235145	790.056	29.3	80.00~	120.00	100.00	
3.929	3.932	-0.003	20420750	825.327	30.6	132.05~	172.05	154.29	
4.159	4.163	-0.004	12276506	835.856	31.0	70.36~	110.36	92.76	
4.303	4.305	-0.002	12656315	833.501	30.9	74.40~	114.40	95.63	
4.481	4.484	-0.003	29316181	853.444	31.6	195.73~	235.73	221.50	
Average of Peak Concentrations =					30.7				

Data File: /chem/eodla.i/011210.b/027f2701.d  
Date: 12-JUN-2010 12:36  
Client ID: RE12-10-7657MSD  
Sample Info: 11202012547111  
Volume Injected (uL): 1.0  
Column phase: CLP1

Instrument: eodla.i  
Operator: YSL  
Column diameter: 0.25



/chem/eodla.i/011210.b/027f2701.d



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

Batch ID: 940402      Verified by: \_\_\_\_\_

Analyst: Andrew Schwemin

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)	Comments
1202012544 MB	11-JAN-2010 19:04:36	30	H2SO4/KM2	2	2	9	1	0.03333	
1202012545 LCS	11-JAN-2010 19:04:36	30	H2SO4/KM2	2	2	9	1	0.03333	Clean up Date: 01/11/10
244125001	11-JAN-2010 19:04:36	30.12	H2SO4/KM2	2	2	9	1	0.0332	Clean up Initials: AJS
244125002	11-JAN-2010 19:04:36	30.03	H2SO4/KM2	2	2	9	1	0.0333	Verified By: AV
244126019	11-JAN-2010 19:04:36	30.08	H2SO4/KM2	2	2	9	1	0.03324	Final Solvent: Hexane
1202012546 MS (244126019)	11-JAN-2010 19:04:36	30.05	H2SO4/KM2	2	2	9	1	0.03328	Clean Up SOP: GL-OA-E-037
1202012547 MSD (244126019)	11-JAN-2010 19:04:36	30.03	H2SO4/KM2	2	2	9	1	0.0333	
244126020	11-JAN-2010 19:04:36	30.17	H2SO4/KM2	2	2	9	1	0.03315	
244137001	11-JAN-2010 19:04:36	30.03	H2SO4/KM2	2	2	9	1	0.0333	
244142001	11-JAN-2010 19:04:36	30.09	H2SO4/KM2	2	2	9	1	0.03323	
244142002	11-JAN-2010 19:04:36	30.19	H2SO4/KM2	2	2	9	1	0.03312	
244142003	11-JAN-2010 19:04:36	30.02	H2SO4/KM2	2	2	9	1	0.03331	
244142004	11-JAN-2010 19:04:36	30.05	H2SO4/KM2	2	2	9	1	0.03328	
244142005	11-JAN-2010 19:04:36	30.17	H2SO4/KM2	2	2	9	1	0.03315	
244142006	11-JAN-2010 19:04:36	30.15	H2SO4/KM2	2	2	9	1	0.03317	
244142007	11-JAN-2010 19:04:36	30.17	H2SO4/KM2	2	2	9	1	0.03315	
244142008	11-JAN-2010 19:04:36	30.05	H2SO4/KM2	2	2	9	1	0.03328	
244142017	11-JAN-2010 19:04:36	30.08	H2SO4/KM2	2	2	9	1	0.03324	
244142018	11-JAN-2010 19:04:36	30.13	H2SO4/KM2	2	2	9	1	0.03319	
LCS 1202012545	PCB Laboratory Control	WE100105-07	1						
MS 1202012546	PCB Laboratory Control	WE100105-07	1						
MSD 1202012547	PCB Laboratory Control	WE100105-07	1						
SURR All	PEST LOW LEVEL SURROGATE 200 UGL	UE091217-15	1						
REGNT All	1:1 sulfuric acid	1133264a	5						
REGNT All	Acetone	1233927	150						
REGNT All	Hexane	1241300-B2	150						
REGNT All	5% Potassium Permanganate	B1202457-F	5						
SOURC All	SODIUM SULFATE	1248200	30						