



Monday, January 11, 2010

REQUEST NUMBER: 10-1210

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
SW-846:8270C						
		1	RE12-10-7236	R	1/7/2010	
		1	RE12-10-7237	R	1/7/2010	
		1	RE12-10-7238	R	1/7/2010	
		1	RE12-10-7239	R	1/7/2010	
		1	RE12-10-7240	R	1/7/2010	
		1	RE12-10-7241	R	1/7/2010	
		1	RE12-10-7242	R	1/7/2010	
		1	RE12-10-7243	R	1/7/2010	
		1	RE12-10-7252	R	1/7/2010	
		1	RE12-10-7253	R	1/7/2010	
		1	RE12-10-7254	R	1/7/2010	
		1	RE12-10-7255	R	1/7/2010	
		1	RE12-10-7276	R	1/7/2010	
SW-846:8321A_MOD						
		1	RE12-10-7236	R	1/7/2010	
		1	RE12-10-7237	R	1/7/2010	
		1	RE12-10-7238	R	1/7/2010	
		1	RE12-10-7239	R	1/7/2010	
		1	RE12-10-7240	R	1/7/2010	
		1	RE12-10-7241	R	1/7/2010	
		1	RE12-10-7242	R	1/7/2010	
		1	RE12-10-7243	R	1/7/2010	
		1	RE12-10-7252	R	1/7/2010	
		1	RE12-10-7253	R	1/7/2010	
		1	RE12-10-7254	R	1/7/2010	
		1	RE12-10-7255	R	1/7/2010	
		1	RE12-10-7276	R	1/7/2010	

Monday, January 11, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1210C

LOS ALAMOS

REQUEST NUMBER: 10-1210

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 2/11/2010

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
RE12-10-7243	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE12-10-7240	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE12-10-7241	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE12-10-7237	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE12-10-7239	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE12-10-7238	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE12-10-7242	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE12-10-7236	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE12-10-7252	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE12-10-7253	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE12-10-7254	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE12-10-7255	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE12-10-7276	1	AMBER GLASS	8082+8270+NMED-EXP	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: 2480

EVENT NAME: 4th Qtr. FY09 - AOC 12-004(a) - Threemile Canyon

SAMPLE ID: RE12-10-7239

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/07/2010		MEDIA:	QBT3		OK
TIME COLLECTED (HH:MM)		11:55		SUB-MEDIA:	TUFF 1		
PRS ID:	12-004(a)	OK		SAMPLE TECH CODE:	HA		
LOCATION ID:	12-610528			FIELD QC TYPE:	NA		
LOCATION TYPE:	GENERIC			FIELD PREP:	NA		
TOP DEPTH:	0	1.0 ft		SAMPLE USAGE:	INV		
BOTTOM DEPTH:	0	2.6 ft		SCREEN/PORT DESC:	X/A		
FIELD MATRIX:	R	OK		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	N/A			COMPOSITE TIME INTERVAL:	N/A		
				WATER FLOWING: YES/NO/NA			
BOREHOLE: YES/NO/NA	NO			BOREHOLE DECLINATION:	N/A		
				BOREHOLE DIRECTION:	N/A		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8082+8270+NME D-EXP	500 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None		
1		Met+U+CLO4+C N	1 GAL POLY	Ice		
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None		

## SAMPLE DESC:

Light brown sandy silty frozen soil (ppm 1/7/10 to brownish grey decomposed tuff)

## SAMPLE COMMENTS:

Sample duplicated by RE12-10-7276

## LOCATION DESC:

4a-1

## FIELD SCREENING/MEASUREMENT RESULTS:

$\alpha \leq 22 \text{ dpm}$

$\text{PID} = \frac{0}{0} \text{ ppm}$

$\text{B}/8 \leq 2250 \text{ dpm}$

## COLLECTED BY (PRINT)

L. Lopez

## REVIEWED BY (PRINT)

J. Marin

RELINQUISHED BY (Printed Name) <u>L. Lopez</u> (Signature) <u>[Signature]</u>	Date/Time 177/10 16:00	RECEIVED BY (Printed Name) <u>L. Lopez</u> (Signature) <u>[Signature]</u>	Date/Time 1/7/10 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: 2480

EVENT NAME: 4th Qtr. FY09 - AOC 12-004(a) - Threemile Canyon

SAMPLE ID: RE12-10-7236

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/07/2010		MEDIA:	QBT3		OK
TIME COLLECTED (HH:MM)		10:40		SUB-MEDIA:	TUFF 1		
PRS ID:	12-004(a)	OK		SAMPLE TECH CODE:	HA		
LOCATION ID:	12-610527			FIELD QC TYPE:	NA		
LOCATION TYPE:	GENERIC			FIELD PREP:	NA		
TOP DEPTH:	0			SAMPLE USAGE:	INV		
BOTTOM DEPTH:	0	0.5 ft		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	8082+8270+NME D-EXP	1RM 1/7/10 500 ML AMBER GLASS 250 mL	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	1	
1		Met+U+CLO4+C N	1 GAL POLY 1 L 1/7/10	Ice	1	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	1	

SAMPLE DESC:

1RM 1/7/10  
Light grayish brown, moderately indurated frozen tuff

SAMPLE COMMENTS:

LOCATION DESC:

4a2

FIELD SCREENING/MEASUREMENT RESULTS:

HE spot test negative

Alpha  $\leq 16$  dpmB18  $\leq 2020$ PID =  $\frac{0}{0}$  ppm

COLLECTED BY (PRINT)

L. Lopez

REVIEWED BY (PRINT)

J. Marin

RELINQUISHED BY (Printed Name) Larry Lopez (Signature) <i>Larry Lopez</i>	Date/Time 1/7/10 16:00	RECEIVED BY (Printed Name) L. Greene (Signature) <i>L. Greene</i>	Date/Time 1/7/10 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: 2480

EVENT NAME: 4th Qtr. FY09 - AOC 12-004(a) - Threemile Canyon

SAMPLE ID: RE12-10-7252

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/07		MEDIA:	QBT3	ALLH	
TIME COLLECTED (HH:MM)		13:46		SUB-MEDIA:	TUFF 1	NA	
PRS ID:	12-004(a)	OK		SAMPLE TECH CODE:	HA	OK	
LOCATION ID:	12-610539			FIELD QC TYPE:	NA		
LOCATION TYPE:	GENERIC			FIELD PREP:	NA		
TOP DEPTH:	0			SAMPLE USAGE:	INV		
BOTTOM DEPTH:	0	0.7 ft		SCREEN/PORT DESC:	NA		
FIELD MATRIX:	R	5		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	8270C+NMED Exp	500 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None		
1		Met+U+CLO4+C N	1 L POLY 1 L 2pm 1/7/10	Ice		
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None		

## SAMPLE DESC:

Light grayish brown, silty sandy dry soil

## SAMPLE COMMENTS:

55 dpm site background  
2010 dpm

## LOCATION DESC:

4a5

## FIELD SCREENING/MEASUREMENT RESULTS:

alpha 22 dpm  
B/x 2050 dpm  
PID = 0 ppm  
HE test negative

COLLECTED BY (PRINT)

REVIEWED BY (PRINT)

J. Marin

RELINQUISHED BY (Printed Name) Lacey Lopez (Signature) Lacey Lopez	Date/Time 1/7/10 16:00	RECEIVED BY (Printed Name) K. Greene (Signature) K. Greene	Date/Time 1/7/10 4:06
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2480

EVENT NAME: 4th Qtr. FY09 - AOC 12-004(a) - Threemile Canyon

SAMPLE ID: RE12-10-7241

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/07/2010		MEDIA:	OBT3		OK
TIME COLLECTED (HH:MM)		12:50		SUB-MEDIA:	TUFF 1		
PRS ID:	12-004(a)	OK		SAMPLE TECH CODE:	HA		
LOCATION ID:	12-610529			FIELD QC TYPE:	NA		
LOCATION TYPE:	GENERIC			FIELD PREP:	NA		
TOP DEPTH:	0	1.0 ft		SAMPLE USAGE:	INV		
BOTTOM DEPTH:	0	2.0 ft		SCREEN/PORT DESC:	NA		
FIELD MATRIX:	R	OK		EXCAVATED: YES	<input checked="" type="radio"/> NO <input type="radio"/> NA		
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		WATER FLOWING: YES <input checked="" type="radio"/> NO <input type="radio"/> NA
BOREHOLE: YES	<input checked="" type="radio"/> NO <input type="radio"/> NA			BOREHOLE DECLINATION:	NA		BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8082+8270+NME D-EXP	500 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None		
1		Met+U+CLO4+C N	1 GAL POLY 1 L from 1/7/10	Ice		
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None		

## SAMPLE DESC:

Light pinkish gray dry ash flow tuff

## SAMPLE COMMENTS:

## LOCATION DESC:

4a3

## FIELD SCREENING/MEASUREMENT RESULTS:

alpha  $\leq$  55 dpm  
 B/x  $\leq$  2450 dpm

P10 =  $\frac{0}{0}$  ppm

COLLECTED BY (PRINT)

L. Lopez

REVIEWED BY (PRINT)

J. MARIN

RELINQUISHED BY (Printed Name) LARRY LOPEZ (Signature) Larry Lopez	Date/Time 1/7/10 16:00	RECEIVED BY (Printed Name) K. G. G. G. (Signature) [Signature]	Date/Time 1/7/10 4:06
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2480

EVENT NAME: 4th Qtr. FY09 - AOC 12-004(a) - Threemile Canyon

SAMPLE ID: RE12-10-7254

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/07/2010		MEDIA:	QBT3	ALLH	
TIME COLLECTED (HH:MM)		14:20		SUB-MEDIA:	TUFF 1	NA	
PRS ID:	12-004(a)	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	12-610540			FIELD QC TYPE:	NA		
LOCATION TYPE:	GENERIC			FIELD PREP:	NA		
TOP DEPTH:	0			SAMPLE USAGE:	INV		
BOTTOM DEPTH:	0	0.6 ft		SCREEN/PORT DESC:	NA		
FIELD MATRIX:	R	S		EXCAVATED: YES/NO	NA		
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
BOREHOLE: YES/NO	NO			WATER FLOWING: YES/NO	NA		
BOREHOLE DECLINATION:	NA			BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8270C+NMED Exp	500 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None		
1		Met+U+CLO4+C N	1 GAL POLY 1 L 2RM 1/2/10	Ice		
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None		

## SAMPLE DESC:

Medium brown, organic, silty, sandy, dry soil

## SAMPLE COMMENTS:

## LOCATION DESC:

4a4

## FIELD SCREENING/MEASUREMENT RESULTS:

Alpha =  $\frac{27}{2440}$  dpm  
Beta/Gamma =  $\frac{27}{2440}$  dpm  
PID =  $\frac{0}{0}$  ppm

Alpha = 27 dpm  
Beta/Gamma = 2440 dpm

PID =  $\frac{0}{0}$  ppm

HE Spot test Negative

COLLECTED BY (PRINT)

L. Lopez

REVIEWED BY (PRINT) J. Marin

RELINQUISHED BY (Printed Name) Larry Lopez (Signature) Larry Lopez	Date/Time 1/7/10 16:00	RECEIVED BY (Printed Name) K. Green (Signature) K. Green	Date/Time 1/7/10 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: 2480

EVENT NAME: 4th Qtr. FY09 - AOC 12-004(a) - Threemile Canyon

SAMPLE ID: RE12-10-7253

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/07/2010		MEDIA:	OBT3		OK
TIME COLLECTED (HH:MM)		13:55		SUB-MEDIA:	TUFF1		
PRS ID:	12-004(a)	OK		SAMPLE TECH CODE:	HA		
LOCATION ID:	12-610539			FIELD QC TYPE:	NA		
LOCATION TYPE:	GENERIC			FIELD PREP:	NA		
TOP DEPTH:	0	1.0		SAMPLE USAGE:	INV		
BOTTOM DEPTH:	0	2.0		SCREEN/PORT DESC:	NA		
FIELD MATRIX:	R	OK		EXCAVATED: YES (NO) NA			
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	8270C+NMED Exp	500 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None		
1		Met+U+CLO4+C N	1 GAL POLY 1 L JRM 1/7/10	Ice		
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None		

## SAMPLE DESC:

Light gray, moderately indurated, dry, ash flow tuff

## SAMPLE COMMENTS:

## LOCATION DESC:

4a5

## FIELD SCREENING/MEASUREMENT RESULTS:

 $\alpha = 27 \text{ dpm}$   $\text{pid} = 0 \text{ ppm}$   
 $\text{B/g} = 2570 \text{ dpm}$ 

## COLLECTED BY (PRINT)

L Lopez

## REVIEWED BY (PRINT) J Marin

RELINQUISHED BY (Printed Name) LARRY LOPEZ (Signature) [Signature]	Date/Time 11/7/10 16:00	RECEIVED BY (Printed Name) K. Green (Signature) [Signature]	Date/Time 11/7/10 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: 2480

EVENT NAME: 4th Qtr. FY09 - AOC 12-004(a) - Threemile Canyon

SAMPLE ID: RE12-10-7284

WORK ORDER:

AS PLANNED	AS COLLECTED	AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):	01/07/2010	MEDIA:	NA
TIME COLLECTED(HH:MM)	1521	SUB-MEDIA:	OTHER
PRS ID: 12-004(a)	OK	SAMPLE TECH CODE:	DC
LOCATION ID: UNK		FIELD QC TYPE:	ER
LOCATION TYPE: GENERIC		FIELD PREP:	UF
TOP DEPTH: 0		SAMPLE USAGE:	QC
BOTTOM DEPTH: 0		SCREEN/PORT DESC:	NA
FIELD MATRIX: W		EXCAVATED: YES/NO/NA	NA
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA	
		WATER FLOWING: YES/NO/NA	NA
BOREHOLE: YES/NO/NA		BOREHOLE DECLINATION: NA	
		BOREHOLE DIRECTION: NA	

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

SAMPLE DESC: QC Sample of RE12-10-7255

## SAMPLE COMMENTS:

WATER

## LOCATION DESC:

4a 4

## FIELD SCREENING/MEASUREMENT RESULTS:

NA

COLLECTED BY (PRINT)

L. Lopez

REVIEWED BY (PRINT)

J. Marin

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Larry Lopez	1/7/10	(Printed Name) V. G. - C. - E.	1/7/10
(Signature) Larry Lopez	16:00	(Signature) [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: 2480

EVENT NAME: 4th Qtr. FY09 - AOC 12-004(a) - Threemile Canyon

SAMPLE ID: RE12-10-7238

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/07/2010		MEDIA:	QBT3	ALL 4	
TIME COLLECTED (HH:MM)		11:40		SUB-MEDIA:	TUFF 1	NA	
PRS ID:	12-004(a)	OK		SAMPLE TECH CODE:	HA		
LOCATION ID:	12-610528			FIELD QC TYPE:	NA		
LOCATION TYPE:	GENERIC			FIELD PREP:	NA		
TOP DEPTH:	0	OK		SAMPLE USAGE:	INV		
BOTTOM DEPTH:	0	FROM 1/7/10 0.85 ft		SCREEN/PORT DESC:	NA		
FIELD MATRIX:	R	S		EXCAVATED: YES (NO) NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
BOREHOLE: YES (NO) NA				WATER FLOWING: YES (NO) NA			
BOREHOLE DECLINATION:	NA			BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8082+8270+NME D-EXP	500 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None		
1		Met+U+CLO4+C N	LOCAL POLY 1L 1/7/10	Ice		
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None		

## SAMPLE DESC:

Light brown silty sandy soil, frozen

## SAMPLE COMMENTS:

## LOCATION DESC:

4a-1

## FIELD SCREENING/MEASUREMENT RESULTS:

HE spot test negative

alpha  $\leq$  11 dpmB/V  $\leq$  1962 dpm

PID = 0 ppm

COLLECTED BY (PRINT)

L. Lopez

REVIEWED BY (PRINT)

J. MARIN

RELINQUISHED BY (Printed Name) Larry Lopez (Signature) Larry Lopez	Date/Time 11/7/10 16:00	RECEIVED BY (Printed Name) K. Gucera (Signature) [Signature]	Date/Time 11/7/10 4:10
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2480

EVENT NAME: 4th Qtr. FY09 - AOC 12-004(a) - Threemile Canyon

SAMPLE ID: RE12-10-7237

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/07/2010		MEDIA: OBT3		OK	
TIME COLLECTED (HH:MM)		11:05		SUB-MEDIA: TUFF 1			
PRS ID:	12-004(a)	OK		SAMPLE TECH CODE: HA			
LOCATION ID:	12-610527			FIELD QC TYPE: NA			
LOCATION TYPE:	GENERIC			FIELD PREP: NA			
TOP DEPTH:	0	1.0 ft		SAMPLE USAGE: INV			
BOTTOM DEPTH:	0	2.0 ft		SCREEN/PORT DESC: NA			
FIELD MATRIX:	R	R		EXCAVATED: YES/NO/NA		(NO) NA	
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA		WATER FLOWING: YES/NO/NA		(NO) NA	
BOREHOLE: YES/NO/NA		BOREHOLE DECLINATION: NA		BOREHOLE DIRECTION: NA			

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8082+8270+NME D-EXP	500 ML AMBER GLASS 250 ML	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		Met+U+CLO4+C N	1 GAL POLY 1L 1/7/10	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Light grayish brown, moderately indurated frozen stuff

SAMPLE COMMENTS:

LOCATION DESC:

4a2

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha  $\leq 16$  dpm  
 B/g  $\leq 2580$  dpm PID = 0 ppm

COLLECTED BY (PRINT)

L. Lopez

REVIEWED BY (PRINT) J. MARIN

RELINQUISHED BY (Printed Name) LARRY LOPEZ (Signature) Larry A. Lopez	Date/Time 1/7/10 16:00	RECEIVED BY (Printed Name) L. Green (Signature) [Signature]	Date/Time 1/7/10 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: 2480

EVENT NAME: 4th Qtr. FY09 - AOC 12-004(a) - Threemile Canyon

SAMPLE ID: RE12-10-7255

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/07/2010		MEDIA:	QBT3		OK
TIME COLLECTED (HH:MM)		14:45		SUB-MEDIA:	TUFF 1		
PRS ID:	12-004(a)	OK		SAMPLE TECH CODE:	HA		
LOCATION ID:	12-610540			FIELD QC TYPE:	NA		
LOCATION TYPE:	GENERIC			FIELD PREP:	NA		
TOP DEPTH:	0	1.0		SAMPLE USAGE:	INV		
BOTTOM DEPTH:	0	1.9		SCREEN/PORT DESC:	NA		
FIELD MATRIX:	R	OK		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
BOREHOLE: YES/NO/NA	NO/NA			WATER FLOWING: YES/NO/NA			
BOREHOLE DECLINATION:	NA			BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8270C+NMED Exp	500ML AMBER GLASS from 1/2 to	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None		
1		Met+U+CLO4+C N	1 GAL POLY 1 L from 1/2 to 1/10	Ice		
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None		

SAMPLE DESC:

Light brownish gray, moderately indurated, dry, ash flow tuff

SAMPLE COMMENTS:

LOCATION DESC:

4a4

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 27 dpm  
Beta/Gamma = 2320 dpm  
COLLECTED BY (PRINT) L. Lopez

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

REVIEWED BY (PRINT) J. Marin

RELINQUISHED BY (Printed Name) Larry A. Lopez (Signature) Larry A. Lopez	Date/Time 1/7/10 16:00	RECEIVED BY (Printed Name) L. Bruce (Signature) [Signature]	Date/Time 1/7/10 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: 2480

EVENT NAME: 4th Qtr. FY09 - AOC 12-004(a) - Threemile Canyon

SAMPLE ID: RE12-10-7242

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/07/2010	MEDIA:	QBT3		ALLH	
TIME COLLECTED (HH:MM)		13:20	SUB-MEDIA:	TUFF 1		NA	
PRS ID:	12-004(a)	OK	SAMPLE TECH CODE:	HA		OK	
LOCATION ID:	12-610530		FIELD QC TYPE:	NA			
LOCATION TYPE:	GENERIC		FIELD PREP:	NA			
TOP DEPTH:	0		SAMPLE USAGE:	INV			
BOTTOM DEPTH:	0	1.0 ft	SCREEN/PORT DESC:	NA			
FIELD MATRIX:	R	S	EXCAVATED: YES/NO/NA	NO			
COMPOSITE TYPE:	NA		COMPOSITE TIME INTERVAL:	NA		WATER FLOWING: YES/NO/NA	
BOREHOLE: YES/NO/NA	NO		BOREHOLE DECLINATION:	NA		BOREHOLE DIRECTION:	NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8082+8270+NME D-EXP	500 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None		
1		Met+U+CLO4+C N	1 GAL POLY 1 L JRM 1/7/10	Ice		
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None		

## SAMPLE DESC:

Dark brown loamy sandy soil

## SAMPLE COMMENTS:

## LOCATION DESC:

4a6

## FIELD SCREENING/MEASUREMENT RESULTS:

Alpha  $\leq 5$  dpm P10 =  $\frac{0}{0}$  ppmB/g  $\leq 1997$  dpm HE Spot test Negative

COLLECTED BY (PRINT)

L. Lopez

REVIEWED BY (PRINT)

J. Marin

RELINQUISHED BY (Printed Name) LARRY LOPEZ (Signature) <i>[Signature]</i>	Date/Time 1/07/10 16:00	RECEIVED BY (Printed Name) K. Guache (Signature) <i>[Signature]</i>	Date/Time 1/7/10 4:10
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2480

EVENT NAME: 4th Qtr. FY09 - AOC 12-004(a) - Threemile Canyon

SAMPLE ID: RE12-10-7276

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/07/2010		MEDIA:		OBT3	
TIME COLLECTED (HH:MM)		11:55		SUB-MEDIA:		TUFF 1	
PRS ID:	12-004(a)	OK		SAMPLE TECH CODE:		HA	
LOCATION ID:	UNK	12-610528		FIELD QC TYPE:		NA	
LOCATION TYPE:	GENERIC			FIELD PREP:		NA	
TOP DEPTH:	0	1.0		SAMPLE USAGE:		INV	
BOTTOM DEPTH:	0	2.6		SCREEN/PORT DESC:		NA	
FIELD MATRIX:	R	OK		EXCAVATED: YES/NO/NA		NO	
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA		WATER FLOWING: YES/NO/NA		NO	
BOREHOLE: YES/NO/NA		BOREHOLE DECLINATION: NA		BOREHOLE DIRECTION: NA			

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8082+8270+NME D-EXP	500 ML AMBER GLASS	Ice	✓	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None		
1		Met+U+CLO4+C N	1 GAL POLY 1L 1/2 1/10	Ice		
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None		

SAMPLE DESC:

Light brown to brownish gray decomposed tuff.

SAMPLE COMMENTS:

Duplicate sample of RE12-10-7239

LOCATION DESC:

4a-1

FIELD SCREENING/MEASUREMENT RESULTS:

 $\alpha \leq 22 \text{ dpm}$  $\beta/\gamma \leq 2250 \text{ dpm}$  $PID = \frac{0}{0} \text{ ppm}$ 

COLLECTED BY (PRINT)

L. Lopez

REVIEWED BY (PRINT) Jan Marin

RELINQUISHED BY (Printed Name) <i>L. Lopez</i> (Signature) <i>L. Lopez</i>	Date/Time 1/07/10 16:00	RECEIVED BY (Printed Name) <i>V. Greene</i> (Signature) <i>V. Greene</i>	Date/Time 1/7/10 4:10
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2480

EVENT NAME: 4th Qtr. FY09 - AOC 12-004(a) - Threemile Canyon

SAMPLE ID: RE12-10-7243

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/07/2010		MEDIA:	QBT3		OK
TIME COLLECTED (HH:MM)		13:34		SUB-MEDIA:	TUFF 1		
PRS ID:	12-004(a)	OK		SAMPLE TECH CODE:	HA		
LOCATION ID:	12-610530			FIELD QC TYPE:	NA		
LOCATION TYPE:	GENERIC			FIELD PREP:	NA		
TOP DEPTH:	0	1.0 ft		SAMPLE USAGE:	INV		
BOTTOM DEPTH:	0	2.0 ft		SCREEN/PORT DESC:	NA		
FIELD MATRIX:	R	OK		EXCAVATED: YES (NO) NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
				WATER FLOWING: YES (NO) NA			
BOREHOLE: YES (NO) NA		BOREHOLE DECLINATION:	NA	BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8082+8270+NME D-EXP	500 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None		
1		Met+U+CLO4+C N	1 GAL POLY 1 L 2RM 1/7/10	Ice		
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None		

## SAMPLE DESC:

Light grayish brown, moderately indurated, dry, ash flow tuff

## SAMPLE COMMENTS:

## LOCATION DESC:

4a6

## FIELD SCREENING/MEASUREMENT RESULTS:

Alpha  $\leq$  49 dpm      PID:  $\frac{0}{0}$  ppm  
 B/g  $\leq$  2260 dpm

## COLLECTED BY (PRINT)

L. Lopez

## REVIEWED BY (PRINT)

J. Marin

RELINQUISHED BY (Printed Name) Larry Lopez (Signature) [Signature]	Date/Time 1/7/10 16:00	RECEIVED BY (Printed Name) K. Greene (Signature) [Signature]	Date/Time 1/7/10 4:10
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2480

EVENT NAME: 4th Qtr. FY09 - AOC 12-004(a) - Threemile Canyon

SAMPLE ID: RE12-10-7240

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/07/2010		MEDIA:	OBT3		0.3 gm 1/7/10 ALH
TIME COLLECTED (HH:MM)		12:25		SUB-MEDIA:	TUFF 1		NA
PRS ID:	12-004(a)	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	12-610529			FIELD QC TYPE:	NA		
LOCATION TYPE:	GENERIC			FIELD PREP:	NA		
TOP DEPTH:	0			SAMPLE USAGE:	INV		
BOTTOM DEPTH:	0	0.6 ft		SCREEN/PORT DESC:			NA
FIELD MATRIX:	R	OK 1/7/10 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+8270+NME D-EXP	500 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None		
1		Met+U+CLO4+C N	1 GAL POLY 1L 1/7/10	Ice		
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None		

## SAMPLE DESC:

Medium brown silty sandy frozen soil

## SAMPLE COMMENTS:

## LOCATION DESC:

4a3

## FIELD SCREENING/MEASUREMENT RESULTS:

alpha  $\leq$  27 dpm  
 B/g  $\leq$  2100 dpm

PID = 0 ppm HE Spot test negative

COLLECTED BY (PRINT)

L. Lopez

REVIEWED BY (PRINT)

J. Marin

RELINQUISHED BY (Printed Name) Larry Lopez (Signature) Larry Lopez	Date/Time 1/7/10 16:00	RECEIVED BY (Printed Name) K. Greer (Signature) K. Greer	Date/Time 1/7/10 4:10
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9834

ARS Sample Delivery Group: ARS2-10-00012

Request or PO Number:

Client Sample ID: RE12-10-7236

ARS Sample ID: ARS2-10-00012-001

Sample Collection Date: 01/07/10 10:40

Date Received: 01/08/10 00:00

Sample Matrix: Sn11/Sn12

Report Date: 01/09/10 06:49

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDL	TDH	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	42.87	32.48	39.18	32.90		pCi/g	EPA 900.0M	1/9/2010	ME	N/A
GROSS BETA	36.68	15.99	19.19	16.23		pCi/g	EPA 900.0M	1/9/2010	ME	N/A
NA-22	0.00	0.00	0.08	0.00		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
K-40	17.39	4.07	1.21	6.10		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CO-60	0.00	7.93	0.08	7.93		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CS-134	0.18	0.12	0.06	0.12		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CS-137	0.21	0.16	0.05	0.16		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
EU-152	0.47	0.34	0.09	0.34		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
PB-212	1.53	0.41	0.07	0.42		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
RA-228	1.69	0.62	0.21	0.62		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
U-235	0.20	0.46	0.22	0.46		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
U-238	3.53	2.26	0.90	2.39		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
AM-241	0.07	0.21	0.10	0.21		pCi/g	EPA 901.1M	1/8/2010	ME	N/A

NOTES: % Moisture: 2.44

*Matthew J. Edger*  
Quality Assurance Review

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

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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: ARS2-10-00012

Request or PO Number:

Client Sample ID: RE12-10-7237

ARS Sample ID: ARS2-10-00012-002

Sample Collection Date: 01/07/10 11:05

Date Received: 01/08/10 00:00

Sample Matrix: Soil/Solid

Report Date: 01/09/10 06:49

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MNC	TPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	13.56	18.29	28.64	18.37		pCi/g	EPA 900.0M	1/9/2010	ME	N/A
GROSS BETA	52.48	16.46	17.99	17.72		pCi/g	EPA 900.0M	1/9/2010	ME	N/A
NA-22	0.08	0.16	0.13	0.16		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
K-40	41.00	11.99	2.04	12.06		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CO-60	0.09	0.16	0.14	0.16		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CS-134	0.00	0.00	0.10	0.00		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CS-137	-0.01	17.45	0.08	17.45		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
EU-152	0.00	13.87	0.16	13.87		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
PB-212	1.82	0.64	0.19	0.65		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
RA-228	0.77	0.57	0.39	0.58		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
U-235	2.45	1.04	0.25	1.05		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
U-238	0.14	2.64	1.49	4.44		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
AM-241	0.00	0.05	0.09	0.05		pCi/g	EPA 901.1M	1/8/2010	ME	N/A

NOTES: % Moisture: 0.94

*Matthew D. Edin*  
Quality Assurance Review

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NELAP Certificate # 887558



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: AR52-10-00012

Client Sample ID: RE12-10-7238

Sample Collection Date: 01/07/10 11:40

Sample Matrix: Soil/Solid

Request or PO Number:

ARS Sample ID: AR52-10-00012-003

Date Received: 01/08/10 00:00

Report Date: 01/09/10 06:49

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MBC	TRU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	81.43	32.93	32.23	33.33		pCi/g	EPA 900.0M	1/8/2010	ME	N/A
GROSS BETA	24.00	15.10	19.85	15.38		pCi/g	EPA 900.0M	1/8/2010	ME	N/A
NA-22	0.00	0.00	0.15	0.00		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
K-40	11.60	12.10	4.62	12.10		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CO-60	0.00	15.58	0.16	15.58		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CS-134	0.15	0.14	0.11	0.14		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CS-137	0.35	0.29	0.19	0.29		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
EU-152	0.77	0.79	0.20	0.79		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
PB-212	1.34	0.57	0.15	0.57		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
RA-226	3.43	1.23	0.42	1.44		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
U-235	1.99	1.15	0.26	1.15		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
U-238	1.62	3.02	1.61	3.04		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
AM-241	0.34	0.40	0.16	0.40		pCi/g	EPA 901.1M	1/8/2010	ME	N/A

NOTES: % Moisture: 1.61

*M. J. F. Eder*  
Quality Assurance Review

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133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9934

ARS Sample Delivery Group: ARS2-10-00012

Request or PQ Number:

Client Sample ID: RE12-10-7239

ARS Sample ID: ARS2-10-00012-004

Sample Collection Date: 01/07/10 11:55

Date Received: 01/08/10 00:00

Sample Matrix: Soil/Solid

Report Date: 01/09/10 06:49

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDL	TRU	QUA	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	38.26	28.71	38.16	29.05		pCi/g	EPA 900.0M	1/9/2010	ME	N/A
GROSS BETA	40.88	19.81	18.65	16.59		pCi/g	EPA 900.0M	1/9/2010	ME	N/A
NA-22	0.00	0.00	0.10	0.00		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
K-40	12.40	7.32	2.41	7.33		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CO 60	0.00	10.74	0.11	10.74		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CS-134	0.10	0.14	0.08	0.14		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CS-137	-0.01	14.06	0.07	14.06		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
EU-152	0.00	11.17	0.13	11.17		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
PB-212	1.89	0.51	0.12	0.51		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
RA 228	1.90	0.48	0.20	0.88		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
U-235	0.98	0.71	0.38	0.71		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
U-238	2.41	2.67	1.32	2.73		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
AM-241	0.06	0.14	0.07	0.14		pCi/g	EPA 901.1M	1/8/2010	ME	N/A

NOTES: % Moisture: 1.06

*Matthew S. Edin*  
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: ARS2-10-00012

Request or PO Number:

Client Sample ID: RE12-10-7240

ARS Sample ID: ARS2-10-00012-005

Sample Collection Date: 01/07/10 12:25

Date Received: 01/08/10 00:00

Sample Matrix: Soil/Solid

Report Date: 01/09/10 06:49

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDL	TPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	37.87	30.93	39.11	31.27		pCi/g	EPA 900.0M	1/9/2010	ME	N/A
GROSS BETA	29.01	14.57	19.00	14.99		pCi/g	EPA 900.0M	1/9/2010	ME	N/A
NA-22	0.00	0.00	0.12	0.00		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
K-40	-0.88	-19.98	3.30	-19.98		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CO-60	0.00	11.83	0.13	11.83		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CS-134	0.00	0.00	0.09	0.00		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CS-137	0.13	0.16	0.07	0.16		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
EU-152	0.00	12.31	0.14	12.31		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
PB-212	1.35	0.48	0.11	0.48		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
RA 226	0.37	0.56	0.37	0.56		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
U-235	1.38	0.80	0.18	0.81		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
U-238	6.45	4.62	1.89	4.85		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
AM-241	0.14	0.21	0.10	0.21		pCi/g	EPA 901.1M	1/8/2010	ME	N/A

NOTES: % Moisture: 1.42

*Matthew J. Eder*  
Quality Assurance Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in whole or in part 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 505-872-9534

ARS Sample Delivery Group: ARS2-10-00012

Request of PU Number:

Client Sample ID: RE12-10-7241

ARS Sample ID: ARS2-10-00012-006

Sample Collection Date: 01/07/10 12:50

Date Received: 01/08/10 00:00

Sample Matrix: Soil/Solid

Report Date: 01/08/10 06:49

Analysis Description	Analysis Results	Analysis Error +/- 2 %	MCN	TRE	Quant	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Review
GROSS ALPHA	41.28	26.73	28.64	29.17		pCi/g	EPA 900.0M	1/8/2010	ME	N/A
GROSS BETA	43.40	18.90	17.99	16.77		pCi/g	EPA 900.0M	1/8/2010	ME	N/A
NA-22	0.00	0.00	0.12	0.00		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
K-40	27.60	9.64	1.92	9.68		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
GO-69	0.07	4.18	0.13	0.18		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CS-134	0.00	0.00	0.09	0.00		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CS-137	0.33	0.26	0.08	0.26		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
EU-152	0.00	66.54	0.18	66.54		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
PB-212	1.43	0.51	0.11	0.51		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
NA-226	1.88	1.71	0.34	1.21		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
U-235	1.79	0.85	0.20	0.85		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
U-238	0.76	2.93	1.55	4.94		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
AM-241	0.69	0.55	0.16	0.55		pCi/g	EPA 901.1M	1/8/2010	ME	N/A

NOTES: % Moisture: 1.05

*Matthew A. Edley*  
Quality Assurance Review

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LELAP Certificate # 30658

NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00012

Request or PO Number:

Client Sample ID: RE12-10-7242

ARS Sample ID: ARS2-10-00012-007

Sample Collection Date: 01/07/10 13:20

Date Received: 01/08/10 00:00

Sample Matrix: Soil/Solid

Report Date: 01/09/10 06:49

Analysis Description	Analysis Results	Analysis Error +/- 2 s	Min	TDI	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	51.43	32.93	12.23	33.53		pCi/g	EPA 900.0M	1/9/2010	ME	N/A
GROSS BETA	41.67	17.06	19.86	17.81		pCi/g	EPA 900.0M	1/9/2010	ME	N/A
NA-22	0.00	0.00	0.12	0.00		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
K-40	16.77	8.84	2.74	8.89		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CO-60	0.00	12.02	0.12	12.02		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CS-134	0.32	0.26	0.09	0.26		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CS-137	0.90	0.31	0.09	0.31		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
EU-152	0.31	0.58	0.14	0.58		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
PB-212	1.64	0.53	0.10	0.53		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
RA-228	0.57	0.40	0.66	0.40		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
U-235	1.58	1.06	0.35	1.06		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
U-238	3.18	2.04	0.87	2.17		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
AM-241	0.78	0.39	0.10	0.39		pCi/g	EPA 901.1M	1/8/2010	ME	N/A

NOTES: % Moisture: 1.53

*Matthew J. Edm*  
Quality Assurance Review

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ARS Sample Delivery Group: ARS2-10-00012  
 Client Sample ID: RE12-10-7243  
 Sample Collection Date: 01/07/10 13:34  
 Sample Matrix: Soil/Solid

Request or PO Number:

ARS Sample ID: ARS2-10-00012-008

Date Received: 01/08/10 00:00

Report Date: 01/09/10 06:49

Analysis Description	Analysis Results	Analysis Error +/- 2 s	WPC	TGU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	49.87	32.87	34.04	33.13		pCi/g	EPA 900.0M	1/9/2010	ME	N/A
GROSS BETA	58.90	17.69	18.46	19.11		pCi/g	EPA 900.0M	1/9/2010	ME	N/A
NA-22	0.00	0.00	0.33	0.00		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
K-40	25.97	9.70	2.08	9.73		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CO-60	0.00	13.61	0.14	13.61		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CS-134	0.00	0.00	0.10	0.00		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CS-137	0.25	0.23	0.09	0.23		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
SU-152	0.00	14.16	0.16	14.16		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
PB-212	1.36	0.88	0.17	0.56		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
RA-228	2.08	0.99	0.35	0.99		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
U-235	0.68	0.79	0.40	0.79		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
U-238	9.15	4.23	1.45	4.72		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
AM-241	0.20	0.33	0.15	0.33		pCi/g	EPA 901.1M	1/8/2010	ME	N/A

NOTES: % Moisture: 0.48

*Matthew L. Eder*  
 Quality Assurance Review

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ARS Sample Delivery Group: ARS2-10-00012

Request or PO Number:

Client Sample ID: RE12-10-7252

ARS Sample ID: ARS2-10-00012-009

Sample Collection Date: 01/07/10 13:46

Date Received: 01/08/10 00:00

Sample Matrix: Soil/Solid

Report Date: 01/09/10 06:49

Analysis Description	Analysis Results	Analysis Error +/- %	MBC	YPI	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	72.39	48.19	39.11	41.16		pCi/g	EPA 900.0M	1/8/2010	ME	N/A
GROSS BETA	61.99	18.35	19.00	19.86		pCi/g	EPA 900.0M	1/8/2010	ME	N/A
NA-22	0.00	0.00	0.11	0.00		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
K-40	26.66	8.92	1.71	8.95		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CO-60	0.13	0.19	0.11	0.19		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CS-134	0.37	0.33	0.08	0.33		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CS-137	0.59	0.32	0.07	0.32		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
EU-152	0.09	0.16	0.13	0.16		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
PB-212	1.50	0.54	0.16	0.54		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
RA-228	1.32	1.03	0.30	1.03		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
U-235	0.07	99.84	0.22	99.84		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
U-238	3.11	4.09	1.14	4.09		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
AM-241	0.02	0.09	0.05	0.09		pCi/g	EPA 901.1M	1/8/2010	ME	N/A

NOTES: % Moisture: 1.52

*Matthew J. Eden*  
Quality Assurance Review

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LELAP Certificate # 30658

NPLAP Certificate # E87558



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505-672-2770 FAX 505-672-9524

ARS Sample Delivery Group: ARS2-10-00012

Client Sample ID: RE12-10-7253

Sample Collection Date: 01/07/10 13:55

Sample Matrix: Soil/Solid

Request or PO Number:

ARS Sample ID: ARS2-10-00012-010

Date Received: 01/08/10 00:00

Report Date: 01/09/10 06:49

Analysis Description	Analysis Results	Analysis Error +/- 2 s	unc	TPH	Quil	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	98.62	42.51	28.64	44.13		pCi/g	EPA 900.0M	1/9/2010	ME	N/A
GROSS BETA	54.42	17.86	17.99	19.06		pCi/g	EPA 900.0M	1/9/2010	ME	N/A
NA-22	0.08	0.15	0.12	0.15		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
K-40	-2.41	-50.73	5.11	-50.73		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CO-60	0.00	12.74	0.13	12.74		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CS-134	0.04	0.08	0.09	0.08		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CS-137	-0.01	16.67	0.08	16.67		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
EU-152	0.02	0.53	0.23	0.53		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
PB-212	1.09	0.60	0.25	0.60		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
RA-228	1.37	0.79	0.34	0.79		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
U-238	0.13	0.27	0.20	0.27		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
U-238	5.58	3.88	1.58	4.09		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
AM-241	0.45	0.48	0.19	0.48		pCi/g	EPA 901.1M	1/8/2010	ME	N/A

NOTES: % Moisture: 0.34

*Matthew J. Eden*  
Quality Assurance Review

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NELAP Certificate # E87558



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ARS Sample Delivery Group: ARS2-10-00012

Request or PO Number:

Client Sample ID: RE12-10-7254

ARS Sample ID: ARS2-10-00012-011

Sample Collection Date: 01/07/10 14:20

Date Received: 01/08/10 00:00

Sample Matrix: Soil/Solid

Report Date: 01/09/10 06:49

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	YMU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	70.75	37.98	32.23	38.96		pCi/g	EPA 900.0M	1/9/2010	ME	N/A
GROSS BETA	52.83	18.56	19.86	19.68		pCi/g	EPA 900.0M	1/9/2010	ME	N/A
NA-22	0.00	0.00	0.11	0.00		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
K-40	-1.54	938.02	2.10	938.02		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CO-60	0.00	11.98	0.17	11.98		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CS-134	0.09	0.11	0.08	0.11		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CS-137	0.25	0.21	0.07	0.21		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
EU-152	0.46	0.48	0.13	0.48		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
PB-212	1.17	0.53	0.20	0.53		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
RA-228	2.67	1.02	0.30	1.02		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
U-235	1.47	0.73	0.18	0.74		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
U-238	8.10	3.46	1.09	3.92		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
AM-241	0.13	0.17	0.07	0.17		pCi/g	EPA 901.1M	1/8/2010	ME	N/A

NOTES: % Moisture: 1.55

*Matthew A. Eder*  
Quality Assurance Review

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505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00012

Request or PO Number:

Client Sample ID: RE12-10-7255

ARS Sample ID: ARS2-10-00012-012

Sample Collection Date: 01/07/10 14:45

Date Received: 01/08/10 00:00

Sample Matrix: Soil/Solid

Report Date: 01/08/10 06:46

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	63.83	36.21	35.16	37.84		pCi/g	EPA 900.0M	1/9/2010	ME	N/A
GROSS BETA	72.96	19.28	18.65	21.33		pCi/g	EPA 900.0M	1/9/2010	ME	N/A
NA-22	0.00	0.00	0.12	0.00		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
K-40	26.53	9.56	1.96	9.89		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CS-60	0.07	0.11	0.14	0.11		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CS-134	0.00	0.00	0.09	0.00		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CS-137	0.24	0.22	0.08	0.22		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
EU-152	0.70	0.62	0.15	0.63		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
PB-212	1.70	0.60	0.17	0.60		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
RA-228	2.95	1.50	0.34	1.50		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
U-235	-0.08	144.89	0.32	144.89		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
U-238	0.48	4.04	1.98	4.04		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
AM-241	0.36	0.36	0.15	0.36		pCi/g	EPA 901.1M	1/8/2010	ME	N/A

NOTES: % Moisture: 0.17

Quality Assurance Review

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LELAP Certificate# 30658

NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00012

Request or PO Number:

Client Sample ID: RE12-10-7276

ARS Sample ID: ARS2-10-00012-013

Sample Collection Date: 01/07/10 11:56

Date Received: 01/08/10 00:00

Sample Matrix: Soil/Sludg

Report Date: 01/09/10 06:49

Analysis Description	Analysis Results	Analysis Error +/- 2 s	mM	TPH	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	87.40	43.63	39.18	44.93		pCi/g	EPA 900.0M	1/9/2010	ME	N/A
GROSS BETA	56.37	18.18	19.19	19.44		pCi/g	EPA 900.0M	1/9/2010	ME	N/A
NA-22	0.00	0.00	0.12	0.00		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
K-40	16.38	7.55	1.91	7.66		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CO-60	0.04	0.10	0.13	0.10		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CS-134	0.14	0.13	0.09	0.14		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CS-137	-0.01	16.35	0.08	16.35		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
SU-152	0.00	12.99	0.18	12.99		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
PB-212	1.15	0.52	0.18	0.53		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
RA-228	0.49	0.47	0.33	0.47		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
U-235	1.22	0.84	0.32	0.84		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
U-238	2.55	3.10	1.42	3.16		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
AM-241	0.28	0.24	0.09	0.24		pCi/g	EPA 901.1M	1/8/2010	ME	N/A

NOTES: % Moisture: 0.84

*Matthew J. Edm*  
Quality Assurance Review

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LELAP Certificate # 3065B

NELAP Certificate # E8755B

## Rad Screening Data Release Form

The Following samples were received at the Field Support Facility (FSF) without screening data  
(list sample number): RE12-10-7253 RE12-10-7240

7254  
7241  
7252  
7236  
7239-Dup ←  
7238  
7237  
7255  
7276-Duplicate  
7222  
7242  
7243  
RE12-10-7221

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): RE12-10-7284

Reason: Field Release (FR)

.....  
Print Last Name


Lopez

Signature

Randy A. Lopez

Date

01/07/2010

DATA VALIDATION COVER SHEET	
5115-1	Records Use only
Data Validation Cover Sheet	
	

**Section I.**

REQUEST NUMBER: 10-1210      VALIDATION DATE: 02/17/10      LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Monica Dymerski      ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

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

☒ OTHER (DESCRIBE): GC/MS SVOC

**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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9. TICS FORMS
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	5. STANDARD CHROMATOGRAMS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10. TICS MASS SPECTRA

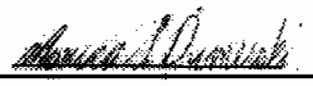
Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

- The ICV %Ds were >20% for 2-methyl-4,6-dinitrophenol; indeno(1,2,3-cd)pyrene; dibenzo(a,h)anthracene; and benzo(g,h,i)perylene. All associated sample results were NDs and, thus, were qualified UJ,SV7c.
- The MS/MSD RPD was > the laboratory acceptance limit for 2,4-dinitrophenol. Since MS/MSD analyses are not a client requirement for this method, no sample data were qualified as a result.


Reviewed by: Mary Donovan

Level: I

Date: 02/17/10

VALIDATOR'S SIGNATURE: 

DATE: 02/17/10

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST	
<b>5115-2</b>  <b>Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist</b>	Records Use only  

Yes No N/A				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, SV9	J-, SV9
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2. The holding time was >2 times the applicable holding time requirement.	R, SV9a	J-, SV9a
<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, SV9b	R, SV9b
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	4. The instrument performance sample did not pass method acceptance criteria.	R, SV16	R, SV16
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	5. Samples were analyzed outside specific method tune time criteria.	N/A	J, SV16b
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	6. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, SV16c	R, SV16c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, SV7	J, SV7
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, SV7a	J, SV7a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9. The affected analytes were analyzed with an RRF of <0.05 in the initial calibration and/or Continuing Calibration Verification (CCV).	R, SV7b	J, SV7b
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10. The Initial Calibration Verification (ICV) and/or CCV were recovered outside the method-specific limits.	UJ, SV7c	J, SV7c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	11. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, SV7d	J, SV7d

# **SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST**


5115-2

## **Semivolatile Organic Compound (SVOC) 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"/>	12. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, SV7f	R, SV7f
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	13. The sample result is $\leq 5X$ (10X for common organic laboratory contaminants) the concentration of the related analyte in the method blank.	U, SV4	J, V4a
<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 (10X for common laboratory contaminants).	N/A	J, SV4a
<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 trip blank, rinsate blank, or equipment blank.	UJ, SV4d	N/A
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	16. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV4e	R, SV4e
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	17. The IS retention time has shifted by more than 30 seconds.	UJ, SV0	J, SV0
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	18. Analyte is positively confirmed but outside the IS retention time window; however, spectral matches must be provided.	N/A	J, SV0a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	19. Required IS retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV0b	R, SV0b
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	20. The quantitating IS area count is $<10\%$ of the expected value, which indicates increased potential for false negative results and other possible problems with sample quantitation. Follow method-specific windows.	R, SV1a	J, SV1a

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST	
<b>5115-2</b>  <b>Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist</b>	Records Use only _____  

Yes   No   N/A				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	21. The IS area count for the quantitating IS is <50% but >10% for organics window relation to the previous continuing calibration. Follow method-specific windows.	UJ, SV1b	J, SV1b
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	22. The IS area count for the quantitating IS is >200% of the area count for the previous continuing calibration. Follow method-specific windows.	UJ, SV1c	J, SV1c
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	23. Required IS Information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV1d	R, SV1d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	24. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, SV3	J-, SV3
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	25. The surrogate is < the Lower Acceptance Level (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.	UJ, SV3a	J-, SV3a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	26. The surrogate %R value is > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, SV3b
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	27. 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, SV3c	J, SV3c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	28. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV3d	R, SV3d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	29. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, SV12	J-, SV12

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST	
<b>5115-2</b>  <b>Semivolatile Organic Compound (SVOC) 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"/>	30. The LCS percent recovery was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, SV12a	J-, SV12a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	31. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, SV12b
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	32. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV12c	R, SV12c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	33. The affected analyte is considered not detected because mass spectrum did not meet specifications.	N/A	U, SV8
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	34. The mass spectrum column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV8a	R, SV8a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	35. Duplicate, dilution, or reanalysis.	UJ, SV88	J, SV88
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	36. 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, SV15	R, SV15
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	37. 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"/>	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, SV19	J, R, SV19





**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210  
Lab Sample ID: 244599008

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD7.I  
Analyst: JMB3  
Aliquot: 30.04 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 21.7  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE12-10-7236  
Batch ID: 941702  
Run Date: 01/20/2010 14:51  
Prep Date: 01/14/2010 19:34  
Data File: s7a2013.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	425	ug/kg	85.0	425
108-95-2	Phenol	U	425	ug/kg	85.0	425
95-57-8	2-Chlorophenol	U	425	ug/kg	85.0	425
106-46-7	1,4-Dichlorobenzene	U	425	ug/kg	85.0	425
621-64-7	N-Nitrosodipropylamine	U	425	ug/kg	85.0	425
59-50-7	4-Chloro-3-methylphenol	U	425	ug/kg	85.0	425
83-32-9	Acenaphthene	U	42.5	ug/kg	14.0	42.5
121-14-2	2,4-Dinitrotoluene	U	425	ug/kg	42.5	425
100-02-7	4-Nitrophenol	U	425	ug/kg	140	425
87-86-5	Pentachlorophenol	U	425	ug/kg	106	425
129-00-0	Pyrene	U	42.5	ug/kg	12.7	42.5
110-86-1	Pyridine	U	425	ug/kg	85.0	425
62-53-3	Aniline	U	425	ug/kg	127	425
111-44-4	bis(2-Chloroethyl) ether	U	425	ug/kg	85.0	425
341-73-1	1,3-Dichlorobenzene	U	425	ug/kg	85.0	425
100-51-6	Benzyl alcohol	U	425	ug/kg	127	425
95-50-1	1,2-Dichlorobenzene	U	425	ug/kg	85.0	425
108-60-1	bis(2-Chloroisopropyl) ether	U	425	ug/kg	85.0	425
95-48-7	o-Cresol	U	425	ug/kg	85.0	425
65794-96-9	m,p-Cresols	U	425	ug/kg	127	425
67-72-1	Hexachloroethane	U	425	ug/kg	85.0	425
98-95-3	Nitrobenzene	U	425	ug/kg	85.0	425
78-59-1	Isophorone	U	425	ug/kg	85.0	425
88-75-5	2-Nitrophenol	U	425	ug/kg	85.0	425
105-67-9	2,4-Dimethylphenol	U	425	ug/kg	149	425
111-91-1	bis(2-Chloroethoxy)methane	U	425	ug/kg	85.0	425
120-83-2	2,4-Dichlorophenol	U	425	ug/kg	85.0	425
65-85-0	Benzoic acid	U	850	ug/kg	212	850
91-20-3	Naphthalene	U	42.5	ug/kg	12.7	42.5
106-47-8	4-Chloroaniline	U	425	ug/kg	85.0	425
87-68-3	Hexachlorobutadiene	U	425	ug/kg	85.0	425
91-57-6	2-Methylnaphthalene	U	42.5	ug/kg	8.50	42.5
77-47-4	Hexachlorocyclopentadiene	U	425	ug/kg	85.0	425
88-06-2	2,4,6-Trichlorophenol	U	425	ug/kg	85.0	425
95-95-4	2,4,5-Trichlorophenol	U	425	ug/kg	85.0	425
91-58-7	2-Chloronaphthalene	U	42.5	ug/kg	14.0	42.5
88-74-4	2-Nitroaniline	U	425	ug/kg	85.0	425
99-09-2	o-Nitroaniline	U	425	ug/kg	85.0	425
	3-Nitroaniline					

Semi-Volatile  
Certificate of Analysis  
Sample Summary

SDG Number: 10-1210  
Lab Sample ID: 244599008

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD7.I  
Analyst: JMB3  
Aliquot: 30.04 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 21.7  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE12-10-7236  
Batch ID: 941702  
Run Date: 01/20/2010 14:51  
Prep Date: 01/14/2010 19:34  
Data File: s7a2013.d

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline	U	425	ug/kg	85.0	425
606-20-2	Dimethylphthalate	U	425	ug/kg	42.5	425
208-96-8	2,6-Dinitrotoluene	U	42.5	ug/kg	12.7	42.5
51-28-5	Acenaphthylene	U	850	ug/kg	161	850
132-64-9	2,4-Dinitrophenol	U	425	ug/kg	85.0	425
84-66-2	Dibenzofuran	U	425	ug/kg	85.0	425
86-73-7	Diethylphthalate	U	42.5	ug/kg	12.7	42.5
7005-72-3	Fluorene	U	425	ug/kg	85.0	425
534-52-1	4-Chlorophenylphenylether	U	425	ug/kg	85.0	425
100-01-6	2-Methyl-4,6-dinitrophenol	U	425	ug/kg	85.0	425 UJ,SV7c
122-39-4	4-Nitroaniline	U	425	ug/kg	127	425
122-66-7	<i>p</i> -Nitroaniline	U	425	ug/kg	85.0	425
101-55-3	Diphenylamine	U	425	ug/kg	85.0	425
118-74-1	Azobenzene	U	425	ug/kg	85.0	425
85-01-8	1,2-Diphenylhydrazine	U	425	ug/kg	85.0	425
120-12-7	4-Bromophenylphenylether	U	425	ug/kg	85.0	425
84-74-2	Hexachlorobenzene	U	42.5	ug/kg	12.7	42.5
206-44-0	Phenanthrene	U	42.5	ug/kg	8.50	42.5
85-68-7	Anthracene	U	425	ug/kg	85.0	425
56-55-3	Di-n-butylphthalate	U	42.5	ug/kg	12.7	42.5
91-94-1	Fluoranthene	U	425	ug/kg	85.0	425
218-01-9	Butylbenzylphthalate	U	42.5	ug/kg	12.7	42.5
117-81-7	Benzo(a)anthracene	U	425	ug/kg	127	425
117-84-0	3,3'-Dichlorobenzidine	U	42.5	ug/kg	12.7	42.5
205-99-2	Chrysene	U	425	ug/kg	85.0	425
207-08-9	bis(2-Ethylhexyl)phthalate	U	425	ug/kg	85.0	425
50-32-8	Di-n-octylphthalate	U	42.5	ug/kg	12.7	42.5
193-39-5	Benzo(b)fluoranthene	U	42.5	ug/kg	12.7	42.5
53-70-3	Benzo(k)fluoranthene	U	42.5	ug/kg	12.7	42.5
191-24-2	Benzo(a)pyrene	U	42.5	ug/kg	12.7	42.5
120-82-1	Indeno(1,2,3-cd)pyrene	U	42.5	ug/kg	12.7	42.5 UJ,SV7c
	Dibenzo(a,h)anthracene	U	42.5	ug/kg	12.7	42.5
	Benzo(ghi)perylene	U	42.5	ug/kg	12.7	42.5
	1,2,4-Trichlorobenzene	U	425	ug/kg	85.0	425

## Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.03	400	ug/kg		J
	Unknown Aldol Condensate	2.82	899	ug/kg		J

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210	Date Collected: 01/07/2010 12:00	Matrix: R
Lab Sample ID: 244599008	Date Received: 01/13/2010 08:55	%Moisture: 21.7
Client ID: RE12-10-7236	Client: LANL010	Project: LANL01004
Batch ID: 941702	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/20/2010 14:51	Inst: MSD7.I	Dilution: 1
Prep Date: 01/14/2010 19:34	Analyst: JMB3	Inj. Vol: .5 uL
Data File: s7a2013.d	Allquot: 30.04 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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Tentatively Identified Compound Summary			Estimated			
CAS No.	Tentatively Identified Compound (TIC)	RT		Units	Fit	Qual
7785-70-8	1R-.alpha.-Pinene	3.37	203	ug/kg	97	NJ
77-53-2	Cedrol	6.39	209	ug/kg	94	NJ
112-80-1	Oleic Acid	8.05	347	ug/kg	83	NJ
	Unknown	8.58	185	ug/kg		J
	Unknown	8.6	330	ug/kg		J
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	8.87	368	ug/kg	98	NJ
	Unknown	8.94	171	ug/kg		J
	Unknown	9.05	397	ug/kg		J
62600-05-9	Cedran-diol, 8S,14-	9.51	189	ug/kg	83	NJ
112-95-8	Eicosane	9.84	173	ug/kg	92	NJ
	Unknown	9.98	201	ug/kg		J
	Unknown	11.51	260	ug/kg		J
	Unknown	12.45	525	ug/kg		J
	Unknown	12.61	269	ug/kg		J
83-46-5	.beta.-Sitosterol	13.23	1420	ug/kg	99	NJ
	Unknown	13.71	693	ug/kg		J
	Unknown	14.3	497	ug/kg		J

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

<b>SDG Number:</b> 10-1210	<b>Date Collected:</b> 01/07/2010 12:00	<b>Matrix:</b> R
<b>Lab Sample ID:</b> 244599004	<b>Date Received:</b> 01/13/2010 08:55	<b>%Moisture:</b> 10.1
<b>Client ID:</b> RE12-10-7237	<b>Client:</b> LANL010	<b>Project:</b> LANL01004
<b>Batch ID:</b> 941702	<b>Method:</b> SW846 8270C	<b>SOP Ref:</b> GL-OA-E-009
<b>Run Date:</b> 01/19/2010 19:32	<b>Inst:</b> MSD7.I	<b>Dilution:</b> 1
<b>Prep Date:</b> 01/14/2010 19:34	<b>Analyst:</b> JMB3	<b>Inj. Vol:</b> .5 uL
<b>Data File:</b> s7a1929.d	<b>Aliquot:</b> 30.19 g	<b>Final Volume:</b> 1 mL
	<b>Column:</b> J&W DB-5MS	<b>Level:</b> LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	369	ug/kg	73.7	369
108-95-2	Phenol	U	369	ug/kg	73.7	369
95-57-8	2-Chlorophenol	U	369	ug/kg	73.7	369
106-46-7	1,4-Dichlorobenzene	U	369	ug/kg	73.7	369
621-64-7	N-Nitrosodipropylamine	U	369	ug/kg	73.7	369
59-50-7	4-Chloro-3-methylphenol	U	369	ug/kg	73.7	369
83-32-9	Acenaphthene	U	36.9	ug/kg	12.2	36.9
121-14-2	2,4-Dinitrotoluene	U	369	ug/kg	36.9	369
100-02-7	4-Nitrophenol	U	369	ug/kg	122	369
87-86-5	Pentachlorophenol	U	369	ug/kg	92.1	369
129-00-0	Pyrene	U	36.9	ug/kg	11.1	36.9
110-86-1	Pyridine	U	369	ug/kg	73.7	369
62-53-3	Aniline	U	369	ug/kg	111	369
111-44-4	bis(2-Chloroethyl) ether	U	369	ug/kg	73.7	369
541-73-1	1,3-Dichlorobenzene	U	369	ug/kg	73.7	369
100-51-6	Benzyl alcohol	U	369	ug/kg	111	369
95-50-1	1,2-Dichlorobenzene	U	369	ug/kg	73.7	369
108-60-1	bis(2-Chloroisopropyl) ether	U	369	ug/kg	73.7	369
95-48-7	o-Cresol	U	369	ug/kg	73.7	369
65794-96-9	m,p-Cresols	U	369	ug/kg	111	369
67-72-1	Hexachloroethane	U	369	ug/kg	73.7	369
98-95-3	Nitrobenzene	U	369	ug/kg	73.7	369
78-59-1	Isophorone	U	369	ug/kg	73.7	369
88-75-5	2-Nitrophenol	U	369	ug/kg	73.7	369
105-67-9	2,4-Dimethylphenol	U	369	ug/kg	129	369
111-91-1	bis(2-Chloroethoxy)methane	U	369	ug/kg	73.7	369
120-83-2	2,4-Dichlorophenol	U	369	ug/kg	73.7	369
65-85-0	Benzoic acid	U	737	ug/kg	184	737
91-20-3	Naphthalene	U	36.9	ug/kg	11.1	36.9
106-47-8	4-Chloroaniline	U	369	ug/kg	73.7	369
87-68-3	Hexachlorobutadiene	U	369	ug/kg	73.7	369
91-57-6	2-Methylnaphthalene	U	36.9	ug/kg	7.37	36.9
77-47-4	Hexachlorocyclopentadiene	U	369	ug/kg	73.7	369
88-06-2	2,4,6-Trichlorophenol	U	369	ug/kg	73.7	369
95-95-4	2,4,5-Trichlorophenol	U	369	ug/kg	73.7	369
91-58-7	2-Chloronaphthalene	U	36.9	ug/kg	12.2	36.9
88-74-4	2-Nitroaniline	U	369	ug/kg	73.7	369
99-09-2	o-Nitroaniline	U	369	ug/kg	73.7	369
	3-Nitroaniline					

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210	Date Collected: 01/07/2010 12:00	Matrix: R
Lab Sample ID: 244599004	Date Received: 01/13/2010 08:55	%Moisture: 10.1
Client ID: RE12-10-7237	Client: LANL010	Project: LANL01004
Batch ID: 941702	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/19/2010 19:32	Inst: MSD7.I	Dilution: 1
Prep Date: 01/14/2010 19:34	Analyst: JMB3	Inj. Vol: .5 uL
Data File: s7a1929.d	Allquot: 30.19 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	369	ug/kg	73.7	369
606-20-2	2,6-Dinitrotoluene	U	369	ug/kg	36.9	369
208-96-8	Acenaphthylene	U	36.9	ug/kg	11.1	36.9
51-28-5	2,4-Dinitrophenol	U	737	ug/kg	140	737
132-64-9	Dibenzofuran	U	369	ug/kg	73.7	369
84-66-2	Diethylphthalate	U	369	ug/kg	73.7	369
86-73-7	Fluorene	U	36.9	ug/kg	11.1	36.9
7005-72-3	4-Chlorophenylphenylether	U	369	ug/kg	73.7	369
534-52-1	2-Methyl-4,6-dinitrophenol	U	369	ug/kg	73.7	369 UJ,SV7c
100-01-6	4-Nitroaniline	U	369	ug/kg	111	369
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	369	ug/kg	73.7	369
122-66-7	Azobenzene	U	369	ug/kg	73.7	369
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	369	ug/kg	73.7	369
118-74-1	Hexachlorobenzene	U	369	ug/kg	73.7	369
85-01-8	Phenanthrene	U	36.9	ug/kg	11.1	36.9
120-12-7	Anthracene	U	36.9	ug/kg	7.37	36.9
84-74-2	Di-n-butylphthalate	U	369	ug/kg	73.7	369
206-44-0	Fluoranthene	U	36.9	ug/kg	11.1	36.9
85-68-7	Butylbenzylphthalate	U	369	ug/kg	73.7	369
56-55-3	Benzo(a)anthracene	U	36.9	ug/kg	11.1	36.9
91-94-1	3,3'-Dichlorobenzidine	U	369	ug/kg	111	369
218-01-9	Chrysene	U	36.9	ug/kg	11.1	36.9
117-81-7	bis(2-Ethylhexyl)phthalate	U	369	ug/kg	73.7	369
117-84-0	Di-n-octylphthalate	U	369	ug/kg	73.7	369
205-99-2	Benzo(b)fluoranthene	U	36.9	ug/kg	11.1	36.9
207-08-9	Benzo(k)fluoranthene	U	36.9	ug/kg	11.1	36.9
50-32-8	Benzo(a)pyrene	U	36.9	ug/kg	11.1	36.9
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.9	ug/kg	11.1	36.9 UJ,SV7c
53-70-3	Dibenzo(a,h)anthracene	U	36.9	ug/kg	11.1	36.9
191-24-2	Benzo(ghi)perylene	U	36.9	ug/kg	11.1	36.9
120-82-1	1,2,4-Trichlorobenzene	U	369	ug/kg	73.7	369

## Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.83	781	ug/kg		JA
	Unknown	3.34	241	ug/kg		J

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**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210	Date Collected: 01/07/2010 12:00	Matrix: R
Lab Sample ID: 244599004	Date Received: 01/13/2010 08:55	%Moisture: 10.1
Client ID: RE12-10-7237	Client: LANL010	Project: LANL01004
Batch ID: 941702	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/19/2010 19:32	Inst: MSD7.I	Dilution: 1
Prep Date: 01/14/2010 19:34	Analyst: JMB3	Inj. Vol: .5 uL
Data File: s7a1929.d	Allquot: 30.19 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
7785-70-8	1R-.alpha.-Pinene	3.36	307	ug/kg	97	NJ
127-91-3	.beta.-Pinene	3.61	158	ug/kg	97	NJ
498-15-7	Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethyl	3.75	326	ug/kg	97	NJ
	Unknown	5.59	191	ug/kg		J
1000245-71-9	E-11-Hexadecenoic acid, ethyl ester	8.05	438	ug/kg	90	NJ
57-11-4	Octadecanoic acid	8.12	162	ug/kg	94	NJ
	Unknown	8.6	397	ug/kg		J
	Unknown	8.66	173	ug/kg		J
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	8.87	327	ug/kg	95	NJ
	Unknown	8.92	161	ug/kg		J
	Unknown	9.05	467	ug/kg		J
	Unknown	9.15	430	ug/kg		J
	Unknown	9.22	508	ug/kg		J
	Unknown	9.39	151	ug/kg		J
	Unknown	9.51	207	ug/kg		J
	Unknown	9.97	331	ug/kg		J
	Unknown	12.72	217	ug/kg		J
	Unknown	13.33	235	ug/kg		J
	Unknown	13.37	171	ug/kg		J

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210  
Lab Sample ID: 244599006

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD7.I  
Analyst: JMB3  
Aliquot: 30.11 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 16.7  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE12-10-7238  
Batch ID: 941702  
Run Date: 01/19/2010 20:16  
Prep Date: 01/14/2010 19:34  
Data File: s7a1931.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	399	ug/kg	79.7	399
108-95-2	Phenol	U	399	ug/kg	79.7	399
95-57-8	2-Chlorophenol	U	399	ug/kg	79.7	399
106-46-7	1,4-Dichlorobenzene	U	399	ug/kg	79.7	399
621-64-7	N-Nitrosodipropylamine	U	399	ug/kg	79.7	399
59-50-7	4-Chloro-3-methylphenol	U	399	ug/kg	79.7	399
83-32-9	Acenaphthene	U	39.9	ug/kg	13.2	39.9
121-14-2	2,4-Dinitrotoluene	U	399	ug/kg	39.9	399
100-02-7	4-Nitrophenol	U	399	ug/kg	132	399
87-86-5	Pentachlorophenol	U	399	ug/kg	99.6	399
129-00-0	Pyrene	U	39.9	ug/kg	12.0	39.9
110-86-1	Pyridine	U	399	ug/kg	79.7	399
62-53-3	Aniline	U	399	ug/kg	120	399
111-44-4	bis(2-Chloroethyl) ether	U	399	ug/kg	79.7	399
541-73-1	1,3-Dichlorobenzene	U	399	ug/kg	79.7	399
100-51-6	Benzyl alcohol	U	399	ug/kg	120	399
95-50-1	1,2-Dichlorobenzene	U	399	ug/kg	79.7	399
108-60-1	bis(2-Chloroisopropyl) ether	U	399	ug/kg	79.7	399
95-48-7	o-Cresol	U	399	ug/kg	79.7	399
65794-96-9	m,p-Cresols	U	399	ug/kg	120	399
67-72-1	Hexachloroethane	U	399	ug/kg	79.7	399
98-95-3	Nitrobenzene	U	399	ug/kg	79.7	399
78-59-1	Isophorone	U	399	ug/kg	79.7	399
88-75-5	2-Nitrophenol	U	399	ug/kg	79.7	399
105-67-9	2,4-Dimethylphenol	U	399	ug/kg	140	399
111-91-1	bis(2-Chloroethoxy)methane	U	399	ug/kg	79.7	399
120-83-2	2,4-Dichlorophenol	U	399	ug/kg	79.7	399
65-85-0	Benzoic acid	U	797	ug/kg	199	797
91-20-3	Naphthalene	U	39.9	ug/kg	12.0	39.9
106-47-8	4-Chloroaniline	U	399	ug/kg	79.7	399
87-68-3	Hexachlorobutadiene	U	399	ug/kg	79.7	399
91-57-6	2-Methylnaphthalene	U	39.9	ug/kg	7.97	39.9
77-47-4	Hexachlorocyclopentadiene	U	399	ug/kg	79.7	399
88-06-2	2,4,6-Trichlorophenol	U	399	ug/kg	79.7	399
95-95-4	2,4,5-Trichlorophenol	U	399	ug/kg	79.7	399
91-58-7	2-Chloronaphthalene	U	39.9	ug/kg	13.2	39.9
88-74-4	2-Nitroaniline	U	399	ug/kg	79.7	399
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	399	ug/kg	79.7	399

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**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210  
Lab Sample ID: 244599006

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD7.I  
Analyst: JMB3  
Aliquot: 30.11 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 16.7  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	399	ug/kg	79.7	399
606-20-2	2,6-Dinitrotoluene	U	399	ug/kg	39.9	399
208-96-8	Acenaphthylene	U	39.9	ug/kg	12.0	39.9
51-28-5	2,4-Dinitrophenol	U	797	ug/kg	151	797
132-64-9	Dibenzofuran	U	399	ug/kg	79.7	399
84-66-2	Diethylphthalate	U	399	ug/kg	79.7	399
86-73-7	Fluorene	U	39.9	ug/kg	12.0	39.9
7005-72-3	4-Chlorophenylphenylether	U	399	ug/kg	79.7	399
534-52-1	2-Methyl-4,6-dinitrophenol	U	399	ug/kg	79.7	399 UJ,SV7c
100-01-6	4-Nitroaniline	U	399	ug/kg	120	399
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	399	ug/kg	79.7	399
122-66-7	Azobenzene	U	399	ug/kg	79.7	399
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	399	ug/kg	79.7	399
118-74-1	Hexachlorobenzene	U	399	ug/kg	79.7	399
85-01-8	Phenanthrene	U	39.9	ug/kg	12.0	39.9
120-12-7	Anthracene	U	39.9	ug/kg	7.97	39.9
84-74-2	Di-n-butylphthalate	U	399	ug/kg	79.7	399
206-44-0	Fluoranthene	U	39.9	ug/kg	12.0	39.9
85-68-7	Butylbenzylphthalate	U	399	ug/kg	79.7	399
56-55-3	Benzo(a)anthracene	U	39.9	ug/kg	12.0	39.9
91-94-1	3,3'-Dichlorobenzidine	U	399	ug/kg	120	399
218-01-9	Chrysene	U	39.9	ug/kg	12.0	39.9
117-81-7	bis(2-Ethylhexyl)phthalate	U	399	ug/kg	79.7	399
117-84-0	Di-n-octylphthalate	U	399	ug/kg	79.7	399
205-99-2	Benzo(b)fluoranthene	U	39.9	ug/kg	12.0	39.9
207-08-9	Benzo(k)fluoranthene	U	39.9	ug/kg	12.0	39.9
50-32-8	Benzo(a)pyrene	U	39.9	ug/kg	12.0	39.9
193-39-5	Indeno(1,2,3-cd)pyrene	U	39.9	ug/kg	12.0	39.9 UJ,SV7c
53-70-3	Dibenzo(a,h)anthracene	U	39.9	ug/kg	12.0	39.9
191-24-2	Benzo(ghi)perylene	U	39.9	ug/kg	12.0	39.9
120-82-1	1,2,4-Trichlorobenzene	U	399	ug/kg	79.7	399

## Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.83	741	ug/kg		JA
	Unknown	8.57	631	ug/kg		J

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**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210	Date Collected: 01/07/2010 12:00	Matrix: R
Lab Sample ID: 244599006	Date Received: 01/13/2010 08:55	%Moisture: 16.7
Client ID: RE12-10-7238	Client: LANL010	Project: LANL01004
Batch ID: 941702	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/19/2010 20:16	Inst: MSD7.I	Dilution: 1
Prep Date: 01/14/2010 19:34	Analyst: JMB3	Inj. Vol: .5 uL
Data File: s7a1931.d	Aliquot: 30.11 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)		RT	Estimated	Units	Fit Qual
	Unknown		9.03	870	ug/kg	J
	Unknown		12.72	540	ug/kg	J

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210	Date Collected: 01/07/2010 12:00	Matrix: R
Lab Sample ID: 244599005	Date Received: 01/13/2010 08:55	%Moisture: 9.3
Client ID: RE12-10-7239	Client: LANL010	Project: LANL01004
Batch ID: 941702	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/19/2010 19:54	Inst: MSD7.I	Dilution: 1
Prep Date: 01/14/2010 19:34	Analyst: JMB3	Inj. Vol: .5 uL
Data File: s7a1930.d	Allquot: 30.01 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	367	ug/kg	73.5	367
108-95-2	Phenol	U	367	ug/kg	73.5	367
95-57-8	2-Chlorophenol	U	367	ug/kg	73.5	367
106-46-7	1,4-Dichlorobenzene	U	367	ug/kg	73.5	367
621-64-7	N-Nitrosodipropylamine	U	367	ug/kg	73.5	367
59-50-7	4-Chloro-3-methylphenol	U	367	ug/kg	73.5	367
83-32-9	Acenaphthene	U	36.7	ug/kg	12.1	36.7
121-14-2	2,4-Dinitrotoluene	U	367	ug/kg	36.7	367
100-02-7	4-Nitrophenol	U	367	ug/kg	121	367
87-86-5	Pentachlorophenol	U	367	ug/kg	91.9	367
129-00-0	Pyrene	U	36.7	ug/kg	11.0	36.7
110-86-1	Pyridine	U	367	ug/kg	73.5	367
62-53-3	Aniline	U	367	ug/kg	110	367
111-44-4	bis(2-Chloroethyl) ether	U	367	ug/kg	73.5	367
541-73-1	1,3-Dichlorobenzene	U	367	ug/kg	73.5	367
100-51-6	Benzyl alcohol	U	367	ug/kg	110	367
95-50-1	1,2-Dichlorobenzene	U	367	ug/kg	73.5	367
108-60-1	bis(2-Chloroisopropyl) ether	U	367	ug/kg	73.5	367
95-48-7	o-Cresol	U	367	ug/kg	73.5	367
65794-96-9	m,p-Cresols	U	367	ug/kg	110	367
67-72-1	Hexachloroethane	U	367	ug/kg	73.5	367
98-95-3	Nitrobenzene	U	367	ug/kg	73.5	367
78-59-1	Isophorone	U	367	ug/kg	73.5	367
88-75-5	2-Nitrophenol	U	367	ug/kg	73.5	367
105-67-9	2,4-Dimethylphenol	U	367	ug/kg	129	367
111-91-1	bis(2-Chloroethoxy)methane	U	367	ug/kg	73.5	367
120-83-2	2,4-Dichlorophenol	U	367	ug/kg	73.5	367
65-85-0	Benzoic acid	U	735	ug/kg	184	735
91-20-3	Naphthalene	U	36.7	ug/kg	11.0	36.7
106-47-8	4-Chloroaniline	U	367	ug/kg	73.5	367
87-68-3	Hexachlorobutadiene	U	367	ug/kg	73.5	367
91-57-6	2-Methylnaphthalene	U	36.7	ug/kg	7.35	36.7
77-47-4	Hexachlorocyclopentadiene	U	367	ug/kg	73.5	367
88-06-2	2,4,6-Trichlorophenol	U	367	ug/kg	73.5	367
95-95-4	2,4,5-Trichlorophenol	U	367	ug/kg	73.5	367
91-58-7	2-Chloronaphthalene	U	36.7	ug/kg	12.1	36.7
88-74-4	2-Nitroaniline	U	367	ug/kg	73.5	367
99-09-2	o-Nitroaniline	U	367	ug/kg	73.5	367
	3-Nitroaniline					

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210  
Lab Sample ID: 244599005

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD7.I  
Analyst: JMB3  
Allquot: 30.01 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 9.3  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE12-10-7239  
Batch ID: 941702  
Run Date: 01/19/2010 19:54  
Prep Date: 01/14/2010 19:34  
Data File: s7a1930.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	367	ug/kg	73.5	367
606-20-2	2,6-Dinitrotoluene	U	367	ug/kg	36.7	367
208-96-8	Acenaphthylene	U	36.7	ug/kg	11.0	36.7
51-28-5	2,4-Dinitrophenol	U	735	ug/kg	140	735
132-64-9	Dibenzofuran	U	367	ug/kg	73.5	367
84-66-2	Diethylphthalate	U	367	ug/kg	73.5	367
86-73-7	Fluorene	U	36.7	ug/kg	11.0	36.7
7005-72-3	4-Chlorophenylphenylether	U	367	ug/kg	73.5	367
534-52-1	2-Methyl-4,6-dinitrophenol	U	367	ug/kg	73.5	367 UJ,SV7c
100-01-6	4-Nitroaniline	U	367	ug/kg	110	367
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	367	ug/kg	73.5	367
122-66-7	Azobenzene	U	367	ug/kg	73.5	367
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	367	ug/kg	73.5	367
118-74-1	Hexachlorobenzene	U	367	ug/kg	73.5	367
85-01-8	Phenanthrene	U	36.7	ug/kg	11.0	36.7
120-12-7	Anthracene	U	36.7	ug/kg	7.35	36.7
84-74-2	Di-n-butylphthalate	U	367	ug/kg	73.5	367
206-44-0	Fluoranthene	U	36.7	ug/kg	11.0	36.7
85-68-7	Butylbenzylphthalate	U	367	ug/kg	73.5	367
56-55-3	Benzo(a)anthracene	U	36.7	ug/kg	11.0	36.7
91-94-1	3,3'-Dichlorobenzidine	U	367	ug/kg	110	367
218-01-9	Chrysene	U	36.7	ug/kg	11.0	36.7
117-81-7	bis(2-Ethylhexyl)phthalate	U	367	ug/kg	73.5	367
117-84-0	Di-n-octylphthalate	U	367	ug/kg	73.5	367
205-99-2	Benzo(b)fluoranthene	U	36.7	ug/kg	11.0	36.7
207-08-9	Benzo(k)fluoranthene	U	36.7	ug/kg	11.0	36.7
50-32-8	Benzo(a)pyrene	U	36.7	ug/kg	11.0	36.7
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.7	ug/kg	11.0	36.7 UJ,SV7c
53-70-3	Dibenzo(a,h)anthracene	U	36.7	ug/kg	11.0	36.7
191-24-2	Benzo(ghi)perylene	U	36.7	ug/kg	11.0	36.7
120-82-1	1,2,4-Trichlorobenzene	U	367	ug/kg	73.5	367

## Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.82	640	ug/kg		JA
	Unknown	9.02	173	ug/kg		J

MLD 02/17/10

Semi-Volatile  
Certificate of Analysis  
Sample Summary

SDG Number: 10-1210	Date Collected: 01/07/2010 12:00	Matrix: R
Lab Sample ID: 244599005	Date Received: 01/13/2010 08:55	%Moisture: 9.3
Client ID: RE12-10-7239	Client: LANL010	Project: LANL01004
Batch ID: 941702	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/19/2010 19:54	Inst: MSD7.I	Dilution: 1
Prep Date: 01/14/2010 19:34	Analyst: JMB3	Inj. Vol: .5 uL
Data File: s7a1930.d	Aliquot: 30.01 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown	10.83	557	ug/kg		J
	Unknown	11.5	724	ug/kg		J
	Unknown	12.71	311	ug/kg		J

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210	Date Collected: 01/07/2010 12:00	Matrix: R
Lab Sample ID: 244599002	Date Received: 01/13/2010 08:55	%Moisture: 13.5
Client ID: RE12-10-7240	Client: LANL010	Project: LANL01004
Batch ID: 941702	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/19/2010 18:48	Inst: MSD7.I	Dilution: 1
Prep Date: 01/14/2010 19:34	Analyst: JMB3	Inj. Vol: .5 uL
Data File: s7a1927.d	Aliquot: 30.14 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	384	ug/kg	76.7	384
108-95-2	Phenol	U	384	ug/kg	76.7	384
95-57-8	2-Chlorophenol	U	384	ug/kg	76.7	384
106-46-7	1,4-Dichlorobenzene	U	384	ug/kg	76.7	384
621-64-7	N-Nitrosodipropylamine	U	384	ug/kg	76.7	384
59-50-7	4-Chloro-3-methylphenol	U	384	ug/kg	76.7	384
83-32-9	Acenaphthene	U	38.4	ug/kg	12.7	38.4
121-14-2	2,4-Dinitrotoluene	U	384	ug/kg	38.4	384
100-02-7	4-Nitrophenol	U	384	ug/kg	127	384
87-86-5	Pentachlorophenol	U	384	ug/kg	95.9	384
129-00-0	Pyrene	U	38.4	ug/kg	11.5	38.4
110-86-1	Pyridine	U	384	ug/kg	76.7	384
62-53-3	Aniline	U	384	ug/kg	115	384
111-44-4	bis(2-Chloroethyl) ether	U	384	ug/kg	76.7	384
541-73-1	1,3-Dichlorobenzene	U	384	ug/kg	76.7	384
100-51-6	Benzyl alcohol	U	384	ug/kg	115	384
95-50-1	1,2-Dichlorobenzene	U	384	ug/kg	76.7	384
108-60-1	bis(2-Chloroisopropyl)ether	U	384	ug/kg	76.7	384
95-48-7	o-Cresol	U	384	ug/kg	76.7	384
65794-96-9	m,p-Cresols	U	384	ug/kg	115	384
67-72-1	Hexachloroethane	U	384	ug/kg	76.7	384
98-95-3	Nitrobenzene	U	384	ug/kg	76.7	384
78-59-1	Isophorone	U	384	ug/kg	76.7	384
88-75-5	2-Nitrophenol	U	384	ug/kg	76.7	384
105-67-9	2,4-Dimethylphenol	U	384	ug/kg	134	384
111-91-1	bis(2-Chloroethoxy)methane	U	384	ug/kg	76.7	384
120-83-2	2,4-Dichlorophenol	U	384	ug/kg	76.7	384
65-85-0	Benzoic acid	U	767	ug/kg	192	767
91-20-3	Naphthalene	U	38.4	ug/kg	11.5	38.4
106-47-8	4-Chloroaniline	U	384	ug/kg	76.7	384
87-68-3	Hexachlorobutadiene	U	384	ug/kg	76.7	384
91-57-6	2-Methylnaphthalene	U	38.4	ug/kg	7.67	38.4
77-47-4	Hexachlorocyclopentadiene	U	384	ug/kg	76.7	384
88-06-2	2,4,6-Trichlorophenol	U	384	ug/kg	76.7	384
95-95-4	2,4,5-Trichlorophenol	U	384	ug/kg	76.7	384
91-58-7	2-Chloronaphthalene	U	38.4	ug/kg	12.7	38.4
88-74-4	2-Nitroaniline	U	384	ug/kg	76.7	384
99-09-2	o-Nitroaniline	U	384	ug/kg	76.7	384
	3-Nitroaniline					

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**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210	Date Collected: 01/07/2010 12:00	Matrix: R
Lab Sample ID: 244599002	Date Received: 01/13/2010 08:55	%Moisture: 13.5
Client ID: RE12-10-7240	Client: LANL010	Project: LANL01004
Batch ID: 941702	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/19/2010 18:48	Inst: MSD7.I	Dilution: 1
Prep Date: 01/14/2010 19:34	Analyst: JMB3	Inj. Vol: .5 uL
Data File: s7a1927.d	Aliquot: 30.14 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	384	ug/kg	76.7	384
606-20-2	2,6-Dinitrotoluene	U	384	ug/kg	38.4	384
208-96-8	Acenaphthylene	U	38.4	ug/kg	11.5	38.4
51-28-5	2,4-Dinitrophenol	U	767	ug/kg	146	767
132-64-9	Dibenzofuran	U	384	ug/kg	76.7	384
84-66-2	Diethylphthalate	U	384	ug/kg	76.7	384
86-73-7	Fluorene	U	38.4	ug/kg	11.5	38.4
7005-72-3	4-Chlorophenylphenylether	U	384	ug/kg	76.7	384
534-52-1	2-Methyl-4,6-dinitrophenol	U	384	ug/kg	76.7	384 UJ,SV7c
100-01-6	4-Nitroaniline	U	384	ug/kg	115	384
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	384	ug/kg	76.7	384
122-66-7	Azobenzene	U	384	ug/kg	76.7	384
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	384	ug/kg	76.7	384
118-74-1	Hexachlorobenzene	U	384	ug/kg	76.7	384
85-01-8	Phenanthrene	U	38.4	ug/kg	11.5	38.4
120-12-7	Anthracene	U	38.4	ug/kg	7.67	38.4
84-74-2	Di-n-butylphthalate	U	384	ug/kg	76.7	384
206-44-0	Fluoranthene	U	38.4	ug/kg	11.5	38.4
85-68-7	Butylbenzylphthalate	U	384	ug/kg	76.7	384
56-55-3	Benzo(a)anthracene	U	38.4	ug/kg	11.5	38.4
91-94-1	3,3'-Dichlorobenzidine	U	384	ug/kg	115	384
218-01-9	Chrysene	U	38.4	ug/kg	11.5	38.4
117-81-7	bis(2-Ethylhexyl)phthalate	U	384	ug/kg	76.7	384
117-84-0	Di-n-octylphthalate	U	384	ug/kg	76.7	384
205-99-2	Benzo(b)fluoranthene	U	38.4	ug/kg	11.5	38.4
207-08-9	Benzo(k)fluoranthene	U	38.4	ug/kg	11.5	38.4
50-32-8	Benzo(a)pyrene	U	38.4	ug/kg	11.5	38.4
193-39-5	Indeno(1,2,3-cd)pyrene	U	38.4	ug/kg	11.5	38.4 UJ,SV7c
53-70-3	Dibenzo(a,h)anthracene	U	38.4	ug/kg	11.5	38.4
191-24-2	Benzo(ghi)perylene	U	38.4	ug/kg	11.5	38.4
120-82-1	1,2,4-Trichlorobenzene	U	384	ug/kg	76.7	384

## Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown Aldol Condensate	2.82	843	ug/kg		JA
77-53-2	Cedrol	6.39	307	ug/kg	94	NJ

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210	Date Collected: 01/07/2010 12:00	Matrix: R
Lab Sample ID: 244599002	Date Received: 01/13/2010 08:55	%Moisture: 13.5
Client ID: RE12-10-7240	Client: LANL010	Project: LANL01004
Batch ID: 941702	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/19/2010 18:48	Inst: MSD7.I	Dilution: 1
Prep Date: 01/14/2010 19:34	Analyst: JMB3	Inj. Vol: .5 uL
Data File: s7a1927.d	Allquot: 30.14 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Paramname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	8.81	836	ug/kg	96	NJ
	Unknown	12.71	190	ug/kg		J

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**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210	Date Collected: 01/07/2010 12:00	Matrix: R
Lab Sample ID: 244599003	Date Received: 01/13/2010 08:55	%Moisture: 9.4
Client ID: RE12-10-7241	Client: LANL010	Project: LANL01004
Batch ID: 941702	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/19/2010 19:11	Inst: MSD7.1	Dilution: 1
Prep Date: 01/14/2010 19:34	Analyst: JMB3	Inj. Vol: .5 uL
Data File: s7a1928.d	Aliquot: 30.02 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	368	ug/kg	73.5	368
108-95-2	Phenol	U	368	ug/kg	73.5	368
95-57-8	2-Chlorophenol	U	368	ug/kg	73.5	368
106-46-7	1,4-Dichlorobenzene	U	368	ug/kg	73.5	368
621-64-7	N-Nitrosodipropylamine	U	368	ug/kg	73.5	368
59-50-7	4-Chloro-3-methylphenol	U	368	ug/kg	73.5	368
83-32-9	Acenaphthene	U	36.8	ug/kg	12.1	36.8
121-14-2	2,4-Dinitrotoluene	U	368	ug/kg	36.8	368
100-02-7	4-Nitrophenol	U	368	ug/kg	121	368
87-86-5	Pentachlorophenol	U	368	ug/kg	91.9	368
129-00-0	Pyrene	U	36.8	ug/kg	11.0	36.8
110-86-1	Pyridine	U	368	ug/kg	73.5	368
62-53-3	Aniline	U	368	ug/kg	110	368
111-44-4	bis(2-Chloroethyl) ether	U	368	ug/kg	73.5	368
541-73-1	1,3-Dichlorobenzene	U	368	ug/kg	73.5	368
100-51-6	Benzyl alcohol	U	368	ug/kg	110	368
95-50-1	1,2-Dichlorobenzene	U	368	ug/kg	73.5	368
108-60-1	bis(2-Chloroisopropyl) ether	U	368	ug/kg	73.5	368
95-48-7	o-Cresol	U	368	ug/kg	73.5	368
65794-96-9	m,p-Cresols	U	368	ug/kg	110	368
67-72-1	Hexachloroethane	U	368	ug/kg	73.5	368
98-95-3	Nitrobenzene	U	368	ug/kg	73.5	368
78-59-1	Isophorone	U	368	ug/kg	73.5	368
88-75-5	2-Nitrophenol	U	368	ug/kg	73.5	368
105-67-9	2,4-Dimethylphenol	U	368	ug/kg	129	368
111-91-1	bis(2-Chloroethoxy)methane	U	368	ug/kg	73.5	368
120-83-2	2,4-Dichlorophenol	U	368	ug/kg	73.5	368
65-85-0	Benzoic acid	U	735	ug/kg	184	735
91-20-3	Naphthalene	U	36.8	ug/kg	11.0	36.8
106-47-8	4-Chloroaniline	U	368	ug/kg	73.5	368
87-68-3	Hexachlorobutadiene	U	368	ug/kg	73.5	368
91-57-6	2-Methylnaphthalene	U	36.8	ug/kg	7.35	36.8
77-47-4	Hexachlorocyclopentadiene	U	368	ug/kg	73.5	368
88-06-2	2,4,6-Trichlorophenol	U	368	ug/kg	73.5	368
95-95-4	2,4,5-Trichlorophenol	U	368	ug/kg	73.5	368
91-58-7	2-Chloronaphthalene	U	36.8	ug/kg	12.1	36.8
88-74-4	2-Nitroaniline	U	368	ug/kg	73.5	368
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	368	ug/kg	73.5	368

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210	Date Collected: 01/07/2010 12:00	Matrix: R
Lab Sample ID: 244599003	Date Received: 01/13/2010 08:55	%Moisture: 9.4
Client ID: RE12-10-7241	Client: LANL010	Project: LANL01004
Batch ID: 941702	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/19/2010 19:11	Inst: MSD7.1	Dilution: 1
Prep Date: 01/14/2010 19:34	Analyst: JMB3	Inj. Vol: .5 uL
Data File: s7a1928.d	Aliquot: 30.02 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	368	ug/kg	73.5	368
606-20-2	2,6-Dinitrotoluene	U	368	ug/kg	36.8	368
208-96-8	Acenaphthylene	U	36.8	ug/kg	11.0	36.8
51-28-5	2,4-Dinitrophenol	U	735	ug/kg	140	735
132-64-9	Dibenzofuran	U	368	ug/kg	73.5	368
84-66-2	Diethylphthalate	U	368	ug/kg	73.5	368
86-73-7	Fluorene	U	36.8	ug/kg	11.0	36.8
7005-72-3	4-Chlorophenylphenylether	U	368	ug/kg	73.5	368
534-52-1	2-Methyl-4,6-dinitrophenol	U	368	ug/kg	73.5	368 UJ,SV7c
100-01-6	4-Nitroaniline	U	368	ug/kg	110	368
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	368	ug/kg	73.5	368
122-66-7	Azobenzene	U	368	ug/kg	73.5	368
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	368	ug/kg	73.5	368
118-74-1	Hexachlorobenzene	U	368	ug/kg	73.5	368
85-01-8	Phenanthrene	U	36.8	ug/kg	11.0	36.8
120-12-7	Anthracene	U	36.8	ug/kg	7.35	36.8
84-74-2	Di-n-butylphthalate	U	368	ug/kg	73.5	368
206-44-0	Fluoranthene	U	36.8	ug/kg	11.0	36.8
85-68-7	Butylbenzylphthalate	U	368	ug/kg	73.5	368
56-55-3	Benzo(a)anthracene	U	36.8	ug/kg	11.0	36.8
91-94-1	3,3'-Dichlorobenzidine	U	368	ug/kg	110	368
218-01-9	Chrysene	U	36.8	ug/kg	11.0	36.8
117-81-7	bis(2-Ethylhexyl)phthalate	U	368	ug/kg	73.5	368
117-84-0	Di-n-octylphthalate	U	368	ug/kg	73.5	368
205-99-2	Benzo(b)fluoranthene	U	36.8	ug/kg	11.0	36.8
207-08-9	Benzo(k)fluoranthene	U	36.8	ug/kg	11.0	36.8
50-32-8	Benzo(a)pyrene	U	36.8	ug/kg	11.0	36.8
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.8	ug/kg	11.0	36.8 UJ,SV7c
53-70-3	Dibenzo(a,h)anthracene	U	36.8	ug/kg	11.0	36.8
191-24-2	Benzo(ghi)perylene	U	36.8	ug/kg	11.0	36.8
120-82-1	1,2,4-Trichlorobenzene	U	368	ug/kg	73.5	368

## Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown Aldol Condensate	2.82	657	ug/kg		JA
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	5.63	227	ug/kg	99	NJ

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210	Date Collected: 01/07/2010 12:00	Matrix: R
Lab Sample ID: 244599003	Date Received: 01/13/2010 08:55	%Moisture: 9.4
Client ID: RE12-10-7241	Client: LANL010	Project: LANL01004
Batch ID: 941702	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/19/2010 19:11	Inst: MSD7.I	Dilution: 1
Prep Date: 01/14/2010 19:34	Analyst: JMB3	Inj. Vol: .5 uL
Data File: s7a1928.d	Allquot: 30.02 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
77-53-2	Cedrol	6.39	556	ug/kg	93	NJ
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	8.82	469	ug/kg	96	NJ

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210  
Lab Sample ID: 244599007

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD7.I  
Analyst: JMB3  
Aliquot: 30.12 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 16.3  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE12-10-7242  
Batch ID: 941702  
Run Date: 01/20/2010 14:29  
Prep Date: 01/14/2010 19:34  
Data File: s7a2012.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	397	ug/kg	79.4	397
108-95-2	Phenol	U	397	ug/kg	79.4	397
95-57-8	2-Chlorophenol	U	397	ug/kg	79.4	397
106-46-7	1,4-Dichlorobenzene	U	397	ug/kg	79.4	397
621-64-7	N-Nitrosodipropylamine	U	397	ug/kg	79.4	397
59-50-7	4-Chloro-3-methylphenol	U	397	ug/kg	79.4	397
83-32-9	Acenaphthene	U	39.7	ug/kg	13.1	39.7
121-14-2	2,4-Dinitrotoluene	U	397	ug/kg	39.7	397
100-02-7	4-Nitrophenol	U	397	ug/kg	131	397
87-86-5	Pentachlorophenol	U	397	ug/kg	99.2	397
129-00-0	Pyrene	J	12.0	ug/kg	11.9	39.7
110-86-1	Pyridine	U	397	ug/kg	79.4	397
62-53-3	Aniline	U	397	ug/kg	119	397
111-44-4	bis(2-Chloroethyl) ether	U	397	ug/kg	79.4	397
541-73-1	1,3-Dichlorobenzene	U	397	ug/kg	79.4	397
100-51-6	Benzyl alcohol	U	397	ug/kg	119	397
95-50-1	1,2-Dichlorobenzene	U	397	ug/kg	79.4	397
108-60-1	bis(2-Chloroisopropyl)ether	U	397	ug/kg	79.4	397
95-48-7	o-Cresol	U	397	ug/kg	79.4	397
65794-96-9	m,p-Cresols	U	397	ug/kg	119	397
67-72-1	Hexachloroethane	U	397	ug/kg	79.4	397
98-95-3	Nitrobenzene	U	397	ug/kg	79.4	397
78-59-1	Isophorone	U	397	ug/kg	79.4	397
88-75-5	2-Nitrophenol	U	397	ug/kg	79.4	397
105-67-9	2,4-Dimethylphenol	U	397	ug/kg	139	397
111-91-1	bis(2-Chloroethoxy)methane	U	397	ug/kg	79.4	397
120-83-2	2,4-Dichlorophenol	U	397	ug/kg	79.4	397
65-85-0	Benzoic acid	U	794	ug/kg	198	794
91-20-3	Naphthalene	U	39.7	ug/kg	11.9	39.7
106-47-8	4-Chloroaniline	U	397	ug/kg	79.4	397
87-68-3	Hexachlorobutadiene	U	397	ug/kg	79.4	397
91-57-6	2-Methylnaphthalene	U	39.7	ug/kg	7.94	39.7
77-47-4	Hexachlorocyclopentadiene	U	397	ug/kg	79.4	397
88-06-2	2,4,6-Trichlorophenol	U	397	ug/kg	79.4	397
95-95-4	2,4,5-Trichlorophenol	U	397	ug/kg	79.4	397
91-58-7	2-Chloronaphthalene	U	39.7	ug/kg	13.1	39.7
88-74-4	2-Nitroaniline	U	397	ug/kg	79.4	397
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	397	ug/kg	79.4	397

MLD 02/17/10

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210	Date Collected: 01/07/2010 12:00	Matrix: R
Lab Sample ID: 244599007	Date Received: 01/13/2010 08:55	%Moisture: 16.3
Client ID: RE12-10-7242	Client: LANL010	Project: LANL01004
Batch ID: 941702	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/20/2010 14:29	Inst: MSD7.I	Dilution: 1
Prep Date: 01/14/2010 19:34	Analyst: JMB3	Inj. Vol: .5 uL
Data File: s7a2012.d	Aliquot: 30.12 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
606-20-2	Dimethylphthalate	U	397	ug/kg	79.4	397
208-96-8	2,6-Dinitrotoluene	U	397	ug/kg	39.7	397
51-28-5	Acenaphthylene	U	39.7	ug/kg	11.9	39.7
132-64-9	2,4-Dinitrophenol	U	794	ug/kg	151	794
84-66-2	Dibenzofuran	U	397	ug/kg	79.4	397
86-73-7	Diethylphthalate	U	397	ug/kg	79.4	397
7005-72-3	Fluorene	U	39.7	ug/kg	11.9	39.7
534-52-1	4-Chlorophenylphenylether	U	397	ug/kg	79.4	397
100-01-6	2-Methyl-4,6-dinitrophenol	U	397	ug/kg	79.4	397
122-39-4	4-Nitroaniline	U	397	ug/kg	119	397
122-66-7	<i>p</i> -Nitroaniline					
101-55-3	Diphenylamine	U	397	ug/kg	79.4	397
118-74-1	Azobenzene	U	397	ug/kg	79.4	397
85-01-8	1,2-Diphenylhydrazine					
120-12-7	4-Bromophenylphenylether	U	397	ug/kg	79.4	397
84-74-2	Hexachlorobenzene	U	397	ug/kg	79.4	397
206-44-0	Phenanthrene	U	39.7	ug/kg	11.9	39.7
85-68-7	Anthracene	U	39.7	ug/kg	7.94	39.7
56-55-3	Di-n-butylphthalate	U	397	ug/kg	79.4	397
91-94-1	Fluoranthene	U	39.7	ug/kg	11.9	39.7
218-01-9	Butylbenzylphthalate	U	397	ug/kg	79.4	397
117-81-7	Benzo(a)anthracene	J	19.2	ug/kg	11.9	39.7
117-84-0	3,3'-Dichlorobenzidine	U	397	ug/kg	119	397
205-99-2	Chrysene	U	39.7	ug/kg	11.9	39.7
207-08-9	bis(2-Ethylhexyl)phthalate	U	397	ug/kg	79.4	397
50-32-8	Di-n-octylphthalate	U	397	ug/kg	79.4	397
193-39-5	Benzo(b)fluoranthene	J	22.3	ug/kg	11.9	39.7
53-70-3	Benzo(k)fluoranthene	U	39.7	ug/kg	11.9	39.7
191-24-2	Benzo(a)pyrene	U	39.7	ug/kg	11.9	39.7
120-82-1	Indeno(1,2,3-cd)pyrene	U	39.7	ug/kg	11.9	39.7
	Dibenzo(a,h)anthracene	U	39.7	ug/kg	11.9	39.7
	Benzo(ghi)perylene	U	39.7	ug/kg	11.9	39.7
	1,2,4-Trichlorobenzene	U	397	ug/kg	79.4	397

UJ,SV7c



## Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.05	300	ug/kg		J
	Unknown Aldol Condensate	2.82	817	ug/kg		J

MLD 02/17/10

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210  
Lab Sample ID: 244599007

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD7.I  
Analyst: JMB3  
Aliquot: 30.12 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 16.3  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE12-10-7242  
Batch ID: 941702  
Run Date: 01/20/2010 14:29  
Prep Date: 01/14/2010 19:34  
Data File: s7a2012.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
<b>Tentatively Identified Compound Summary</b>						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
39029-41-9	Naphthalene, 1,2,3,4,4a,5,6,8a-octahydro	5.53	221	ug/kg	90	NJ
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	5.63	1650	ug/kg	99	NJ
77-53-2	Cedrol	6.39	201	ug/kg	95	NJ
1438-62-6	1-Naphthalenepropanol, .alpha.-ethenylde	7.94	297	ug/kg	87	NJ
	Unknown	8.7	254	ug/kg		J
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	8.81	1520	ug/kg	96	NJ
	Unknown	8.84	422	ug/kg		J
	Unknown	9.3	160	ug/kg		J
	Unknown	11.51	194	ug/kg		J
112-95-8	Eicosane	12.61	310	ug/kg	91	NJ
	Unknown	12.72	239	ug/kg		J
83-46-5	.beta.-Sitosterol	13.23	597	ug/kg	97	NJ
58-22-0	Androst-4-en-3-one, 17-hydroxy-, (17.bet	14.3	291	ug/kg	91	NJ

MLD 02/17/10

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210  
Lab Sample ID: 244599001

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD7.I  
Analyst: JMB3  
Aliquot: 30.03 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 5.8  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE12-10-7243  
Batch ID: 941702  
Run Date: 01/19/2010 17:42  
Prep Date: 01/14/2010 19:34  
Data File: s7a1924.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	354	ug/kg	70.7	354
108-95-2	Phenol	U	354	ug/kg	70.7	354
95-57-8	2-Chlorophenol	U	354	ug/kg	70.7	354
106-46-7	1,4-Dichlorobenzene	U	354	ug/kg	70.7	354
621-64-7	N-Nitrosodipropylamine	U	354	ug/kg	70.7	354
59-50-7	4-Chloro-3-methylphenol	U	354	ug/kg	70.7	354
83-32-9	Acenaphthene	U	35.4	ug/kg	11.7	35.4
121-14-2	2,4-Dinitrotoluene	U	354	ug/kg	35.4	354
100-02-7	4-Nitrophenol	U	354	ug/kg	117	354
87-86-5	Pentachlorophenol	U	354	ug/kg	88.4	354
129-00-0	Pyrene	U	35.4	ug/kg	10.6	35.4
110-86-1	Pyridine	U	354	ug/kg	70.7	354
62-53-3	Aniline	U	354	ug/kg	106	354
111-44-4	bis(2-Chloroethyl) ether	U	354	ug/kg	70.7	354
541-73-1	1,3-Dichlorobenzene	U	354	ug/kg	70.7	354
100-51-6	Benzyl alcohol	U	354	ug/kg	106	354
95-50-1	1,2-Dichlorobenzene	U	354	ug/kg	70.7	354
108-60-1	bis(2-Chloroisopropyl) ether	U	354	ug/kg	70.7	354
95-48-7	o-Cresol	U	354	ug/kg	70.7	354
65794-96-9	m,p-Cresols	U	354	ug/kg	106	354
67-72-1	Hexachloroethane	U	354	ug/kg	70.7	354
98-95-3	Nitrobenzene	U	354	ug/kg	70.7	354
78-59-1	Isophorone	U	354	ug/kg	70.7	354
88-75-5	2-Nitrophenol	U	354	ug/kg	70.7	354
105-67-9	2,4-Dimethylphenol	U	354	ug/kg	124	354
111-91-1	bis(2-Chloroethoxy)methane	U	354	ug/kg	70.7	354
120-83-2	2,4-Dichlorophenol	U	354	ug/kg	70.7	354
65-85-0	Benzoic acid	U	707	ug/kg	177	707
91-20-3	Naphthalene	U	35.4	ug/kg	10.6	35.4
106-47-8	4-Chloroaniline	U	354	ug/kg	70.7	354
87-68-3	Hexachlorobutadiene	U	354	ug/kg	70.7	354
91-57-6	2-Methylnaphthalene	U	35.4	ug/kg	7.07	35.4
77-47-4	Hexachlorocyclopentadiene	U	354	ug/kg	70.7	354
88-06-2	2,4,6-Trichlorophenol	U	354	ug/kg	70.7	354
95-95-4	2,4,5-Trichlorophenol	U	354	ug/kg	70.7	354
91-58-7	2-Chloronaphthalene	U	35.4	ug/kg	11.7	35.4
88-74-4	2-Nitroaniline	U	354	ug/kg	70.7	354
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	354	ug/kg	70.7	354

MLD 02/17/10

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210  
Lab Sample ID: 244599001

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD7.I  
Analyst: JMB3  
Allquot: 30.03 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 5.8  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	354	ug/kg	70.7	354
606-20-2	2,6-Dinitrotoluene	U	354	ug/kg	35.4	354
208-96-8	Acenaphthylene	U	35.4	ug/kg	10.6	35.4
51-28-5	2,4-Dinitrophenol	U	707	ug/kg	134	707
132-64-9	Dibenzofuran	U	354	ug/kg	70.7	354
84-66-2	Diethylphthalate	U	354	ug/kg	70.7	354
86-73-7	Fluorene	U	35.4	ug/kg	10.6	35.4
7005-72-3	4-Chlorophenylphenylether	U	354	ug/kg	70.7	354
534-52-1	2-Methyl-4,6-dinitrophenol	U	354	ug/kg	70.7	354 UJ,SV7c
100-01-6	4-Nitroaniline	U	354	ug/kg	106	354
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	354	ug/kg	70.7	354
122-66-7	Azobenzene	U	354	ug/kg	70.7	354
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	354	ug/kg	70.7	354
118-74-1	Hexachlorobenzene	U	354	ug/kg	70.7	354
85-01-8	Phenanthrene	U	35.4	ug/kg	10.6	35.4
120-12-7	Anthracene	U	35.4	ug/kg	7.07	35.4
84-74-2	Di-n-butylphthalate	U	354	ug/kg	70.7	354
206-44-0	Fluoranthene	U	35.4	ug/kg	10.6	35.4
85-68-7	Butylbenzylphthalate	U	354	ug/kg	70.7	354
56-55-3	Benzo(a)anthracene	U	35.4	ug/kg	10.6	35.4
91-94-1	3,3'-Dichlorobenzidine	U	354	ug/kg	106	354
218-01-9	Chrysene	U	35.4	ug/kg	10.6	35.4
117-81-7	bis(2-Ethylhexyl)phthalate	U	354	ug/kg	70.7	354
117-84-0	Di-n-octylphthalate	U	354	ug/kg	70.7	354
205-99-2	Benzo(b)fluoranthene	U	35.4	ug/kg	10.6	35.4
207-08-9	Benzo(k)fluoranthene	U	35.4	ug/kg	10.6	35.4
50-32-8	Benzo(a)pyrene	U	35.4	ug/kg	10.6	35.4
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.4	ug/kg	10.6	35.4 UJ,SV7c
53-70-3	Dibenzo(a,h)anthracene	U	35.4	ug/kg	10.6	35.4
191-24-2	Benzo(ghi)perylene	U	35.4	ug/kg	10.6	35.4
120-82-1	1,2,4-Trichlorobenzene	U	354	ug/kg	70.7	354

## Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.83	708	ug/kg		JA
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	8.81	219	ug/kg	96	NJ

MLD 02/17/10



**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210	Date Collected: 01/07/2010 12:00	Matrix: R
Lab Sample ID: 244599009	Date Received: 01/13/2010 08:55	%Moisture: 15.9
Client ID: RE12-10-7252	Client: LANL010	Project: LANL01004
Batch ID: 941702	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/20/2010 15:13	Inst: MSD7.I	Dilution: 1
Prep Date: 01/14/2010 19:34	Analyst: JMB3	Inj. Vol: .5 uL
Data File: s7a2014.d	Allquot: 30.13 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	395	ug/kg	78.9	395
108-95-2	Phenol	U	395	ug/kg	78.9	395
95-57-8	2-Chlorophenol	U	395	ug/kg	78.9	395
106-46-7	1,4-Dichlorobenzene	U	395	ug/kg	78.9	395
621-64-7	N-Nitrosodipropylamine	U	395	ug/kg	78.9	395
59-50-7	4-Chloro-3-methylphenol	U	395	ug/kg	78.9	395
83-32-9	Acenaphthene	U	39.5	ug/kg	13.0	39.5
121-14-2	2,4-Dinitrotoluene	U	395	ug/kg	39.5	395
100-02-7	4-Nitrophenol	U	395	ug/kg	130	395
87-86-5	Pentachlorophenol	U	395	ug/kg	98.7	395
129-00-0	Pyrene	U	39.5	ug/kg	11.8	39.5
110-86-1	Pyridine	U	395	ug/kg	78.9	395
62-53-3	Aniline	U	395	ug/kg	118	395
111-44-4	bis(2-Chloroethyl) ether	U	395	ug/kg	78.9	395
541-73-1	1,3-Dichlorobenzene	U	395	ug/kg	78.9	395
100-51-6	Benzyl alcohol	U	395	ug/kg	118	395
95-50-1	1,2-Dichlorobenzene	U	395	ug/kg	78.9	395
108-60-1	bis(2-Chloroisopropyl)ether	U	395	ug/kg	78.9	395
95-48-7	o-Cresol	U	395	ug/kg	78.9	395
65794-96-9	m,p-Cresols	U	395	ug/kg	118	395
67-72-1	Hexachloroethane	U	395	ug/kg	78.9	395
98-95-3	Nitrobenzene	U	395	ug/kg	78.9	395
78-59-1	Isophorone	U	395	ug/kg	78.9	395
88-75-5	2-Nitrophenol	U	395	ug/kg	78.9	395
105-67-9	2,4-Dimethylphenol	U	395	ug/kg	138	395
111-91-1	bis(2-Chloroethoxy)methane	U	395	ug/kg	78.9	395
120-83-2	2,4-Dichlorophenol	U	395	ug/kg	78.9	395
65-85-0	Benzoic acid	U	789	ug/kg	197	789
91-20-3	Naphthalene	U	39.5	ug/kg	11.8	39.5
106-47-8	4-Chloroaniline	U	395	ug/kg	78.9	395
87-68-3	Hexachlorobutadiene	U	395	ug/kg	78.9	395
91-57-6	2-Methylnaphthalene	U	39.5	ug/kg	7.89	39.5
77-47-4	Hexachlorocyclopentadiene	U	395	ug/kg	78.9	395
88-06-2	2,4,6-Trichlorophenol	U	395	ug/kg	78.9	395
95-95-4	2,4,5-Trichlorophenol	U	395	ug/kg	78.9	395
91-58-7	2-Chloronaphthalene	U	39.5	ug/kg	13.0	39.5
88-74-4	2-Nitroaniline	U	395	ug/kg	78.9	395
99-09-2	o-Nitroaniline					
	3-Nitroaniline	U	395	ug/kg	78.9	395

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210	Date Collected: 01/07/2010 12:00	Matrix: R
Lab Sample ID: 244599009	Date Received: 01/13/2010 08:55	%Moisture: 15.9
Client ID: RE12-10-7252	Client: LANL010	Project: LANL01004
Batch ID: 941702	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/20/2010 15:13	Inst: MSD7.I	Dilution: 1
Prep Date: 01/14/2010 19:34	Analyst: JMB3	Inj. Vol: .5 uL
Data File: s7a2014.d	Aliquot: 30.13 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
606-20-2	Dimethylphthalate	U	395	ug/kg	78.9	395
208-96-8	2,6-Dinitrotoluene	U	395	ug/kg	39.5	395
51-28-5	Acenaphthylene	U	39.5	ug/kg	11.8	39.5
132-64-9	2,4-Dinitrophenol	U	789	ug/kg	150	789
84-66-2	Dibenzofuran	U	395	ug/kg	78.9	395
86-73-7	Diethylphthalate	U	395	ug/kg	78.9	395
7005-72-3	Fluorene	U	39.5	ug/kg	11.8	39.5
534-52-1	4-Chlorophenylphenylether	U	395	ug/kg	78.9	395
100-01-6	2-Methyl-4,6-dinitrophenol	U	395	ug/kg	78.9	395 UJ.SV7c
122-39-4	4-Nitroaniline	U	395	ug/kg	118	395
122-66-7	<i>p</i> -Nitroaniline					
101-55-3	Diphenylamine	U	395	ug/kg	78.9	395
118-74-1	Azobenzene	U	395	ug/kg	78.9	395
85-01-8	1,2-Diphenylhydrazine					
120-12-7	4-Bromophenylphenylether	U	395	ug/kg	78.9	395
84-74-2	Hexachlorobenzene	U	395	ug/kg	78.9	395
206-44-0	Phenanthrene	U	39.5	ug/kg	11.8	39.5
85-68-7	Anthracene	U	39.5	ug/kg	7.89	39.5
56-55-3	Di-n-butylphthalate	U	395	ug/kg	78.9	395
91-94-1	Fluoranthene	U	39.5	ug/kg	11.8	39.5
218-01-9	Butylbenzylphthalate	U	395	ug/kg	78.9	395
117-81-7	Benzo(a)anthracene	U	39.5	ug/kg	11.8	39.5
117-84-0	3,3'-Dichlorobenzidine	U	395	ug/kg	118	395
205-99-2	Chrysene	U	39.5	ug/kg	11.8	39.5
207-08-9	bis(2-Ethylhexyl)phthalate	U	395	ug/kg	78.9	395
50-32-8	Di-n-octylphthalate	U	395	ug/kg	78.9	395
193-39-5	Benzo(b)fluoranthene	U	39.5	ug/kg	11.8	39.5
53-70-3	Benzo(k)fluoranthene	U	39.5	ug/kg	11.8	39.5
191-24-2	Benzo(a)pyrene	U	39.5	ug/kg	11.8	39.5
120-82-1	Indeno(1,2,3-cd)pyrene	U	39.5	ug/kg	11.8	39.5 UJ.SV7c
	Dibenzo(a,h)anthracene	U	39.5	ug/kg	11.8	39.5
	Benzo(ghi)perylene	U	39.5	ug/kg	11.8	39.5
	1,2,4-Trichlorobenzene	U	395	ug/kg	78.9	395

## Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.03	332	ug/kg		J
	Unknown	2.07	251	ug/kg		J

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210  
Lab Sample ID: 244599009

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55

Matrix: R  
%Moisture: 15.9  
Project: LANL01004

Client ID: RE12-10-7252

Client: LANL010

SOP Ref: GL-OA-E-009

Batch ID: 941702

Method: SW846 8270C

Dilution: 1

Run Date: 01/20/2010 15:13

Inst: MSD7.I

Inj. Vol: .5 uL

Prep Date: 01/14/2010 19:34

Analyst: JMB3

Final Volume: 1 mL

Data File: 07a2014.d

Aliquot: 30.13 g

Level: LOW

Column: J&W DB-5MS

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
<b>Tentatively Identified Compound Summary</b>						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.82	691	ug/kg		J
	Unknown	8.6	237	ug/kg		J
511-15-9	2-Phenanthrenol, 4h,5,6,7,8,8a,9,10-octa	8.81	444	ug/kg	96	NJ
	Unknown	9.05	166	ug/kg		J
112-95-8	Eicosane	9.83	208	ug/kg	98	NJ
	Unknown	10.52	216	ug/kg		J
	Unknown	10.84	781	ug/kg		J
	Unknown	11.51	1090	ug/kg		J
	Unknown	12.26	362	ug/kg		J
	Unknown	12.31	254	ug/kg		J
	Unknown	12.44	182	ug/kg		J
	Unknown	13.23	516	ug/kg		J
	Unknown	13.7	201	ug/kg		J
	Unknown	14.29	204	ug/kg		J

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210	Date Collected: 01/07/2010 12:00	Matrix: R
Lab Sample ID: 244599010	Date Received: 01/13/2010 08:55	%Moisture: 3.3
Client ID: RE12-10-7253	Client: LANL010	Project: LANL01004
Batch ID: 941702	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/20/2010 15:35	Inst: MSD7.I	Dilution: 1
Prep Date: 01/14/2010 19:34	Analyst: JMB3	Inj. Vol: .5 uL
Data File: s7a2015.d	Allquot: 30.03 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	344	ug/kg	68.8	344
108-95-2	Phenol	U	344	ug/kg	68.8	344
95-57-8	2-Chlorophenol	U	344	ug/kg	68.8	344
106-46-7	1,4-Dichlorobenzene	U	344	ug/kg	68.8	344
621-64-7	N-Nitrosodipropylamine	U	344	ug/kg	68.8	344
59-50-7	4-Chloro-3-methylphenol	U	344	ug/kg	68.8	344
83-32-9	Acenaphthene	U	34.4	ug/kg	11.4	34.4
121-14-2	2,4-Dinitrotoluene	U	344	ug/kg	34.4	344
100-02-7	4-Nitrophenol	U	344	ug/kg	114	344
87-86-5	Pentachlorophenol	U	344	ug/kg	86.1	344
129-00-0	Pyrene	U	34.4	ug/kg	10.3	34.4
110-86-1	Pyridine	U	344	ug/kg	68.8	344
62-53-3	Aniline	U	344	ug/kg	103	344
111-44-4	bis(2-Chloroethyl) ether	U	344	ug/kg	68.8	344
541-73-1	1,3-Dichlorobenzene	U	344	ug/kg	68.8	344
100-51-6	Benzyl alcohol	U	344	ug/kg	103	344
95-50-1	1,2-Dichlorobenzene	U	344	ug/kg	68.8	344
108-60-1	bis(2-Chloroisopropyl) ether	U	344	ug/kg	68.8	344
95-48-7	o-Cresol	U	344	ug/kg	68.8	344
65794-96-9	m,p-Cresols	U	344	ug/kg	103	344
67-72-1	Hexachloroethane	U	344	ug/kg	68.8	344
98-95-3	Nitrobenzene	U	344	ug/kg	68.8	344
78-59-1	Isophorone	U	344	ug/kg	68.8	344
88-75-5	2-Nitrophenol	U	344	ug/kg	68.8	344
105-67-9	2,4-Dimethylphenol	U	344	ug/kg	120	344
111-91-1	bis(2-Chloroethoxy)methane	U	344	ug/kg	68.8	344
120-83-2	2,4-Dichlorophenol	U	344	ug/kg	68.8	344
65-85-0	Benzoic acid	U	688	ug/kg	172	688
91-20-3	Naphthalene	U	34.4	ug/kg	10.3	34.4
106-47-8	4-Chloroaniline	U	344	ug/kg	68.8	344
87-68-3	Hexachlorobutadiene	U	344	ug/kg	68.8	344
91-57-6	2-Methylnaphthalene	U	34.4	ug/kg	6.88	34.4
77-47-4	Hexachlorocyclopentadiene	U	344	ug/kg	68.8	344
88-06-2	2,4,6-Trichlorophenol	U	344	ug/kg	68.8	344
95-95-4	2,4,5-Trichlorophenol	U	344	ug/kg	68.8	344
91-58-7	2-Chloronaphthalene	U	34.4	ug/kg	11.4	34.4
88-74-4	2-Nitroaniline	U	344	ug/kg	68.8	344
99-09-2	o-Nitroaniline	U	344	ug/kg	68.8	344
	3-Nitroaniline					

MLD 02/17/10

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210  
Lab Sample ID: 244599010

Client ID: RE12-10-7253  
Batch ID: 941702  
Run Date: 01/20/2010 15:35  
Prep Date: 01/14/2010 19:34  
Data File: s7a2015.d

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD7.I  
Analyst: JMB3  
Allquot: 30.03 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 3.3  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	344	ug/kg	68.8	344
606-20-2	2,6-Dinitrotoluene	U	344	ug/kg	34.4	344
208-96-8	Acenaphthylene	U	34.4	ug/kg	10.3	34.4
51-28-5	2,4-Dinitrophenol	U	688	ug/kg	131	688
132-64-9	Dibenzofuran	U	344	ug/kg	68.8	344
84-66-2	Diethylphthalate	U	344	ug/kg	68.8	344
86-73-7	Fluorene	U	34.4	ug/kg	10.3	34.4
7005-72-3	4-Chlorophenylphenylether	U	344	ug/kg	68.8	344
534-52-1	2-Methyl-4,6-dinitrophenol	U	344	ug/kg	68.8	344 UJ,SV7c
100-01-6	4-Nitroaniline	U	344	ug/kg	103	344
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	344	ug/kg	68.8	344
122-66-7	Azobenzene	U	344	ug/kg	68.8	344
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	344	ug/kg	68.8	344
118-74-1	Hexachlorobenzene	U	344	ug/kg	68.8	344
85-01-8	Phenanthrene	U	34.4	ug/kg	10.3	34.4
120-12-7	Anthracene	U	34.4	ug/kg	6.88	34.4
84-74-2	Di-n-butylphthalate	U	344	ug/kg	68.8	344
206-44-0	Fluoranthene	U	34.4	ug/kg	10.3	34.4
85-68-7	Butylbenzylphthalate	U	344	ug/kg	68.8	344
56-55-3	Benzo(a)anthracene	U	34.4	ug/kg	10.3	34.4
91-94-1	3,3'-Dichlorobenzidine	U	344	ug/kg	103	344
218-01-9	Chrysene	U	34.4	ug/kg	10.3	34.4
117-81-7	bis(2-Ethylhexyl)phthalate	U	344	ug/kg	68.8	344
117-84-0	Di-n-octylphthalate	U	344	ug/kg	68.8	344
205-99-2	Benzo(b)fluoranthene	U	34.4	ug/kg	10.3	34.4
207-08-9	Benzo(k)fluoranthene	U	34.4	ug/kg	10.3	34.4
50-32-8	Benzo(a)pyrene	U	34.4	ug/kg	10.3	34.4
193-39-5	Indeno(1,2,3-cd)pyrene	U	34.4	ug/kg	10.3	34.4 UJ,SV7c
53-70-3	Dibenzo(a,h)anthracene	U	34.4	ug/kg	10.3	34.4
191-24-2	Benzo(ghi)perylene	U	34.4	ug/kg	10.3	34.4
120-82-1	1,2,4-Trichlorobenzene	U	344	ug/kg	68.8	344

## Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.83	566	ug/kg		J
77-53-2	Cedrol	6.39	202	ug/kg	94	NJ

MLD 02/17/10

Semi-Volatile  
Certificate of Analysis  
Sample Summary

SDG Number: 10-1210	Date Collected: 01/07/2010 12:00	Matrix: R
Lab Sample ID: 244599010	Date Received: 01/13/2010 08:55	%Moisture: 3.3
	Client: LANL010	Project: LANL01004
Client ID: RE12-10-7253	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 941702	Inst: MSD7.I	Dilution: 1
Run Date: 01/20/2010 15:35	Analyst: JMB3	Inj. Vol: .5 uL
Prep Date: 01/14/2010 19:34	Aliquot: 30.03 g	Final Volume: 1 mL
Data File: s7a2015.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	8.81	507	ug/kg	96	NJ
	Unknown	9.83	161	ug/kg		J
	Unknown	10.84	293	ug/kg		J
	Unknown	11.51	418	ug/kg		J

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210  
Lab Sample ID: 244599011

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD7.I  
Analyst: JMB3  
Allquot: 30.01 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 15.3  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE12-10-7254  
Batch ID: 941702  
Run Date: 01/20/2010 15:57  
Prep Date: 01/14/2010 19:34  
Data File: s7a2016.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	394	ug/kg	78.7	394
108-95-2	Phenol	U	394	ug/kg	78.7	394
95-57-8	2-Chlorophenol	U	394	ug/kg	78.7	394
106-46-7	1,4-Dichlorobenzene	U	394	ug/kg	78.7	394
621-64-7	N-Nitrosodipropylamine	U	394	ug/kg	78.7	394
59-50-7	4-Chloro-3-methylphenol	U	394	ug/kg	78.7	394
83-32-9	Acenaphthene	U	39.4	ug/kg	13.0	39.4
121-14-2	2,4-Dinitrotoluene	U	394	ug/kg	39.4	394
100-02-7	4-Nitrophenol	U	394	ug/kg	130	394
87-86-5	Pentachlorophenol	U	394	ug/kg	98.4	394
129-00-0	Pyrene	U	39.4	ug/kg	11.8	39.4
110-86-1	Pyridine	U	394	ug/kg	78.7	394
62-53-3	Aniline	U	394	ug/kg	118	394
111-44-4	bis(2-Chloroethyl) ether	U	394	ug/kg	78.7	394
541-73-1	1,3-Dichlorobenzene	U	394	ug/kg	78.7	394
100-51-6	Benzyl alcohol	U	394	ug/kg	118	394
95-50-1	1,2-Dichlorobenzene	U	394	ug/kg	78.7	394
108-60-1	bis(2-Chloroisopropyl)ether	U	394	ug/kg	78.7	394
95-48-7	o-Cresol	U	394	ug/kg	78.7	394
65794-96-9	m,p-Cresols	U	394	ug/kg	118	394
67-72-1	Hexachloroethane	U	394	ug/kg	78.7	394
98-95-3	Nitrobenzene	U	394	ug/kg	78.7	394
78-59-1	Isophorone	U	394	ug/kg	78.7	394
88-75-5	2-Nitrophenol	U	394	ug/kg	78.7	394
105-67-9	2,4-Dimethylphenol	U	394	ug/kg	138	394
111-91-1	bis(2-Chloroethoxy)methane	U	394	ug/kg	78.7	394
120-83-2	2,4-Dichlorophenol	U	394	ug/kg	78.7	394
65-85-0	Benzoic acid	U	787	ug/kg	197	787
91-20-3	Naphthalene	U	39.4	ug/kg	11.8	39.4
106-47-8	4-Chloroaniline	U	394	ug/kg	78.7	394
87-68-3	Hexachlorobutadiene	U	394	ug/kg	78.7	394
91-57-6	2-Methylnaphthalene	U	39.4	ug/kg	7.87	39.4
77-47-4	Hexachlorocyclopentadiene	U	394	ug/kg	78.7	394
88-06-2	2,4,6-Trichlorophenol	U	394	ug/kg	78.7	394
95-95-4	2,4,5-Trichlorophenol	U	394	ug/kg	78.7	394
91-58-7	2-Chloronaphthalene	U	39.4	ug/kg	13.0	39.4
88-74-4	2-Nitroaniline	U	394	ug/kg	78.7	394
99-09-2	o-Nitroaniline	U	394	ug/kg	78.7	394
	3-Nitroaniline					

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210  
Lab Sample ID: 244599011

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD7.I  
Analyst: JMB3  
Allquot: 30.01 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 15.3  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE12-10-7254  
Batch ID: 941702  
Run Date: 01/20/2010 15:57  
Prep Date: 01/14/2010 19:34  
Data File: s7a2016.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	394	ug/kg	78.7	394
606-20-2	2,6-Dinitrotoluene	U	394	ug/kg	39.4	394
208-96-8	Acenaphthylene	U	39.4	ug/kg	11.8	39.4
51-28-5	2,4-Dinitrophenol	U	787	ug/kg	150	787
132-64-9	Dibenzofuran	U	394	ug/kg	78.7	394
84-66-2	Diethylphthalate	U	394	ug/kg	78.7	394
86-73-7	Fluorene	U	39.4	ug/kg	11.8	39.4
7005-72-3	4-Chlorophenylphenylether	U	394	ug/kg	78.7	394
534-52-1	2-Methyl-4,6-dinitrophenol	U	394	ug/kg	78.7	394 UJ,SV7c
100-01-6	4-Nitroaniline	U	394	ug/kg	118	394
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	394	ug/kg	78.7	394
122-66-7	Azobenzene	U	394	ug/kg	78.7	394
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	394	ug/kg	78.7	394
118-74-1	Hexachlorobenzene	U	394	ug/kg	78.7	394
85-01-8	Phenanthrene	U	39.4	ug/kg	11.8	39.4
120-12-7	Anthracene	U	39.4	ug/kg	7.87	39.4
84-74-2	Di-n-butylphthalate	U	394	ug/kg	78.7	394
206-44-0	Fluoranthene	U	39.4	ug/kg	11.8	39.4
85-68-7	Butylbenzylphthalate	U	394	ug/kg	78.7	394
56-55-3	Benzo(a)anthracene	U	39.4	ug/kg	11.8	39.4
91-94-1	3,3'-Dichlorobenzidine	U	394	ug/kg	118	394
218-01-9	Chrysene	U	39.4	ug/kg	11.8	39.4
117-81-7	bis(2-Ethylhexyl)phthalate	U	394	ug/kg	78.7	394
117-84-0	Di-n-octylphthalate	U	394	ug/kg	78.7	394
205-99-2	Benzo(b)fluoranthene	U	39.4	ug/kg	11.8	39.4
207-08-9	Benzo(k)fluoranthene	U	39.4	ug/kg	11.8	39.4
50-32-8	Benzo(a)pyrene	U	39.4	ug/kg	11.8	39.4
193-39-5	Indeno(1,2,3-cd)pyrene	U	39.4	ug/kg	11.8	39.4 UJ,SV7c
53-70-3	Dibenzo(a,h)anthracene	U	39.4	ug/kg	11.8	39.4
191-24-2	Benzo(ghi)perylene	U	39.4	ug/kg	11.8	39.4
120-82-1	1,2,4-Trichlorobenzene	U	394	ug/kg	78.7	394

## Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.82	857	ug/kg		JA
77-53-2	Cedrol	6.39	200	ug/kg	94	NJ

MLD 02/17/10



**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210	Date Collected: 01/07/2010 12:00	Matrix: R
Lab Sample ID: 244599011	Date Received: 01/13/2010 08:55	%Moisture: 15.3
	Client: LANL010	Project: LANL01004
Client ID: RE12-10-7254	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 941702	Inst: MSD7.I	Dilution: 1
Run Date: 01/20/2010 15:57	Analyst: JMB3	Inj. Vol: .5 uL
Prep Date: 01/14/2010 19:34	Aliquot: 30.01 g	Final Volume: 1 mL
Data File: s7s2016.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	8.81	469	ug/kg	99	NJ
	Unknown	8.84	172	ug/kg		J
629-96-9	1-Eicosanol	9.89	295	ug/kg	81	NJ
	Unknown	10.25	161	ug/kg		J
112-95-8	Eicosane	10.53	202	ug/kg	93	NJ
	Unknown	11.51	314	ug/kg		J
	Unknown	12.46	182	ug/kg		J
	Unknown	12.6	362	ug/kg		J
83-46-5	.beta.-Sitosterol	13.24	1200	ug/kg	98	NJ
	Unknown	13.38	198	ug/kg		J
	Unknown	14.11	737	ug/kg		J
	Unknown	14.3	395	ug/kg		J

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210  
Lab Sample ID: 244599012

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD7.I  
Analyst: JMB3  
Aliquot: 30.18 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 6.6  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE12-10-7255  
Batch ID: 941702  
Run Date: 01/20/2010 16:19  
Prep Date: 01/14/2010 19:34  
Data File: s7a2017.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	355	ug/kg	71.0	355
108-95-2	Phenol	U	355	ug/kg	71.0	355
95-57-8	2-Chlorophenol	U	355	ug/kg	71.0	355
106-46-7	1,4-Dichlorobenzene	U	355	ug/kg	71.0	355
621-64-7	N-Nitrosodipropylamine	U	355	ug/kg	71.0	355
59-50-7	4-Chloro-3-methylphenol	U	355	ug/kg	71.0	355
83-32-9	Acenaphthene	U	35.5	ug/kg	11.7	35.5
121-14-2	2,4-Dinitrotoluene	U	355	ug/kg	35.5	355
100-02-7	4-Nitrophenol	U	355	ug/kg	117	355
87-86-5	Pentachlorophenol	U	355	ug/kg	88.7	355
129-00-0	Pyrene	U	35.5	ug/kg	10.6	35.5
110-86-1	Pyridine	U	355	ug/kg	71.0	355
62-53-3	Aniline	U	355	ug/kg	106	355
111-44-4	bis(2-Chloroethyl) ether	U	355	ug/kg	71.0	355
541-73-1	1,3-Dichlorobenzene	U	355	ug/kg	71.0	355
100-51-6	Benzyl alcohol	U	355	ug/kg	106	355
95-50-1	1,2-Dichlorobenzene	U	355	ug/kg	71.0	355
108-60-1	bis(2-Chloroisopropyl)ether	U	355	ug/kg	71.0	355
95-48-7	o-Cresol	U	355	ug/kg	71.0	355
65794-96-9	m,p-Cresols	U	355	ug/kg	106	355
67-72-1	Hexachloroethane	U	355	ug/kg	71.0	355
98-95-3	Nitrobenzene	U	355	ug/kg	71.0	355
78-39-1	Isophorone	U	355	ug/kg	71.0	355
88-75-5	2-Nitrophenol	U	355	ug/kg	71.0	355
105-67-9	2,4-Dimethylphenol	U	355	ug/kg	124	355
111-91-1	bis(2-Chloroethoxy)methane	U	355	ug/kg	71.0	355
120-83-2	2,4-Dichlorophenol	U	355	ug/kg	71.0	355
65-85-0	Benzoic acid	U	710	ug/kg	177	710
91-20-3	Naphthalene	U	35.5	ug/kg	10.6	35.5
106-47-8	4-Chloroaniline	U	355	ug/kg	71.0	355
87-68-3	Hexachlorobutadiene	U	355	ug/kg	71.0	355
91-57-6	2-Methylnaphthalene	U	35.5	ug/kg	7.10	35.5
77-47-4	Hexachlorocyclopentadiene	U	355	ug/kg	71.0	355
88-06-2	2,4,6-Trichlorophenol	U	355	ug/kg	71.0	355
95-95-4	2,4,5-Trichlorophenol	U	355	ug/kg	71.0	355
91-58-7	2-Chloronaphthalene	U	35.5	ug/kg	11.7	35.5
88-74-4	2-Nitroaniline	U	355	ug/kg	71.0	355
99-09-2	<i>o</i> -Nitroaniline	U	355	ug/kg	71.0	355
	3-Nitroaniline					

MLD 02/17/10

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210  
Lab Sample ID: 244599012

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD7.I  
Analyst: JMB3  
Aliquot: 30.18 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 6.6  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE12-10-7255  
Batch ID: 941702  
Run Date: 01/20/2010 16:19  
Prep Date: 01/14/2010 19:34  
Data File: s7a2017.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
606-20-2	Dimethylphthalate	U	355	ug/kg	71.0	355
208-96-8	2,6-Dinitrotoluene	U	355	ug/kg	35.5	355
51-28-5	Acenaphthylene	U	35.5	ug/kg	10.6	35.5
132-64-9	2,4-Dinitrophenol	U	710	ug/kg	135	710
84-66-2	Dibenzofuran	U	355	ug/kg	71.0	355
86-73-7	Diethylphthalate	U	355	ug/kg	71.0	355
86-73-7	Fluorene	U	35.5	ug/kg	10.6	35.5
7005-72-3	4-Chlorophenylphenylether	U	355	ug/kg	71.0	355
534-52-1	2-Methyl-4,6-dinitrophenol	U	355	ug/kg	71.0	355 UJ,SV7c
100-01-6	4-Nitroaniline	U	355	ug/kg	106	355
122-39-4	<i>p</i> -Nitroaniline					
122-66-7	Diphenylamine	U	355	ug/kg	71.0	355
122-66-7	Azobenzene	U	355	ug/kg	71.0	355
101-55-3	1,2-Diphenylhydrazine					
118-74-1	4-Bromophenylphenylether	U	355	ug/kg	71.0	355
118-74-1	Hexachlorobenzene	U	355	ug/kg	71.0	355
85-01-8	Phenanthrene	U	35.5	ug/kg	10.6	35.5
120-12-7	Anthracene	U	35.5	ug/kg	7.10	35.5
84-74-2	Di-n-butylphthalate	U	355	ug/kg	71.0	355
206-44-0	Fluoranthene	U	35.5	ug/kg	10.6	35.5
85-68-7	Butylbenzylphthalate	U	355	ug/kg	71.0	355
56-55-3	Benzo(a)anthracene	U	35.5	ug/kg	10.6	35.5
91-94-1	3,3'-Dichlorobenzidine	U	355	ug/kg	106	355
218-01-9	Chrysene	U	35.5	ug/kg	10.6	35.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	355	ug/kg	71.0	355
117-84-0	Di-n-octylphthalate	U	355	ug/kg	71.0	355
205-99-2	Benzo(b)fluoranthene	U	35.5	ug/kg	10.6	35.5
207-08-9	Benzo(k)fluoranthene	U	35.5	ug/kg	10.6	35.5
50-32-8	Benzo(a)pyrene	U	35.5	ug/kg	10.6	35.5
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.5	ug/kg	10.6	35.5 UJ,SV7c
53-70-3	Dibenzo(a,h)anthracene	U	35.5	ug/kg	10.6	35.5
191-24-2	Benzo(ghi)perylene	U	35.5	ug/kg	10.6	35.5
120-82-1	1,2,4-Trichlorobenzene	U	355	ug/kg	71.0	355

## Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.82	676	ug/kg		JA
77-53-2	Cedrol	6.39	333	ug/kg	93	NJ

MLD 02/17/10

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210	Date Collected: 01/07/2010 12:00	Matrix: R
Lab Sample ID: 244599012	Date Received: 01/13/2010 08:55	%Moisture: 6.6
	Client: LANL010	Project: LANL01004
Client ID: RE12-10-7255	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 941702	Inst: MSD7.I	Dilution: 1
Run Date: 01/20/2010 16:19	Analyst: JMB3	Inj. Vol: .5 uL
Prep Date: 01/14/2010 19:34	Allquot: 30.18 g	Final Volume: 1 mL
Data File: s7a2017.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	8.81	436	ug/kg	96	NJ
	Unknown	9.83	213	ug/kg		J
	Unknown	10.53	395	ug/kg		J
	Unknown	11.51	580	ug/kg		J
	Unknown	12.73	326	ug/kg		J
83-46-5	.beta.-Sitosterol	13.25	750	ug/kg	97	NJ
	Unknown	14.11	494	ug/kg		J
	Unknown	14.3	251	ug/kg		J

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

Page 1 of 3

SDG Number: 10-1210  
Lab Sample ID: 244599013

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD7.I  
Analyst: JMB3  
Aliquot: 30.14 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 8.4  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE12-10-7276  
Batch ID: 941702  
Run Date: 01/20/2010 16:42  
Prep Date: 01/14/2010 19:34  
Data File: s7a2018.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	362	ug/kg	72.4	362
108-95-2	Phenol	U	362	ug/kg	72.4	362
95-57-8	2-Chlorophenol	U	362	ug/kg	72.4	362
106-46-7	1,4-Dichlorobenzene	U	362	ug/kg	72.4	362
621-64-7	N-Nitrosodipropylamine	U	362	ug/kg	72.4	362
59-50-7	4-Chloro-3-methylphenol	U	362	ug/kg	72.4	362
83-32-9	Acenaphthene	U	36.2	ug/kg	11.9	36.2
121-14-2	2,4-Dinitrotoluene	U	362	ug/kg	36.2	362
100-02-7	4-Nitrophenol	U	362	ug/kg	119	362
87-86-5	Pentachlorophenol	U	362	ug/kg	90.5	362
129-00-0	Pyrene	U	36.2	ug/kg	10.9	36.2
110-86-1	Pyridine	U	362	ug/kg	72.4	362
62-53-3	Aniline	U	362	ug/kg	109	362
111-44-4	bis(2-Chloroethyl) ether	U	362	ug/kg	72.4	362
541-73-1	1,3-Dichlorobenzene	U	362	ug/kg	72.4	362
100-51-6	Benzyl alcohol	U	362	ug/kg	109	362
95-50-1	1,2-Dichlorobenzene	U	362	ug/kg	72.4	362
108-60-1	bis(2-Chloroisopropyl) ether	U	362	ug/kg	72.4	362
95-48-7	o-Cresol	U	362	ug/kg	72.4	362
65794-96-9	m,p-Cresols	U	362	ug/kg	109	362
67-72-1	Hexachloroethane	U	362	ug/kg	72.4	362
98-95-3	Nitrobenzene	U	362	ug/kg	72.4	362
78-59-1	Isophorone	U	362	ug/kg	72.4	362
88-75-5	2-Nitrophenol	U	362	ug/kg	72.4	362
105-67-9	2,4-Dimethylphenol	U	362	ug/kg	127	362
111-91-1	bis(2-Chloroethoxy)methane	U	362	ug/kg	72.4	362
120-83-2	2,4-Dichlorophenol	U	362	ug/kg	72.4	362
65-85-0	Benzoic acid	U	724	ug/kg	181	724
91-20-3	Naphthalene	U	36.2	ug/kg	10.9	36.2
106-47-8	4-Chloroaniline	U	362	ug/kg	72.4	362
87-68-3	Hexachlorobutadiene	U	362	ug/kg	72.4	362
91-57-6	2-Methylnaphthalene	U	36.2	ug/kg	7.24	36.2
77-47-4	Hexachlorocyclopentadiene	U	362	ug/kg	72.4	362
88-06-2	2,4,6-Trichlorophenol	U	362	ug/kg	72.4	362
95-95-4	2,4,5-Trichlorophenol	U	362	ug/kg	72.4	362
91-58-7	2-Chloronaphthalene	U	36.2	ug/kg	11.9	36.2
88-74-4	2-Nitroaniline	U	362	ug/kg	72.4	362
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	362	ug/kg	72.4	362

MLD 02/17/10

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210	Date Collected: 01/07/2010 12:00	Matrix: R
Lab Sample ID: 244599013	Date Received: 01/13/2010 08:55	%Moisture: 8.4
Client ID: RE12-10-7276	Client: LANL010	Project: LANL01004
Batch ID: 941702	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/20/2010 16:42	Inst: MSD7.I	Dilution: 1
Prep Date: 01/14/2010 19:34	Analyst: JMB3	Inj. Vol: .5 uL
Data File: s7a2018.d	Aliquot: 30.14 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
606-20-2	Dimethylphthalate	U	362	ug/kg	72.4	362
208-96-8	2,6-Dinitrotoluene	U	362	ug/kg	36.2	362
51-28-5	Accenaphthylene	U	36.2	ug/kg	10.9	36.2
132-64-9	2,4-Dinitrophenol	U	724	ug/kg	138	724
84-66-2	Dibenzofuran	U	362	ug/kg	72.4	362
86-73-7	Diethylphthalate	U	362	ug/kg	72.4	362
86-73-7	Fluorene	U	36.2	ug/kg	10.9	36.2
7005-72-3	4-Chlorophenylphenylether	U	362	ug/kg	72.4	362
534-52-1	2-Methyl-4,6-dinitrophenol	U	362	ug/kg	72.4	362 UJ,SV7c
100-01-6	4-Nitroaniline	U	362	ug/kg	109	362
122-39-4	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	362	ug/kg	72.4	362
122-66-7	Azobenzene	U	362	ug/kg	72.4	362
101-55-3	1,2-Diphenylhydrazine					
118-74-1	4-Bromophenylphenylether	U	362	ug/kg	72.4	362
118-74-1	Hexachlorobenzene	U	362	ug/kg	72.4	362
85-01-8	Phenanthrene	U	36.2	ug/kg	10.9	36.2
120-12-7	Anthracene	U	36.2	ug/kg	7.24	36.2
84-74-2	Di-n-butylphthalate	U	362	ug/kg	72.4	362
206-44-0	Fluoranthene	U	36.2	ug/kg	10.9	36.2
85-68-7	Butylbenzylphthalate	U	362	ug/kg	72.4	362
56-55-3	Benzo(a)anthracene	U	36.2	ug/kg	10.9	36.2
91-94-1	3,3'-Dichlorobenzidine	U	362	ug/kg	109	362
218-01-9	Chrysene	U	36.2	ug/kg	10.9	36.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	362	ug/kg	72.4	362
117-84-0	Di-n-octylphthalate	U	362	ug/kg	72.4	362
205-99-2	Benzo(b)fluoranthene	U	36.2	ug/kg	10.9	36.2
207-08-9	Benzo(k)fluoranthene	U	36.2	ug/kg	10.9	36.2
50-32-8	Benzo(a)pyrene	U	36.2	ug/kg	10.9	36.2
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.2	ug/kg	10.9	36.2 UJ,SV7c
53-70-3	Dibenzo(a,h)anthracene	U	36.2	ug/kg	10.9	36.2
191-24-2	Benzo(ghi)perylene	U	36.2	ug/kg	10.9	36.2
120-82-1	1,2,4-Trichlorobenzene	U	362	ug/kg	72.4	362

## Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown Aldol Condensate	2.82	676	ug/kg		JA
56246-42-5	2-Butenoic acid, 2-methyl-, 1a,2,4,4a,5,	8.57	313	ug/kg	80	NJ

MLD 02/17/10

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210	Date Collected: 01/07/2010 12:00	Matrix: R
Lab Sample ID: 244599013	Date Received: 01/13/2010 08:55	%Moisture: 8.4
Client ID: RE12-10-7276	Client: LANL010	Project: LANL01004
Batch ID: 941702	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/20/2010 16:42	Inst: MSD7.I	Dilution: 1
Prep Date: 01/14/2010 19:34	Analyst: JMB3	Inj. Vol: .5 uL
Data File: s7a2018.d	Aliquot: 30.14 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	9.03	731	ug/kg		J
55751-83-2	2-Ethylacridine	10.53	415	ug/kg	80	NJ
	Unknown	11.51	519	ug/kg		J
	Unknown	12.72	487	ug/kg		J

## DATA VALIDATION COVER SHEET

5122-1

## Data Validation Cover Sheet

Records Use only



## Section I.

REQUEST NUMBER: 10-1210 VALIDATION DATE: 02/17/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Monica Dymerski ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

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

## Section II. Completeness Check

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

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

- The %Ds were >20% but ≤40% with negative bias for o-nitrotoluene and p-nitrotoluene in a CCV bracketing all samples, and for 2,4-diamino-6-nitrotoluene and 2,6-diamino-4-nitrotoluene in a CCV bracketing sample RE12-10-7276 only. All associated sample results were NDs and, thus, were qualified UJ,HE7c. The CCV %Ds were >20% with positive bias for 1,3,5-trinitrobenzene; RDX; tetryl; and HMX. The associated sample results were NDs and, thus, were not qualified.
- It should be noted that the raw ICAL data from the instrument used for the secondary HE analysis were not reported in the data package. Thus, the surrogate retention time criteria could not be evaluated. No sample data were qualified as a result.
- The MSD %R was > the laboratory UAL for TATB. The associated sample results were NDs and, thus, were not qualified.

Reviewed by: Mary Donovan


Level: I

Date: 02/17/10


VALIDATOR'S SIGNATURE:

DATE: 02/17/10



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

Yes No N/A				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1. The IS retention time has shifted by more than 30 seconds.	R, UJ, HE0	J, HE0
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2. Required IS retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, HE0b	R, HE0b
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3. The quantitating IS area count is <25% of the expected value, which indicates increased potential for false negative results and other possible problems with sample quantitation. Follow the method-specific windows.	R, HE1a	J, HE1a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	4. The IS area count for the quantitating IS is <70% but >25% of the average of that obtained from the calibration standards.	UJ, HE1b	J+, HE1b
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	5. The IS area count for the quantitating IS is >130% of the average of that obtained from the calibration standards.	UJ, HE1c	J-, HE1c
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	6. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, HE1d	R, HE1d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7. The surrogate is <10%R. Follow the external laboratory limits.	R, HE3	J-, HE3
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8. The surrogate is < the Lower Acceptance Limit but ≥10% recovery. Follow the external laboratory limits.	UJ, HE3a	J-, HE3a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9. The surrogate %R value is > the Upper Acceptance Limit. Follow the external laboratory limits.	N/A	J+, HE3b
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	10. At least one surrogate is > the Upper Acceptance Limit and one surrogate is < the Lower Acceptance Limit. Follow the external laboratory limits.	UJ, HE3c	J, HE3c

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

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

# **LC/MS/MS HIGH EXPLOSIVE ANALYTICAL DATA VALIDATION CHECKLIST**

5122-2

## **LC/MS/MS High Explosive Analytical Data Validation Checklist**

Records Use only



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

**LC/MS/MS HIGH EXPLOSIVE ANALYTICAL DATA VALIDATION CHECKLIST**

5122-2

**LC/MS/MS High Explosive Analytical Data Validation Checklist**

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



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

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7243

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599001

Sample Amount 2

Moisture: 5.8

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125221a

Date Analyzed: 29-JAN-10 23:33

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene UJ,HE7c	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 UJ,HE7c	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: RE12-10-7243

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599001

Sample Amount 2

Moisture: 5.8

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250101.wiff

Date Analyzed: 26-JAN-10 12:43

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: RE12-10-7240

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599002

Sample Amount 2

Moisture: 13.5

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125224a

Date Analyzed: 30-JAN-10 01:02

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	UJ,HE7c	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	UJ,HE7c	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: RE12-10-7240

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599002

Sample Amount 2

Moisture: 13.5

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250104.wiff

Date Analyzed: 26-JAN-10 13:30

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: RE12-10-7241

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599003

Sample Amount 2

Moisture: 2.4

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125225a

Date Analyzed: 30-JAN-10 01:31

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	UJ,HE7c 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	UJ,HE7c 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: RE12-10-7241

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599003

Sample Amount 2

Moisture: 2.4

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250105.wiff

Date Analyzed: 26-JAN-10 13:46

Units: ug/kg

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

\*Concentration =

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

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7237

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599004

Sample Amount 2

Moisture: 10.1

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125226a

Date Analyzed: 30-JAN-10 02:01

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 UJ,HE7c	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 UJ,HE7c	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: RE12-10-7237

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599004

Sample Amount 2

Moisture: 10.1

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250109.wiff

Date Analyzed: 26-JAN-10 14:49

Units: ug/kg

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

\*Concentration =

Instrument	X	Concentrated Extract Volume	X	Dilution
Value		Sample Amount		Factor

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7239

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599005

Sample Amount 2

Moisture: 9.3

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125227a

Date Analyzed: 30-JAN-10 02:30

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	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	UJ,HE7c 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	UJ,HE7c 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: RE12-10-7239

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599005

Sample Amount 2

Moisture: 9.3

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250148.wiff

Date Analyzed: 27-JAN-10 01:02

Units: ug/kg

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

\*Concentration =

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

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7238

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599006

Sample Amount 2

Moisture: 16.7

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125231a

Date Analyzed: 30-JAN-10 04:28

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	UJ,HE7c 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	UJ,HE7c 500	U

\*Concentration =

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

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7238

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599006

Sample Amount 2

Moisture: 16.7

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250111.wiff

Date Analyzed: 26-JAN-10 15:20

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: RE12-10-7242

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599007

Sample Amount 2

Molsture: 16.3

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125232a

Date Analyzed: 30-JAN-10 04:58

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	UJ,HE7c 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	UJ,HE7c 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: RE12-10-7242

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599007

Sample Amount 2

Moisture: 16.3

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250112.wiff

Date Analyzed: 26-JAN-10 15:36

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	X	Concentrated Extract Volume	X	Dilution
Value		Sample Amount		Factor

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7236

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599008

Sample Amount 2

Moisture: 21.7

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125233a

Date Analyzed: 30-JAN-10 05:27

Units: ug/kg

Cas No.	Compound	Concentration*	Q	
118-96-7	2,4,6-Trinitrotoluene	500	U	
121-14-2	2,4-Dinitrotoluene	500	U	
121-82-4	RDX	500	U	
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U	
2691-41-0	HMX	500	U	
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U	
479-45-8	Tetryl	500	U	
606-20-2	2,6-Dinitrotoluene	500	U	
78-11-5	PETN	1000	U	
88-72-2	o-Nitrotoluene	UJ,HE7c	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	UJ,HE7c	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: RE12-10-7236

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599008

Sample Amount 2

Moisture: 21.7

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250113.wiff

Date Analyzed: 26-JAN-10 15:52

Units: ug/kg

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

\*Concentration =

Instrument	X	Concentrated Extract Volume	X	Dilution
Value		Sample Amount		Factor

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7252

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599009

Sample Amount 2

Moisture: 15.9

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125234a

Date Analyzed: 30-JAN-10 05:57

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene UJ,HE7c	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 UJ,HE7c	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: RE12-10-7252

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599009

Sample Amount 2

Moisture: 15.9

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250114.wiff

Date Analyzed: 26-JAN-10 16:07

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

MLD 02/17/10

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7253

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599010

Sample Amount 2

Moisture: 3.3

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125235g

Date Analyzed: 30-JAN-10 06:26

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene UJ,HE7c	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 UJ,HE7c	500	U

\*Concentration =

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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7253

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599010

Sample Amount 2

Moisture: 3.3

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250149.wiff

Date Analyzed: 27-JAN-10 01:17

Units: ug/kg

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

\*Concentration =

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

MLD 02/17/10



1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7254

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599011

Sample Amount 2

Moisture: 15.3

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125236a

Date Analyzed: 30-JAN-10 06:56

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 UJ,HE7c	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 UJ,HE7c	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: RE12-10-7254

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599011

Sample Amount 2

Moisture: 15.3

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250116.wiff

Date Analyzed: 26-JAN-10 16:39

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	Concentrated Extract Volume	X	Dilution Factor
		Sample Amount		

MLD 02/17/10

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7255

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599012

Sample Amount 2

Moisture: 6.6

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125237a

Date Analyzed: 30-JAN-10 07:26

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	UJ,HE7c 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	UJ,HE7c 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: RE12-10-7255

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599012

Sample Amount 2

Moisture: 6.6

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250117.wiff

Date Analyzed: 26-JAN-10 16:55

Units: ug/kg

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

\*Concentration =

Instrument Value	X	Concentrated Extract Volume	X	Dilution Factor
		Sample Amount		

MLD 02/17/10

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7276

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599013

Sample Amount 2

Moisture: 8.4

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (nL): 50

GEL data file: EXP0125238a

Date Analyzed: 30-JAN-10 07:55

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene UJ,HE7c	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 UJ,HE7c	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: RE12-10-7276

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599013

Sample Amount 2

Moisture: 8.4

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01270014.wiff

Date Analyzed: 27-JAN-10 13:51


Units: ug/kg

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

\*Concentration =

Instrument X Concentrated Extract Volume X Dilution  
Value Sample Amount Factor

MLD 02/17/10

DATA VALIDATION COVER SHEET	
<b>5116-1</b>  <p style="text-align: center;"><b>Data Validation Cover Sheet</b></p>	Records Use only  

Section I.		
REQUEST NUMBER: <u>10-1210</u>	VALIDATION DATE: <u>02/17/10</u>	LAB CODE: <u>GEL</u>
CONTRACT LABORATORY NAME: <u>GEL Laboratories LLC</u>		
VALIDATOR: <u>Monica Dymerski</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 type="checkbox"/> LCMSMS HIGH EXPLOSIVES
<input type="checkbox"/> OTHER (DESCRIBE): <u>PCBs</u>		<input type="checkbox"/> LCMSMS PERCHLORATES <input checked="" type="checkbox"/> ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS


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

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

- The MSD %R was > the laboratory UAL for Aroclor 1260. It should be noted that the MS/MSD analyses were performed on a LANL sample from another RN, and the parent sample raw data were not included in the data package. Since MS/MSD analyses are not a client requirement for PCBs, no sample data were qualified as a result.

Reviewed by: Mary Donovan Level: I Date: 02/17/10

VALIDATOR'S SIGNATURE:  DATE: 02/17/10

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

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



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


5116-2

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

Records Use only



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

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

Yes No N/A (Check One)			Assign Qualifier Listed Below if Criterion = Yes	Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	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: 10-1210  
Lab Sample ID: 244599008Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 9082  
Inst: ECD1A.J  
Analyst: YS1  
Aliquot: 30.01 g  
Column: 1 CLP1  
2 CLP2Matrix: R  
% Moisture: 21.7  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Paramname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.25	ug/kg	1.42	4.25	1
11104-28-2	Aroclor-1221	U	4.25	ug/kg	1.42	4.25	1
11141-16-5	Aroclor-1232	U	4.25	ug/kg	1.42	4.25	1
53469-21-9	Aroclor-1242	U	4.25	ug/kg	1.42	4.25	1
12672-29-6	Aroclor-1248	U	4.25	ug/kg	1.42	4.25	1
11097-69-1	Aroclor-1254	U	4.25	ug/kg	1.42	4.25	1
11096-82-5	Aroclor-1260	U	4.25	ug/kg	1.42	4.25	1

## PCB

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Certificate of Analysis  
Sample SummarySDG Number: 10-1210  
Lab Sample ID: 244599004Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.I  
Analyst: YS1  
Aliquot: 30.13 g  
Column: 1 CLP1  
2 CLP2Matrix: R  
%Moisture: 10.1  
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	3.69	ug/kg	1.23	3.69	1
11104-28-2	Aroclor-1221	U	3.69	ug/kg	1.23	3.69	1
11141-16-5	Aroclor-1232	U	3.69	ug/kg	1.23	3.69	1
53469-21-9	Aroclor-1242	U	3.69	ug/kg	1.23	3.69	1
12672-29-6	Aroclor-1248	U	3.69	ug/kg	1.23	3.69	1
11097-69-1	Aroclor-1254	U	3.69	ug/kg	1.23	3.69	1
11096-82-5	Aroclor-1260	U	3.69	ug/kg	1.23	3.69	1

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

SDG Number: 10-1210  
Lab Sample ID: 244599006

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.I  
Analyst: YS1  
Aliquot: 30.03 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
% Moisture: 16.7  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE12-10-7238  
Batch ID: 941606  
Run Date: 01/15/2010 14:25  
Prep Date: 01/14/2010 19:23  
Data File: 042f4201.d  
042b4201.d

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.00	ug/kg	1.33	4.00	1
11104-28-2	Aroclor-1221	U	4.00	ug/kg	1.33	4.00	1
11141-16-5	Aroclor-1232	U	4.00	ug/kg	1.33	4.00	1
53469-21-9	Aroclor-1242	U	4.00	ug/kg	1.33	4.00	1
12672-29-6	Aroclor-1248	U	4.00	ug/kg	1.33	4.00	1
11097-69-1	Aroclor-1254	U	4.00	ug/kg	1.33	4.00	1
11096-82-5	Aroclor-1260	U	4.00	ug/kg	1.33	4.00	1

## PCB

Page 1 of 1

Certificate of Analysis  
Sample SummarySDG Number: 10-1210  
Lab Sample ID: 244599005Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.I  
Analyst: YS1  
Aliquot: 30.14 g  
Column: 1 CLP1  
2 CLP2Matrix: R  
% Moisture: 9.3  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Partname	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**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-1210  
Lab Sample ID: 244599002

Client ID: RE12-10-7240  
Batch ID: 941606  
Run Date: 01/15/2010 13:35  
Prep Date: 01/14/2010 19:23  
Data File: 038f3801.d  
038b3801.d

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.I  
Analyst: YS1  
Aliquot: 30.08 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
%Moisture: 13.5  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.84	ug/kg	1.28	3.84	1
11104-28-2	Aroclor-1221	U	3.84	ug/kg	1.28	3.84	1
11141-16-5	Aroclor-1232	U	3.84	ug/kg	1.28	3.84	1
53469-21-9	Aroclor-1242	U	3.84	ug/kg	1.28	3.84	1
12672-29-6	Aroclor-1248	U	3.84	ug/kg	1.28	3.84	1
11097-69-1	Aroclor-1254	U	3.84	ug/kg	1.28	3.84	1
11096-82-5	Aroclor-1260	U	3.84	ug/kg	1.28	3.84	1



## PCB

Page 1 of 1

Certificate of Analysis  
Sample SummarySDG Number: 10-1210  
Lab Sample ID: 244599003Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.I  
Analyst: YS1  
Aliquot: 30.14 g  
Column: 1 CLP1  
2 CLP2Matrix: R  
%Moisture: 9.4  
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	3.66	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

MLD 02/17/10

## PCB

Page 1 of 1

Certificate of Analysis  
Sample SummarySDG Number: 10-1210  
Lab Sample ID: 244599007Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8062  
Inst: ECD1AJ  
Analyst: YS1  
Aliquot: 30.12 g  
Column: 1 CLP1  
2 CLP2Matrix: R  
%Moisture: 16.3  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	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

Page 1 of 1

Certificate of Analysis  
Sample SummarySDG Number: 10-1210  
Lab Sample ID: 244599001Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.J  
Analyst: YS1  
Aliquot: 30.03 g  
Column: 1 CLP1  
2 CLP2Matrix: R  
%Moisture: 5.8  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOWClient ID: RE12-10-7243  
Batch ID: 941606  
Run Date: 01/15/2010 13:23  
Prep Date: 01/14/2010 19:23  
Data File: 037f3701.d  
037b3701.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.54	ug/kg	1.18	3.54	1
11104-28-2	Aroclor-1221	U	3.54	ug/kg	1.18	3.54	1
11141-16-5	Aroclor-1232	U	3.54	ug/kg	1.18	3.54	1
53469-21-9	Aroclor-1242	U	3.54	ug/kg	1.18	3.54	1
12672-29-6	Aroclor-1248	U	3.54	ug/kg	1.18	3.54	1
11097-69-1	Aroclor-1254	U	3.54	ug/kg	1.18	3.54	1
11096-82-5	Aroclor-1260	U	3.54	ug/kg	1.18	3.54	1

## PCB

Page 1 of 1

Certificate of Analysis  
Sample SummarySDG Number: 10-1210  
Lab Sample ID: 244599013Client ID: RE12-10-7276  
Batch ID: 941606  
Run Date: 01/15/2010 15:03  
Prep Date: 01/14/2010 19:23  
Data File: 045f4501.d  
045b4501.dDate Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.I  
Analyst: YS1  
Aliquot: 30.01 g  
Column: 1 CLP1  
2 CLP2Matrix: 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	3.64	ug/kg	1.21	3.64	1
11104-28-2	Aroclor-1221	U	3.64	ug/kg	1.21	3.64	1
11141-16-5	Aroclor-1232	U	3.64	ug/kg	1.21	3.64	1
53469-21-9	Aroclor-1242	U	3.64	ug/kg	1.21	3.64	1
12672-29-6	Aroclor-1248	U	3.64	ug/kg	1.21	3.64	1
11097-69-1	Aroclor-1254	U	3.64	ug/kg	1.21	3.64	1
11096-82-5	Aroclor-1260	U	3.64	ug/kg	1.21	3.64	1

Monday, January 11, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1210C

LOS ALAMOS

REQUEST NUMBER: 10-1210

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 2/11/2010

General Engineering Laboratories, Inc.,  
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

244599%

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE12-10-7243	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE12-10-7240	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE12-10-7241	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE12-10-7237	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE12-10-7239	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE12-10-7238	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE12-10-7242	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE12-10-7236	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE12-10-7252	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE12-10-7253	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE12-10-7254	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE12-10-7255	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE12-10-7276	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R

Relinquished By:

Date Time

Received By:

Date Time

Printed Name

Signature

11/2/10 1400

Printed Name

Signature

Greg Tyler 1-13-10 0855

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Received for DISPOSAL By:

Date

Time

Remarks:

Printed Name

Signature

REQUEST NUMBER: 10-1210

Monday, January 11, 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: 10-1210

Per Agreement Number: 126310011

Project Cost Code: MR3A05529E00

Please analyse the enclosed samples  
according to the schedule indicated:

SHIP DATE: 1/12/2010

TURNAROUND/REPORT DUE: 2/11/2010

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

*Jayway*

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8082	1	RE12-10-7236	R	1/7/2010	
		1	RE12-10-7237	R	1/7/2010	
		1	RE12-10-7238	R	1/7/2010	
		1	RE12-10-7239	R	1/7/2010	
		1	RE12-10-7240	R	1/7/2010	
		1	RE12-10-7241	R	1/7/2010	
		1	RE12-10-7242	R	1/7/2010	
		1	RE12-10-7243	R	1/7/2010	
		1	RE12-10-7276	R	1/7/2010	

Monday, January 11, 2010

REQUEST NUMBER: 10-1210

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8270C	1	RE12-10-7238	R	1/7/2010	
		1	RE12-10-7237	R	1/7/2010	
		1	RE12-10-7238	R	1/7/2010	
		1	RE12-10-7239	R	1/7/2010	
		1	RE12-10-7240	R	1/7/2010	
		1	RE12-10-7241	R	1/7/2010	
		1	RE12-10-7242	R	1/7/2010	
		1	RE12-10-7243	R	1/7/2010	
		1	RE12-10-7252	R	1/7/2010	
		1	RE12-10-7253	R	1/7/2010	
		1	RE12-10-7254	R	1/7/2010	
		1	RE12-10-7255	R	1/7/2010	
		1	RE12-10-7276	R	1/7/2010	
	SW-846:8321A_MOD	1	RE12-10-7238	R	1/7/2010	
		1	RE12-10-7237	R	1/7/2010	
		1	RE12-10-7238	R	1/7/2010	
		1	RE12-10-7239	R	1/7/2010	
		1	RE12-10-7240	R	1/7/2010	
		1	RE12-10-7241	R	1/7/2010	
		1	RE12-10-7242	R	1/7/2010	
		1	RE12-10-7243	R	1/7/2010	
		1	RE12-10-7252	R	1/7/2010	
		1	RE12-10-7253	R	1/7/2010	
		1	RE12-10-7254	R	1/7/2010	
		1	RE12-10-7255	R	1/7/2010	
		1	RE12-10-7276	R	1/7/2010	

Final Page of REQUEST NUMBER 10-1210



January 18, 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: 244599  
SDG: 10-1210

Dear Ms. Valdez:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on January 13, 2010, and analyzed for Explosives by LCMSMS, GC Semivolatile PCB and GC/MS Semivolatile. 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: 10-1210  
Enclosures



**Los Alamos National Laboratory (72733-001-09)**  
**LANL ER Project**  
**Work Order #: 244599**  
**SDG: 10-1210**

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# Case Narrative

**Case Narrative for  
Los Alamos National Laboratory (72733-001-09)  
LANL ER Project  
Workorder #: 244599  
SDG # : 10-1210**

**January 18, 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 13, 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>
244599001	RE12-10-7243
244599002	RE12-10-7240
244599003	RE12-10-7241
244599004	RE12-10-7237
244599005	RE12-10-7239
244599006	RE12-10-7238
244599007	RE12-10-7242
244599008	RE12-10-7236
244599009	RE12-10-7252
244599010	RE12-10-7253
244599011	RE12-10-7254
244599012	RE12-10-7255
244599013	RE12-10-7276

**Case Narrative**

Sample analyses were conducted using methodology as outlined in GEL Laboratories, LLC (GEL) Standard Operating Procedures. Any technical or administrative problems during analysis, data review, and reduction are contained in the analytical case narratives in the enclosed data package.

**Data Package** The enclosed data package contains the following sections: Case Narrative, Chain of Custody, Cooler Receipt Checklist, Data Package Qualifier Definitions and data from the following fractions: Explosives by LCMSMS, GC Semivolatile PCB and GC/MS Semivolatile.

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

A handwritten signature in black ink, appearing to read "Valerie Davis" with a stylized flourish at the end.

Valerie Davis

Project Manager

**List of current GEL Certifications as of 18 January 2010**

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

# **Chain of Custody and Supporting Documentation**

Monday, January 11, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1210C

LOS ALAMOS

REQUEST NUMBER: 10-1210

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 2/11/2010

General Engineering Laboratories, Inc.,  
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

244599/.

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE12-10-7243	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE12-10-7240	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE12-10-7241	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE12-10-7237	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE12-10-7239	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE12-10-7238	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE12-10-7242	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE12-10-7236	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE12-10-7252	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE12-10-7253	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE12-10-7254	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE12-10-7255	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE12-10-7276	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R

Relinquished By:

Date

Time

Received By:

Date

Time

Printed Name

Signature

11/12/10 1400

Printed Name

Signature

Greg Tyler 1-13-10 0855

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Received for DISPOSAL By:

Date

Time

Remarks:

Printed Name

Signature



Monday, January 11, 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: 1/12/2010

TURNAROUND/REPORT DUE: 2/11/2010

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

*Jayway*

REQUEST NUMBER: 10-1210

These Samples are on:

LANL Request Number: 10-1210

Per Agreement Number: 126310011

Project Cost Code: MR3A05529E00

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8082	1	RE12-10-7236	R	1/7/2010	
		1	RE12-10-7237	R	1/7/2010	
		1	RE12-10-7238	R	1/7/2010	
		1	RE12-10-7239	R	1/7/2010	
		1	RE12-10-7240	R	1/7/2010	
		1	RE12-10-7241	R	1/7/2010	
		1	RE12-10-7242	R	1/7/2010	
		1	RE12-10-7243	R	1/7/2010	
		1	RE12-10-7276	R	1/7/2010	

Monday, January 11, 2010

REQUEST NUMBER: 10-1210

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8270C	1	RE12-10-7236	R	1/7/2010	
		1	RE12-10-7237	R	1/7/2010	
		1	RE12-10-7238	R	1/7/2010	
		1	RE12-10-7239	R	1/7/2010	
		1	RE12-10-7240	R	1/7/2010	
		1	RE12-10-7241	R	1/7/2010	
		1	RE12-10-7242	R	1/7/2010	
		1	RE12-10-7243	R	1/7/2010	
		1	RE12-10-7252	R	1/7/2010	
		1	RE12-10-7253	R	1/7/2010	
		1	RE12-10-7254	R	1/7/2010	
		1	RE12-10-7255	R	1/7/2010	
		1	RE12-10-7276	R	1/7/2010	
	SW-846:8321A_MOD	1	RE12-10-7236	R	1/7/2010	
		1	RE12-10-7237	R	1/7/2010	
		1	RE12-10-7238	R	1/7/2010	
		1	RE12-10-7239	R	1/7/2010	
		1	RE12-10-7240	R	1/7/2010	
		1	RE12-10-7241	R	1/7/2010	
		1	RE12-10-7242	R	1/7/2010	
		1	RE12-10-7243	R	1/7/2010	
		1	RE12-10-7252	R	1/7/2010	
		1	RE12-10-7253	R	1/7/2010	
		1	RE12-10-7254	R	1/7/2010	
		1	RE12-10-7255	R	1/7/2010	
		1	RE12-10-7276	R	1/7/2010	

Final Page of REQUEST NUMBER 10-1210

# SAMPLE RECEIPT & REVIEW FORM

Client: LANL		SDG/ARCOC/Work Order: 10-1210	
Received By: Greg Tyler		Date Received: 1/13/10	
Suspected Hazard Information	Yes	No	*If Counts > x2 area background on samples not marked "radioactive", contact the Radiation Safety Group of further investigation.
COC/Samples marked as radioactive?		X	Maximum Counts Observed*: 60cpm
Classified Radioactive II by RSO?		X	
COC/Samples marked containing PCBs?		X	
Shipped as a DOT Hazardous?		X	Hazard Class Shipped: UN#:
Samples identified as Foreign Soil?		X	

Sample Receipt Criteria		Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	X			Circle Applicable: seals broken    damaged container    leaking container    other (describe)
2	Samples requiring cold preservation within 0 ≤ 6 deg. C?	X			Preservation Method: ice bags    blue ice    dry ice    none    other 1-6C    10, 12, 13C
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 4887 1C    7209 7849 4854 10C  
 7209 7849 4924 1C    7209 7849 4800 12C  
 7209 7849 4810 2C    7209 7849 4843 13C  
 7209 7849 4898 3C  
 7209 7849 4946 4C  
 7209 7849 4865 5C  
 7209 7849 4876 6C  
 7209 7849 4935 6C

ORIGIN ID: SAFA (505) 665-9968  
JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
T800 BLDG 1237 DPU 03

SHIP DATE: 12JAN10  
ACTWT: 64.0 LB MAN  
CRD: 0014176/CAFE2449

LOS ALAMOS, NM 87545  
UNITED STATES US

BILL SENDER

VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171  
REF: 6B010AMR3A0352VA00

0014176/CAFE2449



2 of 2  
SH 63 7209 7849 4887  
TRN 7209 7849 4876 0201

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SC-US  
CHS



ORIGIN ID: SAFA (505) 665-9968  
JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
T800 BLDG 1237 DPU 03

SHIP DATE: 12JAN10  
ACTWT: 65.0 LB MAN  
CRD: 0014176/CAFE2449

LOS ALAMOS, NM 87545  
UNITED STATES US

BILL SENDER

VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171  
REF: 6B010AMR2A0515BYDO

0014176/CAFE2449



3 of 3  
7209 7849 4810  
7209 7849 4795 0201

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SC-US  
CHS

Page 10 of 1324

ORIGIN ID: SAFA (505) 665-9968  
JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
T800 BLDG 1237 DPU 03

SHIP DATE: 12JAN10  
ACTWT: 47.0 LB MAN  
CRD: 0014176/CAFE2449

LOS ALAMOS, NM 87545  
UNITED STATES US

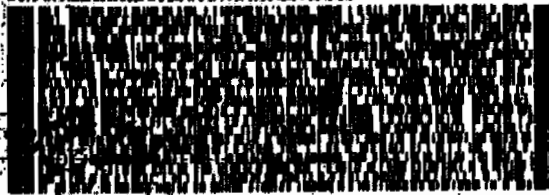
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VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171  
REF: 6B010AMR3A05529E00

0014176/CAFE2449



TRKH 6201 7209 7849 4924  
WED - 13JAN A1  
PRIORITY OVERNIGHT

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SC-US  
CHS



ORIGIN ID: SAFA (505) 665-9968  
JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
T800 BLDG 1237 DPU 03

SHIP DATE: 12JAN10  
ACTWT: 57.0 LB MAN  
CRD: 0014176/CAFE2449

LOS ALAMOS, NM 87545  
UNITED STATES US

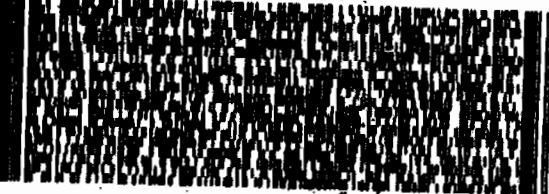
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VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171  
REF: 6B010AMR3A0352VA00

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TRKH 6201 7209 7849 4898  
WED - 13JAN A1  
PRIORITY OVERNIGHT

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SC-US  
CHS

ORIGIN ID: SAFA (505) 665-9968  
JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
TAGO BLDG 1237 DPU 83  
LOS ALAMOS, NM 87545  
UNITED STATES US

SHIP DATE: 12JAN18  
ACTWGT: 55.0 LB MAN  
CAD: 0014176/CAFE2449  
BILL SENDER

VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407  
(843) 556-8171  
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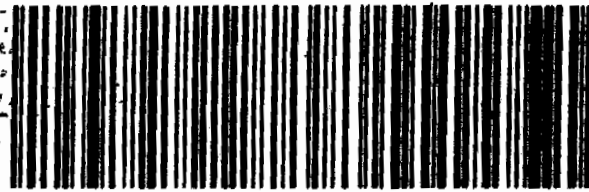
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WED - 13JAN A1  
PRIORITY OVERNIGHT

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ORIGIN ID: SAFA (505) 665-9968  
JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
TAGO BLDG 1237 DPU 83  
LOS ALAMOS, NM 87545  
UNITED STATES US

SHIP DATE: 12JAN18  
ACTWGT: 55.0 LB MAN  
CAD: 0014176/CAFE2449  
BILL SENDER

VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407  
(843) 556-8171  
REF: 6B010AMR3A03529A00

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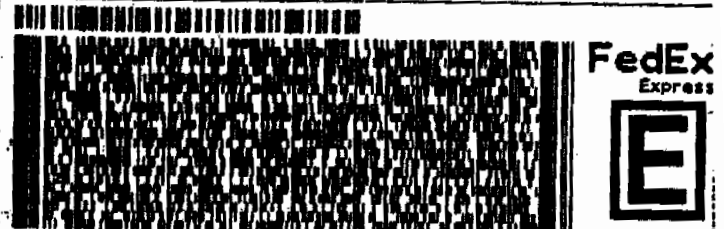
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JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
TAGO BLDG 1237 DPU 83  
LOS ALAMOS, NM 87545  
UNITED STATES US

SHIP DATE: 12JAN18  
ACTWGT: 48.0 LB MAN  
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BILL SENDER

VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407  
(843) 556-8171  
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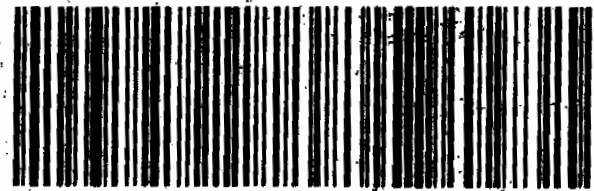
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3 of 3  
MPSH 7209 7849 4865  
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Matrx 7209 7849 4843 0201

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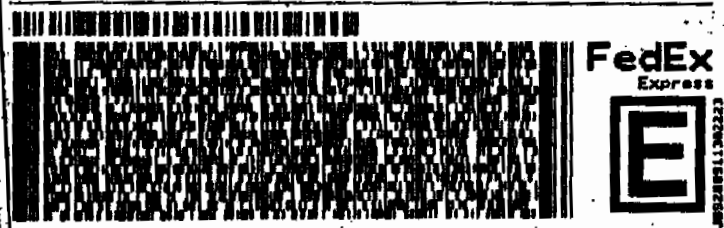
ORIGIN ID: SAFA (505) 665-9968  
JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
TAGO BLDG 1237 DPU 83  
LOS ALAMOS, NM 87545  
UNITED STATES US

SHIP DATE: 12JAN18  
ACTWGT: 61.0 LB MAN  
CAD: 0014176/CAFE2449  
BILL SENDER

VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407  
(843) 556-8171  
REF: 6B010AMR3A05529E00

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TRKH 7209 7849 4935  
WED - 13JAN A1  
PRIORITY OVERNIGHT

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SC-US  
CHS



# **Data Review Qualifier Flag Definition Sheet**

## Data Review Qualifier Definitions

### Qualifier Explanation

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



# **GC/MS Semivolatile Analysis**

**Semi-Volatile Case Narrative  
Los Alamos National Laboratory (LANL)  
SDG 10-1210**

**Method/Analysis Information**

<b>Procedure:</b>	<b>Analysis of Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry</b>
Analytical Method:	SW846 8270C
Prep Method:	SW846 3550B
Analytical Batch Number:	941702
Prep Batch Number:	941701

**Sample Analysis**

The following samples were analyzed using the analytical protocol as established in SW846 8270C:

<b>Sample ID</b>	<b>Client ID</b>
244599001	RE12-10-7243
244599002	RE12-10-7240
244599003	RE12-10-7241
244599004	RE12-10-7237
244599005	RE12-10-7239
244599006	RE12-10-7238
244599007	RE12-10-7242
244599008	RE12-10-7236
244599009	RE12-10-7252
244599010	RE12-10-7253
244599011	RE12-10-7254
244599012	RE12-10-7255
244599013	RE12-10-7276
1202015597	Method Blank (MB)
1202015598	Laboratory Control Sample (LCS)
1202015599	244599001(RE12-10-7243) Matrix Spike (MS)
1202015600	244599001(RE12-10-7243) 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-009 REV# 23.

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 18.2.

### **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. Please note that the second level of the initial calibration (5 mg/L) is only used for n-Nitrosodipropylamine. The various calibration mixes may not be calibrated using all of the calibration levels. In addition, not all of the mixes are calibrated using the same levels.

Diphenylamine has now superseded N-Nitroso-diphenylamine as a CCC on Quantitation Reports, Initial Calibration Reports, Calibration Check Standard Reports, etc. Previous versions of EPA Method 8270 (prior to 8270C) listed N-Nitroso-diphenylamine as a CCC. However, as stated in EPA Method 8270C, Revision 3, December, 1996, Section 1.4.5, "N-Nitroso-diphenylamine decomposes in the gas chromatographic inlet and cannot be separated from Diphenylamine." Studies of these two compounds at GEL, both independent of each other and together, show that they not only co-elute, but also have similar mass spectra. N-Nitroso-diphenylamine and Diphenylamine will be reported as Diphenylamine on all reports and forms. 2,4-Toluene diisocyanate rapidly hydrolyzes in water (half-life less than 30 minutes). Therefore, recoveries of this compound from aqueous matrices should not be expected. In addition, in solid matrices, 2,4-Toluene diisocyanate often reacts with alcohols and amines to produce urethane and ureas and consequently cannot usually coexist in a solution containing these materials. 2,4-Toluene diisocyanate is reported as an estimated value.

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

#### **Initial Calibration**

All initial calibration requirements have been met for this sample delivery group (SDG). A second source initial calibration verification (ICV) was included in the standard section directly behind the initial calibration.

#### **CCV Requirements**

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

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

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

The MB analyzed with this SDG met the acceptance criteria.

#### **Surrogate Recoveries**

All the 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**

Sample 244599001 (RE12-10-7243) was selected for analysis as the matrix spike and matrix spike duplicate.

**Matrix Spike (MS) Recovery Statement**

The MS recoveries were within the established acceptance limits.

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

The MSD recoveries were within the established acceptance limits.

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

The MS (1202015599)/MSD (1202015600) RPD value for 2,4-Dinitrophenol was 38% (SPC limit: 30%). Because the individual spike recoveries were within the acceptance limits in the MS/MSD, the data were reported un-qualified for the RPD value failure.

**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 met the specified holding time. GEL assigns holding times based on the associated methodology that assigns the date and time from sample collection or sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration.

**Preparation/Analytical Method Verification**

All procedures were performed as stated in the SOP.

**Sample Dilutions**

The samples in this SDG did not require dilutions.

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

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

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

The following DER was generated for this SDG: 782060. It is located in the Miscellaneous Section of the data report.

**Manual Integrations**

Some initial calibration standards, continuing calibration standards, and/or samples may require manual integrations due to software limitations. Please see the raw data in the Miscellaneous Section.

**Additional Comments**

Additional comments were not required for this SDG.

**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.

#### **System Configuration**

The samples reported in this SDG were analyzed on one or more of the following instrument systems. Instrument systems are referenced in the raw data and individual form headers by the Instrument ID designations listed below:

<b>Instrument ID</b>	<b>Instrument</b>	<b>System Configuration</b>	<b>Column ID</b>	<b>Column Description</b>
MSD7.I	HP Mass Spectrometer	HP6890/HP5973	DB-5MS	25m x 0.2mm, 0.33um (5% Phenylmethylpolysiloxane)

#### **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.

Reviewer: Chris Benckman Date: 2-8-10

## Roadmap for LANL 10-1210 SVOA

This roadmap was analyzed by jos00786 on 01-21-2010, 10:56.

This roadmap was reviewed by bar00895 on 01-22-2010, 15:43.

Sample

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<input type="checkbox"/>	N	/chem/MSD7.i/s011910.b/s7a1927.d	244599002	19-JAN-2010	18:48	10-1210.sub	RE12-10-7240	1	941702	REPORT
<input type="checkbox"/>	N	/chem/MSD7.i/s011910.b/s7a1928.d	244599003	19-JAN-2010	19:11	10-1210.sub	RE12-10-7241	1	941702	REPORT
<input type="checkbox"/>	N	/chem/MSD7.i/s011910.b/s7a1929.d	244599004	19-JAN-2010	19:32	10-1210.sub	RE12-10-7237	1	941702	REPORT
<input type="checkbox"/>	N	/chem/MSD7.i/s011910.b/s7a1930.d	244599005	19-JAN-2010	19:54	10-1210.sub	RE12-10-7239	1	941702	REPORT
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<input type="checkbox"/>	N	/chem/MSD7.i/s012010.b/s7a2012.d	244599007	20-JAN-2010	14:29	10-1210.sub	RE12-10-7242	1	941702	
<input type="checkbox"/>	N	/chem/MSD7.i/s012010.b/s7a2013.d	244599008	20-JAN-2010	14:51	10-1210.sub	RE12-10-7236	1	941702	
<input type="checkbox"/>	N	/chem/MSD7.i/s012010.b/s7a2014.d	244599009	20-JAN-2010	15:13	10-1210.sub	RE12-10-7252	1	941702	
<input type="checkbox"/>	N	/chem/MSD7.i/s012010.b/s7a2015.d	244599010	20-JAN-2010	15:35	10-1210.sub	RE12-10-7253	1	941702	
<input type="checkbox"/>	N	/chem/MSD7.i/s012010.b/s7a2016.d	244599011	20-JAN-2010	15:57	10-1210.sub	RE12-10-7254	1	941702	
<input type="checkbox"/>	N	/chem/MSD7.i/s012010.b/s7a2017.d	244599012	20-JAN-2010	16:19	10-1210.sub	RE12-10-7255	1	941702	
<input type="checkbox"/>	N	/chem/MSD7.i/s012010.b/s7a2018.d	244599013	20-JAN-2010	16:42	10-1210.sub	RE12-10-7276	1	941702	

QC Sample

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	batchid	comment
<input type="checkbox"/>	N	/chem/MSD7.i/s011910.b/s7a1908.d	1202015597	mb	19-JAN-2010	11:49	10-1210.sub	SBLK01	1	941702	REPORT
<input type="checkbox"/>	N	/chem/MSD7.i/s011910.b/s7a1909.d	1202015598	lcs	19-JAN-2010	12:11	10-1210.sub	SBLK01LCS	1	941702	REPORT
<input type="checkbox"/>	N	/chem/MSD7.i/s011910.b/s7a1925.d	1202015599	ms	19-JAN-2010	18:04	10-1210.sub	RE12-10-7243MS	1	941702	REPORT
<input type="checkbox"/>	N	/chem/MSD7.i/s011910.b/s7a1926.d	1202015600	msd	19-JAN-2010	18:26	10-1210.sub	RE12-10-7243MSD	1	941702	REPORT

# Sample Data Summary



**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210	Date Collected: 01/07/2010 12:00	Matrix: R
Lab Sample ID: 244599008	Date Received: 01/13/2010 08:55	%Moisture: 21.7
Client ID: RE12-10-7236	Client: LANL010	Project: LANL01004
Batch ID: 941702	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/20/2010 14:51	Inst: MSD7.1	Dilution: 1
Prep Date: 01/14/2010 19:34	Analyst: JMB3	Inj. Vol: .5 uL
Data File: s7a2013.d	Aliquot: 30.04 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	425	ug/kg	85.0	425
108-95-2	Phenol	U	425	ug/kg	85.0	425
95-57-8	2-Chlorophenol	U	425	ug/kg	85.0	425
106-46-7	1,4-Dichlorobenzene	U	425	ug/kg	85.0	425
621-64-7	N-Nitrosodipropylamine	U	425	ug/kg	85.0	425
59-50-7	4-Chloro-3-methylphenol	U	425	ug/kg	85.0	425
83-32-9	Acenaphthene	U	42.5	ug/kg	14.0	42.5
121-14-2	2,4-Dinitrotoluene	U	425	ug/kg	42.5	425
100-02-7	4-Nitrophenol	U	425	ug/kg	140	425
87-86-5	Pentachlorophenol	U	425	ug/kg	106	425
129-00-0	Pyrene	U	42.5	ug/kg	12.7	42.5
110-86-1	Pyridine	U	425	ug/kg	85.0	425
62-53-3	Aniline	U	425	ug/kg	127	425
111-44-4	bis(2-Chloroethyl) ether	U	425	ug/kg	85.0	425
541-73-1	1,3-Dichlorobenzene	U	425	ug/kg	85.0	425
100-51-6	Benzyl alcohol	U	425	ug/kg	127	425
95-50-1	1,2-Dichlorobenzene	U	425	ug/kg	85.0	425
108-60-1	bis(2-Chloroisopropyl)ether	U	425	ug/kg	85.0	425
95-48-7	o-Cresol	U	425	ug/kg	85.0	425
65794-96-9	m,p-Cresols	U	425	ug/kg	127	425
67-72-1	Hexachloroethane	U	425	ug/kg	85.0	425
98-95-3	Nitrobenzene	U	425	ug/kg	85.0	425
78-59-1	Isophorone	U	425	ug/kg	85.0	425
88-75-5	2-Nitrophenol	U	425	ug/kg	85.0	425
105-67-9	2,4-Dimethylphenol	U	425	ug/kg	149	425
111-91-1	bis(2-Chloroethoxy)methane	U	425	ug/kg	85.0	425
120-83-2	2,4-Dichlorophenol	U	425	ug/kg	85.0	425
65-85-0	Benzoic acid	U	850	ug/kg	212	850
91-20-3	Naphthalene	U	42.5	ug/kg	12.7	42.5
106-47-8	4-Chloroaniline	U	425	ug/kg	85.0	425
87-68-3	Hexachlorobutadiene	U	425	ug/kg	85.0	425
91-57-6	2-Methylnaphthalene	U	42.5	ug/kg	8.50	42.5
77-47-4	Hexachlorocyclopentadiene	U	425	ug/kg	85.0	425
88-06-2	2,4,6-Trichlorophenol	U	425	ug/kg	85.0	425
95-95-4	2,4,5-Trichlorophenol	U	425	ug/kg	85.0	425
91-58-7	2-Chloronaphthalene	U	42.5	ug/kg	14.0	42.5
88-74-4	2-Nitroaniline	U	425	ug/kg	85.0	425
99-09-2	o-Nitroaniline	U	425	ug/kg	85.0	425
	3-Nitroaniline					

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210  
Lab Sample ID: 244599008

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD7.I  
Analyst: JMB3  
Aliquot: 30.04 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 21.7  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE12-10-7236  
Batch ID: 941702  
Run Date: 01/20/2010 14:51  
Prep Date: 01/14/2010 19:34  
Data File: s7a2013.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	425	ug/kg	85.0	425
606-20-2	2,6-Dinitrotoluene	U	425	ug/kg	42.5	425
208-96-8	Acenaphthylene	U	42.5	ug/kg	12.7	42.5
51-28-5	2,4-Dinitrophenol	U	850	ug/kg	161	850
132-64-9	Dibenzofuran	U	425	ug/kg	85.0	425
84-66-2	Diethylphthalate	U	425	ug/kg	85.0	425
86-73-7	Fluorene	U	42.5	ug/kg	12.7	42.5
7005-72-3	4-Chlorophenylphenylether	U	425	ug/kg	85.0	425
534-52-1	2-Methyl-4,6-dinitrophenol	U	425	ug/kg	85.0	425
100-01-6	4-Nitroaniline	U	425	ug/kg	127	425
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	425	ug/kg	85.0	425
122-66-7	Azobenzene	U	425	ug/kg	85.0	425
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	425	ug/kg	85.0	425
118-74-1	Hexachlorobenzene	U	425	ug/kg	85.0	425
85-01-8	Phenanthrene	U	42.5	ug/kg	12.7	42.5
120-12-7	Anthracene	U	42.5	ug/kg	8.50	42.5
84-74-2	Di-n-butylphthalate	U	425	ug/kg	85.0	425
206-44-0	Fluoranthene	U	42.5	ug/kg	12.7	42.5
85-68-7	Butylbenzylphthalate	U	425	ug/kg	85.0	425
56-55-3	Benzo(a)anthracene	U	42.5	ug/kg	12.7	42.5
91-94-1	3,3'-Dichlorobenzidine	U	425	ug/kg	127	425
218-01-9	Chrysene	U	42.5	ug/kg	12.7	42.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	425	ug/kg	85.0	425
117-84-0	Di-n-octylphthalate	U	425	ug/kg	85.0	425
205-99-2	Benzo(b)fluoranthene	U	42.5	ug/kg	12.7	42.5
207-08-9	Benzo(k)fluoranthene	U	42.5	ug/kg	12.7	42.5
50-32-8	Benzo(a)pyrene	U	42.5	ug/kg	12.7	42.5
193-39-5	Indeno(1,2,3-cd)pyrene	U	42.5	ug/kg	12.7	42.5
53-70-3	Dibenzo(a,h)anthracene	U	42.5	ug/kg	12.7	42.5
191-24-2	Benzo(ghi)perylene	U	42.5	ug/kg	12.7	42.5
120-82-1	1,2,4-Trichlorobenzene	U	425	ug/kg	85.0	425

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.03	400	ug/kg		J
	Unknown Aldol Condensate	2.82	899	ug/kg		J

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210  
Lab Sample ID: 244599008

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD7.1  
Analyst: JMB3  
Aliquot: 30.04 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 21.7  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE12-10-7236  
Batch ID: 941702  
Run Date: 01/20/2010 14:51  
Prep Date: 01/14/2010 19:34  
Data File: s7a2013.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
<b>Tentatively Identified Compound Summary</b>						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
7785-70-8	1R-.alpha.-Pinene	3.37	203	ug/kg	97	NJ
77-53-2	Cedrol	6.39	209	ug/kg	94	NJ
112-80-1	Oleic Acid	8.05	347	ug/kg	83	NJ
	Unknown	8.58	185	ug/kg		J
	Unknown	8.6	330	ug/kg		J
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	8.87	368	ug/kg	98	NJ
	Unknown	8.94	171	ug/kg		J
	Unknown	9.05	397	ug/kg		J
62600-05-9	Cedran-diol, 8S,14-	9.51	189	ug/kg	83	NJ
112-95-8	Eicosane	9.84	173	ug/kg	92	NJ
	Unknown	9.98	201	ug/kg		J
	Unknown	11.51	260	ug/kg		J
	Unknown	12.45	525	ug/kg		J
	Unknown	12.61	269	ug/kg		J
83-46-5	.beta.-Sitosterol	13.23	1420	ug/kg	99	NJ
	Unknown	13.71	693	ug/kg		J
	Unknown	14.3	497	ug/kg		J

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210  
Lab Sample ID: 244599004

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD7.I  
Analyst: JMB3  
Aliquot: 30.19 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 10.1  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	369	ug/kg	73.7	369
108-95-2	Phenol	U	369	ug/kg	73.7	369
95-57-8	2-Chlorophenol	U	369	ug/kg	73.7	369
106-46-7	1,4-Dichlorobenzene	U	369	ug/kg	73.7	369
621-64-7	N-Nitrosodipropylamine	U	369	ug/kg	73.7	369
59-50-7	4-Chloro-3-methylphenol	U	369	ug/kg	73.7	369
83-32-9	Acenaphthene	U	36.9	ug/kg	12.2	36.9
121-14-2	2,4-Dinitrotoluene	U	369	ug/kg	36.9	369
100-02-7	4-Nitrophenol	U	369	ug/kg	122	369
87-86-5	Pentachlorophenol	U	369	ug/kg	92.1	369
129-00-0	Pyrene	U	36.9	ug/kg	11.1	36.9
110-86-1	Pyridine	U	369	ug/kg	73.7	369
62-53-3	Aniline	U	369	ug/kg	111	369
111-44-4	bis(2-Chloroethyl) ether	U	369	ug/kg	73.7	369
541-73-1	1,3-Dichlorobenzene	U	369	ug/kg	73.7	369
100-51-6	Benzyl alcohol	U	369	ug/kg	111	369
95-50-1	1,2-Dichlorobenzene	U	369	ug/kg	73.7	369
108-60-1	bis(2-Chloroisopropyl)ether	U	369	ug/kg	73.7	369
95-48-7	o-Cresol	U	369	ug/kg	73.7	369
65794-96-9	m,p-Cresols	U	369	ug/kg	111	369
67-72-1	Hexachloroethane	U	369	ug/kg	73.7	369
98-95-3	Nitrobenzene	U	369	ug/kg	73.7	369
78-59-1	Isophorone	U	369	ug/kg	73.7	369
88-75-5	2-Nitrophenol	U	369	ug/kg	73.7	369
105-67-9	2,4-Dimethylphenol	U	369	ug/kg	129	369
111-91-1	bis(2-Chloroethoxy)methane	U	369	ug/kg	73.7	369
120-83-2	2,4-Dichlorophenol	U	369	ug/kg	73.7	369
65-85-0	Benzoic acid	U	737	ug/kg	184	737
91-20-3	Naphthalene	U	36.9	ug/kg	11.1	36.9
106-47-8	4-Chloroaniline	U	369	ug/kg	73.7	369
87-68-3	Hexachlorobutadiene	U	369	ug/kg	73.7	369
91-57-6	2-Methylnaphthalene	U	36.9	ug/kg	7.37	36.9
77-47-4	Hexachlorocyclopentadiene	U	369	ug/kg	73.7	369
88-06-2	2,4,6-Trichlorophenol	U	369	ug/kg	73.7	369
95-95-4	2,4,5-Trichlorophenol	U	369	ug/kg	73.7	369
91-58-7	2-Chloronaphthalene	U	36.9	ug/kg	12.2	36.9
88-74-4	2-Nitroaniline	U	369	ug/kg	73.7	369
99-09-2	<i>o</i> -Nitroaniline	U	369	ug/kg	73.7	369
	3-Nitroaniline					

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210	Date Collected: 01/07/2010 12:00	Matrix: R
Lab Sample ID: 244599004	Date Received: 01/13/2010 08:55	%Moisture: 10.1
	Client: LANL010	Project: LANL01004
Client ID: RE12-10-7237	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 941702	Inst: MSD7.I	Dilution: 1
Run Date: 01/19/2010 19:32	Analyst: JMB3	Inj. Vol: .5 uL
Prep Date: 01/14/2010 19:34	Aliquot: 30.19 g	Final Volume: 1 mL
Data File: s7a1929.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	369	ug/kg	73.7	369
606-20-2	2,6-Dinitrotoluene	U	369	ug/kg	36.9	369
208-96-8	Accnaphthylene	U	36.9	ug/kg	11.1	36.9
51-28-5	2,4-Dinitrophenol	U	737	ug/kg	140	737
132-64-9	Dibenzofuran	U	369	ug/kg	73.7	369
84-66-2	Diethylphthalate	U	369	ug/kg	73.7	369
86-73-7	Fluorene	U	36.9	ug/kg	11.1	36.9
7005-72-3	4-Chlorophenylphenylether	U	369	ug/kg	73.7	369
534-52-1	2-Methyl-4,6-dinitrophenol	U	369	ug/kg	73.7	369
100-01-6	4-Nitroaniline	U	369	ug/kg	111	369
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	369	ug/kg	73.7	369
122-66-7	Azobenzene	U	369	ug/kg	73.7	369
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	369	ug/kg	73.7	369
118-74-1	Hexachlorobenzene	U	369	ug/kg	73.7	369
85-01-8	Phenanthrene	U	36.9	ug/kg	11.1	36.9
120-12-7	Anthracene	U	36.9	ug/kg	7.37	36.9
84-74-2	Di-n-butylphthalate	U	369	ug/kg	73.7	369
206-44-0	Fluoranthene	U	36.9	ug/kg	11.1	36.9
85-68-7	Butylbenzylphthalate	U	369	ug/kg	73.7	369
56-55-3	Benzo(a)anthracene	U	36.9	ug/kg	11.1	36.9
91-94-1	3,3'-Dichlorobenzidine	U	369	ug/kg	111	369
218-01-9	Chrysene	U	36.9	ug/kg	11.1	36.9
117-81-7	bis(2-Ethylhexyl)phthalate	U	369	ug/kg	73.7	369
117-84-0	Di-n-octylphthalate	U	369	ug/kg	73.7	369
205-99-2	Benzo(b)fluoranthene	U	36.9	ug/kg	11.1	36.9
207-08-9	Benzo(k)fluoranthene	U	36.9	ug/kg	11.1	36.9
50-32-8	Benzo(a)pyrene	U	36.9	ug/kg	11.1	36.9
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.9	ug/kg	11.1	36.9
53-70-3	Dibenzo(a,h)anthracene	U	36.9	ug/kg	11.1	36.9
191-24-2	Benzo(ghi)perylene	U	36.9	ug/kg	11.1	36.9
120-82-1	1,2,4-Trichlorobenzene	U	369	ug/kg	73.7	369

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.83	781	ug/kg		JA
	Unknown	3.34	241	ug/kg		J

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

<b>SDG Number:</b> 10-1210	<b>Date Collected:</b> 01/07/2010 12:00	<b>Matrix:</b> R
<b>Lab Sample ID:</b> 244599004	<b>Date Received:</b> 01/13/2010 08:55	<b>%Moisture:</b> 10.1
	<b>Client:</b> LANL010	<b>Project:</b> LANL01004
<b>Client ID:</b> RE12-10-7237	<b>Method:</b> SW846 8270C	<b>SOP Ref:</b> GL-OA-E-009
<b>Batch ID:</b> 941702	<b>Inst:</b> MSD7.I	<b>Dilution:</b> 1
<b>Run Date:</b> 01/19/2010 19:32	<b>Analyst:</b> JMB3	<b>Inj. Vol:</b> .5 uL
<b>Prep Date:</b> 01/14/2010 19:34	<b>Aliquot:</b> 30.19 g	<b>Final Volume:</b> 1 mL
<b>Data File:</b> s7a1929.d	<b>Column:</b> J&W DB-5MS	<b>Level:</b> LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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Tentatively Identified Compound Summary			Estimated			
CAS No.	Tentatively Identified Compound (TIC)	RT		Units	Fit	Qual
7785-70-8	1R-.alpha.-Pinene	3.36	307	ug/kg	97	NJ
127-91-3	.beta.-Pinene	3.61	158	ug/kg	97	NJ
498-15-7	Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy	3.75	326	ug/kg	97	NJ
	Unknown	5.59	191	ug/kg		J
1000245-71-9	E-11-Hexadecenoic acid, ethyl ester	8.05	438	ug/kg	90	NJ
57-11-4	Octadecanoic acid	8.12	162	ug/kg	94	NJ
	Unknown	8.6	397	ug/kg		J
	Unknown	8.66	173	ug/kg		J
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	8.87	327	ug/kg	95	NJ
	Unknown	8.92	161	ug/kg		J
	Unknown	9.05	467	ug/kg		J
	Unknown	9.15	430	ug/kg		J
	Unknown	9.22	508	ug/kg		J
	Unknown	9.39	151	ug/kg		J
	Unknown	9.51	207	ug/kg		J
	Unknown	9.97	331	ug/kg		J
	Unknown	12.72	217	ug/kg		J
	Unknown	13.33	235	ug/kg		J
	Unknown	13.37	171	ug/kg		J

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210	Date Collected: 01/07/2010 12:00	Matrix: R
Lab Sample ID: 244599006	Date Received: 01/13/2010 08:55	%Moisture: 16.7
	Client: LANL010	Project: LANL01004
Client ID: RE12-10-7238	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 941702	Inst: MSD7.1	Dilution: 1
Run Date: 01/19/2010 20:16	Analyst: JMB3	Inj. Vol: .5 uL
Prep Date: 01/14/2010 19:34	Aliquot: 30.11 g	Final Volume: 1 mL
Data File: s7a1931.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	399	ug/kg	79.7	399
108-95-2	Phenol	U	399	ug/kg	79.7	399
95-57-8	2-Chlorophenol	U	399	ug/kg	79.7	399
106-46-7	1,4-Dichlorobenzene	U	399	ug/kg	79.7	399
621-64-7	N-Nitrosodipropylamine	U	399	ug/kg	79.7	399
59-50-7	4-Chloro-3-methylphenol	U	399	ug/kg	79.7	399
83-32-9	Acenaphthene	U	39.9	ug/kg	13.2	39.9
121-14-2	2,4-Dinitrotoluene	U	399	ug/kg	39.9	399
100-02-7	4-Nitrophenol	U	399	ug/kg	132	399
87-86-5	Pentachlorophenol	U	399	ug/kg	99.6	399
129-00-0	Pyrene	U	39.9	ug/kg	12.0	39.9
110-86-1	Pyridine	U	399	ug/kg	79.7	399
62-53-3	Aniline	U	399	ug/kg	120	399
111-44-4	bis(2-Chloroethyl) ether	U	399	ug/kg	79.7	399
541-73-1	1,3-Dichlorobenzene	U	399	ug/kg	79.7	399
100-51-6	Benzyl alcohol	U	399	ug/kg	120	399
95-50-1	1,2-Dichlorobenzene	U	399	ug/kg	79.7	399
108-60-1	bis(2-Chloroisopropyl)ether	U	399	ug/kg	79.7	399
95-48-7	o-Cresol	U	399	ug/kg	79.7	399
65794-96-9	m,p-Cresols	U	399	ug/kg	120	399
67-72-1	Hexachloroethane	U	399	ug/kg	79.7	399
98-95-3	Nitrobenzene	U	399	ug/kg	79.7	399
78-59-1	Isophorone	U	399	ug/kg	79.7	399
88-75-5	2-Nitrophenol	U	399	ug/kg	79.7	399
105-67-9	2,4-Dimethylphenol	U	399	ug/kg	140	399
111-91-1	bis(2-Chloroethoxy)methane	U	399	ug/kg	79.7	399
120-83-2	2,4-Dichlorophenol	U	399	ug/kg	79.7	399
65-85-0	Benzoic acid	U	797	ug/kg	199	797
91-20-3	Naphthalene	U	39.9	ug/kg	12.0	39.9
106-47-8	4-Chloroaniline	U	399	ug/kg	79.7	399
87-68-3	Hexachlorobutadiene	U	399	ug/kg	79.7	399
91-57-6	2-Methylnaphthalene	U	39.9	ug/kg	7.97	39.9
77-47-4	Hexachlorocyclopentadiene	U	399	ug/kg	79.7	399
88-06-2	2,4,6-Trichlorophenol	U	399	ug/kg	79.7	399
95-95-4	2,4,5-Trichlorophenol	U	399	ug/kg	79.7	399
91-58-7	2-Chloronaphthalene	U	39.9	ug/kg	13.2	39.9
88-74-4	2-Nitroaniline	U	399	ug/kg	79.7	399
99-09-2	o-Nitroaniline					
	3-Nitroaniline	U	399	ug/kg	79.7	399

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210	Date Collected: 01/07/2010 12:00	Matrix: R
Lab Sample ID: 244599006	Date Received: 01/13/2010 08:55	%Moisture: 16.7
Client ID: RE12-10-7238	Client: LANL010	Project: LANL01004
Batch ID: 941702	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/19/2010 20:16	Inst: MSD7.I	Dilution: 1
Prep Date: 01/14/2010 19:34	Analyst: JMB3	Inj. Vol: .5 uL
Data File: s7a1931.d	Aliquot: 30.11 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	399	ug/kg	79.7	399
606-20-2	2,6-Dinitrotoluene	U	399	ug/kg	39.9	399
208-96-8	Acenaphthylene	U	39.9	ug/kg	12.0	39.9
51-28-5	2,4-Dinitrophenol	U	797	ug/kg	151	797
132-64-9	Dibenzofuran	U	399	ug/kg	79.7	399
84-66-2	Diethylphthalate	U	399	ug/kg	79.7	399
86-73-7	Fluorene	U	39.9	ug/kg	12.0	39.9
7005-72-3	4-Chlorophenylphenylether	U	399	ug/kg	79.7	399
534-52-1	2-Methyl-4,6-dinitrophenol	U	399	ug/kg	79.7	399
100-01-6	4-Nitroaniline	U	399	ug/kg	120	399
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	399	ug/kg	79.7	399
122-66-7	Azobenzene	U	399	ug/kg	79.7	399
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	399	ug/kg	79.7	399
118-74-1	Hexachlorobenzene	U	399	ug/kg	79.7	399
85-01-8	Phenanthrene	U	39.9	ug/kg	12.0	39.9
120-12-7	Anthracene	U	39.9	ug/kg	7.97	39.9
84-74-2	Di-n-butylphthalate	U	399	ug/kg	79.7	399
206-44-0	Fluoranthene	U	39.9	ug/kg	12.0	39.9
85-68-7	Butylbenzylphthalate	U	399	ug/kg	79.7	399
56-55-3	Benzo(a)anthracene	U	39.9	ug/kg	12.0	39.9
91-94-1	3,3'-Dichlorobenzidine	U	399	ug/kg	120	399
218-01-9	Chrysene	U	39.9	ug/kg	12.0	39.9
117-81-7	bis(2-Ethylhexyl)phthalate	U	399	ug/kg	79.7	399
117-84-0	Di-n-octylphthalate	U	399	ug/kg	79.7	399
205-99-2	Benzo(b)fluoranthene	U	39.9	ug/kg	12.0	39.9
207-08-9	Benzo(k)fluoranthene	U	39.9	ug/kg	12.0	39.9
50-32-8	Benzo(a)pyrene	U	39.9	ug/kg	12.0	39.9
193-39-5	Indeno(1,2,3-cd)pyrene	U	39.9	ug/kg	12.0	39.9
53-70-3	Dibenzo(a,h)anthracene	U	39.9	ug/kg	12.0	39.9
191-24-2	Benzo(ghi)perylene	U	39.9	ug/kg	12.0	39.9
120-82-1	1,2,4-Trichlorobenzene	U	399	ug/kg	79.7	399

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.83	741	ug/kg		JA
	Unknown	8.57	631	ug/kg		J



Semi-Volatile  
Certificate of Analysis  
Sample Summary

SDG Number: 10-1210	Date Collected: 01/07/2010 12:00	Matrix: R
Lab Sample ID: 244599006	Date Received: 01/13/2010 08:55	%Moisture: 16.7
	Client: LANL010	Project: LANL01004
Client ID: RE12-10-7238	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 941702	Inst: MSD7.I	Dilution: 1
Run Date: 01/19/2010 20:16	Analyst: JMB3	Inj. Vol: .5 uL
Prep Date: 01/14/2010 19:34	Aliquot: 30.11 g	Final Volume: 1 mL
Data File: s7a1931.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	9.03	870	ug/kg		J
	Unknown	12.72	540	ug/kg		J

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210  
Lab Sample ID: 244599005

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD7.I  
Analyst: JMB3  
Aliquot: 30.01 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 9.3  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE12-10-7239  
Batch ID: 941702  
Run Date: 01/19/2010 19:54  
Prep Date: 01/14/2010 19:34  
Data File: s7a1930.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	367	ug/kg	73.5	367
108-95-2	Phenol	U	367	ug/kg	73.5	367
95-57-8	2-Chlorophenol	U	367	ug/kg	73.5	367
106-46-7	1,4-Dichlorobenzene	U	367	ug/kg	73.5	367
621-64-7	N-Nitrosodipropylamine	U	367	ug/kg	73.5	367
59-50-7	4-Chloro-3-methylphenol	U	367	ug/kg	73.5	367
83-32-9	Acenaphthene	U	36.7	ug/kg	12.1	36.7
121-14-2	2,4-Dinitrotoluene	U	367	ug/kg	36.7	367
100-02-7	4-Nitrophenol	U	367	ug/kg	121	367
87-86-5	Pentachlorophenol	U	367	ug/kg	91.9	367
129-00-0	Pyrene	U	36.7	ug/kg	11.0	36.7
110-86-1	Pyridine	U	367	ug/kg	73.5	367
62-53-3	Aniline	U	367	ug/kg	110	367
111-44-4	bis(2-Chloroethyl) ether	U	367	ug/kg	73.5	367
541-73-1	1,3-Dichlorobenzene	U	367	ug/kg	73.5	367
100-51-6	Benzyl alcohol	U	367	ug/kg	110	367
95-50-1	1,2-Dichlorobenzene	U	367	ug/kg	73.5	367
108-60-1	bis(2-Chloroisopropyl)ether	U	367	ug/kg	73.5	367
95-48-7	o-Cresol	U	367	ug/kg	73.5	367
65794-96-9	m,p-Cresols	U	367	ug/kg	110	367
67-72-1	Hexachloroethane	U	367	ug/kg	73.5	367
98-95-3	Nitrobenzene	U	367	ug/kg	73.5	367
78-59-1	Isophorone	U	367	ug/kg	73.5	367
88-75-5	2-Nitrophenol	U	367	ug/kg	73.5	367
105-67-9	2,4-Dimethylphenol	U	367	ug/kg	129	367
111-91-1	bis(2-Chloroethoxy)methane	U	367	ug/kg	73.5	367
120-83-2	2,4-Dichlorophenol	U	367	ug/kg	73.5	367
65-85-0	Benzoic acid	U	735	ug/kg	184	735
91-20-3	Naphthalene	U	36.7	ug/kg	11.0	36.7
106-47-8	4-Chloroaniline	U	367	ug/kg	73.5	367
87-68-3	Hexachlorobutadiene	U	367	ug/kg	73.5	367
91-57-6	2-Methylnaphthalene	U	36.7	ug/kg	7.35	36.7
77-47-4	Hexachlorocyclopentadiene	U	367	ug/kg	73.5	367
88-06-2	2,4,6-Trichlorophenol	U	367	ug/kg	73.5	367
95-95-4	2,4,5-Trichlorophenol	U	367	ug/kg	73.5	367
91-58-7	2-Chloronaphthalene	U	36.7	ug/kg	12.1	36.7
88-74-4	2-Nitroaniline	U	367	ug/kg	73.5	367
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	367	ug/kg	73.5	367

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210	Date Collected: 01/07/2010 12:00	Matrix: R
Lab Sample ID: 244599005	Date Received: 01/13/2010 08:55	%Moisture: 9.3
Client ID: RE12-10-7239	Client: LANL010	Project: LANL01004
Batch ID: 941702	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/19/2010 19:54	Inst: MSD7.I	Dilution: 1
Prep Date: 01/14/2010 19:34	Analyst: JMB3	Inj. Vol: .5 uL
Data File: s7a1930.d	Aliquot: 30.01 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
<i>m-Nitroaniline</i>						
131-11-3	Dimethylphthalate	U	367	ug/kg	73.5	367
606-20-2	2,6-Dinitrotoluene	U	367	ug/kg	36.7	367
208-96-8	Acenaphthylene	U	36.7	ug/kg	11.0	36.7
51-28-5	2,4-Dinitrophenol	U	735	ug/kg	140	735
132-64-9	Dibenzofuran	U	367	ug/kg	73.5	367
84-66-2	Diethylphthalate	U	367	ug/kg	73.5	367
86-73-7	Fluorene	U	36.7	ug/kg	11.0	36.7
7005-72-3	4-Chlorophenylphenylether	U	367	ug/kg	73.5	367
534-52-1	2-Methyl-4,6-dinitrophenol	U	367	ug/kg	73.5	367
100-01-6	4-Nitroaniline	U	367	ug/kg	110	367
<i>p-Nitroaniline</i>						
122-39-4	Diphenylamine	U	367	ug/kg	73.5	367
122-66-7	Azobenzene	U	367	ug/kg	73.5	367
<i>1,2-Diphenylhydrazine</i>						
101-55-3	4-Bromophenylphenylether	U	367	ug/kg	73.5	367
118-74-1	Hexachlorobenzene	U	367	ug/kg	73.5	367
85-01-8	Phenanthrene	U	36.7	ug/kg	11.0	36.7
120-12-7	Anthracene	U	36.7	ug/kg	7.35	36.7
84-74-2	Di-n-butylphthalate	U	367	ug/kg	73.5	367
206-44-0	Fluoranthene	U	36.7	ug/kg	11.0	36.7
85-68-7	Butylbenzylphthalate	U	367	ug/kg	73.5	367
56-55-3	Benzo(a)anthracene	U	36.7	ug/kg	11.0	36.7
91-94-1	3,3'-Dichlorobenzidine	U	367	ug/kg	110	367
218-01-9	Chrysene	U	36.7	ug/kg	11.0	36.7
117-81-7	bis(2-Ethylhexyl)phthalate	U	367	ug/kg	73.5	367
117-84-0	Di-n-octylphthalate	U	367	ug/kg	73.5	367
205-99-2	Benzo(b)fluoranthene	U	36.7	ug/kg	11.0	36.7
207-08-9	Benzo(k)fluoranthene	U	36.7	ug/kg	11.0	36.7
50-32-8	Benzo(a)pyrene	U	36.7	ug/kg	11.0	36.7
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.7	ug/kg	11.0	36.7
53-70-3	Dibenzo(a,h)anthracene	U	36.7	ug/kg	11.0	36.7
191-24-2	Benzo(ghi)perylene	U	36.7	ug/kg	11.0	36.7
120-82-1	1,2,4-Trichlorobenzene	U	367	ug/kg	73.5	367

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.82	640	ug/kg		JA
	Unknown	9.02	173	ug/kg		J

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210	Date Collected: 01/07/2010 12:00	Matrix: R
Lab Sample ID: 244599005	Date Received: 01/13/2010 08:55	%Moisture: 9.3
Client ID: RE12-10-7239	Client: LANL010	Project: LANL01004
Batch ID: 941702	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/19/2010 19:54	Inst: MSD7J	Dilution: 1
Prep Date: 01/14/2010 19:34	Analyst: JMB3	Inj. Vol: .5 uL
Data File: s7a1930.d	Aliquot: 30.01 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	10.83	557	ug/kg		J
	Unknown	11.5	724	ug/kg		J
	Unknown	12.71	311	ug/kg		J

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210  
Lab Sample ID: 244599002

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD7J  
Analyst: JMB3  
Aliquot: 30.14 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 13.5  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE12-10-7240  
Batch ID: 941702  
Run Date: 01/19/2010 18:48  
Prep Date: 01/14/2010 19:34  
Data File: s7a1927.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	384	ug/kg	76.7	384
108-95-2	Phenol	U	384	ug/kg	76.7	384
95-57-8	2-Chlorophenol	U	384	ug/kg	76.7	384
106-46-7	1,4-Dichlorobenzene	U	384	ug/kg	76.7	384
621-64-7	N-Nitrosodipropylamine	U	384	ug/kg	76.7	384
59-50-7	4-Chloro-3-methylphenol	U	384	ug/kg	76.7	384
83-32-9	Acenaphthene	U	38.4	ug/kg	12.7	38.4
121-14-2	2,4-Dinitrotoluene	U	384	ug/kg	38.4	384
100-02-7	4-Nitrophenol	U	384	ug/kg	127	384
87-86-5	Pentachlorophenol	U	384	ug/kg	95.9	384
129-00-0	Pyrene	U	38.4	ug/kg	11.5	38.4
110-86-1	Pyridine	U	384	ug/kg	76.7	384
62-53-3	Aniline	U	384	ug/kg	115	384
111-44-4	bis(2-Chloroethyl) ether	U	384	ug/kg	76.7	384
541-73-1	1,3-Dichlorobenzene	U	384	ug/kg	76.7	384
100-51-6	Benzyl alcohol	U	384	ug/kg	115	384
95-50-1	1,2-Dichlorobenzene	U	384	ug/kg	76.7	384
108-60-1	bis(2-Chloroisopropyl)ether	U	384	ug/kg	76.7	384
95-48-7	o-Cresol	U	384	ug/kg	76.7	384
65794-96-9	m,p-Cresols	U	384	ug/kg	115	384
67-72-1	Hexachloroethane	U	384	ug/kg	76.7	384
98-95-3	Nitrobenzene	U	384	ug/kg	76.7	384
78-59-1	Isophorone	U	384	ug/kg	76.7	384
88-75-5	2-Nitrophenol	U	384	ug/kg	76.7	384
105-67-9	2,4-Dimethylphenol	U	384	ug/kg	134	384
111-91-1	bis(2-Chloroethoxy)methane	U	384	ug/kg	76.7	384
120-83-2	2,4-Dichlorophenol	U	384	ug/kg	76.7	384
65-85-0	Benzoic acid	U	767	ug/kg	192	767
91-20-3	Naphthalene	U	38.4	ug/kg	11.5	38.4
106-47-8	4-Chloroaniline	U	384	ug/kg	76.7	384
87-68-3	Hexachlorobutadiene	U	384	ug/kg	76.7	384
91-57-6	2-Methylnaphthalene	U	38.4	ug/kg	7.67	38.4
77-47-4	Hexachlorocyclopentadiene	U	384	ug/kg	76.7	384
88-06-2	2,4,6-Trichlorophenol	U	384	ug/kg	76.7	384
95-95-4	2,4,5-Trichlorophenol	U	384	ug/kg	76.7	384
91-58-7	2-Chloronaphthalene	U	38.4	ug/kg	12.7	38.4
88-74-4	2-Nitroaniline	U	384	ug/kg	76.7	384
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	384	ug/kg	76.7	384

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210  
Lab Sample ID: 244599002

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD7.I  
Analyst: JMB3  
Aliquot: 30.14 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 13.5  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	384	ug/kg	76.7	384
606-20-2	2,6-Dinitrotoluene	U	384	ug/kg	38.4	384
208-96-8	Acenaphthylene	U	38.4	ug/kg	11.5	38.4
51-28-5	2,4-Dinitrophenol	U	767	ug/kg	146	767
132-64-9	Dibenzofuran	U	384	ug/kg	76.7	384
84-66-2	Diethylphthalate	U	384	ug/kg	76.7	384
86-73-7	Fluorene	U	38.4	ug/kg	11.5	38.4
7005-72-3	4-Chlorophenylphenylether	U	384	ug/kg	76.7	384
534-52-1	2-Methyl-4,6-dinitrophenol	U	384	ug/kg	76.7	384
100-01-6	4-Nitroaniline	U	384	ug/kg	115	384
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	384	ug/kg	76.7	384
122-66-7	Azobenzene	U	384	ug/kg	76.7	384
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	384	ug/kg	76.7	384
118-74-1	Hexachlorobenzene	U	384	ug/kg	76.7	384
85-01-8	Phenanthrene	U	38.4	ug/kg	11.5	38.4
120-12-7	Anthracene	U	38.4	ug/kg	7.67	38.4
84-74-2	Di-n-butylphthalate	U	384	ug/kg	76.7	384
206-44-0	Fluoranthene	U	38.4	ug/kg	11.5	38.4
85-68-7	Butylbenzylphthalate	U	384	ug/kg	76.7	384
56-55-3	Benzo(a)anthracene	U	38.4	ug/kg	11.5	38.4
91-94-1	3,3'-Dichlorobenzidine	U	384	ug/kg	115	384
218-01-9	Chrysene	U	38.4	ug/kg	11.5	38.4
117-81-7	bis(2-Ethylhexyl)phthalate	U	384	ug/kg	76.7	384
117-84-0	Di-n-octylphthalate	U	384	ug/kg	76.7	384
205-99-2	Benzo(b)fluoranthene	U	38.4	ug/kg	11.5	38.4
207-08-9	Benzo(k)fluoranthene	U	38.4	ug/kg	11.5	38.4
50-32-8	Benzo(a)pyrene	U	38.4	ug/kg	11.5	38.4
193-39-5	Indeno(1,2,3-cd)pyrene	U	38.4	ug/kg	11.5	38.4
53-70-3	Dibenzo(a,h)anthracene	U	38.4	ug/kg	11.5	38.4
191-24-2	Benzo(ghi)perylene	U	38.4	ug/kg	11.5	38.4
120-82-1	1,2,4-Trichlorobenzene	U	384	ug/kg	76.7	384

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.82	843	ug/kg		JA
77-53-2	Cedrol	6.39	307	ug/kg	94	NJ

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210	Date Collected: 01/07/2010 12:00	Matrix: R
Lab Sample ID: 244599002	Date Received: 01/13/2010 08:55	%Moisture: 13.5
	Client: LANL010	Project: LANL01004
Client ID: RE12-10-7240	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 941702	Inst: MSD7.1	Dilution: 1
Run Date: 01/19/2010 18:48	Analyst: JMB3	Inj. Vol: .5 uL
Prep Date: 01/14/2010 19:34	Aliquot: 30.14 g	Final Volume: 1 mL
Data File: s7a1927.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	8.81	836	ug/kg	96	NJ
	Unknown	12.71	190	ug/kg		J

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210  
Lab Sample ID: 244599003

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD7.I  
Analyst: JMB3  
Aliquot: 30.02 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 9.4  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE12-10-7241  
Batch ID: 941702  
Run Date: 01/19/2010 19:11  
Prep Date: 01/14/2010 19:34  
Data File: s7a1928.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	368	ug/kg	73.5	368
108-95-2	Phenol	U	368	ug/kg	73.5	368
95-57-8	2-Chlorophenol	U	368	ug/kg	73.5	368
106-46-7	1,4-Dichlorobenzene	U	368	ug/kg	73.5	368
621-64-7	N-Nitrosodipropylamine	U	368	ug/kg	73.5	368
59-50-7	4-Chloro-3-methylphenol	U	368	ug/kg	73.5	368
83-32-9	Acenaphthene	U	36.8	ug/kg	12.1	36.8
121-14-2	2,4-Dinitrotoluene	U	368	ug/kg	36.8	368
100-02-7	4-Nitrophenol	U	368	ug/kg	121	368
87-86-5	Pentachlorophenol	U	368	ug/kg	91.9	368
129-00-0	Pyrene	U	36.8	ug/kg	11.0	36.8
110-86-1	Pyridine	U	368	ug/kg	73.5	368
62-53-3	Aniline	U	368	ug/kg	110	368
111-44-4	bis(2-Chloroethyl) ether	U	368	ug/kg	73.5	368
541-73-1	1,3-Dichlorobenzene	U	368	ug/kg	73.5	368
100-51-6	Benzyl alcohol	U	368	ug/kg	110	368
95-50-1	1,2-Dichlorobenzene	U	368	ug/kg	73.5	368
108-60-1	bis(2-Chloroisopropyl)ether	U	368	ug/kg	73.5	368
95-48-7	o-Cresol	U	368	ug/kg	73.5	368
65794-96-9	m,p-Cresols	U	368	ug/kg	110	368
67-72-1	Hexachloroethane	U	368	ug/kg	73.5	368
98-95-3	Nitrobenzene	U	368	ug/kg	73.5	368
78-59-1	Isophorone	U	368	ug/kg	73.5	368
88-75-5	2-Nitrophenol	U	368	ug/kg	73.5	368
105-67-9	2,4-Dimethylphenol	U	368	ug/kg	129	368
111-91-1	bis(2-Chloroethoxy)methane	U	368	ug/kg	73.5	368
120-83-2	2,4-Dichlorophenol	U	368	ug/kg	73.5	368
65-85-0	Benzoic acid	U	735	ug/kg	184	735
91-20-3	Naphthalene	U	36.8	ug/kg	11.0	36.8
106-47-8	4-Chloroaniline	U	368	ug/kg	73.5	368
87-68-3	Hexachlorobutadiene	U	368	ug/kg	73.5	368
91-57-6	2-Methylnaphthalene	U	36.8	ug/kg	7.35	36.8
77-47-4	Hexachlorocyclopentadiene	U	368	ug/kg	73.5	368
88-06-2	2,4,6-Trichlorophenol	U	368	ug/kg	73.5	368
95-95-4	2,4,5-Trichlorophenol	U	368	ug/kg	73.5	368
91-58-7	2-Chloronaphthalene	U	36.8	ug/kg	12.1	36.8
88-74-4	2-Nitroaniline	U	368	ug/kg	73.5	368
99-09-2	<i>o</i> -Nitroaniline	U	368	ug/kg	73.5	368
	3-Nitroaniline					



**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

<b>SDG Number:</b> 10-1210	<b>Date Collected:</b> 01/07/2010 12:00	<b>Matrix:</b> R
<b>Lab Sample ID:</b> 244599003	<b>Date Received:</b> 01/13/2010 08:55	<b>%Moisture:</b> 9.4
<b>Client ID:</b> RE12-10-7241	<b>Client:</b> LANL010	<b>Project:</b> LANL01004
<b>Batch ID:</b> 941702	<b>Method:</b> SW846 8270C	<b>SOP Ref:</b> GL-OA-E-009
<b>Run Date:</b> 01/19/2010 19:11	<b>Inst:</b> MSD7.1	<b>Dilution:</b> 1
<b>Prep Date:</b> 01/14/2010 19:34	<b>Analyst:</b> JMB3	<b>Inj. Vol:</b> .5 uL
<b>Data File:</b> s7a1928.d	<b>Aliquot:</b> 30.02 g	<b>Final Volume:</b> 1 mL
	<b>Column:</b> J&W DB-5MS	<b>Level:</b> LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	368	ug/kg	73.5	368
606-20-2	2,6-Dinitrotoluene	U	368	ug/kg	36.8	368
208-96-8	Acenaphthylene	U	36.8	ug/kg	11.0	36.8
51-28-5	2,4-Dinitrophenol	U	735	ug/kg	140	735
132-64-9	Dibenzofuran	U	368	ug/kg	73.5	368
84-66-2	Diethylphthalate	U	368	ug/kg	73.5	368
86-73-7	Fluorene	U	36.8	ug/kg	11.0	36.8
7005-72-3	4-Chlorophenylphenylether	U	368	ug/kg	73.5	368
534-52-1	2-Methyl-4,6-dinitrophenol	U	368	ug/kg	73.5	368
100-01-6	4-Nitroaniline	U	368	ug/kg	110	368
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	368	ug/kg	73.5	368
122-66-7	Azobenzene	U	368	ug/kg	73.5	368
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	368	ug/kg	73.5	368
118-74-1	Hexachlorobenzene	U	368	ug/kg	73.5	368
85-01-8	Phenanthrene	U	36.8	ug/kg	11.0	36.8
120-12-7	Anthracene	U	36.8	ug/kg	7.35	36.8
84-74-2	Di-n-butylphthalate	U	368	ug/kg	73.5	368
206-44-0	Fluoranthene	U	36.8	ug/kg	11.0	36.8
85-68-7	Butylbenzylphthalate	U	368	ug/kg	73.5	368
56-55-3	Benzo(a)anthracene	U	36.8	ug/kg	11.0	36.8
91-94-1	3,3'-Dichlorobenzidine	U	368	ug/kg	110	368
218-01-9	Chrysene	U	36.8	ug/kg	11.0	36.8
117-81-7	bis(2-Ethylhexyl)phthalate	U	368	ug/kg	73.5	368
117-84-0	Di-n-octylphthalate	U	368	ug/kg	73.5	368
205-99-2	Benzo(b)fluoranthene	U	36.8	ug/kg	11.0	36.8
207-08-9	Benzo(k)fluoranthene	U	36.8	ug/kg	11.0	36.8
50-32-8	Benzo(a)pyrene	U	36.8	ug/kg	11.0	36.8
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.8	ug/kg	11.0	36.8
53-70-3	Dibenzo(a,h)anthracene	U	36.8	ug/kg	11.0	36.8
191-24-2	Benzo(ghi)perylene	U	36.8	ug/kg	11.0	36.8
120-82-1	1,2,4-Trichlorobenzene	U	368	ug/kg	73.5	368

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.82	657	ug/kg		JA
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	5.63	227	ug/kg	99	NJ

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210	Date Collected: 01/07/2010 12:00	Matrix: R
Lab Sample ID: 244599003	Date Received: 01/13/2010 08:55	%Moisture: 9.4
	Client: LANL010	Project: LANL01004
Client ID: RE12-10-7241	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 941702	Inst: MSD7.I	Dilution: 1
Run Date: 01/19/2010 19:11	Analyst: JMB3	Inj. Vol: .5 uL
Prep Date: 01/14/2010 19:34	Aliquot: 30.02 g	Final Volume: 1 mL
Data File: s7a1928.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
Tentatively Identified Compound Summary							
CAS No.	Tentatively Identified Compound (TIC)		RT	Estimated	Units	Fit	Qual
77-53-2	Cedrol		6.39	556	ug/kg	93	NJ
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa		8.82	469	ug/kg	96	NJ

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210	Date Collected: 01/07/2010 12:00	Matrix: R
Lab Sample ID: 244599007	Date Received: 01/13/2010 08:55	%Moisture: 16.3
	Client: LANL010	Project: LANL01004
Client ID: RE12-10-7242	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 941702	Inst: MSD7.1	Dilution: 1
Run Date: 01/20/2010 14:29	Analyst: JMB3	Inj. Vol: .5 uL
Prep Date: 01/14/2010 19:34	Aliquot: 30.12 g	Final Volume: 1 mL
Data File: s7a2012.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	397	ug/kg	79.4	397
108-95-2	Phenol	U	397	ug/kg	79.4	397
95-57-8	2-Chlorophenol	U	397	ug/kg	79.4	397
106-46-7	1,4-Dichlorobenzene	U	397	ug/kg	79.4	397
621-64-7	N-Nitrosodipropylamine	U	397	ug/kg	79.4	397
59-50-7	4-Chloro-3-methylphenol	U	397	ug/kg	79.4	397
83-32-9	Acenaphthene	U	39.7	ug/kg	13.1	39.7
121-14-2	2,4-Dinitrotoluene	U	397	ug/kg	39.7	397
100-02-7	4-Nitrophenol	U	397	ug/kg	131	397
87-86-5	Pentachlorophenol	U	397	ug/kg	99.2	397
129-00-0	Pyrene	J	12.0	ug/kg	11.9	39.7
110-86-1	Pyridine	U	397	ug/kg	79.4	397
62-53-3	Aniline	U	397	ug/kg	119	397
111-44-4	bis(2-Chloroethyl) ether	U	397	ug/kg	79.4	397
541-73-1	1,3-Dichlorobenzene	U	397	ug/kg	79.4	397
100-51-6	Benzyl alcohol	U	397	ug/kg	119	397
95-50-1	1,2-Dichlorobenzene	U	397	ug/kg	79.4	397
108-60-1	bis(2-Chloroisopropyl)ether	U	397	ug/kg	79.4	397
95-48-7	o-Cresol	U	397	ug/kg	79.4	397
65794-96-9	m,p-Cresols	U	397	ug/kg	119	397
67-72-1	Hexachloroethane	U	397	ug/kg	79.4	397
98-95-3	Nitrobenzene	U	397	ug/kg	79.4	397
78-59-1	Isophorone	U	397	ug/kg	79.4	397
88-75-5	2-Nitrophenol	U	397	ug/kg	79.4	397
105-67-9	2,4-Dimethylphenol	U	397	ug/kg	139	397
111-91-1	bis(2-Chloroethoxy)methane	U	397	ug/kg	79.4	397
120-83-2	2,4-Dichlorophenol	U	397	ug/kg	79.4	397
65-85-0	Benzoic acid	U	794	ug/kg	198	794
91-20-3	Naphthalene	U	39.7	ug/kg	11.9	39.7
106-47-8	4-Chloroaniline	U	397	ug/kg	79.4	397
87-68-3	Hexachlorobutadiene	U	397	ug/kg	79.4	397
91-57-6	2-Methylnaphthalene	U	39.7	ug/kg	7.94	39.7
77-47-4	Hexachlorocyclopentadiene	U	397	ug/kg	79.4	397
88-06-2	2,4,6-Trichlorophenol	U	397	ug/kg	79.4	397
95-95-4	2,4,5-Trichlorophenol	U	397	ug/kg	79.4	397
91-58-7	2-Chloronaphthalene	U	39.7	ug/kg	13.1	39.7
88-74-4	2-Nitroaniline	U	397	ug/kg	79.4	397
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	397	ug/kg	79.4	397

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210  
Lab Sample ID: 244599007

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD7.1  
Analyst: JMB3  
Aliquot: 30.12 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 16.3  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	397	ug/kg	79.4	397
606-20-2	2,6-Dinitrotoluene	U	397	ug/kg	39.7	397
208-96-8	Acenaphthylene	U	39.7	ug/kg	11.9	39.7
51-28-5	2,4-Dinitrophenol	U	794	ug/kg	151	794
132-64-9	Dibenzofuran	U	397	ug/kg	79.4	397
84-66-2	Diethylphthalate	U	397	ug/kg	79.4	397
86-73-7	Fluorene	U	39.7	ug/kg	11.9	39.7
7005-72-3	4-Chlorophenylphenylether	U	397	ug/kg	79.4	397
534-52-1	2-Methyl-4,6-dinitrophenol	U	397	ug/kg	79.4	397
100-01-6	4-Nitroaniline	U	397	ug/kg	119	397
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	397	ug/kg	79.4	397
122-66-7	Azobenzene	U	397	ug/kg	79.4	397
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	397	ug/kg	79.4	397
118-74-1	Hexachlorobenzene	U	397	ug/kg	79.4	397
85-01-8	Phenanthrene	U	39.7	ug/kg	11.9	39.7
120-12-7	Anthracene	U	39.7	ug/kg	7.94	39.7
84-74-2	Di-n-butylphthalate	U	397	ug/kg	79.4	397
206-44-0	Fluoranthene	U	39.7	ug/kg	11.9	39.7
85-68-7	Butylbenzylphthalate	U	397	ug/kg	79.4	397
56-55-3	Benzo(a)anthracene	J	19.2	ug/kg	11.9	39.7
91-94-1	3,3'-Dichlorobenzidine	U	397	ug/kg	119	397
218-01-9	Chrysene	U	39.7	ug/kg	11.9	39.7
117-81-7	bis(2-Ethylhexyl)phthalate	U	397	ug/kg	79.4	397
117-84-0	Di-n-octylphthalate	U	397	ug/kg	79.4	397
205-99-2	Benzo(b)fluoranthene	J	22.3	ug/kg	11.9	39.7
207-08-9	Benzo(k)fluoranthene	U	39.7	ug/kg	11.9	39.7
50-32-8	Benzo(a)pyrene	U	39.7	ug/kg	11.9	39.7
193-39-5	Indeno(1,2,3-cd)pyrene	U	39.7	ug/kg	11.9	39.7
53-70-3	Dibenzo(a,h)anthracene	U	39.7	ug/kg	11.9	39.7
191-24-2	Benzo(ghi)perylene	U	39.7	ug/kg	11.9	39.7
120-82-1	1,2,4-Trichlorobenzene	U	397	ug/kg	79.4	397

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.05	300	ug/kg		J
	Unknown Aldol Condensate	2.82	817	ug/kg		J

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210	Date Collected: 01/07/2010 12:00	Matrix: R
Lab Sample ID: 244599007	Date Received: 01/13/2010 08:55	%Moisture: 16.3
	Client: LANL010	Project: LANL01004
Client ID: RE12-10-7242	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 941702	Inst: MSD7.I	Dilution: 1
Run Date: 01/20/2010 14:29	Analyst: JMB3	Inj. Vol: .5 uL
Prep Date: 01/14/2010 19:34	Aliquot: 30.12 g	Final Volume: 1 mL
Data File: s7a2012.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
39029-41-9	Naphthalene, 1,2,3,4,4a,5,6,8a-octahydro	5.53	221	ug/kg	90	NJ
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	5.63	1650	ug/kg	99	NJ
77-53-2	Cedrol	6.39	201	ug/kg	95	NJ
1438-62-6	1-Naphthalenepropanol, .alpha.-ethenylde	7.94	297	ug/kg	87	NJ
	Unknown	8.7	254	ug/kg		J
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	8.81	1520	ug/kg	96	NJ
	Unknown	8.84	422	ug/kg		J
	Unknown	9.3	160	ug/kg		J
	Unknown	11.51	194	ug/kg		J
112-95-8	Eicosane	12.61	310	ug/kg	91	NJ
	Unknown	12.72	239	ug/kg		J
83-46-5	.beta.-Sitosterol	13.23	597	ug/kg	97	NJ
58-22-0	Androst-4-en-3-one, 17-hydroxy-, (17.bet	14.3	291	ug/kg	91	NJ

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210  
Lab Sample ID: 244599001

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD7.1  
Analyst: JMB3  
Aliquot: 30.03 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 5.8  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE12-10-7243  
Batch ID: 941702  
Run Date: 01/19/2010 17:42  
Prep Date: 01/14/2010 19:34  
Data File: s7a1924.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	354	ug/kg	70.7	354
108-95-2	Phenol	U	354	ug/kg	70.7	354
95-57-8	2-Chlorophenol	U	354	ug/kg	70.7	354
106-46-7	1,4-Dichlorobenzene	U	354	ug/kg	70.7	354
621-64-7	N-Nitrosodipropylamine	U	354	ug/kg	70.7	354
59-50-7	4-Chloro-3-methylphenol	U	354	ug/kg	70.7	354
83-32-9	Acenaphthene	U	35.4	ug/kg	11.7	35.4
121-14-2	2,4-Dinitrotoluene	U	354	ug/kg	35.4	354
100-02-7	4-Nitrophenol	U	354	ug/kg	117	354
87-86-5	Pentachlorophenol	U	354	ug/kg	88.4	354
129-00-0	Pyrene	U	35.4	ug/kg	10.6	35.4
110-86-1	Pyridine	U	354	ug/kg	70.7	354
62-53-3	Aniline	U	354	ug/kg	106	354
111-44-4	bis(2-Chloroethyl) ether	U	354	ug/kg	70.7	354
541-73-1	1,3-Dichlorobenzene	U	354	ug/kg	70.7	354
100-51-6	Benzyl alcohol	U	354	ug/kg	106	354
95-50-1	1,2-Dichlorobenzene	U	354	ug/kg	70.7	354
108-60-1	bis(2-Chloroisopropyl)ether	U	354	ug/kg	70.7	354
95-48-7	o-Cresol	U	354	ug/kg	70.7	354
65794-96-9	m,p-Cresols	U	354	ug/kg	106	354
67-72-1	Hexachloroethane	U	354	ug/kg	70.7	354
98-95-3	Nitrobenzene	U	354	ug/kg	70.7	354
78-59-1	Isophorone	U	354	ug/kg	70.7	354
88-75-5	2-Nitrophenol	U	354	ug/kg	70.7	354
105-67-9	2,4-Dimethylphenol	U	354	ug/kg	124	354
111-91-1	bis(2-Chloroethoxy)methane	U	354	ug/kg	70.7	354
120-83-2	2,4-Dichlorophenol	U	354	ug/kg	70.7	354
65-85-0	Benzoic acid	U	707	ug/kg	177	707
91-20-3	Naphthalene	U	35.4	ug/kg	10.6	35.4
106-47-8	4-Chloroaniline	U	354	ug/kg	70.7	354
87-68-3	Hexachlorobutadiene	U	354	ug/kg	70.7	354
91-57-6	2-Methylnaphthalene	U	35.4	ug/kg	7.07	35.4
77-47-4	Hexachlorocyclopentadiene	U	354	ug/kg	70.7	354
88-06-2	2,4,6-Trichlorophenol	U	354	ug/kg	70.7	354
95-95-4	2,4,5-Trichlorophenol	U	354	ug/kg	70.7	354
91-58-7	2-Chloronaphthalene	U	35.4	ug/kg	11.7	35.4
88-74-4	2-Nitroaniline	U	354	ug/kg	70.7	354
99-09-2	<i>o</i> -Nitroaniline					
	3-Nitroaniline	U	354	ug/kg	70.7	354

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210  
Lab Sample ID: 244599001

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD7J  
Analyst: JMB3  
Aliquot: 30.03 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 5.8  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	354	ug/kg	70.7	354
606-20-2	2,6-Dinitrotoluene	U	354	ug/kg	35.4	354
208-96-8	Acenaphthylene	U	35.4	ug/kg	10.6	35.4
51-28-5	2,4-Dinitrophenol	U	707	ug/kg	134	707
132-64-9	Dibenzofuran	U	354	ug/kg	70.7	354
84-66-2	Diethylphthalate	U	354	ug/kg	70.7	354
86-73-7	Fluorene	U	35.4	ug/kg	10.6	35.4
7005-72-3	4-Chlorophenylphenylether	U	354	ug/kg	70.7	354
534-52-1	2-Methyl-4,6-dinitrophenol	U	354	ug/kg	70.7	354
100-01-6	4-Nitroaniline	U	354	ug/kg	106	354
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	354	ug/kg	70.7	354
122-66-7	Azobenzene	U	354	ug/kg	70.7	354
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	354	ug/kg	70.7	354
118-74-1	Hexachlorobenzene	U	354	ug/kg	70.7	354
85-01-8	Phenanthrene	U	35.4	ug/kg	10.6	35.4
120-12-7	Anthracene	U	35.4	ug/kg	7.07	35.4
84-74-2	Di-n-butylphthalate	U	354	ug/kg	70.7	354
206-44-0	Fluoranthene	U	35.4	ug/kg	10.6	35.4
85-68-7	Butylbenzylphthalate	U	354	ug/kg	70.7	354
56-55-3	Benzo(a)anthracene	U	35.4	ug/kg	10.6	35.4
91-94-1	3,3'-Dichlorobenzidine	U	354	ug/kg	106	354
218-01-9	Chrysene	U	35.4	ug/kg	10.6	35.4
117-81-7	bis(2-Ethylhexyl)phthalate	U	354	ug/kg	70.7	354
117-84-0	Di-n-octylphthalate	U	354	ug/kg	70.7	354
205-99-2	Benzo(b)fluoranthene	U	35.4	ug/kg	10.6	35.4
207-08-9	Benzo(k)fluoranthene	U	35.4	ug/kg	10.6	35.4
50-32-8	Benzo(a)pyrene	U	35.4	ug/kg	10.6	35.4
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.4	ug/kg	10.6	35.4
53-70-3	Dibenzo(a,h)anthracene	U	35.4	ug/kg	10.6	35.4
191-24-2	Benzo(ghi)perylene	U	35.4	ug/kg	10.6	35.4
120-82-1	1,2,4-Trichlorobenzene	U	354	ug/kg	70.7	354

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.83	708	ug/kg		JA
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	8.81	219	ug/kg	96	NJ

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

<b>SDG Number:</b> 10-1210	<b>Date Collected:</b> 01/07/2010 12:00	<b>Matrix:</b> R
<b>Lab Sample ID:</b> 244599009	<b>Date Received:</b> 01/13/2010 08:55	<b>%Moisture:</b> 15.9
	<b>Client:</b> LANL010	<b>Project:</b> LANL01004
<b>Client ID:</b> RE12-10-7252	<b>Method:</b> SW846 8270C	<b>SOP Ref:</b> GL-OA-E-009
<b>Batch ID:</b> 941702	<b>Inst:</b> MSD7.I	<b>Dilution:</b> 1
<b>Run Date:</b> 01/20/2010 15:13	<b>Analyst:</b> JMB3	<b>Inj. Vol:</b> .5 uL
<b>Prep Date:</b> 01/14/2010 19:34	<b>Aliquot:</b> 30.13 g	<b>Final Volume:</b> 1 mL
<b>Data File:</b> s7a2014.d	<b>Column:</b> J&W DB-5MS	<b>Level:</b> LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	395	ug/kg	78.9	395
108-95-2	Phenol	U	395	ug/kg	78.9	395
95-57-8	2-Chlorophenol	U	395	ug/kg	78.9	395
106-46-7	1,4-Dichlorobenzene	U	395	ug/kg	78.9	395
621-64-7	N-Nitrosodipropylamine	U	395	ug/kg	78.9	395
59-50-7	4-Chloro-3-methylphenol	U	395	ug/kg	78.9	395
83-32-9	Acenaphthene	U	39.5	ug/kg	13.0	39.5
121-14-2	2,4-Dinitrotoluene	U	395	ug/kg	39.5	395
100-02-7	4-Nitrophenol	U	395	ug/kg	130	395
87-86-5	Pentachlorophenol	U	395	ug/kg	98.7	395
129-00-0	Pyrene	U	39.5	ug/kg	11.8	39.5
110-86-1	Pyridine	U	395	ug/kg	78.9	395
62-53-3	Aniline	U	395	ug/kg	118	395
111-44-4	bis(2-Chloroethyl) ether	U	395	ug/kg	78.9	395
541-73-1	1,3-Dichlorobenzene	U	395	ug/kg	78.9	395
100-51-6	Benzyl alcohol	U	395	ug/kg	118	395
95-50-1	1,2-Dichlorobenzene	U	395	ug/kg	78.9	395
108-60-1	bis(2-Chloroisopropyl)ether	U	395	ug/kg	78.9	395
95-48-7	o-Cresol	U	395	ug/kg	78.9	395
65794-96-9	m,p-Cresols	U	395	ug/kg	118	395
67-72-1	Hexachloroethane	U	395	ug/kg	78.9	395
98-95-3	Nitrobenzene	U	395	ug/kg	78.9	395
78-59-1	Isophorone	U	395	ug/kg	78.9	395
88-75-5	2-Nitrophenol	U	395	ug/kg	78.9	395
105-67-9	2,4-Dimethylphenol	U	395	ug/kg	138	395
111-91-1	bis(2-Chloroethoxy)methane	U	395	ug/kg	78.9	395
120-83-2	2,4-Dichlorophenol	U	395	ug/kg	78.9	395
65-85-0	Benzoic acid	U	789	ug/kg	197	789
91-20-3	Naphthalene	U	39.5	ug/kg	11.8	39.5
106-47-8	4-Chloroaniline	U	395	ug/kg	78.9	395
87-68-3	Hexachlorobutadiene	U	395	ug/kg	78.9	395
91-57-6	2-Methylnaphthalene	U	39.5	ug/kg	7.89	39.5
77-47-4	Hexachlorocyclopentadiene	U	395	ug/kg	78.9	395
88-06-2	2,4,6-Trichlorophenol	U	395	ug/kg	78.9	395
95-95-4	2,4,5-Trichlorophenol	U	395	ug/kg	78.9	395
91-58-7	2-Chloronaphthalene	U	39.5	ug/kg	13.0	39.5
88-74-4	2-Nitroaniline	U	395	ug/kg	78.9	395
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	395	ug/kg	78.9	395



**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

<b>SDG Number:</b> 10-1210	<b>Date Collected:</b> 01/07/2010 12:00	<b>Matrix:</b> R
<b>Lab Sample ID:</b> 244599009	<b>Date Received:</b> 01/13/2010 08:55	<b>%Moisture:</b> 15.9
<b>Client ID:</b> RE12-10-7252	<b>Client:</b> LANL010	<b>Project:</b> LANL01004
<b>Batch ID:</b> 941702	<b>Method:</b> SW846 8270C	<b>SOP Ref:</b> GL-OA-E-009
<b>Run Date:</b> 01/20/2010 15:13	<b>Inst:</b> MSD7.I	<b>Dilution:</b> 1
<b>Prep Date:</b> 01/14/2010 19:34	<b>Analyst:</b> JMB3	<b>Inj. Vol:</b> .5 uL
<b>Data File:</b> s7a2014.d	<b>Aliquot:</b> 30.13 g	<b>Final Volume:</b> 1 mL
	<b>Column:</b> J&W DB-5MS	<b>Level:</b> LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m-Nitroaniline</i>					
131-11-3	Dimethylphthalate	U	395	ug/kg	78.9	395
606-20-2	2,6-Dinitrotoluene	U	395	ug/kg	39.5	395
208-96-8	Acenaphthylene	U	39.5	ug/kg	11.8	39.5
51-28-5	2,4-Dinitrophenol	U	789	ug/kg	150	789
132-64-9	Dibenzofuran	U	395	ug/kg	78.9	395
84-66-2	Diethylphthalate	U	395	ug/kg	78.9	395
86-73-7	Fluorene	U	39.5	ug/kg	11.8	39.5
7005-72-3	4-Chlorophenylphenylether	U	395	ug/kg	78.9	395
534-52-1	2-Methyl-4,6-dinitrophenol	U	395	ug/kg	78.9	395
100-01-6	4-Nitroaniline	U	395	ug/kg	118	395
	<i>p-Nitroaniline</i>					
122-39-4	Diphenylamine	U	395	ug/kg	78.9	395
122-66-7	Azobenzene	U	395	ug/kg	78.9	395
	<i>1,2-Diphenylhydrazine</i>					
101-55-3	4-Bromophenylphenylether	U	395	ug/kg	78.9	395
118-74-1	Hexachlorobenzene	U	395	ug/kg	78.9	395
85-01-8	Phenanthrene	U	39.5	ug/kg	11.8	39.5
120-12-7	Anthracene	U	39.5	ug/kg	7.89	39.5
84-74-2	Di-n-butylphthalate	U	395	ug/kg	78.9	395
206-44-0	Fluoranthene	U	39.5	ug/kg	11.8	39.5
85-68-7	Butylbenzylphthalate	U	395	ug/kg	78.9	395
56-55-3	Benzo(a)anthracene	U	39.5	ug/kg	11.8	39.5
91-94-1	3,3'-Dichlorobenzidine	U	395	ug/kg	118	395
218-01-9	Chrysene	U	39.5	ug/kg	11.8	39.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	395	ug/kg	78.9	395
117-84-0	Di-n-octylphthalate	U	395	ug/kg	78.9	395
205-99-2	Benzo(b)fluoranthene	U	39.5	ug/kg	11.8	39.5
207-08-9	Benzo(k)fluoranthene	U	39.5	ug/kg	11.8	39.5
50-32-8	Benzo(a)pyrene	U	39.5	ug/kg	11.8	39.5
193-39-5	Indeno(1,2,3-cd)pyrene	U	39.5	ug/kg	11.8	39.5
53-70-3	Dibenzo(a,h)anthracene	U	39.5	ug/kg	11.8	39.5
191-24-2	Benzo(ghi)perylene	U	39.5	ug/kg	11.8	39.5
120-82-1	1,2,4-Trichlorobenzene	U	395	ug/kg	78.9	395

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.03	332	ug/kg		J
	Unknown	2.07	251	ug/kg		J

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

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<b>SDG Number:</b> 10-1210	<b>Date Collected:</b> 01/07/2010 12:00	<b>Matrix:</b> R
<b>Lab Sample ID:</b> 244599009	<b>Date Received:</b> 01/13/2010 08:55	<b>%Moisture:</b> 15.9
	<b>Client:</b> LANL010	<b>Project:</b> LANL01004
<b>Client ID:</b> RE12-10-7252	<b>Method:</b> SW846 8270C	<b>SOP Ref:</b> GL-OA-E-009
<b>Batch ID:</b> 941702	<b>Inst:</b> MSD7J	<b>Dilution:</b> 1
<b>Run Date:</b> 01/20/2010 15:13	<b>Analyst:</b> JMB3	<b>Inj. Vol:</b> .5 uL
<b>Prep Date:</b> 01/14/2010 19:34	<b>Aliquot:</b> 30.13 g	<b>Final Volume:</b> 1 mL
<b>Data File:</b> s7a2014.d	<b>Column:</b> J&W DB-5MS	<b>Level:</b> LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.82	691	ug/kg		J
	Unknown	8.6	237	ug/kg		J
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	8.81	444	ug/kg	96	NJ
	Unknown	9.05	166	ug/kg		J
112-95-8	Eicosane	9.83	208	ug/kg	98	NJ
	Unknown	10.52	216	ug/kg		J
	Unknown	10.84	781	ug/kg		J
	Unknown	11.51	1090	ug/kg		J
	Unknown	12.26	362	ug/kg		J
	Unknown	12.31	254	ug/kg		J
	Unknown	12.44	182	ug/kg		J
	Unknown	13.23	516	ug/kg		J
	Unknown	13.7	201	ug/kg		J
	Unknown	14.29	204	ug/kg		J

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210	Date Collected: 01/07/2010 12:00	Matrix: R
Lab Sample ID: 244599010	Date Received: 01/13/2010 08:55	%Moisture: 3.3
	Client: LANL010	Project: LANL01004
Client ID: RE12-10-7253	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 941702	Inst: MSD7.I	Dilution: 1
Run Date: 01/20/2010 15:35	Analyst: JMB3	Inj. Vol: .5 uL
Prep Date: 01/14/2010 19:34	Aliquot: 30.03 g	Final Volume: 1 mL
Data File: s7a2015.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	344	ug/kg	68.8	344
108-95-2	Phenol	U	344	ug/kg	68.8	344
95-57-8	2-Chlorophenol	U	344	ug/kg	68.8	344
106-46-7	1,4-Dichlorobenzene	U	344	ug/kg	68.8	344
621-64-7	N-Nitrosodipropylamine	U	344	ug/kg	68.8	344
59-50-7	4-Chloro-3-methylphenol	U	344	ug/kg	68.8	344
83-32-9	Acenaphthene	U	34.4	ug/kg	11.4	34.4
121-14-2	2,4-Dinitrotoluene	U	344	ug/kg	34.4	344
100-02-7	4-Nitrophenol	U	344	ug/kg	114	344
87-86-5	Pentachlorophenol	U	344	ug/kg	86.1	344
129-00-0	Pyrene	U	34.4	ug/kg	10.3	34.4
110-86-1	Pyridine	U	344	ug/kg	68.8	344
62-53-3	Aniline	U	344	ug/kg	103	344
111-44-4	bis(2-Chloroethyl) ether	U	344	ug/kg	68.8	344
541-73-1	1,3-Dichlorobenzene	U	344	ug/kg	68.8	344
100-51-6	Benzyl alcohol	U	344	ug/kg	103	344
95-50-1	1,2-Dichlorobenzene	U	344	ug/kg	68.8	344
108-60-1	bis(2-Chloroisopropyl)ether	U	344	ug/kg	68.8	344
95-48-7	o-Cresol	U	344	ug/kg	68.8	344
65794-96-9	m,p-Cresols	U	344	ug/kg	103	344
67-72-1	Hexachloroethane	U	344	ug/kg	68.8	344
98-95-3	Nitrobenzene	U	344	ug/kg	68.8	344
78-59-1	Isophorone	U	344	ug/kg	68.8	344
88-75-5	2-Nitrophenol	U	344	ug/kg	68.8	344
105-67-9	2,4-Dimethylphenol	U	344	ug/kg	120	344
111-91-1	bis(2-Chloroethoxy)methane	U	344	ug/kg	68.8	344
120-83-2	2,4-Dichlorophenol	U	344	ug/kg	68.8	344
65-85-0	Benzoic acid	U	688	ug/kg	172	688
91-20-3	Naphthalene	U	34.4	ug/kg	10.3	34.4
106-47-8	4-Chloroaniline	U	344	ug/kg	68.8	344
87-68-3	Hexachlorobutadiene	U	344	ug/kg	68.8	344
91-57-6	2-Methylnaphthalene	U	34.4	ug/kg	6.88	34.4
77-47-4	Hexachlorocyclopentadiene	U	344	ug/kg	68.8	344
88-06-2	2,4,6-Trichlorophenol	U	344	ug/kg	68.8	344
95-95-4	2,4,5-Trichlorophenol	U	344	ug/kg	68.8	344
91-58-7	2-Chloronaphthalene	U	34.4	ug/kg	11.4	34.4
88-74-4	2-Nitroaniline	U	344	ug/kg	68.8	344
99-09-2	3-Nitroaniline	U	344	ug/kg	68.8	344

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210  
Lab Sample ID: 244599010

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD7.I  
Analyst: JMB3  
Aliquot: 30.03 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 3.3  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	344	ug/kg	68.8	344
606-20-2	2,6-Dinitrotoluene	U	344	ug/kg	34.4	344
208-96-8	Acenaphthylene	U	34.4	ug/kg	10.3	34.4
51-28-5	2,4-Dinitrophenol	U	688	ug/kg	131	688
132-64-9	Dibenzofuran	U	344	ug/kg	68.8	344
84-66-2	Diethylphthalate	U	344	ug/kg	68.8	344
86-73-7	Fluorene	U	34.4	ug/kg	10.3	34.4
7005-72-3	4-Chlorophenylphenylether	U	344	ug/kg	68.8	344
534-52-1	2-Methyl-4,6-dinitrophenol	U	344	ug/kg	68.8	344
100-01-6	4-Nitroaniline	U	344	ug/kg	103	344
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	344	ug/kg	68.8	344
122-66-7	Azobenzene	U	344	ug/kg	68.8	344
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	344	ug/kg	68.8	344
118-74-1	Hexachlorobenzene	U	344	ug/kg	68.8	344
85-01-8	Phenanthrene	U	34.4	ug/kg	10.3	34.4
120-12-7	Anthracene	U	34.4	ug/kg	6.88	34.4
84-74-2	Di-n-butylphthalate	U	344	ug/kg	68.8	344
206-44-0	Fluoranthene	U	34.4	ug/kg	10.3	34.4
85-68-7	Butylbenzylphthalate	U	344	ug/kg	68.8	344
56-55-3	Benzo(a)anthracene	U	34.4	ug/kg	10.3	34.4
91-94-1	3,3'-Dichlorobenzidine	U	344	ug/kg	103	344
218-01-9	Chrysene	U	34.4	ug/kg	10.3	34.4
117-81-7	bis(2-Ethylhexyl)phthalate	U	344	ug/kg	68.8	344
117-84-0	Di-n-octylphthalate	U	344	ug/kg	68.8	344
205-99-2	Benzo(b)fluoranthene	U	34.4	ug/kg	10.3	34.4
207-08-9	Benzo(k)fluoranthene	U	34.4	ug/kg	10.3	34.4
50-32-8	Benzo(a)pyrene	U	34.4	ug/kg	10.3	34.4
193-39-5	Indeno(1,2,3-cd)pyrene	U	34.4	ug/kg	10.3	34.4
53-70-3	Dibenzo(a,h)anthracene	U	34.4	ug/kg	10.3	34.4
191-24-2	Benzo(ghi)perylene	U	34.4	ug/kg	10.3	34.4
120-82-1	1,2,4-Trichlorobenzene	U	344	ug/kg	68.8	344

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.83	566	ug/kg		J
77-53-2	Cedrol	6.39	202	ug/kg	94	NJ

Semi-Volatile  
Certificate of Analysis  
Sample Summary

SDG Number: 10-1210	Date Collected: 01/07/2010 12:00	Matrix: R
Lab Sample ID: 244599010	Date Received: 01/13/2010 08:55	%Moisture: 3.3
	Client: LANL010	Project: LANL01004
Client ID: RE12-10-7253	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 941702	Inst: MSD7.1	Dilution: 1
Run Date: 01/20/2010 15:35	Analyst: JMB3	Inj. Vol: .5 uL
Prep Date: 01/14/2010 19:34	Aliquot: 30.03 g	Final Volume: 1 mL
Data File: s7a2015.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	8.81	507	ug/kg	96	NJ
	Unknown	9.83	161	ug/kg		J
	Unknown	10.84	293	ug/kg		J
	Unknown	11.51	418	ug/kg		J

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210  
Lab Sample ID: 244599011

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD7.I  
Analyst: JMB3  
Aliquot: 30.01 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 15.3  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE12-10-7254  
Batch ID: 941702  
Run Date: 01/20/2010 15:57  
Prep Date: 01/14/2010 19:34  
Data File: s7a2016.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	394	ug/kg	78.7	394
108-95-2	Phenol	U	394	ug/kg	78.7	394
95-57-8	2-Chlorophenol	U	394	ug/kg	78.7	394
106-46-7	1,4-Dichlorobenzene	U	394	ug/kg	78.7	394
621-64-7	N-Nitrosodipropylamine	U	394	ug/kg	78.7	394
59-50-7	4-Chloro-3-methylphenol	U	394	ug/kg	78.7	394
83-32-9	Acenaphthene	U	39.4	ug/kg	13.0	39.4
121-14-2	2,4-Dinitrotoluene	U	394	ug/kg	39.4	394
100-02-7	4-Nitrophenol	U	394	ug/kg	130	394
87-86-5	Pentachlorophenol	U	394	ug/kg	98.4	394
129-00-0	Pyrene	U	39.4	ug/kg	11.8	39.4
110-86-1	Pyridine	U	394	ug/kg	78.7	394
62-53-3	Aniline	U	394	ug/kg	118	394
111-44-4	bis(2-Chloroethyl) ether	U	394	ug/kg	78.7	394
541-73-1	1,3-Dichlorobenzene	U	394	ug/kg	78.7	394
100-51-6	Benzyl alcohol	U	394	ug/kg	118	394
95-50-1	1,2-Dichlorobenzene	U	394	ug/kg	78.7	394
108-60-1	bis(2-Chloroisopropyl)ether	U	394	ug/kg	78.7	394
95-48-7	o-Cresol	U	394	ug/kg	78.7	394
65794-96-9	m,p-Cresols	U	394	ug/kg	118	394
67-72-1	Hexachloroethane	U	394	ug/kg	78.7	394
98-95-3	Nitrobenzene	U	394	ug/kg	78.7	394
78-59-1	Isophorone	U	394	ug/kg	78.7	394
88-75-5	2-Nitrophenol	U	394	ug/kg	78.7	394
105-67-9	2,4-Dimethylphenol	U	394	ug/kg	138	394
111-91-1	bis(2-Chloroethoxy)methane	U	394	ug/kg	78.7	394
120-83-2	2,4-Dichlorophenol	U	394	ug/kg	78.7	394
65-85-0	Benzoic acid	U	787	ug/kg	197	787
91-20-3	Naphthalene	U	39.4	ug/kg	11.8	39.4
106-47-8	4-Chloroaniline	U	394	ug/kg	78.7	394
87-68-3	Hexachlorobutadiene	U	394	ug/kg	78.7	394
91-57-6	2-Methylnaphthalene	U	39.4	ug/kg	7.87	39.4
77-47-4	Hexachlorocyclopentadiene	U	394	ug/kg	78.7	394
88-06-2	2,4,6-Trichlorophenol	U	394	ug/kg	78.7	394
95-95-4	2,4,5-Trichlorophenol	U	394	ug/kg	78.7	394
91-58-7	2-Chloronaphthalene	U	39.4	ug/kg	13.0	39.4
88-74-4	2-Nitroaniline	U	394	ug/kg	78.7	394
99-09-2	<i>o</i> -Nitroaniline					
	3-Nitroaniline	U	394	ug/kg	78.7	394

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210  
Lab Sample ID: 244599011

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD7.I  
Analyst: JMB3  
Aliquot: 30.01 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 15.3  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE12-10-7254  
Batch ID: 941702  
Run Date: 01/20/2010 15:57  
Prep Date: 01/14/2010 19:34  
Data File: s7a2016.d

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	394	ug/kg	78.7	394
606-20-2	2,6-Dinitrotoluene	U	394	ug/kg	39.4	394
208-96-8	Acenaphthylene	U	39.4	ug/kg	11.8	39.4
51-28-5	2,4-Dinitrophenol	U	787	ug/kg	150	787
132-64-9	Dibenzofuran	U	394	ug/kg	78.7	394
84-66-2	Diethylphthalate	U	394	ug/kg	78.7	394
86-73-7	Fluorene	U	39.4	ug/kg	11.8	39.4
7005-72-3	4-Chlorophenylphenylether	U	394	ug/kg	78.7	394
534-52-1	2-Methyl-4,6-dinitrophenol	U	394	ug/kg	78.7	394
100-01-6	4-Nitroaniline	U	394	ug/kg	118	394
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	394	ug/kg	78.7	394
122-66-7	Azobenzene	U	394	ug/kg	78.7	394
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	394	ug/kg	78.7	394
118-74-1	Hexachlorobenzene	U	394	ug/kg	78.7	394
85-01-8	Phenanthrene	U	39.4	ug/kg	11.8	39.4
120-12-7	Anthracene	U	39.4	ug/kg	7.87	39.4
84-74-2	Di-n-butylphthalate	U	394	ug/kg	78.7	394
206-44-0	Fluoranthene	U	39.4	ug/kg	11.8	39.4
85-68-7	Butylbenzylphthalate	U	394	ug/kg	78.7	394
56-55-3	Benzo(a)anthracene	U	39.4	ug/kg	11.8	39.4
91-94-1	3,3'-Dichlorobenzidine	U	394	ug/kg	118	394
218-01-9	Chrysene	U	39.4	ug/kg	11.8	39.4
117-81-7	bis(2-Ethylhexyl)phthalate	U	394	ug/kg	78.7	394
117-84-0	Di-n-octylphthalate	U	394	ug/kg	78.7	394
205-99-2	Benzo(b)fluoranthene	U	39.4	ug/kg	11.8	39.4
207-08-9	Benzo(k)fluoranthene	U	39.4	ug/kg	11.8	39.4
50-32-8	Benzo(a)pyrene	U	39.4	ug/kg	11.8	39.4
193-39-5	Indeno(1,2,3-cd)pyrene	U	39.4	ug/kg	11.8	39.4
53-70-3	Dibenzo(a,h)anthracene	U	39.4	ug/kg	11.8	39.4
191-24-2	Benzo(ghi)perylene	U	39.4	ug/kg	11.8	39.4
120-82-1	1,2,4-Trichlorobenzene	U	394	ug/kg	78.7	394

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.82	857	ug/kg		JA
77-53-2	Cedrol	6.39	200	ug/kg	94	NJ

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210  
Lab Sample ID: 244599011

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD7.1  
Analyst: JMB3  
Aliquot: 30.01 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 15.3  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
<b>Tentatively Identified Compound Summary</b>						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	8.81	469	ug/kg	99	NJ
	Unknown	8.84	172	ug/kg		J
629-96-9	1-Eicosanol	9.89	295	ug/kg	81	NJ
	Unknown	10.25	161	ug/kg		J
112-95-8	Eicosane	10.53	202	ug/kg	93	NJ
	Unknown	11.51	314	ug/kg		J
	Unknown	12.46	182	ug/kg		J
	Unknown	12.6	362	ug/kg		J
83-46-5	.beta.-Sitosterol	13.24	1200	ug/kg	98	NJ
	Unknown	13.38	198	ug/kg		J
	Unknown	14.11	737	ug/kg		J
	Unknown	14.3	395	ug/kg		J



**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210  
Lab Sample ID: 244599012

Client ID: RE12-10-7255  
Batch ID: 941702  
Run Date: 01/20/2010 16:19  
Prep Date: 01/14/2010 19:34  
Data File: s7a2017.d

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD7.I  
Analyst: JMB3  
Aliquot: 30.18 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 6.6  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	355	ug/kg	71.0	355
108-95-2	Phenol	U	355	ug/kg	71.0	355
95-57-8	2-Chlorophenol	U	355	ug/kg	71.0	355
106-46-7	1,4-Dichlorobenzene	U	355	ug/kg	71.0	355
621-64-7	N-Nitrosodipropylamine	U	355	ug/kg	71.0	355
59-50-7	4-Chloro-3-methylphenol	U	355	ug/kg	71.0	355
83-32-9	Acenaphthene	U	35.5	ug/kg	11.7	35.5
121-14-2	2,4-Dinitrotoluene	U	355	ug/kg	35.5	355
100-02-7	4-Nitrophenol	U	355	ug/kg	117	355
87-86-5	Pentachlorophenol	U	355	ug/kg	88.7	355
129-00-0	Pyrene	U	35.5	ug/kg	10.6	35.5
110-86-1	Pyridine	U	355	ug/kg	71.0	355
62-53-3	Aniline	U	355	ug/kg	106	355
111-44-4	bis(2-Chloroethyl) ether	U	355	ug/kg	71.0	355
541-73-1	1,3-Dichlorobenzene	U	355	ug/kg	71.0	355
100-51-6	Benzyl alcohol	U	355	ug/kg	106	355
95-50-1	1,2-Dichlorobenzene	U	355	ug/kg	71.0	355
108-60-1	bis(2-Chloroisopropyl)ether	U	355	ug/kg	71.0	355
95-48-7	o-Cresol	U	355	ug/kg	71.0	355
65794-96-9	m,p-Cresols	U	355	ug/kg	106	355
67-72-1	Hexachloroethane	U	355	ug/kg	71.0	355
98-95-3	Nitrobenzene	U	355	ug/kg	71.0	355
78-59-1	Isophorone	U	355	ug/kg	71.0	355
88-75-5	2-Nitrophenol	U	355	ug/kg	71.0	355
105-67-9	2,4-Dimethylphenol	U	355	ug/kg	124	355
111-91-1	bis(2-Chloroethoxy)methane	U	355	ug/kg	71.0	355
120-83-2	2,4-Dichlorophenol	U	355	ug/kg	71.0	355
65-85-0	Benzoic acid	U	710	ug/kg	177	710
91-20-3	Naphthalene	U	35.5	ug/kg	10.6	35.5
106-47-8	4-Chloroaniline	U	355	ug/kg	71.0	355
87-68-3	Hexachlorobutadiene	U	355	ug/kg	71.0	355
91-57-6	2-Methylnaphthalene	U	35.5	ug/kg	7.10	35.5
77-47-4	Hexachlorocyclopentadiene	U	355	ug/kg	71.0	355
88-06-2	2,4,6-Trichlorophenol	U	355	ug/kg	71.0	355
95-95-4	2,4,5-Trichlorophenol	U	355	ug/kg	71.0	355
91-58-7	2-Chloronaphthalene	U	35.5	ug/kg	11.7	35.5
88-74-4	2-Nitroaniline	U	355	ug/kg	71.0	355
99-09-2	<i>o</i> -Nitroaniline	U	355	ug/kg	71.0	355
	3-Nitroaniline					

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210  
Lab Sample ID: 244599012

Client ID: RE12-10-7255  
Batch ID: 941702  
Run Date: 01/20/2010 16:19  
Prep Date: 01/14/2010 19:34  
Data File: s7a2017.d

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD7.I  
Analyst: JMB3  
Aliquot: 30.18 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 6.6  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	355	ug/kg	71.0	355
606-20-2	2,6-Dinitrotoluene	U	355	ug/kg	35.5	355
208-96-8	Acenaphthylene	U	35.5	ug/kg	10.6	35.5
51-28-5	2,4-Dinitrophenol	U	710	ug/kg	135	710
132-64-9	Dibenzofuran	U	355	ug/kg	71.0	355
84-66-2	Diethylphthalate	U	355	ug/kg	71.0	355
86-73-7	Fluorene	U	35.5	ug/kg	10.6	35.5
7005-72-3	4-Chlorophenylphenylether	U	355	ug/kg	71.0	355
534-52-1	2-Methyl-4,6-dinitrophenol	U	355	ug/kg	71.0	355
100-01-6	4-Nitroaniline	U	355	ug/kg	106	355
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	355	ug/kg	71.0	355
122-66-7	Azobenzene	U	355	ug/kg	71.0	355
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	355	ug/kg	71.0	355
118-74-1	Hexachlorobenzene	U	355	ug/kg	71.0	355
85-01-8	Phenanthrene	U	35.5	ug/kg	10.6	35.5
120-12-7	Anthracene	U	35.5	ug/kg	7.10	35.5
84-74-2	Di-n-butylphthalate	U	355	ug/kg	71.0	355
206-44-0	Fluoranthene	U	35.5	ug/kg	10.6	35.5
85-68-7	Butylbenzylphthalate	U	355	ug/kg	71.0	355
56-55-3	Benzo(a)anthracene	U	35.5	ug/kg	10.6	35.5
91-94-1	3,3'-Dichlorobenzidine	U	355	ug/kg	106	355
218-01-9	Chrysene	U	35.5	ug/kg	10.6	35.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	355	ug/kg	71.0	355
117-84-0	Di-n-octylphthalate	U	355	ug/kg	71.0	355
205-99-2	Benzo(b)fluoranthene	U	35.5	ug/kg	10.6	35.5
207-08-9	Benzo(k)fluoranthene	U	35.5	ug/kg	10.6	35.5
50-32-8	Benzo(a)pyrene	U	35.5	ug/kg	10.6	35.5
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.5	ug/kg	10.6	35.5
53-70-3	Dibenzo(a,h)anthracene	U	35.5	ug/kg	10.6	35.5
191-24-2	Benzo(ghi)perylene	U	35.5	ug/kg	10.6	35.5
120-82-1	1,2,4-Trichlorobenzene	U	355	ug/kg	71.0	355

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.82	676	ug/kg		JA
77-53-2	Cedrol	6.39	333	ug/kg	93	NJ

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210  
Lab Sample ID: 244599012

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD7.I  
Analyst: JMB3  
Aliquot: 30.18 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 6.6  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE12-10-7255  
Batch ID: 941702  
Run Date: 01/20/2010 16:19  
Prep Date: 01/14/2010 19:34  
Data File: s7a2017.d

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	8.81	436	ug/kg	96	NJ
	Unknown	9.83	213	ug/kg		J
	Unknown	10.53	395	ug/kg		J
	Unknown	11.51	580	ug/kg		J
	Unknown	12.73	326	ug/kg		J
83-46-5	.beta.-Sitosterol	13.25	750	ug/kg	97	NJ
	Unknown	14.11	494	ug/kg		J
	Unknown	14.3	251	ug/kg		J

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210	Date Collected: 01/07/2010 12:00	Matrix: R
Lab Sample ID: 244599013	Date Received: 01/13/2010 08:55	%Moisture: 8.4
Client ID: RE12-10-7276	Client: LANL010	Project: LANL01004
Batch ID: 941702	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/20/2010 16:42	Inst: MSD7.I	Dilution: 1
Prep Date: 01/14/2010 19:34	Analyst: JMB3	Inj. Vol: .5 uL
Data File: s7a2018.d	Aliquot: 30.14 g	Final Volume: 1 mL
	Column: J&W DB-SMS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	362	ug/kg	72.4	362
108-95-2	Phenol	U	362	ug/kg	72.4	362
95-57-8	2-Chlorophenol	U	362	ug/kg	72.4	362
106-46-7	1,4-Dichlorobenzene	U	362	ug/kg	72.4	362
621-64-7	N-Nitrosodipropylamine	U	362	ug/kg	72.4	362
59-50-7	4-Chloro-3-methylphenol	U	362	ug/kg	72.4	362
83-32-9	Acenaphthene	U	36.2	ug/kg	11.9	36.2
121-14-2	2,4-Dinitrotoluene	U	362	ug/kg	36.2	362
100-02-7	4-Nitrophenol	U	362	ug/kg	119	362
87-86-5	Pentachlorophenol	U	362	ug/kg	90.5	362
129-00-0	Pyrene	U	36.2	ug/kg	10.9	36.2
110-86-1	Pyridine	U	362	ug/kg	72.4	362
62-53-3	Aniline	U	362	ug/kg	109	362
111-44-4	bis(2-Chloroethyl) ether	U	362	ug/kg	72.4	362
541-73-1	1,3-Dichlorobenzene	U	362	ug/kg	72.4	362
100-51-6	Benzyl alcohol	U	362	ug/kg	109	362
95-50-1	1,2-Dichlorobenzene	U	362	ug/kg	72.4	362
108-60-1	bis(2-Chloroisopropyl)ether	U	362	ug/kg	72.4	362
95-48-7	o-Cresol	U	362	ug/kg	72.4	362
65794-96-9	m,p-Cresols	U	362	ug/kg	109	362
67-72-1	Hexachloroethane	U	362	ug/kg	72.4	362
98-95-3	Nitrobenzene	U	362	ug/kg	72.4	362
78-59-1	Isophorone	U	362	ug/kg	72.4	362
88-75-5	2-Nitrophenol	U	362	ug/kg	72.4	362
105-67-9	2,4-Dimethylphenol	U	362	ug/kg	127	362
111-91-1	bis(2-Chloroethoxy)methane	U	362	ug/kg	72.4	362
120-83-2	2,4-Dichlorophenol	U	362	ug/kg	72.4	362
65-85-0	Benzoic acid	U	724	ug/kg	181	724
91-20-3	Naphthalene	U	36.2	ug/kg	10.9	36.2
106-47-8	4-Chloroaniline	U	362	ug/kg	72.4	362
87-68-3	Hexachlorobutadiene	U	362	ug/kg	72.4	362
91-57-6	2-Methylnaphthalene	U	36.2	ug/kg	7.24	36.2
77-47-4	Hexachlorocyclopentadiene	U	362	ug/kg	72.4	362
88-06-2	2,4,6-Trichlorophenol	U	362	ug/kg	72.4	362
95-95-4	2,4,5-Trichlorophenol	U	362	ug/kg	72.4	362
91-58-7	2-Chloronaphthalene	U	36.2	ug/kg	11.9	36.2
88-74-4	2-Nitroaniline	U	362	ug/kg	72.4	362
99-09-2	<i>o</i> -Nitroaniline	U	362	ug/kg	72.4	362
	3-Nitroaniline					

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210  
Lab Sample ID: 244599013

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD7.I  
Analyst: JMB3  
Aliquot: 30.14 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 8.4  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE12-10-7276  
Batch ID: 941702  
Run Date: 01/20/2010 16:42  
Prep Date: 01/14/2010 19:34  
Data File: s7a2018.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	362	ug/kg	72.4	362
606-20-2	2,6-Dinitrotoluene	U	362	ug/kg	36.2	362
208-96-8	Acenaphthylene	U	36.2	ug/kg	10.9	36.2
51-28-5	2,4-Dinitrophenol	U	724	ug/kg	138	724
132-64-9	Dibenzofuran	U	362	ug/kg	72.4	362
84-66-2	Diethylphthalate	U	362	ug/kg	72.4	362
86-73-7	Fluorene	U	36.2	ug/kg	10.9	36.2
7005-72-3	4-Chlorophenylphenylether	U	362	ug/kg	72.4	362
534-52-1	2-Methyl-4,6-dinitrophenol	U	362	ug/kg	72.4	362
100-01-6	4-Nitroaniline	U	362	ug/kg	109	362
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	362	ug/kg	72.4	362
122-66-7	Azobenzene	U	362	ug/kg	72.4	362
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	362	ug/kg	72.4	362
118-74-1	Hexachlorobenzene	U	362	ug/kg	72.4	362
85-01-8	Phenanthrene	U	36.2	ug/kg	10.9	36.2
120-12-7	Anthracene	U	36.2	ug/kg	7.24	36.2
84-74-2	Di-n-butylphthalate	U	362	ug/kg	72.4	362
206-44-0	Fluoranthene	U	36.2	ug/kg	10.9	36.2
85-68-7	Butylbenzylphthalate	U	362	ug/kg	72.4	362
56-55-3	Benzo(a)anthracene	U	36.2	ug/kg	10.9	36.2
91-94-1	3,3'-Dichlorobenzidine	U	362	ug/kg	109	362
218-01-9	Chrysene	U	36.2	ug/kg	10.9	36.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	362	ug/kg	72.4	362
117-84-0	Di-n-octylphthalate	U	362	ug/kg	72.4	362
205-99-2	Benzo(b)fluoranthene	U	36.2	ug/kg	10.9	36.2
207-08-9	Benzo(k)fluoranthene	U	36.2	ug/kg	10.9	36.2
50-32-8	Benzo(a)pyrene	U	36.2	ug/kg	10.9	36.2
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.2	ug/kg	10.9	36.2
53-70-3	Dibenzo(a,h)anthracene	U	36.2	ug/kg	10.9	36.2
191-24-2	Benzo(ghi)perylene	U	36.2	ug/kg	10.9	36.2
120-82-1	1,2,4-Trichlorobenzene	U	362	ug/kg	72.4	362

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.82	676	ug/kg		JA
56246-42-5	2-Butenoic acid, 2-methyl-, 1a,2,4,4a,5,	8.57	313	ug/kg	80	NJ

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210  
Lab Sample ID: 244599013

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD7.I  
Analyst: JMB3  
Aliquot: 30.14 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 8.4  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
<b>Tentatively Identified Compound Summary</b>						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	9.03	731	ug/kg		J
55751-83-2	2-Ethylacridine	10.53	415	ug/kg	80	NJ
	Unknown	11.51	519	ug/kg		J
	Unknown	12.72	487	ug/kg		J

# QC Summary

Semi-Volatile  
Surrogate Recovery Report

Page 1 of 1

SDG Number: 10-1210

Matrix Type: SOLID

CAP Column (1) : J&amp;W DB-5MS

Sample ID	Client ID	2FP %REC	PHL %REC	NBZ %REC	FBP %REC	TBP %REC	TPH %REC
1202015597	MB for batch 941701	76	77	89	84	77	101
1202015598	LCS for batch 941701	70	67	82	70	79	83
244599001	RE12-10-7243	62	63	73	70	80	79
1202015599	RE12-10-7243MS	63	63	74	65	82	84
1202015600	RE12-10-7243MSD	62	61	67	65	76	81
244599002	RE12-10-7240	67	67	76	73	80	85
244599003	RE12-10-7241	65	66	75	71	75	78
244599004	RE12-10-7237	63	64	74	71	88	85
244599005	RE12-10-7239	63	63	71	69	73	80
244599006	RE12-10-7238	61	63	71	69	77	82
244599007	RE12-10-7242	62	64	71	71	86	89
244599008	RE12-10-7236	69	70	77	76	88	93
244599009	RE12-10-7252	65	64	72	71	81	89
244599010	RE12-10-7253	67	66	76	72	78	89
244599011	RE12-10-7254	70	71	78	77	86	90
244599012	RE12-10-7255	68	69	76	76	82	87
244599013	RE12-10-7276	65	65	74	72	74	84

**Surrogate****Acceptance Limits**

2FP	= 2-Fluorophenol	(35%-96%)
PHL	= Phenol-d5	(36%-96%)
NBZ	= Nitrobenzene-d5	(34%-104%)
FBP	= 2-Fluorobiphenyl	(36%-100%)
TBP	= 2,4,6-Tribromophenol	(37%-106%)
TPH	= p-Terphenyl-d14	(40%-124%)

\* Recovery outside Acceptance Limits

# Column to be used to flag recovery values

D Sample Diluted



## Semi-Volatile

Page 1 of 4

Quality Control Summary  
Spike Recovery Report

SDG Number: 10-1210

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 941701

Matrix: SOIL

Lab Sample ID: 1202015598

Instrument: MSD7.I

Analysis Date: 01/19/2010 12:11

Dilution: 1

Analyst: JMB3

Pren Batch ID: 941701

Inj. Vol: .5 uL

Batch ID: 941702

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
62-75-9	LCS N-Methyl-N-nitrosomethylam	1670	0.0	1110	67	31-95
108-95-2	LCS Phenol	1670	0.0	1130	68	37-104
95-57-8	LCS 2-Chlorophenol	1670	0.0	1250	75	40-105
106-46-7	LCS 1,4-Dichlorobenzene	1670	0.0	1210	73	34-103
621-64-7	LCS N-Nitrosodipropylamine	1670	0.0	1160	70	36-110
59-50-7	LCS 4-Chloro-3-methylphenol	1670	0.0	1270	76	46-114
83-32-9	LCS Acenaphthene	1670	0.0	1120	67	40-105
121-14-2	LCS 2,4-Dinitrotoluene	1670	0.0	1350	81	49-107
100-02-7	LCS 4-Nitrophenol	1670	0.0	1240	74	33-110
87-86-5	LCS Pentachlorophenol	1670	0.0	1260	76	38-116
129-00-0	LCS Pyrene	1670	0.0	1220	73	43-108
110-86-1	LCS Pyridine	1670	0.0	1140	68	13-129
62-53-3	LCS Aniline	1670	0.0	976	59	30-121
111-44-4	LCS bis(2-Chloroethyl) ether	1670	0.0	1250	75	37-106
541-73-1	LCS 1,3-Dichlorobenzene	1670	0.0	1190	72	33-103
100-51-6	LCS Benzyl alcohol	1670	0.0	1280	77	31-100
95-50-1	LCS 1,2-Dichlorobenzene	1670	0.0	1280	77	34-108
108-60-1	LCS bis(2-Chloroisopropyl)ether	1670	0.0	1370	82	34-120
95-48-7	LCS o-Cresol	1670	0.0	1410	84	39-111
65794-96-9	LCS m,p-Cresols	1670	0.0	1350	81	43-118
67-72-1	LCS Hexachloroethane	1670	0.0	1190	72	34-105
98-95-3	LCS Nitrobenzene	1670	0.0	1300	78	37-110

Semi-Volatile  
Quality Control Summary  
Spike Recovery Report

SDG Number: 10-1210

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 941701

Matrix: SOIL

Lab Sample ID: 1202015598

Instrument: MSD7.I

Analysis Date: 01/19/2010 12:11

Dilution: 1

Analyst: JMB3

Prep Batch ID: 941701

Inj. Vol: .5 uL

Batch ID: 941702

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
78-59-1	LCS Isophorone	1670	0.0	1190	72	41-108
88-75-5	LCS 2-Nitrophenol	1670	0.0	1330	80	35-112
105-67-9	LCS 2,4-Dimethylphenol	1670	0.0	1220	73	35-114
111-91-1	LCS bis(2-Chloroethoxy)methane	1670	0.0	1190	71	40-109
120-83-2	LCS 2,4-Dichlorophenol	1670	0.0	1230	74	45-109
65-85-0	LCS Benzoic acid	3330	0.0	2450	73	27-137
91-20-3	LCS Naphthalene	1670	0.0	1120	67	35-105
106-47-8	LCS 4-Chloroaniline	1670	0.0	999	60	30-122
87-68-3	LCS Hexachlorobutadiene	1670	0.0	1210	73	37-111
91-57-6	LCS 2-Methylnaphthalene	1670	0.0	1270	76	40-106
77-47-4	LCS Hexachlorocyclopentadiene	1670	0.0	1390	84	24-135
88-06-2	LCS 2,4,6-Trichlorophenol	1670	0.0	1240	74	46-107
95-95-4	LCS 2,4,5-Trichlorophenol	1670	0.0	1400	84	44-110
91-58-7	LCS 2-Chloronaphthalene	1670	0.0	1130	68	44-104
88-74-4	LCS 2-Nitroaniline <i>o</i> -Nitroaniline	1670	0.0	1250	75	44-113
99-09-2	LCS 3-Nitroaniline <i>m</i> -Nitroaniline	1670	0.0	1130	68	48-113
131-11-3	LCS Dimethylphthalate	1670	0.0	1330	80	47-104
606-20-2	LCS 2,6-Dinitrotoluene	1670	0.0	1350	81	47-103
208-96-8	LCS Acenaphthylene	1670	0.0	1260	76	43-104
51-28-5	LCS 2,4-Dinitrophenol	1670	0.0	1240	74	32-114
132-64-9	LCS Dibenzofuran	1670	0.0	1480	89	47-112
84-66-2	LCS Diethylphthalate	1670	0.0	1300	78	50-108

Semi-Volatile  
Quality Control Summary  
Spike Recovery Report

SDG Number: 10-1210

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 941701

Matrix: SOIL

Lab Sample ID: 1202015598

Instrument: MSD7.I

Analysis Date: 01/19/2010 12:11

Dilution: 1

Analyst: JMB3

Prep Batch ID: 941701

Inj. Vol: .5 uL

Batch ID: 941702

CAS No	Parname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
86-73-7	LCS Fluorene	1670	0.0	1150	69	49-102
7005-72-3	LCS 4-Chlorophenylphenylether	1670	0.0	1340	80	50-109
534-52-1	LCS 2-Methyl-4,6-dinitrophenol	1670	0.0	1100	66	35-114
100-01-6	LCS 4-Nitroaniline <i>p</i> -Nitroaniline	1670	0.0	1240	75	44-139
122-39-4	LCS Diphenylamine	1670	0.0	1180	71	46-111
122-66-7	LCS Azobenzene <i>1,2</i> -Diphenylhydrazine	1670	0.0	1250	75	40-119
101-55-3	LCS 4-Bromophenylphenylether	1670	0.0	1190	71	45-112
118-74-1	LCS Hexachlorobenzene	1670	0.0	1160	70	44-115
85-01-8	LCS Phenanthrene	1670	0.0	1140	68	45-107
120-12-7	LCS Anthracene	1670	0.0	1260	76	46-106
84-74-2	LCS Di-n-butylphthalate	1670	0.0	1310	79	52-115
206-44-0	LCS Fluoranthene	1670	0.0	1290	78	50-115
85-68-7	LCS Butylbenzylphthalate	1670	0.0	1350	81	49-115
56-55-3	LCS Benzo(a)anthracene	1670	0.0	1260	76	48-105
91-94-1	LCS 3,3'-Dichlorobenzidine	1670	0.0	1150	69	45-98
218-01-9	LCS Chrysene	1670	0.0	1290	78	48-105
117-81-7	LCS bis(2-Ethylhexyl)phthalate	1670	0.0	1430	86	50-117
117-84-0	LCS Di-n-octylphthalate	1670	0.0	1290	78	39-123
205-99-2	LCS Benzo(b)fluoranthene	1670	0.0	1290	78	46-111
207-08-9	LCS Benzo(k)fluoranthene	1670	0.0	1260	76	46-114
50-32-8	LCS Benzo(a)pyrene	1670	0.0	1290	77	49-112
193-39-5	LCS Indeno(1,2,3-cd)pyrene	1670	0.0	1460	88	45-128

Semi-Volatile  
Quality Control Summary  
Spike Recovery Report

Page 4 of 4

SDG Number: 10-1210

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 941701

Matrix: SOIL

Lab Sample ID: 1202015598

Instrument: MSD7.I

Analysis Date: 01/19/2010 12:11

Dilution: 1

Analyst: JMB3

Prep Batch ID: 941701

Inj. Vol: .5 uL

Batch ID: 941702

CAS No	Parname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
53-70-3	LCS Dibenzo(a,h)anthracene	1670	0.0	1500	90	44-131
191-24-2	LCS Benzo(ghi)perylene	1670	0.0	1470	88	42-128
120-82-1	LCS 1,2,4-Trichlorobenzene	1670	0.0	1200	72	36-109

Semi-Volatile  
Quality Control Summary  
Spike Recovery Report

SDG Number: 10-1210

Sample Type: Matrix Spike

Client ID: RE12-10-7243MS

Matrix: R

Lab Sample ID: 1202015599

%Moisture: 5.8

Instrument: MSD7.I

Analysis Date: 01/19/2010 18:04

Dilution: 1

Analyst: JMB3

Pre Batch ID: 941701

Inj. Vol: .5 uL

Batch ID: 941702

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
62-75-9	MS N-Methyl-N-nitrosomethylam	1760	0.00 U	1020	58	32-90
108-95-2	MS Phenol	1760	0.00 U	1140	65	32-105
95-57-8	MS 2-Chlorophenol	1760	0.00 U	1250	71	33-106
106-46-7	MS 1,4-Dichlorobenzene	1760	0.00 U	1140	65	33-95
621-64-7	MS N-Nitrosodipropylamine	1760	0.00 U	1140	65	31-109
59-50-7	MS 4-Chloro-3-methylphenol	1760	0.00 U	1370	78	38-119
83-32-9	MS Acenaphthene	1760	0.00 U	1160	66	39-100
121-14-2	MS 2,4-Dinitrotoluene	1760	0.00 U	1430	81	42-107
100-02-7	MS 4-Nitrophenol	1760	0.00 U	1510	86	24-120
87-86-5	MS Pentachlorophenol	1760	0.00 U	1410	80	26-121
129-00-0	MS Pyrene	1760	0.00 U	1310	74	34-120
110-86-1	MS Pyridine	1760	0.00 U	930	53	30-95
62-53-3	MS Aniline	1760	0.00 U	1090	62	34-111
111-44-4	MS bis(2-Chloroethyl) ether	1760	0.00 U	1190	68	34-101
541-73-1	MS 1,3-Dichlorobenzene	1760	0.00 U	1120	64	31-97
100-51-6	MS Benzyl alcohol	1760	0.00 U	1360	77	17-120
95-50-1	MS 1,2-Dichlorobenzene	1760	0.00 U	1220	69	32-102
108-60-1	MS bis(2-Chloroisopropyl)ether	1760	0.00 U	1340	76	32-113
95-48-7	MS o-Cresol	1760	0.00 U	1350	77	31-119
65794-96-9	MS m,p-Cresols	1760	0.00 U	1370	78	35-125
67-72-1	MS Hexachloroethane	1760	0.00 U	1140	65	30-100
98-95-3	MS Nitrobenzene	1760	0.00 U	1260	71	33-108

Semi-Volatile  
Quality Control Summary  
Spike Recovery Report

SDG Number: 10-1210

Sample Type: Matrix Spike

Client ID: RE12-10-7243MS

Matrix: R

Lab Sample ID: 1202015599

%Moisture: 5.8

Instrument: MSD7.I

Analysis Date: 01/19/2010 18:04

Dilution: 1

Analyst: JMB3

Pred Batch II 941701

Inj. Vol: .5 uL

Batch ID: 941702

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
78-59-1	MS Isophorone	1760	0.00 U	1210	69	34-110
88-75-5	MS 2-Nitrophenol	1760	0.00 U	1280	73	32-108
105-67-9	MS 2,4-Dimethylphenol	1760	0.00 U	1300	74	32-115
111-91-1	MS bis(2-Chloroethoxy)methane	1760	0.00 U	1180	67	35-108
120-83-2	MS 2,4-Dichlorophenol	1760	0.00 U	1290	73	38-110
65-85-0	MS Benzoic acid	3530	0.00 U	2540	72	18-134
91-20-3	MS Naphthalene	1760	0.00 U	1100	62	31-105
106-47-8	MS 4-Chloroaniline	1760	0.00 U	1110	63	29-123
87-68-3	MS Hexachlorobutadiene	1760	0.00 U	1190	67	31-109
91-57-6	MS 2-Methylnaphthalene	1760	0.00 U	1290	73	32-110
77-47-4	MS Hexachlorocyclopentadiene	1760	0.00 U	1130	64	21-122
88-06-2	MS 2,4,6-Trichlorophenol	1760	0.00 U	1360	77	37-108
95-95-4	MS 2,4,5-Trichlorophenol	1760	0.00 U	1510	86	37-116
91-58-7	MS 2-Chloronaphthalene	1760	0.00 U	1130	64	37-103
88-74-4	MS 2-Nitroaniline o-Nitroaniline	1760	0.00 U	1350	76	36-115
99-09-2	MS 3-Nitroaniline m-Nitroaniline	1760	0.00 U	1310	74	39-117
131-11-3	MS Dimethylphthalate	1760	0.00 U	1390	79	41-105
606-20-2	MS 2,6-Dinitrotoluene	1760	0.00 U	1430	81	41-103
208-96-8	MS Acenaphthylene	1760	0.00 U	1290	73	41-103
51-28-5	MS 2,4-Dinitrophenol	1760	0.00 U	1080	61	25-104
132-64-9	MS Dibenzofuran	1760	0.00 U	1510	86	40-114
84-66-2	MS Diethylphthalate	1760	0.00 U	1370	78	43-110

Semi-Volatile  
Quality Control Summary  
Spike Recovery Report

Page 3 of 8

SDG Number: 10-1210

Sample Type: Matrix Spike

Client ID: RE12-10-7243MS

Matrix: R

Lab Sample ID: 1202015599

%Moisture: 5.8

Instrument: MSD7.I

Analysis Date: 01/19/2010 18:04

Dilution: 1

Analyst: JMB3

Prep Batch II 941701

Inj. Vol: .5 uL

Batch ID: 941702

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
86-73-7	MS Fluorene	1760	0.00 U	1170	66	48-99
7005-72-3	MS 4-Chlorophenylphenylether	1760	0.00 U	1400	79	42-111
534-52-1	MS 2-Methyl-4,6-dinitrophenol	1760	0.00 U	1040	59	19-118
100-01-6	MS 4-Nitroaniline <i>p-Nitroaniline</i>	1760	0.00 U	1410	80	35-139
122-39-4	MS Diphenylamine	1760	0.00 U	1260	71	41-112
122-66-7	MS Azobenzene <i>1,2-Diphenylhydrazine</i>	1760	0.00 U	1300	74	37-118
101-55-3	MS 4-Bromophenylphenylether	1760	0.00 U	1270	72	39-112
118-74-1	MS Hexachlorobenzene	1760	0.00 U	1250	71	38-113
85-01-8	MS Phenanthrene	1760	0.00 U	1210	69	38-110
120-12-7	MS Anthracene	1760	0.00 U	1320	75	38-112
84-74-2	MS Di-n-butylphthalate	1760	0.00 U	1400	80	42-119
206-44-0	MS Fluoranthene	1760	0.00 U	1360	77	38-119
85-68-7	MS Butylbenzylphthalate	1760	0.00 U	1460	83	39-126
56-55-3	MS Benzo(a)anthracene	1760	0.00 U	1340	76	39-110
91-94-1	MS 3,3'-Dichlorobenzidine	1760	0.00 U	1320	75	35-106
218-01-9	MS Chrysene	1760	0.00 U	1400	80	39-109
117-81-7	MS bis(2-Ethylhexyl)phthalate	1760	0.00 U	1500	85	40-125
117-84-0	MS Di-n-octylphthalate	1760	0.00 U	1410	80	30-147
205-99-2	MS Benzo(b)fluoranthene	1760	0.00 U	1320	75	38-117
207-08-9	MS Benzo(k)fluoranthene	1760	0.00 U	1410	80	39-120
50-32-8	MS Benzo(a)pyrene	1760	0.00 U	1420	81	40-115
193-39-5	MS Indeno(1,2,3-cd)pyrene	1760	0.00 U	1550	88	32-120

## Semi-Volatile

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Quality Control Summary  
Spike Recovery Report

SDG Number: 10-1210

Sample Type: Matrix Spike

Client ID: RE12-10-7243MS

Matrix: R

Lab Sample ID: 1202015599

% Moisture: 5.8

Instrument: MSD7.I

Analysis Date: 01/19/2010 18:04

Dilution: 1

Analyst: JMB3

Prep Batch ID: 941701

Inj. Vol: .5 uL

Batch ID: 941702

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
53-70-3	MS Dibenzo(a,h)anthracene	1760	0.00 U	1590	90	32-124
191-24-2	MS Benzo(ghi)perylene	1760	0.00 U	1530	87	28-119
120-82-1	MS 1,2,4-Trichlorobenzene	1760	0.00 U	1180	67	31-105



Semi-Volatile  
Quality Control Summary  
Spike Recovery Report

Page 5 of 8

SDG Number: 10-1210

Sample Type: Matrix Spike Duplicate

Client ID: RE12-10-7243MSD

Matrix: R

Lab Sample ID: 1202015600

% Moisture: 5.8

Instrument: MSD7.I

Analysis Date: 01/19/2010 18:26

Dilution: 1

Analyst: JMB3

Prep Batch ID: 941701

Inj. Vol: .5 uL

Batch ID: 941702

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
62-75-9	MSD N-Methyl-N-nitrosomethylam	1770	0.00 U	972	55	32-90	5	0-30
108-95-2	MSD Phenol	1770	0.00 U	1080	61	32-105	5	0-30
95-57-8	MSD 2-Chlorophenol	1770	0.00 U	1180	67	33-106	5	0-30
106-46-7	MSD 1,4-Dichlorobenzene	1770	0.00 U	1120	64	33-95	2	0-30
621-64-7	MSD N-Nitrosodipropylamine	1770	0.00 U	1090	62	31-109	5	0-30
59-50-7	MSD 4-Chloro-3-methylphenol	1770	0.00 U	1220	69	38-119	12	0-30
83-32-9	MSD Acenaphthene	1770	0.00 U	1120	64	39-100	3	0-30
121-14-2	MSD 2,4-Dinitrotoluene	1770	0.00 U	1340	76	42-107	6	0-30
100-02-7	MSD 4-Nitrophenol	1770	0.00 U	1370	77	24-120	10	0-30
87-86-5	MSD Pentachlorophenol	1770	0.00 U	1270	72	26-121	10	0-30
129-00-0	MSD Pyrene	1770	0.00 U	1270	72	34-120	3	0-30
110-86-1	MSD Pyridine	1770	0.00 U	908	51	30-95	2	0-30
62-53-3	MSD Aniline	1770	0.00 U	1090	62	34-111	0	0-30
111-44-4	MSD bis(2-Chloroethyl) ether	1770	0.00 U	1160	66	34-101	3	0-30
541-73-1	MSD 1,3-Dichlorobenzene	1770	0.00 U	1100	62	31-97	3	0-30
100-51-6	MSD Benzyl alcohol	1770	0.00 U	1200	68	17-120	13	0-30
95-50-1	MSD 1,2-Dichlorobenzene	1770	0.00 U	1190	68	32-102	2	0-30
108-60-1	MSD bis(2-Chloroisopropyl) ether	1770	0.00 U	1320	75	32-113	2	0-30
95-48-7	MSD o-Cresol	1770	0.00 U	1340	76	31-119	1	0-30
65794-96-9	MSD m,p-Cresols	1770	0.00 U	1290	73	35-125	6	0-30
67-72-1	MSD Hexachloroethane	1770	0.00 U	1090	62	30-100	4	0-30
98-95-3	MSD Nitrobenzene	1770	0.00 U	1150	65	33-108	9	0-30

Semi-Volatile  
Quality Control Summary  
Spike Recovery Report

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SDG Number: 10-1210

Sample Type: Matrix Spike Duplicate

Client ID: RE12-10-7243MSD

Matrix: R

Lab Sample ID: 1202015600

%Moisture: 5.8

Instrument: MSD7.I

Analysis Date: 01/19/2010 18:26

Dilution: 1

Analyst: JMB3

Prep Batch ID: 941701

Inj. Vol: .5 uL

Batch ID: 941702

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD	Acceptance Limits
78-59-1	MSD Isophorone	1770	0.00 U	1100	62	34-110	10	0-30
88-75-5	MSD 2-Nitrophenol	1770	0.00 U	1180	67	32-108	8	0-30
105-67-9	MSD 2,4-Dimethylphenol	1770	0.00 U	1210	68	32-115	8	0-30
111-91-1	MSD bis(2-Chloroethoxy)methane	1770	0.00 U	1080	61	35-108	9	0-30
120-83-2	MSD 2,4-Dichlorophenol	1770	0.00 U	1160	66	38-110	10	0-30
65-85-0	MSD Benzoic acid	3530	0.00 U	2060	58	18-134	21	0-30
91-20-3	MSD Naphthalene	1770	0.00 U	1070	60	31-105	3	0-30
106-47-8	MSD 4-Chloroaniline	1770	0.00 U	1110	63	29-123	0	0-30
87-68-3	MSD Hexachlorobutadiene	1770	0.00 U	1090	62	31-109	8	0-30
91-57-6	MSD 2-Methylnaphthalene	1770	0.00 U	1210	69	32-110	6	0-30
77-47-4	MSD Hexachlorocyclopentadiene	1770	0.00 U	940	53	21-122	19	0-30
88-06-2	MSD 2,4,6-Trichlorophenol	1770	0.00 U	1340	76	37-108	2	0-30
95-95-4	MSD 2,4,5-Trichlorophenol	1770	0.00 U	1400	79	37-116	8	0-30
91-58-7	MSD 2-Chloronaphthalene	1770	0.00 U	1100	62	37-103	3	0-30
88-74-4	MSD 2-Nitroaniline o-Nitroaniline	1770	0.00 U	1250	71	36-115	7	0-30
99-09-2	MSD 3-Nitroaniline m-Nitroaniline	1770	0.00 U	1280	73	39-117	2	0-30
131-11-3	MSD Dimethylphthalate	1770	0.00 U	1350	76	41-105	3	0-30
606-20-2	MSD 2,6-Dinitrotoluene	1770	0.00 U	1350	76	41-103	6	0-30
208-96-8	MSD Acenaphthylene	1770	0.00 U	1270	72	41-103	2	0-30
51-28-5	MSD 2,4-Dinitrophenol	1770	0.00 U	735	42	25-104	38 *	0-30
132-64-9	MSD Dibenzofuran	1770	0.00 U	1490	84	40-114	1	0-30
84-66-2	MSD Diethylphthalate	1770	0.00 U	1330	76	43-110	3	0-30

Semi-Volatile  
Quality Control Summary  
Spike Recovery Report

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SDG Number: 10-1210

Sample Type: Matrix Spike Duplicate

Client ID: RE12-10-7243MSD

Matrix: R

Lab Sample ID: 1202015600

%Moisture: 5.8

Instrument: MSD7.I

Analysis Date: 01/19/2010 18:26

Dilution: 1

Analyst: JMB3

Pre Batch II 941701

Inj. Vol: .5 uL

Batch ID: 941702

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
86-73-7	MSD Fluorene	1770	0.00 U	1180	67	48-99	1	0-30
7005-72-3	MSD 4-Chlorophenylphenylether	1770	0.00 U	1340	76	42-111	4	0-30
534-52-1	MSD 2-Methyl-4,6-dinitrophenol	1770	0.00 U	823	47	19-118	24	0-30
100-01-6	MSD 4-Nitroaniline <i>p</i> -Nitroaniline	1770	0.00 U	1450	82	35-139	3	0-30
122-39-4	MSD Diphenylamine	1770	0.00 U	1240	70	41-112	2	0-30
122-66-7	MSD Azobenzene <i>1,2</i> -Diphenylhydrazine	1770	0.00 U	1270	72	37-118	3	0-30
101-55-3	MSD 4-Bromophenylphenylether	1770	0.00 U	1200	68	39-112	6	0-30
118-74-1	MSD Hexachlorobenzene	1770	0.00 U	1160	66	38-113	7	0-30
85-01-8	MSD Phenanthrene	1770	0.00 U	1210	68	38-110	0	0-30
120-12-7	MSD Anthracene	1770	0.00 U	1310	74	38-112	1	0-30
84-74-2	MSD Di-n-butylphthalate	1770	0.00 U	1400	79	42-119	0	0-30
206-44-0	MSD Fluoranthene	1770	0.00 U	1380	78	38-119	2	0-30
85-68-7	MSD Butylbenzylphthalate	1770	0.00 U	1420	81	39-126	2	0-30
56-55-3	MSD Benzo(a)anthracene	1770	0.00 U	1300	74	39-110	3	0-30
91-94-1	MSD 3,3'-Dichlorobenzidine	1770	0.00 U	1300	74	35-106	2	0-30
218-01-9	MSD Chrysene	1770	0.00 U	1390	79	39-109	1	0-30
117-81-7	MSD bis(2-Ethylhexyl)phthalate	1770	0.00 U	1520	86	40-125	1	0-30
117-84-0	MSD Di-n-octylphthalate	1770	0.00 U	1390	79	30-147	1	0-30
205-99-2	MSD Benzo(b)fluoranthene	1770	0.00 U	1310	74	38-117	1	0-30
207-08-9	MSD Benzo(k)fluoranthene	1770	0.00 U	1370	77	39-120	3	0-30
50-32-8	MSD Benzo(a)pyrene	1770	0.00 U	1370	77	40-115	4	0-30
193-39-5	MSD Indeno(1,2,3-cd)pyrene	1770	0.00 U	1490	84	32-120	4	0-30

## Semi-Volatile

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Quality Control Summary  
Spike Recovery Report

SDG Number: 10-1210

Sample Type: Matrix Spike Duplicate

Client ID: RE12-10-7243MSD

Matrix: R

Lab Sample ID: 1202015600

%Moisture: 5.8

Instrument: MSD7.1

Analysis Date: 01/19/2010 18:26

Dilution: 1

Analyst: JMB3

Prep Batch II 941701

Inj. Vol: .5 uL

Batch ID: 941702

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits	Acceptance RPD	Acceptance Limits
53-70-3	MSD Dibenzo(a,h)anthracene	1770	0.00 U	1540	87	32-124	3	0-30
191-24-2	MSD Benzo(ghi)perylene	1770	0.00 U	1460	83	28-119	4	0-30
120-82-1	MSD 1,2,4-Trichlorobenzene	1770	0.00 U	1110	63	31-105	6	0-30

## Method Blank Summary

Page 1 of 1

SDG Number:	10-1210	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 941701	Instrument ID:	MSD7.I	Data File:	s7a1908.d
Lab Sample ID:	1202015597	Prep Date:	01/14/2010 19:34	Analyzed:	01/19/10 11:49
Column:	J&W DB-5MS	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 941701	1202015598	s7a1909.d	01/19/10	1211
02 RE12-10-7243	244599001	s7a1924.d	01/19/10	1742
03 RE12-10-7243MS	1202015599	s7a1925.d	01/19/10	1804
04 RE12-10-7243MSD	1202015600	s7a1926.d	01/19/10	1826
05 RE12-10-7240	244599002	s7a1927.d	01/19/10	1848
06 RE12-10-7241	244599003	s7a1928.d	01/19/10	1911
07 RE12-10-7237	244599004	s7a1929.d	01/19/10	1932
08 RE12-10-7239	244599005	s7a1930.d	01/19/10	1954
09 RE12-10-7238	244599006	s7a1931.d	01/19/10	2016
10 RE12-10-7242	244599007	s7a2012.d	01/20/10	1429
11 RE12-10-7236	244599008	s7a2013.d	01/20/10	1451
12 RE12-10-7252	244599009	s7a2014.d	01/20/10	1513
13 RE12-10-7253	244599010	s7a2015.d	01/20/10	1535
14 RE12-10-7254	244599011	s7a2016.d	01/20/10	1557
15 RE12-10-7255	244599012	s7a2017.d	01/20/10	1619
16 RE12-10-7276	244599013	s7a2018.d	01/20/10	1642

## Instrument Performance Check

## DFTPP

Lab Name GEL Laboratories LLC

Client SDG: 10-1210

Instrument ID: MSD7.1

Injection Date/Time: 13-JAN-10 16:11

Column Description: Phenomenex ZB-5MS

Lab File ID /chem/MSD7.i/s011310.b/s7a1301.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	57.5
68	Less than 2% of mass 69	1.3
69	Mass 69 Relative Abundance	43.2
70	Less than 2% of mass 69	0
127	40 - 60% of mass 198	49
197	0 - 1% of mass 198	0
199	5 - 9% of mass 198	6.9
275	10 - 30% of mass 198	23.2
365	Greater than 1% of mass 198	2.1
441	Present, but less than mass 443	77.5
442	Greater than 40% of mass 198	81.7
443	17 - 23% of mass 442	19.4

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD, BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGA001	WBN100112-08	/chem/MSD7.i/s011310.b/s7a1301	13-JAN-10 16:51
MEGA010	WBN100112-07	/chem/MSD7.i/s011310.b/s7a1301	13-JAN-10 17:18
MEGA020	WBN100112-06	/chem/MSD7.i/s011310.b/s7a1301	13-JAN-10 17:45
MEGA040	WBN100112-05.1	/chem/MSD7.i/s011310.b/s7a1301	13-JAN-10 18:12
MEGA050	WBN100112-04	/chem/MSD7.i/s011310.b/s7a1301	13-JAN-10 18:39
MEGA080	WBN100112-03	/chem/MSD7.i/s011310.b/s7a1301	13-JAN-10 19:07
MEGA100	WBN100112-02	/chem/MSD7.i/s011310.b/s7a1301	13-JAN-10 19:34
MEGA120	WBN100112-01	/chem/MSD7.i/s011310.b/s7a1301	13-JAN-10 20:01
AP010	WBN100103-01	/chem/MSD7.i/s011310.b/s7a1311	13-JAN-10 20:28
AP020	WBN100103-02	/chem/MSD7.i/s011310.b/s7a1311	13-JAN-10 20:50
AP040	WBN100103-03.1	/chem/MSD7.i/s011310.b/s7a1311	13-JAN-10 21:12
AP050	WBN100103-04	/chem/MSD7.i/s011310.b/s7a1311	13-JAN-10 21:34
AP080	WBN100103-05	/chem/MSD7.i/s011310.b/s7a1311	13-JAN-10 21:55
AP100	WBN100103-06	/chem/MSD7.i/s011310.b/s7a1311	13-JAN-10 22:17
AP120	WBN100103-07	/chem/MSD7.i/s011310.b/s7a1311	13-JAN-10 22:39
MEGAICV	WBN091106-09.3	/chem/MSD7.i/s011310.b/s7a1321	14-JAN-10 01:32

## Instrument Performance Check

## DFTPP

Lab Name GEL Laboratories LLC

Client SDG: 10-1210

Instrument ID: MSD7.1

Injection Date/Time: 13-JAN-10 16:11

Column Description: Phenomenex ZB-5MS

Lab File ID /chem/MSD7.i/s011310.b/s7a1301.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	57.5
68	Less than 2% of mass 69	1.3
69	Mass 69 Relative Abundance	43.2
70	Less than 2% of mass 69	0
127	40 - 60% of mass 198	49
197	0 - 1% of mass 198	0
199	5 - 9% of mass 198	6.9
275	10 - 30% of mass 198	23.2
365	Greater than 1% of mass 198	2.1
441	Present, but less than mass 443	77.5
442	Greater than 40% of mass 198	81.7
443	17 - 23% of mass 442	19.4

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD, BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
APICV	WBN100103-03.1	/chem/MSD7.i/s011310.b/s7a1320	14-JAN-10 01:58

## Instrument Performance Check

## DFTPP

Lab Name GEL Laboratories LLC

Client SDG: 10-1210

Instrument ID: MSD7.I

Injection Date/Time: 19-JAN-10 09:18

Column Description: Phenomenex ZB-5MS

Lab File ID /chem/MSD7.i/s011910.b/s7a1901.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	56.2
68	Less than 2% of mass 69	1.8
69	Mass 69 Relative Abundance	41.3
70	Less than 2% of mass 69	0.3
127	40 - 60% of mass 198	45.6
197	0 - 1% of mass 198	0
199	5 - 9% of mass 198	6.8
275	10 - 30% of mass 198	22
365	Greater than 1% of mass 198	1.9
441	Present, but less than mass 443	77.5
442	Greater than 40% of mass 198	74.8
443	17 - 23% of mass 442	19.3

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGACVS	WBN091225-12.3	/chem/MSD7.i/s011910.b/s7a1901.d	19-JAN-10 09:31
APCVS	WBN100103-03.4	/chem/MSD7.i/s011910.b/s7a1901.d	19-JAN-10 09:58
SBLK01	1202015597	/chem/MSD7.i/s011910.b/s7a1901.d	19-JAN-10 11:49
SBLK01LCS	1202015598	/chem/MSD7.i/s011910.b/s7a1901.d	19-JAN-10 12:11
RE12-10-7243	244599001	/chem/MSD7.i/s011910.b/s7a192.d	19-JAN-10 17:42
RE12-10-7243MS	1202015599	/chem/MSD7.i/s011910.b/s7a192.d	19-JAN-10 18:04
RE12-10-7243MSD	1202015600	/chem/MSD7.i/s011910.b/s7a192.d	19-JAN-10 18:26
RE12-10-7240	244599002	/chem/MSD7.i/s011910.b/s7a192.d	19-JAN-10 18:48
RE12-10-7241	244599003	/chem/MSD7.i/s011910.b/s7a192.d	19-JAN-10 19:11
RE12-10-7237	244599004	/chem/MSD7.i/s011910.b/s7a192.d	19-JAN-10 19:32
RE12-10-7239	244599005	/chem/MSD7.i/s011910.b/s7a193.d	19-JAN-10 19:54
RE12-10-7238	244599006	/chem/MSD7.i/s011910.b/s7a193.d	19-JAN-10 20:16



## Instrument Performance Check

## DFTPP

Lab Name GEL Laboratories LLC

Client SDG: 10-1210

Instrument ID: MSD7.I

Injection Date/Time: 20-JAN-10 10:52

Column Description: Phenomenex ZB-5MS

Lab File ID /chem/MSD7.i/s012010.b/s7a2002.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	58.3
68	Less than 2% of mass 69	0.6
69	Mass 69 Relative Abundance	41.5
70	Less than 2% of mass 69	0.6
127	40 - 60% of mass 198	46
197	0 - 1% of mass 198	0
199	5 - 9% of mass 198	6.8
275	10 - 30% of mass 198	22.5
365	Greater than 1% of mass 198	2
441	Present, but less than mass 443	75.7
442	Greater than 40% of mass 198	77.9
443	17 - 23% of mass 442	19

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD, BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGACVS	WBN091225-12.3	/chem/MSD7.i/s012010.b/s7a200	20-JAN-10 11:05
APCVS	WBN100103-03.4	/chem/MSD7.i/s012010.b/s7a200	20-JAN-10 11:32
RE12-10-7242	244599007	/chem/MSD7.i/s012010.b/s7a201	20-JAN-10 14:29
RE12-10-7236	244599008	/chem/MSD7.i/s012010.b/s7a201	20-JAN-10 14:51
RE12-10-7252	244599009	/chem/MSD7.i/s012010.b/s7a201	20-JAN-10 15:13
RE12-10-7253	244599010	/chem/MSD7.i/s012010.b/s7a201	20-JAN-10 15:35
RE12-10-7254	244599011	/chem/MSD7.i/s012010.b/s7a201	20-JAN-10 15:57
RE12-10-7255	244599012	/chem/MSD7.i/s012010.b/s7a201	20-JAN-10 16:19
RE12-10-7276	244599013	/chem/MSD7.i/s012010.b/s7a201	20-JAN-10 16:42

### Internal Standard Area and RT Summary

Lab Name : GEL Laboratories LLC

Client SDG: 10-1210

Instrument: MSD7.1

STD Analysis Time: 19-JAN-10 09:31

GC Column: J&amp;W DB-5MS

Data File: s7a1902.d

	1,4-Dichlorobenzene-d4			Naphthalene-d8			Acenaphthene-d10			Phenanthrene-d10			Chrysene-d12			Perylene-d12		
	Area	#	RT #	Area	#	RT #	Area	#	RT #	Area	#	RT #	Area	#	RT #	Area	#	RT #
12 Hour STD	324962		3.79	1186653		4.65	634038		5.9	1178577		7.05	942861		9.43	794671		11.0
Upper Limit	649924		4.29	2373306		5.15	1268076		6.4	2357154		7.55	1885722		9.93	1589342		11.5
Lower Limit	162481		3.29	593327		4.15	317019		5.4	589289		6.55	471431		8.93	397336		10.5
Sample ID																		
BLK01	314713		3.79	1164505		4.65	598244		5.89	1053967		7.04	804289		9.42	556183		11.0
BLK01LCS	314418		3.79	1172531		4.65	610198		5.9	1164802		7.04	958049		9.43	785801		11.0
RE12-10-7243	417966		3.79	1557277		4.65	803408		5.89	1465067		7.04	1221167		9.42	830961		11.0
RE12-10-7243MS	354488		3.79	1327601		4.65	715637		5.9	1359706		7.04	1067174		9.43	852674		11.0
RE12-10-7243MSD	222060		3.79	851903		4.65	432924		5.89	834207		7.04	696736		9.42	555558		11.0
RE12-10-7240	309683		3.79	1156877		4.65	607360		5.89	1135300		7.04	969219		9.42	720354		11.0
RE12-10-7241	408442		3.79	1517349		4.65	792909		5.89	1464645		7.04	1258875		9.42	936714		11.0
RE12-10-7237	426085		3.79	1574816		4.65	810129		5.89	1522767		7.04	1257539		9.43	847393		11.0
RE12-10-7239	300904		3.79	1132572		4.65	587059		5.89	1092987		7.04	915793		9.42	664744		11.0
RE12-10-7238	378837		3.79	1392517		4.65	727389		5.89	1324883		7.04	1079648		9.42	755189		11.0

Area Upper Limit = +100% of internal standard area

Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT

RT Lower Limit = - 0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk

\* Value outside of QC Limits

### Internal Standard Area and RT Summary

Lab Name : GEL Laboratories LLC

Client SDG: 10-1210

Instrument: MSD7.I

STD Analysis Time: 20-JAN-10 11:05

GC Column: J&amp;W DB-5MS

Data File: s7a2003.d

	1,4-Dichlorobenzene-d4			Naphthalene-d8			Acenaphthene-d10			Phenanthrene-d10			Chrysene-d12			Perylene-d12		
	Area	#	RT #	Area	#	RT #	Area	#	RT #	Area	#	RT #	Area	#	RT #	Area	#	RT #
12 Hour STD	294260		3.79	1090611		4.65	574137		5.9	1076686		7.04	892251		9.43	717180		11.0
Upper Limit	588520		4.29	2181222		5.15	1148274		6.4	2153372		7.54	1784502		9.93	1434360		11.5
Lower Limit	147130		3.29	545306		4.15	287069		5.4	538343		6.54	446126		8.93	358590		10.5
Sample ID																		
RE12-10-7242	329968		3.79	1219611		4.65	629223		5.9	1155117		7.04	913132		9.42	631931		11.0
RE12-10-7236	281642		3.79	1058246		4.65	558189		5.89	1025214		7.04	798367		9.42	562927		11.0
RE12-10-7252	249011		3.79	934855		4.65	495712		5.89	915271		7.04	724158		9.42	496354		11.0
RE12-10-7253	359171		3.79	1346790		4.65	701160		5.89	1269902		7.04	1028032		9.42	693229		11.0
RE12-10-7254	300885		3.79	1129565		4.65	602651		5.89	1085136		7.04	874972		9.42	562522		11.0
RE12-10-7255	351199		3.79	1333397		4.65	669346		5.89	1249792		7.04	1008567		9.42	678887		11.0
RE12-10-7276	261074		3.79	966701		4.65	520891		5.89	949436		7.04	773850		9.42	524309		11.0

Area Upper Limit = +100% of internal standard area

Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT

RT Lower Limit = - 0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk

\* Value outside of QC Limits

# Sample Data

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210  
Lab Sample ID: 244599008

Client ID: RE12-10-7236  
Batch ID: 941702  
Run Date: 01/20/2010 14:51  
Prep Date: 01/14/2010 19:34  
Data File: s7a2013.d

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD7.I  
Analyst: JMB3  
Aliquot: 30.04 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 21.7  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	425	ug/kg	85.0	425
108-95-2	Phenol	U	425	ug/kg	85.0	425
95-57-8	2-Chlorophenol	U	425	ug/kg	85.0	425
106-46-7	1,4-Dichlorobenzene	U	425	ug/kg	85.0	425
621-64-7	N-Nitrosodipropylamine	U	425	ug/kg	85.0	425
59-50-7	4-Chloro-3-methylphenol	U	425	ug/kg	85.0	425
83-32-9	Acenaphthene	U	42.5	ug/kg	14.0	42.5
121-14-2	2,4-Dinitrotoluene	U	425	ug/kg	42.5	425
100-02-7	4-Nitrophenol	U	425	ug/kg	140	425
87-86-5	Pentachlorophenol	U	425	ug/kg	106	425
129-00-0	Pyrene	U	42.5	ug/kg	12.7	42.5
110-86-1	Pyridine	U	425	ug/kg	85.0	425
62-53-3	Aniline	U	425	ug/kg	127	425
111-44-4	bis(2-Chloroethyl) ether	U	425	ug/kg	85.0	425
541-73-1	1,3-Dichlorobenzene	U	425	ug/kg	85.0	425
100-51-6	Benzyl alcohol	U	425	ug/kg	127	425
95-50-1	1,2-Dichlorobenzene	U	425	ug/kg	85.0	425
108-60-1	bis(2-Chloroisopropyl)ether	U	425	ug/kg	85.0	425
95-48-7	o-Cresol	U	425	ug/kg	85.0	425
65794-96-9	m,p-Cresols	U	425	ug/kg	127	425
67-72-1	Hexachloroethane	U	425	ug/kg	85.0	425
98-95-3	Nitrobenzene	U	425	ug/kg	85.0	425
78-59-1	Isophorone	U	425	ug/kg	85.0	425
88-75-5	2-Nitrophenol	U	425	ug/kg	85.0	425
105-67-9	2,4-Dimethylphenol	U	425	ug/kg	149	425
111-91-1	bis(2-Chloroethoxy)methane	U	425	ug/kg	85.0	425
120-83-2	2,4-Dichlorophenol	U	425	ug/kg	85.0	425
65-85-0	Benzoic acid	U	850	ug/kg	212	850
91-20-3	Naphthalene	U	42.5	ug/kg	12.7	42.5
106-47-8	4-Chloroaniline	U	425	ug/kg	85.0	425
87-68-3	Hexachlorobutadiene	U	425	ug/kg	85.0	425
91-57-6	2-Methylnaphthalene	U	42.5	ug/kg	8.50	42.5
77-47-4	Hexachlorocyclopentadiene	U	425	ug/kg	85.0	425
88-06-2	2,4,6-Trichlorophenol	U	425	ug/kg	85.0	425
95-95-4	2,4,5-Trichlorophenol	U	425	ug/kg	85.0	425
91-58-7	2-Chloronaphthalene	U	42.5	ug/kg	14.0	42.5
88-74-4	2-Nitroaniline	U	425	ug/kg	85.0	425
99-09-2	o-Nitroaniline					
	3-Nitroaniline	U	425	ug/kg	85.0	425

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210  
Lab Sample ID: 244599008

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD7.I  
Analyst: JMB3  
Aliquot: 30.04 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 21.7  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE12-10-7236  
Batch ID: 941702  
Run Date: 01/20/2010 14:51  
Prep Date: 01/14/2010 19:34  
Data File: s7a2013.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	425	ug/kg	85.0	425
606-20-2	2,6-Dinitrotoluene	U	425	ug/kg	42.5	425
208-96-8	Acenaphthylene	U	42.5	ug/kg	12.7	42.5
51-28-5	2,4-Dinitrophenol	U	850	ug/kg	161	850
132-64-9	Dibenzofuran	U	425	ug/kg	85.0	425
84-66-2	Diethylphthalate	U	425	ug/kg	85.0	425
86-73-7	Fluorene	U	42.5	ug/kg	12.7	42.5
7005-72-3	4-Chlorophenylphenylether	U	425	ug/kg	85.0	425
534-52-1	2-Methyl-4,6-dinitrophenol	U	425	ug/kg	85.0	425
100-01-6	4-Nitroaniline	U	425	ug/kg	127	425
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	425	ug/kg	85.0	425
122-66-7	Azobenzene	U	425	ug/kg	85.0	425
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	425	ug/kg	85.0	425
118-74-1	Hexachlorobenzene	U	425	ug/kg	85.0	425
85-01-8	Phenanthrene	U	42.5	ug/kg	12.7	42.5
120-12-7	Anthracene	U	42.5	ug/kg	8.50	42.5
84-74-2	Di-n-butylphthalate	U	425	ug/kg	85.0	425
206-44-0	Fluoranthene	U	42.5	ug/kg	12.7	42.5
85-68-7	Butylbenzylphthalate	U	425	ug/kg	85.0	425
56-55-3	Benzo(a)anthracene	U	42.5	ug/kg	12.7	42.5
91-94-1	3,3'-Dichlorobenzidine	U	425	ug/kg	127	425
218-01-9	Chrysene	U	42.5	ug/kg	12.7	42.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	425	ug/kg	85.0	425
117-84-0	Di-n-octylphthalate	U	425	ug/kg	85.0	425
205-99-2	Benzo(b)fluoranthene	U	42.5	ug/kg	12.7	42.5
207-08-9	Benzo(k)fluoranthene	U	42.5	ug/kg	12.7	42.5
50-32-8	Benzo(a)pyrene	U	42.5	ug/kg	12.7	42.5
193-39-5	Indeno(1,2,3-cd)pyrene	U	42.5	ug/kg	12.7	42.5
53-70-3	Dibenzo(a,h)anthracene	U	42.5	ug/kg	12.7	42.5
191-24-2	Benzo(ghi)perylene	U	42.5	ug/kg	12.7	42.5
120-82-1	1,2,4-Trichlorobenzene	U	425	ug/kg	85.0	425

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.03	400	ug/kg		J
	Unknown Aldol Condensate	2.82	899	ug/kg		J

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210	Date Collected: 01/07/2010 12:00	Matrix: R
Lab Sample ID: 244599008	Date Received: 01/13/2010 08:55	%Moisture: 21.7
	Client: LANL010	Project: LANL01004
Client ID: RE12-10-7236	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 941702	Inst: MSD7.I	Dilution: 1
Run Date: 01/20/2010 14:51	Analyst: JMB3	Inj. Vol: .5 uL
Prep Date: 01/14/2010 19:34	Allquot: 30.04 g	Final Volume: 1 mL
Data File: s7a2013.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
---------	----------	-----------	--------	-------	---------	---------

Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
7785-70-8	1R-.alpha.-Pinene	3.37	203	ug/kg	97	NJ
77-53-2	Cedrol	6.39	209	ug/kg	94	NJ
112-80-1	Oleic Acid	8.05	347	ug/kg	83	NJ
	Unknown	8.58	185	ug/kg		J
	Unknown	8.6	330	ug/kg		J
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	8.87	368	ug/kg	98	NJ
	Unknown	8.94	171	ug/kg		J
	Unknown	9.05	397	ug/kg		J
62600-05-9	Cedran-diol, 8S,14-	9.51	189	ug/kg	83	NJ
112-95-8	Eicosane	9.84	173	ug/kg	92	NJ
	Unknown	9.98	201	ug/kg		J
	Unknown	11.51	260	ug/kg		J
	Unknown	12.45	525	ug/kg		J
	Unknown	12.61	269	ug/kg		J
83-46-5	.beta.-Sitosterol	13.23	1420	ug/kg	99	NJ
	Unknown	13.71	693	ug/kg		J
	Unknown	14.3	497	ug/kg		J

Data File: /chem/MSD7.i/s012010.b/s7a2013.d  
Report Date: 20-Jan-2010 16:00

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GEL Laboratories LLC

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Data file : /chem/MSD7.i/s012010.b/s7a2013.d  
Lab Smp Id: 244599008 Client Smp ID: RE12-10-7236  
Inj Date : 20-JAN-2010 14:51  
Operator : JMB3 Inst ID: MSD7.i  
Smp Info : |244599008|941702|1|SVM|1|LANL  
Misc Info : |MSD8270\_S|WBN100107-02|  
Comment : Column: J&W Scientific DB-5MS 25m x 0.2mm x 0.33um film thickness  
Method : /chem/MSD7.i/s012010.b/MSD7-M8270C-AQA-011310.m  
Meth Date : 20-Jan-2010 13:15 jos00786 Quant Type: ISTD  
Cal Date : 15-JAN-2010 19:06 Cal File: s7a1515.d  
Als bottle: 12  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1210.sub  
Target Version: 3.50  
Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.04000	weight of sample
M	21.66640	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE		ON-COLUMN	FINAL
	=====	==	=====	=====	=====		(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.793	3.793	(1.000)	281642		40.0000	
* 29 Naphthalene-d8	136	4.650	4.655	(1.000)	1058246		40.0000	
* 46 Acenaphthene-d10	164	5.892	5.897	(1.000)	558189		40.0000	
* 67 Phenanthrene-d10	188	7.043	7.043	(1.000)	1025214		40.0000	
* 91 Chrysene-d12	240	9.422	9.431	(1.000)	798367		40.0000	
* 98 Perylene-d12	264	10.967	10.977	(1.000)	562927		40.0000	
\$ 3 2-Fluorophenol	112	2.993	2.984	(0.789)	558716		69.0347	2930
\$ 5 Phenol-d5	99	3.513	3.513	(0.926)	732557		70.2039	2980
\$ 20 Nitrobenzene-d5	82	4.149	4.154	(0.892)	335531		38.4364	1630
\$ 39 2-Fluorobiphenyl	172	5.391	5.391	(0.915)	622986		37.8748	1610
\$ 60 2,4,6-Tribromophenol	329	6.479	6.484	(1.100)	124030		88.3235	3750
\$ 81 p-Terphenyl-d14	244	8.406	8.406	(0.892)	636454		46.6748	1980



## ION RATIO REPORT

## SV REPORT

Data file: s7a2013.d

Report Date: 01/20/2010 15:54

Lab. ID: 244599008

SampleType: SAMPLE

Injection Date: 20-JAN-2010 14:51

Operator: JMB3

Instrument: MSD7.i

Sample Info: |244599008|941702|1|SVM|1|LANL

Miscellaneous Info: |MSD8270\_S|WBN100107-02|

Comment:

Method used: /chem/MSD7.i/s012010.b/MSD7-M8270C-AQA-011310.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1210

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4	Aniline	CAS#: 62-53-3				
66	37389	3.51	3.58	80-120	100	(T)
93	2472	3.47	3.58	187-247	7	(QT)
-----						
17	N-Nitrosodipropylamine	CAS#: 621-64-7				
70	49492	4.15	4.03	80-120	100	(T)
42	39778	4.15	4.03	63-123	80	(T)
-----						
27	Benzoic acid	CAS#: 65-85-0				
105	417	4.46	4.43	80-120	100	( )
122	1461	4.39	4.43	58-118	350	(Q)
77	786	4.43	4.43	51-111	188	(Q)
-----						
40	2-Chloronaphthalene	CAS#: 91-58-7				
162	19880	5.63	5.50	80-120	100	(T)
164	1190	5.63	5.50	2- 62	6	(T)
127	1562	5.63	5.50	7- 67	8	(T)
-----						
42	o-Nitroaniline	CAS#: 88-74-4				
65	28867	5.63	5.56	80-120	100	(T)
92	33113	5.63	5.56	26- 86	115	(QT)
138	2152	5.63	5.56	61-121	7	(QT)
-----						
43	Dimethylphthalate	CAS#: 131-11-3				
163	100455	5.89	5.67	80-120	100	(T)
164	557940	5.89	5.67	0- 40	555	(QT)
-----						

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
44	2,6-Dinitrotoluene			CAS#: 606-20-2		
165	72745	5.89	5.72	80-120	100	(T)
63	1475	5.89	5.72	49-109	2	(QT)
-----						
50	2,4-Dinitrotoluene			CAS#: 121-14-2		
165	72745	5.89	6.01	80-120	100	(T)
89	2247	5.89	6.01	44-104	3	(QT)
63	1475	5.89	6.01	29- 89	2	(QT)
-----						
53	Fluorene			CAS#: 86-73-7		
166	10683	6.48	6.30	80-120	100	(T)
165	11620	6.48	6.30	56-116	109	(T)
167	3902	6.48	6.30	0- 44	37	(T)
-----						
61	4-Bromophenylphenylether			CAS#: 101-55-3		
248	9363	6.48	6.66	80-120	100	(T)
141	69653	6.48	6.66	57-117	744	(QT)
250	18218	6.48	6.66	68-128	195	(QT)

Q qualifier indicates ion failed ratio requirement

Data File: /chem/MSD7.i/s012010.b/s7a2013.d  
Report Date: 20-Jan-2010 16:00

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GEL Laboratories LLC

GEL Laboratories, LLC

Data file : /chem/MSD7.i/s012010.b/s7a2013.d  
Lab Smp Id: 244599008 Client Smp ID: RE12-10-7236  
Inj Date : 20-JAN-2010 14:51  
Operator : JMB3 Inst ID: MSD7.i  
Smp Info : |244599008|941702|1|SVM|1|LANL  
Misc Info : |MSD8270 S|WBN100107-02|  
Comment : Column: J&W Scientific DB-5MS 25m x 0.2mm x 0.33um film thickness  
Method : /chem/MSD7.i/s012010.b/MSD7-M8270C-AQA-011310.m  
Meth Date : 20-Jan-2010 13:15 jos00786 Quant Type: ISTD  
Cal Date : 15-JAN-2010 19:06 Cal File: s7a1515.d  
Als bottle: 12  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1210.sub  
Target Version: 3.50  
Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.04000	weight of sample
M	21.66640	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.793	1778824	40.000
* 46 Acenaphthene-d10	5.892	2455756	40.000
* 67 Phenanthrene-d10	7.043	2624463	40.000
* 91 Chrysene-d12	9.422	2717812	40.000
* 98 Perylene-d12	10.967	1656411	40.000

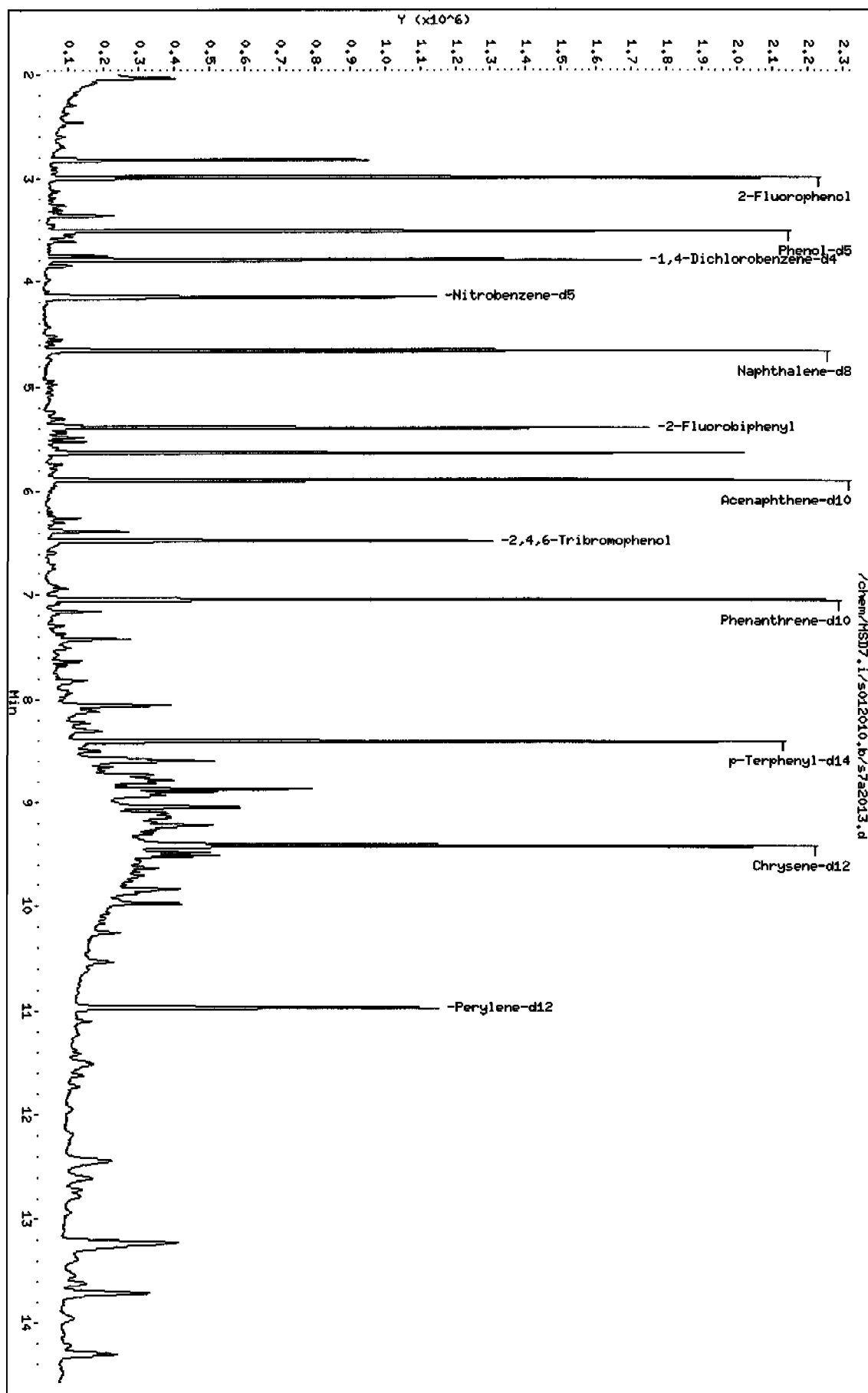
CONCENTRATIONS				QUANT			
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
Unknown					CAS #:		
2.035	418980	9.42150675	400	0		0	10
Unknown Aldol Condensate					CAS #:		
2.825	941128	21.1629165	899	0		0	10
1R-.alpha.-Pinene					CAS #: 7785-70-8		
3.369	212129	4.77010370	203	97	NIST05.L	15188	10
Cedrol					CAS #: 77-53-2		
6.388	302630	4.92932218	209	94	NIST05.L	72886	46
Oleic Acid					CAS #: 112-80-1		
8.054	535089	8.15540307	346	83	NIST05.L	113354	67
Unknown					CAS #:		
8.579	296379	4.36202810	185	0		0	91
Unknown					CAS #:		
8.603	527291	7.76052106	330	0		0	91
1-Phenanthrenecarboxylic acid, 1,2,3,4,4					CAS #: 1235-74-1		
8.873	588011	8.65418094	368	98	NIST05.L	133618	91
Unknown					CAS #:		
8.935	273125	4.01978350	171	0		0	91
Unknown					CAS #:		
9.051	635374	9.35125086	397	0		0	91
Cedran-diol, 8S,14-					CAS #: 62600-05-9		
9.513	301560	4.43828072	189	83	NIST05.L	83830	91
Eicosane					CAS #: 112-95-8		
9.836	276211	4.06519026	173	92	NIST05.L	113488	91
Unknown					CAS #:		
9.975	321087	4.72566366	201	0		0	91
Unknown					CAS #:		
11.511	253689	6.12622847	260	0		0	98
Unknown					CAS #:		
12.446	511331	12.3479174	525	0		0	98

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
Unknown				CAS #:			
12.609	261901	6.32453827	269	0		0	98
.beta.-Sitosterol				CAS #: 83-46-5			
13.226	1383469	33.4088281	1420	99	NIST05.L	174399	98
Unknown				CAS #:			
13.707	675509	16.3125821	693	0		0	98
Unknown				CAS #:			
14.304	484307	11.6953260	497	0		0	98

Data File: /chem/MSD7.i/s012010.b/s7a2013.d  
 Date : 20-JAN-2010 14:51  
 Client ID: REL2-10-7236  
 Sample Info: 124459008194170211SVN11LNL  
 Volume Injected (uL): 0.5  
 Column phase: J&W DB-5MS

Instrument: MSD7.i  
 Operator: JHB3  
 Column diameter: 0.20



Date : 20-JAN-2010 14:51

Client ID: RE12-10-7236

Instrument: MSD7.1

Sample Info: 1244599008194170211|SVH11|LANL

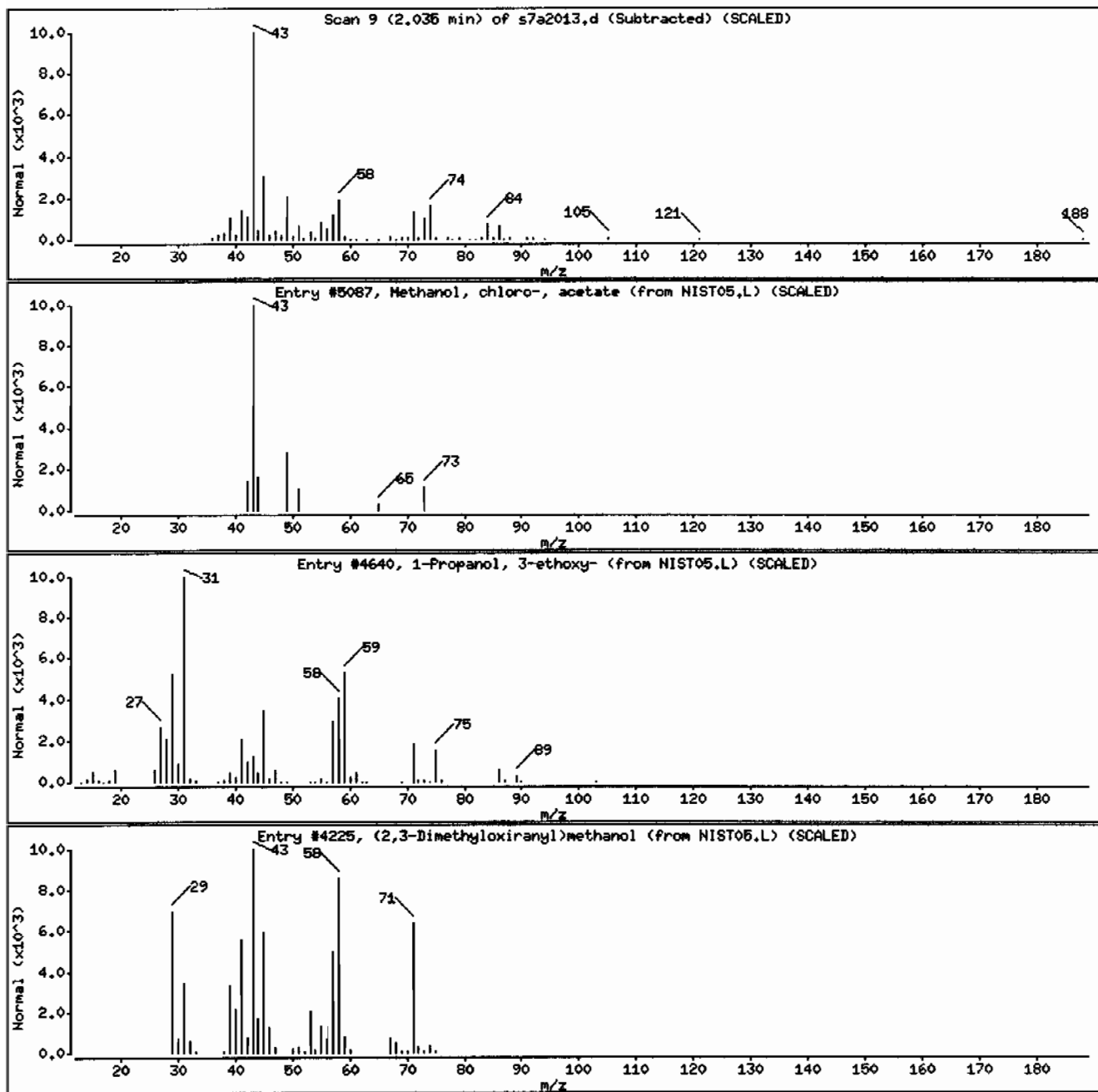
Volume Injected (uL): 0.5

Operator: JHB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Methanol, chloro-, acetate	625-56-9	NIST05.L	5087	32	C3H5ClO2	108
1-Propanol, 3-ethoxy-	111-35-3	NIST05.L	4640	9	C5H12O2	104
(2,3-Dimethyloxiranyl)methanol	1000306-71-8	NIST05.L	4225	9	C5H10O2	102



Date : 20-JAN-2010 14:51

Client ID: RE12-10-7236

Instrument: MSD7.i

Sample Info: 1244599008194170211SVMI11LANL

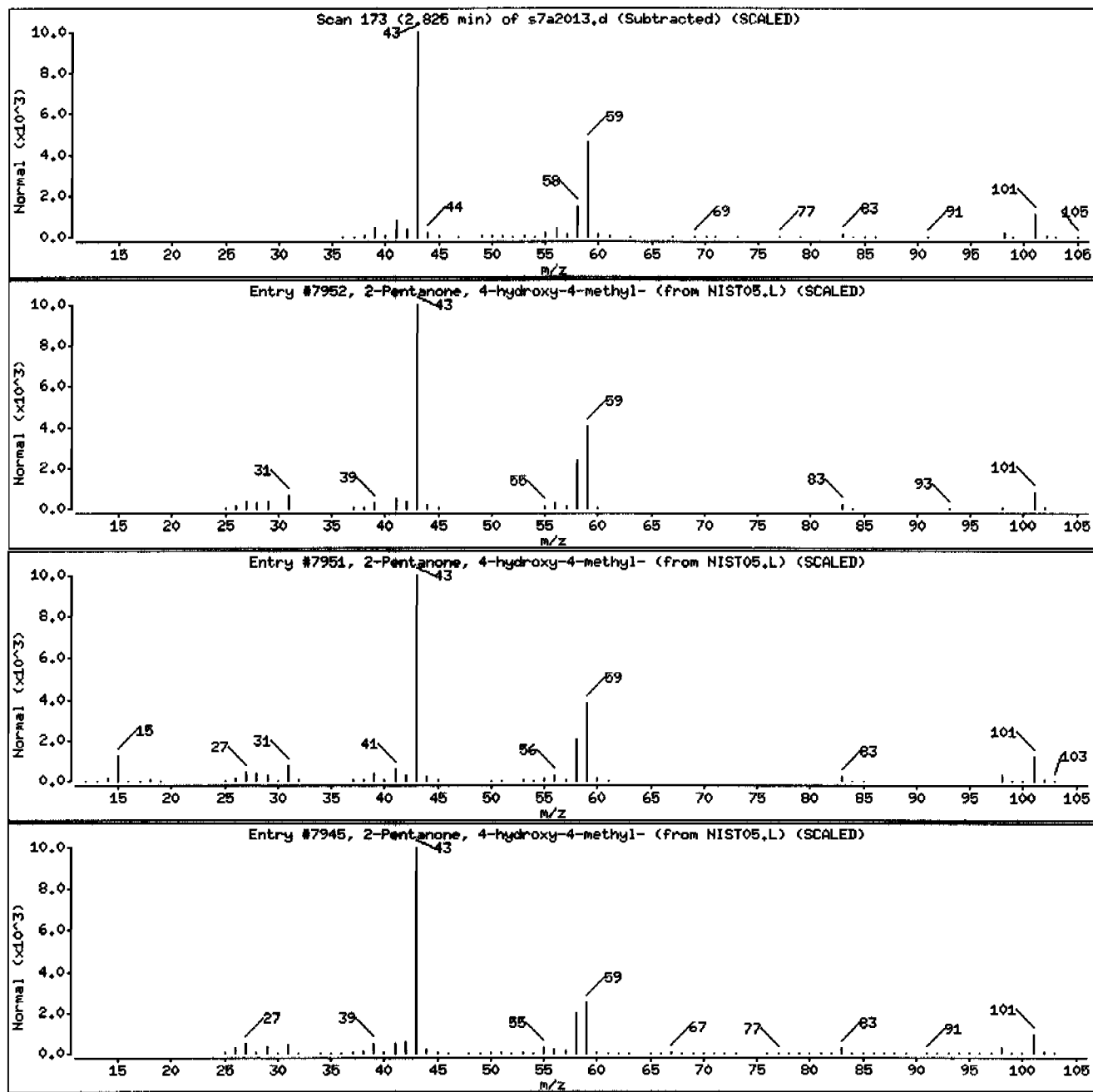
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	38	C6H12O2	116





Date : 20-JAN-2010 14:51

Client ID: RE12-10-7236

Instrument: MSD7.i

Sample Info: I244599008194170211SVH111LANL

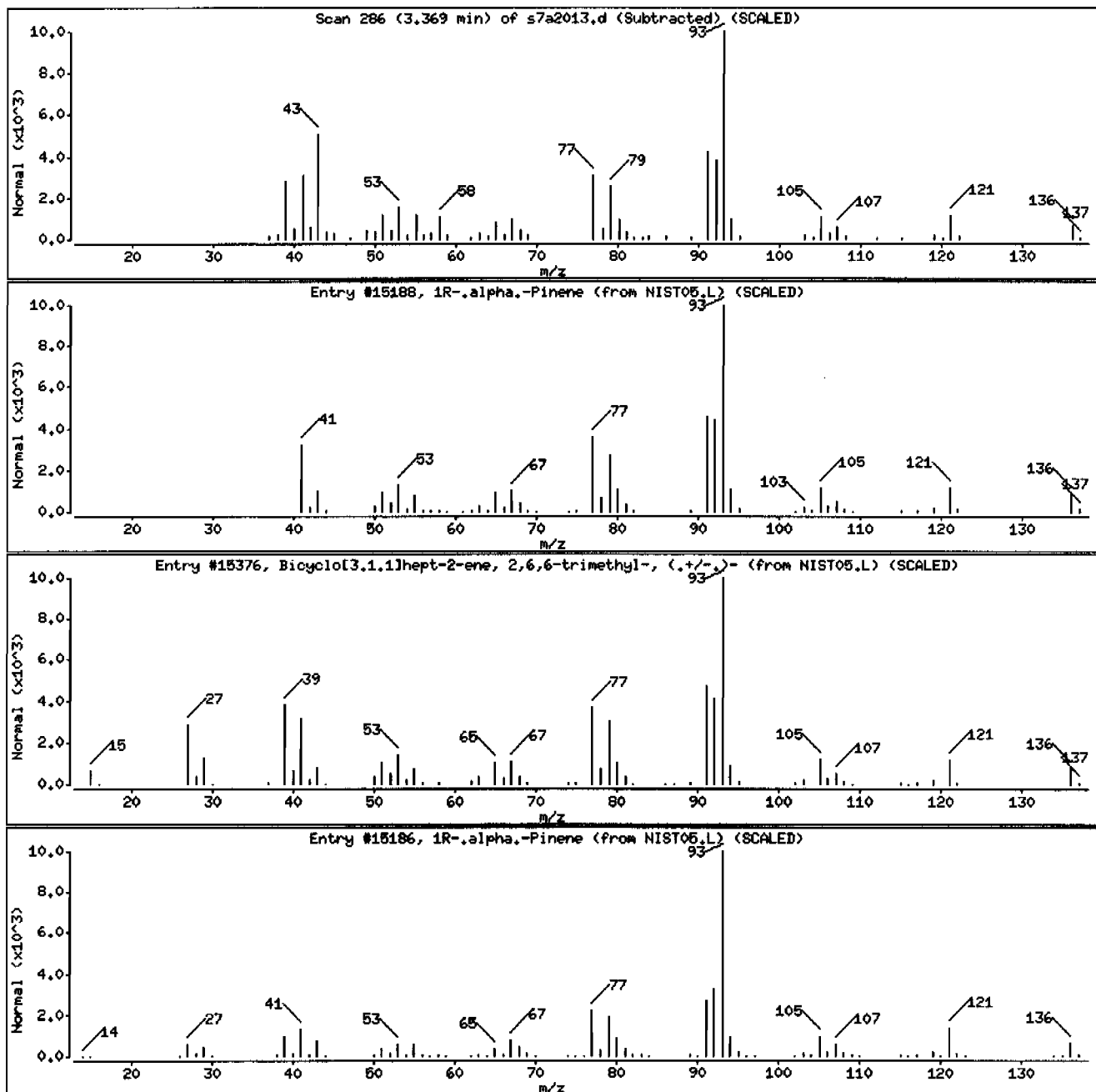
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1R-.alpha.-Pinene	7785-70-8	NIST05.L	15188	97	C10H16	136
Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethy	2437-95-8	NIST05.L	15376	96	C10H16	136
1R-.alpha.-Pinene	7785-70-8	NIST05.L	15186	96	C10H16	136



Date: 20-JAN-2010 14:51

Client ID: RE12-10-7236

Instrument: MSD7.i

Sample Info: 12445990081941702111SVMI11LAML

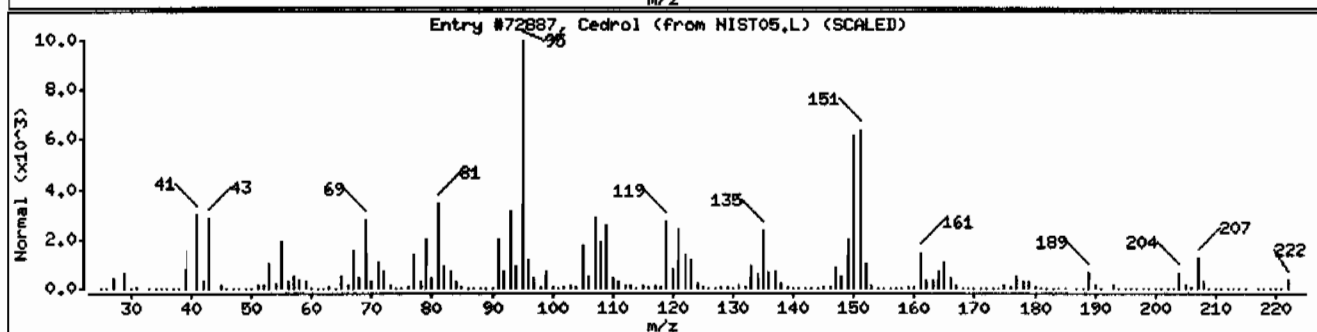
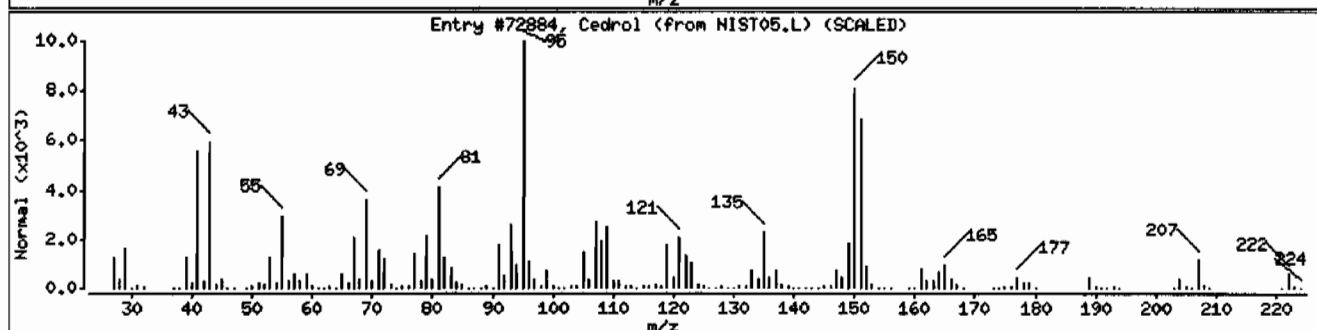
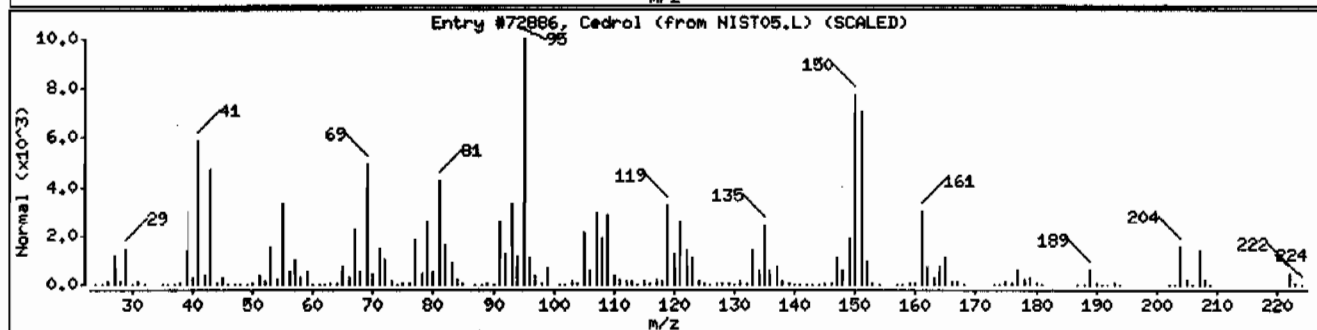
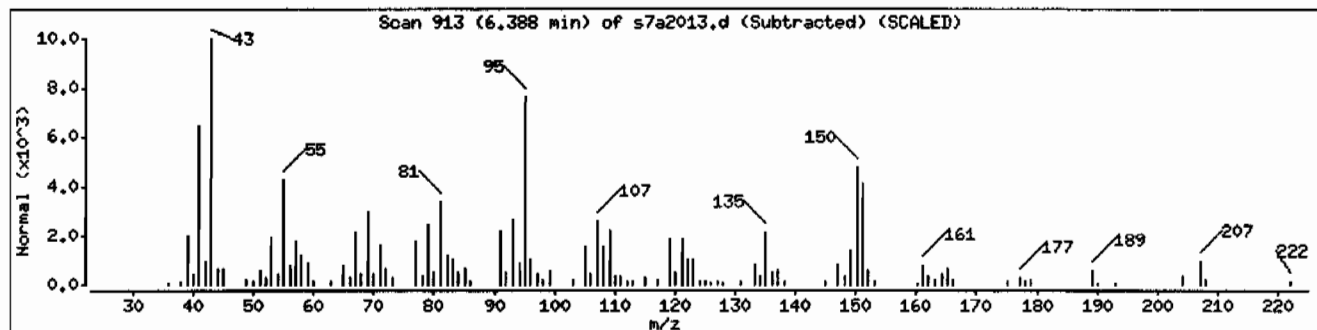
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cedrol	77-53-2	NIST05.L	72886	94	C15H26O	222
Cedrol	77-53-2	NIST05.L	72884	91	C15H26O	222
Cedrol	77-53-2	NIST05.L	72887	90	C15H26O	222



Date: 20-JAN-2010 14:51

Client ID: RE12-10-7236

Instrument: MSD7.1

Sample Info: 1244599008194170211SVH11ILANL

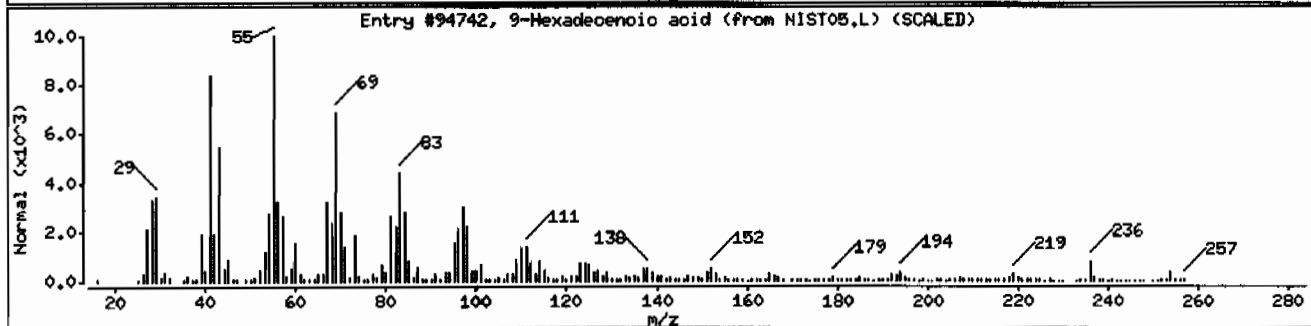
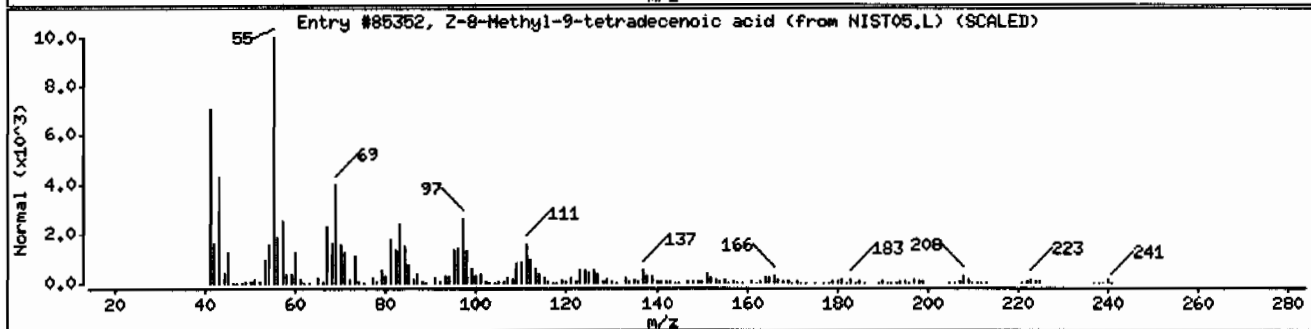
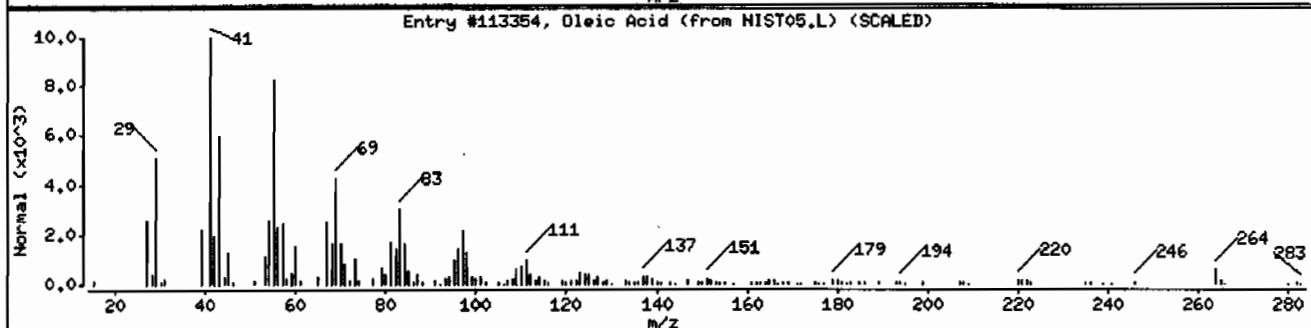
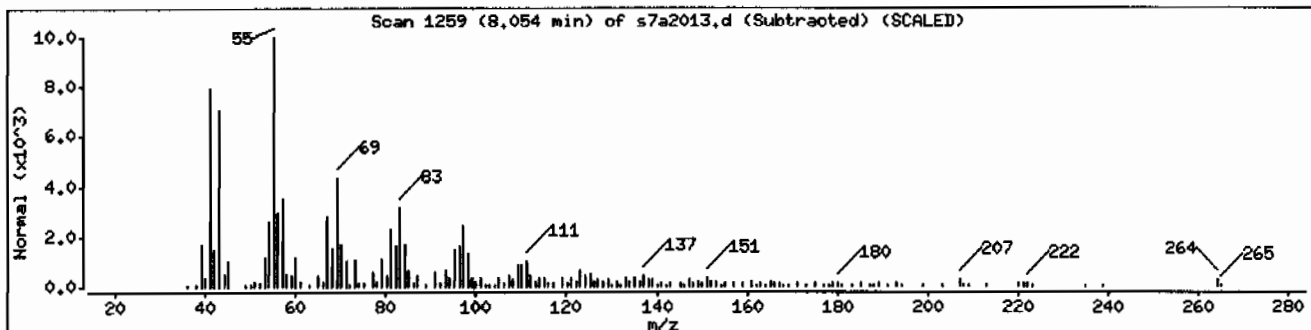
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Oleic Acid	112-80-1	NIST05.L	113354	83	C18H34O2	282
Z-8-Methyl-9-tetradecenoic acid	1000130-84-5	NIST05.L	85352	74	C15H28O2	240
9-Hexadecenoic acid	2091-29-4	NIST05.L	94742	72	C16H30O2	254



Date : 20-JAN-2010 14:51

Client ID: RE12-10-7236

Instrument: MSD7.i

Sample Info: 1244599008194170211SVH111LANL

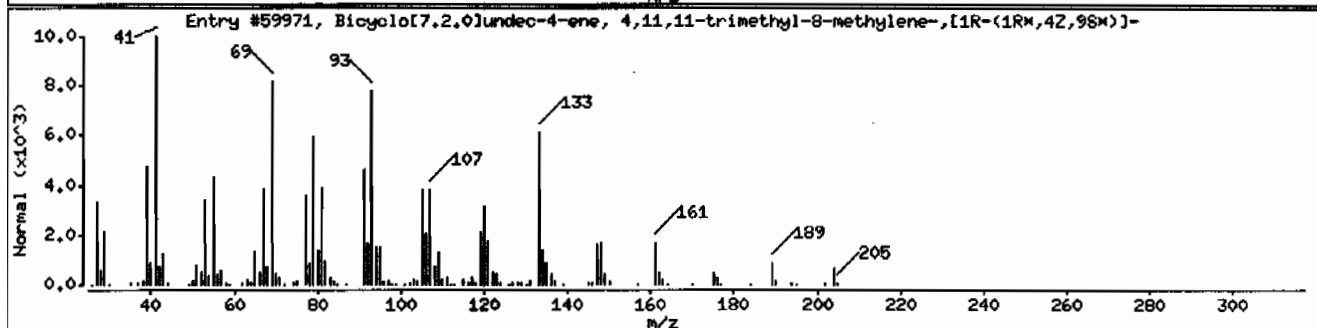
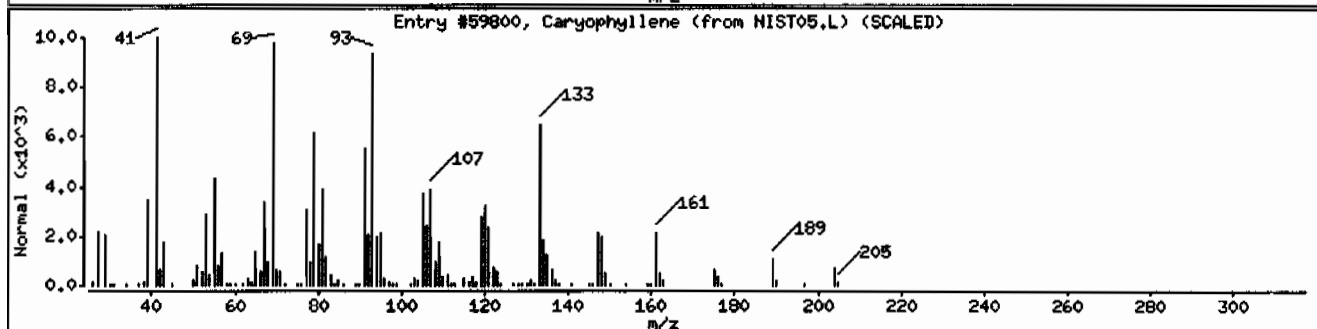
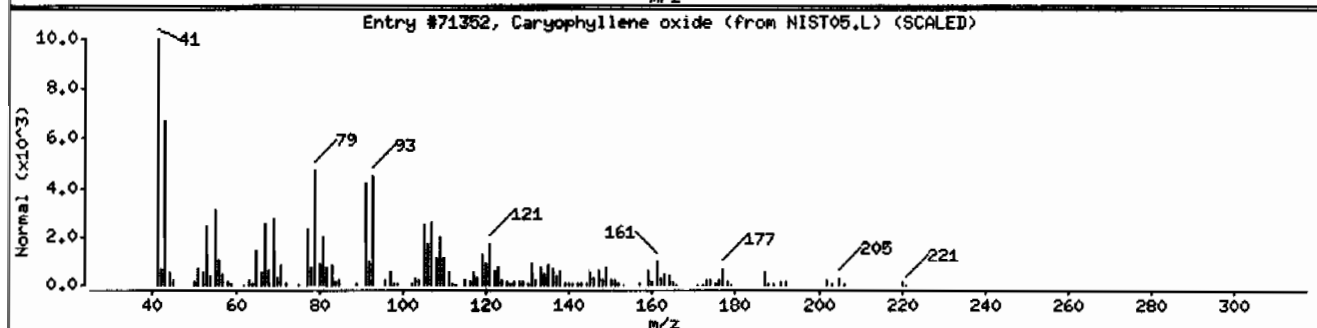
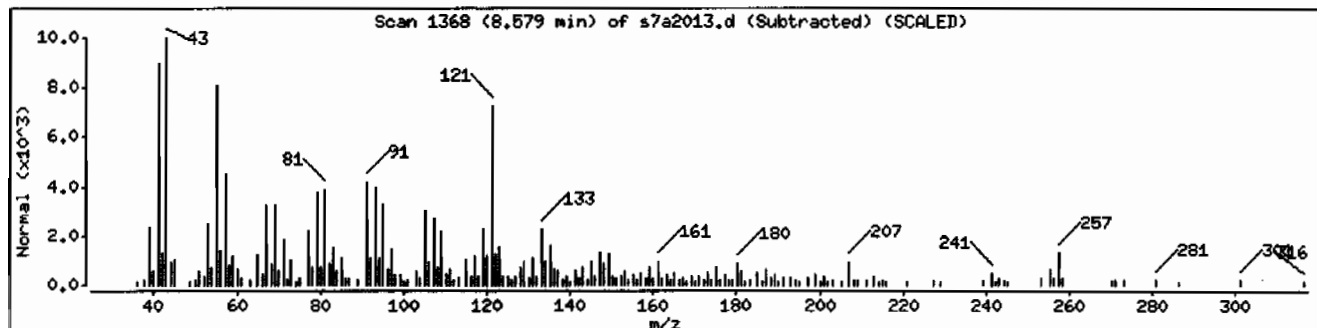
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Caryophyllene oxide	1139-30-6	NIST05.L	71352	43	C <sub>15</sub> H <sub>24</sub> O	220
Caryophyllene	87-44-5	NIST05.L	59800	43	C <sub>15</sub> H <sub>24</sub>	204
Bicyclo[7.2.0]undec-4-ene, 4,11,11-trimethyl-	118-65-0	NIST05.L	59971	38	C <sub>15</sub> H <sub>24</sub>	204



Date : 20-JAN-2010 14:51

Client ID: RE12-10-7236

Instrument: MSD7.1

Sample Info: 1244599008194170211SVH11/LANL

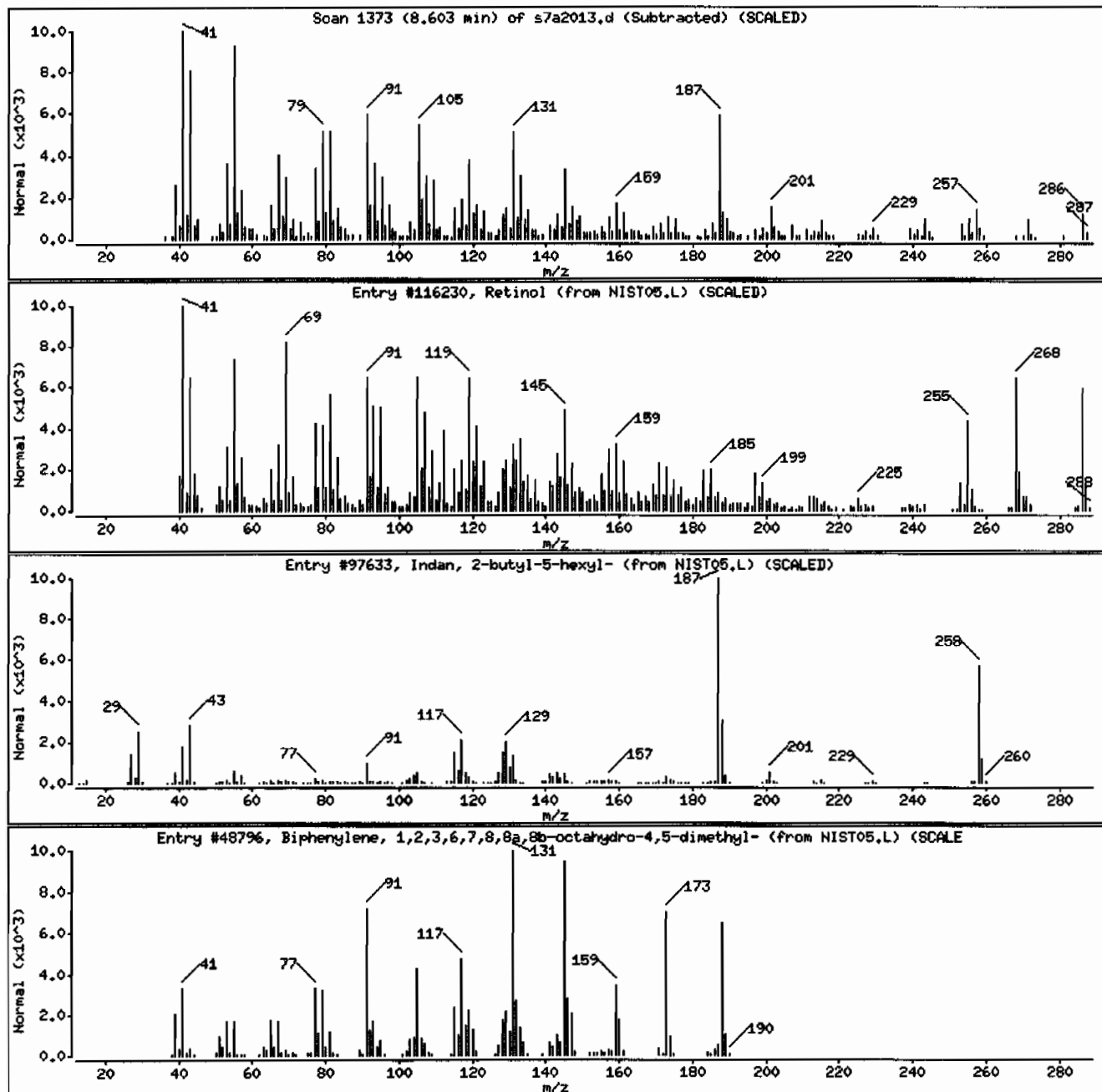
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Retinol	68-26-8	NIST05.L	116230	60	C20H30O	286
Indan, 2-butyl-5-hexyl-	25446-32-6	NIST05.L	97633	38	C19H30	258
Biphenylene, 1,2,3,6,7,8,8a,8b-octahydro	106988-87-8	NIST05.L	48796	30	C14H20	188



Date : 20-JAN-2010 14:51

Client ID: RE12-10-7236

Instrument: MSD7.i

Sample Info: I244599008I94170211ISVM11ILANL

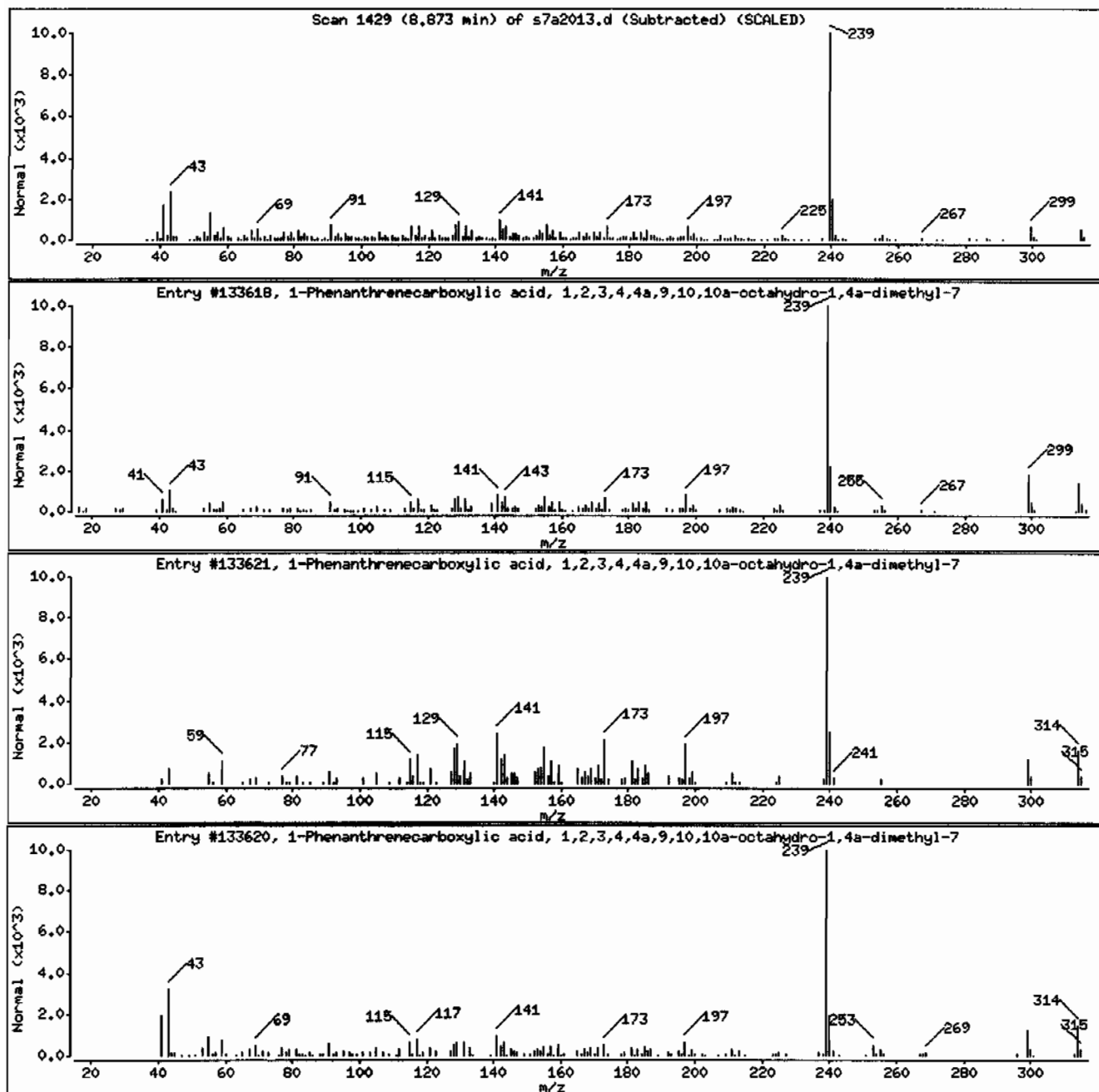
Volume Injected (uL): 0.5

Operator: JHB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133618	98	C21H30O2	314
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133621	95	C21H30O2	314
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133620	93	C21H30O2	314



Date : 20-JAN-2010 14:51

Client ID: RE12-10-7236

Instrument: HSD7,i

Sample Info: 1244599008194170211SVH111LANH

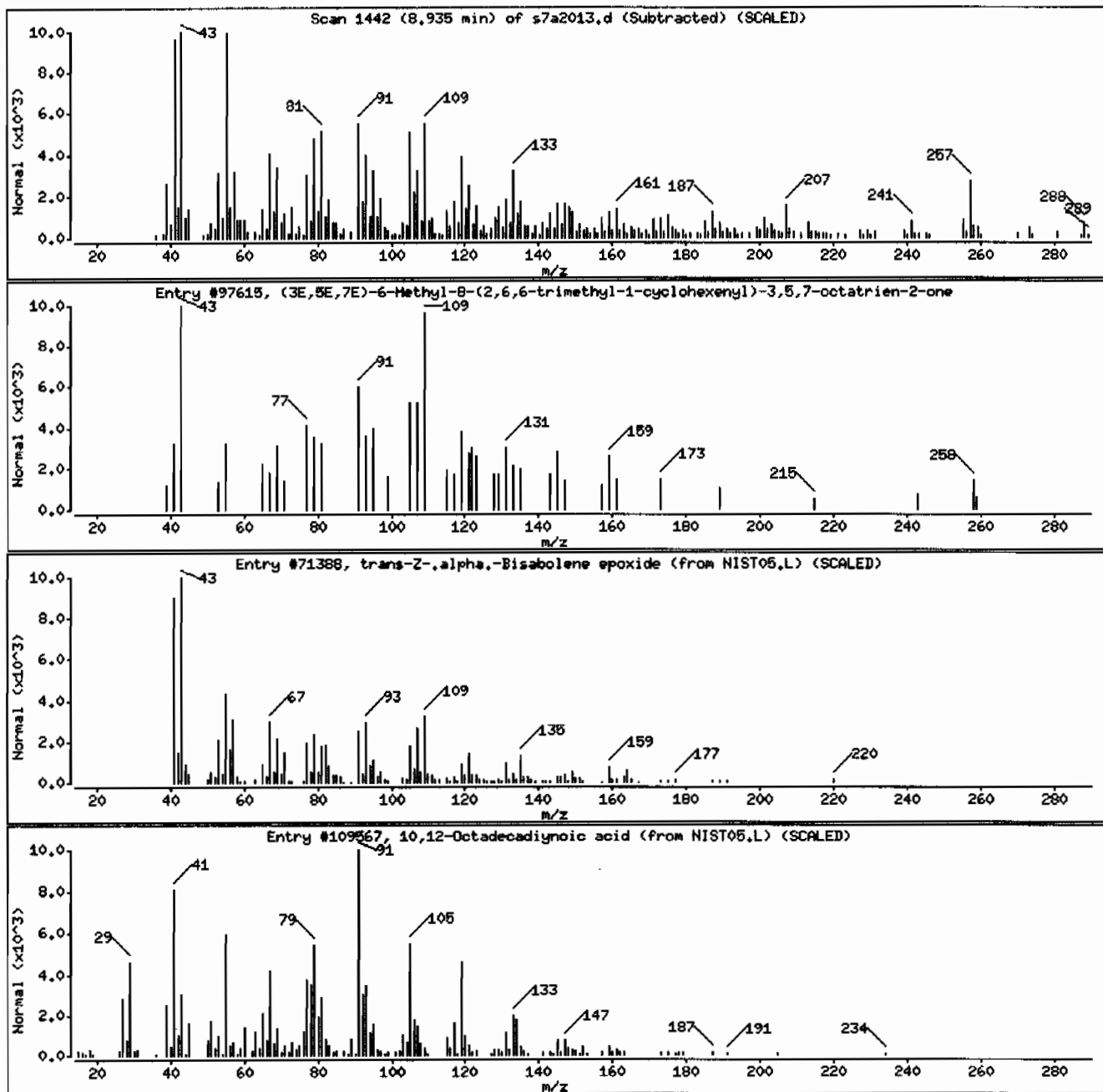
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
(3E,5E,7E)-6-Methyl-8-(2,6,6-trimethyl-1	17974-57-1	NIST05.L	97615	60	C18H26O	258
trans-Z,-alpha,-Bisabolene epoxide	1000131-71-1	NIST05.L	71388	46	C15H24O	220
10,12-Octadecadiynoic acid	7333-25-7	NIST05.L	109567	43	C18H28O2	276



Date : 20-JAN-2010 14:51

Client ID: RE12-10-7236

Instrument: HSD7.i

Sample Info: 12445990081941702111SVH111LANL

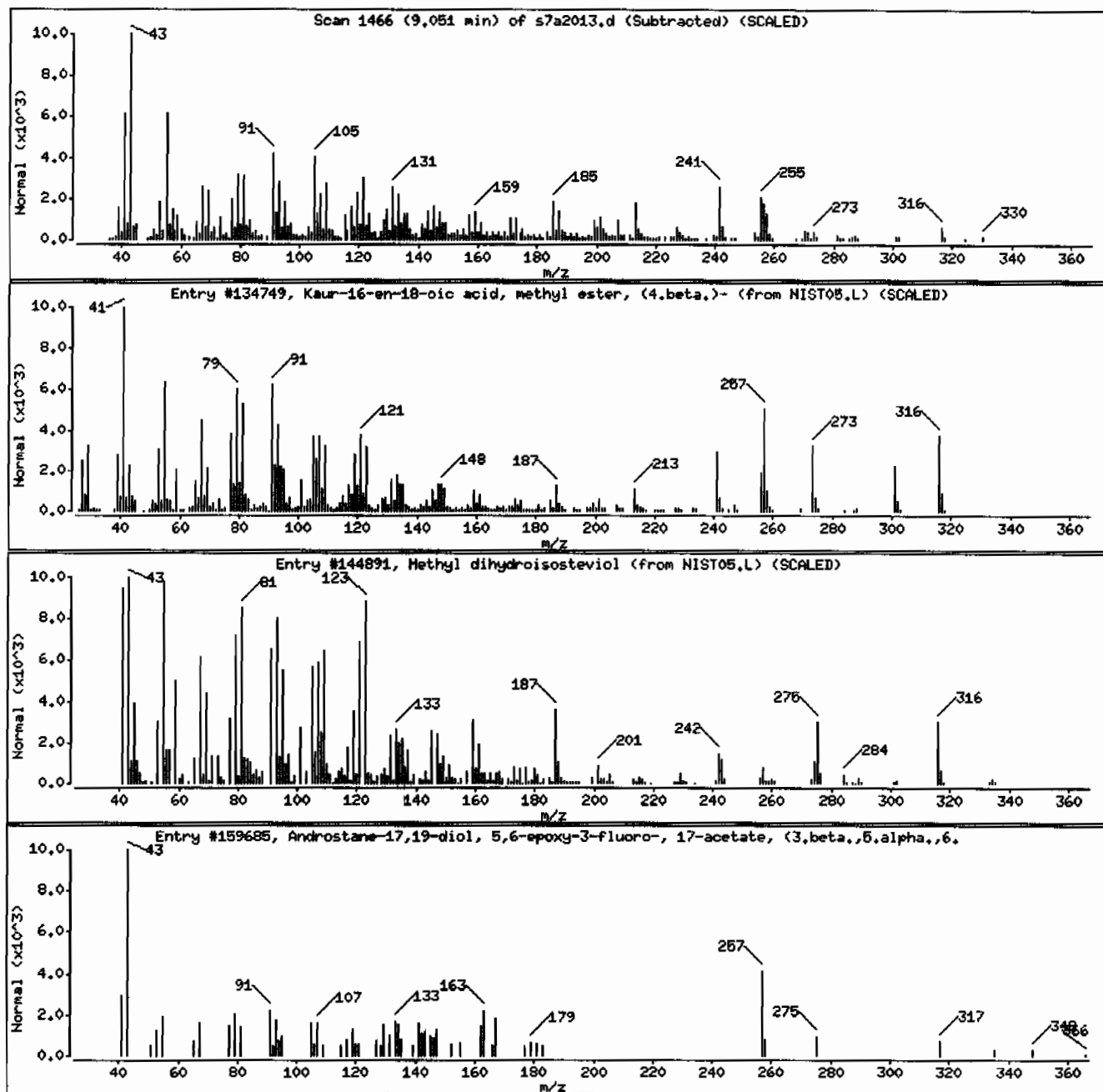
Volume Injected (uL): 0.5

Operator: JHB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Kaur-16-en-18-oic acid, methyl ester, (4	5524-25-4	NIST05.L	134749	47	C21H32O2	316
Methyl dihydroisosteviol	202577-02-4	NIST05.L	144891	16	C21H34O3	334
Androstane-17,19-diol, 5,6-epoxy-3-fluor	40242-94-2	NIST05.L	159685	12	C21H31FO4	366





Date: 20-JAN-2010 14:51

Client ID: RE12-10-7236

Instrument: HSD7.i

Sample Info: I244599008194170211SVH111LANL

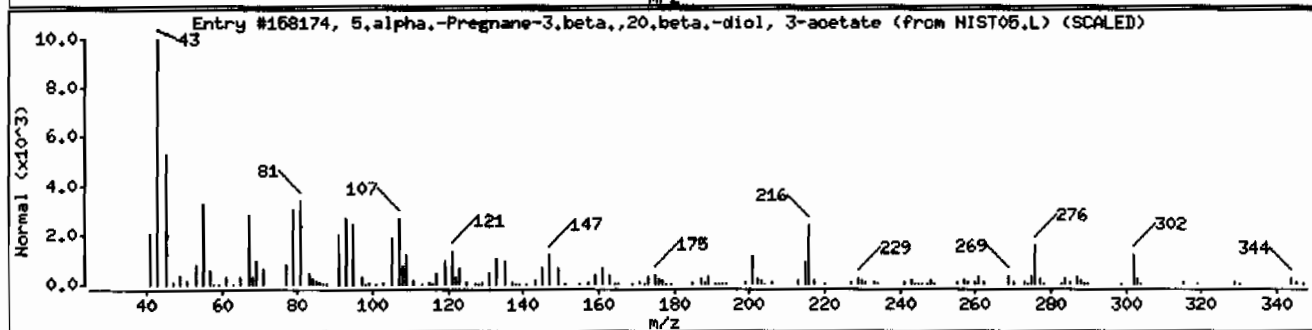
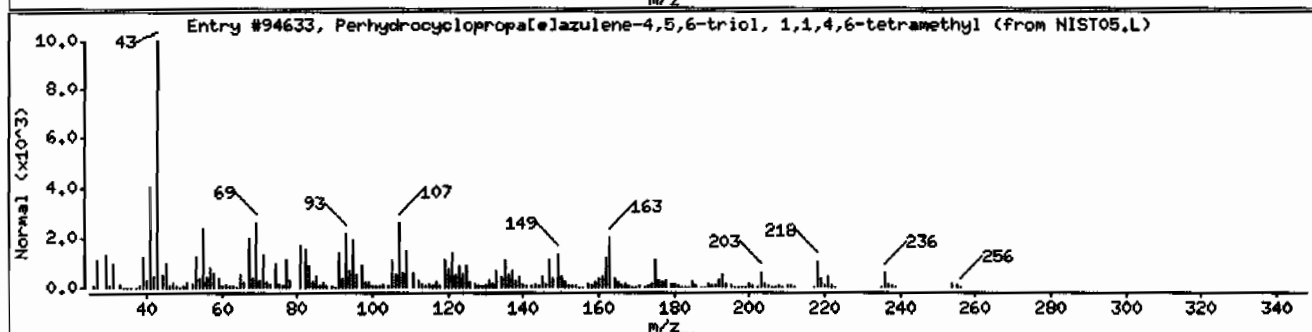
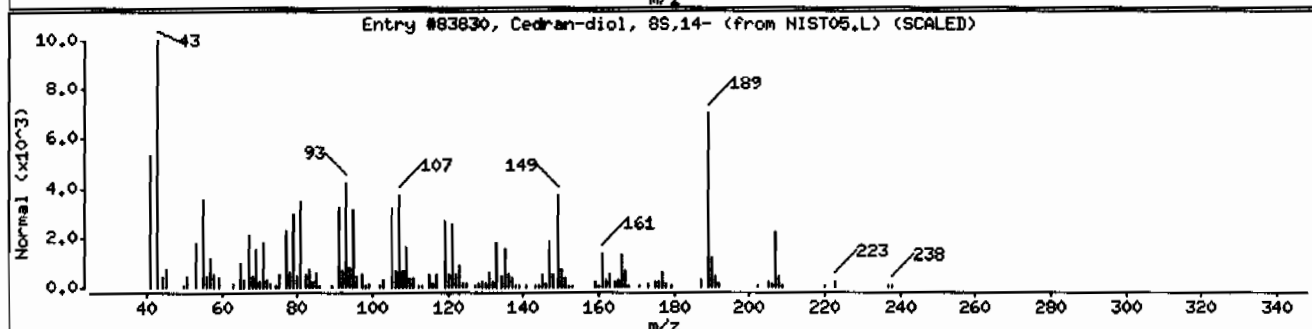
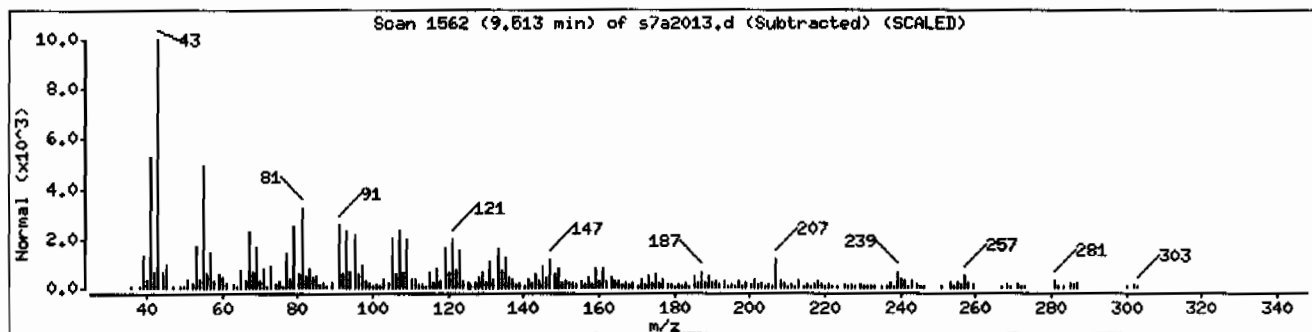
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cedran-diol, 8S,14-	62600-06-9	NIST05.L	83830	83	C <sub>15</sub> H <sub>26</sub> O <sub>2</sub>	238
Perhydrocyclopropa[elazulene-4,5,6-triol	1000197-87-8	NIST05.L	94633	53	C <sub>15</sub> H <sub>26</sub> O <sub>3</sub>	254
5.alpha.-Pregnane-3.beta.,20.beta.-diol,	17182-23-9	NIST05.L	158174	47	C <sub>23</sub> H <sub>38</sub> O <sub>3</sub>	362



Date : 20-JAN-2010 14:51

Client ID: RE12-10-7236

Instrument: MSD7.i

Sample Info: 1244599008194170211SVH111LANL

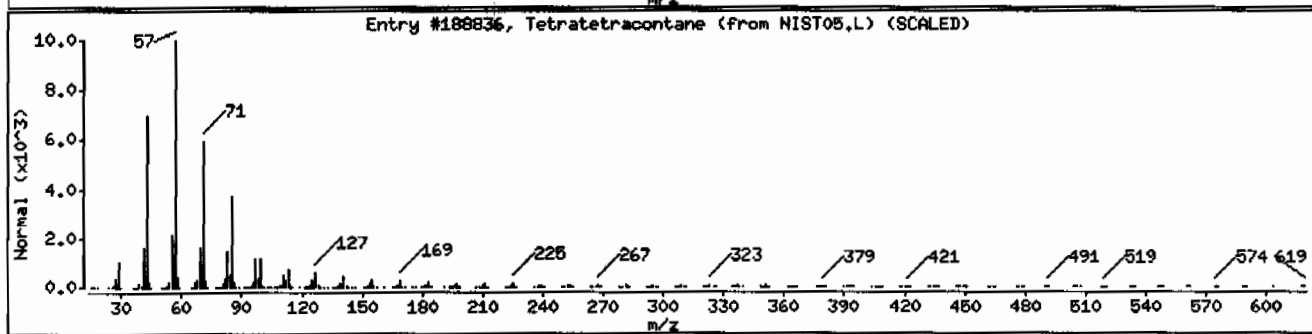
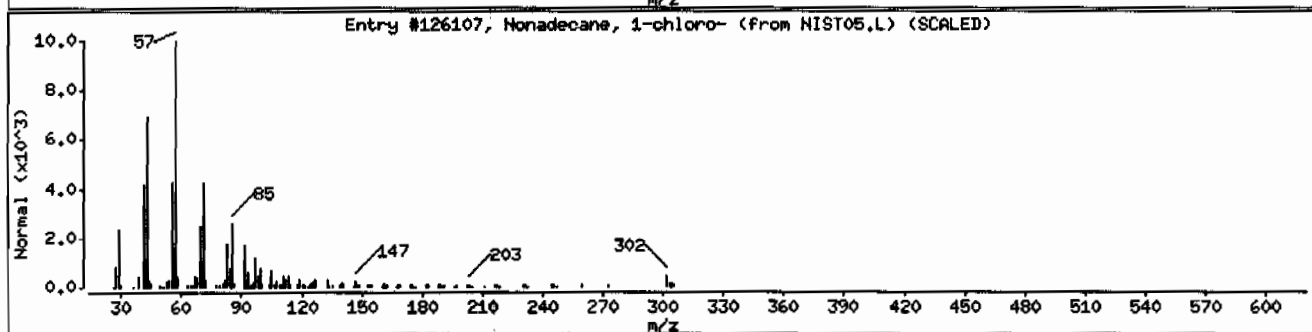
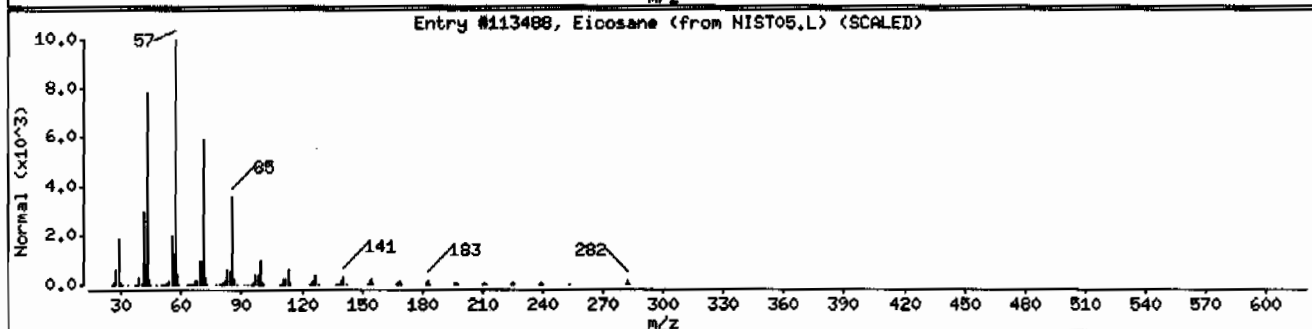
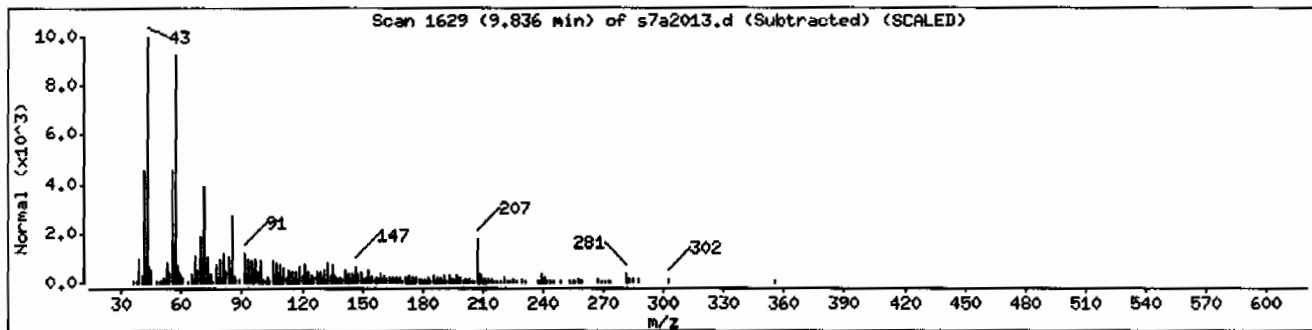
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Eicosane	112-95-8	NIST05.L	113488	92	C20H42	282
Nonadecane, 1-chloro-	62016-76-6	NIST05.L	126107	91	C19H39Cl	302
Tetratetracontane	7098-22-8	NIST05.L	188836	76	C44H90	619



Date: 20-JAN-2010 14:51

Client ID: RE12-10-7236

Instrument: HSD7.i

Sample Info: 1244599008194170211ISVH11ILANL

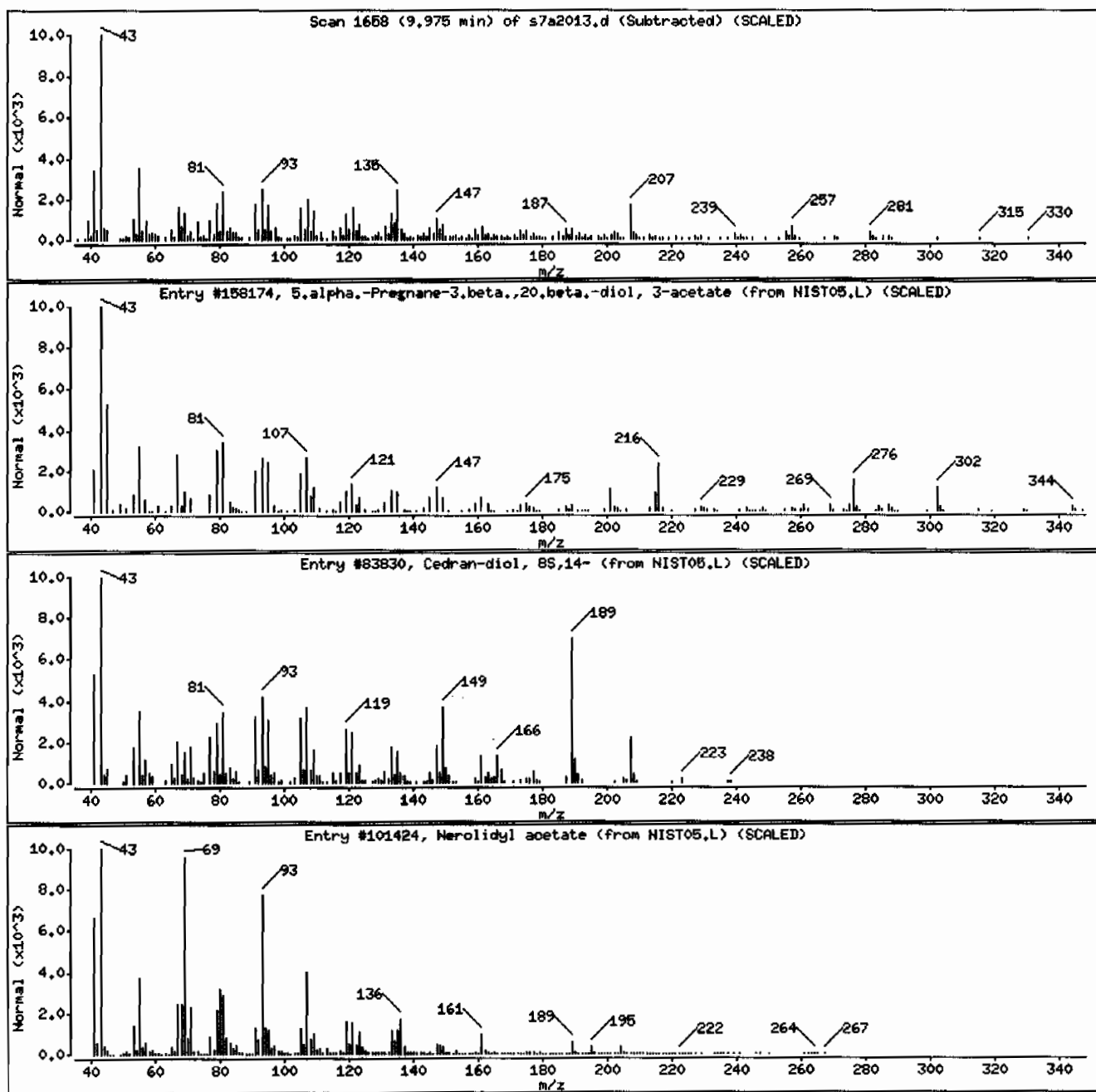
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
5.alpha.-Pregnane-3.beta.,20.beta.-diol,	17182-23-9	NIST05.L	158174	43	C23H38O3	362
Cedran-diol, 8S,14-	62600-05-9	NIST05.L	83830	42	C15H26O2	238
Nerolidyl acetate	2306-78-7	NIST05.L	101424	38	C17H28O2	264



Date: 20-JAN-2010 14:51

Client ID: RE12-10-7236

Instrument: MSD7.1

Sample Info: 1244599008194170211SVH111LANL

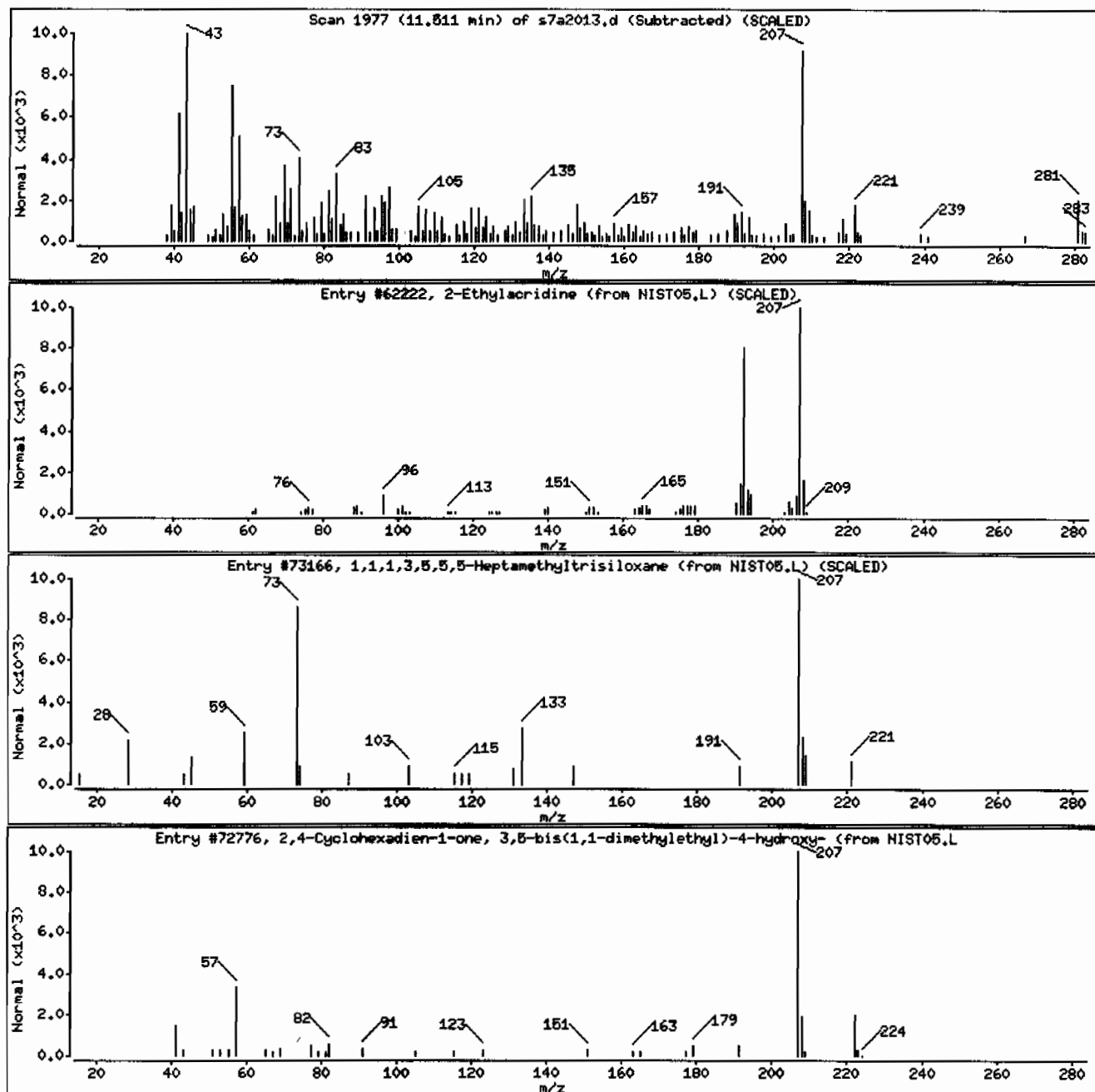
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Ethylacridine	56761-83-2	NIST05.L	62222	60	C15H13N	207
1,1,1,3,5,5,5-Heptamethyltrisiloxane	1873-88-7	NIST05.L	73166	47	C7H22O2Si3	222
2,4-Cyclohexadien-1-one, 3,5-bis(1,1-dim	54965-43-4	NIST05.L	72776	46	C14H22O2	222



Date : 20-JAN-2010 14:51

Client ID: RE12-10-7236

Instrument: HSD7.i

Sample Info: I2445990081941702111SVH111LANL

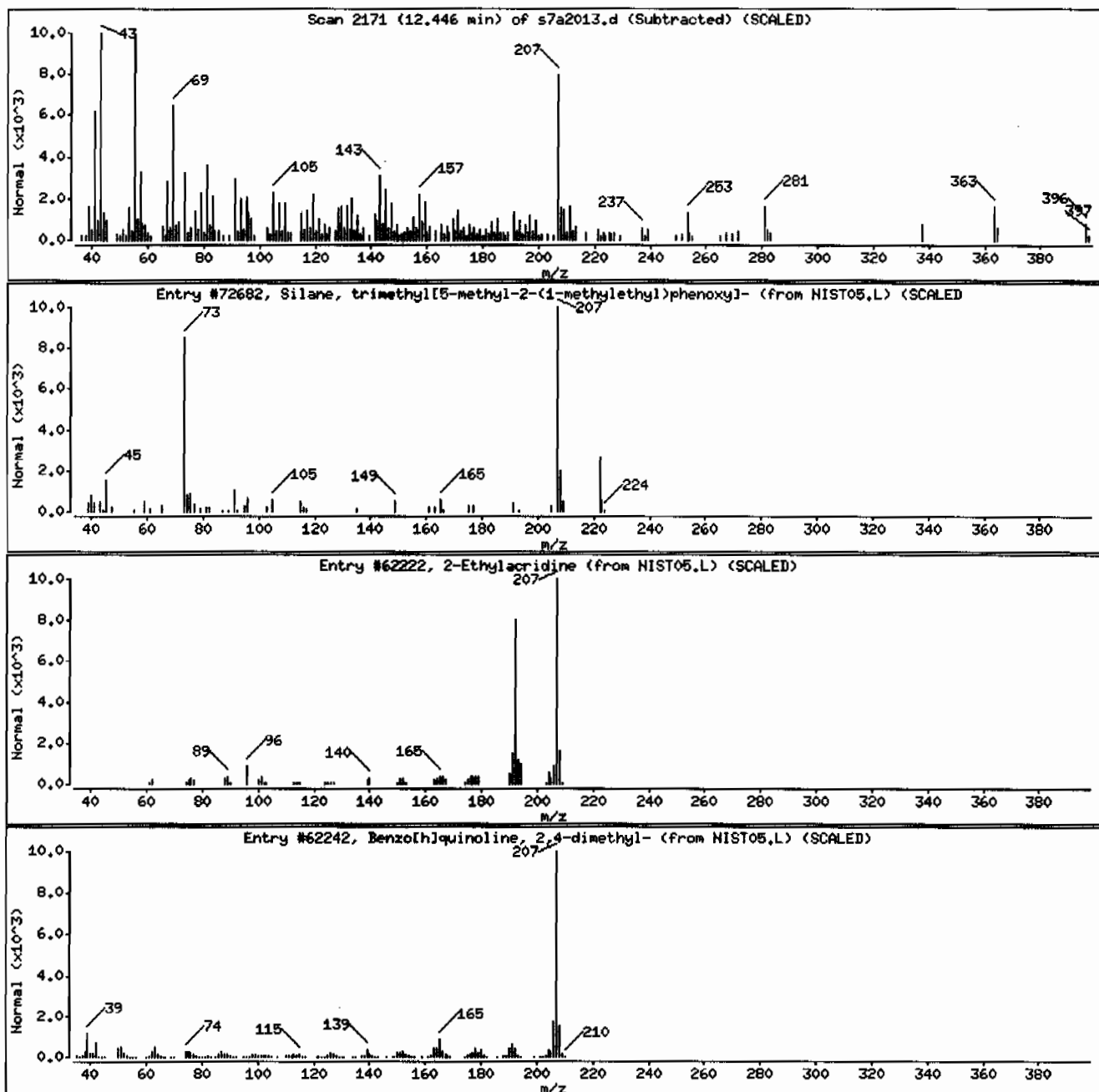
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Silane, trimethyl[5-methyl-2-(1-methylet	55012-80-1	NIST05.L	72682	38	C13H22OSi	222
2-Ethylacridine	55751-83-2	NIST05.L	62222	38	C15H13N	207
Benzo[h]quinoline, 2,4-dimethyl-	605-67-4	NIST05.L	62242	38	C15H13N	207



Date : 20-JAN-2010 14:51

Client ID: RE12-10-7236

Instrument: MSD7.i

Sample Info: I244599008I941702I1ISVH11LANL

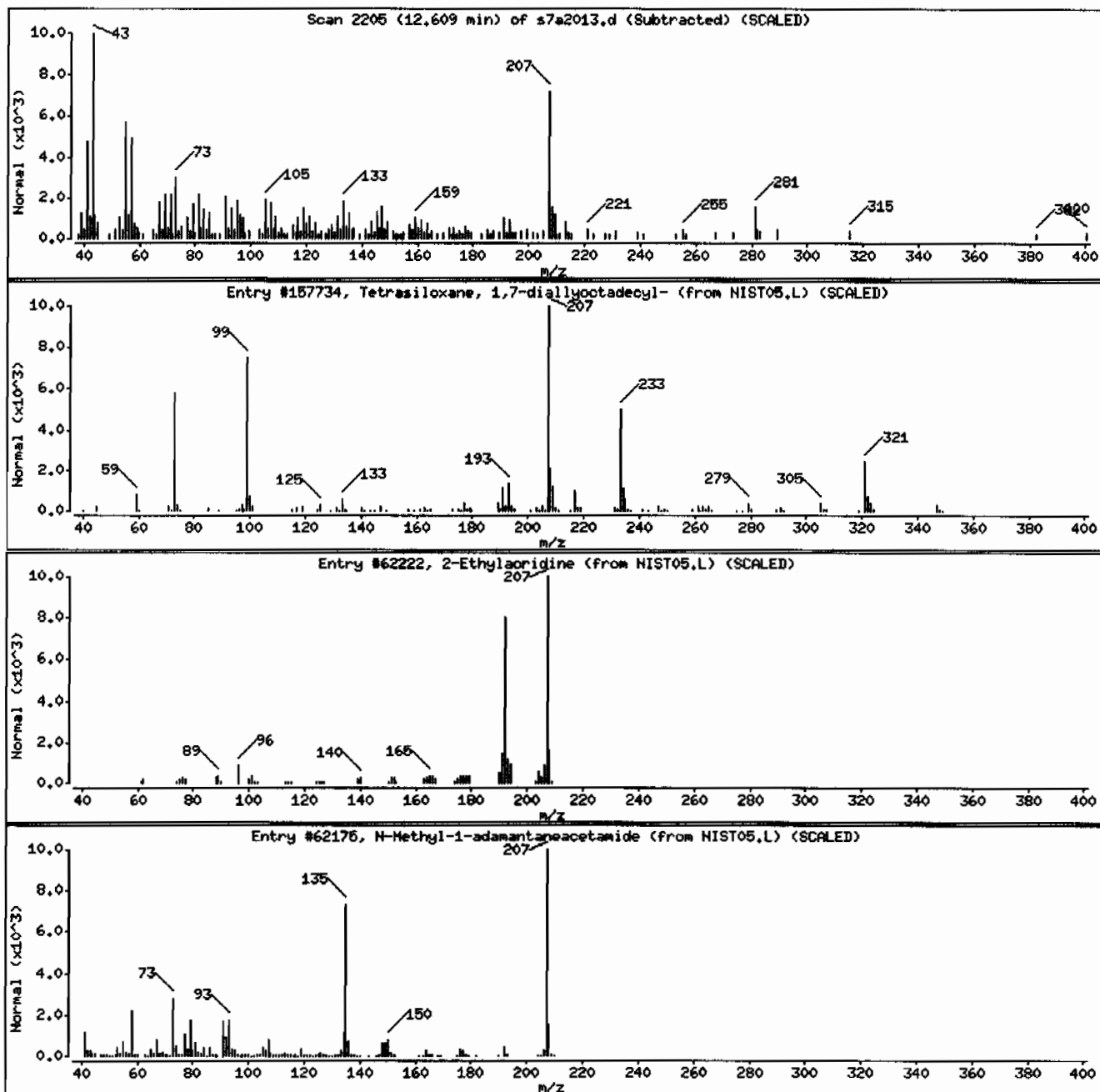
Volume Injected (uL): 0.5

Operator: JHB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Tetrasiloxane, 1,7-diallyloctadecyl-	1000309-08-2	NIST05.L	157734	53	C14H34O3Si4	362
2-Ethylacridine	55751-83-2	NIST05.L	62222	38	C15H13N	207
N-Methyl-1-adamantanecetamide	31897-93-5	NIST05.L	62175	38	C13H21NO	207



Date: 20-JAN-2010 14:51

Client ID: RE12-10-7236

Instrument: MSD7.1

Sample Info: 1244599008194170211SVH111LANL

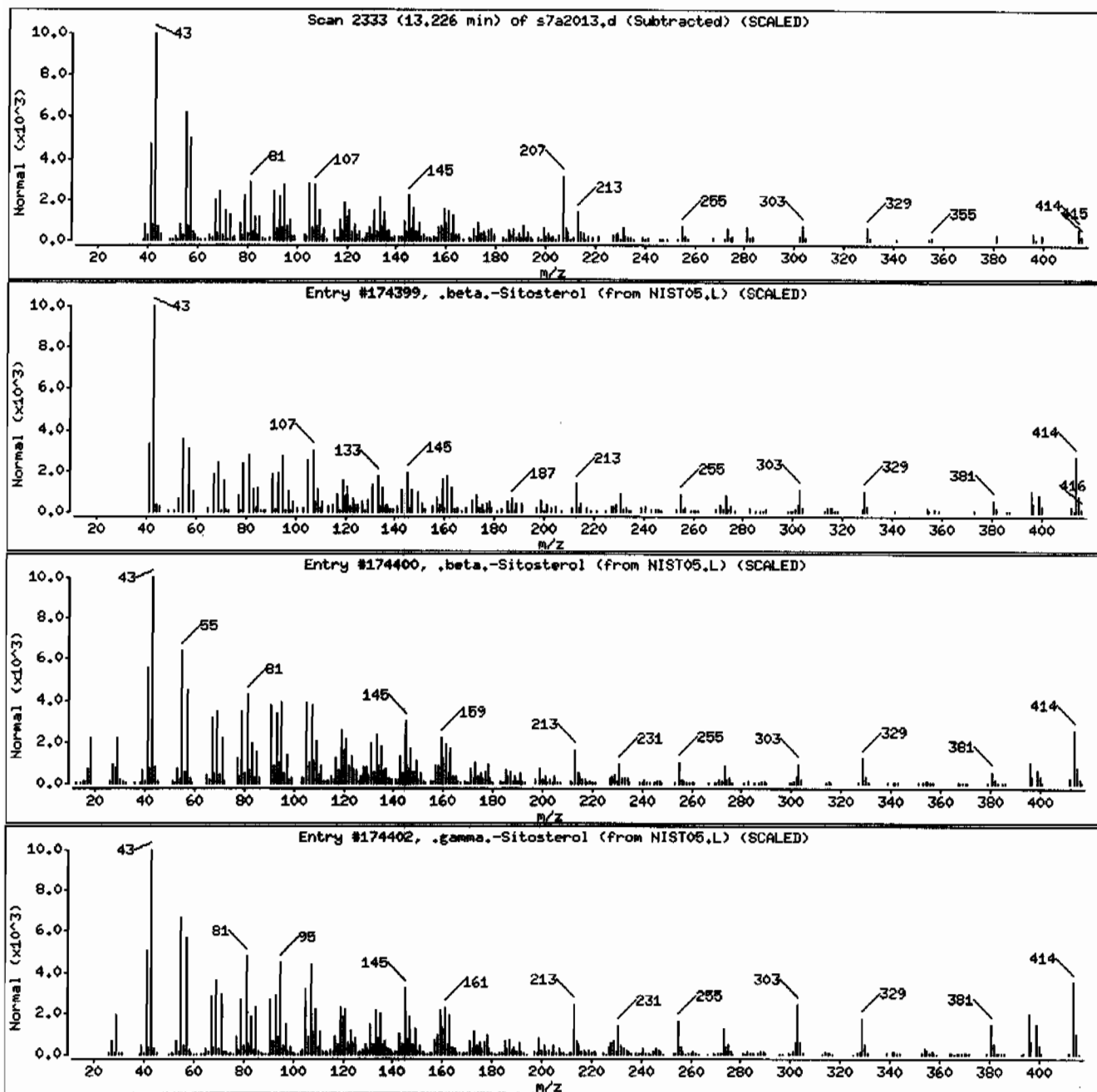
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
.beta.-Sitosterol	83-46-5	NIST05.L	174399	99	C <sub>29</sub> H <sub>50</sub> O	414
.beta.-Sitosterol	83-46-5	NIST05.L	174400	99	C <sub>29</sub> H <sub>50</sub> O	414
.gamma.-Sitosterol	83-47-6	NIST05.L	174402	96	C <sub>29</sub> H <sub>50</sub> O	414



Date : 20-JAN-2010 14:51

Client ID: RE12-10-7236

Instrument: MSD7.i

Sample Info: 1244599008194170211SVH111LANL

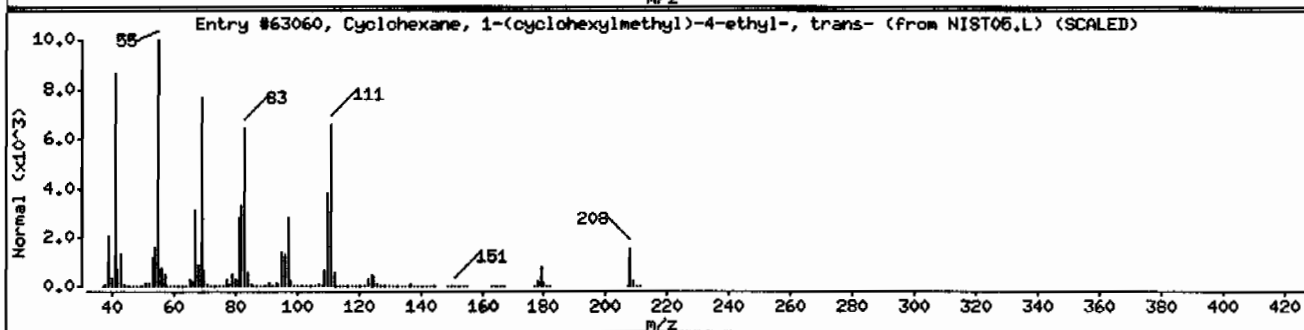
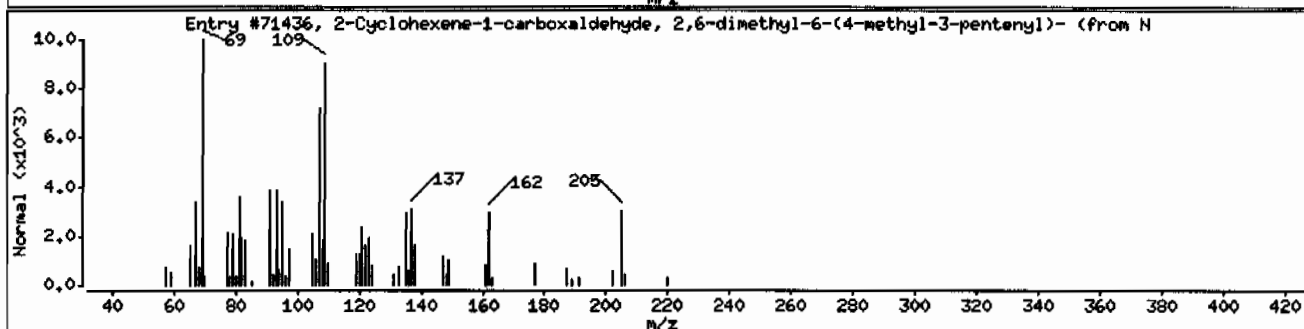
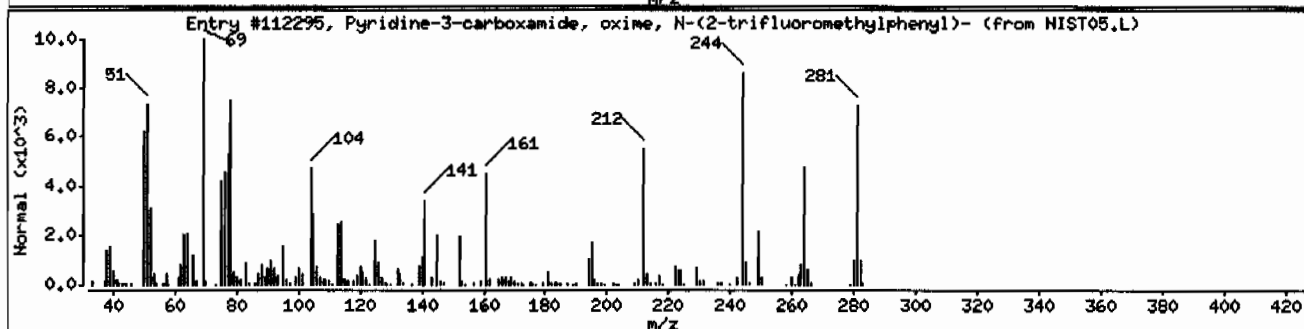
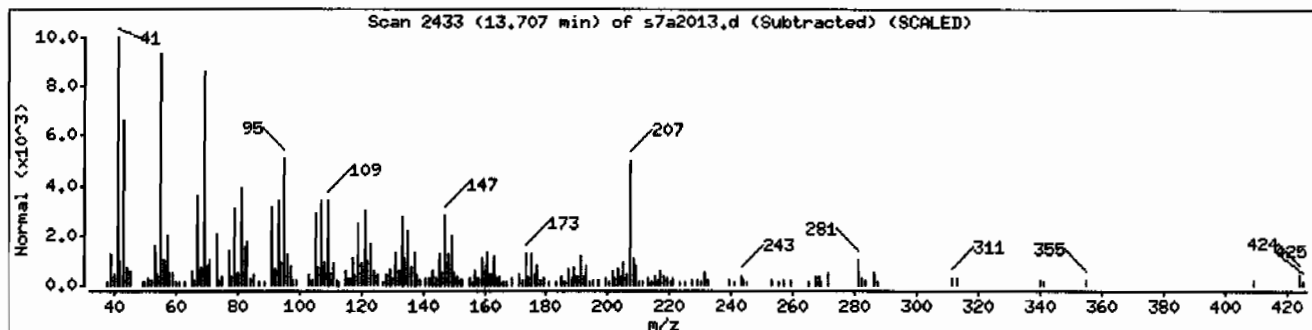
Volume Injected (uL): 0.5

Operator: JHB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Pyridine-3-carboxamide, oxime, N-(2-trif	288246-53-7	NIST05.L	112295	64	C13H10F3N3O	281
2-Cyclohexene-1-carboxaldehyde, 2,6-dime	56772-07-7	NIST05.L	71436	25	C15H24O	220
Cyclohexane, 1-(cyclohexylmethyl)-4-ethy	54934-94-0	NIST05.L	63060	22	C15H28	208





Date : 20-JAN-2010 14:51

Client ID: RE12-10-7236

Instrument: MSD7.i

Sample Info: 1244599008194170211SVMI11LANL

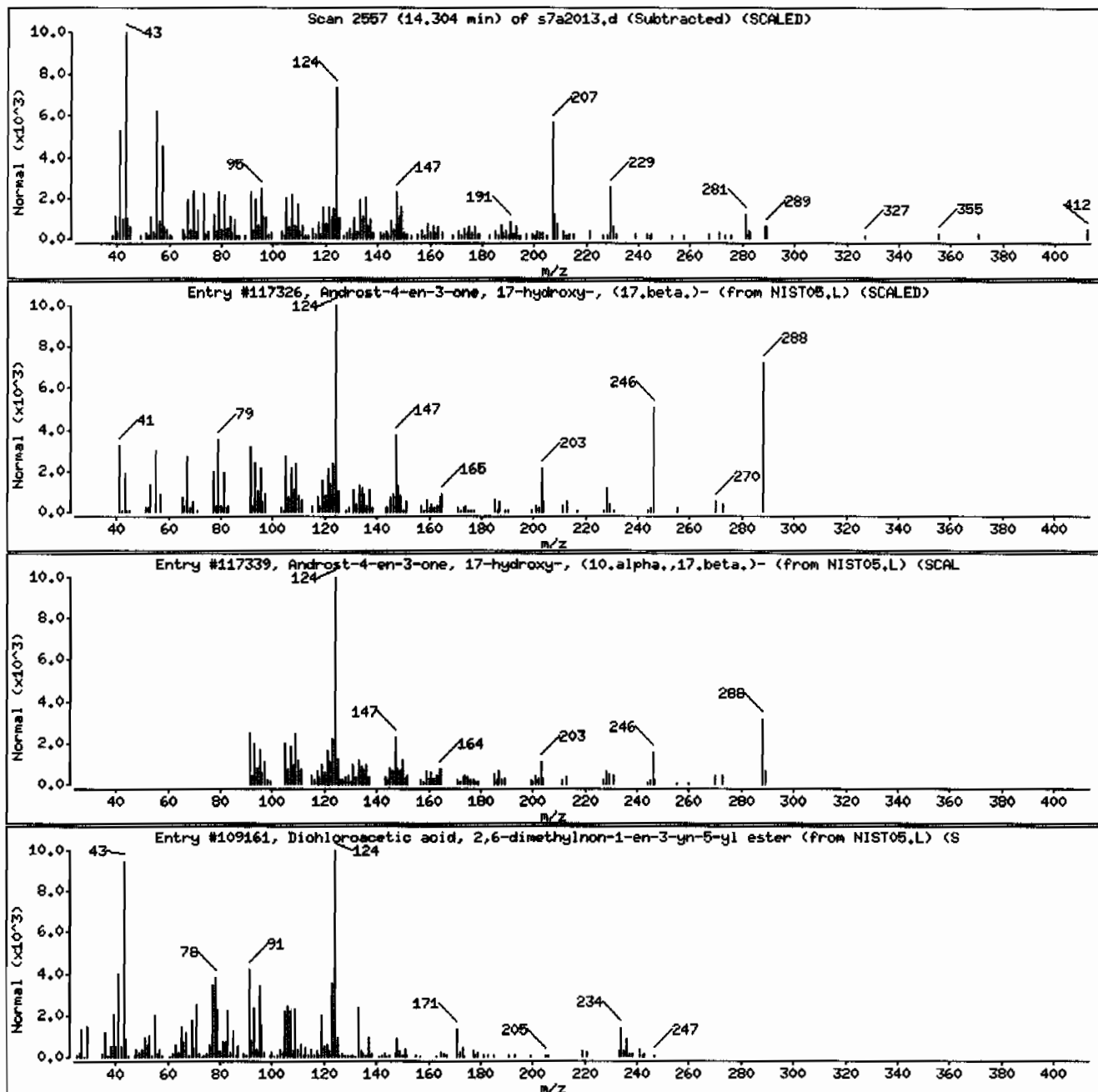
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Androst-4-en-3-one, 17-hydroxy-, (17.bet	58-22-0	NIST05.L	117326	64	C19H28O2	288
Androst-4-en-3-one, 17-hydroxy-, (10.alp	604-39-7	NIST05.L	117339	51	C19H28O2	288
Dichloroacetic acid, 2,6-dimethylnon-1-e	1000299-43-5	NIST05.L	109161	38	C13H18Cl2O2	276



**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210  
Lab Sample ID: 244599004

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD7.I  
Analyst: JMB3  
Aliquot: 30.19 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 10.1  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE12-10-7237  
Batch ID: 941702  
Run Date: 01/19/2010 19:32  
Prep Date: 01/14/2010 19:34  
Data File: s7a1929.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	369	ug/kg	73.7	369
108-95-2	Phenol	U	369	ug/kg	73.7	369
95-57-8	2-Chlorophenol	U	369	ug/kg	73.7	369
106-46-7	1,4-Dichlorobenzene	U	369	ug/kg	73.7	369
621-64-7	N-Nitrosodipropylamine	U	369	ug/kg	73.7	369
59-50-7	4-Chloro-3-methylphenol	U	369	ug/kg	73.7	369
83-32-9	Acenaphthene	U	36.9	ug/kg	12.2	36.9
121-14-2	2,4-Dinitrotoluene	U	369	ug/kg	36.9	369
100-02-7	4-Nitrophenol	U	369	ug/kg	122	369
87-86-5	Pentachlorophenol	U	369	ug/kg	92.1	369
129-00-0	Pyrene	U	36.9	ug/kg	11.1	36.9
110-86-1	Pyridine	U	369	ug/kg	73.7	369
62-53-3	Aniline	U	369	ug/kg	111	369
111-44-4	bis(2-Chloroethyl) ether	U	369	ug/kg	73.7	369
541-73-1	1,3-Dichlorobenzene	U	369	ug/kg	73.7	369
100-51-6	Benzyl alcohol	U	369	ug/kg	111	369
95-50-1	1,2-Dichlorobenzene	U	369	ug/kg	73.7	369
108-60-1	bis(2-Chloroisopropyl)ether	U	369	ug/kg	73.7	369
95-48-7	o-Cresol	U	369	ug/kg	73.7	369
65794-96-9	m,p-Cresols	U	369	ug/kg	111	369
67-72-1	Hexachloroethane	U	369	ug/kg	73.7	369
98-95-3	Nitrobenzene	U	369	ug/kg	73.7	369
78-59-1	Isophorone	U	369	ug/kg	73.7	369
88-75-5	2-Nitrophenol	U	369	ug/kg	73.7	369
105-67-9	2,4-Dimethylphenol	U	369	ug/kg	129	369
111-91-1	bis(2-Chloroethoxy)methane	U	369	ug/kg	73.7	369
120-83-2	2,4-Dichlorophenol	U	369	ug/kg	73.7	369
65-85-0	Benzoic acid	U	737	ug/kg	184	737
91-20-3	Naphthalene	U	36.9	ug/kg	11.1	36.9
106-47-8	4-Chloroaniline	U	369	ug/kg	73.7	369
87-68-3	Hexachlorobutadiene	U	369	ug/kg	73.7	369
91-57-6	2-Methylnaphthalene	U	36.9	ug/kg	7.37	36.9
77-47-4	Hexachlorocyclopentadiene	U	369	ug/kg	73.7	369
88-06-2	2,4,6-Trichlorophenol	U	369	ug/kg	73.7	369
95-95-4	2,4,5-Trichlorophenol	U	369	ug/kg	73.7	369
91-58-7	2-Chloronaphthalene	U	36.9	ug/kg	12.2	36.9
88-74-4	2-Nitroaniline	U	369	ug/kg	73.7	369
99-09-2	3-Nitroaniline	U	369	ug/kg	73.7	369

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210	Date Collected: 01/07/2010 12:00	Matrix: R
Lab Sample ID: 244599004	Date Received: 01/13/2010 08:55	%Moisture: 10.1
Client ID: RE12-10-7237	Client: LANL010	Project: LANL01004
Batch ID: 941702	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/19/2010 19:32	Inst: MSD7.1	Dilution: 1
Prep Date: 01/14/2010 19:34	Analyst: JMB3	Inj. Vol: .5 uL
Data File: s7a1929.d	Aliquot: 30.19 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	369	ug/kg	73.7	369
606-20-2	2,6-Dinitrotoluene	U	369	ug/kg	36.9	369
208-96-8	Acenaphthylene	U	36.9	ug/kg	11.1	36.9
51-28-5	2,4-Dinitrophenol	U	737	ug/kg	140	737
132-64-9	Dibenzofuran	U	369	ug/kg	73.7	369
84-66-2	Diethylphthalate	U	369	ug/kg	73.7	369
86-73-7	Fluorene	U	36.9	ug/kg	11.1	36.9
7005-72-3	4-Chlorophenylphenylether	U	369	ug/kg	73.7	369
534-52-1	2-Methyl-4,6-dinitrophenol	U	369	ug/kg	73.7	369
100-01-6	4-Nitroaniline	U	369	ug/kg	111	369
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	369	ug/kg	73.7	369
122-66-7	Azobenzene	U	369	ug/kg	73.7	369
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	369	ug/kg	73.7	369
118-74-1	Hexachlorobenzene	U	369	ug/kg	73.7	369
85-01-8	Phenanthrene	U	36.9	ug/kg	11.1	36.9
120-12-7	Anthracene	U	36.9	ug/kg	7.37	36.9
84-74-2	Di-n-butylphthalate	U	369	ug/kg	73.7	369
206-44-0	Fluoranthene	U	36.9	ug/kg	11.1	36.9
85-68-7	Butylbenzylphthalate	U	369	ug/kg	73.7	369
56-55-3	Benzo(a)anthracene	U	36.9	ug/kg	11.1	36.9
91-94-1	3,3'-Dichlorobenzidine	U	369	ug/kg	111	369
218-01-9	Chrysene	U	36.9	ug/kg	11.1	36.9
117-81-7	bis(2-Ethylhexyl)phthalate	U	369	ug/kg	73.7	369
117-84-0	Di-n-octylphthalate	U	369	ug/kg	73.7	369
205-99-2	Benzo(b)fluoranthene	U	36.9	ug/kg	11.1	36.9
207-08-9	Benzo(k)fluoranthene	U	36.9	ug/kg	11.1	36.9
50-32-8	Benzo(a)pyrene	U	36.9	ug/kg	11.1	36.9
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.9	ug/kg	11.1	36.9
53-70-3	Dibenzo(a,h)anthracene	U	36.9	ug/kg	11.1	36.9
191-24-2	Benzo(ghi)perylene	U	36.9	ug/kg	11.1	36.9
120-82-1	1,2,4-Trichlorobenzene	U	369	ug/kg	73.7	369

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.83	781	ug/kg		JA
	Unknown	3.34	241	ug/kg		J

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210	Date Collected: 01/07/2010 12:00	Matrix: R
Lab Sample ID: 244599004	Date Received: 01/13/2010 08:55	% Moisture: 10.1
Client ID: RE12-10-7237	Client: LANL010	Project: LANL01004
Batch ID: 941702	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/19/2010 19:32	Inst: MSD7.I	Dilution: 1
Prep Date: 01/14/2010 19:34	Analyst: JMB3	Inj. Vol: .5 uL
Data File: s7a1929.d	Aliquot: 30.19 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
<b>Tentatively Identified Compound Summary</b>						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
7785-70-8	IR-.alpha.-Pinene	3.36	307	ug/kg	97	NJ
127-91-3	.beta.-Pinene	3.61	158	ug/kg	97	NJ
498-15-7	Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy	3.75	326	ug/kg	97	NJ
	Unknown	5.59	191	ug/kg		J
1000245-71-9	E-11-Hexadecenoic acid, ethyl ester	8.05	438	ug/kg	90	NJ
57-11-4	Octadecanoic acid	8.12	162	ug/kg	94	NJ
	Unknown	8.6	397	ug/kg		J
	Unknown	8.66	173	ug/kg		J
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	8.87	327	ug/kg	95	NJ
	Unknown	8.92	161	ug/kg		J
	Unknown	9.05	467	ug/kg		J
	Unknown	9.15	430	ug/kg		J
	Unknown	9.22	508	ug/kg		J
	Unknown	9.39	151	ug/kg		J
	Unknown	9.51	207	ug/kg		J
	Unknown	9.97	331	ug/kg		J
	Unknown	12.72	217	ug/kg		J
	Unknown	13.33	235	ug/kg		J
	Unknown	13.37	171	ug/kg		J

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Data file : /chem/MSD7.i/s011910.b/s7a1929.d  
Lab Smp Id: 244599004 Client Smp ID: RE12-10-7237  
Inj Date : 19-JAN-2010 19:32  
Operator : JMB3 Inst ID: MSD7.i  
Smp Info : |244599004|941702|1|SVMF|1|LANL  
Misc Info : |MSD8270\_S|WBN100107-02|  
Comment : Column: J&W Scientific DB-5MS 25m x 0.2mm x 0.33um film thickness  
Method : /chem/MSD7.i/s011910.b/MSD7-M8270C-AQA-011310.m  
Meth Date : 19-Jan-2010 18:16 llo00884 Quant Type: ISTD  
Cal Date : 15-JAN-2010 19:06 Cal File: s7a1515.d  
Als bottle: 28  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1210.sub  
Target Version: 3.50  
Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.19000	weight of sample
M	10.12260	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4		152	3.788	3.793	(1.000)	426085	40.0000	
* 29 Naphthalene-d8		136	4.650	4.654	(1.000)	1574816	40.0000	
* 46 Acenaphthene-d10		164	5.892	5.897	(1.000)	810129	40.0000	
* 67 Phenanthrene-d10		188	7.043	7.048	(1.000)	1522767	40.0000	
* 91 Chrysene-d12		240	9.427	9.426	(1.000)	1257539	40.0000	
* 98 Perylene-d12		264	10.967	10.972	(1.000)	847393	40.0000	
\$ 3 2-Fluorophenol		112	2.989	2.984	(0.789)	768782	62.7886	2310
\$ 5 Phenol-d5		99	3.509	3.508	(0.926)	1012582	64.1433	2360
\$ 20 Nitrobenzene-d5		82	4.144	4.154	(0.891)	480991	37.0258	1360
\$ 39 2-Fluorobiphenyl		172	5.387	5.391	(0.914)	853071	35.7342	1320
\$ 60 2,4,6-Tribromophenol		329	6.480	6.484	(1.100)	178514	87.5888	3230
\$ 81 p-Terphenyl-d14		244	8.406	8.406	(0.892)	909257	42.3334	1560

## ION RATIO REPORT

## SV REPORT

Data file: s7a1929.d

Report Date: 01/19/2010 19:49

Lab. ID: 244599004

SampleType: SAMPLE

Injection Date: 19-JAN-2010 19:32

Operator: JMB3

Instrument: MSD7.i

Sample Info: |244599004|941702|1|SVMF|1|LANL

Miscellaneous Info: |MSD8270\_S|WBN100107-02|

Comment:

Method used: /chem/MSD7.i/s011910.b/MSD7-M8270C-AQA-011310.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1210

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
1 N-Methyl-N-nitrosomethylamine				CAS#: 62-75-9		
74	48210	2.06	2.29	80-120	100	(T)
42	15242	2.07	2.29	85-145	32	(QT)
43	117526	2.07	2.29	22- 82	244	(QT)
-----						
4 Aniline				CAS#: 62-53-3		
66	51909	3.51	3.58	80-120	100	(T)
93	1685	3.47	3.58	217-277	3	(QT)
-----						
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	73237	4.14	4.03	80-120	100	(T)
42	59818	4.14	4.03	63-123	82	(T)
-----						
27 Benzoic acid				CAS#: 65-85-0		
105	363	4.46	4.43	80-120	100	( )
122	2187	4.39	4.43	59-119	602	(Q)
77	993	4.46	4.43	38- 98	274	(Q)
-----						
40 2-Chloronaphthalene				CAS#: 91-58-7		
162	39114	5.63	5.50	80-120	100	(T)
164	2214	5.63	5.50	3- 63	6	(T)
127	2641	5.63	5.50	7- 67	7	(QT)
-----						
42 o-Nitroaniline				CAS#: 88-74-4		
65	55083	5.63	5.55	80-120	100	(T)
92	60738	5.63	5.55	27- 87	110	(QT)
138	4424	5.63	5.55	62-122	8	(QT)
-----						

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
43 Dimethylphthalate				CAS#: 131-11-3		
163	147137	5.90	5.67	80-120	100	(T)
164	810129	5.89	5.67	0- 40	551	(QT)
-----						
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	104706	5.89	5.72	80-120	100	(T)
63	2413	5.89	5.72	50-110	2	(QT)
-----						
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	104706	5.89	6.01	80-120	100	(T)
89	1222	5.89	6.01	44-104	1	(QT)
63	2413	5.89	6.01	30- 90	2	(QT)
-----						
53 Fluorene				CAS#: 86-73-7		
166	14565	6.48	6.30	80-120	100	(T)
165	14870	6.48	6.30	57-117	102	(T)
167	4957	6.48	6.30	0- 43	34	(T)
-----						
61 4-Bromophenylphenylether				CAS#: 101-55-3		
248	13364	6.48	6.66	80-120	100	(T)
141	92698	6.48	6.66	57-117	694	(QT)
250	25799	6.48	6.66	66-126	193	(QT)
-----						
93 bis(2-Ethylhexyl)phthalate				CAS#: 117-81-7		
149	117593	9.12	9.36	80-120	100	(T)
167	8534	9.12	9.36	3- 63	7	(T)

Q qualifier indicates ion failed ratio requirement

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Data file : /chem/MSD7.i/s011910.b/s7a1929.d  
 Lab Smp Id: 244599004 Client Smp ID: RE12-10-7237  
 Inj Date : 19-JAN-2010 19:32  
 Operator : JMB3 Inst ID: MSD7.i  
 Smp Info : |244599004|941702|1|SVMF|1|LANL  
 Misc Info : |MSD8270\_S|WBN100107-02|  
 Comment : Column: J&W Scientific DB-5MS 25m x 0.2mm x 0.33um film thickness  
 Method : /chem/MSD7.i/s011910.b/MSD7-M8270C-AQA-011310.m  
 Meth Date : 19-Jan-2010 18:16 llo00884 Quant Type: ISTD  
 Cal Date : 15-JAN-2010 19:06 Cal File: s7a1515.d  
 Als bottle: 28  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: 10-1210.sub  
 Target Version: 3.50  
 Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.19000	weight of sample
M	10.12260	% moisture

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.788	2613584	40.000
* 46 Acenaphthene-d10	5.892	3524729	40.000
* 67 Phenanthrene-d10	7.043	3748378	40.000
* 91 Chrysene-d12	9.427	4030095	40.000
* 98 Perylene-d12	10.967	2502928	40.000

CONCENTRATIONS					QUANT		
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
----	----	-----	-----	----	-----	-----	-----

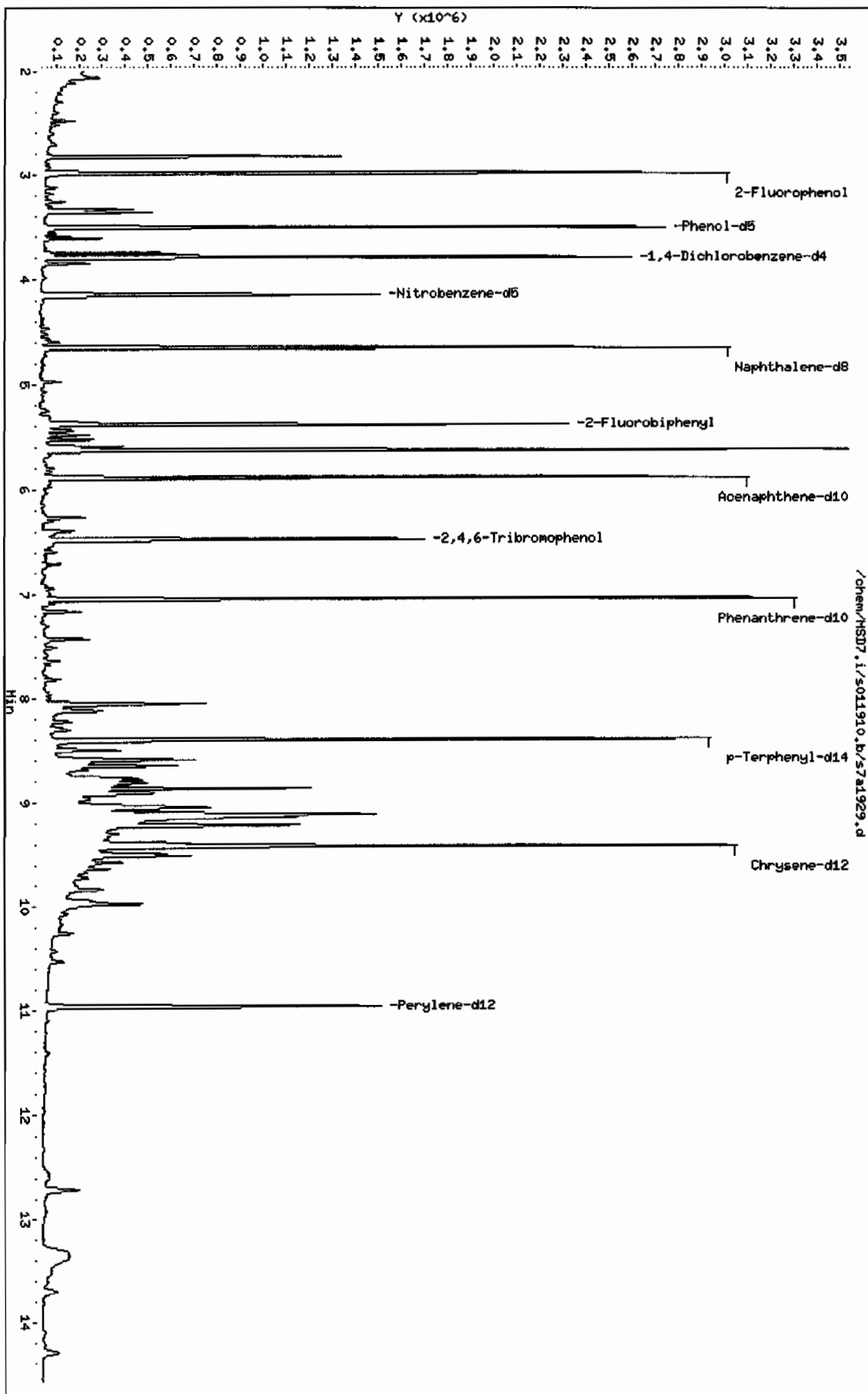


RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
Unknown Aldol Condensate				CAS #:			
2.830	1383857	21.1794528	780	0		0	10
Unknown				CAS #:			
3.340	428103	6.55196628	241	0		0	10
1R-.alpha.-Pinene				CAS #: 7785-70-8			
3.364	543725	8.32151748	307	97	NIST05.L	15188	10
.beta.-Pinene				CAS #: 127-91-3			
3.610	280474	4.29255851	158	97	NIST05.L	15171	10
Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy				CAS #: 498-15-7			
3.749	578612	8.85544801	326	97	NIST05.L	15369	10
Unknown				CAS #:			
5.594	457189	5.18835559	191	0		0	46
E-11-Hexadecenoic acid, ethyl ester				CAS #: 1000245-71-9			
8.054	1113511	11.8825839	438	90	NIST05.L	113379	67
Octadecanoic acid				CAS #: 57-11-4			
8.122	412784	4.40493426	162	94	NIST05.L	114821	67
Unknown				CAS #:			
8.603	1085197	10.7709306	397	0		0	91
Unknown				CAS #:			
8.656	472249	4.68722085	173	0		0	91
1-Phenanthrenecarboxylic acid, 1,2,3,4,4				CAS #: 1235-74-1			
8.873	894566	8.87885928	327	95	NIST05.L	133621	91
Unknown				CAS #:			
8.916	439334	4.36053292	161	0		0	91
Unknown				CAS #:			
9.051	1275925	12.6639645	467	0		0	91
Unknown				CAS #:			
9.147	1175484	11.6670540	430	0		0	91
Unknown				CAS #:			
9.224	1389575	13.7919806	508	0		0	91

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
Unknown				CAS #:			
9.393	412737	4.09654806	151	0		0	91
Unknown				CAS #:			
9.513	565827	5.61601270	207	0		0	91
Unknown				CAS #:			
9.971	906128	8.99361240	331	0		0	91
Unknown				CAS #:			
12.715	368837	5.89448903	217	0		0	98
Unknown				CAS #:			
13.327	399235	6.38028380	235	0		0	98
Unknown				CAS #:			
13.370	290029	4.63504153	171	0		0	98

Data File: /chem/MSD7.1/5011910.b/s7a1929.d  
 Date: 19-JUN-2010 19:32  
 Client ID: REL2-10-7237  
 Sample Info: 1244599004194170211SVHF11LNL  
 Volume Injected (uL): 0.5  
 Column Phase: J&W DB-SMS

Instrument: MSD7.1  
 Operator: JHB3  
 Column diameter: 0.20



Date : 19-JAN-2010 19:32

Client ID: RE12-10-7237

Instrument: MSD7.1

Sample Info: 1244599004/94170211ISVMFI11LANL

Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

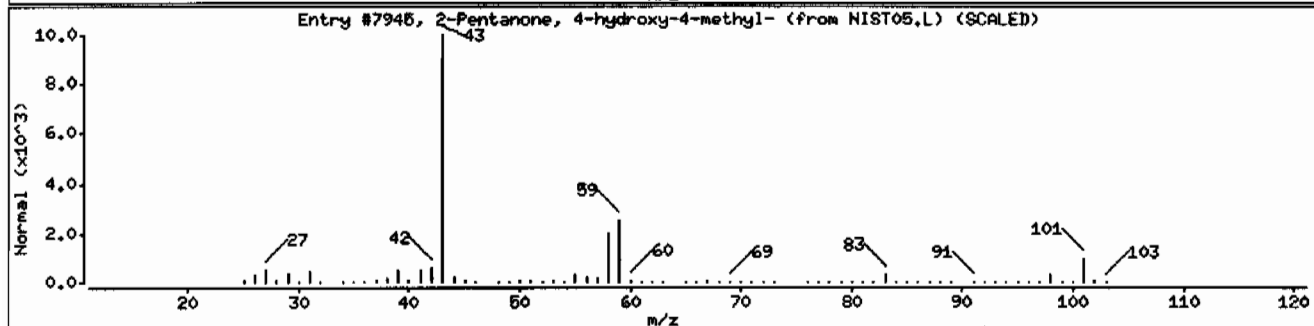
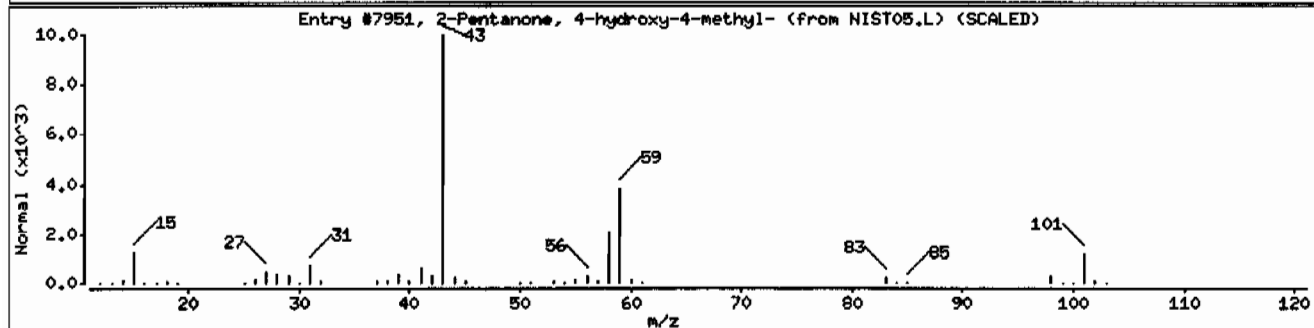
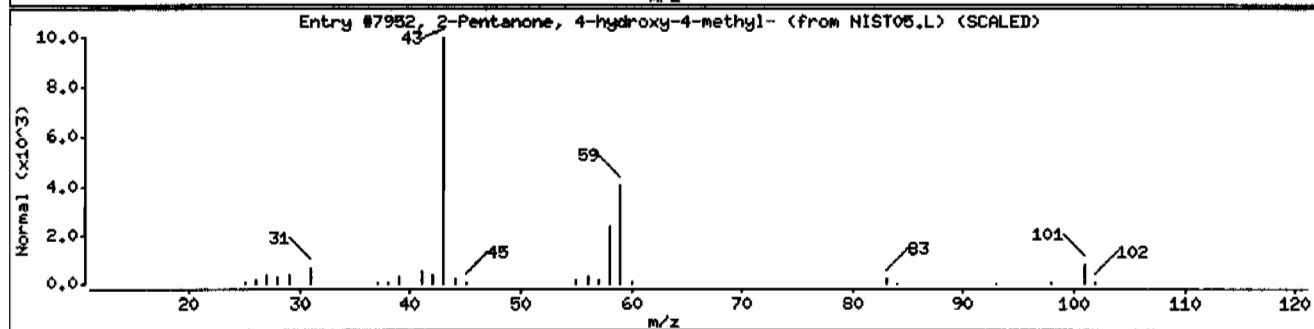
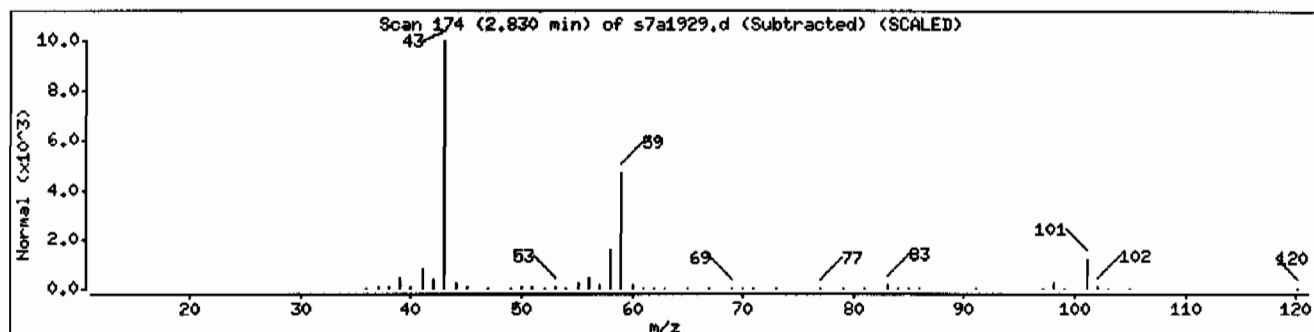
Column diameter: 0.20

