

Tuesday, March 02, 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: 3/2/2010

TURNAROUND/REPORT DUE: 4/1/2010

TURNAROUND REQD: 30 Days

**RAD SCREENING: Yes, Below Background**  
**LAB REQUEST COMMENTS:**

LANL ER SMO CONTACT:

Signature:



REQUEST NUMBER: 10-2199

These Samples are on:

LANL Request Number: 10-2199  
Per Agreement Number: 126310011  
Project Cost Code: MR3A05529E00

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
SW-846:8082		1	RE36-10-8273	R	2/25/2010	
		1	RE36-10-8274	R	2/25/2010	
		1	RE36-10-8275	R	2/25/2010	
		1	RE36-10-8276	R	2/25/2010	
		1	RE36-10-8277	R	2/25/2010	
		1	RE36-10-8278	R	2/25/2010	
		1	RE36-10-8279	R	2/25/2010	
		1	RE36-10-8280	R	2/25/2010	
		1	RE36-10-8287	R	2/25/2010	

Tuesday, March 02, 2010

REQUEST NUMBER: 10-2199

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8082	1	RE36-10-8288	R	2/25/2010	
		1	RE36-10-8291	R	2/25/2010	
	SW-846:8260B	1	RE36-10-8273	R	2/25/2010	
		1	RE36-10-8274	R	2/25/2010	
		1	RE36-10-8275	R	2/25/2010	
		1	RE36-10-8276	R	2/25/2010	
		1	RE36-10-8277	R	2/25/2010	
		1	RE36-10-8278	R	2/25/2010	
		1	RE36-10-8279	R	2/25/2010	
		1	RE36-10-8280	R	2/25/2010	
		1	RE36-10-8287	R	2/25/2010	
		1	RE36-10-8288	R	2/25/2010	
	SW-846:8270C	1	RE36-10-8291	R	2/25/2010	
		1	RE36-10-8295	S	2/25/2010	
		1	RE36-10-8273	R	2/25/2010	
		1	RE36-10-8274	R	2/25/2010	
		1	RE36-10-8275	R	2/25/2010	
		1	RE36-10-8276	R	2/25/2010	
		1	RE36-10-8277	R	2/25/2010	
		1	RE36-10-8278	R	2/25/2010	
		1	RE36-10-8279	R	2/25/2010	
		1	RE36-10-8280	R	2/25/2010	
	SW-846:8321A_MOD	1	RE36-10-8291	R	2/25/2010	
		1	RE36-10-8273	R	2/25/2010	
		1	RE36-10-8274	R	2/25/2010	
		1	RE36-10-8275	R	2/25/2010	

Tuesday, March 02, 2010

REQUEST NUMBER: 10-2199

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
SW-846:8321A_MOD						
		1	RE36-10-8276	R	2/25/2010	
		1	RE36-10-8277	R	2/25/2010	
		1	RE36-10-8278	R	2/25/2010	
		1	RE36-10-8279	R	2/25/2010	
		1	RE36-10-8280	R	2/25/2010	
		1	RE36-10-8287	R	2/25/2010	
		1	RE36-10-8288	R	2/25/2010	
		1	RE36-10-8291	R	2/25/2010	

Final Page of REQUEST NUMBER 10-2199

Thursday, March 04, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-2199C.

LOS ALAMOS

REQUEST NUMBER: 10-2199

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 4/1/2010

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
RE36-10-8288	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-8288	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-8279	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-8279	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-8277	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-8277	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-8280	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-8280	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-8278	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-8278	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-8274	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-8274	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-8291	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-8291	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-8287	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-8287	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-8273	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-8273	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-8275	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-8275	1	SEPTUM AMBER GLASS	8260B	Ice	R



Thursday, March 04, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-2199C

LOS ALAMOS

REQUEST NUMBER: 10-2199

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 4/1/2010

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
RE36-10-8276	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-8276	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-8295	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S

Relinquished By:


Date

Time

Received By:

Date

Time

  
Printed Name      Signature

3/2/10      3:00

  
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: 2505

EVENT NAME: 4th Qtr. FY09 - SWMU C-36-003 - Threemile Canyon

SAMPLE ID: RE36-10-8273

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/25/2010		MEDIA:	QBT3	72m 2/25/10	<del>ANA</del> SED
TIME COLLECTED (HH:MM)		915		SUB-MEDIA:	TUFF 1		NA
PRS ID:	C-36-003		ok	SAMPLE TECH CODE:	HA		ok
LOCATION ID:	36-610821		↓	FIELD QC TYPE:	NA		↓
LOCATION TYPE:	GENERIC		↓	FIELD PREP:	NA		↓
TOP DEPTH:	0		0.0	SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0		0.5	SCREEN/PORT DESC:			NA
FIELD MATRIX:	R		SED	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		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		METALS+U-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Brown sandy silt, moist, roots, rocks

FD RE36-10-8291

SAMPLE COMMENTS:

NA

LOCATION DESC:

8-43

FIELD SCREENING/MEASUREMENT RESULTS:

 $\alpha \leq 36$  dpm $B/\beta \leq 1873$  dpm

PID Ambient Reading = 72m 2/25/10 ppm

COLLECTED BY (PRINT)

TLMcfarland

REVIEWED BY (PRINT)

J. Branch

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J. Branch	2/25/10	(Printed Name) Sherri Newwood	2/25/10
(Signature)	1530	(Signature)	1530
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2505

EVENT NAME: 4th Qtr. FY09 - SWMU C-36-003 - Threemile Canyon

SAMPLE ID: RE36-10-8274

WORK ORDER:

	<u>AS PLANNED</u>	<u>AS COLLECTED</u>	<u>AS PLANNED</u>	<u>AS COLLECTED</u>
DATE COLLECTED(MM/DD/YYYY):		02/25/2010	MEDIA:	QBT3
TIME COLLECTED (HH:MM)		0945	SUB-MEDIA:	TUFF 1
PRS ID:	C-36-003	ok	SAMPLE TECH CODE:	HA
LOCATION ID:	36-610821	↓	FIELD QC TYPE:	NA
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA
TOP DEPTH:	0	2.0	SAMPLE USAGE:	INV
BOTTOM DEPTH:	0	3.0	SCREEN/PORT DESC:	NA
FIELD MATRIX:	R	S	EXCAVATED: YES/NO/NA	NA
COMPOSITE TYPE:	NA	COMPOSITE TIME INTERVAL:	NA	WATER FLOWING: YES/NO/NA
BOREHOLE: YES/NO/NA	NA	BOREHOLE DECLINATION:	NA	BOREHOLE DIRECTION:
			NA	

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8082+8270+NME D-EXP	500 ML AMBER GLASS	Ice	Y	
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		METALS+U-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Dark brown silty sand

SAMPLE COMMENTS:

NA

LOCATION DESC:

8-43

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha  $\leq$  82 dpm  
 Beta/Gamma  $\leq$  2040 dpm

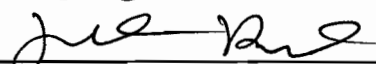
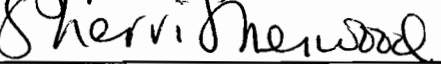
PID  $\frac{\text{Ambient Reading}}{\text{Reading}} = \text{ppm}$

COLLECTED BY (PRINT)

Th McFarland

REVIEWED BY (PRINT)

J. Branch

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J. Branch	2/25/10	(Printed Name) Sherri Sherwood	2/25/10
(Signature) 	1530	(Signature) 	1530
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

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

EVENT ID: 2505

EVENT NAME: 4th Qtr. FY09 - SWMU C-36-003 - Threemile Canyon

SAMPLE ID: RE36-10-8275

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/25/2010		MEDIA:	QBT3		SED
TIME COLLECTED (HH:MM)		955		SUB-MEDIA:	TUFF 1		NA
PRS ID:	C-36-003		ok	SAMPLE TECH CODE:	HA		ok
LOCATION ID:	36-610822		↓	FIELD QC TYPE:	NA		↓
LOCATION TYPE:	GENERIC		↓	FIELD PREP:	NA		↓
TOP DEPTH:	0		0.0	SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0		0.5	SCREEN/PORT DESC:			NA
FIELD MATRIX:	R		SED	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		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		METALS+U-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Brown loamy silt, roots, leaves

FR: RE 36-10-8294

SAMPLE COMMENTS:

NA

LOCATION DESC:

8-49

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha  $\leq$  29 dpm  
 Beta/Gamma  $\leq$  1647 dpm

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

73m 2/25/10

COLLECTED BY (PRINT)

J. McFarland

REVIEWED BY (PRINT)

J. Branch

RELINQUISHED BY (Printed Name) J. Branch (Signature) <i>[Signature]</i>	Date/Time 2/25/10 1530	RECEIVED BY (Printed Name) <i>[Signature]</i> (Signature) <i>[Signature]</i>	Date/Time 2/25/10 1530
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

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

EVENT ID: 2505

EVENT NAME: 4th Qtr. FY09 - SWMU C-36-003 - Threemile Canyon

SAMPLE ID: RE36-10-8276

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/25/2010		MEDIA:	QBT3		SED
TIME COLLECTED (HH:MM)		1000		SUB-MEDIA:	TUFF 1		NA
PRS ID:	C-36-003		OK	SAMPLE TECH CODE:	HA		OK
LOCATION ID:	36-610822		↓	FIELD QC TYPE:	NA		↓
LOCATION TYPE:	GENERIC		↓	FIELD PREP:	NA		↓
TOP DEPTH:	0		2.0	SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0		3.0	SCREEN/PORT DESC:			NA
FIELD MATRIX:	R		SED	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		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		METALS+U-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Brown loamy silt, roots

SAMPLE COMMENTS:

NA

LOCATION DESC:

8-49

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha  $\leq$  36 dpm  
 Beta/Gamma  $\leq$  1655 dpm

PID  $\frac{\text{Ambient Reading}}{72 \text{ m } 2/25/10} = \text{ppm}$

COLLECTED BY (PRINT)

ThMcFarland

REVIEWED BY (PRINT)

J. Branch

RELINQUISHED BY (Printed Name) J. Branch (Signature) <i>J. Branch</i>	Date/Time 2/25/10 1530	RECEIVED BY (Printed Name) Sherin Newwood (Signature) <i>Sherin Newwood</i>	Date/Time 2/25/10 1530
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