## Library Search Compound Match

Unknown Aldol Condensate

2-Pentanone, 4-hydroxy-4-methyl-

CAS Number	Library	Entry	Quality	Formula	Weight
123-42-2	NIST05.L	7952	50	C6H12O2	116
123-42-2	NIST05.L	7951	50	C6H12O2	116
123-42-2	NIST05.L	7945	38	C6H12O2	116



Date: 19-JAN-2010 19:32

Client ID: RE12-10-7237

Instrument: HSD7.i

Sample Info: I244599004194170211SVMF11ILANL

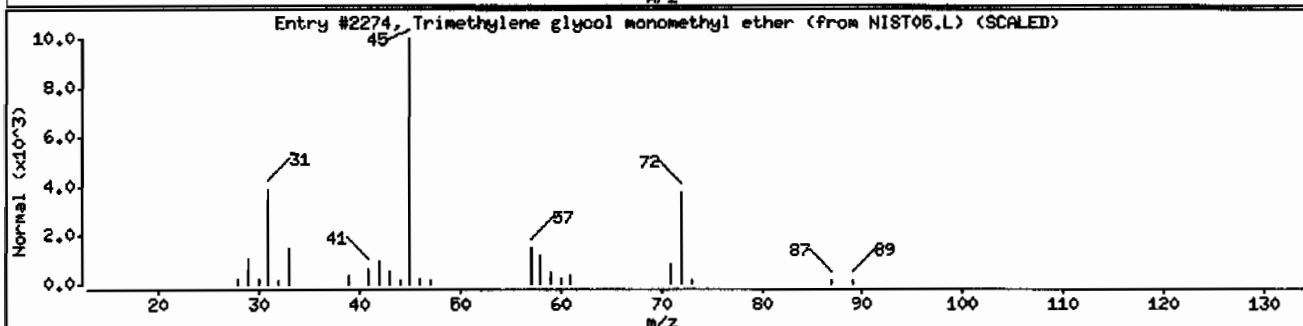
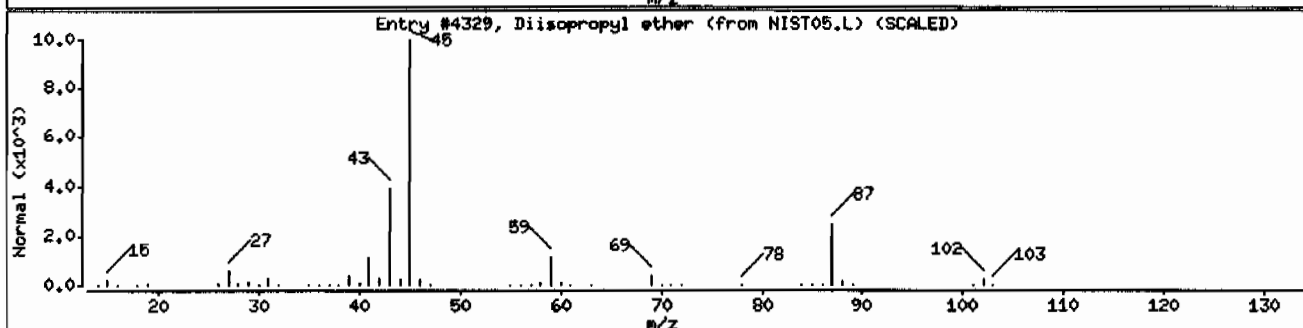
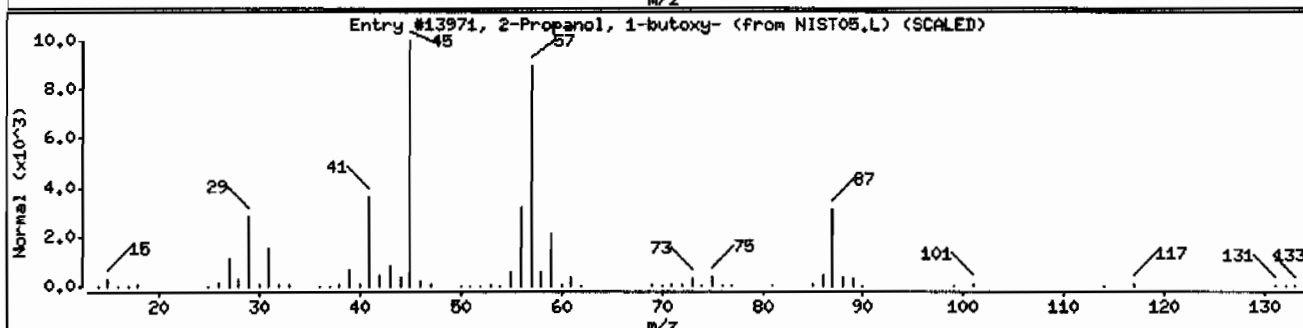
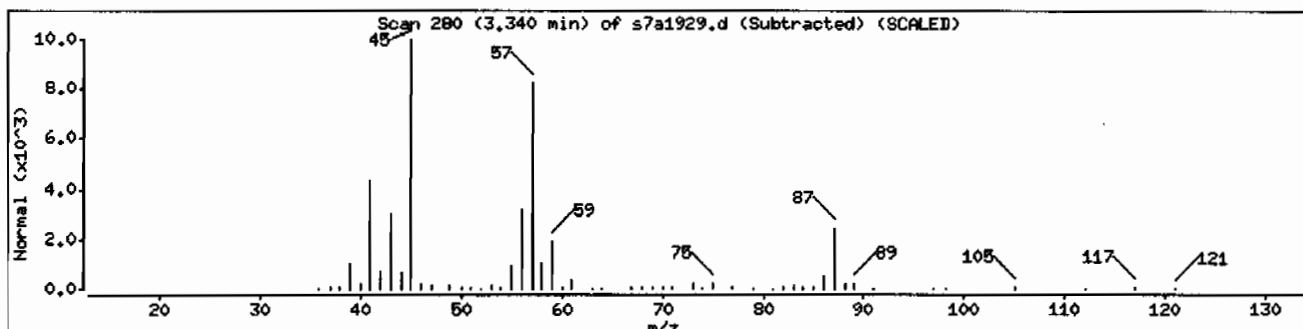
Volume Injected (uL): 0.5

Operator: JHB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Propanol, 1-butoxy-	5131-66-8	NIST05.L	13971	53	C7H16O2	132
Diisopropyl ether	108-20-3	NIST05.L	4329	50	C6H14O	102
Trimethylene glycol monomethyl ether	1889-49-7	NIST05.L	2274	47	C4H10O2	90



Date : 19-JAN-2010 19:32

Client ID: RE12-10-7237

Instrument: MSD7.1

Sample Info: 1244599004194170211ISVMF11ILANL

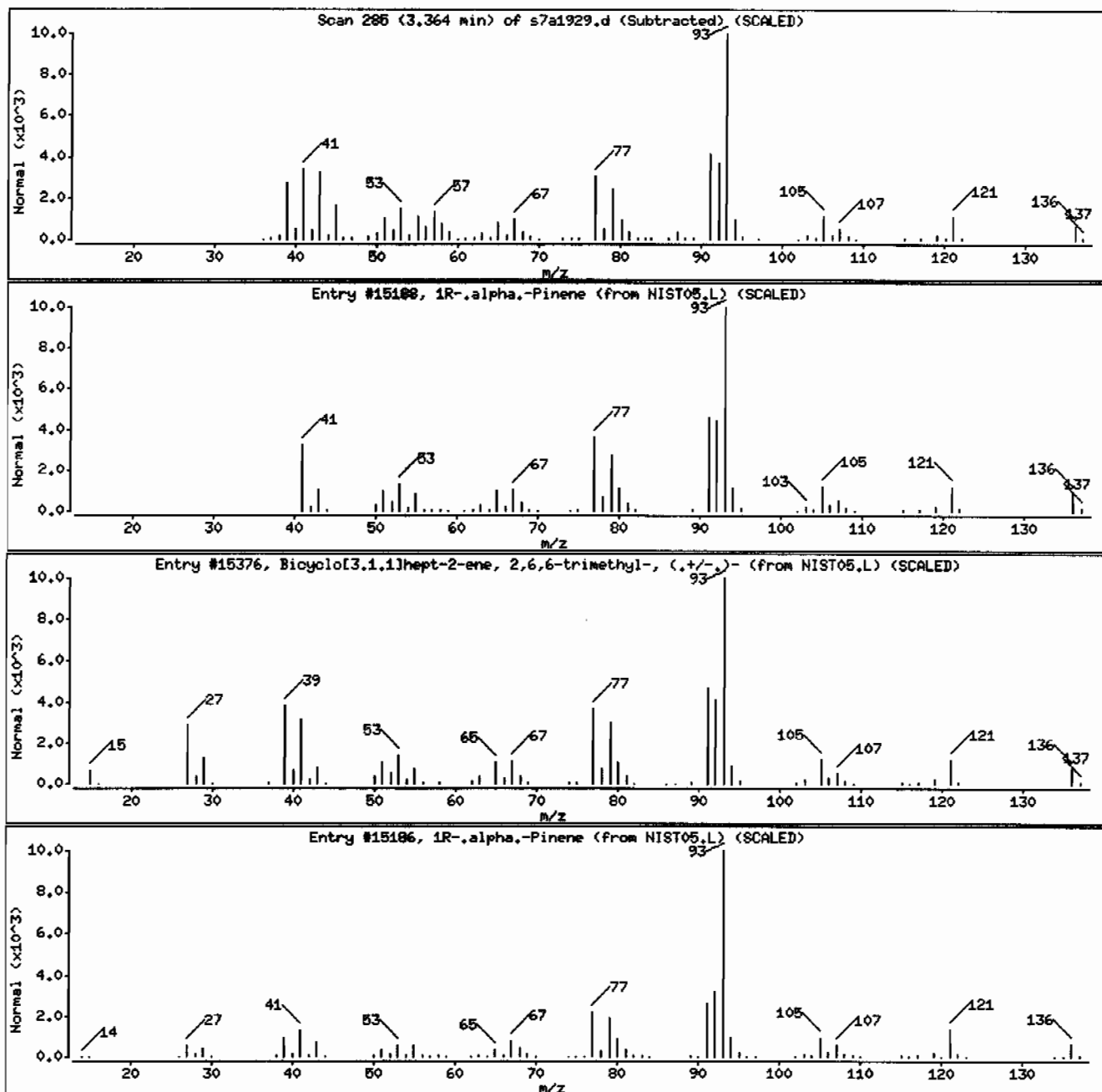
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1R-.alpha.-Pinene	7785-70-8	NIST05.L	15188	97	C10H16	136
Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethyl	2437-95-8	NIST05.L	15376	96	C10H16	136
1R-.alpha.-Pinene	7785-70-8	NIST05.L	15186	96	C10H16	136



Date : 19-JAN-2010 19:32

Client ID: RE12-10-7237

Instrument: HSD7.i

Sample Info: 1244599004194170211SVHF11/LANL

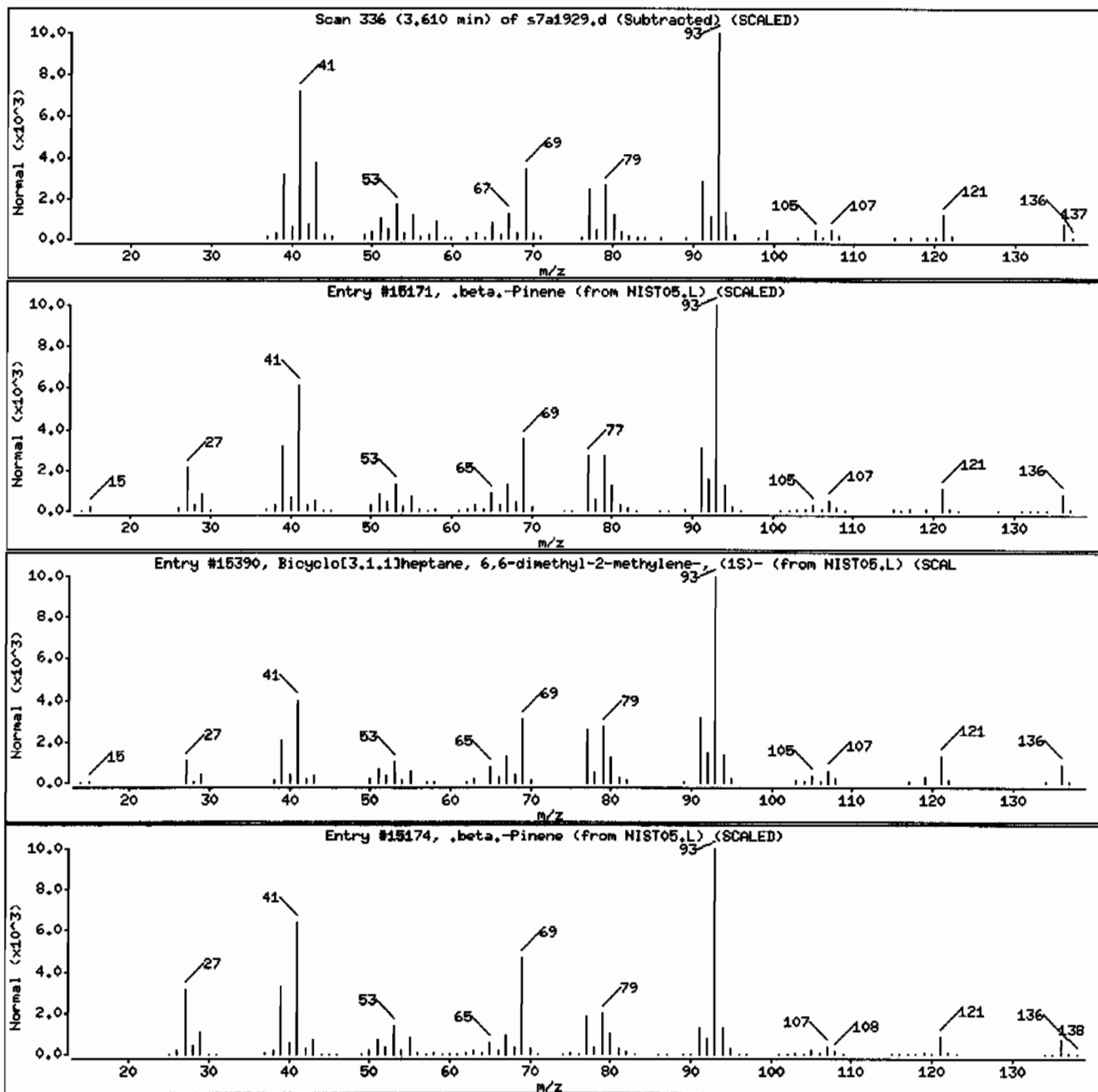
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
.beta.-Pinene	127-91-3	NIST05.L	15171	97	C10H16	136
Bicyclo[3,1,1]heptane, 6,6-dimethyl-2-methylene-	18172-67-3	NIST05.L	15390	95	C10H16	136
.beta.-Pinene	127-91-3	NIST05.L	15174	94	C10H16	136



Date: 19-JAN-2010 19:32

Client ID: RE12-10-7237

Instrument: MSD7.i

Sample Info: 1244599004194170211SVHF111LANL

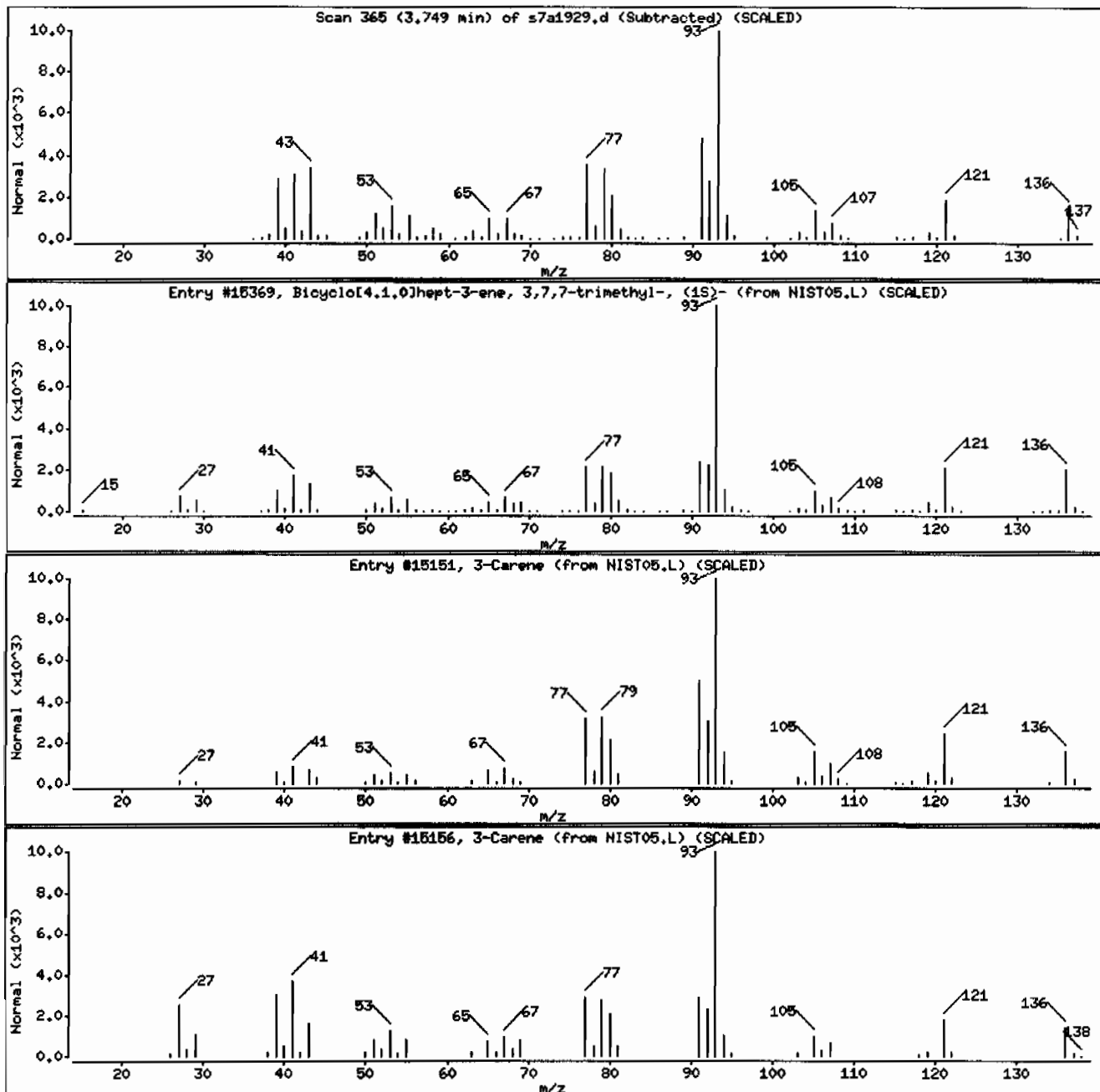
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethyl	498-15-7	NIST05.L	15369	97	C10H16	136
3-Carene	13466-78-9	NIST05.L	15151	97	C10H16	136
3-Carene	13466-78-9	NIST05.L	15156	96	C10H16	136





Date: 19-JAN-2010 19:32

Client ID: RE12-10-7237

Instrument: HSD7.i

Sample Info: 1244599004194170211ISVMF11ILANL

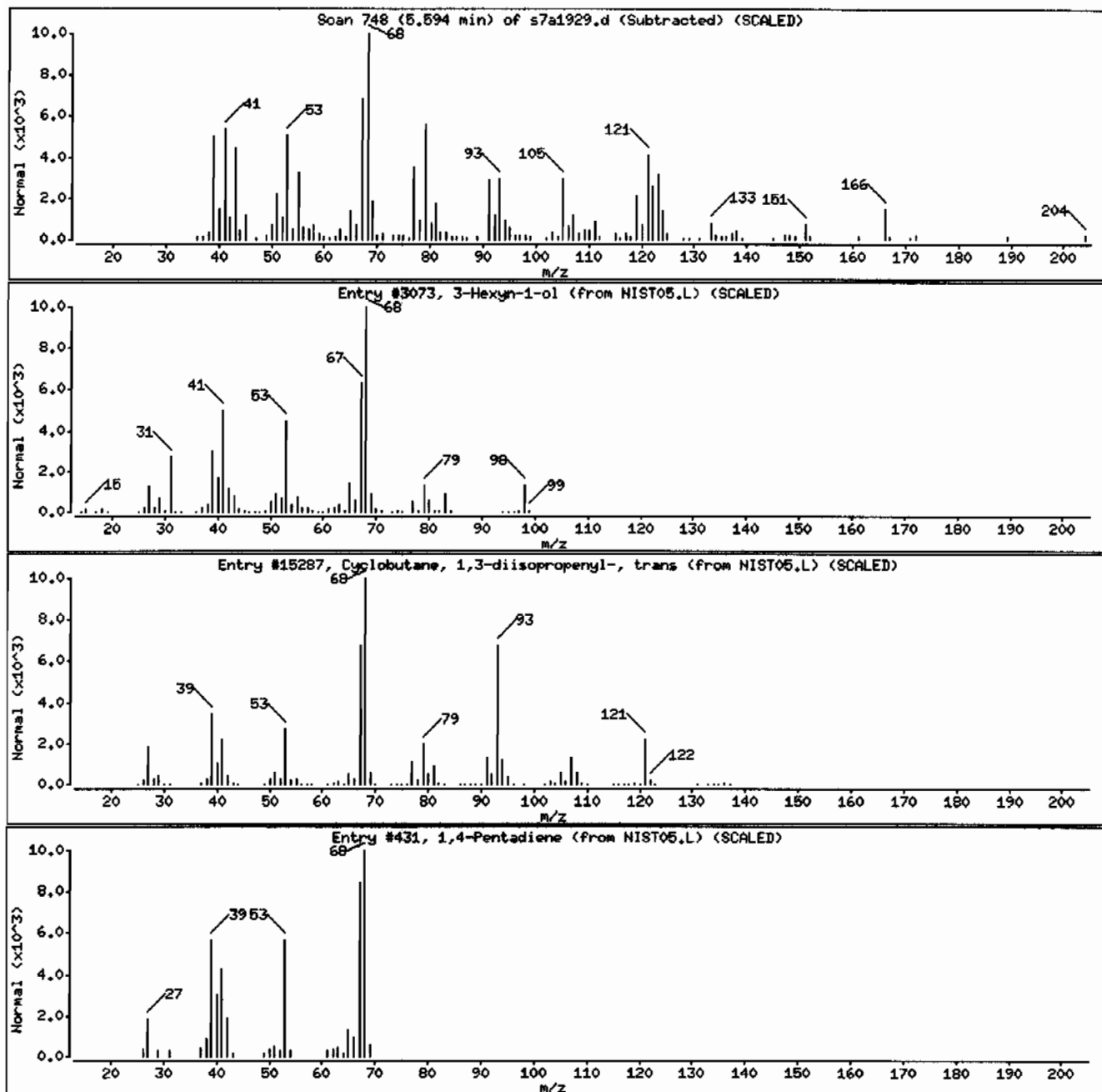
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
3-Hexyn-1-ol	1002-28-4	NIST05.L	3073	53	C6H10O	98
Cyclobutane, 1,3-diisopropenyl-, trans	1000152-89-6	NIST05.L	15287	53	C10H16	136
1,4-Pentadiene	591-93-5	NIST05.L	431	52	C5H8	68



Date : 19-JAN-2010 19:32

Client ID: RE12-10-7237

Instrument: HSD7.i

Sample Info: 1244599004194170211SVHF11LANL

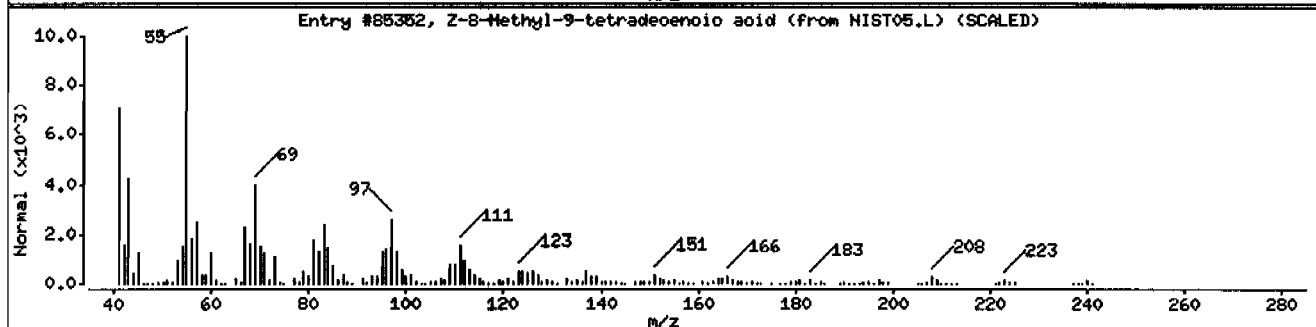
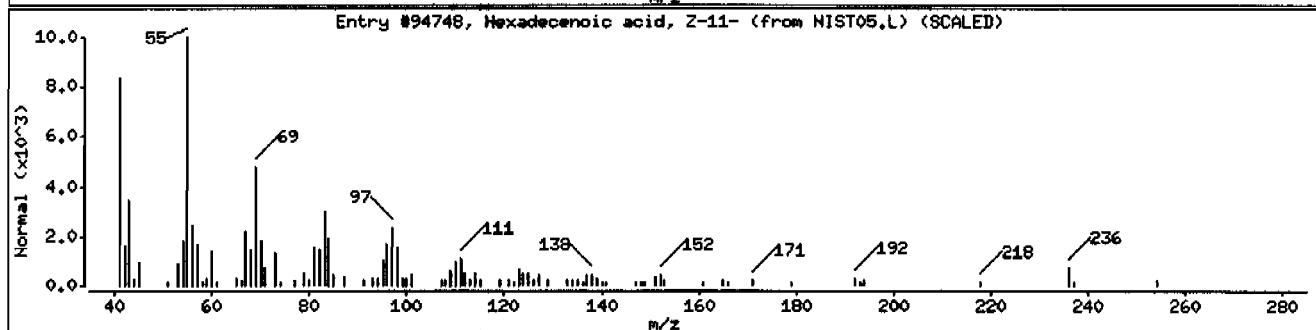
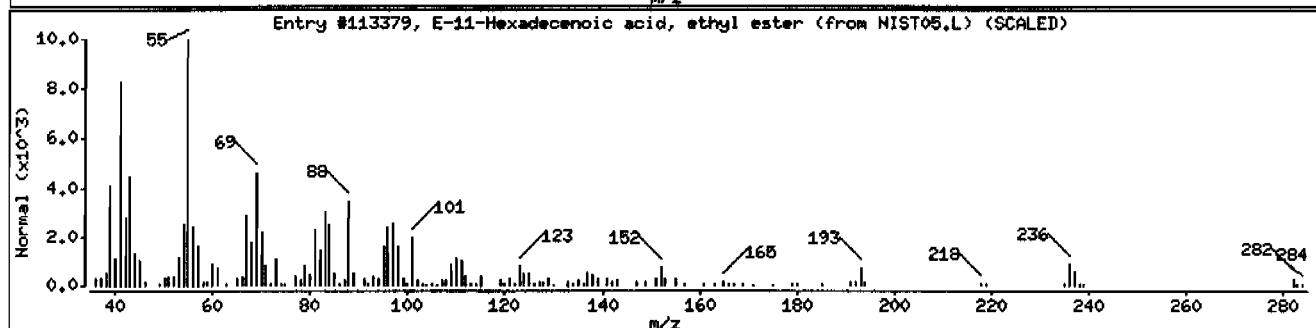
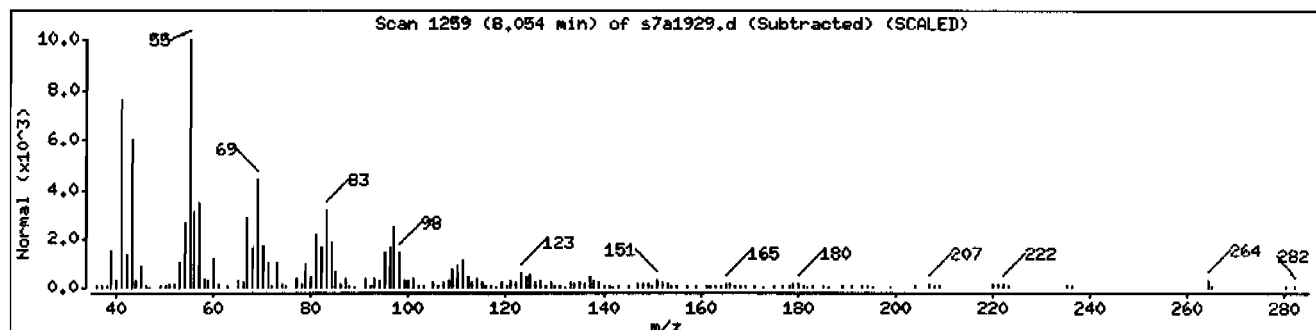
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
E-11-Hexadecenoic acid, ethyl ester	1000245-71-9	NIST05.L	113379	90	C18H34O2	282
Hexadecenoic acid, Z-11-	2416-20-8	NIST05.L	94748	86	C16H30O2	254
Z-8-Methyl-9-tetradecenoic acid	1000130-84-5	NIST05.L	85352	86	C15H28O2	240



Date: 19-JAN-2010 19:32

Client ID: RE12-10-7237

Instrument: MSD7.1

Sample Info: I244599004194170211SVHF11ILANL

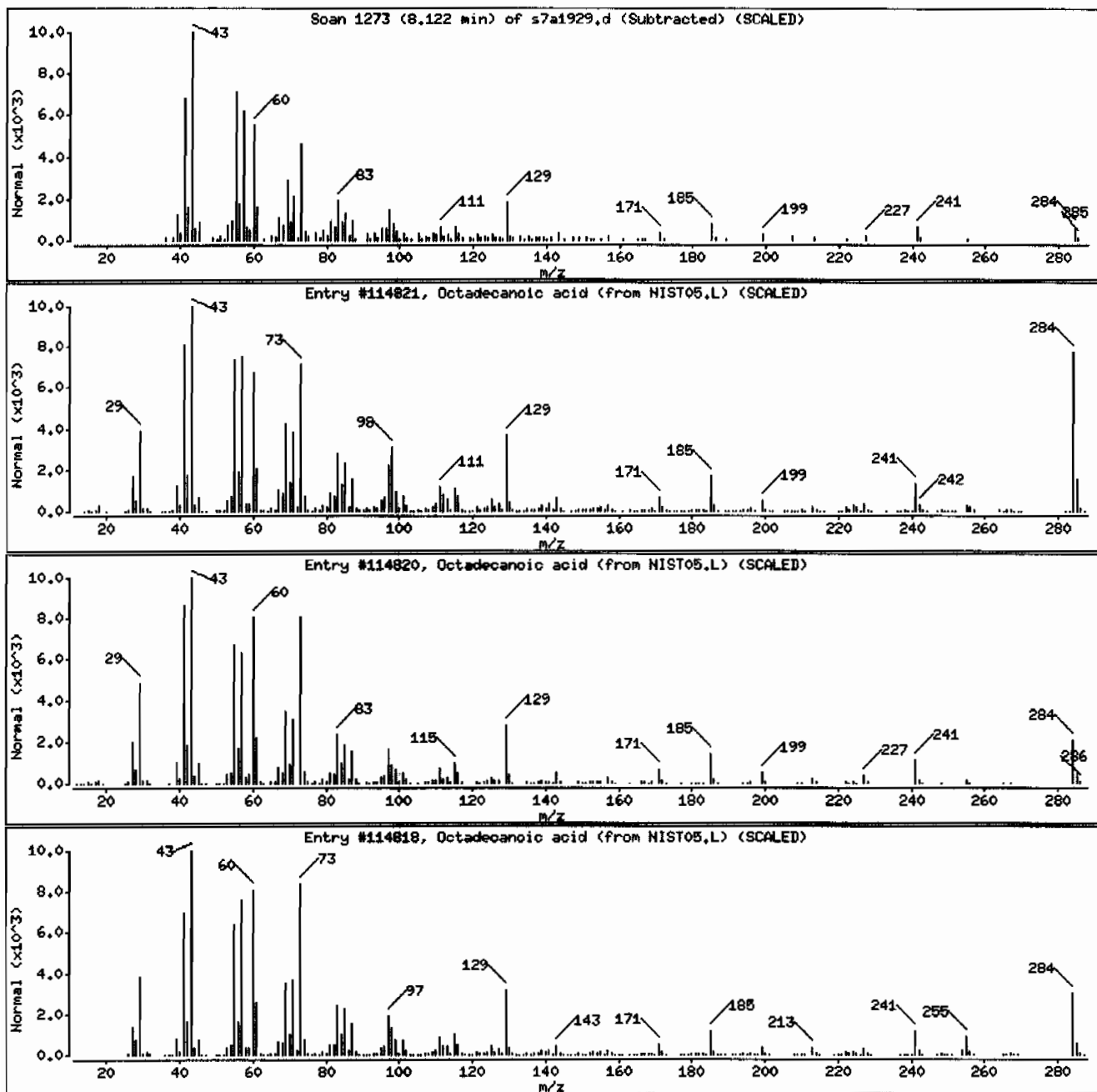
Volume Injected (uL): 0.5

Operator: JHB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Octadecanoic acid	57-11-4	NIST05.L	114821	94	C18H36O2	284
Octadecanoic acid	57-11-4	NIST05.L	114820	91	C18H36O2	284
Octadecanoic acid	57-11-4	NIST05.L	114818	91	C18H36O2	284



Date: 19-JAN-2010 19:32

Client ID: RE12-10-7237

Instrument: MSD7.1

Sample Info: 12445990041941702111SVHF11ILANL

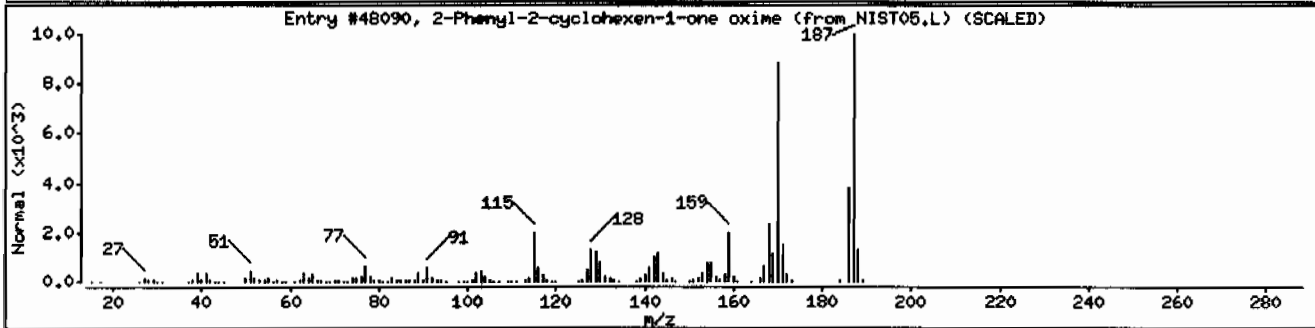
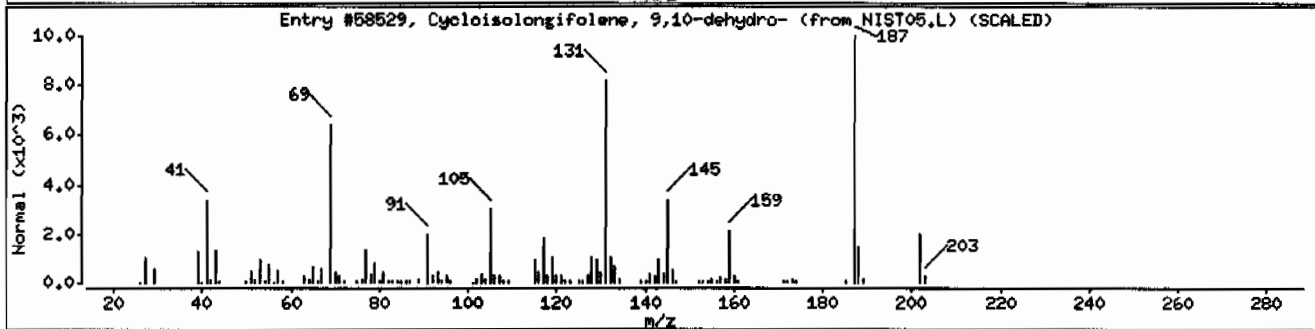
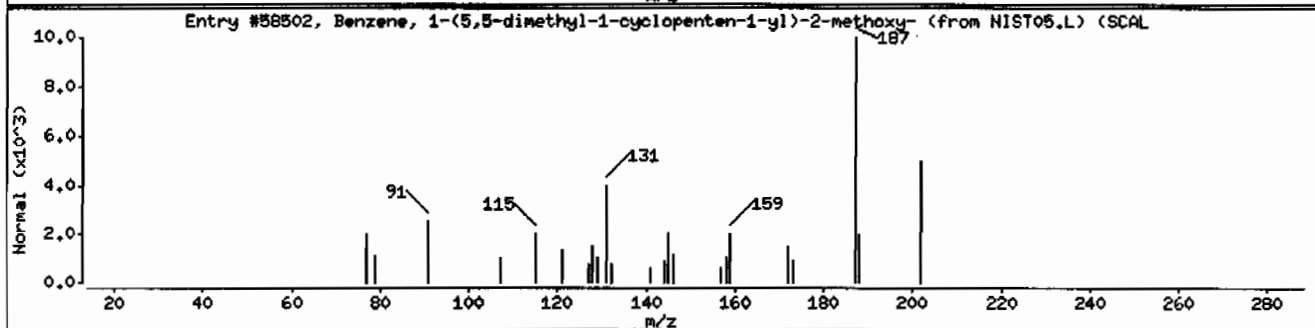
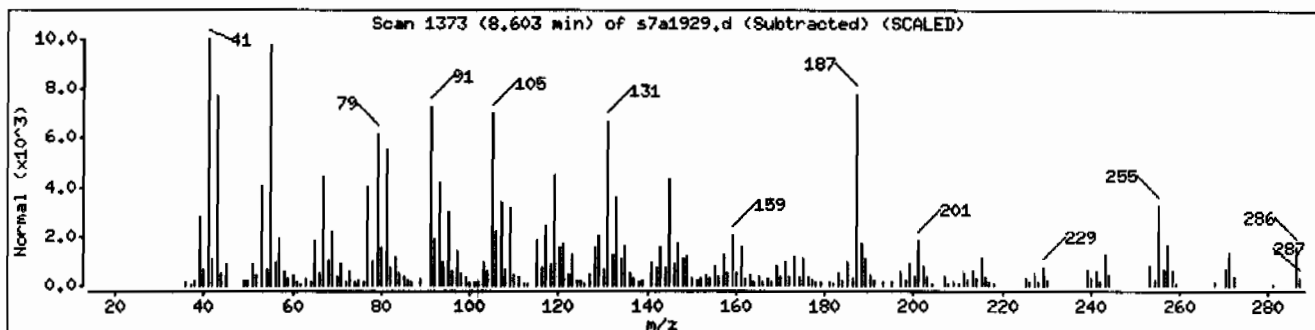
Volume Injected (uL): 0.5

Operator: JHB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Benzene, 1-(5,5-dimethyl-1-cyclopenten-1-yl)-2-methoxy-	39877-93-5	NIST05.L	58502	38	C <sub>14</sub> H <sub>18</sub> O	202
Cycloisolongifolene, 9,10-dehydro-	1000156-81-6	NIST05.L	58529	27	C <sub>15</sub> H <sub>22</sub>	202
2-Phenyl-2-cyclohexen-1-one oxime	56923-15-0	NIST05.L	48090	25	C <sub>12</sub> H <sub>13</sub> NO	187



Date : 19-JAN-2010 19:32

Client ID: RE12-10-7237

Instrument: HSD7.i

Sample Info: 12448990041941702111SVHF11ILANL

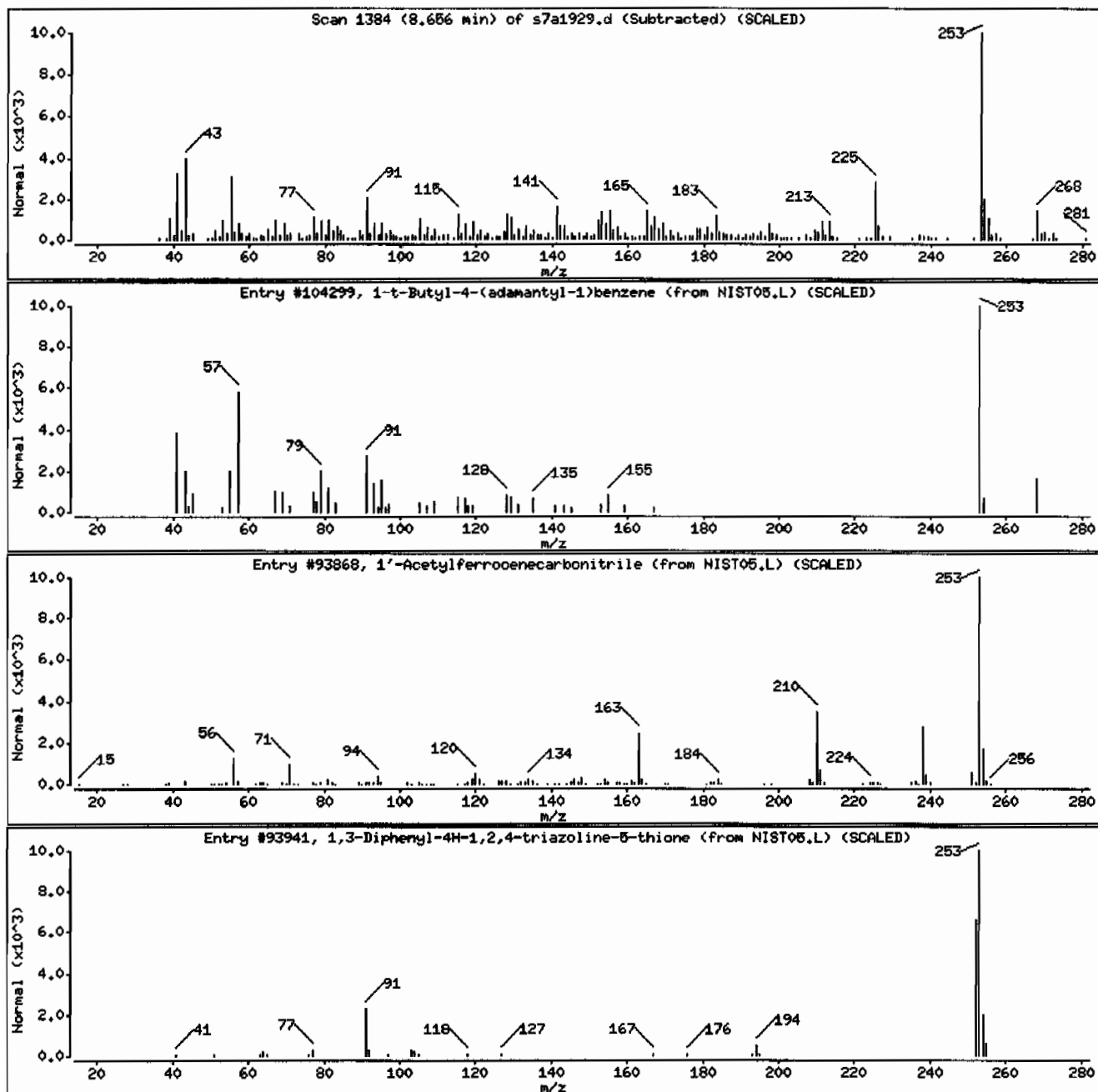
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1-t-Butyl-4-(adamantyl-1)benzene	59974-45-7	NIST05.L	104299	50	C <sub>20</sub> H <sub>28</sub>	268
1'-Acetylferrocenecarbonitrile	12276-85-6	NIST05.L	93868	47	C <sub>13</sub> H <sub>11</sub> FeNO	253
1,3-Diphenyl-4H-1,2,4-triazoline-5-thione	5055-73-2	NIST05.L	93941	47	C <sub>14</sub> H <sub>11</sub> N <sub>3</sub> S	253



Date: 19-JAN-2010 19:32

Client ID: RE12-10-7237

Instrument: MSD7.i

Sample Info: 1244599004194170211SVHF11ILANL

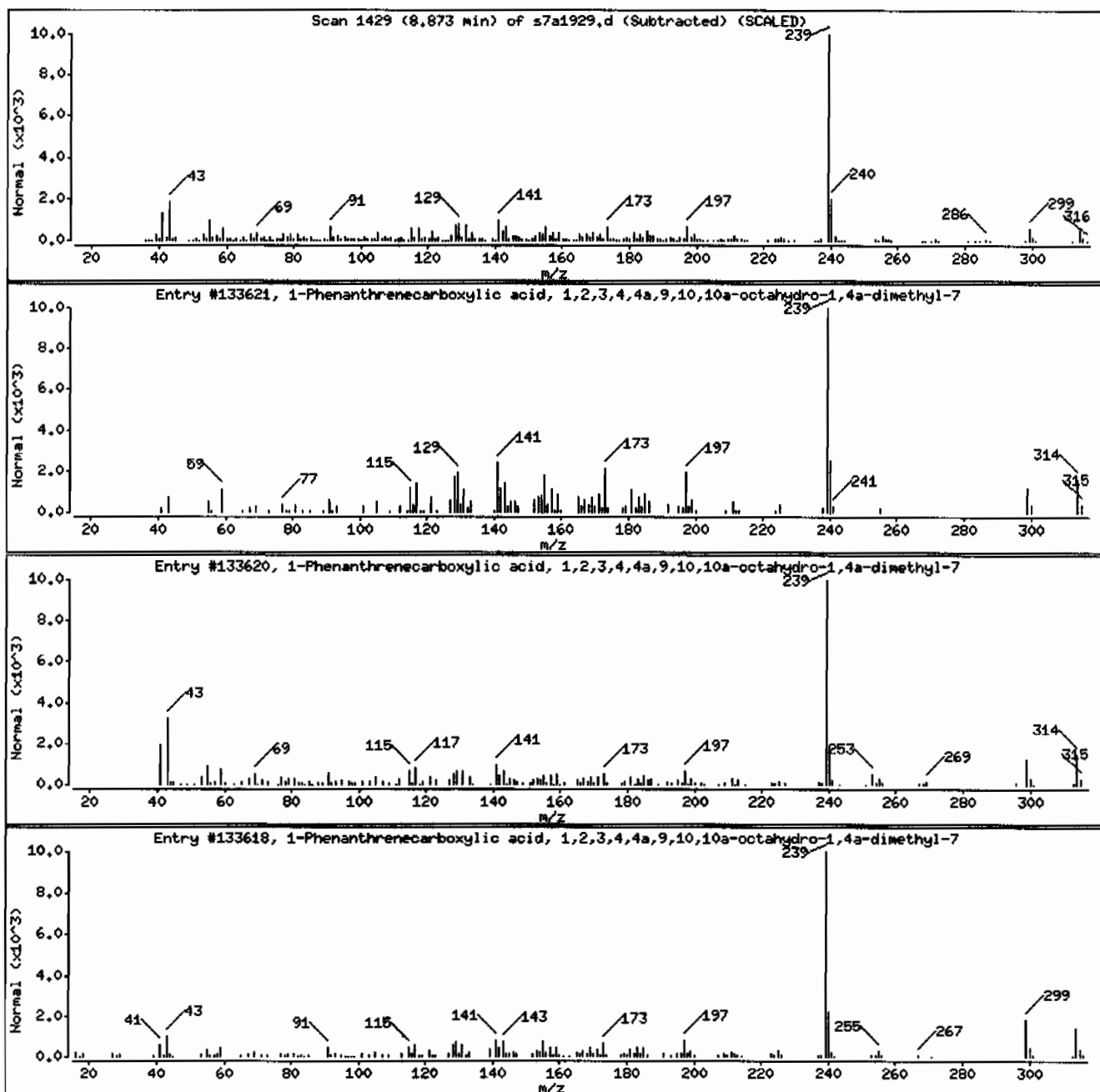
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133621	95	C21H30O2	314
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133620	95	C21H30O2	314
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133618	83	C21H30O2	314



Date: 19-JAN-2010 19:32

Client ID: RE12-10-7237

Instrument: MSD7.i

Sample Info: 1244599004194170211SVMF111LANL

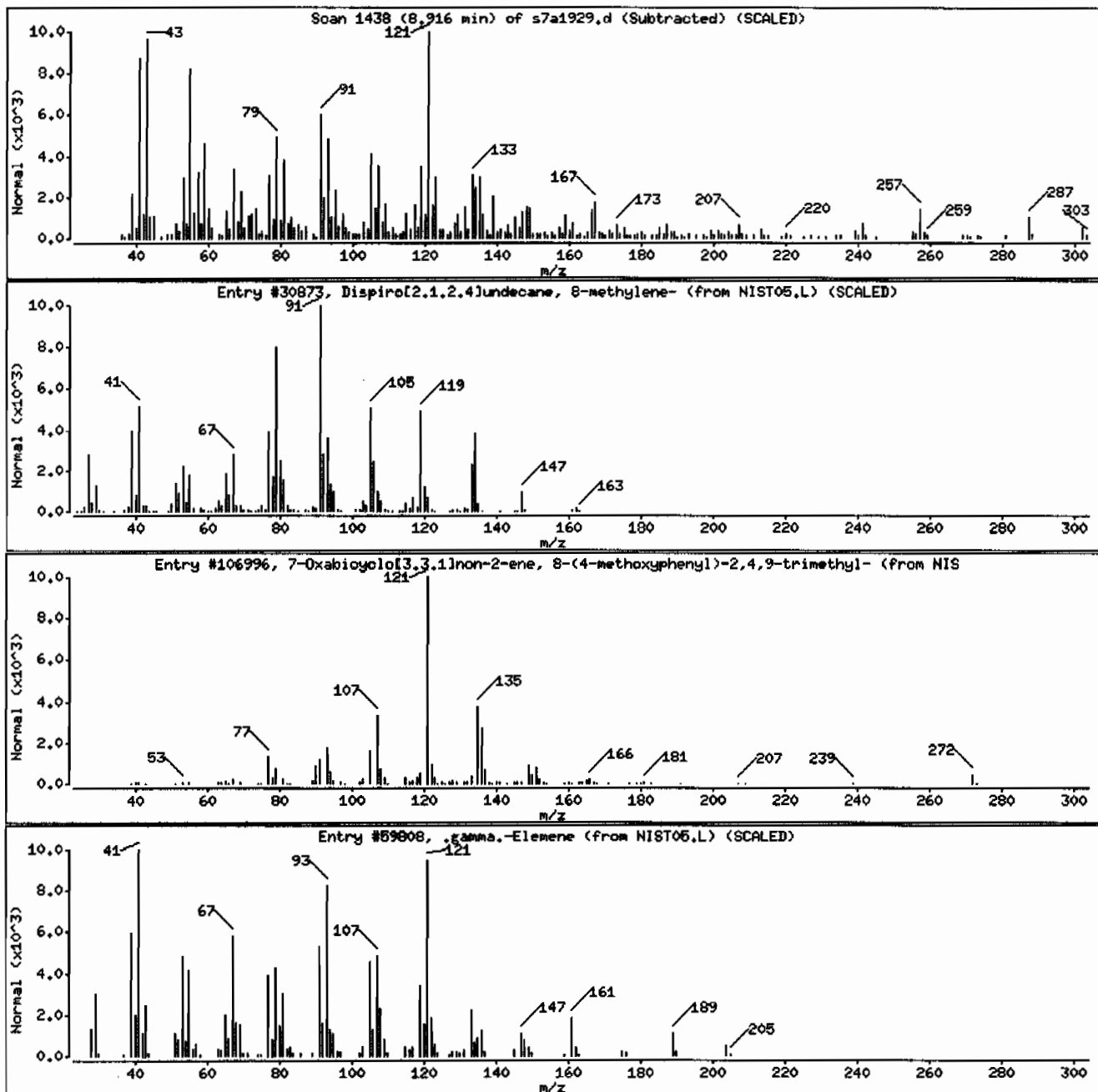
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Dispiro[2.1.2.4]undecane, 8-methylene-	51567-08-9	NIST05.L	30873	44	C12H18	162
7-Oxabicyclo[3.3.1]non-2-ene, 8-(4-methoxyphenyl)-2,4,9-trimethyl-	1000264-58-5	NIST05.L	106996	27	C18H24O2	272
.gamma.-Elemene	339154-91-8	NIST05.L	59808	25	C15H24	204



Date: 19-JAN-2010 19:32

Client ID: RE12-10-7237

Instrument: MSD7.i

Sample Info: 1244599004194170211SVHF111LANL

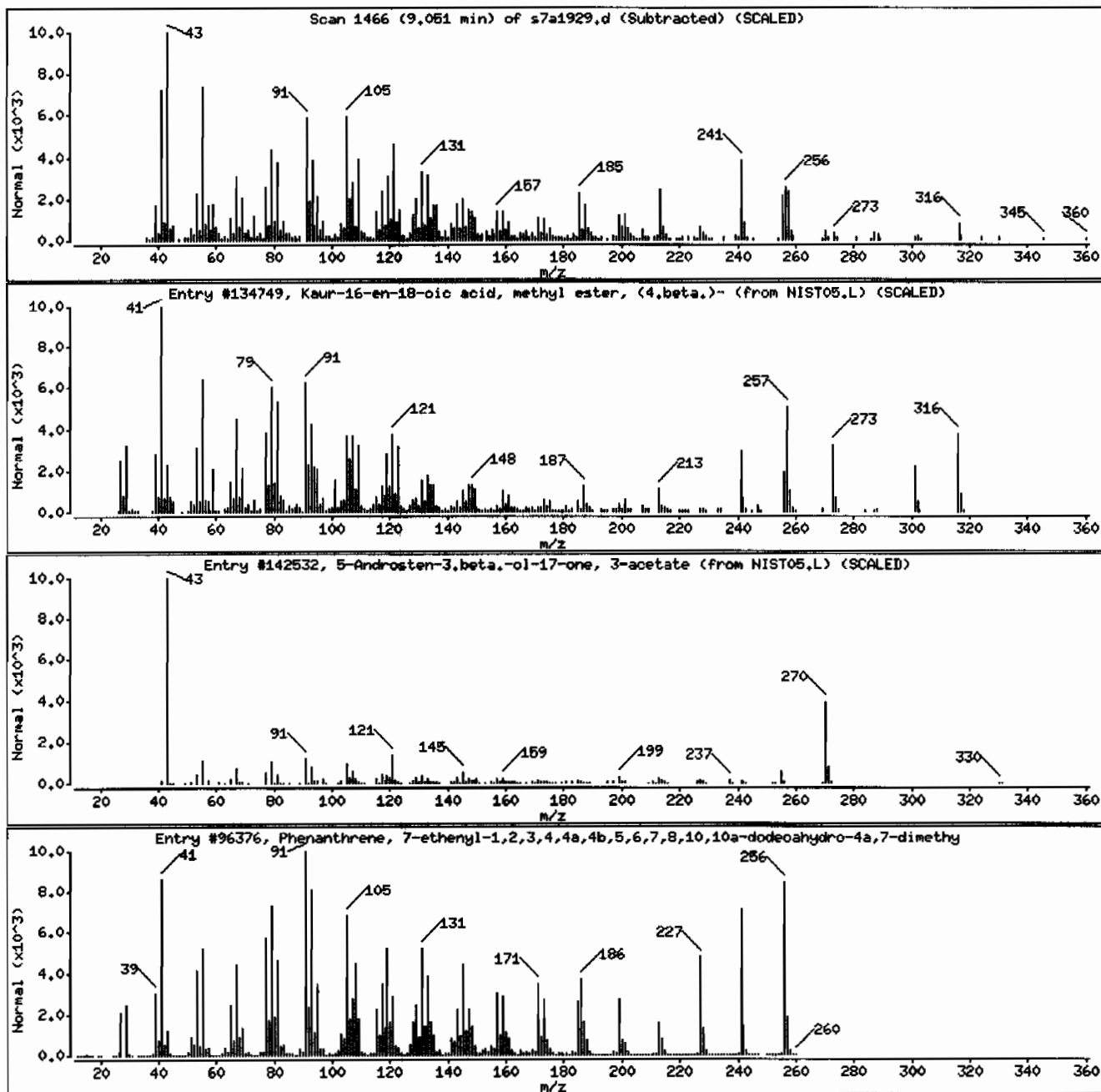
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Kaur-16-en-18-oic acid, methyl ester, (4	5524-25-4	NIST05.L	134749	43	C21H32O2	316
5-Androsten-3,β-ol-17-one, 3-acetate	1000127-30-4	NIST05.L	142532	25	C21H30O3	330
Phenanthrene, 7-ethenyl-1,2,3,4,4a,4b,5,	26549-04-2	NIST05.L	96376	25	C19H28	256





Date : 19-JAN-2010 19:32

Client ID: RE12-10-7237

Instrument: MSD7.i

Sample Info: 1244599004194170211SVMF11ILANL

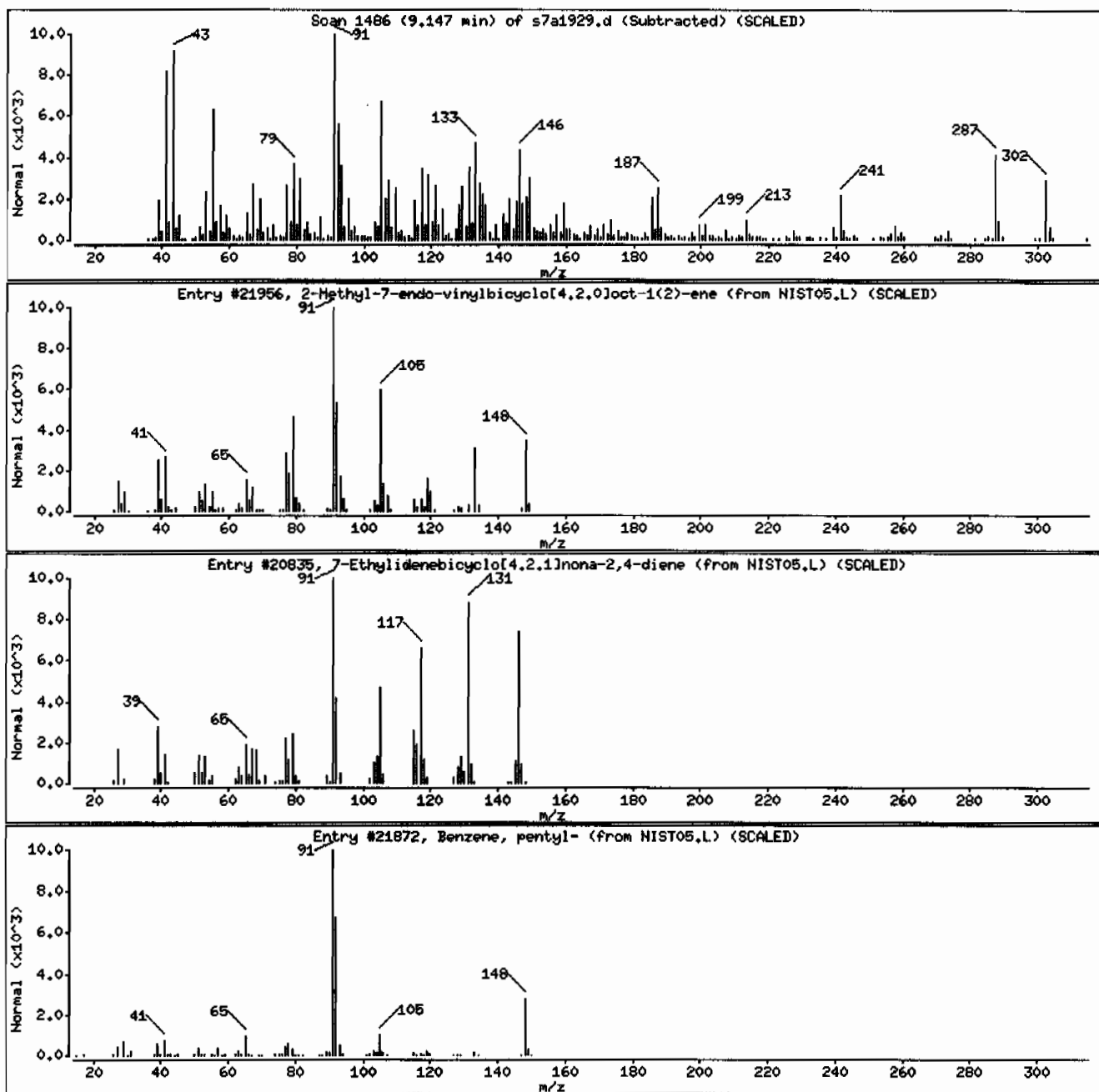
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Methyl-7-endo-vinylbicyclo[4.2.0]oct-1	1000200-99-1	NIST05.L	21956	18	C11H16	148
7-Ethylidenebicyclo[4.2.1]nona-2,4-diene	94400-10-9	NIST05.L	20835	15	C11H14	146
Benzene, pentyl-	538-68-1	NIST05.L	21872	11	C11H16	148



Date: 19-JAN-2010 19:32

Client ID: RE12-10-7237

Instrument: HSD7.i

Sample Info: 1244599004194170211SVHF11ILANL

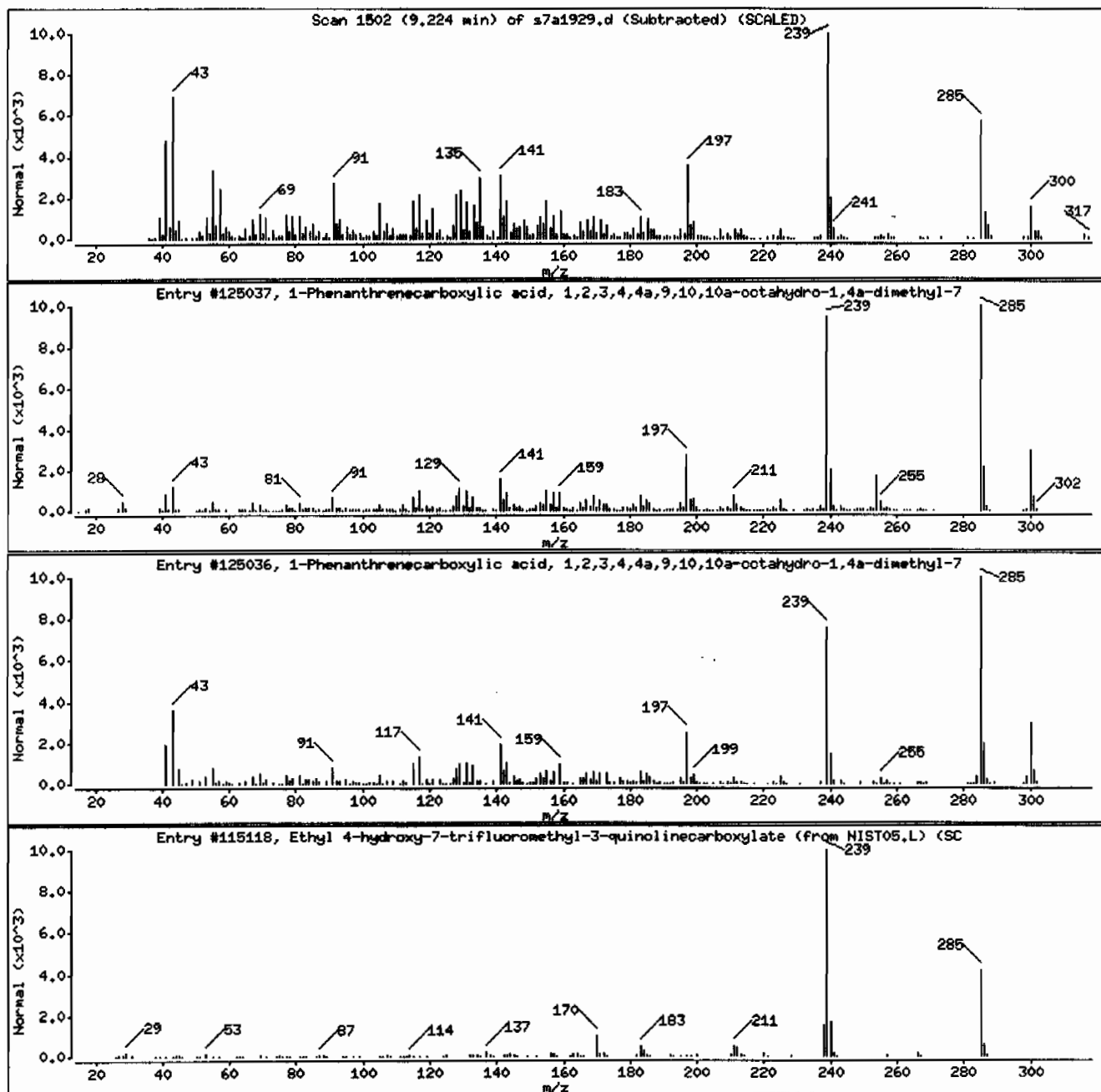
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125037	91	C20H28O2	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125036	86	C20H28O2	300
Ethyl 4-hydroxy-7-trifluoromethyl-3-quin	391-02-6	NIST05.L	115118	46	C13H10F3NO3	285



Date : 19-JAN-2010 19:32

Client ID: RE12-10-7237

Instrument: HSD7.i

Sample Info: 1244599004194170211SVHF11ILANL

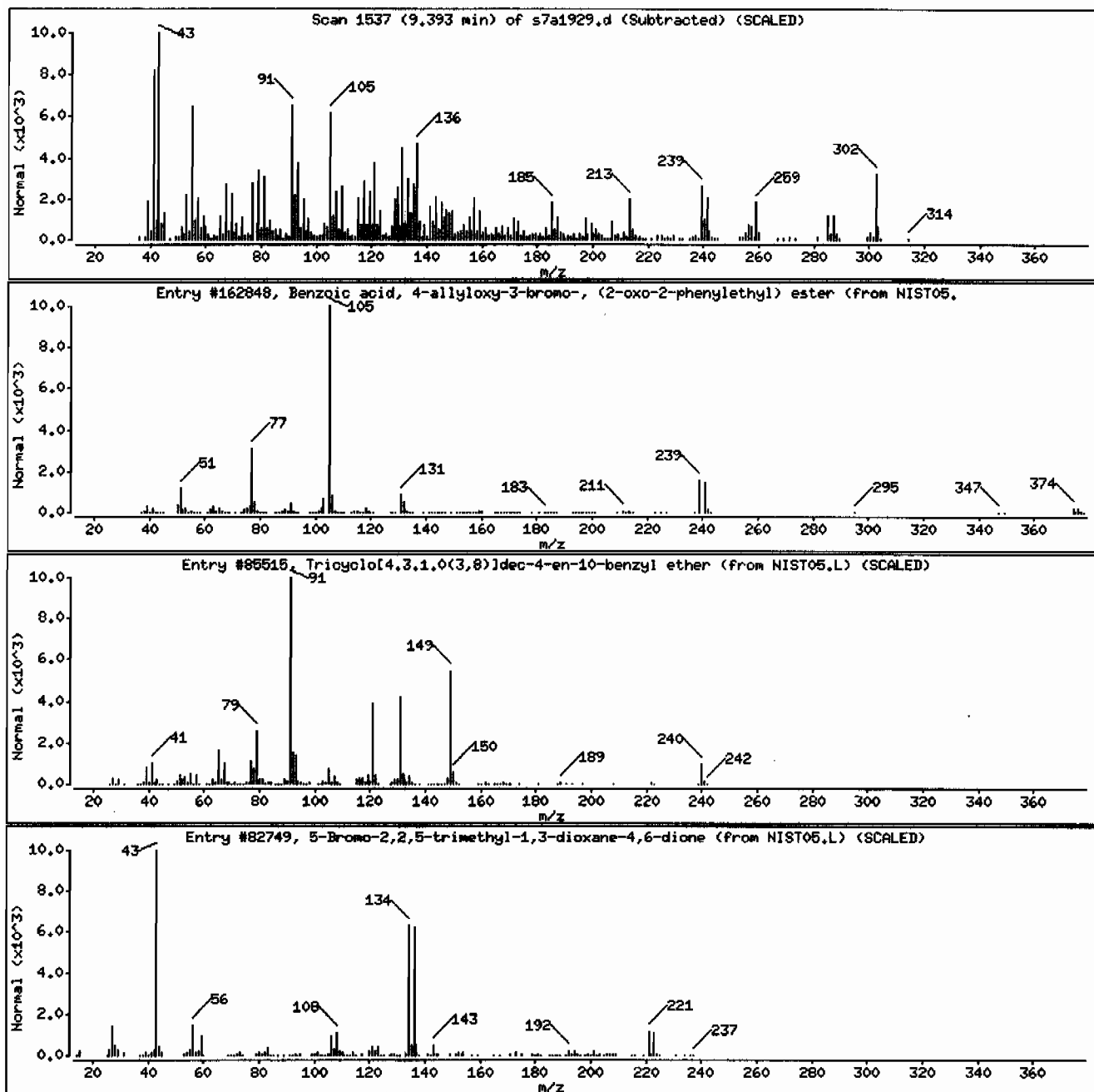
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Benzoic acid, 4-allyloxy-3-bromo-, (2-ox	284680-03-1	NIST05.L	162848	9	C18H15BrO4	374
Tricyclo[4.3.1.0(3,8)]dec-4-en-10-benzyl	1000197-67-3	NIST05.L	85515	9	C17H20O	240
5-Bromo-2,2,5-trimethyl-1,3-dioxane-4,6-	34817-42-0	NIST05.L	82749	9	C7H9BrO4	236



Date: 19-JAN-2010 19:32

Client ID: RE12-10-7237

Instrument: MSD7.i

Sample Info: 1244599004194170211ISVHF11ILANL

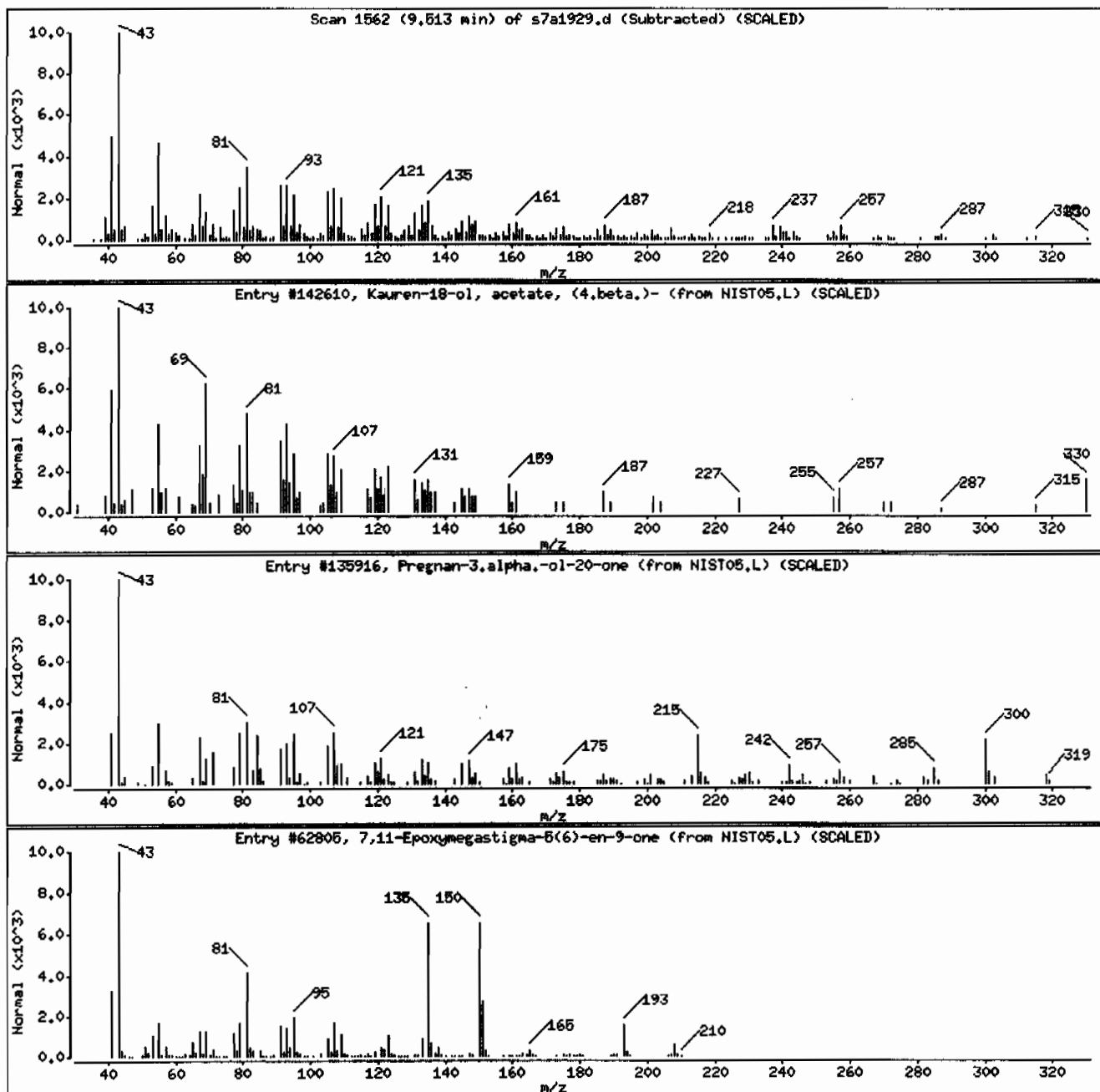
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Kauren-18-ol, acetate, (4,beta.)-	72150-74-4	NIST05.L	142610	58	C22H34O2	330
Pregnan-3,alpha.-ol-20-one	128-20-1	NIST05.L	135916	47	C21H34O2	318
7,11-Epoxyneogastigma-5(6)-en-9-one	64243-62-5	NIST05.L	62805	43	C13H20O2	208



Date : 19-JAN-2010 19:32

Client ID: RE12-10-7237

Instrument: HSD7.i

Sample Info: I2445990041941702111SVHF111LANL

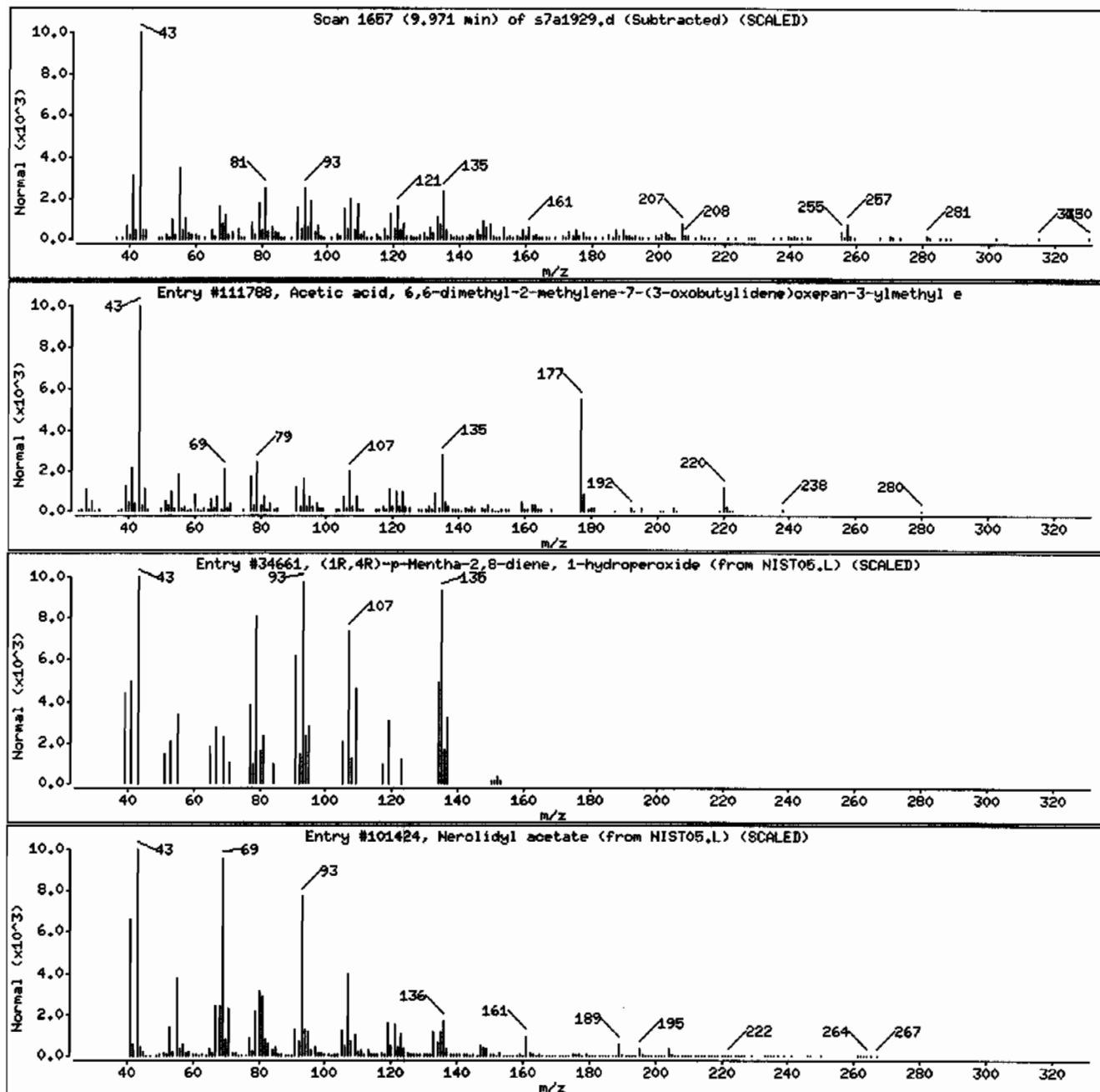
Volume Injected (uL): 0.5

Operator: JHB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Acetic acid, 6,6-dimethyl-2-methylene-7-	1000186-15-5	NIST05.L	111788	64	C16H24O4	280
(1R,4R)-p-Mentha-2,8-diene, 1-hydroperox	1000292-74-0	NIST05.L	34661	47	C10H16O2	168
Nerolidyl acetate	2306-78-7	NIST05.L	101424	47	C17H28O2	264



Date : 19-JAN-2010 19:32

Client ID: RE12-10-7237

Instrument: HSD7.i

Sample Info: 1244599004|94170211|SVNF11ILANL

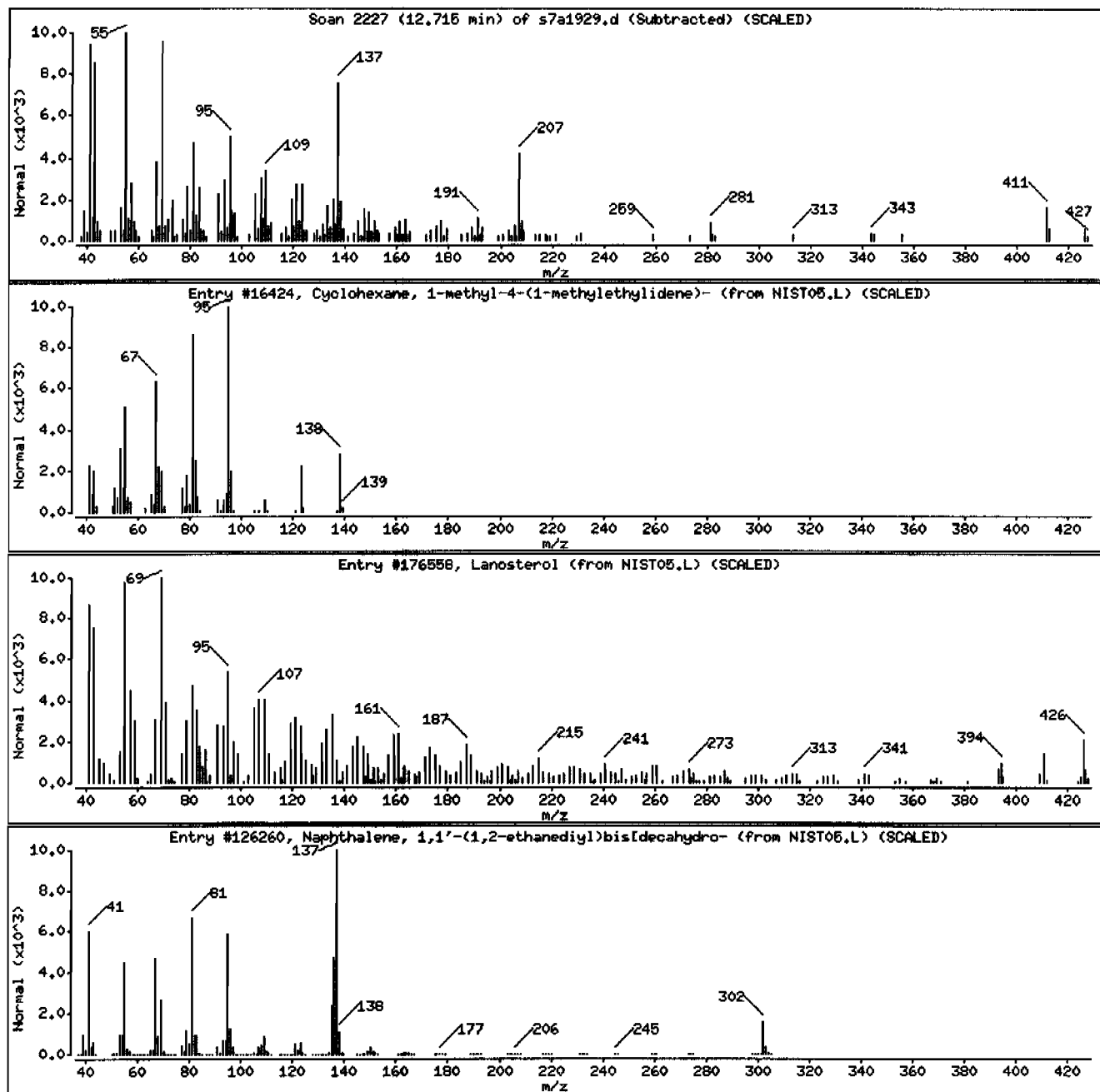
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cyclohexane, 1-methyl-4-(1-methylethylidene)	1124-27-2	NIST05.L	16424	44	C10H18	138
Lanosterol	79-63-0	NIST05.L	176558	38	C30H50O	426
Naphthalene, 1,1'-(1,2-ethanediyl)bis[de	54934-69-9	NIST05.L	126260	35	C22H38	302



Date: 19-JAN-2010 19:32

Client ID: RE12-10-7237

Instrument: MSD7.i

Sample Info: 1244599004194170211|SVMF11|LANL

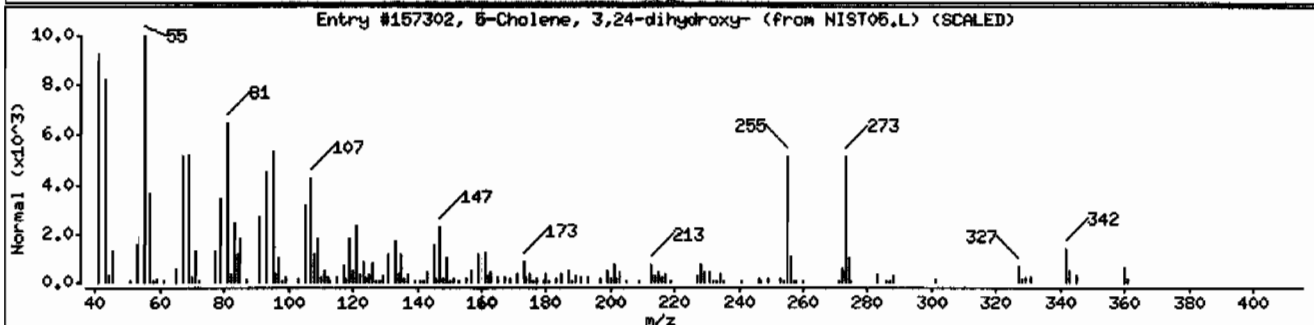
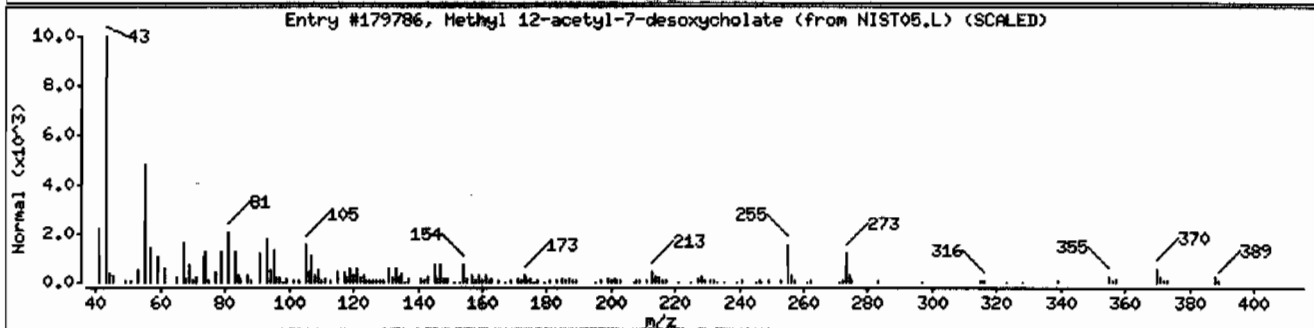
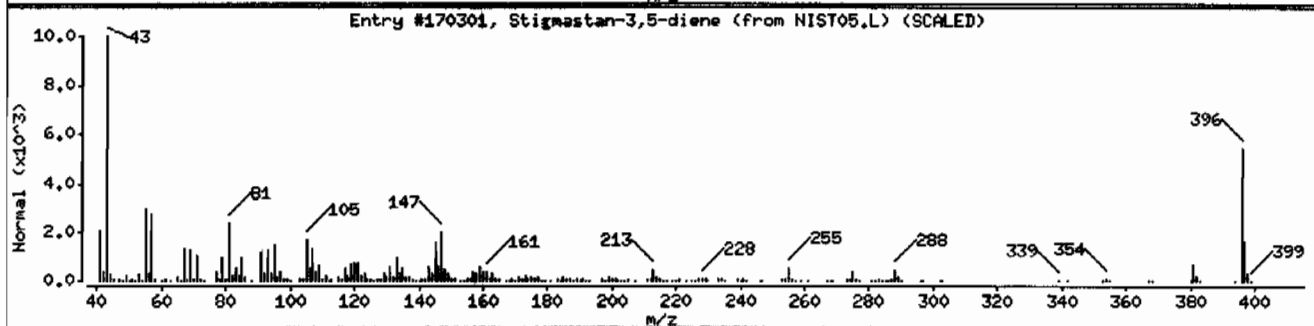
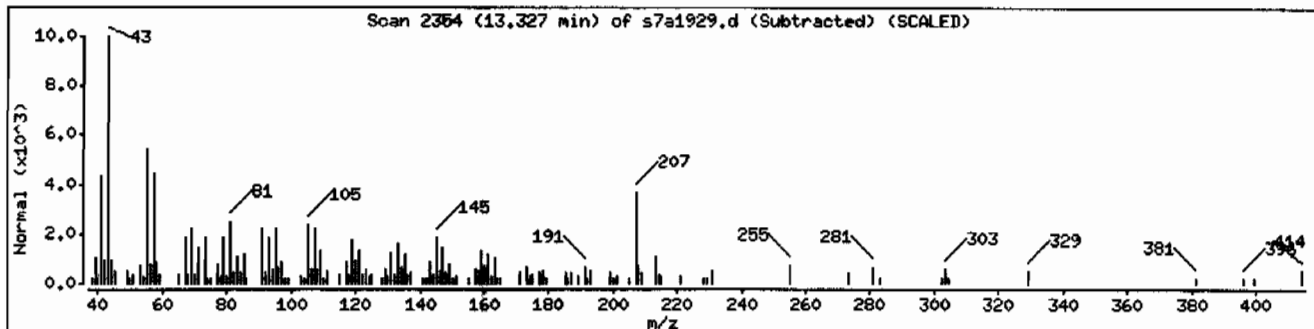
Volume Injected (uL): 0.5

Operator: JHB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Stigmastan-3,5-diene	1000214-16-4	NIST05.L	170301	46	C29H48	396
Methyl 12-acetyl-7-desoxycholate	66647-48-3	NIST05.L	179786	43	C27H44O5	448
5-Cholene, 3,24-dihydroxy-	1000251-69-2	NIST05.L	157302	35	C24H40O2	360



Date: 19-JAN-2010 19:32

Client ID: RE12-10-7237

Instrument: MSD7.i

Sample Info: 1244599004194170211SVHF111LANL

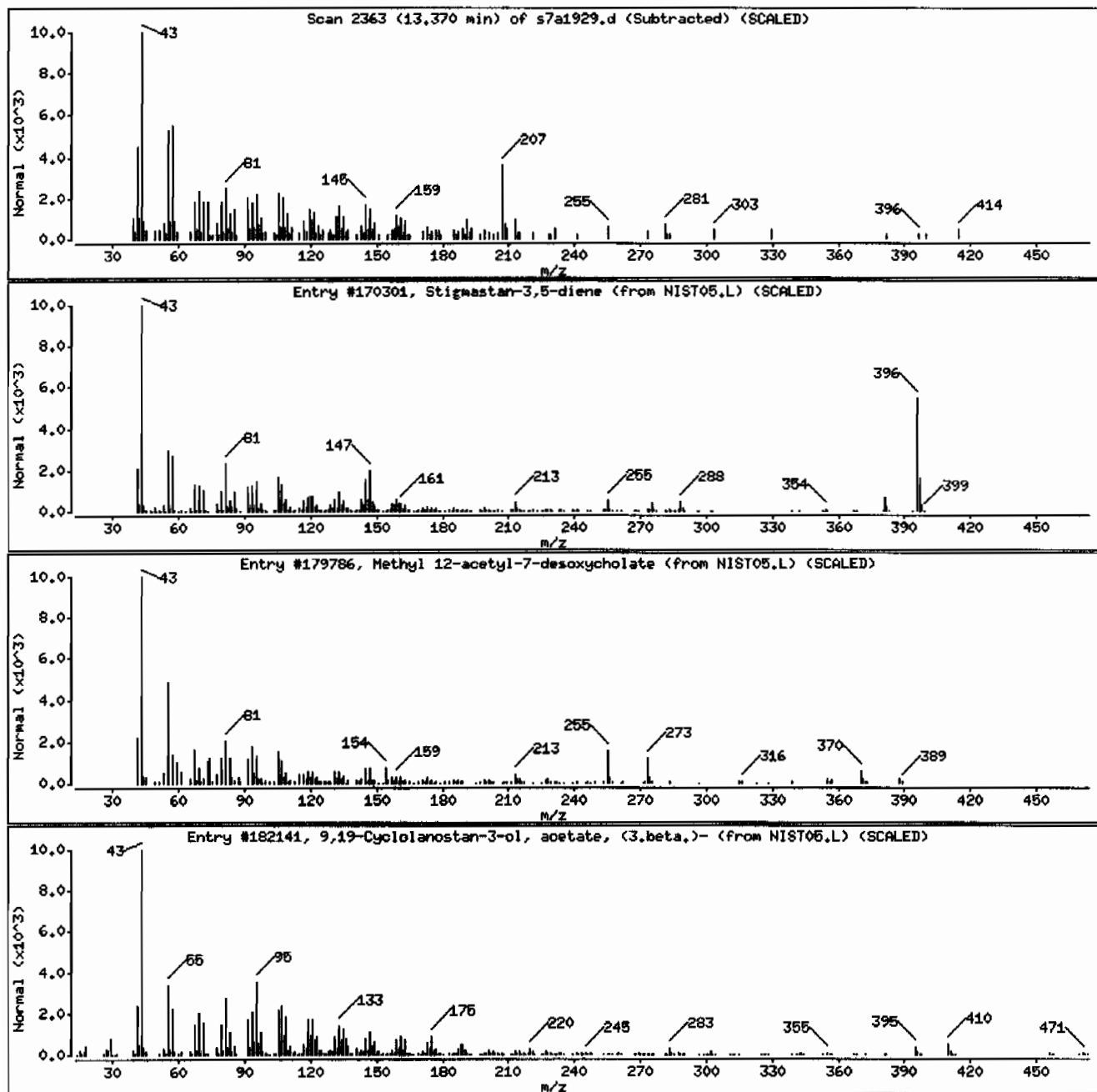
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Stigmastan-3,5-diene	1000214-16-4	NIST05.L	170301	50	C29H48	396
Methyl 12-acetyl-7-desoxycholate	55547-48-3	NIST05.L	179786	43	C27H44O5	448
9,19-Cyclolanostan-3-ol, acetate, (3,β)	4575-74-0	NIST05.L	182141	38	C32H54O2	470





**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210	Date Collected: 01/07/2010 12:00	Matrix: R
Lab Sample ID: 244599006	Date Received: 01/13/2010 08:55	%Moisture: 16.7
Client ID: RE12-10-7238	Client: LANL010	Project: LANL01004
Batch ID: 941702	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/19/2010 20:16	Inst: MSD7.I	Dilution: 1
Prep Date: 01/14/2010 19:34	Analyst: JMB3	Inj. Vol: .5 uL
Data File: s7a1931.d	Aliquot: 30.11 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	399	ug/kg	79.7	399
108-95-2	Phenol	U	399	ug/kg	79.7	399
95-57-8	2-Chlorophenol	U	399	ug/kg	79.7	399
106-46-7	1,4-Dichlorobenzene	U	399	ug/kg	79.7	399
621-64-7	N-Nitrosodipropylamine	U	399	ug/kg	79.7	399
59-50-7	4-Chloro-3-methylphenol	U	399	ug/kg	79.7	399
83-32-9	Acenaphthene	U	39.9	ug/kg	13.2	39.9
121-14-2	2,4-Dinitrotoluene	U	399	ug/kg	39.9	399
100-02-7	4-Nitrophenol	U	399	ug/kg	132	399
87-86-5	Pentachlorophenol	U	399	ug/kg	99.6	399
129-00-0	Pyrene	U	39.9	ug/kg	12.0	39.9
110-86-1	Pyridine	U	399	ug/kg	79.7	399
62-53-3	Aniline	U	399	ug/kg	120	399
111-44-4	bis(2-Chloroethyl) ether	U	399	ug/kg	79.7	399
541-73-1	1,3-Dichlorobenzene	U	399	ug/kg	79.7	399
100-51-6	Benzyl alcohol	U	399	ug/kg	120	399
95-50-1	1,2-Dichlorobenzene	U	399	ug/kg	79.7	399
108-60-1	bis(2-Chloroisopropyl)ether	U	399	ug/kg	79.7	399
95-48-7	o-Cresol	U	399	ug/kg	79.7	399
65794-96-9	m,p-Cresols	U	399	ug/kg	120	399
67-72-1	Hexachloroethane	U	399	ug/kg	79.7	399
98-95-3	Nitrobenzene	U	399	ug/kg	79.7	399
78-59-1	Isophorone	U	399	ug/kg	79.7	399
88-75-5	2-Nitrophenol	U	399	ug/kg	79.7	399
105-67-9	2,4-Dimethylphenol	U	399	ug/kg	140	399
111-91-1	bis(2-Chloroethoxy)methane	U	399	ug/kg	79.7	399
120-83-2	2,4-Dichlorophenol	U	399	ug/kg	79.7	399
65-85-0	Benzoic acid	U	797	ug/kg	199	797
91-20-3	Naphthalene	U	39.9	ug/kg	12.0	39.9
106-47-8	4-Chloroaniline	U	399	ug/kg	79.7	399
87-68-3	Hexachlorobutadiene	U	399	ug/kg	79.7	399
91-57-6	2-Methylnaphthalene	U	39.9	ug/kg	7.97	39.9
77-47-4	Hexachlorocyclopentadiene	U	399	ug/kg	79.7	399
88-06-2	2,4,6-Trichlorophenol	U	399	ug/kg	79.7	399
95-95-4	2,4,5-Trichlorophenol	U	399	ug/kg	79.7	399
91-58-7	2-Chloronaphthalene	U	39.9	ug/kg	13.2	39.9
88-74-4	2-Nitroaniline	U	399	ug/kg	79.7	399
99-09-2	o-Nitroaniline	U	399	ug/kg	79.7	399
	3-Nitroaniline					

Semi-Volatile  
Certificate of Analysis  
Sample Summary

SDG Number: 10-1210	Date Collected: 01/07/2010 12:00	Matrix: R
Lab Sample ID: 244599006	Date Received: 01/13/2010 08:55	%Moisture: 16.7
Client ID: RE12-10-7238	Client: LANL010	Project: LANL01004
Batch ID: 941702	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/19/2010 20:16	Inst: MSD7.I	Dilution: 1
Prep Date: 01/14/2010 19:34	Analyst: JMB3	Inj. Vol: .5 uL
Data File: s7a1931.d	Aliquot: 30.11 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	399	ug/kg	79.7	399
606-20-2	2,6-Dinitrotoluene	U	399	ug/kg	39.9	399
208-96-8	Acenaphthylene	U	39.9	ug/kg	12.0	39.9
51-28-5	2,4-Dinitrophenol	U	797	ug/kg	151	797
132-64-9	Dibenzofuran	U	399	ug/kg	79.7	399
84-66-2	Diethylphthalate	U	399	ug/kg	79.7	399
86-73-7	Fluorene	U	39.9	ug/kg	12.0	39.9
7005-72-3	4-Chlorophenylphenylether	U	399	ug/kg	79.7	399
534-52-1	2-Methyl-4,6-dinitrophenol	U	399	ug/kg	79.7	399
100-01-6	4-Nitroaniline	U	399	ug/kg	120	399
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	399	ug/kg	79.7	399
122-66-7	Azobenzene	U	399	ug/kg	79.7	399
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	399	ug/kg	79.7	399
118-74-1	Hexachlorobenzene	U	399	ug/kg	79.7	399
85-01-8	Phenanthrene	U	39.9	ug/kg	12.0	39.9
120-12-7	Anthracene	U	39.9	ug/kg	7.97	39.9
84-74-2	Di-n-butylphthalate	U	399	ug/kg	79.7	399
206-44-0	Fluoranthene	U	39.9	ug/kg	12.0	39.9
85-68-7	Butylbenzylphthalate	U	399	ug/kg	79.7	399
56-55-3	Benzo(a)anthracene	U	39.9	ug/kg	12.0	39.9
91-94-1	3,3'-Dichlorobenzidine	U	399	ug/kg	120	399
218-01-9	Chrysene	U	39.9	ug/kg	12.0	39.9
117-81-7	bis(2-Ethylhexyl)phthalate	U	399	ug/kg	79.7	399
117-84-0	Di-n-octylphthalate	U	399	ug/kg	79.7	399
205-99-2	Benzo(b)fluoranthene	U	39.9	ug/kg	12.0	39.9
207-08-9	Benzo(k)fluoranthene	U	39.9	ug/kg	12.0	39.9
50-32-8	Benzo(a)pyrene	U	39.9	ug/kg	12.0	39.9
193-39-5	Indeno(1,2,3-cd)pyrene	U	39.9	ug/kg	12.0	39.9
53-70-3	Dibenzo(a,h)anthracene	U	39.9	ug/kg	12.0	39.9
191-24-2	Benzo(ghi)perylene	U	39.9	ug/kg	12.0	39.9
120-82-1	1,2,4-Trichlorobenzene	U	399	ug/kg	79.7	399

## Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.83	741	ug/kg		JA
	Unknown	8.57	631	ug/kg		J

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210	Date Collected: 01/07/2010 12:00	Matrix: R
Lab Sample ID: 244599006	Date Received: 01/13/2010 08:55	%Moisture: 16.7
Client ID: RE12-10-7238	Client: LANL010	Project: LANL01004
Batch ID: 941702	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/19/2010 20:16	Inst: MSD7.I	Dilution: 1
Prep Date: 01/14/2010 19:34	Analyst: JMB3	Inj. Vol: .5 uL
Data File: s7a1931.d	Aliquot: 30.11 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
---------	---------	-----------	--------	-------	---------	---------

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	9.03	870	ug/kg		J
	Unknown	12.72	540	ug/kg		J

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Data file : /chem/MSD7.i/s011910.b/s7a1931.d  
Lab Smp Id: 244599006 Client Smp ID: RE12-10-7238  
Inj Date : 19-JAN-2010 20:16  
Operator : JMB3 Inst ID: MSD7.i  
Smp Info : |244599006|941702|1|SVMF|1|LANL  
Misc Info : |MSD8270\_S|WBN100107-02|  
Comment : Column: J&W Scientific DB-5MS 25m x 0.2mm x 0.33um film thickness  
Method : /chem/MSD7.i/s011910.b/MSD7-M8270C-AQA-011310.m  
Meth Date : 19-Jan-2010 18:16 llo00884 Quant Type: ISTD  
Cal Date : 15-JAN-2010 19:06 Cal File: s7a1515.d  
Als bottle: 30  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1210.sub  
Target Version: 3.50  
Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.11000	weight of sample
M	16.67800	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG			RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT REL RT		ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.788	3.793 (1.000)	378837	40.0000	
* 29 Naphthalene-d8	136	4.650	4.654 (1.000)	1392517	40.0000	
* 46 Acenaphthene-d10	164	5.892	5.897 (1.000)	727389	40.0000	
* 67 Phenanthrene-d10	188	7.043	7.048 (1.000)	1324883	40.0000	
* 91 Chrysene-d12	240	9.422	9.426 (1.000)	1079648	40.0000	
* 98 Perylene-d12	264	10.967	10.972 (1.000)	755189	40.0000	
\$ 3 2-Fluorophenol	112	2.993	2.984 (0.790)	668956	61.4496	2450
\$ 5 Phenol-d5	99	3.508	3.508 (0.926)	881271	62.7877	2500
\$ 20 Nitrobenzene-d5	82	4.144	4.154 (0.891)	409573	35.6556	1420
\$ 39 2-Fluorobiphenyl	172	5.386	5.391 (0.914)	742996	34.6636	1380
\$ 60 2,4,6-Tribromophenol	329	6.480	6.484 (1.100)	140374	76.7098	3060
\$ 81 p-Terphenyl-d14	244	8.406	8.406 (0.892)	758326	41.1237	1640

## ION RATIO REPORT

## SV REPORT

Data file: s7a1931.d

Report Date: 01/19/2010 20:34

Lab. ID: 244599006

SampleType: SAMPLE

Injection Date: 19-JAN-2010 20:16

Operator: JMB3

Instrument: MSD7.i

Sample Info: |244599006|941702|1|SVMF|1|LANL

Miscellaneous Info: |MSD8270\_S|WBN100107-02|

Comment:

Method used: /chem/MSD7.i/s011910.b/MSD7-M8270C-AQA-011310.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1210

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4 Aniline		CAS#: 62-53-3				
66	45770	3.51	3.58	80-120	100	(T)
93	455	3.57	3.58	217-277	1	(Q)
-----						
17 N-Nitrosodipropylamine		CAS#: 621-64-7				
70	58829	4.14	4.03	80-120	100	(T)
42	46393	4.14	4.03	63-123	79	(T)
-----						
27 Benzoic acid		CAS#: 65-85-0				
105	344	4.41	4.43	80-120	100	( )
122	397	4.65	4.43	59-119	115	(T)
77	207	4.40	4.43	38- 98	60	( )
-----						
40 2-Chloronaphthalene		CAS#: 91-58-7				
162	36515	5.53	5.50	80-120	100	( )
164	284	5.53	5.50	3- 63	1	(Q)
127	293	5.53	5.50	7- 67	1	(Q)
-----						
43 Dimethylphthalate		CAS#: 131-11-3				
163	133112	5.89	5.67	80-120	100	(T)
164	727389	5.89	5.67	0- 40	546	(QT)
-----						
44 2,6-Dinitrotoluene		CAS#: 606-20-2				
165	95495	5.89	5.72	80-120	100	(T)
63	1623	5.89	5.72	50-110	2	(QT)
-----						

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
50	2,4-Dinitrotoluene			CAS#: 121-14-2		
165	95495	5.89	6.01	80-120	100	(T)
89	1081	5.89	6.01	44-104	1	(QT)
63	1623	5.89	6.01	30- 90	2	(QT)
-----						
53	Fluorene			CAS#: 86-73-7		
166	12128	6.48	6.30	80-120	100	(T)
165	11813	6.47	6.30	57-117	97	(T)
167	3731	6.47	6.30	0- 43	31	(T)
-----						
61	4-Bromophenylphenylether			CAS#: 101-55-3		
248	10438	6.48	6.66	80-120	100	(T)
141	77505	6.47	6.66	57-117	742	(QT)
250	21206	6.48	6.66	66-126	203	(QT)

-----

Q qualifier indicates ion failed ratio requirement

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Data file : /chem/MSD7.i/s011910.b/s7a1931.d  
Lab Smp Id: 244599006 Client Smp ID: RE12-10-7238  
Inj Date : 19-JAN-2010 20:16  
Operator : JMB3 Inst ID: MSD7.i  
Smp Info : |244599006|941702|1|SVMF|1|LANL  
Misc Info : |MSD8270 S|WBN100107-02|  
Comment : Column: J&W Scientific DB-5MS 25m x 0.2mm x 0.33um film thickness  
Method : /chem/MSD7.i/s011910.b/MSD7-M8270C-AQA-011310.m  
Meth Date : 19-Jan-2010 18:16 llo00884 Quant Type: ISTD  
Cal Date : 15-JAN-2010 19:06 Cal File: s7a1515.d  
Als bottle: 30  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1210.sub  
Target Version: 3.50  
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	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.11000	weight of sample
M	16.67800	% moisture

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.788	2389981	40.000
* 91 Chrysene-d12	9.422	2960285	40.000
* 98 Perylene-d12	10.967	2244536	40.000

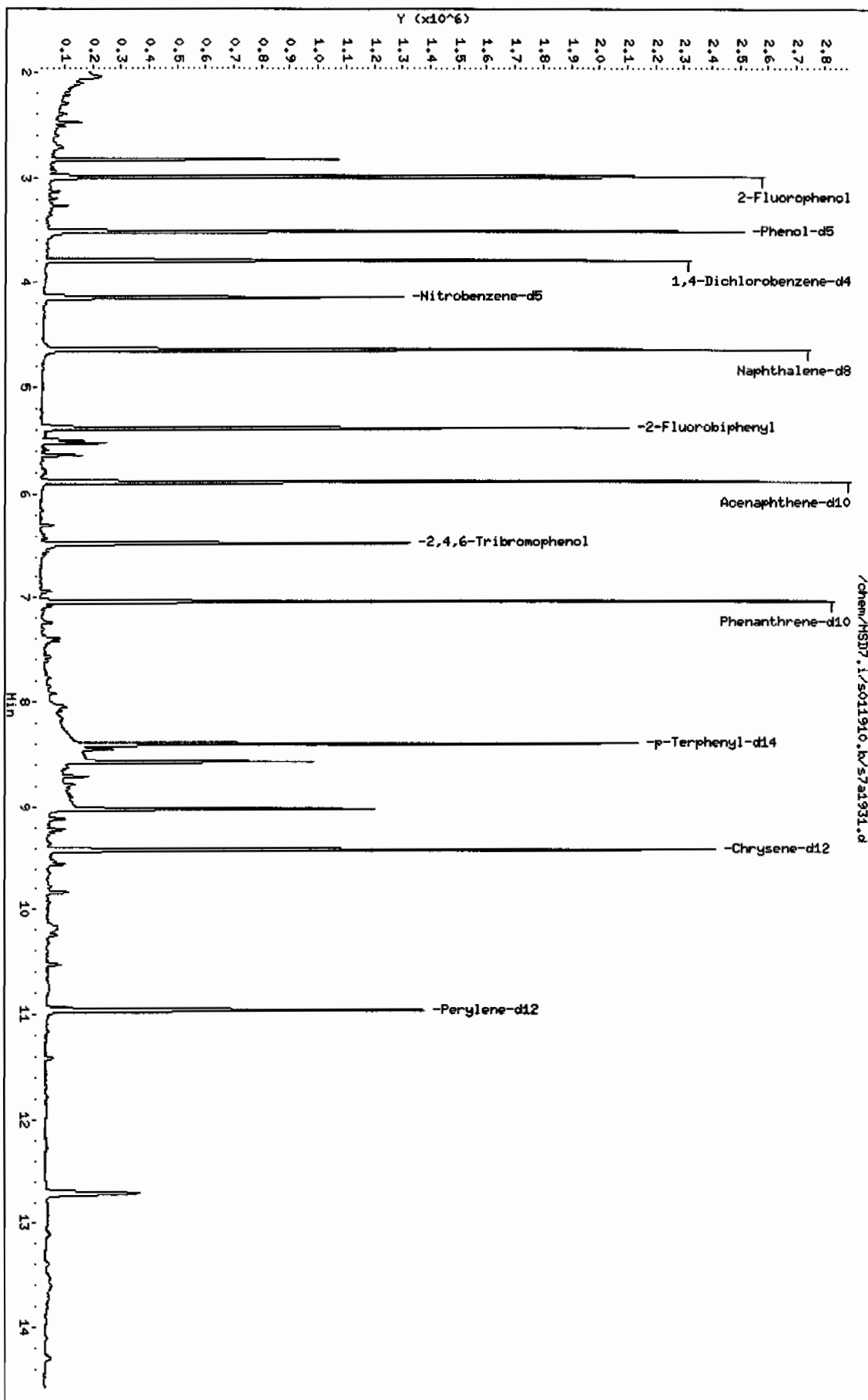
CONCENTRATIONS				QUANT			
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====

RT	AREA	CONCENTRATIONS		QUAL	QUANT		CPND #
		ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
Unknown Aldol Condensate					CAS #:		
2.830	1110991	18.5941457	741	0		0	10
Unknown					CAS #:		
8.574	1171002	15.8228285	631	0		0	91
Unknown					CAS #:		
9.027	1614576	21.8164881	870	0		0	91
Unknown					CAS #:		
12.715	759861	13.5415323	540	0		0	98



Data File: /chem/HSD7.1/s011910.b/s7a1931.d  
Date: 19-MAY-2010 20:16  
Client ID: REL2-10-7238  
Sample Info: 124459006194170211SVHF11LRLN  
Volume Injected (uL): 0.5  
Column Phase: J&W DB-SMS

Instrument: HSD7.1  
Operator: JMB3  
Column diameter: 0.20



Date: 19-JAN-2010 20:16

Client ID: RE12-10-7238

Instrument: MSD7.i

Sample Info: 12445990061941702111SVHF111LANL

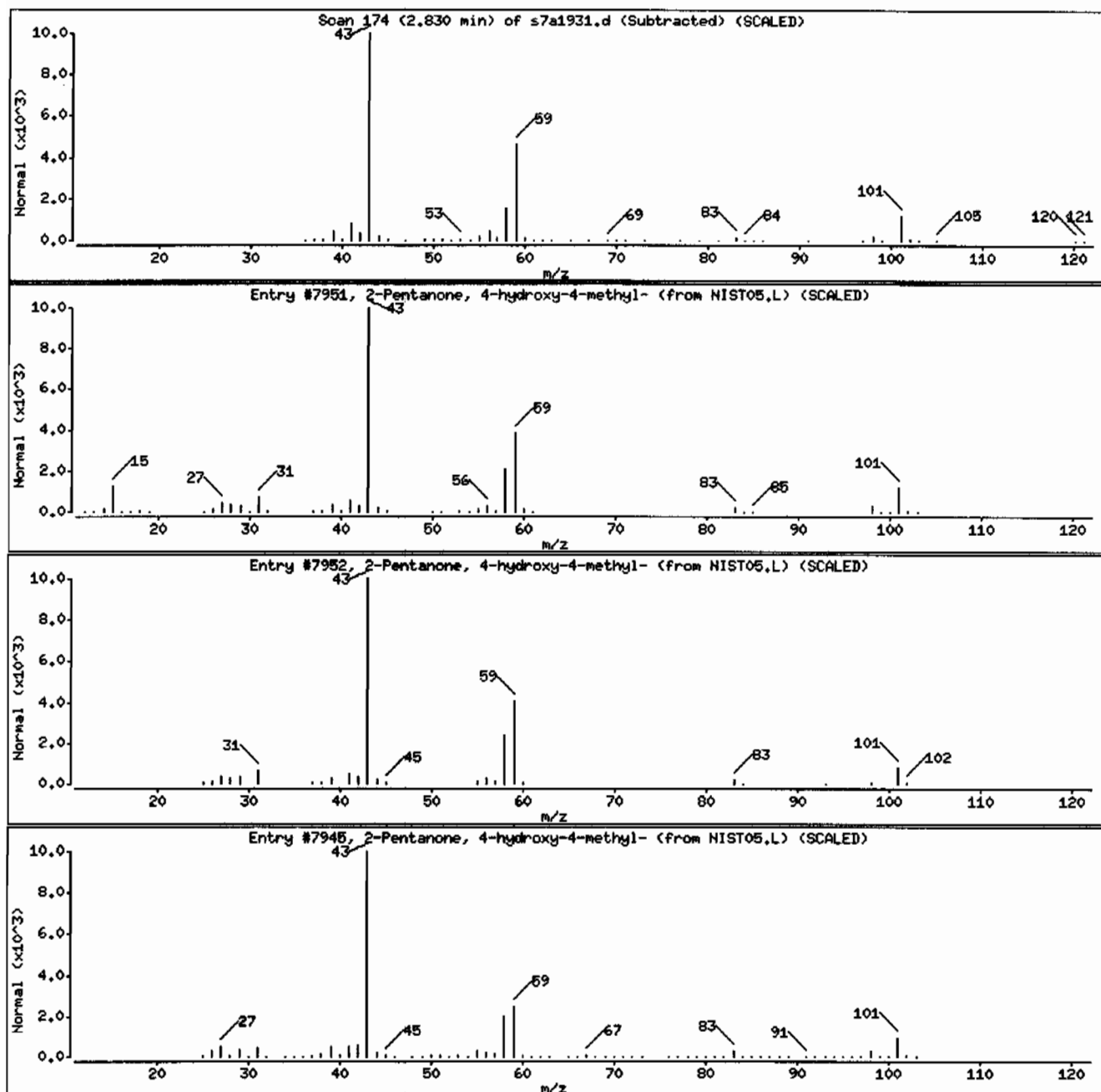
Volume Injected (uL): 0.8

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	38	C6H12O2	116



Date : 19-JAN-2010 20:16

Client ID: RE12-10-7238

Instrument: HSD7.i

Sample Info: 1244599006194170211SVMF11ILANL

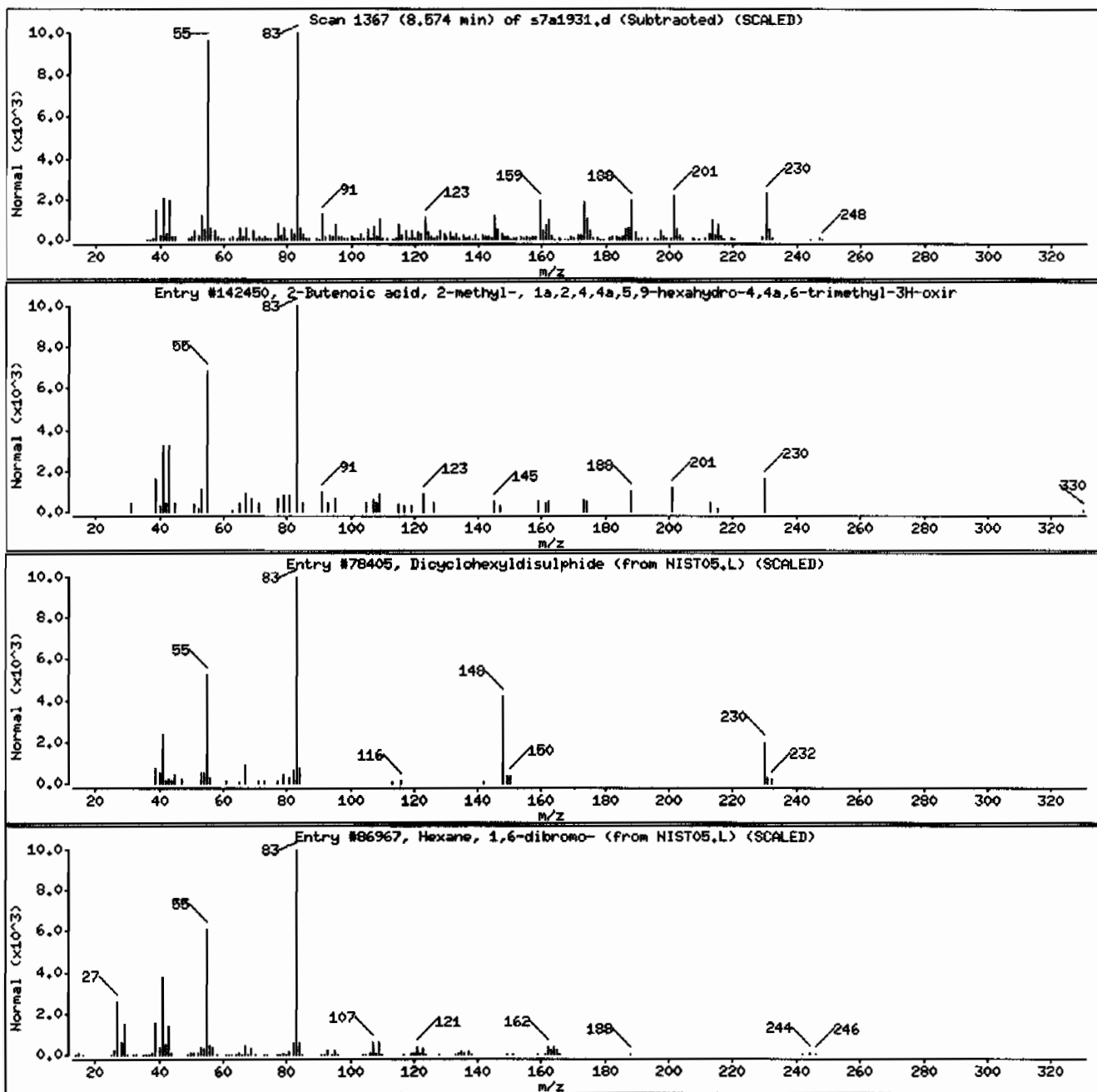
Volume Injected (uL): 0.5

Operator: JHB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Butenoic acid, 2-methyl-, 1a,2,4,4a,5,	56246-42-5	NIST05.L	142450	72	C20H26O4	330
Dicyclohexyldisulphide	2550-40-5	NIST05.L	78405	43	C12H22S2	230
Hexane, 1,6-dibromo-	629-03-8	NIST05.L	86967	30	C6H12Br2	242



Date: 19-JAN-2010 20:16

Client ID: RE12-10-7238

Instrument: HSD7.i

Sample Info: 1244599006194170211SVHF111LANL

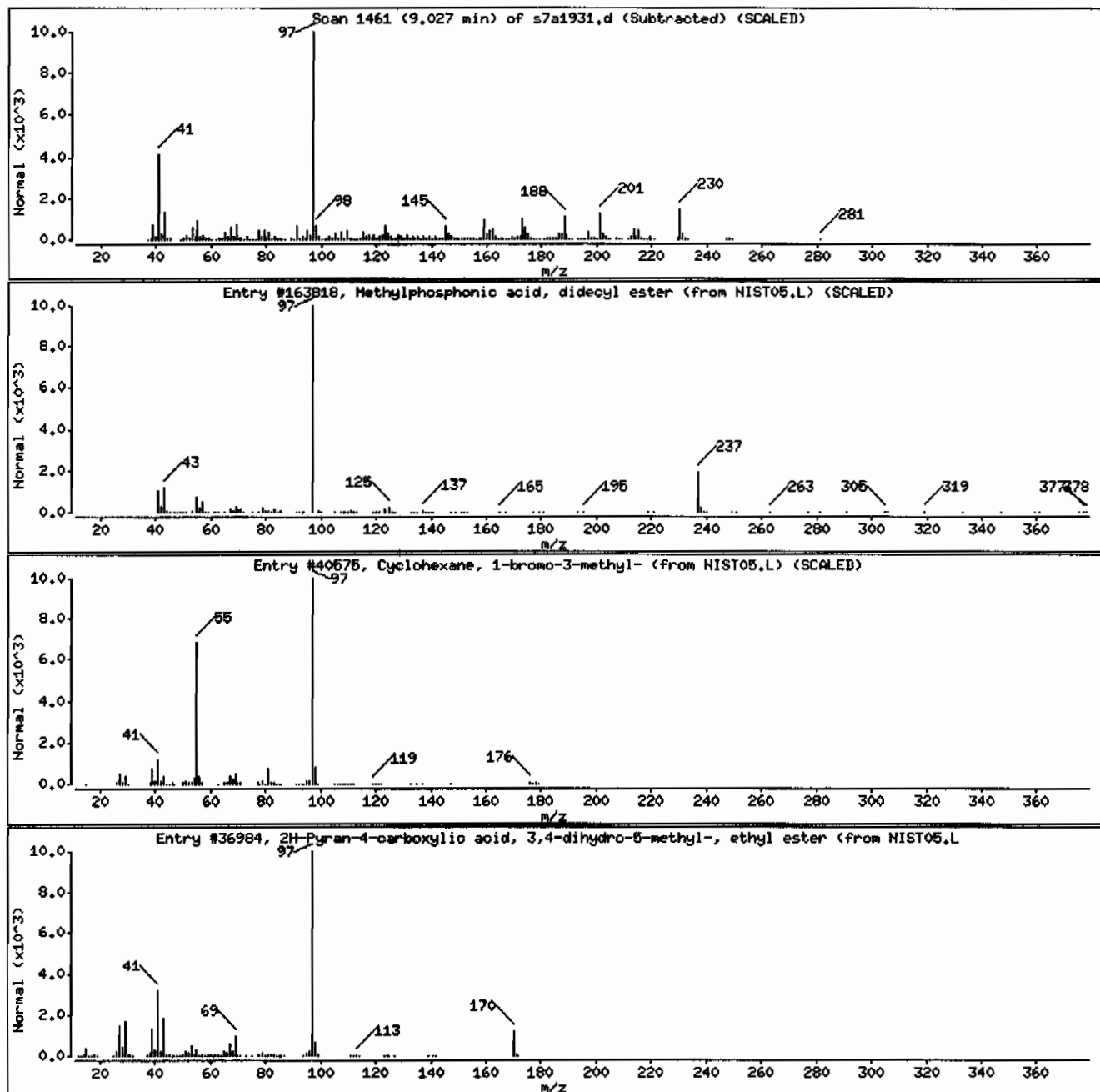
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Methylphosphonic acid, didecyl ester	59651-63-7	NIST05.L	163818	43	C21H45O3P	376
Cyclohexane, 1-bromo-3-methyl-	13905-48-1	NIST05.L	40575	43	C7H13Br	176
2H-Pyran-4-carboxylic acid, 3,4-dihydro-	38858-64-9	NIST05.L	36984	43	C9H14O3	170



Date: 19-JAN-2010 20:16

Client ID: RE12-10-7238

Instrument: MSD7.i

Sample Info: 1244599006194170211SVMF111LANL

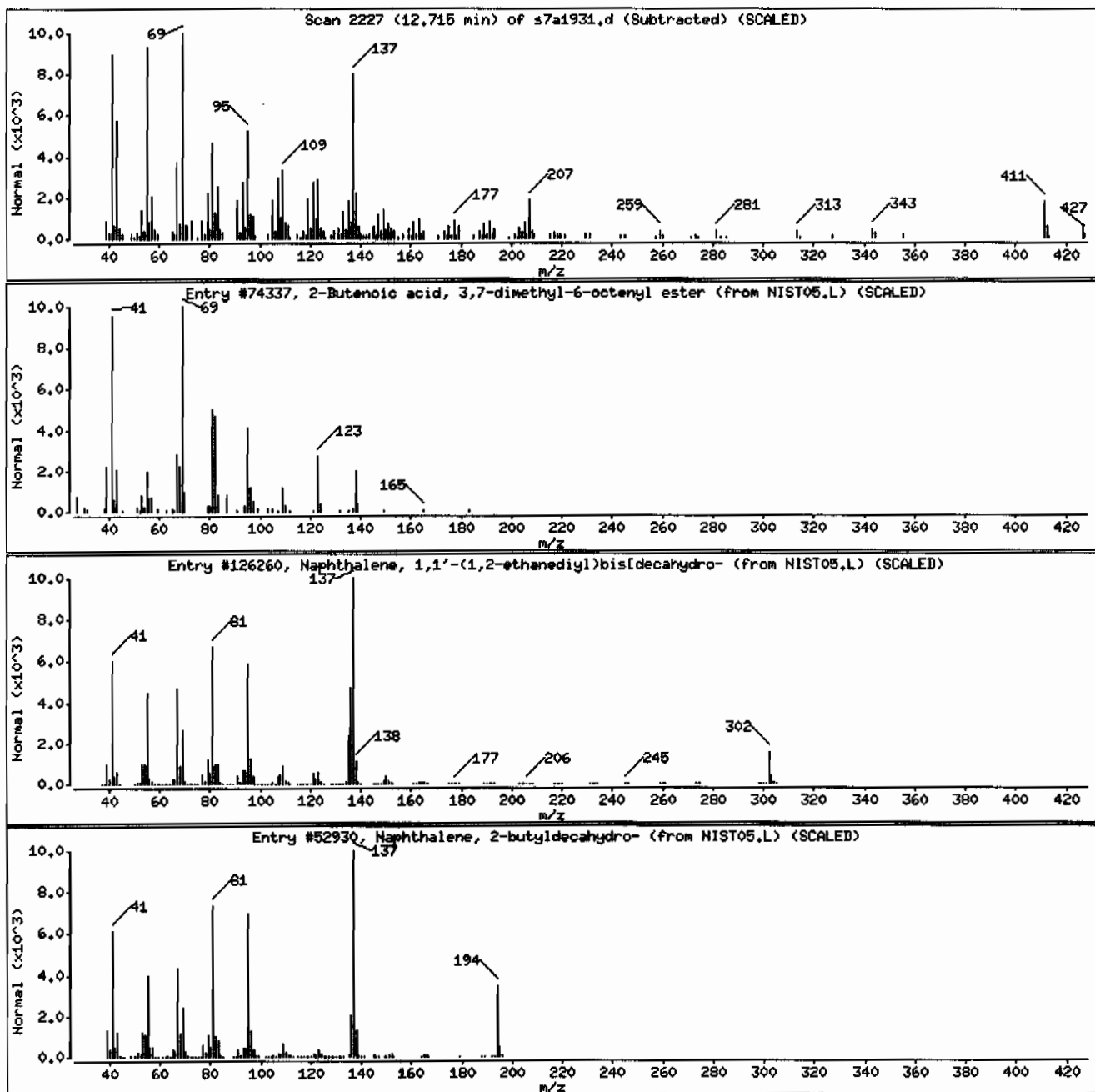
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Butenoic acid, 3,7-dimethyl-6-octenyl	68039-38-3	NIST05.L	74337	46	C <sub>14</sub> H <sub>24</sub> O <sub>2</sub>	224
Naphthalene, 1,1'-(1,2-ethanediyl)bis[de	84934-69-9	NIST05.L	126260	35	C <sub>22</sub> H <sub>38</sub>	302
Naphthalene, 2-butyldecahydro-	6305-52-8	NIST05.L	52930	35	C <sub>14</sub> H <sub>26</sub>	194



**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210  
Lab Sample ID: 244599005

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD7.1  
Analyst: JMB3  
Aliquot: 30.01 g  
Column: J&W DB-SMS

Matrix: R  
%Moisture: 9.3  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE12-10-7239  
Batch ID: 941702  
Run Date: 01/19/2010 19:54  
Prep Date: 01/14/2010 19:34  
Data File: s7a1930.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	367	ug/kg	73.5	367
108-95-2	Phenol	U	367	ug/kg	73.5	367
95-57-8	2-Chlorophenol	U	367	ug/kg	73.5	367
106-46-7	1,4-Dichlorobenzene	U	367	ug/kg	73.5	367
621-64-7	N-Nitrosodipropylamine	U	367	ug/kg	73.5	367
59-50-7	4-Chloro-3-methylphenol	U	367	ug/kg	73.5	367
83-32-9	Acenaphthene	U	36.7	ug/kg	12.1	36.7
121-14-2	2,4-Dinitrotoluene	U	367	ug/kg	36.7	367
100-02-7	4-Nitrophenol	U	367	ug/kg	121	367
87-86-5	Pentachlorophenol	U	367	ug/kg	91.9	367
129-00-0	Pyrene	U	36.7	ug/kg	11.0	36.7
110-86-1	Pyridine	U	367	ug/kg	73.5	367
62-53-3	Aniline	U	367	ug/kg	110	367
111-44-4	bis(2-Chloroethyl) ether	U	367	ug/kg	73.5	367
541-73-1	1,3-Dichlorobenzene	U	367	ug/kg	73.5	367
100-51-6	Benzyl alcohol	U	367	ug/kg	110	367
95-50-1	1,2-Dichlorobenzene	U	367	ug/kg	73.5	367
108-60-1	bis(2-Chloroisopropyl)ether	U	367	ug/kg	73.5	367
95-48-7	o-Cresol	U	367	ug/kg	73.5	367
65794-96-9	m,p-Cresols	U	367	ug/kg	110	367
67-72-1	Hexachloroethane	U	367	ug/kg	73.5	367
98-95-3	Nitrobenzene	U	367	ug/kg	73.5	367
78-59-1	Isophorone	U	367	ug/kg	73.5	367
88-75-5	2-Nitrophenol	U	367	ug/kg	73.5	367
105-67-9	2,4-Dimethylphenol	U	367	ug/kg	129	367
111-91-1	bis(2-Chloroethoxy)methane	U	367	ug/kg	73.5	367
120-83-2	2,4-Dichlorophenol	U	367	ug/kg	73.5	367
65-85-0	Benzoic acid	U	735	ug/kg	184	735
91-20-3	Naphthalene	U	36.7	ug/kg	11.0	36.7
106-47-8	4-Chloroaniline	U	367	ug/kg	73.5	367
87-68-3	Hexachlorobutadiene	U	367	ug/kg	73.5	367
91-57-6	2-Methylnaphthalene	U	36.7	ug/kg	7.35	36.7
77-47-4	Hexachlorocyclopentadiene	U	367	ug/kg	73.5	367
88-06-2	2,4,6-Trichlorophenol	U	367	ug/kg	73.5	367
95-95-4	2,4,5-Trichlorophenol	U	367	ug/kg	73.5	367
91-58-7	2-Chloronaphthalene	U	36.7	ug/kg	12.1	36.7
88-74-4	2-Nitroaniline	U	367	ug/kg	73.5	367
99-09-2	o-Nitroaniline	U	367	ug/kg	73.5	367
	3-Nitroaniline					

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210	Date Collected: 01/07/2010 12:00	Matrix: R
Lab Sample ID: 244599005	Date Received: 01/13/2010 08:55	%Moisture: 9.3
	Client: LANL010	Project: LANL01004
Client ID: RE12-10-7239	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 941702	Inst: MSD7.I	Dilution: 1
Run Date: 01/19/2010 19:54	Analyst: JMB3	Inj. Vol: .5 uL
Prep Date: 01/14/2010 19:34	Aliquot: 30.01 g	Final Volume: 1 mL
Data File: s7a1930.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	367	ug/kg	73.5	367
606-20-2	2,6-Dinitrotoluene	U	367	ug/kg	36.7	367
208-96-8	Acenaphthylene	U	36.7	ug/kg	11.0	36.7
51-28-5	2,4-Dinitrophenol	U	735	ug/kg	140	735
132-64-9	Dibenzofuran	U	367	ug/kg	73.5	367
84-66-2	Diethylphthalate	U	367	ug/kg	73.5	367
86-73-7	Fluorene	U	36.7	ug/kg	11.0	36.7
7005-72-3	4-Chlorophenylphenylether	U	367	ug/kg	73.5	367
534-52-1	2-Methyl-4,6-dinitrophenol	U	367	ug/kg	73.5	367
100-01-6	4-Nitroaniline	U	367	ug/kg	110	367
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	367	ug/kg	73.5	367
122-66-7	Azobenzene	U	367	ug/kg	73.5	367
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	367	ug/kg	73.5	367
118-74-1	Hexachlorobenzene	U	367	ug/kg	73.5	367
85-01-8	Phenanthrene	U	36.7	ug/kg	11.0	36.7
120-12-7	Anthracene	U	36.7	ug/kg	7.35	36.7
84-74-2	Di-n-butylphthalate	U	367	ug/kg	73.5	367
206-44-0	Fluoranthene	U	36.7	ug/kg	11.0	36.7
85-68-7	Butylbenzylphthalate	U	367	ug/kg	73.5	367
56-55-3	Benzo(a)anthracene	U	36.7	ug/kg	11.0	36.7
91-94-1	3,3'-Dichlorobenzidine	U	367	ug/kg	110	367
218-01-9	Chrysene	U	36.7	ug/kg	11.0	36.7
117-81-7	bis(2-Ethylhexyl)phthalate	U	367	ug/kg	73.5	367
117-84-0	Di-n-octylphthalate	U	367	ug/kg	73.5	367
205-99-2	Benzo(b)fluoranthene	U	36.7	ug/kg	11.0	36.7
207-08-9	Benzo(k)fluoranthene	U	36.7	ug/kg	11.0	36.7
50-32-8	Benzo(a)pyrene	U	36.7	ug/kg	11.0	36.7
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.7	ug/kg	11.0	36.7
53-70-3	Dibenzo(a,h)anthracene	U	36.7	ug/kg	11.0	36.7
191-24-2	Benzo(ghi)perylene	U	36.7	ug/kg	11.0	36.7
120-82-1	1,2,4-Trichlorobenzene	U	367	ug/kg	73.5	367

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.82	640	ug/kg		JA
	Unknown	9.02	173	ug/kg		J

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210	Date Collected: 01/07/2010 12:00	Matrix: R
Lab Sample ID: 244599005	Date Received: 01/13/2010 08:55	%Moisture: 9.3
	Client: LANL010	Project: LANL01004
Client ID: RE12-10-7239	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 941702	Inst: MSD7.1	Dilution: 1
Run Date: 01/19/2010 19:54	Analyst: JMB3	Inj. Vol: .5 uL
Prep Date: 01/14/2010 19:34	Aliquot: 30.01 g	Final Volume: 1 mL
Data File: s7a1930.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
Tentatively Identified Compound Summary							
CAS No.	Tentatively Identified Compound (TIC)		RT	Estimated	Units	Fit	Qual
	Unknown		10.83	557	ug/kg		J
	Unknown		11.5	724	ug/kg		J
	Unknown		12.71	311	ug/kg		J



Data File: /chem/MSD7.i/s011910.b/s7a1930.d  
Report Date: 19-Jan-2010 20:37

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Data file : /chem/MSD7.i/s011910.b/s7a1930.d  
Lab Smp Id: 244599005 Client Smp ID: RE12-10-7239  
Inj Date : 19-JAN-2010 19:54  
Operator : JMB3 Inst ID: MSD7.i  
Smp Info : |244599005|941702|1|SVMF|1|LANL  
Misc Info : |MSD8270\_S|WBN100107-02|  
Comment : Column: J&W Scientific DB-5MS 25m x 0.2mm x 0.33um film thickness  
Method : /chem/MSD7.i/s011910.b/MSD7-M8270C-AQA-011310.m  
Meth Date : 19-Jan-2010 18:16 llo00884 Quant Type: ISTD  
Cal Date : 15-JAN-2010 19:06 Cal File: s7a1515.d  
Als bottle: 29  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1210.sub  
Target Version: 3.50

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.01000	weight of sample
M	9.32420	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG				CONCENTRATIONS		
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.788	3.793	(1.000)	300904	40.0000	
* 29 Naphthalene-d8	136	4.650	4.654	(1.000)	1132572	40.0000	
* 46 Acenaphthene-d10	164	5.892	5.897	(1.000)	587059	40.0000	
* 67 Phenanthrene-d10	188	7.043	7.048	(1.000)	1092987	40.0000	
* 91 Chrysene-d12	240	9.422	9.426	(1.000)	915793	40.0000	
* 98 Perylene-d12	264	10.962	10.972	(1.000)	664744	40.0000	
\$ 3 2-Fluorophenol	112	2.988	2.984	(0.789)	547220	63.2860	2320
\$ 5 Phenol-d5	99	3.508	3.508	(0.926)	704486	63.1919	2320
\$ 20 Nitrobenzene-d5	82	4.149	4.154	(0.892)	329622	35.2815	1300
\$ 39 2-Fluorobiphenyl	172	5.386	5.391	(0.914)	597262	34.5252	1270
\$ 60 2,4,6-Tribromophenol	329	6.479	6.484	(1.100)	107189	72.5770	2670
\$ 81 p-Terphenyl-d14	244	8.406	8.406	(0.892)	627077	40.0905	1470

## ION RATIO REPORT

## SV REPORT

Data file: s7a1930.d

Report Date: 01/19/2010 20:34

Lab. ID: 244599005

SampleType: SAMPLE

Injection Date: 19-JAN-2010 19:54

Operator: JMB3

Instrument: MSD7.i

Sample Info: |244599005|941702|1|SVMF|1|LANL

Miscellaneous Info: |MSD8270\_S|WBN100107-02|

Comment:

Method used: /chem/MSD7.i/s011910.b/MSD7-M8270C-AQA-011310.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1210

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4 Aniline		CAS#: 62-53-3				
66	35960	3.51	3.58	80-120	100	(T)
93	419	3.47	3.58	217-277	1	(QT)
-----						
17 N-Nitrosodipropylamine		CAS#: 621-64-7				
70	47942	4.15	4.03	80-120	100	(T)
42	37010	4.15	4.03	63-123	77	(T)
-----						
27 Benzoic acid		CAS#: 65-85-0				
105	172	4.43	4.43	80-120	100	( )
122	250	4.65	4.43	59-119	145	(QT)
77	195	4.42	4.43	38- 98	113	(Q)
-----						
43 Dimethylphthalate		CAS#: 131-11-3				
163	106457	5.89	5.67	80-120	100	(T)
164	587059	5.89	5.67	0- 40	551	(QT)
-----						
44 2,6-Dinitrotoluene		CAS#: 606-20-2				
165	75617	5.89	5.72	80-120	100	(T)
63	1244	5.89	5.72	50-110	2	(QT)
-----						
50 2,4-Dinitrotoluene		CAS#: 121-14-2				
165	75617	5.89	6.01	80-120	100	(T)
89	851	5.89	6.01	44-104	1	(QT)
63	1244	5.89	6.01	30- 90	2	(QT)
-----						

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
53 Fluorene			CAS#: 86-73-7			
166	9228	6.48	6.30	80-120	100	(T)
165	9121	6.48	6.30	57-117	99	(T)
167	3026	6.48	6.30	0- 43	33	(T)

Q qualifier indicates ion failed ratio requirement

Data File: /chem/MSD7.i/s011910.b/s7a1930.d  
 Report Date: 19-Jan-2010 20:37

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## GEL Laboratories, LLC

Data file : /chem/MSD7.i/s011910.b/s7a1930.d  
 Lab Smp Id: 244599005 Client Smp ID: RE12-10-7239  
 Inj Date : 19-JAN-2010 19:54  
 Operator : JMB3 Inst ID: MSD7.i  
 Smp Info : |244599005|941702|1|SVMF|1|LANL  
 Misc Info : |MSD8270\_S|WBN100107-02|  
 Comment : Column: J&W Scientific DB-5MS 25m x 0.2mm x 0.33um film thickness  
 Method : /chem/MSD7.i/s011910.b/MSD7-M8270C-AQA-011310.m  
 Meth Date : 19-Jan-2010 18:16 llo00884 Quant Type: ISTD  
 Cal Date : 15-JAN-2010 19:06 Cal File: s7a1515.d  
 Als bottle: 29  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: 10-1210.sub  
 Target Version: 3.50

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.01000	weight of sample
M	9.32420	% moisture

Cpnd Variable Local Compound Variable

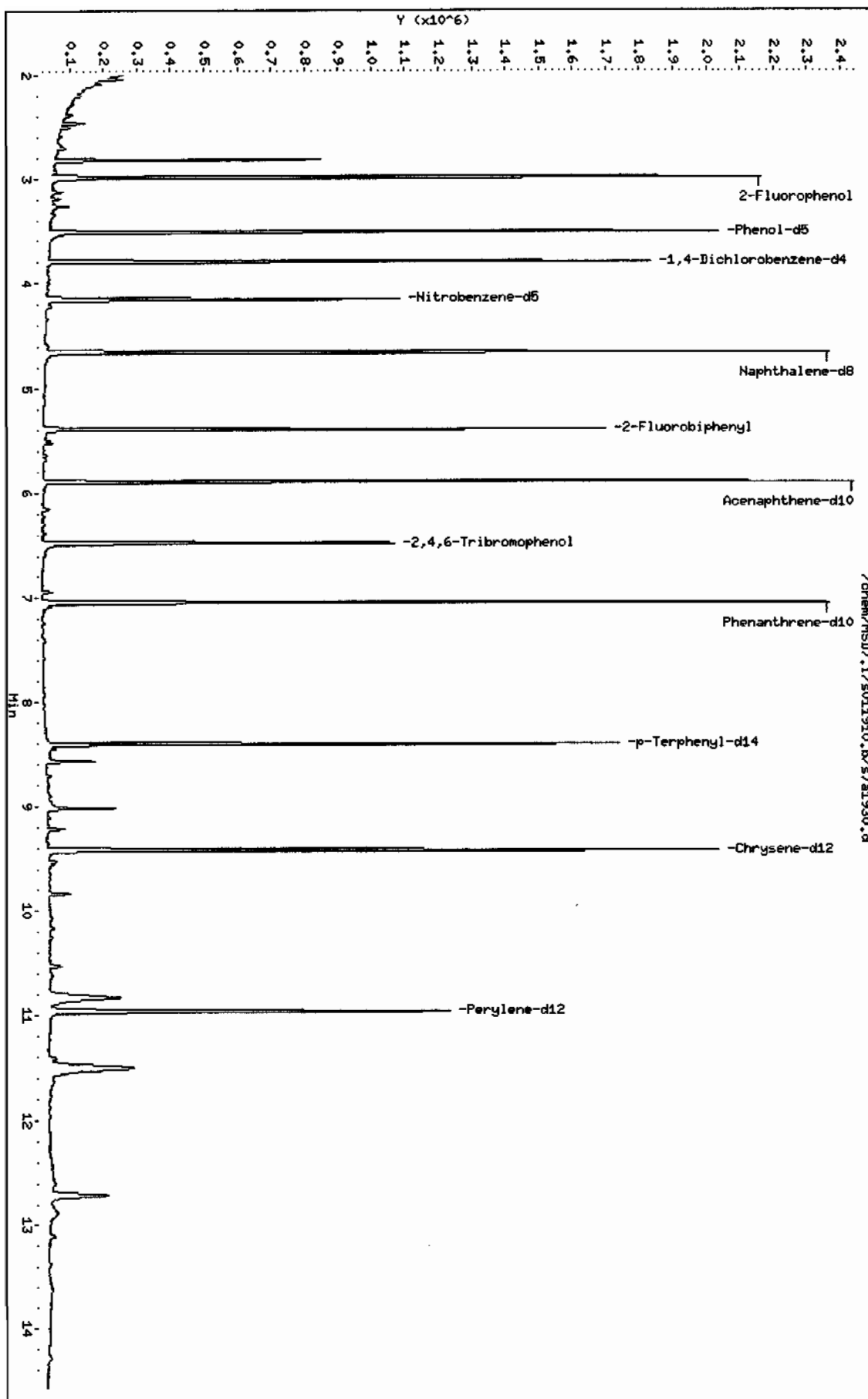
ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.788	1914576	40.000
* 91 Chrysene-d12	9.422	2512148	40.000
* 98 Perylene-d12	10.962	1959412	40.000

CONCENTRATIONS				QUANT			
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate							
2.820	833548	17.4147749	640	0		0	10

RT	AREA	CONCENTRATIONS		QUAL	LIBRARY	QUANT		CPND #
		ON-COL (ng/ul)	FINAL (ug/Kg)			LIB	ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====	=====
Unknown					CAS #:			
9.022	294921	4.69591118	172	0			0	91
Unknown					CAS #:			
10.828	742248	15.1524592	557	0			0	98
Unknown					CAS #:			
11.502	965456	19.7090908	724	0			0	98
Unknown					CAS #:			
12.710	414587	8.46350065	311	0			0	98

Data File: /chem/MSD7.i/s011910.b/s7a1930.d  
Date: 19-JAN-2010 19:54  
Client ID: REL2-10-7239  
Sample Info: 124459006194170211SNWF11LNLNL  
Volume Injected (uL): 0.5  
Column phase: J&W DB-5MS

Instrument: MSD7.i  
Operator: JHB3  
Column diameter: 0.20



Date : 19-JAN-2010 19:54

Client ID: RE12-10-7239

Instrument: HSD7.i

Sample Info: I244599005194170211ISVMFI11LANL

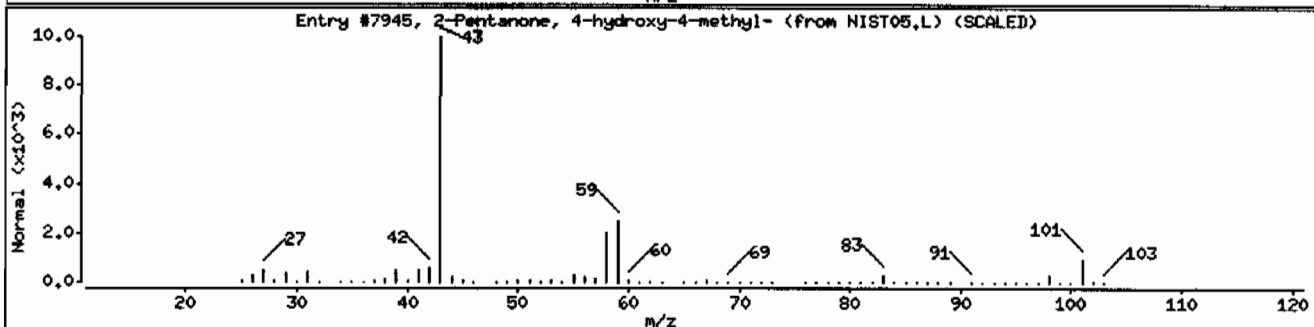
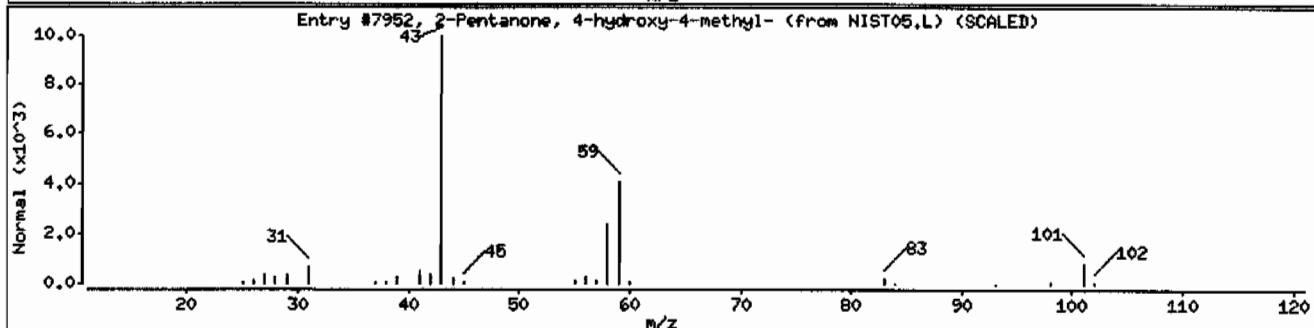
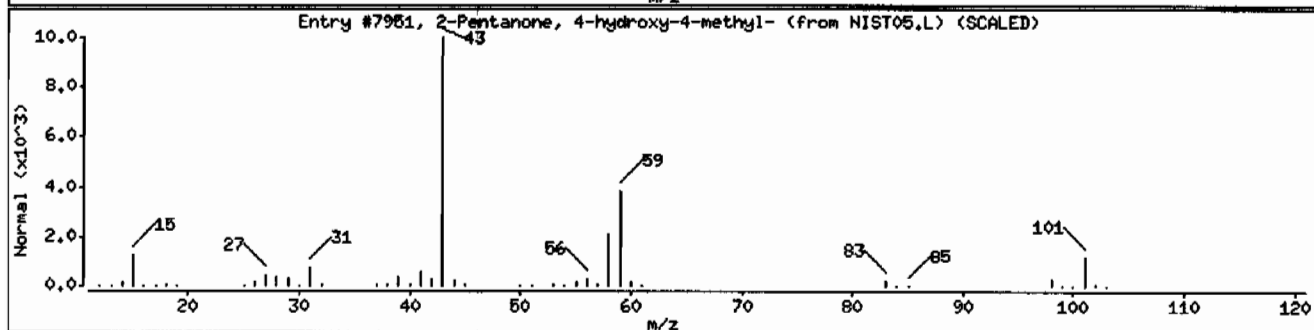
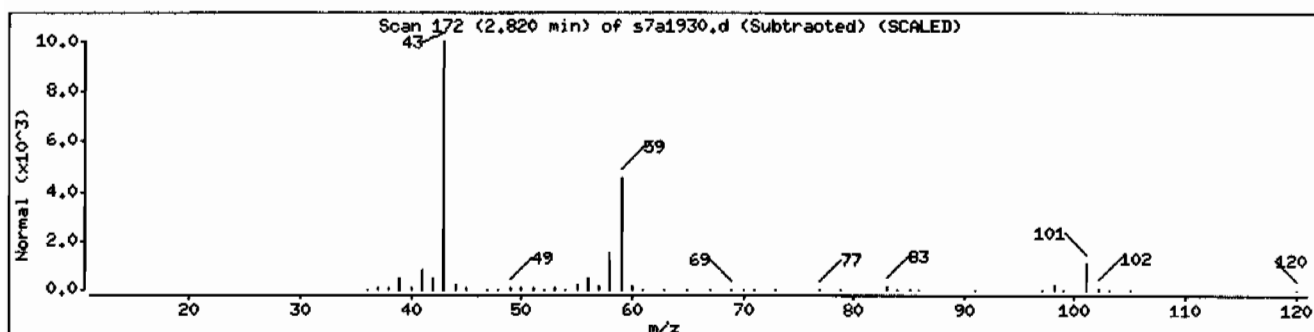
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	45	C6H12O2	116



Date: 19-JAN-2010 19:54

Client ID: RE12-10-7239

Instrument: MSD7.i

Sample Info: 1244599005194170211SMHF111LANL

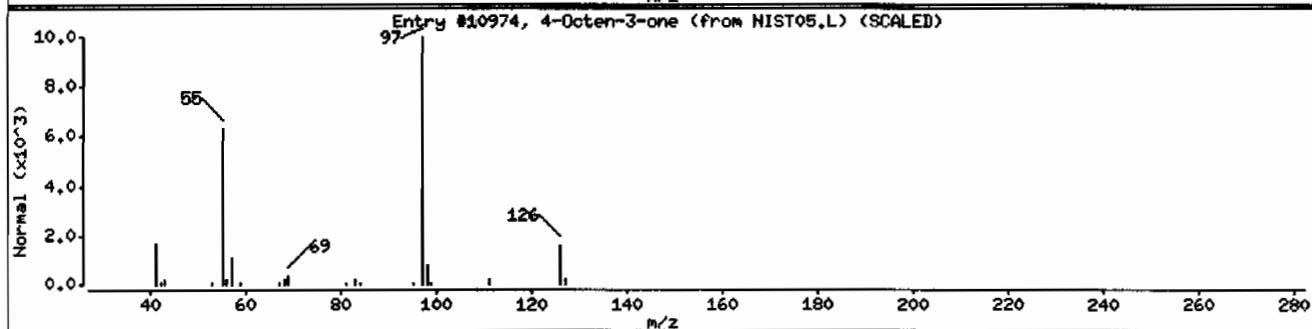
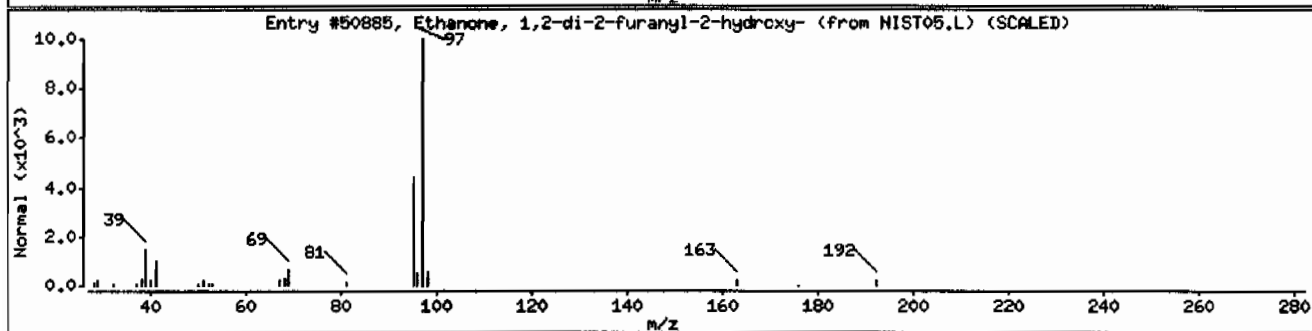
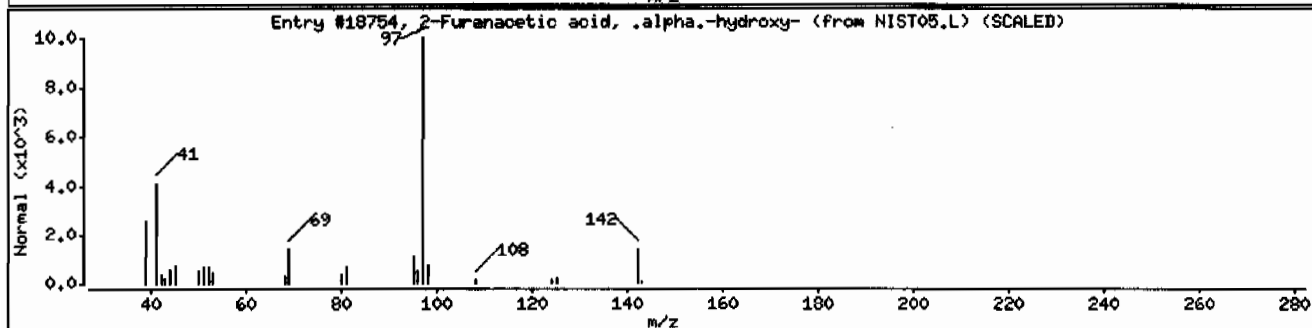
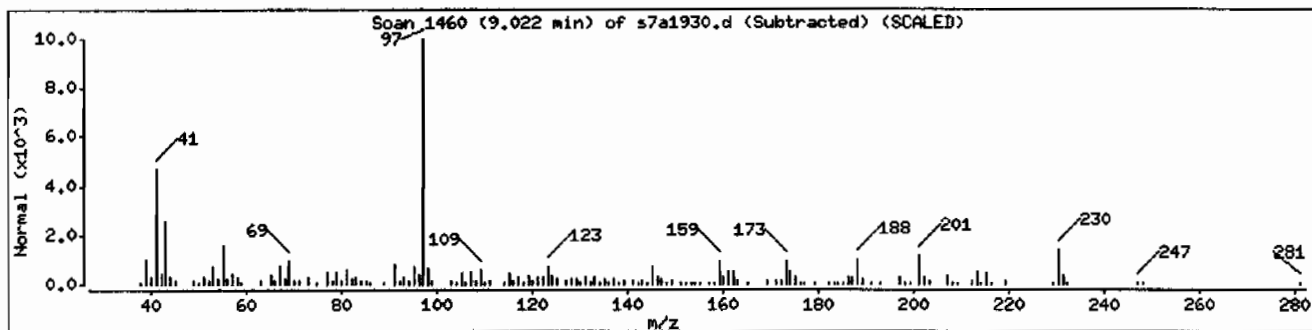
Volume Injected (ul): 0.5

Operator: JHB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Furanacetic acid, .alpha.-hydroxy-	19377-73-2	NIST05.L	18754	46	C6H6O4	142
Ethanone, 1,2-di-2-furanyl-2-hydroxy-	552-86-3	NIST05.L	50885	43	C10H8O4	192
4-Octen-3-one	14129-48-7	NIST05.L	10974	43	C8H14O	126





Date: 19-JAN-2010 19:54

Client ID: RE12-10-7239

Instrument: MSD7.i

Sample Info: 12445990051941702111SVHF111LANL

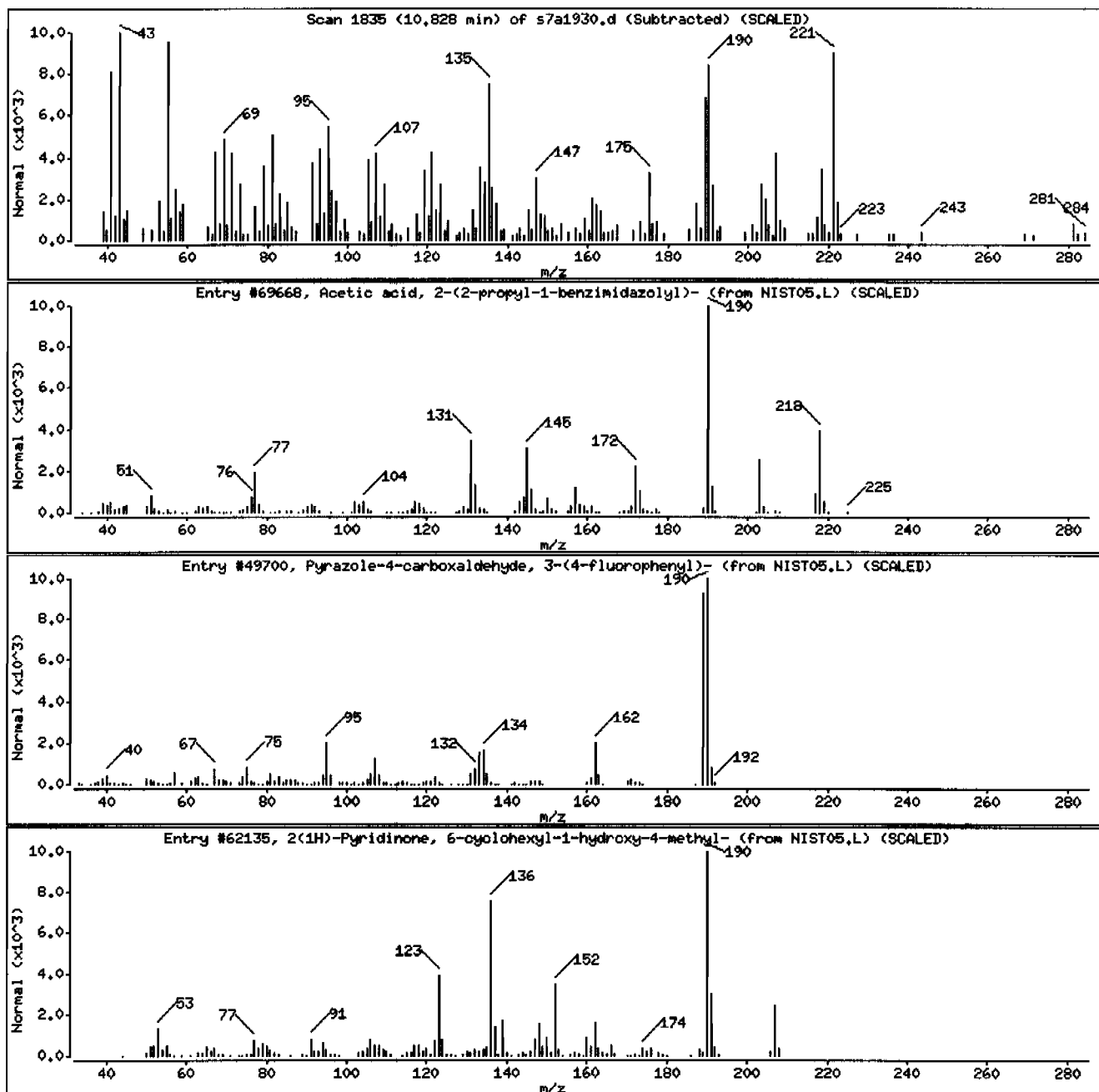
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Acetic acid, 2-(2-propyl-1-benzimidazolyl)	331736-92-6	NIST05.L	69668	56	C12H14N2O2	218
Pyrazole-4-carboxaldehyde, 3-(4-fluoroph	306936-87-2	NIST05.L	49700	38	C10H7FN2O	190
2(1H)-Pyridinone, 6-cyclohexyl-1-hydroxy	29342-05-0	NIST05.L	62135	35	C12H17NO2	207



Date: 19-JAN-2010 19:54

Client ID: RE12-10-7239

Instrument: MSD7.1

Sample Info: 12445990051941702118VMF11ILANL

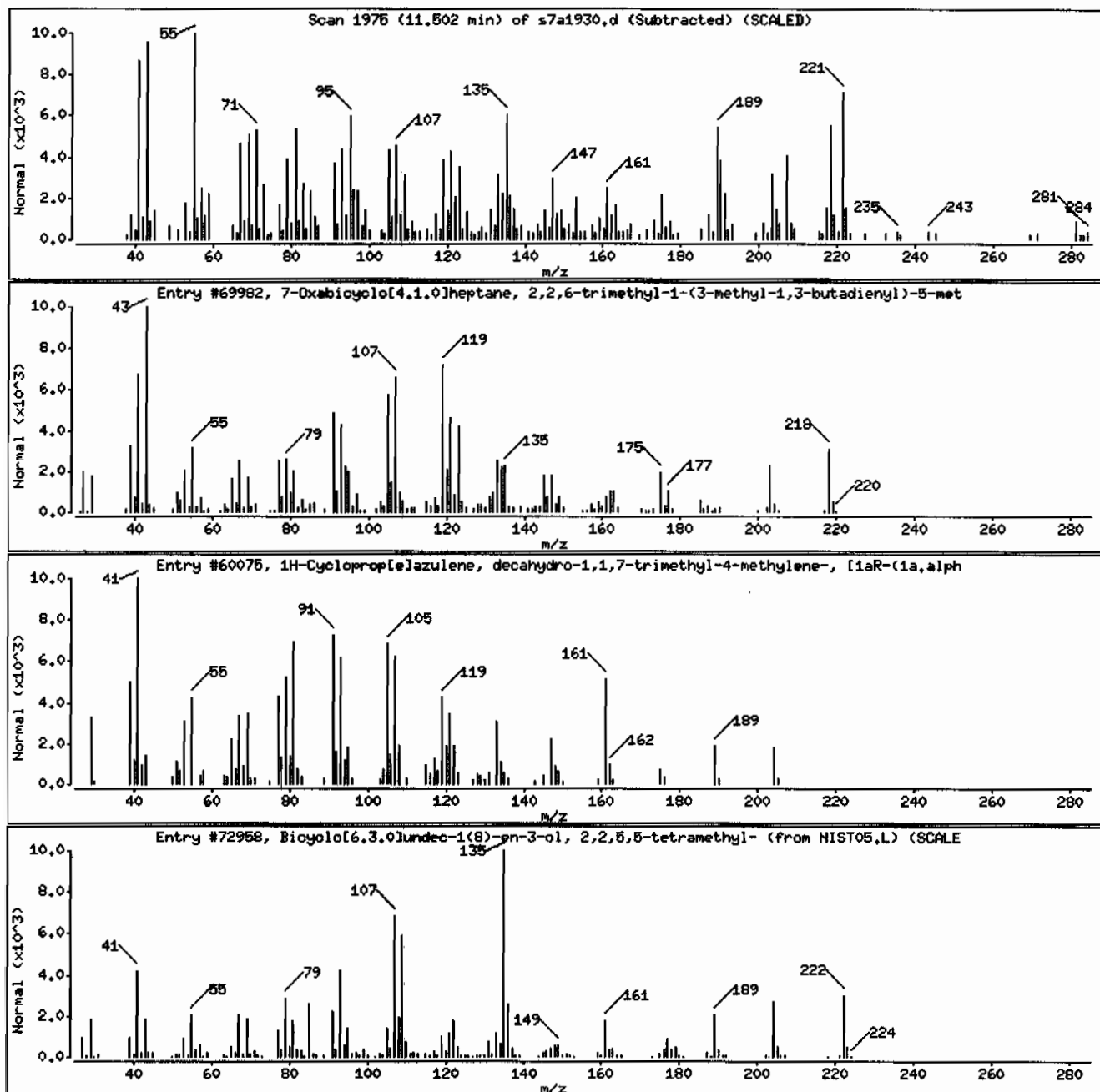
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5HS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
7-Oxabicyclo[4.1.0]heptane, 2,2,6-trimet	70038-20-9	NIST05.L	69982	47	C15H22O	218
1H-Cycloprop[1]azulene, decahydro-1,1,7-	25246-27-9	NIST05.L	60075	43	C15H24	204
Bicyclo[6.3.0]undec-1(8)-en-3-ol, 2,2,5,	1000164-02-6	NIST05.L	72958	35	C15H26O	222



Date : 19-JAN-2010 19:54

Client ID: RE12-10-7239

Instrument: HSD7.i

Sample Info: 12445990051941702111SVHF111LANL

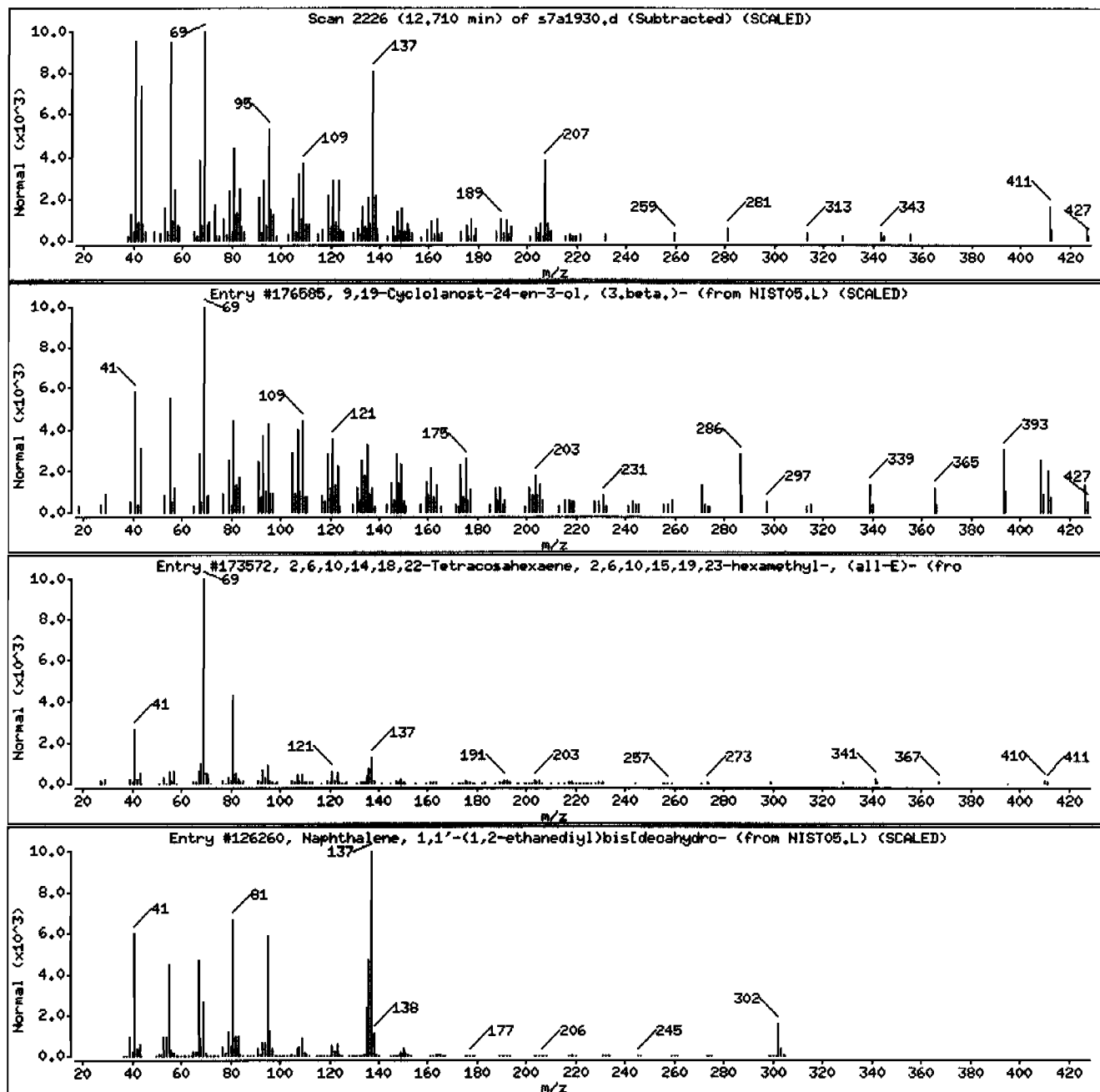
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
9,19-Cyclolanost-24-en-3-ol, (3.beta.)-	469-38-5	NIST05.L	176585	46	C30H50O	426
2,6,10,14,18,22-Tetracosahexaene, 2,6,10	111-02-4	NIST05.L	173572	43	C30H50	410
Naphthalene, 1,1'-(1,2-ethanediyl)bis[de	54934-69-9	NIST05.L	126260	38	C22H38	302



**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210  
Lab Sample ID: 244599002

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD7.1  
Analyst: JMB3  
Aliquot: 30.14 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 13.5  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	384	ug/kg	76.7	384
108-95-2	Phenol	U	384	ug/kg	76.7	384
95-57-8	2-Chlorophenol	U	384	ug/kg	76.7	384
106-46-7	1,4-Dichlorobenzene	U	384	ug/kg	76.7	384
621-64-7	N-Nitrosodipropylamine	U	384	ug/kg	76.7	384
59-50-7	4-Chloro-3-methylphenol	U	384	ug/kg	76.7	384
83-32-9	Acenaphthene	U	38.4	ug/kg	12.7	38.4
121-14-2	2,4-Dinitrotoluene	U	384	ug/kg	38.4	384
100-02-7	4-Nitrophenol	U	384	ug/kg	127	384
87-86-5	Pentachlorophenol	U	384	ug/kg	95.9	384
129-00-0	Pyrene	U	38.4	ug/kg	11.5	38.4
110-86-1	Pyridine	U	384	ug/kg	76.7	384
62-53-3	Aniline	U	384	ug/kg	115	384
111-44-4	bis(2-Chloroethyl) ether	U	384	ug/kg	76.7	384
541-73-1	1,3-Dichlorobenzene	U	384	ug/kg	76.7	384
100-51-6	Benzyl alcohol	U	384	ug/kg	115	384
95-50-1	1,2-Dichlorobenzene	U	384	ug/kg	76.7	384
108-60-1	bis(2-Chloroisopropyl)ether	U	384	ug/kg	76.7	384
95-48-7	o-Cresol	U	384	ug/kg	76.7	384
65794-96-9	m,p-Cresols	U	384	ug/kg	115	384
67-72-1	Hexachloroethane	U	384	ug/kg	76.7	384
98-95-3	Nitrobenzene	U	384	ug/kg	76.7	384
78-59-1	Isophorone	U	384	ug/kg	76.7	384
88-75-5	2-Nitrophenol	U	384	ug/kg	76.7	384
105-67-9	2,4-Dimethylphenol	U	384	ug/kg	134	384
111-91-1	bis(2-Chloroethoxy)methane	U	384	ug/kg	76.7	384
120-83-2	2,4-Dichlorophenol	U	384	ug/kg	76.7	384
65-85-0	Benzoic acid	U	767	ug/kg	192	767
91-20-3	Naphthalene	U	38.4	ug/kg	11.5	38.4
106-47-8	4-Chloroaniline	U	384	ug/kg	76.7	384
87-68-3	Hexachlorobutadiene	U	384	ug/kg	76.7	384
91-57-6	2-Methylnaphthalene	U	38.4	ug/kg	7.67	38.4
77-47-4	Hexachlorocyclopentadiene	U	384	ug/kg	76.7	384
88-06-2	2,4,6-Trichlorophenol	U	384	ug/kg	76.7	384
95-95-4	2,4,5-Trichlorophenol	U	384	ug/kg	76.7	384
91-58-7	2-Chloronaphthalene	U	38.4	ug/kg	12.7	38.4
88-74-4	2-Nitroaniline	U	384	ug/kg	76.7	384
99-09-2	o-Nitroaniline	U	384	ug/kg	76.7	384
	3-Nitroaniline					

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210  
Lab Sample ID: 244599002

Client ID: RE12-10-7240  
Batch ID: 941702  
Run Date: 01/19/2010 18:48  
Prep Date: 01/14/2010 19:34  
Data File: s7a1927.d

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD7.1  
Analyst: JMB3  
Aliquot: 30.14 g  
Column: J&W DB-SMS

Matrix: R  
%Moisture: 13.5  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	384	ug/kg	76.7	384
606-20-2	2,6-Dinitrotoluene	U	384	ug/kg	38.4	384
208-96-8	Acenaphthylene	U	38.4	ug/kg	11.5	38.4
51-28-5	2,4-Dinitrophenol	U	767	ug/kg	146	767
132-64-9	Dibenzofuran	U	384	ug/kg	76.7	384
84-66-2	Diethylphthalate	U	384	ug/kg	76.7	384
86-73-7	Fluorene	U	38.4	ug/kg	11.5	38.4
7005-72-3	4-Chlorophenylphenylether	U	384	ug/kg	76.7	384
534-52-1	2-Methyl-4,6-dinitrophenol	U	384	ug/kg	76.7	384
100-01-6	4-Nitroaniline	U	384	ug/kg	115	384
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	384	ug/kg	76.7	384
122-66-7	Azobenzene	U	384	ug/kg	76.7	384
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	384	ug/kg	76.7	384
118-74-1	Hexachlorobenzene	U	384	ug/kg	76.7	384
85-01-8	Phenanthrene	U	38.4	ug/kg	11.5	38.4
120-12-7	Anthracene	U	38.4	ug/kg	7.67	38.4
84-74-2	Di-n-butylphthalate	U	384	ug/kg	76.7	384
206-44-0	Fluoranthene	U	38.4	ug/kg	11.5	38.4
85-68-7	Butylbenzylphthalate	U	384	ug/kg	76.7	384
56-55-3	Benzo(a)anthracene	U	38.4	ug/kg	11.5	38.4
91-94-1	3,3'-Dichlorobenzidine	U	384	ug/kg	115	384
218-01-9	Chrysene	U	38.4	ug/kg	11.5	38.4
117-81-7	bis(2-Ethylhexyl)phthalate	U	384	ug/kg	76.7	384
117-84-0	Di-n-octylphthalate	U	384	ug/kg	76.7	384
205-99-2	Benzo(b)fluoranthene	U	38.4	ug/kg	11.5	38.4
207-08-9	Benzo(k)fluoranthene	U	38.4	ug/kg	11.5	38.4
50-32-8	Benzo(a)pyrene	U	38.4	ug/kg	11.5	38.4
193-39-5	Indeno(1,2,3-cd)pyrene	U	38.4	ug/kg	11.5	38.4
53-70-3	Dibenzo(a,h)anthracene	U	38.4	ug/kg	11.5	38.4
191-24-2	Benzo(ghi)perylene	U	38.4	ug/kg	11.5	38.4
120-82-1	1,2,4-Trichlorobenzene	U	384	ug/kg	76.7	384

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.82	843	ug/kg		JA
77-53-2	Cedrol	6.39	307	ug/kg	94	NJ

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210  
Lab Sample ID: 244599002

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD7.1  
Analyst: JMB3  
Aliquot: 30.14 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 13.5  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE12-10-7240  
Batch ID: 941702  
Run Date: 01/19/2010 18:48  
Prep Date: 01/14/2010 19:34  
Data File: s7a1927.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
---------	----------	-----------	--------	-------	---------	---------

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	8.81	836	ug/kg	96	NJ
	Unknown	12.71	190	ug/kg		J

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Data file : /chem/MSD7.i/s011910.b/s7a1927.d  
Lab Smp Id: 244599002 Client Smp ID: RE12-10-7240  
Inj Date : 19-JAN-2010 18:48  
Operator : JMB3 Inst ID: MSD7.i  
Smp Info : |244599002|941702|1|SVMF|1|LANL  
Misc Info : |MSD8270\_S|WBN100107-02|  
Comment : Column: J&W Scientific DB-5MS 25m x 0.2mm x 0.33um film thickness  
Method : /chem/MSD7.i/s011910.b/MSD7-M8270C-AQA-011310.m  
Meth Date : 19-Jan-2010 18:16 llo00884 Quant Type: ISTD  
Cal Date : 15-JAN-2010 19:06 Cal File: s7a1515.d  
Als bottle: 26  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1210.sub  
Target Version: 3.50  
Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.14000	weight of sample
M	13.51980	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG				RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT		ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.788	3.793	(1.000)	309683	40.0000	
* 29 Naphthalene-d8	136	4.650	4.654	(1.000)	1156877	40.0000	
* 46 Acenaphthene-d10	164	5.892	5.897	(1.000)	607360	40.0000	
* 67 Phenanthrene-d10	188	7.038	7.048	(1.000)	1135300	40.0000	
* 91 Chrysene-d12	240	9.417	9.426	(1.000)	969219	40.0000	
* 98 Perylene-d12	264	10.963	10.972	(1.000)	720354	40.0000	
\$ 3 2-Fluorophenol	112	2.989	2.984	(0.789)	593537	66.6966	2560
\$ 5 Phenol-d5	99	3.513	3.508	(0.928)	770526	67.1564	2580
\$ 20 Nitrobenzene-d5	82	4.149	4.154	(0.892)	361620	37.8933	1450
\$ 39 2-Fluorobiphenyl	172	5.387	5.391	(0.914)	650837	36.3647	1400
\$ 60 2,4,6-Tribromophenol	329	6.480	6.484	(1.100)	121998	79.8431	3060
\$ 81 p-Terphenyl-d14	244	8.406	8.406	(0.893)	701691	42.3879	1630

## ION RATIO REPORT

## SV REPORT

Data file: s7a1927.d

Report Date: 01/19/2010 19:49

Lab. ID: 244599002

SampleType: SAMPLE

Injection Date: 19-JAN-2010 18:48

Operator: JMB3

Instrument: MSD7.i

Sample Info: |244599002|941702|1|SVMF|1|LANL

Miscellaneous Info: |MSD8270\_S|WBN100107-02|

Comment:

Method used: /chem/MSD7.i/s011910.b/MSD7-M8270C-AQA-011310.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1210

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4	Aniline	CAS#: 62-53-3				
66	38738	3.51	3.58	80-120	100	(T)
93	151	3.57	3.58	217-277	0	(Q)
-----						
17	N-Nitrosodipropylamine	CAS#: 621-64-7				
70	51966	4.15	4.03	80-120	100	(T)
42	40344	4.15	4.03	63-123	78	(T)
-----						
27	Benzoic acid	CAS#: 65-85-0				
105	369	4.45	4.43	80-120	100	( )
122	226	4.40	4.43	59-119	61	( )
77	299	4.39	4.43	38- 98	81	( )
-----						
40	2-Chloronaphthalene	CAS#: 91-58-7				
162	10689	5.63	5.50	80-120	100	(T)
164	478	5.63	5.50	3- 63	4	(T)
127	646	5.63	5.50	7- 67	6	(QT)
-----						
42	o-Nitroaniline	CAS#: 88-74-4				
65	15975	5.63	5.55	80-120	100	(T)
92	18806	5.63	5.55	27- 87	118	(QT)
138	903	5.63	5.55	62-122	6	(QT)
-----						
43	Dimethylphthalate	CAS#: 131-11-3				
163	111175	5.89	5.67	80-120	100	(T)
164	607360	5.89	5.67	0- 40	546	(QT)
-----						



MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
44	2,6-Dinitrotoluene			CAS#: 606-20-2		
165	78773	5.89	5.72	80-120	100	(T)
63	1304	5.89	5.72	50-110	2	(QT)
-----						
50	2,4-Dinitrotoluene			CAS#: 121-14-2		
165	78773	5.89	6.01	80-120	100	(T)
89	1025	5.89	6.01	44-104	1	(QT)
63	1304	5.89	6.01	30- 90	2	(QT)
-----						
53	Fluorene			CAS#: 86-73-7		
166	10118	6.48	6.30	80-120	100	(T)
165	10546	6.48	6.30	57-117	104	(T)
167	3316	6.48	6.30	0- 43	33	(T)
-----						
61	4-Bromophenylphenylether			CAS#: 101-55-3		
248	8889	6.48	6.66	80-120	100	(T)
141	66930	6.48	6.66	57-117	753	(QT)
250	17874	6.48	6.66	66-126	201	(QT)
-----						
92	Chrysene			CAS#: 218-01-9		
228	6924	9.41	9.45	80-120	100	( )
229	2909	9.41	9.45	0- 50	42	( )
226	1453	9.41	9.45	0- 59	21	( )
-----						

Q qualifier indicates ion failed ratio requirement

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Data file : /chem/MSD7.i/s011910.b/s7a1927.d  
 Lab Smp Id: 244599002 Client Smp ID: RE12-10-7240  
 Inj Date : 19-JAN-2010 18:48  
 Operator : JMB3 Inst ID: MSD7.i  
 Smp Info : |244599002|941702|1|SVMF|1|LANL  
 Misc Info : |MSD8270\_S|WBN100107-02|  
 Comment : Column: J&W Scientific DB-5MS 25m x 0.2mm x 0.33um film thickness  
 Method : /chem/MSD7.i/s011910.b/MSD7-M8270C-AQA-011310.m  
 Meth Date : 19-Jan-2010 18:16 llo00884 Quant Type: ISTD  
 Cal Date : 15-JAN-2010 19:06 Cal File: s7a1515.d  
 Als bottle: 26  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: 10-1210.sub  
 Target Version: 3.50  
 Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.14000	weight of sample
M	13.51980	% moisture

Cpnd Variable

Local Compound Variable

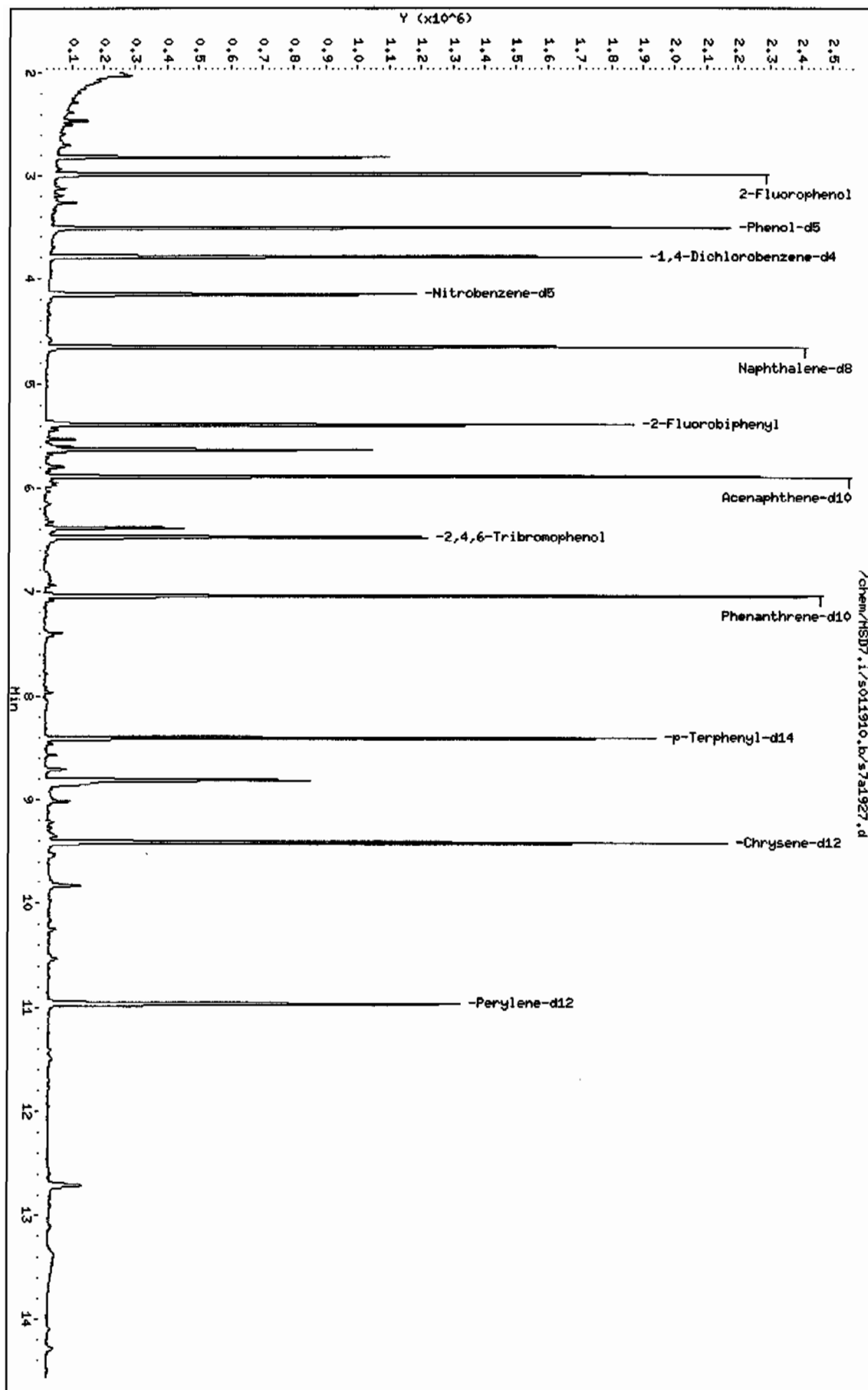
ISTD	RT	AREA	AMOUNT
=====	====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.788	1974449	40.000
* 46 Acenaphthene-d10	5.892	2665103	40.000
* 91 Chrysene-d12	9.417	2725185	40.000
* 98 Perylene-d12	10.963	2128004	40.000

CONCENTRATIONS					QUANT		
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
====	====	=====	=====	=====	=====	=====	=====

RT	AREA	CONCENTRATIONS		QUAL	QUANT		CPND #
		ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
Unknown Aldol Condensate					CAS #:		
2.820	1084740	21.9755320	843	0		0	10
Cedrol					CAS #: 77-53-2		
6.388	533451	8.00645703	307	94	NIST05.L	72887	46
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa					CAS #: 511-15-9		
8.810	1485143	21.7987829	836	96	NIST05.L	116239	91
Unknown					CAS #:		
12.711	264059	4.96350457	190	0		0	98

Data File: /chem/HSD7.i/s011910.b/s7a1927.d  
Date: 19-JUN-2010 18:48  
Client ID: REL2-10-7240  
Sample Info: 124459002194170211SVHF11LHNL  
Volume Injected (uL): 0.5  
Column phase: JMW DB-SMS

Instrument: HSD7.i  
Operator: JHB3  
Column diameter: 0.20



Date: 19-JAN-2010 18:48

Client ID: RE12-10-7240

Instrument: HSD7.i

Sample Info: 1244599002194170211SVMF11ILANL

Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

## Library Search Compound Match

Unknown Aldol Condensate

2-Pentanone, 4-hydroxy-4-methyl-

CAS Number

Library

Entry

Quality

Formula

Weight

123-42-2

NIST05.L

7951

59

C6H12O2

116

2-Pentanone, 4-hydroxy-4-methyl-

123-42-2

NIST05.L

7952

50

C6H12O2

116

2-Pentanone, 4-hydroxy-4-methyl-

123-42-2

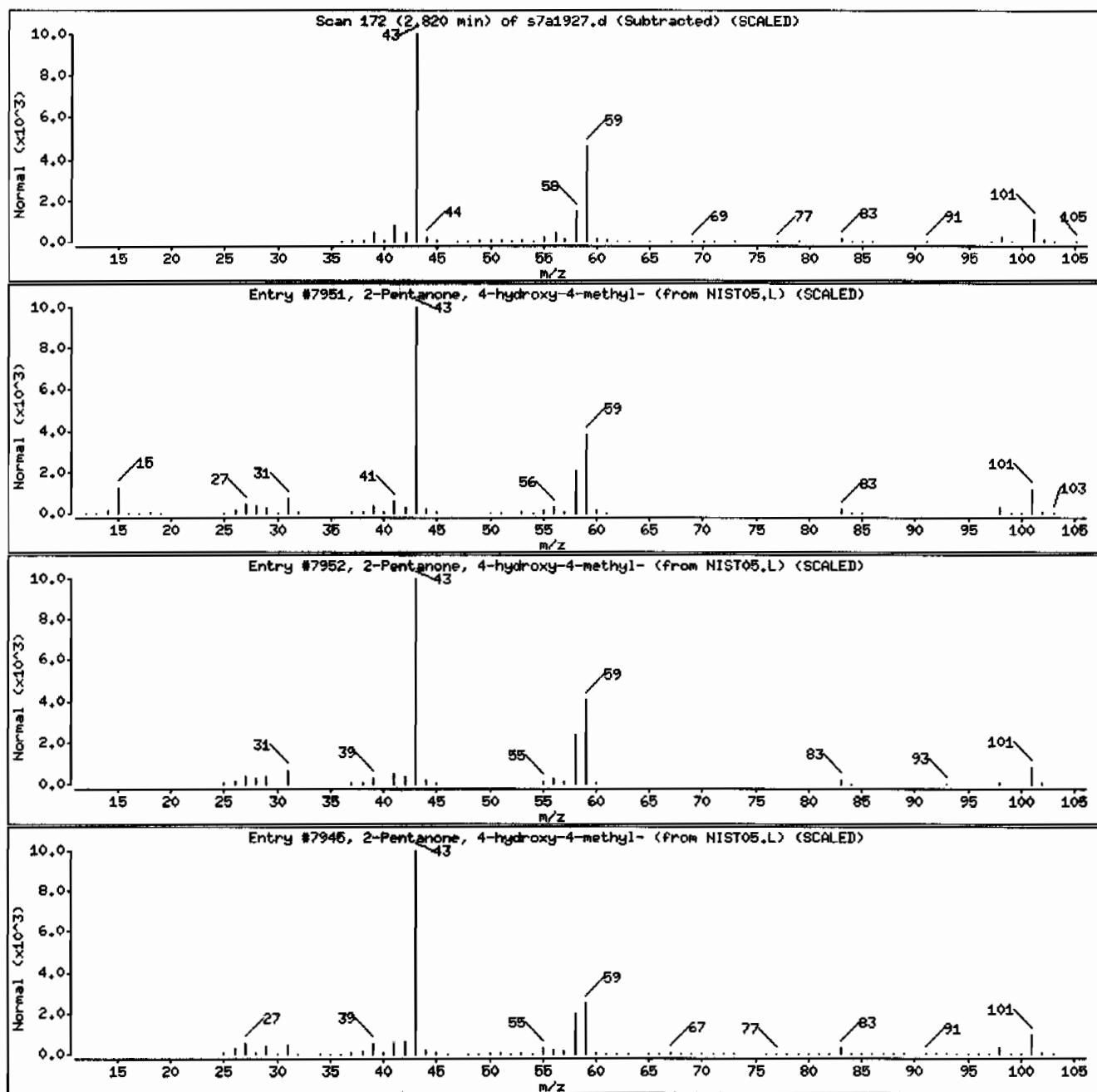
NIST05.L

7945

47

C6H12O2

116



Date: 19-JAN-2010 18:48

Client ID: RE12-10-7240

Instrument: MSD7.i

Sample Info: 1244599002194170211SVMF111LANL

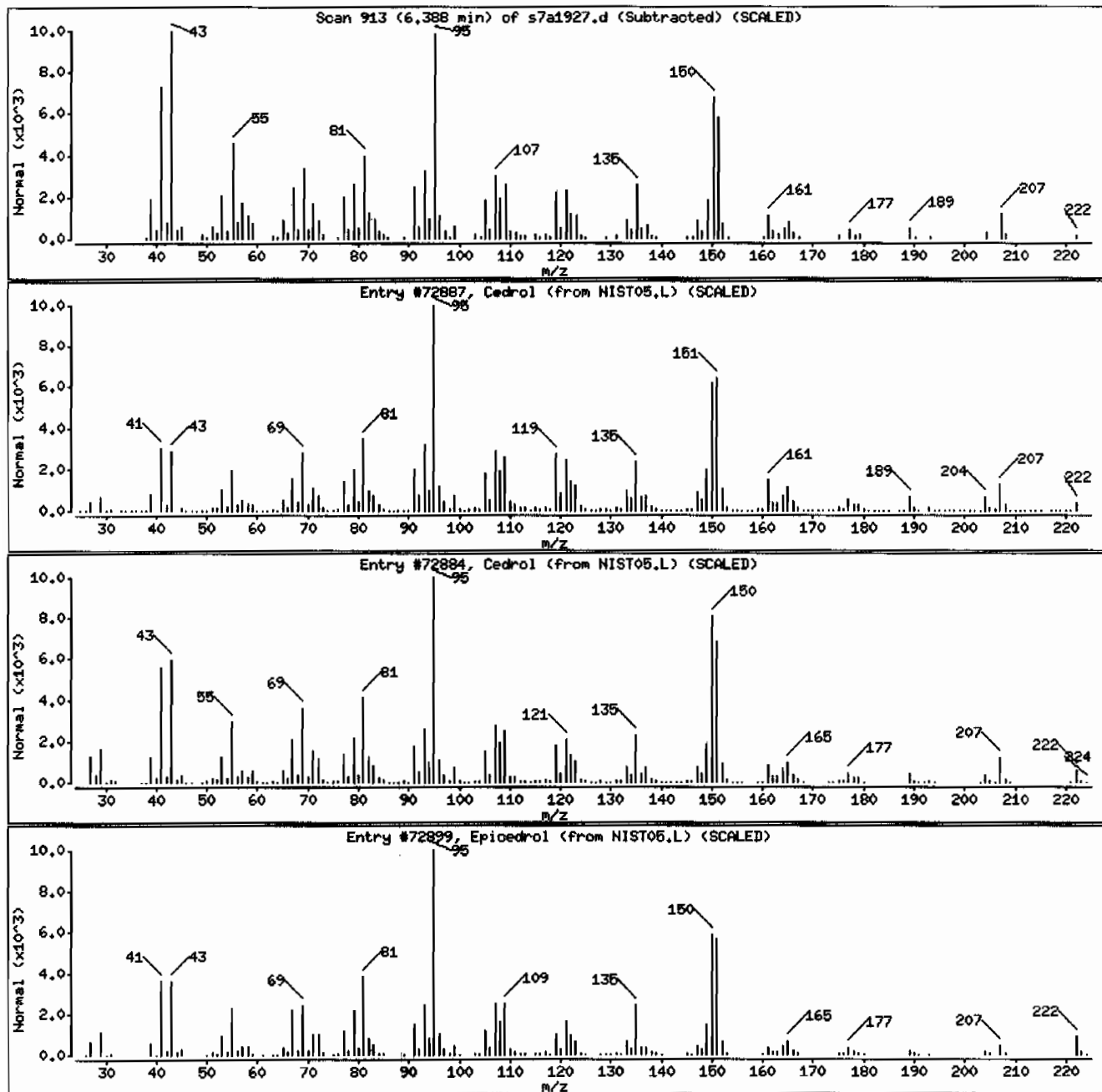
Volume Injected (uL): 0.5

Operator: JHB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cedrol	77-53-2	NIST05.L	72887	94	C <sub>15</sub> H <sub>26</sub> O	222
Cedrol	77-53-2	NIST05.L	72884	91	C <sub>15</sub> H <sub>26</sub> O	222
Epicedrol	1000156-22-8	NIST05.L	72899	90	C <sub>15</sub> H <sub>26</sub> O	222



Date: 19-JAN-2010 18:48

Client ID: RE12-10-7240

Instrument: MSD7.i

Sample Info: 1244599002194170211SVMF111LANL

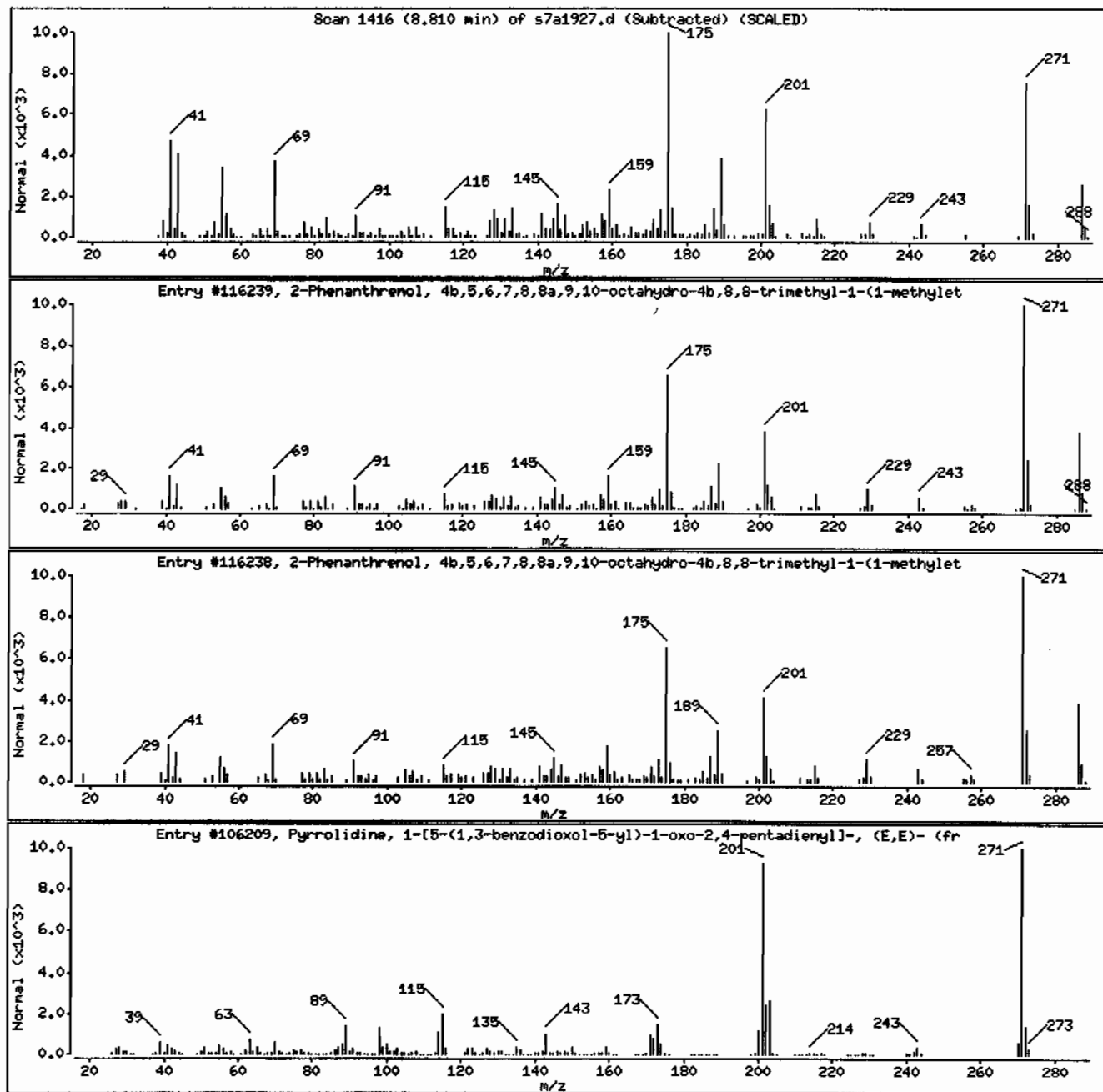
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116239	96	C20H30O	286
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116238	90	C20H30O	286
Pyrrolidine, 1-[5-(1,3-benzodioxol-5-yl)	25924-78-1	NIST05.L	106209	41	C16H17NO3	271



Date: 19-JAN-2010 18:48

Client ID: RE12-10-7240

Instrument: MSD7.1

Sample Info: 12445990021941702111SVMF111LANL

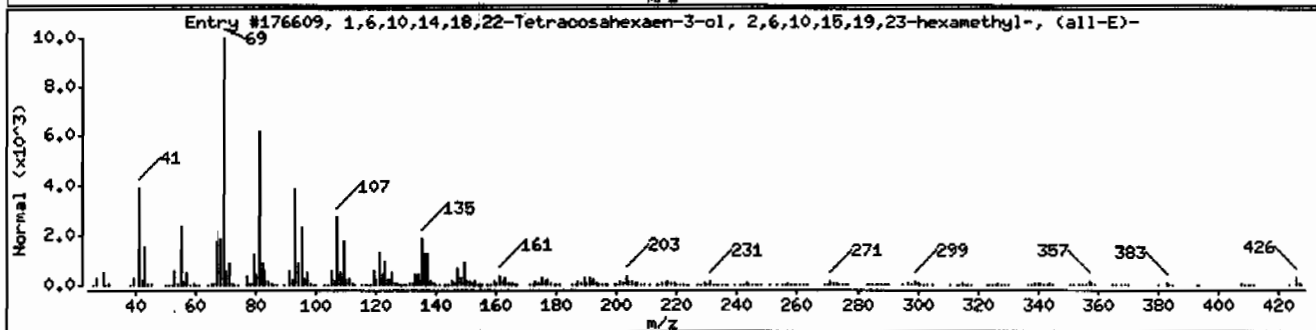
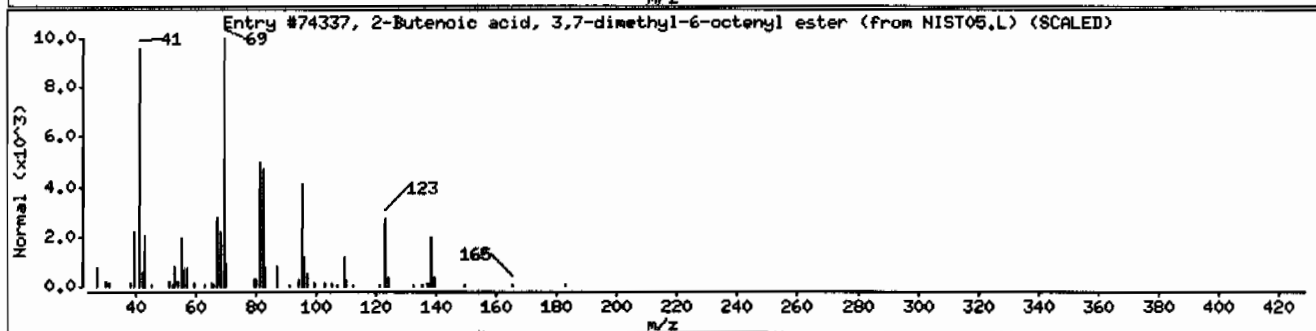
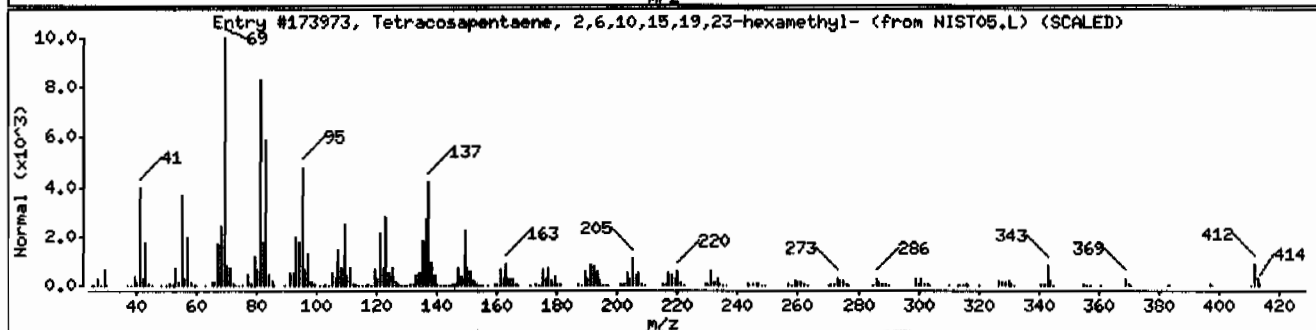
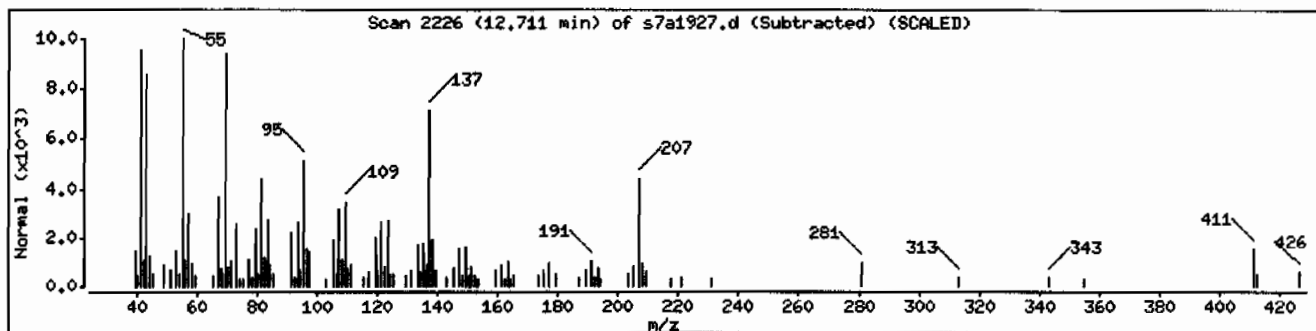
Volume Injected (uL): 0.5

Operator: JHB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Tetracosapentaene, 2,6,10,15,19,23-hexamethyl-	26266-08-0	NIST05.L	173973	50	C30H52	412
2-Butenoic acid, 3,7-dimethyl-6-octenyl	68039-38-3	NIST05.L	74337	43	C14H24O2	224
1,6,10,14,18,22-Tetracosahexaen-3-ol, 2,	54159-46-5	NIST05.L	176609	41	C30H50O	426





**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

<b>SDG Number:</b> 10-1210	<b>Date Collected:</b> 01/07/2010 12:00	<b>Matrix:</b> R
<b>Lab Sample ID:</b> 244599003	<b>Date Received:</b> 01/13/2010 08:55	<b>%Moisture:</b> 9.4
	<b>Client:</b> LANL010	<b>Project:</b> LANL01004
<b>Client ID:</b> RE12-10-7241	<b>Method:</b> SW846 8270C	<b>SOP Ref:</b> GL-OA-E-009
<b>Batch ID:</b> 941702	<b>Inst:</b> MSD7.I	<b>Dilution:</b> 1
<b>Run Date:</b> 01/19/2010 19:11	<b>Analyst:</b> JMB3	<b>Inj. Vol:</b> .5 uL
<b>Prep Date:</b> 01/14/2010 19:34	<b>Aliquot:</b> 30.02 g	<b>Final Volume:</b> 1 mL
<b>Data File:</b> s7a1928.d	<b>Column:</b> J&W DB-5MS	<b>Level:</b> LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	368	ug/kg	73.5	368
108-95-2	Phenol	U	368	ug/kg	73.5	368
95-57-8	2-Chlorophenol	U	368	ug/kg	73.5	368
106-46-7	1,4-Dichlorobenzene	U	368	ug/kg	73.5	368
621-64-7	N-Nitrosodipropylamine	U	368	ug/kg	73.5	368
59-50-7	4-Chloro-3-methylphenol	U	368	ug/kg	73.5	368
83-32-9	Acenaphthene	U	36.8	ug/kg	12.1	36.8
121-14-2	2,4-Dinitrotoluene	U	368	ug/kg	36.8	368
100-02-7	4-Nitrophenol	U	368	ug/kg	121	368
87-86-5	Pentachlorophenol	U	368	ug/kg	91.9	368
129-00-0	Pyrene	U	36.8	ug/kg	11.0	36.8
110-86-1	Pyridine	U	368	ug/kg	73.5	368
62-53-3	Aniline	U	368	ug/kg	110	368
111-44-4	bis(2-Chloroethyl) ether	U	368	ug/kg	73.5	368
541-73-1	1,3-Dichlorobenzene	U	368	ug/kg	73.5	368
100-51-6	Benzyl alcohol	U	368	ug/kg	110	368
95-50-1	1,2-Dichlorobenzene	U	368	ug/kg	73.5	368
108-60-1	bis(2-Chloroisopropyl) ether	U	368	ug/kg	73.5	368
95-48-7	o-Cresol	U	368	ug/kg	73.5	368
65794-96-9	m,p-Cresols	U	368	ug/kg	110	368
67-72-1	Hexachloroethane	U	368	ug/kg	73.5	368
98-95-3	Nitrobenzene	U	368	ug/kg	73.5	368
78-59-1	Isophorone	U	368	ug/kg	73.5	368
88-75-5	2-Nitrophenol	U	368	ug/kg	73.5	368
105-67-9	2,4-Dimethylphenol	U	368	ug/kg	129	368
111-91-1	bis(2-Chloroethoxy)methane	U	368	ug/kg	73.5	368
120-83-2	2,4-Dichlorophenol	U	368	ug/kg	73.5	368
65-85-0	Benzoic acid	U	735	ug/kg	184	735
91-20-3	Naphthalene	U	36.8	ug/kg	11.0	36.8
106-47-8	4-Chloroaniline	U	368	ug/kg	73.5	368
87-68-3	Hexachlorobutadiene	U	368	ug/kg	73.5	368
91-57-6	2-Methylnaphthalene	U	36.8	ug/kg	7.35	36.8
77-47-4	Hexachlorocyclopentadiene	U	368	ug/kg	73.5	368
88-06-2	2,4,6-Trichlorophenol	U	368	ug/kg	73.5	368
95-95-4	2,4,5-Trichlorophenol	U	368	ug/kg	73.5	368
91-58-7	2-Chloronaphthalene	U	36.8	ug/kg	12.1	36.8
88-74-4	2-Nitroaniline	U	368	ug/kg	73.5	368
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	368	ug/kg	73.5	368

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210	Date Collected: 01/07/2010 12:00	Matrix: R
Lab Sample ID: 244599003	Date Received: 01/13/2010 08:55	%Moisture: 9.4
	Client: LANL010	Project: LANL01004
Client ID: RE12-10-7241	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 941702	Inst: MSD7.1	Dilution: 1
Run Date: 01/19/2010 19:11	Analyst: JMB3	Inj. Vol: .5 uL
Prep Date: 01/14/2010 19:34	Aliquot: 30.02 g	Final Volume: 1 mL
Data File: s7a1928.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	368	ug/kg	73.5	368
606-20-2	2,6-Dinitrotoluene	U	368	ug/kg	36.8	368
208-96-8	Acenaphthylene	U	36.8	ug/kg	11.0	36.8
51-28-5	2,4-Dinitrophenol	U	735	ug/kg	140	735
132-64-9	Dibenzofuran	U	368	ug/kg	73.5	368
84-66-2	Diethylphthalate	U	368	ug/kg	73.5	368
86-73-7	Fluorene	U	36.8	ug/kg	11.0	36.8
7005-72-3	4-Chlorophenylphenylether	U	368	ug/kg	73.5	368
534-52-1	2-Methyl-4,6-dinitrophenol	U	368	ug/kg	73.5	368
100-01-6	4-Nitroaniline	U	368	ug/kg	110	368
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	368	ug/kg	73.5	368
122-66-7	Azobenzene	U	368	ug/kg	73.5	368
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	368	ug/kg	73.5	368
118-74-1	Hexachlorobenzene	U	368	ug/kg	73.5	368
85-01-8	Phenanthrene	U	36.8	ug/kg	11.0	36.8
120-12-7	Anthracene	U	36.8	ug/kg	7.35	36.8
84-74-2	Di-n-butylphthalate	U	368	ug/kg	73.5	368
206-44-0	Fluoranthene	U	36.8	ug/kg	11.0	36.8
85-68-7	Butylbenzylphthalate	U	368	ug/kg	73.5	368
56-55-3	Benzo(a)anthracene	U	36.8	ug/kg	11.0	36.8
91-94-1	3,3'-Dichlorobenzidine	U	368	ug/kg	110	368
218-01-9	Chrysene	U	36.8	ug/kg	11.0	36.8
117-81-7	bis(2-Ethylhexyl)phthalate	U	368	ug/kg	73.5	368
117-84-0	Di-n-octylphthalate	U	368	ug/kg	73.5	368
205-99-2	Benzo(b)fluoranthene	U	36.8	ug/kg	11.0	36.8
207-08-9	Benzo(k)fluoranthene	U	36.8	ug/kg	11.0	36.8
50-32-8	Benzo(a)pyrene	U	36.8	ug/kg	11.0	36.8
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.8	ug/kg	11.0	36.8
53-70-3	Dibenzo(a,h)anthracene	U	36.8	ug/kg	11.0	36.8
191-24-2	Benzo(ghi)perylene	U	36.8	ug/kg	11.0	36.8
120-82-1	1,2,4-Trichlorobenzene	U	368	ug/kg	73.5	368

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.82	657	ug/kg		JA
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	5.63	227	ug/kg	99	NJ

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210	Date Collected: 01/07/2010 12:00	Matrix: R
Lab Sample ID: 244599003	Date Received: 01/13/2010 08:55	%Moisture: 9.4
	Client: LANL010	Project: LANL01004
Client ID: RE12-10-7241	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 941702	Inst: MSD7J	Dilution: 1
Run Date: 01/19/2010 19:11	Analyst: JMB3	Inj. Vol: .5 uL
Prep Date: 01/14/2010 19:34	Aliquot: 30.02 g	Final Volume: 1 mL
Data File: s7a1928.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
Tentatively Identified Compound Summary							
CAS No.	Tentatively Identified Compound (TIC)		RT	Estimated	Units	Fit	Qual
77-53-2	Cedrol		6.39	556	ug/kg	93	NJ
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa		8.82	469	ug/kg	96	NJ

Data File: /chem/MSD7.i/s011910.b/s7a1928.d  
 Report Date: 19-Jan-2010 19:54

Page 1

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Data file : /chem/MSD7.i/s011910.b/s7a1928.d  
 Lab Smp Id: 244599003 Client Smp ID: RE12-10-7241  
 Inj Date : 19-JAN-2010 19:11  
 Operator : JMB3 Inst ID: MSD7.i  
 Smp Info : |244599003|941702|1|SVMF|1|LANL  
 Misc Info : |MSD8270\_S|WBN100107-02|  
 Comment : Column: J&W Scientific DB-5MS 25m x 0.2mm x 0.33um film thickness  
 Method : /chem/MSD7.i/s011910.b/MSD7-M8270C-AQA-011310.m  
 Meth Date : 19-Jan-2010 18:16 llo00884 Quant Type: ISTD  
 Cal Date : 15-JAN-2010 19:06 Cal File: s7a1515.d  
 Als bottle: 27  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: 10-1210.sub  
 Target Version: 3.50  
 Processing Host: hpc1pl

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.02000	weight of sample
M	9.36530	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN	FINAL
	MASS					(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.788	3.793	(1.000)	408442	40.0000	
* 29 Naphthalene-d8	136	4.650	4.654	(1.000)	1517349	40.0000	
* 46 Acenaphthene-d10	164	5.892	5.897	(1.000)	792909	40.0000	
* 67 Phenanthrene-d10	188	7.043	7.048	(1.000)	1464645	40.0000	
* 91 Chrysene-d12	240	9.422	9.426	(1.000)	1258875	40.0000	
* 98 Perylene-d12	264	10.968	10.972	(1.000)	936714	40.0000	
\$ 3 2-Fluorophenol	112	2.989	2.984	(0.789)	759001	64.6674	2380
\$ 5 Phenol-d5	99	3.509	3.508	(0.926)	995322	65.7734	2420
\$ 20 Nitrobenzene-d5	82	4.149	4.154	(0.892)	470214	37.5670	1380
\$ 39 2-Fluorobiphenyl	172	5.387	5.391	(0.914)	832248	35.6191	1310
\$ 60 2,4,6-Tribromophenol	329	6.480	6.484	(1.100)	149924	75.1586	2760
\$ 81 p-Terphenyl-d14	244	8.406	8.406	(0.892)	843631	39.2363	1440

## ION RATIO REPORT

## SV REPORT

Data file: s7a1928.d

Report Date: 01/19/2010 19:49

Lab. ID: 244599003

SampleType: SAMPLE

Injection Date: 19-JAN-2010 19:11

Operator: JMB3

Instrument: MSD7.i

Sample Info: |244599003|941702|1|SVMF|1|LANL

Miscellaneous Info: |MSD8270\_S|WBN100107-02|

Comment:

Method used: /chem/MSD7.i/s011910.b/MSD7-M8270C-AQA-011310.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1210

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4 Aniline		CAS#: 62-53-3				
66	51493	3.51	3.58	80-120	100	(T)
93	657	3.37	3.58	217-277	1	(QT)
-----						
17 N-Nitrosodipropylamine		CAS#: 621-64-7				
70	67926	4.15	4.03	80-120	100	(T)
42	51764	4.14	4.03	63-123	76	(T)
-----						
27 Benzoic acid		CAS#: 65-85-0				
105	150	4.46	4.43	80-120	100	( )
122	302	4.65	4.43	59-119	201	(QT)
77	415	4.41	4.43	38- 98	277	(Q)
-----						
43 Dimethylphthalate		CAS#: 131-11-3				
163	142949	5.89	5.67	80-120	100	(T)
164	792909	5.89	5.67	0- 40	555	(QT)
-----						
44 2,6-Dinitrotoluene		CAS#: 606-20-2				
165	101943	5.89	5.72	80-120	100	(T)
63	1658	5.89	5.72	50-110	2	(QT)
-----						
50 2,4-Dinitrotoluene		CAS#: 121-14-2				
165	101943	5.89	6.01	80-120	100	(T)
89	1273	5.89	6.01	44-104	1	(QT)
63	1658	5.89	6.01	30- 90	2	(QT)
-----						

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
53	Fluorene		CAS#:	86-73-7		
166	12550	6.48	6.30	80-120	100	(T)
165	12886	6.48	6.30	57-117	103	(T)
167	3986	6.48	6.30	0- 43	32	(T)

-----  
 Q qualifier indicates ion failed ratio requirement

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Data file : /chem/MSD7.i/s011910.b/s7a1928.d  
Lab Smp Id: 244599003 Client Smp ID: RE12-10-7241  
Inj Date : 19-JAN-2010 19:11  
Operator : JMB3 Inst ID: MSD7.i  
Smp Info : |244599003|941702|1|SVMF|1|LANL  
Misc Info : |MSD8270 S|WBN100107-02|  
Comment : Column: J&W Scientific DB-5MS 25m x 0.2mm x 0.33um film thickness  
Method : /chem/MSD7.i/s011910.b/MSD7-M8270C-AQA-011310.m  
Meth Date : 19-Jan-2010 18:16 llo00884 Quant Type: ISTD  
Cal Date : 15-JAN-2010 19:06 Cal File: s7a1515.d  
Als bottle: 27  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1210.sub  
Target Version: 3.50  
Processing Host: hpclpl

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.02000	weight of sample
M	9.36530	% moisture

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.788	2577773	40.000
* 46 Acenaphthene-d10	5.892	3439546	40.000
* 91 Chrysene-d12	9.422	3396978	40.000

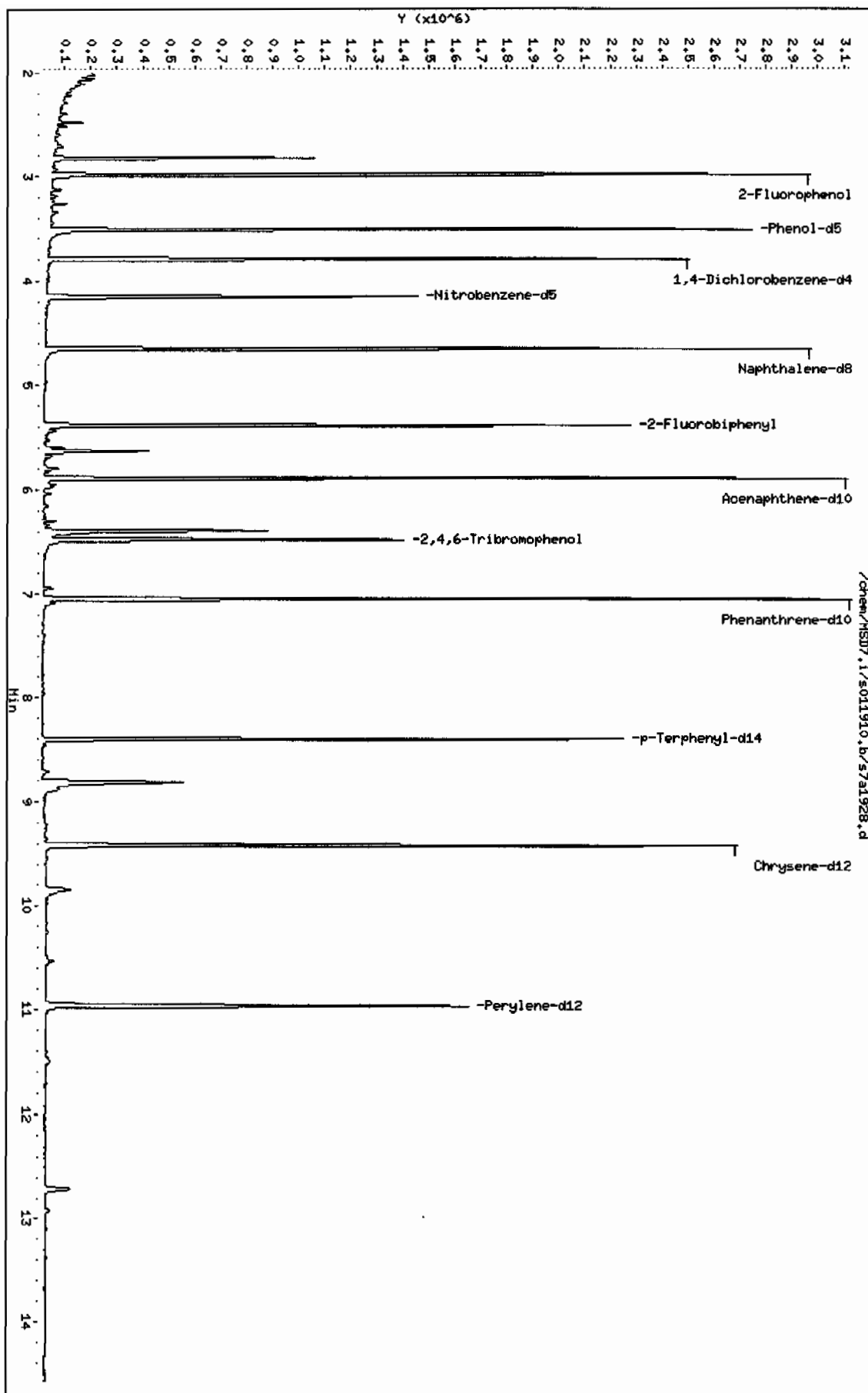
CONCENTRATIONS				QUANT			
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
Unknown Aldol Condensate				CAS #:			
2.825	1151674	17.8708311	657	0		0	10
1,4-Methanoazulene, decahydro-4,8,8-trim				CAS #: 475-20-7			
5.632	530673	6.17142739	227	99	NIST05.L	60020	46
Cedrol				CAS #: 77-53-2			
6.393	1301379	15.1343094	556	93	NIST05.L	72886	46
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa				CAS #: 511-15-9			
8.815	1084412	12.7691372	469	96	NIST05.L	116239	91



Data File: /chem/MSD7.1/s011910.b/s7a1928.d  
 Date: 19-JAN-2010 19:11  
 Client ID: RE12-10-7241  
 Sample Info: 124459003194170211SVHF11LNL  
 Volume Injected (uL): 0.5  
 Column phase: J&W DB-SMS

Instrument: MSD7.1  
 Operator: JMB3  
 Column diameter: 0.20



Date : 19-JAN-2010 19:11

Client ID: RE12-10-7241

Instrument: MSD7.i

Sample Info: 1244599003194170211SVHF11ILANL

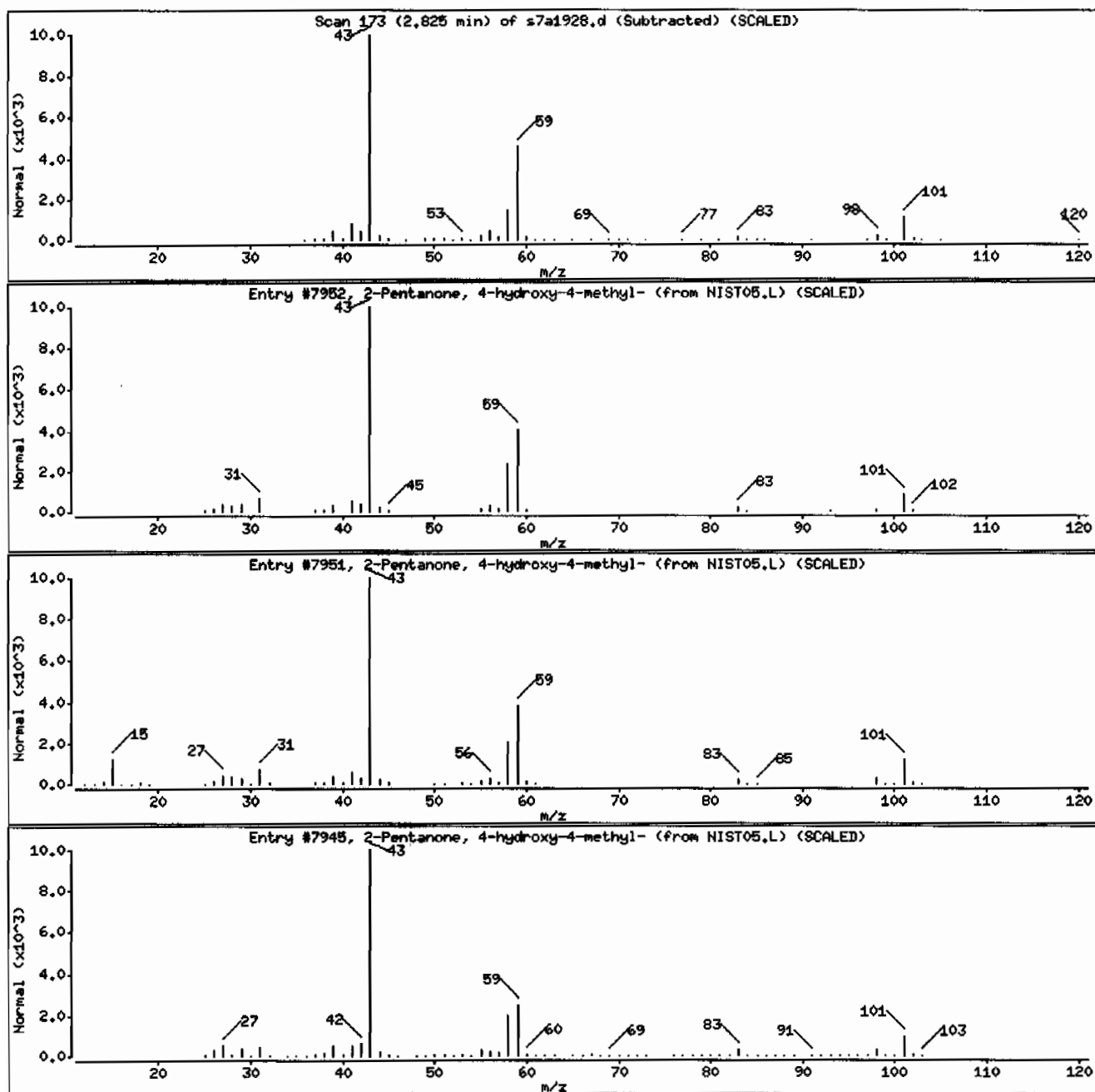
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	25	C6H12O2	116



Date : 19-JAN-2010 19:11

Client ID: RE12-10-7241

Instrument: MSD7.i

Sample Info: 1244599003194170211SVHF11ILANL

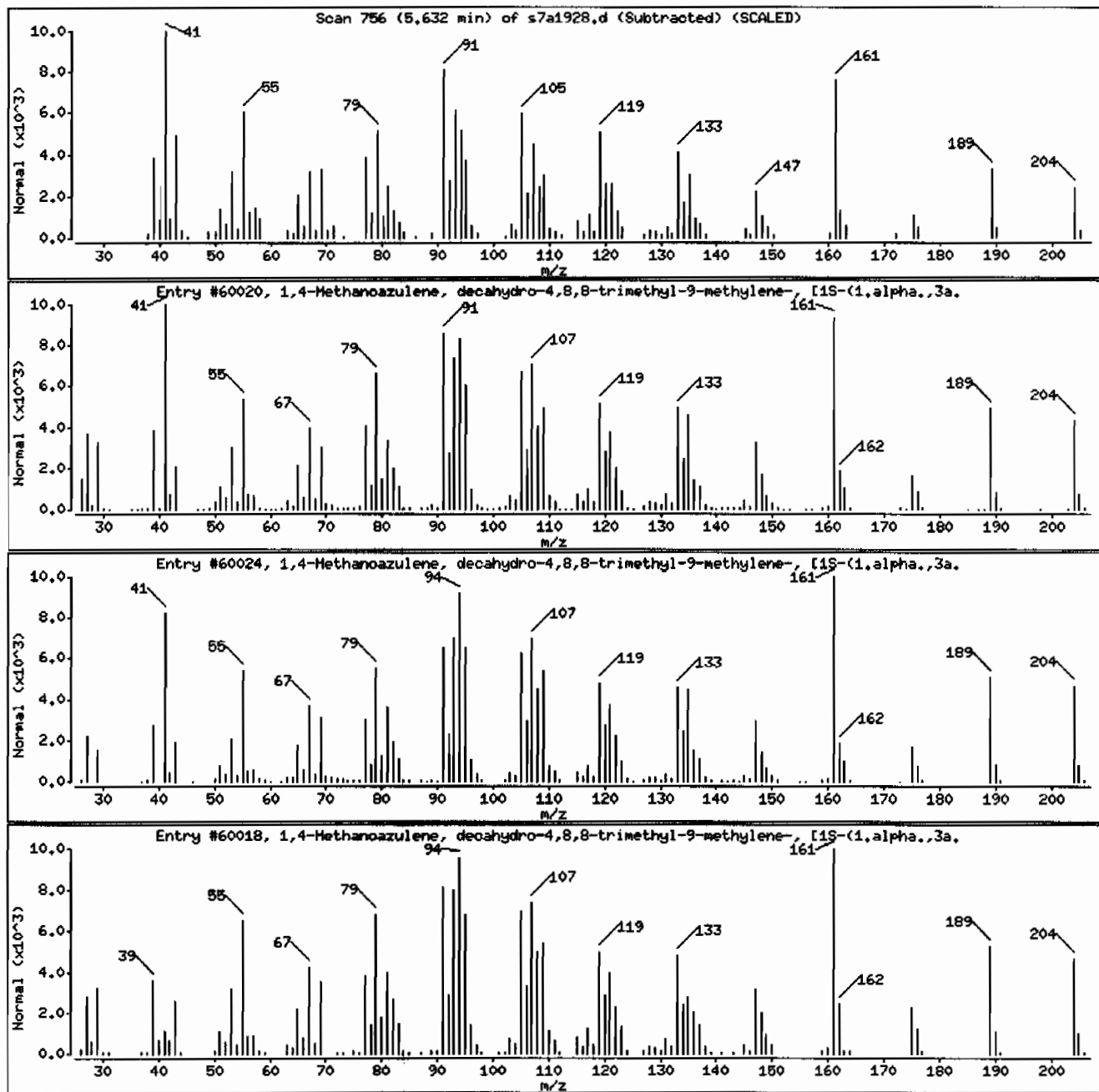
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,4-Methanoazulene, decahydro-4,8,8-trim	475-20-7	NIST05.L	60020	99	C15H24	204
1,4-Methanoazulene, decahydro-4,8,8-trim	475-20-7	NIST05.L	60024	99	C15H24	204
1,4-Methanoazulene, decahydro-4,8,8-trim	475-20-7	NIST05.L	60018	97	C15H24	204



Date : 19-JAN-2010 19:11

Client ID: RE12-10-7241

Instrument: MSD7.i

Sample Info: 1244599003194170211SVMF11ILANL

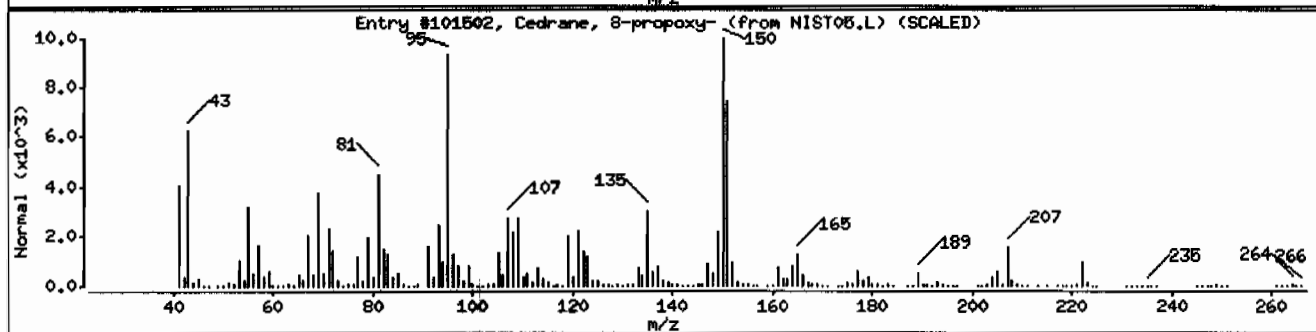
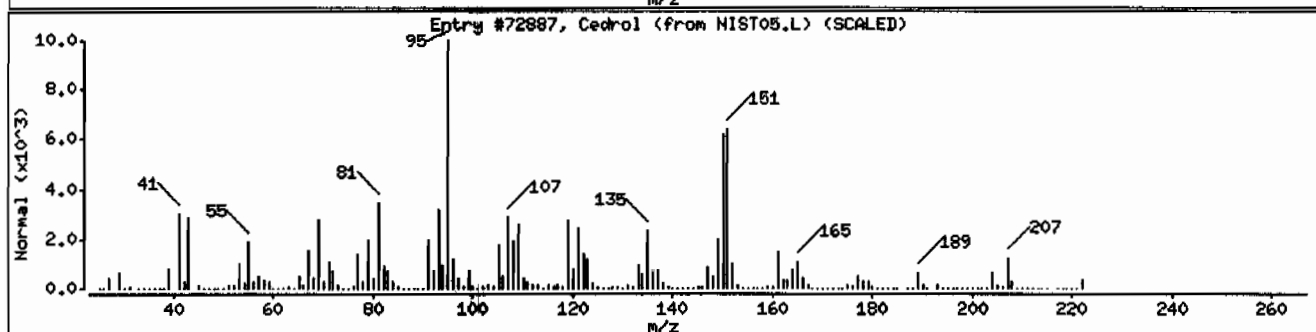
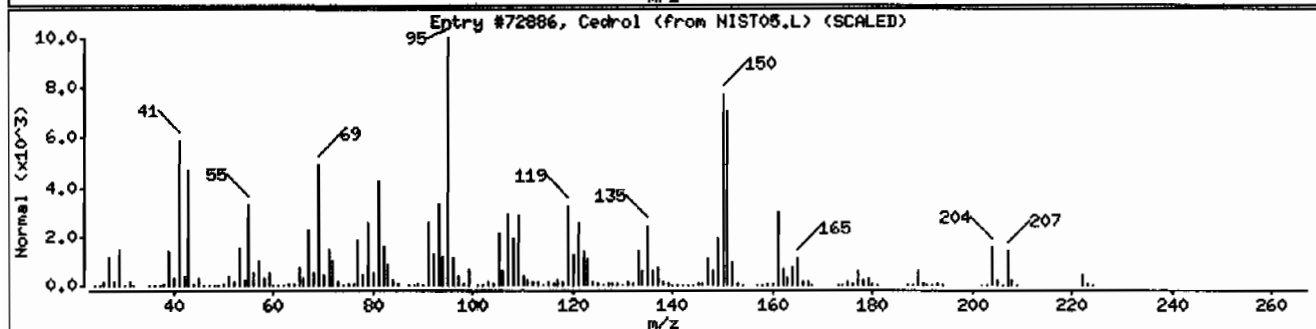
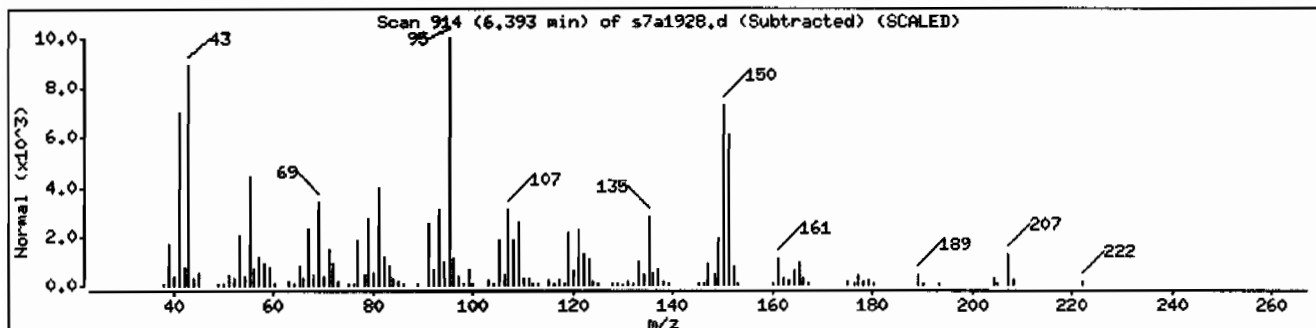
Volume Injected (uL): 0.8

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cedrol	77-53-2	NIST05.L	72886	93	C15H26O	222
Cedrol	77-53-2	NIST05.L	72887	91	C15H26O	222
Cedrane, 8-propoxy-	19870-75-8	NIST05.L	101502	91	C18H32O	264



Date : 19-JAN-2010 19:11

Client ID: RE12-10-7241

Instrument: MSD7.i

Sample Info: 1244599003194170211SVHF111LANL

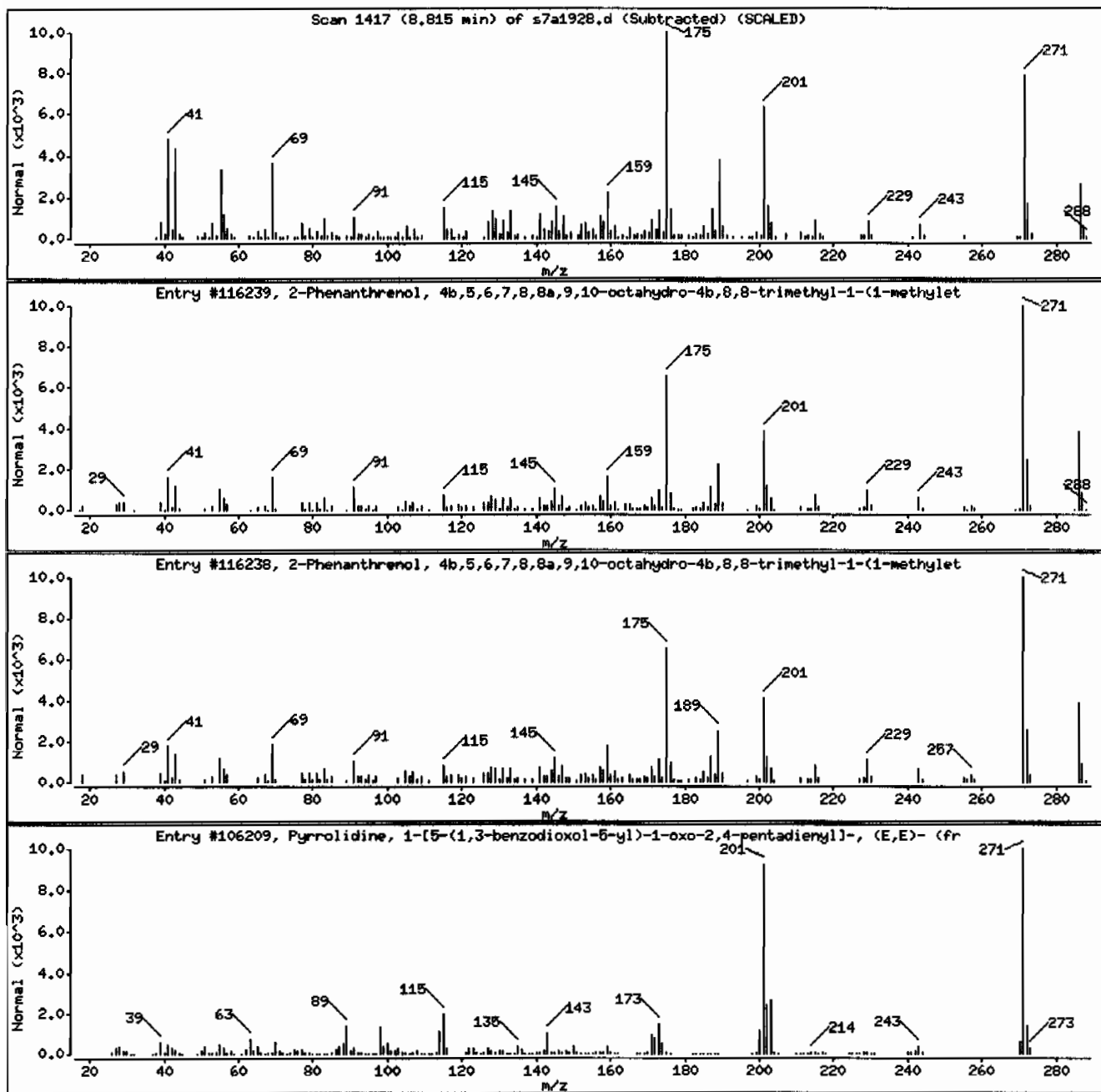
Volume Injected (uL): 0.5

Operator: JHB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116239	96	C20H30O	286
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116238	95	C20H30O	286
Pyrrolidine, 1-[5-(1,3-benzodioxol-5-yl)	25924-78-1	NIST05.L	106209	45	C16H17NO3	271



**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210  
Lab Sample ID: 244599007

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD7.1  
Analyst: JMB3  
Aliquot: 30.12 g  
Column: J&W DB-SMS

Matrix: R  
%Moisture: 16.3  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE12-10-7242  
Batch ID: 941702  
Run Date: 01/20/2010 14:29  
Prep Date: 01/14/2010 19:34  
Data File: s7a2012.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	397	ug/kg	79.4	397
108-95-2	Phenol	U	397	ug/kg	79.4	397
95-57-8	2-Chlorophenol	U	397	ug/kg	79.4	397
106-46-7	1,4-Dichlorobenzene	U	397	ug/kg	79.4	397
621-64-7	N-Nitrosodipropylamine	U	397	ug/kg	79.4	397
59-50-7	4-Chloro-3-methylphenol	U	397	ug/kg	79.4	397
83-32-9	Acenaphthene	U	39.7	ug/kg	13.1	39.7
121-14-2	2,4-Dinitrotoluene	U	397	ug/kg	39.7	397
100-02-7	4-Nitrophenol	U	397	ug/kg	131	397
87-86-5	Pentachlorophenol	U	397	ug/kg	99.2	397
129-00-0	Pyrene	J	12.0	ug/kg	11.9	39.7
110-86-1	Pyridine	U	397	ug/kg	79.4	397
62-53-3	Aniline	U	397	ug/kg	119	397
111-44-4	bis(2-Chloroethyl) ether	U	397	ug/kg	79.4	397
541-73-1	1,3-Dichlorobenzene	U	397	ug/kg	79.4	397
100-51-6	Benzyl alcohol	U	397	ug/kg	119	397
95-50-1	1,2-Dichlorobenzene	U	397	ug/kg	79.4	397
108-60-1	bis(2-Chloroisopropyl)ether	U	397	ug/kg	79.4	397
95-48-7	o-Cresol	U	397	ug/kg	79.4	397
65794-96-9	m,p-Cresols	U	397	ug/kg	119	397
67-72-1	Hexachloroethane	U	397	ug/kg	79.4	397
98-95-3	Nitrobenzene	U	397	ug/kg	79.4	397
78-59-1	Isophorone	U	397	ug/kg	79.4	397
88-75-5	2-Nitrophenol	U	397	ug/kg	79.4	397
105-67-9	2,4-Dimethylphenol	U	397	ug/kg	139	397
111-91-1	bis(2-Chloroethoxy)methane	U	397	ug/kg	79.4	397
120-83-2	2,4-Dichlorophenol	U	397	ug/kg	79.4	397
65-85-0	Benzoic acid	U	794	ug/kg	198	794
91-20-3	Naphthalene	U	39.7	ug/kg	11.9	39.7
106-47-8	4-Chloroaniline	U	397	ug/kg	79.4	397
87-68-3	Hexachlorobutadiene	U	397	ug/kg	79.4	397
91-57-6	2-Methylnaphthalene	U	39.7	ug/kg	7.94	39.7
77-47-4	Hexachlorocyclopentadiene	U	397	ug/kg	79.4	397
88-06-2	2,4,6-Trichlorophenol	U	397	ug/kg	79.4	397
95-95-4	2,4,5-Trichlorophenol	U	397	ug/kg	79.4	397
91-58-7	2-Chloronaphthalene	U	39.7	ug/kg	13.1	39.7
88-74-4	2-Nitroaniline	U	397	ug/kg	79.4	397
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	397	ug/kg	79.4	397

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210  
Lab Sample ID: 244599007

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD7.I  
Analyst: JMB3  
Aliquot: 30.12 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 16.3  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE12-10-7242  
Batch ID: 941702  
Run Date: 01/20/2010 14:29  
Prep Date: 01/14/2010 19:34  
Data File: s7a2012.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	397	ug/kg	79.4	397
606-20-2	2,6-Dinitrotoluene	U	397	ug/kg	39.7	397
208-96-8	Acenaphthylene	U	39.7	ug/kg	11.9	39.7
51-28-5	2,4-Dinitrophenol	U	794	ug/kg	151	794
132-64-9	Dibenzofuran	U	397	ug/kg	79.4	397
84-66-2	Diethylphthalate	U	397	ug/kg	79.4	397
86-73-7	Fluorene	U	39.7	ug/kg	11.9	39.7
7005-72-3	4-Chlorophenylphenylether	U	397	ug/kg	79.4	397
534-52-1	2-Methyl-4,6-dinitrophenol	U	397	ug/kg	79.4	397
100-01-6	4-Nitroaniline	U	397	ug/kg	119	397
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	397	ug/kg	79.4	397
122-66-7	Azobenzene	U	397	ug/kg	79.4	397
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	397	ug/kg	79.4	397
118-74-1	Hexachlorobenzene	U	397	ug/kg	79.4	397
85-01-8	Phenanthrene	U	39.7	ug/kg	11.9	39.7
120-12-7	Anthracene	U	39.7	ug/kg	7.94	39.7
84-74-2	Di-n-butylphthalate	U	397	ug/kg	79.4	397
206-44-0	Fluoranthene	U	39.7	ug/kg	11.9	39.7
85-68-7	Butylbenzylphthalate	U	397	ug/kg	79.4	397
56-55-3	Benzo(a)anthracene	J	19.2	ug/kg	11.9	39.7
91-94-1	3,3'-Dichlorobenzidine	U	397	ug/kg	119	397
218-01-9	Chrysene	U	39.7	ug/kg	11.9	39.7
117-81-7	bis(2-Ethylhexyl)phthalate	U	397	ug/kg	79.4	397
117-84-0	Di-n-octylphthalate	U	397	ug/kg	79.4	397
205-99-2	Benzo(b)fluoranthene	J	22.3	ug/kg	11.9	39.7
207-08-9	Benzo(k)fluoranthene	U	39.7	ug/kg	11.9	39.7
50-32-8	Benzo(a)pyrene	U	39.7	ug/kg	11.9	39.7
193-39-5	Indeno(1,2,3-cd)pyrene	U	39.7	ug/kg	11.9	39.7
53-70-3	Dibenzo(a,h)anthracene	U	39.7	ug/kg	11.9	39.7
191-24-2	Benzo(ghi)perylene	U	39.7	ug/kg	11.9	39.7
120-82-1	1,2,4-Trichlorobenzene	U	397	ug/kg	79.4	397

## Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.05	300	ug/kg		J
	Unknown Aldol Condensate	2.82	817	ug/kg		J

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210	Date Collected: 01/07/2010 12:00	Matrix: R
Lab Sample ID: 244599007	Date Received: 01/13/2010 08:55	%Moisture: 16.3
	Client: LANL010	Project: LANL01004
Client ID: RE12-10-7242	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 941702	Inst: MSD7J	Dilution: 1
Run Date: 01/20/2010 14:29	Analyst: JMB3	Inj. Vol: .5 uL
Prep Date: 01/14/2010 19:34	Aliquot: 30.12 g	Final Volume: 1 mL
Data File: s7a2012.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
---------	---------	-----------	--------	-------	---------	---------

Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
39029-41-9	Naphthalene, 1,2,3,4,4a,5,6,8a-octahydro	5.53	221	ug/kg	90	NJ
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	5.63	1650	ug/kg	99	NJ
77-53-2	Cedrol	6.39	201	ug/kg	95	NJ
1438-62-6	1-Naphthalenepropanol, .alpha.-ethenylde	7.94	297	ug/kg	87	NJ
	Unknown	8.7	254	ug/kg		J
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	8.81	1520	ug/kg	96	NJ
	Unknown	8.84	422	ug/kg		J
	Unknown	9.3	160	ug/kg		J
	Unknown	11.51	194	ug/kg		J
112-95-8	Eicosane	12.61	310	ug/kg	91	NJ
	Unknown	12.72	239	ug/kg		J
83-46-5	.beta.-Sitosterol	13.23	597	ug/kg	97	NJ
58-22-0	Androst-4-en-3-one, 17-hydroxy-, (17.bet	14.3	291	ug/kg	91	NJ



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Data file : /chem/MSD7.i/s012010.b/s7a2012.d  
Lab Smp Id: 244599007 Client Smp ID: RE12-10-7242  
Inj Date : 20-JAN-2010 14:29  
Operator : JMB3 Inst ID: MSD7.i  
Smp Info : |244599007|941702|1|SVM|1|LANL  
Misc Info : |MSD8270\_S|WBN100107-02|  
Comment : Column: J&W Scientific DB-5MS 25m x 0.2mm x 0.33um film thickness  
Method : /chem/MSD7.i/s012010.b/MSD7-M8270C-AQA-011310.m  
Meth Date : 20-Jan-2010 13:15 jos00786 Quant Type: ISTD  
Cal Date : 15-JAN-2010 19:06 Cal File: s7a1515.d  
Als bottle: 11  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1210.sub  
Target Version: 3.50  
Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.12000	weight of sample
M	16.34100	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.792	3.793	(1.000)	329968	40.0000	
* 29 Naphthalene-d8	136	4.650	4.655	(1.000)	1219611	40.0000	
* 46 Acenaphthene-d10	164	5.897	5.897	(1.000)	629223	40.0000	
* 67 Phenanthrene-d10	188	7.043	7.043	(1.000)	1155117	40.0000	
* 91 Chrysene-d12	240	9.422	9.431	(1.000)	913132	40.0000	
* 98 Perylene-d12	264	10.967	10.977	(1.000)	631931	40.0000	
\$ 3 2-Fluorophenol	112	2.993	2.984	(0.789)	586990	61.9060	2460
\$ 5 Phenol-d5	99	3.513	3.513	(0.926)	777996	63.6389	2520
\$ 20 Nitrobenzene-d5	82	4.149	4.154	(0.892)	359575	35.7409	1420
\$ 39 2-Fluorobiphenyl	172	5.391	5.391	(0.914)	661963	35.7012	1420
\$ 60 2,4,6-Tribromophenol	329	6.479	6.484	(1.099)	135428	85.5529	3400
\$ 81 p-Terphenyl-d14	244	8.406	8.406	(0.892)	692082	44.3754	1760

Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN	FINAL	
						(ng/ul)	(ug/Kg)	
=====	=====	==	=====	=====	=====	=====	=====	
79 Pyrene	202	8.300	8.305	(0.881)	8709	0.30178	12.0 (a)	
89 Benzo (a) anthracene	228	9.446	9.417	(1.003)	10598	0.48373	19.2 (a)	
95 Benzo (b) fluoranthene	252	10.495	10.505	(0.957)	9219	0.56172	22.3 (a)	

# QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).

## ION RATIO REPORT

## SV REPORT

Data file: s7a2012.d

Report Date: 01/20/2010 15:54

Lab. ID: 244599007

SampleType: SAMPLE

Injection Date: 20-JAN-2010 14:29

Operator: JMB3

Instrument: MSD7.i

Sample Info: |244599007|941702|1|SVM|1|LANL

Miscellaneous Info: |MSD8270\_S|WBN100107-02|

Comment:

Method used: /chem/MSD7.i/s012010.b/MSD7-M8270C-AQA-011310.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1210

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
1 N-Methyl-N-nitrosomethylamine				CAS#: 62-75-9		
74	47367	2.05	2.30	80-120	100	(T)
42	17674	2.05	2.30	85-145	37	(QT)
43	210772	2.05	2.30	24- 84	445	(QT)
-----						
4 Aniline				CAS#: 62-53-3		
66	40740	3.51	3.58	80-120	100	(T)
93	1431	3.47	3.58	187-247	4	(QT)
-----						
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	51894	4.15	4.03	80-120	100	(T)
42	40271	4.15	4.03	63-123	78	(T)
-----						
27 Benzoic acid				CAS#: 65-85-0		
105	550	4.46	4.43	80-120	100	( )
122	1449	4.39	4.43	58-118	263	(Q)
77	953	4.43	4.43	51-111	173	(Q)
-----						
40 2-Chloronaphthalene				CAS#: 91-58-7		
162	6931	5.44	5.50	80-120	100	( )
164	1217	5.63	5.50	2- 62	18	(T)
127	301	5.44	5.50	7- 67	4	(Q)
-----						
42 o-Nitroaniline				CAS#: 88-74-4		
65	38616	5.63	5.56	80-120	100	(T)
92	47997	5.63	5.56	26- 86	124	(QT)
138	2674	5.63	5.56	61-121	7	(QT)
-----						

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
43 Dimethylphthalate				CAS#: 131-11-3		
163	112199	5.90	5.67	80-120	100	(T)
164	628033	5.90	5.67	0- 40	560	(QT)
-----						
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	82777	5.89	5.72	80-120	100	(T)
63	1795	5.89	5.72	49-109	2	(QT)
-----						
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	82777	5.89	6.01	80-120	100	(T)
89	1196	5.89	6.01	44-104	1	(QT)
63	1938	5.89	6.01	29- 89	2	(QT)
-----						
53 Fluorene				CAS#: 86-73-7		
166	11594	6.48	6.30	80-120	100	(T)
165	11867	6.48	6.30	56-116	102	(T)
167	4045	6.48	6.30	0- 44	35	(T)
-----						
61 4-Bromophenylphenylether				CAS#: 101-55-3		
248	9831	6.48	6.66	80-120	100	(T)
141	73787	6.48	6.66	57-117	751	(QT)
250	20238	6.48	6.66	68-128	206	(QT)
-----						
76 Fluoranthene				CAS#: 206-44-0		
202	8709	8.30	8.09	80-120	100	(T)
203	2835	8.30	8.09	0- 48	33	(T)
101	3285	8.30	8.09	0- 44	38	(T)
-----						
79 Pyrene				CAS#: 129-00-0		
202	8709	8.30	8.30	80-120	100	( )
200	1875	8.30	8.30	0- 49	22	( )
101	3285	8.30	8.30	0- 47	38	( )
-----						
89 Benzo(a)anthracene				CAS#: 56-55-3		
228	10598	9.45	9.42	80-120	100	( )
226	2446	9.45	9.42	0- 56	23	( )
229	1150	9.44	9.42	0- 50	11	( )
-----						
92 Chrysene				CAS#: 218-01-9		
228	10598	9.45	9.46	80-120	100	( )
229	1151	9.44	9.46	0- 49	11	( )
226	2446	9.45	9.46	0- 59	23	( )
-----						
95 Benzo(b)fluoranthene				CAS#: 205-99-2		
252	9219	10.50	10.51	80-120	100	( )
253	2672	10.50	10.51	0- 52	29	( )
125	1267	10.50	10.51	0- 45	14	( )
-----						

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
96 Benzo(k)fluoranthene				CAS#: 207-08-9		
252	9219	10.50	10.53	80-120	100	( )
253	2672	10.50	10.53	0- 52	29	( )
125	1282	10.50	10.53	0- 47	14	( )

-----  
 Q qualifier indicates ion failed ratio requirement

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Data file : /chem/MSD7.i/s012010.b/s7a2012.d  
 Lab Smp Id: 244599007 Client Smp ID: RE12-10-7242  
 Inj Date : 20-JAN-2010 14:29  
 Operator : JMB3 Inst ID: MSD7.i  
 Smp Info : |244599007|941702|1|SVM|1|LANL  
 Misc Info : |MSD8270 S|WBN100107-02|  
 Comment : Column: J&W Scientific DB-5MS 25m x 0.2mm x 0.33um film thickness  
 Method : /chem/MSD7.i/s012010.b/MSD7-M8270C-AQA-011310.m  
 Meth Date : 20-Jan-2010 13:15 jos00786 Quant Type: ISTD  
 Cal Date : 15-JAN-2010 19:06 Cal File: s7a1515.d  
 Als bottle: 11  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: 10-1210.sub  
 Target Version: 3.50  
 Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.12000	weight of sample
M	16.34100	% moisture

Cpnd Variable Local Compound Variable

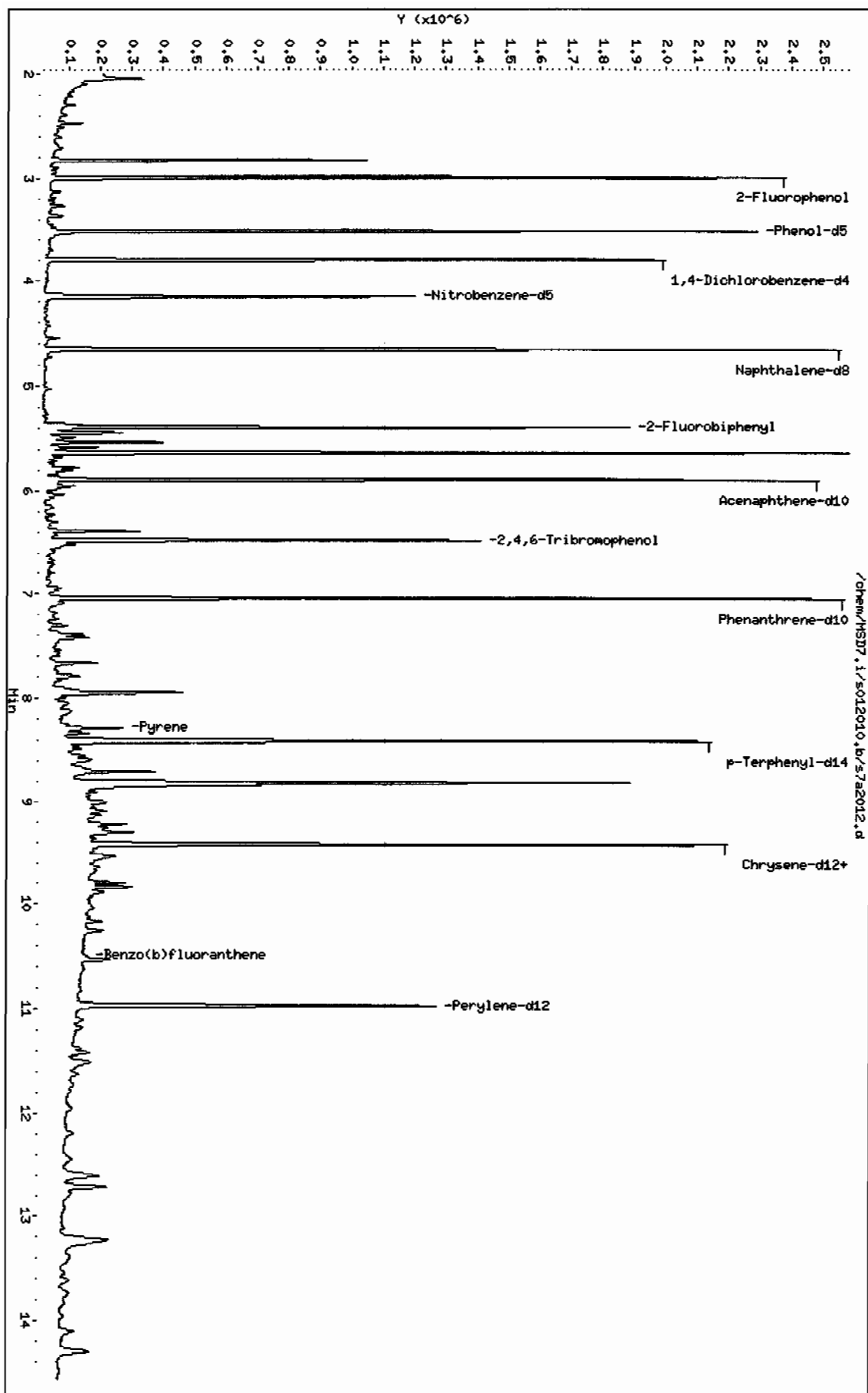
ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.792	2097055	40.000
* 46 Acenaphthene-d10	5.897	2781841	40.000
* 67 Phenanthrene-d10	7.043	2943367	40.000
* 91 Chrysene-d12	9.422	2580757	40.000
* 98 Perylene-d12	10.967	1890155	40.000

CONCENTRATIONS				QUANT		
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY CPND #
=====	=====	=====	=====	=====	=====	=====

RT	AREA	CONCENTRATIONS		QUAL	QUANT		
		ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	CPND #
Unknown					CAS #:		
2.049	396357	7.56025540	300	0		0	10
Unknown Aldol Condensate					CAS #:		
2.825	1079775	20.5960327	817	0		0	10
Naphthalene, 1,2,3,4,4a,5,6,8a-octahydro					CAS #: 39029-41-9		
5.531	387909	5.5772967	221	90	NIST05.L	60057	46
1,4-Methanoazulene, decahydro-4,8,8-trim					CAS #: 475-20-7		
5.632	2889860	41.5531987	1650	99	NIST05.L	60023	46
Cedrol					CAS #: 77-53-2		
6.388	351900	5.05996069	201	95	NIST05.L	72887	46
1-Naphthalenepropanol, .alpha.-ethenylde					CAS #: 1438-62-6		
7.943	550791	7.48518274	297	87	NIST05.L	118752	67
Unknown					CAS #:		
8.704	413738	6.41265650	254	0		0	91
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa					CAS #: 511-15-9		
8.815	2470711	38.2943486	1520	96	NIST05.L	116239	91
Unknown					CAS #:		
8.839	685950	10.6317650	422	0		0	91
Unknown					CAS #:		
9.301	260291	4.03433932	160	0		0	91
Unknown					CAS #:		
11.507	231404	4.89703098	194	0		0	98
Eicosane					CAS #: 112-95-8		
12.609	368652	7.80150810	310	91	NIST05.L	113489	98
Unknown					CAS #:		
12.720	284950	6.03019941	239	0		0	98
.beta.-Sitosterol					CAS #: 83-46-5		
13.226	710804	15.0422298	597	97	NIST05.L	174400	98
Androst-4-en-3-one, 17-hydroxy-, (17.bet					CAS #: 58-22-0		
14.304	347047	7.34430836	291	91	NIST05.L	117326	98

Data File: /chem/HSD7.i/s012010.b/s7a2012.d  
 Date: 20-JAN-2010 14:29  
 Client ID: REL2-10-7242  
 Sample Info: 1244590071941702:11SVH11L1ANL  
 Volume Injected (uL): 0.5  
 Column phase: 3M DB-SHS

Instrument: MSD7.i  
 Operator: JHB3  
 Column diameter: 0.20





Data File: /chem/MSD7.i/s012010.b/s7a2012.d

Page 2

Date : 20-JAN-2010 14:29

Client ID: RE12-10-7242

Instrument: MSD7.i

Sample Info: 1244599007194170211SVMI1ILANL

Volume Injected (uL): 0.5

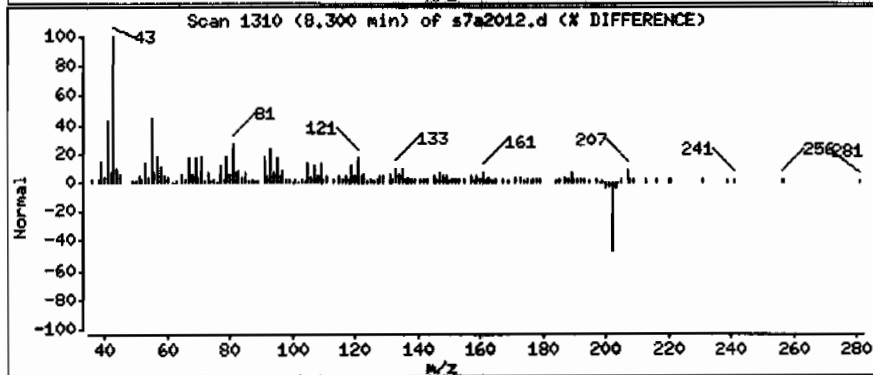
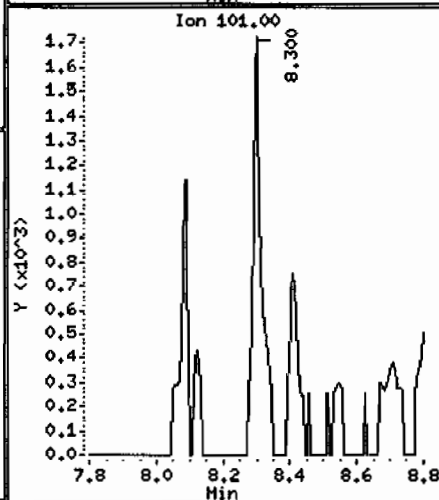
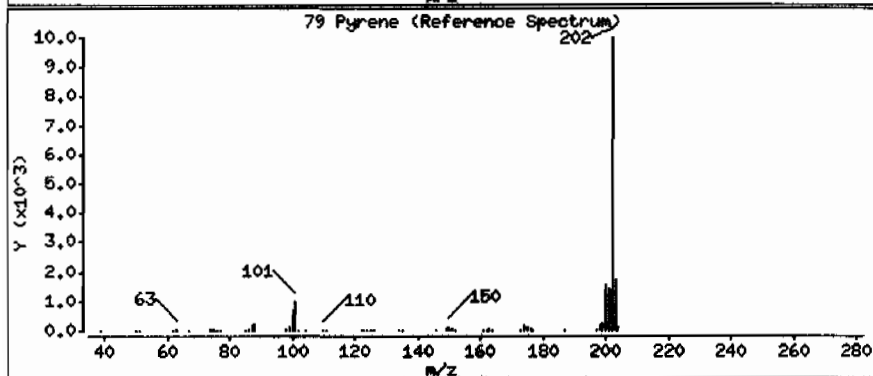
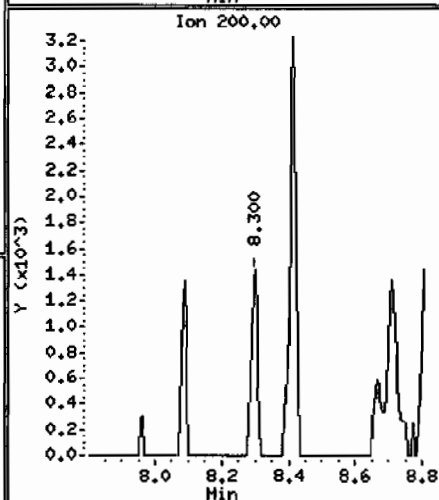
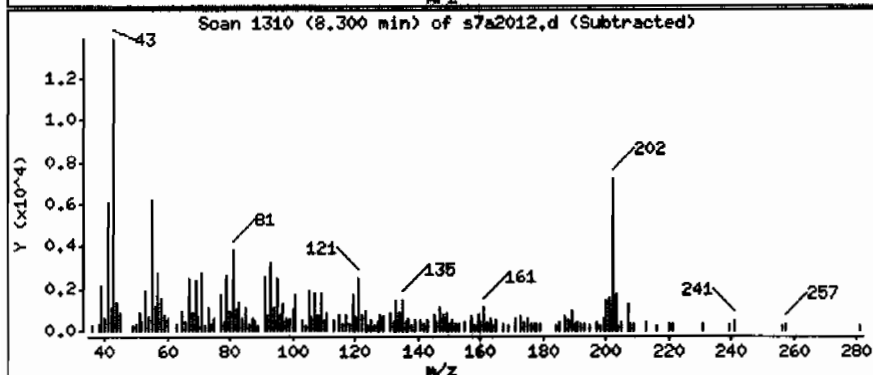
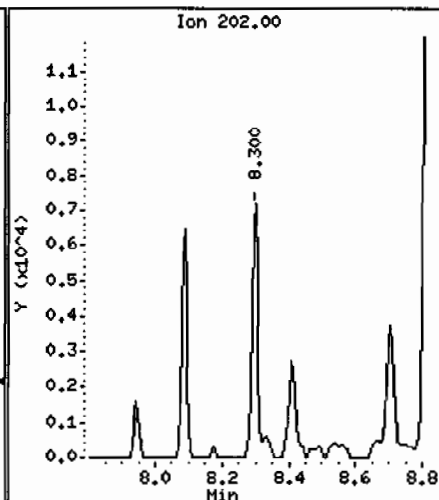
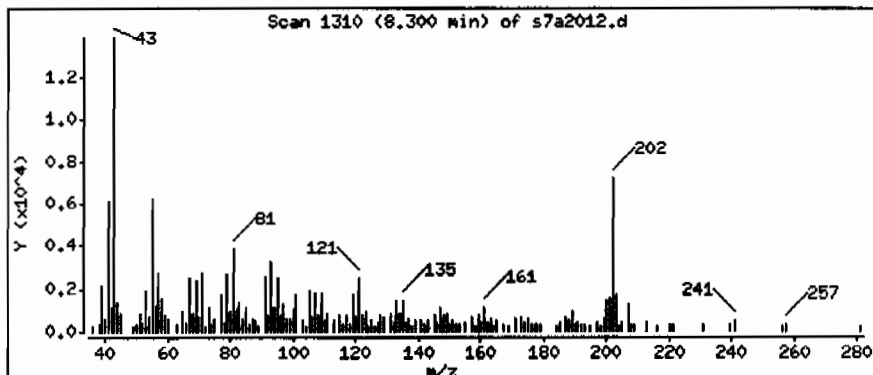
Operator: JMB3

Column phase: J&W DB-5MS

Column diameter: 0.20

79 Pyrene

Concentration: 12.0 ug/Kg



Date : 20-JAN-2010 14:29

Client ID: RE12-10-7242

Instrument: MSD7.i

Sample Info: 1244599007194170211SVH111LANL

Volume Injected (uL): 0.5

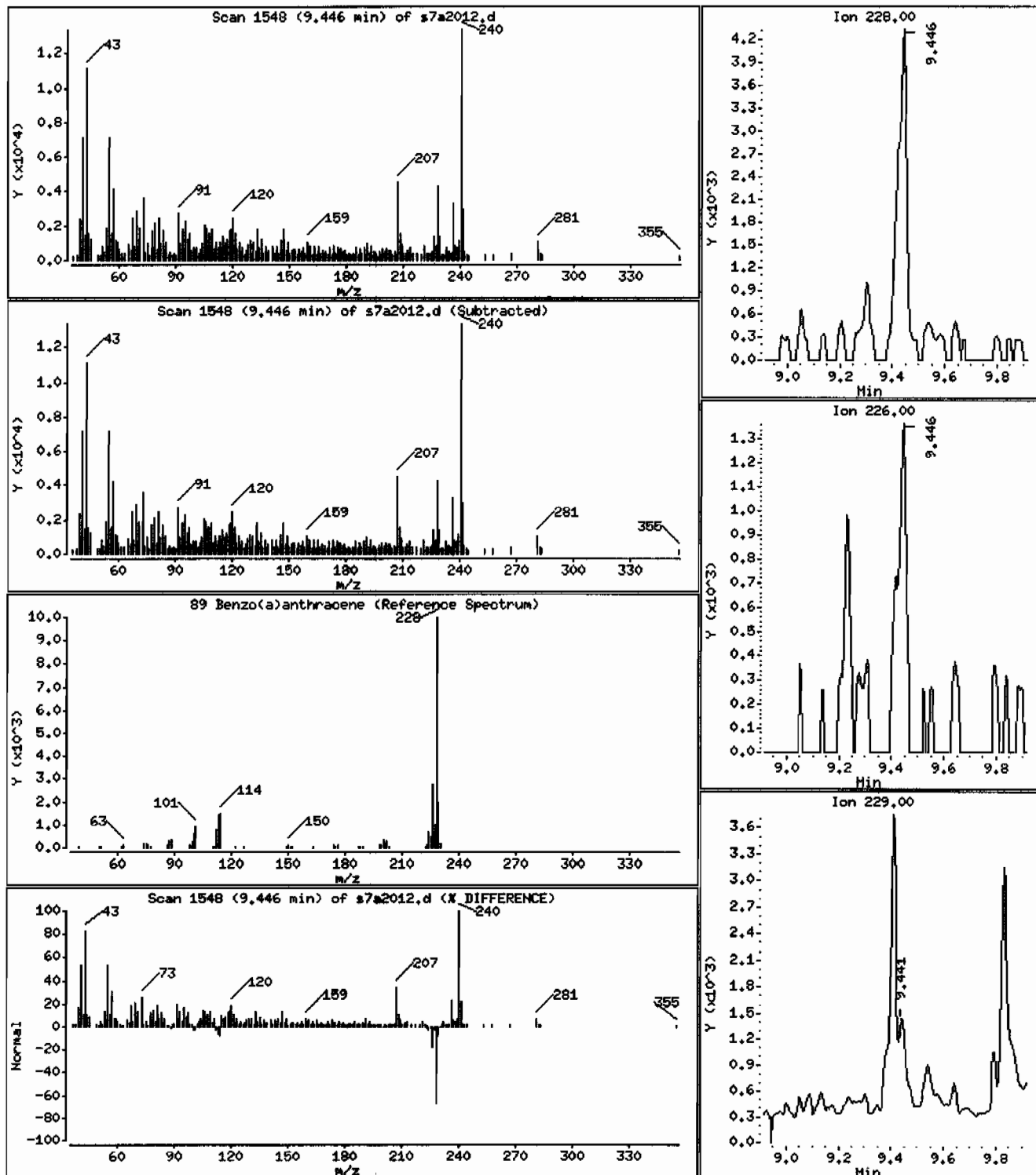
Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

89 Benzo(a)anthracene

Concentration: 19.2 ug/Kg



Date: 20-JAN-2010 14:29

Client ID: RE12-10-7242

Instrument: MSD7.i

Sample Info: 1244599007194170211SVN111LANL

Volume Injected (uL): 0.5

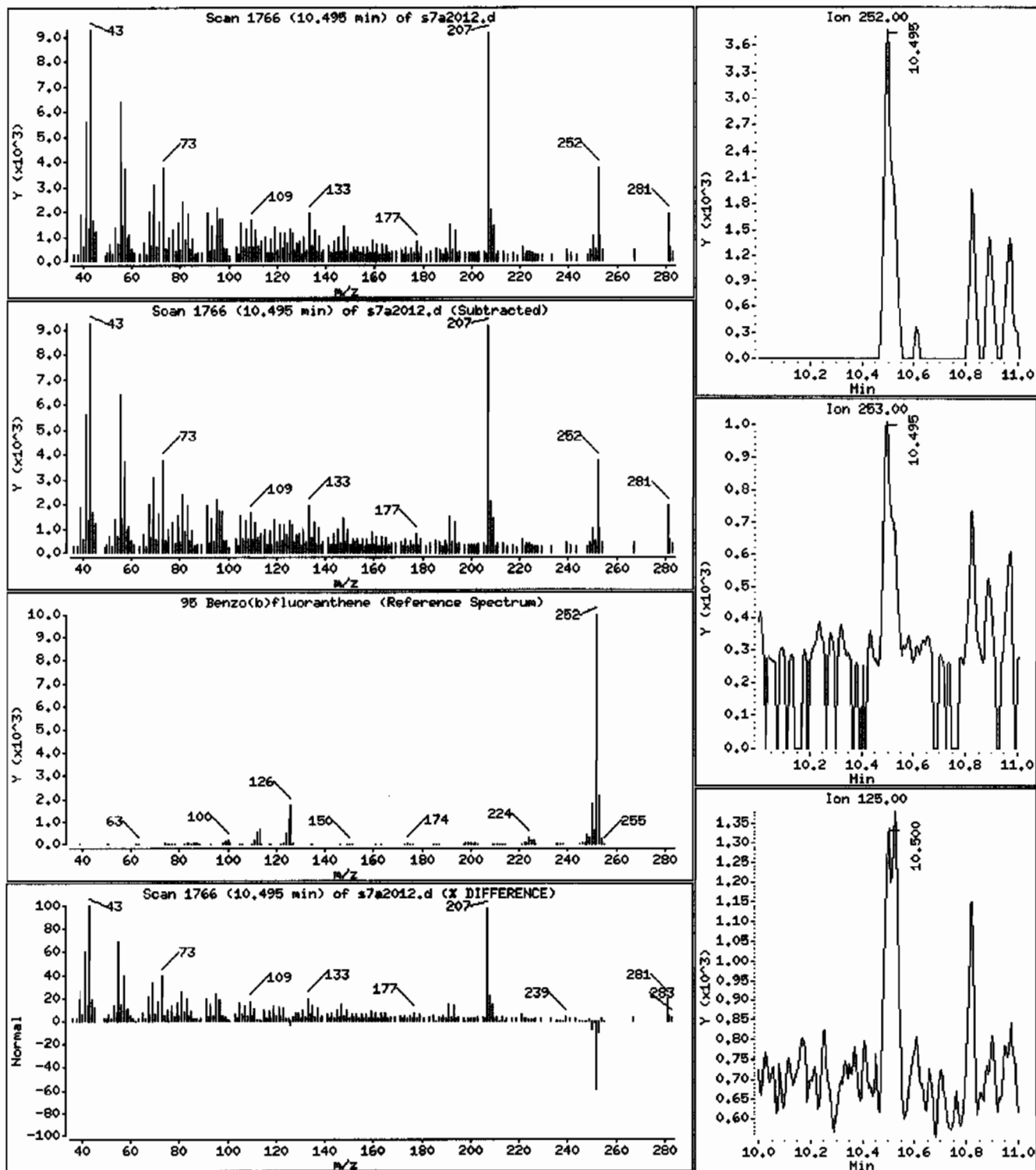
Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

96 Benzo(b)fluoranthene

Concentration: 22.3 ug/Kg



Date : 20-JAN-2010 14:29

Client ID: RE12-10-7242

Instrument: MSD7.i

Sample Info: 1244599007194170211ISVH111LANL

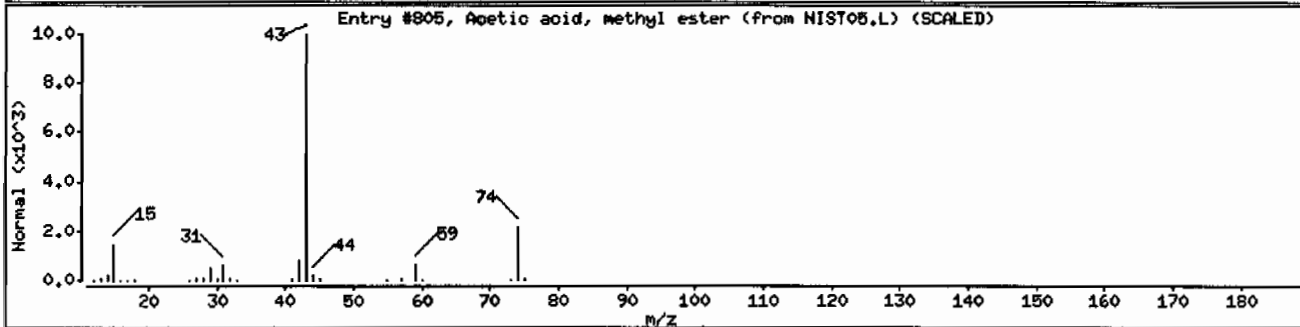
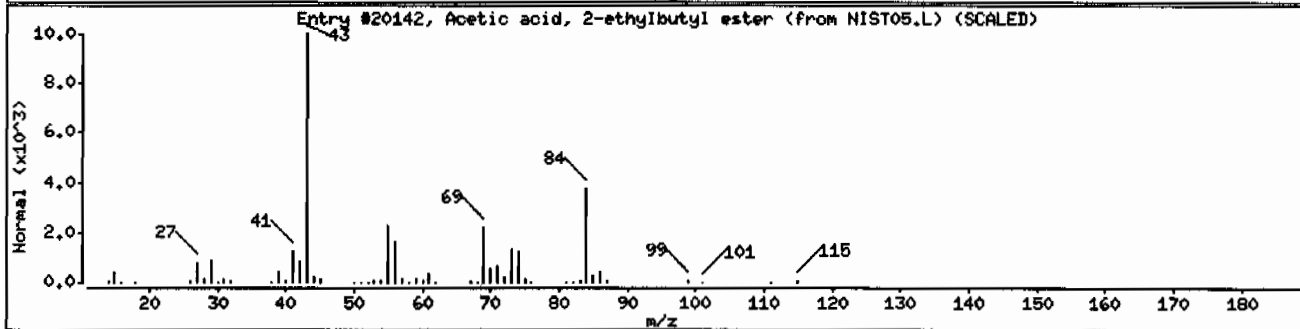
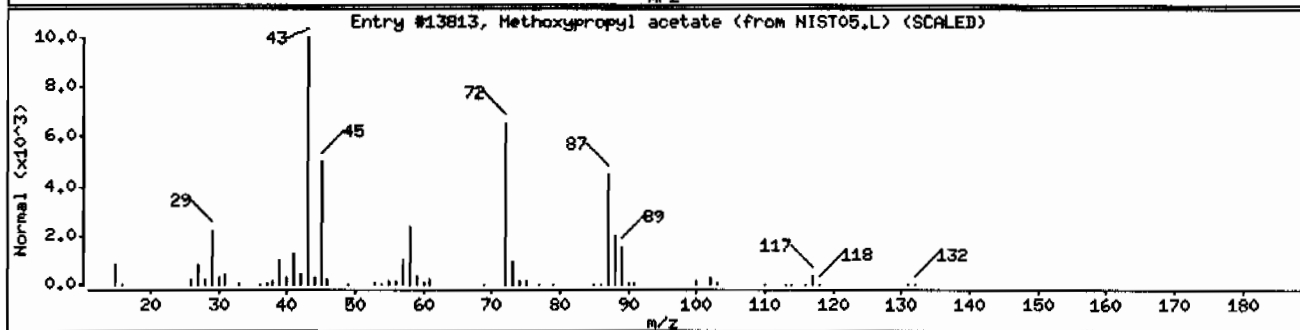
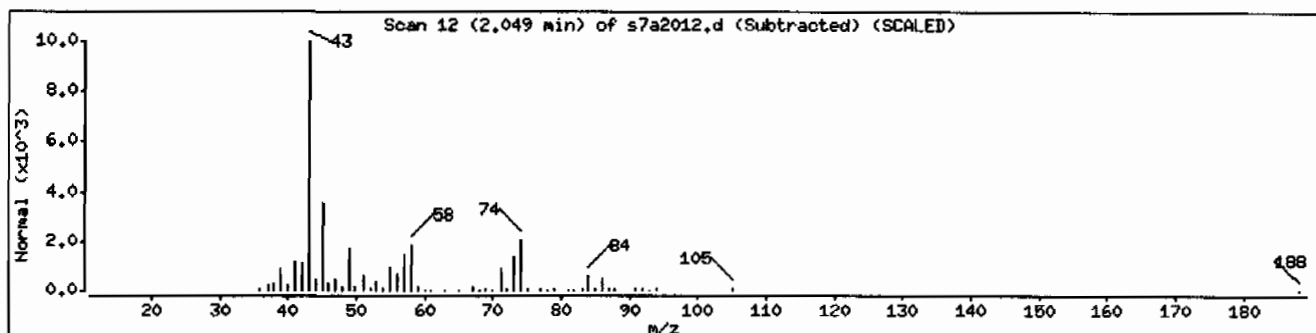
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Methoxypropyl acetate	41448-83-3	NIST05.L	13813	10	C6H12O3	132
Acetic acid, 2-ethylbutyl ester	10031-87-5	NIST05.L	20142	10	C8H16O2	144
Acetic acid, methyl ester	79-20-9	NIST05.L	805	9	C3H6O2	74



Date : 20-JAN-2010 14:29

Client ID: RE12-10-7242

Instrument: HSD7.i

Sample Info: 1244599007194170211SVH111LANL

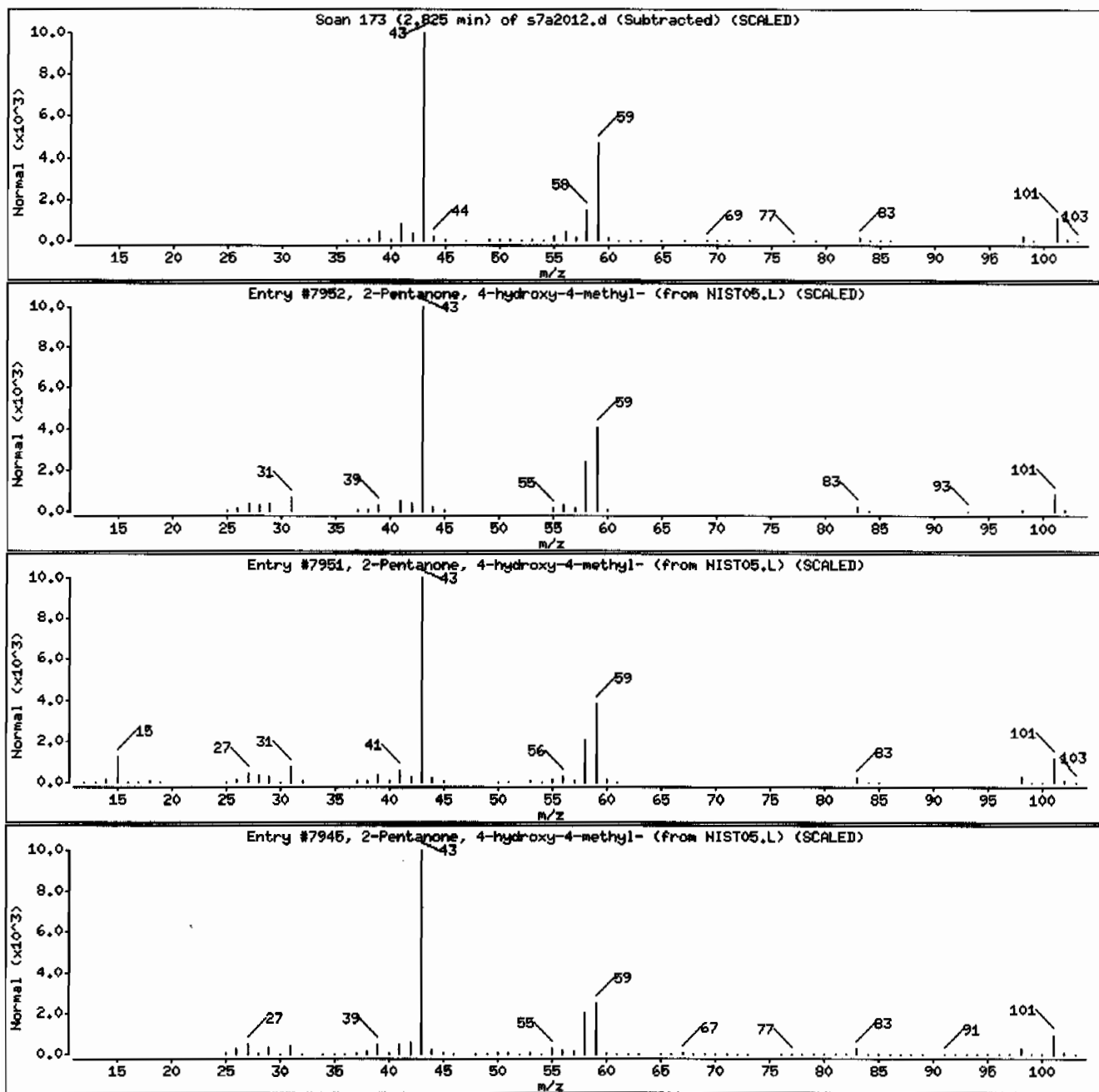
Volume Injected (uL): 0.5

Operator: JHB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C <sub>6</sub> H <sub>12</sub> O <sub>2</sub>	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C <sub>6</sub> H <sub>12</sub> O <sub>2</sub>	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	38	C <sub>6</sub> H <sub>12</sub> O <sub>2</sub>	116



Date: 20-JAN-2010 14:29

Client ID: RE12-10-7242

Instrument: MSD7.i

Sample Info: 1244599007194170211SVH11ILANL

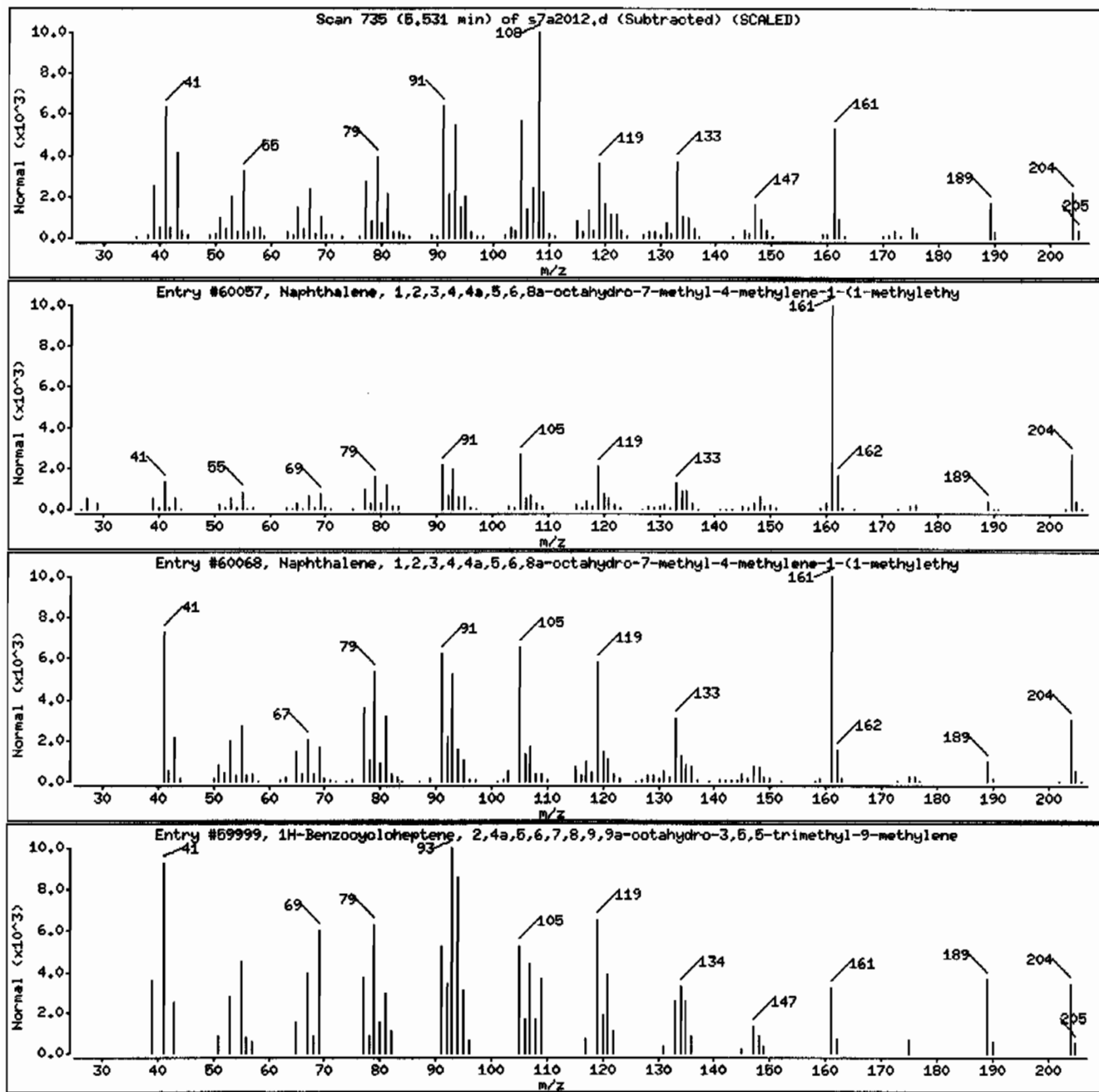
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Naphthalene, 1,2,3,4,4a,5,6,8a-octahydro	39029-41-9	NIST05.L	60057	90	C15H24	204
Naphthalene, 1,2,3,4,4a,5,6,8a-octahydro	30021-74-0	NIST05.L	60068	83	C15H24	204
1H-Benzocycloheptene, 2,4a,5,6,7,8,9,9a-	3853-83-6	NIST05.L	59999	78	C15H24	204



Date : 20-JAN-2010 14:29

Client ID: RE12-10-7242

Instrument: HSD7.i

Sample Info: 1244599007194170211SVH11LANL

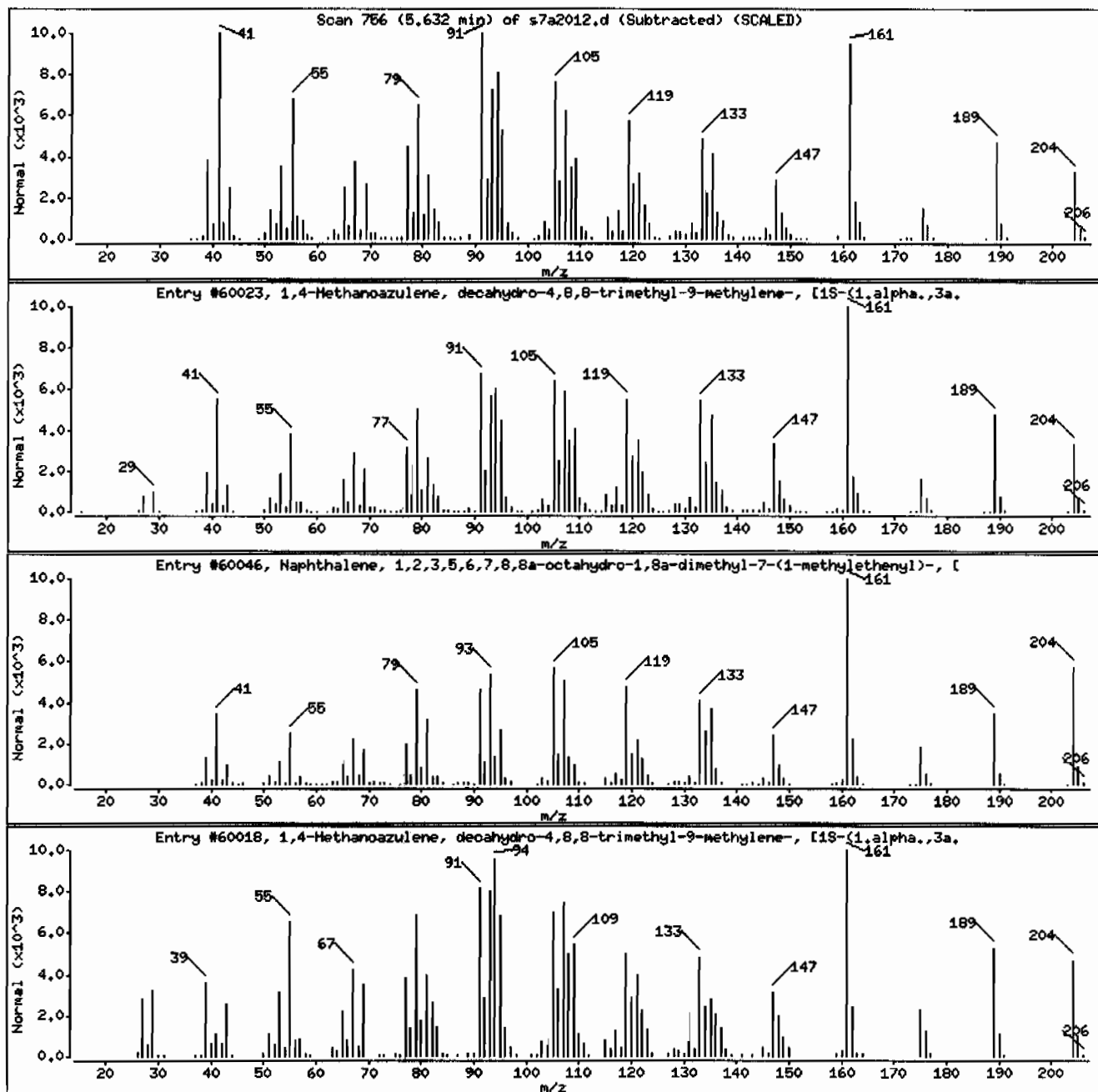
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,4-Methanoazulene, decahydro-4,8,8-trim	475-20-7	NIST05.L	60023	99	C15H24	204
Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	4630-07-3	NIST05.L	60046	98	C15H24	204
1,4-Methanoazulene, decahydro-4,8,8-trim	475-20-7	NIST05.L	60018	97	C15H24	204



Date: 20-JAN-2010 14:29

Client ID: RE12-10-7242

Instrument: MSD7.i

Sample Info: 1244599007194170211ISVM11ILANL

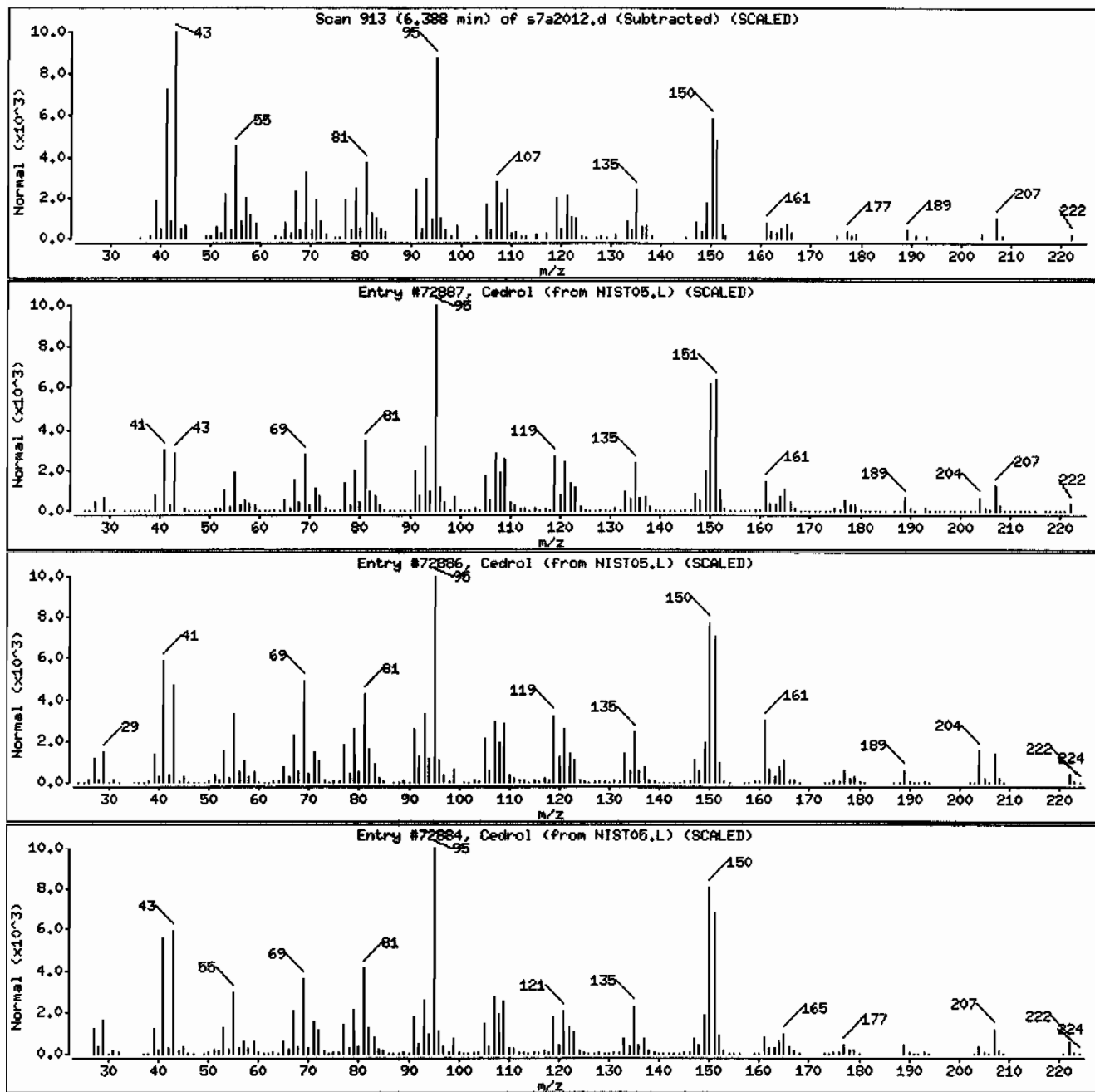
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cedrol	77-53-2	NIST05.L	72887	95	C <sub>15</sub> H <sub>26</sub> O	222
Cedrol	77-53-2	NIST05.L	72886	93	C <sub>15</sub> H <sub>26</sub> O	222
Cedrol	77-53-2	NIST05.L	72884	91	C <sub>15</sub> H <sub>26</sub> O	222





Date : 20-JAN-2010 14:29

Client ID: RE12-10-7242

Instrument: HSD7.1

Sample Info: 1244599007194170211SVMI11LANL

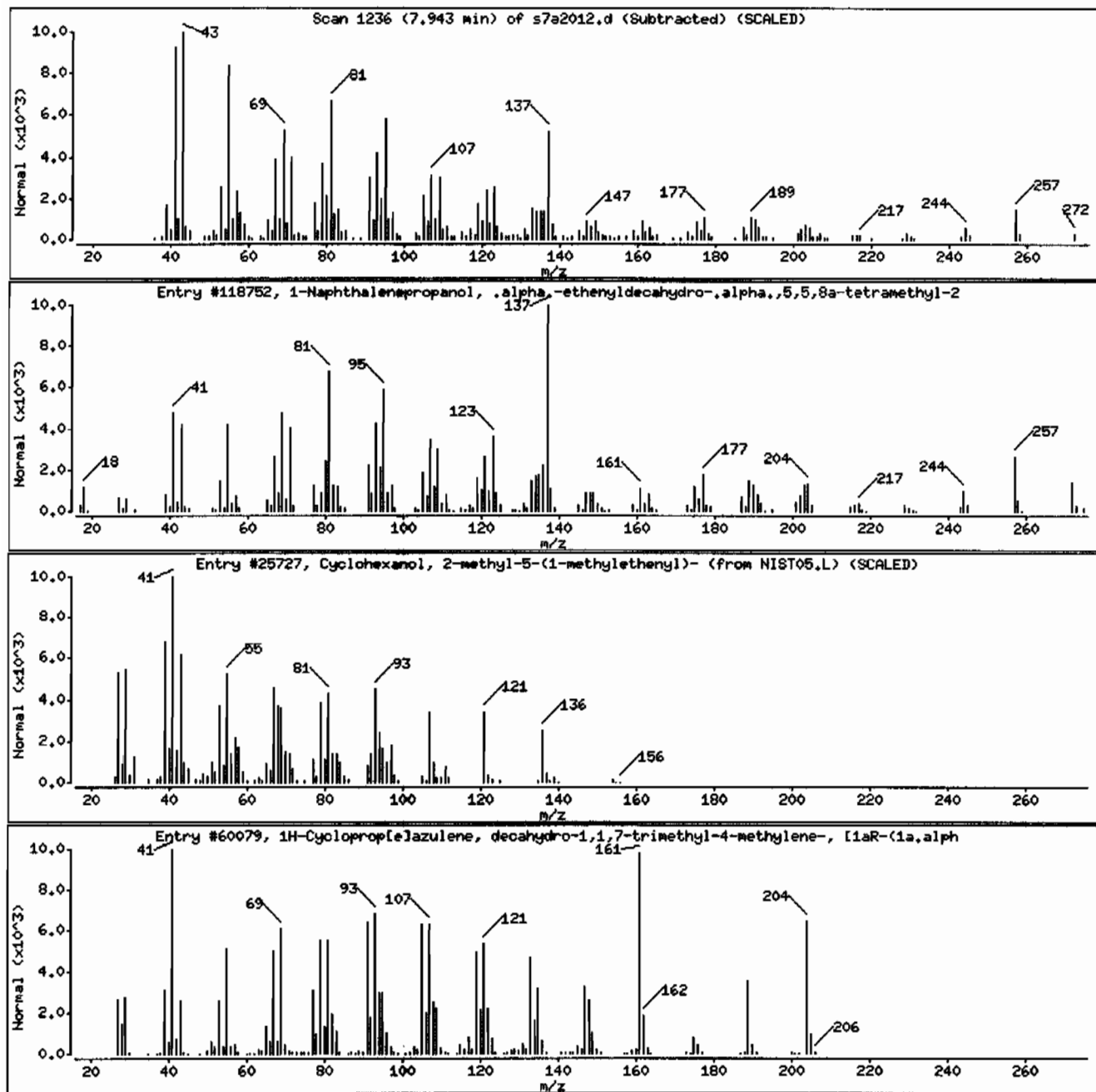
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Naphthalenepropanol, .alpha.-ethenylde	1438-62-6	NIST05.L	118752	87	C20H34O	290
Cyclohexanol, 2-methyl-5-(1-methyletheny	619-01-2	NIST05.L	25727	51	C10H18O	154
1H-Cycloprop[1,2-b:4,5-b']diazulene, decahydro-1,1,7-	489-39-4	NIST05.L	60079	49	C15H24	204



Date: 20-JAN-2010 14:29

Client ID: RE12-10-7242

Instrument: HSD7.i

Sample Info: 1244899007194170211SVH111LANL

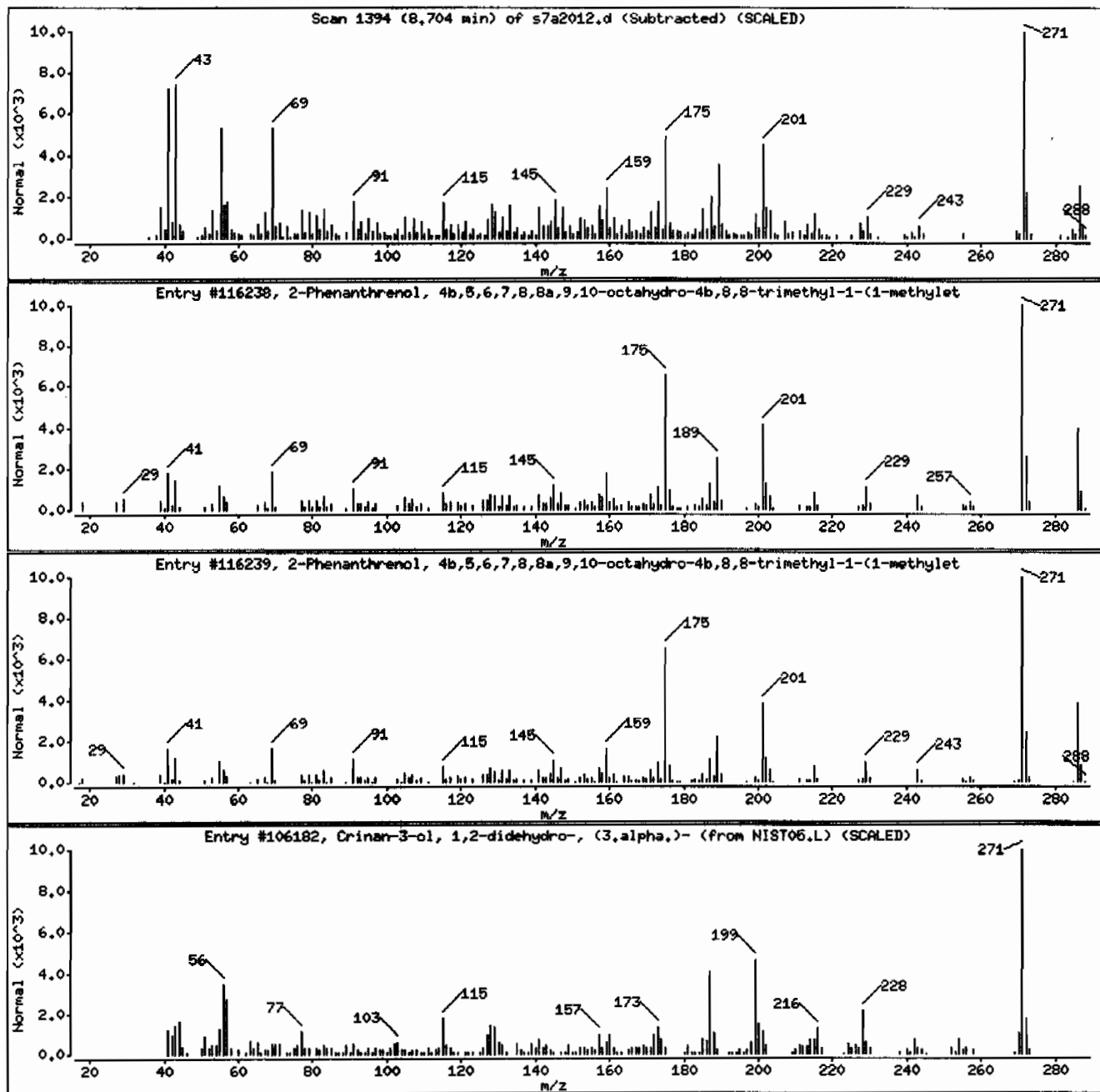
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116238	95	C20H30O	286
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116239	91	C20H30O	286
Crinan-3-ol, 1,2-didehydro-, (3.alpha.)-	510-67-8	NIST05.L	106182	41	C16H17NO3	271



Date: 20-JAN-2010 14:29

Client ID: RE12-10-7242

Instrument: MSD7.i

Sample Info: 12445990071941702111SVMI11LANL

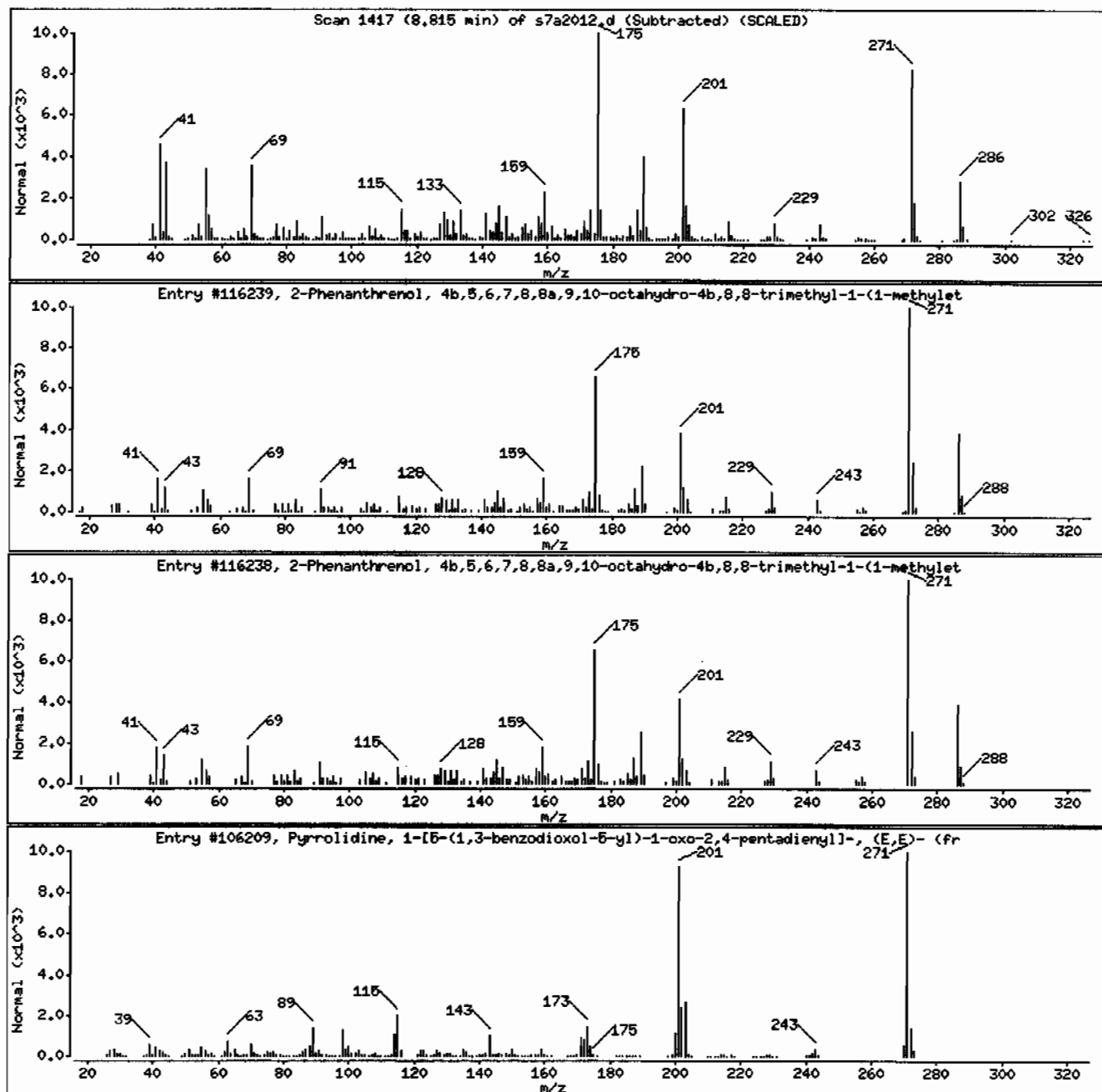
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116239	96	C20H30O	286
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116238	91	C20H30O	286
Pyrrolidine, 1-[5-(1,3-benzodioxol-5-yl)]	25924-78-1	NIST05.L	106209	38	C16H17NO3	271



Date : 20-JAN-2010 14:29

Client ID: RE12-10-7242

Instrument: MSD7.i

Sample Info: I244599007194170211SVH111LANL

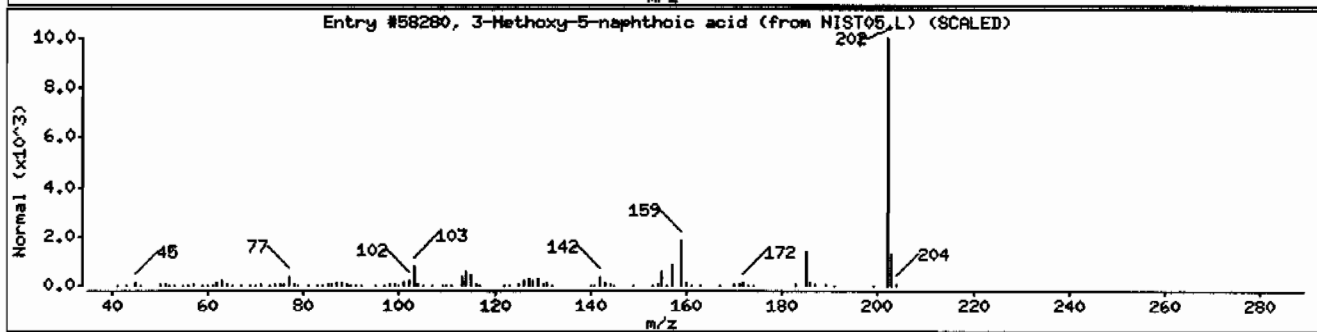
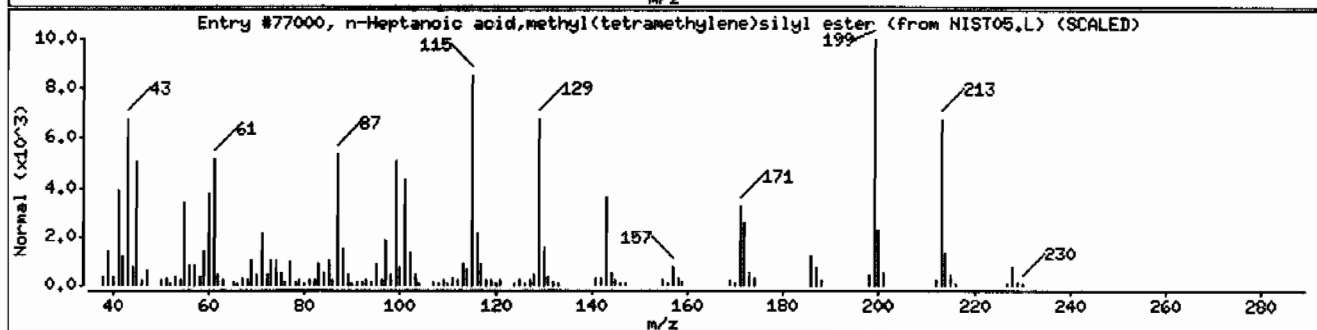
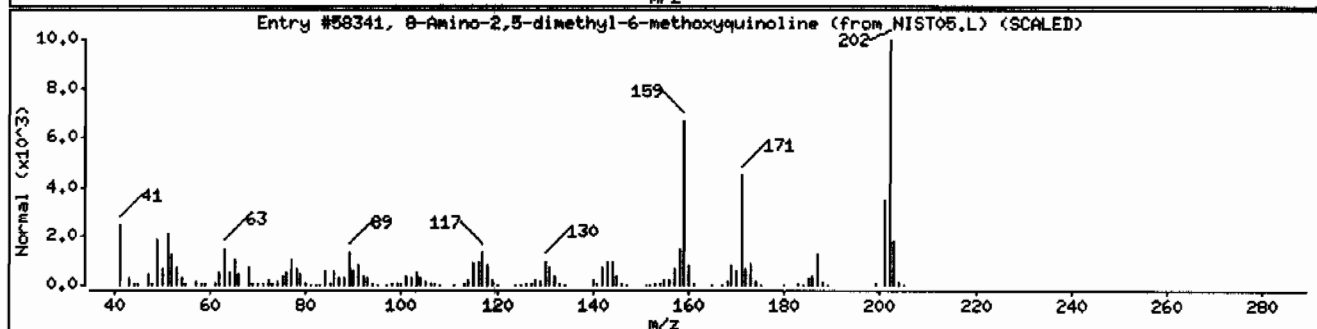
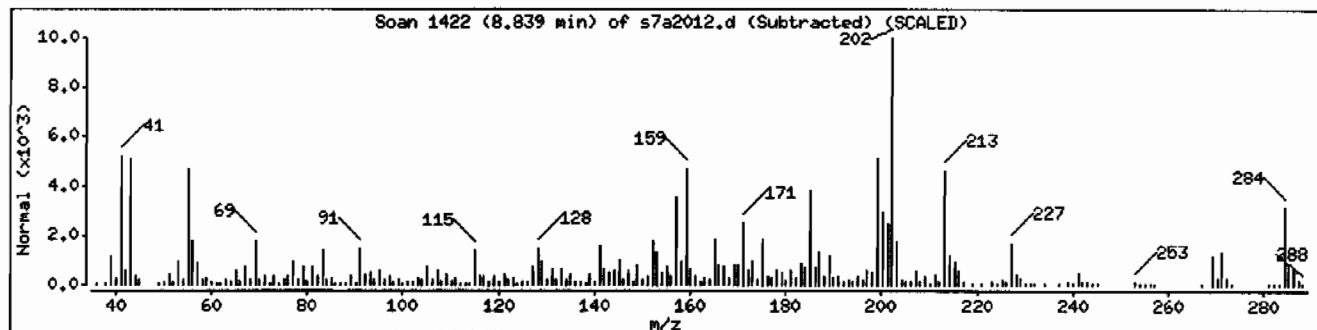
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
8-Amino-2,5-dimethyl-6-methoxyquinoline	1000214-69-9	NIST05.L	58341	64	C <sub>12</sub> H <sub>14</sub> N <sub>2</sub> O	202
n-Heptanoic acid,methyl(tetramethylene)s	1000217-03-6	NIST05.L	77000	60	C <sub>12</sub> H <sub>24</sub> O <sub>2</sub> Si	228
3-Methoxy-5-naphthoic acid	7498-58-0	NIST05.L	58280	46	C <sub>12</sub> H <sub>10</sub> O <sub>3</sub>	202



Date: 20-JAN-2010 14:29

Client ID: RE12-10-7242

Instrument: MSD7.1

Sample Info: I244599007194170211ISVH11ILANL

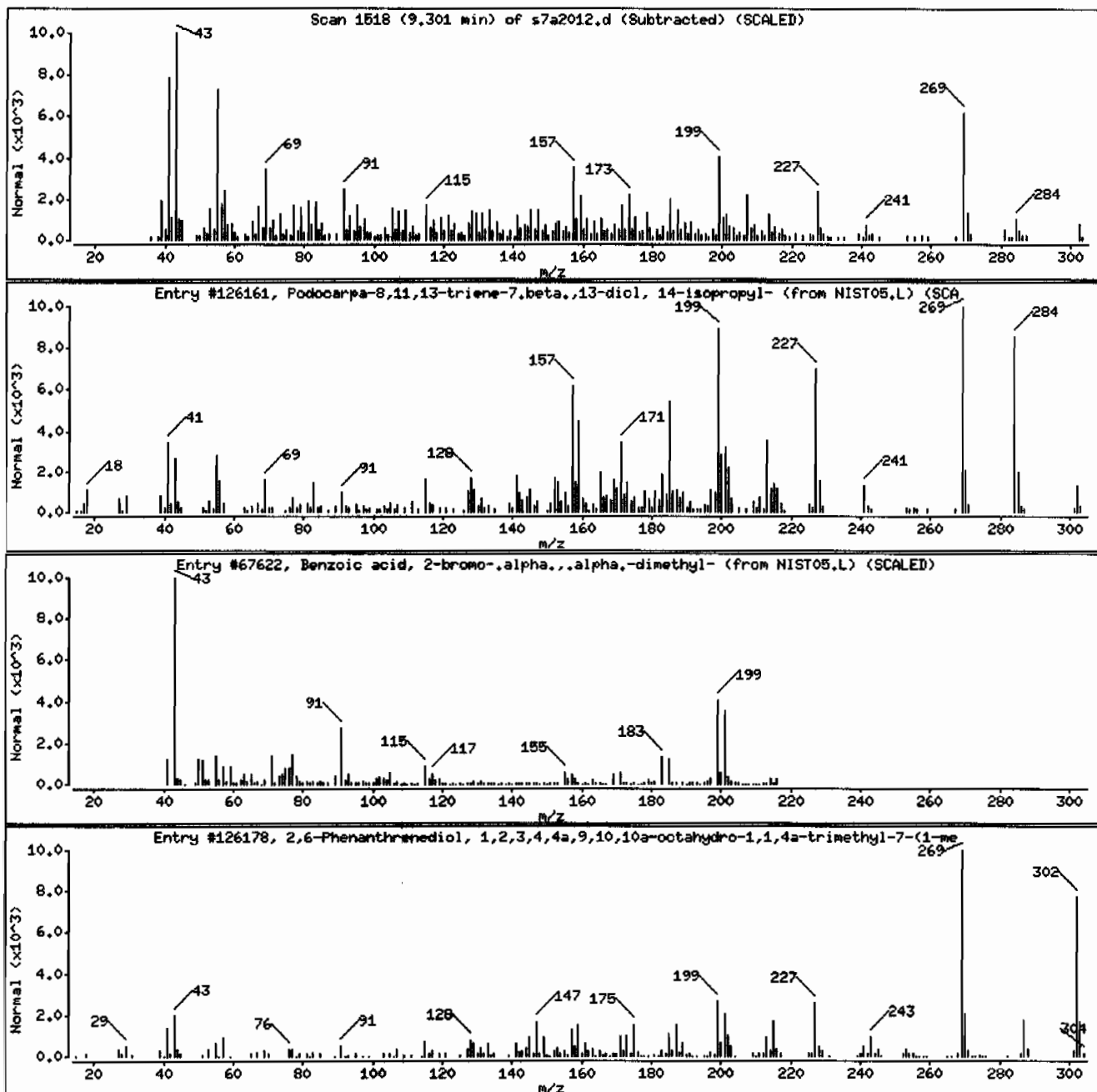
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Podocarpa-8,11,13-triene-7,β,13-diol	24338-19-0	NIST05.L	126161	58	C20H30O2	302
Benzoic acid, 2-bromo-,α,α,α-trimethyl-	7073-69-0	NIST05.L	67622	25	C9H11BrO	214
2,6-Phenanthrenediol, 1,2,3,4,4a,9,10,10a-octahydro-1,1,4a-trimethyl-7-(1-methyl-2-propenyl)-	564-73-8	NIST05.L	126178	16	C20H30O2	302



Date: 20-JAN-2010 14:29

Client ID: RE12-10-7242

Instrument: MSD7.i

Sample Info: 12445990071941702111SVH111LANL

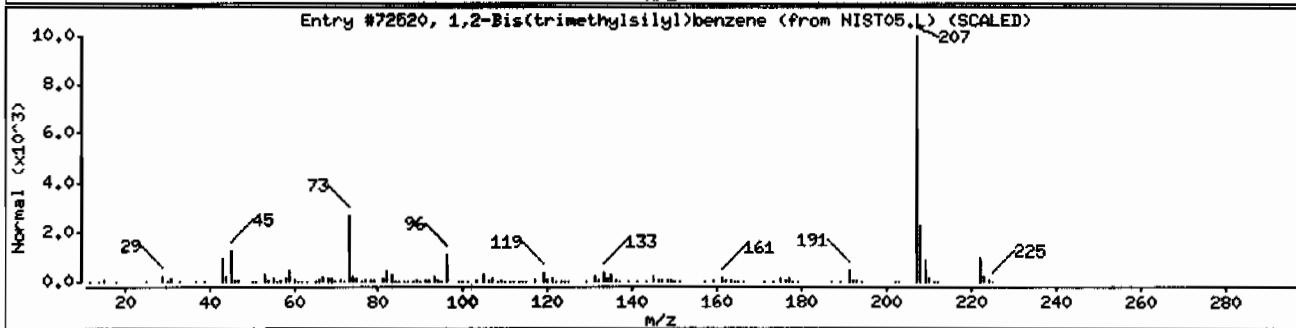
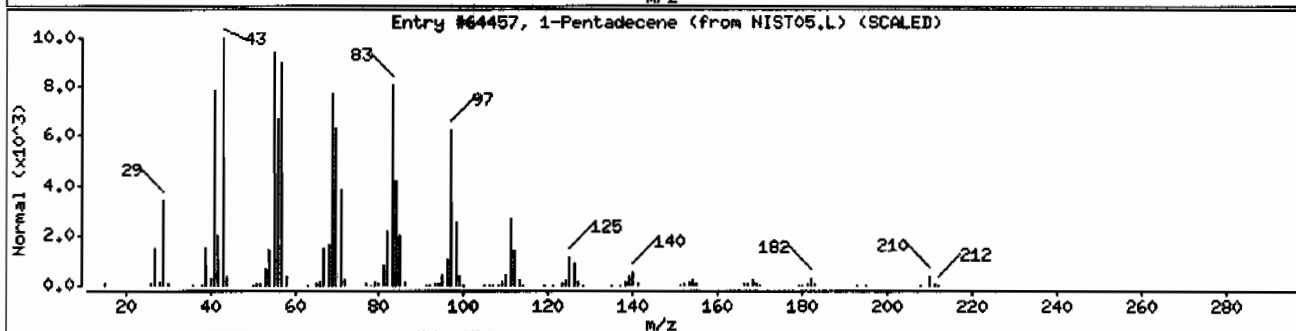
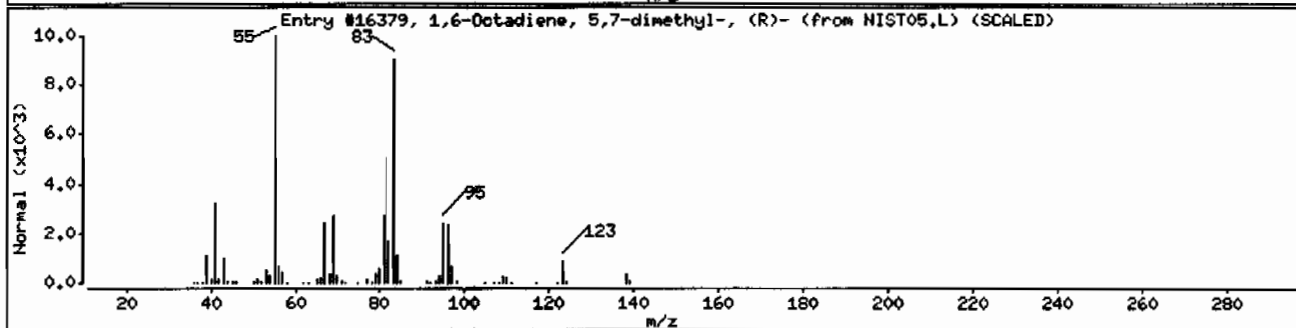
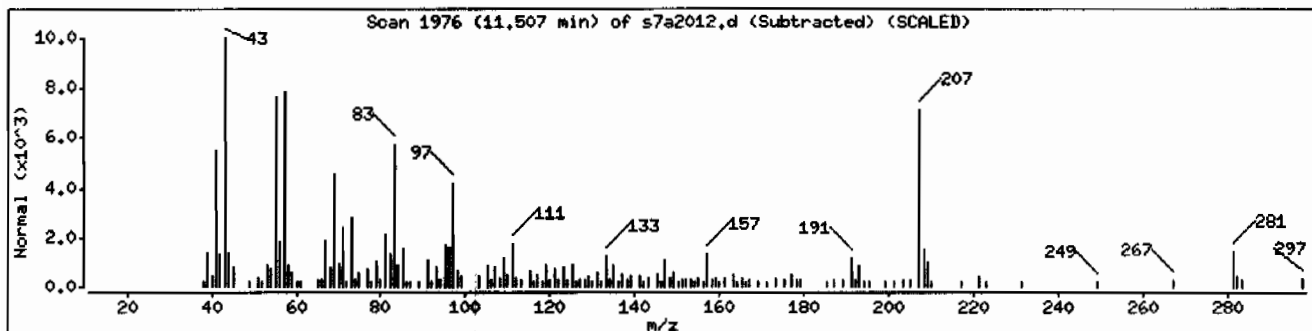
Volume Injected (uL): 0.5

Operator: JHB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,6-Octadiene, 5,7-dimethyl-, (R)-	85006-04-8	NIST05.L	16379	56	C10H18	138
1-Pentadecene	13360-61-7	NIST05.L	64457	42	C15H30	210
1,2-Bis(trimethylsilyl)benzene	17151-09-6	NIST05.L	72520	35	C12H22Si2	222



Date : 20-JAN-2010 14:29

Client ID: RE12-10-7242

Instrument: HSD7.i

Sample Info: I244599007194170211SVMI11LANL

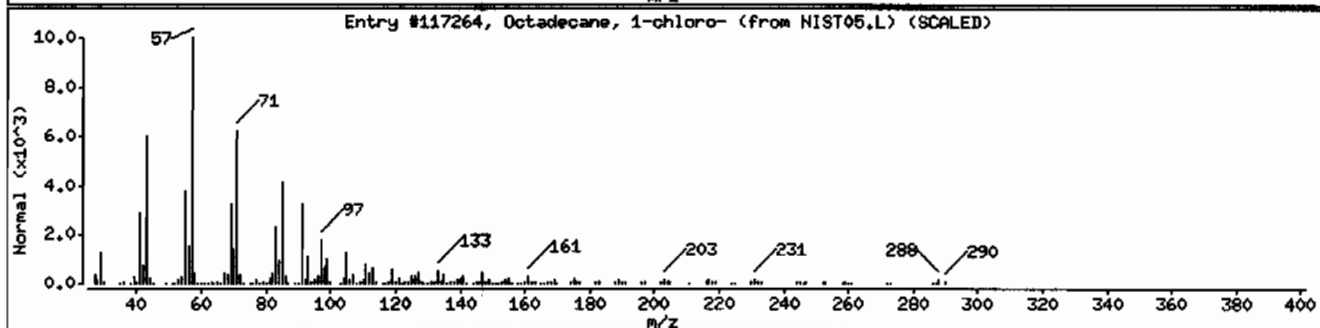
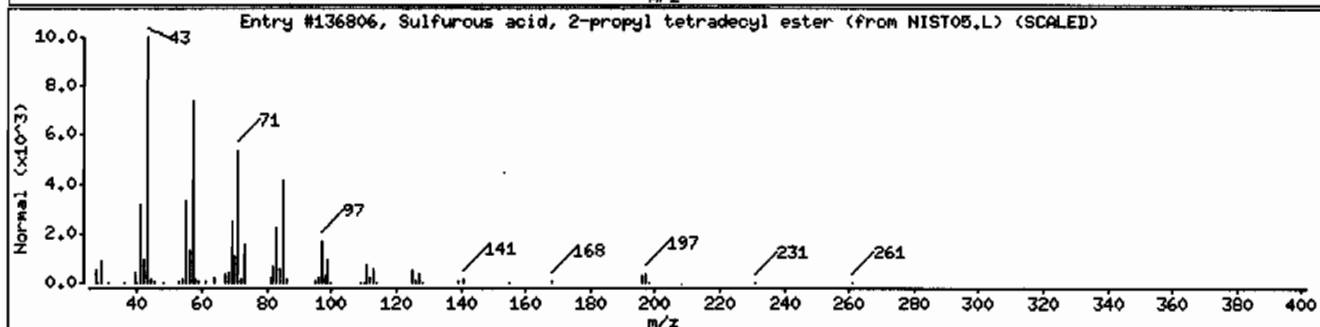
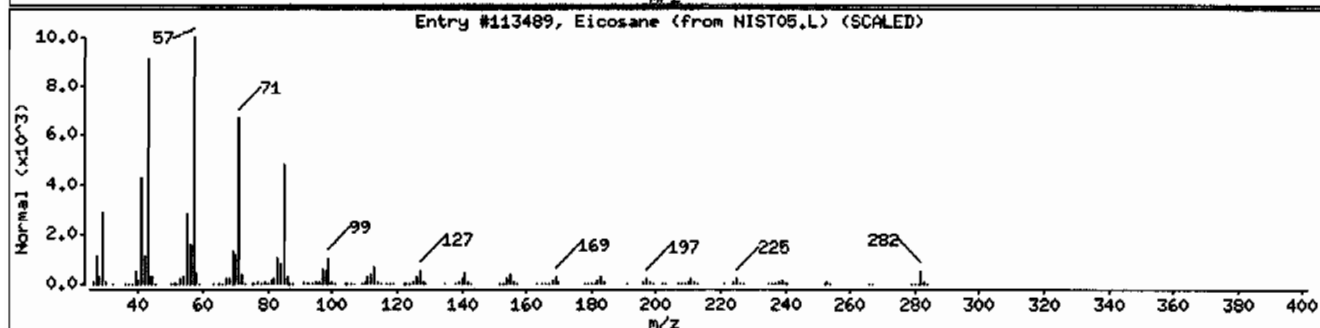
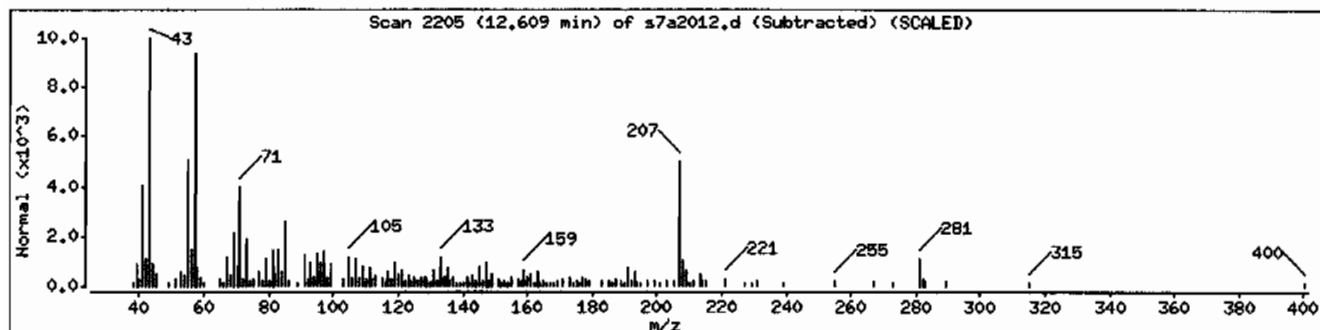
Volume Injected (uL): 0.5

Operator: JHB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Eicosane	112-95-8	NIST05.L	113489	91	C20H42	282
Sulfurous acid, 2-propyl tetradecyl este	1000309-12-5	NIST05.L	136806	30	C17H36O3S	320
Octadecane, 1-chloro-	3386-33-2	NIST05.L	117264	30	C18H37Cl	288



Date : 20-JAN-2010 14:29

Client ID: RE12-10-7242

Instrument: MSD7.i

Sample Info: I2445990071941702111SVH111LANL

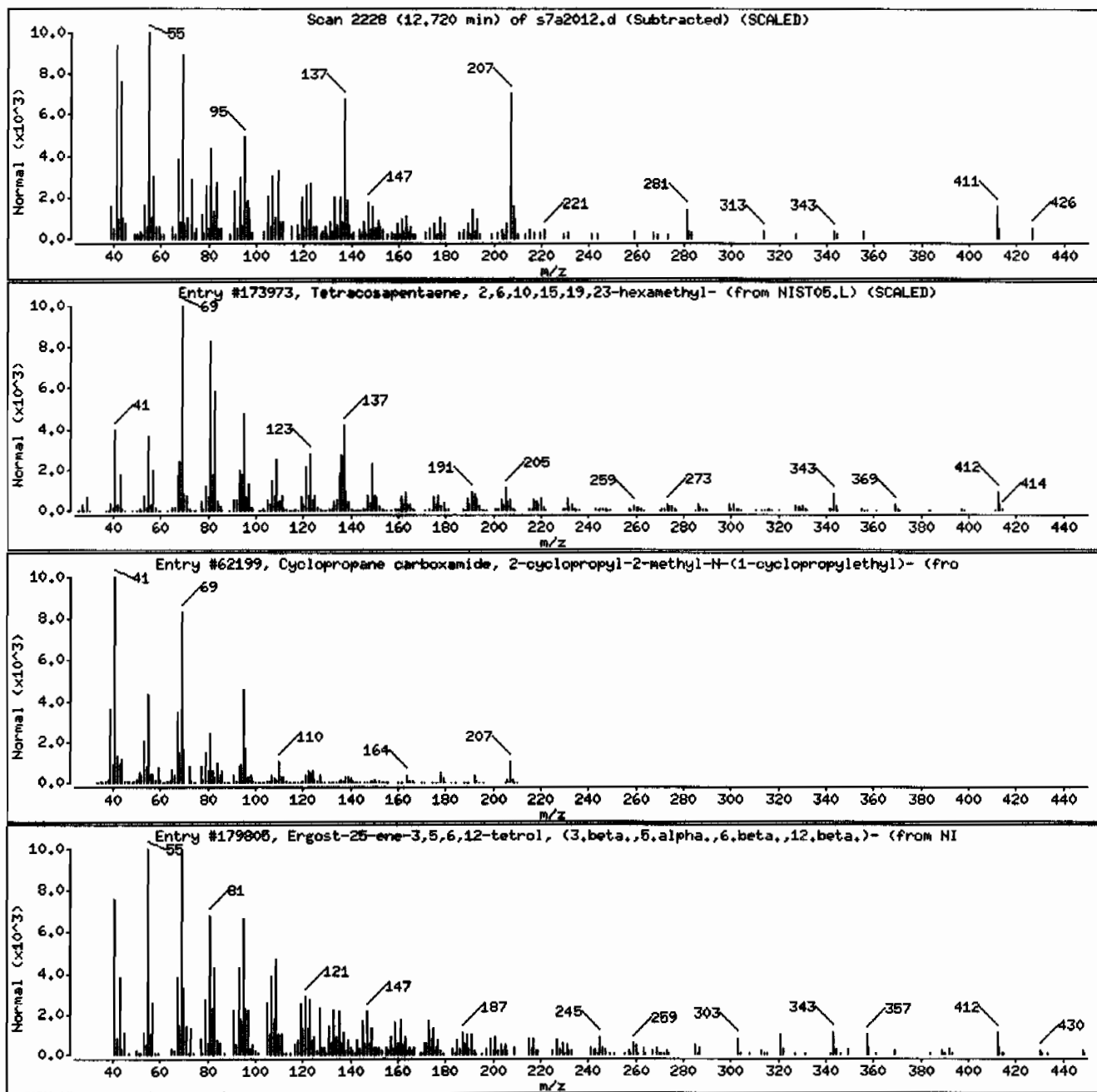
Volume Injected (uL): 0.5

Operator: JHB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Tetracosapentaene, 2,6,10,15,19,23-hexam	26266-08-0	NIST05.L	173973	53	C30H52	412
Cyclopropane carboxamide, 2-cyclopropyl-	331416-19-4	NIST05.L	62199	52	C13H21NO	207
Ergost-25-ene-3,5,6,12-tetrol, (3,β.,	56052-97-2	NIST05.L	179805	43	C28H48O4	448





Date: 20-JAN-2010 14:29

Client ID: RE12-10-7242

Instrument: MSD7.i

Sample Info: 12448990071941702111SVH111LANL

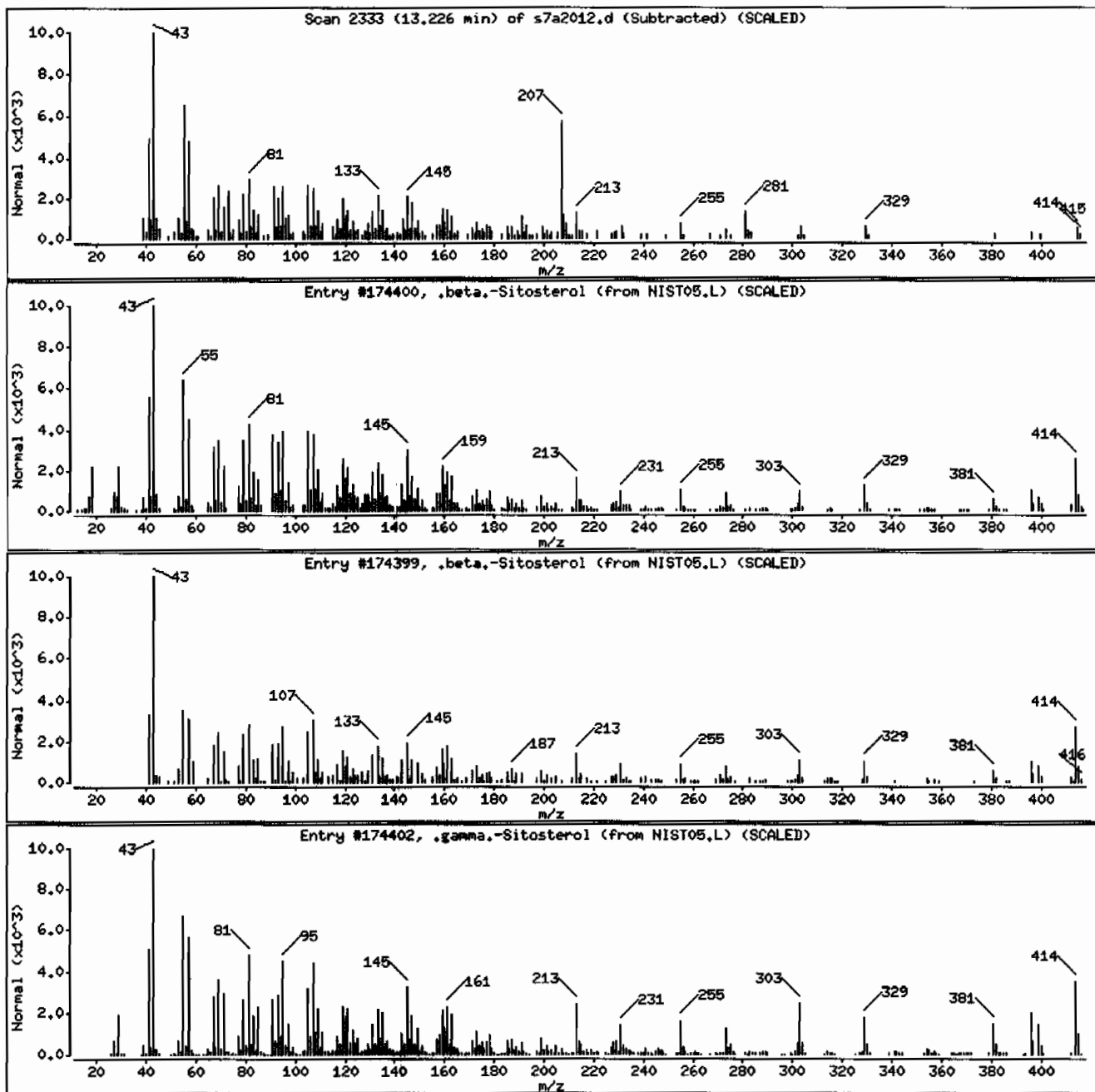
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
.beta.-Sitosterol	83-46-5	NIST05.L	174400	97	C <sub>29</sub> H <sub>50</sub> O	414
.beta.-Sitosterol	83-46-5	NIST05.L	174399	92	C <sub>29</sub> H <sub>50</sub> O	414
.gamma.-Sitosterol	83-47-6	NIST05.L	174402	78	C <sub>29</sub> H <sub>50</sub> O	414



Date : 20-JAN-2010 14:29

Client ID: RE12-10-7242

Instrument: MSD7.i

Sample Info: 1244599007194170211ISVH11LANL

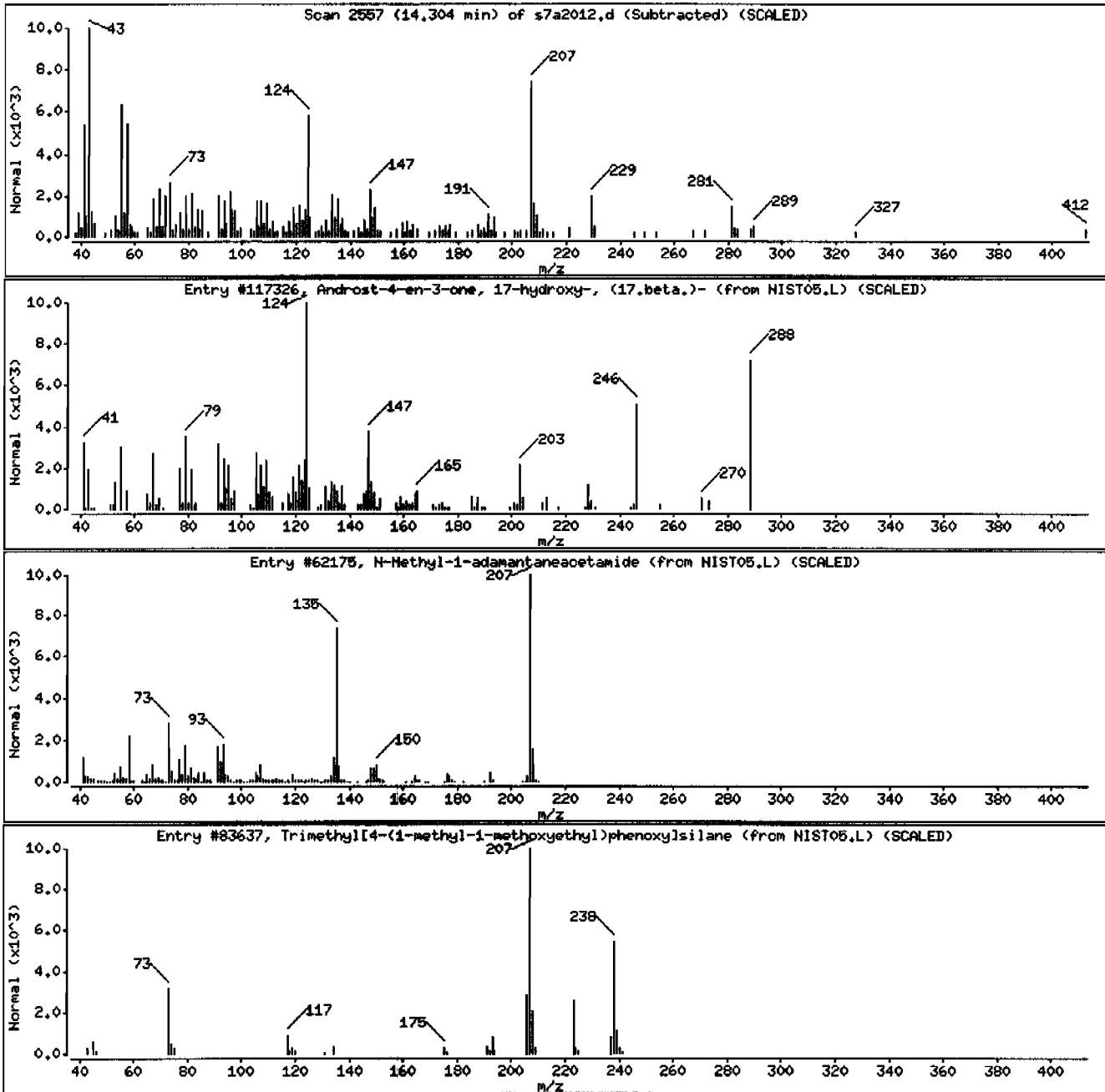
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Androst-4-en-3-one, 17-hydroxy-, (17,bet	58-22-0	NIST05.L	117326	91	C19H28O2	288
N-Methyl-1-adamantaneacetamide	31897-93-6	NIST05.L	62175	38	C13H21NO	207
Trimethyl[4-(1-methyl-1-methoxyethyl)phe	1000283-54-8	NIST05.L	83637	35	C13H22O2Si	238



**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210  
Lab Sample ID: 244599001

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD7.1  
Analyst: JMB3  
Aliquot: 30.03 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 5.8  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE12-10-7243  
Batch ID: 941702  
Run Date: 01/19/2010 17:42  
Prep Date: 01/14/2010 19:34  
Data File: s7a1924.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	354	ug/kg	70.7	354
108-95-2	Phenol	U	354	ug/kg	70.7	354
95-57-8	2-Chlorophenol	U	354	ug/kg	70.7	354
106-46-7	1,4-Dichlorobenzene	U	354	ug/kg	70.7	354
621-64-7	N-Nitrosodipropylamine	U	354	ug/kg	70.7	354
59-50-7	4-Chloro-3-methylphenol	U	354	ug/kg	70.7	354
83-32-9	Acenaphthene	U	35.4	ug/kg	11.7	35.4
121-14-2	2,4-Dinitrotoluene	U	354	ug/kg	35.4	354
100-02-7	4-Nitrophenol	U	354	ug/kg	117	354
87-86-5	Pentachlorophenol	U	354	ug/kg	88.4	354
129-00-0	Pyrene	U	35.4	ug/kg	10.6	35.4
110-86-1	Pyridine	U	354	ug/kg	70.7	354
62-53-3	Aniline	U	354	ug/kg	106	354
111-44-4	bis(2-Chloroethyl) ether	U	354	ug/kg	70.7	354
541-73-1	1,3-Dichlorobenzene	U	354	ug/kg	70.7	354
100-51-6	Benzyl alcohol	U	354	ug/kg	106	354
95-50-1	1,2-Dichlorobenzene	U	354	ug/kg	70.7	354
108-60-1	bis(2-Chloroisopropyl)ether	U	354	ug/kg	70.7	354
95-48-7	o-Cresol	U	354	ug/kg	70.7	354
65794-96-9	m,p-Cresols	U	354	ug/kg	106	354
67-72-1	Hexachloroethane	U	354	ug/kg	70.7	354
98-95-3	Nitrobenzene	U	354	ug/kg	70.7	354
78-59-1	Isophorone	U	354	ug/kg	70.7	354
88-75-5	2-Nitrophenol	U	354	ug/kg	70.7	354
105-67-9	2,4-Dimethylphenol	U	354	ug/kg	124	354
111-91-1	bis(2-Chloroethoxy)methane	U	354	ug/kg	70.7	354
120-83-2	2,4-Dichlorophenol	U	354	ug/kg	70.7	354
65-85-0	Benzoic acid	U	707	ug/kg	177	707
91-20-3	Naphthalene	U	35.4	ug/kg	10.6	35.4
106-47-8	4-Chloroaniline	U	354	ug/kg	70.7	354
87-68-3	Hexachlorobutadiene	U	354	ug/kg	70.7	354
91-57-6	2-Methylnaphthalene	U	35.4	ug/kg	7.07	35.4
77-47-4	Hexachlorocyclopentadiene	U	354	ug/kg	70.7	354
88-06-2	2,4,6-Trichlorophenol	U	354	ug/kg	70.7	354
95-95-4	2,4,5-Trichlorophenol	U	354	ug/kg	70.7	354
91-58-7	2-Chloronaphthalene	U	35.4	ug/kg	11.7	35.4
88-74-4	2-Nitroaniline	U	354	ug/kg	70.7	354
99-09-2	<i>o</i> -Nitroaniline					
	3-Nitroaniline	U	354	ug/kg	70.7	354

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210  
Lab Sample ID: 244599001

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD7.I  
Analyst: JMB3  
Aliquot: 30.03 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 5.8  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	354	ug/kg	70.7	354
606-20-2	2,6-Dinitrotoluene	U	354	ug/kg	35.4	354
208-96-8	Acenaphthylene	U	35.4	ug/kg	10.6	35.4
51-28-5	2,4-Dinitrophenol	U	707	ug/kg	134	707
132-64-9	Dibenzofuran	U	354	ug/kg	70.7	354
84-66-2	Diethylphthalate	U	354	ug/kg	70.7	354
86-73-7	Fluorene	U	35.4	ug/kg	10.6	35.4
7005-72-3	4-Chlorophenylphenylether	U	354	ug/kg	70.7	354
534-52-1	2-Methyl-4,6-dinitrophenol	U	354	ug/kg	70.7	354
100-01-6	4-Nitroaniline	U	354	ug/kg	106	354
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	354	ug/kg	70.7	354
122-66-7	Azobenzene	U	354	ug/kg	70.7	354
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	354	ug/kg	70.7	354
118-74-1	Hexachlorobenzene	U	354	ug/kg	70.7	354
85-01-8	Phenanthrene	U	35.4	ug/kg	10.6	35.4
120-12-7	Anthracene	U	35.4	ug/kg	7.07	35.4
84-74-2	Di-n-butylphthalate	U	354	ug/kg	70.7	354
206-44-0	Fluoranthene	U	35.4	ug/kg	10.6	35.4
85-68-7	Butylbenzylphthalate	U	354	ug/kg	70.7	354
56-55-3	Benzo(a)anthracene	U	35.4	ug/kg	10.6	35.4
91-94-1	3,3'-Dichlorobenzidine	U	354	ug/kg	106	354
218-01-9	Chrysene	U	35.4	ug/kg	10.6	35.4
117-81-7	bis(2-Ethylhexyl)phthalate	U	354	ug/kg	70.7	354
117-84-0	Di-n-octylphthalate	U	354	ug/kg	70.7	354
205-99-2	Benzo(b)fluoranthene	U	35.4	ug/kg	10.6	35.4
207-08-9	Benzo(k)fluoranthene	U	35.4	ug/kg	10.6	35.4
50-32-8	Benzo(a)pyrene	U	35.4	ug/kg	10.6	35.4
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.4	ug/kg	10.6	35.4
53-70-3	Dibenzo(a,h)anthracene	U	35.4	ug/kg	10.6	35.4
191-24-2	Benzo(ghi)perylene	U	35.4	ug/kg	10.6	35.4
120-82-1	1,2,4-Trichlorobenzene	U	354	ug/kg	70.7	354

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.83	708	ug/kg		JA
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	8.81	219	ug/kg	96	NJ

Data File: /chem/MSD7.i/s011910.b/s7a1924.d  
Report Date: 19-Jan-2010 19:53

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Data file : /chem/MSD7.i/s011910.b/s7a1924.d  
Lab Smp Id: 244599001 Client Smp ID: RE12-10-7243  
Inj Date : 19-JAN-2010 17:42  
Operator : JMB3 Inst ID: MSD7.i  
Smp Info : |244599001|941702|1|SVMF|1|LANL  
Misc Info : |MSD8270\_S|WBN100107-02|  
Comment : Column: J&W Scientific DB-5MS 25m x 0.2mm x 0.33um film thickness  
Method : /chem/MSD7.i/s011910.b/MSD7-M8270C-AQA-011310.m  
Meth Date : 19-Jan-2010 18:16 llo00884 Quant Type: ISTD  
Cal Date : 15-JAN-2010 19:06 Cal File: s7a1515.d  
Als bottle: 23  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1210.sub  
Target Version: 3.50  
Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.03000	weight of sample
M	5.83610	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG			RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT REL RT		ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.788	3.793 (1.000)	417966	40.0000	
* 29 Naphthalene-d8	136	4.650	4.654 (1.000)	1557277	40.0000	
* 46 Acenaphthene-d10	164	5.892	5.897 (1.000)	803408	40.0000	
* 67 Phenanthrene-d10	188	7.043	7.048 (1.000)	1465067	40.0000	
* 91 Chrysene-d12	240	9.422	9.426 (1.000)	1221167	40.0000	
* 98 Perylene-d12	264	10.967	10.972 (1.000)	830961	40.0000	
\$ 3 2-Fluorophenol	112	2.988	2.984 (0.789)	741260	61.7168	2180
\$ 5 Phenol-d5	99	3.508	3.508 (0.926)	980901	63.3434	2240
\$ 20 Nitrobenzene-d5	82	4.144	4.154 (0.891)	469267	36.5301	1290
\$ 39 2-Fluorobiphenyl	172	5.391	5.391 (0.915)	831336	35.1151	1240
\$ 60 2,4,6-Tribromophenol	329	6.480	6.484 (1.100)	160945	79.6291	2820
\$ 81 p-Terphenyl-d14	244	8.406	8.406 (0.892)	827638	39.6811	1400

## ION RATIO REPORT

## SV REPORT

Data file: s7a1924.d

Report Date: 01/19/2010 19:48

Lab. ID: 244599001

SampleType: SAMPLE

Injection Date: 19-JAN-2010 17:42

Operator: JMB3

Instrument: MSD7.i

Sample Info: |244599001|941702|1|SVMF|1|LANL

Miscellaneous Info: |MSD8270\_S|WBN100107-02|

Comment:

Method used: /chem/MSD7.i/s011910.b/MSD7-M8270C-AQA-011310.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1210

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
1 N-Methyl-N-nitrosomethylamine				CAS#: 62-75-9		
74	38220	2.05	2.29	80-120	100	(T)
42	16696	2.07	2.29	85-145	44	(QT)
43	178510	2.07	2.29	22- 82	467	(QT)
-----						
4 Aniline				CAS#: 62-53-3		
66	49935	3.51	3.58	80-120	100	(T)
93	153	3.61	3.58	217-277	0	(Q)
-----						
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	65610	4.14	4.03	80-120	100	(T)
42	50998	4.14	4.03	63-123	78	(T)
-----						
27 Benzoic acid				CAS#: 65-85-0		
105	396	4.46	4.43	80-120	100	( )
122	459	4.42	4.43	59-119	116	( )
77	203	4.46	4.43	38- 98	51	( )
-----						
43 Dimethylphthalate				CAS#: 131-11-3		
163	144731	5.90	5.67	80-120	100	(T)
164	803408	5.89	5.67	0- 40	555	(QT)
-----						
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	103724	5.89	5.72	80-120	100	(T)
63	1683	5.89	5.72	50-110	2	(QT)
-----						

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
50	2,4-Dinitrotoluene		CAS#: 121-14-2			
165	103724	5.89	6.01	80-120	100	(T)
89	1210	5.89	6.01	44-104	1	(QT)
63	1683	5.89	6.01	30- 90	2	(QT)
-----						
53	Fluorene		CAS#: 86-73-7			
166	13055	6.48	6.30	80-120	100	(T)
165	13901	6.48	6.30	57-117	106	(T)
167	4456	6.48	6.30	0- 43	34	(T)
-----						
61	4-Bromophenylphenylether		CAS#: 101-55-3			
248	11819	6.48	6.66	80-120	100	(T)
141	84809	6.48	6.66	57-117	718	(QT)
250	23335	6.48	6.66	66-126	197	(QT)

-----  
Q qualifier indicates ion failed ratio requirement

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Data file : /chem/MSD7.i/s011910.b/s7a1924.d  
Lab Smp Id: 244599001 Client Smp ID: RE12-10-7243  
Inj Date : 19-JAN-2010 17:42  
Operator : JMB3 Inst ID: MSD7.i  
Smp Info : |244599001|941702|1|SVMF|1|LANL  
Misc Info : |MSD8270 S|WBN100107-02|  
Comment : Column: J&W Scientific DB-5MS 25m x 0.2mm x 0.33um film thickness  
Method : /chem/MSD7.i/s011910.b/MSD7-M8270C-AQA-011310.m  
Meth Date : 19-Jan-2010 18:16 llo00884 Quant Type: ISTD  
Cal Date : 15-JAN-2010 19:06 Cal File: s7a1515.d  
Als bottle: 23  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1210.sub  
Target Version: 3.50  
Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.03000	weight of sample
M	5.83610	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.788	2628787	40.000
* 91 Chrysene-d12	9.422	3339328	40.000

CONCENTRATIONS				QUANT			
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
-----	-----	-----	-----	-----	-----	-----	-----
Unknown Aldol Condensate				CAS #:			
2.830	1316147	20.0266822	708	0		0	10



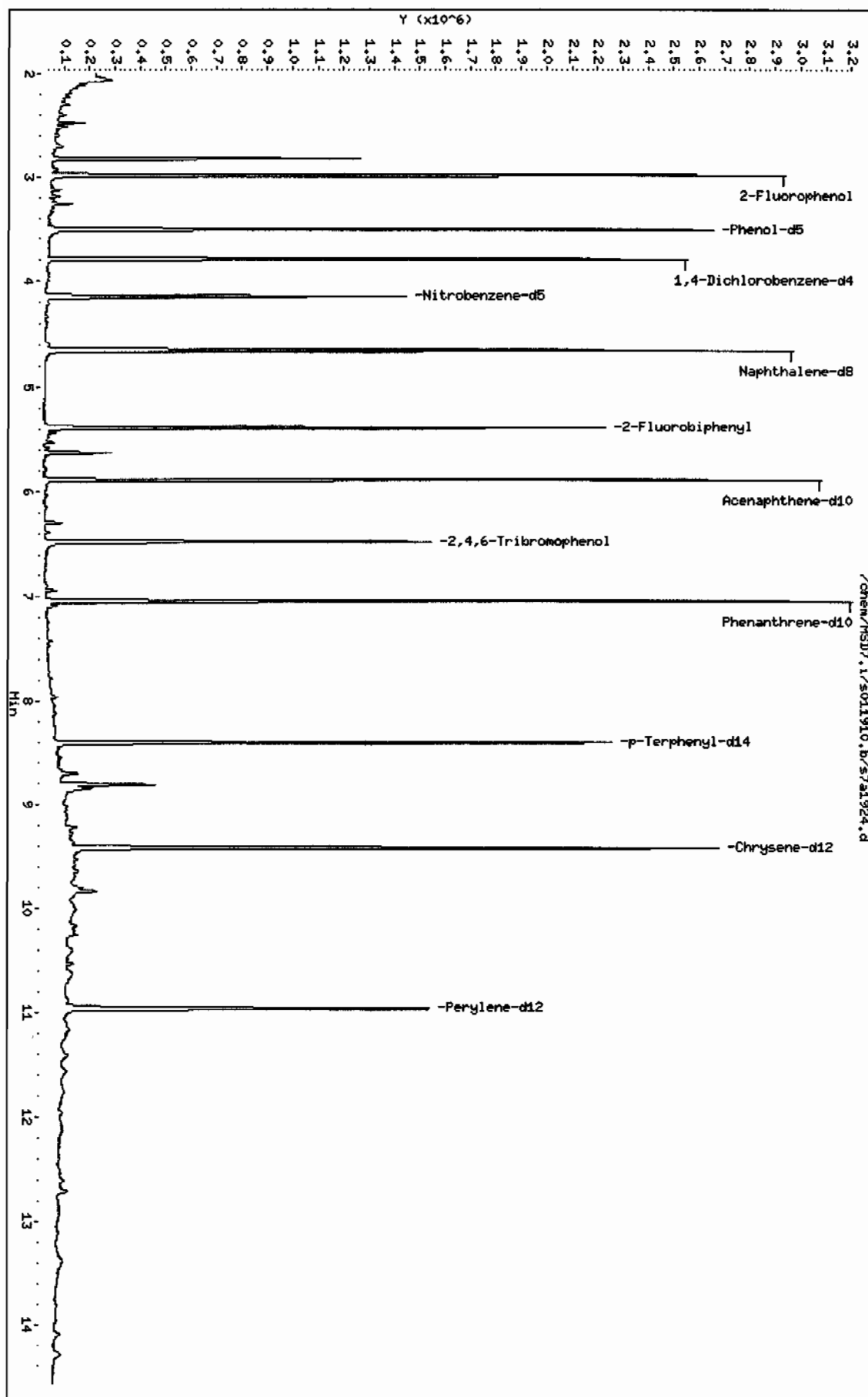
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		ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
8.810	517690	6.20112815	219	96	NIST05.L	116239	91

2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa      CAS #: 511-15-9

Data File: /chem/MSD7.i/s011910.b/s7a1924.d  
Date: 19-JAN-2010 17:42  
Client ID: REL2-10-7243  
Sample Info: 124459900194170211SUMF11LNL  
Volume Injected (uL): 0.5  
Column phase: J&W DB-5MS

Instrument: MSD7.1  
Operator: JMB3  
Column diameter: 0.20

Page 1



Date: 19-JAN-2010 17:42

Client ID: RE12-10-7243

Instrument: HSD7.i

Sample Info: 12445990011941702111SVMF111LANL

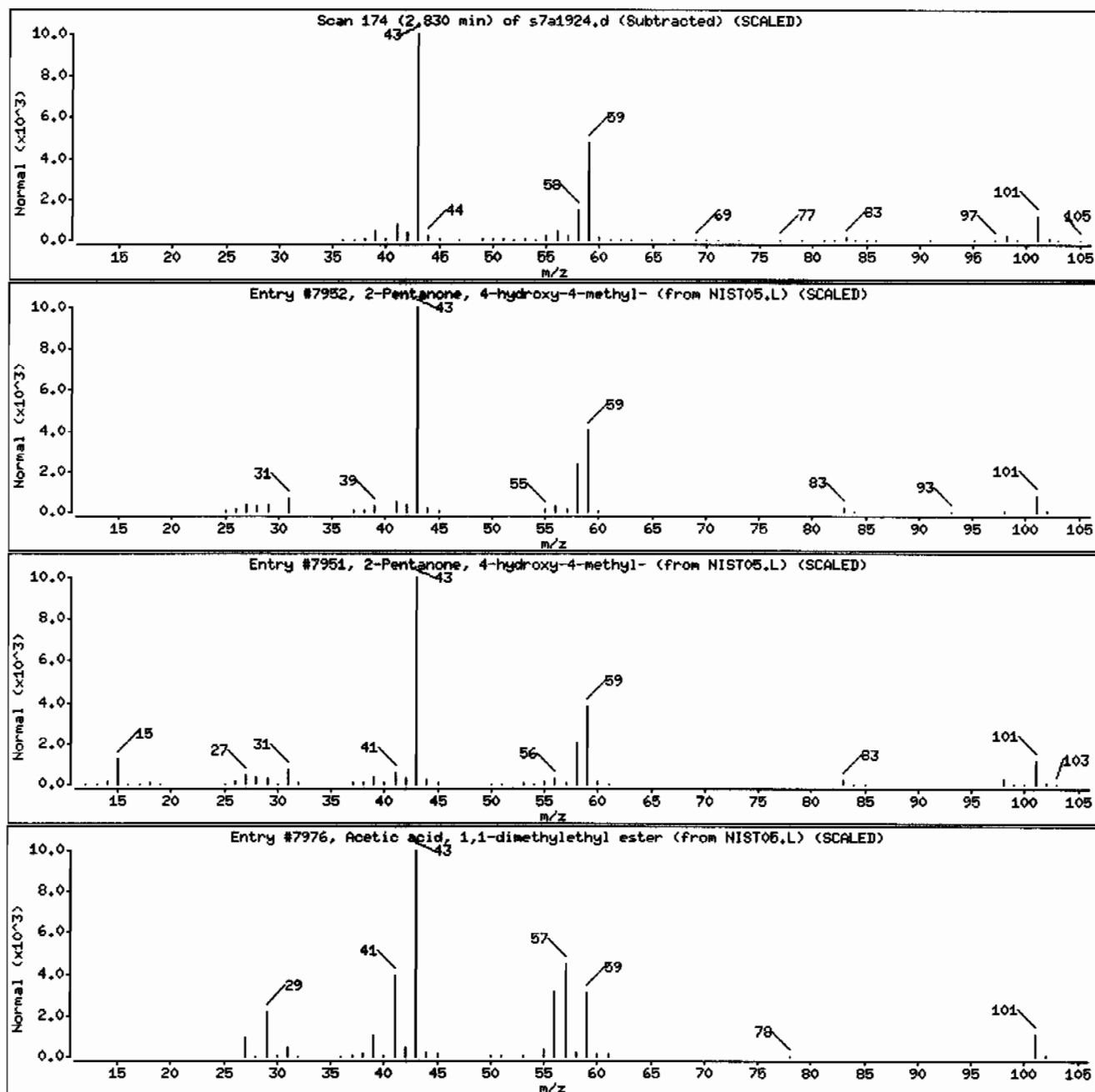
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H12O2	116
Acetic acid, 1,1-dimethylethyl ester	540-88-5	NIST05.L	7976	23	C6H12O2	116



Date: 19-JAN-2010 17:42

Client ID: RE12-10-7243

Instrument: MSD7.i

Sample Info: I24459900194170211SVHF111LANL

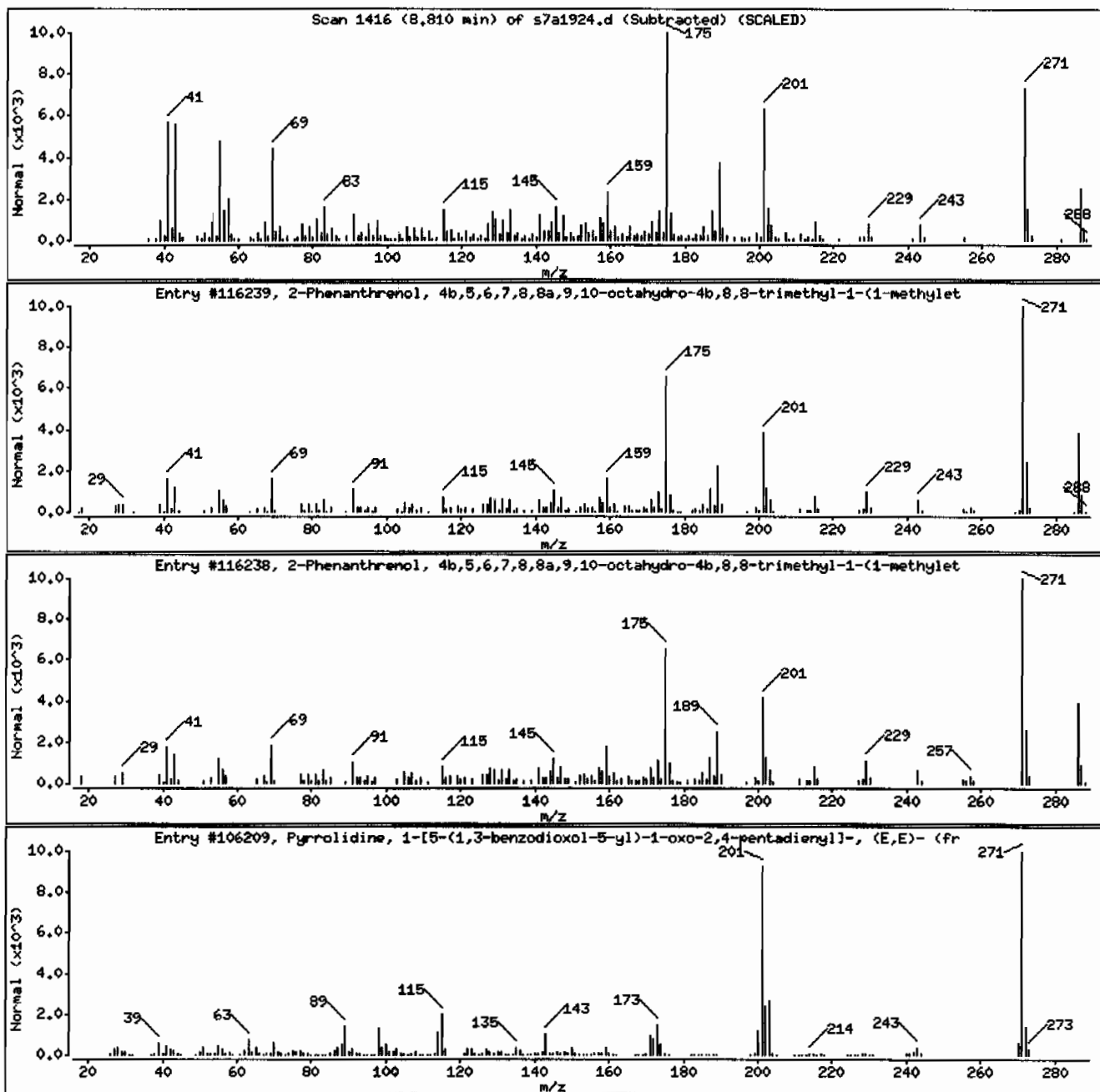
Volume Injected (uL): 0.5

Operator: JHB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116239	96	C20H30O	286
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116238	93	C20H30O	286
Pyrrolidine, 1-[5-(1,3-benzodioxol-5-yl)	25924-78-1	NIST05.L	106209	43	C16H17NO3	271



**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210  
Lab Sample ID: 244599009

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD7.I  
Analyst: JMB3  
Aliquot: 30.13 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 15.9  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	395	ug/kg	78.9	395
108-95-2	Phenol	U	395	ug/kg	78.9	395
95-57-8	2-Chlorophenol	U	395	ug/kg	78.9	395
106-46-7	1,4-Dichlorobenzene	U	395	ug/kg	78.9	395
621-64-7	N-Nitrosodipropylamine	U	395	ug/kg	78.9	395
59-50-7	4-Chloro-3-methylphenol	U	395	ug/kg	78.9	395
83-32-9	Acenaphthene	U	39.5	ug/kg	13.0	39.5
121-14-2	2,4-Dinitrotoluene	U	395	ug/kg	39.5	395
100-02-7	4-Nitrophenol	U	395	ug/kg	130	395
87-86-5	Pentachlorophenol	U	395	ug/kg	98.7	395
129-00-0	Pyrene	U	39.5	ug/kg	11.8	39.5
110-86-1	Pyridine	U	395	ug/kg	78.9	395
62-53-3	Aniline	U	395	ug/kg	118	395
111-44-4	bis(2-Chloroethyl) ether	U	395	ug/kg	78.9	395
541-73-1	1,3-Dichlorobenzene	U	395	ug/kg	78.9	395
100-51-6	Benzyl alcohol	U	395	ug/kg	118	395
95-50-1	1,2-Dichlorobenzene	U	395	ug/kg	78.9	395
108-60-1	bis(2-Chloroisopropyl)ether	U	395	ug/kg	78.9	395
95-48-7	o-Cresol	U	395	ug/kg	78.9	395
65794-96-9	m,p-Cresols	U	395	ug/kg	118	395
67-72-1	Hexachloroethane	U	395	ug/kg	78.9	395
98-95-3	Nitrobenzene	U	395	ug/kg	78.9	395
78-59-1	Isophorone	U	395	ug/kg	78.9	395
88-75-5	2-Nitrophenol	U	395	ug/kg	78.9	395
105-67-9	2,4-Dimethylphenol	U	395	ug/kg	138	395
111-91-1	bis(2-Chloroethoxy)methane	U	395	ug/kg	78.9	395
120-83-2	2,4-Dichlorophenol	U	395	ug/kg	78.9	395
65-85-0	Benzoic acid	U	789	ug/kg	197	789
91-20-3	Naphthalene	U	39.5	ug/kg	11.8	39.5
106-47-8	4-Chloroaniline	U	395	ug/kg	78.9	395
87-68-3	Hexachlorobutadiene	U	395	ug/kg	78.9	395
91-57-6	2-Methylnaphthalene	U	39.5	ug/kg	7.89	39.5
77-47-4	Hexachlorocyclopentadiene	U	395	ug/kg	78.9	395
88-06-2	2,4,6-Trichlorophenol	U	395	ug/kg	78.9	395
95-95-4	2,4,5-Trichlorophenol	U	395	ug/kg	78.9	395
91-58-7	2-Chloronaphthalene	U	39.5	ug/kg	13.0	39.5
88-74-4	2-Nitroaniline	U	395	ug/kg	78.9	395
99-09-2	<i>o</i> -Nitroaniline	U	395	ug/kg	78.9	395
	3-Nitroaniline					

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210	Date Collected: 01/07/2010 12:00	Matrix: R
Lab Sample ID: 244599009	Date Received: 01/13/2010 08:55	%Moisture: 15.9
	Client: LANL010	Project: LANL01004
Client ID: RE12-10-7252	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 941702	Inst: MSD7.1	Dilution: 1
Run Date: 01/20/2010 15:13	Analyst: JMB3	Inj. Vol: .5 uL
Prep Date: 01/14/2010 19:34	Aliquot: 30.13 g	Final Volume: 1 mL
Data File: s7a2014.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	395	ug/kg	78.9	395
606-20-2	2,6-Dinitrotoluene	U	395	ug/kg	39.5	395
208-96-8	Acenaphthylene	U	39.5	ug/kg	11.8	39.5
51-28-5	2,4-Dinitrophenol	U	789	ug/kg	150	789
132-64-9	Dibenzofuran	U	395	ug/kg	78.9	395
84-66-2	Diethylphthalate	U	395	ug/kg	78.9	395
86-73-7	Fluorene	U	39.5	ug/kg	11.8	39.5
7005-72-3	4-Chlorophenylphenylether	U	395	ug/kg	78.9	395
534-52-1	2-Methyl-4,6-dinitrophenol	U	395	ug/kg	78.9	395
100-01-6	4-Nitroaniline	U	395	ug/kg	118	395
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	395	ug/kg	78.9	395
122-66-7	Azobenzene	U	395	ug/kg	78.9	395
	<i>1,2-Diphenylhydrazine</i>					
101-55-3	4-Bromophenylphenylether	U	395	ug/kg	78.9	395
118-74-1	Hexachlorobenzene	U	395	ug/kg	78.9	395
85-01-8	Phenanthrene	U	39.5	ug/kg	11.8	39.5
120-12-7	Anthracene	U	39.5	ug/kg	7.89	39.5
84-74-2	Di-n-butylphthalate	U	395	ug/kg	78.9	395
206-44-0	Fluoranthene	U	39.5	ug/kg	11.8	39.5
85-68-7	Butylbenzylphthalate	U	395	ug/kg	78.9	395
56-55-3	Benzo(a)anthracene	U	39.5	ug/kg	11.8	39.5
91-94-1	3,3'-Dichlorobenzidine	U	395	ug/kg	118	395
218-01-9	Chrysene	U	39.5	ug/kg	11.8	39.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	395	ug/kg	78.9	395
117-84-0	Di-n-octylphthalate	U	395	ug/kg	78.9	395
205-99-2	Benzo(b)fluoranthene	U	39.5	ug/kg	11.8	39.5
207-08-9	Benzo(k)fluoranthene	U	39.5	ug/kg	11.8	39.5
50-32-8	Benzo(a)pyrene	U	39.5	ug/kg	11.8	39.5
193-39-5	Indeno(1,2,3-cd)pyrene	U	39.5	ug/kg	11.8	39.5
53-70-3	Dibenzo(a,h)anthracene	U	39.5	ug/kg	11.8	39.5
191-24-2	Benzo(ghi)perylene	U	39.5	ug/kg	11.8	39.5
120-82-1	1,2,4-Trichlorobenzene	U	395	ug/kg	78.9	395

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.03	332	ug/kg		J
	Unknown	2.07	251	ug/kg		J

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

<b>SDG Number:</b> 10-1210	<b>Date Collected:</b> 01/07/2010 12:00	<b>Matrix:</b> R
<b>Lab Sample ID:</b> 244599009	<b>Date Received:</b> 01/13/2010 08:55	<b>%Moisture:</b> 15.9
<b>Client ID:</b> RE12-10-7252	<b>Client:</b> LANL010	<b>Project:</b> LANL01004
<b>Batch ID:</b> 941702	<b>Method:</b> SW846 8270C	<b>SOP Ref:</b> GL-OA-E-009
<b>Run Date:</b> 01/20/2010 15:13	<b>Inst:</b> MSD7.I	<b>Dilution:</b> 1
<b>Prep Date:</b> 01/14/2010 19:34	<b>Analyst:</b> JMB3	<b>Inj. Vol:</b> .5 uL
<b>Data File:</b> s7a2014.d	<b>Aliquot:</b> 30.13 g	<b>Final Volume:</b> 1 mL
	<b>Column:</b> J&W DB-5MS	<b>Level:</b> LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
---------	----------	-----------	--------	-------	---------	---------

Tentatively Identified Compound Summary			Estimated			
CAS No.	Tentatively Identified Compound (TIC)	RT		Units	Fit	Qual
	Unknown Aldol Condensate	2.82	691	ug/kg		J
	Unknown	8.6	237	ug/kg		J
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	8.81	444	ug/kg	96	NJ
	Unknown	9.05	166	ug/kg		J
112-95-8	Eicosane	9.83	208	ug/kg	98	NJ
	Unknown	10.52	216	ug/kg		J
	Unknown	10.84	781	ug/kg		J
	Unknown	11.51	1090	ug/kg		J
	Unknown	12.26	362	ug/kg		J
	Unknown	12.31	254	ug/kg		J
	Unknown	12.44	182	ug/kg		J
	Unknown	13.23	516	ug/kg		J
	Unknown	13.7	201	ug/kg		J
	Unknown	14.29	204	ug/kg		J

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Data file : /chem/MSD7.i/s012010.b/s7a2014.d  
Lab Smp Id: 244599009 Client Smp ID: RE12-10-7252  
Inj Date : 20-JAN-2010 15:13  
Operator : JMB3 Inst ID: MSD7.i  
Smp Info : |244599009|941702|1|SVM|1|LANL  
Misc Info : |MSD8270\_S|WBN100107-02|  
Comment : Column: J&W Scientific DB-5MS 25m x 0.2mm x 0.33um film thickness  
Method : /chem/MSD7.i/s012010.b/MSD7-M8270C-AQA-011310.m  
Meth Date : 20-Jan-2010 13:15 jos00786 Quant Type: ISTD  
Cal Date : 15-JAN-2010 19:06 Cal File: s7a1515.d  
Als bottle: 13  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1210.sub  
Target Version: 3.50  
Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.13000	weight of sample
M	15.92230	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG			RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT REL RT		ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.793	3.793 (1.000)	249011	40.0000	
* 29 Naphthalene-d8	136	4.650	4.655 (1.000)	934855	40.0000	
* 46 Acenaphthene-d10	164	5.892	5.897 (1.000)	495712	40.0000	
* 67 Phenanthrene-d10	188	7.043	7.043 (1.000)	915271	40.0000	
* 91 Chrysene-d12	240	9.422	9.431 (1.000)	724158	40.0000	
* 98 Perylene-d12	264	10.963	10.977 (1.000)	496354	40.0000	
\$ 3 2-Fluorophenol	112	2.993	2.984 (0.789)	464711	64.9438	2560
\$ 5 Phenol-d5	99	3.513	3.513 (0.926)	593318	64.3112	2540
\$ 20 Nitrobenzene-d5	82	4.149	4.154 (0.892)	275868	35.7729	1410
\$ 39 2-Fluorobiphenyl	172	5.391	5.391 (0.915)	516264	35.3424	1400
\$ 60 2,4,6-Tribromophenol	329	6.479	6.484 (1.100)	101248	81.1872	3200
\$ 81 p-Terphenyl-d14	244	8.406	8.406 (0.892)	548234	44.3252	1750



## ION RATIO REPORT

## SV REPORT

Data file: s7a2014.d

Report Date: 01/20/2010 15:55

Lab. ID: 244599009

SampleType: SAMPLE

Injection Date: 20-JAN-2010 15:13

Operator: JMB3

Instrument: MSD7.i

Sample Info: |244599009|941702|1|SVM|1|LANL

Miscellaneous Info: |MSD8270\_S|WBN100107-02|

Comment:

Method used: /chem/MSD7.i/s012010.b/MSD7-M8270C-AQA-011310.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1210

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4 Aniline		CAS#: 62-53-3				
66	30847	3.51	3.58	80-120	100	(T)
93	455	3.47	3.58	187-247	1	(QT)
-----						
17 N-Nitrosodipropylamine		CAS#: 621-64-7				
70	40738	4.15	4.03	80-120	100	(T)
42	32978	4.15	4.03	63-123	81	(T)
-----						
40 2-Chloronaphthalene		CAS#: 91-58-7				
162	14134	5.63	5.50	80-120	100	(T)
164	722	5.63	5.50	2- 62	5	(T)
127	1043	5.63	5.50	7- 67	7	(T)
-----						
42 o-Nitroaniline		CAS#: 88-74-4				
65	21458	5.63	5.56	80-120	100	(T)
92	23508	5.63	5.56	26- 86	110	(QT)
138	1486	5.63	5.56	61-121	7	(QT)
-----						
43 Dimethylphthalate		CAS#: 131-11-3				
163	88953	5.90	5.67	80-120	100	(T)
164	495225	5.89	5.67	0- 40	557	(QT)
-----						
44 2,6-Dinitrotoluene		CAS#: 606-20-2				
165	63419	5.89	5.72	80-120	100	(T)
63	1301	5.89	5.72	49-109	2	(QT)
-----						

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
50 2,4-Dinitrotoluene			CAS#: 121-14-2			
165	63419	5.89	6.01	80-120	100	(T)
89	1578	5.89	6.01	44-104	2	(QT)
63	1301	5.89	6.01	29- 89	2	(QT)
-----						
53 Fluorene			CAS#: 86-73-7			
166	8844	6.48	6.30	80-120	100	(T)
165	8749	6.48	6.30	56-116	99	(T)
167	3071	6.48	6.30	0- 44	35	(T)
-----						
61 4-Bromophenylphenylether			CAS#: 101-55-3			
248	7183	6.48	6.66	80-120	100	(T)
141	56644	6.48	6.66	57-117	789	(QT)
250	15004	6.48	6.66	68-128	209	(QT)

-----  
 Q qualifier indicates ion failed ratio requirement

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Data file : /chem/MSD7.i/s012010.b/s7a2014.d  
 Lab Smp Id: 244599009 Client Smp ID: RE12-10-7252  
 Inj Date : 20-JAN-2010 15:13  
 Operator : JMB3 Inst ID: MSD7.i  
 Smp Info : |244599009|941702|1|SVM|1|LANL  
 Misc Info : |MSD8270\_S|WBN100107-02|  
 Comment : Column: J&W Scientific DB-5MS 25m x 0.2mm x 0.33um film thickness  
 Method : /chem/MSD7.i/s012010.b/MSD7-M8270C-AQA-011310.m  
 Meth Date : 20-Jan-2010 13:15 jos00786 Quant Type: ISTD  
 Cal Date : 15-JAN-2010 19:06 Cal File: s7a1515.d  
 Als bottle: 13  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: 10-1210.sub  
 Target Version: 3.50  
 Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.13000	weight of sample
M	15.92230	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.793	1591274	40.000
* 91 Chrysene-d12	9.422	2101230	40.000
* 98 Perylene-d12	10.963	1461433	40.000

CONCENTRATIONS				QUANT			
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====

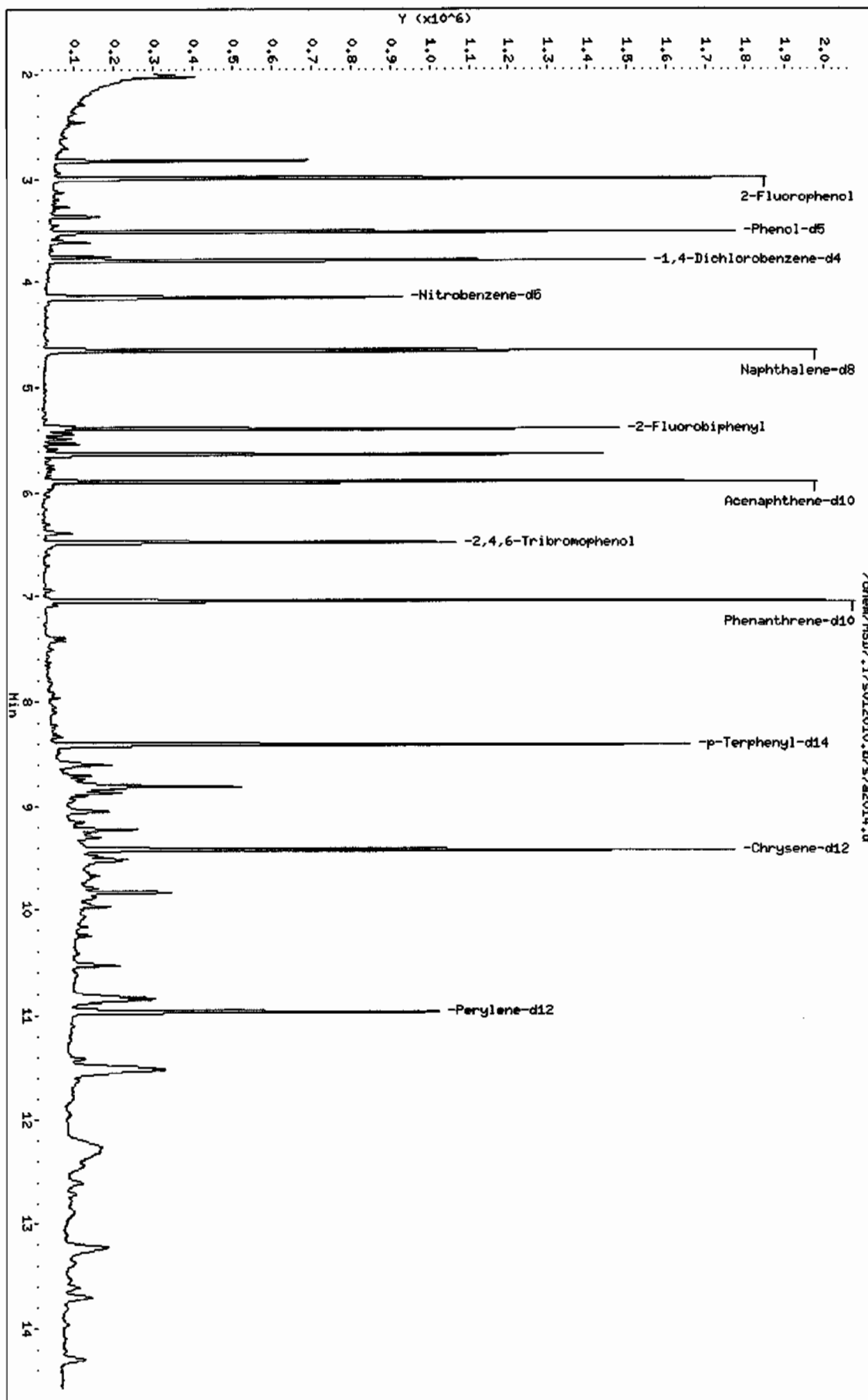
RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
Unknown					CAS #:		
2.025	334275	8.40269673	332	0		0	10
Unknown					CAS #:		
2.073	252543	6.34818706	250	0		0	10
Unknown Aldol Condensate					CAS #:		
2.820	696683	17.5125843	691	0		0	10
Unknown					CAS #:		
8.603	315364	6.00341746	237	0		0	91
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa					CAS #: 511-15-9		
8.810	590203	11.2353693	444	96	NIST05.L	116239	91
Unknown					CAS #:		
9.051	221516	4.21688734	166	0		0	91
Eicosane					CAS #: 112-95-8		
9.831	276698	5.26734728	208	98	NIST05.L	113490	91
Unknown					CAS #:		
10.524	200074	5.47609084	216	0		0	98
Unknown					CAS #:		
10.842	722948	19.7873612	781	0		0	98
Unknown					CAS #:		
11.511	1006408	27.5457721	1090	0		0	98
Unknown					CAS #:		
12.263	335121	9.17238533	362	0		0	98
Unknown					CAS #:		
12.311	235462	6.44468197	254	0		0	98
Unknown					CAS #:		
12.441	168388	4.60884752	182	0		0	98
Unknown					CAS #:		
13.226	477836	13.0785542	516	0		0	98
Unknown					CAS #:		
13.698	186142	5.09477284	201	0		0	98

RT	AREA	CONCENTRATIONS		QUAL	QUANT		CPND #
		ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
Unknown					CAS #:		
14.295	188781	5.16702123	204	0		0	98

Data File: /chem/HSD7.i/s012010.b/s7a2014.d  
Date: 20-JAN-2010 15:13  
Client ID: RE12-10-7252  
Sample Info: 124459009194170211SVH11LNL  
Volume Injected (uL): 0.5  
Column phase: JMW DB-SMS

Instrument: HSD7.i  
Operator: JHB3  
Column diameter: 0.20

Page 1



Date : 20-JAN-2010 15:13

Client ID: RE12-10-7252

Instrument: MSD7.i

Sample Info: 1244599009194170211ISVM11ILANL

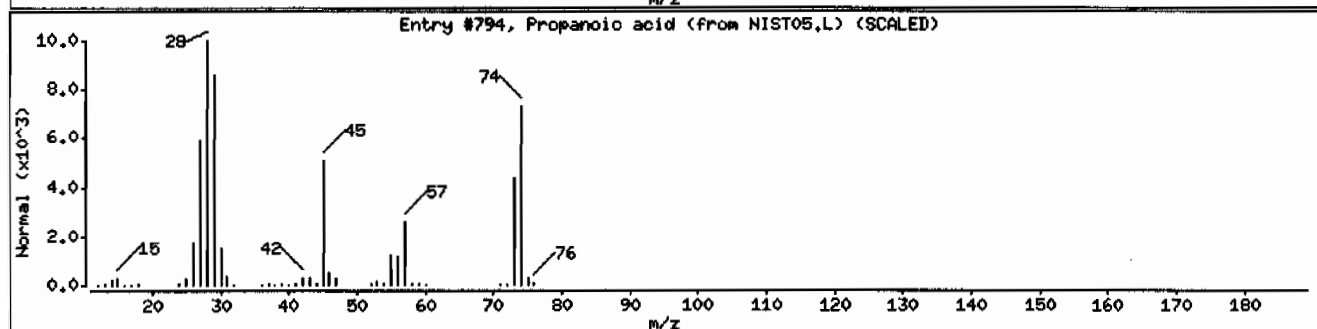
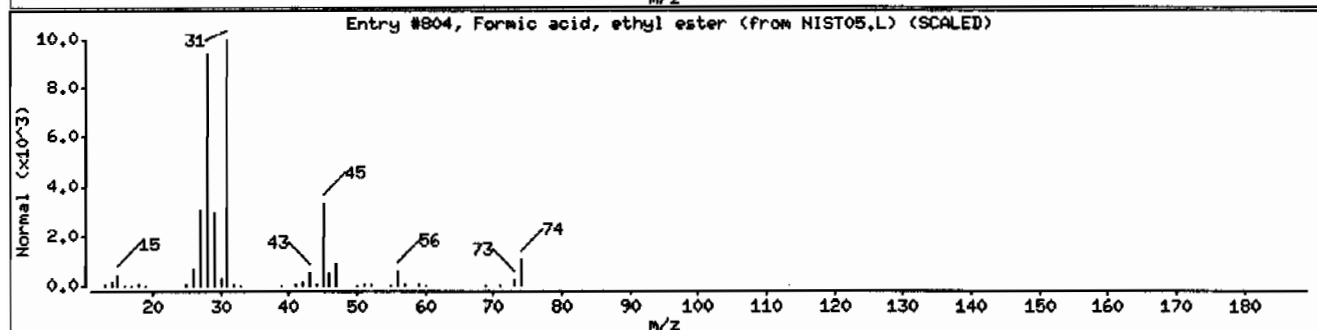
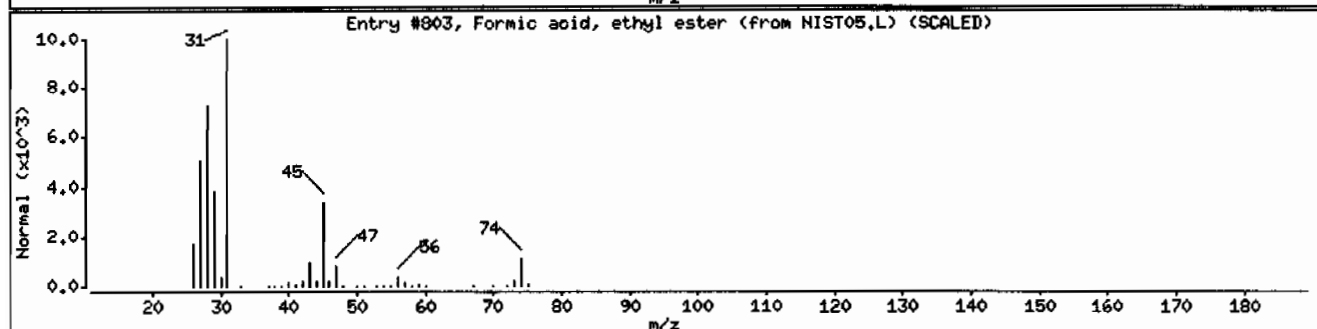
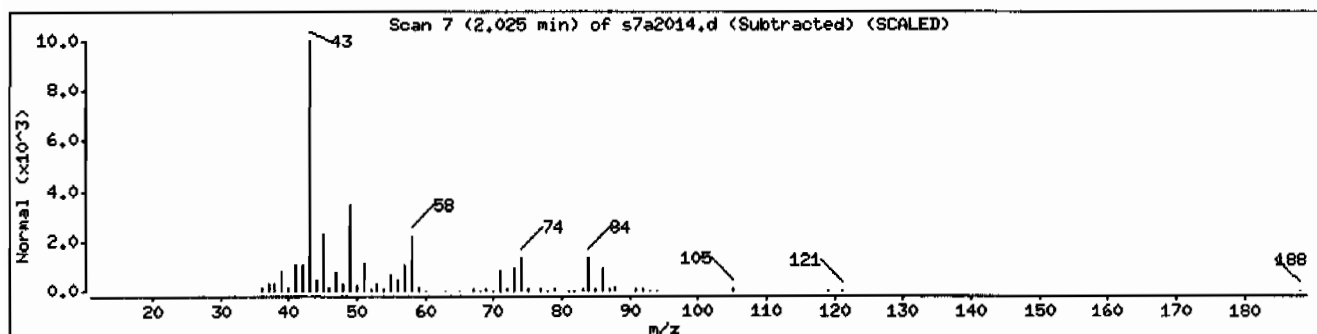
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Formic acid, ethyl ester	109-94-4	NIST05.L	803	10	C3H6O2	74
Formic acid, ethyl ester	109-94-4	NIST05.L	804	9	C3H6O2	74
Propanoic acid	79-09-4	NIST05.L	794	9	C3H6O2	74



Date : 20-JAN-2010 15:13

Client ID: RE12-10-7252

Instrument: HSD7.i

Sample Info: 12445990091941702111SVH111LANL

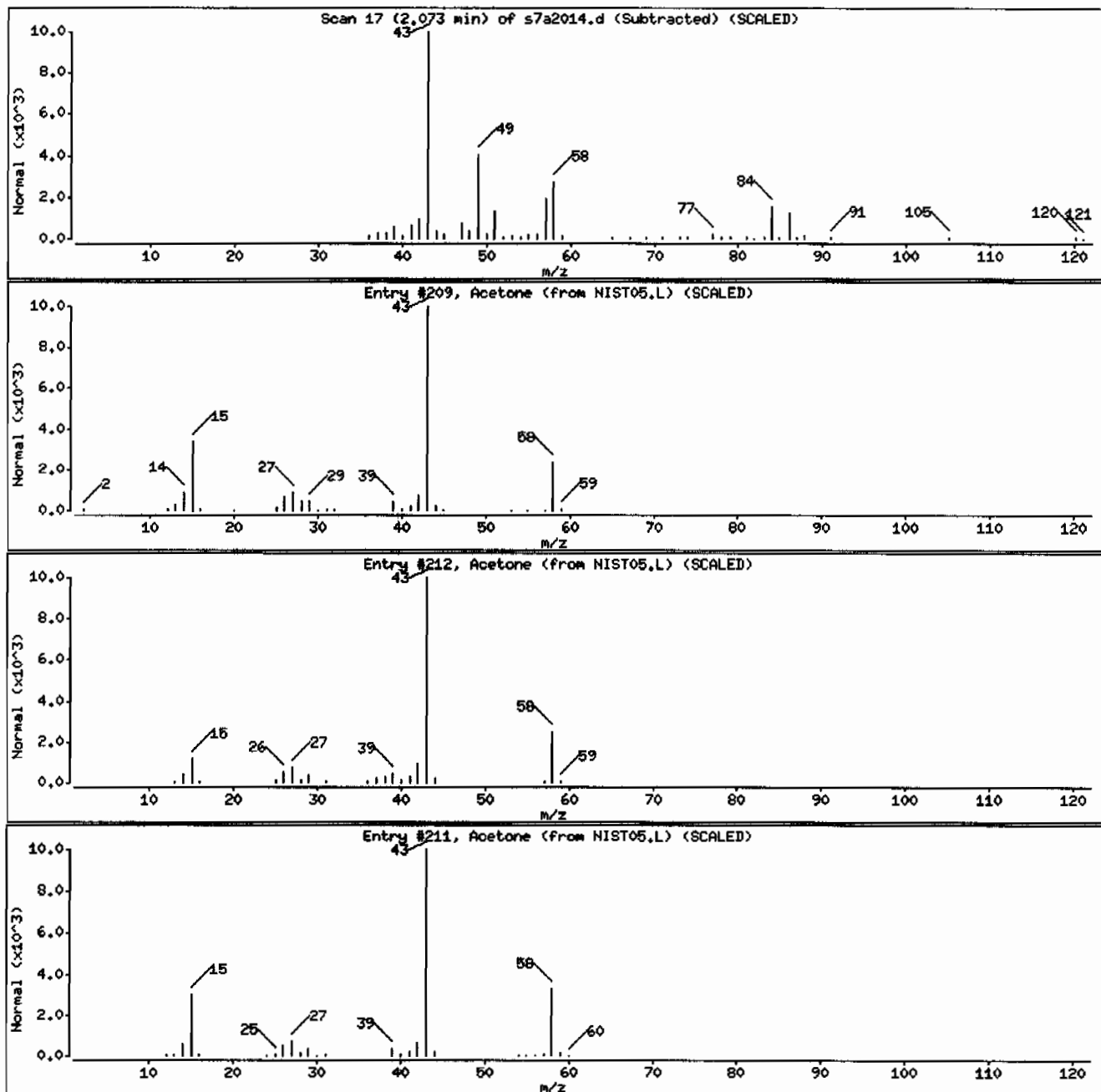
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Acetone	67-64-1	NIST05.L	209	11	C3H6O	58
Acetone	67-64-1	NIST05.L	212	10	C3H6O	58
Acetone	67-64-1	NIST05.L	211	9	C3H6O	58





Date : 20-JAN-2010 15:13

Client ID: RE12-10-7252

Instrument: HSD7.i

Sample Info: I244599009194170211ISVH11ILANL

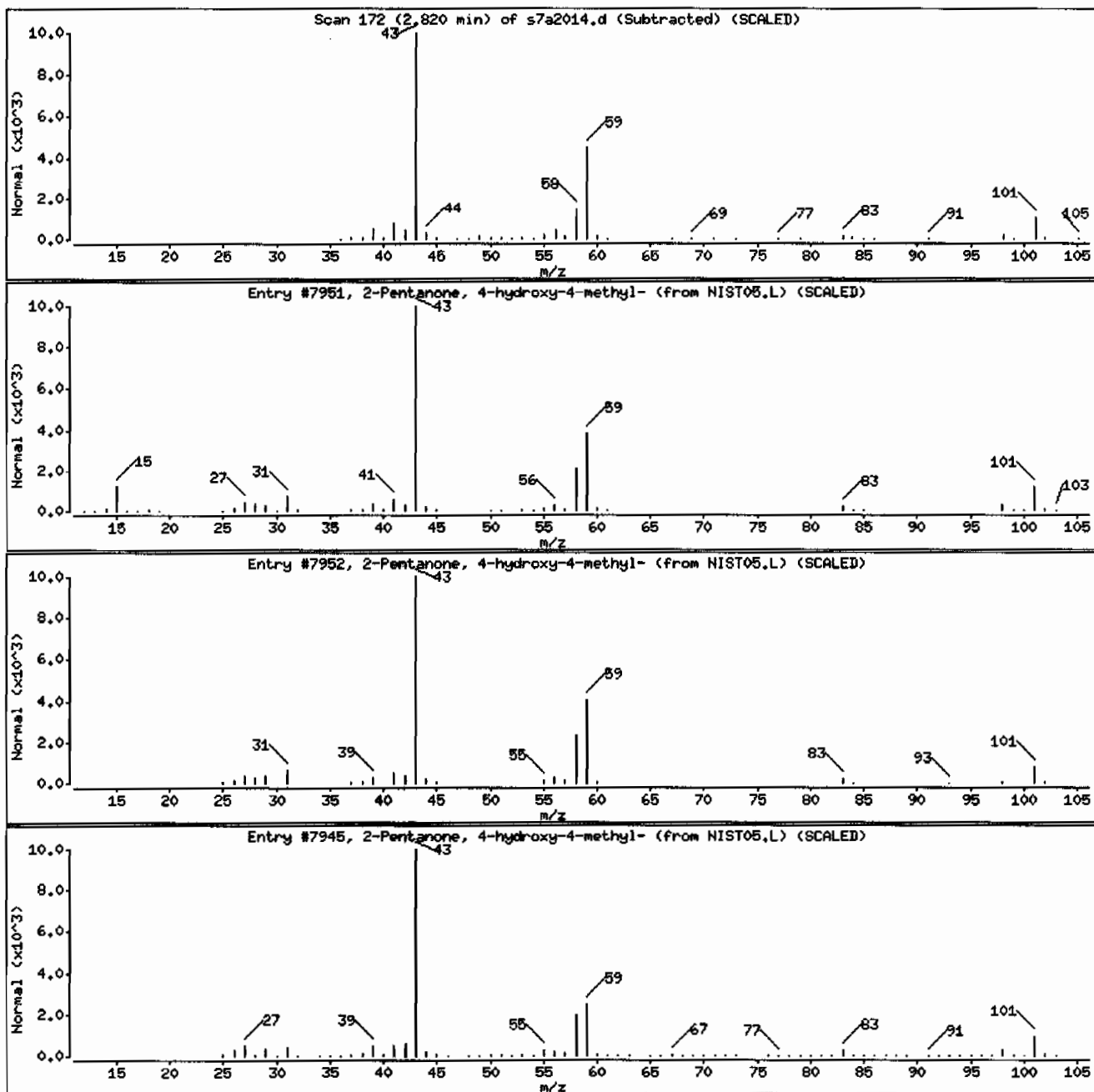
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C <sub>6</sub> H <sub>12</sub> O <sub>2</sub>	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C <sub>6</sub> H <sub>12</sub> O <sub>2</sub>	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	38	C <sub>6</sub> H <sub>12</sub> O <sub>2</sub>	116



Date : 20-JAN-2010 15:13

Client ID: RE12-10-7252

Instrument: MSD7.1

Sample Info: 1244599009194170211SVH11LANL

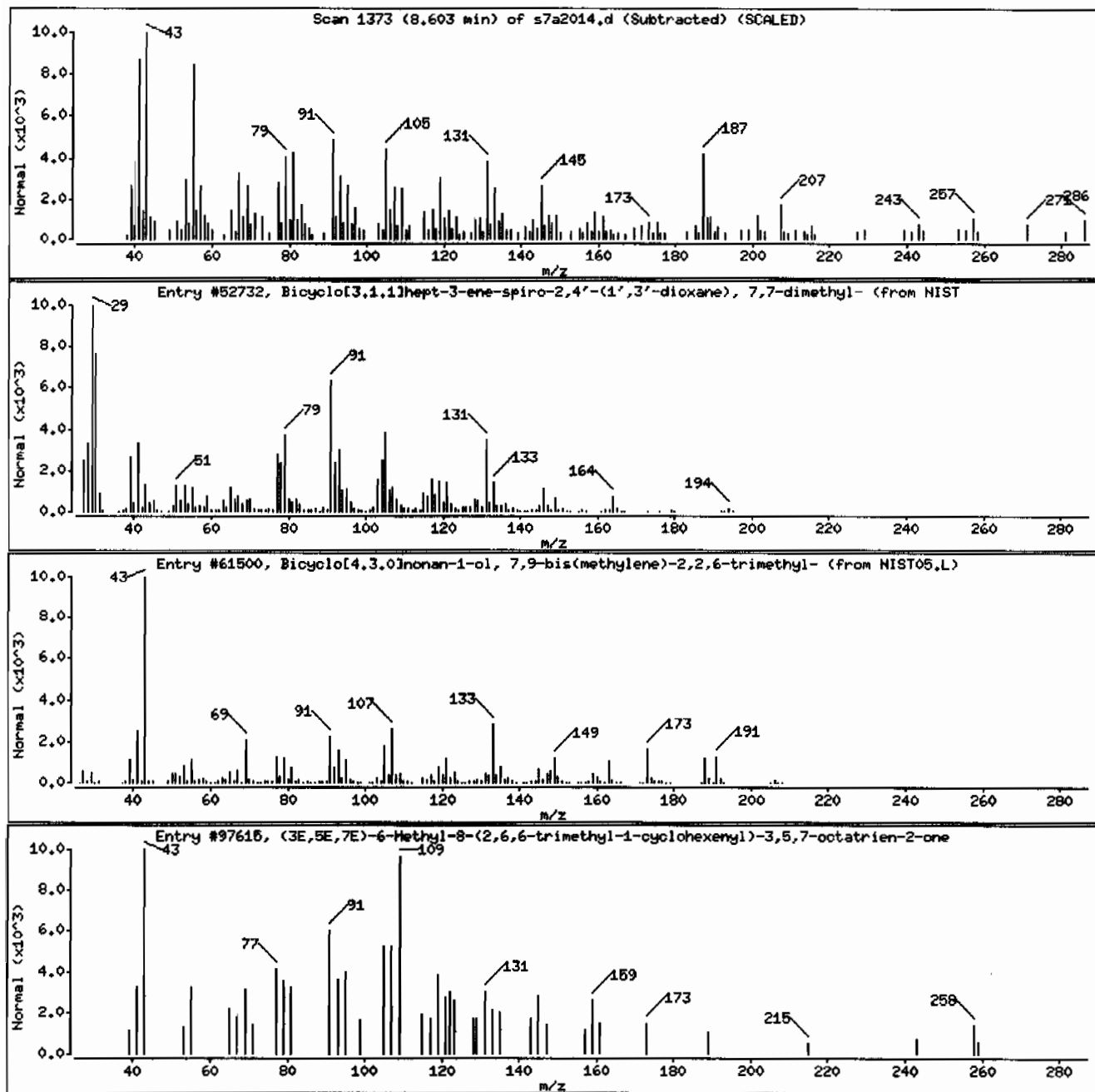
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Bicyclo[3.1.1]hept-3-ene-spiro-2,4'-(1',	1000149-76-2	NIST05.L	52732	12	C12H18O2	194
Bicyclo[4.3.0]nonan-1-ol, 7,9-bis(methyl	125257-63-8	NIST05.L	61500	10	C14H22O	206
(3E,5E,7E)-6-Methyl-8-(2,6,6-trimethyl-1	17974-57-1	NIST05.L	97615	10	C18H26O	258



Date : 20-JAN-2010 15:13

Client ID: RE12-10-7252

Instrument: MSD7.i

Sample Info: 1244599009194170211SVH111LANL

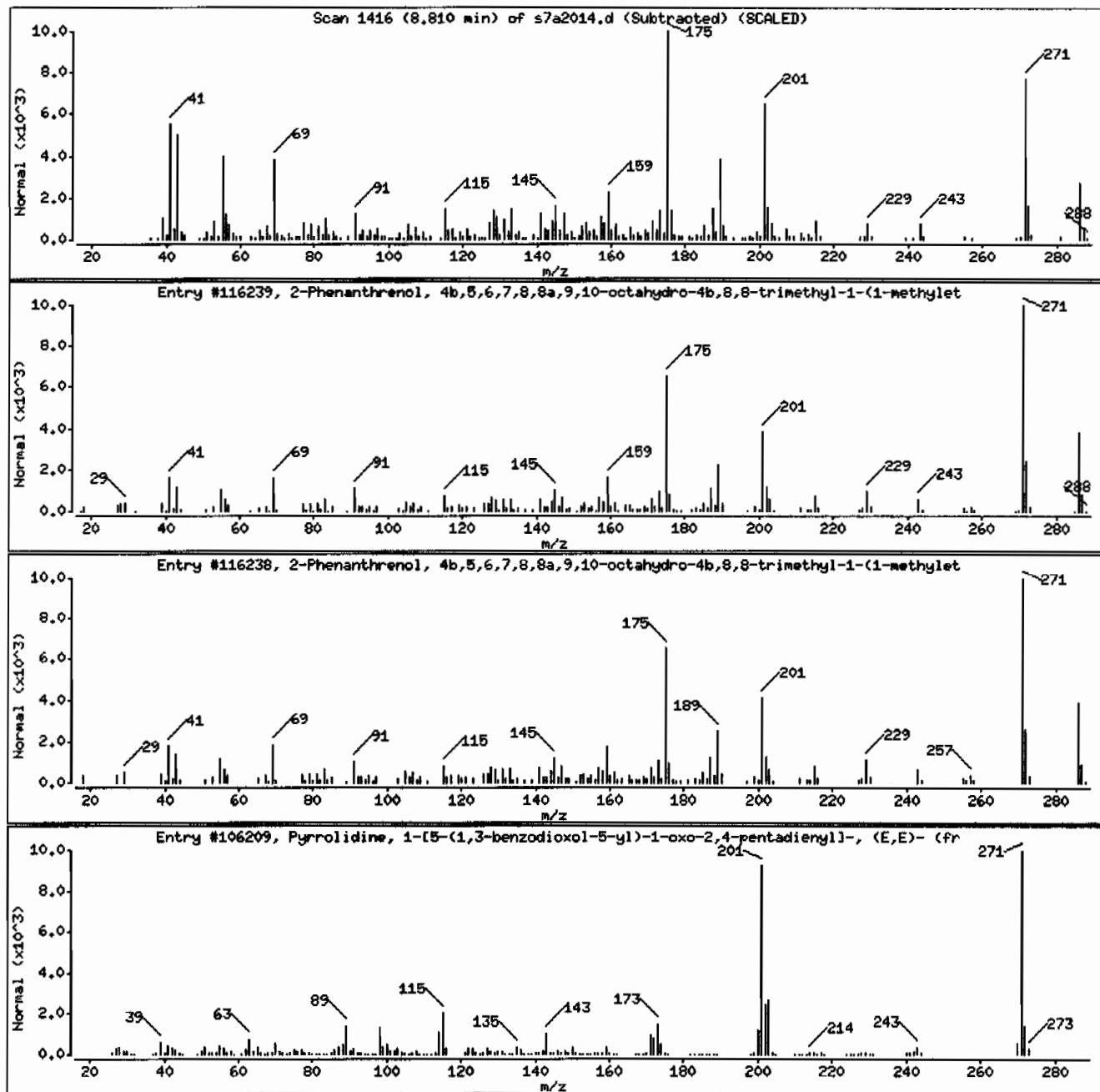
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116239	96	C20H30O	286
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116238	78	C20H30O	286
Pyrrolidine, 1-[5-(1,3-benzodioxol-5-yl)]	25924-78-1	NIST05.L	106209	38	C16H17NO3	271



Date : 20-JAN-2010 15:13

Client ID: RE12-10-7282

Instrument: MSD7.1

Sample Info: 1244599009194170211SVH111LANL

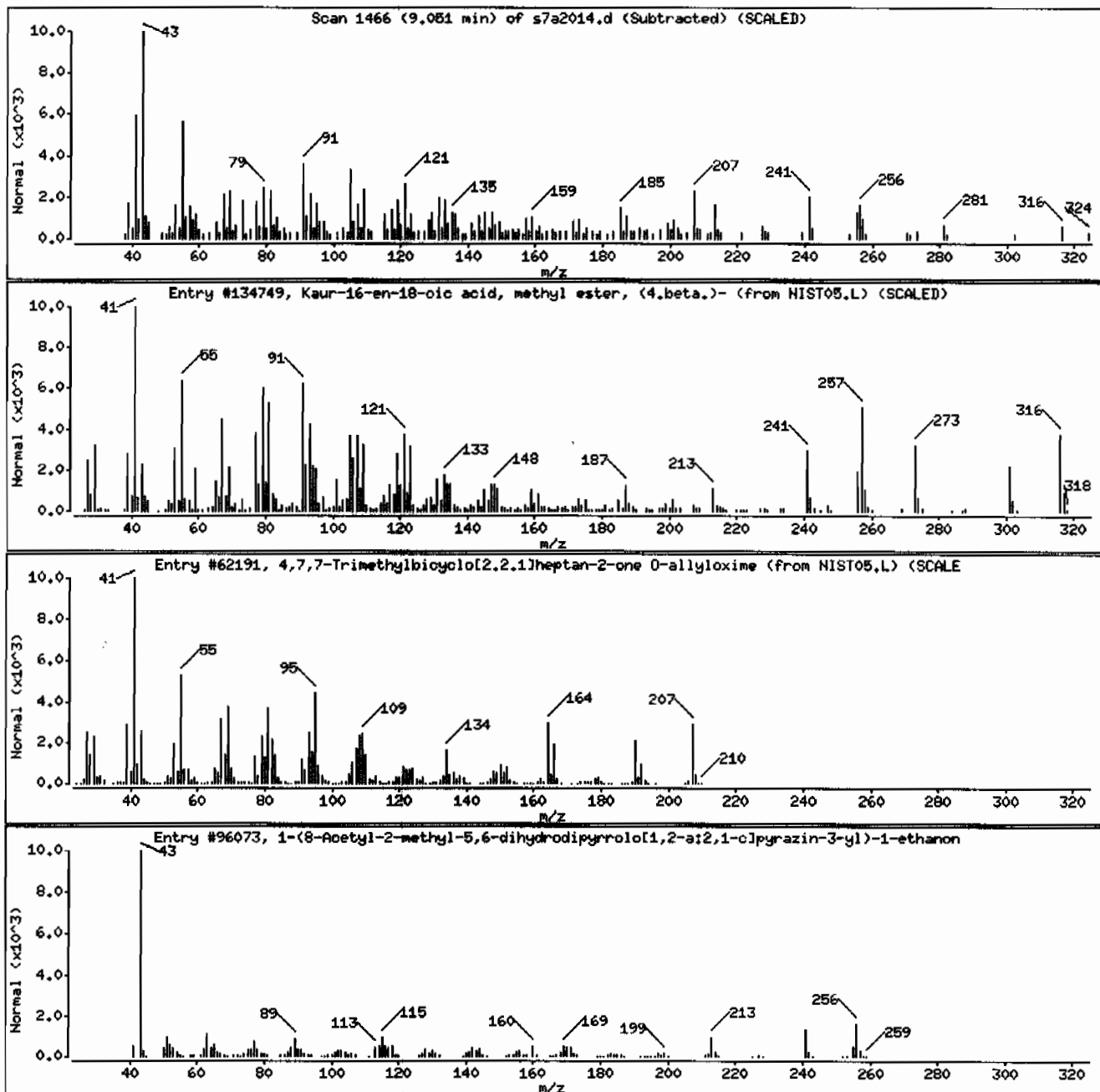
Volume Injected (uL): 0.5

Operator: JHB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Kaur-16-en-18-oic acid, methyl ester, (4	5524-25-4	NIST05.L	134749	41	C21H32O2	316
4,7,7-Trimethylbicyclo[2.2.1]heptan-2-on	1000210-89-8	NIST05.L	62191	18	C13H21NO	207
1-(8-Acetyl-2-methyl-5,6-dihydrodipyrrol	1000305-46-1	NIST05.L	96073	11	C15H16N2O2	256



Date : 20-JAN-2010 15:13

Client ID: RE12-10-7252

Instrument: HSD7.i

Sample Info: 1244599009194170211SVH111LANL

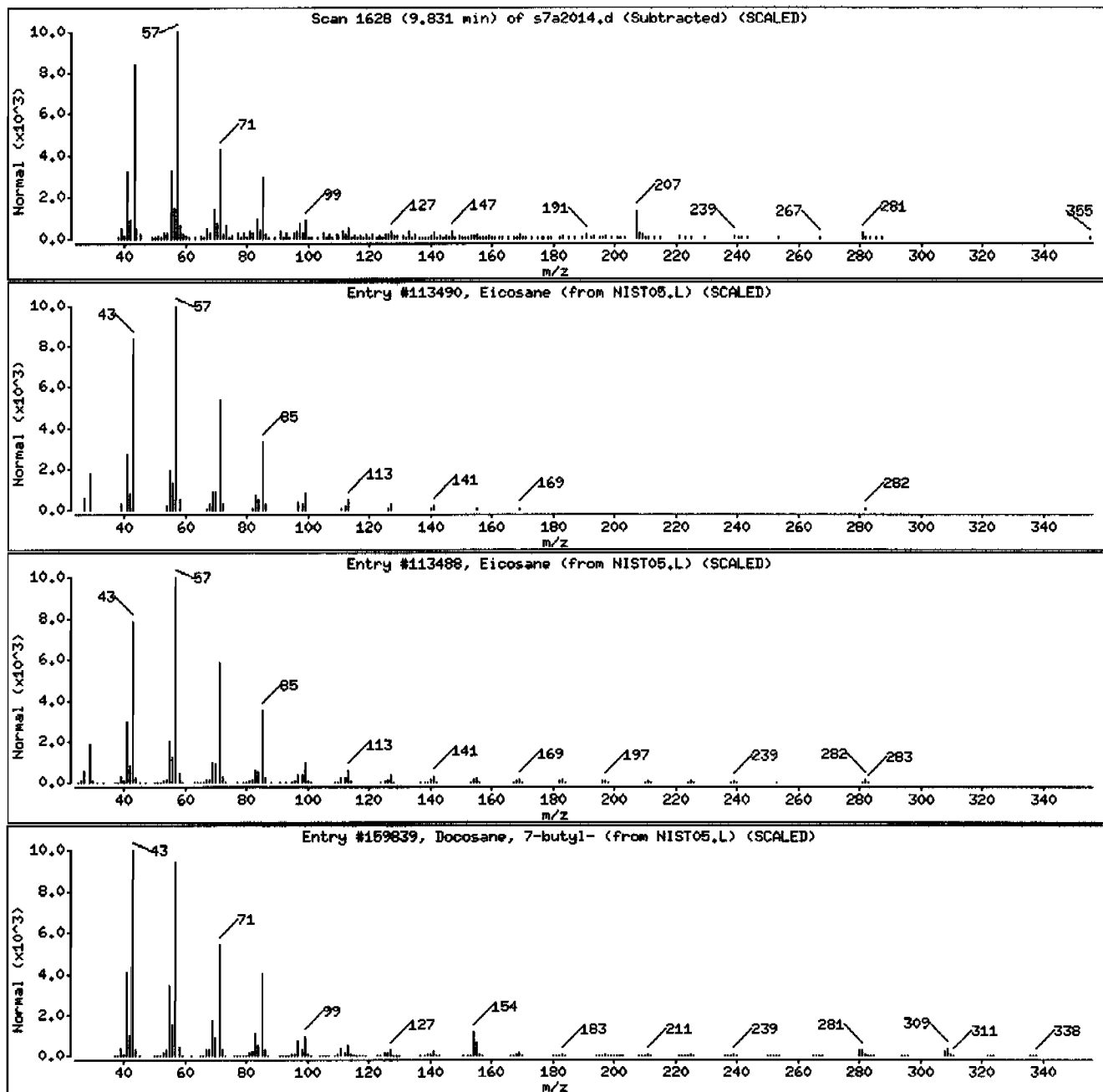
Volume Injected (uL): 0.8

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Eicosane	112-95-8	NIST05.L	113490	98	C <sub>20</sub> H <sub>42</sub>	282
Eicosane	112-95-8	NIST05.L	113488	96	C <sub>20</sub> H <sub>42</sub>	282
Docosane, 7-butyl-	55282-15-0	NIST05.L	159839	83	C <sub>26</sub> H <sub>54</sub>	366



Date : 20-JAN-2010 15:13

Client ID: RE12-10-7252

Instrument: HSD7.i

Sample Info: 1244599009194170211ISVH11LANL

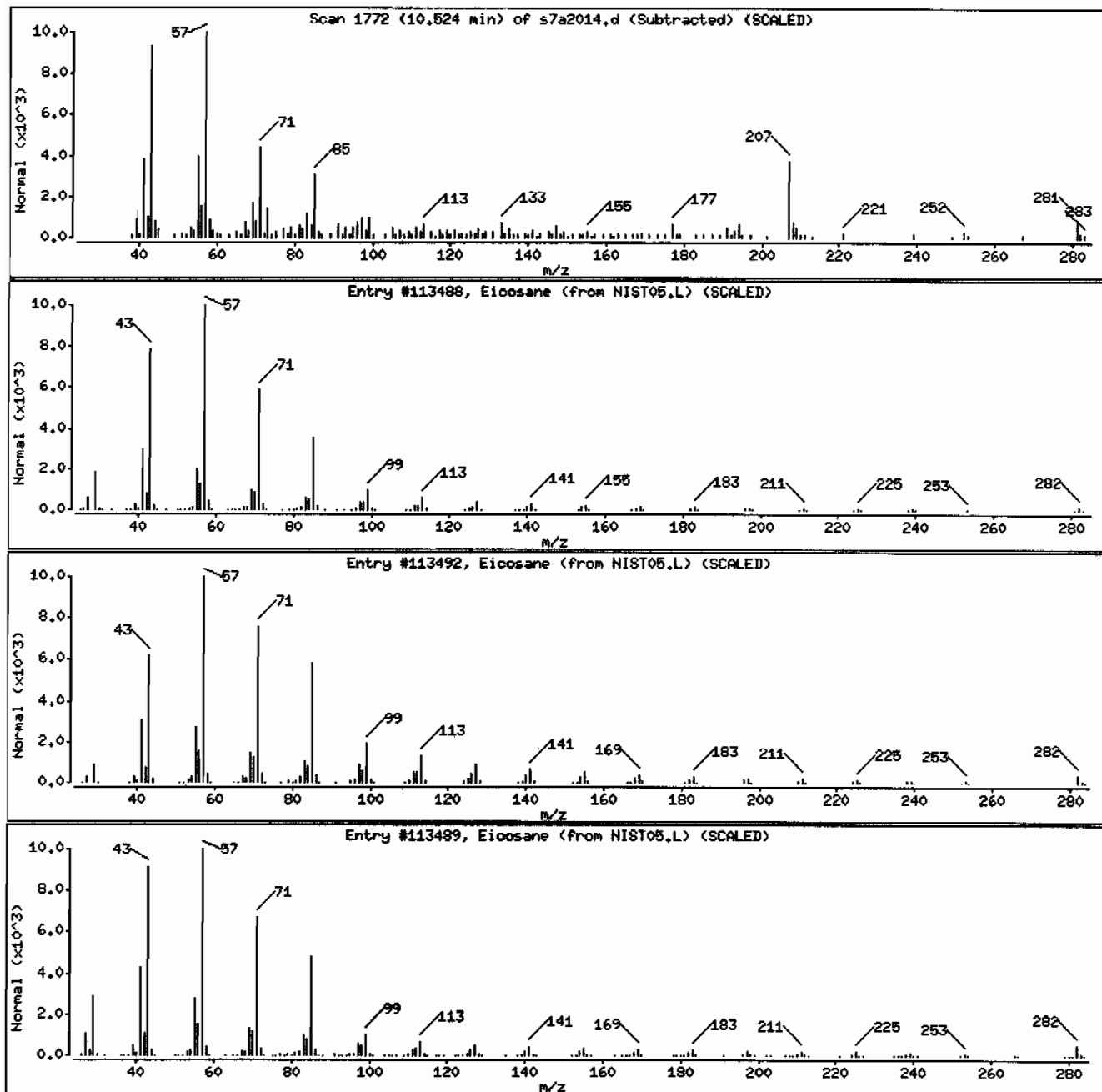
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Eicosane	112-95-8	NIST05.L	113488	96	C20H42	282
Eicosane	112-95-8	NIST05.L	113492	90	C20H42	282
Eicosane	112-95-8	NIST05.L	113489	89	C20H42	282



Date: 20-JAN-2010 15:13

Client ID: RE12-10-7252

Instrument: MSD7.1

Sample Info: 1244599009194170211ISVM11ILANL

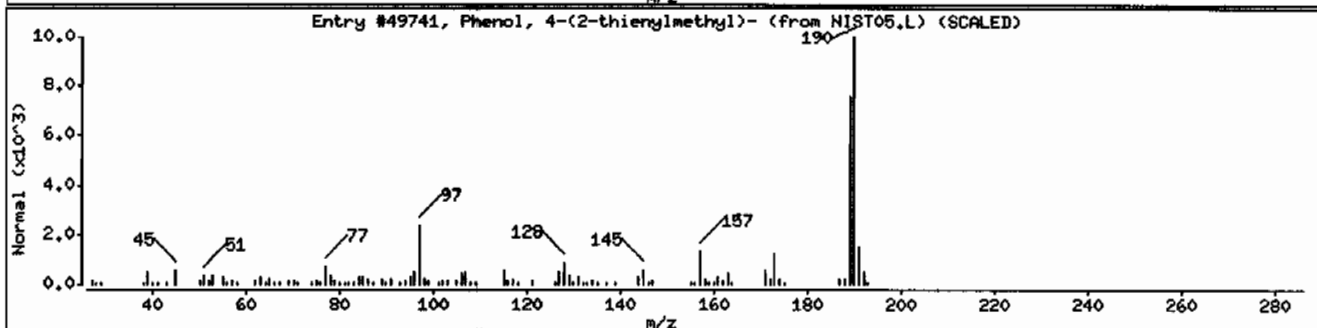
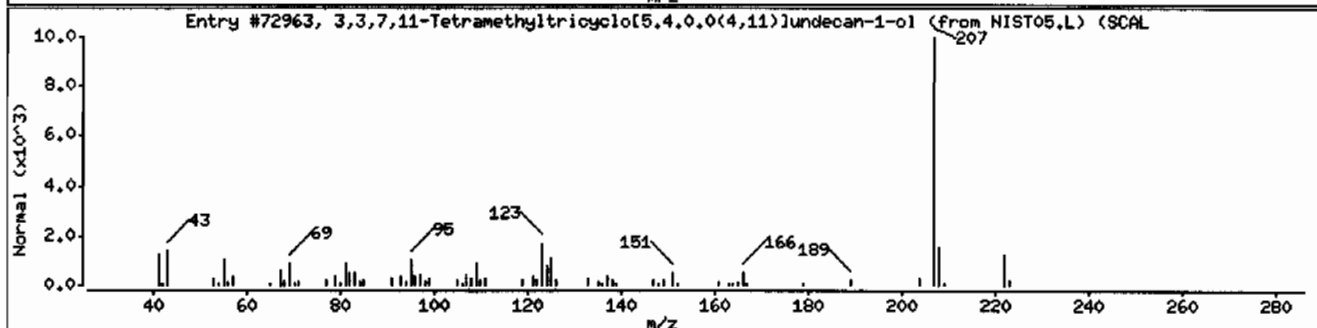
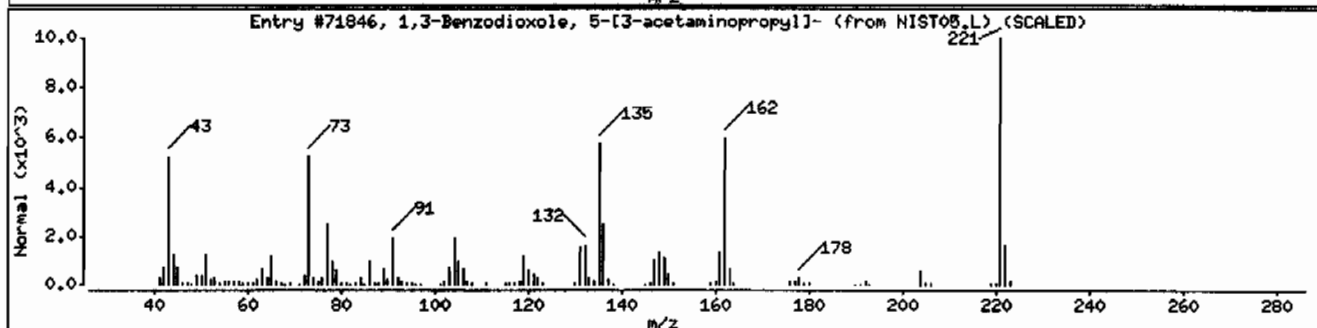
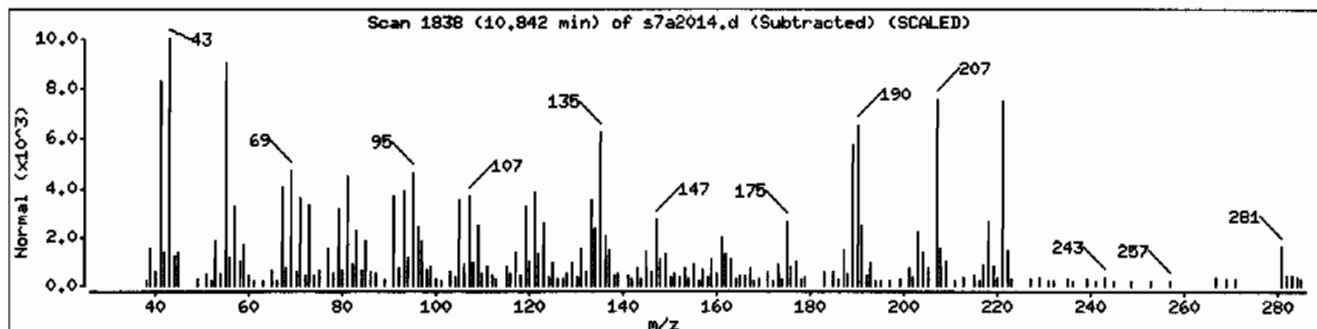
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,3-Benzodioxole, 5-[3-acetaminopropyl]-	1000124-33-0	NIST05.L	71846	35	C12H15NO3	221
3,3,7,11-Tetramethyltricyclo[5.4.0.0(4,1	117691-80-7	NIST05.L	72963	30	C15H26O	222
Phenol, 4-(2-thienylmethyl)-	91680-55-6	NIST05.L	49741	25	C11H10OS	190



Date : 20-JAN-2010 15:13

Client ID: RE12-10-7252

Instrument: HSD7.i

Sample Info: 1244599009194170211SVMI1:LANL

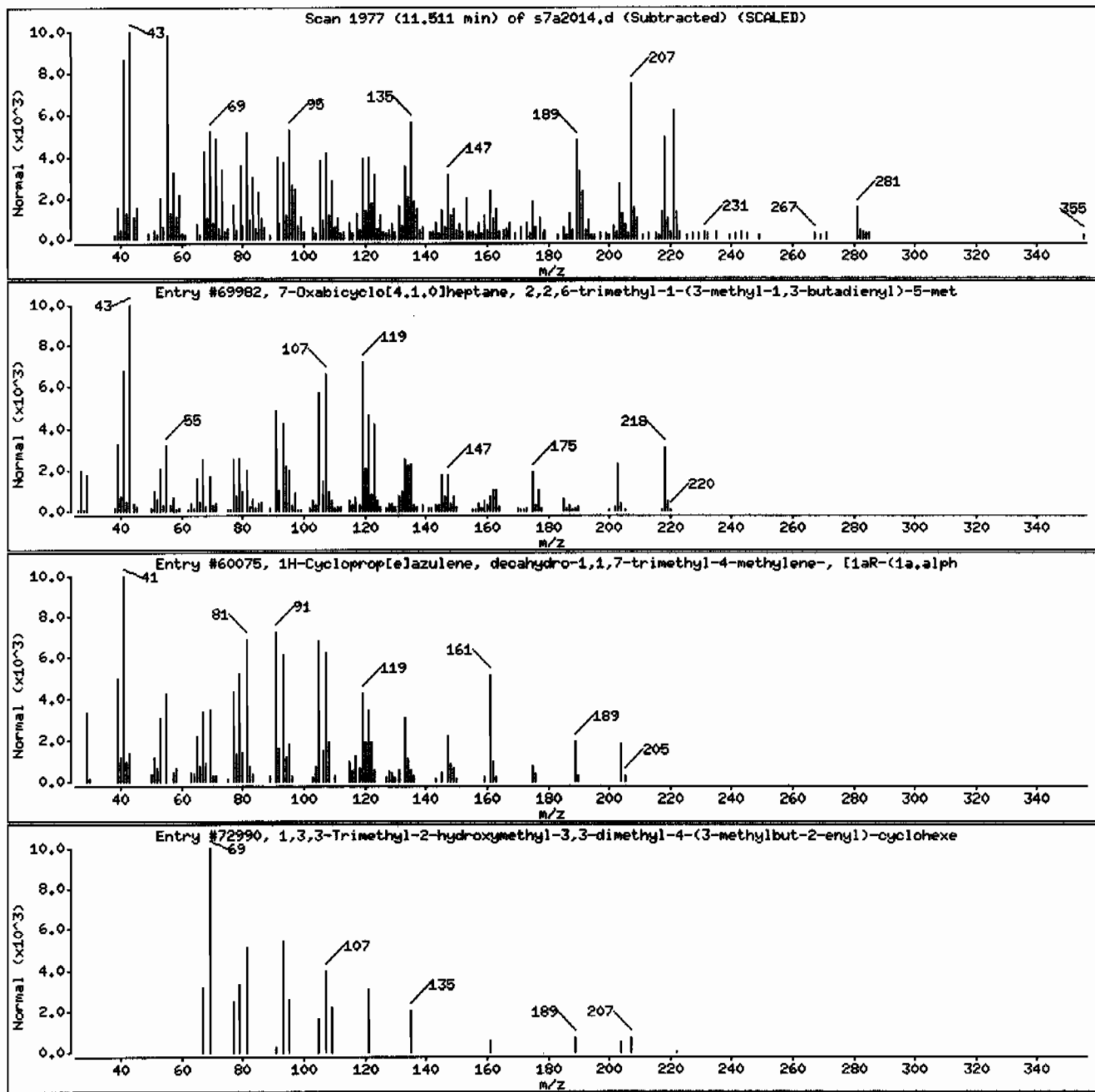
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
7-Oxabicyclo[4.1.0]heptane, 2,2,6-trimethyl	70038-20-9	NIST05.L	69982	76	C15H22O	218
1H-Cycloprop[elazulene, decahydro-1,1,7-	28246-27-9	NIST05.L	60075	43	C15H24	204
1,3,3-Trimethyl-2-hydroxymethyl-3,3-dime	1000144-10-7	NIST05.L	72990	38	C15H26O	222





Date : 20-JAN-2010 15:13

Client ID: RE12-10-7252

Instrument: MSD7.i

Sample Info: I244599009194170211ISVM111LANL

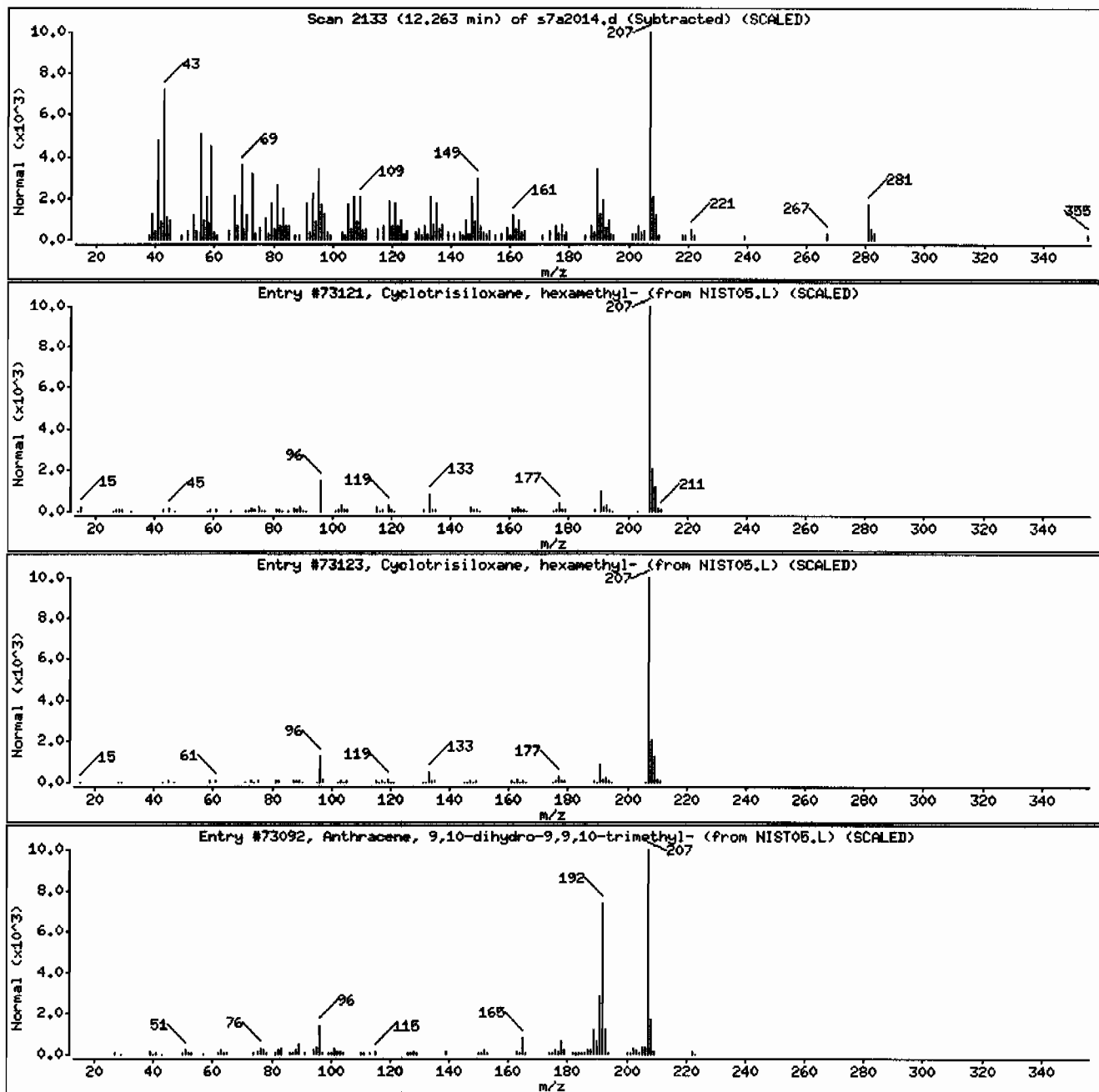
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73121	43	C <sub>6</sub> H <sub>18</sub> O <sub>3</sub> Si <sub>3</sub>	222
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73123	43	C <sub>6</sub> H <sub>18</sub> O <sub>3</sub> Si <sub>3</sub>	222
Anthracene, 9,10-dihydro-9,9,10-trimethyl-	14923-29-6	NIST05.L	73092	27	C <sub>17</sub> H <sub>18</sub>	222



Date : 20-JAN-2010 15:13

Client ID: RE12-10-7252

Instrument: HSD7.i

Sample Info: 12445990091941702111SVH111LANL

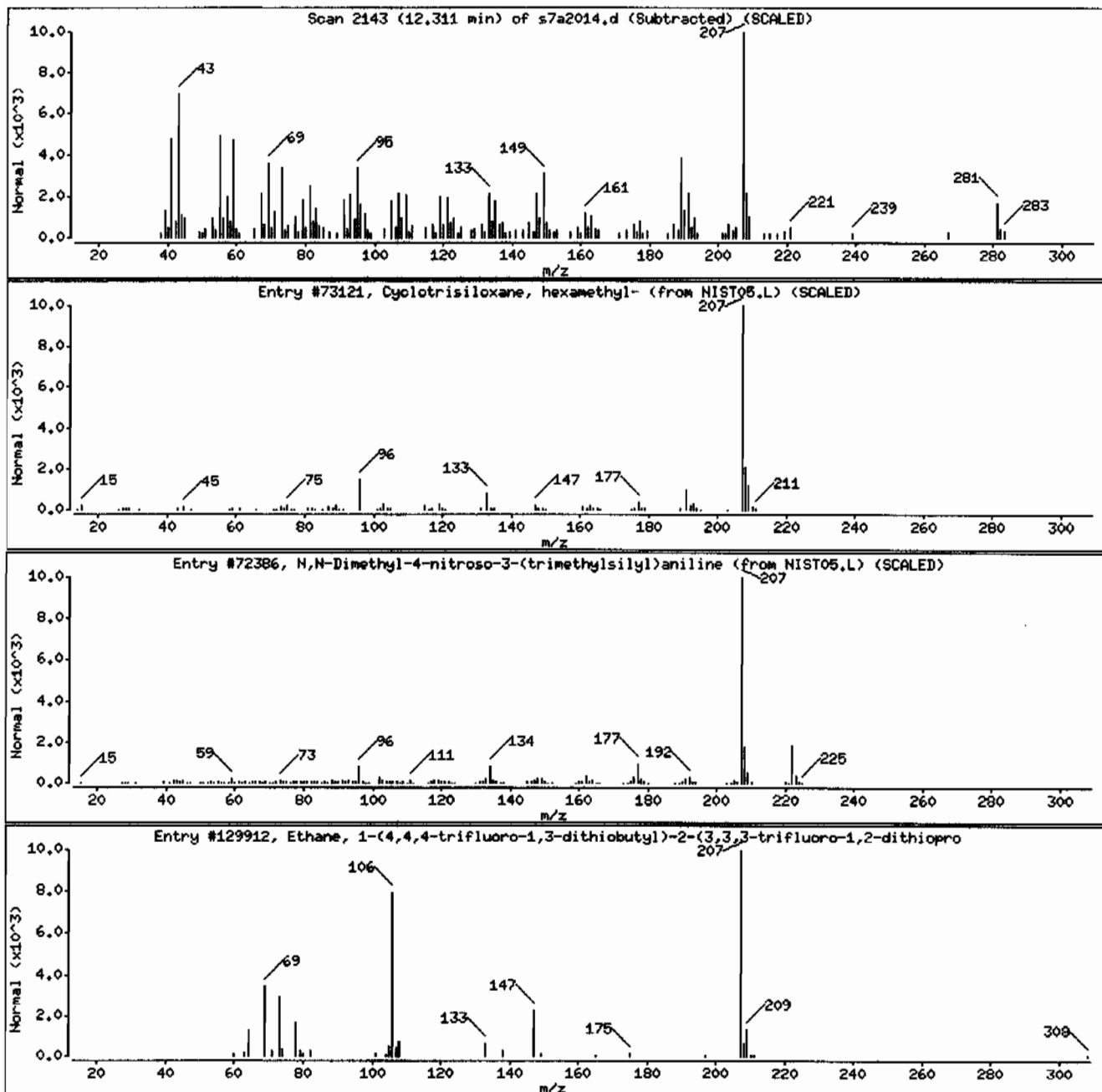
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73121	46	C <sub>6</sub> H <sub>18</sub> O <sub>3</sub> Si <sub>3</sub>	222
N,N-Dimethyl-4-nitroso-3-(trimethylsilyl)	17993-84-9	NIST05.L	72386	27	C <sub>11</sub> H <sub>18</sub> N <sub>2</sub> O <sub>3</sub> Si	222
Ethane, 1-(4,4,4-trifluoro-1,3-dithiobut	1000226-87-3	NIST05.L	129912	25	C <sub>5</sub> H <sub>6</sub> F <sub>6</sub> S <sub>4</sub>	308



Date: 20-JAN-2010 15:13

Client ID: RE12-10-7252

Instrument: MSD7.i

Sample Info: 12445990091941702111SVH111LANL

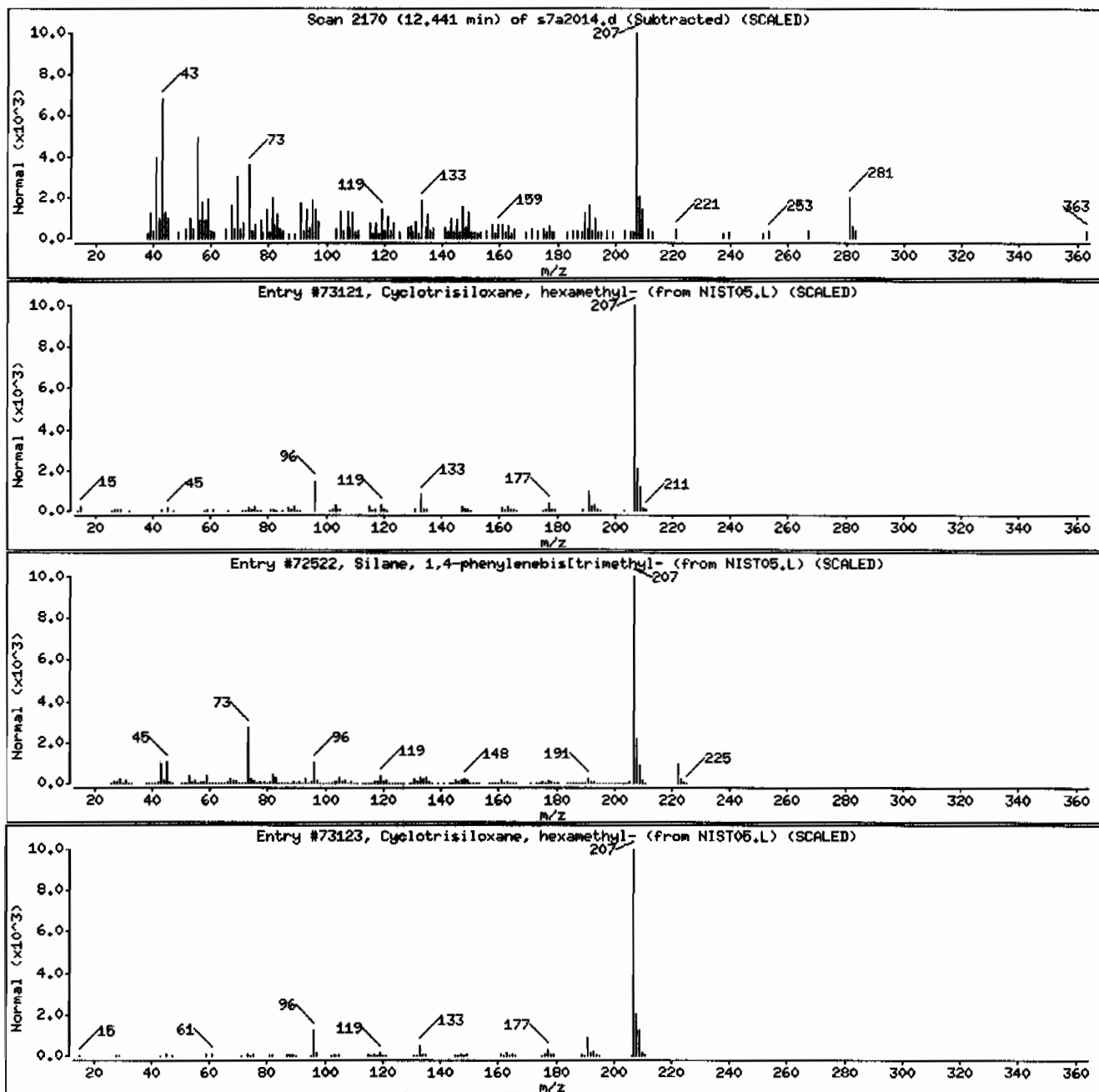
Volume Injected (uL): 0.5

Operator: JHB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73121	53	C6H18O3Si3	222
Silane, 1,4-phenylenebis(trimethyl)-	13183-70-5	NIST05.L	72522	53	C12H22Si2	222
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73123	53	C6H18O3Si3	222



Date : 20-JAN-2010 15:13

Client ID: RE12-10-7252

Instrument: MSD7.i

Sample Info: 1244599009194170211SVH111LANL

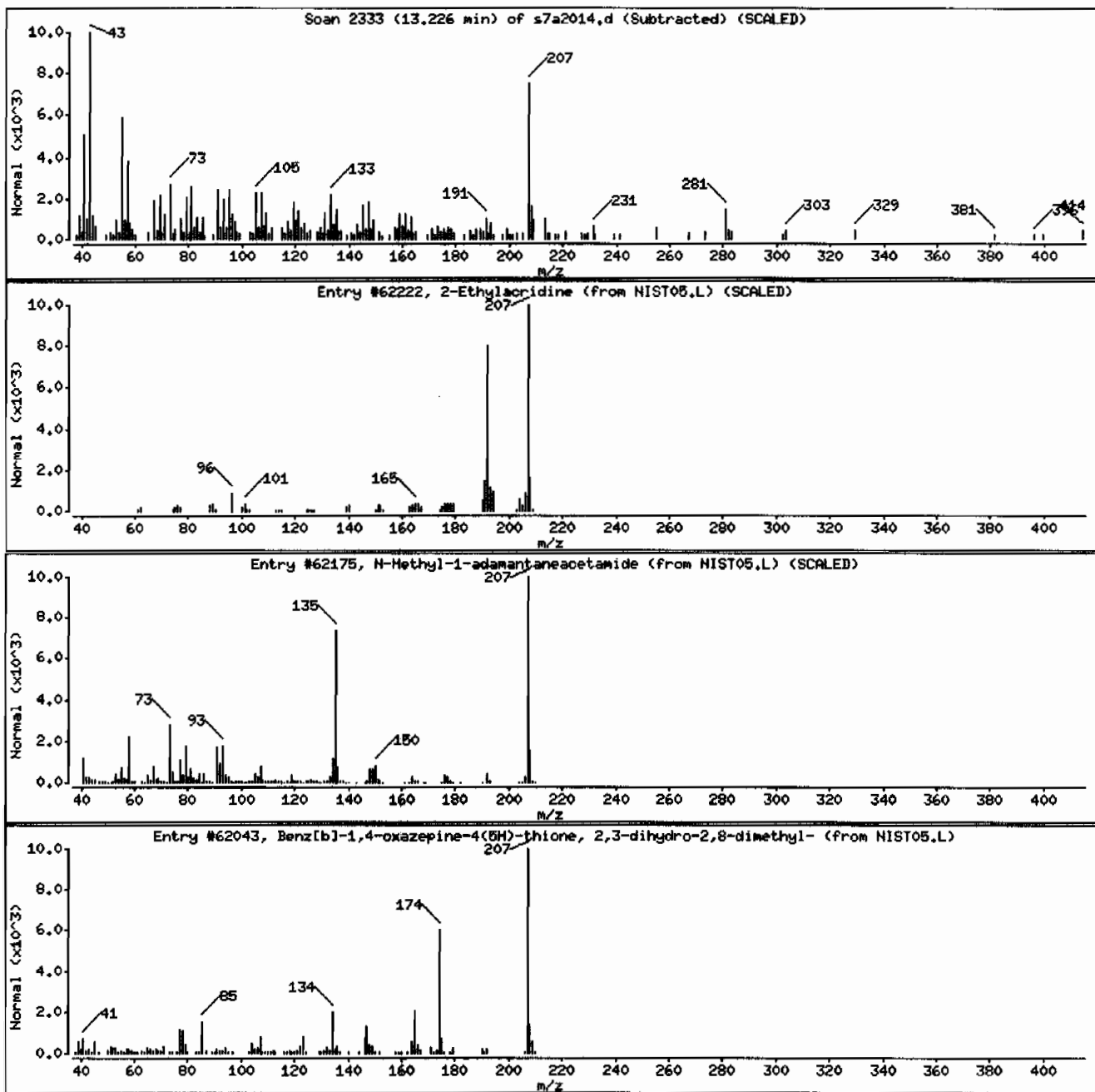
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Ethylacridine	55751-83-2	NIST05.L	62222	46	C15H13N	207
N-Methyl-1-adamantaneacetamide	31897-93-5	NIST05.L	62175	43	C13H21NO	207
Benz[b]-1,4-oxazepine-4(5H)-thione, 2,3-	1000258-63-4	NIST05.L	62043	41	C11H13NOS	207



Date: 20-JAN-2010 15:13

Client ID: RE12-10-7252

Instrument: MSD7.i

Sample Info: 12445990091941702111SVH111LANL

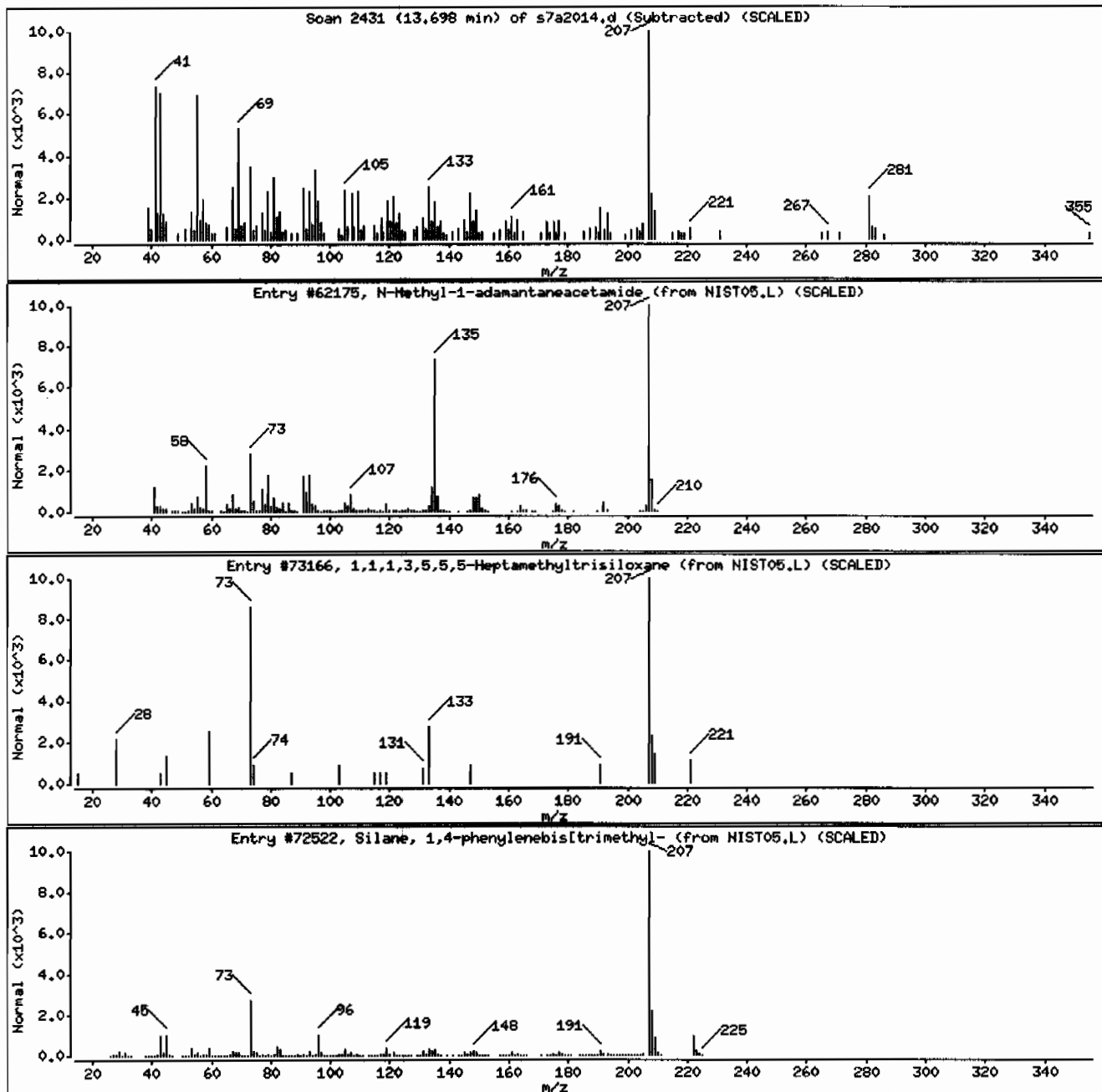
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
N-Methyl-1-adamantaneacetamide	31897-93-5	NIST05.L	62175	45	C13H21NO	207
1,1,1,3,5,5,5-Heptamethyltrisiloxane	1873-88-7	NIST05.L	73166	43	C7H22O2Si3	222
Silane, 1,4-phenylenebis(trimethyl-	13183-70-5	NIST05.L	72522	38	C12H22Si2	222