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

EVENT ID: 2505

EVENT NAME: 4th Qtr. FY09 - SWMU C-36-003 - Threemile Canyon

SAMPLE ID: RE36-10-8277

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/25/2010	MEDIA:	OBT3		SED	
TIME COLLECTED (HH:MM)		1010	SUB-MEDIA:	TUFF 1		NA	
PRS ID:	C-36-003	ok	SAMPLE TECH CODE:	HA		ok	
LOCATION ID:	36-610823	↓	FIELD QC TYPE:	NA		↓	
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA		↓	
TOP DEPTH:	0	0.0	SAMPLE USAGE:	INV		↓	
BOTTOM DEPTH:	0	0.5	SCREEN/PORT DESC:			NA	
FIELD MATRIX:	R	SED	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
I	Normal	8082+8270+NME D-EXP	500 ML AMBER GLASS	Ice	Y	
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		METALS+U-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

moist loamy silt, roots

SAMPLE COMMENTS:

NA

LOCATION DESC:

8-53

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha  $\leq$  20 dpm  
Beta/Gamma  $\leq$  1564 dpm

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

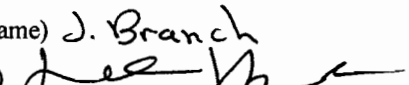
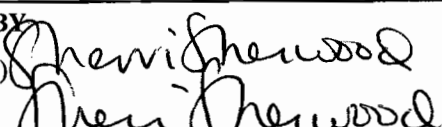
T<sub>hm</sub> 2/25/10

COLLECTED BY (PRINT)

TLMcFarland

REVIEWED BY (PRINT)

J. Branch

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J. Branch	2/25/10	(Printed Name) Sheri Sherwood	2/25/10
(Signature) 	1530	(Signature) 	1530
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2505

EVENT NAME: 4th Qtr. FY09 - SWMU C-36-003 - Threemile Canyon

SAMPLE ID: RE36-10-8278

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/25/2010		MEDIA:	QBT3		SED
TIME COLLECTED (HH:MM)		1020		SUB-MEDIA:	TUFF 1		NA
PRS ID:	C-36-003	ok		SAMPLE TECH CODE:	HA		ok
LOCATION ID:	36-610823	↓		FIELD QC TYPE:	NA		↓
LOCATION TYPE:	GENERIC			FIELD PREP:	NA		
TOP DEPTH:	0	2.0		SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0	3.0		SCREEN/PORT DESC:			NA
FIELD MATRIX:	R	SED		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		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		METALS+U-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: Brown loamy silt, roots

SAMPLE COMMENTS: NA

LOCATION DESC: 8-53

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha  $\leq$  58 dpm  
Beta/Gamma  $\leq$  2200 dpm

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

COLLECTED BY (PRINT)

J. McFarland

REVIEWED BY (PRINT)

J. Branch

RELINQUISHED BY (Printed Name) J. Branch (Signature) <i>[Signature]</i>	Date/Time 2/25/10 1530	RECEIVED BY (Printed Name) Sherin Sherwood (Signature) <i>[Signature]</i>	Date/Time 2/25/10 1530
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2505

EVENT NAME: 4th Qtr. FY09 - SWMU C-36-003 - Threemile Canyon

SAMPLE ID: RE36-10-8279

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/25/2010		MEDIA:	QBT3		A117
TIME COLLECTED (HH:MM)		1120		SUB-MEDIA:	TUFF 1		NA
PRS ID:	C-36-003	ok		SAMPLE TECH CODE:	HA		ok
LOCATION ID:	36-610824			FIELD QC TYPE:	NA		
LOCATION TYPE:	GENERIC			FIELD PREP:	NA		
TOP DEPTH:	0	0.0		SAMPLE USAGE:	INV		
BOTTOM DEPTH:	0	0.5		SCREEN/PORT DESC:			NA
FIELD MATRIX:	R	S		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
				WATER FLOWING: YES/NO/NA			
BOREHOLE: YES/NO/NA				BOREHOLE DECLINATION:	NA		
				BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8082+8270+NME D-EXP	500 ML AMBER GLASS	Ice	y	
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	y	
1		H3	500 ML POLY	Ice	y	
1		METALS+U-GEL	125 ML POLY	Ice	y	
1		Perchlorate+CN+ N03+pH	500 ML POLY	Ice	y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	y	

SAMPLE DESC:

Dry silt, leaves

SAMPLE COMMENTS:

NA

LOCATION DESC:

8 - 26

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha  $\leq$  47 dpm  
Beta/Gamma  $\leq$  1961 dpm

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

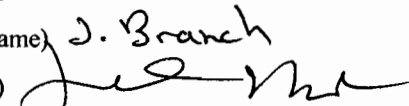
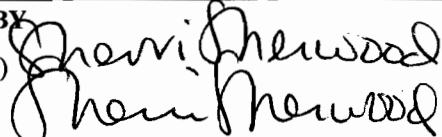
77m 2/25/10

COLLECTED BY (PRINT)

Th McFarlane

REVIEWED BY (PRINT)

J. Branch

RELINQUISHED BY (Printed Name) J. Branch (Signature) 	Date/Time 2/25/10 1530	RECEIVED BY (Printed Name) Sheri Newwood (Signature) 	Date/Time 2/25/10 1530
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time



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

EVENT ID: 2505

EVENT NAME: 4th Qtr. FY09 - SWMU C-36-003 - Threemile Canyon

SAMPLE ID: RE36-10-8280

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/25/2010		MEDIA:	OBT3		Allh
TIME COLLECTED (HH:MM)		1132		SUB-MEDIA:	TUFF 1		NA
PRS ID:	C-36-003		OK	SAMPLE TECH CODE:	HA		OK
LOCATION ID:	36-610824		↓	FIELD QC TYPE:	NA		↓
LOCATION TYPE:	GENERIC		↓	FIELD PREP:	NA		↓
TOP DEPTH:	0		2.0	SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0		3.0	SCREEN/PORT DESC:			NA
FIELD MATRIX:	R		S	EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA	COMPOSITE TIME INTERVAL:	NA	WATER FLOWING: YES/NO/NA			
BOREHOLE: YES/NO/NA		BOREHOLE DECLINATION:	NA	BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8082+8270+NME D-EXP	500 ML AMBER GLASS	Ice	Y	
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		METALS+U-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Dry silt

SAMPLE COMMENTS:

NA

LOCATION DESC:

8-26

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 30 dpm  
Beta/Gamma = 1793 dpm

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

COLLECTED BY (PRINT)

J. McFarland

REVIEWED BY (PRINT)

J. Branch

RELINQUISHED BY (Printed Name) J. Branch (Signature) <i>J. Branch</i>	Date/Time 2/25/10 1530	RECEIVED BY (Printed Name) Sherrill Sherrill (Signature) <i>Sherrill Sherrill</i>	Date/Time 2/25/10 1530
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2505

EVENT NAME: 4th Qtr. FY09 - SWMU C-36-003 - Threemile Canyon

SAMPLE ID: RE36-10-8287

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/25/2010		MEDIA:	OBT3	73m 2/25/10	Alth SED
TIME COLLECTED (HH:MM)		0900		SUB-MEDIA:	TUFF 1		NA
PRS ID:	C-36-003	ok		SAMPLE TECH CODE:	HA		ok
LOCATION ID:	36-610828	↓		FIELD QC TYPE:	NA		
LOCATION TYPE:	GENERIC			FIELD PREP:	NA		↓
TOP DEPTH:	0	0.0		SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0	0.5		SCREEN/PORT DESC:			NA
FIELD MATRIX:	R	SED		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		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		METALS+U-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: moist brown silty sand, roots, leaves, rocks

FTB: RE36-10-8295

SAMPLE COMMENTS:

NA

FD RE36-10-8292

LOCATION DESC: 8-36

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha ≤ 10 dpm

Beta/Gamma ≤ 1564 dpm

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

73m 2/25/10

COLLECTED BY (PRINT)

Th McFarland

REVIEWED BY (PRINT)

J. Branch

RELINQUISHED BY (Printed Name) J. Branch (Signature) <i>J. Branch</i>	Date/Time 2/25/10 1530	RECEIVED BY (Printed Name) <i>Henry Herwood</i> (Signature) <i>Henry Herwood</i>	Date/Time 2/25/10 1530
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

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

EVENT ID: 2505

EVENT NAME: 4th Qtr. FY09 - SWMU C-36-003 - Threemile Canyon

SAMPLE ID: RE36-10-8288

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/25/2010		MEDIA:	QBT3		Allh
TIME COLLECTED (HH:MM)		915		SUB-MEDIA:	TUFF 1		NA
PRS ID:	C-36-003	ok		SAMPLE TECH CODE:	HA		ok
LOCATION ID:	36-610828	↓		FIELD QC TYPE:	NA		↓
LOCATION TYPE:	GENERIC	↓		FIELD PREP:	NA		↓
TOP DEPTH:	0	2.0		SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0	3.0		SCREEN/PORT DESC:			NA
FIELD MATRIX:	R	S		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		WATER FLOWING: YES/NO/NA
BOREHOLE: YES/NO/NA		BOREHOLE DECLINATION:	NA	BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8082+8270+NME D-EXP	500 ML AMBER GLASS	Ice	Y	
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		METALS+U-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Dark brown silty sand, roots, rocks

SAMPLE COMMENTS:

NA

LOCATION DESC:

8-36

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 35 dpm  
Beta/Gamma = 18.73 dpm

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

72m 2/25/10

COLLECTED BY (PRINT)

ThMcFarlane

REVIEWED BY (PRINT)

J. Branch

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J. Branch	2/25/10	(Printed Name) Sheri Newwood	2/25/10
(Signature)	1530	(Signature)	1530
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2505

EVENT NAME: 4th Qtr. FY09 - SWMU C-36-003 - Threemile Canyon

SAMPLE ID: RE36-10-8291

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/25/2010		MEDIA: QBT3		2 <sup>nd</sup> 2/25/10 <del>Atk</del> SED	
TIME COLLECTED (HH:MM)		0915		SUB-MEDIA: TUFF 1		NA	
PRS ID:	C-36-003	ok		SAMPLE TECH CODE: HA		ok	
LOCATION ID:	UNK	36-610831		FIELD QC TYPE: ED		↓	
LOCATION TYPE:	GENERIC	ok		FIELD PREP: NA		↓	
TOP DEPTH:	0	0.0		SAMPLE USAGE: QC		↓	
BOTTOM DEPTH:	0	0.5		SCREEN/PORT DESC:		NA	
FIELD MATRIX:	R	SLED		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	g	
1		8260B	125 ML SEPTUM AMBER GLASS	Ice		
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None		
1		H3	500 ML POLY	Ice		
1		METALS+U-GEL	125 ML POLY	Ice		
1		Perchlorate+CN+ N03+pH	500 ML POLY	Ice		
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	✓	

SAMPLE DESC: QC Sample of RE36-10-8273

SAMPLE COMMENTS: NA

LOCATION DESC: 8-43

## FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 26 dpm  
Beta/Gamma = 1873 dpm

PID  $\frac{\text{Ambient Reading}}{\text{Reading}} = \text{ppm}$  7<sup>th</sup> 2/25/10