Date : 20-JAN-2010 15:13

Client ID: RE12-10-7252

Instrument: HSD7.i

Sample Info: 1244599009194170211SVH11/LANL

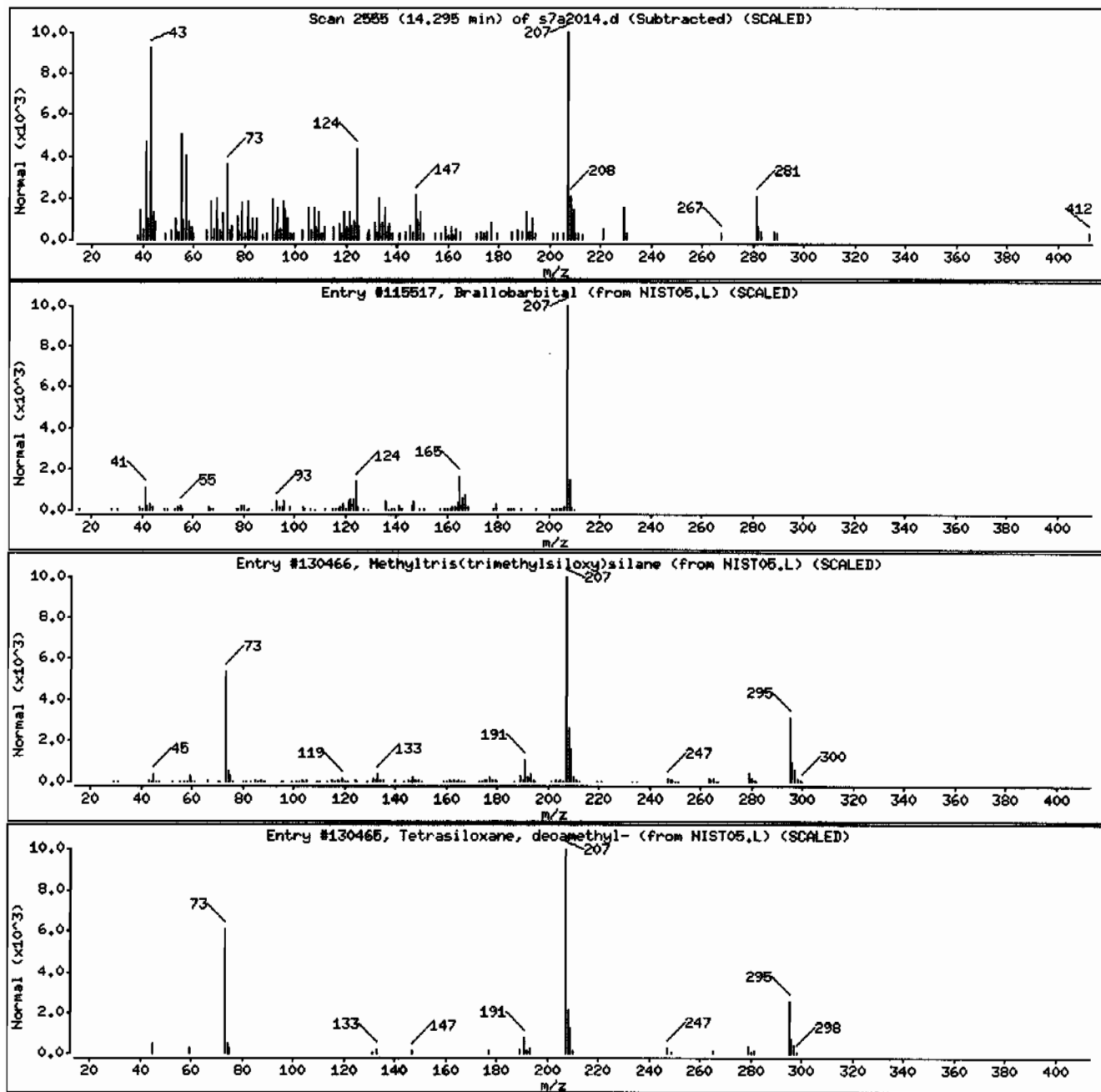
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Brallobarbitol	561-86-4	NIST05.L	115517	47	C10H11BrN2O3	286
Methyltris(trimethylsiloxy)silane	17928-28-8	NIST05.L	130466	38	C10H30O3Si4	310
Tetrasiloxane, decamethyl-	141-62-8	NIST05.L	130465	38	C10H30O3Si4	310



**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

<b>SDG Number:</b> 10-1210	<b>Date Collected:</b> 01/07/2010 12:00	<b>Matrix:</b> R
<b>Lab Sample ID:</b> 244599010	<b>Date Received:</b> 01/13/2010 08:55	<b>%Moisture:</b> 3.3
<b>Client ID:</b> RE12-10-7253	<b>Client:</b> LANL010	<b>Project:</b> LANL01004
<b>Batch ID:</b> 941702	<b>Method:</b> SW846 8270C	<b>SOP Ref:</b> GL-OA-E-009
<b>Run Date:</b> 01/20/2010 15:35	<b>Inst:</b> MSD7.I	<b>Dilution:</b> 1
<b>Prep Date:</b> 01/14/2010 19:34	<b>Analyst:</b> JMB3	<b>Inj. Vol:</b> .5 uL
<b>Data File:</b> s7a2015.d	<b>Aliquot:</b> 30.03 g	<b>Final Volume:</b> 1 mL
	<b>Column:</b> J&W DB-5MS	<b>Level:</b> LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	344	ug/kg	68.8	344
108-95-2	Phenol	U	344	ug/kg	68.8	344
95-57-8	2-Chlorophenol	U	344	ug/kg	68.8	344
106-46-7	1,4-Dichlorobenzene	U	344	ug/kg	68.8	344
621-64-7	N-Nitrosodipropylamine	U	344	ug/kg	68.8	344
59-50-7	4-Chloro-3-methylphenol	U	344	ug/kg	68.8	344
83-32-9	Acenaphthene	U	34.4	ug/kg	11.4	34.4
121-14-2	2,4-Dinitrotoluene	U	344	ug/kg	34.4	344
100-02-7	4-Nitrophenol	U	344	ug/kg	114	344
87-86-5	Pentachlorophenol	U	344	ug/kg	86.1	344
129-00-0	Pyrene	U	34.4	ug/kg	10.3	34.4
110-86-1	Pyridine	U	344	ug/kg	68.8	344
62-53-3	Aniline	U	344	ug/kg	103	344
111-44-4	bis(2-Chloroethyl) ether	U	344	ug/kg	68.8	344
541-73-1	1,3-Dichlorobenzene	U	344	ug/kg	68.8	344
100-51-6	Benzyl alcohol	U	344	ug/kg	103	344
95-50-1	1,2-Dichlorobenzene	U	344	ug/kg	68.8	344
108-60-1	bis(2-Chloroisopropyl)ether	U	344	ug/kg	68.8	344
95-48-7	o-Cresol	U	344	ug/kg	68.8	344
65794-96-9	m,p-Cresols	U	344	ug/kg	103	344
67-72-1	Hexachloroethane	U	344	ug/kg	68.8	344
98-95-3	Nitrobenzene	U	344	ug/kg	68.8	344
78-59-1	Isophorone	U	344	ug/kg	68.8	344
88-75-5	2-Nitrophenol	U	344	ug/kg	68.8	344
105-67-9	2,4-Dimethylphenol	U	344	ug/kg	120	344
111-91-1	bis(2-Chloroethoxy)methane	U	344	ug/kg	68.8	344
120-83-2	2,4-Dichlorophenol	U	344	ug/kg	68.8	344
65-85-0	Benzoic acid	U	688	ug/kg	172	688
91-20-3	Naphthalene	U	34.4	ug/kg	10.3	34.4
106-47-8	4-Chloroaniline	U	344	ug/kg	68.8	344
87-68-3	Hexachlorobutadiene	U	344	ug/kg	68.8	344
91-57-6	2-Methylnaphthalene	U	34.4	ug/kg	6.88	34.4
77-47-4	Hexachlorocyclopentadiene	U	344	ug/kg	68.8	344
88-06-2	2,4,6-Trichlorophenol	U	344	ug/kg	68.8	344
95-95-4	2,4,5-Trichlorophenol	U	344	ug/kg	68.8	344
91-58-7	2-Chloronaphthalene	U	34.4	ug/kg	11.4	34.4
88-74-4	2-Nitroaniline	U	344	ug/kg	68.8	344
99-09-2	<i>o</i> -Nitroaniline	U	344	ug/kg	68.8	344
	3-Nitroaniline					

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210	Date Collected: 01/07/2010 12:00	Matrix: R
Lab Sample ID: 244599010	Date Received: 01/13/2010 08:55	%Moisture: 3.3
Client ID: RE12-10-7253	Client: LANL010	Project: LANL01004
Batch ID: 941702	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/20/2010 15:35	Inst: MSD7.I	Dilution: 1
Prep Date: 01/14/2010 19:34	Analyst: JMB3	Inj. Vol: .5 uL
Data File: s7a2015.d	Aliquot: 30.03 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	344	ug/kg	68.8	344
606-20-2	2,6-Dinitrotoluene	U	344	ug/kg	34.4	344
208-96-8	Acenaphthylene	U	34.4	ug/kg	10.3	34.4
51-28-5	2,4-Dinitrophenol	U	688	ug/kg	131	688
132-64-9	Dibenzofuran	U	344	ug/kg	68.8	344
84-66-2	Diethylphthalate	U	344	ug/kg	68.8	344
86-73-7	Fluorene	U	34.4	ug/kg	10.3	34.4
7005-72-3	4-Chlorophenylphenylether	U	344	ug/kg	68.8	344
534-52-1	2-Methyl-4,6-dinitrophenol	U	344	ug/kg	68.8	344
100-01-6	4-Nitroaniline	U	344	ug/kg	103	344
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	344	ug/kg	68.8	344
122-66-7	Azobenzene	U	344	ug/kg	68.8	344
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	344	ug/kg	68.8	344
118-74-1	Hexachlorobenzene	U	344	ug/kg	68.8	344
85-01-8	Phenanthrene	U	34.4	ug/kg	10.3	34.4
120-12-7	Anthracene	U	34.4	ug/kg	6.88	34.4
84-74-2	Di-n-butylphthalate	U	344	ug/kg	68.8	344
206-44-0	Fluoranthene	U	34.4	ug/kg	10.3	34.4
85-68-7	Butylbenzylphthalate	U	344	ug/kg	68.8	344
56-55-3	Benzo(a)anthracene	U	34.4	ug/kg	10.3	34.4
91-94-1	3,3'-Dichlorobenzidine	U	344	ug/kg	103	344
218-01-9	Chrysene	U	34.4	ug/kg	10.3	34.4
117-81-7	bis(2-Ethylhexyl)phthalate	U	344	ug/kg	68.8	344
117-84-0	Di-n-octylphthalate	U	344	ug/kg	68.8	344
205-99-2	Benzo(b)fluoranthene	U	34.4	ug/kg	10.3	34.4
207-08-9	Benzo(k)fluoranthene	U	34.4	ug/kg	10.3	34.4
50-32-8	Benzo(a)pyrene	U	34.4	ug/kg	10.3	34.4
193-39-5	Indeno(1,2,3-cd)pyrene	U	34.4	ug/kg	10.3	34.4
53-70-3	Dibenzo(a,h)anthracene	U	34.4	ug/kg	10.3	34.4
191-24-2	Benzo(ghi)perylene	U	34.4	ug/kg	10.3	34.4
120-82-1	1,2,4-Trichlorobenzene	U	344	ug/kg	68.8	344

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.83	566	ug/kg		J
77-53-2	Cedrol	6.39	202	ug/kg	94	NJ



Semi-Volatile  
Certificate of Analysis  
Sample Summary

SDG Number: 10-1210	Date Collected: 01/07/2010 12:00	Matrix: R
Lab Sample ID: 244599010	Date Received: 01/13/2010 08:55	%Moisture: 3.3
	Client: LANL010	Project: LANL01004
Client ID: RE12-10-7253	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 941702	Inst: MSD7.1	Dilution: 1
Run Date: 01/20/2010 15:35	Analyst: JMB3	Inj. Vol: .5 uL
Prep Date: 01/14/2010 19:34	Aliquot: 30.03 g	Final Volume: 1 mL
Data File: s7a2015.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	8.81	507	ug/kg	96	NJ
	Unknown	9.83	161	ug/kg		J
	Unknown	10.84	293	ug/kg		J
	Unknown	11.51	418	ug/kg		J

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Data file : /chem/MSD7.i/s012010.b/s7a2015.d  
Lab Smp Id: 244599010 Client Smp ID: RE12-10-7253  
Inj Date : 20-JAN-2010 15:35  
Operator : JMB3 Inst ID: MSD7.i  
Smp Info : |244599010|941702|1|SVM|1|LANL  
Misc Info : |MSD8270\_S|WBN100107-02|  
Comment : Column: J&W Scientific DB-5MS 25m x 0.2mm x 0.33um film thickness  
Method : /chem/MSD7.i/s012010.b/MSD7-M8270C-AQA-011310.m  
Meth Date : 20-Jan-2010 13:15 jos00786 Quant Type: ISTD  
Cal Date : 15-JAN-2010 19:06 Cal File: s7a1515.d  
Als bottle: 14  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1210.sub  
Target Version: 3.50  
Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.03000	weight of sample
M	3.26110	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG			RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT REL RT		ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.792	3.793 (1.000)	359171	40.0000	
* 29 Naphthalene-d8	136	4.650	4.655 (1.000)	1346790	40.0000	
* 46 Acenaphthene-d10	164	5.892	5.897 (1.000)	701160	40.0000	
* 67 Phenanthrene-d10	188	7.043	7.043 (1.000)	1269902	40.0000	
* 91 Chrysene-d12	240	9.422	9.431 (1.000)	1028032	40.0000	
* 98 Perylene-d12	264	10.967	10.977 (1.000)	693229	40.0000	
\$ 3 2-Fluorophenol	112	2.993	2.984 (0.789)	687062	66.5684	2290
\$ 5 Phenol-d5	99	3.513	3.513 (0.926)	879782	66.1136	2280
\$ 20 Nitrobenzene-d5	82	4.149	4.154 (0.892)	419942	37.7995	1300
\$ 39 2-Fluorobiphenyl	172	5.391	5.391 (0.915)	747896	36.1974	1250
\$ 60 2,4,6-Tribromophenol	329	6.479	6.484 (1.100)	137974	78.2187	2690
\$ 81 p-Terphenyl-d14	244	8.406	8.406 (0.892)	781910	44.5316	1530

## ION RATIO REPORT

## SV REPORT

Data file: s7a2015.d

Report Date: 01/20/2010 15:55

Lab. ID: 244599010

SampleType: SAMPLE

Injection Date: 20-JAN-2010 15:35

Operator: JMB3

Instrument: MSD7.i

Sample Info: |244599010|941702|1|SVM|1|LANL

Miscellaneous Info: |MSD8270\_S|WBN100107-02|

Comment:

Method used: /chem/MSD7.i/s012010.b/MSD7-M8270C-AQA-011310.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1210

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4	Aniline	CAS#: 62-53-3				
66	45397	3.51	3.58	80-120	100	(T)
93	786	3.57	3.58	187-247	2	(Q)
-----						
17	N-Nitrosodipropylamine	CAS#: 621-64-7				
70	60494	4.15	4.03	80-120	100	(T)
42	46503	4.15	4.03	63-123	77	(T)
-----						
27	Benzoic acid	CAS#: 65-85-0				
105	343	4.41	4.43	80-120	100	( )
122	292	4.65	4.43	58-118	85	(T)
77	413	4.41	4.43	51-111	120	(Q)
-----						
40	2-Chloronaphthalene	CAS#: 91-58-7				
162	8062	5.63	5.50	80-120	100	(T)
164	310	5.63	5.50	2- 62	4	(T)
127	473	5.63	5.50	7- 67	6	(QT)
-----						
43	Dimethylphthalate	CAS#: 131-11-3				
163	125726	5.90	5.67	80-120	100	(T)
164	701160	5.89	5.67	0- 40	558	(QT)
-----						
44	2,6-Dinitrotoluene	CAS#: 606-20-2				
165	89251	5.89	5.72	80-120	100	(T)
63	1369	5.89	5.72	49-109	2	(QT)
-----						

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
50	2,4-Dinitrotoluene		CAS#: 121-14-2			
165	89251	5.89	6.01	80-120	100	(T)
89	1194	5.89	6.01	44-104	1	(QT)
63	1369	5.89	6.01	29- 89	2	(QT)
-----						
53	Fluorene		CAS#: 86-73-7			
166	11704	6.48	6.30	80-120	100	(T)
165	11983	6.48	6.30	56-116	102	(T)
167	4013	6.48	6.30	0- 44	34	(T)
-----						
61	4-Bromophenylphenylether		CAS#: 101-55-3			
248	10475	6.48	6.66	80-120	100	(T)
141	77205	6.48	6.66	57-117	737	(QT)
250	20698	6.48	6.66	68-128	198	(QT)

-----

Q qualifier indicates ion failed ratio requirement

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Data file : /chem/MSD7.i/s012010.b/s7a2015.d  
 Lab Smp Id: 244599010 Client Smp ID: RE12-10-7253  
 Inj Date : 20-JAN-2010 15:35  
 Operator : JMB3 Inst ID: MSD7.i  
 Smp Info : |244599010|941702|1|SVM|1|LANL  
 Misc Info : |MSD8270 S|WBN100107-02|  
 Comment : Column: J&W Scientific DB-5MS 25m x 0.2mm x 0.33um film thickness  
 Method : /chem/MSD7.i/s012010.b/MSD7-M8270C-AQA-011310.m  
 Meth Date : 20-Jan-2010 13:15 jos00786 Quant Type: ISTD  
 Cal Date : 15-JAN-2010 19:06 Cal File: s7a1515.d  
 Als bottle: 14  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: 10-1210.sub  
 Target Version: 3.50  
 Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.03000	weight of sample
M	3.26110	% moisture

Cpnd Variable Local Compound Variable

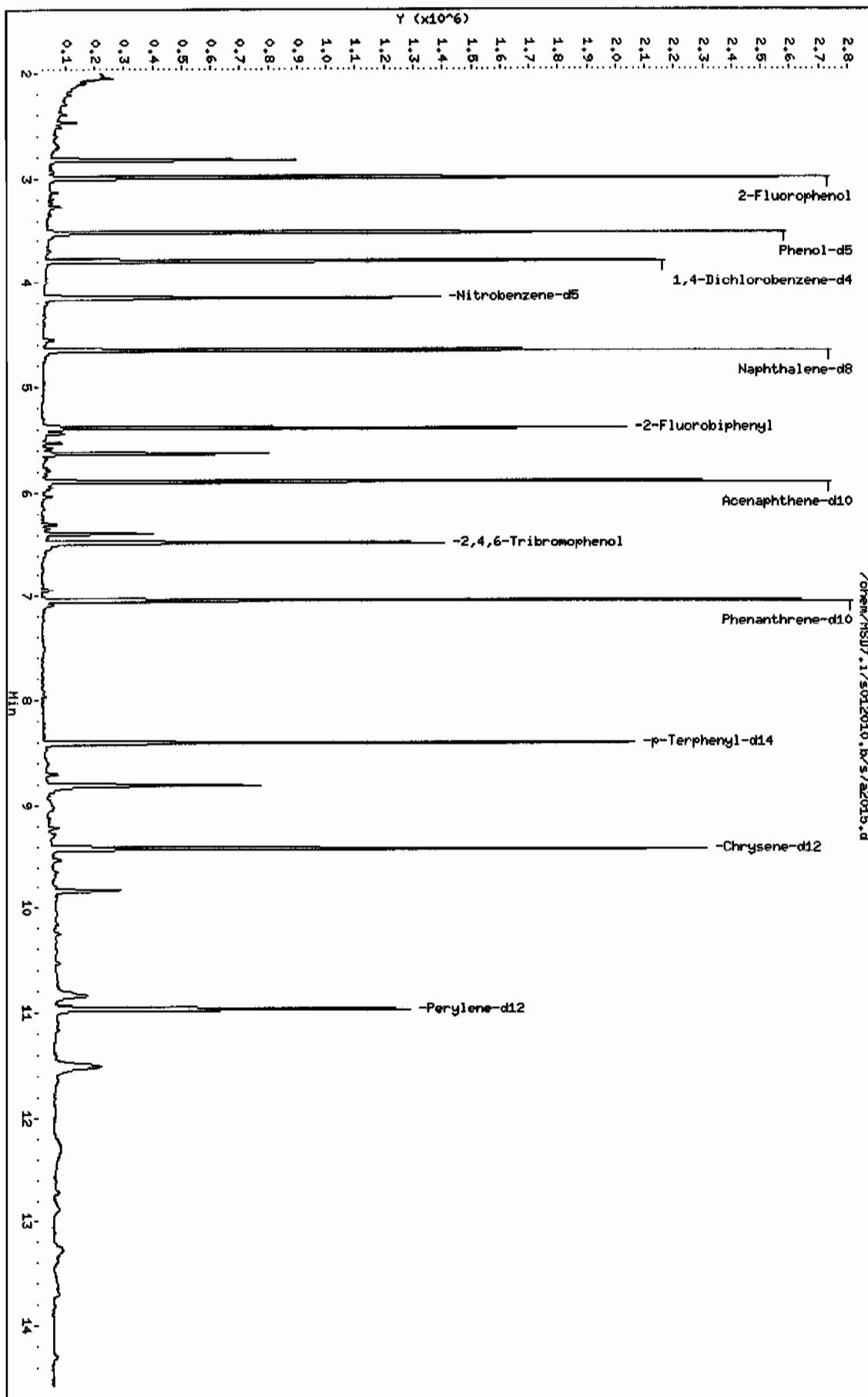
ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.792	2312920	40.000
* 46 Acenaphthene-d10	5.892	3020632	40.000
* 91 Chrysene-d12	9.422	2828299	40.000
* 98 Perylene-d12	10.967	2052206	40.000

CONCENTRATIONS				QUANT		
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY CPND #
----	----	-----	-----	----	-----	-----

CONCENTRATIONS				QUANT			
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate				CAS #:			
2.829	950879	16.4446447	566	0		0	10
Cedrol				CAS #: 77-53-2			
6.388	442346	5.85765951	202	94	NIST05.L	72884	46
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa				CAS #: 511-15-9			
8.810	1041301	14.7268842	507	96	NIST05.L	116239	91
Unknown				CAS #:			
9.826	330727	4.67739287	161	0		0	91
Unknown				CAS #:			
10.837	436486	8.50763865	293	0		0	98
Unknown				CAS #:			
11.507	623279	12.1484690	418	0		0	98

Data File: /chem/MSD7.i/s012010.b/s7a2015.d  
Date : 20-JAN-2010 15:35  
Client ID: RE12-10-7253  
Sample Info: 1244599010194170211SVN11.LANL  
Volume Injected (uL): 0.5  
Column phase: J&W DB-SMS

Instrument: MSD7.i  
Operator: JMB3  
Column diameter: 0.20



Date : 20-JAN-2010 15:35

Client ID: RE12-10-7253

Instrument: MSD7.i

Sample Info: 1244599010194170211ISVM11ILANL

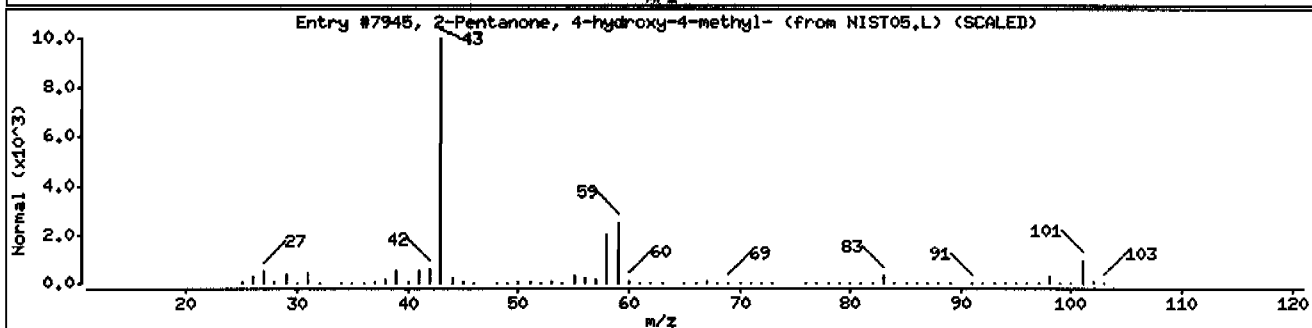
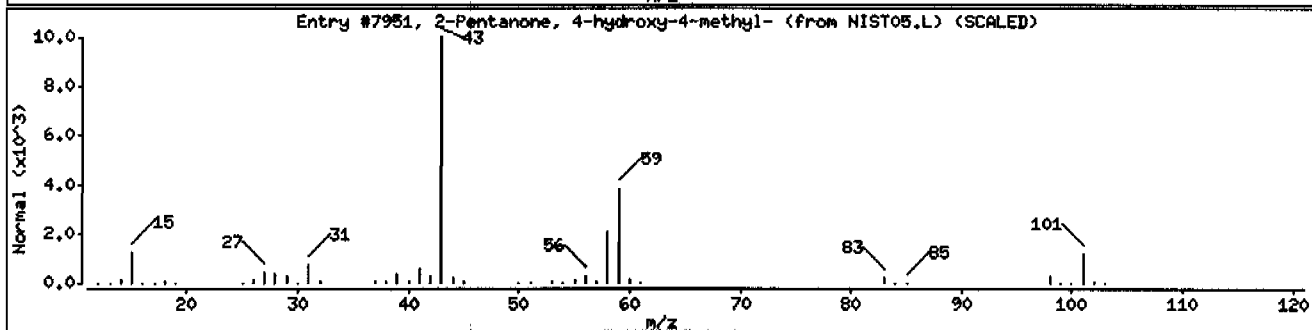
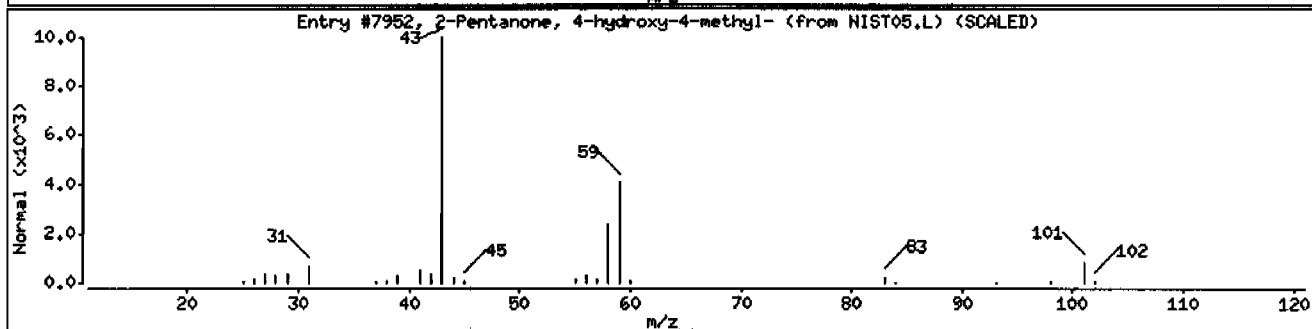
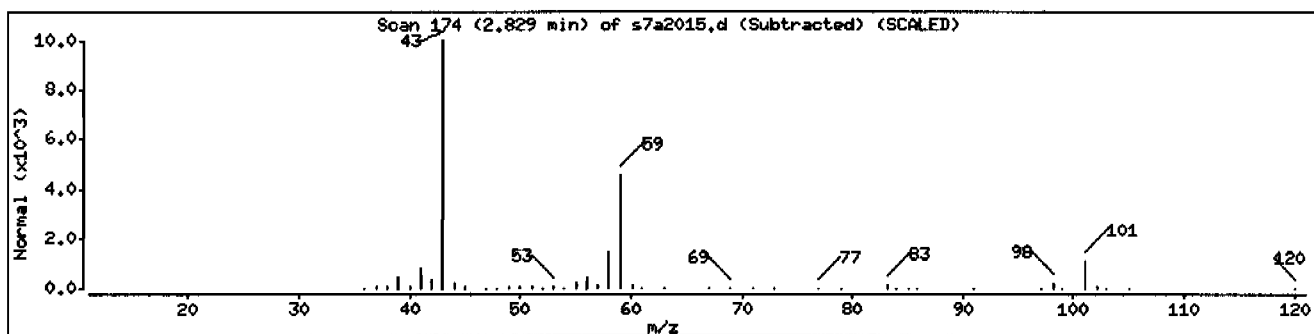
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7962	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7961	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	38	C6H12O2	116





Date: 20-JAN-2010 15:35

Client ID: RE12-10-7253

Instrument: MSD7.i

Sample Info: 12445990101941702111SVMI11LANL

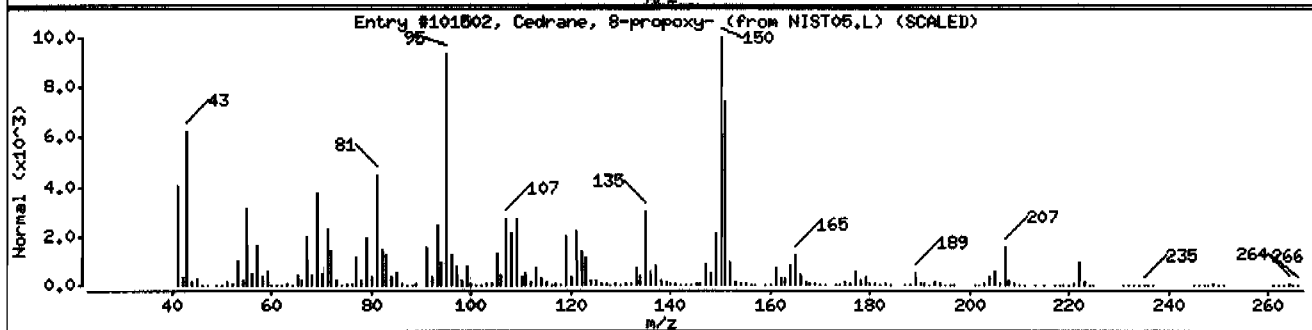
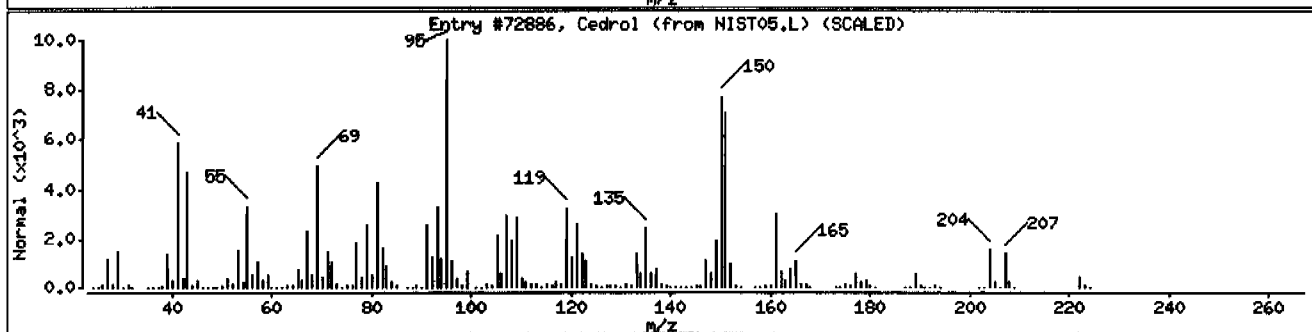
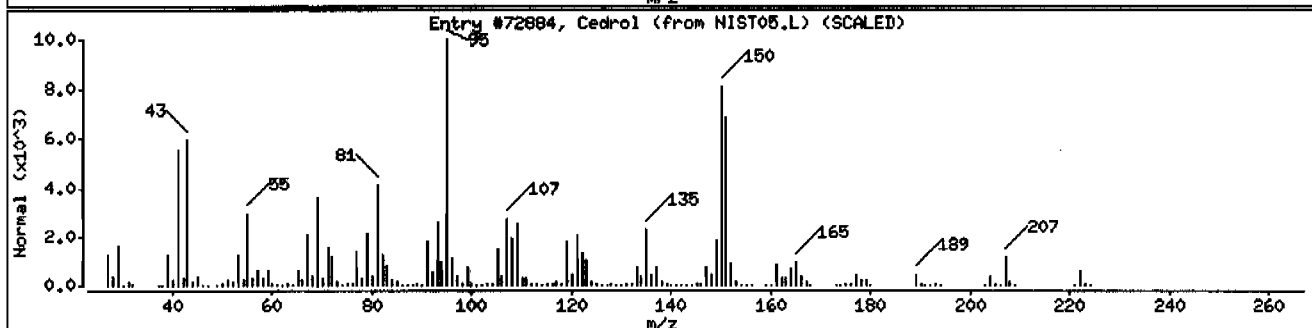
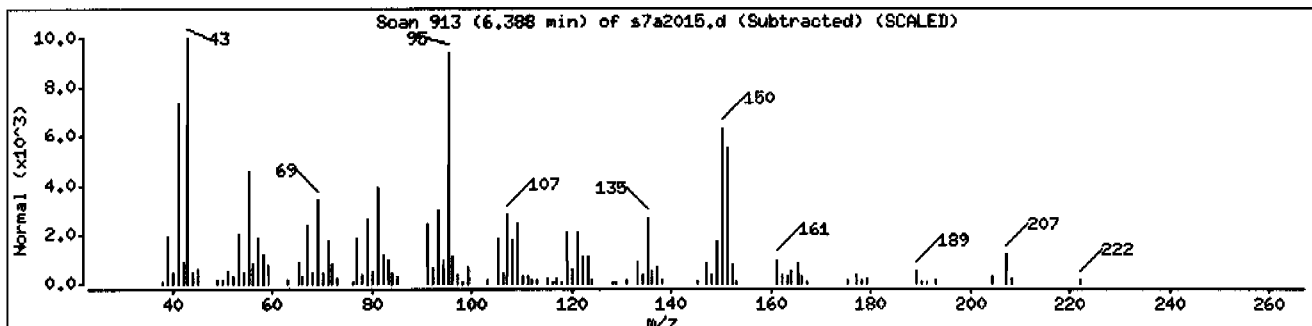
Volume Injected (UL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cedrol	77-53-2	NIST05.L	72884	94	C <sub>15</sub> H <sub>26</sub> O	222
Cedrol	77-53-2	NIST05.L	72886	91	C <sub>15</sub> H <sub>26</sub> O	222
Cedrane, 8-propoxy-	19870-75-8	NIST05.L	101502	91	C <sub>18</sub> H <sub>32</sub> O	264



Date: 20-JAN-2010 15:35

Client ID: RE12-10-7253

Instrument: MSD7.i

Sample Info: I244599010194170211SVH11LANL

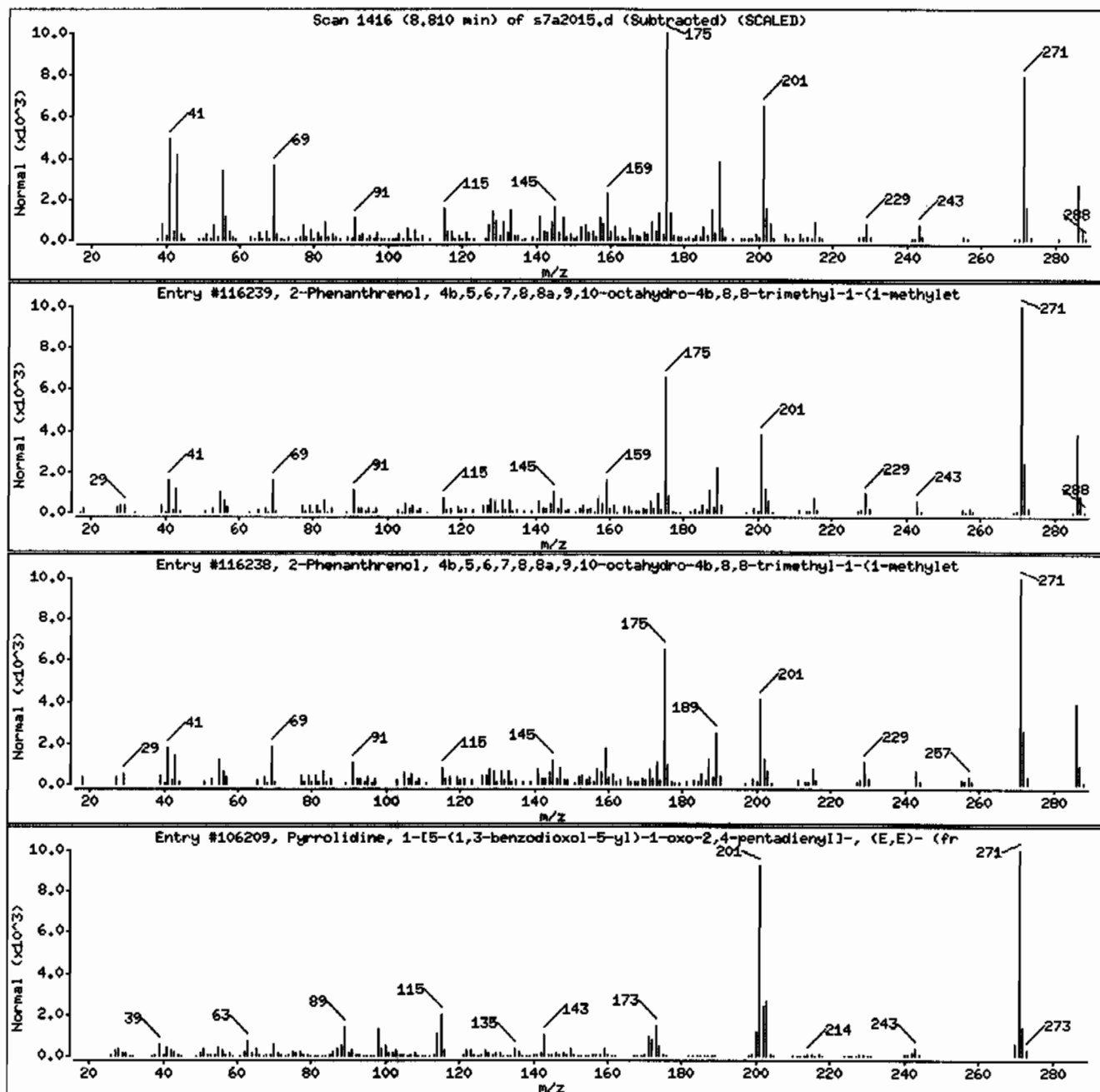
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116239	96	C20H30O	286
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116238	46	C20H30O	286
Pyrrolidine, 1-[5-(1,3-benzodioxol-5-yl)]	25924-78-1	NIST05.L	106209	41	C16H17NO3	271



Date : 20-JAN-2010 15:35

Client ID: RE12-10-7253

Instrument: MSD7,i

Sample Info: 12445990101941702111SVH111LANL

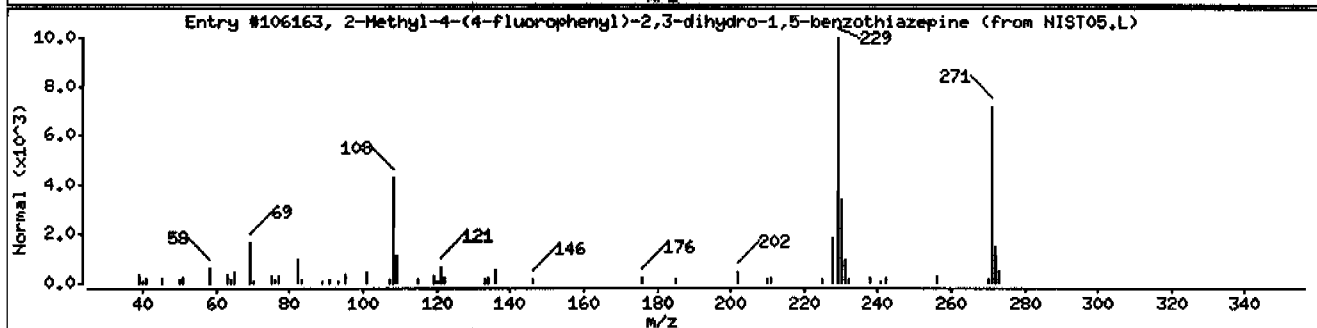
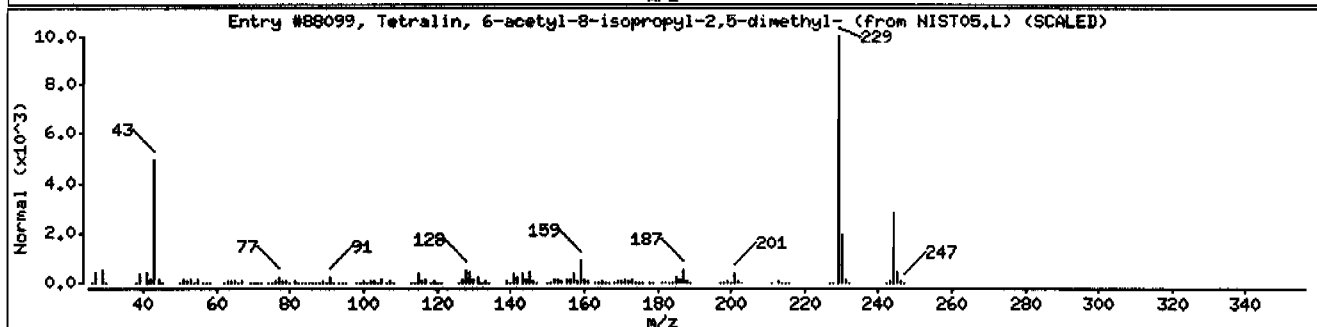
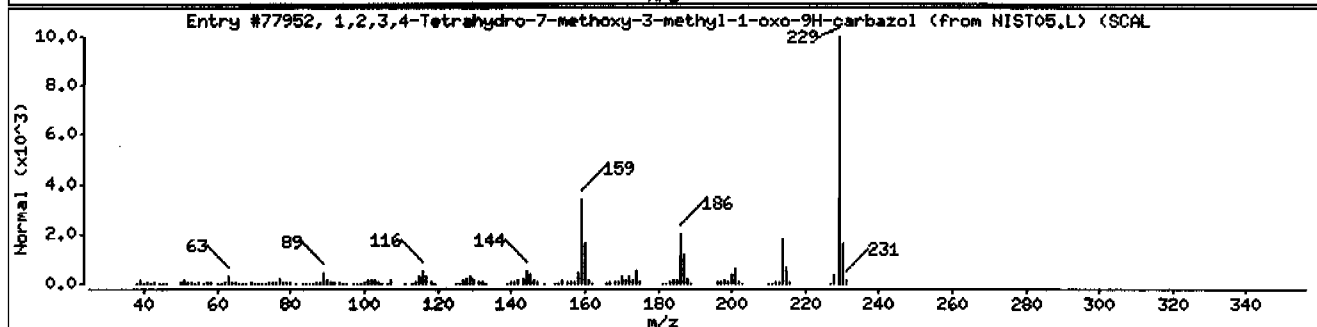
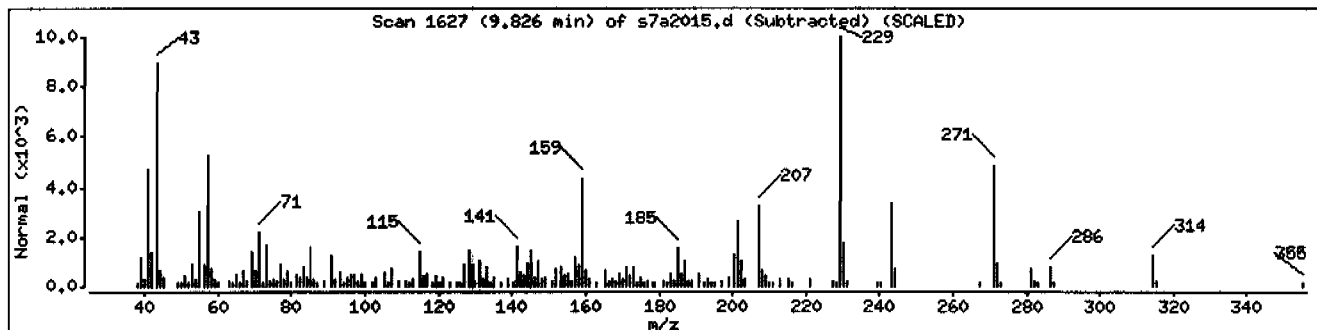
Volume Injected (uL): 0.5

Operator: JHB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,2,3,4-Tetrahydro-7-methoxy-3-methyl-1-	32550-51-9	NIST05.L	77952	45	C14H15NO2	229
Tetralin, 6-acetyl-8-isopropyl-2,5-dimet	1000155-43-5	NIST05.L	88099	43	C17H24O	244
2-Methyl-4-(4-fluorophenyl)-2,3-dihydro-	74148-64-4	NIST05.L	106163	30	C16H14FNS	271



Date : 20-JAN-2010 15:35

Client ID: RE12-10-7253

Instrument: HSD7.i

Sample Info: 12445990101941702111SVH111LANL

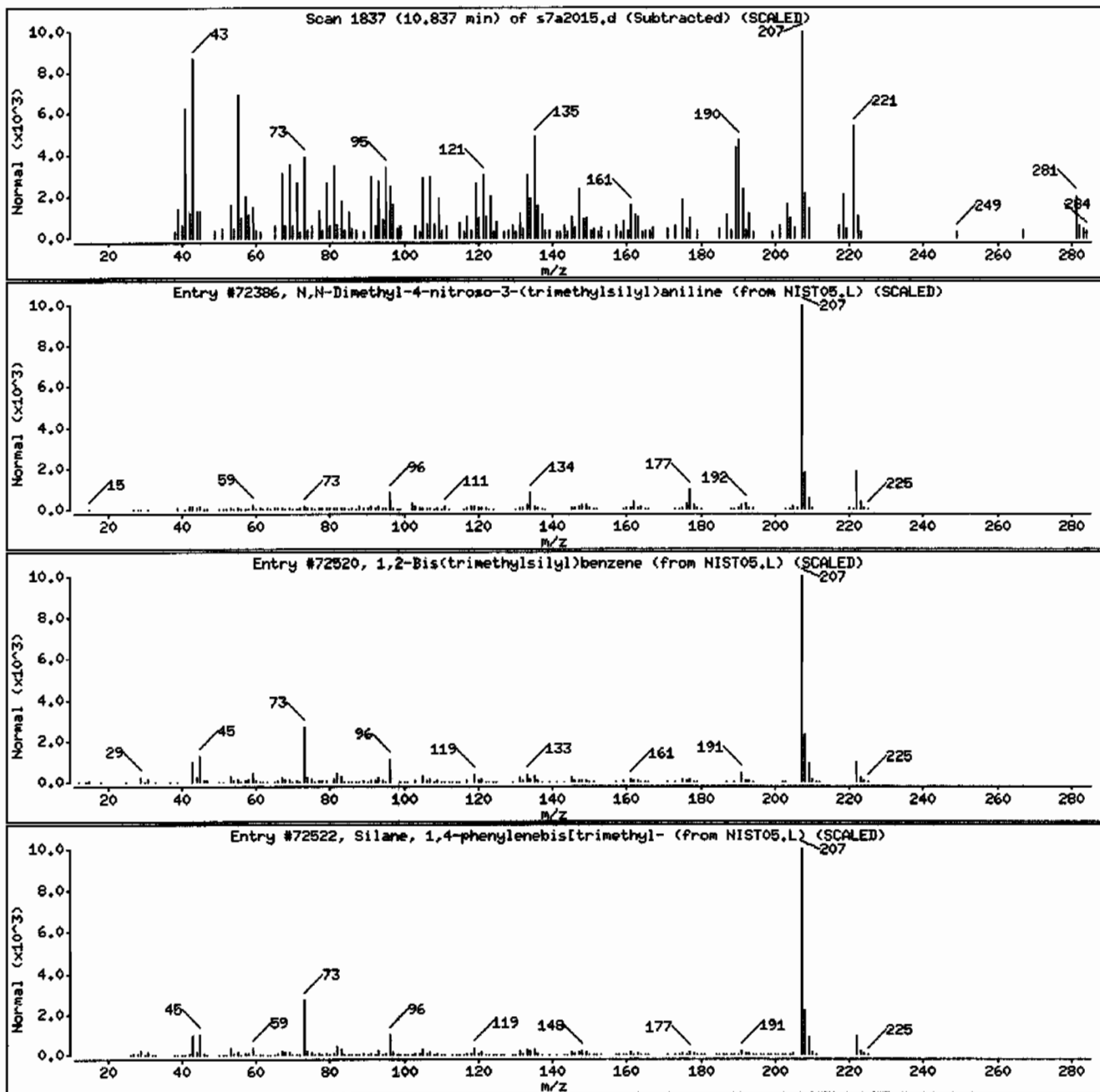
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
N,N-Dimethyl-4-nitroso-3-(trimethylsilyl)	17993-84-9	NIST05.L	72386	51	C11H18N2OSi	222
1,2-Bis(trimethylsilyl)benzene	17151-09-6	NIST05.L	72520	25	C12H22Si2	222
Silane, 1,4-phenylenebis(trimethyl-	13183-70-5	NIST05.L	72522	25	C12H22Si2	222



Date : 20-JAN-2010 15:35

Client ID: RE12-10-7253

Instrument: MSD7.1

Sample Info: 1244599010194170211SVMI11LANL

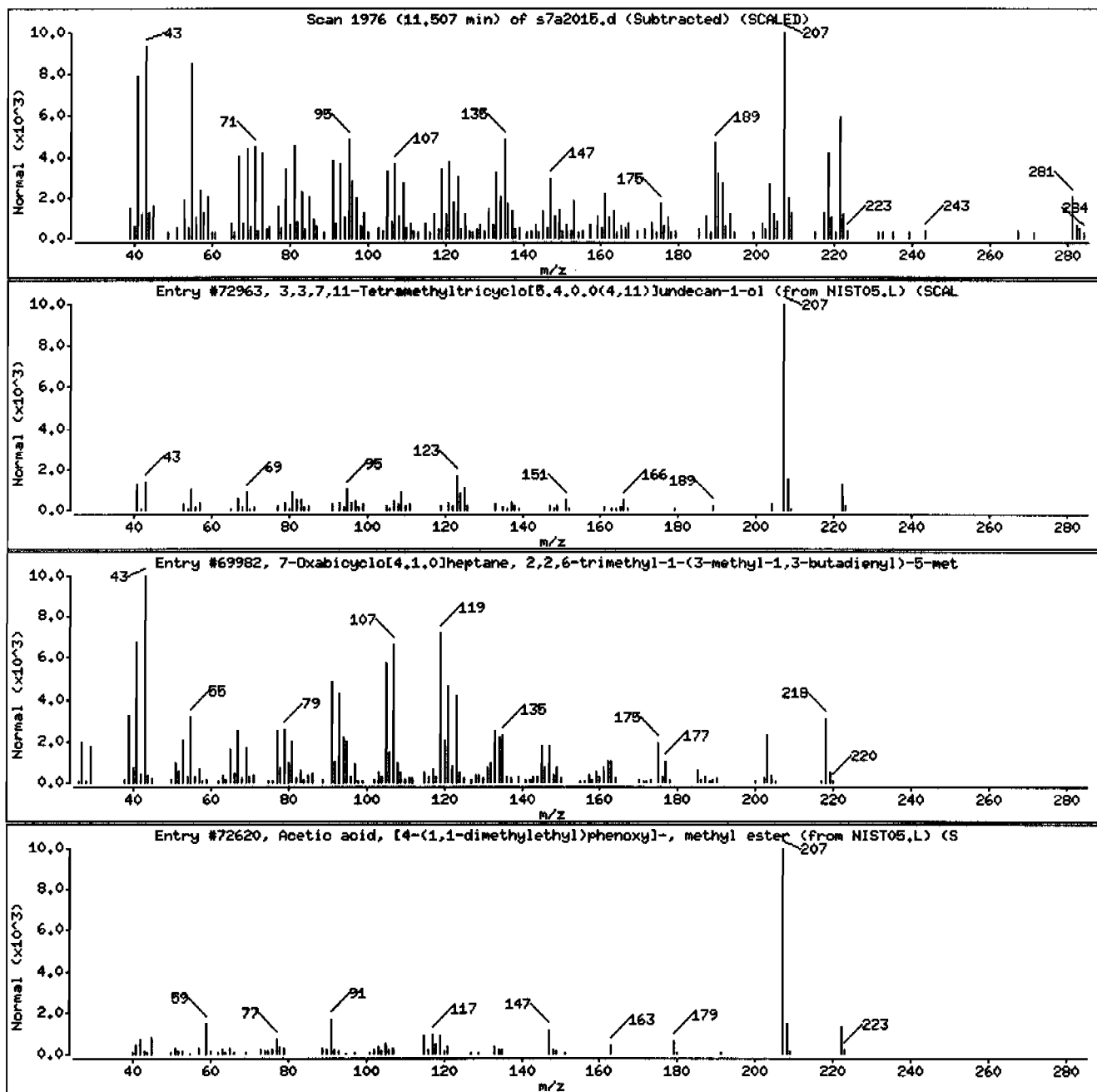
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
3,3,7,11-Tetramethyltricyclo[5.4.0.0(4,1	117591-80-7	NIST05.L	72963	25	C15H26O	222
7-Oxabicyclo[4.1.0]heptane, 2,2,6-trimet	70038-20-9	NIST05.L	69982	25	C15H22O	218
Acetic acid, [4-(1,1-dimethylethyl)pheno	88530-82-3	NIST05.L	72620	20	C13H18O3	222



**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210  
Lab Sample ID: 244599011

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD7.I  
Analyst: JMB3  
Aliquot: 30.01 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 15.3  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	394	ug/kg	78.7	394
108-95-2	Phenol	U	394	ug/kg	78.7	394
95-57-8	2-Chlorophenol	U	394	ug/kg	78.7	394
106-46-7	1,4-Dichlorobenzene	U	394	ug/kg	78.7	394
621-64-7	N-Nitrosodipropylamine	U	394	ug/kg	78.7	394
59-50-7	4-Chloro-3-methylphenol	U	394	ug/kg	78.7	394
83-32-9	Acenaphthene	U	39.4	ug/kg	13.0	39.4
121-14-2	2,4-Dinitrotoluene	U	394	ug/kg	39.4	394
100-02-7	4-Nitrophenol	U	394	ug/kg	130	394
87-86-5	Pentachlorophenol	U	394	ug/kg	98.4	394
129-00-0	Pyrene	U	39.4	ug/kg	11.8	39.4
110-86-1	Pyridine	U	394	ug/kg	78.7	394
62-53-3	Aniline	U	394	ug/kg	118	394
111-44-4	bis(2-Chloroethyl) ether	U	394	ug/kg	78.7	394
541-73-1	1,3-Dichlorobenzene	U	394	ug/kg	78.7	394
100-51-6	Benzyl alcohol	U	394	ug/kg	118	394
95-50-1	1,2-Dichlorobenzene	U	394	ug/kg	78.7	394
108-60-1	bis(2-Chloroisopropyl)ether	U	394	ug/kg	78.7	394
95-48-7	o-Cresol	U	394	ug/kg	78.7	394
65794-96-9	m,p-Cresols	U	394	ug/kg	118	394
67-72-1	Hexachloroethane	U	394	ug/kg	78.7	394
98-95-3	Nitrobenzene	U	394	ug/kg	78.7	394
78-59-1	Isophorone	U	394	ug/kg	78.7	394
88-75-5	2-Nitrophenol	U	394	ug/kg	78.7	394
105-67-9	2,4-Dimethylphenol	U	394	ug/kg	138	394
111-91-1	bis(2-Chloroethoxy)methane	U	394	ug/kg	78.7	394
120-83-2	2,4-Dichlorophenol	U	394	ug/kg	78.7	394
65-85-0	Benzoic acid	U	787	ug/kg	197	787
91-20-3	Naphthalene	U	39.4	ug/kg	11.8	39.4
106-47-8	4-Chloroaniline	U	394	ug/kg	78.7	394
87-68-3	Hexachlorobutadiene	U	394	ug/kg	78.7	394
91-57-6	2-Methylnaphthalene	U	39.4	ug/kg	7.87	39.4
77-47-4	Hexachlorocyclopentadiene	U	394	ug/kg	78.7	394
88-06-2	2,4,6-Trichlorophenol	U	394	ug/kg	78.7	394
95-95-4	2,4,5-Trichlorophenol	U	394	ug/kg	78.7	394
91-58-7	2-Chloronaphthalene	U	39.4	ug/kg	13.0	39.4
88-74-4	2-Nitroaniline	U	394	ug/kg	78.7	394
99-09-2	<i>o</i> -Nitroaniline	U	394	ug/kg	78.7	394
	3-Nitroaniline					

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210  
Lab Sample ID: 244599011

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD7.1  
Analyst: JMB3  
Aliquot: 30.01 g  
Column: J&W DB-5MS

Matrix: R  
% Moisture: 15.3  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE12-10-7254  
Batch ID: 941702  
Run Date: 01/20/2010 15:57  
Prep Date: 01/14/2010 19:34  
Data File: s7a2016.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
<i>m-Nitroaniline</i>						
131-11-3	Dimethylphthalate	U	394	ug/kg	78.7	394
606-20-2	2,6-Dinitrotoluene	U	394	ug/kg	39.4	394
208-96-8	Acenaphthylene	U	39.4	ug/kg	11.8	39.4
51-28-5	2,4-Dinitrophenol	U	787	ug/kg	150	787
132-64-9	Dibenzofuran	U	394	ug/kg	78.7	394
84-66-2	Diethylphthalate	U	394	ug/kg	78.7	394
86-73-7	Fluorene	U	39.4	ug/kg	11.8	39.4
7005-72-3	4-Chlorophenylphenylether	U	394	ug/kg	78.7	394
534-52-1	2-Methyl-4,6-dinitrophenol	U	394	ug/kg	78.7	394
100-01-6	4-Nitroaniline	U	394	ug/kg	118	394
<i>p-Nitroaniline</i>						
122-39-4	Diphenylamine	U	394	ug/kg	78.7	394
122-66-7	Azobenzene	U	394	ug/kg	78.7	394
<i>1,2-Diphenylhydrazine</i>						
101-55-3	4-Bromophenylphenylether	U	394	ug/kg	78.7	394
118-74-1	Hexachlorobenzene	U	394	ug/kg	78.7	394
85-01-8	Phenanthrene	U	39.4	ug/kg	11.8	39.4
120-12-7	Anthracene	U	39.4	ug/kg	7.87	39.4
84-74-2	Di-n-butylphthalate	U	394	ug/kg	78.7	394
206-44-0	Fluoranthene	U	39.4	ug/kg	11.8	39.4
85-68-7	Butylbenzylphthalate	U	394	ug/kg	78.7	394
56-55-3	Benzo(a)anthracene	U	39.4	ug/kg	11.8	39.4
91-94-1	3,3'-Dichlorobenzidine	U	394	ug/kg	118	394
218-01-9	Chrysene	U	39.4	ug/kg	11.8	39.4
117-81-7	bis(2-Ethylhexyl)phthalate	U	394	ug/kg	78.7	394
117-84-0	Di-n-octylphthalate	U	394	ug/kg	78.7	394
205-99-2	Benzo(b)fluoranthene	U	39.4	ug/kg	11.8	39.4
207-08-9	Benzo(k)fluoranthene	U	39.4	ug/kg	11.8	39.4
50-32-8	Benzo(a)pyrene	U	39.4	ug/kg	11.8	39.4
193-39-5	Indeno(1,2,3-cd)pyrene	U	39.4	ug/kg	11.8	39.4
53-70-3	Dibenzo(a,h)anthracene	U	39.4	ug/kg	11.8	39.4
191-24-2	Benzo(ghi)perylene	U	39.4	ug/kg	11.8	39.4
120-82-1	1,2,4-Trichlorobenzene	U	394	ug/kg	78.7	394

## Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.82	857	ug/kg		JA
77-53-2	Cedrol	6.39	200	ug/kg	94	NJ

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210  
Lab Sample ID: 244599011

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD7.I  
Analyst: JMB3  
Aliquot: 30.01 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 15.3  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE12-10-7254  
Batch ID: 941702  
Run Date: 01/20/2010 15:57  
Prep Date: 01/14/2010 19:34  
Data File: s7a2016.d

CAS No.	Paramname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
---------	-----------	-----------	--------	-------	---------	---------

Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	8.81	469	ug/kg	99	NJ
	Unknown	8.84	172	ug/kg		J
629-96-9	1-Eicosanol	9.89	295	ug/kg	81	NJ
	Unknown	10.25	161	ug/kg		J
112-95-8	Eicosane	10.53	202	ug/kg	93	NJ
	Unknown	11.51	314	ug/kg		J
	Unknown	12.46	182	ug/kg		J
	Unknown	12.6	362	ug/kg		J
83-46-5	.beta.-Sitosterol	13.24	1200	ug/kg	98	NJ
	Unknown	13.38	198	ug/kg		J
	Unknown	14.11	737	ug/kg		J
	Unknown	14.3	395	ug/kg		J



Data File: /chem/MSD7.i/s012010.b/s7a2016.d  
Report Date: 20-Jan-2010 17:39

Page 1

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Data file : /chem/MSD7.i/s012010.b/s7a2016.d  
Lab Smp Id: 244599011 Client Smp ID: RE12-10-7254  
Inj Date : 20-JAN-2010 15:57  
Operator : JMB3 Inst ID: MSD7.i  
Smp Info : |244599011|941702|1|SVM|1|LANL  
Misc Info : |MSD8270\_S|WBN100107-02|  
Comment : Column: J&W Scientific DB-5MS 25m x 0.2mm x 0.33um film thickness  
Method : /chem/MSD7.i/s012010.b/MSD7-M8270C-AQA-011310.m  
Meth Date : 20-Jan-2010 17:34 llo00884 Quant Type: ISTD  
Cal Date : 15-JAN-2010 19:06 Cal File: s7a1515.d  
Als bottle: 15  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1210.sub  
Target Version: 3.50  
Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.01000	weight of sample
M	15.32270	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG				CONCENTRATIONS		
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.793	3.793	(1.000)	300885	40.0000	
* 29 Naphthalene-d8	136	4.650	4.655	(1.000)	1129565	40.0000	
* 46 Acenaphthene-d10	164	5.892	5.897	(1.000)	602651	40.0000	
* 67 Phenanthrene-d10	188	7.043	7.043	(1.000)	1085136	40.0000	
* 91 Chrysene-d12	240	9.422	9.431	(1.000)	874972	40.0000	
* 98 Perylene-d12	264	10.967	10.977	(1.000)	562522	40.0000	
\$ 3 2-Fluorophenol	112	2.993	2.984	(0.789)	602900	69.7298	2740
\$ 5 Phenol-d5	99	3.518	3.513	(0.928)	789718	70.8417	2790
\$ 20 Nitrobenzene-d5	82	4.149	4.154	(0.892)	363802	39.0437	1540
\$ 39 2-Fluorobiphenyl	172	5.391	5.391	(0.915)	681197	38.3584	1510
\$ 60 2,4,6-Tribromophenol	329	6.479	6.484	(1.100)	130015	85.7548	3370
\$ 81 p-Terphenyl-d14	244	8.406	8.406	(0.892)	675894	45.2275	1780

## ION RATIO REPORT

## SV REPORT

Data file: s7a2016.d

Report Date: 01/20/2010 17:35

Lab. ID: 244599011

SampleType: SAMPLE

Injection Date: 20-JAN-2010 15:57

Operator: JMB3

Instrument: MSD7.i

Sample Info: |244599011|941702|1|SVM|1|LANL

Miscellaneous Info: |MSD8270\_S|WBN100107-02|

Comment:

Method used: /chem/MSD7.i/s012010.b/MSD7-M8270C-AQA-011310.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1210

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4 Aniline CAS#: 62-53-3						
66	40130	3.52	3.58	80-120	100	( )
93	2142	3.48	3.58	187-247	5	(QT)
-----						
17 N-Nitrosodipropylamine CAS#: 621-64-7						
70	52792	4.15	4.03	80-120	100	(T)
42	43618	4.15	4.03	63-123	83	(T)
-----						
27 Benzoic acid CAS#: 65-85-0						
105	842	4.44	4.43	80-120	100	( )
122	72	4.44	4.43	58-118	9	(Q)
77	2729	4.44	4.43	51-111	324	(Q)
-----						
40 2-Chloronaphthalene CAS#: 91-58-7						
162	9970	5.63	5.50	80-120	100	(T)
164	484	5.63	5.50	2- 62	5	(T)
127	671	5.63	5.50	7- 67	7	(QT)
-----						
42 o-Nitroaniline CAS#: 88-74-4						
65	15839	5.63	5.56	80-120	100	(T)
92	17941	5.63	5.56	26- 86	113	(QT)
138	1121	5.63	5.56	61-121	7	(QT)
-----						
43 Dimethylphthalate CAS#: 131-11-3						
163	108013	5.89	5.67	80-120	100	(T)
164	601680	5.89	5.67	0- 40	557	(QT)
-----						

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	77898	5.89	5.72	80-120	100	(T)
63	1536	5.89	5.72	49-109	2	(QT)
-----						
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	77898	5.89	6.01	80-120	100	(T)
89	1637	5.89	6.01	44-104	2	(QT)
63	1536	5.89	6.01	29- 89	2	(QT)
-----						
53 Fluorene				CAS#: 86-73-7		
166	11253	6.48	6.30	80-120	100	(T)
165	11335	6.48	6.30	56-116	101	(T)
167	3963	6.48	6.30	0- 44	35	(T)
-----						
61 4-Bromophenylphenylether				CAS#: 101-55-3		
248	9636	6.48	6.66	80-120	100	(T)
141	71171	6.48	6.66	57-117	739	(QT)
250	19785	6.48	6.66	68-128	205	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

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Data file : /chem/MSD7.i/s012010.b/s7a2016.d  
 Lab Smp Id: 244599011 Client Smp ID: RE12-10-7254  
 Inj Date : 20-JAN-2010 15:57  
 Operator : JMB3 Inst ID: MSD7.i  
 Smp Info : |244599011|941702|1|SVM|1|LANL  
 Misc Info : |MSD8270 S|WBN100107-02|  
 Comment : Column: J&W Scientific DB-5MS 25m x 0.2mm x 0.33um film thickness  
 Method : /chem/MSD7.i/s012010.b/MSD7-M8270C-AQA-011310.m  
 Meth Date : 20-Jan-2010 17:34 llo00884 Quant Type: ISTD  
 Cal Date : 15-JAN-2010 19:06 Cal File: s7a1515.d  
 Als bottle: 15  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: 10-1210.sub  
 Target Version: 3.50  
 Processing Host: hpclpl

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	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.01000	weight of sample
M	15.32270	% moisture

Cpnd Variable Local Compound Variable

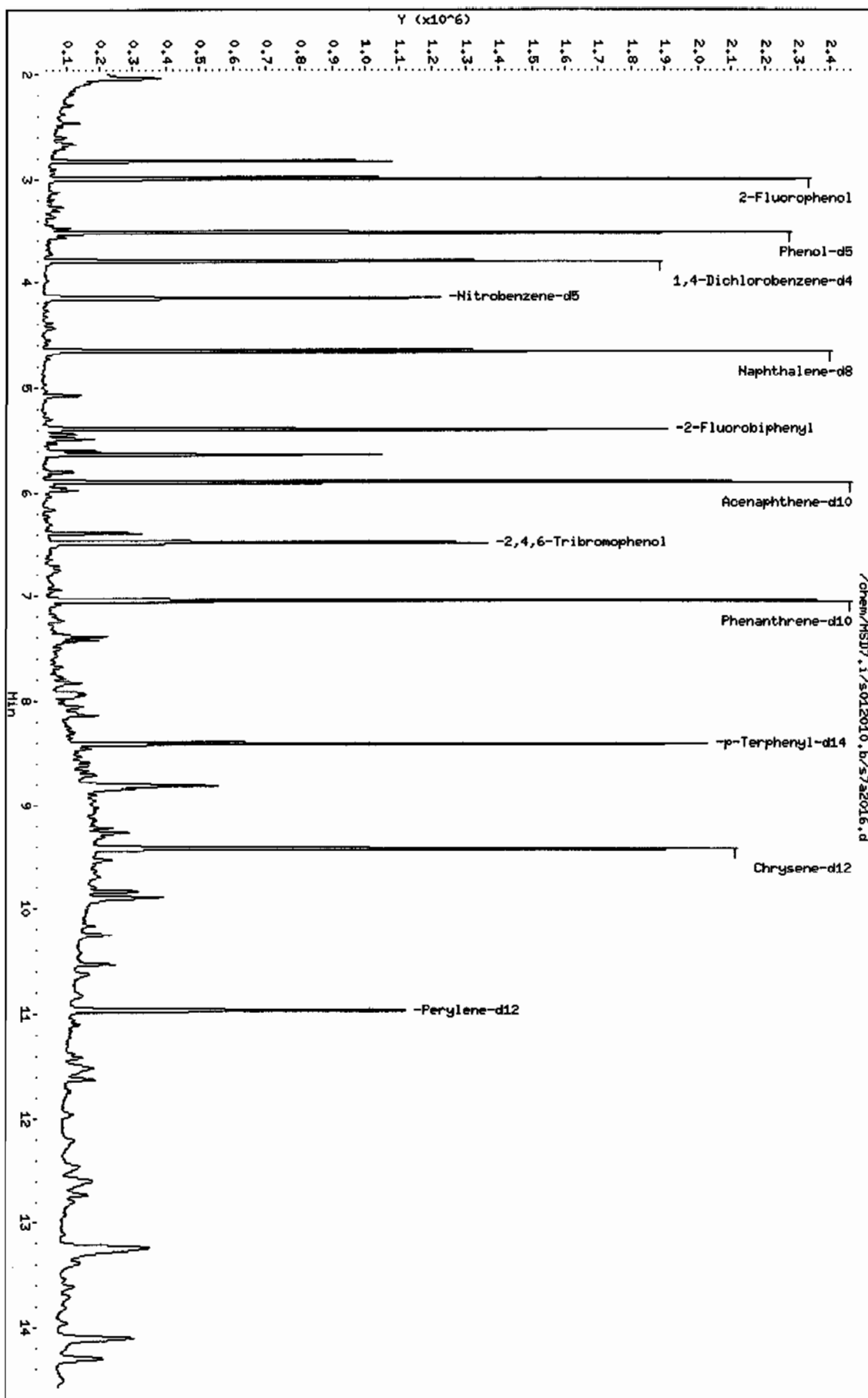
ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.793	1930738	40.000
* 46 Acenaphthene-d10	5.892	2652629	40.000
* 91 Chrysene-d12	9.422	2386532	40.000
* 98 Perylene-d12	10.967	1672839	40.000

CONCENTRATIONS				QUANT			
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
====	====	=====	=====	====	=====	=====	=====
Unknown Aldol Condensate					CAS #:		
2.825	1050664	21.7670950	856	0		0	10
Cedrol					CAS #: 77-53-2		
6.388	336635	5.07624062	200	94	NIST05.L	72886	46
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa					CAS #: 511-15-9		
8.810	710398	11.9067833	468	99	NIST05.L	116239	91
Unknown					CAS #:		
8.839	260477	4.36577655	172	0		0	91
1-Eicosanol					CAS #: 629-96-9		
9.894	446809	7.48883701	295	81	NIST05.L	123792	91
Unknown					CAS #:		
10.250	171014	4.08918682	161	0		0	98
Eicosane					CAS #: 112-95-8		
10.529	214631	5.13212639	202	93	NIST05.L	113488	98
Unknown					CAS #:		
11.511	333619	7.97729884	314	0		0	98
Unknown					CAS #:		
12.465	193787	4.63372456	182	0		0	98
Unknown					CAS #:		
12.605	385214	9.21101415	362	0		0	98
.beta.-Sitosterol					CAS #: 83-46-5		
13.240	1275163	30.4909843	1200	98	NIST05.L	174400	98
Unknown					CAS #:		
13.380	209913	5.01931616	198	0		0	98
Unknown					CAS #:		
14.107	782954	18.7215638	737	0		0	98
Unknown					CAS #:		
14.300	419452	10.0297110	395	0		0	98

Data File: /chem/HSD7.i/s012010.b/s7a2016.d  
 Date: 20-JAN-2010 15:57  
 Client ID: REL2-10-7284  
 Sample Info: 12445901194170211SVH11LRL  
 Volume Injected (uL): 0.5  
 Column phase: J&W DB-5MS

Instrument: HSD7.i  
 Operator: JHB3  
 Column diameter: 0.20



Date : 20-JAN-2010 15:57

Client ID: RE12-10-7254

Instrument: HSD7.i

Sample Info: 1244599011941702111SVH111LANL

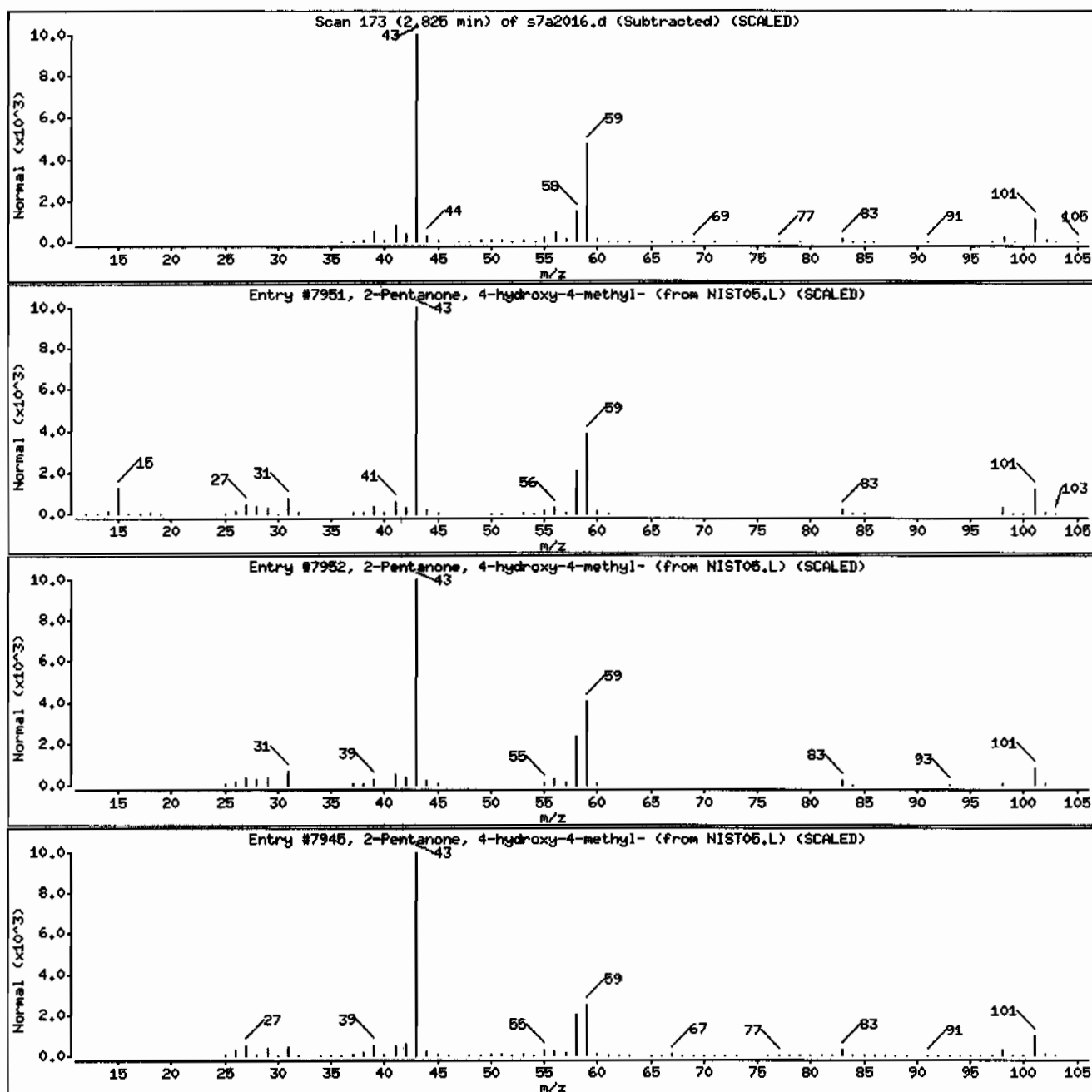
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	38	C6H12O2	116



Date : 20-JAN-2010 15:57

Client ID: RE12-10-7254

Instrument: MSD7.1

Sample Info: I244599011941702111SVMI11LANL

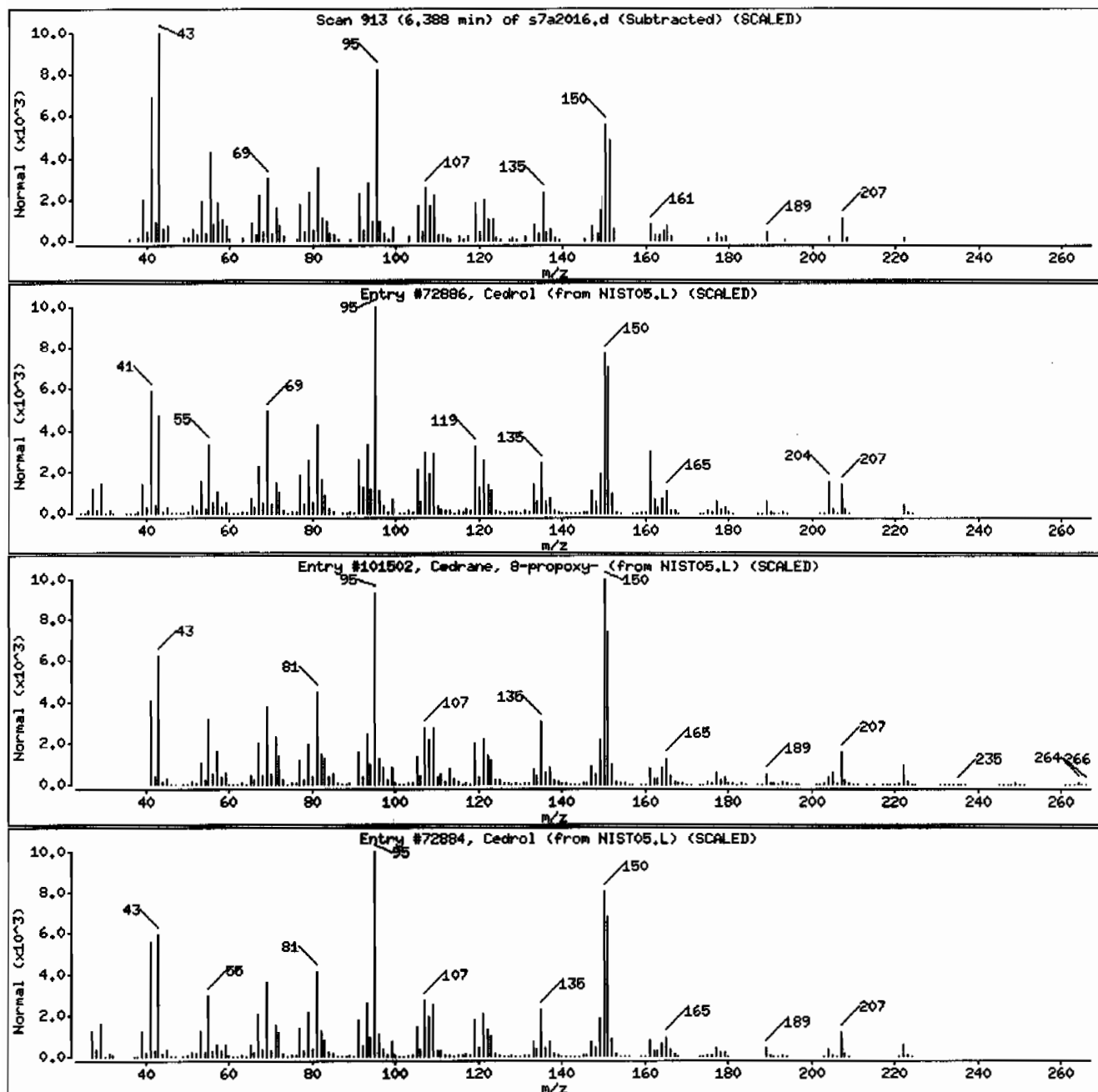
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cedrol	77-53-2	NIST05.L	72886	94	C15H26O	222
Cedrane, 8-propoxy-	19870-76-8	NIST05.L	101502	91	C18H32O	264
Cedrol	77-53-2	NIST05.L	72884	91	C15H26O	222





Date: 20-JAN-2010 15:57

Client ID: RE12-10-7254

Instrument: MSD7.i

Sample Info: 124459901194170211SVH111LANL

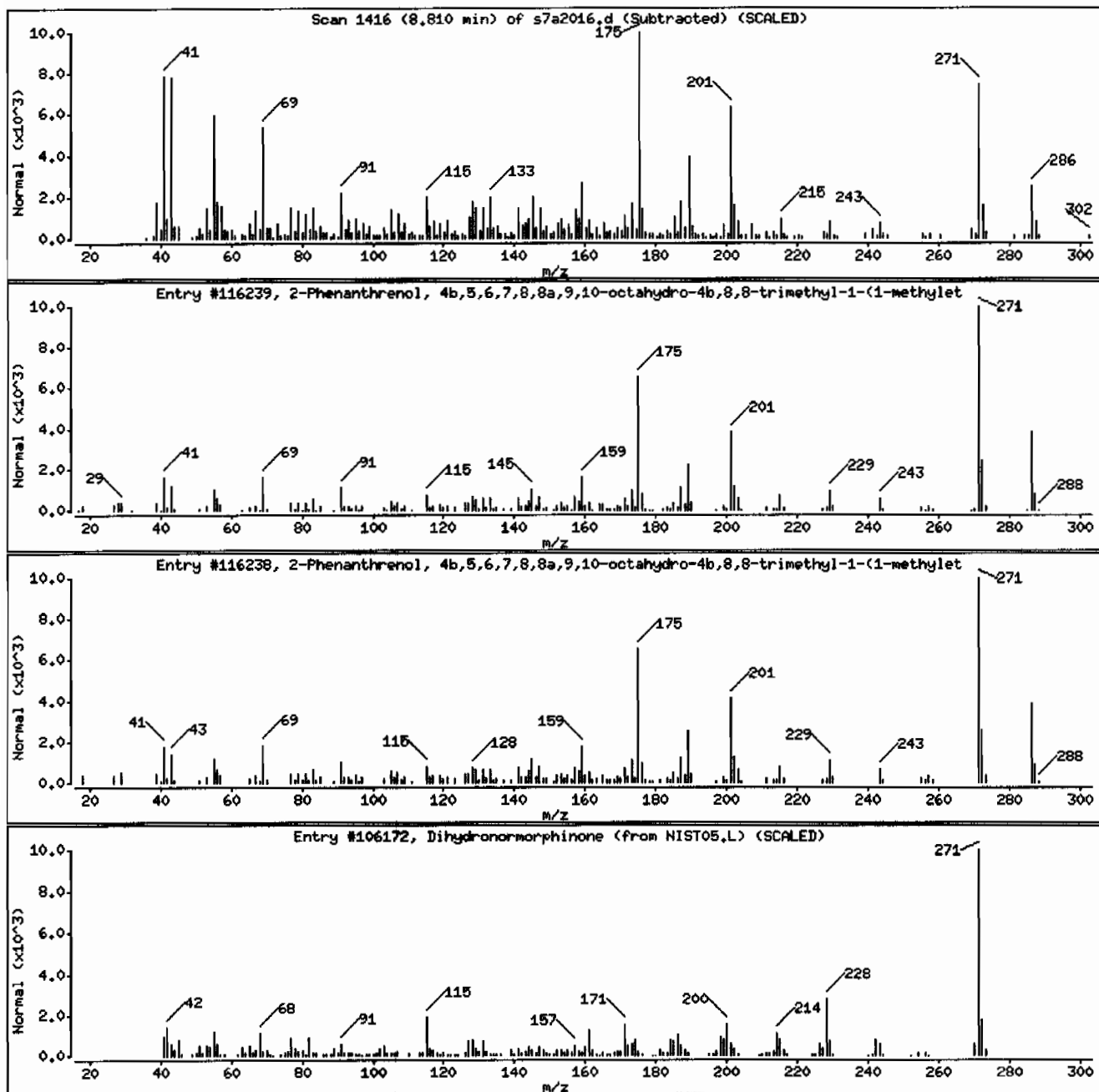
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116239	99	C20H30O	286
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116238	90	C20H30O	286
Dihydronormorphinone	14696-23-2	NIST05.L	106172	25	C16H17NO3	271



Date: 20-JAN-2010 15:57

Client ID: RE12-10-7254

Instrument: MSD7.i

Sample Info: 1244599011194170211SVMI11LANL

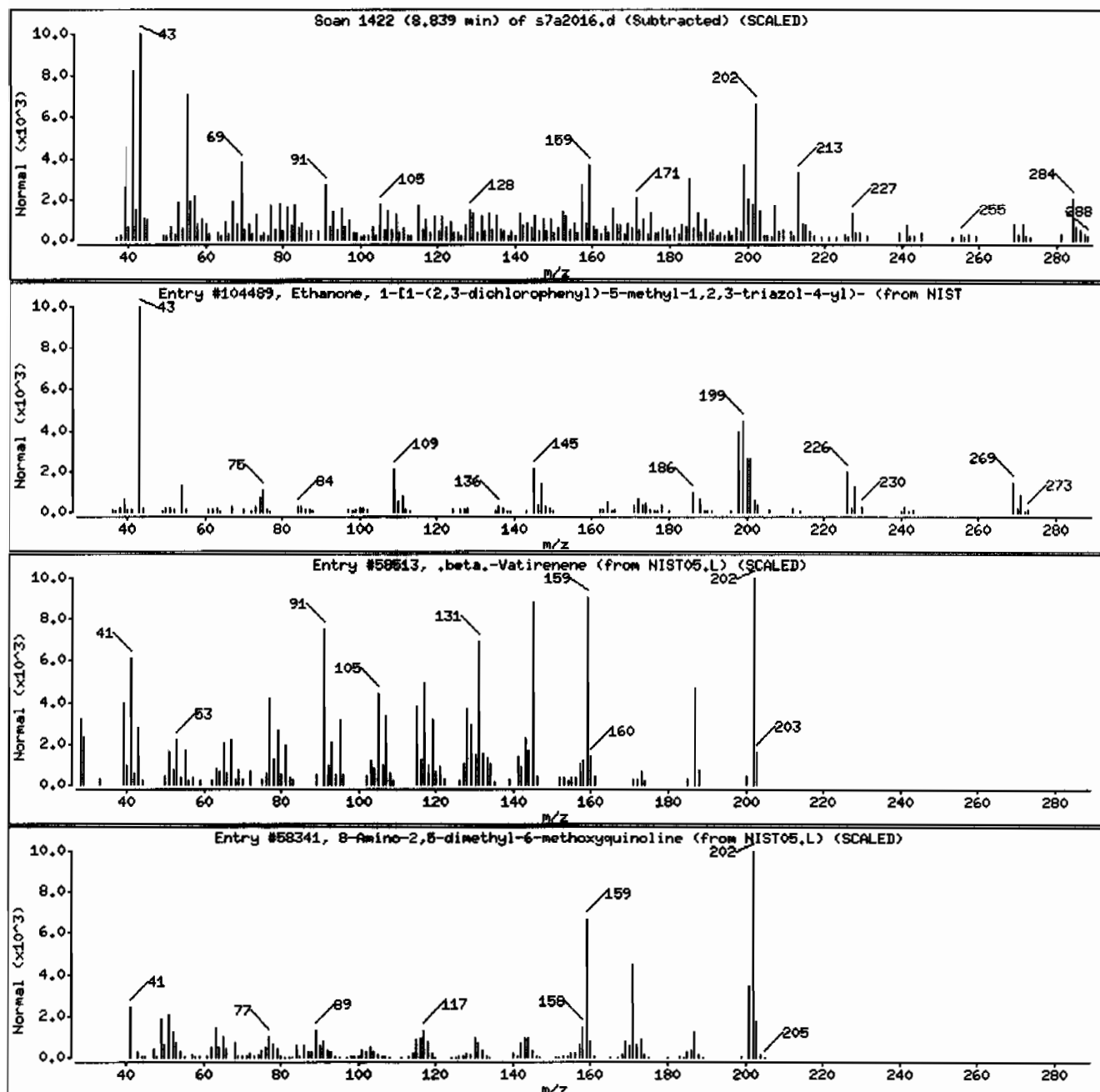
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Ethanone, 1-[1-(2,3-dichlorophenyl)-5-me	1000264-57-4	NIST05.L	104489	46	C11H9Cl2N3O	269
.beta.-Vatirenene	1000293-04-2	NIST05.L	58513	45	C15H22	202
8-Amino-2,5-dimethyl-6-methoxyquinoline	1000214-69-9	NIST05.L	58341	42	C12H14N2O	202



Date: 20-JAN-2010 16:57

Client ID: RE12-10-7254

Instrument: HSD7.i

Sample Info: 1244599011/94170211/SMH11/LANL

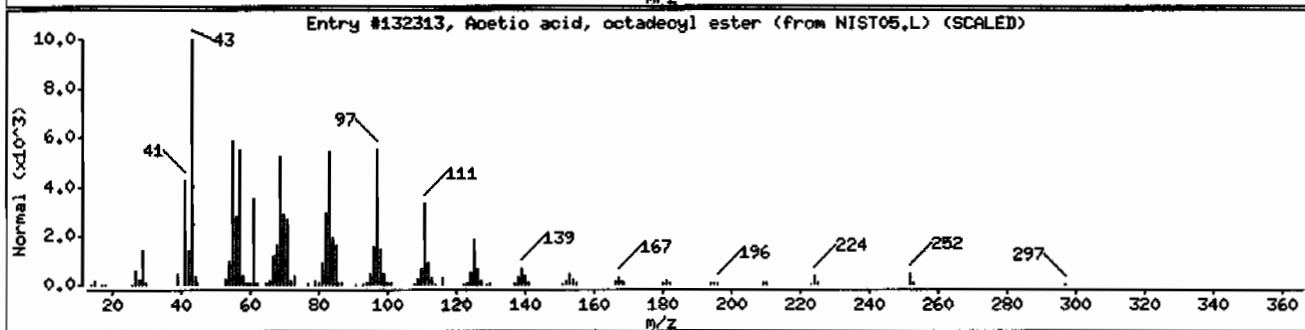
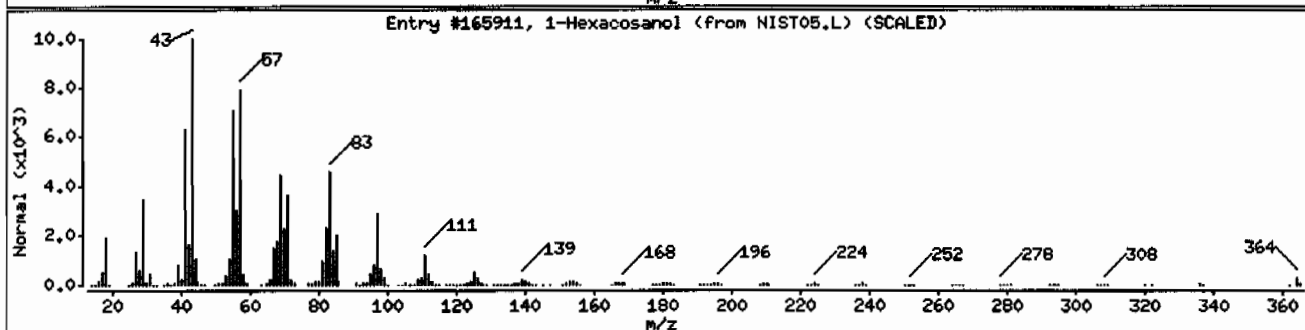
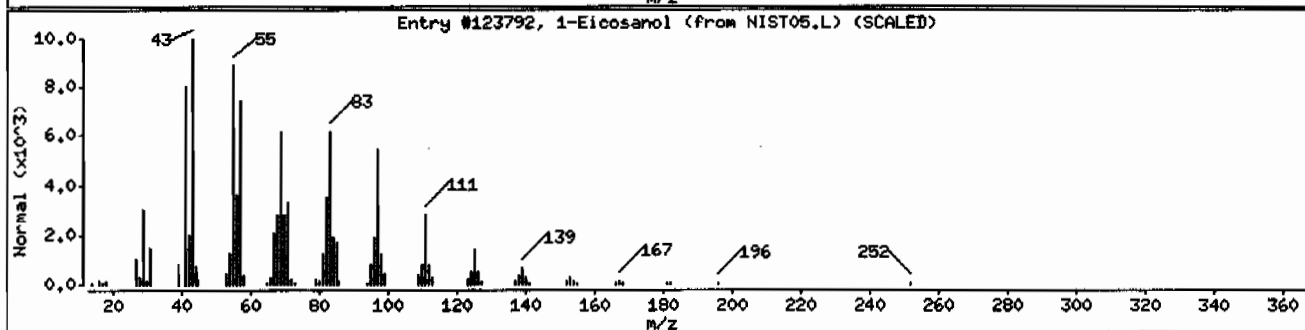
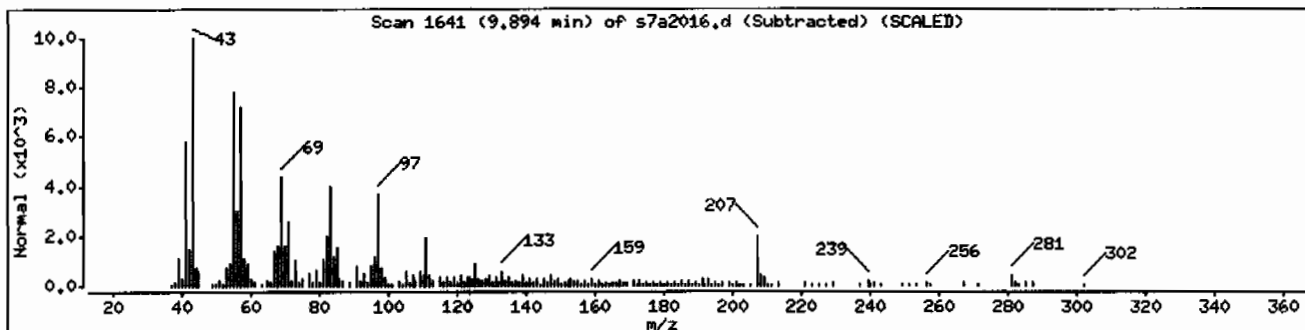
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Eicosanol	629-96-9	NIST05.L	123792	81	C20H42O	298
1-Hexacosanol	506-52-6	NIST05.L	165911	76	C26H54O	382
Acetic acid, octadecyl ester	822-23-1	NIST05.L	132313	72	C20H40O2	312



Date : 20-JAN-2010 15:57

Client ID: RE12-10-7254

Instrument: MSD7.i

Sample Info: 12445990111941702111SVH111LANL

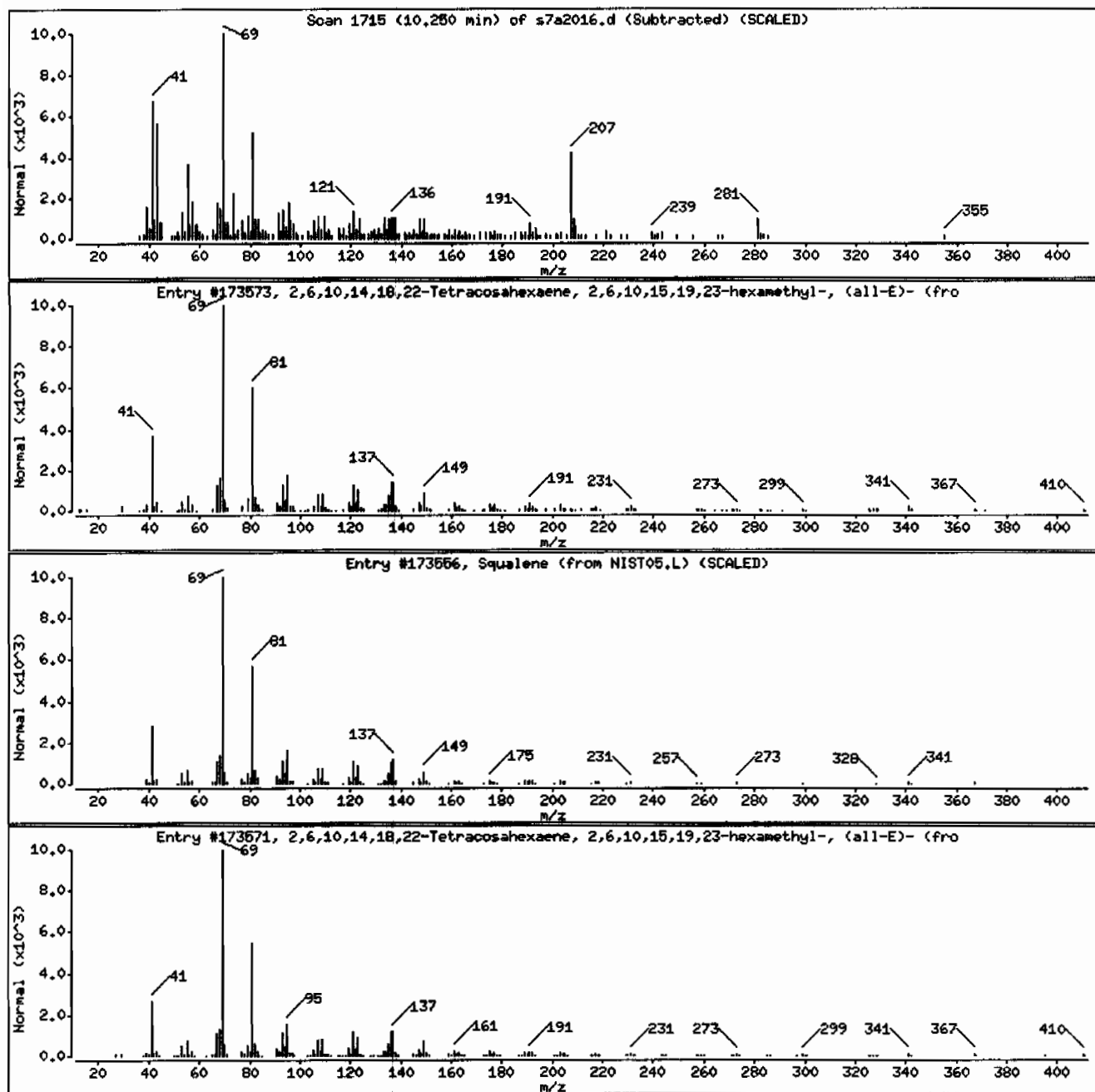
Volume Injected (uL): 0.5

Operator: JHB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2,6,10,14,18,22-Tetracosahexaene, 2,6,10	111-02-4	NIST05.L	173573	55	C30H50	410
Squalene	7683-64-9	NIST05.L	173556	49	C30H50	410
2,6,10,14,18,22-Tetracosahexaene, 2,6,10	111-02-4	NIST05.L	173571	49	C30H50	410



Date : 20-JAN-2010 15:57

Client ID: RE12-10-7254

Instrument: MSD7.i

Sample Info: 1244599011194170211SVMI11LANL

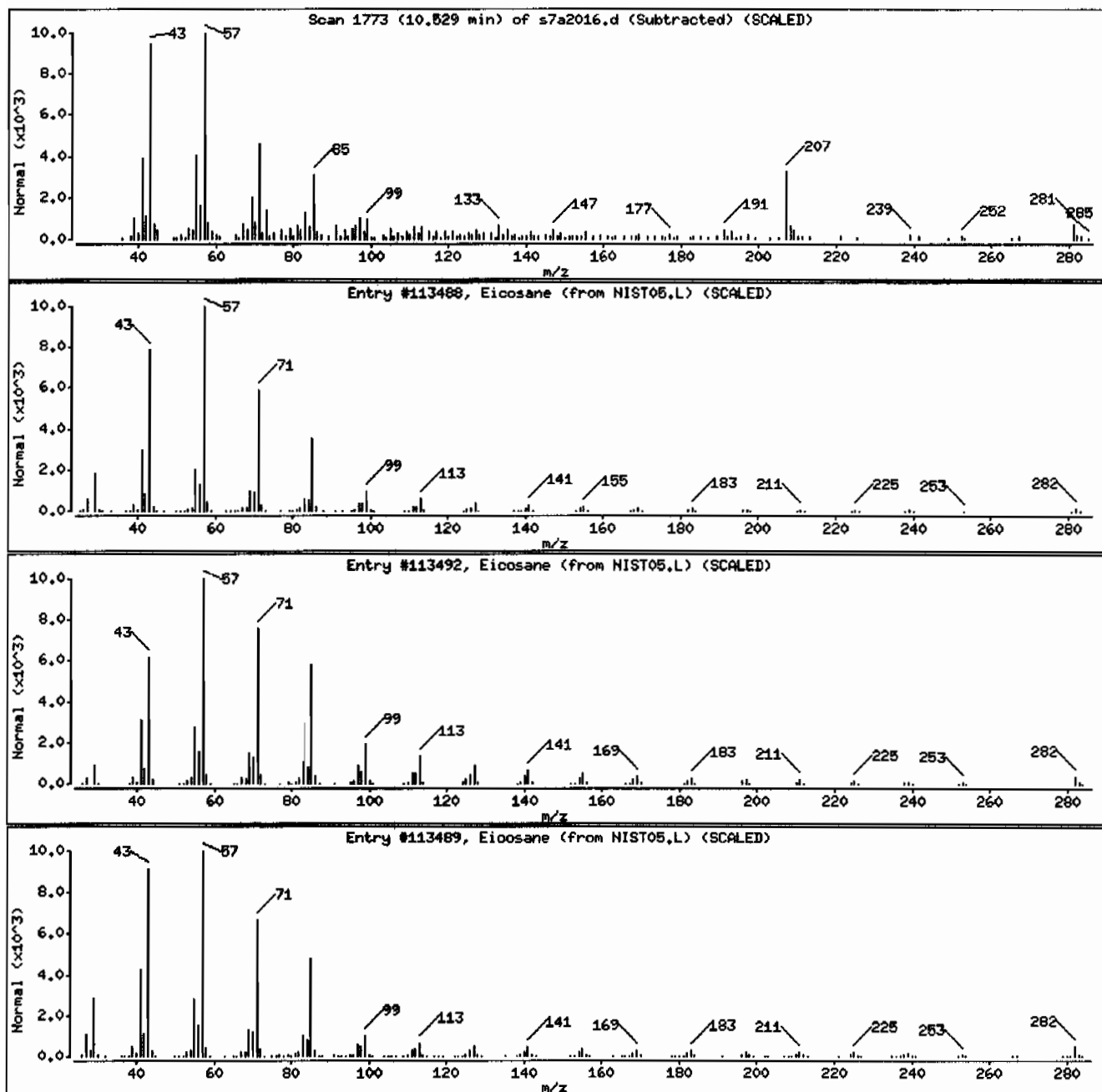
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Eicosane	112-95-8	NIST05.L	113488	93	C20H42	282
Eicosane	112-95-8	NIST05.L	113492	90	C20H42	282
Eicosane	112-95-8	NIST05.L	113489	83	C20H42	282



Date: 20-JAN-2010 15:57

Client ID: RE12-10-7254

Instrument: MSD7.i

Sample Info: 12445990111941702111SVH11/LANL

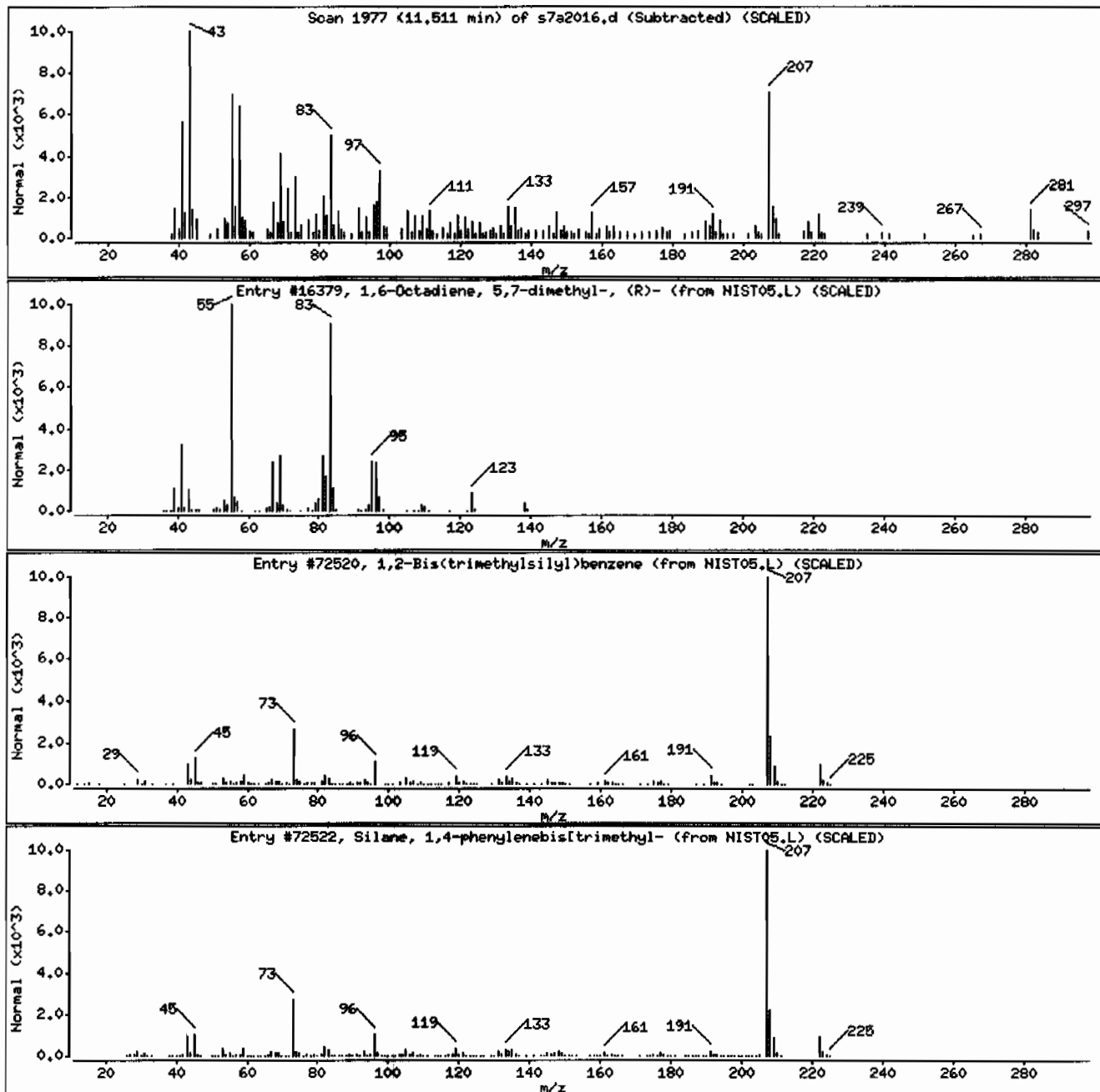
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,6-Octadiene, 5,7-dimethyl-, (R)-	85006-04-8	NIST05.L	16379	56	C10H18	138
1,2-Bis(trimethylsilyl)benzene	17151-09-6	NIST05.L	72520	46	C12H22Si2	222
Silane, 1,4-phenylenebis(trimethyl-	13183-70-5	NIST05.L	72522	41	C12H22Si2	222



Date : 20-JAN-2010 15:57

Client ID: RE12-10-7254

Instrument: MSD7.1

Sample Info: 1244899011194170211SVH111LANL

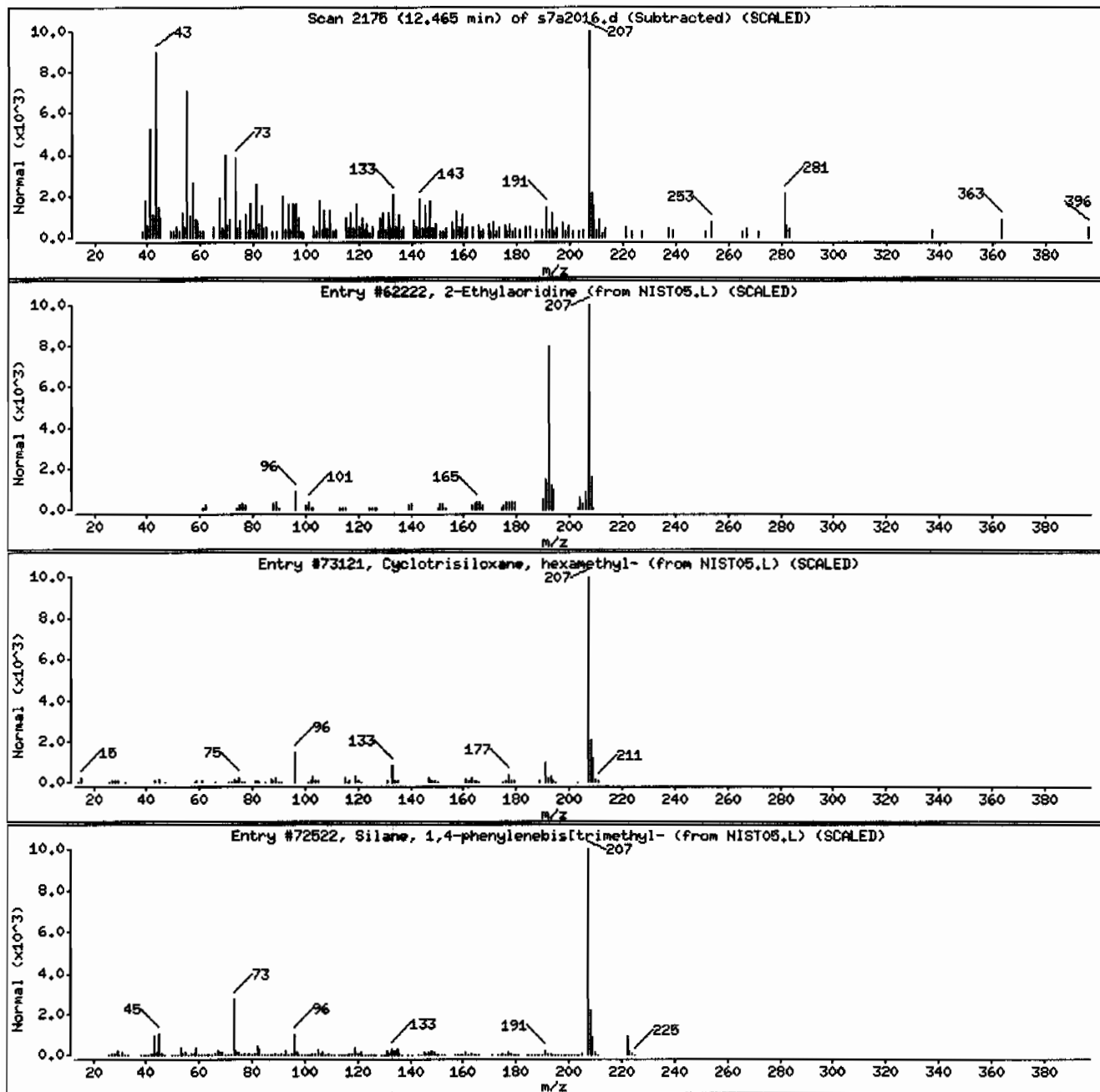
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Ethylacridine	55751-83-2	NIST05.L	62222	50	C15H13N	207
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73121	50	C6H18O3Si3	222
Silane, 1,4-phenylenebis(trimethyl-	13183-70-5	NIST05.L	72522	47	C12H22Si2	222



Date : 20-JAN-2010 15:57

Client ID: RE12-10-7254

Instrument: HSD7.i

Sample Info: 1244599011194170211SVMI11LANL

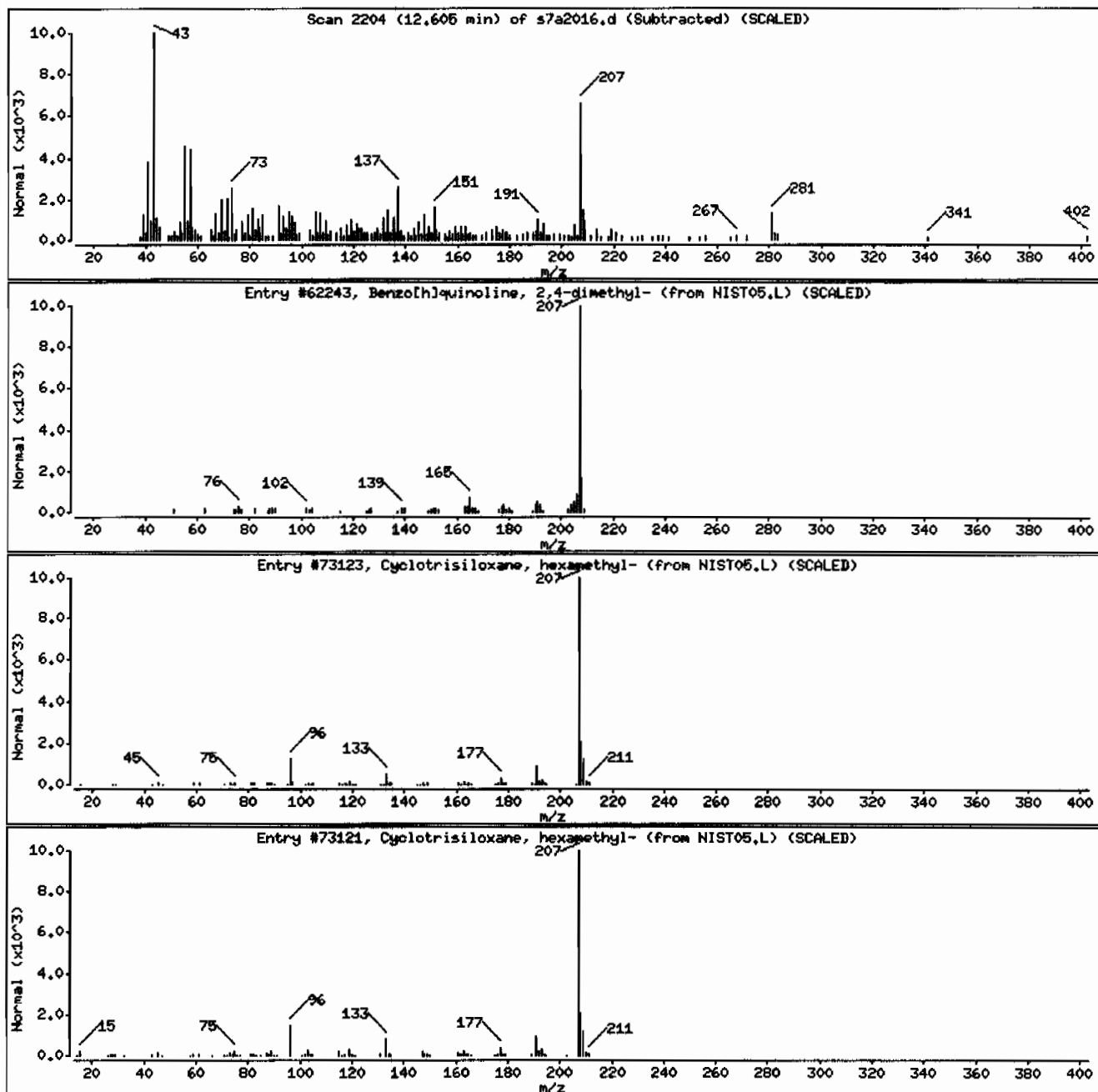
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Benzo[h]quinoline, 2,4-dimethyl-	605-67-4	NIST05.L	62243	50	C15H13N	207
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73123	43	C6H18O3Si3	222
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73121	43	C6H18O3Si3	222





Date : 20-JAN-2010 15:57

Client ID: RE12-10-7254

Instrument: MSD7.1

Sample Info: 124459901194170211SVMI11LANL

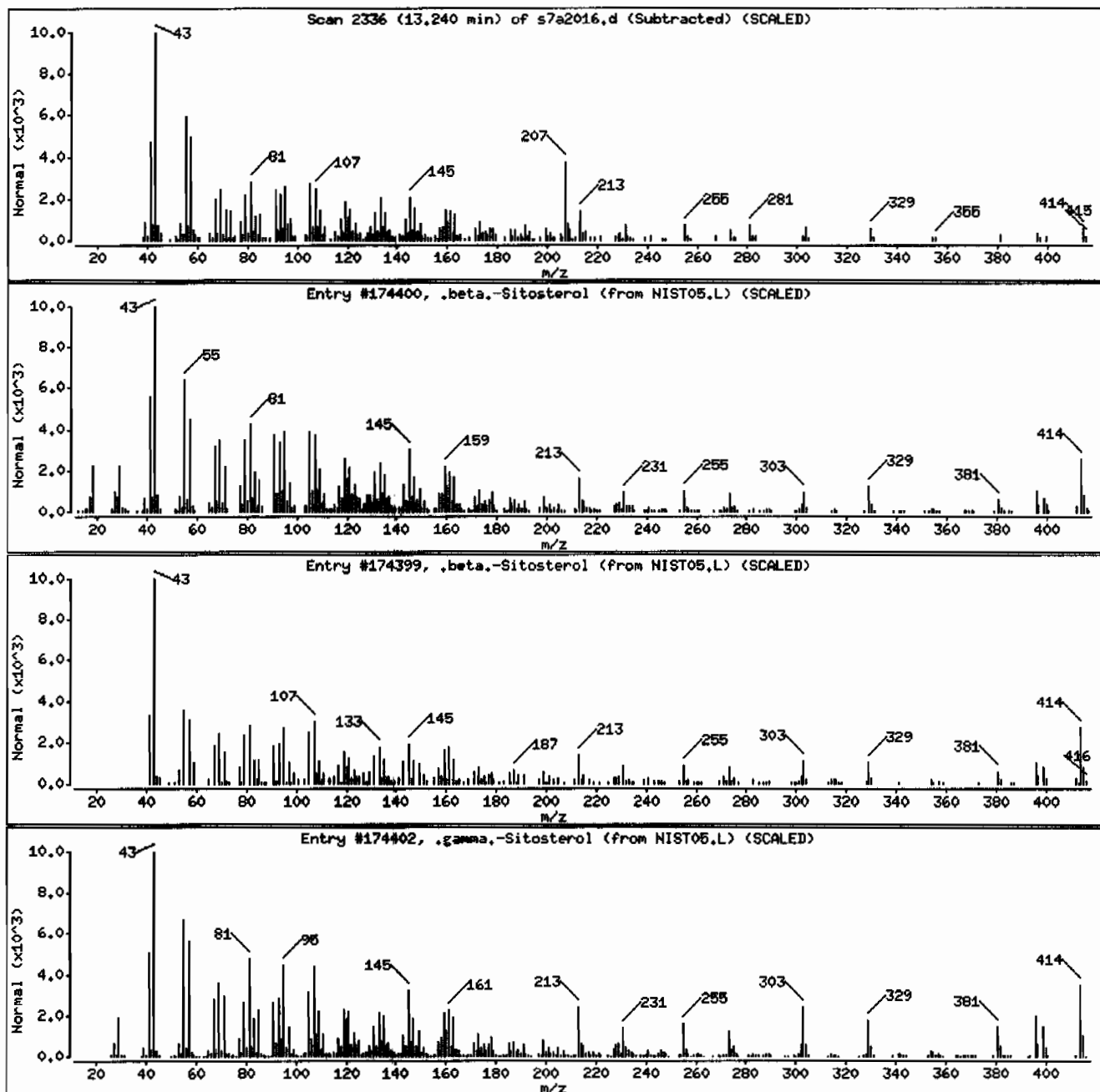
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
.beta.-Sitosterol	83-46-5	NIST05.L	174400	98	C29H50O	414
.beta.-Sitosterol	83-46-5	NIST05.L	174399	97	C29H50O	414
.gamma.-Sitosterol	83-47-6	NIST05.L	174402	95	C29H50O	414



Date : 20-JAN-2010 15:57

Client ID: RE12-10-7254

Instrument: HSD7.i

Sample Info: 124459901194170211SVH11LANL

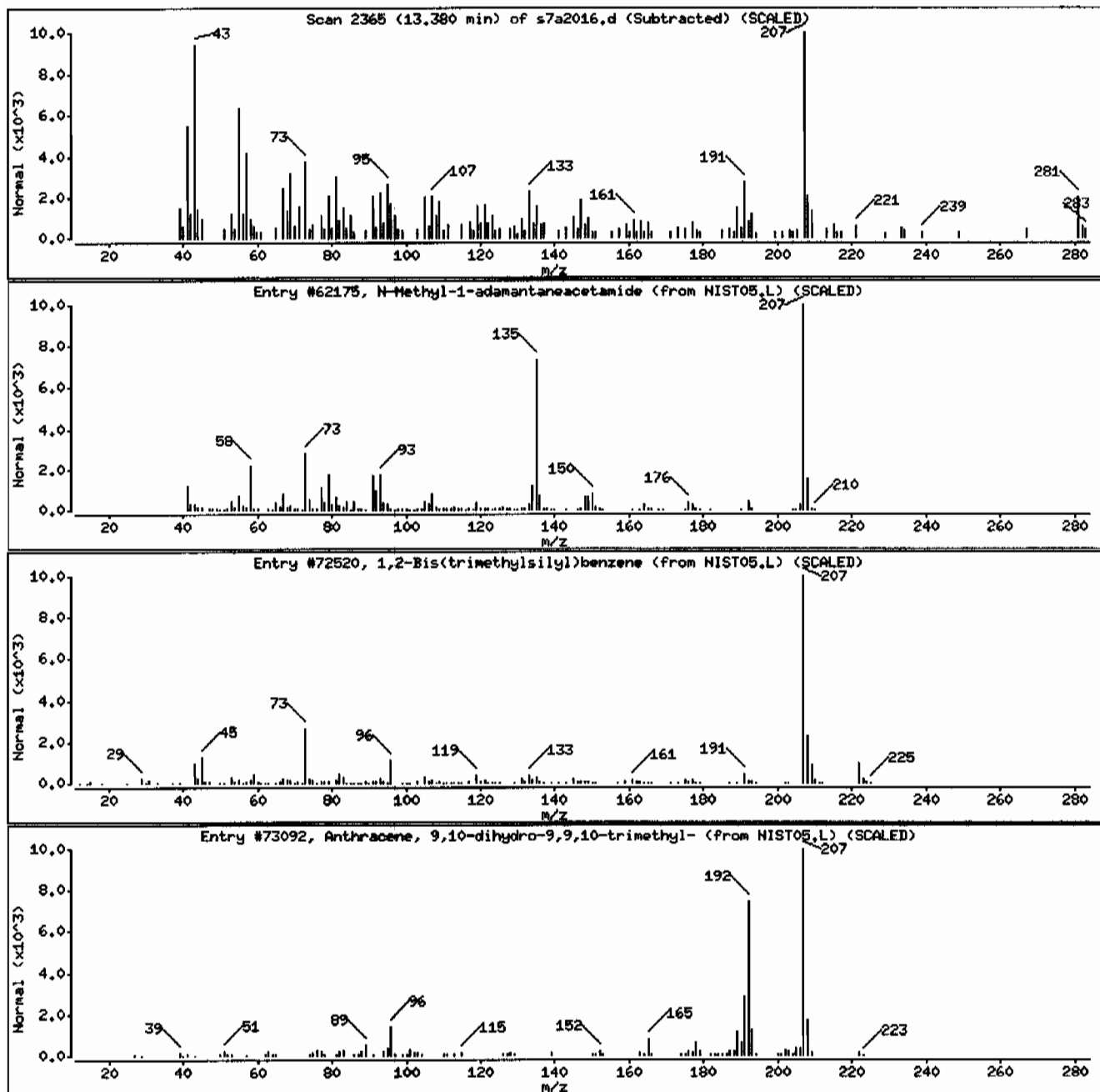
Volume Injected (uL): 0.5

Operator: JHB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
N-Methyl-1-adamantaneacetamide	31897-93-5	NIST05.L	62175	49	C13H21NO	207
1,2-Bis(trimethylsilyl)benzene	17151-09-6	NIST05.L	72520	43	C12H22Si2	222
Anthracene, 9,10-dihydro-9,9,10-trimethy	14923-29-6	NIST05.L	73092	38	C17H18	222



Date : 20-JAN-2010 15:57

Client ID: RE12-10-7254

Instrument: MSD7.i

Sample Info: I244599011194170211ISVH11ILANL

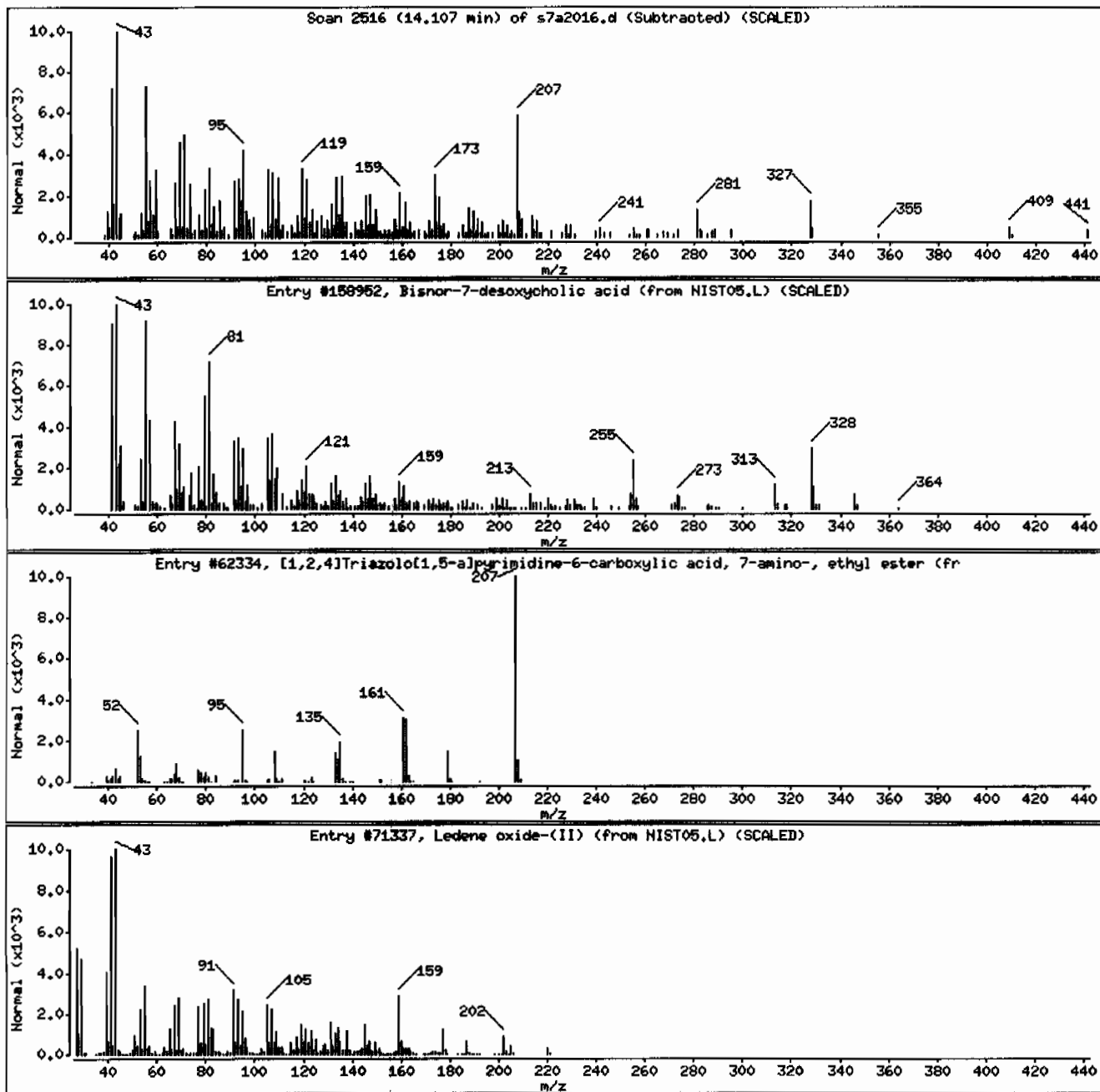
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Bisnor-7-desoxycholeic acid	1000252-00-7	NIST05.L	158952	38	C22H36O4	364
[1,2,4]Triazolo[1,5-a]pyrimidine-6-carbo	1000316-75-8	NIST05.L	62334	14	C8H9N5O2	207
Ledene oxide-(II)	1000159-36-7	NIST05.L	71337	14	C15H24O	220



Date : 20-JAN-2010 15:57

Client ID: RE12-10-7254

Instrument: MSD7.i

Sample Info: 1244599011194170211SVMI11LANL

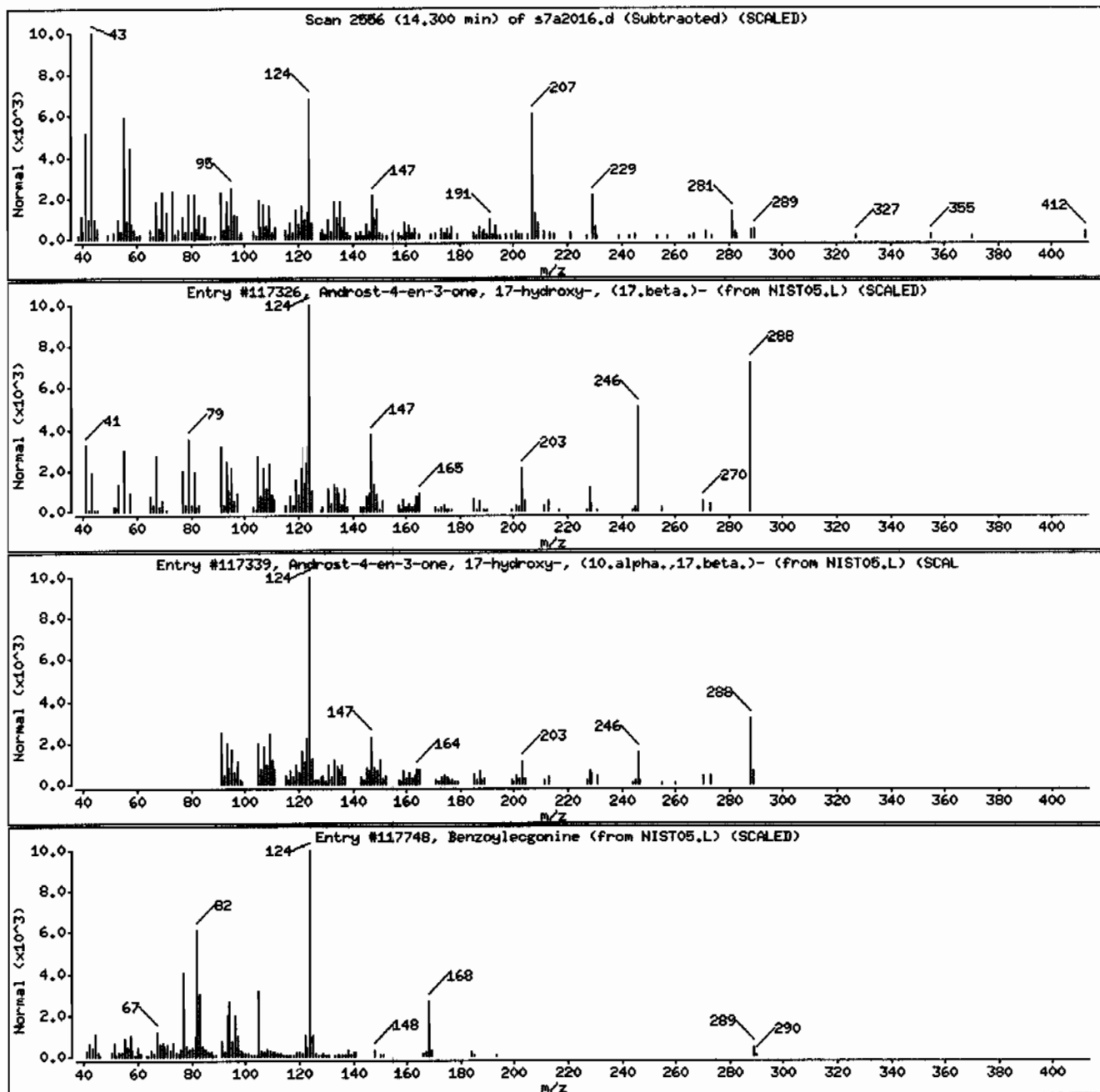
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Androst-4-en-3-one, 17-hydroxy-, (17.bet	58-22-0	NIST05.L	117326	35	C19H28O2	288
Androst-4-en-3-one, 17-hydroxy-, (10.alp	604-39-7	NIST05.L	117339	35	C19H28O2	288
Benzoyllecgonine	519-09-5	NIST05.L	117748	25	C16H19NO4	289



**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210	Date Collected: 01/07/2010 12:00	Matrix: R
Lab Sample ID: 244599012	Date Received: 01/13/2010 08:55	%Moisture: 6.6
	Client: LANL010	Project: LANL01004
Client ID: RE12-10-7255	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 941702	Inst: MSD7.I	Dilution: 1
Run Date: 01/20/2010 16:19	Analyst: JMB3	Inj. Vol: .5 uL
Prep Date: 01/14/2010 19:34	Aliquot: 30.18 g	Final Volume: 1 mL
Data File: s7a2017.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	355	ug/kg	71.0	355
108-95-2	Phenol	U	355	ug/kg	71.0	355
95-57-8	2-Chlorophenol	U	355	ug/kg	71.0	355
106-46-7	1,4-Dichlorobenzene	U	355	ug/kg	71.0	355
621-64-7	N-Nitrosodipropylamine	U	355	ug/kg	71.0	355
59-50-7	4-Chloro-3-methylphenol	U	355	ug/kg	71.0	355
83-32-9	Acenaphthene	U	35.5	ug/kg	11.7	35.5
121-14-2	2,4-Dinitrotoluene	U	355	ug/kg	35.5	355
100-02-7	4-Nitrophenol	U	355	ug/kg	117	355
87-86-5	Pentachlorophenol	U	355	ug/kg	88.7	355
129-00-0	Pyrene	U	35.5	ug/kg	10.6	35.5
110-86-1	Pyridine	U	355	ug/kg	71.0	355
62-53-3	Aniline	U	355	ug/kg	106	355
111-44-4	bis(2-Chloroethyl) ether	U	355	ug/kg	71.0	355
541-73-1	1,3-Dichlorobenzene	U	355	ug/kg	71.0	355
100-51-6	Benzyl alcohol	U	355	ug/kg	106	355
95-50-1	1,2-Dichlorobenzene	U	355	ug/kg	71.0	355
108-60-1	bis(2-Chloroisopropyl)ether	U	355	ug/kg	71.0	355
95-48-7	o-Cresol	U	355	ug/kg	71.0	355
65794-96-9	m,p-Cresols	U	355	ug/kg	106	355
67-72-1	Hexachloroethane	U	355	ug/kg	71.0	355
98-95-3	Nitrobenzene	U	355	ug/kg	71.0	355
78-59-1	Isophorone	U	355	ug/kg	71.0	355
88-75-5	2-Nitrophenol	U	355	ug/kg	71.0	355
105-67-9	2,4-Dimethylphenol	U	355	ug/kg	124	355
111-91-1	bis(2-Chloroethoxy)methane	U	355	ug/kg	71.0	355
120-83-2	2,4-Dichlorophenol	U	355	ug/kg	71.0	355
65-85-0	Benzoic acid	U	710	ug/kg	177	710
91-20-3	Naphthalene	U	35.5	ug/kg	10.6	35.5
106-47-8	4-Chloroaniline	U	355	ug/kg	71.0	355
87-68-3	Hexachlorobutadiene	U	355	ug/kg	71.0	355
91-57-6	2-Methylnaphthalene	U	35.5	ug/kg	7.10	35.5
77-47-4	Hexachlorocyclopentadiene	U	355	ug/kg	71.0	355
88-06-2	2,4,6-Trichlorophenol	U	355	ug/kg	71.0	355
95-95-4	2,4,5-Trichlorophenol	U	355	ug/kg	71.0	355
91-58-7	2-Chloronaphthalene	U	35.5	ug/kg	11.7	35.5
88-74-4	2-Nitroaniline	U	355	ug/kg	71.0	355
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	355	ug/kg	71.0	355

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

<b>SDG Number:</b> 10-1210	<b>Date Collected:</b> 01/07/2010 12:00	<b>Matrix:</b> R
<b>Lab Sample ID:</b> 244599012	<b>Date Received:</b> 01/13/2010 08:55	<b>%Moisture:</b> 6.6
<b>Client ID:</b> RE12-10-7255	<b>Client:</b> LANL010	<b>Project:</b> LANL01004
<b>Batch ID:</b> 941702	<b>Method:</b> SW846 8270C	<b>SOP Ref:</b> GL-OA-E-009
<b>Run Date:</b> 01/20/2010 16:19	<b>Inst:</b> MSD7.1	<b>Dilution:</b> 1
<b>Prep Date:</b> 01/14/2010 19:34	<b>Analyst:</b> JMB3	<b>Inj. Vol:</b> .5 uL
<b>Data File:</b> s7a2017.d	<b>Aliquot:</b> 30.18 g	<b>Final Volume:</b> 1 mL
	<b>Column:</b> J&W DB-5MS	<b>Level:</b> LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	355	ug/kg	71.0	355
606-20-2	2,6-Dinitrotoluene	U	355	ug/kg	35.5	355
208-96-8	Acenaphthylene	U	35.5	ug/kg	10.6	35.5
51-28-5	2,4-Dinitrophenol	U	710	ug/kg	135	710
132-64-9	Dibenzofuran	U	355	ug/kg	71.0	355
84-66-2	Diethylphthalate	U	355	ug/kg	71.0	355
86-73-7	Fluorene	U	35.5	ug/kg	10.6	35.5
7005-72-3	4-Chlorophenylphenylether	U	355	ug/kg	71.0	355
534-52-1	2-Methyl-4,6-dinitrophenol	U	355	ug/kg	71.0	355
100-01-6	4-Nitroaniline	U	355	ug/kg	106	355
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	355	ug/kg	71.0	355
122-66-7	Azobenzene	U	355	ug/kg	71.0	355
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	355	ug/kg	71.0	355
118-74-1	Hexachlorobenzene	U	355	ug/kg	71.0	355
85-01-8	Phenanthrene	U	35.5	ug/kg	10.6	35.5
120-12-7	Anthracene	U	35.5	ug/kg	7.10	35.5
84-74-2	Di-n-butylphthalate	U	355	ug/kg	71.0	355
206-44-0	Fluoranthene	U	35.5	ug/kg	10.6	35.5
85-68-7	Butylbenzylphthalate	U	355	ug/kg	71.0	355
56-55-3	Benzo(a)anthracene	U	35.5	ug/kg	10.6	35.5
91-94-1	3,3'-Dichlorobenzidine	U	355	ug/kg	106	355
218-01-9	Chrysene	U	35.5	ug/kg	10.6	35.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	355	ug/kg	71.0	355
117-84-0	Di-n-octylphthalate	U	355	ug/kg	71.0	355
205-99-2	Benzo(b)fluoranthene	U	35.5	ug/kg	10.6	35.5
207-08-9	Benzo(k)fluoranthene	U	35.5	ug/kg	10.6	35.5
50-32-8	Benzo(a)pyrene	U	35.5	ug/kg	10.6	35.5
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.5	ug/kg	10.6	35.5
53-70-3	Dibenzo(a,h)anthracene	U	35.5	ug/kg	10.6	35.5
191-24-2	Benzo(ghi)perylene	U	35.5	ug/kg	10.6	35.5
120-82-1	1,2,4-Trichlorobenzene	U	355	ug/kg	71.0	355

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.82	676	ug/kg		JA
77-53-2	Cedrol	6.39	333	ug/kg	93	NJ

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210	Date Collected: 01/07/2010 12:00	Matrix: R
Lab Sample ID: 244599012	Date Received: 01/13/2010 08:55	%Moisture: 6.6
	Client: LANL010	Project: LANL01004
Client ID: RE12-10-7255	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 941702	Inst: MSD7.I	Dilution: 1
Run Date: 01/20/2010 16:19	Analyst: JMB3	Inj. Vol: .5 uL
Prep Date: 01/14/2010 19:34	Aliquot: 30.18 g	Final Volume: 1 mL
Data File: s7a2017.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
---------	----------	-----------	--------	-------	---------	---------

Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	8.81	436	ug/kg	96	NJ
	Unknown	9.83	213	ug/kg		J
	Unknown	10.53	395	ug/kg		J
	Unknown	11.51	580	ug/kg		J
	Unknown	12.73	326	ug/kg		J
83-46-5	.beta.-Sitosterol	13.25	750	ug/kg	97	NJ
	Unknown	14.11	494	ug/kg		J
	Unknown	14.3	251	ug/kg		J

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Data file : /chem/MSD7.i/s012010.b/s7a2017.d  
 Lab Smp Id: 244599012 Client Smp ID: RE12-10-7255  
 Inj Date : 20-JAN-2010 16:19  
 Operator : JMB3 Inst ID: MSD7.i  
 Smp Info : |244599012|941702|1|SVM|1|LANL  
 Misc Info : |MSD8270\_S|WBN100107-02|  
 Comment : Column: J&W Scientific DB-5MS 25m x 0.2mm x 0.33um film thickness  
 Method : /chem/MSD7.i/s012010.b/MSD7-M8270C-AQA-011310.m  
 Meth Date : 20-Jan-2010 17:34 llo00884 Quant Type: ISTD  
 Cal Date : 15-JAN-2010 19:06 Cal File: s7a1515.d  
 Als bottle: 16  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: 10-1210.sub  
 Target Version: 3.50  
 Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.18000	weight of sample
M	6.60650	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4		152	3.793	3.793	(1.000)	351199	40.0000	
* 29 Naphthalene-d8		136	4.650	4.655	(1.000)	1333397	40.0000	
* 46 Acenaphthene-d10		164	5.892	5.897	(1.000)	669346	40.0000	
* 67 Phenanthrene-d10		188	7.043	7.043	(1.000)	1249792	40.0000	
* 91 Chrysene-d12		240	9.422	9.431	(1.000)	1008567	40.0000	
* 98 Perylene-d12		264	10.967	10.977	(1.000)	678887	40.0000	
\$ 3 2-Fluorophenol		112	2.993	2.984	(0.789)	685110	67.8861	2410
\$ 5 Phenol-d5		99	3.513	3.513	(0.926)	893437	68.6638	2440
\$ 20 Nitrobenzene-d5		82	4.149	4.154	(0.892)	415362	37.7628	1340
\$ 39 2-Fluorobiphenyl		172	5.391	5.391	(0.915)	749985	38.0238	1350
\$ 60 2,4,6-Tribromophenol		329	6.480	6.484	(1.100)	138786	82.4187	2920
\$ 81 p-Terphenyl-d14		244	8.406	8.406	(0.892)	745058	43.2517	1530



## ION RATIO REPORT

## SV REPORT

Data file: s7a2017.d

Report Date: 01/20/2010 17:35

Lab. ID: 244599012

SampleType: SAMPLE

Injection Date: 20-JAN-2010 16:19

Operator: JMB3

Instrument: MSD7.i

Sample Info: |244599012|941702|1|SVM|1|LANL

Miscellaneous Info: |MSD8270\_S|WBN100107-02|

Comment:

Method used: /chem/MSD7.i/s012010.b/MSD7-M8270C-AQA-011310.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1210

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4	Aniline		CAS#: 62-53-3			
66	45704	3.51	3.58	80-120	100	(T)
93	243	3.48	3.58	187-247	1	(QT)
-----						
17	N-Nitrosodipropylamine		CAS#: 621-64-7			
70	59854	4.15	4.03	80-120	100	(T)
42	47859	4.15	4.03	63-123	80	(T)
-----						
27	Benzoic acid		CAS#: 65-85-0			
105	617	4.43	4.43	80-120	100	( )
122	256	4.65	4.43	58-118	41	(QT)
77	1185	4.45	4.43	51-111	192	(Q)
-----						
40	2-Chloronaphthalene		CAS#: 91-58-7			
162	9592	5.63	5.50	80-120	100	(T)
164	493	5.63	5.50	2- 62	5	(T)
127	842	5.63	5.50	7- 67	9	(T)
-----						
42	o-Nitroaniline		CAS#: 88-74-4			
65	15183	5.63	5.56	80-120	100	(T)
92	17756	5.63	5.56	26- 86	117	(QT)
138	892	5.63	5.56	61-121	6	(QT)
-----						
43	Dimethylphthalate		CAS#: 131-11-3			
163	121621	5.90	5.67	80-120	100	(T)
164	669346	5.89	5.67	0- 40	550	(QT)
-----						

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
44	2,6-Dinitrotoluene			CAS#: 606-20-2		
165	87910	5.89	5.72	80-120	100	(T)
63	1644	5.89	5.72	49-109	2	(QT)
-----						
50	2,4-Dinitrotoluene			CAS#: 121-14-2		
165	87910	5.89	6.01	80-120	100	(T)
89	1715	5.89	6.01	44-104	2	(QT)
63	1644	5.89	6.01	29- 89	2	(QT)
-----						
53	Fluorene			CAS#: 86-73-7		
166	11843	6.48	6.30	80-120	100	(T)
165	11610	6.48	6.30	56-116	98	(T)
167	3919	6.48	6.30	0- 44	33	(T)
-----						
61	4-Bromophenylphenylether			CAS#: 101-55-3		
248	10333	6.48	6.66	80-120	100	(T)
141	78393	6.48	6.66	57-117	759	(QT)
250	20586	6.48	6.66	68-128	199	(QT)

Q qualifier indicates ion failed ratio requirement

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Data file : /chem/MSD7.i/s012010.b/s7a2017.d  
Lab Smp Id: 244599012 Client Smp ID: RE12-10-7255  
Inj Date : 20-JAN-2010 16:19  
Operator : JMB3 Inst ID: MSD7.i  
Smp Info : |244599012|941702|1|SVM|1|LANL  
Misc Info : |MSD8270 S|WBN100107-02|  
Comment : Column: J&W Scientific DB-5MS 25m x 0.2mm x 0.33um film thickness  
Method : /chem/MSD7.i/s012010.b/MSD7-M8270C-AQA-011310.m  
Meth Date : 20-Jan-2010 17:34 llo00884 Quant Type: ISTD  
Cal Date : 15-JAN-2010 19:06 Cal File: s7a1515.d  
Als bottle: 16  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1210.sub  
Target Version: 3.50  
Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.18000	weight of sample
M	6.60650	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.793	2260868	40.000
* 46 Acenaphthene-d10	5.892	2960495	40.000
* 91 Chrysene-d12	9.422	2735406	40.000
* 98 Perylene-d12	10.967	2004471	40.000

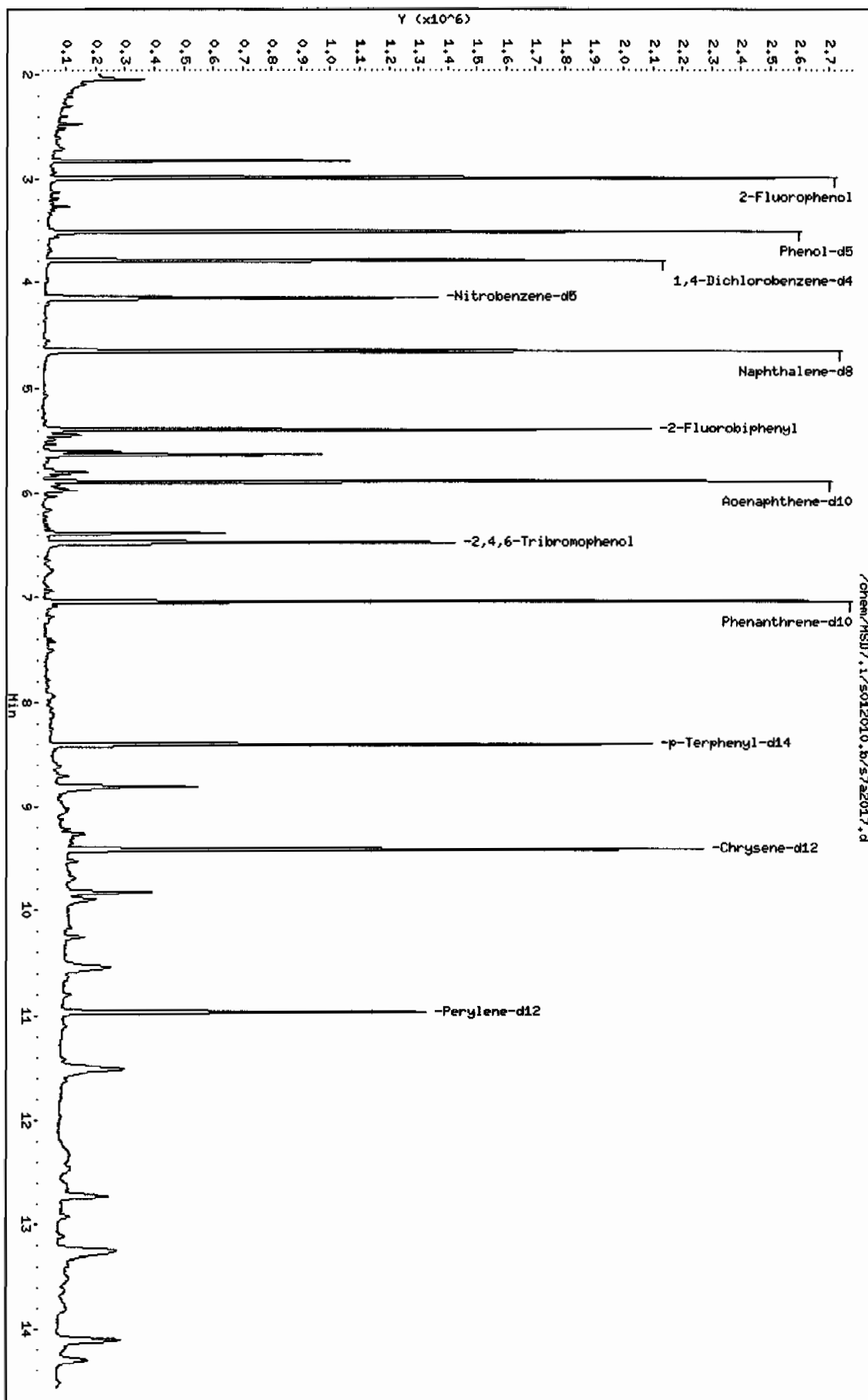
CONCENTRATIONS				QUANT			
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
Unknown Aldol Condensate					CAS #:		
2.825	1076446	19.0448256	676	0		0	10
Cedrol					CAS #: 77-53-2		
6.388	695616	9.39864789	333	93	NIST05.L	72886	46
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa					CAS #: 511-15-9		
8.810	839738	12.2795270	436	96	NIST05.L	116239	91
Unknown					CAS #:		
9.831	411295	6.01438841	213	0		0	91
Unknown					CAS #:		
10.534	558224	11.1395722	395	0		0	98
Unknown					CAS #:		
11.512	819464	16.3527132	580	0		0	98
Unknown					CAS #:		
12.735	460964	9.19870652	326	0		0	98
.beta.-Sitosterol					CAS #: 83-46-5		
13.245	1060042	21.1535377	750	97	NIST05.L	174400	98
Unknown					CAS #:		
14.107	697821	13.9252870	494	0		0	98
Unknown					CAS #:		
14.305	355016	7.08447219	251	0		0	98

Data File: /chem/MSD7.i/s012010.b/s7a2017.d  
 Date: 20-Jan-2010 16:19  
 Client ID: REL2-10-7255  
 Sample Info: 1244599012194170211SVN11LNL  
 Volume Injected (uL): 0.5  
 Column phase: J&W DB-BMS

Instrument: MSD7.1  
 Operator: JHB3  
 Column diameter: 0.20

Page 1



Date : 20-JAN-2010 16:19

Client ID: RE12-10-7255

Instrument: MSD7,i

Sample Info: I2445990121941702111SVH111LANL

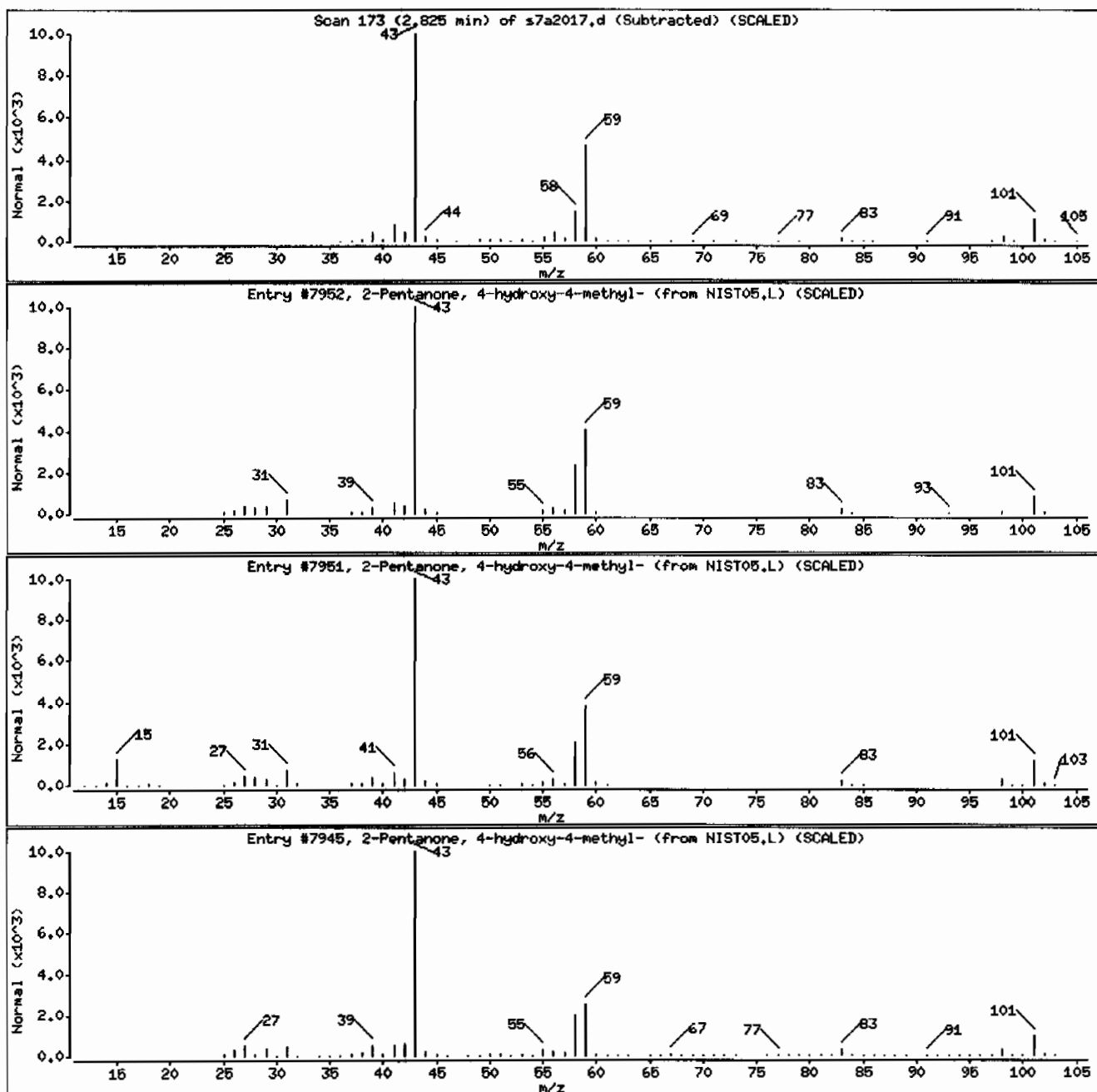
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	25	C6H12O2	116



Date: 20-JAN-2010 16:19

Client ID: RE12-10-7255

Instrument: MSD7.i

Sample Info: 1244599012194170211SVH11/LANL

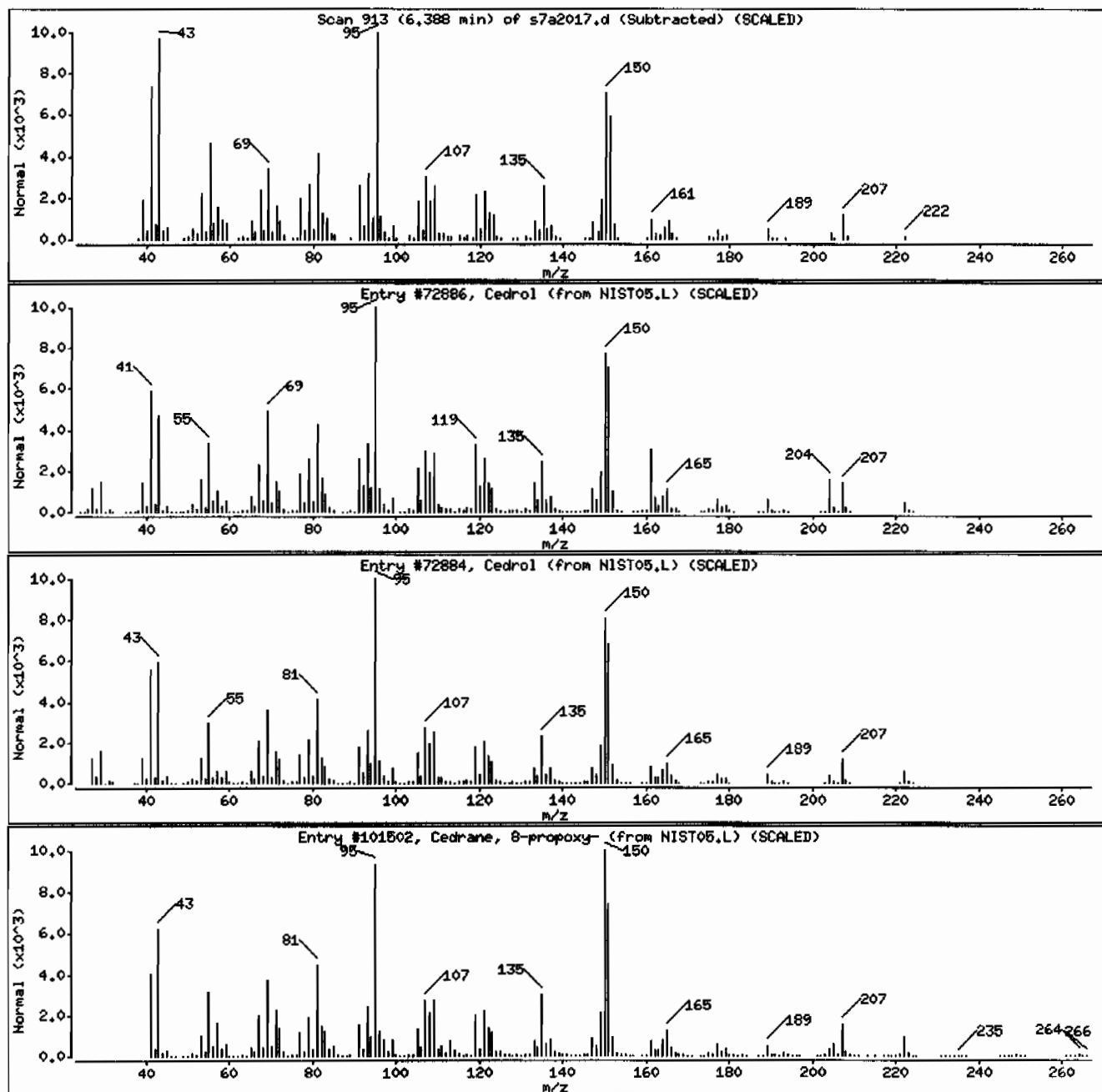
Volume Injected (uL): 0.5

Operator: JHB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cedrol	77-53-2	NIST05.L	72886	93	C15H26O	222
Cedrol	77-53-2	NIST05.L	72884	91	C15H26O	222
Cedrane, 8-propoxy-	19870-75-8	NIST05.L	101502	91	C18H32O	264



Date : 20-JAN-2010 16:19

Client ID: RE12-10-7255

Instrument: MSD7.1

Sample Info: 12445990121941702111SVMI11LANL

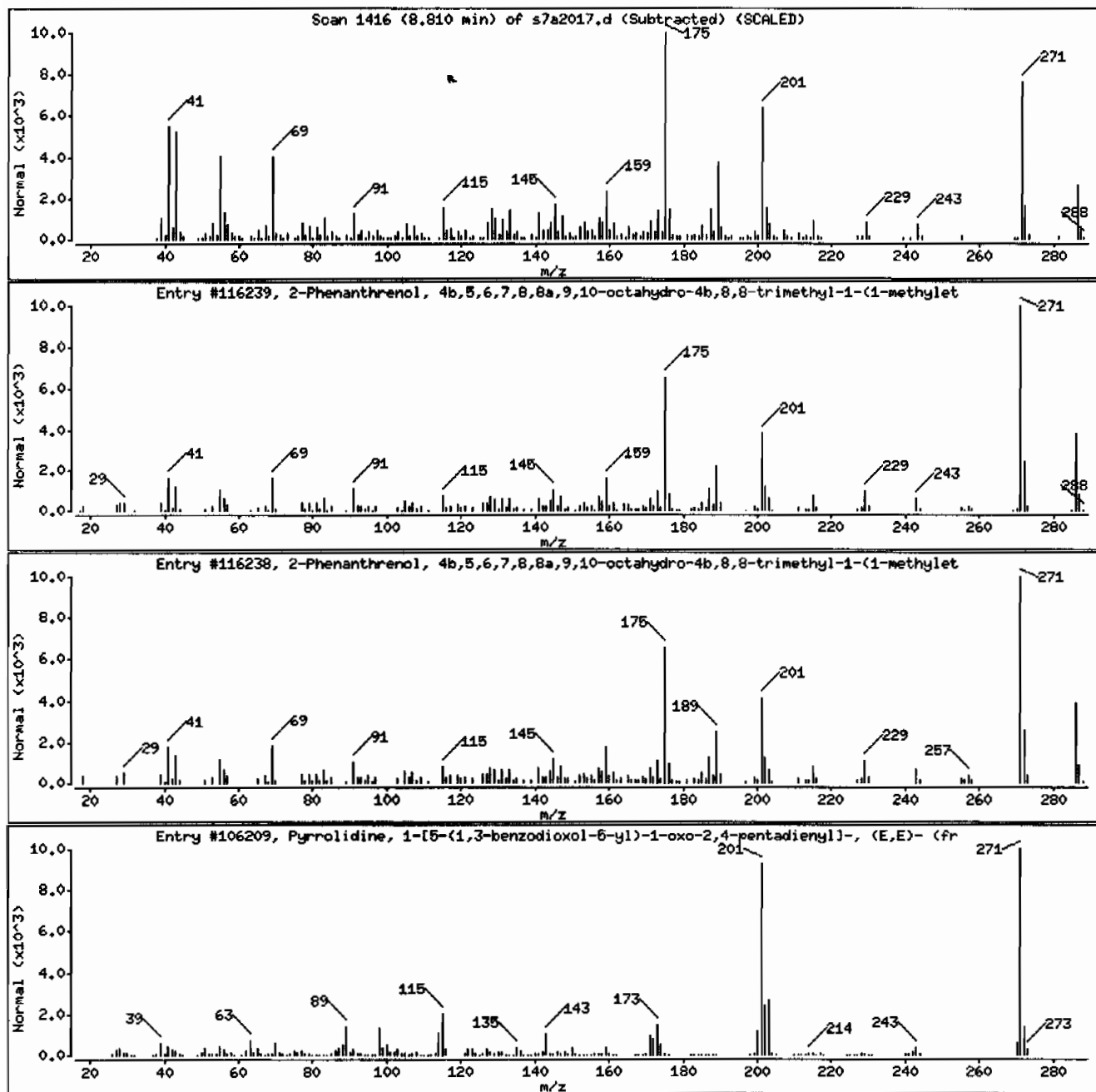
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116239	96	C20H30O	286
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116238	96	C20H30O	286
Pyrrolidine, 1-[5-(1,3-benzodioxol-5-yl)	25924-78-1	NIST05.L	106209	50	C16H17NO3	271





Date : 20-JAN-2010 16:19

Client ID: RE12-10-7255

Instrument: HSD7.i

Sample Info: 1244599012194170211SVH11LANL

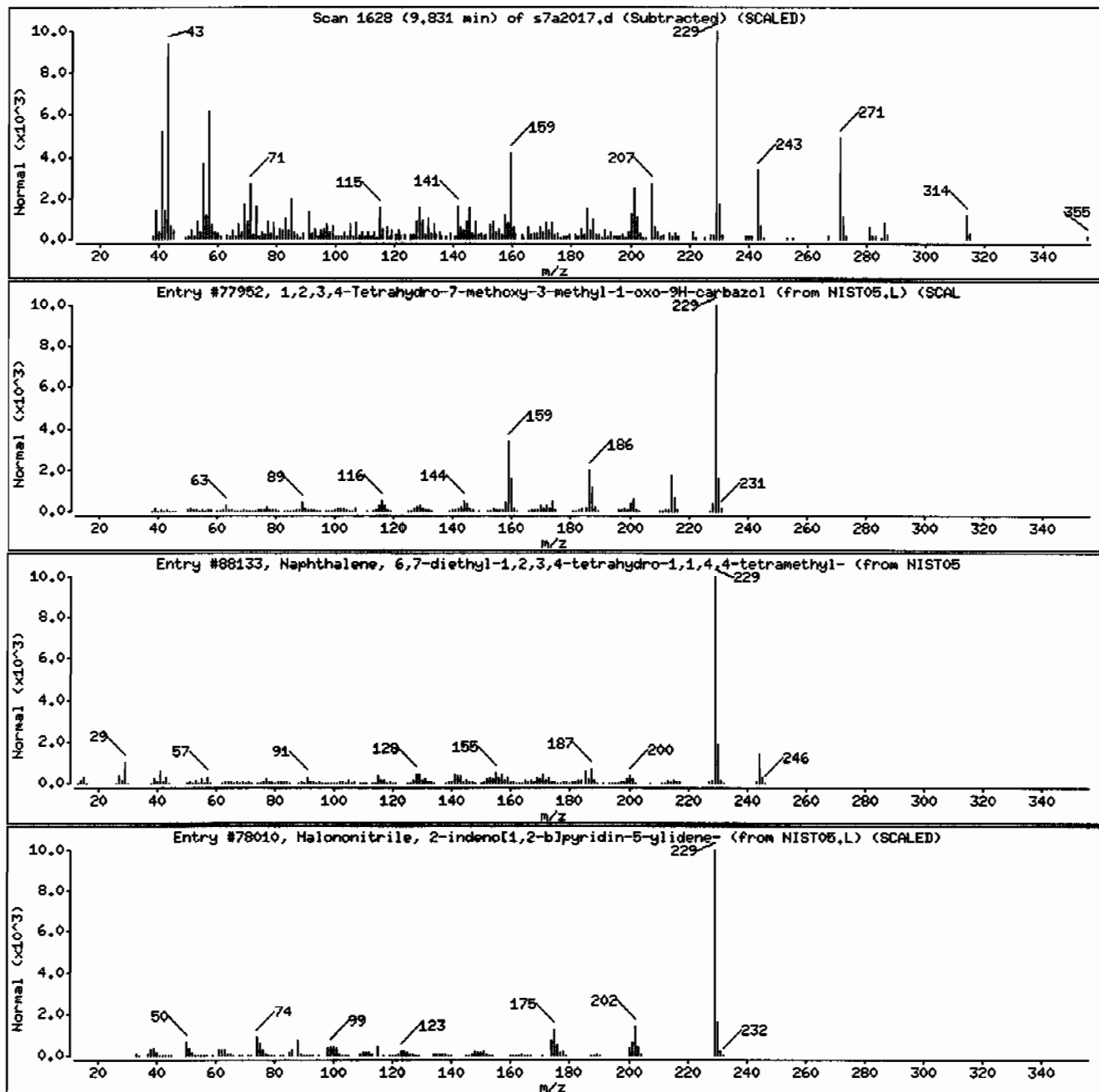
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,2,3,4-Tetrahydro-7-methoxy-3-methyl-1-Naphthalene, 6,7-diethyl-1,2,3,4-tetrahy	32550-51-9	NIST05.L	77952	45	C14H15NO2	229
Malononitrile, 2-indeno[1,2-b]pyridin-5-	55741-10-1	NIST05.L	88133	46	C18H28	244
	1000316-60-9	NIST05.L	78010	38	C15H7N3	229



Date : 20-JAN-2010 16:19

Client ID: RE12-10-7255

Instrument: MSD7.i

Sample Info: 1244599012194170211SVH11LANL

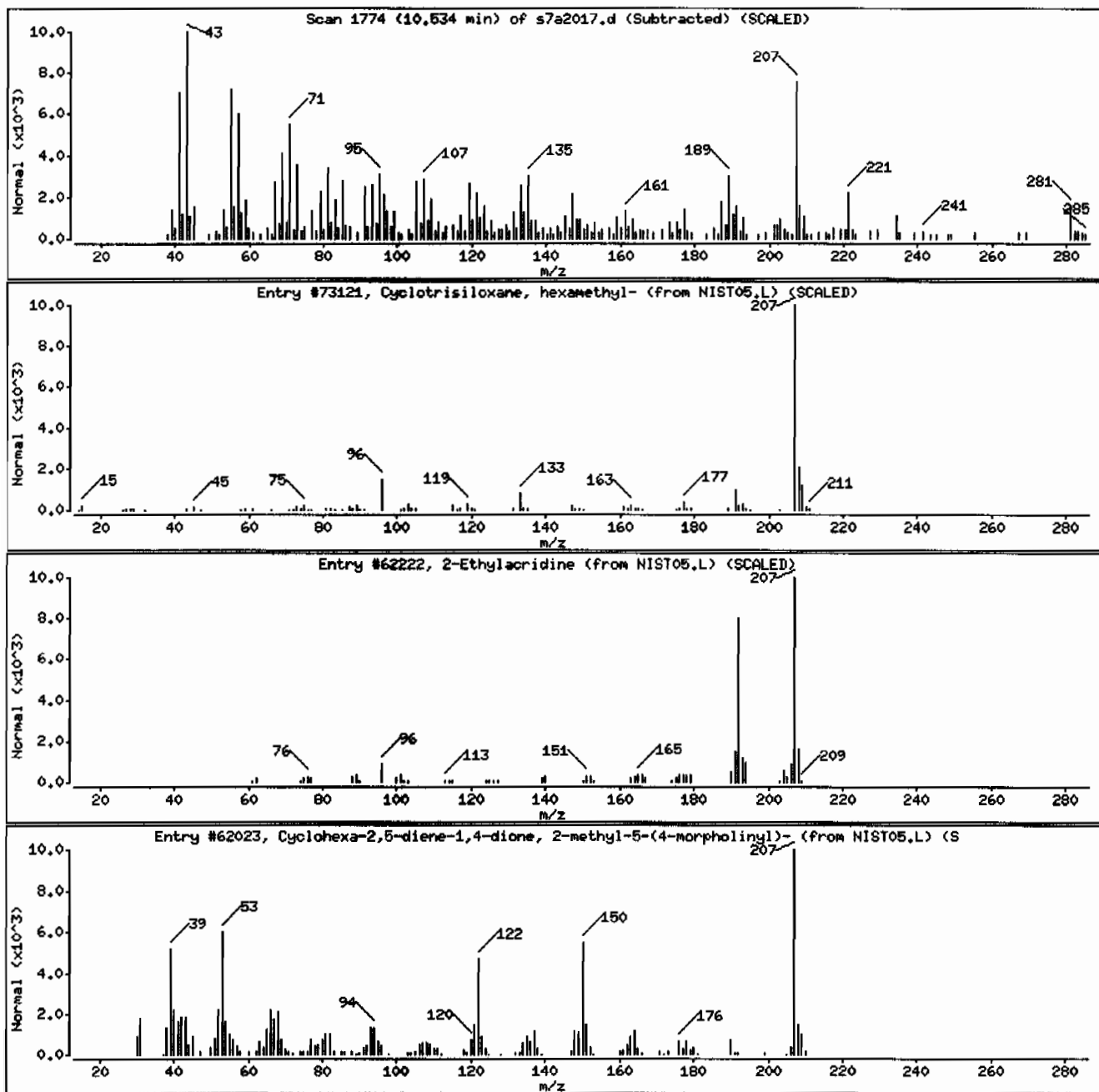
Volume Injected (uL): 0.5

Operator: JHB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73121	43	C <sub>6</sub> H <sub>18</sub> O <sub>3</sub> Si <sub>3</sub>	222
2-Ethylacridine	55751-83-2	NIST05.L	62222	42	C <sub>15</sub> H <sub>13</sub> N	207
Cyclohexa-2,5-diene-1,4-dione, 2-methyl-	2158-89-6	NIST05.L	62023	38	C <sub>11</sub> H <sub>13</sub> NO <sub>3</sub>	207



Date : 20-JAN-2010 16:19

Client ID: RE12-10-7255

Instrument: MSD7.i

Sample Info: I2445990121941702111SVH111LANL

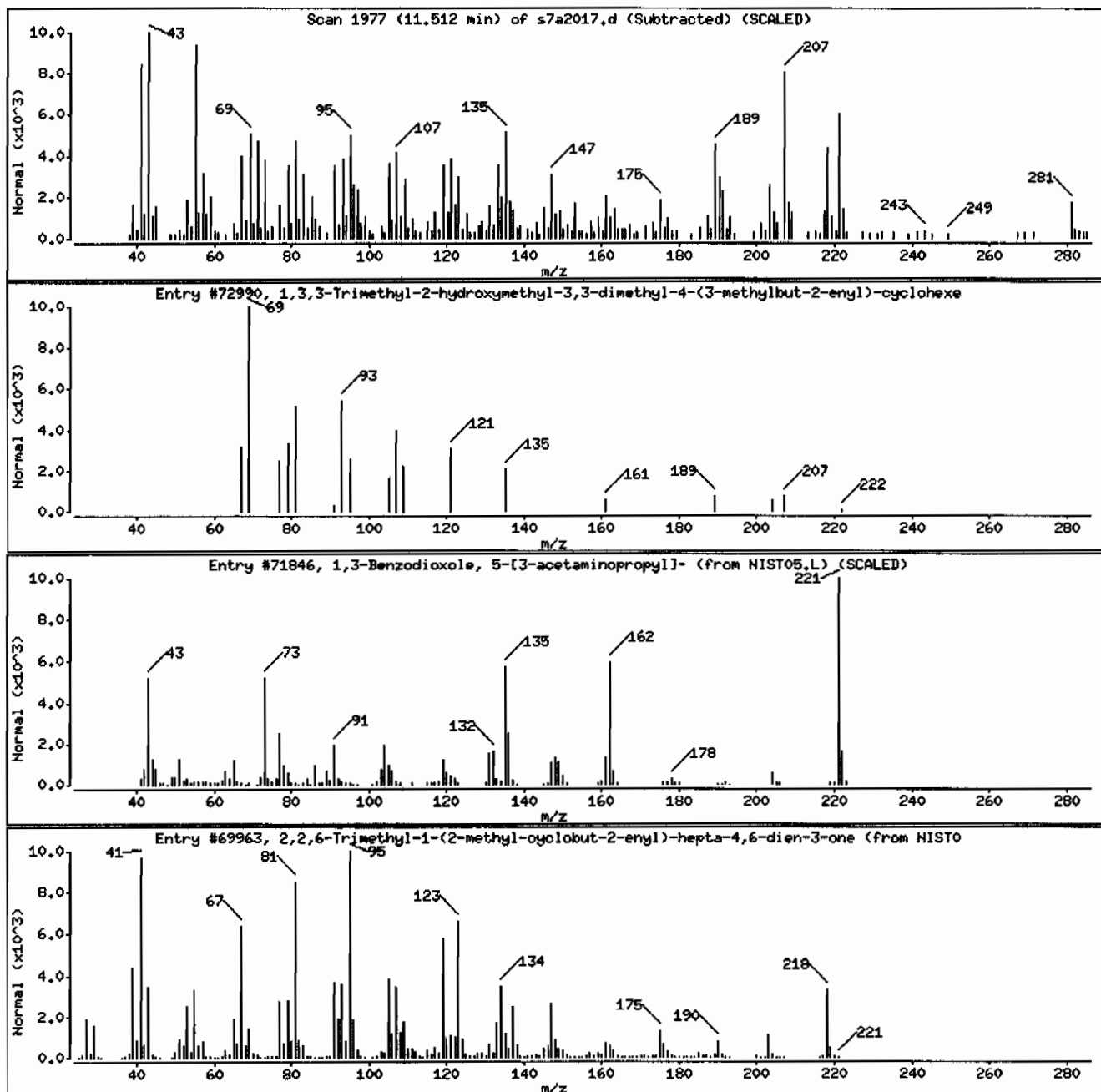
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Hatch	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,3,3-Trimethyl-2-hydroxymethyl-3,3-dime	1000144-10-7	NIST05.L	72990	50	C16H26O	222
1,3-Benzodioxole, 5-[3-acetaminopropyl]-	1000124-33-0	NIST05.L	71846	25	C12H15NO3	221
2,2,6-Trimethyl-1-(2-methyl-cyclobut-2-yl	1000188-72-8	NIST05.L	69963	25	C15H22O	218



Date : 20-JAN-2010 16:19

Client ID: RE12-10-7255

Instrument: MSD7.i

Sample Info: 1244599012194170211SVH11ILANL

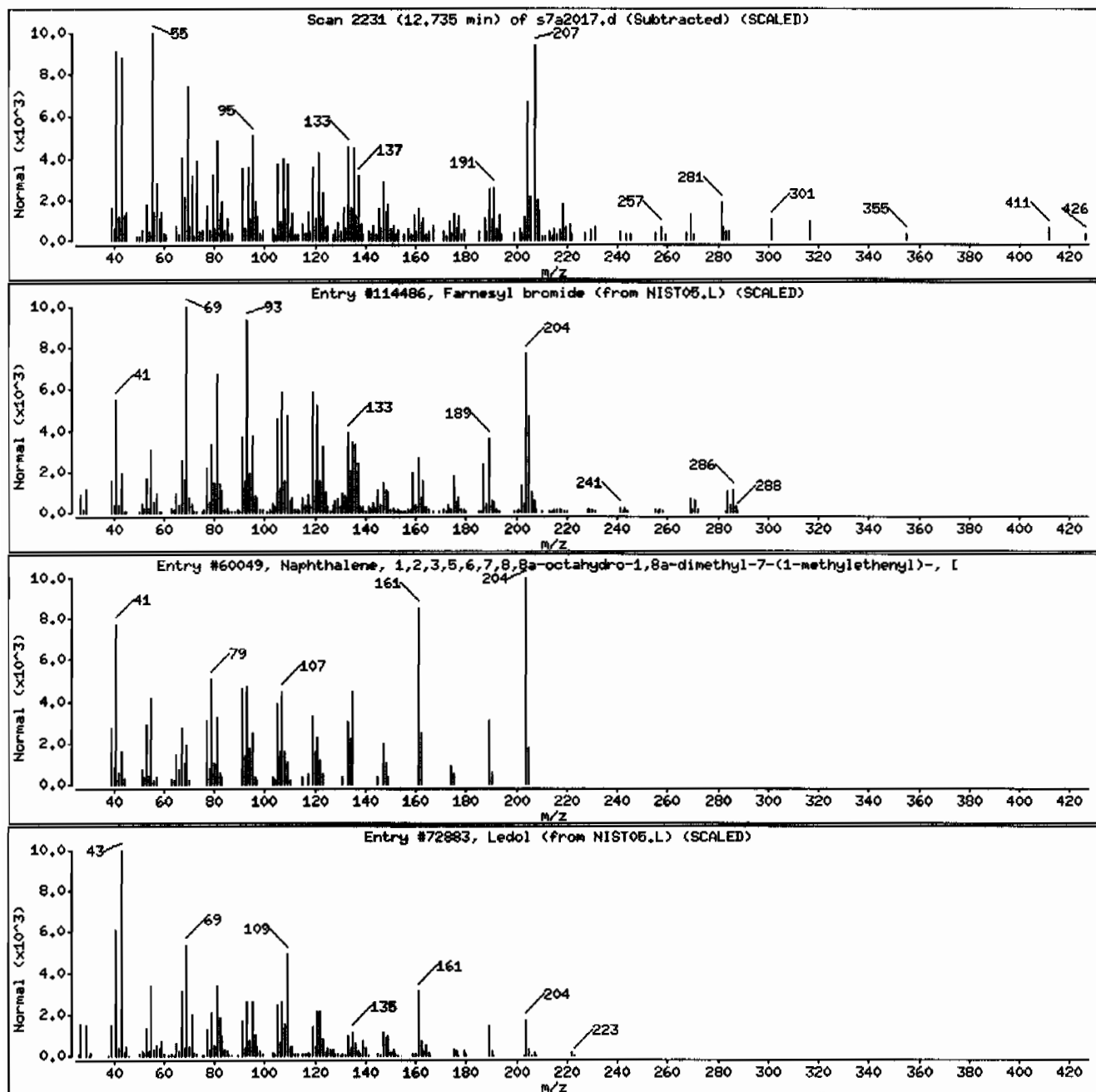
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Farnesyl bromide	6874-67-5	NIST05.L	114486	43	C <sub>15</sub> H <sub>25</sub> Br	284
Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	4630-07-3	NIST05.L	60049	35	C <sub>15</sub> H <sub>24</sub>	204
Ledol	577-27-5	NIST05.L	72883	35	C <sub>15</sub> H <sub>26</sub> O	222



Date : 20-JAN-2010 16:19

Client ID: RE12-10-7255

Instrument: MSD7.i

Sample Info: 1244599012194170211ISVM11/LANL

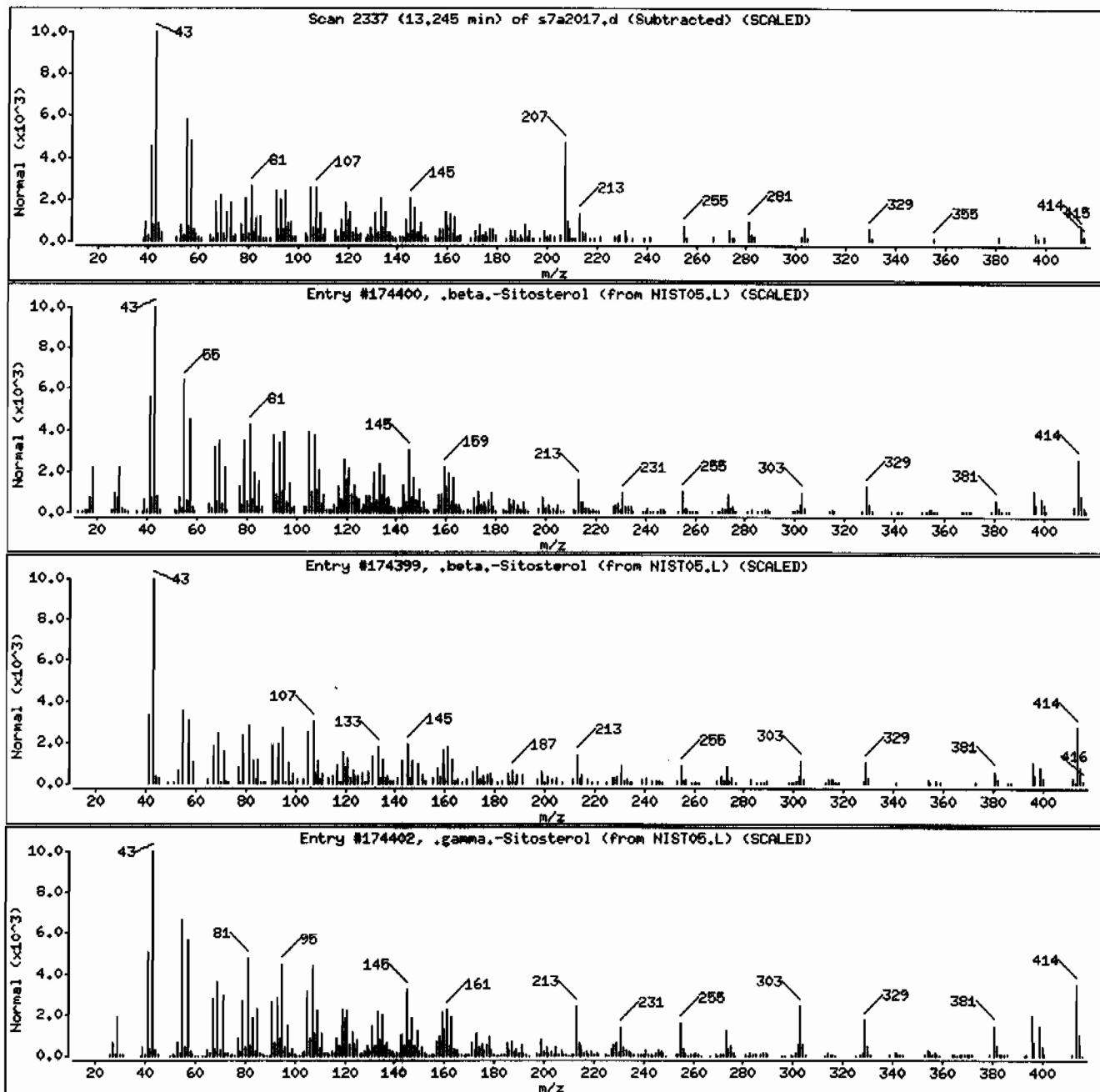
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
.beta.-Sitosterol	83-46-5	NIST05.L	174400	97	C <sub>29</sub> H <sub>50</sub> O	414
.beta.-Sitosterol	83-46-5	NIST05.L	174399	96	C <sub>29</sub> H <sub>50</sub> O	414
.gamma.-Sitosterol	83-47-6	NIST05.L	174402	86	C <sub>29</sub> H <sub>50</sub> O	414



Date : 20-JAN-2010 16:19

Client ID: RE12-10-7255

Instrument: HSD7.1

Sample Info: I244599012194170211SVMI1ILANL

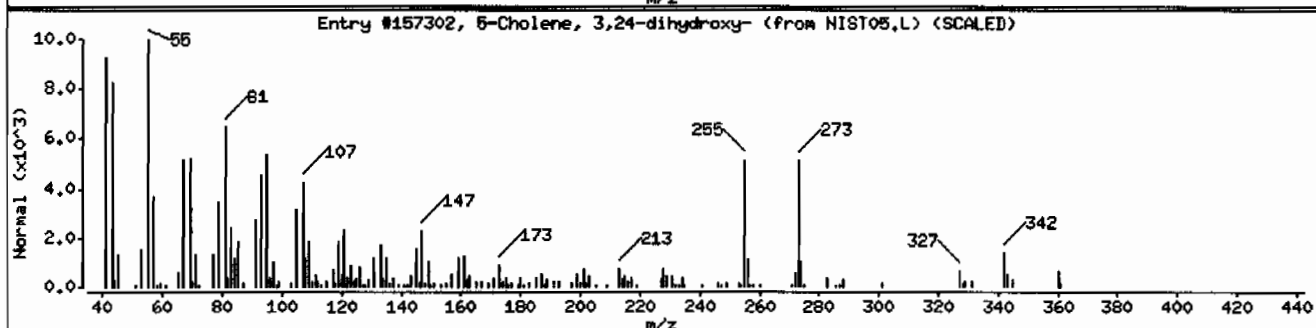
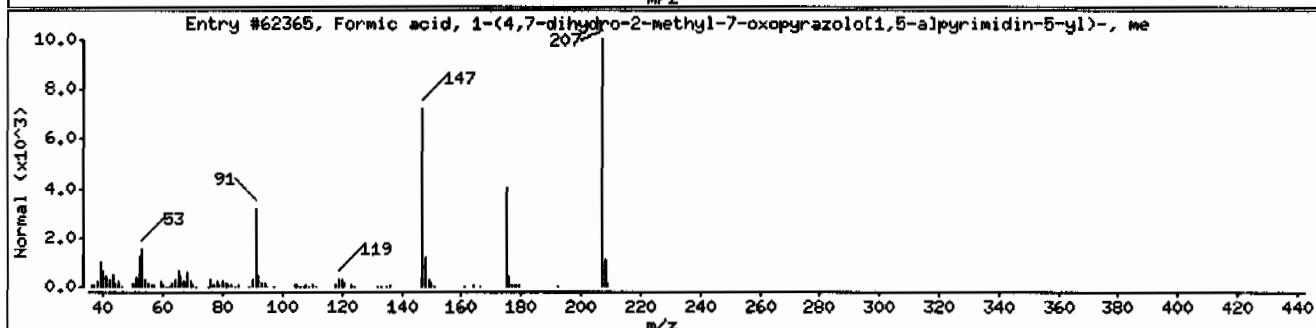
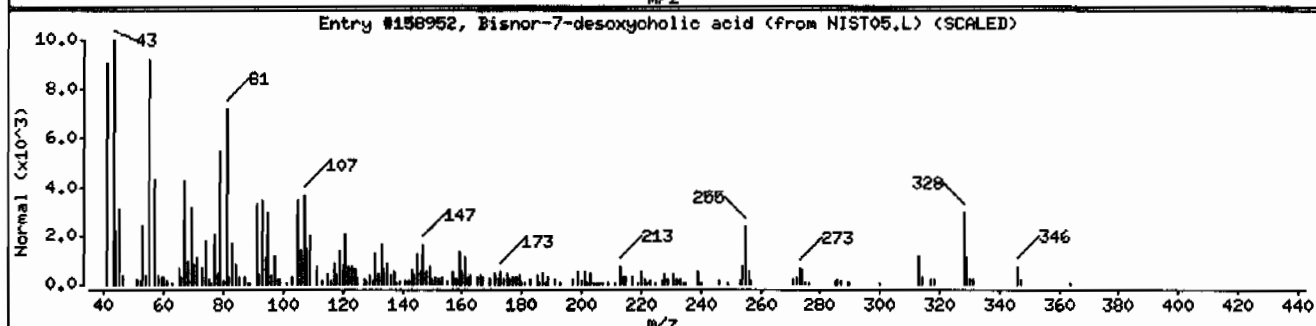
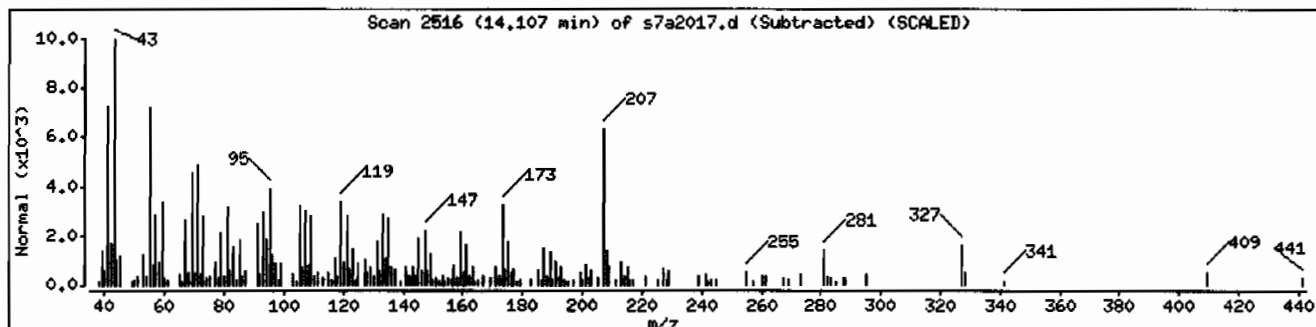
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Bisnor-7-desoxycholeic acid	1000252-00-7	NIST05.L	158952	32	C22H36O4	364
Formic acid, 1-(4,7-dihydro-2-methyl-7-o	1000267-28-6	NIST05.L	62365	14	C9H9N3O3	207
5-Cholene, 3,24-dihydroxy-	1000251-69-2	NIST05.L	157302	14	C24H40O2	360



Date : 20-JAN-2010 16:19

Client ID: RE12-10-7255

Instrument: MSD7.i

Sample Info: I244599012194170211ISVH11/LANL

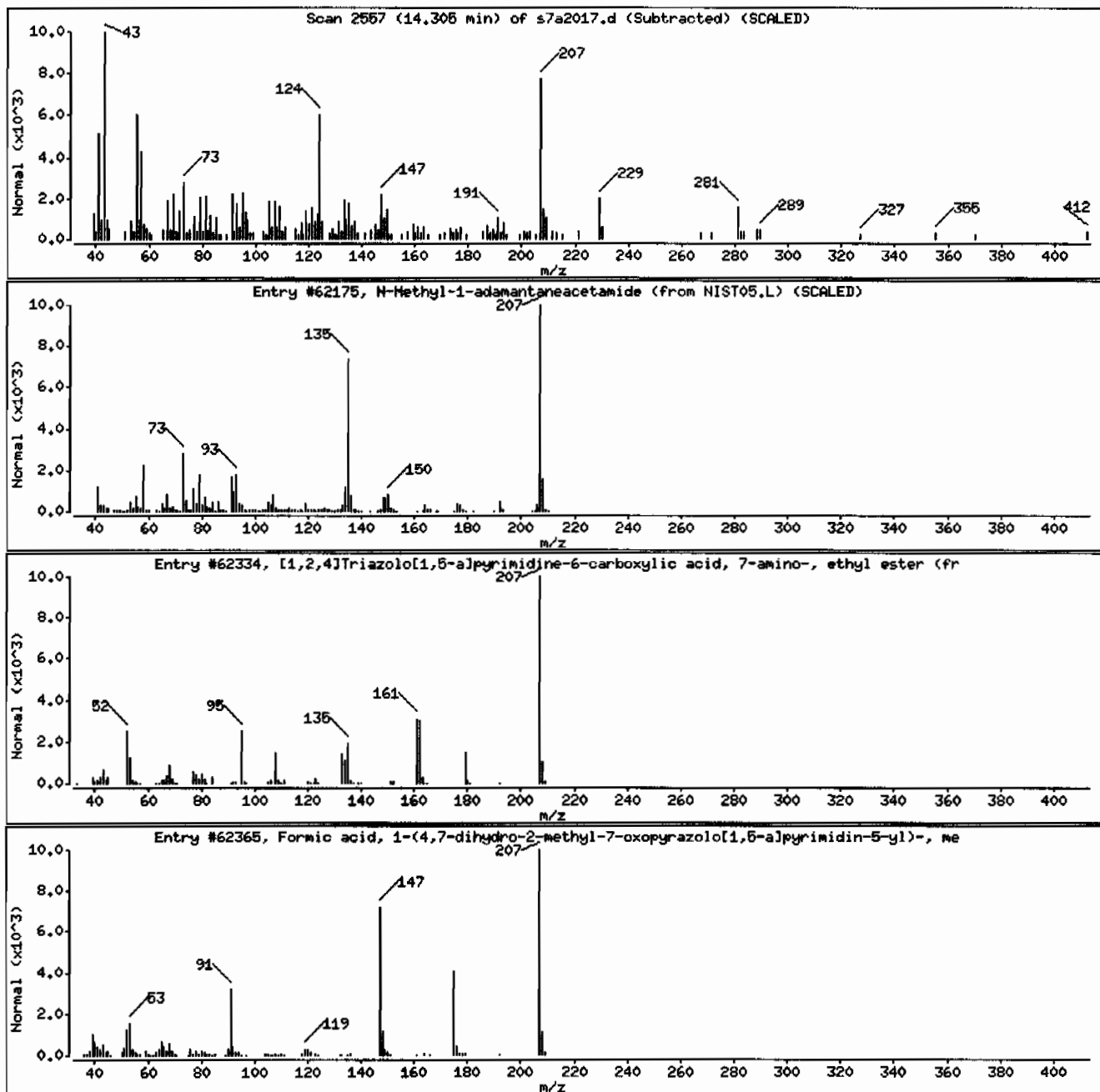
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
N-Methyl-1-adamantaneacetamide	31897-93-5	NIST05.L	62175	38	C13H21NO	207
[1,2,4]Triazolo[1,5-a]pyrimidine-6-carbo	1000316-76-8	NIST05.L	62334	38	C8H9N5O2	207
Formic acid, 1-(4,7-dihydro-2-methyl-7-o	1000267-28-6	NIST05.L	62365	35	C9H9N3O3	207



**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210  
Lab Sample ID: 244599013

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD7.I  
Analyst: JMB3  
Aliquot: 30.14 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 8.4  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE12-10-7276  
Batch ID: 941702  
Run Date: 01/20/2010 16:42  
Prep Date: 01/14/2010 19:34  
Data File: s7a2018.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	362	ug/kg	72.4	362
108-95-2	Phenol	U	362	ug/kg	72.4	362
95-57-8	2-Chlorophenol	U	362	ug/kg	72.4	362
106-46-7	1,4-Dichlorobenzene	U	362	ug/kg	72.4	362
621-64-7	N-Nitrosodipropylamine	U	362	ug/kg	72.4	362
59-50-7	4-Chloro-3-methylphenol	U	362	ug/kg	72.4	362
83-32-9	Acenaphthene	U	36.2	ug/kg	11.9	36.2
121-14-2	2,4-Dinitrotoluene	U	362	ug/kg	36.2	362
100-02-7	4-Nitrophenol	U	362	ug/kg	119	362
87-86-5	Pentachlorophenol	U	362	ug/kg	90.5	362
129-00-0	Pyrene	U	36.2	ug/kg	10.9	36.2
110-86-1	Pyridine	U	362	ug/kg	72.4	362
62-53-3	Aniline	U	362	ug/kg	109	362
111-44-4	bis(2-Chloroethyl) ether	U	362	ug/kg	72.4	362
541-73-1	1,3-Dichlorobenzene	U	362	ug/kg	72.4	362
100-51-6	Benzyl alcohol	U	362	ug/kg	109	362
95-50-1	1,2-Dichlorobenzene	U	362	ug/kg	72.4	362
108-60-1	bis(2-Chloroisopropyl)ether	U	362	ug/kg	72.4	362
95-48-7	o-Cresol	U	362	ug/kg	72.4	362
65794-96-9	m,p-Cresols	U	362	ug/kg	109	362
67-72-1	Hexachloroethane	U	362	ug/kg	72.4	362
98-95-3	Nitrobenzene	U	362	ug/kg	72.4	362
78-59-1	Isophorone	U	362	ug/kg	72.4	362
88-75-5	2-Nitrophenol	U	362	ug/kg	72.4	362
105-67-9	2,4-Dimethylphenol	U	362	ug/kg	127	362
111-91-1	bis(2-Chloroethoxy)methane	U	362	ug/kg	72.4	362
120-83-2	2,4-Dichlorophenol	U	362	ug/kg	72.4	362
65-85-0	Benzoic acid	U	724	ug/kg	181	724
91-20-3	Naphthalene	U	36.2	ug/kg	10.9	36.2
106-47-8	4-Chloroaniline	U	362	ug/kg	72.4	362
87-68-3	Hexachlorobutadiene	U	362	ug/kg	72.4	362
91-57-6	2-Methylnaphthalene	U	36.2	ug/kg	7.24	36.2
77-47-4	Hexachlorocyclopentadiene	U	362	ug/kg	72.4	362
88-06-2	2,4,6-Trichlorophenol	U	362	ug/kg	72.4	362
95-95-4	2,4,5-Trichlorophenol	U	362	ug/kg	72.4	362
91-58-7	2-Chloronaphthalene	U	36.2	ug/kg	11.9	36.2
88-74-4	2-Nitroaniline	U	362	ug/kg	72.4	362
99-09-2	<i>o</i> -Nitroaniline	U	362	ug/kg	72.4	362
	3-Nitroaniline					



**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210  
Lab Sample ID: 244599013

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD7.I  
Analyst: JMB3  
Allquot: 30.14 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 8.4  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	362	ug/kg	72.4	362
606-20-2	2,6-Dinitrotoluene	U	362	ug/kg	36.2	362
208-96-8	Acenaphthylene	U	36.2	ug/kg	10.9	36.2
51-28-5	2,4-Dinitrophenol	U	724	ug/kg	138	724
132-64-9	Dibenzofuran	U	362	ug/kg	72.4	362
84-66-2	Diethylphthalate	U	362	ug/kg	72.4	362
86-73-7	Fluorene	U	36.2	ug/kg	10.9	36.2
7005-72-3	4-Chlorophenylphenylether	U	362	ug/kg	72.4	362
534-52-1	2-Methyl-4,6-dinitrophenol	U	362	ug/kg	72.4	362
100-01-6	4-Nitroaniline	U	362	ug/kg	109	362
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	362	ug/kg	72.4	362
122-66-7	Azobenzene	U	362	ug/kg	72.4	362
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	362	ug/kg	72.4	362
118-74-1	Hexachlorobenzene	U	362	ug/kg	72.4	362
85-01-8	Phenanthrene	U	36.2	ug/kg	10.9	36.2
120-12-7	Anthracene	U	36.2	ug/kg	7.24	36.2
84-74-2	Di-n-butylphthalate	U	362	ug/kg	72.4	362
206-44-0	Fluoranthene	U	36.2	ug/kg	10.9	36.2
85-68-7	Butylbenzylphthalate	U	362	ug/kg	72.4	362
56-55-3	Benzo(a)anthracene	U	36.2	ug/kg	10.9	36.2
91-94-1	3,3'-Dichlorobenzidine	U	362	ug/kg	109	362
218-01-9	Chrysene	U	36.2	ug/kg	10.9	36.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	362	ug/kg	72.4	362
117-84-0	Di-n-octylphthalate	U	362	ug/kg	72.4	362
205-99-2	Benzo(b)fluoranthene	U	36.2	ug/kg	10.9	36.2
207-08-9	Benzo(k)fluoranthene	U	36.2	ug/kg	10.9	36.2
50-32-8	Benzo(a)pyrene	U	36.2	ug/kg	10.9	36.2
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.2	ug/kg	10.9	36.2
53-70-3	Dibenzo(a,h)anthracene	U	36.2	ug/kg	10.9	36.2
191-24-2	Benzo(ghi)perylene	U	36.2	ug/kg	10.9	36.2
120-82-1	1,2,4-Trichlorobenzene	U	362	ug/kg	72.4	362

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.82	676	ug/kg		JA
56246-42-5	2-Butenoic acid, 2-methyl-, 1a,2,4,4a,5,	8.57	313	ug/kg	80	NJ

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210  
Lab Sample ID: 244599013

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD7.1  
Analyst: JMB3  
Aliquot: 30.14 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 8.4  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE12-10-7276  
Batch ID: 941702  
Run Date: 01/20/2010 16:42  
Prep Date: 01/14/2010 19:34  
Data File: s7a2018.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
---------	----------	-----------	--------	-------	---------	---------

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	9.03	731	ug/kg		J
55751-83-2	2-Ethylacridine	10.53	415	ug/kg	80	NJ
	Unknown	11.51	519	ug/kg		J
	Unknown	12.72	487	ug/kg		J

Data File: /chem/MSD7.i/s012010.b/s7a2018.d  
Report Date: 20-Jan-2010 17:40

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Data file : /chem/MSD7.i/s012010.b/s7a2018.d  
Lab Smp Id: 244599013 Client Smp ID: RE12-10-7276  
Inj Date : 20-JAN-2010 16:42  
Operator : JMB3 Inst ID: MSD7.i  
Smp Info : |244599013|941702|1|SVM|1|LANL  
Misc Info : |MSD8270\_S|WBN100107-02|  
Comment : Column: J&W Scientific DB-5MS 25m x 0.2mm x 0.33um film thickness  
Method : /chem/MSD7.i/s012010.b/MSD7-M8270C-AQA-011310.m  
Meth Date : 20-Jan-2010 17:34 llo00884 Quant Type: ISTD  
Cal Date : 15-JAN-2010 19:06 Cal File: s7a1515.d  
Als bottle: 17  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1210.sub  
Target Version: 3.50  
Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.14000	weight of sample
M	8.35460	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT	SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
								ON-COLUMN	FINAL
								(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152			3.793	3.793	(1.000)	261074	40.0000	
* 29 Naphthalene-d8	136			4.650	4.655	(1.000)	966701	40.0000	
* 46 Acenaphthene-d10	164			5.892	5.897	(1.000)	520891	40.0000	
* 67 Phenanthrene-d10	188			7.043	7.043	(1.000)	949436	40.0000	
* 91 Chrysene-d12	240			9.422	9.431	(1.000)	773850	40.0000	
* 98 Perylene-d12	264			10.963	10.977	(1.000)	524309	40.0000	
\$ 3 2-Fluorophenol	112			2.993	2.984	(0.789)	490602	65.3942	2370
\$ 5 Phenol-d5	99			3.513	3.513	(0.926)	628811	65.0091	2350
\$ 20 Nitrobenzene-d5	82			4.149	4.154	(0.892)	293802	36.8434	1330
\$ 39 2-Fluorobiphenyl	172			5.391	5.391	(0.915)	550192	35.8444	1300
\$ 60 2,4,6-Tribromophenol	329			6.480	6.484	(1.100)	96955	73.9868	2680
\$ 81 p-Terphenyl-d14	244			8.406	8.406	(0.892)	557611	42.1884	1530

## ION RATIO REPORT

## SV REPORT

Data file: s7a2018.d

Report Date: 01/20/2010 17:35

Lab. ID: 244599013

SampleType: SAMPLE

Injection Date: 20-JAN-2010 16:42

Operator: JMB3

Instrument: MSD7.i

Sample Info: |244599013|941702|1|SVM|1|LANL

Miscellaneous Info: |MSD8270\_S|WBN100107-02|

Comment:

Method used: /chem/MSD7.i/s012010.b/MSD7-M8270C-AQA-011310.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1210

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4	Aniline	CAS#: 62-53-3				
66	33105	3.51	3.58	80-120	100	(T)
93	279	3.47	3.58	187-247	1	(QT)
-----						
17	N-Nitrosodipropylamine	CAS#: 621-64-7				
70	42584	4.15	4.03	80-120	100	(T)
42	32805	4.15	4.03	63-123	77	(T)
-----						
43	Dimethylphthalate	CAS#: 131-11-3				
163	92988	5.89	5.67	80-120	100	(T)
164	520891	5.89	5.67	0- 40	560	(QT)
-----						
44	2,6-Dinitrotoluene	CAS#: 606-20-2				
165	66054	5.89	5.72	80-120	100	(T)
63	1209	5.89	5.72	49-109	2	(QT)
-----						
50	2,4-Dinitrotoluene	CAS#: 121-14-2				
165	66054	5.89	6.01	80-120	100	(T)
89	877	5.89	6.01	44-104	1	(QT)
63	1209	5.89	6.01	29- 89	2	(QT)
-----						
53	Fluorene	CAS#: 86-73-7				
166	8662	6.48	6.30	80-120	100	(T)
165	8445	6.48	6.30	56-116	98	(T)
167	2920	6.48	6.30	0- 44	34	(T)

Q qualifier indicates ion failed ratio requirement

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Data file : /chem/MSD7.i/s012010.b/s7a2018.d  
Lab Smp Id: 244599013 Client Smp ID: RE12-10-7276  
Inj Date : 20-JAN-2010 16:42  
Operator : JMB3 Inst ID: MSD7.i  
Smp Info : |244599013|941702|1|SVM|1|LANL  
Misc Info : |MSD8270 S|WBN100107-02|  
Comment : Column: J&W Scientific DB-5MS 25m x 0.2mm x 0.33um film thickness  
Method : /chem/MSD7.i/s012010.b/MSD7-M8270C-AQA-011310.m  
Meth Date : 20-Jan-2010 17:34 llo00884 Quant Type: ISTD  
Cal Date : 15-JAN-2010 19:06 Cal File: s7a1515.d  
Als bottle: 17  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1210.sub  
Target Version: 3.50  
Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.14000	weight of sample
M	8.35460	% moisture

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.793	1683501	40.000
* 91 Chrysene-d12	9.422	2101341	40.000
* 98 Perylene-d12	10.963	1566380	40.000

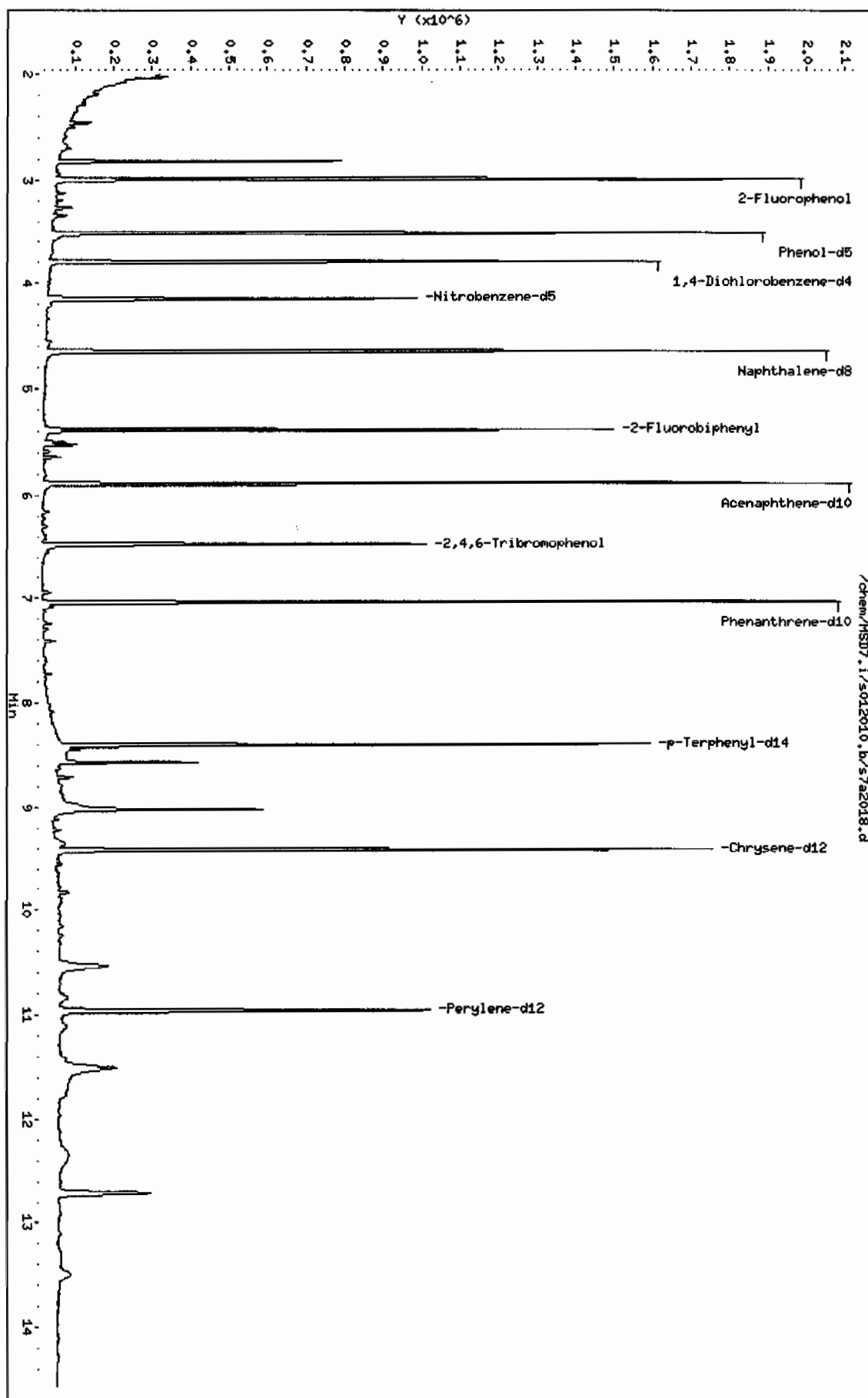
CONCENTRATIONS				QUANT			
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====

RT	AREA	CONCENTRATIONS		QUAL	QUANT		CPND #
		ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
Unknown Aldol Condensate					CAS #:		
2.820	785561	18.6649167	676	0		0	10
2-Butenoic acid, 2-methyl-, 1a,2,4,4a,5,					CAS #: 56246-42-5		
8.569	454224	8.64636903	313	80	NIST05.L	142450	91
Unknown					CAS #:		
9.027	1060696	20.1908294	731	0		0	91
2-Ethylacridine					CAS #: 55751-83-2		
10.534	448668	11.4574487	415	80	NIST05.L	62222	98
Unknown					CAS #:		
11.507	560972	14.3253128	519	0		0	98
Unknown					CAS #:		
12.715	526514	13.4453754	487	0		0	98

Data File: /chem/MSD7.i/s012010.b/s7a2018.d  
Date: 20-JUN-2010 16:42  
Client ID: RE12-10-7276  
Sample Info: 1244899013194170211SVH11LNL  
Volume Injected (uL): 0.5  
Column phase: 3M DB-SHS

Instrument: MSD7.i  
Operator: JHB3  
Column diameter: 0.20

Page 1



Date : 20-JAN-2010 16:42

Client ID: RE12-10-7276

Instrument: MSD7.i

Sample Info: I244599013194170211SVH11ILANL

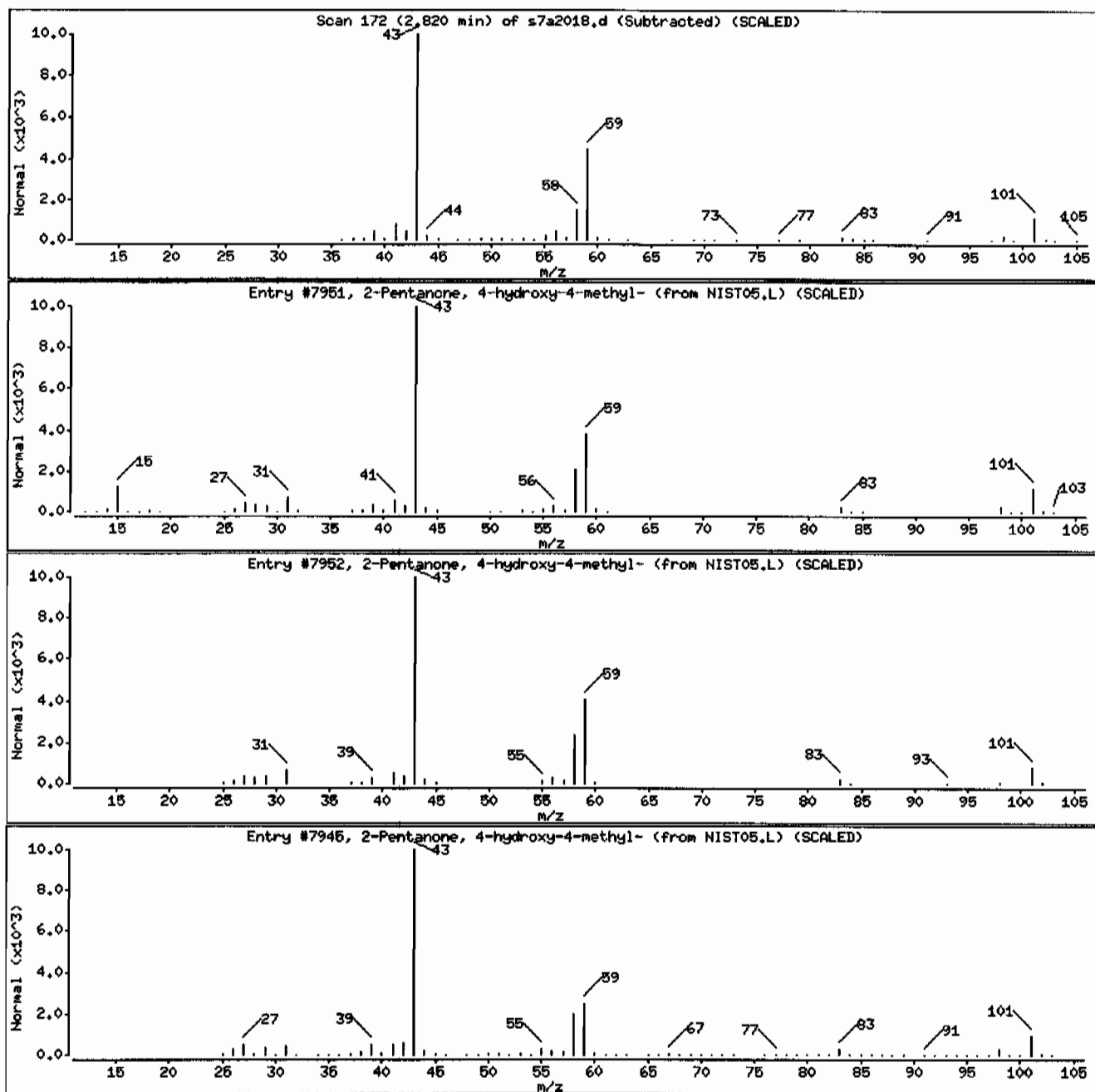
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	45	C6H12O2	116





Date : 20-JAN-2010 16:42

Client ID: RE12-10-7276

Instrument: MSD7.i

Sample Info: 1244599013194170211SVMI11LANL

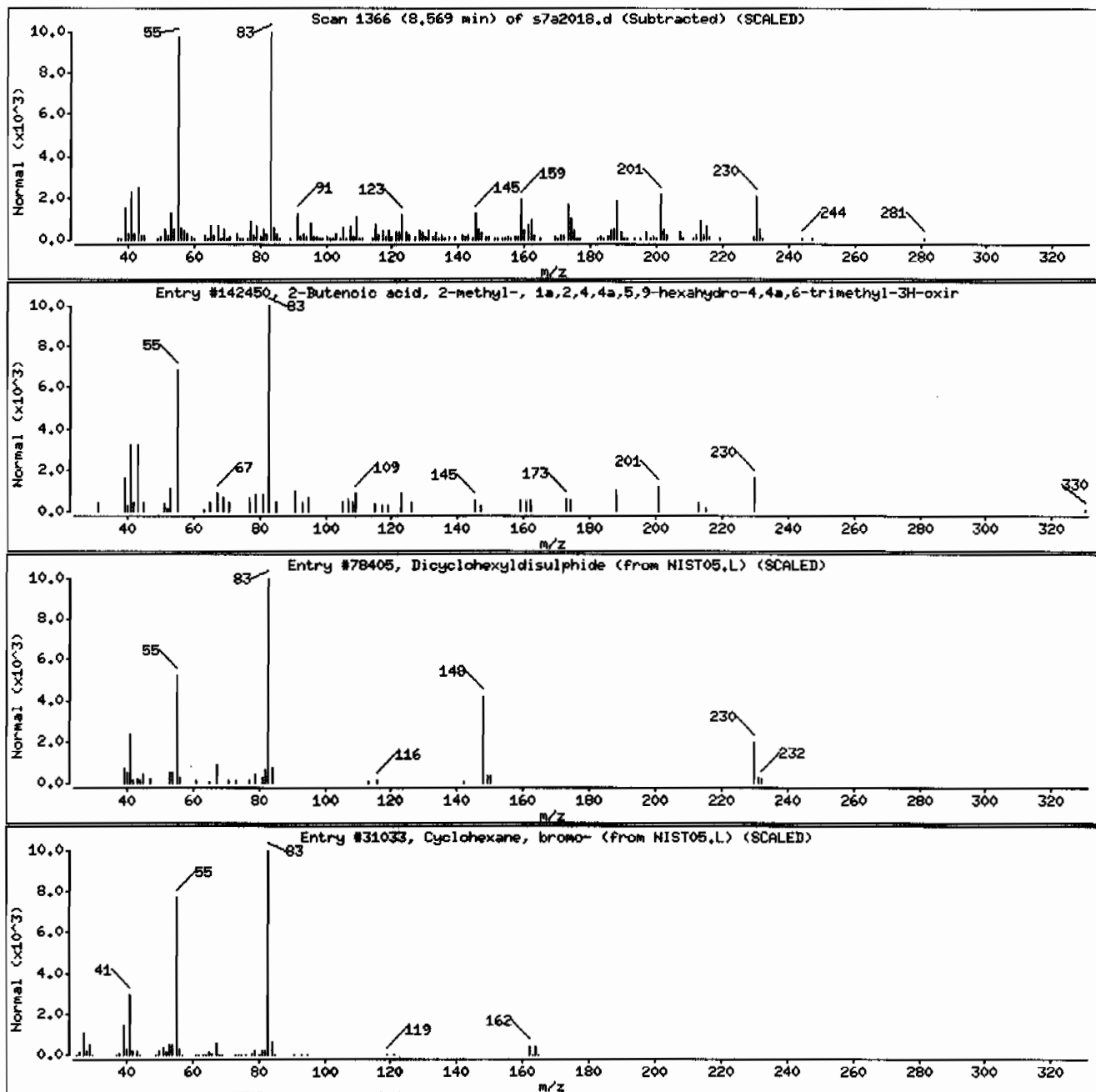
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Butenoic acid, 2-methyl-, 1a,2,4,4a,5,9-hexahydro-4,4a,6-trimethyl-3H-oxir	56246-42-5	NIST05.L	142450	80	C20H26O4	330
Dicyclohexyldisulphide	2550-40-5	NIST05.L	78405	46	C12H22S2	230
Cyclohexane, bromo-	108-85-0	NIST05.L	31033	38	C6H11Br	162



Date: 20-JAN-2010 16:42

Client ID: RE12-10-7276

Instrument: MSD7.i

Sample Info: 1244599013194170211SVH11ILANL

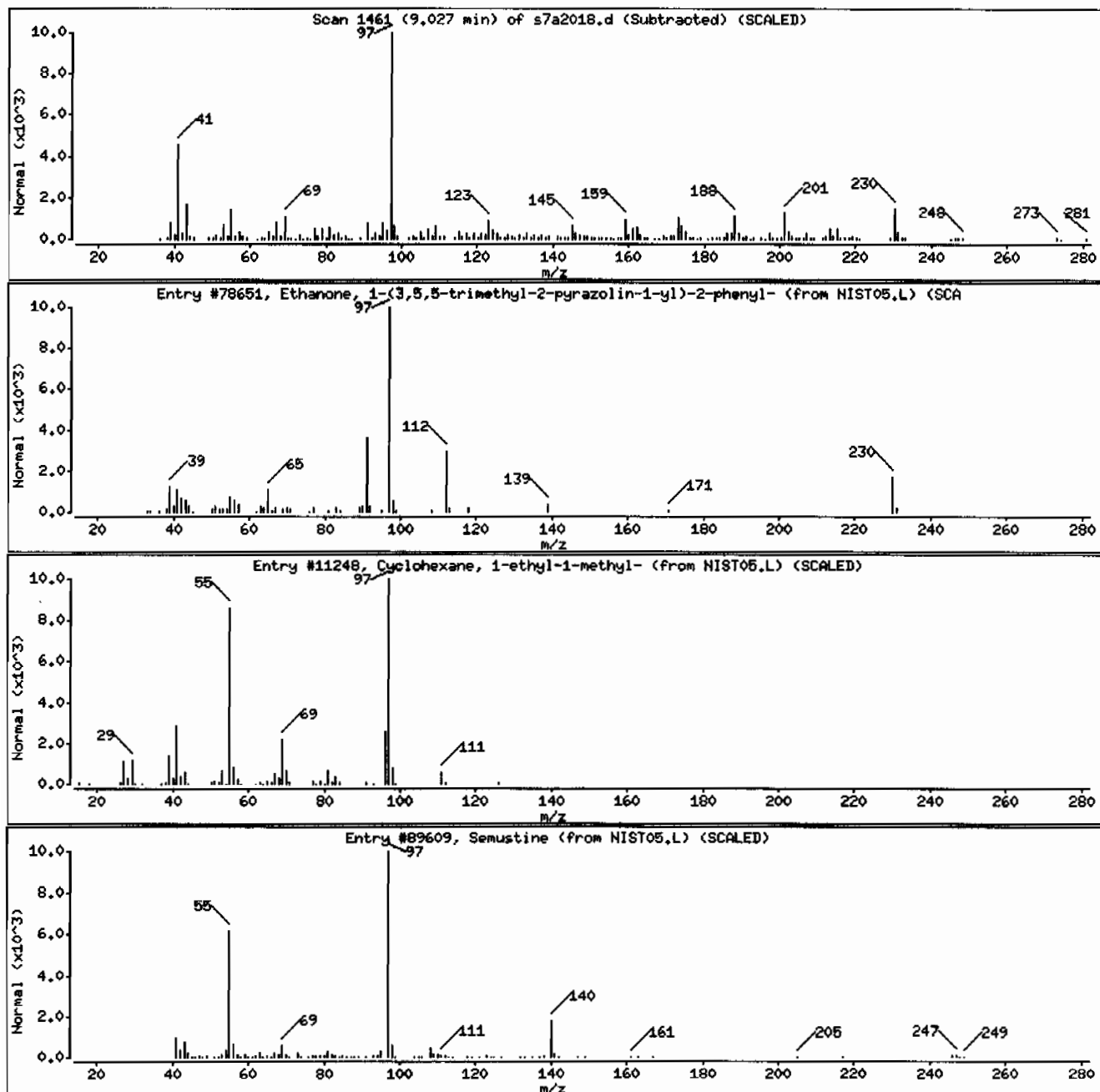
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Ethanone, 1-(3,5,5-trimethyl-2-pyrazolin	1000277-62-2	NIST05.L	78651	50	C14H18N2O	230
Cyclohexane, 1-ethyl-1-methyl-	4926-90-3	NIST05.L	11248	46	C9H18	126
Semustine	13909-09-6	NIST05.L	89609	46	C10H18ClN3O2	247



Date : 20-JAN-2010 16:42

Client ID: RE12-10-7276

Instrument: HSD7.i

Sample Info: 1244599013194170211ISVH11/LANL

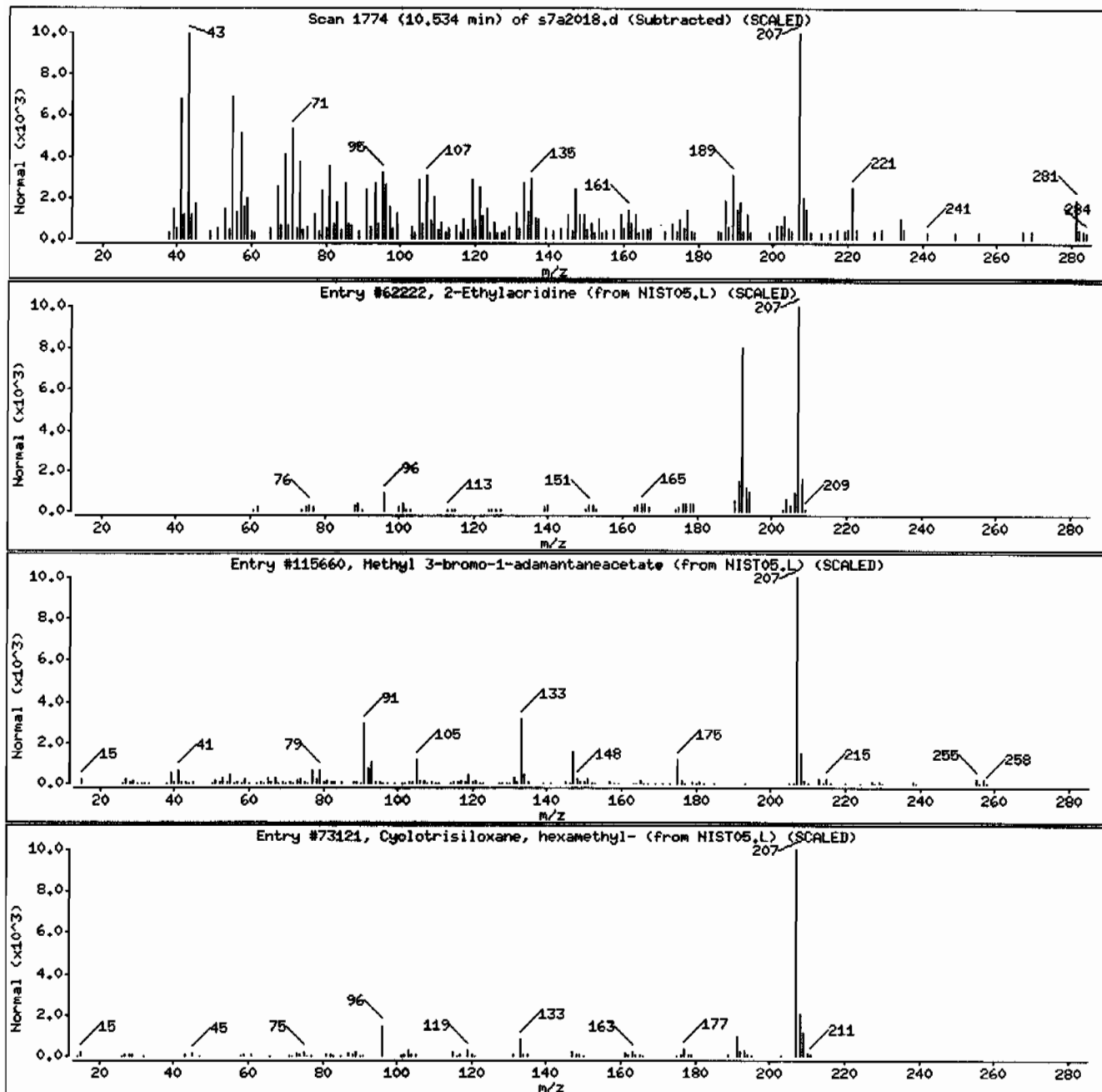
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Ethylacridine	55751-83-2	NIST05.L	62222	80	C15H13N	207
Methyl 3-bromo-1-adamantaneacetate	14575-01-0	NIST05.L	115660	38	C13H19BrO2	286
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73121	38	C6H18O3Si3	222



Date : 20-JAN-2010 16:42

Client ID: RE12-10-7276

Instrument: MSD7.i

Sample Info: 1244599013194170211SVH11LANL

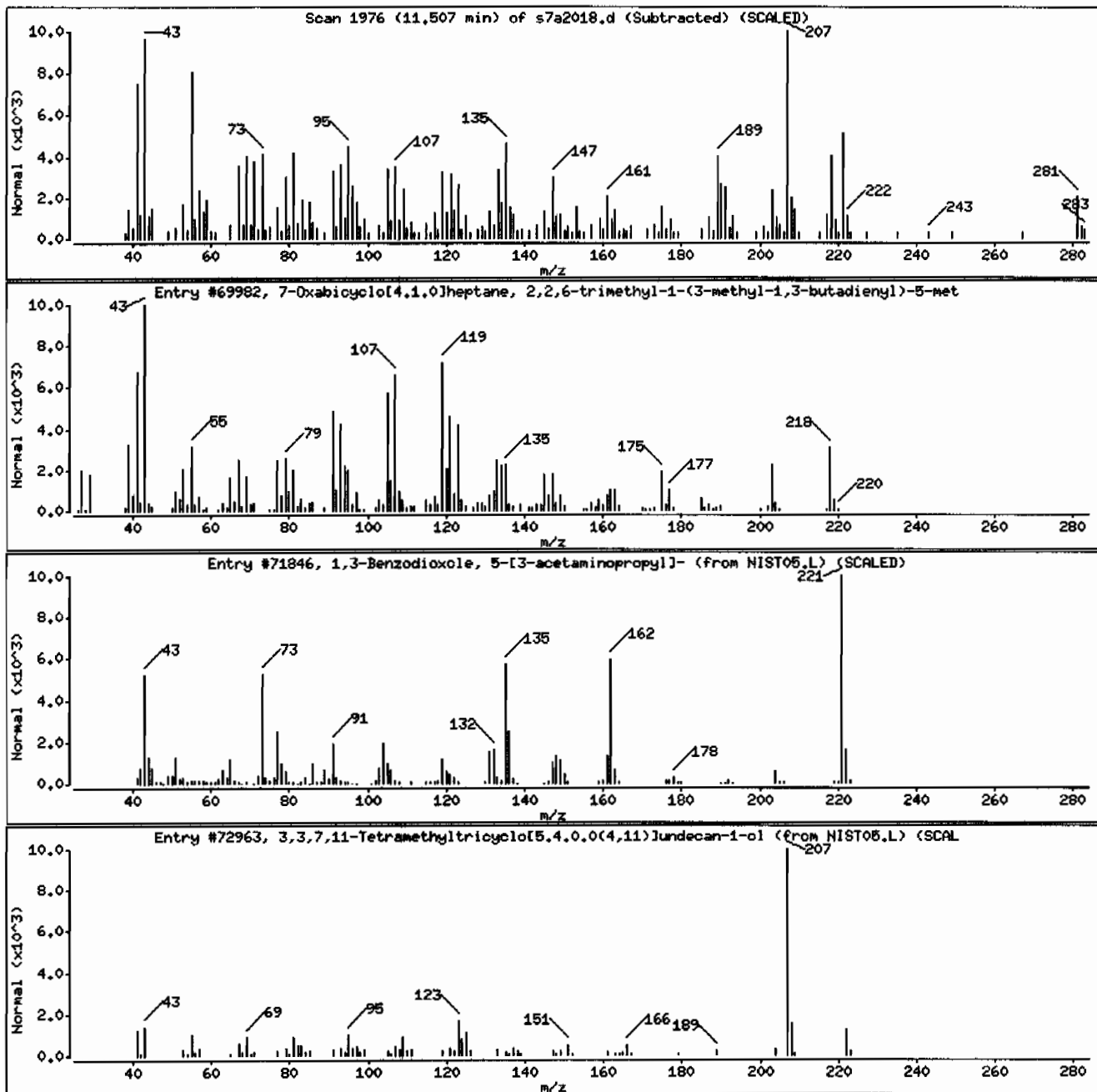
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
7-Oxabicyclo[4.1.0]heptane, 2,2,6-trimet	70038-20-9	NIST05.L	69982	40	C15H22O	218
1,3-Benzodioxole, 5-[3-acetaminopropyl]-	1000124-33-0	NIST05.L	71846	25	C12H15NO3	221
3,3,7,11-Tetramethyltricyclo[5.4.0.0(4,1	117591-80-7	NIST05.L	72963	22	C15H26O	222



Date : 20-JAN-2010 16:42

Client ID: RE12-10-7276

Instrument: MSD7.i

Sample Info: 12445990131941702111SVMI1ILANL

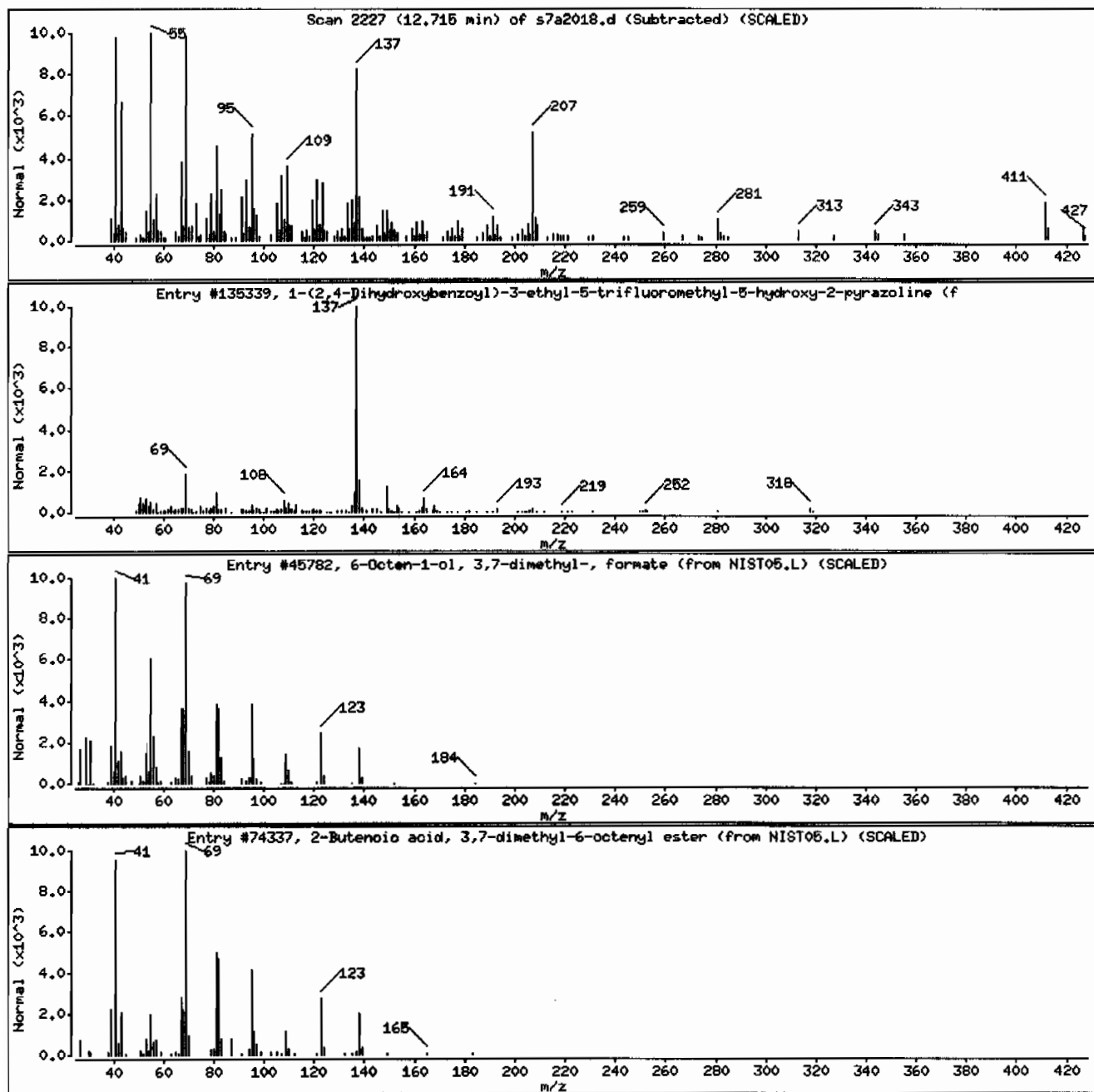
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1-(2,4-Dihydroxybenzoyl)-3-ethyl-5-trifl	331835-05-3	NIST05.L	135339	43	C13H13F3N2O4	318
6-Octen-1-ol, 3,7-dimethyl-, formate	105-85-1	NIST05.L	45782	35	C11H20O2	184
2-Butenoic acid, 3,7-dimethyl-6-octenyl	68039-38-3	NIST05.L	74337	38	C14H24O2	224



# Standard Data

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
MEGA MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
1,4-Dichlorobenzene-d4 (INTERNAL STANDARD)								
Naphthalene-d8 (INTERNAL STANDARD)								
Acenaphthene-d10 (INTERNAL STANDARD)								
Phenanthrene-d10 (INTERNAL STANDARD)								
Chrysene-d12 (INTERNAL STANDARD)								
Perylene-d12 (INTERNAL STANDARD)								
2-Fluorophenol (SURROGATE)		10	20	40	50	80	100	120
Phenol-d5 (SURROGATE)		10	20	40	50	80	100	120
2-Chlorophenol-d4 (CLP SURROGATE)		10	20	40	50	80	100	120
1,2-Dichlorobenzene-d4 (CLP SURROGATE)		10	20	40	50	80	100	120
Nitrobenzene-d5 (SURROGATE)		10	20	40	50	80	100	120
2-Fluorobiphenyl (SURROGATE)		10	20	40	50	80	100	120
2,4,6-Tribromophenol (SURROGATE)		10	20	40	50	80	100	120
p-Terphenyl-d14 (SURROGATE)		10	20	40	50	80	100	120
N-Nitrosodimethylamine	1**	10	20	40	50	80	100	120
Pyridine		10	20	40	50	80	100	120
Aniline		10	20	40	50	80	100	120
Phenol		10	20	40	50	80	100	120
bis(2-Chloroethyl)ether		10	20	40	50	80	100	120
2-Chlorophenol		10	20	40	50	80	100	120
n-Decane		10	20	40	50	80	100	120
1,3-Dichlorobenzene		10	20	40	50	80	100	120
1,4-Dichlorobenzene		10	20	40	50	80	100	120
Benzyl Alcohol		10	20	40	50	80	100	120
1,2-Dichlorobenzene		10	20	40	50	80	100	120
bis(2-Chloroisopropyl)ether		10	20	40	50	80	100	120
o-Cresol (2-Methylphenol)		10	20	40	50	80	100	120
N-Nitrosodipropylamine	1**	10	20	40	50	80	100	120
m,p-Cresols (3-Methylphenol & 4-Methylphenol)		10	20	40	50	80	100	120
Hexachloroethane		10	20	40	50	80	100	120
Nitrobenzene		10	20	40	50	80	100	120
Isophorone		10	20	40	50	80	100	120
2-Nitrophenol		10	20	40	50	80	100	120
2,4-Dimethylphenol		10	20	40	50	80	100	120
bis(2-Chloroethoxy)methane		10	20	40	50	80	100	120
2,4-Dichlorophenol		10	20	40	50	80	100	120
Benzoic Acid			20	40	50	80	100	120
1,2,4-Trichlorobenzene		10	20	40	50	80	100	120
Naphthalene	1	10	20	40	50	80	100	120
alpha-Terpineol		10	20	40	50	80	100	120
4-Chloroaniline		10	20	40	50	80	100	120

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
MEGA MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Hexachlorobutadiene		10	20	40	50	80	100	120
4-Chloro-3-methylphenol		10	20	40	50	80	100	120
2-Methylnaphthalene	1	10	20	40	50	80	100	120

1-Methylnaphthalene	1	10	20	40	50	80	100	120
Hexachlorocyclopentadiene		10	20	40	50	80	100	120
2,3-Dichloroaniline		10	20	40	50	80	100	120
2,4,6-Trichlorophenol		10	20	40	50	80	100	120
2,4,5-Trichlorophenol		10	20	40	50	80	100	120
2-Chloronaphthalene	1	10	20	40	50	80	100	120
o-Nitroaniline		10	20	40	50	80	100	120
m-Nitroaniline		10	20	40	50	80	100	120
Dimethylphthalate	1**	10	20	40	50	80	100	120
2,6-Dinitrotoluene		10	20	40	50	80	100	120
Acenaphthylene	1	10	20	40	50	80	100	120
Acenaphthene	1	10	20	40	50	80	100	120
2,4-Dinitrophenol			20	40	50	80	100	120
Dibenzofuran		10	20	40	50	80	100	120
2,4-Dinitrotoluene		10	20	40	50	80	100	120
Diethylphthalate	1**	10	20	40	50	80	100	120
4-Nitrophenol		10	20	40	50	80	100	120
Fluorene	1	10	20	40	50	80	100	120
4-Chlorophenyl phenyl ether		10	20	40	50	80	100	120
2-Methyl-4,6-dinitrophenol		10	20	40	50	80	100	120
p-Nitroaniline		10	20	40	50	80	100	120
Diphenylamine		10	20	40	50	80	100	120
1,2-Diphenylhydrazine		10	20	40	50	80	100	120
4-Bromophenyl phenylether		10	20	40	50	80	100	120
Hexachlorobenzene		10	20	40	50	80	100	120
Pentachlorophenol		10	20	40	50	80	100	120
n-Octadecane		10	20	40	50	80	100	120
Phenanthrene	1	10	20	40	50	80	100	120
Anthracene	1	10	20	40	50	80	100	120
Di-n-butylphthalate	1**	10	20	40	50	80	100	120
Fluoranthene	1	10	20	40	50	80	100	120
Pyrene	1	10	20	40	50	80	100	120
Butylbenzylphthalate	1**	10	20	40	50	80	100	120
Benzo(a)anthracene	1	10	20	40	50	80	100	120
Chrysene	1	10	20	40	50	80	100	120
bis (2-Ethylhexyl) phthalate	1	10	20	40	50	80	100	120
Di-n-octylphthalate	1**	10	20	40	50	80	100	120

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
MEGA MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Benzo(b)fluoranthene	1	10	20	40	50	80	100	120
Benzo(k)fluoranthene	1	10	20	40	50	80	100	120
Benzo(a)pyrene	1	10	20	40	50	80	100	120
Indeno-(1,2,3-cd)pyrene	1	10	20	40	50	80	100	120
Dibenzo(a,h)anthracene	1	10	20	40	50	80	100	120
Benzo(ghi)perylene	1	10	20	40	50	80	100	120
m-Dinitrobenzene		10	20	40	50	80	100	120
2,3,4,6-Tetrachlorophenol		10	20	40	50	80	100	120
Dinoseb		10	20	40	50	80	100	120
Carbazole	1	10	20	40	50	80	100	120



p-Benzoquinone		10	20	40	50	80	100	120
Methoxychlor	1**	10	20	40	50	80	100	120
p-Toluidine		10	20	40	50	80	100	120
m-Toluidine		10	20	40	50	80	10	120
1,4-Dinitrobenzene		10	20	40	50	80	100	120
2-Ethoxyethanol		10	20	40	50	80	100	120
Phthalic anhydride		10	20	40	50	80	100	120
Methylenebis(2-chloroaniline)		10	20	40	50	80	100	120
Dibenzo(a,e)pyrene		10	20	40	50	80	100	120

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
AP MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Benzaldehyde	10	20	40	50	80	100	120	
Acetophenone	10	20	40	50	80	100	120	
Caprolactam	10	20	40	50	80	100	120	
1,1'-Biphenyl	10	20	40	50	80	100	120	
Atrazine	10	20	40	50	80	100	120	
Benzidine	10	20	40	50	80	100	120	
3,3'-Dichlorobenzidine	10	20	40	50	80	100	120	
1,4-Dioxane	10	20	40	50	80	100	120	
Methyl methacrylate	10	20	40	50	80	100	120	
Ethyl methacrylate	10	20	40	50	80	100	120	
2-Picoline	10	20	40	50	80	100	120	
N-Nitrosomethylethylamine	10	20	40	50	80	100	120	
Methyl methanesulfonate	10	20	40	50	80	100	120	
N-Nitrosodiethylamine	10	20	40	50	80	100	120	
Ethyl methanesulfonate	10	20	40	50	80	100	120	
Pentachloroethane	10	20	40	50	80	100	120	
N-Nitrosopyrrolidine	10	20	40	50	80	100	120	
N-Nitrosomorpholine	10	20	40	50	80	100	120	
o-Toluidine	10	20	40	50	80	100	120	
N-Nitrosopiperidine	10	20	40	50	80	100	120	
a,a-Dimethylphenethylamine	10	20	40	50	80	100	120	
2,6-Dichlorophenol	10	20	40	50	80	100	120	

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
AP MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Hexachloropropene	10	20	40	50	80	100	120	
p-Phenylenediamine	10	20	40	50	80	100	120	
N-Nitrosodi-n-butylamine	10	20	40	50	80	100	120	
Safrole	10	20	40	50	80	100	120	
1,2,4,5-Tetrachlorobenzene	10	20	40	50	80	100	120	
Isosafrole	10	20	40	50	80	100	120	
1,4-Naphthoquinone	10	20	40	50	80	100	120	
Pentachlorobenzene	10	20	40	50	80	100	120	
1-Naphthylamine	10	20	40	50	80	100	120	
2-Naphthylamine	10	20	40	50	80	100	120	
5-Nitro-o-toluidine	10	20	40	50	80	100	120	
1,3,5-Trinitrobenzene	10	20	40	50	80	100	120	
Phenacetin	10	20	40	50	80	100	120	
Diallate	10	20	40	50	80	100	120	
cis-Diallate	1.5	3	6	7.5	12	15	18	
trans-Diallate	8.5	17	34	42	68	85	102	
4-Aminobiphenyl	10	20	40	50	80	100	120	

Pentachloronitrobenzene		10	20	40	50	80	100	120
Pronamide		10	20	40	50	80	100	120
4-Nitroquinoline oxide		10	20	40	50	80	100	120
Methapyrilene	1**	10	20	40	50	80	100	120
Isodrin	1**	10	20	40	50	80	100	120
Aramite		10	20	40	50	80	100	120
Kepone	1**	10	20	40	50	80	100	120
p-(Dimethylamino)azobenzene		10	20	40	50	80	100	120
Chlorobenzilate		10	20	40	50	80	100	120
3,3'-Dimethylbenzidine		10	20	40	50	80	100	120
2-Acetylaminofluorene		10	20	40	50	80	100	120
7,12-Dimethylbenz(a)anthracene		10	20	40	50	80	100	120
3-Methylcholanthrene		10	20	40	50	80	100	120

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Hexachlorophene		500	1000	1250	1500	1750	2000	

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
PEST MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Tributylphosphate		10	20	40	50	80	100	120
Triethylphosphorothioate		10	20	40	50	80	100	120
Thionazin		10	20	40	50	80	100	120
Sulfotepp		10	20	40	50	80	100	120
Phorate		10	20	40	50	80	100	120
Dimethoate		10	20	40	50	80	100	120
Disulfoton		10	20	40	50	80	100	120
Methyl parathion		10	20	40	50	80	100	120
Famphur		10	20	40	50	80	100	120
Parathion		10	20	40	50	80	100	120

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
NEVADA MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
bis(Chloromethyl)ether		10	20	40	50	80	100	120
4-Chlorothiophenol		10	20	40	50	80	100	120
4-Chlorothioanisole		10	20	40	50	80	100	120
Phthalic acid		10	20	40	50	80	100	120
Hydroxymethyl phthalimide		10	20	40	50	80	100	120
Diphenyl sulfide		10	20	40	50	80	100	120
Diphenyl disulfide		10	20	40	50	80	100	120
Phenyl sulfone		10	20	40	50	80	100	120
Octachlorostyrene		10	20	40	50	80	100	120
Thiophenol		10	20	40	50	80	100	120
2,2'-Dichlorobenzil		10	20	40	50	80	100	120
bis(p-Chlorophenyl)disulfide		10	20	40	50	80	100	120

bis(p-Chlorophenyl)sulfone		10	20	40	50	80	100	120
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SW846 8270C/8270D/EPA 625								
Calibration Standard Concentration Levels*								
BJCO MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
1-Hexanol		10	20	40	50	80	100	120
Quinoline		10	20	40	50	80	100	120
2,4-Toluene diisocyanate		10	20	40	50	80	100	120
1-Nitropyrene		10	20	40	50	80	100	120
5-Methylchrysene		10	20	40	50	80	100	120
Benzo(i)fluoranthene		10	20	40	50	80	100	120
Dibenzo(a,h)pyrene		10	20	40	50	80	100	120
Dibenzo(a,h)acridine		10	20	40	50	80	100	120
Dibenzo(a,j)acridine		10	20	40	50	80	100	120
Dibenzo(a,i)pyrene		10	20	40	50	80	100	120
Dibenzo(a,l)pyrene		10	20	40	50	80	100	120
7H-Dibenzo(c,g)carbazole		10	20	40	50	80	10	120

All values are mg/L without the prep factor.

# Indicates the calibration verification concentration level used

\* Usual calibration levels using SCAN methodology

\*\* This analyte included in this level at special client request.

(0210/Full list)

Report Date: 19-Jan-2010 11:44

### Calibration History

Method : /chem/MSD7.i/s011910.b/MSD7-M8270C-AQA-011310.m

Start Cal Date: 13-JAN-2010 16:51

End Cal Date : 15-JAN-2010 19:06

#### Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
13-JAN-2010 16:51	MEGA	/chem/MSD7.i/s011310.b/s7a1303.d
Cal Level: 2 , Cal Amount: 10.00000		
15-JAN-2010 16:53	NEV	/chem/MSD7.i/s011510.b/s7a1509.d
15-JAN-2010 14:41	HEX	/chem/MSD7.i/s011510.b/s7a1503.d
13-JAN-2010 23:00	PEST	/chem/MSD7.i/s011310.b/s7a1318.d
13-JAN-2010 20:28	AP12	/chem/MSD7.i/s011310.b/s7a1311.d
13-JAN-2010 17:18	MEGA	/chem/MSD7.i/s011310.b/s7a1304.d
Cal Level: 3 , Cal Amount: 20.00000		
15-JAN-2010 17:15	NEV	/chem/MSD7.i/s011510.b/s7a1510.d
15-JAN-2010 15:03	HEX	/chem/MSD7.i/s011510.b/s7a1504.d
13-JAN-2010 23:22	PEST	/chem/MSD7.i/s011310.b/s7a1319.d
13-JAN-2010 20:50	AP12	/chem/MSD7.i/s011310.b/s7a1312.d
13-JAN-2010 17:45	MEGA	/chem/MSD7.i/s011310.b/s7a1305.d
Cal Level: 4 , Cal Amount: 40.00000		
15-JAN-2010 17:38	NEV	/chem/MSD7.i/s011510.b/s7a1511.d
15-JAN-2010 15:25	HEX	/chem/MSD7.i/s011510.b/s7a1505.d
13-JAN-2010 23:44	PEST	/chem/MSD7.i/s011310.b/s7a1320.d
13-JAN-2010 21:12	AP12	/chem/MSD7.i/s011310.b/s7a1313.d
13-JAN-2010 18:12	MEGA	/chem/MSD7.i/s011310.b/s7a1306.d
Cal Level: 5 , Cal Amount: 50.00000		
15-JAN-2010 18:00	NEV	/chem/MSD7.i/s011510.b/s7a1512.d
15-JAN-2010 15:47	HEX	/chem/MSD7.i/s011510.b/s7a1506.d
14-JAN-2010 00:06	PEST	/chem/MSD7.i/s011310.b/s7a1321.d
13-JAN-2010 21:34	AP12	/chem/MSD7.i/s011310.b/s7a1314.d
13-JAN-2010 18:39	MEGA	/chem/MSD7.i/s011310.b/s7a1307.d
Cal Level: 6 , Cal Amount: 80.00000		
15-JAN-2010 18:22	NEV	/chem/MSD7.i/s011510.b/s7a1513.d
15-JAN-2010 16:09	HEX	/chem/MSD7.i/s011510.b/s7a1507.d
14-JAN-2010 00:27	PEST	/chem/MSD7.i/s011310.b/s7a1322.d
13-JAN-2010 21:55	AP12	/chem/MSD7.i/s011310.b/s7a1315.d
13-JAN-2010 19:07	MEGA	/chem/MSD7.i/s011310.b/s7a1308.d
Cal Level: 7 , Cal Amount: 100.00000		

15-JAN-2010 18:44	NEV	/chem/MSD7.i/s011510.b/s7a1514.d
15-JAN-2010 16:31	HEX	/chem/MSD7.i/s011510.b/s7a1508.d
14-JAN-2010 00:49	PEST	/chem/MSD7.i/s011310.b/s7a1323.d
13-JAN-2010 22:17	AP12	/chem/MSD7.i/s011310.b/s7a1316.d
13-JAN-2010 19:34	MEGA	/chem/MSD7.i/s011310.b/s7a1309.d

+-----+  
 | Cal Level: 8 , Cal Amount: 120.00000  
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15-JAN-2010 19:06	NEV	/chem/MSD7.i/s011510.b/s7a1515.d
14-JAN-2010 01:10	PEST	/chem/MSD7.i/s011310.b/s7a1324.d
13-JAN-2010 22:39	AP12	/chem/MSD7.i/s011310.b/s7a1317.d
13-JAN-2010 20:01	MEGA	/chem/MSD7.i/s011310.b/s7a1310.d

# Continuing Calibration

Ccal Level Mode: GLOBAL LEVEL 4

+-----+  
 | Ccal Level: 4 , Ccal Amount: 40.0  
 +-----+

19-JAN-2010 09:31	MEGA	/chem/MSD7.i/s011910.b/s7a1902.d
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+-----+  
 | Ccal Level: 4 , Ccal Amount: 40.0  
 +-----+

19-JAN-2010 10:20	PEST	/chem/MSD7.i/s011910.b/s7a1904.d
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+-----+  
 | Ccal Level: 4 , Ccal Amount: 40.0  
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19-JAN-2010 09:58	AP12	/chem/MSD7.i/s011910.b/s7a1903.d
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## GEL Laboratories LLC

## INITIAL CALIBRATION DATA

Start Cal Date : 13-JAN-2010 16:51  
 End Cal Date : 15-JAN-2010 19:06  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /chem/MSD7.i/s011910.b/MSD7-M8270C-AQA-011310.m  
 Cal Date : 19-Jan-2010 11:44 jen00986

## Calibration File Names:

Level 1: /chem/MSD7.i/s011310.b/s7a1303.d  
 Level 2: /chem/MSD7.i/s011510.b/s7a1509.d  
 Level 3: /chem/MSD7.i/s011510.b/s7a1510.d  
 Level 4: /chem/MSD7.i/s011510.b/s7a1511.d  
 Level 5: /chem/MSD7.i/s011510.b/s7a1512.d  
 Level 6: /chem/MSD7.i/s011510.b/s7a1513.d  
 Level 7: /chem/MSD7.i/s011510.b/s7a1514.d  
 Level 8: /chem/MSD7.i/s011510.b/s7a1515.d

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients m1	m2	%RSD or R^2
1 N-Methyl-N-nitrosomethylamine	++++ 0.86880	0.88939 0.78732	0.95815	0.83799	0.85920	0.81042	AVRG		0.85875		6.51636
2 Pyridine	++++ 1.03080	1.02987 0.95815	1.10461	1.02068	1.00469	0.98693	AVRG				
4 Aniline	++++ 0.65803	0.70353 0.61486	0.74041	0.66330	0.64736	0.64840	AVRG		1.01939		4.48197
209 Benzaldehyde	++++ 0.82614	1.07723 0.79323	1.12512	0.97981	1.00602	0.89516	AVRG		0.66799		6.19065
6 Phenol	++++ 1.38952	1.67278 1.25963	1.72916	1.51549	1.43485	1.36271	AVRG		0.95753		13.03078
							AVRG		1.48059		11.47002

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Start Cal Date : 13-JAN-2010 16:51  
 End Cal Date : 15-JAN-2010 19:06  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /chem/MSD7.i/s011910.b/MSD7-M8270C-AQA-011310.m  
 Cal Date : 19-Jan-2010 11:44 jen00986

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients m1	m2	%RSD or R^2
7 bis(2-Chloroethyl) ether	1.41708 1.12778	1.33565 1.00638	1.33998	1.18046	1.14137	1.13631	AVRG		1.21062		11.46274
8 2-Chlorophenol	++++ 0.96651	1.19827 0.89427	1.22018	1.04398	0.99402	0.95680	AVRG		1.03915		11.99373
203 n-Decane	++++ 1.15070	2.28123 1.01143	2.19400	1.70416	1.54977	1.27117	AVRG		1.59464		31.21372
9 1,3-Dichlorobenzene	++++ 1.11739	1.40263 1.02386	1.42443	1.24307	1.18567	1.11579	AVRG		1.21612		12.40760
11 1,4-Dichlorobenzene	++++ 1.03672	1.33155 0.95331	1.34663	1.16385	1.11003	1.04371	AVRG		1.14083		13.17944
12 Benzyl alcohol	++++ 0.75413	0.77688 0.71145	0.82689	0.76125	0.72453	0.72191	AVRG		0.75386		5.30533
13 1,2-Dichlorobenzene	++++ 0.94692	1.25805 0.86393	1.25231	1.06509	0.99436	0.93732	AVRG		1.04543		14.88738
14 bis(2-Chloroisopropyl) ether	++++ ++++	3.20471 ++++	3.20580	2.77341	2.56227	2.32267	AVRG		2.81377		13.90798
15 o-Cresol	++++ 0.73009	0.95386 0.65368	0.94329	0.80835	0.75725	0.70463	AVRG		0.79302		14.66533

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 Cal Date : 19-Jan-2010 11:44 jen00986

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients ml	m2	%RSD or R^2
16 Acetophenone	++++ 1.09128	1.35738 1.05992	1.36884	1.22585	1.25870	1.09153	AVRG		1.20764		10.70025
17 N-Nitrosodipropylamine	0.86492 0.83506	0.94013 0.75307	0.98242	0.89987	0.84977	0.83510	AVRG		0.86879		8.07907
18 m,p-Cresols	++++ 1.18814	1.26385 1.13057	1.30802	1.19082	1.13835	1.14633	AVRG		1.19515		5.64463
19 Hexachloroethane	++++ 0.42265	0.53190 0.38378	0.54536	0.48419	0.44982	0.42898	AVRG		0.46381		12.81898
21 Nitrobenzene	++++ 0.29827	0.36655 0.27695	0.37283	0.33243	0.31976	0.30907	AVRG		0.32512		10.78269
22 Isophorone	++++ 0.63666	0.66878 0.59047	0.70864	0.63949	0.63443	0.63797	AVRG		0.64520		5.60593
23 2-Nitrophenol	++++ 0.12151	0.14860 0.11137	0.15977	0.14342	0.13634	0.12672	AVRG		0.13539		12.35581
24 2,4-Dimethylphenol	++++ 0.23015	0.29614 0.20815	0.30386	0.26566	0.25248	0.23545	AVRG		0.25598		13.70766
25 bis(2-Chloroethoxy)methane	++++ 0.34045	0.42635 0.30816	0.43168	0.37361	0.35712	0.34544	AVRG		0.36897		12.34646



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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
26 2,4-Dichlorophenol	++++ 0.22199	0.24370 0.20487	0.25806	0.24090	0.22587	0.22085	AVRG		0.23089		7.67567
27 Benzoic acid	++++ 501684	++++ 586086	68953	160625	219066	395943	LINR	0.21036	0.20230		0.99343
28 1,2,4-Trichlorobenzene	++++ 0.23965	0.30183 0.22503	0.29820	0.26362	0.25318	0.24754	AVRG		0.26129		11.10180
30 Naphthalene	1.06286 ++++	0.95932 ++++	0.93335	0.82192	0.77031	++++	AVRG		0.90955		12.72868
204 alpha-Terpineol	++++ 631152	96337 ++++	198064	325765	385112	534650	LINR	-0.27637	0.22398		0.99075
31 4-Chloroaniline	++++ 0.35268	0.42888 0.32677	0.42632	0.38171	0.36333	0.35956	AVRG		0.37704		10.12971
189 Caprolactam	++++ 0.08409	0.08417 0.08116	0.09158	0.08852	0.09020	0.08140	AVRG		0.08588		4.90748
32 Hexachlorobutadiene	++++ 0.12870	0.14838 0.12024	0.15157	0.13507	0.13010	0.12994	AVRG		0.13485		8.34946
33 4-Chloro-3-methylphenol	++++ 0.23376	0.26578 0.21964	0.28012	0.25441	0.24095	0.24076	AVRG		0.24792		8.22932

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 Cal Date : 19-Jan-2010 11:44 jen00986

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
34 2-Methylnaphthalene	0.654581	0.647361	0.651371	0.570071	0.542681	0.512491	AVRG		0.565351		14.004781
	0.495371	0.448871									
35 1-Methylnaphthalene	0.665851	0.628181	0.626911	0.543131	0.511831	0.483271	AVRG		0.559571		14.455221
	0.457851	++++									
36 Hexachlorocyclopentadiene	++++	0.204731	0.227301	0.214471	0.211191	0.191241	AVRG		0.204711		7.115331
	0.199871	0.184201									
208 1,1'-Biphenyl	++++	1.502901	1.481701	1.268741	1.244991	1.068381	AVRG		1.313341		13.776331
	++++	++++									
205 2,3-Dichloroaniline	++++	0.620371	0.622561	0.524391	0.492501	0.449681	AVRG		0.541901		14.268981
	++++	++++									
37 2,4,6-Trichlorophenol	++++	0.308351	0.328461	0.286771	0.274881	0.262781	AVRG		0.278581		11.599401
	0.255031	0.233791									
38 2,4,5-Trichlorophenol	++++	0.339761	0.360161	0.323751	0.309551	0.288481	AVRG		0.312261		9.797551
	0.286221	0.277881									
40 2-Chloronaphthalene	1.242811	1.147061	1.120451	0.956341	0.919591	0.851461	AVRG		1.039621		14.658191
	++++	++++									
42 o-Nitroaniline	++++	0.387671	0.418621	0.386701	0.368071	0.346771	AVRG		0.371721		7.536461
	0.356741	0.337501									

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Compound	1	10	20	40	50	80	Curve	b	Coefficients m1	m2	%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					
	100	120									
	Level 7	Level 8									
41 m-Nitroaniline	++++	0.281621	0.302351	0.283401	0.263581	0.247711	AVRG		0.265131		9.415341
	0.243001	0.234271									
43 Dimethylphthalate	++++	1.242111	1.244771	1.098411	1.066651	1.019741	AVRG		1.087841		10.817221
	1.006501	0.936701									
44 2,6-Dinitrotoluene	++++	0.292681	0.297901	0.260851	0.254051	0.236771	AVRG		0.255581		12.158131
	0.232611	0.214171									
45 Acenaphthylene	1.983991	1.923391	1.922461	1.649271	1.562601	1.420721	AVRG		1.693341		14.757511
	1.390961	++++									
47 Acenaphthene	1.208241	1.118171	1.106741	0.935611	0.892011	++++	AVRG		1.052151		12.656281
	++++	++++									
48 2,4-Dinitrophenol	++++	++++	0.079501	0.094501	0.090391	0.093041	AVRG		0.092041		7.299051
	0.097991	0.096851									
49 Dibenzofuran	++++	1.643711	1.604021	1.416011	1.331411	1.214661	AVRG		1.400771		13.636591
	1.194791	++++									
50 2,4-Dinitrotoluene	++++	0.346761	0.366421	0.341181	0.330071	0.313921	AVRG		0.331631		6.477141
	0.319031	0.304011									
51 Diethylphthalate	++++	1.382101	1.344901	1.157171	1.107021	1.011491	AVRG		1.165661		14.182771
	0.991291	++++									

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients m1	m2	%RSD or R <sup>2</sup>
	100	120									
	Level 7	Level 8									
52 4-Nitrophenol	++++ 0.19545	0.16382 0.19360	0.19713	0.19653	0.19219	0.18557	AVRG		0.18919		6.25870
53 Fluorene	1.45271 ++++	1.37025 ++++	1.31251	1.09670	1.03152	++++	AVRG		1.25274		14.42701
54 4-Chlorophenylphenylether	++++ 0.49508	0.61811 0.46433	0.61230	0.55118	0.53244	0.50780	AVRG		0.54018		10.76570
55 2-Methyl-4,6-dinitrophenol	++++ 0.08989	0.06070 0.08673	0.08430	0.08550	0.08582	0.09078	AVRG		0.08339		12.32680
56 p-Nitroaniline	++++ 0.22613	0.26642 0.22078	0.27674	0.23673	0.22126	0.20574	AVRG		0.23626		10.99270
133 Diphenylamine	++++ 0.46388	0.62225 0.43513	0.61372	0.51686	0.50834	0.48311	AVRG		0.52047		13.83183
58 1,2-Diphenylhydrazine	++++ 0.55978	0.81952 ++++	0.79140	0.66696	0.65088	0.60977	AVRG		0.68305		14.96181
59 Tributylphosphate	++++ 1.05952	1.59408 ++++	1.41427	1.30943	1.29260	1.14389	AVRG		1.30230		14.64426
61 4-Bromophenylphenylether	++++ 0.14913	0.16837 0.14260	0.17009	0.15052	0.15033	0.15091	AVRG		0.15456		6.74446

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients ml	m2	%RSD or R^2
63 Hexachlorobenzene	++++ 0.14280	0.15741 0.13512	0.15654 0.13831	0.13831 0.13800	0.13800 0.14362	0.14362 AVRG	AVRG	0.14454	6.21330		
207 Atrazine	++++ 0.03458	0.04928 ++++	0.05219 ++++	0.04335 ++++	0.04328 0.03866	0.03866 AVRG	AVRG	0.04356	14.94680		
65 Pentachlorophenol	++++ 0.08656	0.05834 0.08556	0.07419 0.08556	0.07409 0.07689	0.07689 0.08356	0.08356 AVRG	AVRG	0.07703	12.68008		
206 n-Octadecane	++++ 0.34564	0.81183 0.28865	0.76932 0.28865	0.55747 0.51401	0.51401 0.40766	0.40766 AVRG	AVRG	0.52780	38.27676		
68 Phenanthrene	1.06169 ++++	0.96897 ++++	0.94311 0.94311	0.80214 0.77778	0.77778 0.73410	0.73410 AVRG	AVRG	0.88130	14.59290		
69 Anthracene	0.97749 0.72787	0.99425 0.67672	0.96562 0.67672	0.83308 1.05147	0.78731 1.06532	0.74902 0.99915	AVRG	0.83892	14.86114		
72 Di-n-butylphthalate	++++ 0.92627	1.23188 0.84433	1.25296 0.84433	1.05147 0.97160	1.06532 0.92367	0.99915 0.87880	AVRG	1.05305	14.22530		
76 Fluoranthene	1.01251 0.85829	1.07956 0.81956	1.07171 0.81956	0.97160 0.52496	0.92367 0.58981	0.87880 0.51829	AVRG	0.95196	10.28696		
77 Benzidine	++++ 0.52722	0.48589 0.48814	0.51734 0.48814	0.52496 0.58981	0.58981 0.51829	0.51829 AVRG	AVRG	0.52166	6.60301		

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients ml	m2	%RSD or R <sup>2</sup>
79 Pyrene	1.36317 1.23678	1.39178 1.05881	1.37481	1.21668	1.19550	1.27581	AVRG	1.26417	8.88716		
85 Butylbenzylphthalate	++++ 0.54763	0.54604 0.46812	0.59333	0.53894	0.54608	0.57600	AVRG	0.54516	7.20358		
89 Benzo(a)anthracene	1.08297 0.92390	1.00054 0.88114	1.03857	0.92844	0.89862	0.92356	AVRG	0.95972	7.52938		
90 3,3'-Dichlorobenzidine	++++ 0.28014	0.23488 0.25334	0.25322	0.26516	0.28936	0.26630	AVRG	0.26320	6.90905		
92 Chrysene	1.01902 0.80167	0.97100 0.76776	0.98239	0.84257	0.84563	0.81969	AVRG	0.88121	10.76848		
93 bis(2-Ethylhexyl)phthalate	0.57954 0.59666	0.75662 0.50984	0.78166	0.65092	0.64030	0.65364	AVRG	0.64615	13.86051		
94 Di-n-octylphthalate	++++ 1.58188	1.52803 1.27498	1.55395	1.39234	1.40888	1.53648	AVRG	1.46808	7.62202		
95 Benzo(b)fluoranthene	0.99697 1.05968	1.03559 1.13219	1.05453	0.99573	0.99395	1.04225	AVRG	1.03886	4.46238		
96 Benzo(k)fluoranthene	1.00348 0.99048	1.16016 0.75290	1.11418	0.98134	0.92956	0.93617	AVRG	0.98353	12.57429		

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients ml	m2	%RSD or R <sup>2</sup>
97 Benzo(a)pyrene	0.74402 0.89666	0.90920 0.85875	0.96341 0.88792	0.88495 0.88792	0.88110 0.88792	0.88792 0.88792	AVRG		0.87825		7.08371
99 Indeno(1,2,3-cd)pyrene	0.49720 0.63955	0.63458 0.61902	0.74055 0.71227	0.71939 0.71227	0.72120 0.71227	0.71227 0.71227	AVRG		0.66047		12.23896
100 Dibenzo(a,h)anthracene	0.40736 0.50751	0.49800 0.49933	0.57716 0.57716	0.56220 0.56220	0.57628 0.57628	0.55605 0.55605	AVRG		0.52299		11.00783
101 Benzo(ghi)perylene	0.49478 0.50674	0.54446 0.48832	0.60561 0.60561	0.61539 0.61539	0.60722 0.60722	0.58574 0.58574	AVRG		0.55616		9.72715
102 1,4-Dioxane	++++ 0.36184	0.47498 0.35143	0.47371 0.47371	0.40974 0.40974	0.42455 0.42455	0.39057 0.39057	AVRG		0.41241		11.95278
103 Methyl methacrylate	++++ 0.19508	0.23561 0.18669	0.25209 0.18669	0.21844 0.21844	0.22442 0.22442	0.20613 0.20613	AVRG		0.21692		10.56619
104 Ethyl methacrylate	++++ 0.81216	0.95817 0.79583	1.01880 0.79583	0.89146 0.89146	0.92137 0.92137	0.86026 0.86026	AVRG		0.89401		8.89277
105 2-Picoline	++++ 1.19451	1.49025 1.15456	1.57228 1.15456	1.37238 1.37238	1.39709 1.39709	1.26508 1.26508	AVRG		1.34945		11.37533
106 N-Nitrosomethylethylamine	++++ 0.55492	0.57479 0.54783	0.62408 0.62408	0.57186 0.57186	0.59245 0.59245	0.56465 0.56465	AVRG		0.57580		4.46578

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 Cal Date : 19-Jan-2010 11:44 jen00986

Compound	1	10	20	40	50	80	Curve	b	Coefficients m1	m2	%RSD or R^2
107 Methyl methanesulfonate	++++ 0.52807	0.57925 0.51369	0.62031 0.51369	0.55264 0.51369	0.58659 0.51369	0.55087 0.51369	AVRG		0.56163		6.50044
108 N-Nitrosodiethylamine	++++ 0.54359	0.59055 0.53674	0.63974 0.53674	0.57910 0.53674	0.60040 0.53674	0.55514 0.53674	AVRG		0.57789		6.27177
109 Ethyl Methanesulfonate	++++ 0.72581	0.76918 0.70271	0.82036 0.70271	0.75452 0.70271	0.78919 0.70271	0.73437 0.70271	AVRG		0.75659		5.29715
110 Pentachloroethane	++++ 0.30225	0.34701 0.29279	0.36677 0.29279	0.32523 0.29279	0.33602 0.29279	0.31277 0.29279	AVRG		0.32612		7.96342
111 N-Nitrosopyrrolidine	++++ 0.52873	0.60315 0.51205	0.65188 0.51205	0.60969 0.51205	0.63850 0.51205	0.54085 0.51205	AVRG		0.58355		9.56592
113 N-Nitrosomorpholine	++++ 0.74676	0.98514 0.69041	1.01227 0.69041	0.91453 0.69041	0.94823 0.69041	0.81742 0.69041	AVRG		0.87354		14.15390
114 o-Toluidine	++++ 1.53554	1.95525 1.44650	2.00273 1.44650	1.73521 1.44650	1.83178 1.44650	1.60899 1.44650	AVRG		1.73086		12.21793
115 N-Nitrosopiperidine	++++ 0.15274	0.16211 0.14665	0.17290 0.14665	0.16175 0.14665	0.16486 0.14665	0.15255 0.14665	AVRG		0.15908		5.61082
116 a,a-Dimethylphenethylamine	++++ 1.27980	1.05960 1.18469	1.25709 1.18469	1.25611 1.18469	1.29819 1.18469	1.19917 1.18469	AVRG		1.21923		6.67792



## GEL Laboratories LLC

## INITIAL CALIBRATION DATA

Start Cal Date : 13-JAN-2010 16:51  
 End Cal Date : 15-JAN-2010 19:06  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /chem/MSD7.i/s011910.b/MSD7-M8270C-AQA-011310.m  
 Cal Date : 19-Jan-2010 11:44 jen00986

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients ml	m2	%RSD or R^2
100	100	120									
Level 7	Level 8										
117 Triethylphosphorothioate	++++	0.14496	0.14398	0.12991	0.13219	0.12275					
	0.11849	0.11738					AVRG		0.12995		8.70958
118 2,6-Dichlorophenol	++++	0.21183	0.22721	0.21954	0.22474	0.20280					
	0.20908	0.19772					AVRG		0.21328		5.19358
119 Hexachloropropene	++++	0.09224	0.10674	0.10538	0.11250	0.10209					
	0.10543	0.10009					AVRG		0.10349		6.09937
120 p-Phenylenediamine	++++	0.30045	0.30920	0.27829	0.28798	0.23154					
	0.22478	++++					AVRG		0.27204		13.10502
121 N-Nitrosodi-n-butylamine	++++	0.27235	0.28948	0.22750	0.22678	0.20294					
	0.20668	++++					AVRG		0.23762		14.90850
122 Saffrole	++++	0.20303	0.21313	0.19694	0.19498	0.17454					
	0.17203	0.16348					AVRG		0.18830		9.75145
123 1,2,4,5-Tetrachlorobenzene	++++	0.50952	0.52359	0.45075	0.44724	0.40706					
	0.40730	0.39059					AVRG		0.44801		11.57515
124 Isosafrole	++++	0.39642	0.41430	0.37355	0.38043	0.33419					
	0.33847	0.32234					AVRG		0.36567		9.47221
125 1,4-Naphthoquinone	++++	0.41213	0.42513	0.33756	0.32954	0.27088					
	0.26238	0.24394					AVRG		0.32594		22.12794

## GEL Laboratories LLC

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 Cal Date : 19-Jan-2010 11:44 jen00986

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients m1	m2	%RSD or R <sup>2</sup>
126 m-Dinitrobenzene	++++ 0.19221	0.20680 0.18156	0.21820	0.20367	0.19847	0.19342	AVRG		0.19919		5.91404
127 Pentachlorobenzene	++++ 0.34242	0.38028 0.35337	0.38706	0.35349	0.36180	0.33082	AVRG		0.35589		6.11146
128 1-Naphthylamine	++++ 0.84978	1.06054 0.79498	1.07552	0.98112	1.01203	0.85440	AVRG		0.94691		11.88100
129 2-Naphthylamine	++++ 0.92698	1.18810 0.87536	1.18347	1.08346	1.12187	0.94800	AVRG		1.04675		12.27985
130 2,3,4,6-Tetrachlorophenol	++++ 0.23287	0.25391 0.21725	0.26992	0.25397	0.24723	0.24473	AVRG		0.24570		6.84971
131 5-Nitro-o-toluidine	++++ 0.32529	0.29512 0.30377	0.32188	0.32993	0.35065	0.31331	AVRG		0.31999		5.70075
132 Thionazin	++++ 0.16464	0.21254 0.15331	0.20731	0.19411	0.19772	0.17404	AVRG		0.18624		12.06404
134 Sulfotepp	++++ 0.07731	0.06984 0.07654	0.06785	0.06825	0.06859	0.07140	AVRG		0.07140		5.54941
135 Phorate	++++ 0.35334	0.48374 0.32360	0.46253	0.43051	0.41680	0.36504	AVRG		0.40508		14.67137

## GEL Laboratories LLC

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 Integrator : HP RTE  
 Method file : /chem/MSD7.i/s011910.b/MSD7-M8270C-AQA-011310.m  
 Cal Date : 19-Jan-2010 11:44 jen00986

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients ml	m2	%RSD or R <sup>2</sup>
	100 Level 7	120 Level 8									
136 1,3,5-Trinitrobenzene	++++ 0.13672	0.10162 0.11189	0.12849	0.13043	0.14376	0.13249	AVRG		0.12649		11.59269
137 Phenacetin	++++ 0.26990	0.26877 0.25853	0.28872	0.27476	0.29233	0.26205	AVRG		0.27358		4.66682
138 Diallyl	++++ ++++	0.31162 ++++	0.32003	0.26637	0.25948	0.22932	AVRG		0.27737		13.66115
139 Dimethoate	++++ 0.26880	0.26479 0.25124	0.27398	0.26734	0.27986	0.26510	AVRG		0.26730		3.32470
140 4-Aminobiphenyl	++++ 0.53908	0.66439 0.49813	0.68548	0.65711	0.67293	0.55700	AVRG		0.61059		12.54198
141 Pentachloronitrobenzene	++++ 0.04824	0.06555 0.04582	0.06631	0.05633	0.05613	0.05025	AVRG		0.05552		14.57216
142 Pronamide	++++ 0.18608	0.29628 0.17698	0.30157	0.24252	0.23250	0.19656	AVRG		0.23321		21.76909
143 Dinoseb	++++ 0.13987	0.09042 0.13715	0.12821	0.13534	0.13598	0.14162	AVRG		0.12980		13.77398
144 Disulfoton	++++ 0.30175	0.41147 0.27224	0.39434	0.36763	0.35634	0.31077	AVRG		0.34493		14.89085

GEL Laboratories LLC  
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 Cal Date : 19-Jan-2010 11:44 jen00986

Compound	1	10	20	40	50	80	Curve	b	Coefficients m1	m2	%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					
	100	120									
	Level 7	Level 8									
145 Methyl parathion	++++	0.17243	0.19573	0.19477	0.20506	0.19911	AVRG		0.19361		5.51936
	0.19997	0.18821									
146 4-Nitroquinoline-1-oxide	++++	0.02928	0.03008	0.02626	0.02758	0.02167	AVRG		0.02419		23.15445
	0.01941	0.01509									
147 Methapyrilene	++++	0.65484	0.72146	0.58985	0.58164	0.50142	AVRG		0.60984		13.57995
	++++	++++									
148 Isodrin	++++	0.12050	0.12814	0.10611	0.10575	0.09656	AVRG		0.10589		13.22846
	0.09280	0.09138									
149 Aramite	++++	0.04572	0.05335	0.04995	0.05102	0.04683	AVRG		0.04813		6.94603
	0.04586	0.04419									
150 Kepone	++++	0.06478	0.07477	0.06607	0.06941	0.06643	AVRG		0.06756		5.21469
	0.06654	0.06495									
151 p-(Dimethylamino)azobenzene	++++	0.33958	0.36491	0.32328	0.31587	0.28351	AVRG		0.31262		10.51808
	0.27935	0.28185									
152 Chlorobenzilate	++++	0.25316	0.27609	0.24099	0.22879	0.22334	AVRG		0.24177		7.66039
	0.22634	0.24364									
153 3,3'-Dimethylbenzidine	++++	0.58294	0.62484	0.59700	0.62812	0.56782	AVRG		0.58779		5.43298
	0.57564	0.53815									

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 Cal Date : 19-Jan-2010 11:44 jen00986

Compound	1	10	20	40	50	80	Curve	b	Coefficients ml	m2	%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					
	100	120									
	Level 7	Level 8									
154 Famphur	++++	0.34293	0.35640	0.35333	0.36388	0.34897					
	0.35186	0.33815					AVRG		0.35079		2.42811
155 2-Acetylaminofluorene	++++	0.22906	0.26071	0.30220	0.33870	0.31870					
	0.32600	0.28645					AVRG		0.29455		13.20654
157 7,12Dimethylbenz(a)anthracene	++++	0.49055	0.56096	0.49107	0.47664	0.44238					
	0.47763	0.48720					AVRG		0.48949		7.29126
158 3-Methylcholanthrene	++++	0.37469	0.40654	0.40074	0.41929	0.37655					
	0.39929	0.38314					AVRG		0.39432		4.22479
26 Phthalic anhydride	++++	17802	63670	136080	167026	258664					
	326501	387207					LINR	0.03594	0.12452		0.99693
173 Carbazole	0.86461	0.90783	0.93259	0.81316	0.76105	0.72966					
	0.71732	0.67464					AVRG		0.80011		11.81641
174 Hexachlorophene	++++	0.02881	0.03850	0.03998	0.04154	0.03543					
	0.04105	++++					AVRG		0.03755		12.82216
179 Dibenzo(a,e)pyrene	++++	0.26279	0.21194	0.28705	0.31052	0.27777					
	0.22659	++++					AVRG		0.26278		14.22624
185 (2,3-Dibromopropyl)phosphate	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+00		0.000e+00

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 Method file : /chem/MSD7.i/s011910.b/MSD7-M8270C-AQA-011310.m  
 Cal Date : 19-Jan-2010 11:44 jen00986

Compound	1	10	20	40	50	80	Curve	b	Coefficients ml	m2	SRSD or R <sup>2</sup>
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					
	100	120									
	Level 7	Level 8									
184 p-Benzquinone	++++	0.06655	0.08086	0.08809	0.12563	0.14993					
	0.15421	0.13847					AVRG		0.11482		31.115081<-
191 Parathion	++++	0.04302	0.04840	0.04863	0.05311	0.05474					
	0.05775	0.05620					AVRG		0.05169		10.10344
192 Methoxychlor	++++	0.60262	0.68127	0.61971	0.59381	0.62438					
	0.59149	0.53427					AVRG		0.60679		7.27805
210 m-Toluidine	++++	1.34351	1.41939	1.32580	1.35959	1.38421					
	1.48774	1.55861					AVRG		1.41126		5.99317
211 p-Toluidine	++++	1.19092	1.16677	1.13422	1.03862	1.04792					
	1.01200	0.79991					AVRG		1.05576		12.49876
212 Cis Diallate	++++	0.30717	0.34670	0.30098	0.30136	0.28690					
	0.29180	0.28476					AVRG		0.30281		6.94210
213 Trans Diallate	++++	0.36662	0.37651	0.31338	0.30527	0.26979					
	++++	++++					AVRG		0.32631		13.66115
214 1,4-Dinitrobenzene	++++	0.20213	0.23378	0.22604	0.21776	0.21122					
	0.21850	0.20918					AVRG		0.21694		4.91361
215 2-Ethoxyethanol	++++	1.06285	1.16019	1.06866	0.96547	0.96788					
	0.98145	0.89824					AVRG		1.01496		8.59687

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Compound	1	10	20	40	50	80	Curve	b	Coefficients	m1	m2	%RSD or R <sup>2</sup>
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6						
	100	120										
	Level 7	Level 8										
216 Methylenebis(2-chloroaniline)	++++	0.12057	0.14302	0.13505	0.12980	0.13369						
	0.13289	0.13160				AVRG				0.13237		5.05871
226 2,2'-Dichlorobenzil	++++	0.74178	0.75192	0.71371	0.70525	0.66450						
	++++	0.61564				AVRG				0.69880		7.30389
227 4-Chlorothioanisole	++++	0.23827	0.25288	0.24529	0.24518	0.23195						
	++++	0.21435				AVRG				0.23799		5.70656
228 4-Chlorothiophenol	++++	30556	101498	252564	300443	508460						
	++++	704552				LINR		0.10496		0.20783		0.99743
229 bis(p-Chlorophenyl)sulfone	++++	0.44120	0.42676	0.39168	0.39081	0.35974						
	++++	0.33628				AVRG				0.39108		10.08085
230 bis(p-Chlorophenyl)disulfide	++++	0.22646	0.21014	0.18860	0.19053	0.16462						
	++++	0.15081				AVRG				0.18853		14.82259
231 Diphenyl disulfide	++++	0.28541	0.25455	0.23964	0.24204	0.21486						
	++++	0.19670				AVRG				0.23553		10.82223
232 Diphenyl sulfide	++++	0.88267	0.85145	0.79583	0.79935	0.74037						
	++++	0.66655				AVRG				0.78937		9.84306
233 Phenyl sulfone	++++	0.50195	0.48312	0.45403	0.44999	0.41349						
	++++	0.37279				AVRG				0.44589		10.52158

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients m1	m2	%RSD or R^2
	100	120									
	Level 7	Level 8									
234 Hydroxymethyl phthalimide	++++	14573	32398	48393	61372	94869	LINR	-0.04139	0.07618		0.99267
	++++	143033									
235 Phthalic acid	++++	12580	35505	101795	139857	206275	LINR	0.18939	0.09753		0.99665
	++++	332645									
236 Thiophenol	++++	55193	163704	388728	487155	762725	LINR	0.04425	1.11913		0.99612
	++++	1041441									
237 bis(Chloromethyl) ether	++++	1.10253	1.09460	1.01664	1.02874	0.95967	AVRG		1.02047		7.06312
	++++	0.92064									
238 Octachlorostyrene	++++	0.05015	0.04794	0.04706	0.04641	0.04574	AVRG		0.04707		3.83116
	++++	0.04512									
222 Trichlorophenols	++++	0.32405	0.34431	0.30526	0.29222	0.27563	AVRG		0.29542		10.60638
	0.27063	0.25583									
223 Tetrachlorophenols	++++	0.25391	0.26992	0.25397	0.24723	0.24473	AVRG		0.24570		6.84971
	0.23287	0.21725									
224 Benzo (b,k) fluoranthene	1.00023	1.09787	1.08436	0.98853	0.96175	0.98921	AVRG		1.01120		5.45943
	1.02508	0.94254									
225 TTO Sum Semivolatiles	++++	++++	++++	++++	++++	++++	AVRG		0.000e+00		0.000e+00
	++++	++++									



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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
\$ 3 2-Fluorophenol	++++ 1.10726	1.20273 1.02495	1.30129	1.17488	1.13762	1.09735	AVRG		1.14944		7.67318
\$ 5 Phenol-d5	++++ 1.44525	1.58928 1.33643	1.64869	1.50015	1.45443	1.39964	AVRG		1.48198		7.27306
\$ 187 2-Chlorophenol-d4	++++ ++++	++++ ++++	++++	++++	++++	++++	AVRG		0.000e+00		0.000e+00
\$ 188 1,2-Dichlorobenzene-d4	++++ ++++	++++ ++++	++++	++++	++++	++++	AVRG		0.000e+00		0.000e+00
\$ 20 Nitrobenzene-d5	++++ 0.31003	0.36604 0.29401	0.36548	0.33575	0.32339	0.31502	AVRG		0.32996		8.34902
\$ 39 2-Fluorobiphenyl	++++ ++++	1.36843 ++++	1.34696	1.13154	1.05987	0.98675	AVRG		1.17871		14.54057
\$ 60 2,4,6-Tribromophenol	++++ 0.10532	0.09256 0.10388	0.10381	0.09928	0.09926	0.10040	AVRG		0.10063		4.26669
\$ 81 p-Terphenyl-d14	++++ 0.70500	0.72672 0.61874	0.73063	0.65173	0.63774	0.71178	AVRG		0.66319		6.72022

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Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Linear	Amt = b + Rsp/ml	Response

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD7.i Injection Date: 14-JAN-2010 01:32  
Lab File ID: s7a1325.d Init. Cal. Date(s): 13-JAN-2010 14-JAN-2010  
Analysis Type: Init. Cal. Times: 16:51 01:10  
Lab Sample ID: WBN091106-09.3 Quant Type: ISTD  
Method: /chem/MSD7.i/s011310.b/MSD7-M8270C-AQA-011310.m

COMPOUND		RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
1	3 2-Fluorophenol	1.14944	1.19979	1.19979	0.000	4.38067	60.00000	Averaged
1	5 Phenol-d5	1.48198	1.46736	1.46736	0.000	-0.98671	60.00000	Averaged
1	20 Nitrobenzene-d5	0.32996	0.34065	0.34065	0.000	3.24024	60.00000	Averaged
1	39 2-Fluorobiphenyl	1.17871	1.14576	1.14576	0.000	-2.79503	60.00000	Averaged
1	60 2,4,6-Tribromophenol	0.10063	0.10523	0.10523	0.000	4.57101	60.00000	Averaged
1	81 p-Terphenyl-d14	0.68319	0.69434	0.69434	0.000	1.63158	60.00000	Averaged
1	1 N-Methyl-N-nitrosomethylami	0.85875	0.84167	0.84167	0.000	-1.98906	60.00000	Averaged
1	2 Pyridine	1.01939	1.08019	1.08019	0.000	5.96476	60.00000	Averaged
1	4 Aniline	0.66799	0.67553	0.67553	0.000	1.12909	60.00000	Averaged
1	6 Phenol	1.48059	1.45713	1.45713	0.001	-1.58488	20.00000	Averaged ccc
1	7 bis(2-Chloroethyl) ether	1.21062	1.11386	1.11386	0.000	-7.99271	60.00000	Averaged
1	8 2-Chlorophenol	1.03915	1.01572	1.01572	0.000	-2.25469	60.00000	Averaged
1	203 n-Decane	1.59464	1.38841	1.38841	0.000	-12.93222	60.00000	Averaged
1	9 1,3-Dichlorobenzene	1.21612	1.23436	1.23436	0.000	1.50004	60.00000	Averaged
1	11 1,4-Dichlorobenzene	1.14083	1.12997	1.12997	0.001	-0.95180	20.00000	Averaged ccc
1	13 1,2-Dichlorobenzene	1.04543	0.98075	0.98075	0.000	-6.18639	60.00000	Averaged
1	14 bis(2-Chloroisopropyl)ether	2.81377	2.67314	2.67314	0.000	-4.99796	60.00000	Averaged
1	12 Benzyl alcohol	0.75386	0.74467	0.74467	0.000	-1.21841	60.00000	Averaged
1	15 o-Cresol	0.79302	0.75562	0.75562	0.000	-4.71607	60.00000	Averaged
1	18 m,p-Cresols	1.19515	1.18671	1.18671	0.000	-0.70651	60.00000	Averaged
1	17 N-Nitrosodipropylamine	0.86879	0.87578	0.87578	0.050	0.80426	60.00000	Averaged spcc
1	19 Hexachloroethane	0.46381	0.45922	0.45922	0.000	-0.98974	60.00000	Averaged
1	21 Nitrobenzene	0.32512	0.33012	0.33012	0.000	1.53735	60.00000	Averaged
1	22 Isophorone	0.64520	0.63755	0.63755	0.000	-1.18618	60.00000	Averaged
1	23 2-Nitrophenol	0.13539	0.14118	0.14118	0.001	4.27881	20.00000	Averaged ccc
1	24 2,4-Dimethylphenol	0.25598	0.25694	0.25694	0.000	0.37175	60.00000	Averaged
1	25 bis(2-Chloroethoxy)methane	0.36897	0.35440	0.35440	0.000	-3.94894	60.00000	Averaged
1	26 2,4-Dichlorophenol	0.23089	0.23339	0.23339	0.001	1.08396	20.00000	Averaged ccc
1	27 Benzoic acid	44.87163	40.00000	0.18438	0.000	12.17907	60.00000	Linear
1	28 1,2,4-Trichlorobenzene	0.26129	0.25789	0.25789	0.000	-1.30332	60.00000	Averaged
1	30 Naphthalene	0.90955	0.85854	0.85854	0.000	-5.60883	60.00000	Averaged
1	204 alpha-Terpineol	38.38876	40.00000	0.27686	0.000	-4.02809	60.00000	Linear
1	31 4-Chloroaniline	0.37704	0.39730	0.39730	0.000	5.37528	60.00000	Averaged
1	32 Hexachlorobutadiene	0.13485	0.13525	0.13525	0.001	0.29124	20.00000	Averaged ccc
1	33 4-Chloro-3-methylphenol	0.24792	0.24654	0.24654	0.001	-0.55793	20.00000	Averaged ccc
1	34 2-Methylnaphthalene	0.56535	0.62714	0.62714	0.000	10.93034	60.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD7.i Injection Date: 14-JAN-2010 01:32  
Lab File ID: s7a1325.d Init. Cal. Date(s): 13-JAN-2010 14-JAN-2010  
Analysis Type: Init. Cal. Times: 16:51 01:10  
Lab Sample ID: WBN091106-09.3 Quant Type: ISTD  
Method: /chem/MSD7.i/s011310.b/MSD7-M8270C-AQA-011310.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
35 1-Methylnaphthalene	0.55957	0.57444	0.57444	0.000	2.65596	60.00000	Averaged
36 Hexachlorocyclopentadiene	0.20471	0.18903	0.18903	0.050	-7.65838	60.00000	Averaged spcc
205 2,3-Dichloroaniline	0.54190	0.51854	0.51854	0.000	-4.31104	60.00000	Averaged
37 2,4,6-Trichlorophenol	0.27858	0.28344	0.28344	0.001	1.74317	20.00000	Averaged ccc
38 2,4,5-Trichlorophenol	0.31226	0.30290	0.30290	0.000	-2.99627	60.00000	Averaged
40 2-Chloronaphthalene	1.03962	0.95077	0.95077	0.000	-8.54689	60.00000	Averaged
42 o-Nitroaniline	0.37172	0.38673	0.38673	0.000	4.03769	60.00000	Averaged
41 m-Nitroaniline	0.26513	0.28498	0.28498	0.000	7.48645	60.00000	Averaged
43 Dimethylphthalate	1.08784	1.12875	1.12875	0.000	3.76031	60.00000	Averaged
44 2,6-Dinitrotoluene	0.25558	0.25894	0.25894	0.000	1.31460	60.00000	Averaged
50 2,4-Dinitrotoluene	0.33163	0.35229	0.35229	0.000	6.23095	60.00000	Averaged
45 Acenaphthylene	1.69334	1.77553	1.77553	0.000	4.85347	60.00000	Averaged
47 Acenaphthene	1.05215	0.98231	0.98231	0.001	-6.63786	20.00000	Averaged ccc
48 2,4-Dinitrophenol	0.09204	0.09507	0.09507	0.050	3.28585	60.00000	Averaged spcc
49 Dibenzofuran	1.40077	1.37982	1.37982	0.000	-1.49529	60.00000	Averaged
51 Diethylphthalate	1.16566	1.16558	1.16558	0.000	-0.00717	60.00000	Averaged
52 4-Nitrophenol	0.18919	0.20884	0.20884	0.050	10.39134	60.00000	Averaged spcc
53 Fluorene	1.25274	1.18582	1.18582	0.000	-5.34180	60.00000	Averaged
54 4-Chlorophenylphenylether	0.54018	0.55809	0.55809	0.000	3.31674	60.00000	Averaged
55 2-Methyl-4,6-dinitrophenol	0.08339	0.10609	0.10609	0.000	27.21980	60.00000	Averaged
56 p-Nitroaniline	0.23626	0.24773	0.24773	0.000	4.85652	60.00000	Averaged
133 Diphenylamine	0.52047	0.51293	0.51293	0.001	-1.44852	20.00000	Averaged ccc
58 1,2-Diphenylhydrazine	0.68305	0.65986	0.65986	0.000	-3.39523	60.00000	Averaged
61 4-Bromophenylphenylether	0.15456	0.14839	0.14839	0.000	-3.99250	60.00000	Averaged
63 Hexachlorobenzene	0.14454	0.13629	0.13629	0.000	-5.70637	60.00000	Averaged
65 Pentachlorophenol	0.07703	0.07569	0.07569	0.001	-1.74322	20.00000	Averaged ccc
206 n-Octadecane	0.52780	0.51332	0.51332	0.000	-2.74265	60.00000	Averaged
68 Phenanthrene	0.88130	0.85569	0.85569	0.000	-2.90541	60.00000	Averaged
69 Anthracene	0.83892	0.89421	0.89421	0.000	6.59003	60.00000	Averaged
72 Di-n-butylphthalate	1.05305	1.09163	1.09163	0.000	3.66328	60.00000	Averaged
76 Fluoranthene	0.95196	1.06485	1.06485	0.001	11.85875	20.00000	Averaged ccc
79 Pyrene	1.26417	1.22973	1.22973	0.000	-2.72444	60.00000	Averaged
85 Butylbenzylphthalate	0.54516	0.53999	0.53999	0.000	-0.94829	60.00000	Averaged
89 Benzo(a)anthracene	0.95972	0.99492	0.99492	0.000	3.66762	60.00000	Averaged
92 Chrysene	0.88121	0.89853	0.89853	0.000	1.96484	60.00000	Averaged
93 bis(2-Ethylhexyl)phthalate	0.64615	0.64124	0.64124	0.000	-0.75996	60.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD7.i Injection Date: 14-JAN-2010 01:32  
Lab File ID: s7a1325.d Init. Cal. Date(s): 13-JAN-2010 14-JAN-2010  
Analysis Type: Init. Cal. Times: 16:51 01:10  
Lab Sample ID: WBN091106-09.3 Quant Type: ISTD  
Method: /chem/MSD7.i/s011310.b/MSD7-M8270C-AQA-011310.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
94 Di-n-octylphthalate	1.46808	1.31949	1.31949	0.001	-10.12118	20.00000	Averaged ccc
95 Benzo(b)fluoranthene	1.03886	1.03342	1.03342	0.000	-0.52354	60.00000	Averaged
96 Benzo(k)fluoranthene	0.98353	1.03486	1.03486	0.000	5.21859	60.00000	Averaged
97 Benzo(a)pyrene	0.87825	0.97124	0.97124	0.001	10.58803	20.00000	Averaged ccc
99 Indeno(1,2,3-cd)pyrene	0.66047	0.87420	0.87420	0.000	32.36097	60.00000	Averaged
100 Dibenzo(a,h)anthracene	0.52299	0.67664	0.67664	0.000	29.38074	60.00000	Averaged
101 Benzo(ghi)perylene	0.55616	0.74723	0.74723	0.000	34.35618	60.00000	Averaged
126 m-Dinitrobenzene	0.19919	0.20832	0.20832	0.000	4.58087	60.00000	Averaged
130 2,3,4,6-Tetrachlorophenol	0.24570	0.24766	0.24766	0.000	0.79855	60.00000	Averaged
143 Dinoseb	0.12980	0.13272	0.13272	0.000	2.25248	60.00000	Averaged
173 Carbazole	0.80011	0.84181	0.84181	0.000	5.21177	60.00000	Averaged
184 p-Benzoquinone	0.11482	0.18234	0.18234	0.000	58.80961	60.00000	Averaged
192 Methoxychlor	0.60679	0.61713	0.61713	0.000	1.70370	60.00000	Averaged
211 p-Toluidine	1.05576	1.12387	1.12387	0.000	6.45090	60.00000	Averaged
210 m-Toluidine	1.41126	1.45105	1.45105	0.000	2.81942	60.00000	Averaged
215 2-Ethoxyethanol	1.01496	1.07609	1.07609	0.000	6.02263	60.00000	Averaged
179 Dibenzo(a,e)pyrene	0.26278	0.24062	0.24062	0.000	-8.43317	60.00000	Averaged
26 Phthalic anhydride	58.64946	40.00000	0.17810	0.000	46.62365	60.00000	Linear
214 1,4-Dinitrobenzene	0.21694	0.23423	0.23423	0.000	7.96774	60.00000	Averaged
216 Methylenebis(2-chloroanilin	0.13237	0.15335	0.15335	0.000	15.84857	60.00000	Averaged
M 222 Trichlorophenols	0.29542	0.29317	0.29317	0.000	-0.76161	60.00000	Averaged
M 223 Tetrachlorophenols	0.24570	0.24766	0.24766	0.000	0.79855	60.00000	Averaged
M 224 Benzo(b,k)fluoranthene	1.01120	1.03414	1.03414	0.000	2.26898	60.00000	Averaged

Data File: /chem/MSD7.i/s011310.b/s7a1325.d  
 Report Date: 03-Feb-2010 11:32

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Data file : /chem/MSD7.i/s011310.b/s7a1325.d  
 Lab Smp Id: WBN091106-09.3 Client Smp ID: MEGAICV  
 Inj Date : 14-JAN-2010 01:32  
 Operator : JMB3 Inst ID: MSD7.i  
 Smp Info : |WBN091106-09.3|40 PPM|1|SVM|1|MEGAICV  
 Misc Info : |MSD8270|WBN100107-02|  
 Comment : Column: J&W Scientific DB-5MS 25m x 0.2mm x 0.33um film thickness  
 Method : /chem/MSD7.i/s011310.b/MSD7-M8270C-AQA-011310.m  
 Meth Date : 03-Feb-2010 11:32 jos00786 Quant Type: ISTD  
 Cal Date : 14-JAN-2010 01:10 Cal File: s7a1324.d  
 Als bottle: 25 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: MEGA.sub  
 Target Version: 3.50  
 Processing Host: kilroy

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
=====	=====	==	=====	=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	152	3.798	3.798	(1.000)	326422	40.0000	
* 29 Naphthalene-d8	136	4.659	4.659	(1.000)	1191198	40.0000	
* 46 Acenaphthene-d10	164	5.907	5.907	(1.000)	626816	40.0000	
* 67 Phenanthrene-d10	188	7.053	7.053	(1.000)	1165131	40.0000	
* 91 Chrysene-d12	240	9.441	9.441	(1.000)	1021532	40.0000	
* 98 Perylene-d12	264	10.992	10.992	(1.000)	916299	40.0000	
\$ 3 2-Fluorophenol	112	2.989	2.989	(0.787)	391639	40.0000	41.8
\$ 5 Phenol-d5	99	3.513	3.513	(0.925)	478978	40.0000	39.6
\$ 20 Nitrobenzene-d5	82	4.159	4.159	(0.893)	405785	40.0000	41.3
\$ 39 2-Fluorobiphenyl	172	5.396	5.396	(0.914)	718183	40.0000	38.9
\$ 60 2,4,6-Tribromophenol	329	6.489	6.489	(1.099)	65960	40.0000	41.8
\$ 81 p-Terphenyl-d14	244	8.415	8.415	(0.891)	709288	40.0000	40.6
1 N-Methyl-N-nitrosomethylamine	74	2.300	2.300	(0.606)	274740	40.0000	39.2
2 Pyridine	79	2.329	2.329	(0.613)	352599	40.0000	42.4
4 Aniline	66	3.586	3.586	(0.944)	220507	40.0000	40.4
6 Phenol	94	3.523	3.523	(0.928)	475638	40.0000	39.4
7 bis(2-Chloroethyl) ether	63	3.600	3.600	(0.948)	363589	40.0000	36.8
8 2-Chlorophenol	128	3.663	3.663	(0.964)	331553	40.0000	39.1
203 n-Decane	43	3.653	3.653	(0.962)	453209	40.0000	34.8
9 1,3-Dichlorobenzene	146	3.764	3.764	(0.991)	402923	40.0000	40.6
11 1,4-Dichlorobenzene	146	3.807	3.807	(1.003)	368847	40.0000	39.6
13 1,2-Dichlorobenzene	146	3.913	3.913	(1.030)	320139	40.0000	37.5
14 bis(2-Chloroisopropyl)ether	45	3.942	3.942	(1.038)	872572	40.0000	38.0
12 Benzyl alcohol	108	3.865	3.865	(1.018)	243078	40.0000	39.5
15 o-Cresol	107	3.918	3.918	(1.032)	246652	40.0000	38.1
18 m,p-Cresols	107	4.019	4.019	(1.058)	387368	40.0000	39.7

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
=====	=====	==	=====	=====	=====	=====	=====
17 N-Nitrosodipropylamine	70	4.043	4.043	(1.065)	285873	40.0000	40.3
19 Hexachloroethane	117	4.139	4.139	(1.090)	149900	40.0000	39.6
21 Nitrobenzene	77	4.173	4.173	(0.896)	393239	40.0000	40.6
22 Isophorone	82	4.327	4.327	(0.929)	759449	40.0000	39.5
23 2-Nitrophenol	139	4.385	4.385	(0.941)	168178	40.0000	41.7
24 2,4-Dimethylphenol	122	4.380	4.380	(0.940)	306061	40.0000	40.1
25 bis(2-Chloroethoxy)methane	93	4.448	4.448	(0.955)	422161	40.0000	38.4
26 2,4-Dichlorophenol	162	4.544	4.544	(0.975)	278019	40.0000	40.4
27 Benzoic acid	105	4.452	4.452	(0.956)	219635	40.0000	44.9
28 1,2,4-Trichlorobenzene	180	4.611	4.611	(0.990)	307196	40.0000	39.5
30 Naphthalene	128	4.674	4.674	(1.003)	1022687	40.0000	37.8
204 alpha-Terpineol	59	4.650	4.650	(0.998)	329800	40.0000	38.4
31 4-Chloroaniline	127	4.688	4.688	(1.006)	473266	40.0000	42.2
32 Hexachlorobutadiene	225	4.741	4.741	(1.018)	161106	40.0000	40.1
33 4-Chloro-3-methylphenol	107	5.001	5.001	(1.073)	293672	40.0000	39.8
34 2-Methylnaphthalene	142	5.151	5.151	(1.105)	747053	40.0000	44.4
35 1-Methylnaphthalene	142	5.228	5.228	(1.122)	684267	40.0000	41.1
36 Hexachlorocyclopentadiene	237	5.257	5.257	(0.890)	118490	40.0000	36.9
205 2,3-Dichloroaniline	161	5.348	5.348	(0.905)	325027	40.0000	38.3
37 2,4,6-Trichlorophenol	196	5.338	5.338	(0.904)	177663	40.0000	40.7
38 2,4,5-Trichlorophenol	196	5.367	5.367	(0.909)	189863	40.0000	38.8
40 2-Chloronaphthalene	162	5.502	5.502	(0.932)	595955	40.0000	36.6
42 o-Nitroaniline	65	5.560	5.560	(0.941)	242410	40.0000	41.6
41 m-Nitroaniline	138	5.854	5.854	(0.991)	178631	40.0000	43.0
43 Dimethylphthalate	163	5.675	5.675	(0.961)	707516	40.0000	41.5
44 2,6-Dinitrotoluene	165	5.728	5.728	(0.970)	162306	40.0000	40.5
50 2,4-Dinitrotoluene	165	6.017	6.017	(1.019)	220821	40.0000	42.5
45 Acenaphthylene	152	5.806	5.806	(0.983)	1112929	40.0000	41.9
47 Acenaphthene	154	5.931	5.931	(1.004)	615730	40.0000	37.3
48 2,4-Dinitrophenol	184	5.926	5.926	(1.003)	59590	40.0000	41.3
49 Dibenzofuran	168	6.051	6.051	(1.024)	864894	40.0000	39.4
51 Diethylphthalate	149	6.176	6.176	(1.046)	730603	40.0000	40.0
52 4-Nitrophenol	139	5.945	5.945	(1.007)	130907	40.0000	44.2
53 Fluorene	166	6.306	6.306	(1.068)	743290	40.0000	37.9
54 4-Chlorophenylphenylether	204	6.287	6.287	(1.064)	349822	40.0000	41.3
55 2-Methyl-4,6-dinitrophenol	198	6.326	6.326	(0.897)	123603	40.0000	50.9
56 p-Nitroaniline	138	6.311	6.311	(1.068)	155282	40.0000	41.9
133 Diphenylamine	169	6.374	6.374	(0.904)	597633	40.0000	39.4
58 1,2-Diphenylhydrazine	77	6.407	6.407	(0.908)	768825	40.0000	38.6
61 4-Bromophenylphenylether	248	6.667	6.667	(0.945)	172898	40.0000	38.4
63 Hexachlorobenzene	284	6.735	6.735	(0.955)	158800	40.0000	37.7
65 Pentachlorophenol	266	6.879	6.879	(0.975)	88184	40.0000	39.3
206 n-Octadecane	57	6.879	6.879	(0.975)	598086	40.0000	38.9
68 Phenanthrene	178	7.072	7.072	(1.003)	996996	40.0000	38.8
69 Anthracene	178	7.115	7.115	(1.009)	1041866	40.0000	42.6
72 Di-n-butylphthalate	149	7.476	7.476	(1.060)	1271891	40.0000	41.5
76 Fluoranthene	202	8.098	8.098	(1.148)	1240694	40.0000	44.7

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
=====	----	==	=====	=====	=====	=====	=====
79 Pyrene	202	8.309	8.309	(0.880)	1256204	40.0000	38.9
85 Butylbenzylphthalate	149	8.849	8.849	(0.937)	551619	40.0000	39.6
89 Benzo(a)anthracene	228	9.422	9.422	(0.998)	1016340	40.0000	41.5
92 Chrysene	228	9.460	9.460	(1.002)	917875	40.0000	40.8
93 bis(2-Ethylhexyl)phthalate	149	9.374	9.374	(0.993)	655044	40.0000	39.7
94 Di-n-octylphthalate	149	9.990	9.990	(0.909)	1209047	40.0000	36.0
95 Benzo(b)fluoranthene	252	10.515	10.515	(0.957)	946924	40.0000	39.8 (H)
96 Benzo(k)fluoranthene	252	10.549	10.549	(0.960)	948242	40.0000	42.1
97 Benzo(a)pyrene	252	10.919	10.919	(0.993)	889946	40.0000	44.2
99 Indeno(1,2,3-cd)pyrene	276	12.585	12.585	(1.145)	801032	40.0000	52.9
100 Dibenzo(a,h)anthracene	278	12.610	12.610	(1.147)	620007	40.0000	51.8
101 Benzo(ghi)perylene	276	13.081	13.081	(1.190)	684688	40.0000	53.7
126 m-Dinitrobenzene	168	5.709	5.709	(0.967)	130576	40.0000	41.8
130 2,3,4,6-Tetrachlorophenol	232	6.128	6.128	(1.038)	155236	40.0000	40.3
143 Dinoseb	211	7.005	7.005	(0.993)	154640	40.0000	40.9
173 Carbazole	167	7.231	7.231	(1.025)	980814	40.0000	42.1
184 p-Benzoquinone	54	3.287	3.287	(0.866)	59521	40.0000	63.5
192 Methoxychlor	227	9.316	9.316	(0.987)	630419	40.0000	40.7
211 p-Toluidine	106	4.072	4.072	(1.072)	366856	40.0000	42.6
210 m-Toluidine	106	4.096	4.096	(1.079)	473656	40.0000	41.1
215 2-Ethoxyethanol	59	2.146	2.146	(0.565)	351259	40.0000	42.4
179 Dibenzo(a,e)pyrene	302	16.760	16.760	(1.525)	220476	40.0000	36.6
26 Phthalic anhydride	104	5.189	5.189	(1.114)	212147	40.0000	58.6
214 1,4-Dinitrobenzene	75	5.651	5.651	(0.957)	146819	40.0000	43.2 (H)
216 Methylenebis(2-chloroaniline)	231	9.374	9.374	(0.993)	156655	40.0000	46.3
M 222 Trichlorophenols	196				367526	80.0000	79.4
M 223 Tetrachlorophenols	232				155236	40.0000	40.3
M 224 Benzo(b,k)fluoranthene	252				1895166	80.0000	81.8

# QC Flag Legend

H - Operator selected an alternate compound hit.



Data File: /chem/MSD7.i/s011310.b/s7a1325.d

Date: 14-JAN-2010 01:32

Client ID: MEGALICV

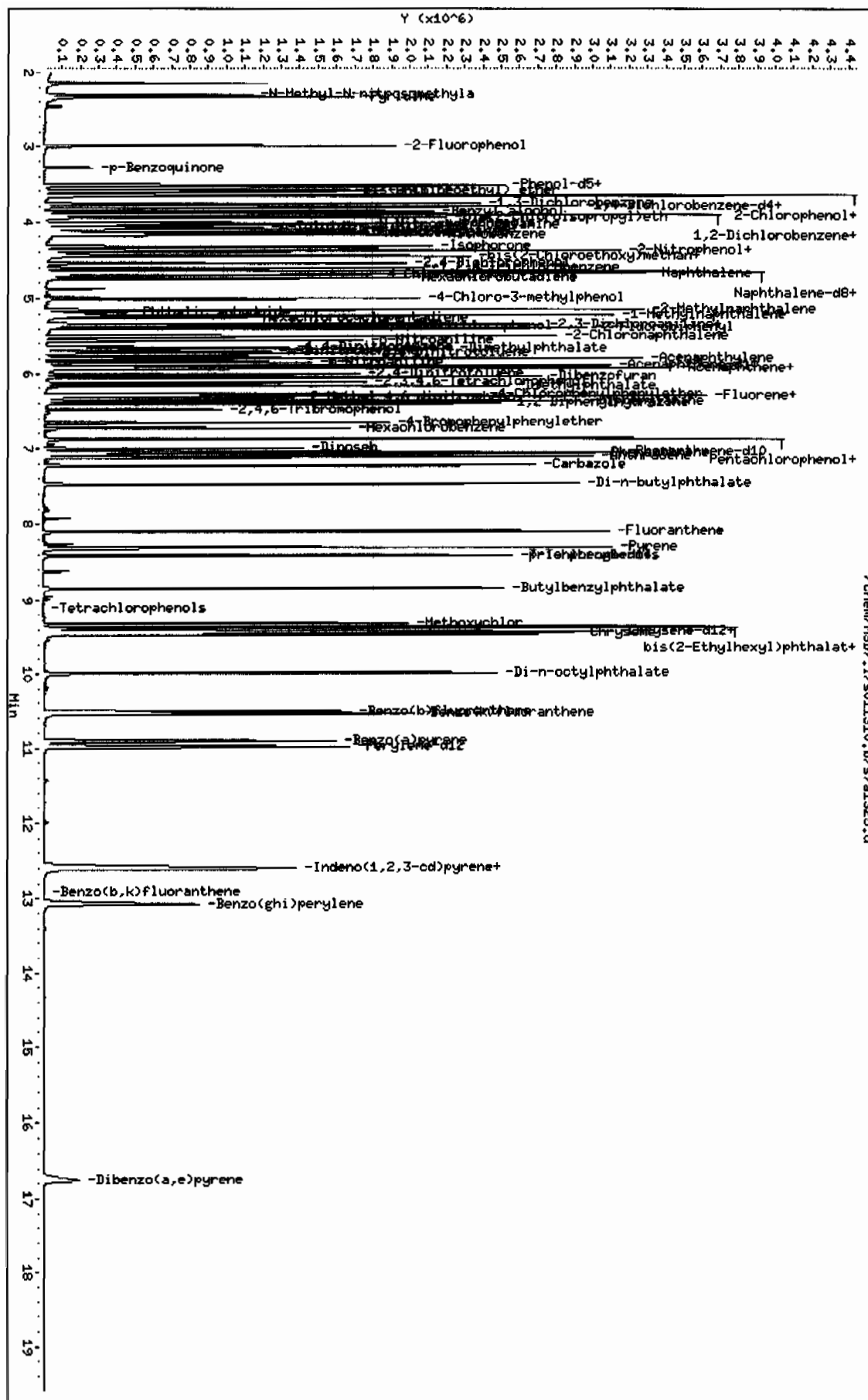
Sample Info: MBN091106-09.3140 PPH11SVH11MEGALICV

Column Phase: JMW DB-SMS

Instrument: MSD7.1

Operator: JMB3

Column diameter: 0.20



GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD7.i Injection Date: 14-JAN-2010 01:58  
Lab File ID: s7a1326.d Init. Cal. Date(s): 13-JAN-2010 14-JAN-2010  
Analysis Type: Init. Cal. Times: 16:51 01:10  
Lab Sample ID: WBN100103-03.1 Quant Type: ISTD  
Method: /chem/MSD7.i/s011310.b/MSD7-M8270C-AQA-011310.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
209 Benzaldehyde	0.95753	0.79795	0.79795	0.000	-16.66559	60.00000	Averaged
16 Acetophenone	1.20764	1.18343	1.18343	0.000	-2.00502	60.00000	Averaged
189 Caprolactam	0.08588	0.09142	0.09142	0.000	6.45623	60.00000	Averaged
208 1,1'-Biphenyl	1.31334	1.27886	1.27886	0.000	-2.62519	60.00000	Averaged
207 Atrazine	0.04356	0.04434	0.04434	0.000	1.79438	60.00000	Averaged
77 Benzidine	0.52166	0.55737	0.55737	0.000	6.84447	60.00000	Averaged
90 3,3'-Dichlorobenzidine	0.26320	0.27622	0.27622	0.000	4.94576	60.00000	Averaged
102 1,4-Dioxane	0.41241	0.49385	0.49385	0.000	19.74967	60.00000	Averaged
103 Methyl methacrylate	0.21692	0.26328	0.26328	0.000	21.37050	60.00000	Averaged
104 Ethyl methacrylate	0.89401	1.06726	1.06726	0.000	19.37916	60.00000	Averaged
105 2-Picoline	1.34945	1.29454	1.29454	0.000	-4.06902	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.57580	0.56791	0.56791	0.000	-1.36887	60.00000	Averaged
107 Methyl methanesulfonate	0.56163	0.59229	0.59229	0.000	5.45765	60.00000	Averaged
108 N-Nitrosodiethylamine	0.57789	0.56124	0.56124	0.000	-2.88213	60.00000	Averaged
109 Ethyl Methanesulfonate	0.75659	0.89802	0.89802	0.000	18.69262	60.00000	Averaged
110 Pentachloroethane	0.32612	0.43308	0.43308	0.000	32.79865	60.00000	Averaged
111 N-Nitrosopyrrolidine	0.58355	0.57768	0.57768	0.000	-1.00623	60.00000	Averaged
113 N-Nitrosomorpholine	0.87354	0.89793	0.89793	0.000	2.79241	60.00000	Averaged
114 o-Toluidine	1.73086	1.63252	1.63252	0.000	-5.68176	60.00000	Averaged
115 N-Nitrosopiperidine	0.15908	0.15531	0.15531	0.000	-2.36978	60.00000	Averaged
116 a,a-Dimethylphenethylamine	1.21923	1.18799	1.18799	0.000	-2.56263	60.00000	Averaged
118 2,6-Dichlorophenol	0.21328	0.21867	0.21867	0.000	2.52837	60.00000	Averaged
119 Hexachloropropene	0.10349	0.15901	0.15901	0.000	53.64293	60.00000	Averaged
120 p-Phenylenediamine	0.27204	0.26366	0.26366	0.000	-3.08032	60.00000	Averaged
121 N-Nitrosodi-n-butylamine	0.23762	0.22372	0.22372	0.000	-5.85087	60.00000	Averaged
122 Safrole	0.18830	0.21905	0.21905	0.000	16.32677	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.44801	0.48183	0.48183	0.000	7.55083	60.00000	Averaged
124 Isosafrole	0.36567	0.48390	0.48390	0.000	32.33300	60.00000	Averaged
125 1,4-Naphthoquinone	0.32594	0.33538	0.33538	0.000	2.89769	60.00000	Averaged
127 Pentachlorobenzene	0.35589	0.35947	0.35947	0.000	1.00722	60.00000	Averaged
128 1-Naphthylamine	0.94691	0.97084	0.97084	0.000	2.52712	60.00000	Averaged
129 2-Naphthylamine	1.04675	1.09999	1.09999	0.000	5.08584	60.00000	Averaged
131 5-Nitro-o-toluidine	0.31999	0.33268	0.33268	0.000	3.96424	60.00000	Averaged
136 1,3,5-Trinitrobenzene	0.12649	0.17457	0.17457	0.000	38.02000	60.00000	Averaged
137 Phenacetin	0.27358	0.29582	0.29582	0.000	8.13090	60.00000	Averaged
138 Diallate	0.27737	0.24962	0.24962	0.000	-10.00237	60.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD7.i Injection Date: 14-JAN-2010 01:58  
Lab File ID: s7a1326.d Init. Cal. Date(s): 13-JAN-2010 14-JAN-2010  
Analysis Type: Init. Cal. Times: 16:51 01:10  
Lab Sample ID: WBN100103-03.1 Quant Type: ISTD  
Method: /chem/MSD7.i/s011310.b/MSD7-M8270C-AQA-011310.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
212 Cis Diallate	0.30281	0.37658	0.37658	0.000	24.36086	60.00000	Averaged
213 Trans Diallate	0.32631	0.29367	0.29367	0.000	-10.00237	60.00000	Averaged
140 4-Aminobiphenyl	0.61059	0.66578	0.66578	0.000	9.03960	60.00000	Averaged
141 Pentachloronitrobenzene	0.05552	0.05755	0.05755	0.000	3.66016	60.00000	Averaged
142 Pronamide	0.23321	0.24450	0.24450	0.000	4.84020	60.00000	Averaged
146 4-Nitroquinoline-1-oxide	0.02419	0.02836	0.02836	0.000	17.20387	60.00000	Averaged
147 Methapyrilene	0.60984	0.58599	0.58599	0.000	-3.91113	60.00000	Averaged
148 Isodrin	0.10589	0.09829	0.09829	0.000	-7.17455	60.00000	Averaged
149 Aramite	0.04813	0.04606	0.04606	0.000	-4.29191	60.00000	Averaged
150 Kepone	0.06756	0.06399	0.06399	0.000	-5.28343	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.31262	0.30095	0.30095	0.000	-3.73166	60.00000	Averaged
152 Chlorobenzilate	0.24177	0.22704	0.22704	0.000	-6.09114	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.58779	0.58158	0.58158	0.000	-1.05629	60.00000	Averaged
155 2-Acetylaminofluorene	0.29455	0.31146	0.31146	0.000	5.74303	60.00000	Averaged
157 7,12Dimethylbenz(a)anthracene	0.48949	0.45941	0.45941	0.000	-6.14423	60.00000	Averaged
158 3-Methylcholanthrene	0.39432	0.42152	0.42152	0.000	6.89763	60.00000	Averaged

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Data file : /chem/MSD7.i/s011310.b/s7a1326.d  
Lab Smp Id: WBN100103-03.1 Client Smp ID: APICV  
Inj Date : 14-JAN-2010 01:58  
Operator : JMB3 Inst ID: MSD7.i  
Smp Info : |WBN100103-03.1|40 PPM|1|SVM|1|APICV  
Misc Info : |MSD8270|WBN100107-02|  
Comment : Column: J&W Scientific DB-5MS 25m x 0.2mm x 0.33um film thickness  
Method : /chem/MSD7.i/s011310.b/MSD7-M8270C-AQA-011310.m  
Meth Date : 18-Jan-2010 10:47 jos00786 Quant Type: ISTD  
Cal Date : 14-JAN-2010 01:10 Cal File: s7a1324.d  
Als bottle: 26 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: AP12.sub  
Target Version: 3.50  
Processing Host: kilroy

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.797	3.797	(1.000)	371687	40.0000	
* 29 Naphthalene-d8	136	4.655	4.655	(1.000)	1319873	40.0000	
* 46 Acenaphthene-d10	164	5.902	5.902	(1.000)	691242	40.0000	
* 67 Phenanthrene-d10	188	7.053	7.053	(1.000)	1244451	40.0000	
* 91 Chrysene-d12	240	9.431	9.431	(1.000)	1148166	40.0000	
* 98 Perylene-d12	264	10.982	10.982	(1.000)	889906	40.0000	
209 Benzaldehyde	77	3.523	3.523	(0.928)	296588	40.0000	33.3
16 Acetophenone	105	4.048	4.048	(1.066)	439866	40.0000	39.2
189 Caprolactam	113	4.934	4.934	(1.060)	120662	40.0000	42.6
208 1,1'-Biphenyl	154	5.478	5.478	(0.928)	884003	40.0000	38.9
207 Atrazine	173	6.764	6.764	(0.959)	55177	40.0000	40.7
77 Benzidine	184	8.189	8.189	(0.868)	639953	40.0000	42.7
90 3,3'-Dichlorobenzidine	252	9.369	9.369	(0.993)	317143	40.0000	42.0
102 1,4-Dioxane	88	2.151	2.151	(0.566)	183559	40.0000	47.9
103 Methyl methacrylate	100	2.146	2.146	(0.565)	97858	40.0000	48.5
104 Ethyl methacrylate	69	2.512	2.512	(0.661)	396686	40.0000	47.8
105 2-Picoline	93	2.704	2.704	(0.712)	481164	40.0000	38.4
106 N-Nitrosomethylethylamine	88	2.743	2.743	(0.722)	211086	40.0000	39.4
107 Methyl methanesulfonate	80	2.902	2.902	(0.764)	220145	40.0000	42.2
108 N-Nitrosodiethylamine	102	3.133	3.133	(0.825)	208605	40.0000	38.8
109 Ethyl Methanesulfonate	79	3.287	3.287	(0.866)	333782	40.0000	47.5
110 Pentachloroethane	167	3.624	3.624	(0.954)	160971	40.0000	53.1
111 N-Nitrosopyrrolidine	100	4.038	4.038	(1.063)	214715	40.0000	39.6
113 N-Nitrosomorpholine	56	4.057	4.057	(1.068)	333749	40.0000	41.1
114 o-Toluidine	106	4.072	4.072	(1.072)	606785	40.0000	37.7
115 N-Nitrosopiperidine	114	4.269	4.269	(0.917)	204989	40.0000	39.0

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
116 a,a-Dimethylphenethylamine	58	4.520	4.520	(0.971)	1567996	40.0000	39.0
118 2,6-Dichlorophenol	162	4.698	4.698	(1.009)	288614	40.0000	41.0
119 Hexachloropropene	213	4.727	4.727	(1.016)	209874	40.0000	61.4
120 p-Phenylenediamine	108	4.934	4.934	(1.060)	347998	40.0000	38.8
121 N-Nitrosodi-n-butylamine	84	4.905	4.905	(1.054)	295282	40.0000	37.6
122 Safrole	162	5.069	5.069	(1.089)	289113	40.0000	46.5
123 1,2,4,5-Tetrachlorobenzene	216	5.266	5.266	(0.892)	333064	40.0000	43.0
124 Isosafrole	162	5.439	5.439	(0.922)	334494	40.0000	52.9
125 1,4-Naphthoquinone	158	5.618	5.618	(0.952)	231829	40.0000	41.2
127 Pentachlorobenzene	250	6.017	6.017	(1.020)	248484	40.0000	40.4
128 1-Naphthylamine	143	6.104	6.104	(1.034)	671084	40.0000	41.0
129 2-Naphthylamine	143	6.162	6.162	(1.044)	760357	40.0000	42.0
131 5-Nitro-o-toluidine	152	6.297	6.297	(1.067)	229962	40.0000	41.6
136 1,3,5-Trinitrobenzene	75	6.547	6.547	(0.928)	217250	40.0000	55.2
137 Phenacetin	108	6.595	6.595	(0.935)	368137	40.0000	43.2 (Q)
138 Diallate	86	6.576	6.576	(0.932)	310643	40.0000	36.0
212 Cis Diallate	86	6.653	6.653	(0.943)	70295	6.00000	7.5
213 Trans Diallate	86	6.576	6.576	(0.932)	310643	34.0000	30.6
140 4-Aminobiphenyl	169	6.874	6.874	(0.975)	828536	40.0000	43.6
141 Pentachloronitrobenzene	237	6.894	6.894	(0.977)	71618	40.0000	41.5 (Q)
142 Pronamide	173	6.894	6.894	(0.977)	304268	40.0000	41.9
146 4-Nitroquinoline-1-oxide	101	7.707	7.707	(1.093)	35289	40.0000	46.9
147 Methapyrilene	58	7.751	7.751	(1.099)	729235	40.0000	38.4
148 Isodrin	193	7.963	7.963	(1.129)	122321	40.0000	37.1
149 Aramite	185	8.367	8.367	(1.186)	57324	40.0000	38.3
150 Kepone	272	8.940	8.940	(1.268)	79638	40.0000	37.9
151 p-(Dimethylamino)azobenzene	120	8.541	8.541	(0.906)	345546	40.0000	38.5
152 Chlorobenzilate	251	8.574	8.574	(0.909)	260679	40.0000	37.6
153 3,3'-Dimethylbenzidine	212	8.854	8.854	(0.939)	667749	40.0000	39.6
155 2-Acetylaminofluorene	181	9.099	9.099	(0.965)	357611	40.0000	42.3
157 7,12Dimethylbenz(a)anthracene	256	10.486	10.486	(0.955)	408835	40.0000	37.5
158 3-Methylcholanthrene	268	11.353	11.353	(1.034)	375112	40.0000	42.8

#### QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD7.1/s011310.b/s7a1326.d

Date: 14-JAN-2010 01:58

Client ID: APICV

Sample Info: ILMN100103-03.1.40 PPH11SV/11APICV

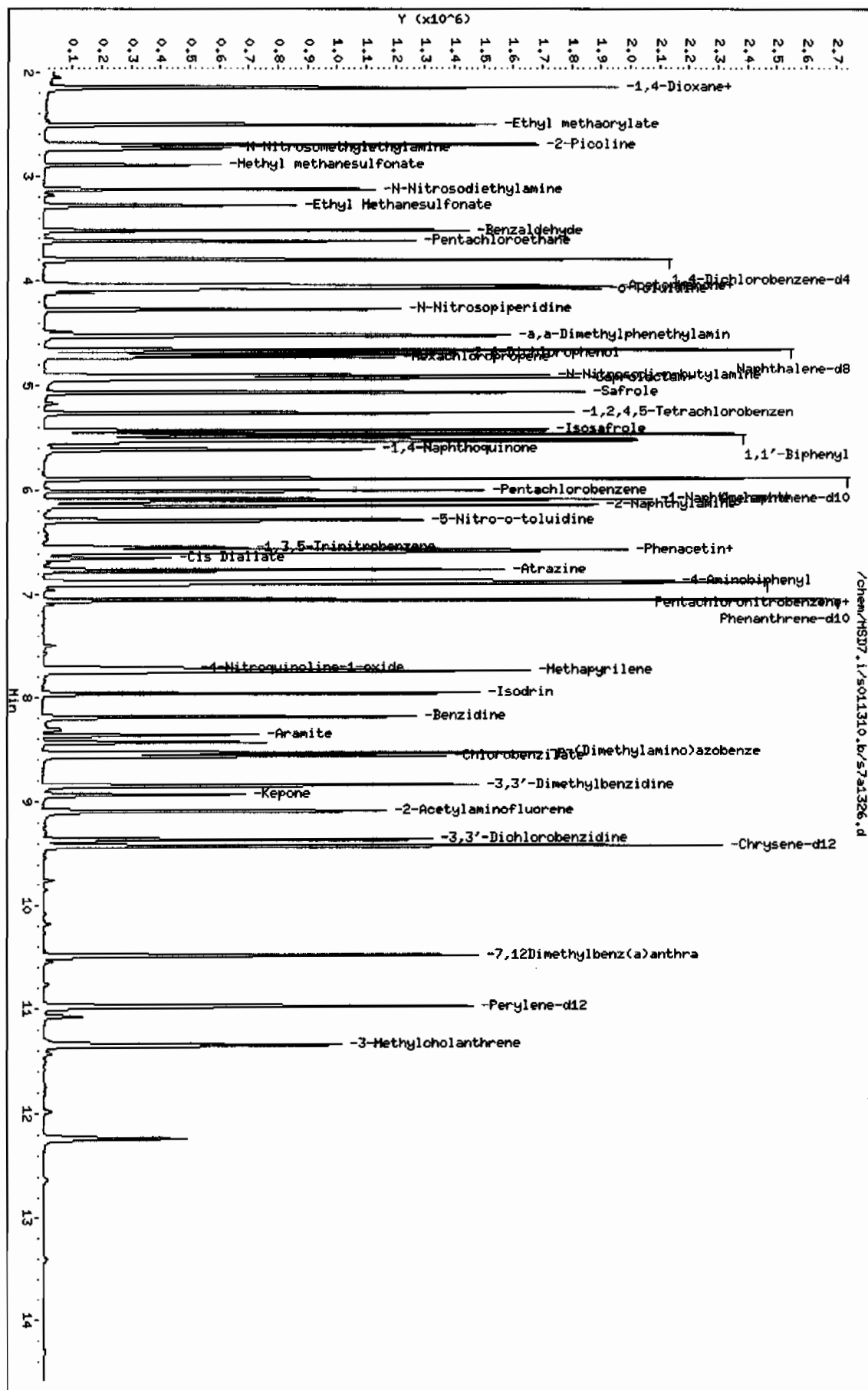
Column phase: J&W DB-SMS

Instrument: MSD7.1

Operator: JHB3

Column diameter: 0.20

/chem/MSD7.1/s011310.b/s7a1326.d



GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD7.i Injection Date: 19-JAN-2010 09:31  
Lab File ID: s7a1902.d Init. Cal. Date(s): 13-JAN-2010 15-JAN-2010  
Analysis Type: Init. Cal. Times: 16:51 19:06  
Lab Sample ID: WBN091225-12.3 Quant Type: ISTD  
Method: /chem/MSD7.i/s011910.b/MSD7-M8270C-AQA-011310.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
3 2-Fluorophenol	1.14944	1.07544	1.07544	0.000	-6.43798	60.00000	Averaged
5 Phenol-d5	1.48198	1.37751	1.37751	0.000	-7.04951	60.00000	Averaged
20 Nitrobenzene-d5	0.32996	0.30530	0.30530	0.000	-7.47379	60.00000	Averaged
39 2-Fluorobiphenyl	1.17871	1.02489	1.02489	0.000	-13.04941	60.00000	Averaged
60 2,4,6-Tribromophenol	0.10063	0.09457	0.09457	0.000	-6.02711	60.00000	Averaged
81 p-Terphenyl-d14	0.68319	0.61403	0.61403	0.000	-10.12318	60.00000	Averaged
1 N-Methyl-N-nitrosomethylami	0.85875	0.80202	0.80202	0.000	-6.60637	60.00000	Averaged
2 Pyridine	1.01939	0.91218	0.91218	0.000	-10.51699	60.00000	Averaged
4 Aniline	0.66799	0.62020	0.62020	0.000	-7.15292	60.00000	Averaged
6 Phenol	1.48059	1.36783	1.36783	0.001	-7.61615	20.00000	Averaged ccc
7 bis(2-Chloroethyl) ether	1.21062	1.08978	1.08978	0.000	-9.98168	60.00000	Averaged
8 2-Chlorophenol	1.03915	0.97876	0.97876	0.000	-5.81099	60.00000	Averaged
203 n-Decane	1.59464	1.88804	1.88804	0.000	18.39918	60.00000	Averaged
9 1,3-Dichlorobenzene	1.21612	1.16123	1.16123	0.000	-4.51394	60.00000	Averaged
11 1,4-Dichlorobenzene	1.14083	1.08656	1.08656	0.001	-4.75657	20.00000	Averaged ccc
13 1,2-Dichlorobenzene	1.04543	0.99293	0.99293	0.000	-5.02106	60.00000	Averaged
14 bis(2-Chloroisopropyl) ether	2.81377	2.83082	2.83082	0.000	0.60577	60.00000	Averaged
12 Benzyl alcohol	0.75386	0.66532	0.66532	0.000	-11.74508	60.00000	Averaged
15 o-Cresol	0.79302	0.76449	0.76449	0.000	-3.59842	60.00000	Averaged
18 m,p-Cresols	1.19515	1.06252	1.06252	0.000	-11.09722	60.00000	Averaged
17 N-Nitrosodipropylamine	0.86879	0.79558	0.79558	0.050	-8.42676	60.00000	Averaged spcc
19 Hexachloroethane	0.46381	0.43795	0.43795	0.000	-5.57538	60.00000	Averaged
21 Nitrobenzene	0.32512	0.29733	0.29733	0.000	-8.54944	60.00000	Averaged
22 Isophorone	0.64520	0.57971	0.57971	0.000	-10.15123	60.00000	Averaged
23 2-Nitrophenol	0.13539	0.13304	0.13304	0.001	-1.73401	20.00000	Averaged ccc
24 2,4-Dimethylphenol	0.25598	0.24243	0.24243	0.000	-5.29622	60.00000	Averaged
25 bis(2-Chloroethoxy)methane	0.36897	0.33610	0.33610	0.000	-8.90834	60.00000	Averaged
26 2,4-Dichlorophenol	0.23089	0.22205	0.22205	0.001	-3.82983	20.00000	Averaged ccc
27 Benzoic acid	32.70023	40.00000	0.12283	0.000	-18.24943	60.00000	Linear
28 1,2,4-Trichlorobenzene	0.26129	0.24409	0.24409	0.000	-6.58379	60.00000	Averaged
30 Naphthalene	0.90955	0.73533	0.73533	0.000	-19.15473	60.00000	Averaged
204 alpha-Terpineol	43.86813	40.00000	0.30755	0.000	9.67033	60.00000	Linear
31 4-Chloroaniline	0.37704	0.34072	0.34072	0.000	-9.63247	60.00000	Averaged
32 Hexachlorobutadiene	0.13485	0.12464	0.12464	0.001	-7.57771	20.00000	Averaged ccc
33 4-Chloro-3-methylphenol	0.24792	0.23571	0.23571	0.001	-4.92259	20.00000	Averaged ccc
34 2-Methylnaphthalene	0.56535	0.52114	0.52114	0.000	-7.81978	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD7.i Injection Date: 19-JAN-2010 09:31  
Lab File ID: s7a1902.d Init. Cal. Date(s): 13-JAN-2010 15-JAN-2010  
Analysis Type: Init. Cal. Times: 16:51 19:06  
Lab Sample ID: WBN091225-12.3 Quant Type: ISTD  
Method: /chem/MSD7.i/s011910.b/MSD7-M8270C-AQA-011310.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
35 1-Methylnaphthalene	0.55957	0.50031	0.50031	0.000	-10.59021	60.00000	Averaged
36 Hexachlorocyclopentadiene	0.20471	0.21446	0.21446	0.050	4.75947	60.00000	Averaged spcc
205 2,3-Dichloroaniline	0.54190	0.47231	0.47231	0.000	-12.84196	60.00000	Averaged
37 2,4,6-Trichlorophenol	0.27858	0.27308	0.27308	0.001	-1.97530	20.00000	Averaged ccc
38 2,4,5-Trichlorophenol	0.31226	0.28890	0.28890	0.000	-7.47876	60.00000	Averaged
40 2-Chloronaphthalene	1.03962	0.87052	0.87052	0.000	-16.26588	60.00000	Averaged
42 o-Nitroaniline	0.37172	0.34876	0.34876	0.000	-6.17713	60.00000	Averaged
41 m-Nitroaniline	0.26513	0.24046	0.24046	0.000	-9.30739	60.00000	Averaged
43 Dimethylphthalate	1.08784	0.99612	0.99612	0.000	-8.43107	60.00000	Averaged
44 2,6-Dinitrotoluene	0.25558	0.23366	0.23366	0.000	-8.57399	60.00000	Averaged
50 2,4-Dinitrotoluene	0.33163	0.30600	0.30600	0.000	-7.72781	60.00000	Averaged
45 Acenaphthylene	1.69334	1.46963	1.46963	0.000	-13.21146	60.00000	Averaged
47 Acenaphthene	1.05215	0.86091	0.86091	0.001	-18.17685	20.00000	Averaged ccc
48 2,4-Dinitrophenol	0.09204	0.09191	0.09191	0.050	-0.14049	60.00000	Averaged spcc
49 Dibenzofuran	1.40077	1.26365	1.26365	0.000	-9.78848	60.00000	Averaged
51 Diethylphthalate	1.16566	1.03655	1.03655	0.000	-11.07654	60.00000	Averaged
52 4-Nitrophenol	0.18919	0.16388	0.16388	0.050	-13.37781	60.00000	Averaged spcc
53 Fluorene	1.25274	1.00335	1.00335	0.000	-19.90751	60.00000	Averaged
54 4-Chlorophenylphenylether	0.54018	0.50852	0.50852	0.000	-5.86084	60.00000	Averaged
55 2-Methyl-4,6-dinitrophenol	0.08339	0.08324	0.08324	0.000	-0.17630	60.00000	Averaged
56 p-Nitroaniline	0.23626	0.20626	0.20626	0.000	-12.69607	60.00000	Averaged
133 Diphenylamine	0.52047	0.46574	0.46574	0.001	-10.51528	20.00000	Averaged ccc
58 1,2-Diphenylhydrazine	0.68305	0.59729	0.59729	0.000	-12.55644	60.00000	Averaged
61 4-Bromophenylphenylether	0.15456	0.13337	0.13337	0.000	-13.71126	60.00000	Averaged
63 Hexachlorobenzene	0.14454	0.12677	0.12677	0.000	-12.29596	60.00000	Averaged
65 Pentachlorophenol	0.07703	0.07237	0.07237	0.001	-6.05418	20.00000	Averaged ccc
206 n-Octadecane	0.52780	0.56305	0.56305	0.000	6.67990	60.00000	Averaged
68 Phenanthrene	0.88130	0.71717	0.71717	0.000	-18.62351	60.00000	Averaged
69 Anthracene	0.83892	0.73834	0.73834	0.000	-11.98887	60.00000	Averaged
72 Di-n-butylphthalate	1.05305	0.97968	0.97968	0.000	-6.96742	60.00000	Averaged
76 Fluoranthene	0.95196	0.86425	0.86425	0.001	-9.21417	20.00000	Averaged ccc
79 Pyrene	1.26417	1.13915	1.13915	0.000	-9.88946	60.00000	Averaged
85 Butylbenzylphthalate	0.54516	0.51286	0.51286	0.000	-5.92605	60.00000	Averaged
89 Benzo(a)anthracene	0.95972	0.85604	0.85604	0.000	-10.80266	60.00000	Averaged
92 Chrysene	0.88121	0.77755	0.77755	0.000	-11.76342	60.00000	Averaged
93 bis(2-Ethylhexyl)phthalate	0.64615	0.65463	0.65463	0.000	1.31262	60.00000	Averaged



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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD7.i Injection Date: 19-JAN-2010 09:31  
Lab File ID: s7a1902.d Init. Cal. Date(s): 13-JAN-2010 15-JAN-2010  
Analysis Type: Init. Cal. Times: 16:51 19:06  
Lab Sample ID: WBN091225-12.3 Quant Type: ISTD  
Method: /chem/MSD7.i/s011910.b/MSD7-M8270C-AQA-011310.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
94 Di-n-octylphthalate	1.46808	1.31605	1.31605	0.001	-10.35528	20.00000	Averaged ccc
95 Benzo(b)fluoranthene	1.03886	0.90386	0.90386	0.000	-12.99469	60.00000	Averaged
96 Benzo(k)fluoranthene	0.98353	0.87019	0.87019	0.000	-11.52377	60.00000	Averaged
97 Benzo(a)pyrene	0.87825	0.80305	0.80305	0.001	-8.56303	20.00000	Averaged ccc
99 Indeno(1,2,3-cd)pyrene	0.66047	0.68485	0.68485	0.000	3.69151	60.00000	Averaged
100 Dibenzo(a,h)anthracene	0.52299	0.54299	0.54299	0.000	3.82422	60.00000	Averaged
101 Benzo(ghi)perylene	0.55616	0.58794	0.58794	0.000	5.71422	60.00000	Averaged
126 m-Dinitrobenzene	0.19919	0.17872	0.17872	0.000	-10.27677	60.00000	Averaged
130 2,3,4,6-Tetrachlorophenol	0.24570	0.23832	0.23832	0.000	-3.00332	60.00000	Averaged
143 Dinoseb	0.12980	0.12882	0.12882	0.000	-0.75159	60.00000	Averaged
173 Carbazole	0.80011	0.74919	0.74919	0.000	-6.36357	60.00000	Averaged
184 p-Benzoquinone	0.11482	0.07081	0.07081	0.000	-38.32788	60.00000	Averaged
192 Methoxychlor	0.60679	0.58105	0.58105	0.000	-4.24254	60.00000	Averaged
211 p-Toluidine	1.05576	0.95957	0.95957	0.000	-9.11155	60.00000	Averaged
210 m-Toluidine	1.41126	1.02099	1.02099	0.000	-27.65402	60.00000	Averaged
215 2-Ethoxyethanol	1.01496	1.04010	1.04010	0.000	2.47652	60.00000	Averaged
179 Dibenzo(a,e)pyrene	0.26278	0.23307	0.23307	0.000	-11.30424	60.00000	Averaged
26 Phthalic anhydride	28.19456	40.00000	0.08329	0.000	-29.51360	60.00000	Linear
214 1,4-Dinitrobenzene	0.21694	0.20418	0.20418	0.000	-5.88139	60.00000	Averaged
216 Methylenebis(2-chloroanilin	0.13237	0.11986	0.11986	0.000	-9.45595	60.00000	Averaged
M 222 Trichlorophenols	0.29542	0.28099	0.28099	0.000	-4.88387	60.00000	Averaged
M 223 Tetrachlorophenols	0.24570	0.23832	0.23832	0.000	-3.00332	60.00000	Averaged
M 224 Benzo(b,k)fluoranthene	1.01120	0.88703	0.88703	0.000	-12.27935	60.00000	Averaged

Data File: /chem/MSD7.i/s011910.b/s7a1902.d  
Report Date: 20-Jan-2010 09:54

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Data file : /chem/MSD7.i/s011910.b/s7a1902.d  
Lab Smp Id: WBN091225-12.3 Client Smp ID: MEGACVS  
Inj Date : 19-JAN-2010 09:31  
Operator : JMB3 Inst ID: MSD7.i  
Smp Info : |WBN091225-12.3|CVS|1|SVMF|1|MEGACVS  
Misc Info : |MSD8270|WBN100107-02|  
Comment : Column: J&W Scientific DB-5MS 25m x 0.2mm x 0.33um film thickness  
Method : /chem/MSD7.i/s011910.b/MSD7-M8270C-AQA-011310.m  
Meth Date : 20-Jan-2010 09:54 jos00786 Quant Type: ISTD  
Cal Date : 15-JAN-2010 19:06 Cal File: s7a1515.d  
Als bottle: 2 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: MEGA.sub  
Target Version: 3.50  
Processing Host: kilroy

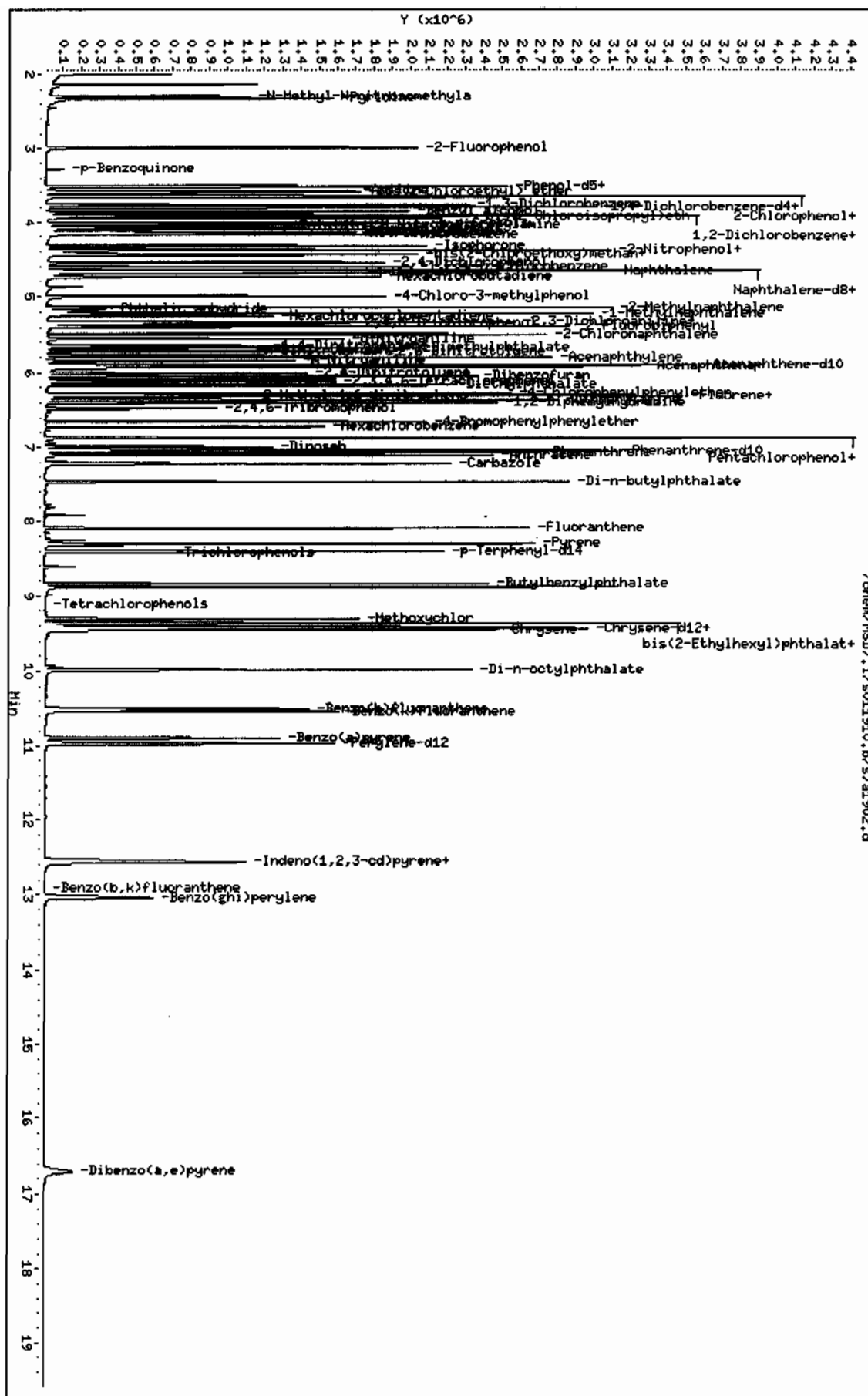
						AMOUNTS	
	QUANT SIG					CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng/ul)	(ng/ul)
=====	=====	==	=====	=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	152	3.793	3.793	(1.000)	324962	40.0000	
* 29 Naphthalene-d8	136	4.654	4.654	(1.000)	1186653	40.0000	
* 46 Acenaphthene-d10	164	5.897	5.897	(1.000)	634038	40.0000	
* 67 Phenanthrene-d10	188	7.048	7.048	(1.000)	1178577	40.0000	
* 91 Chrysene-d12	240	9.426	9.426	(1.000)	942861	40.0000	
* 98 Perylene-d12	264	10.972	10.972	(1.000)	794671	40.0000	
\$ 3 2-Fluorophenol	112	2.984	2.984	(0.787)	349477	40.0000	37.4
\$ 5 Phenol-d5	99	3.508	3.508	(0.925)	447638	40.0000	37.2
\$ 20 Nitrobenzene-d5	82	4.154	4.154	(0.892)	362286	40.0000	37.0
\$ 39 2-Fluorobiphenyl	172	5.391	5.391	(0.914)	649822	40.0000	34.8
\$ 60 2,4,6-Tribromophenol	329	6.484	6.484	(1.100)	59958	40.0000	37.6
\$ 81 p-Terphenyl-d14	244	8.406	8.406	(0.892)	578945	40.0000	36.0
1 N-Methyl-N-nitrosomethylamine	74	2.295	2.295	(0.605)	260626	40.0000	37.4
2 Pyridine	79	2.324	2.324	(0.613)	296424	40.0000	35.8
4 Aniline	66	3.581	3.581	(0.944)	201543	40.0000	37.1
6 Phenol	94	3.518	3.518	(0.928)	444492	40.0000	37.0
7 bis(2-Chloroethyl) ether	63	3.595	3.595	(0.948)	354138	40.0000	36.0
8 2-Chlorophenol	128	3.658	3.658	(0.964)	318061	40.0000	37.7
203 n-Decane	43	3.648	3.648	(0.962)	613540	40.0000	47.4
9 1,3-Dichlorobenzene	146	3.759	3.759	(0.991)	377354	40.0000	38.2
11 1,4-Dichlorobenzene	146	3.807	3.807	(1.004)	353092	40.0000	38.1
13 1,2-Dichlorobenzene	146	3.908	3.908	(1.030)	322666	40.0000	38.0
14 bis(2-Chloroisopropyl) ether	45	3.937	3.937	(1.038)	919908	40.0000	40.2
12 Benzyl alcohol	108	3.860	3.860	(1.018)	216203	40.0000	35.3
15 o-Cresol	107	3.913	3.913	(1.032)	248429	40.0000	38.6
18 m,p-Cresols	107	4.014	4.014	(1.058)	345280	40.0000	35.6

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
=====	=====	==	=====	=====	=====	=====	=====
17 N-Nitrosodipropylamine	70	4.033	4.033	(1.063)	258533	40.0000	36.6
19 Hexachloroethane	117	4.134	4.134	(1.090)	142318	40.0000	37.8
21 Nitrobenzene	77	4.168	4.168	(0.896)	352823	40.0000	36.6
22 Isophorone	82	4.322	4.322	(0.929)	687912	40.0000	35.9
23 2-Nitrophenol	139	4.380	4.380	(0.941)	157876	40.0000	39.3
24 2,4-Dimethylphenol	122	4.375	4.375	(0.940)	287676	40.0000	37.9
25 bis(2-Chloroethoxy)methane	93	4.443	4.443	(0.954)	398836	40.0000	36.4
26 2,4-Dichlorophenol	162	4.539	4.539	(0.975)	263495	40.0000	38.5
27 Benzoic acid	105	4.433	4.433	(0.952)	145751	40.0000	32.7
28 1,2,4-Trichlorobenzene	180	4.601	4.601	(0.989)	289651	40.0000	37.4
30 Naphthalene	128	4.669	4.669	(1.003)	872581	40.0000	32.3
204 alpha-Terpineol	59	4.645	4.645	(0.998)	364951	40.0000	43.9
31 4-Chloroaniline	127	4.683	4.683	(1.006)	404314	40.0000	36.1
32 Hexachlorobutadiene	225	4.736	4.736	(1.018)	147899	40.0000	37.0
33 4-Chloro-3-methylphenol	107	4.996	4.996	(1.073)	279711	40.0000	38.0
34 2-Methylnaphthalene	142	5.146	5.146	(1.106)	618413	40.0000	36.9
35 1-Methylnaphthalene	142	5.218	5.218	(1.121)	593699	40.0000	35.8
36 Hexachlorocyclopentadiene	237	5.252	5.252	(0.891)	135973	40.0000	41.9
205 2,3-Dichloroaniline	161	5.343	5.343	(0.906)	299461	40.0000	34.9
37 2,4,6-Trichlorophenol	196	5.333	5.333	(0.904)	173142	40.0000	39.2
38 2,4,5-Trichlorophenol	196	5.357	5.357	(0.909)	183176	40.0000	37.0
40 2-Chloronaphthalene	162	5.497	5.497	(0.932)	551941	40.0000	33.5
42 o-Nitroaniline	65	5.555	5.555	(0.942)	221128	40.0000	37.5
41 m-Nitroaniline	138	5.849	5.849	(0.992)	152458	40.0000	36.3
43 Dimethylphthalate	163	5.666	5.666	(0.961)	631580	40.0000	36.6
44 2,6-Dinitrotoluene	165	5.719	5.719	(0.970)	148152	40.0000	36.6
50 2,4-Dinitrotoluene	165	6.012	6.012	(1.020)	194015	40.0000	36.9
45 Acenaphthylene	152	5.801	5.801	(0.984)	931799	40.0000	34.7
47 Acenaphthene	154	5.921	5.921	(1.004)	545847	40.0000	32.7
48 2,4-Dinitrophenol	184	5.916	5.916	(1.003)	58277	40.0000	39.9
49 Dibenzofuran	168	6.046	6.046	(1.025)	801204	40.0000	36.1
51 Diethylphthalate	149	6.166	6.166	(1.046)	657210	40.0000	35.6
52 4-Nitrophenol	139	5.935	5.935	(1.007)	103904	40.0000	34.6
53 Fluorene	166	6.301	6.301	(1.069)	636161	40.0000	32.0
54 4-Chlorophenylphenylether	204	6.277	6.277	(1.064)	322420	40.0000	37.6
55 2-Methyl-4,6-dinitrophenol	198	6.316	6.316	(0.896)	98105	40.0000	39.9
56 p-Nitroaniline	138	6.301	6.301	(1.069)	130778	40.0000	34.9
133 Diphenylamine	169	6.364	6.364	(0.903)	548913	40.0000	35.8
58 1,2-Diphenylhydrazine	77	6.402	6.402	(0.908)	703947	40.0000	35.0
61 4-Bromophenylphenylether	248	6.658	6.658	(0.945)	157189	40.0000	34.5
63 Hexachlorobenzene	284	6.730	6.730	(0.955)	149407	40.0000	35.1
65 Pentachlorophenol	266	6.874	6.874	(0.975)	85288	40.0000	37.6
206 n-Octadecane	57	6.874	6.874	(0.975)	663601	40.0000	42.7
68 Phenanthrene	178	7.067	7.067	(1.003)	845241	40.0000	32.6
69 Anthracene	178	7.110	7.110	(1.009)	870194	40.0000	35.2
72 Di-n-butylphthalate	149	7.467	7.467	(1.059)	1154631	40.0000	37.2
76 Fluoranthene	202	8.093	8.093	(1.148)	1018582	40.0000	36.3

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
79 Pyrene	202	8.300	8.300	(0.880)	1074058	40.0000	36.0
85 Butylbenzylphthalate	149	8.839	8.839	(0.938)	483551	40.0000	37.6
89 Benzo(a)anthracene	228	9.412	9.412	(0.998)	807130	40.0000	35.7
92 Chrysene	228	9.450	9.450	(1.003)	733124	40.0000	35.3
93 bis(2-Ethylhexyl)phthalate	149	9.364	9.364	(0.993)	617224	40.0000	40.5
94 Di-n-octylphthalate	149	9.980	9.980	(0.910)	1045829	40.0000	35.8
95 Benzo(b)fluoranthene	252	10.500	10.500	(0.957)	718275	40.0000	34.8
96 Benzo(k)fluoranthene	252	10.534	10.534	(0.960)	691518	40.0000	35.4
97 Benzo(a)pyrene	252	10.900	10.900	(0.993)	638157	40.0000	36.6
99 Indeno(1,2,3-cd)pyrene	276	12.561	12.561	(1.145)	544231	40.0000	41.5
100 Dibenzo(a,h)anthracene	278	12.576	12.576	(1.146)	431495	40.0000	41.5
101 Benzo(ghi)perylene	276	13.048	13.048	(1.189)	467217	40.0000	42.3
126 m-Dinitrobenzene	168	5.704	5.704	(0.967)	113316	40.0000	35.9
130 2,3,4,6-Tetrachlorophenol	232	6.123	6.123	(1.038)	151102	40.0000	38.8
143 Dinoseb	211	7.000	7.000	(0.993)	151829	40.0000	39.7
173 Carbazole	167	7.226	7.226	(1.025)	882979	40.0000	37.4
184 p-Benzquinone	54	3.282	3.282	(0.865)	23011	40.0000	24.7
192 Methoxychlor	227	9.306	9.306	(0.987)	547849	40.0000	38.3
211 p-Toluidine	106	4.067	4.067	(1.072)	311823	40.0000	36.4
210 m-Toluidine	106	4.091	4.091	(1.079)	331784	40.0000	28.9
215 2-Ethoxyethanol	59	2.136	2.136	(0.563)	337992	40.0000	41.0
179 Dibenzo(a,e)pyrene	302	16.707	16.707	(1.523)	185215	40.0000	35.5
26 Phthalic anhydride	104	5.179	5.179	(1.113)	98839	40.0000	28.2
214 1,4-Dinitrobenzene	75	5.646	5.646	(0.958)	129461	40.0000	37.6
216 Methylenebis(2-chloroaniline)	231	9.359	9.359	(0.993)	113008	40.0000	36.2
M 222 Trichlorophenols	196				356318	80.0000	76.1
M 223 Tetrachlorophenols	232				151102	40.0000	38.8
M 224 Benzo(b,k)fluoranthene	252				1409793	80.0000	70.2

Column phase: 3 $\mu$ M DB-5MS

Operator: JMB3

$$+ \text{chem/MSD7.i/s011910.b/s7a1902.d}$$


GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD7.i Injection Date: 19-JAN-2010 09:58  
Lab File ID: s7a1903.d Init. Cal. Date(s): 13-JAN-2010 15-JAN-2010  
Analysis Type: Init. Cal. Times: 16:51 19:06  
Lab Sample ID: WBN100103-03.4 Quant Type: ISTD  
Method: /chem/MSD7.i/s011910.b/MSD7-M8270C-AQA-011310.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
209 Benzaldehyde	0.95753	0.93893	0.93893	0.000	-1.94265	60.00000	Averaged
16 Acetophenone	1.20764	1.14125	1.14125	0.000	-5.49760	60.00000	Averaged
189 Caprolactam	0.08588	0.07940	0.07940	0.000	-7.53943	60.00000	Averaged
208 1,1'-Biphenyl	1.31334	1.16479	1.16479	0.000	-11.31097	60.00000	Averaged
207 Atrazine	0.04356	0.04161	0.04161	0.000	-4.46746	60.00000	Averaged
77 Benzidine	0.52166	0.49981	0.49981	0.000	-4.19033	60.00000	Averaged
90 3,3'-Dichlorobenzidine	0.26320	0.24599	0.24599	0.000	-6.53978	60.00000	Averaged
102 1,4-Dioxane	0.41241	0.40283	0.40283	0.000	-2.32283	60.00000	Averaged
103 Methyl methacrylate	0.21692	0.21575	0.21575	0.000	-0.54131	60.00000	Averaged
104 Ethyl methacrylate	0.89401	0.87495	0.87495	0.000	-2.13165	60.00000	Averaged
105 2-Picoline	1.34945	1.33339	1.33339	0.000	-1.19031	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.57580	0.52918	0.52918	0.000	-8.09632	60.00000	Averaged
107 Methyl methanesulfonate	0.56163	0.54192	0.54192	0.000	-3.51055	60.00000	Averaged
108 N-Nitrosodiethylamine	0.57789	0.54323	0.54323	0.000	-5.99882	60.00000	Averaged
109 Ethyl Methanesulfonate	0.75659	0.71357	0.71357	0.000	-5.68683	60.00000	Averaged
110 Pentachloroethane	0.32612	0.31035	0.31035	0.000	-4.83523	60.00000	Averaged
111 N-Nitrosopyrrolidine	0.58355	0.56447	0.56447	0.000	-3.26996	60.00000	Averaged
113 N-Nitrosomorpholine	0.87354	0.91657	0.91657	0.000	4.92676	60.00000	Averaged
114 o-Toluidine	1.73086	1.63279	1.63279	0.000	-5.66613	60.00000	Averaged
115 N-Nitrosopiperidine	0.15908	0.14786	0.14786	0.000	-7.05420	60.00000	Averaged
116 a,a-Dimethylphenethylamine	1.21923	1.13343	1.13343	0.000	-7.03750	60.00000	Averaged
118 2,6-Dichlorophenol	0.21328	0.20032	0.20032	0.000	-6.07539	60.00000	Averaged
119 Hexachloropropene	0.10349	0.10376	0.10376	0.000	0.26135	60.00000	Averaged
120 p-Phenylenediamine	0.27204	0.26192	0.26192	0.000	-3.71840	60.00000	Averaged
121 N-Nitrosodi-n-butylamine	0.23762	0.21674	0.21674	0.000	-8.79039	60.00000	Averaged
122 Safrole	0.18830	0.18071	0.18071	0.000	-4.03417	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.44801	0.41188	0.41188	0.000	-8.06411	60.00000	Averaged
124 Isosafrole	0.36567	0.34161	0.34161	0.000	-6.57870	60.00000	Averaged
125 1,4-Naphthoquinone	0.32594	0.33388	0.33388	0.000	2.43873	60.00000	Averaged
127 Pentachlorobenzene	0.35589	0.32249	0.32249	0.000	-9.38538	60.00000	Averaged
128 1-Naphthylamine	0.94691	0.91746	0.91746	0.000	-3.10996	60.00000	Averaged
129 2-Naphthylamine	1.04675	1.02171	1.02171	0.000	-2.39208	60.00000	Averaged
131 5-Nitro-o-toluidine	0.31999	0.30332	0.30332	0.000	-5.20955	60.00000	Averaged
136 1,3,5-Trinitrobenzene	0.12649	0.13147	0.13147	0.000	3.94394	60.00000	Averaged
137 Phenacetin	0.27358	0.24951	0.24951	0.000	-8.79695	60.00000	Averaged
138 Diallate	0.27737	0.24526	0.24526	0.000	-11.57491	60.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD7.i Injection Date: 19-JAN-2010 09:58  
 Lab File ID: s7a1903.d Init. Cal. Date(s): 13-JAN-2010 15-JAN-2010  
 Analysis Type: Init. Cal. Times: 16:51 19:06  
 Lab Sample ID: WBN100103-03.4 Quant Type: ISTD  
 Method: /chem/MSD7.i/s011910.b/MSD7-M8270C-AQA-011310.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
212 Cis Diallate	0.30281	0.27568	0.27568	0.000	-8.95912	60.00000	Averaged
213 Trans Diallate	0.32631	0.28854	0.28854	0.000	-11.57491	60.00000	Averaged
140 4-Aminobiphenyl	0.61059	0.59811	0.59811	0.000	-2.04448	60.00000	Averaged
141 Pentachloronitrobenzene	0.05552	0.05187	0.05187	0.000	-6.57296	60.00000	Averaged
142 Pronamide	0.23321	0.22773	0.22773	0.000	-2.35084	60.00000	Averaged
146 4-Nitroquinoline-1-oxide	0.02419	0.02443	0.02443	0.000	0.98730	60.00000	Averaged
147 Methapyrilene	0.60984	0.58146	0.58146	0.000	-4.65444	60.00000	Averaged
148 Isodrin	0.10589	0.09741	0.09741	0.000	-8.01247	60.00000	Averaged
149 Aramite	0.04813	0.04712	0.04712	0.000	-2.09641	60.00000	Averaged
150 Kepone	0.06756	0.06271	0.06271	0.000	-7.18625	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.31262	0.30196	0.30196	0.000	-3.40991	60.00000	Averaged
152 Chlorobenzilate	0.24177	0.23559	0.23559	0.000	-2.55548	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.58779	0.57264	0.57264	0.000	-2.57737	60.00000	Averaged
155 2-Acetylaminofluorene	0.29455	0.26511	0.26511	0.000	-9.99494	60.00000	Averaged
157 7,12Dimethylbenz(a)anthracene	0.48949	0.47679	0.47679	0.000	-2.59360	60.00000	Averaged
158 3-Methylcholanthrene	0.39432	0.36141	0.36141	0.000	-8.34559	60.00000	Averaged

Data File: /chem/MSD7.i/s011910.b/s7a1903.d  
Report Date: 19-Jan-2010 11:52

Page 1

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Data file : /chem/MSD7.i/s011910.b/s7a1903.d  
Lab Smp Id: WBN100103-03.4 Client Smp ID: APCVS  
Inj Date : 19-JAN-2010 09:58  
Operator : JMB3 Inst ID: MSD7.i  
Smp Info : |WBN100103-03.4|CVS|1|SVMF|1|APCVS  
Misc Info : |MSD8270|WBN100107-02|  
Comment : Column: J&W Scientific DB-5MS 25m x 0.2mm x 0.33um film thickness  
Method : /chem/MSD7.i/s011910.b/MSD7-M8270C-AQA-011310.m  
Meth Date : 19-Jan-2010 11:52 jen00986 Quant Type: ISTD  
Cal Date : 15-JAN-2010 19:06 Cal File: s7a1515.d  
Als bottle: 3 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: AP12.sub  
Target Version: 3.50  
Processing Host: hpc1p1

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
=====	=====	==	=====	=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	152	3.793	3.793	(1.000)	375255	40.0000	
* 29 Naphthalene-d8	136	4.650	4.650	(1.000)	1356472	40.0000	
* 46 Acenaphthene-d10	164	5.892	5.892	(1.000)	717657	40.0000	
* 67 Phenanthrene-d10	188	7.043	7.043	(1.000)	1287150	40.0000	
* 91 Chrysene-d12	240	9.422	9.422	(1.000)	1072888	40.0000	
* 98 Perylene-d12	264	10.963	10.963	(1.000)	748130	40.0000	
209 Benzaldehyde	77	3.518	3.518	(0.928)	352337	40.0000	39.2
16 Acetophenone	105	4.043	4.043	(1.066)	428261	40.0000	37.8
189 Caprolactam	113	4.924	4.924	(1.059)	107704	40.0000	37.0
208 1,1'-Biphenyl	154	5.468	5.468	(0.928)	835919	40.0000	35.5
207 Atrazine	173	6.759	6.759	(0.960)	53559	40.0000	38.2
77 Benzdine	184	8.179	8.179	(0.868)	536234	40.0000	38.3
90 3,3'-Dichlorobenzidine	252	9.359	9.359	(0.993)	263916	40.0000	37.4
102 1,4-Dioxane	88	2.146	2.146	(0.566)	151162	40.0000	39.1
103 Methyl methacrylate	100	2.141	2.141	(0.564)	80960	40.0000	39.8
104 Ethyl methacrylate	69	2.507	2.507	(0.661)	328329	40.0000	39.1
105 2-Picoline	93	2.700	2.700	(0.712)	500360	40.0000	39.5
106 N-Nitrosomethylethylamine	88	2.743	2.743	(0.723)	198576	40.0000	36.8
107 Methyl methanesulfonate	80	2.897	2.897	(0.764)	203357	40.0000	38.6
108 N-Nitrosodiethylamine	102	3.128	3.128	(0.825)	203848	40.0000	37.6
109 Ethyl Methanesulfonate	79	3.282	3.282	(0.865)	267769	40.0000	37.7
110 Pentachloroethane	167	3.619	3.619	(0.954)	116460	40.0000	38.1
111 N-Nitrosopyrrolidine	100	4.029	4.029	(1.062)	211819	40.0000	38.7
113 N-Nitrosomorpholine	56	4.053	4.053	(1.069)	343949	40.0000	42.0
114 o-Toluidine	106	4.067	4.067	(1.072)	612711	40.0000	37.7
115 N-Nitrosopiperidine	114	4.265	4.265	(0.917)	200564	40.0000	37.2



Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
=====	=====	==	=====	=====	=====	=====	=====
116 a,a-Dimethylphenethylamine	58	4.510	4.510	(0.970)	1537467	40.0000	37.2
118 2,6-Dichlorophenol	162	4.693	4.693	(1.009)	271726	40.0000	37.6
119 Hexachloropropene	213	4.722	4.722	(1.016)	140753	40.0000	40.1
120 p-Phenylenediamine	108	4.929	4.929	(1.060)	355293	40.0000	38.5
121 N-Nitrosodi-n-butylamine	84	4.900	4.900	(1.054)	293995	40.0000	36.5
122 Safrole	162	5.064	5.064	(1.089)	245122	40.0000	38.4
123 1,2,4,5-Tetrachlorobenzene	216	5.261	5.261	(0.893)	295587	40.0000	36.8
124 Isosafrole	162	5.430	5.430	(0.922)	245162	40.0000	37.4
125 1,4-Naphthoquinone	158	5.613	5.613	(0.953)	239614	40.0000	41.0
127 Pentachlorobenzene	250	6.013	6.013	(1.020)	231436	40.0000	36.2
128 1-Naphthylamine	143	6.094	6.094	(1.034)	658422	40.0000	38.8
129 2-Naphthylamine	143	6.152	6.152	(1.044)	733239	40.0000	39.0
131 5-Nitro-o-toluidine	152	6.287	6.287	(1.067)	217682	40.0000	37.9
136 1,3,5-Trinitrobenzene	75	6.542	6.542	(0.929)	169226	40.0000	41.6
137 Phenacetin	108	6.586	6.586	(0.935)	321159	40.0000	36.5 (Q)
138 Diallate	86	6.571	6.571	(0.933)	315687	40.0000	35.4
212 Cis Diallate	86	6.643	6.643	(0.943)	53226	6.00000	5.5
213 Trans Diallate	86	6.571	6.571	(0.933)	315687	34.0000	30.1
140 4-Aminobiphenyl	169	6.865	6.865	(0.975)	769852	40.0000	39.2
141 Pentachloronitrobenzene	237	6.884	6.884	(0.977)	66762	40.0000	37.4 (Q)
142 Pronamide	173	6.884	6.884	(0.977)	293121	40.0000	39.0
146 4-Nitroquinoline-1-oxide	101	7.703	7.703	(1.094)	31449	40.0000	40.4
147 Methapyrilene	58	7.741	7.741	(1.099)	748421	40.0000	38.1
148 Isodrin	193	7.953	7.953	(1.129)	125375	40.0000	36.8
149 Aramite	185	8.358	8.358	(1.187)	60650	40.0000	39.2
150 Kepone	272	8.931	8.931	(1.268)	80715	40.0000	37.1
151 p-(Dimethylamino)azobenzene	120	8.531	8.531	(0.905)	323969	40.0000	38.6
152 Chlorobenzilate	251	8.565	8.565	(0.909)	252759	40.0000	39.0
153 3,3'-Dimethylbenzidine	212	8.844	8.844	(0.939)	614376	40.0000	39.0
155 2-Acetylaminofluorene	181	9.089	9.089	(0.965)	284430	40.0000	36.0
157 7,12Dimethylbenz(a)anthracene	256	10.476	10.476	(0.956)	356703	40.0000	39.0
158 3-Methylcholanthrene	268	11.333	11.333	(1.034)	270382	40.0000	36.7

#### QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/HSD7.i/s011910.b/s7a1903.d

Date: 19-JAN-2010 09:58

Client ID: JPCVS

Sample Info: 1MBN100103-03.41CVS11SVNF11APCVS

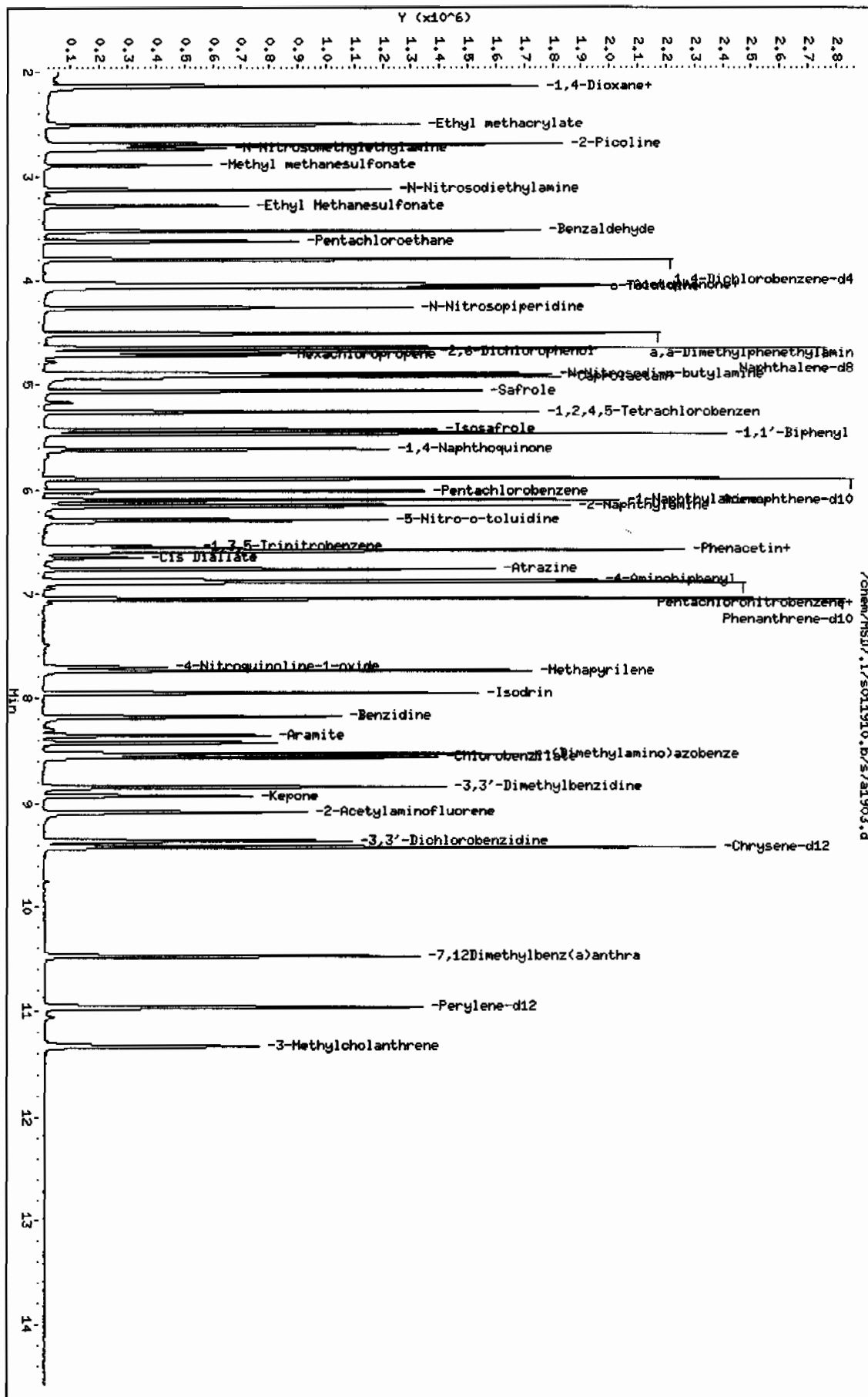
Column phase: J&W DB-SHS

Instrument: HSD7.i

Operator: JHB3

Column diameter: 0.20

/chem/HSD7.i/s011910.b/s7a1903.d



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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD7.i Injection Date: 20-JAN-2010 11:05  
Lab File ID: s7a2003.d Init. Cal. Date(s): 13-JAN-2010 15-JAN-2010  
Analysis Type: Init. Cal. Times: 16:51 19:06  
Lab Sample ID: WBN091225-12.3 Quant Type: ISTD  
Method: /chem/MSD7.i/s012010.b/MSD7-M8270C-AQA-011310.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
3 2-Fluorophenol	1.14944	1.11060	1.11060	0.000	-3.37911	60.00000	Averaged
5 Phenol-d5	1.48198	1.45587	1.45587	0.000	-1.76198	60.00000	Averaged
20 Nitrobenzene-d5	0.32996	0.32144	0.32144	0.000	-2.58307	60.00000	Averaged
39 2-Fluorobiphenyl	1.17871	1.10120	1.10120	0.000	-6.57585	60.00000	Averaged
60 2,4,6-Tribromophenol	0.10063	0.10260	0.10260	0.000	1.95472	60.00000	Averaged
81 p-Terphenyl-d14	0.68319	0.65532	0.65532	0.000	-4.07915	60.00000	Averaged
1 N-Methyl-N-nitrosomethylami	0.85875	0.81558	0.81558	0.000	-5.02756	60.00000	Averaged
2 Pyridine	1.01939	0.91298	0.91298	0.000	-10.43872	60.00000	Averaged
4 Aniline	0.66799	0.65040	0.65040	0.000	-2.63243	60.00000	Averaged
6 Phenol	1.48059	1.43391	1.43391	0.001	-3.15299	20.00000	Averaged ccc
7 bis(2-Chloroethyl) ether	1.21062	1.18017	1.18017	0.000	-2.51546	60.00000	Averaged
8 2-Chlorophenol	1.03915	1.04321	1.04321	0.000	0.39119	60.00000	Averaged
203 n-Decane	1.59464	2.08307	2.08307	0.000	30.62976	60.00000	Averaged
9 1,3-Dichlorobenzene	1.21612	1.21790	1.21790	0.000	0.14658	60.00000	Averaged
11 1,4-Dichlorobenzene	1.14083	1.15416	1.15416	0.001	1.16857	20.00000	Averaged ccc
13 1,2-Dichlorobenzene	1.04543	1.09190	1.09190	0.000	4.44530	60.00000	Averaged
14 bis(2-Chloroisopropyl) ether	2.81377	3.03210	3.03210	0.000	7.75941	60.00000	Averaged
12 Benzyl alcohol	0.75386	0.62518	0.62518	0.000	-17.06915	60.00000	Averaged
15 o-Cresol	0.79302	0.83882	0.83882	0.000	5.77454	60.00000	Averaged
18 m,p-Cresols	1.19515	1.10777	1.10777	0.000	-7.31185	60.00000	Averaged
17 N-Nitrosodipropylamine	0.86879	0.83693	0.83693	0.050	-3.66718	60.00000	Averaged spcc
19 Hexachloroethane	0.46381	0.46164	0.46164	0.000	-0.46843	60.00000	Averaged
21 Nitrobenzene	0.32512	0.31577	0.31577	0.000	-2.87577	60.00000	Averaged
22 Isophorone	0.64520	0.60088	0.60088	0.000	-6.86952	60.00000	Averaged
23 2-Nitrophenol	0.13539	0.14327	0.14327	0.001	5.81632	20.00000	Averaged ccc
24 2,4-Dimethylphenol	0.25598	0.25365	0.25365	0.000	-0.91332	60.00000	Averaged
25 bis(2-Chloroethoxy)methane	0.36897	0.35741	0.35741	0.000	-3.13233	60.00000	Averaged
26 2,4-Dichlorophenol	0.23089	0.23436	0.23436	0.001	1.50152	20.00000	Averaged ccc
27 Benzoic acid	35.27712	40.00000	0.13586	0.000	-11.80721	60.00000	Linear
28 1,2,4-Trichlorobenzene	0.26129	0.25957	0.25957	0.000	-0.66037	60.00000	Averaged
30 Naphthalene	0.90955	0.77924	0.77924	0.000	-14.32730	60.00000	Averaged
204 alpha-Terpineol	46.59556	40.00000	0.32282	0.000	16.48889	60.00000	Linear
31 4-Chloroaniline	0.37704	0.36471	0.36471	0.000	-3.26907	60.00000	Averaged
32 Hexachlorobutadiene	0.13485	0.13135	0.13135	0.001	-2.59909	20.00000	Averaged ccc
33 4-Chloro-3-methylphenol	0.24792	0.25788	0.25788	0.001	4.01752	20.00000	Averaged ccc
34 2-Methylnaphthalene	0.56535	0.54828	0.54828	0.000	-3.01966	60.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD7.i Injection Date: 20-JAN-2010 11:05  
Lab File ID: s7a2003.d Init. Cal. Date(s): 13-JAN-2010 15-JAN-2010  
Analysis Type: Init. Cal. Times: 16:51 19:06  
Lab Sample ID: WBN091225-12.3 Quant Type: ISTD  
Method: /chem/MSD7.i/s012010.b/MSD7-M8270C-AQA-011310.m

COMPOUND	RRF / AMOUNT	RF40	CCAL	MIN	MAX	CURVE TYPE
			RRF40	RRF	%D / %DRIFT	
35 1-Methylnaphthalene	0.55957	0.53177	0.53177	0.000	-4.96897	Averaged
36 Hexachlorocyclopentadiene	0.20471	0.20439	0.20439	0.050	-0.15736	Averaged spcc
205 2,3-Dichloroaniline	0.54190	0.51197	0.51197	0.000	-5.52278	Averaged
37 2,4,6-Trichlorophenol	0.27858	0.28884	0.28884	0.001	3.68085	Averaged ccc
38 2,4,5-Trichlorophenol	0.31226	0.31617	0.31617	0.000	1.25439	Averaged
40 2-Chloronaphthalene	1.03962	0.94604	0.94604	0.000	-9.00186	Averaged
42 o-Nitroaniline	0.37172	0.39021	0.39021	0.000	4.97325	Averaged
41 m-Nitroaniline	0.26513	0.26999	0.26999	0.000	1.83258	Averaged
43 Dimethylphthalate	1.08784	1.08275	1.08275	0.000	-0.46785	Averaged
44 2,6-Dinitrotoluene	0.25558	0.25328	0.25328	0.000	-0.89987	Averaged
50 2,4-Dinitrotoluene	0.33163	0.33717	0.33717	0.000	1.67121	Averaged
45 Acenaphthylene	1.69334	1.60234	1.60234	0.000	-5.37436	Averaged
47 Acenaphthene	1.05215	0.93036	0.93036	0.001	-11.57589	Averaged ccc
48 2,4-Dinitrophenol	0.09204	0.09124	0.09124	0.050	-0.87708	Averaged spcc
49 Dibenzofuran	1.40077	1.38838	1.38838	0.000	-0.88420	Averaged
51 Diethylphthalate	1.16566	1.10866	1.10866	0.000	-4.89048	Averaged
52 4-Nitrophenol	0.18919	0.19320	0.19320	0.050	2.12267	Averaged spcc
53 Fluorene	1.25274	1.10193	1.10193	0.000	-12.03791	Averaged
54 4-Chlorophenylphenylether	0.54018	0.55190	0.55190	0.000	2.17041	Averaged
55 2-Methyl-4,6-dinitrophenol	0.08339	0.08136	0.08136	0.000	-2.42795	Averaged
56 p-Nitroaniline	0.23626	0.25057	0.25057	0.000	6.05763	Averaged
133 Diphenylamine	0.52047	0.50974	0.50974	0.001	-2.06269	Averaged ccc
58 1,2-Diphenylhydrazine	0.68305	0.65270	0.65270	0.000	-4.44313	Averaged
61 4-Bromophenylphenylether	0.15456	0.14546	0.14546	0.000	-5.89333	Averaged
63 Hexachlorobenzene	0.14454	0.13517	0.13517	0.000	-6.48677	Averaged
65 Pentachlorophenol	0.07703	0.07314	0.07314	0.001	-5.04211	Averaged ccc
206 n-Octadecane	0.52780	0.61821	0.61821	0.000	17.13055	Averaged
68 Phenanthrene	0.88130	0.80444	0.80444	0.000	-8.72131	Averaged
69 Anthracene	0.83892	0.82391	0.82391	0.000	-1.78968	Averaged
72 Di-n-butylphthalate	1.05305	1.05439	1.05439	0.000	0.12698	Averaged
76 Fluoranthene	0.95196	0.96320	0.96320	0.001	1.18023	Averaged ccc
79 Pyrene	1.26417	1.21406	1.21406	0.000	-3.96384	Averaged
85 Butylbenzylphthalate	0.54516	0.55119	0.55119	0.000	1.10584	Averaged
89 Benzo(a)anthracene	0.95972	0.93865	0.93865	0.000	-2.19533	Averaged
92 Chrysene	0.88121	0.86795	0.86795	0.000	-1.50529	Averaged
93 bis(2-Ethylhexyl)phthalate	0.64615	0.67653	0.67653	0.000	4.70237	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD7.i Injection Date: 20-JAN-2010 11:05  
Lab File ID: s7a2003.d Init. Cal. Date(s): 13-JAN-2010 15-JAN-2010  
Analysis Type: Init. Cal. Times: 16:51 19:06  
Lab Sample ID: WBN091225-12.3 Quant Type: ISTD  
Method: /chem/MSD7.i/s012010.b/MSD7-M8270C-AQA-011310.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
94 Di-n-octylphthalate	1.46808	1.46180	1.46180	0.001	-0.42749	20.00000	Averaged ccc
95 Benzo(b)fluoranthene	1.03886	0.99013	0.99013	0.000	-4.69077	60.00000	Averaged
96 Benzo(k)fluoranthene	0.98353	0.95839	0.95839	0.000	-2.55612	60.00000	Averaged
97 Benzo(a)pyrene	0.87825	0.89421	0.89421	0.001	1.81729	20.00000	Averaged ccc
99 Indeno(1,2,3-cd)pyrene	0.66047	0.72809	0.72809	0.000	10.23877	60.00000	Averaged
100 Dibenzo(a,h)anthracene	0.52299	0.59102	0.59102	0.000	13.00945	60.00000	Averaged
101 Benzo(ghi)perylene	0.55616	0.59852	0.59852	0.000	7.61734	60.00000	Averaged
126 m-Dinitrobenzene	0.19919	0.19841	0.19841	0.000	-0.39110	60.00000	Averaged
130 2,3,4,6-Tetrachlorophenol	0.24570	0.25396	0.25396	0.000	3.36292	60.00000	Averaged
143 Dinoseb	0.12980	0.12660	0.12660	0.000	-2.46675	60.00000	Averaged
173 Carbazole	0.80011	0.82897	0.82897	0.000	3.60700	60.00000	Averaged
184 p-Benzoquinone	0.11482	0.04937	0.04937	0.000	-56.99782	60.00000	Averaged
192 Methoxychlor	0.60679	0.58617	0.58617	0.000	-3.39791	60.00000	Averaged
211 p-Toluidine	1.05576	1.02223	1.02223	0.000	-3.17673	60.00000	Averaged
210 m-Toluidine	1.41126	1.06573	1.06573	0.000	-24.48373	60.00000	Averaged
215 2-Ethoxyethanol	1.01496	1.02449	1.02449	0.000	0.93835	60.00000	Averaged
179 Dibenzo(a,e)pyrene	0.26278	0.33478	0.33478	0.000	27.40200	60.00000	Averaged
26 Phthalic anhydride	24.61413	40.00000	0.07215	0.000	-38.46467	60.00000	Linear
214 1,4-Dinitrobenzene	0.21694	0.22130	0.22130	0.000	2.00815	60.00000	Averaged
216 Methylenebis(2-chloroanilin	0.13237	0.14083	0.14083	0.000	6.38509	60.00000	Averaged
M 222 Trichlorophenols	0.29542	0.30250	0.30250	0.000	2.39847	60.00000	Averaged
M 223 Tetrachlorophenols	0.24570	0.25396	0.25396	0.000	3.36292	60.00000	Averaged
M 224 Benzo(b,k)fluoranthene	1.01120	0.97426	0.97426	0.000	-3.65264	60.00000	Averaged

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Data file : /chem/MSD7.i/s012010.b/s7a2003.d  
Lab Smp Id: WBN091225-12.3 Client Smp ID: MEGACVS  
Inj Date : 20-JAN-2010 11:05  
Operator : JMB3 Inst ID: MSD7.i  
Smp Info : |WBN091225-12.3|CVS|1|SVMF|1|MEGACVS  
Misc Info : |MSD8270|WBN100107-02|  
Comment : Column: J&W Scientific DB-5MS 25m x 0.2mm x 0.33um film thickness  
Method : /chem/MSD7.i/s012010.b/MSD7-M8270C-AQA-011310.m  
Meth Date : 20-Jan-2010 17:34 llo00884 Quant Type: ISTD  
Cal Date : 15-JAN-2010 19:06 Cal File: s7a1515.d  
Als bottle: 2 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: MEGA.sub  
Target Version: 3.50  
Processing Host: hpc1p1

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL	
						(ng/ul)	(ng/ul)	
* 10 1,4-Dichlorobenzene-d4	152	3.793	3.793	(1.000)	294260	40.0000		
* 29 Naphthalene-d8	136	4.655	4.655	(1.000)	1090611	40.0000		
* 46 Acenaphthene-d10	164	5.897	5.897	(1.000)	574137	40.0000		
* 67 Phenanthrene-d10	188	7.043	7.043	(1.000)	1076686	40.0000		
* 91 Chrysene-d12	240	9.431	9.431	(1.000)	892251	40.0000		
* 98 Perylene-d12	264	10.977	10.977	(1.000)	717180	40.0000		
\$ 3 2-Fluorophenol	112	2.984	2.984	(0.787)	326805	40.0000	38.6	
\$ 5 Phenol-d5	99	3.513	3.513	(0.926)	428404	40.0000	39.3	
\$ 20 Nitrobenzene-d5	82	4.154	4.154	(0.892)	350564	40.0000	39.0	
\$ 39 2-Fluorobiphenyl	172	5.391	5.391	(0.914)	632239	40.0000	37.4	
\$ 60 2,4,6-Tribromophenol	329	6.484	6.484	(1.100)	58905	40.0000	40.8	
\$ 81 p-Terphenyl-d14	244	8.406	8.406	(0.891)	584712	40.0000	38.4	
1 N-Methyl-N-nitrosomethylamine	74	2.295	2.295	(0.605)	239992	40.0000	38.0	
2 Pyridine	79	2.324	2.324	(0.613)	268653	40.0000	35.8	
4 Aniline	66	3.576	3.576	(0.943)	191387	40.0000	38.9	
6 Phenol	94	3.523	3.523	(0.929)	421942	40.0000	38.7	
7 bis(2-Chloroethyl) ether	63	3.595	3.595	(0.948)	347277	40.0000	39.0	
8 2-Chlorophenol	128	3.658	3.658	(0.964)	306976	40.0000	40.2	
203 n-Decane	43	3.648	3.648	(0.962)	612964	40.0000	52.2	
9 1,3-Dichlorobenzene	146	3.759	3.759	(0.991)	358380	40.0000	40.0	
11 1,4-Dichlorobenzene	146	3.802	3.802	(1.003)	339623	40.0000	40.5	
13 1,2-Dichlorobenzene	146	3.908	3.908	(1.030)	321302	40.0000	41.8	
14 bis(2-Chloroisopropyl)ether	45	3.937	3.937	(1.038)	892227	40.0000	43.1	
12 Benzyl alcohol	108	3.860	3.860	(1.018)	183966	40.0000	33.2	
15 o-Cresol	107	3.913	3.913	(1.032)	246830	40.0000	42.3	
18 m,p-Cresols	107	4.014	4.014	(1.058)	325971	40.0000	37.1	

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
17 N-Nitrosodipropylamine	70	4.033	4.033	(1.063)	246275	40.0000	38.5
19 Hexachloroethane	117	4.135	4.135	(1.090)	135842	40.0000	39.8
21 Nitrobenzene	77	4.168	4.168	(0.896)	344385	40.0000	38.8
22 Isophorone	82	4.317	4.317	(0.928)	655328	40.0000	37.2
23 2-Nitrophenol	139	4.380	4.380	(0.941)	156247	40.0000	42.3
24 2,4-Dimethylphenol	122	4.375	4.375	(0.940)	276629	40.0000	39.6
25 bis(2-Chloroethoxy)methane	93	4.443	4.443	(0.954)	389799	40.0000	38.7
26 2,4-Dichlorophenol	162	4.539	4.539	(0.975)	255594	40.0000	40.6
27 Benzoic acid	105	4.428	4.428	(0.951)	148168	40.0000	35.3
28 1,2,4-Trichlorobenzene	180	4.602	4.602	(0.989)	283088	40.0000	39.7
30 Naphthalene	128	4.669	4.669	(1.003)	849845	40.0000	34.3
204 alpha-Terpineol	59	4.645	4.645	(0.998)	352070	40.0000	46.6
31 4-Chloroaniline	127	4.683	4.683	(1.006)	397757	40.0000	38.7
32 Hexachlorobutadiene	225	4.736	4.736	(1.018)	143251	40.0000	39.0
33 4-Chloro-3-methylphenol	107	4.996	4.996	(1.073)	281245	40.0000	41.6
34 2-Methylnaphthalene	142	5.146	5.146	(1.106)	597958	40.0000	38.8
35 1-Methylnaphthalene	142	5.218	5.218	(1.121)	579953	40.0000	38.0
36 Hexachlorocyclopentadiene	237	5.252	5.252	(0.891)	117348	40.0000	39.9
205 2,3-Dichloroaniline	161	5.343	5.343	(0.906)	293941	40.0000	37.8
37 2,4,6-Trichlorophenol	196	5.334	5.334	(0.904)	165831	40.0000	41.5
38 2,4,5-Trichlorophenol	196	5.362	5.362	(0.909)	181527	40.0000	40.5
40 2-Chloronaphthalene	162	5.497	5.497	(0.932)	543154	40.0000	36.4
42 o-Nitroaniline	65	5.555	5.555	(0.942)	224034	40.0000	42.0
41 m-Nitroaniline	138	5.849	5.849	(0.992)	155012	40.0000	40.7
43 Dimethylphthalate	163	5.666	5.666	(0.961)	621647	40.0000	39.8
44 2,6-Dinitrotoluene	165	5.719	5.719	(0.970)	145416	40.0000	39.6
50 2,4-Dinitrotoluene	165	6.012	6.012	(1.020)	193581	40.0000	40.7
45 Acenaphthylene	152	5.801	5.801	(0.984)	919960	40.0000	37.8
47 Acenaphthene	154	5.921	5.921	(1.004)	534153	40.0000	35.4
48 2,4-Dinitrophenol	184	5.916	5.916	(1.003)	52382	40.0000	39.6
49 Dibenzofuran	168	6.041	6.041	(1.024)	797121	40.0000	39.6
51 Diethylphthalate	149	6.167	6.167	(1.046)	636520	40.0000	38.0
52 4-Nitrophenol	139	5.940	5.940	(1.007)	110924	40.0000	40.8
53 Fluorene	166	6.301	6.301	(1.069)	632661	40.0000	35.2
54 4-Chlorophenylphenylether	204	6.277	6.277	(1.064)	316867	40.0000	40.9
55 2-Methyl-4,6-dinitrophenol	198	6.316	6.316	(0.897)	87602	40.0000	39.0
56 p-Nitroaniline	138	6.301	6.301	(1.069)	143861	40.0000	42.4
133 Diphenylamine	169	6.364	6.364	(0.904)	548825	40.0000	39.2
58 1,2-Diphenylhydrazine	77	6.403	6.403	(0.909)	702757	40.0000	38.2
61 4-Bromophenylphenylether	248	6.658	6.658	(0.945)	156610	40.0000	37.6
63 Hexachlorobenzene	284	6.730	6.730	(0.956)	145531	40.0000	37.4
65 Pentachlorophenol	266	6.874	6.874	(0.976)	78754	40.0000	38.0
206 n-Octadecane	57	6.874	6.874	(0.976)	665619	40.0000	46.8
68 Phenanthrene	178	7.067	7.067	(1.003)	866128	40.0000	36.5
69 Anthracene	178	7.106	7.106	(1.009)	887088	40.0000	39.3
72 Di-n-butylphthalate	149	7.467	7.467	(1.060)	1135247	40.0000	40.0
76 Fluoranthene	202	8.093	8.093	(1.149)	1037062	40.0000	40.5

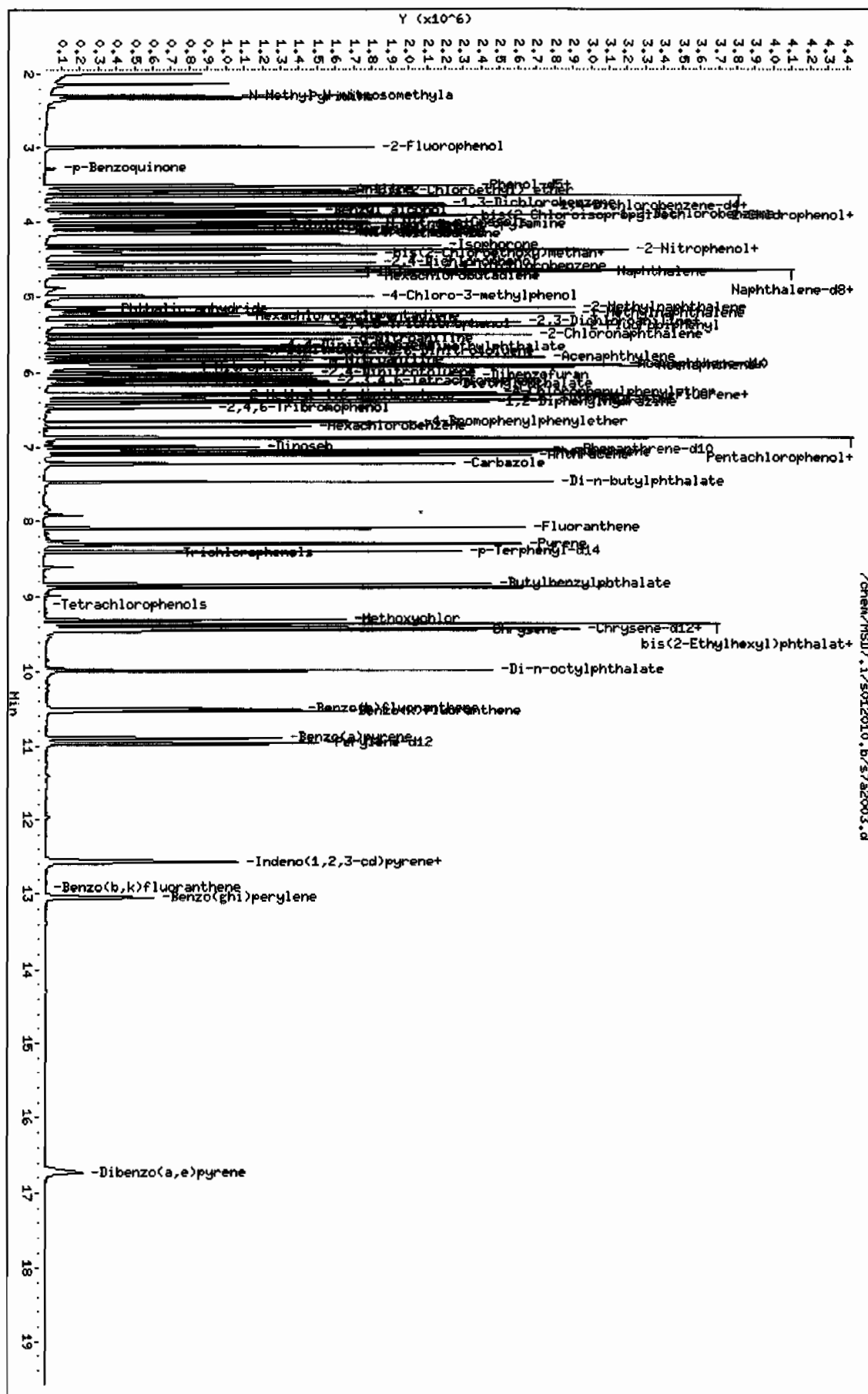
Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
=====	=====	==	=====	=====	=====	=====	=====
79 Pyrene	202	8.305	8.305	(0.881)	1083244	40.0000	38.4
85 Butylbenzylphthalate	149	8.839	8.839	(0.937)	491800	40.0000	40.4
89 Benzo(a)anthracene	228	9.417	9.417	(0.998)	837511	40.0000	39.1
92 Chrysene	228	9.455	9.455	(1.003)	774428	40.0000	39.4
93 bis(2-Ethylhexyl)phthalate	149	9.364	9.364	(0.993)	603636	40.0000	41.9
94 Di-n-octylphthalate	149	9.980	9.980	(0.909)	1048374	40.0000	39.8
95 Benzo(b)fluoranthene	252	10.505	10.505	(0.957)	710102	40.0000	38.1
96 Benzo(k)fluoranthene	252	10.534	10.534	(0.960)	687341	40.0000	39.0
97 Benzo(a)pyrene	252	10.905	10.905	(0.993)	641310	40.0000	40.7
99 Indeno(1,2,3-cd)pyrene	276	12.566	12.566	(1.145)	522174	40.0000	44.1
100 Dibenzo(a,h)anthracene	278	12.581	12.581	(1.146)	423870	40.0000	45.2
101 Benzo(ghi)perylene	276	13.052	13.052	(1.189)	429248	40.0000	43.0
126 m-Dinitrobenzene	168	5.704	5.704	(0.967)	113916	40.0000	39.8
130 2,3,4,6-Tetrachlorophenol	232	6.123	6.123	(1.038)	145807	40.0000	41.3
143 Dinoseb	211	7.000	7.000	(0.994)	136306	40.0000	39.0
173 Carbazole	167	7.226	7.226	(1.026)	892536	40.0000	41.4
184 p-Benzoquinone	54	3.282	3.282	(0.865)	14529	40.0000	17.2
192 Methoxychlor	227	9.306	9.306	(0.987)	523015	40.0000	38.6
211 p-Toluidine	106	4.067	4.067	(1.072)	300800	40.0000	38.7
210 m-Toluidine	106	4.091	4.091	(1.079)	313603	40.0000	30.2
215 2-Ethoxyethanol	59	2.136	2.136	(0.563)	301465	40.0000	40.4
179 Dibenzo(a,e)pyrene	302	16.731	16.731	(1.524)	240099	40.0000	51.0
26 Phthalic anhydride	104	5.179	5.179	(1.113)	78684	40.0000	24.6
214 1,4-Dinitrobenzene	75	5.647	5.647	(0.958)	127057	40.0000	40.8
216 Methylenebis(2-chloroaniline)	231	9.364	9.364	(0.993)	125652	40.0000	42.6
M 222 Trichlorophenols	196				347358	80.0000	81.9
M 223 Tetrachlorophenols	232				145807	40.0000	41.3
M 224 Benzo(b,k)fluoranthene	252				1397443	80.0000	77.1



Instrument: MSD7.1

Column phase: J&W DB-5MS

Operator: JMB3  
Column diameter: 0.20



GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD7.i Injection Date: 20-JAN-2010 11:32  
Lab File ID: s7a2004.d Init. Cal. Date(s): 13-JAN-2010 15-JAN-2010  
Analysis Type: Init. Cal. Times: 16:51 19:06  
Lab Sample ID: WBN100103-03.4 Quant Type: ISTD  
Method: /chem/MSD7.i/s012010.b/MSD7-M8270C-AQA-011310.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
209 Benzaldehyde	0.95753	0.99850	0.99850	0.000	4.27876	60.00000	Averaged
16 Acetophenone	1.20764	1.21958	1.21958	0.000	0.98841	60.00000	Averaged
189 Caprolactam	0.08588	0.08835	0.08835	0.000	2.87644	60.00000	Averaged
208 1,1'-Biphenyl	1.31334	1.26020	1.26020	0.000	-4.04590	60.00000	Averaged
207 Atrazine	0.04356	0.04706	0.04706	0.000	8.04163	60.00000	Averaged
77 Benzidine	0.52166	0.61648	0.61648	0.000	18.17503	60.00000	Averaged
90 3,3'-Dichlorobenzidine	0.26320	0.28517	0.28517	0.000	8.34686	60.00000	Averaged
102 1,4-Dioxane	0.41241	0.41153	0.41153	0.000	-0.21151	60.00000	Averaged
103 Methyl methacrylate	0.21692	0.21998	0.21998	0.000	1.40749	60.00000	Averaged
104 Ethyl methacrylate	0.89401	0.91008	0.91008	0.000	1.79809	60.00000	Averaged
105 2-Picoline	1.34945	1.36644	1.36644	0.000	1.25867	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.57580	0.56204	0.56204	0.000	-2.38820	60.00000	Averaged
107 Methyl methanesulfonate	0.56163	0.57006	0.57006	0.000	1.50060	60.00000	Averaged
108 N-Nitrosodiethylamine	0.57789	0.57362	0.57362	0.000	-0.73972	60.00000	Averaged
109 Ethyl Methanesulfonate	0.75659	0.76055	0.76055	0.000	0.52260	60.00000	Averaged
110 Pentachloroethane	0.32612	0.32663	0.32663	0.000	0.15725	60.00000	Averaged
111 N-Nitrosopyrrolidine	0.58355	0.60608	0.60608	0.000	3.86055	60.00000	Averaged
113 N-Nitrosomorpholine	0.87354	0.98565	0.98565	0.000	12.83432	60.00000	Averaged
114 o-Toluidine	1.73086	1.73925	1.73925	0.000	0.48455	60.00000	Averaged
115 N-Nitrosopiperidine	0.15908	0.16119	0.16119	0.000	1.32606	60.00000	Averaged
116 a,a-Dimethylphenethylamine	1.21923	1.21631	1.21631	0.000	-0.23957	60.00000	Averaged
118 2,6-Dichlorophenol	0.21328	0.21513	0.21513	0.000	0.86765	60.00000	Averaged
119 Hexachloropropene	0.10349	0.10092	0.10092	0.000	-2.48938	60.00000	Averaged
120 p-Phenylenediamine	0.27204	0.27563	0.27563	0.000	1.31922	60.00000	Averaged
121 N-Nitrosodi-n-butylamine	0.23762	0.23593	0.23593	0.000	-0.71106	60.00000	Averaged
122 Safrole	0.18830	0.19520	0.19520	0.000	3.66199	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.44801	0.44790	0.44790	0.000	-0.02328	60.00000	Averaged
124 Isosafrole	0.36567	0.37003	0.37003	0.000	1.19273	60.00000	Averaged
125 1,4-Naphthoquinone	0.32594	0.37039	0.37039	0.000	13.63883	60.00000	Averaged
127 Pentachlorobenzene	0.35589	0.35066	0.35066	0.000	-1.47096	60.00000	Averaged
128 1-Naphthylamine	0.94691	0.99175	0.99175	0.000	4.73602	60.00000	Averaged
129 2-Naphthylamine	1.04675	1.10195	1.10195	0.000	5.27370	60.00000	Averaged
131 5-Nitro-o-toluidine	0.31999	0.33582	0.33582	0.000	4.94667	60.00000	Averaged
136 1,3,5-Trinitrobenzene	0.12649	0.14566	0.14566	0.000	15.16260	60.00000	Averaged
137 Phenacetin	0.27358	0.28358	0.28358	0.000	3.65713	60.00000	Averaged
138 Diallate	0.27737	0.27591	0.27591	0.000	-0.52420	60.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD7.i Injection Date: 20-JAN-2010 11:32  
 Lab File ID: s7a2004.d Init. Cal. Date(s): 13-JAN-2010 15-JAN-2010  
 Analysis Type: Init. Cal. Times: 16:51 19:06  
 Lab Sample ID: WBN100103-03.4 Quant Type: ISTD  
 Method: /chem/MSD7.i/s012010.b/MSD7-M8270C-AQA-011310.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
212 Cis Diallate	0.30281	0.30682	0.30682	0.000	1.32421	60.00000	Averaged
213 Trans Diallate	0.32631	0.32460	0.32460	0.000	-0.52420	60.00000	Averaged
140 4-Aminobiphenyl	0.61059	0.64422	0.64422	0.000	5.50720	60.00000	Averaged
141 Pentachloronitrobenzene	0.05552	0.05650	0.05650	0.000	1.76829	60.00000	Averaged
142 Pronamide	0.23321	0.24923	0.24923	0.000	6.87005	60.00000	Averaged
146 4-Nitroquinoline-1-oxide	0.02419	0.01890	0.01890	0.000	-21.86661	60.00000	Averaged
147 Methapyrilene	0.60984	0.64742	0.64742	0.000	6.16160	60.00000	Averaged
148 Isodrin	0.10589	0.10767	0.10767	0.000	1.68469	60.00000	Averaged
149 Aramite	0.04813	0.05039	0.05039	0.000	4.70511	60.00000	Averaged
150 Kepone	0.06756	0.06295	0.06295	0.000	-6.82938	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.31262	0.34247	0.34247	0.000	9.54828	60.00000	Averaged
152 Chlorobenzilate	0.24177	0.25936	0.25936	0.000	7.27918	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.58779	0.65220	0.65220	0.000	10.95919	60.00000	Averaged
155 2-Acetylaminofluorene	0.29455	0.33717	0.33717	0.000	14.47113	60.00000	Averaged
157 7,12Dimethylbenz(a)anthrace	0.48949	0.50402	0.50402	0.000	2.96959	60.00000	Averaged
158 3-Methylcholanthrene	0.39432	0.40049	0.40049	0.000	1.56370	60.00000	Averaged

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Data file : /chem/MSD7.i/s012010.b/s7a2004.d  
 Lab Smp Id: WBN100103-03.4 Client Smp ID: APCVS  
 Inj Date : 20-JAN-2010 11:32  
 Operator : JMB3 Inst ID: MSD7.i  
 Smp Info : |WBN100103-03.4|CVS|1|SVMF|1|APCVS  
 Misc Info : |MSD8270|WBN100107-02|  
 Comment : Column: J&W Scientific DB-5MS 25m x 0.2mm x 0.33um film thickness  
 Method : /chem/MSD7.i/s012010.b/MSD7-M8270C-AQA-011310.m  
 Meth Date : 20-Jan-2010 13:13 jos00786 Quant Type: ISTD  
 Cal Date : 15-JAN-2010 19:06 Cal File: s7a1515.d  
 Als bottle: 3 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: AP12.sub  
 Target Version: 3.50  
 Processing Host: hpclp1

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT	ON-COL
							(ng/ul)	(ng/ul)
* 10 1,4-Dichlorobenzene-d4		152	3.793	3.793	(1.000)	374848	40.0000	
* 29 Naphthalene-d8		136	4.650	4.650	(1.000)	1340855	40.0000	
* 46 Acenaphthene-d10		164	5.892	5.892	(1.000)	711630	40.0000	
* 67 Phenanthrene-d10		188	7.043	7.043	(1.000)	1259302	40.0000	
* 91 Chrysene-d12		240	9.422	9.422	(1.000)	991089	40.0000	
* 98 Perylene-d12		264	10.963	10.963	(1.000)	685232	40.0000	
209 Benzaldehyde		77	3.518	3.518	(0.928)	374286	40.0000	41.7
16 Acetophenone		105	4.043	4.043	(1.066)	457158	40.0000	40.4
189 Caprolactam		113	4.929	4.929	(1.060)	118458	40.0000	41.2
208 1,1'-Biphenyl		154	5.468	5.468	(0.928)	896798	40.0000	38.4
207 Atrazine		173	6.759	6.759	(0.960)	59262	40.0000	43.2
77 Benzidine		184	8.179	8.179	(0.868)	610983	40.0000	47.3
90 3,3'-Dichlorobenzidine		252	9.359	9.359	(0.993)	282627	40.0000	43.3
102 1,4-Dioxane		88	2.146	2.146	(0.566)	154262	40.0000	39.9
103 Methyl methacrylate		100	2.141	2.141	(0.565)	82457	40.0000	40.6
104 Ethyl methacrylate		69	2.507	2.507	(0.661)	341143	40.0000	40.7
105 2-Picoline		93	2.700	2.700	(0.712)	512206	40.0000	40.5
106 N-Nitrosomethylethylamine		88	2.743	2.743	(0.723)	210681	40.0000	39.0
107 Methyl methanesulfonate		80	2.897	2.897	(0.764)	213686	40.0000	40.6
108 N-Nitrosodiethylamine		102	3.128	3.128	(0.825)	215020	40.0000	39.7
109 Ethyl Methanesulfonate		79	3.287	3.287	(0.867)	285089	40.0000	40.2
110 Pentachloroethane		167	3.619	3.619	(0.954)	122437	40.0000	40.1
111 N-Nitrosopyrrolidine		100	4.029	4.029	(1.062)	227187	40.0000	41.5
113 N-Nitrosomorpholine		56	4.053	4.053	(1.069)	369469	40.0000	45.1
114 o-Toluidine		106	4.067	4.067	(1.072)	651954	40.0000	40.2
115 N-Nitrosopiperidine		114	4.265	4.265	(0.917)	216131	40.0000	40.5

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
=====	=====	=====	=====	=====	=====	=====	=====
116 a,a-Dimethylphenethylamine	58	4.510	4.510	(0.970)	1630900	40.0000	39.9
118 2,6-Dichlorophenol	162	4.693	4.693	(1.009)	288452	40.0000	40.3
119 Hexachloropropene	213	4.722	4.722	(1.016)	135315	40.0000	39.0
120 p-Phenylenediamine	108	4.929	4.929	(1.060)	369578	40.0000	40.5
121 N-Nitrosodi-n-butylamine	84	4.900	4.900	(1.054)	316352	40.0000	39.7
122 Safrole	162	5.064	5.064	(1.089)	261732	40.0000	41.5
123 1,2,4,5-Tetrachlorobenzene	216	5.261	5.261	(0.893)	318740	40.0000	40.0
124 Isosafrole	162	5.430	5.430	(0.922)	263326	40.0000	40.5
125 1,4-Naphthoquinone	158	5.613	5.613	(0.953)	263580	40.0000	45.4
127 Pentachlorobenzene	250	6.013	6.013	(1.020)	249536	40.0000	39.4
128 1-Naphthylamine	143	6.094	6.094	(1.034)	705762	40.0000	41.9
129 2-Naphthylamine	143	6.152	6.152	(1.044)	784183	40.0000	42.1
131 5-Nitro-o-toluidine	152	6.292	6.292	(1.068)	238982	40.0000	42.0
136 1,3,5-Trinitrobenzene	75	6.542	6.542	(0.929)	183434	40.0000	46.1
137 Phenacetin	108	6.586	6.586	(0.935)	357117	40.0000	41.5 (Q)
138 Diallate	86	6.571	6.571	(0.933)	347456	40.0000	39.8
212 Cis Diallate	86	6.643	6.643	(0.943)	57957	6.00000	6.1
213 Trans Diallate	86	6.571	6.571	(0.933)	347456	34.0000	33.8
140 4-Aminobiphenyl	169	6.865	6.865	(0.975)	811262	40.0000	42.2
141 Pentachloronitrobenzene	237	6.884	6.884	(0.977)	71150	40.0000	40.7 (Q)
142 Pronamide	173	6.884	6.884	(0.977)	313860	40.0000	42.7
146 4-Nitroquinoline-1-oxide	101	7.703	7.703	(1.094)	23805	40.0000	31.2
147 Methapyrilene	58	7.736	7.736	(1.098)	815293	40.0000	42.5
148 Isodrin	193	7.953	7.953	(1.129)	135594	40.0000	40.7
149 Aramite	185	8.358	8.358	(1.187)	63461	40.0000	41.9
150 Kepone	272	8.931	8.931	(1.268)	79273	40.0000	37.3
151 p-(Dimethylamino)azobenzene	120	8.531	8.531	(0.905)	339418	40.0000	43.8
152 Chlorobenzilate	251	8.565	8.565	(0.909)	257053	40.0000	42.9
153 3,3'-Dimethylbenzidine	212	8.844	8.844	(0.939)	646392	40.0000	44.4
155 2-Acetylaminofluorene	181	9.090	9.090	(0.965)	334166	40.0000	45.8
157 7,12Dimethylbenz(a)anthracene	256	10.472	10.472	(0.955)	345374	40.0000	41.2
158 3-Methylcholanthrene	268	11.334	11.334	(1.034)	274426	40.0000	40.6

# QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD7.1/s012010.b/s7a2004.d

Date: 20-JAN-2010 11:32

Client ID: APCVS

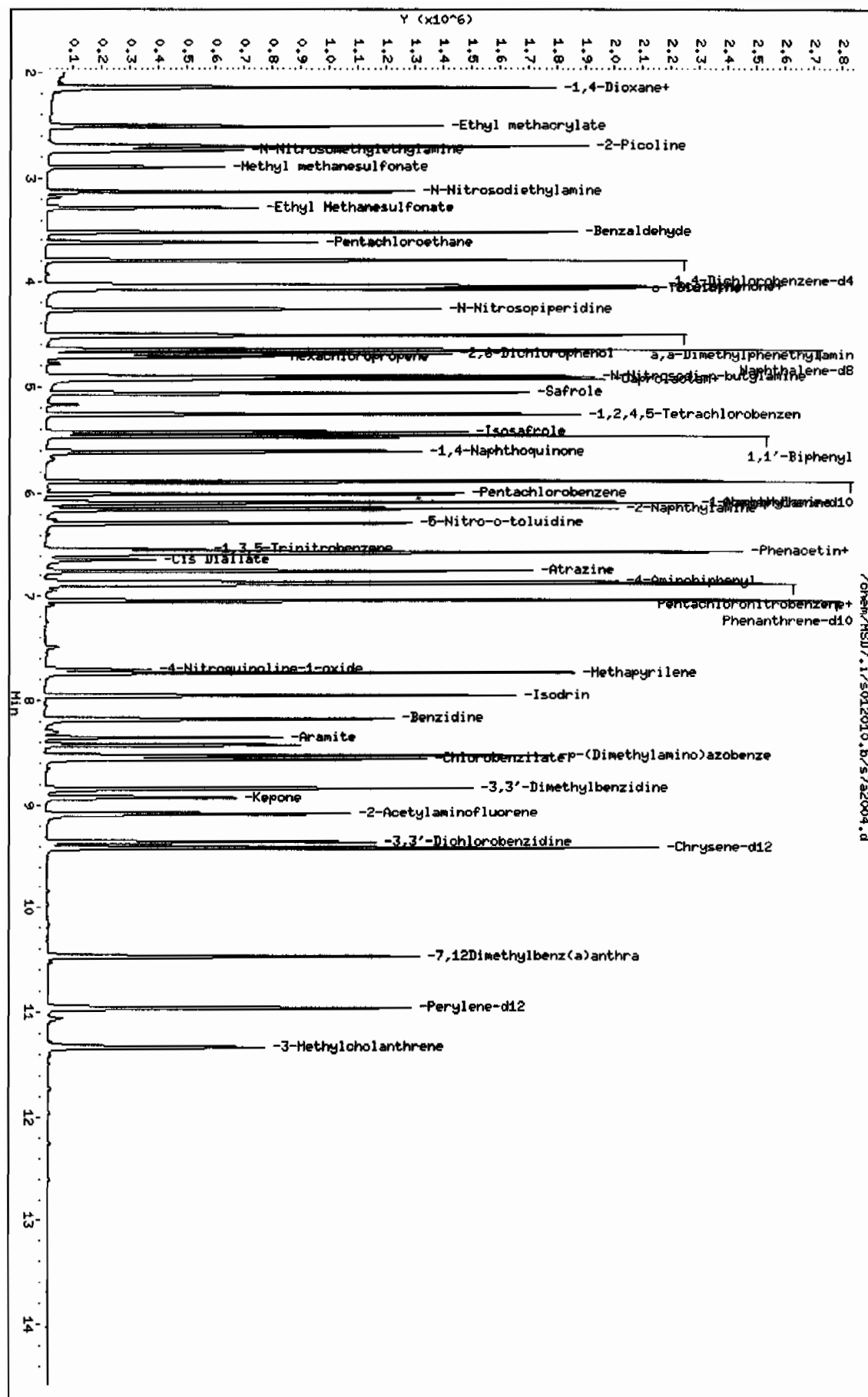
Sample Info: IJBN100103-03.41CVS111SVNF111APCVS

Column phase: J&W DB-5MS

Instrument: MSD7.1

Operator: JMB3

Column diameter: 0.20



# QC Data

Data File: /chem/MSD7.i/s011310.b/s7a1301.d

Page 1

Date : 13-JAN-2010 16:11

Client ID: DFTPP

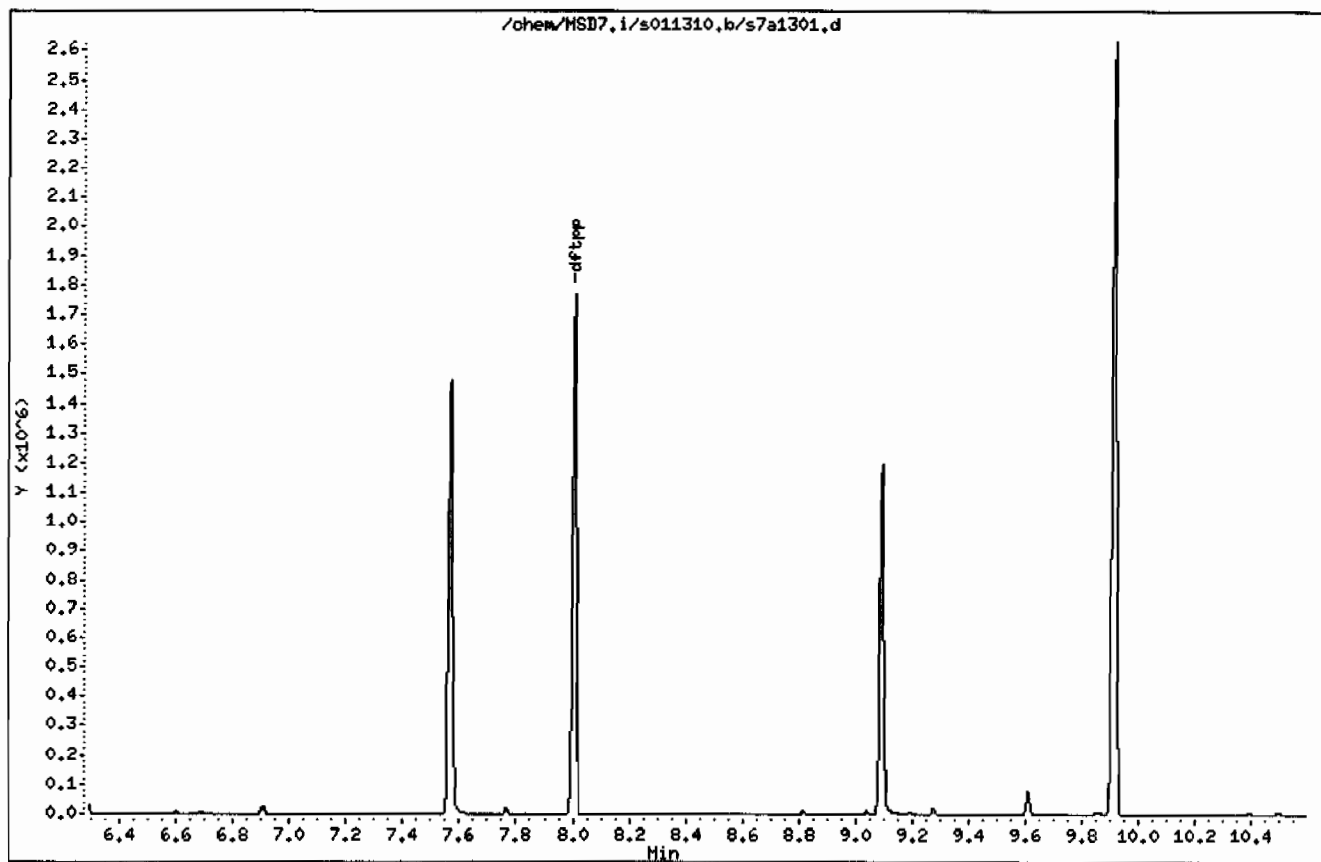
Instrument: MSD7.i

Sample Info: IWBNO91213-011DFTPP11ISVMF111DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20





Date : 13-JAN-2010 16:11

Client ID: DFTPP

Instrument: HSD7.i

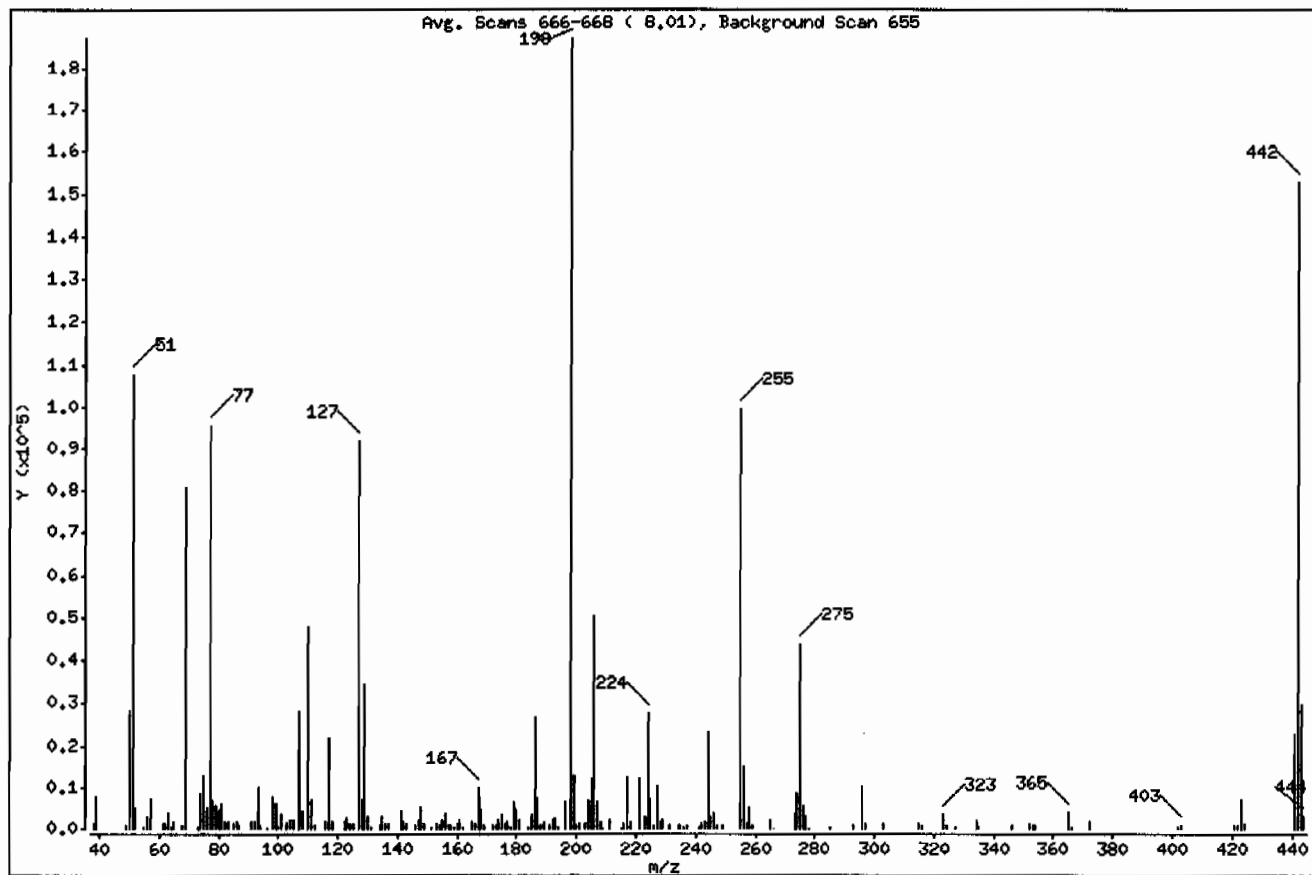
Sample Info: INBN091213-01|DFTPP11|SVHF11|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	57.50
68	Less than 2.00% of mass 69	0.57 ( 1.32)
69	Mass 69 relative abundance	43.15
70	Less than 2.00% of mass 69	0.00 ( 0.00)
127	40.00 - 60.00% of mass 198	49.02
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.91
275	10.00 - 30.00% of mass 198	23.23
365	Greater than 1.00% of mass 198	2.10
441	Present, but less than mass 443	12.25
442	Greater than 40.00% of mass 198	81.68
443	17.00 - 23.00% of mass 442	15.81 ( 19.36)

Date : 13-JAN-2010 16:11

Client ID: DFTPP

Instrument: MSD7.i

Sample Info: IMBN091213-01.DFTPP11.SVHF11.DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-EHS

Column diameter: 0.20

Data File: s7a1301.d  
Spectrum: Avg. Scans 666-668 ( 8.01), Background Scan 655  
Location of Maximum: 198.00  
Number of points: 186

m/z	Y	m/z	Y	m/z	Y	m/z	Y
38.00	1370	116.00	1525	180.00	4602	246.00	3710
39.00	7646	117.00	21792	181.00	2132	247.00	806
49.00	818	118.00	1596	184.00	609	249.00	847
50.00	28320	122.00	1665	185.00	3625	255.00	99448
51.00	107728	123.00	2507	186.00	26656	256.00	15179
52.00	5375	124.00	1187	187.00	7443	267.00	1185
55.00	534	125.00	1204	188.00	731	288.00	5066
56.00	3056	127.00	91840	189.00	1598	259.00	828
57.00	7165	128.00	7070	191.00	770	265.00	2105
61.00	1103	129.00	34656	192.00	2213	266.00	170
62.00	1401	130.00	2969	193.00	2415	273.00	3335
63.00	3783	131.00	624	194.00	366	274.00	8783
64.00	585	134.00	1044	196.00	6461	275.00	43820
65.00	1676	135.00	2805	198.00	187328	276.00	5706
68.00	1067	136.00	1210	199.00	12954	277.00	3012
69.00	80840	137.00	1426	200.00	958	278.00	167
73.00	637	141.00	4327	201.00	1202	285.00	380
74.00	8473	142.00	1599	203.00	1378	293.00	735
75.00	12804	143.00	1078	204.00	6986	296.00	10501
76.00	5046	146.00	780	205.00	11954	297.00	1479
77.00	95424	147.00	2079	206.00	50216	303.00	1237
78.00	6812	148.00	5175	207.00	6512	315.00	1092
79.00	5796	149.00	1135	208.00	1570	316.00	713
80.00	4429	151.00	548	209.00	170	323.00	3590
81.00	6231	153.00	1435	211.00	2152	324.00	657
82.00	1595	154.00	1036	215.00	170	327.00	630
83.00	1520	155.00	2325	216.00	1126	334.00	2112
85.00	1085	156.00	3967	217.00	12301	335.00	387
86.00	1914	157.00	965	218.00	1792	346.00	788
87.00	818	158.00	836	221.00	12131	352.00	1085
91.00	1524	159.00	611	223.00	2913	353.00	691
92.00	1644	160.00	1433	224.00	27762	354.00	1021
93.00	10075	161.00	2181	225.00	7224	365.00	3940
94.00	706	162.00	368	226.00	840	366.00	628
96.00	174	165.00	1673	227.00	10426	372.00	1558

Date : 13-JAN-2010 16:11

Client ID: DFTPP

Instrument: HSD7.i

Sample Info: INBN091213-01IDFTPP11SVHF11IDFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s7a1301.d

Spectrum: Avg. Scans 666-668 ( 8.01), Background Scan 655

Location of Maximum: 198.00

Number of points: 186

m/z	Y	m/z	Y	m/z	Y	m/z	Y
98.00	7612	166.00	1412	228.00	1572	402.00	624
99.00	5970	167.00	9953	229.00	2350	403.00	815
100.00	600	168.00	4688	231.00	966	421.00	733
101.00	3814	169.00	808	234.00	679	422.00	758
103.00	1248	172.00	662	235.00	807	423.00	6937
104.00	2148	173.00	994	236.00	548	424.00	1351
105.00	2122	174.00	1978	237.00	820	441.00	22952
107.00	28128	175.00	3609	241.00	610	442.00	153024
108.00	4452	176.00	1112	242.00	1493	443.00	29624
110.00	47928	177.00	1694	243.00	1730	444.00	2831
111.00	7102	178.00	595	244.00	23112		
112.00	879	179.00	6315	245.00	3183		

Data File: /chem/MSD7.i/s011910.b/s7a1901.d

Page 1

Date : 19-JAN-2010 09:18

Client ID: DFTPP

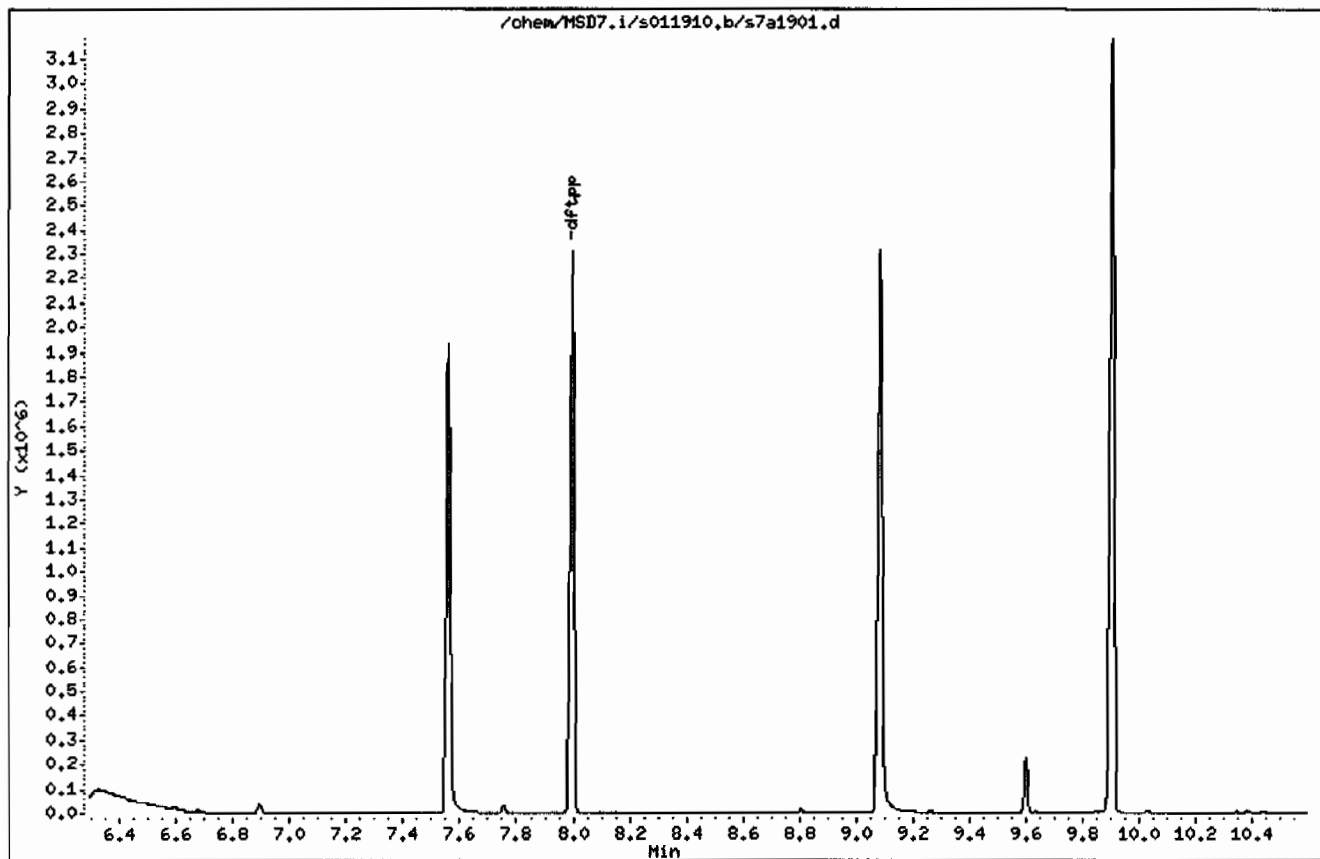
Instrument: MSD7.i

Sample Info: IWBNI00107-01IDFTPP11ISVMF11IDFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20



Date : 19-JAN-2010 09:18

Client ID: DFTPP

Instrument: MSD7.i

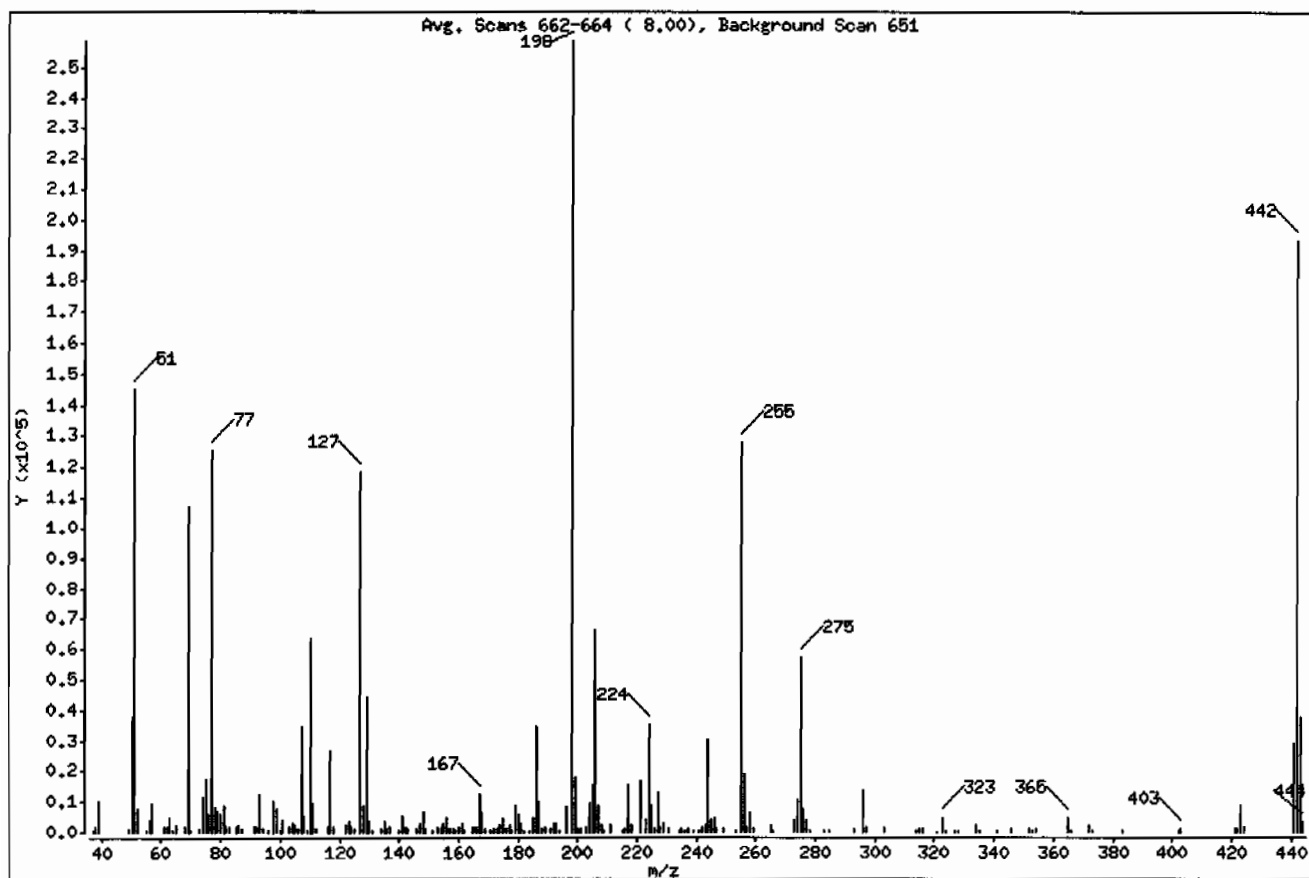
Sample Info: INBN100107-01IDFTPP11SVHF11IDFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	56.20
68	Less than 2.00% of mass 69	0.76 ( 1.84)
69	Mass 69 relative abundance	41.34
70	Less than 2.00% of mass 69	0.13 ( 0.32)
127	40.00 - 60.00% of mass 198	45.63
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.81
275	10.00 - 30.00% of mass 198	21.95
365	Greater than 1.00% of mass 198	1.91
441	Present, but less than mass 443	11.23
442	Greater than 40.00% of mass 198	74.82
443	17.00 - 23.00% of mass 442	14.48 ( 19.35)

Date : 19-JAN-2010 09:18

Client ID: DFTPP

Instrument: MSD7.i

Sample Info: IWBH100107-01IDFTPP11SVHF11IDFTPP

Operator: JMB3

Column phase: Phenomenex ZB-EHS

Column diameter: 0.20

Data File: s7a1901.d

Spectrum: Avg. Scans 662-664 ( 8.00), Background Scan 651

Location of Maximum: 198.00

Number of points: 202

m/z	Y	m/z	Y	m/z	Y	m/z	Y
-----							
37.00	569	116.00	1621	182.00	362	255.00	128056
38.00	1835	117.00	26864	184.00	746	256.00	18784
39.00	10398	118.00	1826	185.00	4470	257.00	1541
49.00	1037	122.00	2251	186.00	34208	258.00	6597
50.00	38168	123.00	3560	187.00	9818	259.00	1010
-----							
51.00	145408	124.00	1505	188.00	1034	265.00	2594
52.00	7776	125.00	1464	189.00	1935	266.00	346
55.00	808	127.00	118096	191.00	993	273.00	4249
56.00	4416	128.00	9135	192.00	2785	274.00	10814
57.00	9625	129.00	44288	193.00	3212	275.00	56808
-----							
61.00	1570	130.00	3641	194.00	709	276.00	7863
62.00	1788	131.00	727	196.00	8237	277.00	3939
63.00	4866	134.00	1296	198.00	258752	278.00	700
64.00	726	135.00	3643	199.00	17616	283.00	384
65.00	2310	136.00	1427	200.00	1380	285.00	646
-----							
68.00	1965	137.00	1786	201.00	1456	293.00	985
69.00	106976	140.00	604	203.00	1696	296.00	13461
70.00	347	141.00	5630	204.00	9225	297.00	2003
73.00	980	142.00	1884	205.00	15387	303.00	1600
74.00	11228	143.00	1232	206.00	65984	314.00	680
-----							
75.00	17304	146.00	1032	207.00	8680	315.00	1359
76.00	6058	147.00	2943	208.00	2208	316.00	935
77.00	125272	148.00	6829	209.00	604	321.00	170
78.00	8583	149.00	1184	211.00	2533	323.00	4578
79.00	7396	151.00	753	215.00	643	324.00	866
-----							
80.00	6073	153.00	1833	216.00	1405	327.00	835
81.00	8640	154.00	1320	217.00	15710	328.00	343
82.00	2011	155.00	3066	218.00	2286	334.00	2645
83.00	1787	156.00	4993	221.00	16560	335.00	670
85.00	1659	157.00	1092	223.00	4007	341.00	387
-----							
86.00	2292	158.00	1046	224.00	34824	346.00	1021
87.00	1081	159.00	824	225.00	9168	352.00	1257
91.00	1926	160.00	1708	226.00	1070	353.00	868
92.00	2057	161.00	2745	227.00	13226	354.00	1365
93.00	12646	162.00	796	228.00	1837	365.00	4938

Date : 19-JAN-2010 09:18

Client ID: DFTPP

Instrument: MSD7.i

Sample Info: IMBN100107-011DFTPP11SVHF111DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s7a1901.d

Spectrum: Avg. Scans 662-664 ( 8.00), Background Scan 661

Location of Maximum: 198.00

Number of points: 202

m/z	Y	m/z	Y	m/z	Y	m/z	Y
94.00	1037	165.00	1897	229.00	2891	366.00	738
96.00	563	166.00	1931	231.00	1342	372.00	2274
98.00	9958	167.00	12394	234.00	874	373.00	385
99.00	7777	168.00	6419	235.00	986	383.00	364
100.00	684	169.00	1179	236.00	646	402.00	791
101.00	4368	171.00	349	237.00	1258	403.00	1170
103.00	1708	172.00	927	239.00	370	421.00	1084
104.00	2700	173.00	1436	241.00	787	422.00	1004
105.00	2505	174.00	2339	242.00	1840	423.00	8871
106.00	1039	175.00	4893	243.00	2366	424.00	1800
107.00	34728	176.00	1372	244.00	30520	441.00	29048
108.00	5440	177.00	2208	245.00	4062	442.00	193600
109.00	392	178.00	737	246.00	4786	443.00	37464
110.00	63472	179.00	8817	247.00	915	444.00	3643
111.00	9792	180.00	5903	249.00	1008		
112.00	1176	181.00	2856	253.00	648		

Data File: /chem/MSD7.i/s012010.b/s7a2002.d

Page 1

Date : 20-JAN-2010 10:52

Client ID: DFTPP

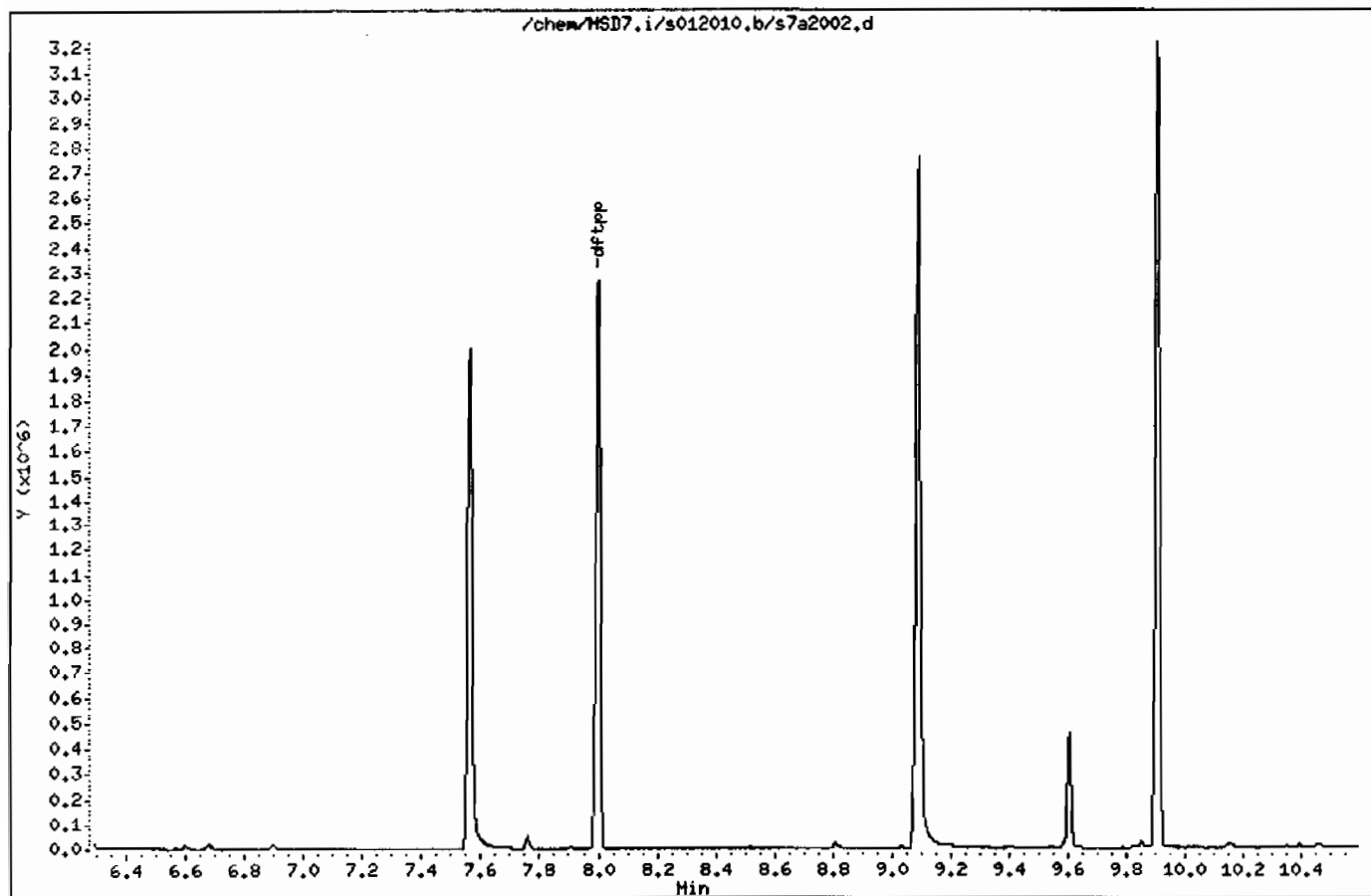
Instrument: MSD7.i

Sample Info: IWBNI00107-01|DFTPP|1|SVHF|1|DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20





Date : 20-JAN-2010 10:52

Client ID: DFTPP

Instrument: MSD7.i

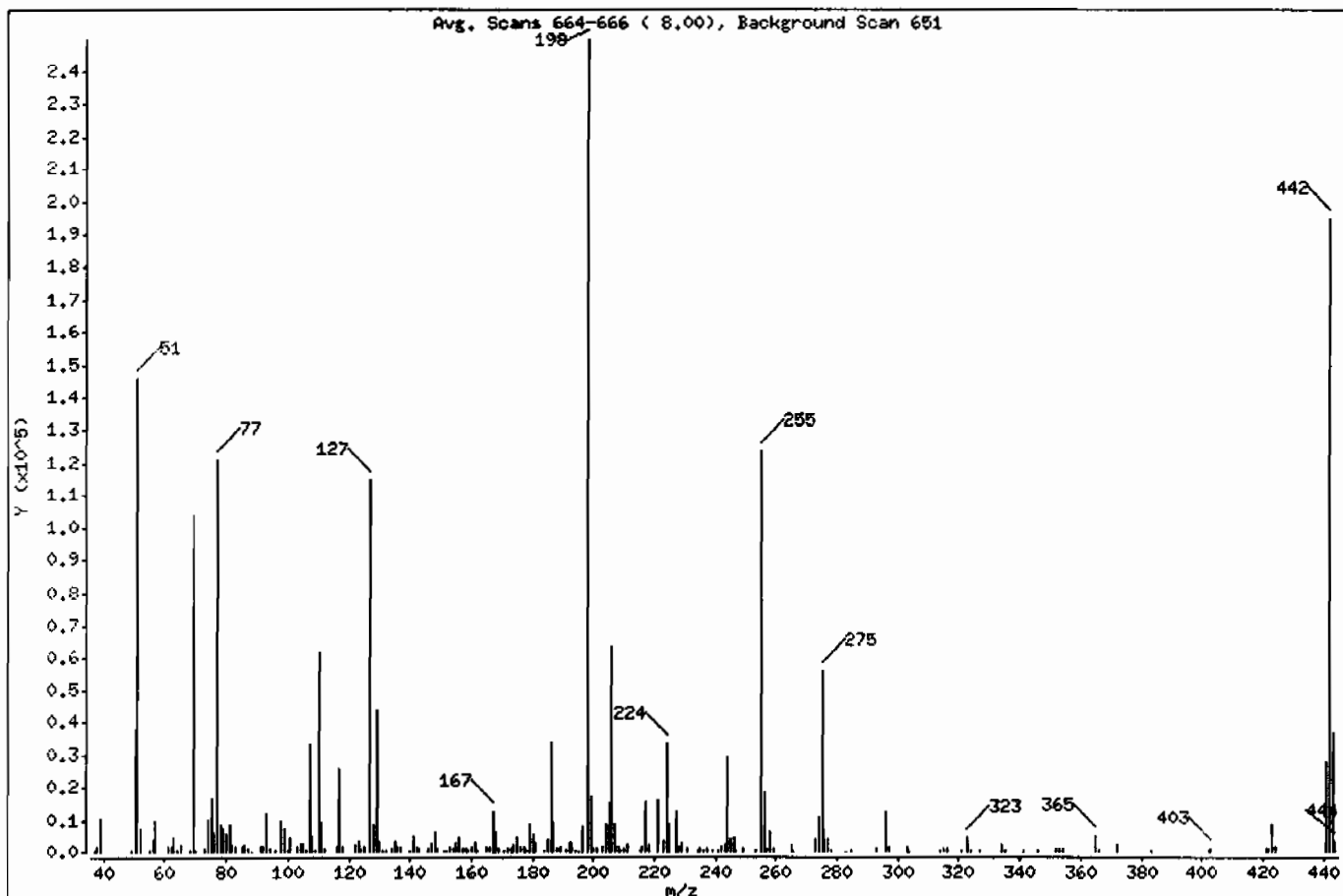
Sample Info: IWBH100107-01/DFTPP11/SVHF11/DFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	58.34
68	Less than 2.00% of mass 69	0.25 ( 0.60)
69	Mass 69 relative abundance	41.53
70	Less than 2.00% of mass 69	0.26 ( 0.62)
127	40.00 - 60.00% of mass 198	45.97
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.81
275	10.00 - 30.00% of mass 198	22.49
365	Greater than 1.00% of mass 198	2.00
441	Present, but less than mass 443	11.21
442	Greater than 40.00% of mass 198	77.87
443	17.00 - 23.00% of mass 442	14.80 ( 19.01)

Date : 20-JAN-2010 10:52

Client ID: DFTPP

Instrument: MSD7.i

Sample Info: IWBNI00107-01IDFTPP11SVMF11IDFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s7a2002.d

Spectrum: Avg. Scans 664-666 ( 8.00), Background Scan 661

Location of Maximum: 198.00

Number of points: 204

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	585	116.00	1890	181.00	2612	255.00	123312
38.00	1786	117.00	25712	184.00	621	256.00	18224
39.00	10184	118.00	1782	185.00	4212	257.00	1419
49.00	748	122.00	2034	186.00	33960	258.00	6489
50.00	37784	123.00	3177	187.00	9284	259.00	1110
51.00	145664	124.00	1399	188.00	970	265.00	2529
52.00	7556	125.00	1492	189.00	1937	266.00	170
55.00	797	127.00	114792	191.00	850	273.00	4076
56.00	4132	128.00	8889	192.00	2861	274.00	10767
57.00	9515	129.00	43488	193.00	3131	275.00	56160
61.00	1600	130.00	3445	194.00	595	276.00	7300
62.00	1915	131.00	663	195.00	208	277.00	4071
63.00	4734	132.00	357	196.00	8111	278.00	767
64.00	624	134.00	1267	198.00	249664	283.00	175
65.00	2211	135.00	3575	199.00	17016	285.00	720
68.00	626	136.00	1567	200.00	1289	293.00	992
69.00	103704	137.00	1815	201.00	1426	296.00	12741
70.00	646	140.00	346	203.00	1678	297.00	1923
73.00	892	141.00	5445	204.00	8554	303.00	1555
74.00	10507	142.00	1784	205.00	14945	304.00	181
75.00	16392	143.00	1153	206.00	63664	314.00	629
76.00	6175	146.00	1000	207.00	8432	315.00	1408
77.00	121384	147.00	2639	208.00	1949	316.00	868
78.00	8471	148.00	6409	209.00	765	321.00	357
79.00	7590	149.00	1319	210.00	959	323.00	4474
80.00	5893	151.00	671	211.00	2518	324.00	761
81.00	8572	152.00	376	215.00	561	327.00	793
82.00	2213	153.00	1815	216.00	1522	334.00	2547
83.00	1873	154.00	1433	217.00	15218	335.00	679
85.00	1532	155.00	2994	218.00	2067	341.00	557
86.00	2224	156.00	4652	221.00	16132	346.00	842
87.00	985	157.00	1047	223.00	3454	352.00	1328
88.00	167	158.00	1094	224.00	33504	353.00	1000
91.00	1738	159.00	710	225.00	8594	354.00	1422
92.00	1822	160.00	1866	227.00	12465	365.00	4996

Data File: /chem/MSD7.i/s012010.b/s7a2002.d

Page 4

Date : 20-JAN-2010 10:52

Client ID: DFTPP

Instrument: MSD7.i

Sample Info: IWBNI00107-01IDFTPP11SVMF11IDFTPP

Operator: JMB3

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s7a2002.d

Spectrum: Avg. Scans 664-666 ( 8.00), Background Scan 651

Location of Maximum: 198.00

Number of points: 204

m/z	Y	m/z	Y	m/z	Y	m/z	Y
93.00	12212	161.00	2590	228.00	1742	366.00	667
94.00	956	162.00	707	229.00	2800	372.00	2064
96.00	603	165.00	1980	231.00	1150	383.00	364
98.00	9495	166.00	1728	234.00	740	402.00	714
99.00	7515	167.00	12435	235.00	988	403.00	1200
100.00	697	168.00	6070	236.00	638	421.00	1111
101.00	4310	169.00	1055	237.00	1197	422.00	964
103.00	1460	171.00	635	239.00	362	423.00	8498
104.00	2752	172.00	1073	241.00	722	424.00	1771
105.00	2619	173.00	1292	242.00	1939	441.00	27984
106.00	576	174.00	2404	243.00	2231	442.00	194432
107.00	33504	175.00	4459	244.00	28984	443.00	36960
108.00	5214	176.00	1463	245.00	3831	444.00	3398
109.00	711	177.00	1879	246.00	4734		
110.00	62112	178.00	720	247.00	860		
111.00	9150	179.00	8453	249.00	887		
112.00	1056	180.00	5672	253.00	605		

Semi-Volatile  
Certificate of Analysis  
Sample Summary

SDG Number: 10-1210

Matrix: SOIL

Lab Sample ID: 1202015597

Client Sample: QC for batch 941701

Client: LANL010

Project: QC

Client ID: MB for batch 941701

Method: SW846 8270C

SOP Ref: GL-OA-E-009

Batch ID: 941702

Inst: MSD7.1

Dilution: 1

Run Date: 01/19/2010 11:49

Analyst: JMB3

Inj. Vol: .5 uL

Prep Date: 01/14/2010 19:34

Aliquot: 30 g

Final Volume: 1 mL

Data File: s7a1908.d

Column: J&amp;W DB-5MS

Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	333	ug/kg	66.7	333
108-95-2	Phenol	U	333	ug/kg	66.7	333
95-57-8	2-Chlorophenol	U	333	ug/kg	66.7	333
106-46-7	1,4-Dichlorobenzene	U	333	ug/kg	66.7	333
621-64-7	N-Nitrosodipropylamine	U	333	ug/kg	66.7	333
59-50-7	4-Chloro-3-methylphenol	U	333	ug/kg	66.7	333
83-32-9	Acenaphthene	U	33.3	ug/kg	11.0	33.3
121-14-2	2,4-Dinitrotoluene	U	333	ug/kg	33.3	333
100-02-7	4-Nitrophenol	U	333	ug/kg	110	333
87-86-5	Pentachlorophenol	U	333	ug/kg	83.3	333
129-00-0	Pyrene	U	33.3	ug/kg	10.0	33.3
110-86-1	Pyridine	U	333	ug/kg	66.7	333
62-53-3	Aniline	U	333	ug/kg	100	333
111-44-4	bis(2-Chloroethyl) ether	U	333	ug/kg	66.7	333
541-73-1	1,3-Dichlorobenzene	U	333	ug/kg	66.7	333
100-51-6	Benzyl alcohol	U	333	ug/kg	100	333
95-50-1	1,2-Dichlorobenzene	U	333	ug/kg	66.7	333
108-60-1	bis(2-Chloroisopropyl)ether	U	333	ug/kg	66.7	333
95-48-7	o-Cresol	U	333	ug/kg	66.7	333
65794-96-9	m,p-Cresols	U	333	ug/kg	100	333
67-72-1	Hexachloroethane	U	333	ug/kg	66.7	333
98-95-3	Nitrobenzene	U	333	ug/kg	66.7	333
78-59-1	Isophorone	U	333	ug/kg	66.7	333
88-75-5	2-Nitrophenol	U	333	ug/kg	66.7	333
105-67-9	2,4-Dimethylphenol	U	333	ug/kg	117	333
111-91-1	bis(2-Chloroethoxy)methane	U	333	ug/kg	66.7	333
120-83-2	2,4-Dichlorophenol	U	333	ug/kg	66.7	333
65-85-0	Benzoic acid	U	667	ug/kg	167	667
91-20-3	Naphthalene	U	33.3	ug/kg	10.0	33.3
106-47-8	4-Chloroaniline	U	333	ug/kg	66.7	333
87-68-3	Hexachlorobutadiene	U	333	ug/kg	66.7	333
91-57-6	2-Methylnaphthalene	U	33.3	ug/kg	6.67	33.3
77-47-4	Hexachlorocyclopentadiene	U	333	ug/kg	66.7	333
88-06-2	2,4,6-Trichlorophenol	U	333	ug/kg	66.7	333
95-95-4	2,4,5-Trichlorophenol	U	333	ug/kg	66.7	333
91-58-7	2-Chloronaphthalene	U	33.3	ug/kg	11.0	33.3
88-74-4	2-Nitroaniline	U	333	ug/kg	66.7	333
99-09-2	3-Nitroaniline	U	333	ug/kg	66.7	333

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210  
Lab Sample ID: 1202015597  
Client Sample: QC for batch 941701  
Client ID: MB for batch 941701  
Batch ID: 941702  
Run Date: 01/19/2010 11:49  
Prep Date: 01/14/2010 19:34  
Data File: s7a1908.d

Client: LANL010  
Method: SW846 8270C  
Inst: MSD7.I  
Analyst: JMB3  
Aliquot: 30 g  
Column: J&W DB-SMS

Matrix: SOIL  
Project: QC  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	333	ug/kg	66.7	333
606-20-2	2,6-Dinitrotoluene	U	333	ug/kg	33.3	333
208-96-8	Acenaphthylene	U	33.3	ug/kg	10.0	33.3
51-28-5	2,4-Dinitrophenol	U	667	ug/kg	127	667
132-64-9	Dibenzofuran	U	333	ug/kg	66.7	333
84-66-2	Diethylphthalate	U	333	ug/kg	66.7	333
86-73-7	Fluorene	U	33.3	ug/kg	10.0	33.3
7005-72-3	4-Chlorophenylphenylether	U	333	ug/kg	66.7	333
534-52-1	2-Methyl-4,6-dinitrophenol	U	333	ug/kg	66.7	333
100-01-6	4-Nitroaniline	U	333	ug/kg	100	333
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	333	ug/kg	66.7	333
122-66-7	Azobenzene	U	333	ug/kg	66.7	333
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	333	ug/kg	66.7	333
118-74-1	Hexachlorobenzene	U	333	ug/kg	66.7	333
85-01-8	Phenanthrene	U	33.3	ug/kg	10.0	33.3
120-12-7	Anthracene	U	33.3	ug/kg	6.67	33.3
84-74-2	Di-n-butylphthalate	U	333	ug/kg	66.7	333
206-44-0	Fluoranthene	U	33.3	ug/kg	10.0	33.3
85-68-7	Butylbenzylphthalate	U	333	ug/kg	66.7	333
56-55-3	Benzo(a)anthracene	U	33.3	ug/kg	10.0	33.3
91-94-1	3,3'-Dichlorobenzidine	U	333	ug/kg	100	333
218-01-9	Chrysene	U	33.3	ug/kg	10.0	33.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	333	ug/kg	66.7	333
117-84-0	Di-n-octylphthalate	U	333	ug/kg	66.7	333
205-99-2	Benzo(b)fluoranthene	U	33.3	ug/kg	10.0	33.3
207-08-9	Benzo(k)fluoranthene	U	33.3	ug/kg	10.0	33.3
50-32-8	Benzo(a)pyrene	U	33.3	ug/kg	10.0	33.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	33.3	ug/kg	10.0	33.3
53-70-3	Dibenzo(a,h)anthracene	U	33.3	ug/kg	10.0	33.3
191-24-2	Benzo(ghi)perylene	U	33.3	ug/kg	10.0	33.3
120-82-1	1,2,4-Trichlorobenzene	U	333	ug/kg	66.7	333

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.05	212	ug/kg		J
	Unknown Aldol Condensate	2.82	839	ug/kg		JA

Data File: /chem/MSD7.i/s011910.b/s7a1908.d  
Report Date: 19-Jan-2010 14:39

Page 1

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Data file : /chem/MSD7.i/s011910.b/s7a1908.d  
Lab Smp Id: 1202015597 Client Smp ID: SBLK01  
Inj Date : 19-JAN-2010 11:49  
Operator : JMB3 Inst ID: MSD7.i  
Smp Info : |1202015597|941702|1|SVMF|1|SBLK01  
Misc Info : |MSD8270\_S|WBN100107-02|  
Comment : Column: J&W Scientific DB-5MS 25m x 0.2mm x 0.33um film thickness  
Method : /chem/MSD7.i/s011910.b/MSD7-M8270C-AQA-011310.m  
Meth Date : 19-Jan-2010 11:56 jen00986 Quant Type: ISTD  
Cal Date : 15-JAN-2010 19:06 Cal File: s7a1515.d  
Als bottle: 8 QC Sample: BLANK  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1210.sub  
Target Version: 3.50  
Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4		152	3.788	3.793	(1.000)	314713	40.0000	
* 29 Naphthalene-d8		136	4.650	4.654	(1.000)	1164505	40.0000	
* 46 Acenaphthene-d10		164	5.892	5.897	(1.000)	598244	40.0000	
* 67 Phenanthrene-d10		188	7.038	7.048	(1.000)	1053967	40.0000	
* 91 Chrysene-d12		240	9.417	9.426	(1.000)	804289	40.0000	
* 98 Perylene-d12		264	10.958	10.972	(1.000)	556183	40.0000	
\$ 3 2-Fluorophenol		112	2.988	2.984	(0.789)	687706	76.0434	2530
\$ 5 Phenol-d5		99	3.508	3.508	(0.926)	896395	76.8780	2560
\$ 20 Nitrobenzene-d5		82	4.149	4.154	(0.892)	427671	44.5211	1480
\$ 39 2-Fluorobiphenyl		172	5.391	5.391	(0.915)	739181	41.9301	1400
\$ 60 2,4,6-Tribromophenol		329	6.479	6.484	(1.100)	115805	76.9449	2560
\$ 81 p-Terphenyl-d14		244	8.406	8.406	(0.893)	697053	50.7425	1690

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Data file : /chem/MSD7.i/s011910.b/s7a1908.d  
Lab Smp Id: 1202015597 Client Smp ID: SBLK01  
Inj Date : 19-JAN-2010 11:49  
Operator : JMB3 Inst ID: MSD7.i  
Smp Info : |1202015597|941702|1|SVMF|1|SBLK01  
Misc Info : |MSD8270\_S|WBN100107-02|  
Comment : Column: J&W Scientific DB-5MS 25m x 0.2mm x 0.33um film thickness  
Method : /chem/MSD7.i/s011910.b/MSD7-M8270C-AQA-011310.m  
Meth Date : 19-Jan-2010 11:56 jen00986 Quant Type: ISTD  
Cal Date : 15-JAN-2010 19:06 Cal File: s7a1515.d  
Als bottle: 8 QC Sample: BLANK  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1210.sub  
Target Version: 3.50  
Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

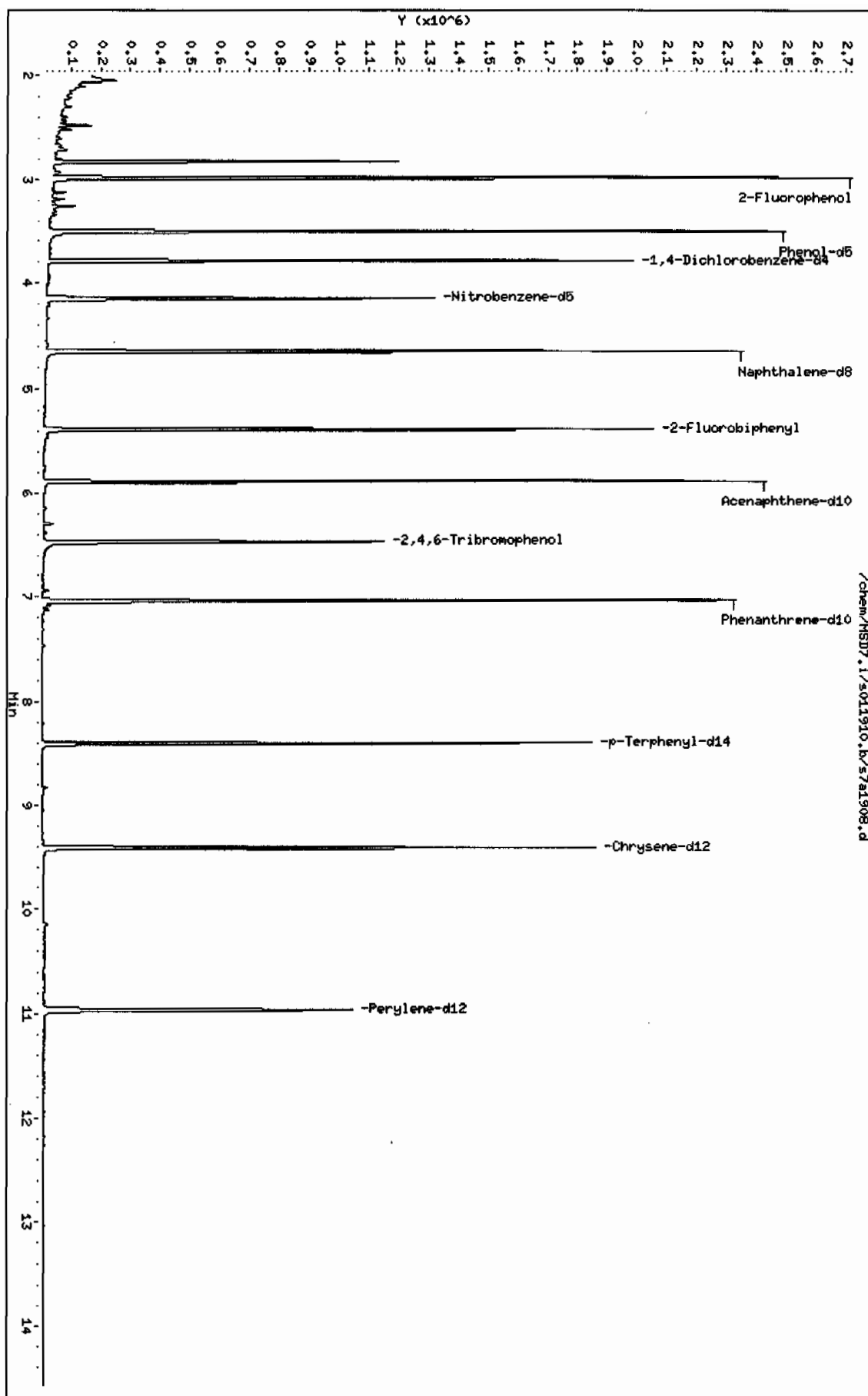
Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.788	2024917	40.000

CONCENTRATIONS				QUANT			
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
----	----	-----	-----	----	-----	-----	-----
Unknown				CAS #:			
2.049	321398	6.34886692	212	0		0	10
Unknown Aldol Condensate				CAS #:			
2.825	1273905	25.1645826	839	0		0	10

Data File: /chem/HSD7.i/s011910.b/s7a1908.d  
Date : 19-Jan-2010 11:49  
Client ID: SNLK01  
Sample Info: 120201697194170211.SUNF11.SBLK01  
Volume Injected (uL): 0.5  
Column phase: J&W DB-5MS

Instrument: HSD7.i  
Operator: JH33  
Column diameter: 0.20





Date: 19-JAN-2010 11:49

Client ID: SBLK01

Instrument: MSD7.i

Sample Info: 11202015597194170211SVMF11SBLK01

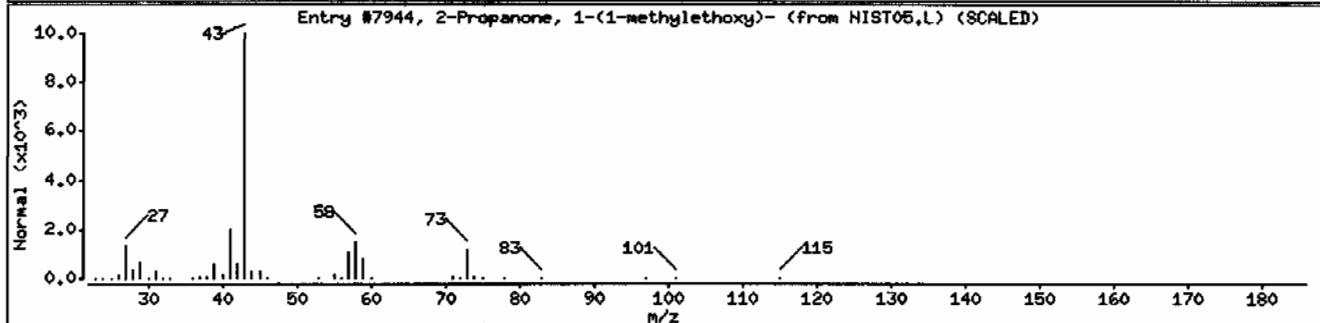
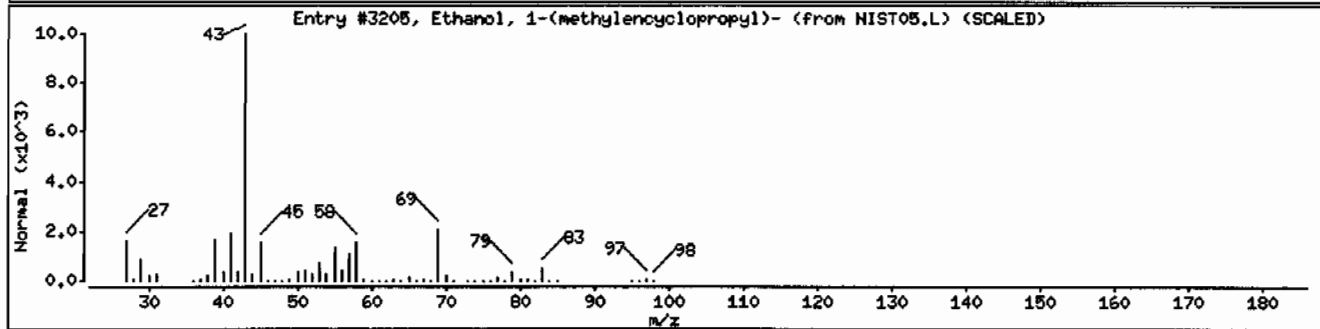
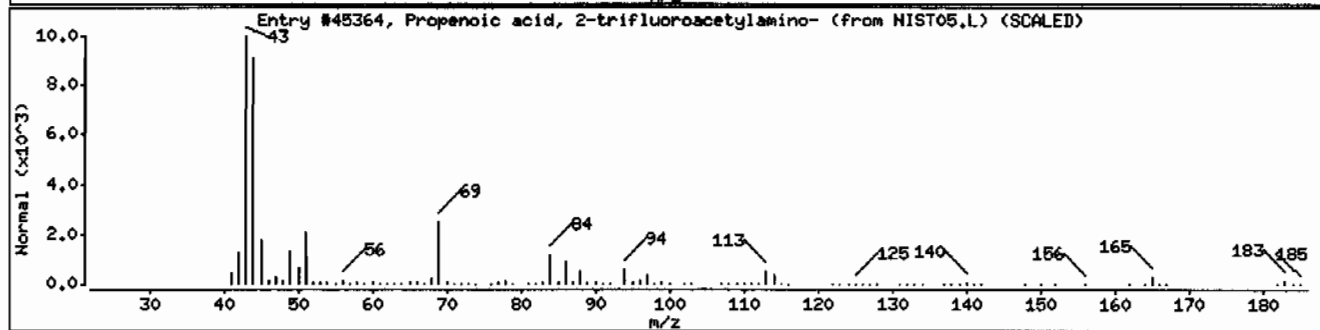
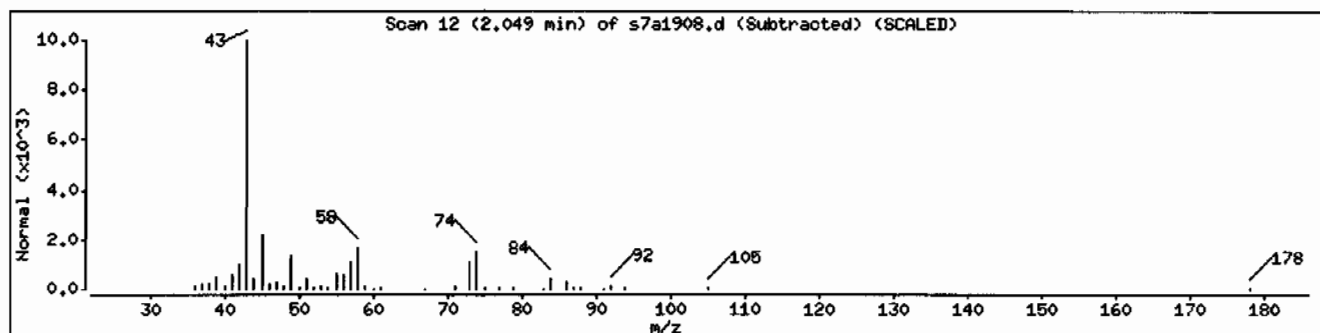
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propenoic acid, 2-trifluoroacetyl-amino-	675-00-3	NIST05.L	45364	26	C5H4F3NO3	183
Ethanol, 1-(methylenecyclopropyl)-	1000152-74-6	NIST05.L	3205	25	C6H10O	98
2-Propanone, 1-(1-methylethoxy)-	42781-12-4	NIST05.L	7944	16	C6H12O2	116



Date: 19-JAN-2010 11:49

Client ID: SBLK01

Instrument: HSD7.i

Sample Info: I12020155971941702111SVHF111SBLK01

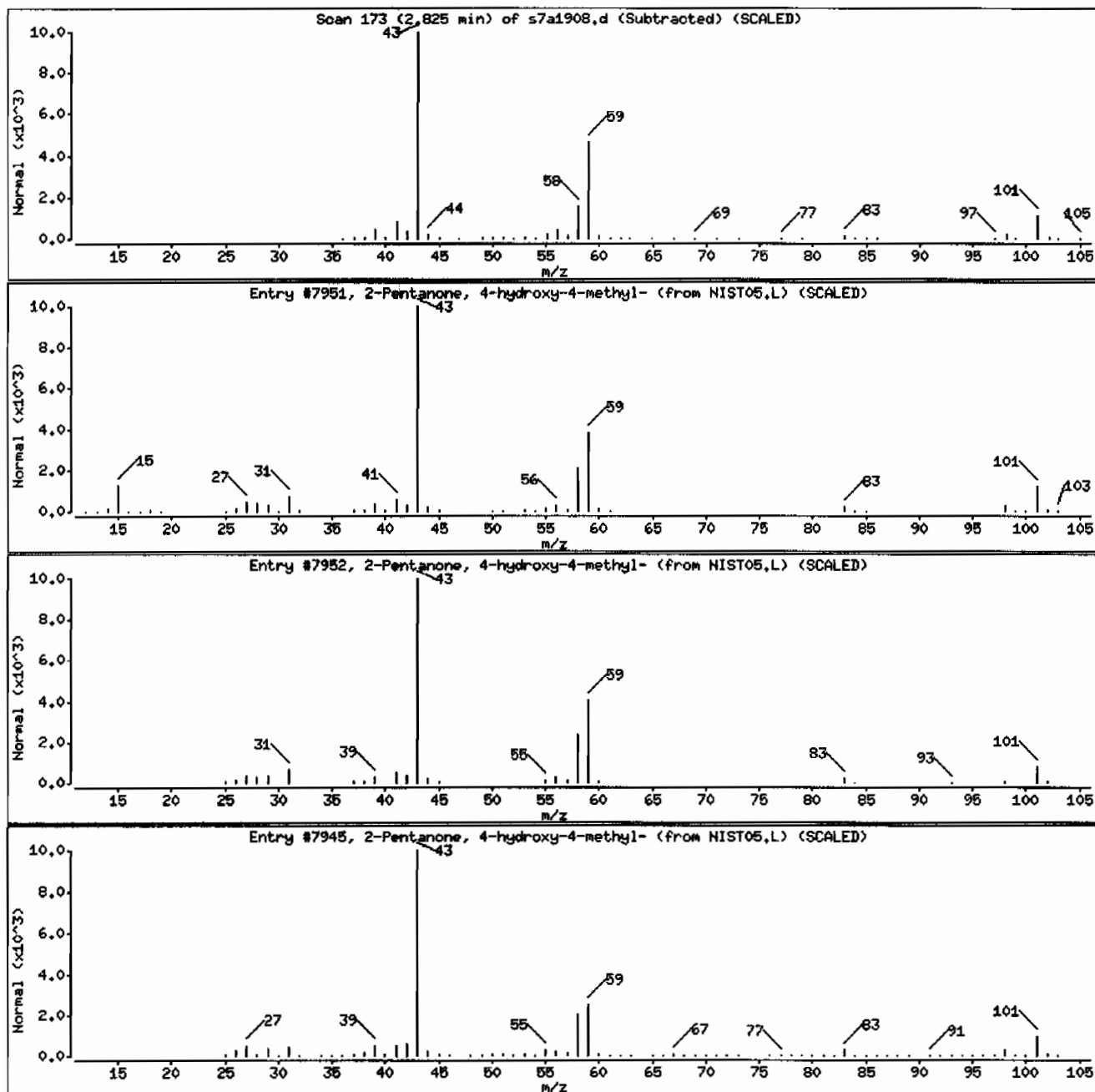
Volume Injected (uL): 0.5

Operator: JMB3

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C <sub>6</sub> H <sub>12</sub> O <sub>2</sub>	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C <sub>6</sub> H <sub>12</sub> O <sub>2</sub>	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	38	C <sub>6</sub> H <sub>12</sub> O <sub>2</sub>	116



**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210  
Lab Sample ID: 1202015598  
Client Sample: QC for batch 941701  
Client ID: LCS for batch 941701  
Batch ID: 941702  
Run Date: 01/19/2010 12:11  
Prep Date: 01/14/2010 19:34  
Data File: s7a1909.d

Client: LANL010  
Method: SW846 8270C  
Inst: MSD7.I  
Analyst: JMB3  
Aliquot: 30 g  
Column: J&W DB-5MS

Matrix: SOIL  
Project: QC  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine		1110	ug/kg	66.7	333
108-95-2	Phenol		1130	ug/kg	66.7	333
95-57-8	2-Chlorophenol		1250	ug/kg	66.7	333
106-46-7	1,4-Dichlorobenzene		1210	ug/kg	66.7	333
621-64-7	N-Nitrosodipropylamine		1160	ug/kg	66.7	333
59-50-7	4-Chloro-3-methylphenol		1270	ug/kg	66.7	333
83-32-9	Acenaphthene		1120	ug/kg	11.0	33.3
121-14-2	2,4-Dinitrotoluene		1350	ug/kg	33.3	333
100-02-7	4-Nitrophenol		1240	ug/kg	110	333
87-86-5	Pentachlorophenol		1260	ug/kg	83.3	333
129-00-0	Pyrene		1220	ug/kg	10.0	33.3
110-86-1	Pyridine		1140	ug/kg	66.7	333
62-53-3	Aniline		976	ug/kg	100	333
111-44-4	bis(2-Chloroethyl) ether		1250	ug/kg	66.7	333
541-73-1	1,3-Dichlorobenzene		1190	ug/kg	66.7	333
100-51-6	Benzyl alcohol		1280	ug/kg	100	333
95-50-1	1,2-Dichlorobenzene		1280	ug/kg	66.7	333
108-60-1	bis(2-Chloroisopropyl)ether		1370	ug/kg	66.7	333
95-48-7	o-Cresol		1410	ug/kg	66.7	333
65794-96-9	m,p-Cresols		1350	ug/kg	100	333
67-72-1	Hexachloroethane		1190	ug/kg	66.7	333
98-95-3	Nitrobenzene		1300	ug/kg	66.7	333
78-59-1	Isophorone		1190	ug/kg	66.7	333
88-75-5	2-Nitrophenol		1330	ug/kg	66.7	333
105-67-9	2,4-Dimethylphenol		1220	ug/kg	117	333
111-91-1	bis(2-Chloroethoxy)methane		1190	ug/kg	66.7	333
120-83-2	2,4-Dichlorophenol		1230	ug/kg	66.7	333
65-85-0	Benzoic acid		2450	ug/kg	167	667
91-20-3	Naphthalene		1120	ug/kg	10.0	33.3
106-47-8	4-Chloroaniline		999	ug/kg	66.7	333
87-68-3	Hexachlorobutadiene		1210	ug/kg	66.7	333
91-57-6	2-Methylnaphthalene		1270	ug/kg	6.67	33.3
77-47-4	Hexachlorocyclopentadiene		1390	ug/kg	66.7	333
88-06-2	2,4,6-Trichlorophenol		1240	ug/kg	66.7	333
95-95-4	2,4,5-Trichlorophenol		1400	ug/kg	66.7	333
91-58-7	2-Chloronaphthalene		1130	ug/kg	11.0	33.3
88-74-4	2-Nitroaniline		1250	ug/kg	66.7	333
99-09-2	o-Nitroaniline					
	3-Nitroaniline		1130	ug/kg	66.7	333

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210  
Lab Sample ID: 1202015598  
Client Sample: QC for batch 941701  
Client ID: LCS for batch 941701  
Batch ID: 941702  
Run Date: 01/19/2010 12:11  
Prep Date: 01/14/2010 19:34  
Data File: s7a1909.d

Client: LANL010  
Method: SW846 8270C  
Inst: MSD7.1  
Analyst: JMB3  
Aliquot: 30 g  
Column: J&W DB-5MS

Matrix: SOIL  
Project: QC  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate		1330	ug/kg	66.7	333
606-20-2	2,6-Dinitrotoluene		1350	ug/kg	33.3	333
208-96-8	Acenaphthylene		1260	ug/kg	10.0	33.3
51-28-5	2,4-Dinitrophenol		1240	ug/kg	127	667
132-64-9	Dibenzofuran		1480	ug/kg	66.7	333
84-66-2	Diethylphthalate		1300	ug/kg	66.7	333
86-73-7	Fluorene		1150	ug/kg	10.0	33.3
7005-72-3	4-Chlorophenylphenylether		1340	ug/kg	66.7	333
534-52-1	2-Methyl-4,6-dinitrophenol		1100	ug/kg	66.7	333
100-01-6	4-Nitroaniline		1240	ug/kg	100	333
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine		1180	ug/kg	66.7	333
122-66-7	Azobenzene		1250	ug/kg	66.7	333
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether		1190	ug/kg	66.7	333
118-74-1	Hexachlorobenzene		1160	ug/kg	66.7	333
85-01-8	Phenanthrene		1140	ug/kg	10.0	33.3
120-12-7	Anthracene		1260	ug/kg	6.67	33.3
84-74-2	Di-n-butylphthalate		1310	ug/kg	66.7	333
206-44-0	Fluoranthene		1290	ug/kg	10.0	33.3
85-68-7	Butylbenzylphthalate		1350	ug/kg	66.7	333
56-55-3	Benzo(a)anthracene		1260	ug/kg	10.0	33.3
91-94-1	3,3'-Dichlorobenzidine		1150	ug/kg	100	333
218-01-9	Chrysene		1290	ug/kg	10.0	33.3
117-81-7	bis(2-Ethylhexyl)phthalate		1430	ug/kg	66.7	333
117-84-0	Di-n-octylphthalate		1290	ug/kg	66.7	333
205-99-2	Benzo(b)fluoranthene		1290	ug/kg	10.0	33.3
207-08-9	Benzo(k)fluoranthene		1260	ug/kg	10.0	33.3
50-32-8	Benzo(a)pyrene		1290	ug/kg	10.0	33.3
193-39-5	Indeno(1,2,3-cd)pyrene		1460	ug/kg	10.0	33.3
53-70-3	Dibenzo(a,h)anthracene		1500	ug/kg	10.0	33.3
191-24-2	Benzo(ghi)perylene		1470	ug/kg	10.0	33.3
120-82-1	1,2,4-Trichlorobenzene		1200	ug/kg	66.7	333

Data File: /chem/MSD7.i/s011910.b/s7a1909.d  
Report Date: 19-Jan-2010 14:36

Page 1

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Data file : /chem/MSD7.i/s011910.b/s7a1909.d  
Lab Smp Id: 1202015598 Client Smp ID: SBLK01LCS  
Inj Date : 19-JAN-2010 12:11  
Operator : JMB3 Inst ID: MSD7.i  
Smp Info : |1202015598|941702|1|SVMF|1|SBLK01LCS  
Misc Info : |MSD8270\_S|WBN100107-02|  
Comment : Column: J&W Scientific DB-5MS 25m x 0.2mm x 0.33um film thickness  
Method : /chem/MSD7.i/s011910.b/MSD7-M8270C-AQA-011310.m  
Meth Date : 19-Jan-2010 11:56 jen00986 Quant Type: ISTD  
Cal Date : 15-JAN-2010 19:06 Cal File: s7a1515.d  
Als bottle: 9 QC Sample: LCS  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1210.sub  
Target Version: 3.50  
Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.793	3.793	(1.000)	314418	40.0000	
* 29 Naphthalene-d8	136	4.650	4.654	(1.000)	1172531	40.0000	
* 46 Acenaphthene-d10	164	5.897	5.897	(1.000)	610198	40.0000	
* 67 Phenanthrene-d10	188	7.043	7.048	(1.000)	1164802	40.0000	
* 91 Chrysene-d12	240	9.426	9.426	(1.000)	958049	40.0000	
* 98 Perylene-d12	264	10.967	10.972	(1.000)	785801	40.0000	
\$ 3 2-Fluorophenol	112	2.988	2.984	(0.788)	635263	70.3104	2340
\$ 5 Phenol-d5	99	3.513	3.508	(0.926)	778994	66.8719	2230
\$ 20 Nitrobenzene-d5	82	4.149	4.154	(0.892)	396340	40.9771	1360
\$ 39 2-Fluorobiphenyl	172	5.391	5.391	(0.914)	629863	35.0291	1170
\$ 60 2,4,6-Tribromophenol	329	6.480	6.484	(1.099)	121572	79.1946	2640
\$ 81 p-Terphenyl-d14	244	8.406	8.406	(0.892)	676428	41.3382	1380

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
6 Phenol	94	3.523	3.518	(0.929)	394085	33.8616	1130
8 2-Chlorophenol	128	3.658	3.658	(0.964)	307172	37.6060	1250
11 1,4-Dichlorobenzene	146	3.802	3.807	(1.003)	326197	36.3757	1210
17 N-Nitrosodipropylamine	70	4.029	4.033	(1.062)	237923	34.8397	1160 (Q)
28 1,2,4-Trichlorobenzene	180	4.602	4.601	(0.990)	276345	36.0793	1200
33 4-Chloro-3-methylphenol	107	5.001	4.996	(1.076)	277621	38.2015	1270
47 Acenaphthene	154	5.921	5.921	(1.004)	540794	33.6931	1120
50 2,4-Dinitrotoluene	165	6.008	6.012	(1.019)	204154	40.3552	1340
52 4-Nitrophenol	139	5.940	5.935	(1.007)	107422	37.2217	1240
65 Pentachlorophenol	266	6.874	6.874	(0.976)	84821	37.8148	1260
79 Pyrene	202	8.300	8.300	(0.880)	1105100	36.4980	1220
2 Pyridine	79	2.343	2.324	(0.618)	274428	34.2484	1140
4 Aniline	66	3.576	3.581	(0.943)	153770	29.2859	976 (Q)
7 bis(2-Chloroethyl) ether	63	3.595	3.595	(0.948)	356341	37.4464	1250
9 1,3-Dichlorobenzene	146	3.759	3.759	(0.991)	342691	35.8492	1190
12 Benzyl alcohol	108	3.860	3.860	(1.018)	227990	38.4750	1280
13 1,2-Dichlorobenzene	146	3.903	3.908	(1.029)	314645	38.2895	1280
14 bis(2-Chloroisopropyl) ether	45	3.937	3.937	(1.038)	906317	40.9773	1360
15 o-Cresol	107	3.913	3.913	(1.032)	262962	42.1852	1410
18 m,p-Cresols	107	4.009	4.014	(1.057)	380529	40.5058	1350
19 Hexachloroethane	117	4.130	4.134	(1.089)	130463	35.7848	1190
21 Nitrobenzene	77	4.163	4.168	(0.895)	371022	38.9304	1300
22 Isophorone	82	4.317	4.322	(0.929)	677056	35.7984	1190
23 2-Nitrophenol	139	4.375	4.380	(0.941)	157901	39.7862	1330
24 2,4-Dimethylphenol	122	4.370	4.375	(0.940)	275287	36.6867	1220
25 bis(2-Chloroethoxy)methane	93	4.438	4.443	(0.954)	385952	35.6843	1190
26 2,4-Dichlorophenol	162	4.539	4.539	(0.976)	250008	36.9387	1230
27 Benzoic acid	105	4.447	4.433	(0.956)	385685	73.4536	2450
30 Naphthalene	128	4.669	4.669	(1.004)	897529	33.6633	1120
31 4-Chloroaniline	127	4.683	4.683	(1.007)	331270	29.9734	999
32 Hexachlorobutadiene	225	4.732	4.736	(1.018)	143986	36.4244	1210
34 2-Methylnaphthalene	142	5.146	5.146	(1.107)	631263	38.0916	1270
36 Hexachlorocyclopentadiene	237	5.247	5.252	(0.890)	130613	41.8246	1390
37 2,4,6-Trichlorophenol	196	5.333	5.333	(0.904)	158203	37.2267	1240
38 2,4,5-Trichlorophenol	196	5.362	5.357	(0.909)	200431	42.0768	1400
40 2-Chloronaphthalene	162	5.497	5.497	(0.932)	537009	33.8607	1130
42 o-Nitroaniline	65	5.550	5.555	(0.941)	212372	37.4513	1250
41 m-Nitroaniline	138	5.844	5.849	(0.991)	137593	34.0192	1130
43 Dimethylphthalate	163	5.661	5.666	(0.960)	661272	39.8478	1330
44 2,6-Dinitrotoluene	165	5.719	5.719	(0.970)	157468	40.3888	1350
45 Acenaphthylene	152	5.796	5.801	(0.983)	975337	37.7572	1260
48 2,4-Dinitrophenol	184	5.916	5.916	(1.003)	52279	37.2331	1240 (Q)
49 Dibenzofuran	168	6.041	6.046	(1.024)	946752	44.3057	1480
51 Diethylphthalate	149	6.167	6.166	(1.046)	692324	38.9338	1300
53 Fluorene	166	6.297	6.301	(1.068)	657051	34.3818	1150
54 4-Chlorophenylphenylether	204	6.277	6.277	(1.064)	331043	40.1733	1340
55 2-Methyl-4,6-dinitrophenol	198	6.316	6.316	(0.897)	80236	33.0431	1100

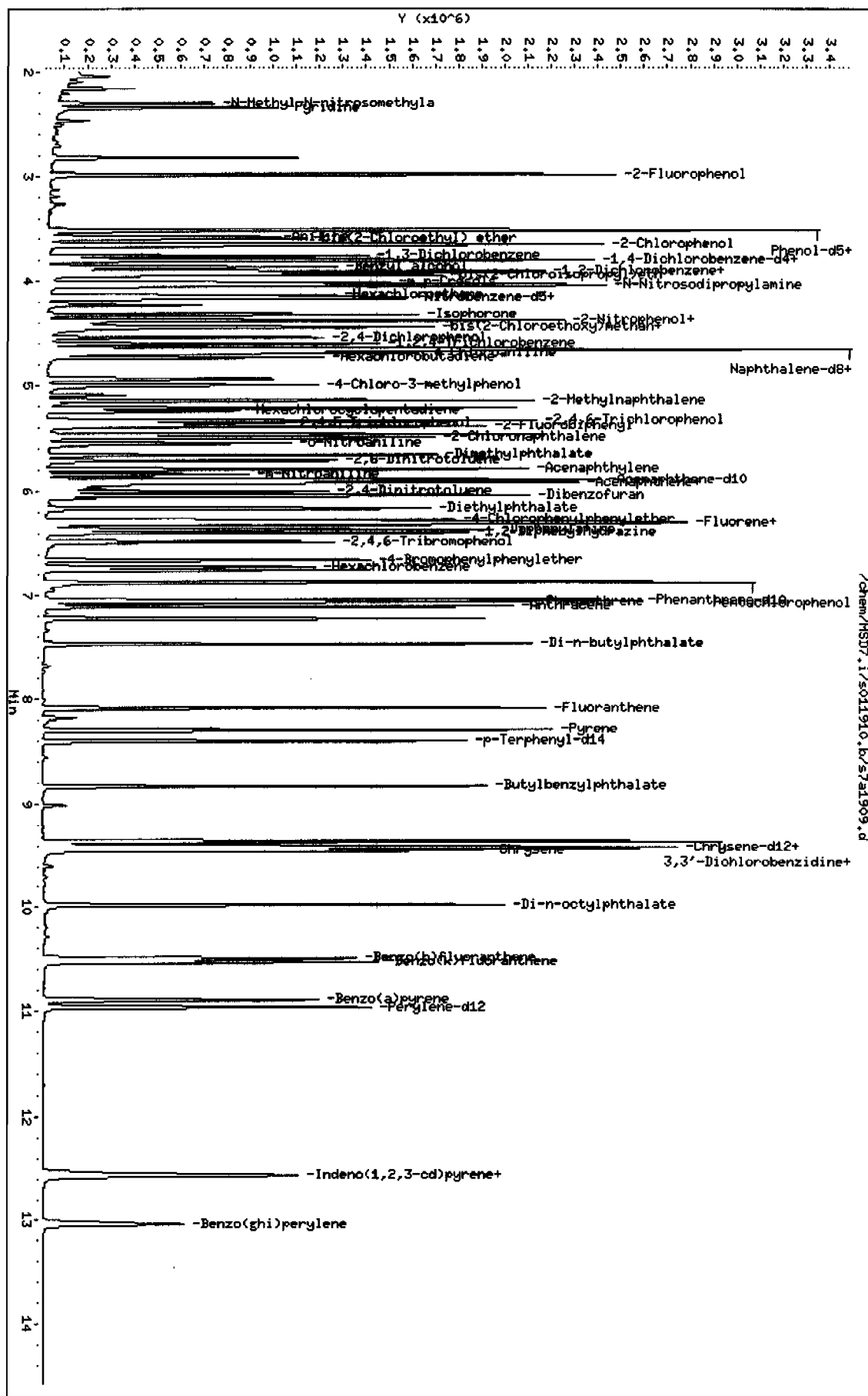
Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
56 p-Nitroaniline	138	6.297	6.301	(1.068)	134593	37.3447	1240
133 Diphenylamine	169	6.364	6.364	(0.904)	536360	35.3889	1180
58 1,2-Diphenylhydrazine	77	6.398	6.402	(0.908)	744984	37.4542	1250
61 4-Bromophenylphenylether	248	6.658	6.658	(0.945)	160742	35.7132	1190
63 Hexachlorobenzene	284	6.725	6.730	(0.955)	146591	34.8275	1160
68 Phenanthrene	178	7.062	7.067	(1.003)	878445	34.2294	1140
69 Anthracene	178	7.106	7.110	(1.009)	925424	37.8816	1260
72 Di-n-butylphthalate	149	7.467	7.467	(1.060)	1204310	39.2732	1310
76 Fluoranthene	202	8.088	8.093	(1.148)	1075045	38.7806	1290
85 Butylbenzylphthalate	149	8.834	8.839	(0.937)	526909	40.3537	1340
89 Benzo(a)anthracene	228	9.412	9.412	(0.998)	870520	37.8710	1260
90 3,3'-Dichlorobenzidine	252	9.364	9.359	(0.993)	217440	34.4926	1150
92 Chrysene	228	9.451	9.450	(1.003)	818497	38.7800	1290
93 bis(2-Ethylhexyl)phthalate	149	9.359	9.364	(0.993)	664295	42.9242	1430
94 Di-n-octylphthalate	149	9.975	9.980	(0.910)	1119058	38.8018	1290
95 Benzo(b)fluoranthene	252	10.495	10.500	(0.957)	791150	38.7658	1290
96 Benzo(k)fluoranthene	252	10.529	10.534	(0.960)	730326	37.7985	1260
97 Benzo(a)pyrene	252	10.895	10.900	(0.993)	668255	38.7321	1290
99 Indeno(1,2,3-cd)pyrene	276	12.556	12.561	(1.145)	568014	43.7778	1460
100 Dibenzo(a,h)anthracene	278	12.571	12.576	(1.146)	463784	45.1413	1500
101 Benzo(ghi)perylene	276	13.043	13.048	(1.189)	483132	44.2197	1470
1 N-Methyl-N-nitrosomethylamine	74	2.305	2.295	(0.608)	224982	33.3298	1110

# QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD7.1/s011910.b/57a1909.d  
 Date: 19-JAN-2010 12:11  
 Client ID: SBLK01LCS  
 Sample Info: 112020155981941702111SVH111SBLK01LCS  
 Volume Injected (uL): 0.5  
 Column Phase: J&W DB-5MS

Instrument: MSD7.1  
 Operator: JHB3  
 Column diameter: 0.20





**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

<b>SDG Number:</b> 10-1210	<b>Date Collected:</b> 01/07/2010 12:00	<b>Matrix:</b> R
<b>Lab Sample ID:</b> 1202015599	<b>Date Received:</b> 01/13/2010 08:55	<b>%Moisture:</b> 5.8
<b>Client Sample:</b> QC for batch 941701	<b>Client:</b> LANL010	<b>Project:</b> QC
<b>Client ID:</b> RE12-10-7243MS	<b>Method:</b> SW846 8270C	<b>SOP Ref:</b> GL-OA-E-009
<b>Batch ID:</b> 941702	<b>Inst:</b> MSD7.1	<b>Dilution:</b> 1
<b>Run Date:</b> 01/19/2010 18:04	<b>Analyst:</b> JMB3	<b>Inj. Vol:</b> .5 uL
<b>Prep Date:</b> 01/14/2010 19:34	<b>Aliquot:</b> 30.12 g	<b>Final Volume:</b> 1 mL
<b>Data File:</b> s7a1925.d	<b>Column:</b> J&W DB-5MS	<b>Level:</b> LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine		1020	ug/kg	70.5	353
108-95-2	Phenol		1140	ug/kg	70.5	353
95-57-8	2-Chlorophenol		1250	ug/kg	70.5	353
106-46-7	1,4-Dichlorobenzene		1140	ug/kg	70.5	353
621-64-7	N-Nitrosodipropylamine		1140	ug/kg	70.5	353
59-50-7	4-Chloro-3-methylphenol		1370	ug/kg	70.5	353
83-32-9	Acenaphthene		1160	ug/kg	11.6	35.3
121-14-2	2,4-Dinitrotoluene		1430	ug/kg	35.3	353
100-02-7	4-Nitrophenol		1510	ug/kg	116	353
87-86-5	Pentachlorophenol		1410	ug/kg	88.1	353
129-00-0	Pyrene		1310	ug/kg	10.6	35.3
110-86-1	Pyridine		930	ug/kg	70.5	353
62-53-3	Aniline		1090	ug/kg	106	353
111-44-4	bis(2-Chloroethyl) ether		1190	ug/kg	70.5	353
541-73-1	1,3-Dichlorobenzene		1120	ug/kg	70.5	353
100-51-6	Benzyl alcohol		1360	ug/kg	106	353
95-50-1	1,2-Dichlorobenzene		1220	ug/kg	70.5	353
108-60-1	bis(2-Chloroisopropyl)ether		1340	ug/kg	70.5	353
95-48-7	o-Cresol		1350	ug/kg	70.5	353
65794-96-9	m,p-Cresols		1370	ug/kg	106	353
67-72-1	Hexachloroethane		1140	ug/kg	70.5	353
98-95-3	Nitrobenzene		1260	ug/kg	70.5	353
78-59-1	Isophorone		1210	ug/kg	70.5	353
88-75-5	2-Nitrophenol		1280	ug/kg	70.5	353
105-67-9	2,4-Dimethylphenol		1300	ug/kg	123	353
111-91-1	bis(2-Chloroethoxy)methane		1180	ug/kg	70.5	353
120-83-2	2,4-Dichlorophenol		1290	ug/kg	70.5	353
65-85-0	Benzoic acid		2540	ug/kg	176	705
91-20-3	Naphthalene		1100	ug/kg	10.6	35.3
106-47-8	4-Chloroaniline		1110	ug/kg	70.5	353
87-68-3	Hexachlorobutadiene		1190	ug/kg	70.5	353
91-57-6	2-Methylnaphthalene		1290	ug/kg	7.05	35.3
77-47-4	Hexachlorocyclopentadiene		1130	ug/kg	70.5	353
88-06-2	2,4,6-Trichlorophenol		1360	ug/kg	70.5	353
95-95-4	2,4,5-Trichlorophenol		1510	ug/kg	70.5	353
91-58-7	2-Chloronaphthalene		1130	ug/kg	11.6	35.3
88-74-4	2-Nitroaniline		1350	ug/kg	70.5	353
99-09-2	o-Nitroaniline		1310	ug/kg	70.5	353
	3-Nitroaniline					

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210	Date Collected: 01/07/2010 12:00	Matrix: R
Lab Sample ID: 1202015599	Date Received: 01/13/2010 08:55	%Moisture: 5.8
Client Sample: QC for batch 941701	Client: LANL010	Project: QC
Client ID: RE12-10-7243MS	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 941702	Inst: MSD7.I	Dilution: 1
Run Date: 01/19/2010 18:04	Analyst: JMB3	Inj. Vol: .5 uL
Prep Date: 01/14/2010 19:34	Aliquot: 30.12 g	Final Volume: 1 mL
Data File: s7a1925.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate		1390	ug/kg	70.5	353
606-20-2	2,6-Dinitrotoluene		1430	ug/kg	35.3	353
208-96-8	Acenaphthylene		1290	ug/kg	10.6	35.3
51-28-5	2,4-Dinitrophenol		1080	ug/kg	134	705
132-64-9	Dibenzofuran		1510	ug/kg	70.5	353
84-66-2	Diethylphthalate		1370	ug/kg	70.5	353
86-73-7	Fluorene		1170	ug/kg	10.6	35.3
7005-72-3	4-Chlorophenylphenylether		1400	ug/kg	70.5	353
534-52-1	2-Methyl-4,6-dinitrophenol		1040	ug/kg	70.5	353
100-01-6	4-Nitroaniline		1410	ug/kg	106	353
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine		1260	ug/kg	70.5	353
122-66-7	Azobenzene		1300	ug/kg	70.5	353
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether		1270	ug/kg	70.5	353
118-74-1	Hexachlorobenzene		1250	ug/kg	70.5	353
85-01-8	Phenanthrene		1210	ug/kg	10.6	35.3
120-12-7	Anthracene		1320	ug/kg	7.05	35.3
84-74-2	Di-n-butylphthalate		1400	ug/kg	70.5	353
206-44-0	Fluoranthene		1360	ug/kg	10.6	35.3
85-68-7	Butylbenzylphthalate		1460	ug/kg	70.5	353
56-55-3	Benzo(a)anthracene		1340	ug/kg	10.6	35.3
91-94-1	3,3'-Dichlorobenzidine		1320	ug/kg	106	353
218-01-9	Chrysene		1400	ug/kg	10.6	35.3
117-81-7	bis(2-Ethylhexyl)phthalate		1500	ug/kg	70.5	353
117-84-0	Di-n-octylphthalate		1410	ug/kg	70.5	353
205-99-2	Benzo(b)fluoranthene		1320	ug/kg	10.6	35.3
207-08-9	Benzo(k)fluoranthene		1410	ug/kg	10.6	35.3
50-32-8	Benzo(a)pyrene		1420	ug/kg	10.6	35.3
193-39-5	Indeno(1,2,3-cd)pyrene		1550	ug/kg	10.6	35.3
53-70-3	Dibenzo(a,h)anthracene		1590	ug/kg	10.6	35.3
191-24-2	Benzo(ghi)perylene		1530	ug/kg	10.6	35.3
120-82-1	1,2,4-Trichlorobenzene		1180	ug/kg	70.5	353

Data File: /chem/MSD7.i/s011910.b/s7a1925.d  
Report Date: 19-Jan-2010 19:52

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Data file : /chem/MSD7.i/s011910.b/s7a1925.d  
Lab Smp Id: 1202015599 Client Smp ID: RE12-10-7243MS  
Inj Date : 19-JAN-2010 18:04  
Operator : JMB3 Inst ID: MSD7.i  
Smp Info : |1202015599|941702|1|SVMF|1|MS  
Misc Info : |MSD8270\_S|WBN100107-02|  
Comment : Column: J&W Scientific DB-5MS 25m x 0.2mm x 0.33um film thickness  
Method : /chem/MSD7.i/s011910.b/MSD7-M8270C-AQA-011310.m  
Meth Date : 19-Jan-2010 18:16 llo00884 Quant Type: ISTD  
Cal Date : 15-JAN-2010 19:06 Cal File: s7a1515.d  
Als bottle: 24 QC Sample: MS  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1210.sub  
Target Version: 3.50  
Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.12000	weight of sample
M	5.83610	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG			RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT REL RT		ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.788	3.793 (1.000)	354488	40.0000	
* 29 Naphthalene-d8	136	4.650	4.654 (1.000)	1327601	40.0000	
* 46 Acenaphthene-d10	164	5.897	5.897 (1.000)	715637	40.0000	
* 67 Phenanthrene-d10	188	7.043	7.048 (1.000)	1359706	40.0000	
* 91 Chrysene-d12	240	9.427	9.426 (1.000)	1067174	40.0000	
* 98 Perylene-d12	264	10.972	10.972 (1.000)	852674	40.0000	
\$ 3 2-Fluorophenol	112	2.989	2.984 (0.789)	643615	63.1827	2230
\$ 5 Phenol-d5	99	3.513	3.508 (0.928)	823485	62.7006	2210
\$ 20 Nitrobenzene-d5	82	4.149	4.154 (0.892)	402615	36.7637	1300
\$ 39 2-Fluorobiphenyl	172	5.391	5.391 (0.914)	684282	32.4486	1140
\$ 60 2,4,6-Tribromophenol	329	6.484	6.484 (1.100)	148297	82.3702	2900
\$ 81 p-Terphenyl-d14	244	8.406	8.406 (0.892)	765862	42.0178	1480

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
6 Phenol	94	3.523	3.518	(0.930)	423192	32.2523	1140
8 2-Chlorophenol	128	3.658	3.658	(0.966)	325226	35.3156	1240
11 1,4-Dichlorobenzene	146	3.802	3.807	(1.004)	328157	32.4579	1140
17 N-Nitrosodipropylamine	70	4.029	4.033	(1.064)	248721	32.3040	1140 (Q)
28 1,2,4-Trichlorobenzene	180	4.602	4.601	(0.990)	289409	33.3715	1180
33 4-Chloro-3-methylphenol	107	5.001	4.996	(1.076)	320621	38.9651	1370
47 Acenaphthene	154	5.921	5.921	(1.004)	618258	32.8441	1160
50 2,4-Dinitrotoluene	165	6.008	6.012	(1.019)	240700	40.5690	1430
52 4-Nitrophenol	139	5.950	5.935	(1.009)	145397	42.9571	1510
65 Pentachlorophenol	266	6.879	6.874	(0.977)	104564	39.9342	1410
79 Pyrene	202	8.305	8.300	(0.881)	1249801	37.0562	1310
2 Pyridine	79	2.353	2.324	(0.621)	238239	26.3713	930
4 Aniline	66	3.576	3.581	(0.944)	183747	31.0393	1090
7 bis(2-Chloroethyl) ether	63	3.590	3.595	(0.948)	362844	33.8197	1190
9 1,3-Dichlorobenzene	146	3.759	3.759	(0.992)	343355	31.8585	1120
12 Benzyl alcohol	108	3.860	3.860	(1.019)	258472	38.6885	1360
13 1,2-Dichlorobenzene	146	3.903	3.908	(1.030)	319546	34.4904	1220
14 bis(2-Chloroisopropyl) ether	45	3.932	3.937	(1.038)	950057	38.0995	1340
15 o-Cresol	107	3.913	3.913	(1.033)	269993	38.4172	1350
18 m,p-Cresols	107	4.009	4.014	(1.058)	411058	38.8095	1370
19 Hexachloroethane	117	4.130	4.134	(1.090)	132617	32.2638	1140
21 Nitrobenzene	77	4.163	4.168	(0.895)	385065	35.6845	1260
22 Isophorone	82	4.318	4.322	(0.929)	737362	34.4331	1210
23 2-Nitrophenol	139	4.375	4.380	(0.941)	163234	36.3257	1280
24 2,4-Dimethylphenol	122	4.375	4.375	(0.941)	314144	36.9750	1300
25 bis(2-Chloroethoxy)methane	93	4.438	4.443	(0.954)	410214	33.4974	1180
26 2,4-Dichlorophenol	162	4.539	4.539	(0.976)	280049	36.5442	1290
27 Benzoic acid	105	4.452	4.433	(0.958)	426633	71.9553	2540
30 Naphthalene	128	4.664	4.669	(1.003)	942103	31.2078	1100 (Q)
31 4-Chloroaniline	127	4.684	4.683	(1.007)	394654	31.5374	1110
32 Hexachlorobutadiene	225	4.732	4.736	(1.018)	150471	33.6187	1180
34 2-Methylnaphthalene	142	5.146	5.146	(1.107)	688062	36.6693	1290
36 Hexachlorocyclopentadiene	237	5.247	5.252	(0.890)	117801	32.1641	1130
37 2,4,6-Trichlorophenol	196	5.334	5.333	(0.904)	192252	38.5733	1360
38 2,4,5-Trichlorophenol	196	5.367	5.357	(0.910)	239683	42.9035	1510
40 2-Chloronaphthalene	162	5.497	5.497	(0.932)	595785	32.0318	1130
42 o-Nitroaniline	65	5.555	5.555	(0.942)	253955	38.1860	1350
41 m-Nitroaniline	138	5.844	5.849	(0.991)	176120	37.1290	1310
43 Dimethylphthalate	163	5.661	5.666	(0.960)	770034	39.5651	1390
44 2,6-Dinitrotoluene	165	5.719	5.719	(0.970)	186043	40.6872	1430
45 Acenaphthylene	152	5.796	5.801	(0.983)	1110474	36.6548	1290
48 2,4-Dinitrophenol	184	5.916	5.916	(1.003)	50244	30.5112	1080 (Q)
49 Dibenzofuran	168	6.041	6.046	(1.024)	1073956	42.8537	1510
51 Diethylphthalate	149	6.167	6.166	(1.046)	811872	38.9298	1370
53 Fluorene	166	6.301	6.301	(1.069)	743172	33.1586	1170
54 4-Chlorophenylphenylether	204	6.277	6.277	(1.064)	383054	39.6361	1400
55 2-Methyl-4,6-dinitrophenol	198	6.316	6.316	(0.897)	83851	29.5817	1040

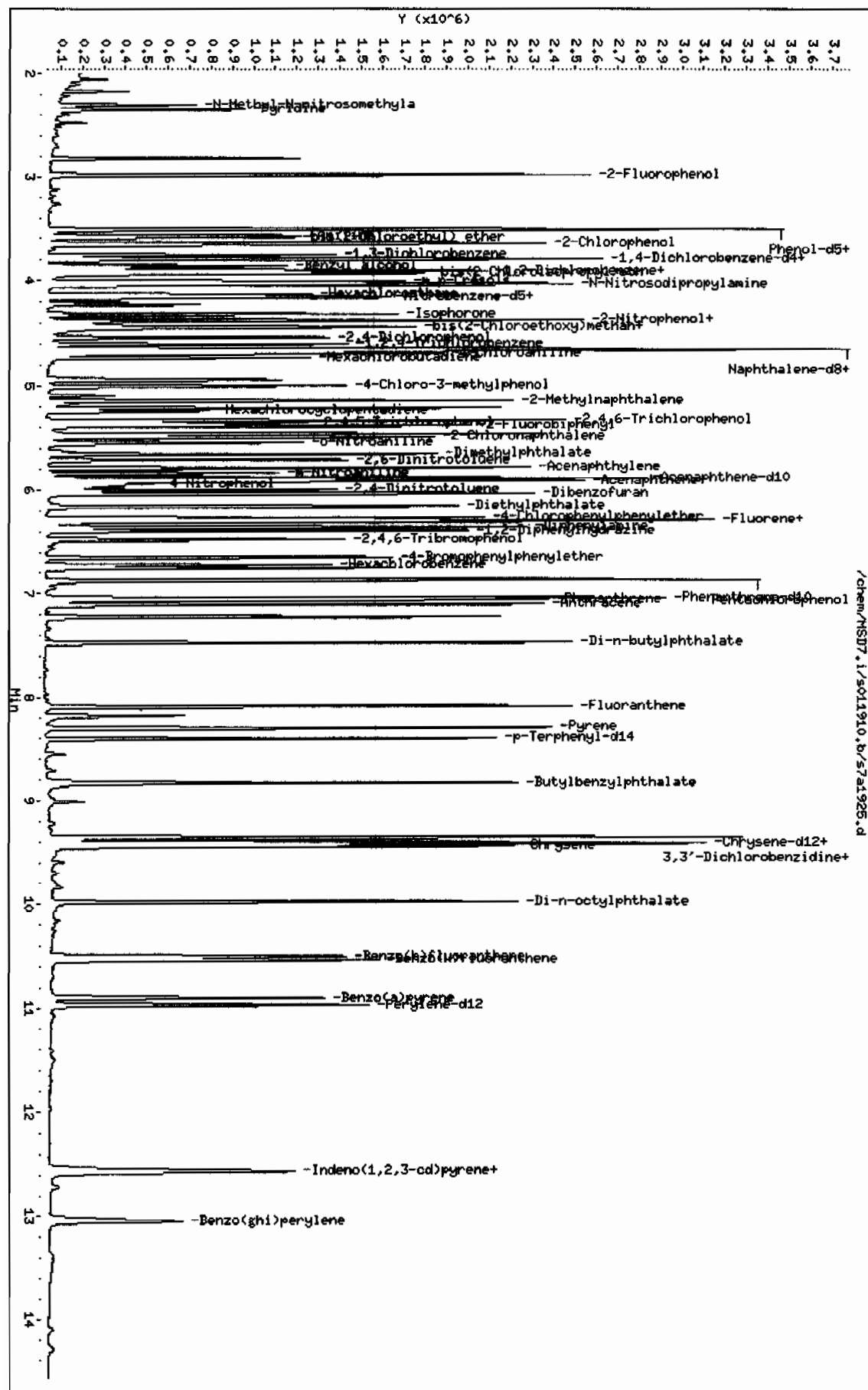
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng/ul)	FINAL (ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
56 p-Nitroaniline	138	6.297	6.301	(1.068)	168948	39.9700	1410
133 Diphenylamine	169	6.364	6.364	(0.904)	631673	35.7035	1260
58 1,2-Diphenylhydrazine	77	6.398	6.402	(0.908)	857572	36.9344	1300
61 4-Bromophenylphenylether	248	6.658	6.658	(0.945)	188790	35.9322	1270
63 Hexachlorobenzene	284	6.725	6.730	(0.955)	174240	35.4625	1250
68 Phenanthrene	178	7.067	7.067	(1.003)	1030791	34.4082	1210
69 Anthracene	178	7.106	7.110	(1.009)	1064808	37.3393	1320
72 Di-n-butylphthalate	149	7.467	7.467	(1.060)	1423701	39.7726	1400
76 Fluoranthene	202	8.088	8.093	(1.148)	1248141	38.5708	1360
85 Butylbenzylphthalate	149	8.839	8.839	(0.938)	602312	41.4115	1460
89 Benzo(a)anthracene	228	9.412	9.412	(0.998)	974166	38.0464	1340
90 3,3'-Dichlorobenzidine	252	9.364	9.359	(0.993)	263861	37.5763	1320
92 Chrysene	228	9.451	9.450	(1.003)	936029	39.8137	1400
93 bis(2-Ethylhexyl)phthalate	149	9.364	9.364	(0.993)	735673	42.6754	1500
94 Di-n-octylphthalate	149	9.976	9.980	(0.909)	1248184	39.8848	1410
95 Benzo(b)fluoranthene	252	10.500	10.500	(0.957)	829111	37.4397	1320
96 Benzo(k)fluoranthene	252	10.534	10.534	(0.960)	836528	39.8995	1410
97 Benzo(a)pyrene	252	10.900	10.900	(0.993)	754816	40.3181	1420
99 Indeno(1,2,3-cd)pyrene	276	12.561	12.561	(1.145)	618757	43.9485	1550
100 Dibenzo(a,h)anthracene	278	12.576	12.576	(1.146)	504026	45.2106	1590
101 Benzo(ghi)perylene	276	13.048	13.048	(1.189)	513382	43.3032	1530
1 N-Methyl-N-nitrosomethylamine	74	2.314	2.295	(0.611)	221035	29.0437	1020(Q)

# QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD7.i/s011910.b/s7a1926.d  
 Date: 19-JAN-2010 18:04  
 Client ID: RE12-10-7243MS  
 Sample Info: 1120201559194170211.S\NH11.INS  
 Volume Injected (uL): 0.5  
 Column phase: JMW DB-SMS

Instrument: MSD7.i  
 Operator: JHB3  
 Column diameter: 0.20



**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1210	Date Collected: 01/07/2010 12:00	Matrix: R
Lab Sample ID: 1202015600	Date Received: 01/13/2010 08:55	%Moisture: 5.8
Client Sample: QC for batch 941701	Client: LANL010	Project: QC
Client ID: RE12-10-7243MSD	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 941702	Inst: MSD7.I	Dilution: 1
Run Date: 01/19/2010 18:26	Analyst: JMB3	Inj. Vol: .5 uL
Prep Date: 01/14/2010 19:34	Aliquot: 30.05 g	Final Volume: 1 mL
Data File: s7a1926.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine		972	ug/kg	70.7	353
108-95-2	Phenol		1080	ug/kg	70.7	353
95-57-8	2-Chlorophenol		1180	ug/kg	70.7	353
106-46-7	1,4-Dichlorobenzene		1120	ug/kg	70.7	353
621-64-7	N-Nitrosodipropylamine		1090	ug/kg	70.7	353
59-50-7	4-Chloro-3-methylphenol		1220	ug/kg	70.7	353
83-32-9	Acenaphthene		1120	ug/kg	11.7	35.3
121-14-2	2,4-Dinitrotoluene		1340	ug/kg	35.3	353
100-02-7	4-Nitrophenol		1370	ug/kg	117	353
87-86-5	Pentachlorophenol		1270	ug/kg	88.4	353
129-00-0	Pyrene		1270	ug/kg	10.6	35.3
110-86-1	Pyridine		908	ug/kg	70.7	353
62-53-3	Aniline		1090	ug/kg	106	353
111-44-4	bis(2-Chloroethyl) ether		1160	ug/kg	70.7	353
541-73-1	1,3-Dichlorobenzene		1100	ug/kg	70.7	353
100-51-6	Benzyl alcohol		1200	ug/kg	106	353
95-50-1	1,2-Dichlorobenzene		1190	ug/kg	70.7	353
108-60-1	bis(2-Chloroisopropyl)ether		1320	ug/kg	70.7	353
95-48-7	o-Cresol		1340	ug/kg	70.7	353
65794-96-9	m,p-Cresols		1290	ug/kg	106	353
67-72-1	Hexachloroethane		1090	ug/kg	70.7	353
98-95-3	Nitrobenzene		1150	ug/kg	70.7	353
78-59-1	Isophorone		1100	ug/kg	70.7	353
88-75-5	2-Nitrophenol		1180	ug/kg	70.7	353
105-67-9	2,4-Dimethylphenol		1210	ug/kg	124	353
111-91-1	bis(2-Chloroethoxy)methane		1080	ug/kg	70.7	353
120-83-2	2,4-Dichlorophenol		1160	ug/kg	70.7	353
65-85-0	Benzoic acid		2060	ug/kg	177	707
91-20-3	Naphthalene		1070	ug/kg	10.6	35.3
106-47-8	4-Chloroaniline		1110	ug/kg	70.7	353
87-68-3	Hexachlorobutadiene		1090	ug/kg	70.7	353
91-57-6	2-Methylnaphthalene		1210	ug/kg	7.07	35.3
77-47-4	Hexachlorocyclopentadiene		940	ug/kg	70.7	353
88-06-2	2,4,6-Trichlorophenol		1340	ug/kg	70.7	353
95-95-4	2,4,5-Trichlorophenol		1400	ug/kg	70.7	353
91-58-7	2-Chloronaphthalene		1100	ug/kg	11.7	35.3
88-74-4	2-Nitroaniline		1250	ug/kg	70.7	353
99-09-2	o-Nitroaniline					
	3-Nitroaniline		1280	ug/kg	70.7	353

Semi-Volatile  
Certificate of Analysis  
Sample Summary

SDG Number: 10-1210	Date Collected: 01/07/2010 12:00	Matrix: R
Lab Sample ID: 1202015600	Date Received: 01/13/2010 08:55	%Moisture: 5.8
Client Sample: QC for batch 941701	Client: LANL010	Project: QC
Client ID: RE12-10-7243MSD	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 941702	Inst: MSD7J	Dilution: 1
Run Date: 01/19/2010 18:26	Analyst: JMB3	Inj. Vol: .5 uL
Prep Date: 01/14/2010 19:34	Aliquot: 30.05 g	Final Volume: 1 mL
Data File: s7a1926.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate		1350	ug/kg	70.7	353
606-20-2	2,6-Dinitrotoluene		1350	ug/kg	35.3	353
208-96-8	Acenaphthylene		1270	ug/kg	10.6	35.3
51-28-5	2,4-Dinitrophenol		735	ug/kg	134	707
132-64-9	Dibenzofuran		1490	ug/kg	70.7	353
84-66-2	Diethylphthalate		1330	ug/kg	70.7	353
86-73-7	Fluorene		1180	ug/kg	10.6	35.3
7005-72-3	4-Chlorophenylphenylether		1340	ug/kg	70.7	353
534-52-1	2-Methyl-4,6-dinitrophenol		823	ug/kg	70.7	353
100-01-6	4-Nitroaniline		1450	ug/kg	106	353
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine		1240	ug/kg	70.7	353
122-66-7	Azobenzene		1270	ug/kg	70.7	353
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether		1200	ug/kg	70.7	353
118-74-1	Hexachlorobenzene		1160	ug/kg	70.7	353
85-01-8	Phenanthrene		1210	ug/kg	10.6	35.3
120-12-7	Anthracene		1310	ug/kg	7.07	35.3
84-74-2	Di-n-butylphthalate		1400	ug/kg	70.7	353
206-44-0	Fluoranthene		1380	ug/kg	10.6	35.3
85-68-7	Butylbenzylphthalate		1420	ug/kg	70.7	353
56-55-3	Benzo(a)anthracene		1300	ug/kg	10.6	35.3
91-94-1	3,3'-Dichlorobenzidine		1300	ug/kg	106	353
218-01-9	Chrysene		1390	ug/kg	10.6	35.3
117-81-7	bis(2-Ethylhexyl)phthalate		1520	ug/kg	70.7	353
117-84-0	Di-n-octylphthalate		1390	ug/kg	70.7	353
205-99-2	Benzo(b)fluoranthene		1310	ug/kg	10.6	35.3
207-08-9	Benzo(k)fluoranthene		1370	ug/kg	10.6	35.3
50-32-8	Benzo(a)pyrene		1370	ug/kg	10.6	35.3
193-39-5	Indeno(1,2,3-cd)pyrene		1490	ug/kg	10.6	35.3
53-70-3	Dibenzo(a,h)anthracene		1540	ug/kg	10.6	35.3
191-24-2	Benzo(ghi)perylene		1460	ug/kg	10.6	35.3
120-82-1	1,2,4-Trichlorobenzene		1110	ug/kg	70.7	353



Data File: /chem/MSD7.i/s011910.b/s7a1926.d  
Report Date: 19-Jan-2010 19:52

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Data file : /chem/MSD7.i/s011910.b/s7a1926.d  
Lab Smp Id: 1202015600 Client Smp ID: RE12-10-7243MSD  
Inj Date : 19-JAN-2010 18:26  
Operator : JMB3 Inst ID: MSD7.i  
Smp Info : |1202015600|941702|1|SVMF|1|MSD  
Misc Info : |MSD8270\_S|WBN100107-02|  
Comment : Column: J&W Scientific DB-5MS 25m x 0.2mm x 0.33um film thickness  
Method : /chem/MSD7.i/s011910.b/MSD7-M8270C-AQA-011310.m  
Meth Date : 19-Jan-2010 18:16 llo00884 Quant Type: ISTD  
Cal Date : 15-JAN-2010 19:06 Cal File: s7a1515.d  
Als bottle: 25 QC Sample: MSD  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1210.sub  
Target Version: 3.50  
Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.05000	weight of sample
M	5.83610	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4		152	3.793	3.793	(1.000)	222060	40.0000	
* 29 Naphthalene-d8		136	4.650	4.654	(1.000)	851903	40.0000	
* 46 Acenaphthene-d10		164	5.892	5.897	(1.000)	432924	40.0000	
* 67 Phenanthrene-d10		188	7.043	7.048	(1.000)	834207	40.0000	
* 91 Chrysene-d12		240	9.422	9.426	(1.000)	696736	40.0000	
* 98 Perylene-d12		264	10.963	10.972	(1.000)	555558	40.0000	
\$ 3 2-Fluorophenol		112	2.988	2.984	(0.788)	397459	62.2867	2200
\$ 5 Phenol-d5		99	3.513	3.508	(0.926)	502058	61.0240	2160
\$ 20 Nitrobenzene-d5		82	4.149	4.154	(0.892)	234951	33.4337	1180
\$ 39 2-Fluorobiphenyl		172	5.391	5.391	(0.915)	415391	32.5611	1150
\$ 60 2,4,6-Tribromophenol		329	6.480	6.484	(1.100)	83214	76.4039	2700
\$ 81 p-Terphenyl-d14		244	8.406	8.406	(0.892)	484792	40.7385	1440

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
6 Phenol	94	3.523	3.518	(0.929)	250585	30.4866	1080
8 2-Chlorophenol	128	3.658	3.658	(0.964)	193419	33.5283	1180
11 1,4-Dichlorobenzene	146	3.802	3.807	(1.003)	201233	31.7738	1120
17 N-Nitrosodipropylamine	70	4.024	4.033	(1.061)	148601	30.8103	1090 (Q)
28 1,2,4-Trichlorobenzene	180	4.602	4.601	(0.990)	174637	31.3817	1110
33 4-Chloro-3-methylphenol	107	5.001	4.996	(1.076)	181980	34.4655	1220
47 Acenaphthene	154	5.916	5.921	(1.004)	362501	31.8330	1120
50 2,4-Dinitrotoluene	165	6.008	6.012	(1.020)	136463	38.0202	1340
52 4-Nitrophenol	139	5.940	5.935	(1.008)	79177	38.6687	1370
65 Pentachlorophenol	266	6.874	6.874	(0.976)	57802	35.9813	1270
79 Pyrene	202	8.300	8.300	(0.881)	793215	36.0229	1270
2 Pyridine	79	2.324	2.324	(0.613)	145402	25.6933	908
4 Aniline	66	3.576	3.581	(0.943)	114362	30.8393	1090
7 bis(2-Chloroethyl) ether	63	3.590	3.595	(0.947)	221117	32.9005	1160
9 1,3-Dichlorobenzene	146	3.759	3.759	(0.991)	209259	30.9954	1100
12 Benzyl alcohol	108	3.860	3.860	(1.018)	142459	34.0400	1200
13 1,2-Dichlorobenzene	146	3.903	3.908	(1.029)	195985	33.7691	1190
14 bis(2-Chloroisopropyl) ether	45	3.937	3.937	(1.038)	584202	37.3993	1320
15 o-Cresol	107	3.913	3.913	(1.032)	166422	37.8020	1340
18 m,p-Cresols	107	4.009	4.014	(1.057)	241309	36.3697	1280
19 Hexachloroethane	117	4.130	4.134	(1.089)	79542	30.8919	1090
21 Nitrobenzene	77	4.163	4.168	(0.895)	224981	32.4914	1150
22 Isophorone	82	4.313	4.322	(0.928)	428700	31.1980	1100
23 2-Nitrophenol	139	4.375	4.380	(0.941)	96403	33.4327	1180
24 2,4-Dimethylphenol	122	4.370	4.375	(0.940)	186553	34.2184	1210
25 bis(2-Chloroethoxy) methane	93	4.438	4.443	(0.954)	241166	30.6898	1080
26 2,4-Dichlorophenol	162	4.539	4.539	(0.976)	161903	32.9243	1160
27 Benzoic acid	105	4.428	4.433	(0.952)	214313	58.1566	2060
30 Naphthalene	128	4.664	4.669	(1.003)	585784	30.2399	1070 (Q)
31 4-Chloroaniline	127	4.683	4.683	(1.007)	252372	31.4288	1110
32 Hexachlorobutadiene	225	4.732	4.736	(1.018)	88573	30.8394	1090
34 2-Methylnaphthalene	142	5.146	5.146	(1.107)	413147	34.3129	1210
36 Hexachlorocyclopentadiene	237	5.252	5.252	(0.891)	58905	26.5862	940
37 2,4,6-Trichlorophenol	196	5.334	5.333	(0.905)	114287	37.9047	1340
38 2,4,5-Trichlorophenol	196	5.362	5.357	(0.910)	133440	39.4841	1400
40 2-Chloronaphthalene	162	5.497	5.497	(0.933)	349516	31.0628	1100
42 o-Nitroaniline	65	5.550	5.555	(0.942)	142675	35.4631	1250
41 m-Nitroaniline	138	5.844	5.849	(0.992)	104184	36.3067	1280
43 Dimethylphthalate	163	5.661	5.666	(0.961)	449117	38.1455	1350
44 2,6-Dinitrotoluene	165	5.714	5.719	(0.970)	105416	38.1094	1350
45 Acenaphthylene	152	5.796	5.801	(0.984)	657871	35.8959	1270
48 2,4-Dinitrophenol	184	5.916	5.916	(1.004)	20713	20.7921	735 (Q)
49 Dibenzofuran	168	6.041	6.046	(1.025)	639705	42.1951	1490
51 Diethylphthalate	149	6.167	6.166	(1.047)	476428	37.7636	1330
53 Fluorene	166	6.297	6.301	(1.069)	451758	33.3192	1180
54 4-Chlorophenylphenylether	204	6.277	6.277	(1.065)	221413	37.8717	1340
55 2-Methyl-4,6-dinitrophenol	198	6.311	6.316	(0.896)	40477	23.2753	822 (Q)

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
56 p-Nitroaniline	138	6.292	6.301	(1.068)	105110	41.1061	1450
133 Diphenylamine	169	6.364	6.364	(0.904)	380425	35.0476	1240
58 1,2-Diphenylhydrazine	77	6.398	6.402	(0.908)	511382	35.8986	1270
61 4-Bromophenylphenylether	248	6.658	6.658	(0.945)	109222	33.8833	1200
63 Hexachlorobenzene	284	6.725	6.730	(0.955)	99216	32.9135	1160
68 Phenanthrene	178	7.062	7.067	(1.003)	629278	34.2377	1210
69 Anthracene	178	7.106	7.110	(1.009)	646522	36.9529	1300
72 Di-n-butylphthalate	149	7.467	7.467	(1.060)	870564	39.6403	1400
76 Fluoranthene	202	8.088	8.093	(1.148)	777051	39.1395	1380
85 Butylbenzylphthalate	149	8.834	8.839	(0.938)	382831	40.3156	1420
89 Benzo(a)anthracene	228	9.407	9.412	(0.998)	616205	36.8615	1300
90 3,3'-Dichlorobenzidine	252	9.359	9.359	(0.993)	168925	36.8468	1300
92 Chrysene	228	9.446	9.450	(1.003)	604388	39.3755	1390
93 bis(2-Ethylhexyl)phthalate	149	9.359	9.364	(0.993)	482729	42.8907	1520
94 Di-n-octylphthalate	149	9.975	9.980	(0.910)	801540	39.3104	1390
95 Benzo(b)fluoranthene	252	10.496	10.500	(0.957)	533707	36.9893	1310
96 Benzo(k)fluoranthene	252	10.524	10.534	(0.960)	528923	38.7198	1370
97 Benzo(a)pyrene	252	10.890	10.900	(0.993)	472255	38.7159	1370
99 Indeno(1,2,3-cd)pyrene	276	12.552	12.561	(1.145)	387192	42.2089	1490
100 Dibenzo(a,h)anthracene	278	12.566	12.576	(1.146)	316384	43.5567	1540
101 Benzo(ghi)perylene	276	13.033	13.048	(1.189)	319604	41.3757	1460
1 N-Methyl-N-nitrosomethylamine	74	2.290	2.295	(0.604)	131148	27.5095	972 (Q)

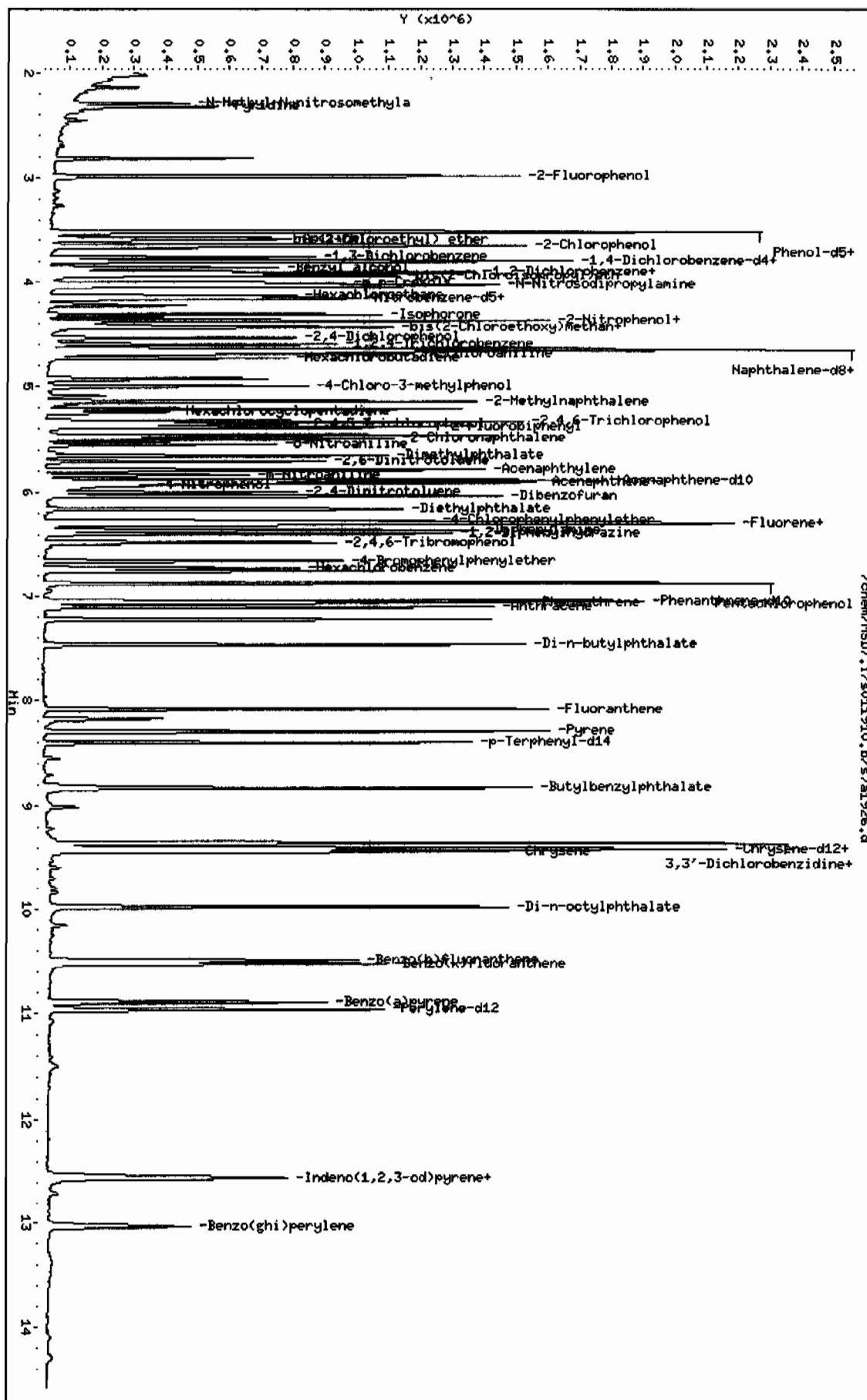
#### QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/HSD7.i/s011910.b/s7a1926.d  
 Date: 19-Jan-2010 18:26  
 Client ID: RE12-10-7243MSD  
 Sample Info: 112020156001941702111SVNF111MSD  
 Volume Injected (uL): 0.5  
 Column phase: J&W DB-5MS

Instrument: MSD7.i  
 Operator: JMB3  
 Column diameter: 0.20

/chem/HSD7.i/s011910.b/s7a1926.d



# Miscellaneous Data

# Prep Logbook

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

Batch ID: 941701      Verified by: \_\_\_\_\_  
 Analyst: Alberto Velasco  
 Method: SW846 3550B      Lab SOP: GL-OA-E-010 REV# 18  
    Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1202015597 MB	14-JAN-2010 19:34:44	30	1	0.03333
1202015598 LCS	14-JAN-2010 19:34:44	30	1	0.03333
244599001	14-JAN-2010 19:34:44	30.03	1	0.0333
1202015599 MS (244599001)	14-JAN-2010 19:34:44	30.12	1	0.0332
1202015600 MSD (244599001)	14-JAN-2010 19:34:44	30.05	1	0.03328
244599002	14-JAN-2010 19:34:44	30.14	1	0.03318
244599003	14-JAN-2010 19:34:44	30.02	1	0.03331
244599004	14-JAN-2010 19:34:44	30.19	1	0.03312
244599005	14-JAN-2010 19:34:44	30.01	1	0.03332
244599006	14-JAN-2010 19:34:44	30.11	1	0.03321
244599007	14-JAN-2010 19:34:44	30.12	1	0.0332
244599008	14-JAN-2010 19:34:44	30.04	1	0.03329
244599009	14-JAN-2010 19:34:44	30.13	1	0.03319
244599010	14-JAN-2010 19:34:44	30.03	1	0.0333
244599011	14-JAN-2010 19:34:44	30.01	1	0.03332
244599012	14-JAN-2010 19:34:44	30.18	1	0.03313
244599013	14-JAN-2010 19:34:44	30.14	1	0.03318

Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:
LCS	1202015598	BNA LCS w/o Benzidine 50ppm	UE091130-11	1	mL	Verified By: AJS
LCS	1202015598	BENZIDINE LCS	UE100108-21	1	mL	Final Solvent: CH2Cl2
MS	1202015599	BNA LCS w/o Benzidine 50ppm	UE091130-11	1	mL	
MS	1202015599	BENZIDINE LCS	UE100108-21	1	mL	
MSD	1202015600	BNA LCS w/o Benzidine 50ppm	UE091130-11	1	mL	
MSD	1202015600	BENZIDINE LCS	UE100108-21	1	mL	
SURR	All	BNA for all Surrogate	UE100108-10	1	mL	
REGNT	All	Methylene Chloride	1253574-D	150	mL	
REGNT	All	Acetone	1255284	150	mL	
SOURC	All	SODIUM SULFATE	1248200	30	g	

# GEL ORGANIC RUN LOG

INSTRUMENT ID: MSD /

DATE: 01/13/2010 METHOD: See raw data OPERATOR: JMB3 REVIEWED BY: DATE:   
 HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT: 1239699-D   
 Multiplier Voltage: 1776 Emv Extr. Injection Volume: 0.5, 1.0 ul   
 DFTPP Solution ID: WBN091213-01 Internal Std ID: WBN100107-02   
 CALIBRATION & QC INFORMATION:   
 Initial Calibration Dates: See Calibration History and Standard Logbook.   
 Initial Calibration Std ID's: See Calibration History and Standard Logbook.

SOP: GL-OA-E-009 Rev. 23 Sequence Number: /chem/MSD7.i/s011310.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s7a1301a.d	WBN091213-01	JMB3	13-JAN-2010 15:53	DFTPP	s011310	1.0	DFTPP	DUSE
s7a1301-b.d	WBN091213-01	JMB3	13-JAN-2010 16:11	DFTPP	s011310	1.0	DFTPP	8270d TUNE: MEGA - AP - PEST
s7a1301.d	WBN091213-01	JMB3	13-JAN-2010 16:11	DFTPP	s011310	1.0	DFTPP	8270c TUNE: MEGA - AP - PEST
s7a1302.d	INST BLK	JMB3	13-JAN-2010 16:24	-----	s011310	1.0	INST BLK	
s7a1303.d	WBN100112-08	JMB3	13-JAN-2010 16:51	1 PPM	s011310	1.0	MEGA001	
s7a1304.d	WBN100112-07	JMB3	13-JAN-2010 17:18	10 PPM	s011310	1.0	MEGA010	
s7a1305.d	WBN100112-06	JMB3	13-JAN-2010 17:45	120 PPM	s011310	1.0	MEGA020	
s7a1306.d	WBN100112-05.1	JMB3	13-JAN-2010 18:12	140 PPM	s011310	1.0	MEGA040	
s7a1307.d	WBN100112-04	JMB3	13-JAN-2010 18:39	150 PPM	s011310	1.0	MEGA050	
s7a1308.d	WBN100112-03	JMB3	13-JAN-2010 19:07	180 PPM	s011310	1.0	MEGA080	
s7a1309.d	WBN100112-02	JMB3	13-JAN-2010 19:34	1100 PPM	s011310	1.0	MEGA100	
s7a1310.d	WBN100112-01	JMB3	13-JAN-2010 20:01	1120 PPM	s011310	1.0	MEGA120	
s7a1311.d	WBN100103-01	JMB3	13-JAN-2010 20:28	110 PPM	s011310	1.0	AP010	
s7a1312.d	WBN100103-02	JMB3	13-JAN-2010 20:50	120 PPM	s011310	1.0	AP020	
s7a1313.d	WBN100103-03.1	JMB3	13-JAN-2010 21:12	140 PPM	s011310	1.0	AP040	
s7a1314.d	WBN100103-04	JMB3	13-JAN-2010 21:34	150 PPM	s011310	1.0	AP050	
s7a1315.d	WBN100103-05	JMB3	13-JAN-2010 21:55	180 PPM	s011310	1.0	AP080	
s7a1316.d	WBN100103-06	JMB3	13-JAN-2010 22:17	1100 PPM	s011310	1.0	AP100	
s7a1317.d	WBN100103-07	JMB3	13-JAN-2010 22:39	1120 PPM	s011310	1.0	AP120	

s7a1318.d	WBN100103-25	JMB3	13-JAN-2010 23:00	110 PPM	s011310		1.0 PEST010	
s7a1319.d	WBN100103-24	JMB3	13-JAN-2010 23:22	120 PPM	s011310		1.0 PEST020	
s7a1320.d	WBN100103-23.1	JMB3	13-JAN-2010 23:44	140 PPM	s011310		1.0 PEST040	
s7a1321.d	WBN100103-22	JMB3	14-JAN-2010 00:06	150 PPM	s011310		1.0 PEST050	
s7a1322.d	WBN100103-21	JMB3	14-JAN-2010 00:27	180 PPM	s011310		1.0 PEST080	
s7a1323.d	WBN100103-20	JMB3	14-JAN-2010 00:49	100 PPM	s011310		1.0 PEST100	
s7a1324.d	WBN100103-19	JMB3	14-JAN-2010 01:10	120 PPM	s011310		1.0 PEST120	
s7a1325-625.d	WBN091106-09.3	JMB3	14-JAN-2010 01:32	140 PPM	s011310		1.0 MEGAICV	625 MEGA ICV
s7a1325-D.d	WBN091106-09.3	JMB3	14-JAN-2010 01:32	140 PPM	s011310		1.0 MEGAICV	8270d MEGA ICV
s7a1325.d	WBN091106-09.3	JMB3	14-JAN-2010 01:32	140 PPM	s011310		1.0 MEGAICV	8270c MEGA ICV
s7a1326-625.d	WBN100103-03.1	JMB3	14-JAN-2010 01:58	140 PPM	s011310		1.0 APICV	625 AP ICV
s7a1326-D.d	WBN100103-03.1	JMB3	14-JAN-2010 01:58	140 PPM	s011310		1.0 APICV	8270d AP ICV
s7a1326.d	WBN100103-03.1	JMB3	14-JAN-2010 01:58	140 PPM	s011310		1.0 APICV	8270c AP ICV
s7a1327-625.d	WBN100103-23.1	JMB3	14-JAN-2010 02:20	140 PPM	s011310		1.0 PESTICV	625 PEST ICV
s7a1327-D.d	WBN100103-23.1	JMB3	14-JAN-2010 02:20	140 PPM	s011310		1.0 PESTICV	8270d PEST ICV
s7a1327.d	WBN100103-23.1	JMB3	14-JAN-2010 02:20	140 PPM	s011310		1.0 PESTICV	8270c PEST ICV

Instrument Batch: /chem/MSD7.i/s011310.b



## GEL ORGANIC RUN LOG

INSTRUMENT ID: MSD/

DATE: 01/19/2010

METHOD: See raw data

OPERATOR: JMB3

REVIEWED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

HARDWARE CONFIGURATION &amp; METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT: 1239699-D

Multiplier Voltage: 1776 Emv Extr. Injection Volume: 0.5, 1.0 ul

DFTPP Solution ID: WBN100107-01 Internal Std ID: WBN100107-02

CALIBRATION &amp; QC INFORMATION:

Initial Calibration Dates: See Calibration History and Standard Logbook.

Initial Calibration Std ID's: See Calibration History and Standard Logbook.

SOP: GL-OA-E-009 Rev. 23

Sequence Number: /chem/MSD7.i/s011910.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
Is7a1901.d	WBN100107-01	JMB3	19-JAN-2010 09:18	DFTPP	Is011910	1.0	DFTPP	8270c/625 Tune: Passes
Is7a1902-625.d	WBN091225-12.3	JMB3	19-JAN-2010 09:31	CVS	Is011910	1.0	MEGACVS	625 MEGA CVS (IS1: 324962)
Is7a1902.d	WBN091225-12.3	JMB3	19-JAN-2010 09:31	CVS	Is011910	1.0	MEGACVS	8270c MEGA CVS (IS1: 324962)
Is7a1903-625.d	WBN100103-03.4	JMB3	19-JAN-2010 09:58	CVS	Is011910	1.0	APCVS	625 AP CVS
Is7a1903.d	WBN100103-03.4	JMB3	19-JAN-2010 09:58	CVS	Is011910	1.0	APCVS	8270c AP CVS
Is7a1904.d	WBN100103-23.5	JMB3	19-JAN-2010 10:20	CVS	Is011910	1.0	PESTCVS	8270c PEST CVS
Is7a1905-1.d	1202018253	JMB3	19-JAN-2010 10:42	942715	10-1249	1.0	MB	REPORT
Is7a1905-2.d	1202018253	JMB3	19-JAN-2010 10:42	942715	10-1266	1.0	MB	REPORT
Is7a1905-3.d	1202018253	JMB3	19-JAN-2010 10:42	942715	10-1275	1.0	MB	REPORT
Is7a1905-4.d	1202018253	JMB3	19-JAN-2010 10:42	942715	10-1269	1.0	MB	REPORT
Is7a1905-5.d	1202018253	JMB3	19-JAN-2010 10:42	942715	10-1270	1.0	MB	REPORT
Is7a1905.d	1202018253	JMB3	19-JAN-2010 10:42	942715	10-1251	1.0	MB	REPORT
Is7a1906-1.d	1202018258	JMB3	19-JAN-2010 11:04	942715	10-1249	1.0	LCS	REPORT
Is7a1906-2.d	1202018258	JMB3	19-JAN-2010 11:04	942715	10-1266	1.0	LCS	REPORT
Is7a1906-3.d	1202018258	JMB3	19-JAN-2010 11:04	942715	10-1275	1.0	LCS	REPORT
Is7a1906-4.d	1202018258	JMB3	19-JAN-2010 11:04	942715	10-1269	1.0	LCS	REPORT
Is7a1906-5.d	1202018258	JMB3	19-JAN-2010 11:04	942715	10-1270	1.0	LCS	REPORT
Is7a1906.d	1202018258	JMB3	19-JAN-2010 11:04	942715	10-1251	1.0	LCS	REPORT
Is7a1907-1.d	1202018834	JMB3	19-JAN-2010 11:26	942715	10-1249	1.0	LCSD	REPORT

s7a1907-2.d  1202018834	JMB3  19-JAN-2010 11:26	942715  10-1266	1.0 LCSD	REPORT
s7a1907-3.d  1202018834	JMB3  19-JAN-2010 11:26	942715  10-1275	1.0 LCSD	REPORT
s7a1907-4.d  1202018834	JMB3  19-JAN-2010 11:26	942715  10-1269	1.0 LCSD	REPORT
s7a1907-5.d  1202018834	JMB3  19-JAN-2010 11:26	942715  10-1270	1.0 LCSD	REPORT
s7a1907.d  1202018834	JMB3  19-JAN-2010 11:26	942715  10-1251	1.0 LCSD	REPORT
s7a1908.d  1202015597	JMB3  19-JAN-2010 11:49	941702  10-1210	1.0 SBLK01	REPORT
s7a1909.d  1202015598	JMB3  19-JAN-2010 12:11	941702  10-1210	1.0 SBLK01LCS	REPORT
s7a1910.d  1244838002	JMB3  19-JAN-2010 12:33	942715  10-1251	1.0 LANL	REPORT
s7a1911.d  1244838007	JMB3  19-JAN-2010 12:55	942715  10-1251	1.0 LANL	REPORT: fails surr - sample consumed
s7a1912.d  1244838008	JMB3  19-JAN-2010 13:17	942715  10-1251	1.0 LANL	REPORT
s7a1913.d  1244851002	JMB3  19-JAN-2010 13:39	942715  10-1249	1.0 LANL	REPORT
s7a1914.d  1202017186	JMB3  19-JAN-2010 14:02	942290  244814	1.0 LCS	REPORT: rerun of s7a1823
s7a1915.d  1244851005	JMB3  19-JAN-2010 14:23	942715  10-1249	1.0 LANL	REPORT
s7a1916.d  1202018254	JMB3  19-JAN-2010 14:46	942715  10-1249	1.0 MS_LANL	REPORT
s7a1917.d  1244883001	JMB3  19-JAN-2010 15:07	942715  10-1266	1.0 LANL	REPORT
s7a1918.d  1244894002	JMB3  19-JAN-2010 15:30	942715  10-1275	1.0 LANL	REPORT
s7a1919.d  1202018255	JMB3  19-JAN-2010 15:52	942715  10-1275	1.0 MS_LANL	REPORT
s7a1920.d  1202018257	JMB3  19-JAN-2010 16:14	942715  10-1275	1.0 MSD_LANL	REPORT
s7a1921.d  1244894007	JMB3  19-JAN-2010 16:36	942715  10-1275	1.0 LANL	REPORT
s7a1922.d  1244895002	JMB3  19-JAN-2010 16:58	942715  10-1269	1.0 LANL	REPORT: fails surr - rx s4a2110 CONFIRMS
s7a1923.d  1244925004	JMB3  19-JAN-2010 17:20	942715  10-1270	1.0 LANL	DUSE: matrix/OR hit - rerun @ 4x - see s7a1933
s7a1924.d  1244599001	JMB3  19-JAN-2010 17:42	941702  10-1210	1.0 LANL	REPORT
s7a1925.d  1202015599	JMB3  19-JAN-2010 18:04	941702  10-1210	1.0 MS	REPORT
s7a1926.d  1202015600	JMB3  19-JAN-2010 18:26	941702  10-1210	1.0 MSD	REPORT
s7a1927.d  1244599002	JMB3  19-JAN-2010 18:48	941702  10-1210	1.0 LANL	REPORT
s7a1928.d  1244599003	JMB3  19-JAN-2010 19:11	941702  10-1210	1.0 LANL	REPORT
s7a1929.d  1244599004	JMB3  19-JAN-2010 19:32	941702  10-1210	1.0 LANL	REPORT

s7a1930.d	244599005	JMB3	19-JAN-2010 19:54	941702	10-1210	1.0 LANL	REPORT	
s7a1931.d	244599006	JMB3	19-JAN-2010 20:16	941702	10-1210	1.0 LANL	REPORT	
s7a1932.d	244895002	JMB3	19-JAN-2010 20:38	942715	10-1269	4.0 LANL	DUSE: see neat run s7a1922	
s7a1933.d	244925004	JMB3	19-JAN-2010 21:00	942715	10-1270	4.0 LANL	REPORT	
s7a1934.d	1202018801	JMB3	19-JAN-2010 21:22	942932	244585	1.0 SBLK01	DUSE: BRKL RX's confirm surr failure	
s7a1935.d	1202018802	JMB3	19-JAN-2010 21:44	942932	244585	1.0 SBLK01LCS	DUSE: BRKL RX's confirm surr failure	
s7a1936.d	1202018803	JMB3	19-JAN-2010 22:06	942932	244585	1.0 SBLK01LCS	DUSE: BRKL RX's confirm surr failure	
s7a1937.d	244585001	JMB3	19-JAN-2010 22:27	942932	244585	1.0 BRKL	DUSE: rx of s7a1724 - CONFIRM SURR FAILURE	
s7a1938.d	244585002	JMB3	19-JAN-2010 22:50	942932	244585	1.0 BRKL	DUSE: rx of s7a1725 - CONFIRM SURR FAILURE	

Instrument Batch: /chem/MSD7.i/s011910.b

# GEL ORGANIC RUN LOG

INSTRUMENT ID: MSD/

DATE: 01/20/2010 METHOD: See raw data OPERATOR: JMB3 REVIEWED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
 HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT: 1239699-D  
 Multiplier Voltage: 1776 Emv Extr. Injection Volume: 0.5, 1.0 ul  
 DFTPP Solution ID: WBN100107-01 Internal Std ID: WBN100107-02  
 CALIBRATION & QC INFORMATION:  
 Initial Calibration Dates: See Calibration History and Standard Logbook.  
 Initial Calibration Std ID's: See Calibration History and Standard Logbook.

SOP: GL-OA-E-009 Rev. 23 Sequence Number: /chem/MSD7.i/s012010.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
1s7a2001.d	WBN100107-01	JMB3	120-JAN-2010 10:07	1DFTPP	1s012010	1	1.0 DFTPP	1DUSE
1s7a2002-D.d	WBN100107-01	JMB3	120-JAN-2010 10:52	1DFTPP	1s012010	1	1.0 DFTPP	
1s7a2002.d	WBN100107-01	JMB3	120-JAN-2010 10:52	1DFTPP	1s012010	1	1.0 DFTPP	
1s7a2003-D.d	WBN091225-12.3	JMB3	120-JAN-2010 11:05	1CVS	1s012010	1	1.0 MEGACVS	
1s7a2003.d	WBN091225-12.3	JMB3	120-JAN-2010 11:05	1CVS	1s012010	1	1.0 MEGACVS	1pass 294260
1s7a2004-D.d	WBN100103-03.4	JMB3	120-JAN-2010 11:32	1CVS	1s012010	1	1.0 APCVS	
1s7a2004.d	WBN100103-03.4	JMB3	120-JAN-2010 11:32	1CVS	1s012010	1	1.0 APCVS	
1s7a2005-D.d	WBN100103-23.5	JMB3	120-JAN-2010 11:54	1CVS	1s012010	1	1.0 PESTCVS	
1s7a2005.d	WBN100103-23.5	JMB3	120-JAN-2010 11:54	1CVS	1s012010	1	1.0 PESTCVS	
1s7a2006.d	1202019478	JMB3	120-JAN-2010 12:16	1943199	1244901	1	1.0 MB	
1s7a2007.d	1202019479	JMB3	120-JAN-2010 12:38	1943199	1244901	1	1.0 LCS	
1s7a2008.d	1202019482	JMB3	120-JAN-2010 13:00	1943199	1244901	1	1.0 LCSD	
1s7a2009.d	1244901001	JMB3	120-JAN-2010 13:22	1943199	1244901	1	1.0 GEEL_RPBL	
1s7a2010.d	1244901002	JMB3	120-JAN-2010 13:44	1943199	1244901	1	1.0 GEEL_RPBL	
1s7a2011.d	1244903001	JMB3	120-JAN-2010 14:07	1943199	1244903	1	1.0 GEEL_RPBL	
1s7a2012.d	1244599007	JMB3	120-JAN-2010 14:29	1941702	110-1210	1	1.0 LANL	
1s7a2013.d	1244599008	JMB3	120-JAN-2010 14:51	1941702	110-1210	1	1.0 LANL	
1s7a2014.d	1244599009	JMB3	120-JAN-2010 15:13	1941702	110-1210	1	1.0 LANL	
1s7a2015.d	1244599010	JMB3	120-JAN-2010 15:35	1941702	110-1210	1	1.0 LANL	

ls7a2016.d	244599011		IJMB3	20-JAN-2010 15:57	1941702	10-1210		1.0 LANL	
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+									
ls7a2017.d	244599012		IJMB3	20-JAN-2010 16:19	1941702	10-1210		1.0 LANL	
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+									
ls7a2018.d	244599013		IJMB3	20-JAN-2010 16:42	1941702	10-1210		1.0 LANL	
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+									

Instrument Batch: /chem/MSD7.i/s012010.b

### DATA EXCEPTION REPORT

<b>Mo. Day Yr.</b> 21-JAN-10	<b>Division:</b> Industrial	<b>Quality Criteria:</b> Specifications	<b>Type:</b> Process
<b>Instrument Type:</b> SEM/VOA GC/MS	<b>Test / Method:</b> SW846 8270C	<b>Matrix Type:</b> Solid	<b>Client Code:</b> LANL
<b>Batch ID:</b> 941702	<b>Sample Numbers:</b> See Below		
<b>Potentially affected work order(s) (SDG):</b> 244599(10-1210) <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(1202015599)/MSD(1202015600) RPD value for 2,4-Dinitrophenol was 38%. The limit is 30%.		1. Since the individual spike recoveries for 2,4-Dinitrophenol were within the acceptance limits in the MS and MSD, the data were reported.	

**Originator's Name:**

Josh Brooks

21-JAN-10

**Data Validator/Group Leader:**

Barbara Bailey

21-JAN-10

# LC/MS/MS EXPLOSIVES ANALYSIS

**LC/MS/MS Case Narrative  
Los Alamos National Laboratory (LANL)  
SDG 10-1210**

**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:** 941658

**Prep Batch Number:** 941657

**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>
244599001	RE12-10-7243
244599002	RE12-10-7240
244599003	RE12-10-7241
244599004	RE12-10-7237
244599005	RE12-10-7239
244599006	RE12-10-7238
244599007	RE12-10-7242
244599008	RE12-10-7236
244599009	RE12-10-7252
244599010	RE12-10-7253
244599011	RE12-10-7254
244599012	RE12-10-7255
244599013	RE12-10-7276
1202015498	Method Blank (MB)
1202015499	Laboratory Control Sample (LCS)
1202015500	244599001(RE12-10-7243) Matrix Spike (MS)
1202015501	244599001(RE12-10-7243) Matrix Spike Duplicate (MSD)

**Preparation/Analytical Method Verification**

**SOP Reference**

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

10-1210-EXPLCMS

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## **Primary Analyte Analysis**

### **Calibration Information**

#### **Initial Calibration**

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

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

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

#### **Calibration Blank Requirements**

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

#### **CRI Requirements**

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

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

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

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

#### **Surrogate Recoveries**

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

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

The LCS spike recoveries were within the established acceptance limits.

#### **QC Sample Designation**

Sample 244599001 (RE12-10-7243) was chosen for matrix spike and matrix spike duplicate analysis.

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

The MS spike recoveries were within the established acceptance limits.

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

The MSD spike recoveries were within the established acceptance limits.

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

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

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

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

### **Technical Information**

#### **Holding Time Specifications**

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

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

All procedures were performed as stated in the SOP.

#### **Sample Dilutions**

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

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

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

#### **Secondary Analyte Analysis**

#### **Calibration Information**

##### **Initial Calibration**

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

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

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

##### **Calibration Blank Requirements**

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

##### **CRI Requirements**

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

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

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

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

##### **Surrogate Recoveries**

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

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

The LCS spike recoveries were within the established acceptance limits.

##### **QC Sample Designation**

Sample 244599001 (RE12-10-7243) 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 recovered TATB at 199%. The recovery limits are 44-166%. Since the LCS and the MS met acceptance limits for TATB, the data are reported. Please see data exception report 785184.

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

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

**Internal Standard (ISTD) Acceptance**

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

**Technical Information****Holding Time Specifications**

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

**Preparation/Analytical Method Verification**

All procedures were performed as stated in the SOP.

**Sample Dilutions**

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

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

Samples 244599005 (RE12-10-7239), 244599010 (RE12-10-7253) and 244599013 (RE12-10-7276) failed acceptance criteria. They were re-analyzed and passed acceptance criteria. The re-analysis data are reported.

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

Data exception report 785184 was generated for this SDG.

The MSD recovered TATB at 199%. The recovery limits are 44-166%. Since the LCS and the MS met acceptance limits for TATB, 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: J'sphere ODS-H80, 150 x 4.6mm I.D.

### Certification Statement

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

### Review Validation:

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

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

Reviewer: Henderson M. Maurer Date: 02/02/10

# SAMPLE DATA SUMMARY

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7243

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599001

Sample Amount 2

Moisture: 5.8

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125221a

Date Analyzed: 29-JAN-10 23:33

Units: ug/kg

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

\*Concentration =

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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7243

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599001

Sample Amount 2

Moisture: 5.8

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250101.wiff

Date Analyzed: 26-JAN-10 12:43

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: RE12-10-7240

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599002

Sample Amount 2

Moisture: 13.5

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125224a

Date Analyzed: 30-JAN-10 01:02

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



1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7240

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599002

Sample Amount 2

Moisture: 13.5

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250104.wiff

Date Analyzed: 26-JAN-10 13:30

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: RE12-10-7241

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599003

Sample Amount 2

Moisture: 9.4

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125225a

Date Analyzed: 30-JAN-10 01:31

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: RE12-10-7241

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599003

Sample Amount 2

Moisture: 9.4

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250105.wiff

Date Analyzed: 26-JAN-10 13:46

Units: ug/kg

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

\*Concentration =

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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7237

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599004

Sample Amount 2

Moisture: 10.1

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125226a

Date Analyzed: 30-JAN-10 02:01

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: RE12-10-7237

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599004

Sample Amount 2

Moisture: 10.1

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250109.wiff

Date Analyzed: 26-JAN-10 14:49

Units: ug/kg

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

\*Concentration =

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

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7239

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599005

Sample Amount 2

Moisture: 9.3

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125227a

Date Analyzed: 30-JAN-10 02:30

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	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: RE12-10-7239

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599005

Sample Amount 2

Moisture: 9.3

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250148.wiff

Date Analyzed: 27-JAN-10 01:02

Units: ug/kg

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

\*Concentration =

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

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7238

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599006

Sample Amount 2

Moisture: 16.7

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125231a

Date Analyzed: 30-JAN-10 04:28

Units: ug/kg

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

\*Concentration =

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

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7238

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599006

Sample Amount 2

Moisture: 16.7

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250111.wiff

Date Analyzed: 26-JAN-10 15:20

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: RE12-10-7242

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599007

Sample Amount 2

Molsture: 16.3

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125232a

Date Analyzed: 30-JAN-10 04:58

Units: ug/kg

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

\*Concentration =

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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7242

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599007

Sample Amount 2

Moisture: 16.3

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250112.wiff

Date Analyzed: 26-JAN-10 15:36

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: RE12-10-7236

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599008

Sample Amount 2

Moisture: 21.7

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125233a

Date Analyzed: 30-JAN-10 05:27

Units: ug/kg

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

\*Concentration =

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

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7236

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599008

Sample Amount 2

Moisture: 21.7

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250113.wiff

Date Analyzed: 26-JAN-10 15:52

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
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1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7252

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599009

Sample Amount 2

Moisture: 15.9

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125234a

Date Analyzed: 30-JAN-10 05:57

Units: ug/kg

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

\*Concentration =

Instrument	X	Concentrated Extract Volume	X	Dilution
Value		Sample Amount		Factor

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7252

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599009

Sample Amount 2

Moisture: 15.9

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250114.wiff

Date Analyzed: 26-JAN-10 16:07

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: RE12-10-7253

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599010

Sample Amount 2

Moisture: 3.3

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125235a

Date Analyzed: 30-JAN-10 06:26

Units: ug/kg

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

\*Concentration =

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



1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7253

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599010

Sample Amount 2

Moisture: 3.3

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250149.wiff

Date Analyzed: 27-JAN-10 01:17

Units: ug/kg

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

\*Concentration =

Instrument Value	X	Concentrated Extract Volume	X	Dilution Factor
		Sample Amount		

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7254

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599011

Sample Amount 2

Moisture: 15.3

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125236a

Date Analyzed: 30-JAN-10 06:56

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: RE12-10-7254

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599011

Sample Amount 2

Moisture: 15.3

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250116.wiff

Date Analyzed: 26-JAN-10 16:39

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: RE12-10-7255

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599012

Sample Amount 2

Moisture: 6.6

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125237a

Date Analyzed: 30-JAN-10 07:26

Units: ug/kg

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

\*Concentration =

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

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7255

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599012

Sample Amount 2

Moisture: 6.6

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250117.wiff

Date Analyzed: 26-JAN-10 16:55

Units: ug/kg

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

\*Concentration =

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

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7276

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599013

Sample Amount 2

Moisture: 8.4

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125238a

Date Analyzed: 30-JAN-10 07:55

Units: ug/kg

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

\*Concentration =

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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7276

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599013

Sample Amount 2

Moisture: 8.4

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01270014.wiff

Date Analyzed: 27-JAN-10 13:51

Units: ug/kg

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

\*Concentration =

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

# QUALITY CONTROL SUMMARY



# High Explosives Surrogate Recovery Summary

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1210

Lab Code: GEL

HPLC Column: Phenomenex Ultracarb 5u ODS(20)

Lab Sample ID	Client Sample ID	DNT	QC Limits	Flg
244599001	RE12-10-7243	112	73.7 - 133.3	
244599001	RE12-10-7243	76.4	73.7 - 133.3	
244599002	RE12-10-7240	108	73.7 - 133.3	
244599002	RE12-10-7240	102	73.7 - 133.3	
244599003	RE12-10-7241	109	73.7 - 133.3	
244599003	RE12-10-7241	87.6	73.7 - 133.3	
244599004	RE12-10-7237	98.3	73.7 - 133.3	
244599004	RE12-10-7237	80	73.7 - 133.3	
244599005	RE12-10-7239	107	73.7 - 133.3	
244599005	RE12-10-7239	88.8	73.7 - 133.3	
244599006	RE12-10-7238	121	73.7 - 133.3	
244599006	RE12-10-7238	77.6	73.7 - 133.3	
244599007	RE12-10-7242	117	73.7 - 133.3	
244599007	RE12-10-7242	77.6	73.7 - 133.3	
244599008	RE12-10-7236	109	73.7 - 133.3	
244599008	RE12-10-7236	85.6	73.7 - 133.3	
244599009	RE12-10-7252	107	73.7 - 133.3	
244599009	RE12-10-7252	88.4	73.7 - 133.3	
244599010	RE12-10-7253	112	73.7 - 133.3	
244599010	RE12-10-7253	91.2	73.7 - 133.3	
244599011	RE12-10-7254	109	73.7 - 133.3	
244599011	RE12-10-7254	88	73.7 - 133.3	
244599012	RE12-10-7255	108	73.7 - 133.3	
244599012	RE12-10-7255	104	73.7 - 133.3	
244599013	RE12-10-7276	111	73.7 - 133.3	
244599013	RE12-10-7276	112	73.7 - 133.3	
1202015498	MB for batch 941657	107	73.7 - 133.3	
1202015498	MB for batch 941657	84	73.7 - 133.3	
1202015499	LCS for batch 941657	110	73.7 - 133.3	
1202015499	LCS for batch 941657	93.2	73.7 - 133.3	
1202015500	RE12-10-7243(244599001MS)	110	73.7 - 133.3	
1202015500	RE12-10-7243(244599001MS)	105	73.7 - 133.3	
1202015501	RE12-10-7243(244599001MSD)	108	73.7 - 133.3	
1202015501	RE12-10-7243(244599001MSD)	105	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) 10-1210

Extract Batch Code: 941657

Date Extracted: 21-JAN-10

GEL LCS ID: 1202015499

GEL LCSDUP ID:

Analysis Date/Time: 29-JAN-10 22:34

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	5120	102					62.1 - 124
2,4,6-Trinitrotoluene	5000	5280	106					78.3 - 132
2,4-Dinitrotoluene	5000	4480	89.7					82.7 - 132
2,6-Dinitrotoluene	5000	4950	99					86.9 - 122
2-Amino-4,6-dinitrotoluene	5000	5850	117					84.2 - 149
4-Amino-2,6-dinitrotoluene	5000	5830	117					85.6 - 133
HMX	5000	4670	93.5					66.5 - 142
Nitrobenzene	5000	4590	91.7					71.8 - 126
PETN	5000	5580	112					64.6 - 147
RDX	5000	5240	105					78.7 - 144
Tetryl	5000	2850	57					31.2 - 119
m-Dinitrobenzene	5000	4920	98.5					80.9 - 127
m-Nitrotoluene	5000	4780	95.6					71.9 - 126
o-Nitrotoluene	5000	4520	90.3					75 - 123
p-Nitrotoluene	5000	4620	92.4					73.7 - 124

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

\* Values outside of QC limits

**3B**  
**High Explosives LCS/LCS Duplicate Summary**

Lab Name: GEL Laboratories LLC

Client ID: LCS

Lab Code: GEL

GEL Job No (SDG) 10-1210

Extract Batch Code: 941657

Date Extracted: 21-JAN-10

GEL LCS ID: 1202015499

GEL LCSDUP ID:

Analysis Date/Time: 26-JAN-10 12:12

DUP Analysis Date/Time:

Reporting Units: ug/kg

QC Type: LCS/LCSD

Compound	Spike Added	LCS Conc	LCS Rec #	LCSD Conc	LCSD Rec #	RPD #	RPD	Recovery Limits
2,4-Diamino-6-nitrotoluene	5000	4330	86.6					64.8 - 128
2,6-Diamino-4-nitrotoluene	5000	4420	88.4					69.6 - 133
3,5-Dinitroaniline	5000	4620	92.4					77.3 - 123
tris(o-cresyl) phosphate	5000	4360	87.2					84.3 - 120
TATB	5000	7180	144					46.8 - 166

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

\* Values outside of QC limits

# High Explosives MS/MSD Summary

Lab Name: GEL Laboratories LLC

Client ID: RE12-10-7243

Lab Code: GEL

GEL Job No (SDG) 10-1210

Extract Batch Code: 941657

Date Extracted: 21-JAN-10

GEL Spike ID: 1202015500

GEL SpikeDup ID: 1202015501

Analysis Date/Time: 30-JAN-10 00:03

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	5360	107	5850	117	8.8	30	70.7 - 130
2,4,6-Trinitrotoluene	5000	0	6060	121	6220	124	2.73	30	83.4 - 138
2,4-Dinitrotoluene	5000	0	5440	109	4760	95.2	13.3	30	79.1 - 137
2,6-Dinitrotoluene	5000	0	5160	103	5070	101	1.64	30	85.4 - 125
2-Amino-4,6-dinitrotoluene	5000	0	5860	117	5440	109	7.45	30	77.4 - 154
4-Amino-2,6-dinitrotoluene	5000	0	6210	124	5830	117	6.4	30	77.3 - 140
HMX	5000	0	5460	109	5450	109	.139	30	66.7 - 144
Nitrobenzene	5000	0	4390	87.8	4840	96.8	9.82	30	70.4 - 129
PETN	5000	0	5530	111	5420	108	2	30	61.9 - 153
RDX	5000	0	5630	113	5350	107	4.98	30	73 - 140
Tetryl	5000	0	3350	67.1	3550	70.9	5.61	30	46.8 - 138
m-Dinitrobenzene	5000	0	4950	98.9	5340	107	7.58	30	83.5 - 126
m-Nitrotoluene	5000	0	5290	106	4890	97.9	7.69	30	68.6 - 135
o-Nitrotoluene	5000	0	4950	99	4810	96.1	2.94	30	71.2 - 131
p-Nitrotoluene	5000	0	5070	101	4760	95.3	6.28	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: RE12-10-7243

Lab Code: GEL

GEL Job No (SDG) 10-1210

Extract Batch Code: 941657

Date Extracted: 21-JAN-10

GEL Spike ID: 1202015500

GEL SpikeDup ID: 1202015501

Analysis Date/Time: 26-JAN-10 12:59

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	4580	91.6	4540	90.8	.877	30	51.6 - 127
2,6-Diamino-4-nitrotoluene	5000	0	4210	84.2	4420	88.4	4.87	30	58.9 - 135
3,5-Dinitroaniline	5000	0	5020	100	5090	102	1.39	30	72.8 - 125
tris(o-cresyl) phosphate	5000	0	4830	96.6	4700	94	2.73	30	79.1 - 124
TATB	5000	0	7870	157	9960	199 *	23.4	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): 10-1210

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

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125001a

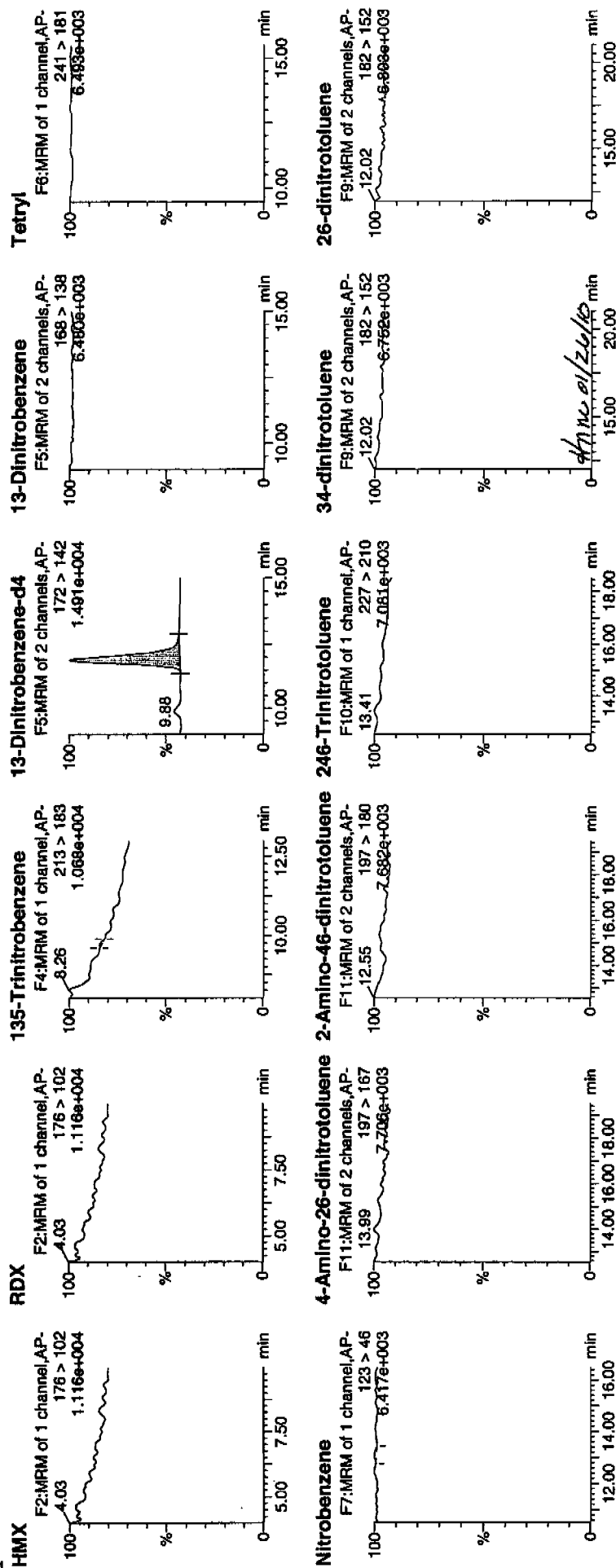
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Time: 11:20:43

ID: XIBLK01

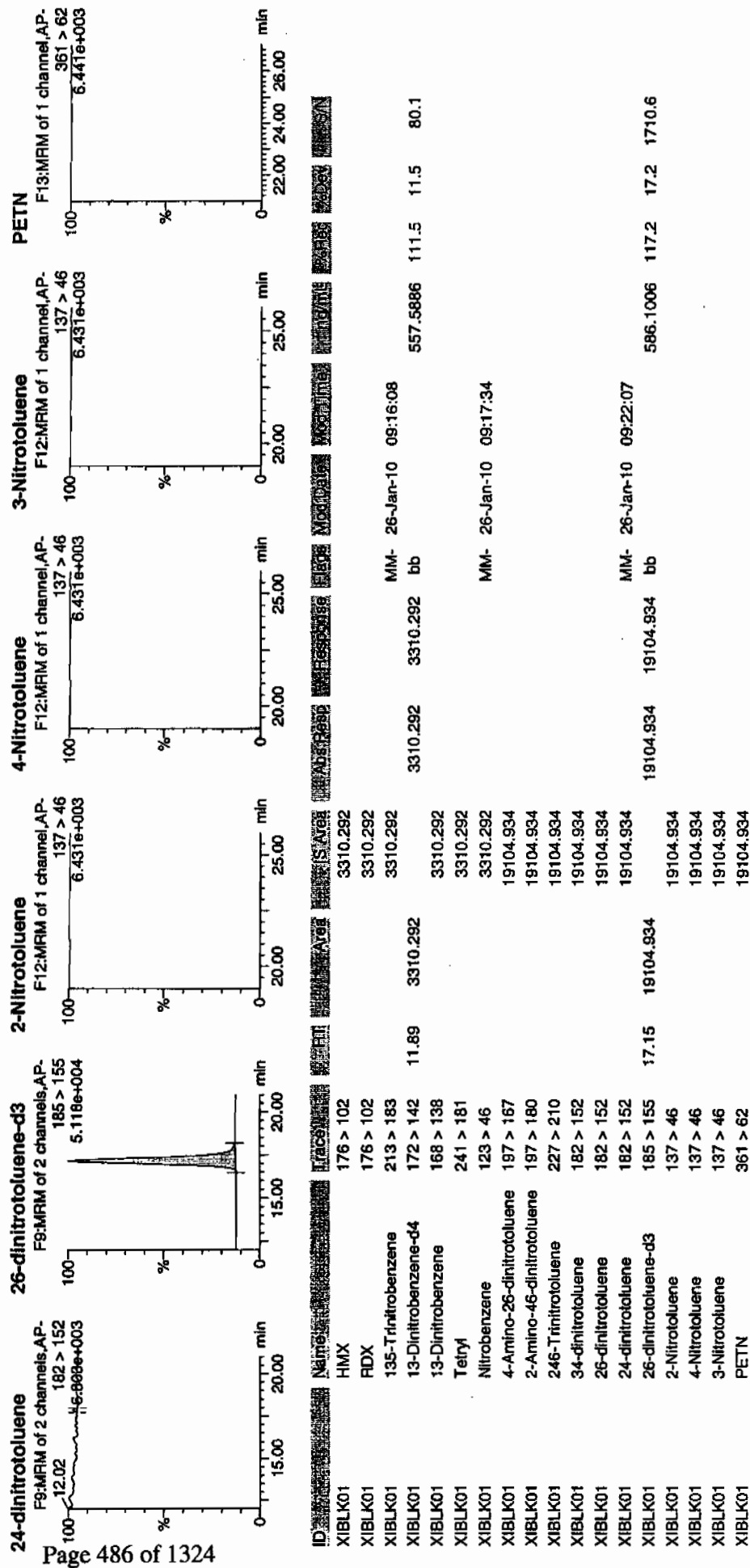
Vial: 1:1,A

1/26/10



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

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





Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1210

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 25-JAN-10 11:50

GEL Data File: EXP0125002a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	490.527
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	511.129
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

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

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

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125002a

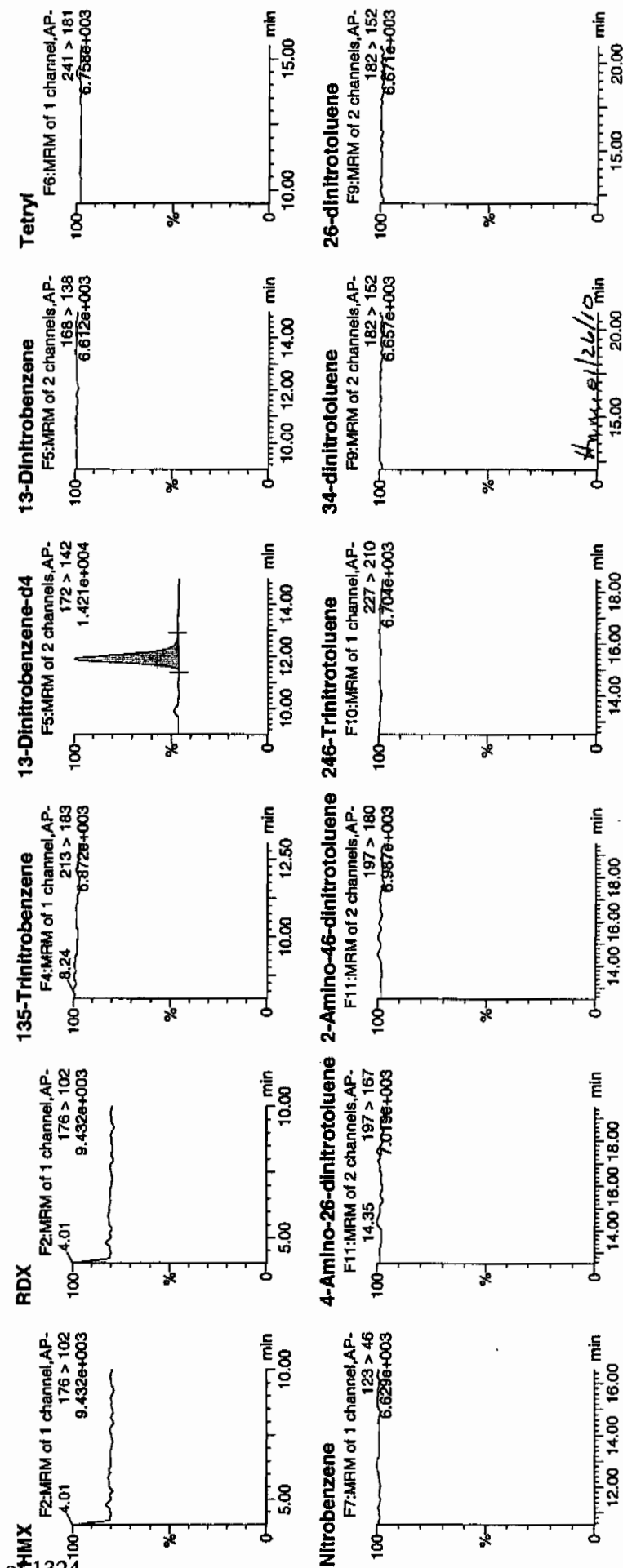
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Time: 11:50:16

ID: XIBLK01

Label: 1:1,A

1/26/10  
MPT

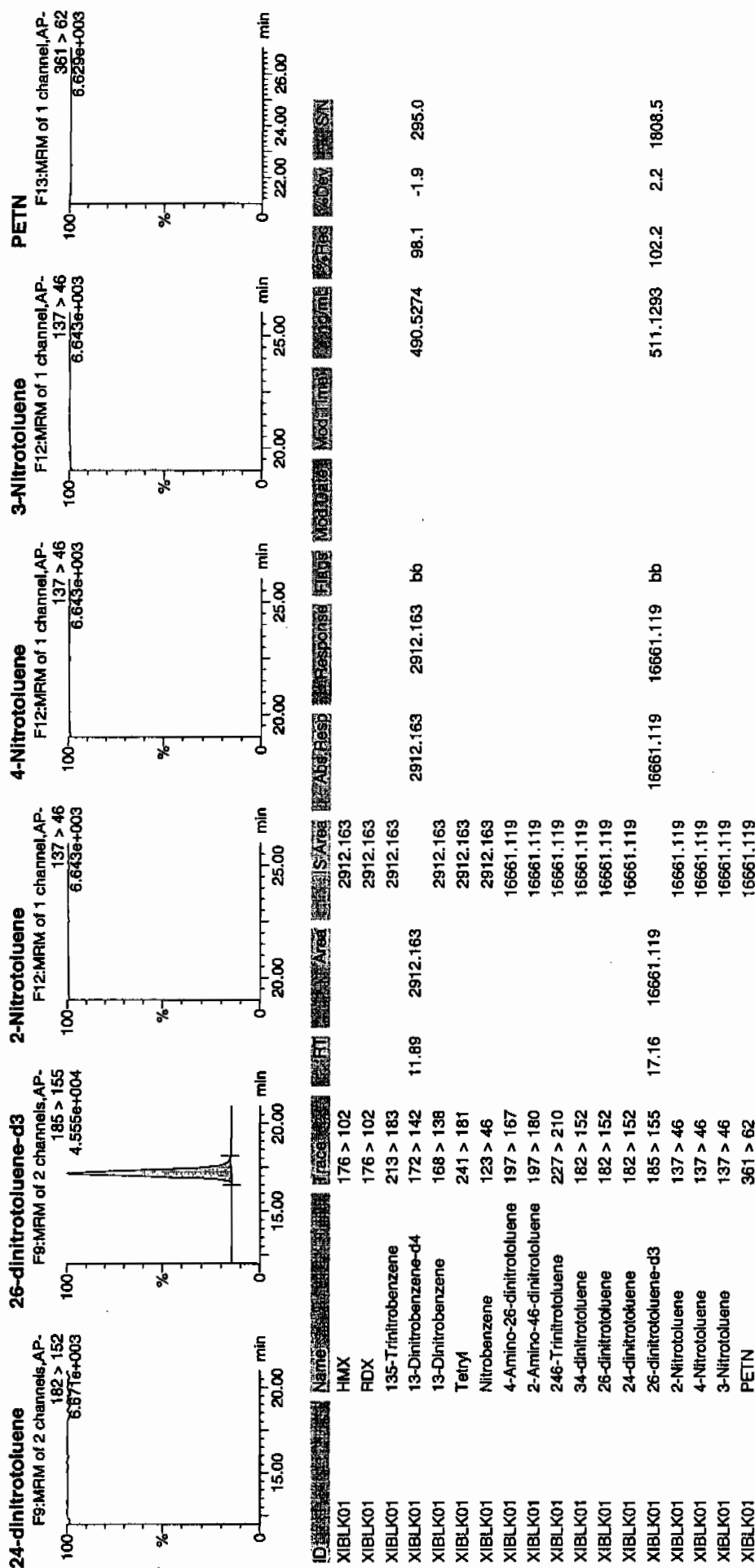


# Quantify Sample Report

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



Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1210

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 25-JAN-10 10:28

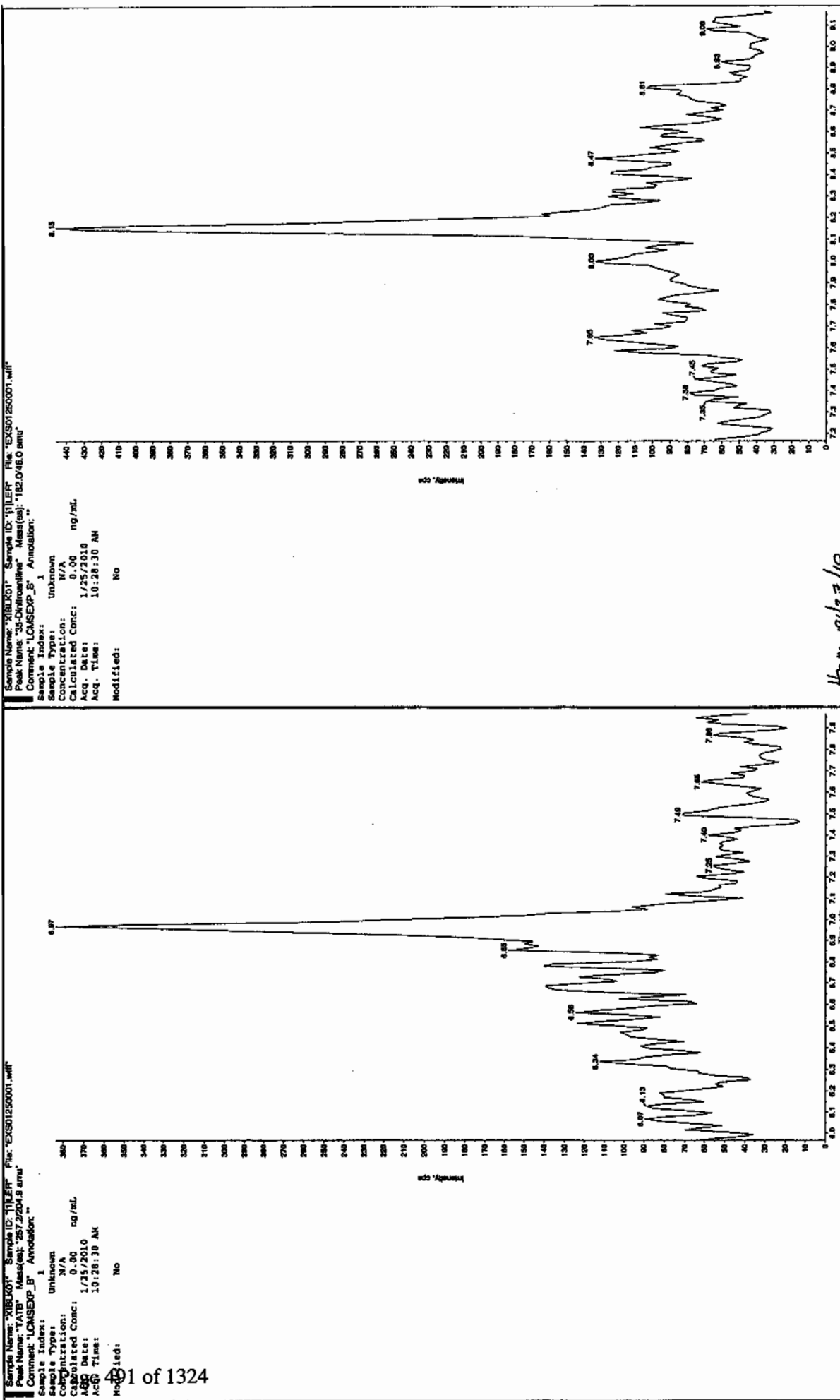
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Instrument ID: LCMSMS

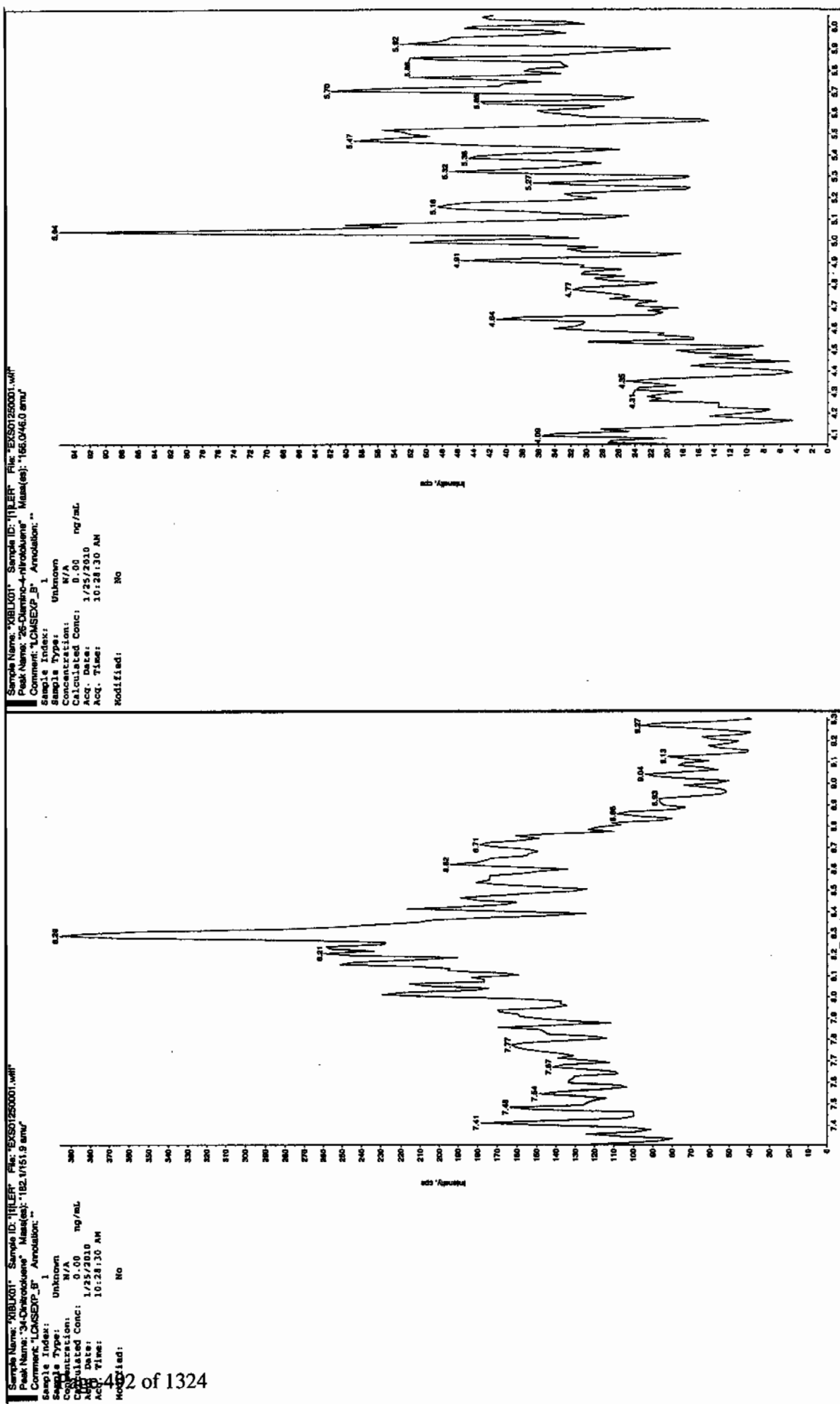
Column: Phenomenex Ultracarb 5u ODS(20)

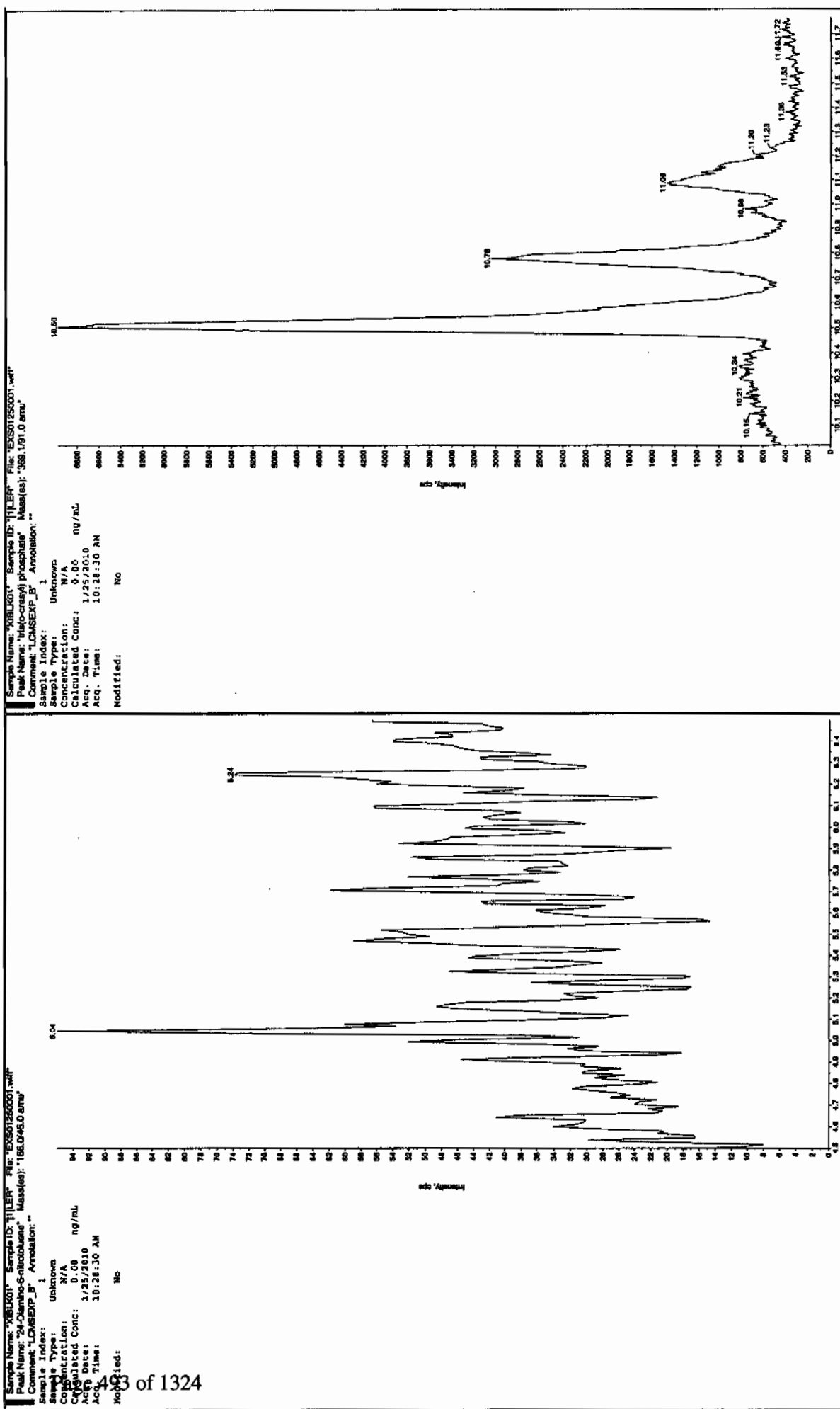
Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

See 1/27/10



See 1/27/10





Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1210

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 25-JAN-10 10:46

GEL Data File: EXS01250002.wiff

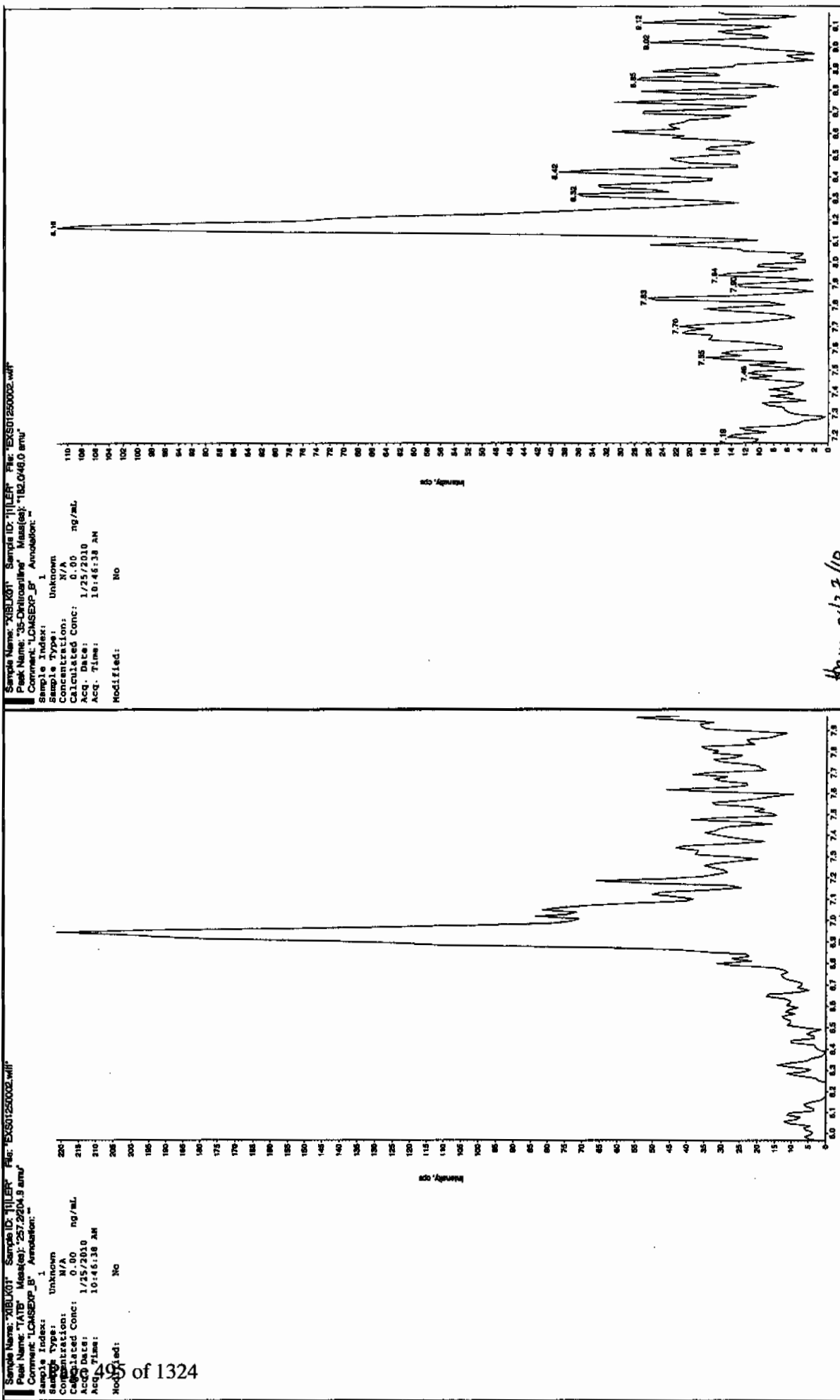
Instrument ID: LCMSMS

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

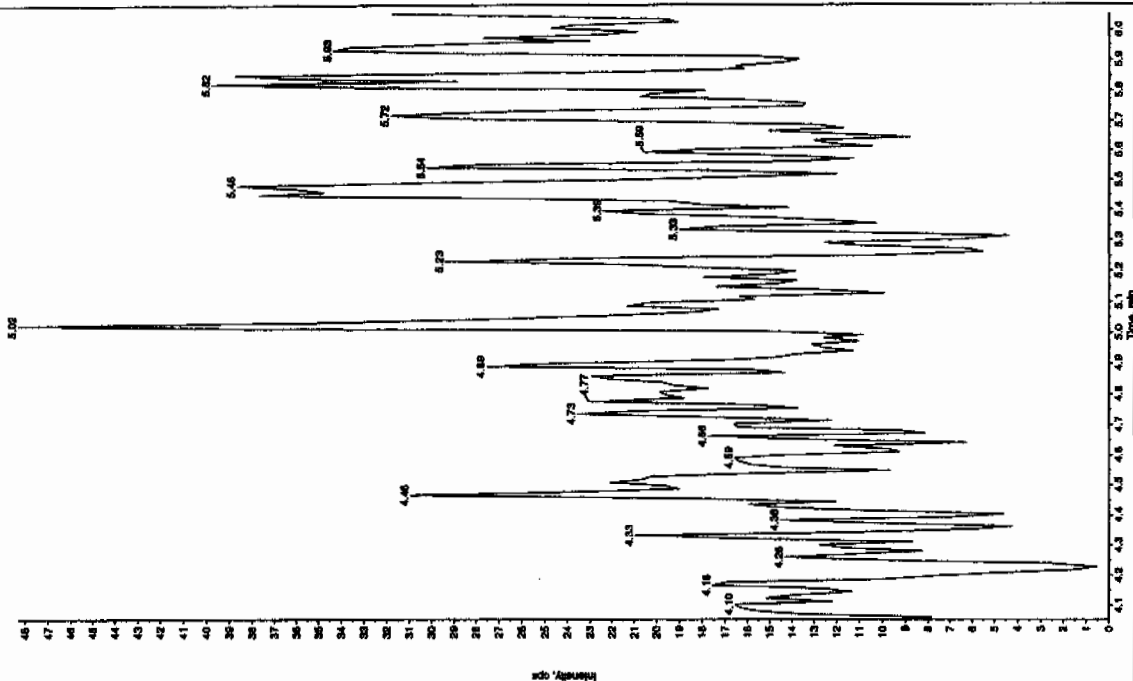


San 1/27/10

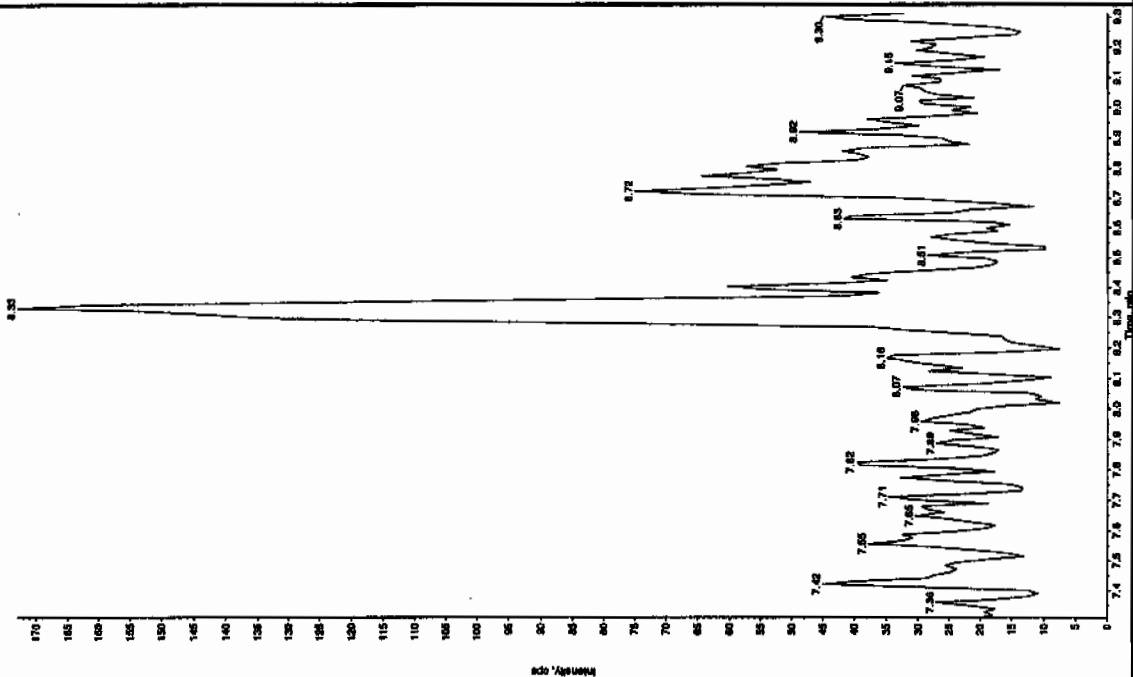


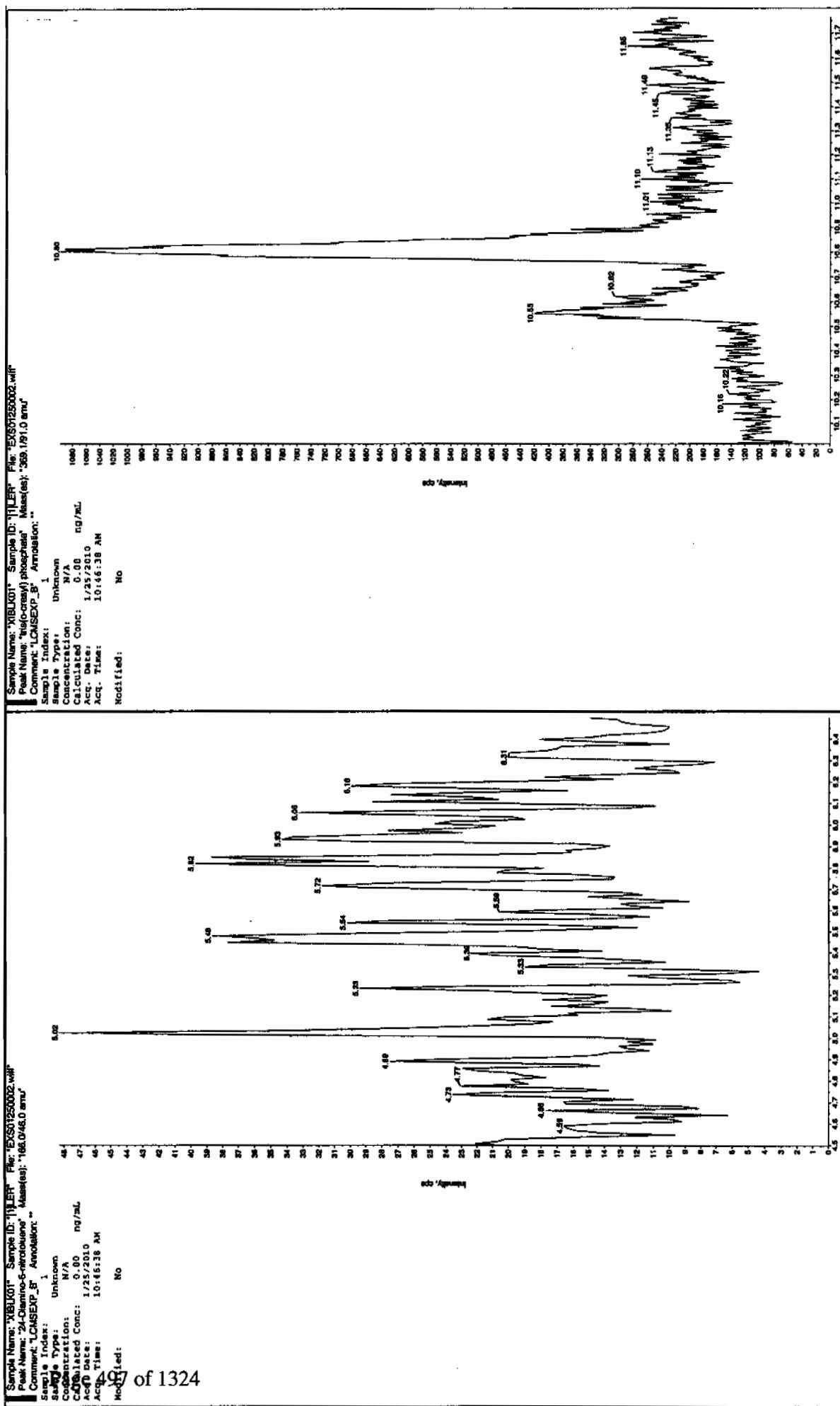
San 1/27/10

Sample Name: "XBLU001" Sample ID: "11111" File: "EXS01250002.wml"  
 Peak Name: "26-Oxamino-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: 1/25/2010  
 Acq. Time: 10:46:38 AM  
 Modified: No



Sample Name: "XBLU001" Sample ID: "11111" File: "EXS01250002.wml"  
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.1151 9 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""  
 Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/25/2010  
 Acq. Time: 10:46:38 AM  
 Modified: No





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

Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1210

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 27-JAN-10 10:27

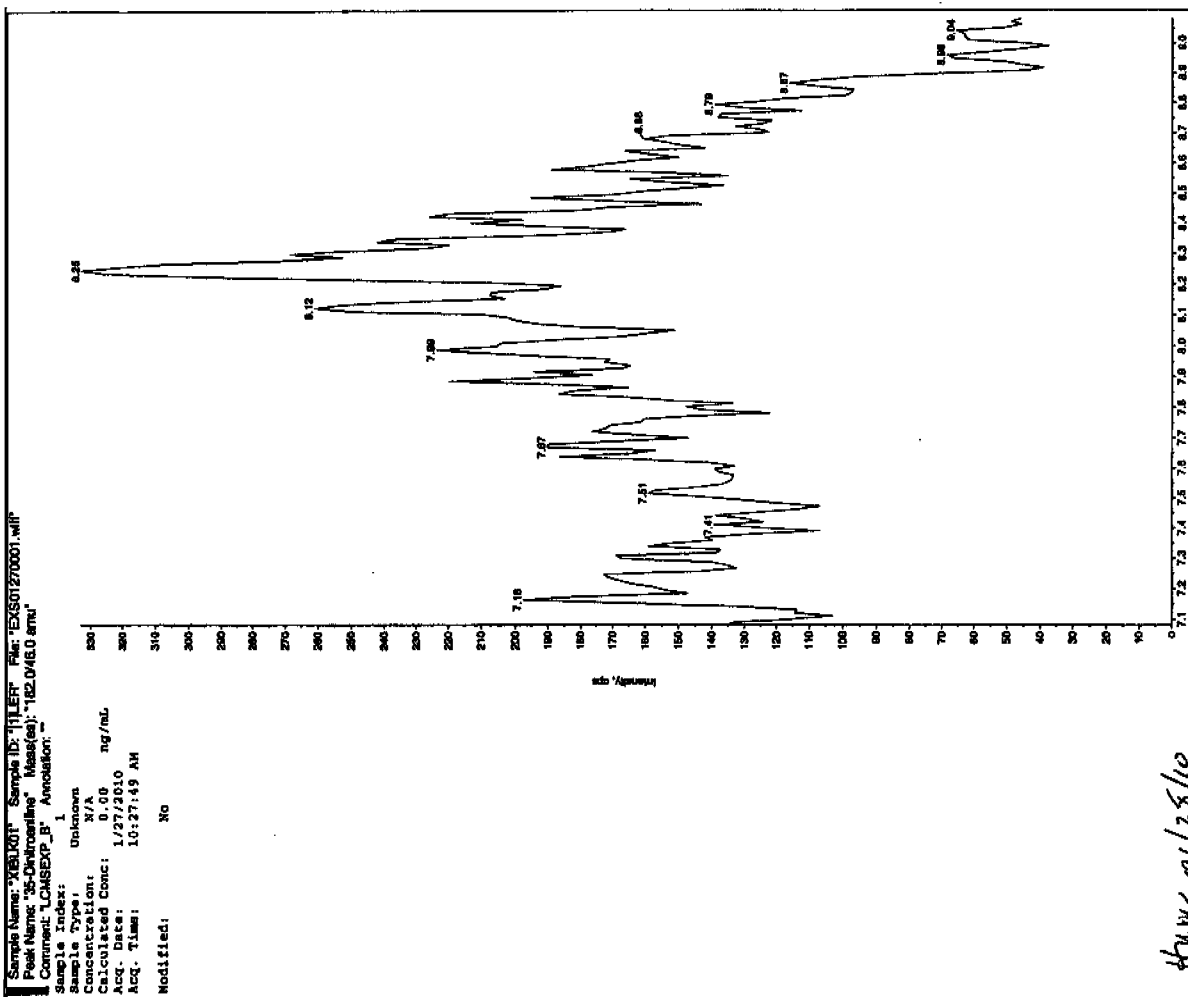
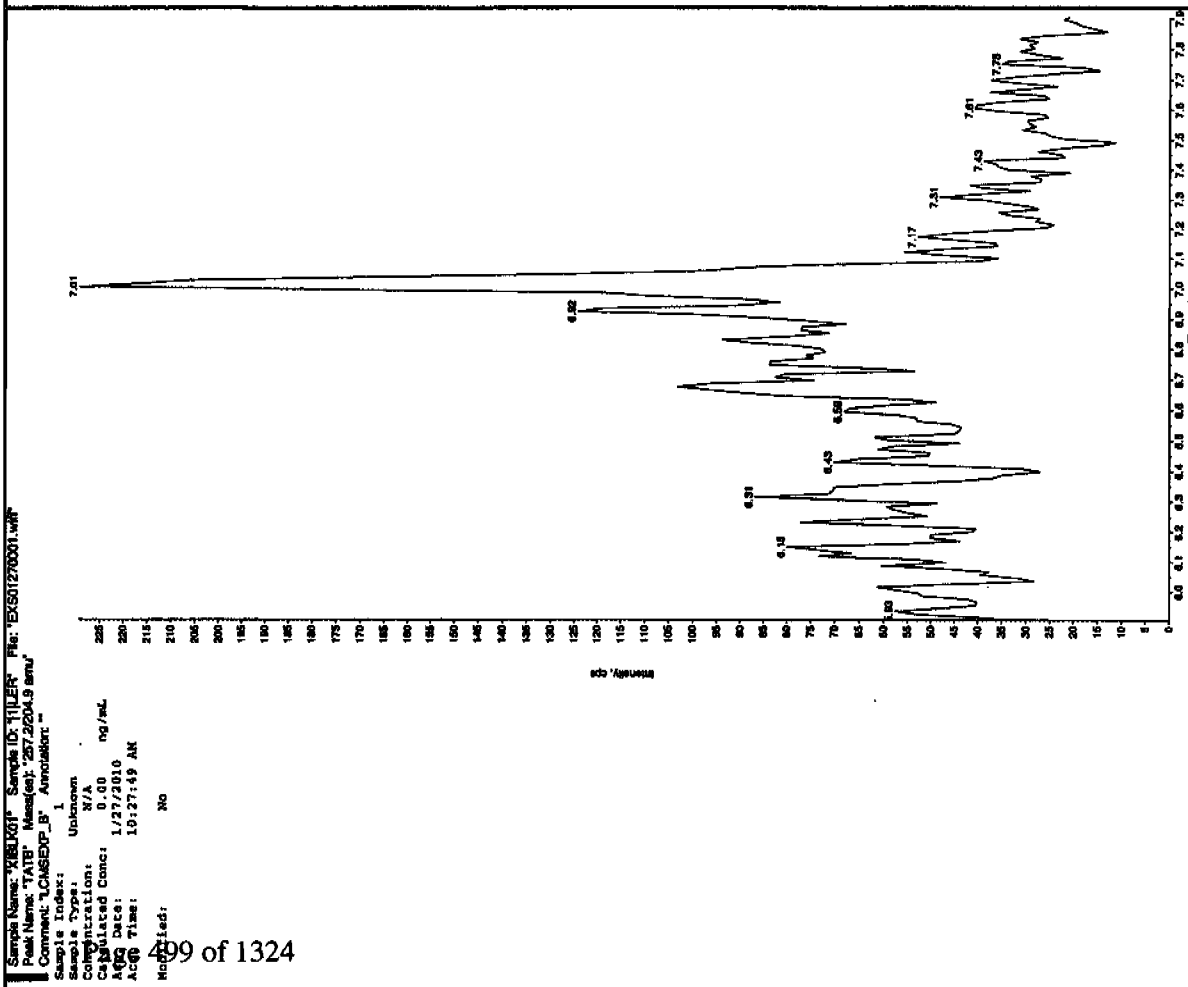
GEL Data File: EXS01270001.wiff

Instrument ID: LCMSMS

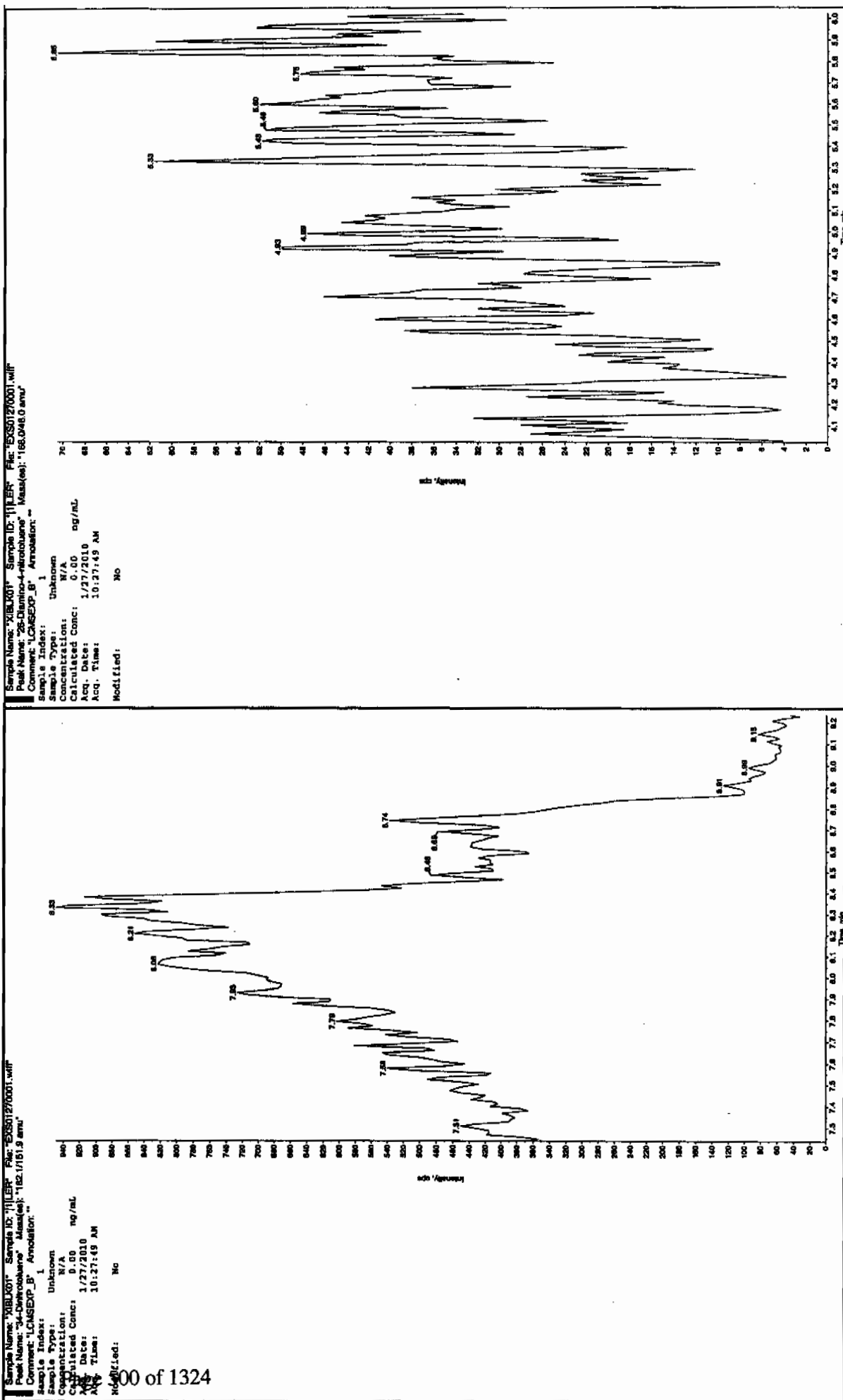
Column: Phenomenex Ultracarb 5u ODS(20)

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

Jan 11/28/10



Jan 01/28/10





Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1210

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 27-JAN-10 10:43

GEL Data File: EXS01270002.wiff

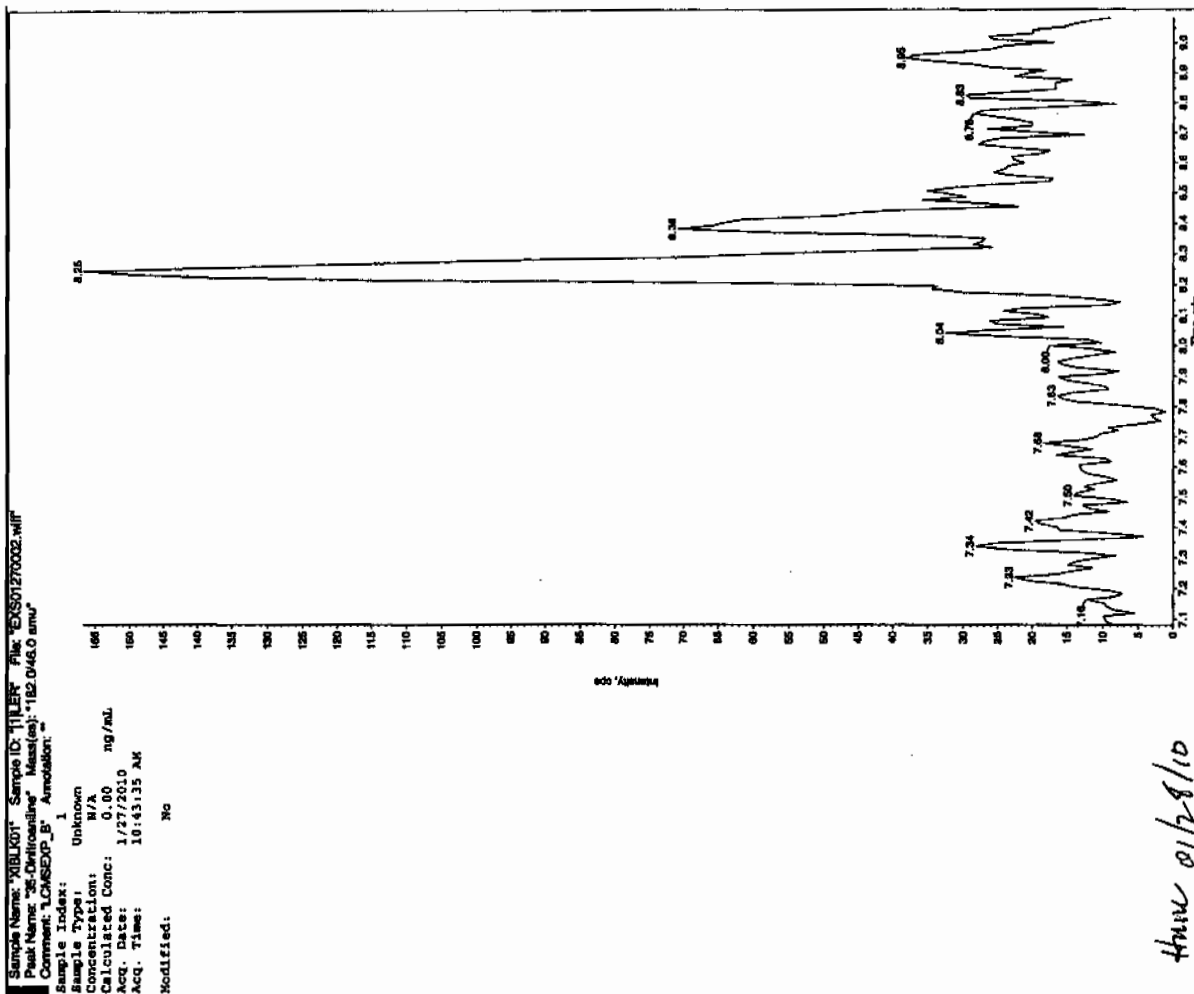
Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

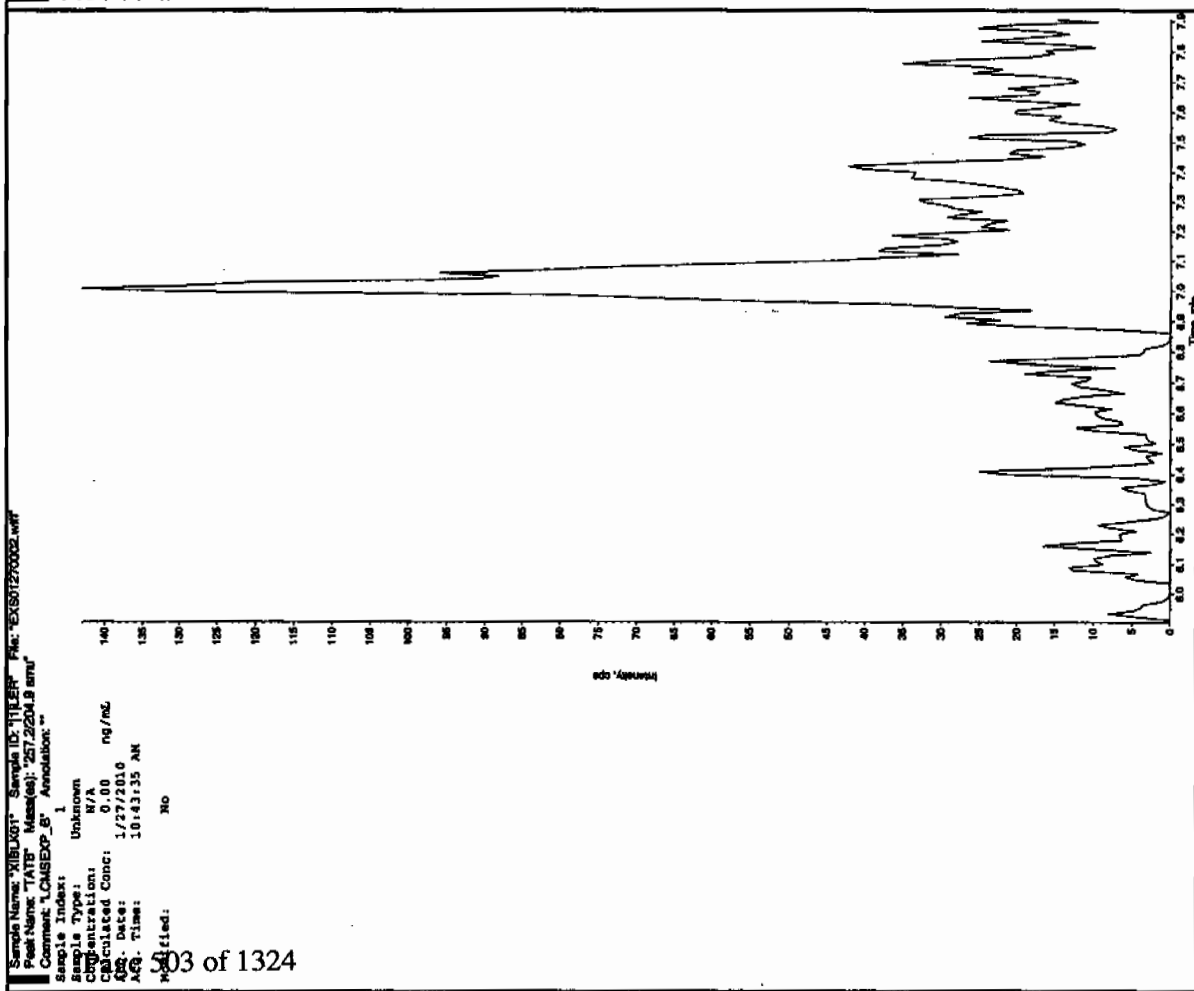
Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0



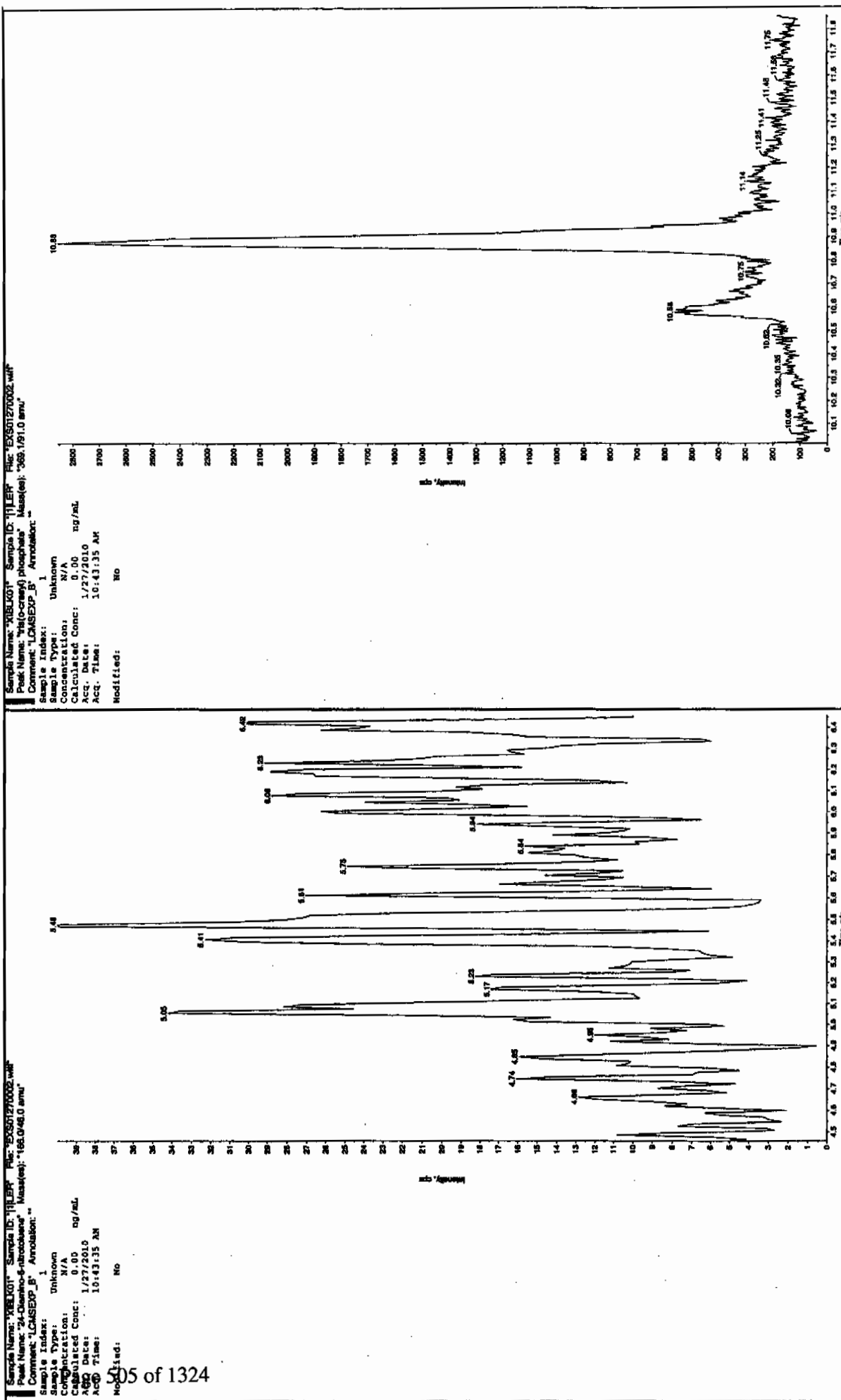
See 1/28/10



June 01/28/10







Sample Name: "XBLK01" Sample ID: "11LEP" File: "EX0501270002.wif"  
 Peak Name: "10-O-cary) phosphatase" Mass(es): "389.191.0 amu"  
 Comment: "LCMSEXP\_5" Annotation: "  
 Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 1/27/2010  
 Acq. Date: 10:43:35 AM  
 Acq. Time: 10:43:35 AM  
 Modified: No

Sample Name: "XBLK01" Sample ID: "11LEP" File: "EX0501270002.wif"  
 Peak Name: "24-O-cary) phosphatase" Mass(es): "168.046.0 amu"  
 Comment: "LCMSEXP\_5" Annotation: "  
 Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 1/27/2010  
 Acq. Date: 10:43:35 AM  
 Acq. Time: 10:43:35 AM  
 Modified: No

4A  
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1210

Lab Code: GEL

Lab Sample ID: XIBLK02

Analysis Date: 25-JAN-10 15:16

GEL Data File: EXP0125009a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	502.66
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	519.883
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

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

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

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125009a

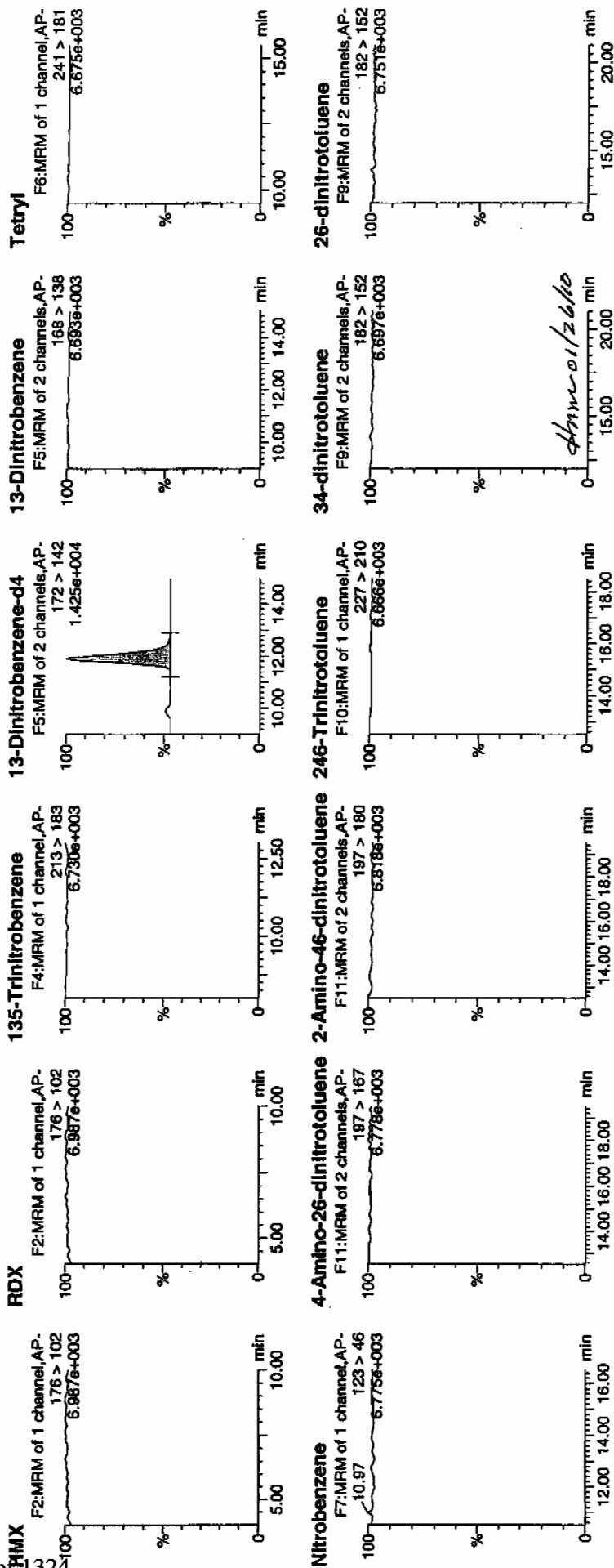
Date: 25-Jan-2010

Time: 15:16:35

ID: XIBLK02

Vial: 1:1,A

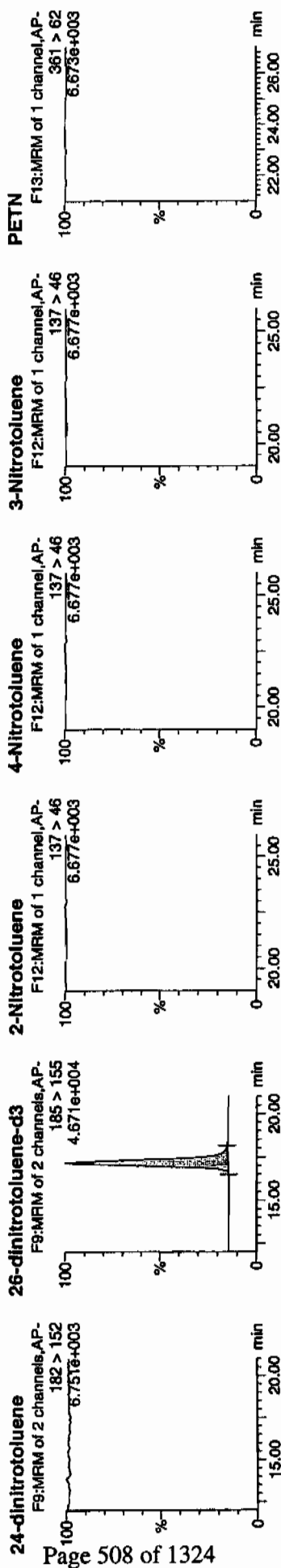
1/26/10  
MJP



Printed: Tue Jan 26 11:27:45 2010, Page 18 of 73

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

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



ID	Name	Mass	Time	Area	Height	Width	Area%	Height%	Width%
XIBLK02	HMX	176 > 102	2984.192						
XIBLK02	RDX	176 > 102	2984.192						
XIBLK02	135-Trinitrobenzene	213 > 183	2984.192						
XIBLK02	13-Dinitrobenzene-d4	172 > 142	11.89						
XIBLK02	13-Dinitrobenzene	168 > 138	2984.192						
XIBLK02	Tetryl	241 > 181	2984.192						
XIBLK02	Nitrobenzene	123 > 46	2984.192						
XIBLK02	4-Amino-28-dinitrotoluene	197 > 167	16946.445						
XIBLK02	2-Amino-46-dinitrotoluene	197 > 180	16946.445						
XIBLK02	246-Trinitrotoluene	227 > 210	16946.445						
XIBLK02	34-dinitrotoluene	182 > 152	16946.445						
XIBLK02	26-dinitrotoluene	182 > 152	16946.445						
XIBLK02	24-dinitrotoluene	182 > 152	16946.445						
XIBLK02	26-dinitrotoluene-d3	185 > 155	17.14						
XIBLK02	2-Nitrotoluene	137 > 46	16946.445						
XIBLK02	4-Nitrotoluene	137 > 46	16946.445						
XIBLK02	3-Nitrotoluene	137 > 46	16946.445						
XIBLK02	PETN	361 > 62	16946.445						

4A  
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1210

Lab Code: GEL

Lab Sample ID: XIBLK03

Analysis Date: 25-JAN-10 16:15

GEL Data File: EXP0125011a

Instrument ID: LCMSMS

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

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	508.032
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	524.258
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

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

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

Name: C:\MASSLYNX\NEW\_EXP\PRO\Data\EXP0125011a

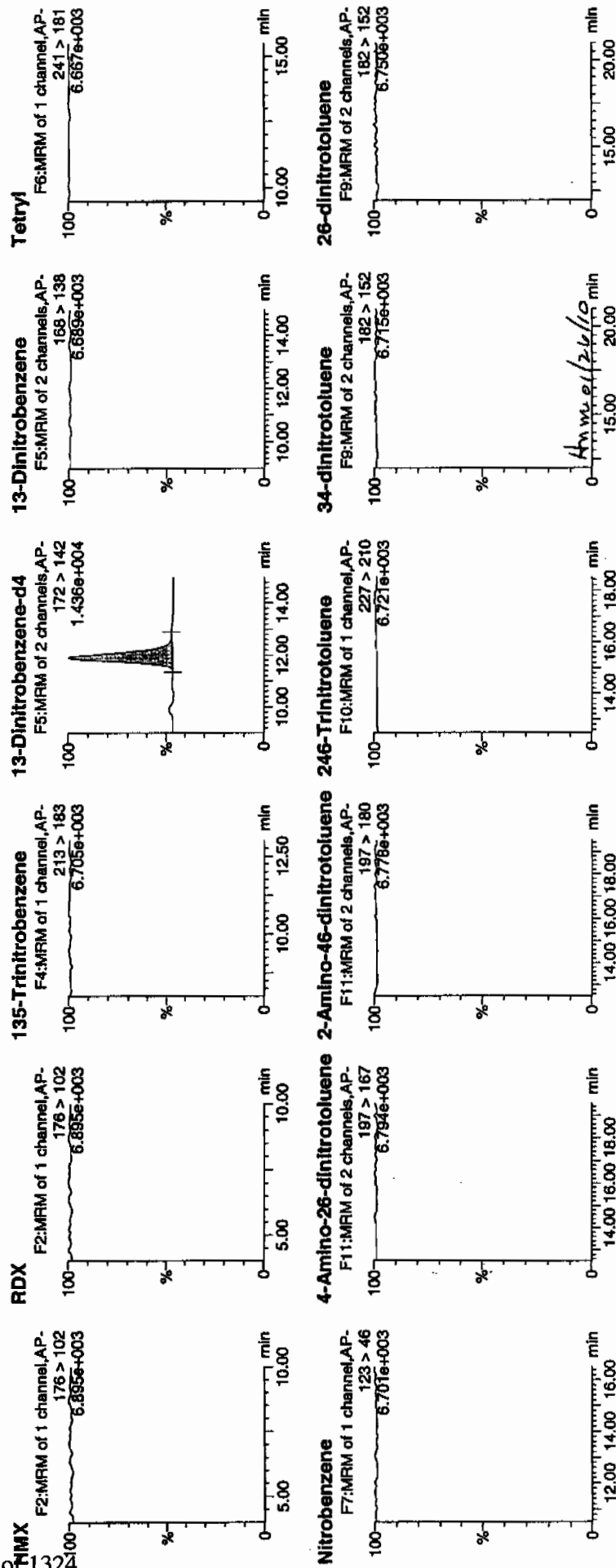
Date: 25-Jan-2010

Time: 16:15:32

ID: XIBLK03

Vial: 1:1A

11/16/10



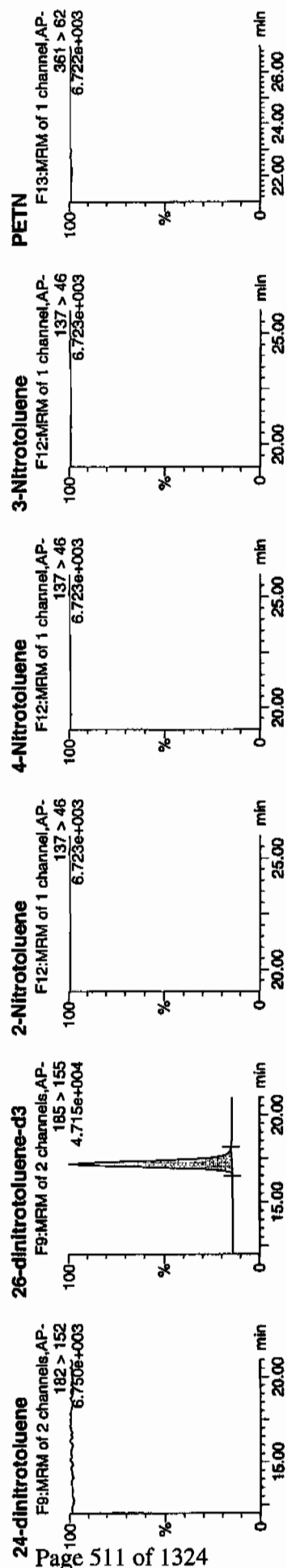


## Quantify Sample Report

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

Printed: Tue Jan 26 11:27:45 2010, Page 22 of 73

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

[illegible]

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1210

Lab Code: GEL

Lab Sample ID: XIBLK04

Analysis Date: 25-JAN-10 22:39

GEL Data File: EXP0125024a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	536.181
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	610.208
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

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

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

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

Date: 25-Jan-2010

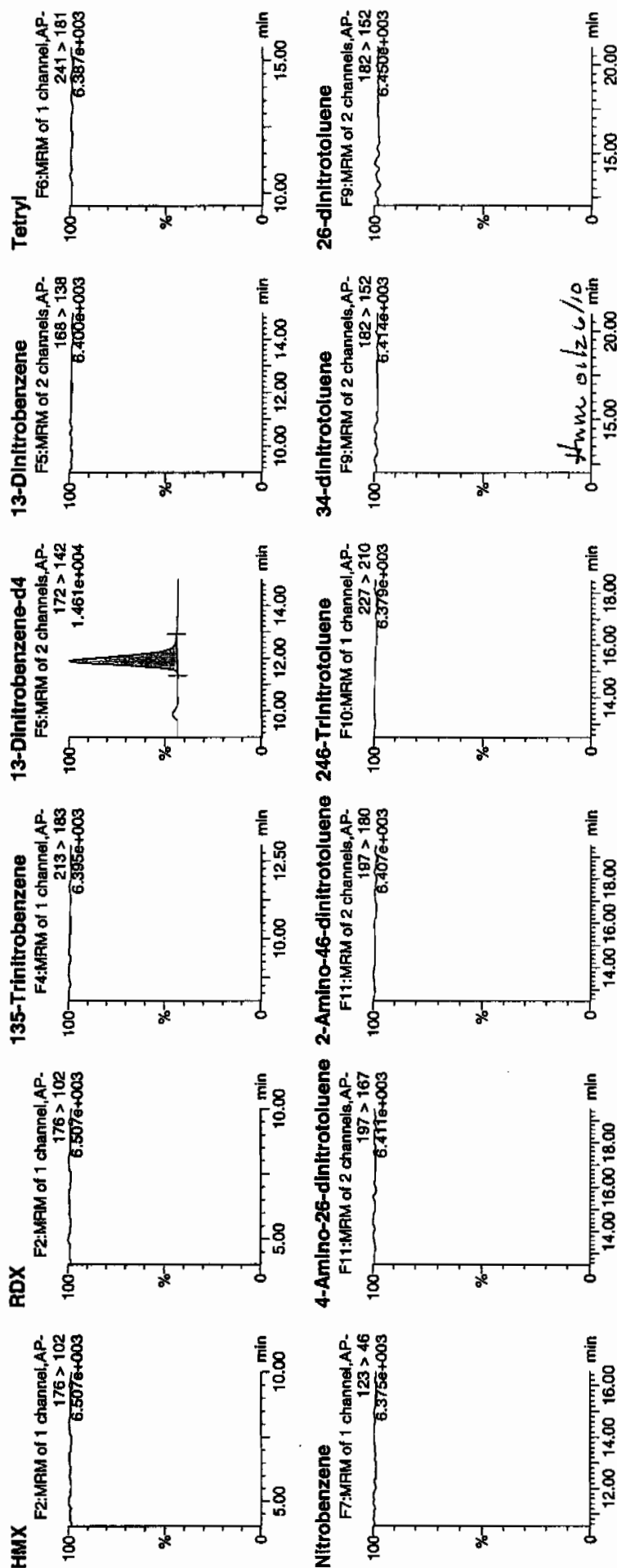
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ID: XIBLK04

Vial: 1:1,A

1/26/10  
MJP

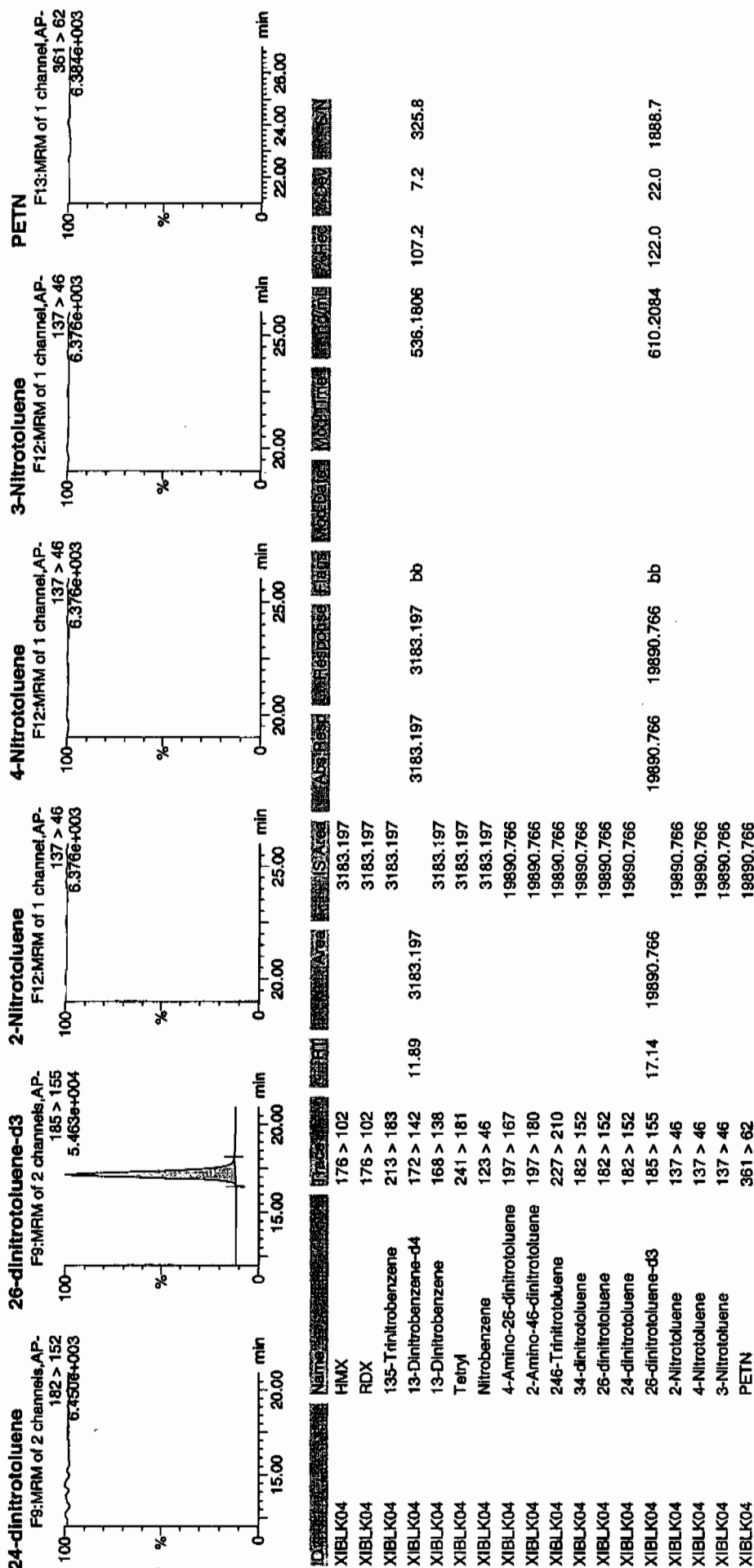
Page 513 of 1324



Printed: Tue Jan 26 11:27:45 2010, Page 48 of 73

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

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



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1210

Lab Code: GEL

Lab Sample ID: XIBLK05

Analysis Date: 26-JAN-10 04:03

GEL Data File: EXP0125035a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	530.31
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	567.52
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

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

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

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125035a

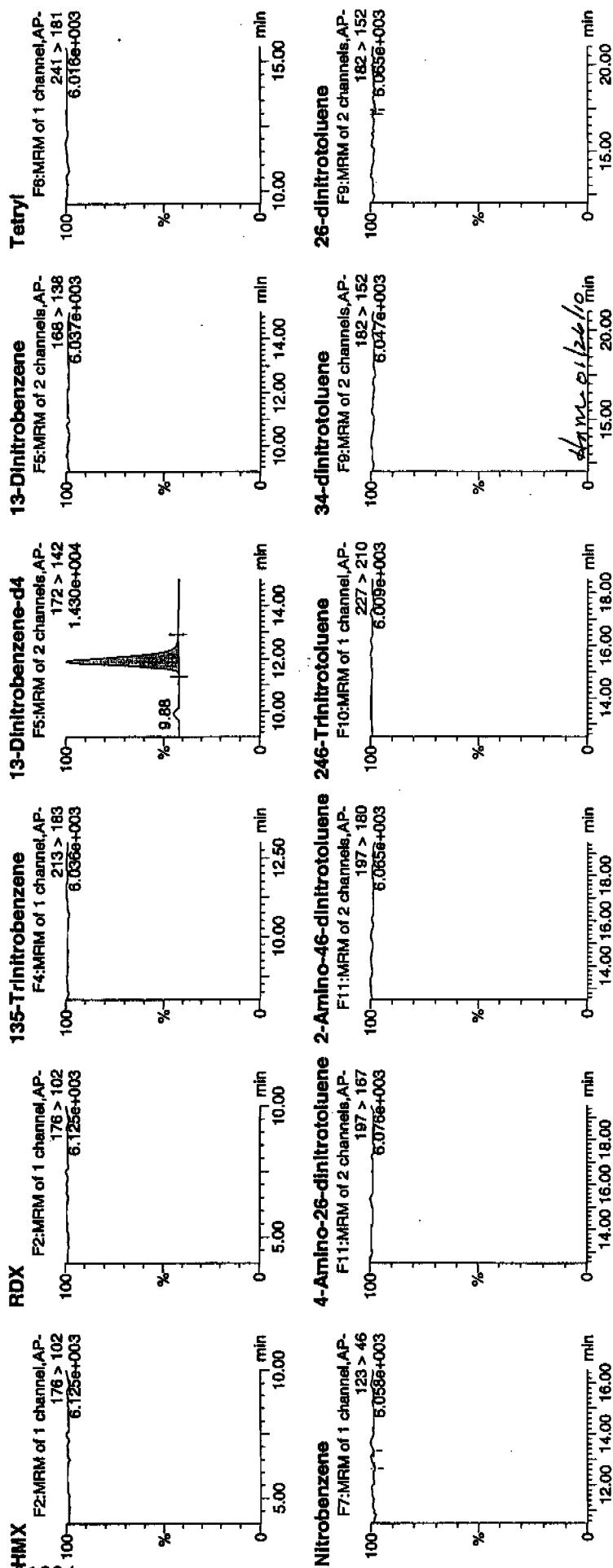
Date: 26-Jan-2010

Time: 04:03:54

ID: XIBLK05

Vial: 1:1,A

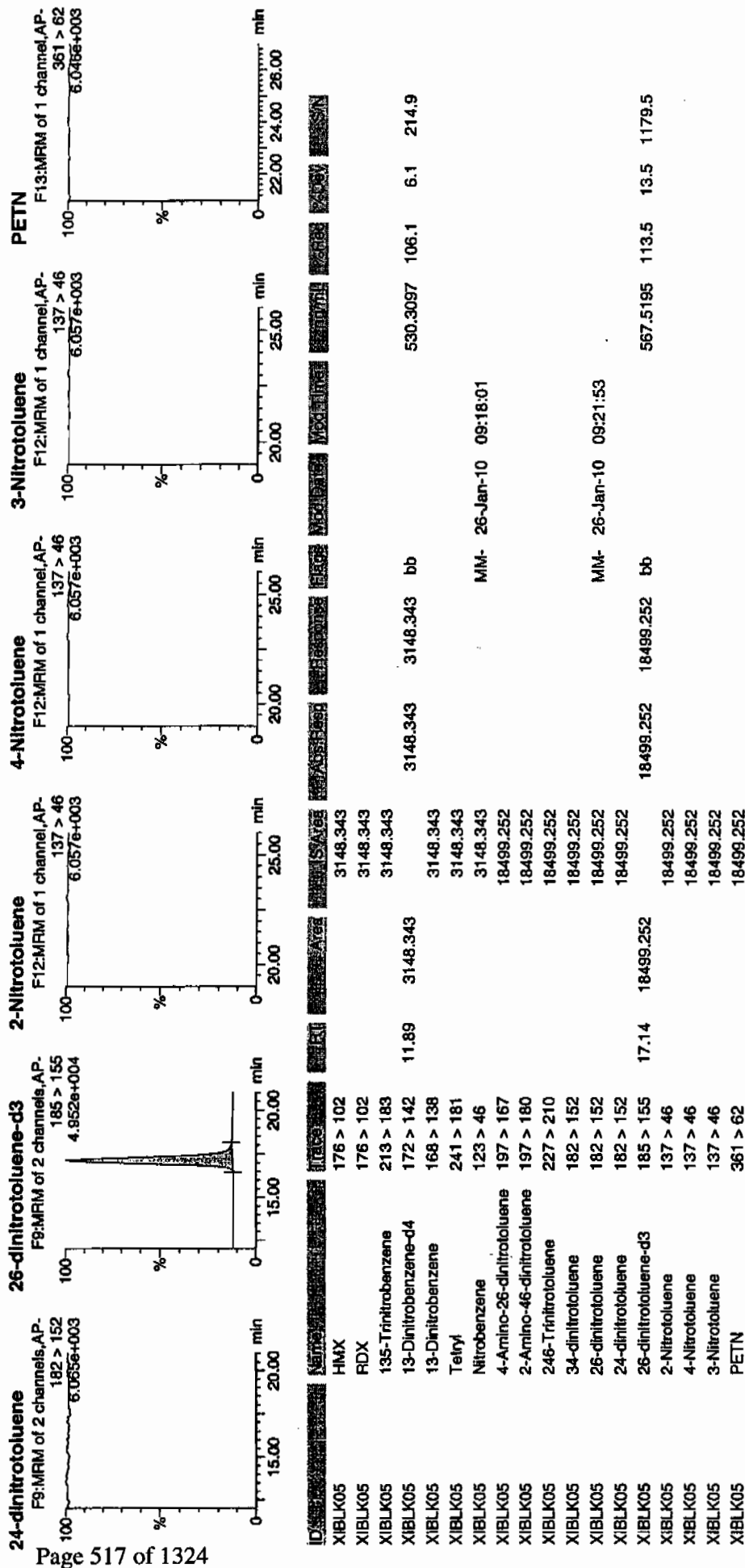
1/26/10  
M.A.P.



Printed: Tue Jan 26 11:27:45 2010, Page 70 of 73

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

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



4A  
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1210

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

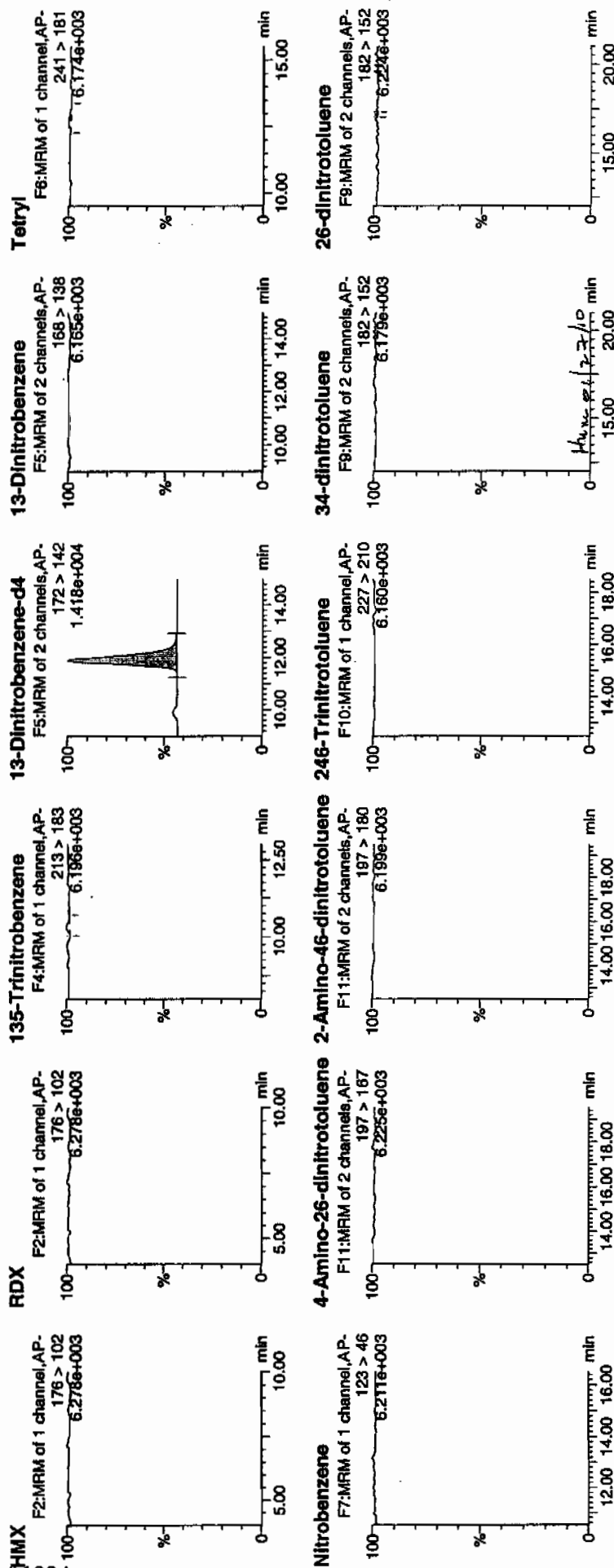
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Time: 10:27:39

ID: XIBLK06

Vial: 1:1,A

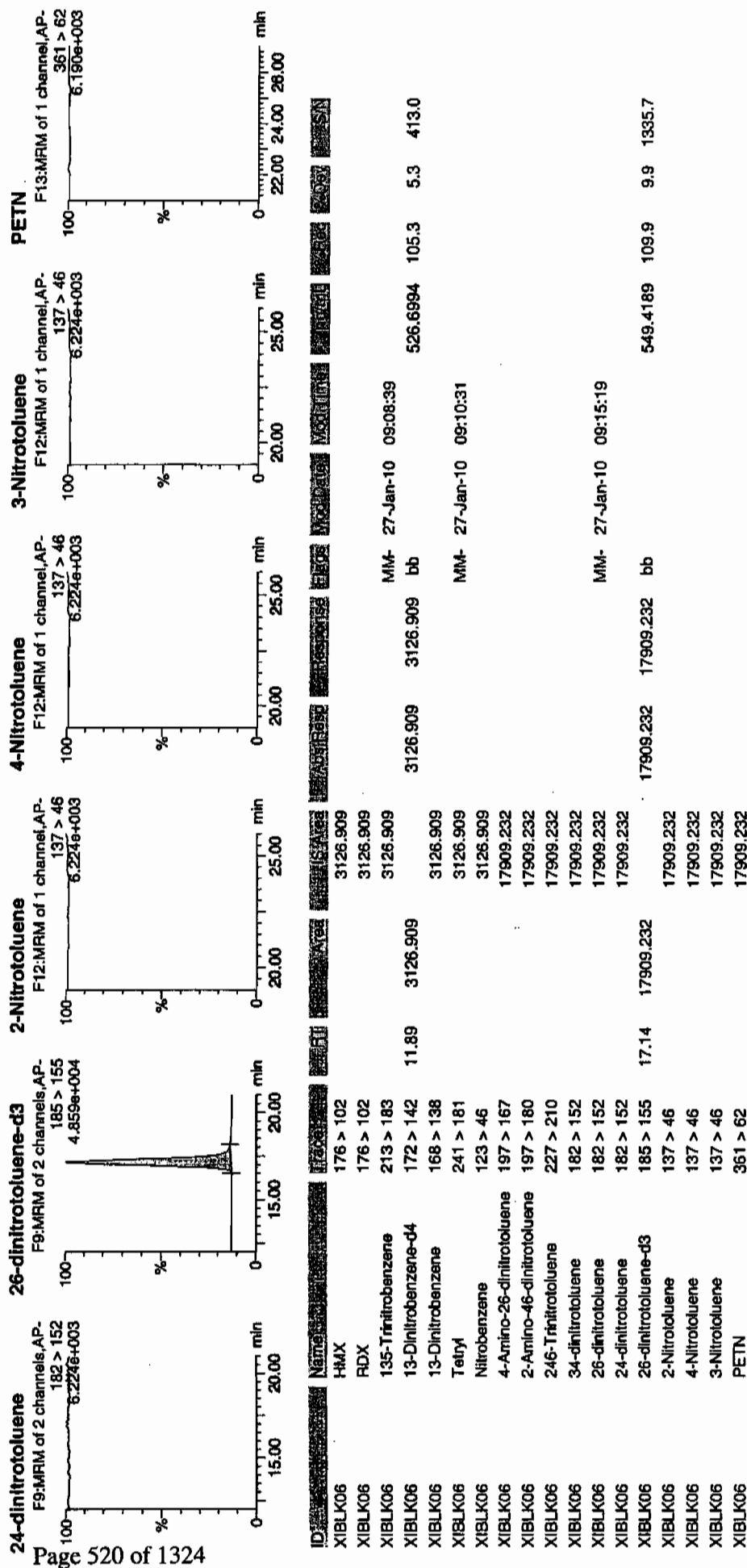
107  
10/10



Printed: Wed Jan 27 09:26:20 2010, Page 24 of 97

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

Dataset: C:\MASSLYNX\New\_Exp\PRO012510expA1.qld, Time: Wed Jan 27 09:20:42 2010



4A  
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1210

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

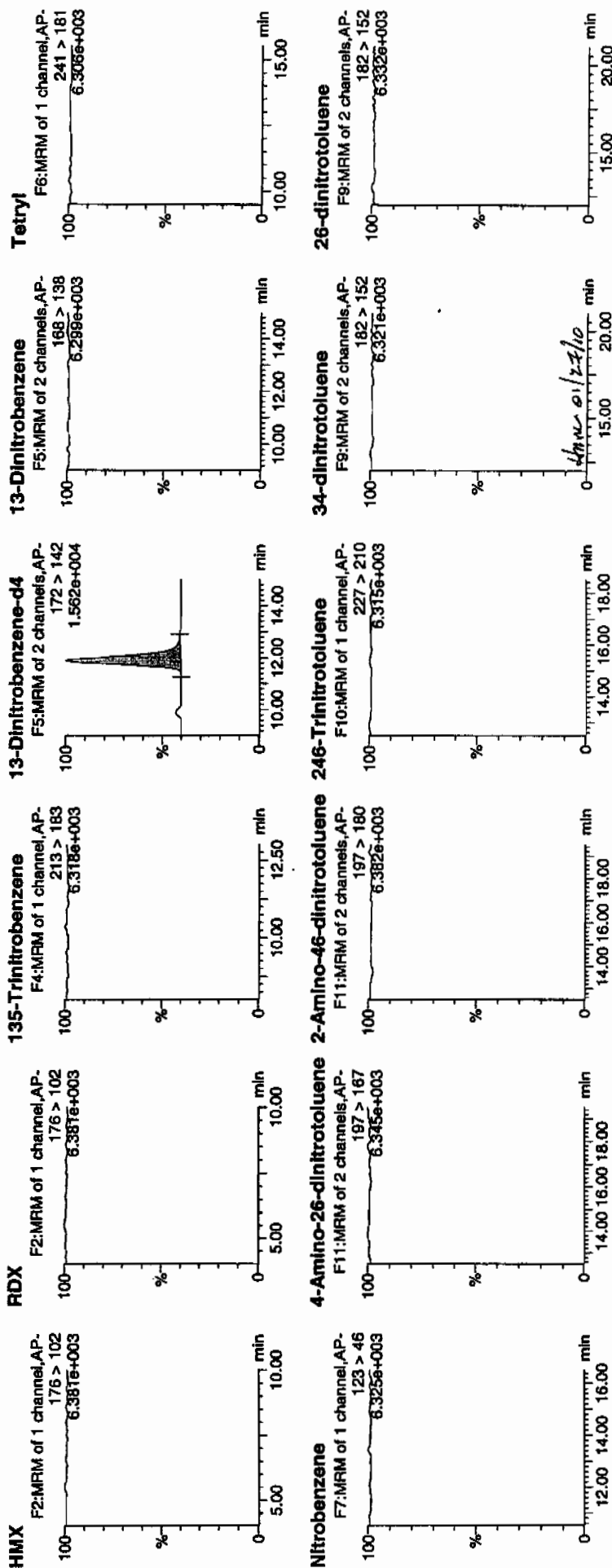
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Time: 16:50:59

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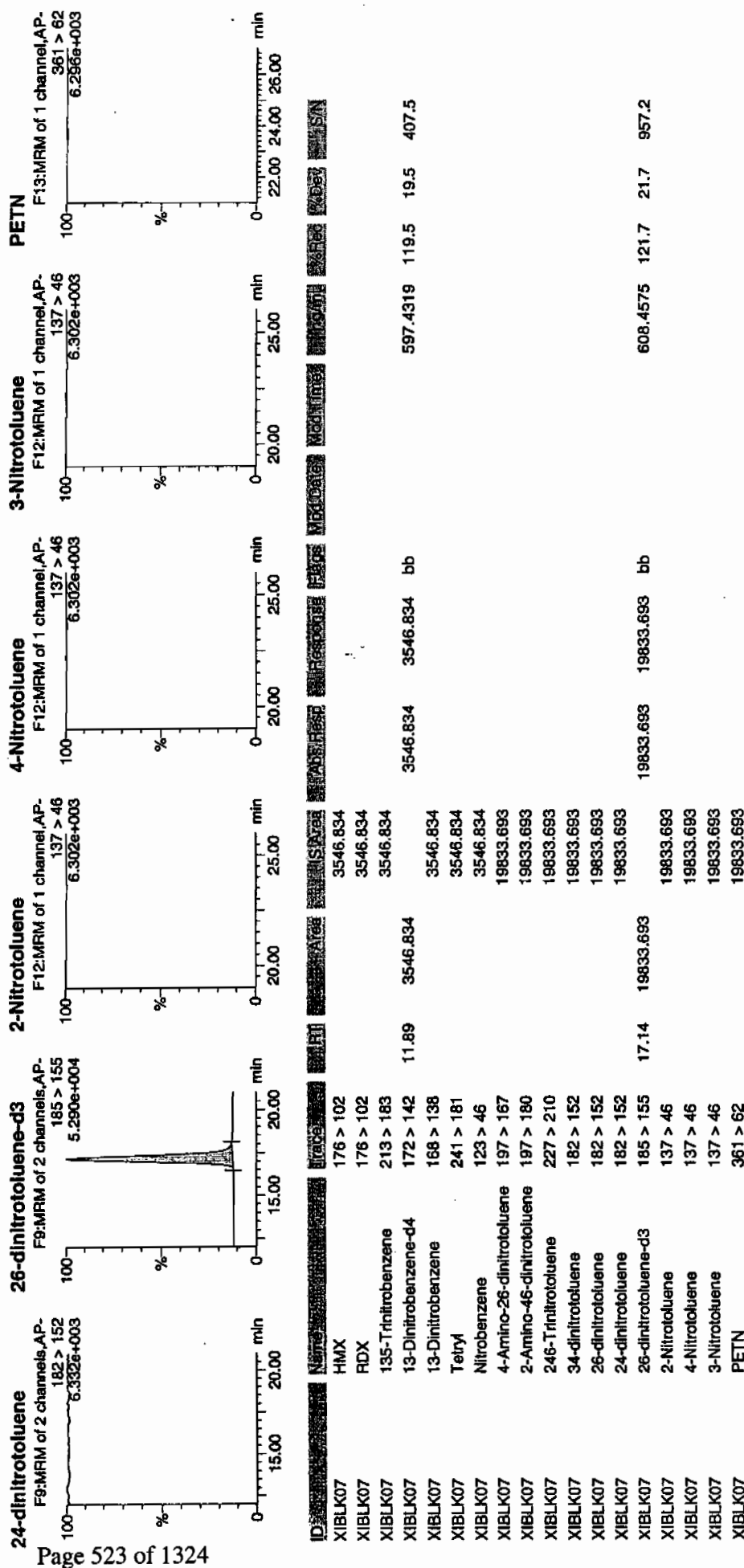
Vial: 1:1,A

1/27/10



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

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



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1210

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

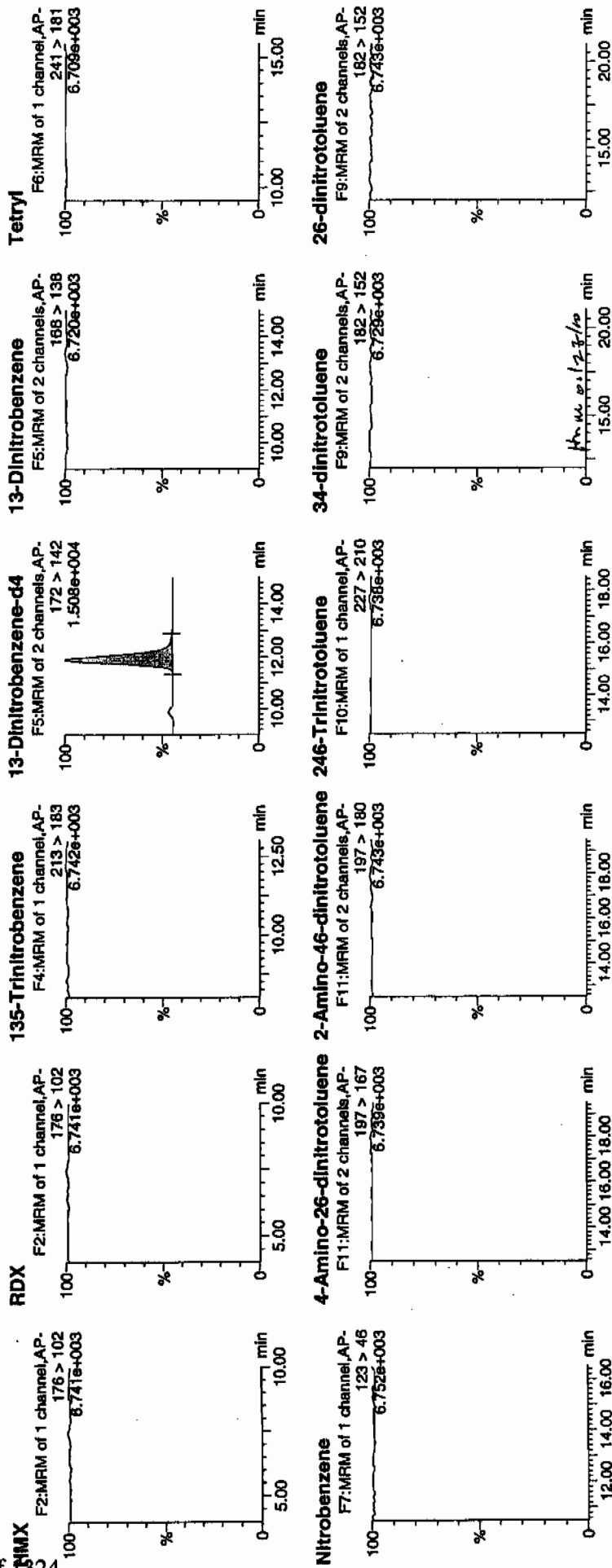
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Time: 19:48:13

ID: XIBLK08

Vial: 1:1,A

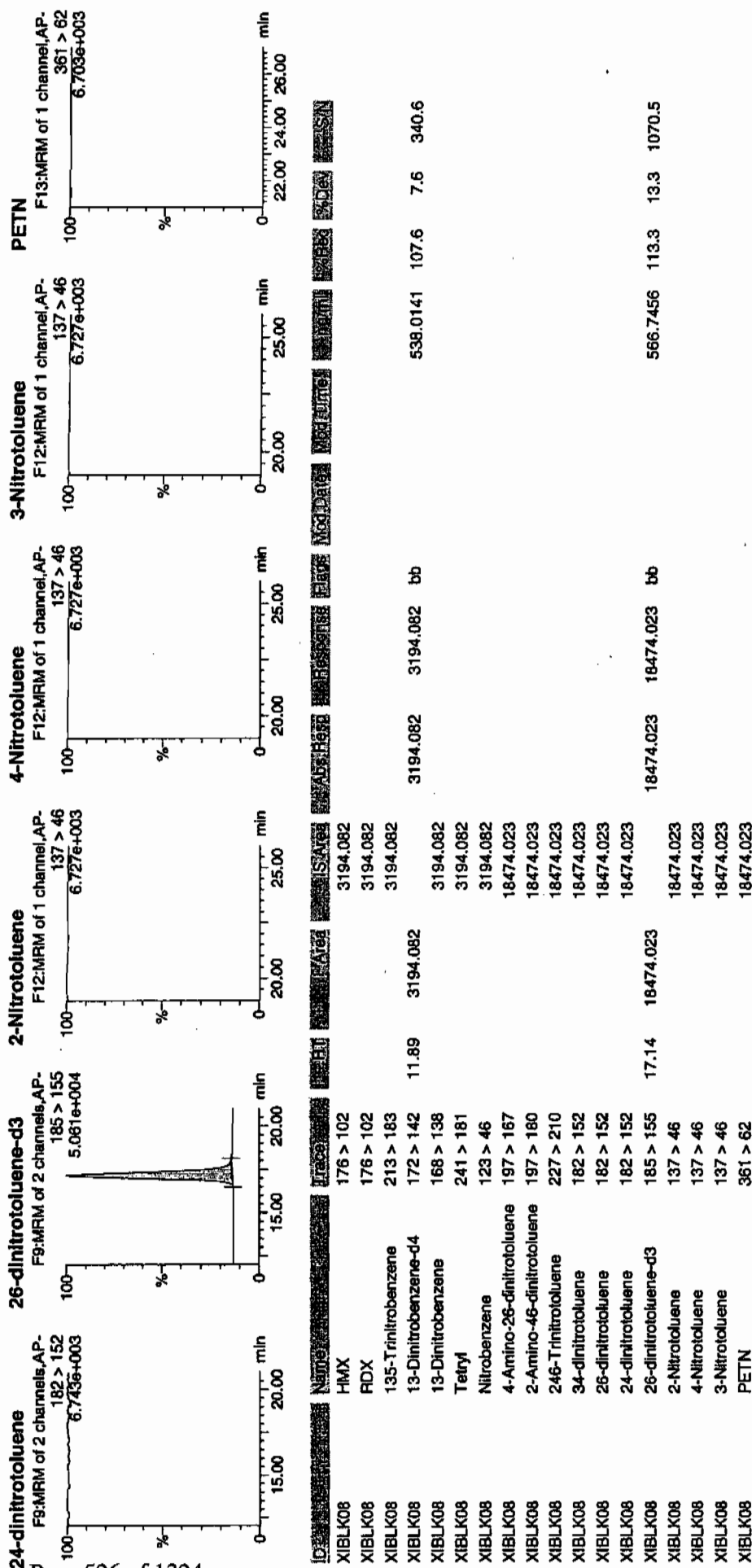
1/27/10  
 1/27/10



Printed: Wed Jan 27 09:26:20 2010, Page 62 of 97

Quantity 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): 10-1210

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

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

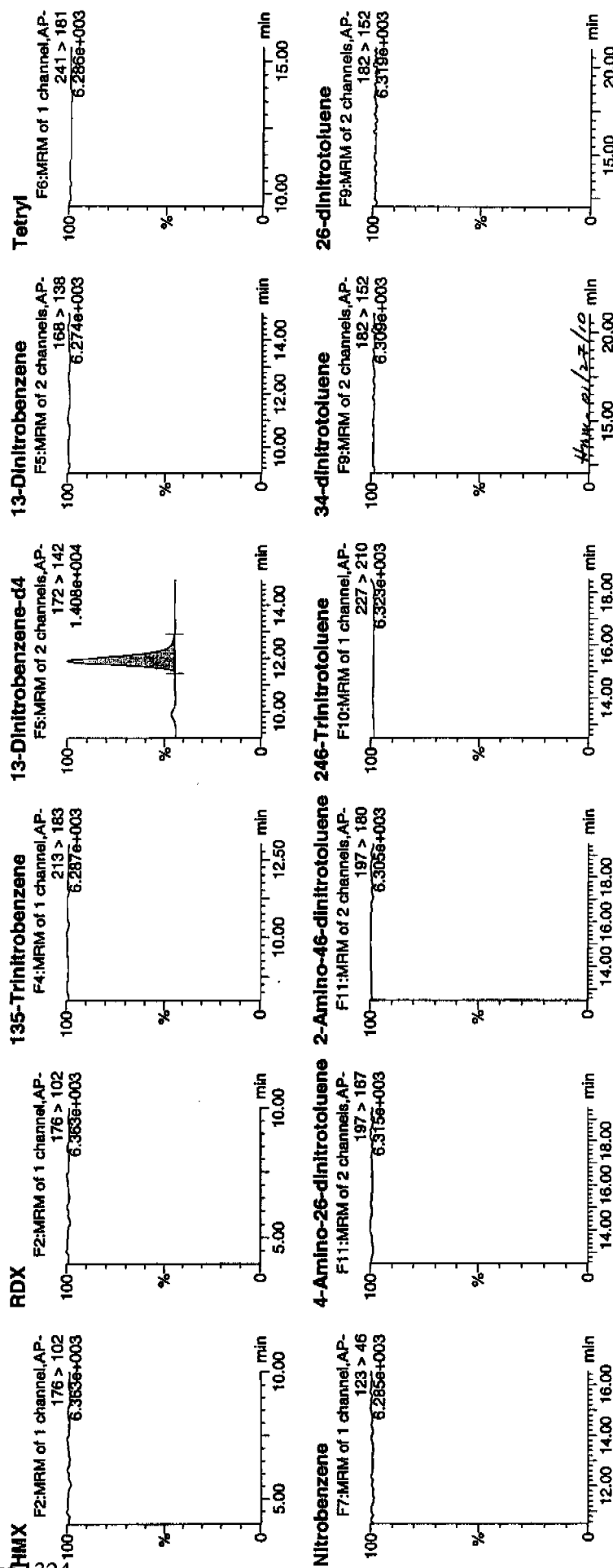
Date: 26-Jan-2010

Time: 23:14:40

ID: XIBLK09

Yial: 1:1,A

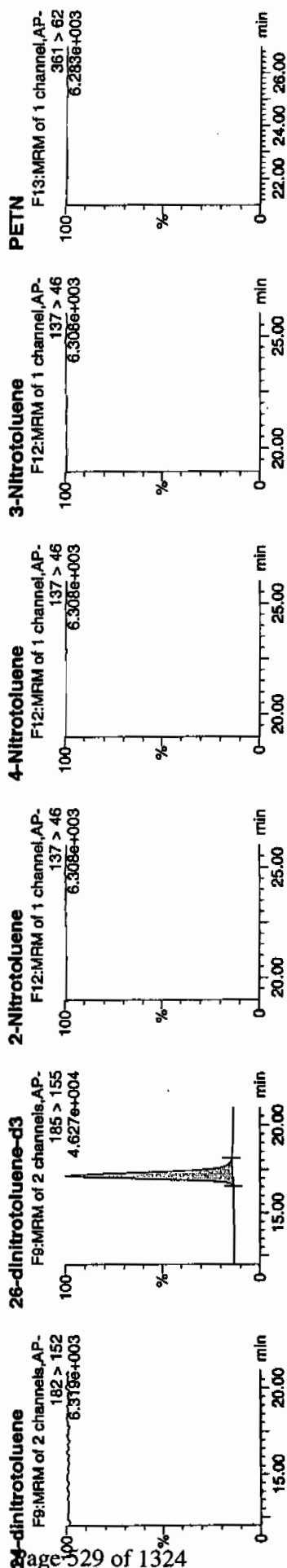
12/2/10



Printed: Wed Jan 27 09:26:20 2010, Page 76 of 97

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

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



ID	Name	Area	Height	Area	Height	Area	Height	Area	Height	Area	Height
XIBLK09	HMX	176 > 102	3113.358	3113.358	3113.358	3113.358	3113.358	3113.358	3113.358	3113.358	3113.358
XIBLK09	RDX	176 > 102	3113.358	3113.358	3113.358	3113.358	3113.358	3113.358	3113.358	3113.358	3113.358
XIBLK09	135-Trinitrobenzene	213 > 183	3113.358	3113.358	3113.358	3113.358	3113.358	3113.358	3113.358	3113.358	3113.358
XIBLK09	13-Dinitrobenzene-d4	172 > 142	11.89	3113.358	3113.358	3113.358	3113.358	3113.358	3113.358	3113.358	3113.358
XIBLK09	13-Dinitrobenzene	168 > 138	3113.358	3113.358	3113.358	3113.358	3113.358	3113.358	3113.358	3113.358	3113.358
XIBLK09	Tetryl	241 > 181	3113.358	3113.358	3113.358	3113.358	3113.358	3113.358	3113.358	3113.358	3113.358
XIBLK09	Nitrobenzene	123 > 46	3113.358	3113.358	3113.358	3113.358	3113.358	3113.358	3113.358	3113.358	3113.358
XIBLK09	4-Amino-26-dinitrotoluene	197 > 167	17081.178	17081.178	17081.178	17081.178	17081.178	17081.178	17081.178	17081.178	17081.178
XIBLK09	2-Amino-46-dinitrotoluene	197 > 180	17081.178	17081.178	17081.178	17081.178	17081.178	17081.178	17081.178	17081.178	17081.178
XIBLK09	246-Trinitrotoluene	227 > 210	17081.178	17081.178	17081.178	17081.178	17081.178	17081.178	17081.178	17081.178	17081.178
XIBLK09	34-dinitrotoluene	182 > 152	17081.178	17081.178	17081.178	17081.178	17081.178	17081.178	17081.178	17081.178	17081.178
XIBLK09	26-dinitrotoluene	182 > 152	17081.178	17081.178	17081.178	17081.178	17081.178	17081.178	17081.178	17081.178	17081.178
XIBLK09	24-dinitrotoluene	182 > 152	17081.178	17081.178	17081.178	17081.178	17081.178	17081.178	17081.178	17081.178	17081.178
XIBLK09	26-dinitrotoluene-d3	185 > 155	17.14	17081.178	17081.178	17081.178	17081.178	17081.178	17081.178	17081.178	17081.178
XIBLK09	2-Nitrotoluene	137 > 46	17081.178	17081.178	17081.178	17081.178	17081.178	17081.178	17081.178	17081.178	17081.178
XIBLK09	4-Nitrotoluene	137 > 46	17081.178	17081.178	17081.178	17081.178	17081.178	17081.178	17081.178	17081.178	17081.178
XIBLK09	3-Nitrotoluene	137 > 46	17081.178	17081.178	17081.178	17081.178	17081.178	17081.178	17081.178	17081.178	17081.178
XIBLK09	PETN	361 > 62	524.0159	104.8	4.8	1008.4	524.4168	104.9	4.9	552.1	524.4168

4A  
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1210

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

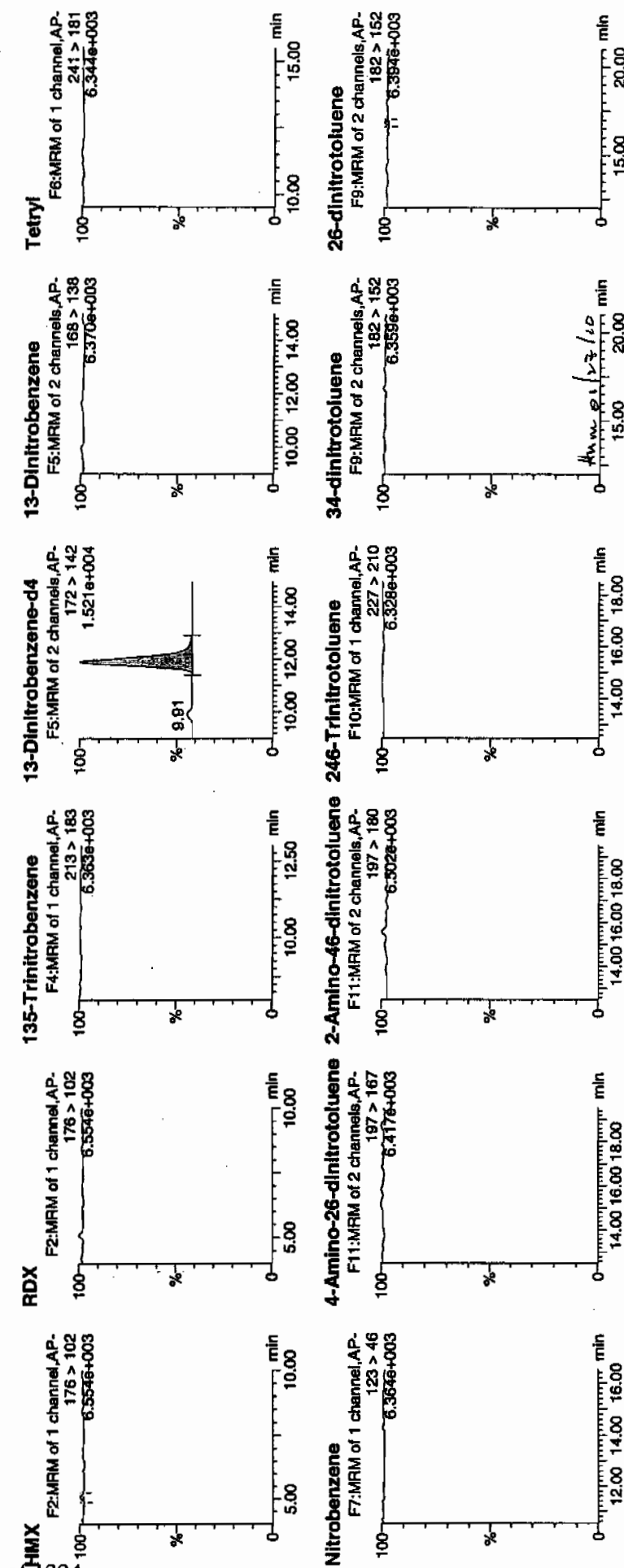
Date: 27-Jan-2010

Time: 03:40:01

ID: XIBLK10

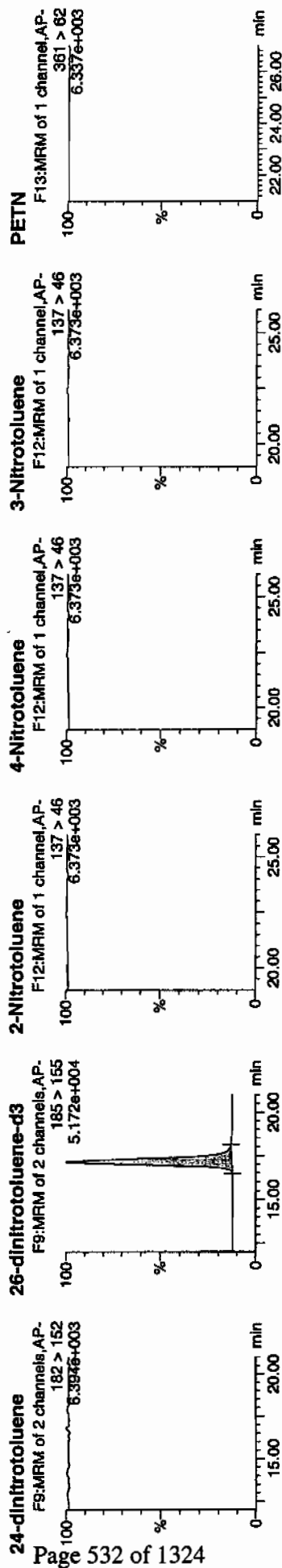
Vial: 1:1,A

10/27/10



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

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



Name	ID	Trace	Int	Area	Sr Area	Abs Resp	Response	Flag	Magnitude	Mod Time	MM- 27-Jan-10	09:07:50
HMX	XIBLK10	176 > 102			3410.997							
RDX	XIBLK10	176 > 102			3410.997							
135-Trinitrobenzene	XIBLK10	213 > 183			3410.997							
13-Dinitrobenzene-d4	XIBLK10	172 > 142	11.89	3410.997		3410.997	3410.997	bb	574.5514	114.9	14.9	620.0
13-Dinitrobenzene	XIBLK10	168 > 138			3410.997							
Tetryl	XIBLK10	241 > 181			3410.997							
Nitrobenzene	XIBLK10	123 > 46			3410.997							
4-Amino-26-dinitrotoluene	XIBLK10	197 > 167			19531.555							
2-Amino-46-dinitrotoluene	XIBLK10	197 > 180			19531.555							
246-Trinitrotoluene	XIBLK10	227 > 210			19531.555							
34-dinitrotoluene	XIBLK10	182 > 152			19531.555							
26-dinitrotoluene	XIBLK10	182 > 152			19531.555							
24-dinitrotoluene	XIBLK10	182 > 152			19531.555							
26-dinitrotoluene-d3	XIBLK10	185 > 155	17.14	19531.555		19531.555	19531.555	bb	599.1885	119.8	19.8	576.2
2-Nitrotoluene	XIBLK10	137 > 46			19531.555							
4-Nitrotoluene	XIBLK10	137 > 46			19531.555							
3-Nitrotoluene	XIBLK10	137 > 46			19531.555							
PETN	XIBLK10	361 > 62			19531.555							

4A  
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1210

Lab Code: GEL

Lab Sample ID: XIBLK11

Analysis Date: 27-JAN-10 10:04

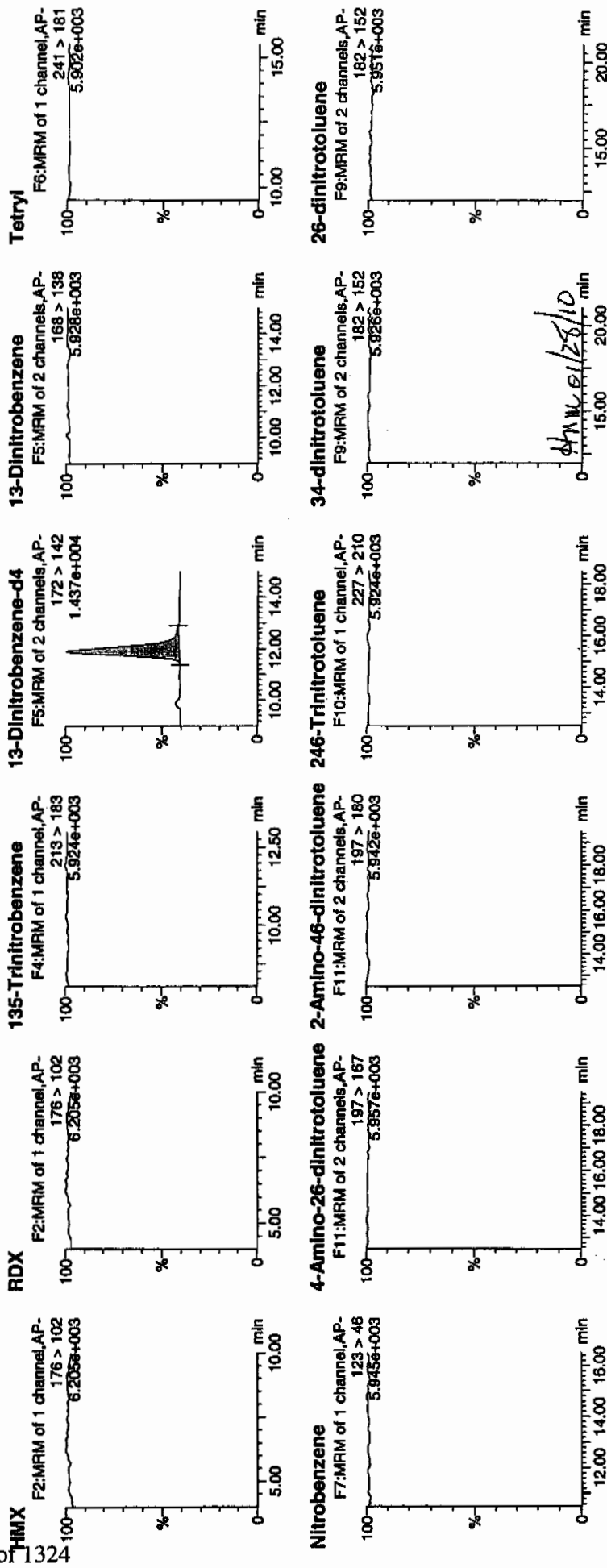
GEL Data File: EXP0125096a

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

NOT  
 1/28/10

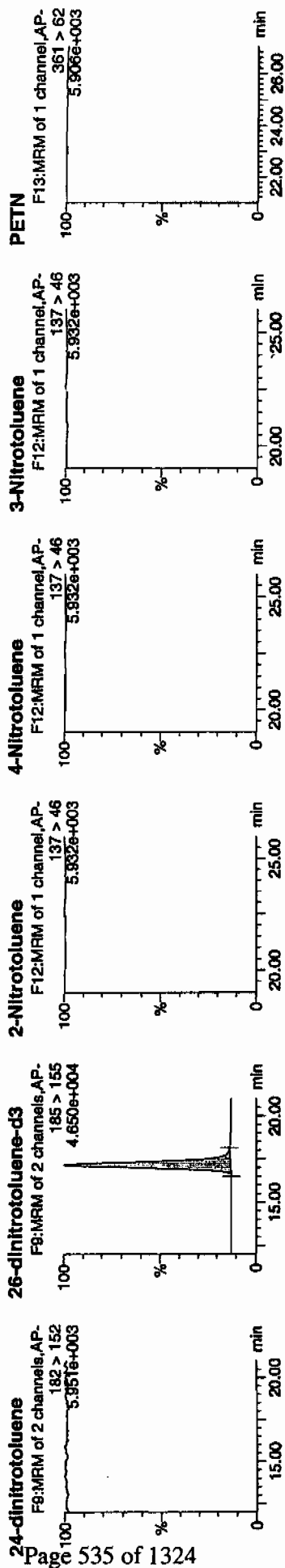




## Quantify Sample Report

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

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



Name	ID#	MW	LogP	H <sub>B</sub>	CatVal	SAR	Abs Resp	Response	F <sub>0.05</sub>	Mod Data	Mod Time	Comments	Accession	Source
HMX	XIBLK11		176 > 102			3315.568								
RDX	XIBLK11		176 > 102			3315.568								
135-Trinitrobenzene	XIBLK11		213 > 183			3315.568								
13-Dinitrobenzene-d4	XIBLK11		172 > 142	11.89	3315.568		3315.568	3315.568	bb			558.4773	111.7	11.7
13-Dinitrobenzene	XIBLK11		168 > 138			3315.568								
Tetryl	XIBLK11		241 > 181			3315.568								
Nitrobenzene	XIBLK11		123 > 46			3315.568								
4-Amino-26-dinitrotoluene	XIBLK11		197 > 167			17238.420								
2-Amino-46-dinitrotoluene	XIBLK11		197 > 180			17238.420								
246-Trinitrotoluene	XIBLK11		227 > 210			17238.420								
34-dinitrotoluene	XIBLK11		182 > 152			17238.420								
26-dinitrotoluene	XIBLK11		182 > 152			17238.420								
24-dinitrotoluene	XIBLK11		182 > 152			17238.420								
26-dinitrotoluene-d3	XIBLK11		185 > 155	17.13	17238.420		17238.420	17238.420	bb			528.8398	105.8	5.8
2-Nitrotoluene	XIBLK11		137 > 46			17238.420								
4-Nitrotoluene	XIBLK11		137 > 46			17238.420								
3-Nitrotoluene	XIBLK11		137 > 46			17238.420								
PETN	XIBLK11		361 > 62			17238.420								

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1210

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

Quantity Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Thu Jan 28 10:43:32 2010, Page 49 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\EXP0125109a

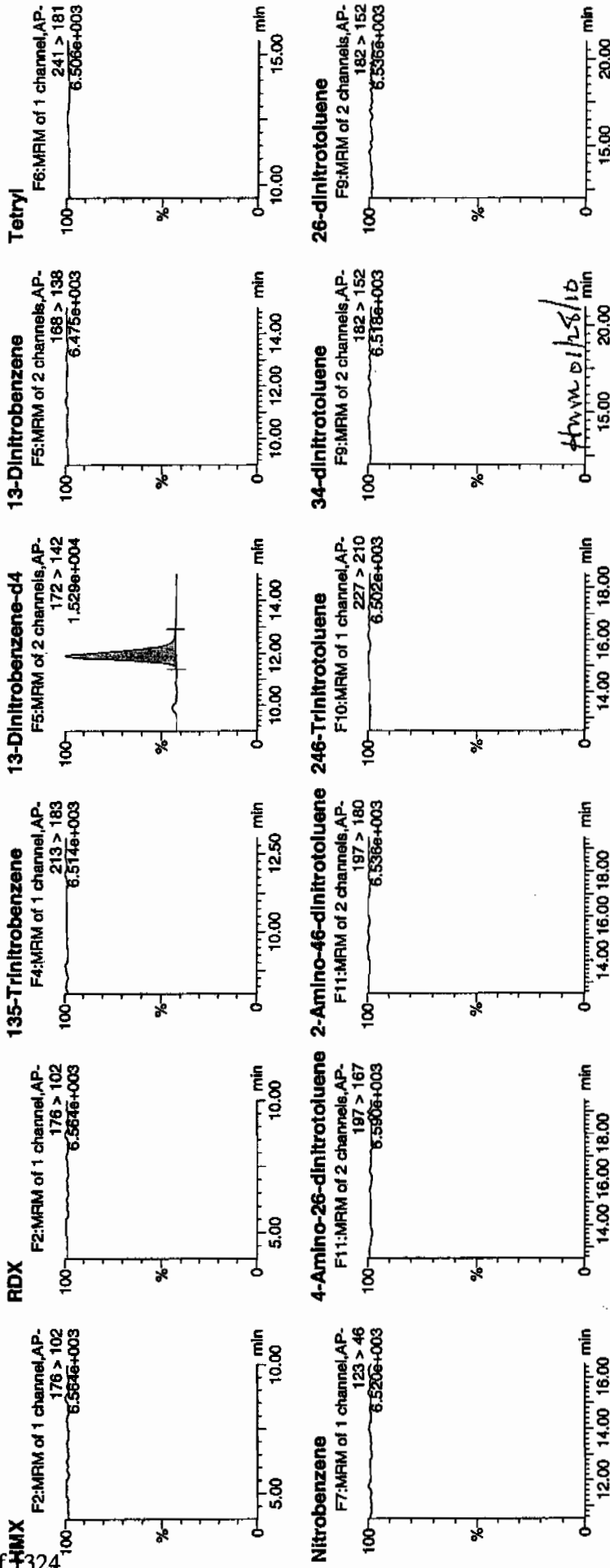
Date: 27-Jan-2010

Time: 16:28:07

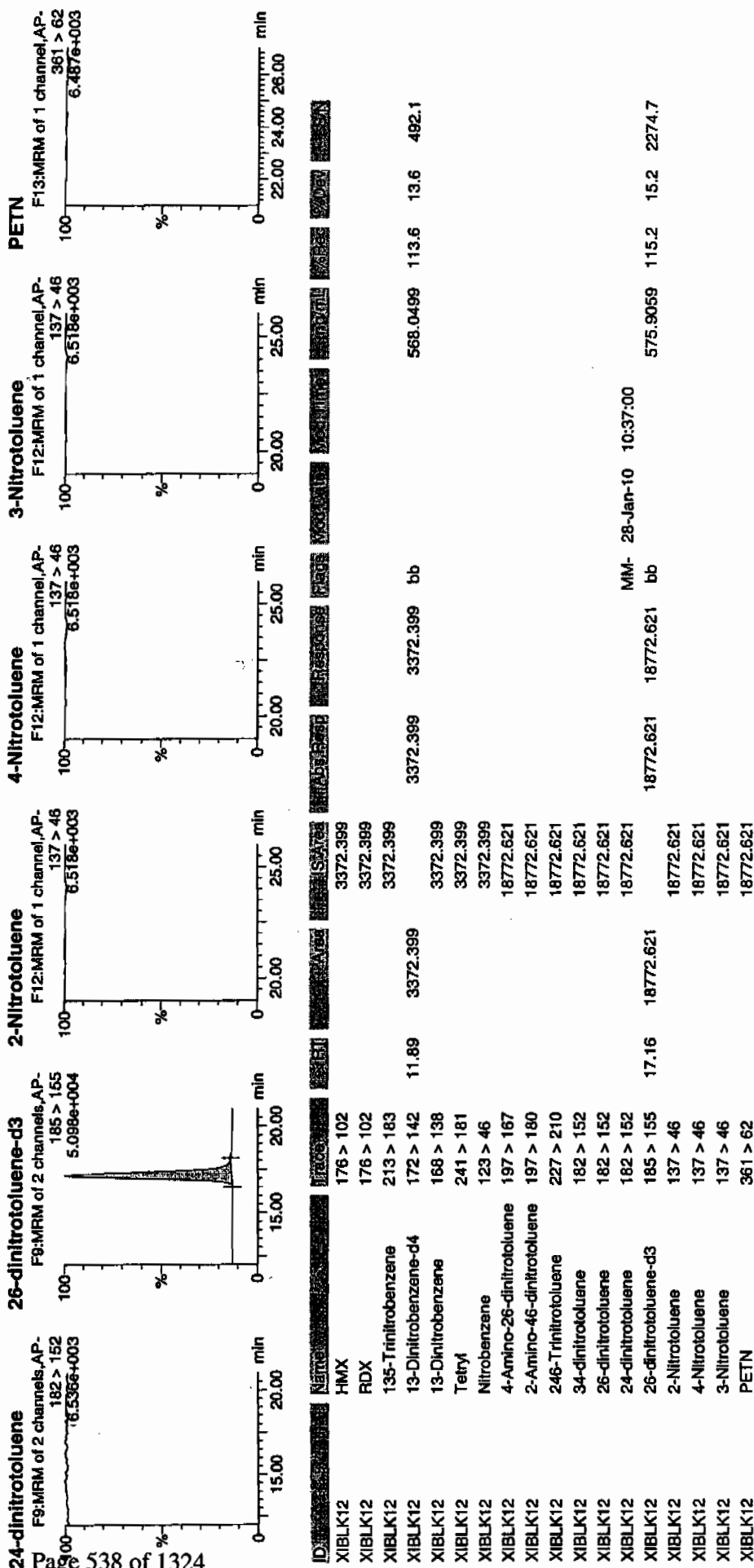
ID: XIBLK12

Vial: 1:1,A

1/27  
1/18/10



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): 10-1210

Lab Code: GEL

Lab Sample ID: XIBLK13

Analysis Date: 27-JAN-10 18:55

GEL Data File: EXP0125114a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	505.557
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	509.162
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

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

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

Name: C:\MASSLYNX\NEW\_EXP\_PRO\Data\EXP0125114a

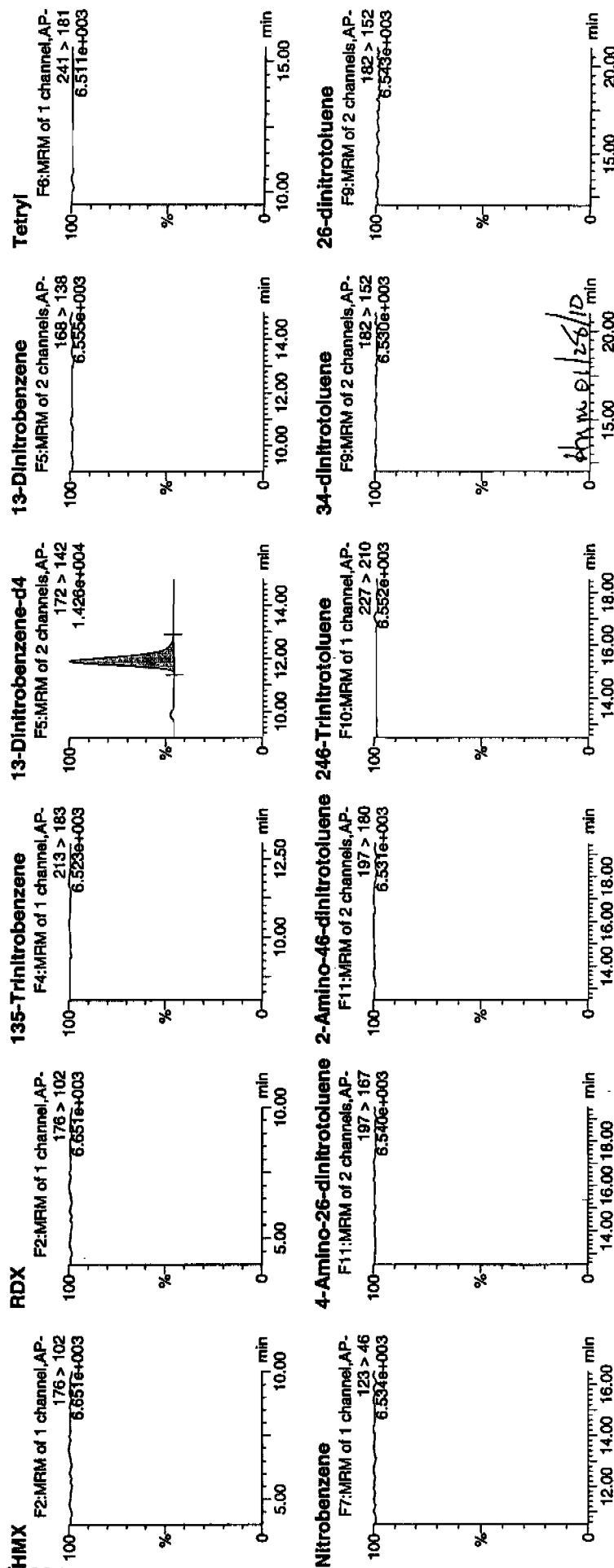
Date: 27-Jan-2010

Time: 18:55:56

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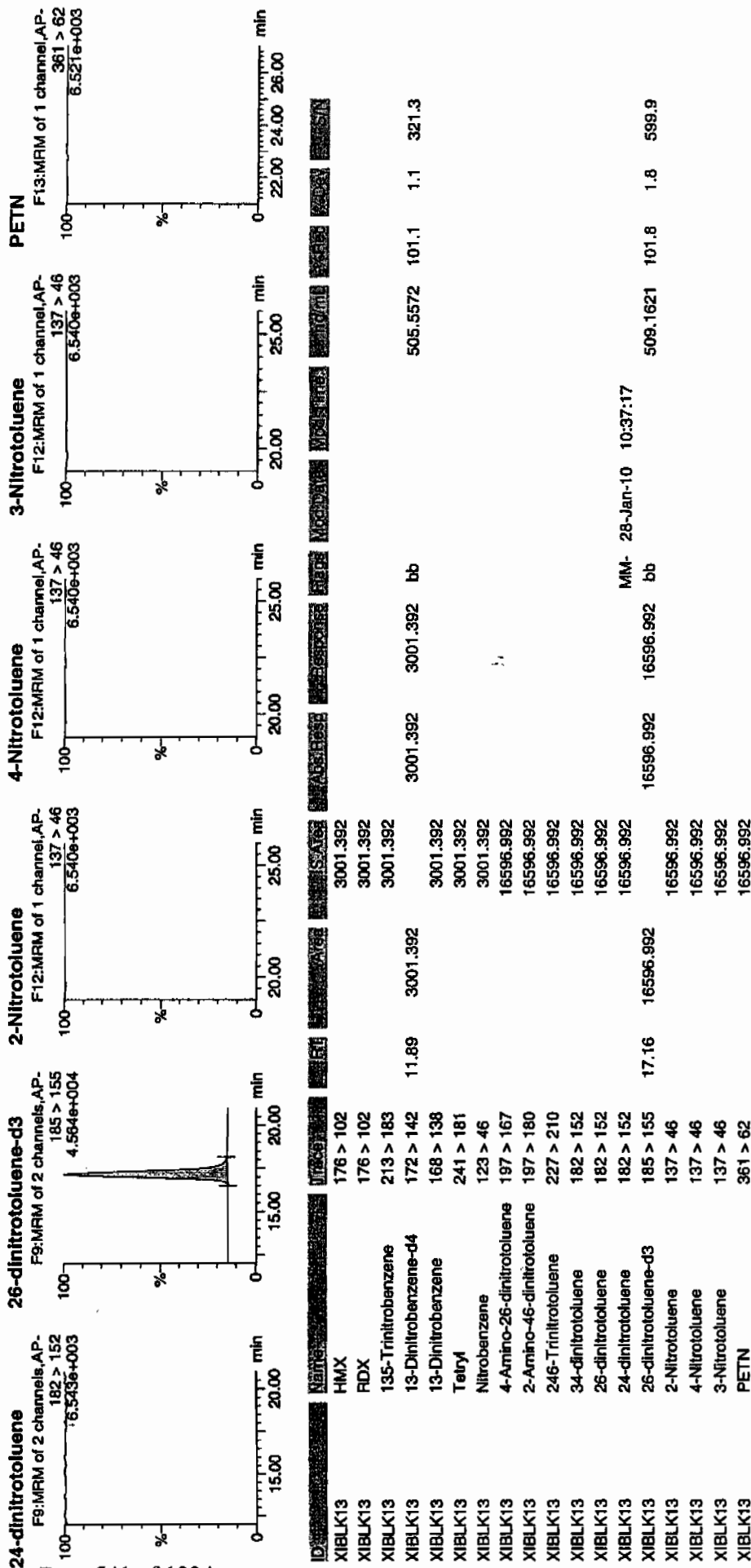
Vial: 1:1,A

WPR  
1/28/10



**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



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1210

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



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

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125117a

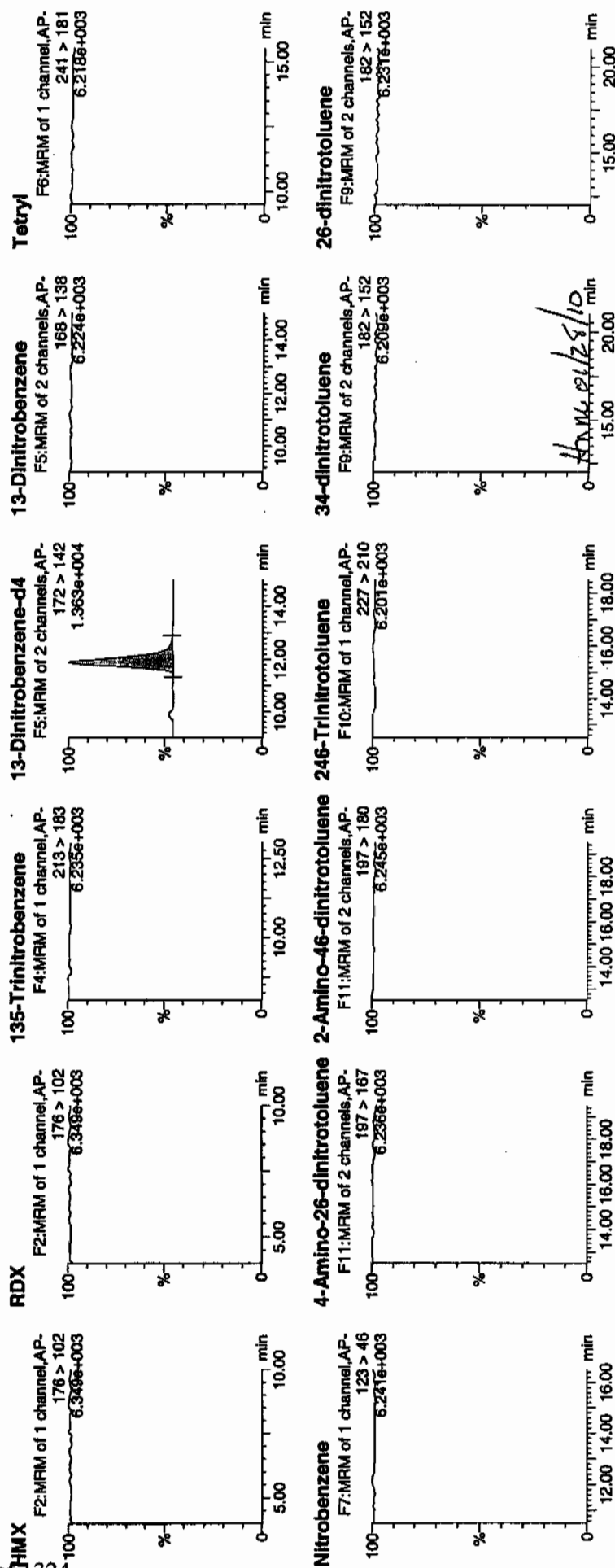
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Time: 20:24:27

ID: XIBLK14

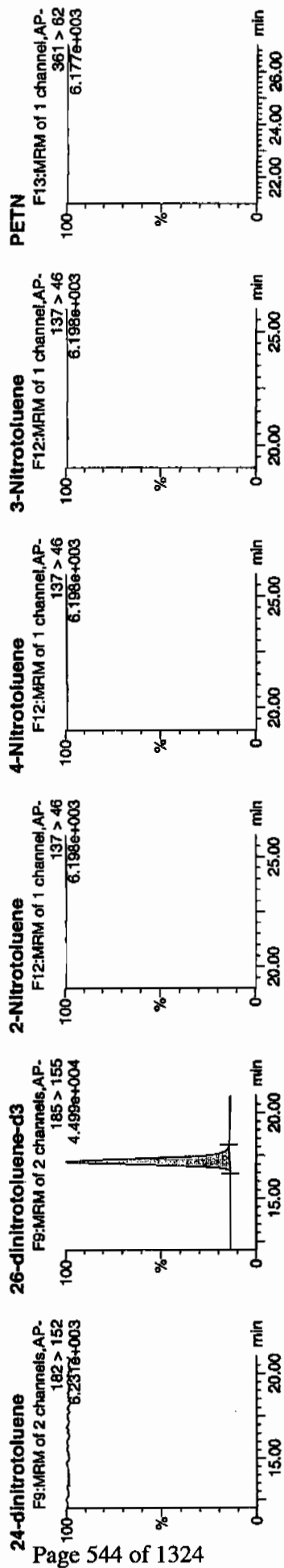
Vial: 1:1,A

1/28/10



**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	Area	Height	Area	Height	Area	Height	Area	Height	Area	Height
XIBLK14	HMZ	176 > 102	2893.334	2893.334	2893.334	2893.334	2893.334	2893.334	2893.334	2893.334	2893.334
XIBLK14	ROX	176 > 102	2893.334	2893.334	2893.334	2893.334	2893.334	2893.334	2893.334	2893.334	2893.334
XIBLK14	135-Trinitrobenzene	213 > 183	2893.334	2893.334	2893.334	2893.334	2893.334	2893.334	2893.334	2893.334	2893.334
XIBLK14	13-Dinitrobenzene-d4	172 > 142	11.89	2893.334	2893.334	2893.334	2893.334	2893.334	2893.334	2893.334	2893.334
XIBLK14	13-Dinitrobenzene	168 > 138	2893.334	2893.334	2893.334	2893.334	2893.334	2893.334	2893.334	2893.334	2893.334
XIBLK14	Tetryl	241 > 181	2893.334	2893.334	2893.334	2893.334	2893.334	2893.334	2893.334	2893.334	2893.334
XIBLK14	Nitrobenzene	123 > 46	2893.334	2893.334	2893.334	2893.334	2893.334	2893.334	2893.334	2893.334	2893.334
XIBLK14	4-Amino-26-dinitrotoluene	197 > 167	16535.035	16535.035	16535.035	16535.035	16535.035	16535.035	16535.035	16535.035	16535.035
XIBLK14	2-Amino-46-dinitrotoluene	197 > 180	16535.035	16535.035	16535.035	16535.035	16535.035	16535.035	16535.035	16535.035	16535.035
XIBLK14	246-Trinitrotoluene	227 > 210	16535.035	16535.035	16535.035	16535.035	16535.035	16535.035	16535.035	16535.035	16535.035
XIBLK14	34-dinitrotoluene	182 > 152	16535.035	16535.035	16535.035	16535.035	16535.035	16535.035	16535.035	16535.035	16535.035
XIBLK14	26-dinitrotoluene	182 > 152	16535.035	16535.035	16535.035	16535.035	16535.035	16535.035	16535.035	16535.035	16535.035
XIBLK14	24-dinitrotoluene	182 > 152	16535.035	16535.035	16535.035	16535.035	16535.035	16535.035	16535.035	16535.035	16535.035
XIBLK14	26-dinitrotoluene-d3	185 > 155	17.14	16535.035	16535.035	16535.035	16535.035	16535.035	16535.035	16535.035	16535.035
XIBLK14	2-Nitrotoluene	137 > 46	16535.035	16535.035	16535.035	16535.035	16535.035	16535.035	16535.035	16535.035	16535.035
XIBLK14	4-Nitrotoluene	137 > 46	16535.035	16535.035	16535.035	16535.035	16535.035	16535.035	16535.035	16535.035	16535.035
XIBLK14	3-Nitrotoluene	137 > 46	16535.035	16535.035	16535.035	16535.035	16535.035	16535.035	16535.035	16535.035	16535.035
XIBLK14	PETN	361 > 82	507.2613	101.5	1.5	1702.2	487.3558	97.5	-2.5	441.4	2893.334

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1210

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

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

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

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125130a

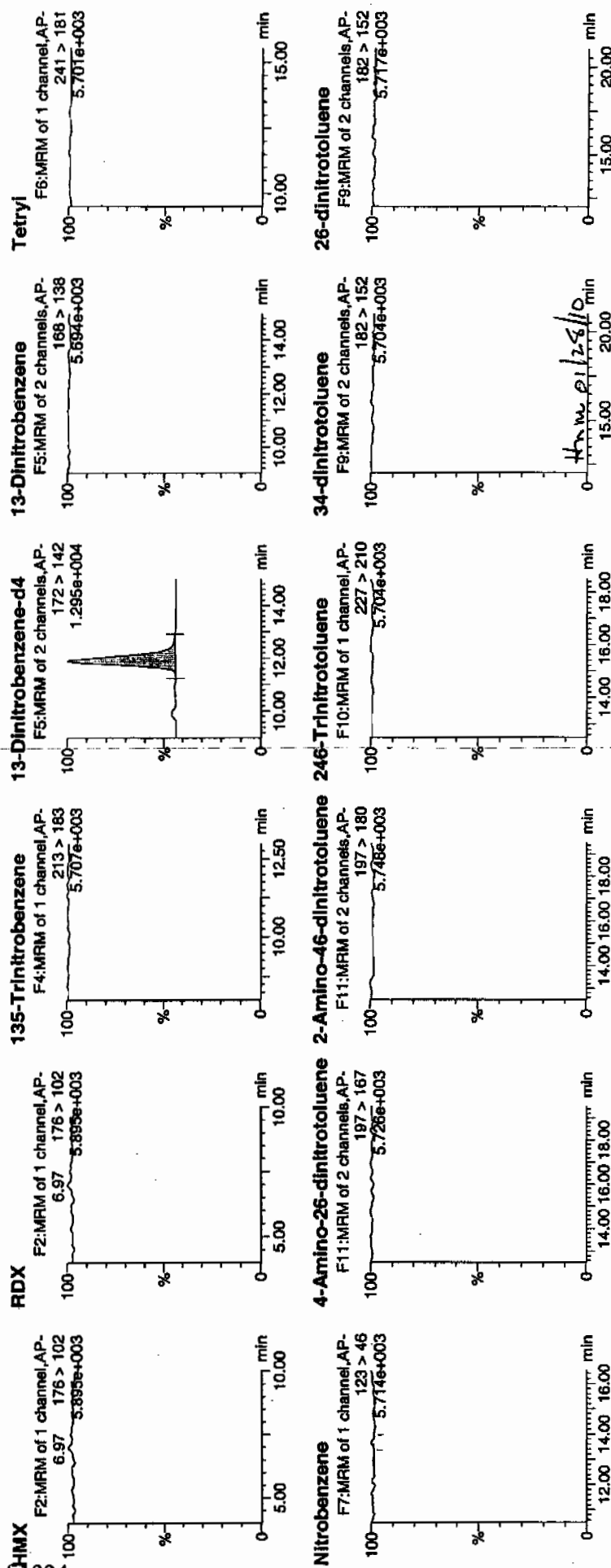
Date: 28-Jan-2010

Time: 02:47:46

ID: XIBLK15

Vial: 1:1,A

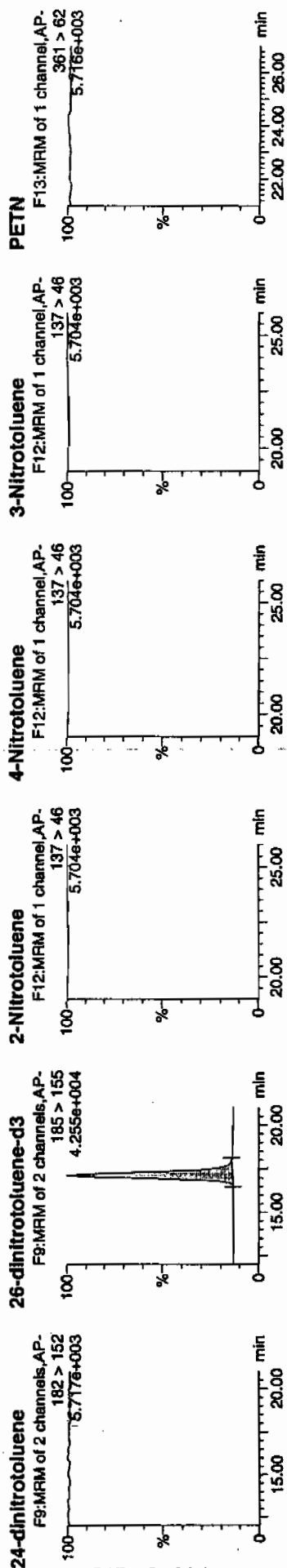
11/28/10



Printed: Thu Jan 28 10:43:32 2010, Page 92 of 121

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	Retention Time (min)	Mass (m/z)
XIBLK15	HMX	176 > 102	2853.098
XIBLK15	RDX	176 > 102	2853.098
XIBLK15	135-Trinitrobenzene	213 > 183	2853.098
XIBLK15	13-Dinitrobenzene-d4	172 > 142	2853.098
XIBLK15	13-Dinitrobenzene	168 > 138	2853.098
XIBLK15	Tetryl	241 > 181	2853.098
XIBLK15	Nitrobenzene	123 > 46	2853.098
XIBLK15	4-Amino-26-dinitrotoluene	197 > 167	15424.672
XIBLK15	2-Amino-46-dinitrotoluene	197 > 180	15424.672
XIBLK15	246-Trinitrotoluene	227 > 210	15424.672
XIBLK15	34-dinitrotoluene	182 > 152	15424.672
XIBLK15	26-dinitrotoluene	182 > 152	15424.672
XIBLK15	24-dinitrotoluene	182 > 152	15424.672
XIBLK15	26-dinitrotoluene-d3	185 > 155	15424.672
XIBLK15	2-Nitrotoluene	137 > 46	15424.672
XIBLK15	4-Nitrotoluene	137 > 46	15424.672
XIBLK15	3-Nitrotoluene	137 > 46	15424.672
XIBLK15	PETN	361 > 62	15424.672

4A  
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1210

Lab Code: GEL

Lab Sample ID: XIBLK16

Analysis Date: 28-JAN-10 09:11

GEL Data File: EXP0125143a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

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

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

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

Name: C:\MASSLYNX\NEW\_EXP\PRO\Data\EXP0125143a

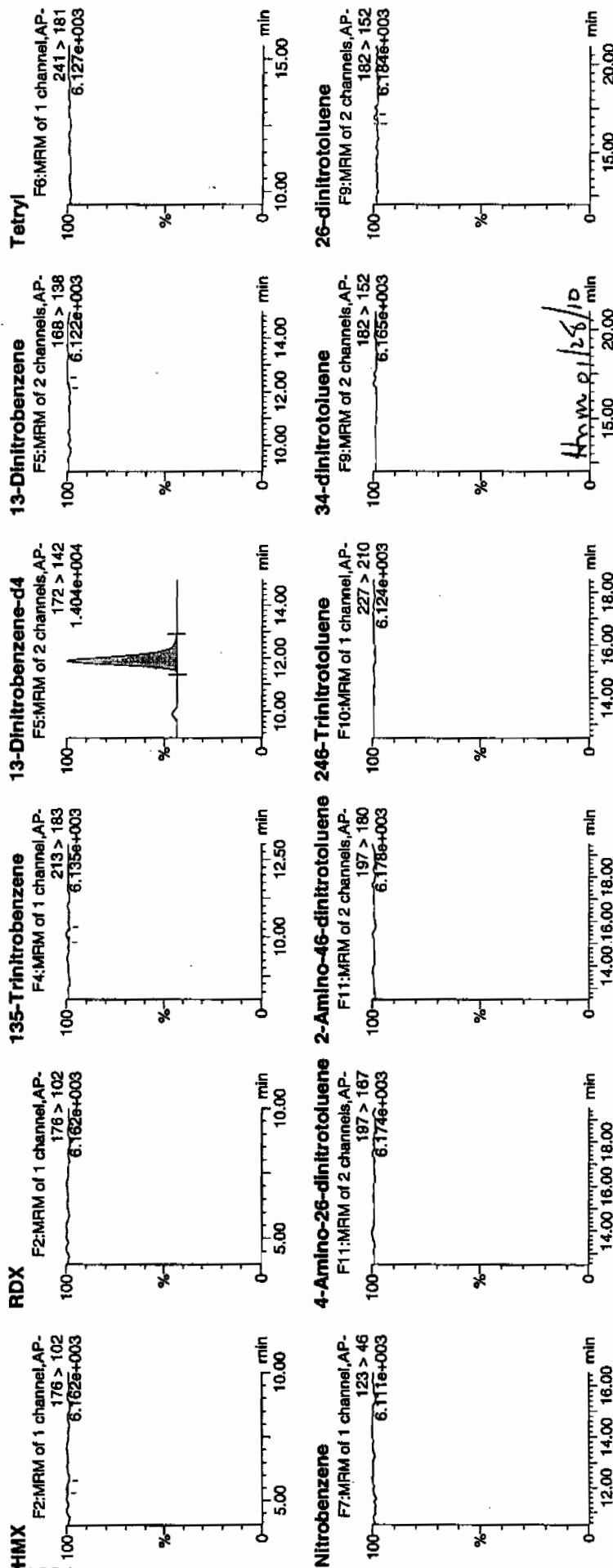
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ID: XIBLK16

Vial: 1:1,A

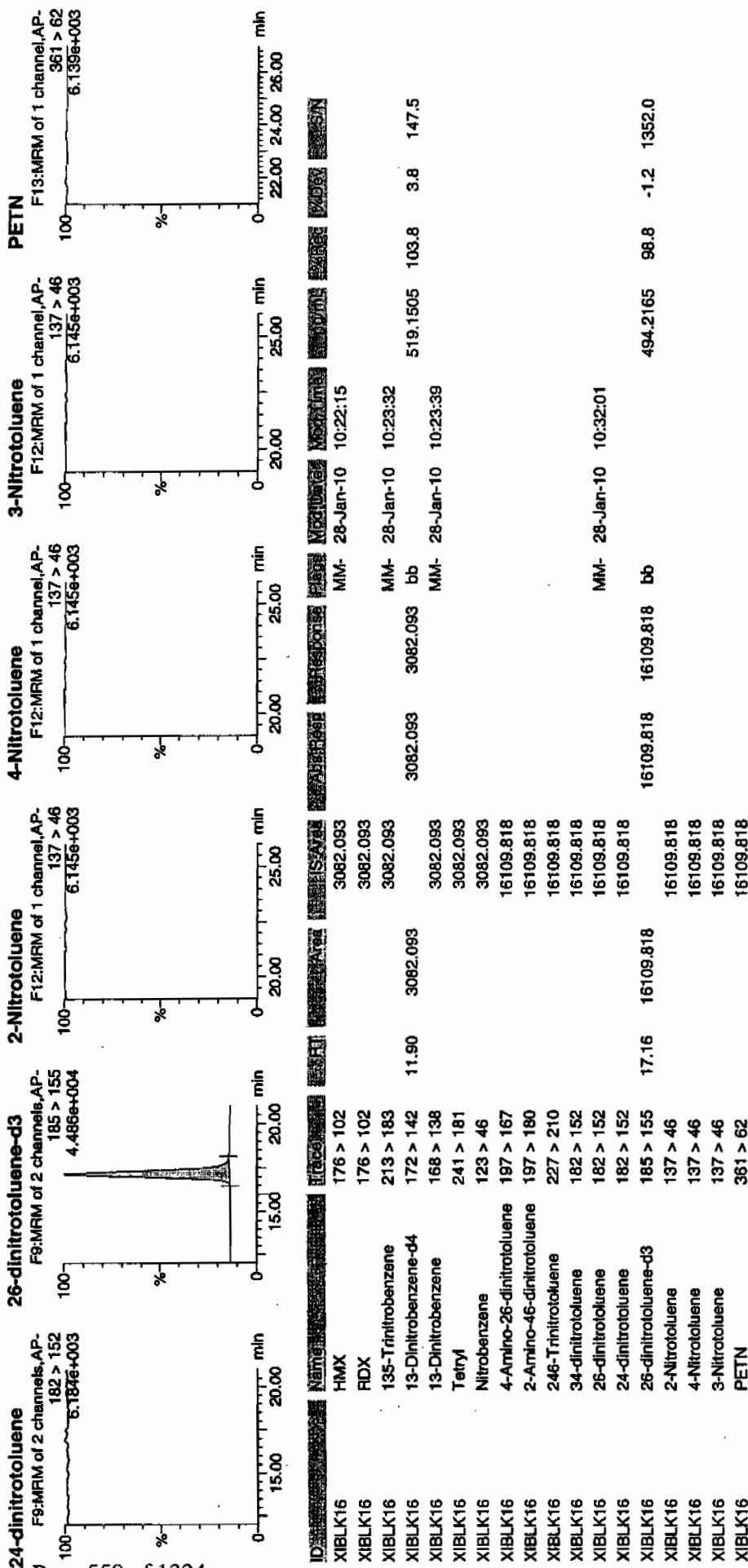
1/28/10  
MPT



Printed: Thu Jan 28 10:43:32 2010, Page 118 of 121

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

Dataset: C:\MASSLYNXNew\_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): 10-1210

Lab Code: GEL

Lab Sample ID: XIBLK17

Analysis Date: 28-JAN-10 15:35

GEL Data File: EXP0125156a

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	612.197
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	577.738
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\012510expA3.qld, Time: Fri Jan 29 07:11:03 2010

Name: C:\MASSLYNX\NEW\_EXP\PRO\Data\EXP0125156a

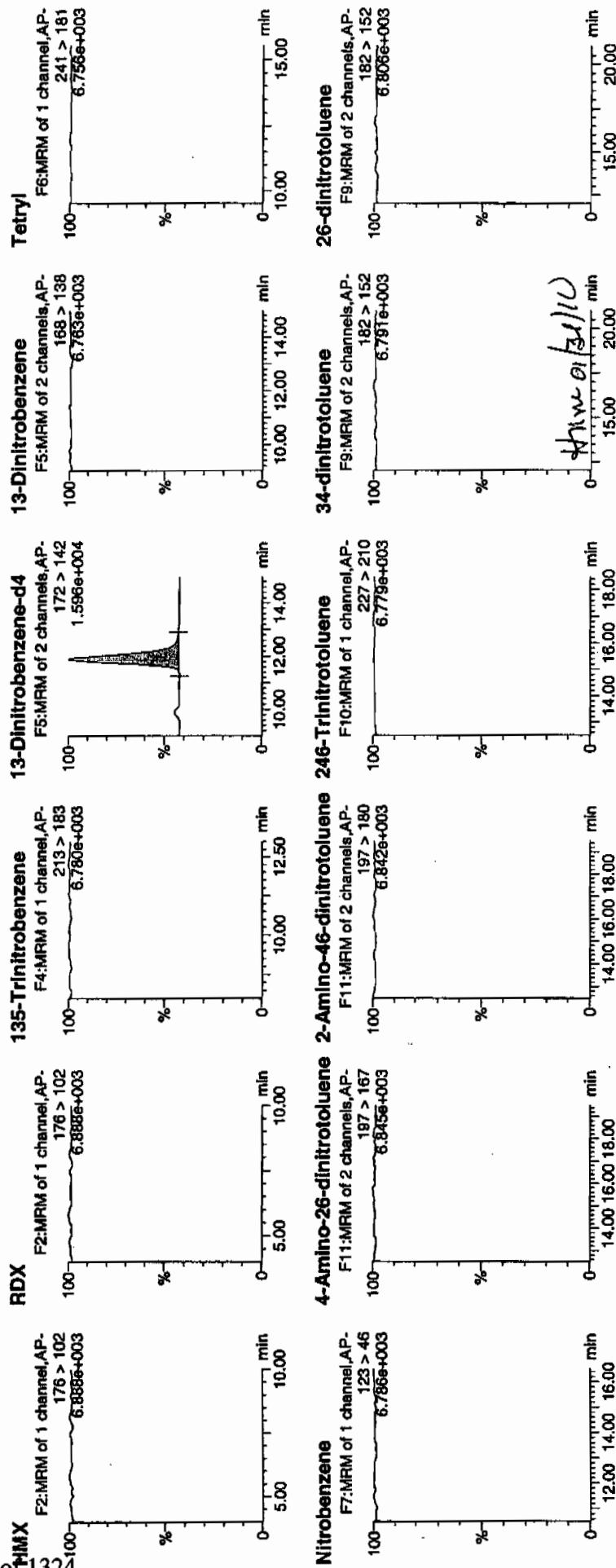
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Time: 15:35:37

ID: XIBLK17

Vial: 1:1,A

11/2/10

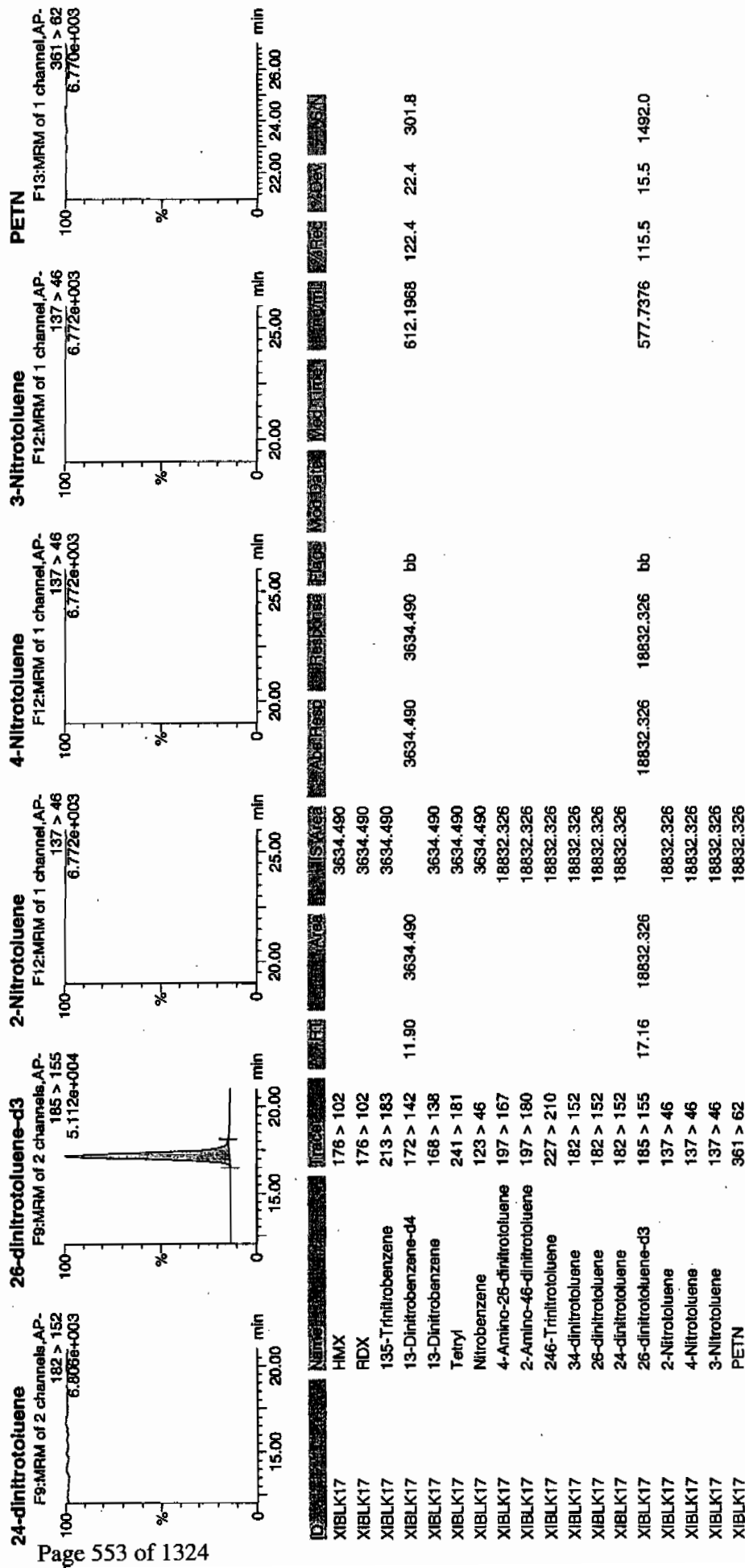


# Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Fri Jan 29 07:12:59 2010, Page 24 of 75

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA3.qld, Time: Fri Jan 29 07:11:03 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1210

Lab Code: GEL

Lab Sample ID: XIBLK18

Analysis Date: 28-JAN-10 17:04

GEL Data File: EXP0125159a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5 $\mu$  ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	507.456
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	534.04
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\012510expA3.qld, Time: Fri Jan 29 07:11:03 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125159a

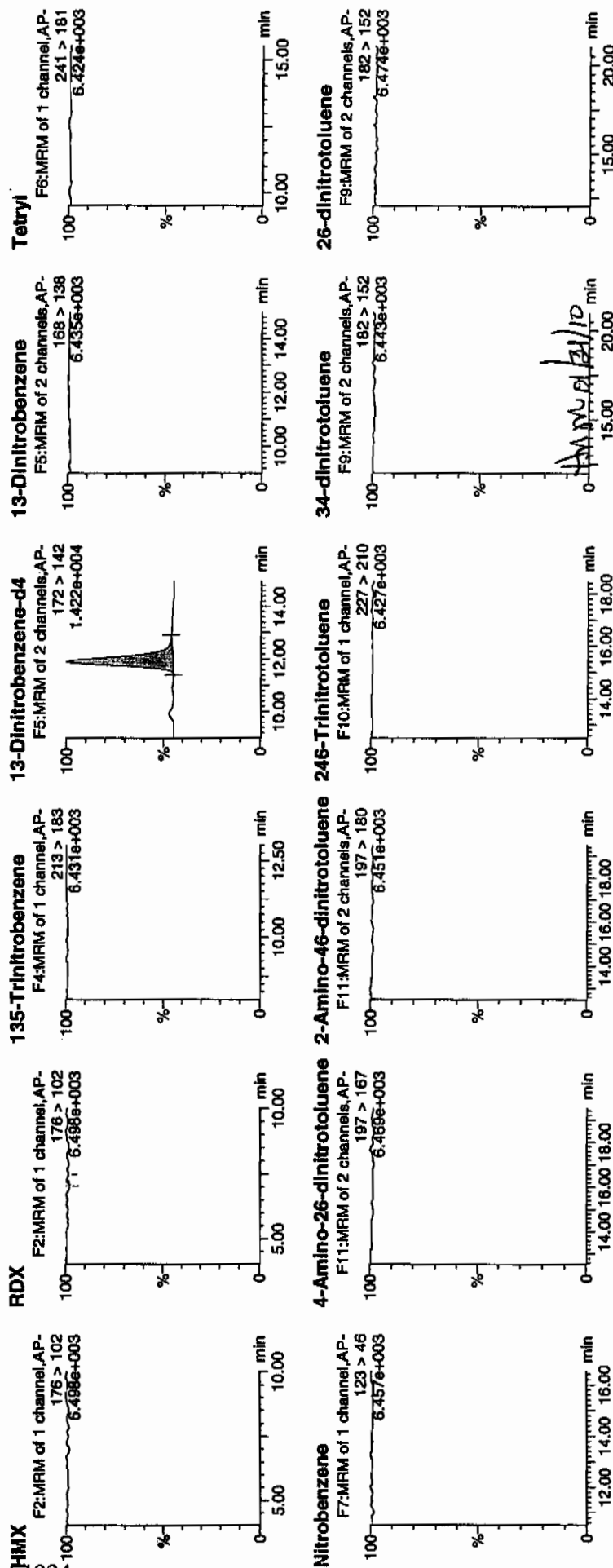
Date: 28-Jan-2010

Time: 17:04:03

ID: XIBLK18

Vial: 1:1,A

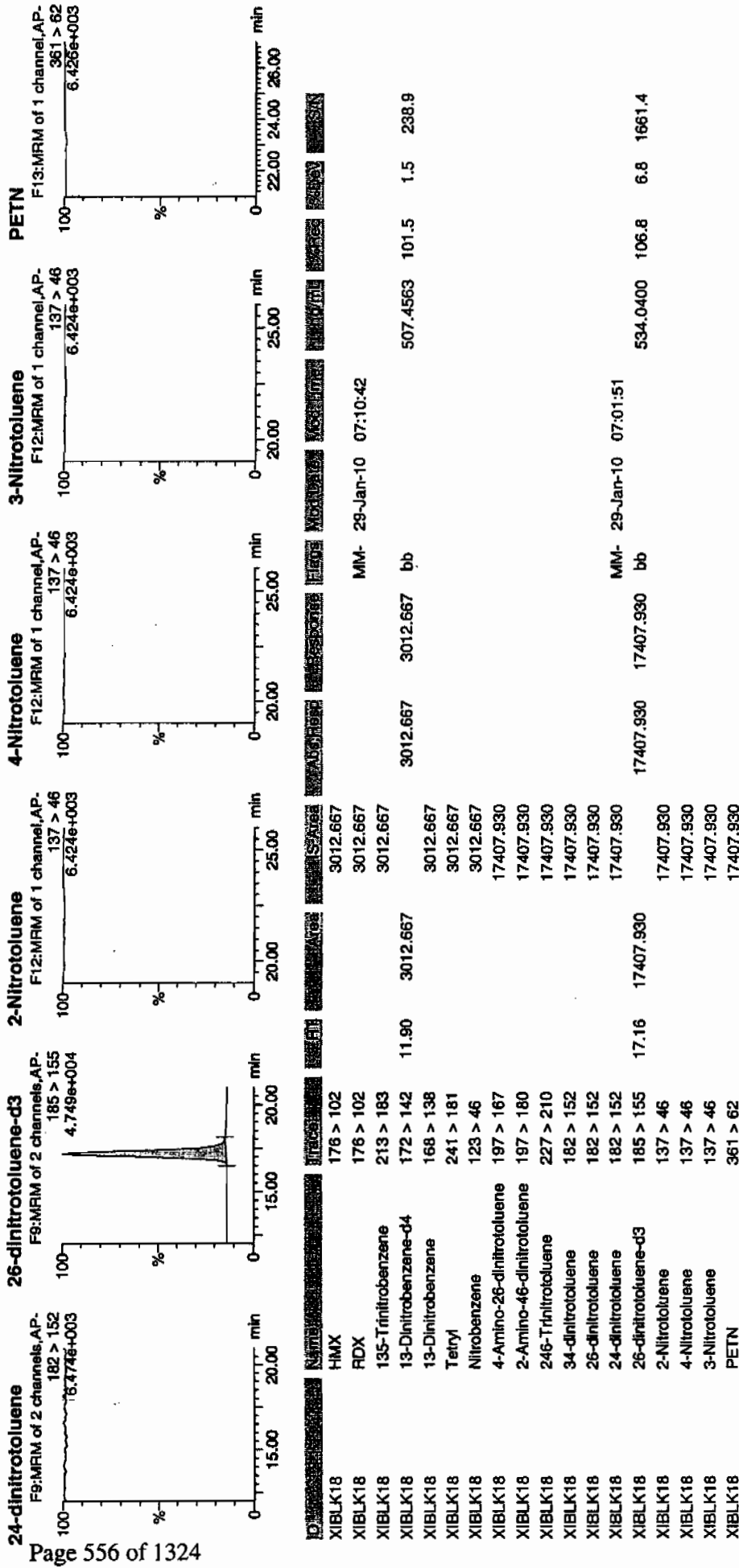
1/29/10  
M.A.P.



Printed: Fri Jan 29 07:12:59 2010, Page 30 of 75

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

Dataset: C:\MASSLYNX\New\_Exp\_PRO\012510expA3.qld, Time: Fri Jan 29 07:11:03 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1210

Lab Code: GEL

Lab Sample ID: XIBLK19

Analysis Date: 28-JAN-10 21:00

GEL Data File: EXP0125167a

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	539.662
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	508.524
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\012510expA3.qld, Time: Fri Jan 29 07:11:03 2010

Name: C:\MASSLYNX\NEW\_EXP\_PRO\Data\EXP0125167a

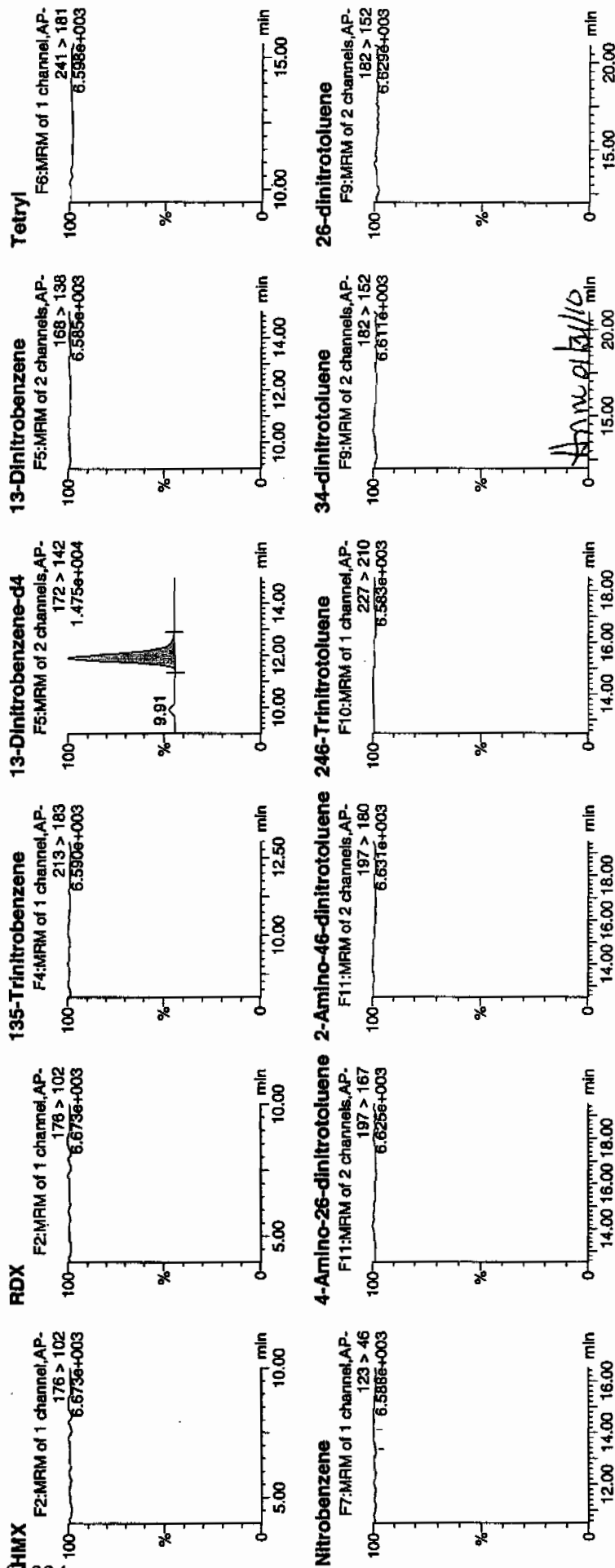
Date: 28-Jan-2010

Time: 21:00:06

ID: XIBLK19

Val: 1:1,A

WRT  
1/29/10

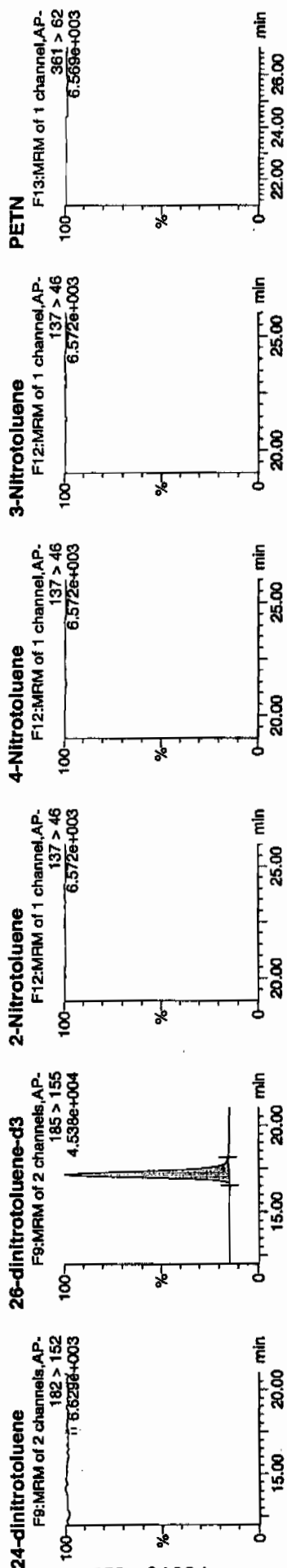




## Quantify Sample Report

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA3.qld, Time: Fri Jan 29 07:11:03 2010



Name	Area	Height	Area	Height	Area	Height	Area	Height	Area	Height	Area	Height
HMX	XIBLK19	176 > 102	3203.866	3203.866								
RDX	XIBLK19	176 > 102	3203.866	3203.866								
135-Trinitrobenzene	XIBLK19	213 > 183	3203.866	3203.866								
13-Dinitrobenzene-d4	XIBLK19	172 > 142	11.90	3203.866	3203.866	bb	539.8621	107.9	7.9	313.2		
13-Dinitrobenzene	XIBLK19	168 > 138	3203.866	3203.866								
Tetryl	XIBLK19	241 > 181	3203.866	3203.866								
Nitrobenzene	XIBLK19	123 > 46	3203.866	3203.866								
4-Amino-26-dinitrotoluene	XIBLK19	197 > 167	16576.209	16576.209								
2-Amino-46-dinitrotoluene	XIBLK19	197 > 180	16576.209	16576.209								
246-Trinitrotoluene	XIBLK19	227 > 210	16576.209	16576.209								
34-dinitrotoluene	XIBLK19	182 > 152	16576.209	16576.209								
26-dinitrotoluene	XIBLK19	182 > 152	16576.209	16576.209								
24-dinitrotoluene	XIBLK19	182 > 152	16576.209	16576.209								
26-dinitrotoluene-d3	XIBLK19	185 > 155	17.16	16576.209	16576.209	bb	508.5245	101.7	1.7	1874.2		
2-Nitrotoluene	XIBLK19	137 > 46	16576.209	16576.209								
4-Nitrotoluene	XIBLK19	137 > 46	16576.209	16576.209								
3-Nitrotoluene	XIBLK19	137 > 46	16576.209	16576.209								
PETN	XIBLK19	361 > 62	16576.209	16576.209								

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1210

Lab Code: GEL

Lab Sample ID: XIBLK20

Analysis Date: 29-JAN-10 03:23

GEL Data File: EXP0125180a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u QDS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	495.296
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	542.599
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

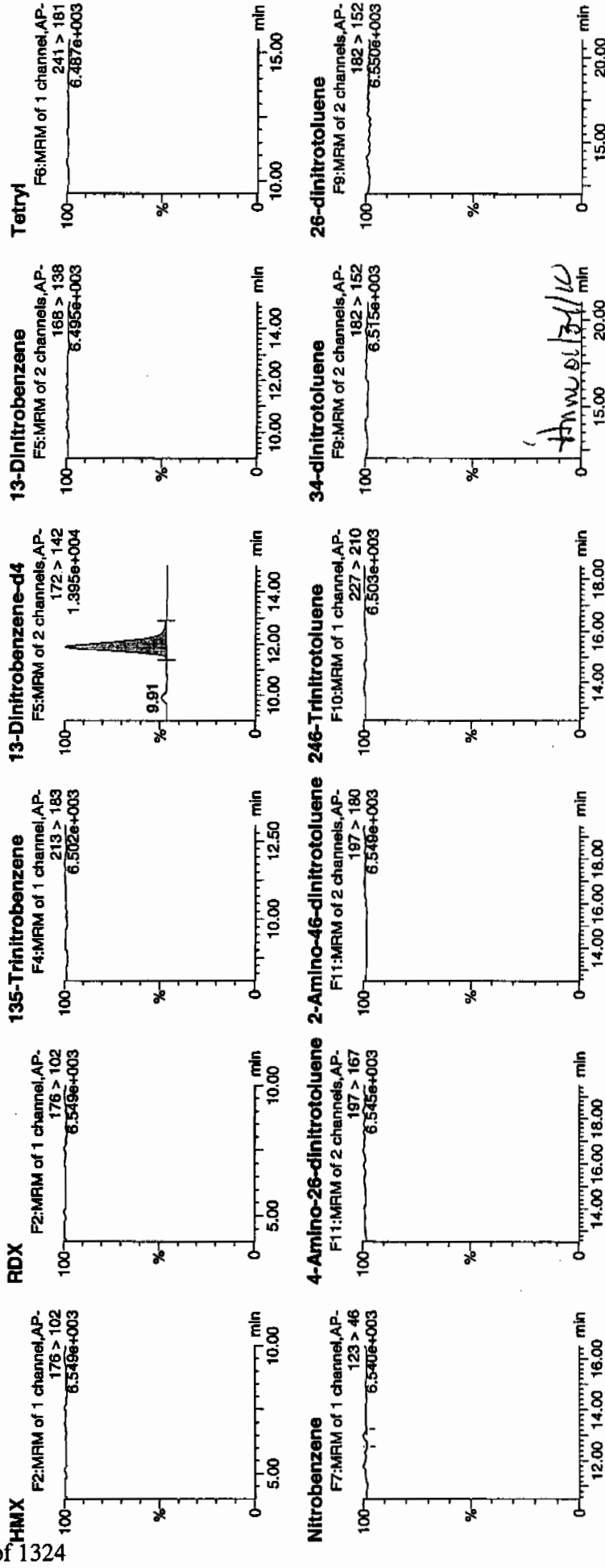
Quantify Sample Report  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA3.qld, Time: Fri Jan 29 07:11:03 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125180a

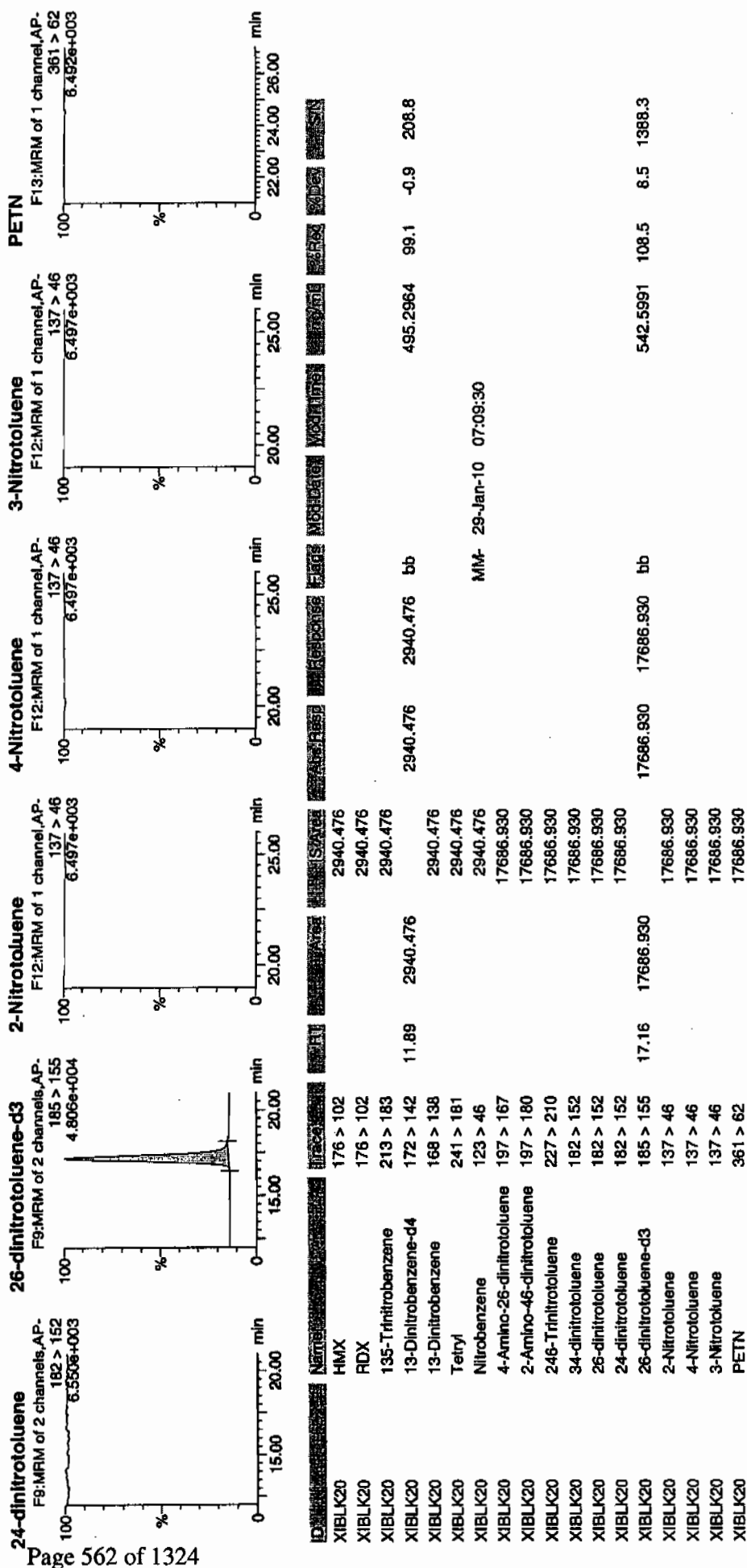
Date: 29-Jan-2010  
Time: 03:23:35  
ID: XIBLK20  
Vial: 1:1,A

1/21/10



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

Dataset: C:\MASSLYNX\New\_Exp\PRO1012510expA3.qld, Time: Fri Jan 29 07:11:03 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1210

Lab Code: GEL

Lab Sample ID: XIBLK21

Analysis Date: 29-JAN-10 09:47

GEL Data File: EXP0125193a

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	474.634
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	484.797
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125193a

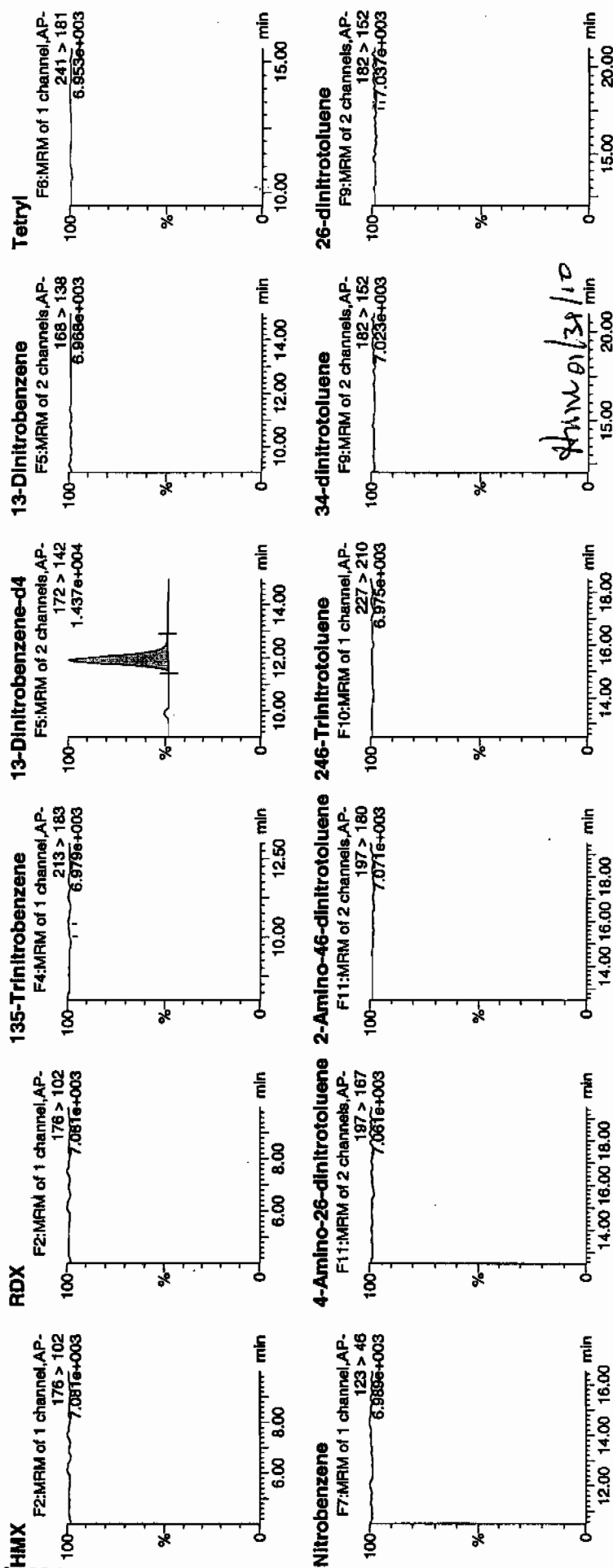
Date: 29-Jan-2010

Time: 09:47:18

ID: XIBLK21

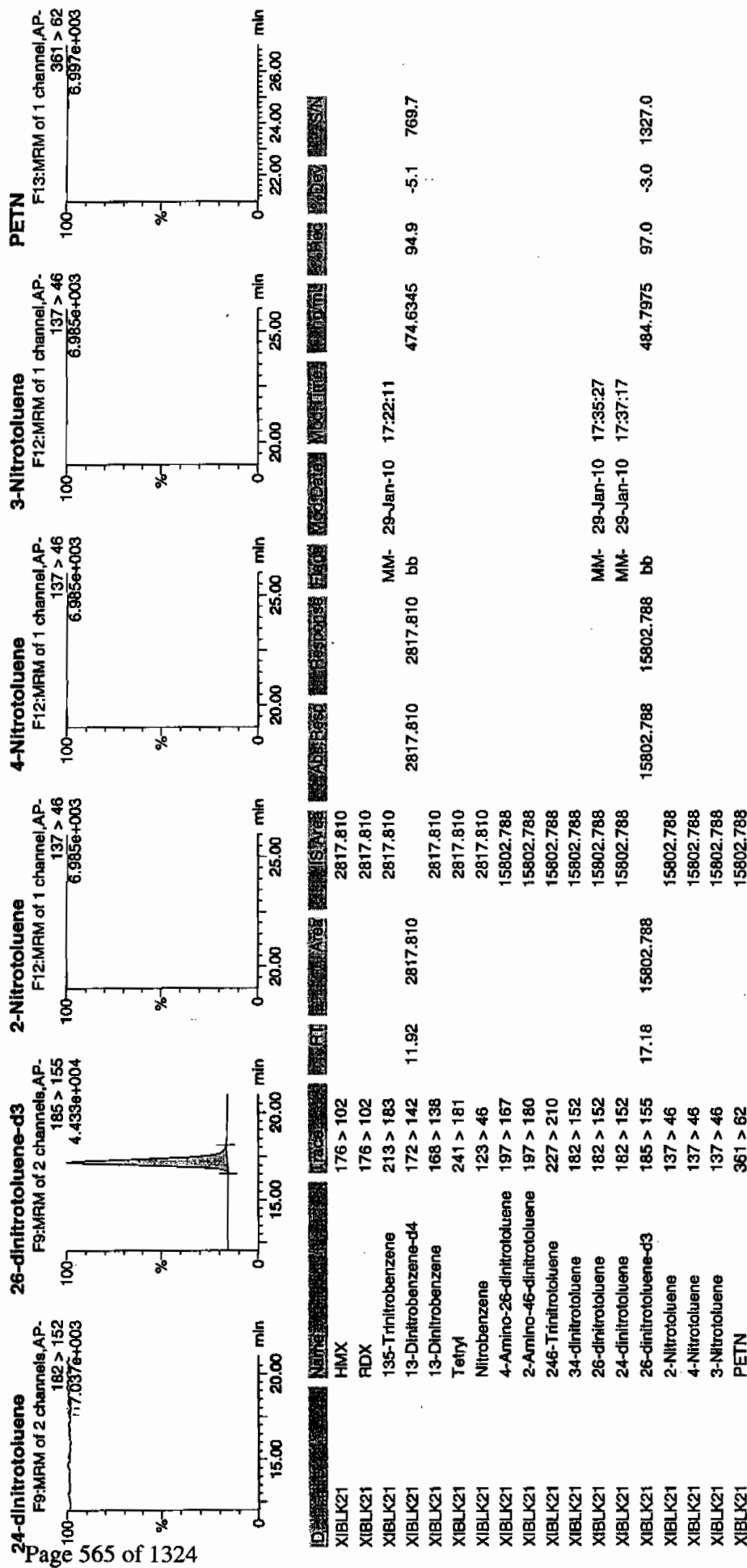
Vial: 1:1,A

1/29/10



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

Dataset: C:\MASSLYN\New\_Exp.PRO\012510expA4.qld, Time: Fri Jan 29 17:40:23 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1210

Lab Code: GEL

Lab Sample ID: XIBLK22

Analysis Date: 29-JAN-10 15:41

GEL Data File: EXP0125205a

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	473.694
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	472.723
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\012510expA4.qld, Time: Fri Jan 29 17:40:23 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125205a

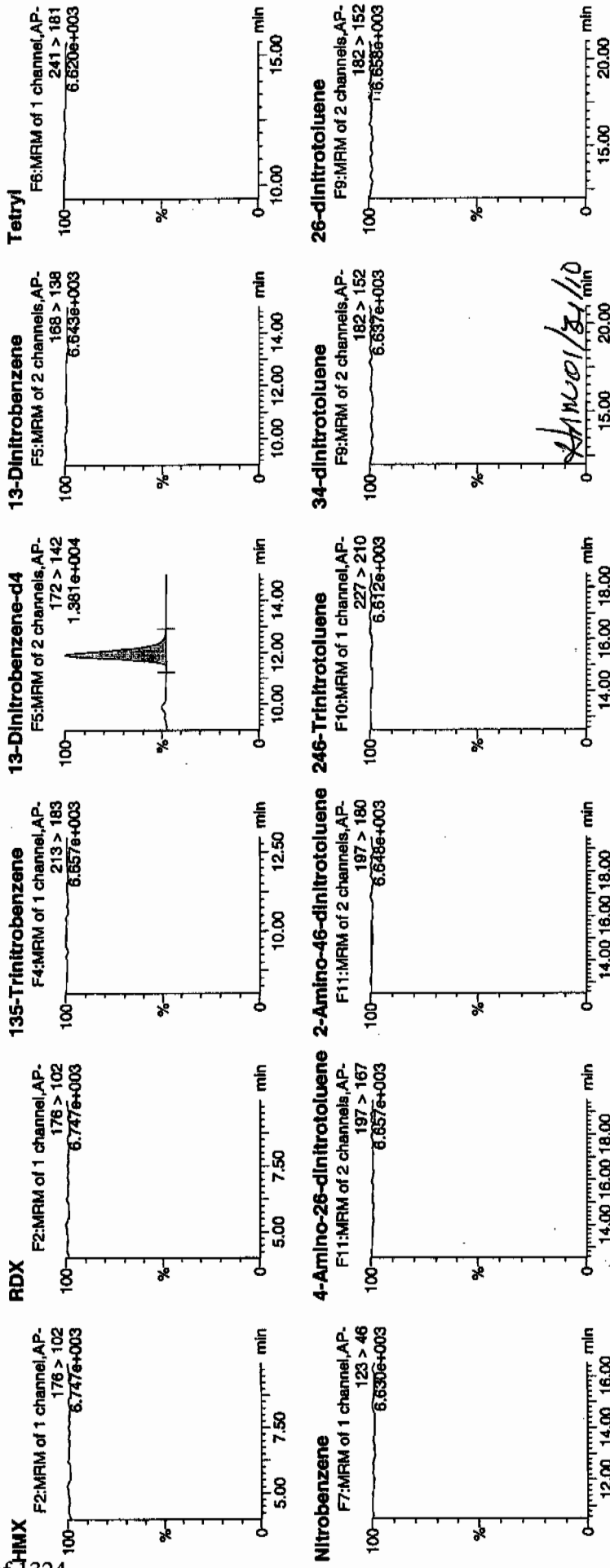
Date: 29-Jan-2010

Time: 15:41:10

ID: XIBLK22

Vial: 1:1,A

1/24/10

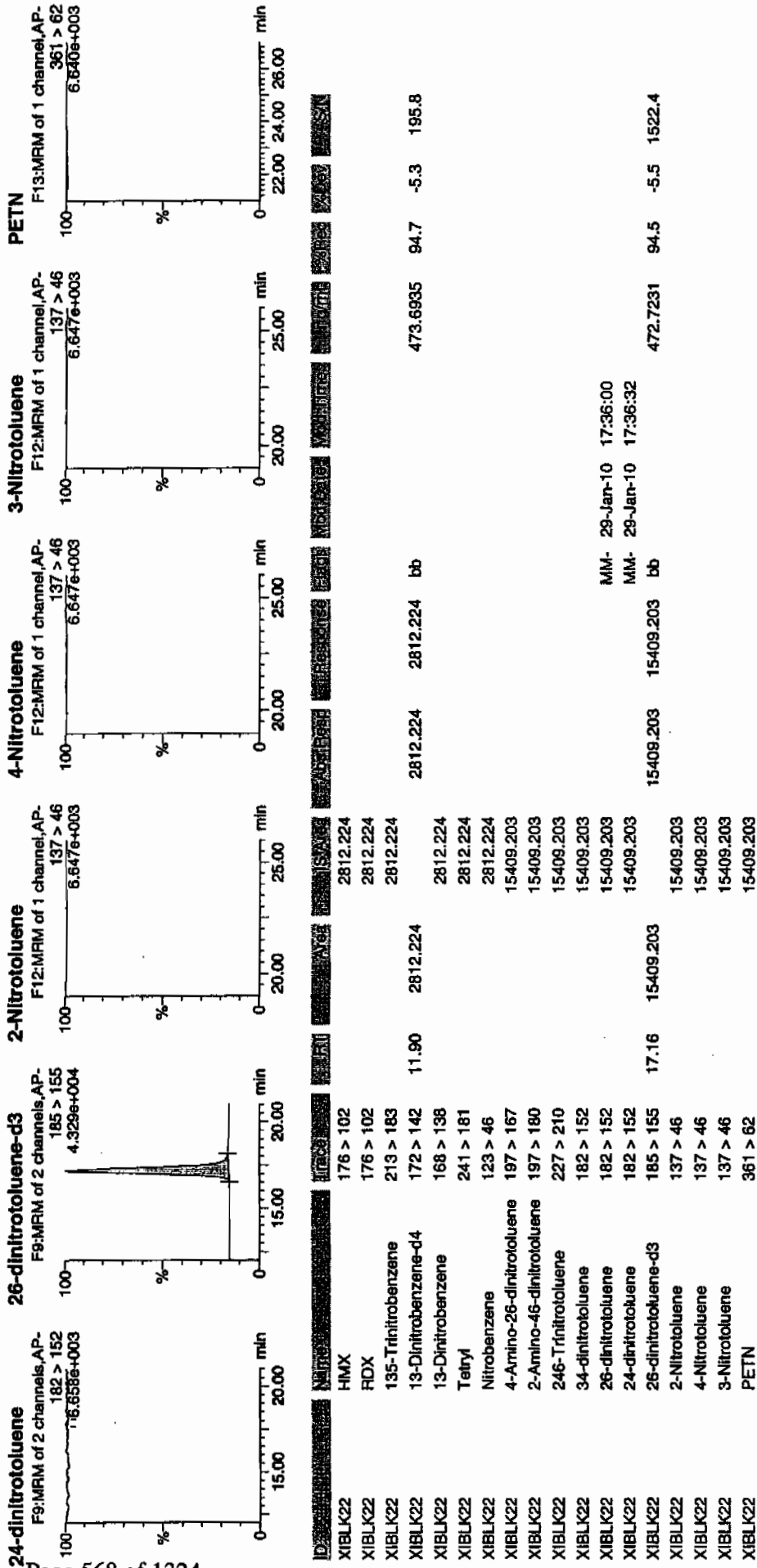


Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Fri Jan 29 17:42:56 2010, Page 48 of 51

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA4.qld, Time: Fri Jan 29 17:40:23 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1210

Lab Code: GEL

Lab Sample ID: XIBLK23

Analysis Date: 29-JAN-10 21:05

GEL Data File: EXP0125216a

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	514.705
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	541.748
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\012510expA5.qld, Time: Sat Jan 30 10:06:54 2010

Name: C:\MASSLYNX\NEW\_EXP\PROData\EXP0125216a

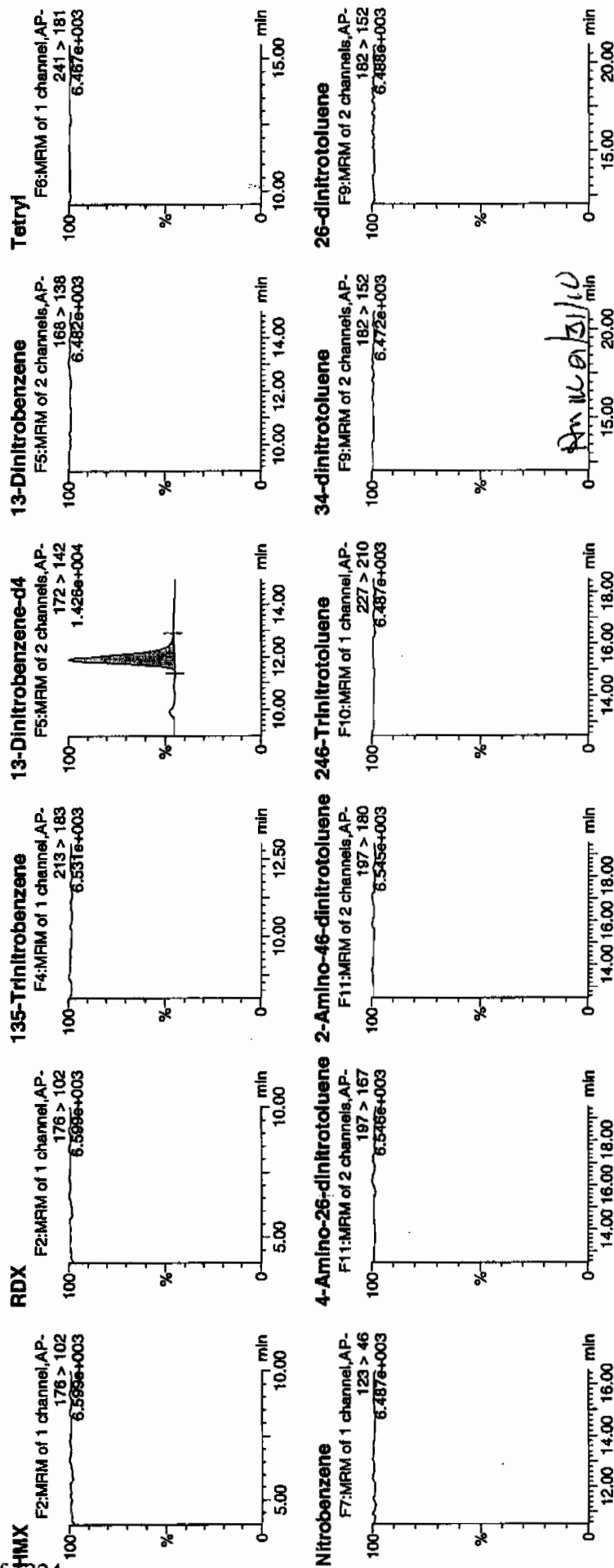
Date: 29-Jan-2010

Time: 21:05:52

ID: XIBLK23

Vial: 1:1,A

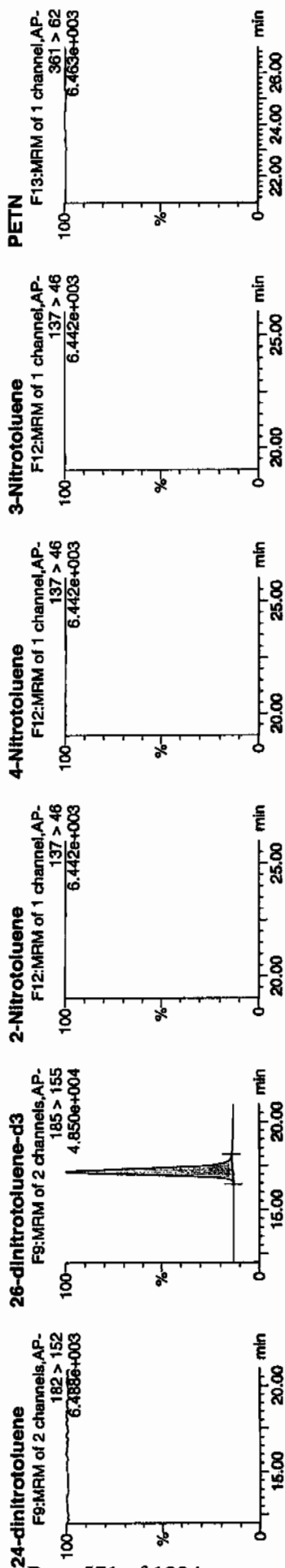
11/30/10



Printed: Sat Jan 30 10:07:34 2010, Page 20 of 71

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

Dataset: C:\MASSLYNX\New\_Exp\PRO1012510expA5.qld, Time: Sat Jan 30 10:06:54 2010



ID	Name	Time	Area	Ratio	Mass	Isotope	Label
XIBLK23	HMX	176 > 102	3055.701				
XIBLK23	RDX	176 > 102	3055.701				
XIBLK23	135-Trinitrobenzene	213 > 183	3055.701				
XIBLK23	13-Dinitrobenzene-d4	172 > 142	11.89	3055.701			
XIBLK23	13-Dinitrobenzene	168 > 138	3055.701				
XIBLK23	Tetryl	241 > 181	3055.701				
XIBLK23	Nitrobenzene	123 > 46	17659.191				
XIBLK23	4-Amino-26-dinitrotoluene	197 > 167	17659.191				
XIBLK23	2-Amino-46-dinitrotoluene	197 > 180	17659.191				
XIBLK23	246-Trinitrotoluene	227 > 210	17659.191				
XIBLK23	34-dinitrotoluene	182 > 152	17659.191				
XIBLK23	26-dinitrotoluene	182 > 152	17659.191				
XIBLK23	24-dinitrotoluene	182 > 152	17659.191				
XIBLK23	26-dinitrotoluene-d3	185 > 155	17.16	17659.191			
XIBLK23	2-Nitrotoluene	137 > 46	17659.191				
XIBLK23	4-Nitrotoluene	137 > 46	17659.191				
XIBLK23	3-Nitrotoluene	137 > 46	17659.191				
XIBLK23	PETN	361 > 62	17659.191				
			3055.701	3055.701	bb		
			514.7050	102.9	2.9	169.1	
			17659.191	17659.191	bb		
			541.7482	108.3	8.3	1417.2	

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1210

Lab Code: GEL

Lab Sample ID: XIBLK24

Analysis Date: 30-JAN-10 03:29

GEL Data File: EXP0125229a

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	519.591
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	493.362
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\012510expA5.qld, Time: Sat Jan 30 10:06:54 2010

Name: C:\MASSLYNX\NEW\_EXP\PRO\data\EXP0125229a

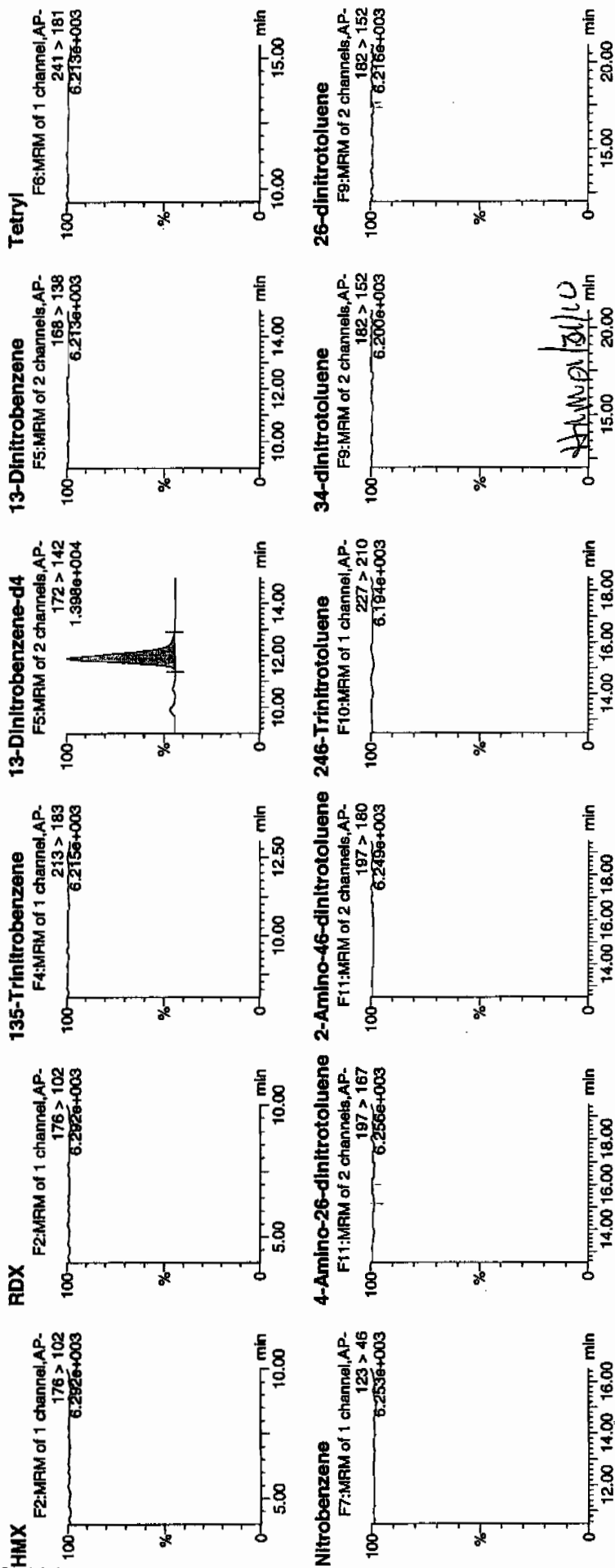
Date: 30-Jan-2010

Time: 03:29:42

ID: XIBLK24

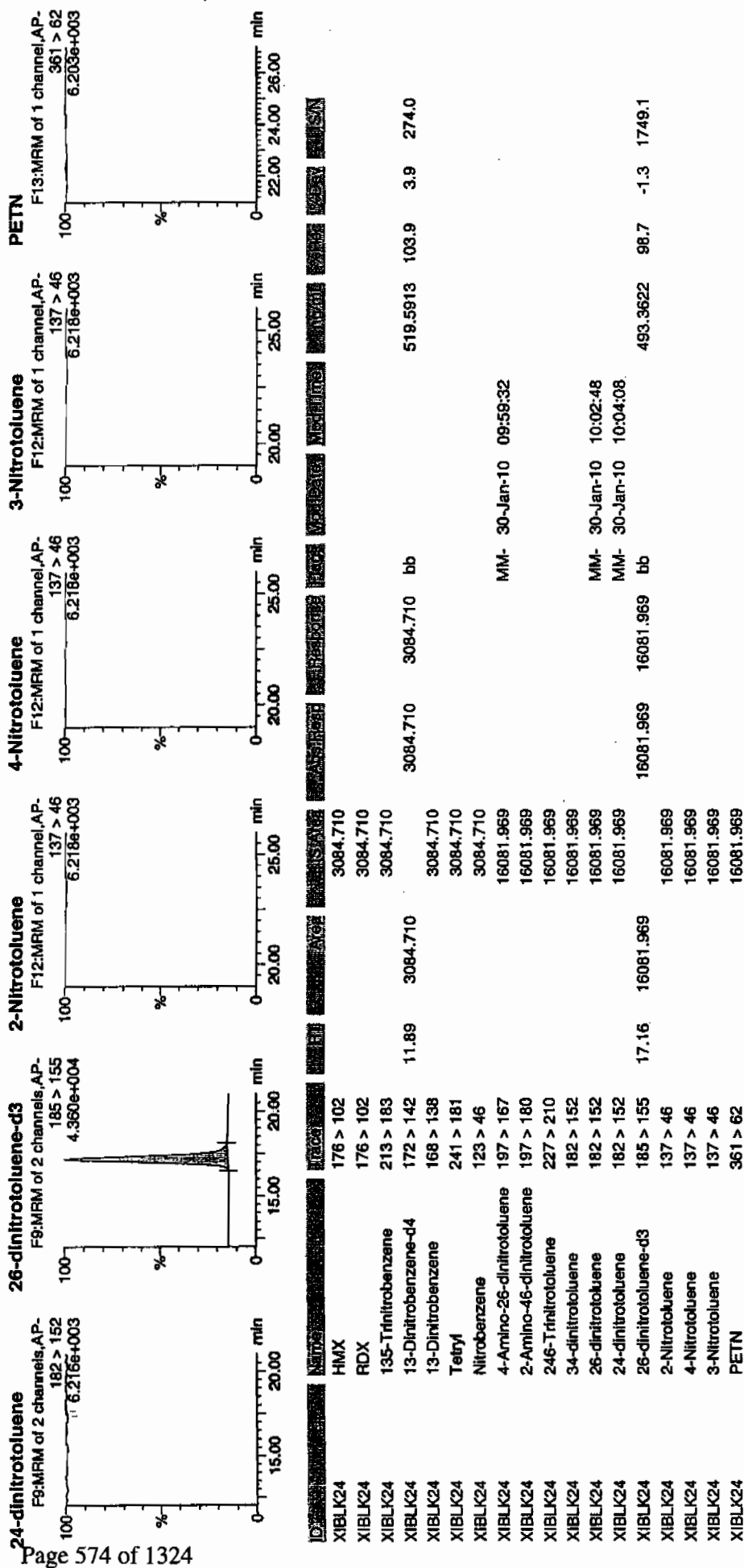
Vial: 1:1,A

1/30/10



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

Dataset: C:\MASSLYNX\New\_Exp\PRO012510expA5.qld, Time: Sat Jan 30 10:06:54 2010





4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1210

Lab Code: GEL

Lab Sample ID: XIBLK25

Analysis Date: 30-JAN-10 08:54

GEL Data File: EXP0125240a

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	575.798
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	542.938
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\012510expA5.qtd, Time: Sat Jan 30 10:06:54 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125240a

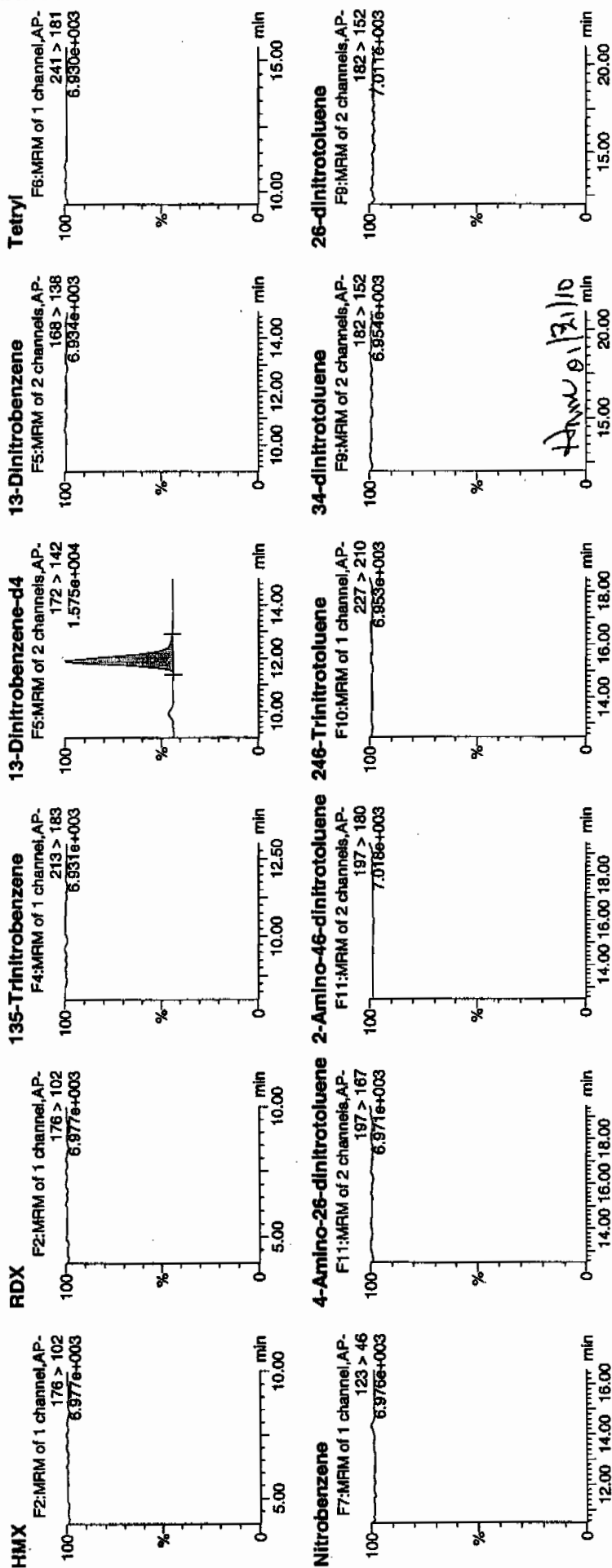
Date: 30-Jan-2010

Time: 08:54:48

ID: XIBLK25

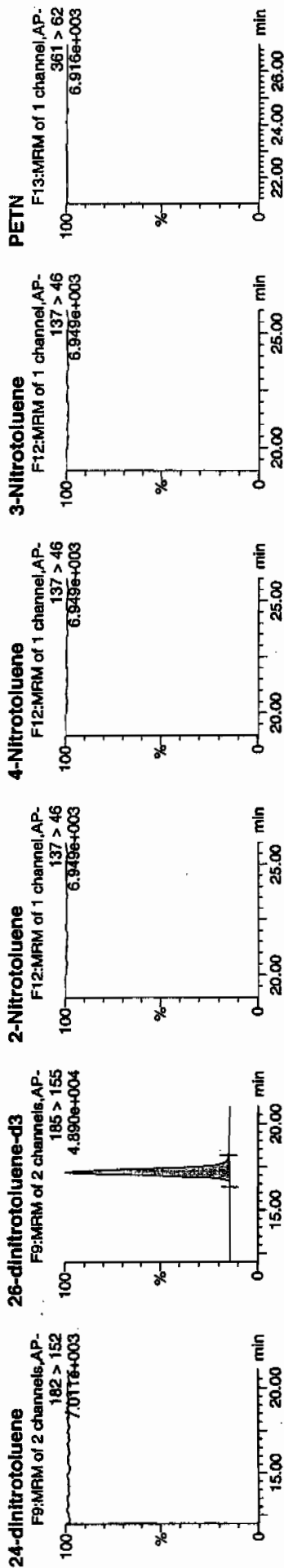
Vial: 1:1,A

1/30/10



Dataset: C:\MASSLYNX\New\_Exp\_PRO\012510expA5.qld, Time: Sat Jan 30 10:06:54 2010

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ID	Name	RT	Area	Height	Width	Area%	Height%	Width%
XIBLK25	HMX	176 > 102	3418.396					
XIBLK25	RDX	176 > 102	3418.396					
XIBLK25	135-Trinitrobenzene	213 > 183	3418.396					
XIBLK25	13-Dinitrobenzene-d4	172 > 142	11.92	3418.396				
XIBLK25	13-Dinitrobenzene	168 > 138	3418.396					
XIBLK25	Tetryl	241 > 181	3418.396					
XIBLK25	Nitrobenzene	123 > 46	17697.979					
XIBLK25	4-Amino-26-dinitrotoluene	197 > 167	17697.979					
XIBLK25	2-Amino-46-dinitrotoluene	197 > 180	17697.979					
XIBLK25	246-Trinitrotoluene	227 > 210	17697.979					
XIBLK25	34-dinitrotoluene	182 > 152	17697.979					
XIBLK25	26-dinitrotoluene	182 > 152	17697.979					
XIBLK25	24-dinitrotoluene	182 > 152	17697.979					
XIBLK25	26-dinitrotoluene-d3	185 > 155	17.18	17697.979				
XIBLK25	2-Nitrotoluene	137 > 46	17697.979					
XIBLK25	4-Nitrotoluene	137 > 46	17697.979					
XIBLK25	3-Nitrotoluene	137 > 46	17697.979					
XIBLK25	PETN	361 > 62						

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1210

Lab Code: GEL

Lab Sample ID: XIBLK02

Analysis Date: 25-JAN-10 12:54

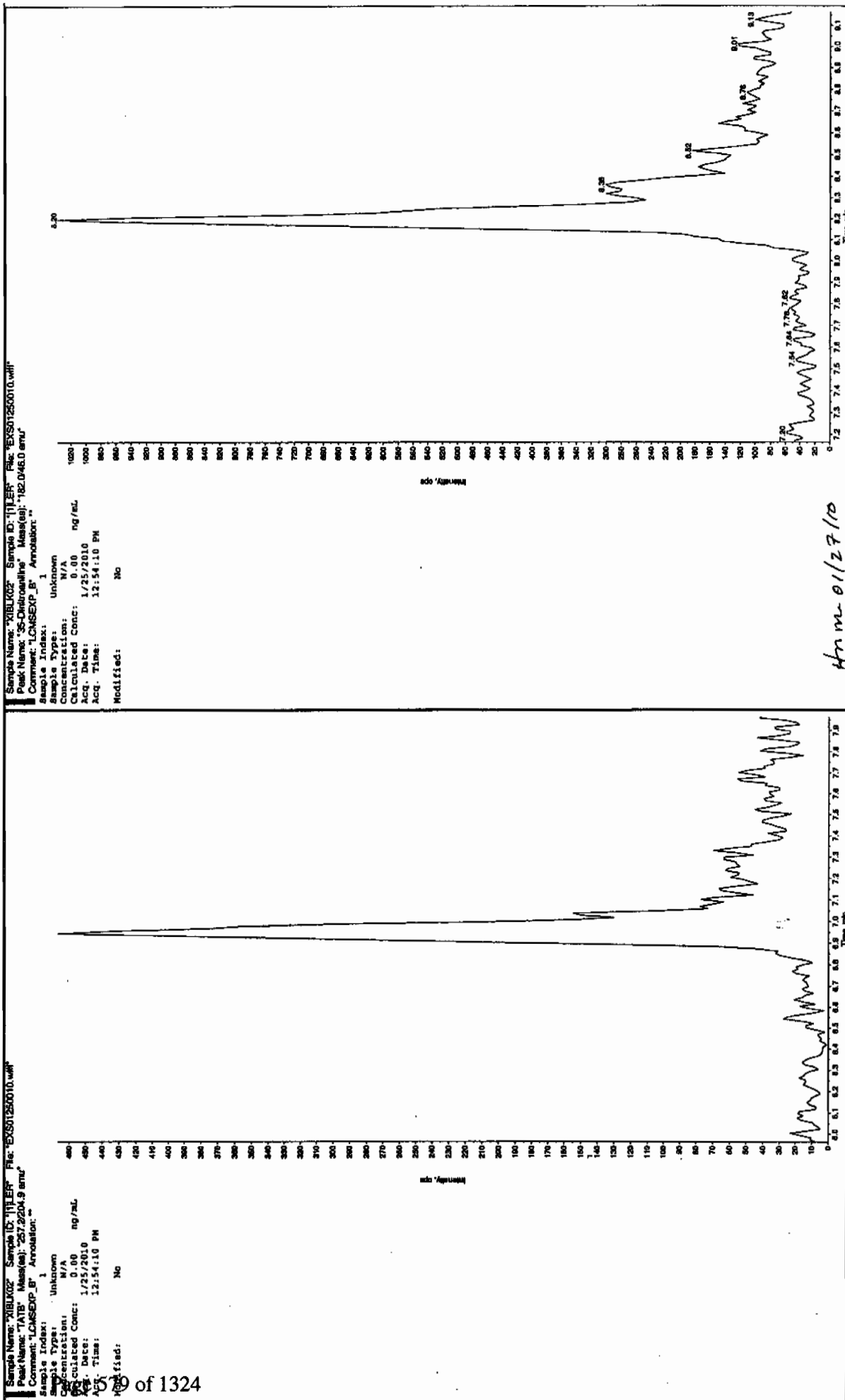
GEL Data File: EXS01250010.wiff

Instrument ID: LCMSMS

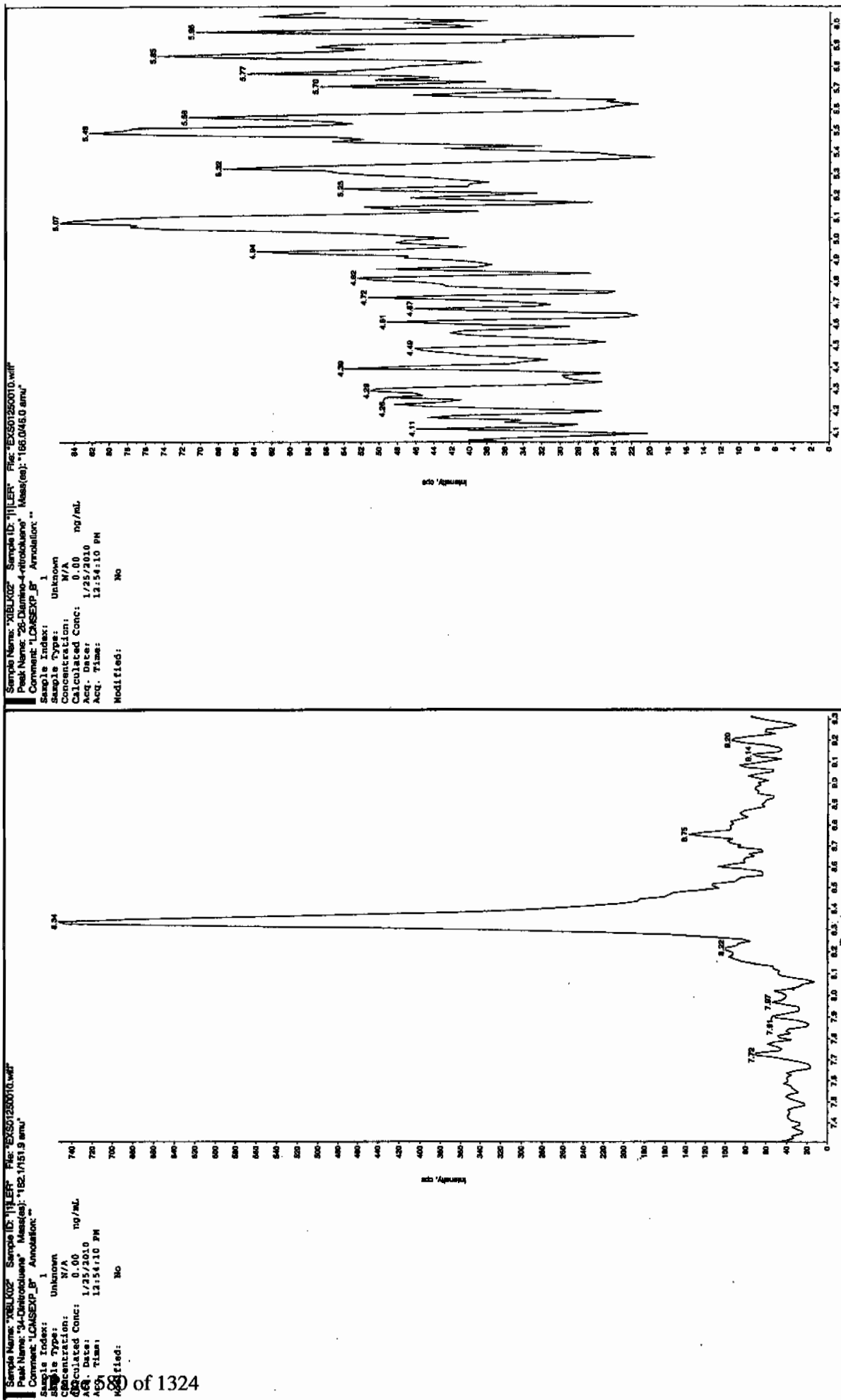
Column: Phenomenex Ultracarb 5u ODS(20)

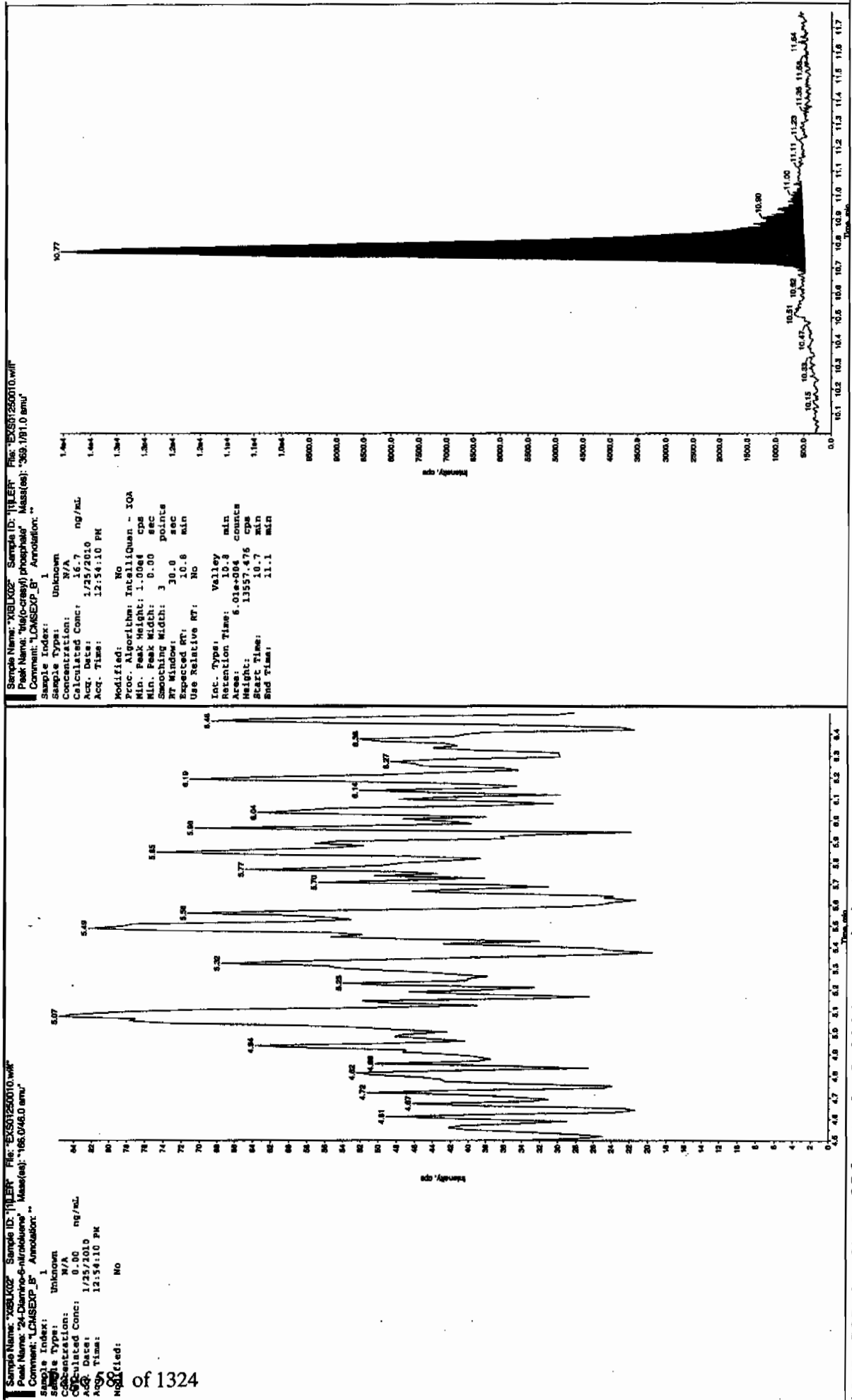
Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	16.7
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Gen 1/27/10



\*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): 10-1210

Lab Code: GEL

Lab Sample ID: XIBLK03

Analysis Date: 25-JAN-10 13:25

GEL Data File: EXS01250012.wiff

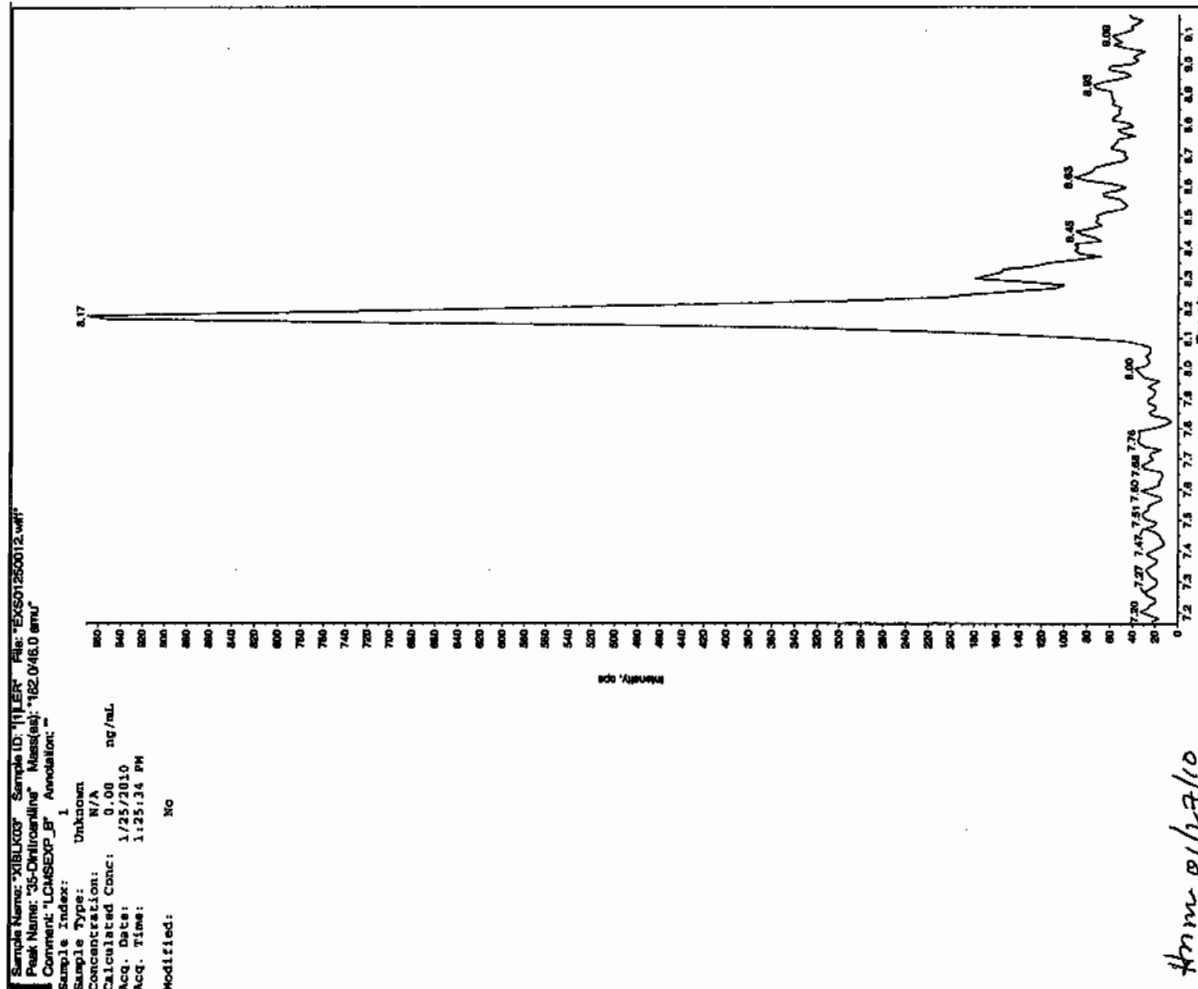
Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

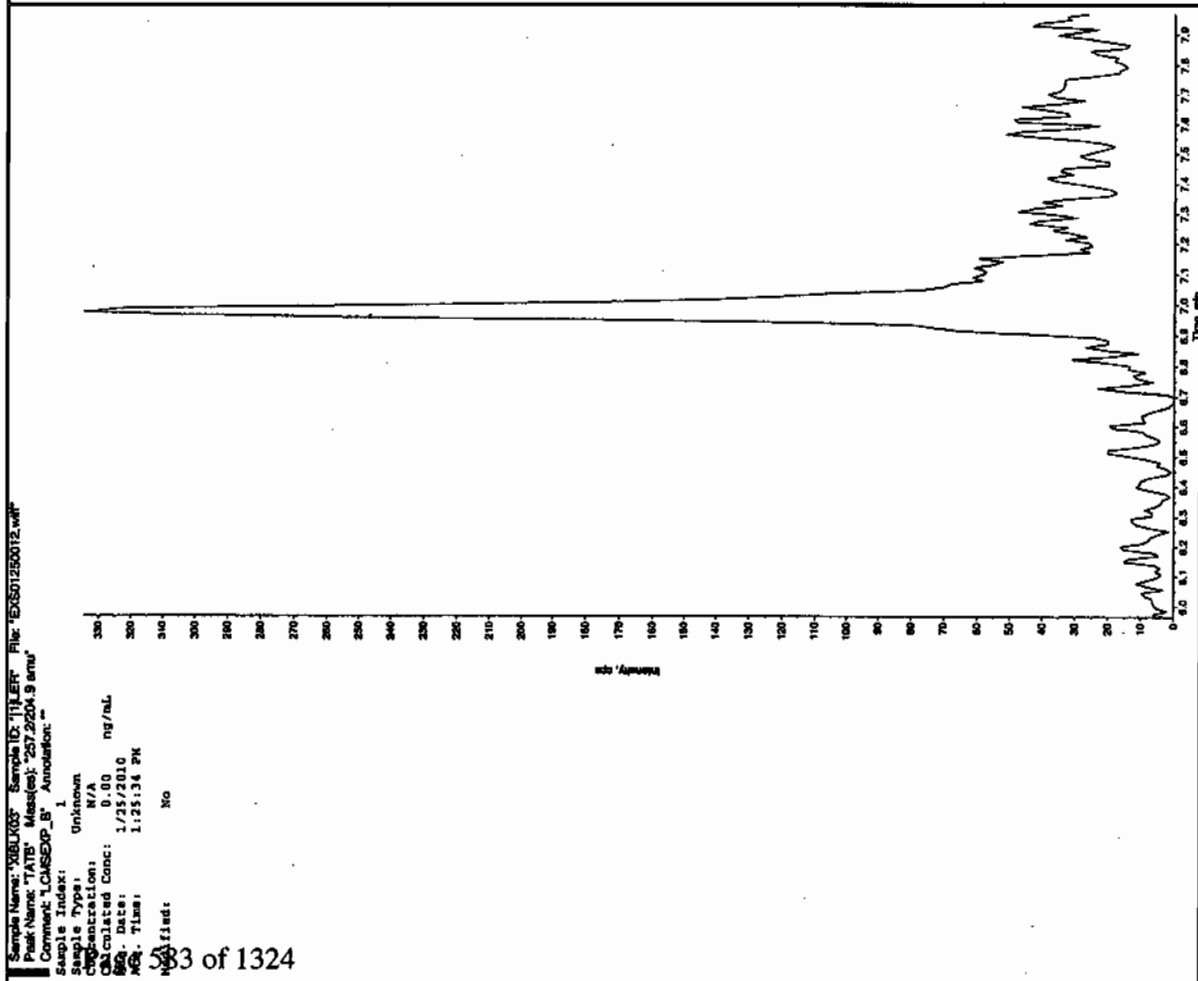
Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

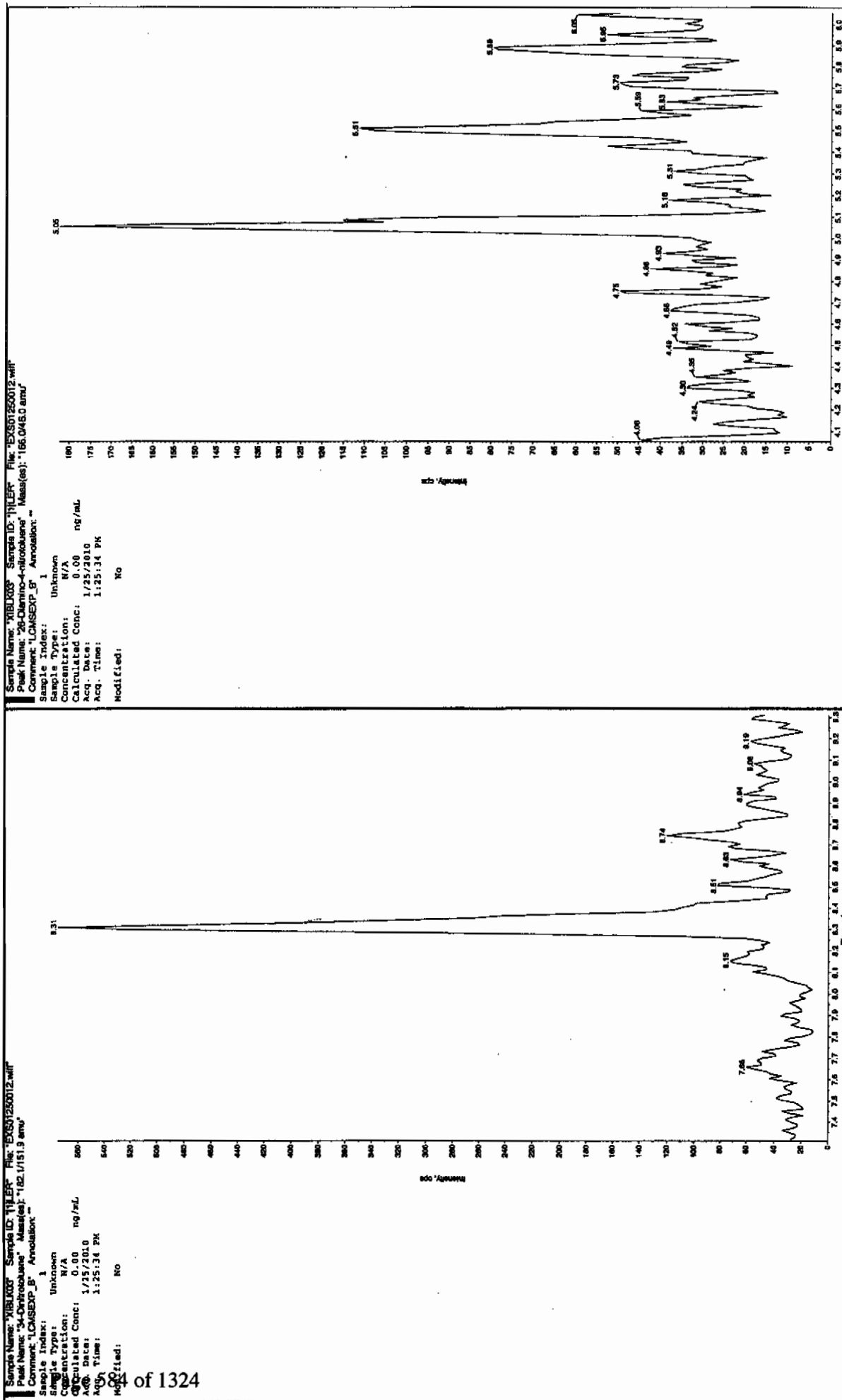


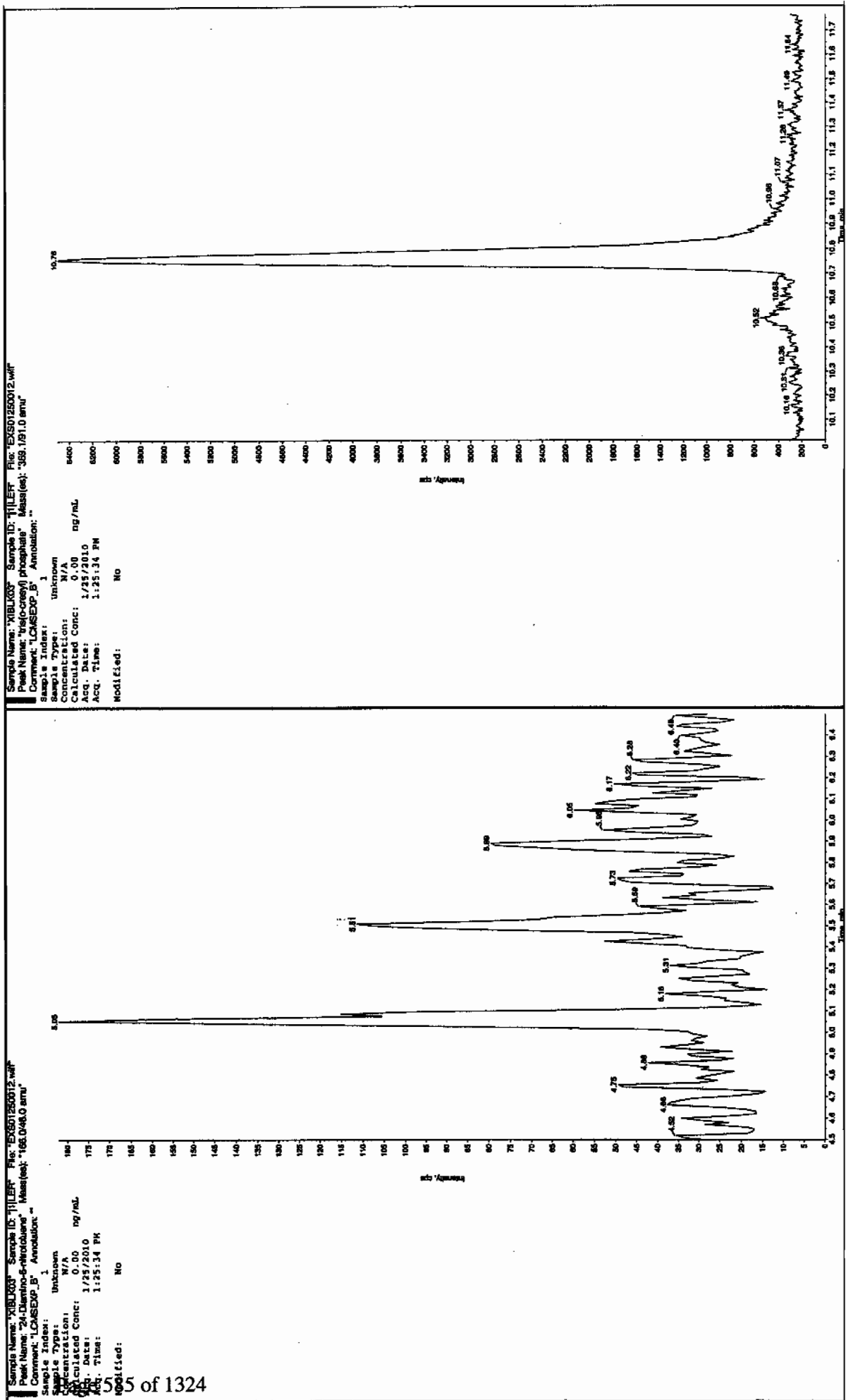
See 1/27/10



See 01/27/10







\*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): 10-1210

Lab Code: GEL

Lab Sample ID: XIBLK04

Analysis Date: 25-JAN-10 14:28

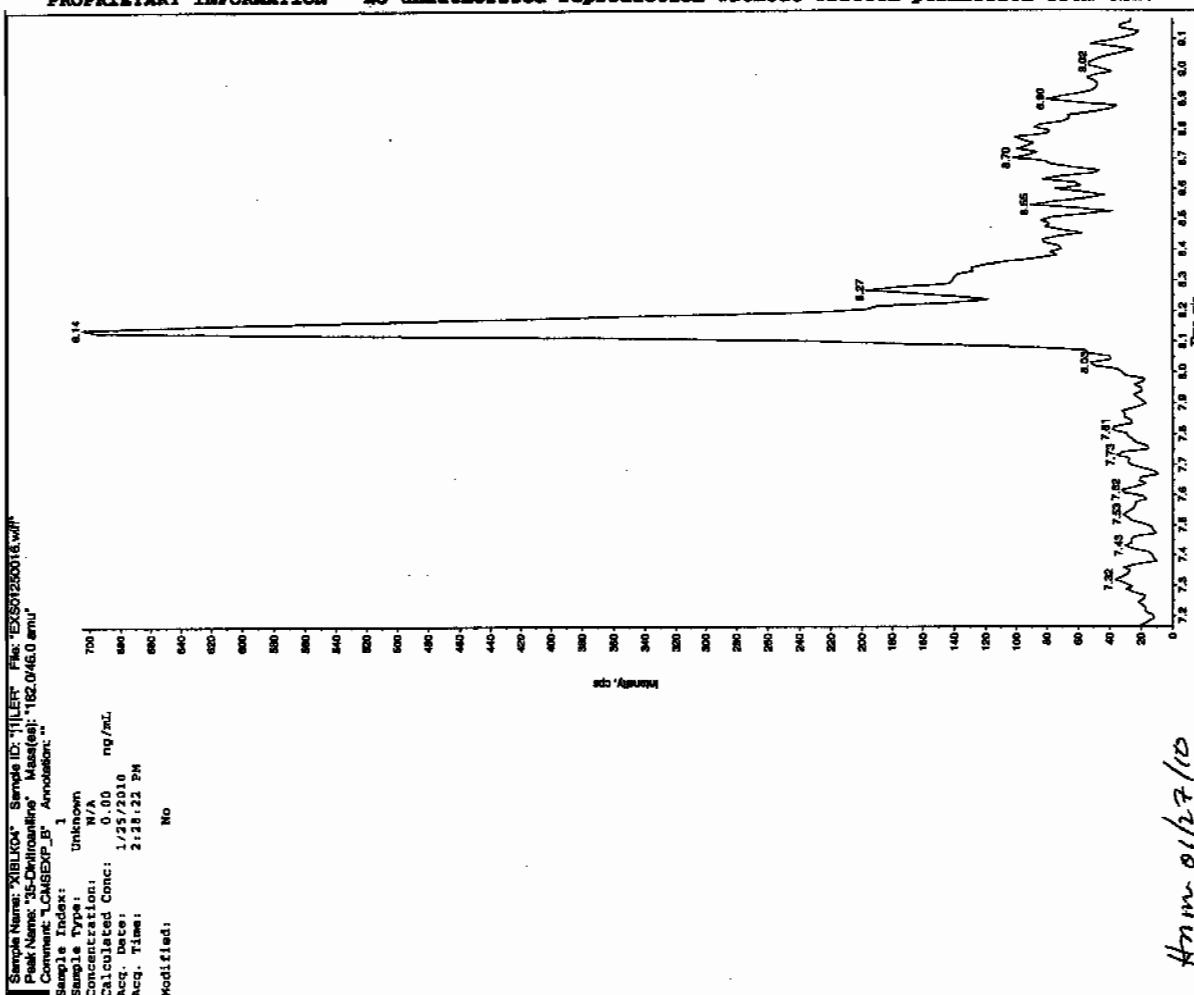
GEL Data File: EXS01250016.wiff

Instrument ID: LCMSMS

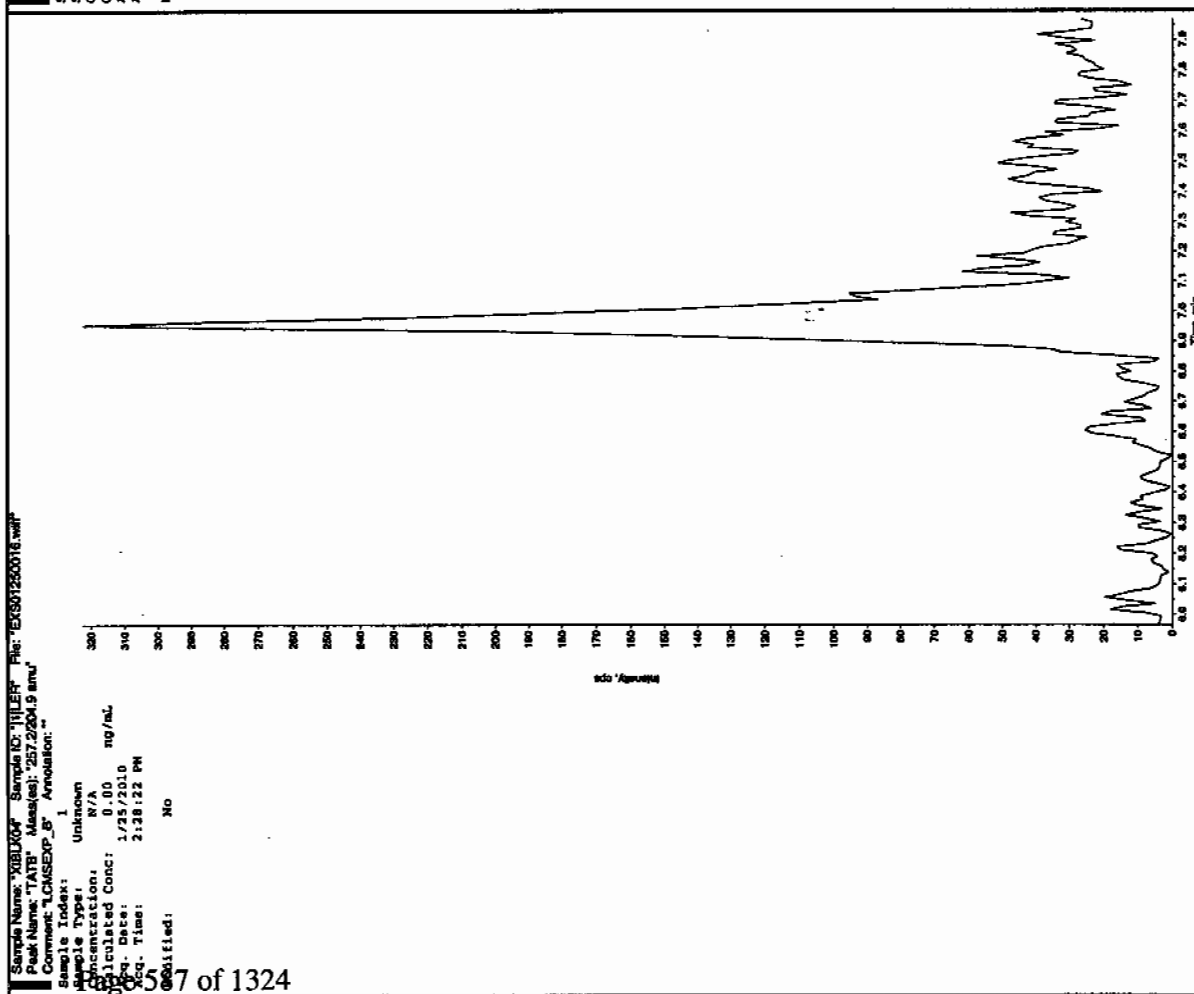
Column: Phenomenex Ultracarb 5u ODS(20)

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

San 112710



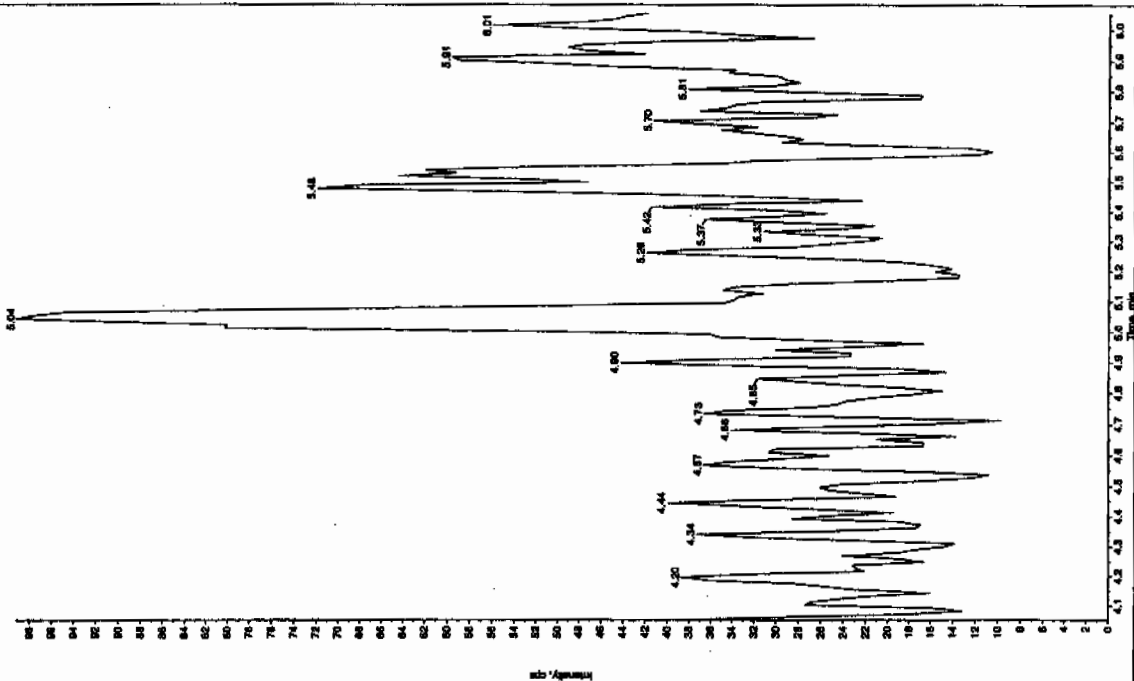
Ann 01/27/10



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

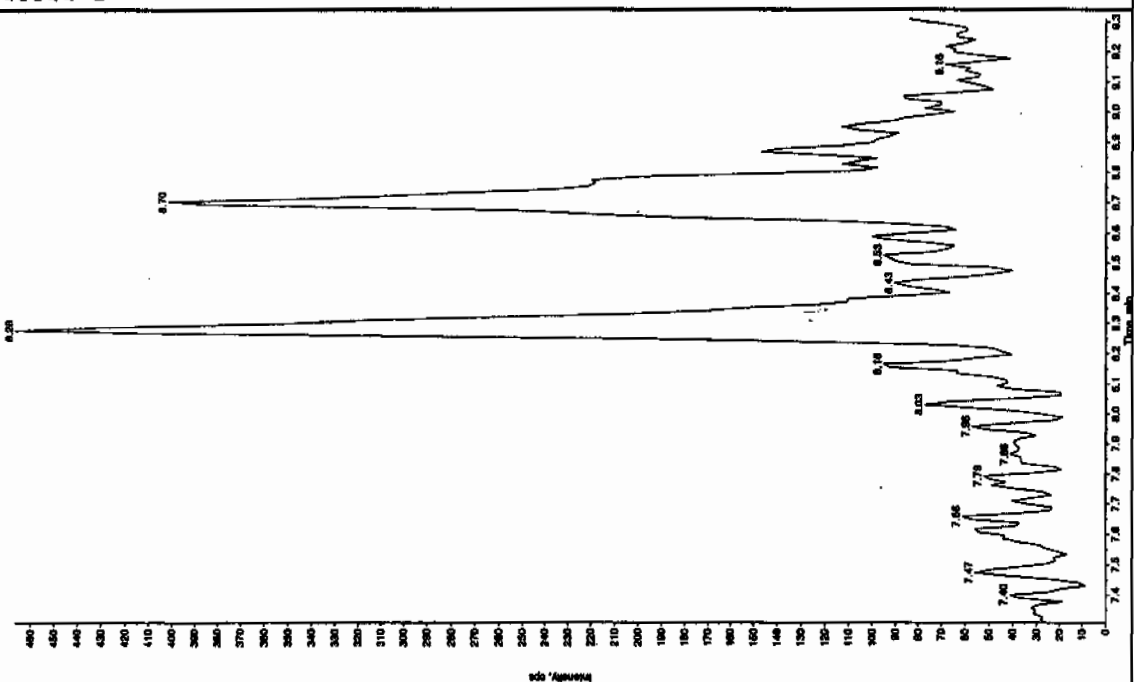
Sample Name: "86LJ04" Sample ID: "11LRF" File: "EXS01250016.wif"  
 Peak Name: "26-Dienho-4-nitrobenzene" Mass(es): "168.046.0 amu"  
 Comment: "LOASEXP\_B" Annotation: "-"

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/25/2010  
 Acq. Time: 2:28:22 PM  
 Modified: No



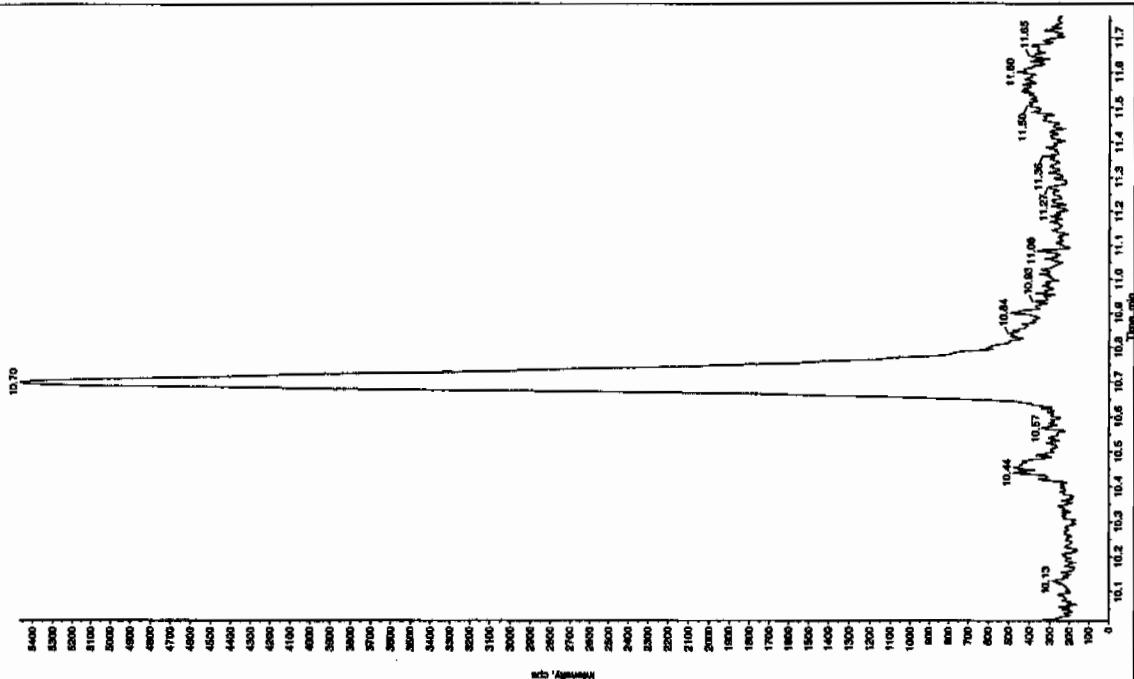
Sample Name: "86LJ04" Sample ID: "11LRF" File: "EXS01250016.wif"  
 Peak Name: "34-Dienho-4-nitrobenzene" Mass(es): "162.151.9 amu"  
 Comment: "LOASEXP\_B" Annotation: "-"

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/25/2010  
 Acq. Time: 2:28:22 PM  
 Modified: No



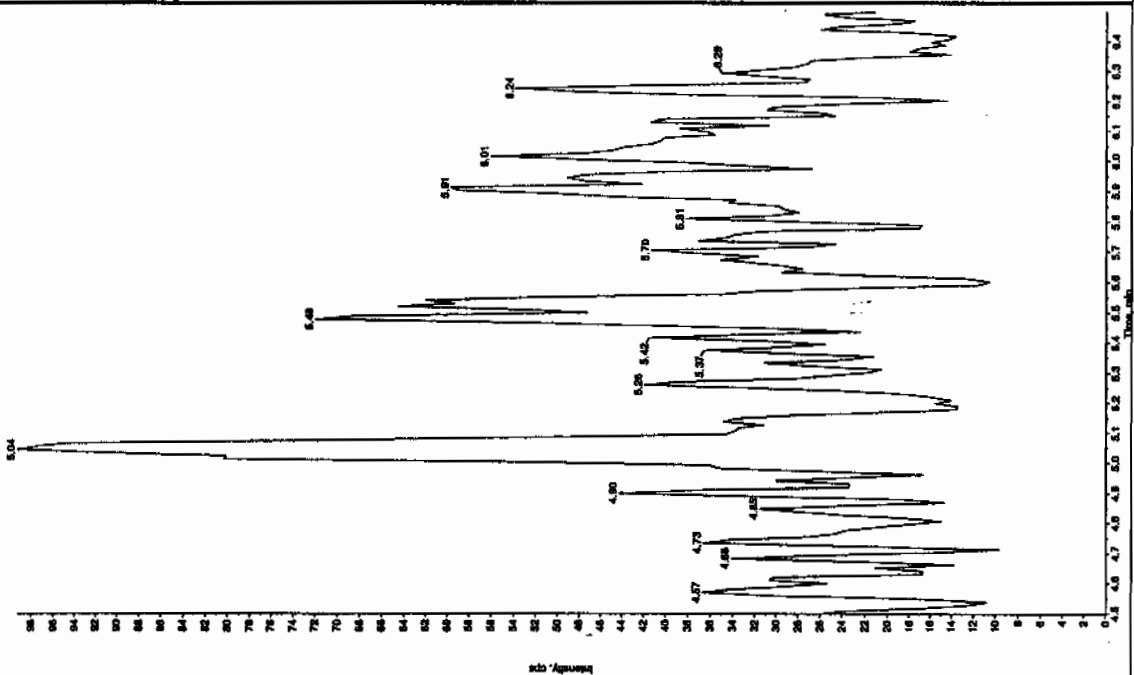
Sample Name: "XBLK04" Sample ID: "111111" File: "EX501250016.wif"  
 Peak Name: "Phosphoric acid" Mass(es): "326.191.0 amu"

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 mg/mL  
 Acq. Date: 1/25/2010  
 Acq. Time: 2:28:22 PM  
 Modified: No



Sample Name: "XBLK04" Sample ID: "111111" File: "EX501250016.wif"  
 Peak Name: "2,4-Dinitrophenol" Mass(es): "165.046.0 amu"

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 mg/mL  
 Acq. Date: 1/25/2010  
 Acq. Time: 2:28:22 PM  
 Modified: No



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1210

Lab Code: GEL

Lab Sample ID: XIBLK05

Analysis Date: 25-JAN-10 16:49

GEL Data File: EXS01250025.wiff

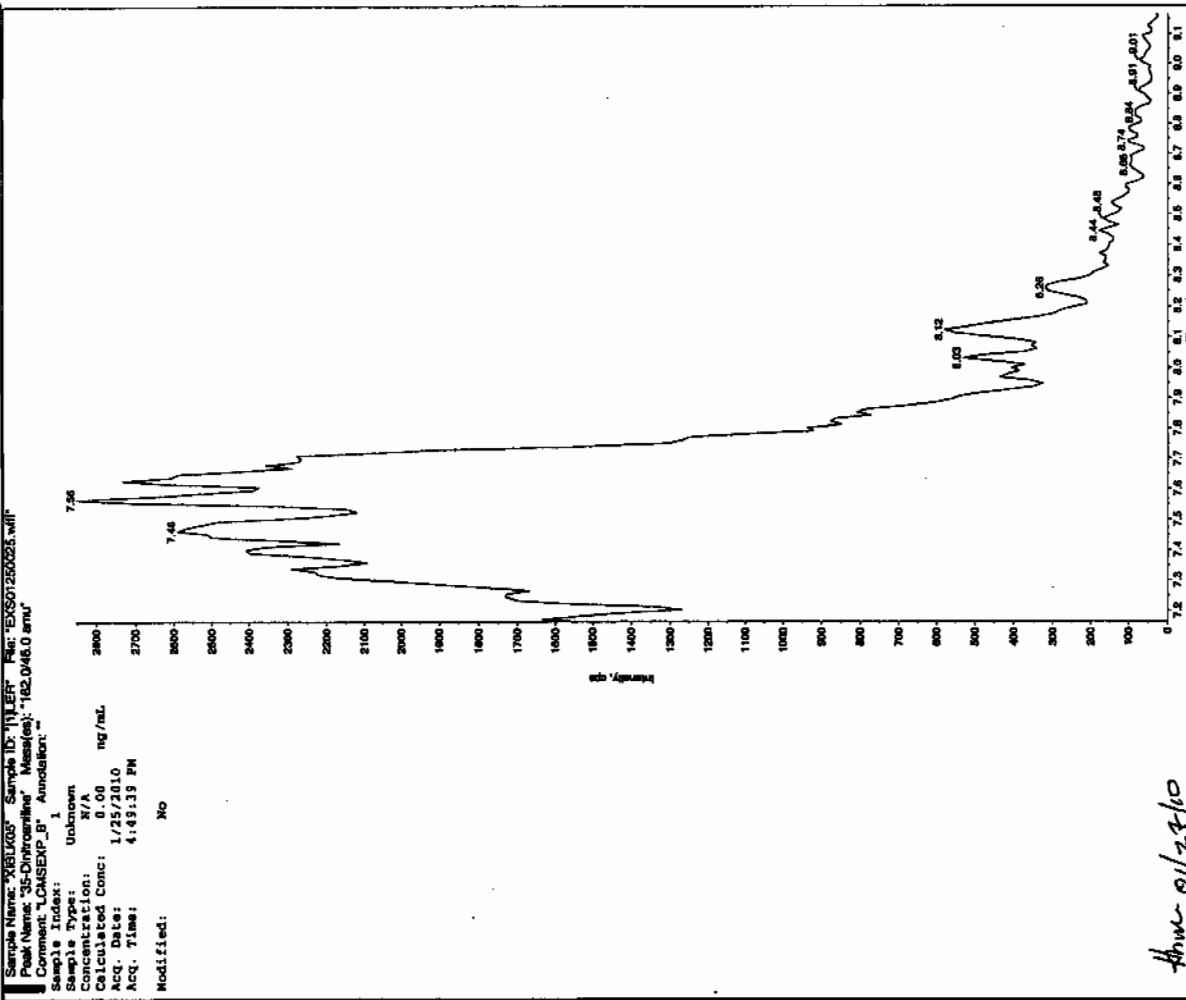
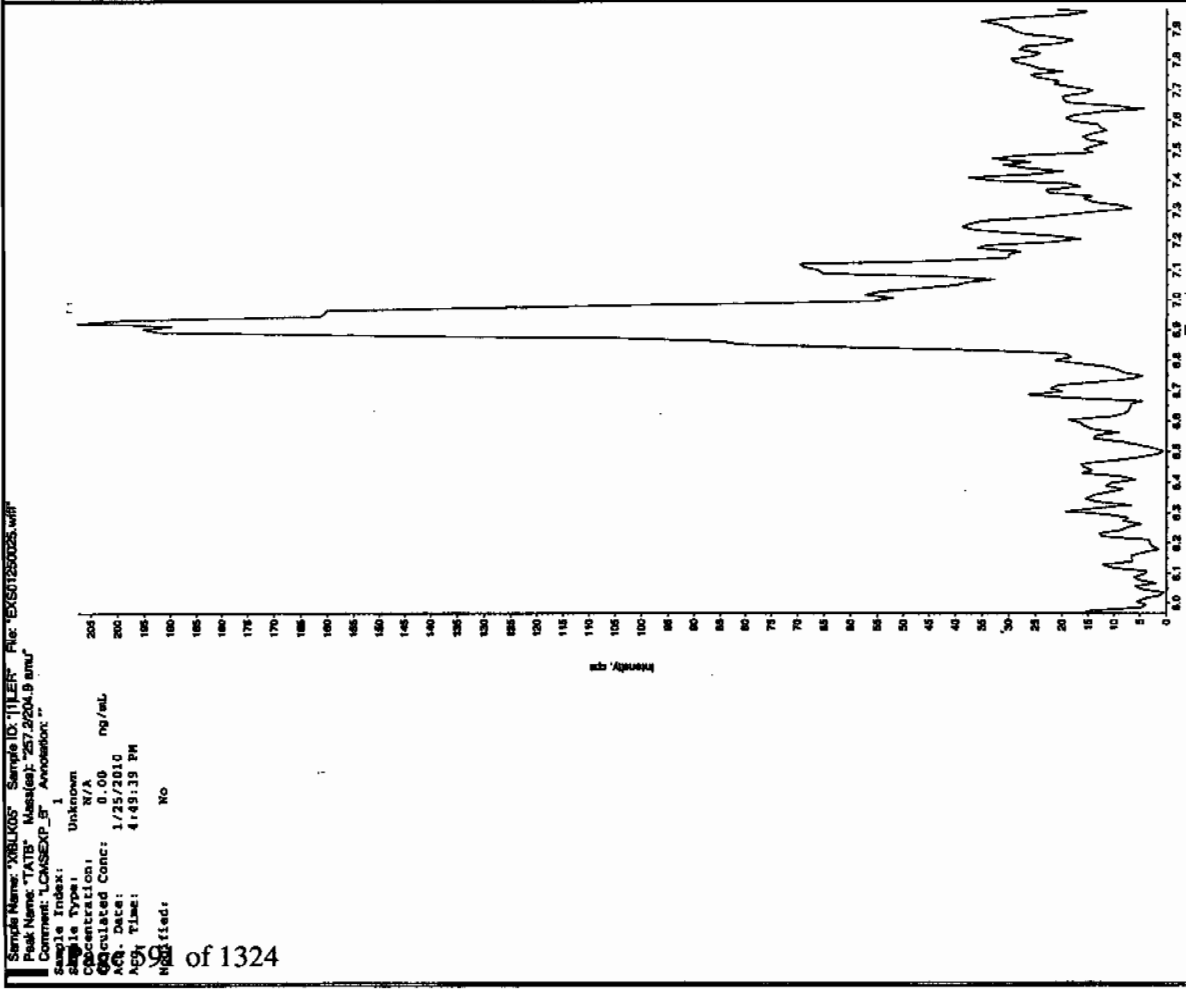
Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

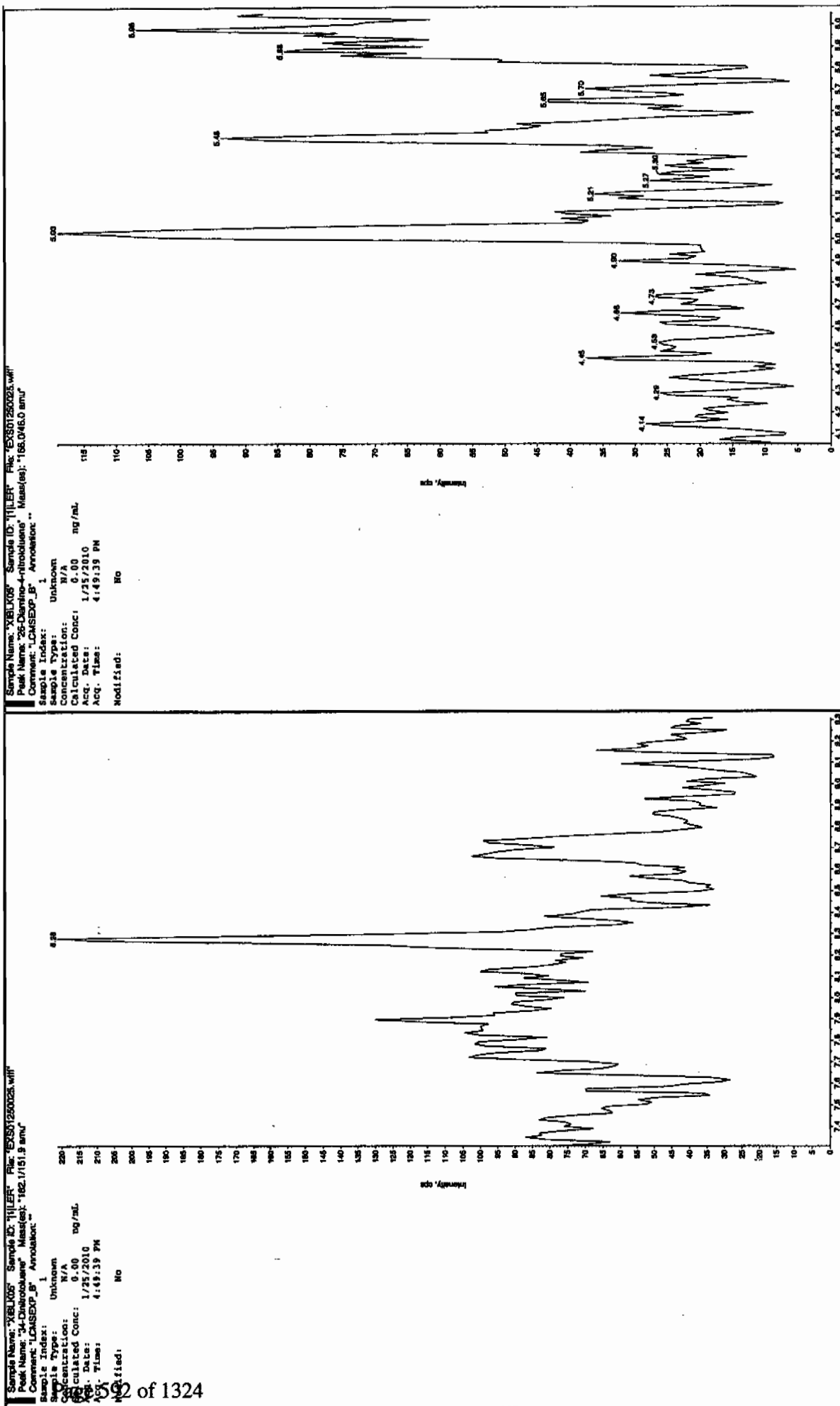
Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0



Len 11/27/10

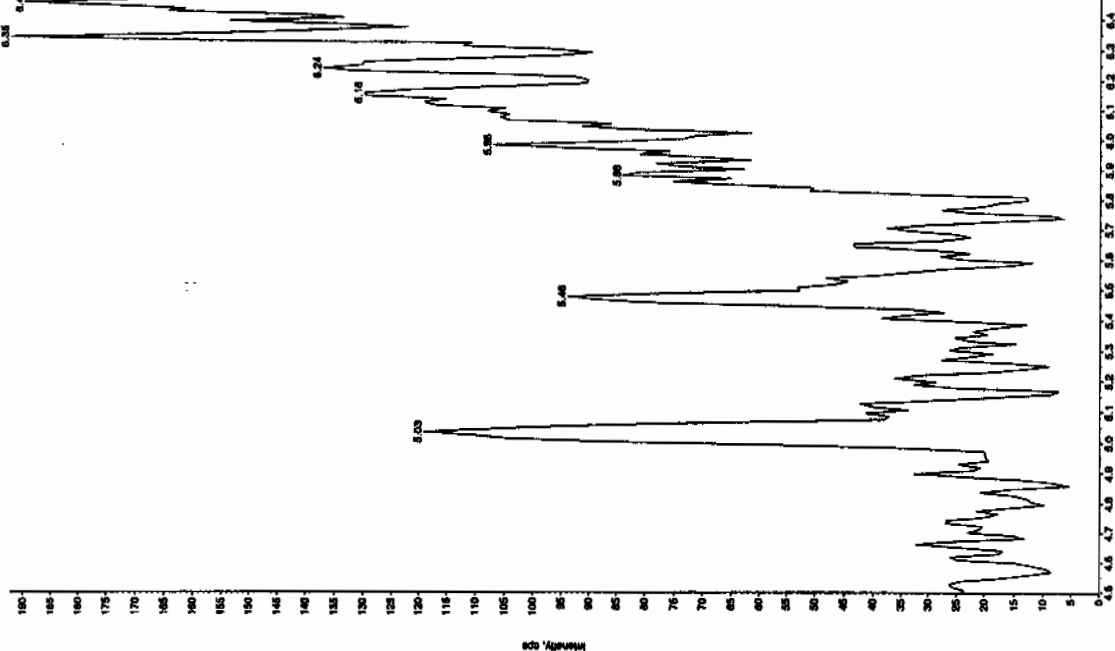


Amc 01/27/10



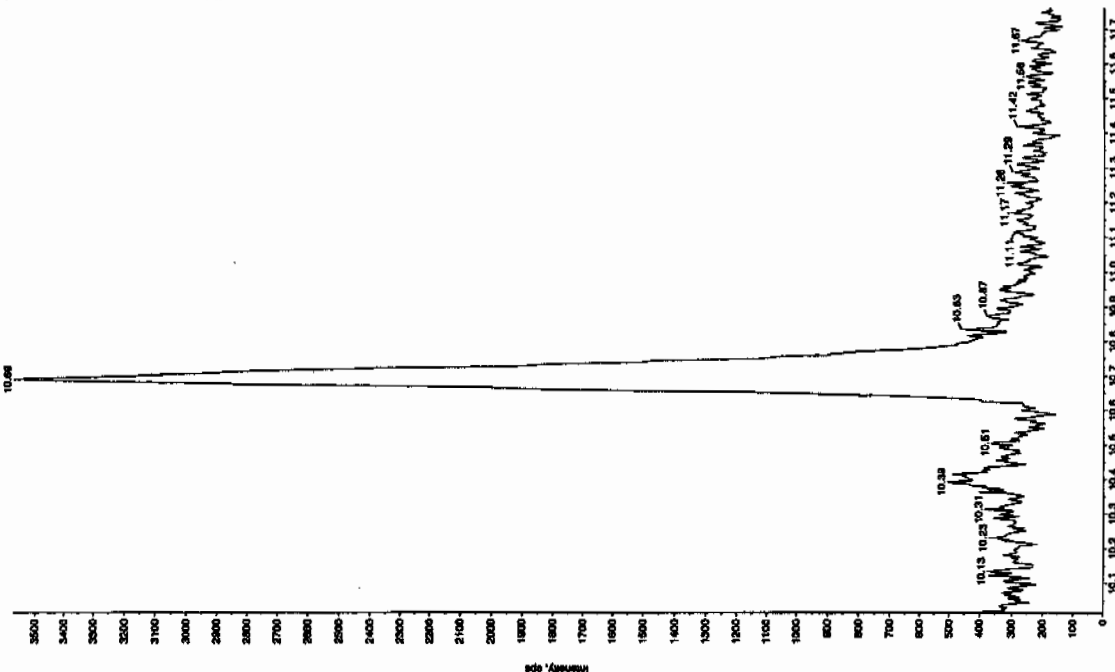
Sample Name: "XBLUX05" Sample ID: "11111" File: "EXS01250025.wif"  
 Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "163.046.0 amu"  
 Comment: "LCMSXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 1/21/2010  
 Acq. Date: 4/19/10  
 Acq. Time: 4:49:39 PM  
 Modified: No



Sample Name: "XBLUX05" Sample ID: "11111" File: "EXS01250025.wif"  
 Peak Name: "10-(o-cresyl) phosphite" Mass(es): "369.151.0 amu"  
 Comment: "LCMSXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 1/21/2010  
 Acq. Date: 4/19/10  
 Acq. Time: 4:49:39 PM  
 Modified: No



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1210

Lab Code: GEL

Lab Sample ID: XIBLK06

Analysis Date: 25-JAN-10 20:14

GEL Data File: EXS01250038.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 1/22/10

Sample Name: "XBL005" Sample ID: "HILLER" File: "EX501260038.wif"

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

Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1

Sample Type: Unknown

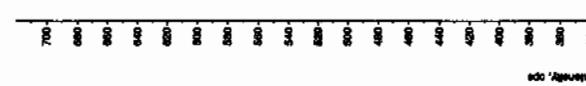
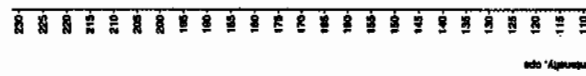
Concentration: N/A ng/mL

Calculated Conc: 1/25/2010

Acq. Date: 8:14:02 PM

Acq. Time: No

Modified: No



Sample Name: "XBL005" Sample ID: "HILLER" File: "EX501260038.wif"

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

Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1

Sample Type: Unknown

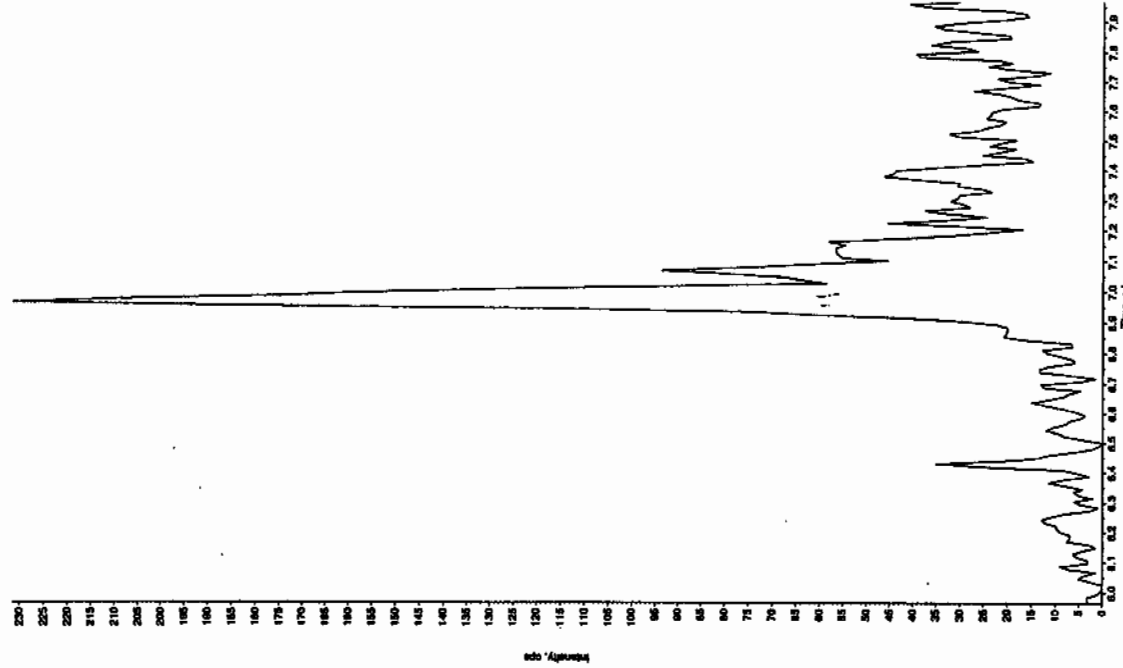
Concentration: N/A ng/mL

Calculated Conc: 1/25/2010

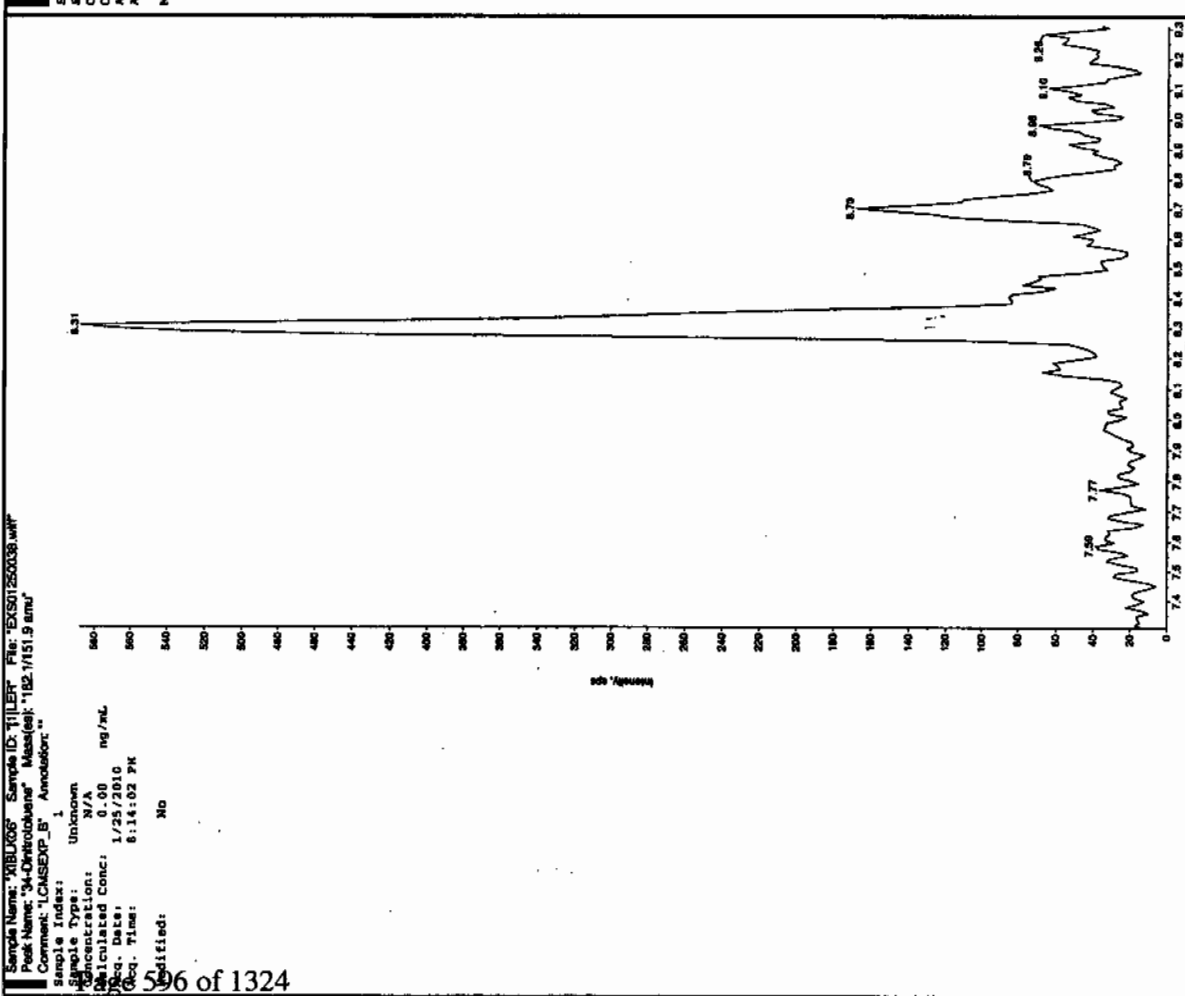
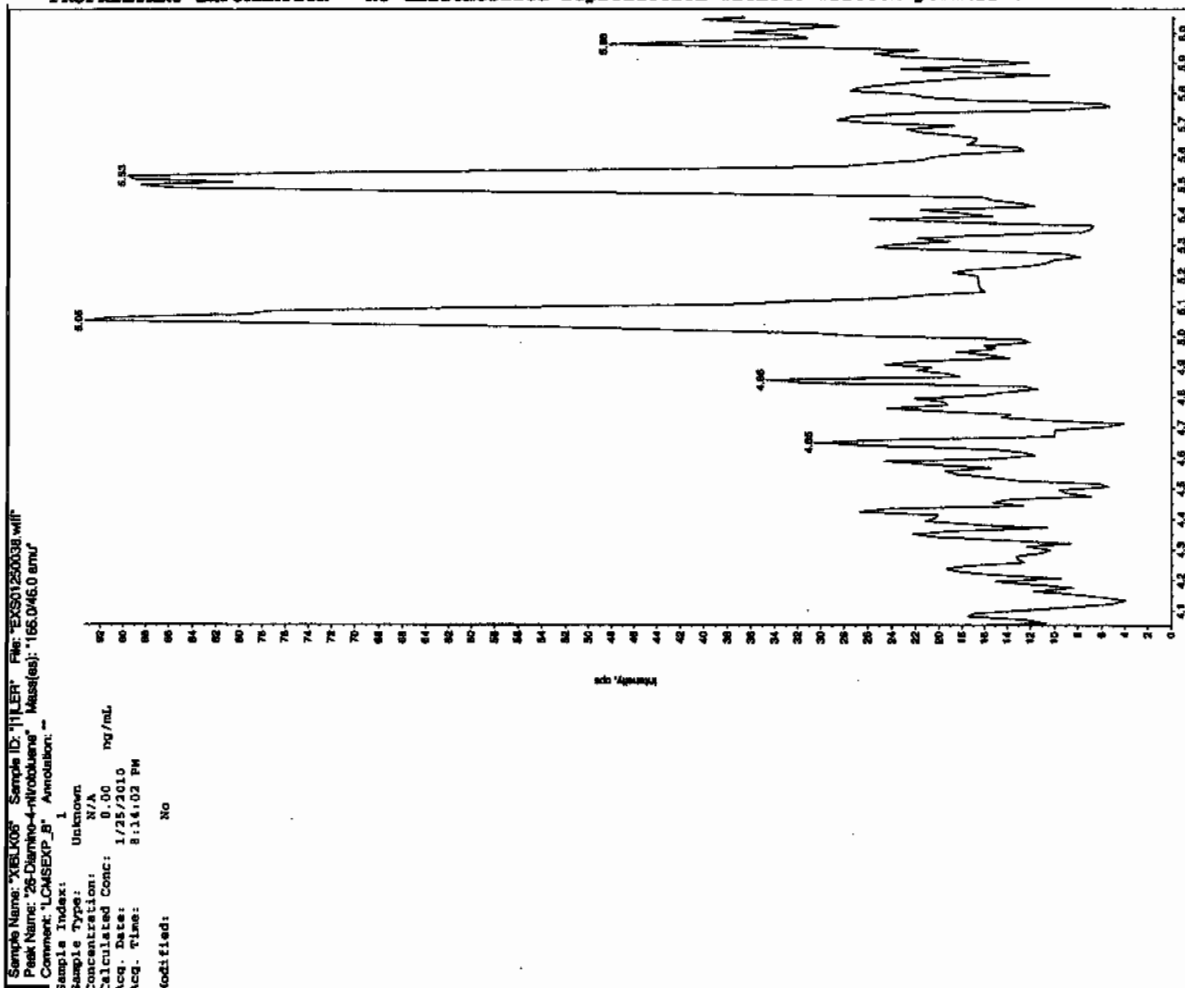
Acq. Date: 8:14:02 PM

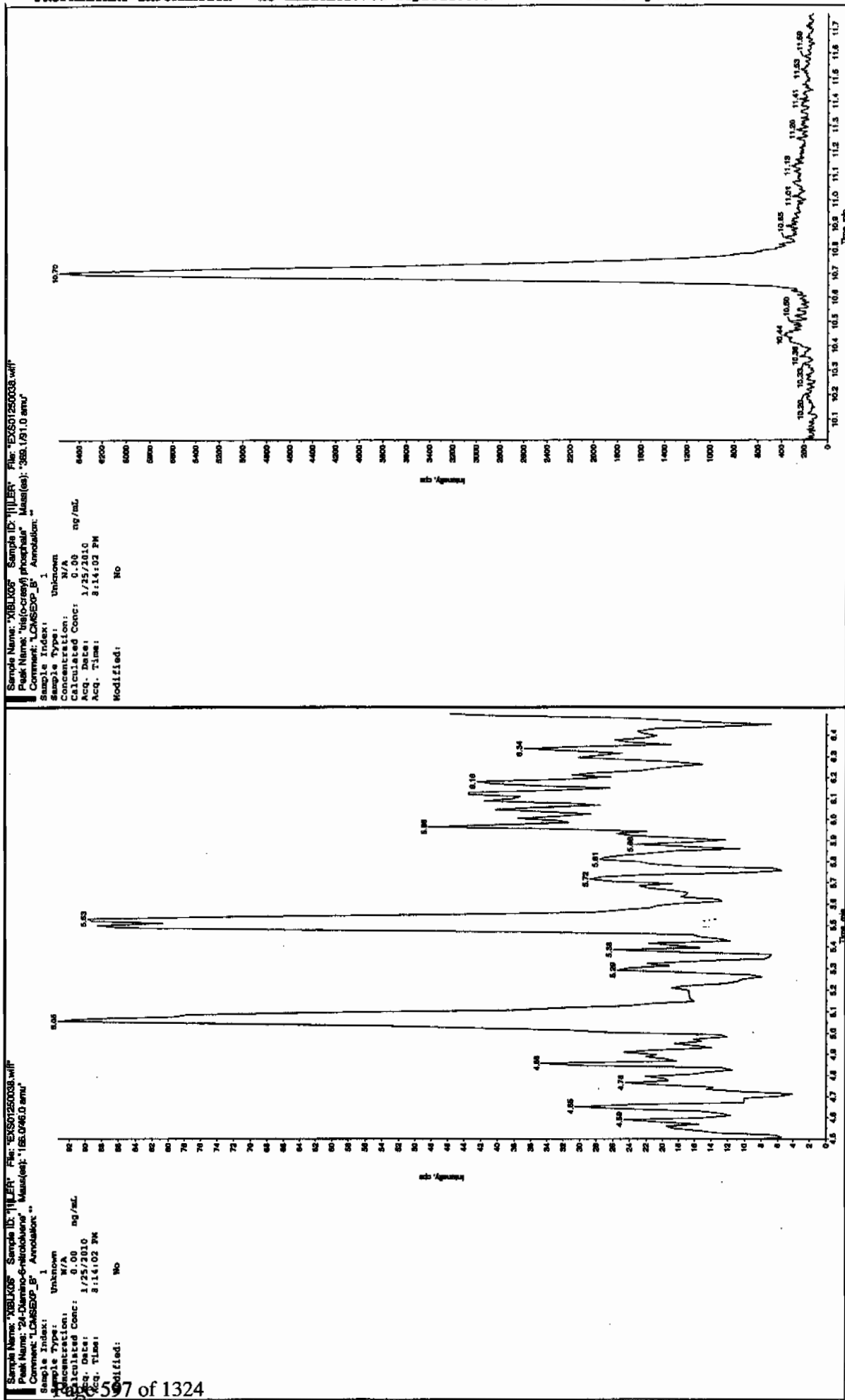
Acq. Time: No

Modified: No



Scan 01/22/10





4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1210

Lab Code: GEL

Lab Sample ID: XIBLK07

Analysis Date: 25-JAN-10 22:19

GEL Data File: EXS01250046.wiff

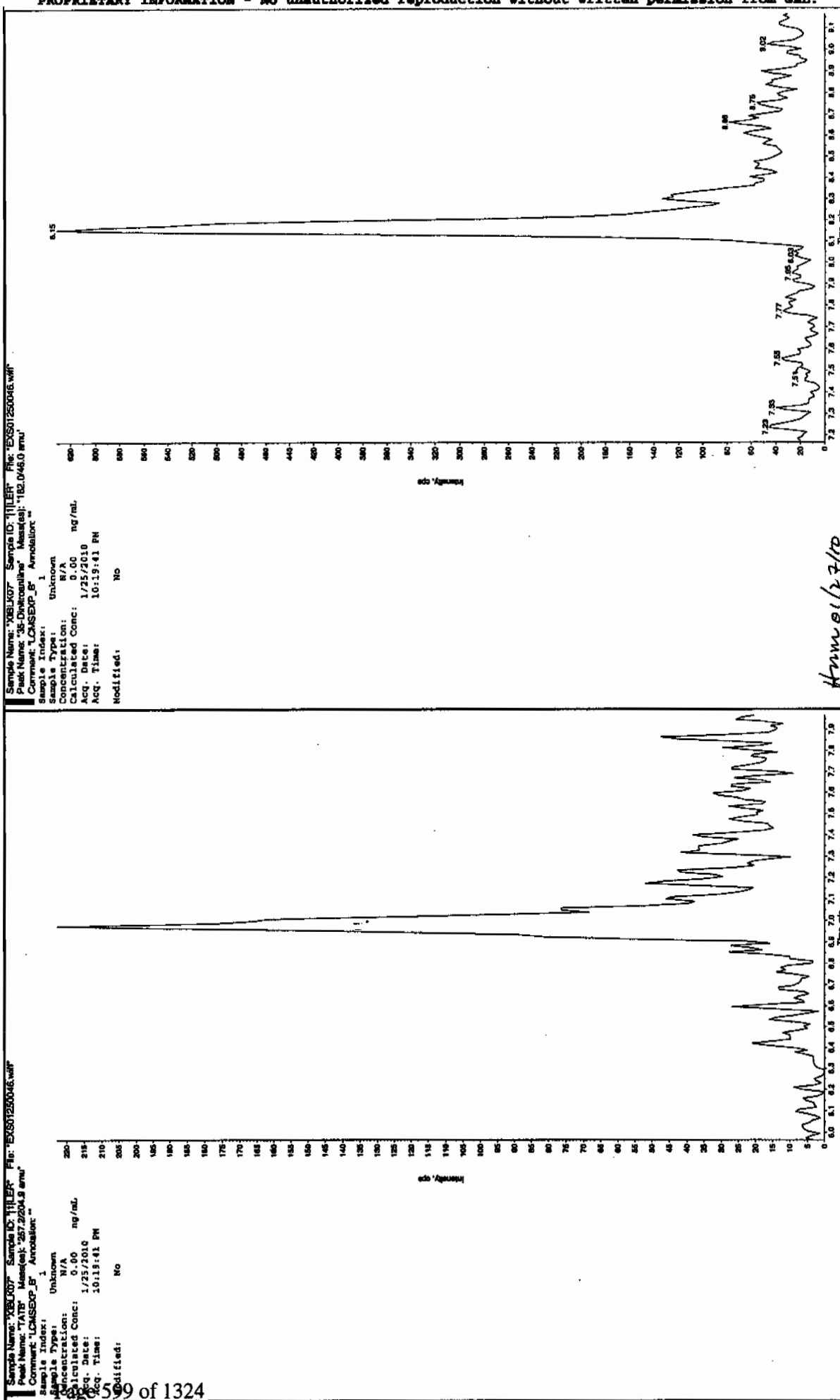
Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

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



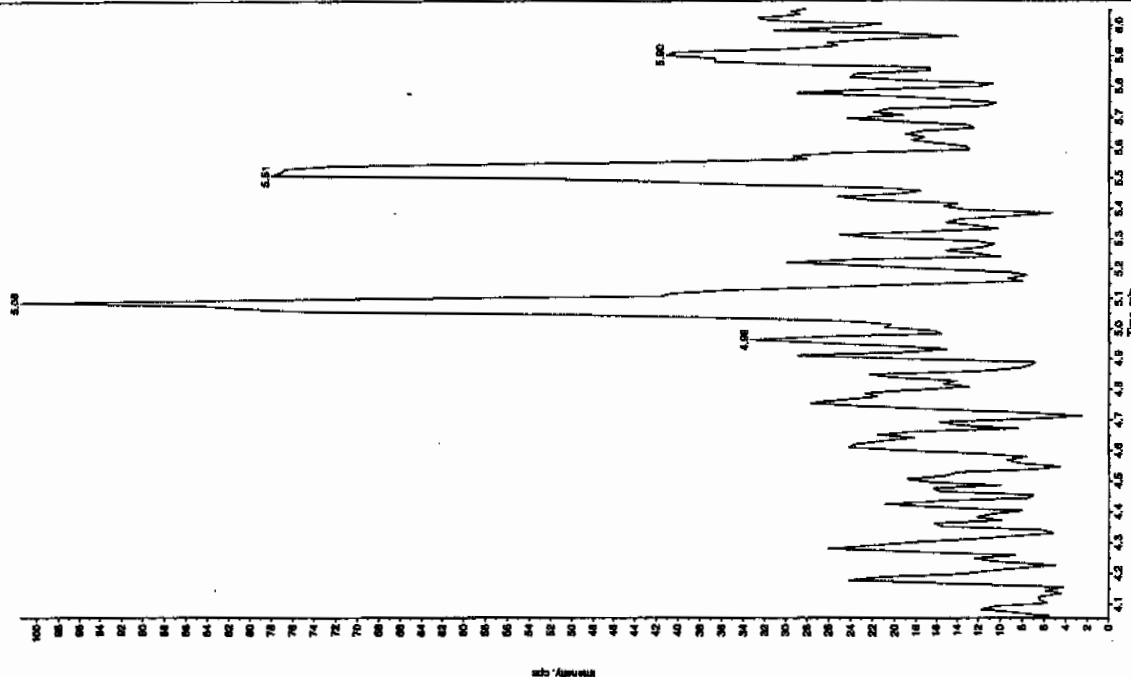
See 1127110



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

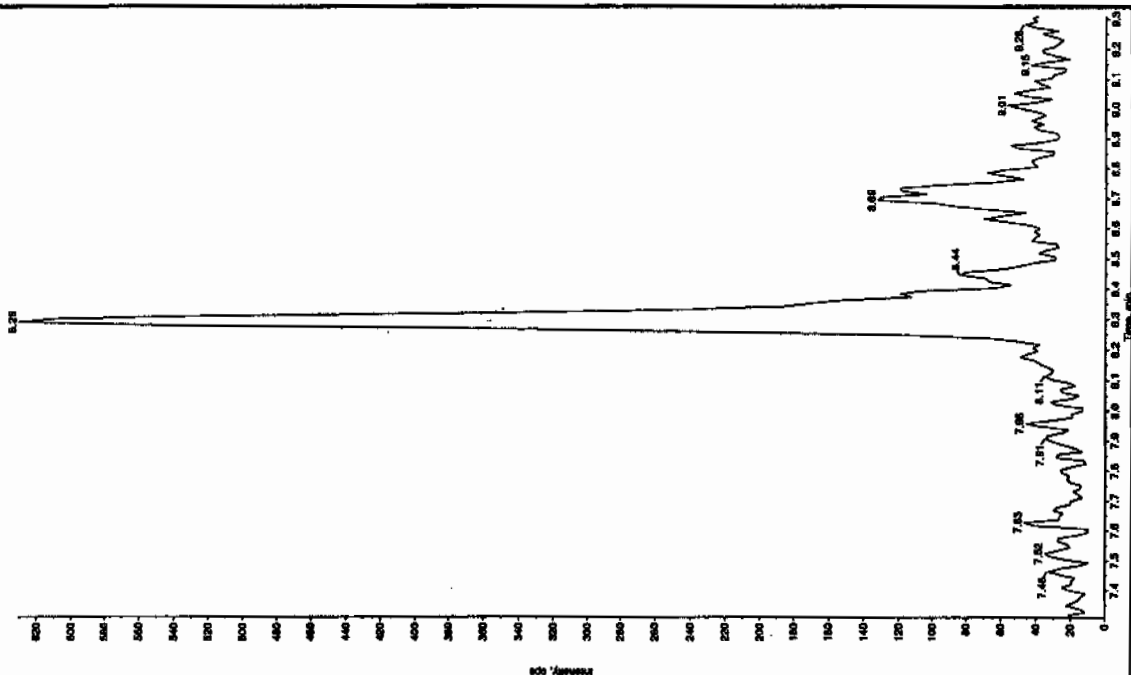
Sample Name: "XBLX07" Sample ID: "HILF" File: "EX301250048.wif"  
 Peak Name: "28-Dinitro-4-nitrotoluene" Mass(es): "166.046.0 amu"  
 Comment: "LCMS EXP\_B" Annotation: "-"

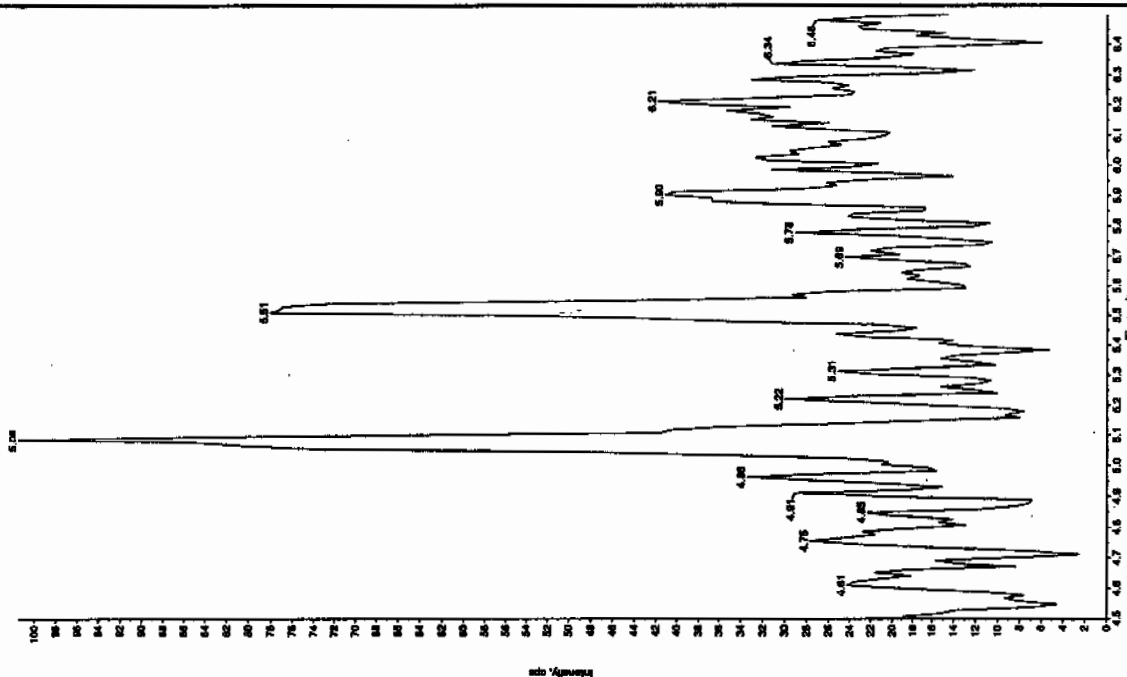
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/25/2010  
 Acq. Time: 10:15:41 PM  
 Modified: No



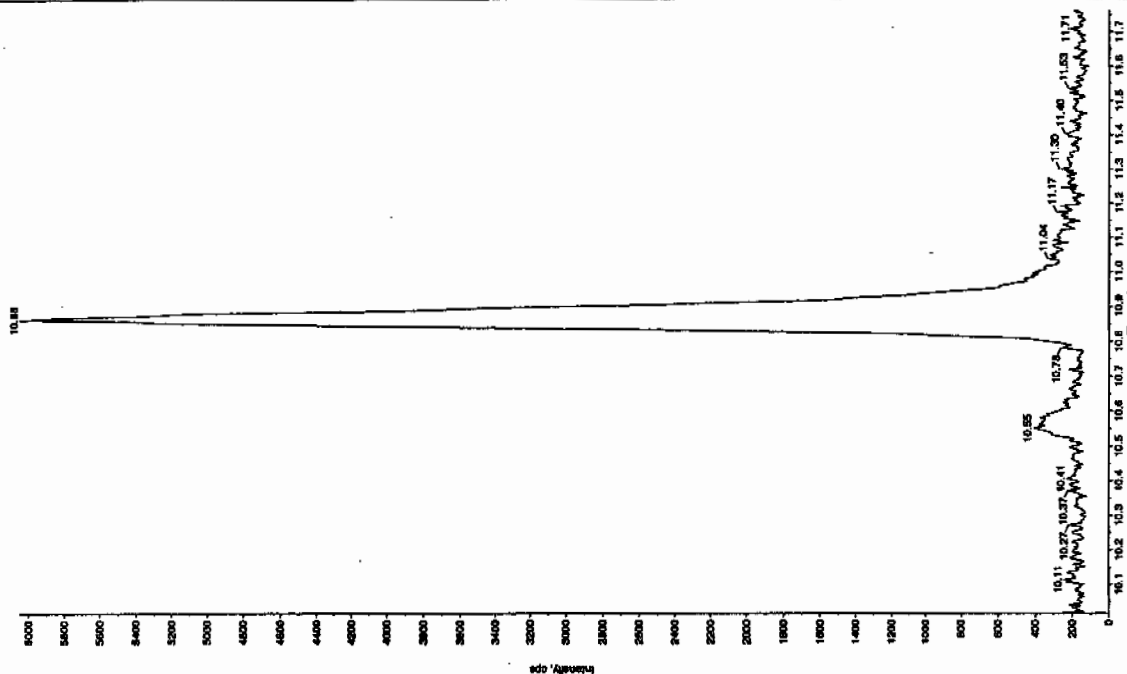
Sample Name: "XBLX07" Sample ID: "HILF" File: "EX301250048.wif"  
 Peak Name: "34-Dinitrotoluene" Mass(es): "162.1751.9 amu"  
 Comment: "LCMS EXP\_B" Annotation: "-"

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/25/2010  
 Acq. Time: 10:15:41 PM  
 Modified: No





Sample Name: "XBLX07" Sample ID: "11LER" File: "EXS01250046.wif"  
Peak Name: "1s(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"  
Comment: "LCASEXP\_B" Annotation: ""



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1210

Lab Code: GEL

Lab Sample ID: XIBLK08

Analysis Date: 26-JAN-10 01:44

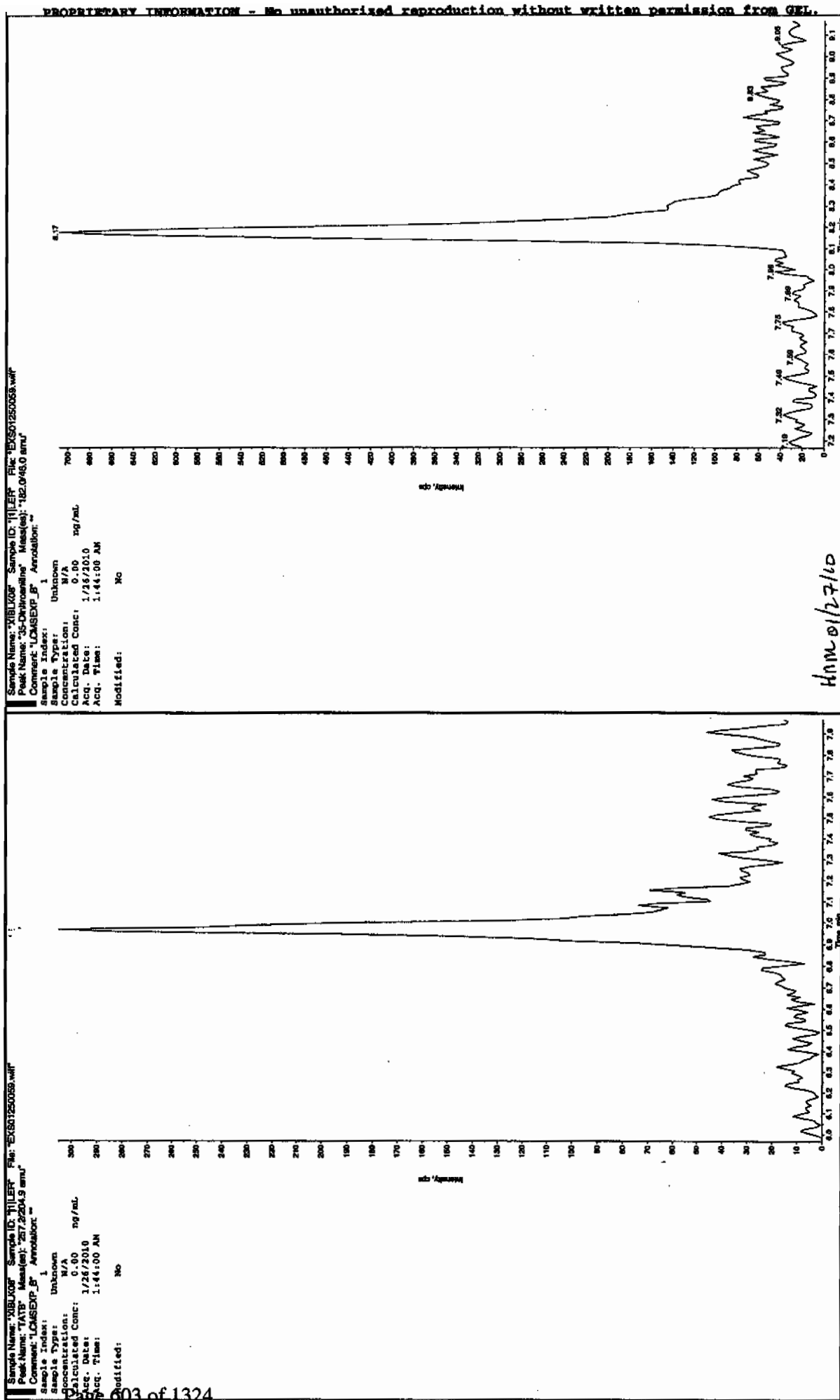
GEL Data File: EXS01250059.wiff

Instrument ID: LCMSMS

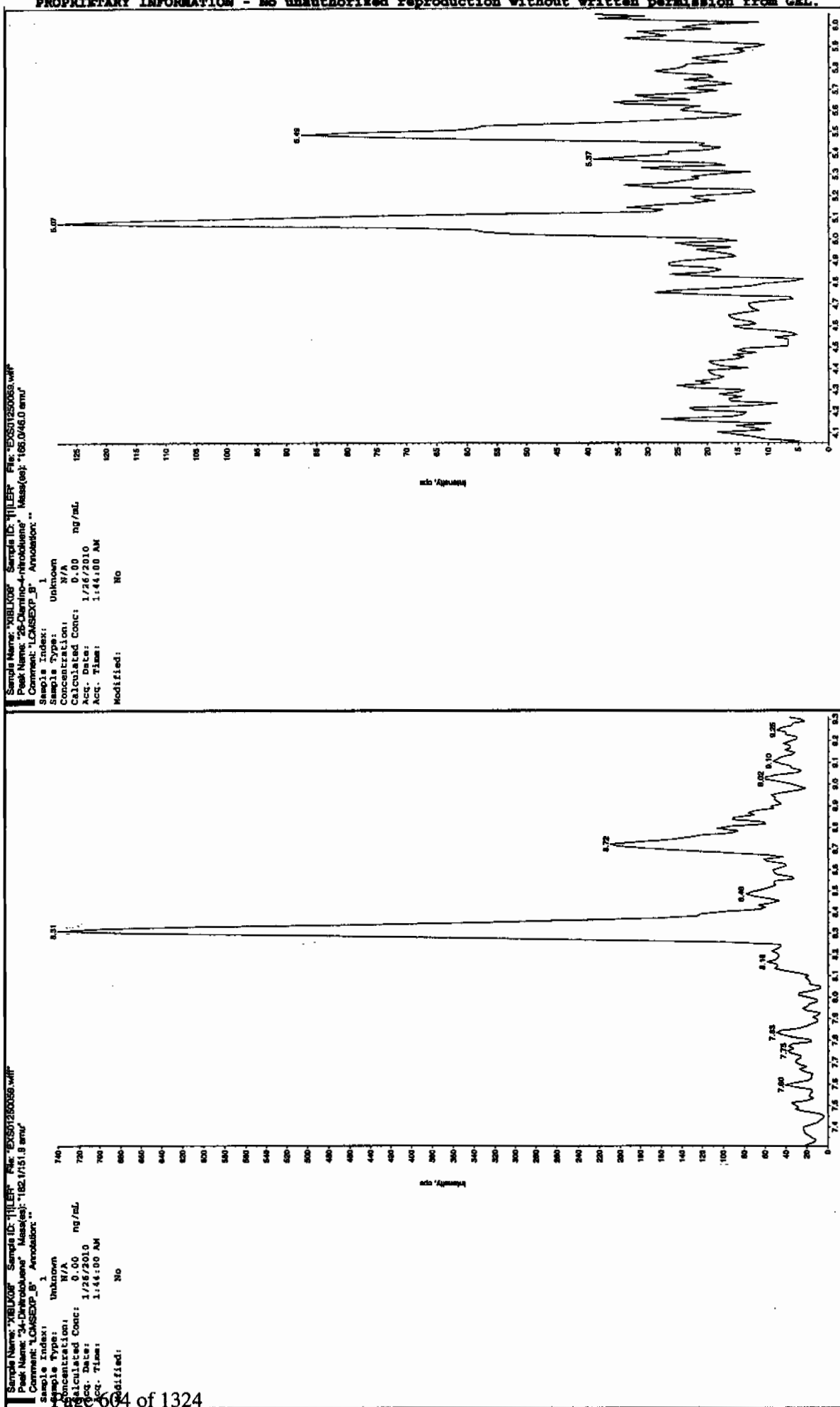
Column: Phenomenex Ultracarb 5u ODS(20)

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

See 1/27/10



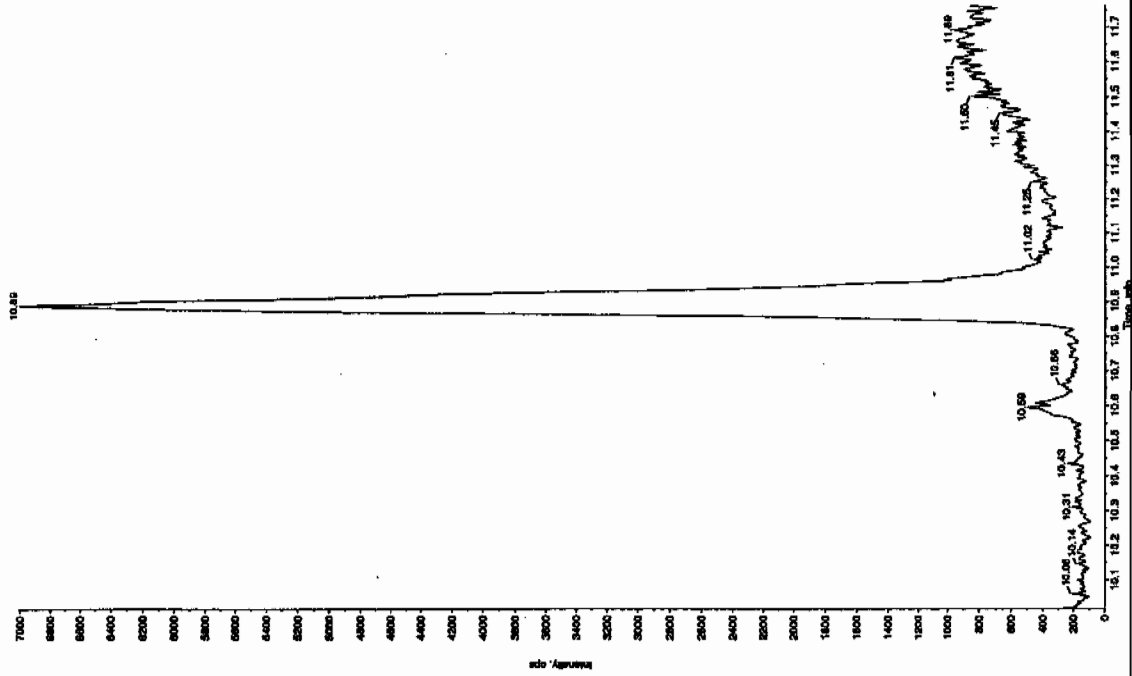
\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



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

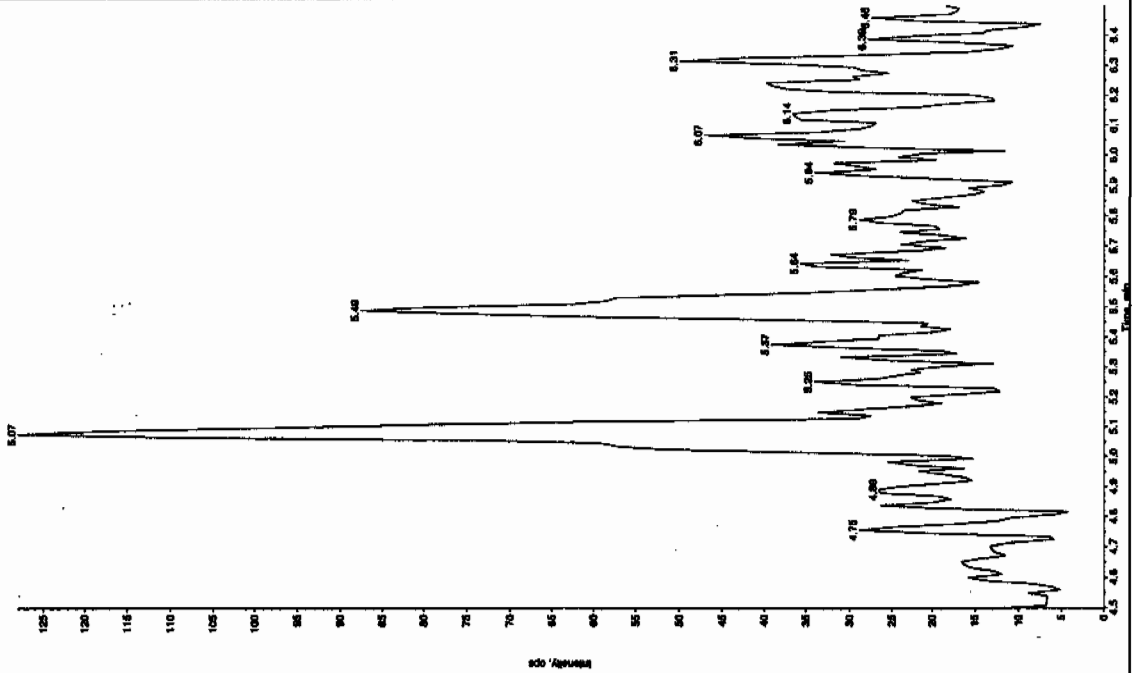
Sample Name: YBLK08 Sample ID: YBLK08 File: EX001250053.wif  
 Peak Name: Tri(n-octyl) phosphite Mass(es): 389.191.0 amu  
 Comment: LCMSEXP\_5 Annotation: "

Sample Index: 1  
 Sample Name: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 1/26/2010  
 Acq. Date: 1:44:00 AM  
 Acq. Time: 1:44:00 AM  
 Modified: No



Sample Name: YBLK08 Sample ID: YBLK08 File: EX001250059.wif  
 Peak Name: 24-Chloro-6-methylcyclohexene Mass(es): 186.046.0 amu  
 Comment: LCMSEXP\_5 Annotation: "

Sample Index: 1  
 Sample Name: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 1/26/2010  
 Acq. Date: 1:44:00 AM  
 Acq. Time: 1:44:00 AM  
 Modified: No



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

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1210

Lab Code: GEL

Lab Sample ID: XIBLK09

Analysis Date: 26-JAN-10 04:05

GEL Data File: EXS01250068.wiff

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

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



See 1127110

Sample Name: "XBLUCS" Sample ID: "T11ER" File: "EX50125068.wif"

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

Comment: "LCMSXP\_B" Annotation: "

Sample Index: 1

Sample Type: Unknown

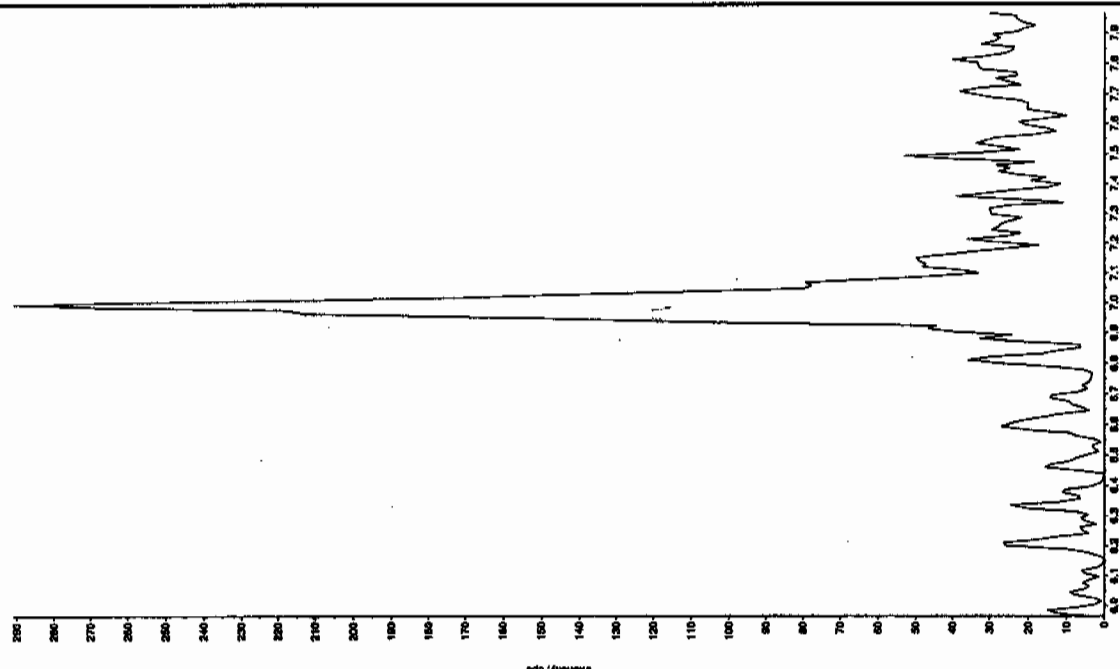
Concentration: N/A

Calculated Conc: 0.00 ng/mL

Acq. Date: 1/26/2010

Acq. Time: 4:05:24 AM

Modified: No



Sample Name: "XBLUCS" Sample ID: "T11ER" File: "EX50125068.wif"

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

Comment: "LCMSXP\_B" Annotation: "

Sample Index: 1

Sample Type: Unknown

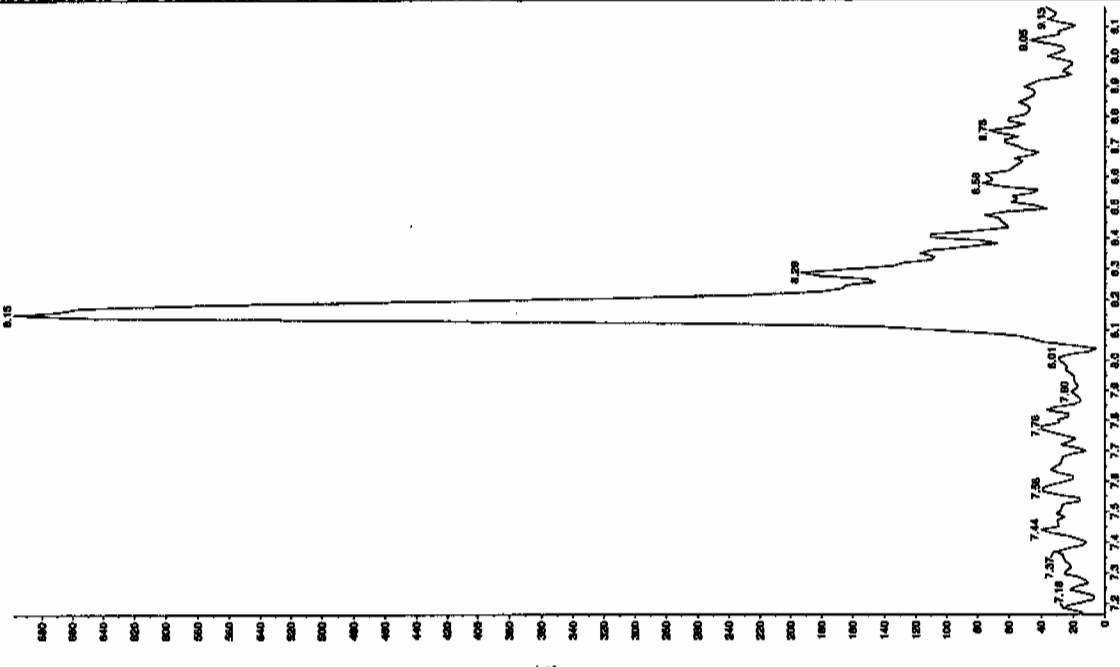
Concentration: W/A

Calculated Conc: 0.00 ng/mL

Acq. Date: 1/26/2010

Acq. Time: 4:05:24 AM

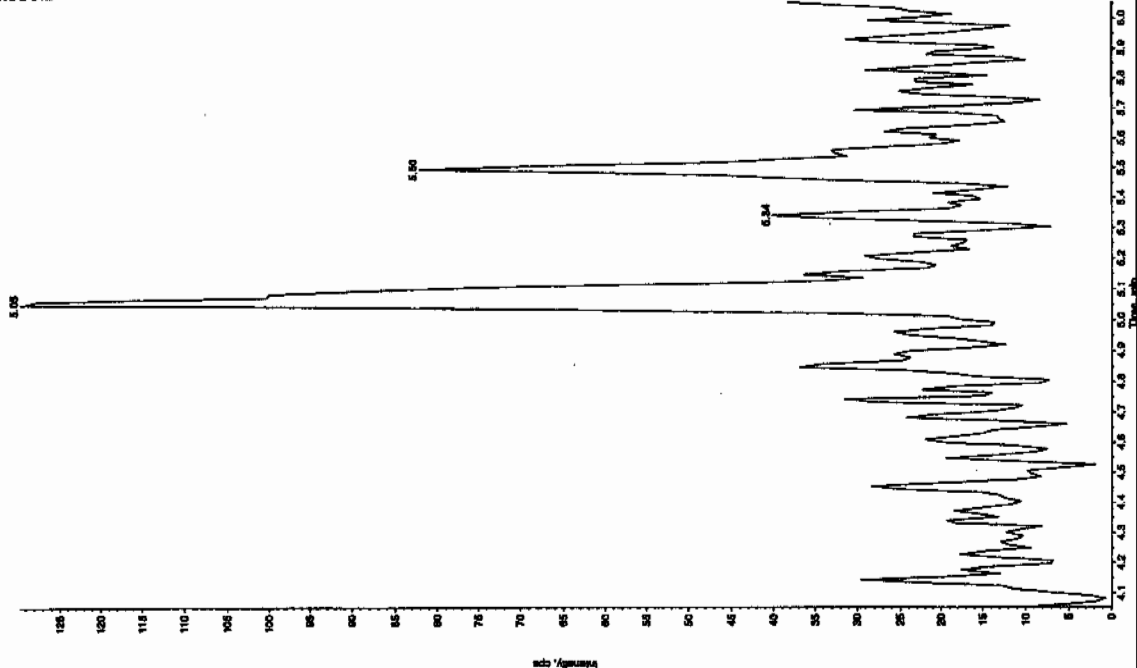
Modified: No



HW 0127110

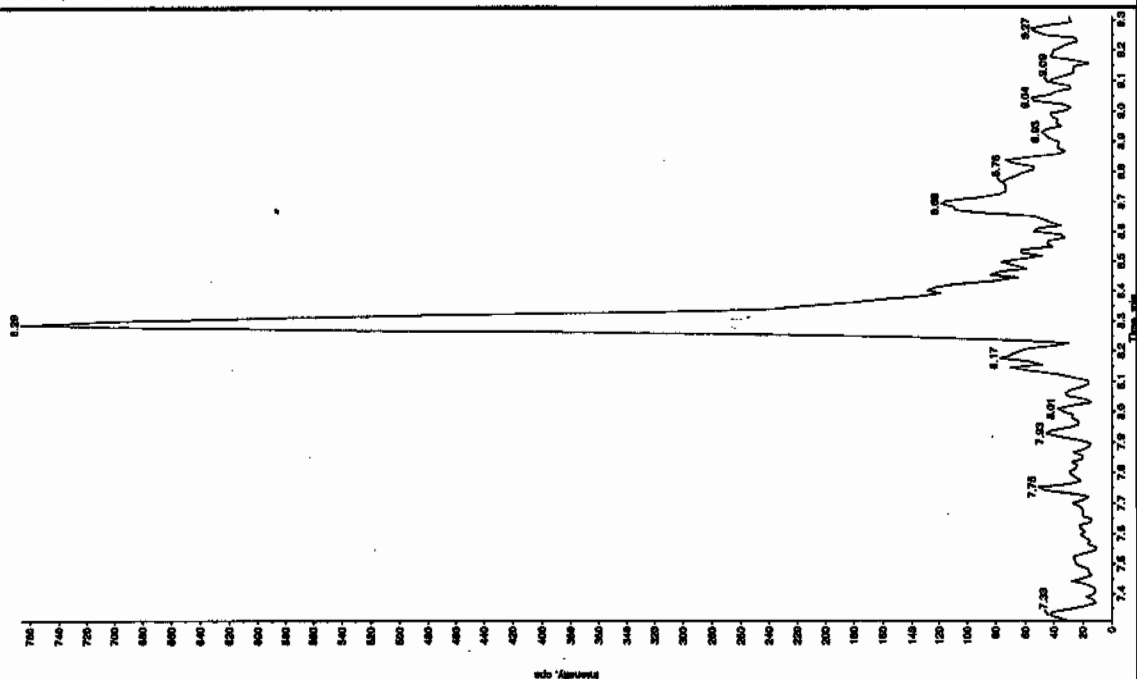
Sample Name: YBLK09 Sample ID: YBLK09 File: EXS01250083.wif  
 Peak Name: 26-Quarcho-antibody Mass(es): 166.0445.0 and  
 Comment: LCMSXP\_B Annotation:

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 1/26/2010  
 Acq. Date: 4:05:24 AM  
 Acq. Time: 4:05:24 AM  
 Modified: No