COLLECTED BY (PRINT)

ThMcFarlane

REVIEWED BY (PRINT)

J. Branch

RELINQUISHED BY (Printed Name) J Branch (Signature) <i>[Signature]</i>	Date/Time 2/25/10 1530	RECEIVED BY (Printed Name) Sheri Sherwood (Signature) <i>[Signature]</i>	Date/Time 2/25/10 1530
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2505

EVENT NAME: 4th Qtr. FY09 - SWMU C-36-003 - Threemile Canyon

SAMPLE ID: RE36-10-8295

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/25/2010		MEDIA:	NA		ok
TIME COLLECTED(HH:MM)		0850		SUB-MEDIA:	OTHER		
PRS ID:	C-36-003	ok		SAMPLE TECH CODE:	DC		
LOCATION ID:	UNK	36-610828		FIELD QC TYPE:	FTB		
LOCATION TYPE:	GENERIC	ok		FIELD PREP:	NA		
TOP DEPTH:	0			SAMPLE USAGE:	QC		
BOTTOM DEPTH:	0			SCREEN/PORT DESC:			NA
FIELD MATRIX:	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	8260B Trip Blank	40 ML SEPTUM AMBER GLASS	Ice	Y	

SAMPLE DESC: QC Sample of RE 36-10 - 8287

## SAMPLE COMMENTS:

FTB

## LOCATION DESC:

NA

## FIELD SCREENING/MEASUREMENT RESULTS:

NA

## COLLECTED BY (PRINT)

TLMcFarland

## REVIEWED BY (PRINT)

J. Branch

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J. Branch	2/25/10	(Printed Name) Sheri Sherwood	2/25/10
(Signature) [Signature]	1530	(Signature) [Signature]	1530
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00076  
 Client Sample ID: RE36-10-8273  
 Sample Collection Date: 02/25/10 09:15  
 Sample Matrix: Soil/Solid

Request or PO Number:  
 ARS Sample ID: ARS2-10-00076-024  
 Date Received: 02/26/10 00:00  
 Report Date: 03/01/10 13:37

Analysis Description	Analysis Results	Analysis Error +/- 2 s	NDC	TPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Treaser/Chem Recovery
GROSS ALPHA	52.08	33.83	37.72	34.42		pCi/g	EPA 900.0M	2/27/2010	NP	N/A
GROSS BETA	44.06	18.85	17.16	16.78		pCi/g	EPA 900.0M	2/27/2010	NP	N/A
NA-22	-0.05	47.11	0.15	47.11		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
K-40	16.78	8.14	1.62	8.15		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
CO-60	0.00	0.00	0.16	0.00		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
CS-134	0.17	0.15	0.11	0.15		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
CS-137	1.37	0.55	0.09	0.55		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
EU-182	-0.18	-0.40	0.41	-0.40		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
PB-212	1.02	0.57	0.23	0.57		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
RA-228	1.76	0.89	0.39	0.89		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
U-235	0.10	1.06	0.71	1.06		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
U-238	4.43	5.12	2.09	5.22		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
AM-241	0.06	0.22	0.13	0.22		pCi/g	EOA 901.1M	2/27/2010	NP	N/A

NOTES: % Moisture: 3.57

*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.

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: ARS2-10-00076  
Client Sample ID: RE36-10-8274  
Sample Collection Date: 02/25/10 09:45  
Sample Matrix: Soil/Solid

Request or PO Number:  
ARS Sample ID: ARS2-10-00076-025  
Date Received: 02/26/10 00:00  
Report Date: 03/01/10 13:37

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	51.50	33.83	34.62	34.41		pCi/g	EPA 900.0M	2/27/2010	NP	N/A
GROSS BETA	54.14	17.10	18.10	18.34		pCi/g	EPA 900.0M	2/27/2010	NP	N/A
NA-22	0.05	0.19	0.16	0.19		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
K-40	32.63	11.72	1.73	11.76		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
CO-60	0.00	0.00	0.17	0.00		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
CS-134	0.08	0.19	0.23	0.19		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
CS-137	0.00	43.08	0.10	43.08		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
EU-152	-0.68	194.52	0.44	194.52		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
PB-212	1.05	0.57	0.21	0.57		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
RA-226	1.88	0.94	0.42	0.94		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
U-235	-0.73	253.55	0.57	253.55		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
U-238	5.32	4.47	1.82	4.63		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
AM-241	0.09	0.28	0.14	0.28		pCi/g	EOA 901.1M	2/27/2010	NP	N/A

NOTES: % Moisture: 1.02

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: ARS2-10-00076  
Client Sample ID: RE36-10-8275  
Sample Collection Date: 02/25/10 09:55  
Sample Matrix: Soil/Solid

Request or PO Number:  
ARS Sample ID: ARS2-10-00076-026  
Date Received: 02/26/10 00:00  
Report Date: 03/01/10 13:37

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	65.82	36.34	33.18	37.22		pCi/g	EPA 900.0M	2/27/2010	NP	N/A
GROSS BETA	49.40	16.61	17.07	17.68		pCi/g	EPA 900.0M	2/27/2010	NP	N/A
NA-22	-0.05	50.80	0.16	50.80		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
K-40	20.22	9.28	1.75	9.29		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
CD-60	0.10	0.21	0.17	0.21		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
CS-134	-0.05	49.39	0.12	49.39		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
CS-137	0.41	0.31	0.10	0.31		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
RU-152	0.32	0.58	0.44	0.58		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
PB-212	0.56	0.49	0.22	0.49		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
RA-228	1.86	0.96	0.43	0.96		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
U-235	1.43	1.52	0.67	1.52		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
U-238	5.23	4.13	1.67	4.30		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
AM-241	-0.02	-0.14	0.08	-0.14		pCi/g	EOA 901.1M	2/27/2010	NP	N/A

NOTES: % Moisture: 5.23

  
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: ARS2-10-00076  
 Client Sample ID: RE36-10-8276  
 Sample Collection Date: 02/25/10 10:00  
 Sample Matrix: Soil/Solid

Request or PO Number:  
 ARS Sample ID: ARS2-10-00076-027  
 Date Received: 02/26/10 00:00  
 Report Date: 03/01/10 13:37

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	TPU	Quel	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	78.23	38.97	27.27	40.13		pCi/g	EPA 900.0M	2/27/2010	NP	N/A
GROSS BETA	50.77	17.96	18.40	19.01		pCi/g	EPA 900.0M	2/27/2010	NP	N/A
NA-22	-0.08	51.94	0.16	51.94		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
K-40	3.99	11.07	5.17	11.07		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
CO-60	0.00	0.00	0.17	0.00		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
CS-134	0.19	0.18	0.12	0.18		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
CS-137	0.24	0.24	0.10	0.24		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
EU-152	0.63	0.68	0.45	0.68		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
PB-212	1.19	0.57	0.19	0.57		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
RA-228	4.03	1.42	0.43	1.43		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
U-235	0.88	1.03	0.54	1.03		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
U-238	6.26	4.36	1.71	4.59		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
AM-241	0.48	0.53	0.22	0.53		pCi/g	EOA 901.1M	2/27/2010	NP	N/A

NOTES: % Moisture: 1.91

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: ARS2-10-00076  
Client Sample ID: RE36-10-8277  
Sample Collection Date: 02/25/10 10:10  
Sample Matrix: Soil/Solid

Request or PO Number:  
ARS Sample ID: ARS2-10-00076-028  
Date Received: 02/26/10 00:00  
Report Date: 03/01/10 13:37

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	70.59	38.42	37.84	39.38		pCi/g	EPA 900.0M	2/27/2010	NP	N/A
GROSS BETA	55.86	17.44	17.33	18.74		pCi/g	EPA 900.0M	2/27/2010	NP	N/A
NA-22	-0.05	47.19	0.15	47.19		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
K-40	23.73	9.69	1.63	9.71		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
CO-60	0.00	0.00	0.16	0.00		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
CS-134	0.11	0.16	0.21	0.16		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
CS-137	0.00	40.45	0.09	40.45		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
EU-192	-0.64	182.67	0.41	182.67		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
PB-212	1.53	0.59	0.17	0.60		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
RA-228	2.07	0.97	0.39	0.97		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
U-235	2.02	1.04	0.67	1.04		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
U-238	3.42	2.86	1.35	2.96		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
AM-241	-0.03	-0.15	0.08	-0.15		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
NOTES: % Moisture: 2.47										

*Matthew J. Edm*  
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: ARS2-10-00076  
Client Sample ID: RE36-10-8278  
Sample Collection Date: 02/25/10 10:20  
Sample Matrix: Soil/Solid

Request or PO Number:  
ARS Sample ID: ARS2-10-00076-029  
Date Received: 02/26/10 00:00  
Report Date: 03/01/10 13:37

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	96.06	44.64	34.62	46.17		pCi/g	EPA 900.0M	2/27/2010	NP	N/A
GROSS BETA	57.59	18.06	18.10	19.38		pCi/g	EPA 900.0M	2/27/2010	NP	N/A
NA-22	-0.05	49.98	0.16	49.98		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
K-40	29.32	11.08	1.72	11.11		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
CO-60	0.00	0.00	0.17	0.00		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
CS-134	-0.06	48.60	0.11	48.60		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
CS-137	0.00	0.00	0.10	0.00		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
EU-152	-0.08	-0.15	0.46	-0.15		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
PB-212	1.45	0.60	0.18	0.60		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
RA-228	1.90	0.96	0.42	0.96		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
U-235	1.62	1.04	0.52	1.04		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
U-238	3.72	4.56	1.90	4.64		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
AM-241	0.24	0.29	0.13	0.29		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
NOTES: % Moisture: 0.76										

*M. L. Edin*  
Quality Assurance Review

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ARS Sample Delivery Group: ARS2-10-00076  
Client Sample ID: RE36-10-8279  
Sample Collection Date: 02/25/10 11:20  
Sample Matrix: Soil/Solid

Request or PO Number:  
ARS Sample ID: ARS2-10-00076-030  
Date Received: 02/26/10 00:00  
Report Date: 03/01/10 13:37

Analysis Description	Analysis Results	Analysis Error +/- 2 s	NDC	TPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	116.86	47.12	33.18	49.24		pCi/g	EPA 900.0M	2/27/2010	NP	N/A
GROSS BETA	79.64	20.08	17.07	22.32		pCi/g	EPA 900.0M	2/27/2010	NP	N/A
NA-22	-0.04	45.57	0.14	45.57		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
K-40	30.33	10.80	1.57	10.84		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
CO-60	0.09	0.18	0.15	0.18		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
CS-134	0.19	0.14	0.13	0.14		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
CS-137	0.32	0.26	0.09	0.26		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
EU-152	0.21	0.18	0.40	0.18		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
PB-212	1.43	0.55	0.15	0.55		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
RA-228	2.84	1.16	0.38	1.17		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
U-235	0.71	0.69	0.67	0.69		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
U-238	4.15	3.18	1.36	3.32		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
AM-241	-0.04	43.16	0.10	43.16		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
NOTES: % Moisture: 0.62										