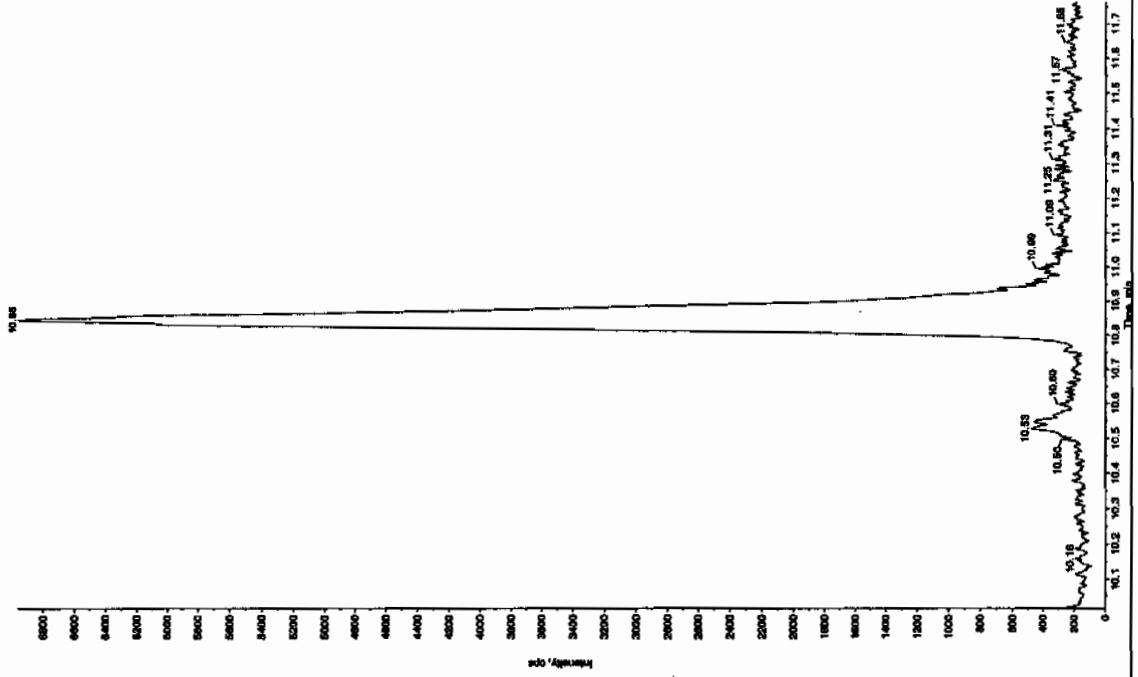


Sample Name: YBLK09 Sample ID: YBLK09 File: EXS01250083.wif  
 Peak Name: 34-Chloroquine Mass(es): 182.1151.9 and  
 Comment: LCMSXP\_B Annotation:

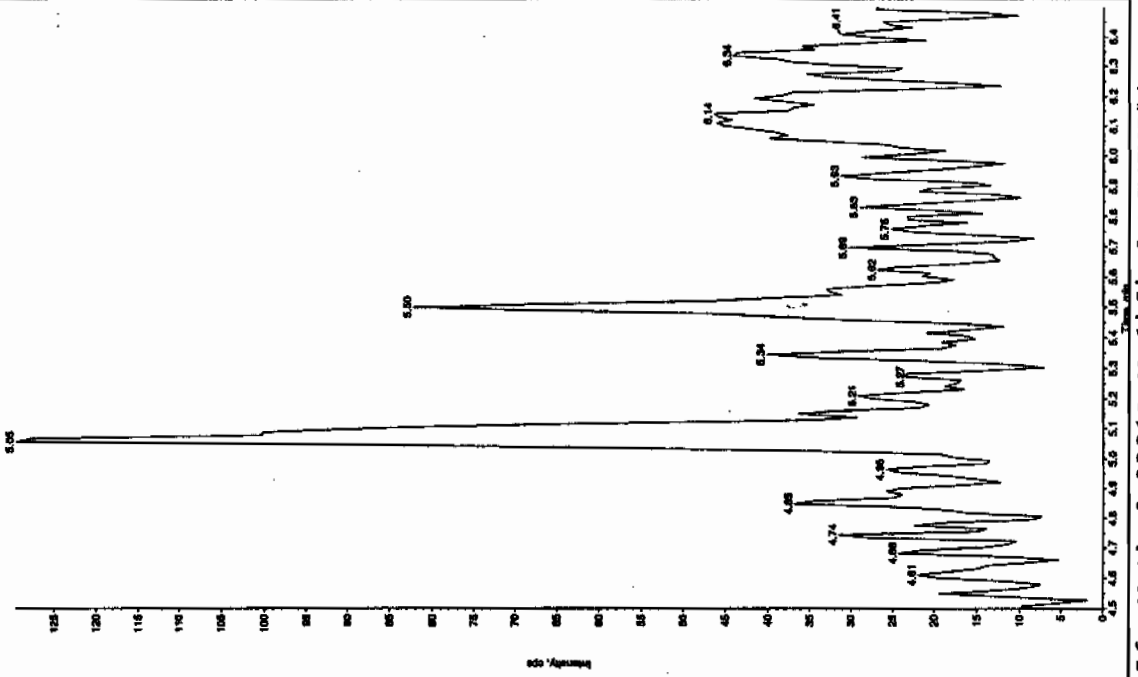
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 1/26/2010  
 Acq. Date: 4:05:24 AM  
 Acq. Time: 4:05:24 AM  
 Modified: No



Sample Name: "BELKOP" Sample ID: "111EF" File: "EVS01250033.wif"  
 Peak Name: "Bel(Ortho) phosphate" Mass(es): "385.161.0 amu"  
 Concentration: "Unknown"  
 Sample Index: "1"  
 Sample Type: "Unknown"  
 Concentration: "N/A"  
 Calculated Conc: "0.00 ng/mL"  
 Acq. Date: "1/26/2010"  
 Acq. Time: "4:05:24 AM"  
 Modified: "No"



Sample Name: "BELKOP" Sample ID: "111EF" File: "EVS01250033.wif"  
 Peak Name: "2,4-Dichloro-5-methylphenol" Mass(es): "165.046.0 amu"  
 Concentration: "Unknown"  
 Sample Index: "1"  
 Sample Type: "Unknown"  
 Concentration: "N/A"  
 Calculated Conc: "0.00 ng/mL"  
 Acq. Date: "1/26/2010"  
 Acq. Time: "4:05:24 AM"  
 Modified: "No"



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1210

Lab Code: GEL

Lab Sample ID: XIBLK10

Analysis Date: 26-JAN-10 07:29

GEL Data File: EXS01250081.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	16.2
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

See 1/27/10

Sample Name: 'XBLK10' Sample ID: 'T1L1R' File: 'EXS01250081.wif'

Peak Name: '35-Dinitrobenzyl' Mass(es): '182.046.0 amu'

Comment: 'LCMS EXP\_B' Annotation: '1'

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 1/26/2010  
 Acq. Date: 7/29/13 AM  
 Acq. Time: 7:29:33 AM  
 Modified: No

Intensity, cps



Time, min

Sample Name: 'XBLK10' Sample ID: 'T1L1R' File: 'EXS01250081.wif'

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

Comment: 'LCMS EXP\_B' Annotation: '1'

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 1/26/2010  
 Acq. Date: 7/29/13 AM  
 Acq. Time: 7:29:33 AM  
 Modified: No

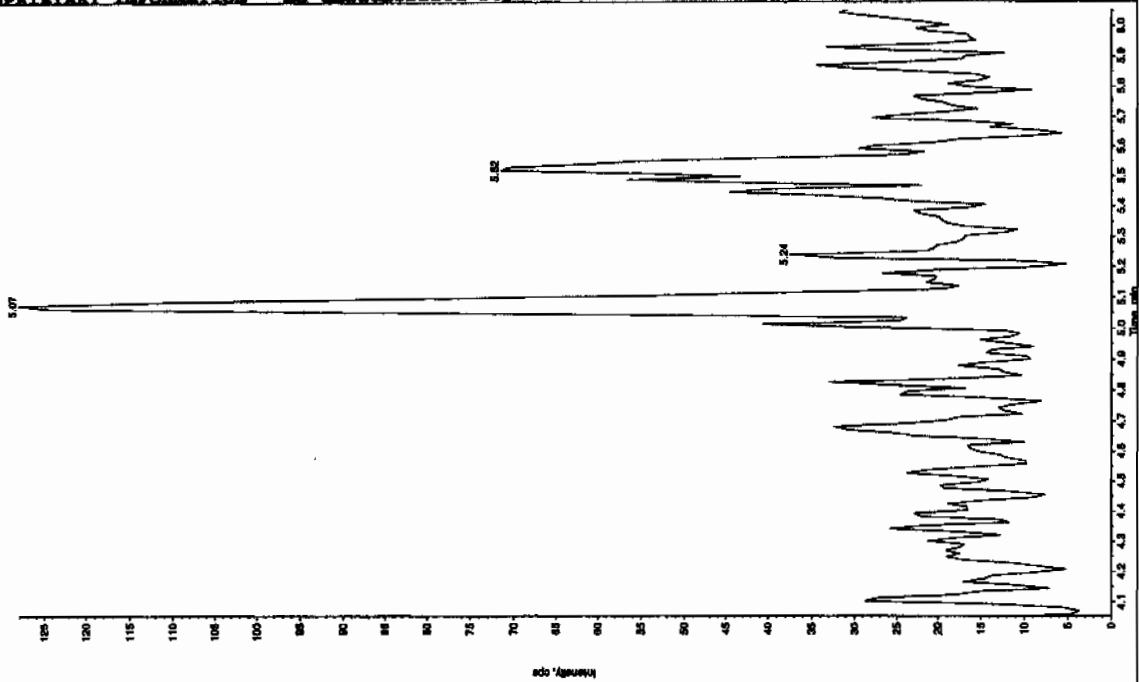
Intensity, cps



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

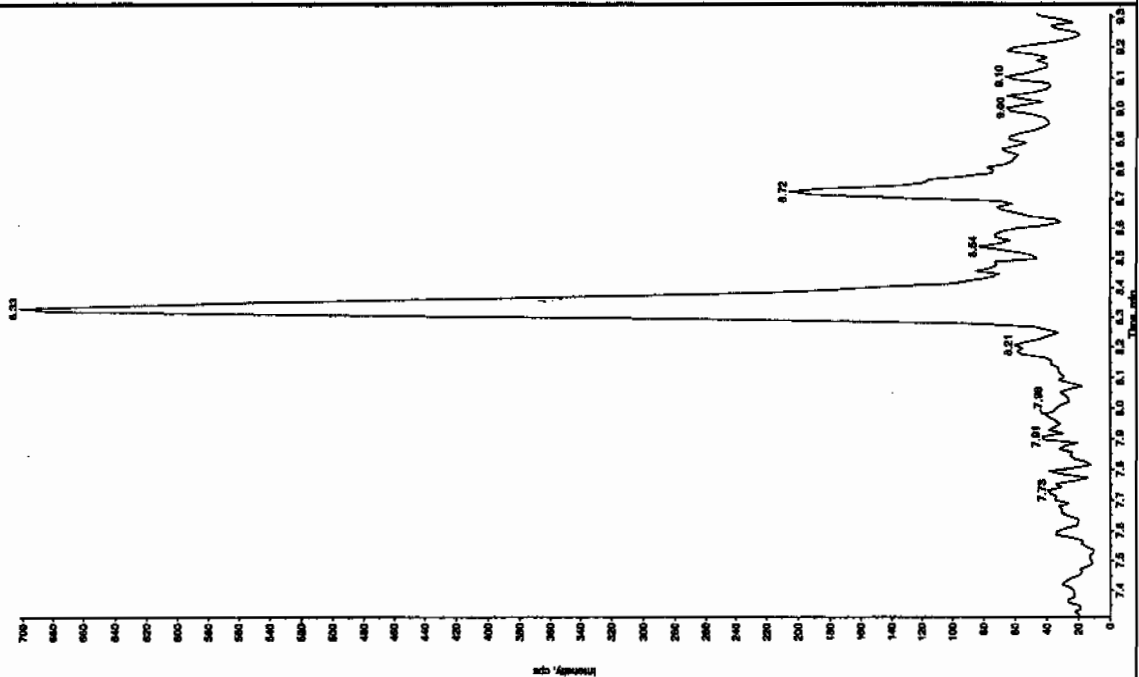
Sample Name: "XIBLK10" Sample ID: "T1L1R" File: "EXS01250081.wif"  
 Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.046.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/26/2010  
 Acq. Time: 7:29:33 AM  
 Modified: NO



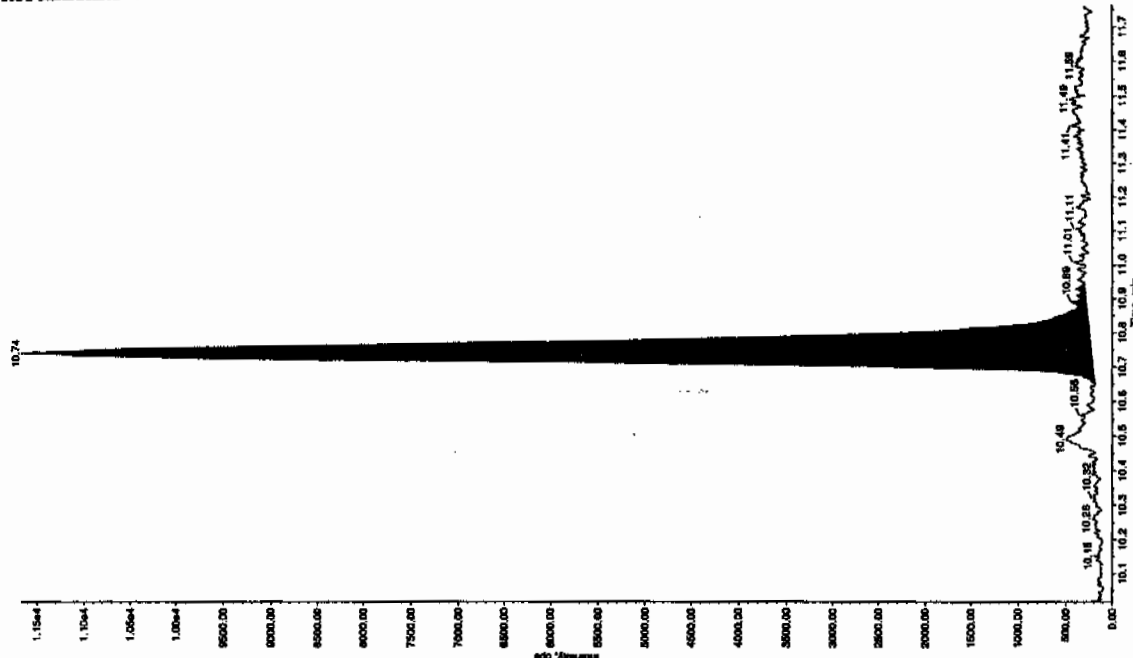
Sample Name: "XIBLK10" Sample ID: "T1L1R" File: "EXS01250081.wif"  
 Peak Name: "34-Chlorotoluene" Mass(es): "182.1451.9 amu"  
 Comment: "LCMSEXP\_B" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/26/2010  
 Acq. Time: 7:29:33 AM  
 Modified: NO



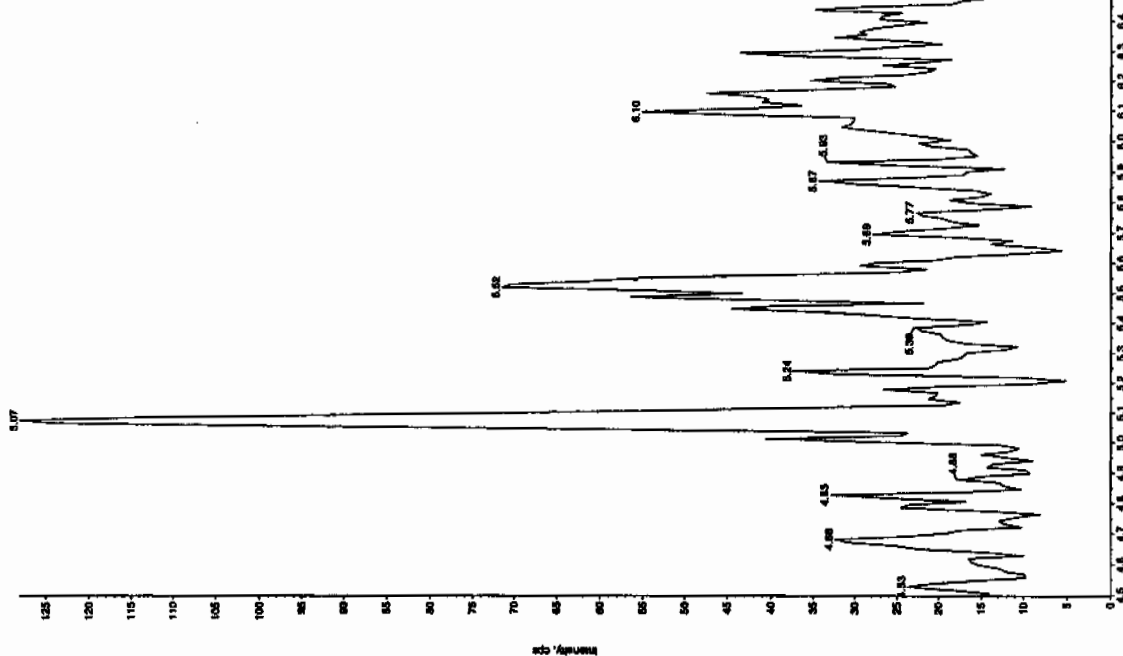
Sample Name: VBLK17 Sample ID: T1LEF File: E:\S01250031.wif  
Peak Name: 10.74  
Concentration: 16.2 ng/mL  
Acq. Date: 1/26/2010  
Acq. Time: 7:29:33 AM  
Annotation: 1

Sample Index: 1  
Sample Type: Unknown  
Concentration: 16.2 ng/mL  
Calculated Conc: 16.2 ng/mL  
Acq. Date: 1/26/2010  
Acq. Time: 7:29:33 AM  
Modified: No  
Proc. Algorithm: IntelliQuan - IQA  
Min. Peak Height: 1.00e4 cps  
Min. Peak Width: 0.00 sec  
Smoothing Width: 3 points  
RT Window: 30.0 sec  
Expected RT: 10.8 min  
Use Relative RT: No  
Int. Type: Valley  
Retention Time: 10.7 min  
Area: 4.74e+004 counts  
Height: 11444.225 cps  
Start Time: 10.7 min  
End Time: 10.9 min



Sample Name: VBLK17 Sample ID: T1LEF File: E:\S01250031.wif  
Peak Name: 10.74  
Concentration: 16.2 ng/mL  
Acq. Date: 1/26/2010  
Acq. Time: 7:29:33 AM  
Annotation: 1

Sample Index: 1  
Sample Type: Unknown  
Concentration: 16.2 ng/mL  
Calculated Conc: 16.2 ng/mL  
Acq. Date: 1/26/2010  
Acq. Time: 7:29:33 AM  
Modified: No



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1210

Lab Code: GEL

Lab Sample ID: XIBLK11

Analysis Date: 26-JAN-10 10:53

GEL Data File: EXS01250094.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	16.4
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0



Scan 167110

Sample Name: 'XBLK11' Sample ID: '11111' File: 'EX50126004.will'

Peak Name: 'TATB' Mass(es): '257.2604.9 amu'

Comment: 'LCMSXP\_B' Annotation: -

Sample Index: 1

Sample Type: Unknown

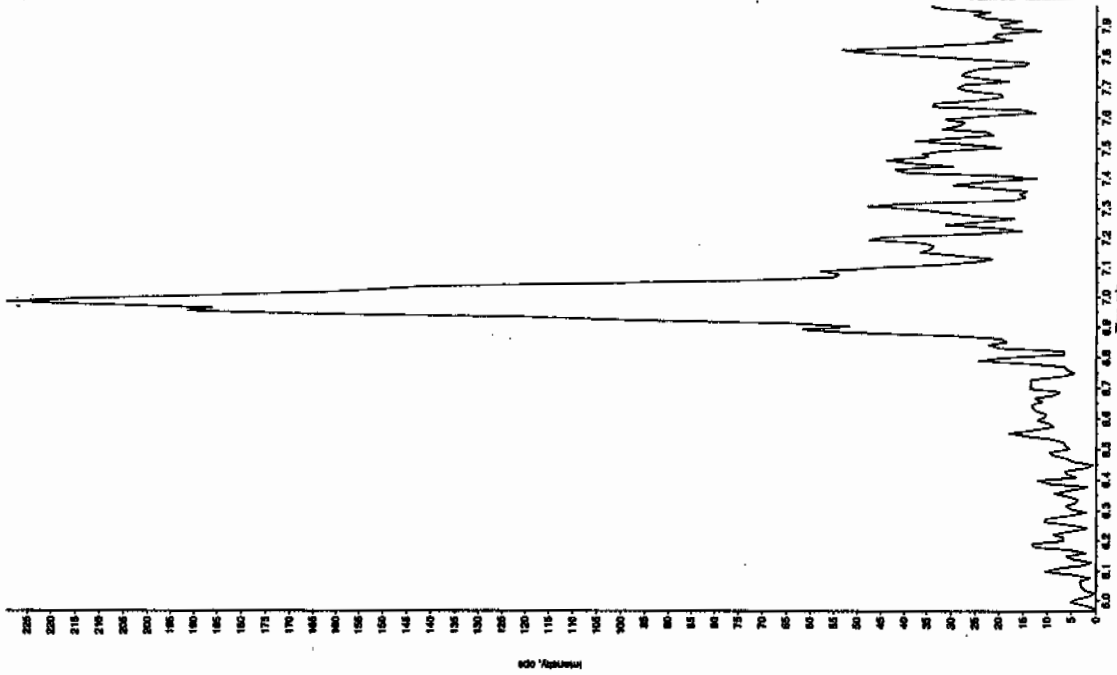
Concentration: N/A

Calculated Conc: 0.00 ng/mL

Acq. Date: 1/26/2010

Acq. Time: 10:53:40 AM

Modified: No



Sample Name: 'XBLK11' Sample ID: '11111' File: 'EX50126004.will'

Peak Name: '3S-Dithionine' Mass(es): '192.046.0 amu'

Comment: 'LCMSXP\_B' Annotation: -

Sample Index: 1

Sample Type: Unknown

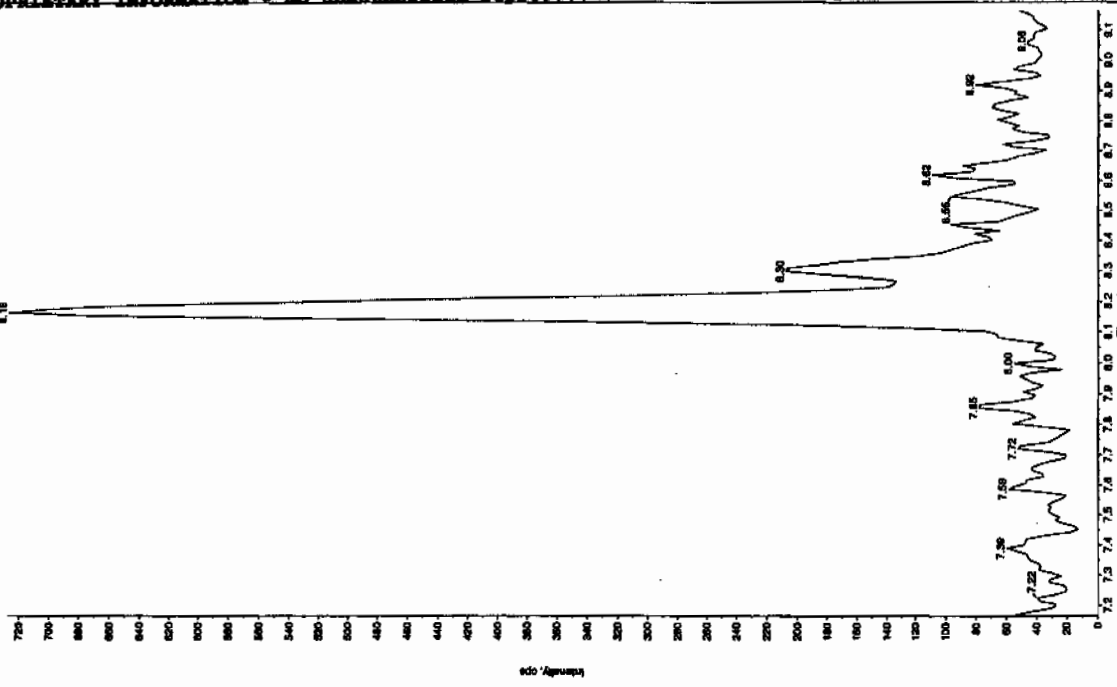
Concentration: N/A

Calculated Conc: 9.00 ng/mL

Acq. Date: 1/26/2010

Acq. Time: 10:53:40 AM

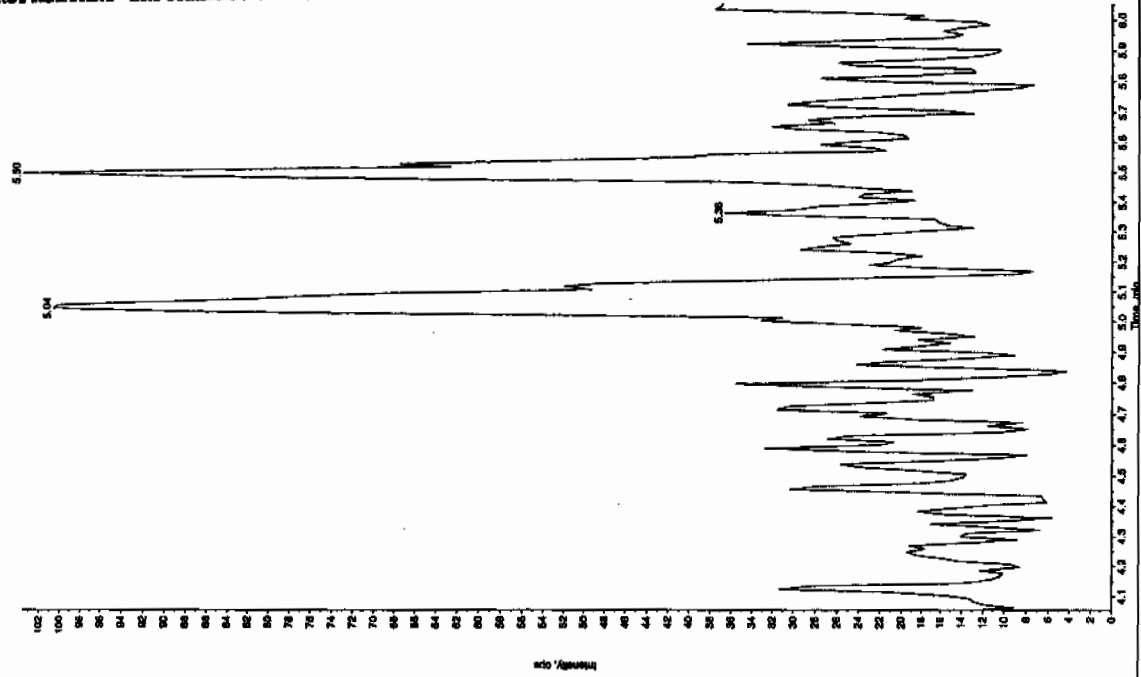
Modified: No



ANAL 01/27/10

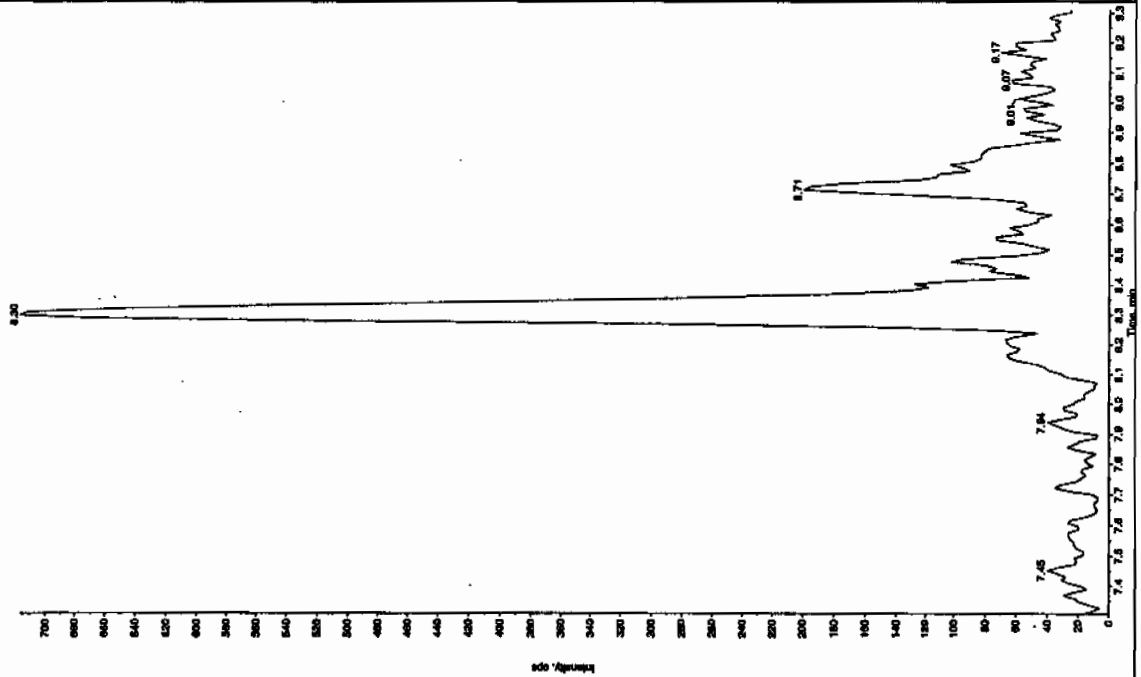
Sample Name: "XBLX11" Sample ID: "11LER" File: "EX501250084.wif"  
Peak Name: "26-Diamino-4-nitrofluorene" Mass(es): "188.046.0 amu"  
Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
Sample Type: Unknown  
Concentration: N/A  
Calculated Conc: 0.00 ng/mL  
Acq. Date: 1/24/2010  
Acq. Time: 10:53:40 AM  
Modified: No



Sample Name: "XBLX11" Sample ID: "11LER" File: "EX501250084.wif"  
Peak Name: "26-Diamino-4-nitrofluorene" Mass(es): "182.151.9 amu"  
Comment: "LCMSEXP\_B" Annotation: ""

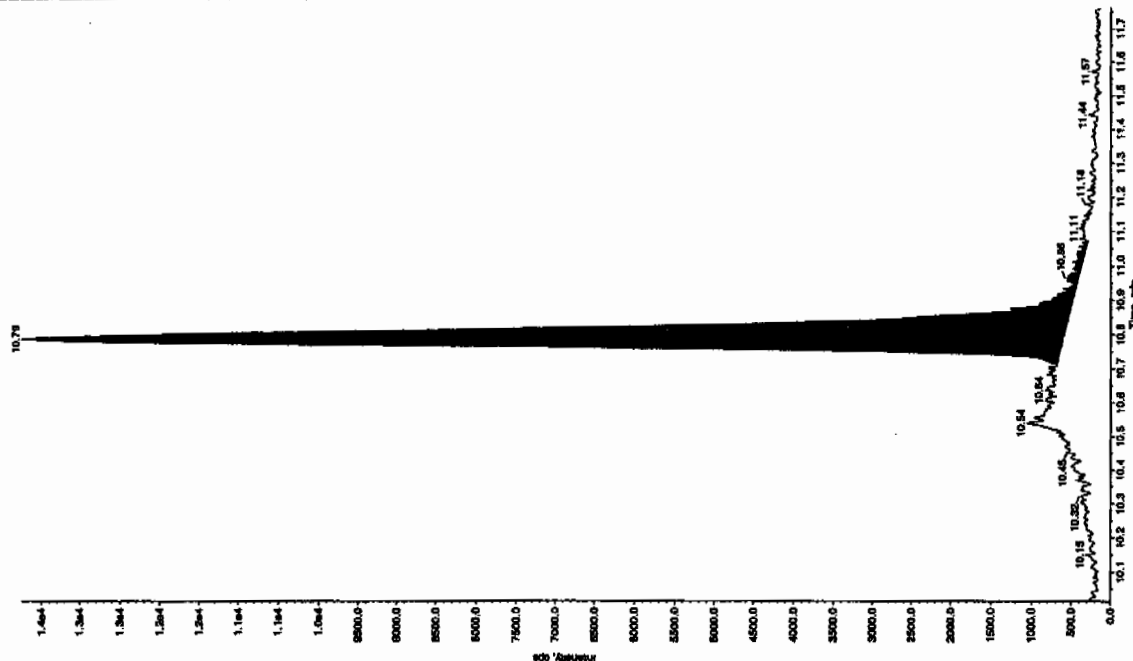
Sample Index: 1  
Sample Type: Unknown  
Concentration: N/A  
Calculated Conc: 0.00 ng/mL  
Acq. Date: 1/24/2010  
Acq. Time: 10:53:40 AM  
Modified: No



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

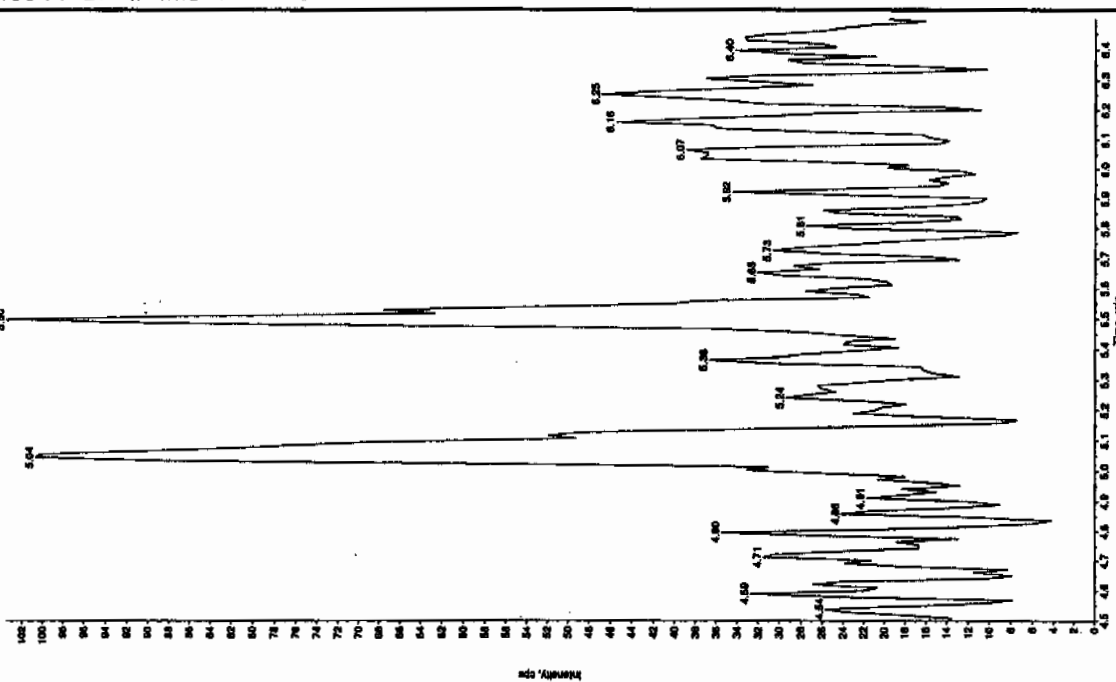
Sample Name: "BULKY1" Sample ID: "11111" File: "EXS01250064.wif"  
 Peak Name: "10.70 (strong) peak" Mass(es): "388.191.0 amu"  
 Comment: "LCMS EXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 16.4 ng/mL  
 Acq. Date: 1/26/2010  
 Acq. Time: 10:53:40 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 1.00e4 cps  
 Min. Peak Width: 3.00 sec  
 Smoothing Width: 3.00 points  
 RT Tolerance: 30.0 sec  
 Retention RT: 10.7 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.7 min  
 Area: 5.13e+004 counts  
 Height: 13186.553 cps  
 Start Time: 10.7 min  
 End Time: 11.1 min



Sample Name: "BULKY1" Sample ID: "11111" File: "EXS01250064.wif"  
 Peak Name: "2A-Diamine-8-nitrofluorene" Mass(es): "166.046.0 amu"  
 Comment: "LCMS EXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/26/2010  
 Acq. Time: 10:53:40 AM  
 Modified: No



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1210

Lab Code: GEL

Lab Sample ID: XIBLK12

Analysis Date: 26-JAN-10 11:40

GEL Data File: EXS01250097.wiff

Instrument ID: LCMSMS

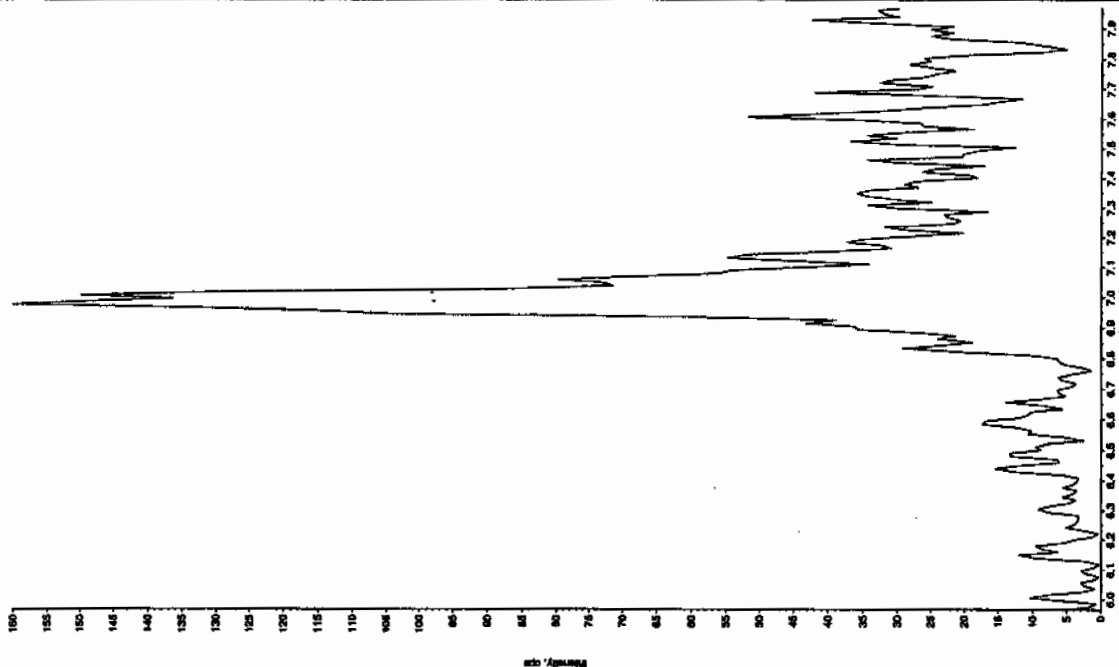
Column: Phenomenex Ultracarb 5u ODS(20)

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

See 1/27/10

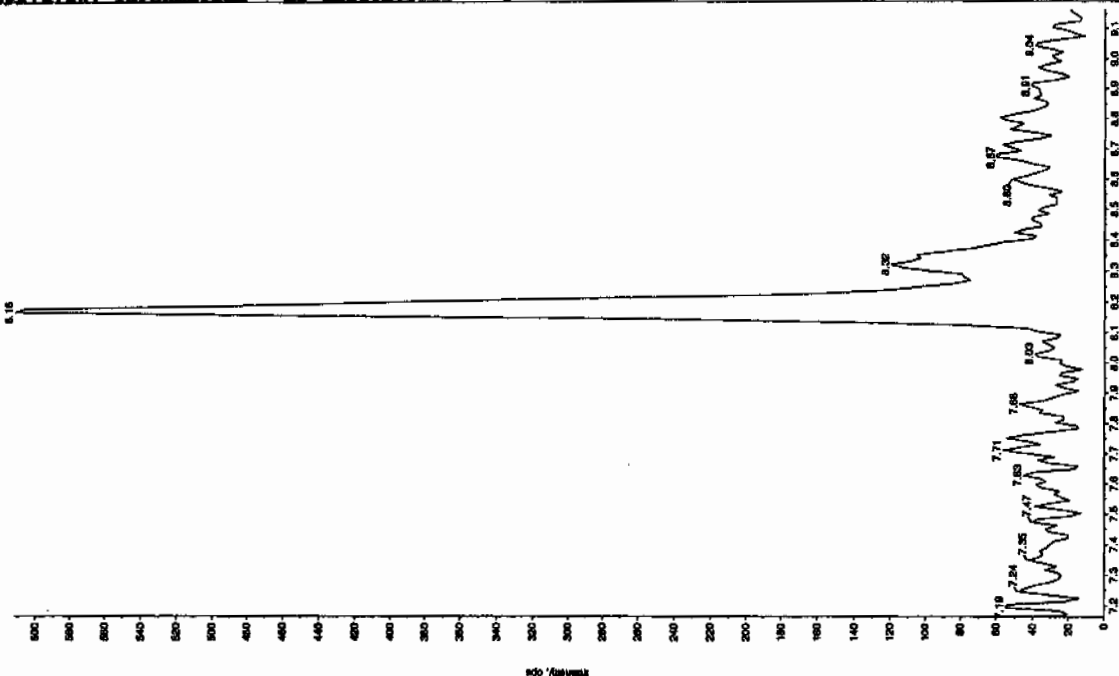
Sample Name: "XIBLK12" Sample ID: "HILLER" File: "EXS01250097.wif"  
 Peak Name: "TATB" Mass(es): "257.2204.9 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/26/2010  
 Acq. Time: 11:40:53 AM  
 Modified: No



Sample Name: "XIBLK12" Sample ID: "HILLER" File: "EXS01250097.wif"  
 Peak Name: "35-Dinitroanisole" Mass(es): "182.046.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

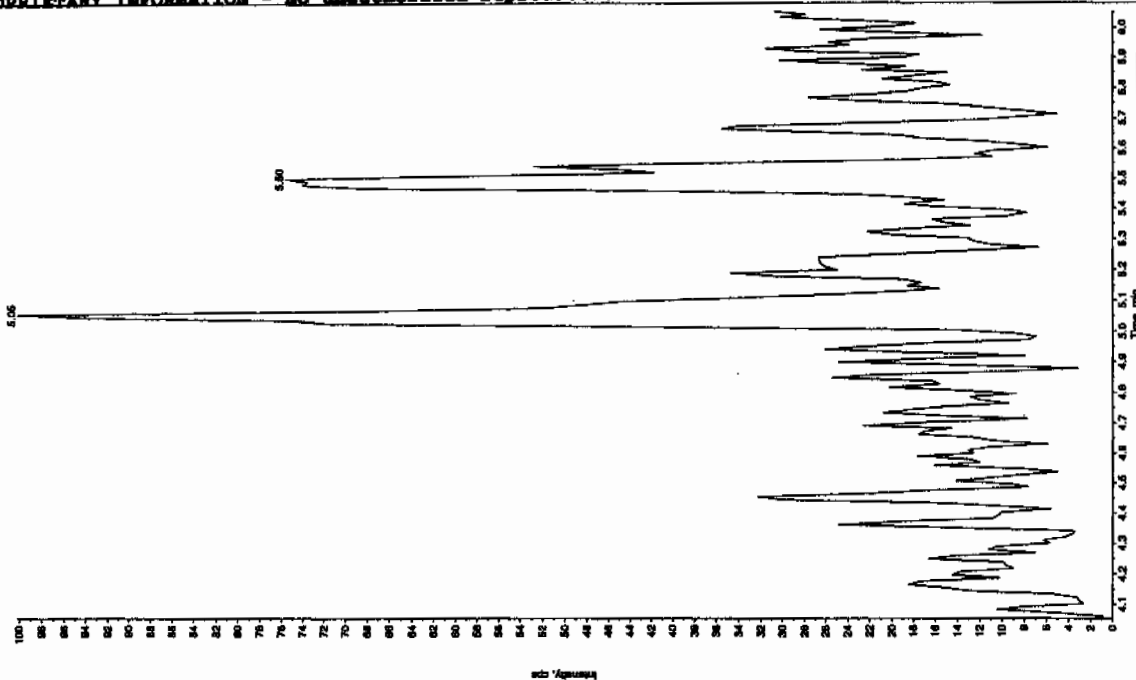
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/26/2010  
 Acq. Time: 11:40:53 AM  
 Modified: No



4/11/10 1/27/10

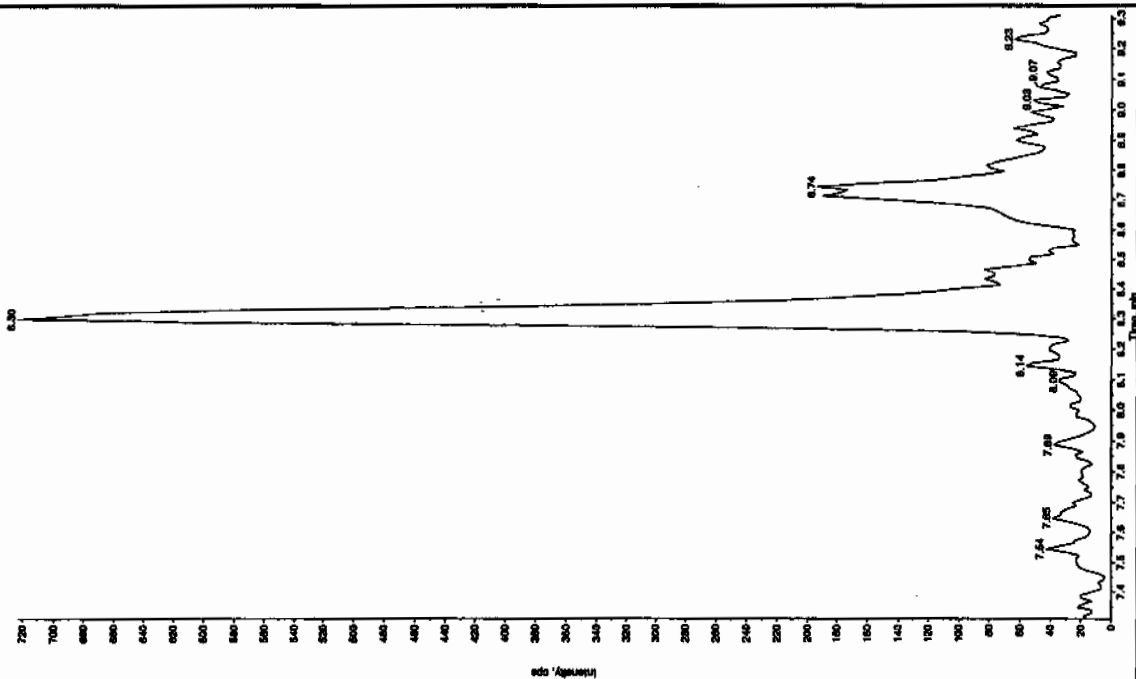
Sample Name: "XBLK12" Sample ID: "T1LER" File: "EXS01260097.wif"  
 Peak Name: "34-Dinitrobenzene" Mass(es): "182.1751.9 amu"  
 Comment: "LCMSXP\_B" Annotation: ""

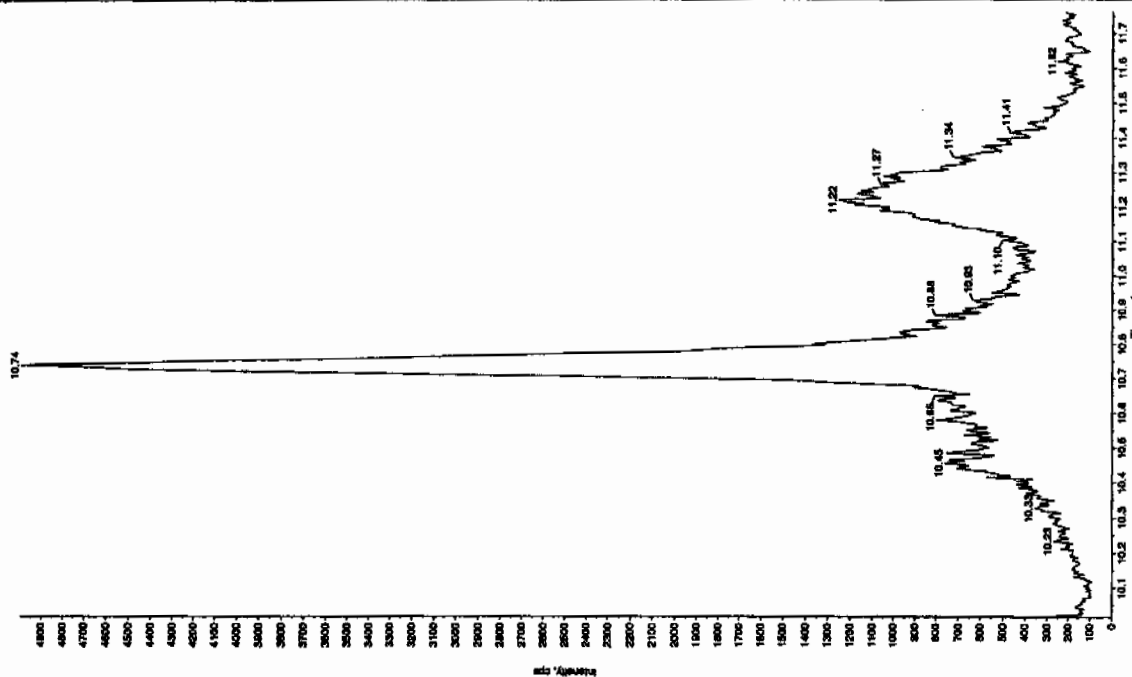
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/26/2010  
 Acq. Time: 11:40:53 AM  
 Modified: No



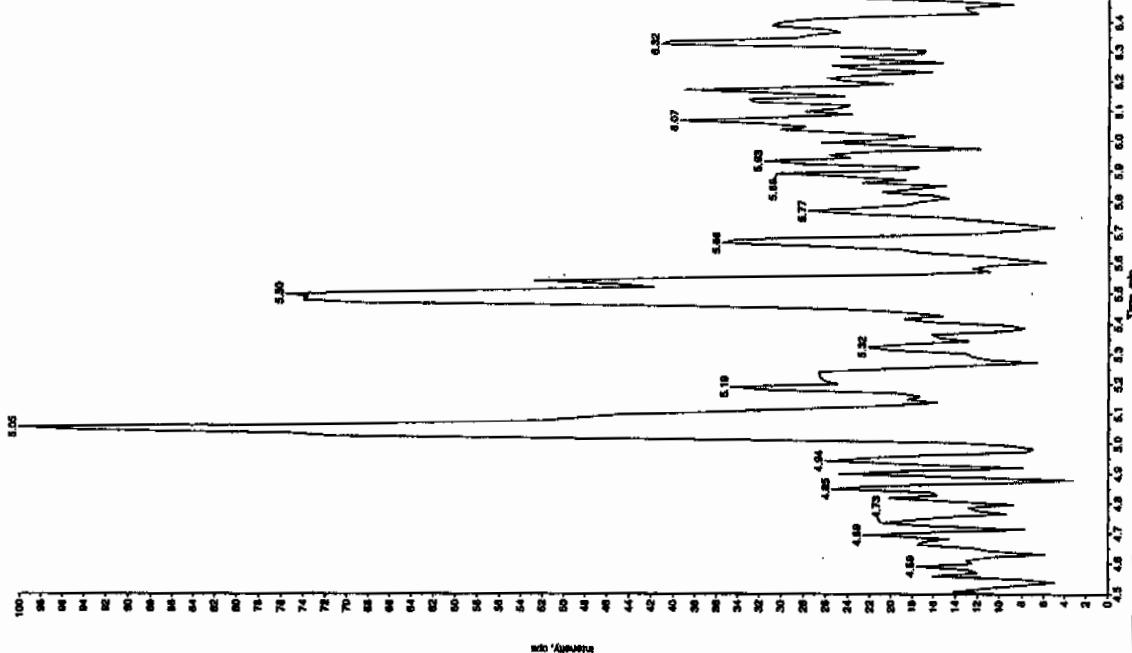
Sample Name: "XBLK12" Sample ID: "T1LER" File: "EXS01260097.wif"  
 Peak Name: "34-Dinitrobenzene" Mass(es): "182.1751.9 amu"  
 Comment: "LCMSXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/26/2010  
 Acq. Time: 11:40:53 AM  
 Modified: No





Sample Index:	1	Comment: "CLASSEP" Annotations *
Sample Type:	Unknown	
Concentration:	N/A	
Calculated Conc:	0.00	ng/mL
Exp. Date:	1/26/2010	
Exp. Time:	11:40:53 AM	
Modified:	No	



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1210

Lab Code: GEL

Lab Sample ID: XTBLK13

Analysis Date: 26-JAN-10 14:17

GEL Data File: EXS01250107.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	16.3
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0



OK 1/27/10

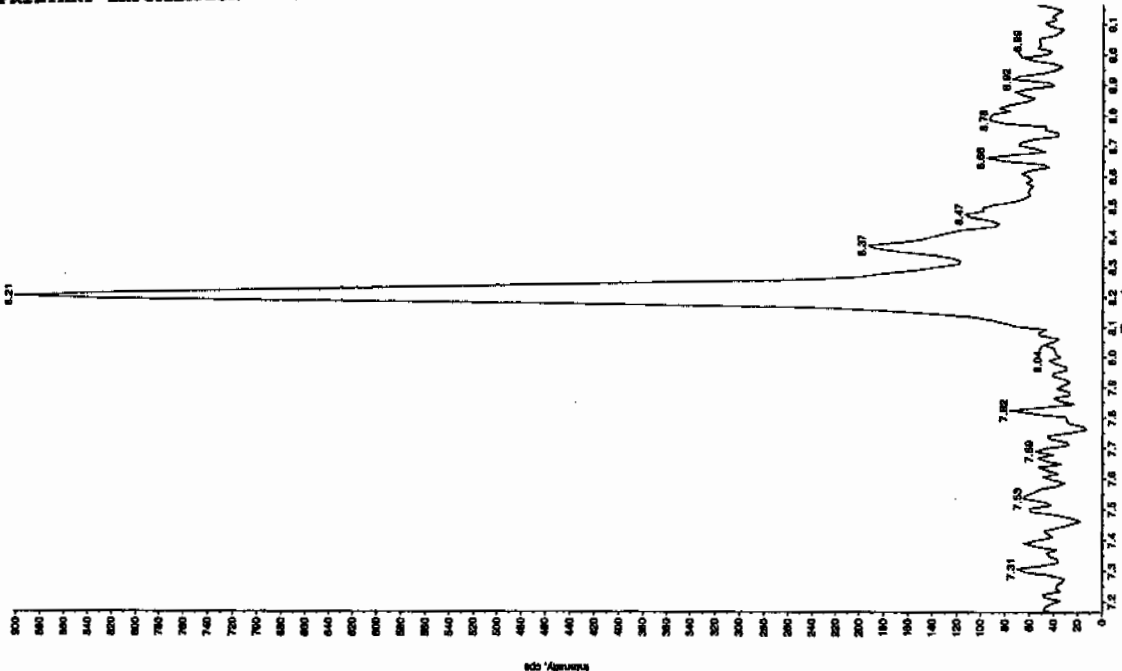
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Sample Name: Y08LX13 Sample ID: Y08LX13 File: EX501250107.wif

Peak Name: 3G-Chloroquine Mass(es): 182.0460 amu

Comment: LCMSEXP\_5 Annotation:

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/26/2010  
 Acq. Time: 2:17:56 PM  
 Modified: No

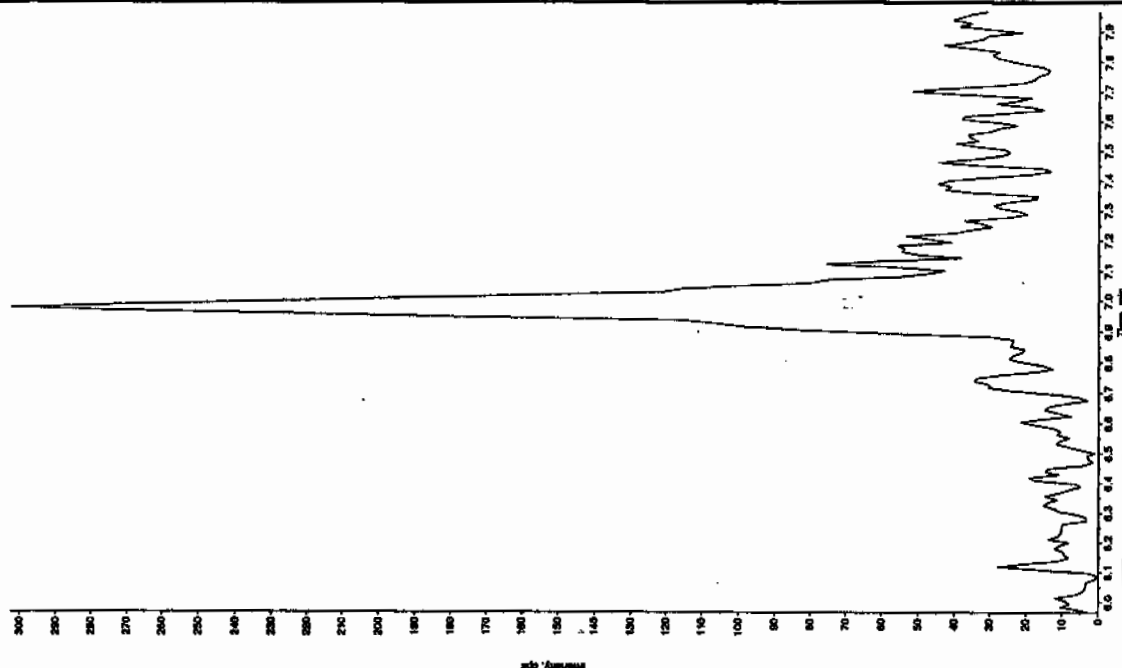


Sample Name: Y08LX13 Sample ID: Y08LX13 File: EX501250107.wif

Peak Name: 3G-Chloroquine Mass(es): 182.0460 amu

Comment: LCMSEXP\_5 Annotation:

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/26/2010  
 Acq. Time: 2:17:56 PM  
 Modified: No

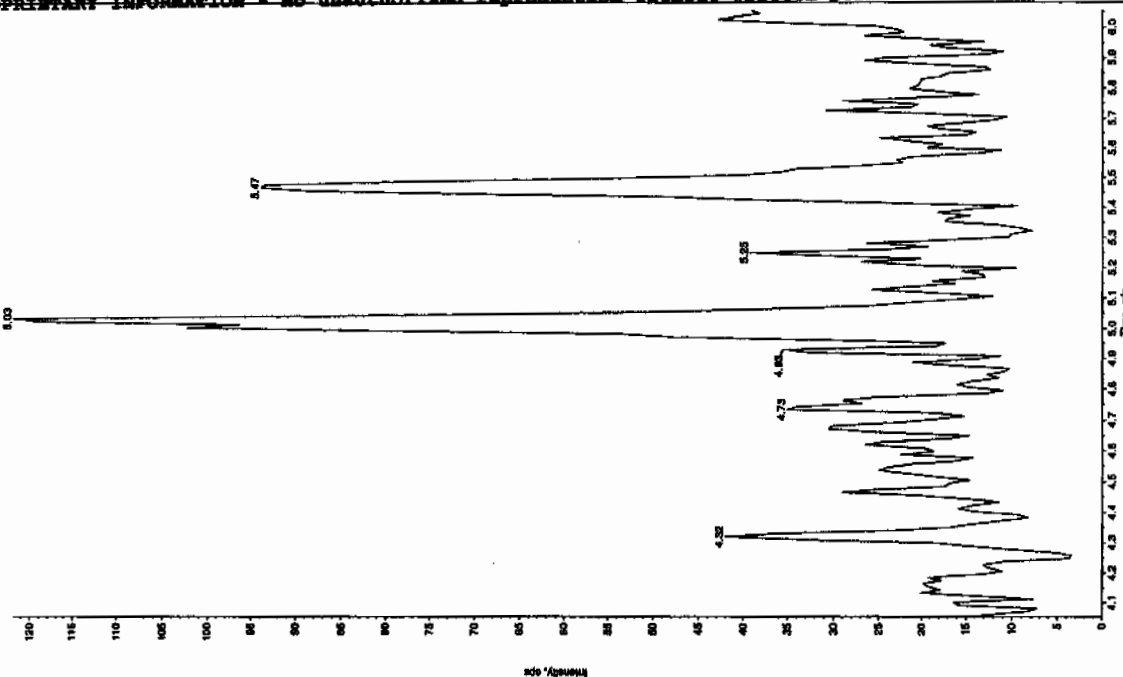


1/27/10

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

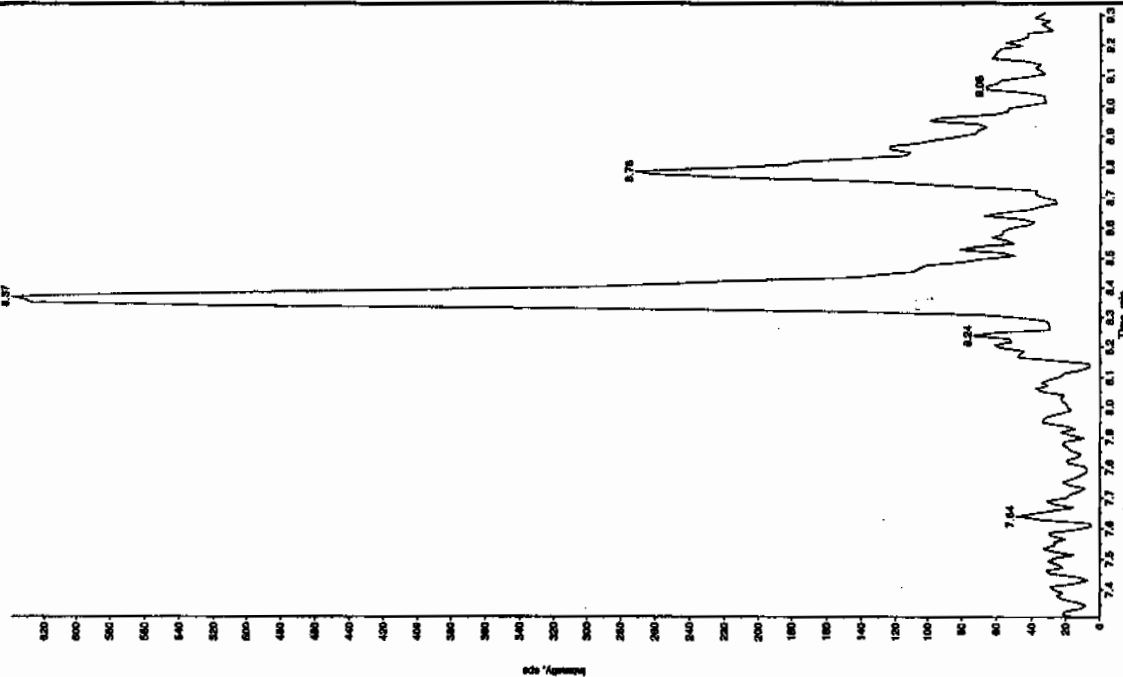
Sample Name: "XBLK13" Sample ID: "11LEP" File: "EXS01250107.mlf"  
 Peak Name: "3,4-Dinitrophenol" Mass(es): "182.1/151.9 amu"  
 Comment: "LCMS-EXP\_9" Acquisition: "Arrested"

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/26/2010  
 Acq. Time: 2:17:56 PM  
 Modified: No



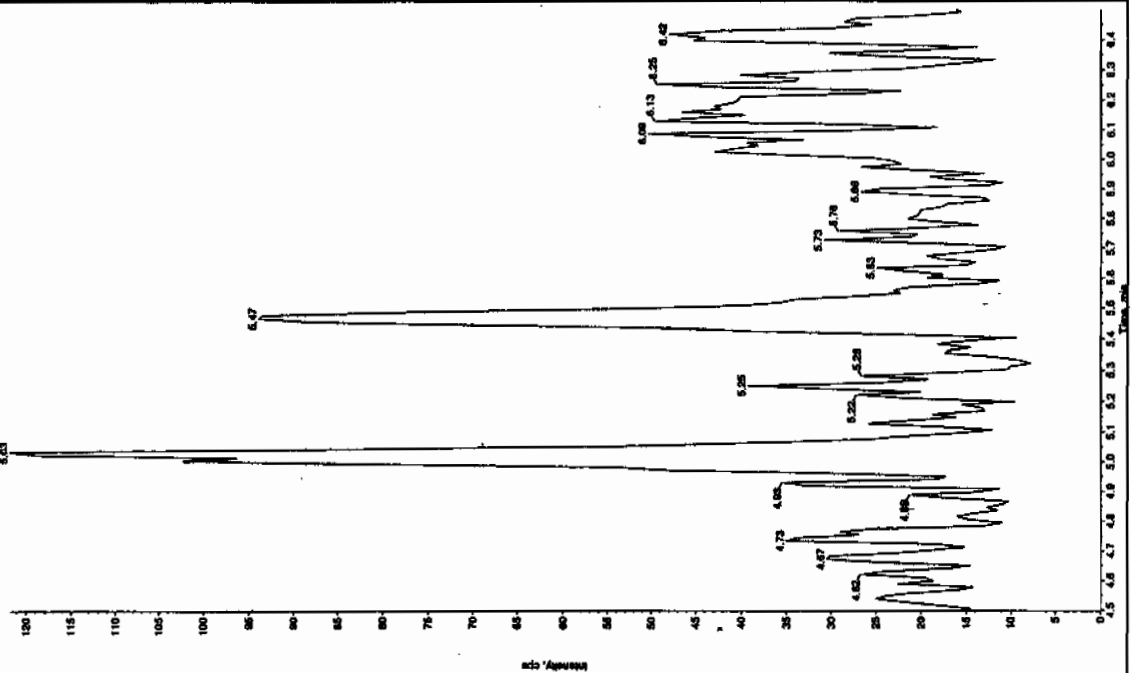
Sample Name: "XBLK13" Sample ID: "11LEP" File: "EXS01250107.mlf"  
 Peak Name: "3,4-Dinitrophenol" Mass(es): "182.1/151.9 amu"  
 Comment: "LCMS-EXP\_9" Acquisition: "Arrested"

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/26/2010  
 Acq. Time: 2:17:56 PM  
 Modified: No



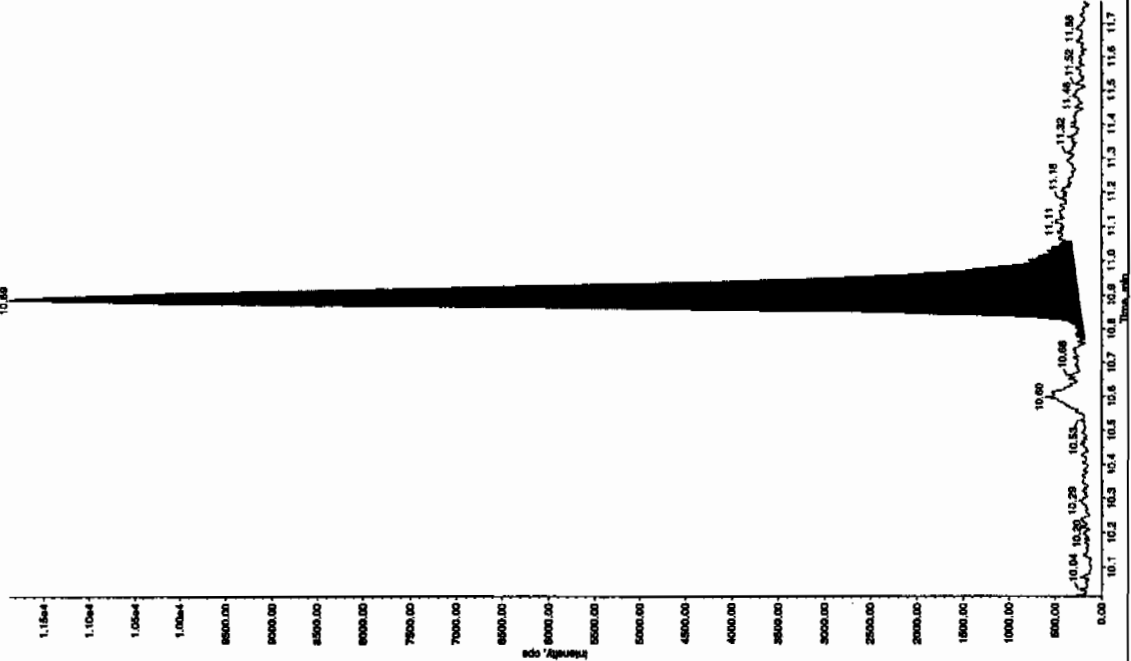
Sample Name: "XBLK13" Sample ID: "111ER" File: "EX501250107.wif"  
 Peak Name: "24-Chloro-6-nitrofluorene" Mass(es): "166.046.0 amu"  
 Comment: "LCMS EXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/26/2010  
 Acq. Time: 2:17:56 PM  
 Modified: No



Sample Name: "XBLK13" Sample ID: "111ER" File: "EX501250107.wif"  
 Peak Name: "Tris(o-cresyl) phosphite" Mass(es): "366.1791.0 amu"  
 Comment: "LCMS EXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 16.3 ng/mL  
 Acq. Date: 1/26/2010  
 Acq. Time: 2:17:56 PM  
 Modified: No  
 Proc. Algorithm: IntelligQuan - IQA  
 Min. Peak Height: 1.00e4 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 10.8 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.9 min  
 Area: 5.06e+004 counts  
 Height: 11611.375 cps  
 Start Time: 10.8 min  
 End Time: 11.1 min



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1210

Lab Code: GEL

Lab Sample ID: XIBLK14

Analysis Date: 26-JAN-10 17:42

GEL Data File: EXS01250120.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	16.2
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

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Sample Name: "XBLK14" Sample ID: "T1LER" File: "EX801250120.wif"

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

Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1

Sample Type: Unknown

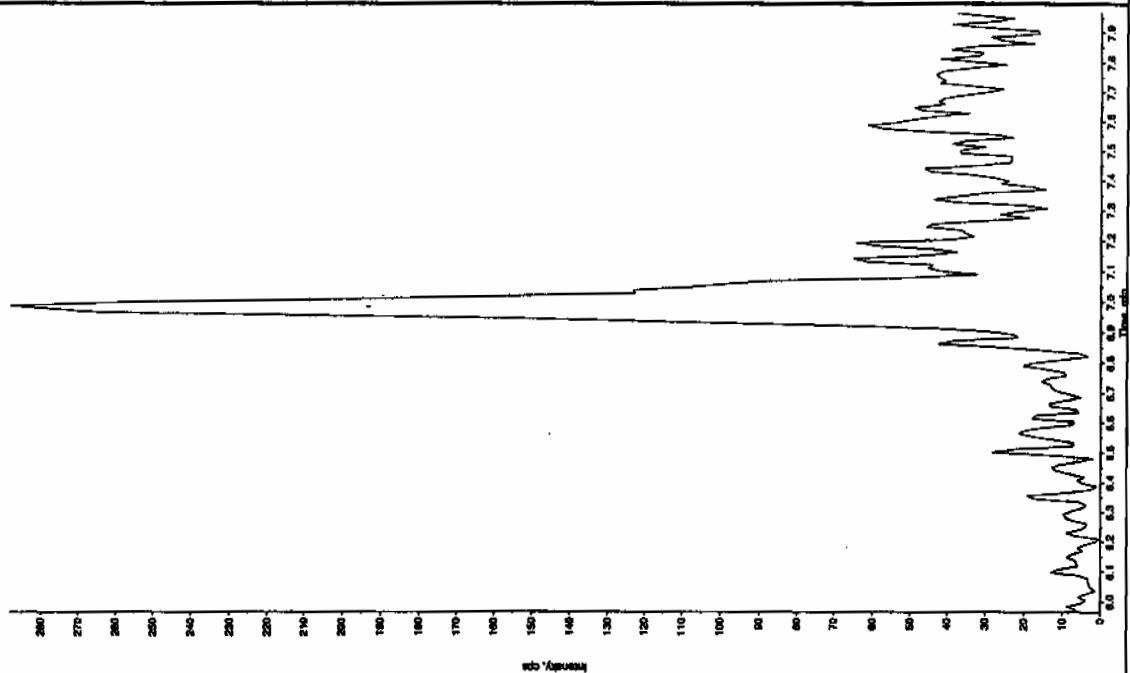
Concentration: 0.00 ng/mL

Calculated Conc: 1/26/2010

Acq. Date: 5:42:06 PM

Acq. Time: No

Modified: No



Sample Name: "XBLK14" Sample ID: "T1LER" File: "EX801250120.wif"

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

Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1

Sample Type: Unknown

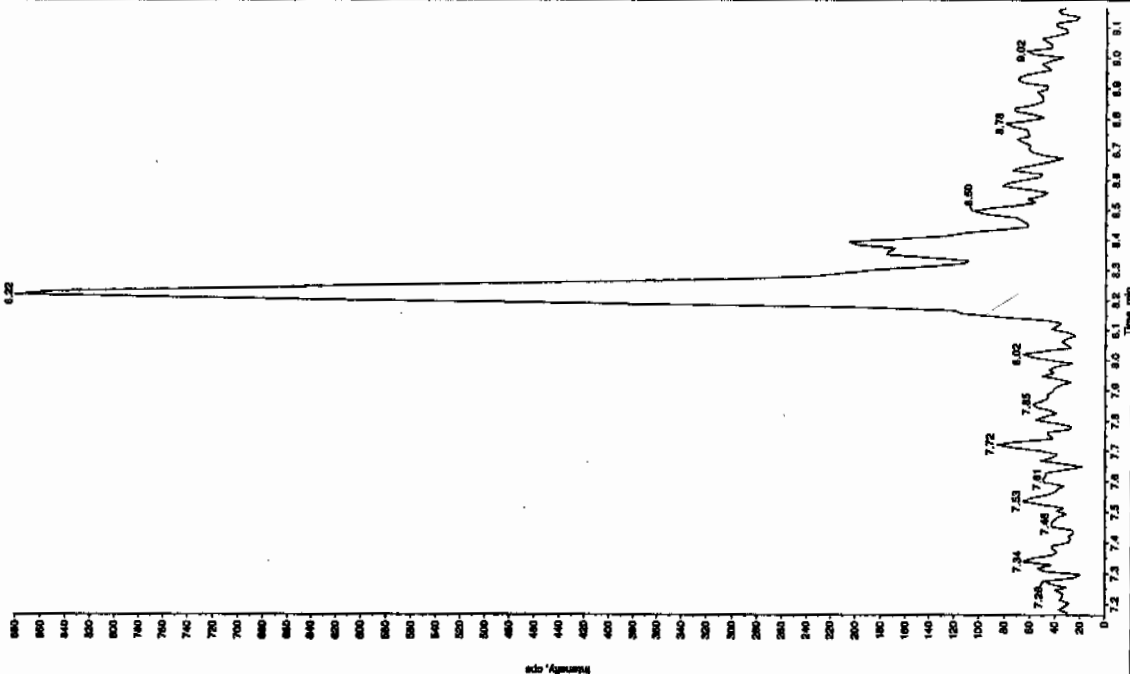
Concentration: 0.00 ng/mL

Calculated Conc: 1/26/2010

Acq. Date: 5:42:06 PM

Acq. Time: No

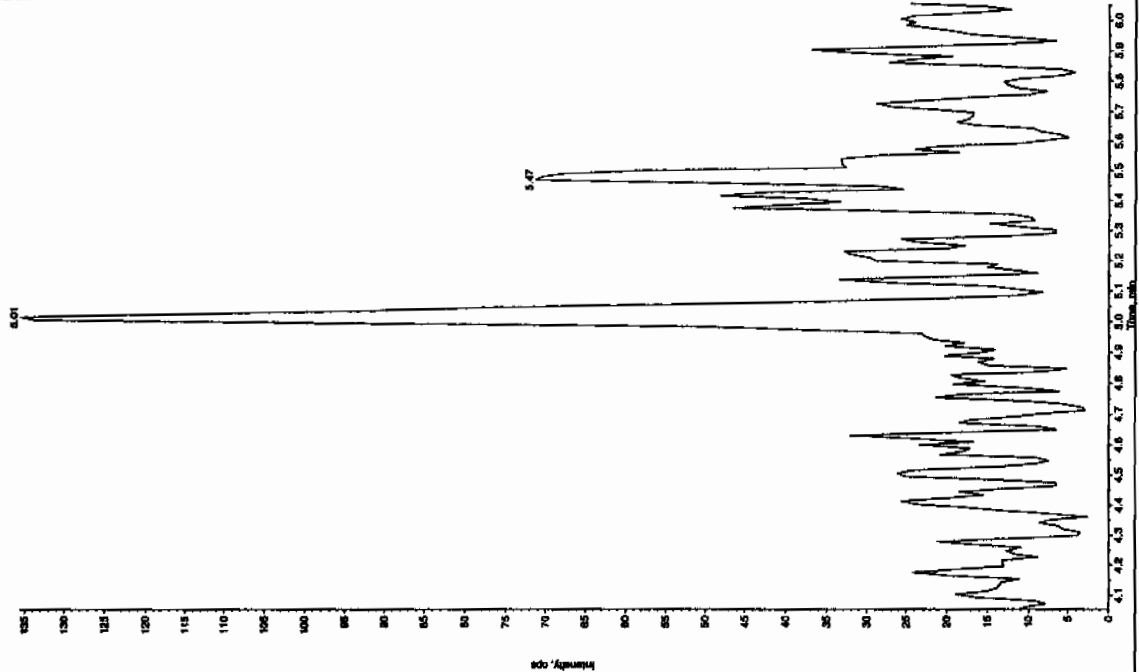
Modified: No



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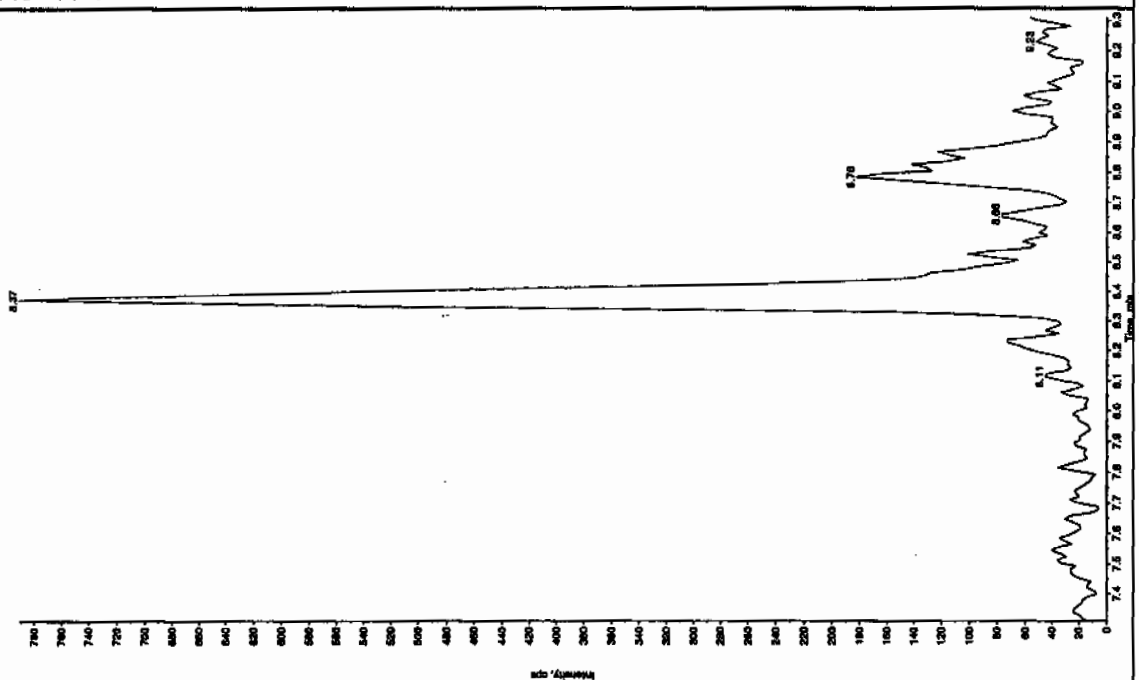
Sample Name: "XBLX14" Sample ID: "T1LER" File: "EX01250120.wif"  
 Peak Name: "26-Dienho-4-nitrobenz" Mass(es): "165.048.0 amu"  
 Comment: "LCMSXP\_B" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/26/2010  
 Acq. Time: 5:42:06 PM  
 Modified: No



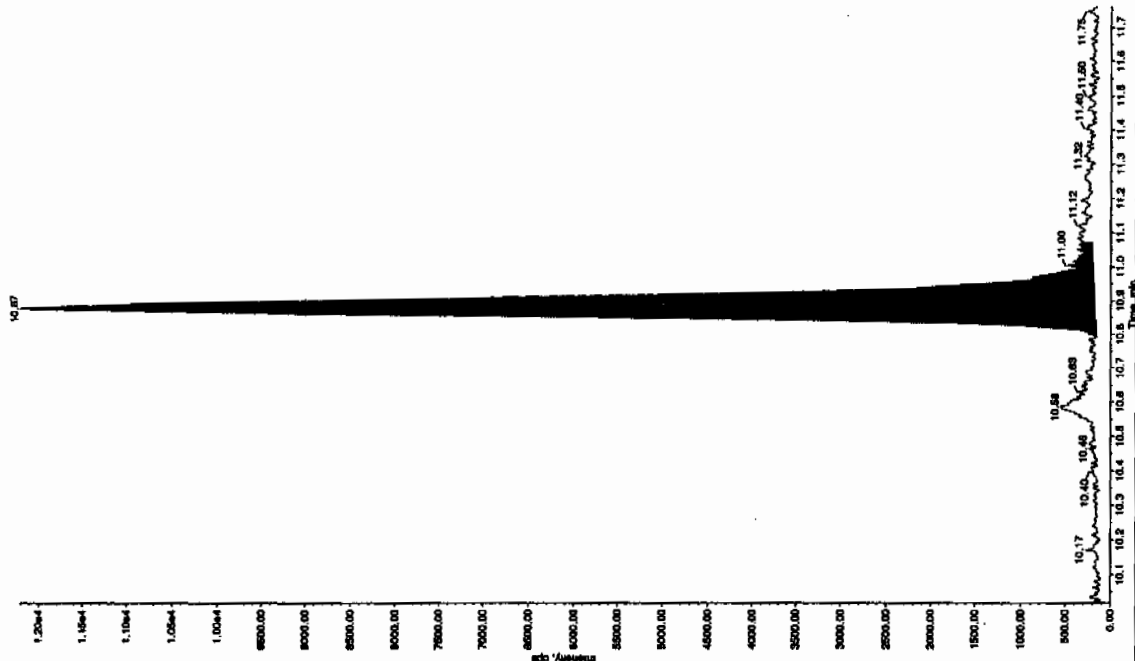
Sample Name: "XBLX14" Sample ID: "T1LER" File: "EX01250120.wif"  
 Peak Name: "34-Dienho-4-nitrobenz" Mass(es): "182.1451.9 amu"  
 Comment: "LCMSXP\_B" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 1.72672010 ng/mL  
 Acq. Date: 1/26/2010  
 Acq. Time: 5:42:06 PM  
 Modified: No



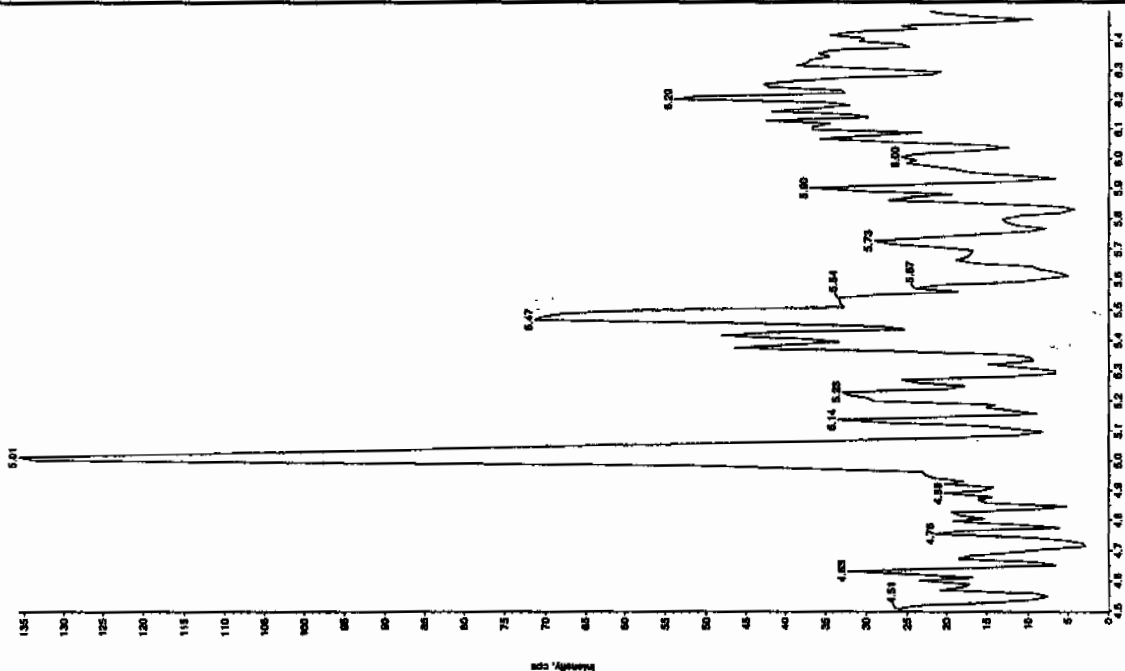
Sample Name: "XBLK14" Sample ID: "111ER" File: "EX301250120.wif"  
 Peak Name: "tri(o-cresyl) phosphate" Mass(es): "388.1/91.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 16.2 ng/mL  
 Acq. Date: 1/25/2010  
 Acq. Time: 5:42:06 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 1.00e4 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 10.8 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.9 min  
 Area: 4.87e+004 counts  
 Height: 12015.487 cps  
 Start Time: 10.8 min  
 End Time: 11.1 min



Sample Name: "XBLK14" Sample ID: "111ER" File: "EX301250120.wif"  
 Peak Name: "24-Diamino-6-nitrochlorane" Mass(es): "165.0/45.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/25/2010  
 Acq. Time: 5:42:06 PM  
 Modified: No



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1210

Lab Code: GEL

Lab Sample ID: XIBLK15

Analysis Date: 26-JAN-10 21:06

GEL Data File: EXS01250133.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	17.1
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

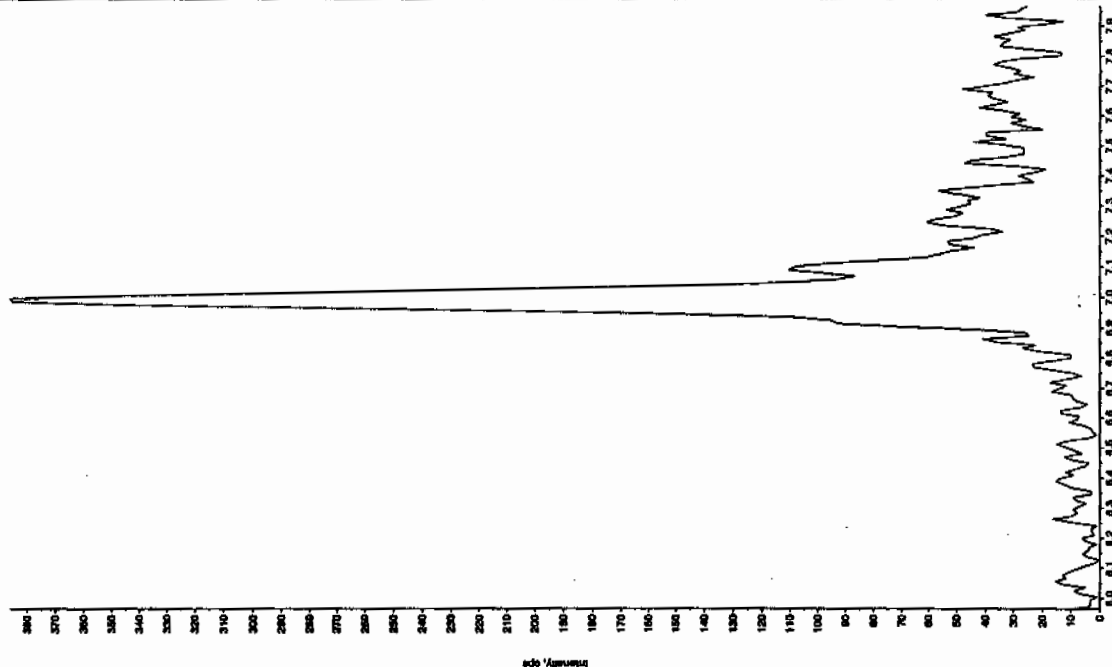


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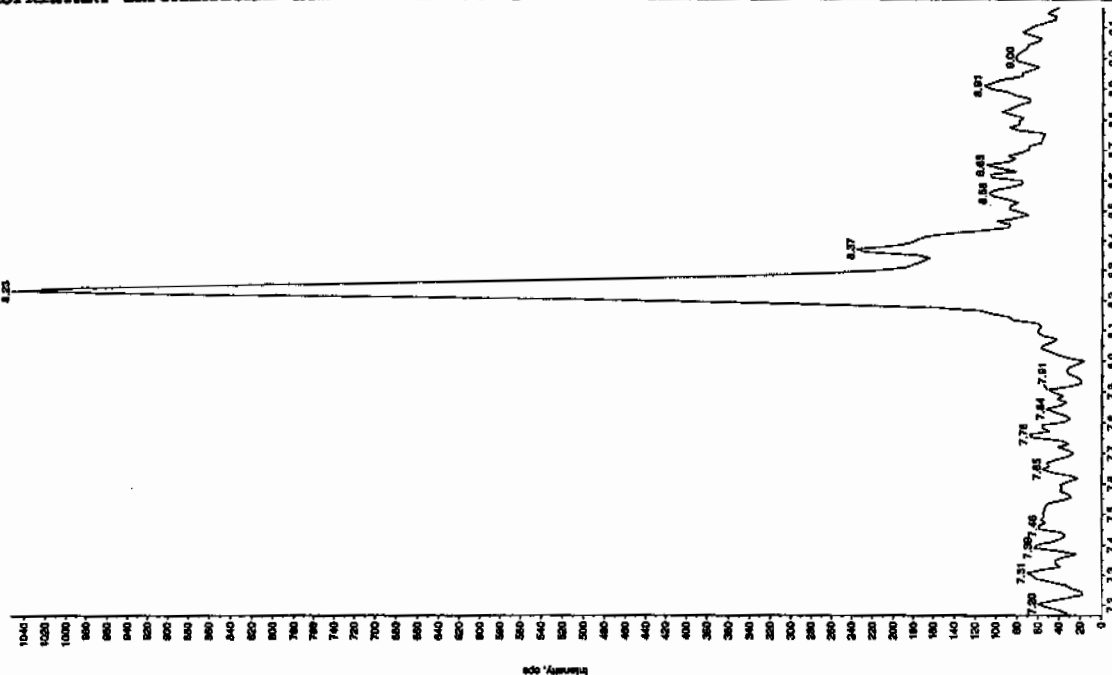
Sample Name: "XIBLK19" Sample ID: "TILLER" File: "EX501250133.wif"  
Peak Name: "TATB" Mass(es): "257.2204.9 amu"  
Comment: "LCMSEXP\_B" Annotation: "

Sample Index: 1  
Sample Type: Unknown  
Concentration: 0.00 ng/mL  
Calculated Conc: 1/26/2010  
Acq. Date: 9:06:19 PM  
Acq. Time: 9:06:19 PM  
Modified: No



Sample Name: "XIBLK19" Sample ID: "TILLER" File: "EX501250133.wif"  
Peak Name: "3S-Dinitrobenzine" Mass(es): "182.046.0 amu"  
Comment: "LCMSEXP\_B" Annotation: "

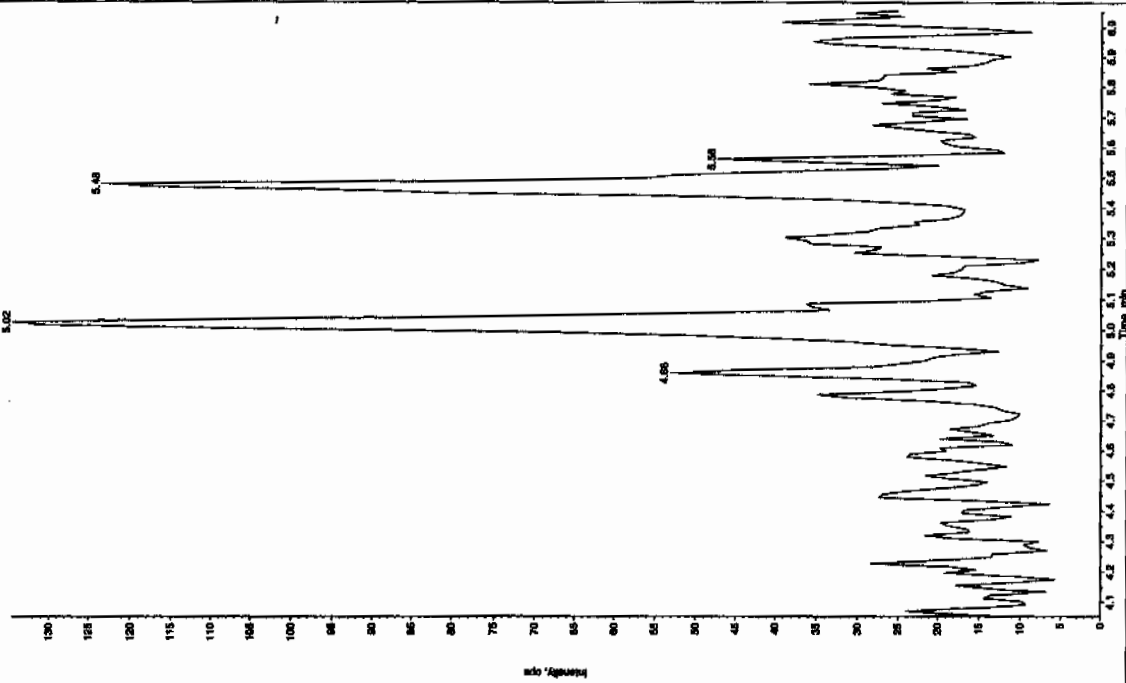
Sample Index: 1  
Sample Type: Unknown  
Concentration: 0.00 ng/mL  
Calculated Conc: 1/26/2010  
Acq. Date: 9:06:19 PM  
Acq. Time: 9:06:19 PM  
Modified: No



8/26/2010 11:27:11

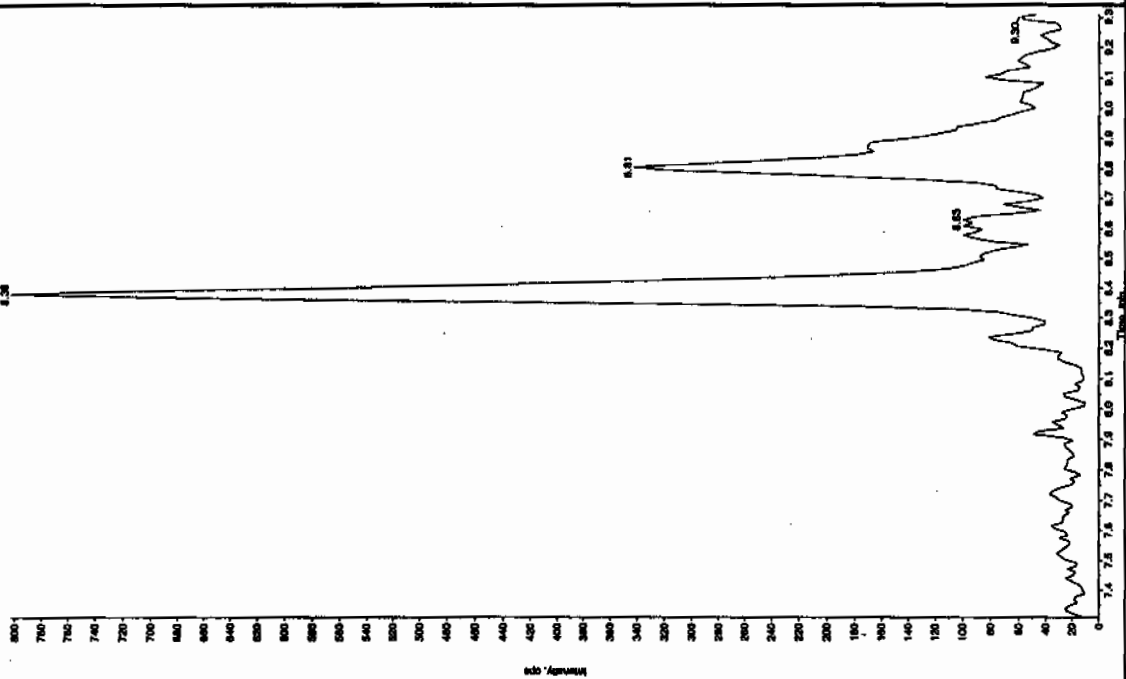
Sample Name: "XBLX15" Sample ID: "111ER" File: "EX501250133.wif"  
 Peak Name: "26-Diamino-4-nitrobenzoate" Mass(es): "166.046.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/26/2010  
 Acq. Time: 3:06:15 PM  
 Modified: No



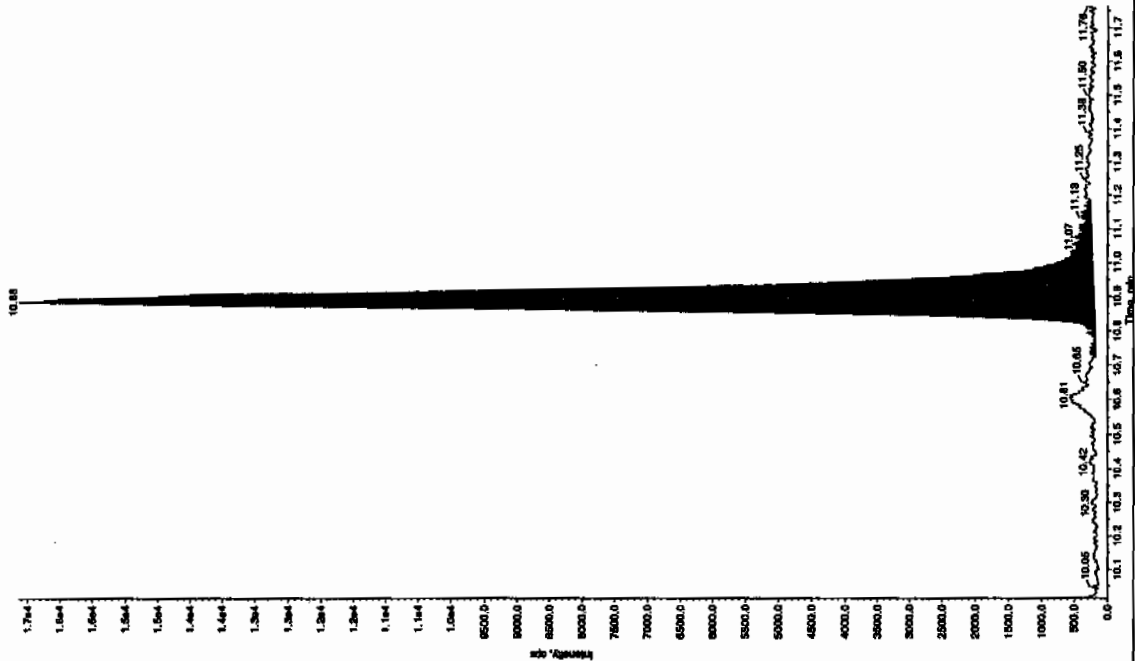
Sample Name: "XBLX15" Sample ID: "111ER" File: "EX501250133.wif"  
 Peak Name: "34-Dinitrobenzoate" Mass(es): "182.1151.9 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/26/2010  
 Acq. Time: 3:06:15 PM  
 Modified: No



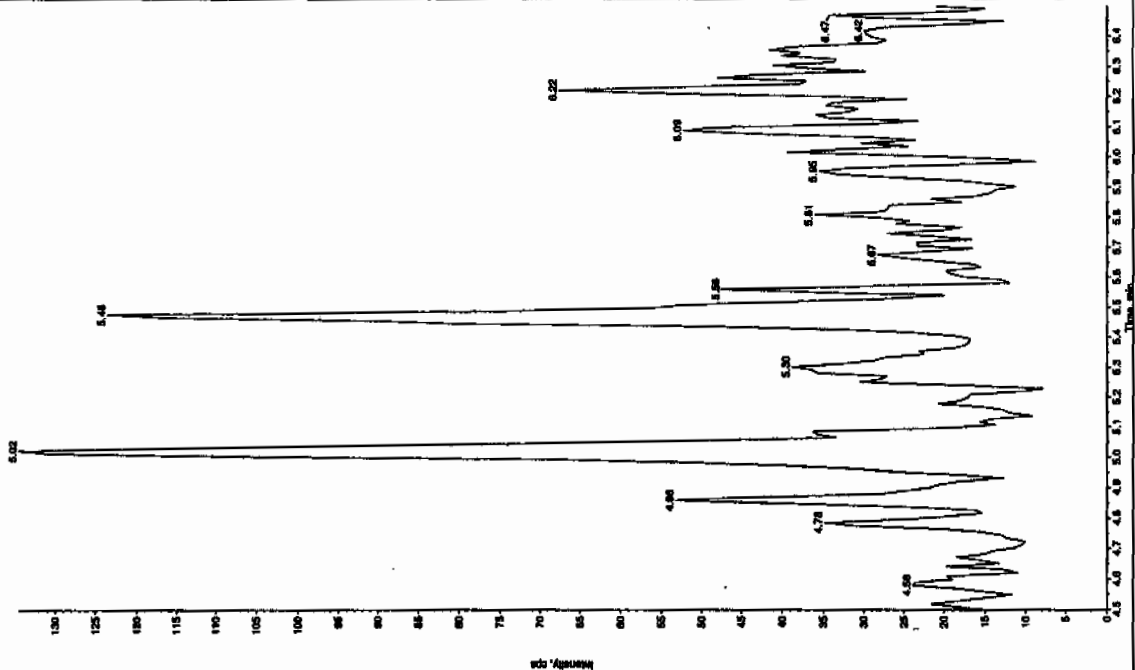
Sample Name: "XBLK15" Sample ID: "11ER" File: "E0501250133.wif"  
 Peak Name: "Tri(nonyl) Phosphate" Mass(es): "358.179.1.0 amu"  
 Comment: "LONGEXP\_5" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 17.1 ng/mL  
 Acq. Date: 1/26/2010  
 Acq. Time: 9:06:19 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: 10.0 sec  
 Expected RT: 10.8 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.8 min  
 Area: 6.98e504 counts  
 Height: 1813.895 cps  
 Start Time: 10.7 min  
 End Time: 11.2 min



Sample Name: "XBLK15" Sample ID: "11ER" File: "E0501250133.wif"  
 Peak Name: "24-Dinitro-6-nitrobenzene" Mass(es): "183.048.0 amu"  
 Comment: "LONGEXP\_5" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Acq. Date: 1/26/2010  
 Acq. Time: 9:06:19 PM  
 Modified: No



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1210

Lab Code: GEL

Lab Sample ID: XIBLK16

Analysis Date: 27-JAN-10 00:14

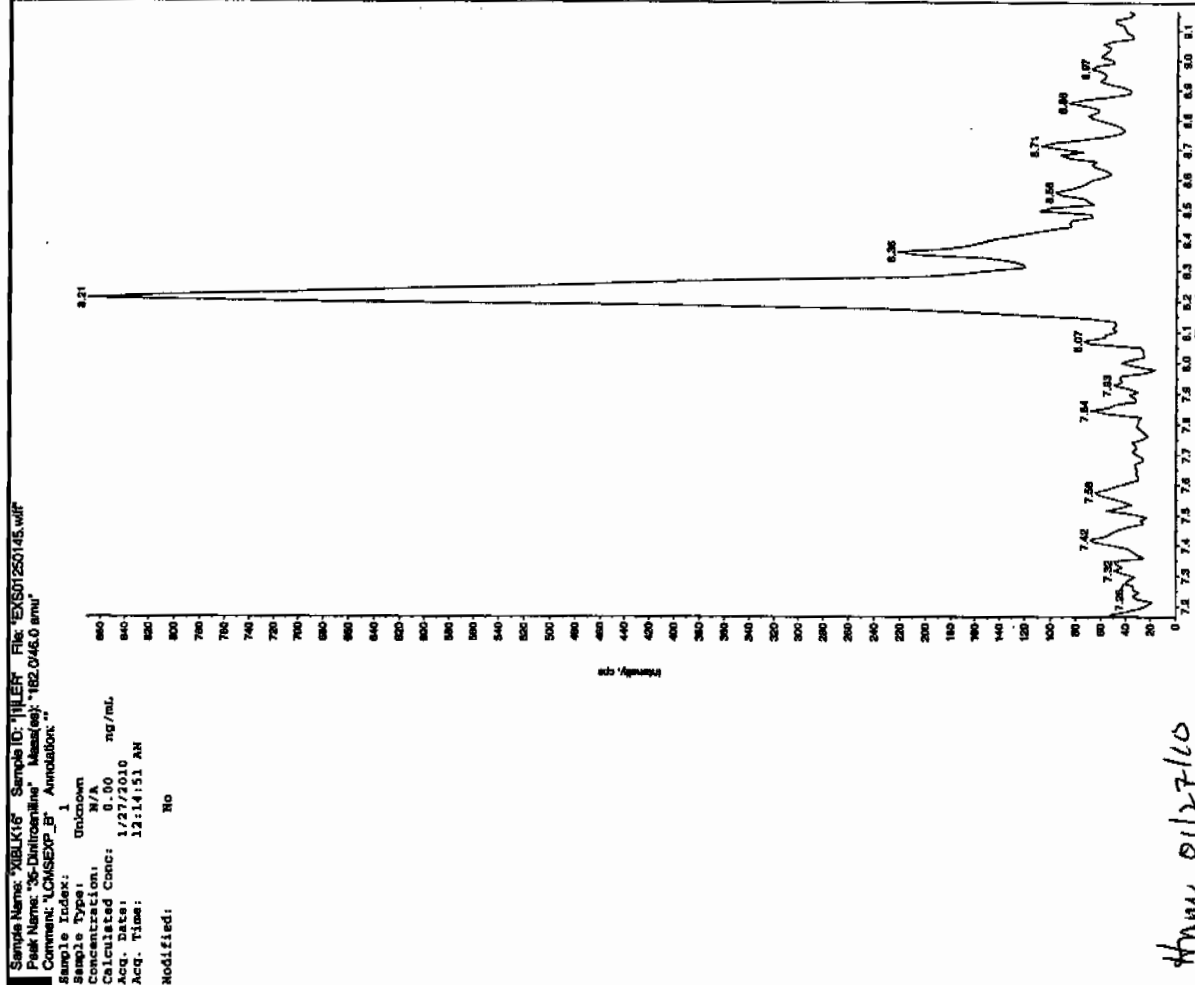
GEL Data File: EXS01250145.wiff

Instrument ID: LCMSMS

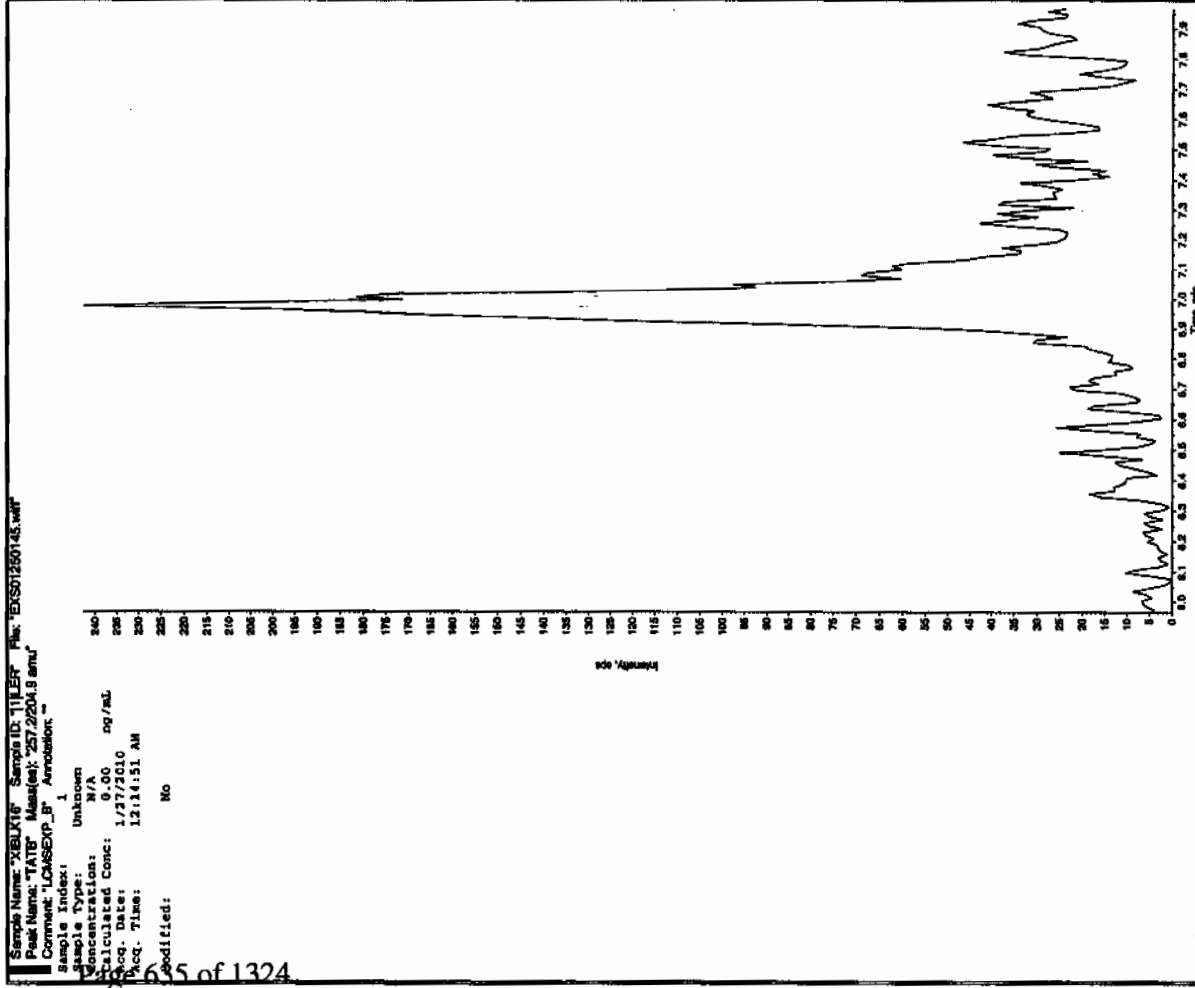
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	16.3
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

dan 1/27/10



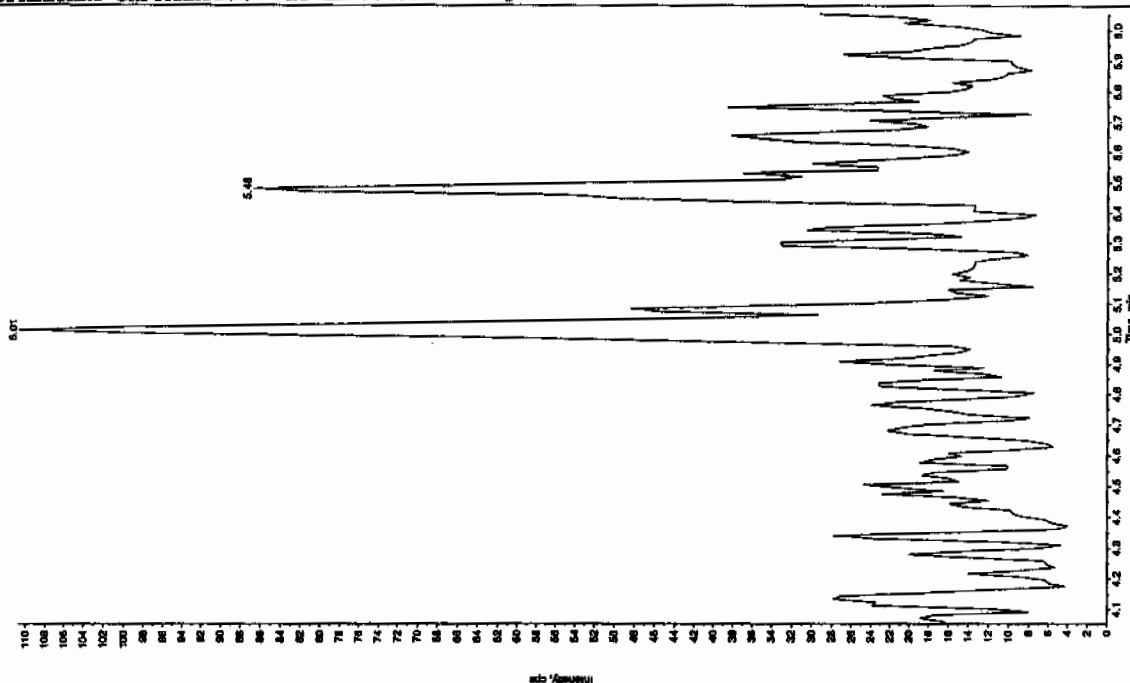
dan 01/27/10



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

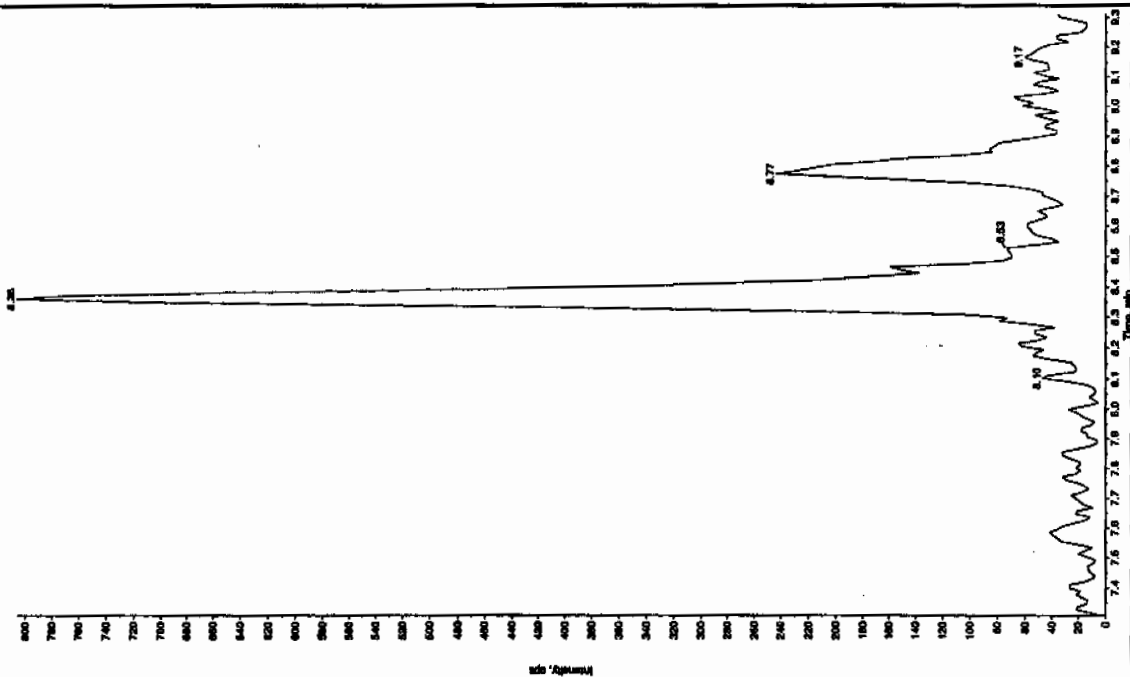
Sample Name: 'WELK16' Sample ID: '11111' File: 'EX501250145.mlf'  
 Peak Name: '26-Dinitro-4-nitrofluorene' Mass(es): '168.048.0 amu'  
 Comment: 'LCMSEXP\_B' Annotation: ''

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/27/2010  
 Acq. Time: 12:14:51 AM  
 Modified: No



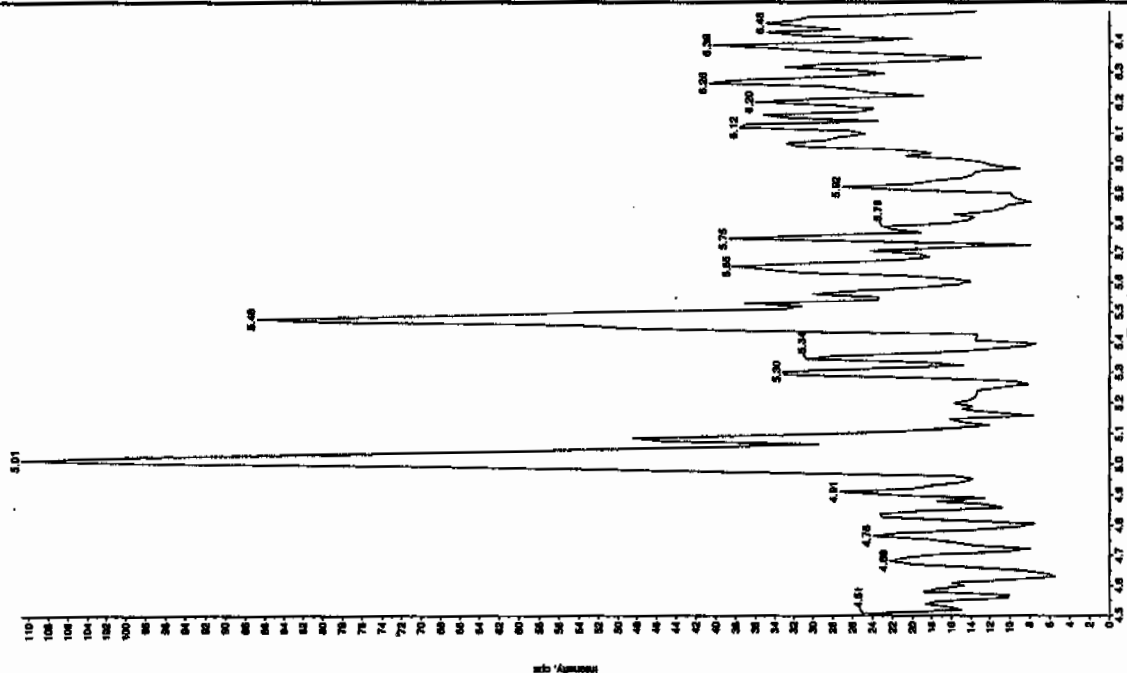
Sample Name: 'WELK16' Sample ID: '11111' File: 'EX501250145.mlf'  
 Peak Name: '26-Dinitro-4-nitrofluorene' Mass(es): '162.1151.9 amu'  
 Comment: 'LCMSEXP\_B' Annotation: ''

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/27/2010  
 Acq. Time: 12:14:51 AM  
 Modified: No



Sample Name: Y8LK16 Sample ID: Y8LK16 File: EX501250145.wif  
 Peak Name: "N/A" Mass(es): "388.151.0 amu"  
 Comment: "LCMSXP\_B" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 16.3 ng/mL  
 Acq. Date: 1/27/2010  
 Acq. Time: 12:14:51 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 1.00e4 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 30.0 points  
 RT Window: 30.0 sec  
 Expected RT: 10.8 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.9 min  
 Area: 4.82e+084 counts  
 Height: 11913.774 cps  
 Start Time: 10.7 min  
 End Time: 11.1 min



Sample Name: Y8LK16 Sample ID: Y8LK16 File: EX501250145.wif  
 Peak Name: "N/A" Mass(es): "165.046.0 amu"  
 Comment: "LCMSXP\_B" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Acq. Date: 1/27/2010  
 Acq. Time: 12:14:51 AM  
 Modified: No



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1210

Lab Code: GEL

Lab Sample ID: XIBLK17

Analysis Date: 27-JAN-10 01:49

GEL Data File: EXS01250151.wiff

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

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

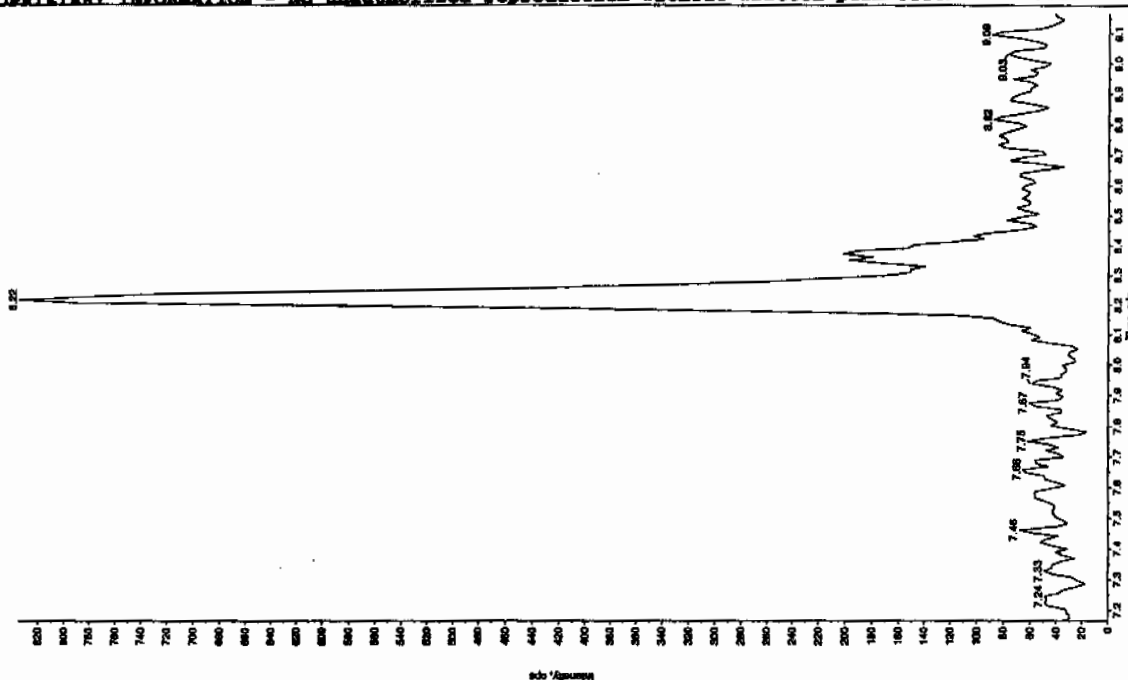


See 1/27/10

Sample Name: "XBLK17" Sample ID: "T1LER" File: "EX501250151.w" Peak Name: "35-Dinitrobenzyl" Mass(es): "182.0460 amu"

Comment: "LCMS-EXP\_B" Annotation: ""

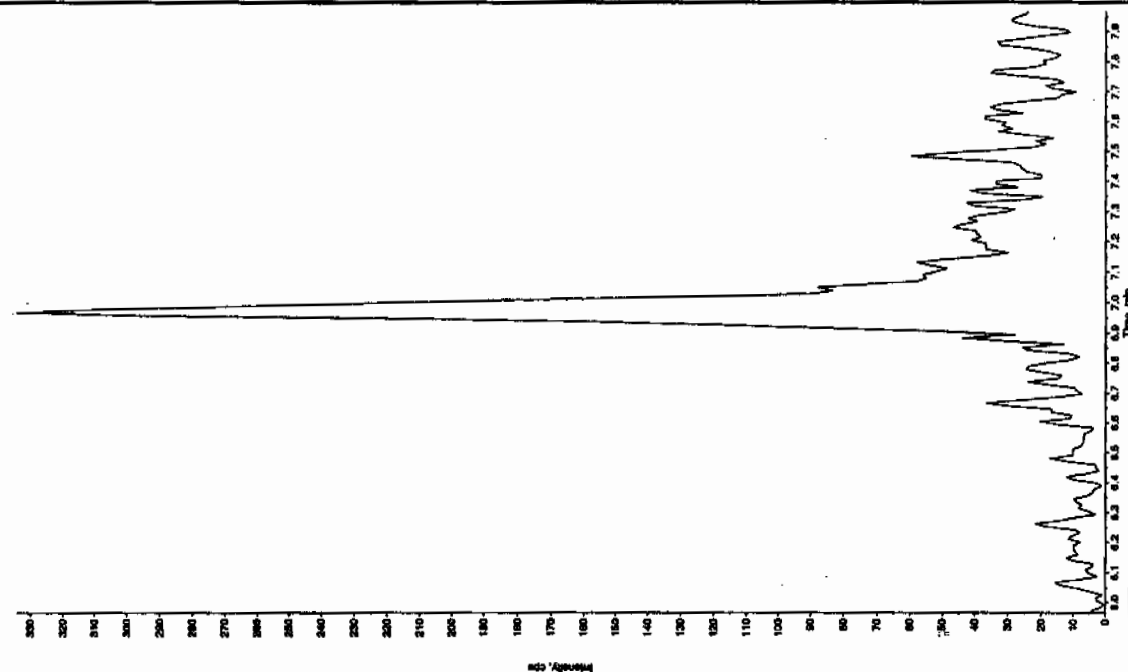
Sample Index: 1  
Sample Type: Unknown  
Concentration: N/A  
Calculated Conc: 0.00 ng/mL  
Acq. Date: 1/27/2010  
Acq. Time: 1:49:12 AM  
Modified: No



Sample Name: "XBLK17" Sample ID: "T1LER" File: "EX501250151.w" Peak Name: "TATB" Mass(es): "257.2204 amu"

Comment: "LCMS-EXP\_B" Annotation: ""

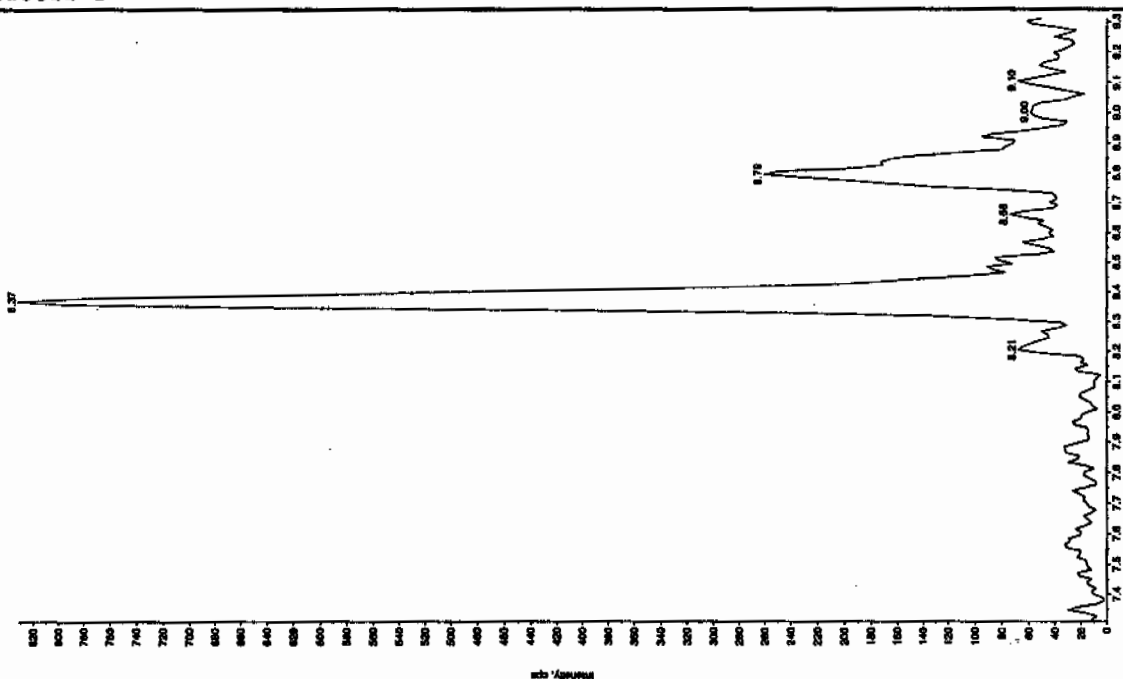
Sample Index: 1  
Sample Type: Unknown  
Concentration: N/A  
Calculated Conc: 0.00 ng/mL  
Acq. Date: 1/27/2010  
Acq. Time: 1:49:12 AM  
Modified: No



See 1/27/10

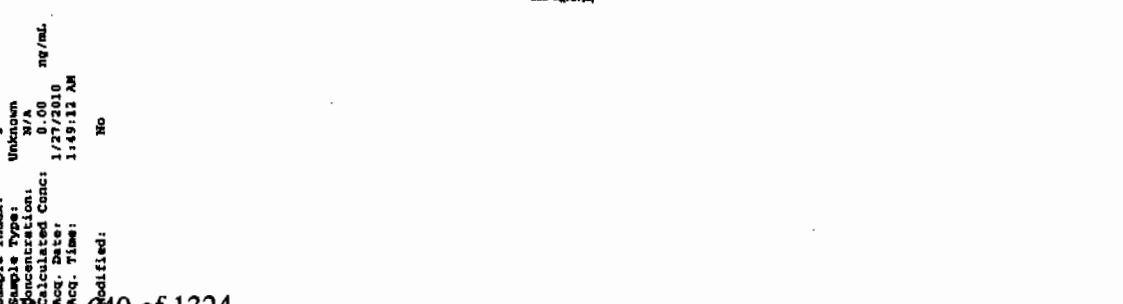
Sample Name: 'XELK17' Sample ID: '111EF' File: 'EX50120151.wif'  
 Peak Name: '28-Diethyl-4-ethoxybenzene' Mass(es): '166.046.0 amu'  
 Comment: 'LCMSExp\_B' Annotation: ''

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/27/2010  
 Acq. Time: 1:49:12 AM  
 Modified: No



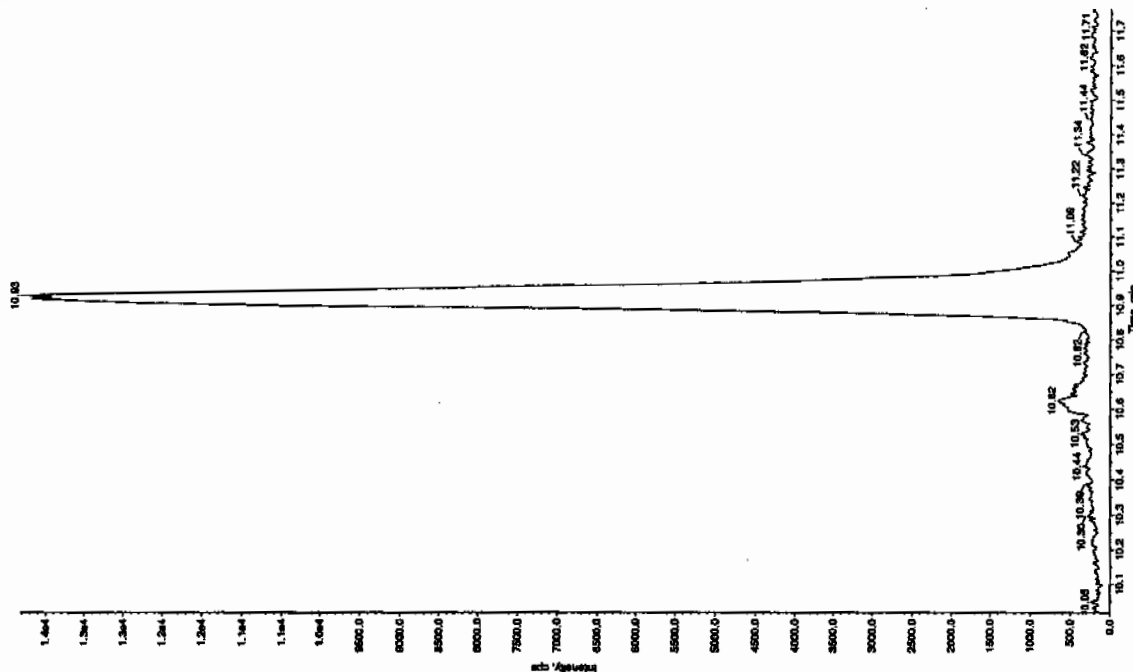
Sample Name: 'XELK17' Sample ID: '111EF' File: 'EX50120151.wif'  
 Peak Name: '28-Diethyl-4-ethoxybenzene' Mass(es): '182.1751.9 amu'  
 Comment: 'LCMSExp\_B' Annotation: ''

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/27/2010  
 Acq. Time: 1:49:12 AM  
 Modified: No



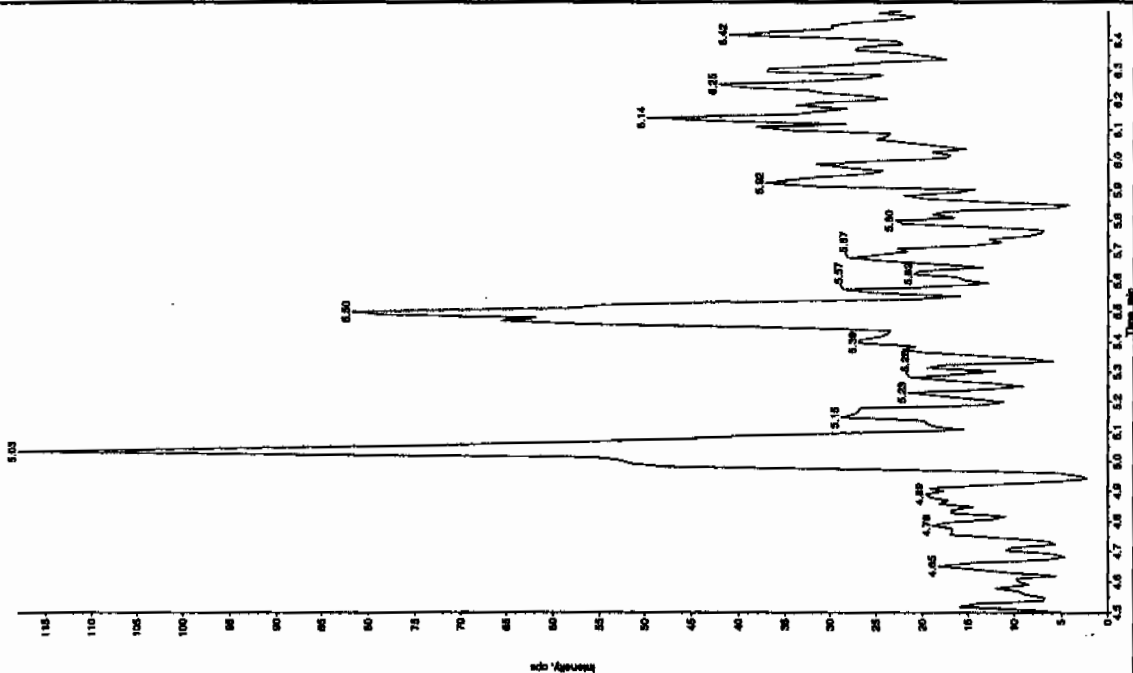
Sample Name: "XELK17" Sample ID: "11111" File: "EX001250151.wif"  
 Peak Name: "Mito-cytochrome b" Mass(es): "355.161.0 amu"  
 Comment: "LCMSXP\_B" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: M/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/27/2010  
 Acq. Time: 1:49:12 AM  
 Modified: No



Sample Name: "XELK17" Sample ID: "11111" File: "EX001250151.wif"  
 Peak Name: "24-Diamino-6-phenylthio" Mass(es): "185.046.0 amu"  
 Comment: "LCMSXP\_B" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: M/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/27/2010  
 Acq. Time: 1:49:12 AM  
 Modified: No



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1210

Lab Code: GEL

Lab Sample ID: XIBLK02

Analysis Date: 27-JAN-10 12:49

GEL Data File: EXS01270010.wiff

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	9.46
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Sen 1/28/10

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Sample Name: 'XBU02' Sample ID: 'T1LEF' File: 'E5501270010.wat'

Peak Name: '35-Dibenzotriene' Mass(es): '182.046.0 amu'

Comment: 'LCMSEXP\_B' Annotation: '1'

Sample Index: '1'

Sample Type: 'Unknown'

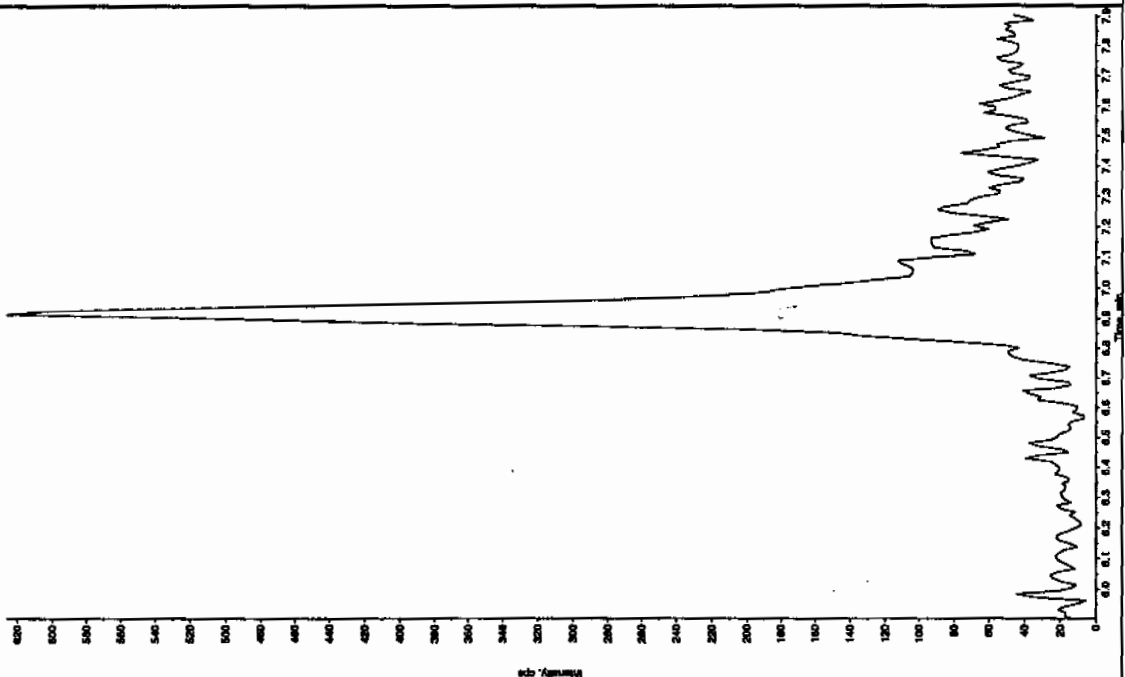
Concentration: 'N/A'

Calculated Conc: '0.00 ng/mL'

Acq. Date: '1/27/2010'

Acq. Time: '12:49:10 PM'

Modified: 'No'



Sample Name: 'XBU02' Sample ID: 'T1LEF' File: 'E5501270010.wat'

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

Comment: 'LCMSEXP\_B' Annotation: '1'

Sample Index: '1'

Sample Type: 'Unknown'

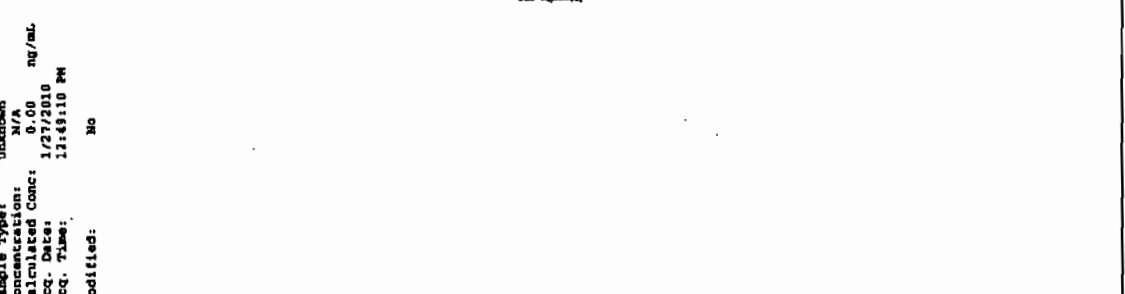
Concentration: 'N/A'

Calculated Conc: '0.00 ng/mL'

Acq. Date: '1/27/2010'

Acq. Time: '12:49:10 PM'

Modified: 'No'

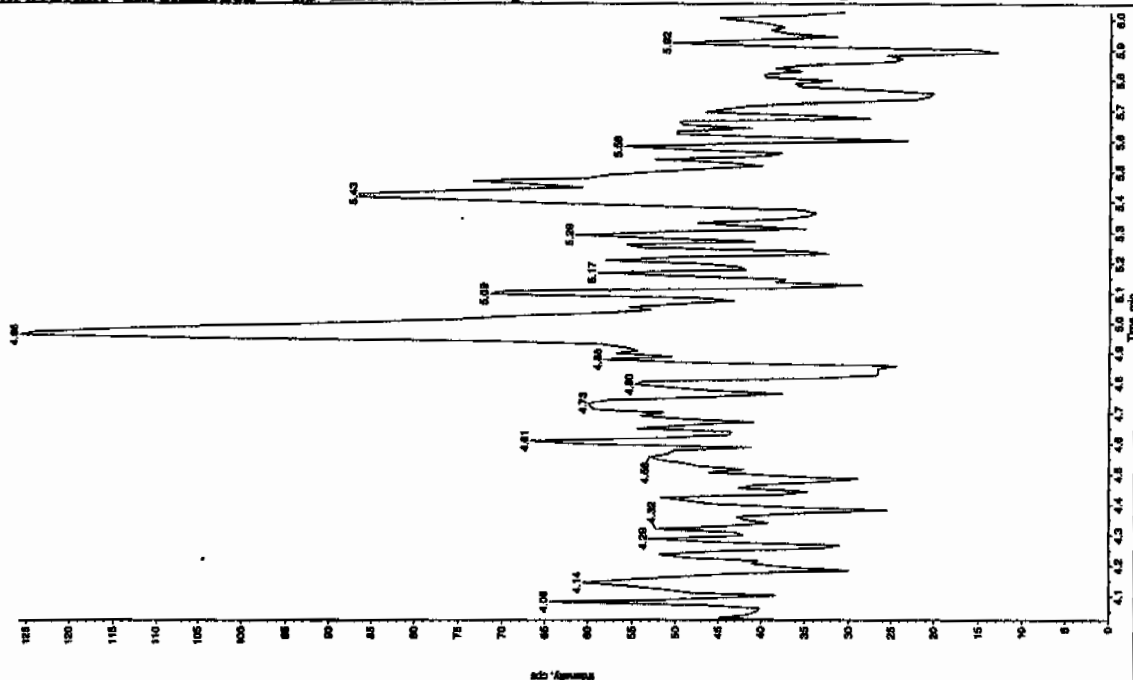


Sen 1/28/10

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

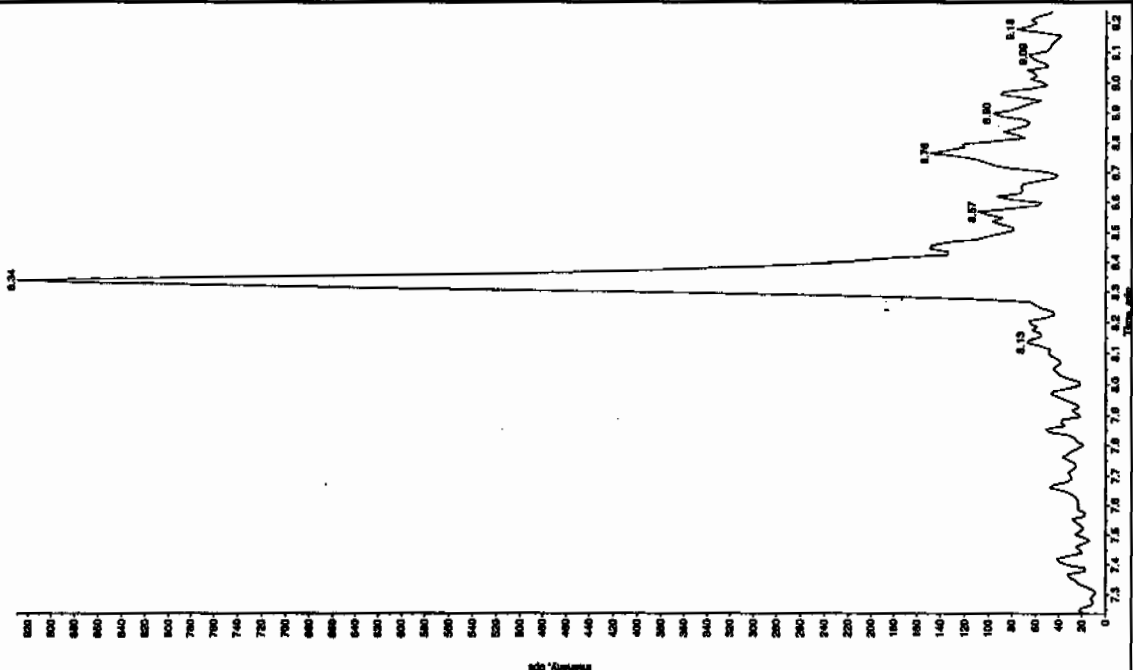
Sample Name: 'X88J02' Sample ID: 'T11ER' File: 'EX8501270010.wif'  
 Peak Name: '26-Diamino-4-nitrodiene' Mass(es): '186.046.0 amu'  
 Comment: 'LCMSDEXP\_B' Annotation: ''

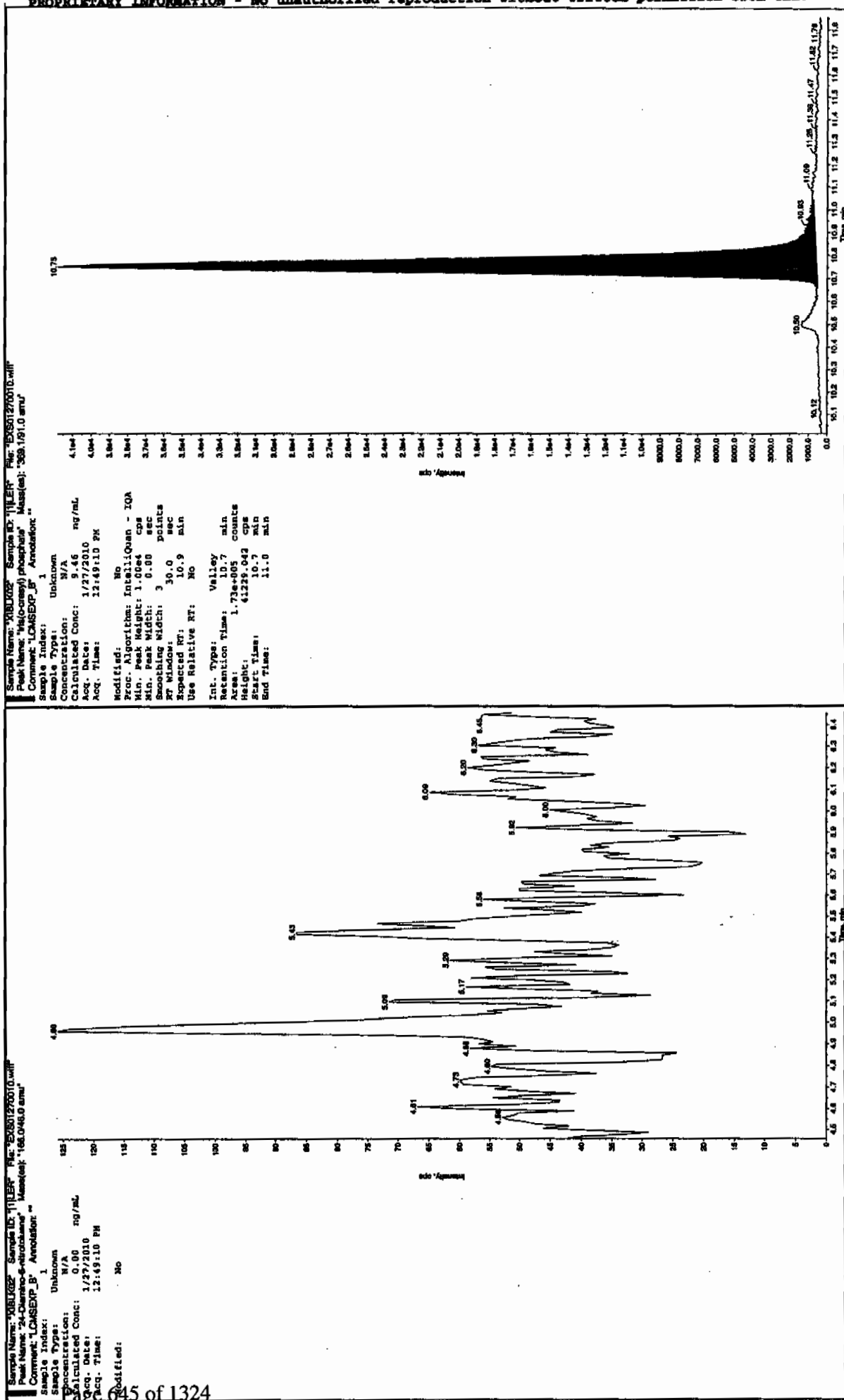
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/27/2010  
 Acq. Time: 12:49:10 PM  
 Modified: No



Sample Name: 'X88J02' Sample ID: 'T11ER' File: 'EX8501270010.wif'  
 Peak Name: '34-Dinitrodiene' Mass(es): '182.1715.9 amu'  
 Comment: 'LCMSDEXP\_B' Annotation: ''

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/27/2010  
 Acq. Time: 12:49:10 PM  
 Modified: No





4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1210

Lab Code: GEL

Lab Sample ID: XIBLK03

Analysis Date: 27-JAN-10 13:20

GEL Data File: EXS01270012.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	5.42
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0



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Sample Name: 'XBL003' Sample ID: 'HILF' File: 'E8501270012.wif'

Peak Name: '35-Chlorous' Mass(es): '182.048.0 amu'

Comment: 'LCMSEXP\_B' Annotation: ''

Sample Index: 1

Sample Type: Unknown

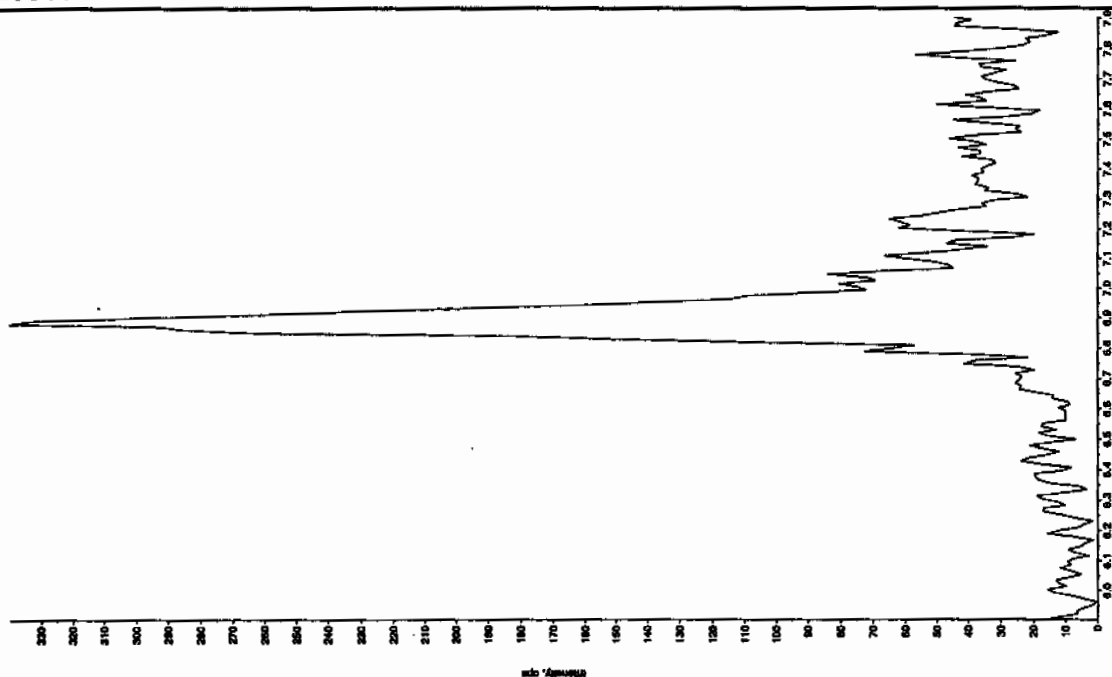
Concentration: N/A

Calculated Conc: 0.00 ng/mL

Acq. Date: 1/27/2010

Acq. Time: 1:20:34 PM

Modified: No



Sample Name: 'XBL003' Sample ID: 'HILF' File: 'E8501270012.wif'

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

Comment: 'LCMSEXP\_B' Annotation: ''

Sample Index: 1

Sample Type: Unknown

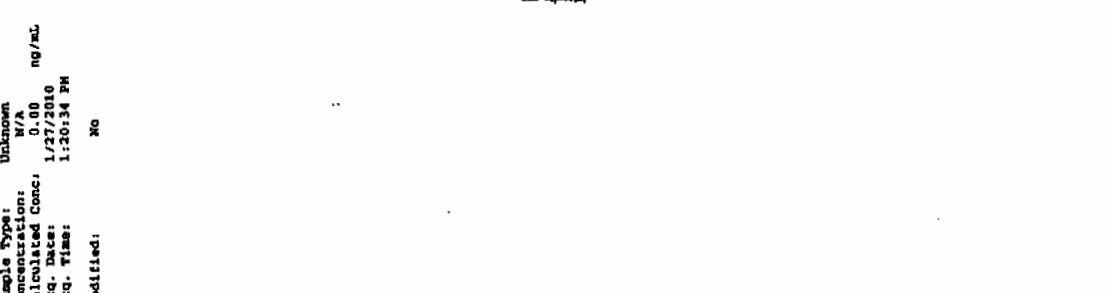
Concentration: N/A

Calculated Conc: 0.00 ng/mL

Acq. Date: 1/27/2010

Acq. Time: 1:20:34 PM

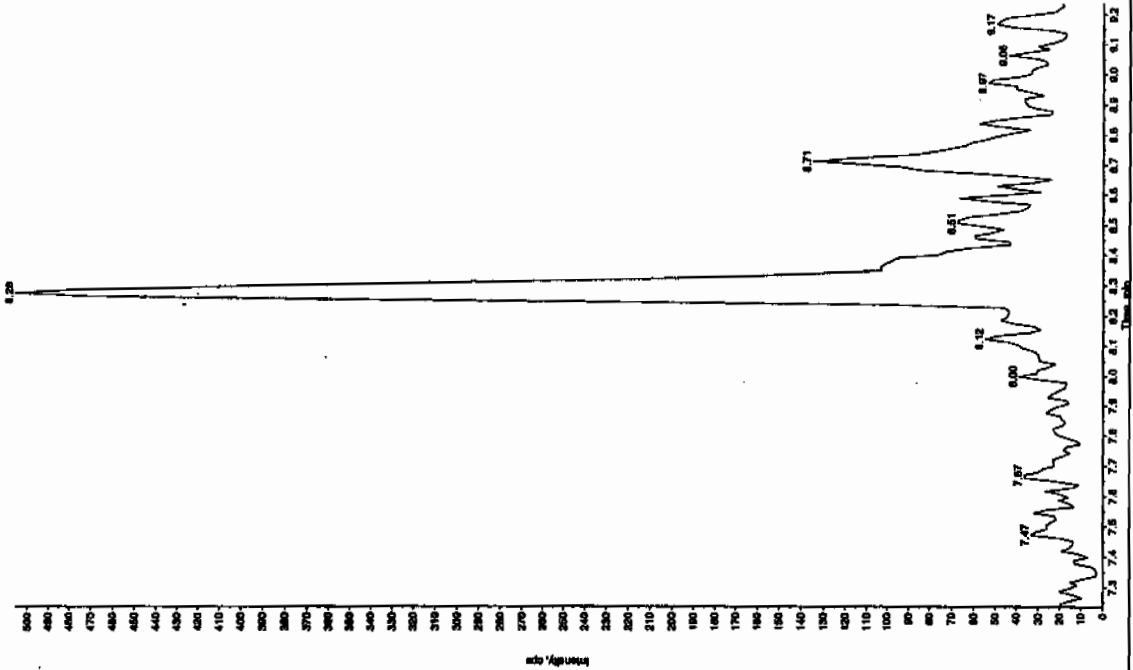
Modified: No



4mm 01/28/10

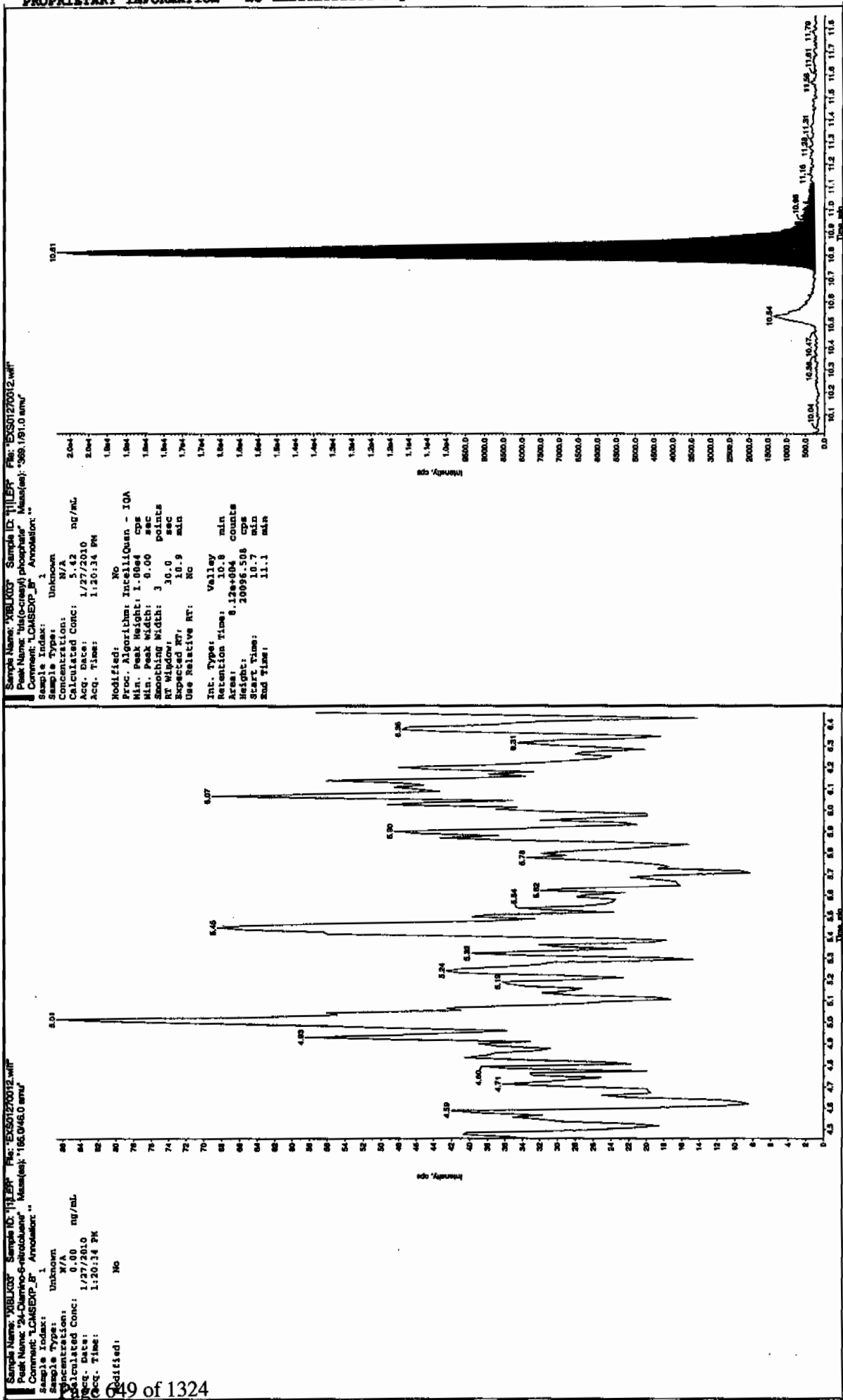
Sample Name: "XIBL003" Sample ID: "HILLER" File: "EX501270012.wiff"  
 Peak Name: "34-Dihydro-4-methyl-2H-pyran-2-one" Mass(es): "182.1151.9 amu"  
 Comment: "LCMSXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/27/2010  
 Acq. Time: 1:20:34 PM  
 Modified: No



Sample Name: "XIBL003" Sample ID: "HILLER" File: "EX501270012.wiff"  
 Peak Name: "34-Dihydro-4-methyl-2H-pyran-2-one" Mass(es): "182.1151.9 amu"  
 Comment: "LCMSXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/27/2010  
 Acq. Time: 1:20:34 PM  
 Modified: No



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1210

Lab Code: GEL

Lab Sample ID: XIBLK04

Analysis Date: 27-JAN-10 14:07

GEL Data File: EXS01270015.wiff

Instrument ID: LCMSMS

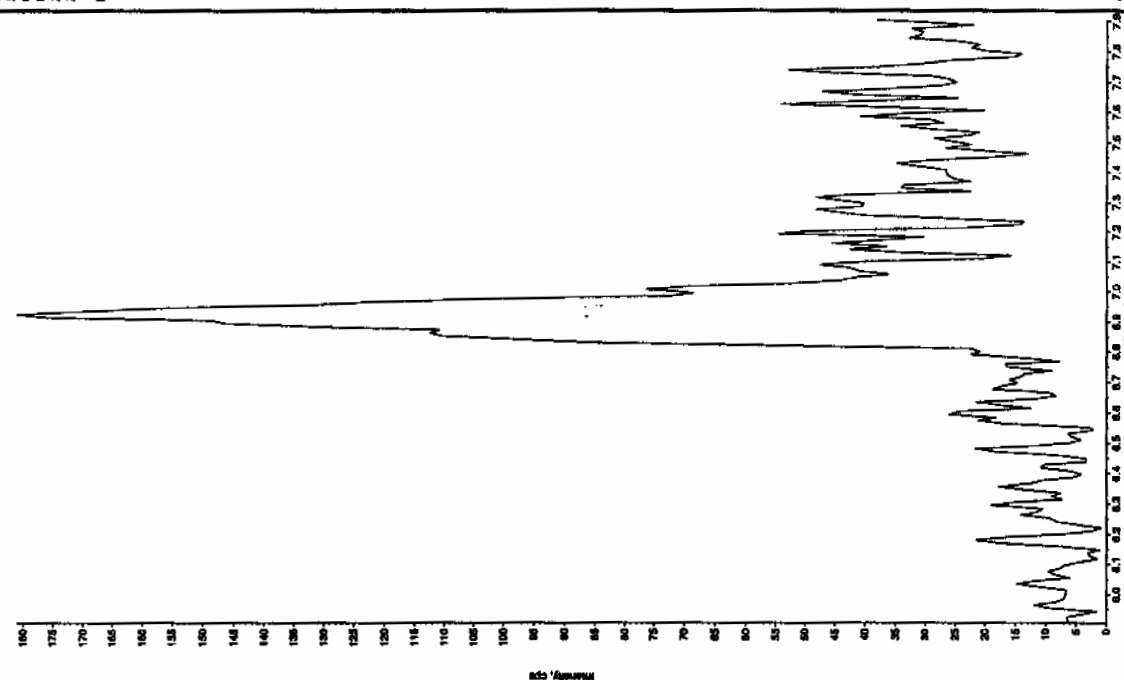
Column: Phenomenex Ultracarb 5u ODS(20)

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

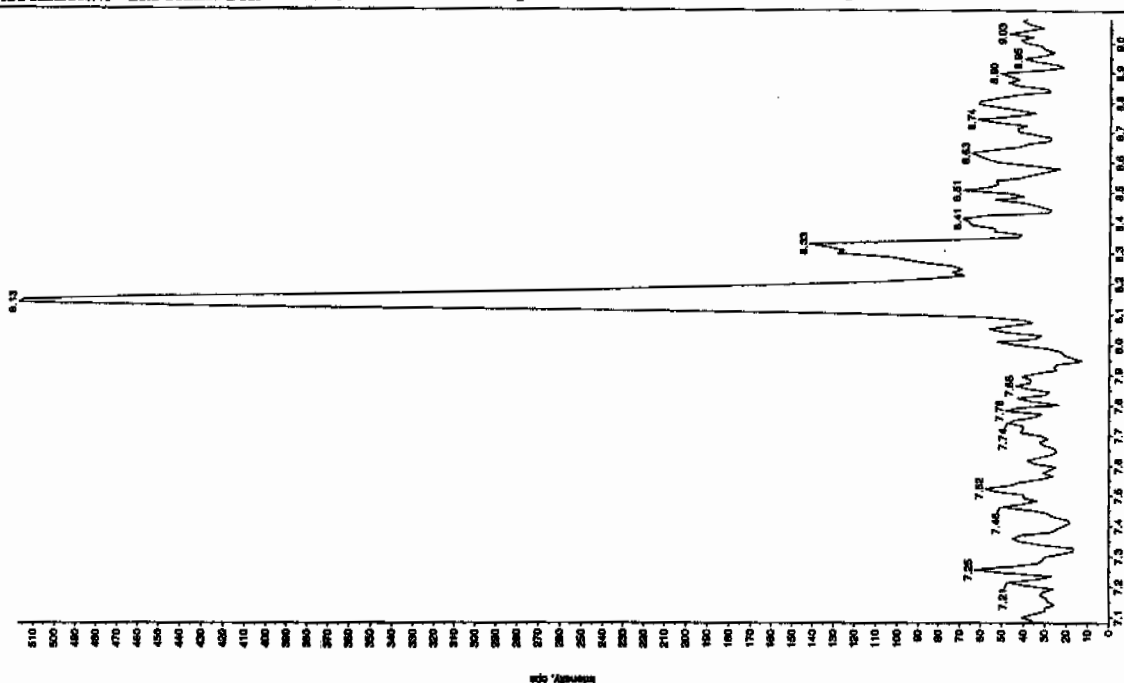
Jan 128/10

Sample Name: "8321A" Sample ID: "H1LEP" File: "E5501270015.wif"  
 Peak Name: "35-Dihydroxy" Mass(es): "162.046.0 amu"  
 Comment: "LCMS-EXP\_B" Annotation: "1"

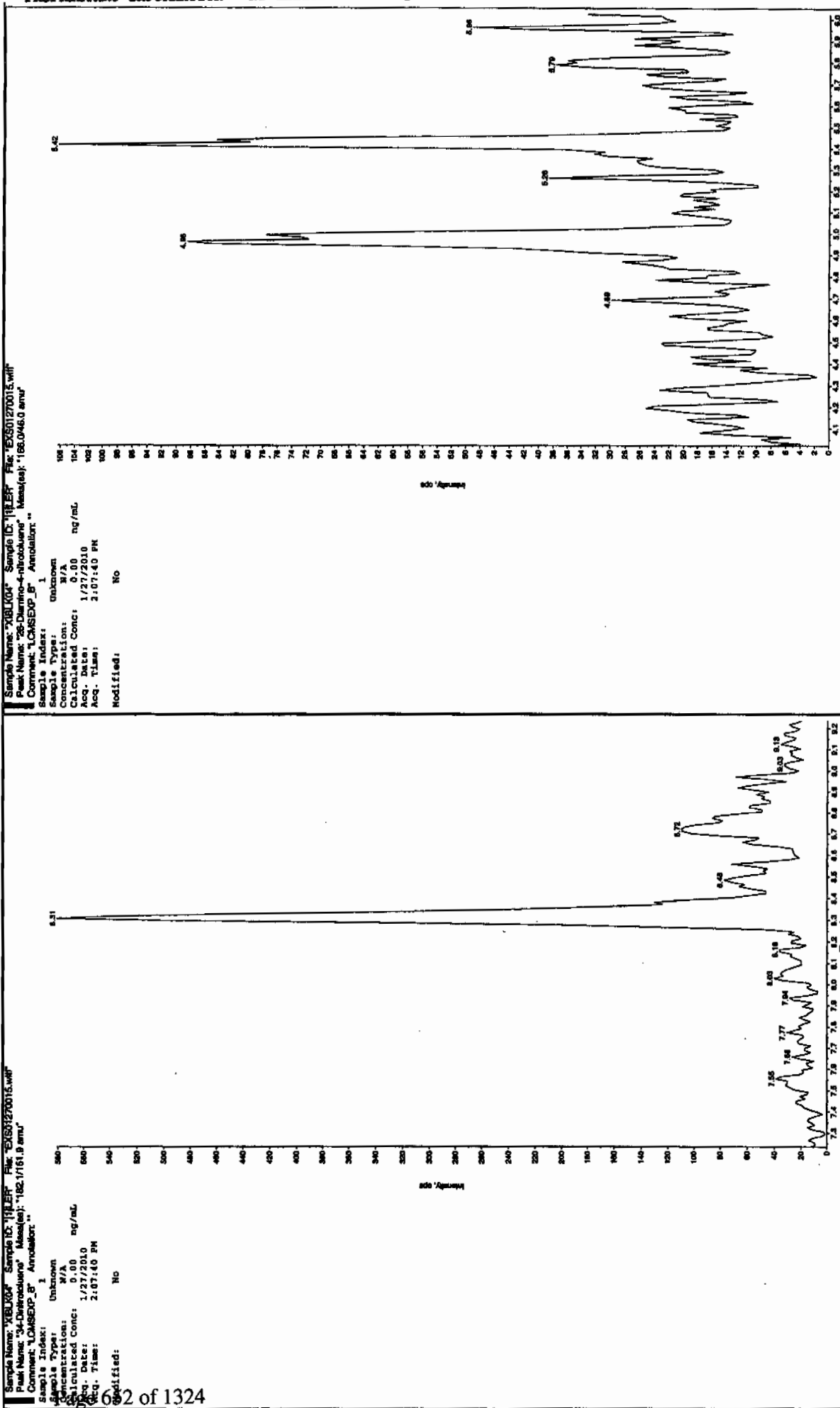
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/27/2010  
 Acq. Time: 2:07:40 PM  
 Modified: No

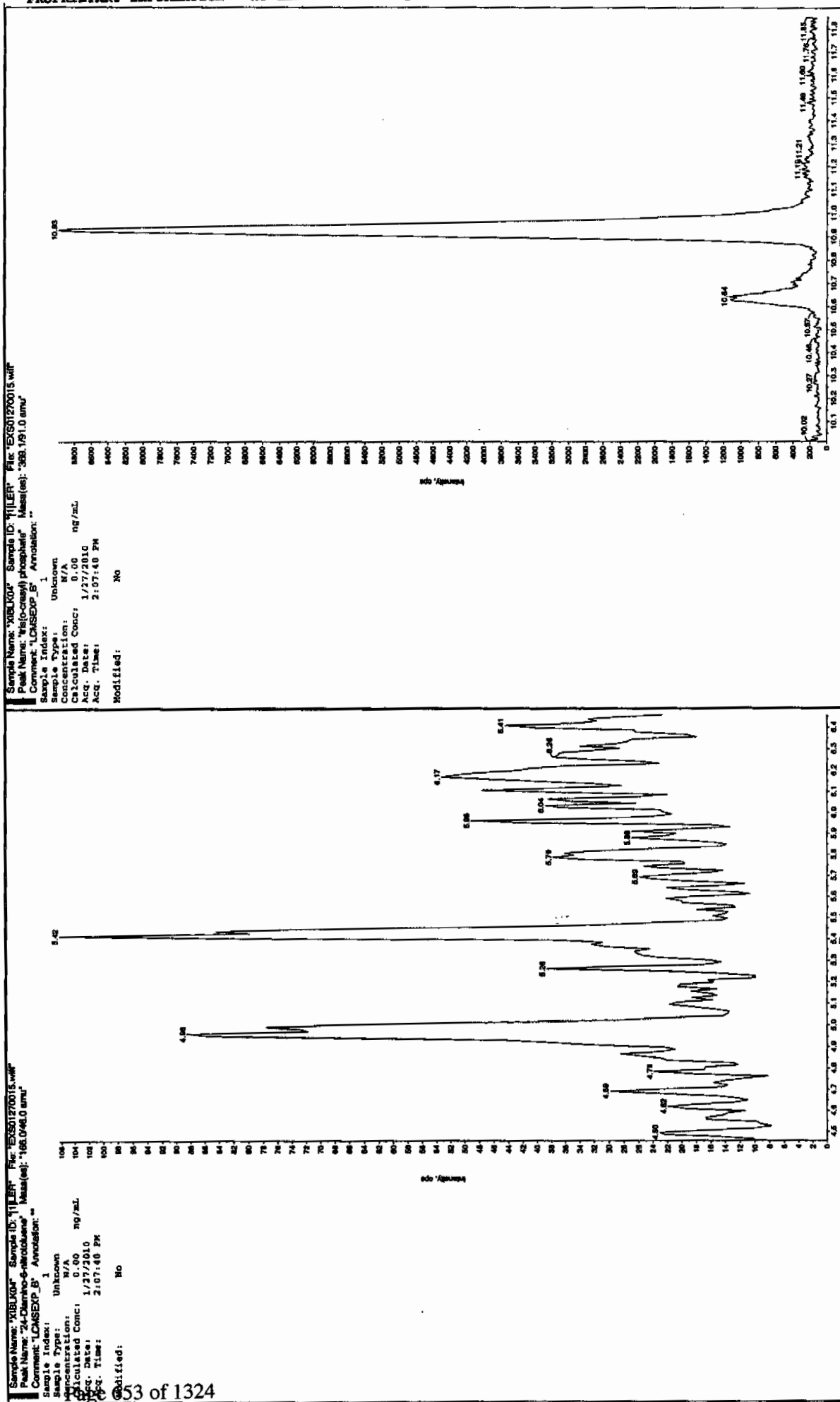


Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/27/2010  
 Acq. Time: 2:07:40 PM  
 Modified: No



Jan 01/28/10





4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1210

Lab Code: GEL

Lab Sample ID: XIBLK05

Analysis Date: 27-JAN-10 16:46

GEL Data File: EXS01270025.wiff

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

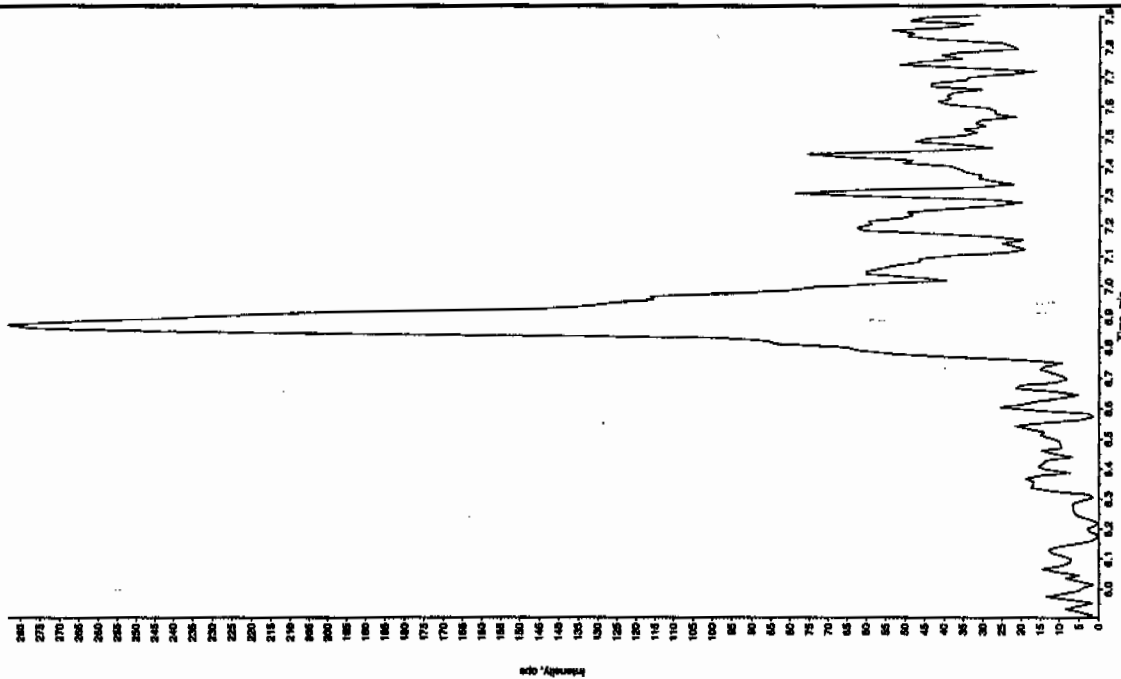
Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	4.47
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0



See 1128110

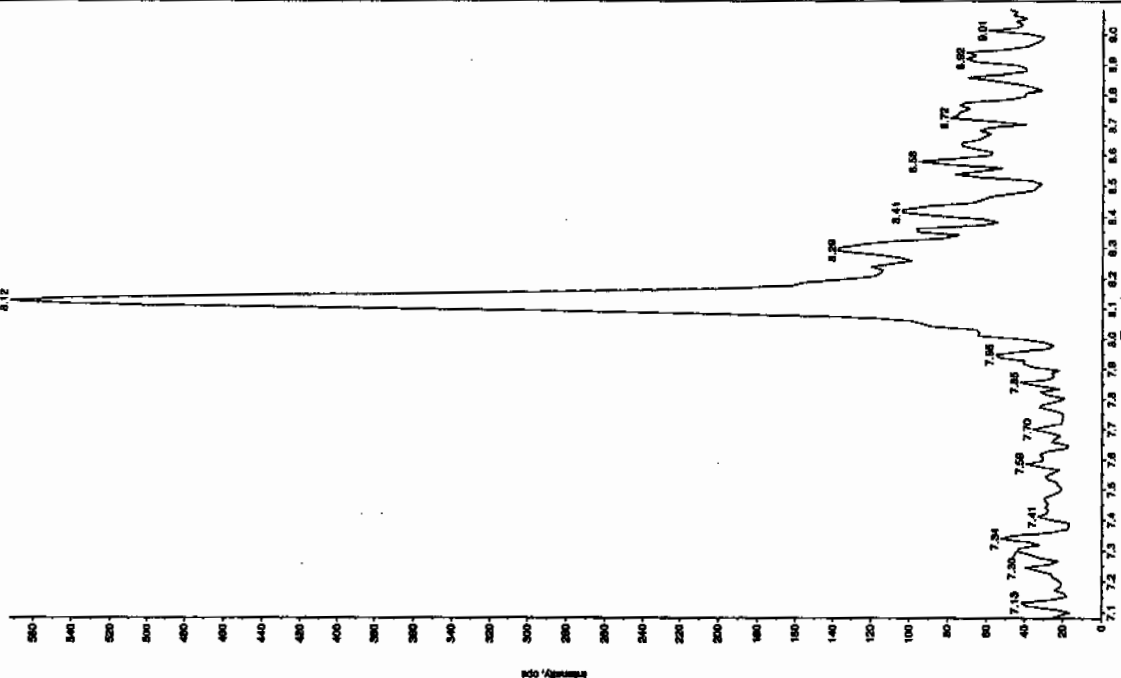
Sample Name: "XBL008" Sample ID: "HLEP" File: "EX001270023.will"  
 Peak Name: "ATB" Mass(es): "287.2004.9 amu"  
 Concentration: "0.00" Annotation: "1"

Sample Index: "Unknown"  
 Sample Type: "N/A"  
 Calculated Conc: "0.00" ng/mL  
 Acq. Date: "1/27/2010"  
 Acq. Time: "4:46:58 PM"  
 Modified: "No"

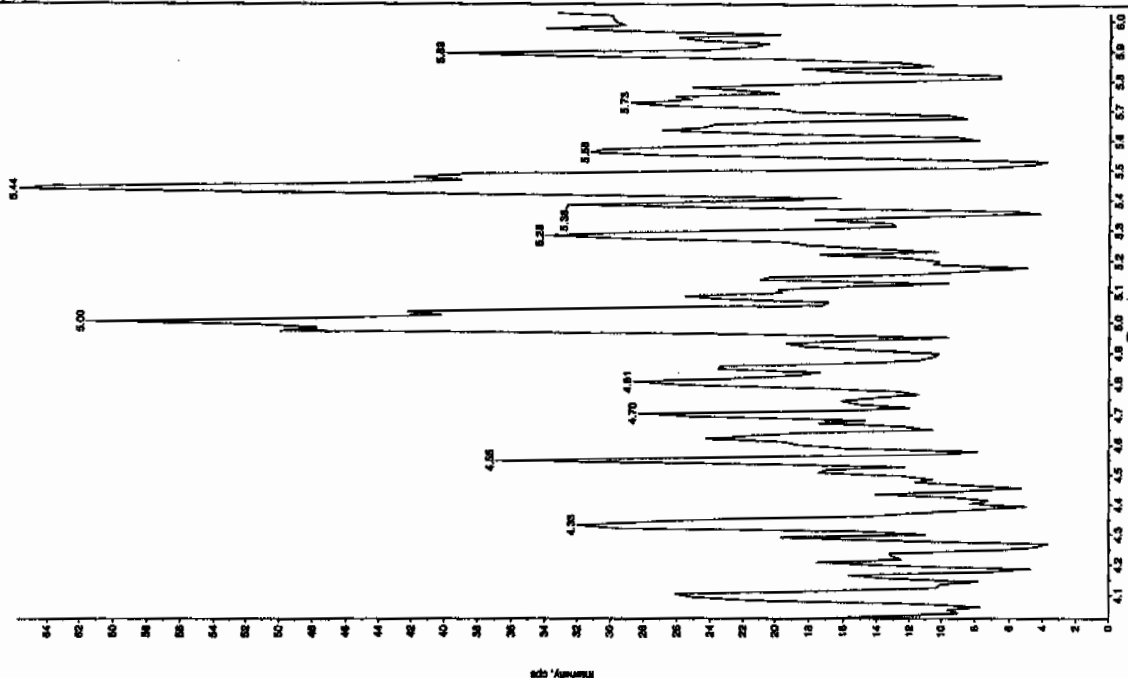


Sample Name: "XBL008" Sample ID: "HLEP" File: "EX001270023.will"  
 Peak Name: "38-Chloroquine" Mass(es): "382.046.0 amu"  
 Concentration: "0.00" Annotation: "1"

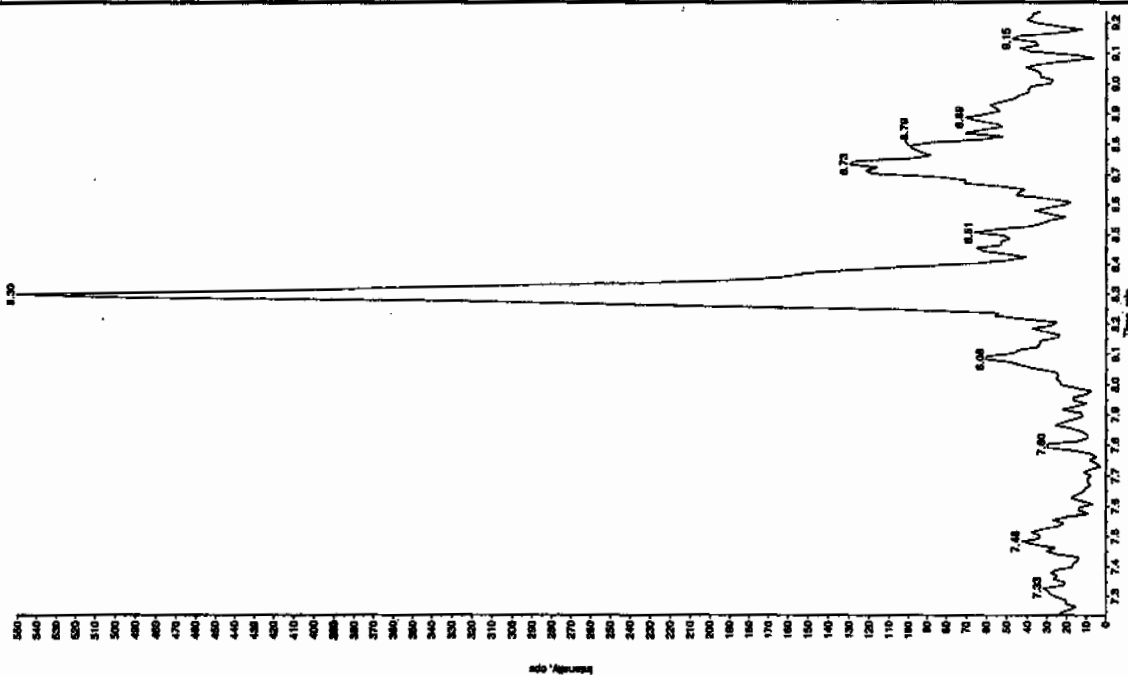
Sample Index: "Unknown"  
 Sample Type: "N/A"  
 Calculated Conc: "0.00" ng/mL  
 Acq. Date: "1/27/2010"  
 Acq. Time: "4:46:58 PM"  
 Modified: "No"



HW 0128110

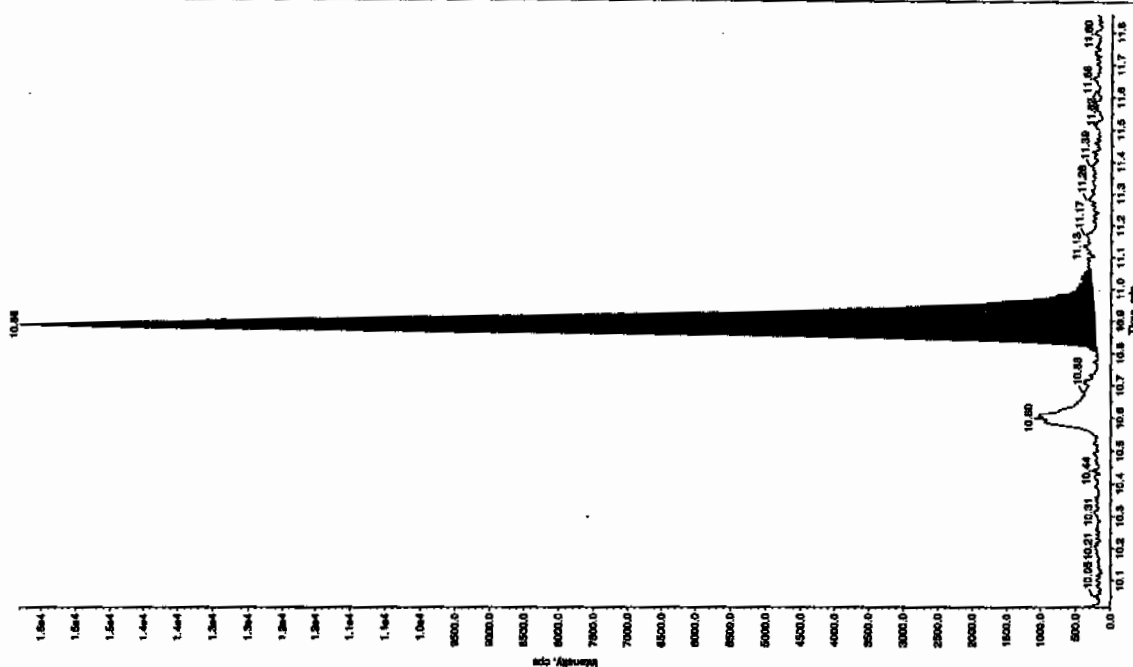


Sample Name: XRBK009 Sample ID: 111457 File: D6501270025.w  
Peak Name: "34-Dibenzotetra" Mass(es): 182.1/151.9 amu  
Comment: LCMSEXP\_B Annotation: --  
Sample Index: 1  
Sample Type: Unknown  
Concentration: N/A  
Calculated Conc: 3.72 ng/mL  
Peak: 1  
Acq. Time: 4.44:18 PM  
Modified: No



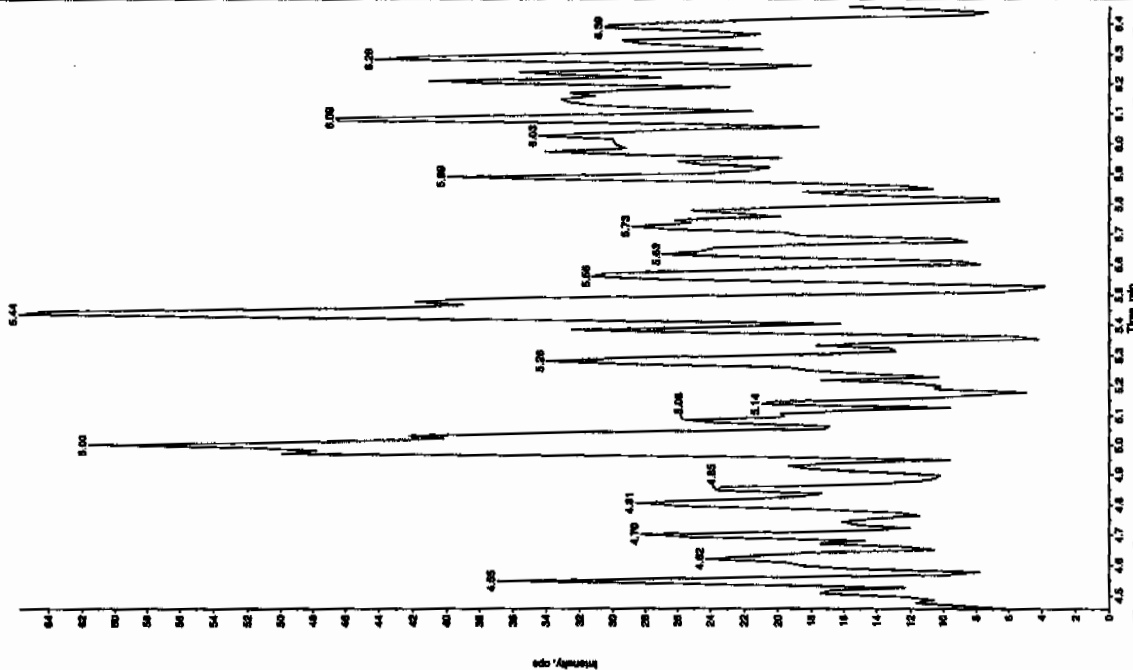
Sample Name: "XBL005" Sample ID: "TILER" File: "EX0501270025.wif"  
 Peak Name: "bis(o-cresyl) phosphate" Mass(es): "369.181.0 amu"  
 Comment: "LCMS-EXP\_B" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 4.47 ng/mL  
 Acq. Date: 1/27/2010  
 Acq. Time: 4:46:58 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 1.00e4 cps  
 Min. Peak Width: 3.00 sec  
 Smoothing Width: 30.0 points  
 RT Window: 30.0 sec  
 Expected RT: 10.9 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.9 min  
 Area: 5.96e+004 counts  
 Weight: 15576.744 cps  
 Start Time: 10.8 min  
 End Time: 11.1 min



Sample Name: "XBL005" Sample ID: "TILER" File: "EX0501270025.wif"  
 Peak Name: "24-Dimethoxy-4-nitrotoluene" Mass(es): "186.046.0 amu"  
 Comment: "LCMS-EXP\_B" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 1/27/2010  
 Acq. Time: 4:46:58 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

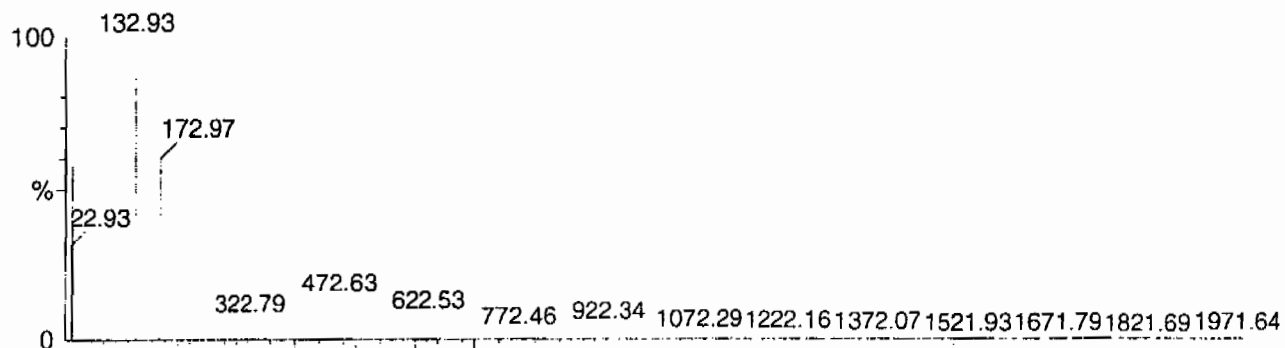
Calibration Report - MS1 Static

Page 1 of 1

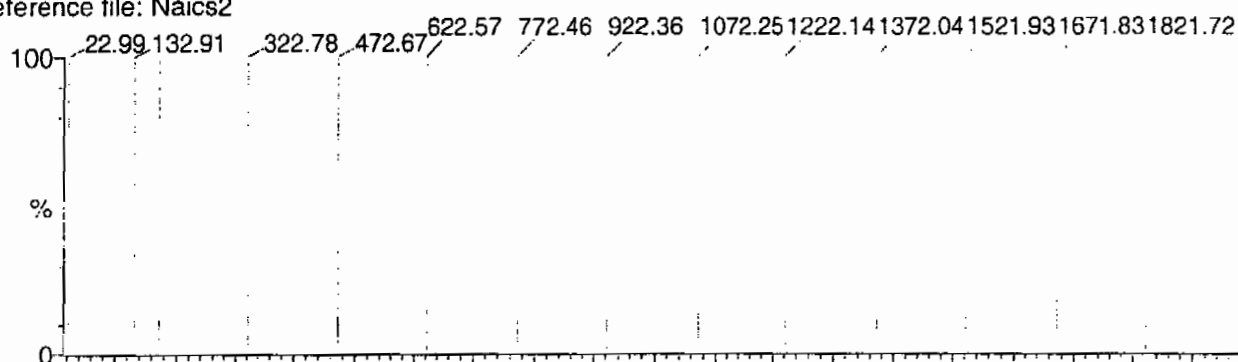
Printed: Fri Aug 25 10:50:01 2006

Data file: STATMS1 - Calibrated

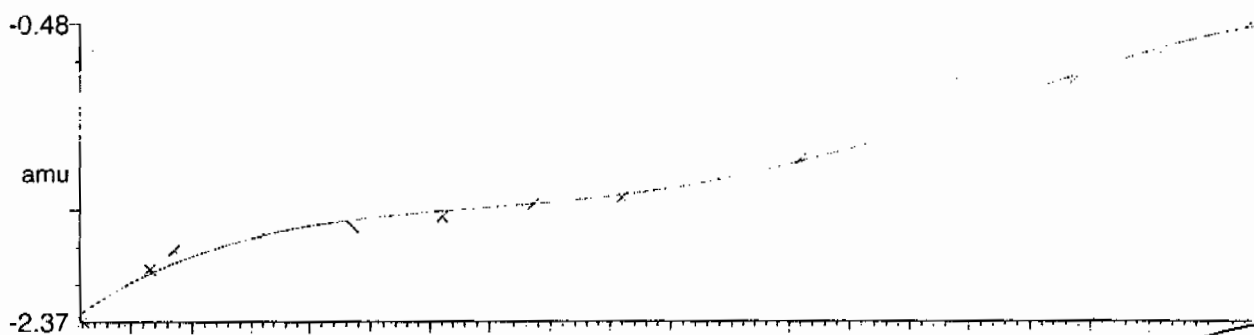
15 matches of 15 tested references



Reference file: Naics2

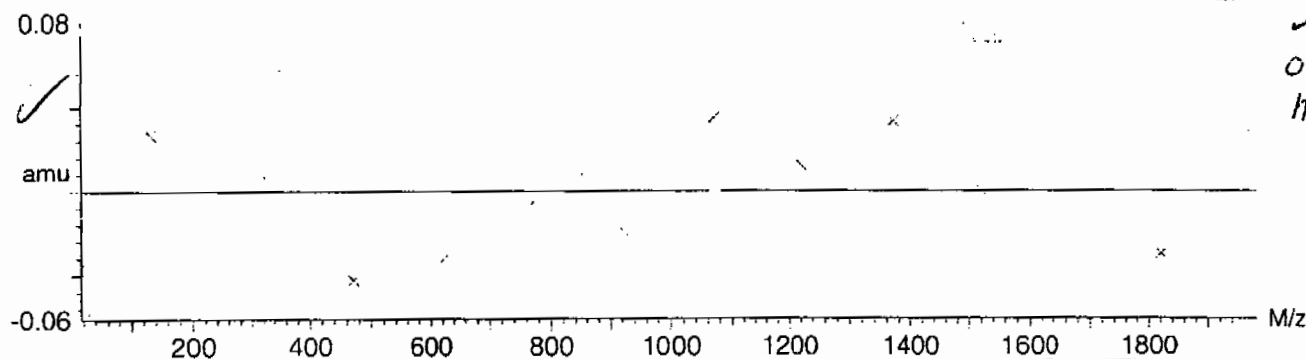


Mass difference (Raw - Ref mass)



Residuals

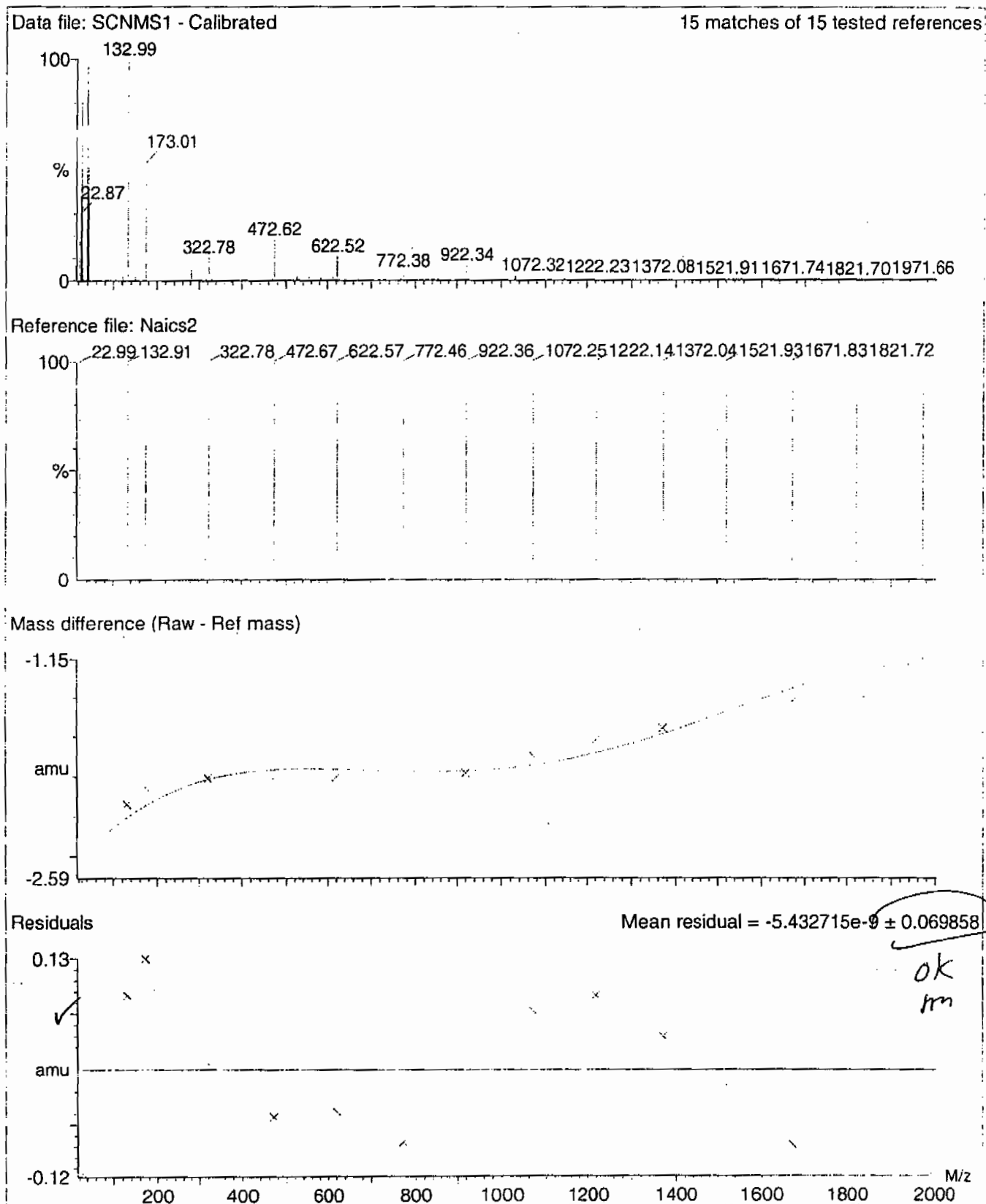
Mean residual =  $-1.673470 \times 10^{-9} \pm 0.036953$



Calibration Report - MS1 Scanning

Page 1 of 1

Printed: Fri Aug 25 10:51:06 2006



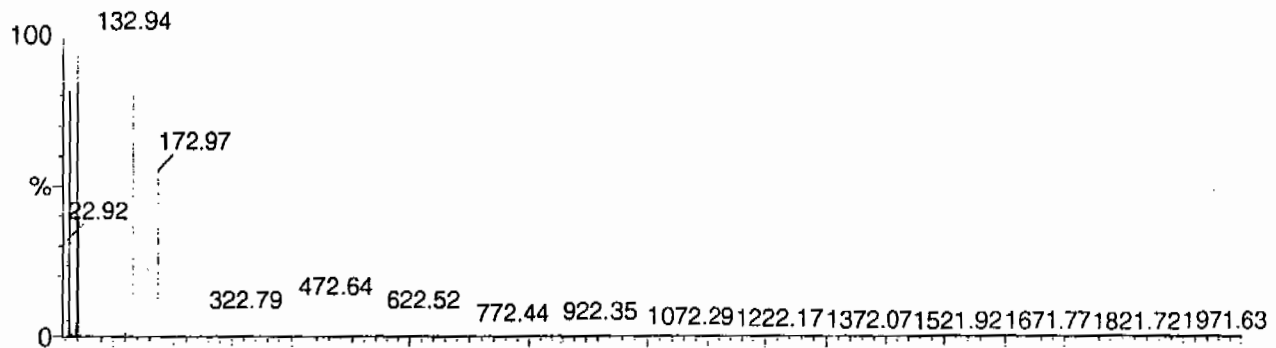
Calibration Report - MS1 Scan Speed Compensation

Page 1 of 1

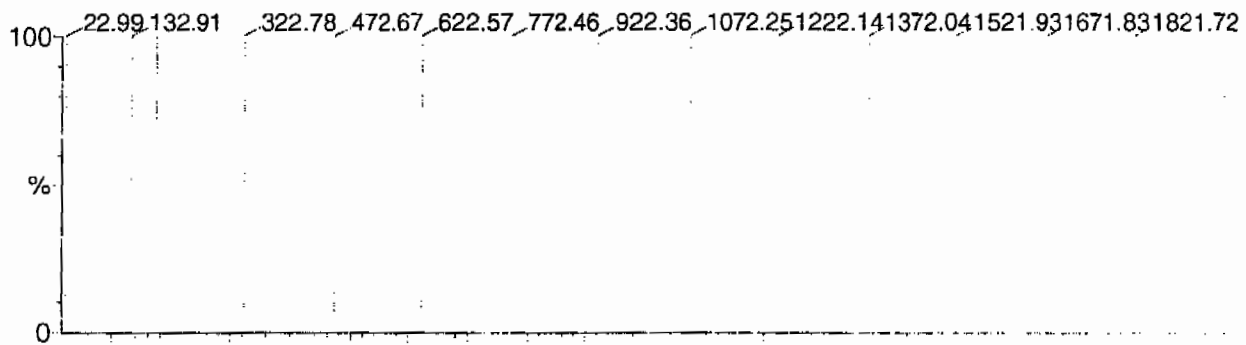
Printed: Fri Aug 25 10:52:01 2006

Data file: FASTMS1 - Calibrated

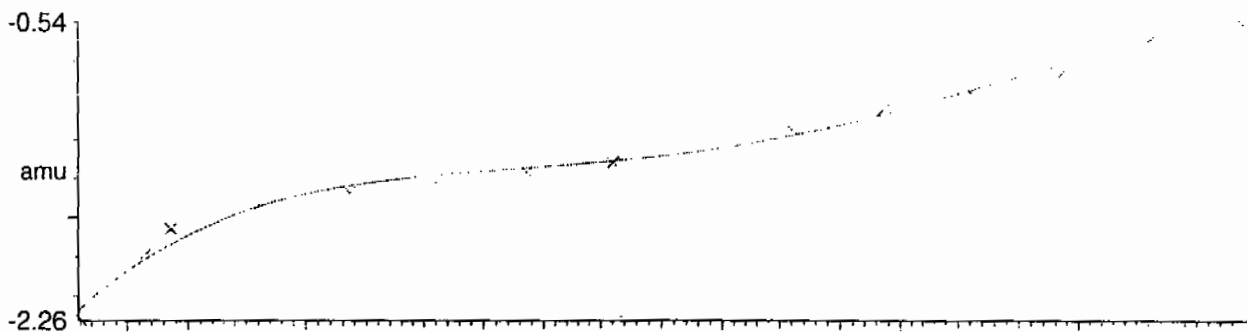
15 matches of 15 tested references



Reference file: Naics2

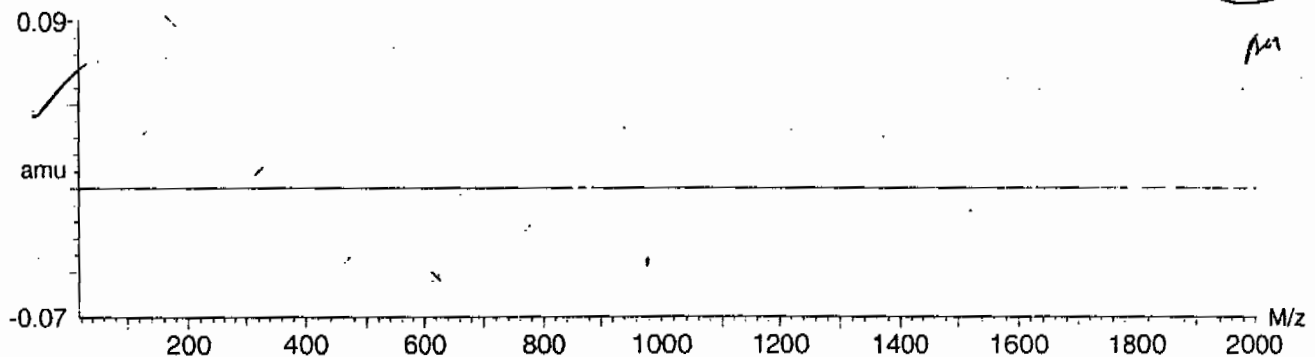


Mass difference (Raw - Ref mass)



Residuals

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



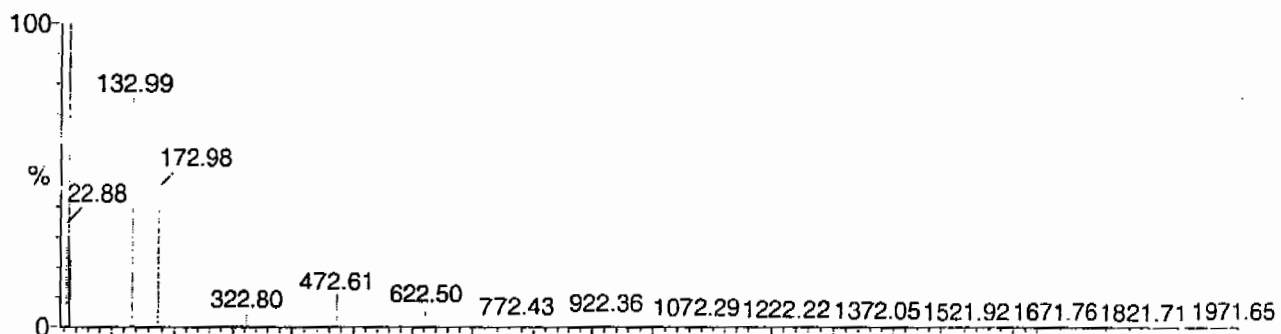
Calibration Report - MS2 Static

Page 1 of 1

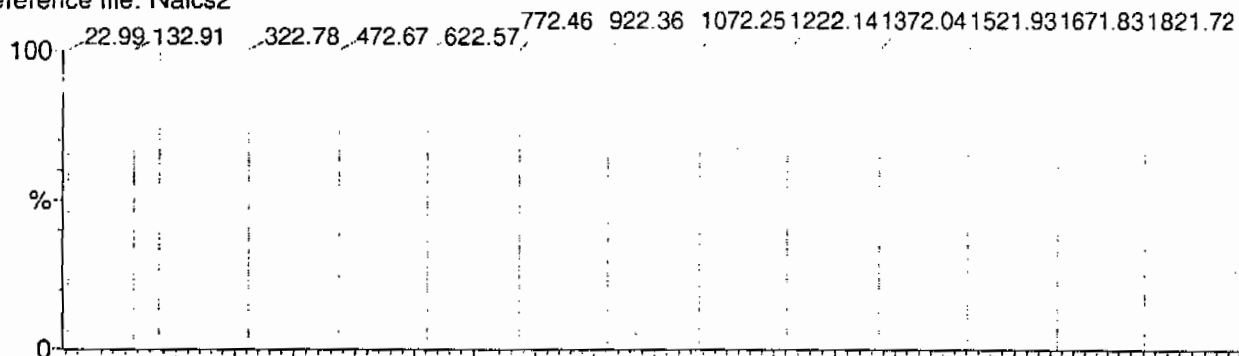
Printed: Fri Aug 25 10:52:54 2006

Data file: STATMS2 - Calibrated

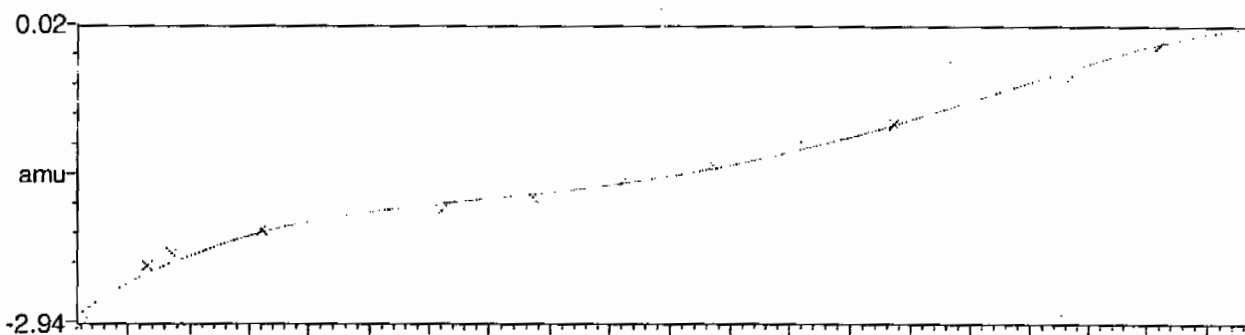
15 matches of 15 tested references



Reference file: Naics2

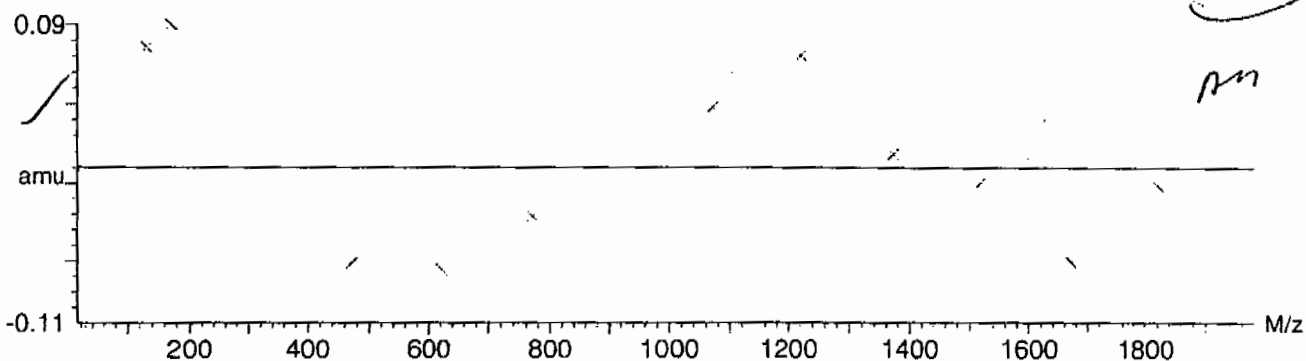


Mass difference (Raw - Ref mass)



Residuals

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





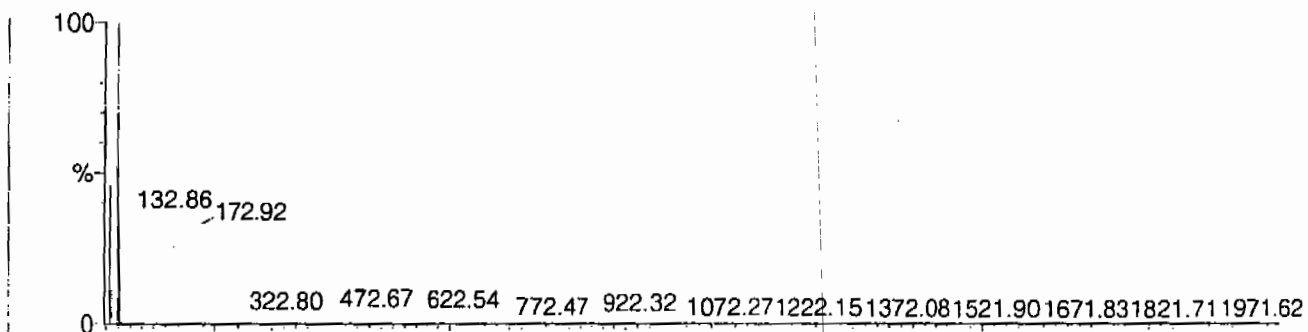
Calibration Report - MS2 Scanning

Page 1 of 1

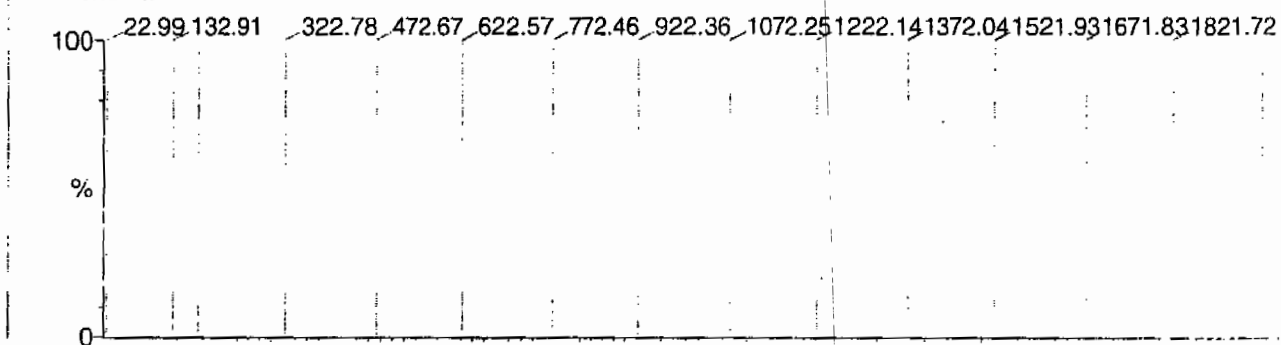
Printed: Fri Aug 25 10:54:00 2006

Data file: SCNMS2 - Calibrated

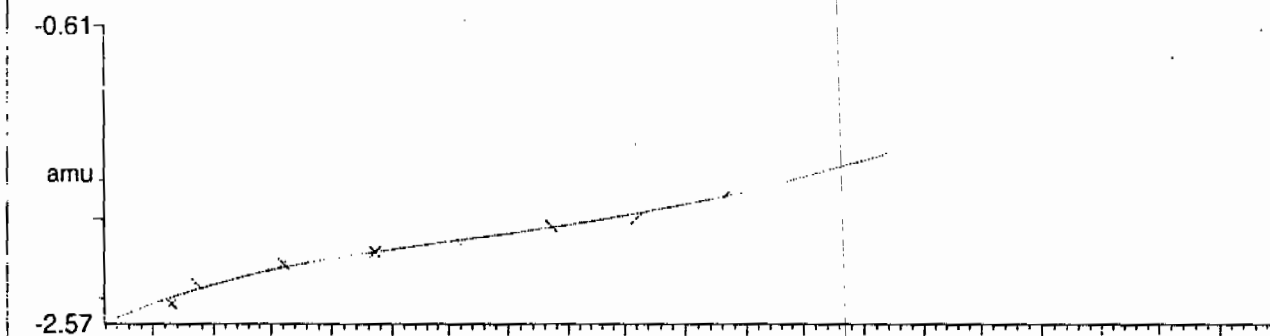
14 matches of 15 tested references



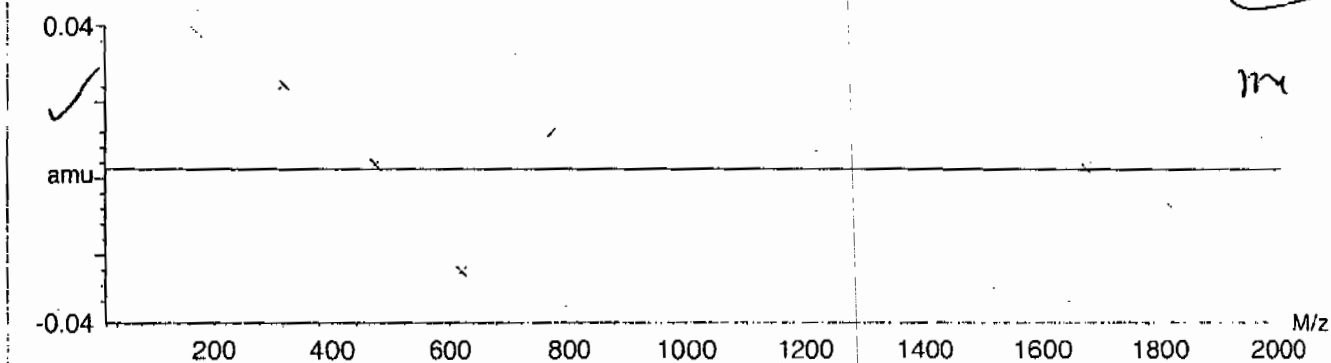
Reference file: Naics2



Mass difference (Raw - Ref mass)



Residuals



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

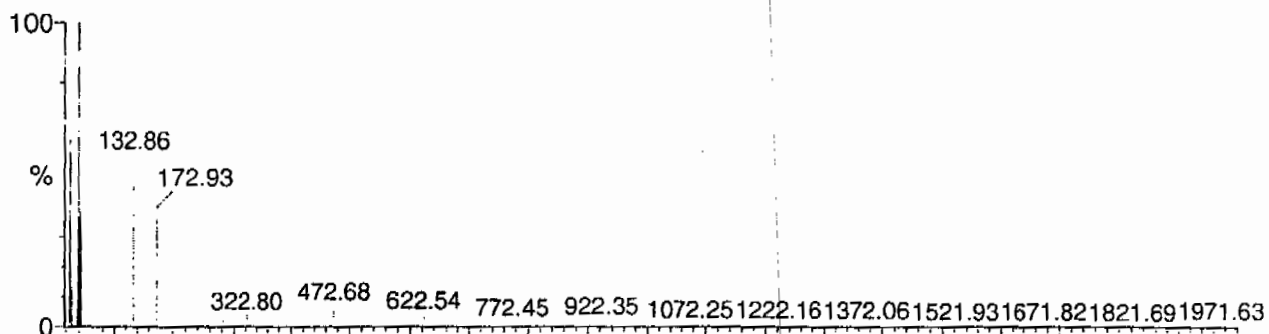
Calibration Report - MS2 Scan Speed Compensation

Page 1 of 1

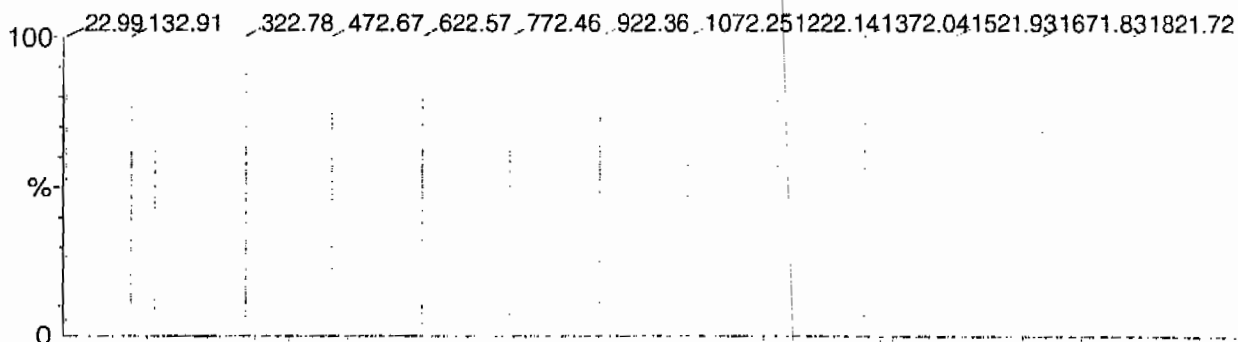
Printed: Fri Aug 25 10:54:54 2006

Data file: FASTMS2 - Calibrated

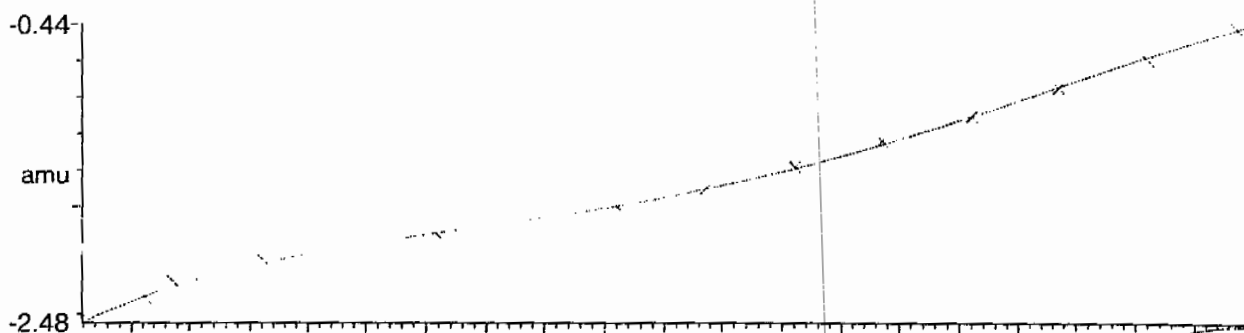
14 matches of 15 tested references



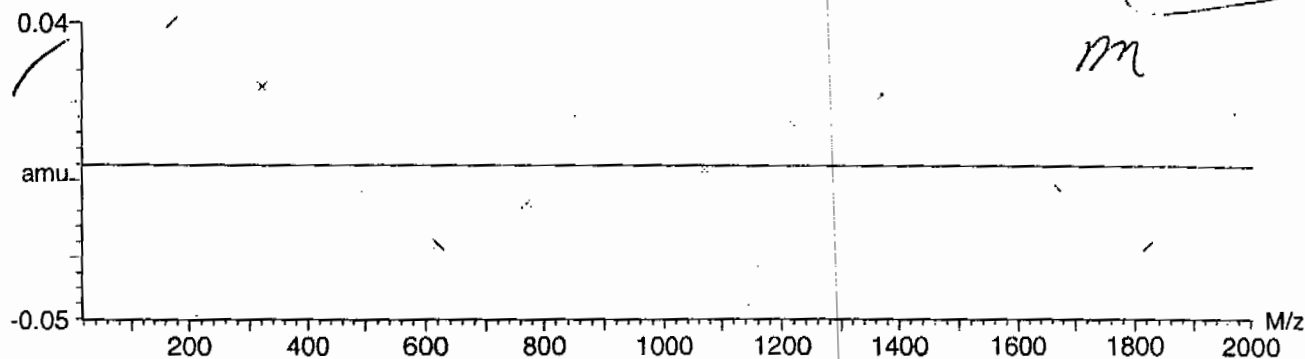
Reference file: Naics2



Mass difference (Raw - Ref mass)



Residuals



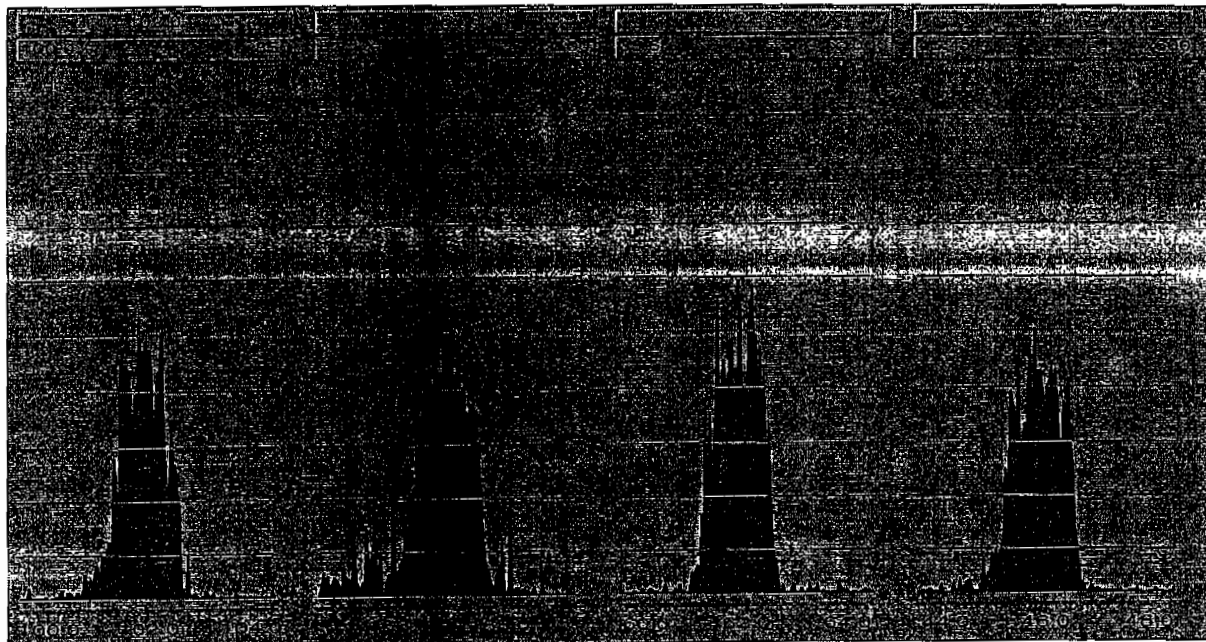
Mean residual =  $-6.785350 \times 10^{-9} \pm 0.023134$

Quattro Micro Tune Parameters

Page 1

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

Printed : Mon Jan 25 11:16:26 2010



# High Explosives Internal Standard Summary

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1210

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 941657	29-jan-10 22:04	EXP0125218a	2677.71	11.895	14774.3	17.158
LCS for batch 941657	29-jan-10 22:34	EXP0125219a	2752.41	11.895	14337	17.135
RE12-10-7243	29-jan-10 23:33	EXP0125221a	2542.88	11.895	14093.8	17.158
RE12-10-7243(244599001MS)	30-jan-10 00:03	EXP0125222a	2639.85	11.9	13656	17.159
RE12-10-7243(244599001MSD)	30-jan-10 00:32	EXP0125223a	2702.09	11.896	15164.9	17.158
RE12-10-7240	30-jan-10 01:02	EXP0125224a	2436.97	11.9	14579	17.159
RE12-10-7241	30-jan-10 01:31	EXP0125225a	2599.6	11.907	14389.4	17.157
RE12-10-7237	30-jan-10 02:01	EXP0125226a	2664.59	11.9	15787.3	17.159
RE12-10-7239	30-jan-10 02:30	EXP0125227a	2652.18	11.895	15263	17.157
RE12-10-7238	30-jan-10 04:28	EXP0125231a	2898.03	11.894	13769.1	17.161
RE12-10-7242	30-jan-10 04:58	EXP0125232a	2665.72	11.894	14774.7	17.161
RE12-10-7236	30-jan-10 05:27	EXP0125233a	2653.25	11.894	14098.1	17.157
RE12-10-7252	30-jan-10 05:57	EXP0125234a	2567.26	11.892	14068.9	17.151
RE12-10-7253	30-jan-10 06:26	EXP0125235a	2782.4	11.895	14976.9	17.161
RE12-10-7254	30-jan-10 06:56	EXP0125236a	2689.36	11.9	14545.6	17.159
RE12-10-7255	30-jan-10 07:26	EXP0125237a	2683.34	11.898	14612.6	17.161
RE12-10-7276	30-jan-10 07:55	EXP0125238a	2731.89	11.921	14759.2	17.179

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: RE12-10-7243

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599001

Sample Amount 2

Moisture: 5.8

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125221a

Date Analyzed: 29-JAN-10 23:33

Units: ug/kg

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

\*Concentration =

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

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA5.qld, Time: Sat Jan 30 10:06:54 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125221a

Date: 29-Jan-2010

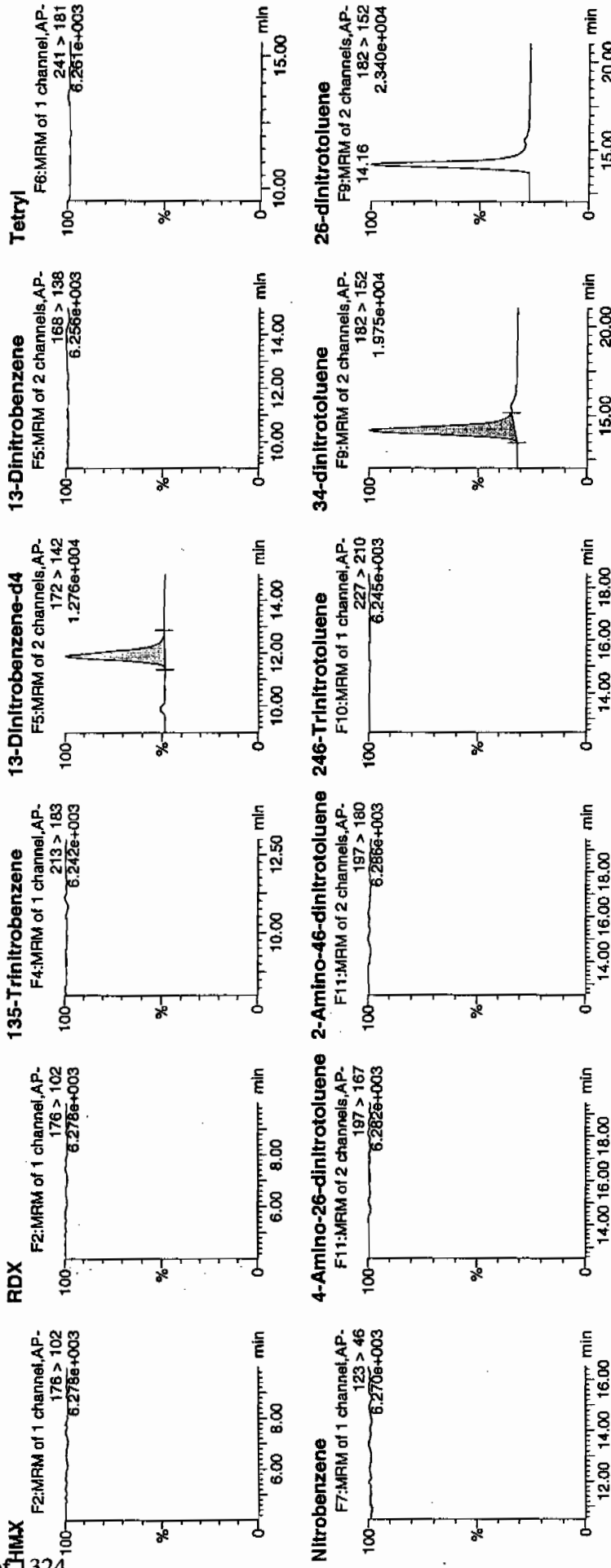
Time: 23:33:42

ID: 244599001

Yial: 3:5,D

*12/10*

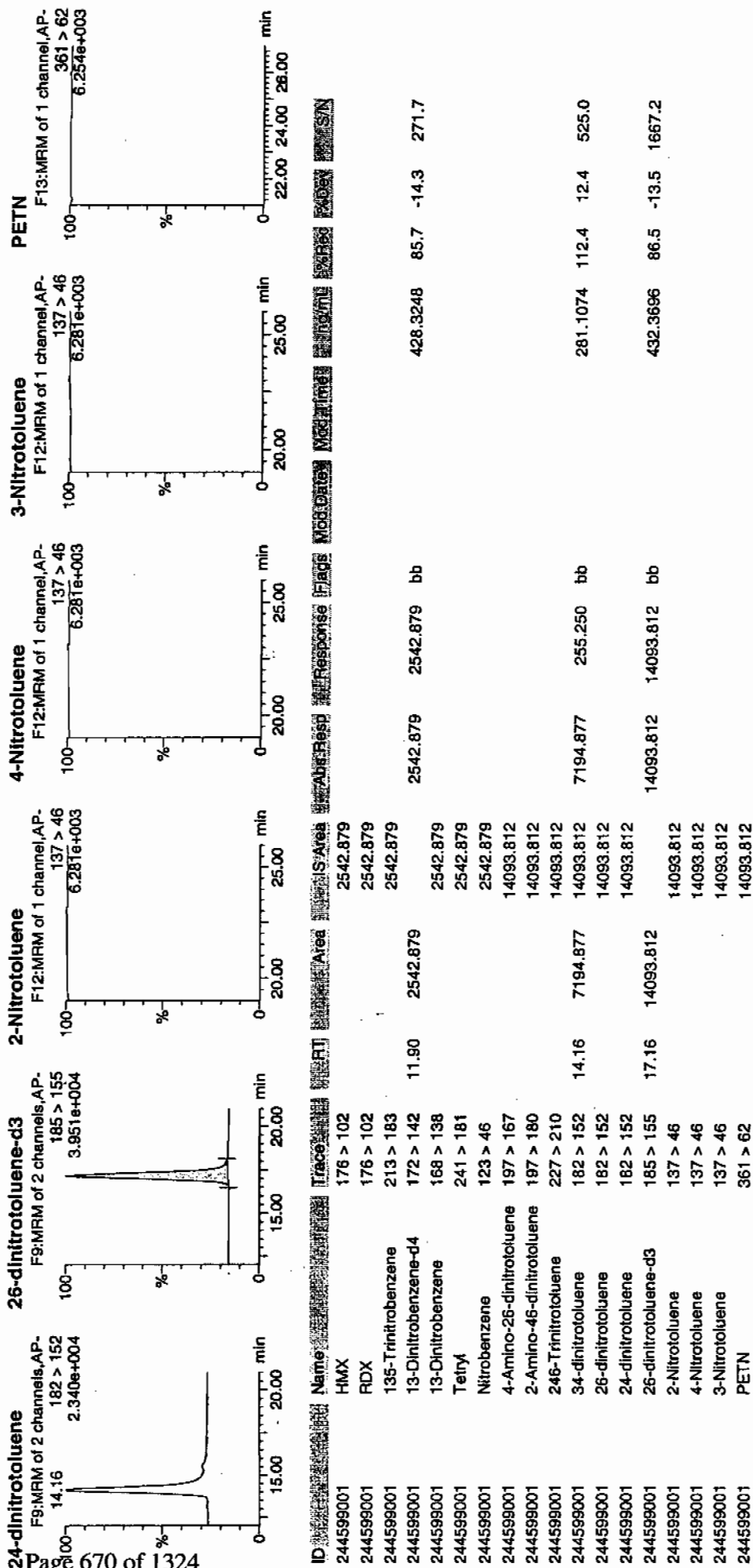
*WAW 941688 | 8000 | 21*



*Handwritten note: 01/31/10*

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA5.qid, Time: Sat Jan 30 10:06:54 2010





1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7243

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599001

Sample Amount 2

Moisture: 5.8

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250101.wiff

Date Analyzed: 26-JAN-10 12:43

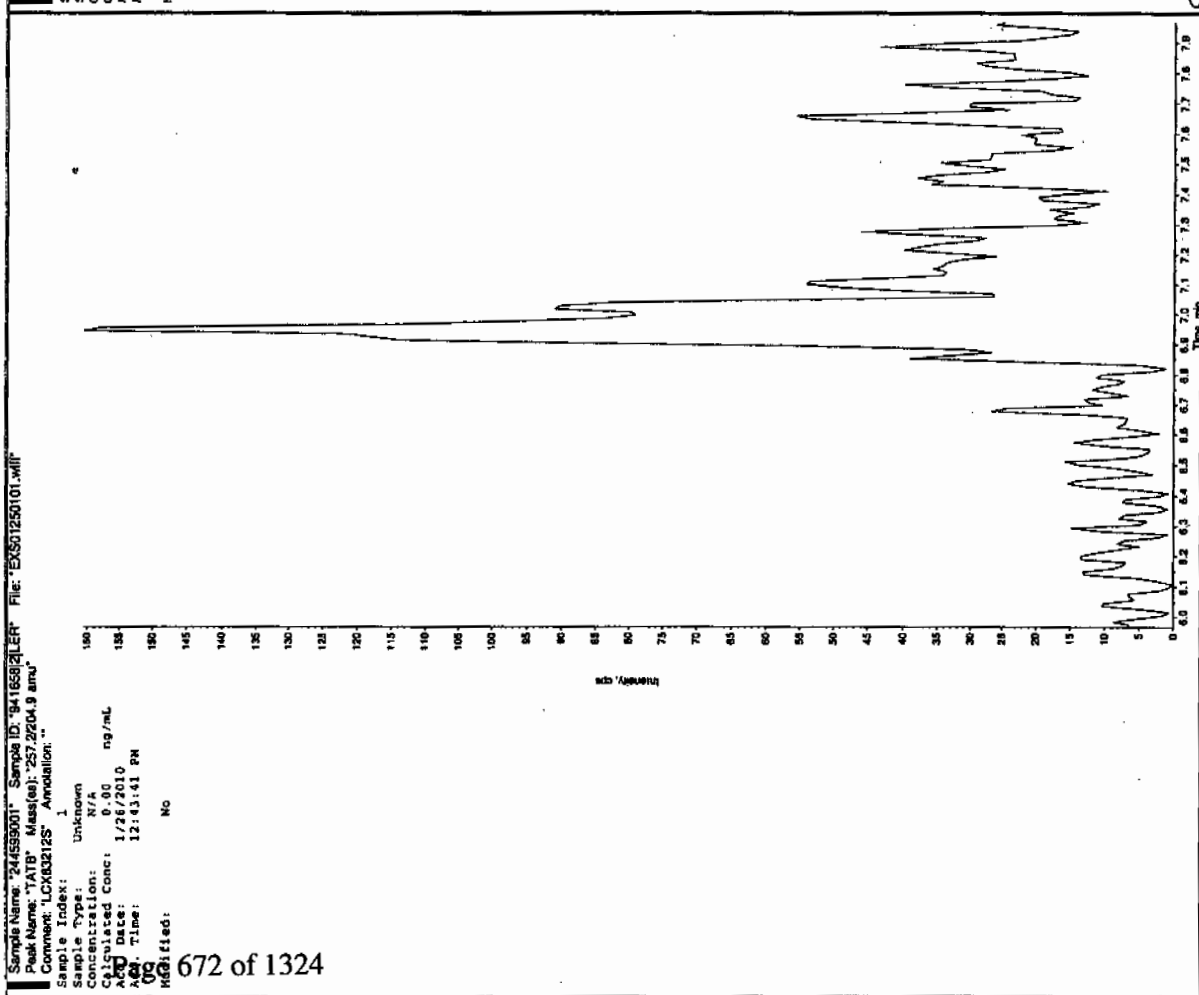
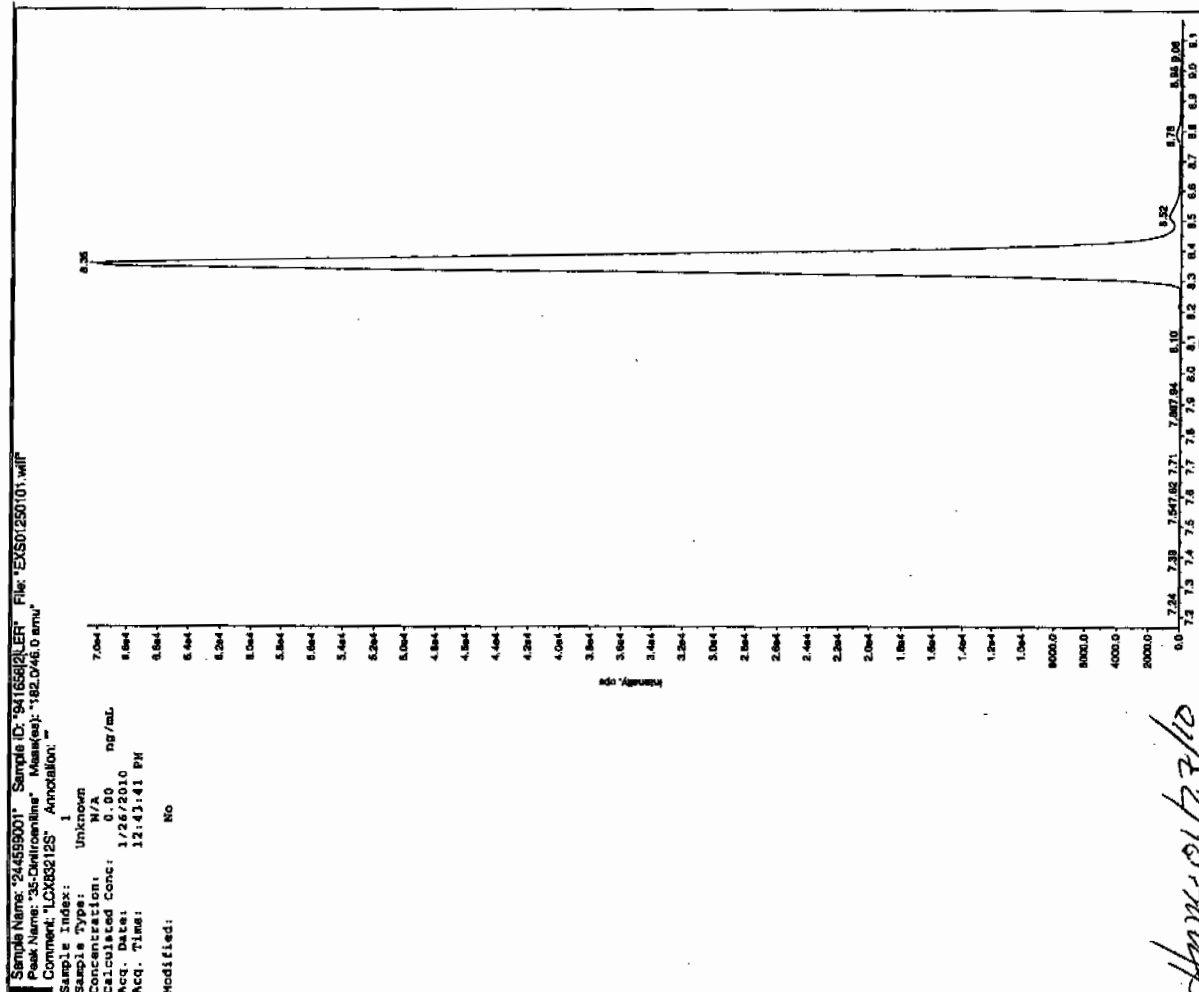
Units: ug/kg

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

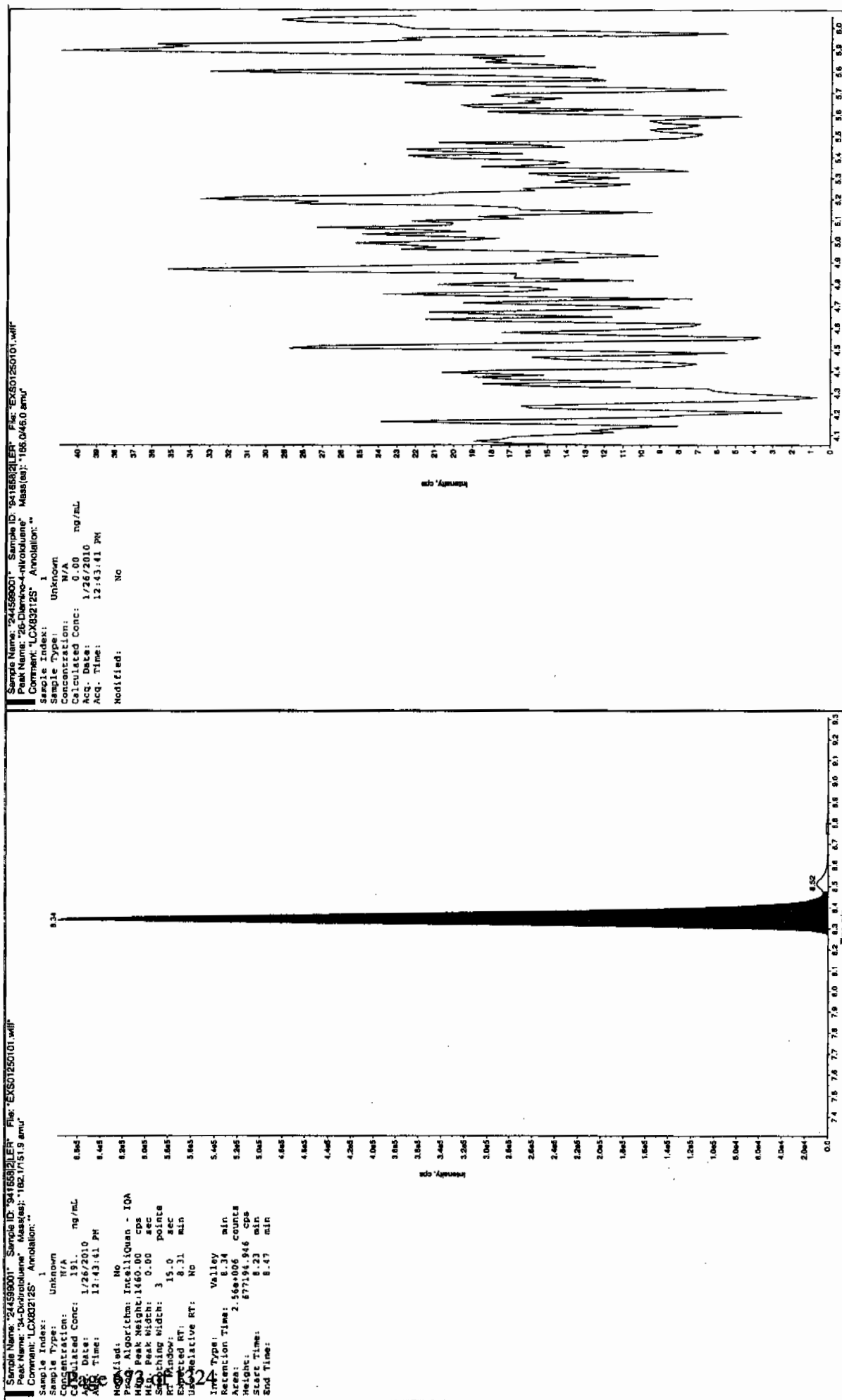
\*Concentration =

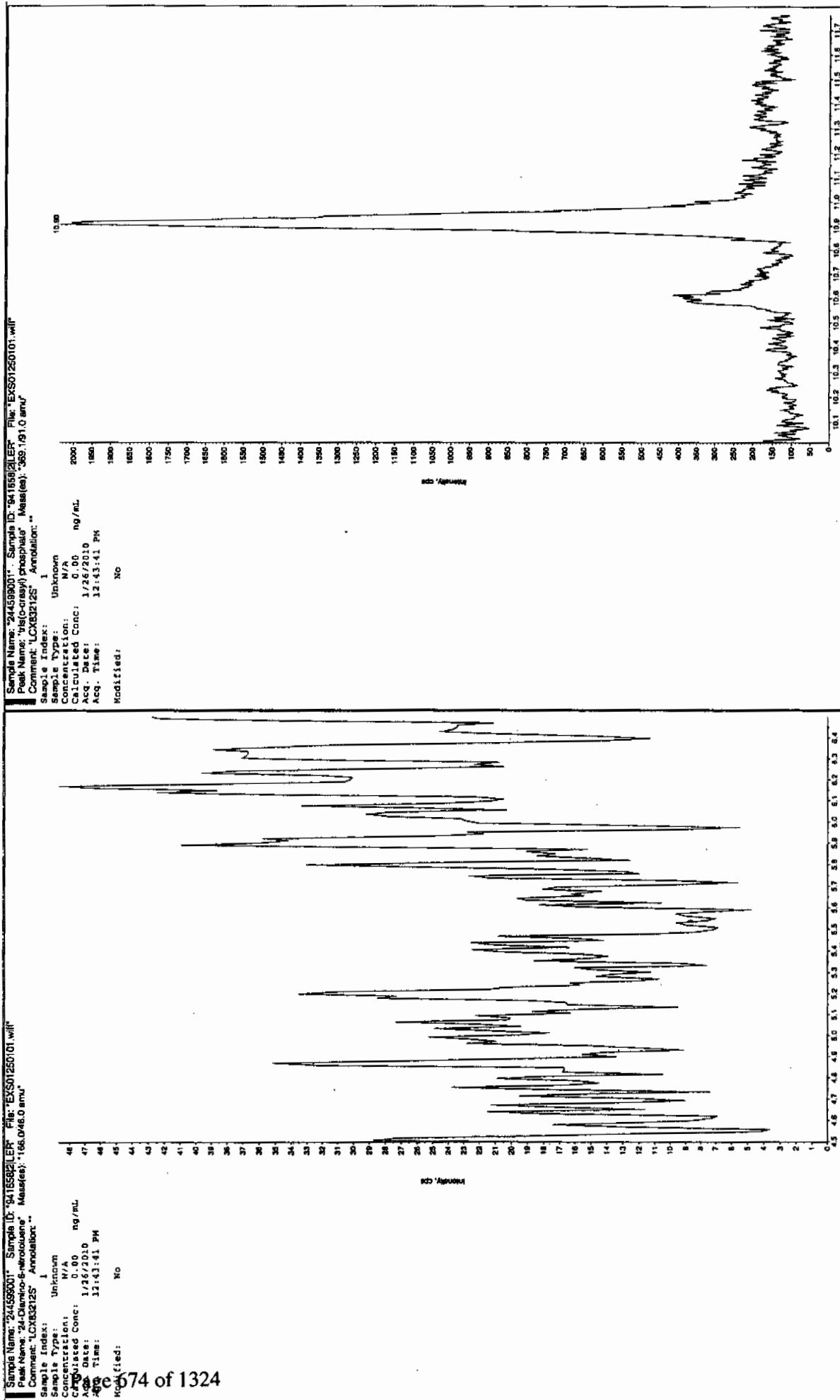
Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

dan 112710



dan 0112710





1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7240

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599002

Sample Amount 2

Moisture: 13.5

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125224a

Date Analyzed: 30-JAN-10 01:02

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

Printed: Sat Jan 30 10:07:34 2010, Page 35 of 71

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA5.qld, Time: Sat Jan 30 10:06:54 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125224a

Date: 30-Jan-2010

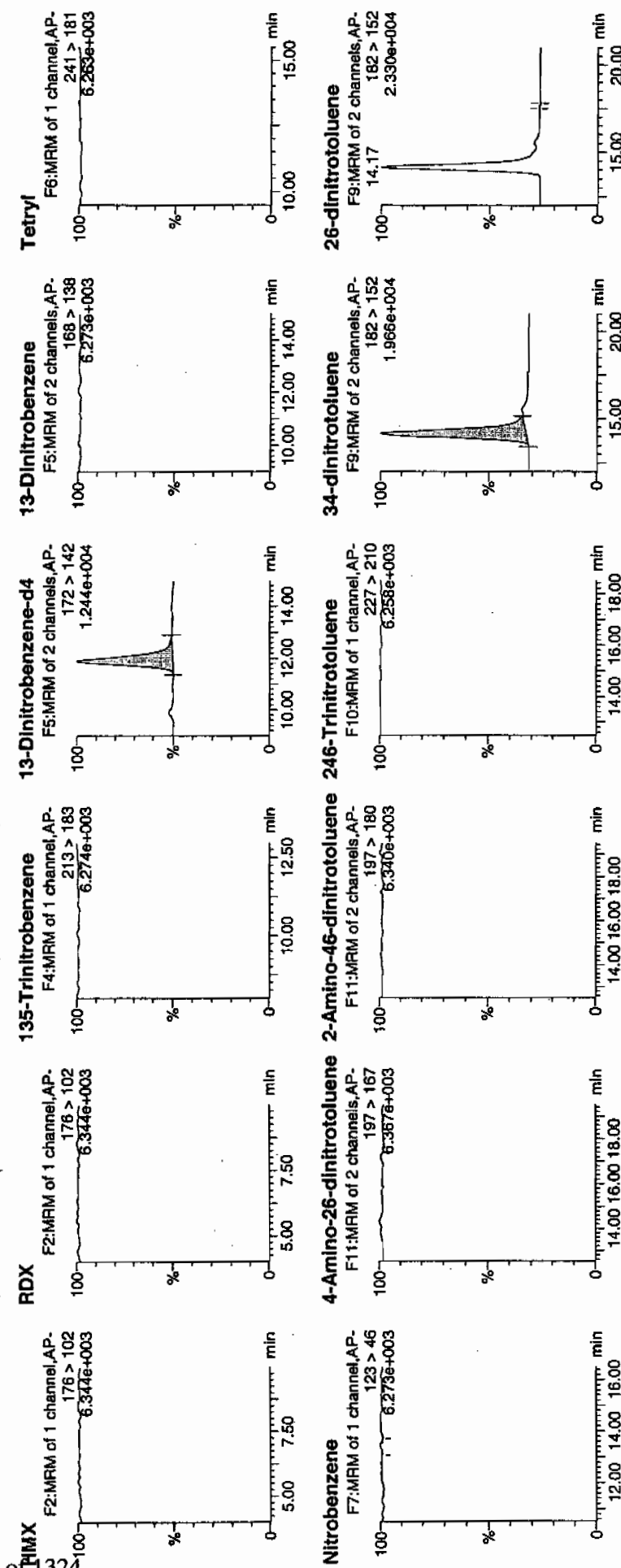
Time: 01:02:08

ID: 244599002

Vial: 3:6.A

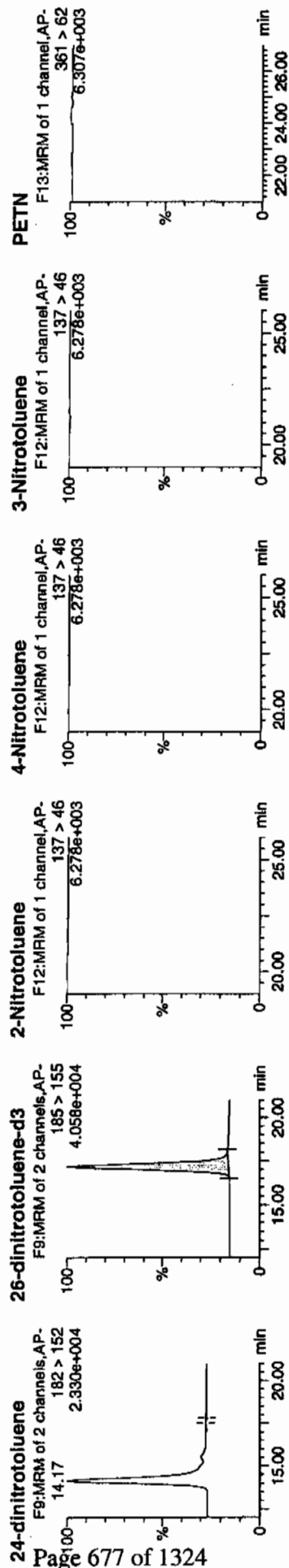
LAU-941658 / Soua / 21

1/24/10



Ham 01/31/10

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA5.qld, Time: Sat Jan 30 10:06:54 2010



ID	Name	Trace	Area	IS:Area	Abs:Resp	Flags	Mod:Time	Mod:Date	Mod:User
244599002	HMX	176 > 102	2436.967	2436.967					
244599002	RDX	176 > 102	2436.967	2436.967					
244599002	135-Trinitrobenzene	213 > 183	2436.967	2436.967					
244599002	13-Dinitrobenzene-d4	172 > 142	11.90	2436.967	2436.967	bb		410.4849	82.1
244599002	13-Dinitrobenzene	168 > 138		2436.967					127.2
244599002	Tetryl	241 > 181		2436.967					
244599002	Nitrobenzene	123 > 46		2436.967			MM- 30-Jan-10 09:57:37		
244599002	4-Amino-26-dinitrotoluene	197 > 167		14578.969					
244599002	2-Amino-46-dinitrotoluene	197 > 180		14578.969					
244599002	246-Trinitrotoluene	227 > 210		14578.969					
244599002	34-dinitrotoluene	182 > 152	14.17	7152.197	7152.197	bb		270.1407	108.1
244599002	26-dinitrotoluene	182 > 152		14578.969			MM- 30-Jan-10 10:02:25		
244599002	24-dinitrotoluene	182 > 152		14578.969			MM- 30-Jan-10 10:04:36		
244599002	26-dinitrotoluene-d3	185 > 155	17.16	14578.969	14578.969	bb		447.2532	89.5
244599002	2-Nitrotoluene	137 > 46		14578.969					2771.0
244599002	4-Nitrotoluene	137 > 46		14578.969					
244599002	3-Nitrotoluene	137 > 46		14578.969					
244599002	PETN	361 > 62							

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7240

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599002

Sample Amount 2

Moisture: 13.5

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250104.wiff

Date Analyzed: 26-JAN-10 13:30

Units: ug/kg

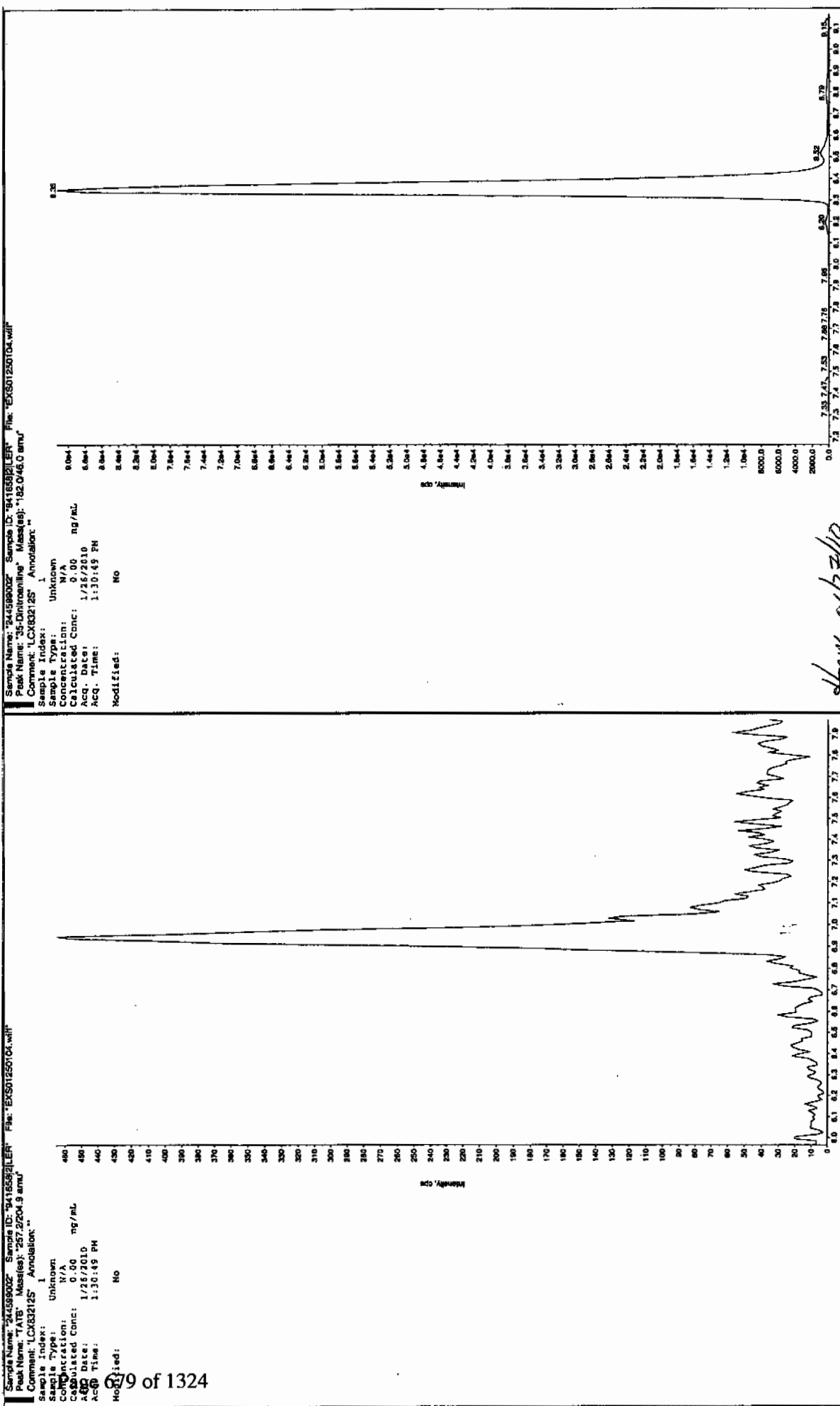
Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

\*Concentration =

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



Run 127110

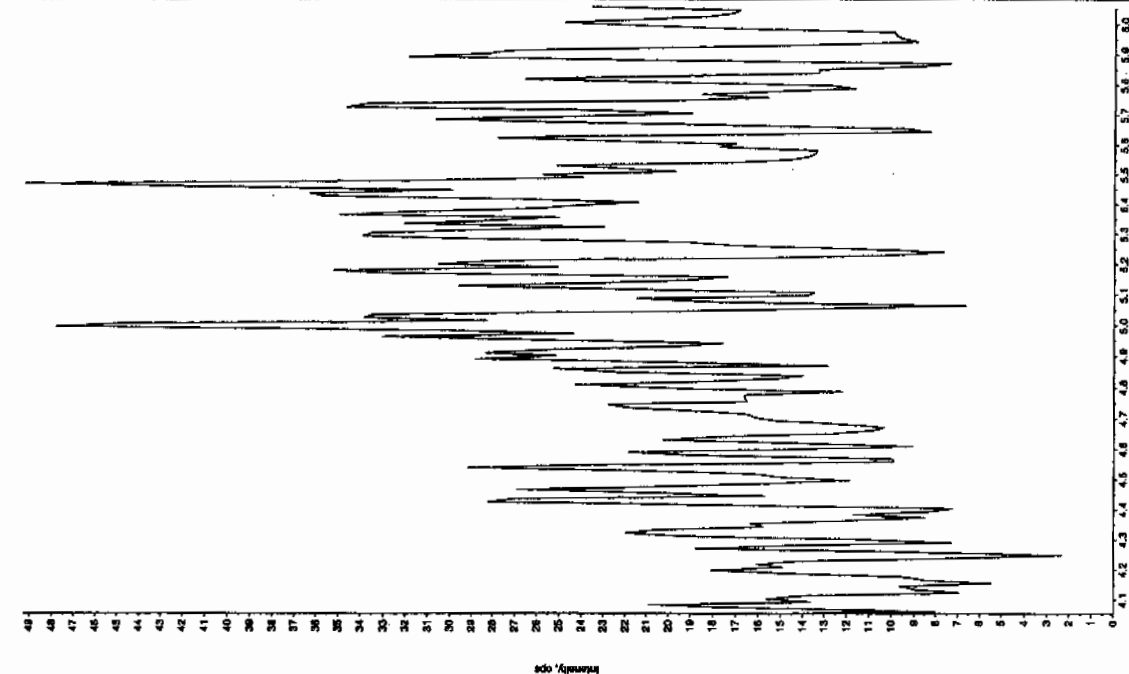
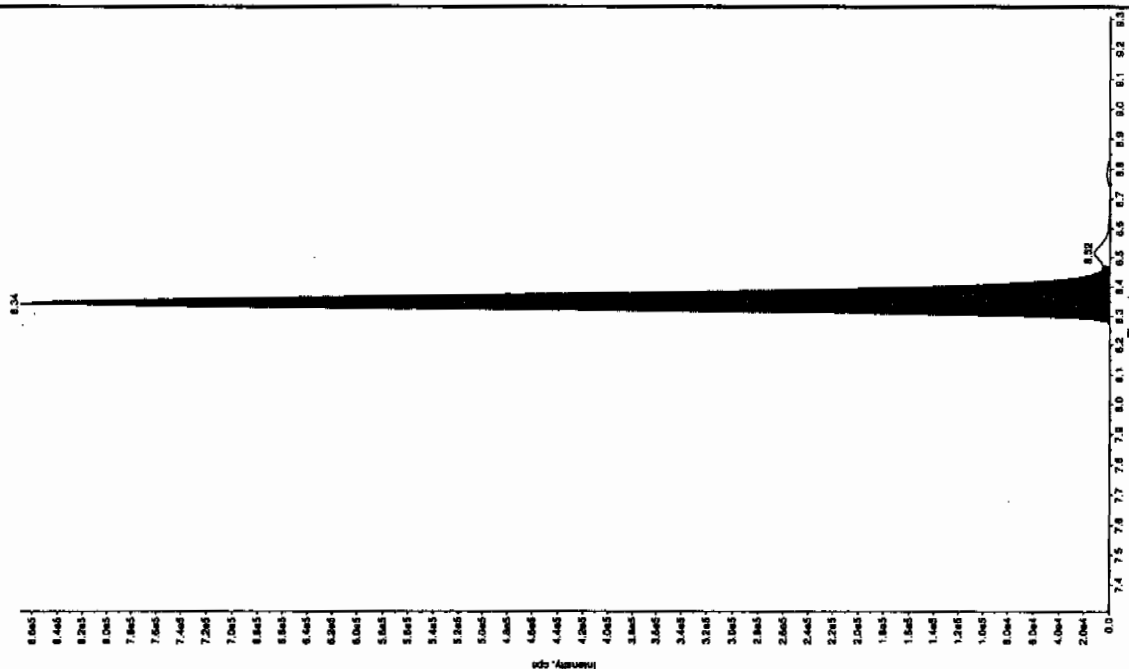


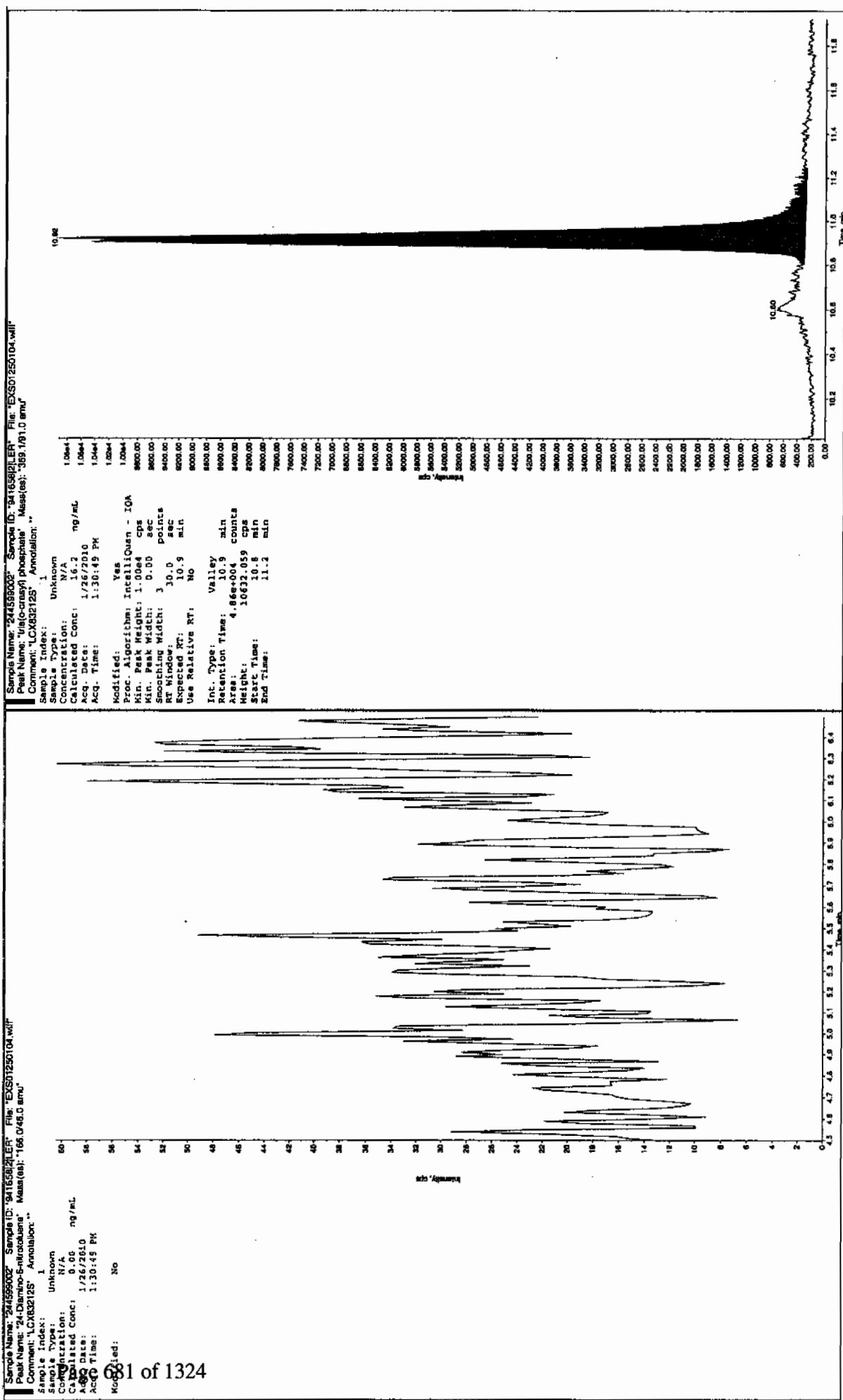
Run 127110

Sample Name: "24559002" Sample ID: "941658|2|LER" File: "EX501250104.wiff"  
Peak Name: "34-Orthotoluene" Mass(es): "182.1/151.9 amu"  
Comment: "C6H5CH3" Acquired: ""

Sample Index:	1	Annotation:
Sample Type:	Unknown	
Concentration:	N/A	
Calculated Conc:	0.00	ng/mL
Acq. Date:	1/26/2010	
Acq. Time:	1:30:49 PM	
Modified:	NO	

Container	Concavex	Amount
Sample Type	Unknown	
Concentration	N/A	10/mL
Calculated Conc:	25%	
ACQ Date:	1/26/2010	
ACQ Time:	1:30:49 PM	
Mod:	NO	
Location:	Trinity Quon - 10A	
Peak Height:	1460.0	CPS
Peak Width:	0.50	sec
Smoothing Width:	15.0	points
RT Window:	8.31	min
Exp. RT:	No	
Use Alternative RT:	No	
Int. Type:	Valley	
Retention Time:	3.38	min
Height:	389572.021	CPS
Start Time:	8.25	min
End Time:	8.47	min





1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7241

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599003

Sample Amount 2

Moisture: 9.4

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125225a

Date Analyzed: 30-JAN-10 01:31

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

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA5.qld, Time: Sat Jan 30 10:06:54 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125225a

Date: 30-Jan-2010

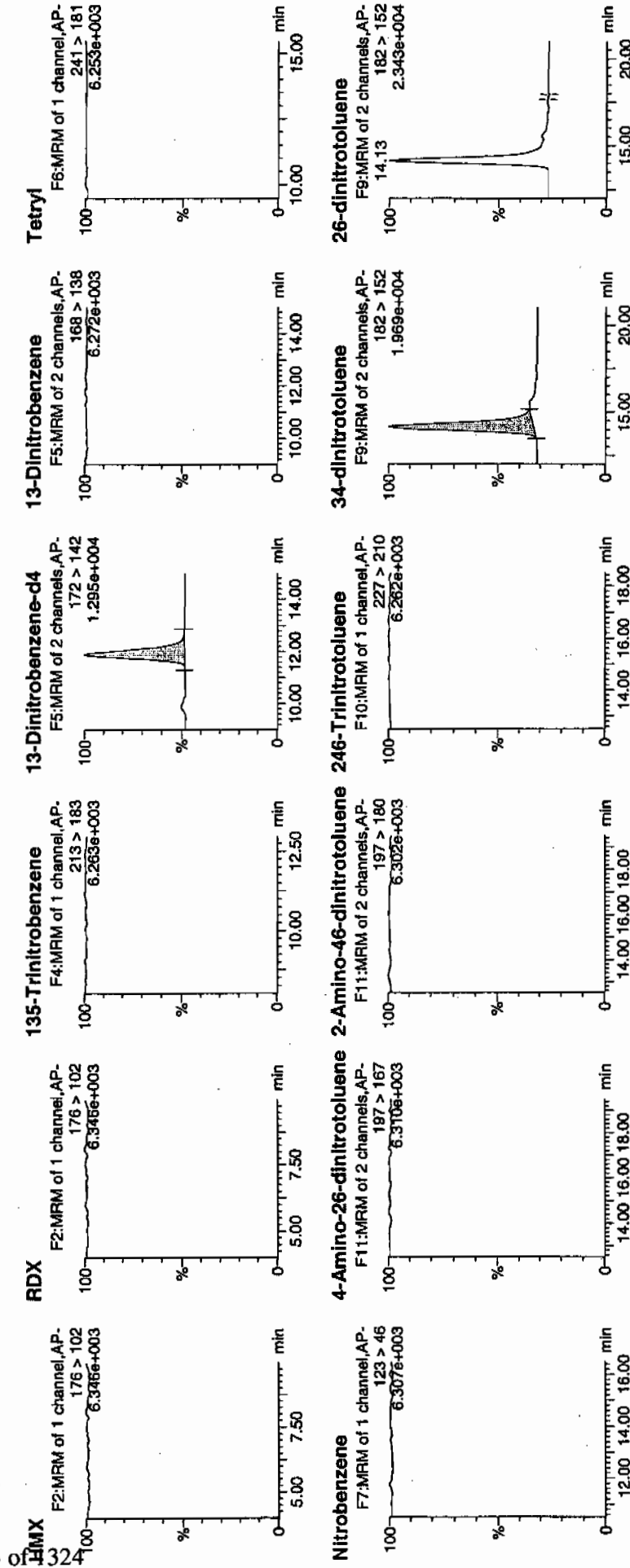
Time: 01:31:39

ID: 244599003

Cal: 3:6,B

11/30/10

LAU 941658 | 21 |

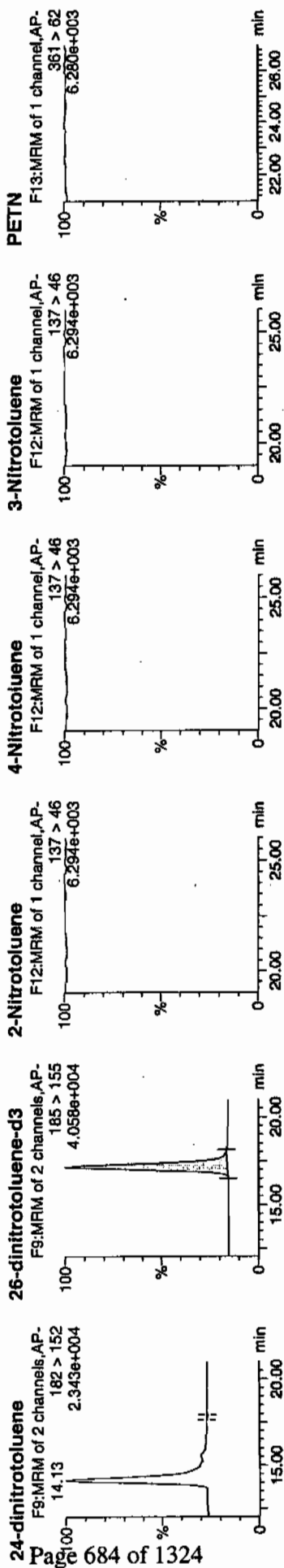


MM 01/31/10

## Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA5.qld, Time: Sat Jan 30 10:06:54 2010



ID	Name	Trace	RT	Area	IS Area	Abs. Resp	Response	Flags	Mod Date	Mod Time	Income	Exp Recd	Exp Dev	SN
244599003	HMx	176 > 102			2599.600									
244599003	RDX	176 > 102			2599.600									
244599003	135-Trinitrobenzene	213 > 183			2599.600									
244599003	13-Dinitrobenzene-d4	172 > 142	11.91	2599.600		2599.600	2599.600	bb			437.8790	87.6	-12.4	234.8
244599003	13-Dinitrobenzene	168 > 138			2599.600									
244599003	Tetryl	241 > 181			2599.600									
244599003	Nitrobenzene	123 > 46			2599.600									
244599003	4-Amino-26-dinitrotoluene	197 > 167			14389.427									
244599003	2-Amino-46-dinitrotoluene	197 > 180			14389.427									
244599003	246-Trinitrotoluene	227 > 210			14389.427									
244599003	34-dinitrotoluene	182 > 152	14.18	7152.529	14389.427	7152.529	248.534	bb			273.7118	109.5	9.5	334.3
244599003	26-dinitrotoluene	182 > 152			14389.427				30-Jan-10	10:02:29				
244599003	24-dinitrotoluene	182 > 152			14389.427				30-Jan-10	10:04:32				
244599003	26-dinitrotoluene-d3	185 > 155	17.16	14389.427		14389.427	14389.427	bb			441.4384	88.3	-11.7	1112.9
244599003	2-Nitrotoluene	137 > 46			14389.427									
244599003	4-Nitrotoluene	137 > 46			14389.427									
244599003	3-Nitrotoluene	137 > 46			14389.427									
244599003	PETN	361 > 62			14389.427									

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7241

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599003

Sample Amount 2

Moisture: 9.4

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250105.wiff

Date Analyzed: 26-JAN-10 13:46

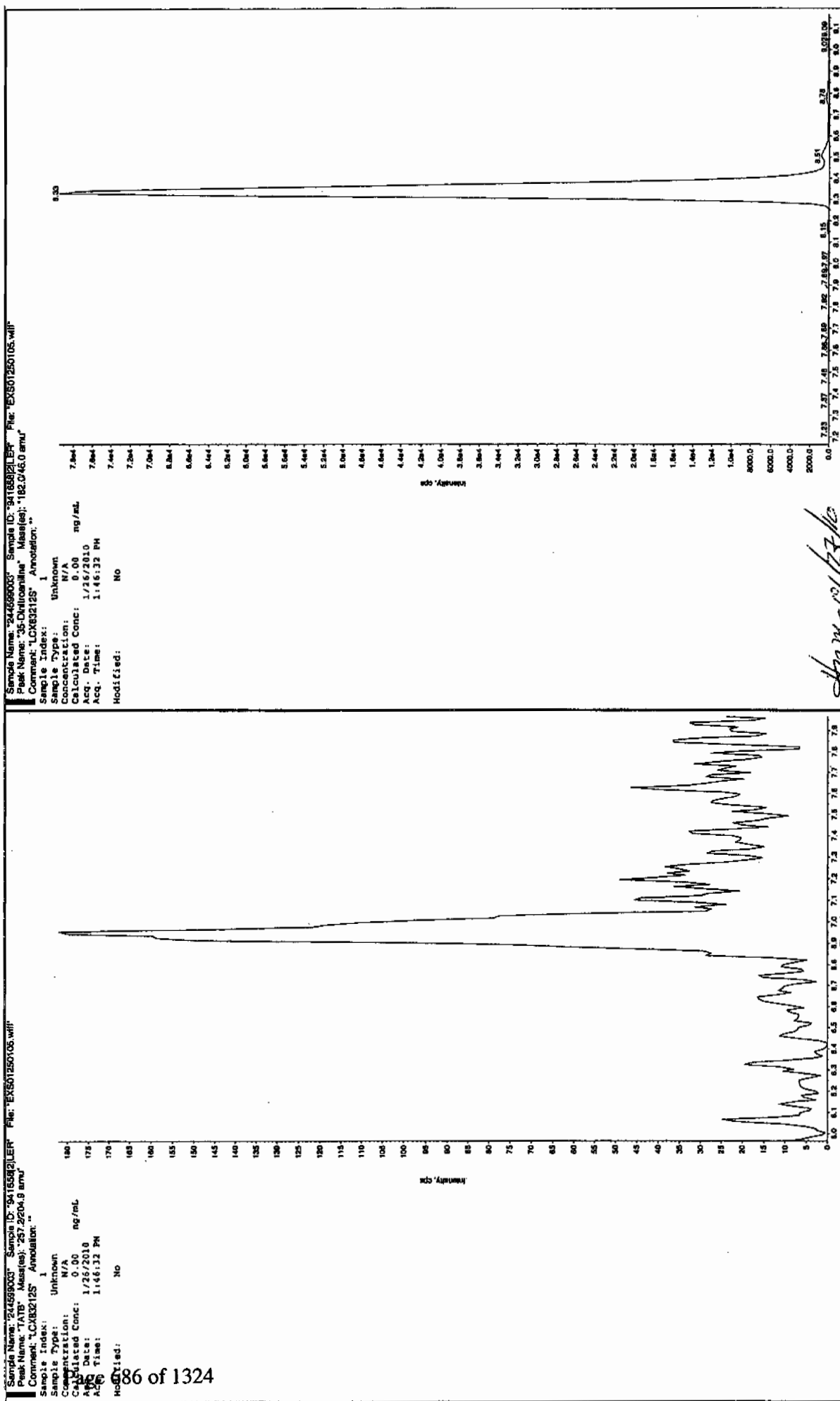
Units: ug/kg

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

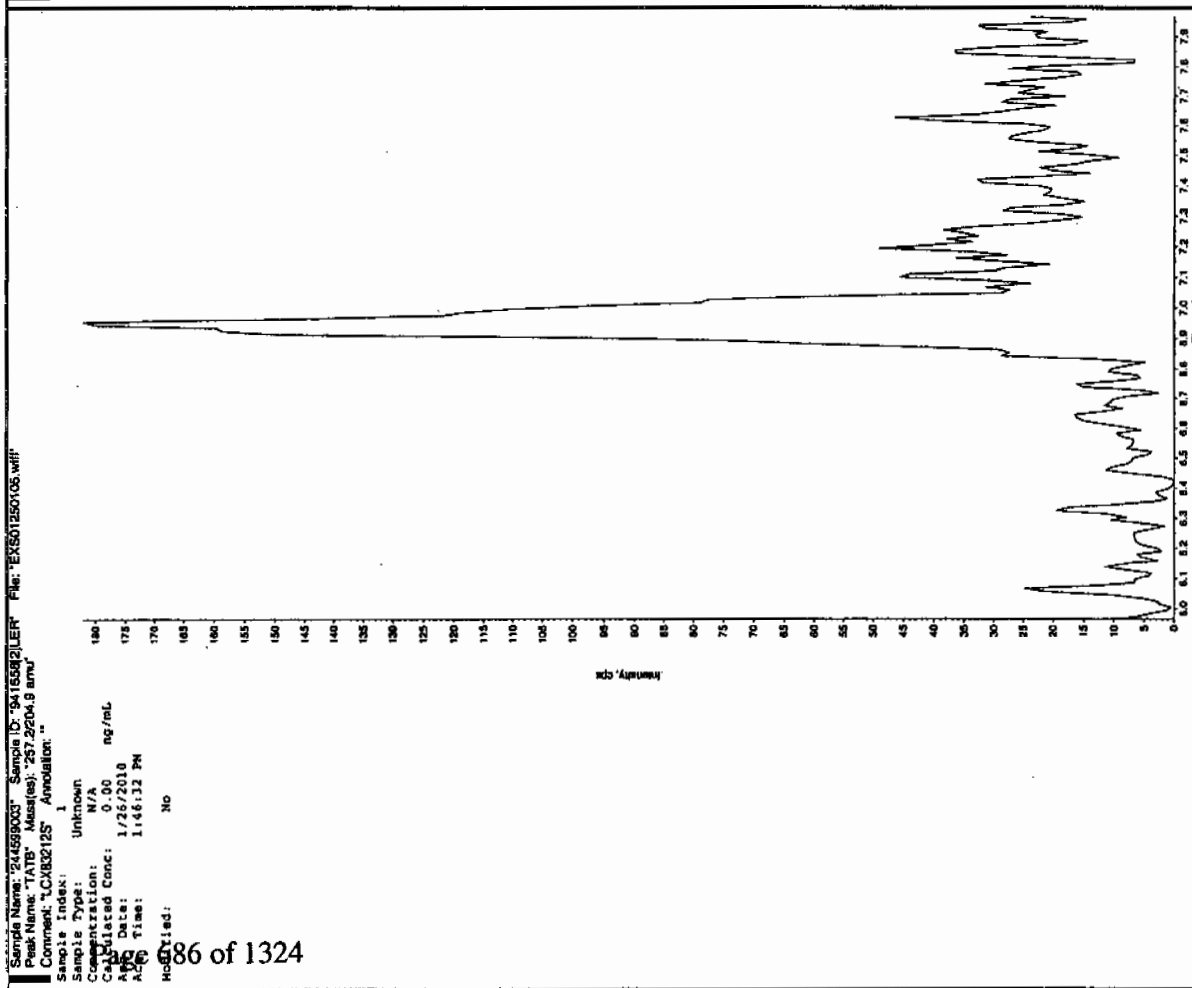
\*Concentration =

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

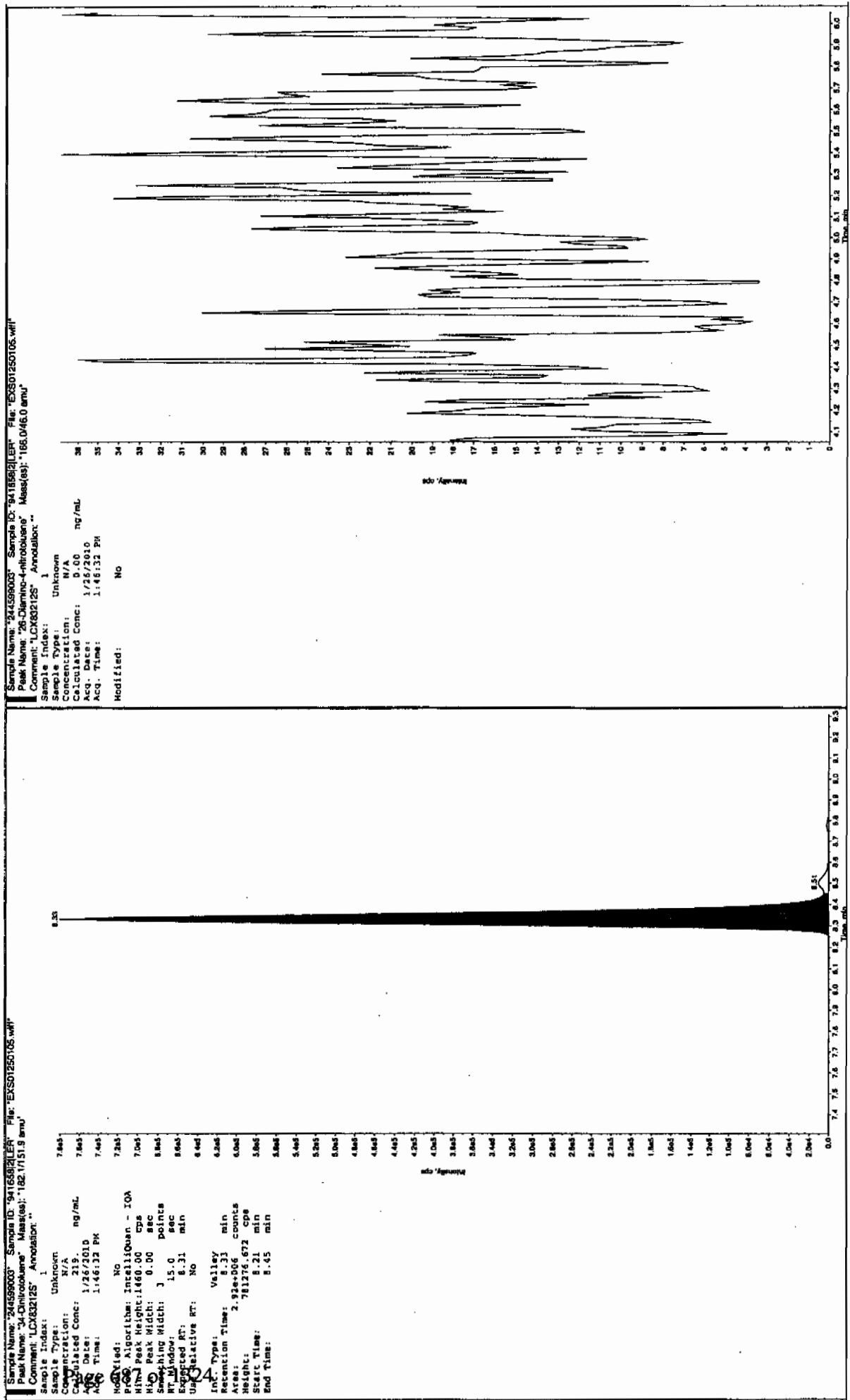
See 11/27/10

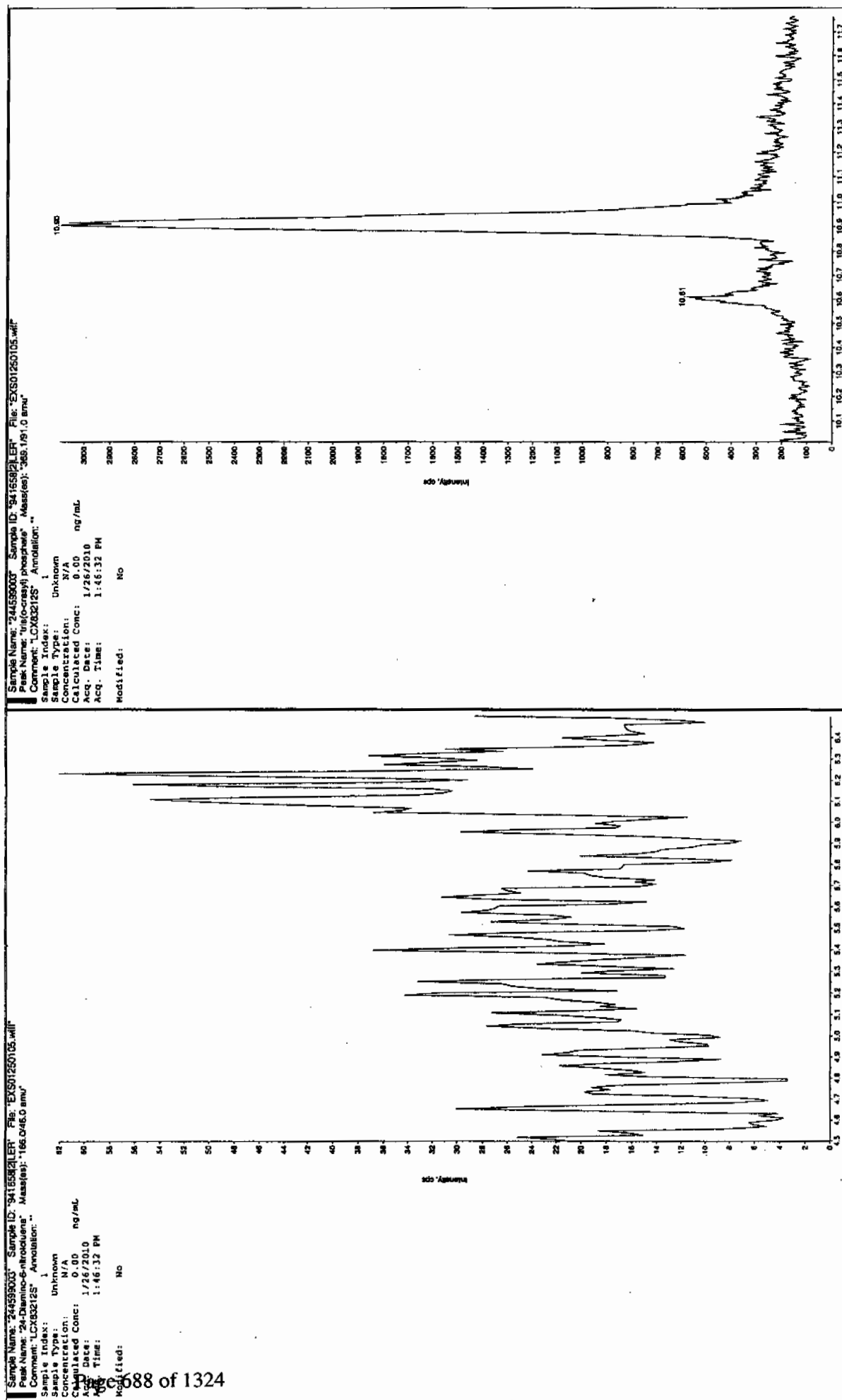


See 11/27/10









1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7237

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599004

Sample Amount 2

Moisture: 10.1

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125226a

Date Analyzed: 30-JAN-10 02:01

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

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

Dataset: C:\MASSLYNX\New\_Exp\_PRO\012510expA5.qld, Time: Sat Jan 30 10:06:54 2010

Name: C:\MASSLYNX\NEW\_EXP\_PRO\Data\EXP0125226a

Date: 30-Jan-2010

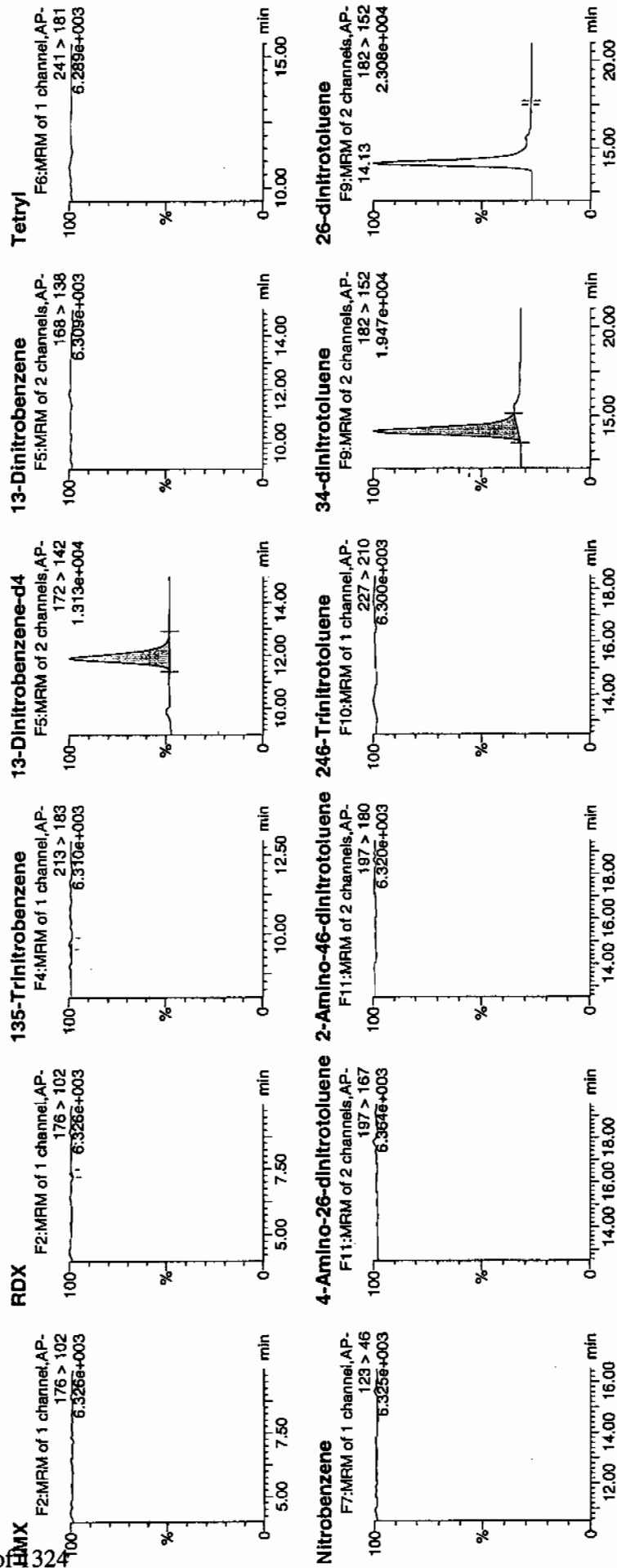
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ID: 244599004

Val: 3:6,C

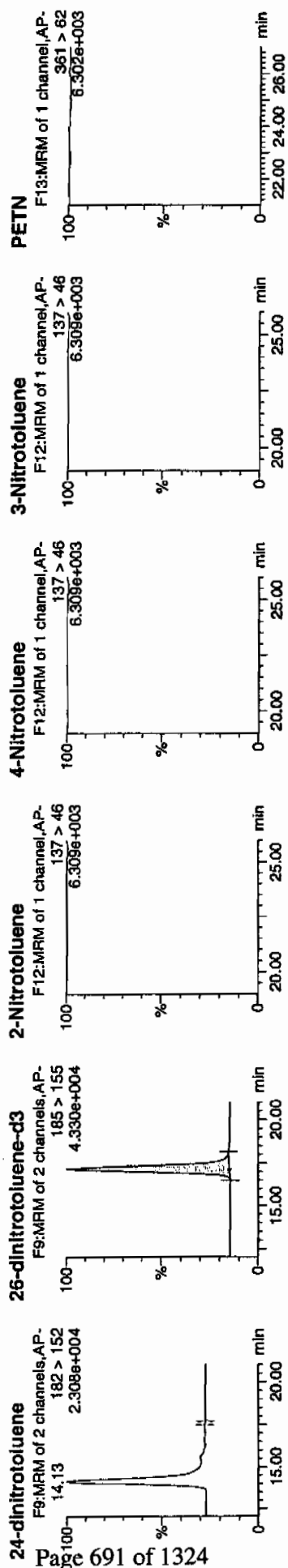
1/30/10

74658 | 21



Am m 01/30/10

Dataset: C:\MASSLYN\New\_Exp.PRO\012510expA5.qld, Time: Sat Jan 30 10:06:54 2010

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1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7237

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599004

Sample Amount 2

Moisture: 10.1

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250109.wiff

Date Analyzed: 26-JAN-10 14:49

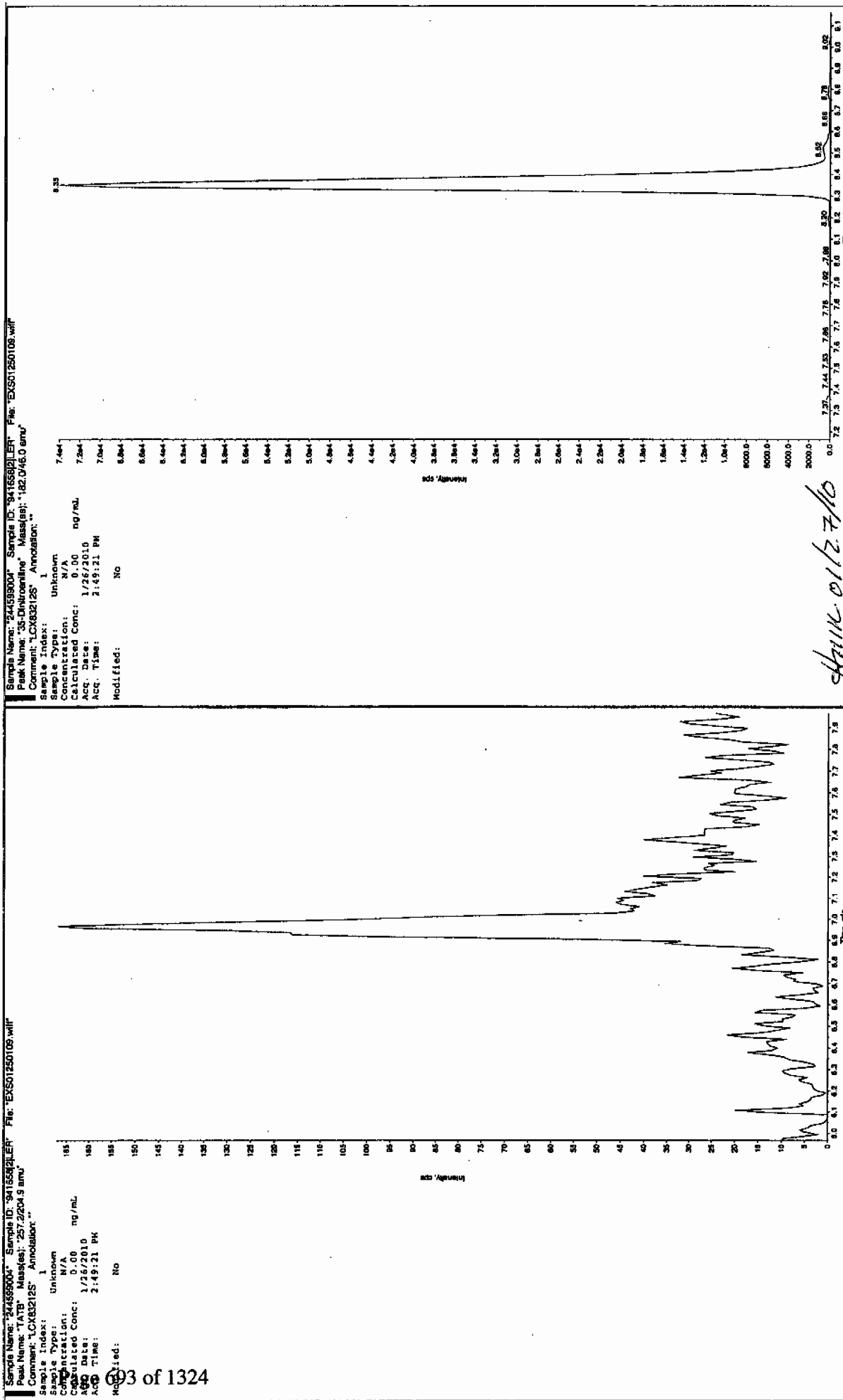
Units: ug/kg

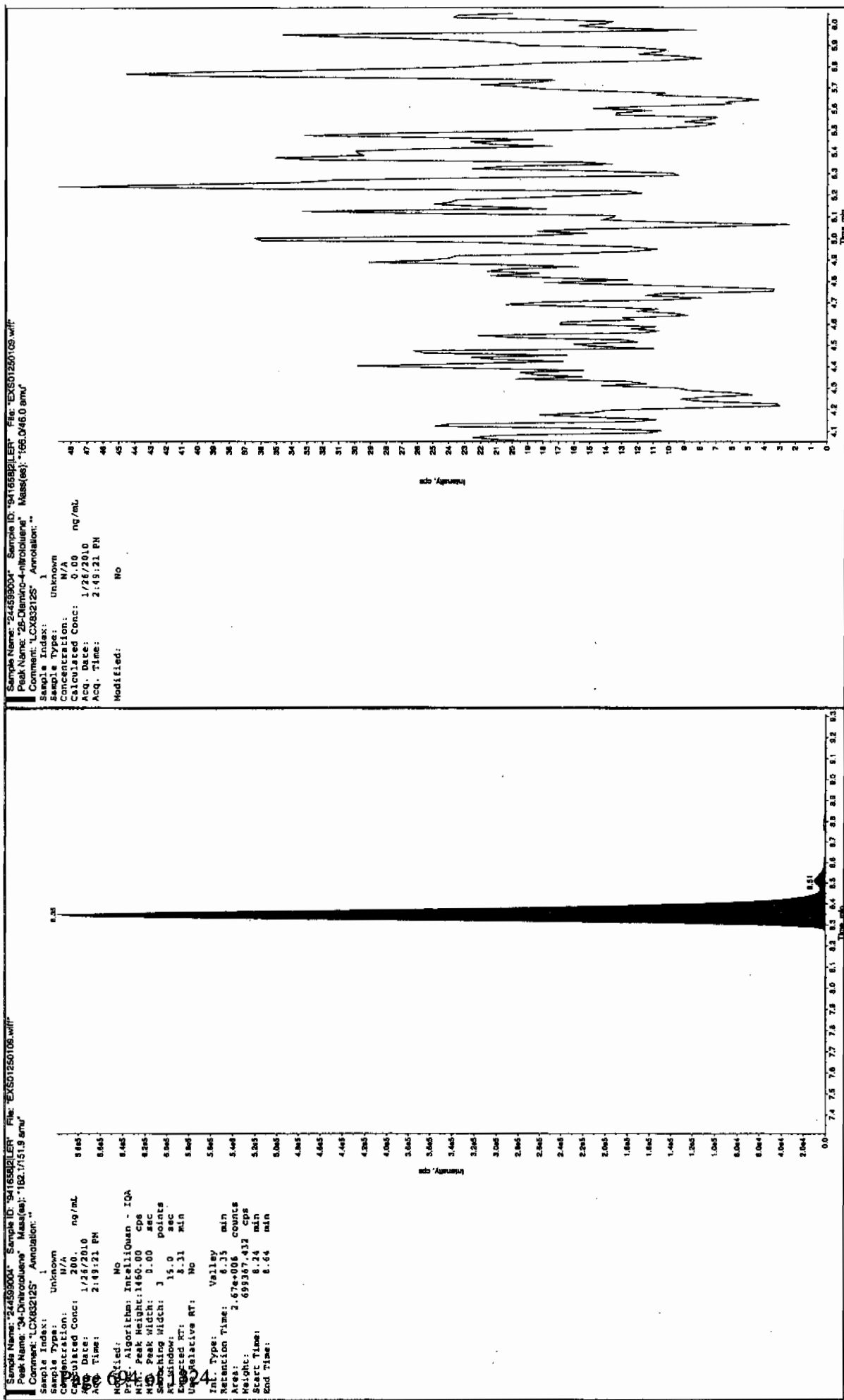
Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

\*Concentration =

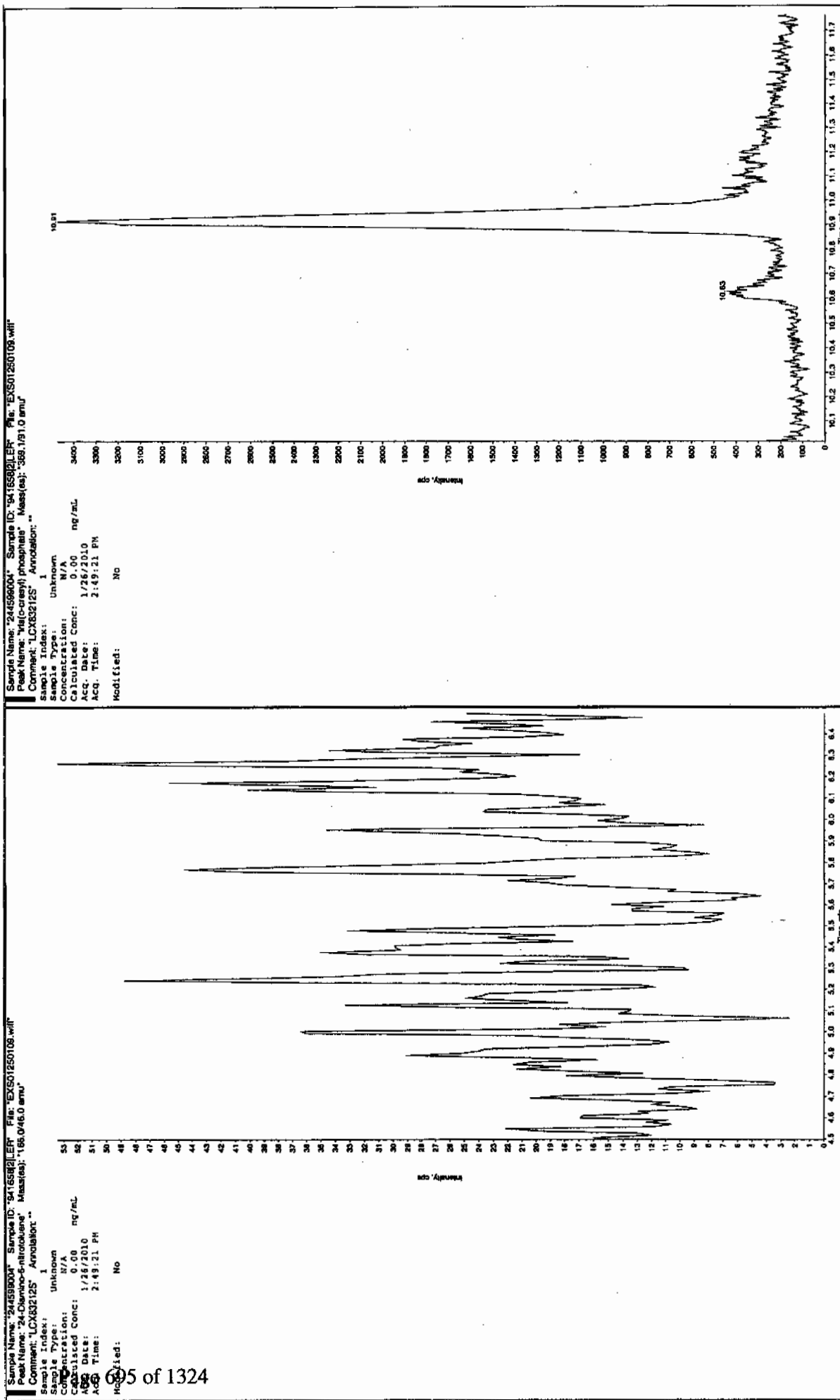
Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

See 1/27/10









1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7239

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599005

Sample Amount 2

Moisture: 9.3

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125227a

Date Analyzed: 30-JAN-10 02:30

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	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

\*Concentration =

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

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA5.qld, Time: Sat Jan 30 10:06:54 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125227a

Date: 30-Jan-2010

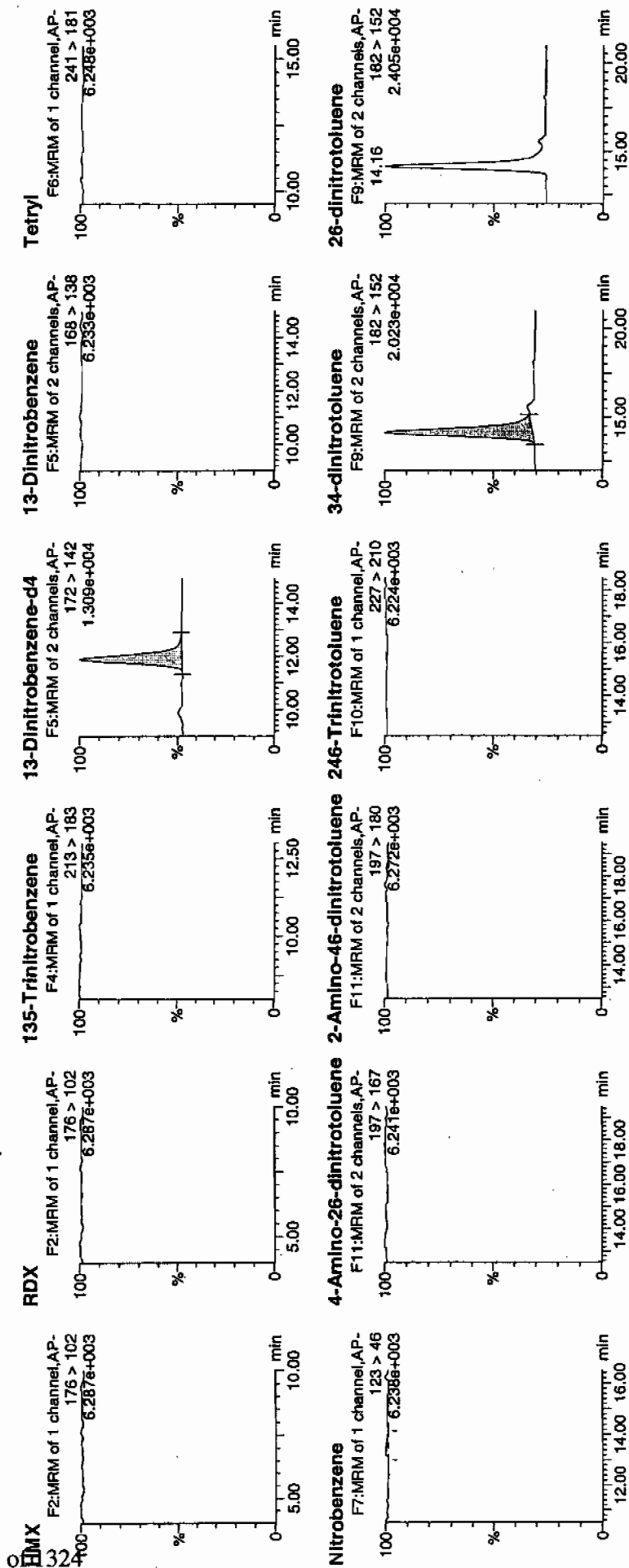
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1/30/10

WAVE 941658 | 2-1

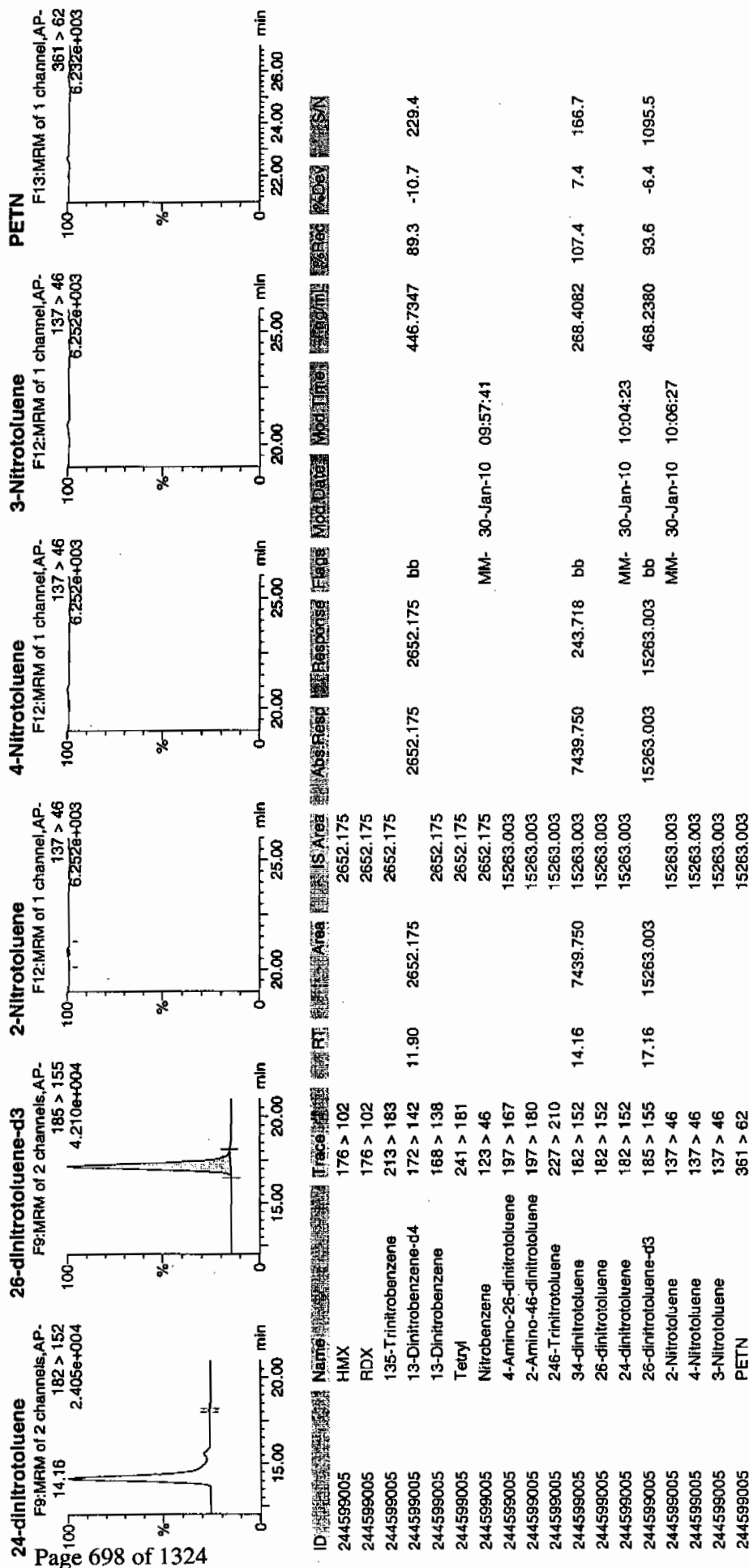


47112  
8/1/31/10

Printed: Sat Jan 30 10:07:34 2010, Page 42 of 71

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

Dataset: C:\MASSLYNX\New\_Exp\_PRO\12510expA5.qld, Time: Sat Jan 30 10:06:54 2010



1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7239

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599005

Sample Amount 2

Moisture: 9.3

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250148.wiff

Date Analyzed: 27-JAN-10 01:02

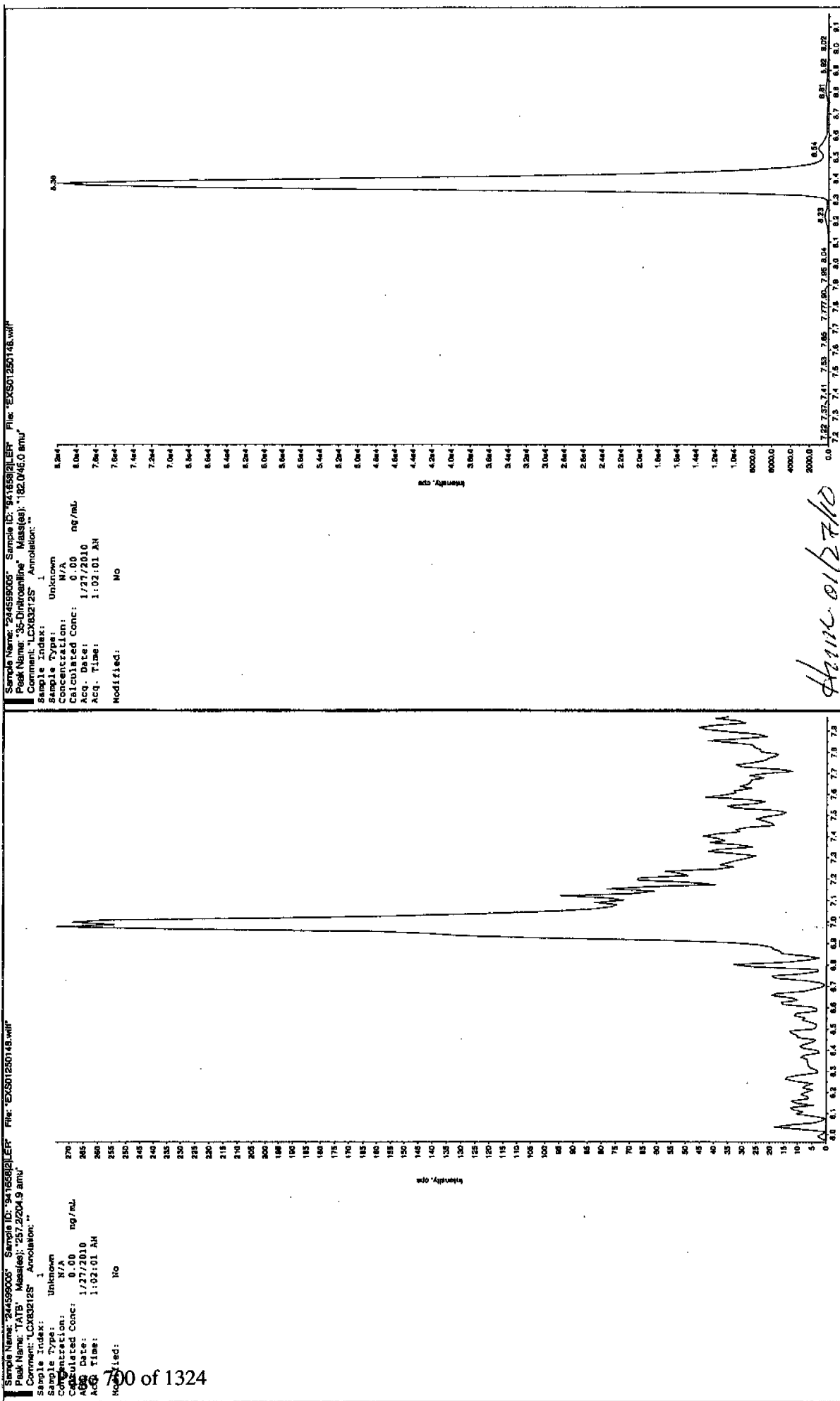
Units: ug/kg

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

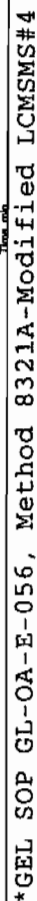
\*Concentration =

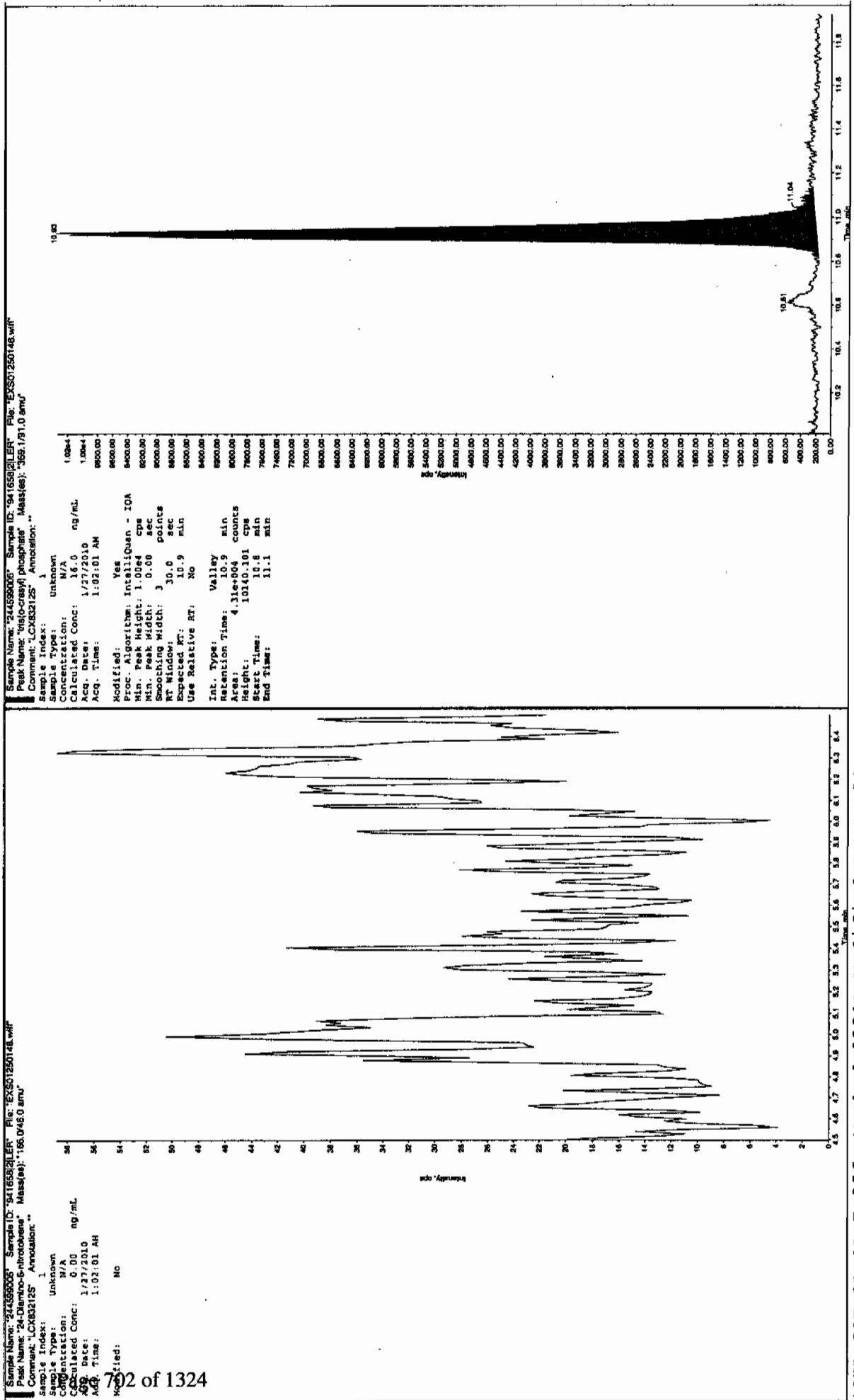
Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

Ken 11/27/10



Ken 01/27/10







1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7238

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599006

Sample Amount 2

Moisture: 16.7

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125231a

Date Analyzed: 30-JAN-10 04:28

Units: ug/kg

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

\*Concentration =

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

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125231a

Date: 30-Jan-2010

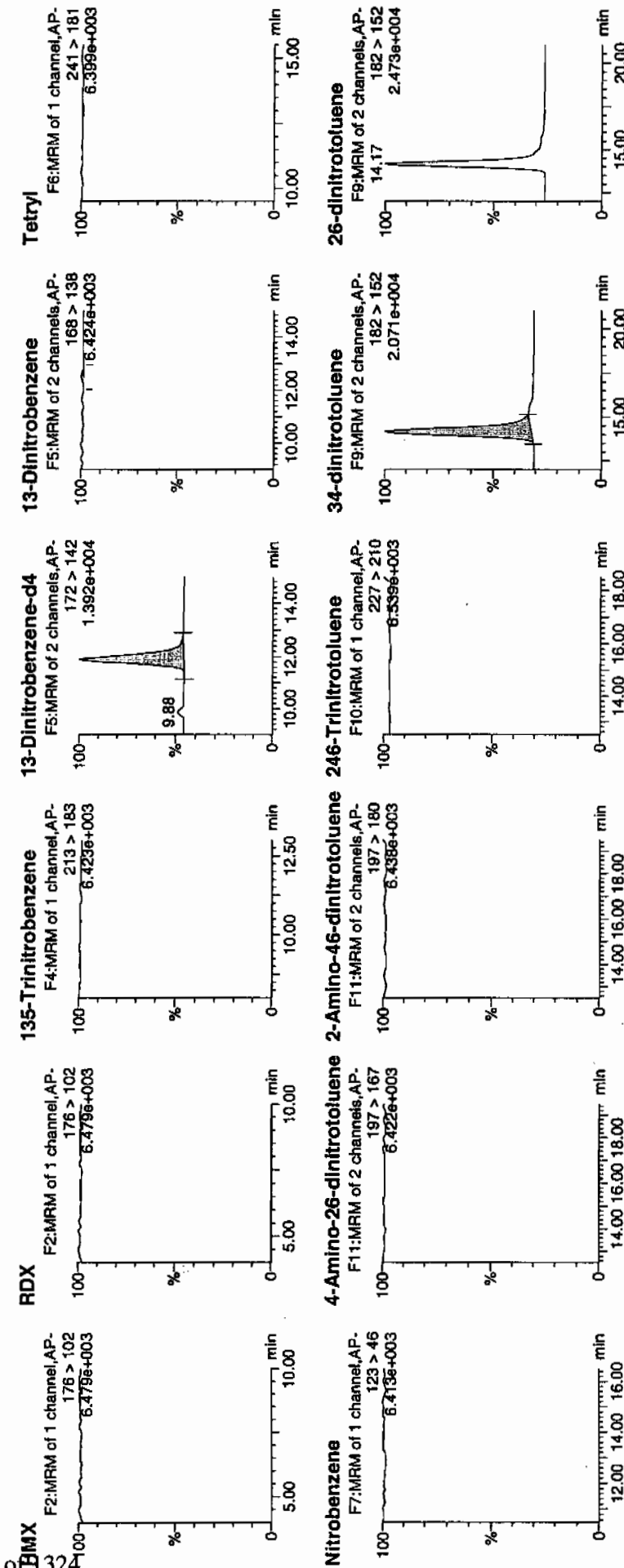
Time: 04:28:39

ID: 244599006

Trial: 3:6,E

1.27  
 1/30/10

941658 | 8022 | 21

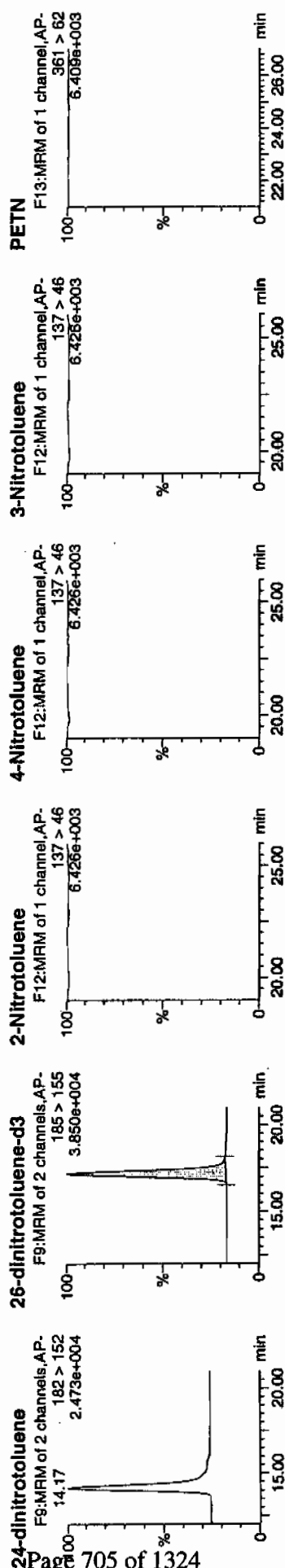


Handwritten signature: *Handwritten signature*

## Quantify Sample Report

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

Dataset: C:\MASSLYN\New\_Exp.PRO\012510expA5.qld, Time: Sat Jan 30 10:06:54 2010



ID	Name	Trace#	FRT	Areg	S Area	W Abs Resp	Resp Reported	Flags	Moderator	Mod Time	Pstg Hdr	% Dev	Totl S/N
244599006	HMX	176 > 102			2898.028								
244599006	RDX	176 > 102			2898.028								
244599006	135-Trinitrobenzene	213 > 183			2898.028								
244599006	13-Dinitrobenzene-d4	172 > 142	11.89	2898.028		2898.028	2898.028	bb			488.1464	-2.4	486.3
244599006	13-Dinitrobenzene	168 > 138			2898.028				MM-	30-Jan-10	09:57:16		
244599006	Tetryl	241 > 181			2898.028								
244599006	Nitrobenzene	123 > 46			2898.028								
244599006	4-Amino-26-dinitrotoluene	197 > 167			13769.065								
244599006	2-Amino-46-dinitrotoluene	197 > 180			13769.065								
244599006	246-Trinitrotoluene	227 > 210			13769.065								
244599006	34-dinitrotoluene	182 > 152	14.17	7547.478	13769.065	7547.478	274.074	bb			301.8386	20.7	496.7
244599006	26-dinitrotoluene	182 > 152			13769.065								
244599006	24-dinitrotoluene	182 > 152			13769.065								
244599006	26-dinitrotoluene-d3	185 > 155	17.16	13769.065		13769.065	13769.065	bb			422.4070	-15.5	1468.4
244599006	2-Nitrotoluene	137 > 46			13769.065								
244599006	4-Nitrotoluene	137 > 46			13769.065								
244599006	3-Nitrotoluene	137 > 46			13769.065								
244599006	PETN	361 > 62			13769.065								

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7238

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599006

Sample Amount 2

Moisture: 16.7

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250111.wiff

Date Analyzed: 26-JAN-10 15:20

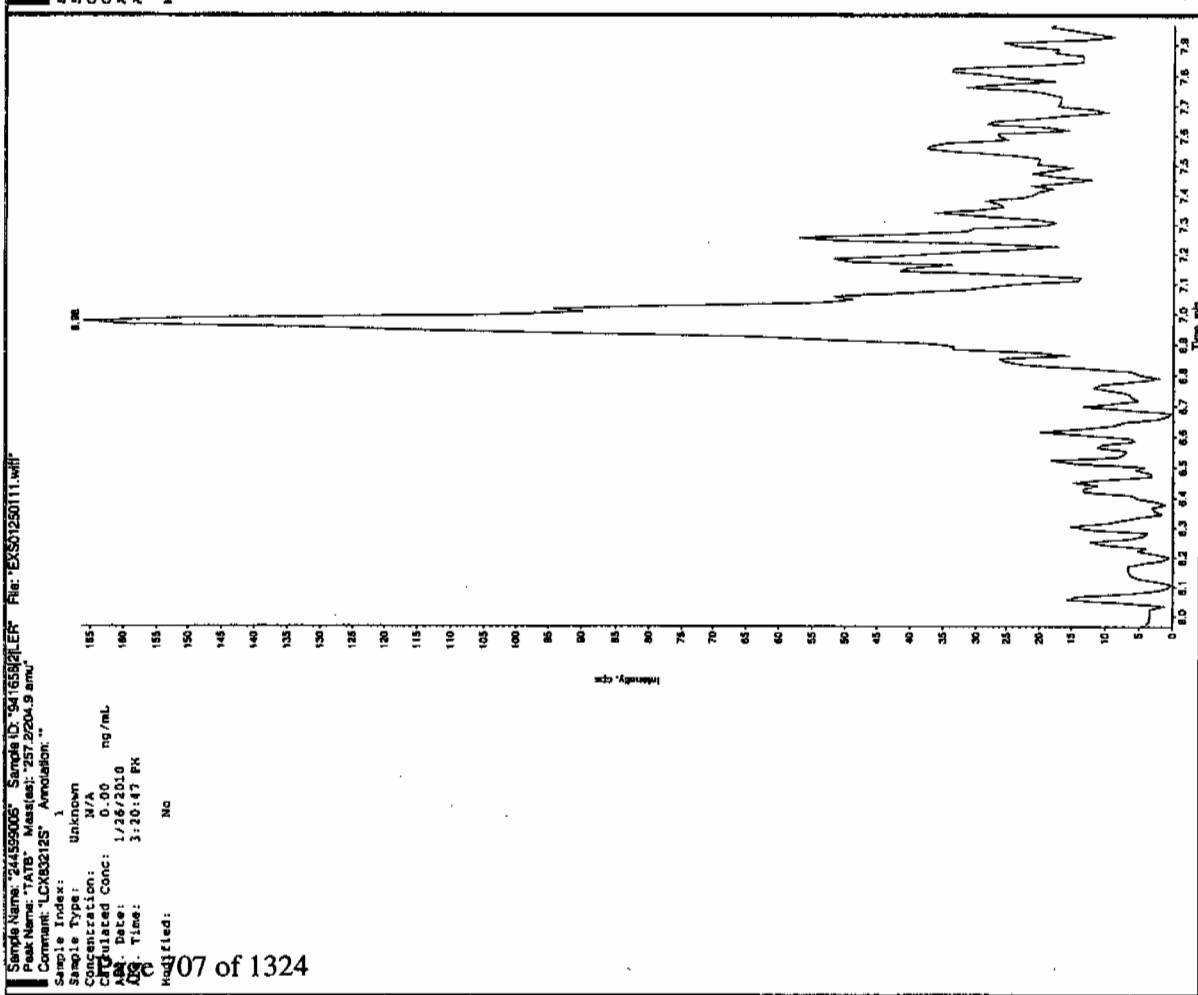
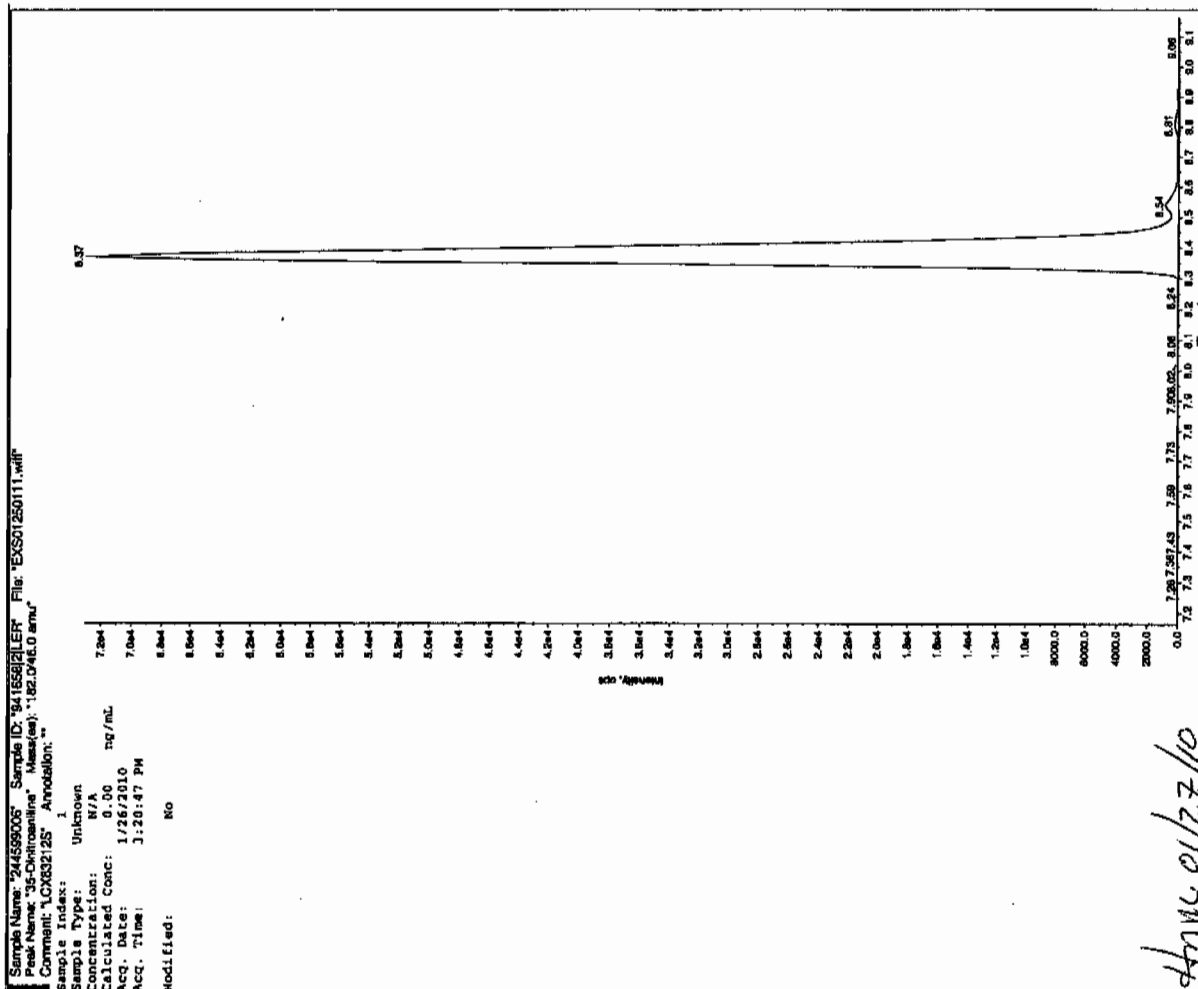
Units: ug/kg

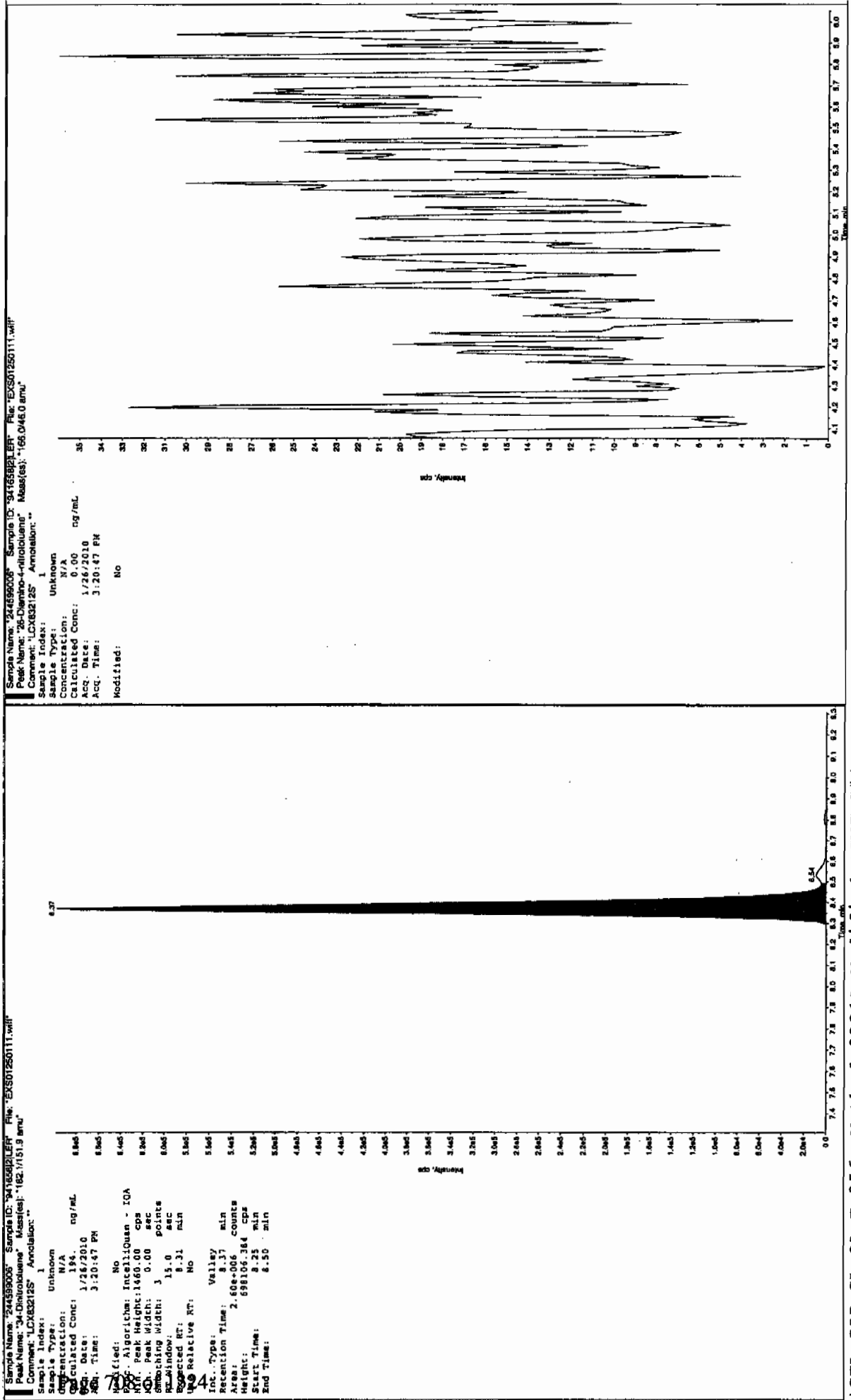
Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

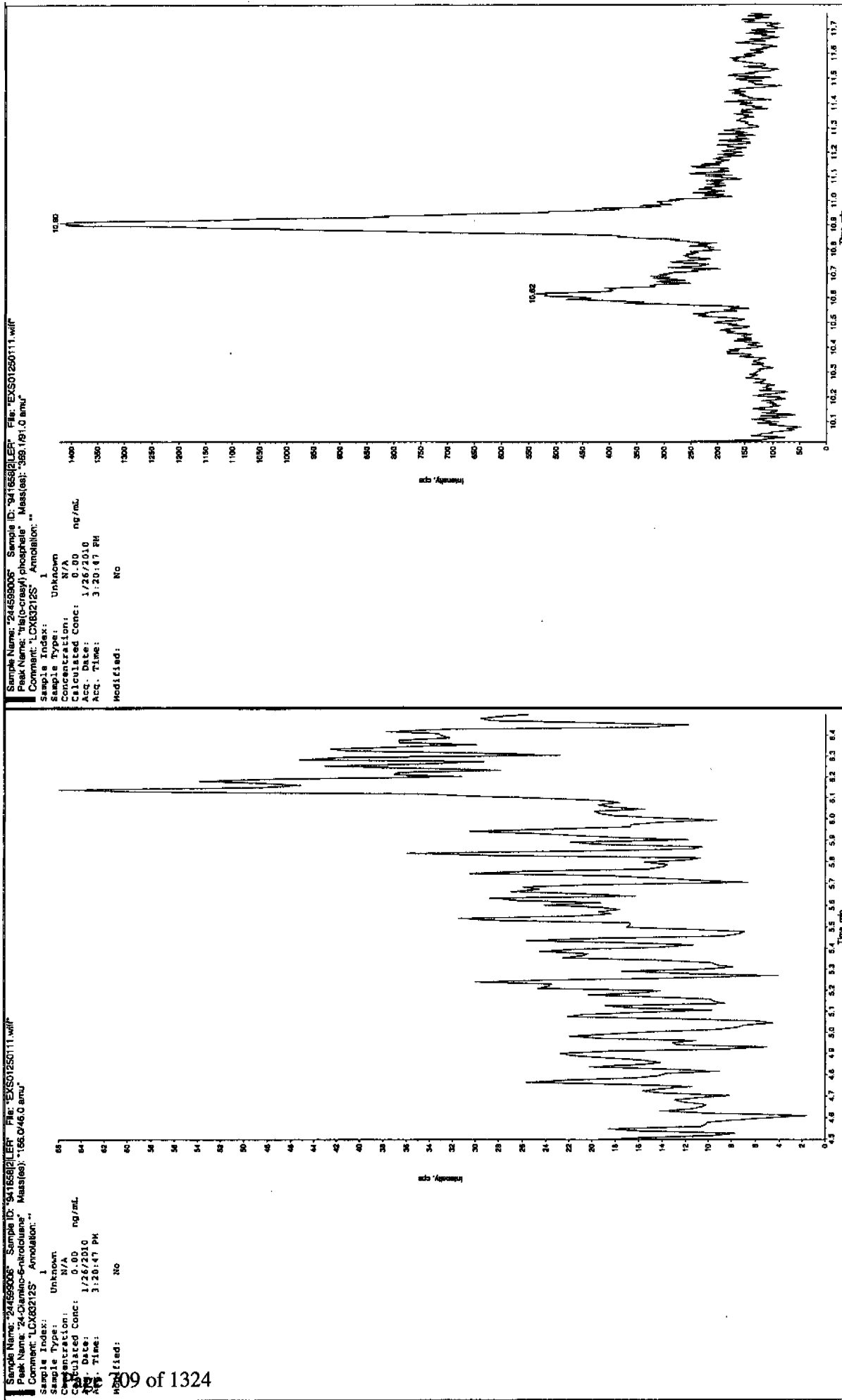
\*Concentration =

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

2011/12/27/10







1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7242

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599007

Sample Amount 2

Moisture: 16.3

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125232a

Date Analyzed: 30-JAN-10 04:58

Units: ug/kg

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

\*Concentration =

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



Printed: Sat Jan 30 10:07:34 2010, Page 51 of 71

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA5.qld, Time: Sat Jan 30 10:06:54 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125232a

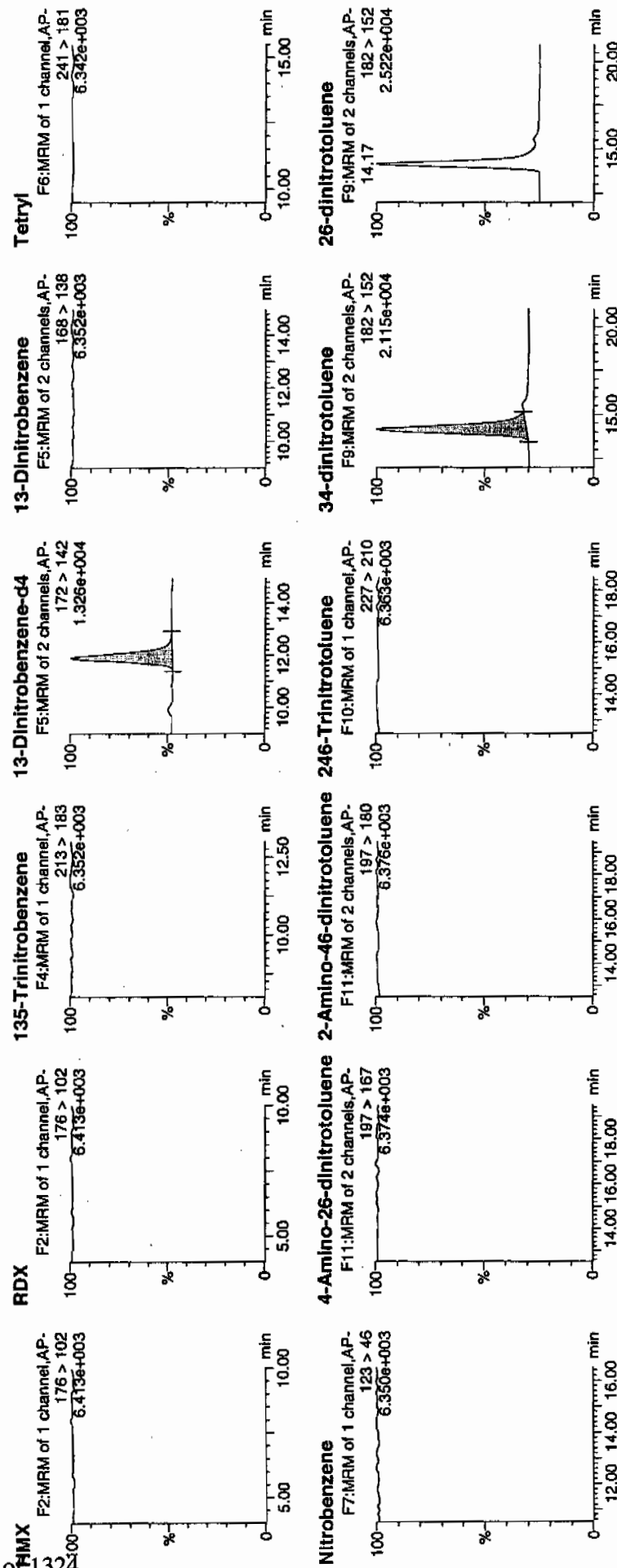
Date: 30-Jan-2010

Time: 04:58:29

ID: 244599007

Vial: 3-6.F

Handwritten notes: *1647*, *1/30/10*, *21*, *941658*, *Souza*



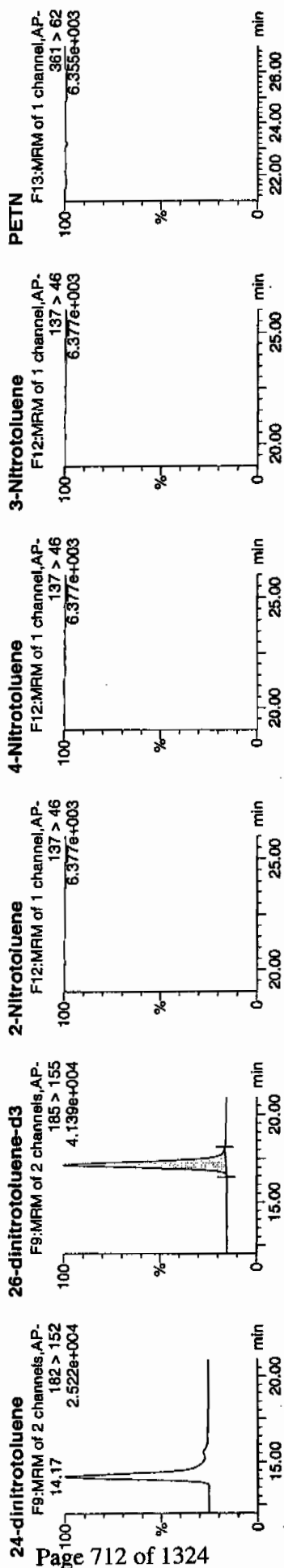
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# Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Sat Jan 30 10:07:34 2010, Page 52 of 71

Dataset: C:\MASSLYNX\New\_Exp\PROV012510expA5.qld, Time: Sat Jan 30 10:06:54 2010



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod	Time	Area	%Area	%Dev	SSN
244599007	HMX	176 > 102			2665.721									
244599007	RDX	176 > 102			2665.721									
244599007	135-Trinitrobenzene	213 > 183			2665.721									
244599007	13-Dinitrobenzene-d4	172 > 142	11.89	2665.721		2665.721	2665.721	bb			449.0164	89.8	-10.2	494.7
244599007	13-Dinitrobenzene	168 > 138			2665.721									
244599007	Tetryl	241 > 181			2665.721									
244599007	Nitrobenzene	123 > 46			2665.721									
244599007	4-Amino-26-dinitrotoluene	197 > 167			14774.694									
244599007	2-Amino-46-dinitrotoluene	197 > 180			14774.694									
244599007	246-Trinitrotoluene	227 > 210			14774.694									
244599007	34-dinitrotoluene	182 > 152	14.17	7826.483	14774.694	7826.483	264.861	bb			291.6927	116.7	16.7	639.4
244599007	26-dinitrotoluene	182 > 152			14774.694									
244599007	24-dinitrotoluene	182 > 152			14774.694									
244599007	26-dinitrotoluene-d3	185 > 155	17.16	14774.694		14774.694	14774.694	bb			453.2576	90.7	-9.3	976.7
244599007	2-Nitrotoluene	137 > 46			14774.694									
244599007	4-Nitrotoluene	137 > 46			14774.694									
244599007	3-Nitrotoluene	137 > 46			14774.694									
244599007	PETN	361 > 62			14774.694									

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7242

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599007

Sample Amount 2

Moisture: 16.3

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250112.wiff

Date Analyzed: 26-JAN-10 15:36

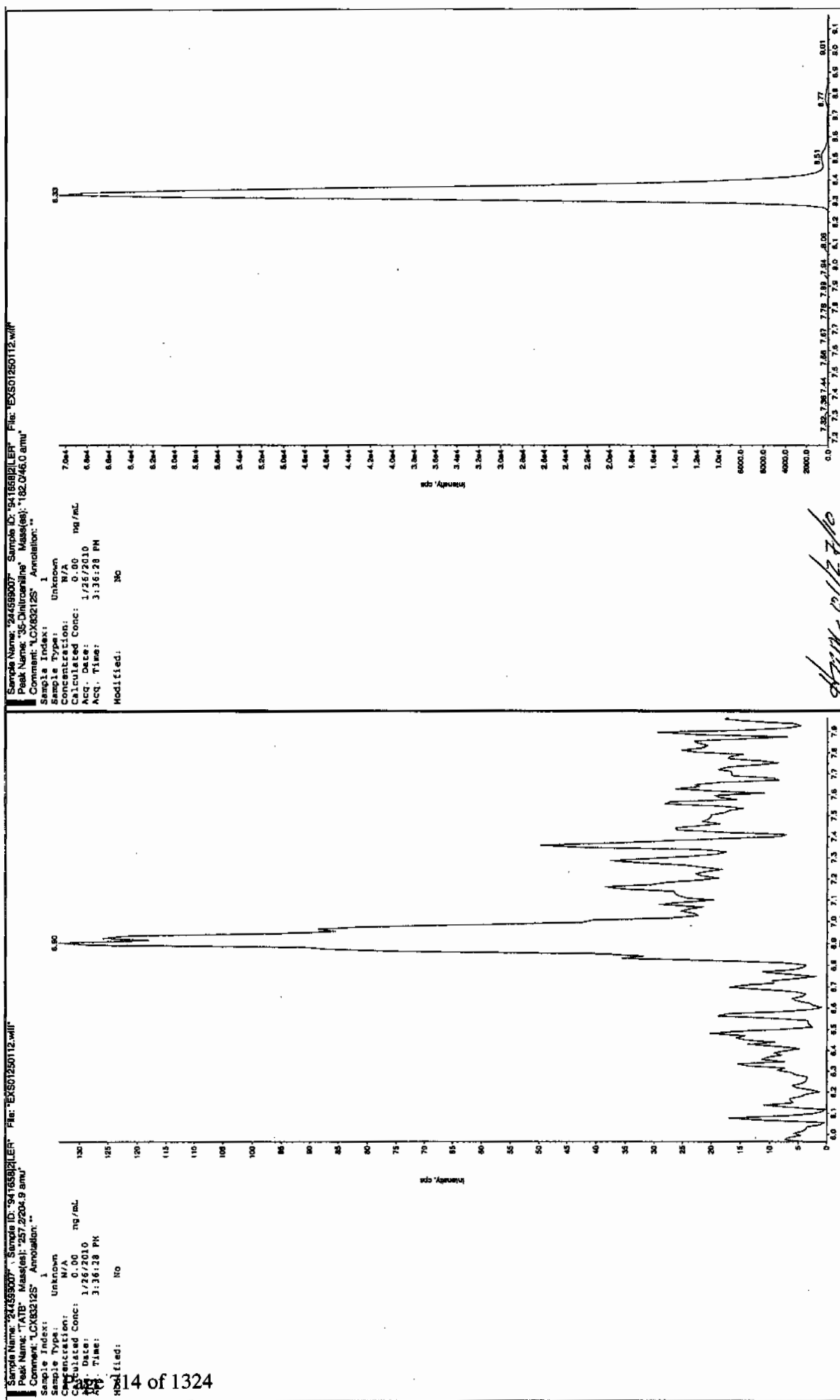
Units: ug/kg

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

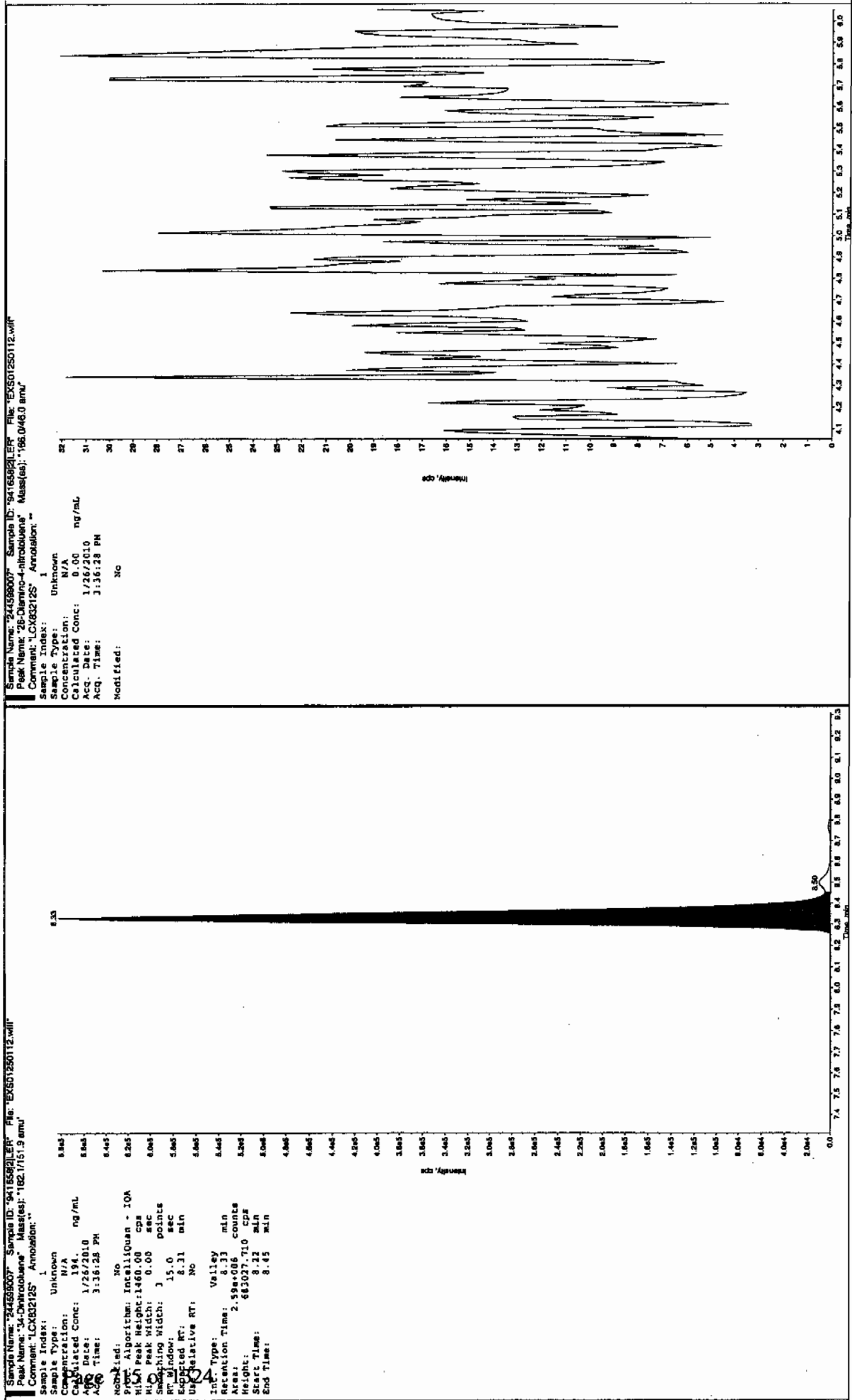
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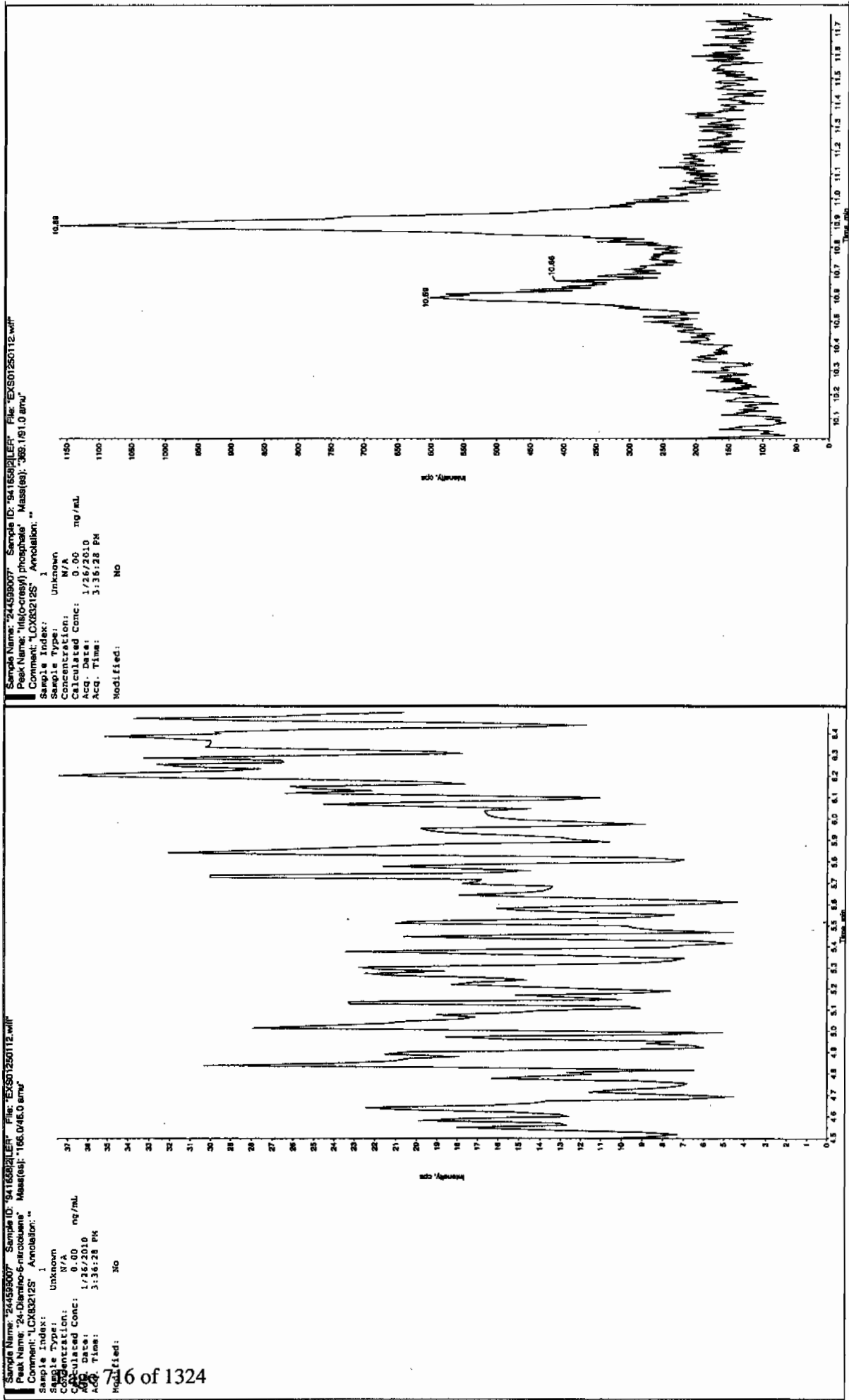
Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

Jan 11/27/10



Jan 11/27/10





1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7236

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599008

Sample Amount 2

Moisture: 21.7

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125233a

Date Analyzed: 30-JAN-10 05:27

Units: ug/kg

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

\*Concentration =

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

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA5.qld, Time: Sat Jan 30 10:06:54 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125233a

Date: 30-Jan-2010

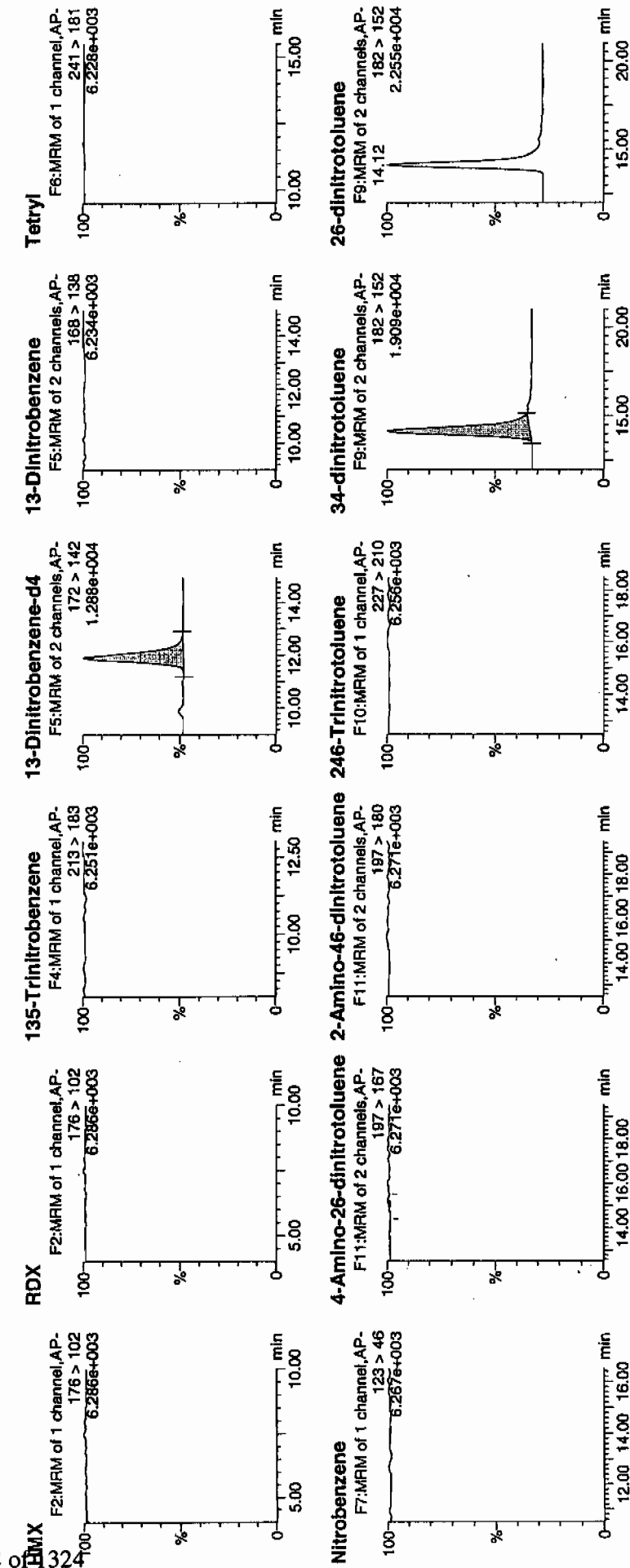
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ID: 244599008

Mail: 3:7,A

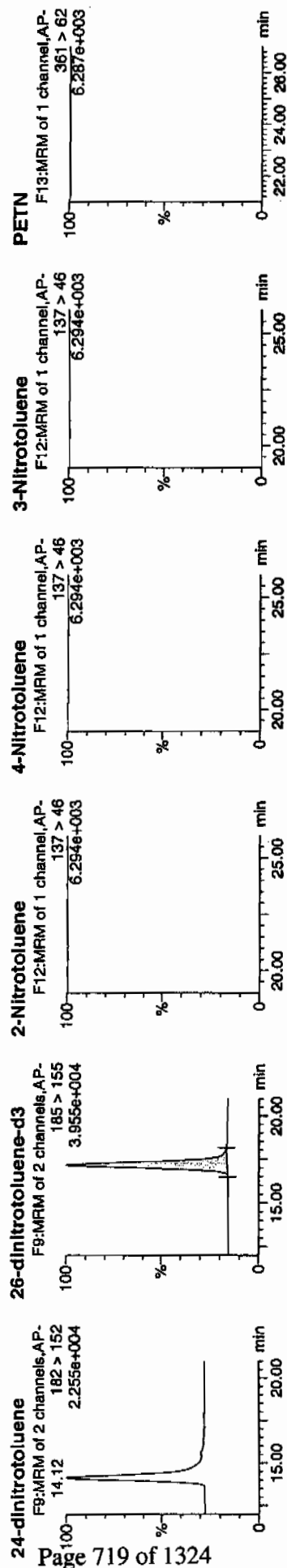
1/30/10

941658 / 21



Am 01/30/10





Name	Trace	RT	Area	S/Area	AbstResp	Flags	ModDate	ModTime	Find/mL	%Rec	%Dev	%SSN
244:598008	HMIX	176 > 102		2653.253								
244:599008	RDX	176 > 102		2653.253								
244:599008	135-Trinitrobenzene	213 > 183		2653.253								
244:599008	13-Dinitrobenzene-d4	172 > 142	11.89	2653.253	2653.253	bb			446.9163	89.4	-10.6	229.8
244:599008	13-Dinitrobenzene	168 > 138		2653.253								
244:599008	Tetryl	241 > 181		2653.253								
244:599008	Nitrobenzene	123 > 46		2653.253								
244:599008	4-Amino-26-dinitrotoluene	197 > 167		14098.144		MM-	30-Jan-10	09:59:41				
244:599008	2-Amino-46-dinitrotoluene	197 > 180		14098.144								
244:599008	246-Trinitrotoluene	227 > 210		14098.144								
244:599008	34-dinitrotoluene	182 > 152	14.17	6981.029	6981.029	bb			272.6684	109.1	9.1	485.2
244:599008	26-dinitrotoluene	182 > 152		14098.144								
244:599008	24-dinitrotoluene	182 > 152		14098.144								
244:599008	26-dinitrotoluene-d3	185 > 155	17.16	14098.144	14098.144	bb			432.5025	86.5	-13.5	2515.2
244:599008	2-Nitrotoluene	137 > 46		14098.144								
244:599008	4-Nitrotoluene	137 > 46		14098.144								
244:599008	3-Nitrotoluene	137 > 46		14098.144								
244:599008	PETN	361 > 62		14098.144								

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7236

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599008

Sample Amount 2

Moisture: 21.7

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250113.wiff

Date Analyzed: 26-JAN-10 15:52

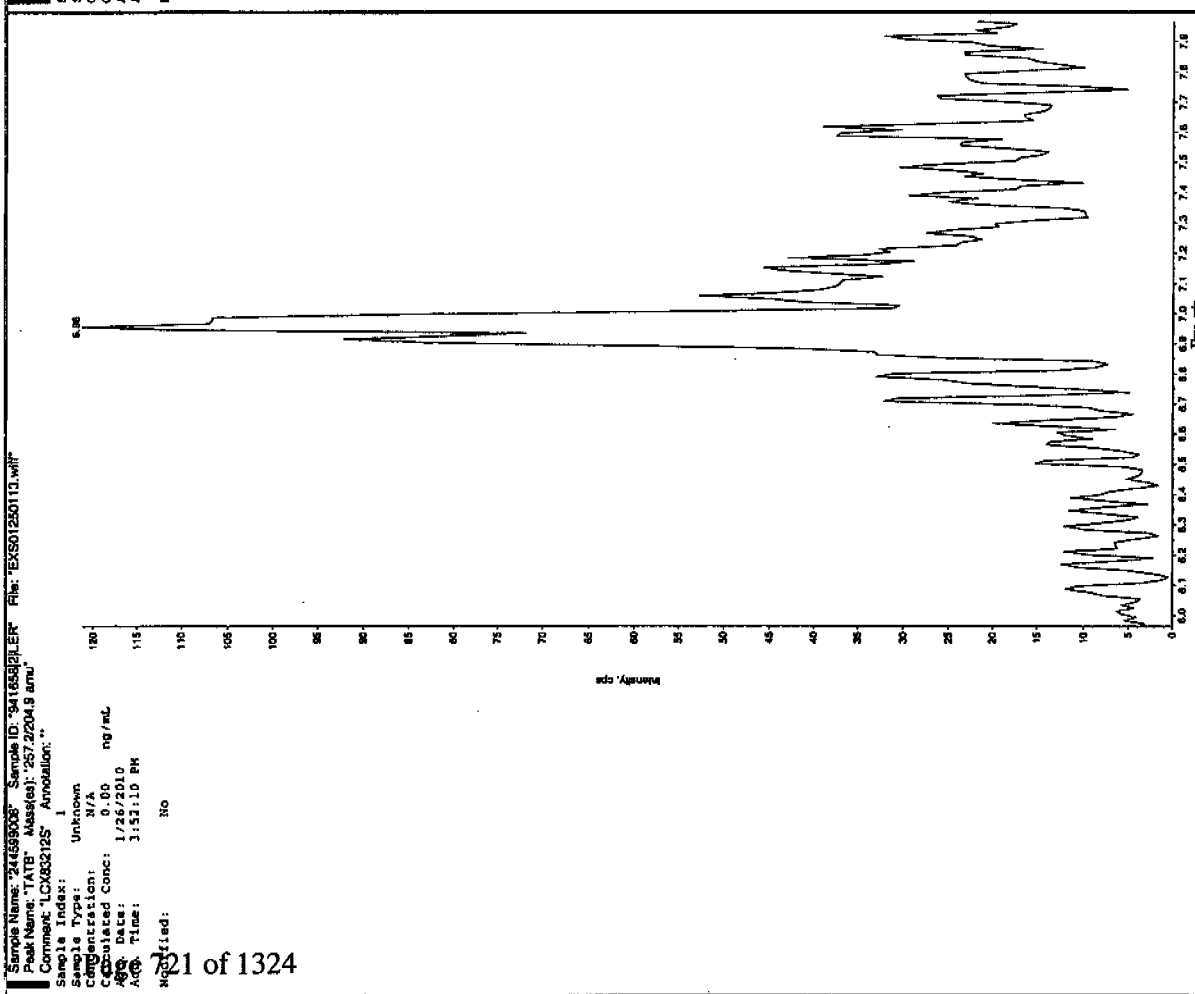
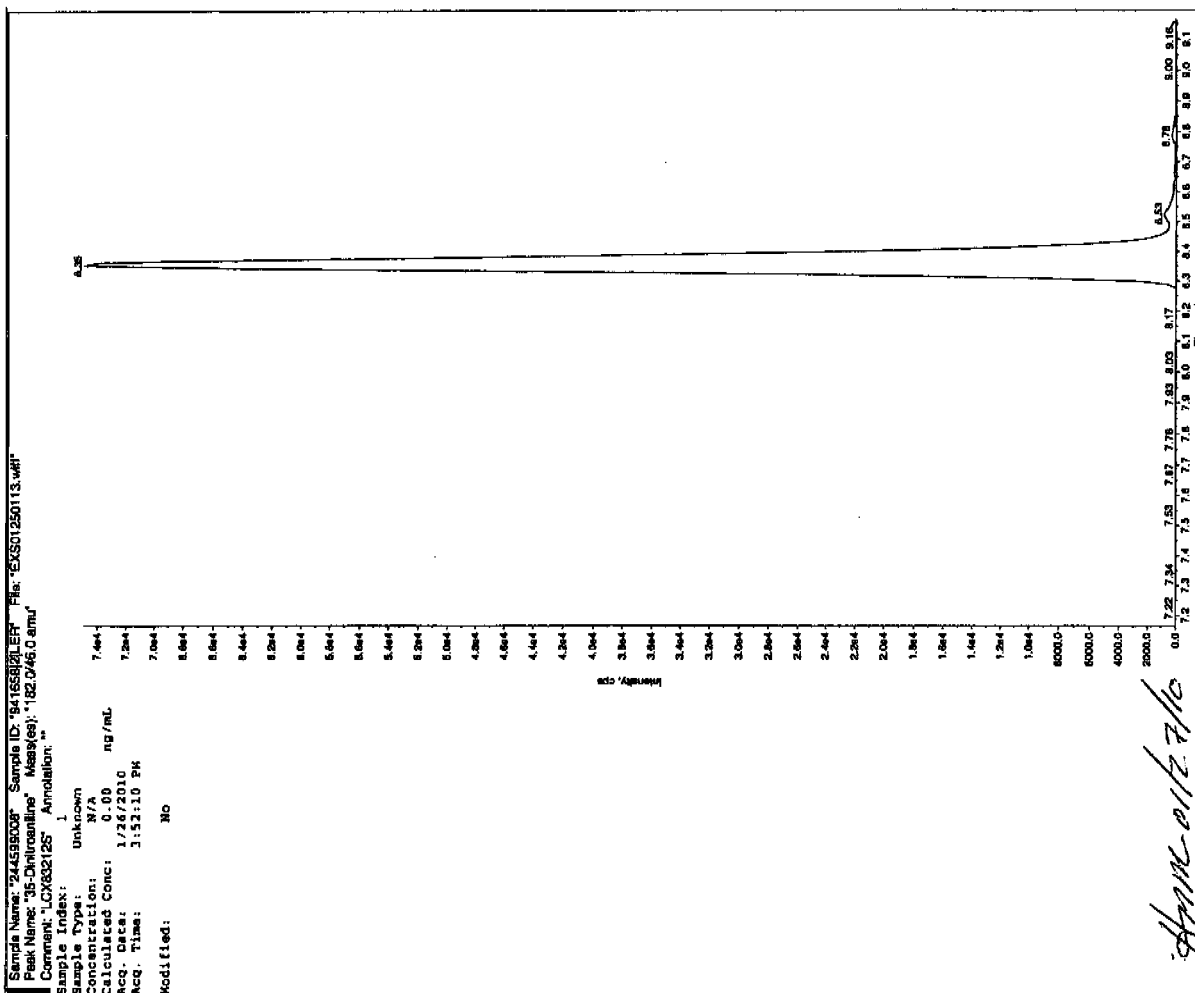
Units: ug/kg

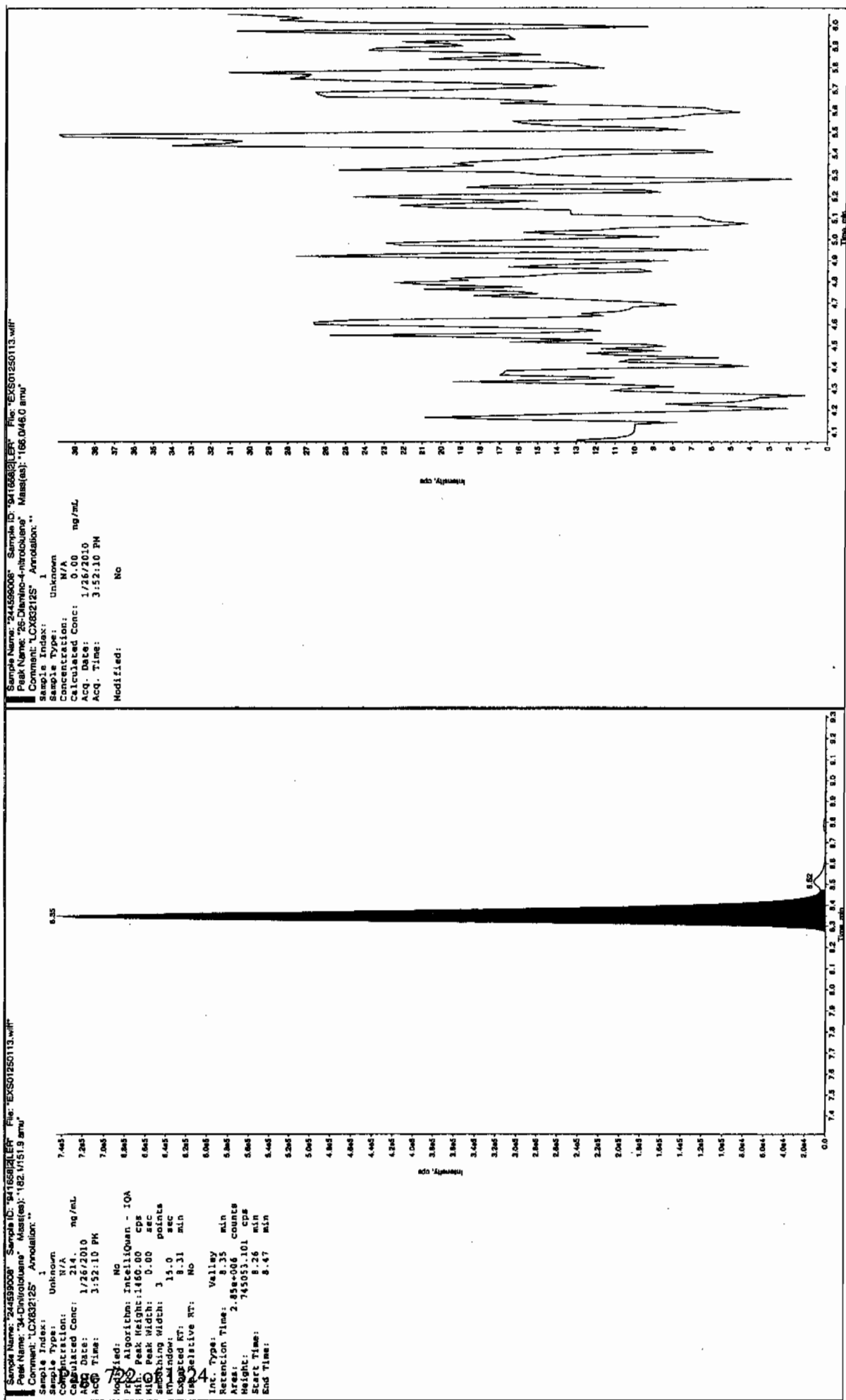
Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

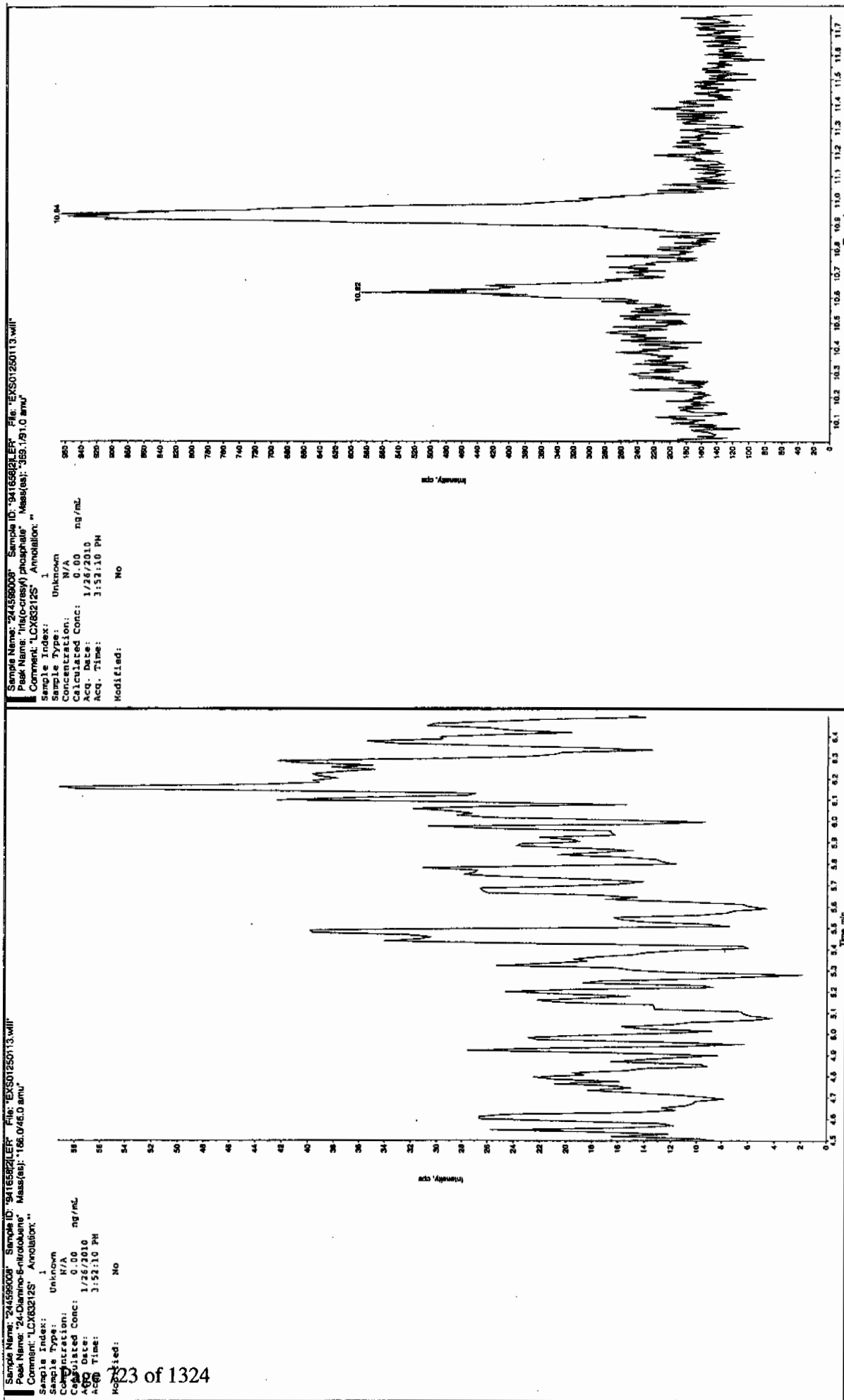
\*Concentration =

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

San 1/27/10







\*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: RE12-10-7252

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599009

Sample Amount 2

Moisture: 15.9

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125234a

Date Analyzed: 30-JAN-10 05:57

Units: ug/kg

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

\*Concentration =

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

# Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Sat Jan 30 10:07:34 2010, Page 55 of 71

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA5.qld, Time: Sat Jan 30 10:06:54 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125234a

Date: 30-Jan-2010

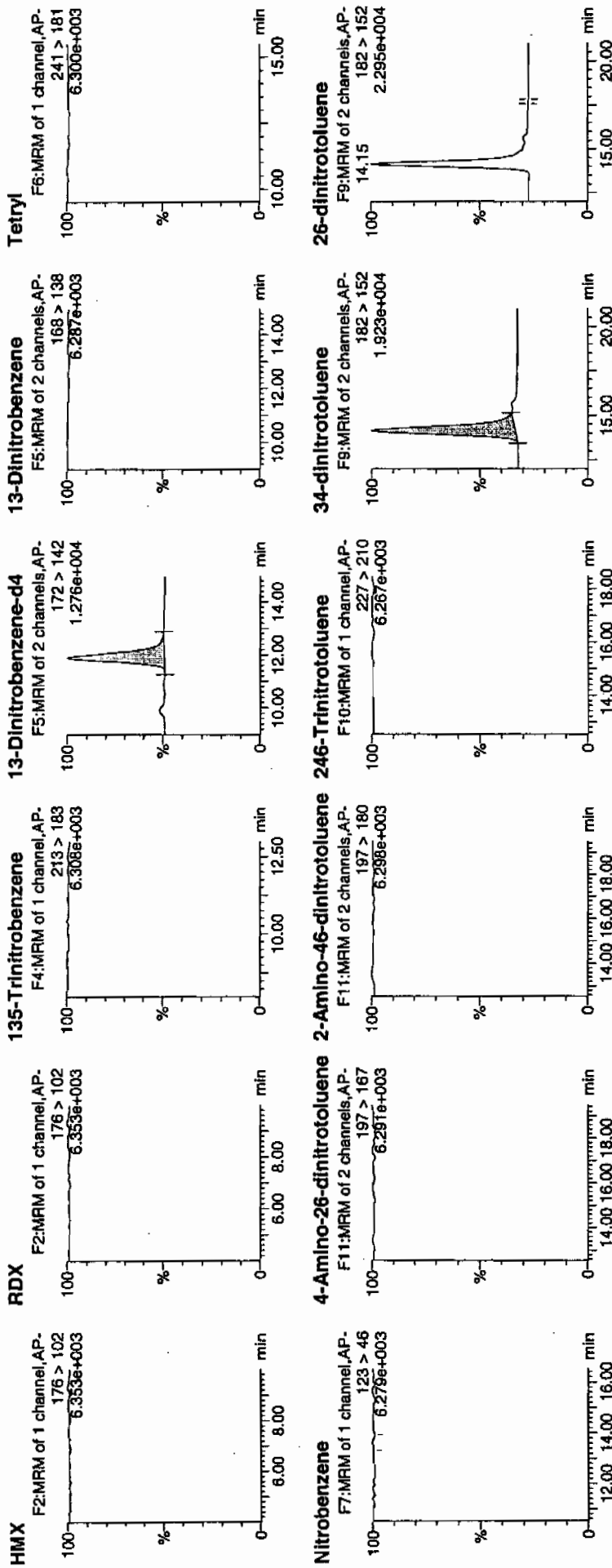
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ID: 244599009

Vial: 3:7,B

1/30/10

Handwritten: 941658 | 21

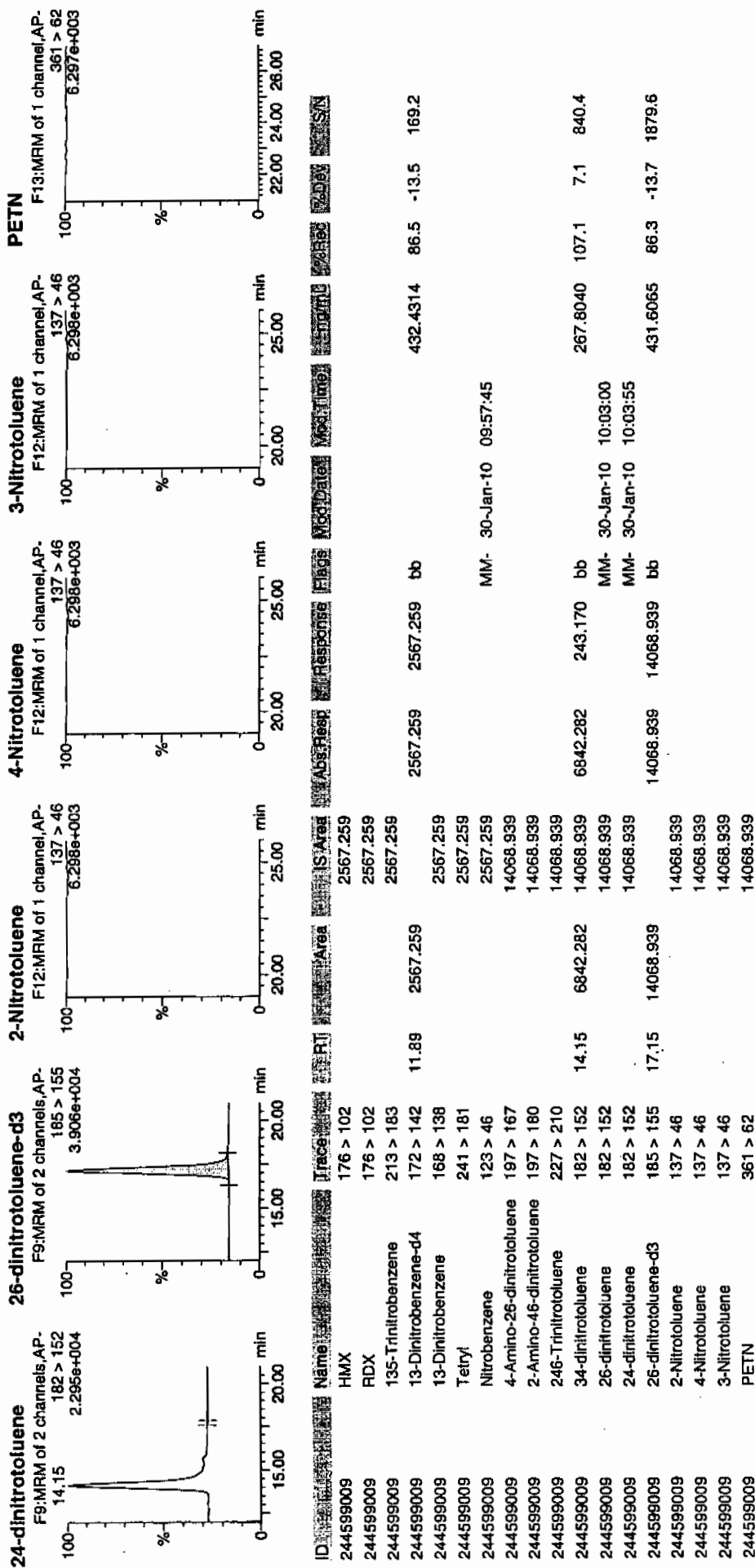


Handwritten: 01/30/10

Printed: Sat Jan 30 10:07:34 2010, Page 56 of 71

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA5.qtd, Time: Sat Jan 30 10:06:54 2010





1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7252

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599009

Sample Amount 2

Moisture: 15.9

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250114.wiff

Date Analyzed: 26-JAN-10 16:07

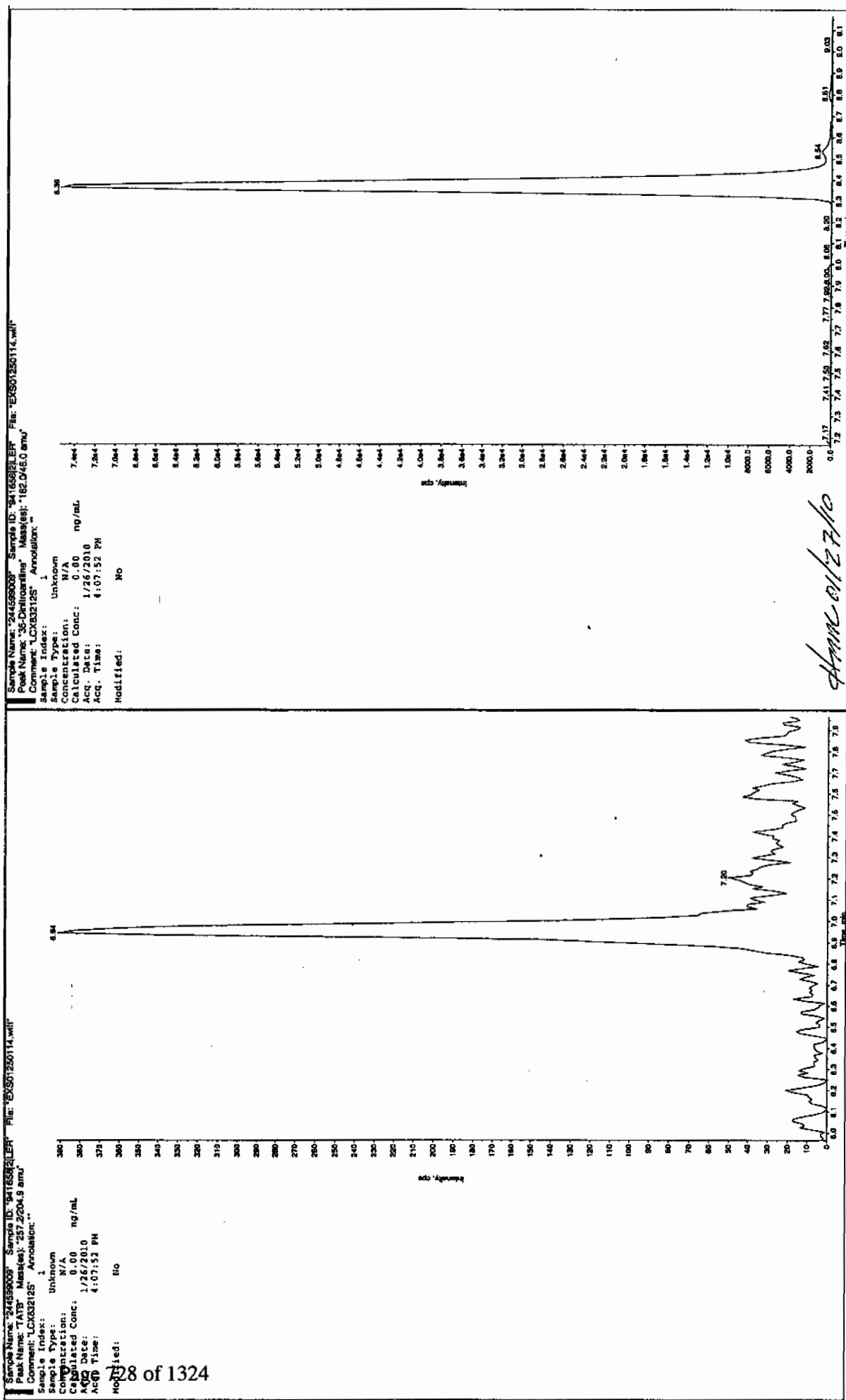
Units: ug/kg

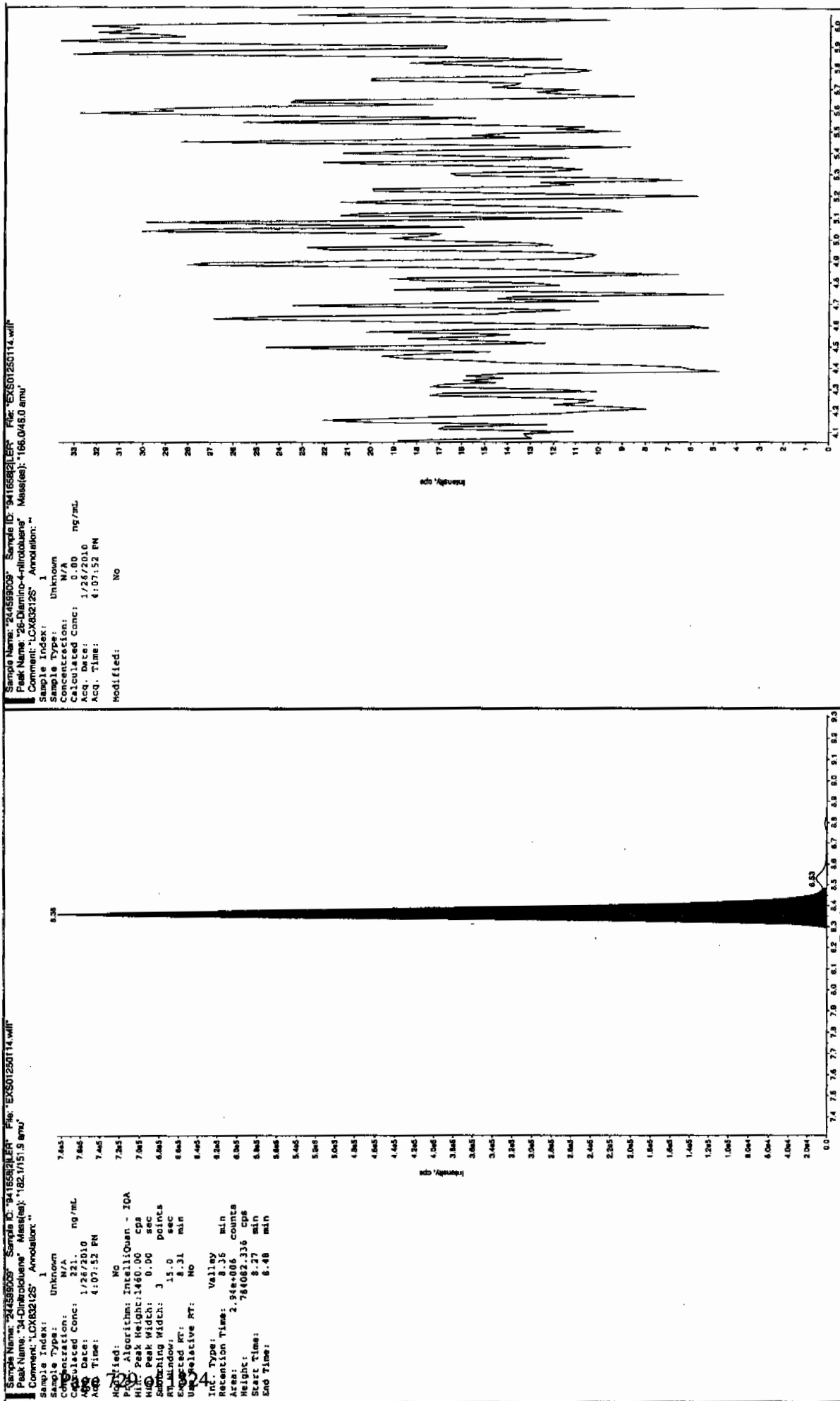
Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

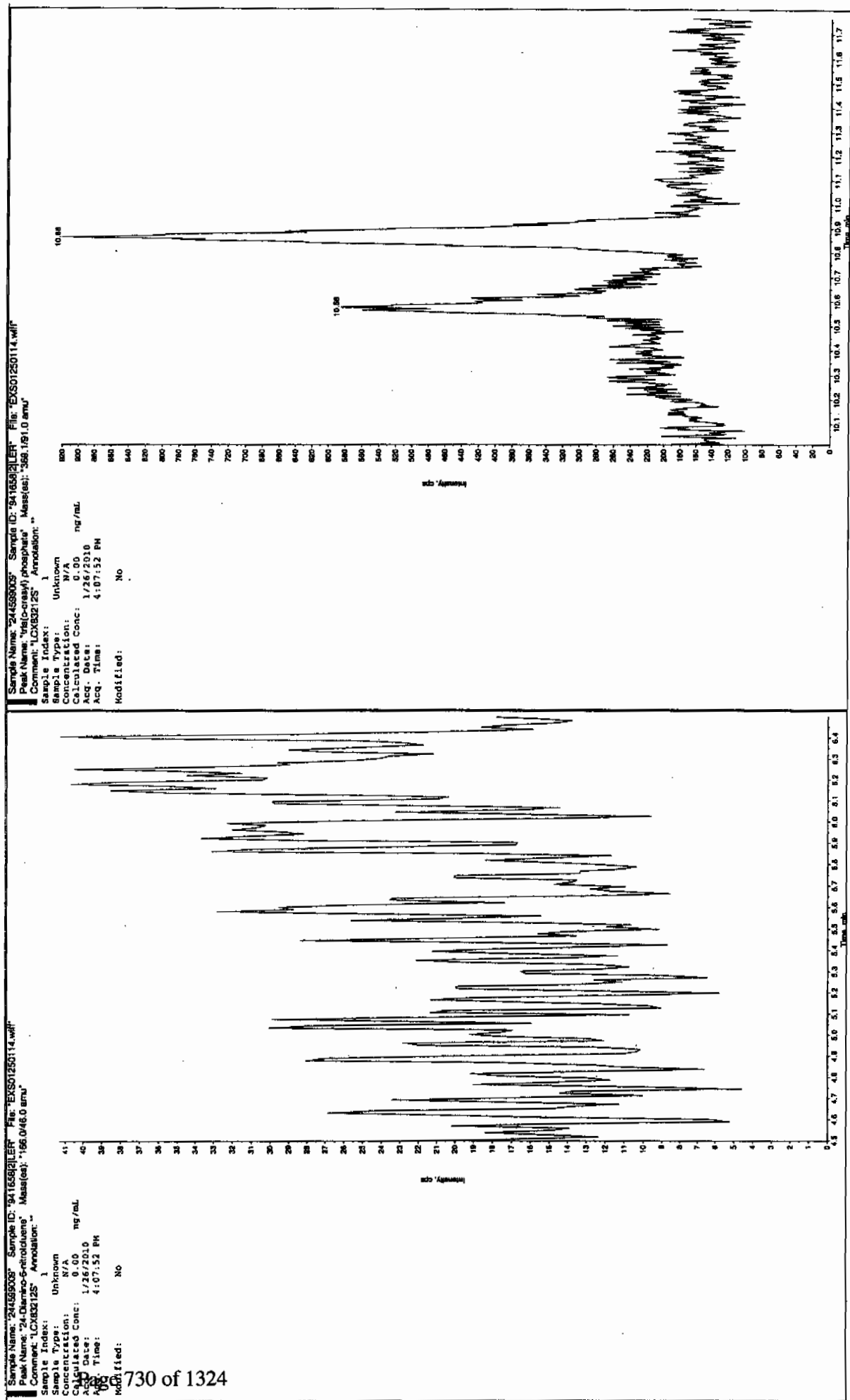
\*Concentration =

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

See 1/27/10







1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7253

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599010

Sample Amount 2

Moisture: 3.3

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125235a

Date Analyzed: 30-JAN-10 06:26

Units: ug/kg

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

\*Concentration =

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

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

Dataset: C:\MASSLYNX\New\_Exp\_PRO\012510expA5.qld, Time: Sat Jan 30 10:06:54 2010

Name: C:\MASSLYNX\NEW\_EXP\_PRO\012510expA5.qld

Date: 30-Jan-2010

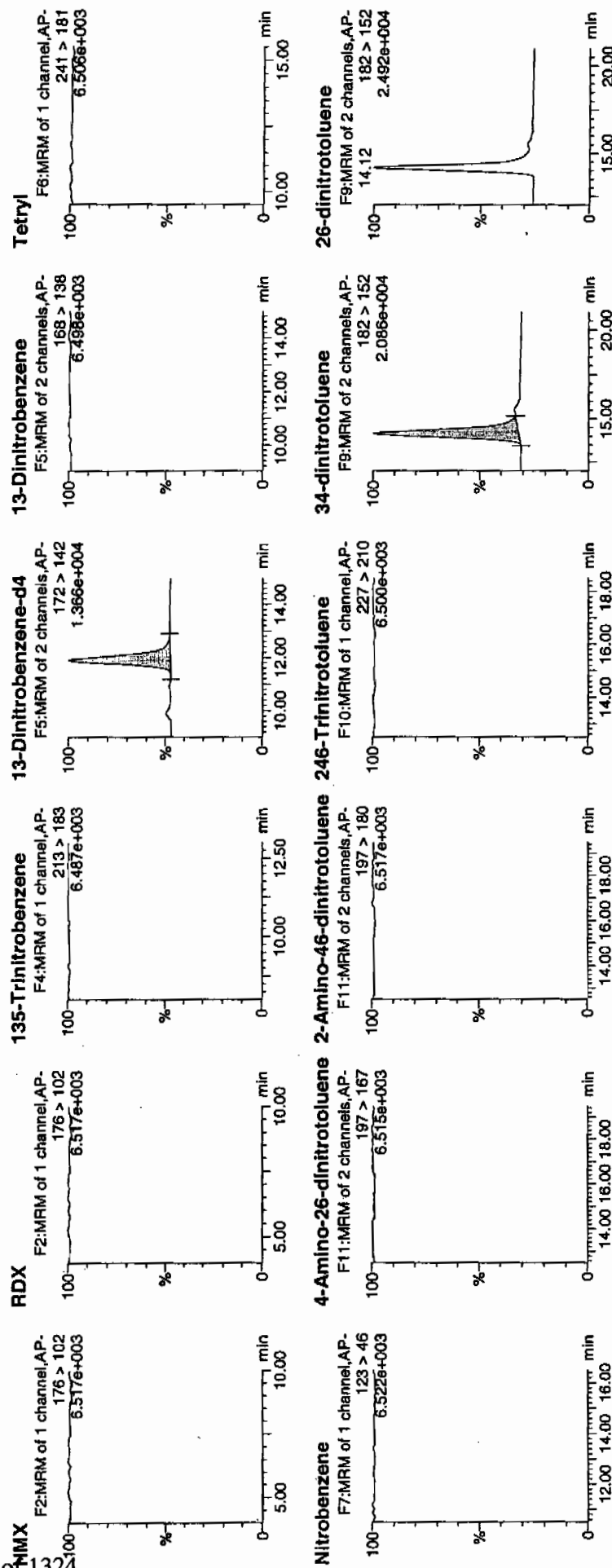
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1/30/10

941658 | 80000 | 21

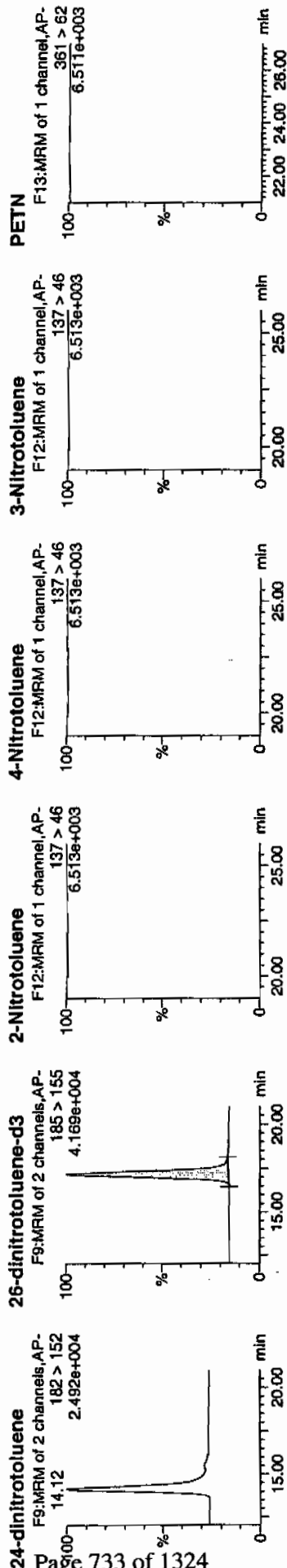


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Printed: Sat Jan 30 10:07:34 2010, Page 58 of 71

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

Dataset: C:\MASSLYNX\New\_Exp\_PRO\012510expA5.qld, Time: Sat Jan 30 10:06:54 2010



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Flags	Mod	Time	Area	% Rec	Peak	SN
244599010	HMx	176 > 102			2782.396								
244599010	RDX	176 > 102			2782.396								
244599010	135-Trinitrobenzene	213 > 183			2782.396								
244599010	13-Dinitrobenzene-d4	172 > 142	11.89	2782.396		2782.396	bb			468.6693	93.7	-6.3	189.6
244599010	13-Dinitrobenzene	168 > 138			2782.396								
244599010	Tetryl	241 > 181			2782.396								
244599010	Nitrobenzene	123 > 46			14976.892								
244599010	4-Amino-26-dinitrotoluene	197 > 167			14976.892								
244599010	2-Amino-46-dinitrotoluene	197 > 180			14976.892								
244599010	246-Trinitrotoluene	227 > 210			14976.892								
244599010	34-dinitrotoluene	182 > 152	14.17	7587.736	14976.892	7587.736	bb			278.9767	111.6	11.6	518.9
244599010	26-dinitrotoluene	182 > 152			14976.892								
244599010	24-dinitrotoluene	182 > 152			14976.892								
244599010	26-dinitrotoluene-d3	185 > 155	17.16	14976.892		14976.892	bb			459.4607	91.9	-8.1	1463.7
244599010	2-Nitrotoluene	137 > 46			14976.892								
244599010	4-Nitrotoluene	137 > 46			14976.892								
244599010	3-Nitrotoluene	137 > 46			14976.892								
244599010	PETN	361 > 62			14976.892								

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7253

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599010

Sample Amount 2

Moisture: 3.3

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250149.wiff

Date Analyzed: 27-JAN-10 01:17

Units: ug/kg

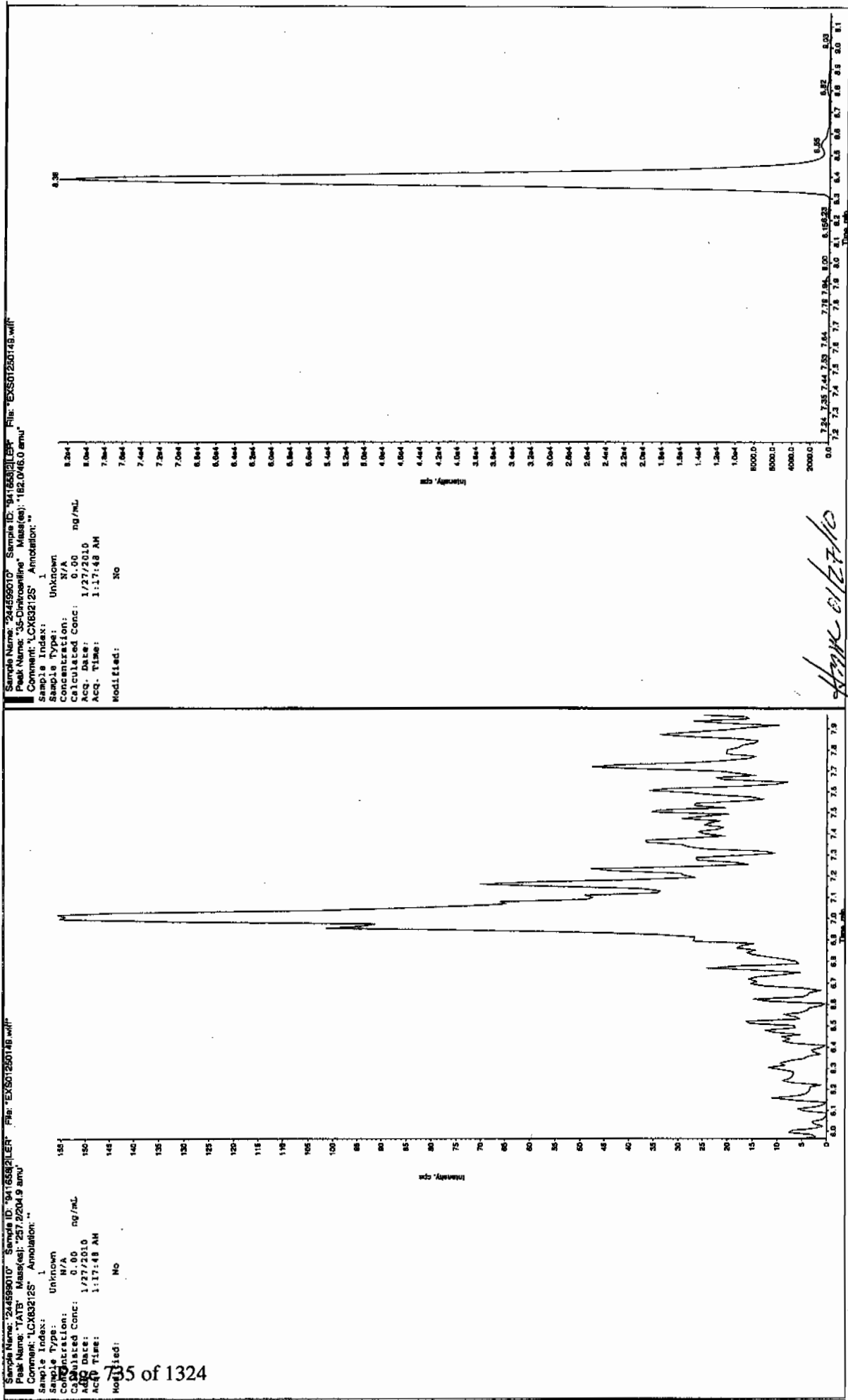
Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

\*Concentration =

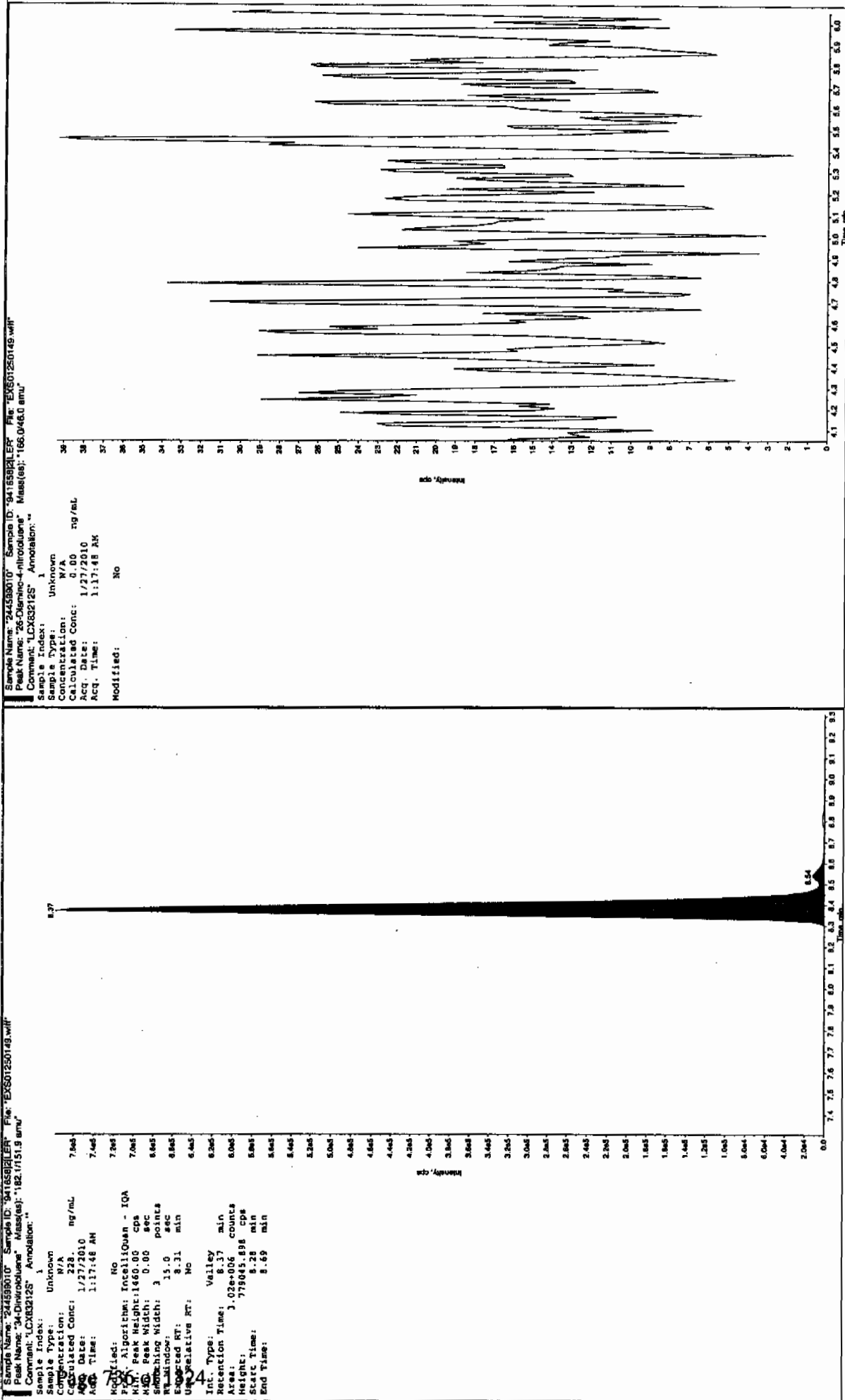
Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

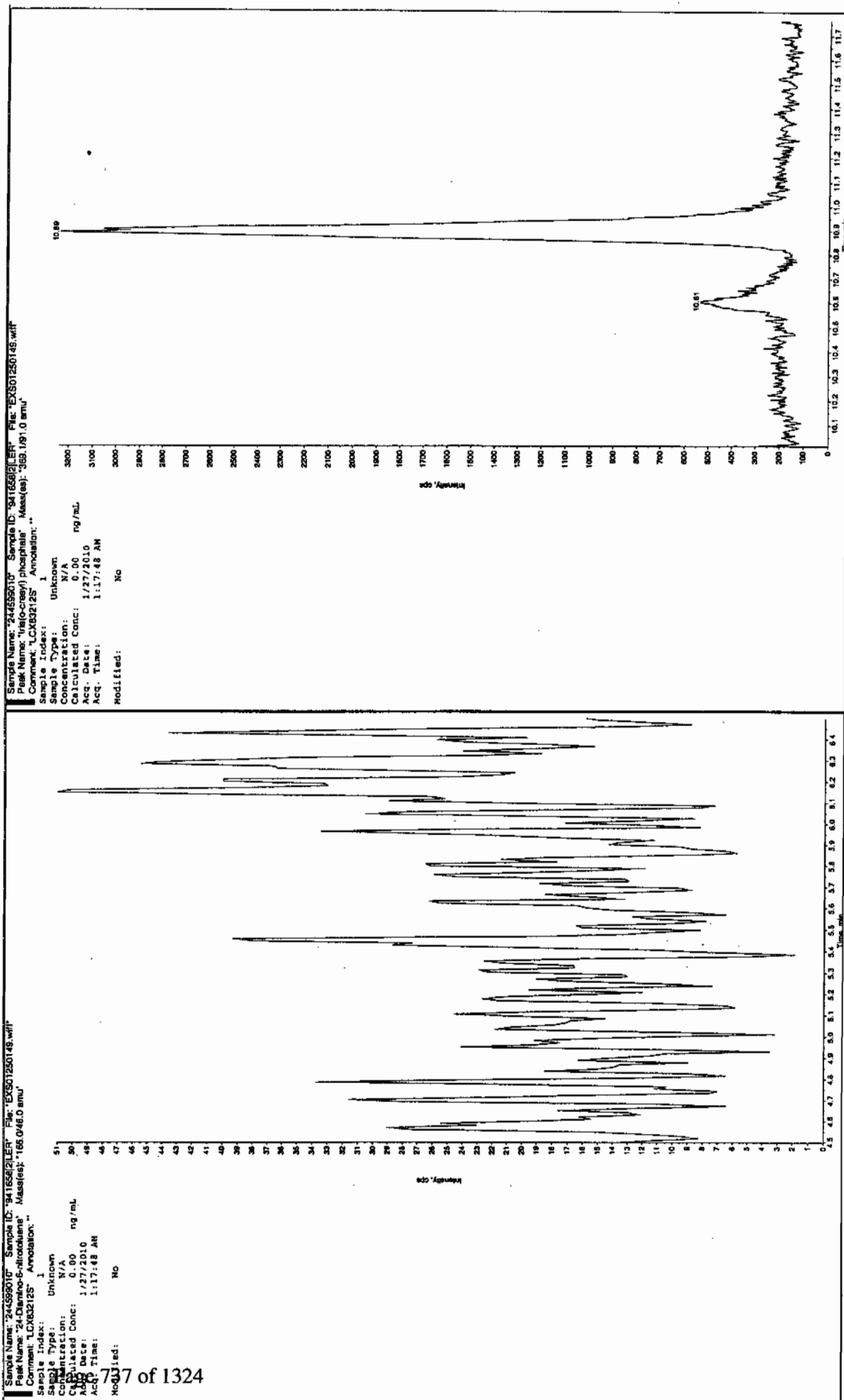


See 1127110



See 1127110





\*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: RE12-10-7254

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599011

Sample Amount 2

Moisture: 15.3

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125236a

Date Analyzed: 30-JAN-10 06:56

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

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

Dataset: C:\MASSLYNX\New\_Exp\_PRO\012510expA5.qld, Time: Sat Jan 30 10:06:54 2010

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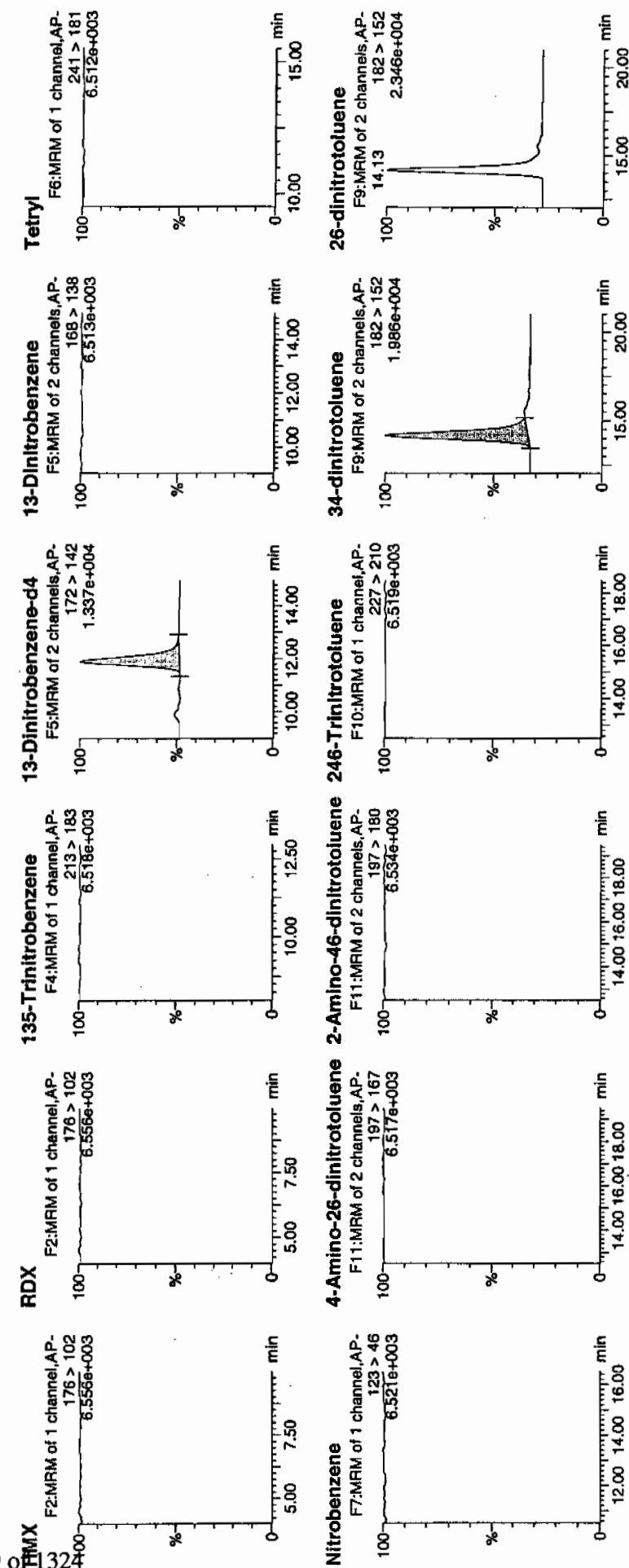
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Time: 06:56:30

ID: 244599011

Mail: 3:7,D

1077  
1/30/10  
WAW 941658 | 21 | 30 →



Handwritten signature and date: 01/30/10

GEL Laboratories, LLC / Analyst: Michael A. Penny

**24-dinitrotoluene**  
 F9:MRM of 2 channels,AP-  
 182 > 152  
 2.346e+004  
 14.13  
 20.00 min

**26-dinitrotoluene-d3**  
 F8:MRM of 2 channels,AP-  
 185 > 155  
 4.082e+004  
 20.00 min

**2-Nitrotoluene**  
 F12:MRM of 1 channel,AP-  
 137 > 46  
 6.562e+003  
 25.00 min

**4-Nitrotoluene**  
 F12:MRM of 1 channel,AP-  
 137 > 46  
 6.562e+003  
 25.00 min

**3-Nitrotoluene**  
 F12:MRM of 1 channel,AP-  
 137 > 46  
 6.562e+003  
 25.00 min

**PETN**  
 F13:MRM of 1 channel,AP-  
 361 > 62  
 5.555e+003  
 22.00 24.00 26.00 min

Page 740 of 1324

Name	Trace	RT	Area	IS Area	Abs. Resp	Response	Flags	Mod.Date	Mod.Time	Integration	%Rec	%Dev	SN
HMX	244599011	176 > 102		2689.358									
RDX	244599011	176 > 102		2689.358									
135-Trinitrobenzene	244599011	213 > 183		2689.358									
13-Dinitrobenzene-d4	244599011	172 > 142	11.90	2689.358	2689.358	bb				452.9979	90.6	-9.4	383.0
13-Dinitrobenzene	244599011	168 > 138											
Teiryf	244599011	241 > 181		2689.358									
Nitrobenzene	244599011	123 > 46		2689.358									
4-Amino-26-dinitrotoluene	244599011	197 > 167		14545.574									
2-Amino-46-dinitrotoluene	244599011	197 > 180		14545.574									
246-Trinitrotoluene	244599011	227 > 210		14545.574									
34-dinitrotoluene	244599011	182 > 152	14.17	7176.675	7176.675	bb				271.6876	108.7	8.7	467.2
26-dinitrotoluene	244599011	182 > 152		14545.574									
24-dinitrotoluene	244599011	182 > 152		14545.574									
26-dinitrotoluene-d3	244599011	185 > 155	17.16	14545.574	14545.574	bb				446.2287	89.2	-10.8	804.1
2-Nitrotoluene	244599011	137 > 46		14545.574									
4-Nitrotoluene	244599011	137 > 46		14545.574									
3-Nitrotoluene	244599011	137 > 46		14545.574									
PETN	244599011	361 > 62		14545.574									

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7254

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599011

Sample Amount 2

Moisture: 15.3

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250116.wiff

Date Analyzed: 26-JAN-10 16:39

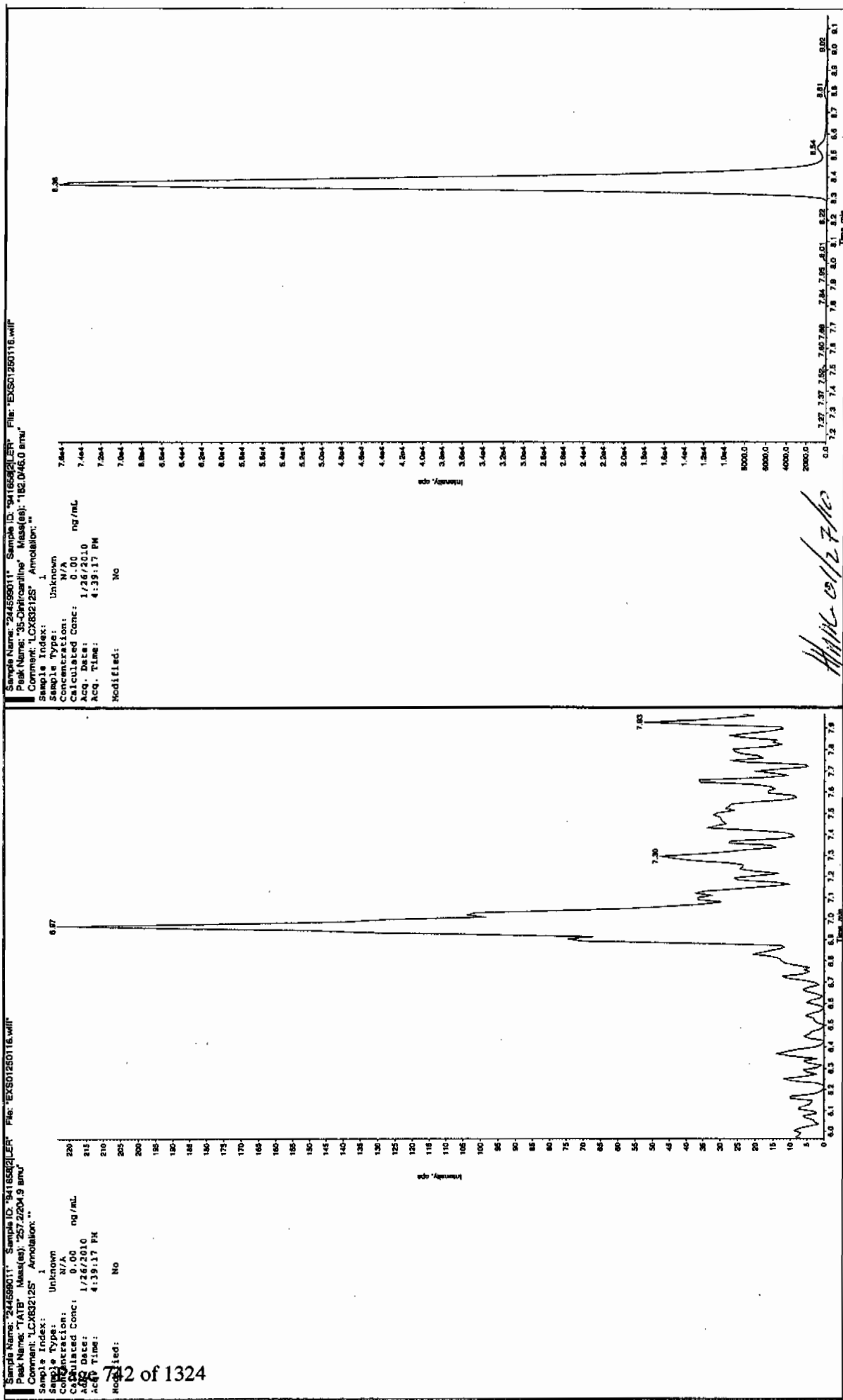
Units: ug/kg

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 =

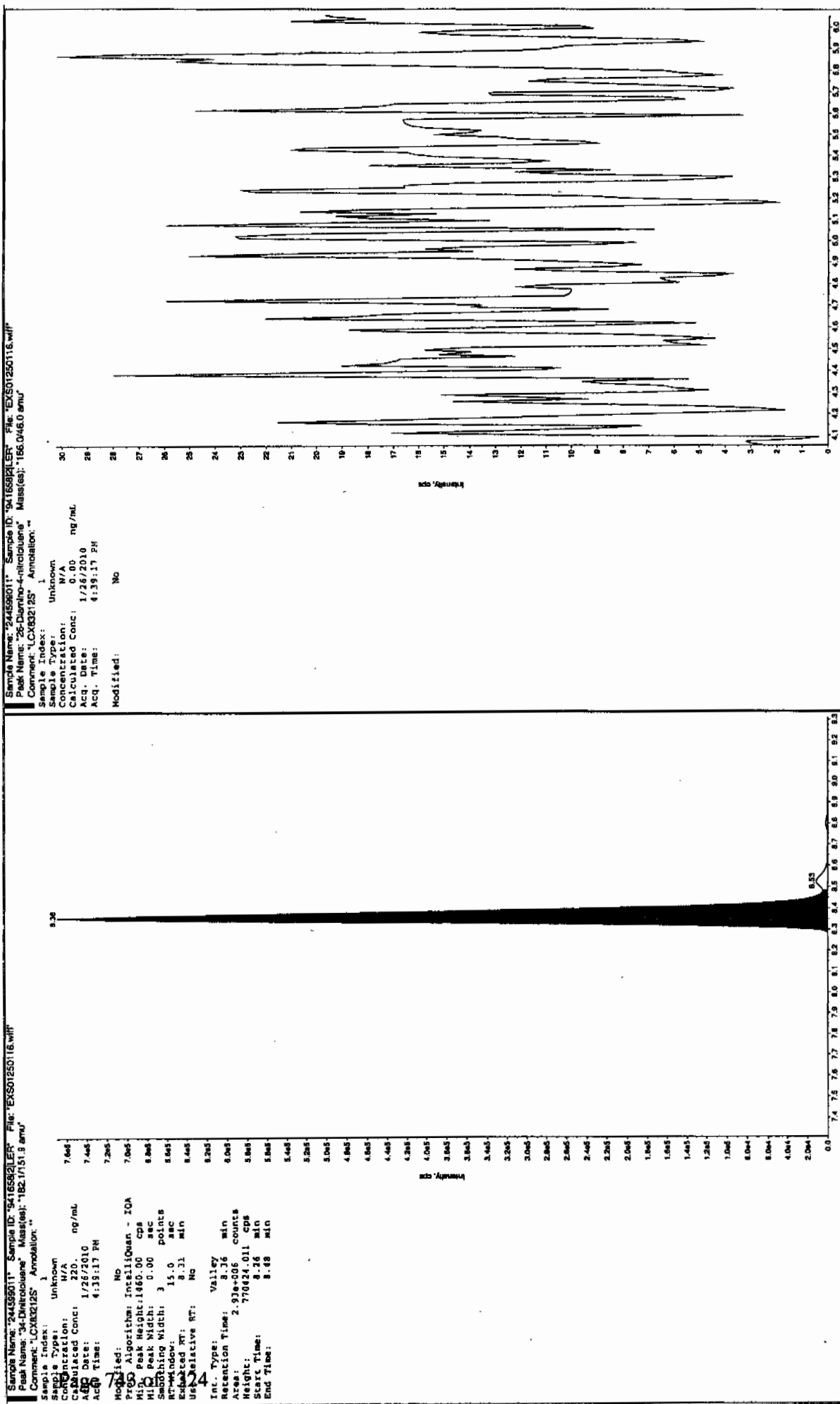
Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

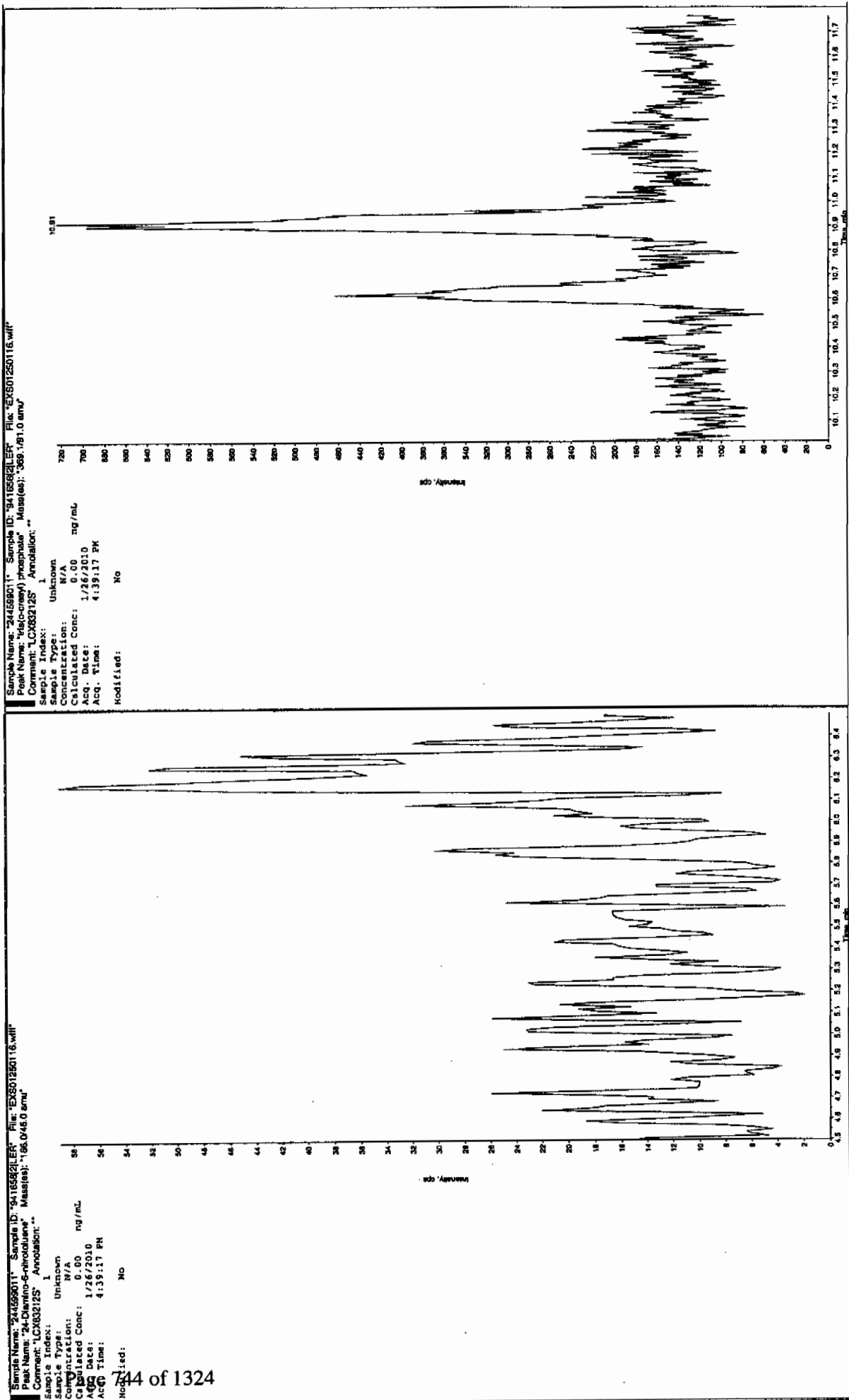
See 167410



WHL 01/27/10







\*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: RE12-10-7255

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599012

Sample Amount 2

Moisture: 6.6

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125237a

Date Analyzed: 30-JAN-10 07:26

Units: ug/kg

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

\*Concentration =

Instrument Value	X	$\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$	X	Dilution Factor
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# Quantify Sample Report GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA5.qld, Time: Sat Jan 30 10:06:54 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125237a

Date: 30-Jan-2010

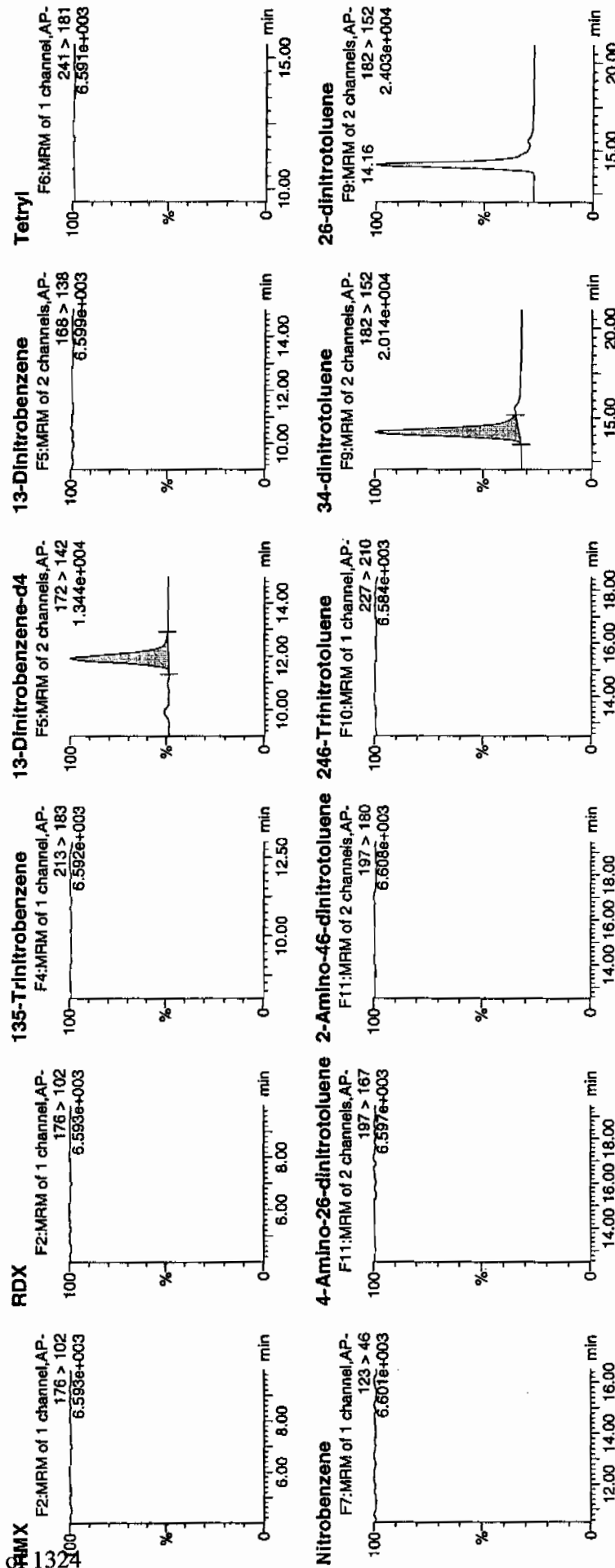
Time: 07:26:00

ID: 244599012

Mat: 3:7,E

1/30/10

WAX 941658 | 21

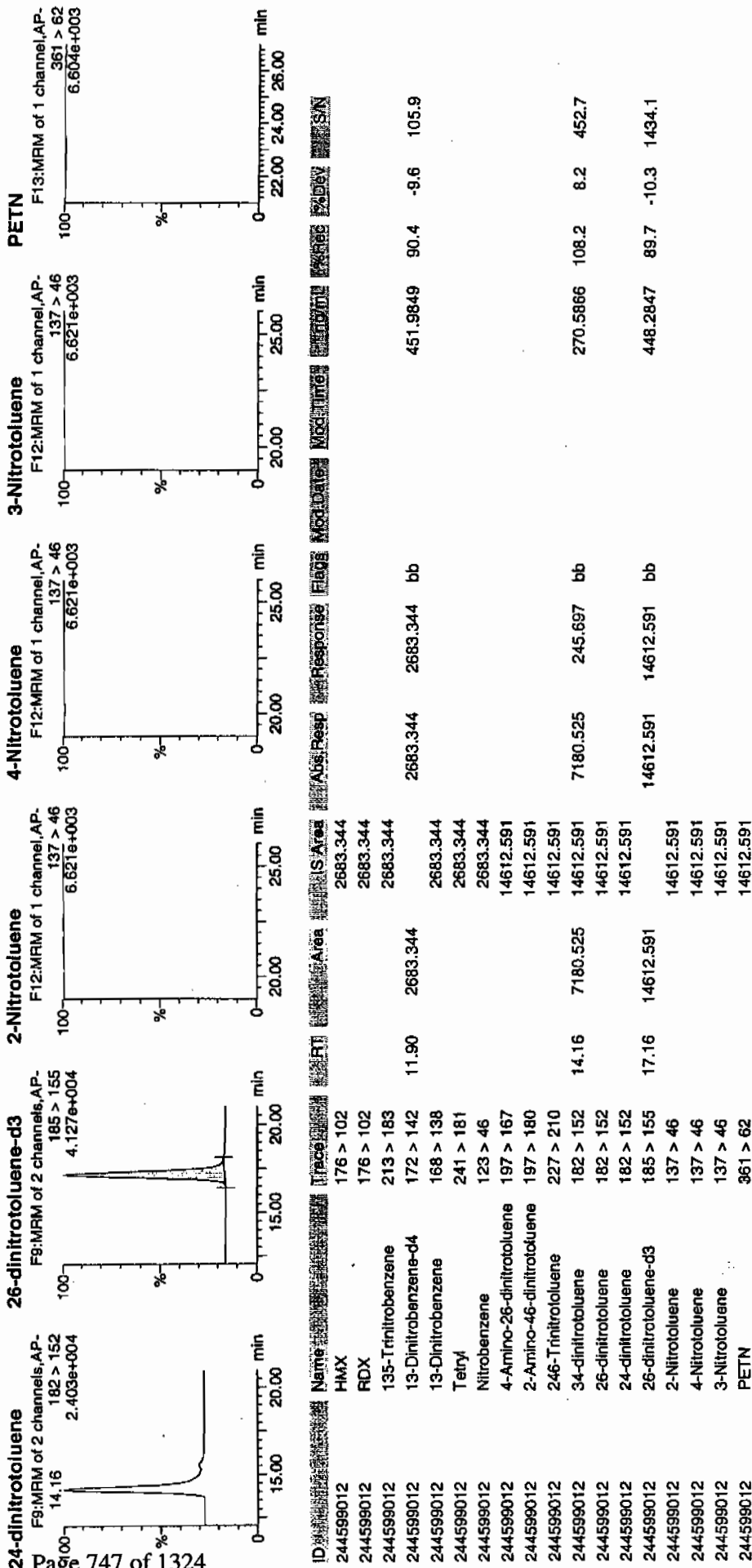


Handwritten signature

Printed: Sat Jan 30 10:07:34 2010, Page 62 of 71

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

Dataset: C:\MASSLYNX\New\_Exp\_PRO\012510expA5.qld, Time: Sat Jan 30 10:06:54 2010



1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7255

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599012

Sample Amount 2

Moisture: 6.6

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250117.wiff

Date Analyzed: 26-JAN-10 16:55

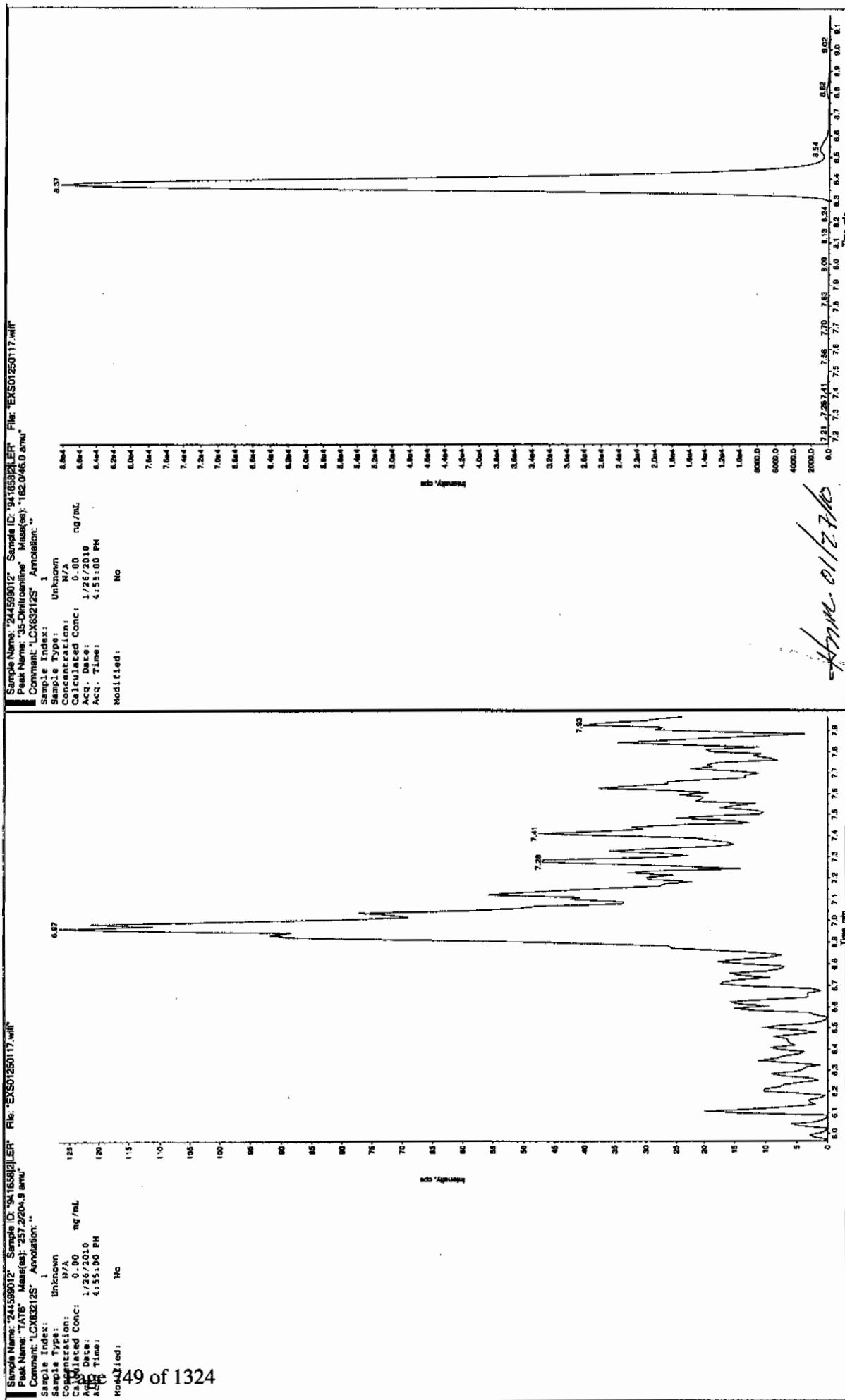
Units: ug/kg

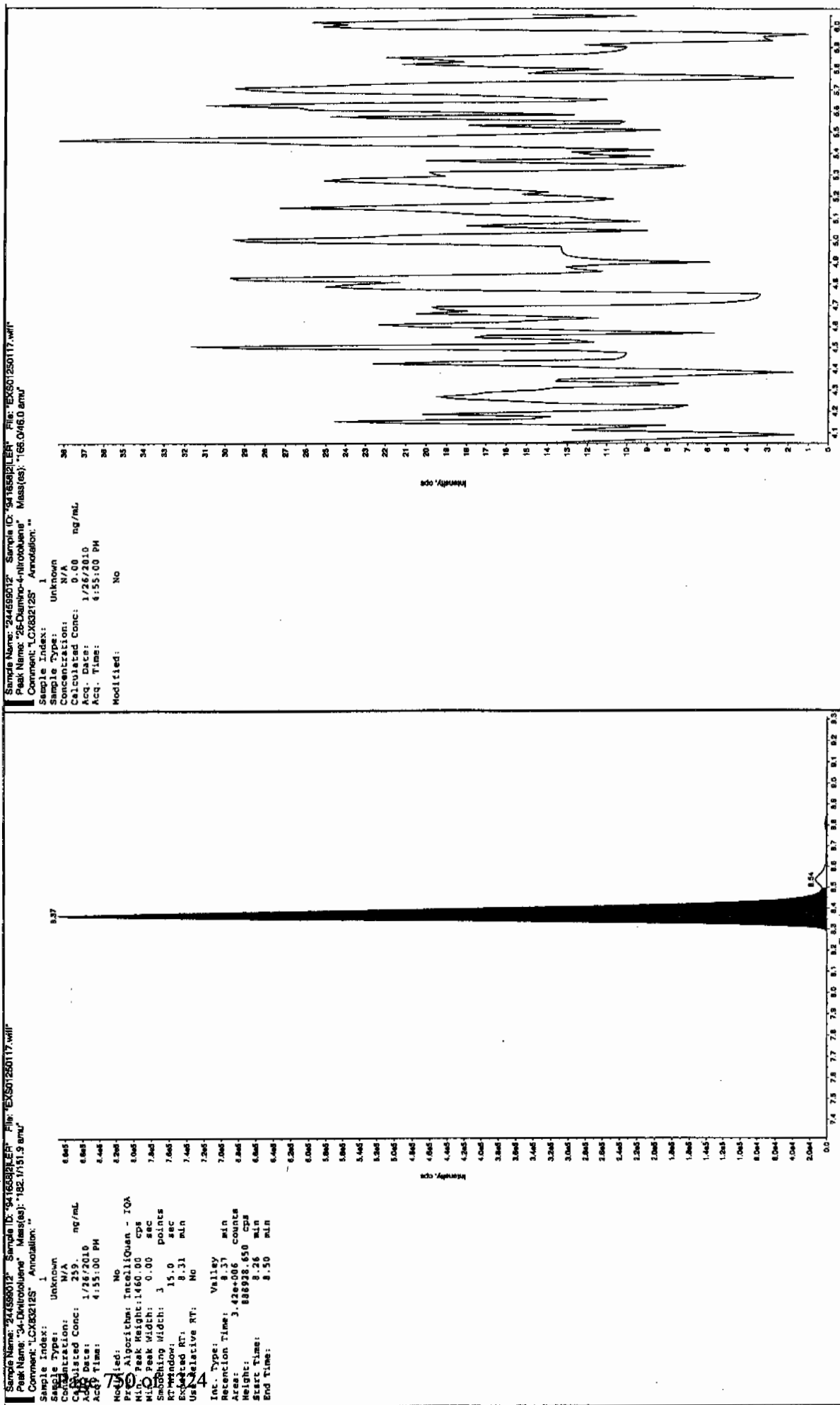
Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

\*Concentration =

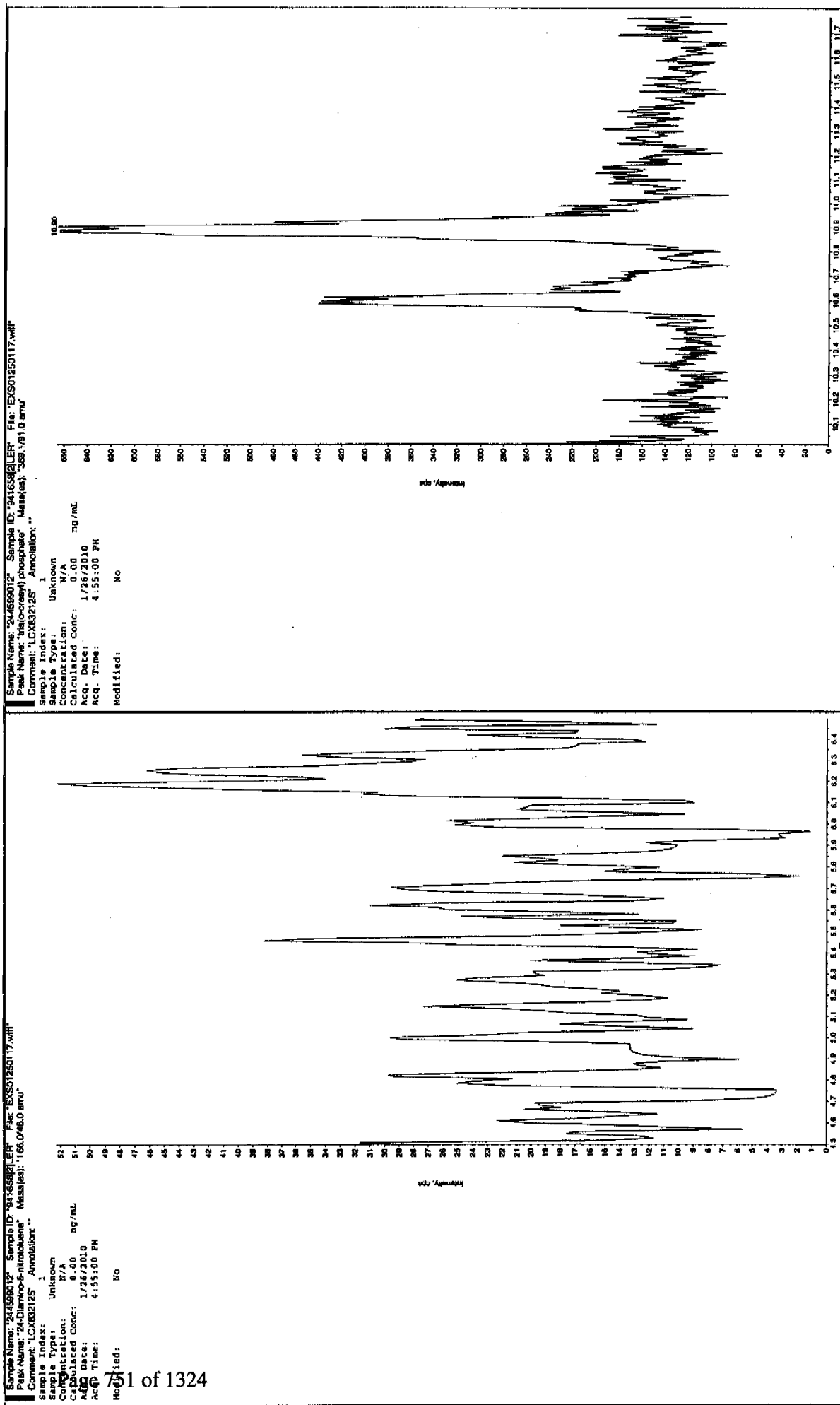
Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

See 1/27/10









1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7276

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599013

Sample Amount 2

Moisture: 8.4

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125238a

Date Analyzed: 30-JAN-10 07:55

Units: ug/kg

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

\*Concentration =

Instrument Value	X	$\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$	X	Dilution Factor
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Quantify Sample Report  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA5.qld, Time: Sat Jan 30 10:06:54 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125238a