*Matthew J. Edlin*  
Quality Assurance Review

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ARS Sample Delivery Group: ARS2-10-00076  
Client Sample ID: RE36-10-8280  
Sample Collection Date: 02/25/10 11:32  
Sample Matrix: Soil/Solid

Request or PO Number:  
ARS Sample ID: ARS2-10-00076-031  
Date Received: 02/26/10 00:00  
Report Date: 03/01/10 13:37

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	92.96	42.39	27.35	43.89		pCi/g	EPA 900.0M	2/27/2010	NP	N/A
GROSS BETA	60.17	19.26	18.89	20.62		pCi/g	EPA 900.0M	2/27/2010	NP	N/A
NA-22	-0.04	45.72	0.15	45.72		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
K-40	34.48	11.49	1.58	11.53		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
CO-60	0.00	0.00	0.15	0.00		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
CS-134	0.18	0.26	0.14	0.26		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
CS-137	0.43	0.30	0.09	0.30		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
SU-152	0.93	0.94	0.40	0.94		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
PB-212	1.37	0.62	0.23	0.62		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
RA-228	1.63	1.23	0.38	1.23		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
U-235	1.95	1.02	0.68	1.02		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
U-238	4.84	4.46	1.88	4.60		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
AM-241	0.07	0.29	0.16	0.29		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
NOTES: % Moisture: 1.43										

*Matthew L. Edler*  
Quality Assurance Review

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ARS Sample Delivery Group: ARS2-10-00076

Client Sample ID: RE36-10-8287

Sample Collection Date: 02/25/10 09:00

Sample Matrix: Soil/Solid

Request or PO Number:

ARS Sample ID: ARS2-10-00076-032

Date Received: 02/26/10 00:00

Report Date: 03/01/10 13:37

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	70.58	38.42	37.84	39.38		pCi/g	EPA 900.0M	2/27/2010	NP	N/A
GROSS BETA	62.74	18.08	17.33	19.65		pCi/g	EPA 900.0M	2/27/2010	NP	N/A
NA-22	-0.04	43.17	0.14	43.17		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
K-40	1.81	8.09	2.98	6.09		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
CO-60	0.00	0.00	0.14	0.00		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
CS-134	-0.08	74.27	0.17	74.27		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
CS-137	0.04	0.15	0.09	0.15		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
EU-152	0.36	0.32	0.40	0.32		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
PB-212	1.14	0.56	0.21	0.56		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
RA-228	2.58	1.19	0.36	1.19		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
U-235	1.95	1.03	0.45	1.03		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
U-238	3.17	3.02	1.42	3.10		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
AM-241	0.06	0.21	0.12	0.21		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
NOTES: % Moisture: 2.55										

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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505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00076

Request or PO Number:

Client Sample ID: RE36-10-8288

ARS Sample ID: ARS2-10-00076-033

Sample Collection Date: 02/25/10 09:15

Date Received: 02/26/10 00:00

Sample Matrix: Soil/Solid

Report Date: 03/01/10 13:37

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	76.07	40.13	34.96	41.20		pCi/g	EPA 900.0M	2/27/2010	NP	N/A
GROSS BETA	72.09	18.94	17.91	20.90		pCi/g	EPA 900.0M	2/27/2010	NP	N/A
NA-22	-0.01	-0.14	0.16	-0.14		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
K-40	26.38	10.15	1.61	10.18		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
CO-60	0.09	0.12	0.16	0.12		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
CS-134	0.13	0.14	0.12	0.14		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
CS-137	0.00	0.00	0.00	0.00		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
EU-162	-0.20	-0.42	0.44	-0.42		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
PB-212	1.31	0.56	0.18	0.56		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
RA-228	0.00	0.00	0.39	0.00		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
U-235	-0.68	215.96	0.48	215.96		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
U-238	6.13	3.81	1.41	4.06		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
AM-241	0.08	0.17	0.09	0.17		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
NOTES: % Moisture: 1.99										

*Matthew J. Edler*  
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: ARS2-10-00076

Request or PO Number:

Client Sample ID: RE36-10-8291

ARS Sample ID: ARS2-10-00076-034

Sample Collection Date: 02/25/10 09:15

Date Received: 02/26/10 00:00

Sample Matrix: Soil/Solid

Report Date: 03/01/10 13:37

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	93.49	42.56	33.18	44.08		pCi/g	EPA 900.0M	2/27/2010	NP	N/A
GROSS BETA	78.08	19.84	17.07	21.84		pCi/g	EPA 900.0M	2/27/2010	NP	N/A
NA-22	-0.04	39.84	0.13	39.84		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
K-40	25.04	9.14	1.37	9.17		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
CO-60	0.06	0.13	0.13	0.13		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
CS-134	0.02	0.04	0.12	0.04		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
CS-137	0.84	0.39	0.08	0.40		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
EU-152	-0.94	154.23	0.35	154.23		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
PB-212	0.78	0.48	0.21	0.49		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
RA-228	1.69	0.87	0.33	0.88		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
U-235	0.87	0.73	0.48	0.73		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
U-238	5.72	3.39	1.18	3.72		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
AM-241	0.15	0.19	0.08	0.19		pCi/g	EOA 901.1M	2/27/2010	NP	N/A
NOTES: % Moisture: 3.79										

*Matthew A. Edger*  
Quality Assurance Review

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LELAP Certificate# 30658

NELAP Certificate # E87558



## DATA VALIDATION COVER SHEET

5114-1

## Data Validation Cover Sheet

Records Use only



## Section I.

REQUEST NUMBER: 10-2199 VALIDATION DATE: 5/5/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Larry Fukui 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): GCMS VOC


## 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):

1. The ICAL and/or CCV RRFs were <0.05 for trichlorotrifluoroethane. The associated sample results were NDs and, thus, were qualified R,V7b.
2. In the FTB, sample RE36-10-8295, associated with samples -8287 and -8288, acetone was detected. The associated result in sample -8287 was a detect  $\leq 10X$  the FTB concentration and, thus, was qualified U,V4d. The other associated sample result was an ND and, thus, was not qualified.
3. The ICV %D was >20% for acetone. In the CCV associated with all samples except -8275, -8276, and -8295, the %Ds were >20% for 2-hexanone and trichlorotrifluoroethane. In the CCV associated with samples -8275, -8276, and -8295, the %D was >20% for trichlorotrifluoroethane. The result for acetone in sample -8295 was a detect and, thus, was qualified J,V7c. All other associated sample results were NDs or were qualified ND and, thus, were qualified UJ,V7c.
4. The bromofluorobenzene surrogate %Rs were > the laboratory UAL for all samples except -8287 and -8295. The results for toluene in samples -8273, -8275, -8278 - -8280, -8288, and -8291, and 4-isopropyltoluene in samples -8273, -8275, -8277, and -8278 were detects and, thus, were qualified J+,V3b. All other associated sample results were NDs and, thus, were not qualified. In sample -8287, the bromofluorobenzene surrogate %R was > the laboratory UAL and the 1,2-dichloroethane-d4 surrogate %R was < the laboratory LAL but  $\geq 10\%$ . The associated sample results for toluene and 4-isopropyltoluene were detects and, thus were qualified J,V3c. All other associated sample results were NDs or qualified ND and, thus, were qualified UJ,V3c.
5. It should be noted that the MS and MSD parent sample was from another LANL RN and trichlorotrifluoroethane was not represented in the MS/MSD analyses. Since an MS/MSD was not required, no sample results were qualified.




VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST	
<b>5114-2</b>  <b>Volatile Organic Compound (VOC) 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, V9	J-, V9
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2. The holding time was >2 times the applicable holding time requirement.	R, V9a	J-, V9a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3. The instrument performance sample did not pass method acceptance criteria.	R, V16	R, V16
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	4. Samples were analyzed outside specific method tune time criteria.	N/A	J, V16b
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	5. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, V16c	R, V16c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	6. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ or R, V7	J, V7
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7. 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, V7a	J, V7a
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8. The affected analytes were analyzed with an RRF of <0.05 in the initial calibration and/or CCV.	R, V7b	J, V7b
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9. The Initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, V7c	J, V7c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, V7d	J, V7d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	11. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, V7f	R, V7f

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST	
<b>5114-2</b>  <b>Volatile Organic Compound (VOC) 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"/>	12. The sample result is ≤5X (10X for common organic laboratory contaminants) the concentration of the related analyte in the method blank.	U, V4	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 (10X for common laboratory contaminants).	N/A	J, V4a
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	14. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, and/or equipment blank.	U, V4d	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, V4e	R, V4e
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	16. The IS retention time has shifted by more than 30 seconds.	UJ, V0	J, V0
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	17. Analyte is positively confirmed but outside the IS retention time window; however, spectral matches must be provided.	N/A	J, V0a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	18. Required IS retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V0b	R, V0b
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	19. The quantitating IS are 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, V1a	J, V1a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	20. The IS area count for the quantitating IS is <50% but >10% for organics window relation to the previous continuing calibration. Follow the method-specific windows.	UJ, V1b	J, V1b

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST	
<b>5114-2</b>  <b>Volatile Organic Compound (VOC) 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 >200% of the area count for the previous organic continuing calibration. Follow the method-specific windows.	UJ, V1c	J, V1c
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	22. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V1d	R, V1d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	23. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, V3	J-, V3
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	24. The surrogate is < the Lower Acceptance Limit (LAL) but $\geq 10\%R$ . Follow the external laboratory limits located within the associated data package.	UJ, V3a	J-, V3a
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	25. The surrogate %R is > the Upper Acceptance Limit (UAL) Follow the external laboratory limits located within the associated data package.	N/A	J+, V3b
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	26. At least one surrogate is > the UAL and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, V3c	J, V3c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	27. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V3d	R, V3d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	28. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, V12	J-, V12
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	29. The LCS percent recovery was < the LAL but > 10%. Follow the external laboratory limits located within the associated data package.	UV, V12a	J-, V12a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	30. The LCS percent recover was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, V12b

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST	
<b>5114-2</b>  <b>Volatile Organic Compound (VOC) 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"/>	31. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V12c	R, V12c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	32. The affected analyte is considered not detected because mass spectrum did not meet specifications.	N/A	U, V8
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	33. The mass spectrum column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V8a	R, V8a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	34. Duplicate, dilution, or reanalysis.	UJ, V88	J, V88
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	35. 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, V15	R, V15
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	36. 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"/>	37. 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, V19	J, R, V19