Date: 30-Jan-2010

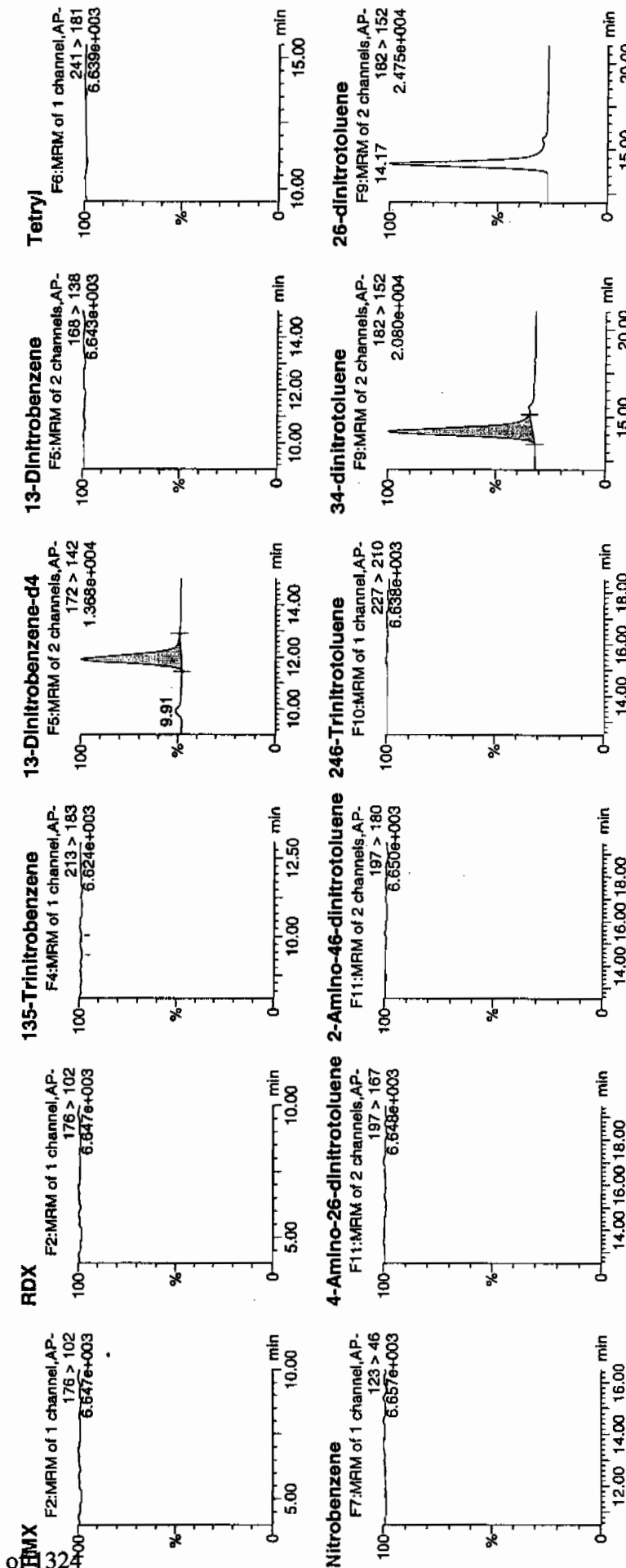
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ID: 244599013

Val: 3:7,F

1477  
1/30/10

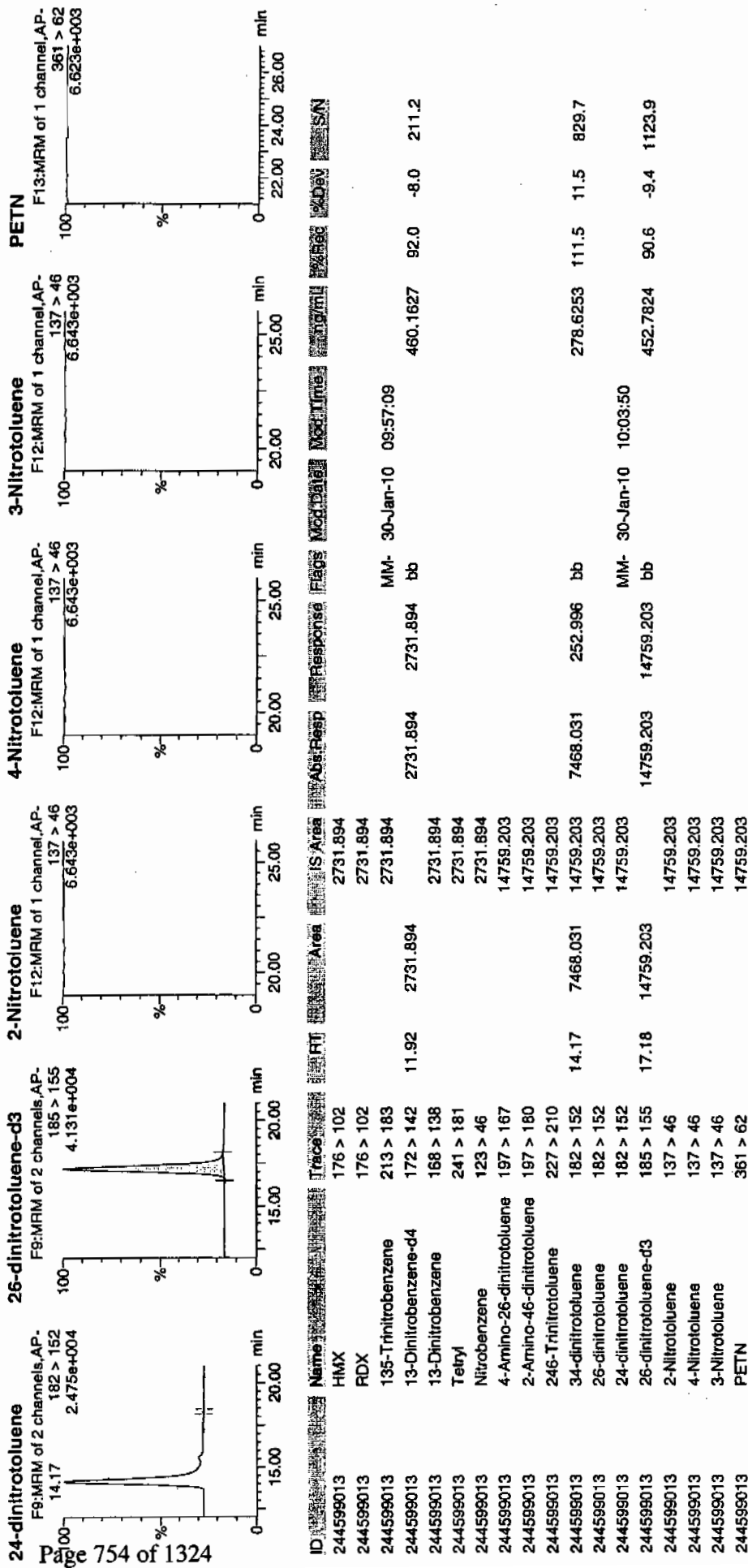
WADW 941658 | 80222 | 21



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

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA5.qid, Time: Sat Jan 30 10:06:54 2010



1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7276

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 244599013

Sample Amount 2

Moisture: 8.4

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01270014.wiff

Date Analyzed: 27-JAN-10 13:51

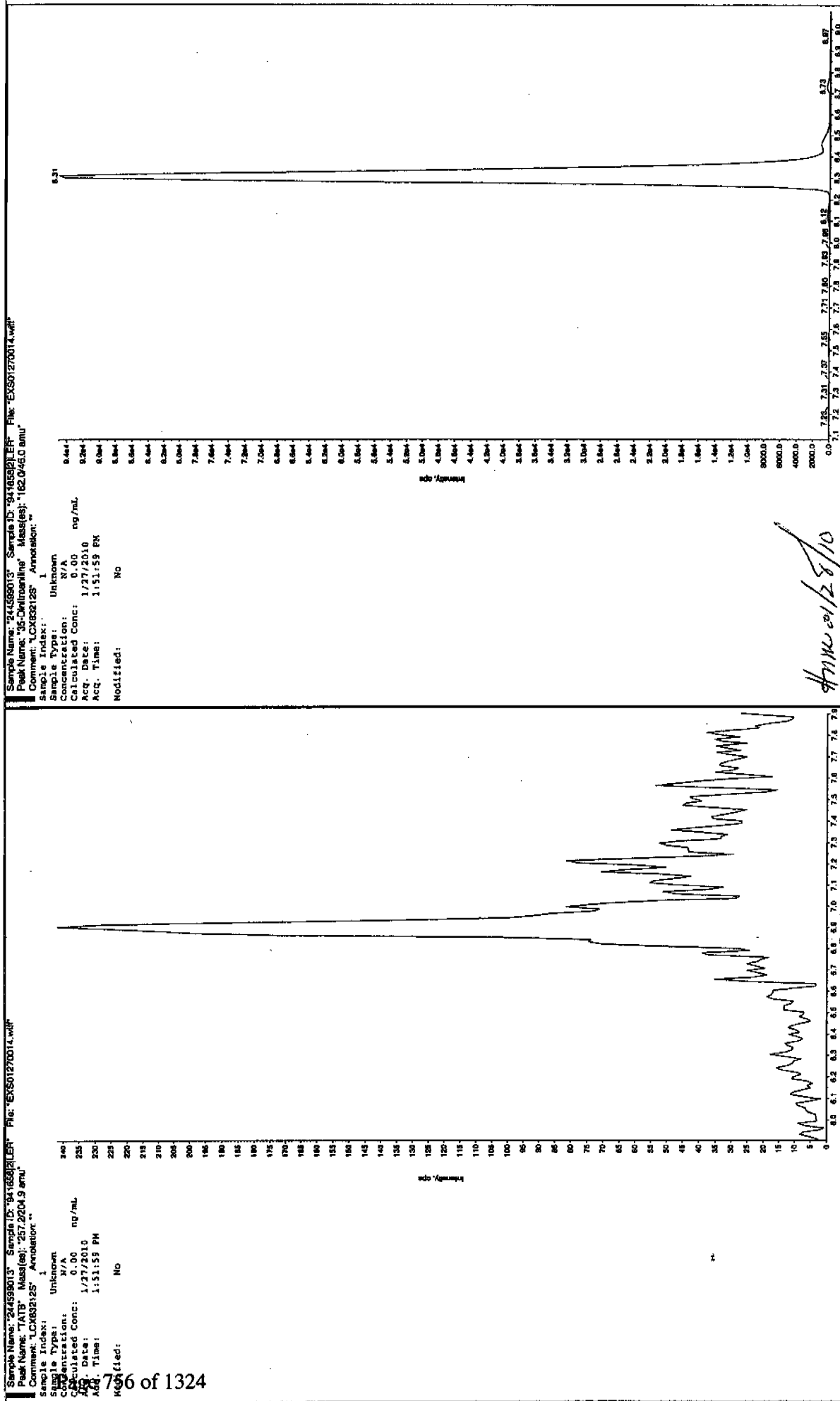
Units: ug/kg

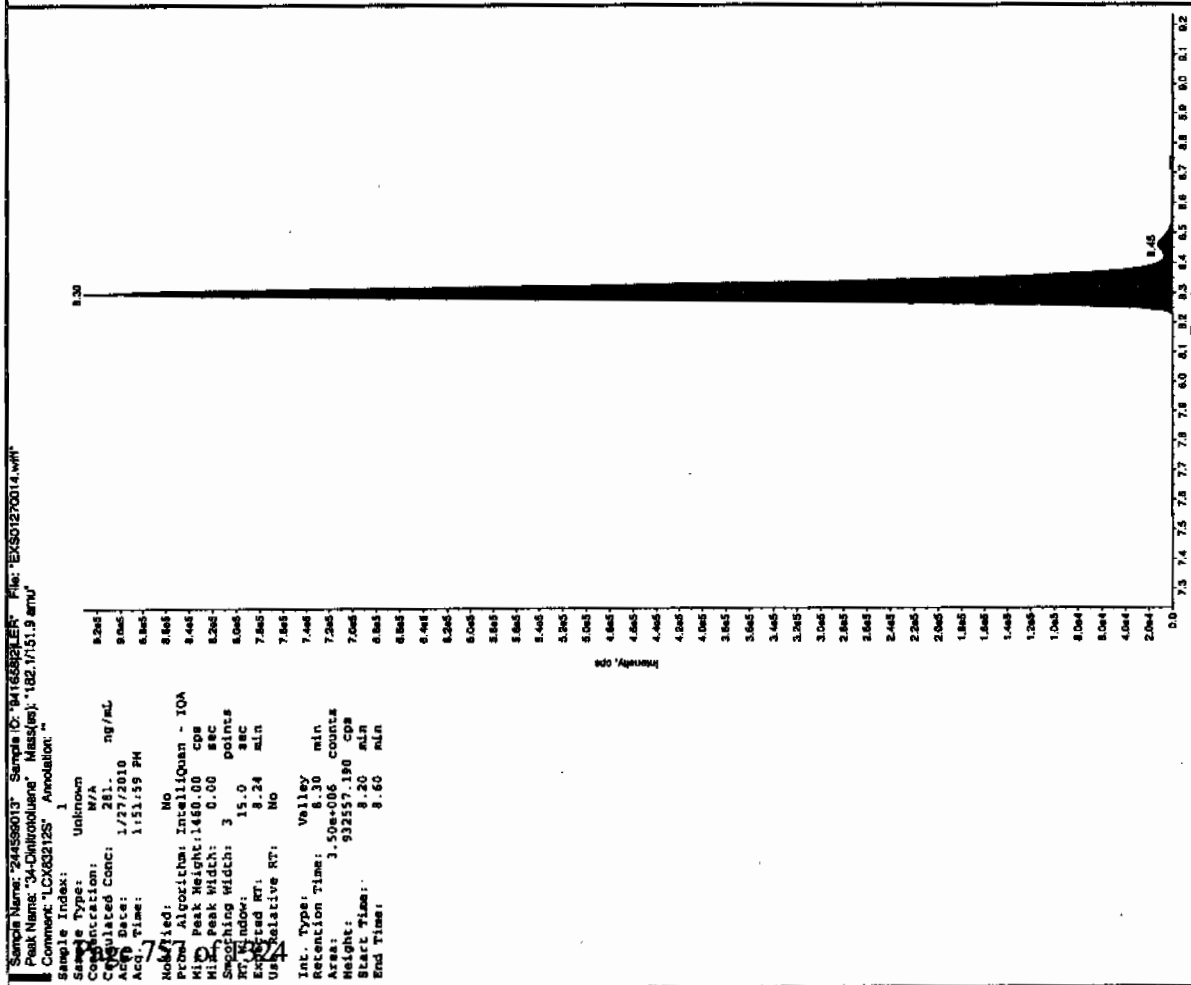
Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

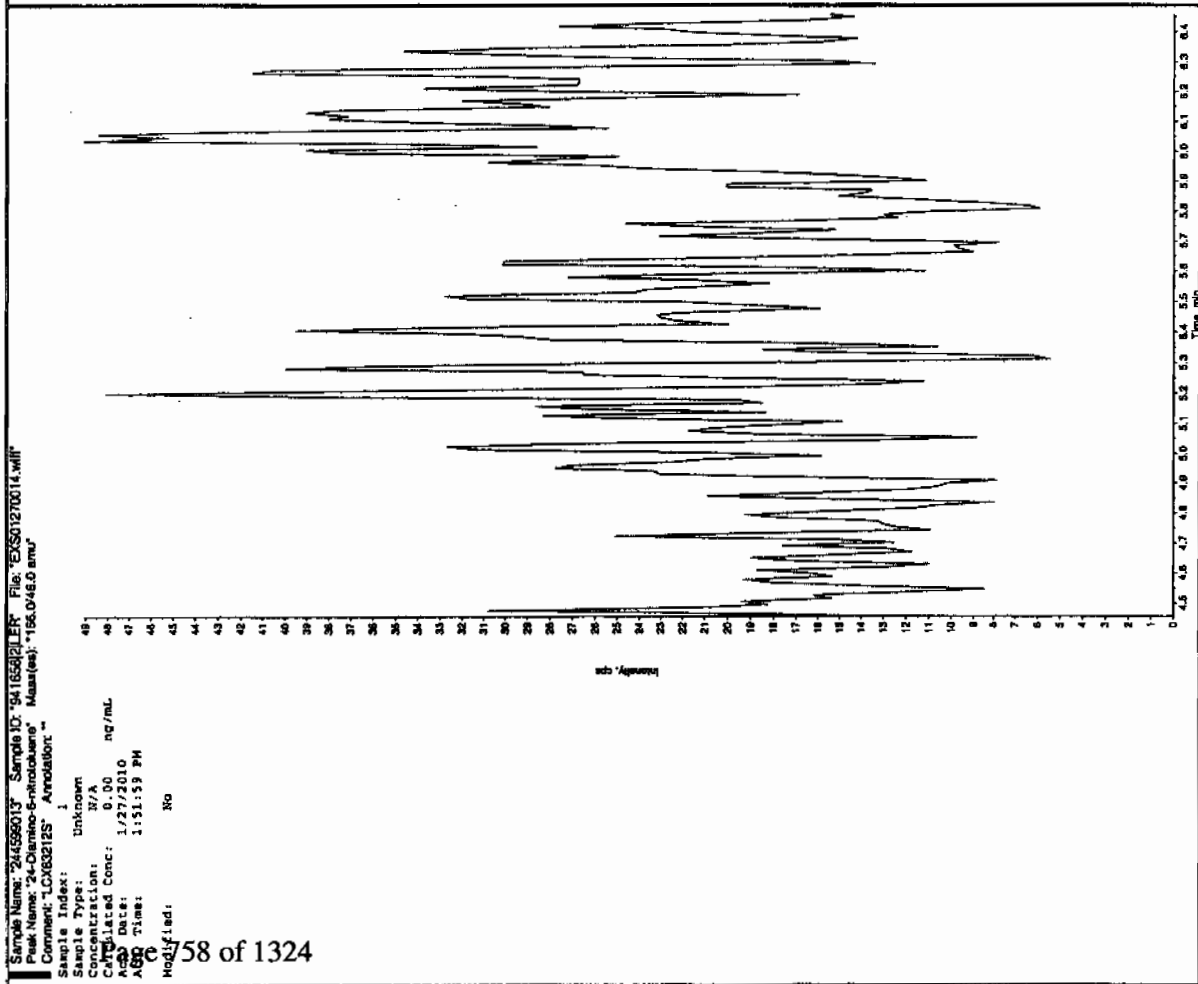
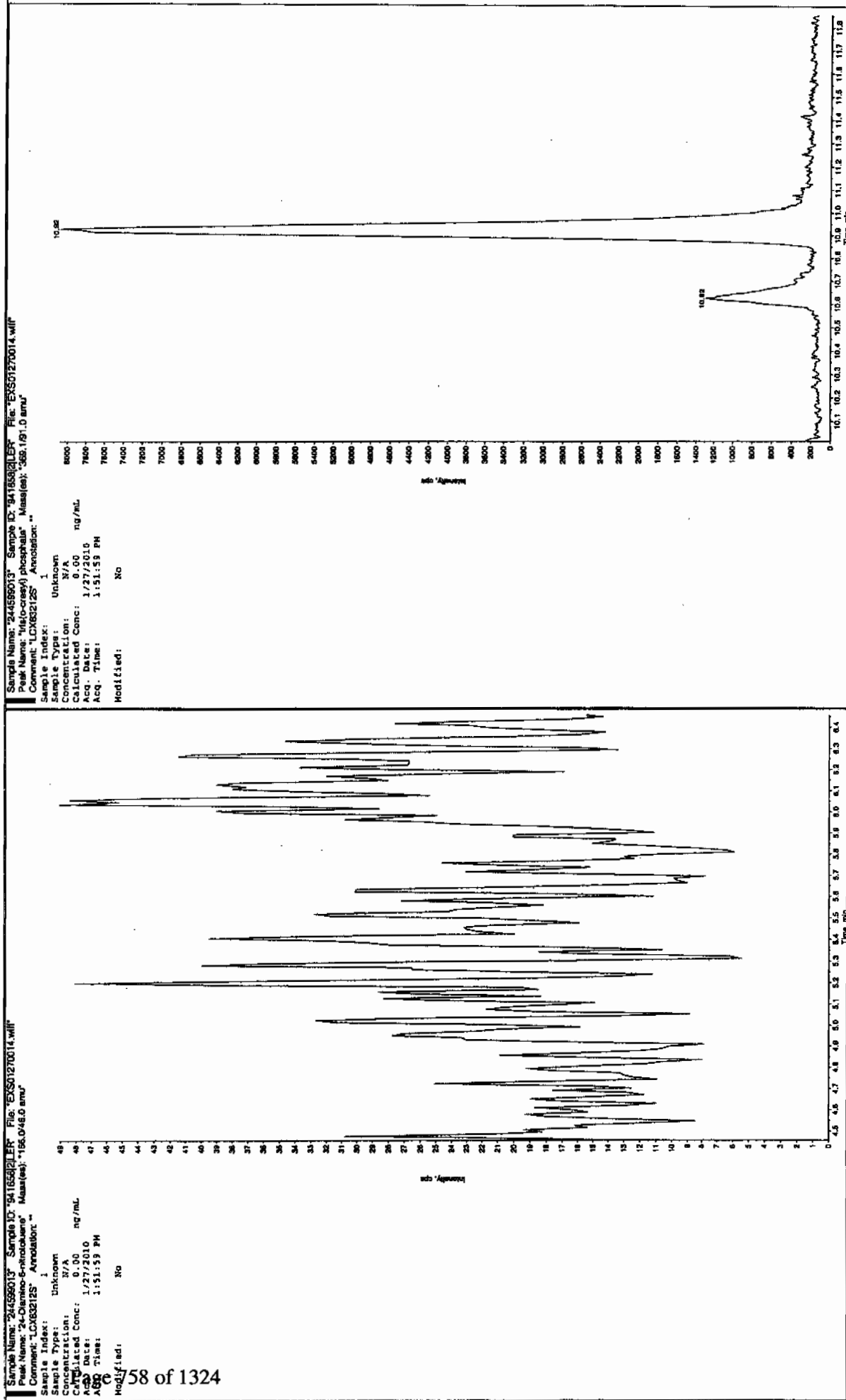
\*Concentration =

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

See 1128110







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



# STANDARDS DATA

SW846 8321A Modified-Explosives  
Calibration Standard Concentration Levels

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

All values are ug/L without the prep factor

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

Calibration Levels 8321A-Modified-EXPL.xls

Form 6

# Explosives Initial Calibration

Lab Name: GEL Laboratories LLC

GEL Job No: 10-1210

Lab Code: GEL

Run Date: 25-JAN-10 27-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-Dinitrobenzene-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

Form 6

# Explosives Initial Calibration

Lab Name: GEL Laboratories LLC

GEL Job No: 10-1210

Lab Code: GEL

Run Date: 25-JAN-10 27-JAN-10

LCMSMS Instrument ID: LCMSMS

Method: 8321A Modified

HPLC Column: Phenomenex Ultracarb 5 ODS(20)

Calibration Type: Linear

	1	2	3	4	5	6	Slope	Intercept	COD	Q
Calibration Level:										
Data File:	EXP0125003a	EXP0125004a	EXP0125005a	EXP0125006a	EXP0125007a	EXP0125008a				
Parname										
1,3,5-Trinitrobenzene	651.953	1067.5	3665.01	7077.27	12962.6	16285.9	2.817	28.102	.999	

Linear fit :  $Y=mx +b$   
where b is Intercept and m is slope

COD is Coefficient of Determination

Q column used to flag COD values outside of Limit (<0.990)

\* Values outside of QC Limit

Form 6

# Explosives Initial Calibration

Lab Name: GEL Laboratories LLC

GEL Job No: 10-1210

Lab Code: GEL

Run Date: 25-JAN-10 27-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

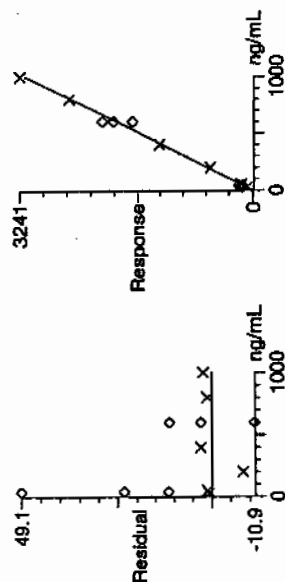
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\1012510expA.qld, Time: Tue Jan 26 09:24:51 2010

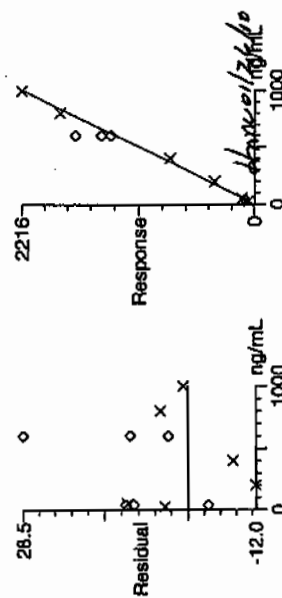
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Calibration: Untitled, Time: Tue Jan 26 09:24:51 2010

Page 764 of 1324

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



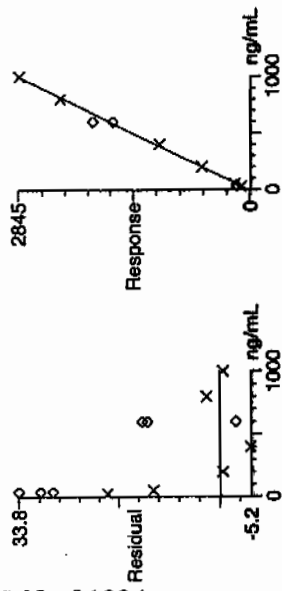
Compound name: RDX  
Response Factor: 2.1986  
RRF SD: 0.185302, % Relative SD: 8.42817  
Response type: Internal Std (Ref 4), Area \* (IS Conc. / IS Area)  
Curve type: RF



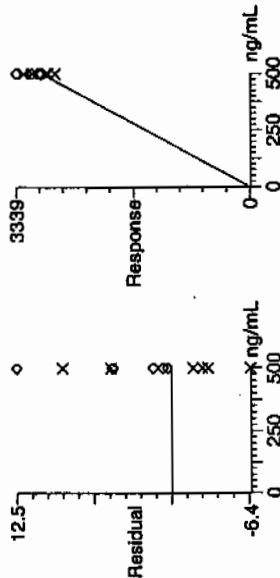
Quantify Calibration Report  
GEL Laboratories, LLC / Analyst: Michael A. Penny

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

Compound name: 135-Trinitrobenzene  
Correlation coefficient:  $r = 0.999489$ ,  $r^2 = 0.998979$   
Calibration curve:  $2.81694 \times 10^4 \times \text{Area} + 28.1015$   
Response type: Internal Std (Ref 4), Area \* (IS Conc. / IS Area)  
Curve type: Linear, Origin: Exclude, Weighting: Null, Axis trans: None



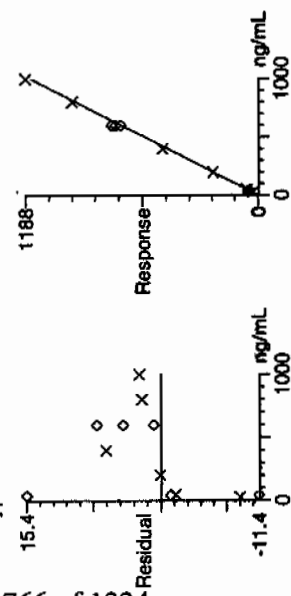
Compound name: 13-Dinitrobenzene-d4  
Response Factor: 5.9368  
RRF SD: 0.33509, % Relative SD: 5.65134  
Response type: External Std, Area  
Curve type: RF



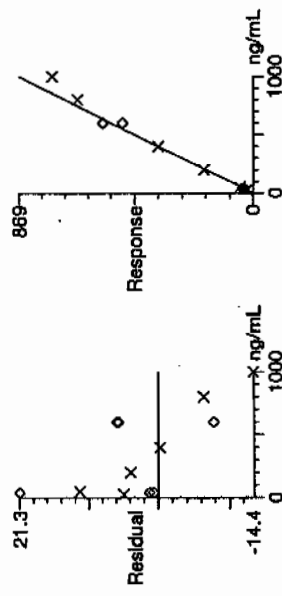
Quantify Calibration Report  
GEL Laboratories, LLC / Analyst: Michael A. Penny

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

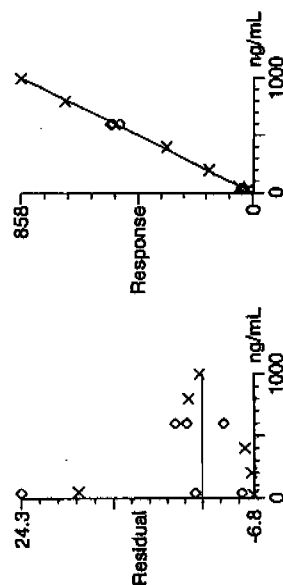




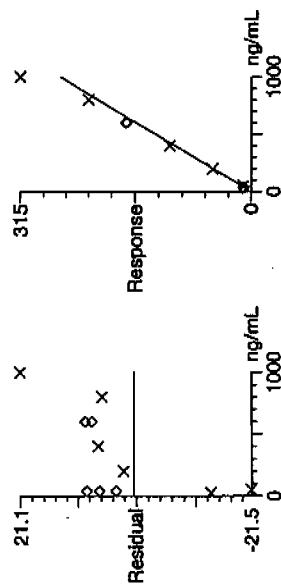
**Quantify Calibration Report**  
 GEL Laboratories, LLC / Analyst : Michael A. Penny

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

Compound name: Nitrobenzene  
 Response Factor: 0.854595  
 RRF SD: 0.076847, % Relative SD: 8.99222  
 Response type: Internal Std ( Ref 4 ), Area \* ( IS Conc. / IS Area )  
 Curve type: Rf



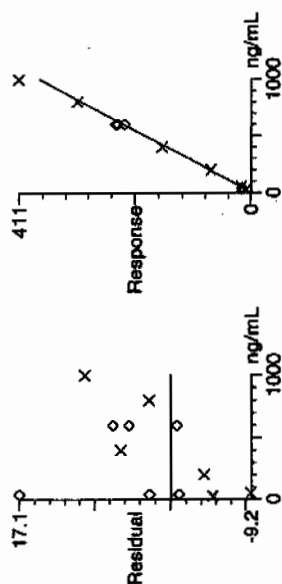
Compound name: 4-Amino-26-dinitrotoluene  
 Response Factor: 0.260514  
 RRF SD: 0.040113, % Relative SD: 15.3977  
 Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )  
 Curve type: Rf



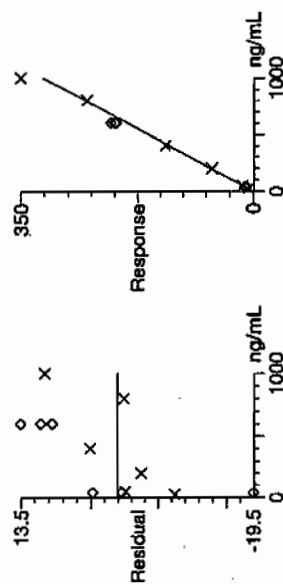
# Quantify Calibration Report GEL Laboratories, LLC / Analyst: Michael A. Penny

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: RF



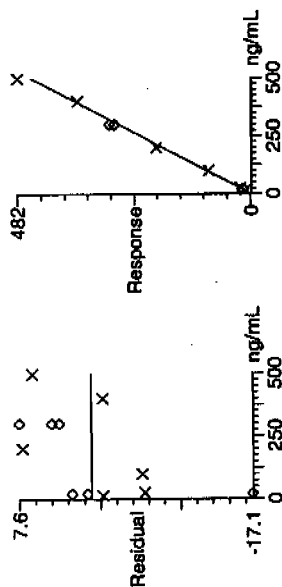
Compound name: 246-Trinitrotoluene  
Response Factor: 0.318064  
RRF SD: 0.020262, % Relative SD: 6.37043  
Response type: Internal Std (Ref 14), Area \* (IS Conc. / IS Area)  
Curve type: RF



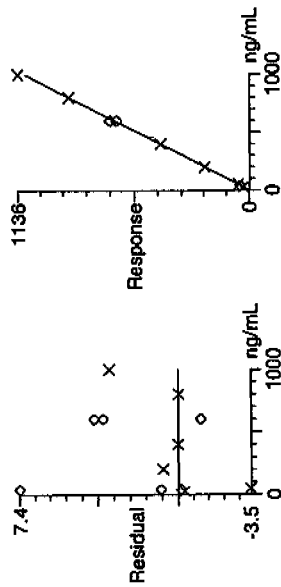
**Quantify Calibration Report**  
GEL Laboratories, LLC / Analyst : Michael A. Penny

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

Compound name: 34-dinitrotoluene  
Response Factor: 0.908014  
RRF SD: 0.0504831, % Relative SD: 5.55973  
Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )  
Curve type: RF



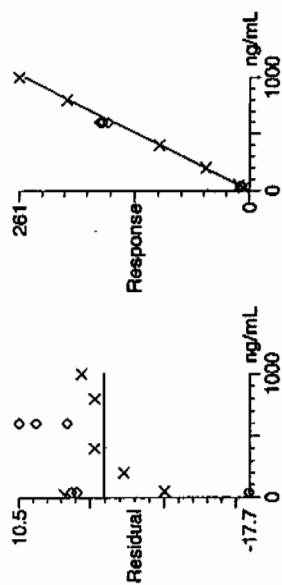
Compound name: 26-dinitrotoluene  
Response Factor: 1.10154  
RRF SD: 0.0235225, % Relative SD: 2.13541  
Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )  
Curve type: RF



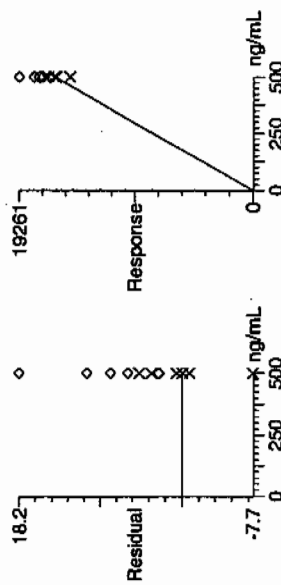
**Quantify Calibration Report**  
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYN\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: RIF



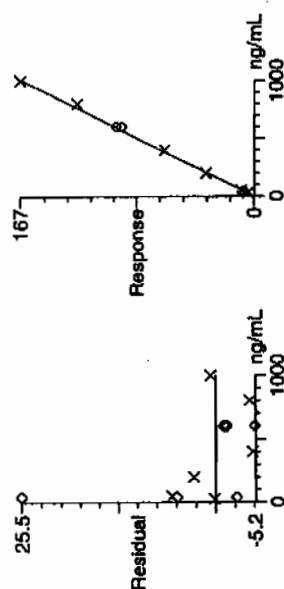
Compound name: 26-dinitrotoluene-d3  
Response Factor: 32.5967  
RRF SD: 1.41533, % Relative SD: 4.34194  
Response type: External Std, Area  
Curve type: RIF



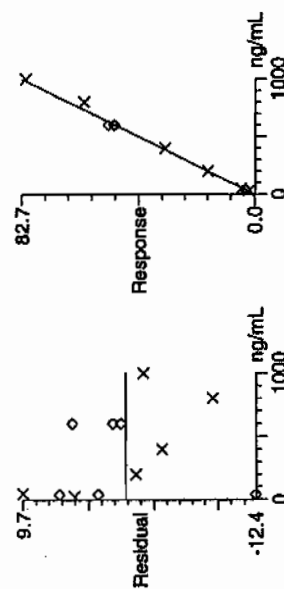
**Quantify Calibration Report**  
GEL Laboratories, LLC / Analyst : Michael A. Penny

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

Compound name: 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



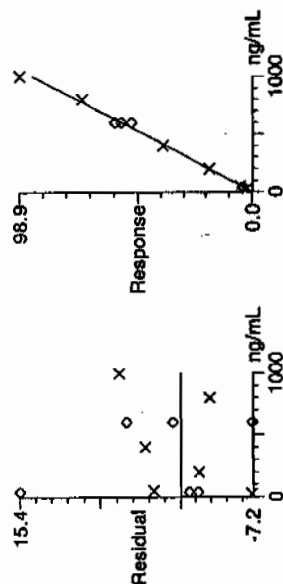
Compound name: 4-Nitrotoluene  
Response Factor: 0.0826798  
RRF SD: 0.00527876, % Relative SD: 6.38459  
Response type: Internal Std (Ref 14), Area \* (IS Conc. / IS Area)  
Curve type: RF



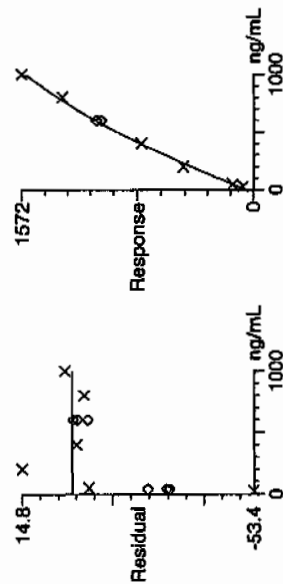
# Quantify Calibration Report GEL Laboratories, LLC / Analyst: Michael A. Penny

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



Explosives Initial Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1210

Lab Code: GEL

GEL Sample ID: WXXICV

GEL Data File EXP0125010a

Analysis Date: 25-JAN-10 15:46

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	584.029	97	
1,3-Dinitrobenzene-d4	500	523.981	105	
2,4,6-Trinitrotoluene	600	654.852	109	
2,4-Dinitrotoluene	600	662.983	110	
2,6-Dinitrotoluene	600	623.146	104	
2,6-Dinitrotoluene-d3	500	512.68	103	
2-Amino-4,6-dinitrotoluene	600	596.059	99	
3,4-Dinitrotoluene	300	322.78	108	
4-Amino-2,6-dinitrotoluene	600	646.592	108	
HMX	600	534.345	89	
Nitrobenzene	600	582.675	97	
PETN	600	572.063	95	
RDX	600	620.495	103	
Tetryl	600	550.312	92	
m-Dinitrobenzene	600	604.886	101	
m-Nitrotoluene	600	631.363	105	
o-Nitrotoluene	600	591.123	99	
p-Nitrotoluene	600	630.068	105	

Recovery Limits:

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

Other Target Analytes 80-120%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

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

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

Name: C:\MASSLYNX\NEW\_EXP\PRO\Data\EXP0125010a

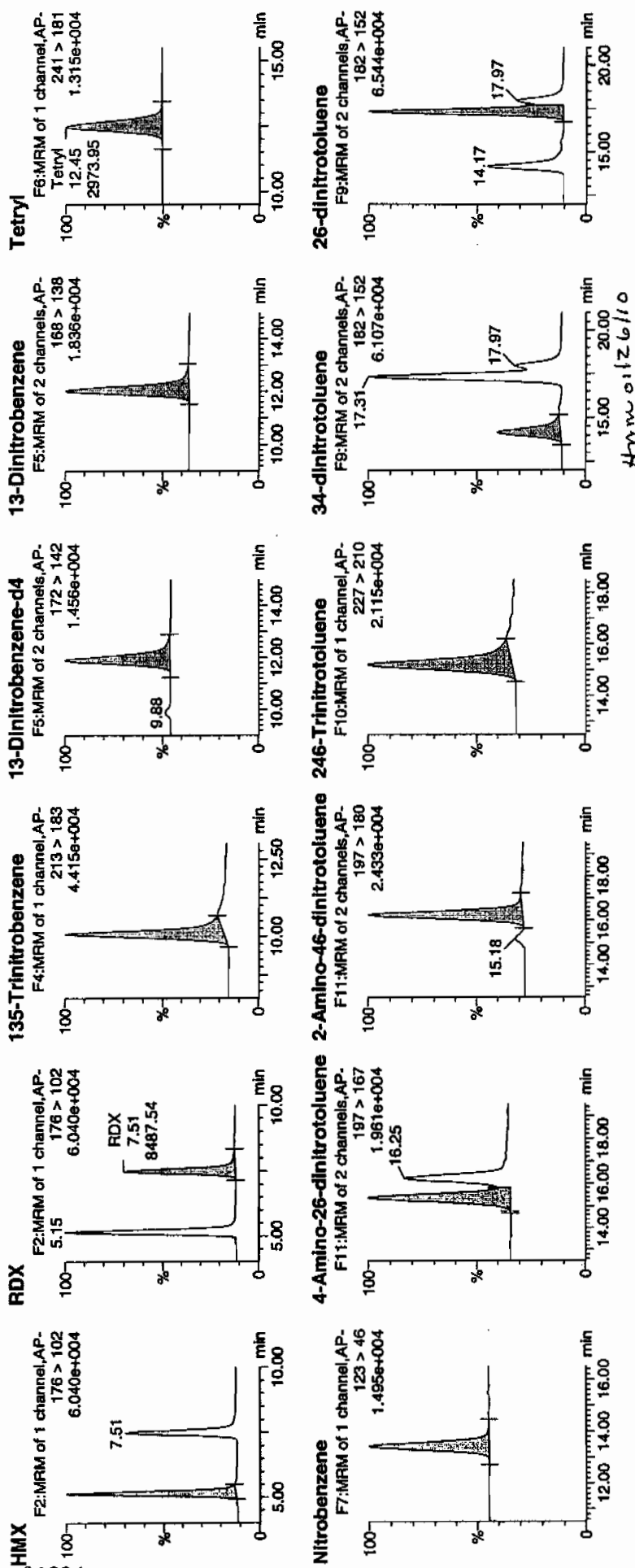
Date: 25-Jan-2010

Time: 15:46:04

ID: WXX100125-071CV

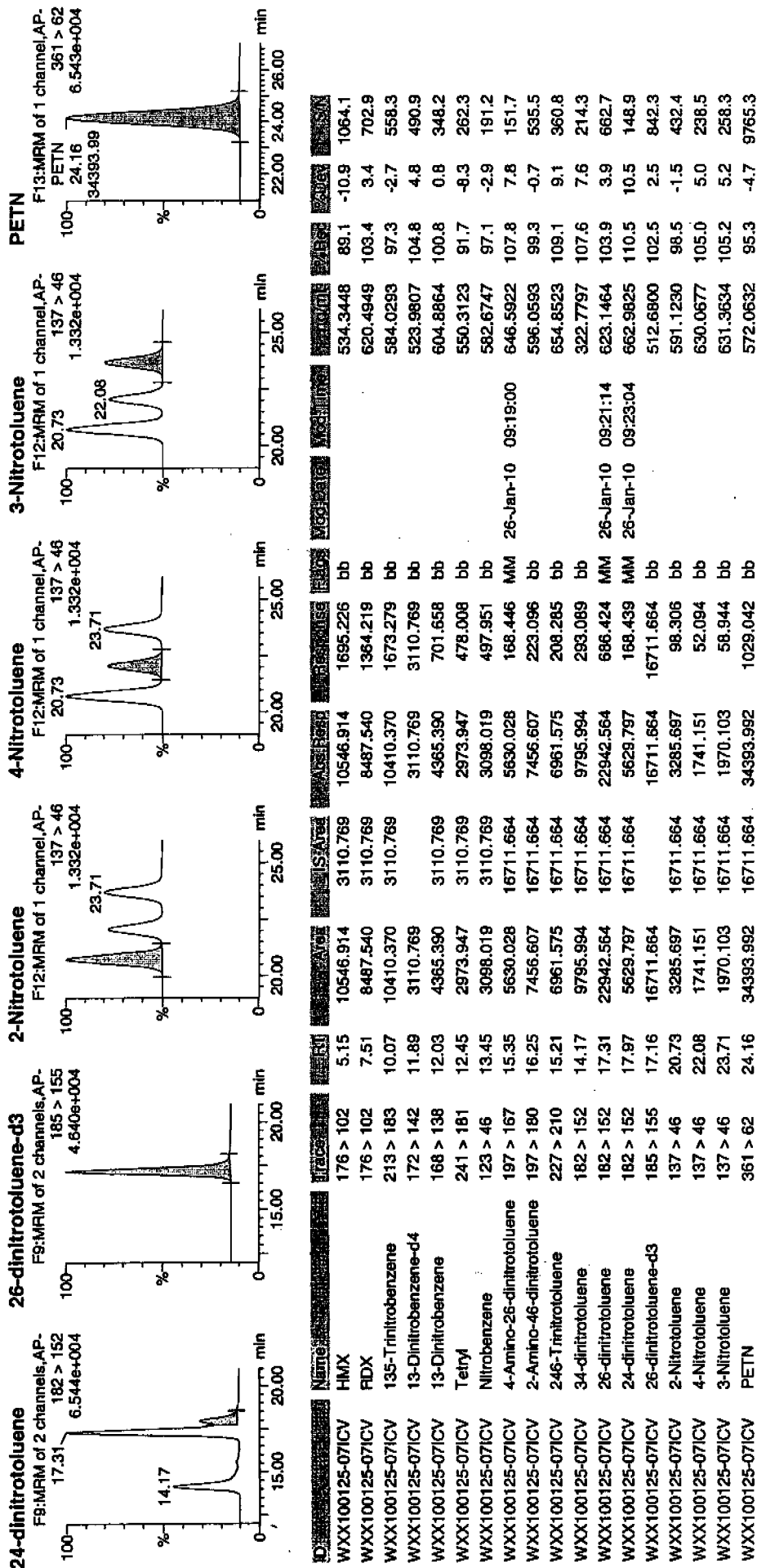
Vial: 1:1,B

1/26/10





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

*not  
1/26/10*

Total 1621.6

Average 101.4

*from 01/26/10*

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

Form 6

# Explosives Initial Calibration

Lab Name: GEL Laboratories LLC

GEL Job No: 10-1210

Lab Code: GEL

Run Date: 25-JAN-10 27-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:	EXS01250003.wif	EXS01250004.wif	EXS01250005.wif	EXS01250006.wif	EXS01250007.wif	EXS01250008.wif	EXS01250009.wif					
Parameter:												
2,4-Diamino-6-nitrotoluene	124000	243000	556000	1130000	1930000	2390000	4860000	-20500	2450	-0.006	.9993	
2,6-Diamino-4-nitrotoluene	196000	379000	859000	1770000	2910000	3810000	7350000	-50100	3930	-1.14	.9996	
3,4-Dinitrotoluene	318000	666000	1460000	3270000	4740000	5910000	10800000	-61500	14400	-3.5	.9975	
3,5-Dinitroaniline	504000	1060000	2200000	4760000	6820000	8600000	14400000	-27700	10200	-1.48	.9998	
TATB	71000	141000	345000	692000	1070000	1350000	2660000	-94.4	1410	-0.43	.9998	
tris(o-cresyl) phosphate	456000	2410000	5510000	10100000	15300000	19000000	29700000	-337000	23800	-4.41	.9996	

Quadratic Fit:  $y = Ax^2 + Bx + C$   
 where  $X^2$  column above is coefficient A  
 X column above is coefficient B  
 intercept is C

COD is Coefficient of Determination

Q column used to flag COD outside of Limit (<0.990)

\* Values outside of QC Limit

012510ICAL

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

Fit	Quadratic	Weighting	None	Iterate No
a0	-94.4			
a1	1.41e+003			
a2	-0.043			
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	-2.77e+004			
a1	1.02e+004			
a2	-1.48			
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	-6.15e+004			
a1	1.44e+004			
a2	-3.5			
Correlation coefficient 0.9975				
Use Area				

Peak Name: 26-Diamino-4-nitrotoluene  
No Internal Standard  
Q1/Q3 Masses: 165.97/46.00 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	-5.01e+004			
a1	3.93e+003			
a2	-0.114			
Correlation coefficient 0.9996				
Use Area				

*See*  
1/27/10

*1/27/10*

012510ICAL

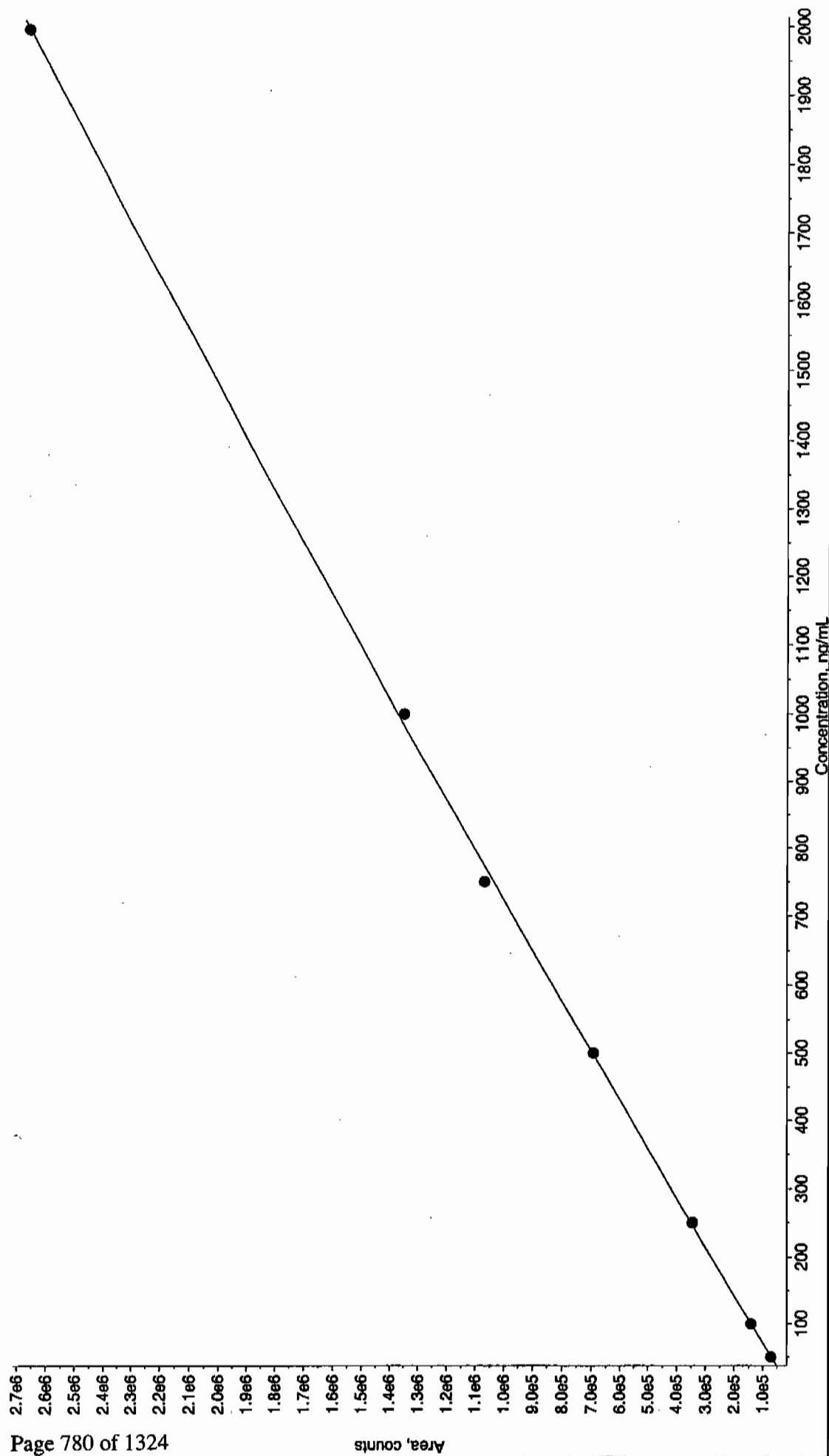
Peak Name: 24-Diamino-6-nitrotoluene  
No Internal Standard  
Q1/Q3 Masses: 165.97/46.00 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	-2.05e+004			
a1	2.45e+003			
a2	-0.00578			
Correlation coefficient 0.9993				
Use Area				

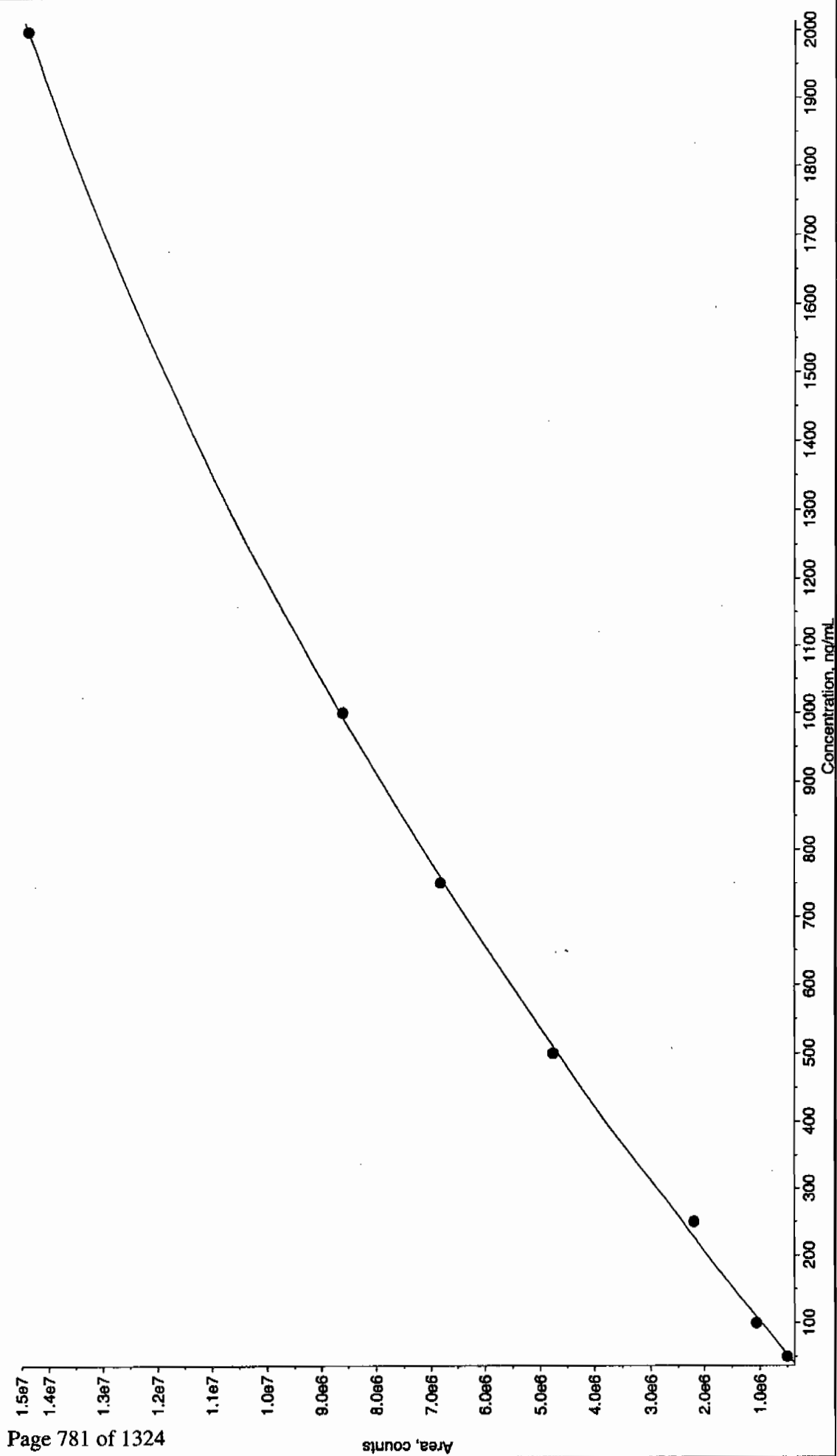
Peak Name: tris(o-cresyl) phosphate  
No Internal Standard  
Q1/Q3 Masses: 369.15/91.00 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	-3.37e+005			
a1	2.38e+004			
a2	-4.41			
Correlation coefficient 0.9996				
Use Area				

012510.rdb (TATB): "Quadratic" Regression ("No" weighting):  $y = -0.043 x^2 + 1.41e+003 x + -94.4$  ( $r = 0.9998$ )

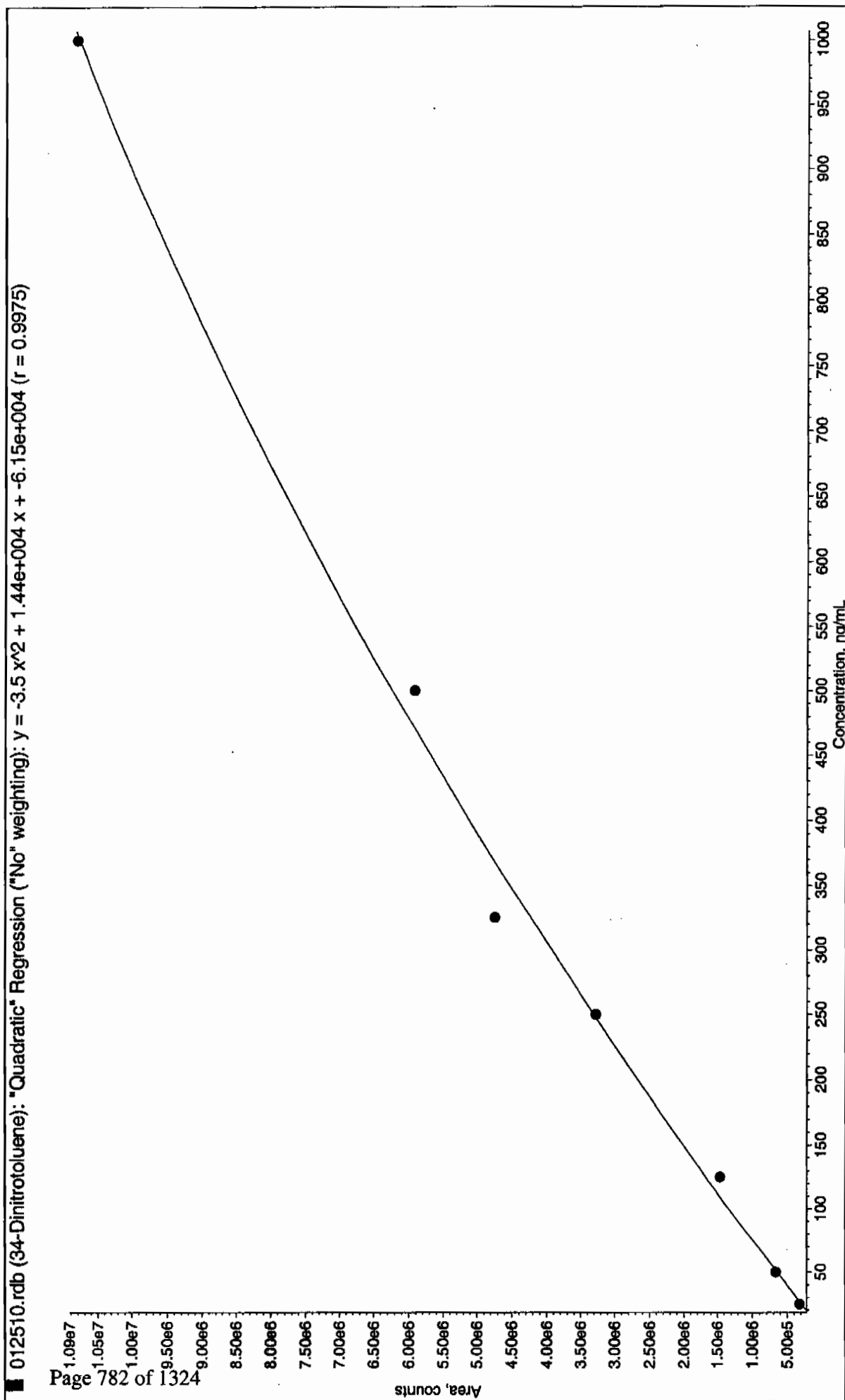


012510.rdb (35-Dinitroaniline): "Quadratic" Regression ("No" weighting):  $y = -1.48 x^2 + 1.02e+004 x + -2.77e+004$  ( $r = 0.9998$ )



012510.rdb (34-Dinitrotoluene): "Quadratic" Regression ("No" weighting):  $y = -3.5 \times 10^{-4} x^2 + 1.44 \times 10^{-4} x + -6.15 \times 10^{-4}$  ( $r = 0.9975$ )

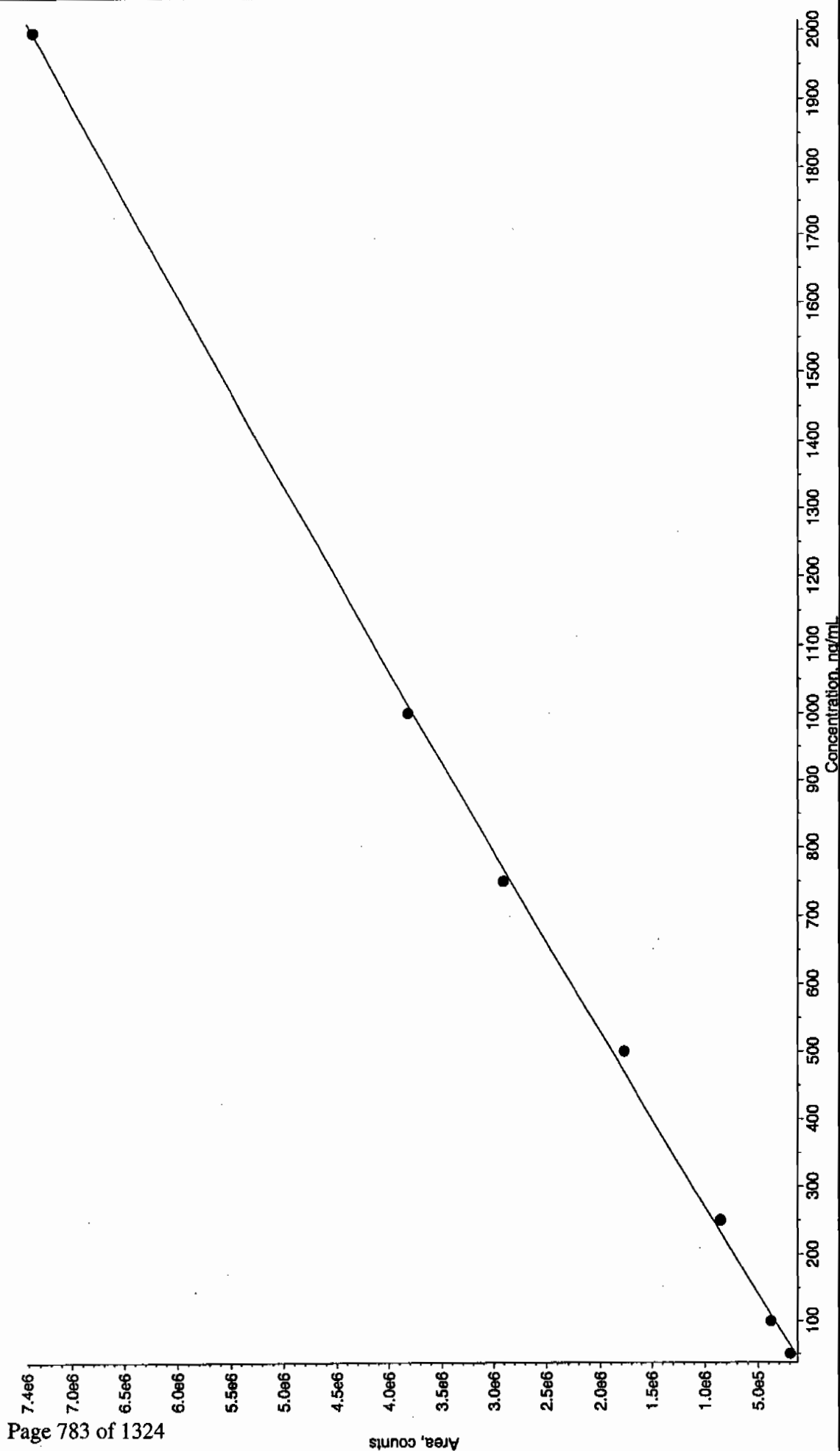
Page 782 of 1324



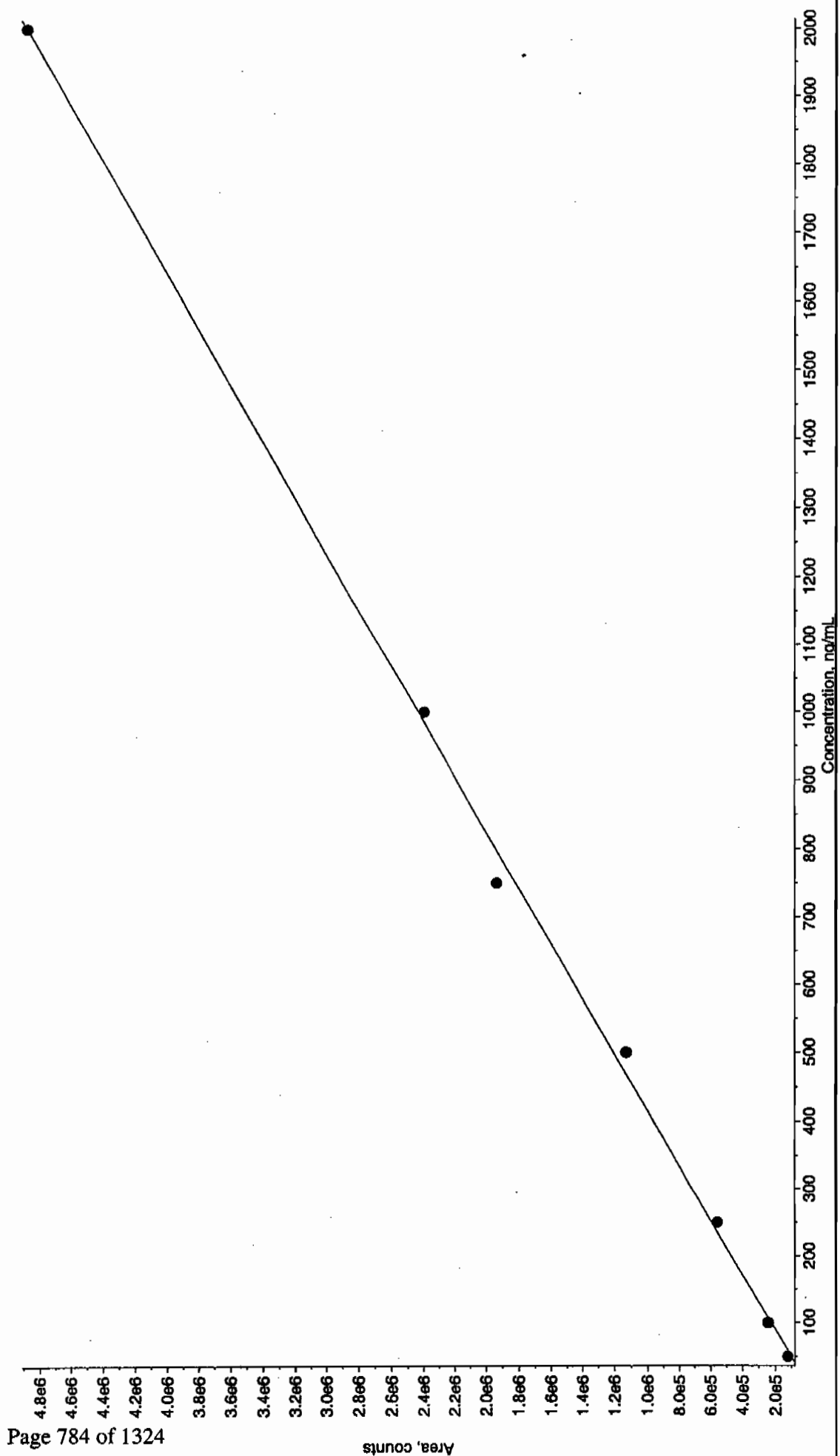
\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



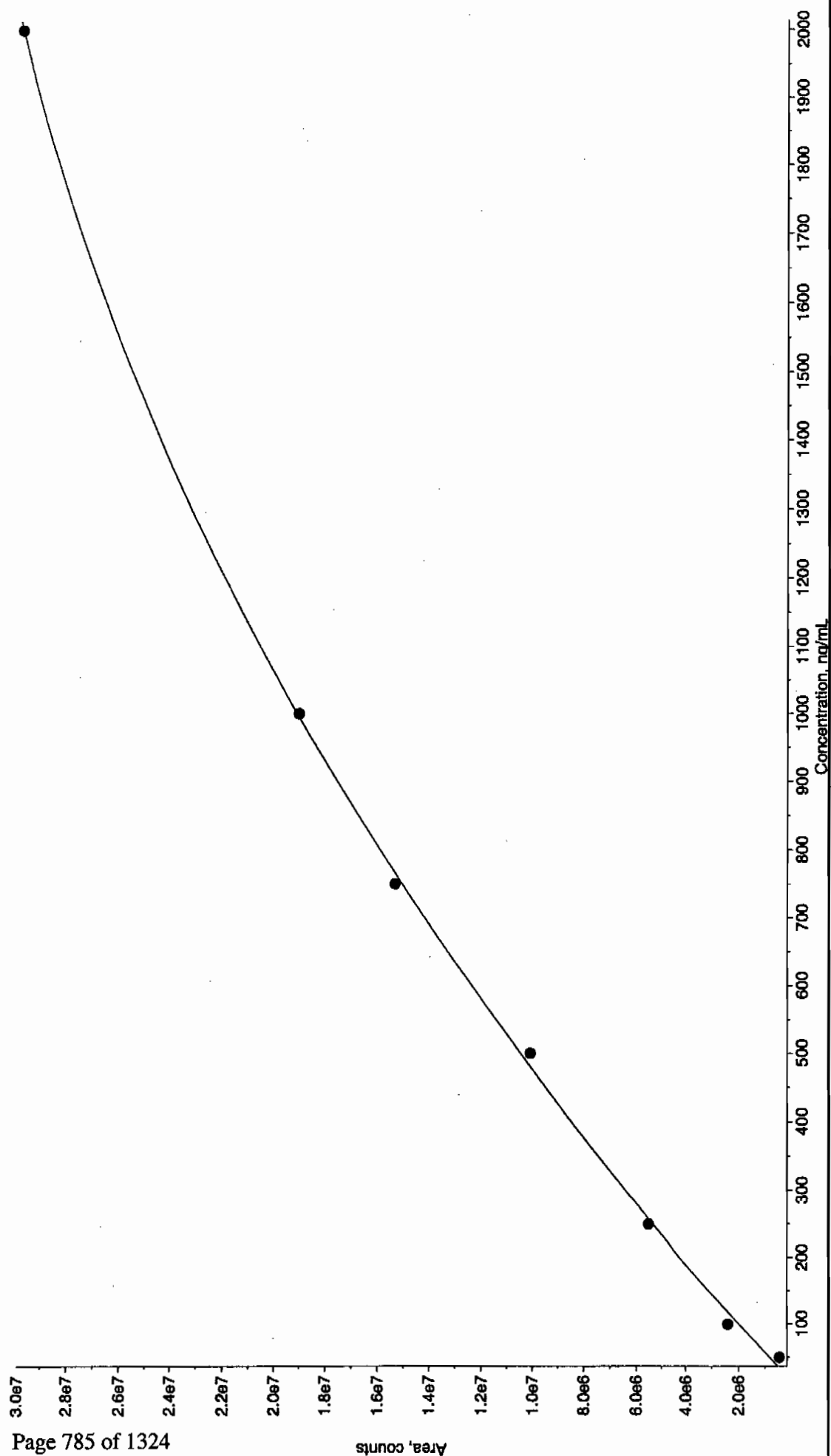
012510.rdb (26-Diamino-4-nitrotoluene): "Quadratic" Regression ("No" weighting):  $y = -0.114 x^2 + 3.93e+003 x + -5.01e+004$  ( $r = 0.9996$ )



012510.rdb (24-Diamino-6-nitrotoluene): "Quadratic" Regression ("No" weighting):  $y = -0.00578 x^2 + 2.45e+003 x + -2.05e+004$  ( $r = 0.9993$ )



012510.rdb (tris(o-cresyl) phosphate): "Quadratic" Regression ("No" weighting):  $y = -4.41 x^2 + 2.38e+004 x + -3.37e+005$  ( $r = 0.9996$ )



# Explosives Initial Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1210

Lab Code: GEL

GEL Sample ID: WXXICV

GEL Data File EXS01250011.wiff

Analysis Date: 25-JAN-10 13:09

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	486	97	
2,6-Diamino-4-nitrotoluene	500	478	96	
3,4-Dinitrotoluene	250	228	91	
3,5-Dinitroaniline	500	485	97	
TATB	500	478	96	
tris(o-cresyl) phosphate	500	509	102	

## Recovery Limits:

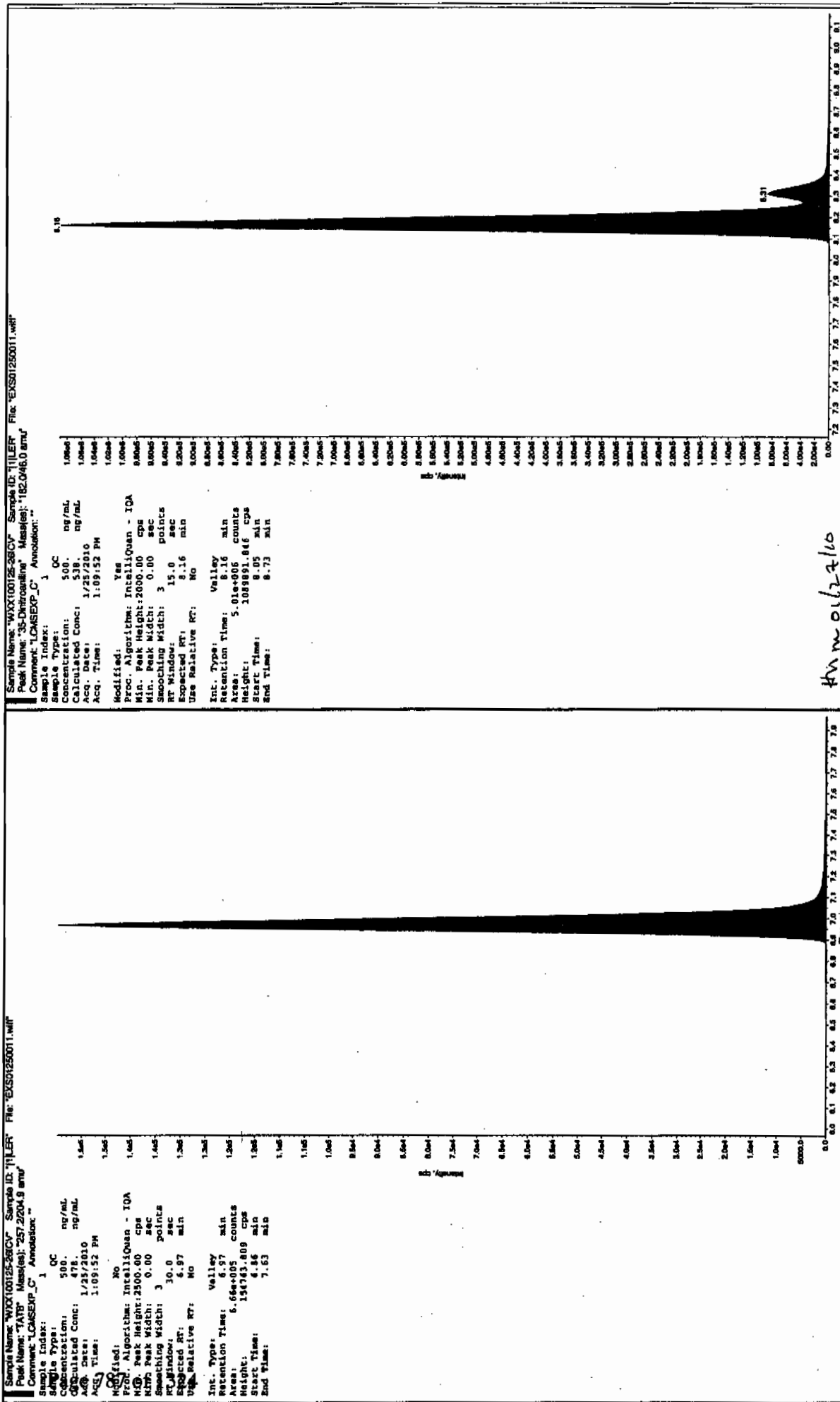
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

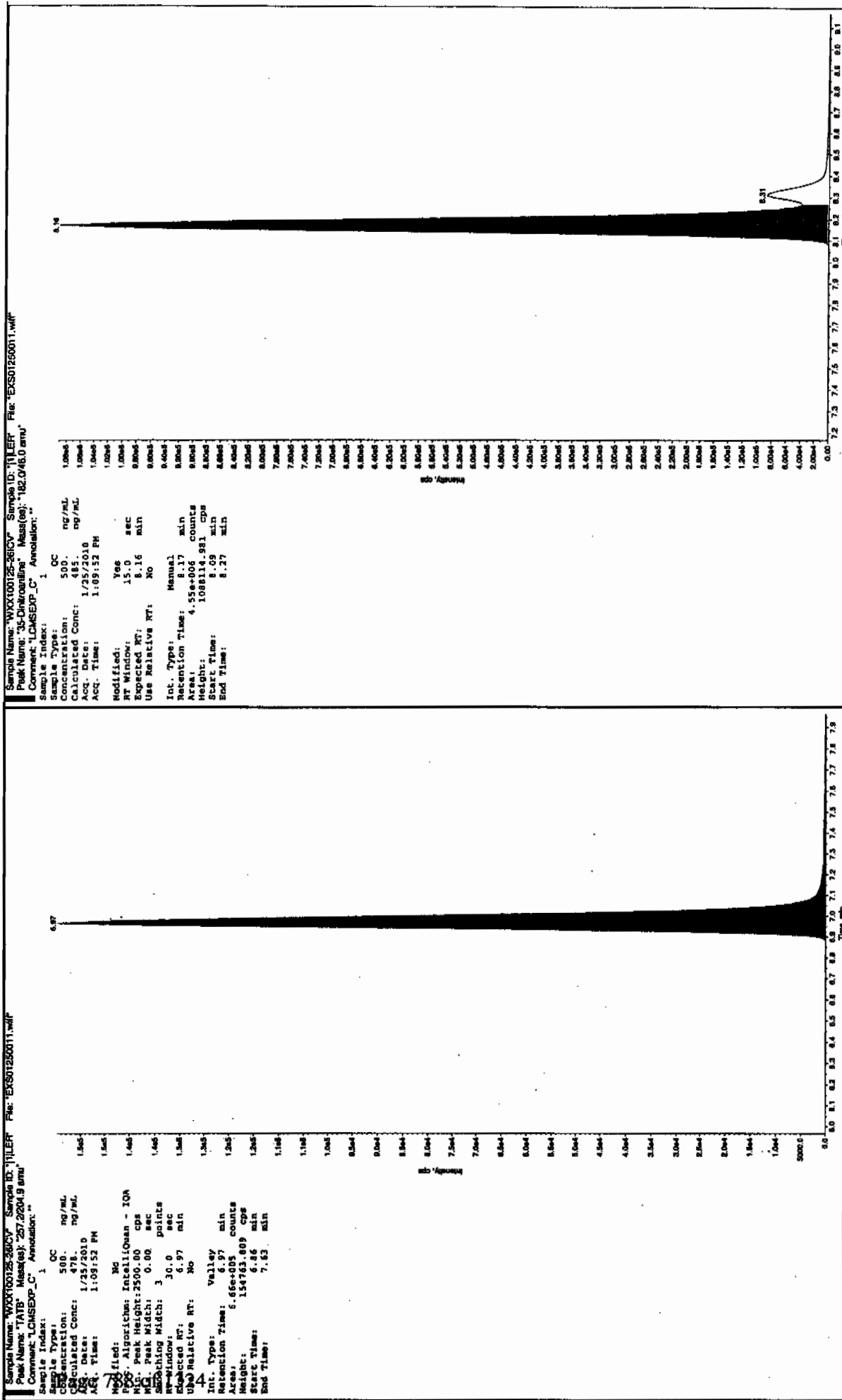
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

Before scan 1127110



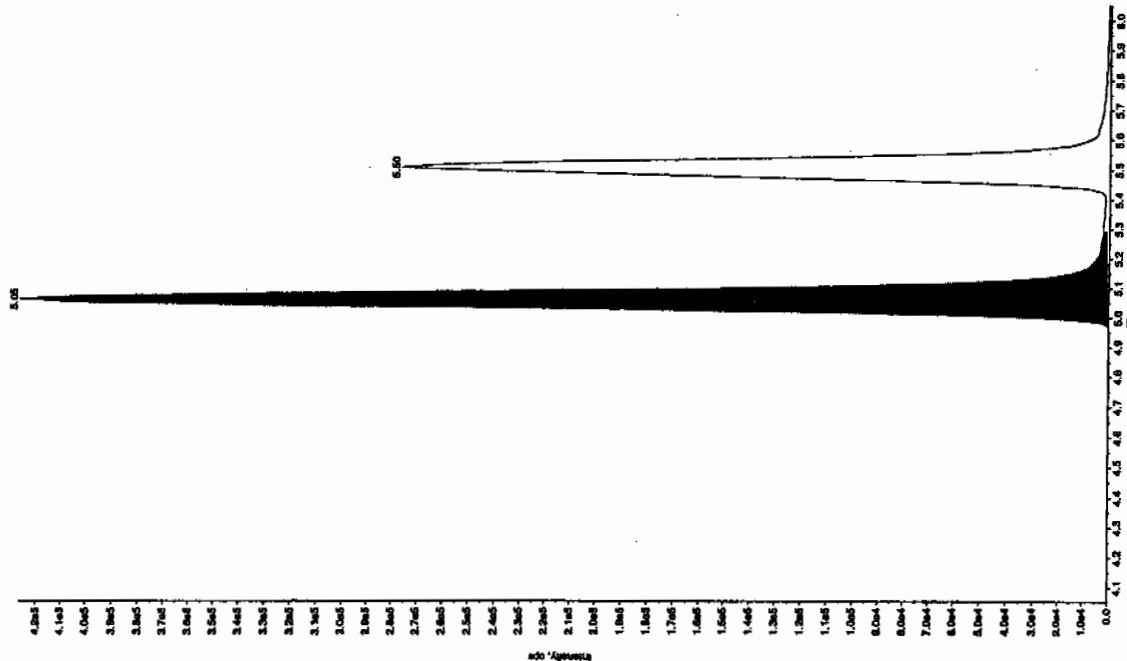
after Jan 11/27/10



Sample Name: WXX100125-281CV Sample ID: 1111ER File: EX501250011.wif  
Peak Name: 28-Diamino-4-nitrofluorene Mass(es): 166.046.0 amu  
Comment: LCMSEXP\_C Annotation: -

Sample Index: 1  
Sample Type: OC  
Concentration: 500  
Calculated Conc: 479  
Acq. Date: 1/25/2010  
Acq. Time: 1:09:52 PM

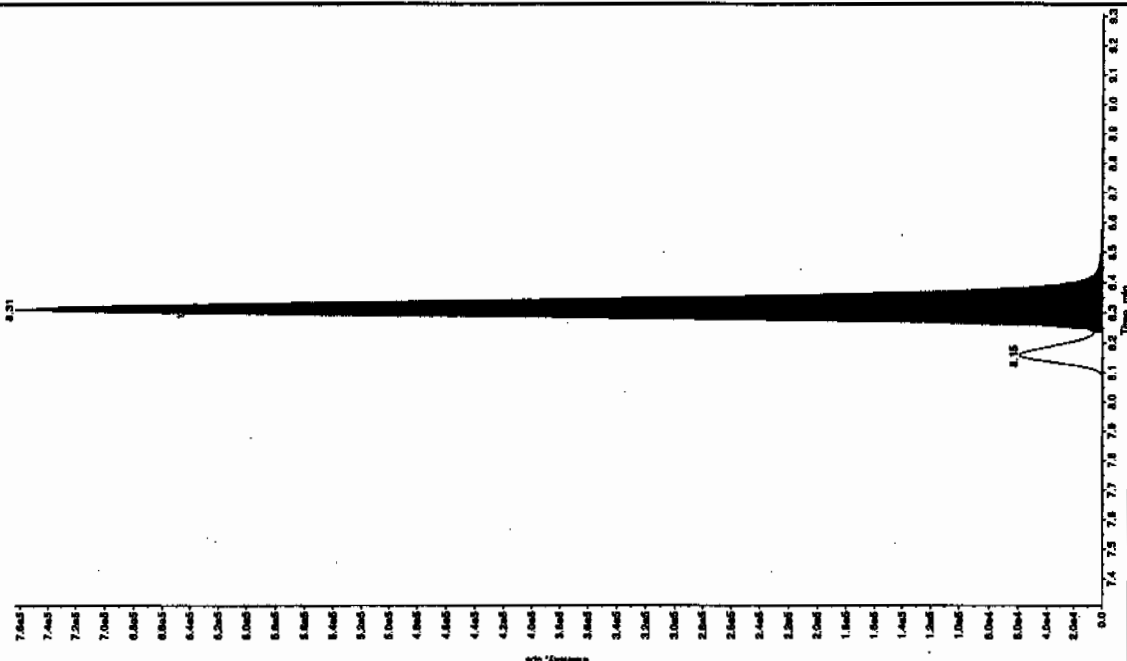
Modified: No  
Proc. Algorithm: IntelliQuan - IQA  
Min. Peak Height: 450.00 cps  
Min. Peak Width: 0.00 sec  
Smoothing Width: 3 points  
RT Window: 30.0 sec  
Expected RT: 5.05 min  
Use Relative RT: No  
Int. Type: Valley  
Retention Time: 5.05 min  
Area: 1.81e+006 counts  
Height: 426538.783 cps  
Start Time: 4.96 min  
End Time: 5.29 min



Sample Name: WXX100125-281CV Sample ID: 1111ER File: EX501250011.wif  
Peak Name: 34-Chlorodurene Mass(es): 162.1715.9 amu  
Comment: LCMSEXP\_C Annotation: -

Sample Index: 1  
Sample Type: OC  
Concentration: 250  
Calculated Conc: 228  
Acq. Date: 1/25/2010  
Acq. Time: 1:09:52 PM

Modified: No  
Proc. Algorithm: IntelliQuan - IQA  
Min. Peak Height: 1460.00 cps  
Min. Peak Width: 0.00 sec  
Smoothing Width: 3 points  
RT Window: 15.0 sec  
Expected RT: 8.31 min  
Use Relative RT: No  
Int. Type: Valley  
Retention Time: 8.31 min  
Area: 3.03e+006 counts  
Height: 763750.466 cps  
Start Time: 8.24 min  
End Time: 8.64 min



Sample Name: "WXX100125-28NCV" Sample ID: "1|LER" File: "EXS01280011.wdf"  
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"  
Comment: "LCINSEXP C Annotation: "

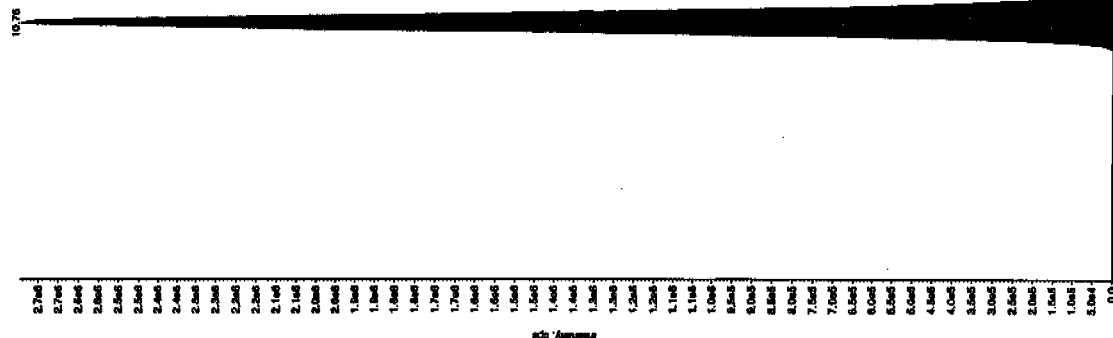
Sample Index:	1	QC
Sample Type:		500. ng/mL
Concentration:		509. ng/mL
Calculated Conc:		
Acq. Date:	1/25/2010	
Acq. Time:	1:09:52 PM	

```

Modified:
Proc. Algorithm: IntelliQuan - IQA
Min. Peak Height: 1.00e4 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 3 points
RT Window: 30.0 sec
Expected RT: 10.8 min
Use Relative RT: No

```

Int. Type:	Valley
Retention Time:	10.8 min
Area:	1.06e+007 counts
Weight:	2746726.563 cps
Start Time:	10.7 min
End Time:	11.1 min



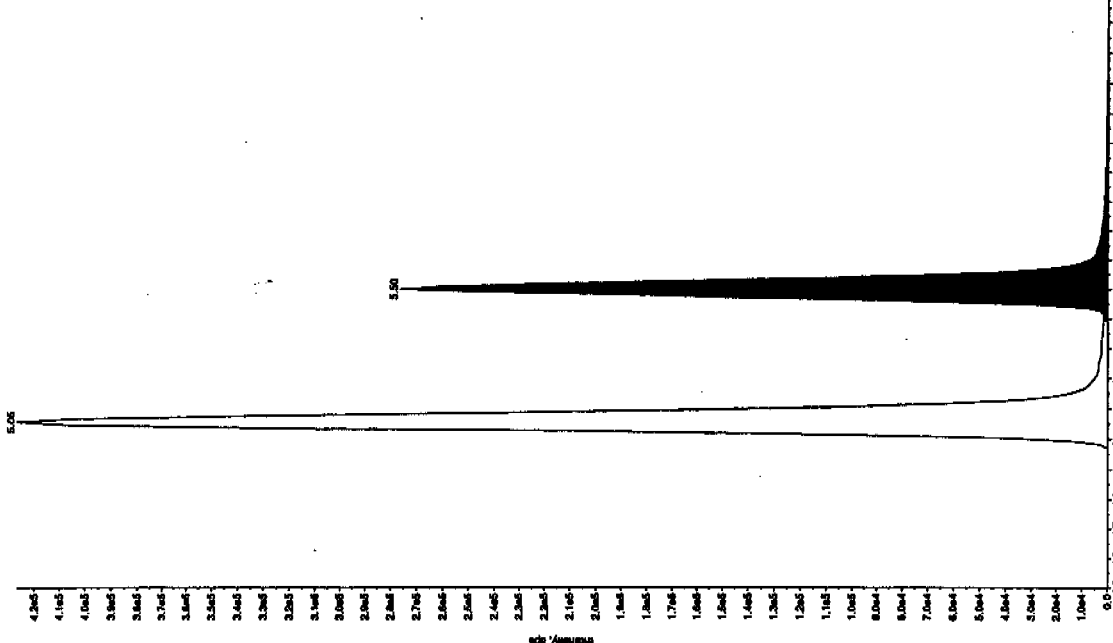
Sample Index:	1	QC
Sample Type:	500.	ng/mL
Concentration:	486.	ng/mL
Calculated Conc:	1/25/2010	
Acq. Date:	1:09:52 PM	
Acq. Time:		

```

Modelled: No
Proc. Algorithm: IntelliQuen - IQA
MMIO Peak Height: 350.00 cps
MMIO Peak Width: 0.00 sec
Smoothing Width: 3 points
RT Window: 30.0 sec
Data Accepted RT: 5.50 min
Data Relative RT: No

```

Int. Type:	Valley
Retention Time:	5.50 min
Area:	1.17e+006 counts
Height:	275918.610 cps
Start Time:	5.39 min
End Time:	5.98 min





Form 6

Explosives Initial Calibration

Lab Name: GEL Laboratories LLC

GEL Job No: 10-1210

Lab Code: GEL

Run Date: 25-JAN-10 27-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:	EXS01270003.wif	EXS01270004.wif	EXS01270005.wif	EXS01270006.wif	EXS01270007.wif	EXS01270008.wif	EXS01270009.wif					
Parameter:												
2,4-Diamino-6-nitrotoluene	112000	216000	568000	1111000	1750000	2180000	4410000	-1430	2270	-.034	.9997	
2,6-Diamino-4-nitrotoluene	181000	334000	899000	1630000	2500000	3500000	6370000	-24500	3600	-.199	.9995	
3,4-Dinitrotoluene	311000	606000	1490000	2880000	4400000	5850000	10600000	-72800	13500	-2.81	.9985	
3,5-Dinitroaniline	484000	967000	2300000	4420000	6530000	8380000	14400000	4560	9530	-1.17	1	
TATB	76400	147000	356000	705000	1080000	1530000	2860000	-16100	1530	-.044	.9995	
tris(o-cresyl) phosphate	1190000	2280000	5390000	10000000	14900000	19200000	30000000	-42400	22800	-3.89	.9998	

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

012710ICAL

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

Fit	Quadratic	Weighting	None	Iterate No
a0	-1.61e+004			
a1	1.53e+003			
a2	-0.0442			
Correlation coefficient 0.9995				
Use Area				

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

Fit	Quadratic	Weighting	None	Iterate No
a0	4.56e+003			
a1	9.53e+003			
a2	-1.17			
Correlation coefficient 1.0000				
Use Area				

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

Fit	Quadratic	Weighting	None	Iterate No
a0	-7.28e+004			
a1	1.35e+004			
a2	-2.81			
Correlation coefficient 0.9985				
Use Area				

Peak Name: 26-Diamino-4-nitrotoluene  
No Internal Standard  
Q1/Q3 Masses: 165.97/46.00 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	-2.45e+004			
a1	3.6e+003			
a2	-0.199			
Correlation coefficient 0.9995				
Use Area				

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

*Jan 1/28/10*

*Jan 1/28/10*

012710ICAL

Iterate No

None

Weighting

Quadratic  
a0 -1.43e+003  
a1 2.27e+003  
a2 -0.0341

Correlation coefficient 0.9997  
Use Area

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

Iterate No

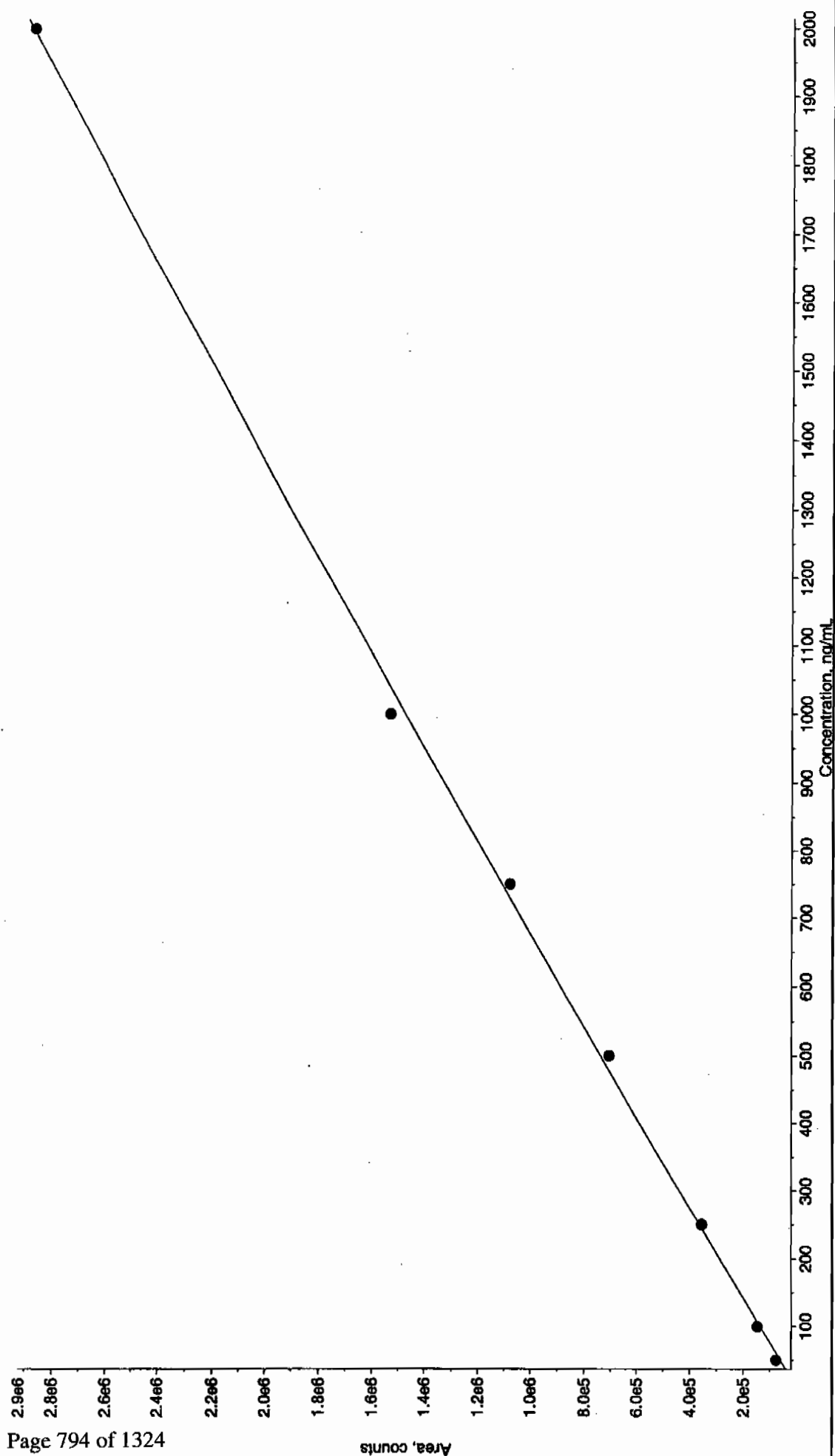
None

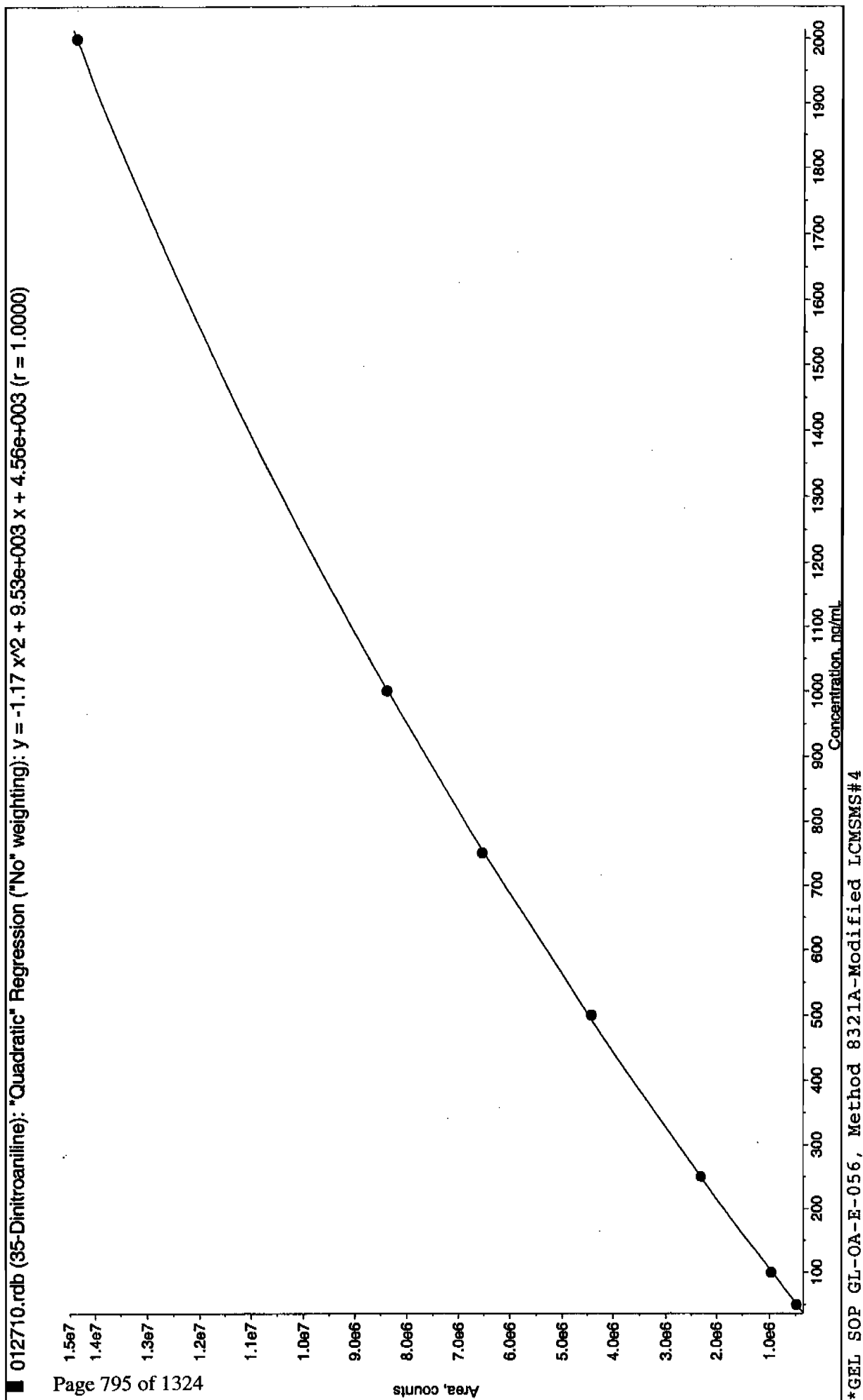
Weighting

Quadratic  
a0 -4.24e+004  
a1 2.28e+004  
a2 -3.89

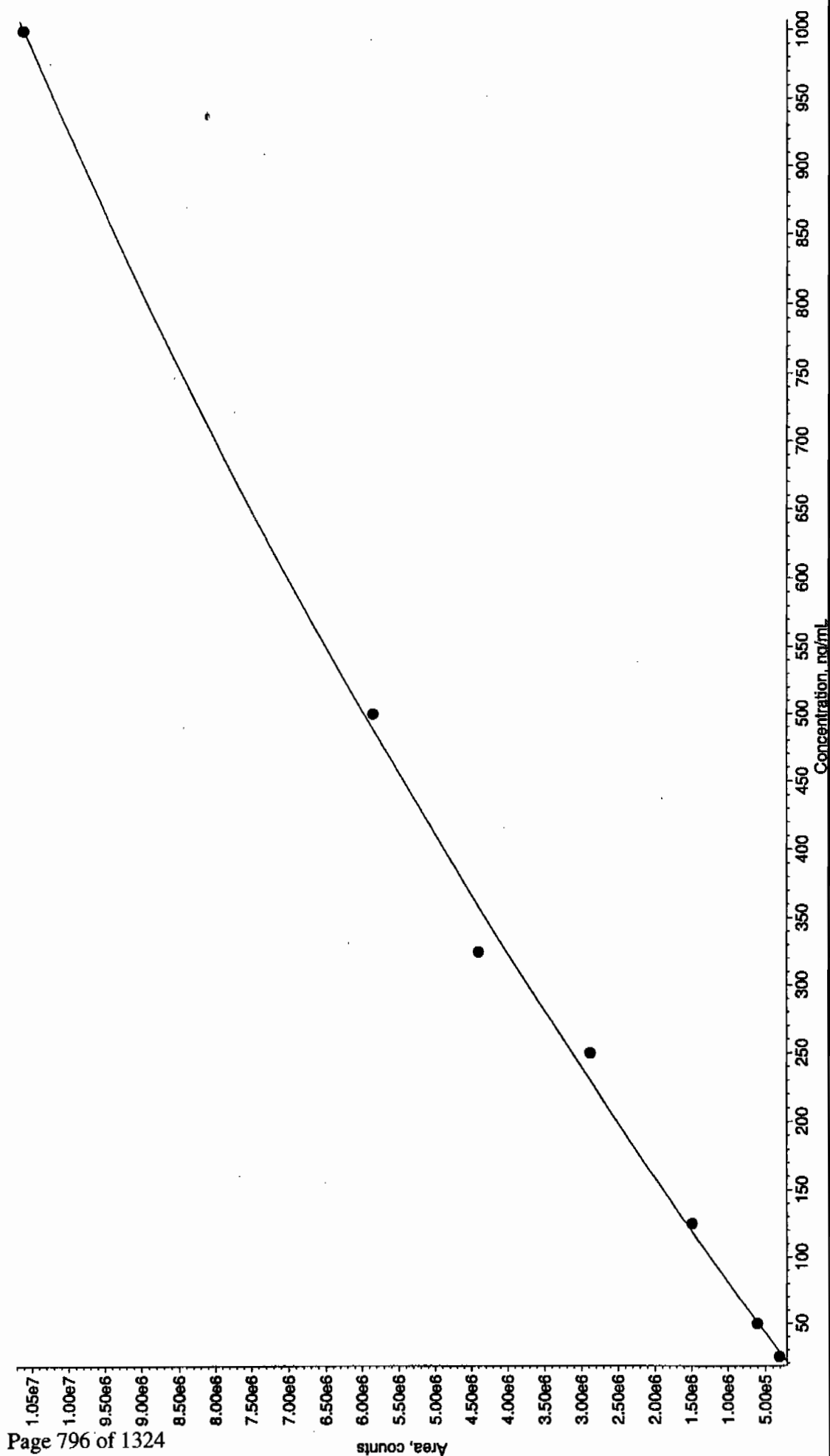
Correlation coefficient 0.9998  
Use Area

012710.rdb (TATB): "Quadratic" Regression ("No" weighting):  $y = -0.0442 x^2 + 1.53e+003 x + -1.61e+004$  ( $r = 0.9995$ )

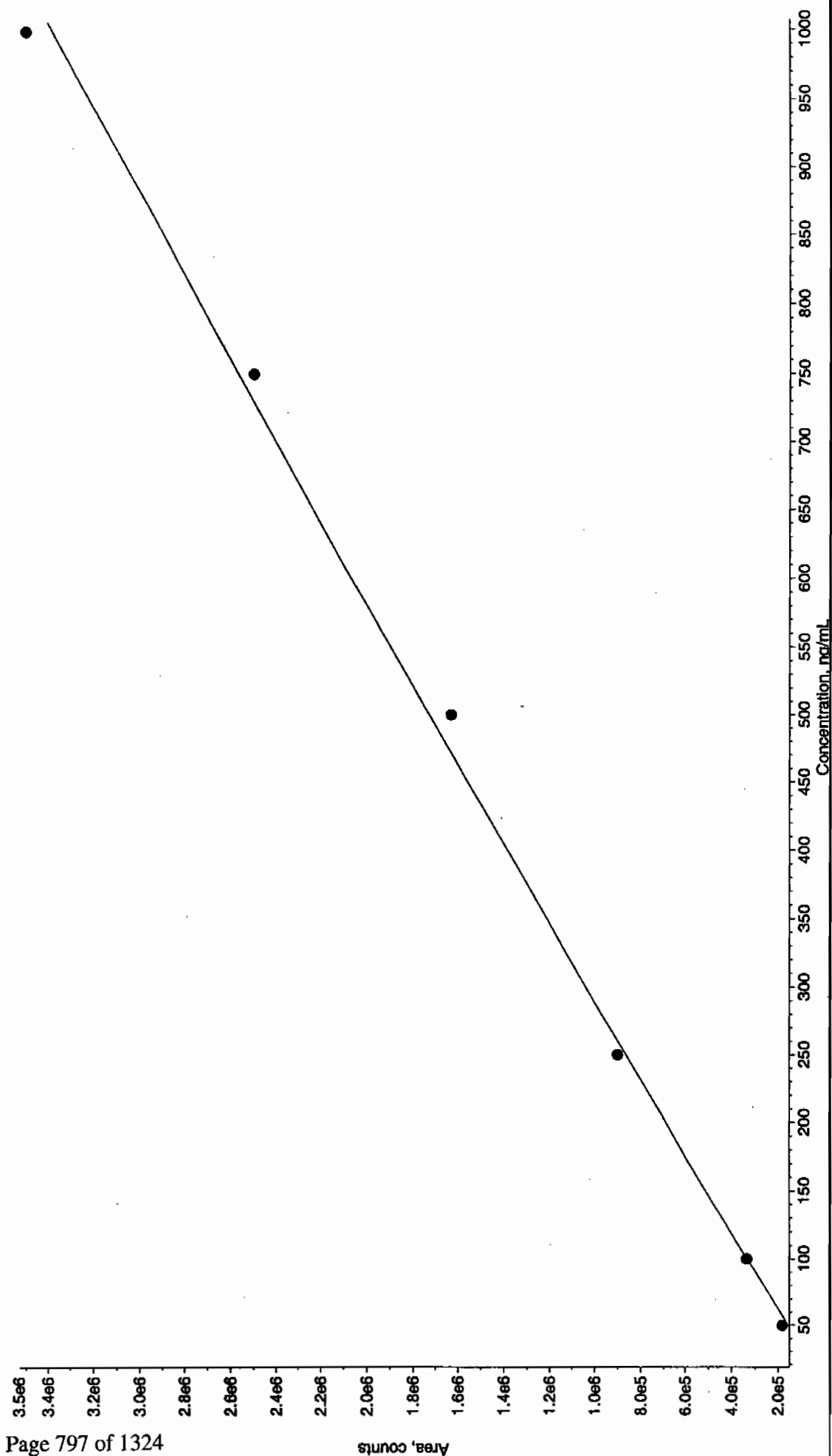




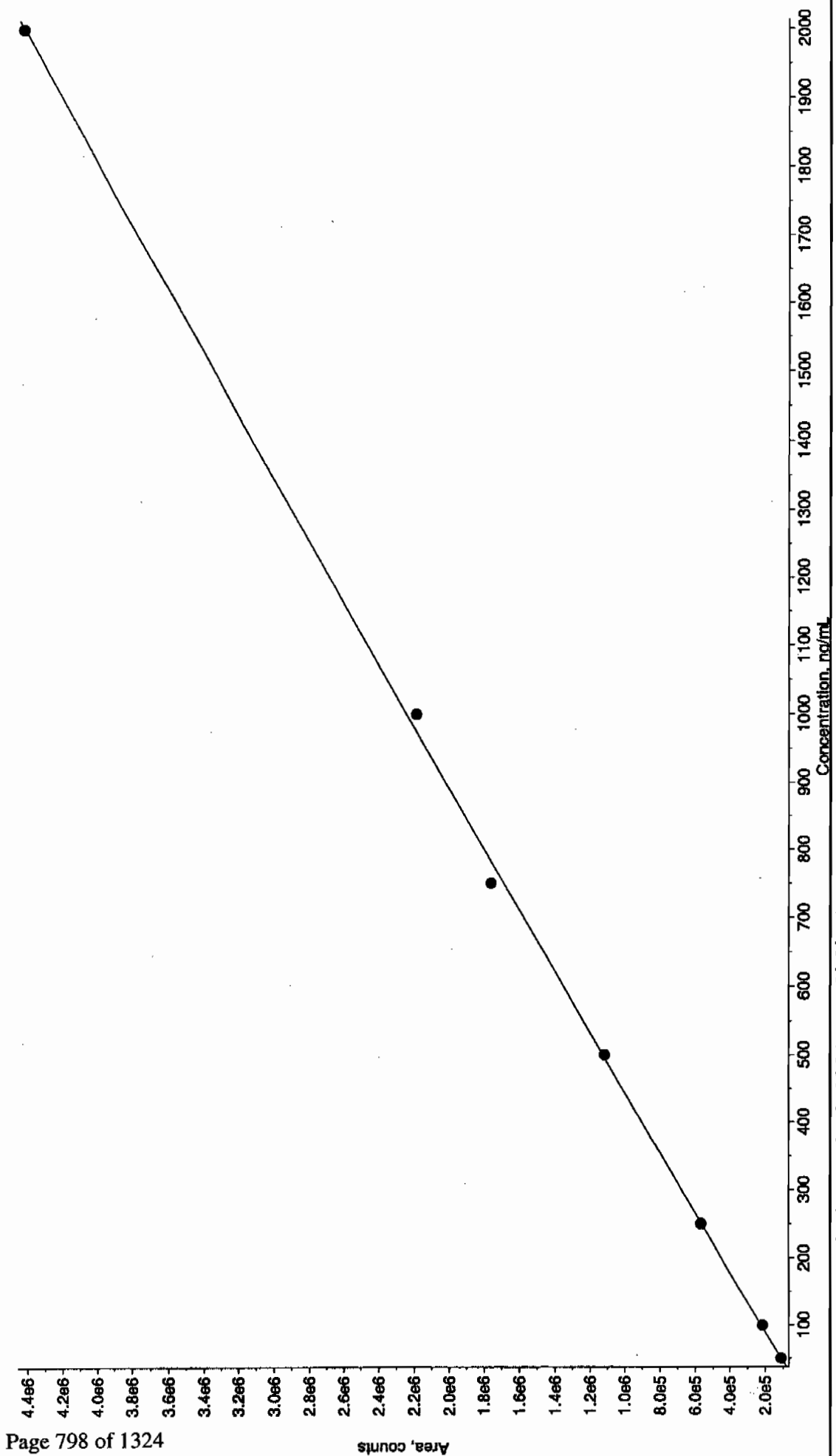
012710.rdb (34-Dinitrotoluene): "Quadratic" Regression ("No" weighting):  $y = -2.81 x^2 + 1.35e+004 x + -7.28e+004$  ( $r = 0.9985$ )



012710.rdb (26-Diamino-4-nitrotoluene): "Quadratic" Regression ("No" weighting):  $y = -0.199 x^2 + 3.6e+003 x + -2.45e+004$  ( $r = 0.9995$ )

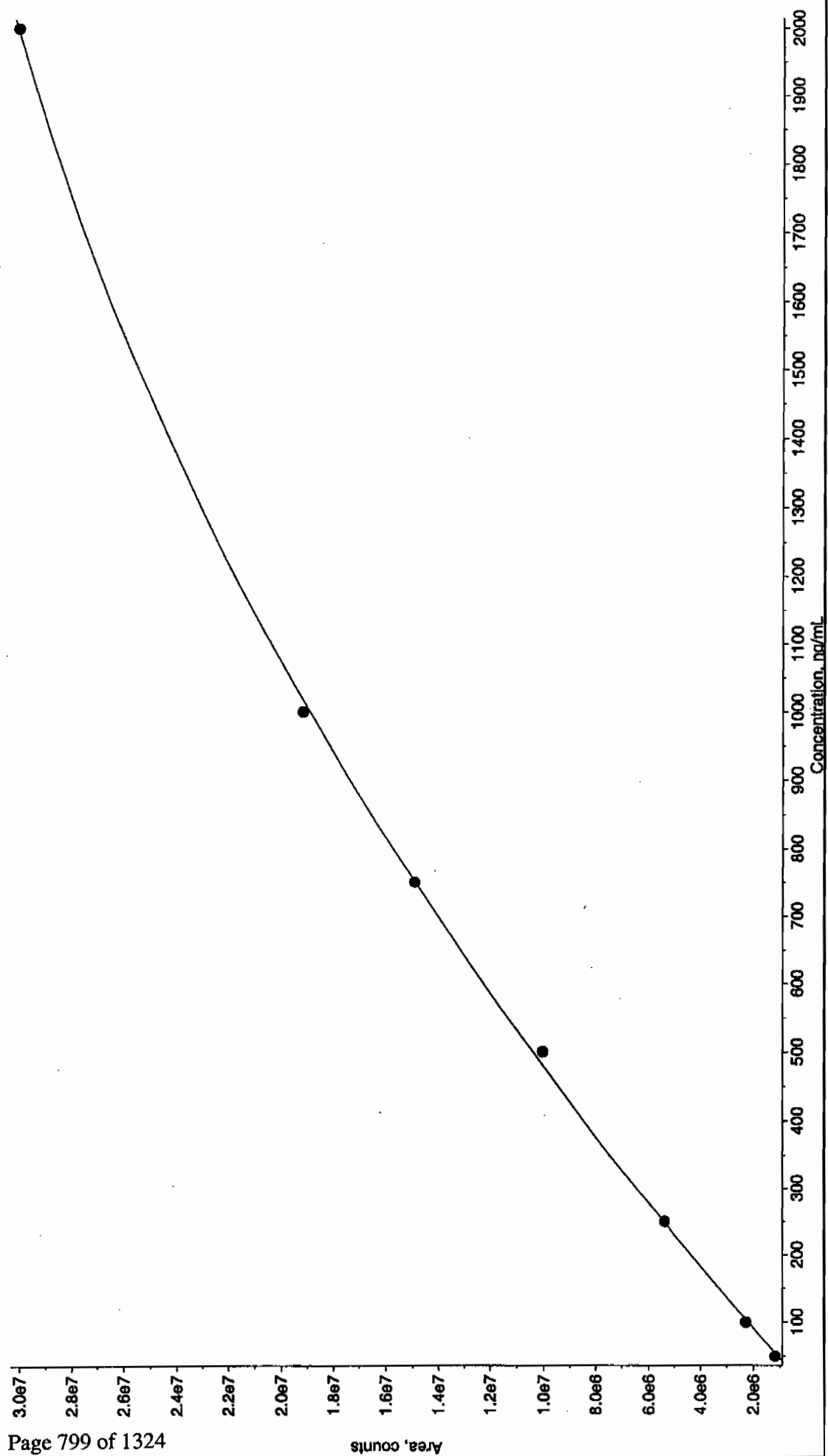


012710.rdb (24-Diamino-6-nitrotoluene): "Quadratic" Regression ("No" weighting):  $y = -0.0341 x^2 + 2.27e+003 x + -1.43e+003$  ( $r = 0.9997$ )





012710.rdb (tris(o-cresyl) phosphate): "Quadratic" Regression ("No" weighting):  $y = -3.89 x^2 + 2.28e+004 x + -4.24e+004$  ( $r = 0.9998$ )



Explosives Initial Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1210

Lab Code: GEL

GEL Sample ID: WXXICV

GEL Data File EXS01270011.wiff

Analysis Date: 27-JAN-10 13:04

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	467	93	
2,6-Diamino-4-nitrotoluene	500	445	89	
3,4-Dinitrotoluene	250	235	94	
3,5-Dinitroaniline	500	485	97	
TATB	500	502	100	
tris(o-cresyl) phosphate	500	497	99	

Recovery Limits:

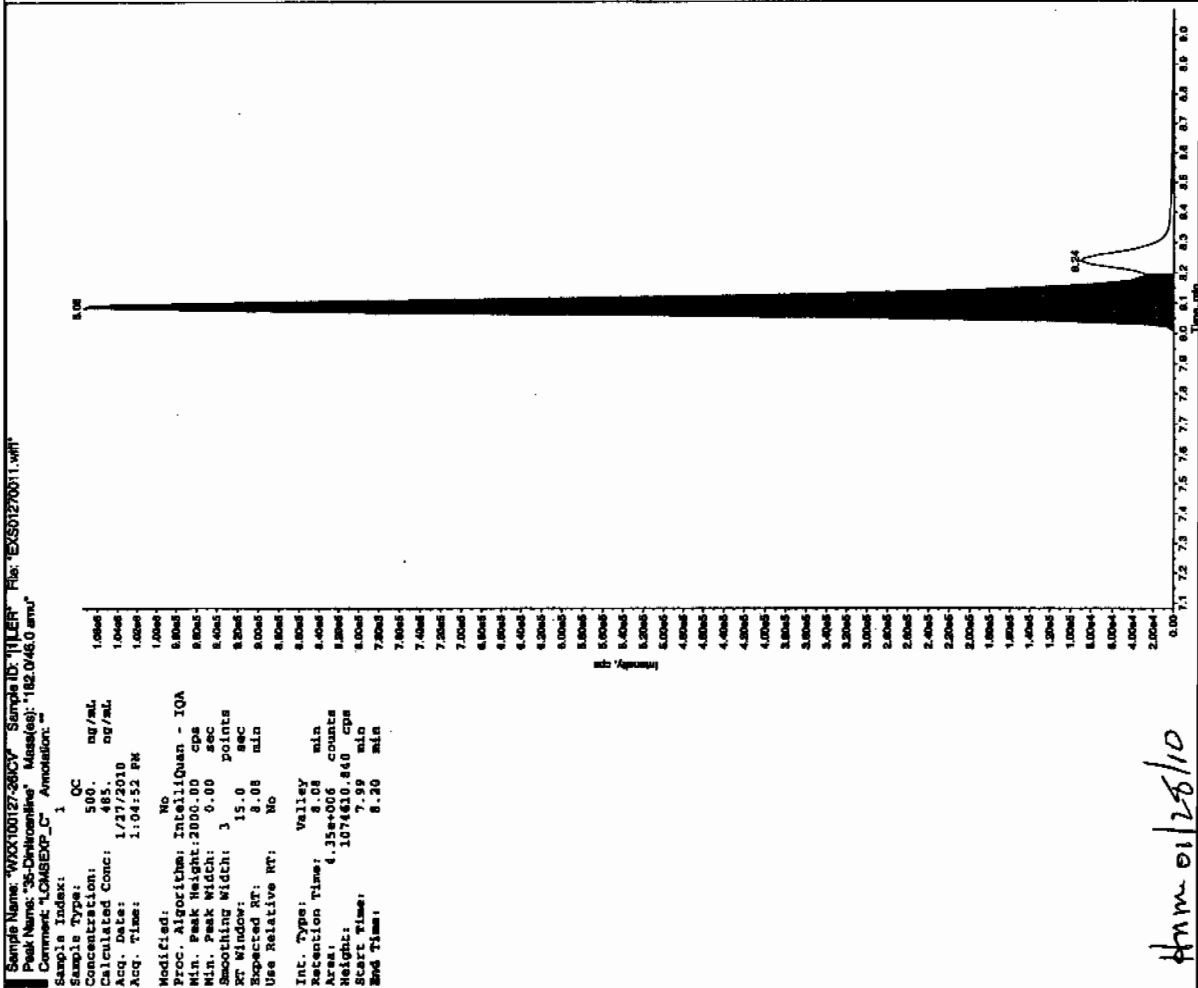
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

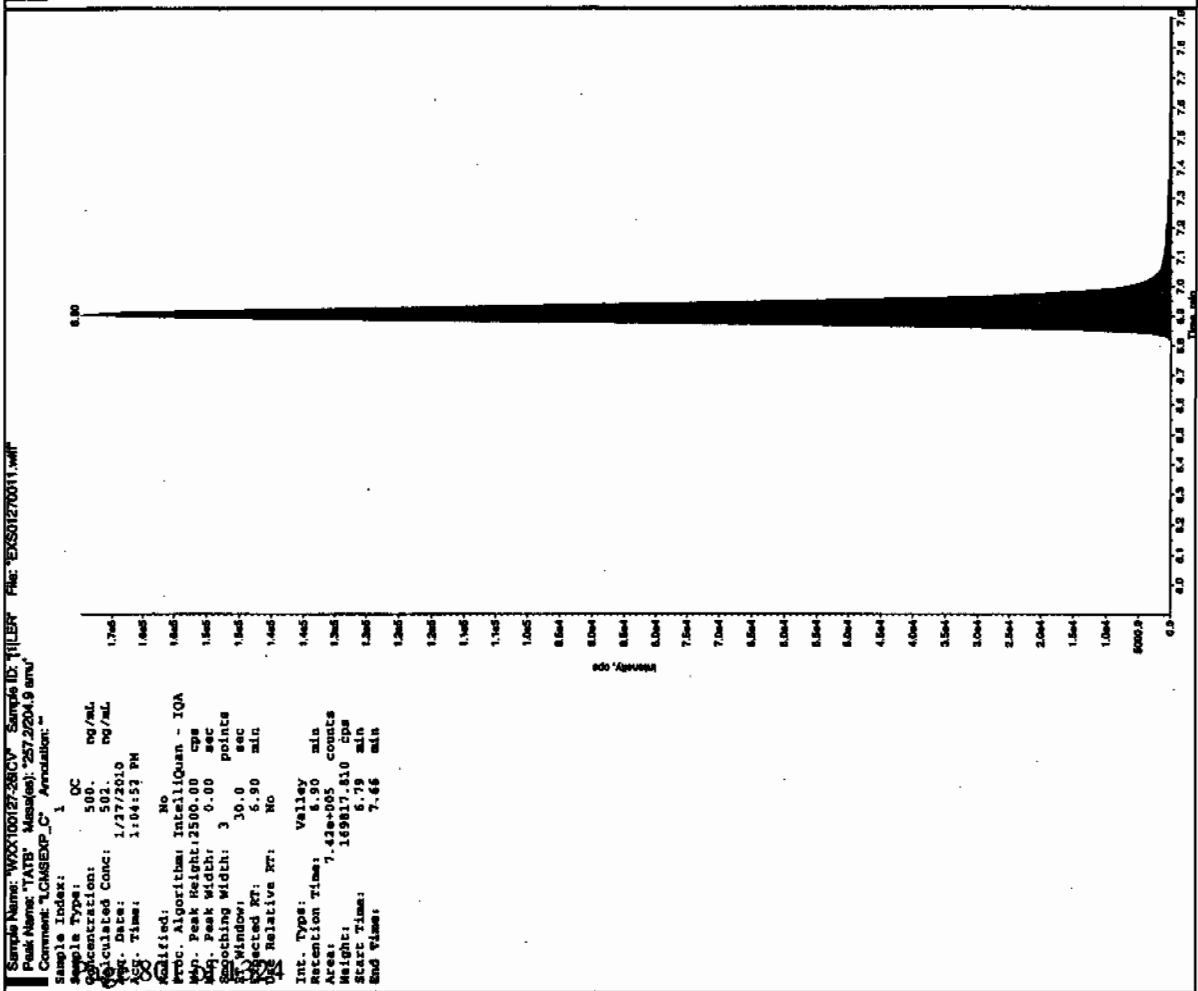
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

See 1/28/10

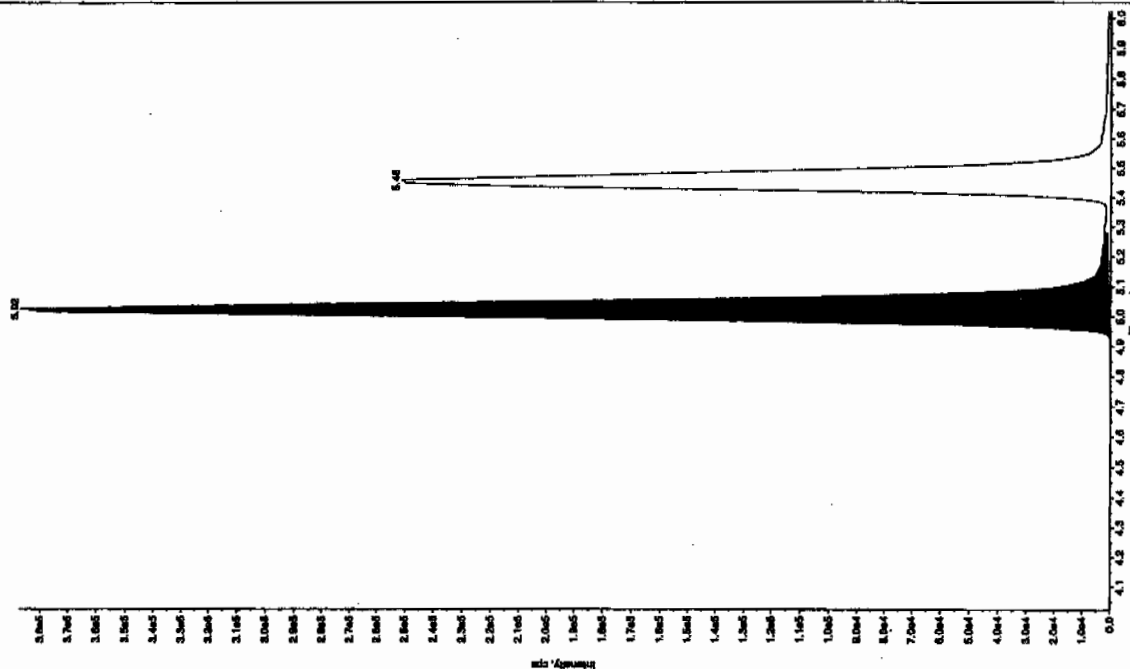


Ann 01/28/10



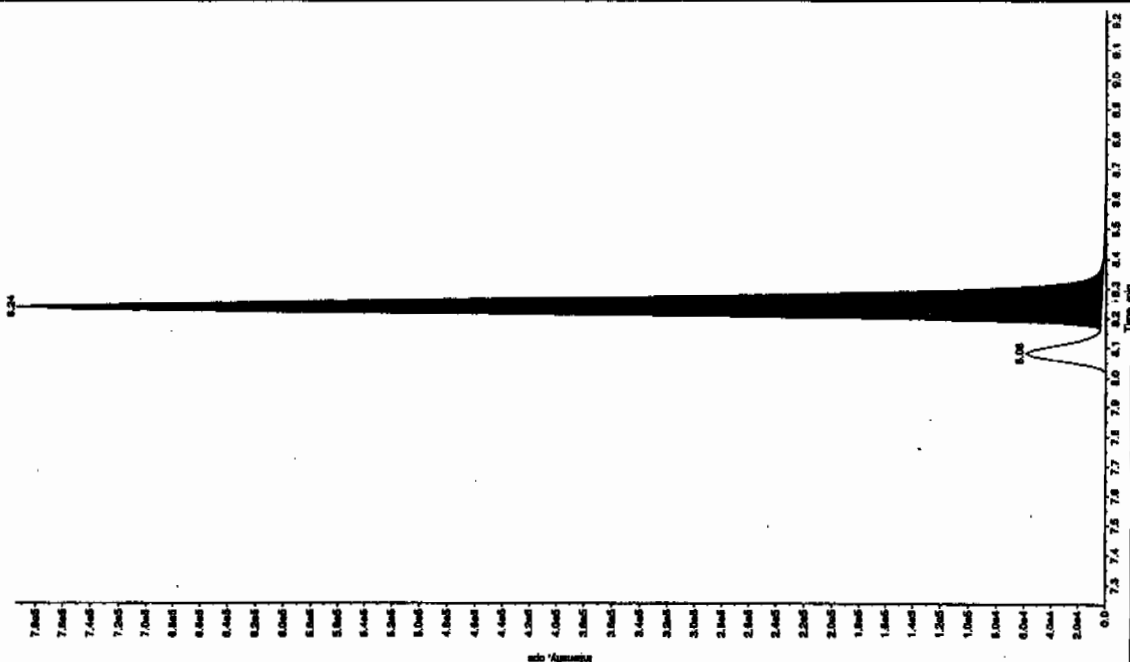
Sample Name: "WXX100127-28CV" Sample ID: "111ER" File: "EXS01270011.wif"  
 Peak Name: "26-Diethoxy-4-nitrofluorene" Mass(es): "166.046.0 amu"  
 Comment: "LCMS-EXP-C" Annotation: "

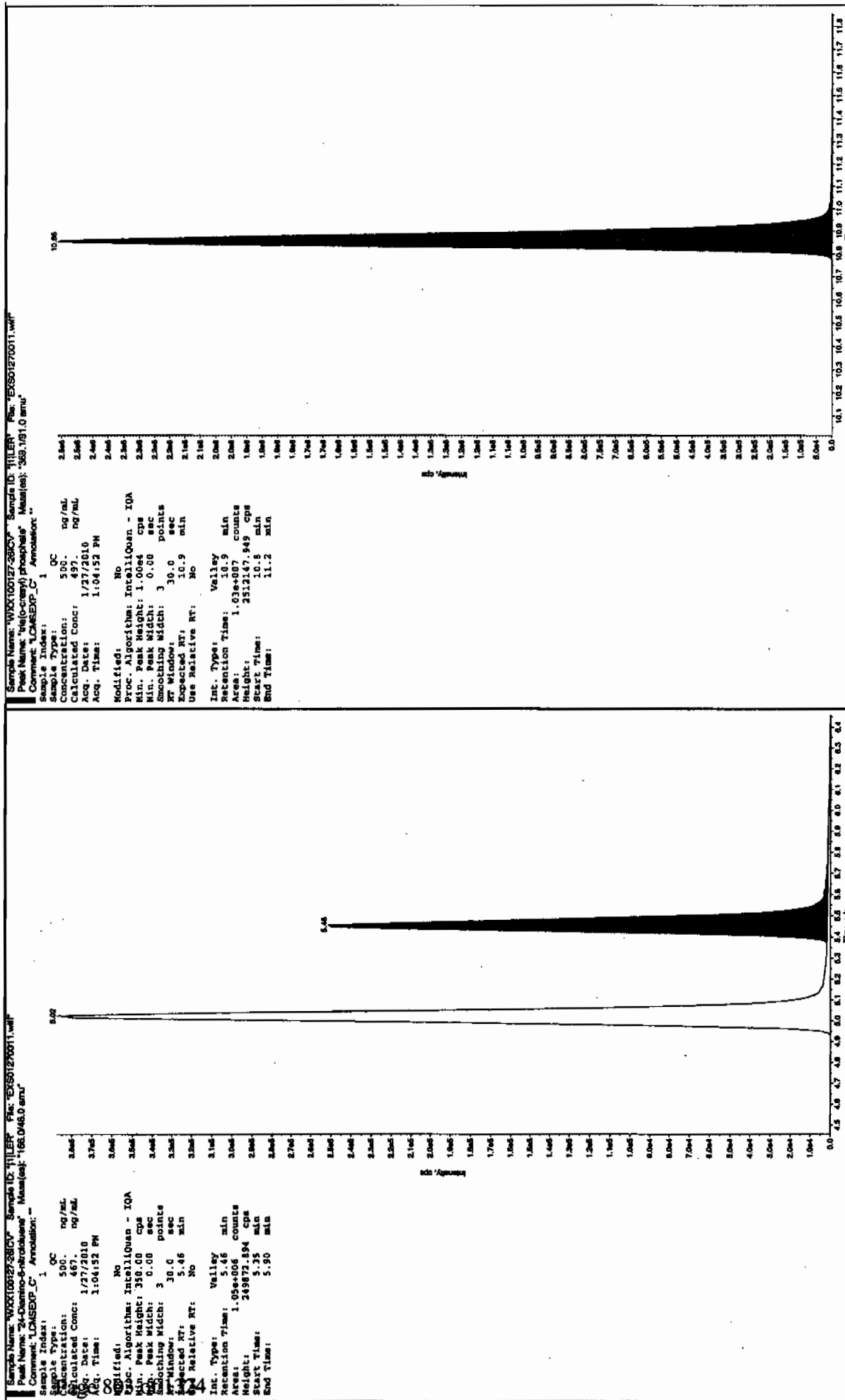
Sample Index: 1  
 Sample Type: OC  
 Concentration: 500 ng/mL  
 Calculated Conc: 445 ng/mL  
 Acq. Date: 1/27/2010  
 Acq. Time: 1:04:52 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 450.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 5.02 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.02 min  
 Area: 1.54e+006 counts  
 Height: 387191.559 cps  
 Start Time: 4.92 min  
 End Time: 5.28 min



Sample Name: "WXX100127-28CV" Sample ID: "111ER" File: "EXS01270011.wif"  
 Peak Name: "34-Diethoxy-4-nitrofluorene" Mass(es): "182.1451.9 amu"  
 Comment: "LCMS-EXP-C" Annotation: "

Sample Index: 1  
 Sample Type: OC  
 Concentration: 250 ng/mL  
 Calculated Conc: 235 ng/mL  
 Acq. Date: 1/27/2010  
 Acq. Time: 1:04:52 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 1460.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 15.0 sec  
 Expected RT: 8.24 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.24 min  
 Area: 2.94e+006 counts  
 Height: 731846.231 cps  
 Start Time: 8.16 min  
 End Time: 8.43 min





7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1210

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

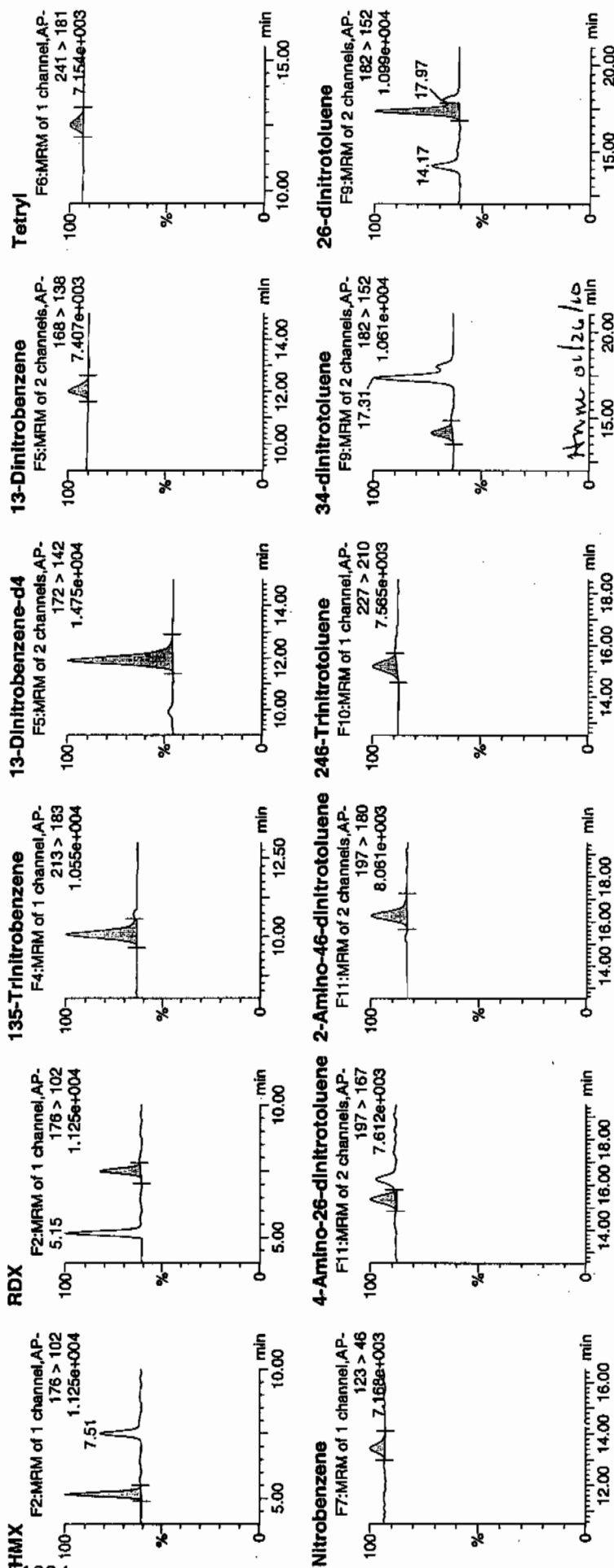
Date: 25-Jan-2010

Time: 16:45:01

ID: WXX100125-08CRI

Vial: 1:1,C

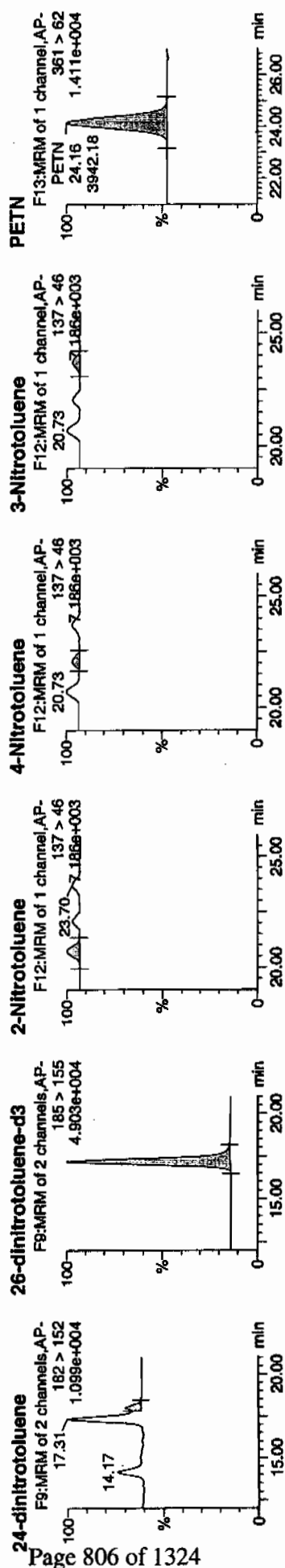
126/10



### Quantify Sample Report

**Analyst: Michael A. Penny**

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



ID	Name	Trace	RT	Area	Height	Response	Plate	Mod Date	Machine	Time	Height	Mod	Dev	SN
WVXX100125-08CRI	HMx	176 > 102	5.15	877.792	3108.327	877.792	141.200	bb		44.5071	111.3	11.3	76.6	
WVXX100125-08CRI	RDX	178 > 102	7.51	527.508	3108.327	527.508	84.854	bb		38.5946	96.5	-3.5	40.9	
WVXX100125-08CRI	135-Trinitrobenzene	213 > 183	10.07	1112.023	3108.327	1112.023	178.878	bd		53.5249	133.8	33.8	118.7	
WVXX100125-08CRI	13-Dinitrobenzene-d4	172 > 142	11.89	3108.327	3108.327	3108.327	3108.327	bb		523.5894	104.7	4.7	149.7	
WVXX100125-08CRI	13-Dinitrobenzene	168 > 138	12.00	285.243	3108.327	285.243	45.884	bb		39.5555	98.9	-1.1	21.1	
WVXX100125-08CRI	Tetryl	241 > 181	12.48	217.540	3108.327	217.540	34.993	bb		40.2862	100.7	0.7	24.2	
WVXX100125-08CRI	Nitrobenzene	123 > 46	13.41	201.306	3108.327	201.306	32.382	bb		37.8913	94.7	-5.3	25.0	
WVXX100125-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.35	388.025	18028.699	388.025	10.761	MM	26-Jan-10 09:19:05	41.3081	103.3	3.3	20.9	
WVXX100125-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.25	632.342	18028.699	632.342	17.537	bb		46.8550	117.1	17.1	62.5	
WVXX100125-08CRI	246-Trinitrotoluene	187 > 210	15.17	369.309	18028.699	369.309	10.242	bb		32.2019	80.5	-19.5	22.6	
WVXX100125-08CRI	34-dinitrotoluene	182 > 152	14.16	542.658	18028.699	542.658	15.050	bb		16.5745	82.9	-17.1	29.3	
WVXX100125-08CRI	26-dinitrotoluene	182 > 152	17.31	1706.312	18028.699	1706.312	47.322	MM	26-Jan-10 09:21:21	42.9598	107.4	7.4	126.9	
WVXX100125-08CRI	24-dinitrotoluene	182 > 152	17.97	301.425	18028.699	301.425	8.360	MM	26-Jan-10 09:23:11	32.9036	82.3	-17.7	26.1	
WVXX100125-08CRI	26-dinitrotoluene-d3	185 > 155	17.16	18028.699	18028.699	18028.699	18028.699	bb		553.0839	110.6	10.6	1520.6	
WVXX100125-08CRI	2-Nitrotoluene	137 > 46	20.73	251.870	18028.699	251.870	6.985	bb		42.0032	105.0	5.0	66.0	
WVXX100125-08CRI	4-Nitrotoluene	137 > 46	22.08	122.362	18028.699	122.362	3.394	bb		41.0443	102.6	2.6	34.7	
WVXX100125-08CRI	3-Nitrotoluene	137 > 46	23.69	132.192	18028.699	132.192	3.666	bb		39.2691	98.2	-1.8	34.1	
WVXX100125-08CRI	PETN	361 > 62	24.16	3942.182	18028.699	3942.182	109.331	bb		31.1804	77.9	-22.1	564.0	



# 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

1077  
1/26/10

Total 1593.1

Average 99.6

Handwritten: 1077 1/26/10

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): 10-1210

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0125023a

Analysis Date: 25-JAN-10 22:09

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	671.995	112	
1,3-Dinitrobenzene-d4	500	501.648	100	
2,4,6-Trinitrotoluene	600	681.012	114	
2,4-Dinitrotoluene	600	650.509	108	
2,6-Dinitrotoluene	600	620.709	103	
2,6-Dinitrotoluene-d3	500	529.849	106	
2-Amino-4,6-dinitrotoluene	600	638.815	106	
3,4-Dinitrotoluene	300	312.536	104	
4-Amino-2,6-dinitrotoluene	600	654.415	109	
HMX	600	616.521	103	
Nitrobenzene	600	622.507	104	
PETN	600	590.603	98	
RDX	600	659.536	110	
Tetryl	600	635.812	106	
m-Dinitrobenzene	600	625.794	104	
m-Nitrotoluene	600	604.626	101	
o-Nitrotoluene	600	593.315	99	
p-Nitrotoluene	600	607.304	101	

Recovery Limits:

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

Other Target Analytes 80-120%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

# Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Tue Jan 26 11:27:45 2010, Page 45 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\EXP0125023a

Date: 25-Jan-2010

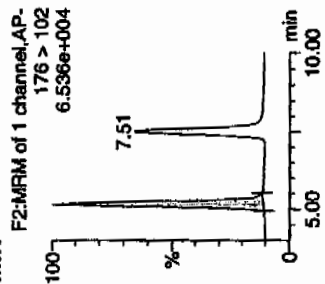
Time: 22:09:44

ID: WXX100125-07CCV

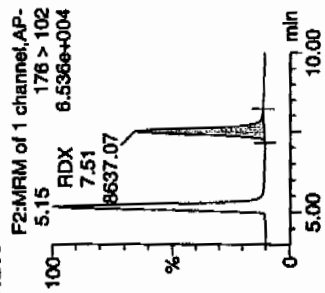
Vial: 1:1,B

1/26/10

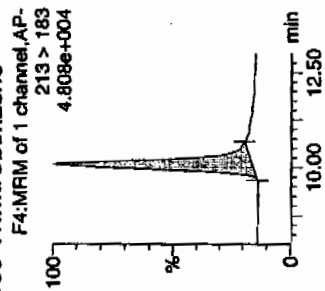
## HMX



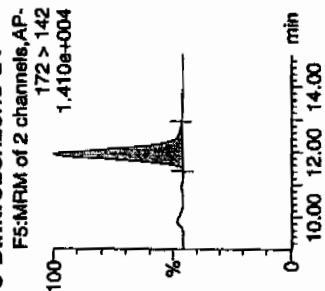
## RDX



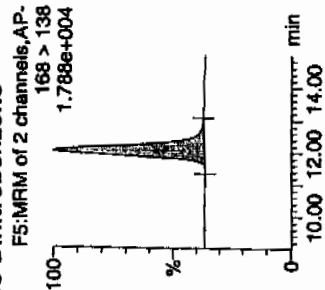
## 135-Trinitrobenzene



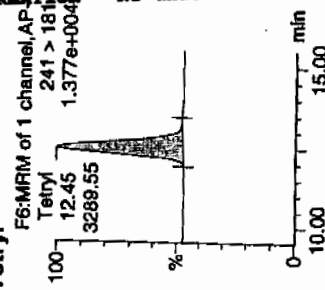
## 13-Dinitrobenzene-d4



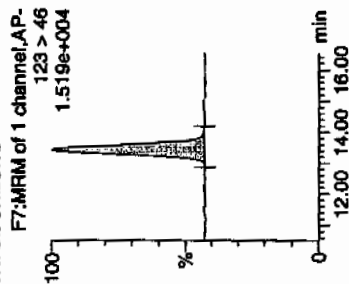
## 13-Dinitrobenzene



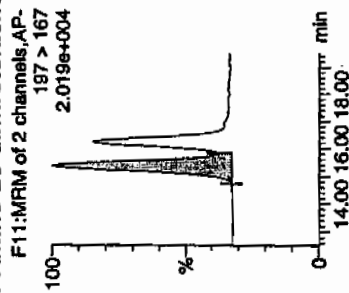
## Tetryl



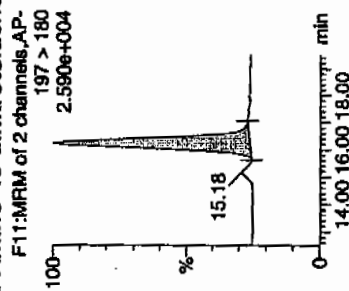
## Nitrobenzene



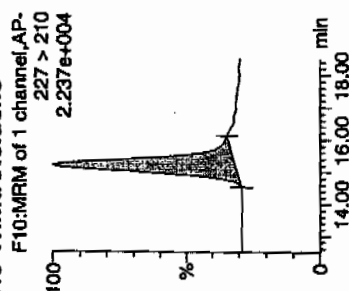
## 4-Amino-26-dinitrotoluene



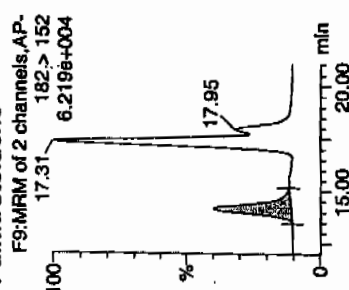
## 2-Amino-46-dinitrotoluene



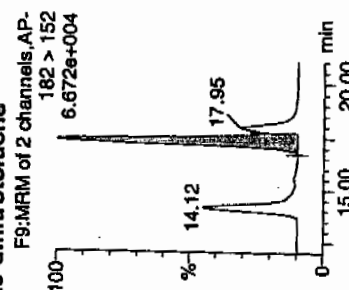
## 246-Trinitrotoluene



## 34-dinitrotoluene



## 26-dinitrotoluene



1/26/10

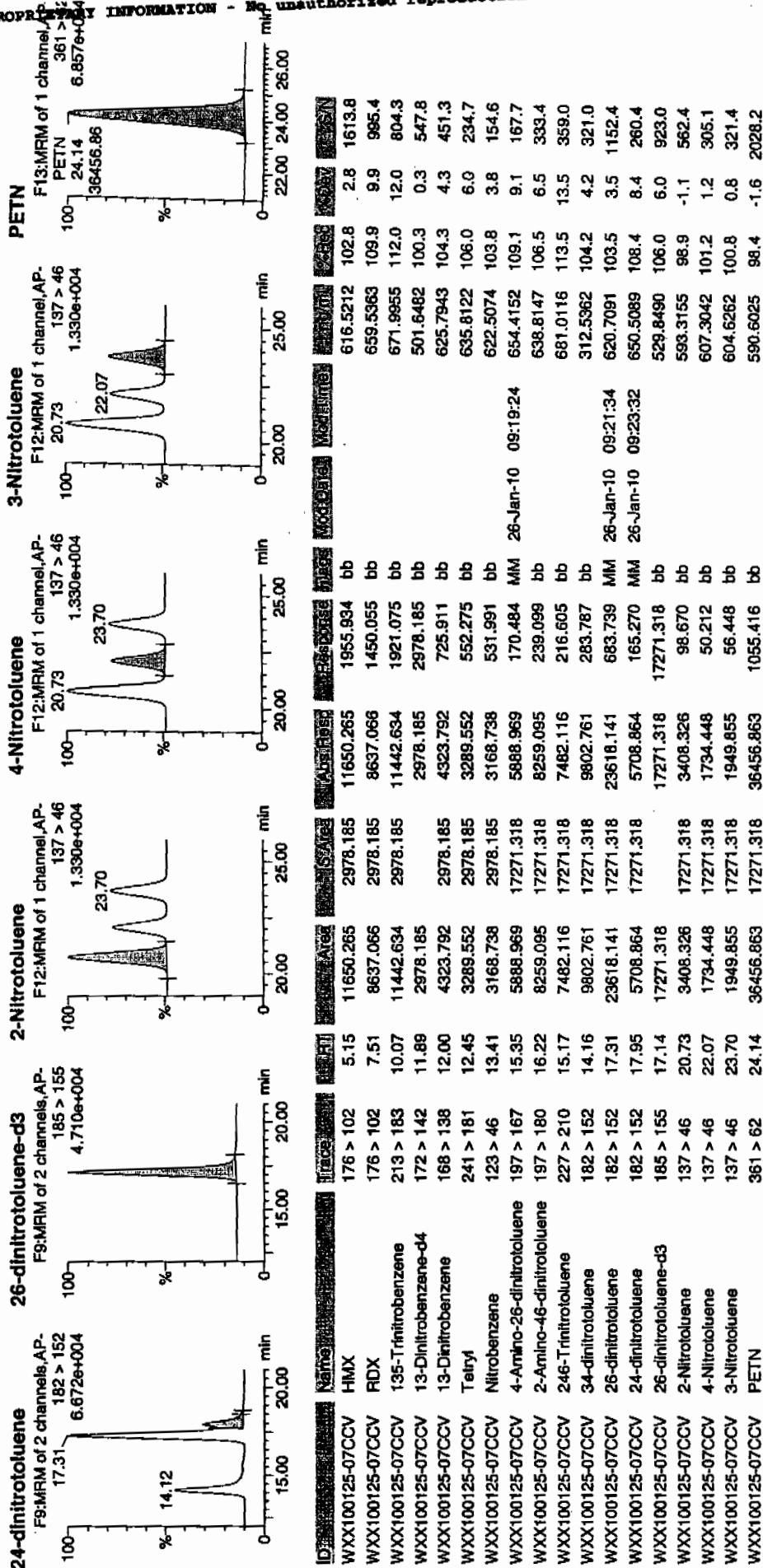
# Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Tue Jan 26 11:27:45 2010, Page 46 of 73

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

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# 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

*not  
1/26/10*

Total 1683.3

Average 105.2

*Area 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): 10-1210

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

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

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

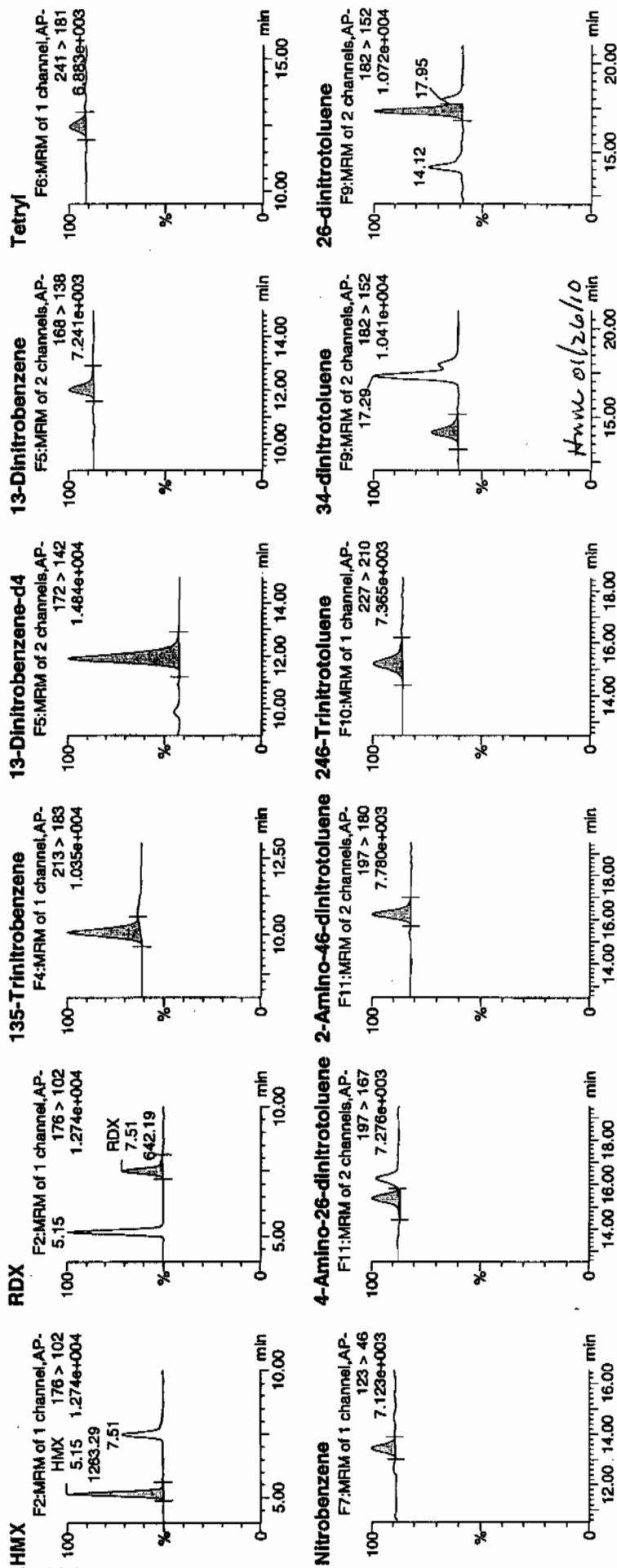
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Time: 23:08:48

ID: WXX100125-08CRI

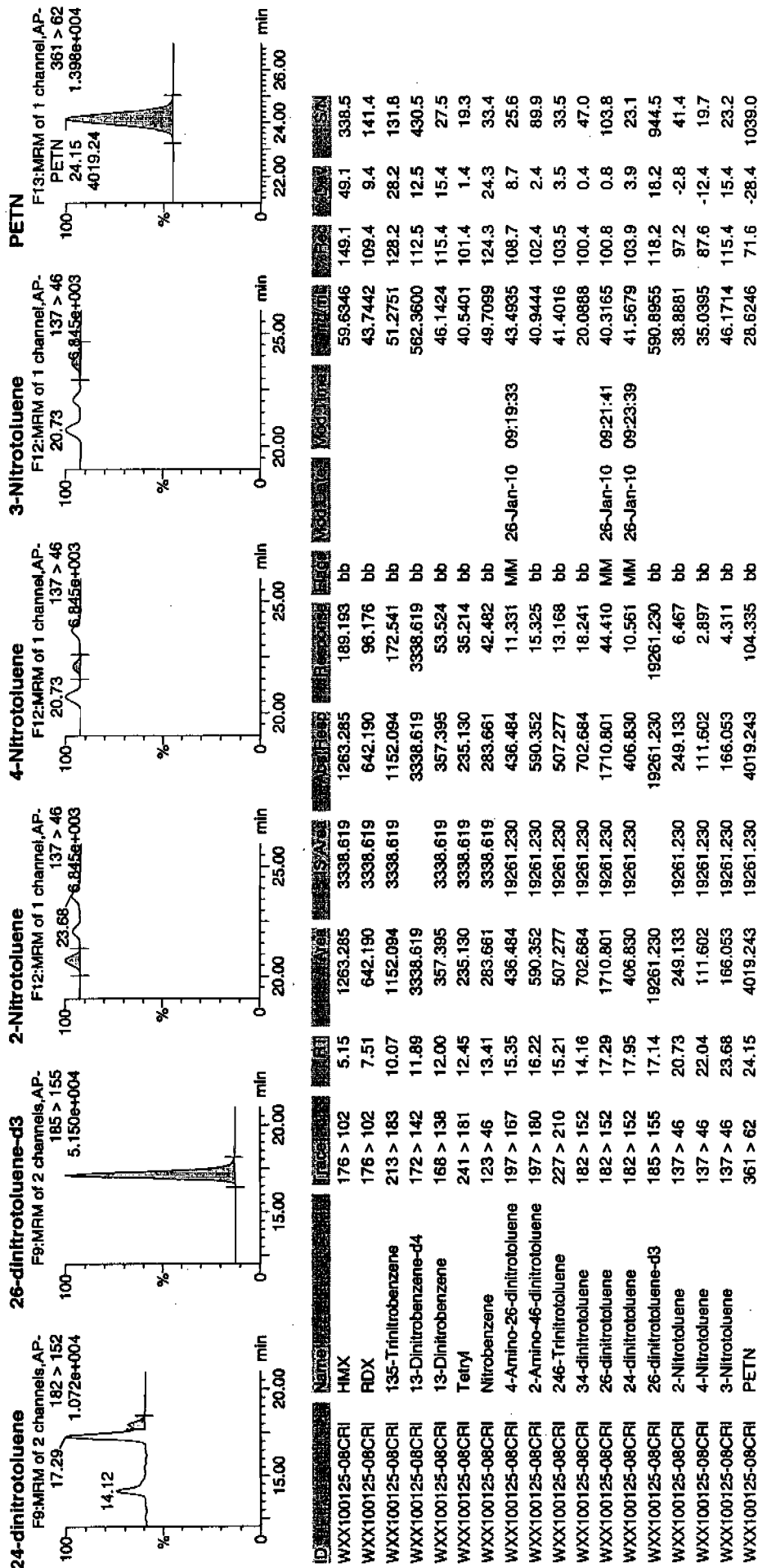
Vial: 1:1,C

1/26/10



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

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





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

*gmm 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): 10-1210

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 Su 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

Printed: Tue Jan 26 11:27:45 2010, Page 67 of 73

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

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Date: 26-Jan-2010

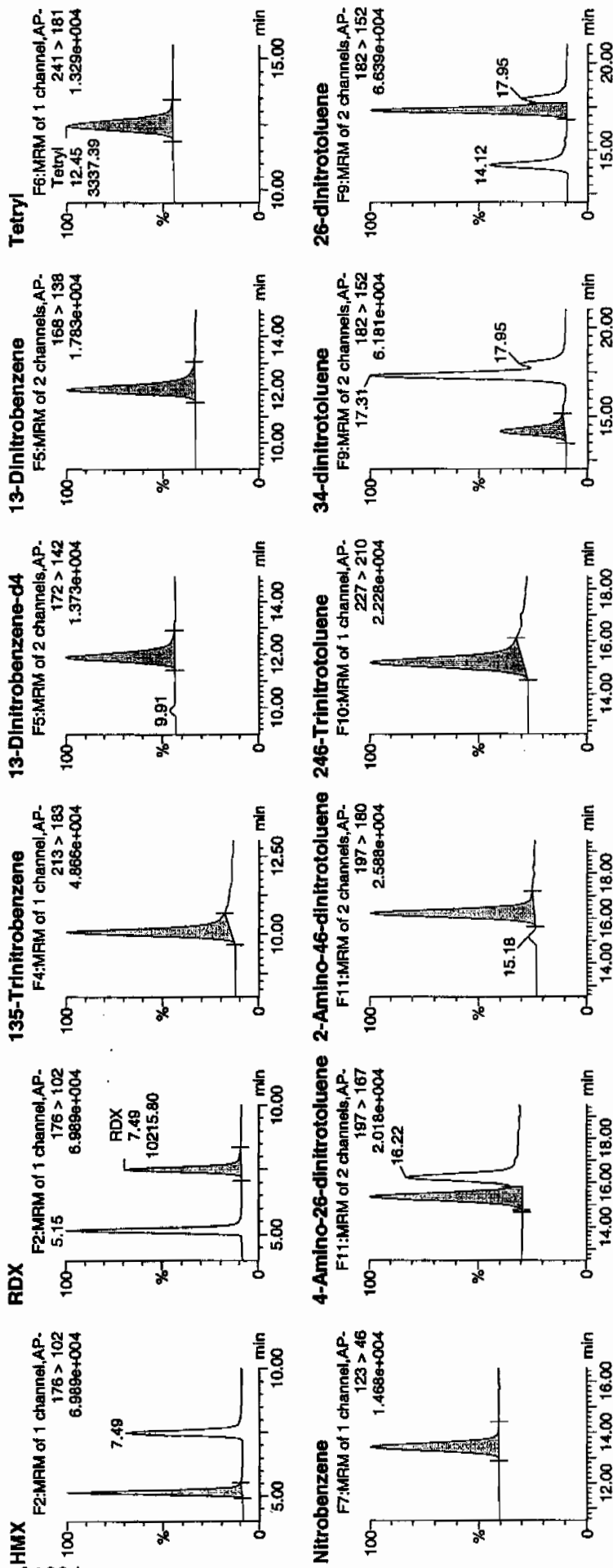
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Page ID: WXX100125-07CCV

817 of 1324

Vial: 1:1,B

1/26/10  
MJP

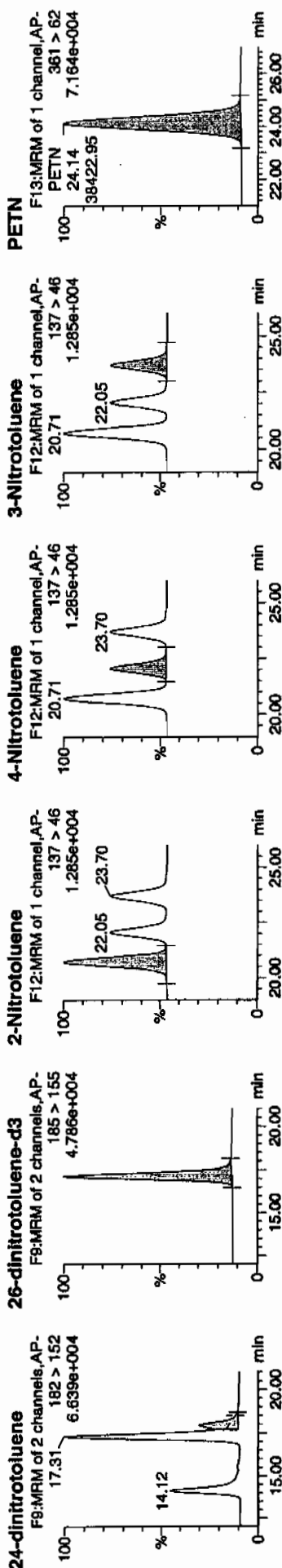


1/26/10

## Quantify Sample Report

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

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



Name	ID	Trace	Area	MS Area	Abundance	Response	Flow	Mod Date	Mod Time	Drift	Peak	SN	
HMx	WXX100125-07CCV	176 > 102	5.15	12727.260	3012.459	12727.260	2112.437	bb			665.8520	111.0	1385.6
RDX	WXX100125-07CCV	176 > 102	7.49	10215.800	3012.459	10215.800	1695.592	bb			771.2149	128.5	918.6
135-Trinitrobenzene	WXX100125-07CCV	213 > 183	10.07	11660.856	3012.459	11660.856	1935.438	bb			677.0943	112.8	921.2
13-Dinitrobenzene-d4	WXX100125-07CCV	172 > 142	11.89	3012.459	3012.459	3012.459	3012.459	bb			507.4213	101.5	175.5
13-Dinitrobenzene	WXX100125-07CCV	168 > 138	12.00	4499.687	3012.459	4499.687	746.846	bb			643.8425	107.3	7.3
Tetryl	WXX100125-07CCV	241 > 181	12.45	3337.394	3012.459	3337.394	553.932	bb			637.7201	106.3	6.3
Nitrobenzene	WXX100125-07CCV	123 > 46	13.41	3155.987	3012.459	3155.987	523.822	bb			612.9484	102.2	2.2
4-Amino-26-dinitrotoluene	WXX100125-07CCV	197 > 167	15.35	6139.198	18022.293	6139.198	170.322	MM	26-Jan-10 09:19:47		653.7944	109.0	9.0
2-Amino-46-dinitrotoluene	WXX100125-07CCV	197 > 180	16.22	8472.895	18022.293	8472.895	235.067	bb			628.0434	104.7	4.7
248-Trinitrotoluene	WXX100125-07CCV	227 > 210	15.17	7615.592	18022.293	7615.592	211.283	bb			664.2769	110.7	10.7
34-dinitrotoluene	WXX100125-07CCV	182 > 152	14.16	10153.055	18022.293	10153.055	281.680	bb			310.2159	103.4	3.4
26-dinitrotoluene	WXX100125-07CCV	182 > 152	17.31	23559.799	18022.293	23559.799	653.629	MM	26-Jan-10 09:21:49		593.3752	98.9	-1.1
24-dinitrotoluene	WXX100125-07CCV	182 > 152	17.95	5738.072	18022.293	5738.072	159.194	MM	26-Jan-10 09:23:53		626.5922	104.4	4.4
26-dinitrotoluene-d3	WXX100125-07CCV	185 > 155	17.14	18022.293	18022.293	18022.293	18022.293	bb			552.8674	110.6	10.6
2-Nitrotoluene	WXX100125-07CCV	137 > 46	20.71	3410.712	18022.293	3410.712	94.625	bb			568.9905	94.8	-5.2
4-Nitrotoluene	WXX100125-07CCV	137 > 46	22.05	1796.469	18022.293	1796.469	49.840	bb			602.8096	100.5	0.5
3-Nitrotoluene	WXX100125-07CCV	137 > 46	23.70	1874.392	18022.293	1874.392	52.002	bb			557.0068	92.8	-7.2
PETN	WXX100125-07CCV	361 > 62	24.14	38422.945	18022.293	38422.945	1065.984	bb			598.0986	99.7	-0.3

GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis: 01/26/10  
 Time of Injection: 0334  
 Standard Number: WXX100125-07CCV  
 Data File: EXP0125034a

HMX	111.0
RDX	128.5
135-TNB	112.8
13-DNB	107.3
Tetryl	106.3
Nitrobenzene	102.2
4A-26-DNT	109.0
2A-46-DNT	104.7
246-TNT	110.7
34-DNT(surr)	103.4
26-DNT	98.9
24-DNT	104.4
2-NT	94.8
4-NT	100.5
3-NT	92.8
PETN	99.7

*not  
1/26/10*

Total 1687.0

Average 105.4

*sum 01/26/10*

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1210

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0125036a

Analysis Date: 26-JAN-10 04:33

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	52.11	130	*
1,3-Dinitrobenzene-d4	500	503.562	101	
2,4,6-Trinitrotoluene	40	39.74	99	
2,4-Dinitrotoluene	40	41.295	103	
2,6-Dinitrotoluene	40	39.945	100	
2,6-Dinitrotoluene-d3	500	539.662	108	
2-Amino-4,6-dinitrotoluene	40	39.655	99	
3,4-Dinitrotoluene	20	20.419	102	
4-Amino-2,6-dinitrotoluene	40	42.579	106	
HMX	40	49.197	123	
Nitrobenzene	40	40.413	101	
PETN	40	28.993	72	
RDX	40	44.285	111	
Tetryl	40	48.534	121	
m-Dinitrobenzene	40	35.432	89	
m-Nitrotoluene	40	39.652	99	
o-Nitrotoluene	40	50.193	125	
p-Nitrotoluene	40	42.49	106	

Recovery Limits:

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

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

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

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

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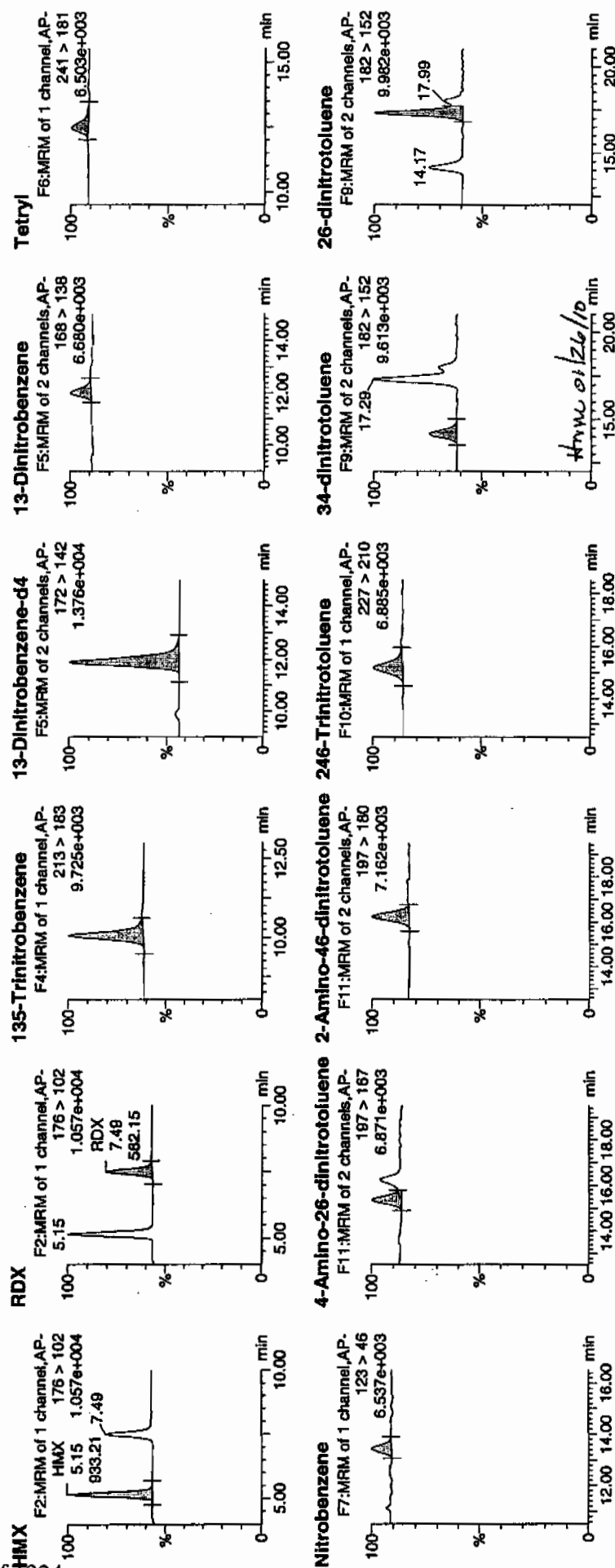
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Time: 04:33:23

ID: WXX100125-08CRI

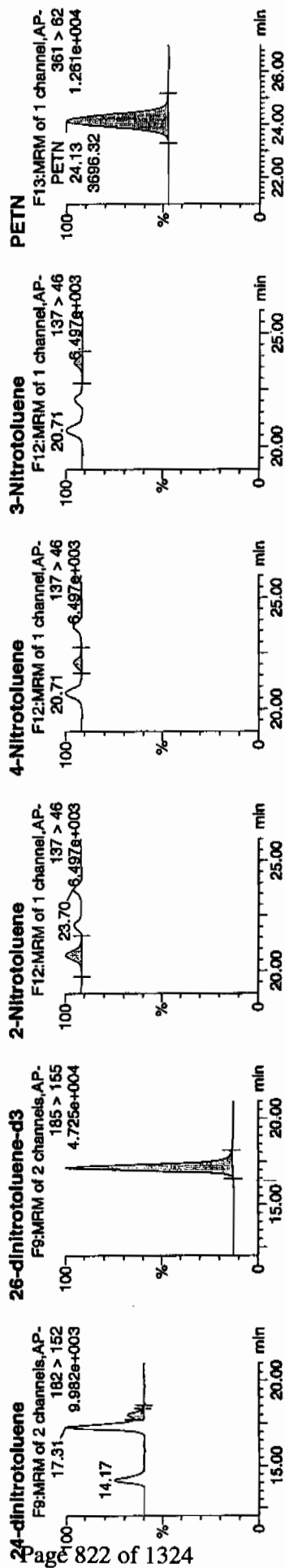
Vial: 1:1,C

11/26/10  
MJP



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

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



ID	Name	Area	Height	Width	Retention	Mass	Area	Height	Width	Retention	Mass
WXX100125-08CRI	HMX	176 > 102	5.15	933.214	2989.546	833.214	156.080	bb	48.1971	123.0	196.3
WXX100125-08CRI	FOX	176 > 102	7.49	582.152	2989.546	582.152	97.365	bb	44.2849	110.7	106.4
WXX100125-08CRI	135-Trinitrobenzene	213 > 183	10.07	1045.697	2989.546	1045.697	174.892	bb	52.1099	130.3	143.8
WXX100125-08CRI	13-Dinitrobenzene-d4	172 > 142	11.89	2989.546	2989.546	2989.546	2989.546	bb	503.5618	100.7	0.7
WXX100125-08CRI	13-Dinitrobenzene	168 > 138	12.00	245.746	2989.546	245.746	41.101	bb	35.4323	88.6	-11.4
WXX100125-08CRI	Tetryl	241 > 181	12.45	252.060	2989.546	252.060	42.157	bb	48.5336	121.3	21.3
WXX100125-08CRI	Nitrobenzene	123 > 46	13.41	206.496	2989.546	206.496	34.536	bb	40.4126	101.0	1.0
WXX100125-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.35	390.258	17591.199	390.258	11.092	MM	42.5791	106.4	6.4
WXX100125-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.22	522.190	17591.199	522.190	14.842	bb	39.6553	99.1	-0.9
WXX100125-08CRI	246-Trinitrotoluene	227 > 210	15.17	444.695	17591.199	444.695	12.640	bb	39.7395	99.3	-0.7
WXX100125-08CRI	34-dinitrotoluene	182 > 152	14.16	652.297	17591.199	652.297	18.540	bb	20.4187	102.1	2.1
WXX100125-08CRI	26-dinitrotoluene	182 > 152	17.31	1548.066	17591.199	1548.066	44.001	MM	39.9449	99.9	-0.1
WXX100125-08CRI	24-dinitrotoluene	182 > 152	17.99	369.118	17591.199	369.118	10.492	MM	41.2951	103.2	3.2
WXX100125-08CRI	26-dinitrotoluene-d3	185 > 155	17.14	17591.199	17591.199	17591.199	17591.199	bb	539.6623	107.9	7.9
WXX100125-08CRI	2-Nitrotoluene	137 > 46	20.72	293.678	17591.199	293.678	8.347	bb	50.1933	125.5	25.5
WXX100125-08CRI	4-Nitrotoluene	137 > 46	22.09	123.598	17591.199	123.598	3.513	bb	42.4900	106.2	6.2
WXX100125-08CRI	3-Nitrotoluene	137 > 46	23.70	130.241	17591.199	130.241	3.702	bb	38.6518	98.1	-0.9
WXX100125-08CRI	PETN	361 > 62	24.13	3696.324	17591.199	3696.324	105.062	bb	28.9932	72.5	-27.5



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

*not  
1/26/10*

Total 1688.2

Average 105.5

*from 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): 10-1210

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0125047a

Analysis Date: 26-JAN-10 09:58

LCMSMS ID: 203

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

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Date: 26-Jan-2010

Time: 09:58:05

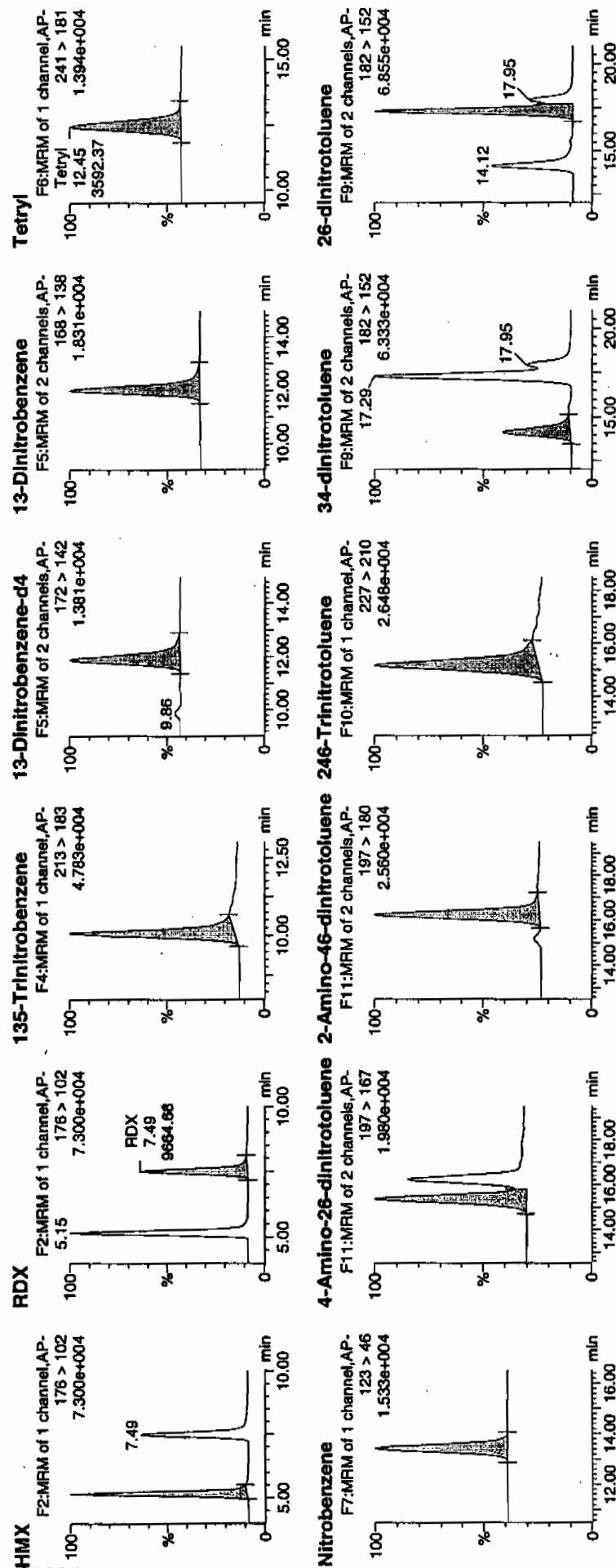
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Vial: 1:1,B

825

0-1324

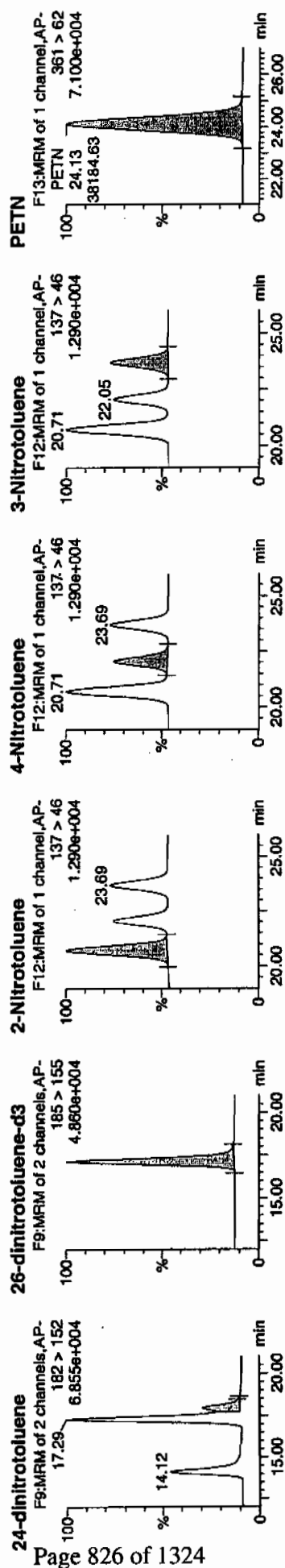
WXX  
1/23/10



WXX  
01/23/10

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

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



FILE NO.	FILE NAME	FILE TYPE	FILE SIZE	FILE DATE	FILE TIME	FILE MODIFIED	FILE CREATOR	FILE OWNER	FILE GROUP	FILE PERMISSION	FILE COMMENT
176	102	13185.493	3138.402	2100.670	bb	662.1429	110.4	10.4	1467.2		
176	102	9664.676	3138.402	1539.745	bb	700.3303	116.7	16.7	893.0		
176	102	11599.277	3138.402	1847.959	bb	646.0397	107.7	7.7	485.6		
176	102	3138.402	3138.402	3138.402	bb	528.8353	105.7	5.7	304.3		
176	102	4488.464	3138.402	715.087	bb	616.4640	102.7	2.7	291.8		
176	102	3592.369	3138.402	572.325	bb	658.8949	109.8	9.8	805.2		
176	102	3376.141	3138.402	537.876	bb	629.3930	104.9	4.9	363.2		
176	102	5854.912	18015.623	162.495	MM	623.7502	104.0	4.0	405.4		
176	102	8395.583	18015.623	233.008	bb	622.5432	103.8	3.8	932.8		
176	102	9676.053	18015.623	268.546	bb	844.3150	140.7	40.7	757.4		
176	102	10706.081	18015.623	297.133	bb	327.2342	109.1	9.1	591.8		
176	102	24108.299	18015.623	669.094	MM	607.4145	101.2	1.2	903.4		
176	102	5507.685	18015.623	152.859	MM	601.6568	100.3	0.3	188.1		
176	102	18015.623	18015.623	18015.623	bb	552.6828	110.5	10.5	865.6		
176	102	3360.283	18015.623	93.260	bb	560.7853	93.5	-6.5	783.1		
176	102	1709.745	18015.623	47.452	bb	573.9215	95.7	-4.3	417.6		
176	102	1944.873	18015.623	53.977	bb	578.1654	96.4	-3.6	446.6		
176	102	38184.633	18015.623	1059.764	bb	593.6821	98.9	-1.1	2758.9		

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:*  
 100%  
 1/27/10

Total 1695.8

Average 106.0

*Handwritten:* HMX 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): 10-1210

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0125049a

Analysis Date: 26-JAN-10 10:57

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	44.638	112	
1,3-Dinitrobenzene-d4	500	604.504	121	
2,4,6-Trinitrotoluene	40	37.616	94	
2,4-Dinitrotoluene	40	40.509	101	
2,6-Dinitrotoluene	40	39.422	99	
2,6-Dinitrotoluene-d3	500	574.489	115	
2-Amino-4,6-dinitrotoluene	40	46.027	115	
3,4-Dinitrotoluene	20	22.575	113	
4-Amino-2,6-dinitrotoluene	40	43.635	109	
HMX	40	41.294	103	
Nitrobenzene	40	37.127	93	
PETN	40	31.781	79	
RDX	40	41.493	104	
Tetryl	40	40.973	102	
m-Dinitrobenzene	40	33.859	85	
m-Nitrotoluene	40	49.924	125	
o-Nitrotoluene	40	42.014	105	
p-Nitrotoluene	40	42.378	106	

**Recovery Limits:**

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

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

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

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

Name: C:\MASSLYNX\NEW\_EXP.PRO\data\EXP0125049a

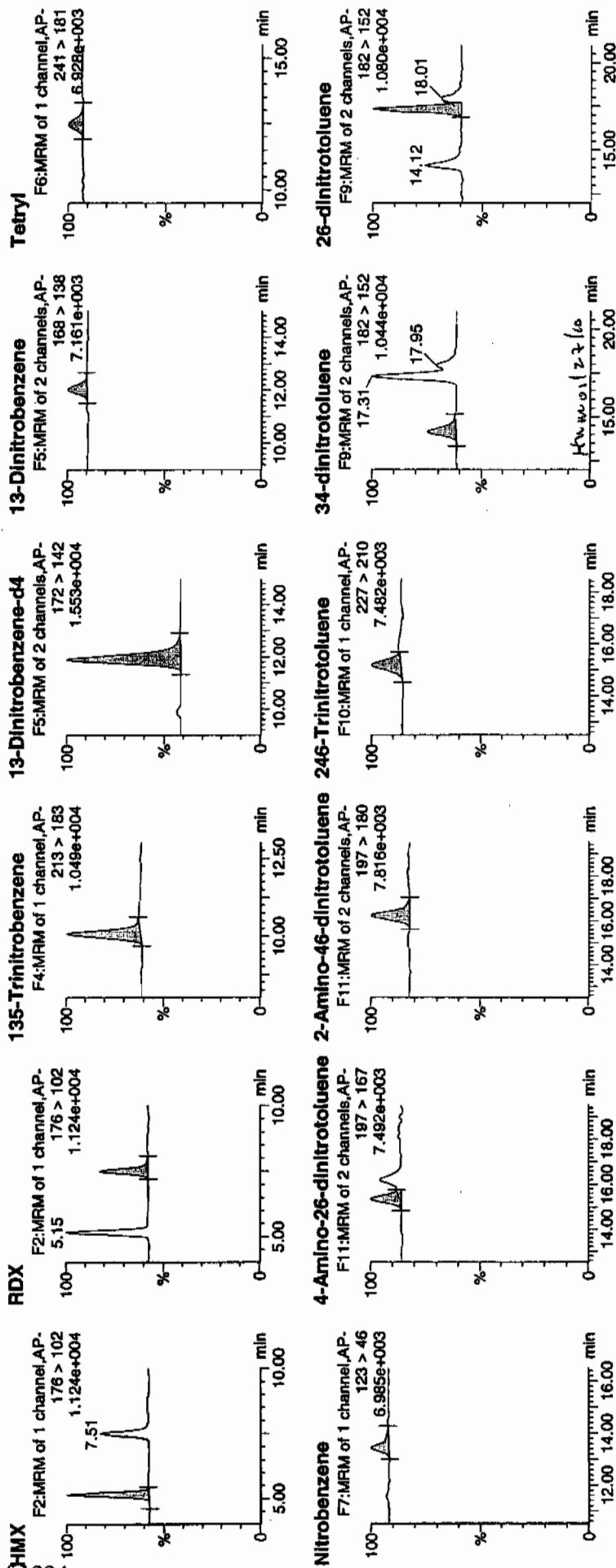
Date: 26-Jan-2010

Time: 10:57:07

ID: WXX100125-08CRI

Vial: 1:1,C

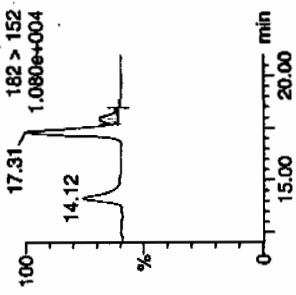
1/27/10  
M.A.P.



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

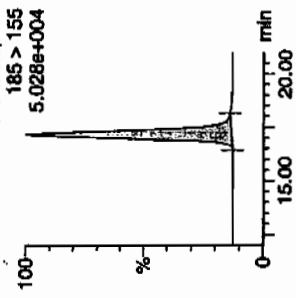
**2,4-dinitrotoluene**

**F9:MRM of 2 channels, AP-**



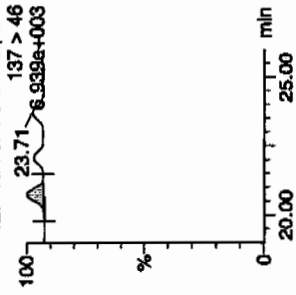
## 26-dinitrotoluene-d3

**F9:MRM of 2 channels, A.P.**



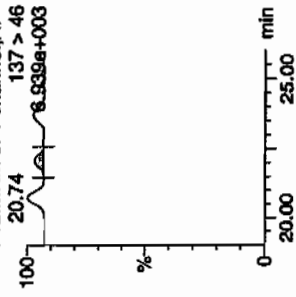
## 2-Nitrotoluene

F12:MRM of 1 channel, AP-.



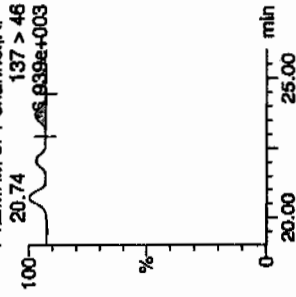
## 4-Nitrotoluene

**F12:MRM of 1 channel.AP-**



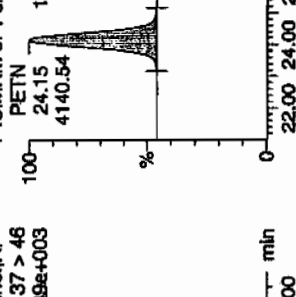
### 3-Nitrotoluene

**F12:MRM of 1 channel AP.**



**PETN**

F13:MRM of 1 d



ID	Name	Index	RT	Area	SArea	Abundance	Height	Width	Median	Area	SArea	Abundance	Height	Width	Median	Area	SArea	Abundance	Height	Width	Median
WXX100125-08CRI	HMX	176 > 102	5.15	940.323	3588.820	940.323	131.007	bb								41.2942	103.2	3.2			113.1
WXX100125-08CRI	RDX	176 > 102	7.51	654.783	3588.820	654.783	91.225	bb								41.4925	103.7	3.7			66.1
WXX100125-08CRI	135-Trinitrobenzene	213 > 183	10.07	1104.246	3588.820	1104.246	153.845	bb								44.6384	111.6	11.6			145.1
WXX100125-08CRI	13-Dinitrobenzene-d4	172 > 142	11.89	3588.820	3588.820	3588.820	3588.820	bb								604.5041	120.9	20.9			191.6
WXX100125-08CRI	13-Dinitrobenzene	168 > 138	12.03	281.911	3588.820	281.911	39.276	bb								33.8594	84.6	-15.4			32.1
WXX100125-08CRI	Tetryl	241 > 181	12.45	255.450	3588.820	255.450	35.590	bb								40.9730	102.4	2.4			13.0
WXX100125-08CRI	Nitrobenzene	123 > 46	13.45	227.737	3588.820	227.737	31.729	bb								37.1272	92.8	-7.2			18.7
WXX100125-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.35	425.744	18726.447	425.744	11.367	MM	27-Jan-10	08:12:17						43.6348	109.1	9.1			23.7
WXX100125-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.22	645.214	18726.447	645.214	17.227	bb								46.0274	115.1	15.1			51.8
WXX100125-08CRI	246-Trinitrotoluene	227 > 210	15.17	448.097	18726.447	448.097	11.984	bb								37.6160	94.0	-6.0			23.5
WXX100125-08CRI	34-dinitrotoluene	182 > 152	14.17	767.709	18726.447	767.709	20.498	bb								22.5745	112.9	12.9			30.5
WXX100125-08CRI	26-dinitrotoluene	182 > 152	17.31	1626.381	18726.447	1626.381	43.425	MM	27-Jan-10	09:15:27						39.4216	98.6	-1.4			95.8
WXX100125-08CRI	24-dinitrotoluene	182 > 152	18.01	385.462	18726.447	385.462	10.292	MM	27-Jan-10	09:19:17						40.5093	101.3	1.3			19.4
WXX100125-08CRI	26-dinitrotoluene-d3	185 > 155	17.14	18726.447	18726.447	18726.447	18726.447	bb								574.4894	114.9	14.9			1389.2
WXX100125-08CRI	2-Nitrotoluene	137 > 46	20.74	261.684	18726.447	261.684	6.987	bb								42.0138	105.0	5.0			60.2
WXX100125-08CRI	4-Nitrotoluene	137 > 46	22.06	131.227	18726.447	131.227	3.504	bb								42.3778	105.9	5.9			31.3
WXX100125-08CRI	3-Nitrotoluene	137 > 46	23.71	174.564	18726.447	174.564	4.661	bb								49.9240	124.8	24.8			37.1
WXX100125-08CRI	PETN	361 > 62	24.15	4140.537	18726.447	4140.537	110.553	bb								31.7814	79.5	-20.5			450.9



GRAND MEAN AVERAGE

Vendor: UltraScientific  
 Date of Analysis 01/26/10  
 Time of Injection 1057  
 Standard Number WXX100125-08CRI  
 Data File EXP0125049a

HMX	103.2
RDX	103.7
135-TNB	111.6
13-DNB	84.6
Tetryl	102.4
Nitrobenzene	92.8
4A-26-DNT	109.1
2A-46-DNT	115.1
246-TNT	94.0
34-DNT(surr)	112.9
26-DNT	98.6
24-DNT	101.3
2-NT	105.0
4-NT	105.9
3-NT	124.8
PETN	79.5

*not  
1/27/10*

Total 1644.5

Average 102.8

*Home 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): 10-1210

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

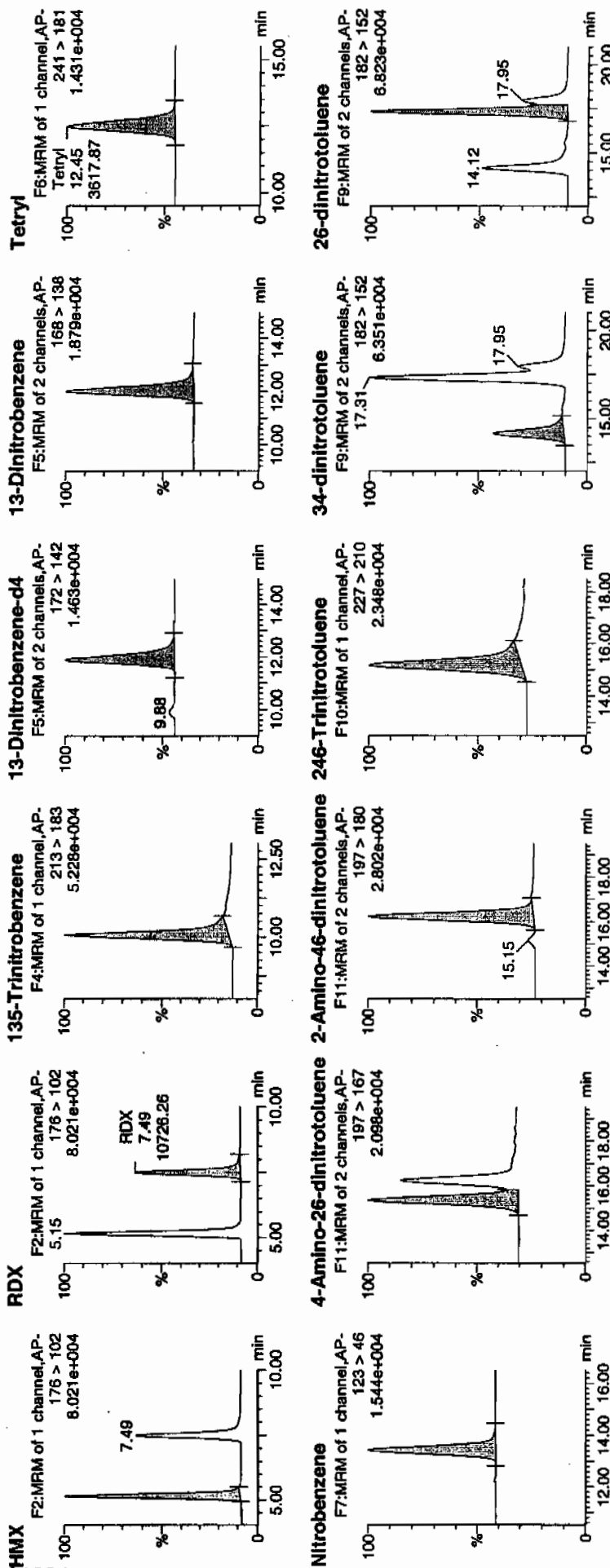
Date: 26-Jan-2010

Time: 16:21:27

ID: WXX100125-07CCV

Vial: 1:1,B

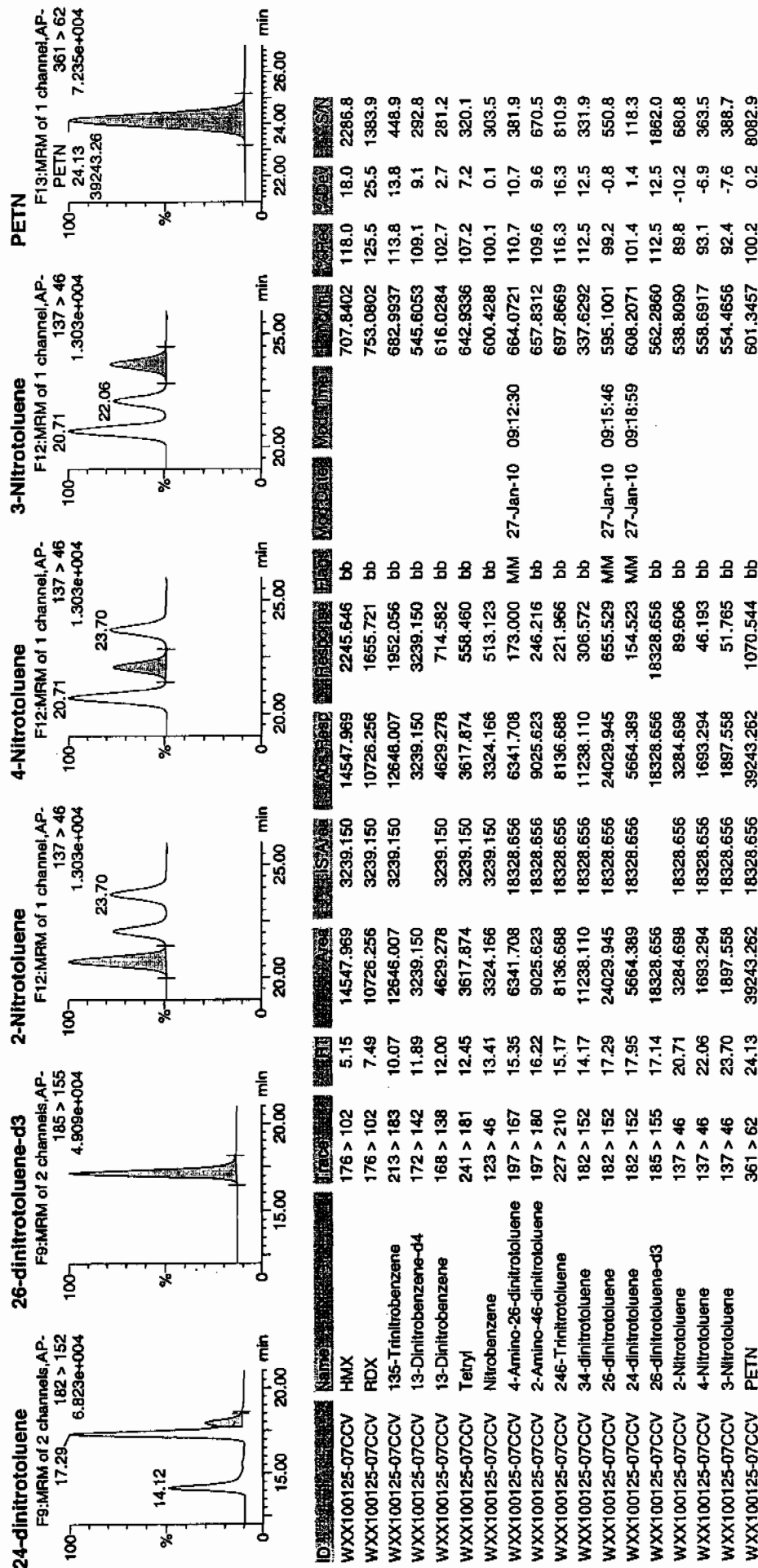
1/27/10



1/27/10

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

Dataset: C:\MASSLYNX\New\_Exp\PRO012510expA1.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

*MTT  
1/27/10*

Total 1692.5

Average 105.8

*Sum - 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): 10-1210

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0125062a

Analysis Date: 26-JAN-10 17:20

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	51.696	129	
1,3-Dinitrobenzene-d4	500	614.783	123	
2,4,6-Trinitrotoluene	40	49.225	123	
2,4-Dinitrotoluene	40	34.729	87	
2,6-Dinitrotoluene	40	39.808	100	
2,6-Dinitrotoluene-d3	500	614.638	123	
2-Amino-4,6-dinitrotoluene	40	45.735	114	
3,4-Dinitrotoluene	20	24.671	123	
4-Amino-2,6-dinitrotoluene	40	51.11	128	
HMX	40	52.738	132	*
Nitrobenzene	40	40.221	101	
PETN	40	28.447	71	
RDX	40	50.85	127	
Tetryl	40	57.694	144	*
m-Dinitrobenzene	40	44.101	110	
m-Nitrotoluene	40	43.112	108	
o-Nitrotoluene	40	44.615	112	
p-Nitrotoluene	40	46.759	117	

Recovery Limits:

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

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

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

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

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125062a

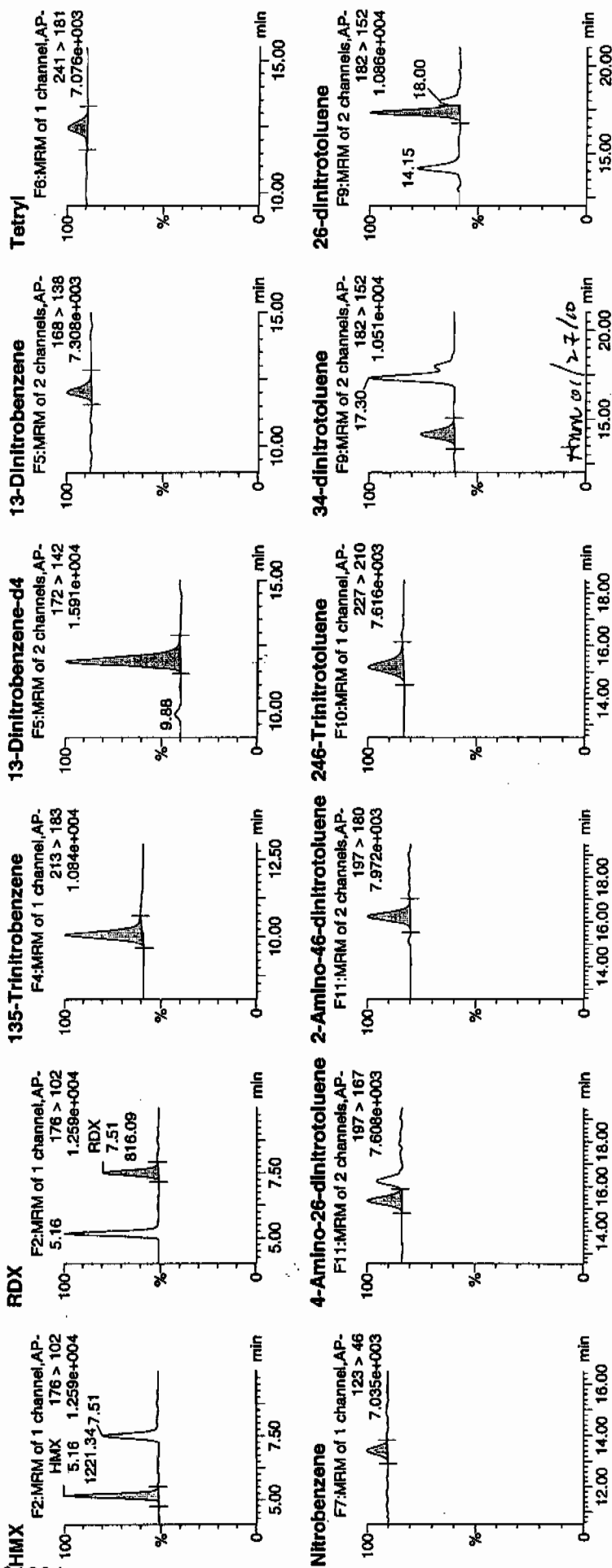
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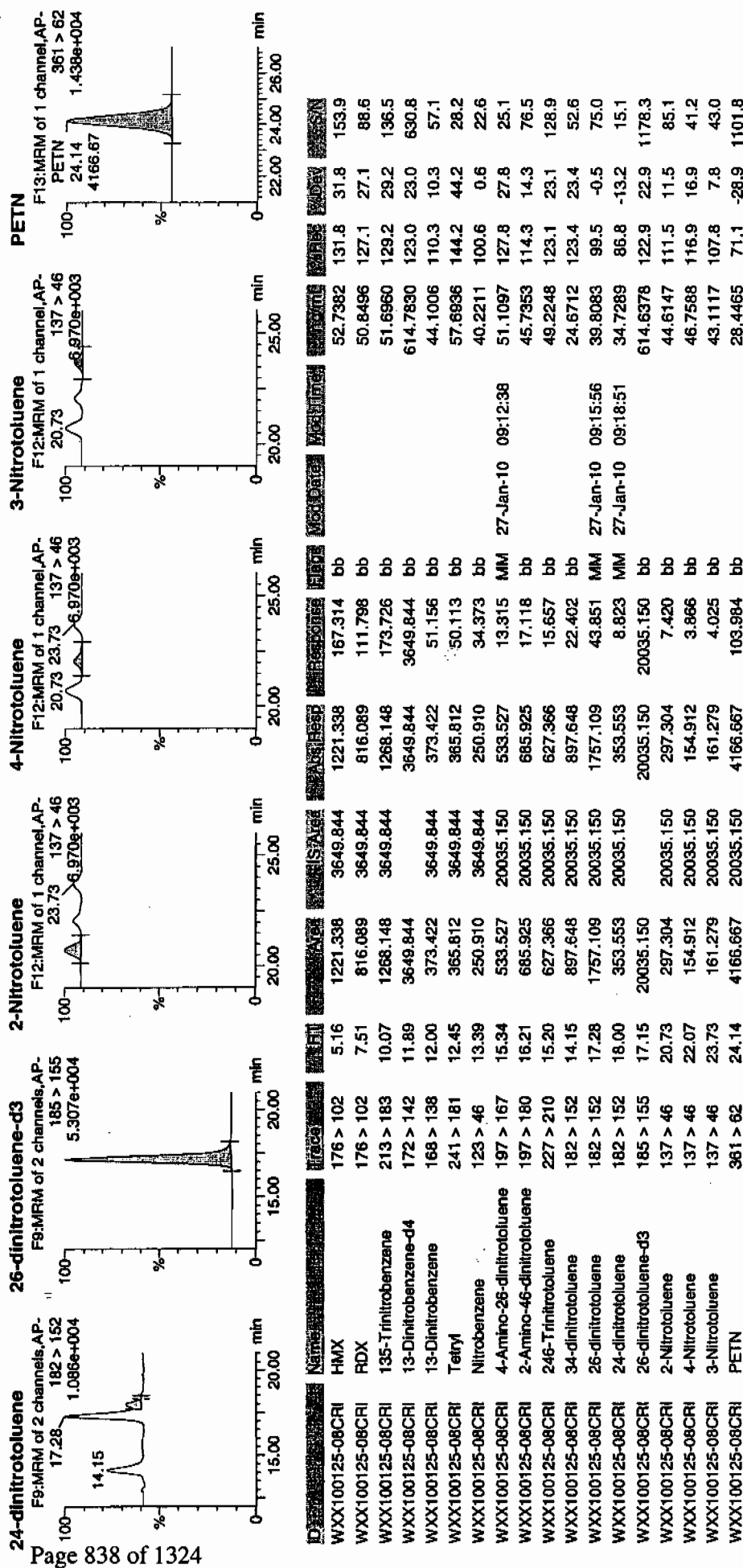
ID: WXX100125-08CRI

Vial: 1:1,C

MTT  
1/27/10



Dataset: C:\MASSLYNX\New\_Exp\PRO\012510expA1.qtd, 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

*NOT  
1/27/10*

Total 1825.4

Average 114.1

*done 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): 10-1210

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

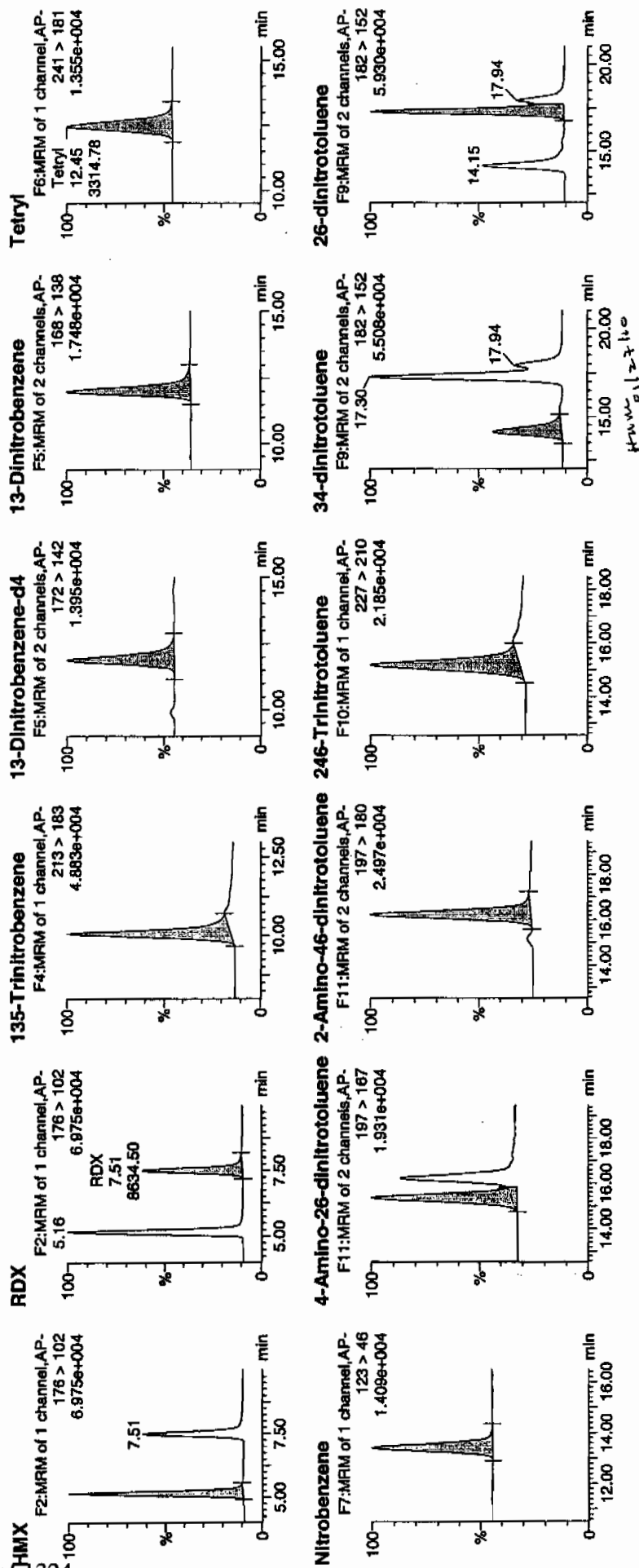
Date: 26-Jan-2010

Time: 22:45:12

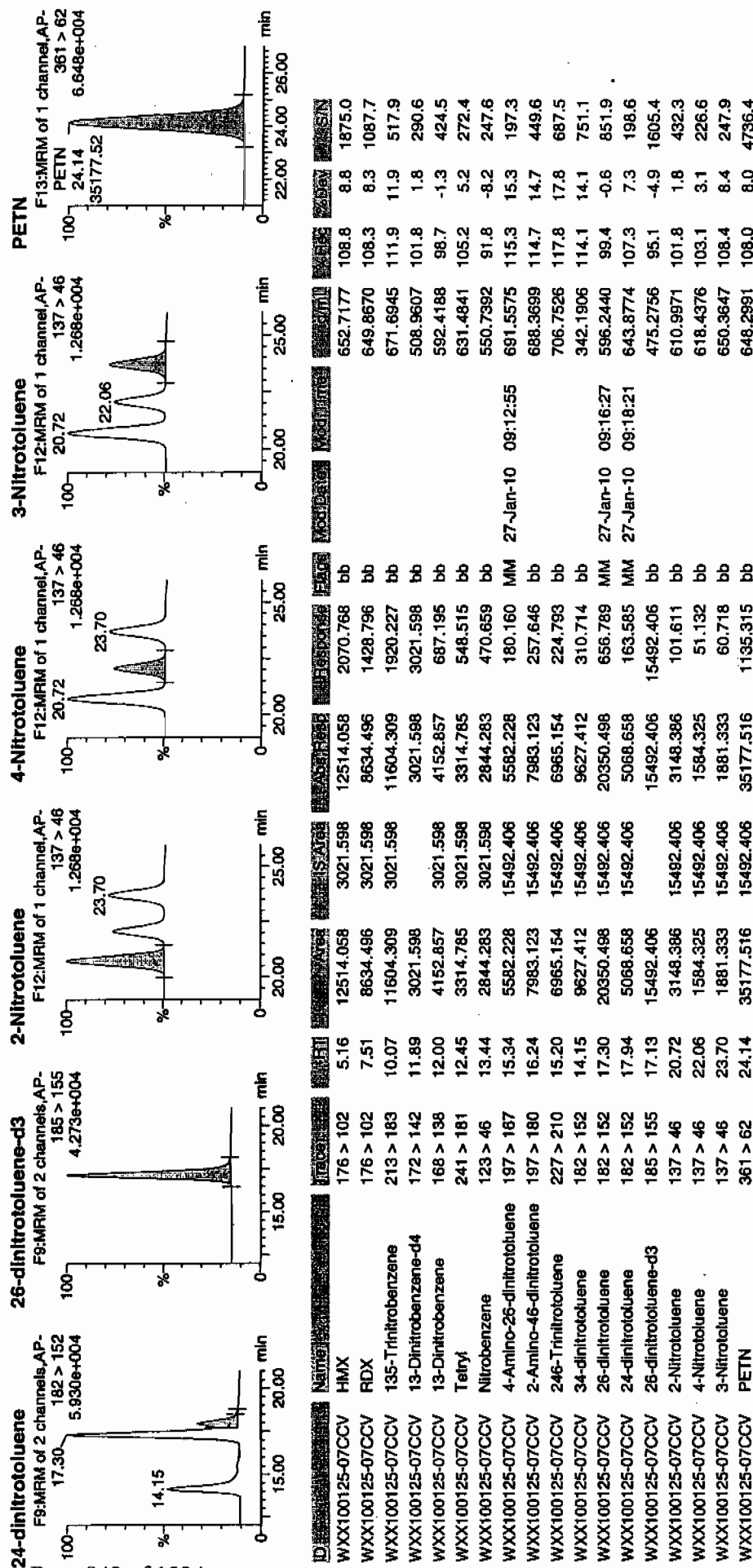
ID: WXX100125-07CCV

Vial: 1;B

1/27/10



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

107.2  
1/27/10

Total 1714.6

Average 107.2

107.2 ± 3.3 / 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): 10-1210

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0125075a

Analysis Date: 26-JAN-10 23:44

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	56.169	140	*
1,3-Dinitrobenzene-d4	500	483.992	97	
2,4,6-Trinitrotoluene	40	40.766	102	
2,4-Dinitrotoluene	40	35.006	88	
2,6-Dinitrotoluene	40	40.845	102	
2,6-Dinitrotoluene-d3	500	507.7	102	
2-Amino-4,6-dinitrotoluene	40	44.774	112	
3,4-Dinitrotoluene	20	23.523	118	
4-Amino-2,6-dinitrotoluene	40	43.317	108	
HMX	40	49.659	124	
Nitrobenzene	40	38.296	96	
PETN	40	36.274	91	
RDX	40	46.372	116	
Tetryl	40	44.916	112	
m-Dinitrobenzene	40	38.172	95	
m-Nitrotoluene	40	37.685	94	
o-Nitrotoluene	40	39.419	99	
p-Nitrotoluene	40	40.939	102	

Recovery Limits:

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

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

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

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

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125075a

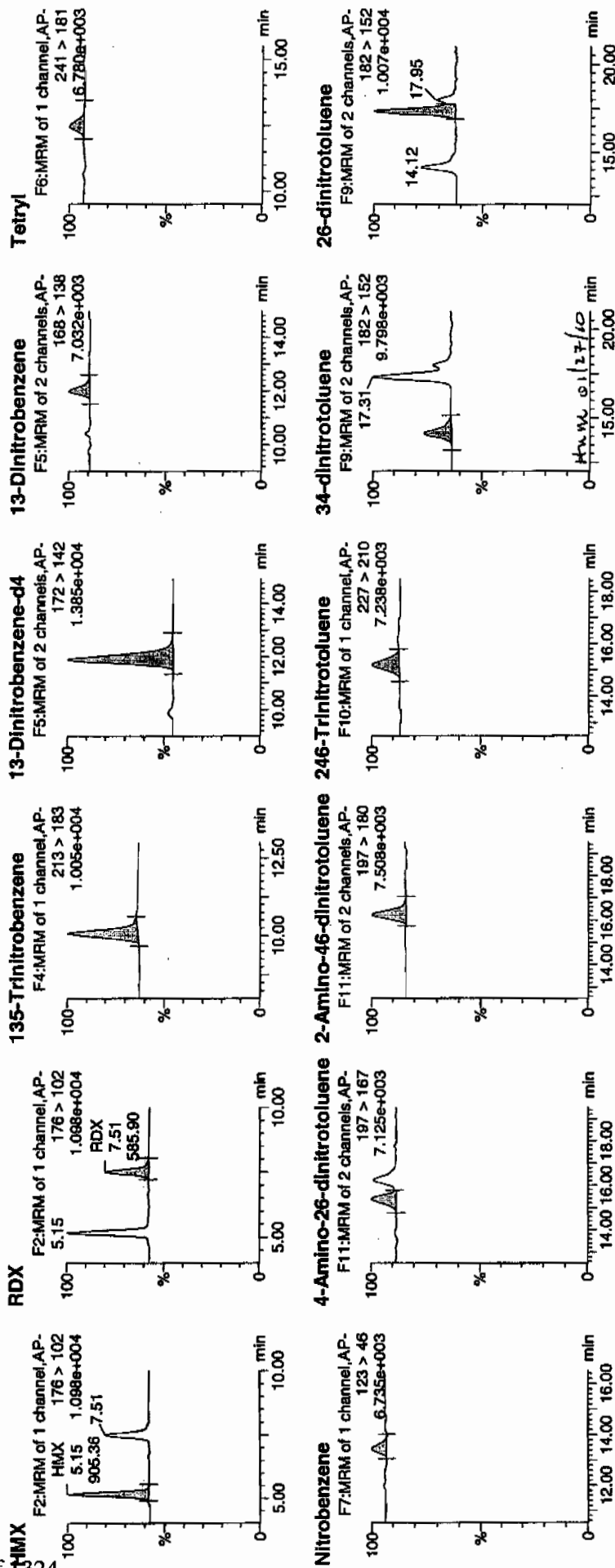
Date: 26-Jan-2010

Time: 23:44:10

ID: WXX100125-08CRI

Vial: 1:1,C

107  
1127/10

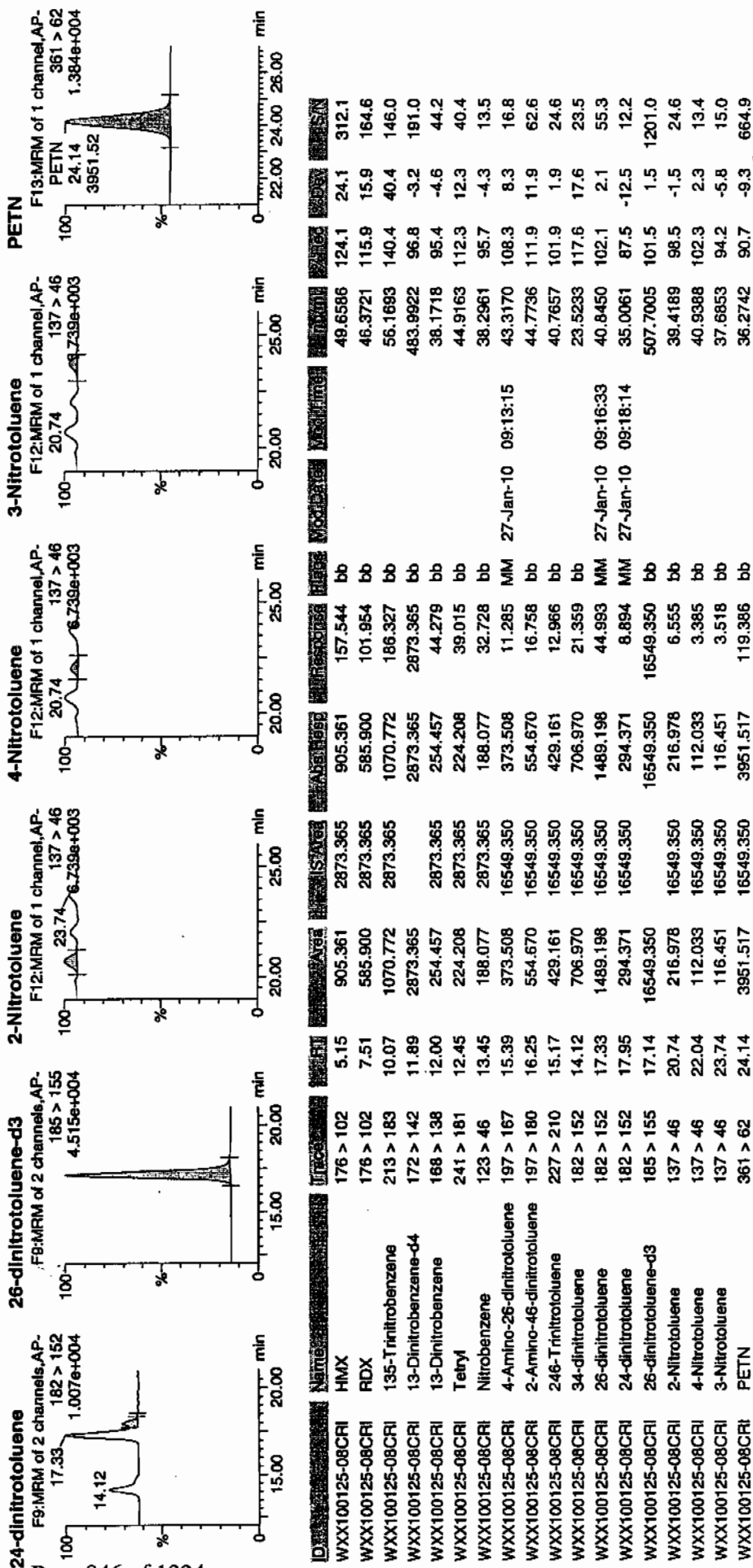


# Quantify Sample Report

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





# 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
Total	1698.8

MAF  
1/27/10

Average

106.2

from 01/27/10

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1210

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

Dataset: C:\MASSLYNX\New\_Exp\PROV012510expA1.qld, Time: Wed Jan 27 09:20:42 2010

Name: C:\MASSLYNX\NEW\_EXP\PROV012510expA1.qld, Time: Wed Jan 27 09:20:42 2010

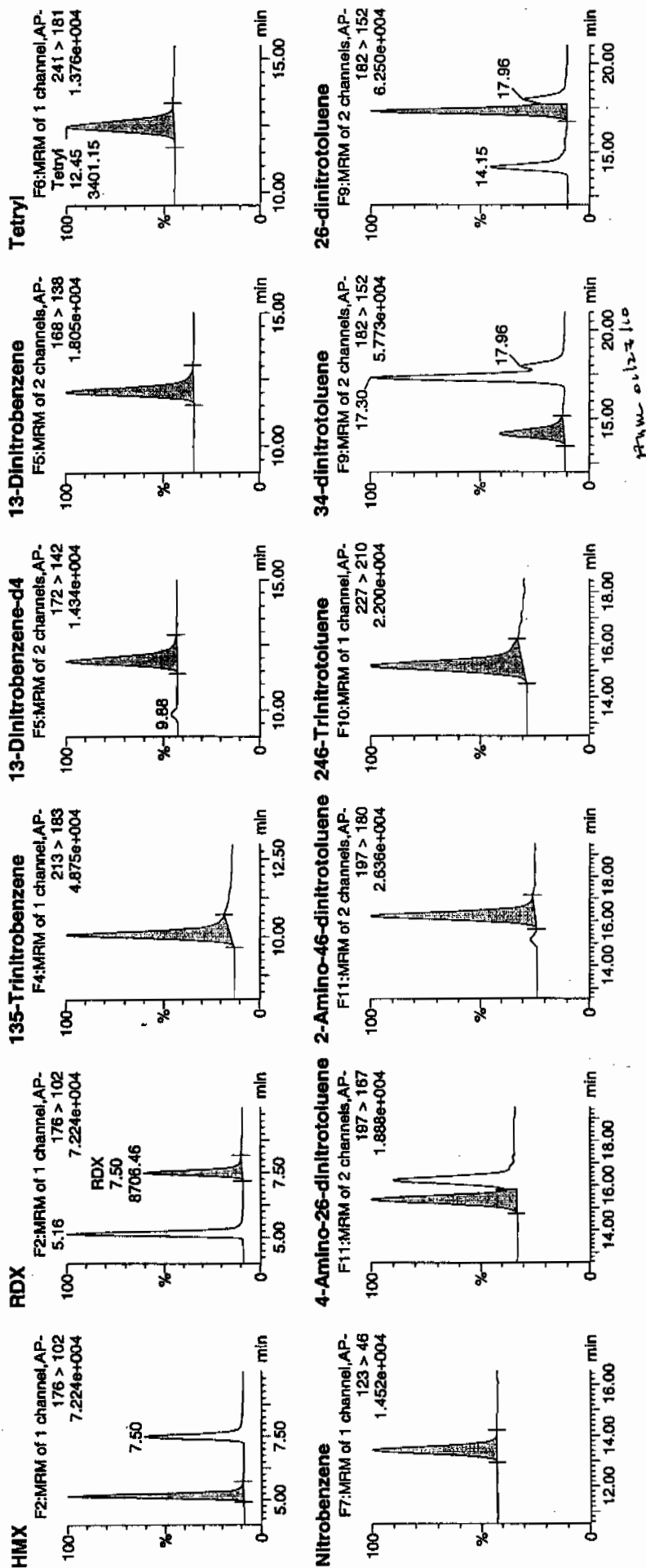
Date: 27-Jan-2010

Time: 03:10:33

ID: WXX100125-07CCV

Vial: 1:1,B

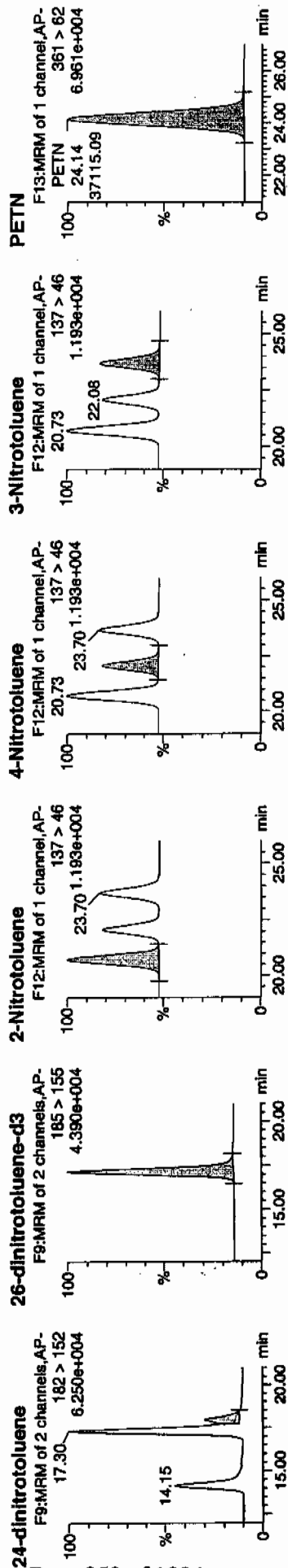
WXX  
1/27/10



### Quantify Sample Report

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

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



ID	Name	Trace	R1	Area	State	Abt. Resp	Reg. Code	Log	Mod. Date	Mod. Time	Mod. Rec	Mod. ASN
WXX100125-07CCV	HMUX	176 > 102	5.16	13210.575	3167.799	13210.575	2085.135	db	657.2461	109.5	9.5	2273.0
WXX100125-07CCV	RDX	176 > 102	7.50	8706.456	3167.799	8706.456	1374.212	bb	625.0402	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	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	19.0	633.2
WXX100125-07CCV	246-Trinitrotoluene	227 > 210	15.20	7451.851	16066.954	7451.851	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	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	544.5933	90.8	-9.2	210.1
WXX100125-07CCV	26-dinitrotoluene-d3	185 > 155	17.15	16066.954	16066.954	16066.954	492.9016	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
Total	1669.3

*WAT  
1/27/10*

Average

104.3

*WAT 01/27/10*

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1210

Lab Code: GEI

GEL Sample ID: WXXCRI

GEL Data File EXP0125084a

Analysis Date: 27-JAN-10 04:09

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	52.216	131	*
1,3-Dinitrobenzene-d4	500	509.03	102	
2,4,6-Trinitrotoluene	40	49.421	124	
2,4-Dinitrotoluene	40	37.395	93	
2,6-Dinitrotoluene	40	41.302	103	
2,6-Dinitrotoluene-d3	500	549.582	110	
2-Amino-4,6-dinitrotoluene	40	41.118	103	
3,4-Dinitrotoluene	20	22.594	113	
4-Amino-2,6-dinitrotoluene	40	41.47	104	
HMX	40	49.161	123	
Nitrobenzene	40	52.118	130	*
PETN	40	34.241	86	
RDX	40	46.475	116	
Tetryl	40	57.554	144	*
m-Dinitrobenzene	40	37.685	94	
m-Nitrotoluene	40	42.967	107	
o-Nitrotoluene	40	44.801	112	
p-Nitrotoluene	40	41.318	103	

Recovery Limits:

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

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

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

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

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

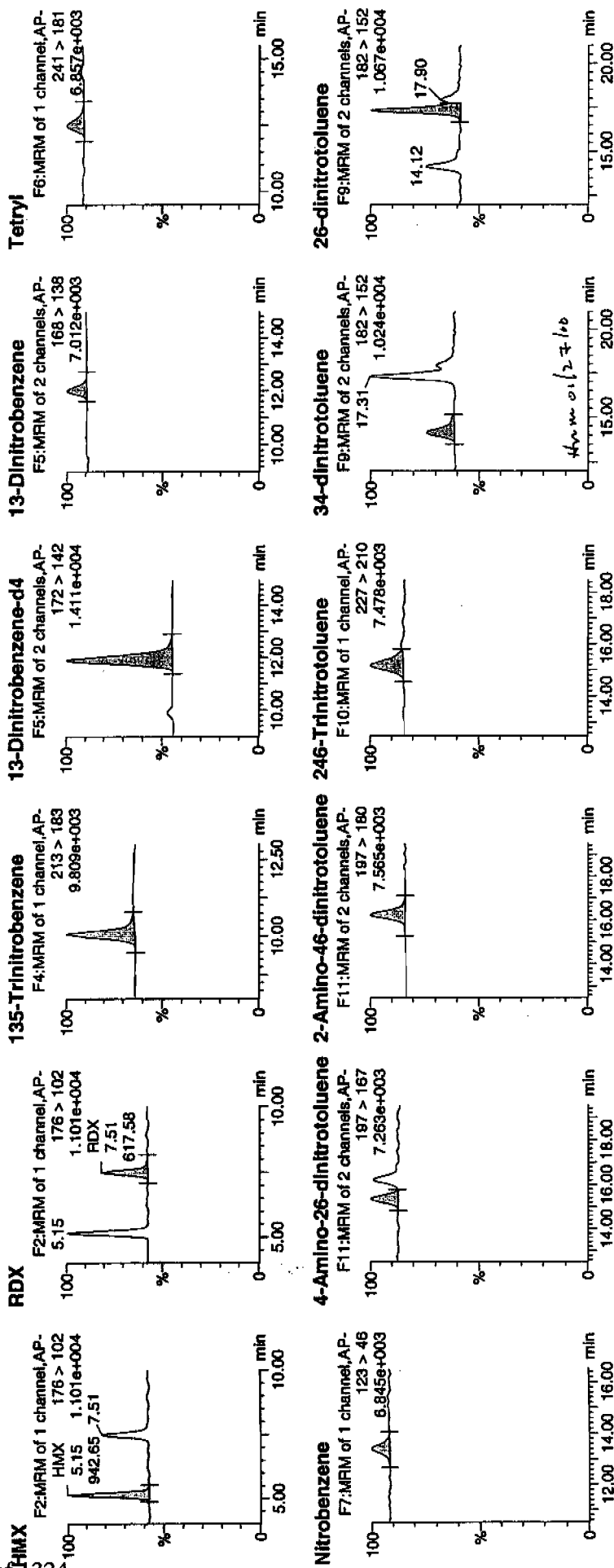
Date: 27-Jan-2010

Time: 04:09:30

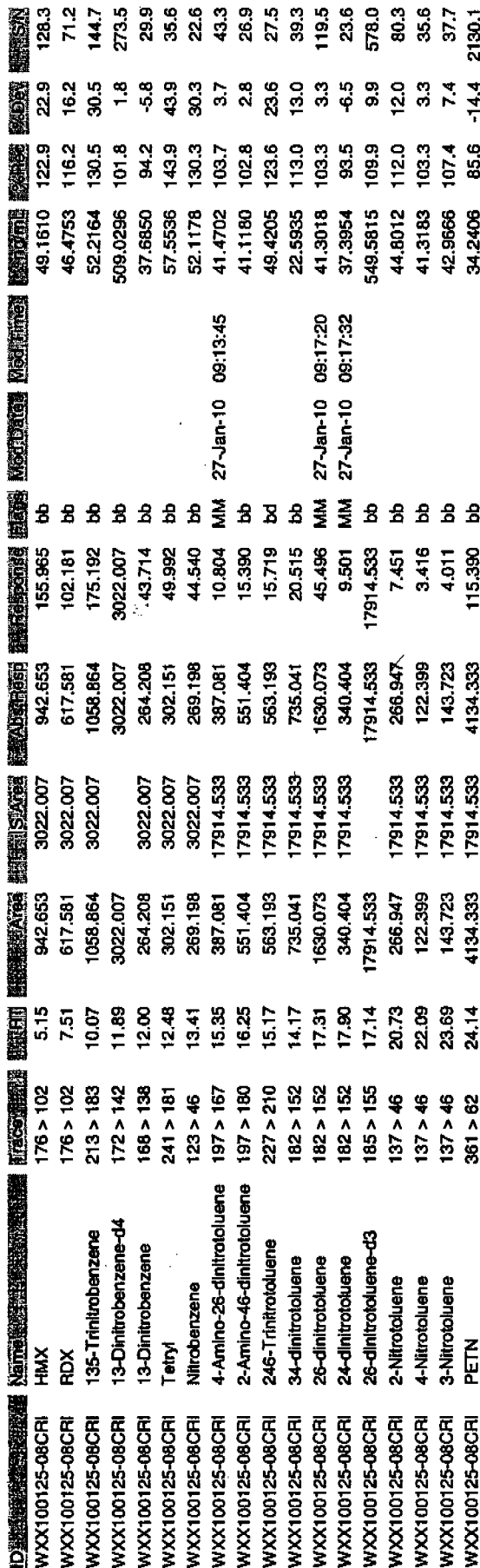
ID: WXX100125-08CRI

Vial: 1:1,C

1/2/10



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# 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

*WXX  
1/27/10*

Total 1786.2

Average 111.6

*from 01/27/10*

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%

No single analyte > +/- 60%

7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1210

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0125095a

Analysis Date: 27-JAN-10 09:34

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	690.785	115	
1,3-Dinitrobenzene-d4	500	557.852	112	
2,4,6-Trinitrotoluene	600	694.988	116	
2,4-Dinitrotoluene	600	594.759	99	
2,6-Dinitrotoluene	600	598.981	100	
2,6-Dinitrotoluene-d3	500	502.328	100	
2-Amino-4,6-dinitrotoluene	600	696.342	116	
3,4-Dinitrotoluene	300	322.957	108	
4-Amino-2,6-dinitrotoluene	600	690.103	115	
HMX	600	748.841	125	*
Nitrobenzene	600	539.735	90	
PETN	600	692.59	115	
RDX	600	801.044	134	*
Tetryl	600	639.631	107	
m-Dinitrobenzene	600	610.103	102	
m-Nitrotoluene	600	630.246	105	
o-Nitrotoluene	600	599.552	100	
p-Nitrotoluene	600	647.051	108	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 70-130%  
Other Target Analytes 80-120%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

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

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

Name: C:\MASSLYNX\NEW\_EXP\PRO\Data\EXP0125095a

Date: 27-Jan-2010

Time: 09:34:49

ID: WXX100125-07CCV

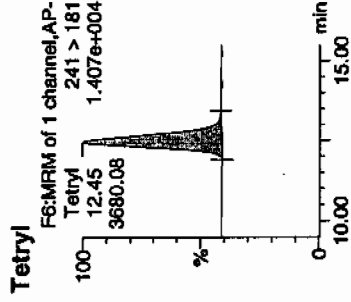
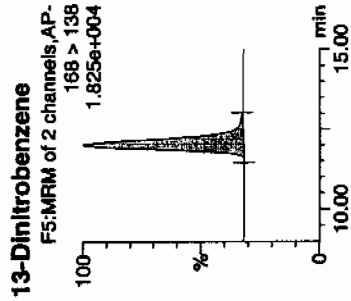
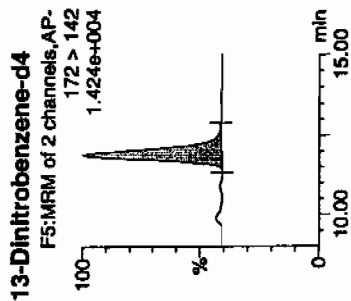
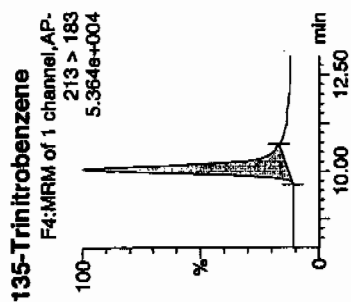
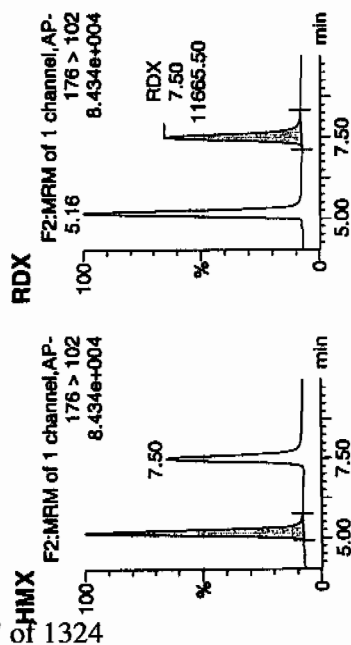
Vial: 1:1,B

1/28/10

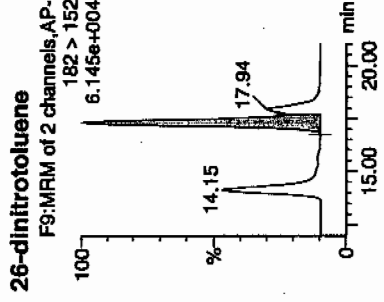
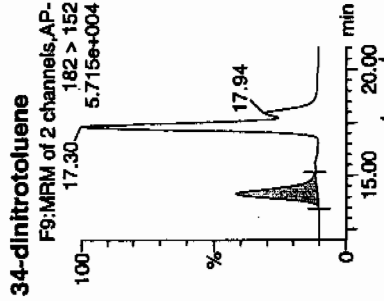
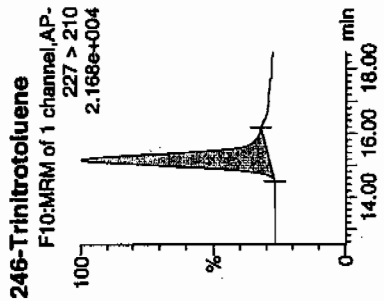
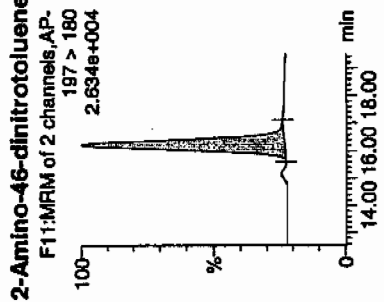
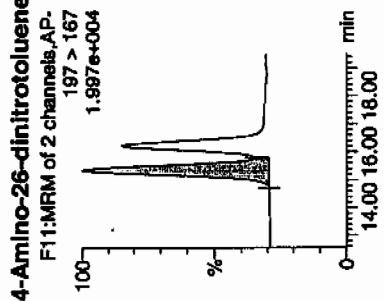
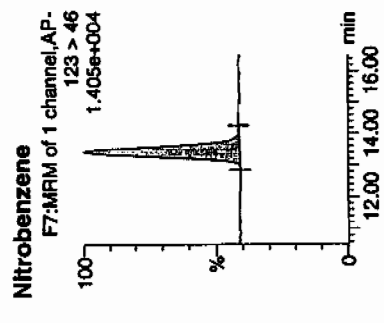
HMZ

1324

RDX



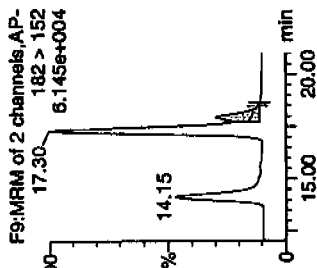
Nitrobenzene



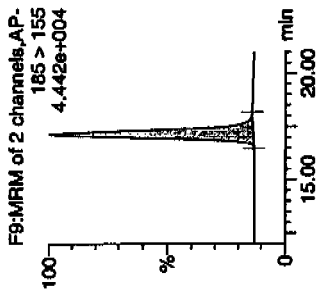
1/28/10

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

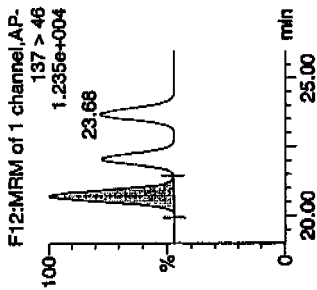
## 24-dinitrotoluene



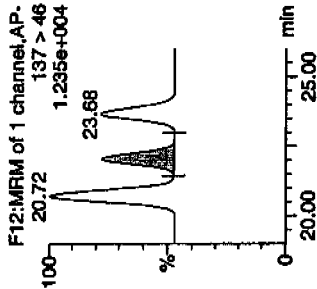
## 26-dinitrotoluene-d3



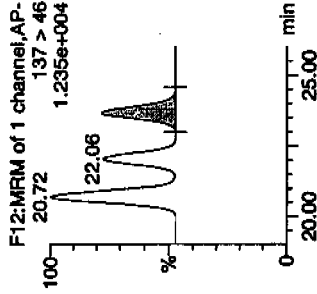
## 2-Nitrotoluene



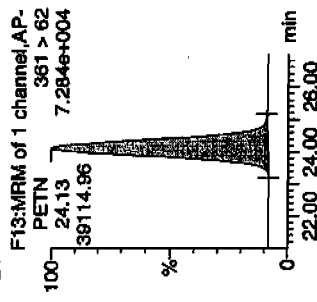
## 4-Nitrotoluene



## 3-Nitrotoluene



## PETN



ID	Name	RT	Area	Height	Width	Area%	Height%	Width%	Area%	Height%	Width%
WXX100125-07CCV	HMX	176 > 102	5.16	15736.088	3311.854	15736.088	2375.722	bb	748.8408	124.8	24.8
WXX100125-07CCV	RDX	176 > 102	7.50	11665.497	3311.854	11665.497	1761.173	bb	801.0437	133.5	33.5
WXX100125-07CCV	135-Trinitrobenzene	213 > 183	10.07	13075.235	3311.854	13075.235	1974.005	bb	690.7855	115.1	15.1
WXX100125-07CCV	13-Dinitrobenzene-d4	172 > 142	11.89	3311.854	3311.854	3311.854	3311.854	bb	557.8517	111.6	11.6
WXX100125-07CCV	13-Dinitrobenzene	168 > 138	12.00	4687.658	3311.854	4687.658	707.709	bb	610.1031	101.7	1.7
WXX100125-07CCV	Tetryl	241 > 181	12.45	3680.079	3311.854	3680.079	555.592	bb	639.6313	106.6	6.6
WXX100125-07CCV	Nitrobenzene	123 > 46	13.44	3055.216	3311.854	3055.216	461.255	bb	539.7350	90.0	-10.0
WXX100125-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.34	5887.552	16374.222	5887.552	179.781	MM	690.1027	115.0	15.0
WXX100125-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.21	8535.235	16374.222	8535.235	260.630	bb	696.3422	116.1	16.1
WXX100125-07CCV	246-Trinitrotoluene	227 > 210	15.20	7239.062	16374.222	7239.062	221.051	bb	694.9878	115.8	15.8
WXX100125-07CCV	34-dinitrotoluene	182 > 152	14.15	9603.470	16374.222	9603.470	293.250	bb	322.9571	107.7	7.7
WXX100125-07CCV	26-dinitrotoluene	182 > 152	17.30	21607.551	16374.222	21607.551	659.804	MM	598.9806	99.8	-0.2
WXX100125-07CCV	24-dinitrotoluene	182 > 152	17.94	4948.492	16374.222	4948.492	151.106	MM	594.7593	99.1	-0.9
WXX100125-07CCV	26-dinitrotoluene-d3	185 > 155	17.13	16374.222	16374.222	16374.222	16374.222	bb	502.3279	100.5	0.5
WXX100125-07CCV	2-Nitrotoluene	137 > 46	20.72	3265.260	16374.222	3265.260	99.707	bb	598.5524	99.9	-0.1
WXX100125-07CCV	4-Nitrotoluene	137 > 46	22.06	1751.977	16374.222	1751.977	53.498	bb	647.0505	107.8	7.8
WXX100125-07CCV	3-Nitrotoluene	137 > 46	23.68	1926.907	16374.222	1926.907	58.840	bb	630.2462	105.0	5.0
WXX100125-07CCV	PETN	361 > 62	24.13	39114.957	16374.222	39114.957	1194.407	bb	692.5896	115.4	15.4

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

Average 109.6

*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): 10-1210

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0125097a

Analysis Date: 27-JAN-10 10:33

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	50.948	127	
1,3-Dinitrobenzene-d4	500	494.315	99	
2,4,6-Trinitrotoluene	40	36.387	91	
2,4-Dinitrotoluene	40	43.297	108	
2,6-Dinitrotoluene	40	40.794	102	
2,6-Dinitrotoluene-d3	500	507.664	102	
2-Amino-4,6-dinitrotoluene	40	41.899	105	
3,4-Dinitrotoluene	20	21.498	107	
4-Amino-2,6-dinitrotoluene	40	50.75	127	
HMX	40	63.85	160	*
Nitrobenzene	40	44.243	111	
PETN	40	40.486	101	
RDX	40	46.52	116	
Tetryl	40	48.725	122	
m-Dinitrobenzene	40	39.009	98	
m-Nitrotoluene	40	44.324	111	
o-Nitrotoluene	40	38.885	97	
p-Nitrotoluene	40	39.287	98	

Recovery Limits:

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

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

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

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

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125097a

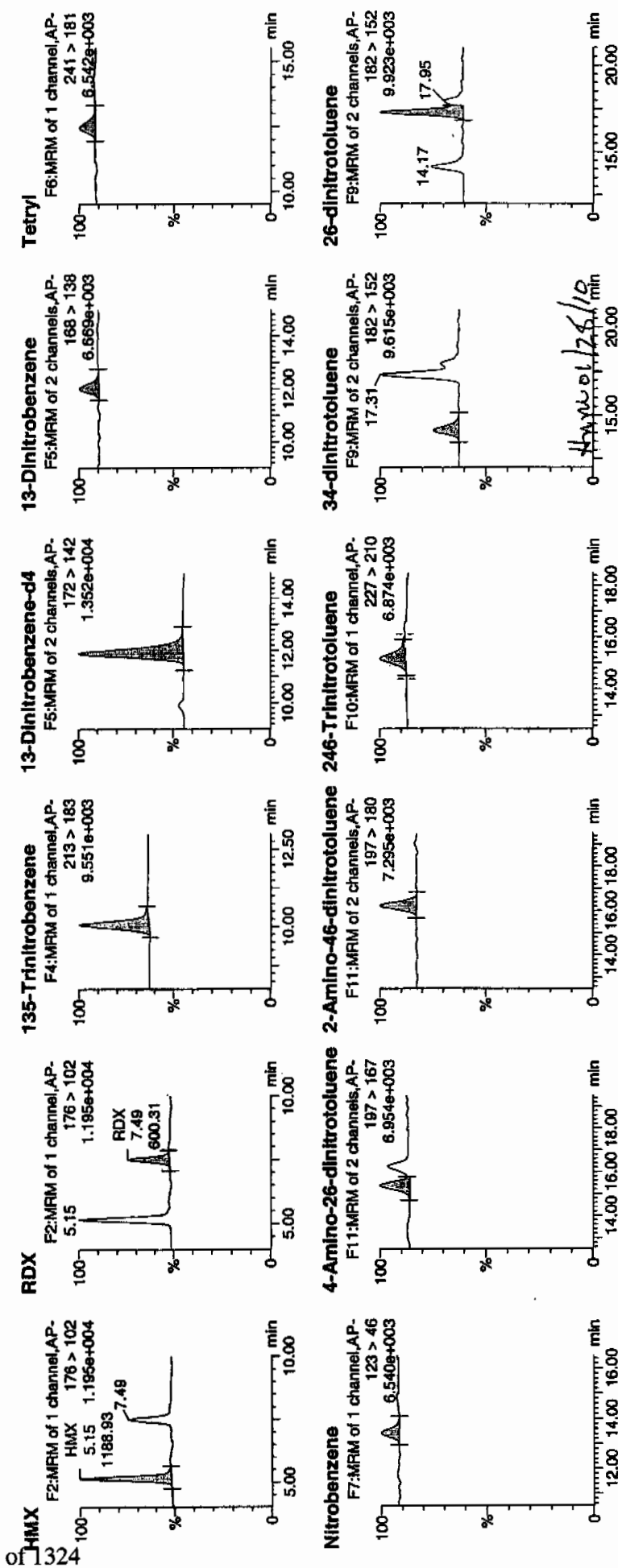
Date: 27-Jan-2010

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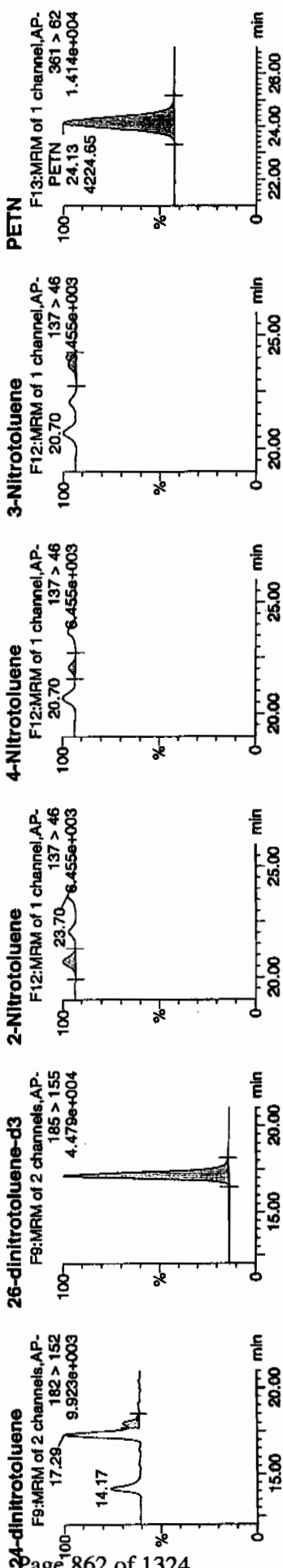
ID: WXX100125-08CRI

Vial: 1:1,C

1/28/10



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



Name	Trace	Time	Area	Height	Area/Height	Peak	ModDate	ModName	Time	Area	Height	Area/Height	ModDate	ModName
HMX	178 > 102	5.15	1188.929	2934.647	1188.929	202.568	bb		63.8504	159.6	58.6	264.2		
RDX	178 > 102	7.49	600.307	2934.647	600.307	102.279	bb		46.5202	116.3	16.3	122.0		
135-Trinitrobenzene	213 > 183	10.07	1007.277	2934.647	1007.277	171.618	bb		50.8476	127.4	27.4	144.9		
13-Dinitrobenzene-d4	172 > 142	11.89	2934.647		2934.647	2934.647	bb		494.3146	98.9	-1.1	159.8		
13-Dinitrobenzene	168 > 138	12.00	265.581	2934.647	265.581	45.249	bb		39.0085	97.5	-2.5	17.4		
Tetryl	241 > 181	12.45	248.406	2934.647	248.406	42.323	bb		48.7248	121.8	21.8	32.4		
Nitrobenzene	123 > 46	13.45	221.918	2934.647	221.918	37.810	bb		44.2432	110.6	10.6	29.0		
4-Amino-26-dinitrotoluene	197 > 167	15.39	437.564	16548.150	437.564	13.221	MM	28-Jan-10	10:28:02	50.7495	126.9	26.9	9.5	
2-Amino-46-dinitrotoluene	197 > 180	16.22	519.016	16548.150	519.016	15.682	bb		41.8986	104.7	4.7	53.3		
246-Trinitrotoluene	227 > 210	15.17	383.041	16548.150	383.041	11.574	MM	28-Jan-10	10:30:48	36.3874	91.0	-9.0	32.2	
34-dinitrotoluene	182 > 152	14.17	646.064	16548.150	646.064	19.521	bb		21.4983	107.5	7.5	41.9		
26-dinitrotoluene	182 > 152	17.29	1487.215	16548.150	1487.215	44.936	MM	28-Jan-10	10:34:13	40.7936	102.0	2.0	88.9	
24-dinitrotoluene	182 > 152	17.95	364.065	16548.150	364.065	11.000	MM	28-Jan-10	10:36:30	43.2971	108.2	8.2	19.2	
26-dinitrotoluene-d3	185 > 155	17.14	16548.150		16548.150	16548.150	bb		507.6637	101.5	1.5	1291.1		
2-Nitrotoluene	137 > 46	20.70	214.024	16548.150	214.024	6.467	bb		38.8651	97.2	-2.8	58.8		
4-Nitrotoluene	137 > 46	22.04	107.504	16548.150	107.504	3.248	bb		39.2867	98.2	-1.8	31.3		
3-Nitrotoluene	137 > 46	23.70	136.954	16548.150	136.954	4.138	bb		44.3236	110.8	10.8	34.6		
PETN	361 > 62	24.13	4224.647	16548.150	4224.647	127.647	bb		40.4856	101.2	1.2	1397.4		



# GRAND MEAN AVERAGE

Vendor: UltraScientific  
 Date of Analysis 01/27/10  
 Time of Injection 1033  
 Standard Number WXX100125-08CRI  
 Data File EXP0125097a

HMX	159.6
RDX	116.3
135-TNB	127.4
13-DNB	97.5
Tetryl	121.8
Nitrobenzene	110.6
4A-26-DNT	126.9
2A-46-DNT	104.7
246-TNT	91.0
34-DNT(surr)	107.5
26-DNT	102.0
24-DNT	108.2
2-NT	97.2
4-NT	98.2
3-NT	110.8
PETN	101.2

not  
1/28/10

Total 1780.9

Average 111.3

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): 10-1210

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

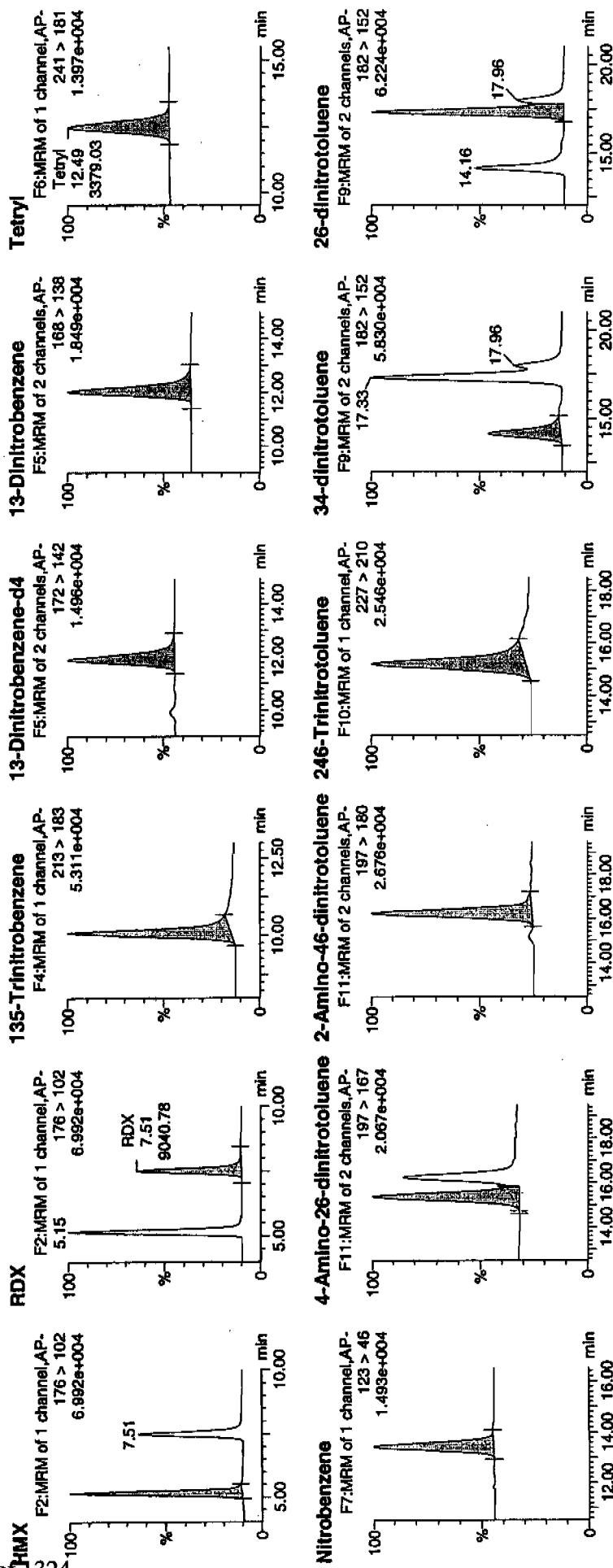
Quantify Sample Report  
GEL Laboratories, LLC / Analyst: Michael A. Penny

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

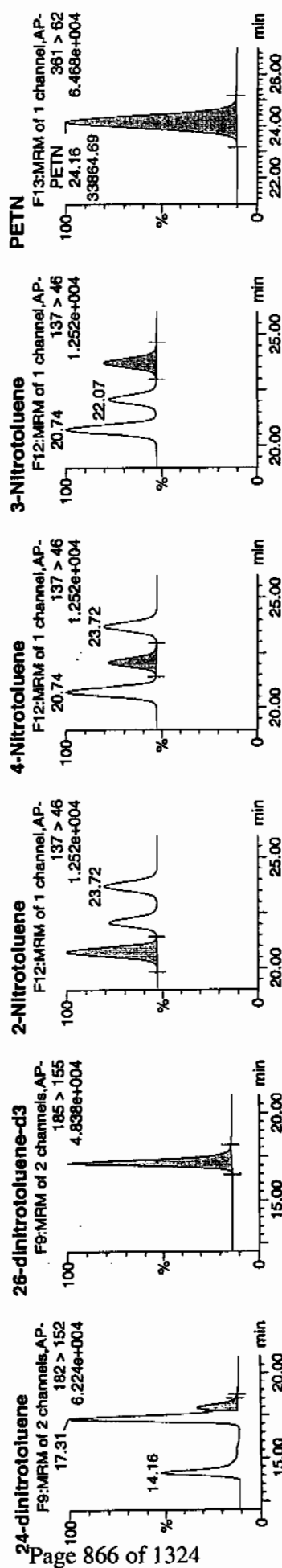


Amw 01/28/10

### Quantify Sample Report

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

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



ID	Name	Mz	Area	%IS	Abund	Response	Pic	MSPeak	Found	Frac	S/N
WXX100125-07CCV	HMX	176 > 102	12453.394	3269.034	12453.394	1904.751	bb		600.3883	100.1	0.1
WXX100125-07CCV	RDX	176 > 102	9040.780	3269.034	9040.780	1382.791	bb		628.9420	104.8	4.8
WXX100125-07CCV	135-Trinitrobenzene	213 > 183	12712.248	3269.034	12712.248	1944.343	bb		680.2555	113.4	13.4
WXX100125-07CCV	13-Dinitrobenzene-d4	172 > 142	3269.034	3269.034	3269.034	3269.034	bb		550.6390	110.1	10.1
WXX100125-07CCV	13-Dinitrobenzene	168 > 138	4556.892	3269.034	4556.892	696.978	bb		600.8524	100.1	0.1
WXX100125-07CCV	Tetryl	241 > 181	3379.031	3269.034	3379.031	516.824	bb		594.9994	99.2	-0.8
WXX100125-07CCV	Nitrobenzene	123 > 46	3005.327	3269.034	3005.327	459.666	bb		537.8760	89.6	-10.4
WXX100125-07CCV	4-Amino-26-dinitrotoluene	197 > 167	6032.938	17302.844	6032.938	174.334	MM	28-Jan-10	669.1924	111.5	11.5
WXX100125-07CCV	2-Amino-46-dinitrotoluene	197 > 180	8525.245	17302.844	8525.245	246.354	bb		658.1991	109.7	9.7
WXX100125-07CCV	246-Trinitrotoluene	227 > 210	8735.267	17302.844	8735.267	252.423	bb		793.8230	132.3	32.3
WXX100125-07CCV	34-dinitrotoluene	182 > 152	10658.028	17302.844	10658.028	307.985	bb		339.1851	113.1	13.1
WXX100125-07CCV	26-dinitrotoluene	182 > 152	23025.027	17302.844	23025.027	665.354	MM	28-Jan-10	604.0189	100.7	0.7
WXX100125-07CCV	24-dinitrotoluene	182 > 152	5319.846	17302.844	5319.846	153.728	MM	28-Jan-10	605.0769	100.8	0.8
WXX100125-07CCV	26-dinitrotoluene-d3	185 > 155	17302.844	17302.844	17302.844	17302.844	bb		530.8162	106.2	6.2
WXX100125-07CCV	2-Nitrotoluene	137 > 46	2878.468	17302.844	2878.468	83.179	bb		500.1657	83.4	-16.6
WXX100125-07CCV	4-Nitrotoluene	137 > 46	1498.221	17302.844	1498.221	43.294	bb		523.6352	87.3	-12.7
WXX100125-07CCV	3-Nitrotoluene	137 > 46	1762.278	17302.844	1762.278	50.925	bb		545.4652	90.9	-9.1
WXX100125-07CCV	PETN	361 > 62	33864.688	17302.844	33864.688	978.587	bb		537.2463	89.5	-10.5

# 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

MTT  
1/28/10

Total 1626.4

Average 101.7

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): 10-1210

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0125110a

Analysis Date: 27-JAN-10 16:57

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	52.299	131	*
1,3-Dinitrobenzene-d4	500	559.774	112	
2,4,6-Trinitrotoluene	40	62.349	156	*
2,4-Dinitrotoluene	40	40.315	101	
2,6-Dinitrotoluene	40	40.693	102	
2,6-Dinitrotoluene-d3	500	553.757	111	
2-Amino-4,6-dinitrotoluene	40	40.05	100	
3,4-Dinitrotoluene	20	21.774	109	
4-Amino-2,6-dinitrotoluene	40	44.776	112	
HMX	40	41.328	103	
Nitrobenzene	40	35.669	89	
PETN	40	28.542	71	
RDX	40	39.292	98	
Tetryl	40	37.065	93	
m-Dinitrobenzene	40	33.575	84	
m-Nitrotoluene	40	41.171	103	
o-Nitrotoluene	40	32.917	82	
p-Nitrotoluene	40	36.803	92	

Recovery Limits:

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

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

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

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

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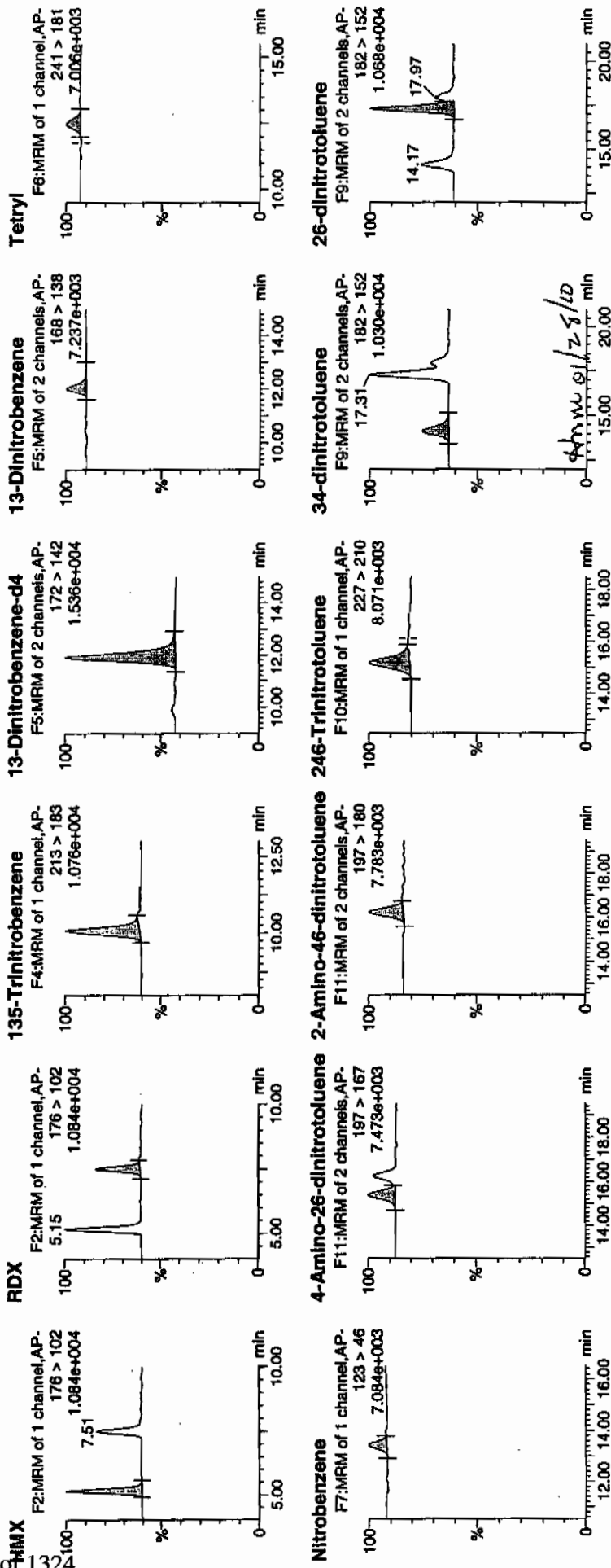
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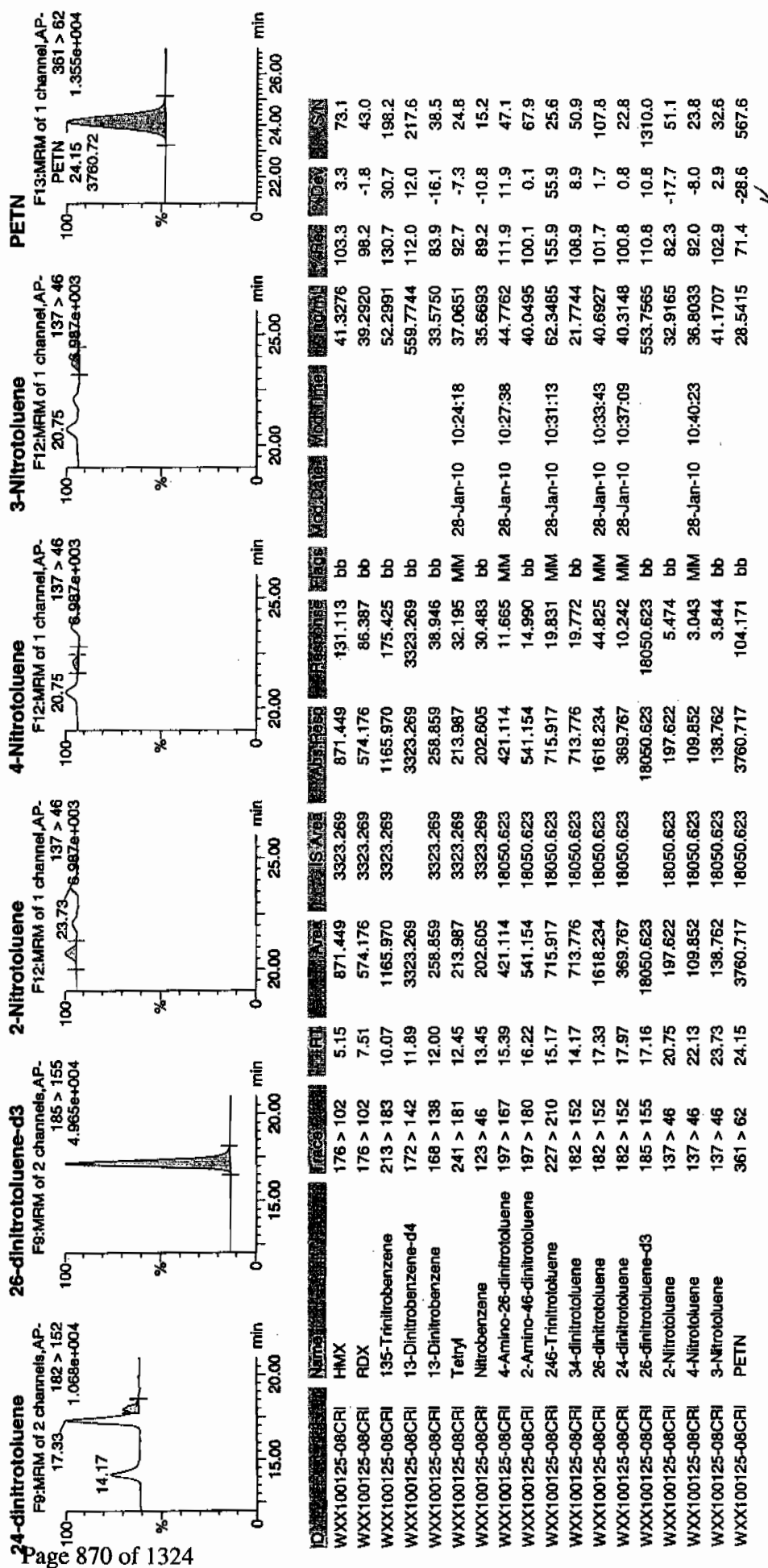
ID: WXX100125-08CRI

Sample: 1:1,C

1/28/10  
MMP



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





# GRAND MEAN AVERAGE

Vendor: UltraScientific  
 Date of Analysis 01/27/10  
 Time of Injection 1657  
 Standard Number WXX100125-08CRI  
 Data File EXP0125110a

HMX	103.3
RDX	98.2
135-TNB	130.7
13-DNB	83.9
Tetryl	92.7
Nitrobenzene	89.2
4A-26-DNT	111.9
2A-46-DNT	100.1
246-TNT	155.9
34-DNT(surr)	108.9
26-DNT	101.7
24-DNT	100.8
2-NT	82.3
4-NT	92.0
3-NT	102.9
PETN	71.4

Total 1625.9

Average 101.6

ICV Limits 85-115%  
 CRI Limits 70-130%  
 CCV Limits 85-115%

No single analyte > +/- 60%

WXX  
1/28/10

WXX 01/28/10

7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1210

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

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Date: 27-Jan-2010

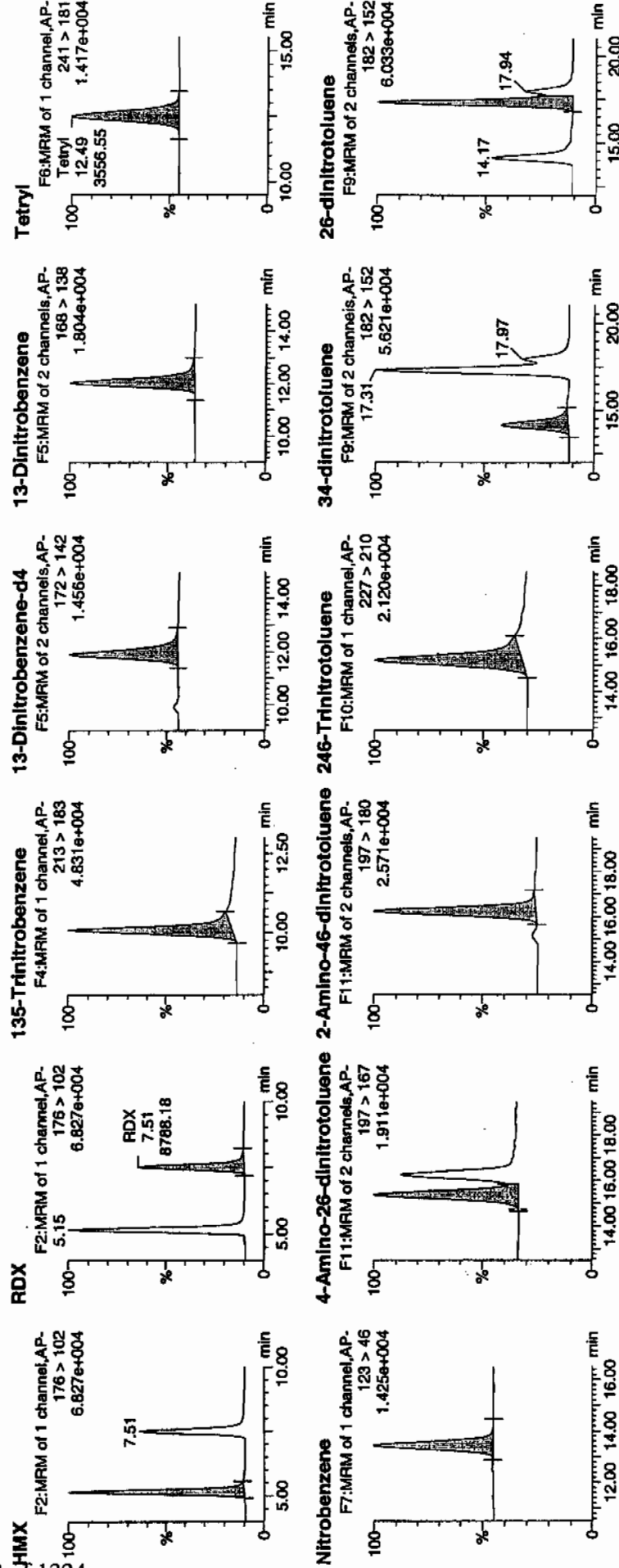
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ID: WXX100125-07CCV

Vial: 1:1,B

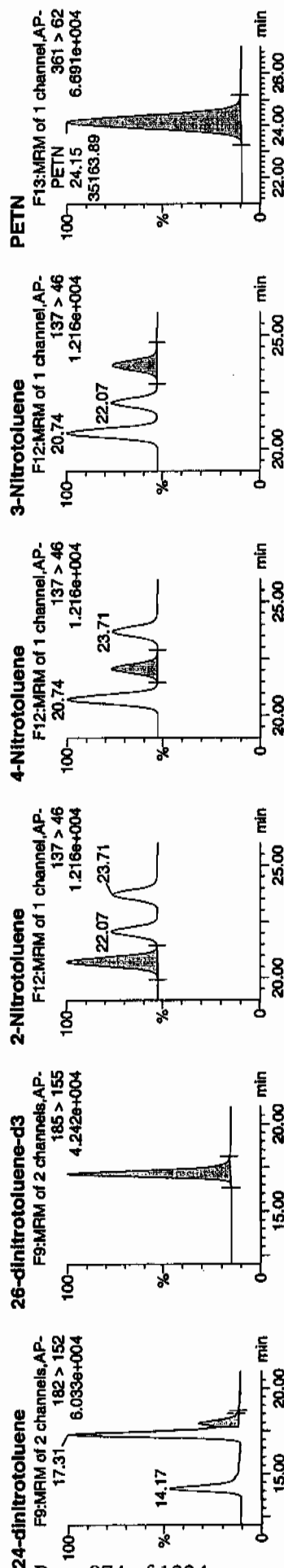
11/18/10

Q1324



Handwritten: 01/18/10

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ID	Name	Time	Area	Height	Width	Area%	Height%	Width%	Area%	Height%	Width%
WXX100125-07CCV	HMX	176 > 102	5.15	12302.053	3143.459	1956.770	bb	616.7849	102.8	2.8	2088.0
WXX100125-07CCV	RDX	176 > 102	7.51	8788.184	3143.459	1397.852	bb	635.7926	106.0	6.0	1271.2
WXX100125-07CCV	135-Trinitrobenzene	213 > 183	10.07	11352.341	3143.459	1805.708	bb	631.0410	105.2	5.2	673.6
WXX100125-07CCV	13-Dinitrobenzene-d4	172 > 142	11.89	3143.459	3143.459	3143.459	bb	529.4871	105.9	5.9	381.5
WXX100125-07CCV	13-Dinitrobenzene	168 > 138	12.00	4321.038	3143.459	687.306	bb	592.5142	98.8	-1.2	418.0
WXX100125-07CCV	Tetryl	241 > 181	12.49	3556.552	3143.459	565.707	bb	651.2761	108.5	8.5	328.1
WXX100125-07CCV	Nitrobenzene	123 > 46	13.45	2866.690	3143.459	455.977	bb	533.5594	88.9	-11.1	182.9
WXX100125-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.35	5439.601	15261.352	5439.601	MM	684.0907	114.0	14.0	231.3
WXX100125-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.22	8002.209	15261.352	8002.209	bb	700.4623	116.7	16.7	448.5
WXX100125-07CCV	246-Trinitrotoluene	227 > 210	15.17	6956.677	15261.352	6956.677	bb	716.5795	119.4	19.4	366.7
WXX100125-07CCV	34-dinitrotoluene	182 > 152	14.17	9267.728	15261.352	9267.728	bb	334.3934	111.5	11.5	287.0
WXX100125-07CCV	26-dinitrotoluene	182 > 152	17.31	20829.203	15261.352	20829.203	MM	619.5088	103.3	3.3	713.0
WXX100125-07CCV	24-dinitrotoluene	182 > 152	17.94	5055.856	15261.352	5055.856	MM	651.9747	108.7	8.7	164.2
WXX100125-07CCV	26-dinitrotoluene-d3	185 > 155	17.16	15261.352	15261.352	15261.352	bb	468.1873	93.6	-6.4	1463.8
WXX100125-07CCV	2-Nitrotoluene	137 > 46	20.74	2830.204	15261.352	2830.204	bb	557.5640	92.9	-7.1	353.0
WXX100125-07CCV	4-Nitrotoluene	137 > 46	22.07	1386.831	15261.352	1386.831	bb	549.5421	91.6	-8.4	180.3
WXX100125-07CCV	3-Nitrotoluene	137 > 46	23.71	1488.980	15261.352	1488.980	bb	522.5237	87.1	-12.9	176.3
WXX100125-07CCV	PETN	361 > 62	24.15	35163.887	15261.352	35163.887	bb	660.7004	110.1	10.1	9730.8

# 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

*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): 10-1210

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

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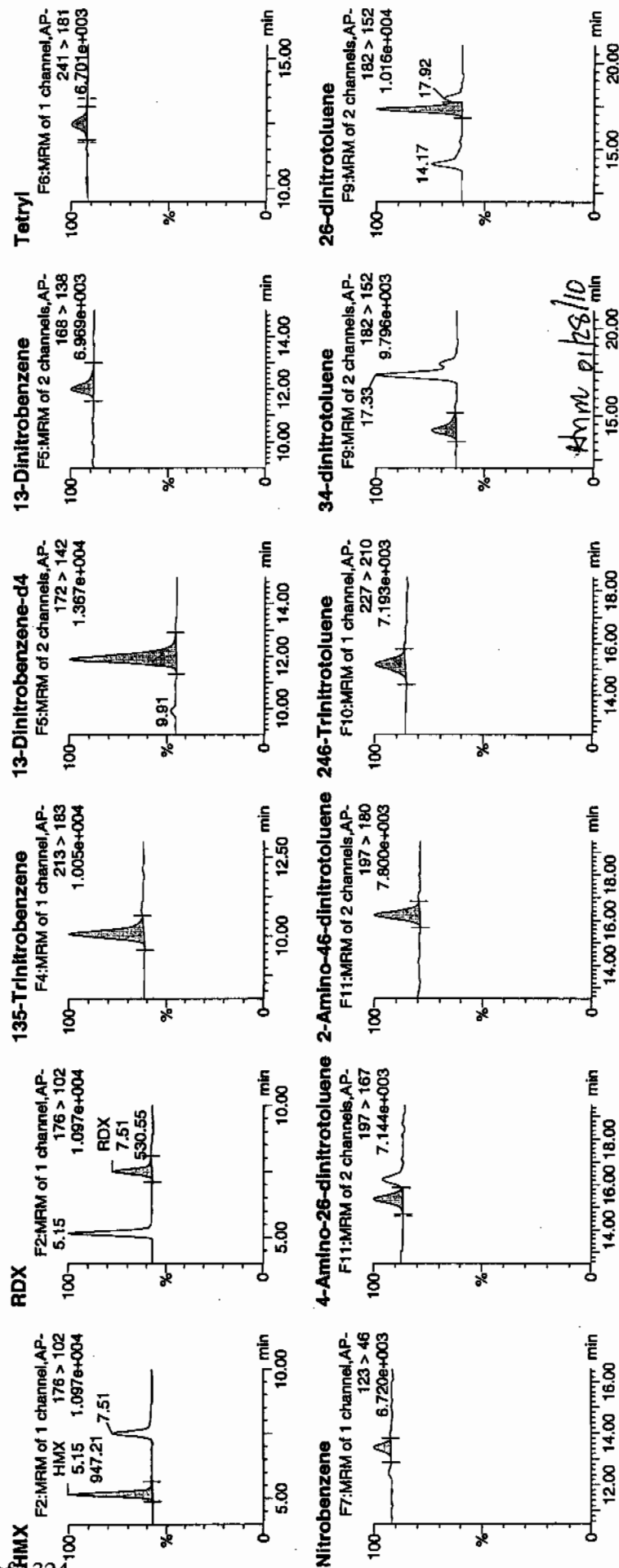
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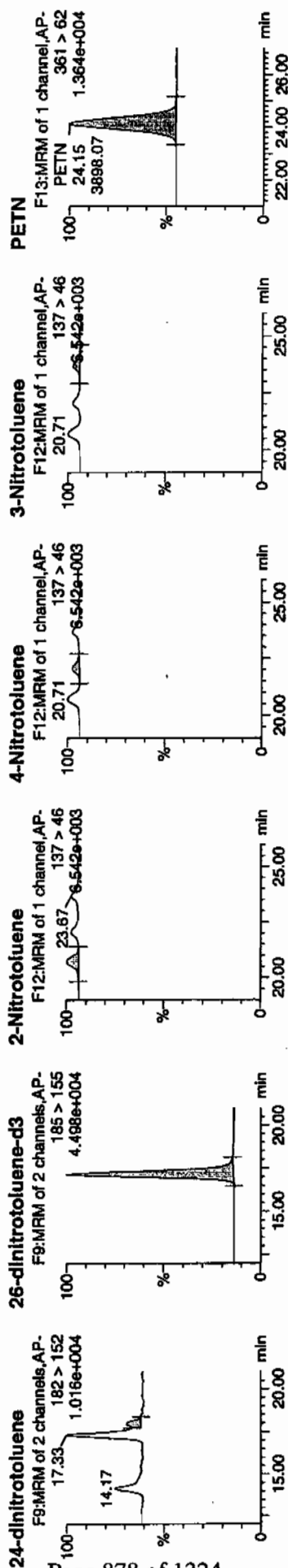
Date: 27-Jan-2010

Time: 20:53:56

ID: WXX100125-08CRI

Vial: 1:1,C





Name	ID	Traces	RT	Area	Status	Peak	Response	Flags	ModDate	ModTime	GC	MS		
HMX	WXX100125-08CRI	176 > 102	5.15	947.212	2901.522	947.212	163.227	bb			51.4500	128.6	28.6	284.0
FDX	WXX100125-08CRI	176 > 102	7.51	530.551	2901.522	530.551	91.426	bb			41.5839	104.0	4.0	132.8
135-Trinitrobenzene	WXX100125-08CRI	213 > 183	10.07	1129.748	2901.522	1129.748	194.682	bb			59.1352	147.8	47.8	266.4
13-Dinitrobenzene-d4	WXX100125-08CRI	172 > 142	11.89	2901.522	2901.522	2901.522	2901.522	bb			488.7350	97.7	-2.3	692.4
13-Dinitrobenzene	WXX100125-08CRI	168 > 138	12.00	315.570	2901.522	315.570	54.380	bb			46.8801	117.2	17.2	32.0
Tetryl	WXX100125-08CRI	241 > 181	12.45	235.963	2901.522	235.963	40.662	MM	28-Jan-10	10:24:03	46.8125	117.0	17.0	27.0
Nitrobenzene	WXX100125-08CRI	123 > 46	13.45	174.742	2901.522	174.742	30.112	bb			35.2356	88.1	-11.9	14.4
4-Amino-26-dinitrotoluene	WXX100125-08CRI	197 > 167	15.36	417.165	16489.053	417.165	12.650	MM	28-Jan-10	10:27:09	48.5570	121.4	21.4	15.3
2-Amino-46-dinitrotoluene	WXX100125-08CRI	197 > 180	16.22	662.126	16489.053	662.126	20.078	bb			53.6430	134.1	34.1	24.3
246-Trinitrotoluene	WXX100125-08CRI	227 > 210	15.21	464.743	16489.053	464.743	14.092	bb			44.3070	110.8	10.8	33.5
34-dinitrotoluene	WXX100125-08CRI	182 > 152	14.17	655.064	16489.053	655.064	19.864	bb			21.8759	109.4	9.4	52.6
26-dinitrotoluene	WXX100125-08CRI	182 > 152	17.33	1505.167	16489.053	1505.167	45.641	MM	28-Jan-10	10:33:21	41.4340	103.6	3.6	82.0
24-dinitrotoluene	WXX100125-08CRI	182 > 152	17.92	294.878	16489.053	294.878	8.942	MM	28-Jan-10	10:37:49	35.1946	88.0	-12.0	15.8
26-dinitrotoluene-d3	WXX100125-08CRI	185 > 155	17.16	16489.053	16489.053	16489.053	16489.053	bb			505.8507	101.2	1.2	251.4
2-Nitrotoluene	WXX100125-08CRI	137 > 46	20.71	210.484	16489.053	210.484	6.383	bb			38.3790	95.9	-4.1	43.2
4-Nitrotoluene	WXX100125-08CRI	137 > 46	22.05	117.032	16489.053	117.032	3.549	bb			42.9219	107.3	7.3	25.0
3-Nitrotoluene	WXX100125-08CRI	137 > 46	23.67	111.204	16489.053	111.204	3.372	bb			36.1189	90.3	-9.7	24.1
PETN	WXX100125-08CRI	361 > 62	24.15	3898.075	16489.053	3898.075	118.202	bb			35.6714	89.2	-10.8	960.7



# GRAND MEAN AVERAGE

Vendor: UltraScientific  
 Date of Analysis 01/27/10  
 Time of Injection 2053  
 Standard Number WXX100125-08CRI  
 Data File EXP0125118a

HMX	128.6
RDX	104.0
135-TNB	147.8
13-DNB	117.2
Tetryl	117.0
Nitrobenzene	88.1
4A-26-DNT	121.4
2A-46-DNT	134.1
246-TNT	110.8
34-DNT(surr)	109.4
26-DNT	103.6
24-DNT	88.0
2-NT	95.9
4-NT	107.3
3-NT	90.3
PETN	89.2

Total 1752.7

Average 109.5

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1210

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 5µ 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\PRON012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

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

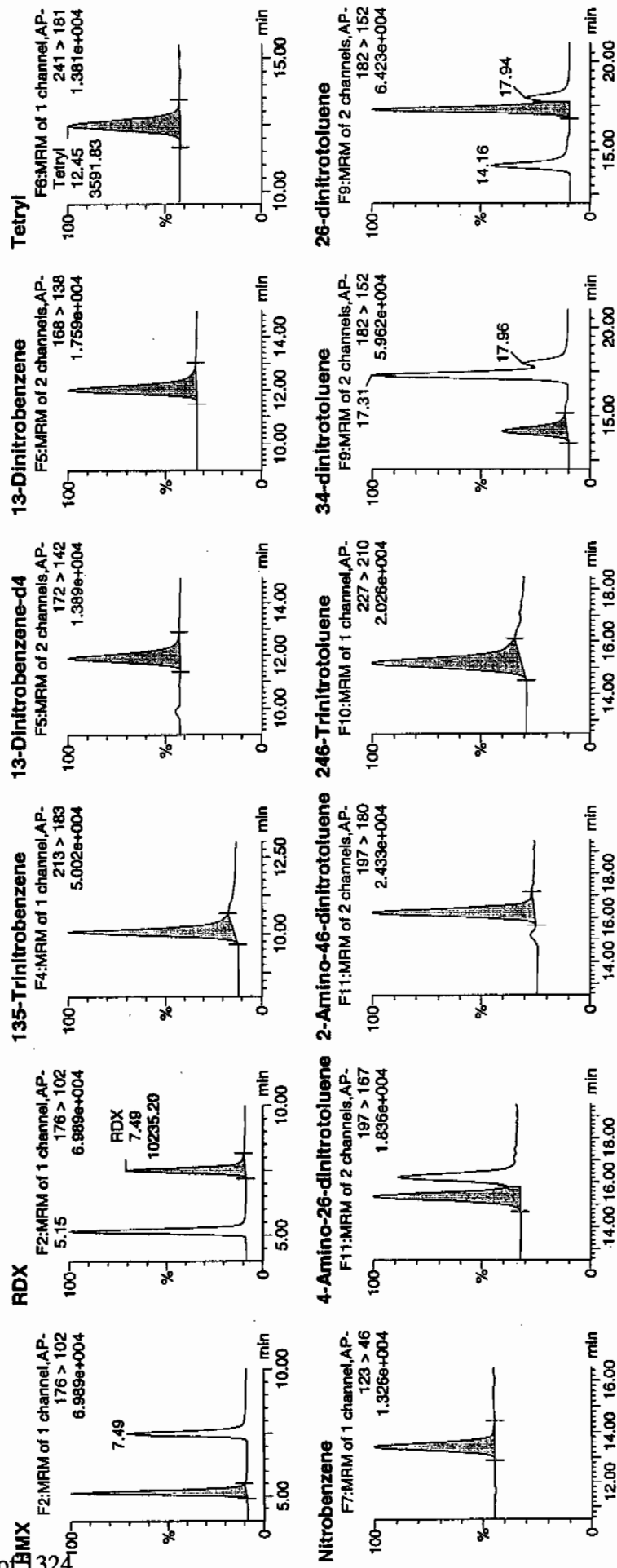
Date: 28-Jan-2010

Time: 02:18:11

ID: WXX100125-07CCV

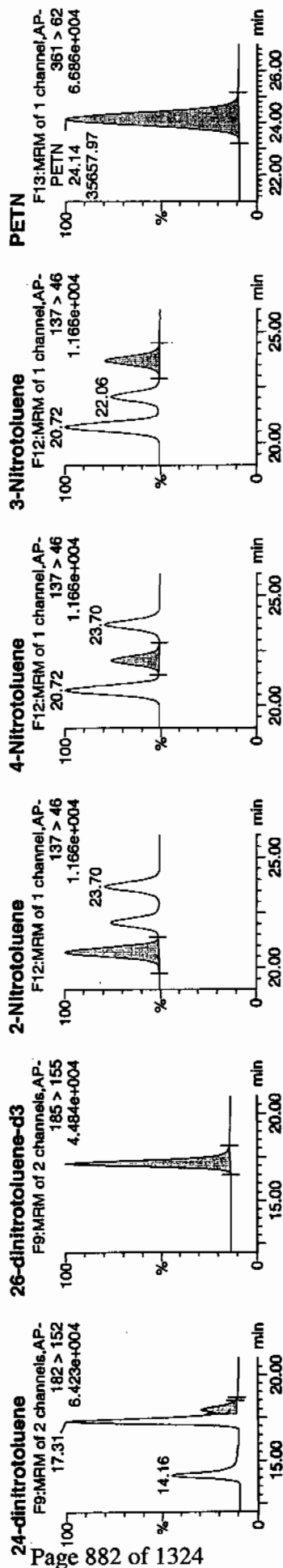
File: 1:1.B

MTT  
1/28/10



Handwritten signature: HNW 01/28/10

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



Name	ID	Trace	HT	Area	Save	Abundance	Peaks	Mass	Vol. Time	Temp	Press	Flow	SN
HMX	WXX100125-07CCV	176 > 102	5.15	12666.174	3076.330	12666.174	2058.850	bb	648.8980	108.1	8.1	2673.8	
RDX	WXX100125-07CCV	176 > 102	7.49	10235.204	3076.330	10235.204	1663.541	bb	756.6373	126.1	26.1	1819.4	
135-Trinitrobenzene	WXX100125-07CCV	213 > 183	10.07	12124.401	3076.330	12124.401	1970.595	bb	689.5748	114.9	14.9	1128.8	
13-Dinitrobenzene-d4	WXX100125-07CCV	172 > 142	11.90	3076.330	3076.330	3076.330	3076.330	bb	518.1798	103.6	3.6	239.3	
13-Dinitrobenzene	WXX100125-07CCV	168 > 138	12.00	4363.751	3076.330	4363.751	709.246	bb	611.4283	101.9	1.9	302.0	
Tetryl	WXX100125-07CCV	241 > 181	12.45	3591.830	3076.330	3591.830	583.785	bb	672.0887	112.0	12.0	480.4	
Nitrobenzene	WXX100125-07CCV	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	WXX100125-07CCV	197 > 157	15.35	5380.591	16735.004	5380.591	160.759	MM	28-Jan-10	10:26:28		210.4	
2-Amino-46-dinitrotoluene	WXX100125-07CCV	197 > 180	16.22	7893.479	16735.004	7893.479	235.837	bb	630.1015	105.0	5.0	263.6	
246-Trinitrotoluene	WXX100125-07CCV	227 > 210	15.17	6876.185	16735.004	6876.185	205.443	bb	645.9179	107.7	7.7	256.5	
34-dinitrotoluene	WXX100125-07CCV	182 > 152	14.16	9487.213	16735.004	9487.213	283.454	bb	312.1693	104.1	4.1	448.2	
26-dinitrotoluene	WXX100125-07CCV	182 > 152	17.31	22371.311	16735.004	22371.311	568.399	MM	28-Jan-10	10:32:28		754.2	
24-dinitrotoluene	WXX100125-07CCV	182 > 152	17.94	5219.031	16735.004	5219.031	155.932	MM	28-Jan-10	10:38:43		157.4	
26-dinitrotoluene-d3	WXX100125-07CCV	185 > 155	17.15	16735.004	16735.004	16735.004	16735.004	bb	513.3960	102.7	2.7	1711.3	
2-Nitrotoluene	WXX100125-07CCV	137 > 46	20.72	2842.840	16735.004	2842.840	84.937	bb	510.7362	85.1	-14.9	301.3	
4-Nitrotoluene	WXX100125-07CCV	137 > 46	22.06	1401.742	16735.004	1401.742	41.881	bb	506.5388	84.4	-15.6	154.0	
3-Nitrotoluene	WXX100125-07CCV	137 > 46	23.70	1653.960	16735.004	1653.960	49.416	bb	529.3091	88.2	-11.8	175.4	
PETN	WXX100125-07CCV	361 > 62	24.14	35657.973	16735.004	35657.973	1065.371	bb	597.8628	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

*11/28/10*

Total 1630.7

Average 101.9

*11/28/10*

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): 10-1210

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0125131a

Analysis Date: 28-JAN-10 03:17

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	57.612	144	*
1,3-Dinitrobenzene-d4	500	504.225	101	
2,4,6-Trinitrotoluene	40	41.133	103	
2,4-Dinitrotoluene	40	36.314	91	
2,6-Dinitrotoluene	40	40.973	102	
2,6-Dinitrotoluene-d3	500	527.33	105	
2-Amino-4,6-dinitrotoluene	40	46.164	115	
3,4-Dinitrotoluene	20	19.933	100	
4-Amino-2,6-dinitrotoluene	40	41.338	103	
HMX	40	53.421	134	*
Nitrobenzene	40	45.023	113	
PETN	40	35.323	88	
RDX	40	41.603	104	
Tetryl	40	51.008	128	
m-Dinitrobenzene	40	39.957	100	
m-Nitrotoluene	40	40.221	101	
o-Nitrotoluene	40	38.017	95	
p-Nitrotoluene	40	33.311	83	

Recovery Limits:

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

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

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

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

Name: C:\MASSLYNX\NEW\_EXP\_PRO\Data\EXP0125131a

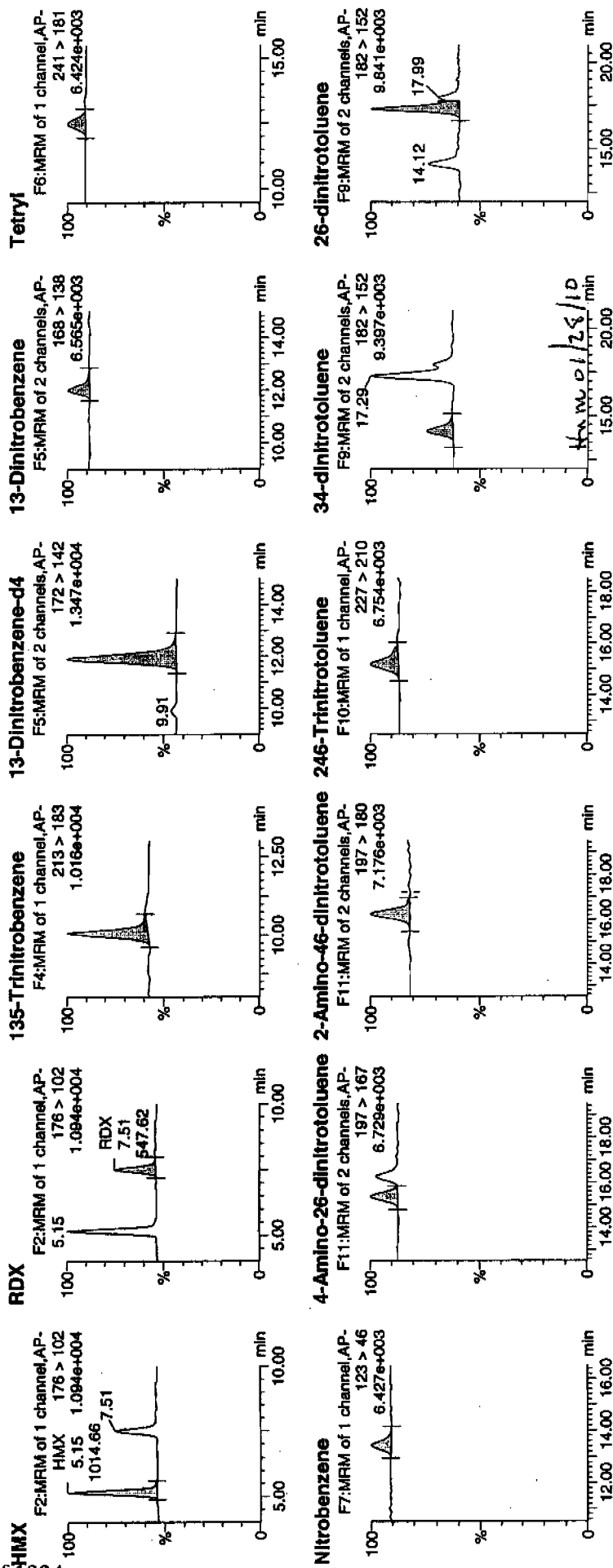
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Time: 03:17:15

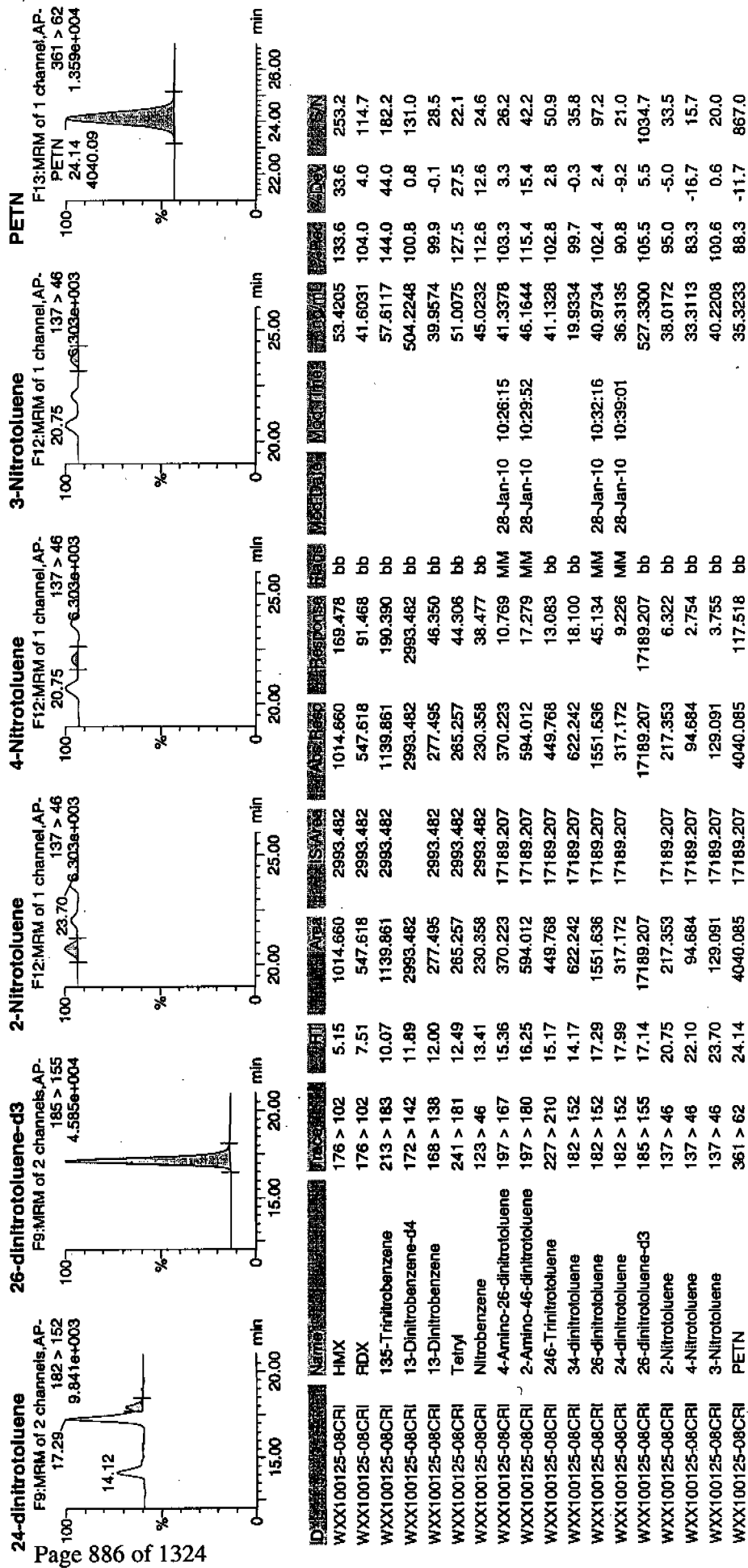
cdID: WXX100125-08CRI

Vial: 1:1,C

1/28/10



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





# 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

*mt  
1/28/10*

Total 1703.2

Average 106.5

*Hum 01/28/10*

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1210

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0125142a

Analysis Date: 28-JAN-10 08:41

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	784.323	131	*
1,3-Dinitrobenzene-d4	500	464.389	93	
2,4,6-Trinitrotoluene	600	865.486	144	*
2,4-Dinitrotoluene	600	635.609	106	
2,6-Dinitrotoluene	600	585.132	98	
2,6-Dinitrotoluene-d3	500	523.158	105	
2-Amino-4,6-dinitrotoluene	600	577.839	96	
3,4-Dinitrotoluene	300	294.928	98	
4-Amino-2,6-dinitrotoluene	600	591.279	99	
HMX	600	672.053	112	
Nitrobenzene	600	572.628	95	
PETN	600	477.341	80	*
RDX	600	583.83	97	
Tetryl	600	717.697	120	
m-Dinitrobenzene	600	626.426	104	
m-Nitrotoluene	600	536.142	89	
o-Nitrotoluene	600	479.542	80	*
p-Nitrotoluene	600	491.628	82	

Recovery Limits:

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

Other Target Analytes 80-120%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

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

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

Name: C:\MASSLYNX\NEW\_EXP\_PRO\Data\EXP0125142a

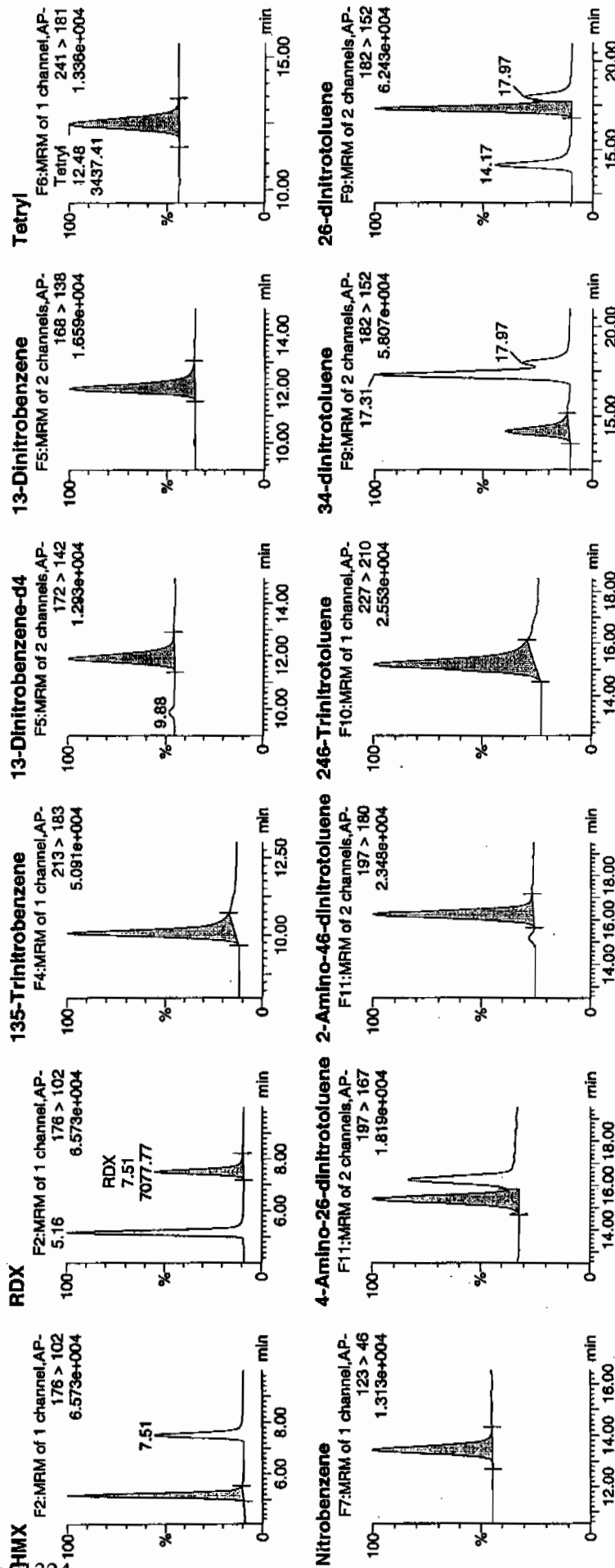
Date: 28-Jan-2010

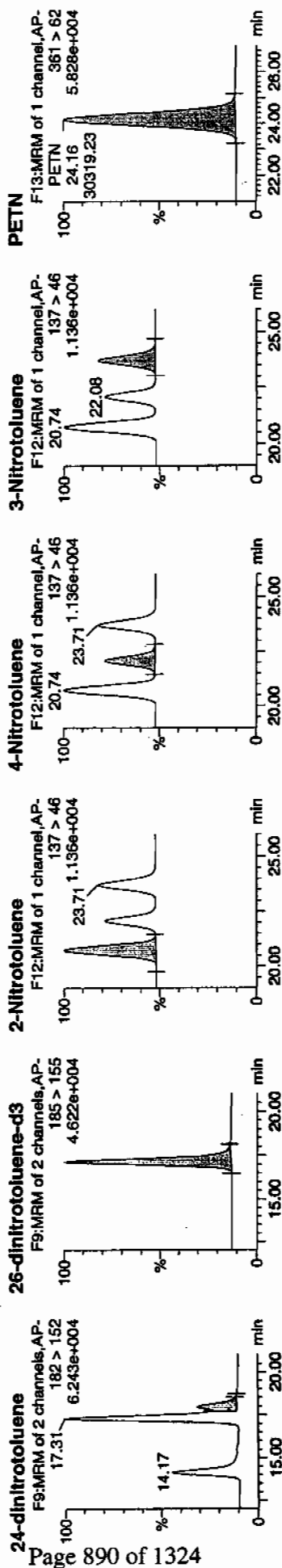
Time: 08:41:46

ID: WXX100125-07CCV

Ratio: 1:1,B

1/28/10





Name	TS	RT	Area	Area%	Response	Peak	Mod Date	Mod Time	Amount	Area	Std Dev	Area%
HMX	176 > 102	5.16	11756.382	2756.983	11756.382	2132.110	bb		672.0530	112.0	12.0	1526.0
RDX	176 > 102	7.51	7077.767	2756.983	7077.767	1283.607	bb		583.8299	97.3	-2.7	773.0
135-Trinitrobenzene	213 > 183	10.07	12337.478	2756.983	12337.478	2237.496	bb		784.3233	130.7	30.7	640.8
13-Dinitrobenzene-d4	172 > 142	11.89	2756.983		2756.983	2756.983	bb		464.3887	92.9	-7.1	567.5
13-Dinitrobenzene	168 > 138	12.00	4006.687	2756.983	4006.687	726.643	bb		626.4261	104.4	4.4	498.2
Tetryl	241 > 181	12.48	3437.411	2756.983	3437.411	623.401	bb		717.8970	119.6	19.6	197.7
Nitrobenzene	123 > 46	13.41	2698.343	2756.983	2698.343	489.365	bb		572.6285	95.4	-4.6	294.3
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	199.9
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
246-Trinitrotoluene	227 > 210	15.17	9388.802	17053.201	9388.802	275.280	bb		865.4856	144.2	44.2	390.4
34-dinitrotoluene	182 > 152	14.17	9133.663	17053.201	9133.663	267.799	bb		294.9283	98.3	-1.7	356.1
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
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
26-dinitrotoluene-d3	185 > 155	17.16	17053.201		17053.201	17053.201	bb		523.1576	104.6	4.6	1226.9
2-Nitrotoluene	137 > 46	20.74	2719.962	17053.201	2719.962	79.749	bb		479.5423	79.9	-20.1	251.2
4-Nitrotoluene	137 > 46	22.08	1386.346	17053.201	1386.346	40.648	bb		491.6275	81.9	-18.1	137.1
3-Nitrotoluene	137 > 46	23.71	1707.166	17053.201	1707.166	50.054	bb		536.1422	89.4	-10.6	155.6
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

*not  
1/28/10*

Total 1630.9

Average 101.9

*from 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): 10-1210

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0125144a

Analysis Date: 28-JAN-10 09:40

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	61.574	154	*
1,3-Dinitrobenzene-d4	500	461.719	92	
2,4,6-Trinitrotoluene	40	45.81	115	
2,4-Dinitrotoluene	40	42.881	107	
2,6-Dinitrotoluene	40	40.235	101	
2,6-Dinitrotoluene-d3	500	522.309	104	
2-Amino-4,6-dinitrotoluene	40	47.484	119	
3,4-Dinitrotoluene	20	20.079	100	
4-Amino-2,6-dinitrotoluene	40	44.024	110	
HMX	40	48.62	122	
Nitrobenzene	40	34.836	87	
PETN	40	27.753	69	*
RDX	40	35.534	89	
Tetryl	40	62.477	156	*
m-Dinitrobenzene	40	42.805	107	
m-Nitrotoluene	40	30.675	77	
o-Nitrotoluene	40	30.694	77	
p-Nitrotoluene	40	31.002	78	

Recovery Limits:

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

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

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

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

Name: C:\MASSLYNX\NEW\_EXP\_PRO\Data\EXP0125144a

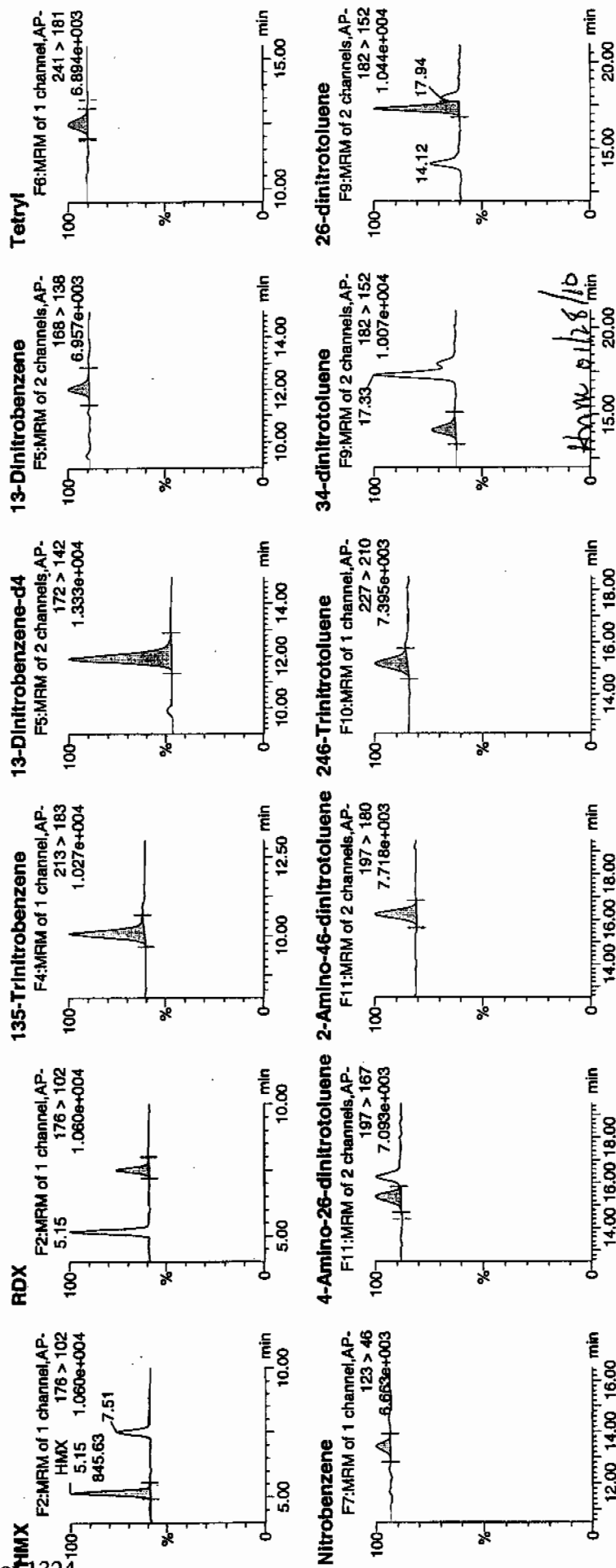
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Time: 09:40:48

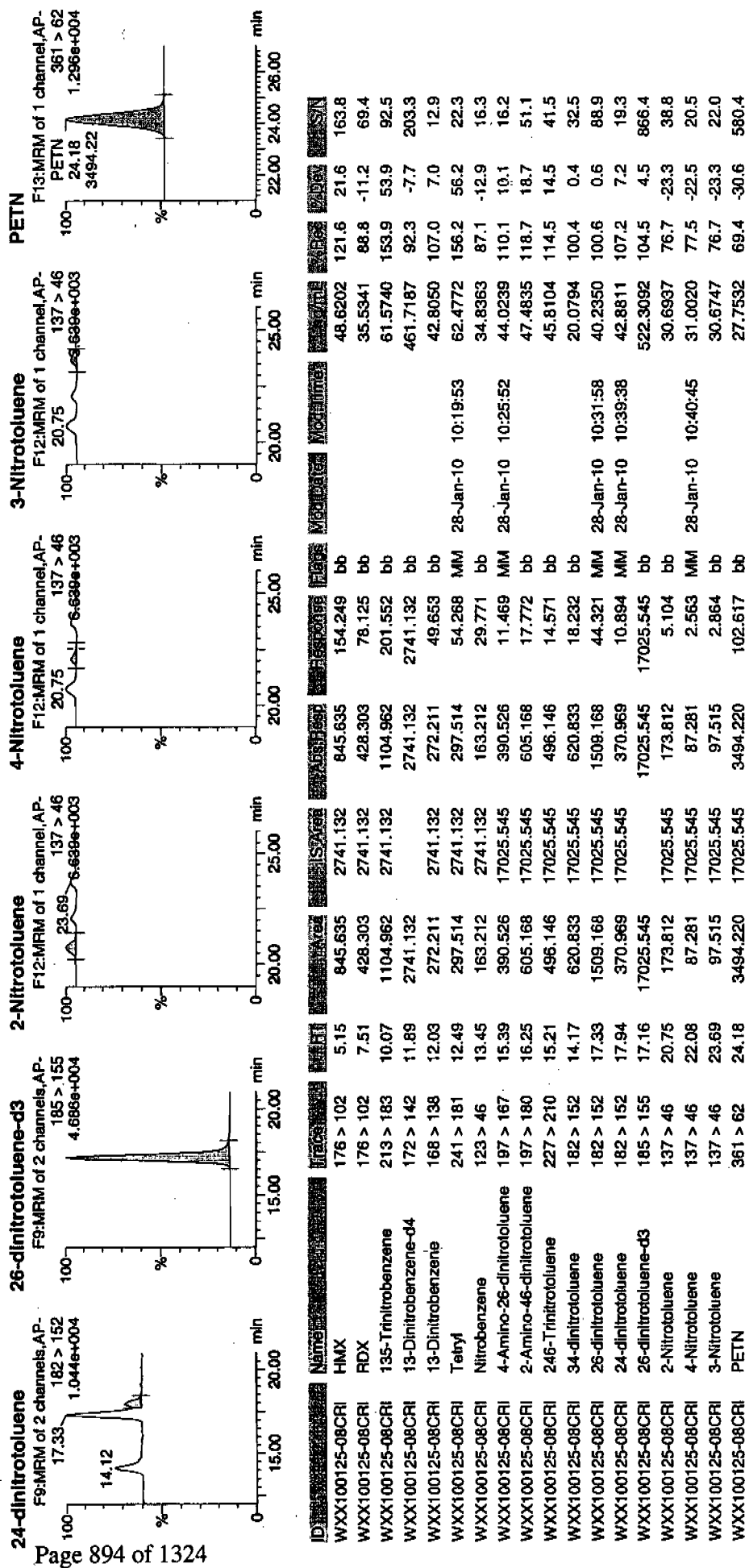
ID: WXX100125-08CRI

Vial: 1:1,C

1/28/10



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





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

*WTP  
1/28/10*

Total 1666.4

Average 104.2

*WTP 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): 10-1210

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0125155a

Analysis Date: 28-JAN-10 15:06

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	725.492	121	*
1,3-Dinitrobenzene-d4	500	408.832	82	
2,4,6-Trinitrotoluene	600	819.036	137	*
2,4-Dinitrotoluene	600	629.825	105	
2,6-Dinitrotoluene	600	622.367	104	
2,6-Dinitrotoluene-d3	500	405.179	81	
2-Amino-4,6-dinitrotoluene	600	764.727	127	*
3,4-Dinitrotoluene	300	334.075	111	
4-Amino-2,6-dinitrotoluene	600	718.695	120	
HMX	600	688.774	115	
Nitrobenzene	600	582.995	97	
PETN	600	663.272	111	
RDX	600	691.837	115	
Tetryl	600	670.811	112	
m-Dinitrobenzene	600	632.337	105	
m-Nitrotoluene	600	632.535	105	
o-Nitrotoluene	600	594.979	99	
p-Nitrotoluene	600	603.637	101	

Recovery Limits:

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

Other Target Analytes 80-120%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA3.qld, Time: Fri Jan 29 07:11:03 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125155a

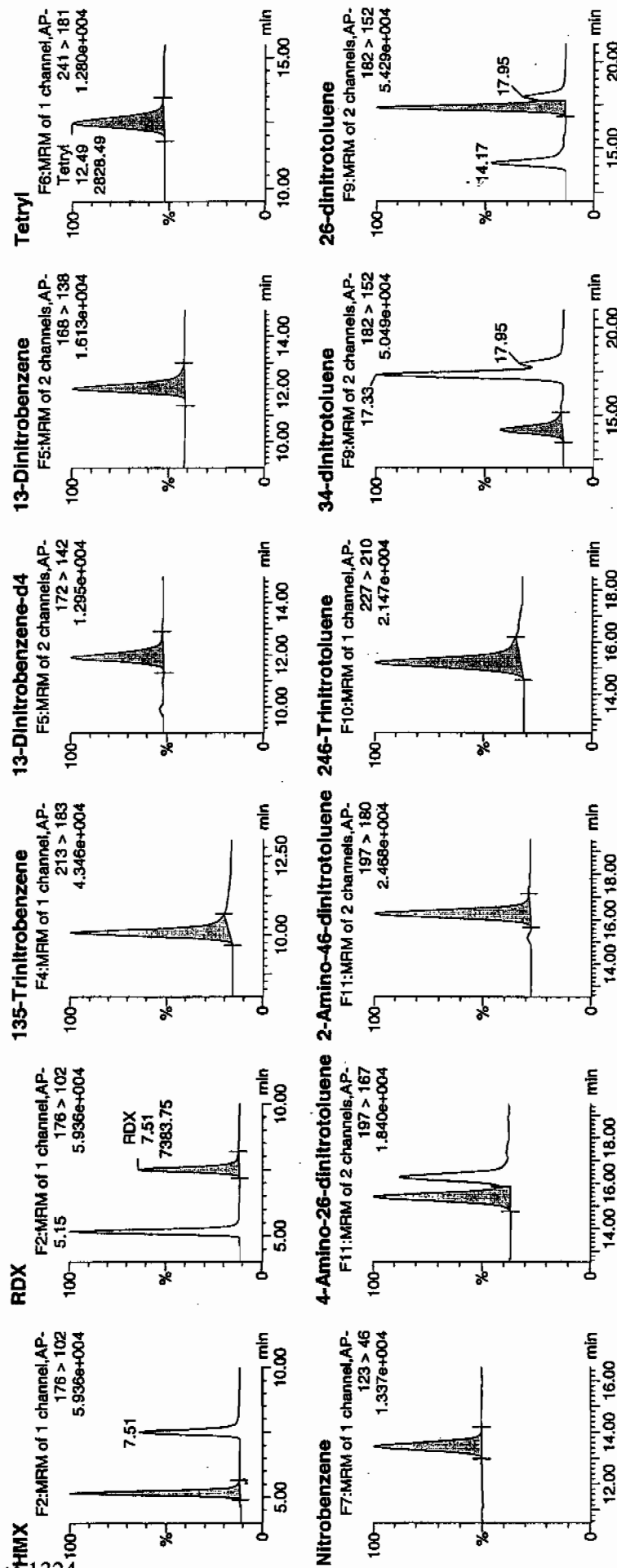
Date: 28-Jan-2010

Time: 15:06:01

ID: WXX100128-07CCV

Vial: 1:1,B

1/27  
1/28/10

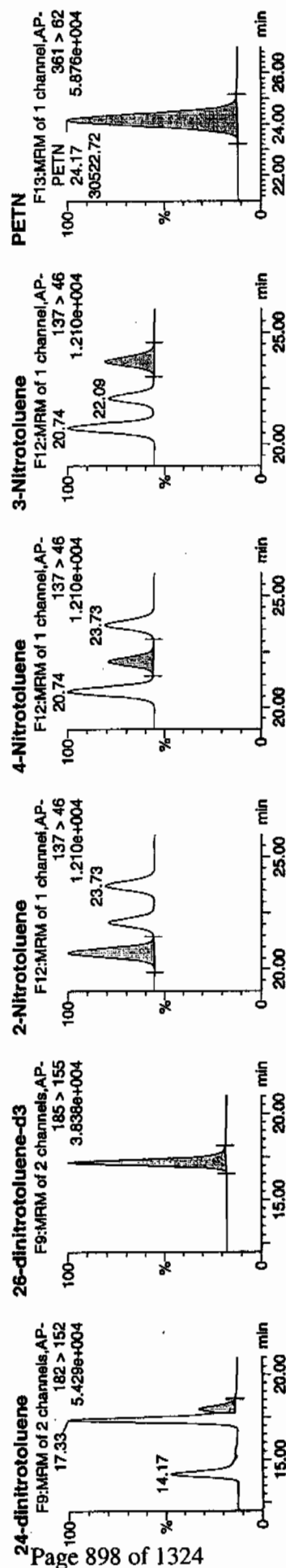


1/13/10

## Quantify Sample Report

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

Dataset: C:\MASSLYN\New\_Exp.PRO\012510expA3.qld, Time: Fri Jan 29 07:11:03 2010



ID	Name	Inch	Ht	Area	Saved	Area Head	Response	Phase	Mod Date	Mod Time	Model	Mass	Stiff
WXX100128-07CCV	HMX	176 > 102	5.15	10607.419	2427.153	10807.419	2185.157	db			688.7736	114.8	1372.3
WXX100128-07CCV	RDX	176 > 102	7.51	7383.747	2427.153	7383.747	1521.072	bb			691.8370	115.3	809.8
WXX100128-07CCV	135-Trinitrobenzene	213 > 183	10.07	10057.012	2427.153	10057.012	2071.771	bb			725.4919	120.9	582.5
WXX100128-07CCV	13-Dinitrobenzene-d4	172 > 142	11.89	2427.153		2427.153	2427.153	bb			408.8318	81.8	-18.2
WXX100128-07CCV	13-Dinitrobenzene	168 > 138	12.00	3560.633	2427.153	3560.633	733.500	bb			632.3370	105.4	5.4
WXX100128-07CCV	Tetryl	241 > 181	12.49	2828.485	2427.153	2828.485	582.675	bb			670.8115	111.8	11.8
WXX100128-07CCV	Nitrobenzene	123 > 46	13.45	2418.534	2427.153	2418.534	498.224	bb			582.9951	97.2	-2.8
WXX100128-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.39	4945.668	13207.479	4945.668	187.230	MM	29-Jan-10	07:08:06	718.6950	119.8	19.8
WXX100128-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.26	7560.642	13207.479	7560.642	286.226	bb			764.7274	127.5	27.5
WXX100128-07CCV	246-Trinitrotoluene	227 > 210	15.21	6881.254	13207.479	6881.254	260.506	bb			819.0364	136.5	36.5
WXX100128-07CCV	34-dinitrotoluene	182 > 152	14.17	8012.847	13207.479	8012.847	303.345	bb			334.0753	111.4	11.4
WXX100128-07CCV	26-dinitrotoluene	182 > 152	17.33	18109.184	13207.479	18109.184	685.566	MM	29-Jan-10	07:04:07	622.3674	103.7	3.7
WXX100128-07CCV	24-dinitrotoluene	182 > 152	17.95	4226.788	13207.479	4226.788	160.015	MM	29-Jan-10	07:02:07	629.8245	105.0	5.0
WXX100128-07CCV	26-dinitrotoluene-d3	185 > 155	17.16	13207.479		13207.479	13207.479	bb			405.1787	81.0	-19.0
WXX100128-07CCV	2-Nitrotoluene	137 > 46	20.74	2613.676	13207.479	2613.676	98.947	bb			594.9793	99.2	-0.8
WXX100128-07CCV	4-Nitrotoluene	137 > 46	22.09	1318.334	13207.479	1318.334	49.909	bb			603.6372	100.6	0.6
WXX100128-07CCV	3-Nitrotoluene	137 > 46	23.73	1559.891	13207.479	1559.891	59.053	bb			632.5349	105.4	5.4
WXX100128-07CCV	PETN	361 > 62	24.17	30522.725	13207.479	30522.725	1155.509	bb			663.2718	110.5	10.5

# GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis: 01/28/10  
 Time of Injection: 1506  
 Standard Number: WXX100128-07CCV  
 Data File: EXP0125155a

HMX	114.8
RDX	115.3
135-TNB	120.9
13-DNB	105.4
Tetryl	111.8
Nitrobenzene	97.2
4A-26-DNT	119.8
2A-46-DNT	127.5
246-TNT	136.5
34-DNT(surr)	111.4
26-DNT	103.7
24-DNT	105.0
2-NT	99.2
4-NT	100.6
3-NT	105.4
PETN	110.5

*not  
1/29/10*

Total 1785.0

Average 111.6

*Handwritten: 1/31/10*

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): 10-1210

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0125157a

Analysis Date: 28-JAN-10 16:05

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	48.507	121	
1,3-Dinitrobenzene-d4	500	499.262	100	
2,4,6-Trinitrotoluene	40	39.8	99	
2,4-Dinitrotoluene	40	33.656	84	
2,6-Dinitrotoluene	40	38.671	97	
2,6-Dinitrotoluene-d3	500	486.959	97	
2-Amino-4,6-dinitrotoluene	40	44.225	111	
3,4-Dinitrotoluene	20	20.49	102	
4-Amino-2,6-dinitrotoluene	40	43.122	108	
HMX	40	43.442	109	
Nitrobenzene	40	34.022	85	
PETN	40	28.129	70	
RDX	40	42.452	106	
Tetryl	40	53.094	133	*
m-Dinitrobenzene	40	38.088	95	
m-Nitrotoluene	40	40.962	102	
o-Nitrotoluene	40	37.089	93	
p-Nitrotoluene	40	33.466	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 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\012510expA3.qld, Time: Fri Jan 29 07:11:03 2010

Name: C:\MASSLYNX\NEW\_EXP\_PRO\Data\EXP0125157a

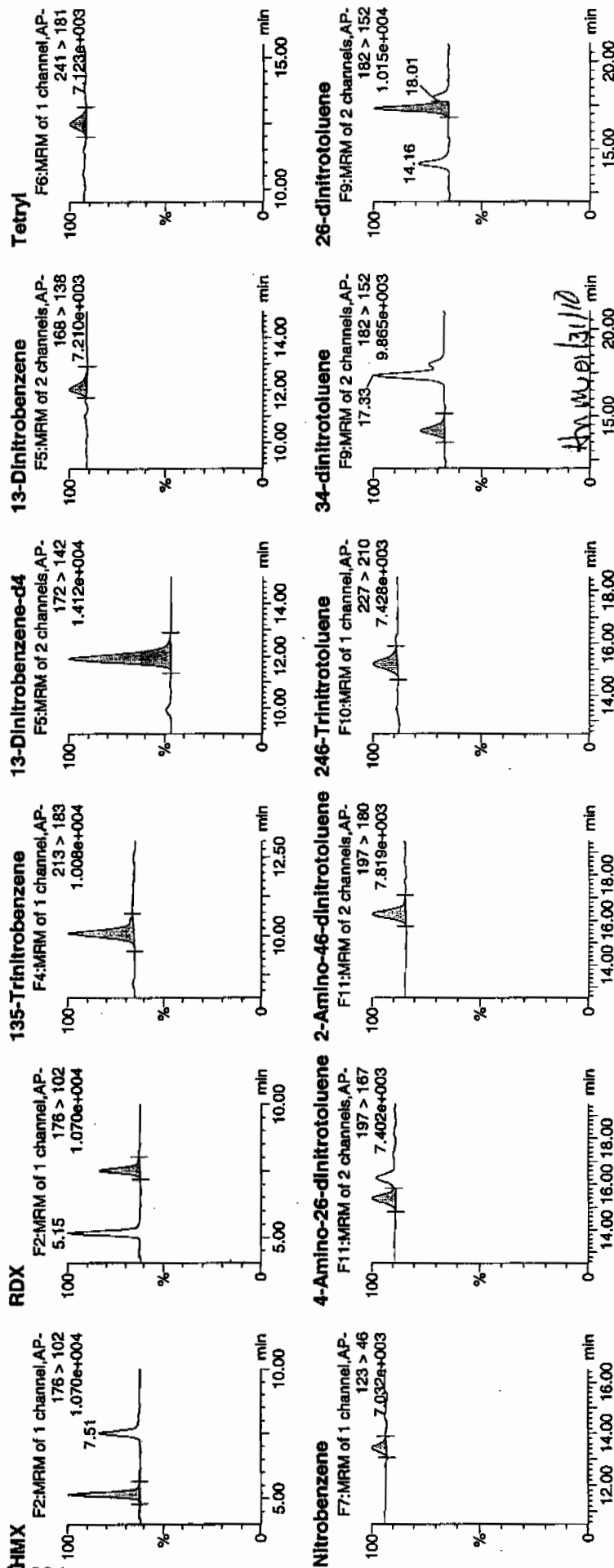
Date: 28-Jan-2010

Time: 16:05:06

ID: WXX100128-08CRI

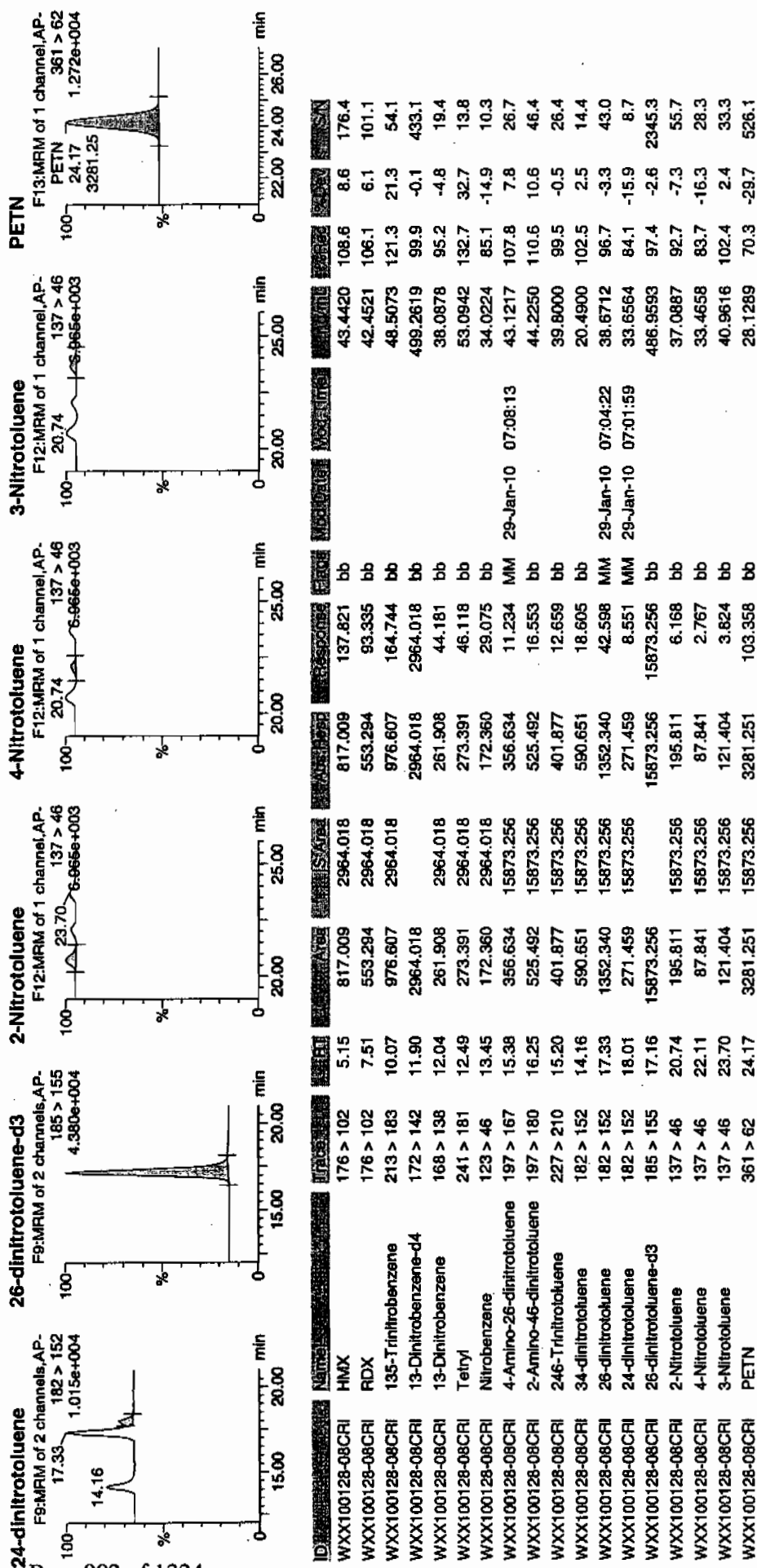
Vial: 1:1,C

1/29/10



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

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA3.qld, Time: Fri Jan 29 07:11:03 2010





# GRAND MEAN AVERAGE

Vendor: UltraScientific  
 Date of Analysis 01/28/10  
 Time of Injection 1605  
 Standard Number WXX100128-08CRI  
 Data File EXP0125157a

HMX	108.6	✓
RDX	106.1	✓
135-TNB	121.3	✓
13-DNB	95.2	
Tetryl	132.7	
Nitrobenzene	85.1	
4A-26-DNT	107.8	
2A-46-DNT	110.6	
246-TNT	99.5	
34-DNT(surr)	102.5	
26-DNT	96.7	
24-DNT	84.1	
2-NT	92.7	
4-NT	83.7	
3-NT	102.4	
PETN	70.3	

WNT  
1/29/10

Total 1599.3

Average 100.0

WNT 01/29/10

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): 10-1210

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0125166a

Analysis Date: 28-JAN-10 20:30

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	668.964	111	
1,3-Dinitrobenzene-d4	500	501.231	100	
2,4,6-Trinitrotoluene	600	698.135	116	
2,4-Dinitrotoluene	600	613.976	102	
2,6-Dinitrotoluene	600	612.82	102	
2,6-Dinitrotoluene-d3	500	479.609	96	
2-Amino-4,6-dinitrotoluene	600	723.747	121	*
3,4-Dinitrotoluene	300	327.253	109	
4-Amino-2,6-dinitrotoluene	600	672.886	112	
HMX	600	676.021	113	
Nitrobenzene	600	540.553	90	
PETN	600	590.442	98	
RDX	600	695.663	116	
Tetryl	600	633.156	106	
m-Dinitrobenzene	600	607.58	101	
m-Nitrotoluene	600	559.459	93	
o-Nitrotoluene	600	535.969	89	
p-Nitrotoluene	600	572.193	95	

Recovery Limits:

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

Other Target Analytes 80-120%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

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

Dataset: C:\MASSLYNX\New\_Exp\_PRO\012510expA3.qld, Time: Fri Jan 29 07:11:03 2010

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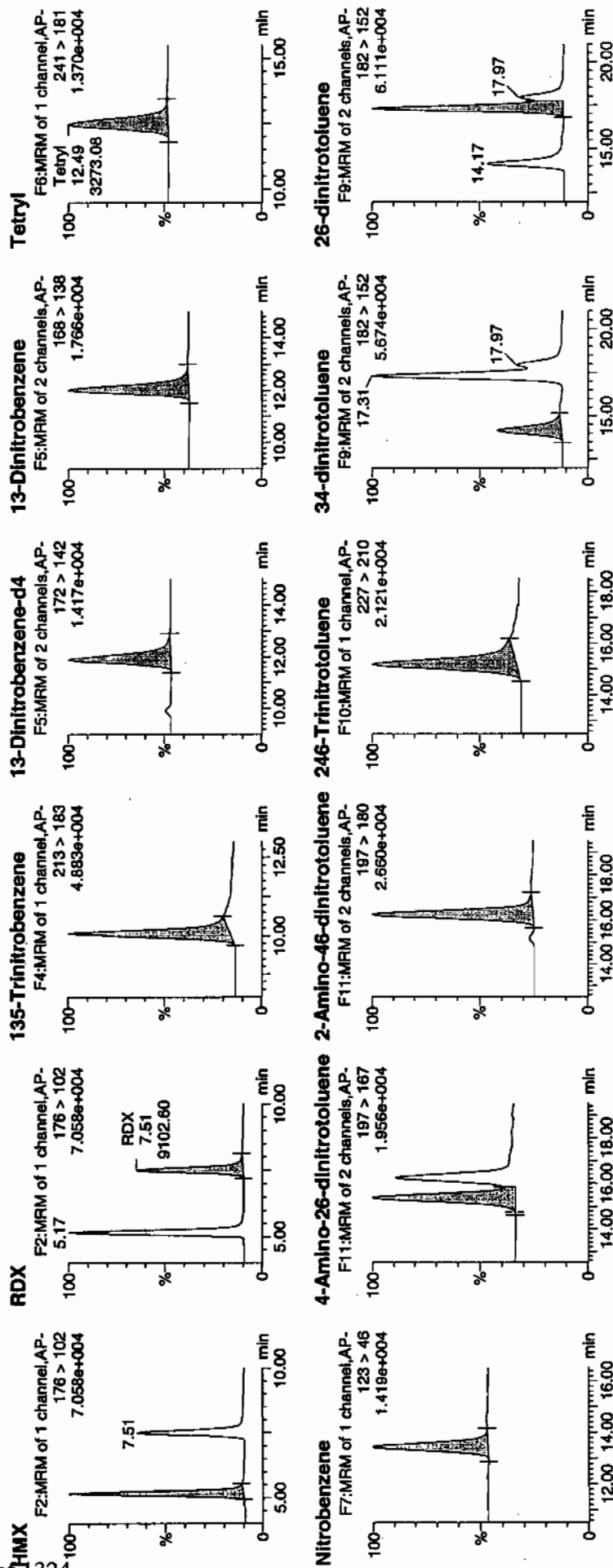
Date: 28-Jan-2010

Time: 20:30:38

ID: WXX100128-07CCV

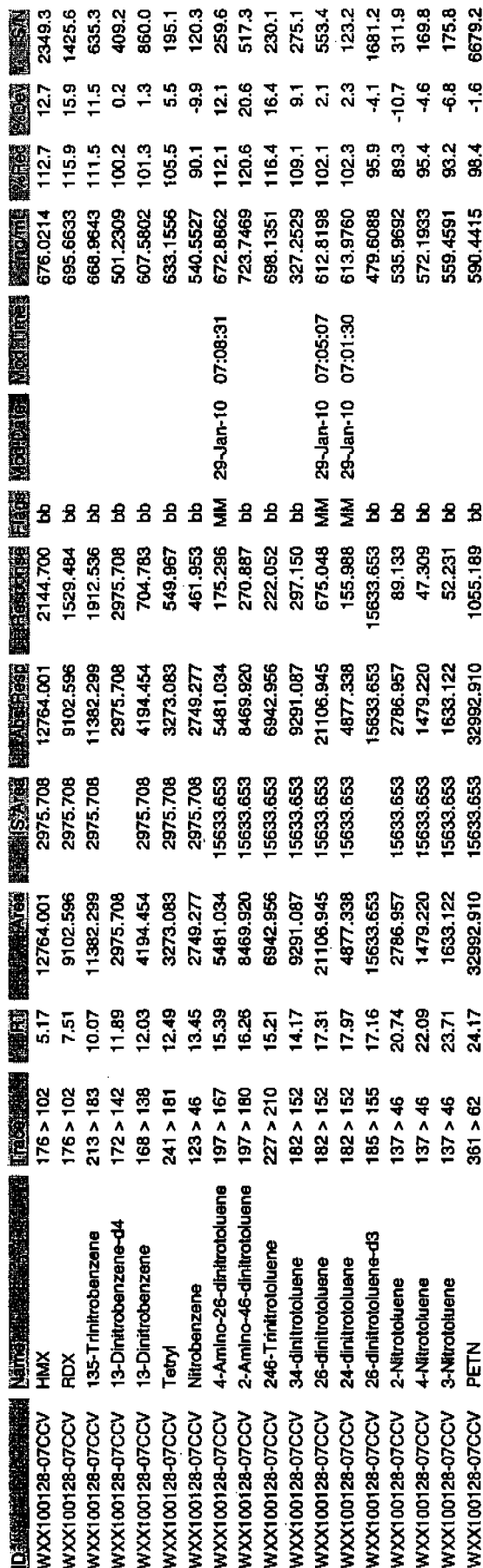
Vial: 1:1,B

11/29/10



11/29/10

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# GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis: 01/28/10  
 Time of Injection: 2030  
 Standard Number: WXX100128-07CCV  
 Data File: EXP0125166a

HMX	112.7
RDX	115.9
135-TNB	111.5
13-DNB	101.3
Tetryl	105.5
Nitrobenzene	90.1
4A-26-DNT	112.1
2A-46-DNT	120.6
246-TNT	116.4
34-DNT(surr)	109.1
26-DNT	102.1
24-DNT	102.3
2-NT	89.3
4-NT	95.4
3-NT	93.2
PETN	98.4

11/28/10

Total 1675.9

Average 104.7

11/28/10

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): 10-1210

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0125168a

Analysis Date: 28-JAN-10 21:29

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	50.682	127	
1,3-Dinitrobenzene-d4	500	535.136	107	
2,4,6-Trinitrotoluene	40	40.043	100	
2,4-Dinitrotoluene	40	38.054	95	
2,6-Dinitrotoluene	40	37.555	94	
2,6-Dinitrotoluene-d3	500	534.891	107	
2-Amino-4,6-dinitrotoluene	40	38.434	96	
3,4-Dinitrotoluene	20	18.528	93	
4-Amino-2,6-dinitrotoluene	40	41.714	104	
HMX	40	44.117	110	
Nitrobenzene	40	45.833	115	
PETN	40	23.008	58	*
RDX	40	38.294	96	
Tetryl	40	34.969	87	
m-Dinitrobenzene	40	35.006	88	
m-Nitrotoluene	40	28.44	71	
o-Nitrotoluene	40	31.291	78	
p-Nitrotoluene	40	35.755	89	

Recovery Limits:

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

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA3.qld, Time: Fri Jan 29 07:11:03 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125168a

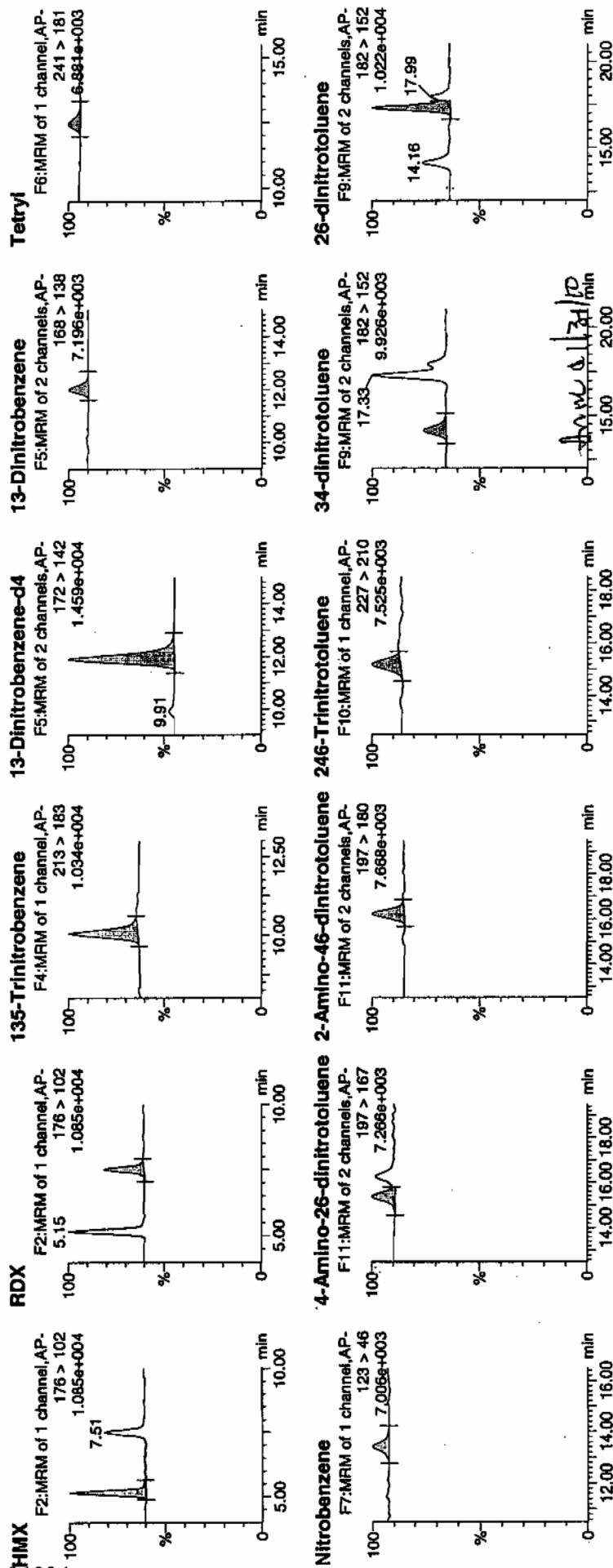
Date: 28-Jan-2010

Time: 21:29:35

ID: WXX100128-08CRI

Vial: 1:1,C

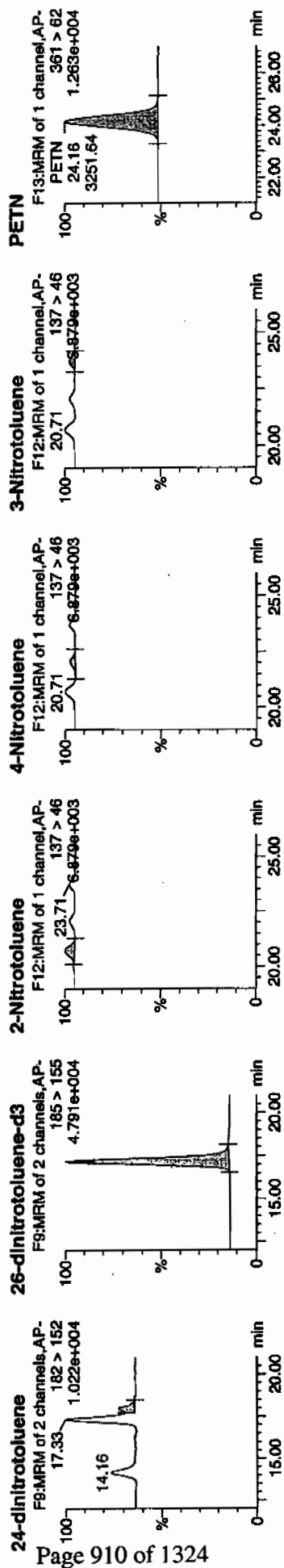
119.10



## Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA3.qld, Time: Fri Jan 29 07:11:03 2010



ID	Name	Trace	Height	Area	Area/SAV	Area/Response	Peak	Model	Model Time	SAV	Area	SN
WXX100128-08CRI	HMx	176 > 102	5.15	889.321	3176.997	889.321	139.963	bb	44.1170	110.3	10.3	159.3
WXX100128-08CRI	RDX	176 > 102	7.51	534.968	3176.997	534.968	84.194	bb	38.2944	95.7	-4.3	84.6
WXX100128-08CRI	135-Trinitrobenzene	213 > 183	10.07	1085.703	3176.997	1085.703	170.869	bb	50.6818	126.7	26.7	92.2
WXX100128-08CRI	13-Dinitrobenzene-d4	172 > 142	11.90	3176.997		3176.997	3176.997	bb	535.1362	107.0	7.0	338.2
WXX100128-08CRI	13-Dinitrobenzene	168 > 138	12.00	258.013	3176.997	258.013	40.606	bb	35.0061	87.5	-12.5	18.2
WXX100128-08CRI	Tetryl	241 > 181	12.45	193.001	3176.997	193.001	30.375	bb	34.9893	87.4	-12.6	15.1
WXX100128-08CRI	Nitrobenzene	123 > 46	13.40	248.875	3176.997	248.875	39.168	bb	45.8326	114.6	14.6	14.3
WXX100128-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.38	378.945	17435.660	378.945	10.867	MM	29-Jan-10 07:08:38	41.7136	104.3	4.3
WXX100128-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.25	501.626	17435.660	501.626	14.385	bb	38.4335	96.1	-3.9	44.4
WXX100128-08CRI	245-Trinitrotoluene	227 > 210	15.20	444.130	17435.660	444.130	12.736	bb	40.0431	100.1	0.1	30.0
WXX100128-08CRI	34-dinitrotoluene	182 > 152	14.16	586.664	17435.660	586.664	16.824	bb	18.5280	92.6	-7.4	9.6
WXX100128-08CRI	26-dinitrotoluene	182 > 152	17.33	1442.559	17435.660	1442.559	41.368	MM	29-Jan-10 07:05:13	37.5546	93.9	-6.1
WXX100128-08CRI	24-dinitrotoluene	182 > 152	17.99	337.142	17435.660	337.142	9.668	MM	29-Jan-10 07:01:15	38.0543	95.1	-4.9
WXX100128-08CRI	26-dinitrotoluene-d3	185 > 155	17.16	17435.660		17435.660	17435.660	bb	534.8907	107.0	7.0	1283.8
WXX100128-08CRI	2-Nitrotoluene	137 > 46	20.71	181.465	17435.660	181.465	5.204	bb	31.2914	78.2	-21.8	55.7
WXX100128-08CRI	4-Nitrotoluene	137 > 46	22.06	103.088	17435.660	103.088	2.956	bb	35.7553	89.4	-10.6	30.1
WXX100128-08CRI	3-Nitrotoluene	137 > 46	23.71	92.590	17435.660	92.590	2.655	bb	28.4404	71.1	-28.9	32.9
WXX100128-08CRI	PETN	361 > 62	24.16	3251.640	17435.660	3251.640	93.247	bb	23.0077	57.5	-42.5	1155.1



GRAND MEAN AVERAGE

Vendor: UltraScientific  
 Date of Analysis 01/28/10  
 Time of Injection 2129  
 Standard Number WXX100128-08CRI  
 Data File EXP0125168a

HMX	110.3
RDX	95.7
135-TNB	126.7
13-DNB	87.5
Tetryl	87.4
Nitrobenzene	114.6
4A-26-DNT	104.3
2A-46-DNT	96.1
246-TNT	100.1
34-DNT(surr)	92.6
26-DNT	93.9
24-DNT	95.1
2-NT	78.2
4-NT	89.4
3-NT	71.1
PETN	57.5

Total 1500.5

Average 93.8

MTF  
1/29/10

Handwritten: *Handwritten: 1/31/10*

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): 10-1210

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0125179a

Analysis Date: 29-JAN-10 02:54

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	693.885	116	
1,3-Dinitrobenzene-d4	500	440.796	88	
2,4,6-Trinitrotoluene	600	678.239	113	
2,4-Dinitrotoluene	600	623.98	104	
2,6-Dinitrotoluene	600	604.152	101	
2,6-Dinitrotoluene-d3	500	455.229	91	
2-Amino-4,6-dinitrotoluene	600	681.159	114	
3,4-Dinitrotoluene	300	331.129	110	
4-Amino-2,6-dinitrotoluene	600	678.045	113	
HMX	600	780.078	130	*
Nitrobenzene	600	600.679	100	
PETN	600	590.757	98	
RDX	600	803.101	134	*
Tetryl	600	613.613	102	
m-Dinitrobenzene	600	661.545	110	
m-Nitrotoluene	600	558.589	93	
o-Nitrotoluene	600	541.629	90	
p-Nitrotoluene	600	563.212	94	

Recovery Limits:

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

Other Target Analytes 80-120%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA3.qld, Time: Fri Jan 29 07:11:03 2010

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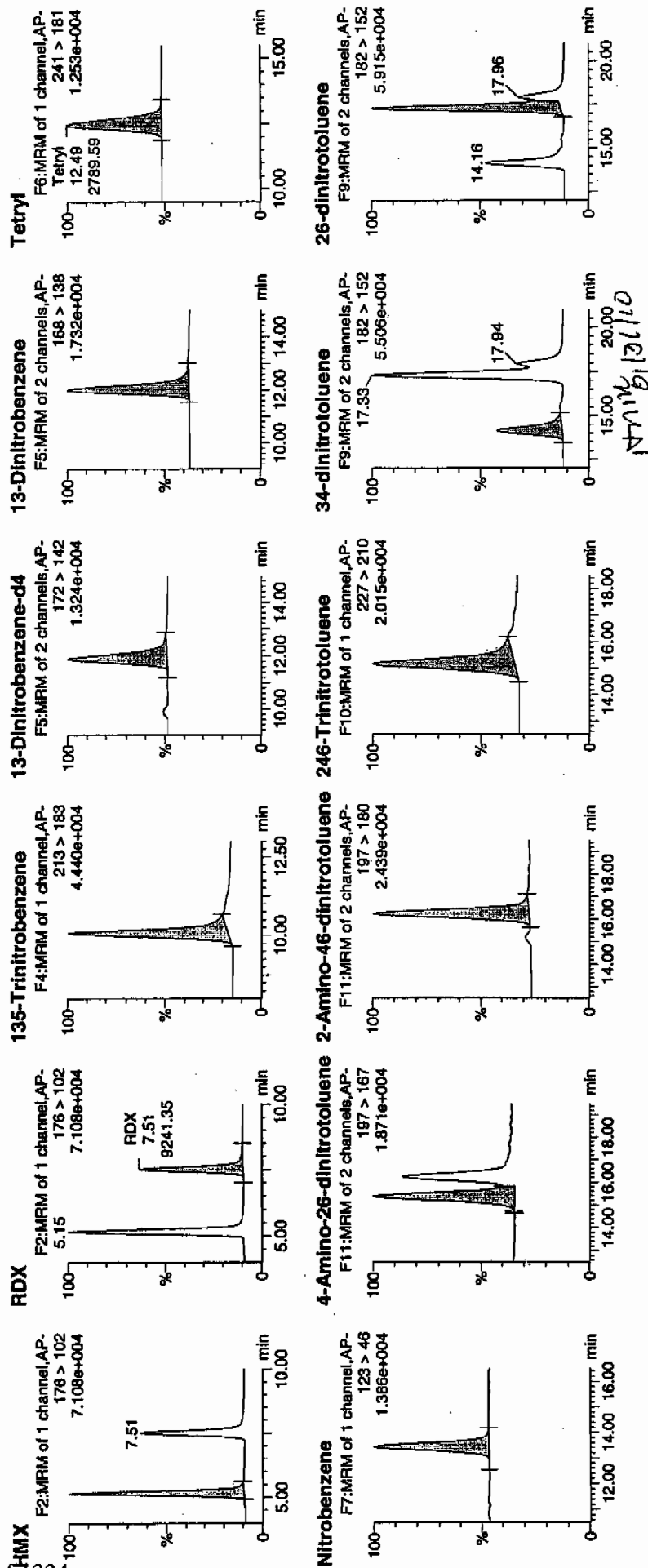
Date: 29-Jan-2010

Time: 02:54:06

ID: WXX100128-07CCV

Vial: 1:1,B

WXX  
1/29/10





# GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis: 01/29/10  
 Time of Injection: 0254  
 Standard Number: WXX100128-07CCV  
 Data File: EXP0125179a

HMX	130.0
RDX	133.9
135-TNB	115.6
13-DNB	110.3
Tetryl	102.3
Nitrobenzene	100.1
4A-26-DNT	113.0
2A-46-DNT	113.5
246-TNT	113.0
34-DNT(surr)	110.4
26-DNT	100.7
24-DNT	104.0
2-NT	90.3
4-NT	93.9
3-NT	93.1
PETN	98.5

Total 1722.6

Average 107.7

WXX  
1/29/10

WXX 01/29/10

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): 10-1210

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0125181a

Analysis Date: 29-JAN-10 03:53

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	52.245	131	*
1,3-Dinitrobenzene-d4	500	462.351	92	
2,4,6-Trinitrotoluene	40	44.081	110	
2,4-Dinitrotoluene	40	34.598	86	
2,6-Dinitrotoluene	40	40.068	100	
2,6-Dinitrotoluene-d3	500	462.209	92	
2-Amino-4,6-dinitrotoluene	40	43.63	109	
3,4-Dinitrotoluene	20	18.662	93	
4-Amino-2,6-dinitrotoluene	40	40.035	100	
HMX	40	48.55	121	
Nitrobenzene	40	38.762	97	
PETN	40	29.755	74	
RDX	40	42.988	107	
Tetryl	40	46.222	116	
m-Dinitrobenzene	40	42.28	106	
m-Nitrotoluene	40	33.043	83	
o-Nitrotoluene	40	37.281	93	
p-Nitrotoluene	40	45.498	114	

Recovery Limits:

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

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA3.qld, Time: Fri Jan 29 07:11:03 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125181a

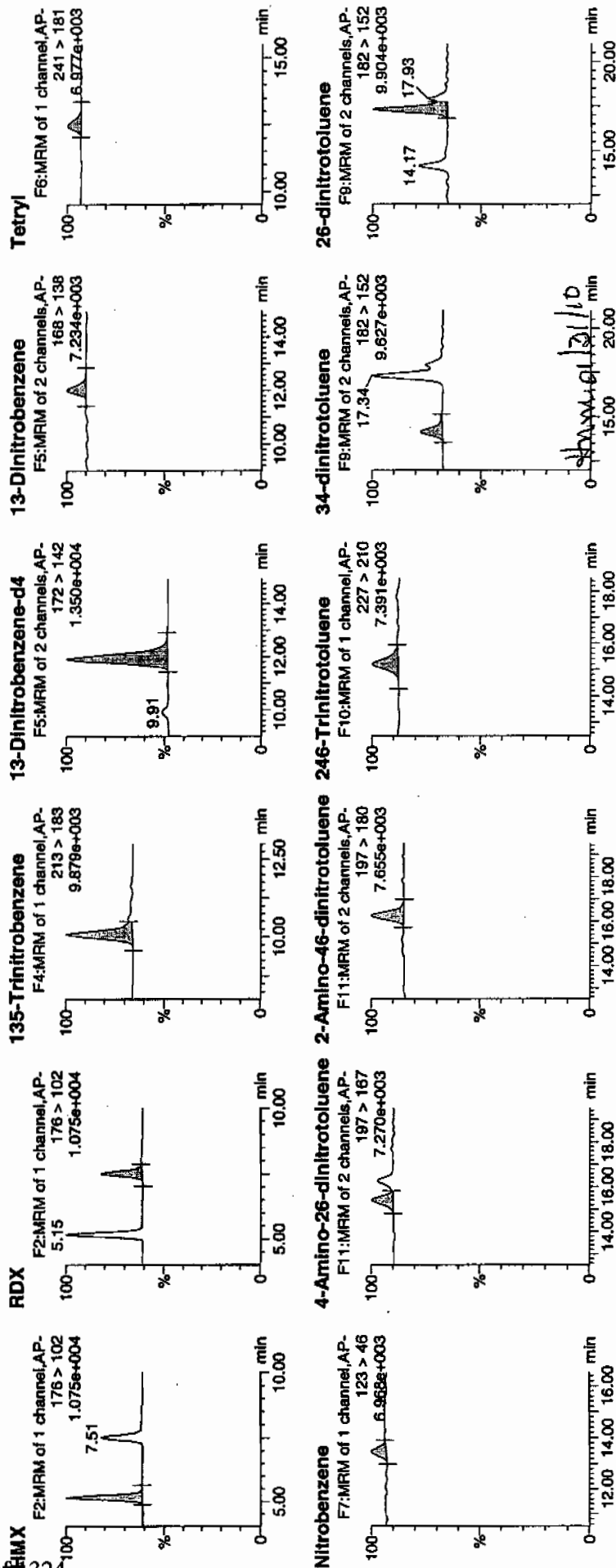
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Time: 03:53:04

ID: WXX100128-08CRI

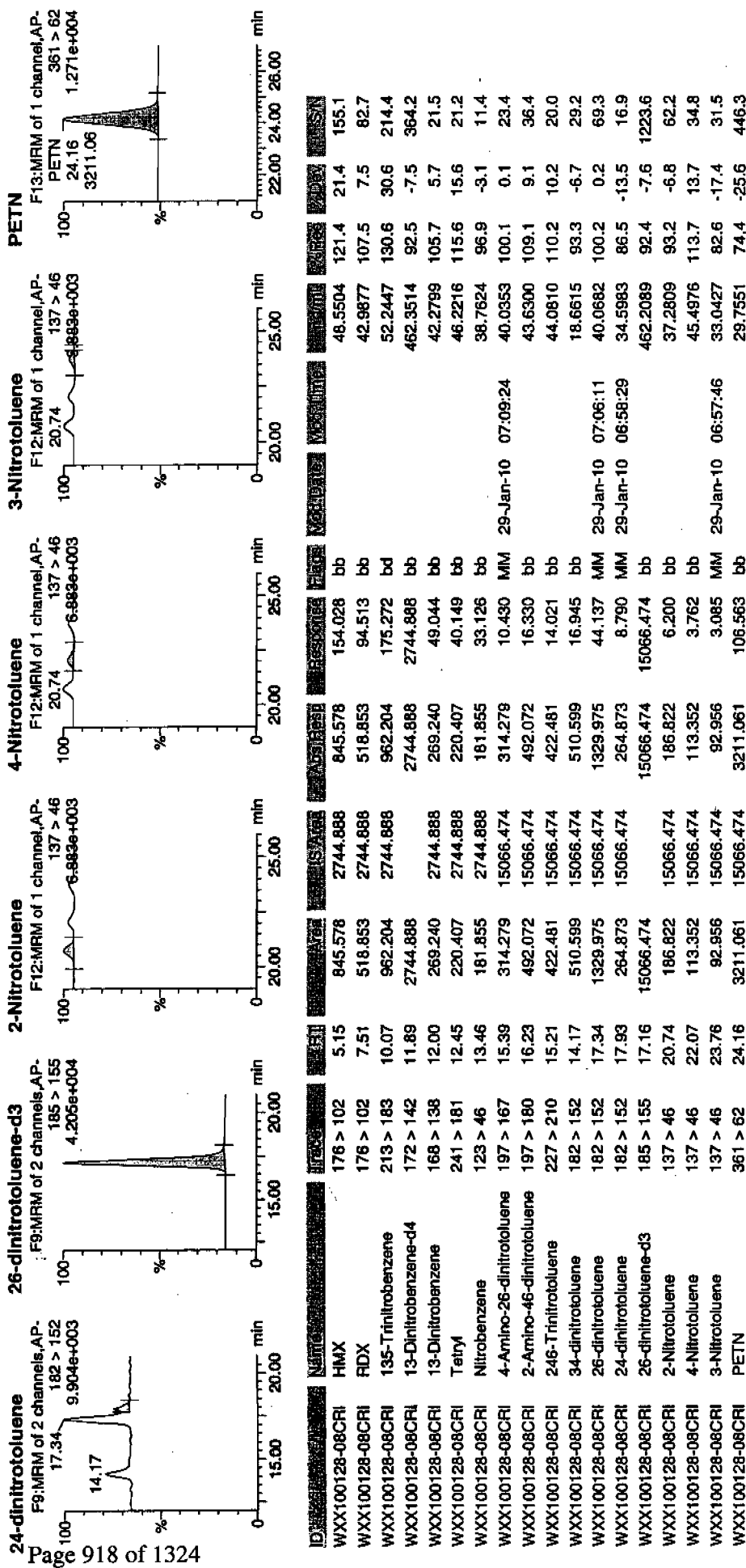
Vial: 1:1,C

1/29/10  
MAY



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

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA3.qld, Time: Fri Jan 29 07:11:03 2010





# GRAND MEAN AVERAGE

Vendor: UltraScientific  
 Date of Analysis 01/29/10  
 Time of Injection 0353  
 Standard Number WXX100128-08CRI  
 Data File EXP0125181a

HMX	121.4
RDX	107.5
135-TNB	130.6
13-DNB	105.7
Tetryl	115.6
Nitrobenzene	96.9
4A-26-DNT	100.1
2A-46-DNT	109.1
246-TNT	110.2
34-DNT(surr)	93.3
26-DNT	100.2
24-DNT	86.5
2-NT	93.2
4-NT	113.7
3-NT	82.6
PETN	74.4

WXX  
1/29/10

Total 1641.0

Average 102.6

*WXX 01/29/10*

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): 10-1210

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0125192a

Analysis Date: 29-JAN-10 09:17

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	659.219	110	
1,3-Dinitrobenzene-d4	500	485.21	97	
2,4,6-Trinitrotoluene	600	731.351	122	*
2,4-Dinitrotoluene	600	648.963	108	
2,6-Dinitrotoluene	600	648.843	108	
2,6-Dinitrotoluene-d3	500	454.865	91	
2-Amino-4,6-dinitrotoluene	600	707.583	118	
3,4-Dinitrotoluene	300	324.482	108	
4-Amino-2,6-dinitrotoluene	600	693.561	116	
HMX	600	714.05	119	
Nitrobenzene	600	533.013	89	
PETN	600	591.612	99	
RDX	600	682.073	114	
Tetryl	600	572.478	95	
m-Dinitrobenzene	600	633.214	106	
m-Nitrotoluene	600	548.448	91	
o-Nitrotoluene	600	541.245	90	
p-Nitrotoluene	600	542.177	90	

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\012510expA4.qld, Time: Fri Jan 29 17:40:23 2010

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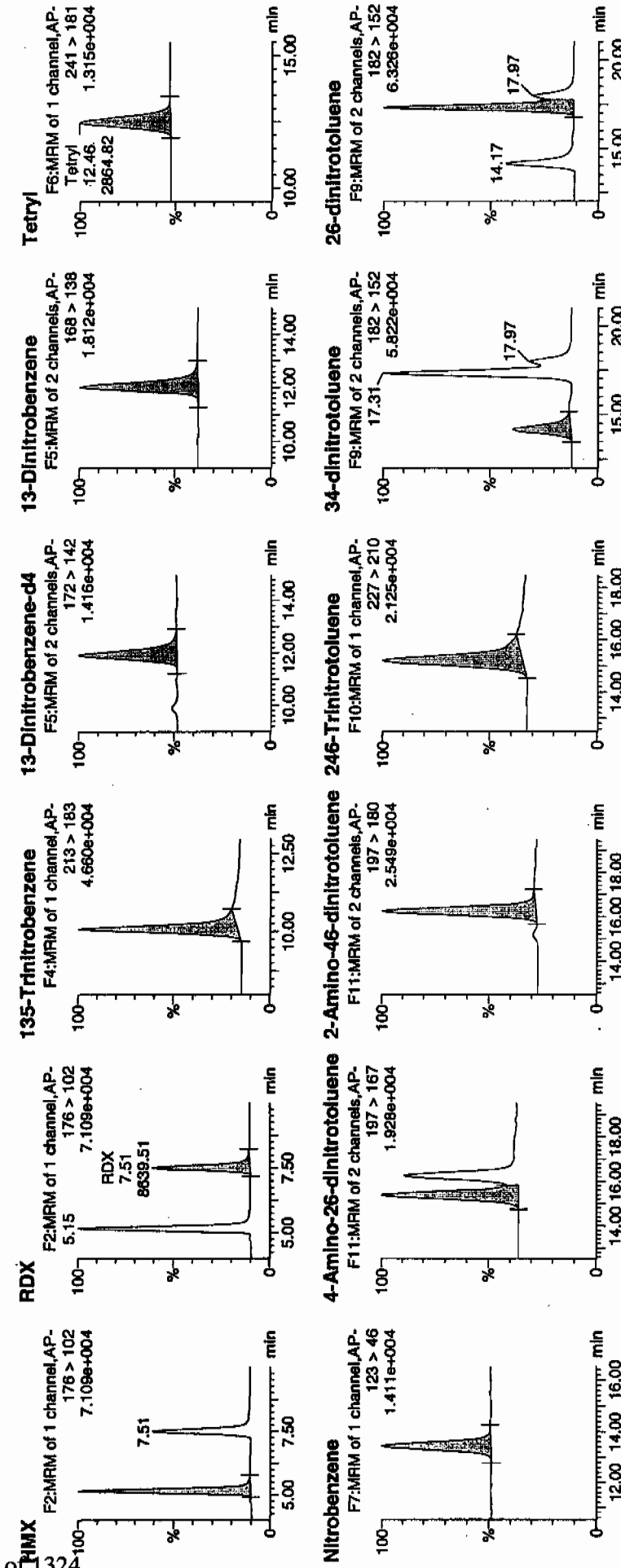
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Time: 09:17:44

ID: WXX100128-07CCV

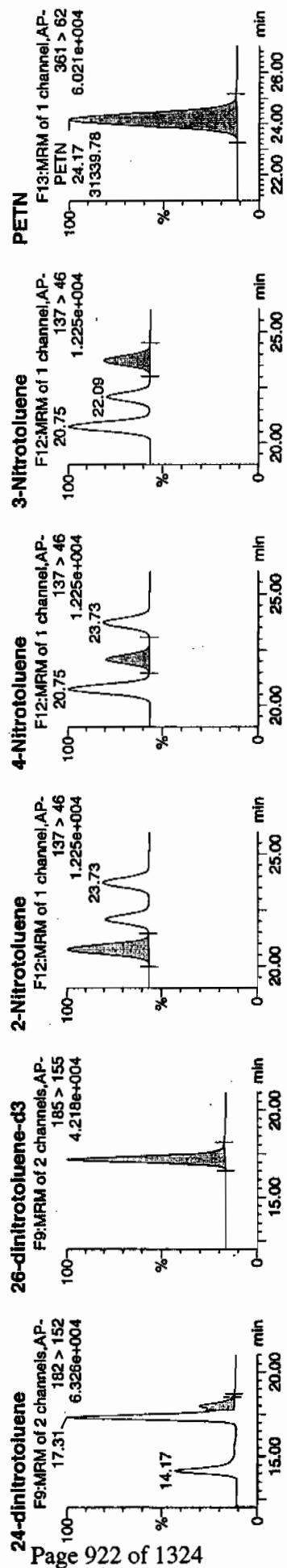
Vial: 1:1,B

11/21/10



Handwritten signature and date: 01/31/10

Dataset: C:\MASSLYN\New\_Exp.PRO\012510expA4.qld, Time: Fri Jan 29 17:40:23 2010



Name	ID	IC	FW	IS	AS	HS	PL	MD	WV	WV	WV	WV	WV	WV
135-Trinitrobenzene	WXX100128-07CCV	176 > 102	5.15	13051.095	2880.596	13051.095	2265.346	db	714.0498	119.0	19.0	1309.8		
13-Dinitrobenzene-d4	WXX100128-07CCV	176 > 102	7.51	8639.514	2880.596	8639.514	1499.605	bb	682.0734	113.7	13.7	737.5		
13-Dinitrobenzene	WXX100128-07CCV	213 > 183	10.08	10860.330	2880.596	10860.330	1885.084	bb	659.2188	109.9	9.9	322.8		
13-Dinitrobenzene	WXX100128-07CCV	172 > 142	11.90	2880.596	2880.596	2880.596	2880.596	bb	485.2102	97.0	-3.0	301.5		
13-Dinitrobenzene	WXX100128-07CCV	168 > 138	12.00	4231.698	2880.596	4231.698	734.518	bb	633.2145	105.5	5.5	401.3		
13-Dinitrobenzene	WXX100128-07CCV	241 > 181	12.46	2864.821	2880.596	2864.821	497.262	bb	572.4781	95.4	-4.6	247.2		
13-Dinitrobenzene	WXX100128-07CCV	123 > 46	13.46	2824.280	2880.596	2824.280	455.510	bb	533.0129	88.8	-11.2	171.5		
13-Dinitrobenzene	WXX100128-07CCV	197 > 167	15.39	5357.976	14827.088	5357.976	180.682	MM	693.5608	115.6	15.6	187.7		
13-Dinitrobenzene	WXX100128-07CCV	197 > 180	16.25	7853.534	14827.088	7853.534	264.837	bb	707.5826	117.9	17.9	451.3		
13-Dinitrobenzene	WXX100128-07CCV	227 > 210	15.21	6898.045	14827.088	6898.045	232.616	bb	731.3508	121.9	21.9	203.3		
13-Dinitrobenzene	WXX100128-07CCV	182 > 152	14.17	8737.130	14827.088	8737.130	294.634	bb	324.4818	108.2	8.2	481.4		
13-Dinitrobenzene	WXX100128-07CCV	182 > 152	17.31	21194.730	14827.088	21194.730	714.730	MM	648.8434	108.1	8.1	733.2		
13-Dinitrobenzene	WXX100128-07CCV	182 > 152	17.97	4889.304	14827.088	4889.304	164.877	MM	648.9834	108.2	8.2	151.7		
13-Dinitrobenzene	WXX100128-07CCV	185 > 155	17.16	14827.088	14827.088	14827.088	14827.088	bb	454.8650	91.0	-9.0	1341.9		
13-Dinitrobenzene	WXX100128-07CCV	137 > 46	20.75	2669.191	14827.088	2669.191	90.011	bb	541.2449	90.2	-9.8	117.5		
13-Dinitrobenzene	WXX100128-07CCV	137 > 46	22.09	1329.311	14827.088	1329.311	44.827	bb	542.1771	90.4	-9.6	61.4		
13-Dinitrobenzene	WXX100128-07CCV	137 > 46	23.73	1518.382	14827.088	1518.382	51.203	bb	548.4478	91.4	-8.6	65.6		
13-Dinitrobenzene	WXX100128-07CCV	361 > 62	24.17	31339.783	14827.088	31339.783	1056.842	bb	591.6116	98.6	-1.4	6152.1		

GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis: 01/29/10  
 Time of Injection: 0917  
 Standard Number: WXX100128-07CCV  
 Data File: EXP0125192a

HMX	119.0
RDX	113.7
135-TNB	109.9
13-DNB	105.5
Tetryl	95.4
Nitrobenzene	88.8
4A-26-DNT	115.6
2A-46-DNT	117.9
246-TNT	121.9
34-DNT(surr)	108.2
26-DNT	108.1
24-DNT	108.2
2-NT	90.2
4-NT	90.4
3-NT	91.4
PETN	98.6

NOT  
1/29/10

Total 1682.8

Average 105.2

*Handwritten: HMC 01/29/10*

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): 10-1210

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0125194a

Analysis Date: 29-JAN-10 10:16

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	48.777	122	
1,3-Dinitrobenzene-d4	500	475.293	95	
2,4,6-Trinitrotoluene	40	42.23	106	
2,4-Dinitrotoluene	40	38.358	96	
2,6-Dinitrotoluene	40	38.828	97	
2,6-Dinitrotoluene-d3	500	454.754	91	
2-Amino-4,6-dinitrotoluene	40	47.076	118	
3,4-Dinitrotoluene	20	18.986	95	
4-Amino-2,6-dinitrotoluene	40	43.769	109	
HMX	40	45.789	114	
Nitrobenzene	40	29.921	75	
PETN	40	30.598	76	
RDX	40	42.011	105	
Tetryl	40	40.656	102	
m-Dinitrobenzene	40	41.817	105	
m-Nitrotoluene	40	34.401	86	
o-Nitrotoluene	40	34.132	85	
p-Nitrotoluene	40	32.943	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 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\012510expA4.qld, Time: Fri Jan 29 17:40:23 2010

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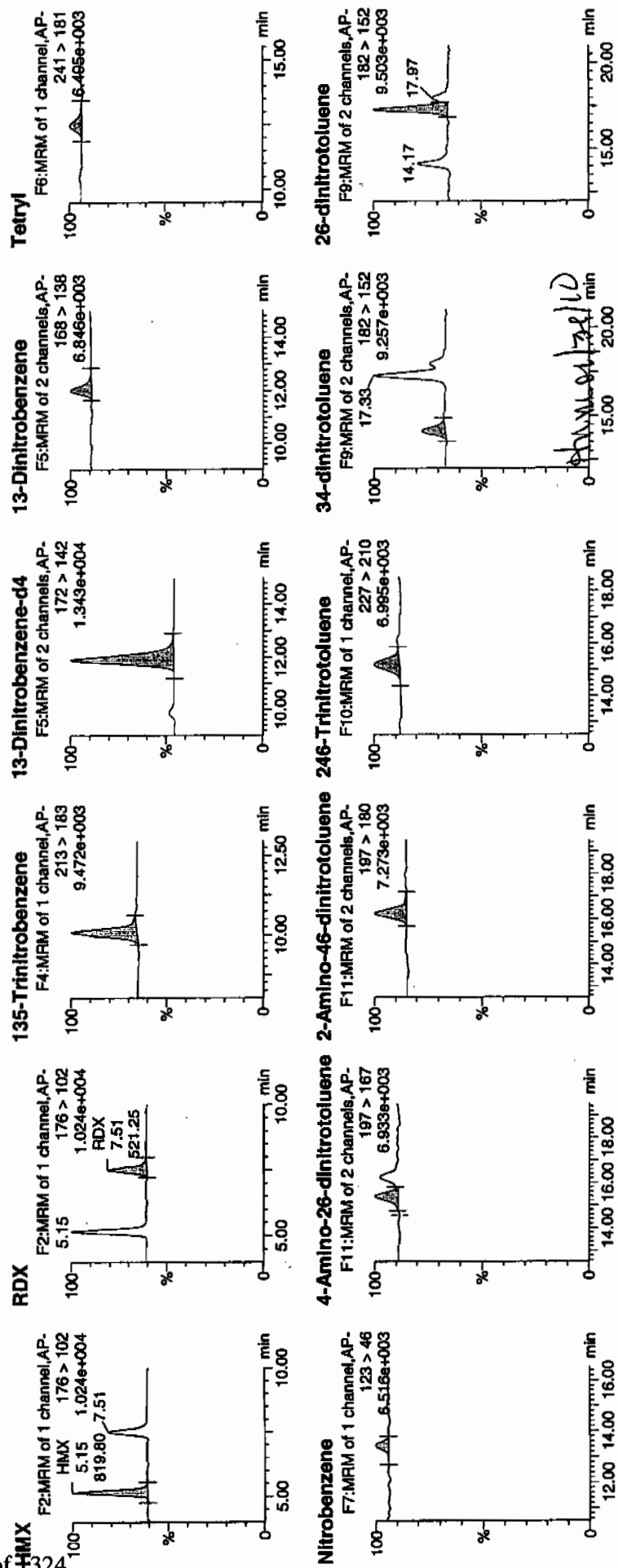
Date: 29-Jan-2010

Time: 10:16:47

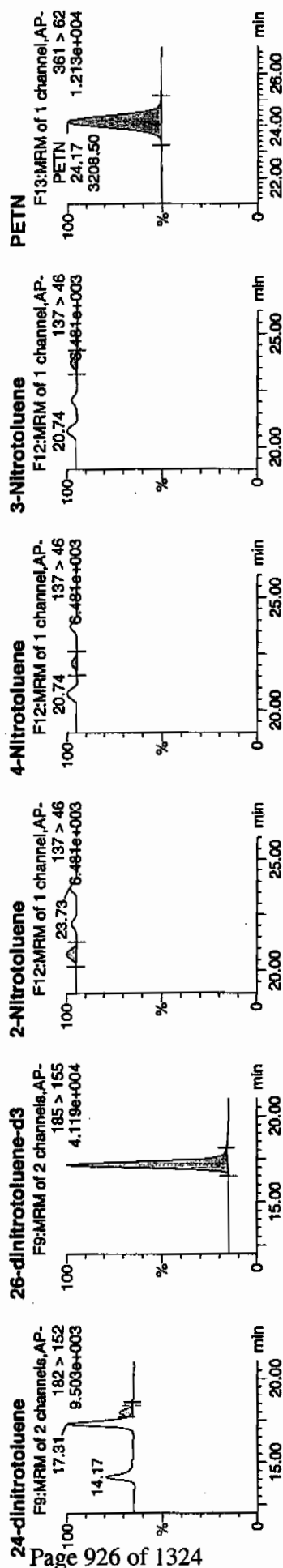
ID: WXX100128-08CRI

Vial: 1:1,C

1/29/10



Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA4.qld, Time: Fri Jan 29 17:40:23 2010



Name	ID	Temp (°C)	Pressure (atm)	Yield (%)	Purity (%)	Boiling Point (°C)	Melting Point (°C)	Density (g/mL)	Refractive Index	Log P				
HMX	WXX100128-08CRI	176 > 102	5.15	819.804	2821.720	819.804	145.267	bb	45.7889	114.5	14.5	151.4		
RDX	WXX100128-08CRI	176 > 102	7.51	521.253	2821.720	521.253	92.364	bb	42.0106	105.0	5.0	79.9		
135-Trinitrobenzene	WXX100128-08CRI	213 > 183	10.07	934.006	2821.720	934.006	165.503	bb	48.7768	121.9	21.9	144.3		
13-Dinitrobenzene-d4	WXX100128-08CRI	172 > 142	11.90	2821.720	2821.720	2821.720	2821.720	bb	475.2931	95.1	-4.9	491.1		
13-Dinitrobenzene	WXX100128-08CRI	168 > 138	12.04	273.743	2821.720	273.743	48.506	bb	41.8165	104.5	4.5	18.5		
Tetryl	WXX100128-08CRI	241 > 181	12.46	199.293	2821.720	199.293	35.314	bb	40.6557	101.6	1.6	16.2		
Nitrobenzene	WXX100128-08CRI	123 > 46	13.41	144.303	2821.720	144.303	25.570	bb	29.9207	74.8	-25.2	10.6		
4-Amino-2,6-dinitrotoluene	WXX100128-08CRI	197 > 167	15.39	338.044	14823.482	338.044	11.402	MM	29-Jan-10	17:25:17	43.7686	109.4	9.4	18.9
2-Amino-4,6-dinitrotoluene	WXX100128-08CRI	197 > 180	16.25	522.374	14823.482	522.374	17.620	bb	47.0760	117.7	17.7	35.3	35.3	
2,4,6-Trinitrotoluene	WXX100128-08CRI	227 > 210	15.21	398.211	14823.482	398.211	13.432	bb	42.2298	105.6	5.6	24.2	24.2	
3,4-dinitrotoluene	WXX100128-08CRI	182 > 152	14.17	511.096	14823.482	511.096	17.239	bb	18.9858	94.9	-5.1	35.6	35.6	
26-dinitrotoluene	WXX100128-08CRI	182 > 152	17.31	1268.026	14823.482	1268.026	42.771	MM	29-Jan-10	17:35:35	38.8281	97.1	-2.9	89.1
24-dinitrotoluene	WXX100128-08CRI	182 > 152	17.97	288.922	14823.482	288.922	9.745	MM	29-Jan-10	17:37:14	38.3583	95.9	-4.1	17.7
26-dinitrotoluene-d3	WXX100128-08CRI	185 > 155	17.16	14823.482	14823.482	14823.482	14823.482	bb	454.7544	91.0	-9.0	1237.8	1237.8	
2-Nitrotoluene	WXX100128-08CRI	137 > 46	20.74	168.282	14823.482	168.282	5.676	bb	34.1317	85.3	-14.7	57.4	57.4	
4-Nitrotoluene	WXX100128-08CRI	137 > 46	22.09	80.751	14823.482	80.751	2.724	bb	32.9434	82.4	-17.6	30.6	30.6	
3-Nitrotoluene	WXX100128-08CRI	137 > 46	23.73	95.216	14823.482	95.216	3.212	bb	34.4009	86.0	-14.0	36.4	36.4	
PETN	WXX100128-08CRI	361 > 62	24.17	3208.496	14823.482	3208.496	108.223	bb	30.5980	76.5	-23.5	648.1	648.1	



# GRAND MEAN AVERAGE

Vendor: UltraScientific  
 Date of Analysis 01/29/10  
 Time of Injection 1016  
 Standard Number WXX100128-08CRI  
 Data File EXP0125194a

HMX	114.5
RDX	105.0
135-TNB	121.9
13-DNB	104.5
Tetryl	101.6
Nitrobenzene	74.8
4A-26-DNT	109.4
2A-46-DNT	117.7
246-TNT	105.6
34-DNT(surr)	94.9
26-DNT	97.1
24-DNT	95.9
2-NT	85.3
4-NT	82.4
3-NT	86.0
PETN	76.5

1007  
1/29/10

Total 1573.1

Average 98.3

Handwritten signature/initials

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): 10-1210

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0125204a

Analysis Date: 29-JAN-10 15:11

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	738.173	123	*
1,3-Dinitrobenzene-d4	500	472.42	94	
2,4,6-Trinitrotoluene	600	700.688	117	
2,4-Dinitrotoluene	600	654.353	109	
2,6-Dinitrotoluene	600	620.767	103	
2,6-Dinitrotoluene-d3	500	437.034	87	
2-Amino-4,6-dinitrotoluene	600	721.572	120	*
3,4-Dinitrotoluene	300	319.312	106	
4-Amino-2,6-dinitrotoluene	600	708.447	118	
HMX	600	717.24	120	
Nitrobenzene	600	535.048	89	
PETN	600	638.27	106	
RDX	600	747.295	125	*
Tetryl	600	591.727	99	
m-Dinitrobenzene	600	617.099	103	
m-Nitrotoluene	600	633.589	106	
o-Nitrotoluene	600	566.348	94	
p-Nitrotoluene	600	607.758	101	

Recovery Limits:

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

Other Target Analytes 80-120%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

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

Dataset: C:\MASSLYNX\New\_Exp\PRO\012510expA4.qld, Time: Fri Jan 29 17:40:23 2010

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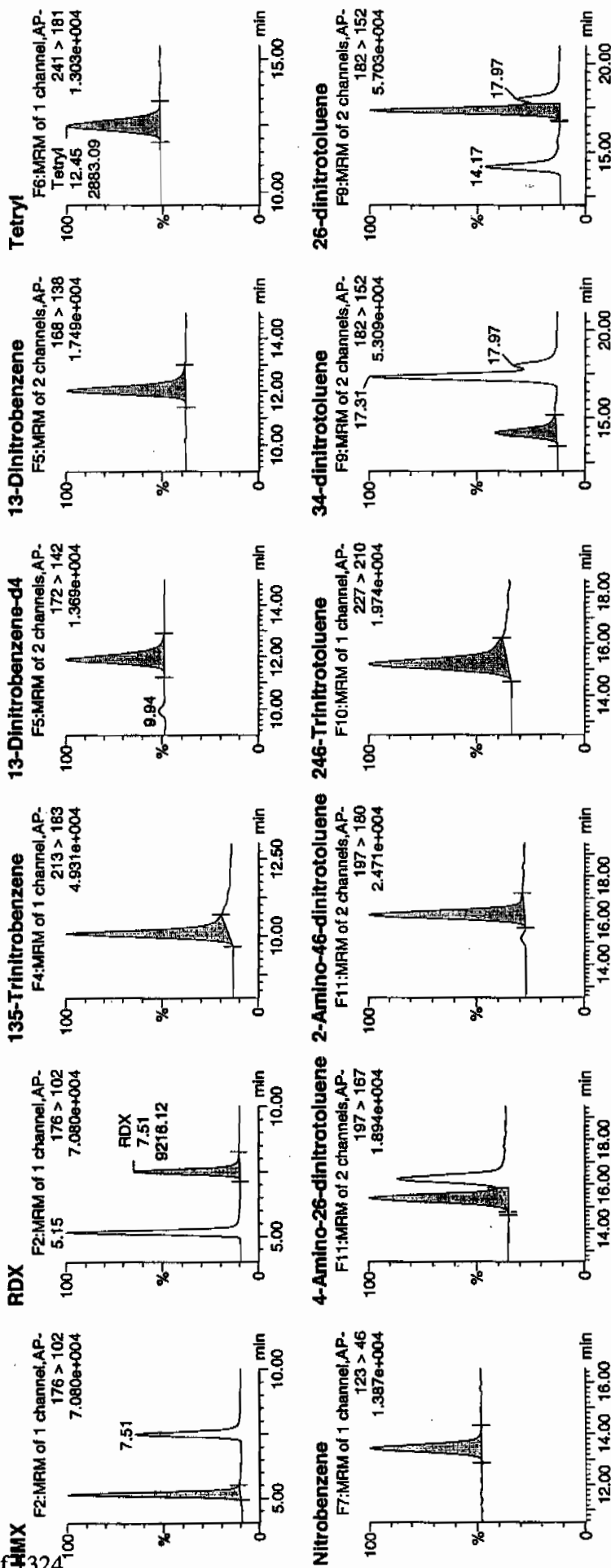
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Time: 15:11:37

ID: WXX100128-07CCV

Signal: 1:1,B

1/29/10



Handwritten signature and date: 1/29/10

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA4.qld, Time: Fri Jan 29 17:40:23 2010

# GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis: 01/29/10  
 Time of Injection: 1511  
 Standard Number: WXX100128-07CCV  
 Data File: EXP0125204a

HMX	119.5
RDX	124.5
135-TNB	123.0
13-DNB	102.8
Tetryl	98.6
Nitrobenzene	89.2
4A-26-DNT	118.1
2A-46-DNT	120.3
246-TNT	116.8
34-DNT(surr)	106.4
26-DNT	103.5
24-DNT	109.1
2-NT	94.4
4-NT	101.3
3-NT	105.6
PETN	106.4

WAF  
1/29/10

Total 1739.5

Average 108.7 ✓

*WML 01/29/10*

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): 10-1210

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0125206a

Analysis Date: 29-JAN-10 16:10

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	54.269	136	*
1,3-Dinitrobenzene-d4	500	405.494	81	
2,4,6-Trinitrotoluene	40	38.033	95	
2,4-Dinitrotoluene	40	27.59	69	*
2,6-Dinitrotoluene	40	40.964	102	
2,6-Dinitrotoluene-d3	500	445.917	89	
2-Amino-4,6-dinitrotoluene	40	45.746	114	
3,4-Dinitrotoluene	20	20.457	102	
4-Amino-2,6-dinitrotoluene	40	42.305	106	
HMX	40	54.951	137	*
Nitrobenzene	40	49.324	123	
PETN	40	32.381	81	
RDX	40	42.281	106	
Tetryl	40	56.523	141	*
m-Dinitrobenzene	40	39.227	98	
m-Nitrotoluene	40	39.714	99	
o-Nitrotoluene	40	36.797	92	
p-Nitrotoluene	40	28.112	70	

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\012510expA4.qld, Time: Fri Jan 29 17:40:23 2010

Name: C:\MASSLYNX\NEW\_EXP\_PRO\Data\EXP0125206a

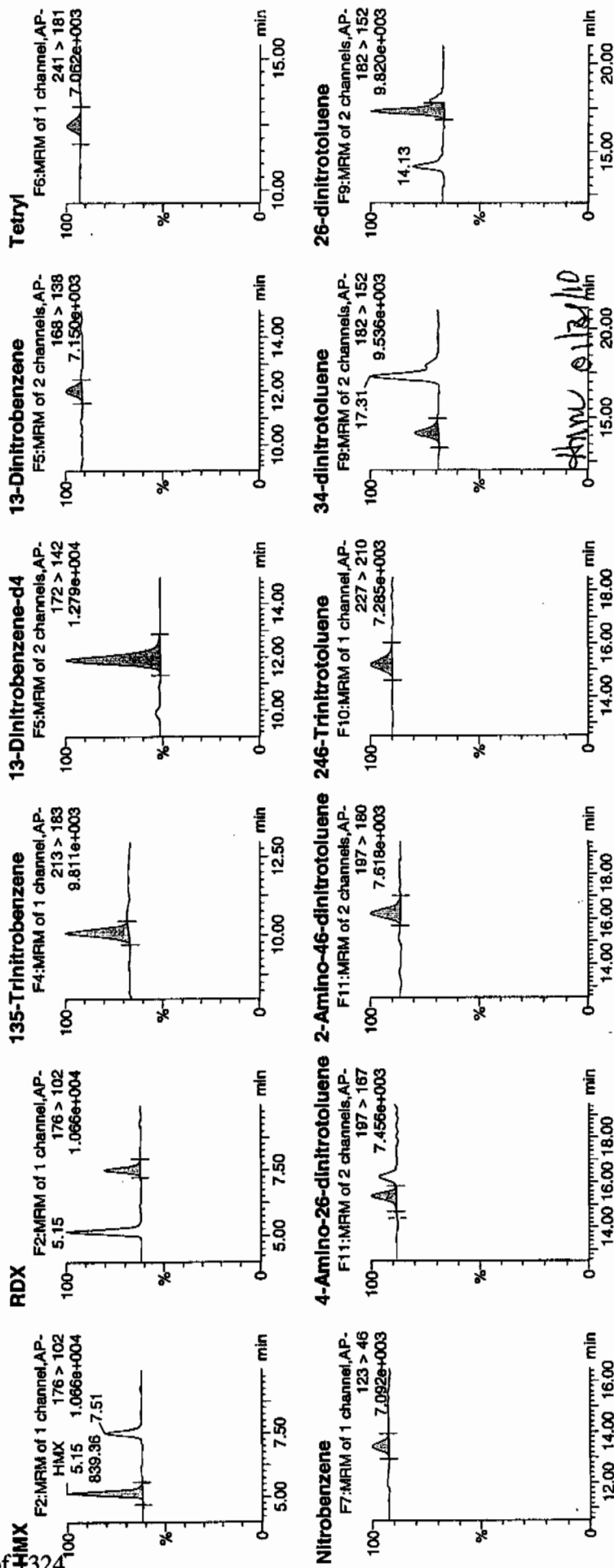
Date: 29-Jan-2010

Time: 16:10:40

ID: WXX100128-08CRI

Trial: 1:1,C

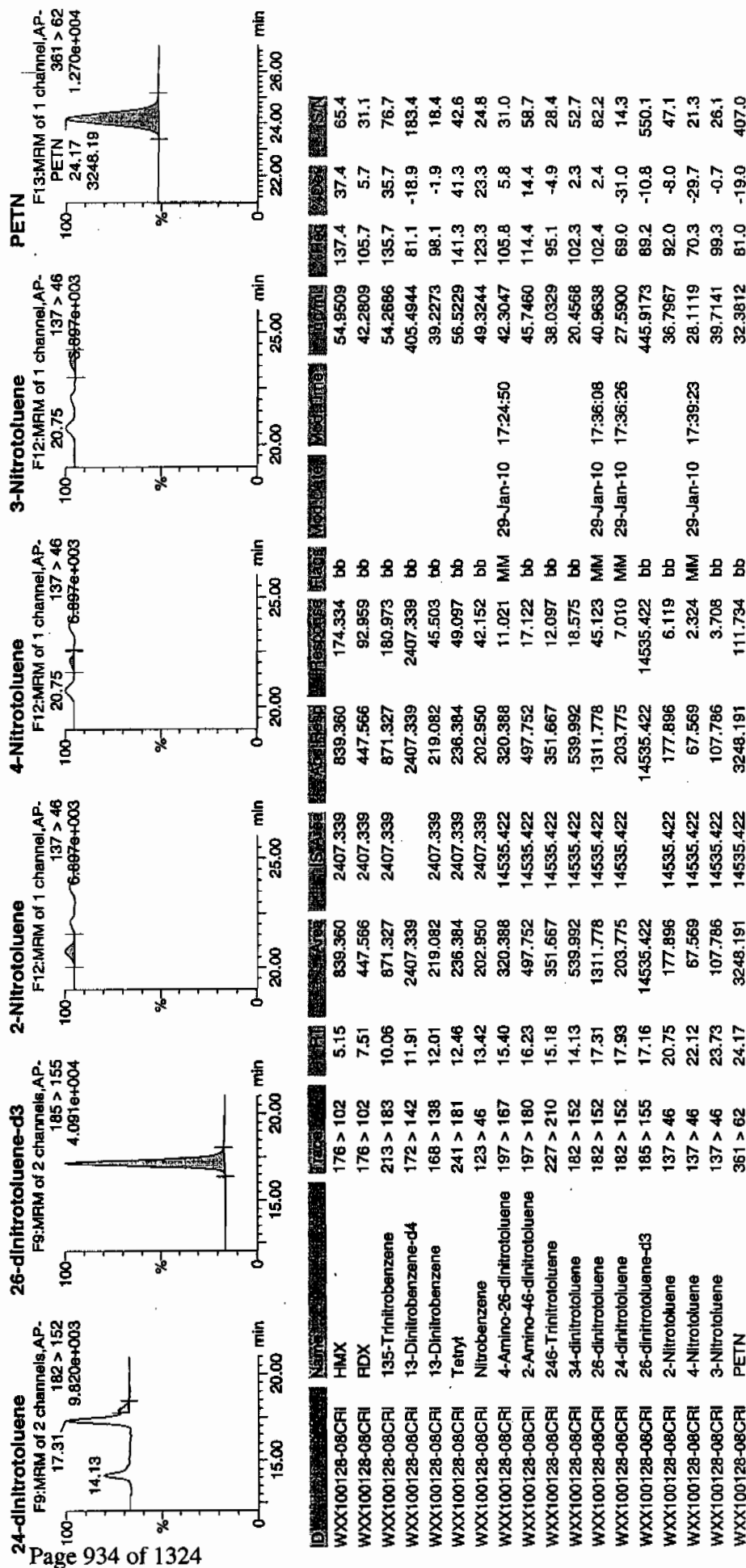
1/29/10  
MJP



Printed: Fri Jan 29 17:42:56 2010, Page 50 of 51

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

Dataset: C:\MASSLYNX\New\_Exp\_PRO\012510expA4.qld, Time: Fri Jan 29 17:40:23 2010





# GRAND MEAN AVERAGE

Vendor: UltraScientific  
 Date of Analysis 01/29/10  
 Time of Injection 1610  
 Standard Number WXX100128-08CRI  
 Data File EXP0125206a

HMX	137.4
RDX	105.7
135-TNB	135.7
13-DNB	98.1
Tetryl	141.3
Nitrobenzene	123.3
4A-26-DNT	105.8
2A-46-DNT	114.4
246-TNT	95.1
34-DNT(surr)	102.3
26-DNT	102.4
24-DNT	69.0
2-NT	92.0
4-NT	70.3
3-NT	99.3
PETN	81.0

not  
1/29/10

Total 1673.1

Average 104.6

*Annex 13/10*

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60%

7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1210

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0125215a

Analysis Date: 29-JAN-10 20:36

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	740.529	123	*
1,3-Dinitrobenzene-d4	500	469.12	94	
2,4,6-Trinitrotoluene	600	596.016	99	
2,4-Dinitrotoluene	600	566.653	94	
2,6-Dinitrotoluene	600	608.922	101	
2,6-Dinitrotoluene-d3	500	534.373	107	
2-Amino-4,6-dinitrotoluene	600	637.224	106	
3,4-Dinitrotoluene	300	277.56	93	
4-Amino-2,6-dinitrotoluene	600	598.904	100	
HMX	600	698.813	116	
Nitrobenzene	600	539.159	90	
PETN	600	493.36	82	
RDX	600	765.654	128	*
Tetryl	600	594.694	99	
m-Dinitrobenzene	600	612.92	102	
m-Nitrotoluene	600	492.714	82	
o-Nitrotoluene	600	447.627	75	*
p-Nitrotoluene	600	456.461	76	*

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 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\012510expA5.qld, Time: Sat Jan 30 10:06:54 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125215a

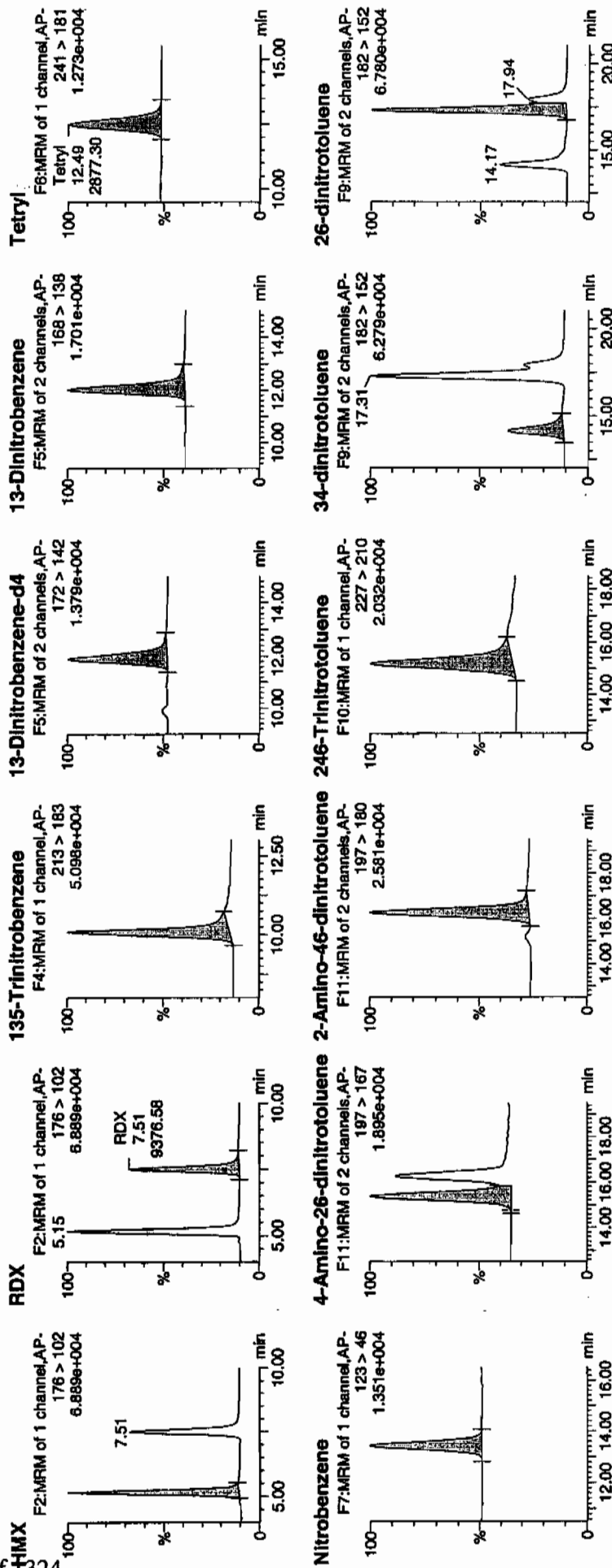
Date: 29-Jan-2010

Time: 20:36:17

ID: WXX100128-07CCV

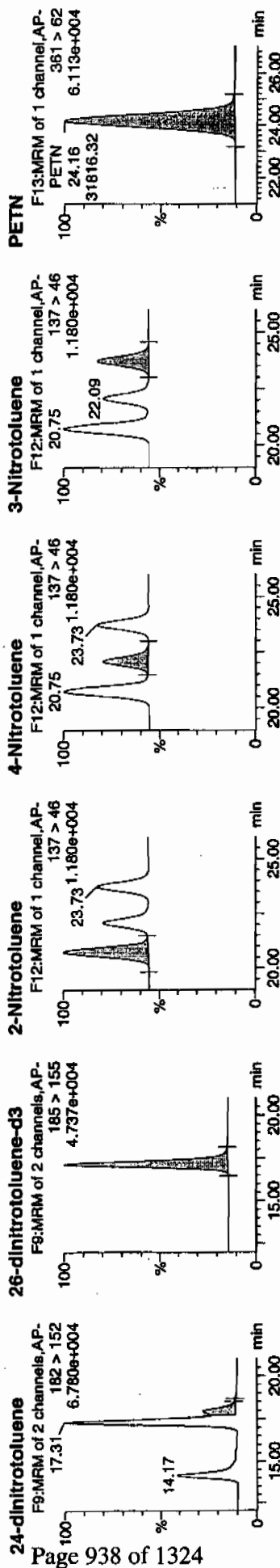
Vial: 1:1,B

WXX  
1/30/10



Hand 8/13/10

Dataset: C:\MASSL\Y\X\New\_Exp.PRO\012510expA5.qld, Time: Sat Jan 30 10:06:54 2010



ID	Name	Time	Area	Height	Width	Area%	Height%	Width%	Area%	Height%	Width%
WXX100128-07CCV	HMX	176 > 102	5.15	12349.028	2785.069	12349.028	2217.006	bb	698.8126	116.5	16.5
WXX100128-07CCV	FDX	176 > 102	7.51	9376.575	2785.069	9376.575	1683.365	bb	765.6538	127.6	27.6
WXX100128-07CCV	135-Trinitrobenzene	213 > 183	10.09	11776.004	2785.069	11776.004	2114.131	bb	740.5295	123.4	23.4
WXX100128-07CCV	13-Dinitrobenzene-d4	172 > 142	11.89	2785.069	2785.069	2785.069	2785.069	bb	469.1195	93.8	-6.2
WXX100128-07CCV	13-Dinitrobenzene	168 > 138	12.03	3960.238	2785.069	3960.238	710.977	bb	612.9201	102.2	2.2
WXX100128-07CCV	Tetryl	241 > 181	12.49	2877.303	2785.069	2877.303	516.559	bb	594.6938	99.1	-0.9
WXX100128-07CCV	Nitrobenzene	123 > 46	13.45	2566.510	2785.069	2566.510	460.782	bb	539.1590	89.9	-10.1
WXX100128-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.39	5435.452	17418.791	5435.452	156.023	MM	598.9041	99.8	-0.2
WXX100128-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.25	8308.872	17418.791	8308.872	238.503	bb	637.2238	106.2	6.2
WXX100128-07CCV	246-Trinitrotoluene	227 > 210	15.21	6604.200	17418.791	6604.200	189.571	bb	596.0158	99.3	-0.7
WXX100128-07CCV	34-dinitrotoluene	182 > 152	14.17	8780.057	17418.791	8780.057	252.028	bb	277.5599	92.5	-7.5
WXX100128-07CCV	26-dinitrotoluene	182 > 152	17.31	23367.473	17418.791	23367.473	670.755	MM	608.9219	101.5	1.5
WXX100128-07CCV	24-dinitrotoluene	182 > 152	17.94	5015.411	17418.791	5015.411	143.966	MM	566.5535	94.4	-5.6
WXX100128-07CCV	26-dinitrotoluene-d3	185 > 155	17.16	17418.791	17418.791	17418.791	17418.791	bb	534.3732	106.9	6.9
WXX100128-07CCV	2-Nitrotoluene	137 > 46	20.75	2593.369	17418.791	2593.369	74.442	bb	447.6271	74.6	-25.4
WXX100128-07CCV	4-Nitrotoluene	137 > 46	22.09	1314.775	17418.791	1314.775	37.740	bb	456.4612	76.1	-23.9
WXX100128-07CCV	3-Nitrotoluene	137 > 46	23.73	1602.516	17418.791	1602.516	46.000	bb	492.7136	82.1	-17.9
WXX100128-07CCV	PETN	361 > 62	24.16	31816.324	17418.791	31816.324	913.276	bb	493.3599	82.2	-17.8

# GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis: 01/29/10  
 Time of Injection: 2036  
 Standard Number: WXX100128-07CCV  
 Data File: EXP0125215a

HMX	116.5
RDX	127.6
135-TNB	123.4
13-DNB	102.2
Tetryl	99.1
Nitrobenzene	89.9
4A-26-DNT	99.8
2A-46-DNT	106.2
246-TNT	99.3
34-DNT(surr)	92.5
26-DNT	101.5
24-DNT	94.4
2-NT	74.6
4-NT	76.1
3-NT	82.1
PETN	82.2

Total 1567.4

Average 98.0

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): 10-1210

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0125217a

Analysis Date: 29-JAN-10 21:35

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	45.813	115	
1,3-Dinitrobenzene-d4	500	514.658	103	
2,4,6-Trinitrotoluene	40	32.321	81	
2,4-Dinitrotoluene	40	36.835	92	
2,6-Dinitrotoluene	40	39.093	98	
2,6-Dinitrotoluene-d3	500	527.397	105	
2-Amino-4,6-dinitrotoluene	40	40.471	101	
3,4-Dinitrotoluene	20	21.544	108	
4-Amino-2,6-dinitrotoluene	40	40.284	101	
HMX	40	48.901	122	
Nitrobenzene	40	39.725	99	
PETN	40	25.898	65	*
RDX	40	44.656	112	
Tetryl	40	42.758	107	
m-Dinitrobenzene	40	35.479	89	
m-Nitrotoluene	40	35.496	89	
o-Nitrotoluene	40	35.748	89	
p-Nitrotoluene	40	36.579	91	

Recovery Limits:

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

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA5.qld, Time: Sat Jan 30 10:06:54 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125217a

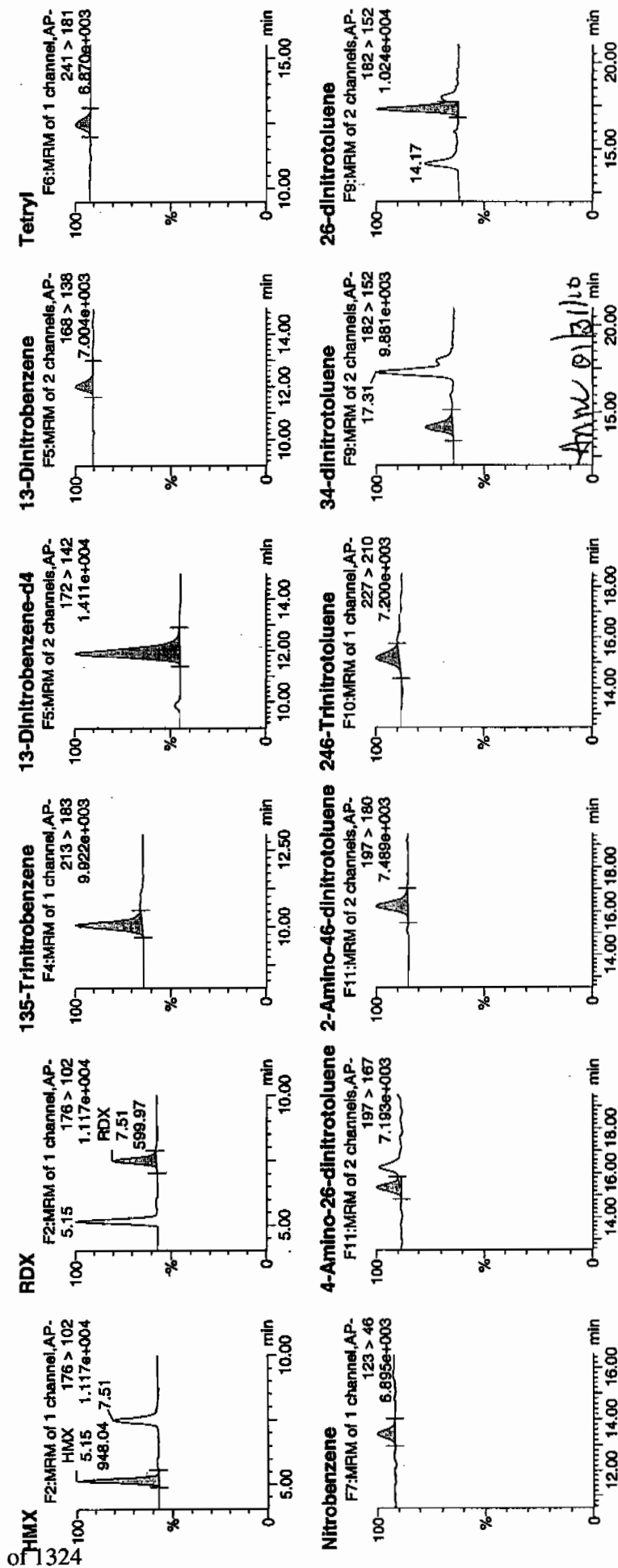
Date: 29-Jan-2010

Time: 21:35:21

ID: WXX100128-08CRI

Vial: 1:1,C

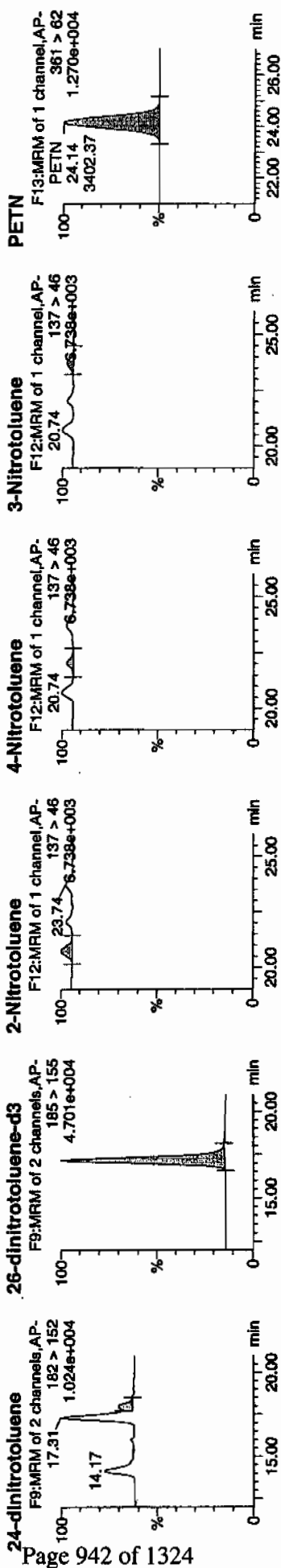
1/30/10



Printed: Sat Jan 30 10:07:34 2010, Page 22 of 71

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

Dataset: C:\MASSLYNX\New\_Exp\_PRO\012510expA5.qld, Time: Sat Jan 30 10:06:54 2010



ID	Name	Area	Height	Width	Area%	Height%	Width%	Area%	Height%	Width%	Area%	Height%	Width%	Area%	Height%	Width%	Area%	Height%	Width%
WX100128-08CRI	HMX	176 > 102	5.15	948.040	3055.423	948.040	155.141	bb	48.9012	122.3	22.3	235.9							
WX100128-08CRI	RDX	176 > 102	7.51	599.968	3055.423	599.968	96.181	bb	44.6561	111.6	11.6	124.0							
WX100128-08CRI	135-Trinitrobenzene	213 > 183	10.07	960.349	3055.423	960.349	157.155	bb	45.8132	114.5	14.5	126.4							
WX100128-08CRI	13-Dinitrobenzene-d4	172 > 142	11.89	3055.423	3055.423	3055.423	41.155	bb	514.6582	102.9	2.9	523.1							
WX100128-08CRI	13-Dinitrobenzene	168 > 138	12.00	251.490	3055.423	251.490	37.140	bb	35.4787	88.7	-11.3	38.3							
WX100128-08CRI	Tetryl	241 > 181	12.45	226.958	3055.423	226.958	33.949	bb	42.7581	106.9	6.9	24.9							
WX100128-08CRI	Nitrobenzene	123 > 46	13.41	207.457	3055.423	207.457	10.495	MM	39.7252	99.3	-0.7	23.1							
WX100128-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.36	360.831	17191.377	360.831	15.148	bb	40.2840	100.7	0.7	32.9							
WX100128-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.22	520.821	17191.377	520.821	15.148	bb	40.4712	101.2	1.2	53.0							
WX100128-08CRI	246-Trinitrotoluene	227 > 210	15.21	353.459	17191.377	353.459	10.280	bb	32.3209	80.8	-19.2	26.1							
WX100128-08CRI	34-dinitrotoluene	182 > 152	14.17	672.612	17191.377	672.612	19.562	bb	21.5442	107.7	7.7	20.6							
WX100128-08CRI	26-dinitrotoluene	182 > 152	17.31	1480.617	17191.377	1480.617	43.063	MM	39.0931	97.7	-2.3	60.3							
WX100128-08CRI	24-dinitrotoluene	182 > 152	18.01	321.769	17191.377	321.769	9.358	MM	36.8352	92.1	-7.9	11.4							
WX100128-08CRI	26-dinitrotoluene-d3	185 > 155	17.16	17191.377	17191.377	17191.377	17191.377	bb	527.3966	105.5	5.5	1071.5							
WX100128-08CRI	2-Nitrotoluene	137 > 46	20.74	204.407	17191.377	204.407	5.945	bb	35.7483	89.4	-10.6	36.2							
WX100128-08CRI	4-Nitrotoluene	137 > 46	22.05	103.984	17191.377	103.984	3.024	bb	36.5785	91.4	-8.6	20.8							
WX100128-08CRI	3-Nitrotoluene	137 > 46	23.74	113.940	17191.377	113.940	3.314	bb	35.4957	88.7	-11.3	20.8							
WX100128-08CRI	PETN	361 > 62	24.14	3402.367	17191.377	3402.367	98.956	bb	25.8976	64.7	-35.3	365.6							



# GRAND MEAN AVERAGE

Vendor: UltraScientific  
 Date of Analysis 01/29/10  
 Time of Injection 2135  
 Standard Number WXX100128-08CRI  
 Data File EXP0125217a

HMX	122.3
RDX	111.6
135-TNB	114.5
13-DNB	88.7
Tetryl	106.9
Nitrobenzene	99.3
4A-26-DNT	100.7
2A-46-DNT	101.2
246-TNT	80.8
34-DNT(surr)	107.7
26-DNT	97.7
24-DNT	92.1
2-NT	89.4
4-NT	91.4
3-NT	88.7
PETN	64.7

WAT  
1/29/10

Total 1557.7

Average 97.4

WAT 01/29/10

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): 10-1210

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0125228a

Analysis Date: 30-JAN-10 03:00

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	738.454	123	*
1,3-Dinitrobenzene-d4	500	426.766	85	
2,4,6-Trinitrotoluene	600	715.856	119	
2,4-Dinitrotoluene	600	634.373	106	
2,6-Dinitrotoluene	600	618.909	103	
2,6-Dinitrotoluene-d3	500	452.481	90	
2-Amino-4,6-dinitrotoluene	600	715.265	119	
3,4-Dinitrotoluene	300	339.99	113	
4-Amino-2,6-dinitrotoluene	600	699.509	117	
HMX	600	717.722	120	
Nitrobenzene	600	645.248	108	
PETN	600	655.849	109	
RDX	600	740.648	123	*
Tetryl	600	741.088	124	*
m-Dinitrobenzene	600	627.78	105	
m-Nitrotoluene	600	594.821	99	
o-Nitrotoluene	600	559.883	93	
p-Nitrotoluene	600	584.99	97	

Recovery Limits:

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

Other Target Analytes 80-120%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

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

Dataset: C:\MASSLYNX\New\_Exp\PRO1012510expA5.qld, Time: Sat Jan 30 10:06:54 2010

Name: C:\MASSLYNX\NEW\_EXP\PRO1012510expA5.qld

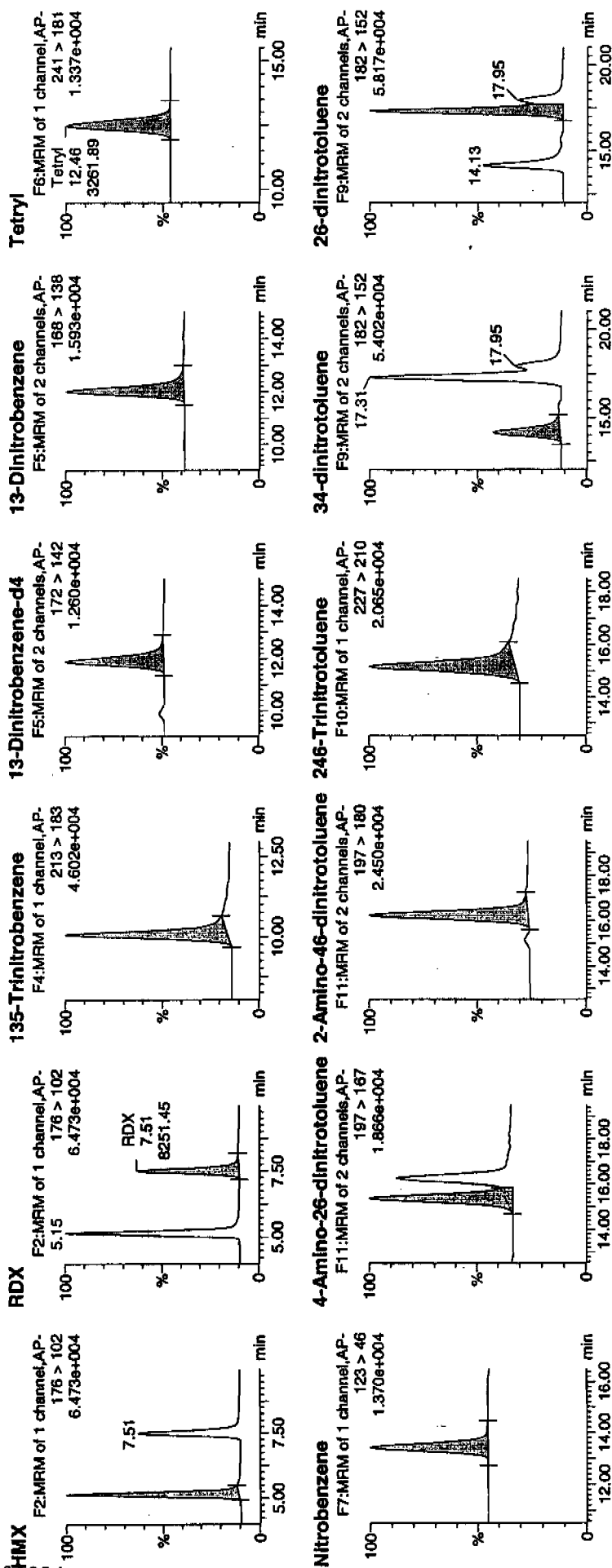
Date: 30-Jan-2010

Time: 03:00:08

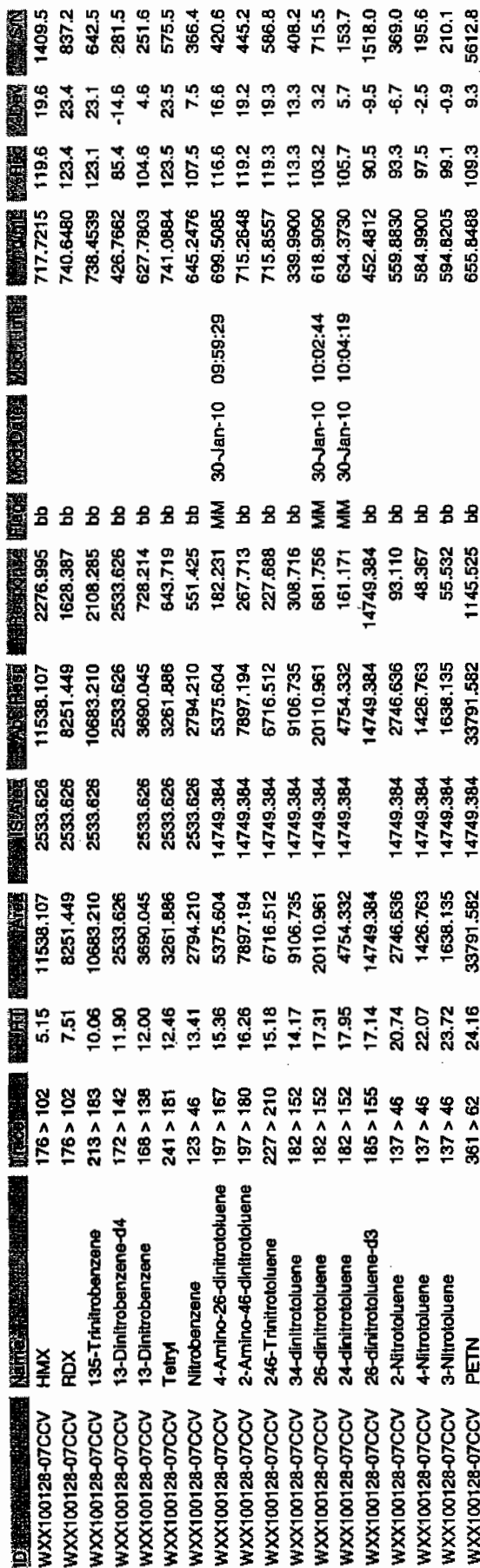
ID: WXX100128-07CCV

File: 1:1,B

1/30/10



1/30/10



GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis: 01/30/10  
 Time of Injection: 0300  
 Standard Number: WXX100128-07CCV  
 Data File: EXP0125228a

HMX	119.6
RDX	123.4
135-TNB	123.1
13-DNB	104.6
Tetryl	123.5
Nitrobenzene	107.5
4A-26-DNT	116.6
2A-46-DNT	119.2
246-TNT	119.3
34-DNT(surr)	113.3
26-DNT	103.2
24-DNT	105.7
2-NT	93.3
4-NT	97.5
3-NT	99.1
PETN	109.3

*100%  
1/30/10*

Total 1778.2

Average 111.1

*Home on 1/30/10*

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): 10-1210

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0125230a

Analysis Date: 30-JAN-10 03:59

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	49.82	125	
1,3-Dinitrobenzene-d4	500	466.753	93	
2,4,6-Trinitrotoluene	40	35.201	88	
2,4-Dinitrotoluene	40	33.512	84	
2,6-Dinitrotoluene	40	38.736	97	
2,6-Dinitrotoluene-d3	500	471.294	94	
2-Amino-4,6-dinitrotoluene	40	39.718	99	
3,4-Dinitrotoluene	20	19.397	97	
4-Amino-2,6-dinitrotoluene	40	44.278	111	
HMX	40	37.74	94	
Nitrobenzene	40	36.598	91	
PETN	40	33.329	83	
RDX	40	43.234	108	
Tetryl	40	52.361	131	*
m-Dinitrobenzene	40	38.67	97	
m-Nitrotoluene	40	50.387	126	
o-Nitrotoluene	40	36.31	91	
p-Nitrotoluene	40	44.218	111	

Recovery Limits:

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

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\102510expA5.qld, Time: Sat Jan 30 10:06:54 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125230a

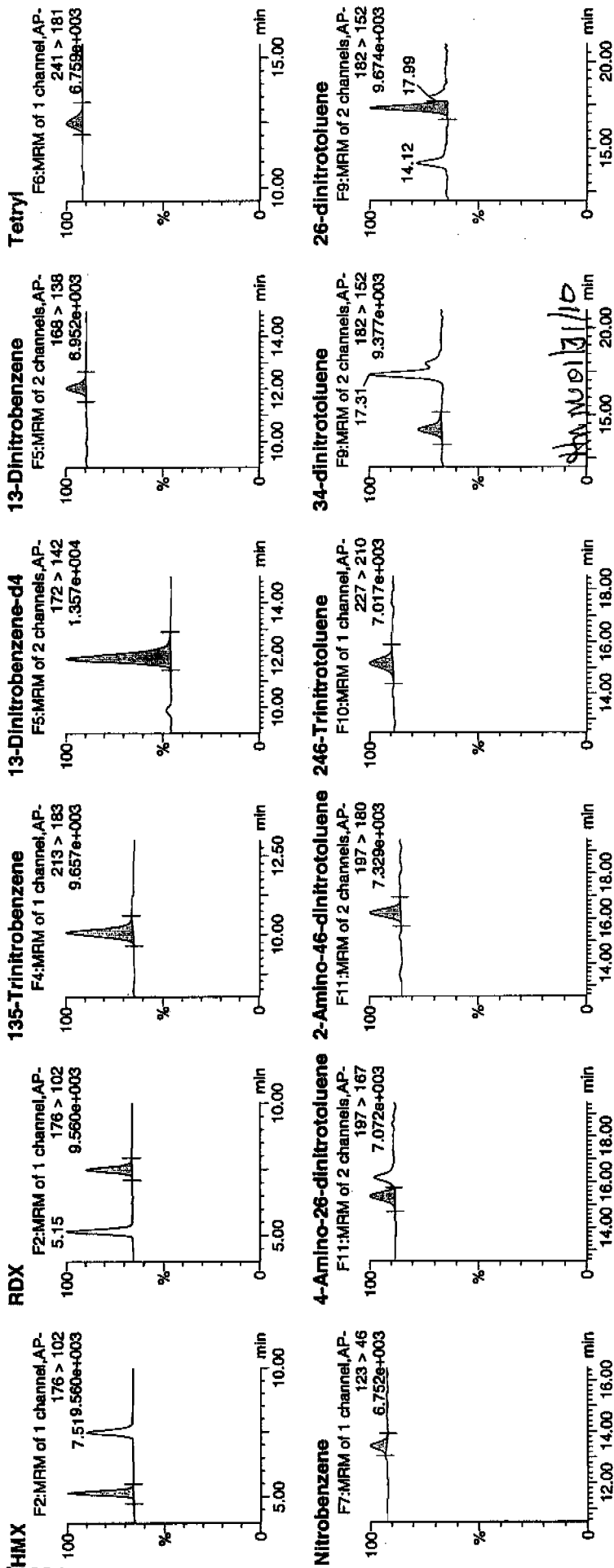
Date: 30-Jan-2010

Time: 03:59:12

ID: WXX100128-08CRI

Vial: 1:1,C

1324







GRAND MEAN AVERAGE

Vendor: UltraScientific  
 Date of Analysis 01/30/10  
 Time of Injection 0359  
 Standard Number WXX100128-08CRI  
 Data File EXP0125230a

HMX	94.3
RDX	108.1
135-TNB	124.6
13-DNB	96.7
Tetryl	130.9
Nitrobenzene	91.5
4A-26-DNT	110.7
2A-46-DNT	99.3
246-TNT	88.0
34-DNT(surr)	97.0
26-DNT	96.8
24-DNT	83.8
2-NT	90.8
4-NT	110.5
3-NT	126.0
PETN	83.3

*not  
1/30/10*

Total 1632.3

Average 102.0

*mark 2/13/10*

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60%

7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1210

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0125239a

Analysis Date: 30-JAN-10 08:25

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	717.705	120	
1,3-Dinitrobenzene-d4	500	428.947	86	
2,4,6-Trinitrotoluene	600	649.883	108	
2,4-Dinitrotoluene	600	644.977	107	
2,6-Dinitrotoluene	600	631.102	105	
2,6-Dinitrotoluene-d3	500	474.992	95	
2-Amino-4,6-dinitrotoluene	600	649.449	108	
3,4-Dinitrotoluene	300	291.019	97	
4-Amino-2,6-dinitrotoluene	600	643.046	107	
HMX	600	785.791	131	*
Nitrobenzene	600	586.767	98	
PETN	600	544.95	91	
RDX	600	777.328	130	*
Tetryl	600	641.099	107	
m-Dinitrobenzene	600	657.998	110	
m-Nitrotoluene	600	568.641	95	
o-Nitrotoluene	600	540.929	90	
p-Nitrotoluene	600	540.539	90	

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\012510expA5.qld, Time: Sat Jan 30 10:06:54 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125239a

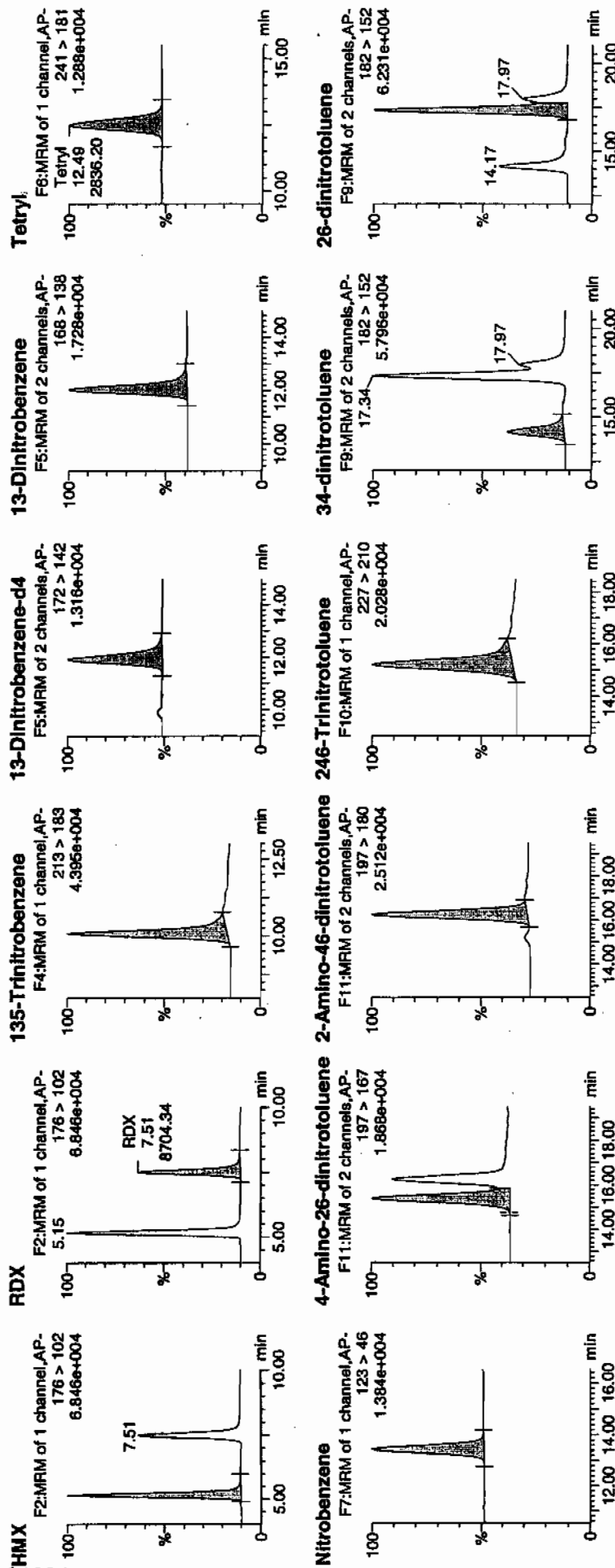
Date: 30-Jan-2010

Time: 08:25:14

ID: WXX100128-07CCV

Vial: 1:1,B

11/2/10

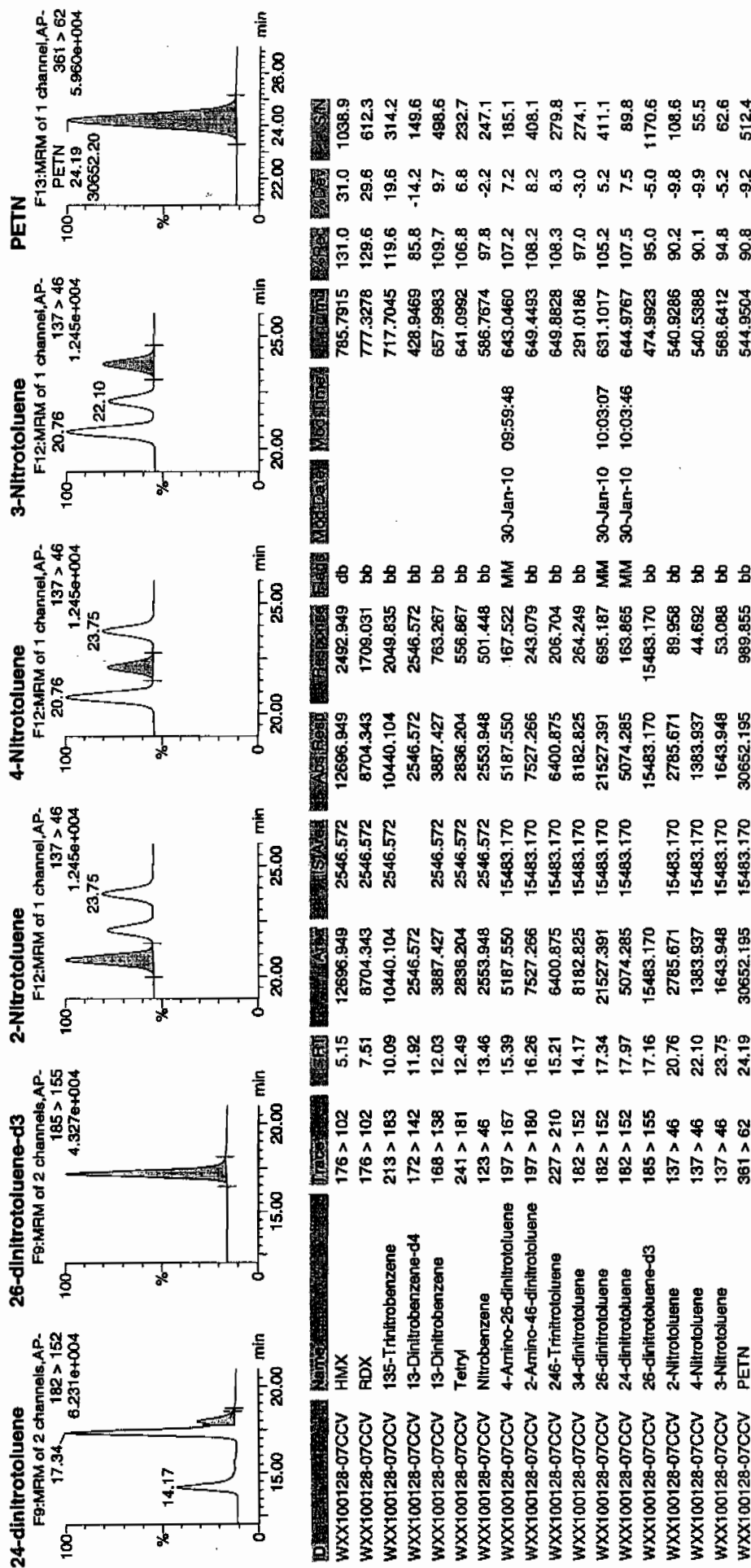


9/14/10 13/1/10

Printed: Sat Jan 30 10:07:34 2010, Page 66 of 71

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA5.qld, Time: Sat Jan 30 10:06:54 2010



# GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis: 01/30/10  
 Time of Injection: 0825  
 Standard Number: WXX100128-07CCV  
 Data File: EXP0125239a

HMX	131.0
RDX	129.6
135-TNB	119.6
13-DNB	109.7
Tetryl	106.8
Nitrobenzene	97.8
4A-26-DNT	107.2
2A-46-DNT	108.2
246-TNT	108.3
34-DNT(surr)	97.0
26-DNT	105.2
24-DNT	107.5
2-NT	90.2
4-NT	90.1
3-NT	94.8
PETN	90.8

*not  
1/30/10*

Total 1693.8

Average 105.9

*Amc 01/31/10*

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): 10-1210

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0125241a

Analysis Date: 30-JAN-10 09:24

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	54.76	137	*
1,3-Dinitrobenzene-d4	500	485.617	97	
2,4,6-Trinitrotoluene	40	37.047	93	
2,4-Dinitrotoluene	40	41.173	103	
2,6-Dinitrotoluene	40	39.954	100	
2,6-Dinitrotoluene-d3	500	482.01	96	
2-Amino-4,6-dinitrotoluene	40	38.831	97	
3,4-Dinitrotoluene	20	21.872	109	
4-Amino-2,6-dinitrotoluene	40	46.803	117	
HMX	40	45.526	114	
Nitrobenzene	40	33.3	83	
PETN	40	29.316	73	
RDX	40	38.687	97	
Tetryl	40	41.242	103	
m-Dinitrobenzene	40	41.138	103	
m-Nitrotoluene	40	43.1	108	
o-Nitrotoluene	40	39.498	99	
p-Nitrotoluene	40	43.878	110	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 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\1012510expA5.qld, Time: Sat Jan 30 10:06:54 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125241a

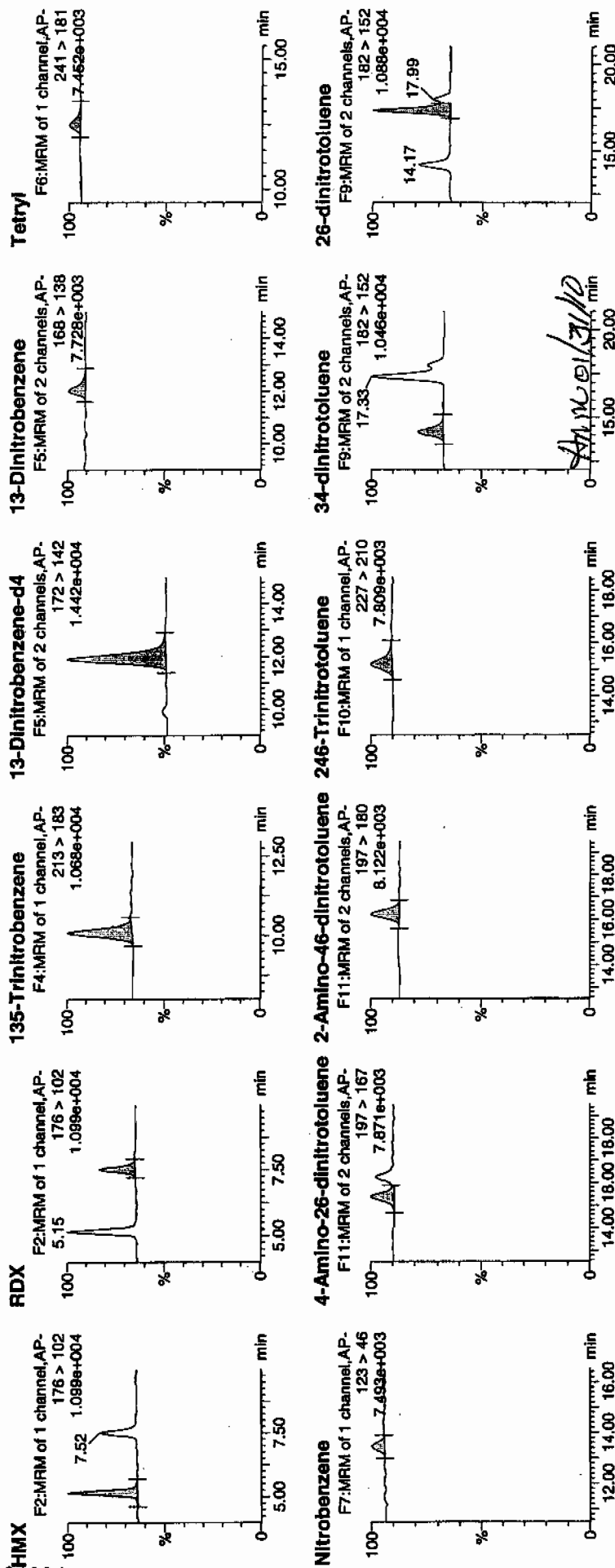
Date: 30-Jan-2010

Time: 09:24:17

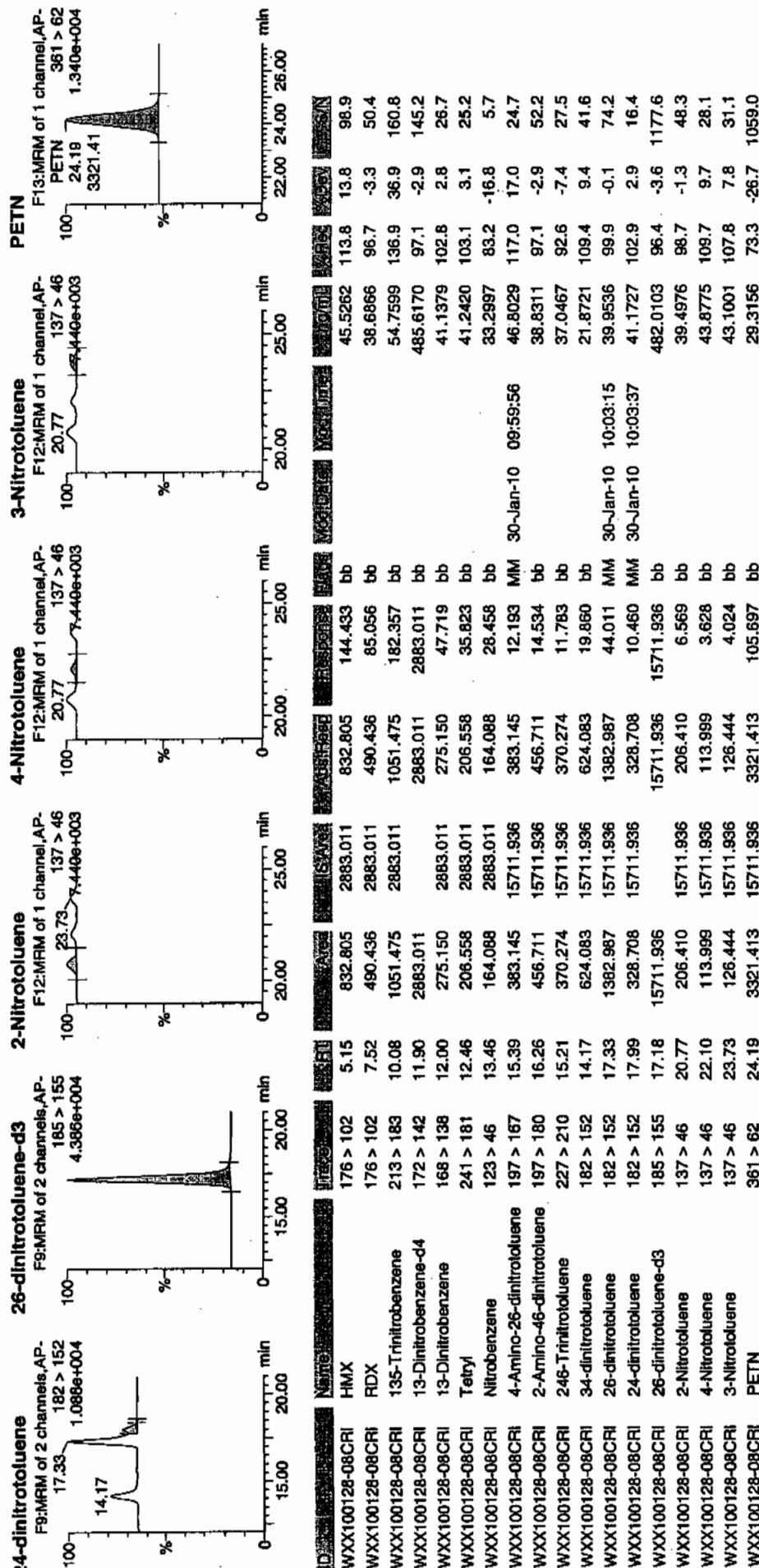
ID: WXX100128-08CRI

Vial: 1:1,C

11/2/10



Dataset: C:\MASSLYNX\New\_Exp\PRO1021510expA5.qld, Time: Sat Jan 30 10:06:54 2010





# GRAND MEAN AVERAGE

Vendor: UltraScientific  
 Date of Analysis 01/30/10  
 Time of Injection 0924  
 Standard Number WXX100128-08CRI  
 Data File EXP0125241a

HMX	113.8
RDX	96.7
135-TNB	136.9
13-DNB	102.8
Tetryl	103.1
Nitrobenzene	83.2
4A-26-DNT	117.0
2A-46-DNT	97.1
246-TNT	92.6
34-DNT(surr)	109.4
26-DNT	99.9
24-DNT	102.9
2-NT	98.7
4-NT	109.7
3-NT	107.8
PETN	73.3

*Handwritten:* 100P  
1/30/10

Total 1644.9

Average 102.8

*Handwritten:* HAN 01/31/10

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): 10-1210

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS01250013.wiff

Analysis Date: 25-JAN-10 13:41

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	104	104	
2,6-Diamino-4-nitrotoluene	100	106	106	
3,4-Dinitrotoluene	50	46.7	94	
3,5-Dinitroaniline	100	104	104	
TATB	100	96.4	96	
tris(o-cresyl) phosphate	100	117	117	

Recovery Limits:

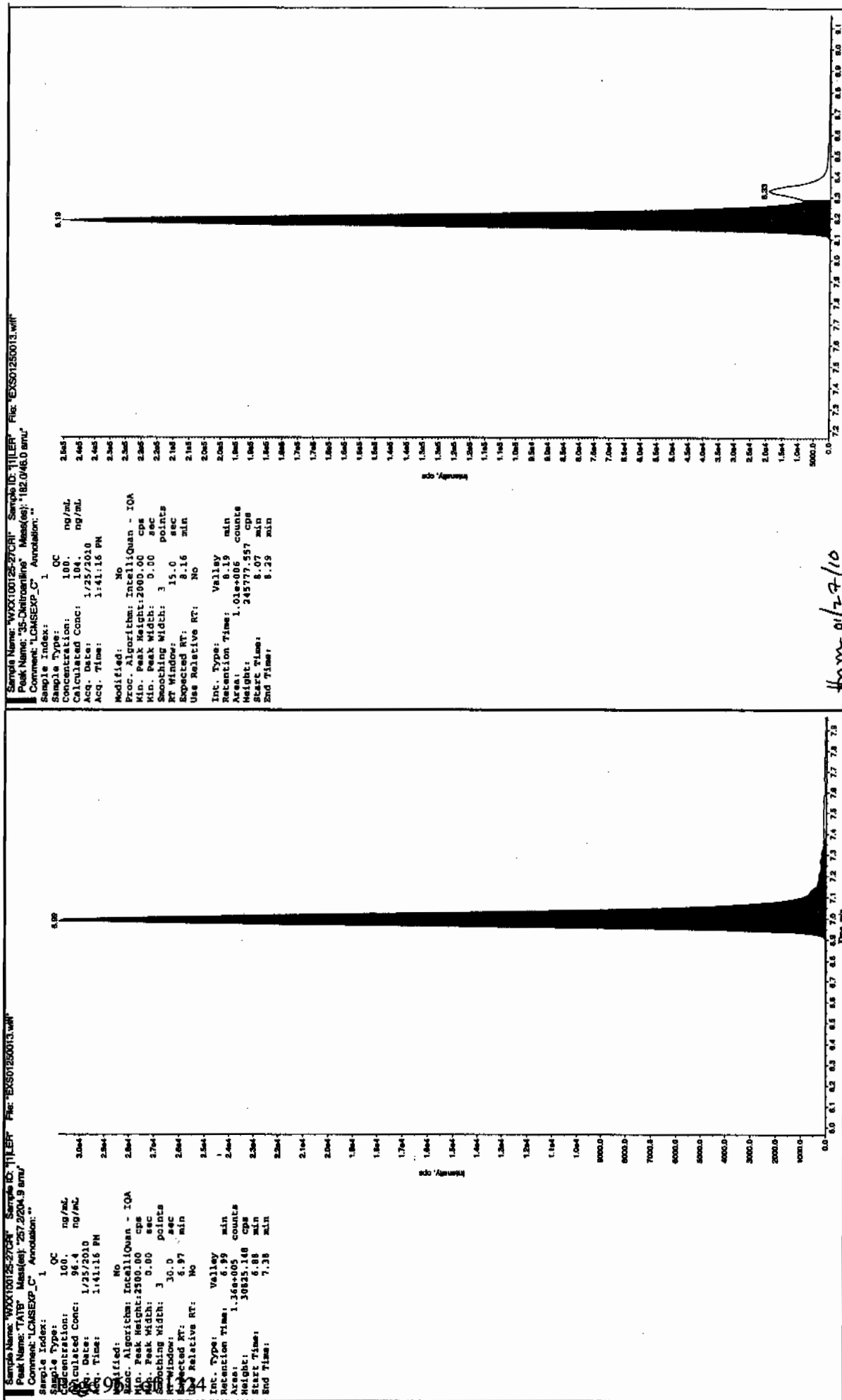
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 50-150%

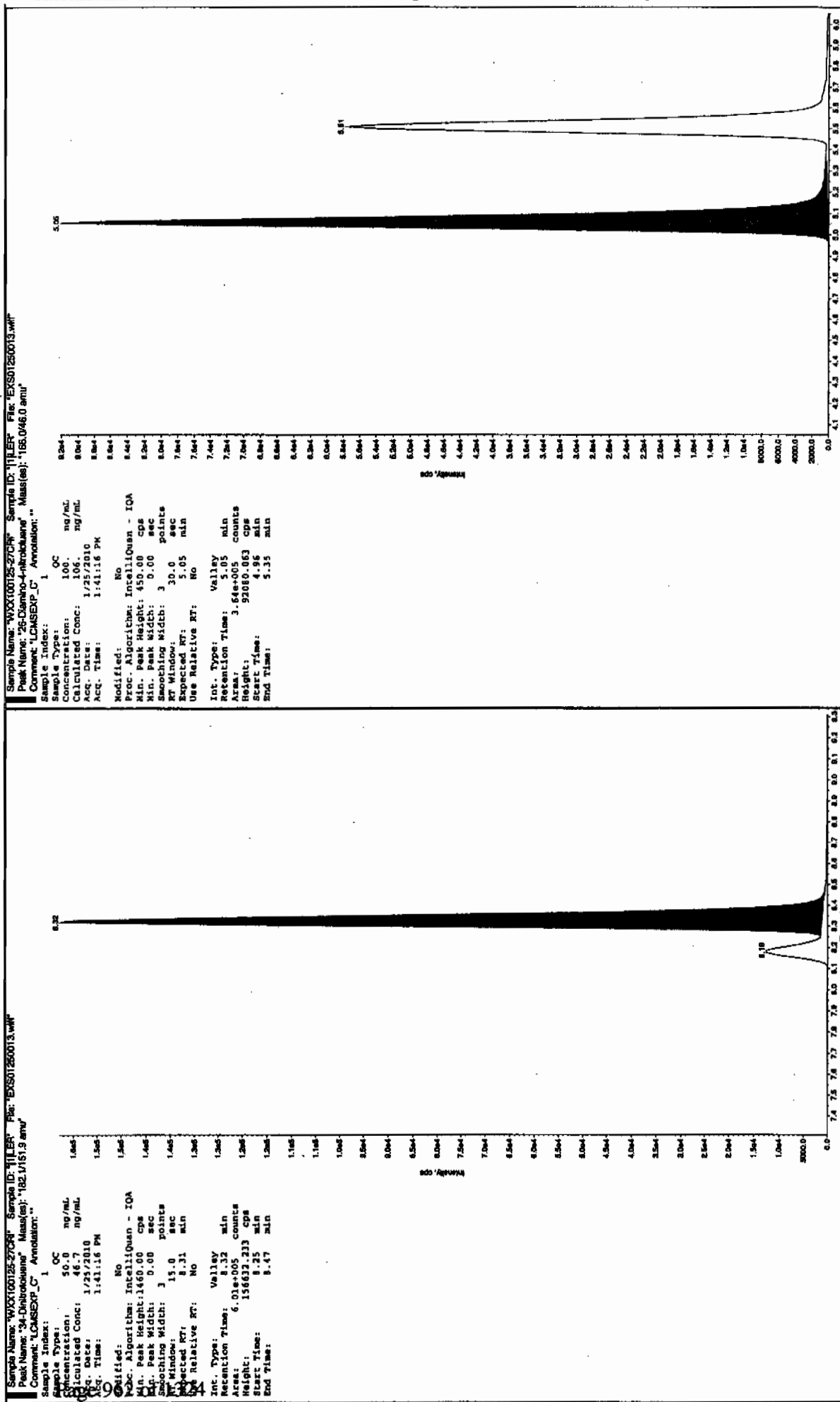
Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

See 1127110



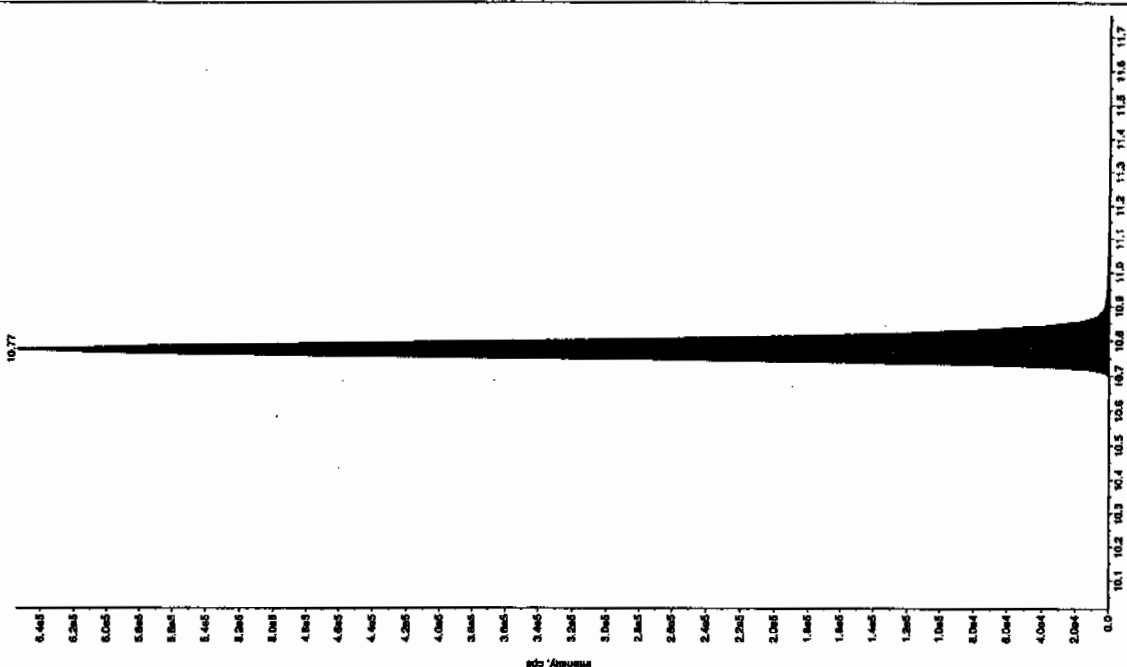


Sample Name: "WXX100125-27CR" Sample ID: "JTLER" File: "EX501250013.wit"  
 Peak Name: "bis(o-cresyl) phosphate" Mass(es): "359.191.0 amu"  
 Comment: "LCMS-EXP-C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 100. ng/mL  
 Calculated Conc: 117. ng/mL  
 Acq. Date: 1/25/2010  
 Acq. Time: 1:41:16 PM

Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 1.09e4 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 10.8 min  
 Use Relative RT: No

Int. Type: Valley  
 Retention Time: 10.8 min  
 Area: 2.38e+006 counts  
 Height: 65498.474 cps  
 Start Time: 10.6 min  
 End Time: 11.1 min

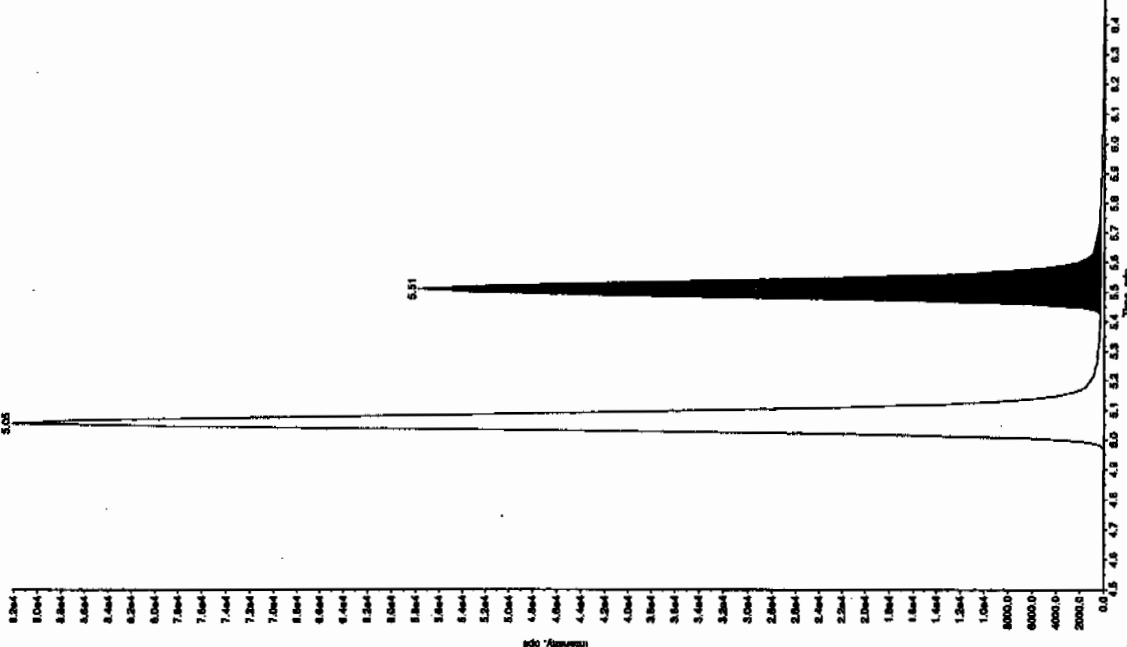


Sample Name: "WXX100125-27CR" Sample ID: "JTLER" File: "EX501250013.wit"  
 Peak Name: "24-Dinitro-6-nitrofluorene" Mass(es): "166.046.0 amu"  
 Comment: "LCMS-EXP-C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 100. ng/mL  
 Calculated Conc: 117. ng/mL  
 Acq. Date: 1/25/2010  
 Acq. Time: 1:41:16 PM

Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 350.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 5.50 min  
 Use Relative RT: No

Int. Type: Valley  
 Retention Time: 5.51 min  
 Area: 2.36e+005 counts  
 Height: 57473.437 cps  
 Start Time: 5.2 min  
 End Time: 5.76 min



7A

Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1210

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS01250024.wiff

Analysis Date: 25-JAN-10 16:33

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	456	91	
2,6-Diamino-4-nitrotoluene	500	429	86	
3,4-Dinitrotoluene	250	232	93	
3,5-Dinitroaniline	500	523	105	
TATB	500	534	107	
tris(o-cresyl) phosphate	500	455	91	

Recovery Limits:

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

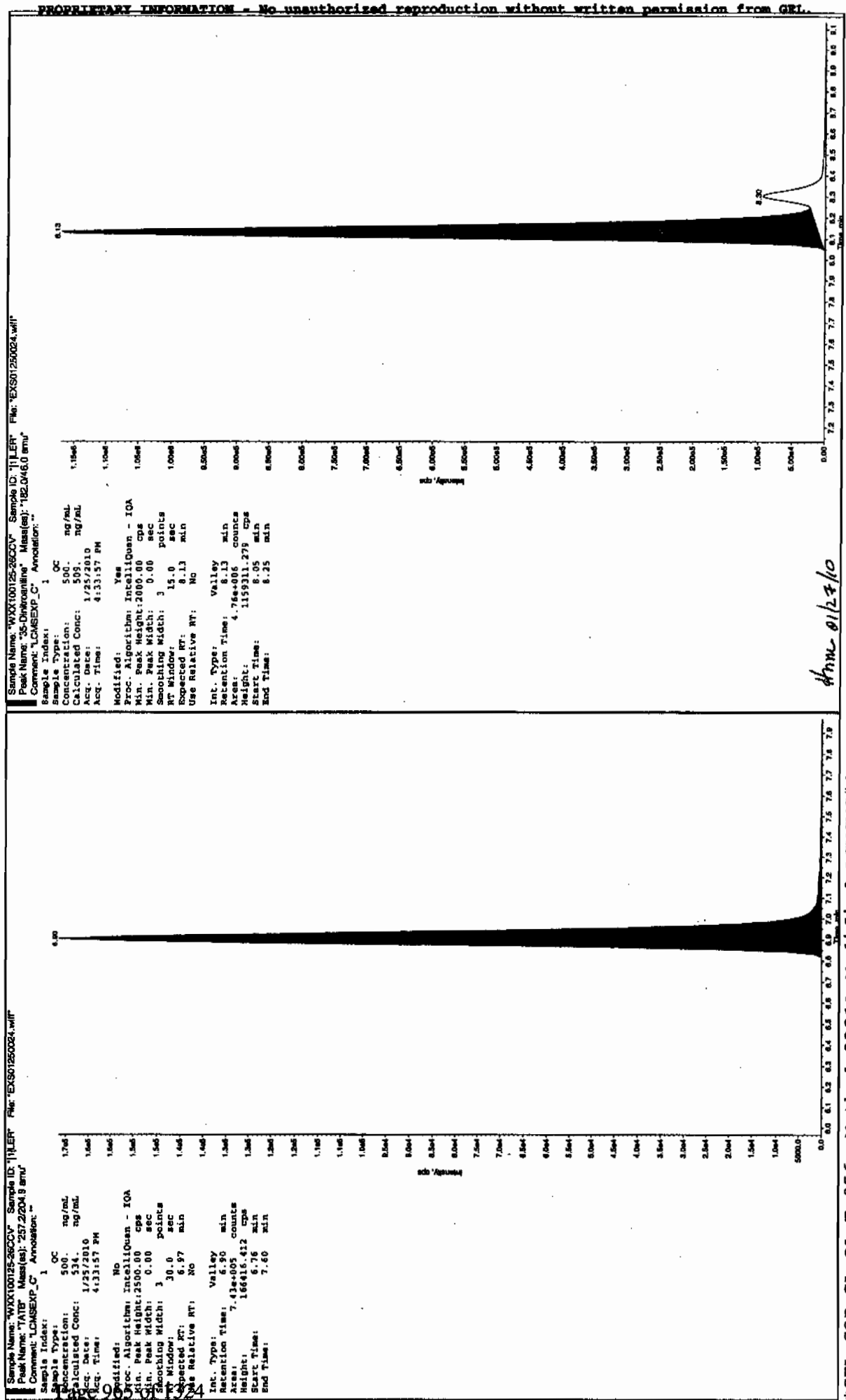
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

# Column used to flag Recovery outside of Limits

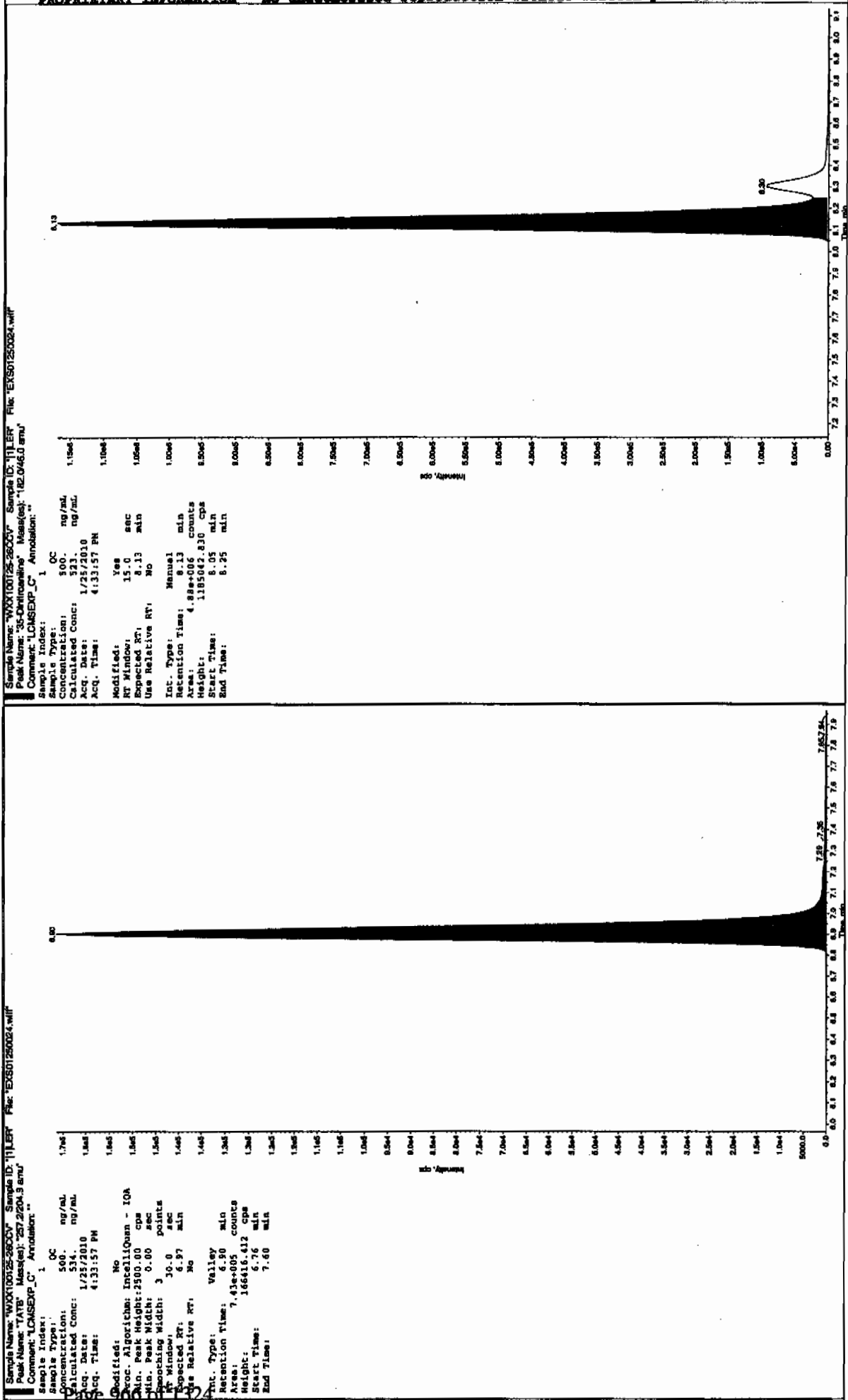
\* Value outside of Recovery Limits

Before Star 1/27/10

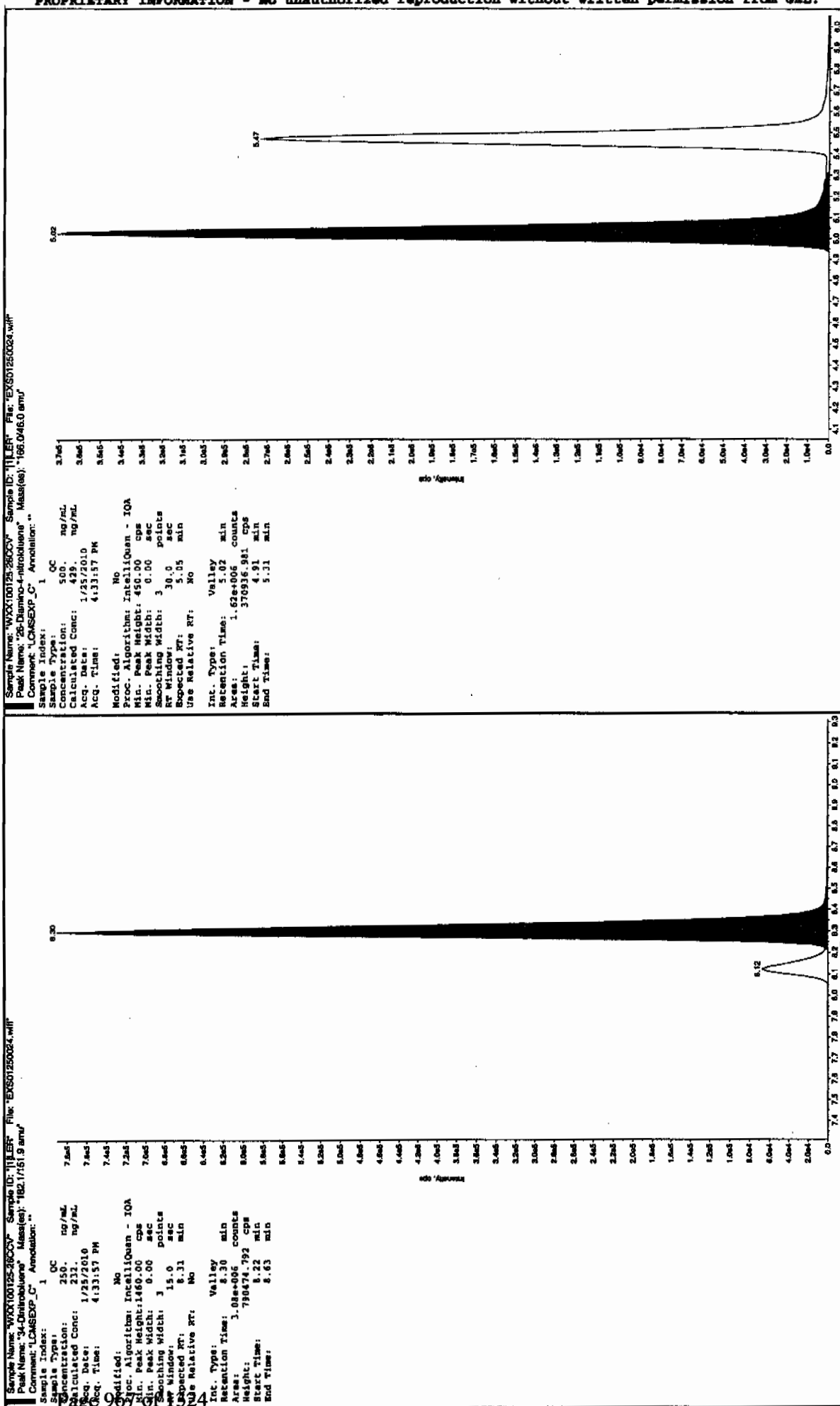


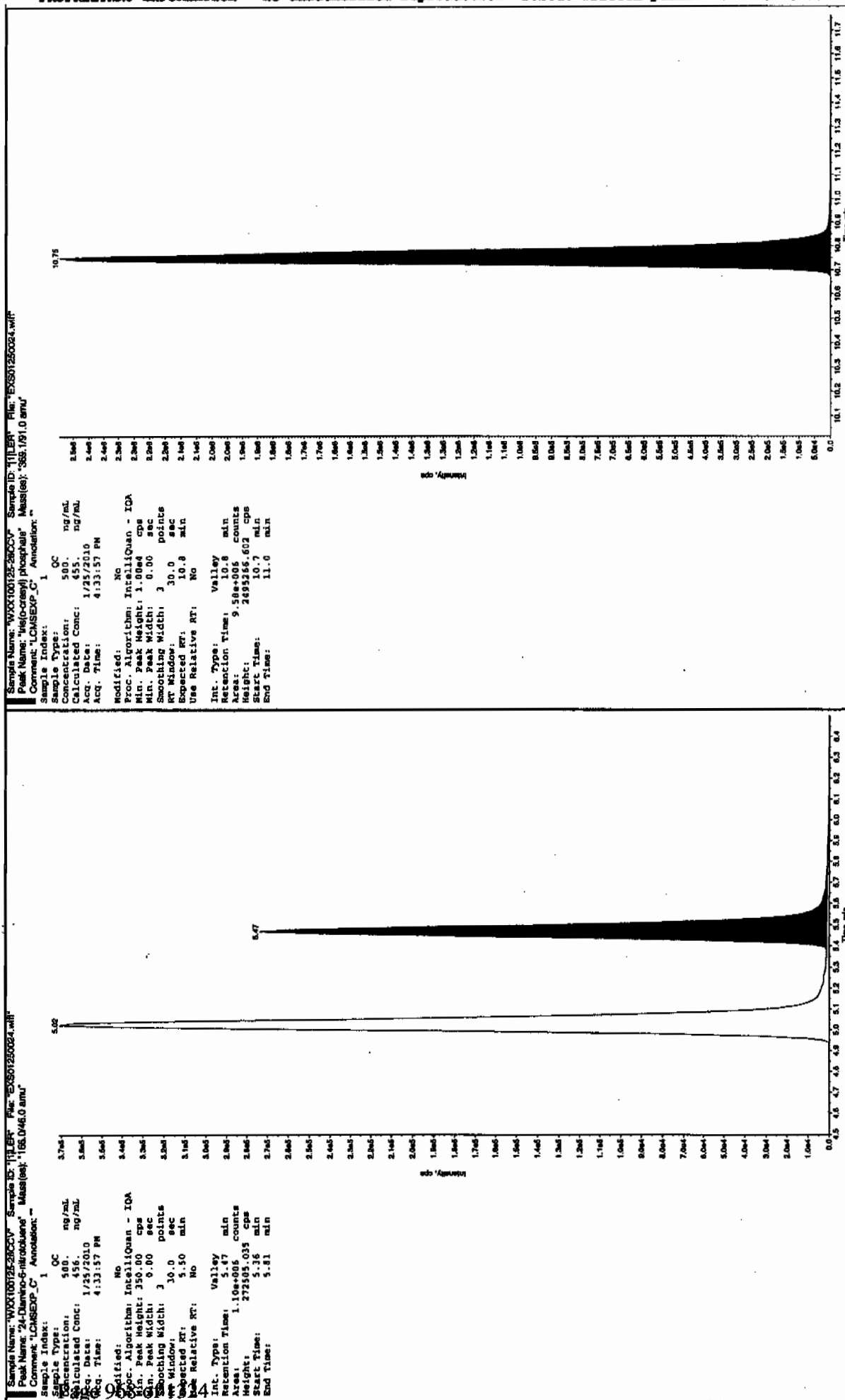
After 01/27/10

after Jan 11-2010









7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1210

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS01250026.wiff

Analysis Date: 25-JAN-10 17:05

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	104	104	
2,6-Diamino-4-nitrotoluene	100	108	108	
3,4-Dinitrotoluene	50	46.3	93	
3,5-Dinitroaniline	100	105	105	
TATB	100	99.8	100	
tris(o-cresyl) phosphate	100	110	110	

Recovery Limits:

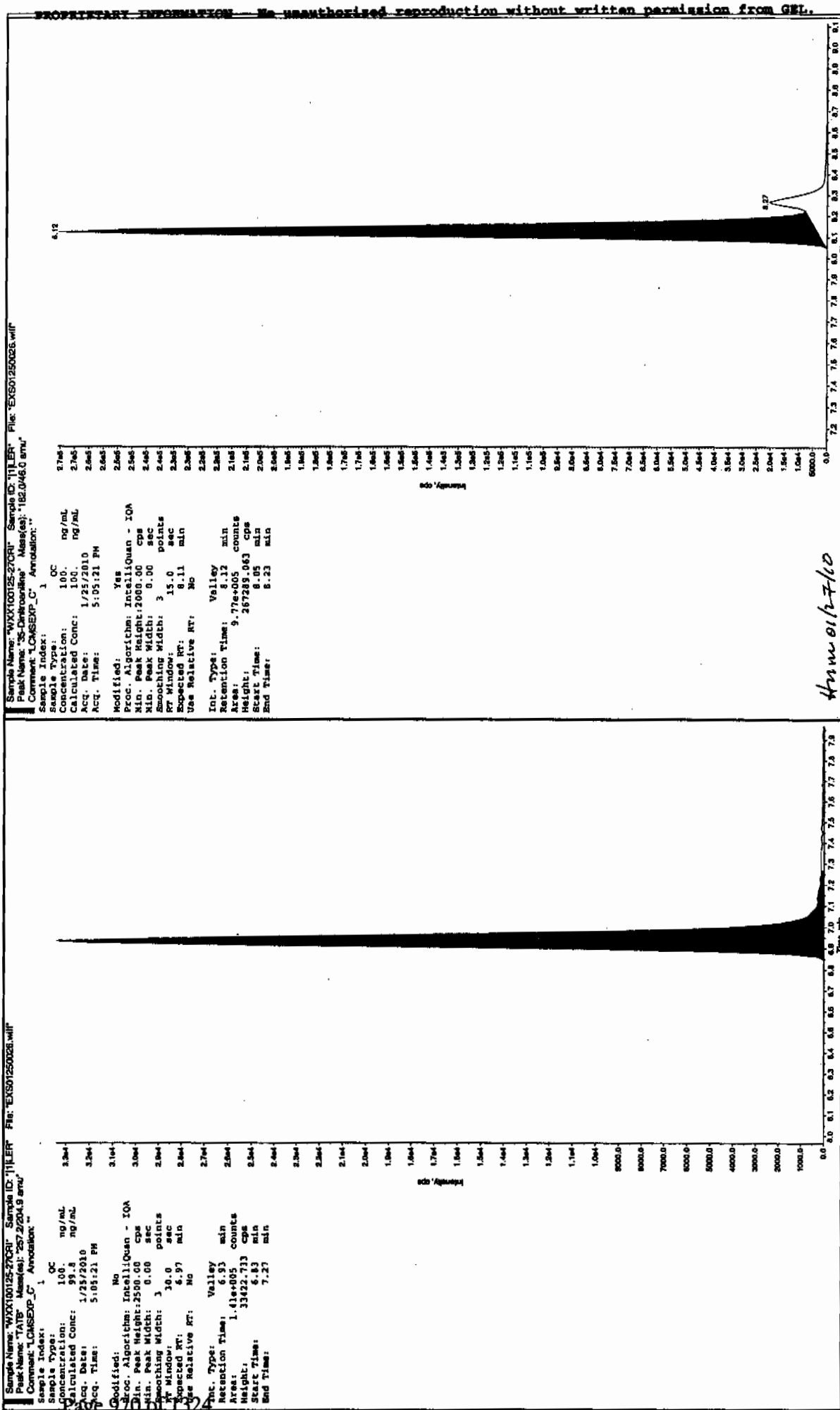
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

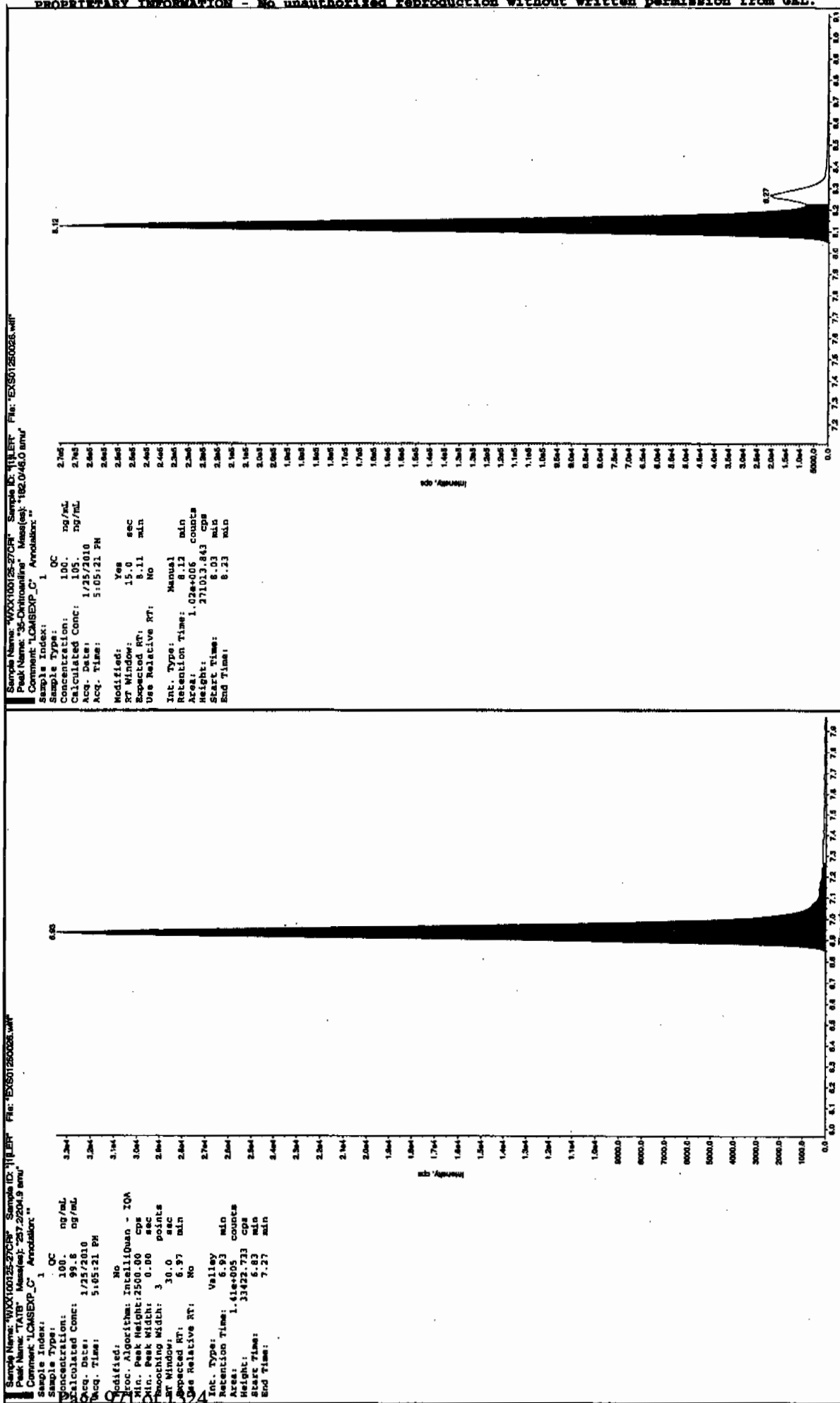
\* Value outside of Recovery Limits

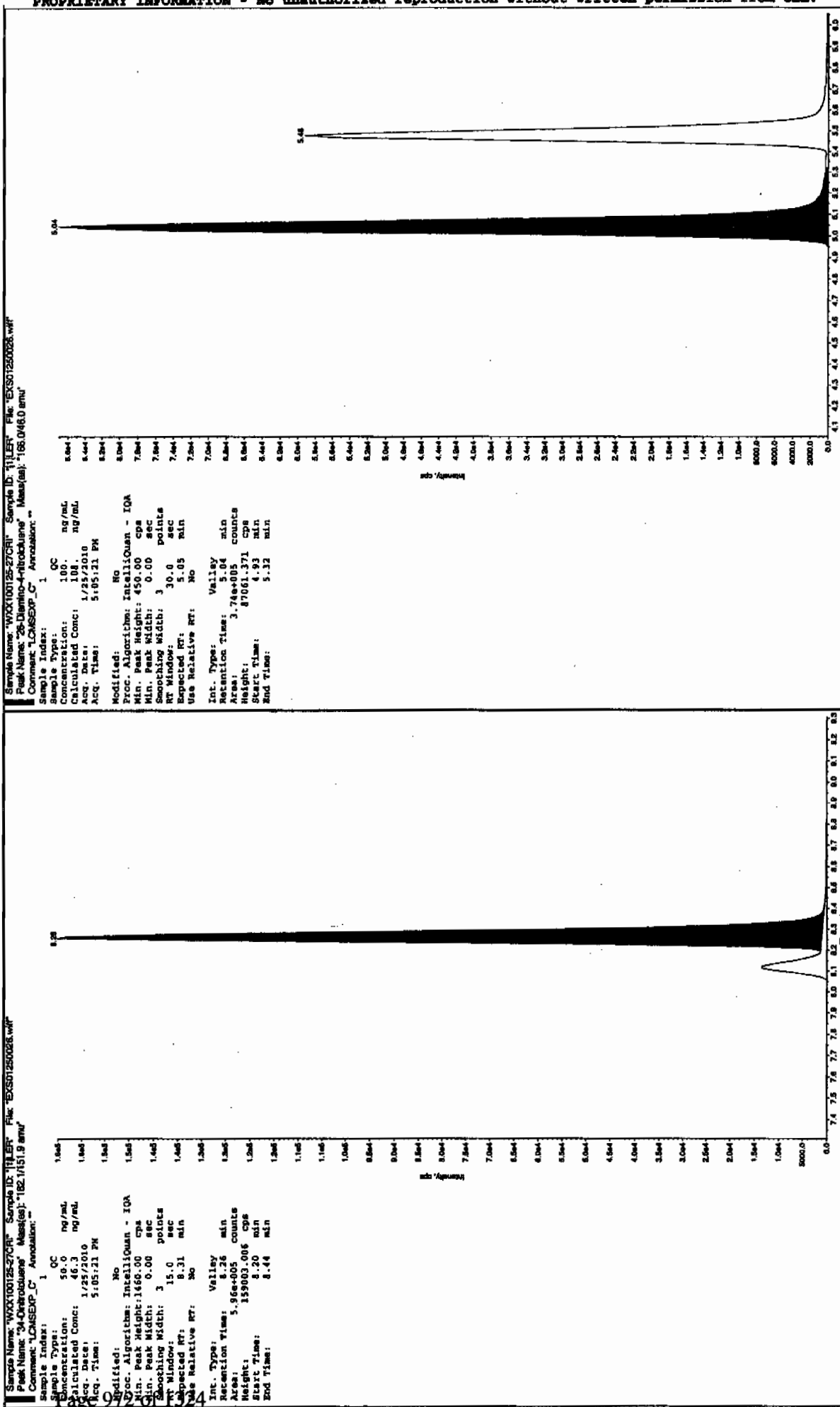
Before Scan 1127110

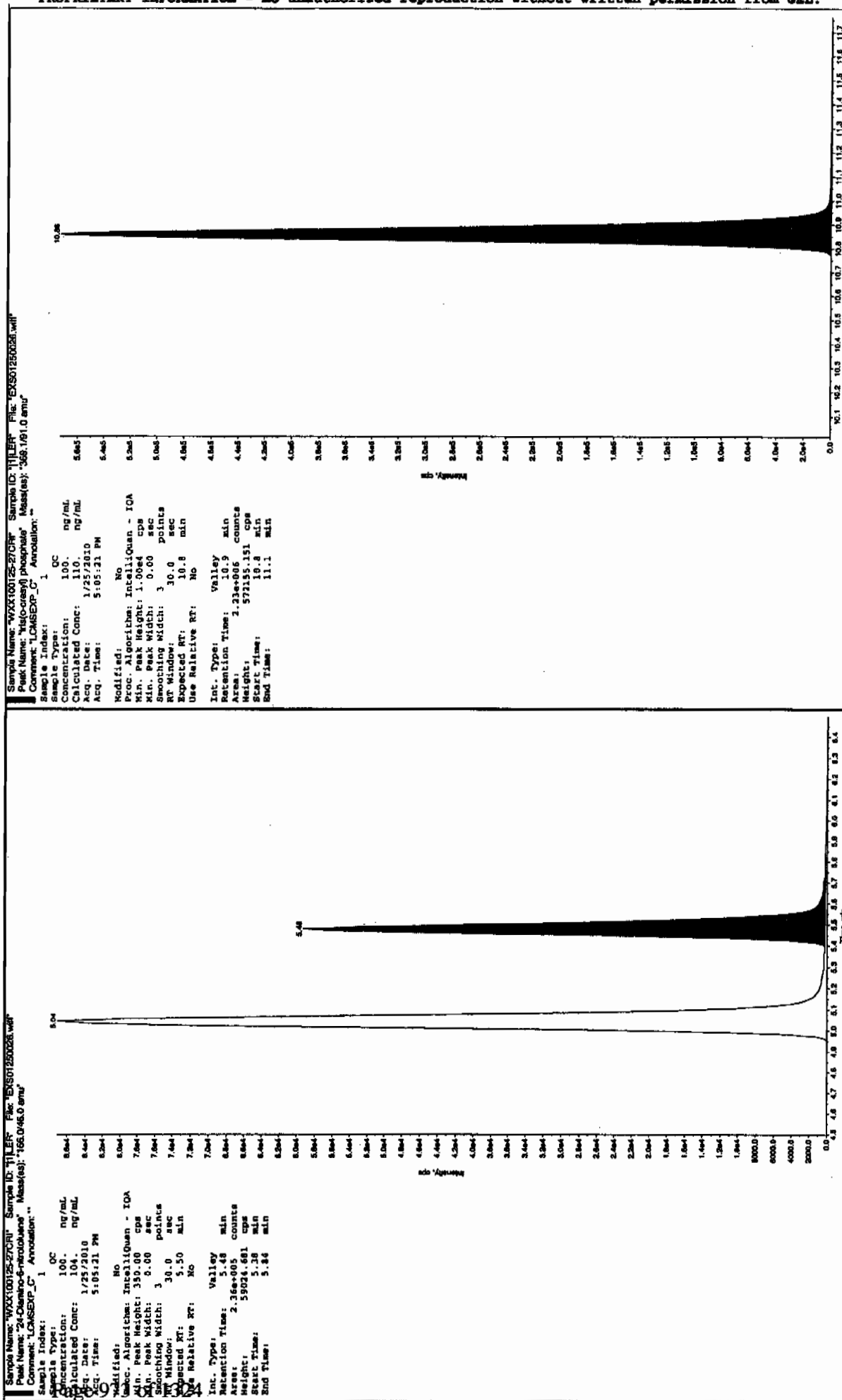


After Scan 8321A-Modified

after Len 1b7/10







7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1210

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS01250037.wiff

Analysis Date: 25-JAN-10 19:58

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	471	94	
2,6-Diamino-4-nitrotoluene	500	433	87	
3,4-Dinitrotoluene	250	219	88	
3,5-Dinitroaniline	500	494	99	
TATB	500	508	102	
tris(o-cresyl) phosphate	500	486	97	

Recovery Limits:

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

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

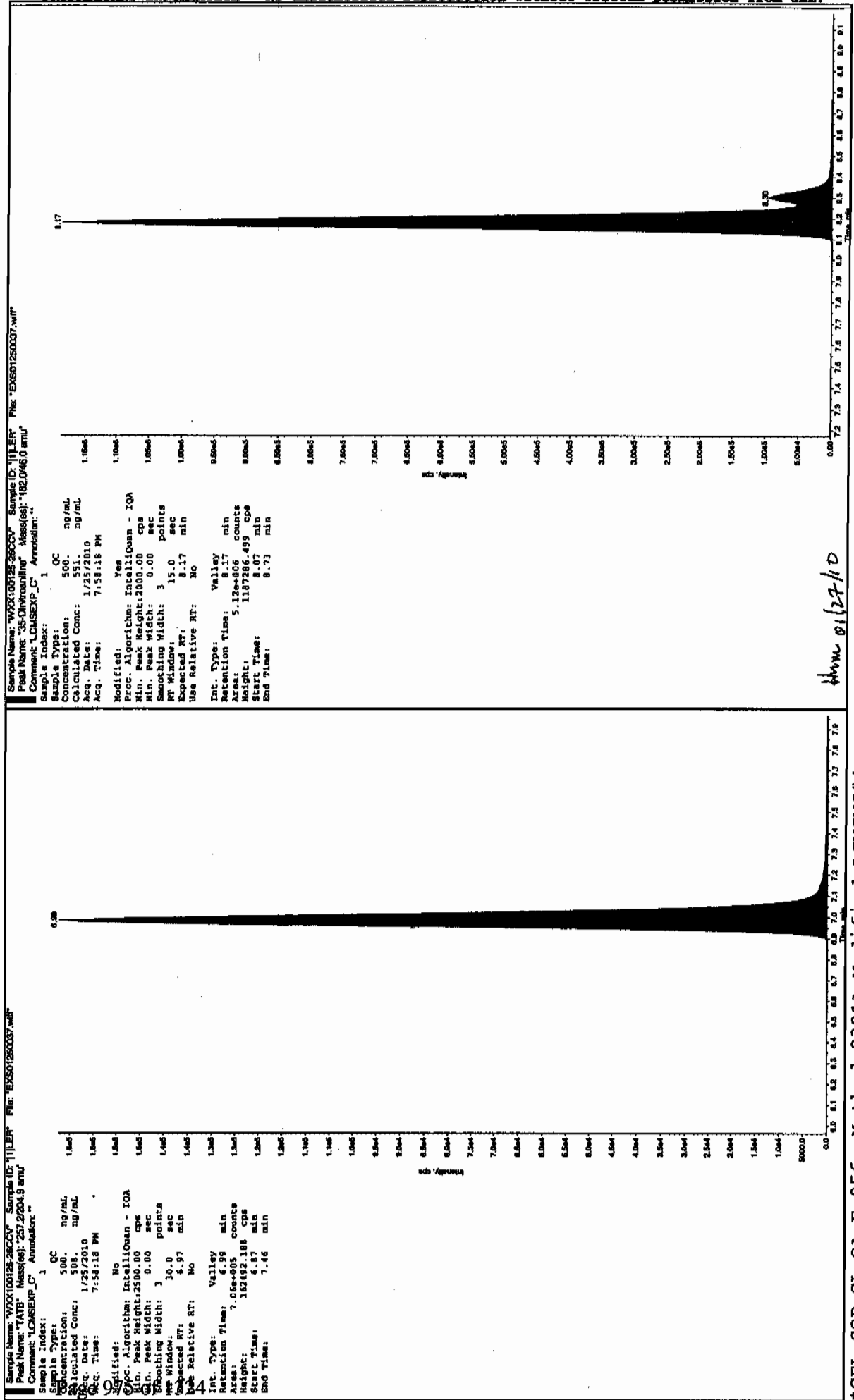
Other Target Analytes 80-120%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

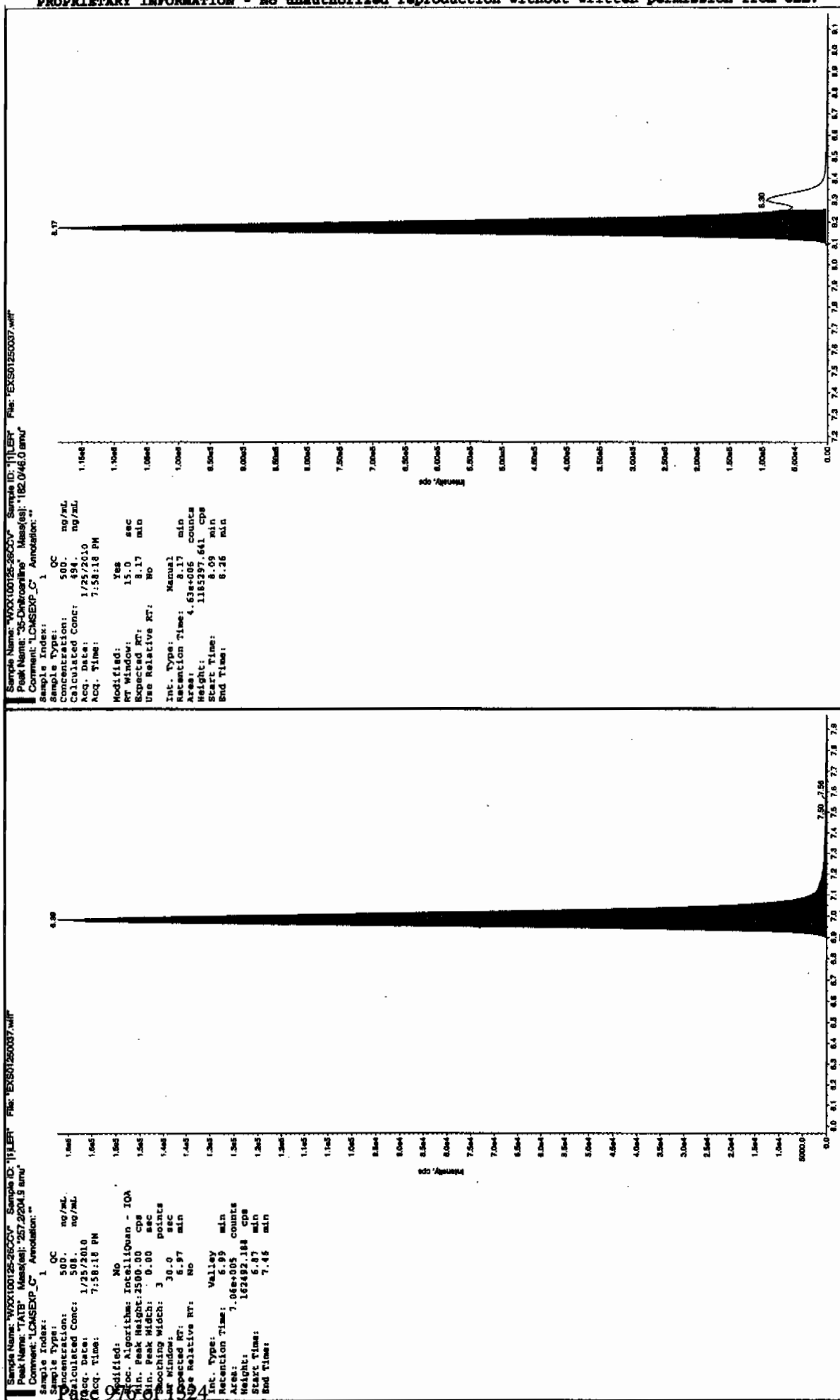


Before Len 11/27/10



After 01/27/10

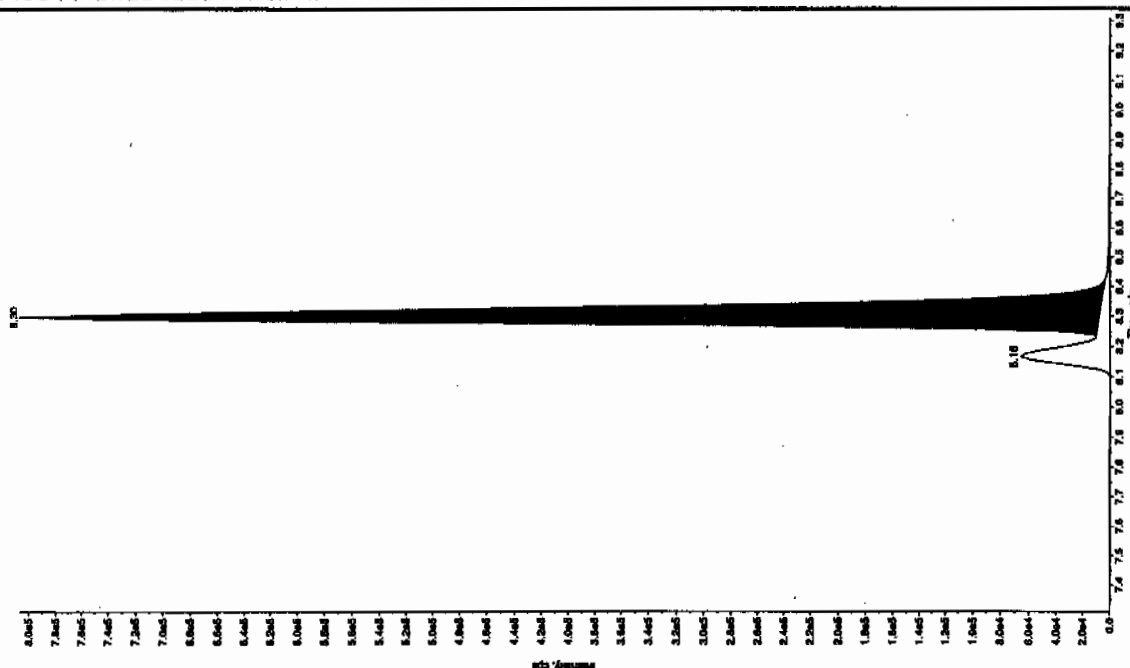
after Jan 11/2010



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

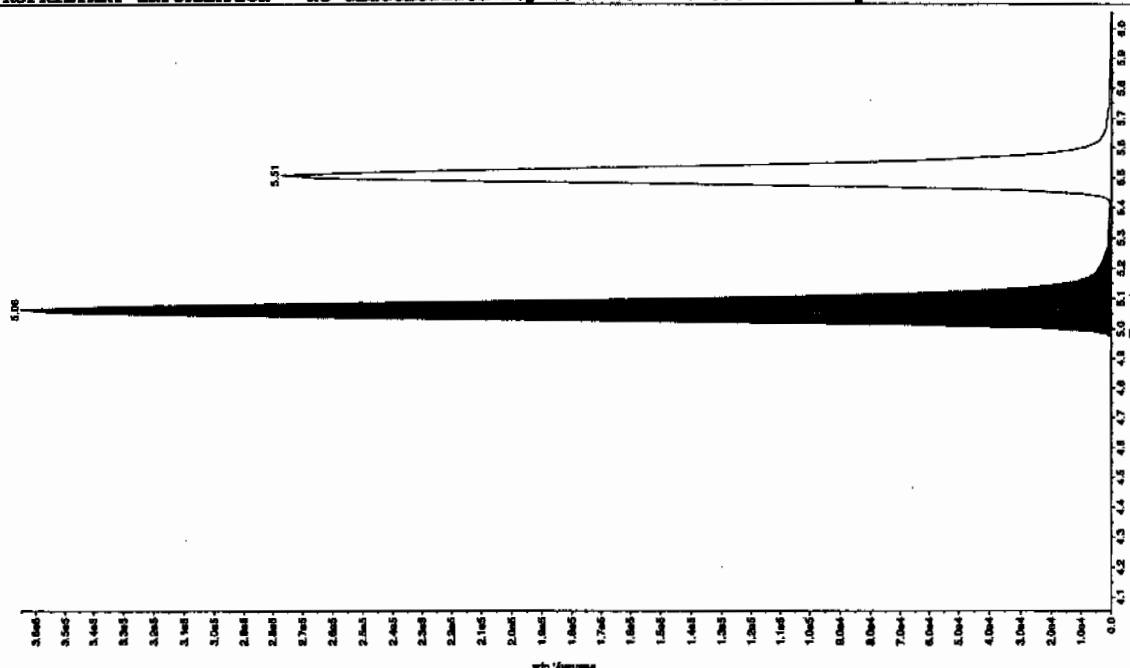
Sample Name: "WXX100125-2600V" Sample ID: "HLEB" File: "EX0101250037.wif"  
 Peak Name: "34-Dinitrofluorene" Measured: "182.1715.9 amu"  
 Comment: "LCMS-EXP-C" Annotation: "

Sample Index: 1  
 Sample Type: QC  
 Concentration: 250. ng/mL  
 Calculated Conc: 2720.0 ng/mL  
 Acq. Date: 1/25/2010  
 Acq. Time: 7:58:18 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 1450.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 15.0 sec  
 Expected RT: 8.11 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.30 min  
 Area: 2.91e+006 counts  
 Height: 799018.311 cps  
 Start Time: 8.24 min  
 End Time: 8.42 min



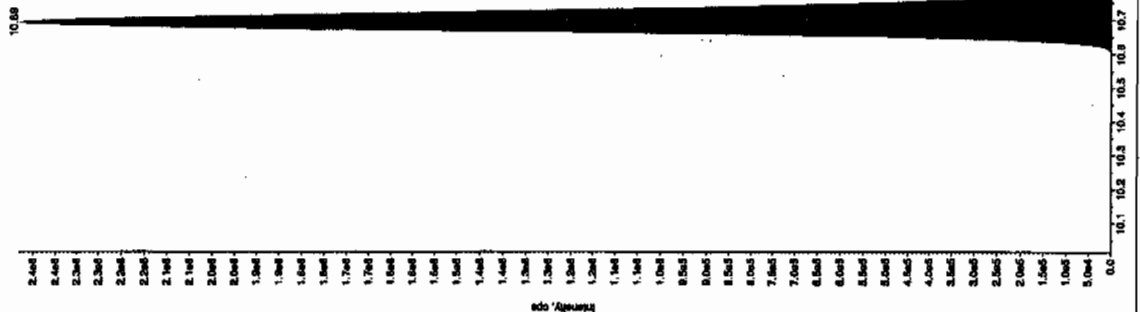
Sample Name: "WXX100125-2600V" Sample ID: "HLEB" File: "EX0101250037.wif"  
 Peak Name: "26-Dinitro-4-nitrofluorene" Measured: "180.046.0 amu"  
 Comment: "LCMS-EXP-C" Annotation: "

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500. ng/mL  
 Calculated Conc: 493.0 ng/mL  
 Acq. Date: 1/25/2010  
 Acq. Time: 7:58:18 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 450.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 5.05 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.06 min  
 Area: 1.63e+006 counts  
 Height: 365131.569 cps  
 Start Time: 4.95 min  
 End Time: 5.14 min



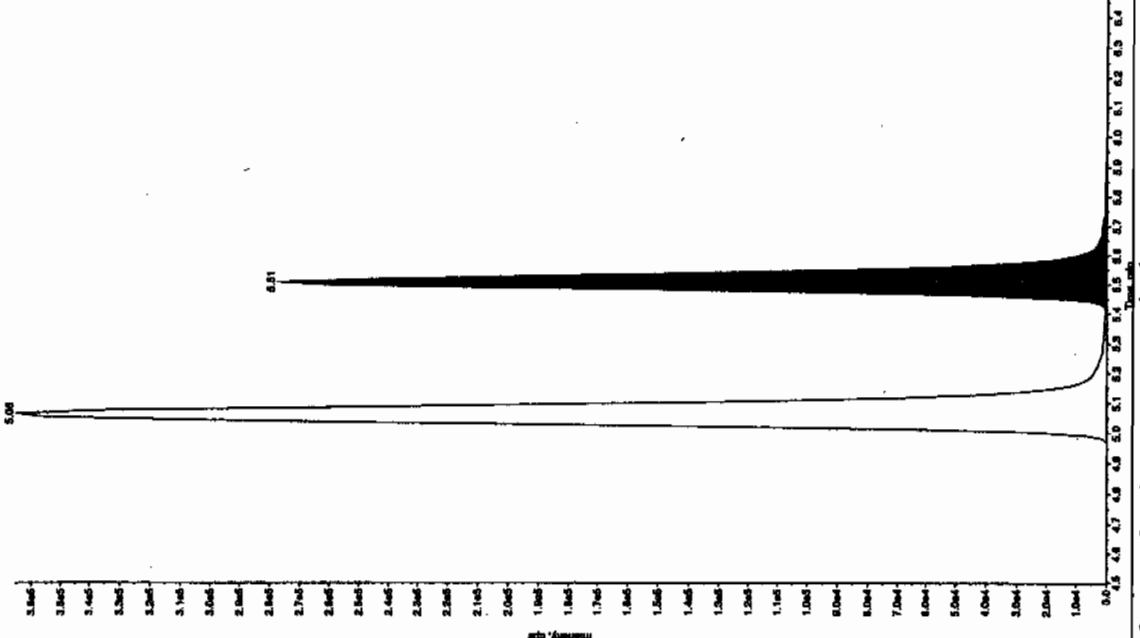
Sample Name: "WXX100125-260CV" Sample ID: "111LRF" File: "EXS01250037.will"  
 Peak Name: "bis(o-cresyl) phosphate" Mass(es): "369.191.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500. ng/mL  
 Calculated Conc: 486. ng/mL  
 Acq. Date: 1/25/2010  
 Acq. Time: 7:58:18 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 1.00e4 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 30.0 points  
 RT Window: 30.0 sec  
 Expected RT: 10.6 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.7 min  
 Area: 1.02e+007 counts  
 Height: 2430585.938 cps  
 Start Time: 10.6 min  
 End Time: 11.0 min



Sample Name: "WXX100125-260CV" Sample ID: "111LRF" File: "EXS01250037.will"  
 Peak Name: "24-Diamino-6-alkotoluene" Mass(es): "196.046.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500. ng/mL  
 Calculated Conc: 471. ng/mL  
 Acq. Date: 1/25/2010  
 Acq. Time: 7:58:18 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 350.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 30.0 points  
 RT Window: 30.0 sec  
 Expected RT: 5.50 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.51 min  
 Area: 1.13e+006 counts  
 Height: 277376.404 cps  
 Start Time: 5.42 min  
 End Time: 5.60 min



**7B**  
**Explosives CRI Standard**

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1210

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS01250039.wiff

Analysis Date: 25-JAN-10 20:29

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	107	107	
2,6-Diamino-4-nitrotoluene	100	97.3	97	
3,4-Dinitrotoluene	50	46.6	93	
3,5-Dinitroaniline	100	104	104	
TATB	100	103	103	
tris(o-cresyl) phosphate	100	111	111	

**Recovery Limits:**

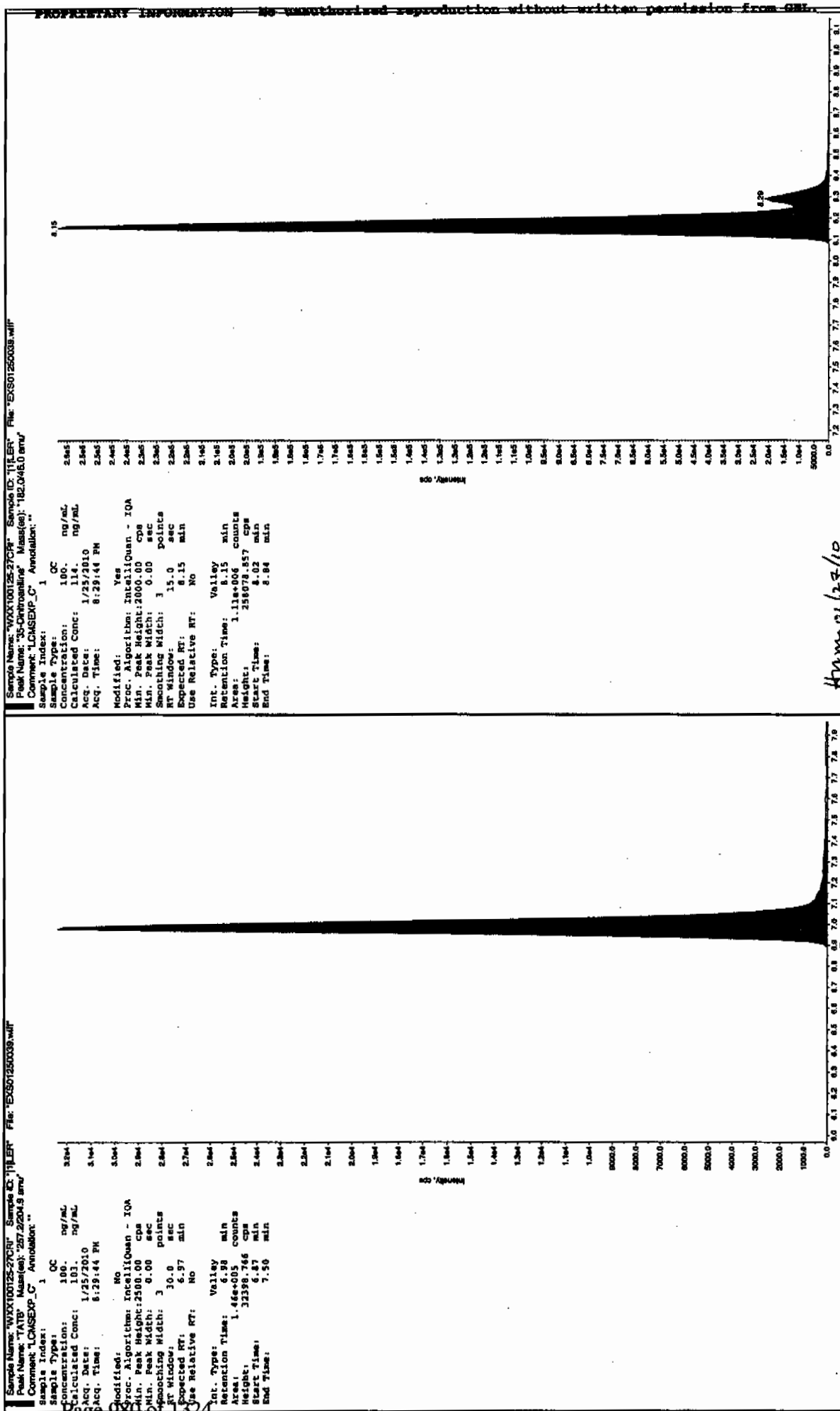
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

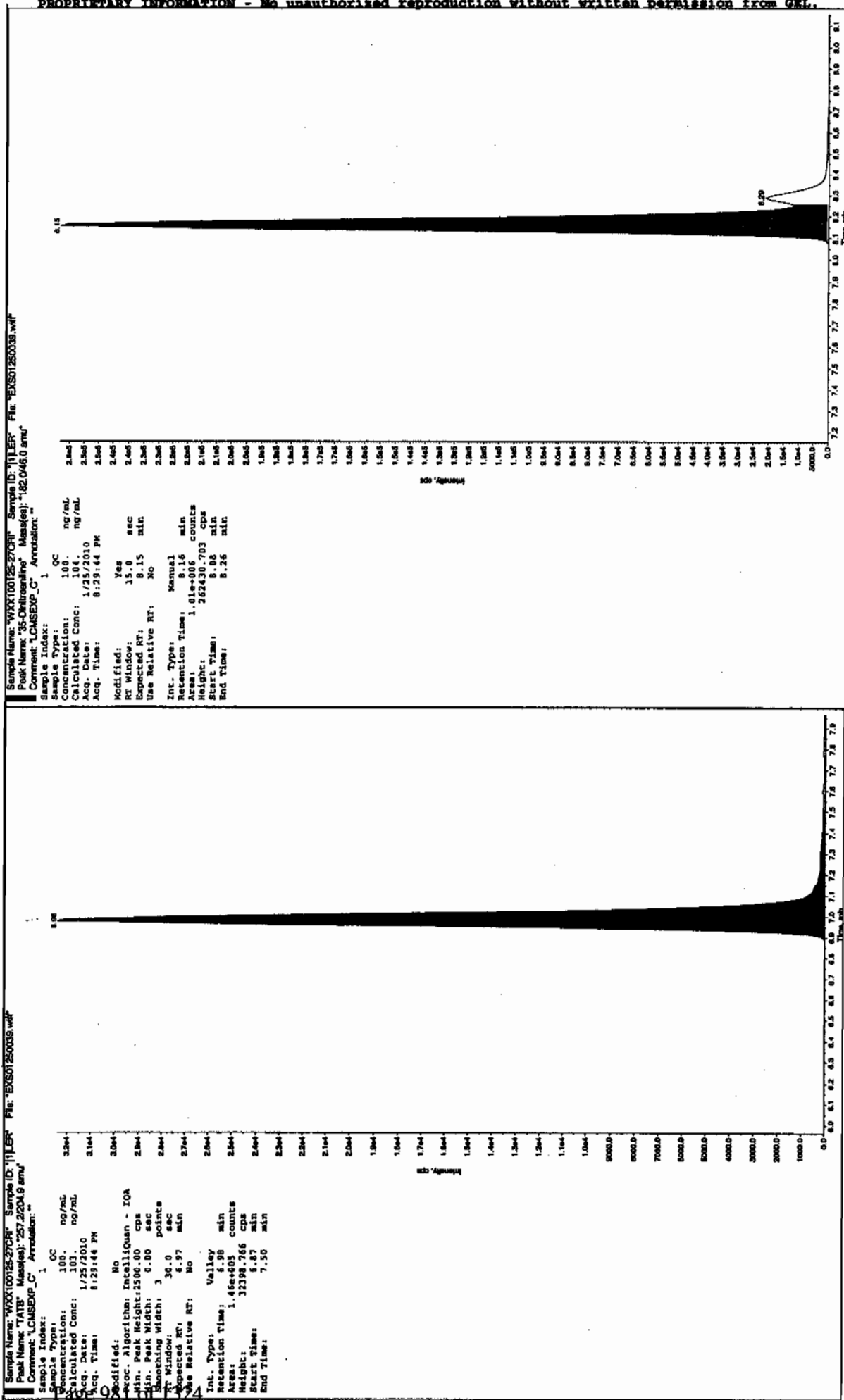
\* Value outside of Recovery Limits

Before Jan 11/27/10



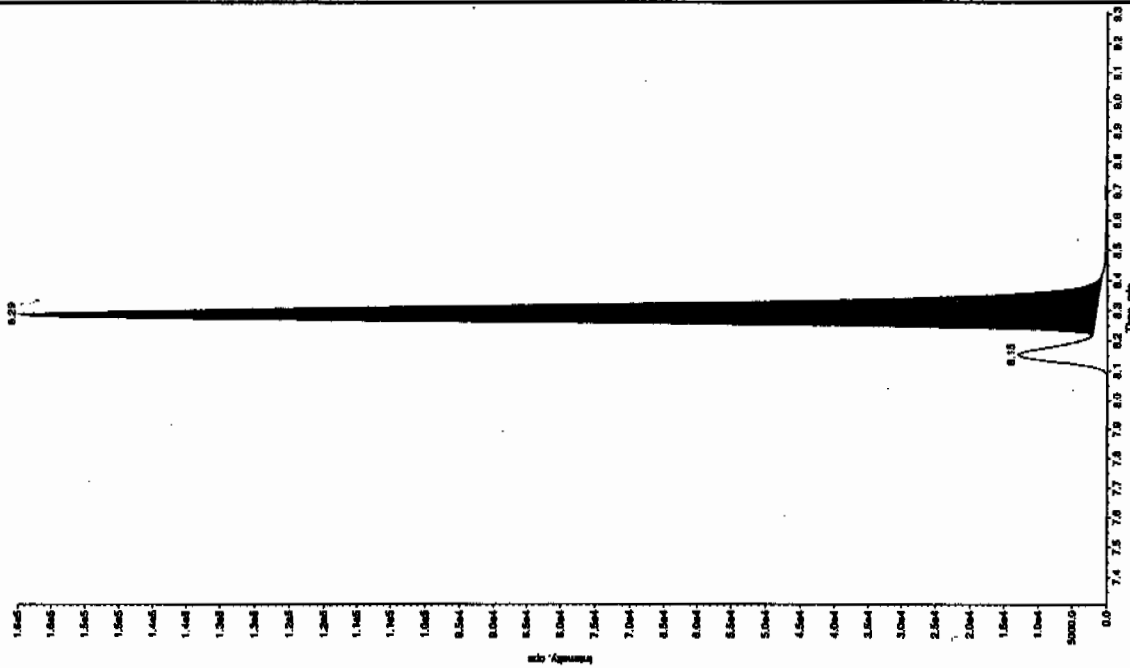
Ann 01/27/10

after 11/27/10



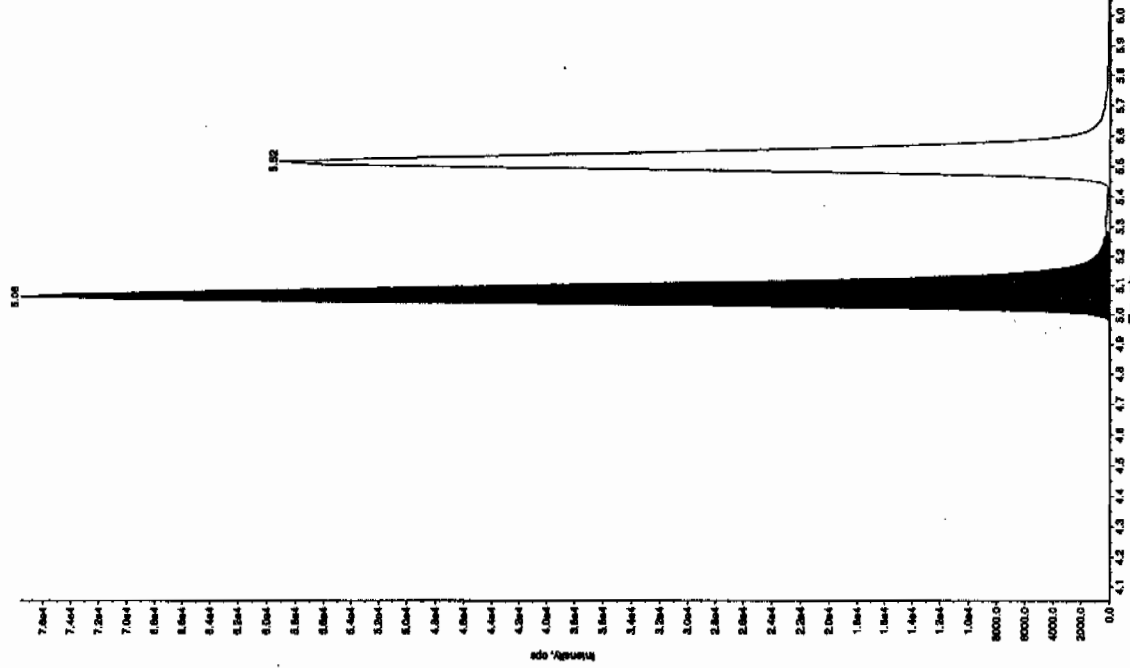
Sample Name: "WXX100125-27CH" Sample ID: "111ER" File: "EX301250039.wif"  
 Peak Name: "34-Dinitrofluorene" Mass(es): "162.1751.9 amu"  
 Comment: "LONSEXP\_C" Annotation: "

Sample Index: 1  
 Sample Type: QC  
 Concentration: 50.0 ng/mL  
 Calculated Conc: 46.6 ng/mL  
 Acq. Date: 1/25/2010  
 Acq. Time: 8:29:44 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 1460.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 15.0 sec  
 Expected RT: 8.31 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 6.04 min  
 Area: 6.00e+023 counts  
 Height: 158537.293 cps  
 Start Time: 8.42 min  
 End Time: 8.42 min

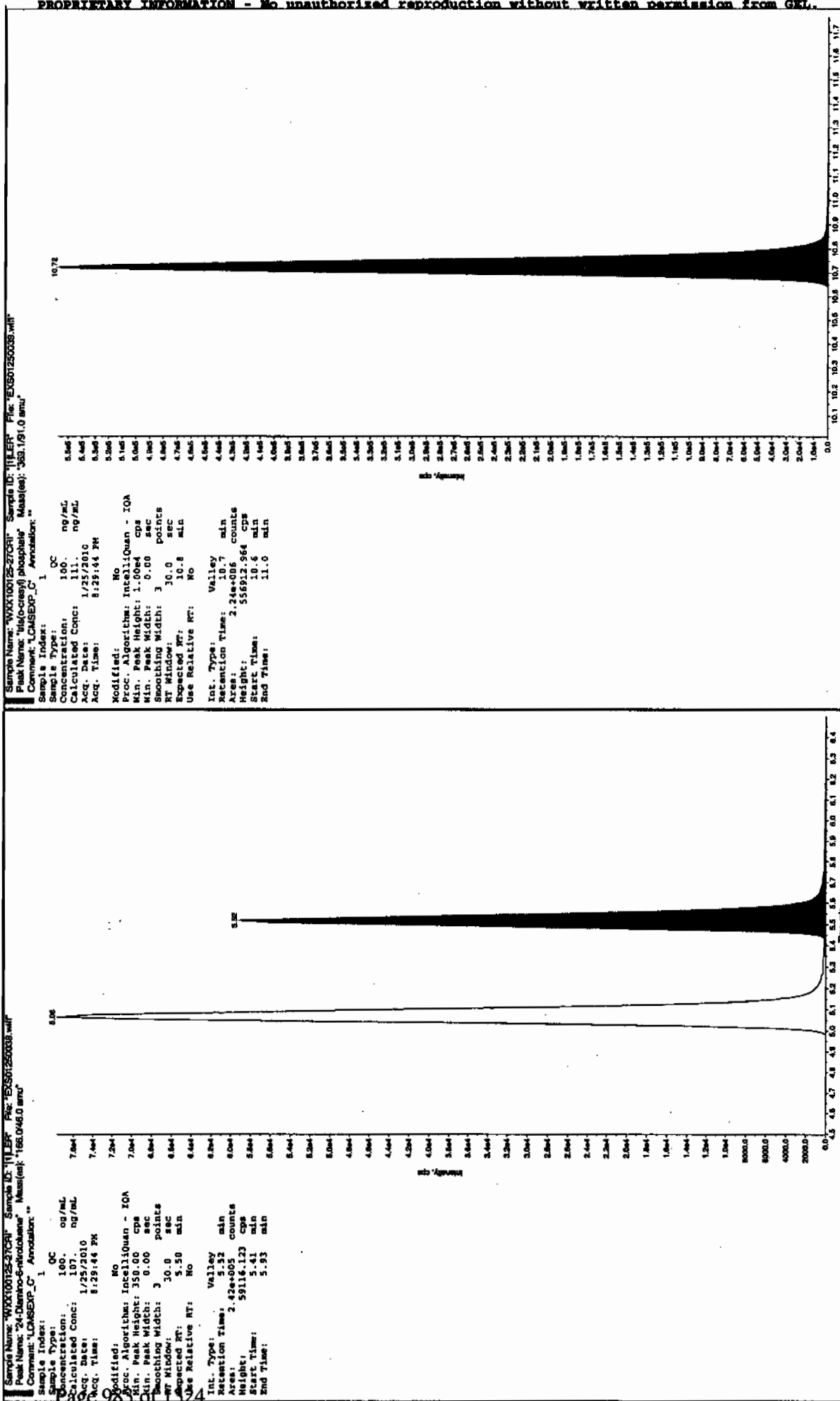


Sample Name: "WXX100125-27CH" Sample ID: "111ER" File: "EX301250039.wif"  
 Peak Name: "26-Dinitro-4-nitrofluorene" Mass(es): "166.0463.0 amu"  
 Comment: "LONSEXP\_C" Annotation: "

Sample Index: 1  
 Sample Type: QC  
 Concentration: 100 ng/mL  
 Calculated Conc: 97.3 ng/mL  
 Acq. Date: 1/25/2010  
 Acq. Time: 8:29:44 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 450.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 5.05 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.06 min  
 Area: 3.32e+005 counts  
 Height: 77675.033 cps  
 Start Time: 4.96 min  
 End Time: 5.26 min







7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1210

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS01250045.wiff

Analysis Date: 25-JAN-10 22:04

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	519	104	
2,6-Diamino-4-nitrotoluene	500	503	101	
3,4-Dinitrotoluene	250	214	85	
3,5-Dinitroaniline	500	499	100	
TATB	500	482	97	
tris(o-cresyl) phosphate	500	480	96	

Recovery Limits:

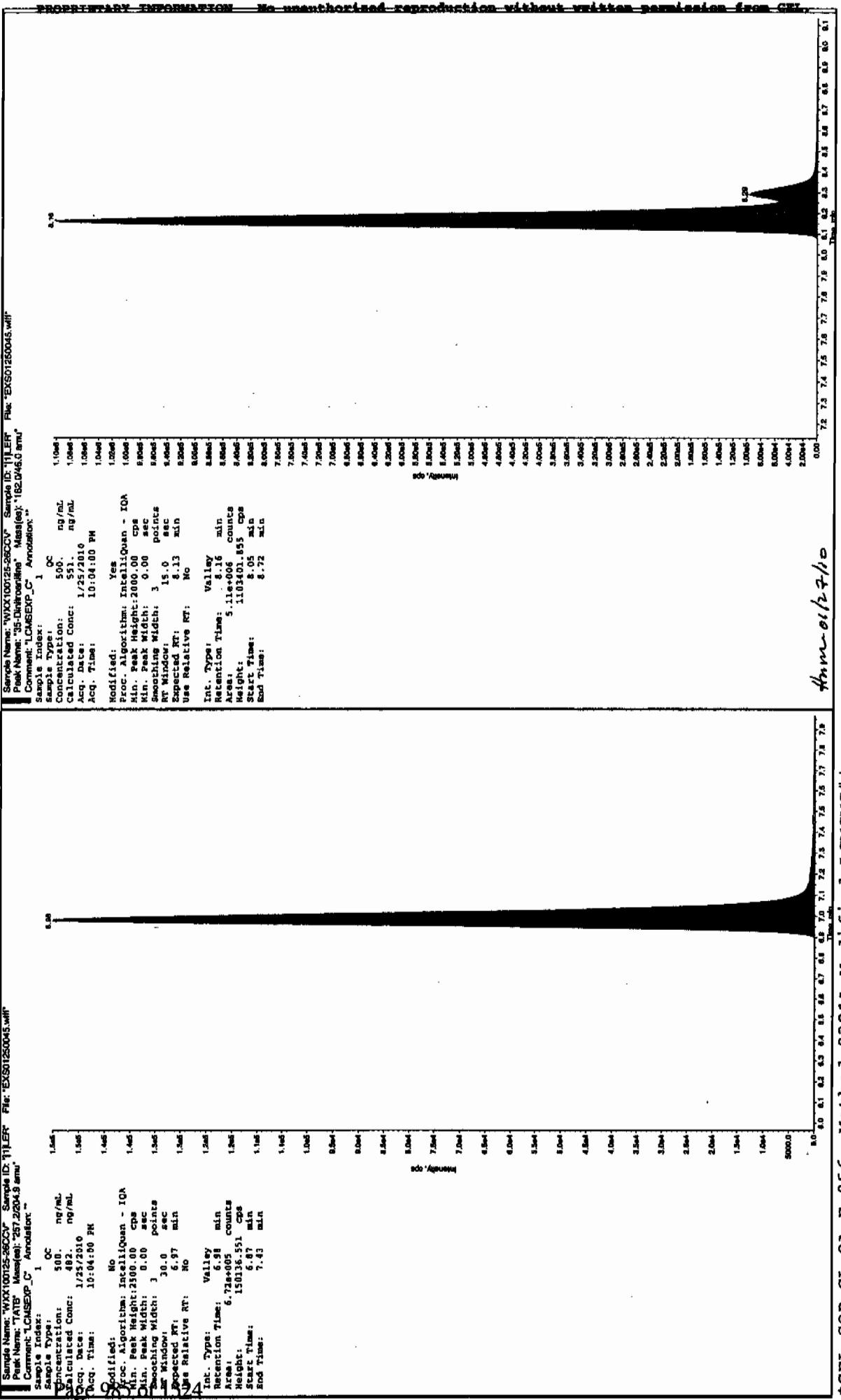
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

# Column used to flag Recovery outside of Limits

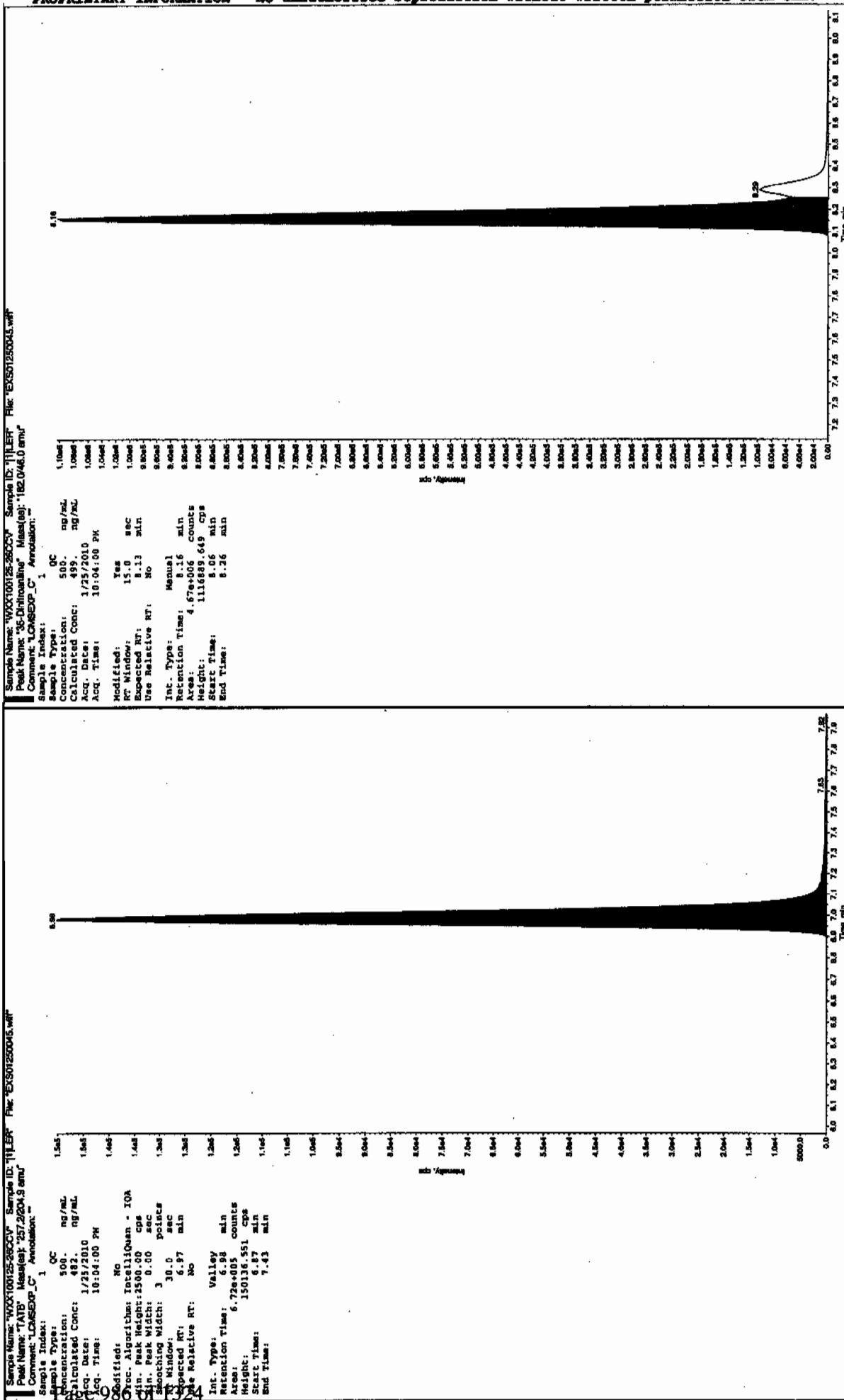
\* Value outside of Recovery Limits

Before 2/27/10



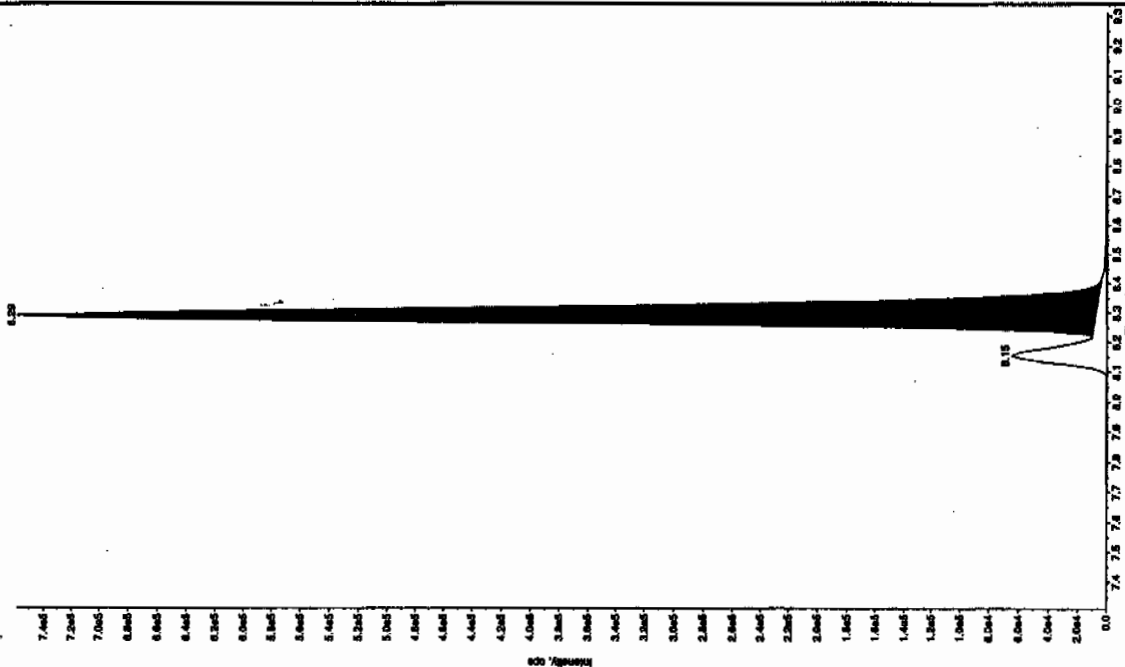
After 2/27/10

after Scan 1/27/10



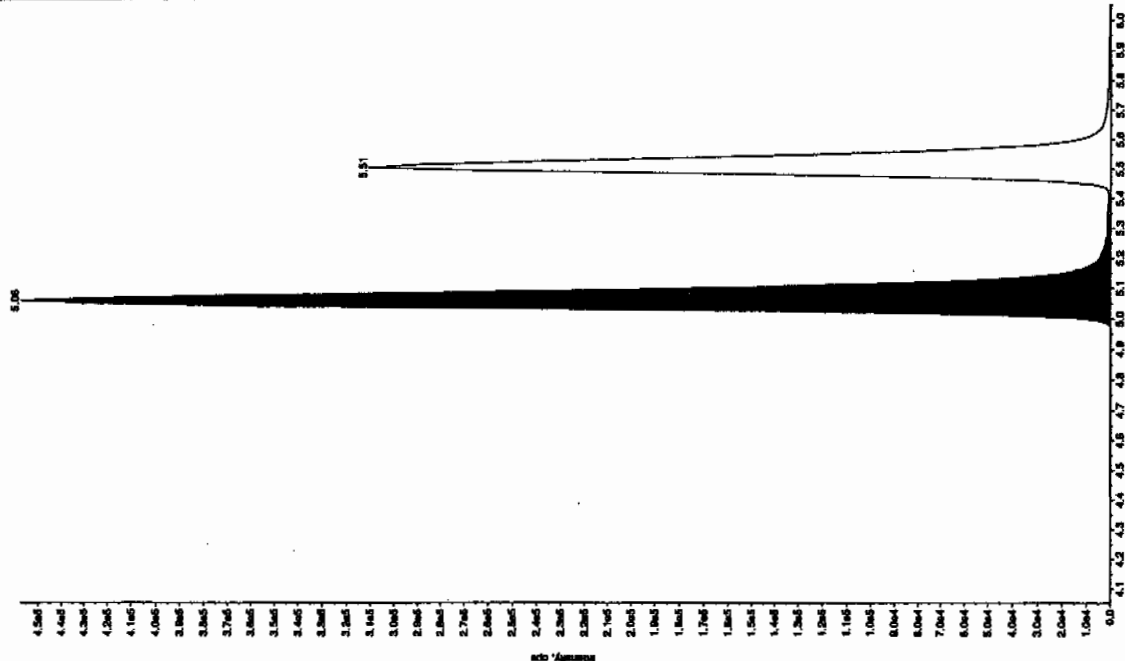
Sample Name: "WXX100125-260CV" Sample ID: "HLEB" File: "EXS01260046.wif"  
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.17451.9 amu"  
 Comment: "LCMS-EXP\_C" Annotation: "

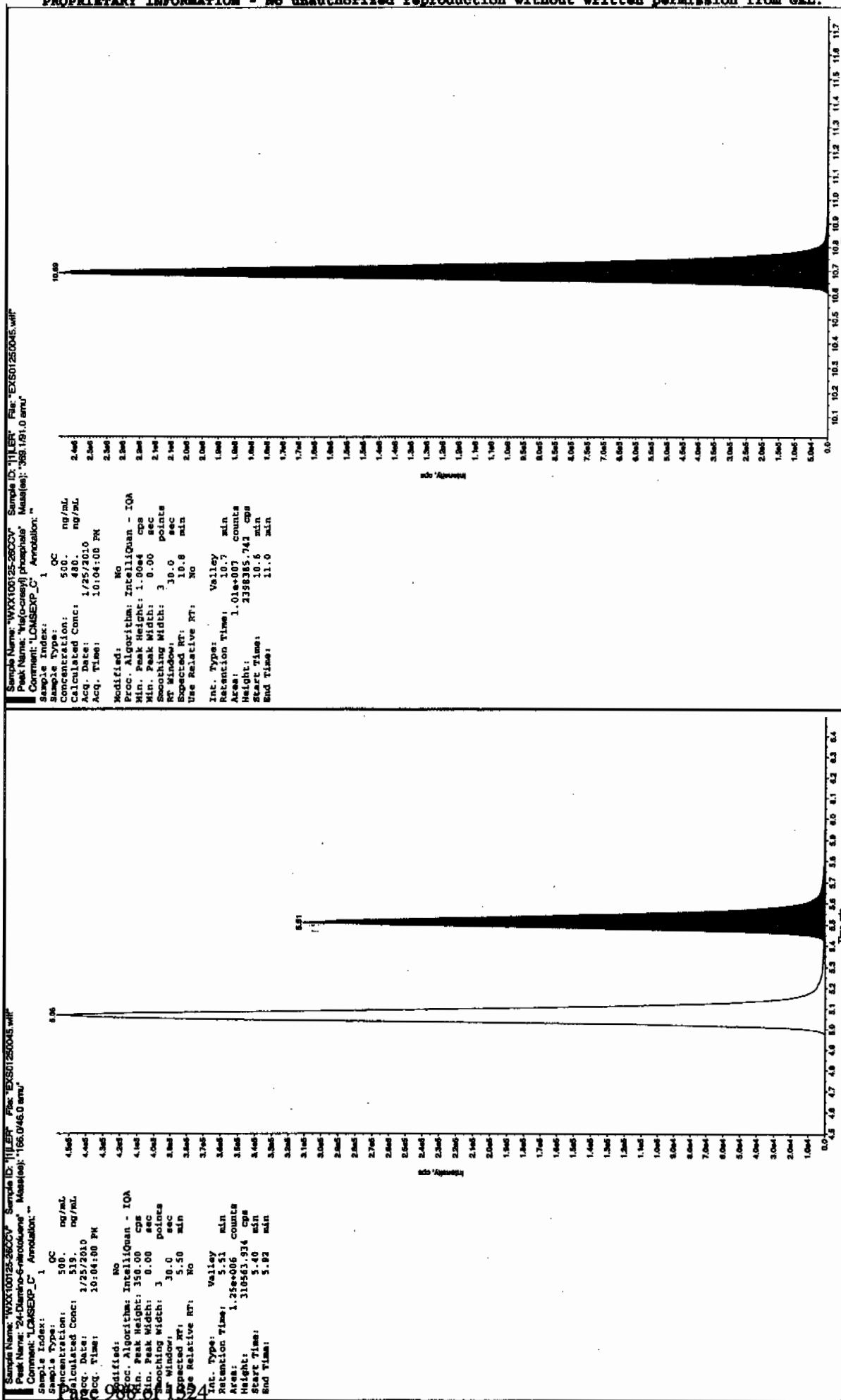
Sample Index: 1  
 Sample Type: QC  
 Concentration: 250. ng/mL  
 Calculated Conc: 215. ng/mL  
 Acq. Date: 1/25/2010  
 Acq. Time: 10:04:00 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 1460.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 15.0 sec  
 Expected RT: 8.31 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.29 min  
 Area: 1.84e+006 counts  
 Height: 750632.263 cps  
 Start Time: 8.22 min  
 End Time: 8.42 min



Sample Name: "WXX100125-260CV" Sample ID: "HLEB" File: "EXS01260046.wif"  
 Peak Name: "28-Dinitro-4-nitrofluorene" Mass(es): "186.046.0 amu"  
 Comment: "LCMS-EXP\_C" Annotation: "

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500. ng/mL  
 Calculated Conc: 503. ng/mL  
 Acq. Date: 1/25/2010  
 Acq. Time: 10:04:00 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 450.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 5.05 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.06 min  
 Area: 1.90e+006 counts  
 Height: 457264.954 cps  
 Start Time: 4.96 min  
 End Time: 5.33 min





**7B**  
**Explosives CRI Standard**

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1210

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS01250047.wiff

Analysis Date: 25-JAN-10 22:35

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	121	121	
2,6-Diamino-4-nitrotoluene	100	110	110	
3,4-Dinitrotoluene	50	48.2	96	
3,5-Dinitroaniline	100	102	102	
TATB	100	101	101	
tris(o-cresyl) phosphate	100	113	113	

**Recovery Limits:**

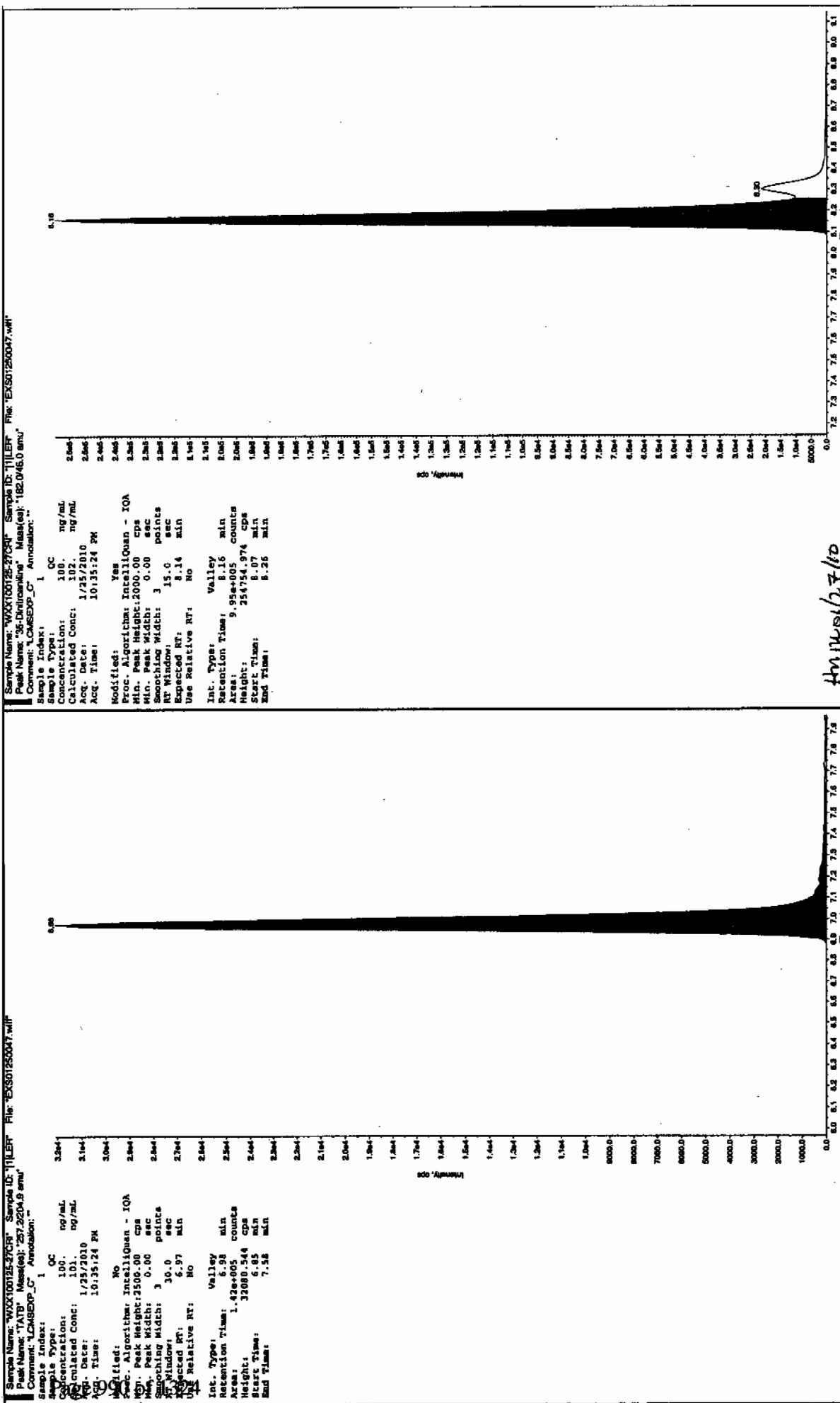
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

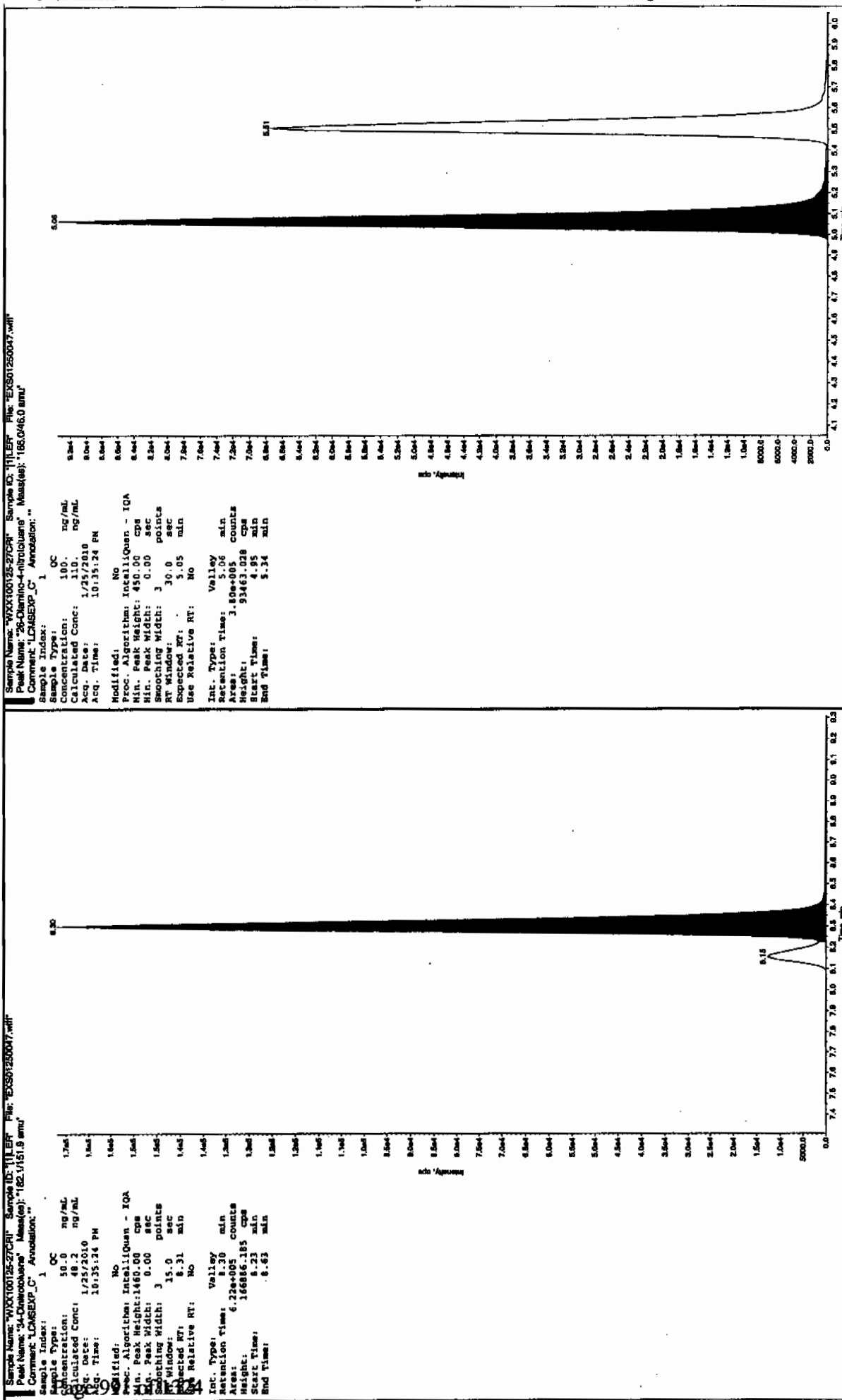
\* Value outside of Recovery Limits

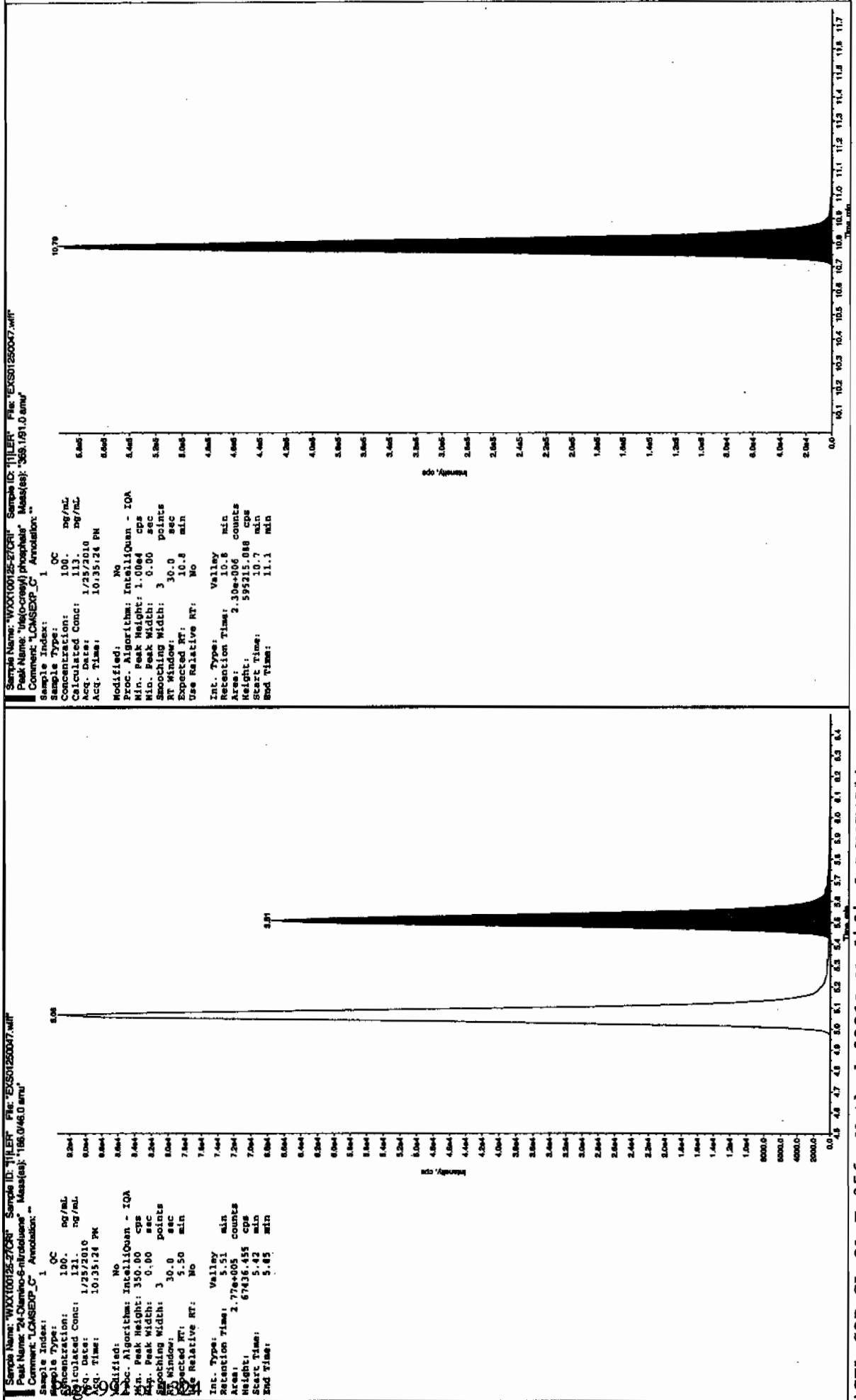
See 112710



Amruse/27/10







7A

Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1210

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS01250058.wiff

Analysis Date: 26-JAN-10 01:28

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	510	102	
2,6-Diamino-4-nitrotoluene	500	472	95	
3,4-Dinitrotoluene	250	227	91	
3,5-Dinitroaniline	500	493	99	
TATB	500	507	101	
tris(o-cresyl) phosphate	500	483	97	

Recovery Limits:

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

Other Target Analytes 80-120%

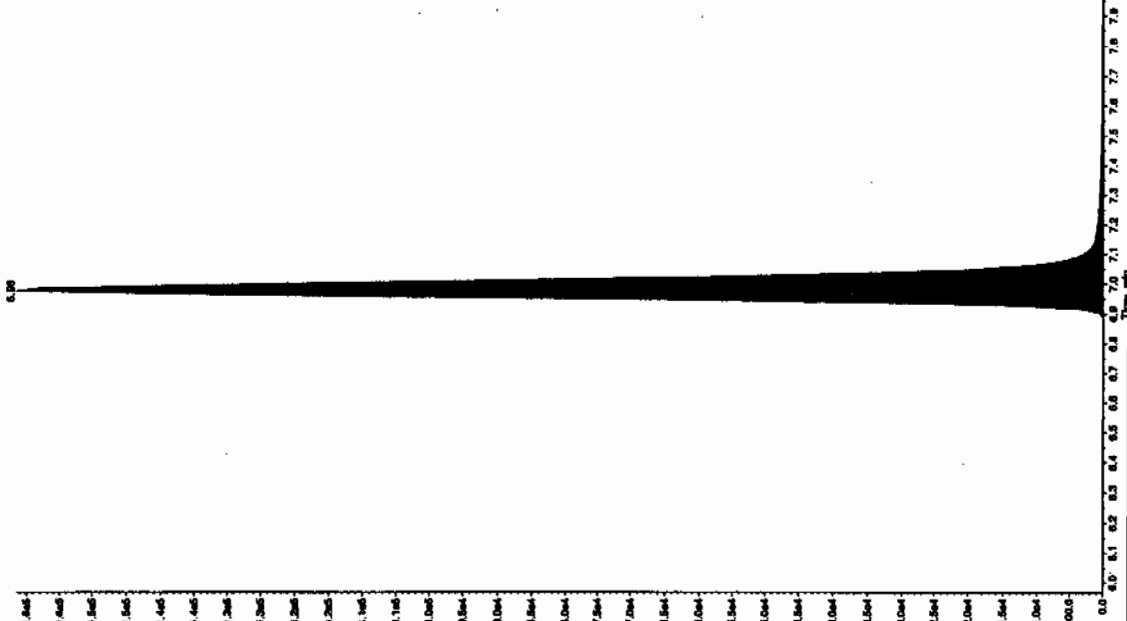
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

Before Scan 112710

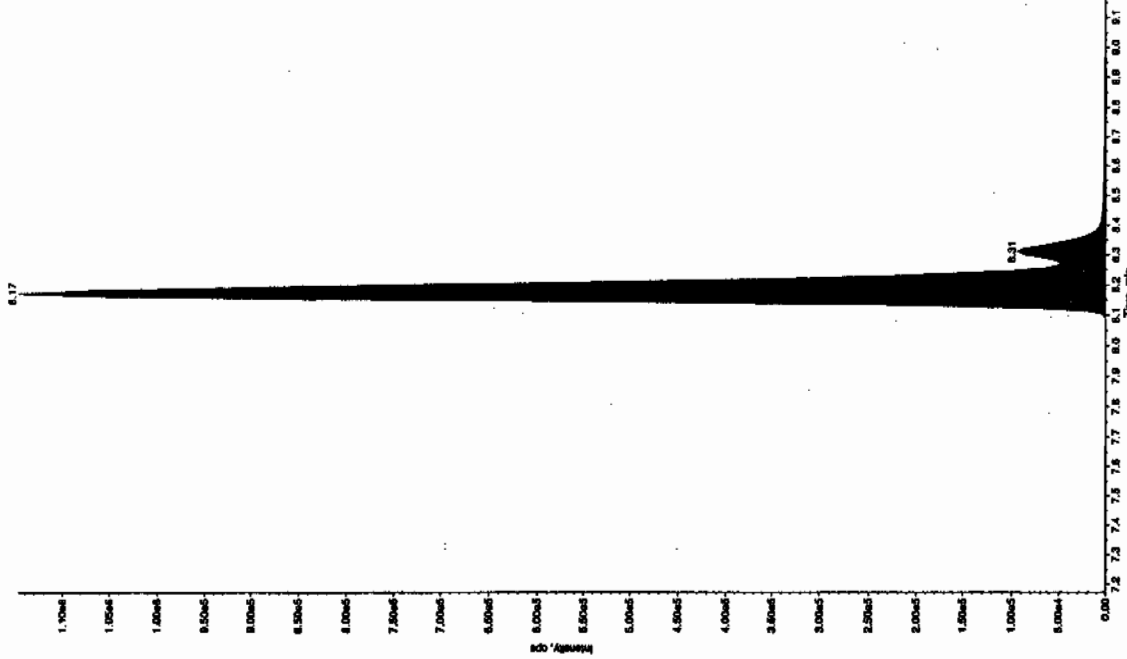
Sample Name: 'XXX100125-2605V' Sample ID: '111ER' File: 'EX501250058.wif'  
 Peak Name: 'TATB' Mass(es): '257.2204.9 amu'  
 Comment: 'LCMSXP\_C' Annotation: ''

Sample Index: 1  
 Sample Type: 1  
 Concentration: 500 ng/mL  
 Calculated Conc: 507 ng/mL  
 Acq. Date: 1/26/2010  
 Acq. Time: 1:28:18 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 2500.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 6.97 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 6.98 min  
 Area: 7.06e+005 counts  
 Height: 161480.480 cps  
 Start Time: 6.63 min  
 End Time: 7.63 min



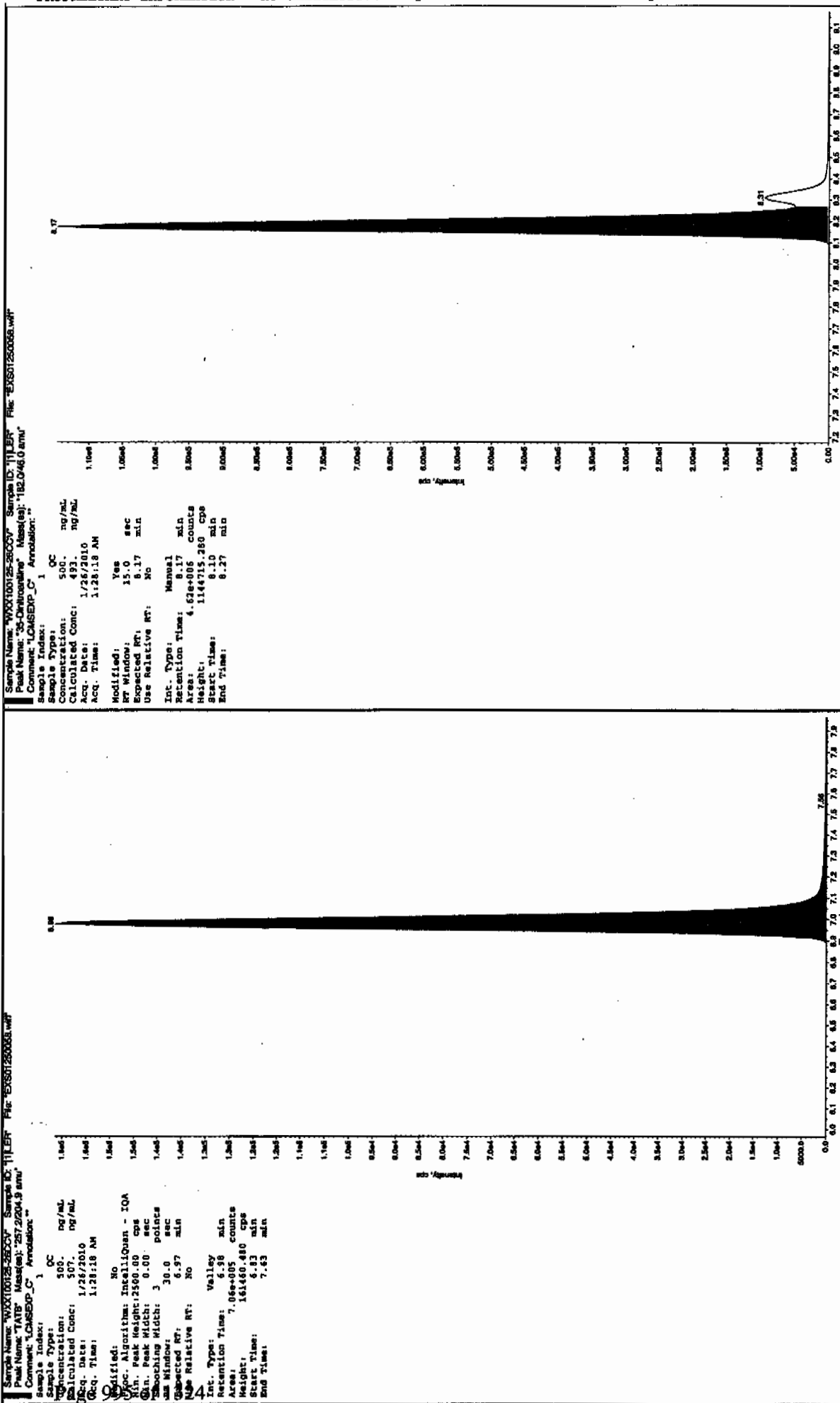
Sample Name: 'XXX100125-2605V' Sample ID: '111ER' File: 'EX501250058.wif'  
 Peak Name: 'TATB' Mass(es): '182.046.0 amu'  
 Comment: 'LCMSXP\_C' Annotation: ''

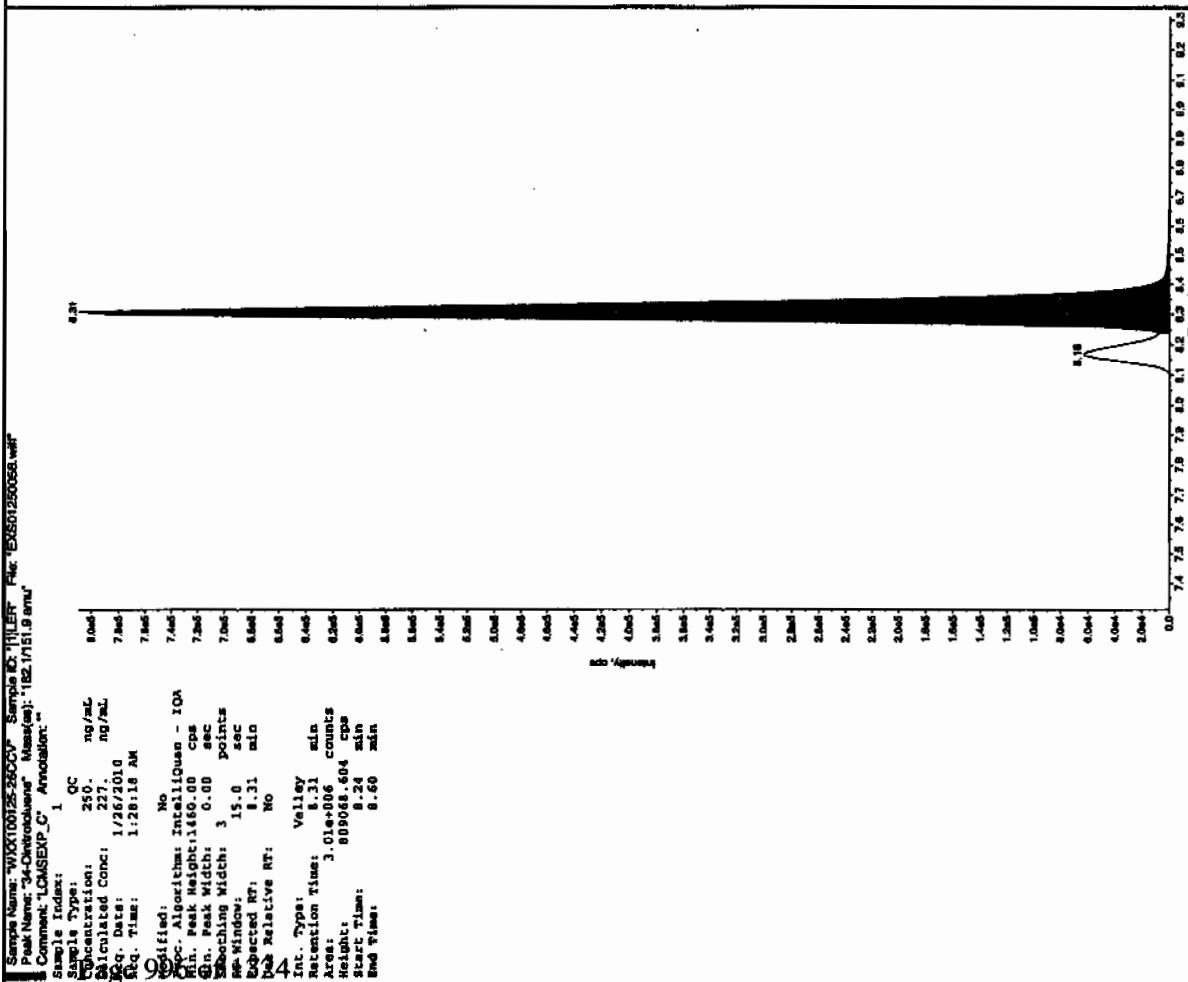
Sample Index: 1  
 Sample Type: 1  
 Concentration: 500 ng/mL  
 Calculated Conc: 546 ng/mL  
 Acq. Date: 1/26/2010  
 Acq. Time: 1:28:18 AM  
 Modified: Yes  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 2000.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 15.0 sec  
 Expected RT: 8.17 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.17 min  
 Area: 5.08e+006 counts  
 Height: 1146952.148 cps  
 Start Time: 8.08 min  
 End Time: 8.74 min



Time 8112710

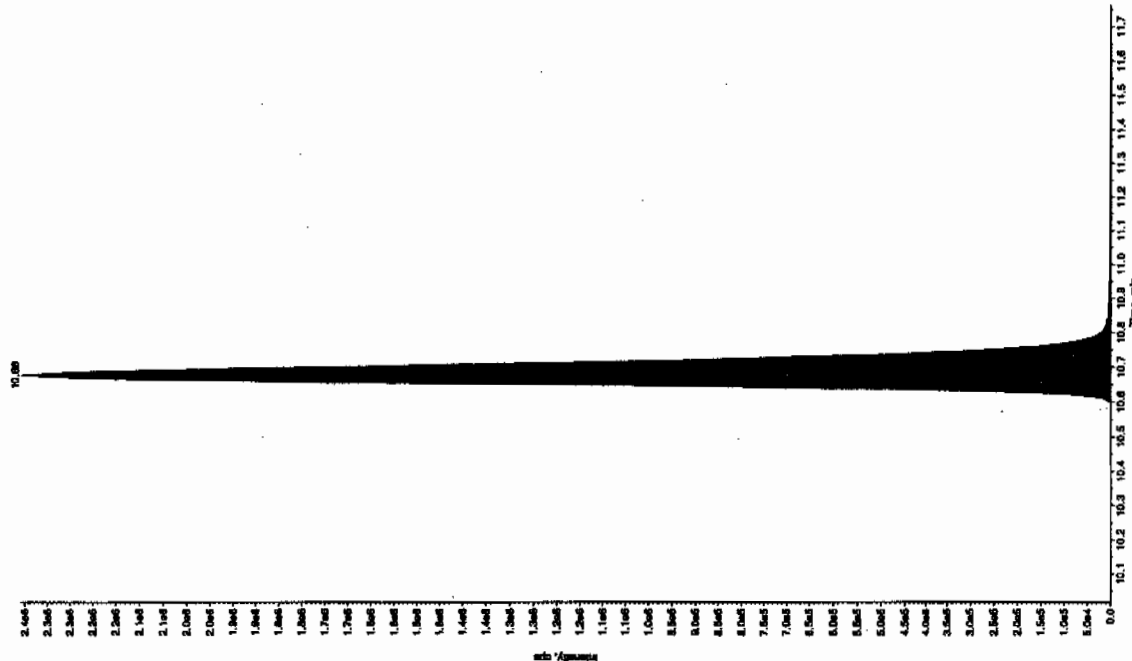
after Jan 11/27/10





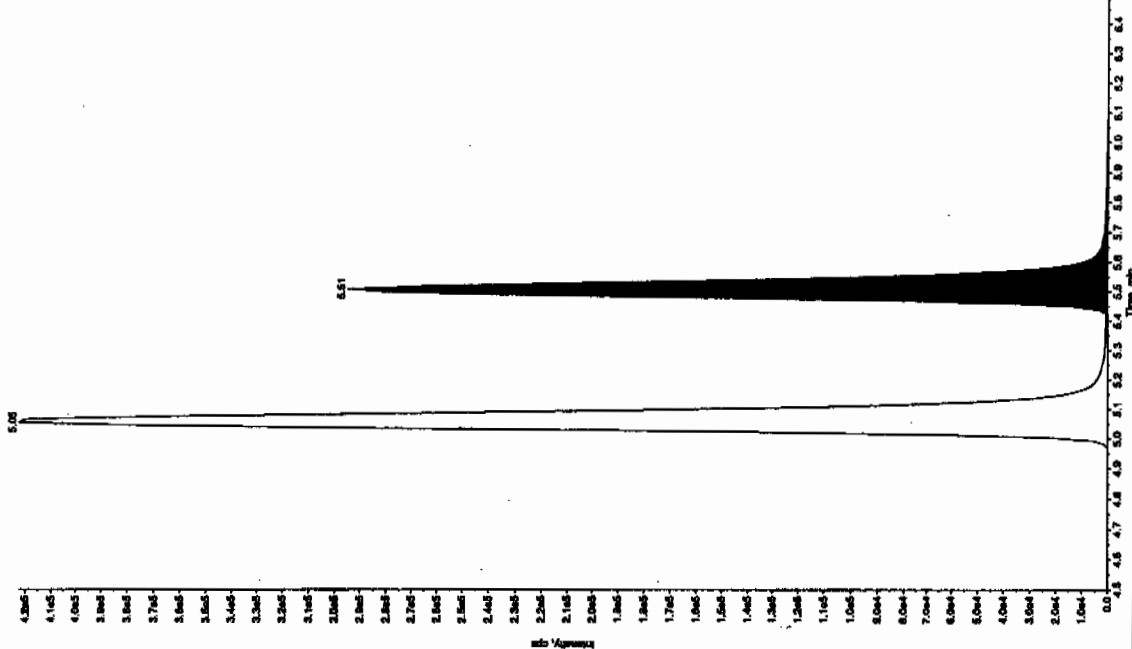
Sample Name: "WXX100125-2600V" Sample ID: "11111" File: "EX001250058.wif"  
 Peak Name: "2a-Damirio-6-ethylolane" Mass(es): 358.191.0 amu  
 Comment: "LCMSXP\_C" Annotation: "

Sample Index: 1  
 Sample Type: OC  
 Concentration: 500. ng/mL  
 Calculated Conc: 483. ng/mL  
 Acq. Date: 1/26/2010  
 Acq. Time: 1:28:18 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 1.00e4 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 10.8 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.7 min  
 Area: 1.01e+007 counts  
 Height: 2359059.570 cps  
 Start Time: 10.6 min  
 End Time: 11.0 min



Sample Name: "WXX100125-2600V" Sample ID: "11111" File: "EX001250058.wif"  
 Peak Name: "2a-Damirio-6-ethylolane" Mass(es): 186.048.0 amu  
 Comment: "LCMSXP\_C" Annotation: "

Sample Index: 1  
 Sample Type: OC  
 Concentration: 500. ng/mL  
 Calculated Conc: 510. ng/mL  
 Acq. Date: 1/26/2010  
 Acq. Time: 1:28:18 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 350.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 5.50 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.31 min  
 Area: 1.23e+006 counts  
 Height: 294758.667 cps  
 Start Time: 5.41 min  
 End Time: 6.00 min



7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1210

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS01250060.wiff

Analysis Date: 26-JAN-10 01:59

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	111	111	
2,6-Diamino-4-nitrotoluene	100	109	109	
3,4-Dinitrotoluene	50	47.7	95	
3,5-Dinitroaniline	100	103	103	
TATB	100	104	104	
tris(o-cresyl) phosphate	100	112	112	

Recovery Limits:

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

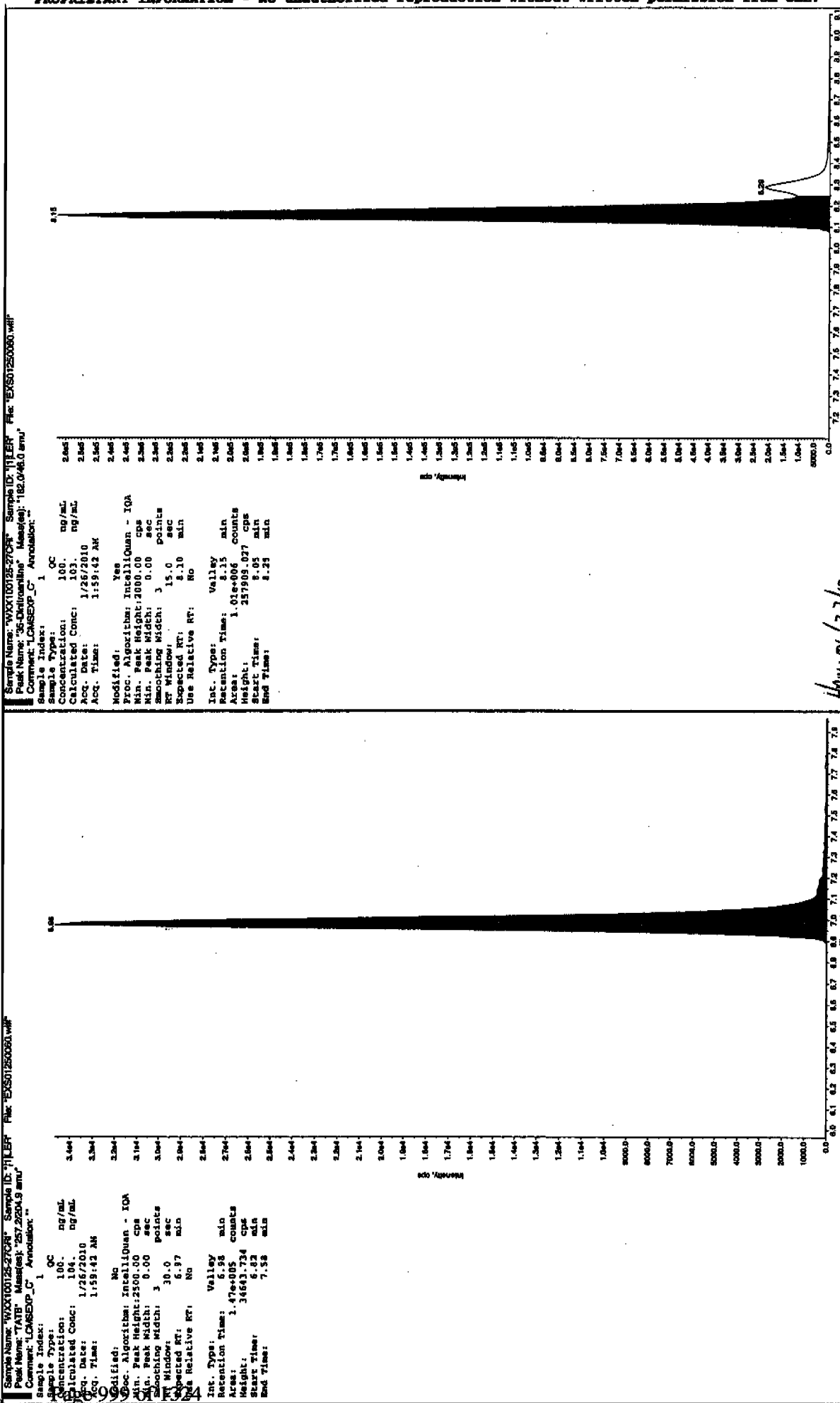
Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

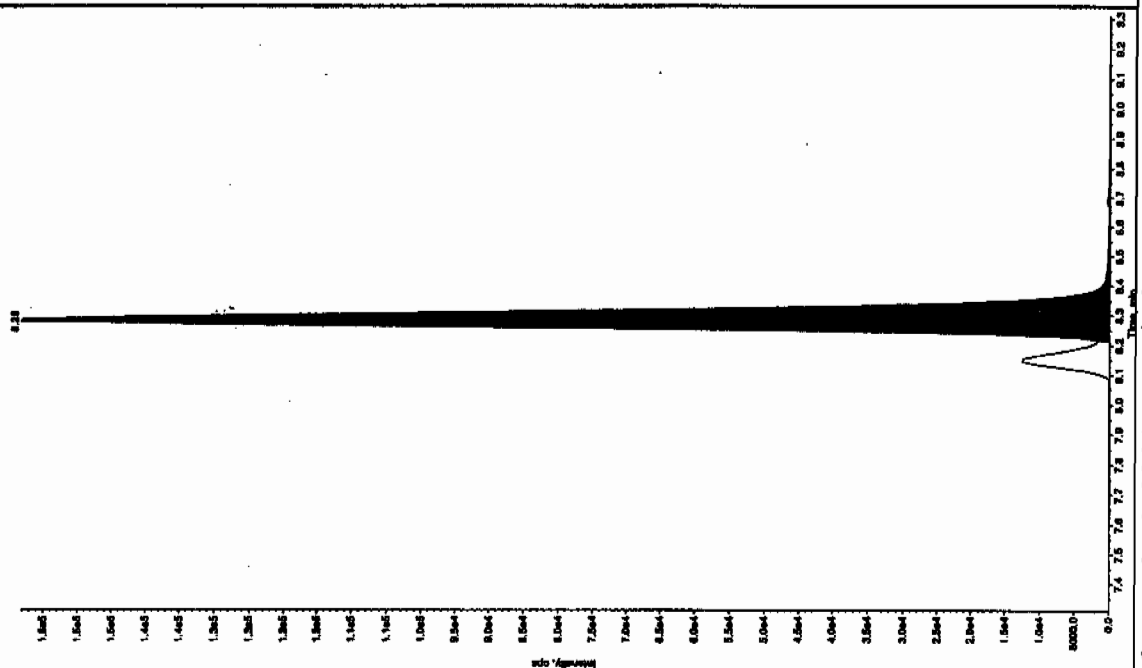


Scan 1127110

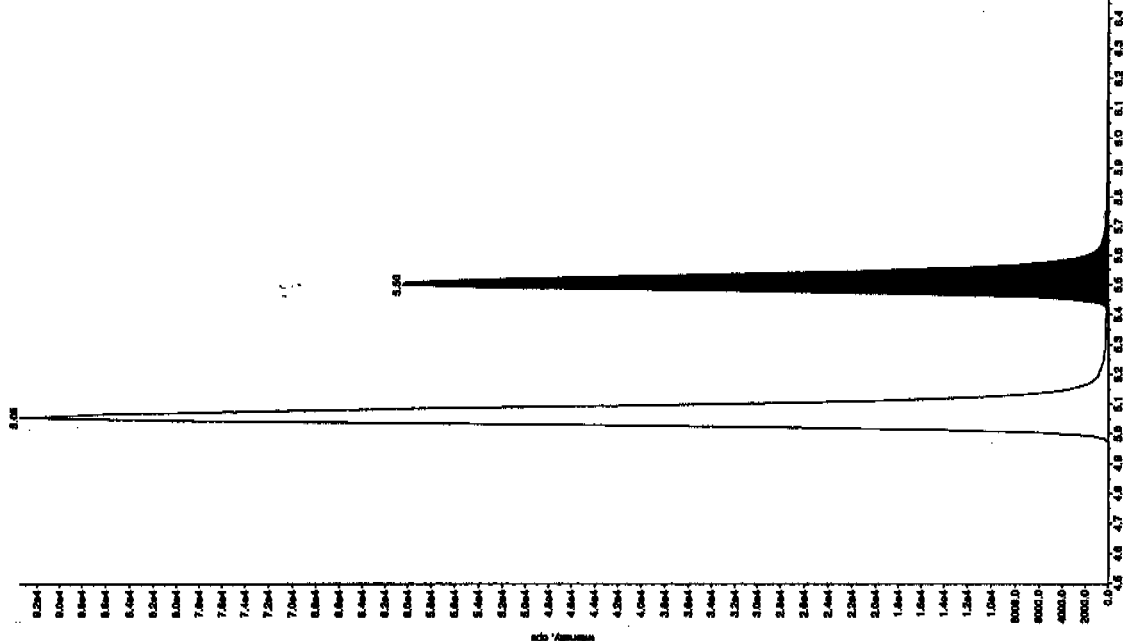
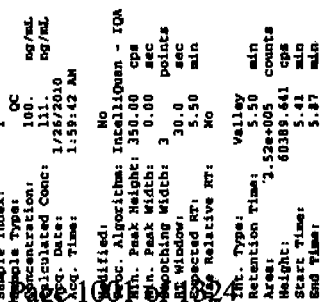


Sample Name: 'WXX100125-2709' Sample ID: '11159' File: 'E580125000.wif'  
 Peak Name: '34-Dibutylamine' Mass(es): '182.1451.5 amu'  
 Comment: 'LCMSEXP\_C' Annotation: ''

Sample Index: 1  
 Sample Type: QC  
 Concentration: 100 ng/mL  
 Calculated Conc: 1/26/2010  
 Acq. Date: 1/26/2010  
 Acq. Time: 1:59:42 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 450.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 5.05 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.05 min  
 Area: 3.79e+005 counts  
 Height: 93513.076 cps  
 Start Time: 4.94 min  
 End Time: 5.33 min



Sample Index: 1  
 Sample Type: QC  
 Concentration: 50.0 ng/mL  
 Calculated Conc: 47.7 ng/mL  
 Acq. Date: 1/26/2010  
 Acq. Time: 1:59:42 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 1400.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 15.0 sec  
 Expected RT: 8.31 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.28 min  
 Area: 6.15e+005 counts  
 Height: 158162.949 cps  
 Start Time: 8.22 min  
 End Time: 8.60 min



7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1210

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS01250067.wiff

Analysis Date: 26-JAN-10 03:49

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	523	105	
2,6-Diamino-4-nitrotoluene	500	495	99	
3,4-Dinitrotoluene	250	228	91	
3,5-Dinitroaniline	500	513	103	
TATB	500	525	105	
tris(o-cresyl) phosphate	500	481	96	

Recovery Limits:

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

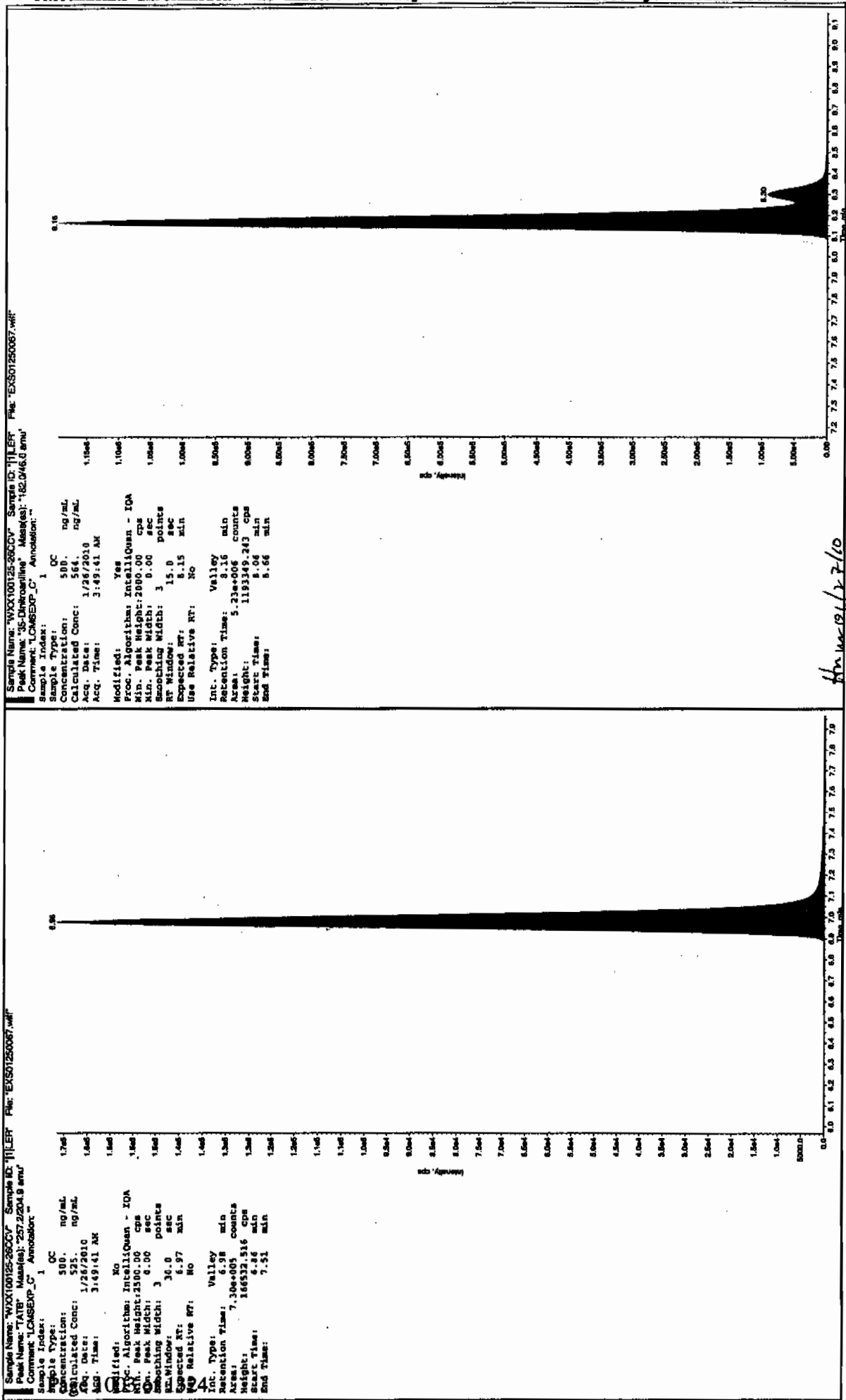
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

# Column used to flag Recovery outside of Limits

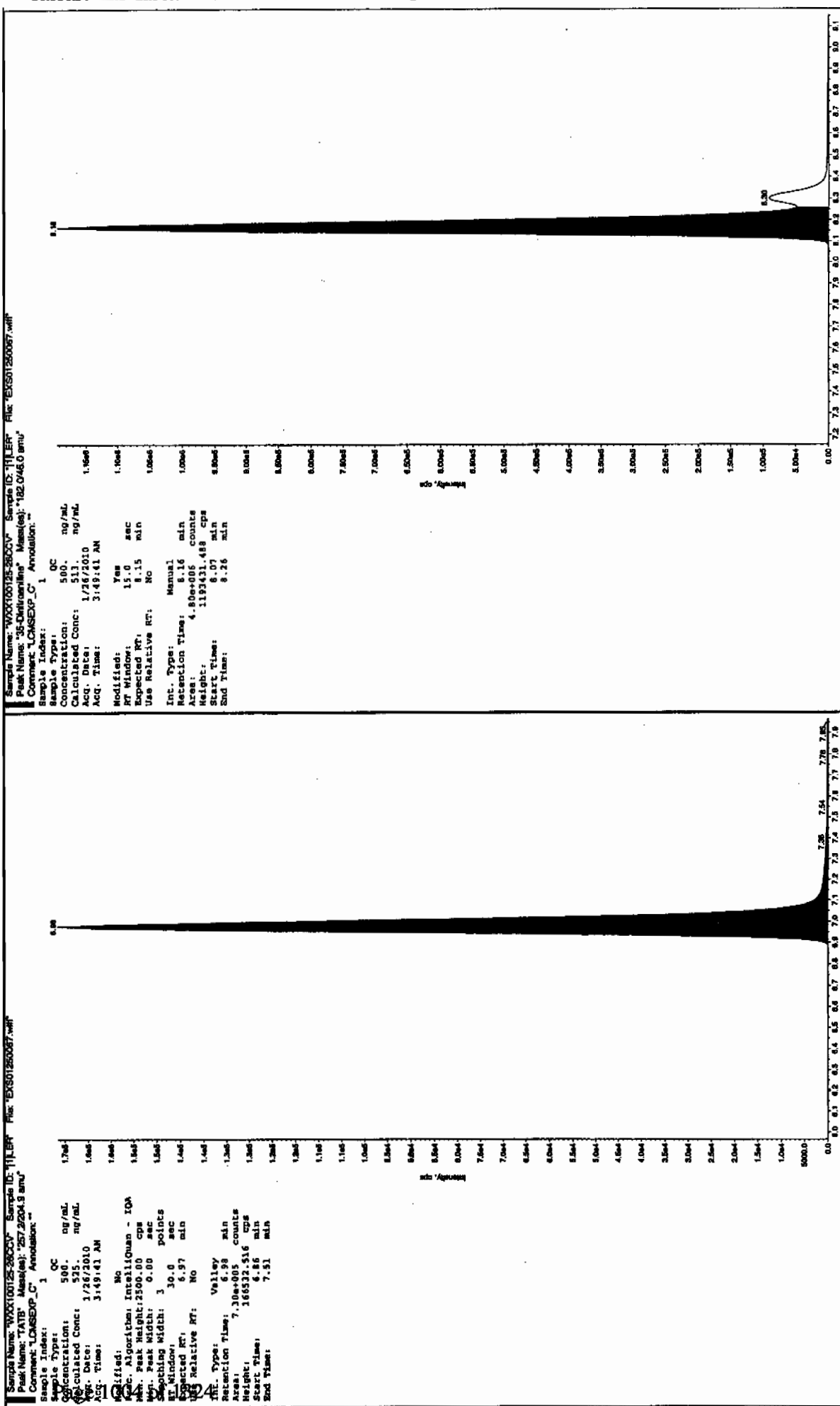
\* Value outside of Recovery Limits

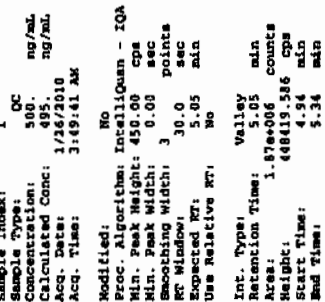
Before Scan 16710



Scan 16710

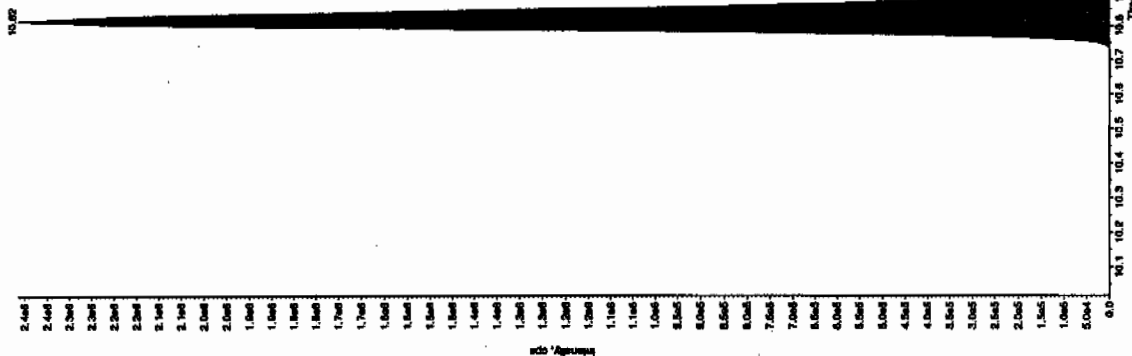
after Jan 11/27/10





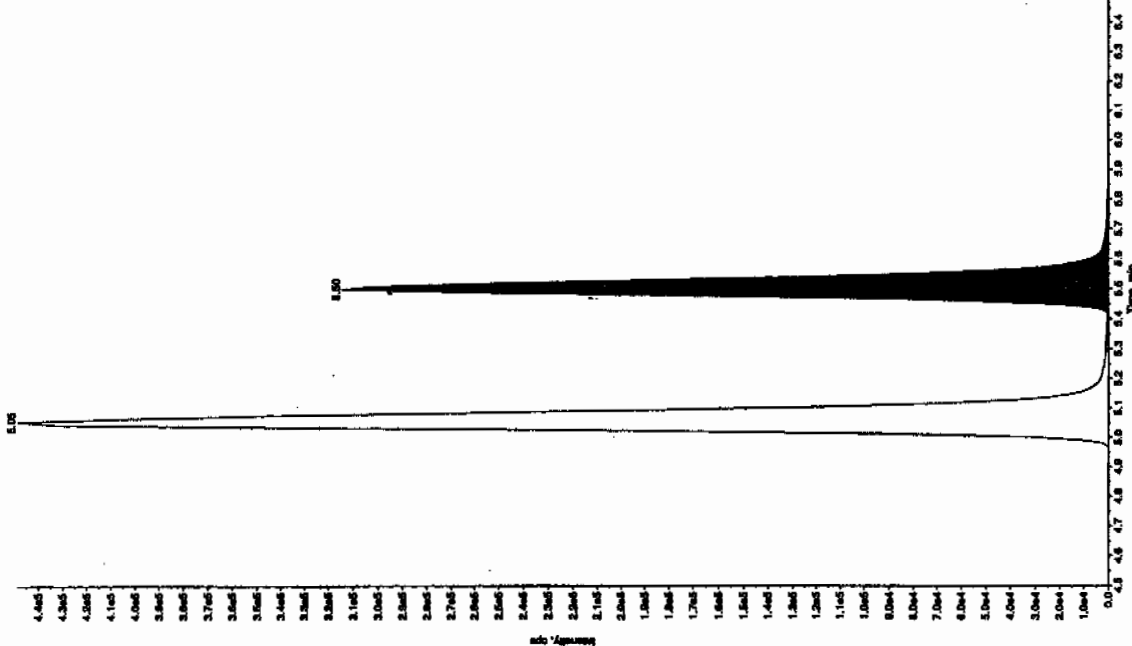
Sample Name: "WXX100125-2800Y" Sample ID: "111111" File: "EX501250007.wif"  
 Peak Name: "24-Diamino-6-oxodure" Mass(es): "385.191.0 amu"  
 Comment: "LCMSDMP\_0" Annotation: ""

Sample Index: 1 QC  
 Sample Type: 500 ng/mL  
 Concentration: 481 ng/mL  
 Calculated Conc: 481  
 Acq. Date: 1/26/2010  
 Acq. Time: 3:49:41 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 1.00e4 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 10.8 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.8 min  
 Area: 1.01e+007 counts  
 Height: 2413636.475 cps  
 Start Time: 10.7 min  
 End Time: 11.1 min



Sample Name: "WXX100125-2800Y" Sample ID: "111111" File: "EX501250007.wif"  
 Peak Name: "24-Diamino-6-oxodure" Mass(es): "166.046.0 amu"  
 Comment: "LCMSDMP\_0" Annotation: ""

Sample Index: 1 QC  
 Sample Type: 500 ng/mL  
 Concentration: 523 ng/mL  
 Calculated Conc: 523  
 Acq. Date: 1/26/2010  
 Acq. Time: 3:49:41 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 350.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 5.50 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.50 min  
 Area: 1.26e+007 counts  
 Height: 314159.027 cps  
 Start Time: 5.41 min  
 End Time: 5.94 min





**7B**  
**Explosives CRI Standard**

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1210

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS01250069.wiff

Analysis Date: 26-JAN-10 04:21

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	112	112	
2,6-Diamino-4-nitrotoluene	100	110	110	
3,4-Dinitrotoluene	50	48.2	96	
3,5-Dinitroaniline	100	108	108	
TATB	100	107	107	
tris(o-cresyl) phosphate	100	111	111	

**Recovery Limits:**

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

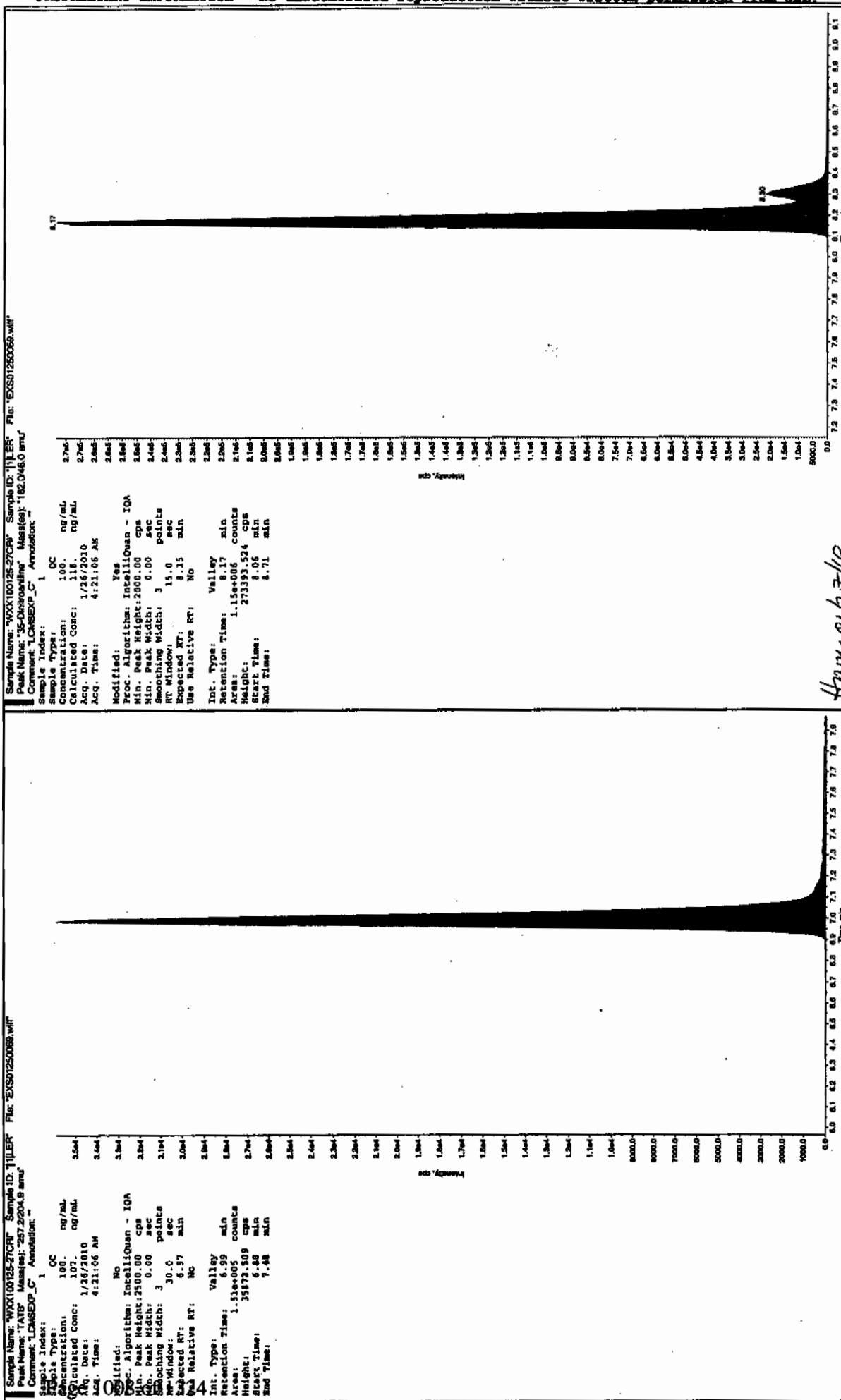
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

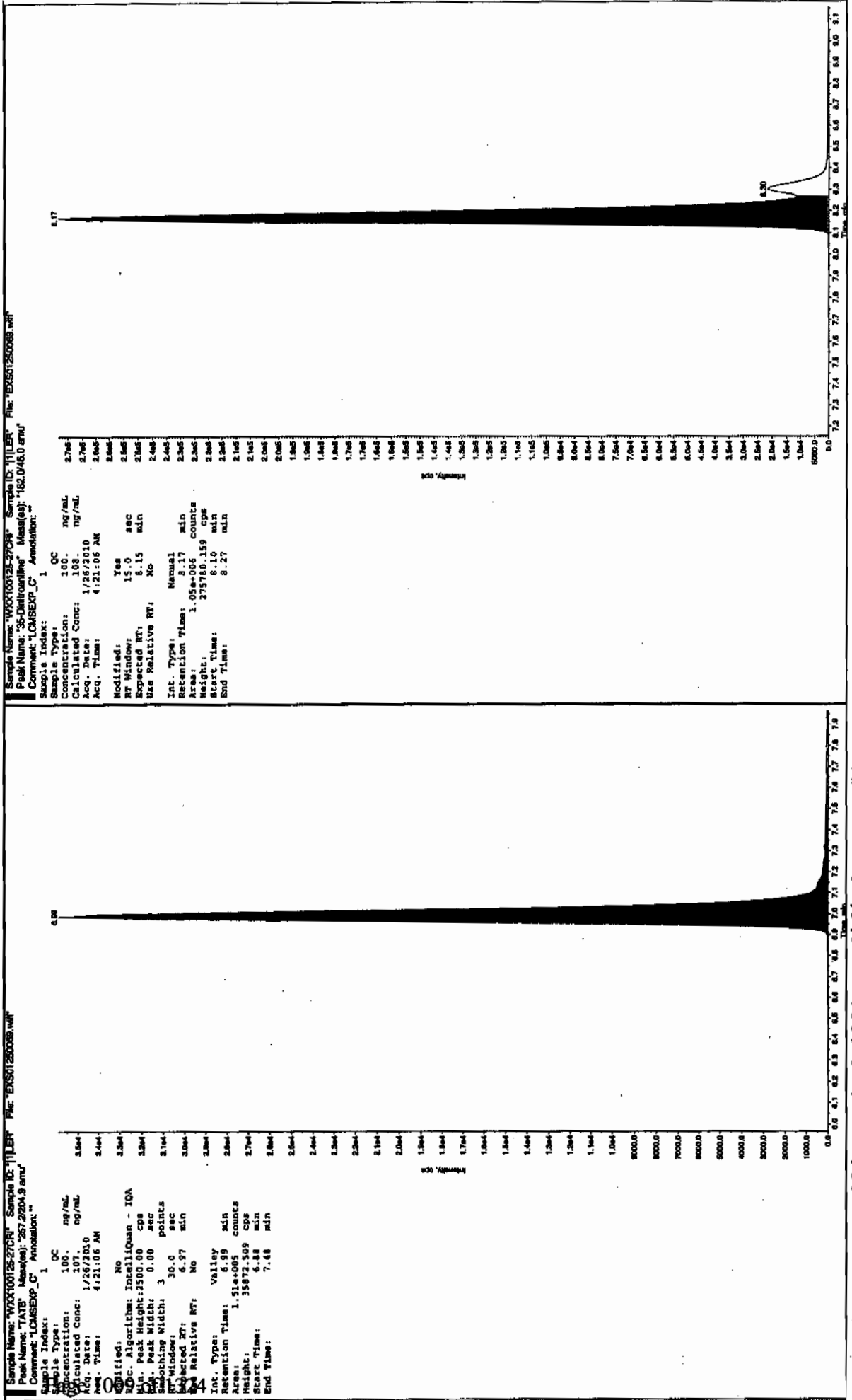
# Column used to flag Recovery outside of Limits

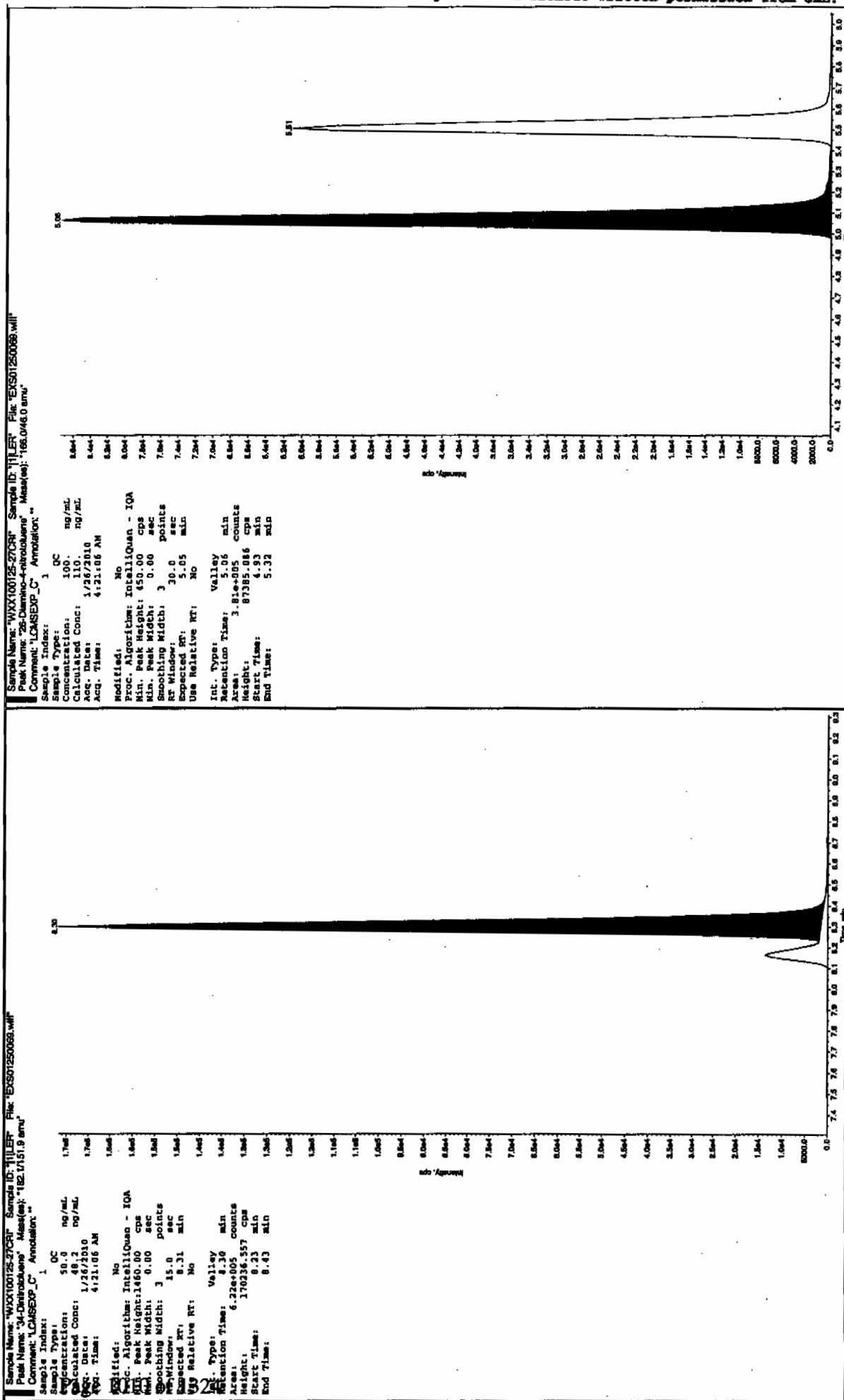
\* Value outside of Recovery Limits

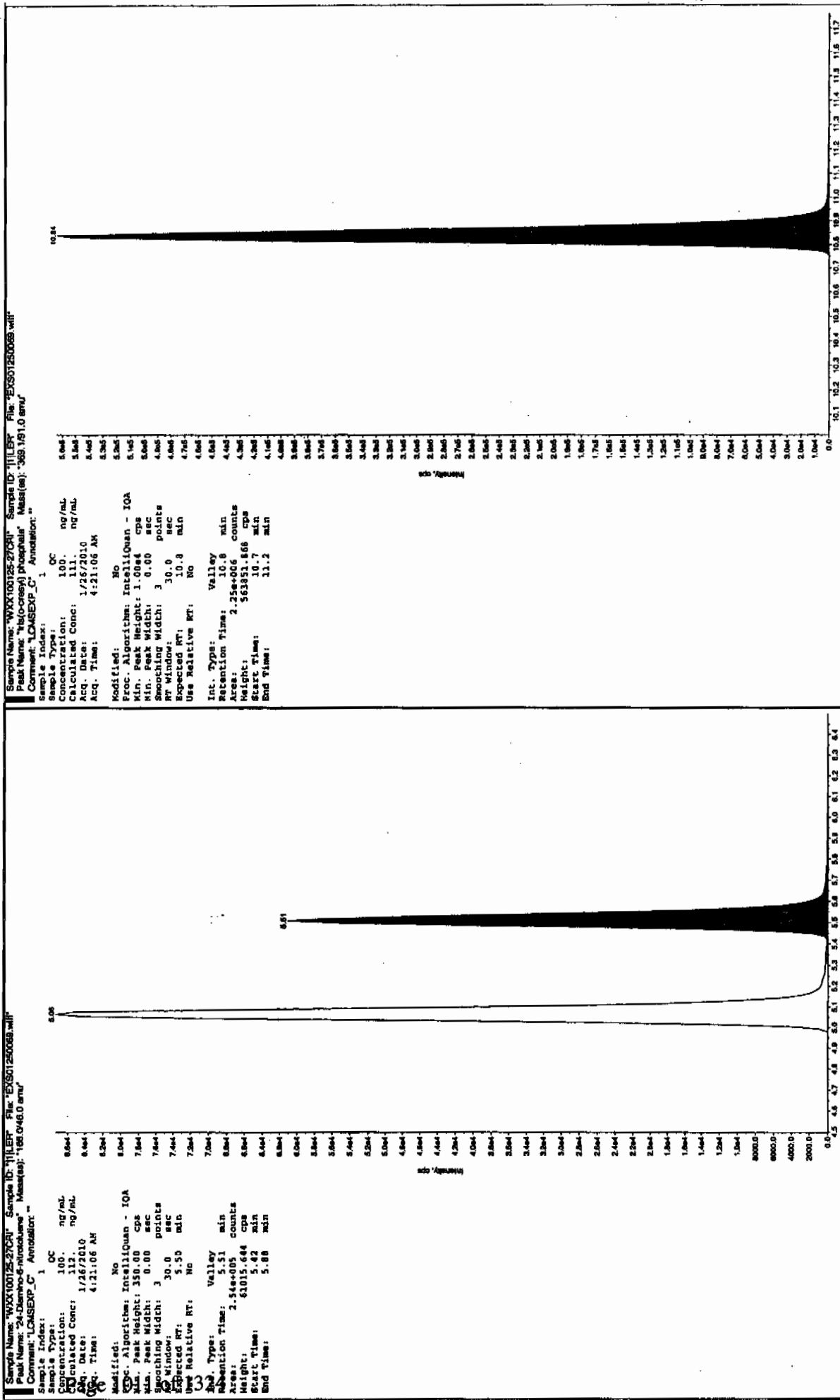
Before Len 1b710



after Jan 11/27/10







7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1210

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS01250080.wiff

Analysis Date: 26-JAN-10 07:13

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	506	101	
2,6-Diamino-4-nitrotoluene	500	493	99	
3,4-Dinitrotoluene	250	236	95	
3,5-Dinitroaniline	500	539	108	
TATB	500	538	108	
tris(o-cresyl) phosphate	500	504	101	

Recovery Limits:

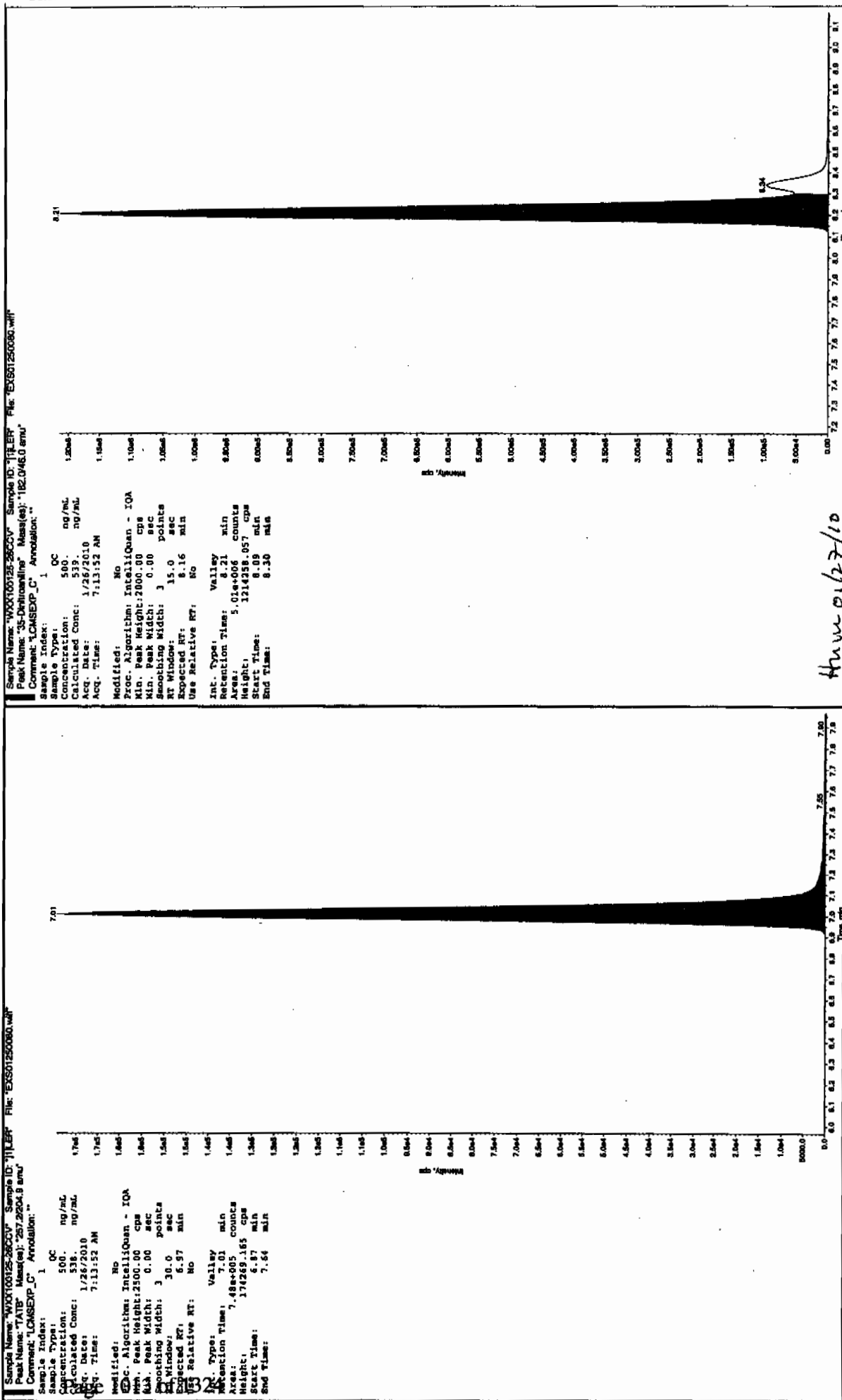
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

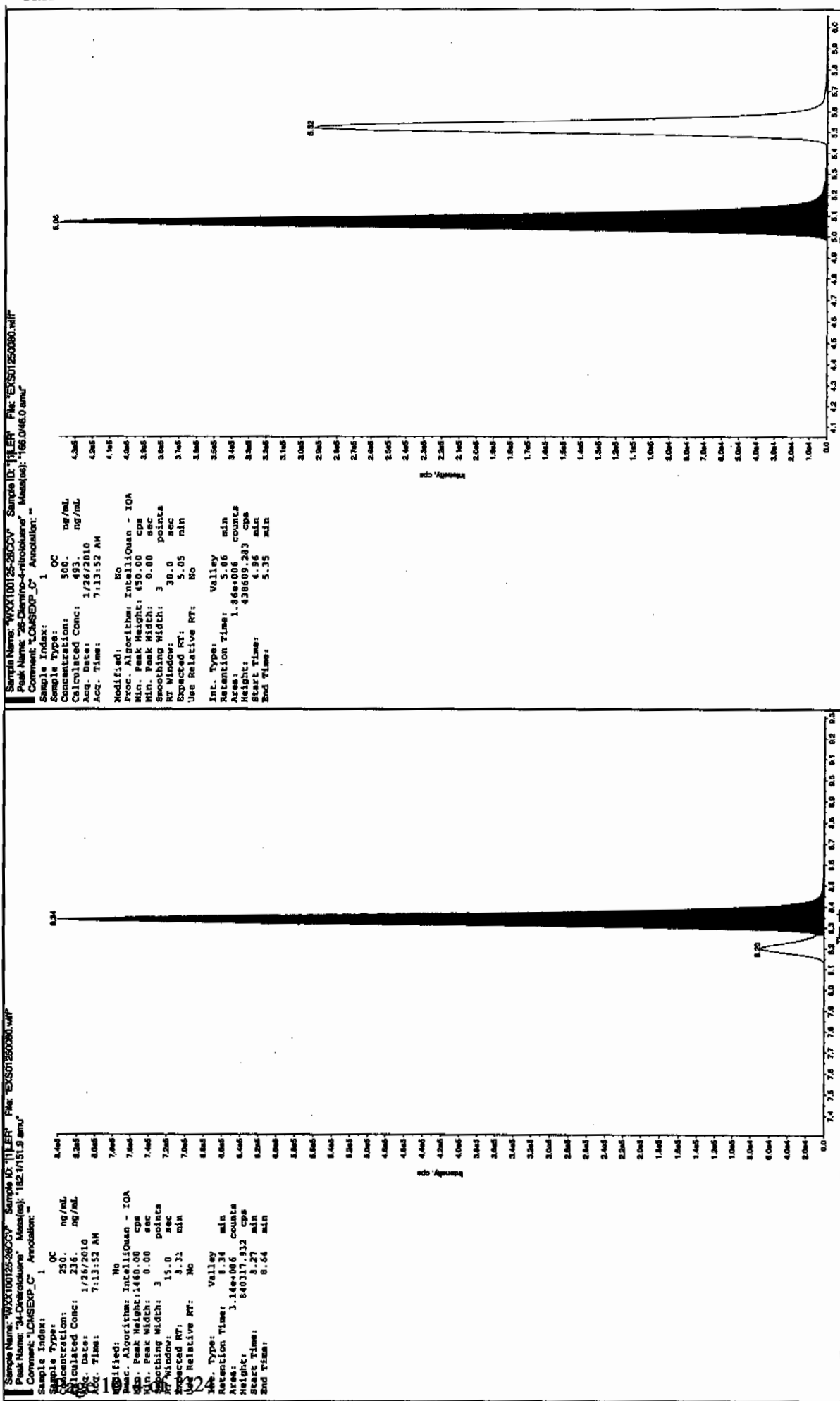
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

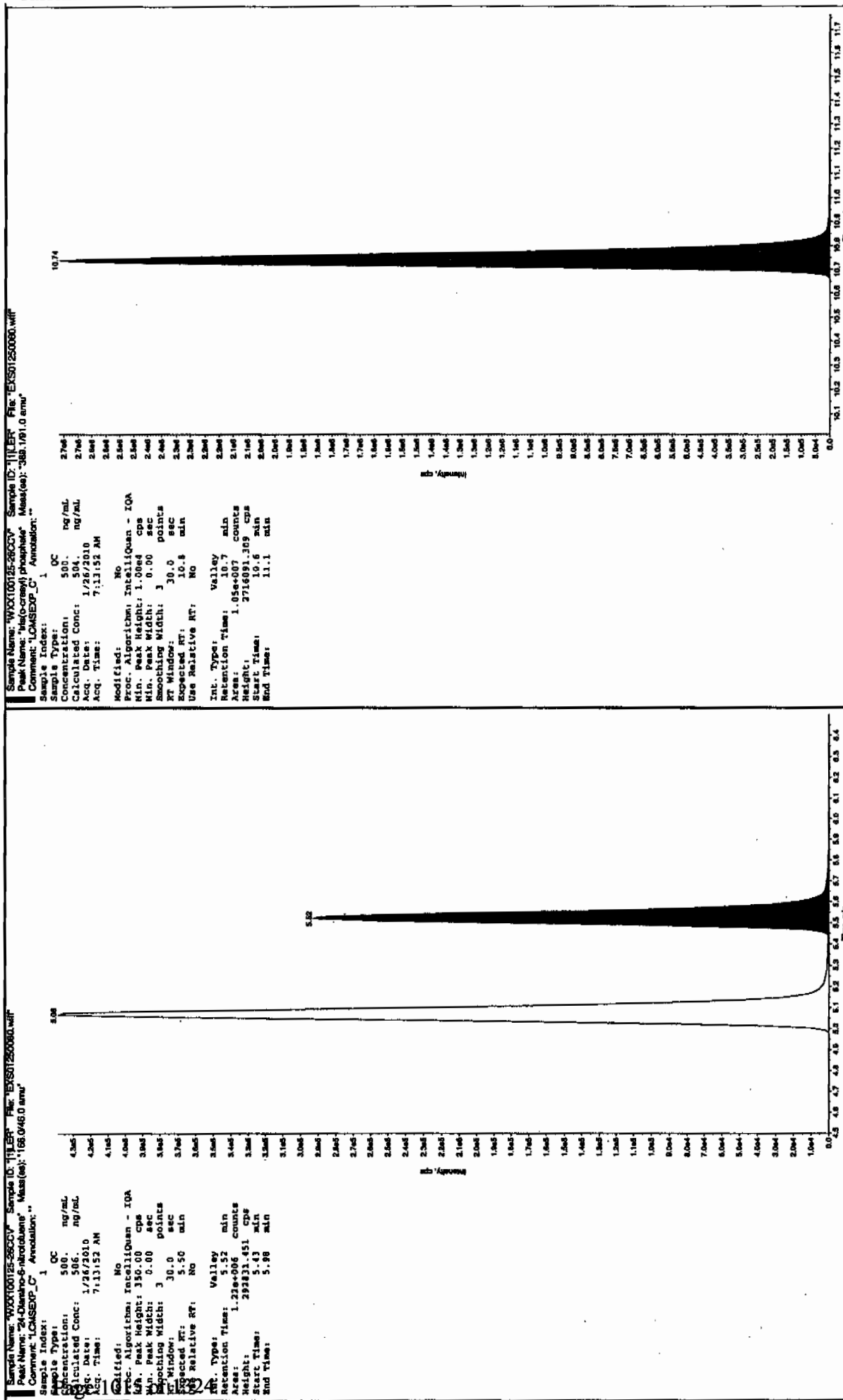
OK 1/27/10



Huu 01/27/10







7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1210

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS01250082.wiff

Analysis Date: 26-JAN-10 07:45

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	111	111	
2,6-Diamino-4-nitrotoluene	100	110	110	
3,4-Dinitrotoluene	50	48.5	97	
3,5-Dinitroaniline	100	109	109	
TATB	100	110	110	
tris(o-cresyl) phosphate	100	116	116	

Recovery Limits:

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

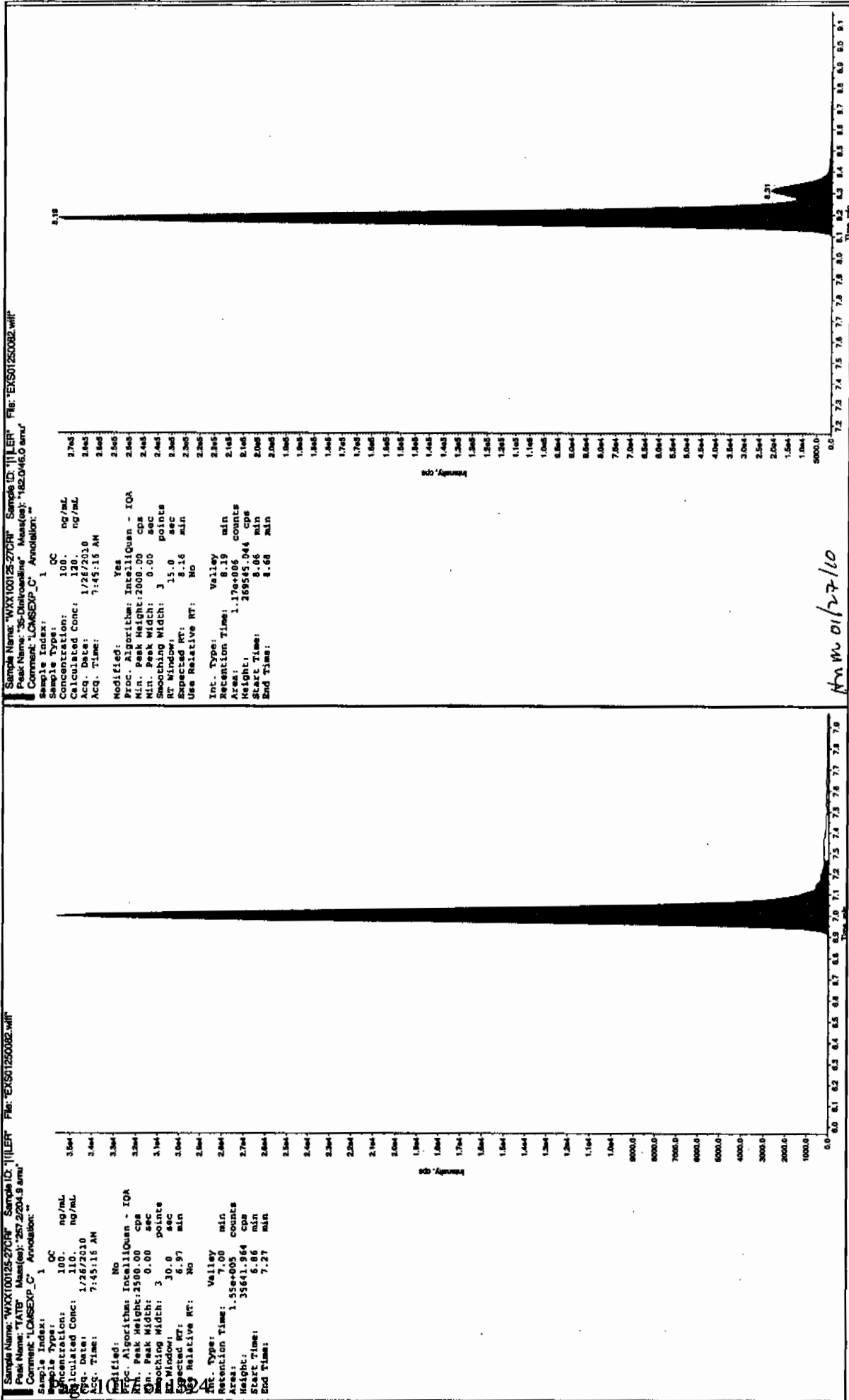
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

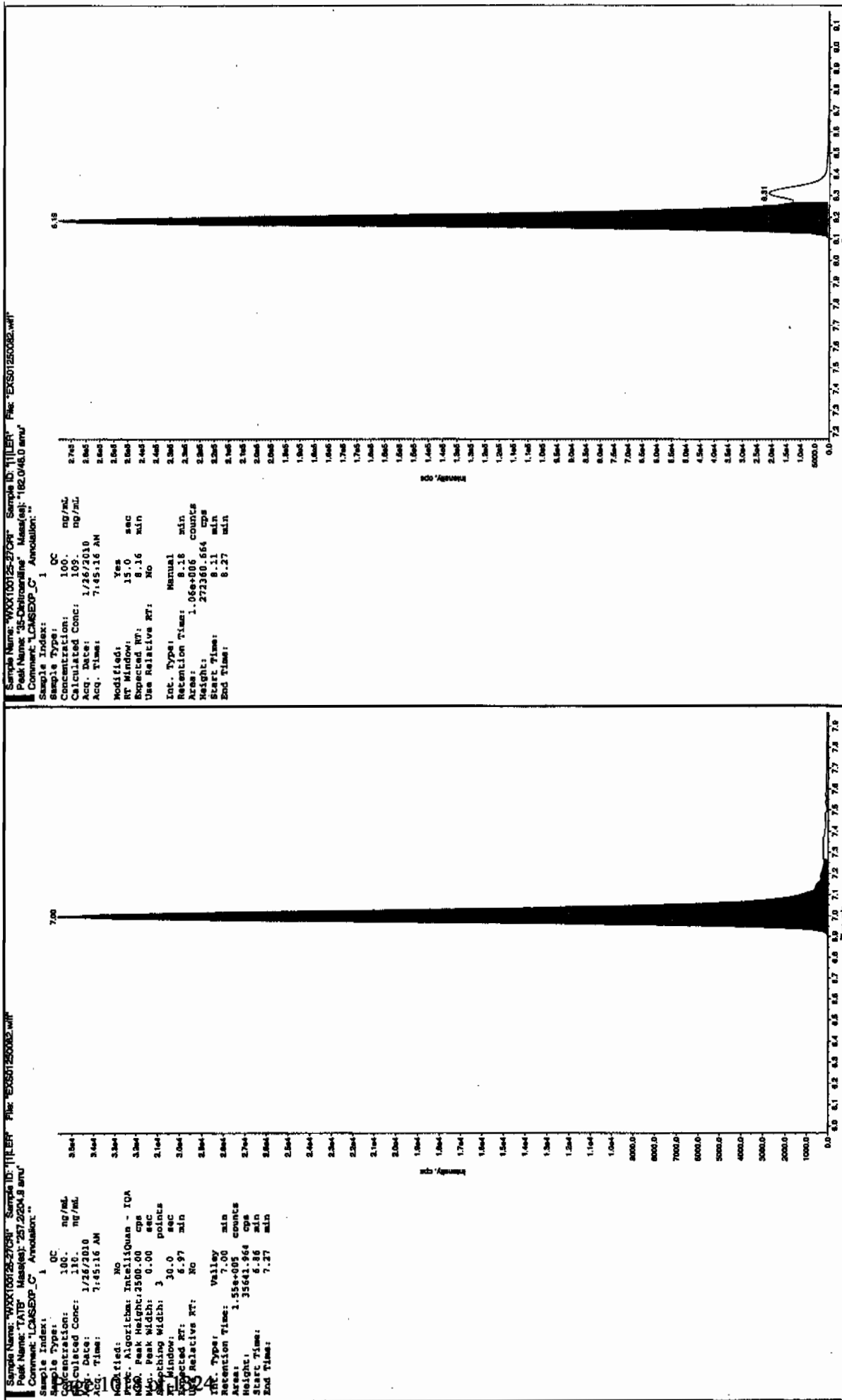
\* Value outside of Recovery Limits

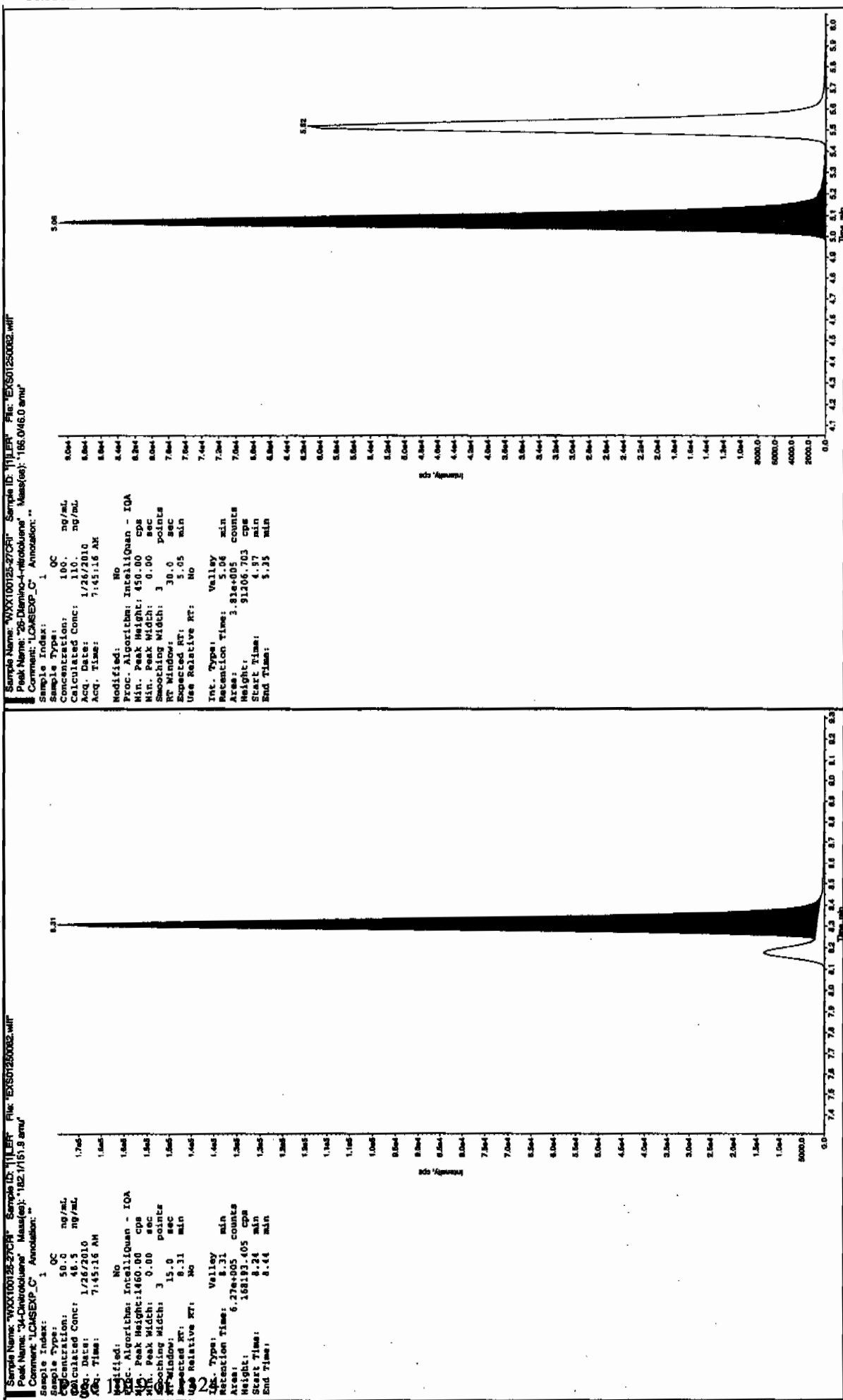
Before Scan 1127110

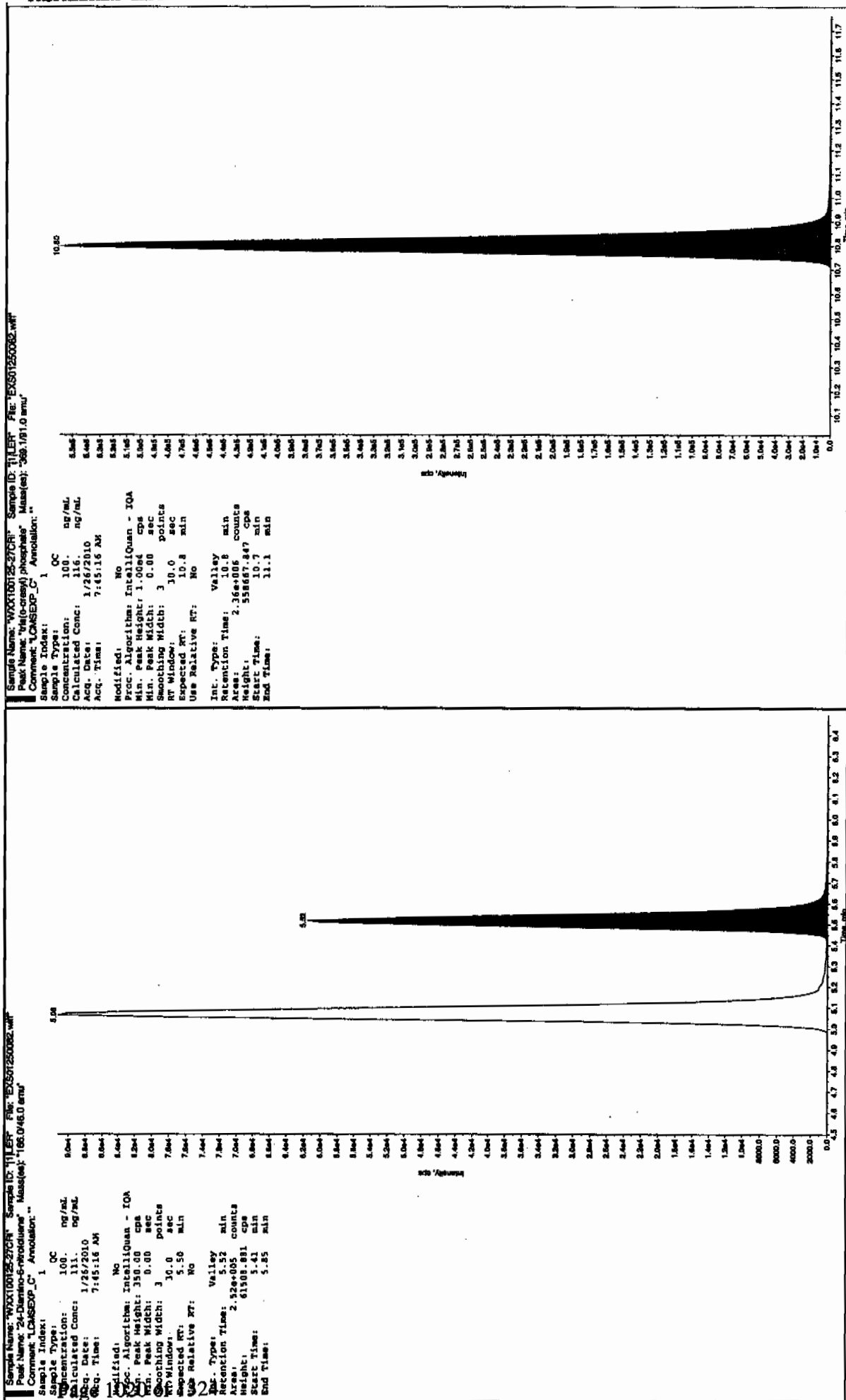


\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

after scan 1127110







7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1210

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS01250093.wiff

Analysis Date: 26-JAN-10 10:37

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	492	98	
2,6-Diamino-4-nitrotoluene	500	457	91	
3,4-Dinitrotoluene	250	226	90	
3,5-Dinitroaniline	500	545	109	
TATB	500	535	107	
tris(o-cresyl) phosphate	500	515	103	

Recovery Limits:

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

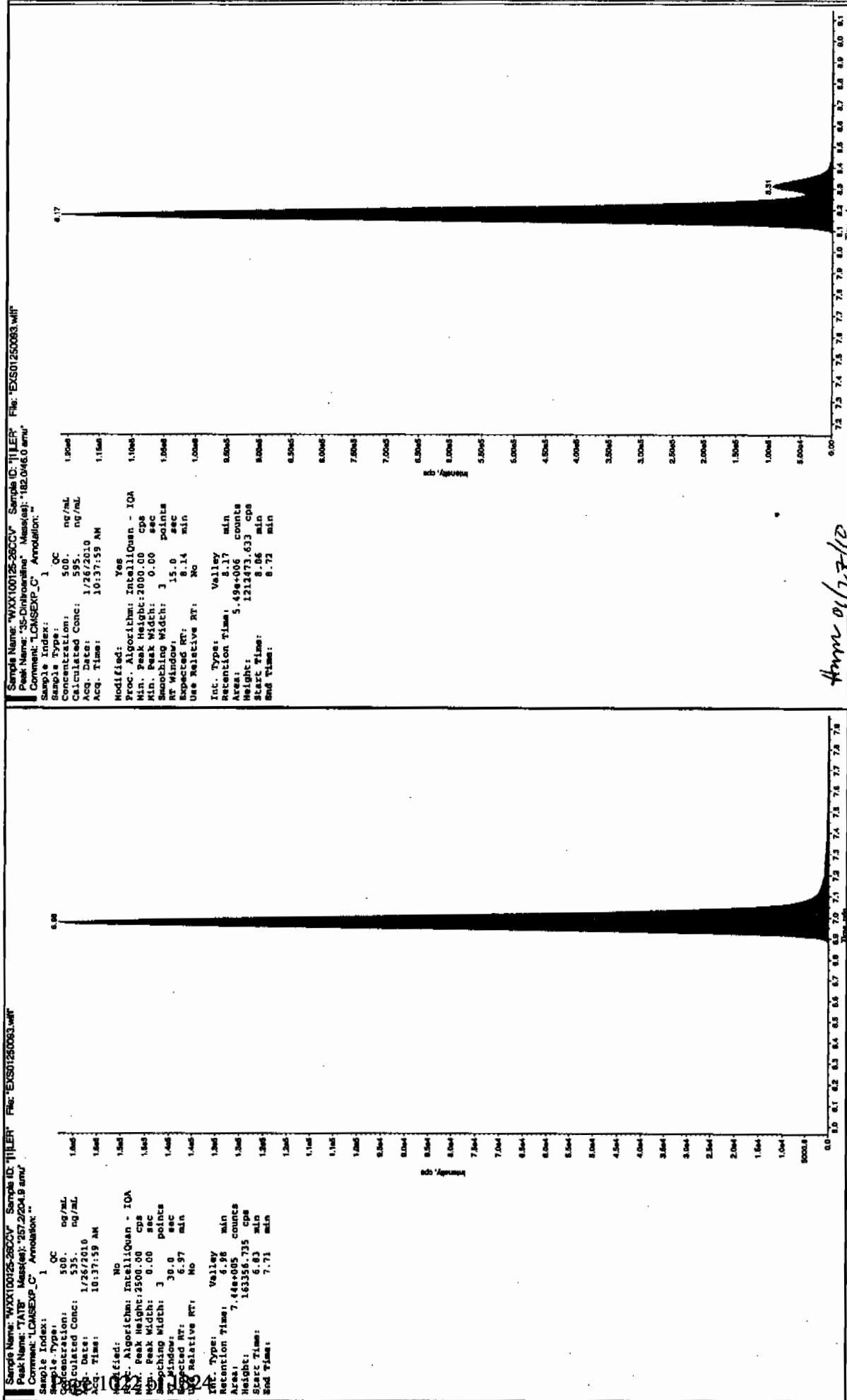
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

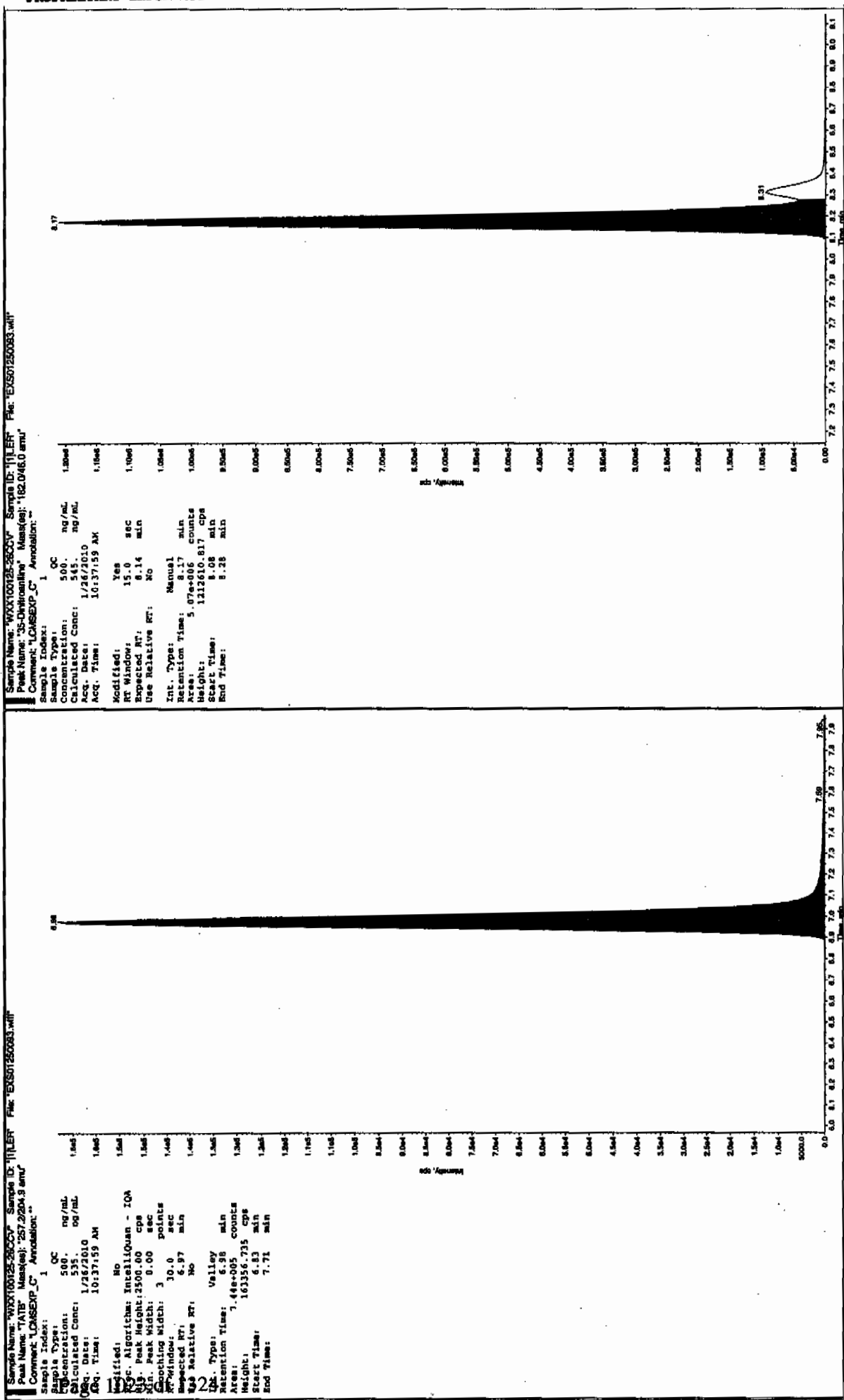
Before Jan 11/27/10



Ann 01/27/10

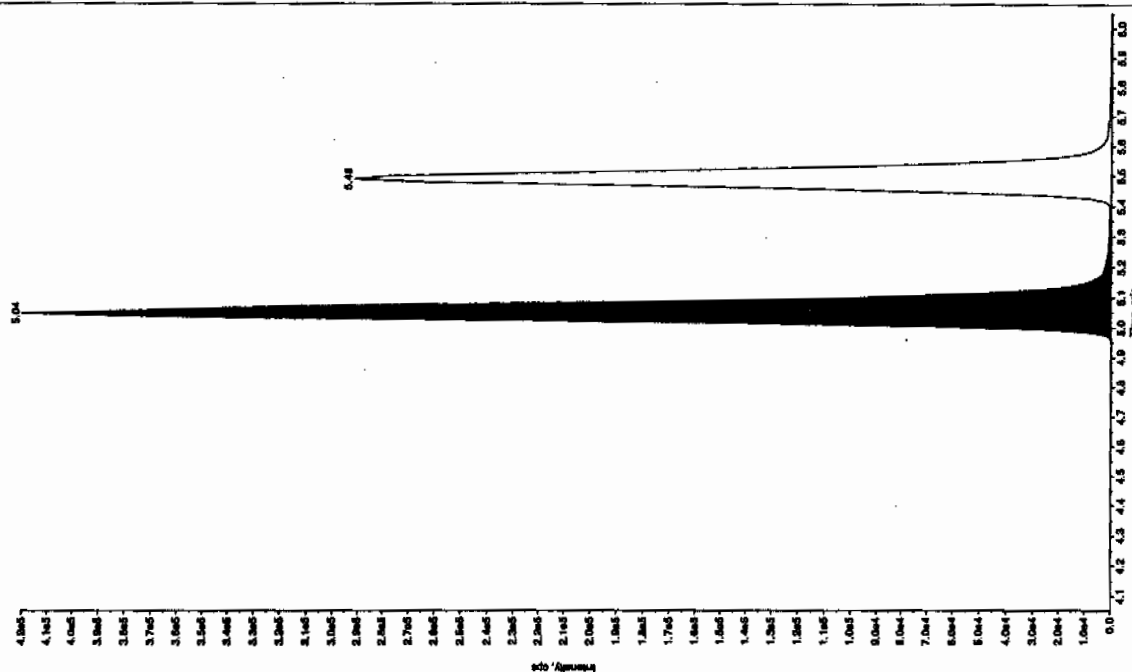


after scan 1127110



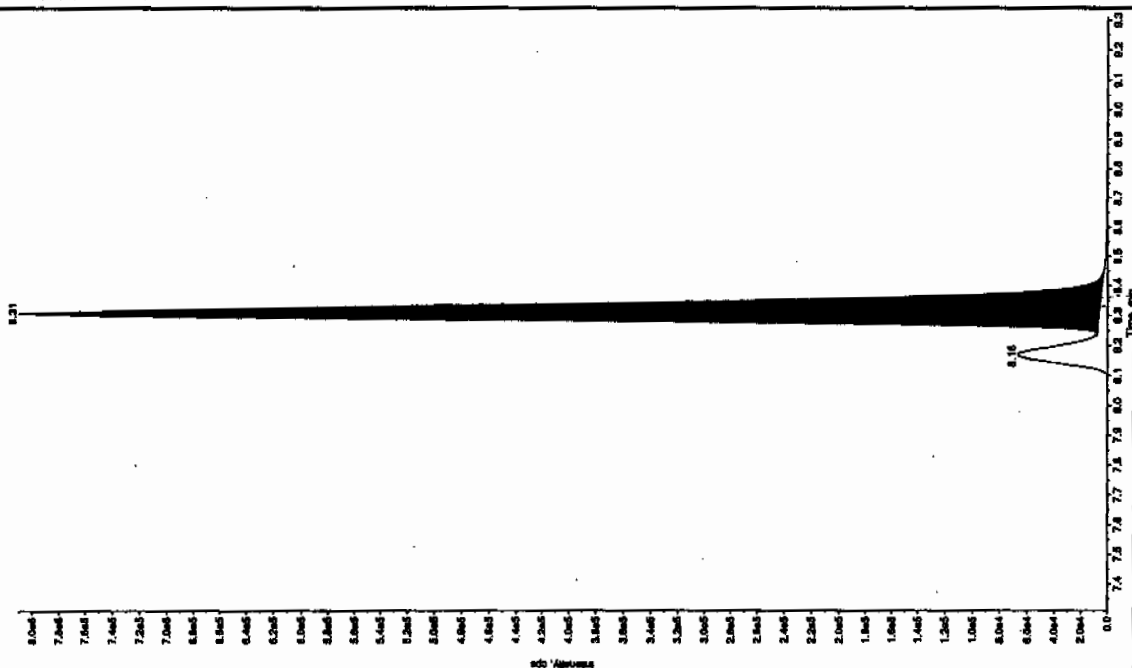
Sample Name: WXX100125-2800V Sample ID: 111ER File: EX501250083.wif  
 Peak Name: 28-Diamino-4-nitrofluorene Mass(es): 186.046.0 amu  
 Comment: LCMSEXP\_C Annotation: "

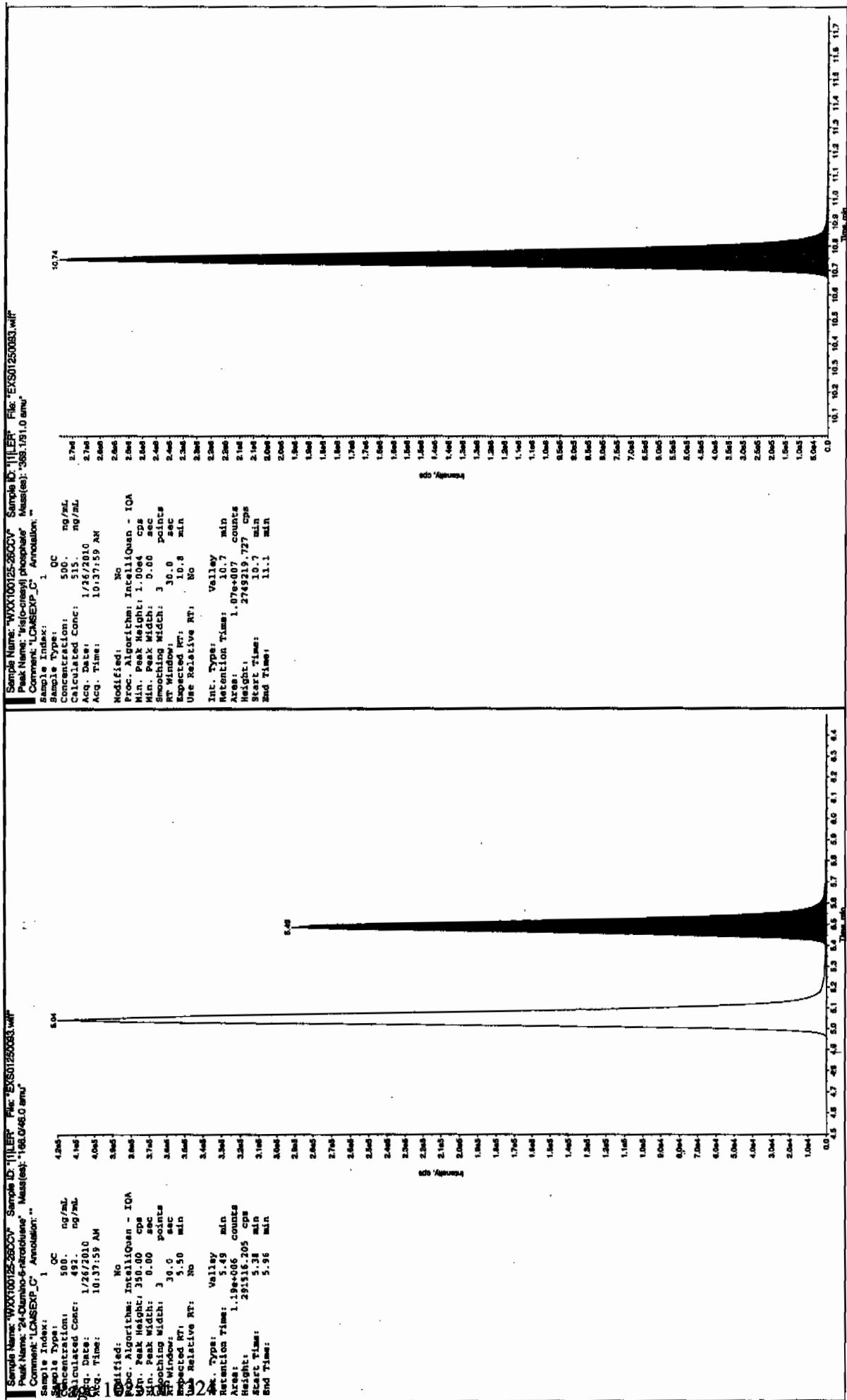
Sample Index: 1  
 Sample Type: QC  
 Concentration: 500. ng/mL  
 Calculated Conc: 457. ng/mL  
 Acq. Date: 1/26/2010  
 Acq. Time: 10:37:59 AM  
 Modified: No  
 XIC Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 450.0 cps  
 Min. Peak Width: 0.00 points  
 Smoothing Width: 30.0 sec  
 RT Window: 5.05 min  
 Expected RT: No  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.04 min  
 Area: 1.72e+006 counts  
 Height: 420222.900 cps  
 Start Time: 4.93 min  
 End Time: 5.32 min



Sample Name: WXX100125-2800V Sample ID: 111ER File: EX501250083.wif  
 Peak Name: 34-Dibenzodioxene Mass(es): 182.1151.9 amu  
 Comment: LCMSEXP\_C Annotation: "

Sample Index: 1  
 Sample Type: QC  
 Concentration: 250. ng/mL  
 Calculated Conc: 228. ng/mL  
 Acq. Date: 1/26/2010  
 Acq. Time: 10:37:59 AM  
 Modified: No  
 XIC Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 1460.00 cps  
 Min. Peak Width: 0.00 points  
 Smoothing Width: 30.0 sec  
 RT Window: 15.0 sec  
 Expected RT: 8.31 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.31 min  
 Area: 3.00e+006 counts  
 Height: 804356.018 cps  
 Start Time: 8.24 min  
 End Time: 8.45 min





7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1210

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS01250095.wiff

Analysis Date: 26-JAN-10 11:09

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	101	101	
2,6-Diamino-4-nitrotoluene	100	107	107	
3,4-Dinitrotoluene	50	50.1	100	
3,5-Dinitroaniline	100	110	110	
TATB	100	109	109	
tris(o-cresyl) phosphate	100	118	118	

Recovery Limits:

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

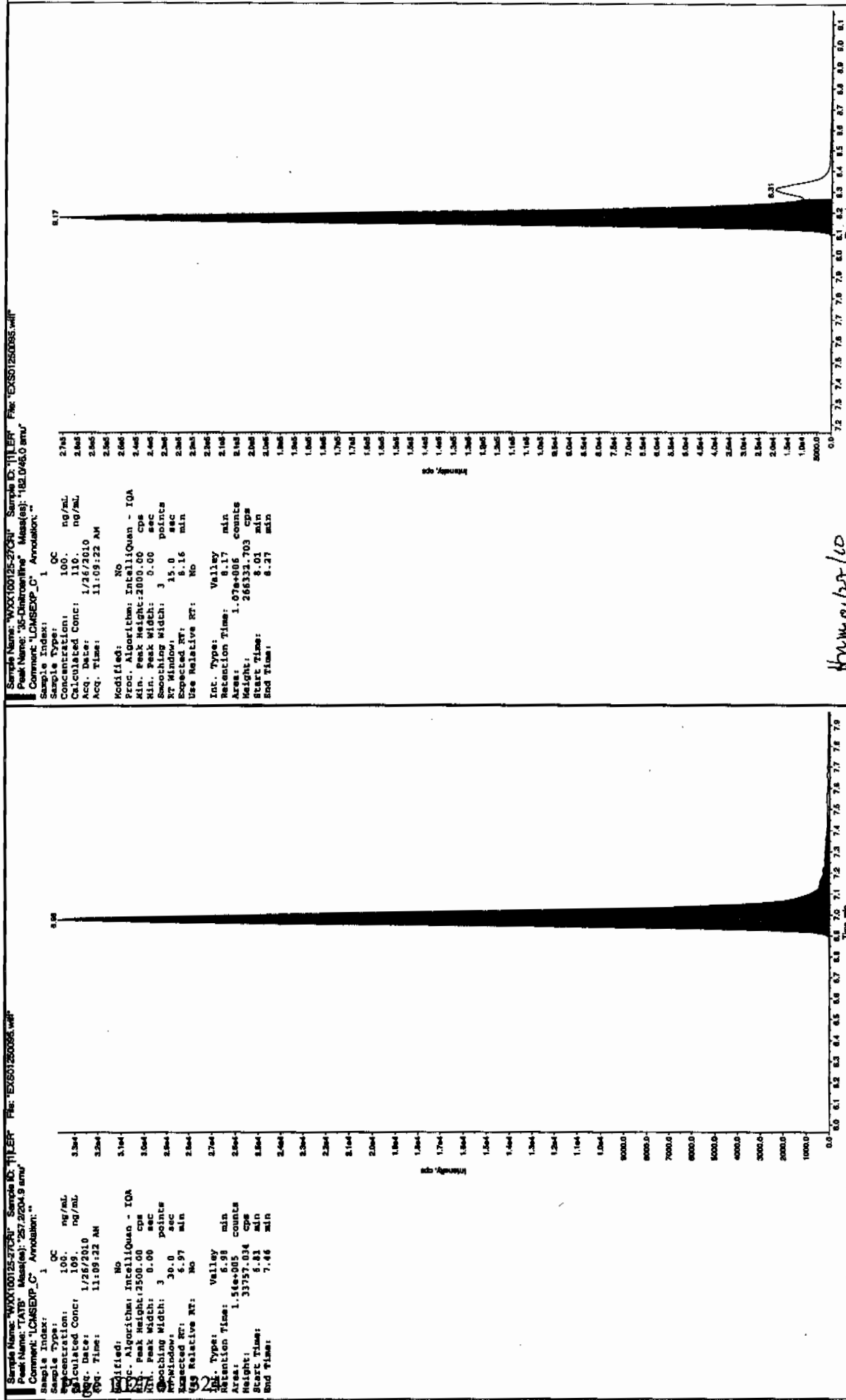
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

261167110



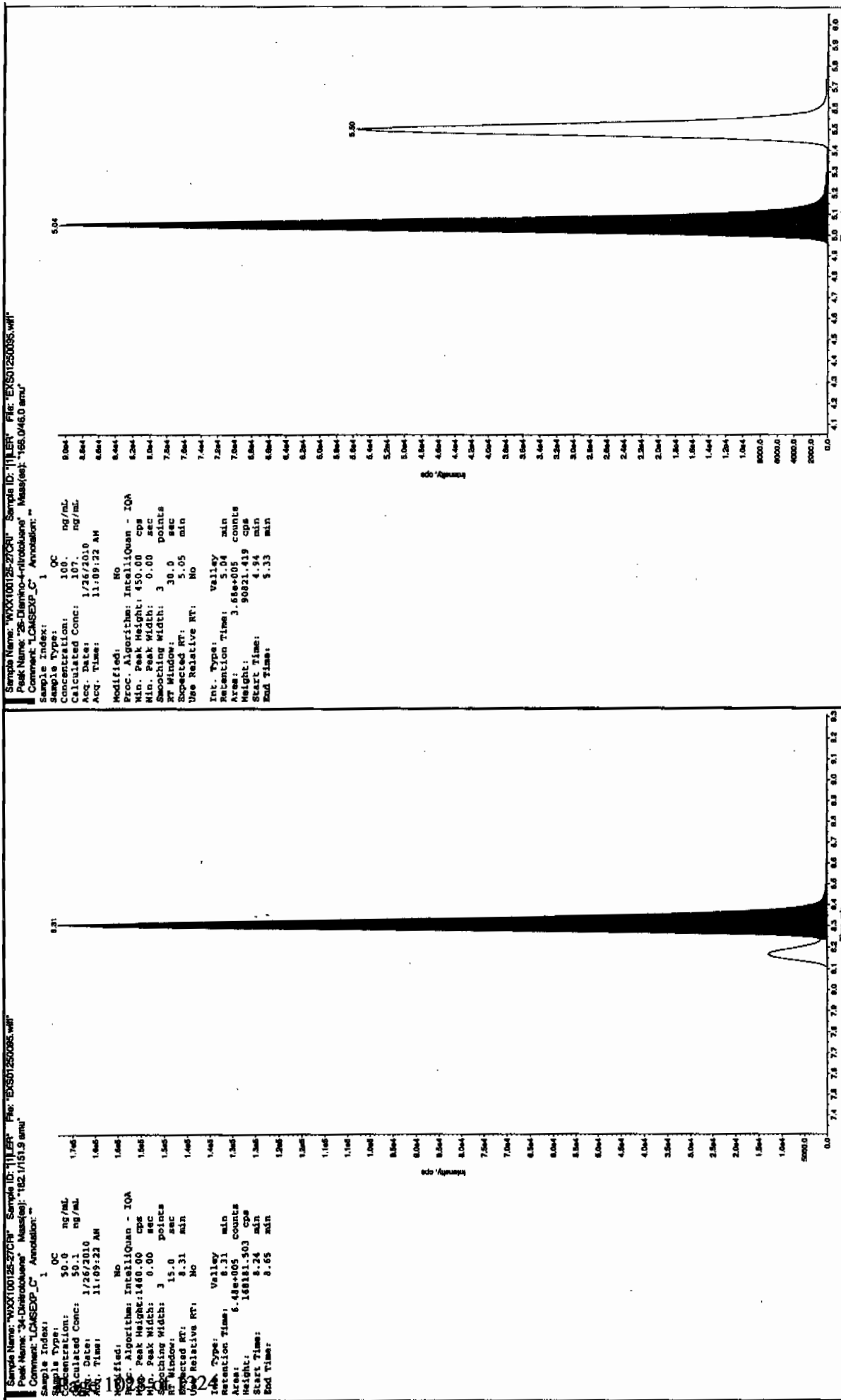
Sample Name: "WXX100125-27031" Sample ID: "111ER" File: "EX6501260085.w" Peak Name: "TATB" Mass(es): "257.20204.9 amu" Comment: "LCMS/EXP\_C" Annotation: "1"

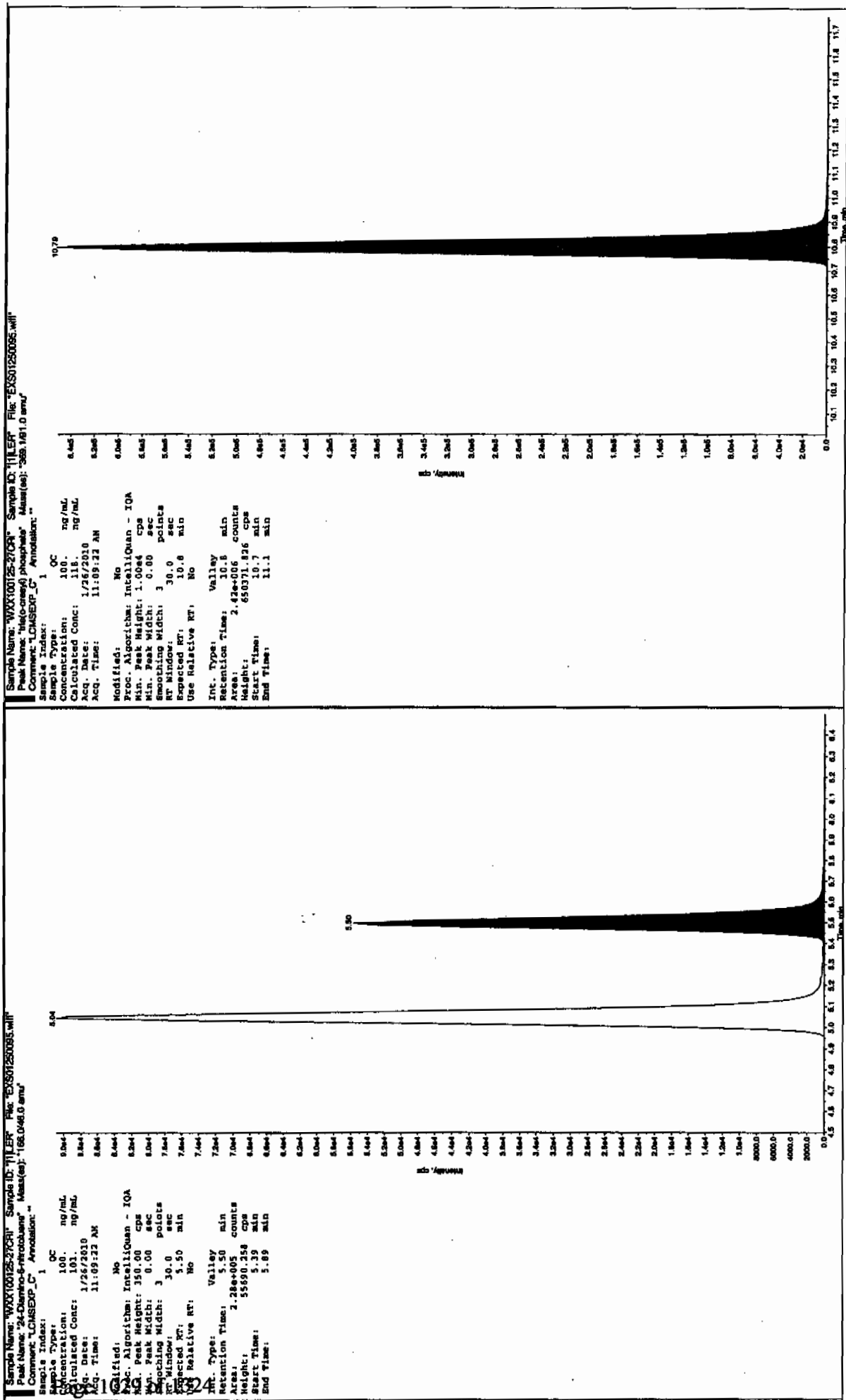
Sample Index: 1  
 Sample Type: QC  
 Concentration: 100. ng/mL  
 Calculated Conc: 110. ng/mL  
 Acq. Date: 1/26/2010  
 Acq. Time: 11:09:22 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 2000.00 cps  
 Min. Peak Width: 3.00 sec  
 Retention Width: 35.0 points  
 Expected RT: 8.16 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.17 min  
 Area: 1.07e+005 counts  
 Height: 266332.703 cps  
 Start Time: 8.01 min  
 End Time: 8.27 min

Sample Name: "WXX100125-27031" Sample ID: "111ER" File: "EX6501260085.w" Peak Name: "TATB" Mass(es): "257.20204.9 amu" Comment: "LCMS/EXP\_C" Annotation: "1"

Sample Index: 1  
 Sample Type: QC  
 Concentration: 100. ng/mL  
 Calculated Conc: 109. ng/mL  
 Acq. Date: 1/26/2010  
 Acq. Time: 11:09:22 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 2500.00 cps  
 Min. Peak Width: 3.00 sec  
 Retention Width: 30.0 points  
 Expected RT: 6.97 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 6.98 min  
 Area: 1.54e+005 counts  
 Height: 33757.034 cps  
 Start Time: 6.81 min  
 End Time: 7.16 min

8.17





7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1210

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS01250106.wiff

Analysis Date: 26-JAN-10 14:02

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	460	92	
2,6-Diamino-4-nitrotoluene	500	456	91	
3,4-Dinitrotoluene	250	219	87	
3,5-Dinitroaniline	500	505	101	
TATB	500	519	104	
tris(o-cresyl) phosphate	500	480	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%

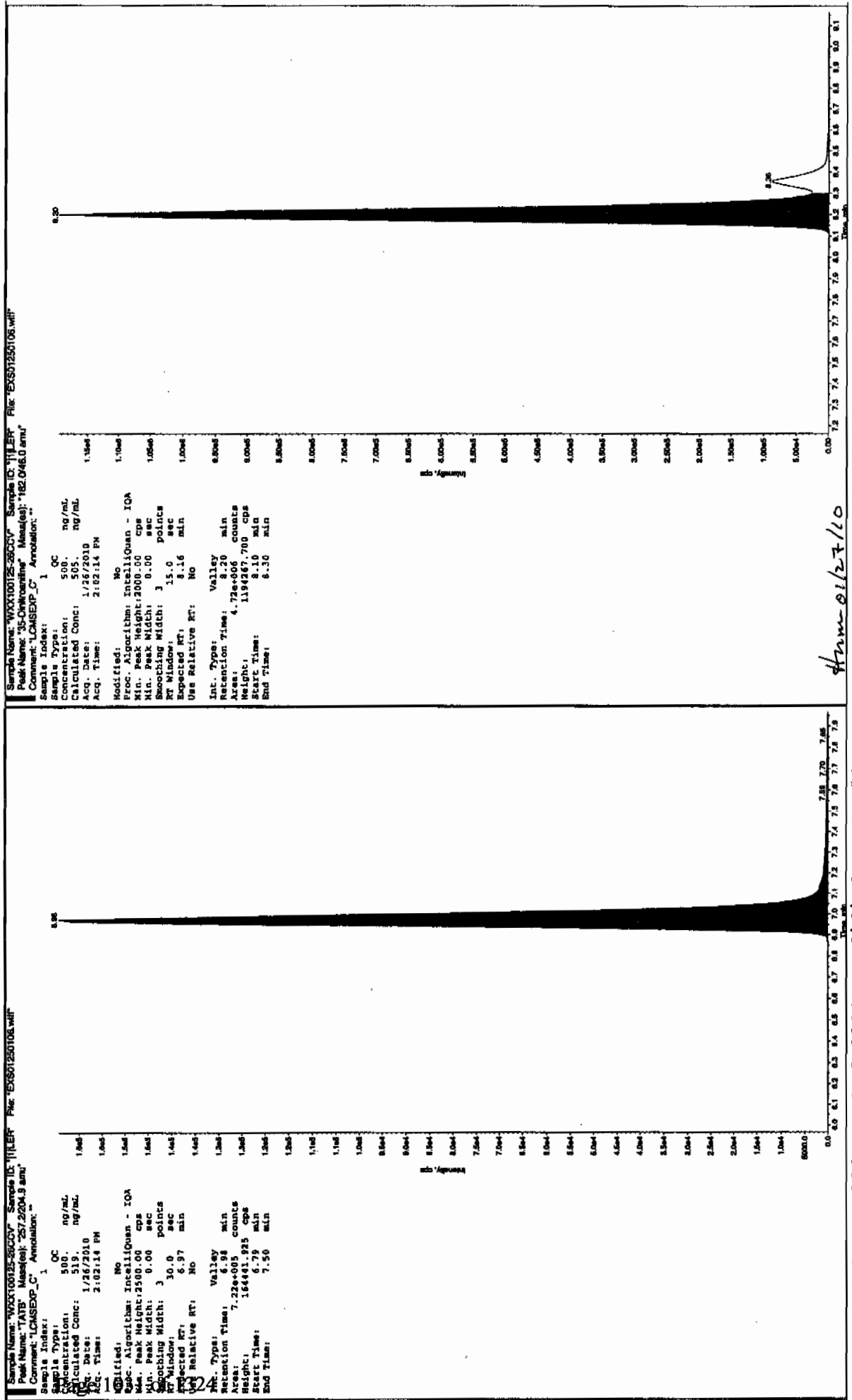
Other Target Analytes 80-120%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits



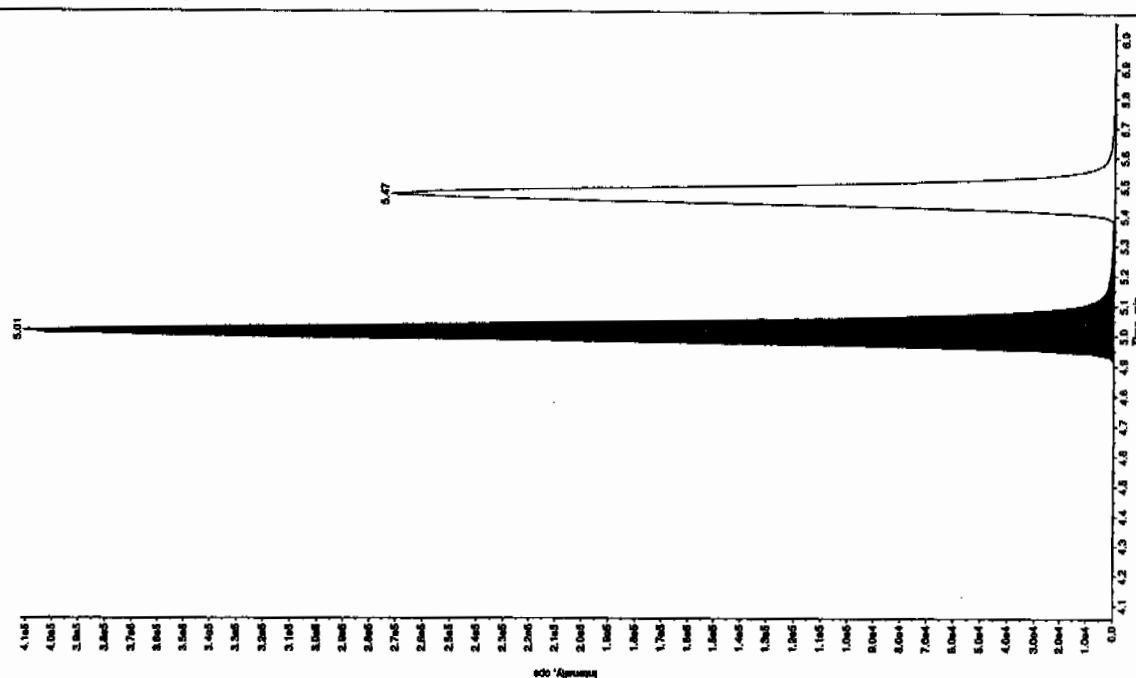
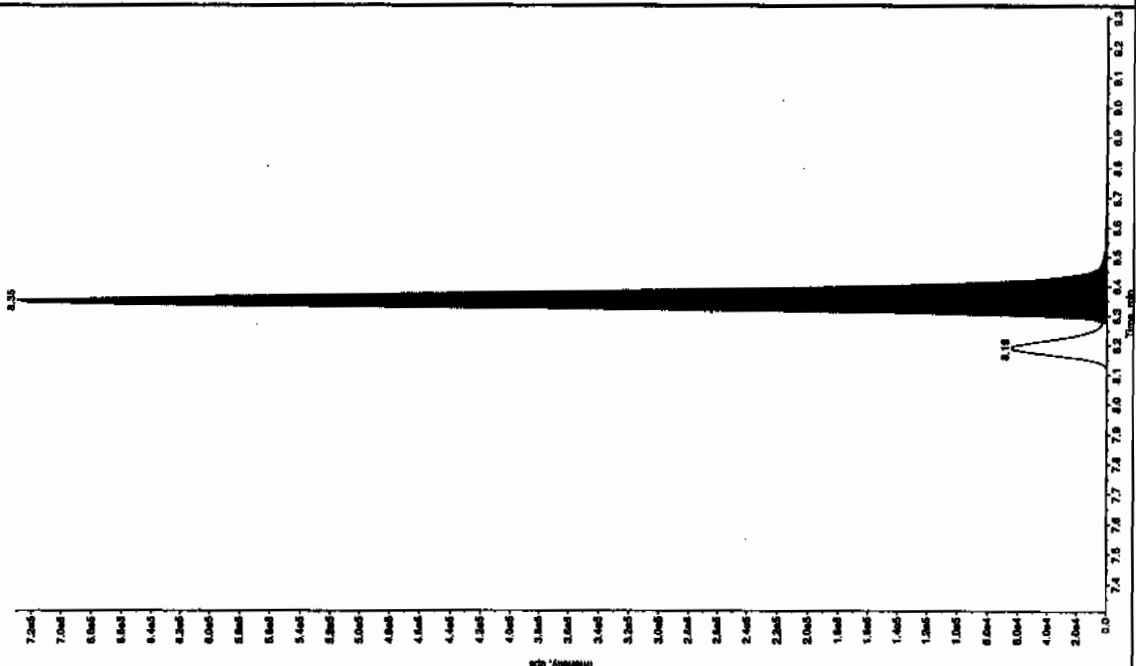
See 1/27/10

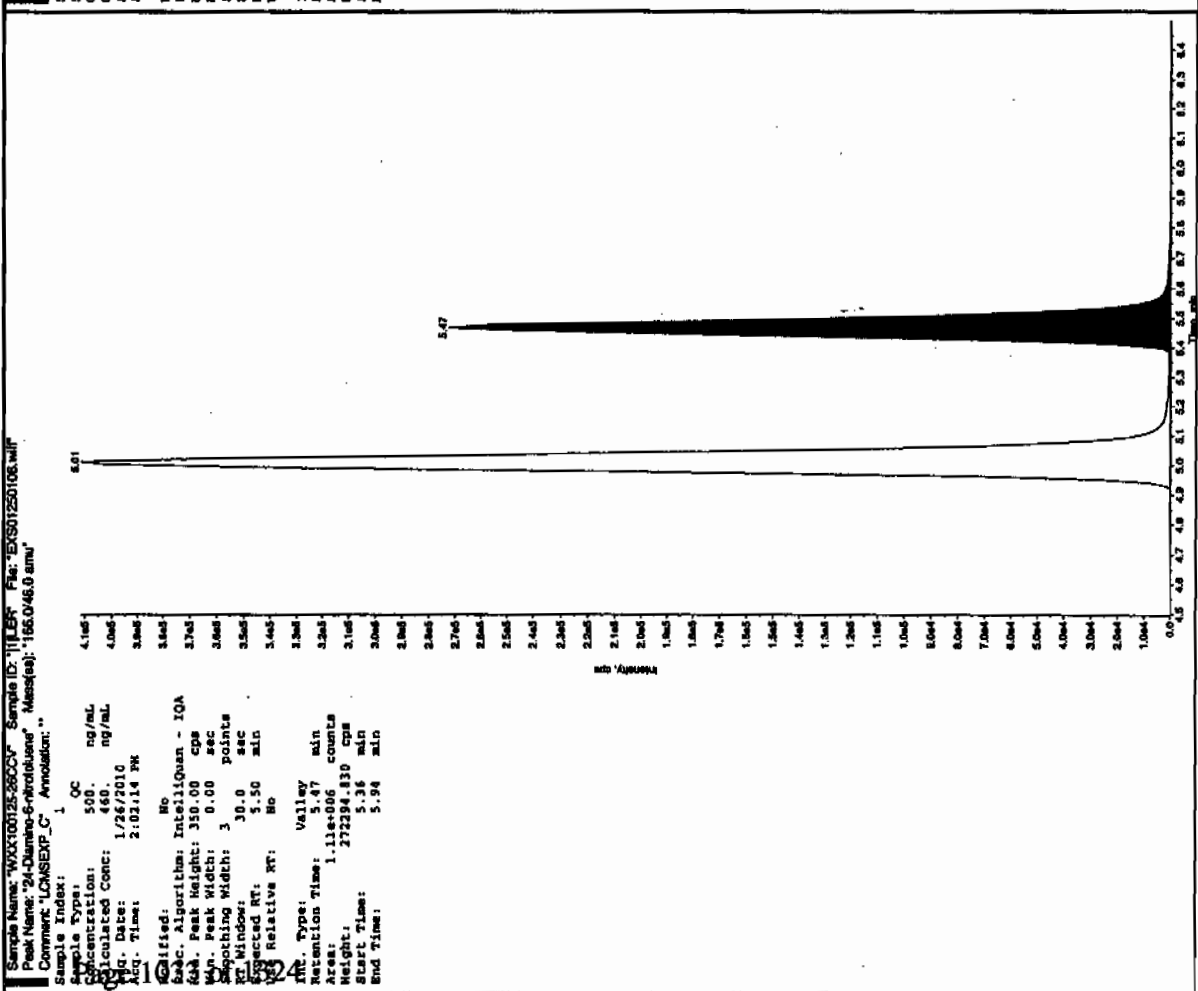
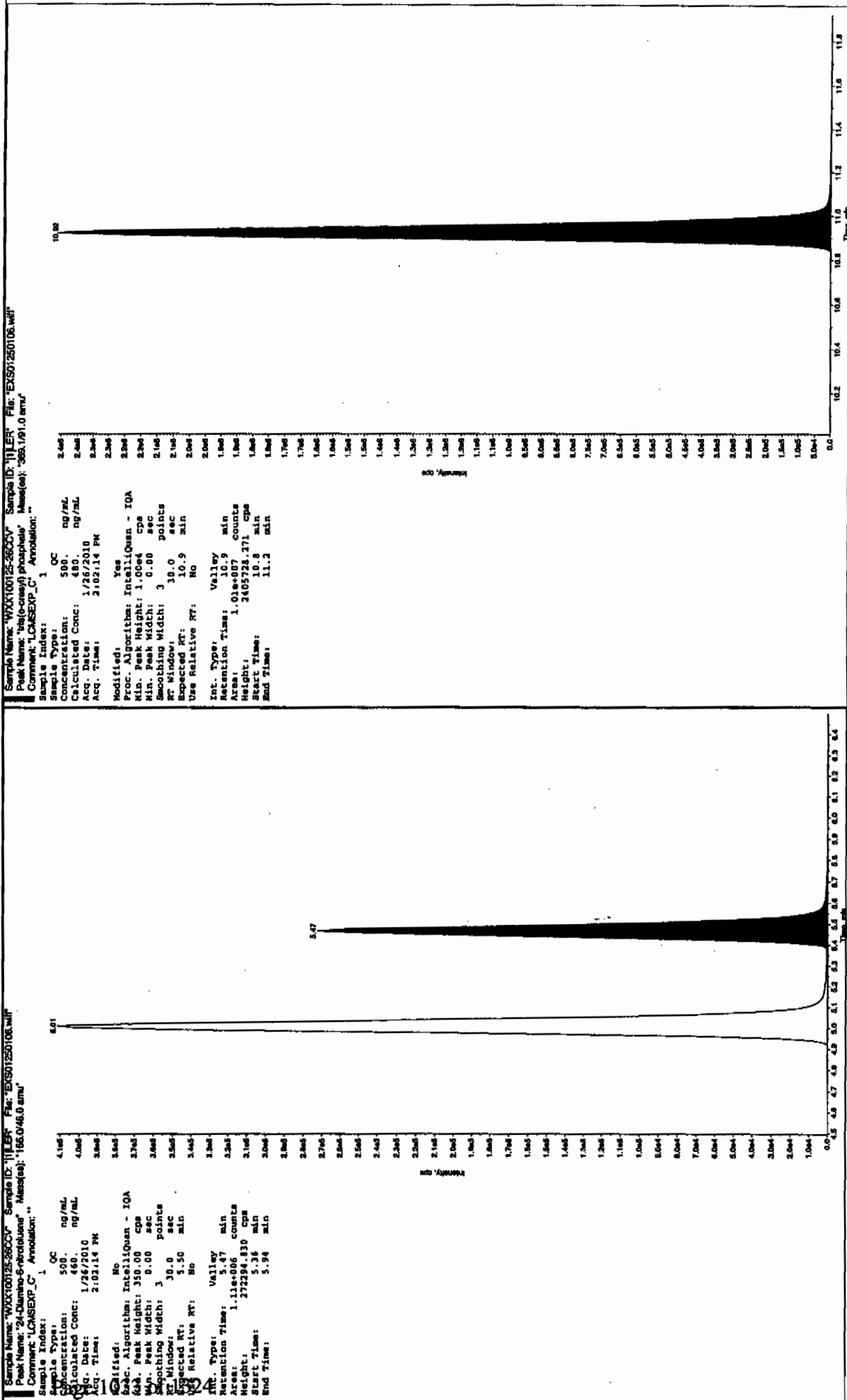


Sample Name: "WXX100125-28CCV" Sample ID: "JILLER" File: "EXS01250106.wiff"  
Peak Name: "34-Dinitrofluorene" Mass(es): "182.1/151.9 amu"

Sample Index:	1	QC
Concentration:	500	
Calculated Conc:	455	
Acq. Date:	1/26/2010	
Acq. Time:	2:03:14	
Modified:	No	
Proc. Algorithm:	IntelliQuan - 101	
Peak Height:	450.00	cps
Peak Width:	3.00	secs
Smoothing Mldth:	3	points
RT Window:	30.0	secs
Expected RT:	5.05	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	1.724	min
Weight:	61451.599	g
Start Time:	4.49	min
End Time:	5.30	min

Sample Type:	1 QC
Concentration:	250.0 ng/mL
Calculated Conc:	219.0 ng/mL
Lab Date:	1/26/2010
Acq. Time:	3:02:14 PM
Sample ID:	NO
Injection:	Injection
Retention Time:	14.00 min
Peak Height:	1460.00 cps
Peak Width:	3.00 sec
Sweeping Width:	3.00 points
RT Window:	15.0 sec
Expected RT:	8.31 min
Relative RT:	NO
Valley	min
Retention Time:	8.15 min
Area:	2.91e+006 counts
Height:	729992.798 cps
Start Time:	8.28 min
End Time:	8.68 min





**7B**  
**Explosives CRI Standard**

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1210

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS01250108.wiff

Analysis Date: 26-JAN-10 14:33

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	101	101	
2,6-Diamino-4-nitrotoluene	100	95.8	96	
3,4-Dinitrotoluene	50	46.1	92	
3,5-Dinitroaniline	100	105	105	
TATB	100	105	105	
tris(o-cresyl) phosphate	100	112	112	

**Recovery Limits:**

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

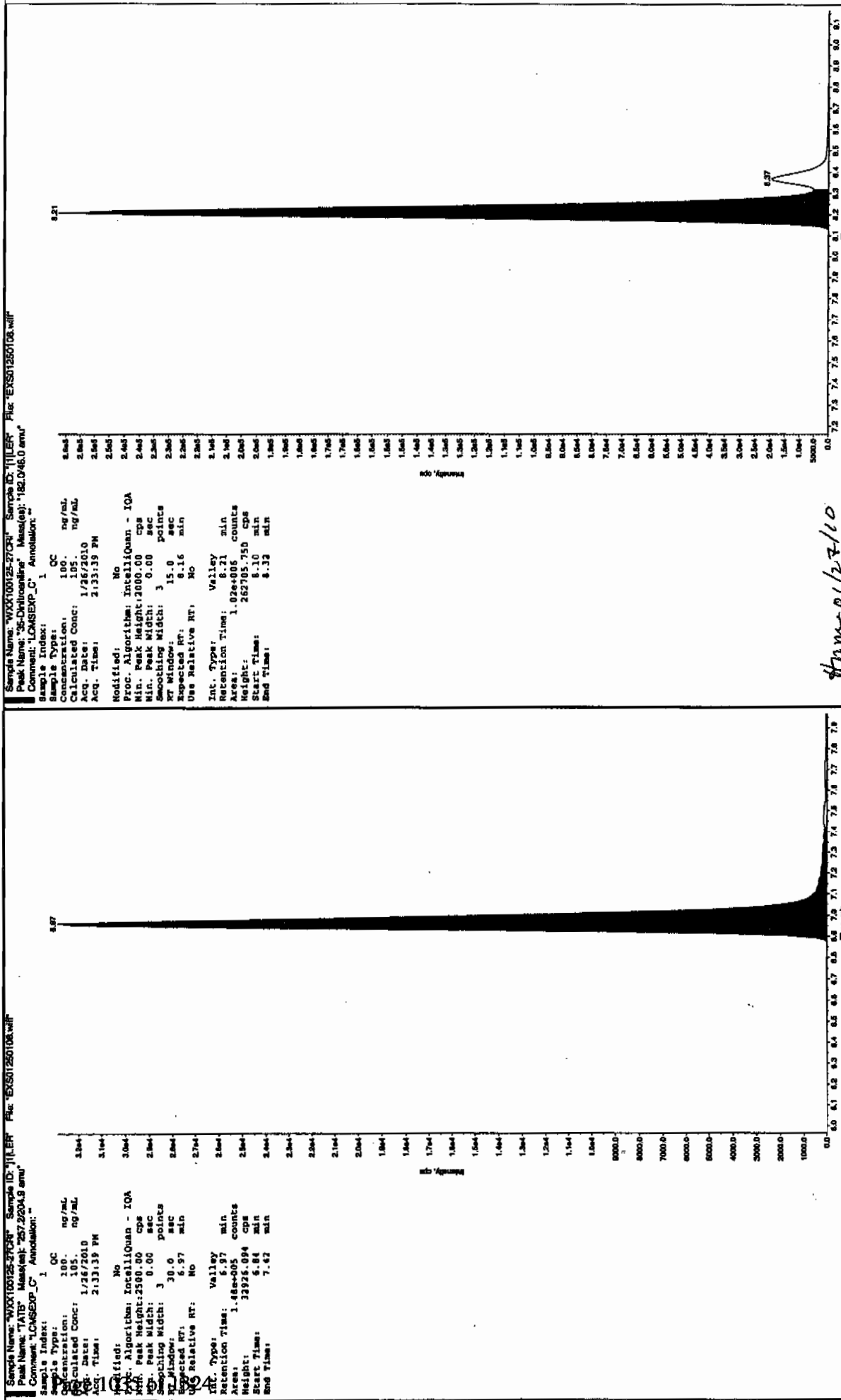
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

Law 1/27/10



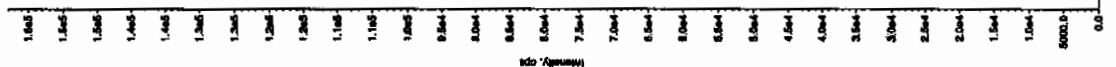
Law 01/27/10

Sample Name: "WXX100125-27CR" Sample ID: "111ER" File: "EXS01250108.vnt"  
 Peak Name: "34-Diamino-4-nitrotoluene" Mass(es): "182.14519 amu"  
 Comment: "LCMSEXP\_C" Annotation: "

Sample Index: 1  
 Sample Type: OC  
 Concentration: 50.0 ng/mL  
 Calculated Conc: 46.1 ng/mL  
 Acq. Date: 1/26/2010  
 Acq. Time: 2:33:39 PM

Modified: No  
 Proc. Algorithm: IntelliQuan - IGA  
 Min. Peak Height: 1450.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 15.0 sec  
 Expected RT: 8.31 min  
 Use Relative RT: No

Int. Type: Valley  
 Retention Time: 8.36 min  
 Area: 5.93e+005 counts  
 Height: 15705.493 cps  
 Start Time: 8.29 min  
 End Time: 8.58 min

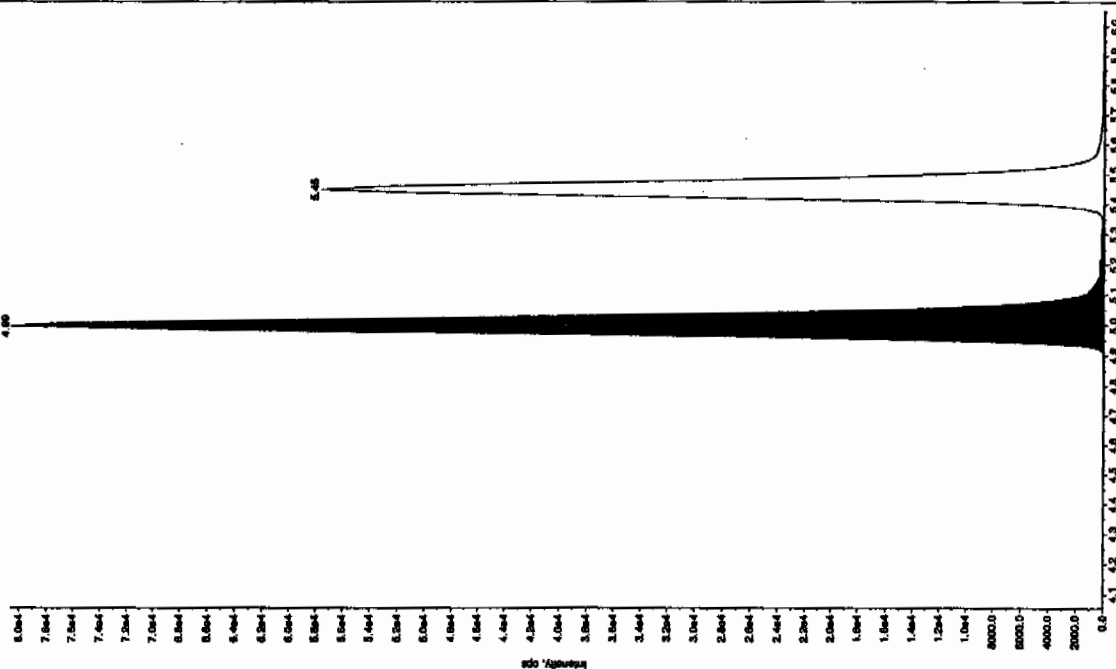


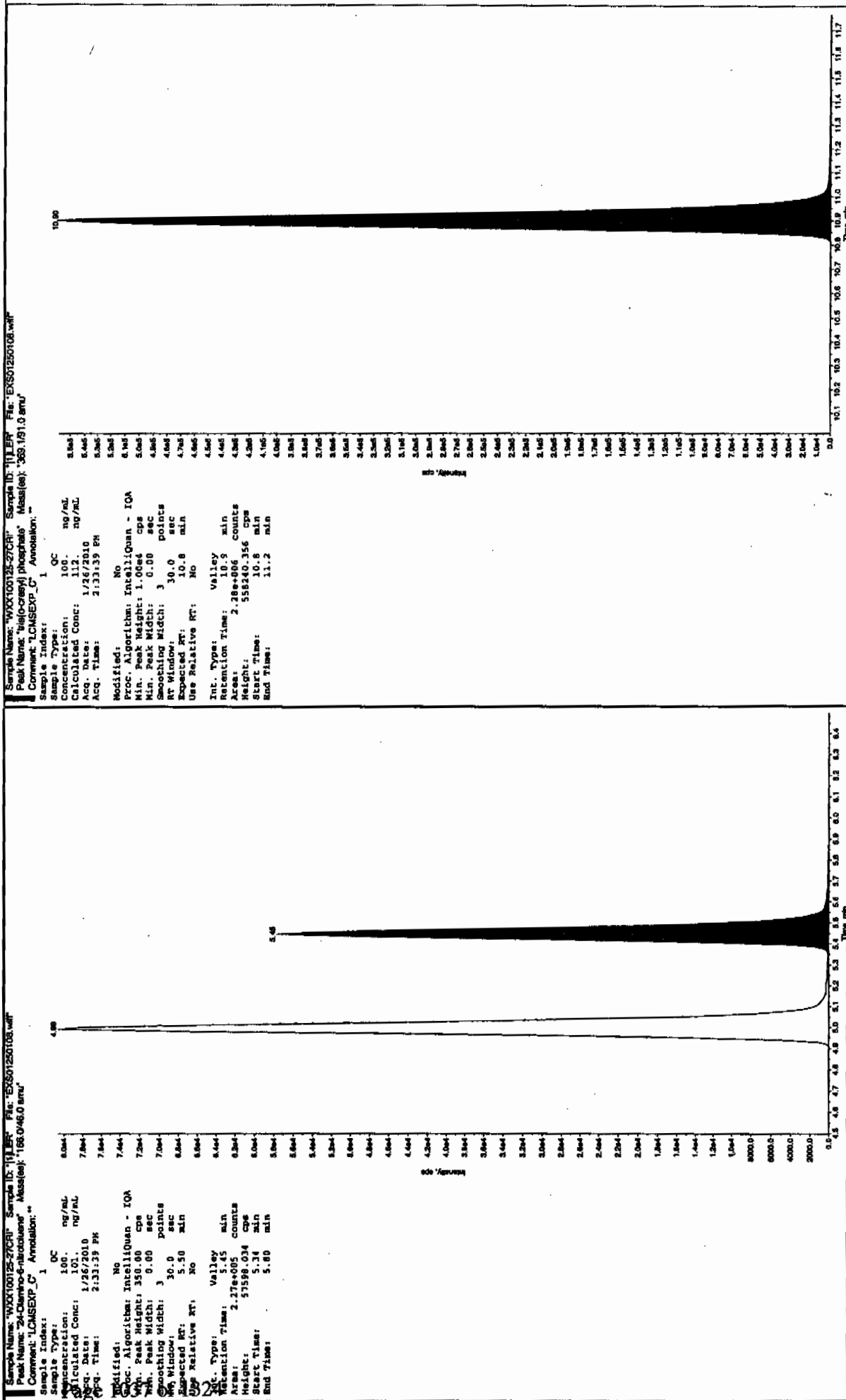
Sample Name: "WXX100125-27CR" Sample ID: "111ER" File: "EXS01250108.vnt"  
 Peak Name: "28-Diamino-4-nitrotoluene" Mass(es): "166.04650 amu"  
 Comment: "LCMSEXP\_C" Annotation: "

Sample Index: 1  
 Sample Type: OC  
 Concentration: 100. ng/mL  
 Calculated Conc: 95.8 ng/mL  
 Acq. Date: 1/26/2010  
 Acq. Time: 2:33:39 PM

Modified: No  
 Proc. Algorithm: IntelliQuan - IGA  
 Min. Peak Height: 450.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 5.05 min  
 Use Relative RT: No

Int. Type: Valley  
 Retention Time: 4.99 min  
 Area: 3.26e+005 counts  
 Height: 80583.031 cps  
 Start Time: 4.89 min  
 End Time: 5.26 min





7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1210

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS01250119.wiff

Analysis Date: 26-JAN-10 17:26

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	449	90	
2,6-Diamino-4-nitrotoluene	500	446	89	
3,4-Dinitrotoluene	250	220	88	
3,5-Dinitroaniline	500	504	101	
TATB	500	488	98	
tris(o-cresyl) phosphate	500	482	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%

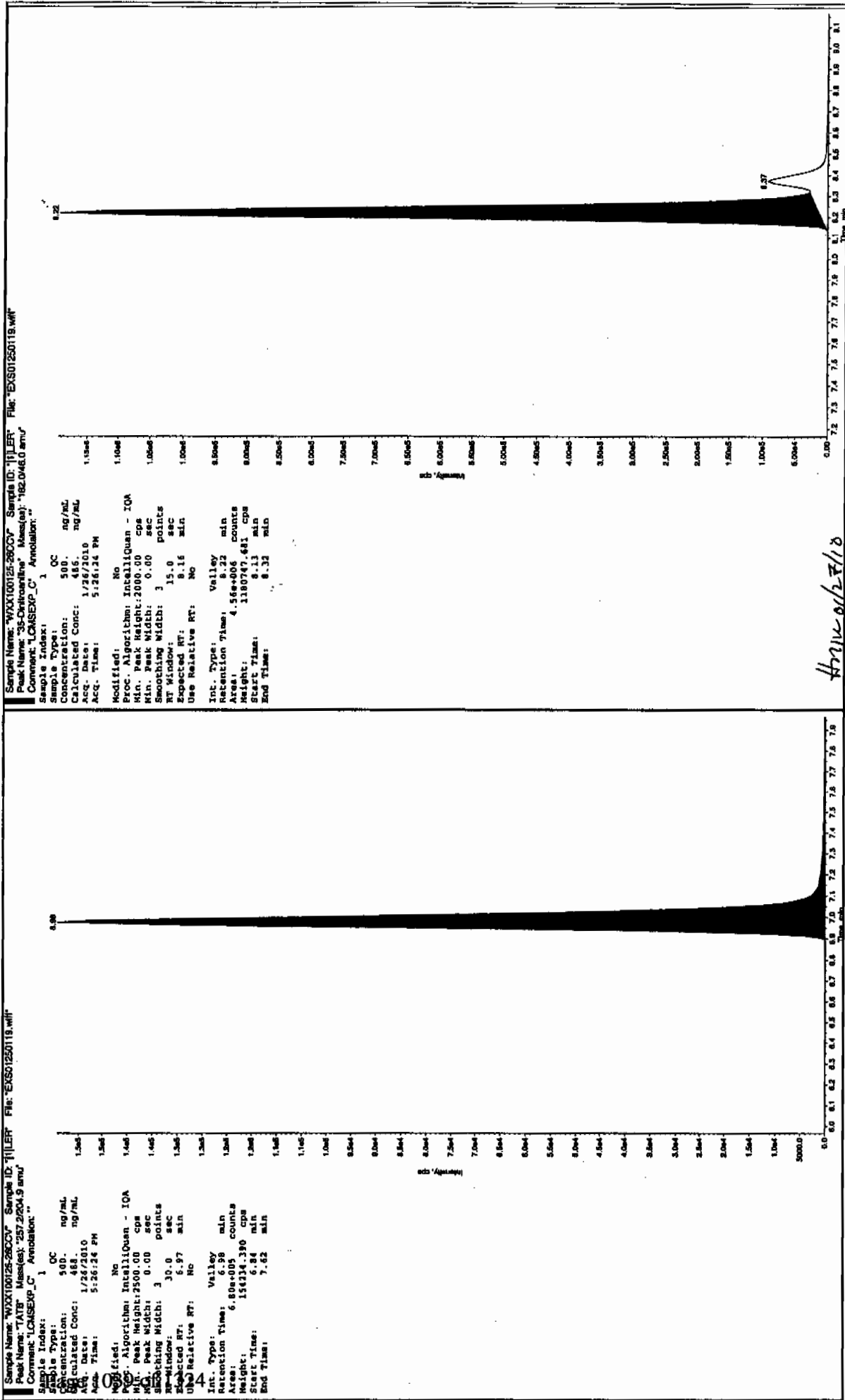
Other Target Analytes 80-120%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

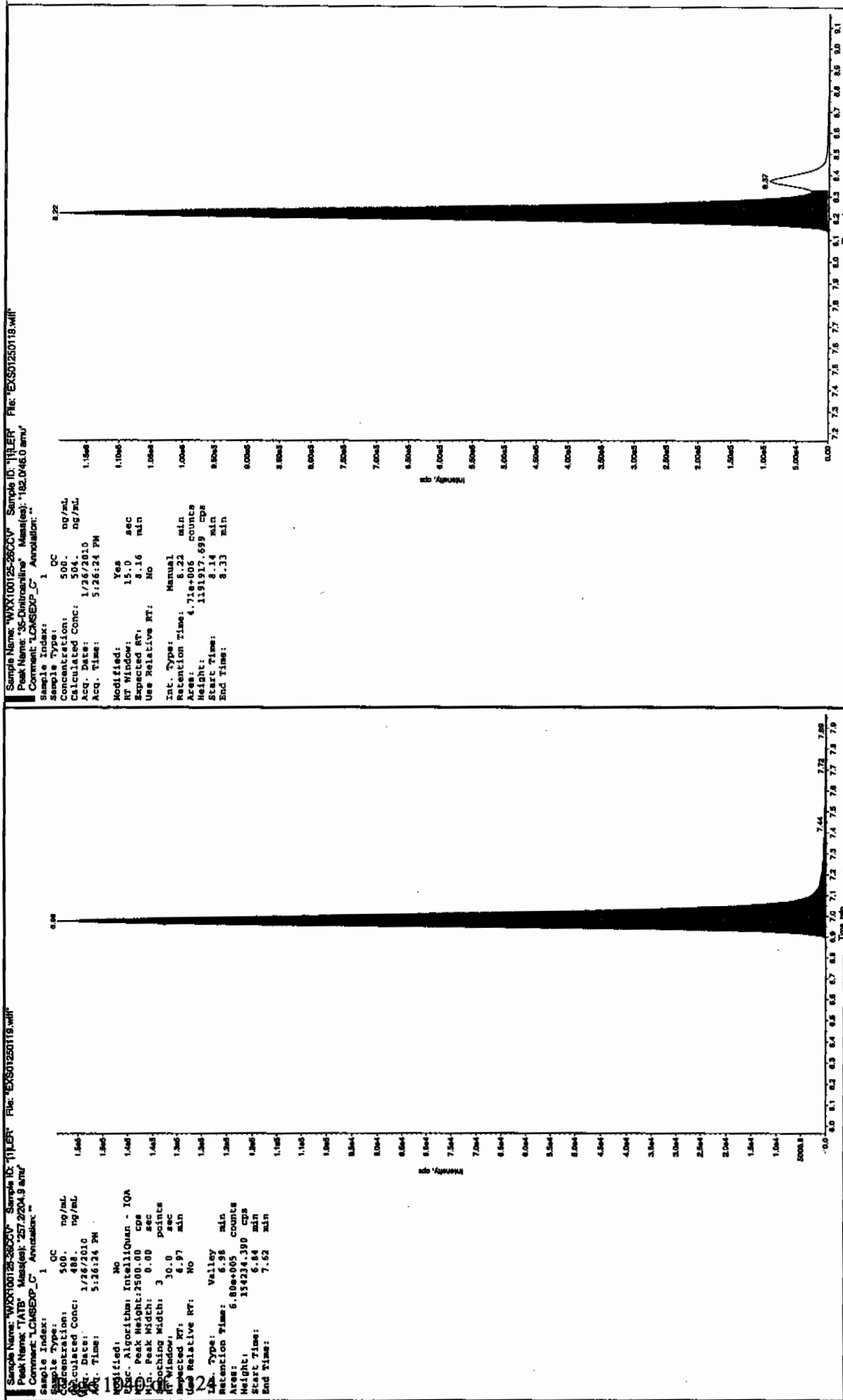


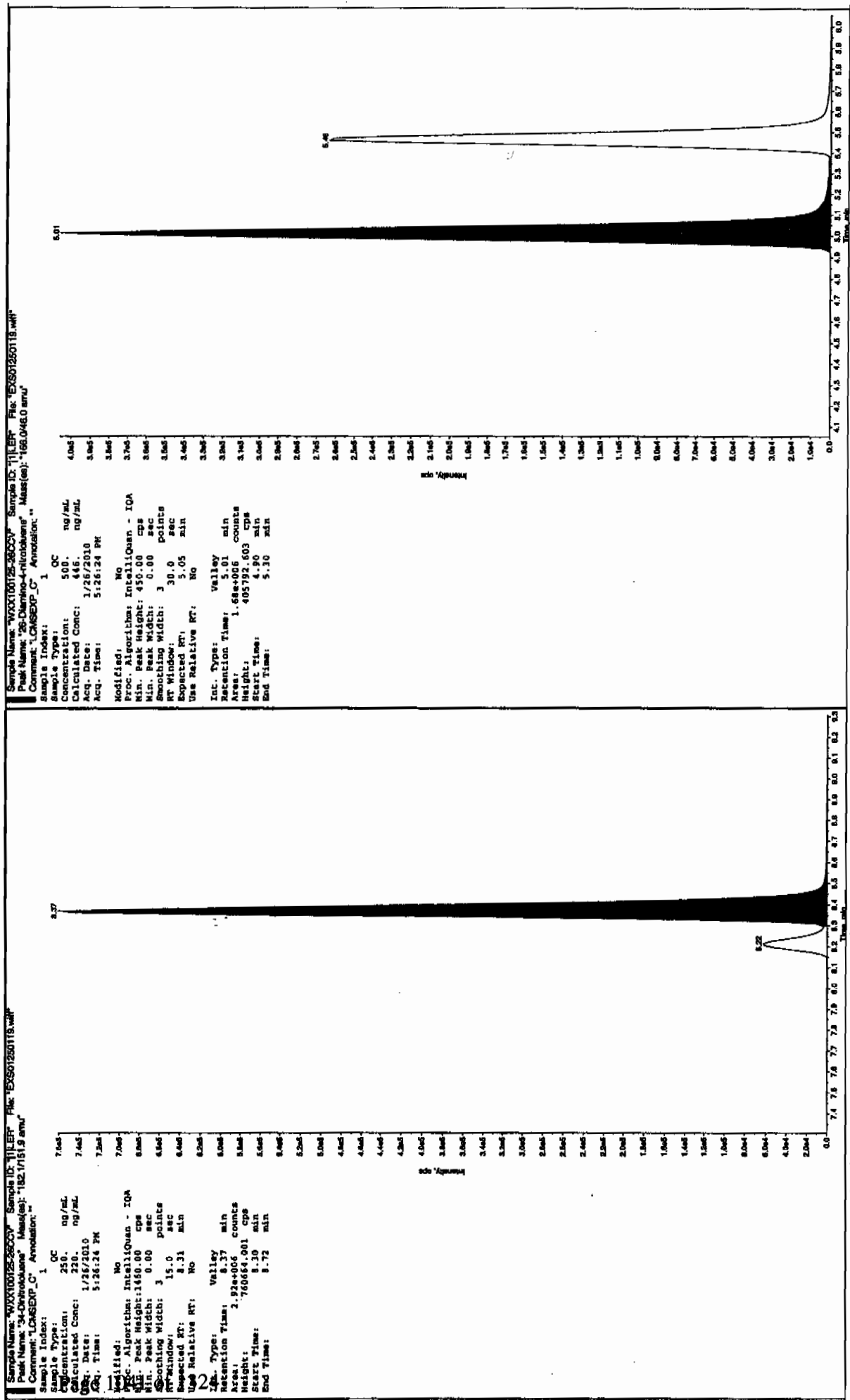
Before Scan 1127110

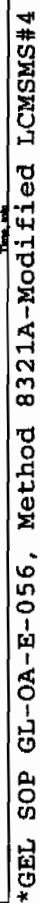


After Scan 1127110

after Jan 11/27/10







7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1210

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS01250121.wiff

Analysis Date: 26-JAN-10 17:57

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	103	103	
2,6-Diamino-4-nitrotoluene	100	99.4	99	
3,4-Dinitrotoluene	50	48.4	97	
3,5-Dinitroaniline	100	103	103	
TATB	100	104	104	
tris(o-cresyl) phosphate	100	114	114	

Recovery Limits:

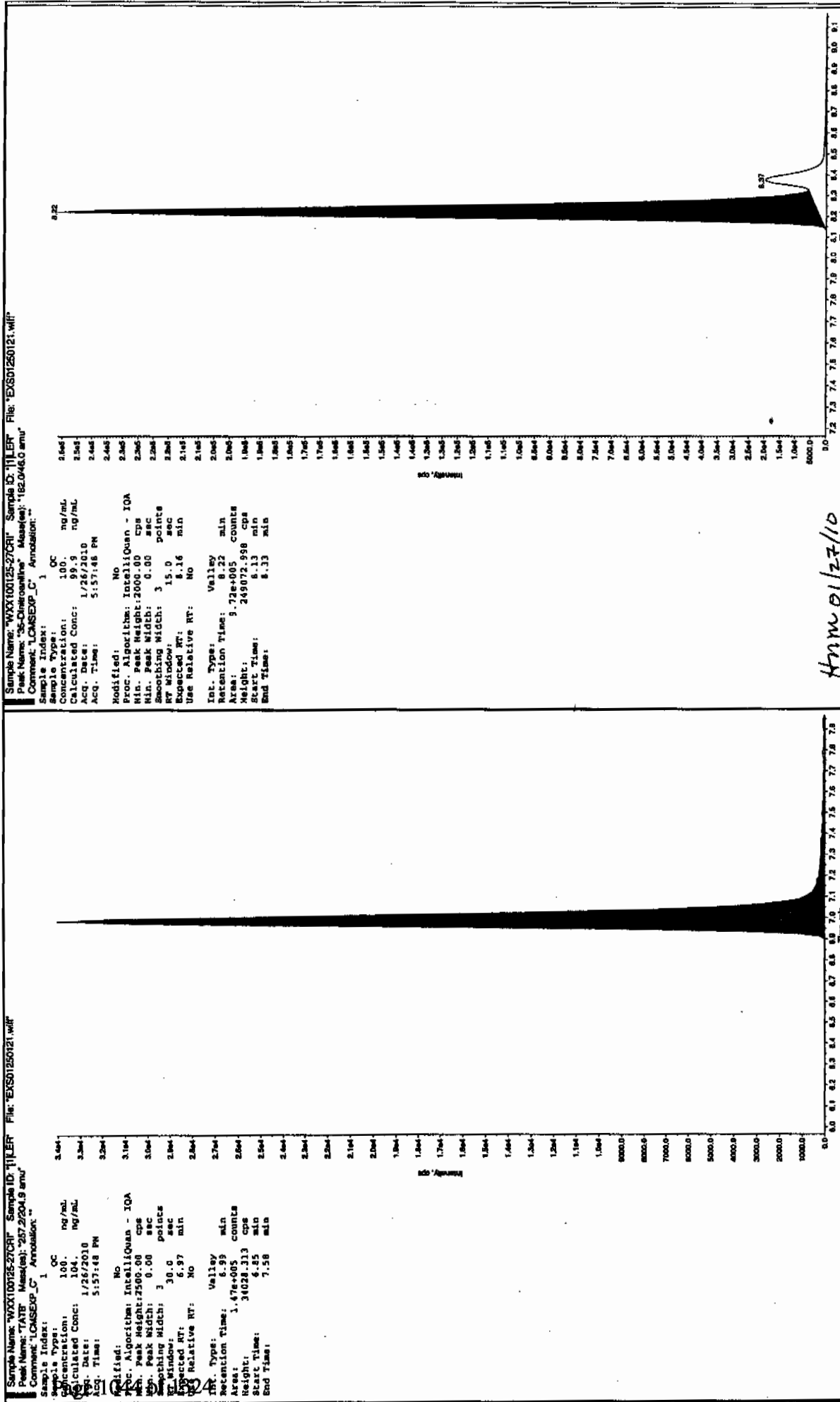
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

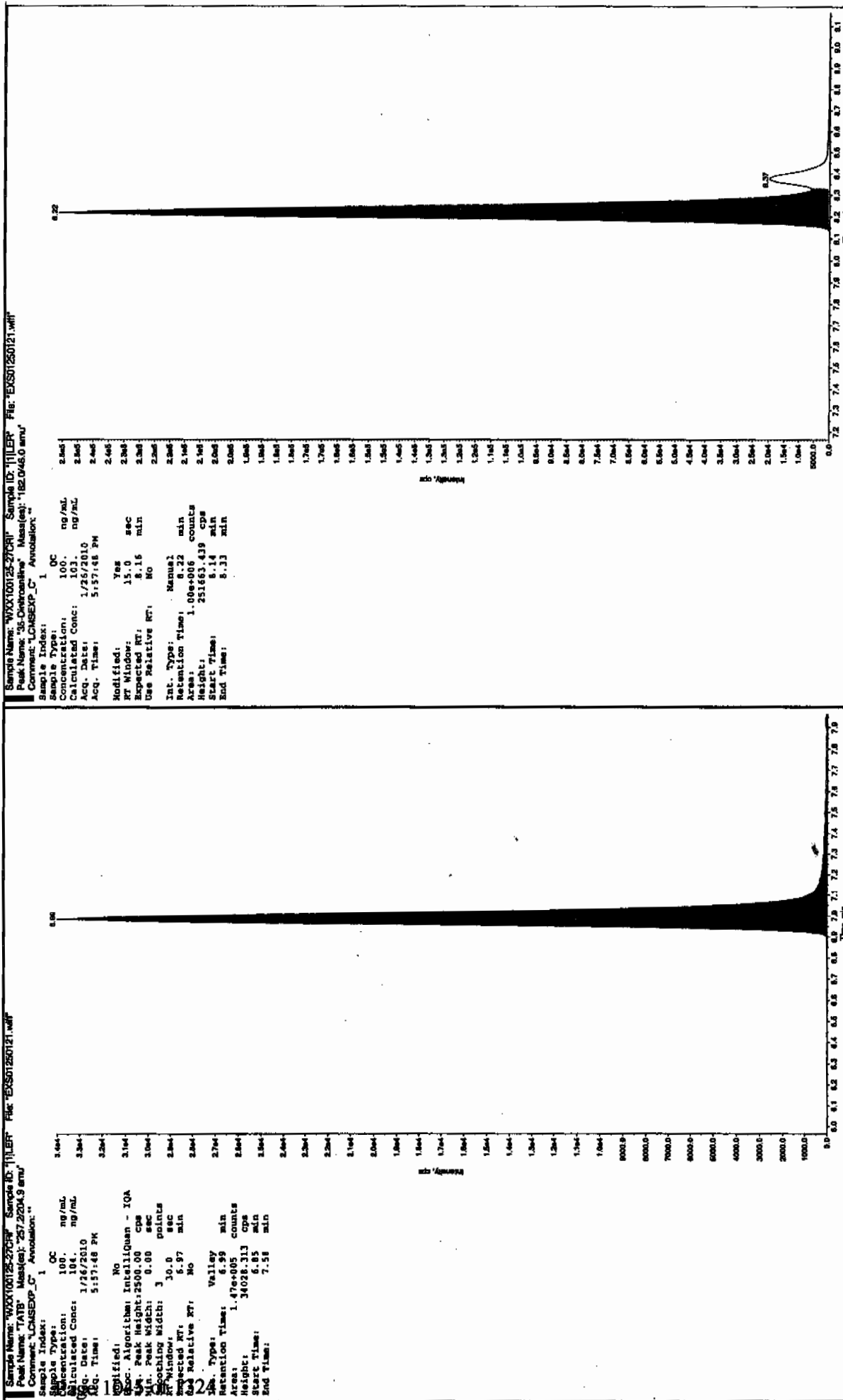
\* Value outside of Recovery Limits

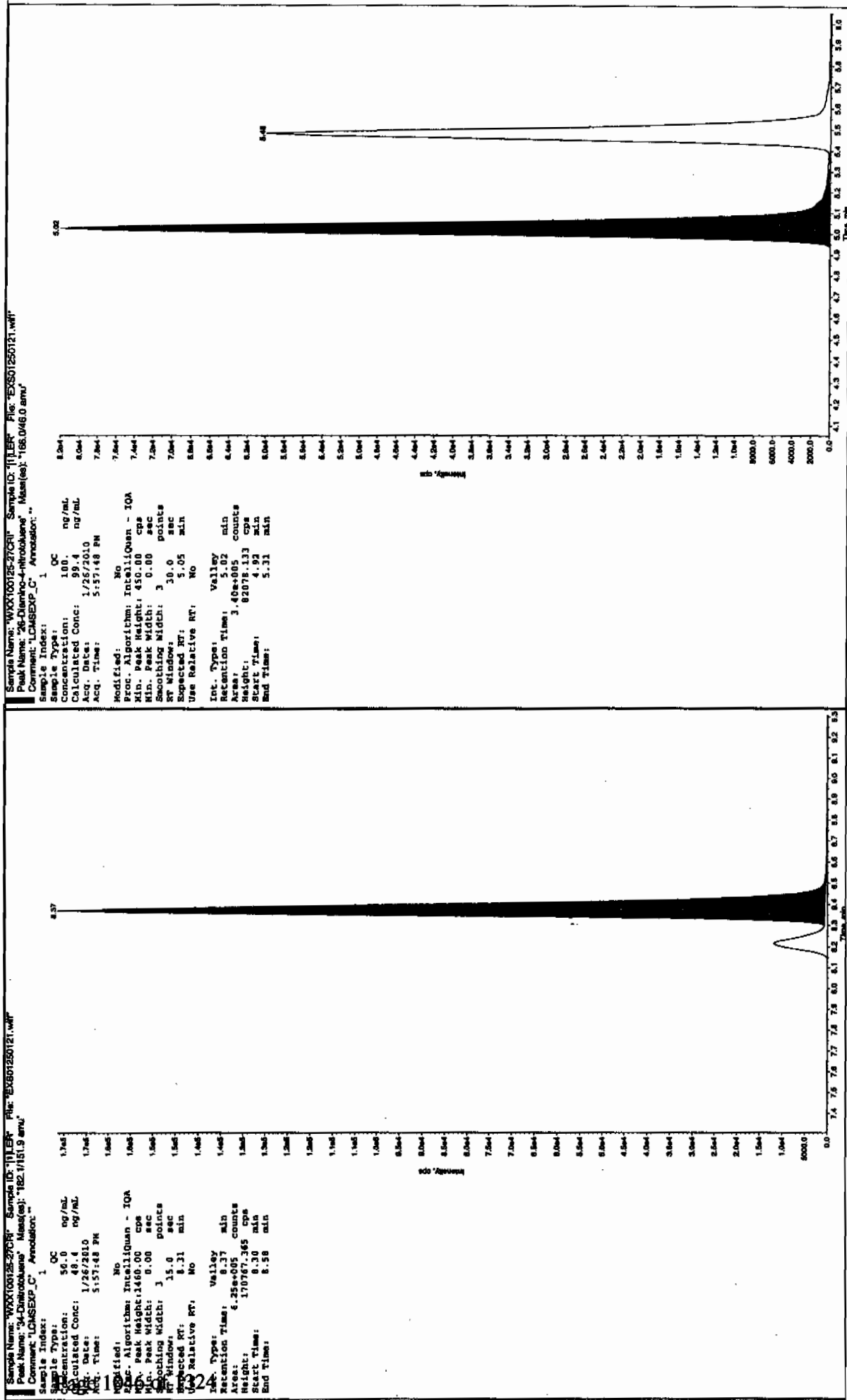
Before Jan 11/27/10



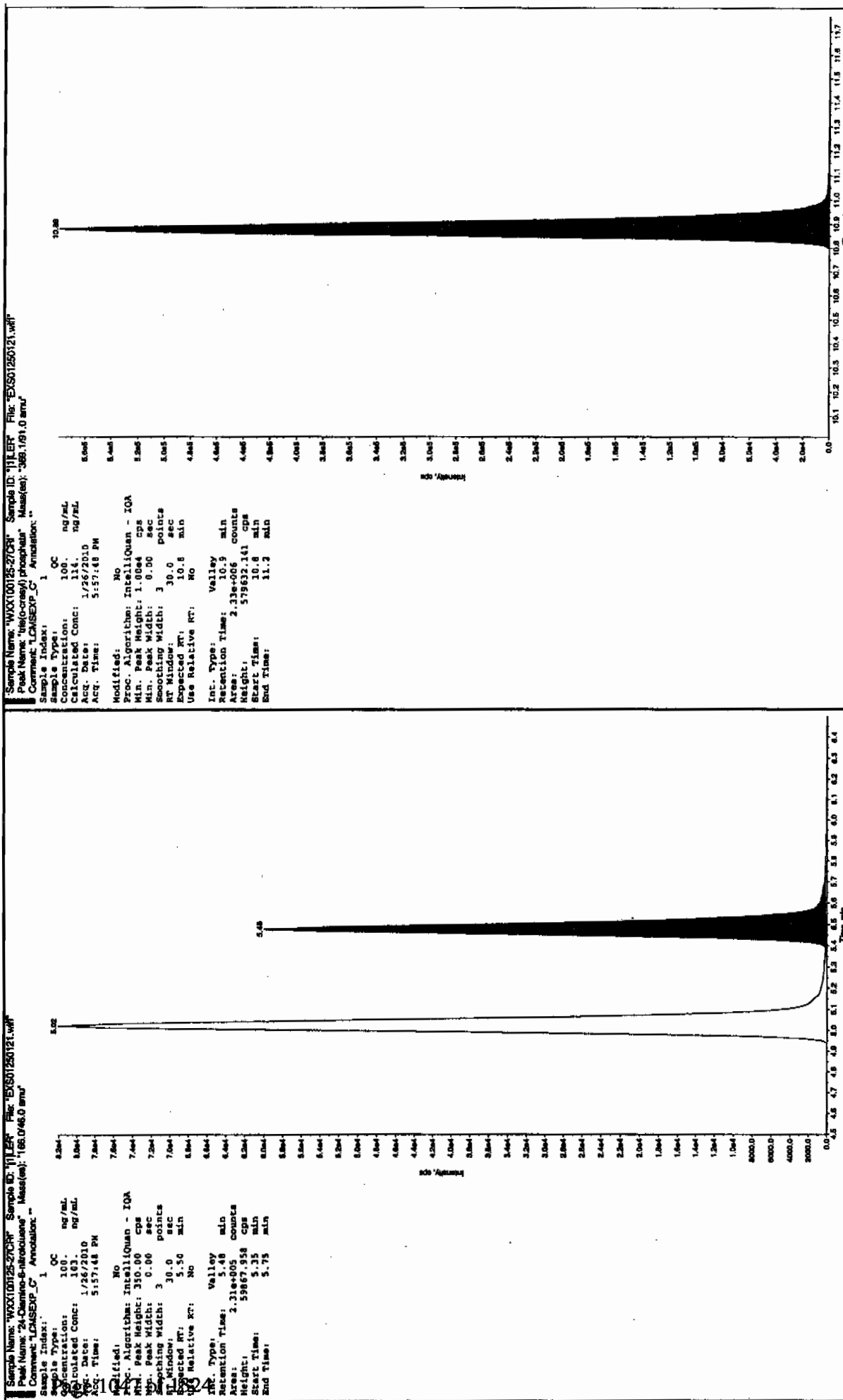
After 01/27/10

after Jan 11/27/10









7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1210

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS01250132.wiff

Analysis Date: 26-JAN-10 20:50

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	463	93	
2,6-Diamino-4-nitrotoluene	500	476	95	
3,4-Dinitrotoluene	250	226	90	
3,5-Dinitroaniline	500	528	106	
TATB	500	555	111	
tris(o-cresyl) phosphate	500	511	102	

Recovery Limits:

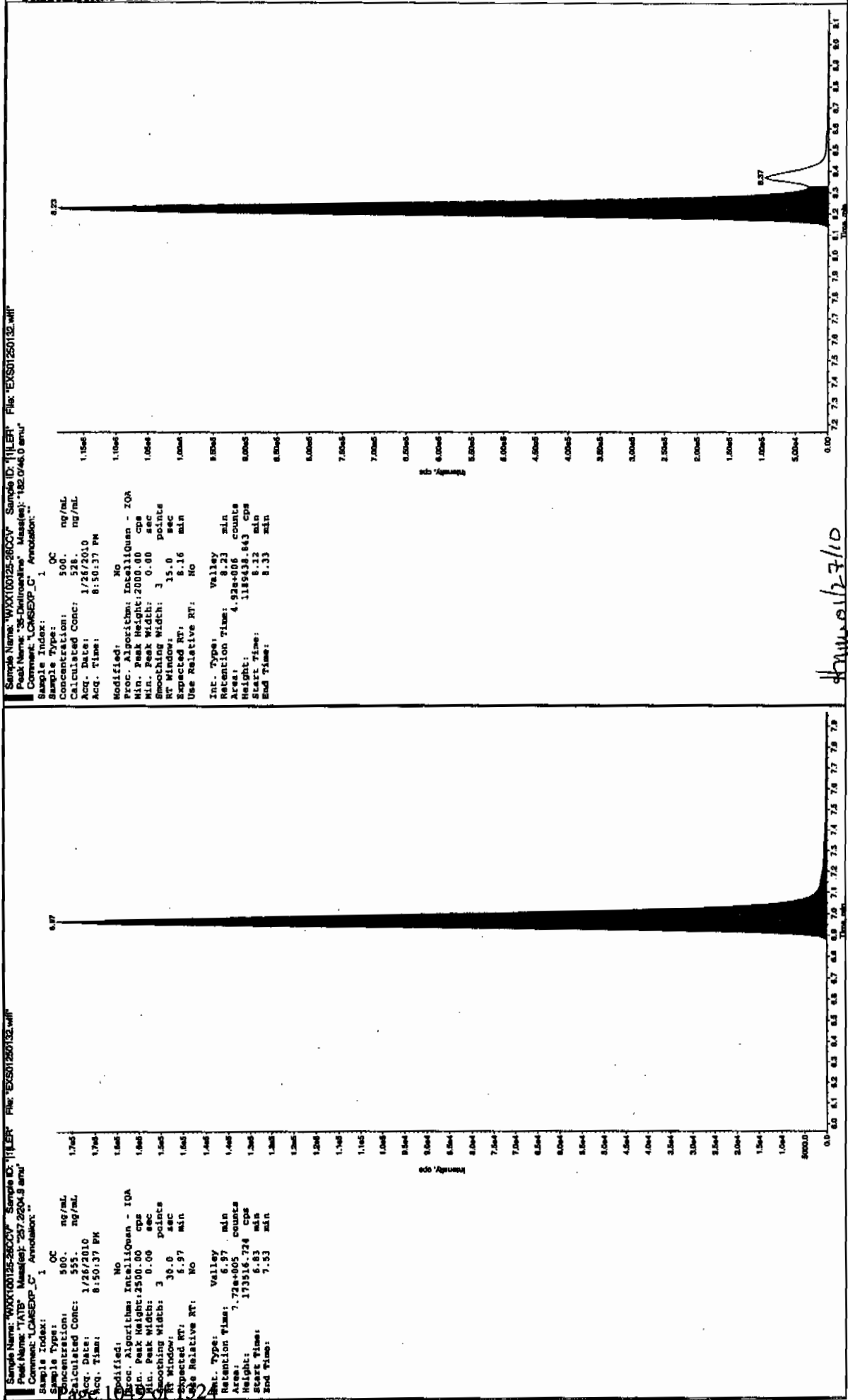
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

# Column used to flag Recovery outside of Limits

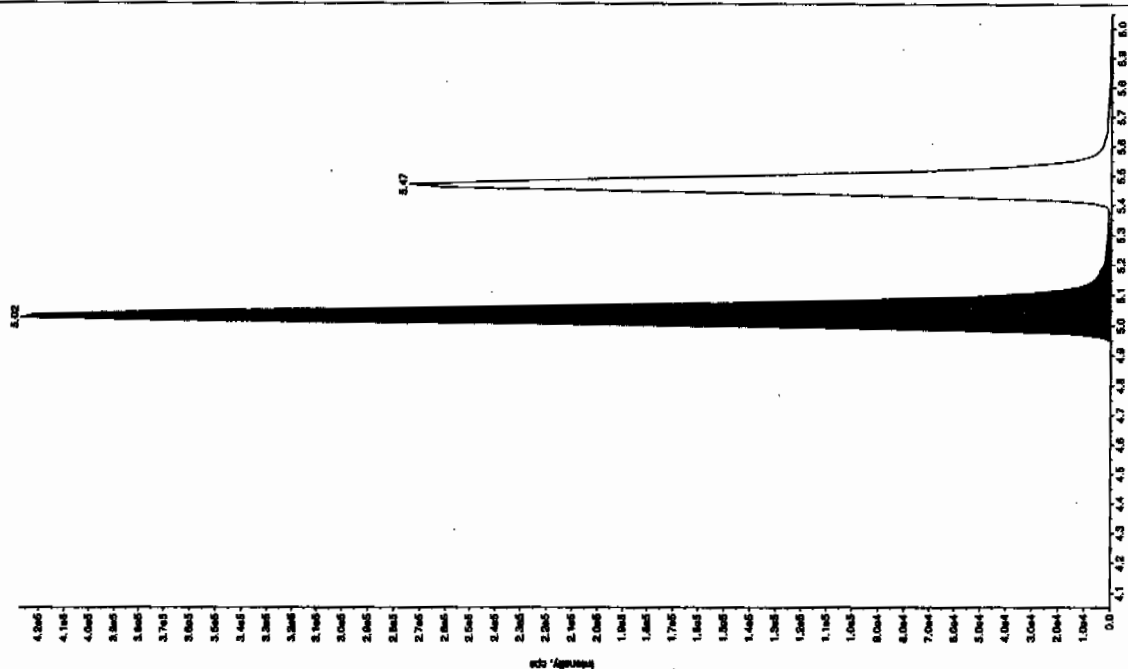
\* Value outside of Recovery Limits

after Jan 1/27/10



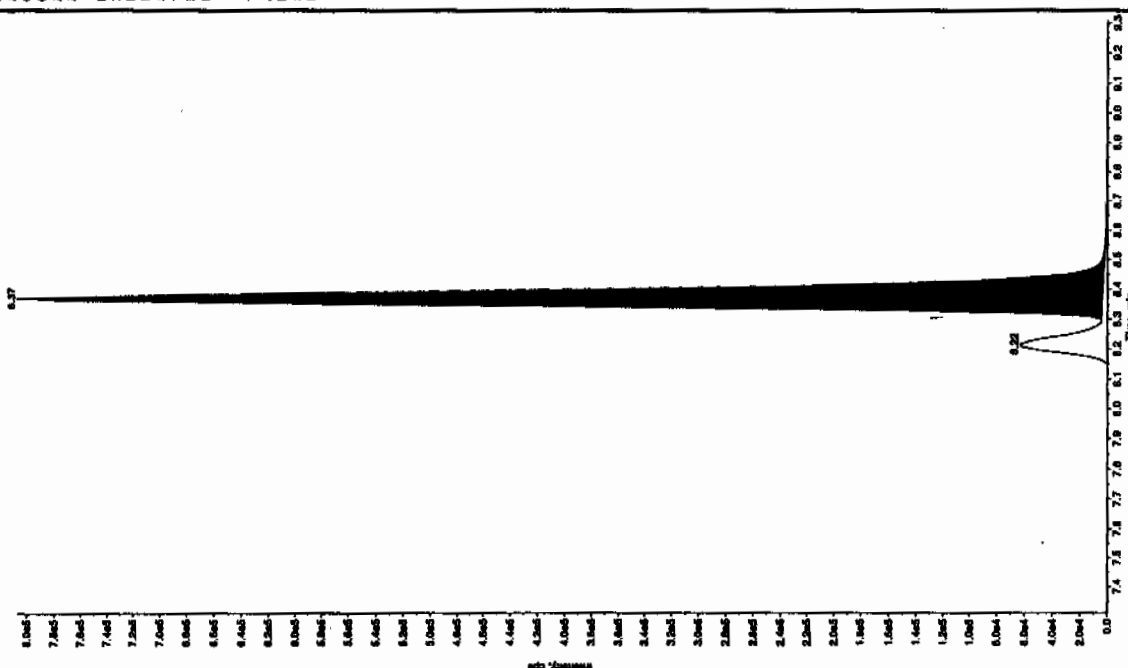
Sample Name: W02100125-2800V Sample ID: 11111111 File: EX0120102.wif  
 Peak Name: 28-Damir-4-nitrobenzyl Mass(es): 166.0463.0 amu  
 Comment: LCMSEXP\_C Acquisition:

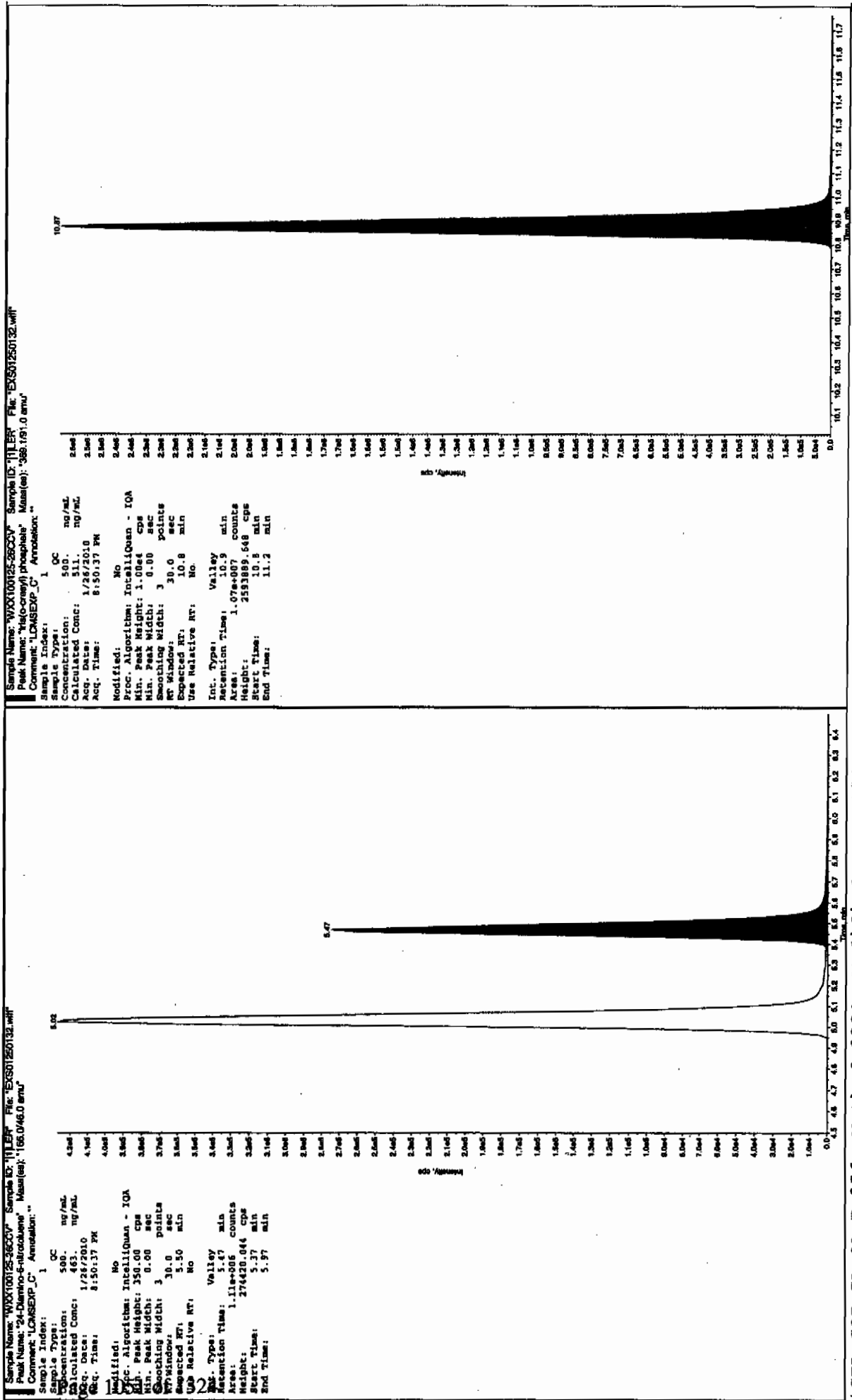
Sample Index: 1  
 Sample Type: 1  
 Concentration: 500.00 ng/mL  
 Calculated Conc: 476.00 ng/mL  
 Acq. Date: 1/26/2010  
 Acq. Time: 8:50:37 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 450.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 10.0 sec  
 Expected RT: 5.05 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.02 min  
 Area: 1.80e+006 counts  
 Height: 427217.651 cps  
 Start Time: 4.92 min  
 End Time: 5.11 min



Sample Name: W02100125-2800V Sample ID: 11111111 File: EX0120102.wif  
 Peak Name: 28-Damir-4-nitrobenzyl Mass(es): 162.1011.9 amu  
 Comment: LCMSEXP\_C Acquisition:

Sample Index: 1  
 Sample Type: 1  
 Concentration: 250.00 ng/mL  
 Calculated Conc: 236.00 ng/mL  
 Acq. Date: 1/26/2010  
 Acq. Time: 8:50:37 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 1469.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 15.0 sec  
 Expected RT: 8.31 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.37 min  
 Area: 3.00e+006 counts  
 Height: 803286.987 cps  
 Start Time: 8.30 min  
 End Time: 8.58 min





7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1210

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS01250134.wiff

Analysis Date: 26-JAN-10 21:22

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	91	91	
2,6-Diamino-4-nitrotoluene	100	98.3	98	
3,4-Dinitrotoluene	50	47.4	95	
3,5-Dinitroaniline	100	110	110	
TATB	100	112	112	
tris(o-cresyl) phosphate	100	119	119	

Recovery Limits:

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

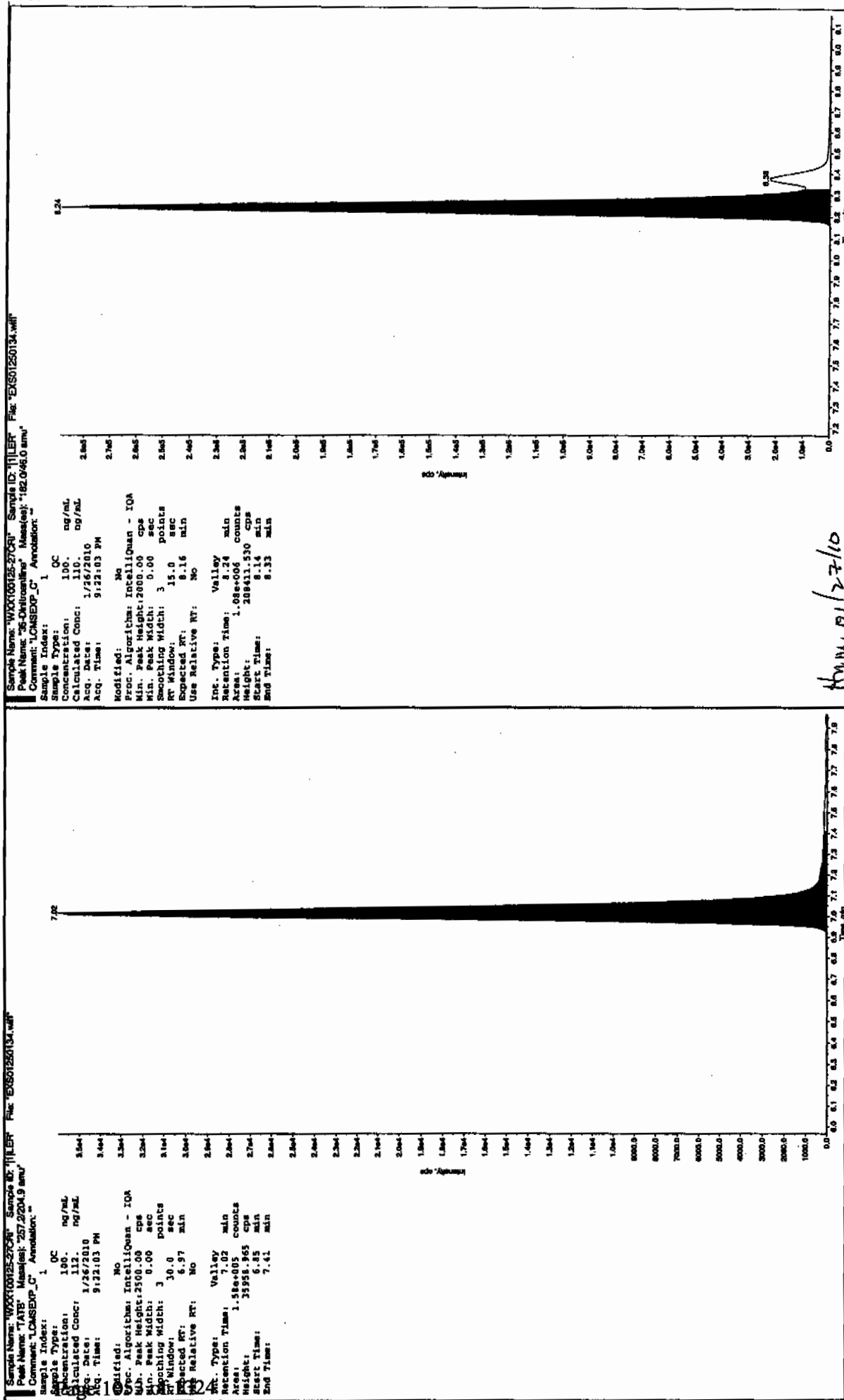
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

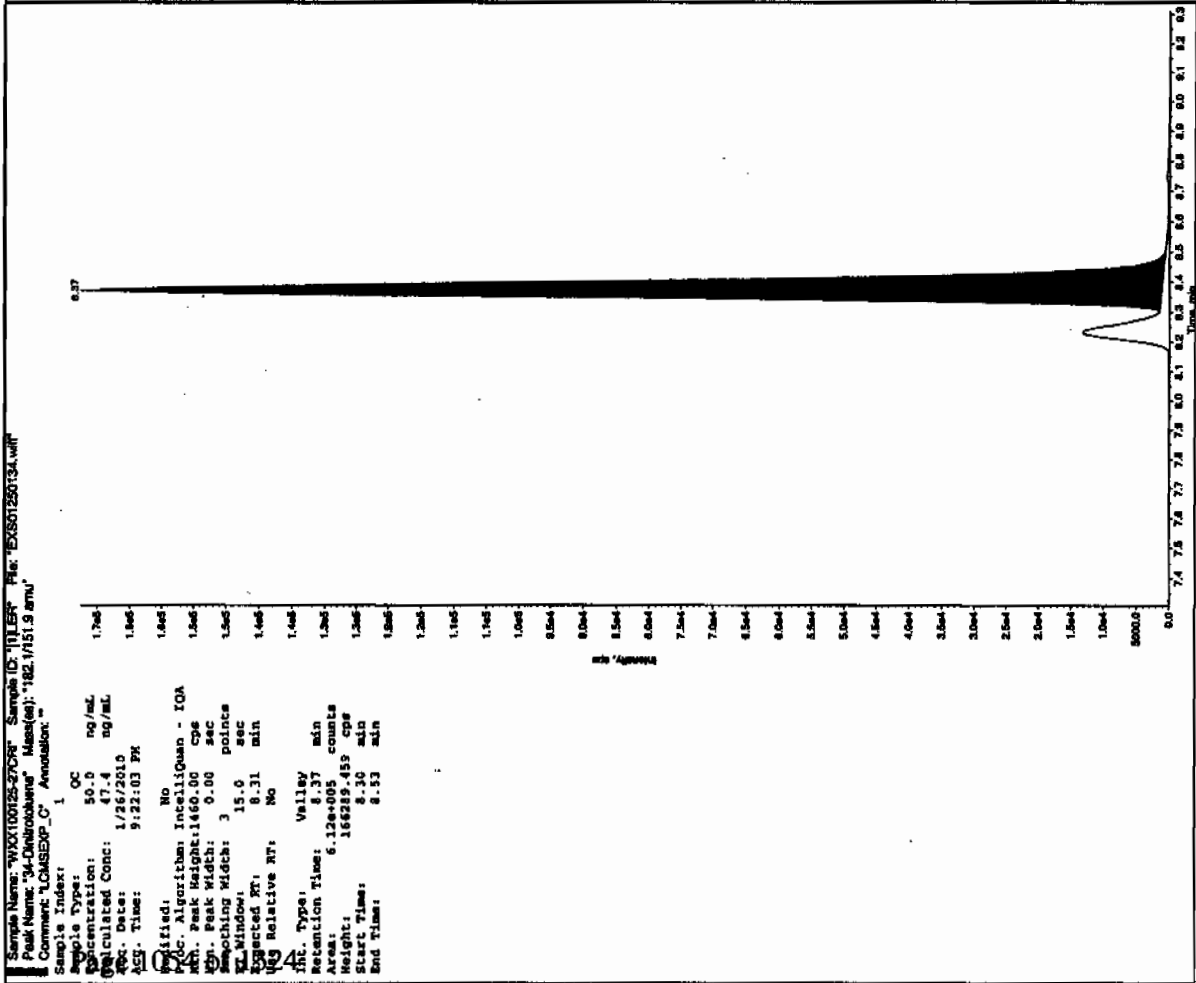
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

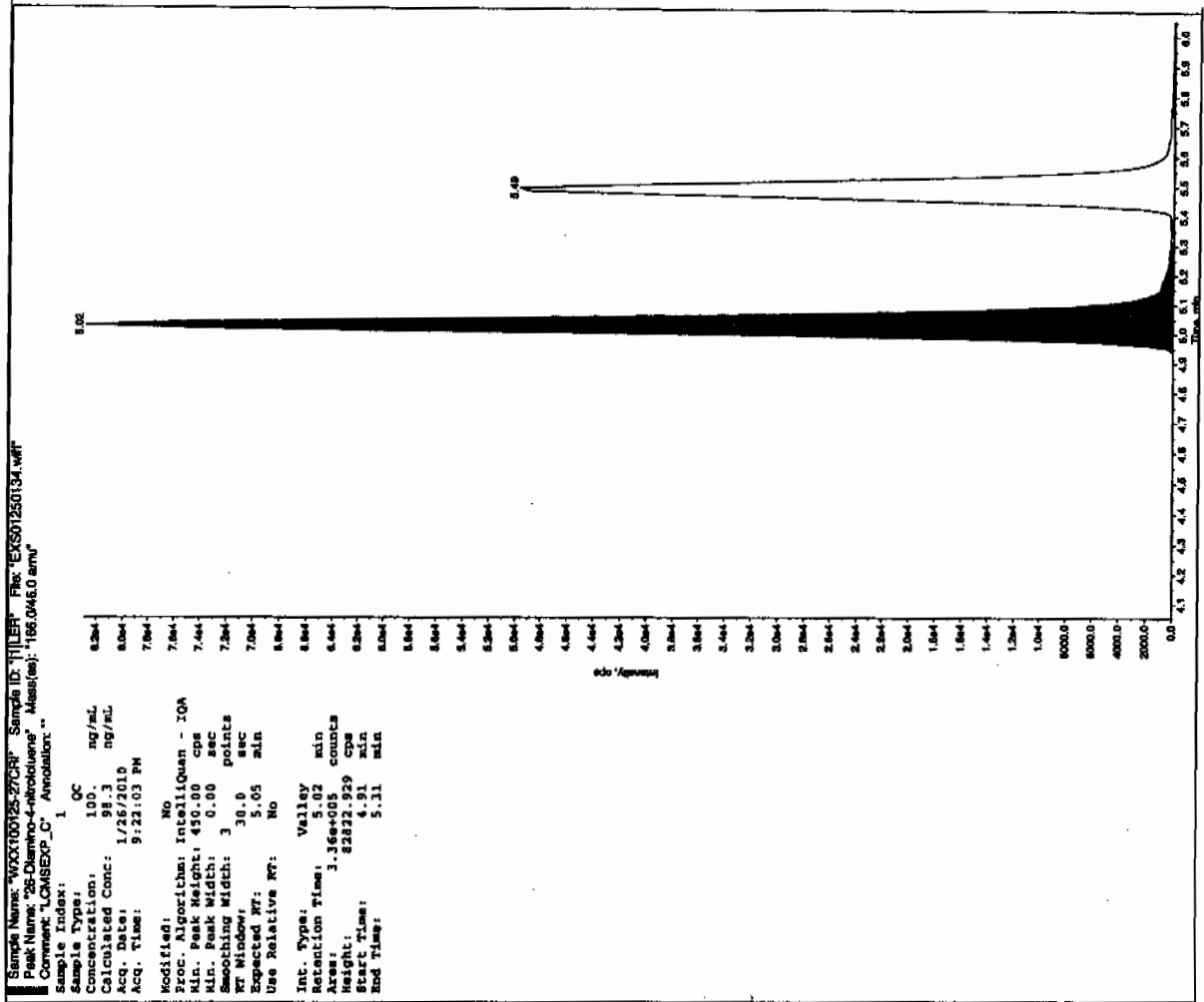
See 1/27/10



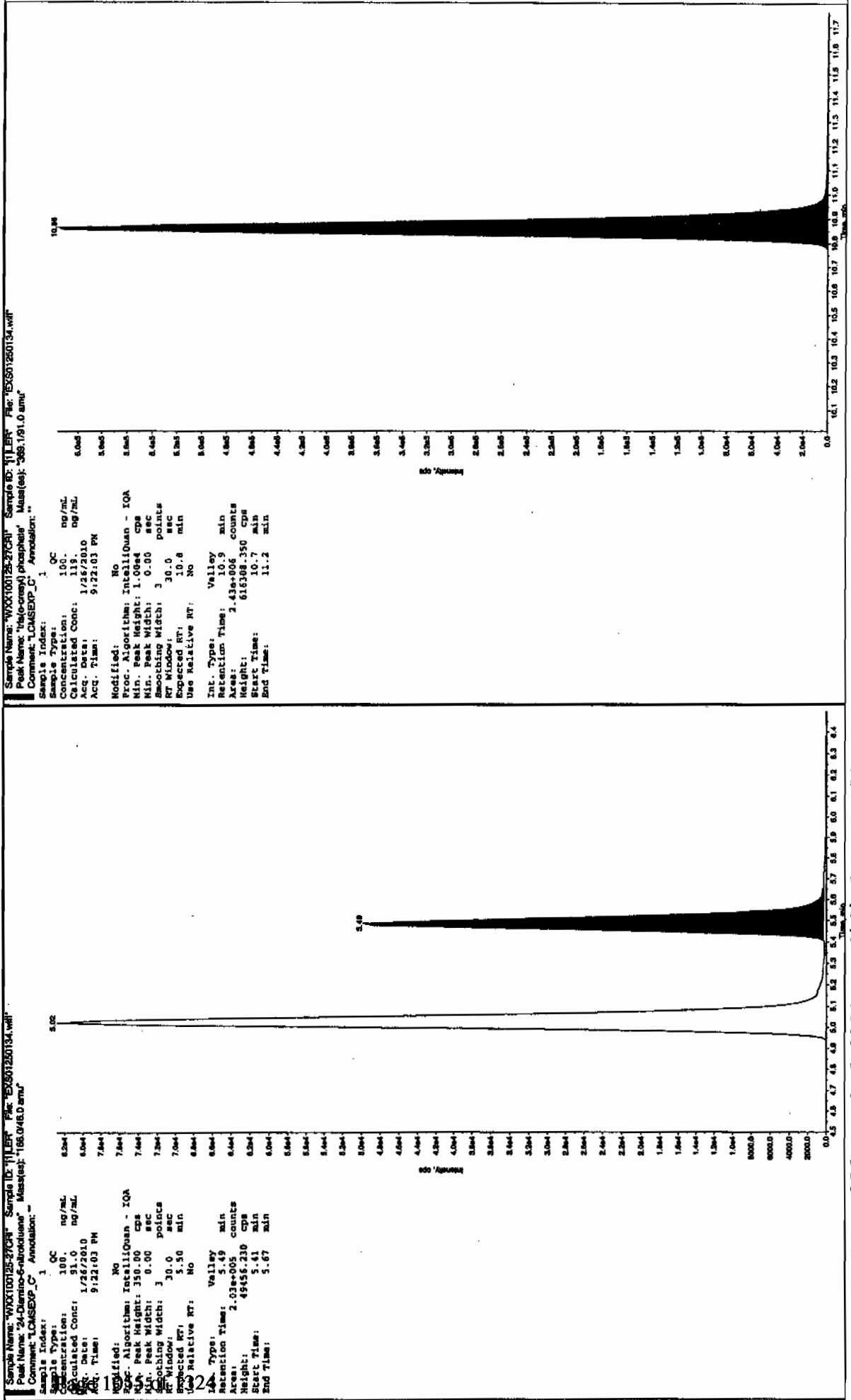
See 1/27/10



\*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): 10-1210

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS01250144.wiff

Analysis Date: 26-JAN-10 23:59

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	424	85	
2,6-Diamino-4-nitrotoluene	500	442	89	
3,4-Dinitrotoluene	250	233	93	
3,5-Dinitroaniline	500	515	103	
TATB	500	558	112	
tris(o-cresyl) phosphate	500	501	100	

Recovery Limits:

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

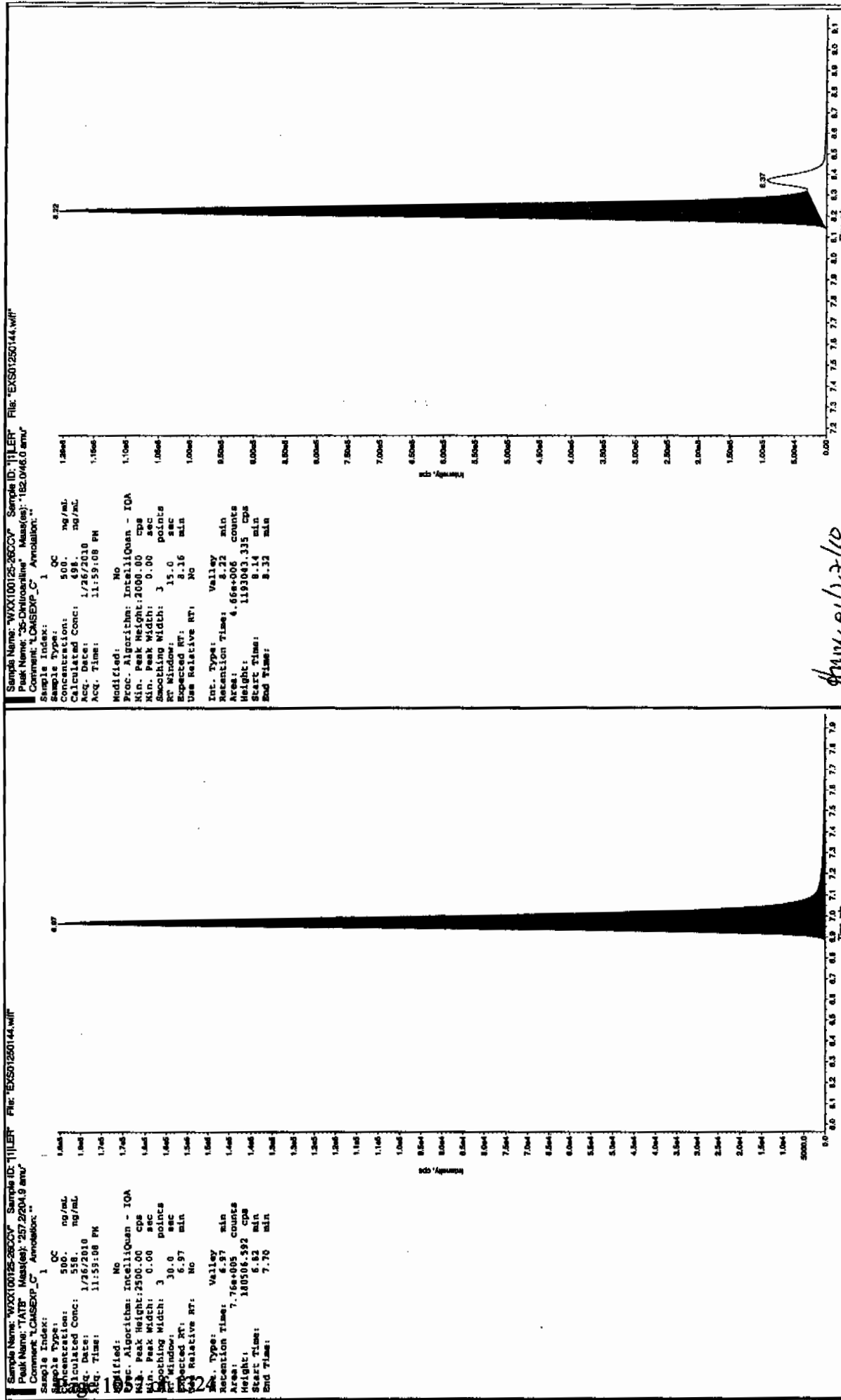
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

# Column used to flag Recovery outside of Limits

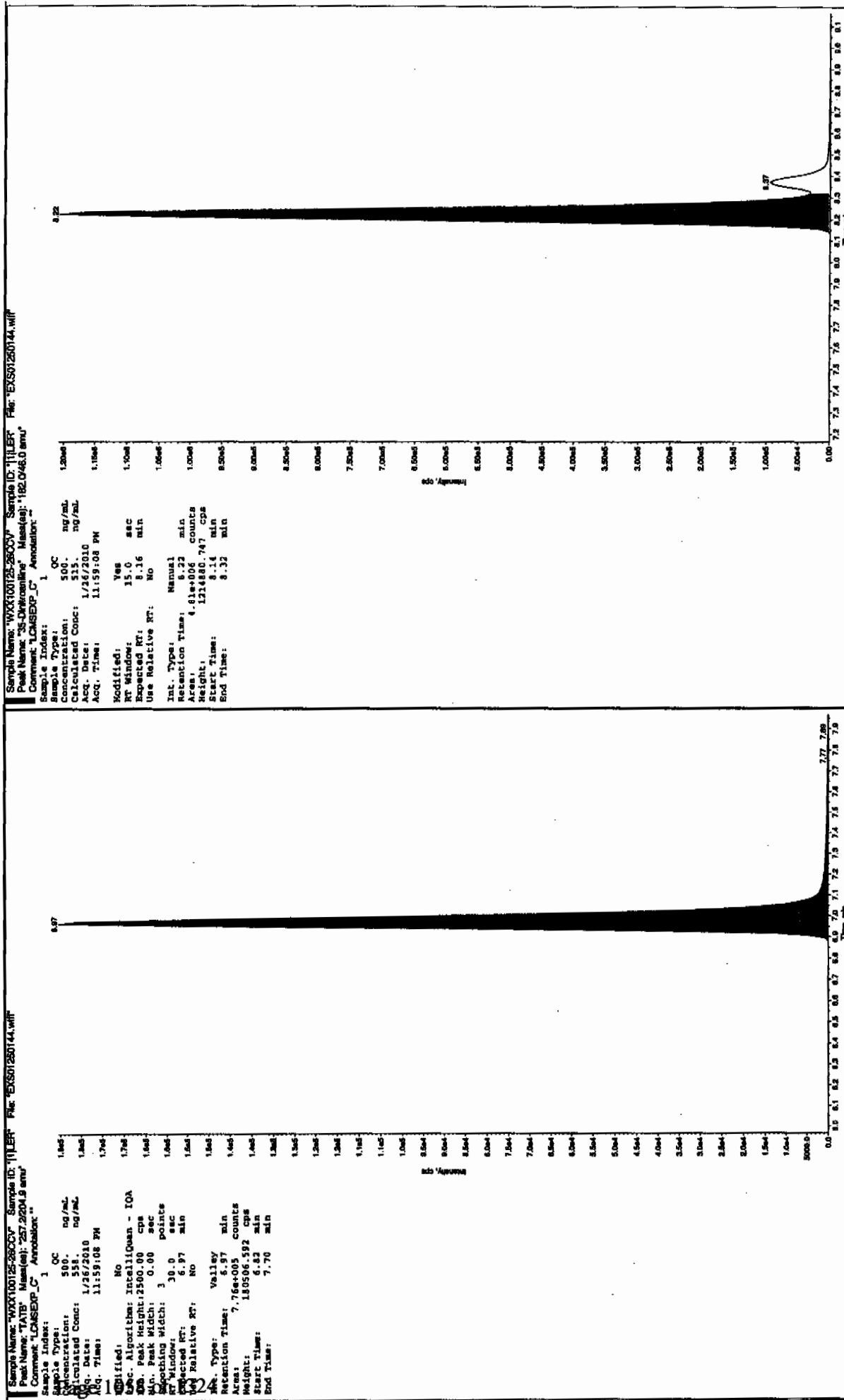
\* Value outside of Recovery Limits

Before Jan 11/2/10



After Jan 11/2/10

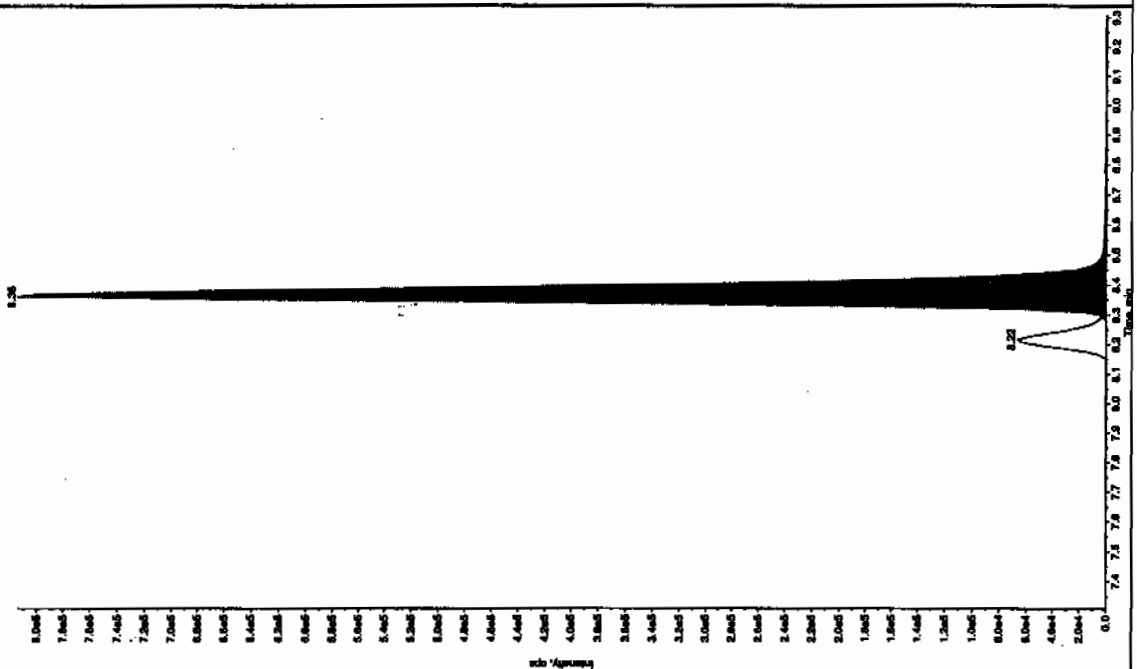
after scan 112710



Sample Name: "WXX100125-280CV" Sample ID: "11LER" File: "EX501250144.wif"  
 Peak Name: "28-Dienviro-4-nitrobenzene" Mass(es): "186.046.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500. ng/mL  
 Calculated Conc: 442. ng/mL  
 Acq. Date: 1/26/2010  
 Acq. Time: 11:59:08 PM

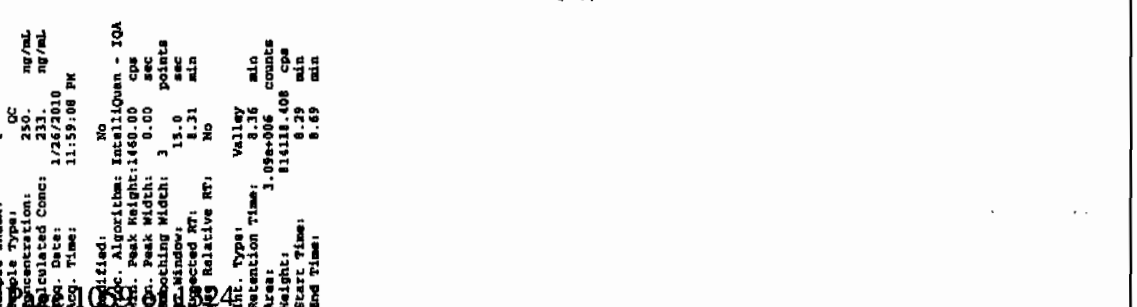
Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 450.00 cps  
 Min. Peak Width: 0.50 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 5.05 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.01 min  
 Area: 1.67e+006 counts  
 Height: 406830.872 cps  
 Start Time: 4.91 min  
 End Time: 5.28 min

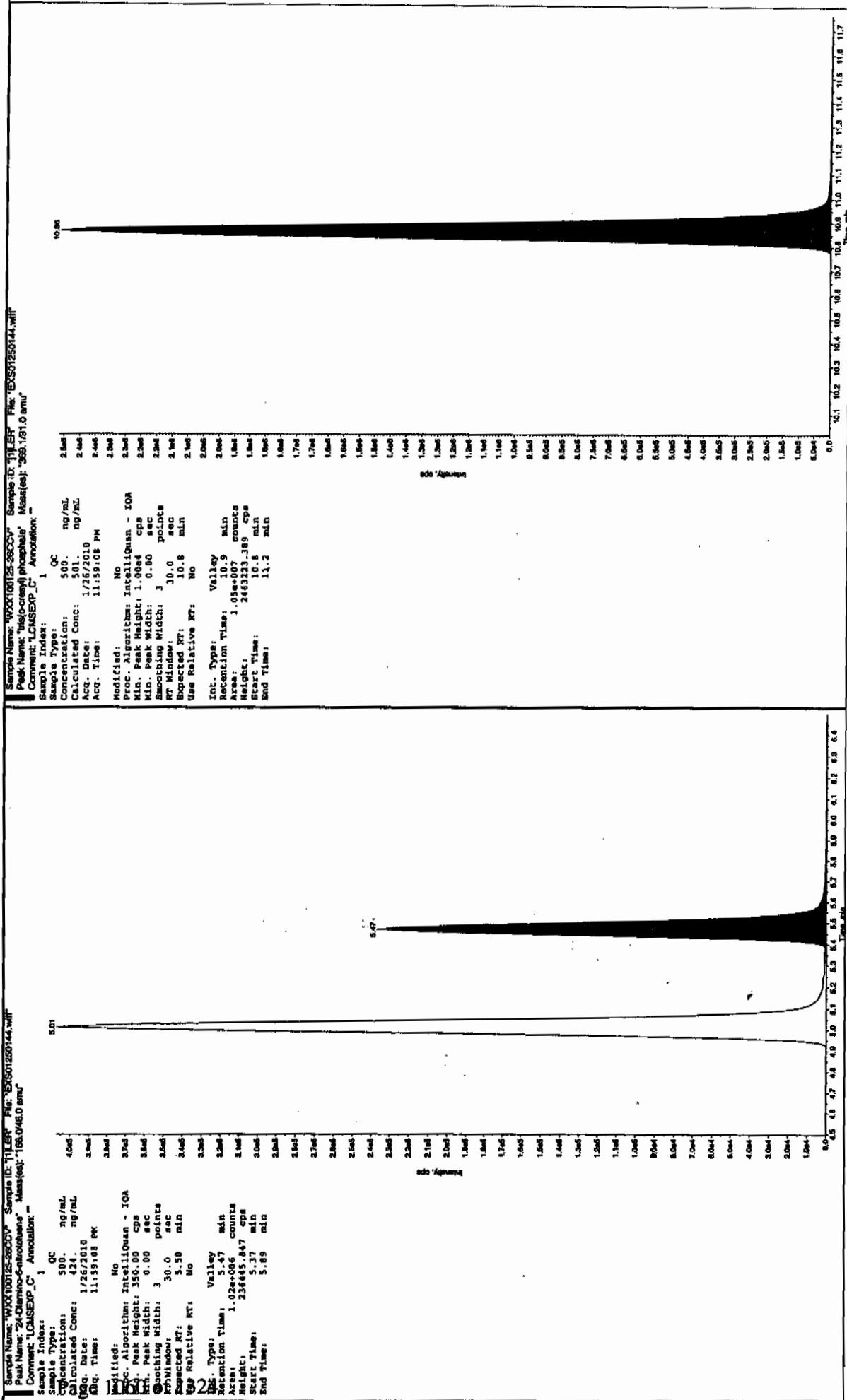


Sample Name: "WXX100125-280CV" Sample ID: "11LER" File: "EX501250144.wif"  
 Peak Name: "34-Dienviro-4-nitrobenzene" Mass(es): "182.1515.9 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 250. ng/mL  
 Calculated Conc: 210. ng/mL  
 Acq. Date: 1/26/2010  
 Acq. Time: 11:59:08 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: 13.0 sec  
 Expected RT: 8.31 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.36 min  
 Area: 3.09e+006 counts  
 Height: 81418.408 cps  
 Start Time: 8.29 min  
 End Time: 8.69 min





**7B**  
**Explosives CRI Standard**

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1210

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS01250146.wiff

Analysis Date: 27-JAN-10 00:30

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	104	104	
2,6-Diamino-4-nitrotoluene	100	108	108	
3,4-Dinitrotoluene	50	47.2	94	
3,5-Dinitroaniline	100	104	104	
TATB	100	109	109	
tris(o-cresyl) phosphate	100	115	115	

**Recovery Limits:**

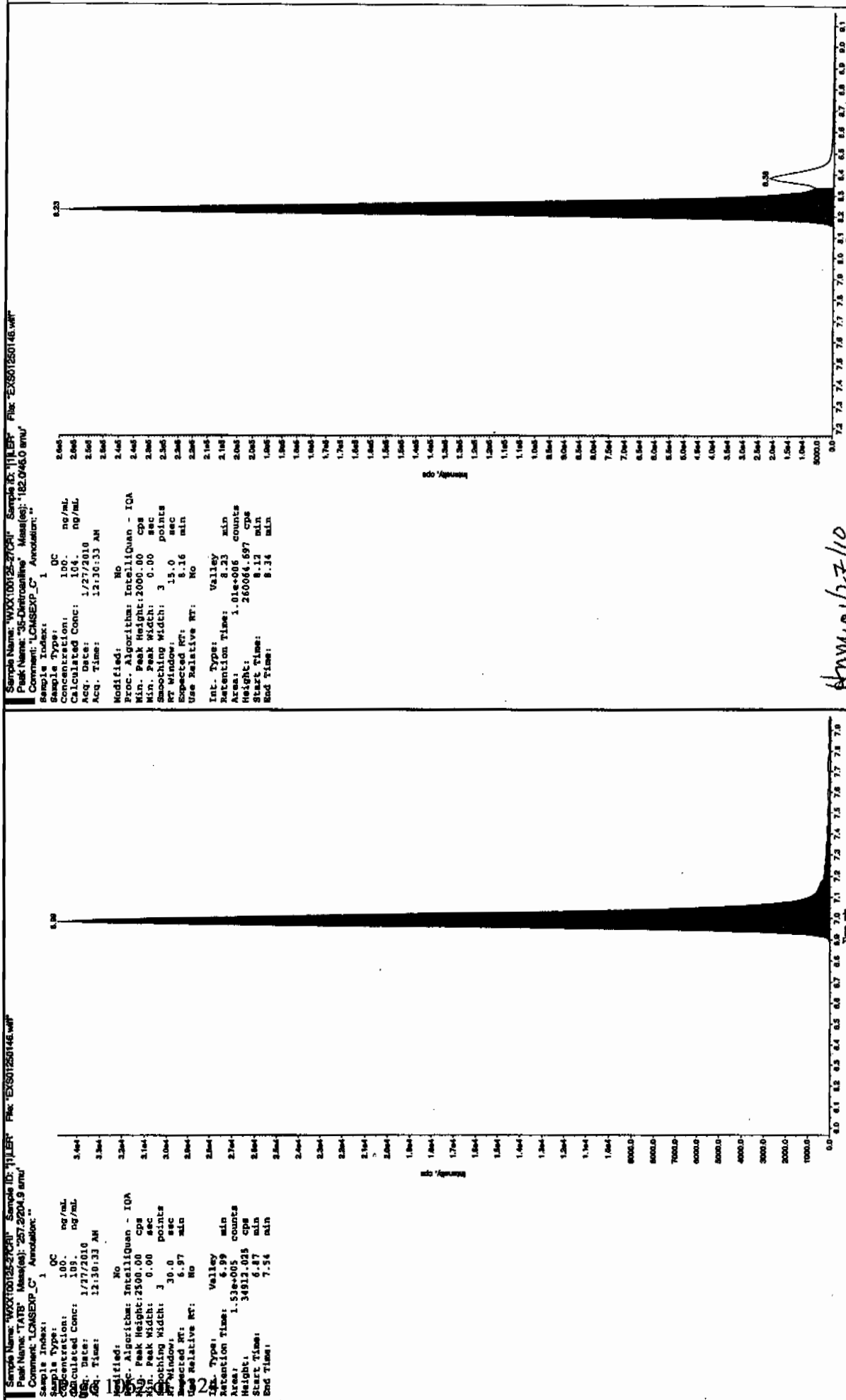
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

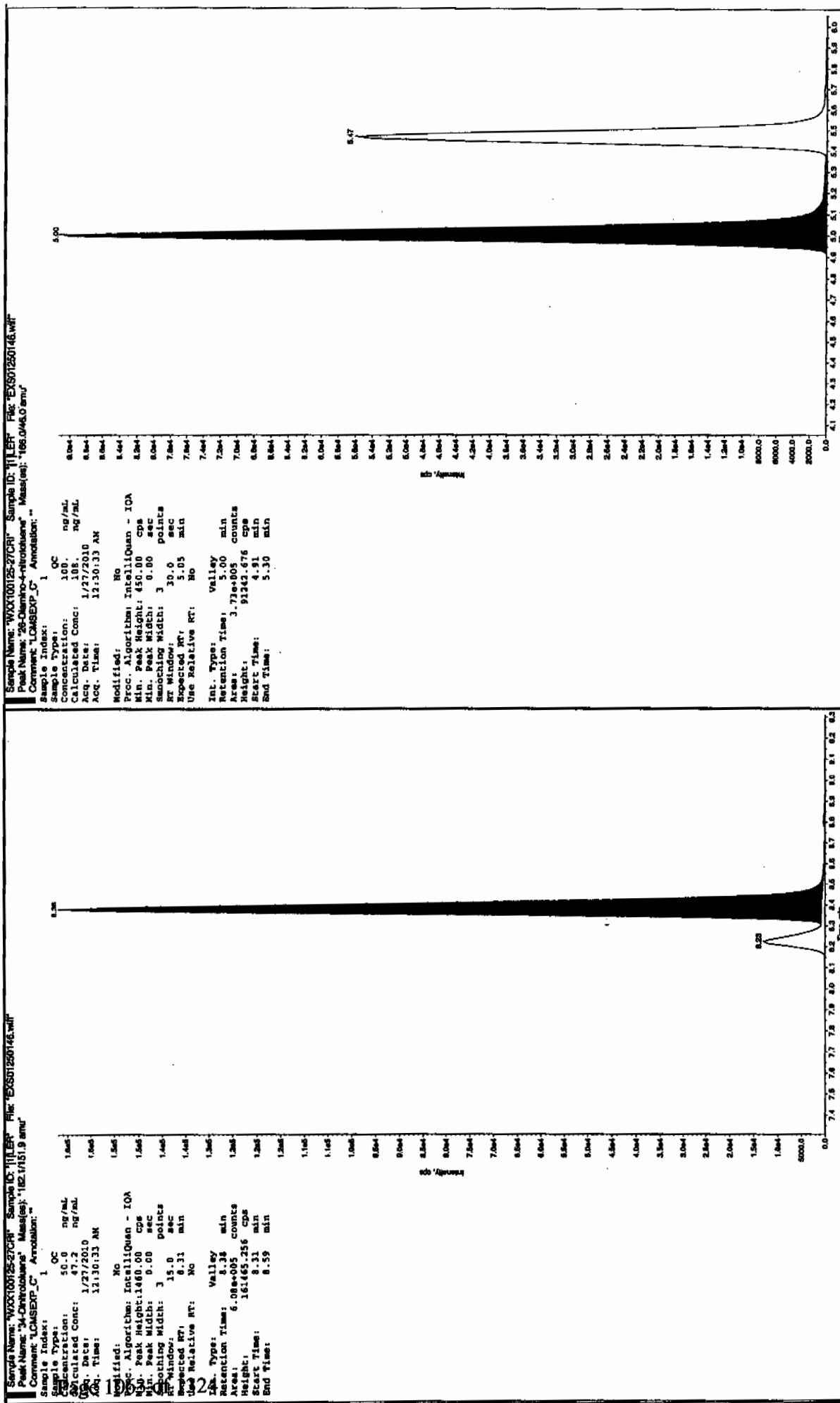
\* Value outside of Recovery Limits

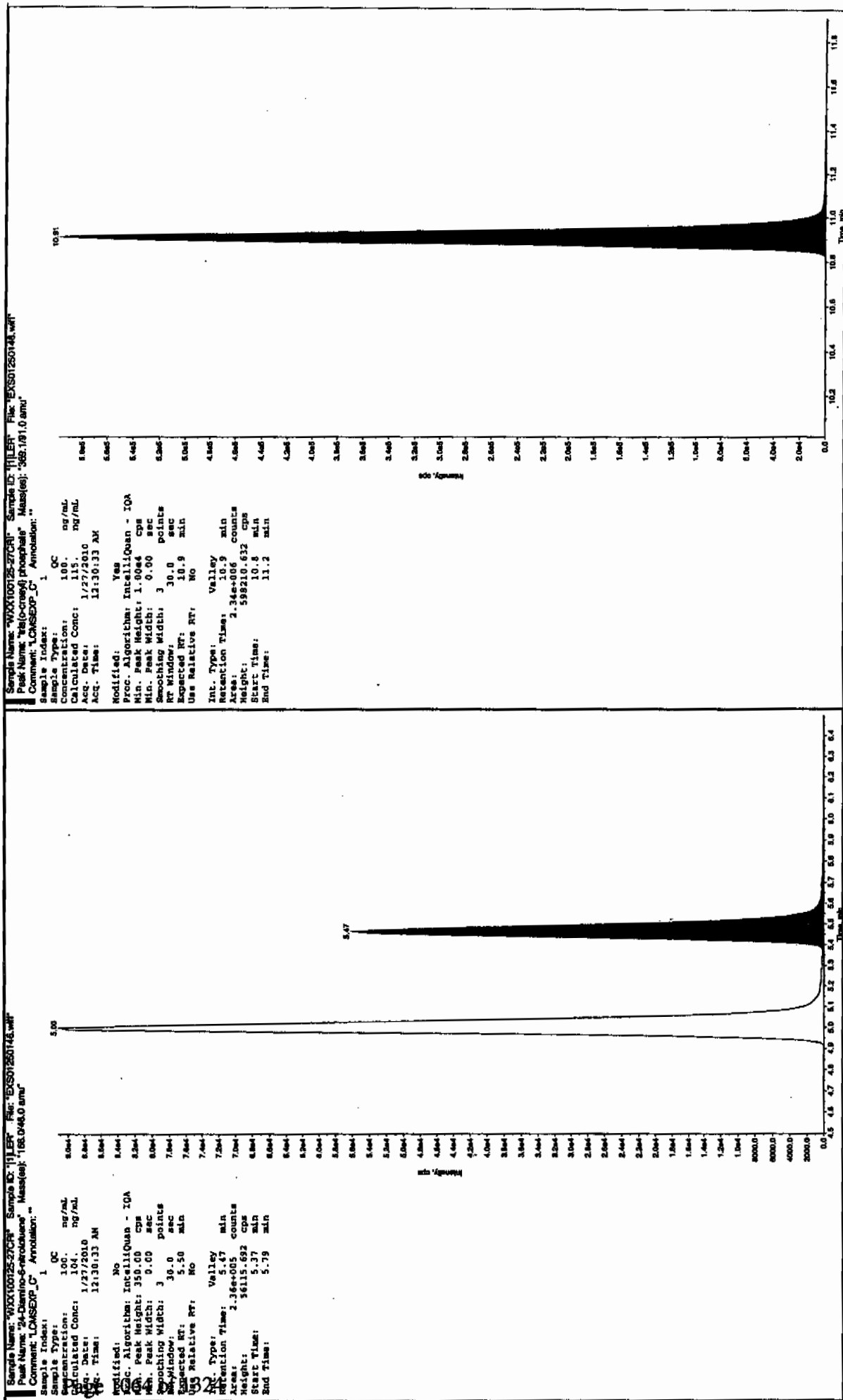
Jan 1/27/10



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







7A

Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1210

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS01250150.wiff

Analysis Date: 27-JAN-10 01:33

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	419	84	
2,6-Diamino-4-nitrotoluene	500	452	90	
3,4-Dinitrotoluene	250	227	91	
3,5-Dinitroaniline	500	509	102	
TATB	500	543	109	
tris(o-cresyl) phosphate	500	504	101	

Recovery Limits:

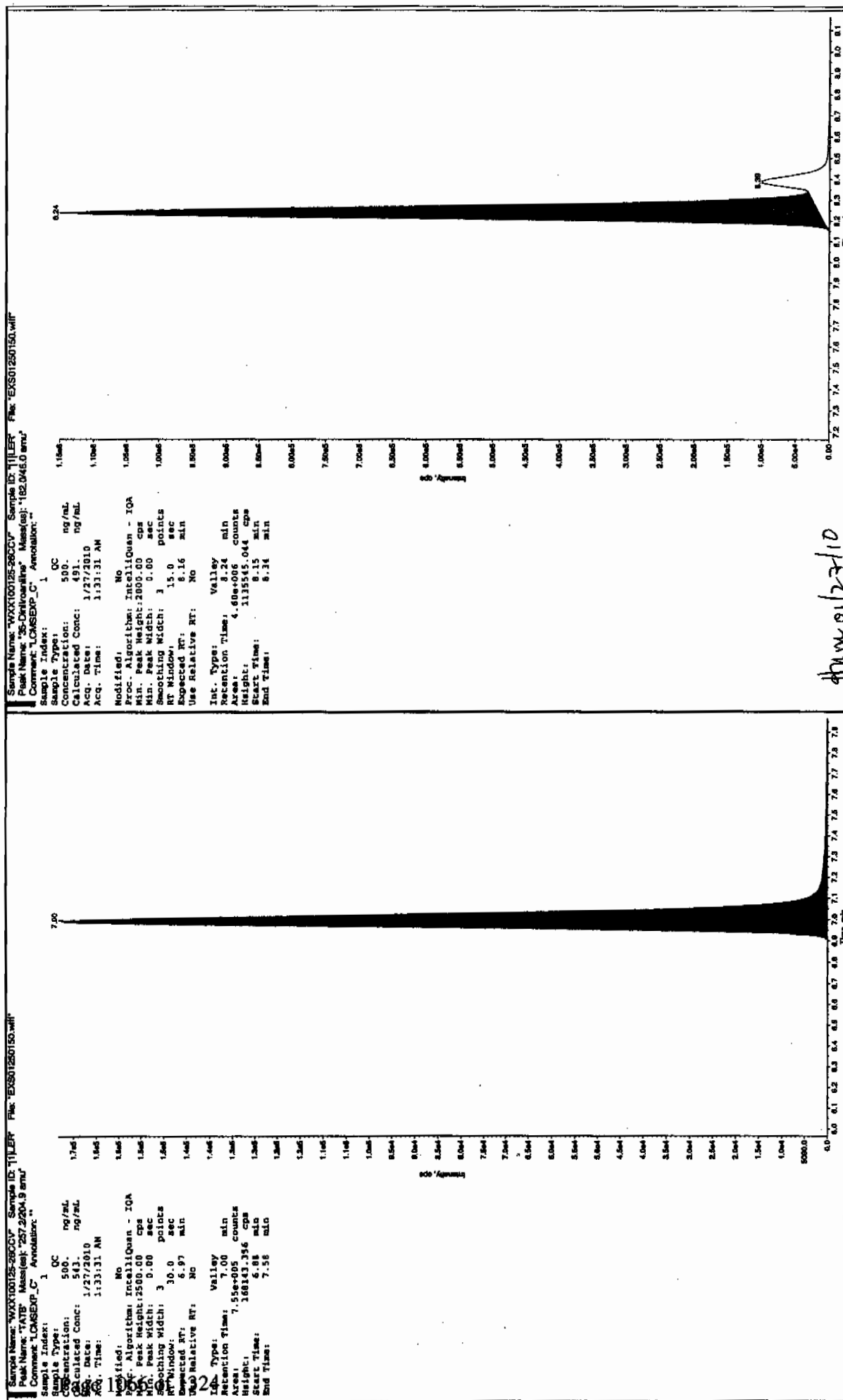
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

# Column used to flag Recovery outside of Limits

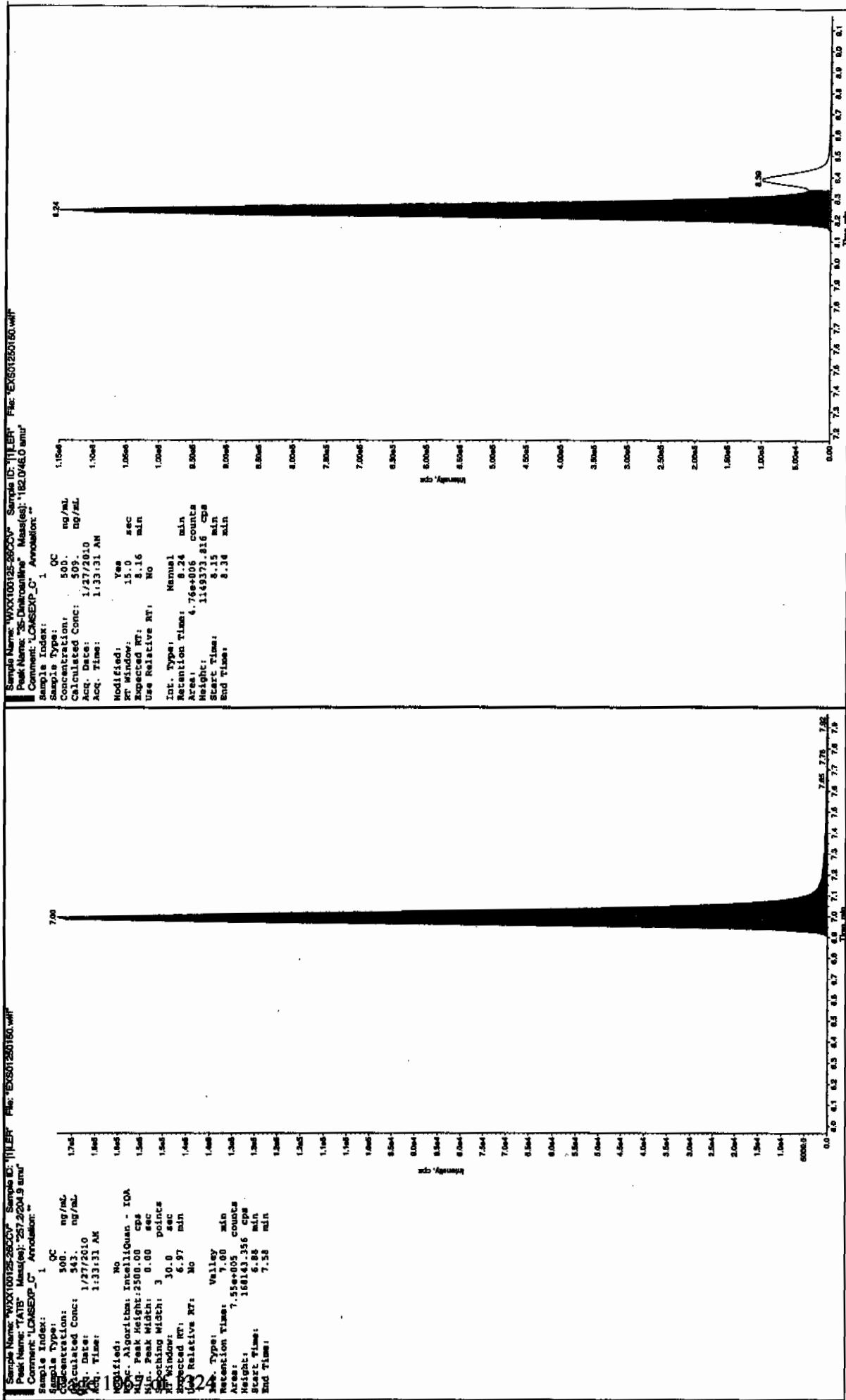
\* Value outside of Recovery Limits

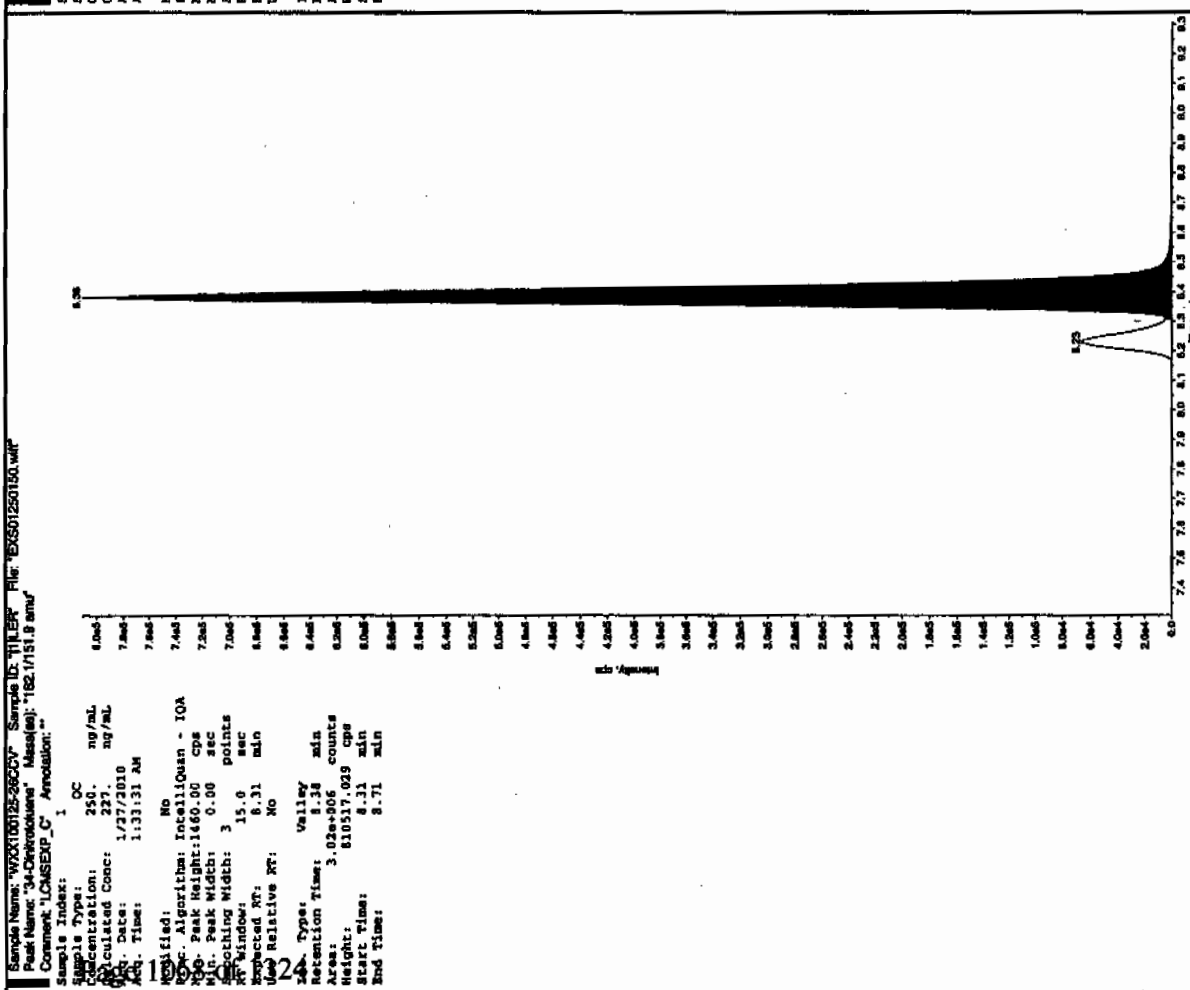
Before clear 1/27/10



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

after Dec 1/27/10







7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1210

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS01250152.wiff

Analysis Date: 27-JAN-10 02:04

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	95.1	95	
2,6-Diamino-4-nitrotoluene	100	95.9	96	
3,4-Dinitrotoluene	50	51.4	103	
3,5-Dinitroaniline	100	113	113	
TATB	100	116	116	
tris(o-cresyl) phosphate	100	117	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%

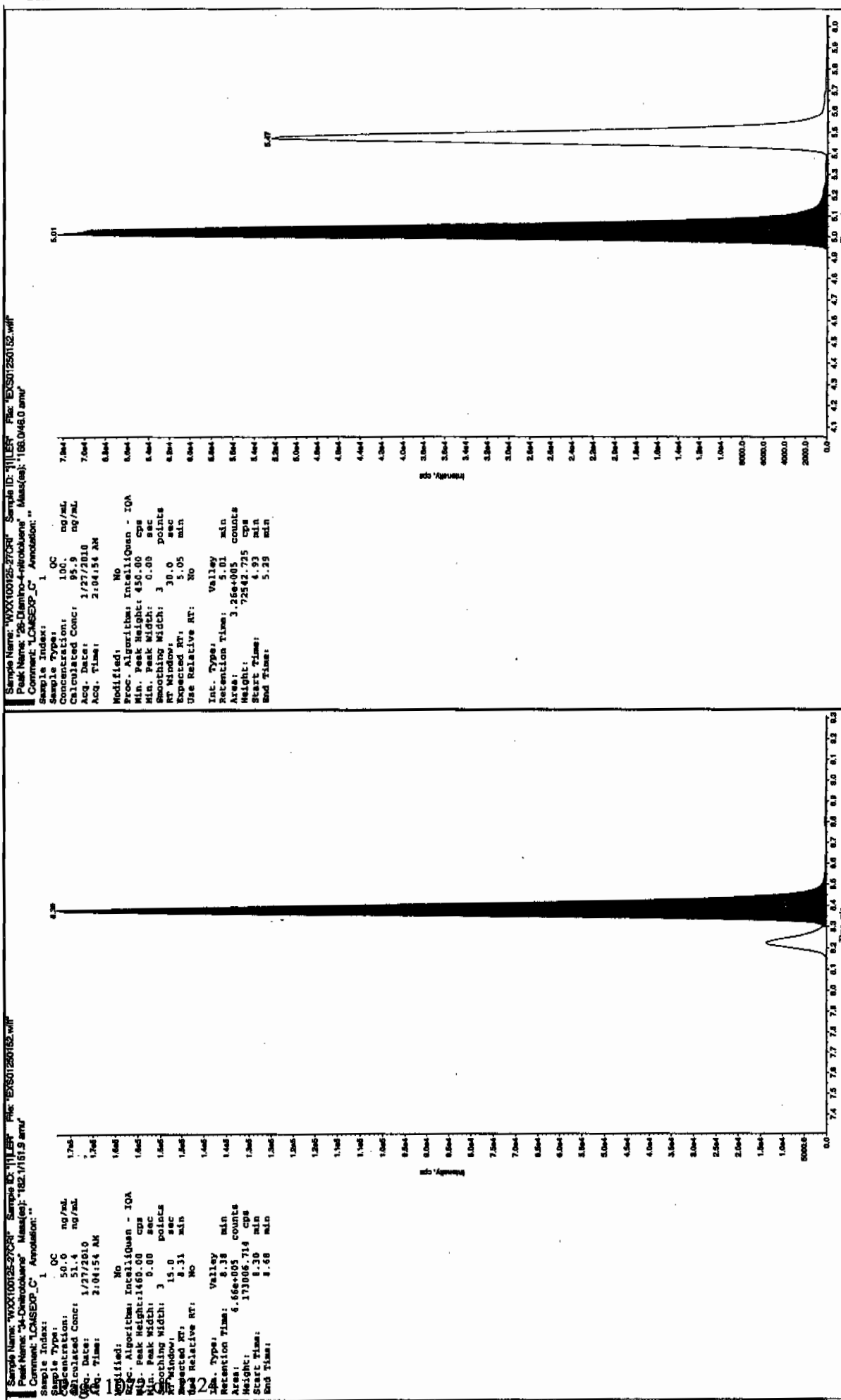
Other Target Analytes 70-130%

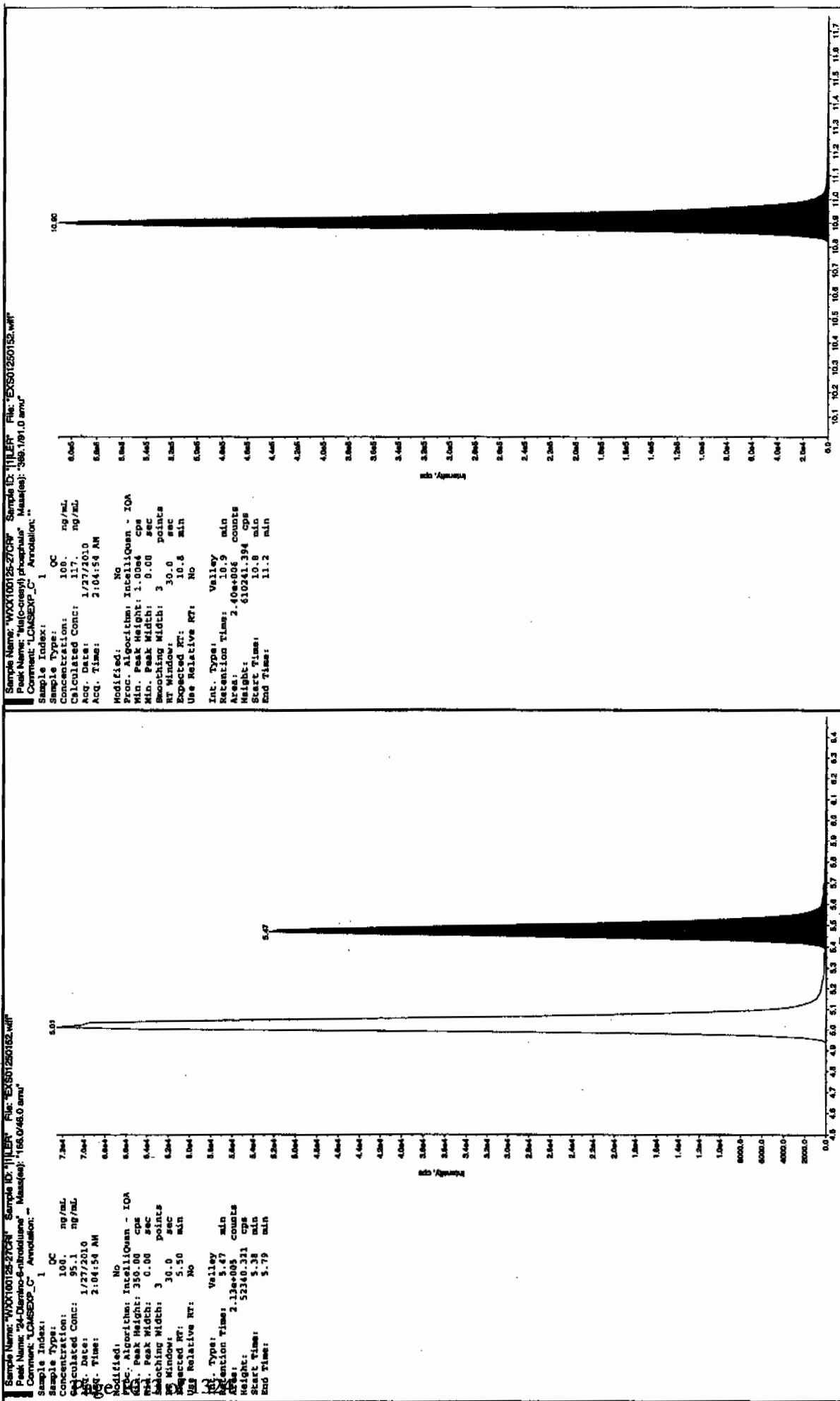
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits









**7B**  
**Explosives CRI Standard**

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1210

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS01270013.wiff

Analysis Date: 27-JAN-10 13:36

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	90.7	91	
2,6-Diamino-4-nitrotoluene	100	96.5	97	
3,4-Dinitrotoluene	50	52	104	
3,5-Dinitroaniline	100	101	101	
TATB	100	112	112	
tris(o-cresyl) phosphate	100	104	104	

**Recovery Limits:**

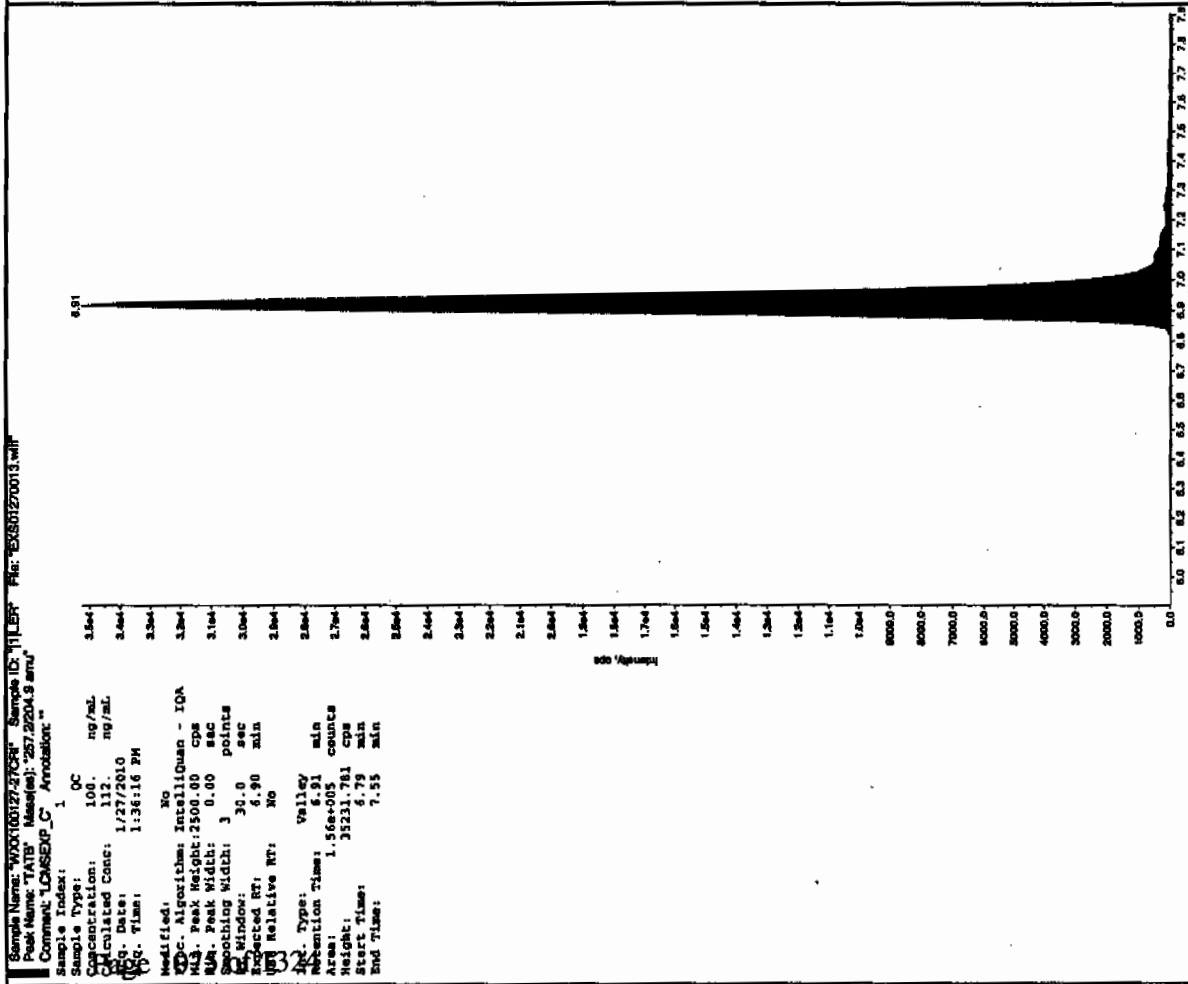
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

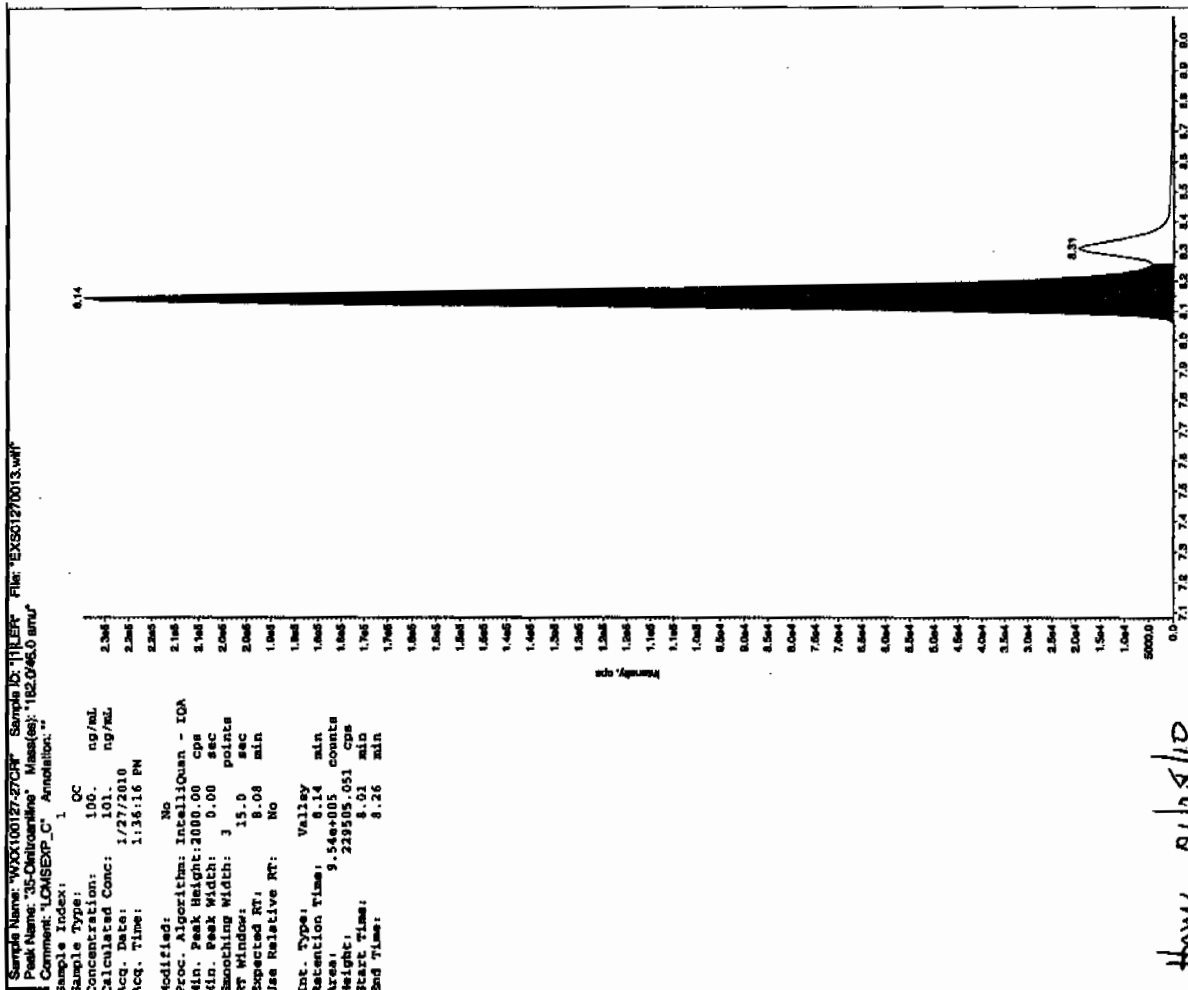
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

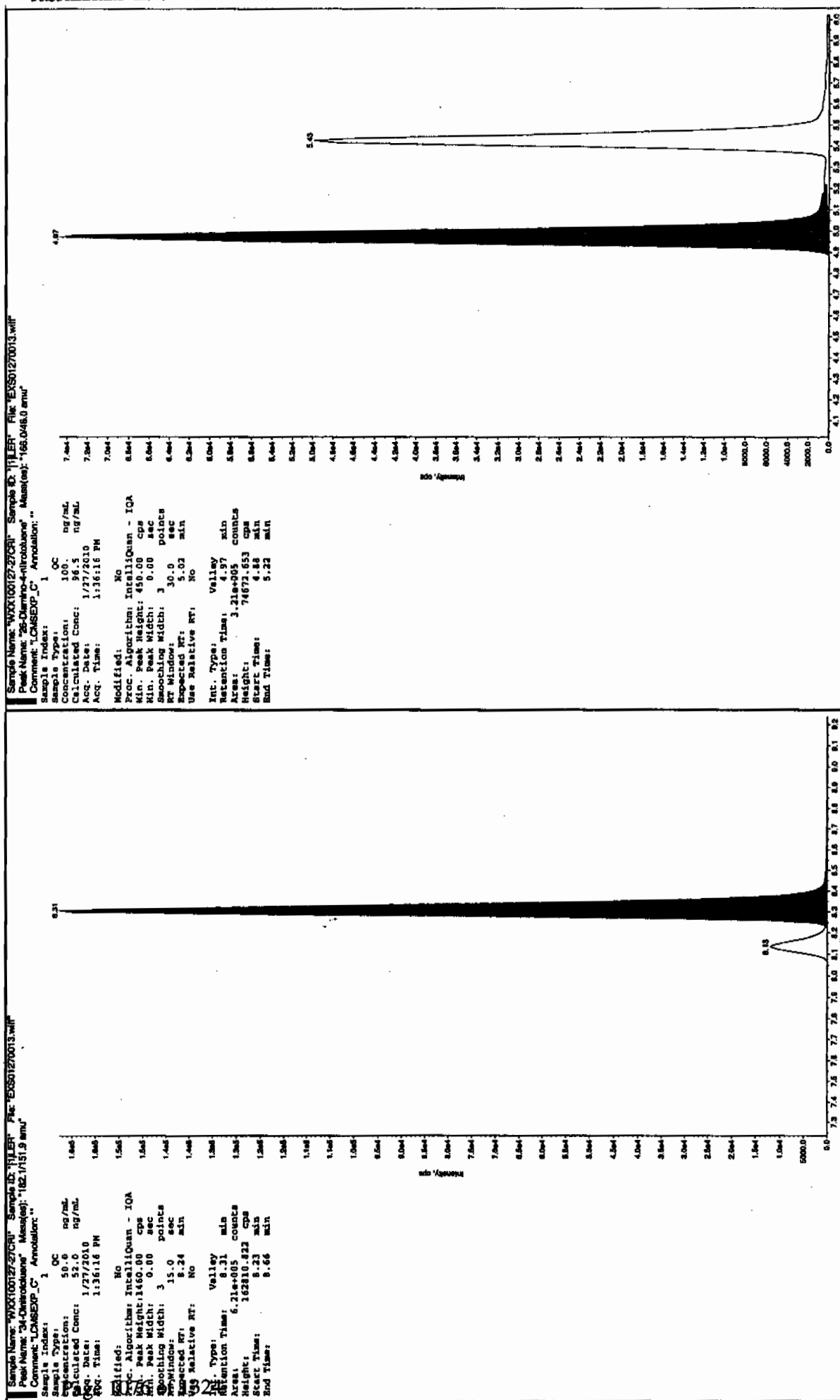
See 1120110



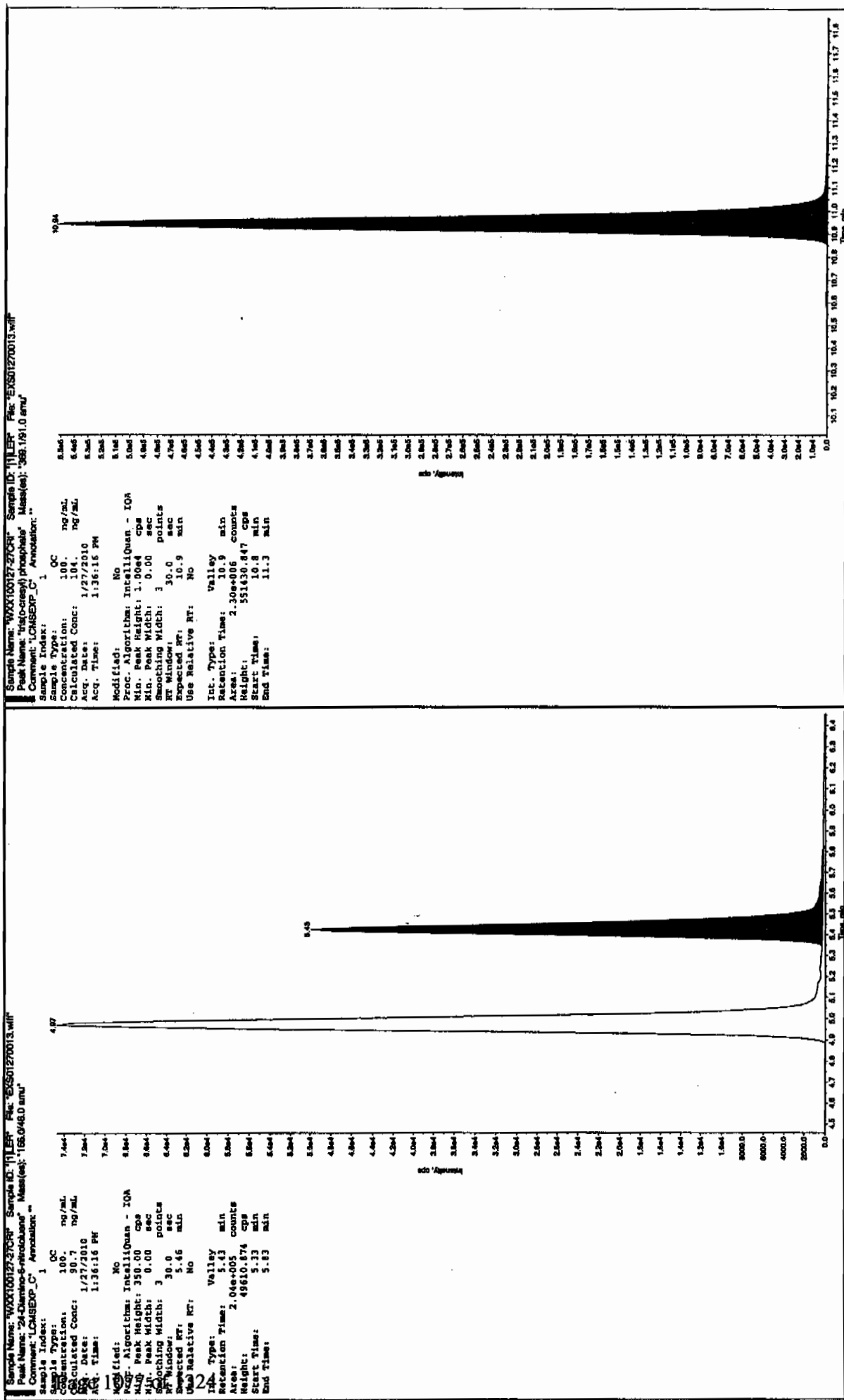
\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



HW 01/28/10



\*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): 10-1210

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS01270024.wiff

Analysis Date: 27-JAN-10 16:31

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	380	76	
2,6-Diamino-4-nitrotoluene	500	372	75	
3,4-Dinitrotoluene	250	233	93	
3,5-Dinitroaniline	500	458	92	
TATB	500	507	101	
tris(o-cresyl) phosphate	500	497	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%

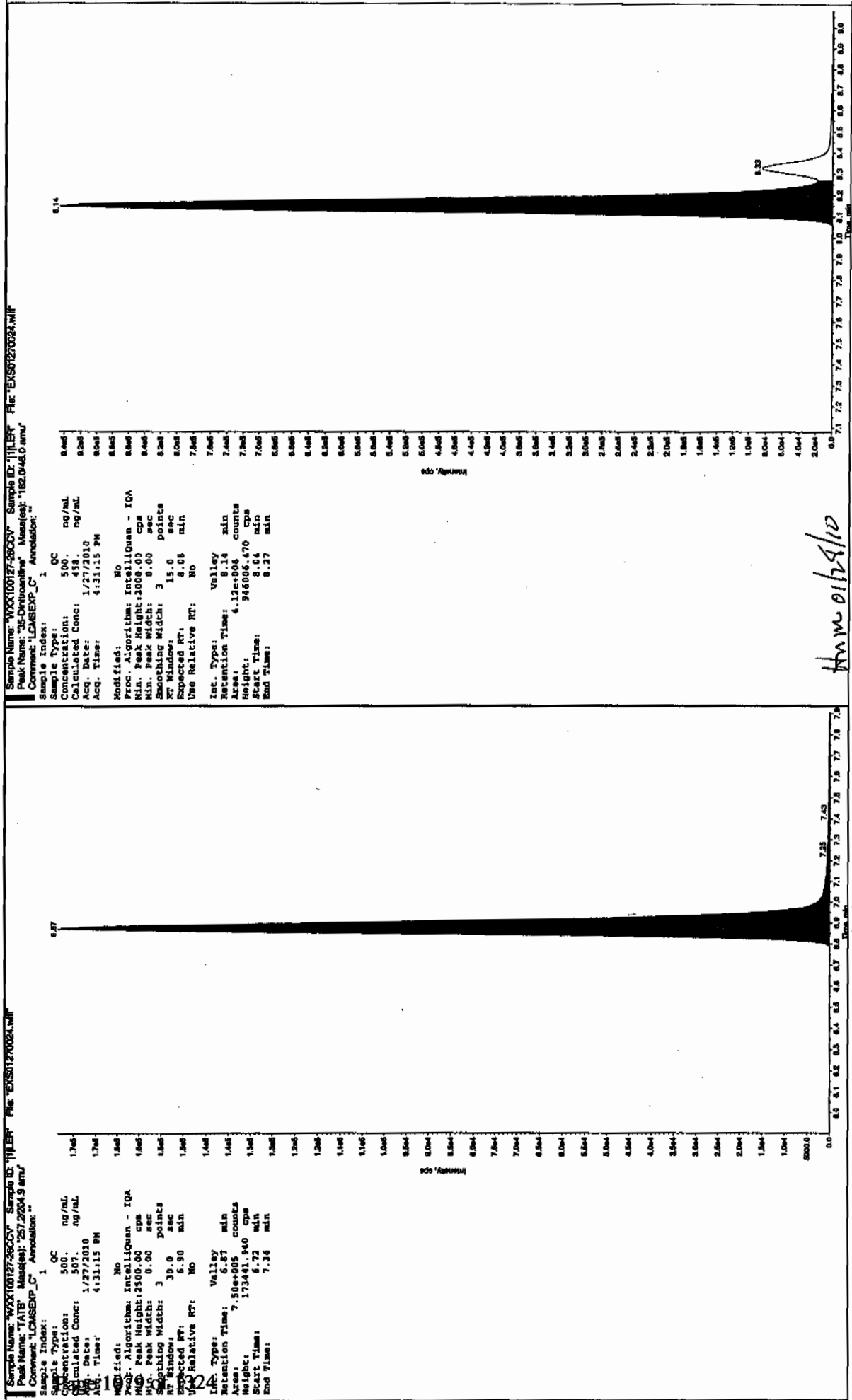
Other Target Analytes 80-120%

# Column used to flag Recovery outside of Limits

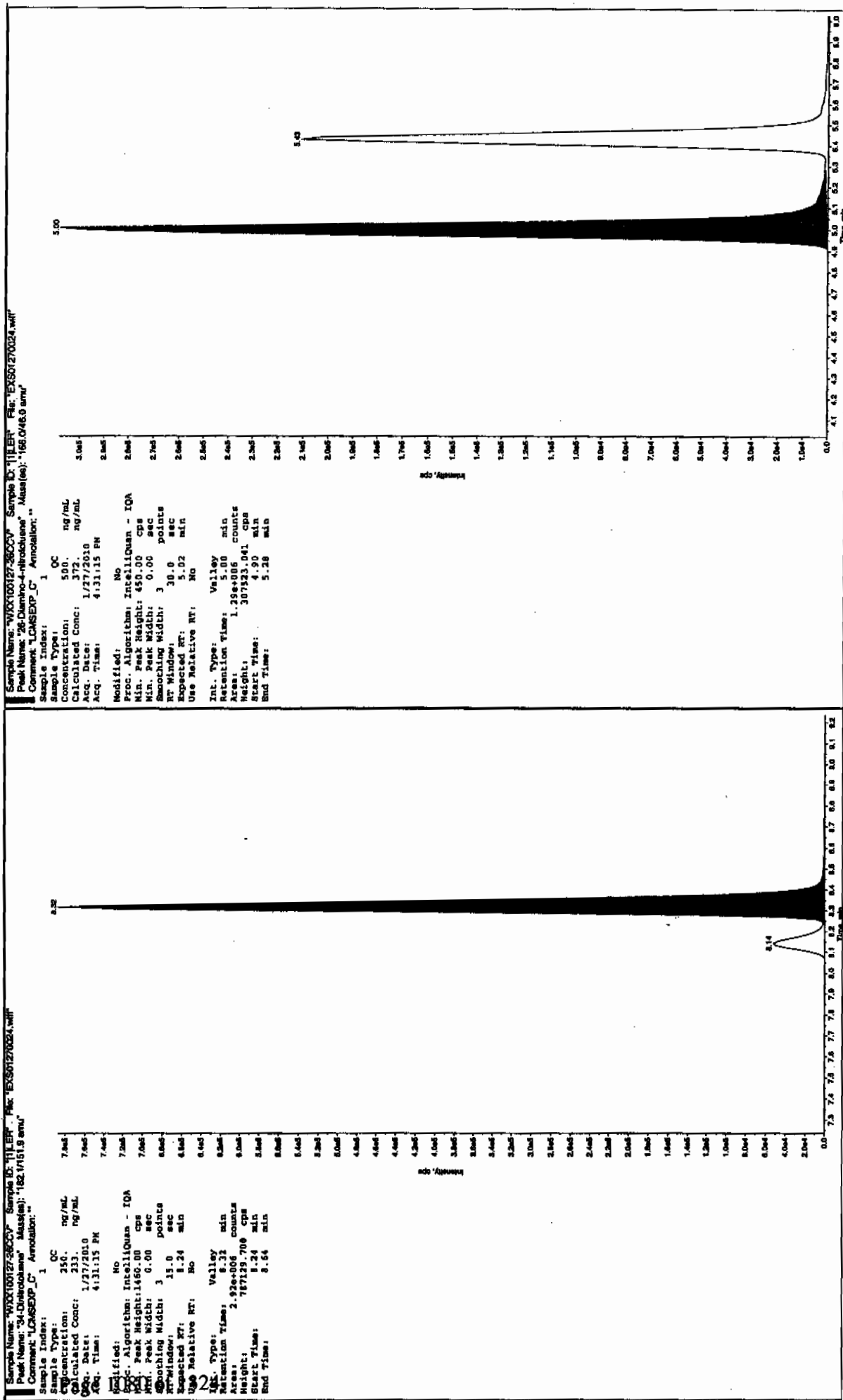
\* Value outside of Recovery Limits

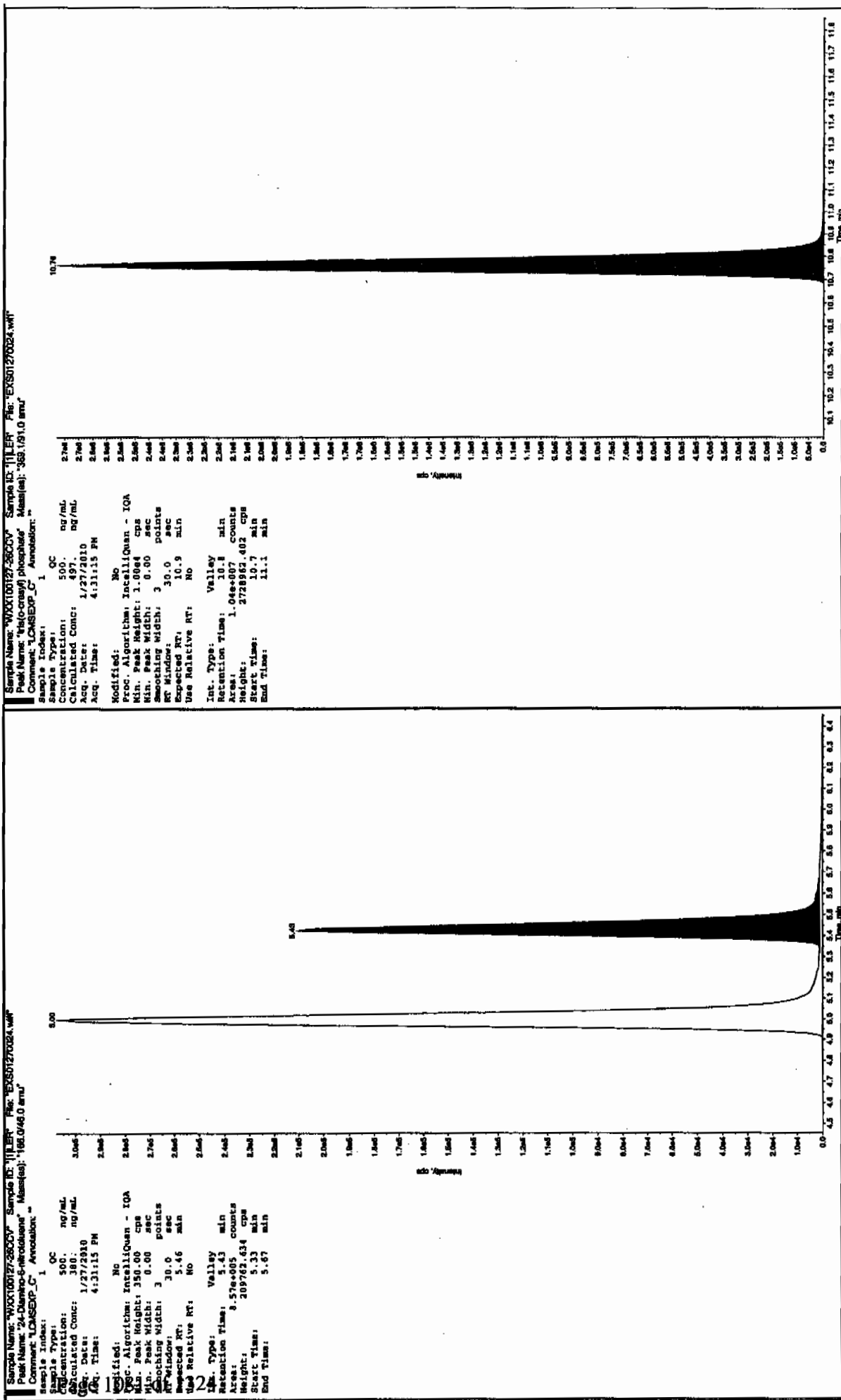


Sen 1/28/10



Ham 01/28/10





**7B**  
**Explosives CRI Standard**

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1210

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS01270026.wiff

Analysis Date: 27-JAN-10 17:02

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	75.2	75	
2,6-Diamino-4-nitrotoluene	100	74.1	74	
3,4-Dinitrotoluene	50	50.2	100	
3,5-Dinitroaniline	100	93.8	94	
TATB	100	113	113	
tris(o-cresyl) phosphate	100	105	105	

**Recovery Limits:**

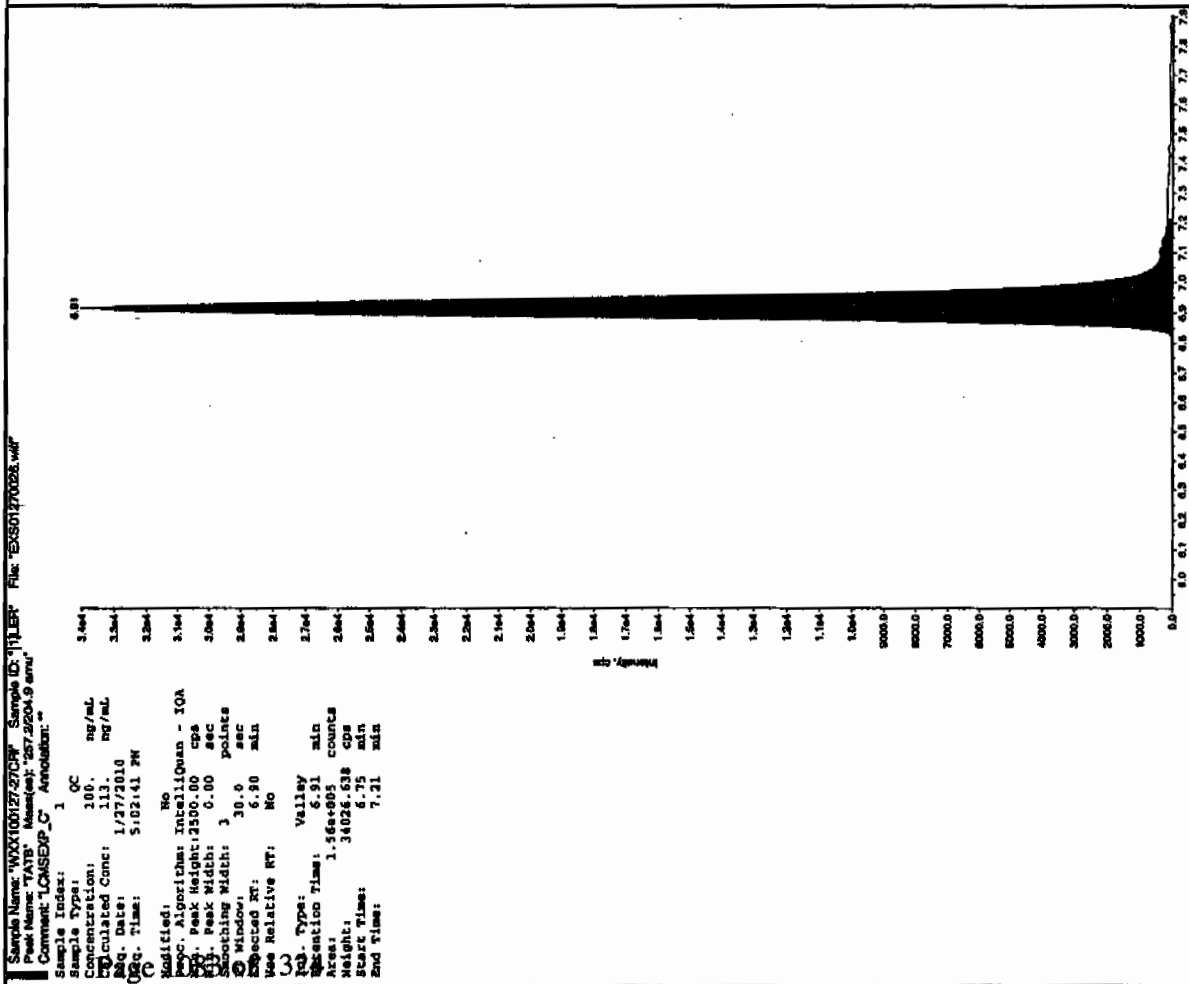
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

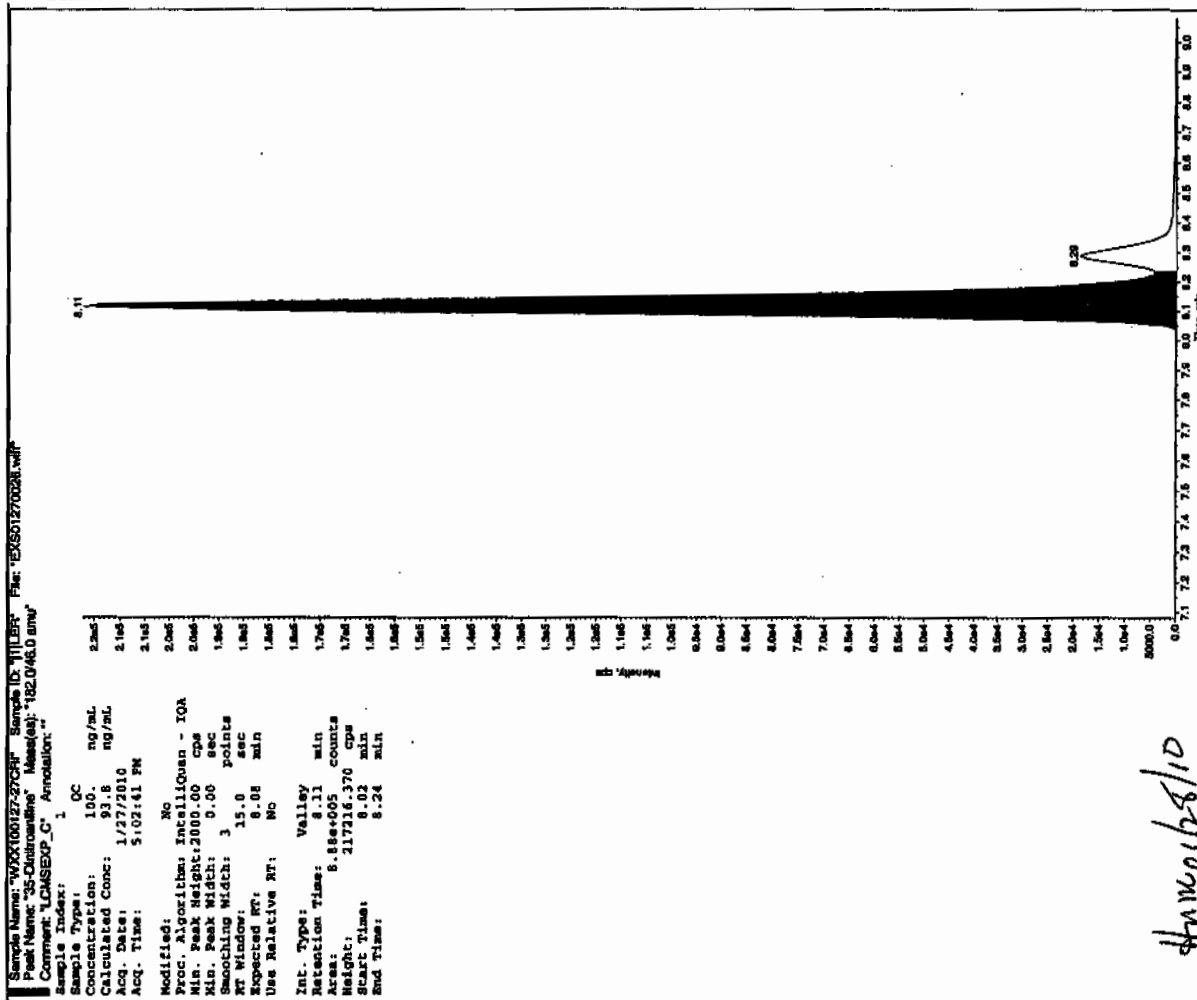
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

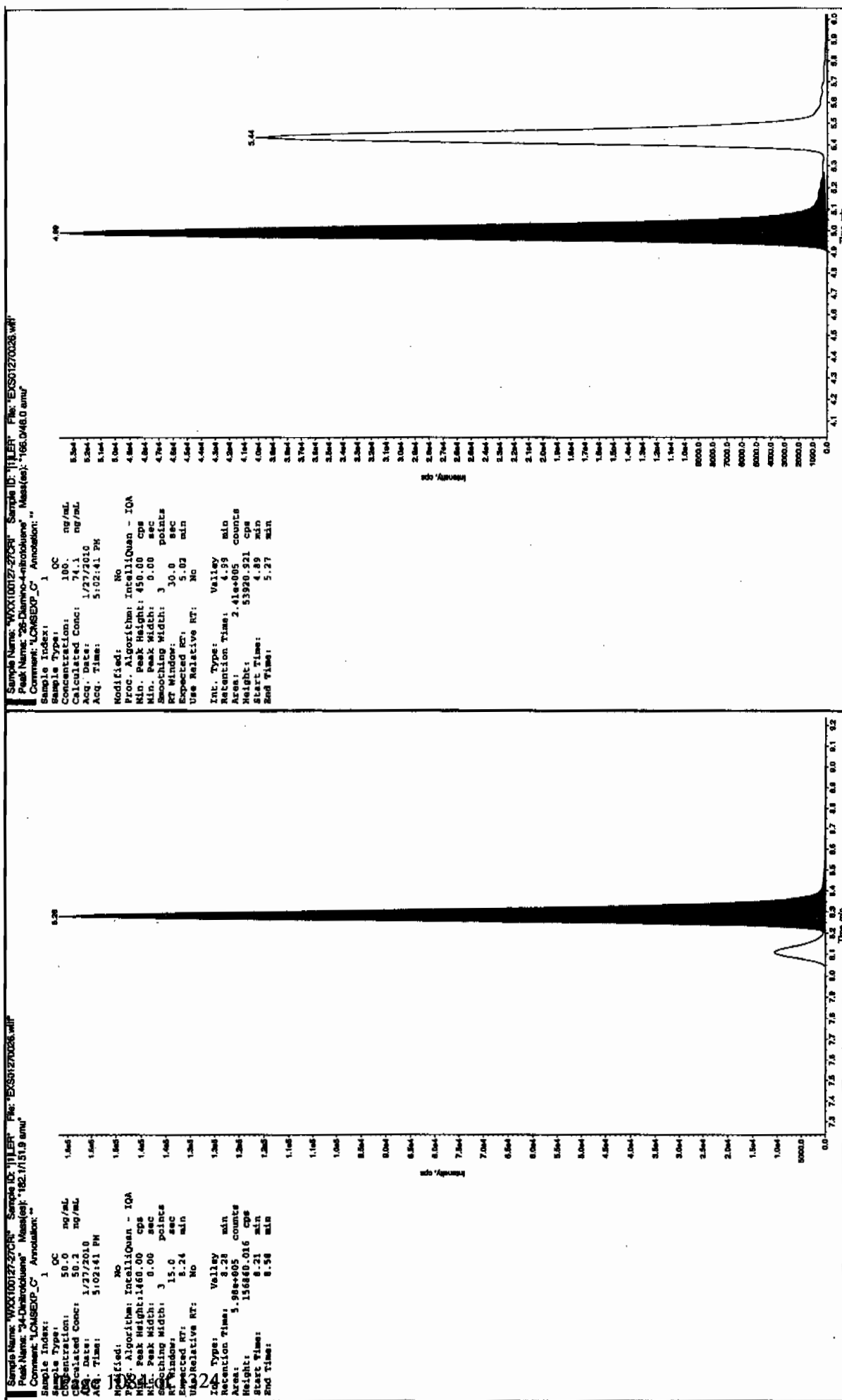
Sen 1/28/10

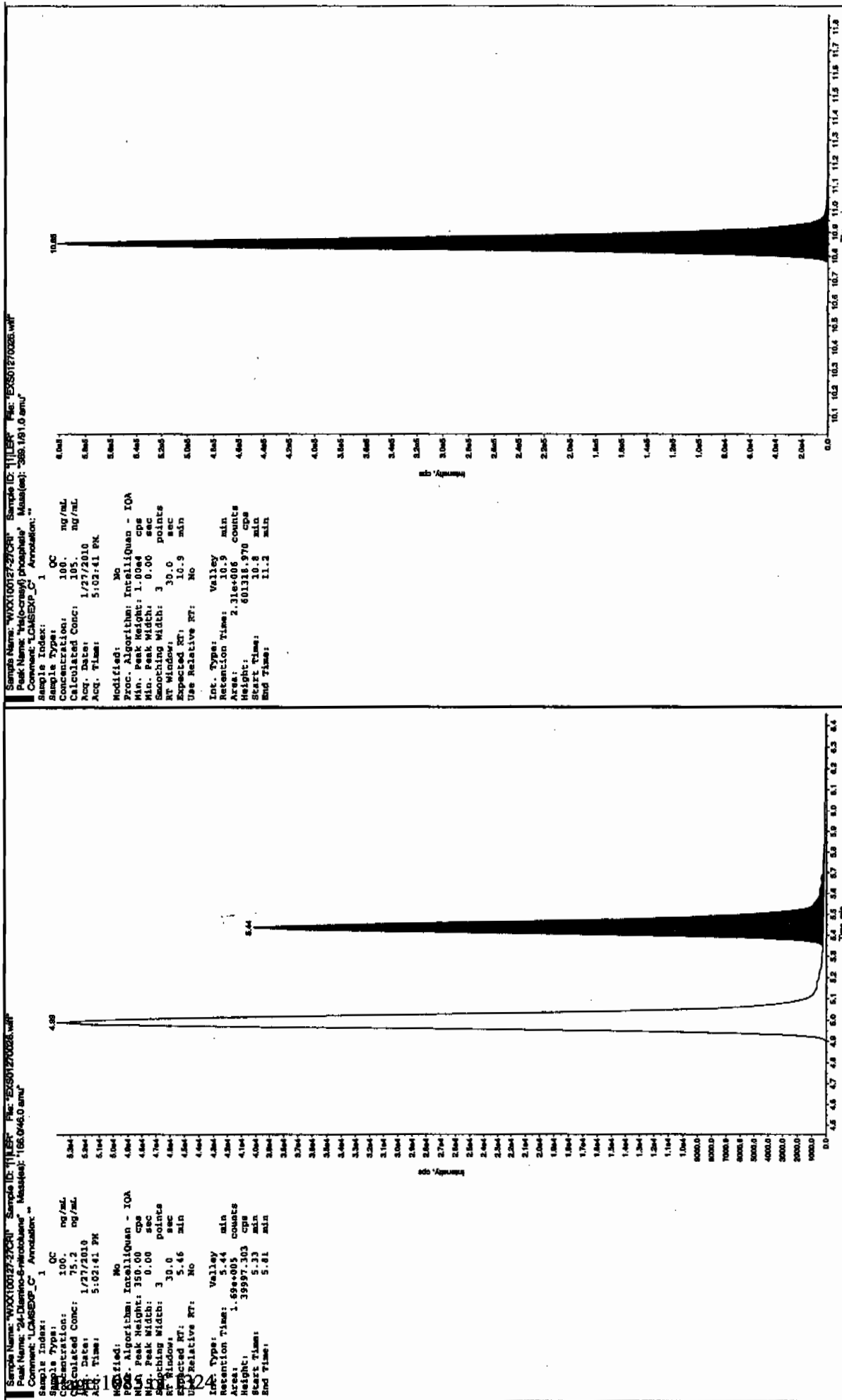


\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



HW01/28/10





# QUALITY CONTROL DATA



1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: MB for batch 941657

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 1202015498

Sample Amount 2

Moisture:

Amount Units g

Date Received: 14-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125218a

Date Analyzed: 29-JAN-10 22:04

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\012510expA5.qld, Time: Sat Jan 30 10:06:54 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125218a

Date: 29-Jan-2010

Time: 22:04:51

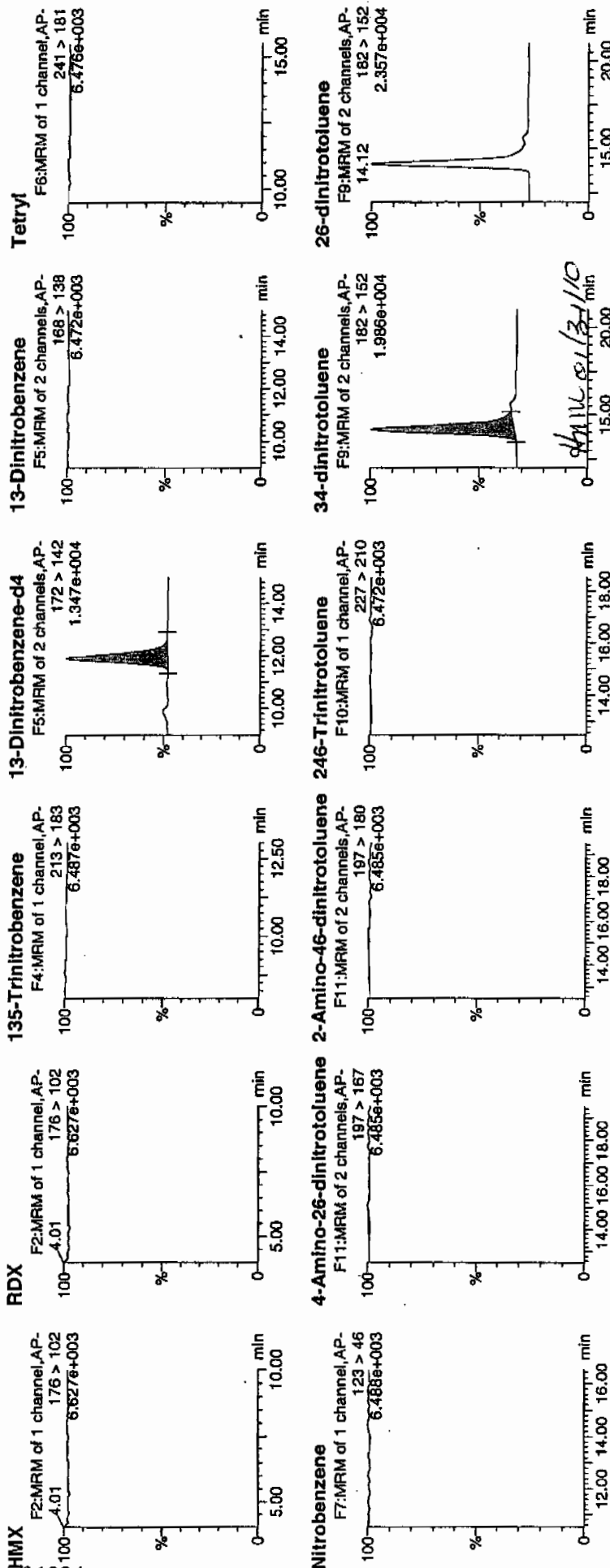
ID: 1202015498

Vial: 3:5,A

1477  
1/30/10

121

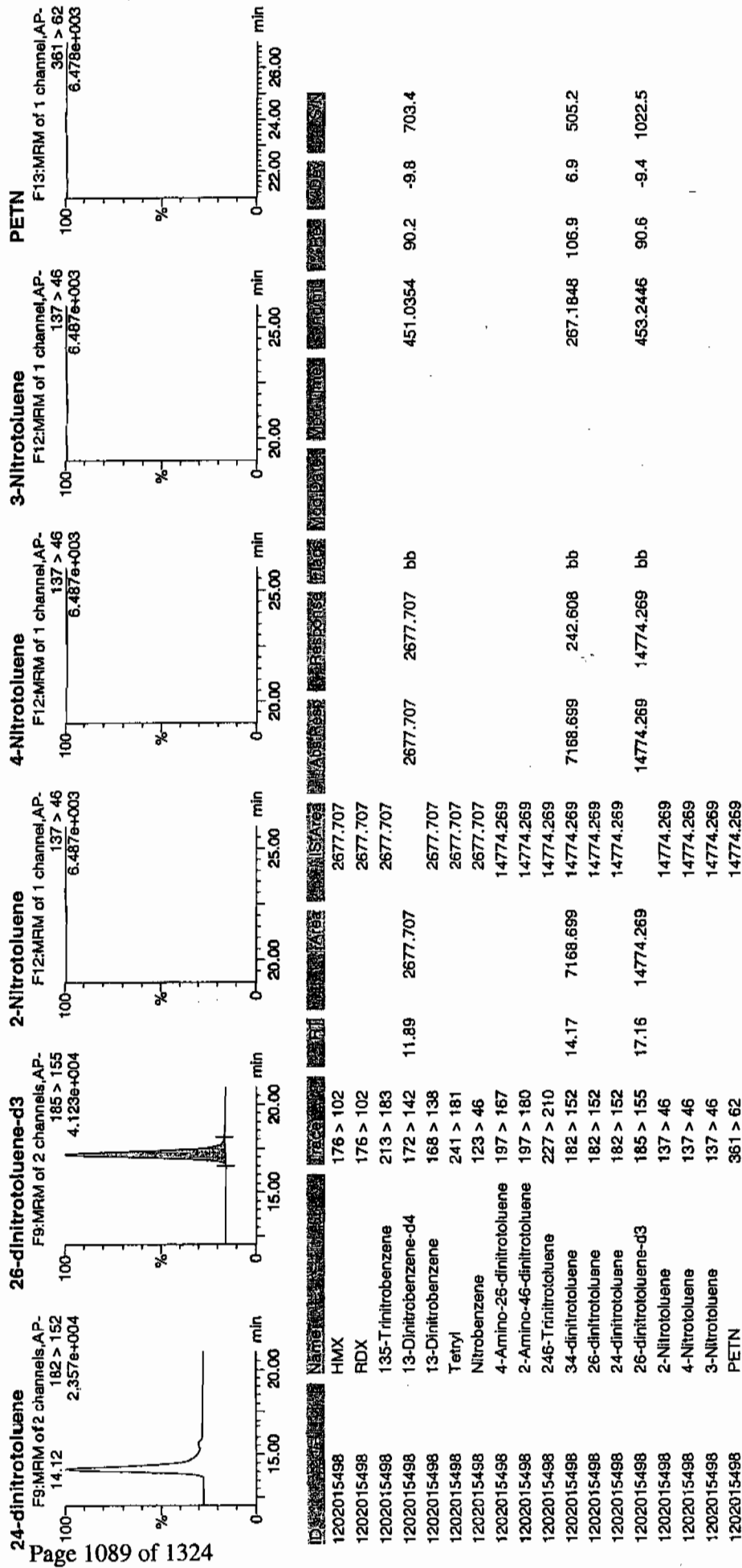
1941688



Printed: Sat Jan 30 10:07:34 2010, Page 24 of 71

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA5.qld, Time: Sat Jan 30 10:06:54 2010



1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: MB for batch 941657

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 1202015498

Sample Amount 2

Moisture:

Amount Units g

Date Received: 14-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250098.wiff

Date Analyzed: 26-JAN-10 11:56

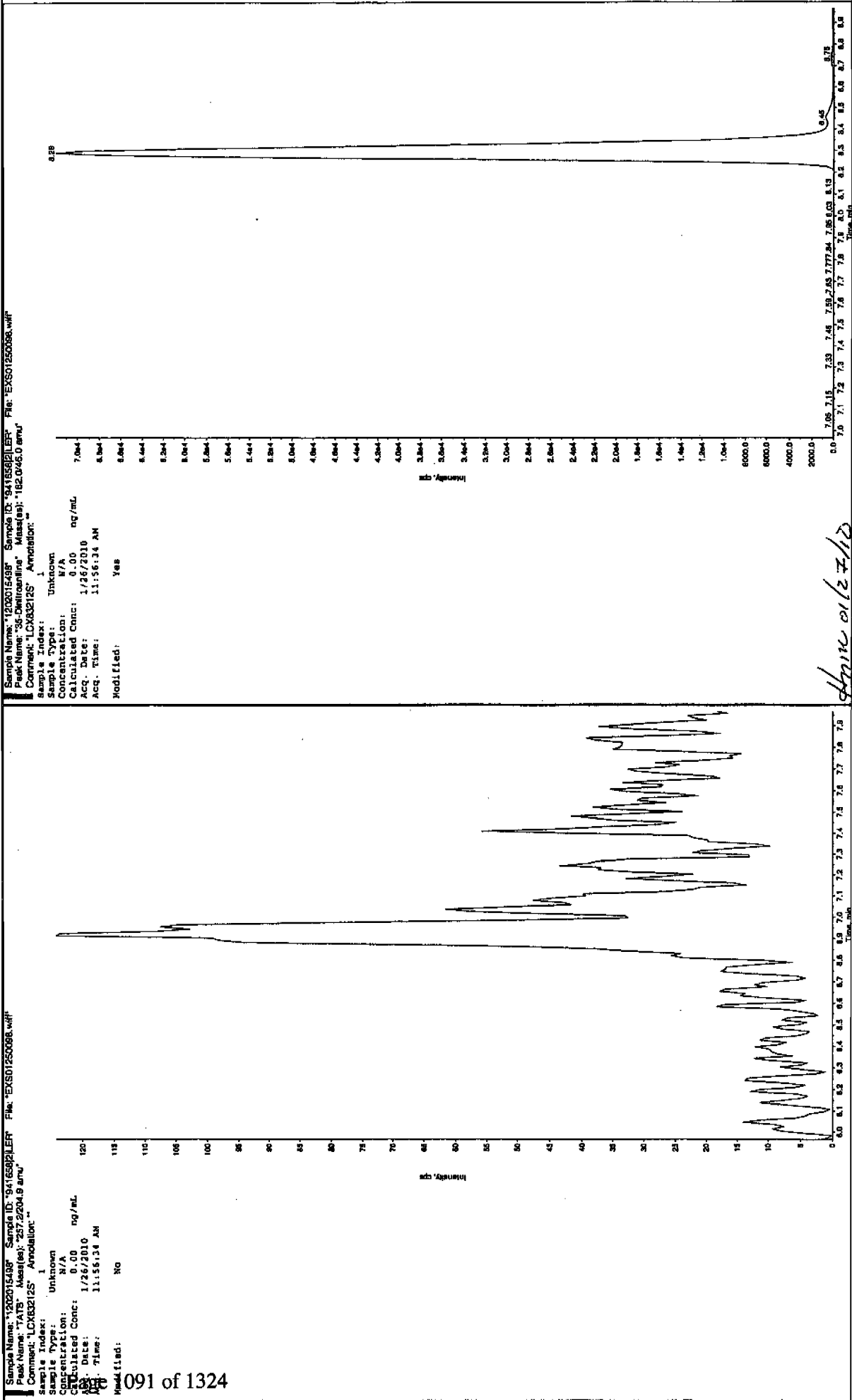
Units: ug/kg

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

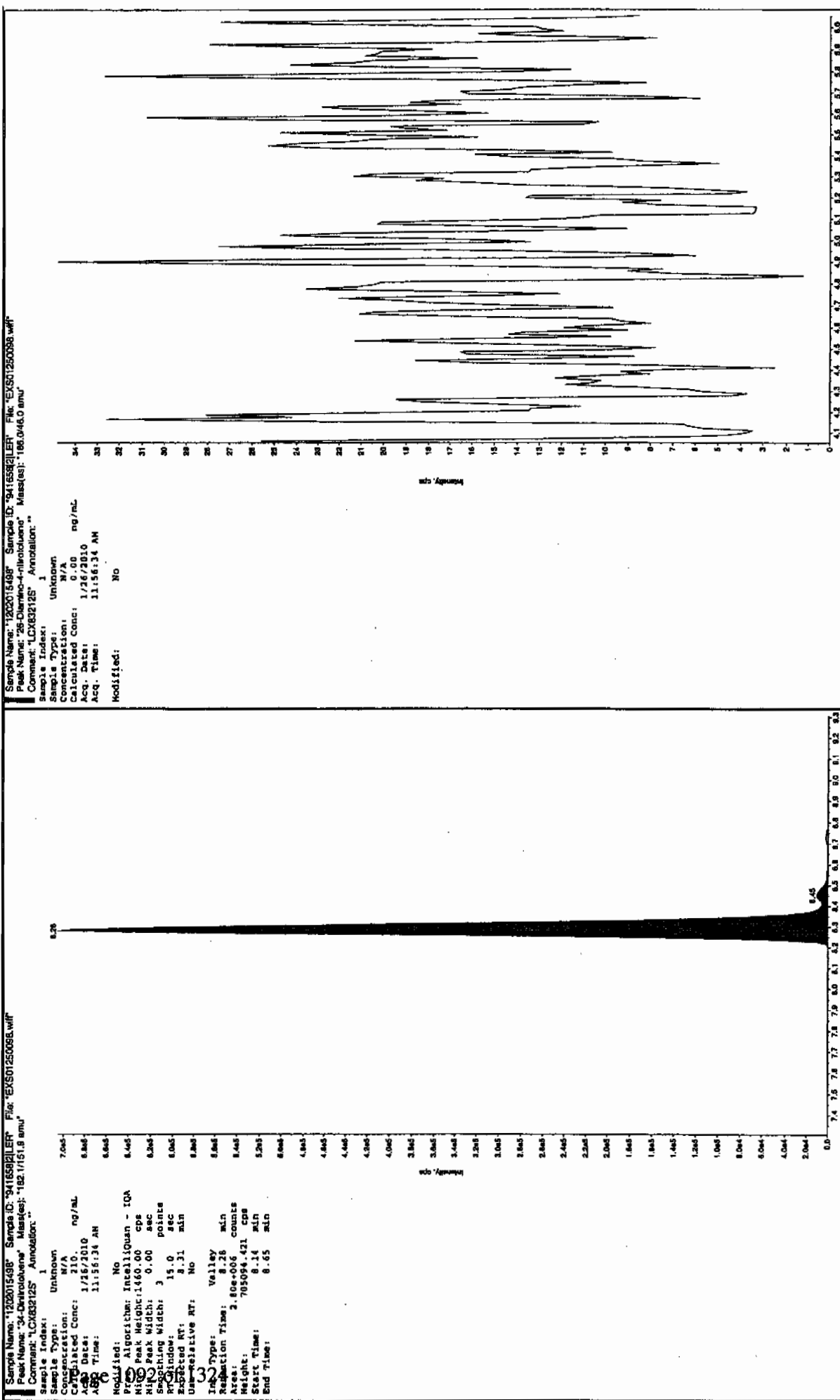
\*Concentration =

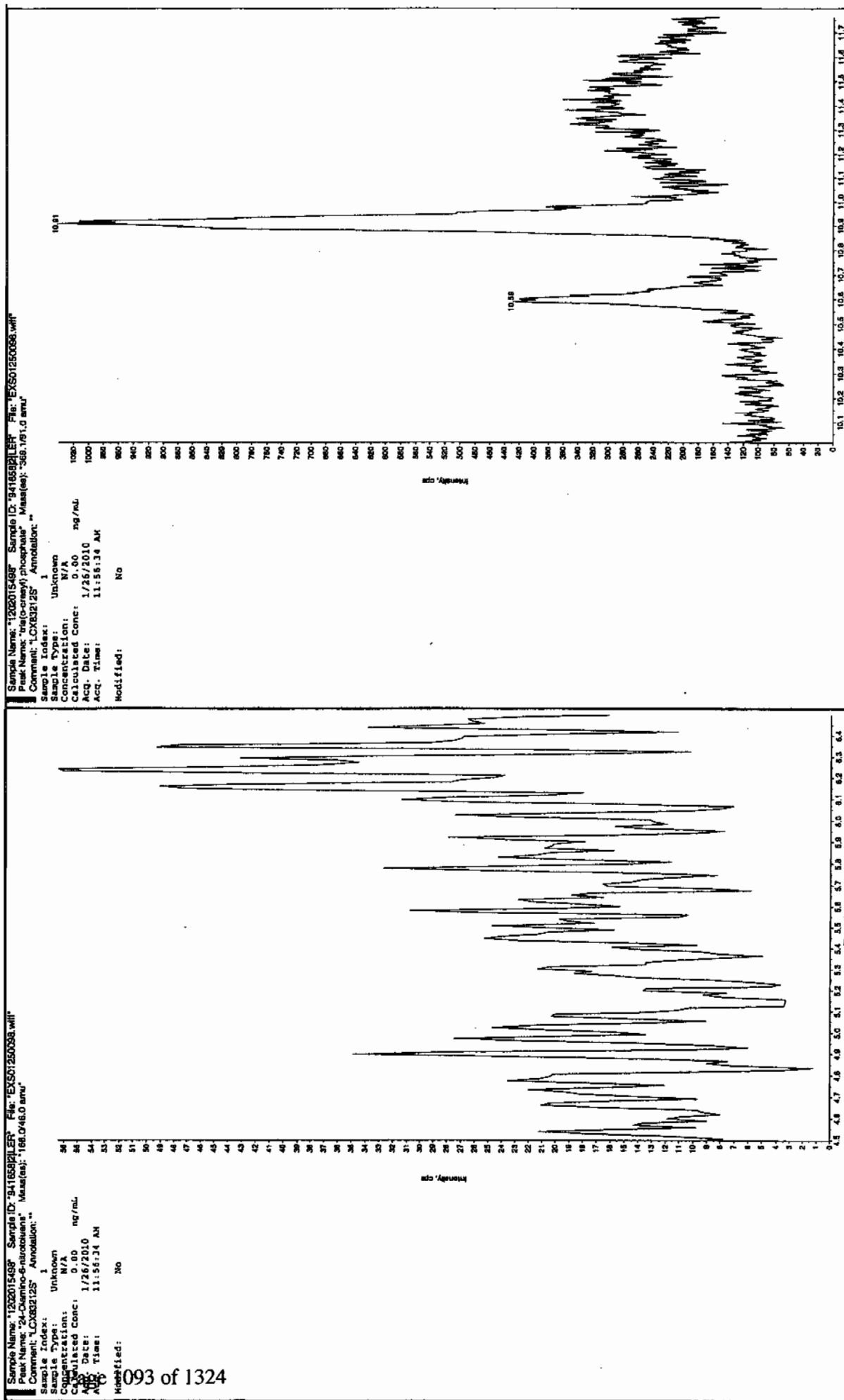
Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

See 1/27/10



See 01/27/10





1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: LCS for batch 941657

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 1202015499

Sample Amount 2

Moisture:

Amount Units g

Date Received: 14-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125219a

Date Analyzed: 29-JAN-10 22:34

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	5280	
121-14-2	2,4-Dinitrotoluene	4480	
121-82-4	RDX	5240	
19406-51-0	4-Amino-2,6-dinitrotoluene	5830	
2691-41-0	HMX	4670	
35572-78-2	2-Amino-4,6-dinitrotoluene	5850	
479-45-8	Tetryl	2850	
606-20-2	2,6-Dinitrotoluene	4950	
78-11-5	PETN	5580	
88-72-2	o-Nitrotoluene	4520	
98-95-3	Nitrobenzene	4590	
99-08-1	m-Nitrotoluene	4780	
99-35-4	1,3,5-Trinitrobenzene	5120	
99-65-0	m-Dinitrobenzene	4920	
99-99-0	p-Nitrotoluene	4620	

\*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\012510expA5.qld, Time: Sat Jan 30 10:06:54 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125219a

Date: 29-Jan-2010

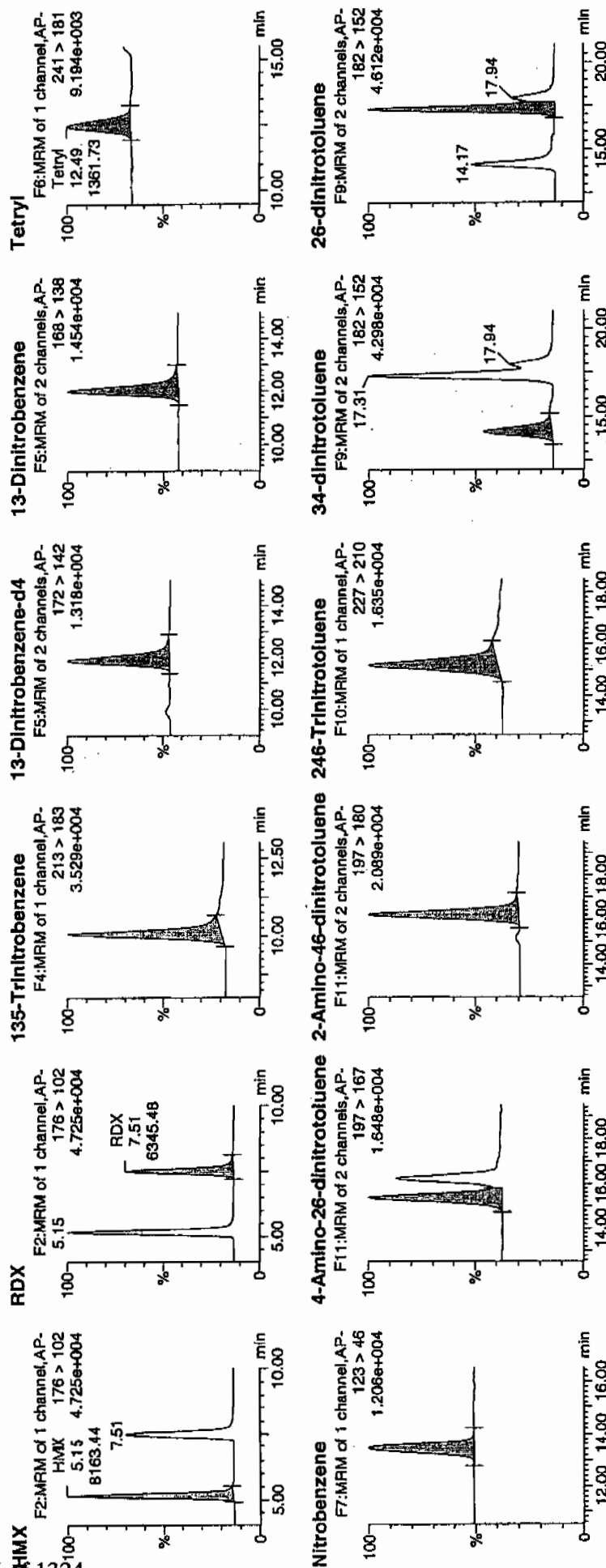
Time: 22:34:26

ID: 1202015499

Val: 3.5,B

10/27  
1/30/10

1600/941658/2000/1008/21

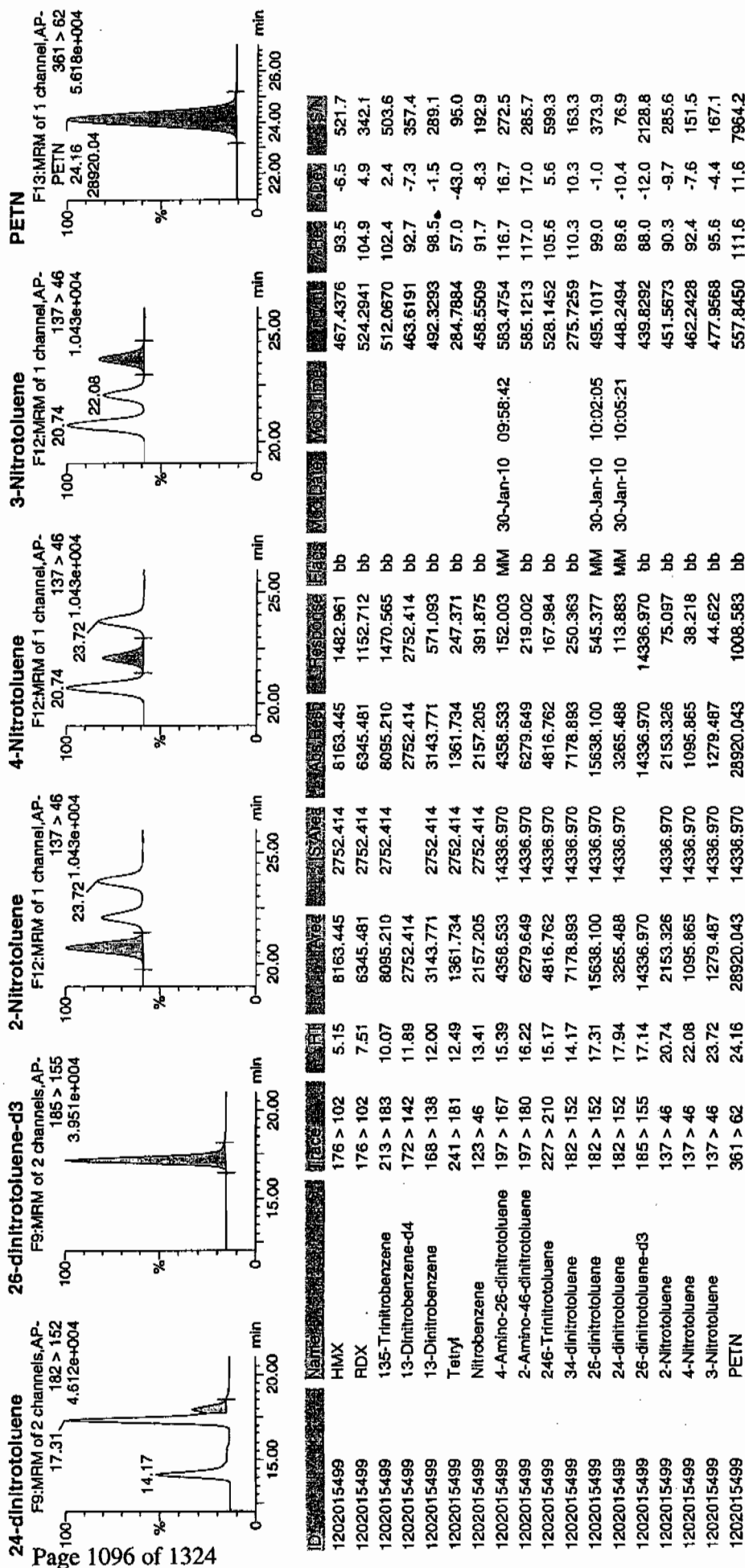


10/27/10

Printed: Sat Jan 30 10:07:34 2010, Page 26 of 71

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

Dataset: C:\MASSLYNX\New\_Exp\PROV012510expA5.qld, Time: Sat Jan 30 10:06:54 2010



1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: LCS for batch 941657

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 1202015499

Sample Amount 2

Moisture:

Amount Units g

Date Received: 14-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250099.wiff

Date Analyzed: 26-JAN-10 12:12

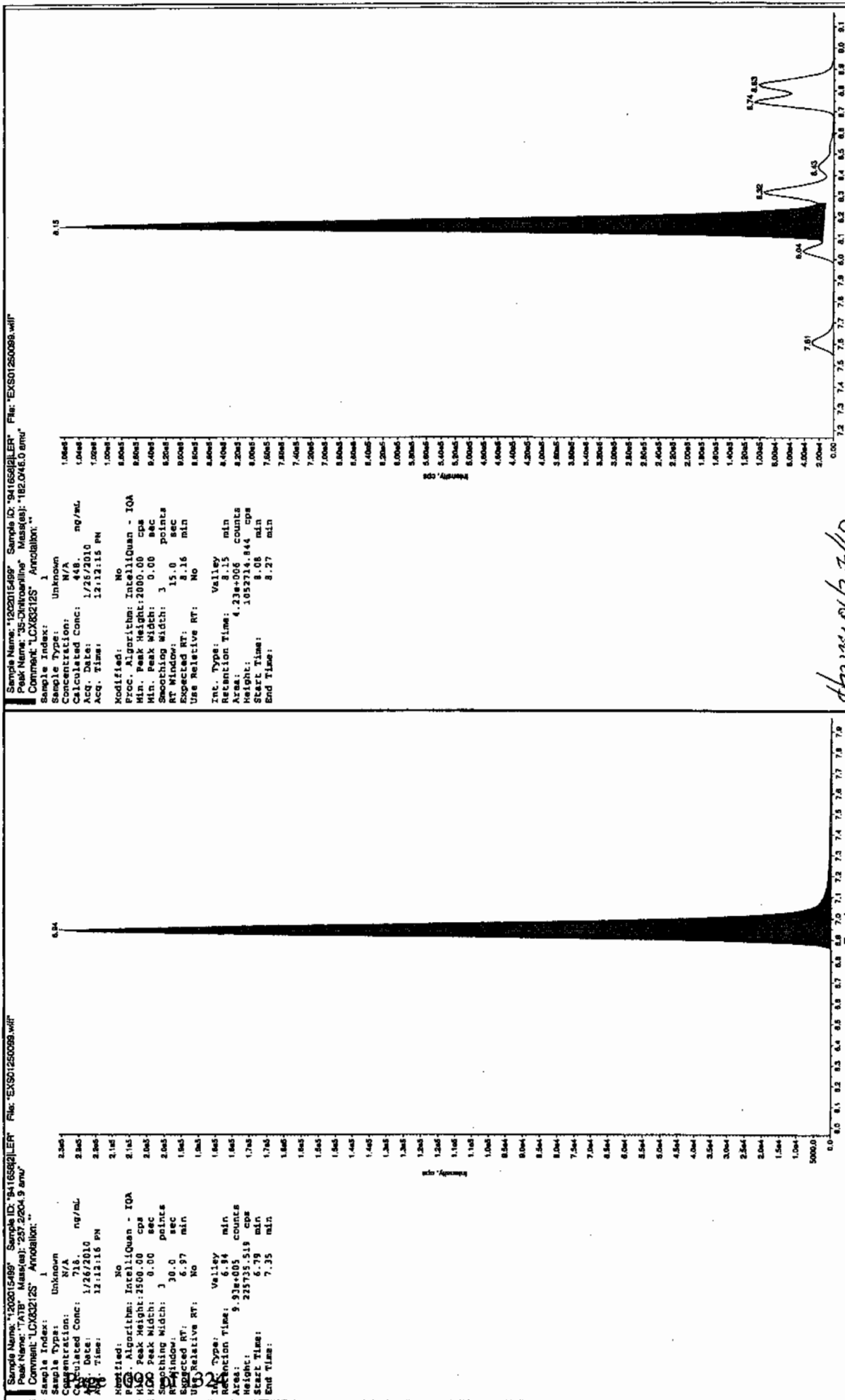
Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	7180	
59229-75-3	2,6-Diamino-4-nitrotoluene	4420	
618-87-1	3,5-Dinitroaniline	4620	
6629-29-4	2,4-Diamino-6-nitrotoluene	4330	
78-30-8	tris(o-cresyl) phosphate	4360	

\*Concentration =

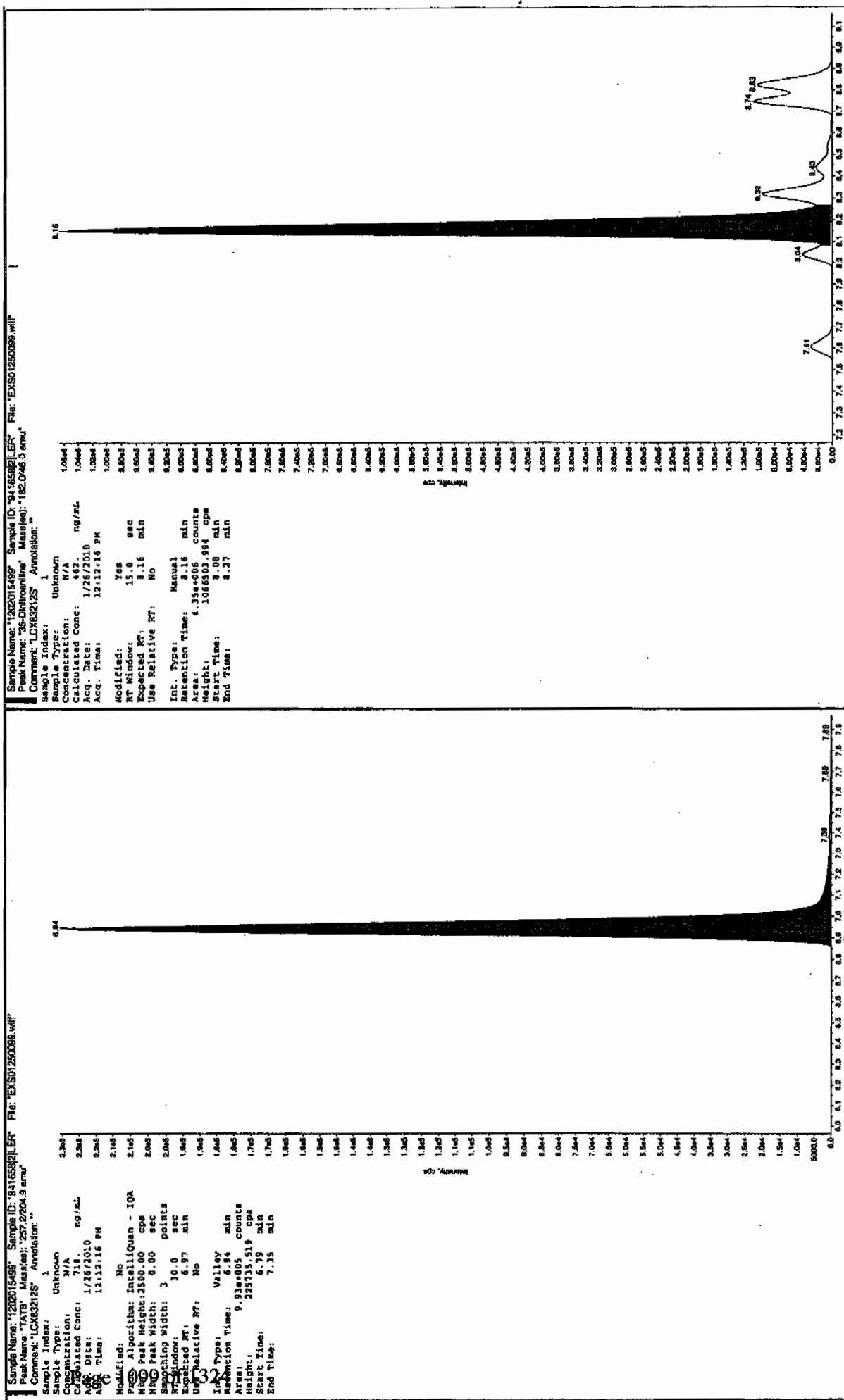
Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

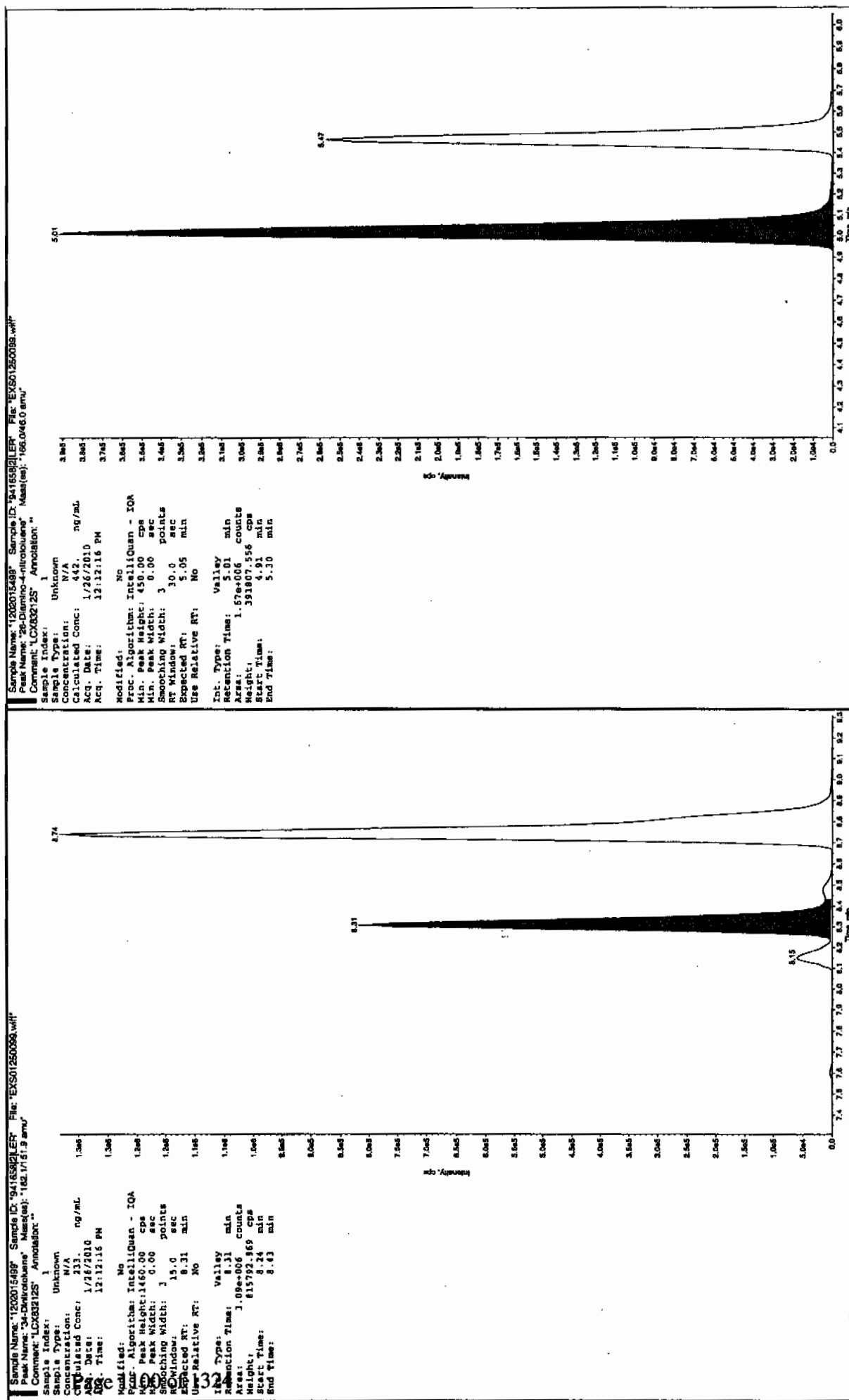
Before Jan 11/27/10

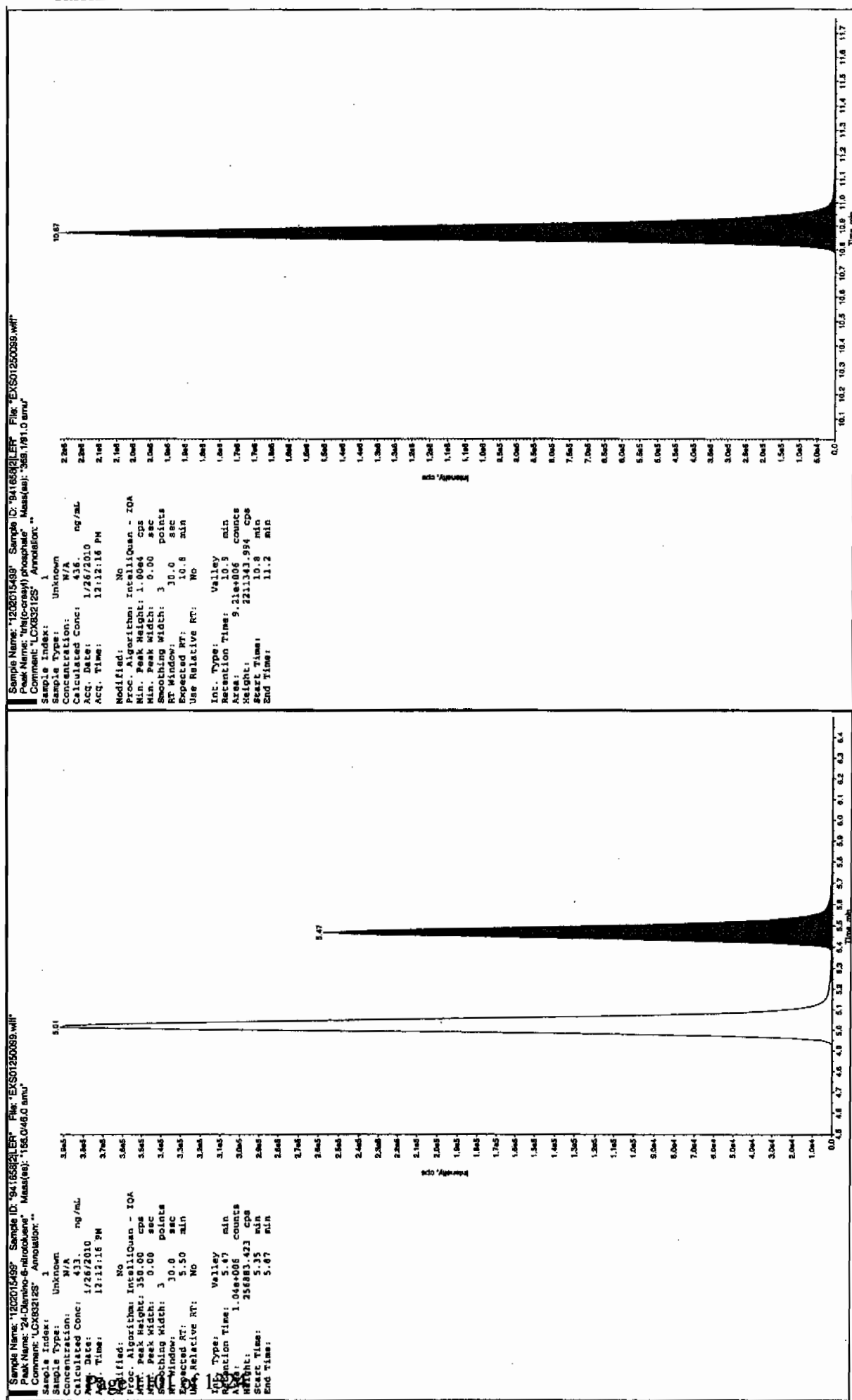


dhm 01/27/10

after Jan 11/27/10







1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7243(244599001MS)

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 1202015500

Sample Amount 2

Moisture: 5.8

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125222a

Date Analyzed: 30-JAN-10 00:03

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	6060	
121-14-2	2,4-Dinitrotoluene	5440	
121-82-4	RDX	5630	
19406-51-0	4-Amino-2,6-dinitrotoluene	6210	
2691-41-0	HMX	5460	
35572-78-2	2-Amino-4,6-dinitrotoluene	5860	
479-45-8	Tetryl	3350	
606-20-2	2,6-Dinitrotoluene	5160	
78-11-5	PETN	5530	
88-72-2	o-Nitrotoluene	4950	
98-95-3	Nitrobenzene	4390	
99-08-1	m-Nitrotoluene	5290	
99-35-4	1,3,5-Trinitrobenzene	5360	
99-65-0	m-Dinitrobenzene	4950	
99-99-0	p-Nitrotoluene	5070	

\*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\012510expA5.qld, Time: Sat Jan 30 10:06:54 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125222a

Date: 30-Jan-2010

Time: 00:03:11

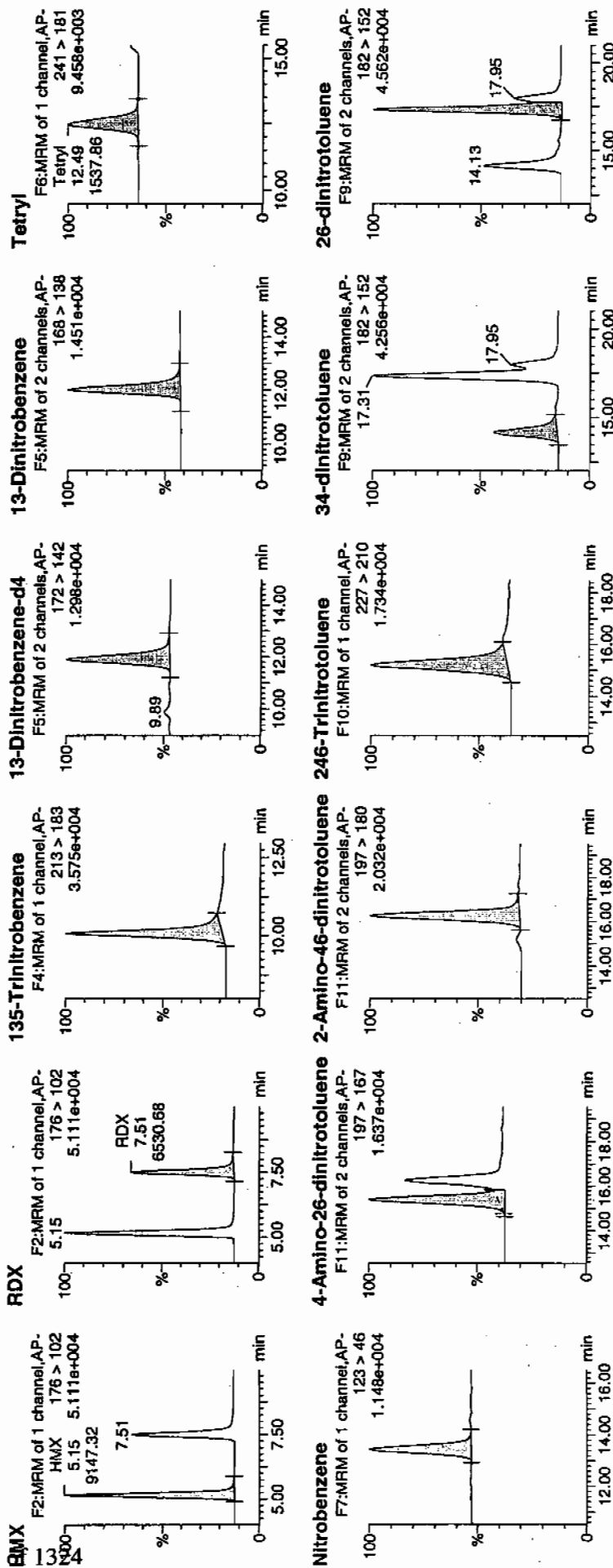
ID: 1202015500

Val: 3:5,E

MSD  
1/30/10

24457900148 | 2 |

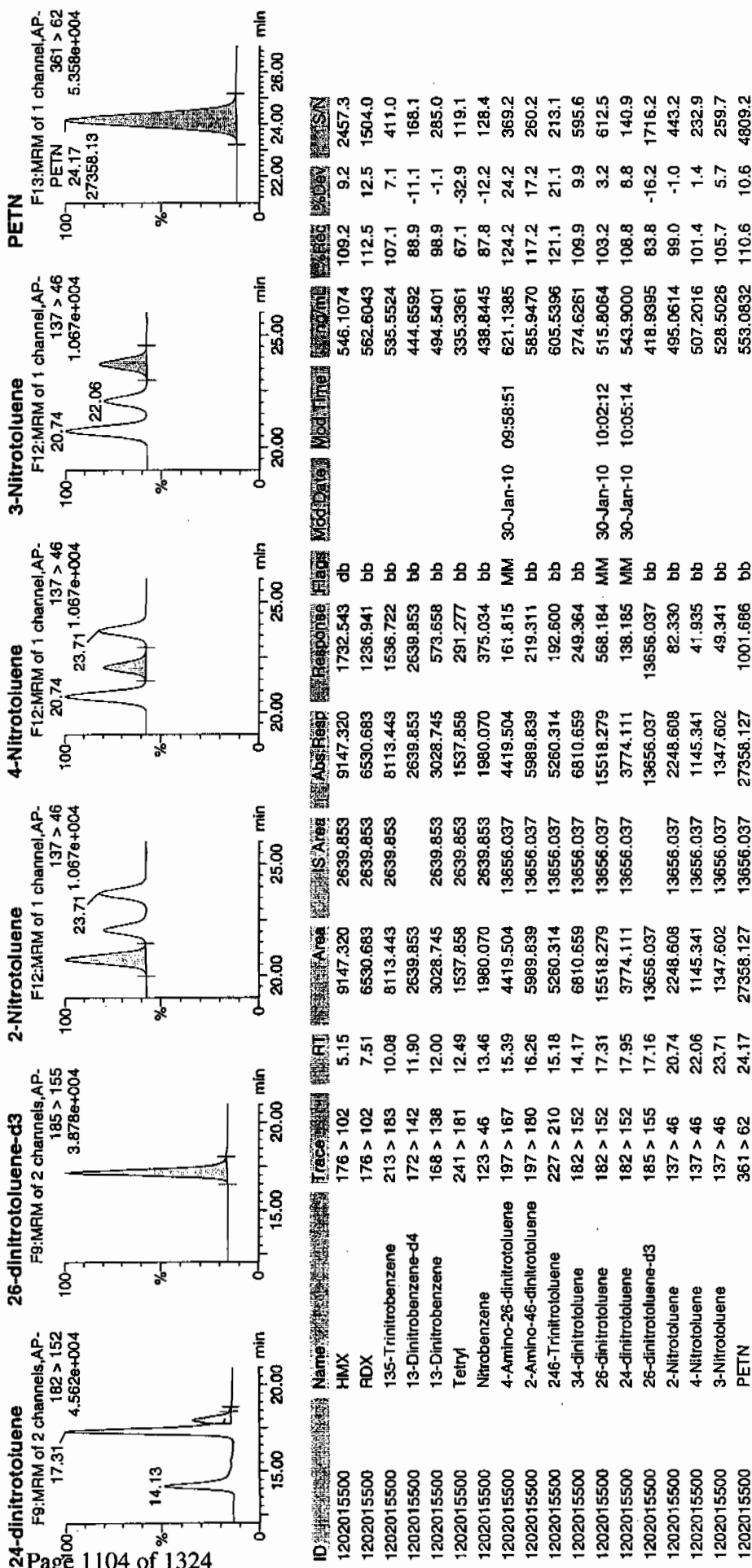
LANU | 94165B | Search



MSD 01/30/10

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

Dataset: C:\MASSLYNX\New\_Exp\_PROV012510expA5.qld, Time: Sat Jan 30 10:06:54 2010



1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7243(244599001MS)

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 1202015500

Sample Amount 2

Moisture: 5.8

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250102.wiff

Date Analyzed: 26-JAN-10 12:59

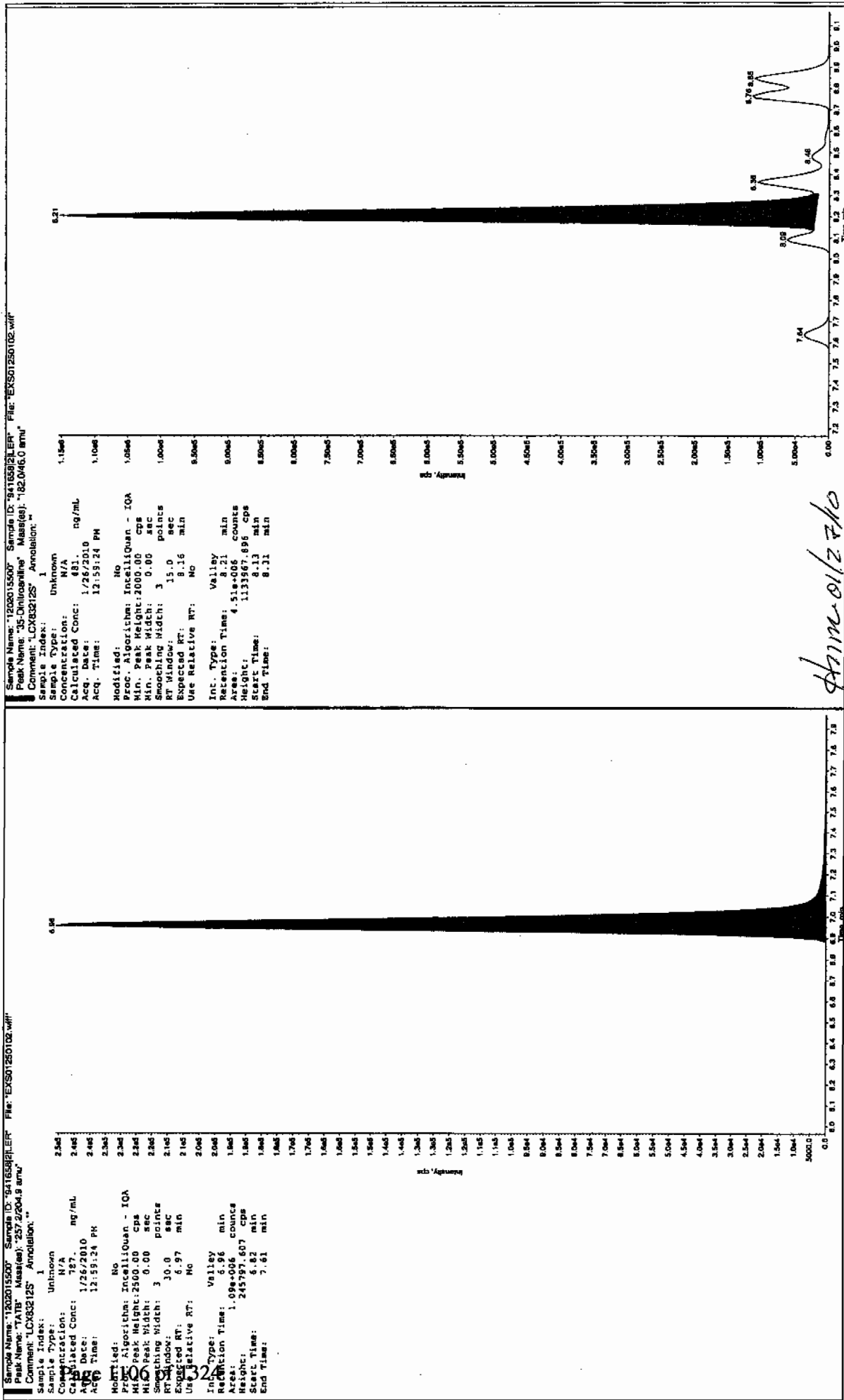
Units: ng/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	7870	
59229-75-3	2,6-Diamino-4-nitrotoluene	4210	
618-87-1	3,5-Dinitroaniline	5020	
6629-29-4	2,4-Diamino-6-nitrotoluene	4580	
78-30-8	tris(o-cresyl) phosphate	4830	

\*Concentration =

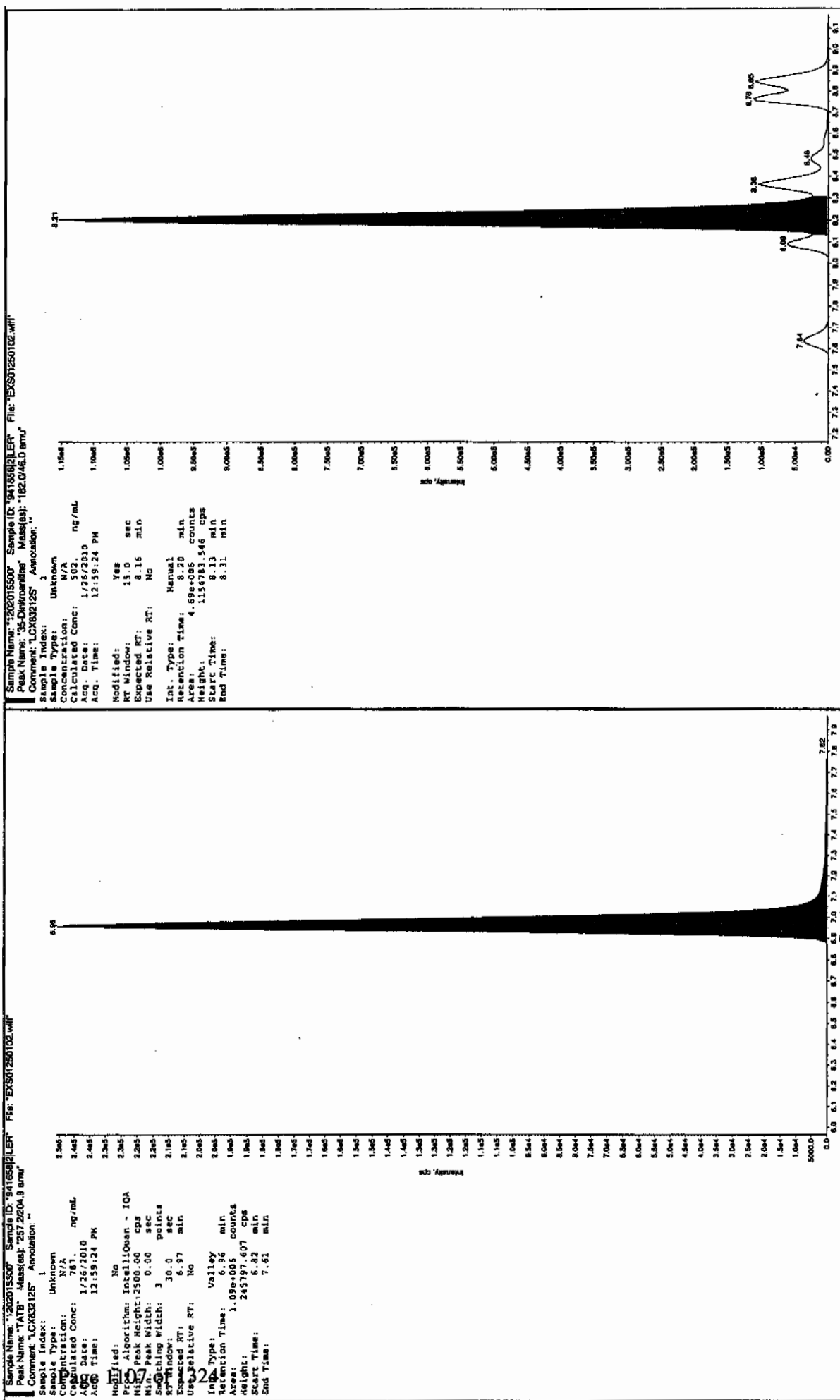
Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

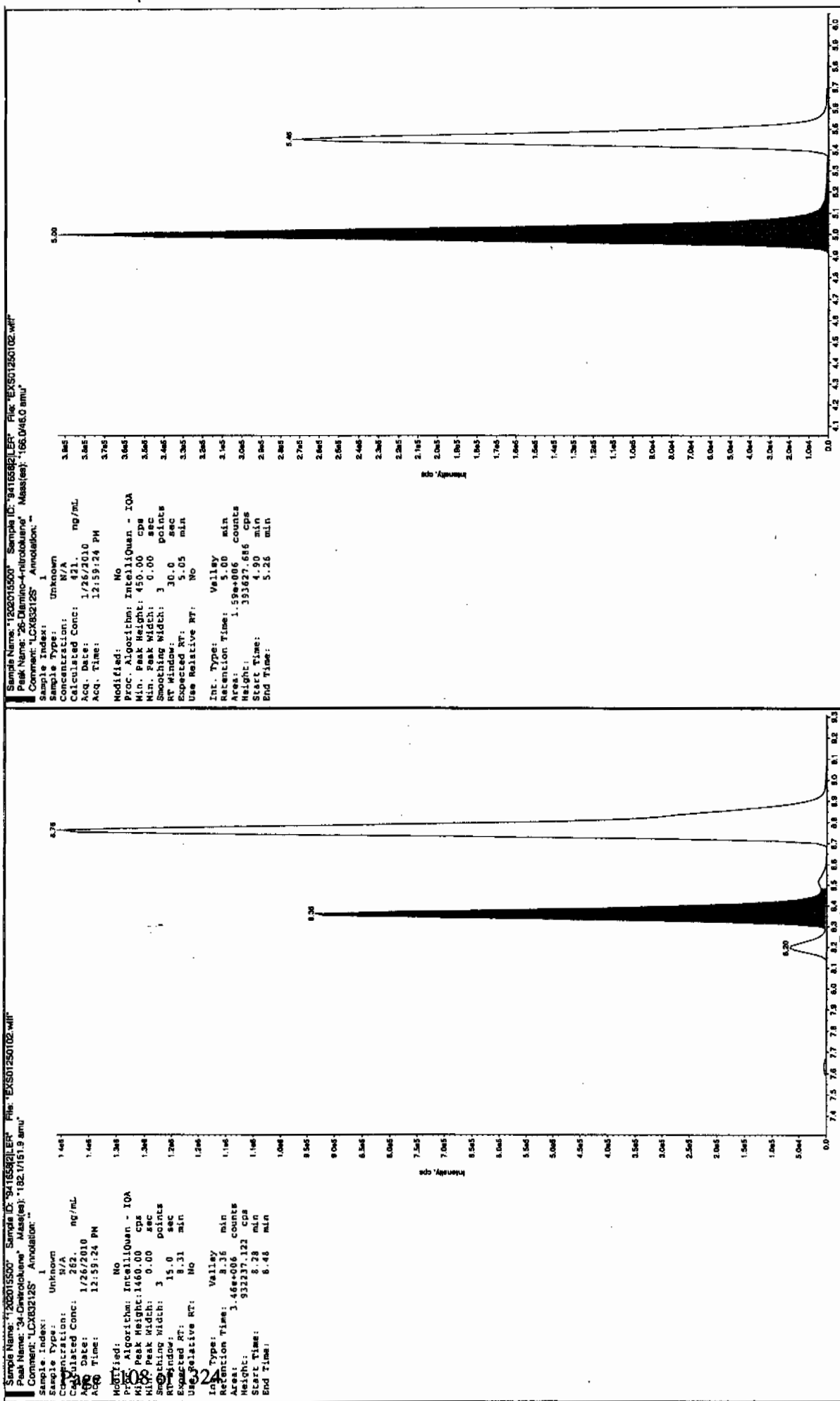
Before Scan 112710

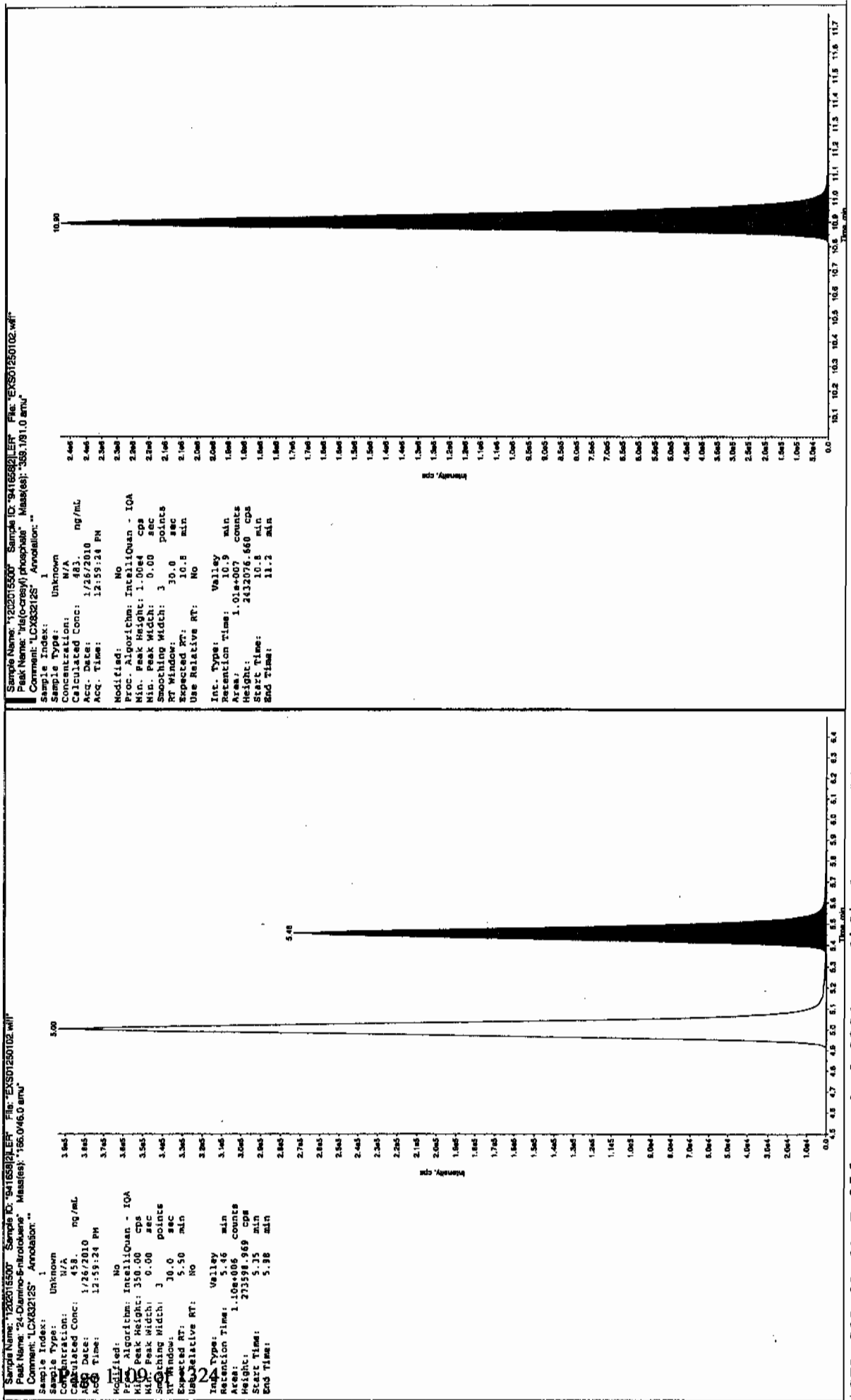


After Scan 112710

after scan 1127110







1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7243(244599001MSD)

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 1202015501

Sample Amount 2

Moisture: 5.8

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125223a

Date Analyzed: 30-JAN-10 00:32

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	6220	
121-14-2	2,4-Dinitrotoluene	4760	
121-82-4	RDX	5350	
19406-51-0	4-Amino-2,6-dinitrotoluene	5830	
2691-41-0	HMX	5450	
35572-78-2	2-Amino-4,6-dinitrotoluene	5440	
479-45-8	Tetryl	3550	
606-20-2	2,6-Dinitrotoluene	5070	
78-11-5	PETN	5420	
88-72-2	o-Nitrotoluene	4810	
98-95-3	Nitrobenzene	4840	
99-08-1	m-Nitrotoluene	4890	
99-35-4	1,3,5-Trinitrobenzene	5850	
99-65-0	m-Dinitrobenzene	5340	
99-99-0	p-Nitrotoluene	4760	

\*Concentration =

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



Dataset: C:\MASSLYNX\New\_Exp.PRO\012510expA5.qld, Time: Sat Jan 30 10:06:54 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0125223a

Date: 30-Jan-2010

Time: 00:32:40

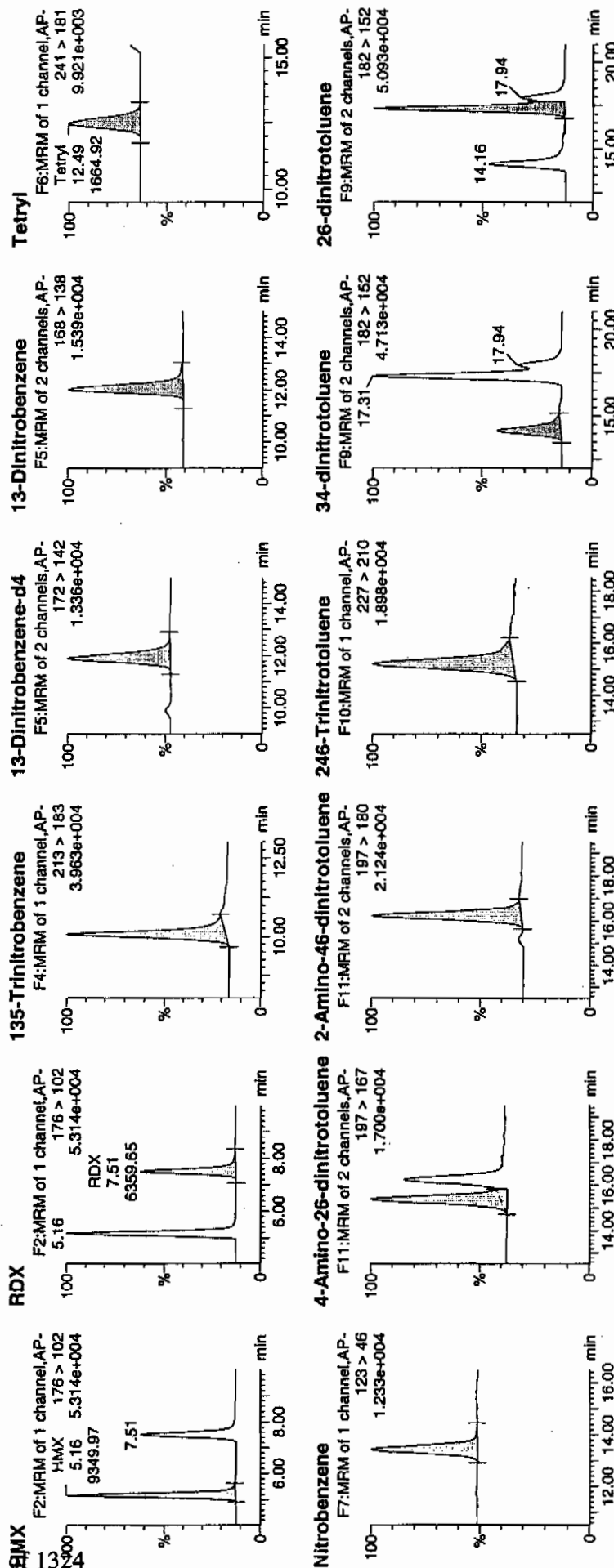
ID: 1202015501

Vial: 3:5.F

1/30/10

21

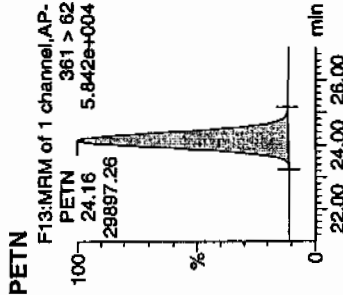
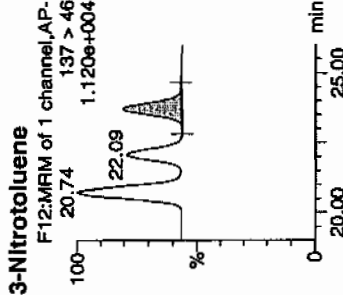
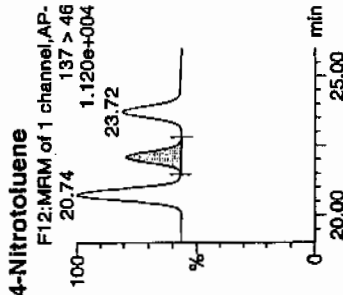
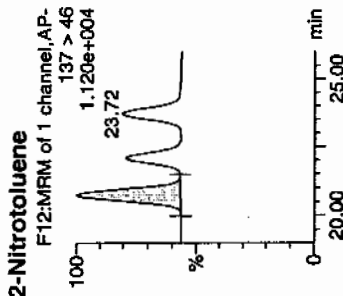
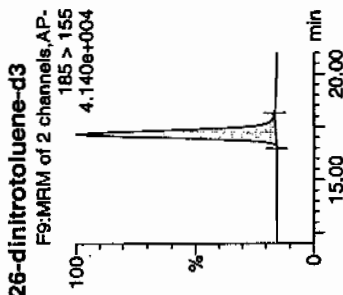
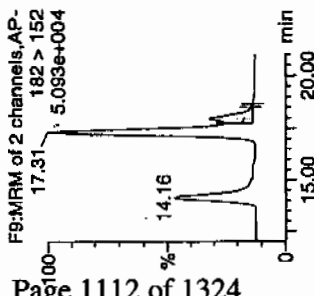
WAW 941658 / 80477 / 244599001 WWS



Amu 01/30/10

Dataset: C:\MASSLYN\New\_Exp.PRO\012510expA5.qld, Time: Sat Jan 30 10:06:54 2010

## 24-dinitrotoluene



ID	Name	Trace	RT	Area	ISArea	Abs Resp	Response	Flags	Mod Date	Mod Time	Waves	Ex Dev	ISN	
1202015501	HMX	176 > 102	5.16	9349.974	2702.086	9349.974	1730.140	bb			545.3498	109.1	9.1	1045.1
1202015501	RDX	176 > 102	7.51	6359.647	2702.086	6359.647	1176.803	bb			535.2516	107.1	7.1	592.9
1202015501	135-Trinitrobenzene	213 > 183	10.07	9054.854	2702.086	9054.854	1675.530	bb			584.8284	117.0	17.0	494.8
1202015501	13-Dinitrobenzene-d4	172 > 142	11.90	2702.086		2702.086	2702.086	bb			455.1418	91.0	-9.0	199.5
1202015501	13-Dinitrobenzene	168 > 138	12.00	3344.426	2702.086	3344.426	618.860	bb			533.5080	106.7	6.7	233.9
1202015501	Tetryl	241 > 181	12.49	1664.918	2702.086	1664.918	308.080	bb			354.6806	70.9	-29.1	245.7
1202015501	Nitrobenzene	123 > 46	13.45	2236.006	2702.086	2236.006	413.756	bb			484.1542	96.8	-3.2	150.1
1202015501	4-Amino-26-dinitrotoluene	197 > 167	15.38	4603.471	15164.872	4603.471	151.781	MM	30-Jan-10	09:59:01	582.6212	116.5	16.5	333.5
1202015501	2-Amino-46-dinitrotoluene	197 > 180	16.25	6173.954	15164.872	6173.954	203.561	bb			543.8668	108.8	8.8	533.6
1202015501	246-Trinitrotoluene	227 > 210	15.20	6003.207	15164.872	6003.207	197.931	bb			622.3005	124.5	24.5	808.7
1202015501	34-dinitrotoluene	182 > 152	14.16	7403.680	15164.872	7403.680	244.106	bb			268.8346	107.5	7.5	331.9
1202015501	26-dinitrotoluene	182 > 152	17.31	16952.838	15164.872	16952.838	558.951	MM	30-Jan-10	10:02:20	507.4246	101.5	1.5	672.3
1202015501	24-dinitrotoluene	182 > 152	17.94	3667.481	15164.872	3667.481	120.920	MM	30-Jan-10	10:04:46	475.9455	95.2	-4.8	143.6
1202015501	26-dinitrotoluene-d3	185 > 155	17.16	15164.872		15164.872	15164.872	bb			465.2275	93.0	-7.0	972.4
1202015501	2-Nitrotoluene	137 > 46	20.74	2424.714	15164.872	2424.714	79.945	bb			480.7196	96.1	-3.9	217.5
1202015501	4-Nitrotoluene	137 > 46	22.09	1194.392	15164.872	1194.392	39.380	bb			476.2978	95.3	-4.7	111.8
1202015501	3-Nitrotoluene	137 > 46	23.72	1385.692	15164.872	1385.692	45.688	bb			489.3709	97.9	-2.1	119.9
1202015501	PETN	361 > 62	24.16	29897.258	15164.872	29897.258	985.741	bb			542.1324	108.4	8.4	7491.1

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7243(244599001MSD)

Lab Code: GEL

GEL Job No (SDG) 10-1210

Matrix: SOIL

GEL Sample ID: 1202015501

Sample Amount 2

Moisture: 5.8

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941657

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250103.wiff

Date Analyzed: 26-JAN-10 13:15

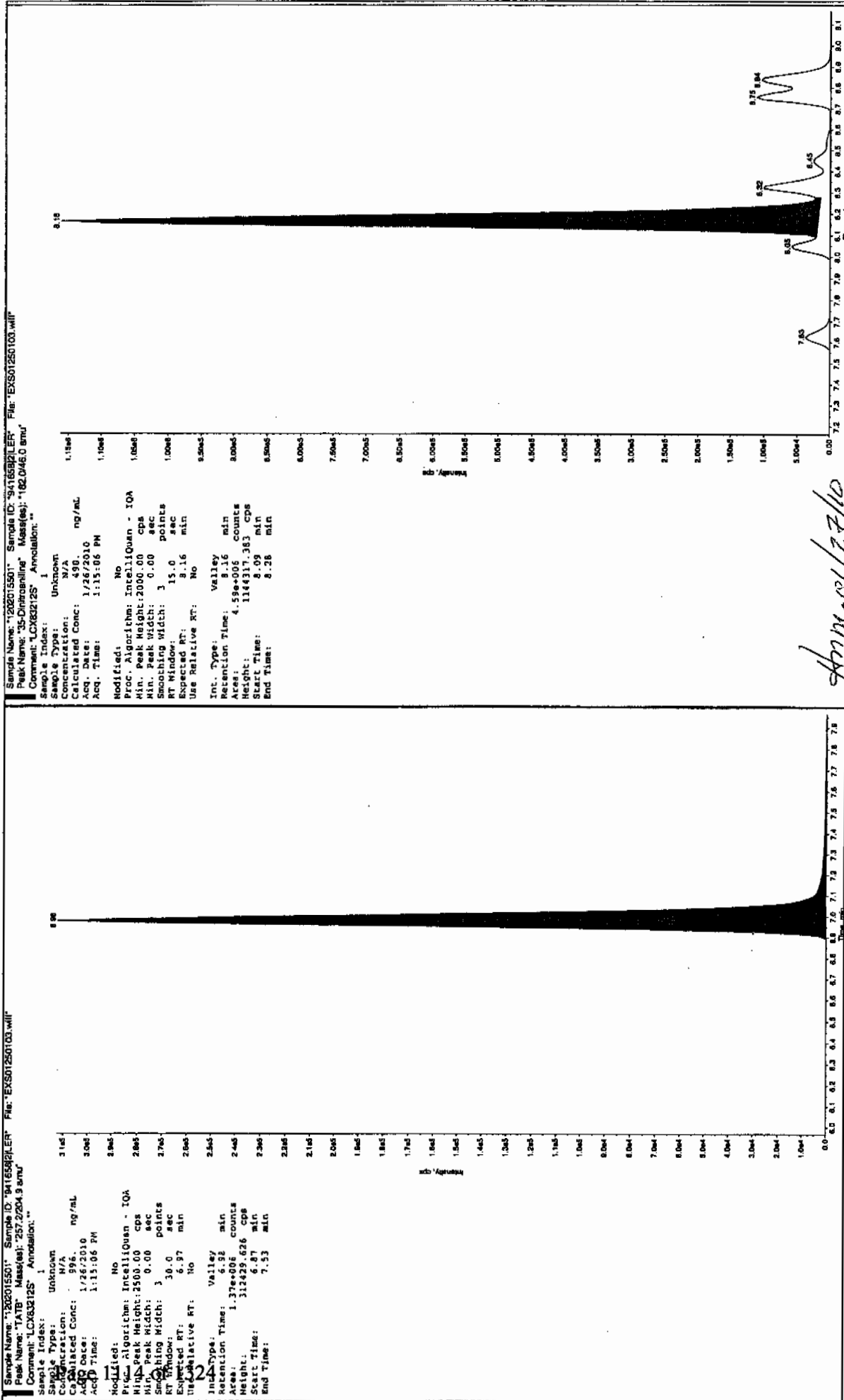
Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	9960	
59229-75-3	2,6-Diamino-4-nitrotoluene	4420	
618-87-1	3,5-Dinitroaniline	5090	
6629-29-4	2,4-Diamino-6-nitrotoluene	4540	
78-30-8	tris(o-cresyl) phosphate	4700	

\*Concentration =

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

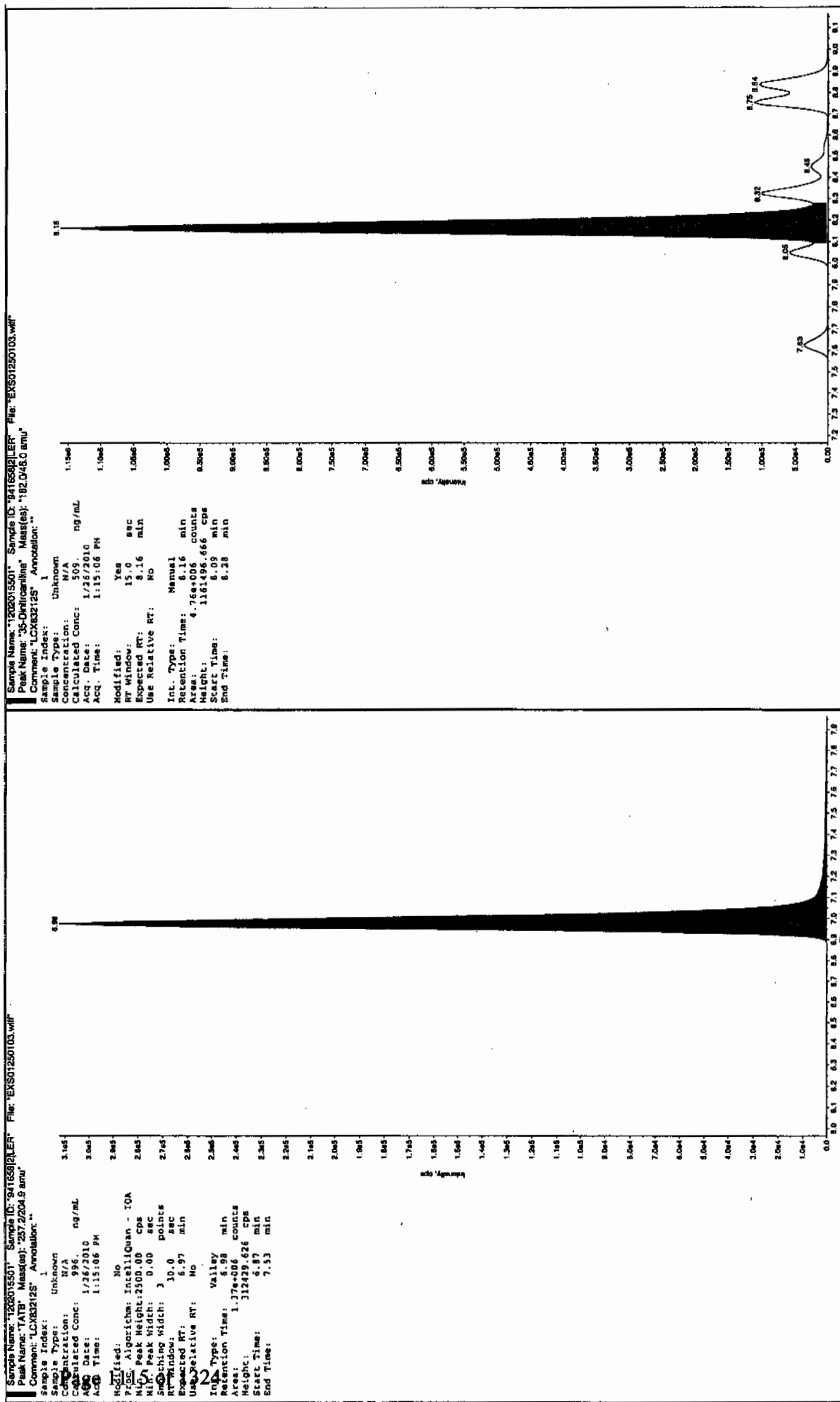
Before Jan 12/7/10

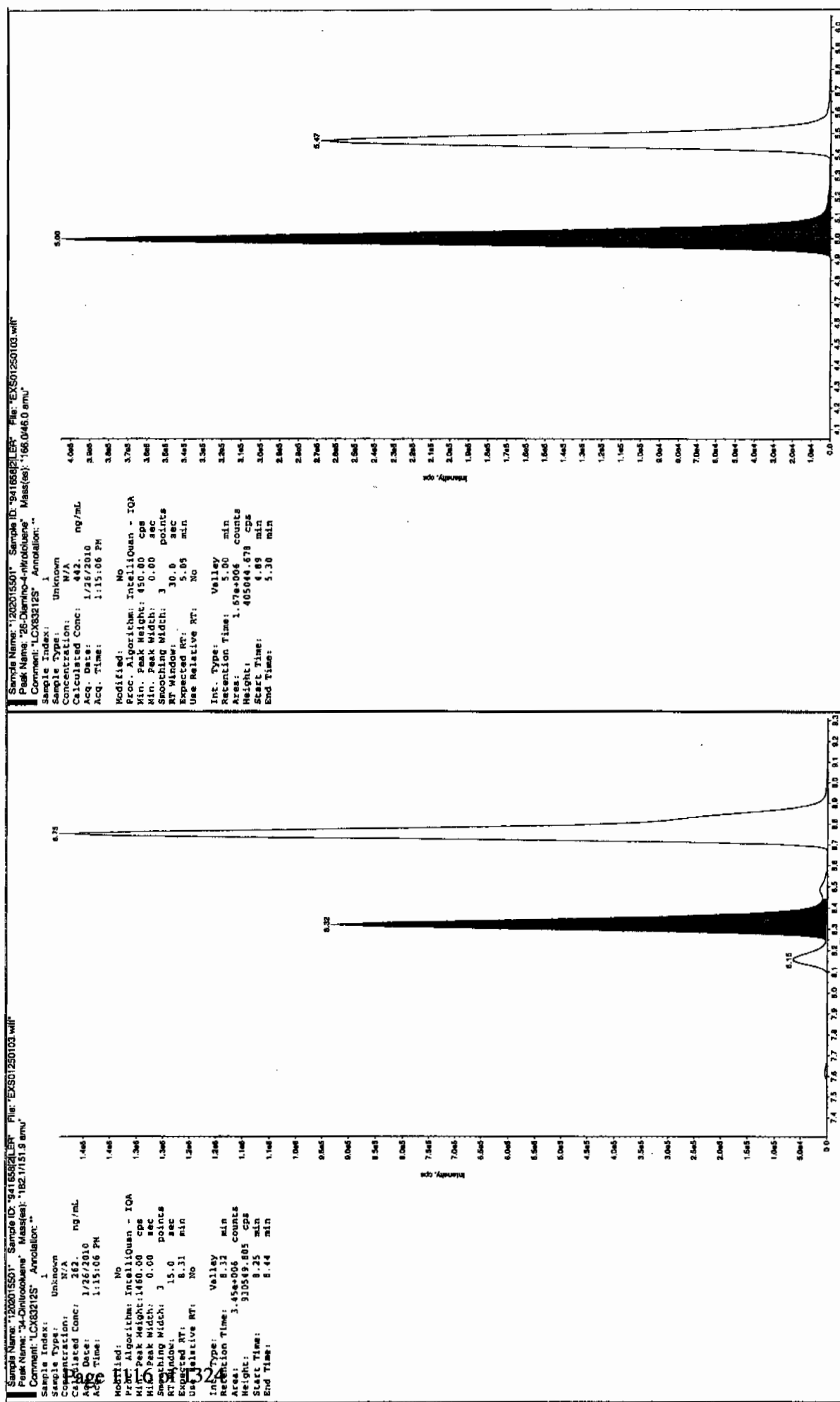


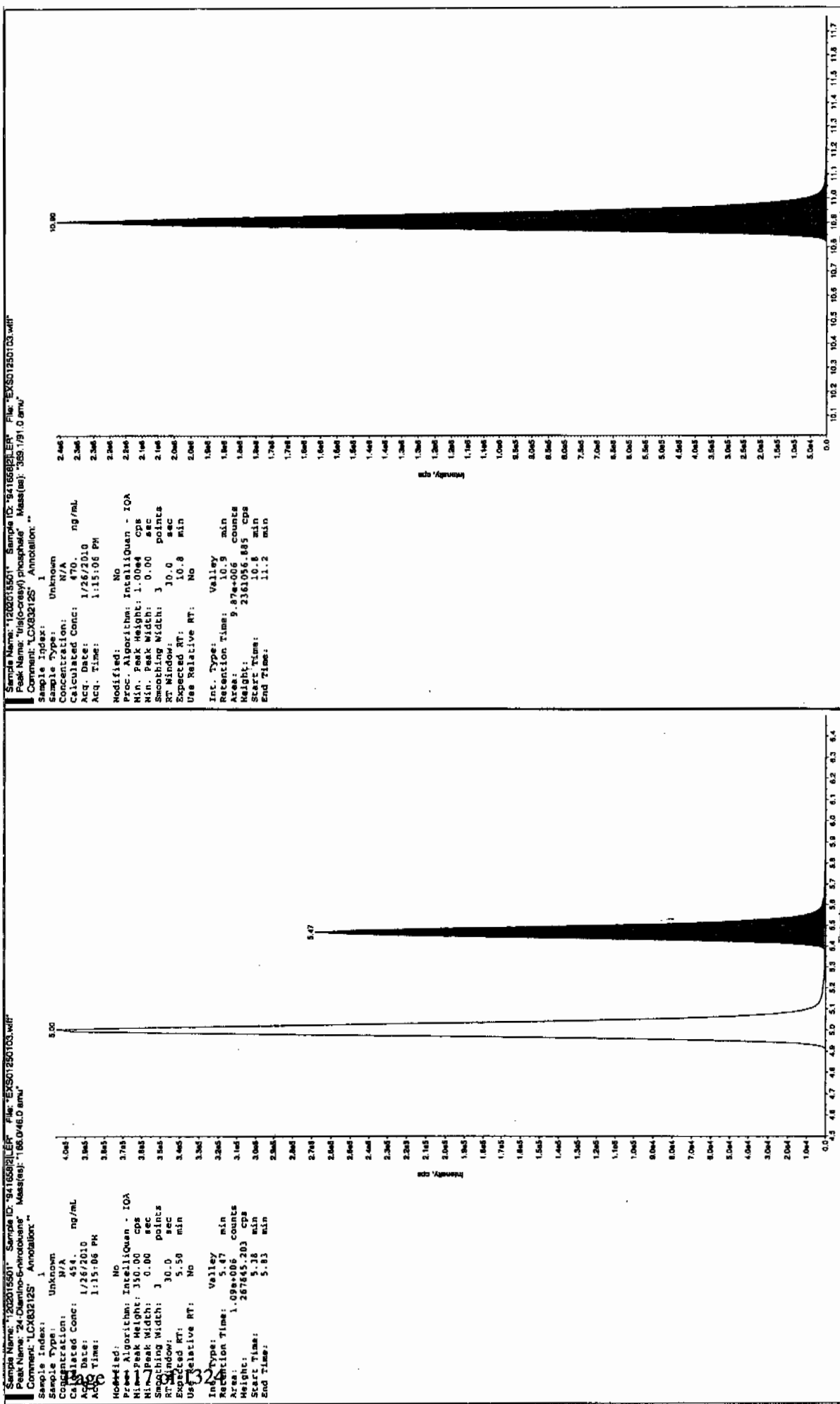
\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

After Jan 12/7/10

after scan 125110







# MISCELLANEOUS DATA



# Prep Logbook Nitroaromatics and Nitramines by High Performance Liquid Chromatography (HPLC)

Batch ID: 941657      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)
1202015498 MB	21-JAN-2010 16:28:35	2	10	5
1202015499 LCS	21-JAN-2010 16:28:35	2	10	5
244597001	21-JAN-2010 16:28:35	2	10	5
244599001	21-JAN-2010 16:28:35	2	10	5
1202015500 MS (244599001)	21-JAN-2010 16:28:35	2	10	5
1202015501 MSD (244599001)	21-JAN-2010 16:28:35	2	10	5
244599002	21-JAN-2010 16:28:35	2	10	5
244599003	21-JAN-2010 16:28:35	2	10	5
244599004	21-JAN-2010 16:28:35	2	10	5
244599005	21-JAN-2010 16:28:35	2	10	5
244599006	21-JAN-2010 16:28:35	2	10	5
244599007	21-JAN-2010 16:28:35	2	10	5
244599008	21-JAN-2010 16:28:35	2	10	5
244599009	21-JAN-2010 16:28:35	2	10	5
244599010	21-JAN-2010 16:28:35	2	10	5
244599011	21-JAN-2010 16:28:35	2	10	5
244599012	21-JAN-2010 16:28:35	2	10	5
244599013	21-JAN-2010 16:28:35	2	10	5

Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:
LCS	1202015499	8321 Explosives LCS	DX091230-03	.1	mL	Final Solvent: ACN
LCS	1202015499	8321 LANL Explosives Mix 10mg/L	UXX100108-01.1	1	mL	
MS	1202015500	8321 Explosives LCS	DX091230-03	.1	mL	
MS	1202015500	8321 LANL Explosives Mix 10mg/L	UXX100108-01.1	1	mL	
MSD	1202015501	8321 Explosives LCS	DX091230-03	.1	mL	
MSD	1202015501	8321 LANL Explosives Mix 10mg/L	UXX100108-01.1	1	mL	
SURR	ALL	3,4-Dinitrotoluene (8330 Surrogate) 100ppm	DXP100121-02	.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: *Shim*  
 Date: 01/23/10  
 SOP: GL-OA-E-056 Rev.12  
 Alt Check Std. ID: WXX100125-07 & WXX100128-07

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				1					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			DUSE-RA	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	WXXCCV	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	WXXCCV	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	1202012974	MAP	1/27/10 21:23	940579	10-1160-1	2	LANL	USE	S
EXP0125120a	1202012975	MAP	1/27/10 21:52	940579	10-1160-1	2	LANL	USE	S
EXP0125121a	244210001	MAP	1/27/10 22:22	940579	10-1160-1	2	LANL	USE	S
EXP0125122a	1202012976	MAP	1/27/10 22:51	940579	10-1160-1	2	LANL	USE	S
EXP0125123a	1202012977	MAP	1/27/10 23:21	940579	10-1160-1	2	LANL	USE	S
EXP0125124a	244210002	MAP	1/27/10 23:50	940579	10-1160-1	2	LANL	USE	S
EXP0125125a	244210003	MAP	1/28/10 0:20	940579	10-1160-1	2	LANL	USE	S
EXP0125126a	244210004	MAP	1/28/10 0:49	940579	10-1160-1	2	LANL	USE	S
EXP0125127a	244210005	MAP	1/28/10 1:19	940579	10-1160-1	2	LANL	USE	S
EXP0125128a	244210006	MAP	1/28/10 1:48	940579	10-1160-1	2	LANL	USE	S
EXP0125129a	WXXCCV	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
EXP0125145a	1202021910	MAP	1/28/10 10:10	944248	Various	2	LANL	USE	S
EXP0125146a	1202021911	MAP	1/28/10 10:40	944248	Various	2	LANL	USE	S
EXP0125147a	245098001	MAP	1/28/10 11:10	944248	10-1336	2	LANL	USE	S
EXP0125148a	245126002	MAP	1/28/10 11:39	944248	10-1334	2	LANL	USE	S
EXP0125149a	245126003	MAP	1/28/10 12:09	944248	10-1334	2	LANL	USE	S
EXP0125150a	245126004	MAP	1/28/10 12:38	944248	10-1334	2	LANL	USE	S
EXP0125151a	245126005	MAP	1/28/10 13:08	944248	10-1334	2	LANL	USE	S
EXP0125152a	245143002	MAP	1/28/10 13:37	944248	10-1337	2	LANL	USE	S
EXP0125153a	1202021912	MAP	1/28/10 14:07	944248	10-1337	2	LANL	USE	S
EXP0125154a	1202021913	MAP	1/28/10 14:36	944248	10-1337	2	LANL	USE	S
EXP0125155a	WXXCCV	MAP	1/28/10 15:06			1		USE	C
EXP0125156a	XIBLK17	MAP	1/28/10 15:35			1		USE	B
EXP0125157a	WXXCRI	MAP	1/28/10 16:05			1		USE	C
EXP0125158a	245143003	MAP	1/28/10 16:34	944248	10-1337	2	LANL	USE	S
EXP0125159a	XIBLK18	MAP	1/28/10 17:04			1		USE	B
EXP0125160a	1202017304	MAP	1/28/10 17:33	942337	Various	2	LANL	USE	S
EXP0125161a	1202017305	MAP	1/28/10 18:03	942337	Various	2	LANL	USE	S
EXP0125162a	244909001	MAP	1/28/10 18:32	942337	10-1279	2	LANL	USE	S
EXP0125163a	244909002	MAP	1/28/10 19:02	942337	10-1279	2	LANL	USE	S
EXP0125164a	244909003	MAP	1/28/10 19:31	942337	10-1279	2	LANL	USE	S
EXP0125165a	244909004	MAP	1/28/10 20:01	942337	10-1279	2	LANL	USE	S
EXP0125166a	WXXCCV	MAP	1/28/10 20:30			1		USE	C
EXP0125167a	XIBLK19	MAP	1/28/10 21:00			1		USE	B
EXP0125168a	WXXCRI	MAP	1/28/10 21:29			1		USE	C
EXP0125169a	244910002	MAP	1/28/10 21:59	942337	10-1281	2	LANL	USE	S
EXP0125170a	1202017306	MAP	1/28/10 22:28	942337	10-1281	2	LANL	USE	S
EXP0125171a	1202017307	MAP	1/28/10 22:58	942337	10-1281	2	LANL	USE	S
EXP0125172a	244910003	MAP	1/28/10 23:27	942337	10-1281	2	LANL	USE	S
EXP0125173a	244910004	MAP	1/28/10 23:57	942337	10-1281	2	LANL	USE	S
EXP0125174a	244910005	MAP	1/29/10 0:26	942337	10-1281	2	LANL	USE	S
EXP0125175a	244910006	MAP	1/29/10 0:56	942337	10-1281	2	LANL	USE	S
EXP0125176a	244910007	MAP	1/29/10 1:25	942337	10-1281	2	LANL	USE	S
EXP0125177a	244910008	MAP	1/29/10 1:55	942337	10-1281	2	LANL	USE	S

EXP0125178a	244910009	MAP	1/29/10 2:24	942337	10-1281	2	LANL	USE	S
EXP0125179a	WXXCCV	MAP	1/29/10 2:54			1		USE	C
EXP0125180a	XIBLK20	MAP	1/29/10 3:23			1		USE	B
EXP0125181a	WXXCRI	MAP	1/29/10 3:53			1		USE	C
EXP0125182a	1202017308	MAP	1/29/10 4:22	942339	Various	2	LANL	USE	S
EXP0125183a	1202017309	MAP	1/29/10 4:52	942339	Various	2	LANL	USE	S
EXP0125184a	244916002	MAP	1/29/10 5:21	942339	10-1284	2	LANL	USE	S
EXP0125185a	244916003	MAP	1/29/10 5:51	942339	10-1284	2	LANL	USE	S
EXP0125186a	244917002	MAP	1/29/10 6:20	942339	10-1285	2	LANL	USE	S
EXP0125187a	244917003	MAP	1/29/10 6:50	942339	10-1285	2	LANL	USE	S
EXP0125188a	244917004	MAP	1/29/10 7:19	942339	10-1285	2	LANL	USE	S
EXP0125189a	244923001	MAP	1/29/10 7:49	942339	10-1287	2	LANL	USE	S
EXP0125190a	1202017310	MAP	1/29/10 8:18	942339	10-1287	2	LANL	USE	S
EXP0125191a	1202017311	MAP	1/29/10 8:48	942339	10-1287	2	LANL	USE	S
EXP0125192a	WXXCCV	MAP	1/29/10 9:17			1		USE	C
EXP0125193a	XIBLK21	MAP	1/29/10 9:47			1		USE	B
EXP0125194a	WXXCRI	MAP	1/29/10 10:16			1		USE	C
EXP0125195a	244923002	MAP	1/29/10 10:46	942339	10-1287	2	LANL	USE	S
EXP0125196a	244923003	MAP	1/29/10 11:15	942339	10-1287	2	LANL	USE	S
EXP0125197a	244923004	MAP	1/29/10 11:45	942339	10-1287	2	LANL	USE	S
EXP0125198a	244923005	MAP	1/29/10 12:14	942339	10-1287	2	LANL	USE	S
EXP0125199a	244923006	MAP	1/29/10 12:44	942339	10-1287	2	LANL	USE	S
EXP0125200a	244923007	MAP	1/29/10 13:13	942339	10-1287	2	LANL	USE	S
EXP0125201a	244923008	MAP	1/29/10 13:43	942339	10-1287	2	LANL	USE	S
EXP0125202a	244923009	MAP	1/29/10 14:12	942339	10-1287	2	LANL	USE	S
EXP0125203a	244923010	MAP	1/29/10 14:42	942339	10-1287	2	LANL	USE	S
EXP0125204a	WXXCCV	MAP	1/29/10 15:11			1		USE	C
EXP0125205a	XIBLK22	MAP	1/29/10 15:41			1		USE	B
EXP0125206a	WXXCRI	MAP	1/29/10 16:10			1		USE	C
EXP0125207a	1202011616	MAP	1/29/10 16:40	940042	Various	2	LANL	USE	S
EXP0125208a	1202011617	MAP	1/29/10 17:09	940042	Various	2	LANL	USE	S
EXP0125209a	244234005	MAP	1/29/10 17:39	940042	10-1168	2	LANL	USE	S
EXP0125210a	1202011618	MAP	1/29/10 18:08	940042	10-1168	2	LANL	USE	S
EXP0125211a	1202011619	MAP	1/29/10 18:38	940042	10-1168	2	LANL	USE	S
EXP0125212a	244234012	MAP	1/29/10 19:07	940042	10-1168	2	LANL	USE	S
EXP0125213a	244234016	MAP	1/29/10 19:37	940042	10-1168	2	LANL	USE	S
EXP0125214a	244239006	MAP	1/29/10 20:06	940042	10-1171	2	LANL	USE	S

EXP0125215a	WXCCV	MAP	1/29/10 20:36	941658	Various	1	LANL	USE	C
EXP0125216a	XIBLK23	MAP	1/29/10 21:05			1		USE	B
EXP0125217a	WXXCRI	MAP	1/29/10 21:35			1		USE	C
EXP0125218a	1202015498	MAP	1/29/10 22:04	941658	Various	2	LANL	USE	S
EXP0125219a	1202015499	MAP	1/29/10 22:34	941658	Various	2	LANL	USE	S
EXP0125220a	244597001	MAP	1/29/10 23:04	941658	10-1209	2	LANL	USE	S
EXP0125221a	244599001	MAP	1/29/10 23:33	941658	10-1210	2	LANL	USE	S
EXP0125222a	1202015500	MAP	1/30/10 0:03	941658	10-1210	2	LANL	USE	S
EXP0125223a	1202015501	MAP	1/30/10 0:32	941658	10-1210	2	LANL	USE	S
EXP0125224a	244599002	MAP	1/30/10 1:02	941658	10-1210	2	LANL	USE	S
EXP0125225a	244599003	MAP	1/30/10 1:31	941658	10-1210	2	LANL	USE	S
EXP0125226a	244599004	MAP	1/30/10 2:01	941658	10-1210	2	LANL	USE	S
EXP0125227a	244599005	MAP	1/30/10 2:30	941658	10-1210	2	LANL	USE	S
EXP0125228a	WXCCV	MAP	1/30/10 3:00			1		USE	C
EXP0125229a	XIBLK24	MAP	1/30/10 3:29			1		USE	B
EXP0125230a	WXXCRI	MAP	1/30/10 3:59			1		USE	C
EXP0125231a	244599006	MAP	1/30/10 4:28	941658	10-1210	2	LANL	USE	S
EXP0125232a	244599007	MAP	1/30/10 4:58	941658	10-1210	2	LANL	USE	S
EXP0125233a	244599008	MAP	1/30/10 5:27	941658	10-1210	2	LANL	USE	S
EXP0125234a	244599009	MAP	1/30/10 5:57	941658	10-1210	2	LANL	USE	S
EXP0125235a	244599010	MAP	1/30/10 6:26	941658	10-1210	2	LANL	USE	S
EXP0125236a	244599011	MAP	1/30/10 6:56	941658	10-1210	2	LANL	USE	S
EXP0125237a	244599012	MAP	1/30/10 7:26	941658	10-1210	2	LANL	USE	S
EXP0125238a	244599013	MAP	1/30/10 7:55	941658	10-1210	2	LANL	USE	S
EXP0125239a	WXCCV	MAP	1/30/10 8:25			1		USE	C
EXP0125240a	XIBLK25	MAP	1/30/10 8:54			1		USE	B
EXP0125241a	WXXCRI	MAP	1/30/10 9:24			1		USE	C



GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS4

Date: 01/25/10  
 Extr. Injection Volume: 10uL  
 Sequence Number: 012510exs  
 Initial Calibration Date: 012510  
 Method: 8321A-Modified  
 Int. Std.: N/A  
 Mobile Phase Lot#: 1250738, 1246467  
 Standard-Samp Reagent Lot#: 1246195, 1253092  
 SOP: GL-OA-E-056 Rev.12  
 Alt Check Std. ID: WXX100125-26

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC Flag
EXS01250001.wiff	XIBLK01	LER	1/25/2010 10:28			1		USE	B
EXS01250002.wiff	XIBLK01	LER	1/25/2010 10:46			1		USE	B
EXS01250003.wiff	WXXICAL-19	LER	1/25/2010 11:02			1		USE	I
EXS01250004.wiff	WXXICAL-20	LER	1/25/2010 11:18			1		USE	I
EXS01250005.wiff	WXXICAL-21	LER	1/25/2010 11:33			1		USE	I
EXS01250006.wiff	WXXICAL-22	LER	1/25/2010 11:51			1		USE	I
EXS01250007.wiff	WXXICAL-23	LER	1/25/2010 12:07			1		USE	I
EXS01250008.wiff	WXXICAL-24	LER	1/25/2010 12:22			1		USE	I
EXS01250009.wiff	WXXICAL-25	LER	1/25/2010 12:38			1		USE	I
EXS01250010.wiff	XIBLK02	LER	1/25/2010 12:54			1		USE	B
EXS01250011.wiff	WXXICV	LER	1/25/2010 13:09			1		USE	C
EXS01250012.wiff	XIBLK03	LER	1/25/2010 13:25			1		USE	B
EXS01250013.wiff	WXXCRI	LER	1/25/2010 13:41			1		USE	C
EXS01250014.wiff	1202015503	LER	1/25/2010 13:56		VARIOUS	2	LANL	USE	S
EXS01250015.wiff	1202015504	LER	1/25/2010 14:12	941660	10-1214	2	LANL	USE	S
EXS01250016.wiff	XIBLK04	LER	1/25/2010 14:28			1		USE	B
EXS01250017.wiff	1202017300	LER	1/25/2010 14:44	942335	VARIOUS	2	LANL	USE	S
EXS01250018.wiff	1202017301	LER	1/25/2010 14:59	942335	VARIOUS	2	LANL	USE	S
EXS01250019.wiff	244847001	LER	1/25/2010 15:15	942335	10-1262	2	LANL	USE	S
EXS01250020.wiff	1202017302	LER	1/25/2010 15:31	942335	10-1262	2	LANL	USE	S
EXS01250021.wiff	1202017303	LER	1/25/2010 15:46	942335	10-1262	2	LANL	USE	S
EXS01250022.wiff	244847002	LER	1/25/2010 16:02	942335	10-1262	2	LANL	DUSE-RA	S
EXS01250023.wiff	244847003	LER	1/25/2010 16:18	942335	10-1262	2	LANL	USE	S
EXS01250024.wiff	WXXCCV	LER	1/25/2010 16:33			1		USE	C
EXS01250025.wiff	XIBLK05	LER	1/25/2010 16:49			1		USE	B
EXS01250026.wiff	WXXCRI	LER	1/25/2010 17:05			1		USE	C
EXS01250027.wiff	244847004	LER	1/25/2010 17:21	942335	10-1262	2	LANL	USE	S
EXS01250028.wiff	244852001	LER	1/25/2010 17:36	942335	10-1263	2	LANL	USE	S
EXS01250029.wiff	244852002	LER	1/25/2010 17:52	942335	10-1263	2	LANL	USE	S
EXS01250030.wiff	244852003	LER	1/25/2010 18:08	942335	10-1263	2	LANL	USE	S

EXS01250031.wiff	244852004	LER	1/25/2010 18:24	942335	10-1263	2	LANL	USE	S
EXS01250032.wiff	244881001	LER	1/25/2010 18:39	942335	10-1264-1	2	LANL	USE	S
EXS01250033.wiff	244881002	LER	1/25/2010 18:55	942335	10-1264-1	2	LANL	USE	S
EXS01250034.wiff	244881003	LER	1/25/2010 19:11	942335	10-1264-1	2	LANL	USE	S
EXS01250035.wiff	244881004	LER	1/25/2010 19:26	942335	10-1264-1	2	LANL	USE	S
EXS01250036.wiff	244905001	LER	1/25/2010 19:42	942335	10-1277	2	LANL	USE	S
EXS01250037.wiff	WXXCCV	LER	1/25/2010 19:58			1		USE	C
EXS01250038.wiff	XIBLK06	LER	1/25/2010 20:14			1		USE	B
EXS01250039.wiff	WXXCRI	LER	1/25/2010 20:29			1		USE	C
EXS01250040.wiff	244905002	LER	1/25/2010 20:45	942335	10-1277	2	LANL	USE	S
EXS01250041.wiff	244905003	LER	1/25/2010 21:01	942335	10-1277	2	LANL	USE	S
EXS01250042.wiff	244905004	LER	1/25/2010 21:16	942335	10-1277	2	LANL	USE	S
EXS01250043.wiff	244905005	LER	1/25/2010 21:32	942335	10-1277	2	LANL	USE	S
EXS01250044.wiff	244905006	LER	1/25/2010 21:48	942335	10-1277	2	LANL	USE	S
EXS01250045.wiff	WXXCCV	LER	1/25/2010 22:04			1		USE	C
EXS01250046.wiff	XIBLK07	LER	1/25/2010 22:19			1		USE	B
EXS01250047.wiff	WXXCRI	LER	1/25/2010 22:35			1		USE	C
EXS01250048.wiff	1202017304	LER	1/25/2010 22:51	942337	VARIOUS	2	LANL	USE	S
EXS01250049.wiff	1202017305	LER	1/25/2010 23:06	942337	VARIOUS	2	LANL	USE	S
EXS01250050.wiff	244909001	LER	1/25/2010 23:22	942337	10-1279	2	LANL	USE	S
EXS01250051.wiff	244909002	LER	1/25/2010 23:38	942337	10-1279	2	LANL	USE	S
EXS01250052.wiff	244909003	LER	1/25/2010 23:54	942337	10-1279	2	LANL	USE	S
EXS01250053.wiff	244909004	LER	1/26/2010 0:09	942337	10-1279	2	LANL	USE	S
EXS01250054.wiff	244910002	LER	1/26/2010 0:25	942337	10-1281	2	LANL	USE	S
EXS01250055.wiff	1202017306	LER	1/26/2010 0:41	942337	10-1281	2	LANL	USE	S
EXS01250056.wiff	1202017307	LER	1/26/2010 0:56	942337	10-1281	2	LANL	USE	S
EXS01250057.wiff	244910003	LER	1/26/2010 1:12	942337	10-1281	2	LANL	USE	S
EXS01250058.wiff	WXXCCV	LER	1/26/2010 1:28			1		USE	C
EXS01250059.wiff	XIBLK08	LER	1/26/2010 1:44			1		USE	B
EXS01250060.wiff	WXXCRI	LER	1/26/2010 1:59			1		USE	C
EXS01250061.wiff	244910004	LER	1/26/2010 2:15	942337	10-1281	2	LANL	USE	S
EXS01250062.wiff	244910005	LER	1/26/2010 2:31	942337	10-1281	2	LANL	USE	S
EXS01250063.wiff	244910006	LER	1/26/2010 2:46	942337	10-1281	2	LANL	USE	S
EXS01250064.wiff	244910007	LER	1/26/2010 3:02	942337	10-1281	2	LANL	USE	S
EXS01250065.wiff	244910008	LER	1/26/2010 3:18	942337	10-1281	2	LANL	USE	S
EXS01250066.wiff	244910009	LER	1/26/2010 3:33	942337	10-1281	2	LANL	USE	S
EXS01250067.wiff	WXXCCV	LER	1/26/2010 3:49			1		USE	C

EXS01250068.wiff	XIBLK09	LER	1/26/2010 4:05			1				USE	B
EXS01250069.wiff	WXXCRI	LER	1/26/2010 4:21			1				USE	C
EXS01250070.wiff	1202015510	LER	1/26/2010 4:36			2				USE	S
EXS01250071.wiff	1202015511	LER	1/26/2010 4:52			2			LANL	USE	S
EXS01250072.wiff	244626001	LER	1/26/2010 5:08		941664	10-1225				USE	S
EXS01250073.wiff	1202015512	LER	1/26/2010 5:23			2				USE	S
EXS01250074.wiff	1202015513	LER	1/26/2010 5:39			2				USE	S
EXS01250075.wiff	244626002	LER	1/26/2010 5:55		941664	10-1225				USE	S
EXS01250076.wiff	244626003	LER	1/26/2010 6:11			2				USE	S
EXS01250077.wiff	244626004	LER	1/26/2010 6:26		941664	10-1225				USE	S
EXS01250078.wiff	244626005	LER	1/26/2010 6:42			2				USE	S
EXS01250079.wiff	244626006	LER	1/26/2010 6:58		941664	10-1225				USE	S
EXS01250080.wiff	WXXCCV	LER	1/26/2010 7:13			1				USE	C
EXS01250081.wiff	XIBLK10	LER	1/26/2010 7:29			1				USE	B
EXS01250082.wiff	WXXCRI	LER	1/26/2010 7:45			1				USE	C
EXS01250083.wiff	244626007	LER	1/26/2010 8:00			2				USE	S
EXS01250084.wiff	244626008	LER	1/26/2010 8:16		941664	10-1225			LANL	USE	S
EXS01250085.wiff	244626009	LER	1/26/2010 8:32			2				USE	S
EXS01250086.wiff	244626010	LER	1/26/2010 8:48		941664	10-1225				USE	S
EXS01250087.wiff	244626011	LER	1/26/2010 9:03			2				USE	S
EXS01250088.wiff	244626012	LER	1/26/2010 9:19		941664	10-1225				USE	S
EXS01250089.wiff	244626013	LER	1/26/2010 9:35			2				USE	S
EXS01250090.wiff	244626014	LER	1/26/2010 9:50		941664	10-1225				USE	S
EXS01250091.wiff	244626015	LER	1/26/2010 10:06			2				USE	S
EXS01250092.wiff	244626016	LER	1/26/2010 10:22		941664	10-1225				USE	S
EXS01250093.wiff	WXXCCV	LER	1/26/2010 10:37			1				USE	C
EXS01250094.wiff	XIBLK11	LER	1/26/2010 10:53			1				USE	B
EXS01250095.wiff	WXXCRI	LER	1/26/2010 11:09			1				USE	C
EXS01250096.wiff	244847002	LER	1/26/2010 11:25			2				USE	S
EXS01250097.wiff	XIBLK12	LER	1/26/2010 11:40		942335	10-1262			LANL	USE	B
EXS01250098.wiff	1202015498	LER	1/26/2010 11:56			1				USE	S
EXS01250099.wiff	1202015499	LER	1/26/2010 12:12		941658	VARIOUS			LANL	USE	S
EXS01250100.wiff	244597001	LER	1/26/2010 12:27			2				USE	S
EXS01250101.wiff	244599001	LER	1/26/2010 12:43		941658	10-1209			LANL	USE	S
EXS01250102.wiff	1202015500	LER	1/26/2010 12:59			2				USE	S
EXS01250103.wiff	1202015501	LER	1/26/2010 13:15		941658	10-1210			LANL	USE	S
EXS01250104.wiff	244599002	LER	1/26/2010 13:30			2				USE	S

EXS01250105.wiff	244599003	LER	1/26/2010 13:46	941658	10-1210	2	LANL	USE	S
EXS01250106.wiff	WXXCVC	LER	1/26/2010 14:02			1		USE	C
EXS01250107.wiff	XIBLK13	LER	1/26/2010 14:17			1		USE	B
EXS01250108.wiff	WXXCRI	LER	1/26/2010 14:33			1		USE	C
EXS01250109.wiff	244599004	LER	1/26/2010 14:49	941658	10-1210	2	LANL	USE	S
EXS01250110.wiff	244599005	LER	1/26/2010 15:05	941658	10-1210	2	LANL	DUSE-RA	S
EXS01250111.wiff	244599006	LER	1/26/2010 15:20	941658	10-1210	2	LANL	USE	S
EXS01250112.wiff	244599007	LER	1/26/2010 15:36	941658	10-1210	2	LANL	USE	S
EXS01250113.wiff	244599008	LER	1/26/2010 15:52	941658	10-1210	2	LANL	USE	S
EXS01250114.wiff	244599009	LER	1/26/2010 16:07	941658	10-1210	2	LANL	USE	S
EXS01250115.wiff	244599010	LER	1/26/2010 16:23	941658	10-1210	2	LANL	DUSE-RA	S
EXS01250116.wiff	244599011	LER	1/26/2010 16:39	941658	10-1210	2	LANL	USE	S
EXS01250117.wiff	244599012	LER	1/26/2010 16:55	941658	10-1210	2	LANL	USE	S
EXS01250118.wiff	244599013	LER	1/26/2010 17:10	941658	10-1210	2	LANL	DUSE-RA	S
EXS01250119.wiff	WXXCVC	LER	1/26/2010 17:26			1		USE	C
EXS01250120.wiff	XIBLK14	LER	1/26/2010 17:42			1		USE	B
EXS01250121.wiff	WXXCRI	LER	1/26/2010 17:57			1		USE	C
EXS01250122.wiff	1202017308	LER	1/26/2010 18:13	942339	VARIOUS	2	LANL	USE	S
EXS01250123.wiff	1202017309	LER	1/26/2010 18:29	942339	VARIOUS	2	LANL	USE	S
EXS01250124.wiff	244916002	LER	1/26/2010 18:45	942339	10-1284	2	LANL	USE	S
EXS01250125.wiff	244916003	LER	1/26/2010 19:00	942339	10-1284	2	LANL	USE	S
EXS01250126.wiff	244917002	LER	1/26/2010 19:16	942339	10-1285	2	LANL	USE	S
EXS01250127.wiff	244917003	LER	1/26/2010 19:32	942339	10-1285	2	LANL	USE	S
EXS01250128.wiff	244917004	LER	1/26/2010 19:47	942339	10-1285	2	LANL	USE	S
EXS01250129.wiff	244923001	LER	1/26/2010 20:03	942339	10-1287	2	LANL	USE	S
EXS01250130.wiff	1202017310	LER	1/26/2010 20:19	942339	10-1287	2	LANL	USE	S
EXS01250131.wiff	1202017311	LER	1/26/2010 20:34	942339	10-1287	2	LANL	USE	S
EXS01250132.wiff	WXXCVC	LER	1/26/2010 20:50			1		USE	C
EXS01250133.wiff	XIBLK15	LER	1/26/2010 21:06			1		USE	B
EXS01250134.wiff	WXXCRI	LER	1/26/2010 21:22			1		USE	C
EXS01250135.wiff	244923002	LER	1/26/2010 21:37	942339	10-1287	2	LANL	USE	S
EXS01250136.wiff	244923003	LER	1/26/2010 21:53	942339	10-1287	2	LANL	USE	S
EXS01250137.wiff	244923004	LER	1/26/2010 22:09	942339	10-1287	2	LANL	USE	S
EXS01250138.wiff	244923005	LER	1/26/2010 22:24	942339	10-1287	2	LANL	USE	S
EXS01250139.wiff	244923006	LER	1/26/2010 22:40	942339	10-1287	2	LANL	USE	S
EXS01250140.wiff	244923007	LER	1/26/2010 22:56	942339	10-1287	2	LANL	USE	S
EXS01250141.wiff	244923008	LER	1/26/2010 23:12	942339	10-1287	2	LANL	USE	S

EXS01250142.wiff	244923009	LER	1/26/2010 23:27	942339	10-1287	2	LANL	USE	S
EXS01250143.wiff	244923010	LER	1/26/2010 23:43	942339	10-1287	2	LANL	USE	S
EXS01250144.wiff	WXXCCV	LER	1/26/2010 23:59			1		USE	C
EXS01250145.wiff	XIBLK16	LER	1/27/2010 0:14			1		USE	B
EXS01250146.wiff	WXXCRI	LER	1/27/2010 0:30			1		USE	C
EXS01250147.wiff	UXX100108-01.2	LER	1/27/2010 0:46	SCREEN	SOLID	2	O2SI	USE	S
EXS01250148.wiff	244599005	LER	1/27/2010 1:02	941658	10-1210	2	LANL	USE	S
EXS01250149.wiff	244599010	LER	1/27/2010 1:17	941658	10-1210	2	LANL	USE	S
EXS01250150.wiff	WXXCCV	LER	1/27/2010 1:33			1		USE	C
EXS01250151.wiff	XIBLK17	LER	1/27/2010 1:49			1		USE	B
EXS01250152.wiff	WXXCRI	LER	1/27/2010 2:04			1		USE	C

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS4

Date: 01/27/10  
 Extr. Injection Volume: 10uL  
 Sequence Number: 012710exs  
 Initial Calibration Date: 012710  
 Method: 8321A-Modified  
 Int. Std.: N/A  
 Mobile Phase Lot#: 1250738, 1246467  
 Standard-Samp Reagent Lot#: 1246195, 1253092  
 Alt Check Std. ID: WXX100127-26

Reviewed By: *Amme*  
 Date: *01/28/10*  
 SOP: GL-OA-E-056 Rev.12

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC Flag
EXS01270001.wiff	XIBLK01	LER	1/27/2010 10:27			1		USE	B
EXS01270002.wiff	XIBLK01	LER	1/27/2010 10:43			1		USE	B
EXS01270003.wiff	WXXICAL-19	LER	1/27/2010 10:59			1		USE	I
EXS01270004.wiff	WXXICAL-20	LER	1/27/2010 11:14			1		USE	I
EXS01270005.wiff	WXXICAL-21	LER	1/27/2010 11:30			1		USE	I
EXS01270006.wiff	WXXICAL-22	LER	1/27/2010 11:46			1		USE	I
EXS01270007.wiff	WXXICAL-23	LER	1/27/2010 12:02			1		USE	I
EXS01270008.wiff	WXXICAL-24	LER	1/27/2010 12:17			1		USE	I
EXS01270009.wiff	WXXICAL-25	LER	1/27/2010 12:33			1		USE	I
EXS01270010.wiff	XIBLK02	LER	1/27/2010 12:49			1		USE	B
EXS01270011.wiff	WXXICV	LER	1/27/2010 13:04			1		USE	C
EXS01270012.wiff	XIBLK03	LER	1/27/2010 13:20			1		USE	B
EXS01270013.wiff	WXXCRI	LER	1/27/2010 13:36			1		USE	C
EXS01270014.wiff	244599013	LER	1/27/2010 13:51	941658	10-1210	2	LANL	USE	S
EXS01270015.wiff	XIBLK04	LER	1/27/2010 14:07			1		USE	B
EXS01270016.wiff	1202021892	LER	1/27/2010 14:23	944240	10-1294	2	LANL	USE	S
EXS01270017.wiff	1202021893	LER	1/27/2010 14:39	944240	10-1294	2	LANL	USE	S
EXS01270018.wiff	245090002	LER	1/27/2010 14:54	944240	10-1294	2	LANL	USE	S
EXS01270019.wiff	1202021894	LER	1/27/2010 15:10	944240	10-1294	2	LANL	USE	S
EXS01270020.wiff	1202021895	LER	1/27/2010 15:26	944240	10-1294	2	LANL	USE	S
EXS01270021.wiff	245090003	LER	1/27/2010 15:41	944240	10-1294	2	LANL	USE	S
EXS01270022.wiff	245090004	LER	1/27/2010 15:57	944240	10-1294	2	LANL	USE	S
EXS01270023.wiff	245090005	LER	1/27/2010 16:15	944240	10-1294	2	LANL	USE	S
EXS01270024.wiff	WXXCCV	LER	1/27/2010 16:31			1		USE	C
EXS01270025.wiff	XIBLK05	LER	1/27/2010 16:46			1		USE	B
EXS01270026.wiff	WXXCRI	LER	1/27/2010 17:02			1		USE	C
EXS01270027.wiff	245090006	LER	1/27/2010 17:18	944240	10-1294	2	LANL	USE	S
EXS01270028.wiff	245090007	LER	1/27/2010 17:34	944240	10-1294	2	LANL	USE	S
EXS01270029.wiff	245090008	LER	1/27/2010 17:49	944240	10-1294	2	LANL	USE	S
EXS01270030.wiff	245090009	LER	1/27/2010 18:05	944240	10-1294	2	LANL	USE	S

*D* *Amme*  
*01/28/10*

EXS01270031.wiff	245090010	LER	1/27/2010 18:21	944240	10-1294	2	LANL	USE	S
EXS01270032.wiff	245090011	LER	1/27/2010 18:36	944240	10-1294	2	LANL	USE	S
EXS01270033.wiff	245090012	LER	1/27/2010 18:52	944240	10-1294	2	LANL	USE	S
EXS01270034.wiff	WXXCCV	LER	1/27/2010 19:08			1		USE	C
EXS01270035.wiff	XIBLK06	LER	1/27/2010 19:24			1		USE	B
EXS01270036.wiff	WXXCRI	LER	1/27/2010 19:39			1		USE	C
EXS01270037.wiff	1202021910	LER	1/27/2010 19:55	944248	VARIOUS	2	LANL	USE	S
EXS01270038.wiff	1202021911	LER	1/27/2010 20:11	944248	VARIOUS	2	LANL	USE	S
EXS01270039.wiff	245098001	LER	1/27/2010 20:26	944248	10-1336	2	LANL	USE	S
EXS01270040.wiff	245126002	LER	1/27/2010 20:42	944248	10-1334	2	LANL	USE	S
EXS01270041.wiff	245126003	LER	1/27/2010 20:58	944248	10-1334	2	LANL	USE	S
EXS01270042.wiff	245126004	LER	1/27/2010 21:14	944248	10-1334	2	LANL	USE	S
EXS01270043.wiff	245126005	LER	1/27/2010 21:29	944248	10-1334	2	LANL	USE	S
EXS01270044.wiff	WXXCCV	LER	1/27/2010 21:45			1		USE	C
EXS01270045.wiff	XIBLK07	LER	1/27/2010 22:01			1		USE	B
EXS01270046.wiff	WXXCRI	LER	1/27/2010 22:16			1		USE	C
EXS01270047.wiff	245143002	LER	1/27/2010 22:32	944248	10-1337	2	LANL	USE	S
EXS01270048.wiff	1202021912	LER	1/27/2010 22:48	944248	10-1337	2	LANL	USE	S
EXS01270049.wiff	1202021913	LER	1/27/2010 23:04	944248	10-1337	2	LANL	USE	S
EXS01270050.wiff	245143003	LER	1/27/2010 23:19	944248	10-1337	2	LANL	USE	S
EXS01270051.wiff	WXXCCV	LER	1/27/2010 23:35			1		USE	C
EXS01270052.wiff	XIBLK08	LER	1/27/2010 23:51			1		USE	B
EXS01270053.wiff	WXXCRI	LER	1/28/2010 0:06			1		USE	C

GEL Laboratories LLC  
Form GEL-DER

DER Report No.: 785184  
Revision No.: 1

### DATA EXCEPTION REPORT

<b>Mo. Day Yr.</b> 30-JAN-10	<b>Division:</b> Federal	<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> 941658	<b>Sample Numbers:</b> 1202015501		
<b>Potentially affected work order(s)(SDG):</b> 244597(10-1209),244599(10-1210) <b>Application Issues:</b> Failed Recovery for MSD/PSD			
<b>Specification and Requirements</b>		<b>DER Disposition:</b>	
<b>Exception Description:</b>  1. The Matrix Spike Duplicate (1202015501) did not meet spike recovery limits for TATB at 199%. The recovery limits are 44-166%.		1. Since the Laboratory Control Sample and the Matrix Spike met acceptance limits for TATB, the data are reported with the appropriate DER. The discrepancy is noted in the case narrative.	