Volatile  
Certificate of Analysis  
Sample Summary

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SDG Number: 10-2199  
Lab Sample ID: 248519001

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: CDS1  
Allquot: 5 g  
Column: DB-624

Matrix: R  
%Moisture: 16.4  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

Client ID: RE36-10-8288  
Batch ID: 963809  
Run Date: 03/11/2010 14:12  
Prep Date: 03/11/2010 10:01  
Data File: 031110V5\5B418.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.20	ug/kg	0.407	1.20	
74-87-3	Chloromethane	U	1.20	ug/kg	0.359	1.20	
75-01-4	Vinyl chloride	U	1.20	ug/kg	0.359	1.20	
74-83-9	Bromomethane	U	1.20	ug/kg	0.359	1.20	
75-00-3	Chloroethane	U	1.20	ug/kg	0.359	1.20	
75-69-4	Trichlorofluoromethane	U	1.20	ug/kg	0.359	1.20	
67-64-1	Acetone	U	5.98	ug/kg	1.99	5.98	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.20	ug/kg	0.359	1.20	
74-88-4	Iodomethane	U	5.98	ug/kg	1.91	5.98	
75-09-2	Methylene chloride	U	5.98	ug/kg	2.39	5.98	
75-15-0	Carbon disulfide	U	5.98	ug/kg	1.50	5.98	
156-60-5	trans-1,2-Dichloroethylene	U	1.20	ug/kg	0.359	1.20	
75-34-3	1,1-Dichloroethane	U	1.20	ug/kg	0.359	1.20	
78-93-3	2-Butanone	U	5.98	ug/kg	1.80	5.98	
156-59-2	cis-1,2-Dichloroethylene	U	1.20	ug/kg	0.359	1.20	
594-20-7	2,2-Dichloropropane	U	1.20	ug/kg	0.359	1.20	
67-66-3	Chloroform	U	1.20	ug/kg	0.359	1.20	
74-97-5	Bromochloromethane	U	1.20	ug/kg	0.395	1.20	
71-55-6	1,1,1-Trichloroethane	U	1.20	ug/kg	0.359	1.20	
563-58-6	1,1-Dichloropropene	U	1.20	ug/kg	0.359	1.20	
56-23-5	Carbon tetrachloride	U	1.20	ug/kg	0.359	1.20	
107-06-2	1,2-Dichloroethane	U	1.20	ug/kg	0.359	1.20	
71-43-2	Benzene	U	1.20	ug/kg	0.359	1.20	
79-01-6	Trichloroethylene	U	1.20	ug/kg	0.395	1.20	
78-87-5	1,2-Dichloropropane	U	1.20	ug/kg	0.359	1.20	
75-27-4	Bromodichloromethane	U	1.20	ug/kg	0.359	1.20	
74-95-3	Dibromomethane	U	1.20	ug/kg	0.359	1.20	
108-10-1	4-Methyl-2-pentanone	U	5.98	ug/kg	1.50	5.98	
10061-01-5	cis-1,3-Dichloropropylene	U	1.20	ug/kg	0.359	1.20	
108-88-3	Toluene	J	0.455	ug/kg	0.359	1.20	J+,V3b
10061-02-6	trans-1,3-Dichloropropylene	U	1.20	ug/kg	0.359	1.20	
79-00-5	1,1,2-Trichloroethane	U	1.20	ug/kg	0.359	1.20	
591-78-6	2-Hexanone	U	5.98	ug/kg	1.80	5.98	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.20	ug/kg	0.359	1.20	
127-18-4	Tetrachloroethylene	U	1.20	ug/kg	0.359	1.20	
124-48-1	Dibromochloromethane	U	1.20	ug/kg	0.359	1.20	
106-93-4	1,2-Dibromoethane	U	1.20	ug/kg	0.359	1.20	
108-90-7	Chlorobenzene	U	1.20	ug/kg	0.359	1.20	

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**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-2199  
 Lab Sample ID: 248519001  
 Client ID: RE36-10-8288  
 Batch ID: 963809  
 Run Date: 03/11/2010 14:12  
 Prep Date: 03/11/2010 10:01  
 Data File: 031110V5\SB418.D

Date Collected: 02/25/2010 12:00  
 Date Received: 03/03/2010 08:50  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: CDS1  
 Allquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 16.4  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.20	ug/kg	0.359	1.20
179601-23-1	m,p-Xylenes	U	2.39	ug/kg	0.359	2.39
95-47-6	o-Xylene	U	1.20	ug/kg	0.359	1.20
100-42-5	Styrene	U	1.20	ug/kg	0.359	1.20
75-25-2	Bromoform	U	1.20	ug/kg	0.359	1.20
79-34-5	1,1,2,2-Tetrachloroethane	U	1.20	ug/kg	0.359	1.20
96-18-4	1,2,3-Trichloropropane	U	1.20	ug/kg	0.359	1.20
108-86-1	Bromobenzene	U	1.20	ug/kg	0.359	1.20
103-65-1	n-Propylbenzene	U	1.20	ug/kg	0.359	1.20
95-49-8	2-Chlorotoluene	U	1.20	ug/kg	0.359	1.20
98-82-8	Isopropylbenzene	U	1.20	ug/kg	0.359	1.20
108-67-8	1,3,5-Trimethylbenzene	U	1.20	ug/kg	0.359	1.20
106-43-4	4-Chlorotoluene	U	1.20	ug/kg	0.359	1.20
98-06-6	tert-Butylbenzene	U	1.20	ug/kg	0.359	1.20
95-63-6	1,2,4-Trimethylbenzene	U	1.20	ug/kg	0.359	1.20
135-98-8	sec-Butylbenzene	U	1.20	ug/kg	0.359	1.20
99-87-6	4-Isopropyltoluene	U	1.20	ug/kg	0.359	1.20
541-73-1	1,3-Dichlorobenzene	U	1.20	ug/kg	0.359	1.20
106-46-7	1,4-Dichlorobenzene	U	1.20	ug/kg	0.359	1.20
104-51-8	n-Butylbenzene	U	1.20	ug/kg	0.359	1.20
96-12-8	1,2-Dibromo-3-chloropropane	U	1.20	ug/kg	0.359	1.20
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.98	ug/kg	1.91	5.98
	<i>Trichlorotrifluoroethane</i>					R,V7b
630-20-6	1,1,1,2-Tetrachloroethane	U	1.20	ug/kg	0.359	1.20
95-50-1	1,2-Dichlorobenzene	U	1.20	ug/kg	0.359	1.20

## Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
No Tentatively Identified Compounds Found				ug/kg		



Volatile  
Certificate of Analysis  
Sample Summary

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SDG Number: 10-2199  
Lab Sample ID: 248519002

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8260B  
Inst: VOAS.I  
Analyst: CDS1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
%Moisture: 7.1  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

Client ID: RE36-10-8279  
Batch ID: 963809  
Run Date: 03/11/2010 14:39  
Prep Date: 03/11/2010 10:02  
Data File: 031110V5/5B419.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.08	ug/kg	0.366	1.08	
74-87-3	Chloromethane	U	1.08	ug/kg	0.323	1.08	
75-01-4	Vinyl chloride	U	1.08	ug/kg	0.323	1.08	
74-83-9	Bromomethane	U	1.08	ug/kg	0.323	1.08	
75-00-3	Chloroethane	U	1.08	ug/kg	0.323	1.08	
75-69-4	Trichlorofluoromethane	U	1.08	ug/kg	0.323	1.08	
67-64-1	Acetone	U	5.38	ug/kg	1.79	5.38	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.08	ug/kg	0.323	1.08	
74-88-4	Iodomethane	U	5.38	ug/kg	1.72	5.38	
75-09-2	Methylene chloride	U	5.38	ug/kg	2.15	5.38	
75-15-0	Carbon disulfide	U	5.38	ug/kg	1.35	5.38	
156-60-5	trans-1,2-Dichloroethylene	U	1.08	ug/kg	0.323	1.08	
75-34-3	1,1-Dichloroethane	U	1.08	ug/kg	0.323	1.08	
78-93-3	2-Butanone	U	5.38	ug/kg	1.61	5.38	
156-59-2	cis-1,2-Dichloroethylene	U	1.08	ug/kg	0.323	1.08	
594-20-7	2,2-Dichloropropane	U	1.08	ug/kg	0.323	1.08	
67-66-3	Chloroform	U	1.08	ug/kg	0.323	1.08	
74-97-5	Bromochloromethane	U	1.08	ug/kg	0.355	1.08	
71-55-6	1,1,1-Trichloroethane	U	1.08	ug/kg	0.323	1.08	
563-58-6	1,1-Dichloropropene	U	1.08	ug/kg	0.323	1.08	
56-23-5	Carbon tetrachloride	U	1.08	ug/kg	0.323	1.08	
107-06-2	1,2-Dichloroethane	U	1.08	ug/kg	0.323	1.08	
71-43-2	Benzene	U	1.08	ug/kg	0.323	1.08	
79-01-6	Trichloroethylene	U	1.08	ug/kg	0.355	1.08	
78-87-5	1,2-Dichloropropane	U	1.08	ug/kg	0.323	1.08	
75-27-4	Bromodichloromethane	U	1.08	ug/kg	0.323	1.08	
74-95-3	Dibromomethane	U	1.08	ug/kg	0.323	1.08	
108-10-1	4-Methyl-2-pentanone	U	5.38	ug/kg	1.35	5.38	
10061-01-5	cis-1,3-Dichloropropylene	U	1.08	ug/kg	0.323	1.08	
108-88-3	Toluene	J	0.334	ug/kg	0.323	1.08	J+,V3b
10061-02-6	trans-1,3-Dichloropropylene	U	1.08	ug/kg	0.323	1.08	
79-00-5	1,1,2-Trichloroethane	U	1.08	ug/kg	0.323	1.08	
591-78-6	2-Hexanone	U	5.38	ug/kg	1.61	5.38	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.08	ug/kg	0.323	1.08	
127-18-4	Tetrachloroethylene	U	1.08	ug/kg	0.323	1.08	
124-48-1	Dibromochloromethane	U	1.08	ug/kg	0.323	1.08	
106-93-4	1,2-Dibromoethane	U	1.08	ug/kg	0.323	1.08	
108-90-7	Chlorobenzene	U	1.08	ug/kg	0.323	1.08	

LMF  
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Volatile  
Certificate of Analysis  
Sample Summary

SDG Number: 10-2199  
Lab Sample ID: 248519002  
  
Client ID: RE36-10-8279  
Batch ID: 963809  
Run Date: 03/11/2010 14:39  
Prep Date: 03/11/2010 10:02  
Data File: 031110V55B419.D

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.1  
Analyst: CDS1  
Allquot: 5 g  
Column: DB-624

Matrix: R  
%Moisture: 7.1  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.08	ug/kg	0.323	1.08
179601-23-1	m,p-Xylenes	U	2.15	ug/kg	0.323	2.15
95-47-6	o-Xylene	U	1.08	ug/kg	0.323	1.08
100-42-5	Styrene	U	1.08	ug/kg	0.323	1.08
75-25-2	Bromoform	U	1.08	ug/kg	0.323	1.08
79-34-5	1,1,2,2-Tetrachloroethane	U	1.08	ug/kg	0.323	1.08
96-18-4	1,2,3-Trichloropropane	U	1.08	ug/kg	0.323	1.08
108-86-1	Bromobenzene	U	1.08	ug/kg	0.323	1.08
103-65-1	n-Propylbenzene	U	1.08	ug/kg	0.323	1.08
95-49-8	2-Chlorotoluene	U	1.08	ug/kg	0.323	1.08
98-82-8	Isopropylbenzene	U	1.08	ug/kg	0.323	1.08
108-67-8	1,3,5-Trimethylbenzene	U	1.08	ug/kg	0.323	1.08
106-43-4	4-Chlorotoluene	U	1.08	ug/kg	0.323	1.08
98-06-6	tert-Butylbenzene	U	1.08	ug/kg	0.323	1.08
95-63-6	1,2,4-Trimethylbenzene	U	1.08	ug/kg	0.323	1.08
135-98-8	sec-Butylbenzene	U	1.08	ug/kg	0.323	1.08
99-87-6	4-Isopropyltoluene	U	1.08	ug/kg	0.323	1.08
541-73-1	1,3-Dichlorobenzene	U	1.08	ug/kg	0.323	1.08
106-46-7	1,4-Dichlorobenzene	U	1.08	ug/kg	0.323	1.08
104-51-8	n-Butylbenzene	U	1.08	ug/kg	0.323	1.08
96-12-8	1,2-Dibromo-3-chloropropane	U	1.08	ug/kg	0.323	1.08
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane <i>Trichlorotrifluoroethane</i>	U	5.38	ug/kg	1.72	5.38 R,V7b
630-20-6	1,1,1,2-Tetrachloroethane	U	1.08	ug/kg	0.323	1.08
95-50-1	1,2-Dichlorobenzene	U	1.08	ug/kg	0.323	1.08

## Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
No Tentatively Identified Compounds Found				ug/kg		

LMF  
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Volatile  
Certificate of Analysis  
Sample Summary

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SDG Number: 10-2199  
Lab Sample ID: 248519003

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: CDS1  
Allquot: 5 g  
Column: DB-624

Matrix: R  
%Moisture: 25.4  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

Client ID: RE36-10-8277  
Batch ID: 963809  
Run Date: 03/11/2010 15:05  
Prep Date: 03/11/2010 10:03  
Data File: 031110V5/5B420.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.34	ug/kg	0.456	1.34	
74-87-3	Chloromethane	U	1.34	ug/kg	0.402	1.34	
75-01-4	Vinyl chloride	U	1.34	ug/kg	0.402	1.34	
74-83-9	Bromomethane	U	1.34	ug/kg	0.402	1.34	
75-00-3	Chloroethane	U	1.34	ug/kg	0.402	1.34	
75-69-4	Trichlorofluoromethane	U	1.34	ug/kg	0.402	1.34	
67-64-1	Acetone	U	6.70	ug/kg	2.23	6.70	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.34	ug/kg	0.402	1.34	
74-88-4	Iodomethane	U	6.70	ug/kg	2.15	6.70	
75-09-2	Methylene chloride	U	6.70	ug/kg	2.68	6.70	
75-15-0	Carbon disulfide	U	6.70	ug/kg	1.68	6.70	
156-60-5	trans-1,2-Dichloroethylene	U	1.34	ug/kg	0.402	1.34	
75-34-3	1,1-Dichloroethane	U	1.34	ug/kg	0.402	1.34	
78-93-3	2-Butanone	U	6.70	ug/kg	2.01	6.70	
156-59-2	cis-1,2-Dichloroethylene	U	1.34	ug/kg	0.402	1.34	
594-20-7	2,2-Dichloropropane	U	1.34	ug/kg	0.402	1.34	
67-66-3	Chloroform	U	1.34	ug/kg	0.402	1.34	
74-97-5	Bromochloromethane	U	1.34	ug/kg	0.442	1.34	
71-55-6	1,1,1-Trichloroethane	U	1.34	ug/kg	0.402	1.34	
563-58-6	1,1-Dichloropropene	U	1.34	ug/kg	0.402	1.34	
56-23-5	Carbon tetrachloride	U	1.34	ug/kg	0.402	1.34	
107-06-2	1,2-Dichloroethane	U	1.34	ug/kg	0.402	1.34	
71-43-2	Benzene	U	1.34	ug/kg	0.402	1.34	
79-01-6	Trichloroethylene	U	1.34	ug/kg	0.442	1.34	
78-87-5	1,2-Dichloropropane	U	1.34	ug/kg	0.402	1.34	
75-27-4	Bromodichloromethane	U	1.34	ug/kg	0.402	1.34	
74-95-3	Dibromomethane	U	1.34	ug/kg	0.402	1.34	
108-10-1	4-Methyl-2-pentanone	U	6.70	ug/kg	1.68	6.70	
10061-01-5	cis-1,3-Dichloropropylene	U	1.34	ug/kg	0.402	1.34	
108-88-3	Toluene	U	1.34	ug/kg	0.402	1.34	
10061-02-6	trans-1,3-Dichloropropylene	U	1.34	ug/kg	0.402	1.34	
79-00-5	1,1,2-Trichloroethane	U	1.34	ug/kg	0.402	1.34	
591-78-6	2-Hexanone	U	6.70	ug/kg	2.01	6.70	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.34	ug/kg	0.402	1.34	
127-18-4	Tetrachloroethylene	U	1.34	ug/kg	0.402	1.34	
124-48-1	Dibromochloromethane	U	1.34	ug/kg	0.402	1.34	
106-93-4	1,2-Dibromoethane	U	1.34	ug/kg	0.402	1.34	
108-90-7	Chlorobenzene	U	1.34	ug/kg	0.402	1.34	

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Volatile  
Certificate of Analysis  
Sample Summary

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SDG Number: 10-2199  
Lab Sample ID: 248519003  
  
Client ID: RE36-10-8277  
Batch ID: 963809  
Run Date: 03/11/2010 15:05  
Prep Date: 03/11/2010 10:03  
Data File: 031110V55B420.D

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: CDS1  
Allquot: 5 g  
Column: DB-624

Matrix: R  
%Moisture: 25.4  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.34	ug/kg	0.402	1.34
179601-23-1	m,p-Xylenes	U	2.68	ug/kg	0.402	2.68
95-47-6	o-Xylene	U	1.34	ug/kg	0.402	1.34
100-42-5	Styrene	U	1.34	ug/kg	0.402	1.34
75-25-2	Bromoform	U	1.34	ug/kg	0.402	1.34
79-34-5	1,1,2,2-Tetrachloroethane	U	1.34	ug/kg	0.402	1.34
96-18-4	1,2,3-Trichloropropane	U	1.34	ug/kg	0.402	1.34
108-86-1	Bromobenzene	U	1.34	ug/kg	0.402	1.34
103-65-1	n-Propylbenzene	U	1.34	ug/kg	0.402	1.34
95-49-8	2-Chlorotoluene	U	1.34	ug/kg	0.402	1.34
98-82-8	Isopropylbenzene	U	1.34	ug/kg	0.402	1.34
108-67-8	1,3,5-Trimethylbenzene	U	1.34	ug/kg	0.402	1.34
106-43-4	4-Chlorotoluene	U	1.34	ug/kg	0.402	1.34
98-06-6	tert-Butylbenzene	U	1.34	ug/kg	0.402	1.34
95-63-6	1,2,4-Trimethylbenzene	U	1.34	ug/kg	0.402	1.34
135-98-8	sec-Butylbenzene	U	1.34	ug/kg	0.402	1.34
99-87-6	4-Isopropyltoluene		12.4	ug/kg	0.402	1.34 J+,V3b
541-73-1	1,3-Dichlorobenzene	U	1.34	ug/kg	0.402	1.34
106-46-7	1,4-Dichlorobenzene	U	1.34	ug/kg	0.402	1.34
104-51-8	n-Butylbenzene	U	1.34	ug/kg	0.402	1.34
96-12-8	1,2-Dibromo-3-chloropropane	U	1.34	ug/kg	0.402	1.34
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.70	ug/kg	2.15	6.70 R,V7b
630-20-6	1,1,1,2-Tetrachloroethane	U	1.34	ug/kg	0.402	1.34
95-50-1	1,2-Dichlorobenzene	U	1.34	ug/kg	0.402	1.34

## Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	unknown hydrocarbon	11.99	9.49	ug/kg	0	J

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**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-2199  
 Lab Sample ID: 248519004

Date Collected: 02/25/2010 12:00  
 Date Received: 03/03/2010 08:50  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: CDS1  
 Allquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 9.5  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