**Originator's Name:**  
Michael Penny      30-JAN-10

**Data Validator/Group Leader:**  
Herbert Maier      31-JAN-10



**GC  
SEMIVOLATILE  
PCB  
ANALYSIS**

**PCB Case Narrative  
Los Alamos National Laboratory (LANL)  
SDG 10-1210**

**Method/Analysis Information**

**Procedure:** Analysis of Polychlorinated Biphenyls by ECD  
**Analytical Method:** SW846 8082  
**Prep Method:** SW846 3550B  
**Analytical Batch Number:** 941606  
**Prep Batch Number:** 941604

**Sample Analysis**

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

<b>Sample ID</b>	<b>Client ID</b>
244599001	RE12-10-7243
244599002	RE12-10-7240
244599003	RE12-10-7241
244599004	RE12-10-7237
244599005	RE12-10-7239
244599006	RE12-10-7238
244599007	RE12-10-7242
244599008	RE12-10-7236
244599013	RE12-10-7276
1202015394	Method Blank (MB)
1202015395	Laboratory Control Sample (LCS)
1202015396	244508002(RE46-10-10026) Matrix Spike (MS)
1202015397	244508002(RE46-10-10026) Matrix Spike Duplicate (MSD)

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

**Preparation/Analytical Method Verification**

**SOP Reference**

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-040 REV# 14.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 23.0.

**Calibration Information**

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package.

**Initial Calibration**

All initial calibration requirements have been met for this sample delivery group (SDG).

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y

axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

#### **Continuing Calibration Verification (CCV) Requirements**

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

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

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

The MB analyzed with this SDG met the acceptance criteria.

##### **Surrogate Recoveries**

All the 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 (#10-1186) was selected for the matrix spike and matrix spike duplicate analysis. A Form III and QC raw data are included in the package summarizing the results.

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

The MS recoveries were within the established acceptance limits.

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

The MSD recovery was not within the acceptance limits for Aroclor-1260 due to dilution and high levels of Aroclors in the parent sample.

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

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

#### **Technical Information**

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

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

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

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

##### **Sample Dilutions**

The samples in this SDG did not require dilutions.

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

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

#### **Miscellaneous Information**

##### **Electronic Package Comment**

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

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

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

Data exception report (DER) is for documentation of any procedural anomalies that may deviate from referenced SOP or contractual document. A DER was not required for this SDG.

#### **Manual Integration**

Certain standards and samples may have required manual integration to correctly position the baseline as set in the calibration standard injections. If manual integration was performed, copies of all manual integration peak profiles are included in the raw data section of this PCB fraction.

#### **Additional Comments**

The additional comments field is used to address special issues associated with each analysis, clarify method/contractual issues pertaining to the analysis, and to list any report documents generated as a result of sample analysis or review. The following additional comments were required:

The higher results from either column have been chosen and reported in the data package for the client samples, MB and LCS.

The data reported on the form I and III may differ slightly from the data reported on the form X. This is due to software limitations in rounding differences between the forms.

Aroclors quantitated on the raw data report by the Target data system do not necessarily represent positive Aroclor identification. In order for positive identification to be made, the Aroclor must match in pattern and retention time; as well as quantitate relatively close between the primary and confirmation columns, as specified in SW846 method 8000. When these conditions are not met, the Aroclor is reported as a non-detect on the data report. These situations will be noted on the raw data as DMP, representing does not match pattern, or DNC does not confirm.

Due to software limitation, the Form VII's will display the results either in the % difference or % drift depending on the type of the calibration curve. If the curve of all analytes is generated using an average response factor (RF), the Form VII will display results using the %difference calculation (RF). If the curve of one or more analytes is generated using a linear curve, the Form VII will display results using the % drift calculation (by concentration) for all analytes.

#### **System Configuration**

The Semi-Volatiles-PCB analysis was performed on the following instrument configuration:

<b>Instrument ID</b>	<b>Instrument</b>	<b>System Configuration</b>	<b>Column ID</b>	<b>Column Description</b>
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: Jimmi Cao

Date: 2/9/10

## Roadmap for LANL 10-1210 PCB

This roadmap was analyzed by yip00818 on 01-18-2010, 07:35.

This roadmap was reviewed by rob01090 on 01-21-2010, 15:41.

This roadmap was packaged by yml on 02-08-2010, 14:03.

This roadmap was validated by jim01140 on 02-09-2010, 09:18.

Front Sample Column

exclude	manual	datafile	sampleid	sampletype	injdte	injtme	sublist	clientid	dilution	prebatchid	comment
<input type="checkbox"/>	N	/chem/ecd1a.i/011510.b/037f3701.d	244599001	sample	15-JAN-2010	13:23	10-1210.sub	RE12-10-7243	1.00000	941606	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/011510.b/038f3801.d	244599002	sample	15-JAN-2010	13:35	10-1210.sub	RE12-10-7240	1.00000	941606	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/011510.b/039f3901.d	244599003	sample	15-JAN-2010	13:48	10-1210.sub	RE12-10-7241	1.00000	941606	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/011510.b/040f4001.d	244599004	sample	15-JAN-2010	14:00	10-1210.sub	RE12-10-7237	1.00000	941606	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/011510.b/041f4101.d	244599005	sample	15-JAN-2010	14:13	10-1210.sub	RE12-10-7239	1.00000	941606	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/011510.b/042f4201.d	244599006	sample	15-JAN-2010	14:25	10-1210.sub	RE12-10-7238	1.00000	941606	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/011510.b/043f4301.d	244599007	sample	15-JAN-2010	14:38	10-1210.sub	RE12-10-7242	1.00000	941606	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/011510.b/044f4401.d	244599008	sample	15-JAN-2010	14:51	10-1210.sub	RE12-10-7236	1.00000	941606	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/011510.b/045f4501.d	244599013	sample	15-JAN-2010	15:03	10-1210.sub	RE12-10-7276	1.00000	941606	UPLOAD BOTH COLUMNS, USE HIGHER

Back Sample Column

exclude	manual	datafile	sampleid	sampletype	injdte	injtme	sublist	clientid	dilution	prebatchid	comment
<input type="checkbox"/>	N	/chem/ecd1a.i/011510.b/037f3701.d	244599001	sample	15-JAN-2010	13:23	10-1210.sub	RE12-10-7243	1.00000	941606	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/011510.b/038f3801.d	244599002	sample	15-JAN-2010	13:35	10-1210.sub	RE12-10-7240	1.00000	941606	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/011510.b/039f3901.d	244599003	sample	15-JAN-2010	13:48	10-1210.sub	RE12-10-7241	1.00000	941606	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/011510.b/040f4001.d	244599004	sample	15-JAN-2010	14:00	10-1210.sub	RE12-10-7237	1.00000	941606	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/011510.b/041f4101.d	244599005	sample	15-JAN-2010	14:13	10-1210.sub	RE12-10-7239	1.00000	941606	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/011510.b/042f4201.d	244599006	sample	15-JAN-2010	14:25	10-1210.sub	RE12-10-7238	1.00000	941606	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/011510.b/043f4301.d	244599007	sample	15-JAN-2010	14:38	10-1210.sub	RE12-10-7242	1.00000	941606	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/011510.b/044f4401.d	244599008	sample	15-JAN-2010	14:51	10-1210.sub	RE12-10-7236	1.00000	941606	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/011510.b/045f4501.d	244599013	sample	15-JAN-2010	15:03	10-1210.sub	RE12-10-7276	1.00000	941606	UPLOAD BOTH COLUMNS, USE HIGHER

Front QC Sample Column

exclude	manual	datafile	sampleid	sampletype	injdte	injtme	sublist	clientid	dilution	prebatchid	comment
<input type="checkbox"/>	N	/chem/ecd1a.i/011510.b/021f2101-1.d	1202015394	mb	15-JAN-2010	10:09	10-1210.sub	PBLK01	1.00000	941606	
<input type="checkbox"/>	N	/chem/ecd1a.i/011510.b/022f2201-1.d	1202015395	lcs	15-JAN-2010	10:22	10-1210.sub	PBLK01LCS	1.00000	941606	

## Back QC Sample Column

exclude	manual	datafile	srmpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
<input type="checkbox"/>	N	/chem/ecd1a.i/011510.b/021b2101-1.d	1202015394	mb	15-JAN-2010	10:09	10-1210.sub	PBLK01	1.00000	941606	<input type="text"/>
<input type="checkbox"/>	N	/chem/ecd1a.i/011510.b/022b2201-1.d	1202015395	lcs	15-JAN-2010	10:22	10-1210.sub	PBLK01LCS	1.00000	941606	<input type="text"/>

# SAMPLE DATA SUMMARY



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

SDG Number: 10-1210  
Lab Sample ID: 244599008

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.I  
Analyst: YS1  
Aliquot: 30.01 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
%Moisture: 21.7  
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	4.25	ug/kg	1.42	4.25	1
11104-28-2	Aroclor-1221	U	4.25	ug/kg	1.42	4.25	1
11141-16-5	Aroclor-1232	U	4.25	ug/kg	1.42	4.25	1
53469-21-9	Aroclor-1242	U	4.25	ug/kg	1.42	4.25	1
12672-29-6	Aroclor-1248	U	4.25	ug/kg	1.42	4.25	1
11097-69-1	Aroclor-1254	U	4.25	ug/kg	1.42	4.25	1
11096-82-5	Aroclor-1260	U	4.25	ug/kg	1.42	4.25	1

## PCB

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## Certificate of Analysis

## Sample Summary

SDG Number: 10-1210  
Lab Sample ID: 244599004

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.I  
Analyst: YS1  
Aliquot: 30.13 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
%Moisture: 10.1  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE12-10-7237  
Batch ID: 941606  
Run Date: 01/15/2010 14:00  
Prep Date: 01/14/2010 19:23  
Data File: 040f4001.d  
040b4001.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.69	ug/kg	1.23	3.69	1
11104-28-2	Aroclor-1221	U	3.69	ug/kg	1.23	3.69	1
11141-16-5	Aroclor-1232	U	3.69	ug/kg	1.23	3.69	1
53469-21-9	Aroclor-1242	U	3.69	ug/kg	1.23	3.69	1
12672-29-6	Aroclor-1248	U	3.69	ug/kg	1.23	3.69	1
11097-69-1	Aroclor-1254	U	3.69	ug/kg	1.23	3.69	1
11096-82-5	Aroclor-1260	U	3.69	ug/kg	1.23	3.69	1

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

SDG Number: 10-1210  
Lab Sample ID: 244599006

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.I  
Analyst: YS1  
Aliquot: 30.03 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
%Moisture: 16.7  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.00	ug/kg	1.33	4.00	1
11104-28-2	Aroclor-1221	U	4.00	ug/kg	1.33	4.00	1
11141-16-5	Aroclor-1232	U	4.00	ug/kg	1.33	4.00	1
53469-21-9	Aroclor-1242	U	4.00	ug/kg	1.33	4.00	1
12672-29-6	Aroclor-1248	U	4.00	ug/kg	1.33	4.00	1
11097-69-1	Aroclor-1254	U	4.00	ug/kg	1.33	4.00	1
11096-82-5	Aroclor-1260	U	4.00	ug/kg	1.33	4.00	1

## PCB

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Certificate of Analysis  
Sample Summary

SDG Number: 10-1210

Lab Sample ID: 244599005

Client ID: RE12-10-7239

Batch ID: 941606

Run Date: 01/15/2010 14:13

Prep Date: 01/14/2010 19:23

Data File: 041f4101.d

041b4101.d

Date Collected: 01/07/2010 12:00

Date Received: 01/13/2010 08:55

Client: LANL010

Method: SW846 8082

Inst: ECD1A.I

Analyst: YS1

Aliquot: 30.14 g

Column: 1 CLP1

2 CLP2

Matrix: R

%Moisture: 9.3

Project: LANL01004

SOP Ref: GL-OA-E-040

Dilution: 1

Inj. Vol: 1 uL

Final Volume: 1 mL

Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.66	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**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-1210  
Lab Sample ID: 244599002

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.I  
Analyst: YS1  
Aliquot: 30.08 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
%Moisture: 13.5  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE12-10-7240  
Batch ID: 941606  
Run Date: 01/15/2010 13:35  
Prep Date: 01/14/2010 19:23  
Data File: 038f3801.d  
038b3801.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.84	ug/kg	1.28	3.84	1
11104-28-2	Aroclor-1221	U	3.84	ug/kg	1.28	3.84	1
11141-16-5	Aroclor-1232	U	3.84	ug/kg	1.28	3.84	1
53469-21-9	Aroclor-1242	U	3.84	ug/kg	1.28	3.84	1
12672-29-6	Aroclor-1248	U	3.84	ug/kg	1.28	3.84	1
11097-69-1	Aroclor-1254	U	3.84	ug/kg	1.28	3.84	1
11096-82-5	Aroclor-1260	U	3.84	ug/kg	1.28	3.84	1

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

SDG Number: 10-1210  
Lab Sample ID: 244599003

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.I  
Analyst: YS1  
Aliquot: 30.14 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
%Moisture: 9.4  
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	3.66	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**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-1210  
Lab Sample ID: 244599007

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.I  
Analyst: YS1  
Aliquot: 30.12 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
%Moisture: 16.3  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.97	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: 10-1210  
 Lab Sample ID: 244599001

Date Collected: 01/07/2010 12:00  
 Date Received: 01/13/2010 08:55

Matrix: R  
 % Moisture: 5.8  
 Project: LANL01004  
 SOP Ref: GL-OA-E-040  
 Dilution: 1  
 Inj. Vol: 1 uL  
 Final Volume: 1 mL  
 Level: LOW

Client ID: RE12-10-7243  
 Batch ID: 941606  
 Run Date: 01/15/2010 13:23  
 Prep Date: 01/14/2010 19:23  
 Data File: 037f3701.d  
 037b3701.d

Client: LANL010  
 Method: SW846 8082  
 Inst: ECD1A.I  
 Analyst: YS1  
 Aliquot: 30.03 g  
 Column: 1 CLP1  
 2 CLP2

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.54	ug/kg	1.18	3.54	1
11104-28-2	Aroclor-1221	U	3.54	ug/kg	1.18	3.54	1
11141-16-5	Aroclor-1232	U	3.54	ug/kg	1.18	3.54	1
53469-21-9	Aroclor-1242	U	3.54	ug/kg	1.18	3.54	1
12672-29-6	Aroclor-1248	U	3.54	ug/kg	1.18	3.54	1
11097-69-1	Aroclor-1254	U	3.54	ug/kg	1.18	3.54	1
11096-82-5	Aroclor-1260	U	3.54	ug/kg	1.18	3.54	1



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

Page 1 of 1

SDG Number: 10-1210  
Lab Sample ID: 244599013

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55

Matrix: R  
%Moisture: 8.4

Client ID: RE12-10-7276  
Batch ID: 941606

Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.I

Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1

Run Date: 01/15/2010 15:03

Analyst: YS1

Inj. Vol: 1 uL

Prep Date: 01/14/2010 19:23

Aliquot: 30.01 g

Final Volume: 1 mL

Data File: 045f4501.d  
045b4501.d

Column: 1 CLP1  
2 CLP2

Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.64	ug/kg	1.21	3.64	1
11104-28-2	Aroclor-1221	U	3.64	ug/kg	1.21	3.64	1
11141-16-5	Aroclor-1232	U	3.64	ug/kg	1.21	3.64	1
53469-21-9	Aroclor-1242	U	3.64	ug/kg	1.21	3.64	1
12672-29-6	Aroclor-1248	U	3.64	ug/kg	1.21	3.64	1
11097-69-1	Aroclor-1254	U	3.64	ug/kg	1.21	3.64	1
11096-82-5	Aroclor-1260	U	3.64	ug/kg	1.21	3.64	1

# QUALITY CONTROL SUMMARY

**PCB**  
**Surrogate Recovery Report**

Page 1 of 1

SDG Number: 10-1210

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 #
1202015394	MB for batch 941604	67	63	73	71
1202015395	LCS for batch 941604	59	54	62	61
244599001	RE12-10-7243	62	58	63	64
244599002	RE12-10-7240	66	59	69	68
244599003	RE12-10-7241	66	59	66	65
244599004	RE12-10-7237	62	58	61	62
244599005	RE12-10-7239	75	63	71	71
244599006	RE12-10-7238	63	57	64	63
244599007	RE12-10-7242	55	51	55	54
244599008	RE12-10-7236	62	57	51	59
244599013	RE12-10-7276	68	61	61	67

**Surrogate**

4CMX = 4cmx

DCB = Decachlorobiphenyl

**Acceptance Limits**

(34%-105%)

(33%-115%)

\* Recovery outside Acceptance Limits

# Column to be used to flag recovery values

D Sample Diluted

PCB

Page 1 of 1

Quality Control Summary  
Spike Recovery Report

SDG Number: 10-1210

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 941604

Matrix: SOIL

Lab Sample ID:1202015395

Instrument: ECD1A.I

Analysis Date: 01/15/2010 10:22

Dilution: 1

Analyst: YS1

Pre Batch II 941604

Inj. Vol: 1 uL

Batch ID: 941606

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	19.7	59	41-110
11096-82-5	LCS Aroclor-1260	33.3	0.0	22.9	69	48-110

PCB

Page 1 of 2

Quality Control Summary  
Spike Recovery Report

SDG Number: 10-1186

Sample Type: Matrix Spike

Client ID: RE46-10-10026MS

Matrix: S

Lab Sample ID:1202015396

%Moisture: 8.7

Instrument: ECD1A.I

Analysis Date: 01/15/2010 11:00

Dilution: 5

Analyst: YS1

Prep Batch ID: 941604

Inj. Vol: 1 uL

Batch ID: 941606

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
12674-11-2	MS Aroclor-1016	36.4	0.00 U	28.1	77	23-117
11096-82-5	MS Aroclor-1260	36.4	45.5	80.8	97	27-116

PCB

Page 2 of 2

Quality Control Summary  
Spike Recovery Report

SDG Number: 10-1186

Client ID: RE46-10-10026MSD

Lab Sample ID:1202015397

Instrument: ECD1A.I

Analyst: YS1

Inj. Vol: 1 uL

Sample Type: Matrix Spike Duplicate

Matrix: S

%Moisture: 8.7

Analysis Date: 01/15/2010 11:12

Dilution: 5

Prep Batch ID: 941604

Batch ID: 941606

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	36.4	0.00 U	30.8	85	23-117	9	0-30
11096-82-5	MSD Aroclor-1260	36.4	45.5	93.3	131 *	27-116	14	0-30

## Method Blank Summary

Page 1 of 1

SDG Number:	10-1210	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 941604	Instrument ID:	ECD1A.I_2	Data File:	021b2101-1.d
Lab Sample ID:	1202015394		ECD1A.I_1		021f2101-1.d
Column:	CLP2	Prep Date:	01/14/2010 19:23	Analyzed:	01/15/10 10:09
	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 941604	1202015395	022f2201-1.d 022b2201-1.d	01/15/10	1022
04 RE12-10-7243	244599001	037f3701.d 037b3701.d	01/15/10	1323
05 RE12-10-7240	244599002	038f3801.d 038b3801.d	01/15/10	1335
06 RE12-10-7241	244599003	039f3901.d 039b3901.d	01/15/10	1348
07 RE12-10-7237	244599004	040f4001.d 040b4001.d	01/15/10	1400
08 RE12-10-7239	244599005	041f4101.d 041b4101.d	01/15/10	1413
09 RE12-10-7238	244599006	042f4201.d 042b4201.d	01/15/10	1425
10 RE12-10-7242	244599007	043f4301.d 043b4301.d	01/15/10	1438
11 RE12-10-7236	244599008	044f4401.d 044b4401.d	01/15/10	1451
12 RE12-10-7276	244599013	045f4501.d 045b4501.d	01/15/10	1503

# SAMPLE DATA



## PCB

Page 1 of 1

## Certificate of Analysis

## Sample Summary

SDG Number: 10-1210  
Lab Sample ID: 244599008

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.J  
Analyst: YS1  
Aliquot: 30.01 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
%Moisture: 21.7  
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	4.25	ug/kg	1.42	4.25	1
11104-28-2	Aroclor-1221	U	4.25	ug/kg	1.42	4.25	1
11141-16-5	Aroclor-1232	U	4.25	ug/kg	1.42	4.25	1
53469-21-9	Aroclor-1242	U	4.25	ug/kg	1.42	4.25	1
12672-29-6	Aroclor-1248	U	4.25	ug/kg	1.42	4.25	1
11097-69-1	Aroclor-1254	U	4.25	ug/kg	1.42	4.25	1
11096-82-5	Aroclor-1260	U	4.25	ug/kg	1.42	4.25	1

Data File: /chem/ecdl1a.i/011510.b/044f4401.d  
Report Date: 23-Jan-2010 12:15

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011510.b/044f4401.d  
Lab Smp Id: 244599008 Client Smp ID: RE12-10-7236  
Inj Date : 15-JAN-2010 14:51  
Operator : YS1 Inst ID: ecd1a.i  
Smp Info : |244599008|1|  
Misc Info : |ECD82P\_1S|941606|SVA|LANL|SOIL|RE12-10-7236|||  
Comment :  
Method : /chem/ecdl1a.i/011510.b/ECD1-F-8082-121409.m  
Meth Date : 23-Jan-2010 12:12 yip00818 Quant Type: ESTD  
Cal Date : 14-DEC-2009 11:34 Cal File: 040f4001.d  
Als bottle: 44  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1210.sub  
Target Version: 3.50 Sample Matrix: Soil  
Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.01000	Weight of sample extracted (g)
M	21.66640	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS

ON-COL FINAL

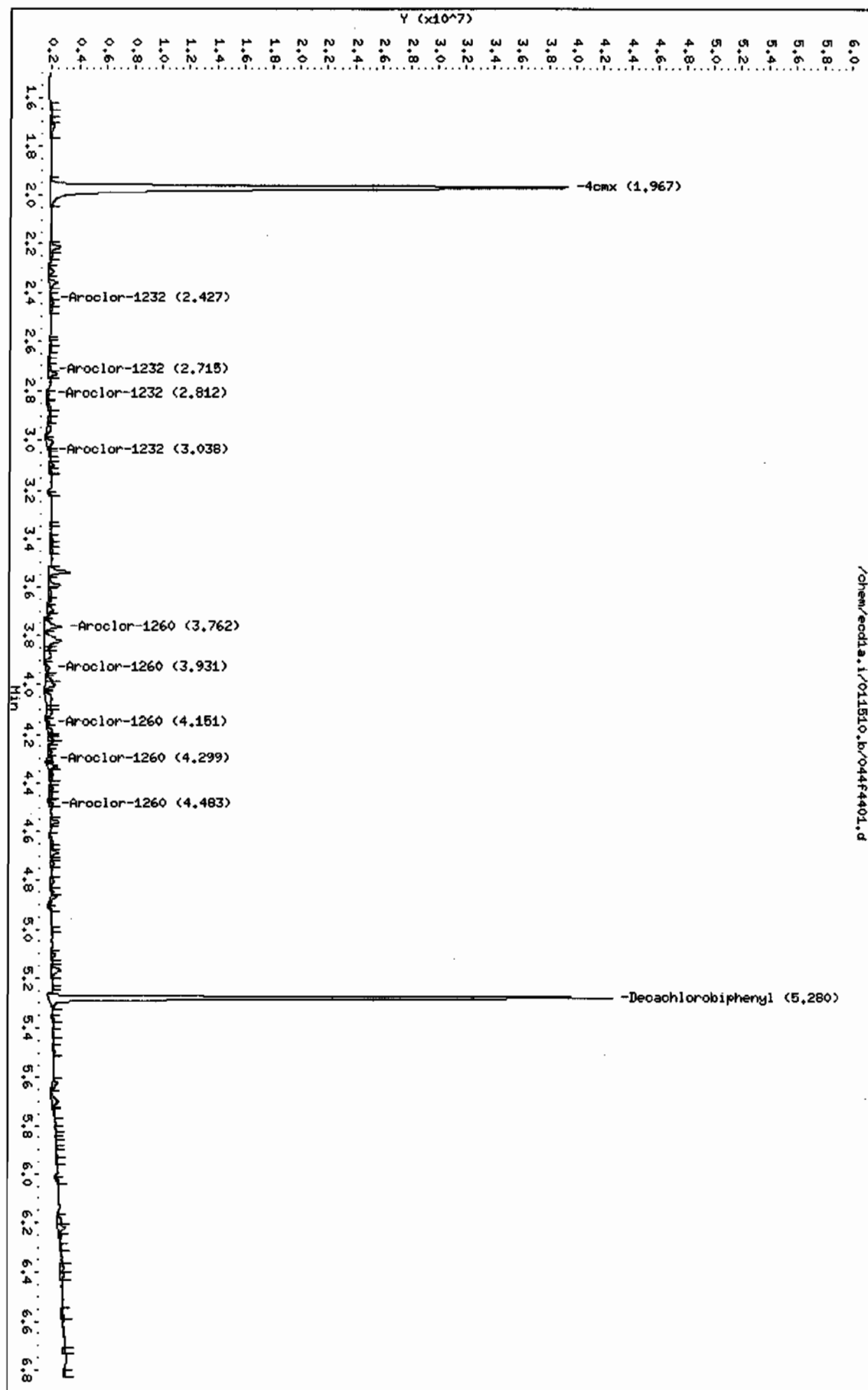
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
----	--------	--------	------------------	---------	--------------	-------

\$ 11 4cmx				CAS #: 877-09-8		
1.967	1.969	-0.002	44587703 124.727	5.3	80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3		
5.280	5.281	-0.001	30837906 102.109	4.3	80.00- 120.00	100.00

Data File: /chem/eod1a.i/011510.b/044f4401.d  
Date: 15-JUN-2010 14:51  
Client ID: RE12-10-7236  
Sample Info: 1245900811  
Volume Injected (uL): 1.0  
Column phase: CLP4

Instrument: eod1a.i  
Operator: YSL  
Column diameter: 0.25



Data File: /chem/ecdla.i/011510.b/044b4401.d  
Report Date: 23-Jan-2010 12:15

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/011510.b/044b4401.d  
Lab Smp Id: 244599008 Client Smp ID: RE12-10-7236  
Inj Date : 15-JAN-2010 14:51  
Operator : YS1 Inst ID: ecdla.i  
Smp Info : |244599008|1|  
Misc Info : |ECD82P\_1S|941606|SVA|LANL|SOIL|RE12-10-7236|||  
Comment :  
Method : /chem/ecdla.i/011510.b/ECD1-B-8082-121409.m  
Meth Date : 23-Jan-2010 12:12 yip00818 Quant Type: ESTD  
Cal Date : 14-DEC-2009 12:16 Cal File: 044b4401.d  
Als bottle: 44  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1210.sub  
Target Version: 3.50 Sample Matrix: Soil  
Processing Host: hpclp1

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

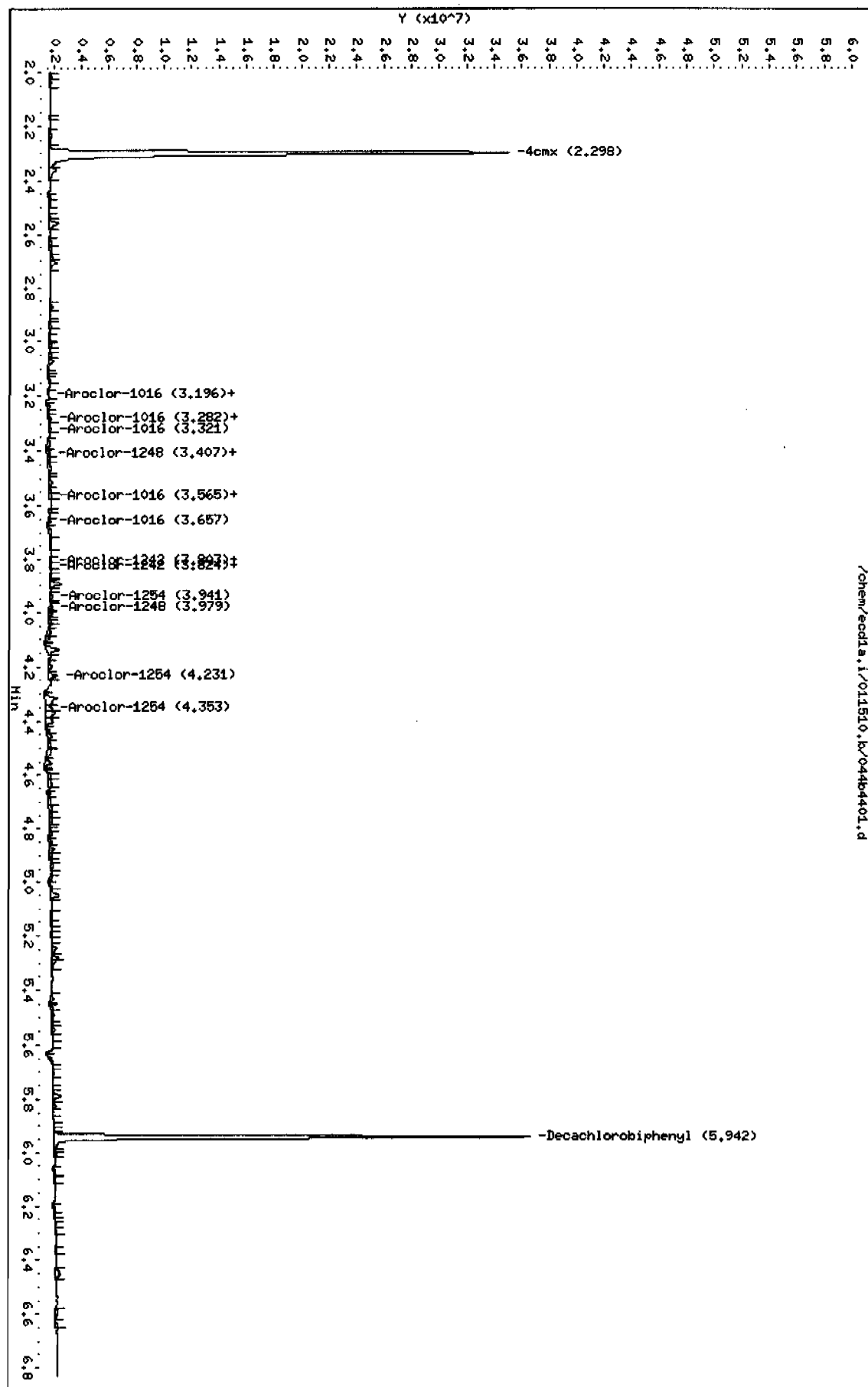
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.01000	Weight of sample extracted (g)
M	21.66640	% Moisture

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	32610516	114.287	4.9 80.00- 120.00	100.00	
-----							
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.942	5.944	-0.002	26370852	118.902	5.0 80.00- 120.00	100.00	
-----							

Data File: /chem/eod1a.i/01510.k/044b4401.d  
Date : 15-JAN-2010 14:51  
Client ID: RE12-10-7236  
Sample Info: 1245900811  
Volume Injected (uL): 1.0  
Column phase: CLP2

Instrument: eod1a.i  
Operator: YSI  
Column diameter: 0.25



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

SDG Number: 10-1210  
Lab Sample ID: 244599004

Client ID: RE12-10-7237  
Batch ID: 941606  
Run Date: 01/15/2010 14:00  
Prep Date: 01/14/2010 19:23  
Data File: 040f4001.d  
040b4001.d

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.I  
Analyst: YS1  
Aliquot: 30.13 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
%Moisture: 10.1  
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	3.69	ug/kg	1.23	3.69	1
11104-28-2	Aroclor-1221	U	3.69	ug/kg	1.23	3.69	1
11141-16-5	Aroclor-1232	U	3.69	ug/kg	1.23	3.69	1
53469-21-9	Aroclor-1242	U	3.69	ug/kg	1.23	3.69	1
12672-29-6	Aroclor-1248	U	3.69	ug/kg	1.23	3.69	1
11097-69-1	Aroclor-1254	U	3.69	ug/kg	1.23	3.69	1
11096-82-5	Aroclor-1260	U	3.69	ug/kg	1.23	3.69	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/011510.b/040f4001.d  
Lab Smp Id: 244599004 Client Smp ID: RE12-10-7237  
Inj Date : 15-JAN-2010 14:00  
Operator : YS1 Inst ID: ecdla.i  
Smp Info : |244599004|1|  
Misc Info : |ECD82P\_1S|941606|SVA|LANL|SOIL|RE12-10-7237|||  
Comment :  
Method : /chem/ecdla.i/011510.b/ECD1-F-8082-121409.m  
Meth Date : 23-Jan-2010 12:12 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: 10-1210.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	30.13000	Weight of sample extracted (g)
M	10.12260	% 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	44142202	123.481	4.6 80.00- 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl CAS #: 2051-24-3						
5.279	5.281	-0.002	37018694	122.574	4.5 80.00- 120.00	100.00
-----						

Data File: /chem/eodla.i/011510.b/040f4001.d

Date: 15-JUN-2010 14:00

Client ID: RE12-10-7237

Sample Info: 124459004111

Volume Injected (uL): 1.0

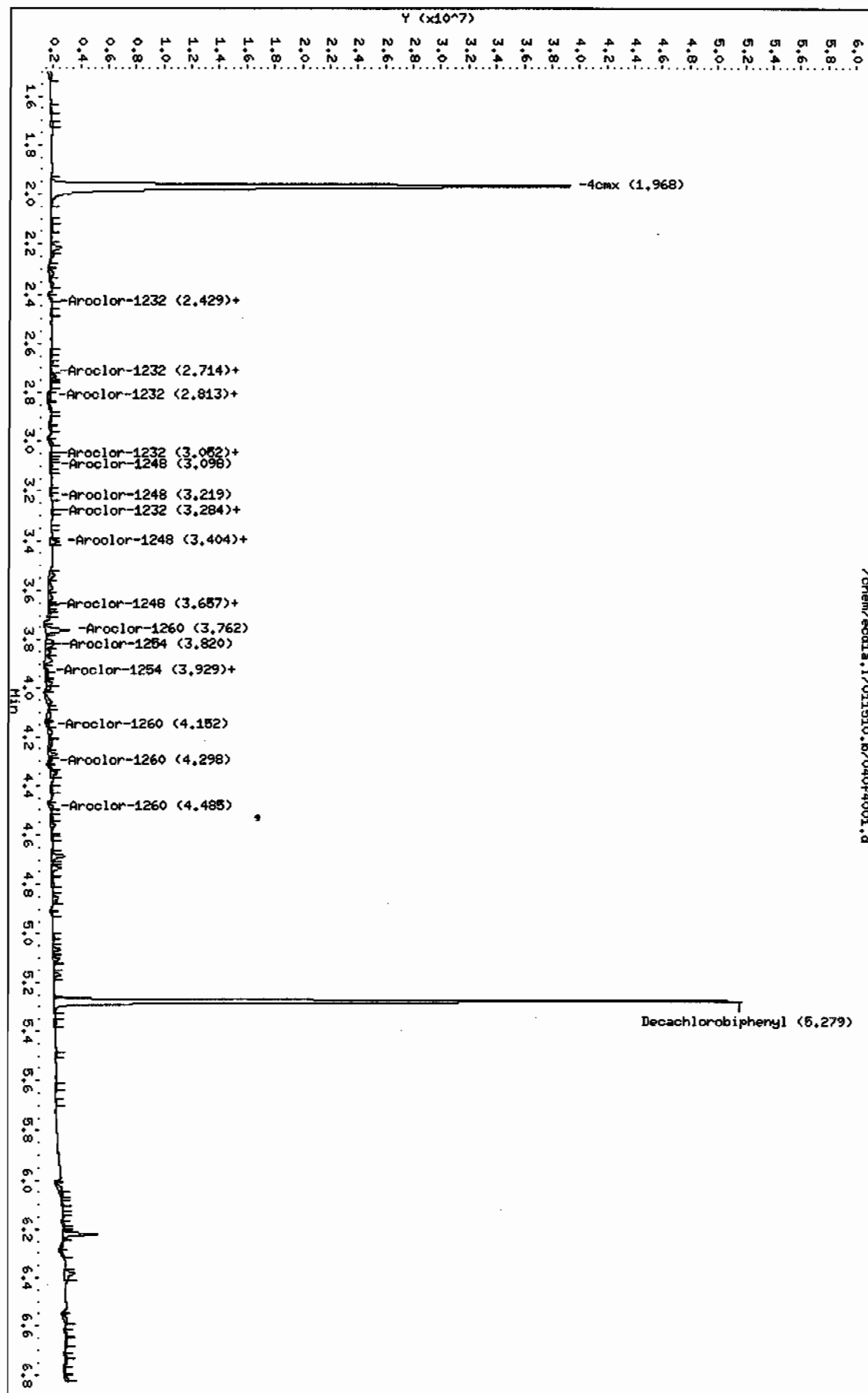
Column phase: CLP1

Instrument: eodla.i

Operator: YSL

Column diameter: 0.25

/chem/eodla.i/011510.b/040f4001.d





Data File: /chem/ecdla.i/011510.b/040b4001.d  
Report Date: 23-Jan-2010 12:14

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/011510.b/040b4001.d

Lab Smp Id: 244599004

Client Smp ID: RE12-10-7237

Inj Date : 15-JAN-2010 14:00

Operator : YSl

Inst ID: ecdla.i

Smp Info : |244599004|1|

Misc Info : |ECD82P\_1S|941606|SVA|LANL|SOIL|RE12-10-7237|

Comment :

Method : /chem/ecdla.i/011510.b/ECD1-B-8082-121409.m

Meth Date : 23-Jan-2010 12:12 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: 10-1210.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	30.13000	Weight of sample extracted (g)
M	10.12260	% Moisture

Cpnd Variable

Local Compound Variable

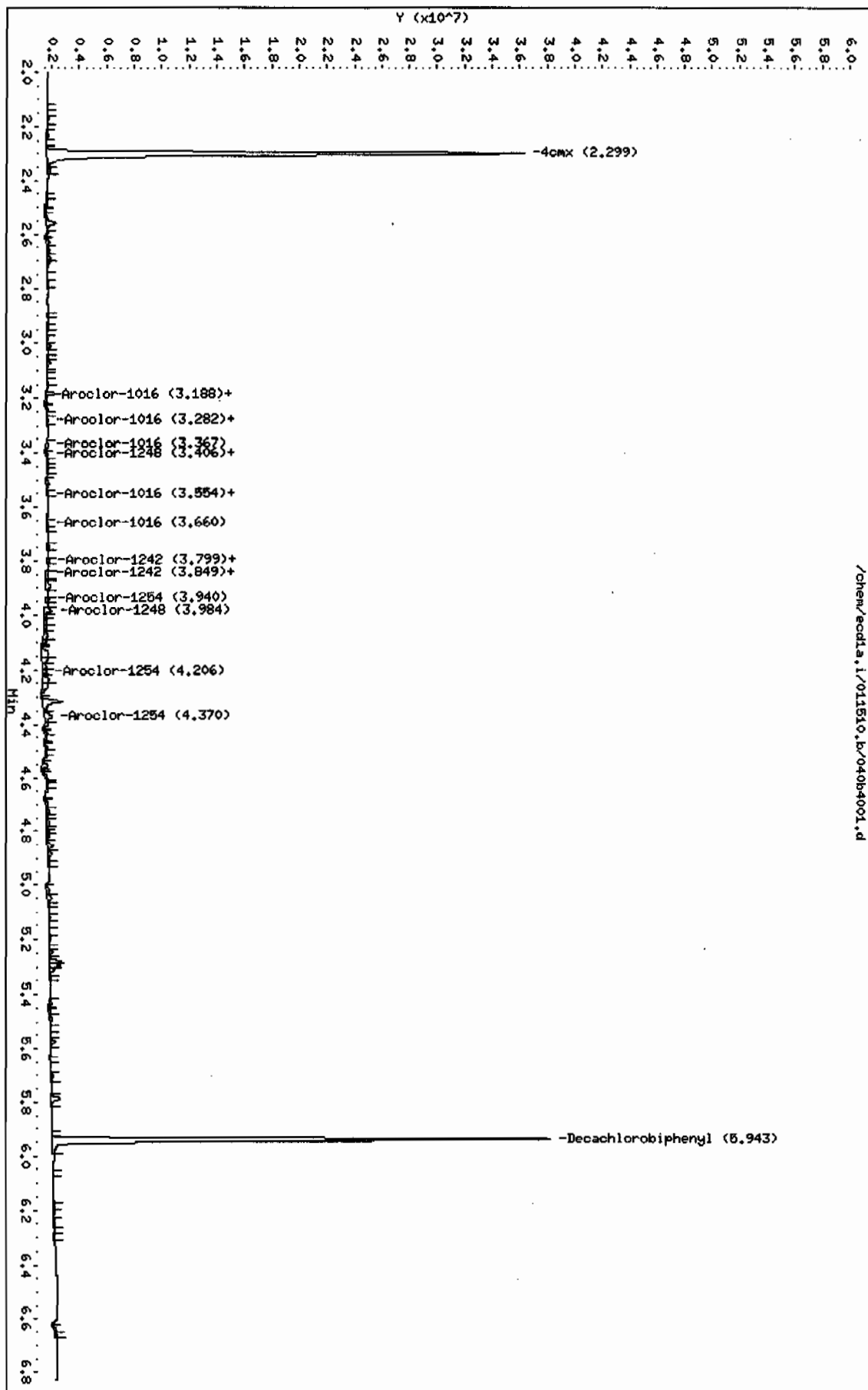
CONCENTRATIONS

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	32882507	115.240	4.2	80.00- 120.00	100.00	
\$ 12 Decachlorobiphenyl							CAS #: 2051-24-3	
5.943	5.944	-0.001	27619364	124.531	4.6	80.00- 120.00	100.00	

Data File: /chem/ecdia.i/011510.b/040b4001.d  
Date: 15-JAN-2010 14:00  
Client ID: RE12-10-7237  
Sample Info: 12459900411  
Volume Injected (uL): 1.0  
Column phase: CLP2

Instrument: ecdia.i  
Operator: YSL  
Column diameter: 0.25

/chem/ecdia.i/011510.b/040b4001.d



## PCB

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## Certificate of Analysis

## Sample Summary

SDG Number: 10-1210  
Lab Sample ID: 244599006

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.I  
Analyst: YS1  
Aliquot: 30.03 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
%Moisture: 16.7  
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	4.00	ug/kg	1.33	4.00	1
11104-28-2	Aroclor-1221	U	4.00	ug/kg	1.33	4.00	1
11141-16-5	Aroclor-1232	U	4.00	ug/kg	1.33	4.00	1
53469-21-9	Aroclor-1242	U	4.00	ug/kg	1.33	4.00	1
12672-29-6	Aroclor-1248	U	4.00	ug/kg	1.33	4.00	1
11097-69-1	Aroclor-1254	U	4.00	ug/kg	1.33	4.00	1
11096-82-5	Aroclor-1260	U	4.00	ug/kg	1.33	4.00	1

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RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/011510.b/042f4201.d  
 Lab Smp Id: 244599006 Client Smp ID: RE12-10-7238  
 Inj Date : 15-JAN-2010 14:25  
 Operator : YS1 Inst ID: ecd1a.i  
 Smp Info : |244599006|1|  
 Misc Info : |ECD82P\_1S|941606|SVA|LANL|SOIL|RE12-10-7238|||  
 Comment :  
 Method : /chem/ecd1a.i/011510.b/ECD1-F-8082-121409.m  
 Meth Date : 23-Jan-2010 12:12 yip00818 Quant Type: ESTD  
 Cal Date : 14-DEC-2009 11:34 Cal File: 040f4001.d  
 Als bottle: 42  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: 10-1210.sub  
 Target Version: 3.50 Sample Matrix: Soil  
 Processing Host: hpc1pl

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

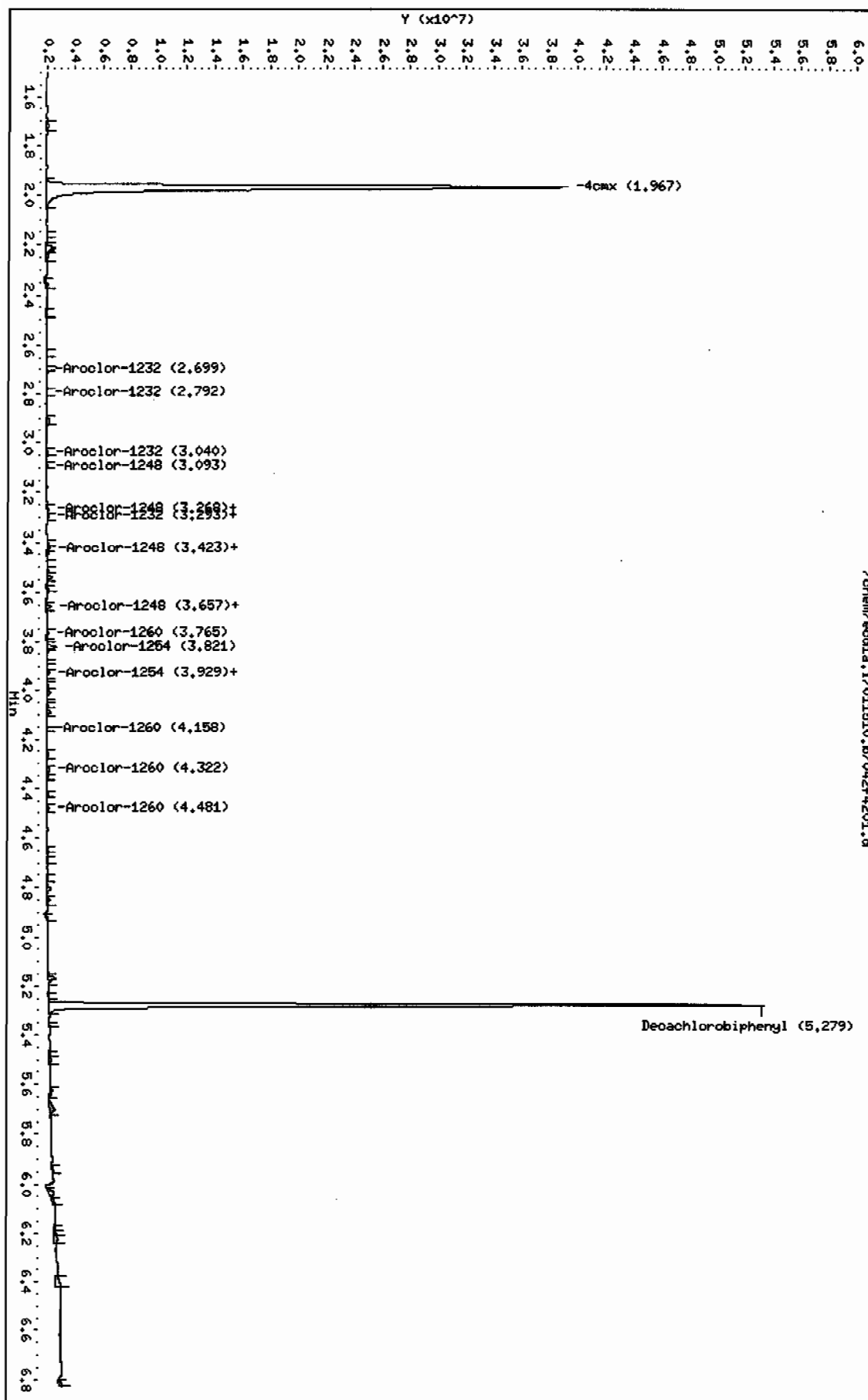
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.03000	Weight of sample extracted (g)
M	16.67800	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS						
		ON-COL	FINAL			
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
11	4cmx					
1.967	1.969	-0.002	44788778	125.289	5.0 80.00- 120.00	100.00
12	Decachlorobiphenyl					
5.279	5.281	-0.002	38873008	128.714	5.1 80.00- 120.00	100.00

Data File: /chem/eodla.i/011510.b/042f4201.d  
 Date: 15-JAN-2010 14:25  
 Client ID: RE12-10-7238  
 Sample Info: 12445900611  
 Volume Injected (uL): 1.0  
 Column phase: CLP1

Instrument: eodla.i  
 Operator: YSL  
 Column diameter: 0.25



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RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL  
Data file : /chem/ecdla.i/011510.b/042b4201.d  
Lab Smp Id: 244599006 Client Smp ID: RE12-10-7238  
Inj Date : 15-JAN-2010 14:25  
Operator : YS1 Inst ID: ecdla.i  
Smp Info : |244599006|1|  
Misc Info : |ECD82P\_1S|941606|SVA|LANL|SOIL|RE12-10-7238|||  
Comment :  
Method : /chem/ecdla.i/011510.b/ECD1-B-8082-121409.m  
Meth Date : 23-Jan-2010 12:12 yip00818 Quant Type: ESTD  
Cal Date : 14-DEC-2009 12:16 Cal File: 044b4401.d  
Als bottle: 42  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1210.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	16.67800	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS							
			ON-COL	FINAL			
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
<hr/>							
\$ 11 4cmx					CAS #: 877-09-8		
2.298	2.299	-0.001	32649852 114.424	4.6	80.00- 120.00	100.00	
<hr/>							
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.942	5.944	-0.002	27897305 125.784	5.0	80.00- 120.00	100.00	
<hr/>							

Data File: /chem/ecdl.a.i/011510.b/042b4201.d

Date: 15-JAN-2010 14:25

Client ID: RE12-10-7238

Sample Info: 12445900611

Volume Injected (uL): 1.0

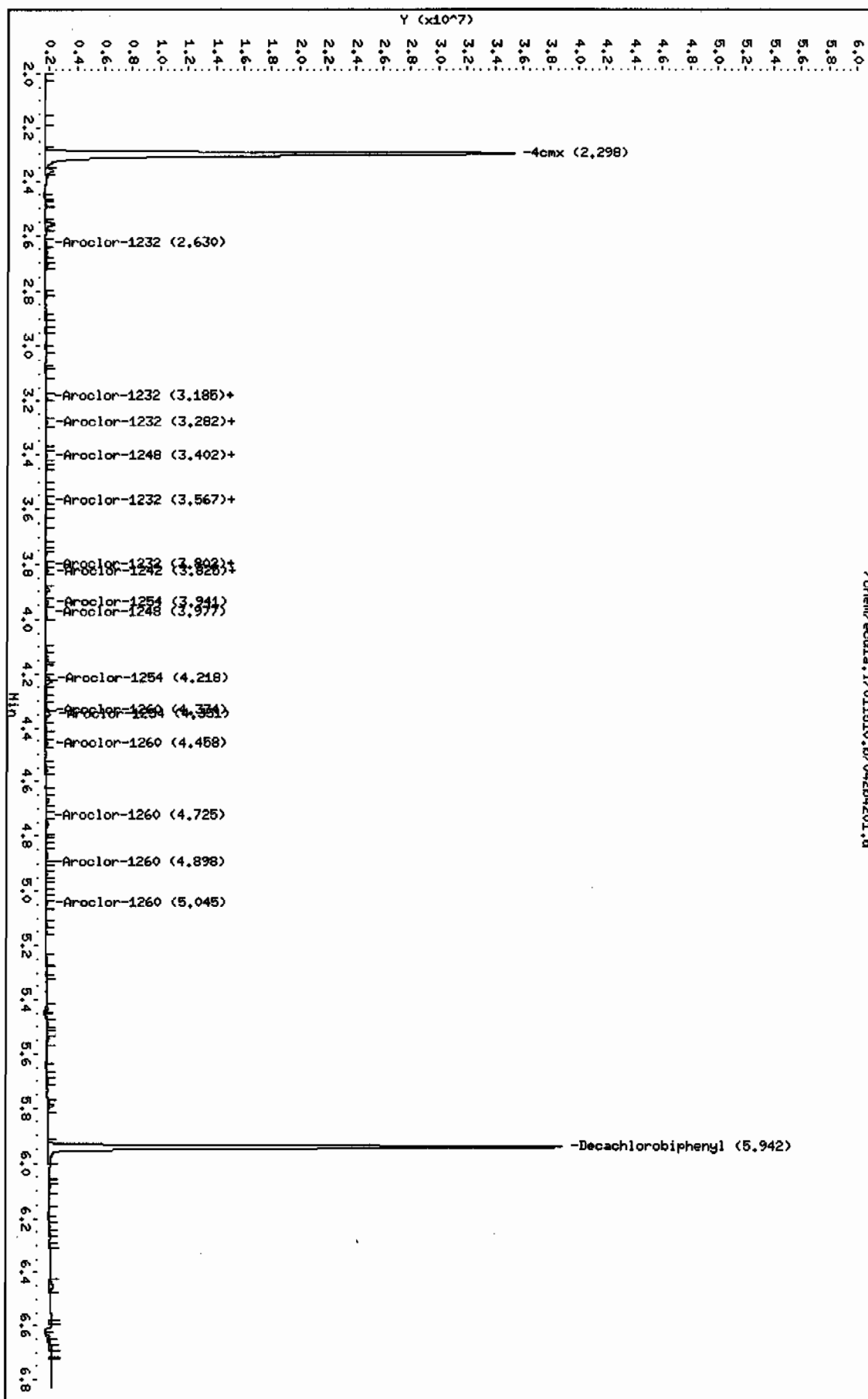
Column phase: CLP2

Instrument: ecdl.a.i

Operator: YSL

Column diameter: 0.25

/chem/ecdl.a.i/011510.b/042b4201.d



## PCB

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Certificate of Analysis  
Sample SummarySDG Number: 10-1210  
Lab Sample ID: 244599005Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.I  
Analyst: YS1  
Aliquot: 30.14 g  
Column: 1 CLP1  
2 CLP2Matrix: R  
%Moisture: 9.3  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.66	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/ecdla.i/011510.b/041f4101.d  
Report Date: 23-Jan-2010 12:14

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/011510.b/041f4101.d  
Lab Smp Id: 244599005 Client Smp ID: RE12-10-7239  
Inj Date : 15-JAN-2010 14:13  
Operator : YS1 Inst ID: ecdla.i  
Smp Info : |244599005|1|  
Misc Info : |ECD82P\_1S|941606|SVA|LANL|SOIL|RE12-10-7239|||  
Comment :  
Method : /chem/ecdla.i/011510.b/ECD1-F-8082-121409.m  
Meth Date : 23-Jan-2010 12:12 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: 10-1210.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	30.14000	Weight of sample extracted (g)
M	9.32420	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS

RT	EXP RT	DLT RT	ON-COL	FINAL	TARGET RANGE	RATIO
			RESPONSE ( ug/L)	(ug/Kg)		
\$ 11 4cmx				CAS #: 877-09-8		
1.968	1.969	-0.001	53480440 149.603	5.5	80.00- 120.00	100.00
\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3		
5.279	5.281	-0.002	43048301 142.539	5.2	80.00- 120.00	100.00

Data File: /chem/eod1a.i/011510.b/041f4101.d

Date: 15-JAN-2010 14:13

Client ID: REL2-10-7239

Sample Info: 124899005111

Volume Injected (uL): 1.0

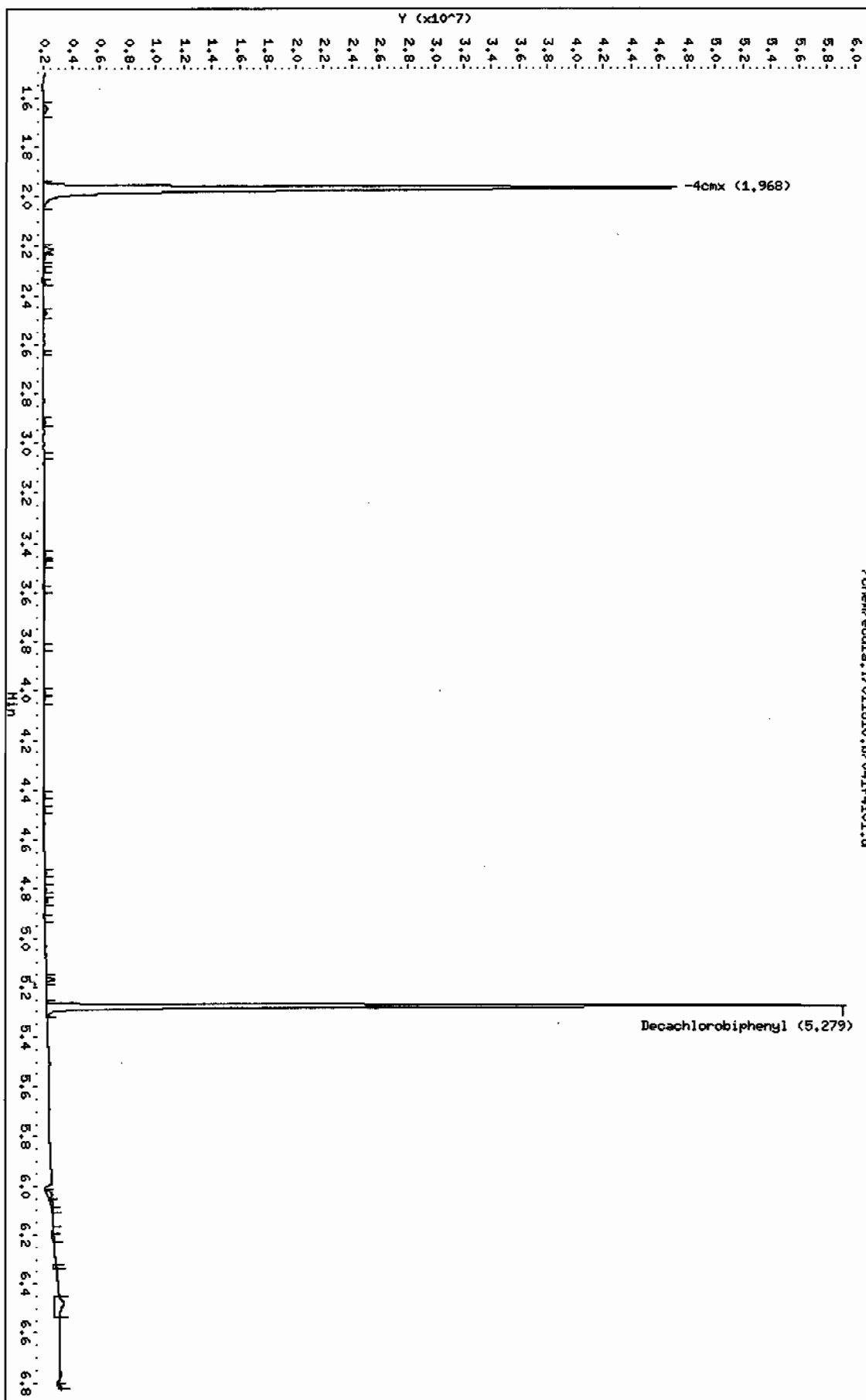
Column phase: CLP1

Instrument: eod1a.i

Operator: YSL

Column diameter: 0.25

/chem/eod1a.i/011510.b/041f4101.d



Data File: /chem/ecdla.i/011510.b/041b4101.d  
Report Date: 23-Jan-2010 12:14

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RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL  
Data file : /chem/ecdla.i/011510.b/041b4101.d  
Lab Smp Id: 244599005 Client Smp ID: RE12-10-7239  
Inj Date : 15-JAN-2010 14:13  
Operator : YS1 Inst ID: ecdla.i  
Smp Info : |244599005|1|  
Misc Info : |ECD82P\_1S|941606|SVA|LANL|SOIL|RE12-10-7239|||  
Comment :  
Method : /chem/ecdla.i/011510.b/ECD1-B-8082-121409.m  
Meth Date : 23-Jan-2010 12:12 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: 10-1210.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	30.14000	Weight of sample extracted (g)
M	9.32420	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS							
			ON-COL	FINAL			
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
<hr/>							
\$ 11 4cmx				CAS #: 877-09-8			
2.298	2.299	-0.001	35987327 126.121	4.6	80.00- 120.00	100.00	
<hr/>							
\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3			
5.942	5.944	-0.002	31277960 141.027	5.2	80.00- 120.00	100.00	
<hr/>							

Data File: /chem/eodla.i/011510.b/041b4101.d

Date: 15-JUN-2010 14:13

Client ID: RE12-10-7239

Sample Info: 124459908111

Volume Injected (uL): 1.0

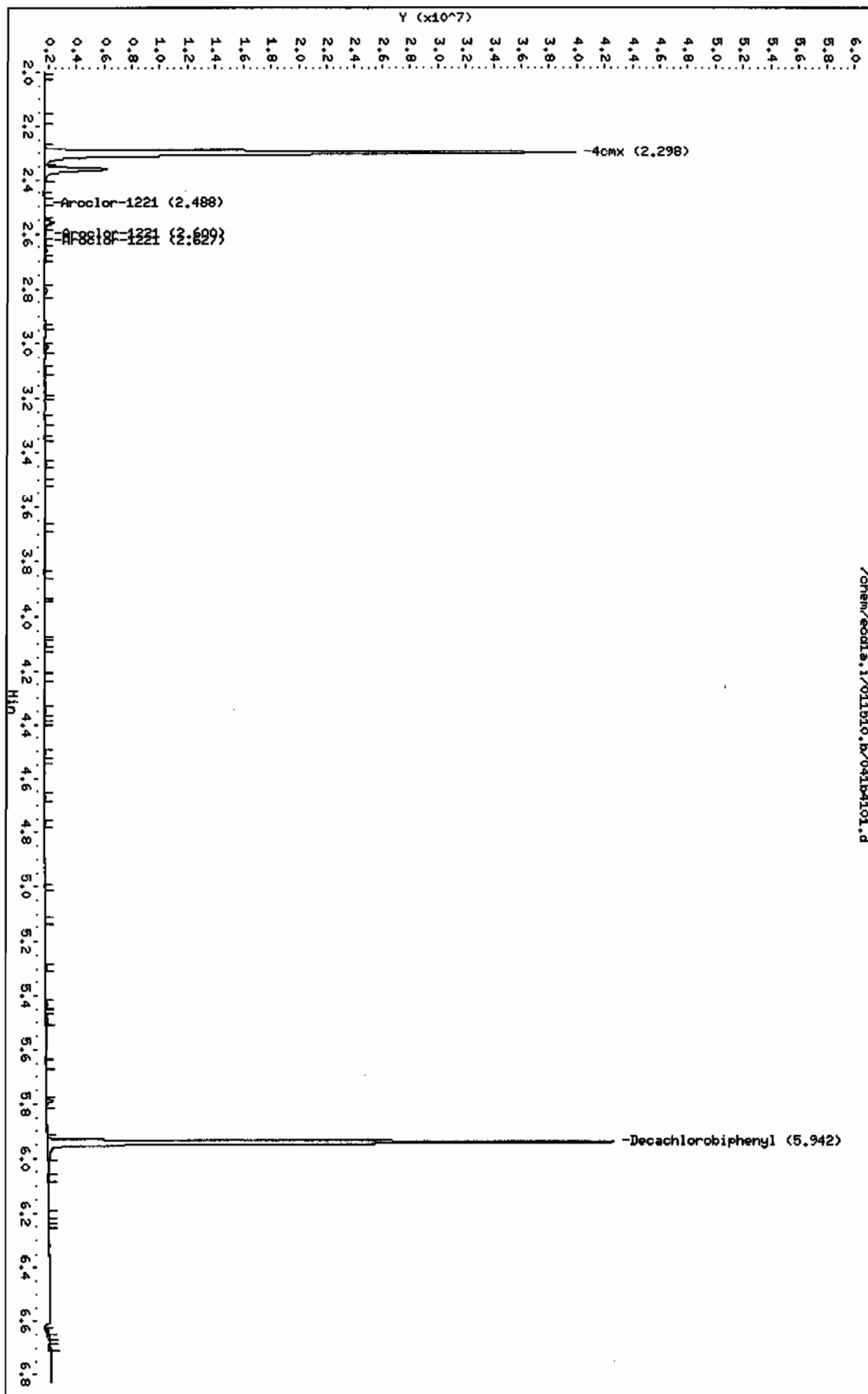
Column phase: CLP2

Instrument: eodla.i

Operator: YSL

Column diameter: 0.25

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

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SDG Number: 10-1210  
Lab Sample ID: 244599002

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.I  
Analyst: YS1  
Aliquot: 30.08 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
%Moisture: 13.5  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE12-10-7240  
Batch ID: 941606  
Run Date: 01/15/2010 13:35  
Prep Date: 01/14/2010 19:23  
Data File: 038f3801.d  
038b3801.d

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.84	ug/kg	1.28	3.84	1
11104-28-2	Aroclor-1221	U	3.84	ug/kg	1.28	3.84	1
11141-16-5	Aroclor-1232	U	3.84	ug/kg	1.28	3.84	1
53469-21-9	Aroclor-1242	U	3.84	ug/kg	1.28	3.84	1
12672-29-6	Aroclor-1248	U	3.84	ug/kg	1.28	3.84	1
11097-69-1	Aroclor-1254	U	3.84	ug/kg	1.28	3.84	1
11096-82-5	Aroclor-1260	U	3.84	ug/kg	1.28	3.84	1

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RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011510.b/038f3801.d  
 Lab Smp Id: 244599002 Client Smp ID: RE12-10-7240  
 Inj Date : 15-JAN-2010 13:35  
 Operator : YS1 Inst ID: ecd1a.i  
 Smp Info : |244599002|1|  
 Misc Info : |ECD82P\_1S|941606|SVA|LANL|SOIL|RE12-10-7240|||  
 Comment :  
 Method : /chem/ecdl1a.i/011510.b/ECD1-F-8082-121409.m  
 Meth Date : 23-Jan-2010 12:12 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: 10-1210.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	13.51980	% Moisture

Cpnd Variable Local Compound Variable

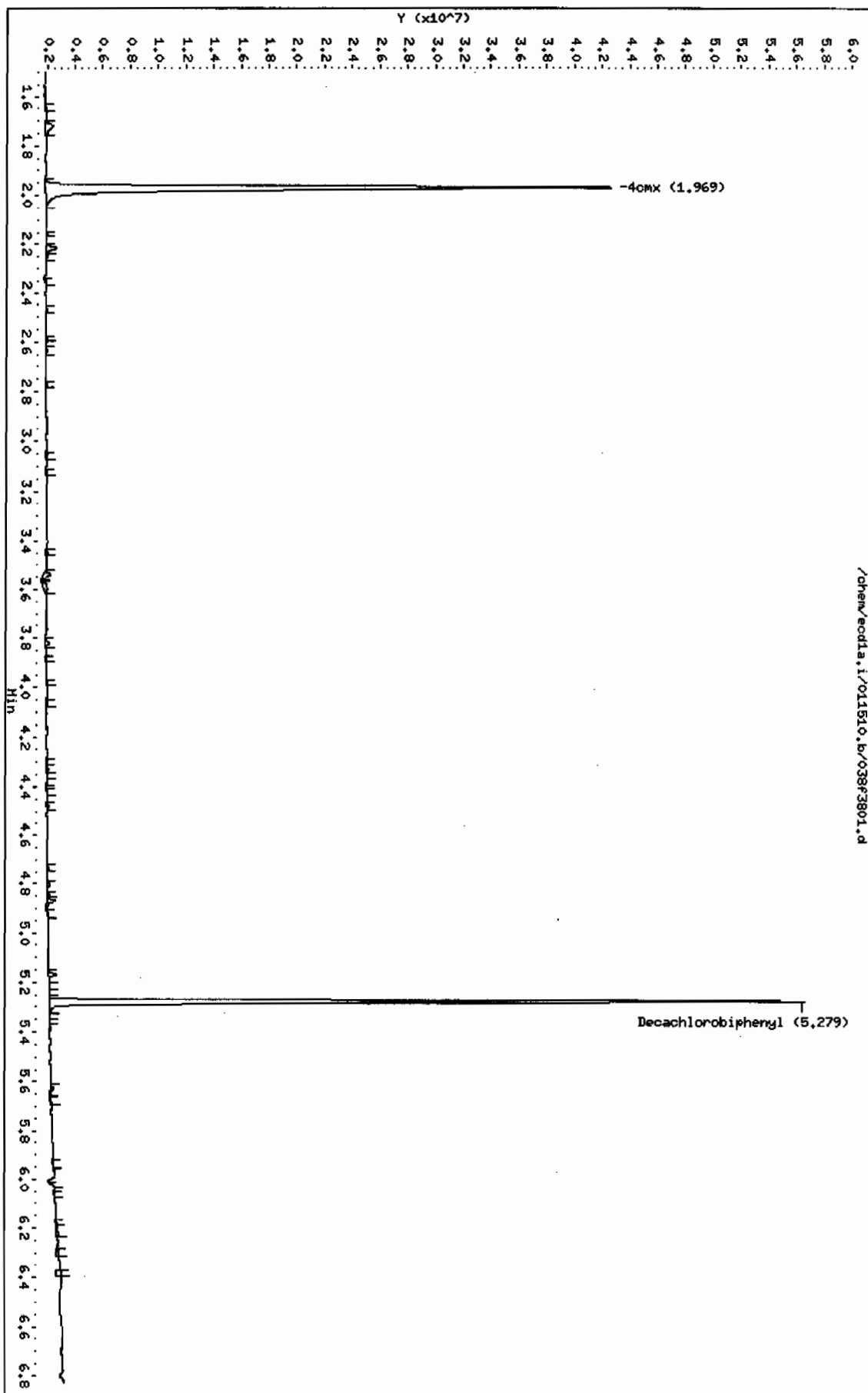
CONCENTRATIONS

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	47503436 132.883	5.1	80.00- 120.00	100.00	
-----							
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.279	5.281	-0.002	41776786 138.329	5.3	80.00- 120.00	100.00	
-----							

Data File: /chem/ecdia.i/011510.b/038f3801.d  
Date: 15-JUN-2010 13:35  
Client ID: RE12-10-7240  
Sample Info: 12469900211  
Volume Injected (uL): 1.0  
Column phase: CLP1

Instrument: ecdia.i  
Operator: YS1  
Column diameter: 0.25

/chem/ecdia.i/011510.b/038f3801.d



Data File: /chem/ecdla.i/011510.b/038b3801.d  
Report Date: 23-Jan-2010 12:13

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/011510.b/038b3801.d  
Lab Smp Id: 244599002 Client Smp ID: RE12-10-7240  
Inj Date : 15-JAN-2010 13:35  
Operator : YS1 Inst ID: ecdla.i  
Smp Info : |244599002|1|  
Misc Info : |ECD82P\_1S|941606|SVA|LANL|SOIL|RE12-10-7240|||  
Comment :  
Method : /chem/ecdla.i/011510.b/ECD1-B-8082-121409.m  
Meth Date : 23-Jan-2010 12:12 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: 10-1210.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	13.51980	% Moisture

Cpnd Variable Local Compound Variable

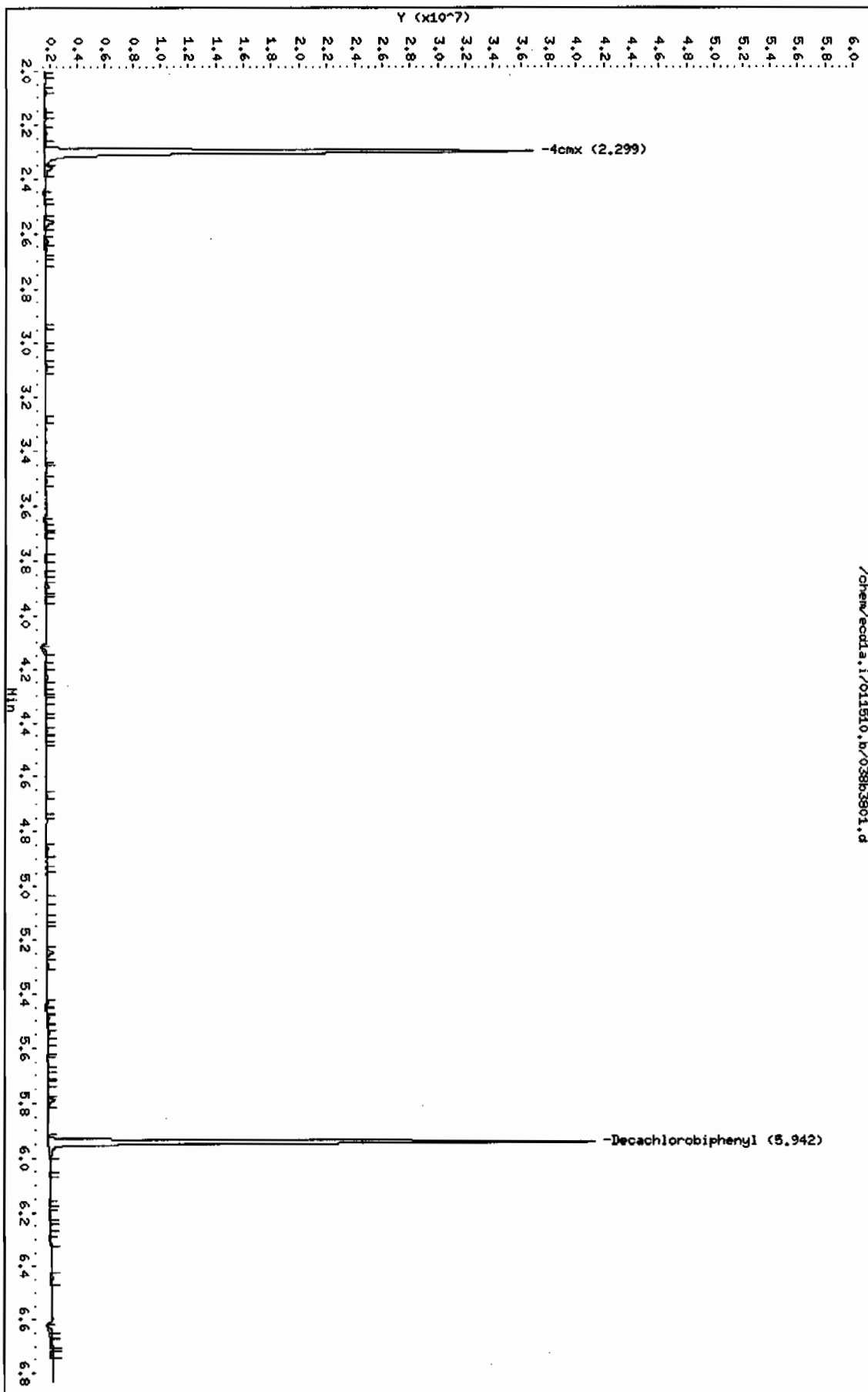
CONCENTRATIONS						
			ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
<hr/>						
\$ 11 4cmx					CAS #: 877-09-8	
2.299	2.299	0.000	33844172	118.610	4.6 80.00- 120.00	100.00
<hr/>						
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3	
5.942	5.944	-0.002	30291471	136.579	5.2 80.00- 120.00	100.00
<hr/>						



Data File: /chem/ecdl.a.i/011510.b/038b3801.d  
Date: 15-JUN-2010 13:35  
Client ID: REL2-10-7240  
Sample Info: 124459002111  
Volume Injected (uL): 1.0  
Column phase: CLP2

Instrument: ecdl.a.i  
Operator: YSL  
Column diameter: 0.25

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

SDG Number: 10-1210  
Lab Sample ID: 244599003

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.J  
Analyst: YS1  
Aliquot: 30.14 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
% Moisture: 9.4  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE12-10-7241  
Batch ID: 941606  
Run Date: 01/15/2010 13:48  
Prep Date: 01/14/2010 19:23  
Data File: 039f3901.d  
039b3901.d

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/ecdl1a.i/011510.b/039f3901.d  
Report Date: 23-Jan-2010 12:13

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RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011510.b/039f3901.d  
Lab Smp Id: 244599003 Client Smp ID: RE12-10-7241  
Inj Date : 15-JAN-2010 13:48  
Operator : YS1 Inst ID: ecd1a.i  
Smp Info : |244599003|1|  
Misc Info : |ECD82P\_1S|941606|SVA|LANL|SOIL|RE12-10-7241|||  
Comment :  
Method : /chem/ecdl1a.i/011510.b/ECD1-F-8082-121409.m  
Meth Date : 23-Jan-2010 12:12 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: 10-1210.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	30.14000	Weight of sample extracted (g)
M	9.36530	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS

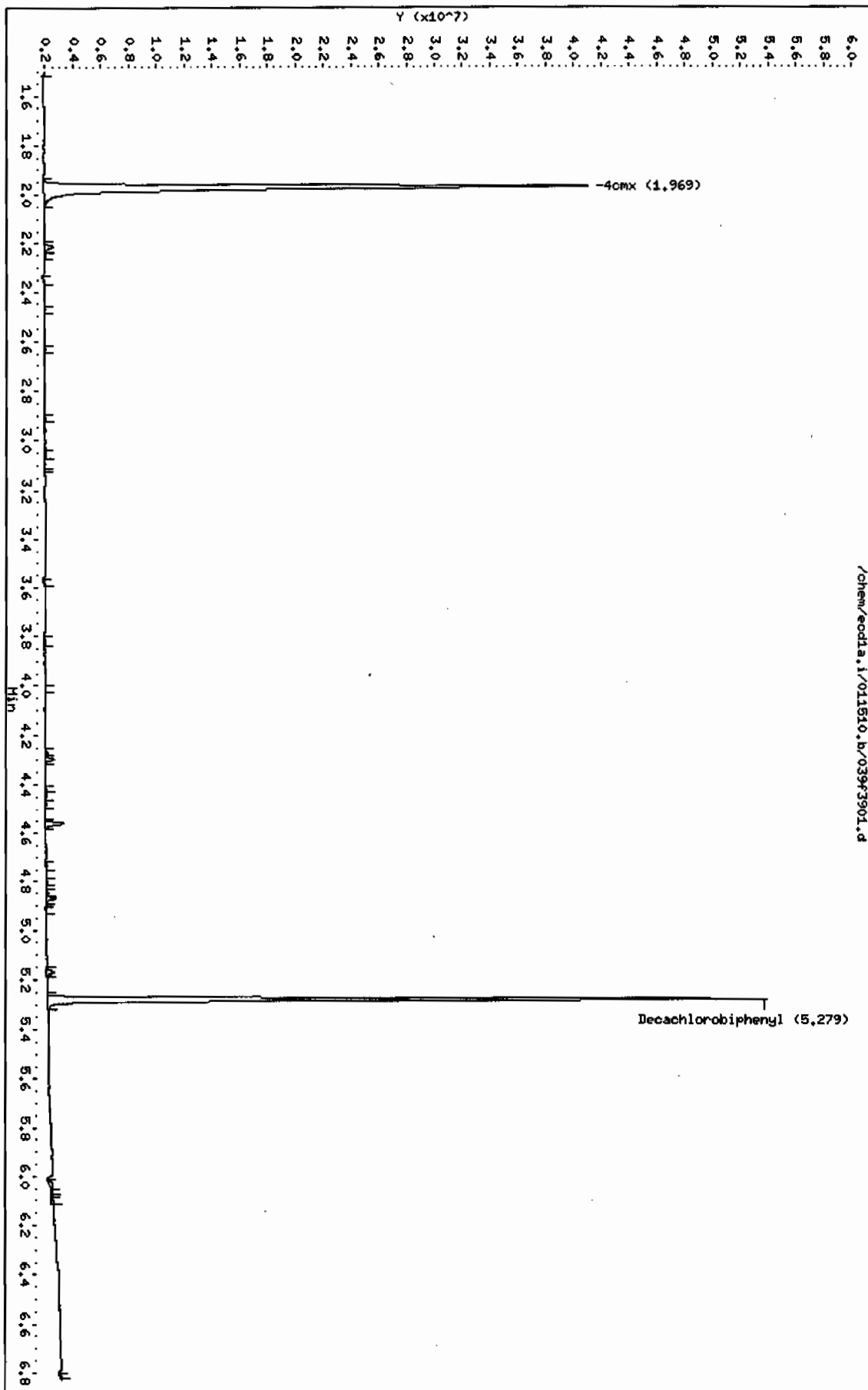
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	ON-COL	FINAL	TARGET RANGE	RATIO
11.4cmx	1.969	1.969	0.000	47108802	131.779	4.8 80.00- 120.00	100.00
CAS #: 877-09-8							
12 Decachlorobiphenyl	5.279	5.281	-0.002	40084564	132.726	4.8 80.00- 120.00	100.00
CAS #: 2051-24-3							

Data File: /chem/ecdda.i/011510.b/039f3901.d  
Date: 15-JAN-2010 13:48  
Client ID: RE12-10-7241  
Sample Info: 124459900311  
Volume Injected (uL): 1.0  
Column Phase: CLP4

Instrument: ecdda.i  
Operator: YSI  
Column diameter: 0.25

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/chem/ecdda.i/011510.b/039f3901.d



Data File: /chem/ecdl1a.i/011510.b/039b3901.d  
Report Date: 23-Jan-2010 12:13

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011510.b/039b3901.d  
Lab Smp Id: 244599003 Client Smp ID: RE12-10-7241  
Inj Date : 15-JAN-2010 13:48  
Operator : YS1 Inst ID: ecd1a.i  
Smp Info : |244599003|1|  
Misc Info : |ECD82P\_1S|941606|SVA|LANL|SOIL|RE12-10-7241|||  
Comment :  
Method : /chem/ecdl1a.i/011510.b/ECD1-B-8082-121409.m  
Meth Date : 23-Jan-2010 12:12 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: 10-1210.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	30.14000	Weight of sample extracted (g)
M	9.36530	% 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	33922131 118.883	4.4	80.00- 120.00	100.00	
-----							
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.943	5.944	-0.001	28978667 130.660	4.8	80.00- 120.00	100.00	
-----							

Data File: /chem/eodla.i/011510.b/039b3901.d

Date : 15-JUN-2010 13:48

Client ID: RE12-10-7241

Sample Info: 1244599003111

Volume Injected (uL): 1.0

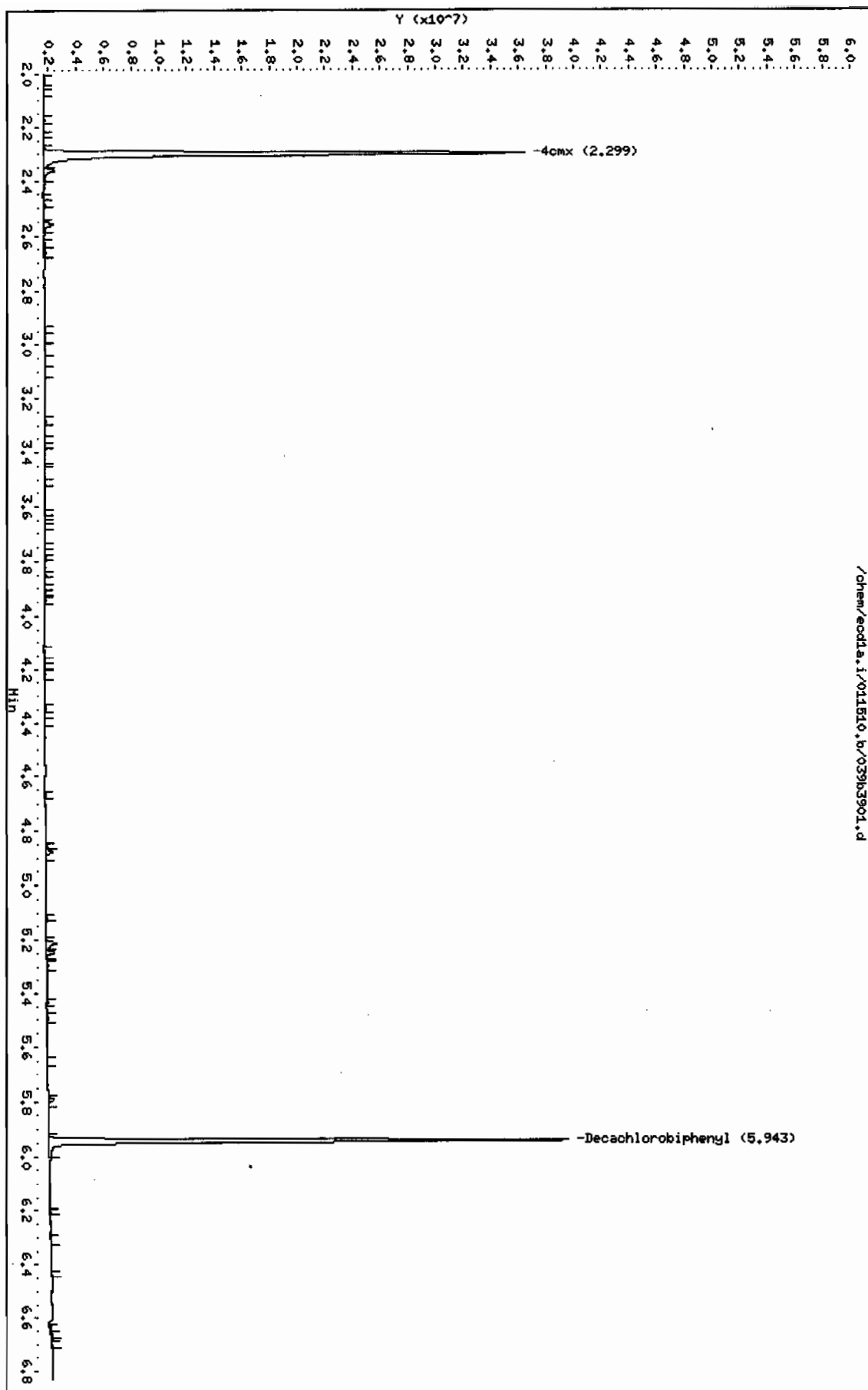
Column phase: CLP2

Instrument: eodla.i

Operator: YSL

Column diameter: 0.25

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## PCB

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Certificate of Analysis  
Sample SummarySDG Number: 10-1210  
Lab Sample ID: 244599007Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.I  
Analyst: YS1  
Aliquot: 30.12 g  
Column: 1 CLP1  
2 CLP2Matrix: R  
% Moisture: 16.3  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.97	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

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RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL  
Data file : /chem/ecd1a.i/011510.b/043f4301.d  
Lab Smp Id: 244599007 Client Smp ID: RE12-10-7242  
Inj Date : 15-JAN-2010 14:38  
Operator : YS1 Inst ID: ecd1a.i  
Smp Info : |244599007|1|  
Misc Info : |ECD82P\_1S|941606|SVA|LANL|SOIL|RE12-10-7242|||  
Comment :  
Method : /chem/ecd1a.i/011510.b/ECD1-F-8082-121409.m  
Meth Date : 23-Jan-2010 12:12 yip00818 Quant Type: ESTD  
Cal Date : 14-DEC-2009 11:34 Cal File: 040f4001.d  
Als bottle: 43  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1210.sub  
Target Version: 3.50 Sample Matrix: Soil  
Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.12000	Weight of sample extracted (g)
M	16.34100	% 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	1.968	1.969 -0.001	39268927 109.849	4.4	80.00- 120.00	100.00
CAS #: 877-09-8						
-----						
12 Decachlorobiphenyl	5.278	5.281 -0.003	33505778 110.943	4.4	80.00- 120.00	100.00
CAS #: 2051-24-3						
-----						



Data File: /chem/eod1a.i/011510.b/043f4301.d

Date : 15-JAN-2010 14:38

Client ID: REL2-10-7242

Sample Info: 1244599007131

Volume Injected (uL): 1.0

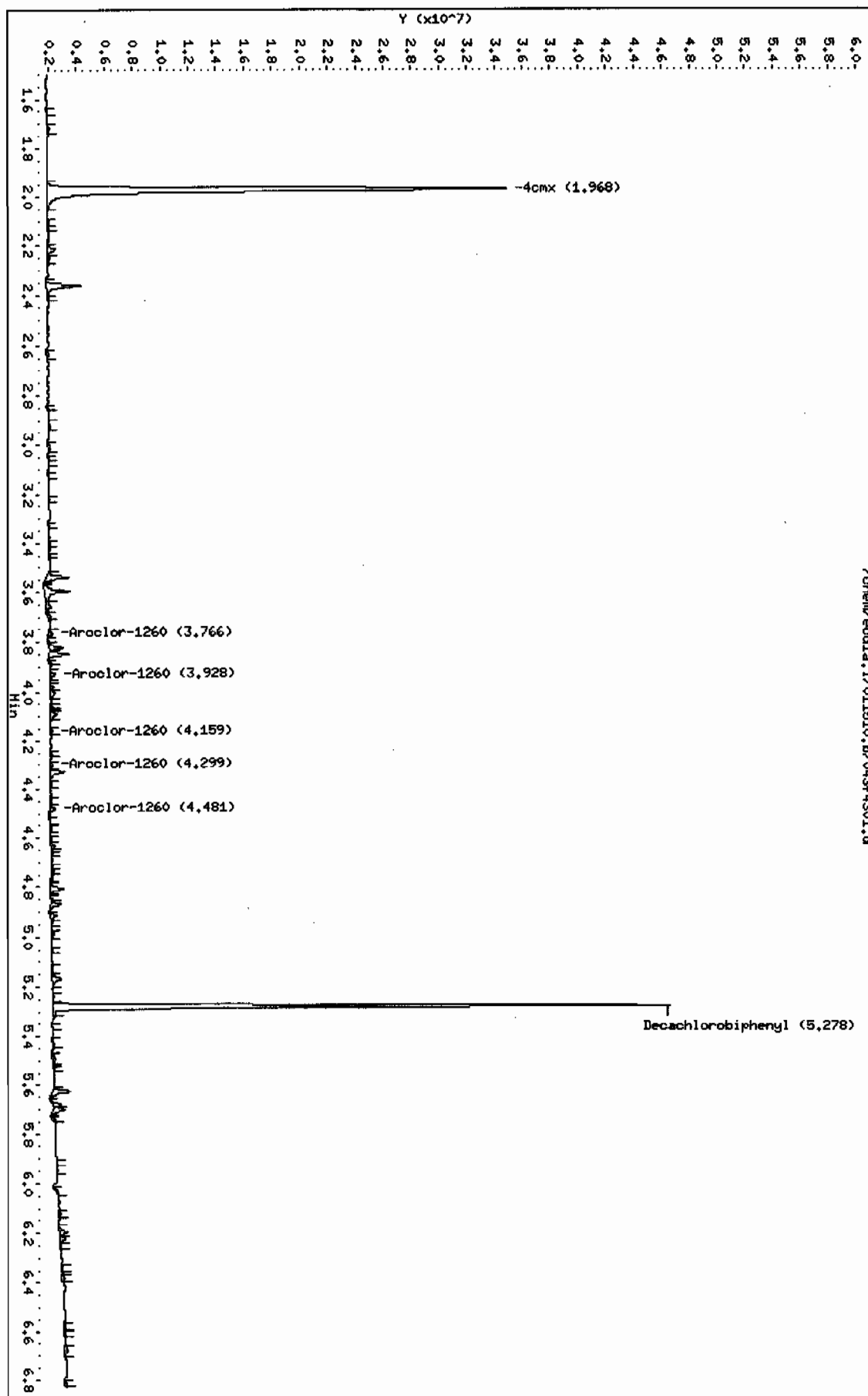
Column phase: CLP1

Instrument: eod1a.i

Operator: YSL

Column diameter: 0.25

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Data File: /chem/ecdl1a.i/011510.b/043b4301.d  
 Report Date: 23-Jan-2010 12:14

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL  
 Data file : /chem/ecdl1a.i/011510.b/043b4301.d  
 Lab Smp Id: 244599007 Client Smp ID: RE12-10-7242  
 Inj Date : 15-JAN-2010 14:38  
 Operator : YS1 Inst ID: ecd1a.i  
 Smp Info : |244599007|1|  
 Misc Info : |ECD82P\_1S|941606|SVA|LANL|SOIL|RE12-10-7242|||  
 Comment :  
 Method : /chem/ecdl1a.i/011510.b/ECD1-B-8082-121409.m  
 Meth Date : 23-Jan-2010 12:12 yip00818 Quant Type: ESTD  
 Cal Date : 14-DEC-2009 12:16 Cal File: 044b4401.d  
 Als bottle: 43  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: 10-1210.sub  
 Target Version: 3.50 Sample Matrix: Soil  
 Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.12000	Weight of sample extracted (g)
M	16.34100	% Moisture

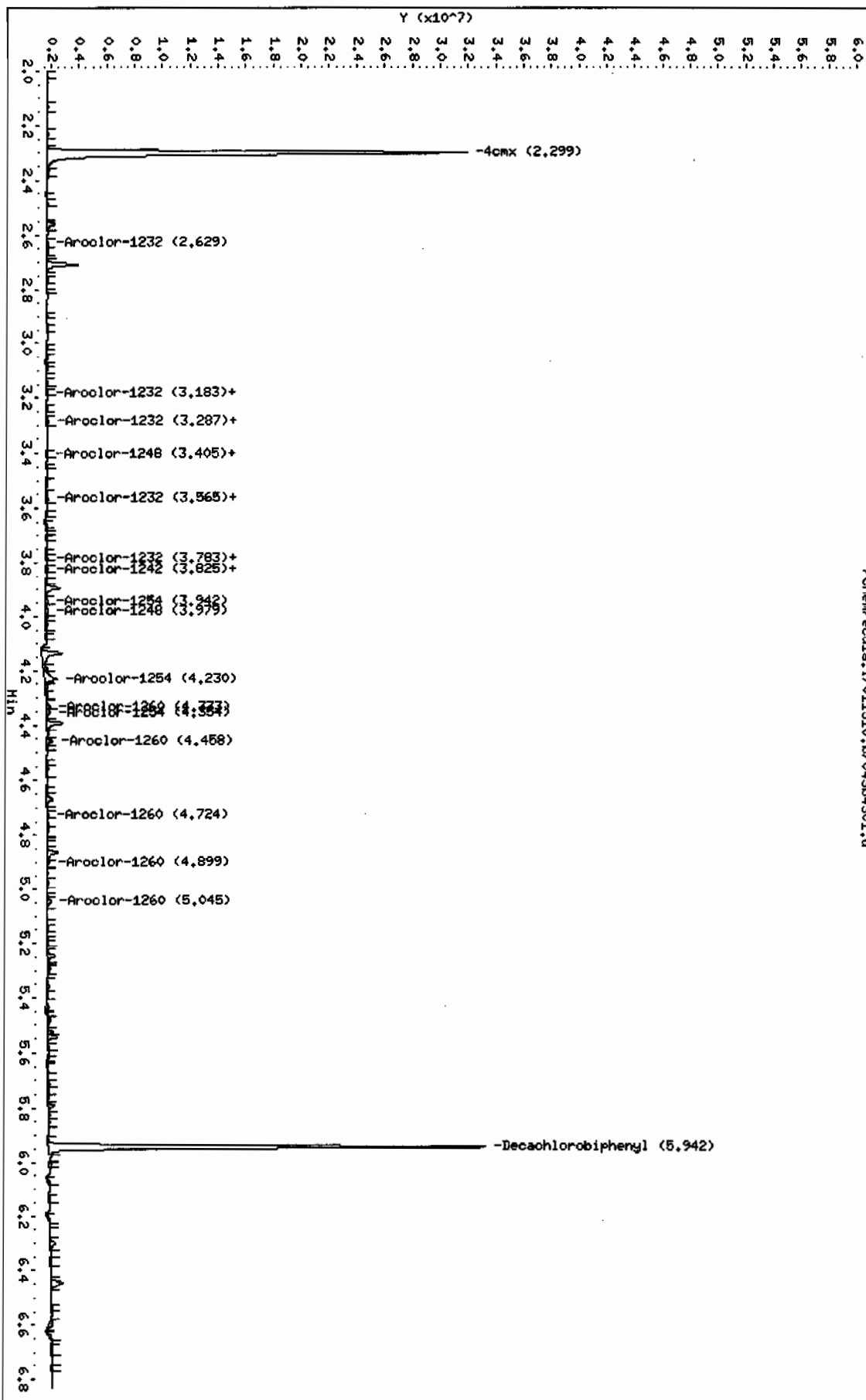
Cpnd Variable Local Compound Variable

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	28940881	101.426	4.0	80.00-	120.00	100.00
-----								
\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3				
5.942	5.944	-0.002	23999643	108.211	4.3	80.00-	120.00	100.00
-----								

Data File: /chem/ecdda.i/011510.b/043b4301.d  
 Date : 15-JAN-2010 14:38  
 Client ID: RE12-10-7242  
 Sample Info: 1244599007141  
 Volume Injected (uL): 1.0  
 Column phase: CLP2

Instrument: ecdda.i  
 Operator: YSL  
 Column diameter: 0.25

/chem/ecdda.i/011510.b/043b4301.d



## PCB

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Certificate of Analysis  
Sample SummarySDG Number: 10-1210  
Lab Sample ID: 244599001Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.I  
Analyst: YS1  
Aliquot: 30.03 g  
Column: 1 CLP1  
2 CLP2Matrix: R  
%Moisture: 5.8  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.54	ug/kg	1.18	3.54	1
11104-28-2	Aroclor-1221	U	3.54	ug/kg	1.18	3.54	1
11141-16-5	Aroclor-1232	U	3.54	ug/kg	1.18	3.54	1
53469-21-9	Aroclor-1242	U	3.54	ug/kg	1.18	3.54	1
12672-29-6	Aroclor-1248	U	3.54	ug/kg	1.18	3.54	1
11097-69-1	Aroclor-1254	U	3.54	ug/kg	1.18	3.54	1
11096-82-5	Aroclor-1260	U	3.54	ug/kg	1.18	3.54	1

Data File: /chem/ecdl1a.i/011510.b/037f3701.d  
Report Date: 23-Jan-2010 12:13

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011510.b/037f3701.d  
Lab Smp Id: 244599001 Client Smp ID: RE12-10-7243  
Inj Date : 15-JAN-2010 13:23  
Operator : YS1 Inst ID: ecd1a.i  
Smp Info : |244599001|1|  
Misc Info : |ECD82P\_1S|941606|SVA|LANL|SOIL|RE12-10-7243|||  
Comment :  
Method : /chem/ecdl1a.i/011510.b/ECD1-F-8082-121409.m  
Meth Date : 23-Jan-2010 12:12 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: 10-1210.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	5.83610	% 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	44668079 124.952	4.4	80.00- 120.00	100.00	
\$ 12 Decachlorobiphenyl							
5.281	5.281	0.000	38061449 126.027	4.4	80.00- 120.00	100.00	

Data File: /chem/ecdda.1/011510.b/037P3701.d

Date : 15-JAN-2010 13:23

Client ID: REL2-10-7243

Sample Info: 12445900111

Volume Injected (uL): 1.0

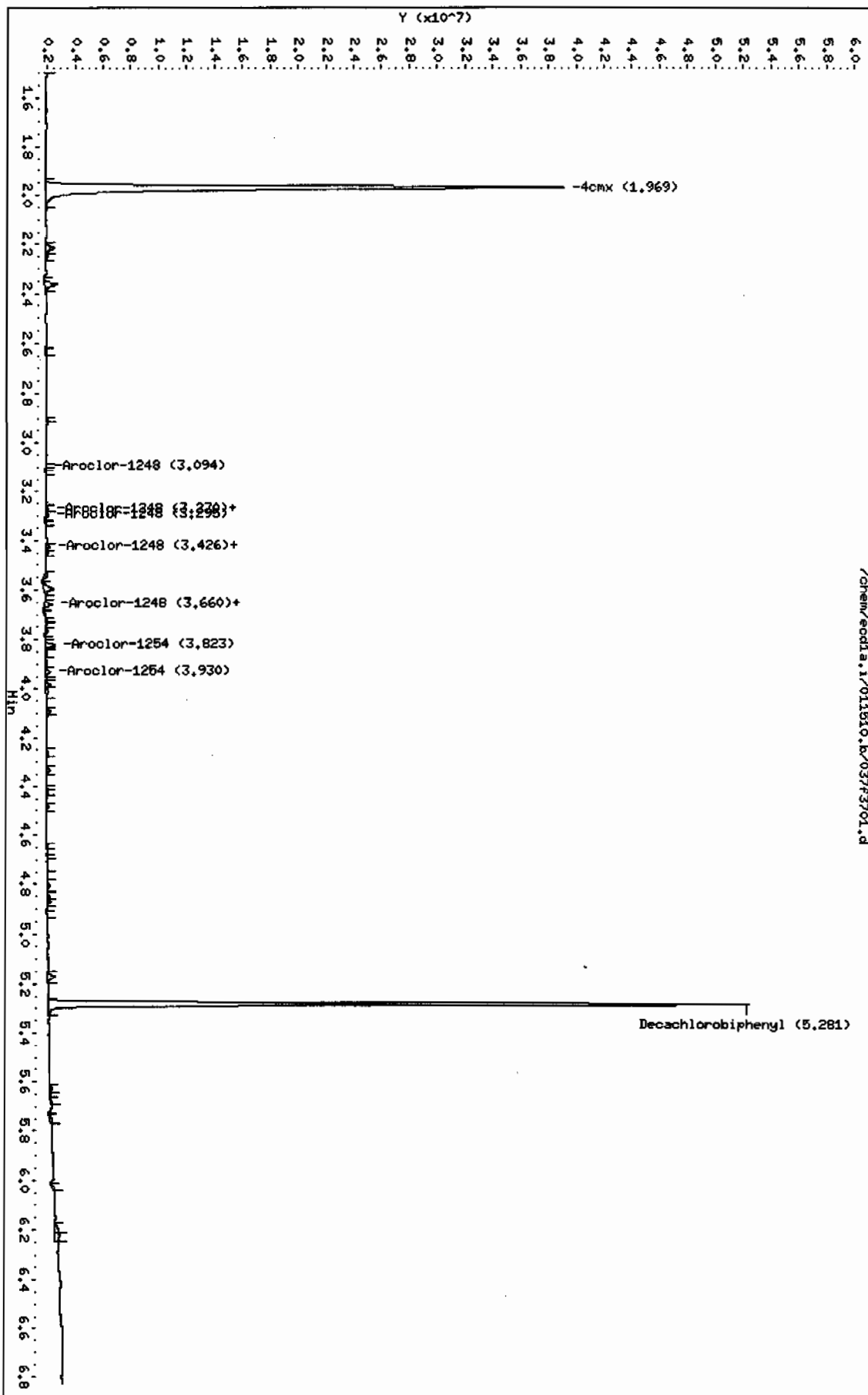
Column phase: CLP1

Instrument: ecdda.1

Operator: YSL

Column diameter: 0.25

/chem/ecdda.1/011510.b/037P3701.d



Data File: /chem/ecdl1a.i/011510.b/037b3701.d  
Report Date: 23-Jan-2010 12:13

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011510.b/037b3701.d  
Lab Smp Id: 244599001 Client Smp ID: RE12-10-7243  
Inj Date : 15-JAN-2010 13:23  
Operator : YS1 Inst ID: ecd1a.i  
Smp Info : |244599001|1|  
Misc Info : |ECD82P\_1S|941606|SVA|LANL|SOIL|RE12-10-7243|  
Comment :  
Method : /chem/ecdl1a.i/011510.b/ECD1-B-8082-121409.m  
Meth Date : 23-Jan-2010 12:12 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: 10-1210.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	5.83610	% Moisture

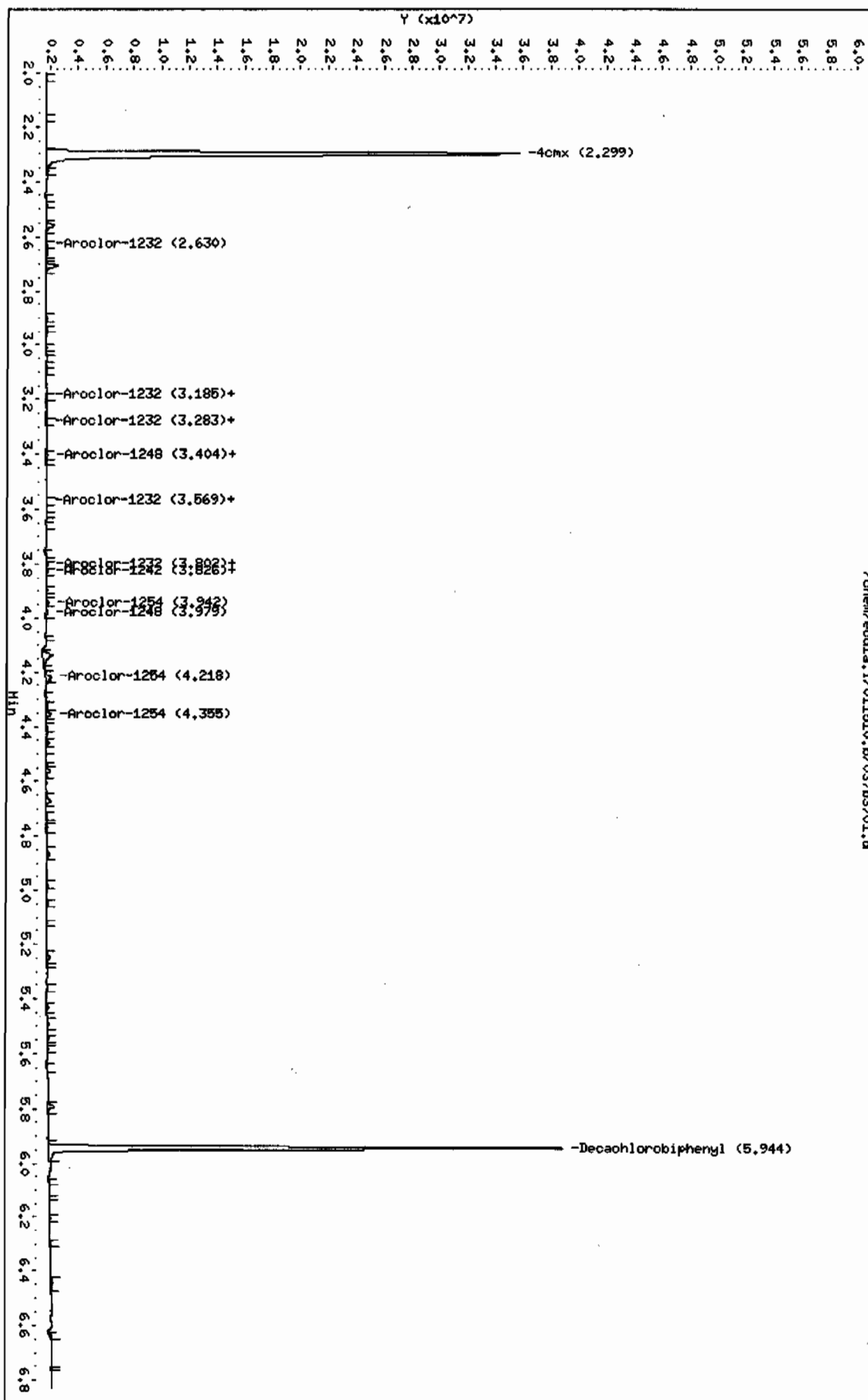
Cpnd Variable Local Compound Variable

CONCENTRATIONS							
			ON-COL	FINAL			
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
<hr/>							
\$ 11 4cmx					CAS #: 877-09-8		
2.299	2.299	0.000	32975314	115.565	4.1 80.00- 120.00	100.00	
<hr/>							
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.944	5.944	0.000	28172819	127.027	4.5 80.00- 120.00	100.00	
<hr/>							

Data File: /chem/ecoda.i/011510.b/037b3701.d  
Date: 15-JUN-2010 13:23  
Client ID: REL2-10-7243  
Sample Info: 12469900111  
Volume Injected (uL): 1.0  
Column phase: CLP2

Instrument: ecoda.i  
Operator: YSL  
Column diameter: 0.25

/chem/ecoda.i/011510.b/037b3701.d





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

SDG Number: 10-1210  
Lab Sample ID: 244599013

Date Collected: 01/07/2010 12:00  
Date Received: 01/13/2010 08:55  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.I  
Analyst: YS1  
Aliquot: 30.01 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: RE12-10-7276  
Batch ID: 941606  
Run Date: 01/15/2010 15:03  
Prep Date: 01/14/2010 19:23  
Data File: 045f4501.d  
045b4501.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.64	ug/kg	1.21	3.64	1
11104-28-2	Aroclor-1221	U	3.64	ug/kg	1.21	3.64	1
11141-16-5	Aroclor-1232	U	3.64	ug/kg	1.21	3.64	1
53469-21-9	Aroclor-1242	U	3.64	ug/kg	1.21	3.64	1
12672-29-6	Aroclor-1248	U	3.64	ug/kg	1.21	3.64	1
11097-69-1	Aroclor-1254	U	3.64	ug/kg	1.21	3.64	1
11096-82-5	Aroclor-1260	U	3.64	ug/kg	1.21	3.64	1

Report Date: 23-Jan-2010 12:15

## GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/011510.b/045f4501.d

Lab Smp Id: 244599013

Client Smp ID: RE12-10-7276

Inj Date : 15-JAN-2010 15:03

Operator : YS1

Inst ID: ecdla.i

Smp Info : |244599013|1|

Misc Info : |ECD82P\_1S|941606|SVA|LANL|SOIL|RE12-10-7276|

Comment :

Method : /chem/ecdla.i/011510.b/ECD1-F-8082-121409.m

Meth Date : 23-Jan-2010 12:12 yip00818 Quant Type: ESTD

Cal Date : 14-DEC-2009 11:34

Cal File: 040f4001.d

Als bottle: 45

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: 10-1210.sub

Target Version: 3.50

Sample Matrix: Soil

Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.01000	Weight of sample extracted (g)
M	8.35460	% Moisture

Cpnd Variable                      Local Compound Variable

## CONCENTRATIONS

RT	EXP RT	DLT RT	RESPONSE ( ug/L)	ON-COL	FINAL	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====	=====
-----							
\$ 11 4cmx					CAS #: 877-09-8		
1.968	1.969	-0.001	48308806 135.136	4.9	80.00- 120.00	100.00	
-----							
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.279	5.281	-0.002	36705321 121.537	4.4	80.00- 120.00	100.00	
-----							

Data File: /chem/eodla.i/011510.b/045f4501.d

Date: 15-JUN-2010 15:03

Client ID: REL2-10-7276

Sample Info: 124459013111

Volume Injected (uL): 1.0

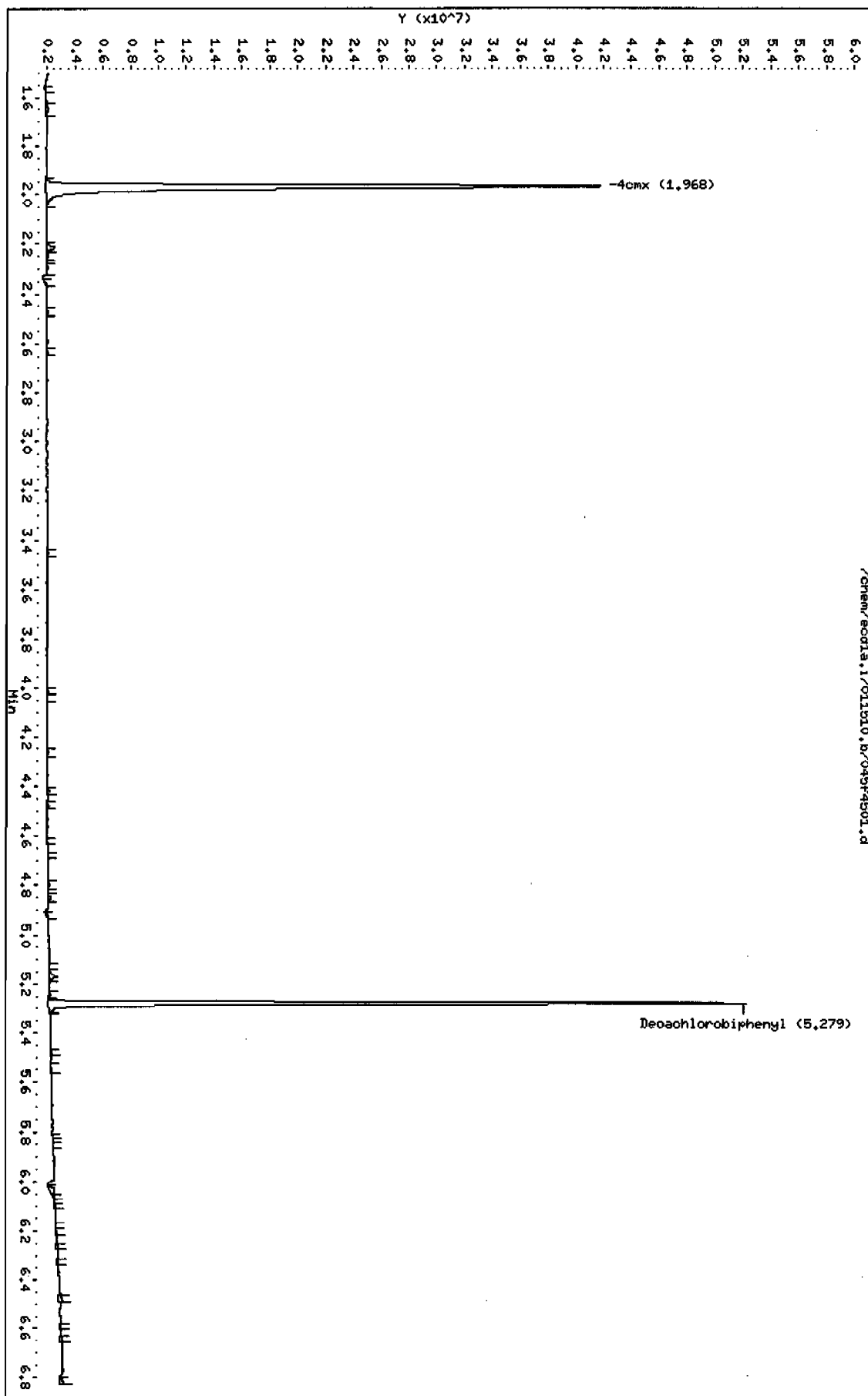
Column Phase: CLP1

Instrument: eodla.i

Operator: YSA

Column diameter: 0.25

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Data File: /chem/ecdla.i/011510.b/045b4501.d  
Report Date: 23-Jan-2010 12:15

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL  
Data file : /chem/ecdla.i/011510.b/045b4501.d  
Lab Smp Id: 244599013 Client Smp ID: RE12-10-7276  
Inj Date : 15-JAN-2010 15:03  
Operator : YS1 Inst ID: ecdla.i  
Smp Info : |244599013|1|  
Misc Info : |ECD82P\_1S|941606|SVA|LANL|SOIL|RE12-10-7276|||  
Comment :  
Method : /chem/ecdla.i/011510.b/ECD1-B-8082-121409.m  
Meth Date : 23-Jan-2010 12:12 yip00818 Quant Type: ESTD  
Cal Date : 14-DEC-2009 12:16 Cal File: 044b4401.d  
Als bottle: 45  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1210.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	30.01000	Weight of sample extracted (g)
M	8.35460	% 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	35093785	122.989	4.5 80.00- 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3	
5.942	5.944	-0.002	29936124	134.977	4.9 80.00- 120.00	100.00
-----						

Data File: /chem/ecdl.a.i/011510.b/045b4501.d

Date: 15-JUN-2010 15:03

Client ID: REL2-10-7276

Sample Info: 124899013111

Volume Injected (uL): 1.0

Column phase: CLP2

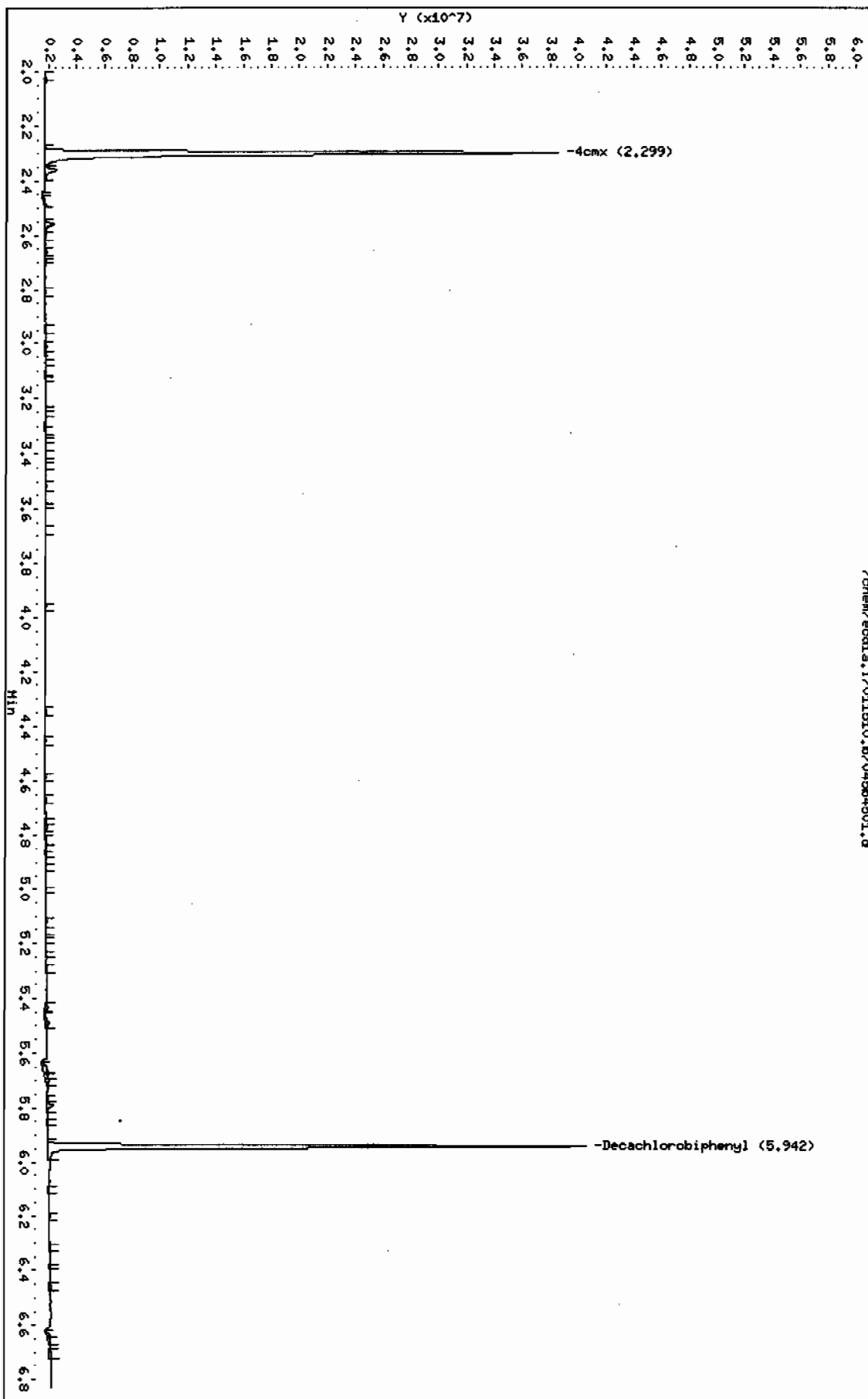
Instrument: ecdl.a.i

Operator: YSL

Column diameter: 0.25

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/chem/ecdl.a.i/011510.b/045b4501.d



# STANDARDS DATA

Report Date: 18-Jan-2010 07:28

### Calibration History

Method : /chem/ecd1a.i/011510.b/ECD1-F-8082-121409.m  
Start Cal Date: 14-DEC-2009 05:36  
End Cal Date : 14-DEC-2009 12:37

#### Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
14-DEC-2009 11:34	AR1268	/chem/ecd1a.i/121409.b/040f4001.d
14-DEC-2009 09:28	AR1248	/chem/ecd1a.i/121409.b/028f2801.d
14-DEC-2009 08:25	AR1242	/chem/ecd1a.i/121409.b/022f2201.d
14-DEC-2009 07:22	AR1254	/chem/ecd1a.i/121409.b/016f1601.d
14-DEC-2009 10:31	AR1660	/chem/ecd1a.i/121409.b/034f3401.d
Cal Level: 2 , Cal Amount: 200.00000		
14-DEC-2009 11:44	AR1268	/chem/ecd1a.i/121409.b/041f4101.d
14-DEC-2009 09:38	AR1248	/chem/ecd1a.i/121409.b/029f2901.d
14-DEC-2009 08:35	AR1242	/chem/ecd1a.i/121409.b/023f2301.d
14-DEC-2009 07:32	AR1254	/chem/ecd1a.i/121409.b/017f1701.d
14-DEC-2009 10:41	AR1660	/chem/ecd1a.i/121409.b/035f3501.d
Cal Level: 3 , Cal Amount: 500.00000		
14-DEC-2009 11:55	AR1268	/chem/ecd1a.i/121409.b/042f4201.d
14-DEC-2009 09:49	AR1248	/chem/ecd1a.i/121409.b/030f3001.d
14-DEC-2009 08:46	AR1242	/chem/ecd1a.i/121409.b/024f2401.d
14-DEC-2009 07:43	AR1254	/chem/ecd1a.i/121409.b/018f1801.d
14-DEC-2009 10:52	AR1660	/chem/ecd1a.i/121409.b/036f3601.d
Cal Level: 4 , Cal Amount: 1000.00000		
14-DEC-2009 12:37	DDTANALOGSTD	/chem/ecd1a.i/121409.b/046f4601.d
14-DEC-2009 09:59	AR1248	/chem/ecd1a.i/121409.b/031f3101.d
14-DEC-2009 08:56	AR1242	/chem/ecd1a.i/121409.b/025f2501.d
14-DEC-2009 07:53	AR1254	/chem/ecd1a.i/121409.b/019f1901.d
14-DEC-2009 11:02	AR1660	/chem/ecd1a.i/121409.b/037f3701.d
14-DEC-2009 12:06	AR1268	/chem/ecd1a.i/121409.b/043f4301.d
14-DEC-2009 05:58	AR1262	/chem/ecd1a.i/121409.b/008f0801.d
14-DEC-2009 05:47	AR1221	/chem/ecd1a.i/121409.b/007f0701.d
14-DEC-2009 05:36	AR1232	/chem/ecd1a.i/121409.b/006f0601.d
Cal Level: 5 , Cal Amount: 4000.00000		
14-DEC-2009 12:16	AR1268	/chem/ecd1a.i/121409.b/044f4401.d
14-DEC-2009 10:10	AR1248	/chem/ecd1a.i/121409.b/032f3201.d
14-DEC-2009 09:07	AR1242	/chem/ecd1a.i/121409.b/026f2601.d
14-DEC-2009 08:04	AR1254	/chem/ecd1a.i/121409.b/020f2001.d
14-DEC-2009 11:13	AR1660	/chem/ecd1a.i/121409.b/038f3801.d

Continuing Calibration  
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 1000		
15-JAN-2010 15:16	AR1660	/chem/ecdla.i/011510.b/046f4601.d
Ccal Level: 4 , Ccal Amount: 1000		
15-JAN-2010 13:01	AR1660	/chem/ecdla.i/011510.b/035f3501.d
Ccal Level: 4 , Ccal Amount: 1000		
15-JAN-2010 11:48	AR1660	/chem/ecdla.i/011510.b/029f2901.d
Ccal Level: 4 , Ccal Amount: 1000		
15-JAN-2010 09:48	AR1660	/chem/ecdla.i/011510.b/019f1901.d
Ccal Level: 4 , Ccal Amount: 1000		
15-JAN-2010 08:06	AR1660	/chem/ecdla.i/011510.b/010f1001.d
Ccal Level: 4 , Ccal Amount: 1000		
15-JAN-2010 07:55	AR1268	/chem/ecdla.i/011510.b/009f0901.d
Ccal Level: 4 , Ccal Amount: 1000		
15-JAN-2010 07:45	AR1262	/chem/ecdla.i/011510.b/008f0801.d
Ccal Level: 4 , Ccal Amount: 1000		
15-JAN-2010 07:34	AR1221	/chem/ecdla.i/011510.b/007f0701.d
Ccal Level: 4 , Ccal Amount: 1000		
15-JAN-2010 07:24	AR1232	/chem/ecdla.i/011510.b/006f0601.d
Ccal Level: 4 , Ccal Amount: 1000		
15-JAN-2010 07:13	AR1248	/chem/ecdla.i/011510.b/005f0501.d
Ccal Level: 4 , Ccal Amount: 1000		
15-JAN-2010 07:03	AR1242	/chem/ecdla.i/011510.b/004f0401.d
Ccal Level: 4 , Ccal Amount: 1000		
15-JAN-2010 06:52	AR1254	/chem/ecdla.i/011510.b/003f0301.d



Report Date: 18-Jan-2010 07:28

### Calibration History

Method : /chem/ecdl1a.i/011510.b/ECD1-B-8082-121409.m  
Start Cal Date: 11-DEC-2009 10:17  
End Cal Date : 14-DEC-2009 12:37

#### Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
14-DEC-2009 11:34	AR1268	/chem/ecdl1a.i/121409.b/040b4001.d
14-DEC-2009 09:28	AR1248	/chem/ecdl1a.i/121409.b/028b2801.d
14-DEC-2009 08:25	AR1242	/chem/ecdl1a.i/121409.b/022b2201.d
14-DEC-2009 07:22	AR1254	/chem/ecdl1a.i/121409.b/016b1601.d
14-DEC-2009 10:31	AR1660	/chem/ecdl1a.i/121409.b/034b3401.d

Cal Level: 2 , Cal Amount: 200.00000		
14-DEC-2009 11:44	AR1268	/chem/ecdl1a.i/121409.b/041b4101.d
14-DEC-2009 09:38	AR1248	/chem/ecdl1a.i/121409.b/029b2901.d
14-DEC-2009 08:35	AR1242	/chem/ecdl1a.i/121409.b/023b2301.d
14-DEC-2009 07:32	AR1254	/chem/ecdl1a.i/121409.b/017b1701.d
14-DEC-2009 10:41	AR1660	/chem/ecdl1a.i/121409.b/035b3501.d

Cal Level: 3 , Cal Amount: 500.00000		
14-DEC-2009 11:55	AR1268	/chem/ecdl1a.i/121409.b/042b4201.d
14-DEC-2009 09:49	AR1248	/chem/ecdl1a.i/121409.b/030b3001.d
14-DEC-2009 08:46	AR1242	/chem/ecdl1a.i/121409.b/024b2401.d
14-DEC-2009 07:43	AR1254	/chem/ecdl1a.i/121409.b/018b1801.d
14-DEC-2009 10:52	AR1660	/chem/ecdl1a.i/121409.b/036b3601.d

Cal Level: 4 , Cal Amount: 1000.00000		
14-DEC-2009 12:37	DDTANALOGSTD	/chem/ecdl1a.i/121409.b/046b4601.d
14-DEC-2009 12:06	AR1268	/chem/ecdl1a.i/121409.b/043b4301.d
14-DEC-2009 05:58	AR1262	/chem/ecdl1a.i/121409.b/008b0801.d
14-DEC-2009 05:47	AR1221	/chem/ecdl1a.i/121409.b/007b0701.d
14-DEC-2009 05:36	AR1232	/chem/ecdl1a.i/121409.b/006b0601.d
14-DEC-2009 09:59	AR1248	/chem/ecdl1a.i/121409.b/031b3101.d
14-DEC-2009 08:56	AR1242	/chem/ecdl1a.i/121409.b/025b2501.d
14-DEC-2009 07:53	AR1254	/chem/ecdl1a.i/121409.b/019b1901.d
14-DEC-2009 11:02	AR1660	/chem/ecdl1a.i/121409.b/037b3701.d

Cal Level: 5 , Cal Amount: 4000.00000		
14-DEC-2009 12:16	AR1268	/chem/ecdl1a.i/121409.b/044b4401.d
14-DEC-2009 10:10	AR1248	/chem/ecdl1a.i/121409.b/032b3201.d
14-DEC-2009 09:07	AR1242	/chem/ecdl1a.i/121409.b/026b2601.d
14-DEC-2009 08:04	AR1254	/chem/ecdl1a.i/121409.b/020b2001.d
14-DEC-2009 11:13	AR1660	/chem/ecdl1a.i/121409.b/038b3801.d

Continuing Calibration  
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 1000		
15-JAN-2010 15:16	AR1660	/chem/ecdla.i/011510.b/046b4601.d
Ccal Level: 4 , Ccal Amount: 1000		
15-JAN-2010 13:01	AR1660	/chem/ecdla.i/011510.b/035b3501.d
Ccal Level: 4 , Ccal Amount: 1000		
15-JAN-2010 11:48	AR1660	/chem/ecdla.i/011510.b/029b2901.d
Ccal Level: 4 , Ccal Amount: 1000		
15-JAN-2010 09:48	AR1660	/chem/ecdla.i/011510.b/019b1901.d
Ccal Level: 4 , Ccal Amount: 1000		
15-JAN-2010 08:06	AR1660	/chem/ecdla.i/011510.b/010b1001.d
Ccal Level: 4 , Ccal Amount: 1000		
15-JAN-2010 07:55	AR1268	/chem/ecdla.i/011510.b/009b0901.d
Ccal Level: 4 , Ccal Amount: 1000		
15-JAN-2010 07:45	AR1262	/chem/ecdla.i/011510.b/008b0801.d
Ccal Level: 4 , Ccal Amount: 1000		
15-JAN-2010 07:34	AR1221	/chem/ecdla.i/011510.b/007b0701.d
Ccal Level: 4 , Ccal Amount: 1000		
15-JAN-2010 07:24	AR1232	/chem/ecdla.i/011510.b/006b0601.d
Ccal Level: 4 , Ccal Amount: 1000		
15-JAN-2010 07:13	AR1248	/chem/ecdla.i/011510.b/005b0501.d
Ccal Level: 4 , Ccal Amount: 1000		
15-JAN-2010 07:03	AR1242	/chem/ecdla.i/011510.b/004b0401.d
Ccal Level: 4 , Ccal Amount: 1000		
15-JAN-2010 06:52	AR1254	/chem/ecdla.i/011510.b/003b0301.d

## GEL Laboratories LLC

## COMPOUND LISTING

Method file : /chem/ecdla.i/011510.b/ECD1-F-8082-121409.m  
 Quant Method : ESTD Target Version : 3.50  
 Last Update : 18-Jan-2010 06:51 Number of Cpnds : 15  
 Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events

Values

-----  
 Initial:Start Threshold 12031.000000  
 Initial:End Threshold 6015.500000  
 Initial:Area Threshold 15489.000000  
 Initial:P-P Resolution 1.000000  
 Initial:Bunch Factor 2.000000  
 Initial:Negative Peaks OFF  
 Initial:Tension 0.500000

Compound	RT	RT Window	RF
1 Aroclor-1016	2.424	2.394-2.454	1.387e+04
	2.700	2.670-2.730	1.010e+04
	2.793	2.763-2.823	1.176e+04
	2.830	2.800-2.860	6.599e+03
	3.041	3.011-3.071	8.673e+03
63 4,4-DDD	3.953	3.933-3.973	3.938e+05
64 4,4-DDE	3.603	3.583-3.623	4.795e+05
62 4,4-DDT	4.118	4.098-4.138	3.238e+05
2 Aroclor-1221	2.082	2.052-2.112	4.301e+03
	2.174	2.144-2.204	2.440e+03
	2.200	2.170-2.230	1.027e+04
3 Aroclor-1232	2.424	2.394-2.454	6.717e+03
	2.712	2.682-2.742	8.157e+03
	2.793	2.763-2.823	5.751e+03
	3.041	3.011-3.071	3.954e+03
4 Aroclor-1242	3.295	3.265-3.325	3.533e+03
	2.424	2.394-2.454	1.166e+04
	2.712	2.682-2.742	1.345e+04
	2.831	2.801-2.861	5.506e+03
	3.042	3.012-3.072	7.245e+03
	3.295	3.265-3.325	6.811e+03

## GEL Laboratories LLC

## COMPOUND LISTING

Method file : /chem/ecdl1a.i/011510.b/ECD1-F-8082-121409.m

Compound	RT	RT Window	RF
5 Aroclor-1248	3.094	3.064-3.124	7.848e+03
	3.245	3.215-3.275	6.870e+03
	3.296	3.266-3.326	1.331e+04
	3.427	3.397-3.457	1.101e+04
	3.660	3.630-3.690	7.455e+03
6 Aroclor-1254	3.270	3.240-3.300	1.249e+04
	3.425	3.395-3.455	1.672e+04
	3.659	3.629-3.689	2.071e+04
	3.822	3.792-3.852	1.569e+04
	3.930	3.900-3.960	1.517e+04
7 Aroclor-1260	3.767	3.737-3.797	1.675e+04
	3.930	3.900-3.960	2.474e+04
	4.160	4.130-4.190	1.469e+04
	4.303	4.273-4.333	1.518e+04
	4.482	4.452-4.512	3.435e+04
8 Aroclor-1262	3.768	3.738-3.798	1.402e+04
	3.930	3.900-3.960	1.841e+04
	4.160	4.130-4.190	2.251e+04
	4.303	4.273-4.333	2.033e+04
	4.482	4.452-4.512	4.317e+04
9 Aroclor-1268	4.668	4.638-4.698	5.438e+04
	4.690	4.660-4.720	5.419e+04
	4.803	4.773-4.833	4.052e+04
	5.006	4.976-5.036	1.833e+04
	5.171	5.141-5.201	1.233e+05
M 10 Aroclor-Total	1.000	0.980-1.020	
\$ 11 4cmx	1.969	1.939-1.999	3.757e+05
\$ 12 Decachlorobiphenyl	5.281	5.251-5.311	3.175e+05

## GEL Laboratories LLC

## COMPOUND LISTING

Method file : /chem/ecdla.i/011510.b/ECD1-B-8082-121409.m  
 Quant Method : ESTD Target Version : 3.50  
 Last Update : 18-Jan-2010 06:51 Number of Cpnds : 15  
 Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	7222.000000
Initial:End Threshold	3611.000000
Initial:Area Threshold	6833.000000
Initial:P-P Resolution	0.000000
Initial:Bunch Factor	2.000000
Initial:Negative Peaks	OFF
Initial:Tension	0.500000

Compound	RT	RT Window	RF
1 Aroclor-1016	3.195	3.165-3.225	1.261e+04
	3.278	3.248-3.308	9.328e+03
	3.342	3.312-3.372	5.411e+03
	3.569	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	2.496	2.466-2.526	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
	3.278	3.248-3.308	4.701e+03
	3.569	3.539-3.599	3.243e+03
4 Aroclor-1242	3.802	3.772-3.832	3.151e+03
	3.196	3.166-3.226	1.059e+04
	3.278	3.248-3.308	8.054e+03
	3.569	3.539-3.599	5.962e+03
	3.802	3.772-3.832	6.057e+03
	3.831	3.801-3.861	6.701e+03

## GEL Laboratories LLC

## COMPOUND LISTING

Method file : /chem/ecdla.i/011510.b/ECD1-B-8082-121409.m

Compound	RT	RT Window	RF
5 Aroclor-1248	3.404	3.374-3.434	8.054e+03
	3.569	3.539-3.599	9.874e+03
	3.802	3.772-3.832	1.122e+04
	3.830	3.800-3.860	1.248e+04
	3.967	3.937-3.997	1.210e+04
6 Aroclor-1254	3.403	3.373-3.433	6.435e+03
	3.825	3.795-3.855	1.156e+04
	3.941	3.911-3.971	1.243e+04
	4.218	4.188-4.248	1.688e+04
	4.354	4.324-4.384	1.244e+04
7 Aroclor-1260	4.334	4.304-4.364	1.368e+04
	4.459	4.429-4.489	1.603e+04
	4.725	4.695-4.755	1.256e+04
	4.899	4.869-4.929	1.281e+04
	5.045	5.015-5.075	2.790e+04
8 Aroclor-1262	4.459	4.429-4.489	1.292e+04
	4.724	4.694-4.754	1.831e+04
	4.899	4.869-4.929	1.658e+04
	5.045	5.015-5.075	3.329e+04
	5.259	5.229-5.289	2.297e+04
9 Aroclor-1268	5.256	5.226-5.286	4.358e+04
	5.284	5.254-5.314	4.039e+04
	5.434	5.404-5.464	3.144e+04
	5.599	5.569-5.629	1.427e+04
	5.791	5.761-5.821	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	5.944	5.914-5.974	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/011510.b/ECD1-F-8082-121409.m  
 Cal Date : 23-Jan-2010 12:15 yip00818  
 Curve Type : Average

## Calibration File Names:

Level 1: /chem/ecdla.i/121409.b/040f4001.d  
 Level 2: /chem/ecdla.i/121409.b/041f4101.d  
 Level 3: /chem/ecdla.i/121409.b/042f4201.d  
 Level 4: /chem/ecdla.i/121409.b/046f4601.d  
 Level 5: /chem/ecdla.i/121409.b/044f4401.d

Compound	100.000	200.000	500.000	1000.000	4000.000	RRF	% RSD
Level 1	Level 2	Level 3	Level 4	Level 5			
1 Aroclor-1016(1)	15975	14641	13829	13236	11653	13867	11.596
(2)	10801	10349	9832	9922	9584	10098	4.757
(3)	13242	12280	11732	11291	10240	11757	9.507
(4)	7178	6867	6609	6421	5920	6599	7.183
(5)	9710	9021	8649	8224	7763	8673	8.604
63 4,4-DDD	++++	++++	++++	393799	++++	393799	0.000
64 4,4-DDE	++++	++++	++++	479509	++++	479509	0.000
62 4,4-DDT	++++	++++	++++	323817	++++	323817	0.000
2 Aroclor-1221(1)	++++	++++	++++	4301	++++	4301	0.000
(2)	++++	++++	++++	2440	++++	2440	0.000
(3)	++++	++++	++++	10272	++++	10272	0.000
3 Aroclor-1232(1)	++++	++++	++++	6717	++++	6717	0.000
(2)	++++	++++	++++	8157	++++	8157	0.000
(3)	++++	++++	++++	5751	++++	5751	0.000
(4)	++++	++++	++++	3954	++++	3954	0.000
(5)	++++	++++	++++	3533	++++	3533	0.000
4 Aroclor-1242(1)	13692	12467	11522	10819	9798	11660	12.846
(2)	14782	14429	13236	12555	12263	13453	8.301
(3)	6076	5890	5423	5191	4949	5506	8.563
(4)	8395	7578	7079	6747	6426	7245	10.645
(5)	7587	7189	6604	6378	6296	6811	8.178
5 Aroclor-1248(1)	9070	8103	7743	7247	7078	7848	10.119
(2)	7785	7181	6827	6444	6114	6870	9.456
(3)	15108	13267	13037	12915	12225	13310	8.094
(4)	12682	11331	10815	10392	9852	11015	9.799
(5)	8605	7806	7405	7124	6336	7455	11.244

GEL Laboratories LLC  
INITIAL CALIBRATION DATA

Start Cal Date : 14-DEC-2009 05:36  
 End Cal Date : 14-DEC-2009 12:37  
 Quant Method : ESTD  
 Origin : Disabled  
 Target Version : 3.50  
 Integrator : Falcon  
 Method file : /chem/ecdla.i/011510.b/ECD1-F-8082-121409.m  
 Cal Date : 23-Jan-2010 12:15 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	363741	359986	359846	335942	357482	3.492
12 Decachlorobiphenyl	316645	310611	307193	296602	278999	302010	4.894



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/011510.b/ECD1-B-8082-121409.m  
 Cal Date : 23-Jan-2010 12:15 yip00818  
 Curve Type : Average

## Calibration File Names:

Level 1: /chem/ecdl1a.i/121409.b/040b4001.d  
 Level 2: /chem/ecdl1a.i/121409.b/041b4101.d  
 Level 3: /chem/ecdl1a.i/121409.b/042b4201.d  
 Level 4: /chem/ecdl1a.i/121409.b/046b4601.d  
 Level 5: /chem/ecdl1a.i/121409.b/044b4401.d

Compound	100.000	200.000	500.000	1000.000	4000.000	RRF	% RSD
Level 1	Level 2	Level 3	Level 4	Level 5			
1 Aroclor-1016(1)	14281	12734	12848	12156	11039	12612	9.333
(2)	10954	9913	9256	8806	7710	9328	13.003
(3)	6310	5679	5380	5089	4598	5411	11.852
(4)	8214	7430	6981	6696	5938	7052	12.003
(5)	7754	6843	6481	6115	5561	6551	12.561
62 4,4-DDT	++++	++++	++++	243613	++++	243613	0.000
63 4,4-DDE	++++	++++	++++	357996	++++	357996	0.000
64 4,4-DDD	++++	++++	++++	289343	++++	289343	0.000
2 Aroclor-1221(1)	++++	++++	++++	3640	++++	3640	0.000
(2)	++++	++++	++++	2329	++++	2329	0.000
(3)	++++	++++	++++	8119	++++	8119	0.000
3 Aroclor-1232(1)	++++	++++	++++	6156	++++	6156	0.000
(2)	++++	++++	++++	6302	++++	6302	0.000
(3)	++++	++++	++++	4701	++++	4701	0.000
(4)	++++	++++	++++	3243	++++	3243	0.000
(5)	++++	++++	++++	3151	++++	3151	0.000
4 Aroclor-1242(1)	12348	11309	9989	9755	9542	10589	11.338
(2)	9730	8628	7875	7358	6677	8054	14.627
(3)	7163	6326	5763	5452	5107	5962	13.534
(4)	7183	6468	5900	5548	5185	6057	12.997
(5)	7820	7123	6589	6229	5746	6701	11.977
5 Aroclor-1248(1)	9914	8542	7972	7289	6553	8054	15.880
(2)	11996	10356	9798	9046	8173	9874	14.605
(3)	13306	11756	11119	10365	9555	11220	12.723
(4)	14720	13121	12480	11577	10516	12483	12.732
(5)	14361	12633	11977	11210	10342	12104	12.596

GEL Laboratories LLC  
INITIAL CALIBRATION DATA

Start Cal Date : 11-DEC-2009 10:17  
 End Cal Date : 14-DEC-2009 12:37  
 Quant Method : ESTD  
 Origin : Disabled  
 Target Version : 3.50  
 Integrator : Falcon  
 Method file : /chem/ecdl1a.i/011510.b/ECD1-B-8082-121409.m  
 Cal Date : 23-Jan-2010 12:15 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
IM 10 Aroclor-Total	++++	++++	++++	++++	++++	++++	++++
\$ 11 4cmx	307069	293716	286931	282899	256086	285340	6.572
\$ 12 Decachlorobiphenyl	248884	228809	224119	212175	194946	221787	9.023

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.: 10-1210  
 Instrument ID: ECD1A Calibration Date: 01/15/10 Time: 0806  
 Lab File ID: 010F1001 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	12817.819	0.01	-7.6	15.0
(2)	10097.726	10556.185	0.01	4.5	15.0
(3)	11757.020	10897.813	0.01	-7.3	15.0
(4)	6599.010	6594.136	0.01	-0.1	15.0
(5)	8673.402	8485.156	0.01	-2.2	15.0
Aroclor-1260	16752.150	16612.936	0.01	-0.8	15.0
(2)	24742.603	25244.962	0.01	2.0	15.0
(3)	14687.346	15028.080	0.01	2.3	15.0
(4)	15184.529	15761.106	0.01	3.8	15.0
(5)	34350.443	35929.139	0.01	4.6	15.0
4cmx	357482.34	376542.08	0.01	5.3	15.0
Decachlorobiphenyl	302009.99	310180.26	0.01	2.7	15.0

FORM VII PEST

FORM 7  
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1210  
 Instrument ID: ECD1A Calibration Date: 01/15/10 Time: 0806  
 Lab File ID: 010B1001 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	11868.197	0.01	-5.9	15.0
(2)	9327.875	7973.607	0.01	-14.5	15.0
(3)	5411.316	4961.934	0.01	-8.3	15.0
(4)	7051.879	6279.579	0.01	-11.0	15.0
(5)	6550.733	5944.918	0.01	-9.2	15.0
Aroclor-1260	13680.027	12157.507	0.01	-11.1	15.0
(2)	16029.019	14886.224	0.01	-7.1	15.0
(3)	12563.933	11381.177	0.01	-9.4	15.0
(4)	12810.076	11745.010	0.01	-8.3	15.0
(5)	27897.674	26366.599	0.01	-5.5	15.0
4cmx	285339.98	278971.22	0.01	-2.2	15.0
Decachlorobiphenyl	221786.62	216807.57	0.01	-2.2	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.: 10-1210  
 Instrument ID: ECD1A Calibration Date: 01/15/10 Time: 0948  
 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	12901.581	0.01	-7.0	15.0
(2)	10097.726	10493.010	0.01	3.9	15.0
(3)	11757.020	10938.399	0.01	-7.0	15.0
(4)	6599.010	6584.460	0.01	-0.2	15.0
(5)	8673.402	8383.959	0.01	-3.3	15.0
Aroclor-1260	16752.150	16647.183	0.01	-0.6	15.0
(2)	24742.603	25304.217	0.01	2.3	15.0
(3)	14687.346	15069.162	0.01	2.6	15.0
(4)	15184.529	15788.314	0.01	4.0	15.0
(5)	34350.443	35976.157	0.01	4.7	15.0
4cmx	357482.34	378434.38	0.01	5.9	15.0
Decachlorobiphenyl	302009.99	310324.97	0.01	2.8	15.0

FORM VII PEST

FORM 7  
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1210  
 Instrument ID: ECD1A Calibration Date: 01/15/10 Time: 0948  
 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	12020.519	0.01	-4.7	15.0
(2)	9327.875	8016.727	0.01	-14.0	15.0
(3)	5411.316	4973.910	0.01	-8.1	15.0
(4)	7051.879	6492.894	0.01	-7.9	15.0
(5)	6550.733	5967.777	0.01	-8.9	15.0
Aroclor-1260	13680.027	12217.129	0.01	-10.7	15.0
(2)	16029.019	14912.128	0.01	-7.0	15.0
(3)	12563.933	11397.878	0.01	-9.3	15.0
(4)	12810.076	11750.887	0.01	-8.3	15.0
(5)	27897.674	26480.462	0.01	-5.1	15.0
=====	=====	=====	=====	=====	=====
4cmx	285339.98	280822.65	0.01	-1.6	15.0
Decachlorobiphenyl	221786.62	219437.38	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.: 10-1210  
 Instrument ID: ECD1A Calibration Date: 01/15/10 Time: 1148  
 Lab File ID: 029F2901 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	13584.311	0.01	-2.0	15.0
(2)	10097.726	10931.957	0.01	8.3	15.0
(3)	11757.020	11585.223	0.01	-1.5	15.0
(4)	6599.010	6984.562	0.01	5.8	15.0
(5)	8673.402	8865.671	0.01	2.2	15.0
Aroclor-1260	16752.150	17570.693	0.01	4.9	15.0
(2)	24742.603	26801.456	0.01	8.3	15.0
(3)	14687.346	15788.905	0.01	7.5	15.0
(4)	15184.529	16510.541	0.01	8.7	15.0
(5)	34350.443	37415.033	0.01	8.9	15.0
4cmx	357482.34	400622.88	0.01	12.1	15.0
Decachlorobiphenyl	302009.99	314592.88	0.01	4.2	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.: 10-1210  
 Instrument ID: ECD1A Calibration Date: 01/15/10 Time: 1148  
 Lab File ID: 029B2901 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	12416.965	0.01	-1.5	15.0
(2)	9327.875	8445.154	0.01	-9.5	15.0
(3)	5411.316	5281.424	0.01	-2.4	15.0
(4)	7051.879	6628.004	0.01	-6.0	15.0
(5)	6550.733	6100.691	0.01	-6.9	15.0
Aroclor-1260	13680.027	12848.178	0.01	-6.1	15.0
(2)	16029.019	15764.886	0.01	-1.6	15.0
(3)	12563.933	11939.037	0.01	-5.0	15.0
(4)	12810.076	12236.691	0.01	-4.5	15.0
(5)	27897.674	27433.576	0.01	-1.7	15.0
4cmx	285339.98	297068.12	0.01	4.1	15.0
Decachlorobiphenyl	221786.62	224308.87	0.01	1.1	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.: 10-1210  
 Instrument ID: ECD1A Calibration Date: 01/15/10 Time: 1301  
 Lab File ID: 035F3501 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	13517.880	0.01	-2.5	15.0
(2)	10097.726	11238.466	0.01	11.3	15.0
(3)	11757.020	11524.266	0.01	-2.0	15.0
(4)	6599.010	6948.339	0.01	5.3	15.0
(5)	8673.402	8813.287	0.01	1.6	15.0
Aroclor-1260	16752.150	17469.135	0.01	4.3	15.0
(2)	24742.603	26524.588	0.01	7.2	15.0
(3)	14687.346	15812.657	0.01	7.7	15.0
(4)	15184.529	16493.741	0.01	8.6	15.0
(5)	34350.443	37560.490	0.01	9.3	15.0
4cmx	357482.34	397897.20	0.01	11.3	15.0
Decachlorobiphenyl	302009.99	312896.62	0.01	3.6	15.0

FORM VII PEST

FORM 7  
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1210  
 Instrument ID: ECD1A Calibration Date: 01/15/10 Time: 1301  
 Lab File ID: 035B3501 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	12739.382	0.01	1.0	15.0
(2)	9327.875	8392.004	0.01	-10.0	15.0
(3)	5411.316	5220.516	0.01	-3.5	15.0
(4)	7051.879	6625.015	0.01	-6.0	15.0
(5)	6550.733	6166.275	0.01	-5.9	15.0
Aroclor-1260	13680.027	12718.701	0.01	-7.0	15.0
(2)	16029.019	15523.296	0.01	-3.2	15.0
(3)	12563.933	11798.932	0.01	-6.1	15.0
(4)	12810.076	12104.254	0.01	-5.5	15.0
(5)	27897.674	27244.469	0.01	-2.3	15.0
4cmx	285339.98	294022.17	0.01	3.0	15.0
Decachlorobiphenyl	221786.62	218834.28	0.01	-1.3	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.: 10-1210  
 Instrument ID: ECD1A Calibration Date: 01/15/10 Time: 1516  
 Lab File ID: 046F4601 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	13473.815	0.01	-2.8	15.0
(2)	10097.726	11116.075	0.01	10.1	15.0
(3)	11757.020	11485.557	0.01	-2.3	15.0
(4)	6599.010	6969.365	0.01	5.6	15.0
(5)	8673.402	8948.866	0.01	3.2	15.0
Aroclor-1260	16752.150	17360.629	0.01	3.6	15.0
(2)	24742.603	26485.033	0.01	7.0	15.0
(3)	14687.346	15728.738	0.01	7.1	15.0
(4)	15184.529	16433.403	0.01	8.2	15.0
(5)	34350.443	37622.189	0.01	9.5	15.0
4cmx	357482.34	397915.34	0.01	11.3	15.0
Decachlorobiphenyl	302009.99	317695.97	0.01	5.2	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.: 10-1210  
 Instrument ID: ECD1A Calibration Date: 01/15/10 Time: 1516  
 Lab File ID: 046B4601 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	12948.204	0.01	2.7	15.0
(2)	9327.875	8349.206	0.01	-10.5	15.0
(3)	5411.316	5192.119	0.01	-4.0	15.0
(4)	7051.879	6582.412	0.01	-6.6	15.0
(5)	6550.733	6092.094	0.01	-7.0	15.0
Aroclor-1260	13680.027	12712.440	0.01	-7.1	15.0
(2)	16029.019	15572.028	0.01	-2.8	15.0
(3)	12563.933	11921.331	0.01	-5.1	15.0
(4)	12810.076	12304.032	0.01	-4.0	15.0
(5)	27897.674	27533.897	0.01	-1.3	15.0
4cmx	285339.98	293292.41	0.01	2.8	15.0
Decachlorobiphenyl	221786.62	224953.55	0.01	1.4	15.0

FORM VII PEST

Data File: /chem/ecdla.i/011510.b/003f0301.d  
Report Date: 23-Jan-2010 12:01

Page 1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/011510.b/003f0301.d  
Lab Smp Id: WAR091216-54 Client Smp ID: AR125401  
Inj Date : 15-JAN-2010 06:52  
Operator : YS1 Inst ID: ecdla.i  
Smp Info : |WAR091216-54  
Misc Info :  
Comment :  
Method : /chem/ecdla.i/011510.b/ECD1-F-8082-121409.m  
Meth Date : 23-Jan-2010 12:01 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		
3.270	3.270	0.000	12220641 1000.00	979	80.00- 120.00	100.00
3.425	3.425	0.000	16944433 1000.00	1010	118.65- 158.65	138.65
3.659	3.659	0.000	22119275 1000.00	1070	161.00- 201.00	181.00
3.822	3.822	0.000	16885074 1000.00	1080	118.17- 158.17	138.17
3.930	3.930	0.000	16096852 1000.00	1060	111.72- 151.72	131.72
Average of Peak Amounts =			1.04e+03			

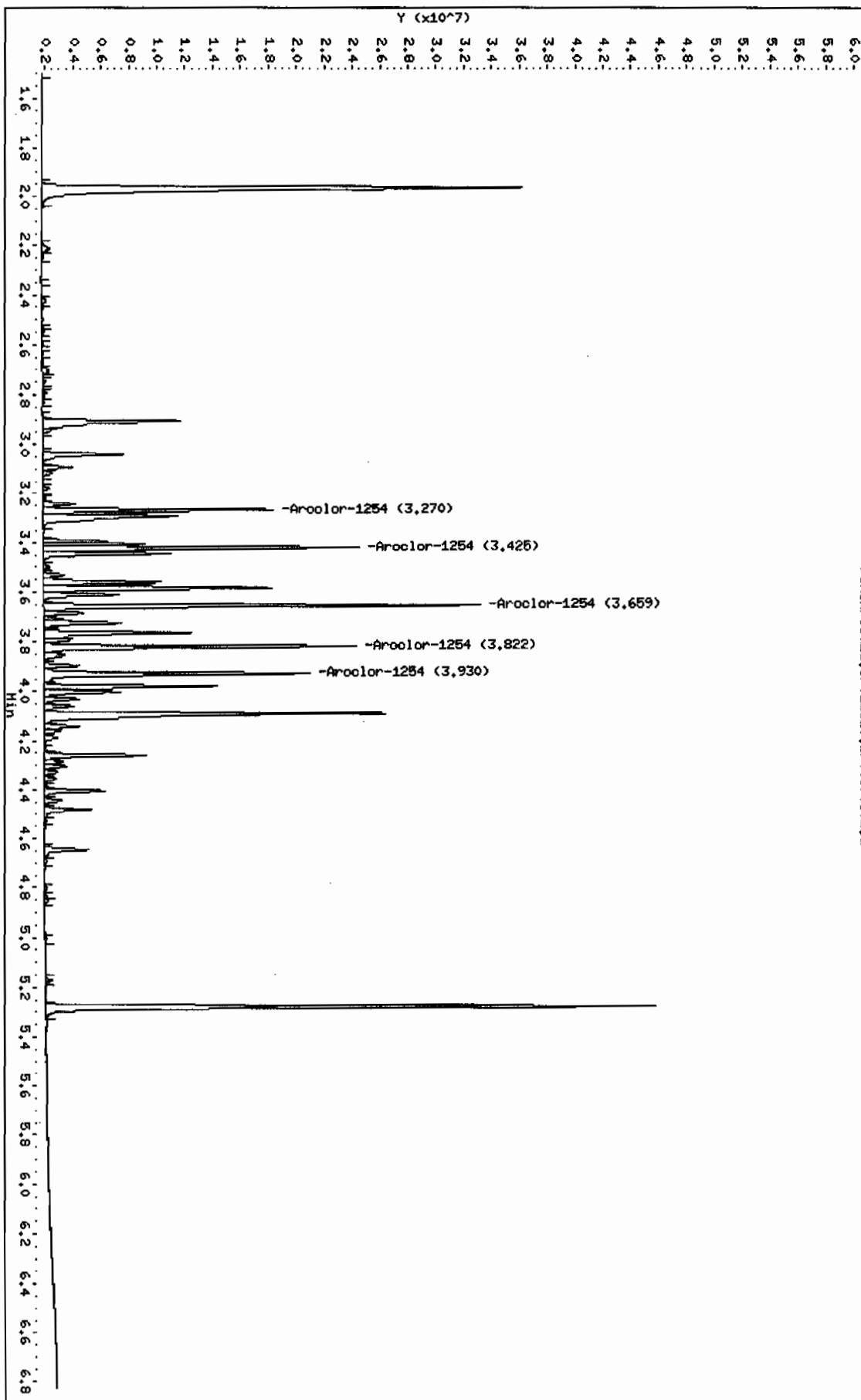
Data File: /chem/ecda.i/011510.b/003f0301.d  
Date: 15-JAN-2010 06:52  
Client ID: AR125401  
Sample Info: 14AR091216-54

Column phase: CLP1

Instrument: ecda.i  
Operator: YSL  
Column diameter: 0.25

Page 1

/chem/ecda.i/011510.b/003f0301.d



Data File: /chem/ecdla.i/011510.b/003b0301.d  
Report Date: 23-Jan-2010 12:01

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/011510.b/003b0301.d  
Lab Smp Id: WAR091216-54 Client Smp ID: AR125401  
Inj Date : 15-JAN-2010 06:52  
Operator : YS1 Inst ID: ecdla.i  
Smp Info : |WAR091216-54  
Misc Info :  
Comment :  
Method : /chem/ecdla.i/011510.b/ECD1-B-8082-121409.m  
Meth Date : 23-Jan-2010 12:01 yip00818 Quant Type: ESTD  
Cal Date : 14-DEC-2009 12:16 Cal File: 044b4401.d  
Als bottle: 3 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: AR1254.sub  
Target Version: 3.50 Sample Matrix: None  
Processing Host: hpclp1

AMOUNTS						
			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	5826019 1000.00	905	80.00- 120.00	100.00
3.825	3.825	0.000	10549033 1000.00	913	161.07- 201.07	181.07
3.941	3.941	0.000	11653421 1000.00	937	180.02- 220.02	200.02
4.218	4.218	0.000	16349484 1000.00	968	260.63- 300.63	280.63
4.354	4.354	0.000	11994525 1000.00	964	185.88- 225.88	205.88
Average of Peak Amounts =				938		

Data File: /chem/ecdl.a.i/011510.b/003b0301.d

Date: 15-JAN-2010 06:52

Client ID: AR125401

Sample Info: 14PR091216-54

Column phase: CLP2

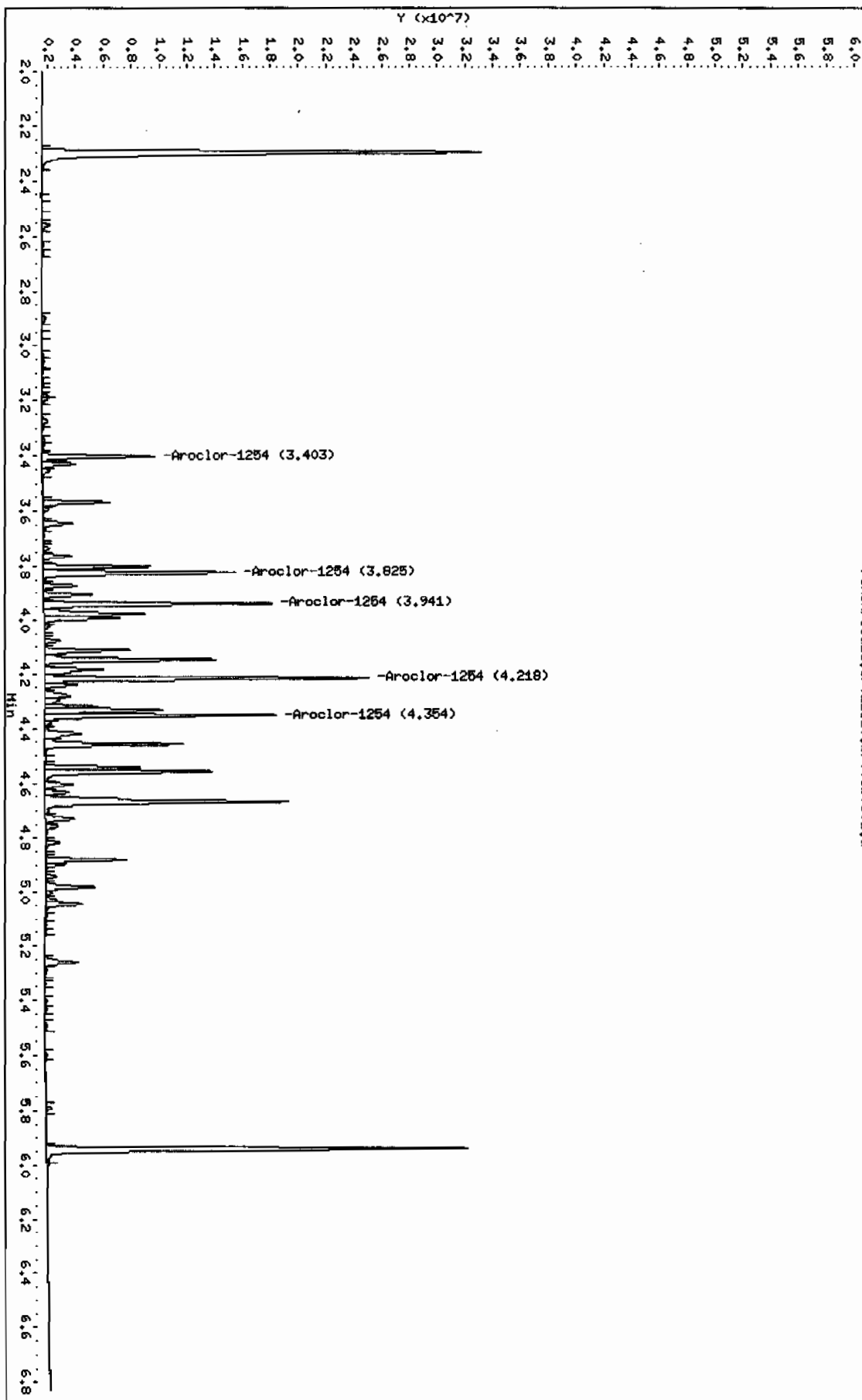
Page 1

Instrument: ecdl.a.i

Operator: YSL

Column diameter: 0.25

/chem/ecdl.a.i/011510.b/003b0301.d





Data File: /chem/ecdl1a.i/011510.b/004f0401.d  
Report Date: 23-Jan-2010 12:01

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011510.b/004f0401.d  
Lab Smp Id: WAR091217-42 Client Smp ID: AR124201  
Inj Date : 15-JAN-2010 07:03  
Operator : YS1 Inst ID: ecd1a.i  
Smp Info : |WAR091217-42  
Misc Info :  
Comment :  
Method : /chem/ecdl1a.i/011510.b/ECD1-F-8082-121409.m  
Meth Date : 23-Jan-2010 12:01 yip00818 Quant Type: ESTD  
Cal Date : 14-DEC-2009 11:34 Cal File: 040f4001.d  
Als bottle: 4 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: AR1242.sub  
Target Version: 3.50 Sample Matrix: None  
Processing Host: hpc1p1

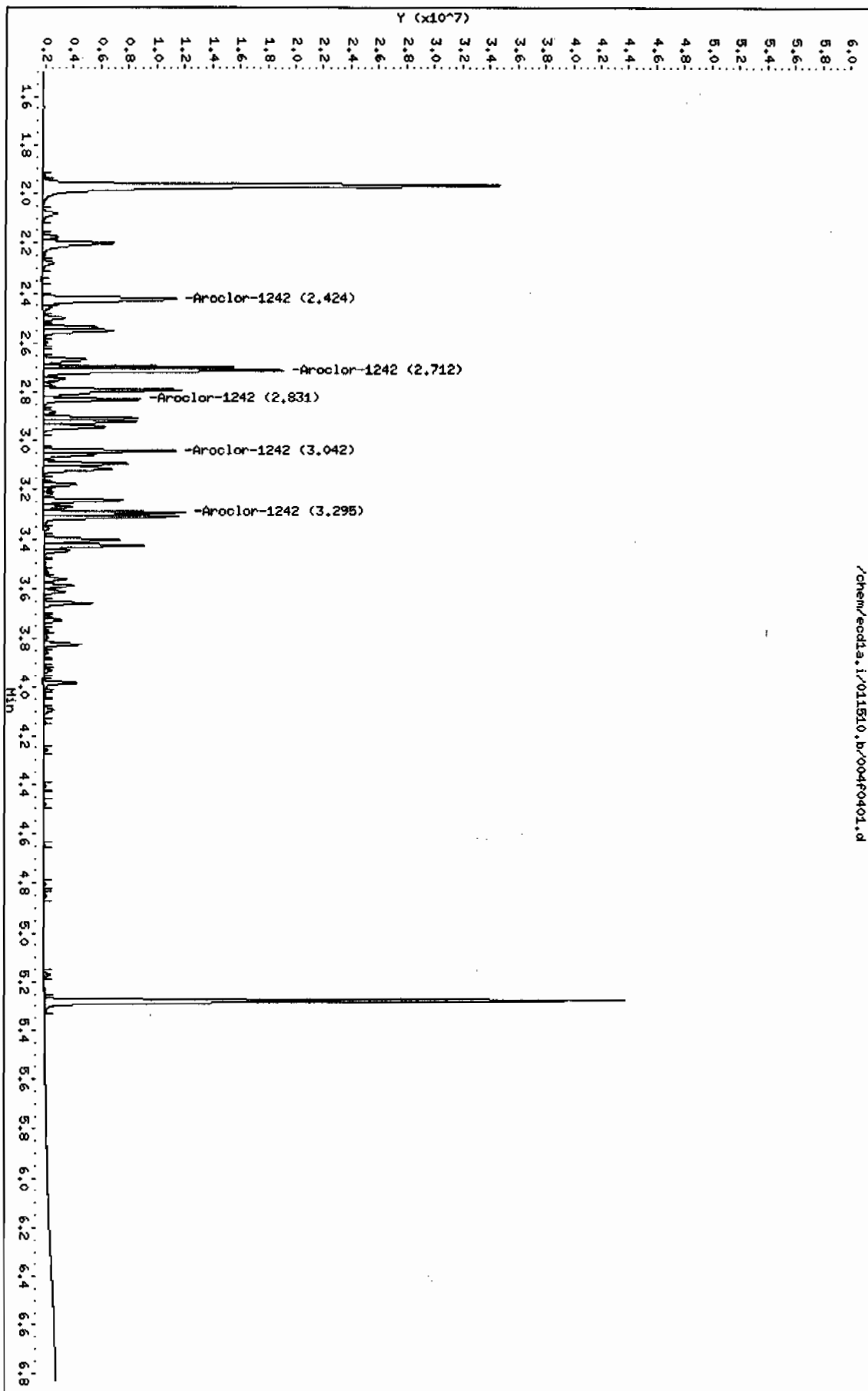
AMOUNTS						
			CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	( ug/L)	TARGET RANGE	RATIO
==	=====	=====	*****	*****	*****	=====
4 Aroclor-1242			CAS #: 53469-21-9			
2.424	2.424	0.000	11221726	1000.00	962 80.00- 120.00	100.00
2.712	2.712	0.000	14743617	1000.00	1100 111.38- 151.38	131.38
2.831	2.831	0.000	5665348	1000.00	1030 30.49- 70.49	50.49
3.042	3.042	0.000	7421558	1000.00	1020 46.14- 86.14	66.14
3.295	3.295	0.000	7369531	1000.00	1080 45.67- 85.67	65.67
Average of Peak Amounts =			1.04e+03			

Data File: /chem/eodla.i/011510.b/004f0401.d  
Date: 15-JAN-2010 07:03  
Client ID: PR124201  
Sample Info: 11AR091217-42

Column phase: CLP1

Instrument: eodla.i  
Operator: YSL  
Column diameter: 0.25

/chem/eodla.i/011510.b/004f0401.d



Data File: /chem/ecdla.i/011510.b/004b0401.d  
Report Date: 23-Jan-2010 12:01

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/011510.b/004b0401.d  
Lab Smp Id: WAR091217-42 Client Smp ID: AR124201  
Inj Date : 15-JAN-2010 07:03  
Operator : YS1 Inst ID: ecdla.i  
Smp Info : |WAR091217-42  
Misc Info :  
Comment :  
Method : /chem/ecdla.i/011510.b/ECD1-B-8082-121409.m  
Meth Date : 23-Jan-2010 12:01 yip00818 Quant Type: ESTD  
Cal Date : 14-DEC-2009 12:16 Cal File: 044b4401.d  
Als bottle: 4 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: AR1242.sub  
Target Version: 3.50 Sample Matrix: None  
Processing Host: hpc1p1

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ug/L)	ON-COL ( ug/L)	TARGET RANGE	RATIO
----	--------	--------	-----------------------------	-------------------	--------------	-------

4 Aroclor-1242			CAS #: 53469-21-9			
3.196	3.196	0.000	10279826 1000.00	971	80.00- 120.00	100.00
3.278	3.278	0.000	6995470 1000.00	869	48.05- 88.05	68.05
3.569	3.569	0.000	5555062 1000.00	932	34.04- 74.04	54.04
3.802	3.802	0.000	5802810 1000.00	958	36.45- 76.45	56.45
3.831	3.831	0.000	6414200 1000.00	957	42.40- 82.40	62.40
Average of Peak Amounts =				937		

Data File: /chem/ecdia.i/011510.b/004b0401.d

Date : 15-JAN-2010 07:03

Client ID: AR124201

Sample Info: 1HAR091217-42

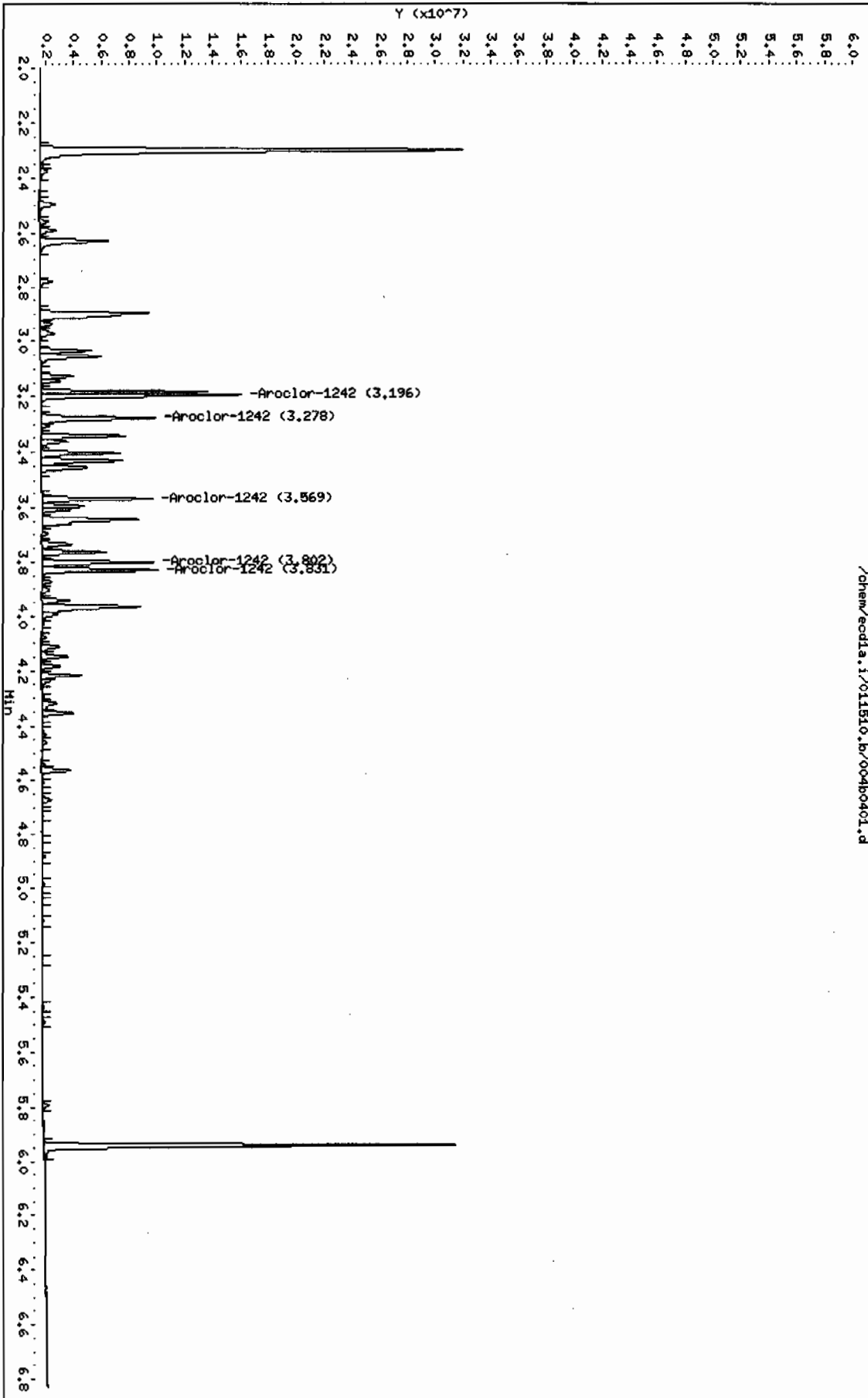
Column phase: CLP2

Instrument: ecdia.i

Operator: YSL

Column diameter: 0.25

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Data File: /chem/ecdl1.i/011510.b/005f0501.d  
Report Date: 23-Jan-2010 12:02

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1.i/011510.b/005f0501.d  
Lab Smp Id: WAR091217-48 Client Smp ID: AR124801  
Inj Date : 15-JAN-2010 07:13  
Operator : YS1 Inst ID: ecd1.i  
Smp Info : |WAR091217-48  
Misc Info :  
Comment :  
Method : /chem/ecdl1.i/011510.b/ECD1-F-8082-121409.m  
Meth Date : 23-Jan-2010 12:02 yip00818 Quant Type: ESTD  
Cal Date : 14-DEC-2009 11:34 Cal File: 040f4001.d  
Als bottle: 5 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: AR1248.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
5 Aroclor-1248					CAS #: 12672-29-6	
3.094	3.094	0.000	7935559 1000.00	1010	80.00- 120.00	100.00
3.245	3.245	0.000	7012292 1000.00	1020	68.37- 108.37	88.37
3.296	3.296	0.000	13726699 1000.00	1030	152.98- 192.98	172.98
3.427	3.427	0.000	11028077 1000.00	1000	118.97- 158.97	138.97
3.660	3.660	0.000	7150348 1000.00	959	70.11- 110.11	90.11
Average of Peak Amounts =				1e+03		

Data File: /chem/ecdda.i/011510.b/005f0501.d

Date: 15-JAN-2010 07:13

Client ID: AR124801

Sample Info: 1MRO91217-48

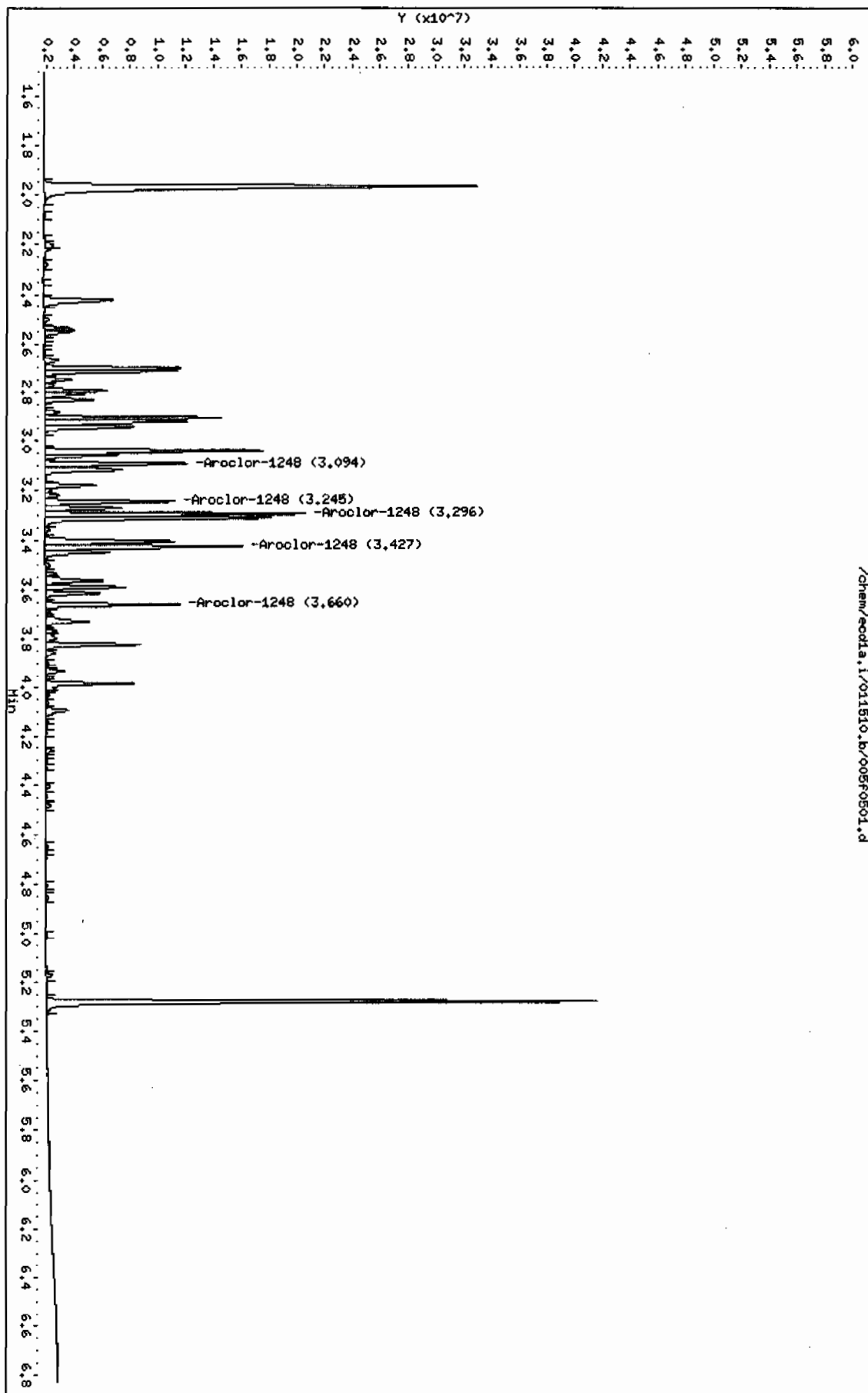
Column phase: CLP1

Instrument: ecdda.i

Operator: YSL

Column diameter: 0.25

/chem/ecdda.i/011510.b/005f0501.d



Data File: /chem/ecdl1a.i/011510.b/005b0501.d  
Report Date: 23-Jan-2010 12:01

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011510.b/005b0501.d  
Lab Smp Id: WAR091217-48 Client Smp ID: AR124801  
Inj Date : 15-JAN-2010 07:13  
Operator : YS1 Inst ID: ecd1a.i  
Smp Info : |WAR091217-48  
Misc Info :  
Comment :  
Method : /chem/ecdl1a.i/011510.b/ECD1-B-8082-121409.m  
Meth Date : 23-Jan-2010 12:01 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: hpc1p1

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	7272230 1000.00	903	80.00- 120.00	100.00
3.569	3.569	0.000	9117152 1000.00	923	105.37- 145.37	125.37
3.802	3.802	0.000	10490361 1000.00	935	124.25- 164.25	144.25
3.830	3.830	0.000	11727527 1000.00	939	141.26- 181.26	161.26
3.967	3.967	0.000	11257844 1000.00	930	134.81- 174.81	154.81
Average of Peak Amounts =				926		

Data File: /chem/ecdl.a.i/011510.b/00500501.d

Date: 15-JAN-2010 07:13

Client ID: AR124801

Sample Info: 14AR091217-48

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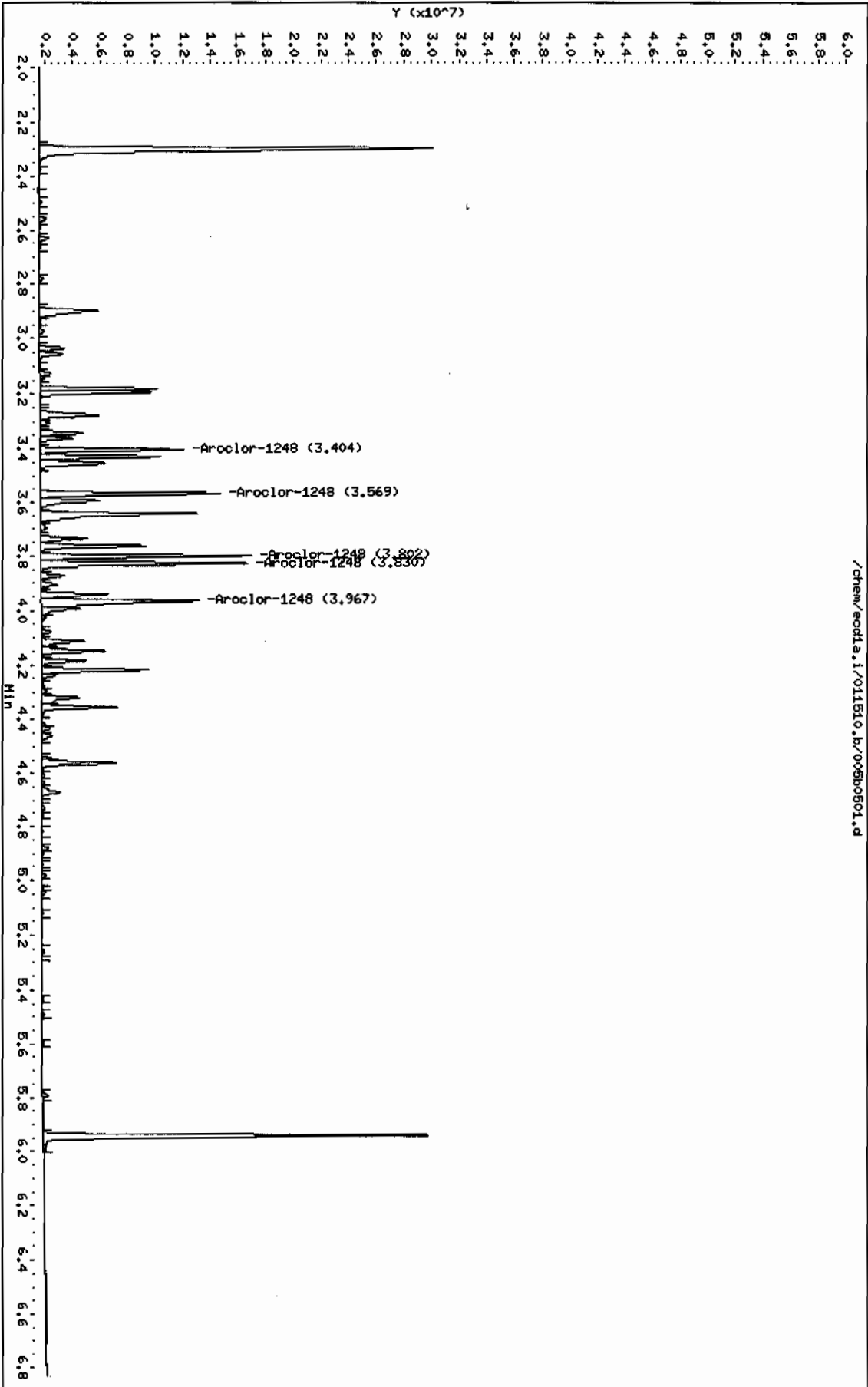
Column phase: CLP2

/chem/ecdl.a.i/011510.b/00500501.d

Instrument: ecdl.a.i

Operator: YSI

Column diameter: 0.25





Data File: /chem/ecdla.i/011510.b/006f0601.d  
Report Date: 23-Jan-2010 12:02

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/011510.b/006f0601.d  
Lab Smp Id: WAR100104-32 Client Smp ID: AR123201  
Inj Date : 15-JAN-2010 07:24  
Operator : YS1 Inst ID: ecdla.i  
Smp Info : |WAR100104-32  
Misc Info :  
Comment :  
Method : /chem/ecdla.i/011510.b/ECD1-F-8082-121409.m  
Meth Date : 23-Jan-2010 12:02 yip00818 Quant Type: ESTD  
Cal Date : 14-DEC-2009 11:34 Cal File: 040f4001.d  
Als bottle: 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					
		CAL-AMT		ON-COL			
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	( ug/L)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	=====
3 Aroclor-1232		CAS #: 11141-16-5					
2.424	2.424	0.000	7030548 1000.00	1050	80.00- 120.00	100.00	
2.712	2.712	0.000	9397784 1000.00	1150	113.67- 153.67	133.67	
2.793	2.793	0.000	6032847 1000.00	1050	65.81- 105.81	85.81	
3.041	3.041	0.000	4477527 1000.00	1130	43.69- 83.69	63.69	
3.295	3.295	0.000	4183245 1000.00	1180	39.50- 79.50	59.50	
Average of Peak Amounts =			1.11e+03				

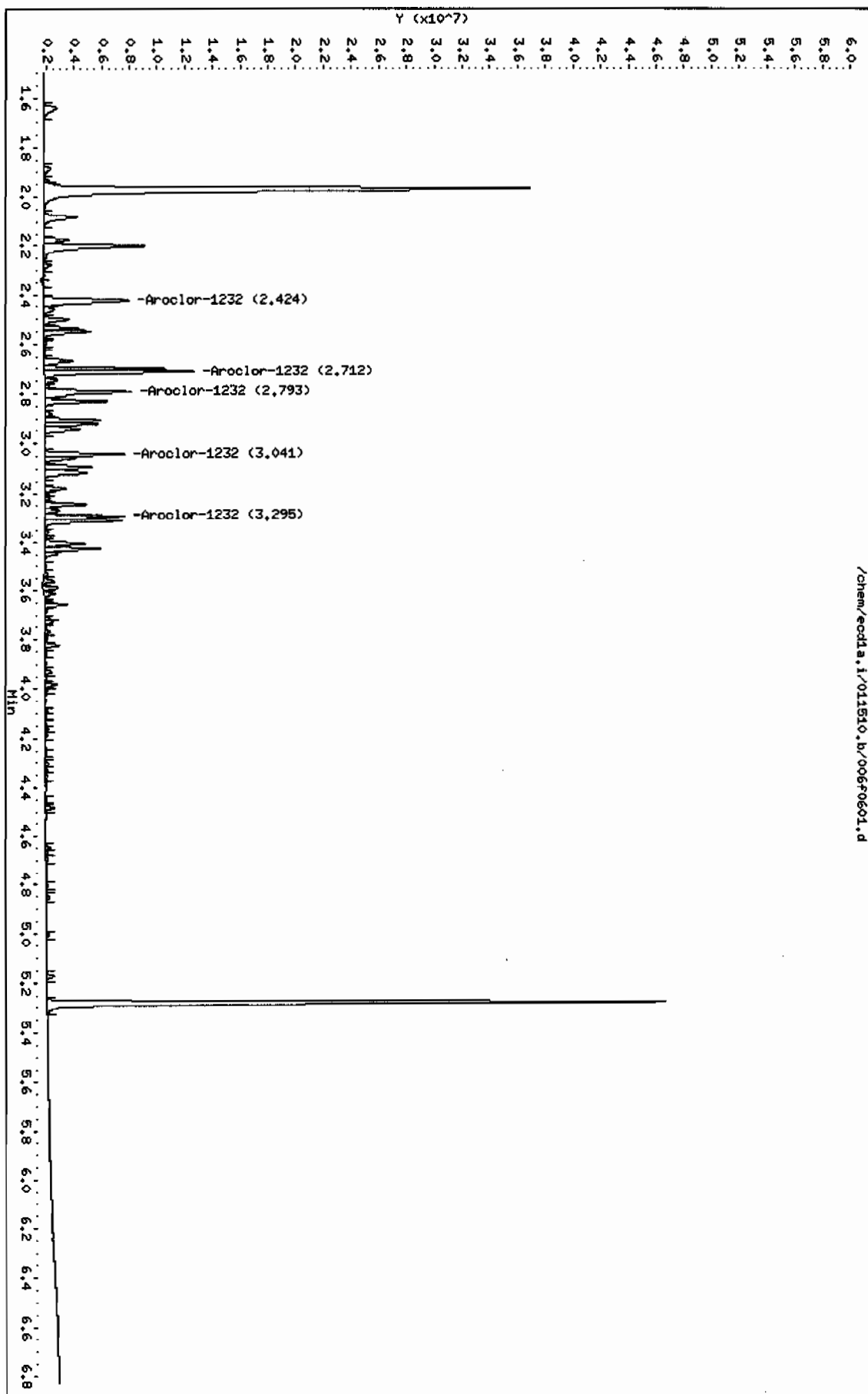
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Date: 15-JUN-2010 07:24  
Client ID: AR123201  
Sample Info: 14AR100104-32

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Column phase: CLP1

Instrument: eod1a.i  
Operator: YSI  
Column diameter: 0.25

/chem/eod1a.i/011510.b/006f0601.d



Data File: /chem/ecdl1a.i/011510.b/006b0601.d  
Report Date: 23-Jan-2010 12:02

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011510.b/006b0601.d

Lab Smp Id: WAR100104-32

Client Smp ID: AR123201

Inj Date : 15-JAN-2010 07:24

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR100104-32

Misc Info :

Comment :

Method : /chem/ecdl1a.i/011510.b/ECD1-B-8082-121409.m

Meth Date : 23-Jan-2010 12:02 yip00818 Quant Type: ESTD

Cal Date : 14-DEC-2009 12:16

Cal File: 044b4401.d

Als bottle: 6

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1232.sub

Target Version: 3.50

Sample Matrix: None

Processing Host: hpclp1

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ug/L)	ON-COL ( ug/L)	TARGET RANGE	RATIO
----	--------	--------	-----------------------------	-------------------	--------------	-------

3 Aroclor-1232			CAS #: 11141-16-5			
2.631	2.631	0.000	6195453 1000.00	1010	80.00- 120.00	100.00
3.196	3.196	0.000	6607178 1000.00	1050	86.65- 126.65	106.65
3.278	3.278	0.000	4583249 1000.00	975	53.98- 93.98	73.98
3.569	3.569	0.000	3415067 1000.00	1050	35.12- 75.12	55.12
3.802	3.802	0.000	3481117 1000.00	1100	36.19- 76.19	56.19

Average of Peak Amounts = 1.04e+03

Data File: /chem/eodla.i/011510.b/0060601.d

Date: 15-JUN-2010 07:24

Client ID: AR123201

Sample Info: IMA100104-32

Column phase: CLP2

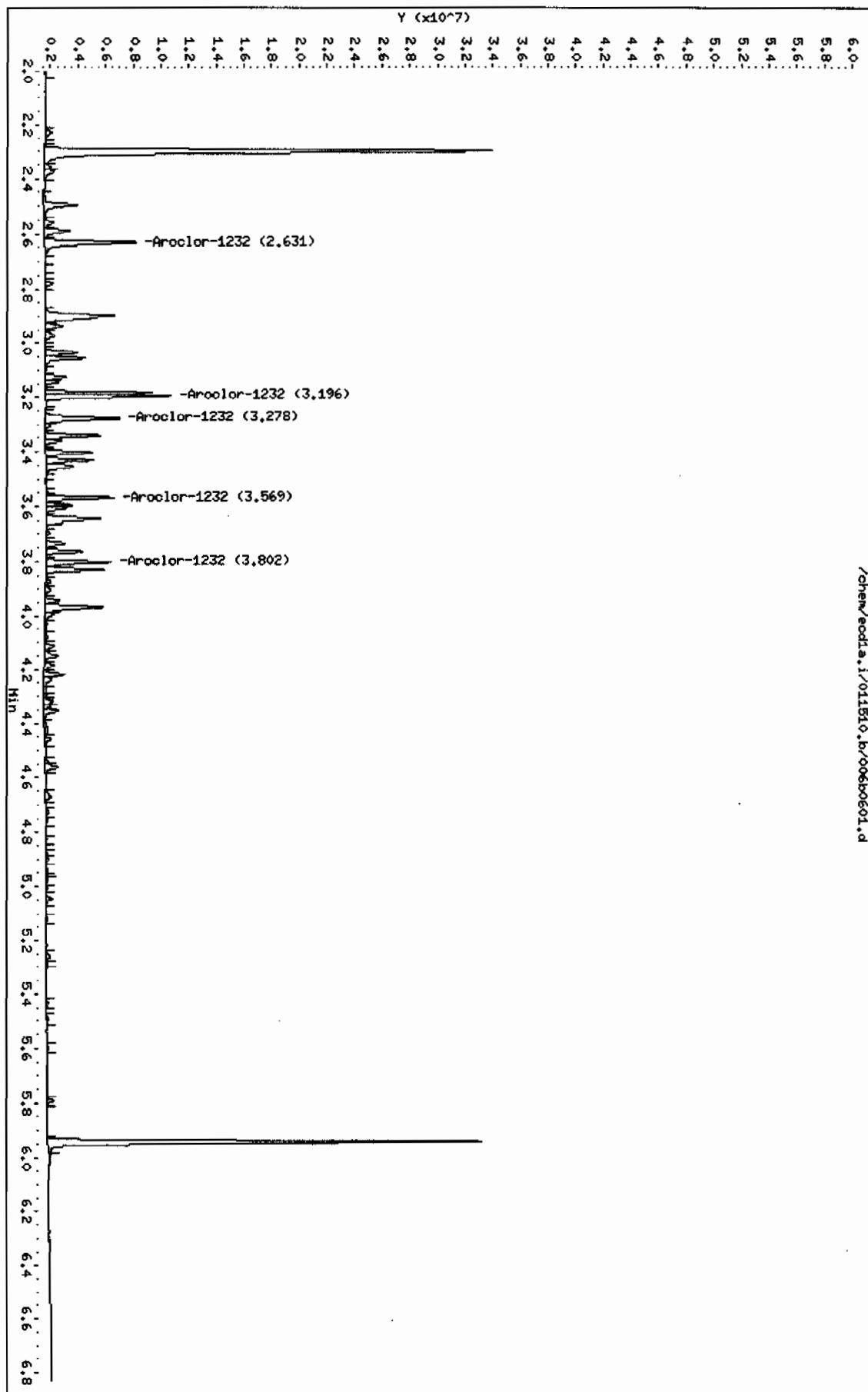
Instrument: eodla.i

Operator: YSA

Column diameter: 0.25

/chem/eodla.i/011510.b/0060601.d

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Data File: /chem/ecdla.i/011510.b/007f0701.d  
Report Date: 23-Jan-2010 12:03

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/011510.b/007f0701.d  
Lab Smp Id: WAR100104-21 Client Smp ID: AR122101  
Inj Date : 15-JAN-2010 07:34  
Operator : YS1 Inst ID: ecdla.i  
Smp Info : |WAR100104-21  
Misc Info :  
Comment :  
Method : /chem/ecdla.i/011510.b/ECD1-F-8082-121409.m  
Meth Date : 23-Jan-2010 12:03 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	Aroclor-1221				CAS #: 11104-28-2	
2.082	2.082	0.000	4275099 1000.00	994	80.00- 120.00	100.00
2.174	2.174	0.000	2393387 1000.00	981	35.98- 75.98	55.98
2.200	2.200	0.000	10273351 1000.00	1000	220.31- 260.31	240.31
Average of Peak Amounts =				992		

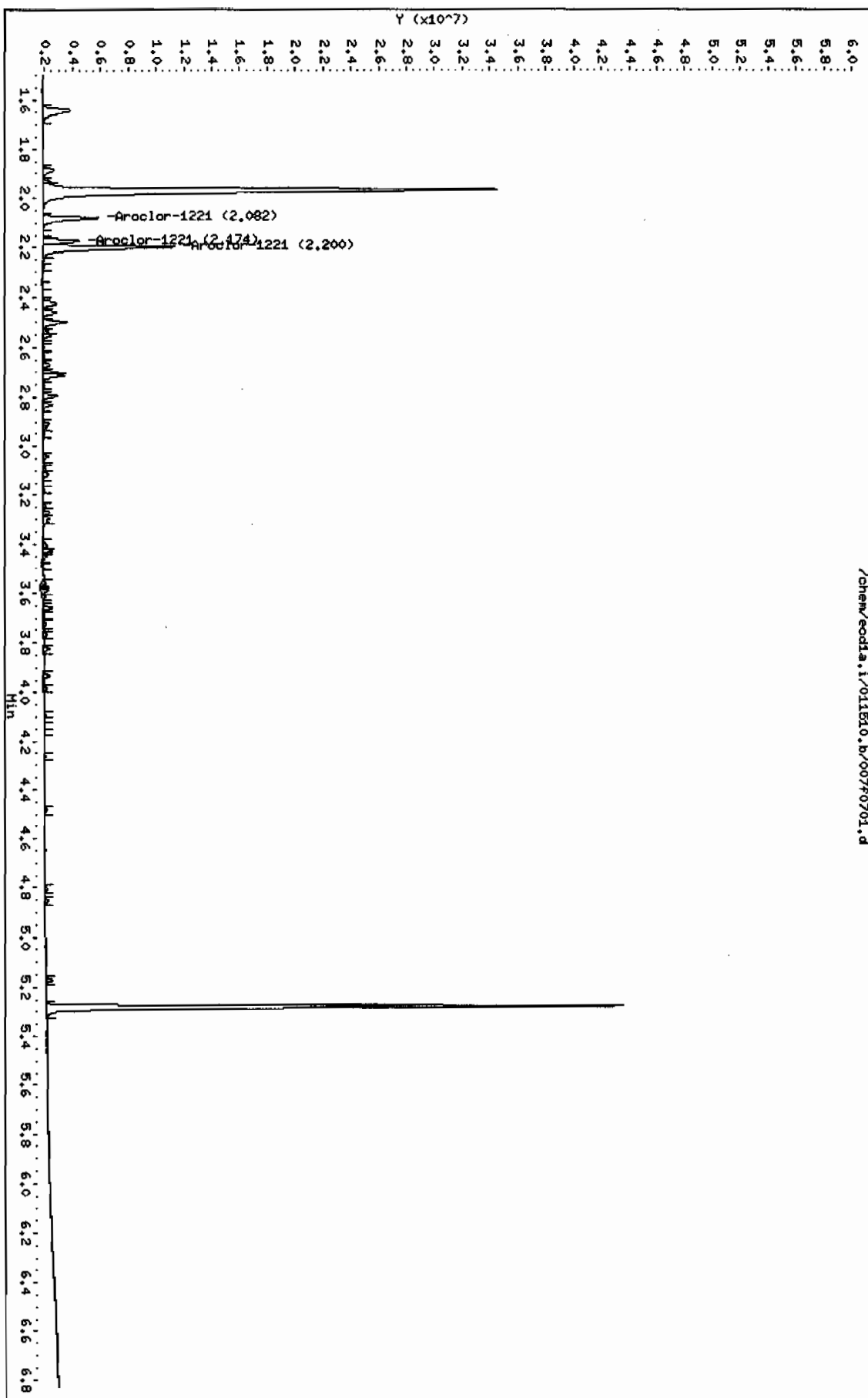
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Date: 15-JAN-2010 07:34  
Client ID: AR122101  
Sample Info: 140R100104-21

Column phase: CLP1

Instrument: eodla.i  
Operator: YSL  
Column diameter: 0.25

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/chem/eodla.i/011510.b/0070701.d



Data File: /chem/ecdla.i/011510.b/007b0701.d  
Report Date: 23-Jan-2010 12:03

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/011510.b/007b0701.d  
Lab Smp Id: WAR100104-21 Client Smp ID: AR122101  
Inj Date : 15-JAN-2010 07:34  
Operator : YS1 Inst ID: ecdla.i  
Smp Info : |WAR100104-21  
Misc Info :  
Comment :  
Method : /chem/ecdla.i/011510.b/ECD1-B-8082-121409.m  
Meth Date : 23-Jan-2010 12:02 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			
2.496	2.496	0.000	3698836 1000.00	1020	80.00- 120.00	100.00
2.590	2.590	0.000	2288525 1000.00	982	41.87- 81.87	61.87
2.631	2.631	0.000	7743513 1000.00	954	189.35- 229.35	209.35
Average of Peak Amounts =			984			

-----

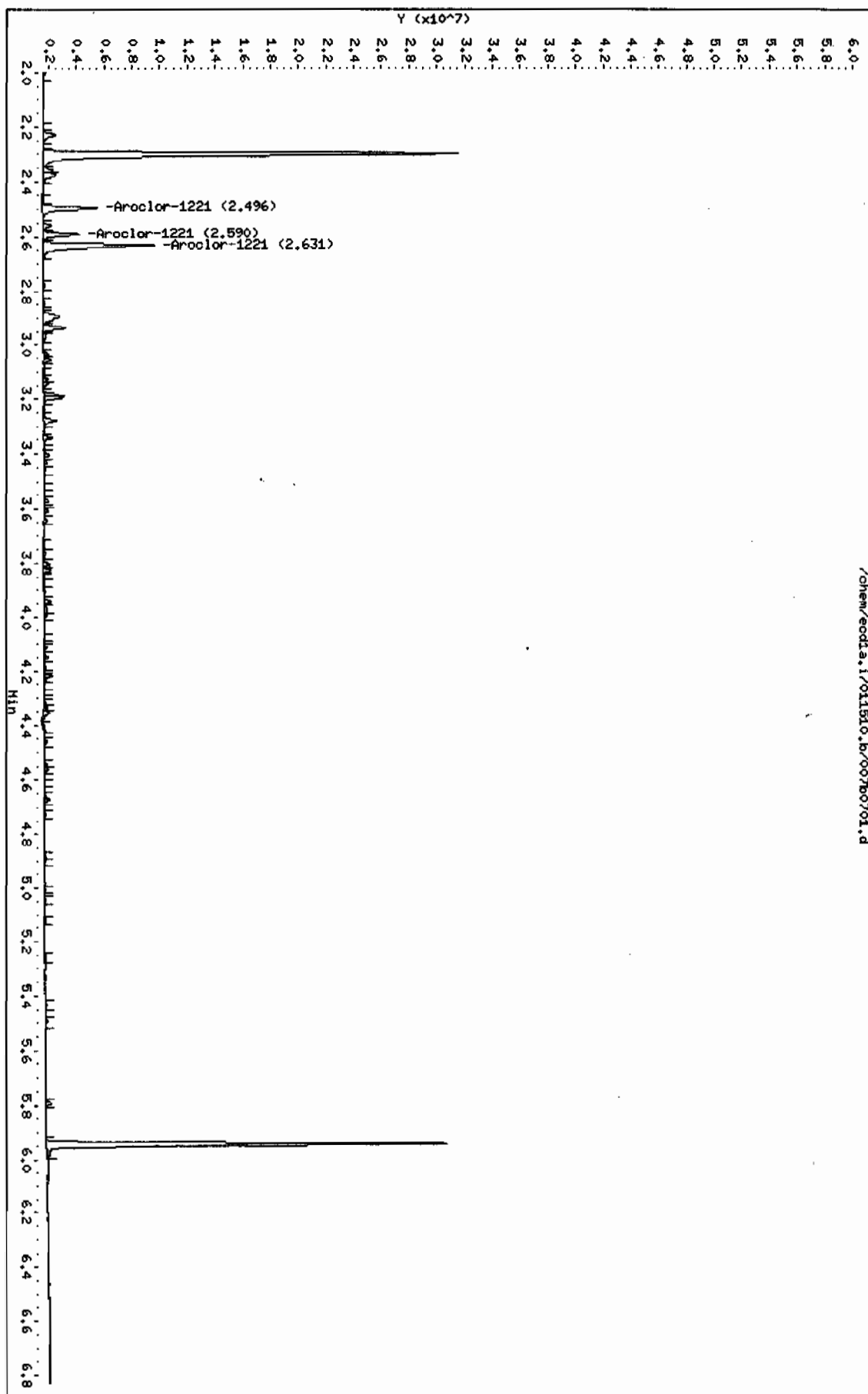
Data File: /chem/ecdda.i/011510.b/007b0701.d  
Date: 15-JAN-2010 07:34  
Client ID: AR122104  
Sample Info: 1MR100104-24

Column phase: CLP2

Instrument: ecdda.i  
Operator: YSL  
Column diameter: 0.25

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/chem/ecdda.i/011510.b/007b0701.d





Data File: /chem/ecdla.i/011510.b/010f1001.d  
Report Date: 23-Jan-2010 12:04

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/011510.b/010f1001.d  
Lab Smp Id: WAR100104-60 01 Client Smp ID: AR166001  
Inj Date : 15-JAN-2010 08:06  
Operator : YS1 Inst ID: ecdla.i  
Smp Info : |WAR100104-60 01  
Misc Info :  
Comment :  
Method : /chem/ecdla.i/011510.b/ECD1-F-8082-121409.m  
Meth Date : 23-Jan-2010 12:04 yip00818 Quant Type: ESTD  
Cal Date : 14-DEC-2009 11:34 Cal File: 040f4001.d  
Als bottle: 10 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	37654208 100.000	105	80.00- 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3		
5.281	5.281	0.000	31018026 100.000	103	80.00- 120.00	100.00
-----						
1 Aroclor-1016				CAS #: 12674-11-2		
2.424	2.424	0.000	12817819 1000.00	924	80.00- 120.00	100.00
2.700	2.700	0.000	10556185 1000.00	1040	62.36- 102.36	82.36
2.793	2.793	0.000	10897813 1000.00	927	65.02- 105.02	85.02
2.830	2.830	0.000	6594136 1000.00	999	31.45- 71.45	51.45
3.041	3.041	0.000	8485156 1000.00	978	46.20- 86.20	66.20
Average of Peak Amounts =				975		
-----						
7 Aroclor-1260				CAS #: 11096-82-5		
3.767	3.767	0.000	16612936 1000.00	992	80.00- 120.00	100.00
3.930	3.930	0.000	25244962 1000.00	1020	131.96- 171.96	151.96
4.160	4.160	0.000	15028080 1000.00	1020	70.46- 110.46	90.46
4.303	4.303	0.000	15761106 1000.00	1040	74.87- 114.87	94.87
4.482	4.482	0.000	35929139 1000.00	1040	196.27- 236.27	216.27
Average of Peak Amounts =				1.02e+03		

Data File: /chem/eodta.i/011510.b/010f1001.d

Date: 15-JAN-2010 08:06

Client ID: AR166001

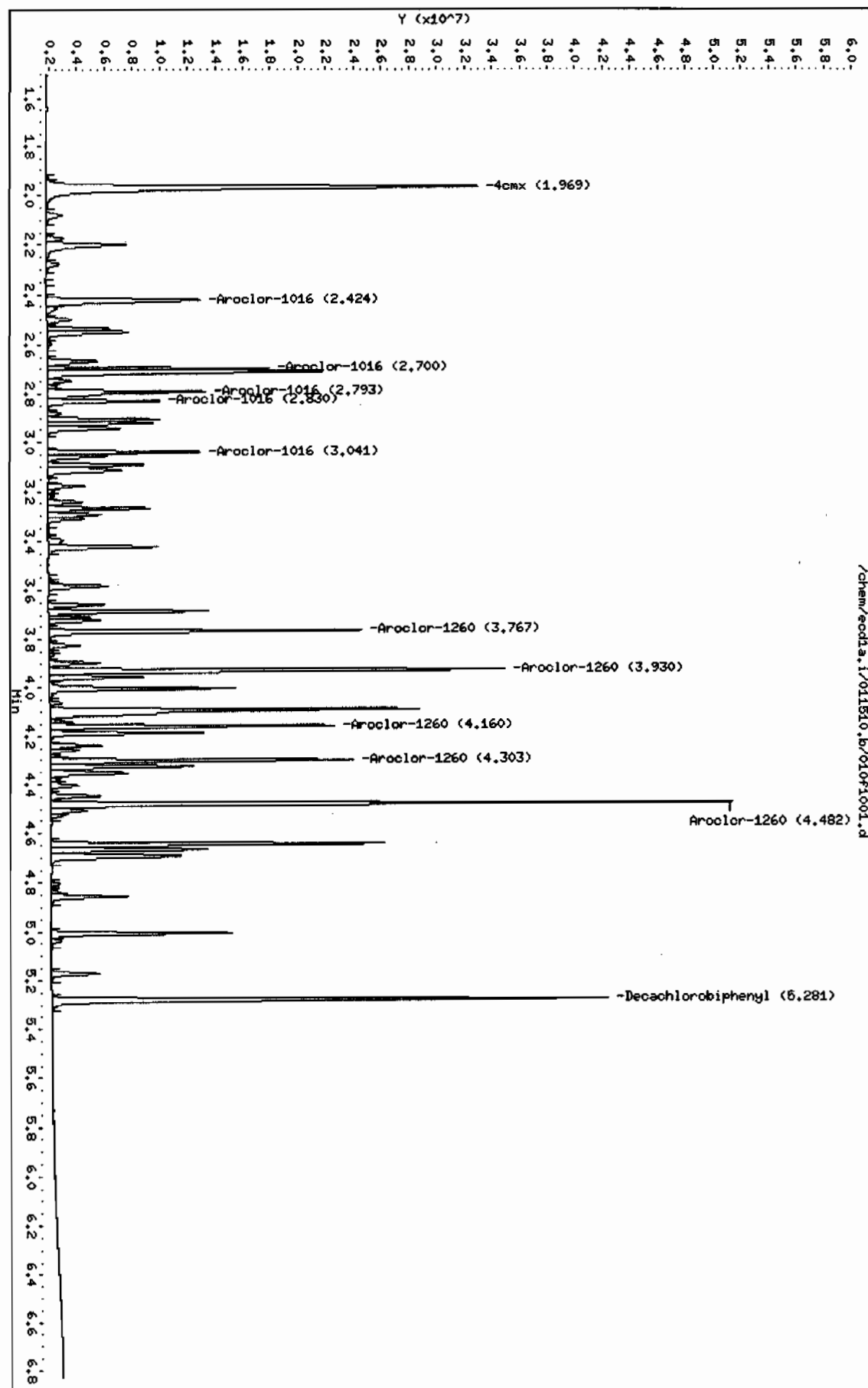
Sample Info: IWAR100104-60 01

Column phase: CLP1

Instrument: eodta.i

Operator: YSI

Column diameter: 0.25



Data File: /chem/ecdl1a.i/011510.b/010b1001.d  
Report Date: 23-Jan-2010 12:04

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011510.b/010b1001.d  
Lab Smp Id: WAR100104-60 01 Client Smp ID: AR166001  
Inj Date : 15-JAN-2010 08:06  
Operator : YS1 Inst ID: ecd1a.i  
Smp Info : |WAR100104-60 01  
Misc Info :  
Comment :  
Method : /chem/ecdl1a.i/011510.b/ECD1-B-8082-121409.m  
Meth Date : 23-Jan-2010 12:04 yip00818 Quant Type: ESTD  
Cal Date : 14-DEC-2009 12:16 Cal File: 044b4401.d  
Als bottle: 10 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
<hr/>						
\$ 11 4cmx				CAS #: 877-09-8		
2.299	2.299	0.000	27897122 100.000	97.8	80.00- 120.00	100.00
<hr/>						
\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3		
5.944	5.944	0.000	21680757 100.000	97.8	80.00- 120.00	100.00
<hr/>						
1 Aroclor-1016				CAS #: 12674-11-2		
3.195	3.195	0.000	11868197 1000.00	941	80.00- 120.00	100.00 (M)
3.278	3.278	0.000	7973607 1000.00	855	47.18- 87.18	67.18
3.342	3.342	0.000	4961934 1000.00	917	21.81- 61.81	41.81
3.569	3.569	0.000	6279579 1000.00	890	32.91- 72.91	52.91
3.645	3.645	0.000	5944918 1000.00	908	30.09- 70.09	50.09
Average of Peak Amounts =				902		
<hr/>						
7 Aroclor-1260				CAS #: 11096-82-5		
4.334	4.334	0.000	12157507 1000.00	889	80.00- 120.00	100.00
4.459	4.459	0.000	14886224 1000.00	929	102.44- 142.44	122.44
4.725	4.725	0.000	11381177 1000.00	906	73.61- 113.61	93.61
4.899	4.899	0.000	11745010 1000.00	917	76.61- 116.61	96.61
5.045	5.045	0.000	26366599 1000.00	945	196.88- 236.88	216.88
Average of Peak Amounts =				917		

Data File: /chem/ecdl1a.i/011510.b/010b1001.d  
Report Date: 23-Jan-2010 12:04

Page 2

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/eodla.i/011510.b/010b1001.d

Date: 15-JAN-2010 08:06

Client ID: AR166001

Sample Info: 1HAR100104-60 01

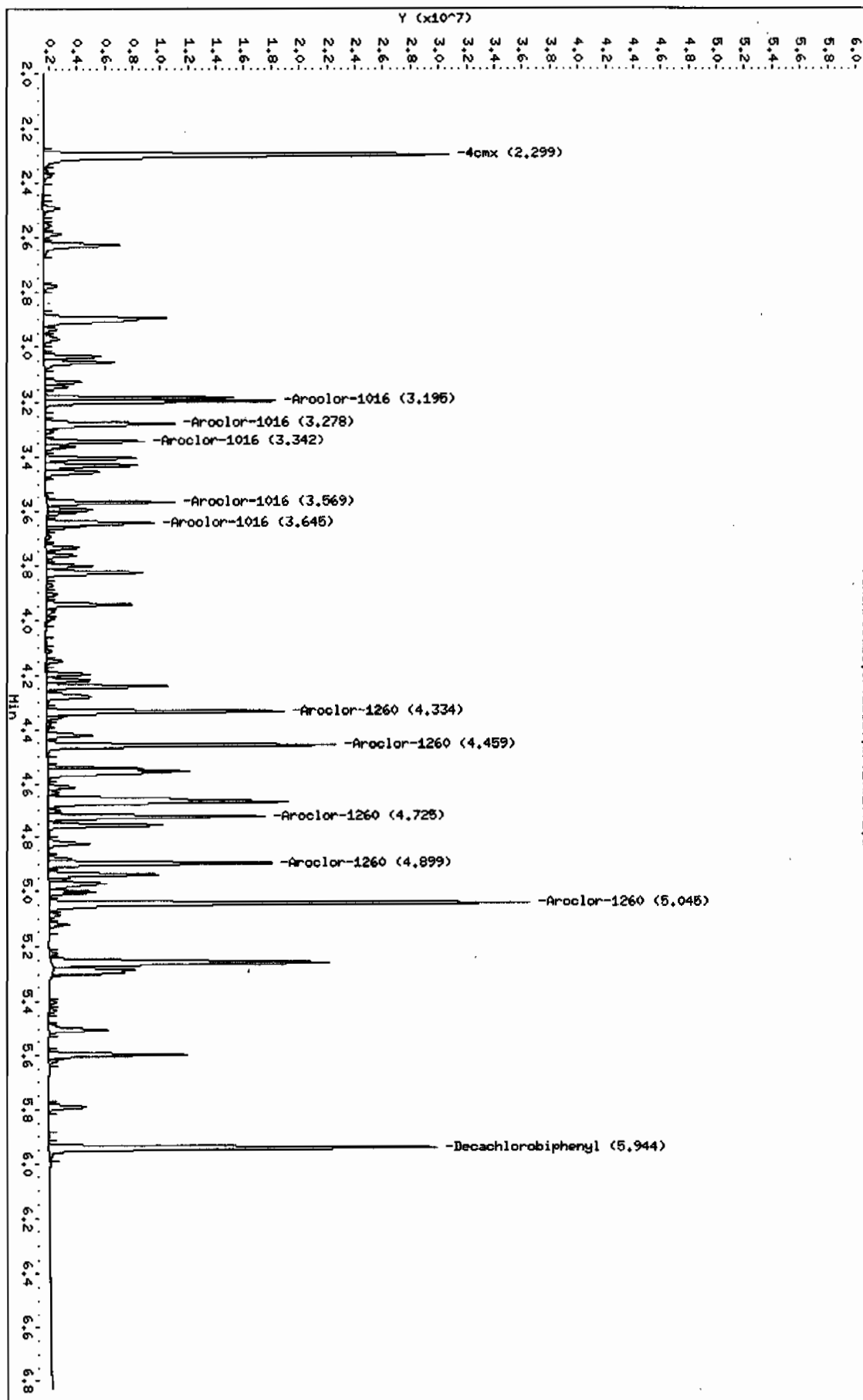
Column phase: CLP2

Instrument: eodla.i

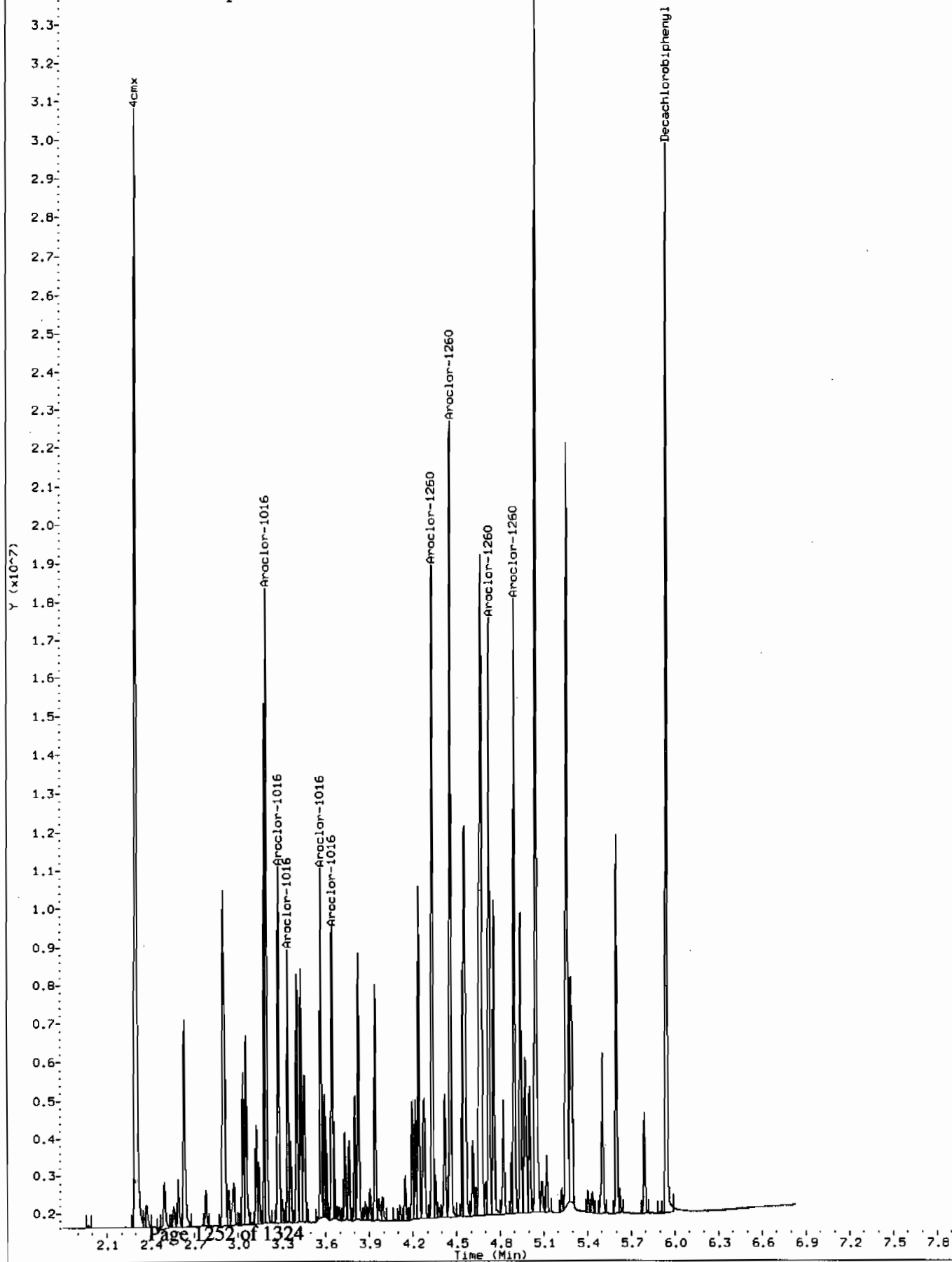
Operator: YSL

Column diameter: 0.25

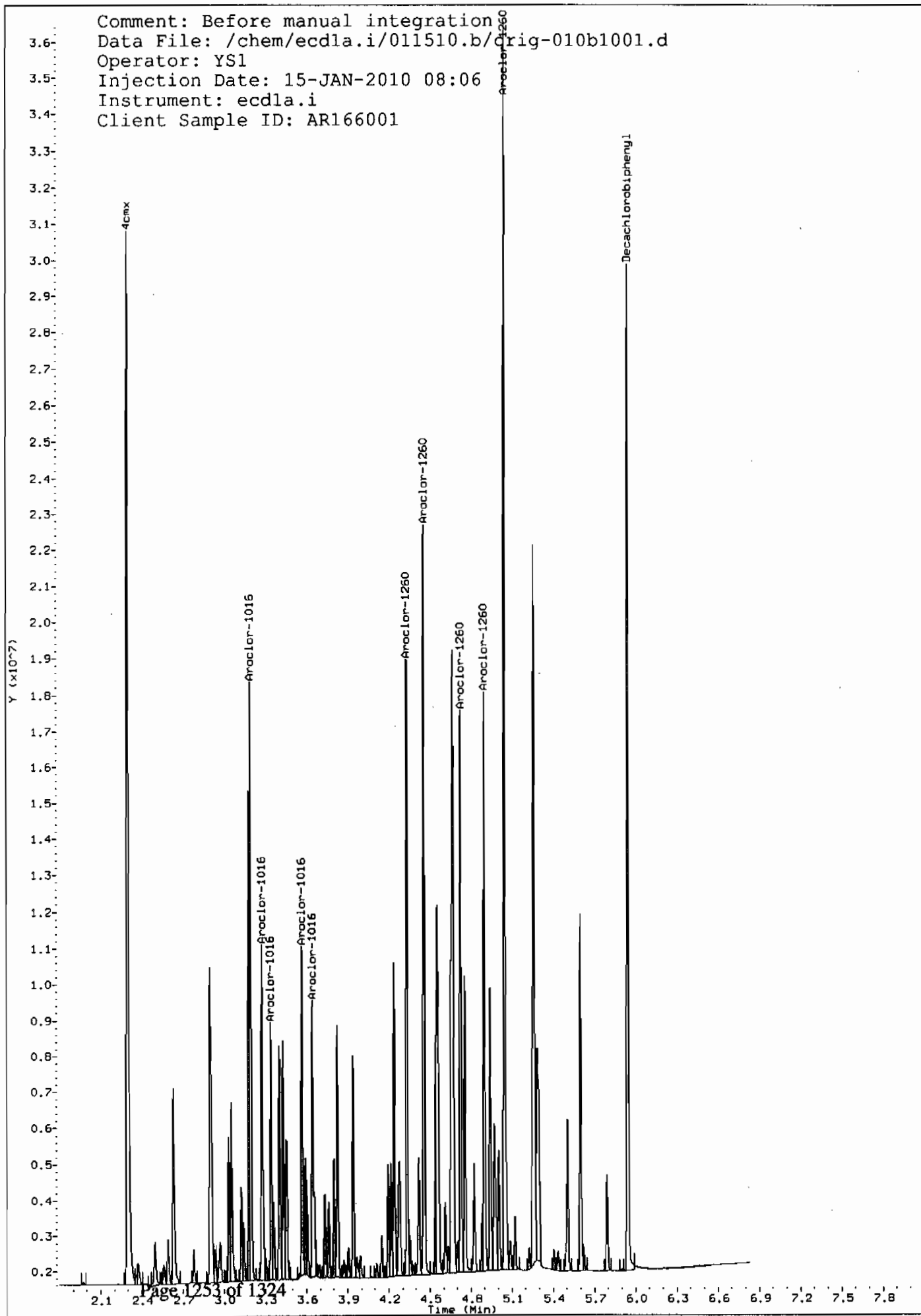
/chem/eodla.i/011510.b/010b1001.d



Comment: Manually Integrated  
Data File: /chem/ecdl1a.i/011510.b/010b1001.d  
Operator: YS1  
Injection Date: 15-JAN-2010 08:06  
Instrument: ecdl1a.i  
Client Sample ID: AR166001



Comment: Before manual integration  
Data File: /chem/ecdla.i/011510.b/orig-010b1001.d  
Operator: YS1  
Injection Date: 15-JAN-2010 08:06  
Instrument: ecdla.i  
Client Sample ID: AR166001



Data File: /chem/ecdl1.i/011510.b/019f1901.d  
 Report Date: 23-Jan-2010 12:07

Page 1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1.i/011510.b/019f1901.d  
 Lab Smp Id: WAR100104-60 02 Client Smp ID: AR166002  
 Inj Date : 15-JAN-2010 09:48  
 Operator : YS1 Inst ID: ecd1a.i  
 Smp Info : |WAR100104-60 02  
 Misc Info :  
 Comment :  
 Method : /chem/ecdl1.i/011510.b/ECD1-F-8082-121409.m  
 Meth Date : 23-Jan-2010 12:06 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: 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	37843438 100.000	106	80.00- 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3		
5.279	5.281	-0.002	31032497 100.000	103	80.00- 120.00	100.00
-----						
1 Aroclor-1016				CAS #: 12674-11-2		
2.423	2.424	-0.001	12901581 1000.00	930	80.00- 120.00	100.00
2.700	2.700	0.000	10493010 1000.00	1040	61.33- 101.33	81.33
2.792	2.793	-0.001	10938399 1000.00	930	64.78- 104.78	84.78
2.829	2.830	-0.001	6584460 1000.00	998	31.04- 71.04	51.04
3.039	3.041	-0.002	8383959 1000.00	967	44.98- 84.98	64.98
Average of Peak Amounts =				973		
-----						
7 Aroclor-1260				CAS #: 11096-82-5		
3.765	3.767	-0.002	16647183 1000.00	994	80.00- 120.00	100.00
3.929	3.930	-0.001	25304217 1000.00	1020	132.00- 172.00	152.00
4.158	4.160	-0.002	15069162 1000.00	1020	70.52- 110.52	90.52
4.301	4.303	-0.002	15788314 1000.00	1040	74.84- 114.84	94.84
4.480	4.482	-0.002	35976157 1000.00	1050	196.11- 236.11	216.11
Average of Peak Amounts =				1.03e+03		



Data File: /chem/eodta.i/011510.b/019f1901.d

Date: 15-JAN-2010 09:48

Client ID: AR160002

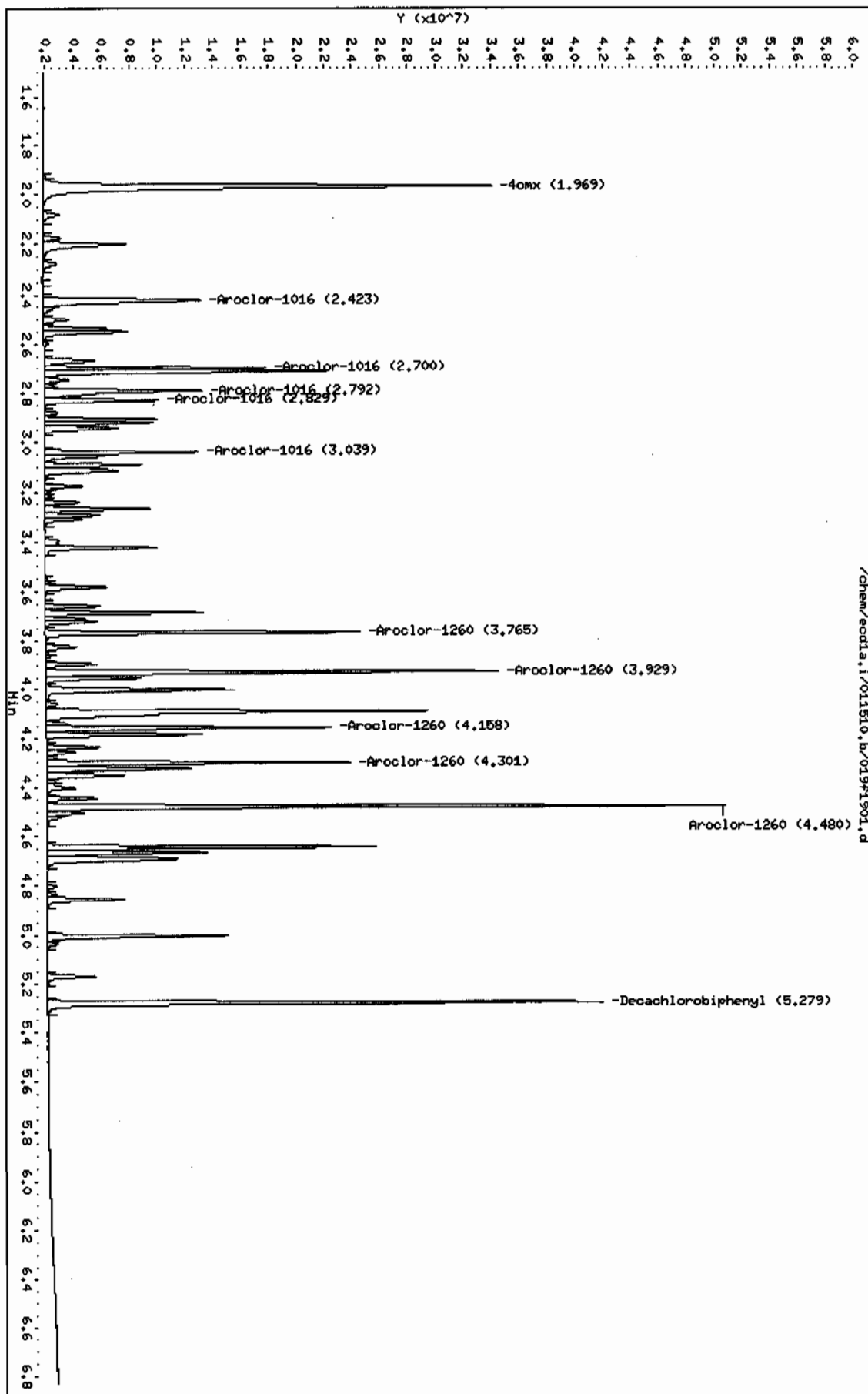
Sample Info: IWR100104-60 02

Column phase: CLP1

Instrument: eodta.i

Operator: YSL

Column diameter: 0.25



Data File: /chem/ecdl1a.i/011510.b/019b1901.d  
 Report Date: 23-Jan-2010 12:07

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011510.b/019b1901.d  
 Lab Smp Id: WAR100104-60 02 Client Smp ID: AR166002  
 Inj Date : 15-JAN-2010 09:48  
 Operator : YS1 Inst ID: ecd1a.i  
 Smp Info : |WAR100104-60 02  
 Misc Info :  
 Comment :  
 Method : /chem/ecdl1a.i/011510.b/ECD1-B-8082-121409.m  
 Meth Date : 23-Jan-2010 12:07 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: hpc1p1

AMOUNTS

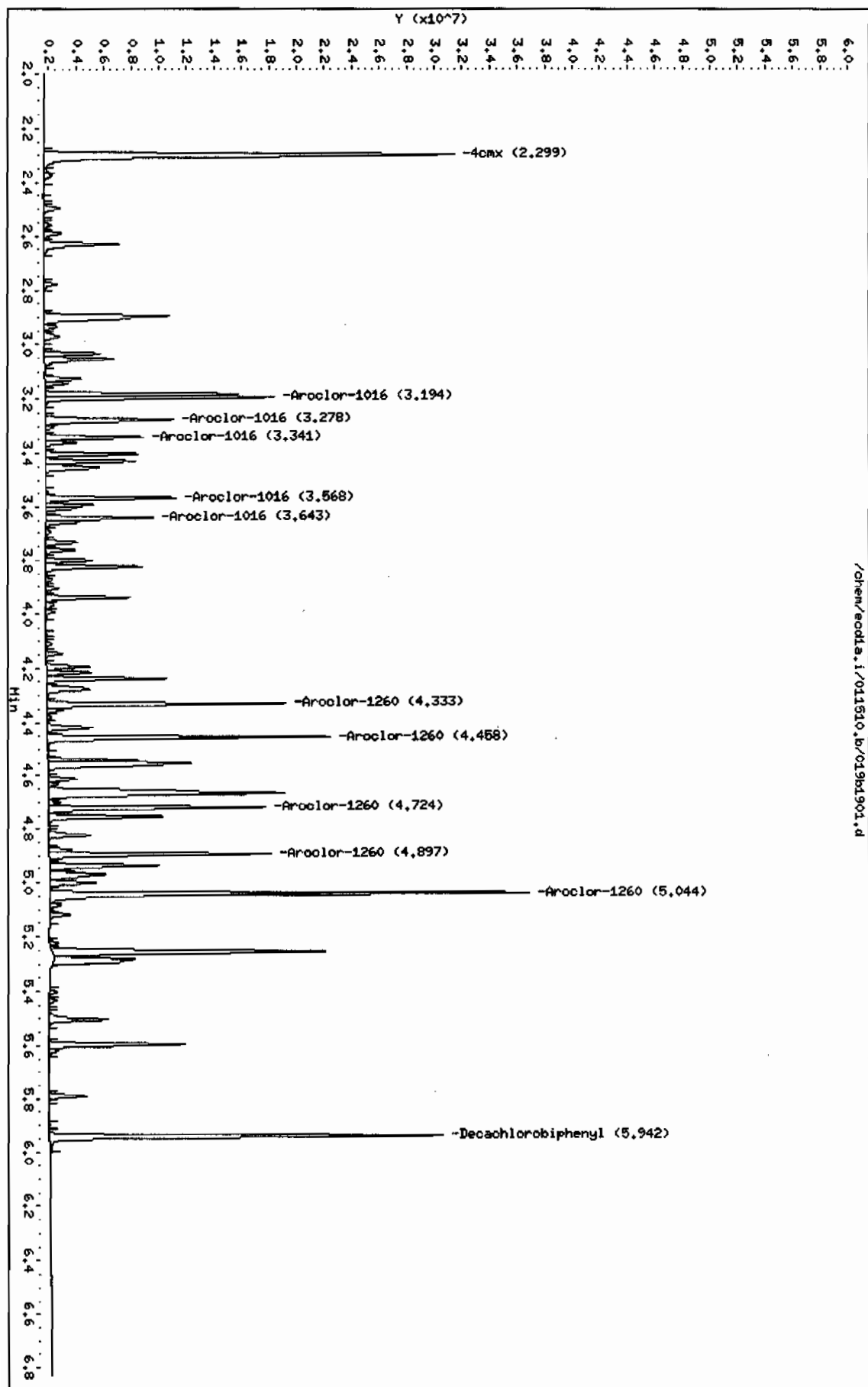
RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ug/L)	ON-COL ( ug/L)	TARGET RANGE	RATIO
\$ 11 4cmx				CAS #: 877-09-8		
2.299	2.299	0.000	28082265 100.000	98.4	80.00- 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3		
5.942	5.944	-0.002	21943738 100.000	98.9	80.00- 120.00	100.00
-----						
1 Aroclor-1016				CAS #: 12674-11-2		
3.194	3.195	-0.001	12020519 1000.00	953	80.00- 120.00	100.00
3.278	3.278	0.000	8016727 1000.00	859	46.69- 86.69	66.69
3.341	3.342	-0.001	4973910 1000.00	919	21.38- 61.38	41.38
3.568	3.569	-0.001	6492894 1000.00	921	34.02- 74.02	54.02
3.643	3.645	-0.002	5967777 1000.00	911	29.65- 69.65	49.65
Average of Peak Amounts =				913		
-----						
7 Aroclor-1260				CAS #: 11096-82-5		
4.333	4.334	-0.001	12217129 1000.00	893	80.00- 120.00	100.00
4.458	4.459	-0.001	14912128 1000.00	930	102.06- 142.06	122.06
4.724	4.725	-0.001	11397878 1000.00	907	73.29- 113.29	93.29
4.897	4.899	-0.002	11750887 1000.00	917	76.18- 116.18	96.18
5.044	5.045	-0.001	26480462 1000.00	949	196.75- 236.75	216.75
Average of Peak Amounts =				919		
-----						

Data File: /chem/ecdl1.i/011510.b/01961901.d  
Date: 15-JAN-2010 09:48  
Client ID: R6166002  
Sample Info: IMR100104-60 02

Column phase: CLP2

Instrument: ecdl1.i  
Operator: YSA  
Column diameter: 0.25

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Data File: /chem/ecdl1a.i/011510.b/029f2901.d  
 Report Date: 23-Jan-2010 12:10

Page 1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011510.b/029f2901.d  
 Lab Smp Id: WAR100104-60 03 Client Smp ID: AR166003  
 Inj Date : 15-JAN-2010 11:48  
 Operator : YS1 Inst ID: ecd1a.i  
 Smp Info : |WAR100104-60 03  
 Misc Info :  
 Comment :  
 Method : /chem/ecdl1a.i/011510.b/ECD1-F-8082-121409.m  
 Meth Date : 23-Jan-2010 12:10 yip00818 Quant Type: ESTD  
 Cal Date : 14-DEC-2009 11:34 Cal File: 040f4001.d  
 Als bottle: 29 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	RESPONSE	CAL-AMT ( ug/L)	ON-COL ( ug/L)	TARGET RANGE	RATIO
---	-----	-----	-----	-----	-----	-----	-----
\$ 11 4cmx					CAS #: 877-09-8		
1.968	1.969	-0.001	40062288	100.000	112	80.00- 120.00	100.00
-----							
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.280	5.281	-0.001	31459288	100.000	104	80.00- 120.00	100.00
-----							
1 Aroclor-1016					CAS #: 12674-11-2		
2.423	2.424	-0.001	13584311	1000.00	980	80.00- 120.00	100.00
2.701	2.700	0.001	10931957	1000.00	1080	60.47- 100.47	80.47
2.792	2.793	-0.001	11585223	1000.00	985	65.28- 105.28	85.28
2.831	2.830	0.001	6984562	1000.00	1060	31.42- 71.42	51.42
3.042	3.041	0.001	8865671	1000.00	1020	45.26- 85.26	65.26
Average of Peak Amounts =					1.03e+03		
-----							
7 Aroclor-1260					CAS #: 11096-82-5		
3.767	3.767	0.000	17570693	1000.00	1050	80.00- 120.00	100.00
3.930	3.930	0.000	26801456	1000.00	1080	132.53- 172.53	152.53
4.161	4.160	0.001	15788905	1000.00	1080	69.86- 109.86	89.86
4.303	4.303	0.000	16510541	1000.00	1090	73.97- 113.97	93.97
4.482	4.482	0.000	37415033	1000.00	1090	192.94- 232.94	212.94
Average of Peak Amounts =					1.08e+03		

Data File: /chem/ecdt.a.i/011510.b/029f2901.d

Date: 15-JUN-2010 11:48

Client ID: AR166003

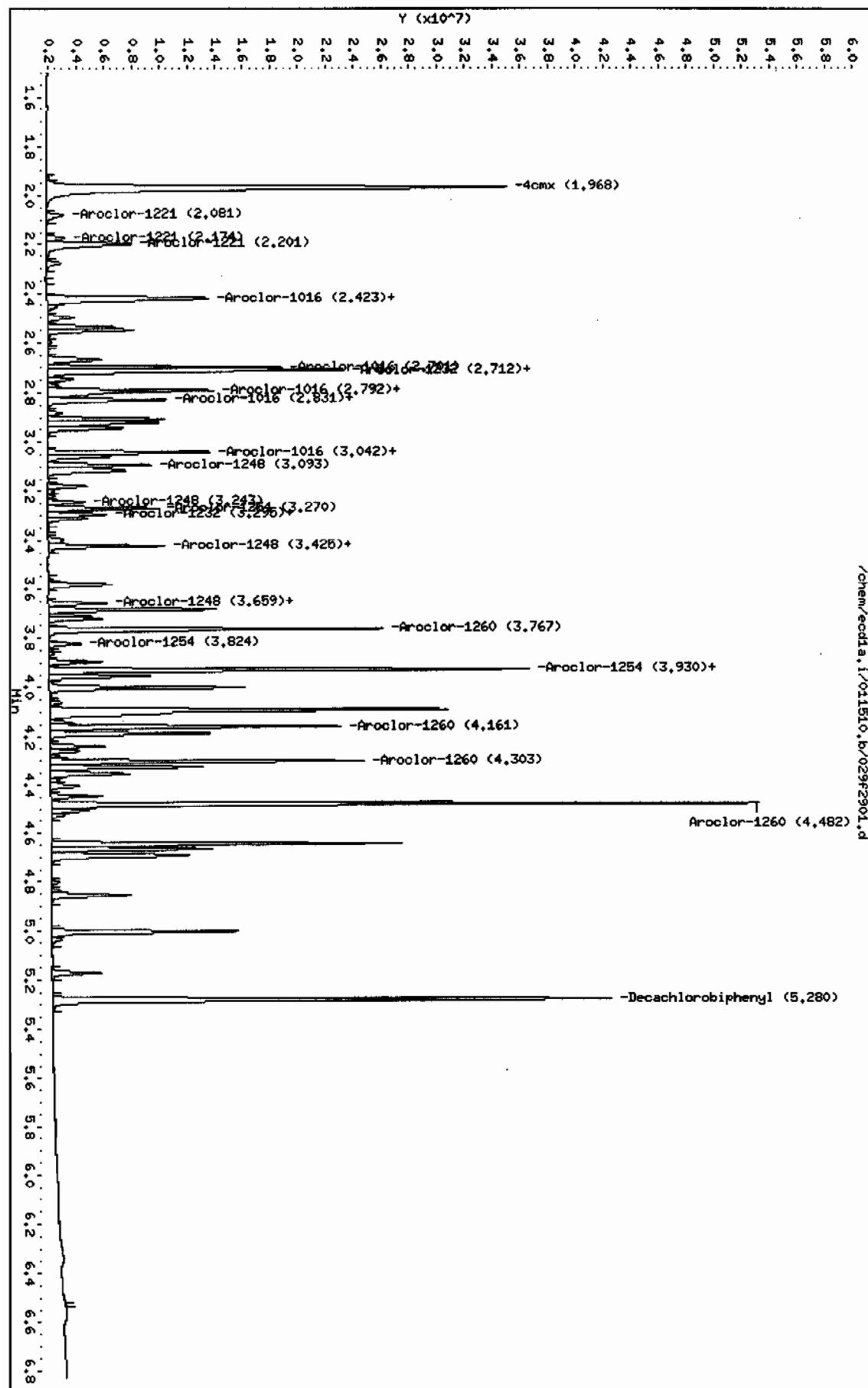
Sample Info: IWR100104-60 03

Column phase: CLP1

Instrument: ecda.i

Operator: YSL

Column diameter: 0.25



Data File: /chem/ecdl1a.i/011510.b/029b2901.d  
 Report Date: 23-Jan-2010 12:10

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011510.b/029b2901.d  
 Lab Smp Id: WAR100104-60 03 Client Smp ID: AR166003  
 Inj Date : 15-JAN-2010 11:48  
 Operator : YS1 Inst ID: ecd1a.i  
 Smp Info : |WAR100104-60 03  
 Misc Info :  
 Comment :  
 Method : /chem/ecdl1a.i/011510.b/ECD1-B-8082-121409.m  
 Meth Date : 23-Jan-2010 12:10 yip00818 Quant Type: ESTD  
 Cal Date : 14-DEC-2009 12:16 Cal File: 044b4401.d  
 Als bottle: 29 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	29706812 100.000	104	80.00- 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3		
5.943	5.944	-0.001	22430887 100.000	101	80.00- 120.00	100.00
-----						
1 Aroclor-1016				CAS #: 12674-11-2		
3.196	3.195	0.001	12416965 1000.00	984	80.00- 120.00	100.00 (M)
3.278	3.278	0.000	8445154 1000.00	905	48.01- 88.01	68.01
3.342	3.342	0.000	5281424 1000.00	976	22.53- 62.53	42.53
3.568	3.569	-0.001	6628004 1000.00	940	33.38- 73.38	53.38
3.644	3.645	-0.001	6100691 1000.00	931	29.13- 69.13	49.13
Average of Peak Amounts =				947		
-----						
7 Aroclor-1260				CAS #: 11096-82-5		
4.334	4.334	0.000	12848178 1000.00	939	80.00- 120.00	100.00
4.458	4.459	-0.001	15764886 1000.00	984	102.70- 142.70	122.70
4.724	4.725	-0.001	11939037 1000.00	950	72.92- 112.92	92.92
4.898	4.899	-0.001	12236691 1000.00	955	75.24- 115.24	95.24
5.045	5.045	0.000	27433576 1000.00	983	193.52- 233.52	213.52
Average of Peak Amounts =				962		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecdla.i/011510.b/02962901.d

Date: 15-Jun-2010 11:48

Client ID: AR166003

Sample Info: IWR100104-60 03

Column phase: CLP2

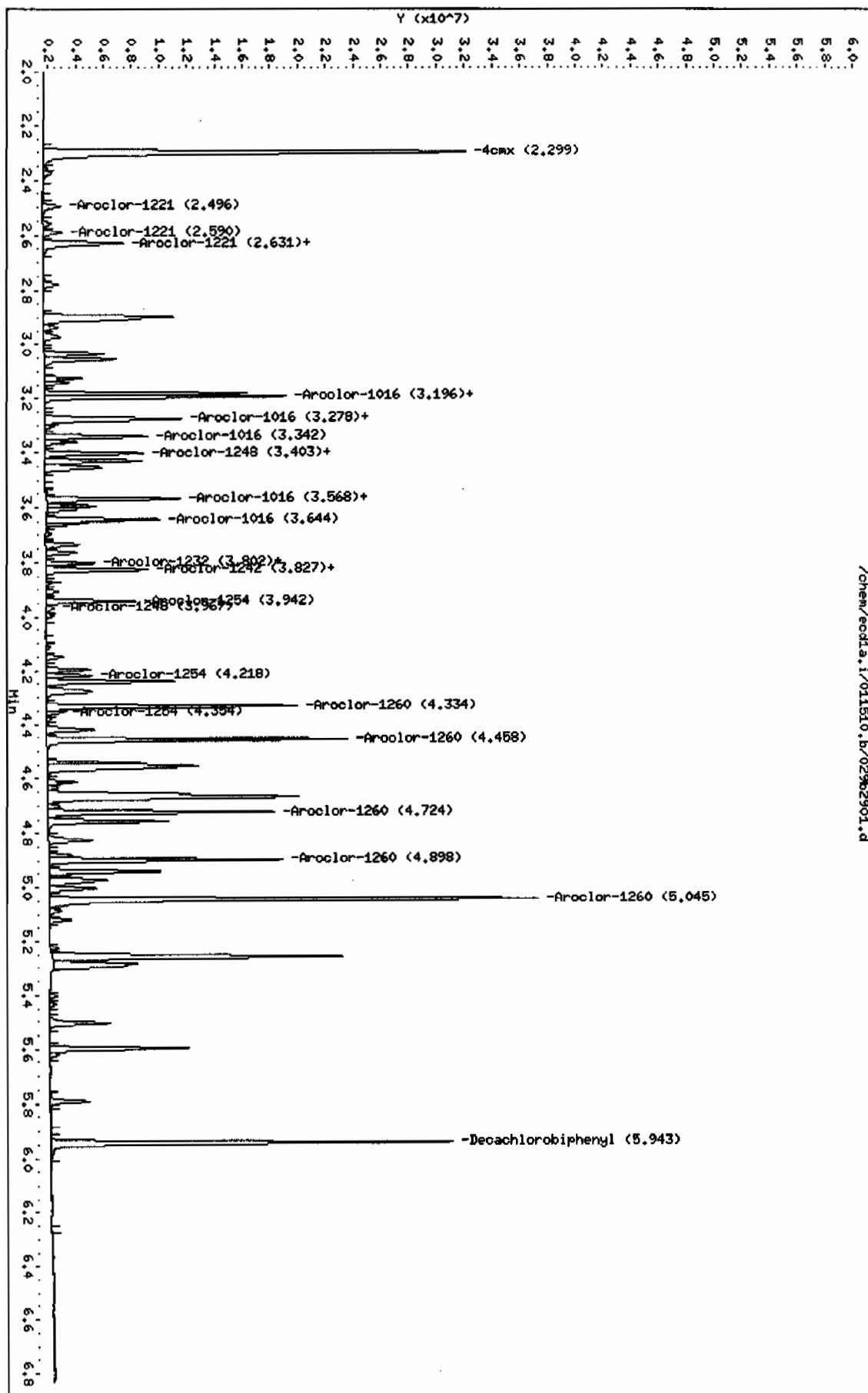
Instrument: ecdla.i

Operator: YSI

Column diameter: 0.25

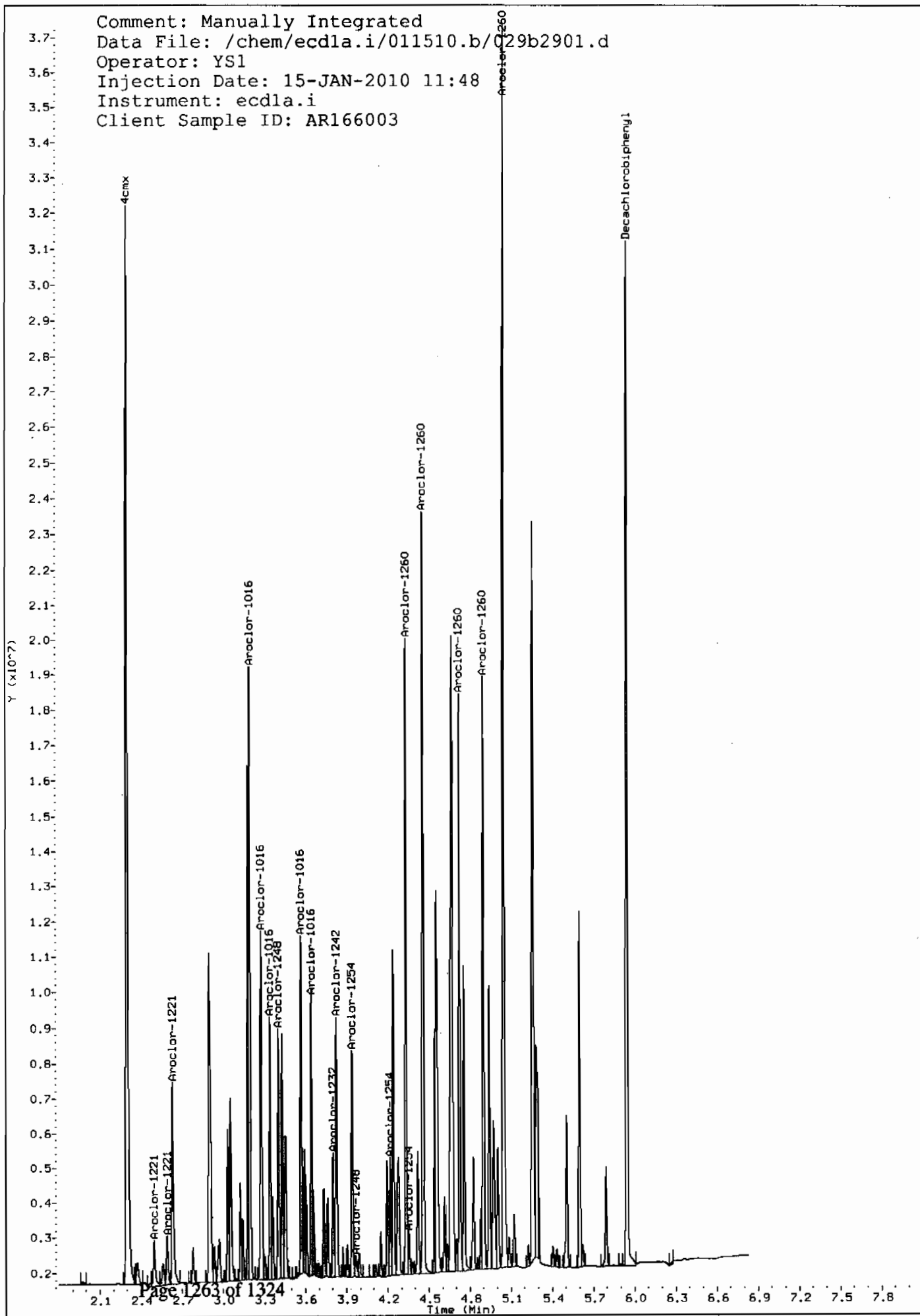
/chem/ecdla.i/011510.b/02962901.d

Page 1

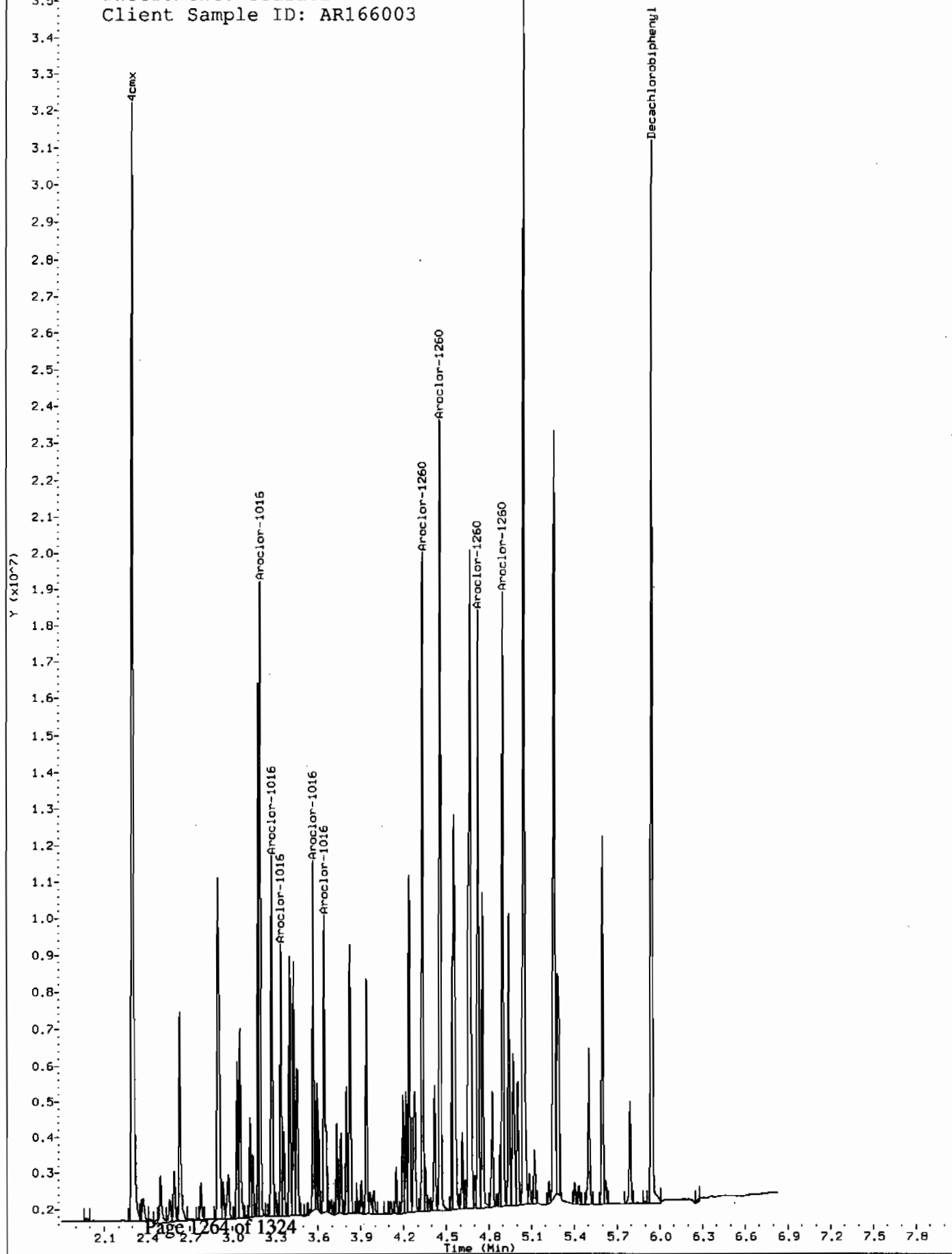




Comment: Manually Integrated  
Data File: /chem/ecdl1.i/011510.b/029b2901.d  
Operator: YS1  
Injection Date: 15-JAN-2010 11:48  
Instrument: ecld1.i  
Client Sample ID: AR166003



Comment: Before manual integration  
Data File: /chem/ecdl.i/011510.b/Orig-029b2901.d  
Operator: YS1  
Injection Date: 15-JAN-2010 11:48  
Instrument: ecdla.i  
Client Sample ID: AR166003



Data File: /chem/ecdla.i/011510.b/035f3501.d  
Report Date: 23-Jan-2010 12:12

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/011510.b/035f3501.d  
Lab Smp Id: WAR100104-60 04 Client Smp ID: AR166004  
Inj Date : 15-JAN-2010 13:01  
Operator : YS1 Inst ID: ecdla.i  
Smp Info : |WAR100104-60 04  
Misc Info :  
Comment :  
Method : /chem/ecdla.i/011510.b/ECD1-F-8082-121409.m  
Meth Date : 23-Jan-2010 12:12 yip00818 Quant Type: ESTD  
Cal Date : 14-DEC-2009 11:34 Cal File: 040f4001.d  
Als bottle: 35 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: AR1660.sub  
Target Version: 3.50 Sample Matrix: None  
Processing Host: hpc1p1

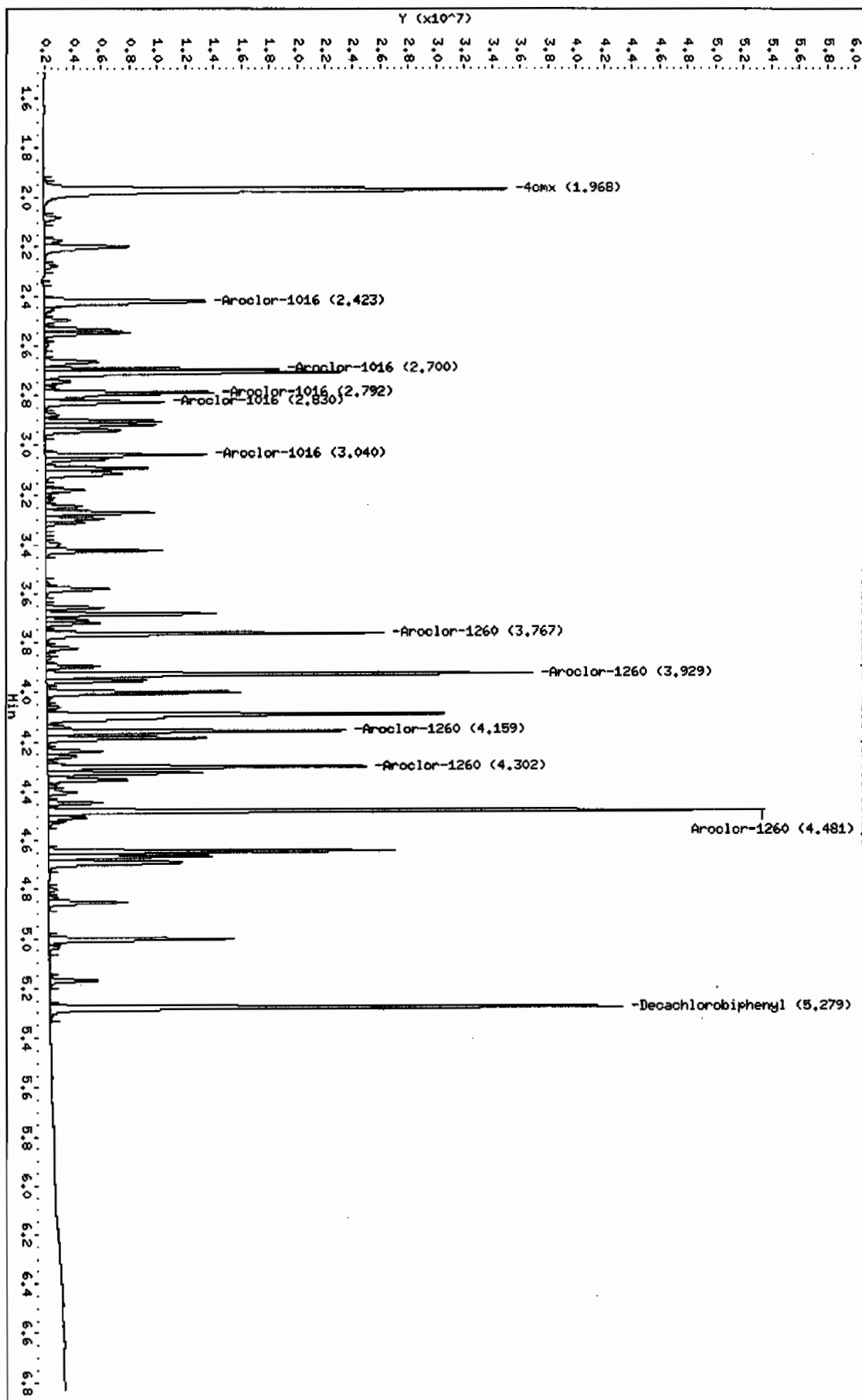
AMOUNTS						
			CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	( ug/L)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
\$ 11 4cmx				CAS #: 877-09-8		
1.968	1.969	-0.001	39789720 100.000	111	80.00- 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3		
5.279	5.281	-0.002	31289662 100.000	104	80.00- 120.00	100.00
-----						
1 Aroclor-1016				CAS #: 12674-11-2		
2.423	2.424	-0.001	13517880 1000.00	975	80.00- 120.00	100.00
2.700	2.700	0.000	11238466 1000.00	1110	63.14- 103.14	83.14
2.792	2.793	-0.001	11524266 1000.00	980	65.25- 105.25	85.25
2.830	2.830	0.000	6948339 1000.00	1050	31.40- 71.40	51.40
3.040	3.041	-0.001	8813287 1000.00	1020	45.20- 85.20	65.20
Average of Peak Amounts =				1.03e+03		
-----						
7 Aroclor-1260				CAS #: 11096-82-5		
3.767	3.767	0.000	17469135 1000.00	1040	80.00- 120.00	100.00
3.929	3.930	-0.001	26524588 1000.00	1070	131.84- 171.84	151.84
4.159	4.160	-0.001	15812657 1000.00	1080	70.52- 110.52	90.52
4.302	4.303	-0.001	16493741 1000.00	1090	74.42- 114.42	94.42
4.481	4.482	-0.001	37560490 1000.00	1090	195.01- 235.01	215.01
Average of Peak Amounts =				1.07e+03		

Data File: /chem/ecdda.i/011510.b/036F3501.d  
Date: 15-JAN-2010 13:01  
Client ID: 60166004  
Sample Info: 1MAR100104-60 04

Column phase: CLP1

Instrument: ecdda.i  
Operator: YSI  
Column diameter: 0.25

/chem/ecdda.i/011510.b/036F3501.d



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011510.b/035b3501.d

Lab Smp Id: WAR100104-60 04

Client Smp ID: AR166004

Inj Date : 15-JAN-2010 13:01

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR100104-60 04

Misc Info :

Comment :

Method : /chem/ecdl1a.i/011510.b/ECD1-B-8082-121409.m

Meth Date : 23-Jan-2010 12:12 yip00818

Quant Type: ESTD

Cal Date : 14-DEC-2009 12:16

Cal File: 044b4401.d

Als bottle: 35

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
==	=====	=====	=====	=====	=====	=====	=====
-----							
\$ 11 4cmx					CAS #:	877-09-8	
2.299	2.299	0.000	29402217	100.000	103	80.00- 120.00	100.00
-----							
\$ 12 Decachlorobiphenyl					CAS #:	2051-24-3	
5.942	5.944	-0.002	21883428	100.000	98.7	80.00- 120.00	100.00
-----							
1 Aroclor-1016					CAS #:	12674-11-2	
3.195	3.195	0.000	12739382	1000.00	1010	80.00- 120.00	100.00 (M)
3.278	3.278	0.000	8392004	1000.00	900	45.87- 85.87	65.87
3.342	3.342	0.000	5220516	1000.00	965	20.98- 60.98	40.98
3.568	3.569	-0.001	6625015	1000.00	939	32.00- 72.00	52.00
3.643	3.645	-0.002	6166275	1000.00	941	28.40- 68.40	48.40
Average of Peak Amounts =					951		
-----							
7 Aroclor-1260					CAS #:	11096-82-5	
4.333	4.334	-0.001	12718701	1000.00	930	80.00- 120.00	100.00
4.458	4.459	-0.001	15523296	1000.00	968	102.05- 142.05	122.05
4.723	4.725	-0.002	11798932	1000.00	939	72.77- 112.77	92.77
4.897	4.899	-0.002	12104254	1000.00	945	75.17- 115.17	95.17
5.044	5.045	-0.001	27244469	1000.00	976	194.21- 234.21	214.21
Average of Peak Amounts =					952		
-----							

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/eodla.i/011510.b/035b3501.d

Date: 15-JAN-2010 13:01

Client ID: AR166004

Sample Info: 114R100104-60 04

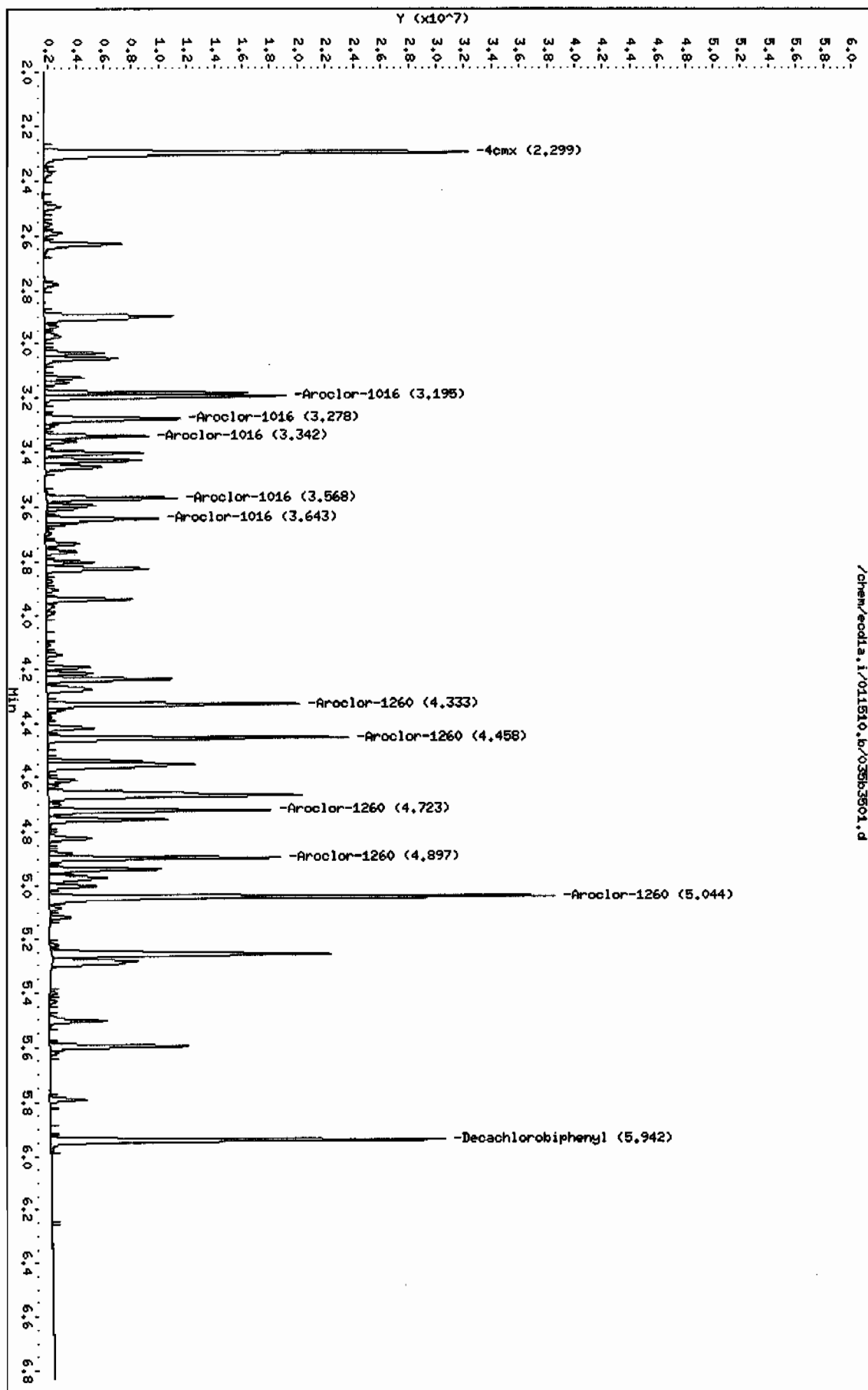
Column phase: CLP2

Instrument: eodla.i

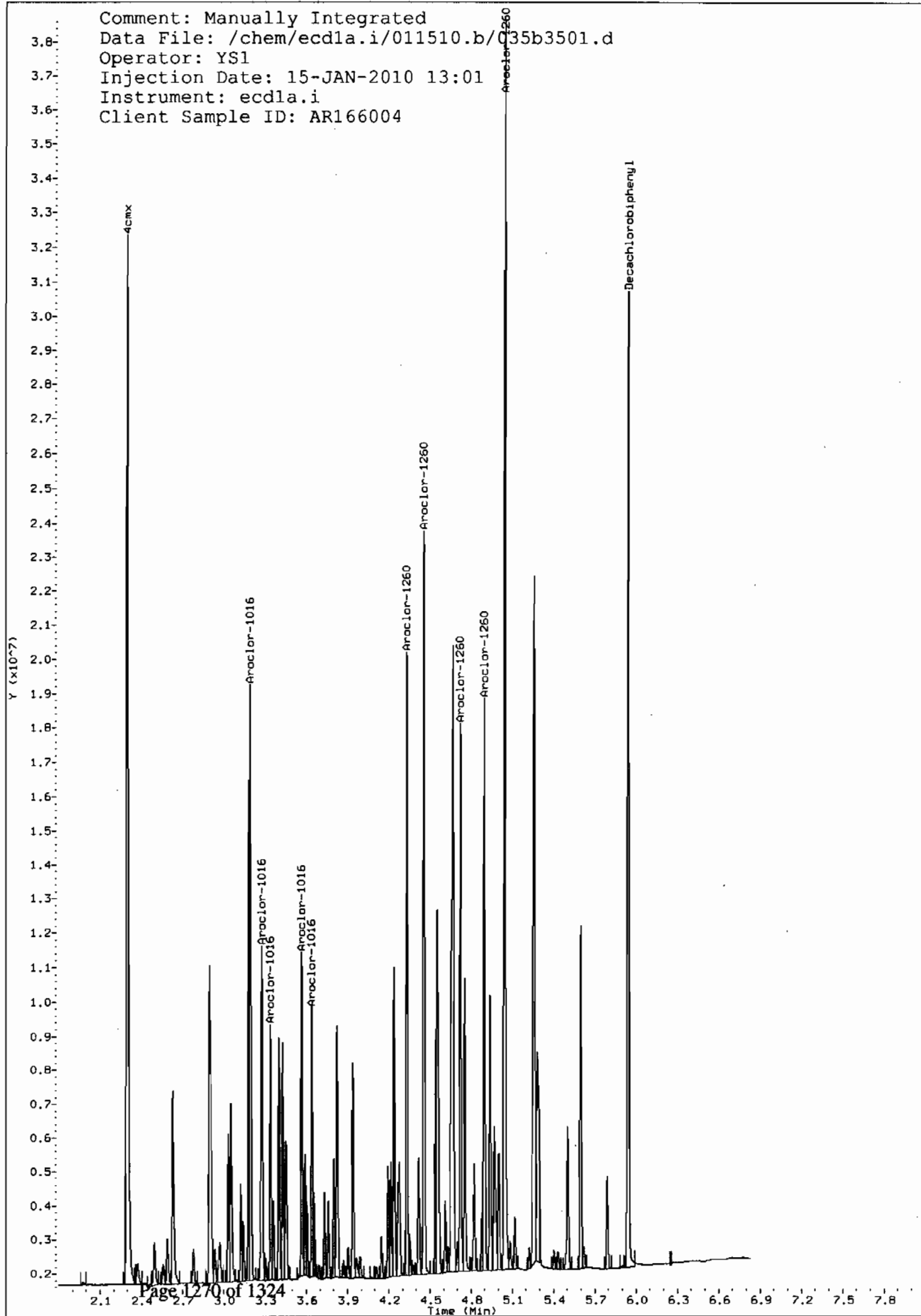
Operator: YSI

Column diameter: 0.25

/chem/eodla.i/011510.b/035b3501.d

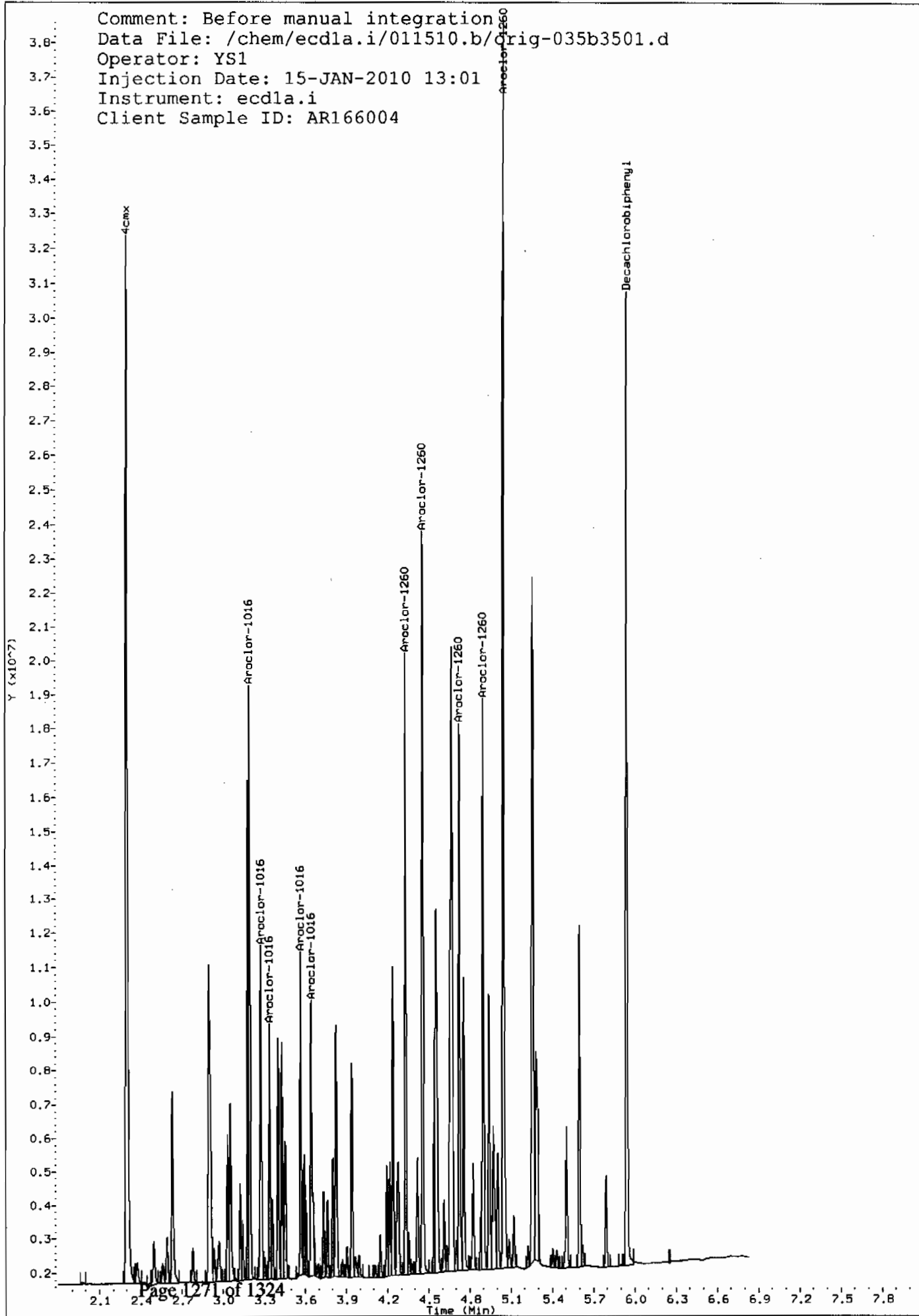


Comment: Manually Integrated  
Data File: /chem/ecdl1.i/011510.b/035b3501.d  
Operator: YS1  
Injection Date: 15-JAN-2010 13:01  
Instrument: ecdl1.i  
Client Sample ID: AR166004





Comment: Before manual integration  
Data File: /chem/ecdl.a.i/011510.b/Orig-035b3501.d  
Operator: YS1  
Injection Date: 15-JAN-2010 13:01  
Instrument: ecldla.i  
Client Sample ID: AR166004



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

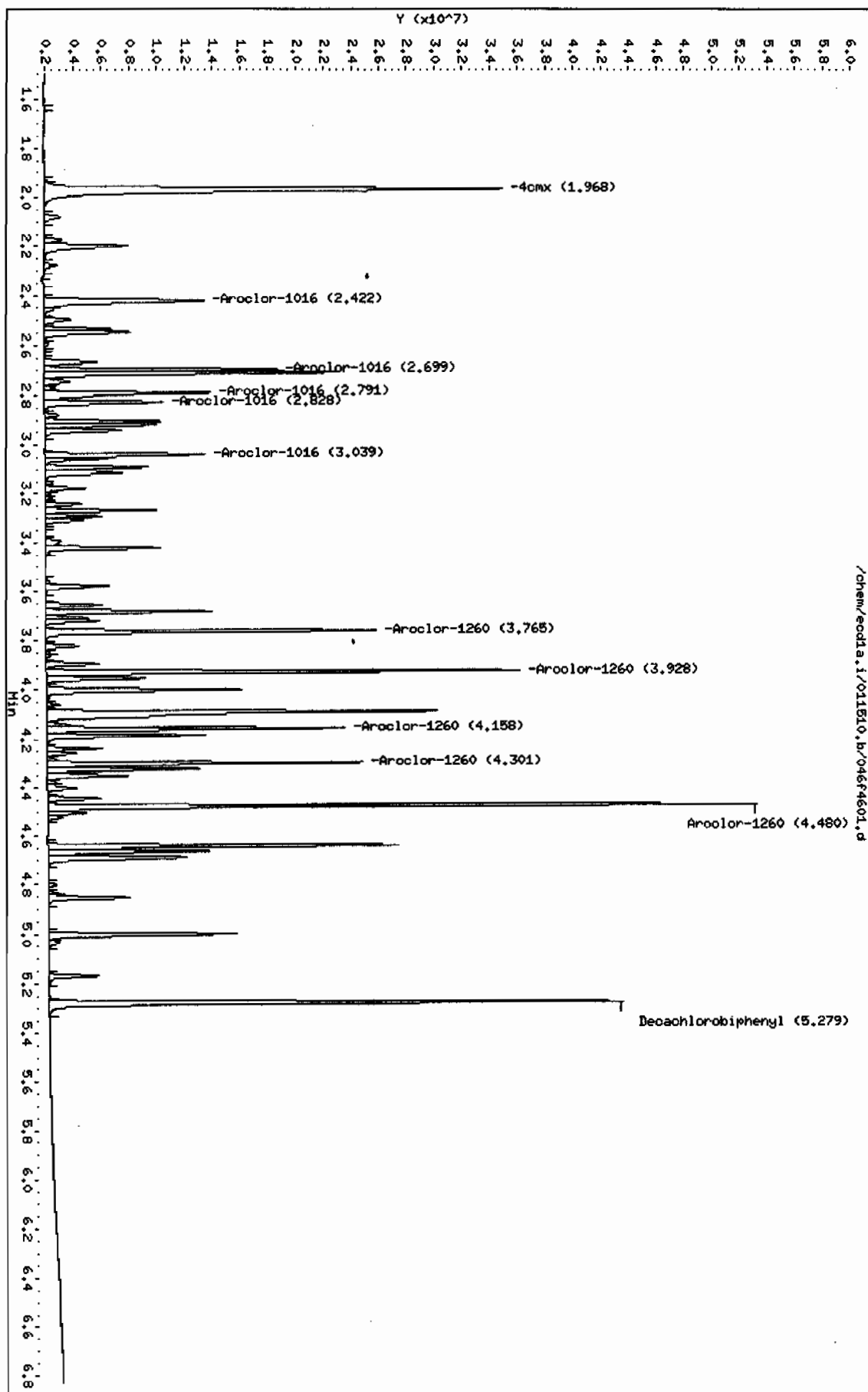
Data file : /chem/ecdla.i/011510.b/046f4601.d  
Lab Smp Id: WAR100104-60 05 Client Smp ID: AR166005  
Inj Date : 15-JAN-2010 15:16  
Operator : YS1 Inst ID: ecdla.i  
Smp Info : |WAR100104-60 05  
Misc Info :  
Comment :  
Method : /chem/ecdla.i/011510.b/ECD1-F-8082-121409.m  
Meth Date : 23-Jan-2010 12:15 yip00818 Quant Type: ESTD  
Cal Date : 14-DEC-2009 11:34 Cal File: 040f4001.d  
Als bottle: 46 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		
1.968	1.969	-0.001	39791534 100.000	111	80.00- 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3		
5.279	5.281	-0.002	31769597 100.000	105	80.00- 120.00	100.00
-----						
1 Aroclor-1016				CAS #: 12674-11-2		
2.422	2.424	-0.002	13473815 1000.00	972	80.00- 120.00	100.00
2.699	2.700	-0.001	11116075 1000.00	1100	62.50- 102.50	82.50
2.791	2.793	-0.002	11485557 1000.00	977	65.24- 105.24	85.24
2.828	2.830	-0.002	6969365 1000.00	1060	31.73- 71.73	51.73
3.039	3.041	-0.002	8948866 1000.00	1030	46.42- 86.42	66.42
Average of Peak Amounts =				1.03e+03		
-----						
7 Aroclor-1260				CAS #: 11096-82-5		
3.765	3.767	-0.002	17360629 1000.00	1040	80.00- 120.00	100.00
3.928	3.930	-0.002	26485033 1000.00	1070	132.56- 172.56	152.56
4.158	4.160	-0.002	15728738 1000.00	1070	70.60- 110.60	90.60
4.301	4.303	-0.002	16433403 1000.00	1080	74.66- 114.66	94.66
4.480	4.482	-0.002	37622189 1000.00	1100	196.71- 236.71	216.71
Average of Peak Amounts =				1.07e+03		

Data File: /chem/eodla.i/011510.b/046f4601.d  
Date: 15-JAN-2010 15:16  
Client ID: AR166005  
Sample Info: IMR100104-60 05

Column phase: CLP1

Instrument: eodla.i  
Operator: YSL  
Column diameter: 0.25



Data File: /chem/ecdl1.i/011510.b/046b4601.d  
 Report Date: 23-Jan-2010 12:16

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1.i/011510.b/046b4601.d  
 Lab Smp Id: WAR100104-60 05 Client Smp ID: AR166005  
 Inj Date : 15-JAN-2010 15:16  
 Operator : YS1 Inst ID: ecd1a.i  
 Smp Info : |WAR100104-60 05  
 Misc Info :  
 Comment :  
 Method : /chem/ecdl1.i/011510.b/ECD1-B-8082-121409.m  
 Meth Date : 23-Jan-2010 12:15 yip00818 Quant Type: ESTD  
 Cal Date : 14-DEC-2009 12:16 Cal File: 044b4401.d  
 Als bottle: 46 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
==	=====	=====	=====	=====	=====	=====	=====	=====
<hr/>								
\$ 11 4cmx					CAS #: 877-09-8			
2.299	2.299	0.000	29329241	100.000	103	80.00~	120.00	100.00
<hr/>								
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3			
5.942	5.944	-0.002	22495355	100.000	101	80.00~	120.00	100.00
<hr/>								
1 Aroclor-1016					CAS #: 12674-11-2			
3.193	3.195	-0.002	12948204	1000.00	1030	80.00~	120.00	100.00 (M)
3.277	3.278	-0.001	8349206	1000.00	895	44.48~	84.48	64.48
3.340	3.342	-0.002	5192119	1000.00	959	20.10~	60.10	40.10
3.567	3.569	-0.002	6582412	1000.00	933	30.84~	70.84	50.84
3.643	3.645	-0.002	6092094	1000.00	930	27.05~	67.05	47.05
Average of Peak Amounts =					949			
<hr/>								
7 Aroclor-1260					CAS #: 11096-82-5			
4.333	4.334	-0.001	12712440	1000.00	929	80.00~	120.00	100.00
4.458	4.459	-0.001	15572028	1000.00	971	102.49~	142.49	122.49
4.723	4.725	-0.002	11921331	1000.00	949	73.78~	113.78	93.78
4.897	4.899	-0.002	12304032	1000.00	960	76.79~	116.79	96.79
5.043	5.045	-0.002	27533897	1000.00	987	196.59~	236.59	216.59
Average of Peak Amounts =					959			

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/eodla.i/011510.b/046b4601.d

Date: 15-JAN-2010 15:16

Client ID: AR16005

Sample Info: 1MR100104-60 05

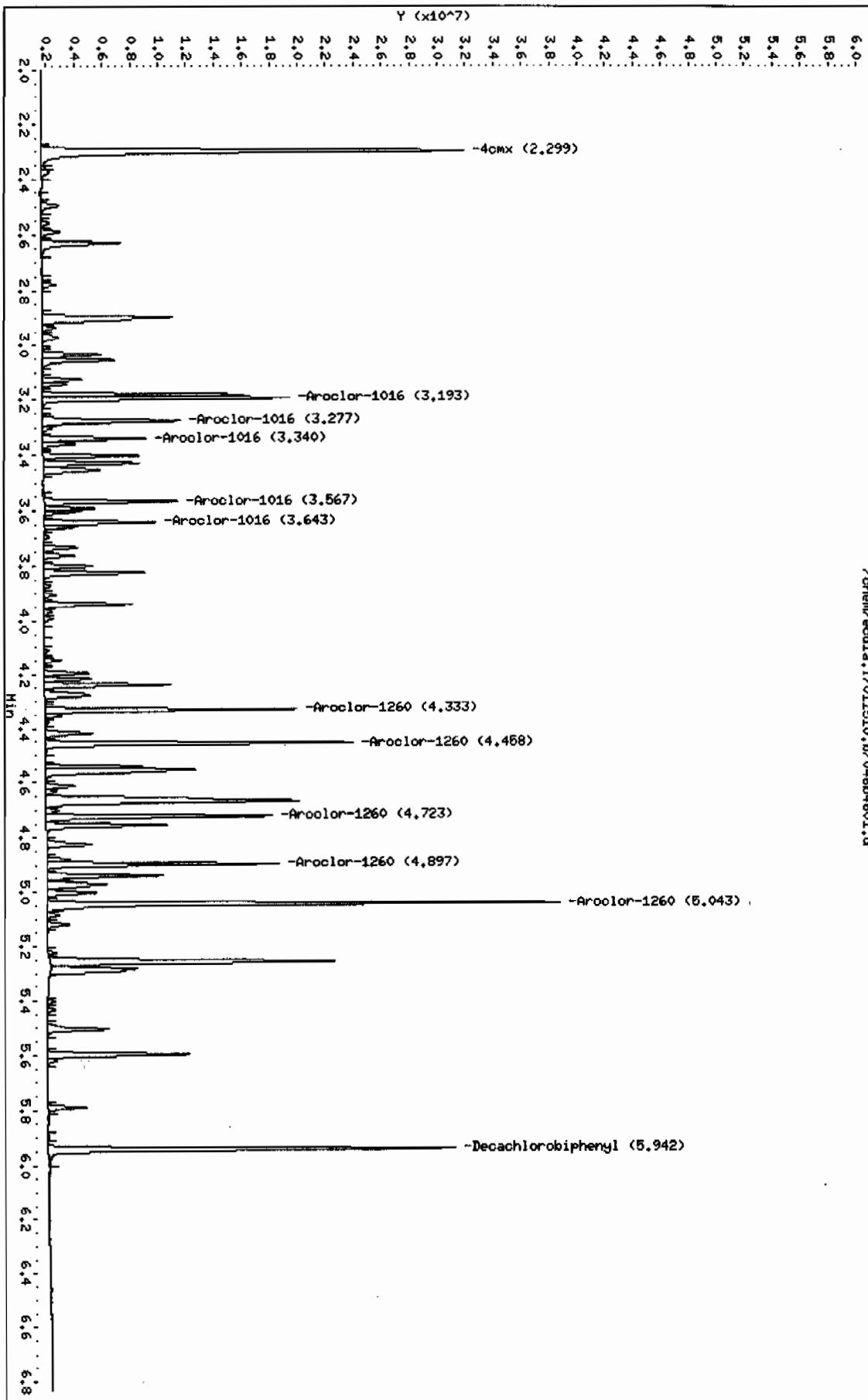
Column phase: CLP2

Instrument: eodla.i

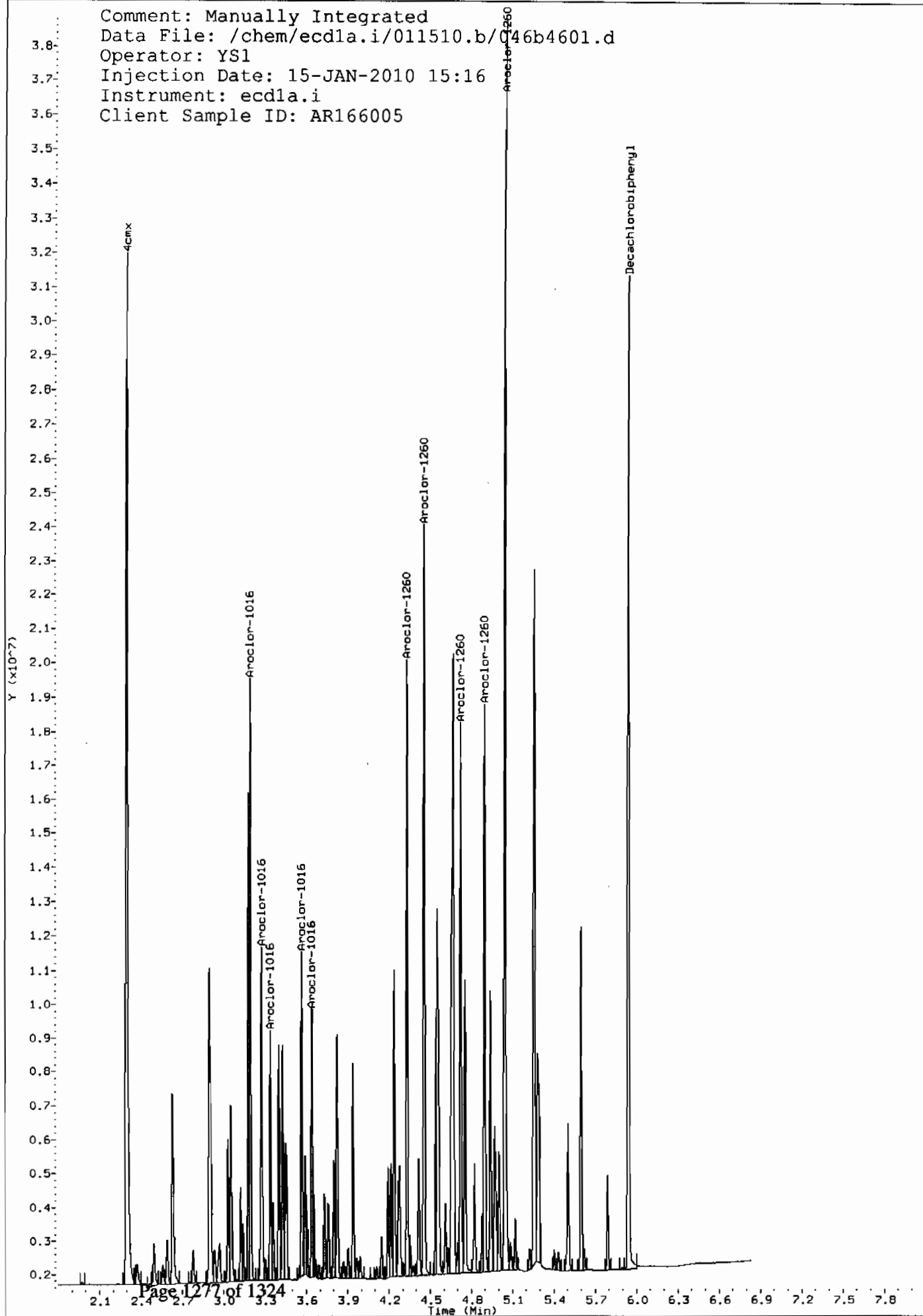
Operator: YSL

Column diameter: 0.25

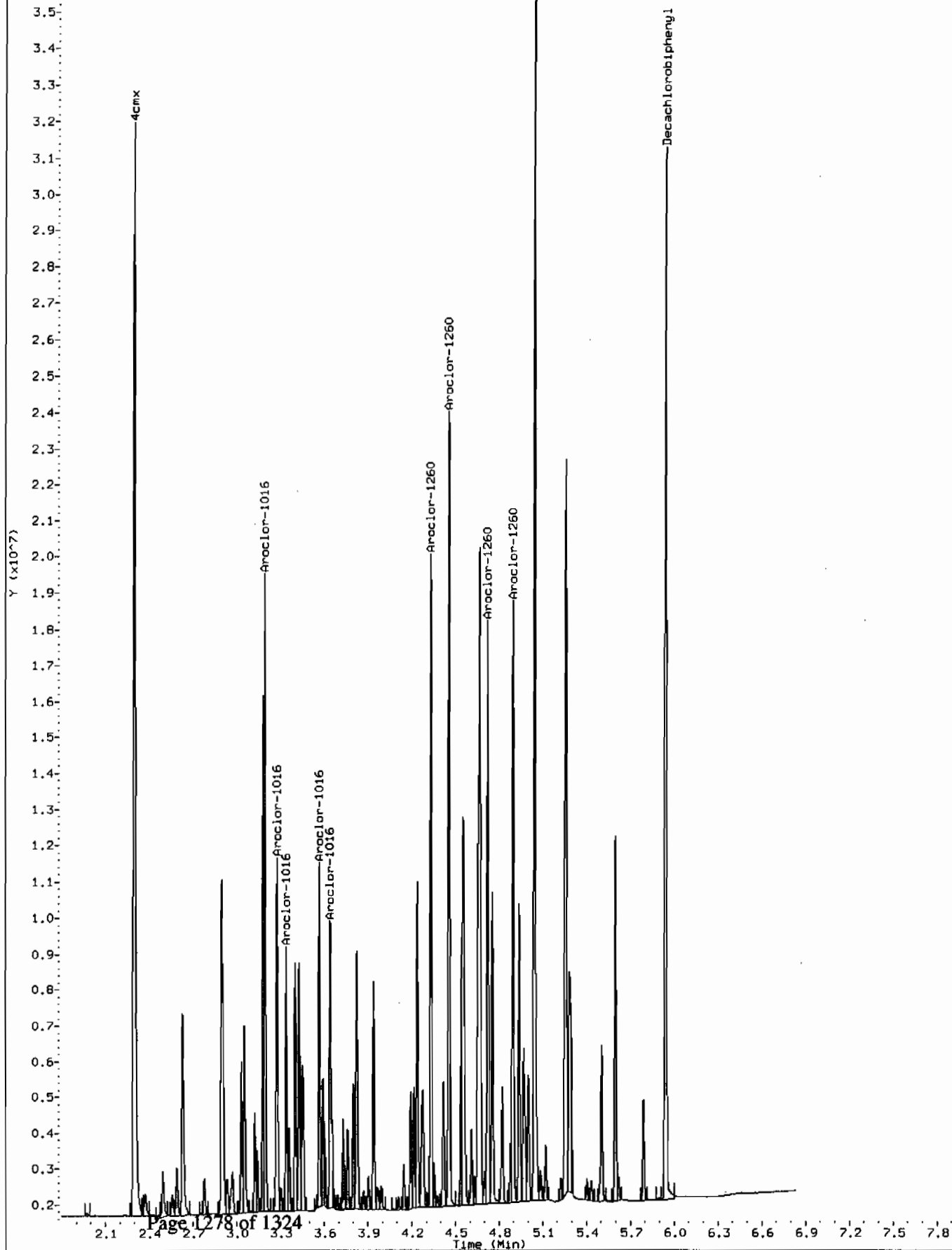
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Comment: Manually Integrated  
Data File: /chem/ecdl1a.i/011510.b/046b4601.d  
Operator: YS1  
Injection Date: 15-JAN-2010 15:16  
Instrument: ecd1a.i  
Client Sample ID: AR166005



Comment: Before manual integration  
Data File: /chem/ecdl1.i/011510.b/orig-046b4601.d  
Operator: YS1  
Injection Date: 15-JAN-2010 15:16  
Instrument: ecd1a.i  
Client Sample ID: AR166005





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.: 10-1210

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 12/14/09 12/14/09

Instrument ID: ECD1A

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION						
S1 : 1.97			DCB: 5.29			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #	
01	PIBLK01	WAR091130-99	12/14/09	0444	1.97	5.29
02	ZZZZZ	ZZZZZ	12/14/09	0454	1.97	5.29
03	ZZZZZ	ZZZZZ	12/14/09	0505	1.97	5.29
04	ZZZZZ	ZZZZZ	12/14/09	0515	1.97	5.29
05	ZZZZZ	ZZZZZ	12/14/09	0526	1.97	5.29
06	AR123201	WAR090930-32	12/14/09	0536	1.97	5.29
07	AR122101	WAR090803-21	12/14/09	0547	1.97	5.29
08	AR126201	WAR090803-62	12/14/09	0558	1.97	5.29
09	ZZZZZ	ZZZZZ	12/14/09	0608	1.97	5.29
10	ZZZZZ	ZZZZZ	12/14/09	0619	1.97	5.29
11	ZZZZZ	ZZZZZ	12/14/09	0629	1.97	5.29
12	ZZZZZ	ZZZZZ	12/14/09	0640	1.97	5.29
13	ZZZZZ	ZZZZZ	12/14/09	0650	1.97	5.29
14	ZZZZZ	ZZZZZ	12/14/09	0701	1.97	5.29
15	ZZZZZ	ZZZZZ	12/14/09	0711	1.97	5.29
16	AR125401	WAR091214-05	12/14/09	0722	1.97	5.29
17	AR125402	WAR091214-06	12/14/09	0732	1.97	5.29
18	AR125403	WAR091214-07	12/14/09	0743	1.97	5.29
19	AR125404	WAR091214-08	12/14/09	0753	1.97	5.29
20	AR125405	IAR091027-01	12/14/09	0804	1.97	5.29
21	AR125401	WAR091102-54	12/14/09	0814	1.97	5.29
22	AR124201	WAR091214-09	12/14/09	0825	1.97	5.29
23	AR124202	WAR091214-10	12/14/09	0835	1.97	5.29
24	AR124203	WAR091214-11	12/14/09	0846	1.97	5.29
25	AR124204	WAR091214-12	12/14/09	0856	1.97	5.29
26	AR124205	IAR0911111-0	12/14/09	0907	1.97	5.29
27	AR124201	WAR091102-42	12/14/09	0917	1.97	5.29
28	AR124801	WAR091214-13	12/14/09	0928	1.97	5.29
29	AR124802	WAR091214-14	12/14/09	0938	1.97	5.29
30	AR124803	WAR091214-15	12/14/09	0949	1.97	5.29
31	AR124804	WAR091214-16	12/14/09	0959	1.97	5.29
32	AR124805	IAR091027-02	12/14/09	1010	1.97	5.29

QC LIMITS

S1 = 4cmx (+/- 0.03 MINUTES)

DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

# Column used to flag retention time values with an asterisk.  
\* Values outside of QC limits.

8D  
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1210

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 12/14/09 12/14/09

Instrument ID: ECD1A

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION						
S1 : 1.97			DCB: 5.29			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #	
01	AR124801	WAR091027-48	12/14/09	1020	1.97	5.29
02	AR166001	WAR091214-01	12/14/09	1031	1.97	5.29
03	AR166002	WAR091214-02	12/14/09	1041	1.97	5.29
04	AR166003	WAR091214-03	12/14/09	1052	1.97	5.29
05	AR166004	WAR091214-04	12/14/09	1102	1.97	5.29
06	AR166005	IAR091102-01	12/14/09	1113	1.97	5.29
07	AR166001	WAR091211-60	12/14/09	1123	1.97	5.29
08	AR126801	WAR091214-17	12/14/09	1134	1.97	5.29
09	AR126802	WAR091214-18	12/14/09	1144	1.97	5.29
10	AR126803	WAR091214-19	12/14/09	1155	1.97	5.29
11	AR126804	WAR091214-20	12/14/09	1206	1.97	5.29
12	AR126805	IAR090817-02	12/14/09	1216	1.97	5.29
13	AR126801	WAR091106-68	12/14/09	1227	1.97	5.29
14	DDTANALOGSTD	WAR091020-DD	12/14/09	1237		
15	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.

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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.: 10-1210

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 12/14/09 12/14/09

Instrument ID: ECD1A

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION						
S1 : 2.30			DCB: 5.94			
	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR091130-99	12/14/09	0444	2.30	5.95
02	ZZZZZ	ZZZZZ	12/14/09	0454	2.30	5.94
03	ZZZZZ	ZZZZZ	12/14/09	0505	2.30	5.95
04	ZZZZZ	ZZZZZ	12/14/09	0515	2.30	5.95
05	ZZZZZ	ZZZZZ	12/14/09	0526	2.30	5.95
06	AR123201	WAR090930-32	12/14/09	0536	2.30	5.95
07	AR122101	WAR090803-21	12/14/09	0547	2.30	5.95
08	AR126201	WAR090803-62	12/14/09	0558	2.30	5.94
09	ZZZZZ	ZZZZZ	12/14/09	0608	2.30	5.94
10	ZZZZZ	ZZZZZ	12/14/09	0619	2.30	5.95
11	ZZZZZ	ZZZZZ	12/14/09	0629	2.30	5.94
12	ZZZZZ	ZZZZZ	12/14/09	0640	2.30	5.94
13	ZZZZZ	ZZZZZ	12/14/09	0650	2.30	5.95
14	ZZZZZ	ZZZZZ	12/14/09	0701	2.30	5.94
15	ZZZZZ	ZZZZZ	12/14/09	0711	2.30	5.95
16	AR125401	WAR091214-05	12/14/09	0722	2.30	5.94
17	AR125402	WAR091214-06	12/14/09	0732	2.30	5.94
18	AR125403	WAR091214-07	12/14/09	0743	2.30	5.94
19	AR125404	WAR091214-08	12/14/09	0753	2.30	5.94
20	AR125405	IAR091027-01	12/14/09	0804	2.30	5.95
21	AR125401	WAR091102-54	12/14/09	0814	2.30	5.94
22	AR124201	WAR091214-09	12/14/09	0825	2.30	5.94
23	AR124202	WAR091214-10	12/14/09	0835	2.30	5.94
24	AR124203	WAR091214-11	12/14/09	0846	2.30	5.94
25	AR124204	WAR091214-12	12/14/09	0856	2.30	5.94
26	AR124205	IAR0911111-0	12/14/09	0907	2.30	5.94
27	AR124201	WAR091102-42	12/14/09	0917	2.30	5.94
28	AR124801	WAR091214-13	12/14/09	0928	2.30	5.94
29	AR124802	WAR091214-14	12/14/09	0938	2.30	5.94
30	AR124803	WAR091214-15	12/14/09	0949	2.30	5.94
31	AR124804	WAR091214-16	12/14/09	0959	2.30	5.94
32	AR124805	IAR091027-02	12/14/09	1010	2.30	5.94

QC LIMITS

S1 = 4cmx (+/- 0.03 MINUTES)

DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

# Column used to flag retention time values with an asterisk.  
\* Values outside of QC limits.

8D  
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1210

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 12/14/09 12/14/09

Instrument ID: ECD1A

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION						
S1 : 2.30			DCB: 5.94			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT	#	DCB RT
						#
01	AR124801	WAR091027-48	12/14/09	1020	2.30	5.95
02	AR166001	WAR091214-01	12/14/09	1031	2.30	5.94
03	AR166002	WAR091214-02	12/14/09	1041	2.30	5.94
04	AR166003	WAR091214-03	12/14/09	1052	2.30	5.94
05	AR166004	WAR091214-04	12/14/09	1102	2.30	5.94
06	AR166005	IAR091102-01	12/14/09	1113	2.30	5.94
07	AR166001	WAR091211-60	12/14/09	1123	2.30	5.94
08	AR126801	WAR091214-17	12/14/09	1134	2.30	5.95
09	AR126802	WAR091214-18	12/14/09	1144	2.30	5.94
10	AR126803	WAR091214-19	12/14/09	1155	2.30	5.94
11	AR126804	WAR091214-20	12/14/09	1206	2.30	5.94
12	AR126805	IAR090817-02	12/14/09	1216	2.30	5.94
13	AR126801	WAR091106-68	12/14/09	1227	2.30	5.94
14	DDTANALOGSTD	WAR091020-DD	12/14/09	1237		
15	PIBLK02	WAR091130-99	12/14/09	1248	2.30	5.94
16	ZZZZZ	ZZZZZ	12/14/09	1258	2.30	5.94
17	ZZZZZ	ZZZZZ	12/14/09	1309	2.30	5.94
18	ZZZZZ	ZZZZZ	12/14/09	1319	2.30	5.94
19	ZZZZZ	ZZZZZ	12/14/09	1330	2.30	5.94
20	ZZZZZ	ZZZZZ	12/14/09	1340	2.30	5.94
21	ZZZZZ	ZZZZZ	12/14/09	1351	2.30	5.94
22	ZZZZZ	ZZZZZ	12/14/09	1403	2.30	5.94
23	ZZZZZ	ZZZZZ	12/14/09	1416	2.30	5.94
24	ZZZZZ	ZZZZZ	12/14/09	1429	2.30	5.94
25	ZZZZZ	ZZZZZ	12/14/09	1441	2.30	5.94
26	AR166002	WAR091211-60	12/14/09	1452	2.30	5.94
27	PIBLK03	WAR091130-99	12/14/09	1502	2.30	5.94
28	ZZZZZ	ZZZZZ	12/14/09	1513	2.30	5.94
29	ZZZZZ	ZZZZZ	12/14/09	1525	2.30	5.94
30	ZZZZZ	ZZZZZ	12/14/09	1538	2.30	5.94
31	ZZZZZ	ZZZZZ	12/14/09	1551	2.30	5.94
32	ZZZZZ	ZZZZZ	12/14/09	1603	2.30	5.94

QC LIMITS  
S1 = 4cmx (+/- 0.03 MINUTES)  
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

# Column used to flag retention time values with an asterisk.  
\* Values outside of QC limits.

page 2 of 2

FORM VIII PEST

OLM03.0

8D  
PCB ANALYTICAL SEQUENCE

Lab Name: GEL LABORATORIES LLC      Contract: N/A  
 Lab Code: N/A      Case No.: N/A      SAS No.: N/A      SDG No.: 10-1210  
 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	SI RT #	DCB RT #
01	PIBLK01	WAR100105-99	01/15/10	0631	
02	ZZZZZ	ZZZZZ	01/15/10	0642	
03	AR125401	WAR091216-54	01/15/10	0652	
04	AR124201	WAR091217-42	01/15/10	0703	
05	AR124801	WAR091217-48	01/15/10	0713	
06	AR123201	WAR100104-32	01/15/10	0724	
07	AR122101	WAR100104-21	01/15/10	0734	
08	AR126201	WAR100104-62	01/15/10	0745	
09	AR126801	WAR100111-68	01/15/10	0755	
10	AR166001	WAR100104-60	01/15/10	0806	
11	DDTANALOGSTD	WAR091219-DD	01/15/10	0816	
12	PIBLK02	WAR100105-99	01/15/10	0827	
13	ZZZZZ	ZZZZZ	01/15/10	0837	
14	ZZZZZ	ZZZZZ	01/15/10	0848	
15	ZZZZZ	ZZZZZ	01/15/10	0858	
16	ZZZZZ	ZZZZZ	01/15/10	0911	
17	ZZZZZ	ZZZZZ	01/15/10	0923	
18	ZZZZZ	ZZZZZ	01/15/10	0936	
19	AR166002	WAR100104-60	01/15/10	0948	
20	PIBLK03	WAR100105-99	01/15/10	0959	
21	PBLK01	1202015394	01/15/10	1009	
22	PBLK01LCS	1202015395	01/15/10	1022	
23	ZZZZZ	ZZZZZ	01/15/10	1034	
24	ZZZZZ	ZZZZZ	01/15/10	1047	
25	ZZZZZ	ZZZZZ	01/15/10	1100	
26	ZZZZZ	ZZZZZ	01/15/10	1112	
27	ZZZZZ	ZZZZZ	01/15/10	1125	
28	ZZZZZ	ZZZZZ	01/15/10	1137	
29	AR166003	WAR100104-60	01/15/10	1148	
30	PIBLK04	AR100105-99	01/15/10	1158	
31	ZZZZZ	ZZZZZ	01/15/10	1211	
32	ZZZZZ	ZZZZZ	01/15/10	1224	

QC LIMITS  
 S1 = 4cmx      (+/- 0.03 MINUTES)  
 DCB = Decachlorobiphenyl      (+/- 0.03 MINUTES)

# Column used to flag retention time values with an asterisk.  
 \* Values outside of QC limits.

8D  
PCB ANALYTICAL SEQUENCE

Lab Name: GEL LABORATORIES LLC      Contract: N/A  
 Lab Code: N/A      Case No.: N/A      SAS No.: N/A      SDG No.: 10-1210  
 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	ZZZZZ	01/15/10	1236	1.97	5.28
02	ZZZZZ	01/15/10	1249	1.97	5.28
03	AR166004	01/15/10	1301	1.97	5.28
04	PIBLK05	01/15/10	1312	1.97	5.28
05	RE12-10-7243	01/15/10	1323	1.97	5.28
06	RE12-10-7240	01/15/10	1335	1.97	5.28
07	RE12-10-7241	01/15/10	1348	1.97	5.28
08	RE12-10-7237	01/15/10	1400	1.97	5.28
09	RE12-10-7239	01/15/10	1413	1.97	5.28
10	RE12-10-7238	01/15/10	1425	1.97	5.28
11	RE12-10-7242	01/15/10	1438	1.97	5.28
12	RE12-10-7236	01/15/10	1451	1.97	5.28
13	RE12-10-7276	01/15/10	1503	1.97	5.28
14	AR166005	01/15/10	1516	1.97	5.28
15	PIBLK06	01/15/10	1526	1.97	5.28
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					

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.: 10-1210  
 GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 12/14/09 12/14/09  
 Instrument ID: ECD1A

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION					
S1 : 2.30			DCB: 5.94		
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	SI RT #	DCB RT #
01 PIBLK01	WAR100105-99	01/15/10	0631	2.30	5.94
02 ZZZZZ	ZZZZZ	01/15/10	0642	2.30	5.94
03 AR125401	WAR091216-54	01/15/10	0652		
04 AR124201	WAR091217-42	01/15/10	0703		
05 AR124801	WAR091217-48	01/15/10	0713		
06 AR123201	WAR100104-32	01/15/10	0724		
07 AR122101	WAR100104-21	01/15/10	0734		
08 AR126201	WAR100104-62	01/15/10	0745		
09 AR126801	WAR100111-68	01/15/10	0755		
10 AR166001	WAR100104-60	01/15/10	0806	2.30	5.94
11 DDTANALOGSTD	WAR091219-DD	01/15/10	0816		
12 PIBLK02	WAR100105-99	01/15/10	0827	2.30	5.94
13 ZZZZZ	ZZZZZ	01/15/10	0837	2.30	5.94
14 ZZZZZ	ZZZZZ	01/15/10	0848	2.30	5.94
15 ZZZZZ	ZZZZZ	01/15/10	0858	2.30	5.94
16 ZZZZZ	ZZZZZ	01/15/10	0911	2.31	5.94
17 ZZZZZ	ZZZZZ	01/15/10	0923	2.31	5.94
18 ZZZZZ	ZZZZZ	01/15/10	0936	2.31	5.94
19 AR166002	WAR100104-60	01/15/10	0948	2.30	5.94
20 PIBLK03	WAR100105-99	01/15/10	0959	2.30	5.94
21 PBLK01	1202015394	01/15/10	1009	2.30	5.94
22 PBLK01LCS	1202015395	01/15/10	1022	2.30	5.94
23 ZZZZZ	ZZZZZ	01/15/10	1034	2.30	5.94
24 ZZZZZ	ZZZZZ	01/15/10	1047	2.30	5.94
25 ZZZZZ	ZZZZZ	01/15/10	1100	2.30	5.94
26 ZZZZZ	ZZZZZ	01/15/10	1112	2.30	5.94
27 ZZZZZ	ZZZZZ	01/15/10	1125	2.30	5.94
28 ZZZZZ	ZZZZZ	01/15/10	1137	2.30	5.94
29 AR166003	WAR100104-60	01/15/10	1148	2.30	5.94
30 PIBLK04	WAR100105-99	01/15/10	1158	2.30	5.94
31 ZZZZZ	ZZZZZ	01/15/10	1211	2.30	5.94
32 ZZZZZ	ZZZZZ	01/15/10	1224	2.30	5.94

QC LIMITS

S1 = 4cmx (+/- 0.03 MINUTES)  
 DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

# Column used to flag retention time values with an asterisk.  
 \* Values outside of QC limits.

8D  
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.: 10-1210  
 GC Column: CLP2      ID: 0.25 (mm) Init. Calib. Date(s): 12/14/09 12/14/09  
 Instrument ID: ECD1A

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION					
S1 : 2.30		DCB: 5.94			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	ZZZZZ	01/15/10	1236	2.30	5.94
02	ZZZZZ	01/15/10	1249	2.30	5.94
03	AR166004	01/15/10	1301	2.30	5.94
04	PIBLK05	01/15/10	1312	2.30	5.94
05	RE12-10-7243	01/15/10	1323	2.30	5.94
06	RE12-10-7240	01/15/10	1335	2.30	5.94
07	RE12-10-7241	01/15/10	1348	2.30	5.94
08	RE12-10-7237	01/15/10	1400	2.30	5.94
09	RE12-10-7239	01/15/10	1413	2.30	5.94
10	RE12-10-7238	01/15/10	1425	2.30	5.94
11	RE12-10-7242	01/15/10	1438	2.30	5.94
12	RE12-10-7236	01/15/10	1451	2.30	5.94
13	RE12-10-7276	01/15/10	1503	2.30	5.94
14	AR166005	01/15/10	1516	2.30	5.94
15	PIBLK06	01/15/10	1526	2.30	5.94
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: 10-1210  
 Lab Sample ID: 1202015395

Client ID: LCS for batch 941604

Data File: 022f2201.d  
 Inst: ECD1A.I\_1  
 Column: CLP1  
 Analyzed: 15-JAN-10 10:22

Data File: 022b2201.d  
 Inst: ECD1A.I\_2  
 Column: CLP2  
 Analyzed: 15-JAN-10 10:22

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor-1016							6.93
Column 1	1	2.42	2.39 – 2.45	19.2	19.7	ug/kg	
	2	2.7	2.67 – 2.73	20.5		ug/kg	
	3	2.79	2.76 – 2.82	18.9		ug/kg	
	4	2.83	2.8 – 2.86	19.8		ug/kg	
	5	3.04	3.01 – 3.07	19.9		ug/kg	
Column 2	1	3.19	3.17 – 3.23	19.2	18.3	ug/kg	
	2	3.28	3.25 – 3.31	17.7		ug/kg	
	3	3.34	3.31 – 3.37	18.2		ug/kg	
	4	3.57	3.54 – 3.6	18.2		ug/kg	
	5	3.64	3.61 – 3.67	18.5		ug/kg	
Aroclor-1260							9.11
Column 1	1	3.77	3.74 – 3.8	21.7	22.9	ug/kg	
	2	3.93	3.9 – 3.96	22.5		ug/kg	
	3	4.16	4.13 – 4.19	22.9		ug/kg	
	4	4.3	4.27 – 4.33	23.4		ug/kg	
	5	4.48	4.45 – 4.51	23.8		ug/kg	
Column 2	1	4.33	4.3 – 4.36	19.8	20.9	ug/kg	
	2	4.46	4.43 – 4.49	20.8		ug/kg	
	3	4.72	4.69 – 4.75	20.7		ug/kg	
	4	4.9	4.87 – 4.93	21.2		ug/kg	
	5	5.04	5.02 – 5.08	21.9		ug/kg	

# QUALITY CONTROL DATA

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

Page 1 of 1

SDG Number: 10-1210

Matrix: SOIL

Lab Sample ID: 1202015394

Client Sample: QC for batch 941604

Client: LANL010

Project: QC

Client ID: MB for batch 941604

Method: SW846 8082

SOP Ref: GL-OA-E-040

Batch ID: 941606

Inst: ECD1A.I

Dilution: 1

Run Date: 01/15/2010 10:09

Analyst: YS1

Inj. Vol: 1 uL

Prep Date: 01/14/2010 19:23

Aliquot: 30 g

Final Volume: 1 mL

Data File: 021f2101-1.d

Column: 1 CLP1

Level: LOW

021b2101-1.d

2 CLP2

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/ecd1a.i/011510.b/021f2101-1.d  
Report Date: 23-Jan-2010 12:07

Page 1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/011510.b/021f2101-1.d  
Lab Smp Id: 1202015394 Client Smp ID: PBLK01  
Inj Date : 15-JAN-2010 10:09  
Operator : YSl Inst ID: ecd1a.i  
Smp Info : |1202015394|1|  
Misc Info : |ECD82P\_1S|941606|SVA|QC A|SOIL|MB|||  
Comment :  
Method : /chem/ecd1a.i/011510.b/ECD1-F-8082-121409.m  
Meth Date : 23-Jan-2010 12:06 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: 10-1210.sub  
Target Version: 3.50 Sample Matrix: Soil  
Processing Host: hpclp1

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

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

Cpnd Variable Local Compound Variable

CONCENTRATIONS

RT	EXP RT	DLT RT	ON-COL	FINAL	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
\$ 11 4cmx							CAS #: 877-09-8	
1.969	1.969	0.000	48042048	134.390	4.5	80.00- 120.00	100.00	
\$ 12 Decachlorobiphenyl							CAS #: 2051-24-3	
5.280	5.281	-0.001	44128205	146.115	4.9	80.00- 120.00	100.00	

Data File: /chem/eodla.i/011510.b/021f2101-1.d

Date: 15-JAN-2010 10:09

Client ID: PBLK01

Sample Info: 1120201539411

Volume Injected (uL): 1.0

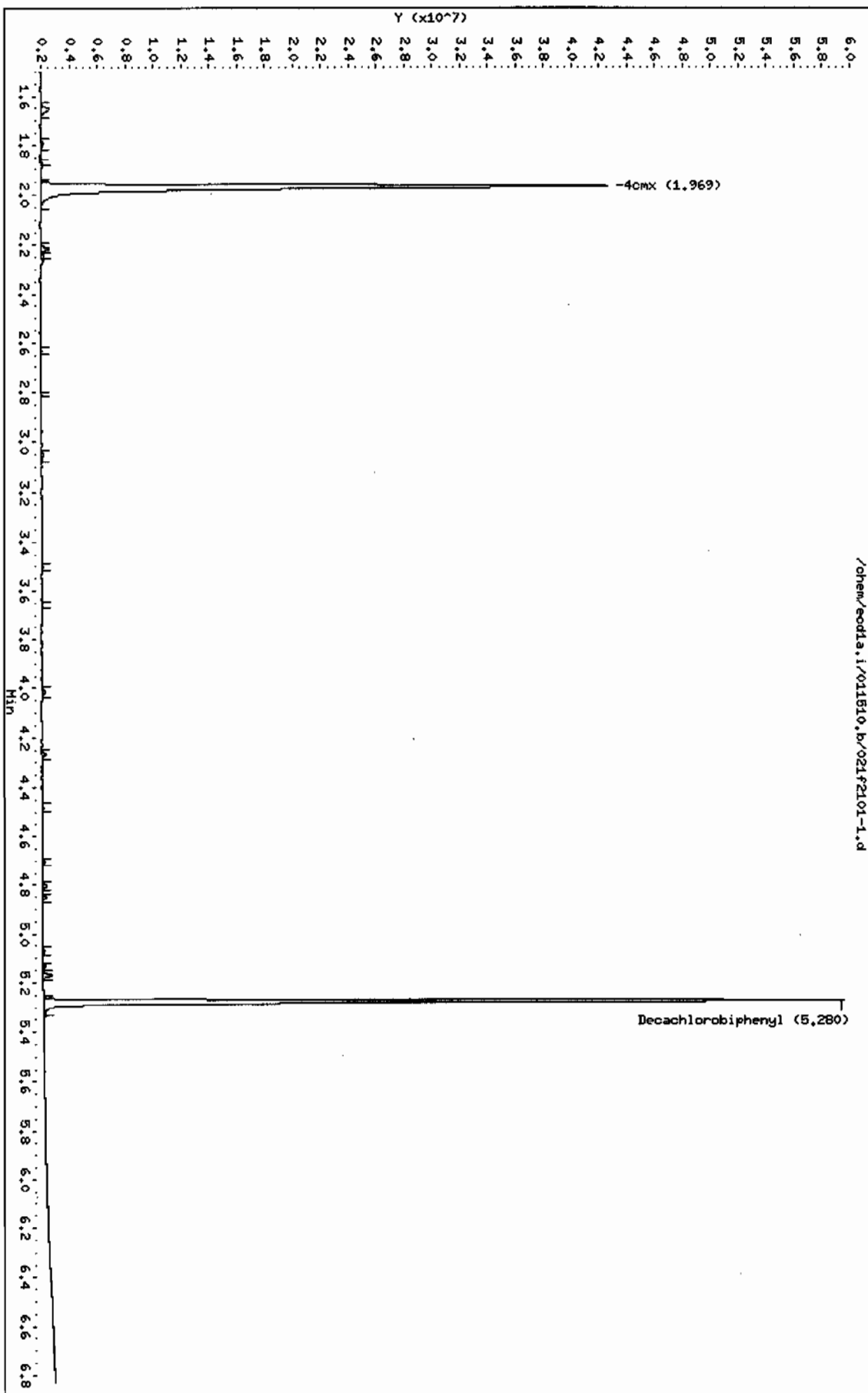
Column phase: CLP1

Instrument: eodla.i

Operator: YSL

Column diameter: 0.25

Page 1



Data File: /chem/ecdl1a.i/011510.b/021b2101-1.d  
Report Date: 23-Jan-2010 12:07

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011510.b/021b2101-1.d  
Lab Smp Id: 1202015394 Client Smp ID: PBLK01  
Inj Date : 15-JAN-2010 10:09  
Operator : YS1 Inst ID: ecd1a.i  
Smp Info : |1202015394|1|  
Misc Info : |ECD82P\_1S|941606|SVA|QC A|SOIL|MB|||  
Comment :  
Method : /chem/ecdl1a.i/011510.b/ECD1-B-8082-121409.m  
Meth Date : 23-Jan-2010 12:07 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: 10-1210.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

RT	EXP RT	DLT RT	ON-COL	FINAL	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
\$ 11 4cmx							CAS #: 877-09-8	
2.300	2.299	0.001	35849637	125.638	4.2	80.00- 120.00	100.00	
\$ 12 Decachlorobiphenyl							CAS #: 2051-24-3	
5.943	5.944	-0.001	31650582	142.707	4.8	80.00- 120.00	100.00	

Data File: /chem/eodla.i/011510.b/021b2101-1.d

Date: 15-JUN-2010 10:09

Client ID: PBLK01

Sample Info: 11202015394111

Volume Injected (uL): 1.0

Column Phase: CLP2

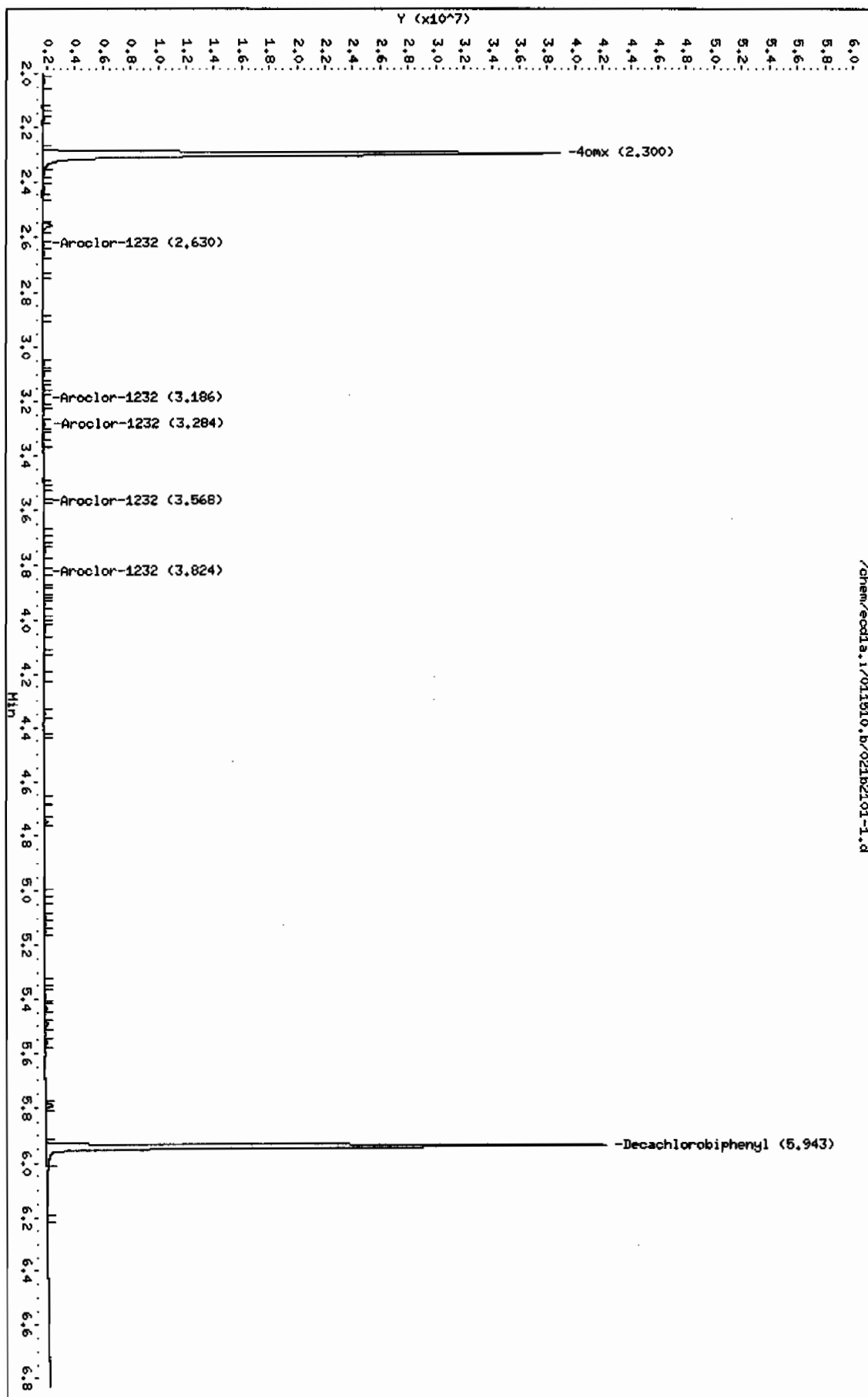
Page 1

Instrument: eodla.i

Operator: YSL

Column diameter: 0.25

/chem/eodla.i/011510.b/021b2101-1.d



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

Page 1 of 1

SDG Number: 10-1210

Matrix: SOIL

Lab Sample ID: 1202015395

Client Sample: QC for batch 941604

Client: LANL010

Project: QC

Client ID: LCS for batch 941604

Method: SW846 8082

SOP Ref: GL-OA-E-040

Batch ID: 941606

Inst: ECD1A.I

Dilution: 1

Run Date: 01/15/2010 10:22

Analyst: YS1

Inj. Vol: 1 uL

Prep Date: 01/14/2010 19:23

Aliquot: 30 g

Final Volume: 1 mL

Data File: 022f2201-1.d

Column: 1 CLP1

Level: LOW

022b2201-1.d

2 CLP2

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016		19.7	ug/kg	1.11	3.33	1
11104-28-2	Aroclor-1221	U	3.33	ug/kg	1.11	3.33	1
11141-16-5	Aroclor-1232	U	3.33	ug/kg	1.11	3.33	1
53469-21-9	Aroclor-1242	U	3.33	ug/kg	1.11	3.33	1
12672-29-6	Aroclor-1248	U	3.33	ug/kg	1.11	3.33	1
11097-69-1	Aroclor-1254	U	3.33	ug/kg	1.11	3.33	1
11096-82-5	Aroclor-1260		22.9	ug/kg	1.11	3.33	1



Data File: /chem/ecdla.i/011510.b/022f2201-1.d  
Report Date: 23-Jan-2010 12:08

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/011510.b/022f2201-1.d  
Lab Smp Id: 1202015395 Client Smp ID: PBLK01LCS  
Inj Date : 15-JAN-2010 10:22  
Operator : YS1 Inst ID: ecdla.i  
Smp Info : |1202015395|1|  
Misc Info : |ECD82P\_1S|941606|SVA|QC A|SOIL|LCS|||  
Comment :  
Method : /chem/ecdla.i/011510.b/ECD1-F-8082-121409.m  
Meth Date : 23-Jan-2010 12:06 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: 10-1210.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

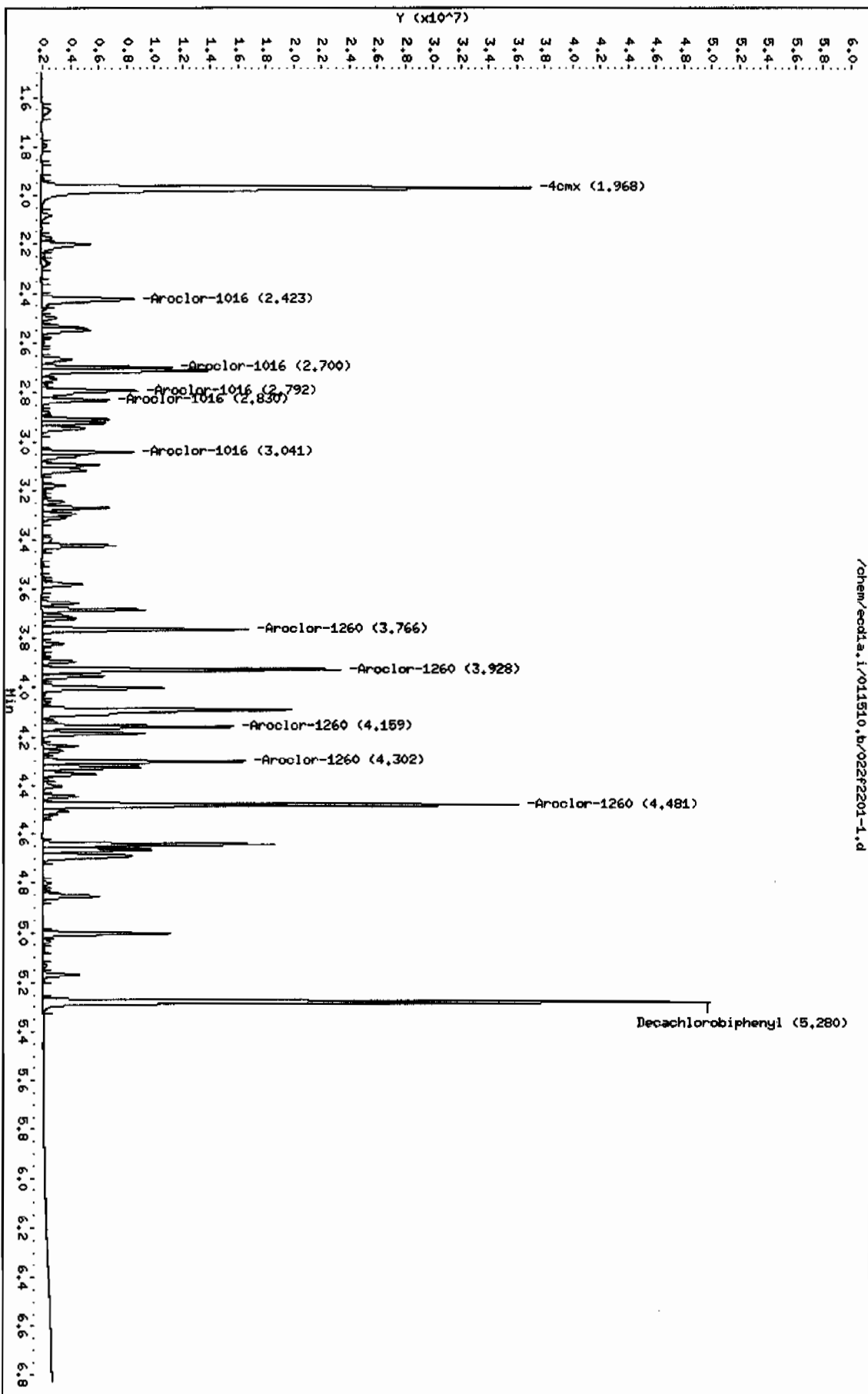
ON-COL FINAL

RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
11	4cmx					
1.968	1.969	-0.001	42081388	117.716	3.9 80.00- 120.00	100.00
12	Decachlorobiphenyl					
5.280	5.281	-0.001	37679316	124.762	4.2 80.00- 120.00	100.00
1	Aroclor-1016					
2.423	2.424	-0.001	7969412	574.709	19.2 80.00- 120.00	100.00
2.700	2.700	0.000	6217327	615.716	20.5 61.33- 101.33	78.01
2.792	2.793	-0.001	6654523	566.004	18.9 64.78- 104.78	83.50
2.830	2.830	0.000	3920844	594.156	19.8 31.04- 71.04	49.20

CONCENTRATIONS								
			ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE ( ug/L)		(ug/Kg)	TARGET RANGE		RATIO
***	*****	*****	*****	*****	*****	*****	*****	*****
1 Aroclor-1016 (continued)								
3.041	3.041	0.000	5182904	597.563	19.9	44.98-	84.98	65.03
Average of Peak Concentrations =					19.6			
-----								
7 Aroclor-1260					CAS #: 11096-82-5			
3.766	3.767	-0.001	10912262	651.395	21.7	80.00-	120.00	100.00
3.928	3.930	-0.002	16711100	675.398	22.5	132.00-	172.00	153.14
4.159	4.160	-0.001	10075472	685.997	22.9	70.52-	110.52	92.33
4.302	4.303	-0.001	10665376	702.384	23.4	74.84-	114.84	97.74
4.481	4.482	-0.001	24536690	714.305	23.8	196.11-	236.11	224.85
Average of Peak Concentrations =					22.9			
-----								

Data File: /chem/ecda.i/011510.b/02f2201-1.d  
Date: 15-JAN-2010 10:22  
Client ID: PBLK01LCS  
Sample Info: 1420201539511  
Volume Injected (uL): 1.0  
Column phase: CLP1

Instrument: ecda.i  
Operator: YSL  
Column diameter: 0.25



Data File: /chem/ecdl1a.i/011510.b/022b2201-1.d  
Report Date: 23-Jan-2010 12:08

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011510.b/022b2201-1.d  
Lab Smp Id: 1202015395 Client Smp ID: PBLK01LCS  
Inj Date : 15-JAN-2010 10:22  
Operator : YS1 Inst ID: ecd1a.i  
Smp Info : |1202015395|1|  
Misc Info : |ECD82P\_1S|941606|SVA|QC A|SOIL|LCS|||  
Comment :  
Method : /chem/ecdl1a.i/011510.b/ECD1-B-8082-121409.m  
Meth Date : 23-Jan-2010 12:07 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: 10-1210.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	
2.299	2.299	0.000	30804288	107.956	3.6 80.00- 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3	
5.942	5.944	-0.002	27099041	122.185	4.1 80.00- 120.00	100.00
-----						
1 Aroclor-1016					CAS #: 12674-11-2	
3.195	3.195	0.000	7251675	575.003	19.2 80.00- 120.00	100.00(M)
3.277	3.278	-0.001	4949449	530.608	17.7 46.69- 86.69	68.25
3.342	3.342	0.000	2953405	545.783	18.2 21.38- 61.38	40.73
3.568	3.569	-0.001	3846400	545.443	18.2 34.02- 74.02	53.04

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	3627304	553.725	18.4	29.65-	69.65	50.02
Average of Peak Concentrations =					18.3			
-----								
7 Aroclor-1260					CAS #: 11096-82-5			
4.333	4.334	-0.001	8140743	595.082	19.8	80.00-	120.00	100.00
4.458	4.459	-0.001	9990871	623.299	20.8	102.06-	142.06	122.73
4.723	4.725	-0.002	7788732	619.928	20.7	73.29-	113.29	95.68
4.897	4.899	-0.002	8129469	634.615	21.2	76.18-	116.18	99.86
5.044	5.045	-0.001	18347926	657.687	21.9	196.75-	236.75	225.38
Average of Peak Concentrations =					20.9			
-----								

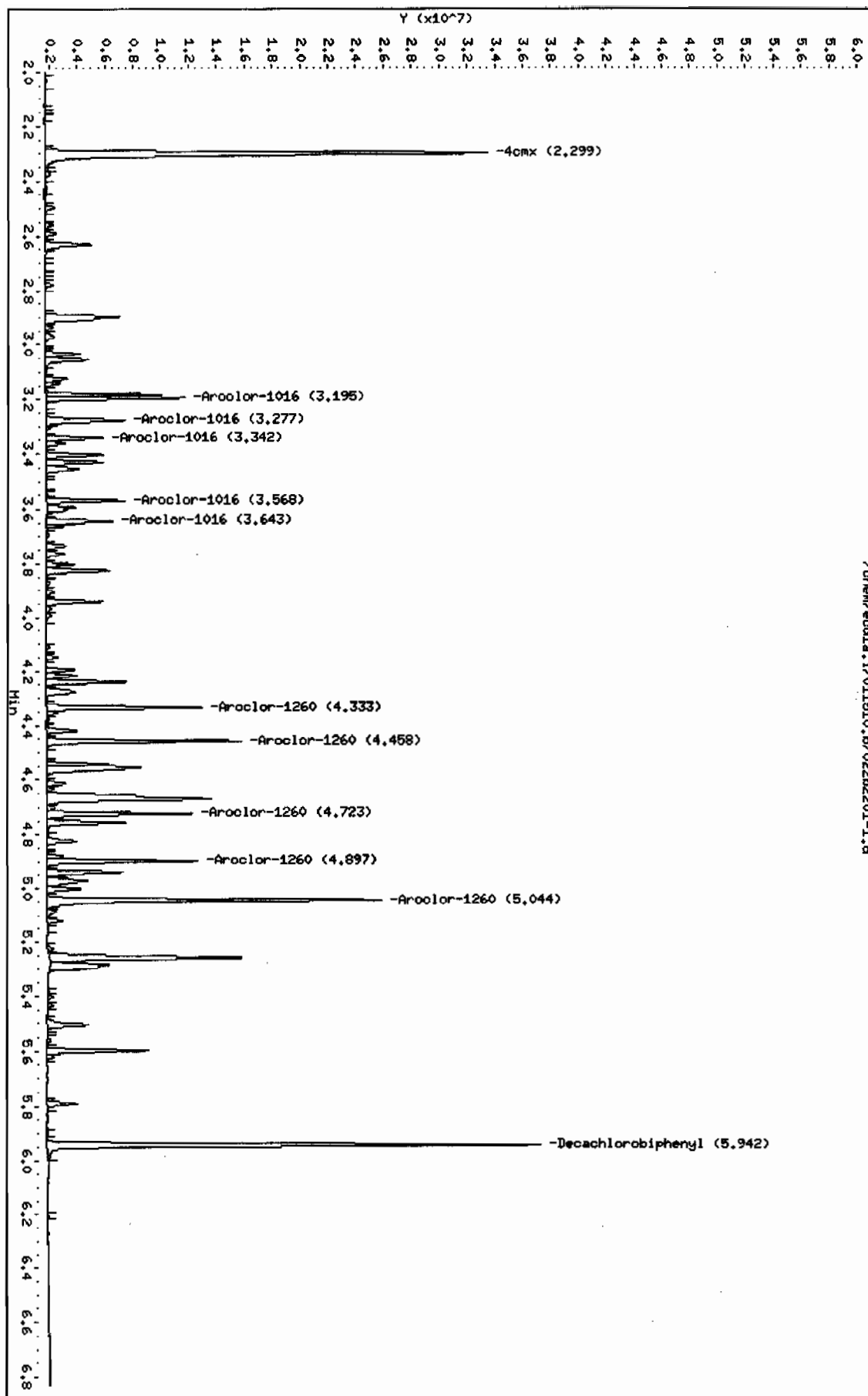
#### QC Flag Legend

M - Compound response manually integrated.

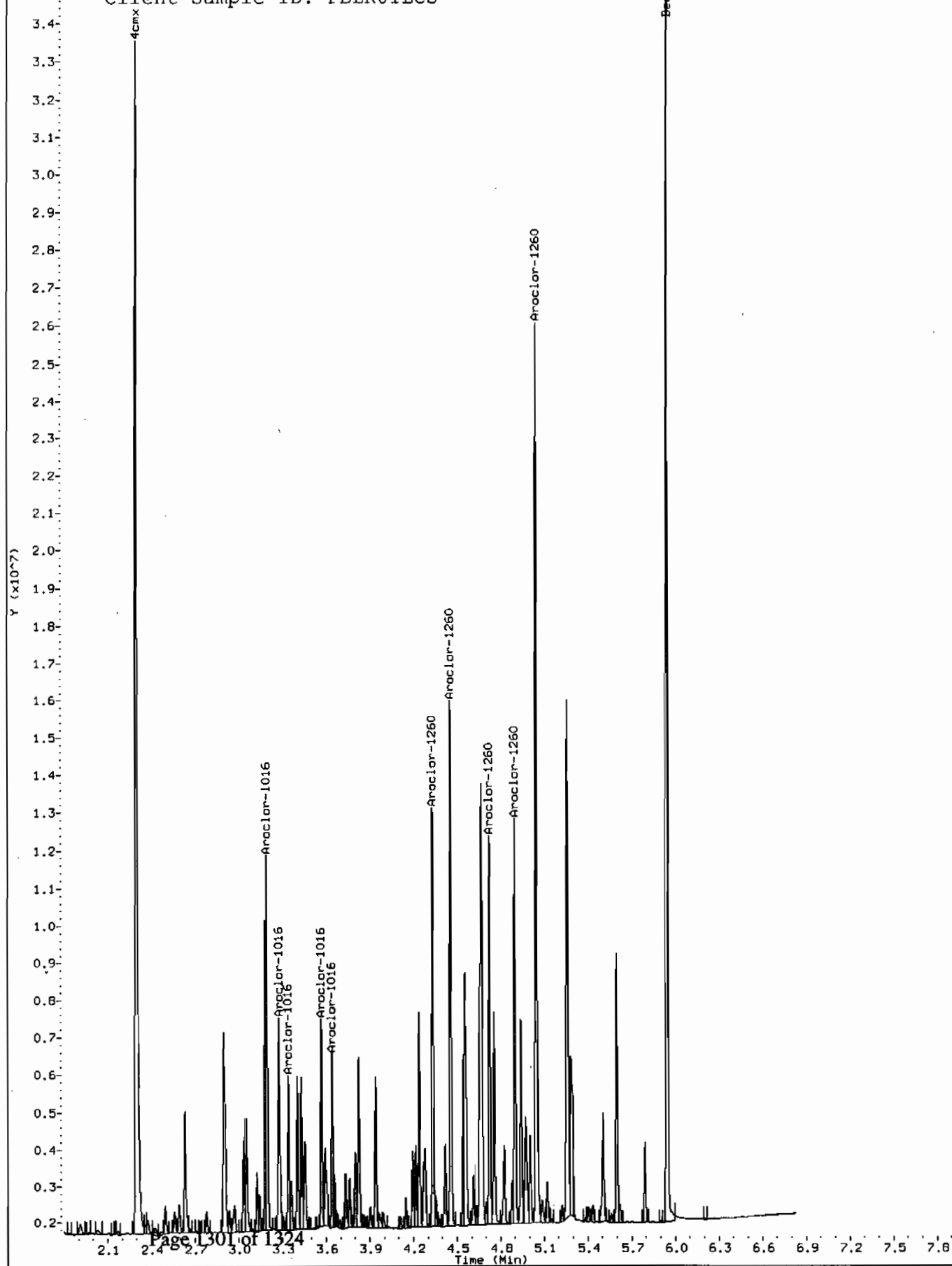
Data File: /chem/ecdt1.i/011510.b/022b2201-1.d  
Date: 15-JAN-2010 10:22  
Client ID: PBLK01LCS  
Sample Info: 1120201539611  
Volume Injected (uL): 1.0  
Column phase: CLP2

Instrument: ecdt1.i  
Operator: YSL  
Column diameter: 0.25

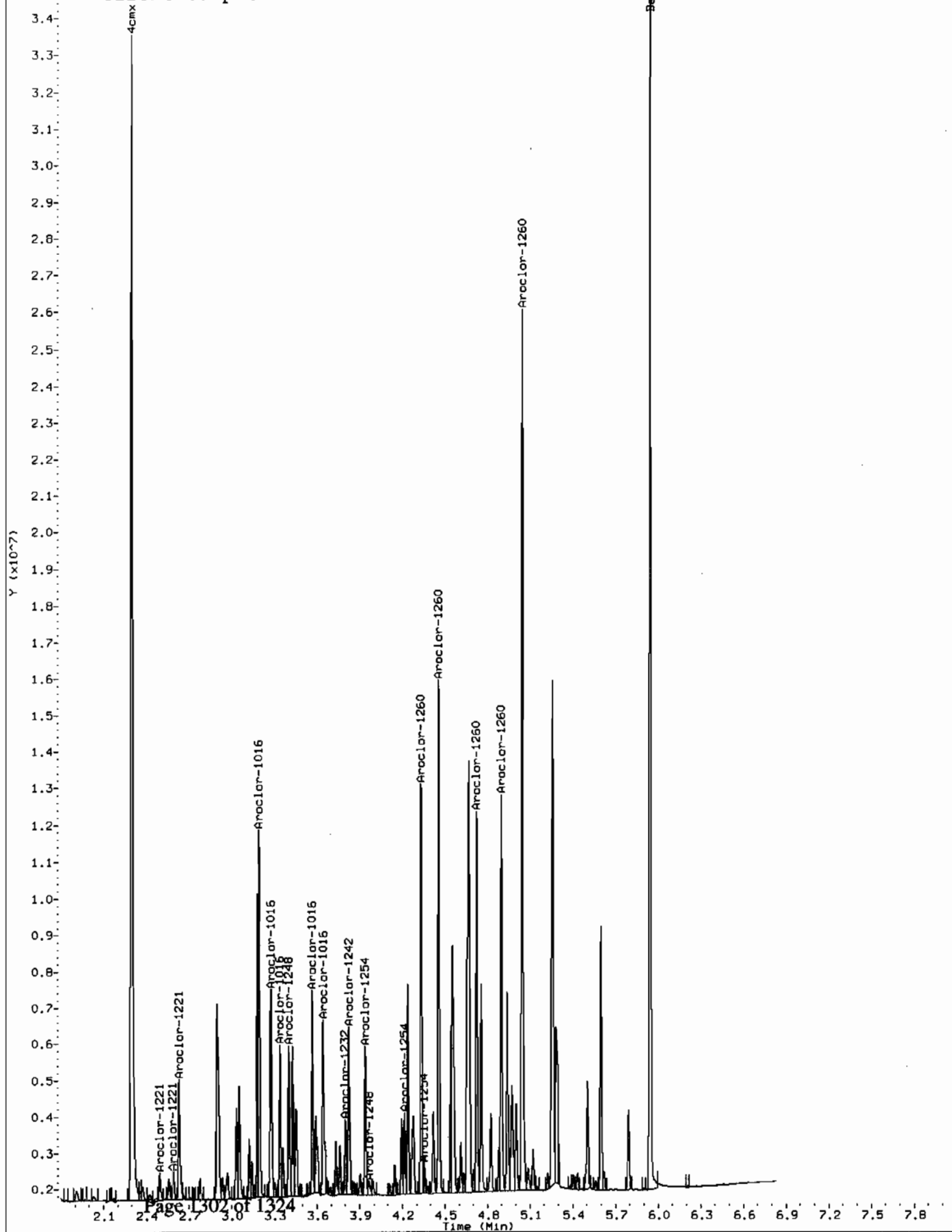
/chem/ecdt1.i/011510.b/022b2201-1.d



Comment: Manually Integrated  
Data File: /chem/ecdl.a.i/011510.b/022b2201-1.  
Operator: YS1  
Injection Date: 15-JAN-2010 10:22  
Instrument: ecdla.i  
Client Sample ID: PBLK01LCS



Comment: Before manual integration  
Data File: /chem/ecdl1.i/011510.b/orig-022b2201-1.d  
Operator: YS1  
Injection Date: 15-JAN-2010 10:22  
Instrument: ecd1a.i  
Client Sample ID: PBLK01LCS





# MISCELLANEOUS DATA

INSTRUMENT ID: ECDDT

DATE: 12/15/2009

METHOD: ECD1-F-8082-121409.m

OPERATOR: YS1

REVIEWED BY:

DATE:

# HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1

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/ecdl.a.i/121409.b

Injection Volume: 0.5 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
I001f0101.d	IWAR091130-99 01	IYS1	I14-DEC-2009 04:44	I	I121409	I	I 1.0I	I CLEAN
I002f0201.d	IWAR091211-60 01	IYS1	I14-DEC-2009 04:54	I	I121409	I	I 1.0I	I DOSE RE-ICAL
I003f0301.d	IWAR091102-54	IYS1	I14-DEC-2009 05:05	I	I121409	I	I 1.0I	I DOSE RE-ICAL
I004f0401.d	IWAR091102-42	IYS1	I14-DEC-2009 05:15	I	I121409	I	I 1.0I	I DOSE RE-ICAL
I005f0501.d	IWAR091027-48	IYS1	I14-DEC-2009 05:26	I	I121409	I	I 1.0I	I DOSE RE-ICAL
I006f0601.d	IWAR090930-32	IYS1	I14-DEC-2009 05:36	I	I121409	I	I 1.0I	I PATTERN ONLY
I007f0701.d	IWAR090803-21	IYS1	I14-DEC-2009 05:47	I	I121409	I	I 1.0I	I PATTERN ONLY
I008f0801.d	IWAR090803-62	IYS1	I14-DEC-2009 05:58	I	I121409	I	I 1.0I	I PATTERN ONLY
I009f0901.d	IWAR091106-68	IYS1	I14-DEC-2009 06:08	I	I121409	I	I 1.0I	I DOSE RE-ICAL
I010f1001.d	I1660-1	IYS1	I14-DEC-2009 06:19	I	I121409	I	I 1.0I	I DOSE
I011f1101.d	I1660-2	IYS1	I14-DEC-2009 06:29	I	I121409	I	I 1.0I	I DOSE
I012f1201.d	I1660-3	IYS1	I14-DEC-2009 06:40	I	I121409	I	I 1.0I	I DOSE
I013f1301.d	I1660-4	IYS1	I14-DEC-2009 06:50	I	I121409	I	I 1.0I	I DOSE
I014f1401.d	IAR091102-01	IYS1	I14-DEC-2009 07:01	I	I121409	I	I 1.0I	I DOSE
I015f1501.d	IWAR091211-60 01	IYS1	I14-DEC-2009 07:11	I	I121409	I	I 1.0I	I DOSE

Instrument Batch: /chem/ecdl.a.i/121409.b

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[illegible]

016f1601.d	WAR091214-05 54	YS1	14-DEC-2009 07:22	121409	1.01	ARI254 I-CAL LEVEL 1
017f1701.d	WAR091214-06 54	YS1	14-DEC-2009 07:32	121409	1.01	ARI254 I-CAL LEVEL 2
018f1801.d	WAR091214-07 54	YS1	14-DEC-2009 07:43	121409	1.01	ARI254 I-CAL LEVEL 3
019f1901.d	WAR091214-08 54	YS1	14-DEC-2009 07:53	121409	1.01	ARI254 I-CAL LEVEL 4
020f2001.d	IAR091027-01	YS1	14-DEC-2009 08:04	121409	1.01	ARI254 I-CAL LEVEL 5
021f2101.d	WAR091102-54	YS1	14-DEC-2009 08:14	121409	1.01	PASSED ON BOTH COLUMNS
022f2201.d	WAR091214-09 42	YS1	14-DEC-2009 08:25	121409	1.01	ARI242 I-CAL LEVEL 1
023f2301.d	WAR091214-10 42	YS1	14-DEC-2009 08:35	121409	1.01	ARI242 I-CAL LEVEL 2
024f2401.d	WAR091214-11 42	YS1	14-DEC-2009 08:46	121409	1.01	ARI242 I-CAL LEVEL 3
025f2501.d	WAR091214-12 42	YS1	14-DEC-2009 08:56	121409	1.01	ARI242 I-CAL LEVEL 4
026f2601.d	IAR091111-01	YS1	14-DEC-2009 09:07	121409	1.01	ARI242 I-CAL LEVEL 5
027f2701.d	WAR091102-42	YS1	14-DEC-2009 09:17	121409	1.01	PASSED ON BOTH COLUMNS
028f2801.d	WAR091214-13 48	YS1	14-DEC-2009 09:28	121409	1.01	ARI248 I-CAL LEVEL 1
029f2901.d	WAR091214-14 48	YS1	14-DEC-2009 09:38	121409	1.01	ARI248 I-CAL LEVEL 2
030f3001.d	WAR091214-15 48	YS1	14-DEC-2009 09:49	121409	1.01	ARI248 I-CAL LEVEL 3
031f3101.d	WAR091214-16 48	YS1	14-DEC-2009 09:59	121409	1.01	ARI248 I-CAL LEVEL 4
032f3201.d	IAR091027-02	YS1	14-DEC-2009 10:10	121409	1.01	ARI248 I-CAL LEVEL 5
033f3301.d	WAR091027-48	YS1	14-DEC-2009 10:20	121409	1.01	PASSED ON BOTH COLUMNS
034f3401.d	WAR091214-01 60	YS1	14-DEC-2009 10:31	121409	1.01	ARI660 I-CAL LEVEL 1
035f3501.d	WAR091214-02 60	YS1	14-DEC-2009 10:41	121409	1.01	ARI660 I-CAL LEVEL 2

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Instrument Batch: /chem/ecdl1a.i/121409.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	WAR091214-03 60	YS1	14-DEC-2009 10:52	121409	1.01	ARI660	I-CAL LEVEL 3	
037f3701.d	WAR091214-04 60	YS1	14-DEC-2009 11:02	121409	1.01	ARI660	I-CAL LEVEL 4	
038f3801.d	IAR091102-01	YS1	14-DEC-2009 11:13	121409	1.01	ARI660	I-CAL LEVEL 5	
039f3901.d	WAR091211-60 01	YS1	14-DEC-2009 11:23	121409	1.01	PASSED ON BOTH COLUMNS		
040f4001.d	WAR091214-17 68	YS1	14-DEC-2009 11:34	121409	1.01	ARI268	I-CAL LEVEL 1	

041f4101.d	WAR091214-18 68	YS1	14-DEC-2009 11:44	121409	1.01	ARI268 I-CAL LEVEL 2
042f4201.d	WAR091214-19 68	YS1	14-DEC-2009 11:55	121409	1.01	ARI268 I-CAL LEVEL 3
043f4301.d	WAR091214-20 68	YS1	14-DEC-2009 12:06	121409	1.01	ARI268 I-CAL LEVEL 4
044f4401.d	WAR090817-02	YS1	14-DEC-2009 12:16	121409	1.01	ARI268 I-CAL LEVEL 5
045f4501.d	WAR091106-68	YS1	14-DEC-2009 12:27	121409	1.01	PASSED ON BOTH COLUMNS
046f4601.d	WAR091020-DDT	YS1	14-DEC-2009 12:37	121409	1.01	IDT ANALOG STANDARD
047f4701.d	WAR091130-99 02	YS1	14-DEC-2009 12:48	121409	1.01	CLEAN
048f4801.d	1201991693	YS1	14-DEC-2009 12:58	931140	1.01QC A	UPLOAD BOTH COLUMNS, USE HIGHER
049f4901.d	1201991694	YS1	14-DEC-2009 13:09	931140	1.01QC A	UPLOAD BOTH COLUMNS, USE HIGHER
050f5001.d	242297001	YS1	14-DEC-2009 13:19	931140	1.01LANL	UPLOAD BOTH COLUMNS, USE HIGHER
051f5101.d	242297002	YS1	14-DEC-2009 13:30	931140	10.01LANL	UPLOAD BOTH COLUMNS, USE HIGHER
052f5201.d	242297003	YS1	14-DEC-2009 13:40	931140	1.01LANL	UPLOAD BOTH COLUMNS, USE HIGHER
053f5301.d	242297004	YS1	14-DEC-2009 13:51	931140	5.01LANL	UPLOAD BOTH COLUMNS, USE HIGHER
054f5401.d	242297005	YS1	14-DEC-2009 14:03	931140	5.01LANL	UPLOAD BOTH COLUMNS, USE HIGHER
055f5501.d	242297006	YS1	14-DEC-2009 14:16	931140	10.01LANL	UPLOAD BOTH COLUMNS, USE HIGHER

Instrument Batch: /chem/ecdl1a.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	5.01LANL		UPLOAD BOTH COLUMNS, USE HIGHER
057f5701.d	242297008	YS1	14-DEC-2009 14:41	931140	10-782	25.01LANL		UPLOAD BOTH COLUMNS, USE HIGHER
058f5801.d	WAR091211-60 02	YS1	14-DEC-2009 14:52		1121409	1.01		PASSED ON BOTH COLUMNS
059f5901.d	WAR091130-99 03	YS1	14-DEC-2009 15:02		1121409	1.01		CLEAN
060f6001.d	242297009	YS1	14-DEC-2009 15:13	931140	10-782	1.01LANL		UPLOAD BOTH COLUMNS, USE HIGHER
061f6101.d	242297010	YS1	14-DEC-2009 15:25	931140	10-782	1.01LANL		DCB LOW RE
062f6201.d	242297011	YS1	14-DEC-2009 15:38	931140	10-782	5.01LANL		UPLOAD BOTH COLUMNS, USE HIGHER
063f6301.d	242297012	YS1	14-DEC-2009 15:51	931140	10-782	5.01LANL		UPLOAD BOTH COLUMNS, USE HIGHER
064f6401.d	242297013	YS1	14-DEC-2009 16:03	931140	10-782	10.01LANL		UPLOAD BOTH COLUMNS, USE HIGHER

065f501.d	1242305004	YS1	14-DEC-2009 16:16	931140	110-786	5.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
066f601.d	1201991695	YS1	14-DEC-2009 16:28	931140	110-786	5.0 QC A	UPLOAD BOTH COLUMNS, USE HIGHER
067f701.d	1201991696	YS1	14-DEC-2009 16:41	931140	110-786	5.0 QC A	UPLOAD BOTH COLUMNS, USE HIGHER
068f801.d	1242305005	YS1	14-DEC-2009 16:53	931140	110-786	5.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
069f901.d	1242305006	YS1	14-DEC-2009 17:06	931140	110-786	5.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
070f001.d	WAR091211-60 03	YS1	14-DEC-2009 17:19	1121409	1.0		PASSED ON BOTH COLUMNS
071f101.d	WAR091130-99 04	YS1	14-DEC-2009 17:31	1121409	1.0		CLEAN
072f201.d	1201992645	YS1	14-DEC-2009 17:44	931553	1242521	1.0 QC A	UPLOAD BOTH COLUMNS, USE HIGHER
073f301.d	1201992646	YS1	14-DEC-2009 17:57	931553	1242521	1.0 QC A	UPLOAD BOTH COLUMNS, USE HIGHER
074f401.d	1242264001	YS1	14-DEC-2009 18:09	931553	1242264	5.0 ENRG	UPLOAD BOTH COLUMNS, USE HIGHER
075f501.d	1242521001	YS1	14-DEC-2009 18:22	931553	1242521	5.0 EMSC	UPLOAD BOTH COLUMNS, USE HIGHER

Instrument Batch: /chem/ecdla.i/121409.b

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Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
076f7601.d	1201992647	YS1	14-DEC-2009 18:35	931553	1242521	5.0 QC A	UPLOAD BOTH COLUMNS, USE HIGHER	
077f7701.d	1201992648	YS1	14-DEC-2009 18:47	931553	1242521	5.0 QC A	UPLOAD BOTH COLUMNS, USE HIGHER	
078f7801.d	1242521002	YS1	14-DEC-2009 19:00	931553	1242521	5.0 EMSC	UPLOAD BOTH COLUMNS, USE HIGHER	
079f7901.d	1242521003	YS1	14-DEC-2009 19:12	931553	1242521	5.0 EMSC	UPLOAD BOTH COLUMNS, USE HIGHER	
080f8001.d	1242521004	YS1	14-DEC-2009 19:25	931553	1242521	5.0 EMSC	UPLOAD BOTH COLUMNS, USE HIGHER	
081f8101.d	1242521005	YS1	14-DEC-2009 19:38	931553	1242521	5.0 EMSC	UPLOAD BOTH COLUMNS, USE HIGHER	
082f8201.d	WAR091211-60 04	YS1	14-DEC-2009 19:50	121409	1.0	1.0	PASSED ON BOTH COLUMNS	
083f8301.d	WAR091130-99 05	YS1	14-DEC-2009 20:03	121409	1.0	1.0	CLEAN	
084f8401.d	1242521006	YS1	14-DEC-2009 20:15	931553	1242521	5.0 EMSC	UPLOAD BOTH COLUMNS, USE HIGHER	
085f8501.d	1242521007	YS1	14-DEC-2009 20:28	931553	1242521	5.0 EMSC	UPLOAD BOTH COLUMNS, USE HIGHER	
086f8601.d	1242521008	YS1	14-DEC-2009 20:41	931553	1242521	5.0 EMSC	UPLOAD BOTH COLUMNS, USE HIGHER	
087f8701.d	WAR091211-60 05	YS1	14-DEC-2009 20:53	121409	1.0	1.0	PASSED ON BOTH COLUMNS	
088f8801.d	WAR091130-99 06	YS1	14-DEC-2009 21:06	121409	1.0	1.0	CLEAN	
089f8901.d	1242297010	YS1	14-DEC-2009 21:19	931140	110-782	1.0 LANL		

090f9001.d	WAR091211-60 06	YS1	14-DEC-2009 21:31	121409	1.01	PASSED ON BOTH COLUMNS
091f9101.d	WAR091130-99 07	YS1	14-DEC-2009 21:44	121409	1.01	CLEAN
092f9201.d	11660	YS1	14-DEC-2009 21:56	121409	1.01	screen
093f9301.d	11660	YS1	14-DEC-2009 22:09	121409	1.01	screen
094f9401.d	11660	YS1	14-DEC-2009 22:22	121409	1.01	screen

Instrument Batch: /chem/ecd1a.i/121409.b

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## GEL ORGANIC RUN LOG

INSTRUMENT ID: ECD1

DATE: 01/18/2010 METHOD: ECD1-F-8082-121409.m OPERATOR: YS1 REVIEWED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT DA699  
ALUMINA LOT 1240553-A  
COPPER LOT 236547-A

Calibration & QC Information  
Initial Calibration Dates: See Calibration History and 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/011510.b Injection Volume: 0.5 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
1001f0101.d	WAR100105-99 01	YS1	115-JAN-2010 06:31		011510	1.01	CLEAN	
1002f0201.d	WAR100104-60 01	YS1	115-JAN-2010 06:42		011510	1.01	DOSE RR FILE 10	
1003f0301.d	WAR091216-54	YS1	115-JAN-2010 06:52		011510	1.01	PASSED ON BOTH COLUMNS	
1004f0401.d	WAR091217-42	YS1	115-JAN-2010 07:03		011510	1.01	PASSED ON BOTH COLUMNS	
1005f0501.d	WAR091217-48	YS1	115-JAN-2010 07:13		011510	1.01	PASSED ON BOTH COLUMNS	
1006f0601.d	WAR100104-32	YS1	115-JAN-2010 07:24		011510	1.01	PATTERN ONLY	
1007f0701.d	WAR100104-21	YS1	115-JAN-2010 07:34		011510	1.01	PATTERN ONLY	
1008f0801.d	WAR100104-62	YS1	115-JAN-2010 07:45		011510	1.01	PATTERN ONLY	
1009f0901.d	WAR100111-68	YS1	115-JAN-2010 07:55		011510	1.01	PATTERN ONLY	
1010f1001.d	WAR100104-60 01	YS1	115-JAN-2010 08:06		011510	1.01	PASSED ON BOTH COLUMNS	
1011f1101.d	WAR091219-DDT	YS1	115-JAN-2010 08:16		011510	1.01	DOT ANALOG STANDARD	
1012f1201.d	WAR100105-99 02	YS1	115-JAN-2010 08:27		011510	1.01	CLEAN	
1013f1301.d	1202015322	YS1	115-JAN-2010 08:37	941569	244665	1.01QC A	UPLOAD BOTH COLUMNS, USE HIGHER	
1014f1401.d	1202015323	YS1	115-JAN-2010 08:48	941569	244665	1.01QC A	UPLOAD BOTH COLUMNS, USE HIGHER	
1015f1501.d	244540002	YS1	115-JAN-2010 08:58	941569	244540	5.0MILS	UPLOAD BOTH COLUMNS, USE HIGHER	

Instrument Batch: /chem/ecd1a.i/011510.b

Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
-----------	-------------------	---------	---------------------	-------	-----	----------	--------	----------

016f1601.d	124465001	YS1	15-JAN-2010 09:11	1941569	1244665	5.0 SNLS	UPLOAD BOTH COLUMNS, USE HIGHER
017f1701.d	1202015389	YS1	15-JAN-2010 09:23	1941569	1244665	5.0 QC A	UPLOAD BOTH COLUMNS, USE HIGHER
018f1801.d	1202015390	YS1	15-JAN-2010 09:36	1941569	1244665	5.0 QC A	UPLOAD BOTH COLUMNS, USE HIGHER
019f1901.d	1244508001	YS1	15-JAN-2010 09:48	1011510	1.0	PASSED ON BOTH COLUMNS	
020f2001.d	1244508002	YS1	15-JAN-2010 09:59	1011510	1.0	CLEAN	
021f2101.d	1202015394	YS1	15-JAN-2010 10:09	1941606	10-1186	1.0 QC A	UPLOAD BOTH COLUMNS, USE HIGHER
022f2201.d	1202015395	YS1	15-JAN-2010 10:22	1941606	10-1186	1.0 QC A	UPLOAD BOTH COLUMNS, USE HIGHER
023f2301.d	1244508001	YS1	15-JAN-2010 10:34	1941606	10-1186	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
024f2401.d	1244508002	YS1	15-JAN-2010 10:47	1941606	10-1186	5.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
025f2501.d	1202015396	YS1	15-JAN-2010 11:00	1941606	10-1186	5.0 QC A	UPLOAD BOTH COLUMNS, USE HIGHER
026f2601.d	1202015397	YS1	15-JAN-2010 11:12	1941606	10-1186	5.0 QC A	UPLOAD BOTH COLUMNS, USE HIGHER
027f2701.d	1244508003	YS1	15-JAN-2010 11:25	1941606	10-1186	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
028f2801.d	1244508004	YS1	15-JAN-2010 11:37	1941606	10-1186	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
029f2901.d	1244508005	YS1	15-JAN-2010 11:48	1011510	1.0	PASSED ON BOTH COLUMNS	
030f3001.d	1244508006	YS1	15-JAN-2010 11:58	1011510	1.0	CLEAN	
031f3101.d	1244508005	YS1	15-JAN-2010 12:11	1941606	10-1186	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
032f3201.d	1244508006	YS1	15-JAN-2010 12:24	1941606	10-1186	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
033f3301.d	1244508007	YS1	15-JAN-2010 12:36	1941606	10-1186	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
034f3401.d	1244508008	YS1	15-JAN-2010 12:49	1941606	10-1186	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
035f3501.d	1244508009	YS1	15-JAN-2010 13:01	1011510	1.0	PASSED ON BOTH COLUMNS	

Instrument Batch: /chem/ecdl.a.i/011510.b

Data File	GL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	1244508005	YS1	15-JAN-2010 13:12	1011510	1.0	CLEAN		
037f3701.d	1244508001	YS1	15-JAN-2010 13:23	1941606	10-1210	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER	
038f3801.d	1244508002	YS1	15-JAN-2010 13:35	1941606	10-1210	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER	
039f3901.d	1244508003	YS1	15-JAN-2010 13:48	1941606	10-1210	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER	
040f4001.d	1244508004	YS1	15-JAN-2010 14:00	1941606	10-1210	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER	



041f4101.d	244599005	YS1	15-JAN-2010 14:13	941606	10-1210	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
042f4201.d	244599006	YS1	15-JAN-2010 14:25	941606	10-1210	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
043f4301.d	244599007	YS1	15-JAN-2010 14:38	941606	10-1210	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
044f4401.d	244599008	YS1	15-JAN-2010 14:51	941606	10-1210	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
045f4501.d	244599013	YS1	15-JAN-2010 15:03	941606	10-1210	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
046f4601.d	WAR100104-60 05	YS1	15-JAN-2010 15:16		011510	1.0		PASSED ON BOTH COLUMNS
047f4701.d	WAR100105-99 06	YS1	15-JAN-2010 15:26		011510	1.0		CLEAN

\* An error was found in the initial calibration level 2 for surrogate 4cmx and DCB. The concentration for I.cal. level 2 was changed from 20ppb to 25ppb on both columns for surrogate 4cmx and DCB in the method to correct the mistake after the data were originally processed. All files in this sequence were re-processed using the corrected method on 01/22/10, and the surrogate concentration was changed slightly. Therefore, the data in Target are slightly different from the ones documented in the original folder.

Data File: /chem/ecdl1a.i/011510.b/025b2501.d  
Report Date: 23-Jan-2010 12:09

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011510.b/025b2501.d  
Lab Smp Id: 1202015396 Client Smp ID: RE46-10-10026MS  
Inj Date : 15-JAN-2010 11:00  
Operator : YS1 Inst ID: ecd1a.i  
Smp Info : |1202015396|5|  
Misc Info : |ECD82P\_1S|941606|SVA|QC A|SOIL|MS|  
Comment :  
Method : /chem/ecdl1a.i/011510.b/ECD1-B-8082-121409.m  
Meth Date : 23-Jan-2010 12:07 yip00818 Quant Type: ESTD  
Cal Date : 14-DEC-2009 12:16 Cal File: 044b4401.d  
Als bottle: 25 QC Sample: MS  
Dil Factor: 5.00000  
Integrator: Falcon Compound Sublist: 10-1186.sub  
Target Version: 3.50 Sample Matrix: Soil  
Processing Host: hpclp1

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

Name	Value	Description
DF	5.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.04000	Weight of sample extracted (g)
M	8.65050	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS

RT	EXP RT	DLT RT	RESPONSE ( ug/L)	ON-COL	FINAL	TARGET RANGE	RATIO
CAS #: 877-09-8							
2.298	2.299	-0.001	6748874	23.6520	4.3	80.00- 120.00	100.00
CAS #: 2051-24-3							
5.942	5.944	-0.002	5419863	24.4373	4.4	80.00- 120.00	100.00
CAS #: 12674-11-2							
3.195	3.195	0.000	1973712	156.500	28.5	80.00- 120.00	100.00 (M)
3.277	3.278	-0.001	1472888	157.902	28.8	46.69- 86.69	74.63
3.341	3.342	-0.001	841761	155.556	28.3	21.38- 61.38	42.65
3.567	3.569	-0.002	1093618	155.082	28.2	34.02- 74.02	55.41

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	1074362	164.006	29.9	29.65~ 69.65	54.43	
Average of Peak Concentrations =					28.8			
-----								
5 Aroclor-1248					CAS #: 12672-29-6			
3.402	3.404	-0.002	946153	117.475	21.4	80.00~ 120.00	100.00(a)	
3.567	3.569	-0.002	1093618	110.757	20.2	105.37~ 145.37	115.59	
3.802	3.802	0.000	580805	51.7644	9.4	124.25~ 164.25	61.39	
3.826	3.830	-0.004	1476618	118.293	21.6	141.26~ 181.26	156.07	
3.967	3.967	0.000	543741	44.9209	8.2	134.81~ 174.81	57.47	
Average of Peak Concentrations =					16.2			
-----								
7 Aroclor-1260					CAS #: 11096-82-5			
4.333	4.334	-0.001	5137459	375.545	68.4	80.00~ 120.00	100.00(R)	
4.457	4.459	-0.002	6625285	413.331	75.3	102.06~ 142.06	128.96	
4.723	4.725	-0.002	5088551	405.013	73.8	73.29~ 113.29	99.05	
4.897	4.899	-0.002	5122206	399.858	72.8	76.18~ 116.18	99.70	
5.044	5.045	-0.001	11900111	426.563	77.7	196.75~ 236.75	231.63	
Average of Peak Concentrations =					73.6			

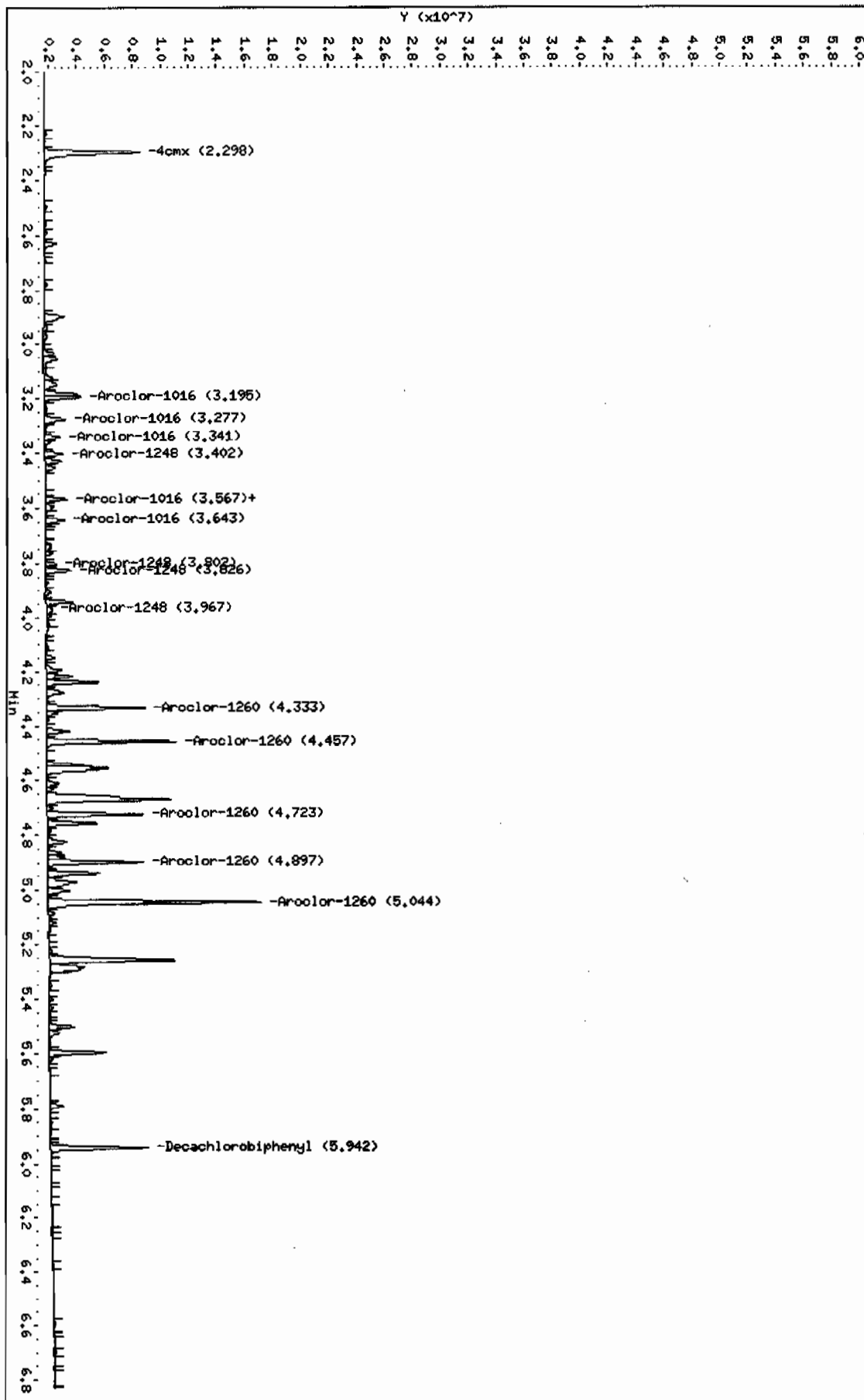
#### QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).  
 R - Spike/Surrogate failed recovery limits.  
 M - Compound response manually integrated.

Data File: /chem/ecdda.i/011510.b/025b2501.d  
Date: 15-JUN-2010 11:00  
Client ID: RE46-10-10026MS  
Sample Info: 11202015396151  
Volume Injected (uL): 1.0  
Column phase: CLP2

Instrument: ecdda.i  
Operator: YSL  
Column diameter: 0.25

/chem/ecdda.i/011510.b/025b2501.d



Data File: /chem/ecdl1a.i/011510.b/025f2501.d  
 Report Date: 23-Jan-2010 12:09

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# GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL  
 Data file : /chem/ecdl1a.i/011510.b/025f2501.d  
 Lab Smp Id: 1202015396 Client Smp ID: RE46-10-10026MS  
 Inj Date : 15-JAN-2010 11:00  
 Operator : YS1 Inst ID: ecd1a.i  
 Smp Info : |1202015396|5|  
 Misc Info : |ECD82P\_1S|941606|SVA|QC A|SOIL|MS|||  
 Comment :  
 Method : /chem/ecdl1a.i/011510.b/ECD1-F-8082-121409.m  
 Meth Date : 23-Jan-2010 12:06 yip00818 Quant Type: ESTD  
 Cal Date : 14-DEC-2009 11:34 Cal File: 040f4001.d  
 Als bottle: 25 QC Sample: MS  
 Dil Factor: 5.00000  
 Integrator: Falcon Compound Sublist: 10-1186.sub  
 Target Version: 3.50 Sample Matrix: Soil  
 Processing Host: hpc1p1

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

Name	Value	Description
DF	5.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.04000	Weight of sample extracted (g)
M	8.65050	% 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	8601759 24.0621	4.4	80.00- 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl			CAS #: 2051-24-3			
5.279	5.281	-0.002	7367250 24.3941	4.4	80.00- 120.00	100.00
-----						
1 Aroclor-1016			CAS #: 12674-11-2			
2.422	2.424	-0.002	2125234 153.260	27.9	80.00- 120.00	100.00
2.699	2.700	-0.001	1586271 157.092	28.6	61.33- 101.33	74.64
2.792	2.793	-0.001	1697899 144.416	26.3	64.78- 104.78	79.89
2.829	2.830	-0.001	1016124 153.981	28.0	31.04- 71.04	47.81

CONCENTRATIONS								
			ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE ( ug/L)		(ug/Kg)	TARGET RANGE		RATIO
==	=====	=====	=====	=====	=====	=====	=====	=====
1 Aroclor-1016 (continued)								
3.040	3.041	-0.001	1413494	162.969	29.7	44.98-	84.98	66.51
Average of Peak Concentrations =					28.1			
-----								
5 Aroclor-1248					CAS #: 12672-29-6			
3.092	3.094	-0.002	977085	124.501	22.7	80.00-	120.00	100.00
3.242	3.245	-0.003	401419	58.4292	10.6	68.37-	108.37	41.08
3.293	3.296	-0.003	933854	70.1593	12.8	152.98-	192.98	95.58
3.423	3.427	-0.004	1827537	165.921	30.2	118.97-	158.97	187.04
3.657	3.660	-0.003	1723513	231.185	42.1	70.11-	110.11	176.39
Average of Peak Concentrations =					23.7			
-----								
7 Aroclor-1260					CAS #: 11096-82-5			
3.766	3.767	-0.001	6864943	409.795	74.7	80.00-	120.00	100.00 (R)
3.928	3.930	-0.002	10958524	442.901	80.7	132.00-	172.00	159.63
4.158	4.160	-0.002	6714599	457.169	83.3	70.52-	110.52	97.81
4.302	4.303	-0.001	6731142	443.289	80.8	74.84-	114.84	98.05
4.480	4.482	-0.002	15903087	462.966	84.4	196.11-	236.11	231.66
Average of Peak Concentrations =					80.8			

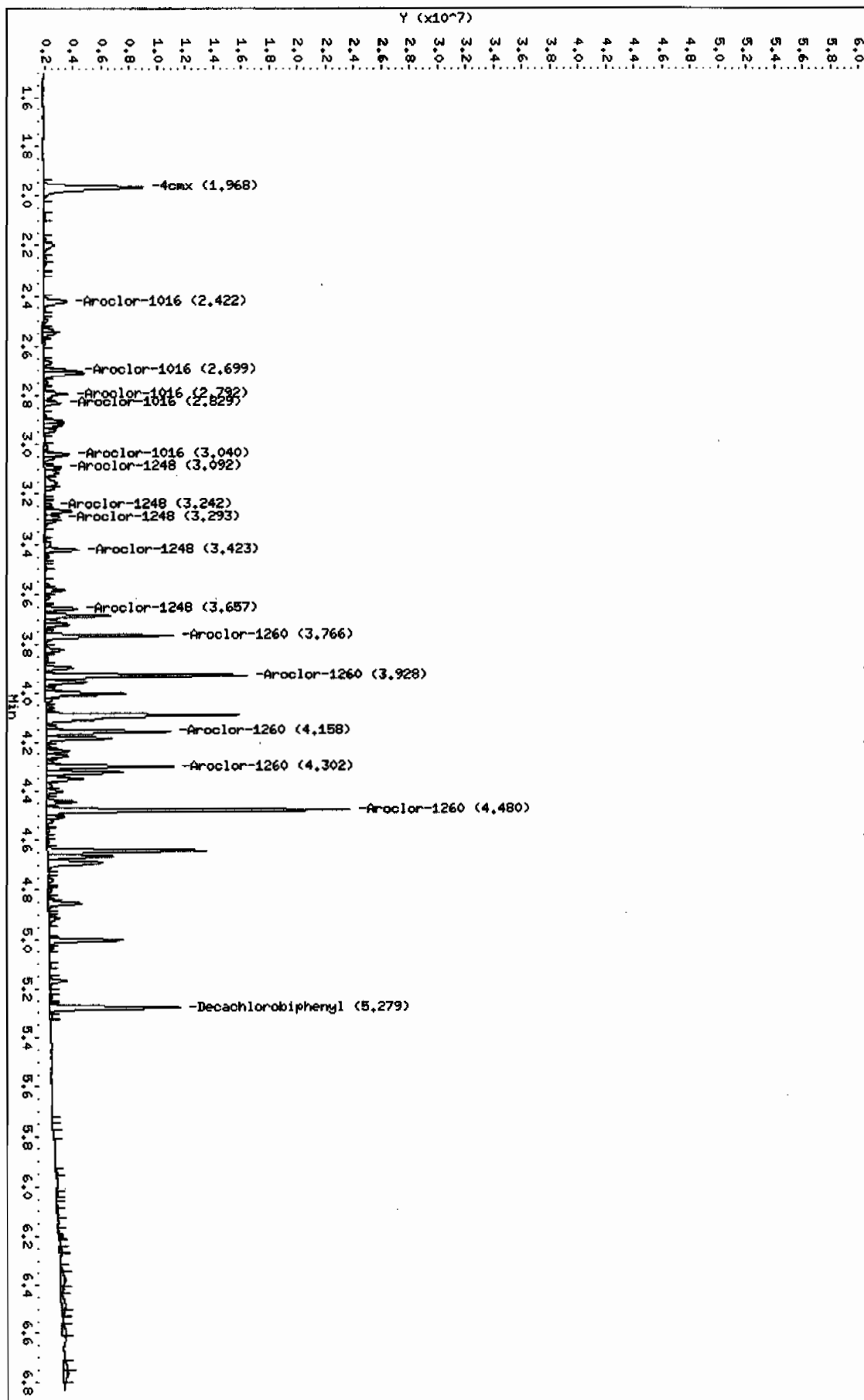
#### QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: /chem/ecda.i/011510.b/025f2501.d  
Date: 15-JAN-2010 11:00  
Client ID: RE46-10-10026HS  
Sample Info: 11202015396151  
Volume Injected (uL): 1.0  
Column phase: CLP1

Instrument: ecda.i  
Operator: YSA  
Column diameter: 0.25

/chem/ecda.i/011510.b/025f2501.d



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011510.b/026b2601.d  
 Lab Smp Id: 1202015397 Client Smp ID: RE46-10-10026MSD  
 Inj Date : 15-JAN-2010 11:12  
 Operator : YS1 Inst ID: ecd1a.i  
 Smp Info : |1202015397|5|  
 Misc Info : |ECD82P\_1S|941606|SVA|QC A|SOIL|MSD|  
 Comment :  
 Method : /chem/ecdl1a.i/011510.b/ECD1-B-8082-121409.m  
 Meth Date : 23-Jan-2010 12:07 yip00818 Quant Type: ESTD  
 Cal Date : 14-DEC-2009 12:16 Cal File: 044b4401.d  
 Als bottle: 26 QC Sample: MSD  
 Dil Factor: 5.00000  
 Integrator: Falcon Compound Sublist: 10-1186.sub  
 Target Version: 3.50 Sample Matrix: Soil  
 Processing Host: hpc1p1

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

Name	Value	Description
DF	5.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.09000	Weight of sample extracted (g)
M	8.65050	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS						
RT	EXP RT	DLT RT	ON-COL RESPONSE ( ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
-----						
\$ 11 4cmx				CAS #: 877-09-8		
2.299	2.299	0.000	7160407 25.0943	4.6	80.00- 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3		
5.943	5.944	-0.001	5879489 26.5097	4.8	80.00- 120.00	100.00
-----						
1 Aroclor-1016				CAS #: 12674-11-2		
3.194	3.195	-0.001	2188329 173.518	31.6	80.00- 120.00	100.00 (M)
3.277	3.278	-0.001	1482742 158.958	28.9	46.69- 86.69	67.76
3.341	3.342	-0.001	871879 161.121	29.3	21.38- 61.38	39.84
3.568	3.569	-0.001	1311272 185.946	33.8	34.02- 74.02	59.92



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	1298729	198.257	36.1	29.65~	69.65	59.35	
Average of Peak Concentrations =					31.9				
-----									
5 Aroclor-1248					CAS #: 12672-29-6				
3.403	3.404	-0.001	1132443	140.605	25.6	80.00~	120.00	100.00	
3.568	3.569	-0.001	1311272	132.801	24.2	105.37~	145.37	115.79	
3.801	3.802	-0.001	797585	71.0849	12.9	124.25~	164.25	70.43	
3.826	3.830	-0.004	1897750	152.030	27.6	141.26~	181.26	167.58	
3.967	3.967	0.000	956309	79.0051	14.4	134.81~	174.81	84.45	
Average of Peak Concentrations =					20.9				
-----									
7 Aroclor-1260					CAS #: 11096-82-5				
4.334	4.334	0.000	6084027	444.738	80.9	80.00~	120.00	100.00(R)	
4.459	4.459	0.000	7789444	485.959	88.4	102.06~	142.06	128.03	
4.724	4.725	-0.001	5603767	446.020	81.1	73.29~	113.29	92.11	
4.898	4.899	-0.001	5571757	434.951	79.1	76.18~	116.18	91.58	
5.044	5.045	-0.001	14210256	509.371	92.6	196.75~	236.75	233.57	
Average of Peak Concentrations =					84.4				

#### QC Flag Legend

R - Spike/Surrogate failed recovery limits.  
 M - Compound response manually integrated.

Data File: /chem/ecda.i/011510.b/026b2601.d

Date: 15-JAN-2010 11:12

Client ID: RE46-10-10026HSD

Sample Info: 1202015397151

Volume Injected (uL): 1.0

Column phase: CLP2

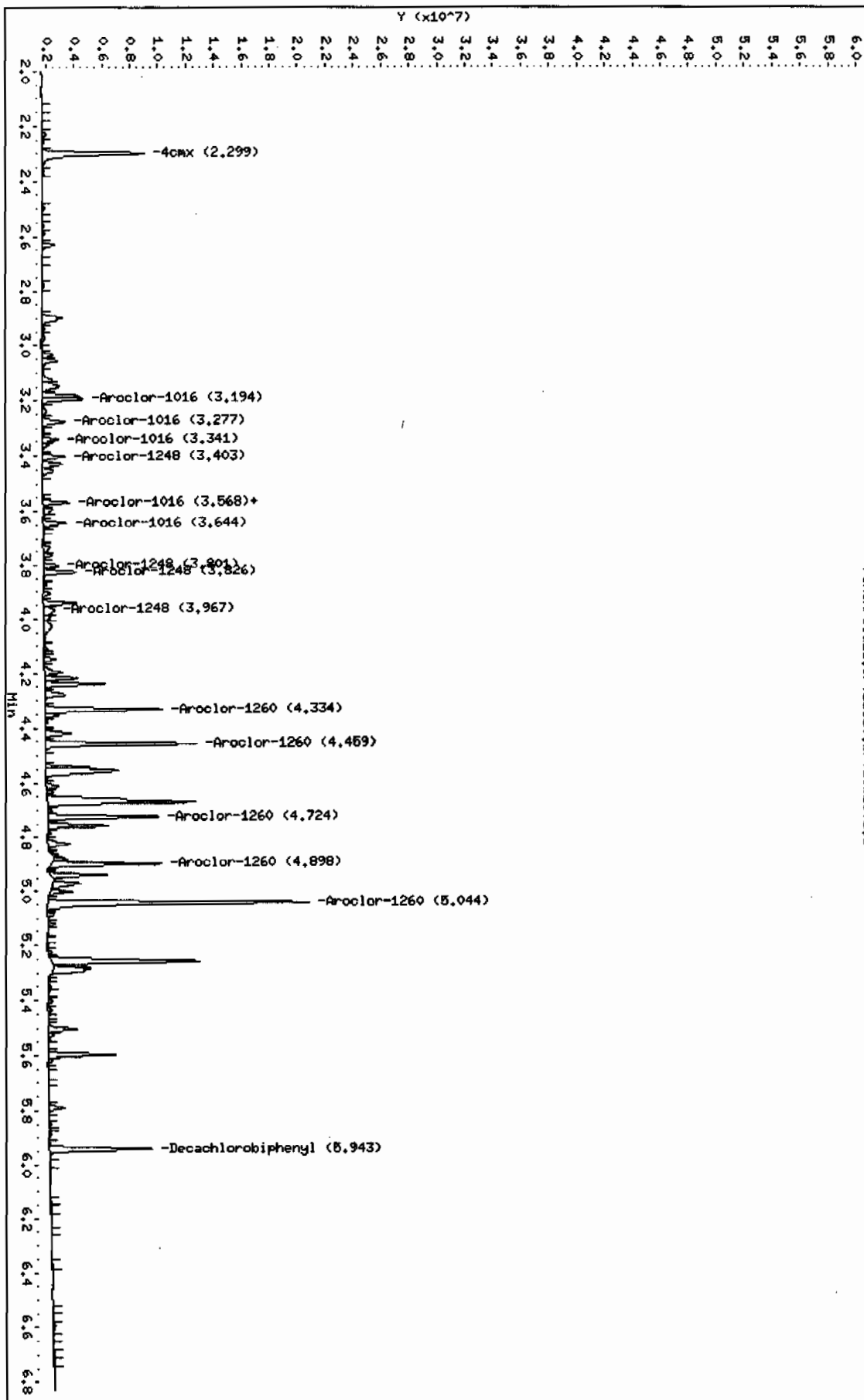
Instrument: ecda.i

Operator: YSL

Column diameter: 0.25

Page 1

/chem/ecda.i/011510.b/026b2601.d



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/011510.b/026f2601.d  
Lab Smp Id: 1202015397 Client Smp ID: RE46-10-10026MSD  
Inj Date : 15-JAN-2010 11:12  
Operator : YS1 Inst ID: ecdla.i  
Smp Info : |1202015397|5|  
Misc Info : |ECD82P\_1S|941606|SVA|QC A|SOIL|MSD|||  
Comment :  
Method : /chem/ecdla.i/011510.b/ECD1-F-8082-121409.m  
Meth Date : 23-Jan-2010 12:06 yip00818 Quant Type: ESTD  
Cal Date : 14-DEC-2009 11:34 Cal File: 040f4001.d  
Als bottle: 26 QC Sample: MSD  
Dil Factor: 5.00000  
Integrator: Falcon Compound Sublist: 10-1186.sub  
Target Version: 3.50 Sample Matrix: Soil  
Processing Host: hpclp1

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

Name	Value	Description
DF	5.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.09000	Weight of sample extracted (g)
M	8.65050	% 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	9046287 25.3055	4.6	80.00- 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3	
5.279	5.281	-0.002	7629403 25.2621	4.6	80.00- 120.00	100.00
-----						
1 Aroclor-1016					CAS #: 12674-11-2	
2.423	2.424	-0.001	2384219 171.936	31.3	80.00- 120.00	100.00
2.699	2.700	-0.001	1630788 161.501	29.4	61.33- 101.33	68.40
2.792	2.793	-0.001	1801721 153.246	27.9	64.78- 104.78	75.57
2.829	2.830	-0.001	1101095 166.858	30.4	31.04- 71.04	46.18

CONCENTRATIONS						
			ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
1 Aroclor-1016 (continued)						
3.039	3.041	-0.002	1686264	194.418	35.4 44.98- 84.98	70.73
Average of Peak Concentrations =				30.8		
-----						
5 Aroclor-1248				CAS #: 12672-29-6		
3.091	3.094	-0.003	1166104	148.586	27.0 80.00- 120.00	100.00
3.242	3.245	-0.003	537493	78.2357	14.2 68.37- 108.37	46.09
3.294	3.296	-0.002	1395340	104.830	19.1 152.98- 192.98	119.66
3.424	3.427	-0.003	2243164	203.655	37.0 118.97- 158.97	192.36
3.658	3.660	-0.002	2072806	278.038	50.6 70.11- 110.11	177.75
Average of Peak Concentrations =				29.6		
-----						
7 Aroclor-1260				CAS #: 11096-82-5		
3.765	3.767	-0.002	7944040	474.210	86.3 80.00- 120.00	100.00(R)
3.929	3.930	-0.001	12741881	514.977	93.7 132.00- 172.00	160.40
4.159	4.160	-0.001	7666858	522.004	95.0 70.52- 110.52	96.51
4.302	4.303	-0.001	7622582	501.997	91.3 74.84- 114.84	95.95
4.481	4.482	-0.001	18977761	552.475	100 196.11- 236.11	238.89
Average of Peak Concentrations =				93.3		
-----						

#### QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: /chem/eod1a.i/011510.b/026f2601.d

Date: 15-JAN-2010 11:12

Client ID: RE46-10-10026MSD

Sample Info: 1120201537161

Volume Injected (uL): 1.0

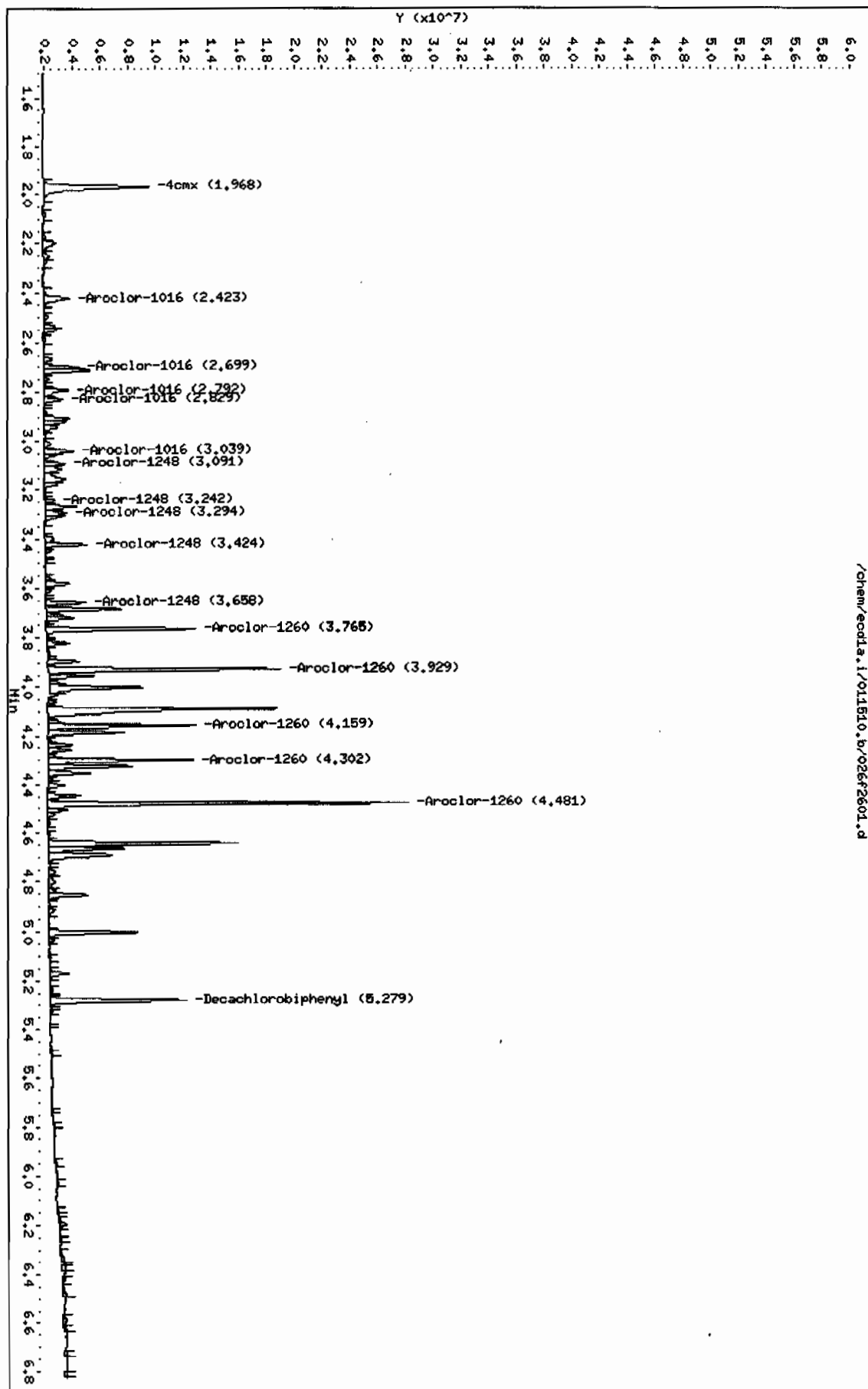
Column phase: CLP1

Instrument: eod1a.i

Operator: YSA

Column diameter: 0.25

Page 1



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

Batch ID: 941604  
 Analyst: Andrew Schwenin  
 Method: SW846 3550B

Verified by: \_\_\_\_\_

Lab SOP: GL-OA-E-010 REV# 18  
 Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Clean Up	Prior to Clean up (mL)	Amount Cleaned (mL)	After Clean up (mL)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1202015394 MB	14-JAN-2010 19:23:28	30	H2SO4/KMn2	2	2	9	1	0.03333
1202015395 LCS	14-JAN-2010 19:23:28	30	H2SO4/KMn2	2	2	9	1	0.03333
244508001	14-JAN-2010 19:23:28	30.19	H2SO4/KMn2	2	2	9	1	0.03312
244508002	14-JAN-2010 19:23:28	30.03	H2SO4/KMn2	2	2	9	1	0.0333
1202015396 MS (244508002)	14-JAN-2010 19:23:28	30.04	H2SO4/KMn2	2	2	9	1	0.03329
1202015397 MSD (244508002)	14-JAN-2010 19:23:28	30.09	H2SO4/KMn2	2	2	9	1	0.03323
244508003	14-JAN-2010 19:23:28	30.04	H2SO4/KMn2	2	2	9	1	0.03329
244508004	14-JAN-2010 19:23:28	30.02	H2SO4/KMn2	2	2	9	1	0.03331
244508005	14-JAN-2010 19:23:28	30.05	H2SO4/KMn2	2	2	9	1	0.03328
244508006	14-JAN-2010 19:23:28	30.07	H2SO4/KMn2	2	2	9	1	0.03326
244508007	14-JAN-2010 19:23:28	30.02	H2SO4/KMn2	2	2	9	1	0.03331
244508008	14-JAN-2010 19:23:28	30.17	H2SO4/KMn2	2	2	9	1	0.03315
244599001	14-JAN-2010 19:23:28	30.03	H2SO4/KMn2	2	2	9	1	0.0333
244599002	14-JAN-2010 19:23:28	30.08	H2SO4/KMn2	2	2	9	1	0.03324
244599003	14-JAN-2010 19:23:28	30.14	H2SO4/KMn2	2	2	9	1	0.03318
244599004	14-JAN-2010 19:23:28	30.13	H2SO4/KMn2	2	2	9	1	0.03319
244599005	14-JAN-2010 19:23:28	30.14	H2SO4/KMn2	2	2	9	1	0.03318
244599006	14-JAN-2010 19:23:28	30.03	H2SO4/KMn2	2	2	9	1	0.0333
244599007	14-JAN-2010 19:23:28	30.12	H2SO4/KMn2	2	2	9	1	0.0332
244599008	14-JAN-2010 19:23:28	30.01	H2SO4/KMn2	2	2	9	1	0.03332
244599013	14-JAN-2010 19:23:28	30.01	H2SO4/KMn2	2	2	9	1	0.03332
Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:		
LCS	1202015395	PCB Laboratory Control	WE100105-07	1	mL	Clean up Date: 01/14/10		
MS	1202015396	PCB Laboratory Control	WE100105-07	1	mL	Clean up Initials: AJS		
MSD	1202015397	PCB Laboratory Control	WE100105-07	1	mL	Verified By: AV		
SURR	All	PEST LOW LEVEL SURROGATE 200 UG/L	UE091215-16	1	mL	Final Solvent: Hexane		
REGNT All		1:1 sulfuric acid	1133264a	5	mL	Clean Up SOP: GL-OA-E-037		
REGNT All		Hexane	1255282-B2	150	mL			
REGNT All		Acetone	1255284	150	mL			
REGNT All		5% Potassium Permanganate	B1202457-F	5	mL			
SOURC All		SODIUM SULFATE	1248200	30	g			