Client ID: RE36-10-8280  
 Batch ID: 963809  
 Run Date: 03/11/2010 15:32  
 Prep Date: 03/11/2010 10:04  
 Data File: 031110V5/5B421.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.10	ug/kg	0.376	1.10	
74-87-3	Chloromethane	U	1.10	ug/kg	0.331	1.10	
75-01-4	Vinyl chloride	U	1.10	ug/kg	0.331	1.10	
74-83-9	Bromomethane	U	1.10	ug/kg	0.331	1.10	
75-00-3	Chloroethane	U	1.10	ug/kg	0.331	1.10	
75-69-4	Trichlorofluoromethane	U	1.10	ug/kg	0.331	1.10	
67-64-1	Acetone	U	5.52	ug/kg	1.83	5.52	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.10	ug/kg	0.331	1.10	
74-88-4	Iodomethane	U	5.52	ug/kg	1.77	5.52	
75-09-2	Methylene chloride	U	5.52	ug/kg	2.21	5.52	
75-15-0	Carbon disulfide	U	5.52	ug/kg	1.38	5.52	
156-60-5	trans-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10	
75-34-3	1,1-Dichloroethane	U	1.10	ug/kg	0.331	1.10	
78-93-3	2-Butanone	U	5.52	ug/kg	1.66	5.52	
156-59-2	cis-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10	
594-20-7	2,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10	
67-66-3	Chloroform	U	1.10	ug/kg	0.331	1.10	
74-97-5	Bromochloromethane	U	1.10	ug/kg	0.364	1.10	
71-55-6	1,1,1-Trichloroethane	U	1.10	ug/kg	0.331	1.10	
563-58-6	1,1-Dichloropropene	U	1.10	ug/kg	0.331	1.10	
56-23-5	Carbon tetrachloride	U	1.10	ug/kg	0.331	1.10	
107-06-2	1,2-Dichloroethane	U	1.10	ug/kg	0.331	1.10	
71-43-2	Benzene	U	1.10	ug/kg	0.331	1.10	
79-01-6	Trichloroethylene	U	1.10	ug/kg	0.364	1.10	
78-87-5	1,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10	
75-27-4	Bromodichloromethane	U	1.10	ug/kg	0.331	1.10	
74-95-3	Dibromomethane	U	1.10	ug/kg	0.331	1.10	
108-10-1	4-Methyl-2-pentanone	U	5.52	ug/kg	1.38	5.52	
10061-01-5	cis-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10	
108-88-3	Toluene	J	0.398	ug/kg	0.331	1.10	J+,V3b
10061-02-6	trans-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10	
79-00-5	1,1,2-Trichloroethane	U	1.10	ug/kg	0.331	1.10	
591-78-6	2-Hexanone	U	5.52	ug/kg	1.66	5.52	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.10	ug/kg	0.331	1.10	
127-18-4	Tetrachloroethylene	U	1.10	ug/kg	0.331	1.10	
124-48-1	Dibromochloromethane	U	1.10	ug/kg	0.331	1.10	
106-93-4	1,2-Dibromoethane	U	1.10	ug/kg	0.331	1.10	
108-90-7	Chlorobenzene	U	1.10	ug/kg	0.331	1.10	

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Volatile  
Certificate of Analysis  
Sample Summary

SDG Number: 10-2199  
Lab Sample ID: 248519004  
  
Client ID: RE36-10-8280  
Batch ID: 963809  
Run Date: 03/11/2010 15:32  
Prep Date: 03/11/2010 10:04  
Data File: 031110V5/SB421.D

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: CDS1  
Allquot: 5 g  
Column: DB-624

Matrix: R  
%Moisture: 9.5  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.10	ug/kg	0.331	1.10
179601-23-1	m,p-Xylenes	U	2.21	ug/kg	0.331	2.21
95-47-6	o-Xylene	U	1.10	ug/kg	0.331	1.10
100-42-5	Styrene	U	1.10	ug/kg	0.331	1.10
75-25-2	Bromoform	U	1.10	ug/kg	0.331	1.10
79-34-5	1,1,2,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
96-18-4	1,2,3-Trichloropropane	U	1.10	ug/kg	0.331	1.10
108-86-1	Bromobenzene	U	1.10	ug/kg	0.331	1.10
103-65-1	n-Propylbenzene	U	1.10	ug/kg	0.331	1.10
95-49-8	2-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-82-8	Isopropylbenzene	U	1.10	ug/kg	0.331	1.10
108-67-8	1,3,5-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
106-43-4	4-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-06-6	tert-Butylbenzene	U	1.10	ug/kg	0.331	1.10
95-63-6	1,2,4-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
135-98-8	sec-Butylbenzene	U	1.10	ug/kg	0.331	1.10
99-87-6	4-Isopropyltoluene	U	1.10	ug/kg	0.331	1.10
541-73-1	1,3-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
106-46-7	1,4-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
104-51-8	n-Butylbenzene	U	1.10	ug/kg	0.331	1.10
96-12-8	1,2-Dibromo-3-chloropropane	U	1.10	ug/kg	0.331	1.10
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.52	ug/kg	1.77	5.52 R,V7b
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
95-50-1	1,2-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10

## Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown hydrocarbon	12.77	5.8	ug/kg	0	J

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Volatile  
Certificate of Analysis  
Sample Summary

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SDG Number: 10-2199

Lab Sample ID: 248519005

Date Collected: 02/25/2010 12:00

Date Received: 03/03/2010 08:50

Matrix: R

%Moisture: 6.4

Client ID: RE36-10-8278

Batch ID: 963809

Run Date: 03/11/2010 15:58

Prep Date: 03/11/2010 10:05

Data File: 031110V5/5B422.D

Client: LANL010

Method: SW846 8260B

Inst: VOA5.I

Analyst: CDS1

Allquot: 5 g

Column: DB-624

Project: LANL01004

SOP Ref: GL-OA-E-038

Dilution: 1

Purge Vol: 5 mL

Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.07	ug/kg	0.363	1.07	
74-87-3	Chloromethane	U	1.07	ug/kg	0.320	1.07	
75-01-4	Vinyl chloride	U	1.07	ug/kg	0.320	1.07	
74-83-9	Bromomethane	U	1.07	ug/kg	0.320	1.07	
75-00-3	Chloroethane	U	1.07	ug/kg	0.320	1.07	
75-69-4	Trichlorofluoromethane	U	1.07	ug/kg	0.320	1.07	
67-64-1	Acetone	U	5.34	ug/kg	1.77	5.34	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.07	ug/kg	0.320	1.07	
74-88-4	Iodomethane	U	5.34	ug/kg	1.71	5.34	
75-09-2	Methylene chloride	U	5.34	ug/kg	2.14	5.34	
75-15-0	Carbon disulfide	U	5.34	ug/kg	1.33	5.34	
156-60-5	trans-1,2-Dichloroethylene	U	1.07	ug/kg	0.320	1.07	
75-34-3	1,1-Dichloroethane	U	1.07	ug/kg	0.320	1.07	
78-93-3	2-Butanone	U	5.34	ug/kg	1.60	5.34	
156-59-2	cis-1,2-Dichloroethylene	U	1.07	ug/kg	0.320	1.07	
594-20-7	2,2-Dichloropropane	U	1.07	ug/kg	0.320	1.07	
67-66-3	Chloroform	U	1.07	ug/kg	0.320	1.07	
74-97-5	Bromochloromethane	U	1.07	ug/kg	0.352	1.07	
71-55-6	1,1,1-Trichloroethane	U	1.07	ug/kg	0.320	1.07	
563-58-6	1,1-Dichloropropene	U	1.07	ug/kg	0.320	1.07	
56-23-5	Carbon tetrachloride	U	1.07	ug/kg	0.320	1.07	
107-06-2	1,2-Dichloroethane	U	1.07	ug/kg	0.320	1.07	
71-43-2	Benzene	U	1.07	ug/kg	0.320	1.07	
79-01-6	Trichloroethylene	U	1.07	ug/kg	0.352	1.07	
78-87-5	1,2-Dichloropropane	U	1.07	ug/kg	0.320	1.07	
75-27-4	Bromodichloromethane	U	1.07	ug/kg	0.320	1.07	
74-95-3	Dibromomethane	U	1.07	ug/kg	0.320	1.07	
108-10-1	4-Methyl-2-pentanone	U	5.34	ug/kg	1.33	5.34	
10061-01-5	cis-1,3-Dichloropropylene	U	1.07	ug/kg	0.320	1.07	
108-88-3	Toluene	J	0.331	ug/kg	0.320	1.07	J+,V3b
10061-02-6	trans-1,3-Dichloropropylene	U	1.07	ug/kg	0.320	1.07	
79-00-5	1,1,2-Trichloroethane	U	1.07	ug/kg	0.320	1.07	
591-78-6	2-Hexanone	U	5.34	ug/kg	1.60	5.34	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.07	ug/kg	0.320	1.07	
127-18-4	Tetrachloroethylene	U	1.07	ug/kg	0.320	1.07	
124-48-1	Dibromochloromethane	U	1.07	ug/kg	0.320	1.07	
106-93-4	1,2-Dibromoethane	U	1.07	ug/kg	0.320	1.07	
108-90-7	Chlorobenzene	U	1.07	ug/kg	0.320	1.07	

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**Volatile  
Certificate of Analysis  
Sample Summary**

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SDG Number: 10-2199  
Lab Sample ID: 248519005  
  
Client ID: RE36-10-8278  
Batch ID: 963809  
Run Date: 03/11/2010 15:58  
Prep Date: 03/11/2010 10:05  
Data File: 031110V55B422.D

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: CDS1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
%Moisture: 6.4  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.07	ug/kg	0.320	1.07
179601-23-1	m,p-Xylenes	U	2.14	ug/kg	0.320	2.14
95-47-6	o-Xylene	U	1.07	ug/kg	0.320	1.07
100-42-5	Styrene	U	1.07	ug/kg	0.320	1.07
75-25-2	Bromoform	U	1.07	ug/kg	0.320	1.07
79-34-5	1,1,2,2-Tetrachloroethane	U	1.07	ug/kg	0.320	1.07
96-18-4	1,2,3-Trichloropropane	U	1.07	ug/kg	0.320	1.07
108-86-1	Bromobenzene	U	1.07	ug/kg	0.320	1.07
103-65-1	n-Propylbenzene	U	1.07	ug/kg	0.320	1.07
95-49-8	2-Chlorotoluene	U	1.07	ug/kg	0.320	1.07
98-82-8	Isopropylbenzene	U	1.07	ug/kg	0.320	1.07
108-67-8	1,3,5-Trimethylbenzene	U	1.07	ug/kg	0.320	1.07
106-43-4	4-Chlorotoluene	U	1.07	ug/kg	0.320	1.07
98-06-6	tert-Butylbenzene	U	1.07	ug/kg	0.320	1.07
95-63-6	1,2,4-Trimethylbenzene	U	1.07	ug/kg	0.320	1.07
135-98-8	sec-Butylbenzene	U	1.07	ug/kg	0.320	1.07
99-87-6	4-Isopropyltoluene	J	1.05	ug/kg	0.320	1.07 J+,V3b
541-73-1	1,3-Dichlorobenzene	U	1.07	ug/kg	0.320	1.07
106-46-7	1,4-Dichlorobenzene	U	1.07	ug/kg	0.320	1.07
104-51-8	n-Butylbenzene	U	1.07	ug/kg	0.320	1.07
96-12-8	1,2-Dibromo-3-chloropropane	U	1.07	ug/kg	0.320	1.07
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.34	ug/kg	1.71	5.34 R,V7b
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.07	ug/kg	0.320	1.07
95-50-1	1,2-Dichlorobenzene	U	1.07	ug/kg	0.320	1.07

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
No Tentatively Identified Compounds Found				ug/kg		

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**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-2199  
 Lab Sample ID: 248519006  
 Client ID: RE36-10-8274  
 Batch ID: 963809  
 Run Date: 03/11/2010 16:25  
 Prep Date: 03/11/2010 10:06  
 Data File: 031110V55B423.D

Date Collected: 02/25/2010 12:00  
 Date Received: 03/03/2010 08:50  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: CDS1  
 Allquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 10.2  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.11	ug/kg	0.379	1.11	
74-87-3	Chloromethane	U	1.11	ug/kg	0.334	1.11	
75-01-4	Vinyl chloride	U	1.11	ug/kg	0.334	1.11	
74-83-9	Bromomethane	U	1.11	ug/kg	0.334	1.11	
75-00-3	Chloroethane	U	1.11	ug/kg	0.334	1.11	
75-69-4	Trichlorofluoromethane	U	1.11	ug/kg	0.334	1.11	
67-64-1	Acetone	U	5.57	ug/kg	1.85	5.57	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.11	ug/kg	0.334	1.11	
74-88-4	Iodomethane	U	5.57	ug/kg	1.78	5.57	
75-09-2	Methylene chloride	U	5.57	ug/kg	2.23	5.57	
75-15-0	Carbon disulfide	U	5.57	ug/kg	1.39	5.57	
156-60-5	trans-1,2-Dichloroethylene	U	1.11	ug/kg	0.334	1.11	
75-34-3	1,1-Dichloroethane	U	1.11	ug/kg	0.334	1.11	
78-93-3	2-Butanone	U	5.57	ug/kg	1.67	5.57	
156-59-2	cis-1,2-Dichloroethylene	U	1.11	ug/kg	0.334	1.11	
594-20-7	2,2-Dichloropropane	U	1.11	ug/kg	0.334	1.11	
67-66-3	Chloroform	U	1.11	ug/kg	0.334	1.11	
74-97-5	Bromochloromethane	U	1.11	ug/kg	0.368	1.11	
71-55-6	1,1,1-Trichloroethane	U	1.11	ug/kg	0.334	1.11	
563-58-6	1,1-Dichloropropene	U	1.11	ug/kg	0.334	1.11	
56-23-5	Carbon tetrachloride	U	1.11	ug/kg	0.334	1.11	
107-06-2	1,2-Dichloroethane	U	1.11	ug/kg	0.334	1.11	
71-43-2	Benzene	U	1.11	ug/kg	0.334	1.11	
79-01-6	Trichloroethylene	U	1.11	ug/kg	0.368	1.11	
78-87-5	1,2-Dichloropropane	U	1.11	ug/kg	0.334	1.11	
75-27-4	Bromodichloromethane	U	1.11	ug/kg	0.334	1.11	
74-95-3	Dibromomethane	U	1.11	ug/kg	0.334	1.11	
108-10-1	4-Methyl-2-pentanone	U	5.57	ug/kg	1.39	5.57	
10061-01-5	cis-1,3-Dichloropropylene	U	1.11	ug/kg	0.334	1.11	
108-88-3	Toluene	U	1.11	ug/kg	0.334	1.11	
10061-02-6	trans-1,3-Dichloropropylene	U	1.11	ug/kg	0.334	1.11	
79-00-5	1,1,2-Trichloroethane	U	1.11	ug/kg	0.334	1.11	
591-78-6	2-Hexanone	U	5.57	ug/kg	1.67	5.57	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.11	ug/kg	0.334	1.11	
127-18-4	Tetrachloroethylene	U	1.11	ug/kg	0.334	1.11	
124-48-1	Dibromochloromethane	U	1.11	ug/kg	0.334	1.11	
106-93-4	1,2-Dibromoethane	U	1.11	ug/kg	0.334	1.11	
108-90-7	Chlorobenzene	U	1.11	ug/kg	0.334	1.11	

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Sample Summary

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SDG Number: 10-2199  
Lab Sample ID: 248519006

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.1  
Analyst: CDS1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
%Moisture: 10.2  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

Client ID: RE36-10-8274  
Batch ID: 963809  
Run Date: 03/11/2010 16:25  
Prep Date: 03/11/2010 10:06  
Data File: 031110V5/5B423.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.11	ug/kg	0.334	1.11
179601-23-1	m,p-Xylenes	U	2.23	ug/kg	0.334	2.23
95-47-6	o-Xylene	U	1.11	ug/kg	0.334	1.11
100-42-5	Styrene	U	1.11	ug/kg	0.334	1.11
75-25-2	Bromoform	U	1.11	ug/kg	0.334	1.11
79-34-5	1,1,2,2-Tetrachloroethane	U	1.11	ug/kg	0.334	1.11
96-18-4	1,2,3-Trichloropropane	U	1.11	ug/kg	0.334	1.11
108-86-1	Bromobenzene	U	1.11	ug/kg	0.334	1.11
103-65-1	n-Propylbenzene	U	1.11	ug/kg	0.334	1.11
95-49-8	2-Chlorotoluene	U	1.11	ug/kg	0.334	1.11
98-82-8	Isopropylbenzene	U	1.11	ug/kg	0.334	1.11
108-67-8	1,3,5-Trimethylbenzene	U	1.11	ug/kg	0.334	1.11
106-43-4	4-Chlorotoluene	U	1.11	ug/kg	0.334	1.11
98-06-6	tert-Butylbenzene	U	1.11	ug/kg	0.334	1.11
95-63-6	1,2,4-Trimethylbenzene	U	1.11	ug/kg	0.334	1.11
135-98-8	sec-Butylbenzene	U	1.11	ug/kg	0.334	1.11
99-87-6	4-Isopropyltoluene	U	1.11	ug/kg	0.334	1.11
541-73-1	1,3-Dichlorobenzene	U	1.11	ug/kg	0.334	1.11
106-46-7	1,4-Dichlorobenzene	U	1.11	ug/kg	0.334	1.11
104-51-8	n-Butylbenzene	U	1.11	ug/kg	0.334	1.11
96-12-8	1,2-Dibromo-3-chloropropane	U	1.11	ug/kg	0.334	1.11
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.57	ug/kg	1.78	5.57
	<i>Trichlorotrifluoroethane</i>					R,V7b
630-20-6	1,1,1,2-Tetrachloroethane	U	1.11	ug/kg	0.334	1.11
95-50-1	1,2-Dichlorobenzene	U	1.11	ug/kg	0.334	1.11

## Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
No Tentatively Identified Compounds Found				ug/kg		

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**Volatile  
Certificate of Analysis  
Sample Summary**

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SDG Number: 10-2199  
Lab Sample ID: 248519007

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: CDS1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
%Moisture: 28.9  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

Client ID: RE36-10-8291  
Batch ID: 963809  
Run Date: 03/11/2010 16:51  
Prep Date: 03/11/2010 10:07  
Data File: 031110V5SB424.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.41	ug/kg	0.478	1.41	
74-87-3	Chloromethane	U	1.41	ug/kg	0.422	1.41	
75-01-4	Vinyl chloride	U	1.41	ug/kg	0.422	1.41	
74-83-9	Bromomethane	U	1.41	ug/kg	0.422	1.41	
75-00-3	Chloroethane	U	1.41	ug/kg	0.422	1.41	
75-69-4	Trichlorofluoromethane	U	1.41	ug/kg	0.422	1.41	
67-64-1	Acetone	U	7.04	ug/kg	2.34	7.04	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.41	ug/kg	0.422	1.41	
74-88-4	Iodomethane	U	7.04	ug/kg	2.25	7.04	
75-09-2	Methylene chloride	U	7.04	ug/kg	2.81	7.04	
75-15-0	Carbon disulfide	U	7.04	ug/kg	1.76	7.04	
156-60-5	trans-1,2-Dichloroethylene	U	1.41	ug/kg	0.422	1.41	
75-34-3	1,1-Dichloroethane	U	1.41	ug/kg	0.422	1.41	
78-93-3	2-Butanone	U	7.04	ug/kg	2.11	7.04	
156-59-2	cis-1,2-Dichloroethylene	U	1.41	ug/kg	0.422	1.41	
594-20-7	2,2-Dichloropropane	U	1.41	ug/kg	0.422	1.41	
67-66-3	Chloroform	U	1.41	ug/kg	0.422	1.41	
74-97-5	Bromochloromethane	U	1.41	ug/kg	0.464	1.41	
71-55-6	1,1,1-Trichloroethane	U	1.41	ug/kg	0.422	1.41	
563-58-6	1,1-Dichloropropene	U	1.41	ug/kg	0.422	1.41	
56-23-5	Carbon tetrachloride	U	1.41	ug/kg	0.422	1.41	
107-06-2	1,2-Dichloroethane	U	1.41	ug/kg	0.422	1.41	
71-43-2	Benzene	U	1.41	ug/kg	0.422	1.41	
79-01-6	Trichloroethylene	U	1.41	ug/kg	0.464	1.41	
78-87-5	1,2-Dichloropropane	U	1.41	ug/kg	0.422	1.41	
75-27-4	Bromodichloromethane	U	1.41	ug/kg	0.422	1.41	
74-95-3	Dibromomethane	U	1.41	ug/kg	0.422	1.41	
108-10-1	4-Methyl-2-pentanone	U	7.04	ug/kg	1.76	7.04	
10061-01-5	cis-1,3-Dichloropropylene	U	1.41	ug/kg	0.422	1.41	
108-88-3	Toluene	J	0.732	ug/kg	0.422	1.41	J+,V3b
10061-02-6	trans-1,3-Dichloropropylene	U	1.41	ug/kg	0.422	1.41	
79-00-5	1,1,2-Trichloroethane	U	1.41	ug/kg	0.422	1.41	
591-78-6	2-Hexanone	U	7.04	ug/kg	2.11	7.04	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.41	ug/kg	0.422	1.41	
127-18-4	Tetrachloroethylene	U	1.41	ug/kg	0.422	1.41	
124-48-1	Dibromochloromethane	U	1.41	ug/kg	0.422	1.41	
106-93-4	1,2-Dibromoethane	U	1.41	ug/kg	0.422	1.41	
108-90-7	Chlorobenzene	U	1.41	ug/kg	0.422	1.41	

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Certificate of Analysis  
Sample Summary

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SDG Number: 10-2199  
Lab Sample ID: 248519007  
  
Client ID: RE36-10-8291  
Batch ID: 963809  
Run Date: 03/11/2010 16:51  
Prep Date: 03/11/2010 10:07  
Data File: 031110V55B424.D

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.1  
Analyst: CDS1  
Allquot: 5 g  
Column: DB-624

Matrix: R  
%Moisture: 28.9  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
100-41-4	Ethylbenzene	U	1.41	ug/kg	0.422	1.41	
179601-23-1	m,p-Xylenes	U	2.81	ug/kg	0.422	2.81	
95-47-6	o-Xylene	U	1.41	ug/kg	0.422	1.41	
100-42-5	Styrene	U	1.41	ug/kg	0.422	1.41	
75-25-2	Bromoform	U	1.41	ug/kg	0.422	1.41	
79-34-5	1,1,2,2-Tetrachloroethane	U	1.41	ug/kg	0.422	1.41	
96-18-4	1,2,3-Trichloropropane	U	1.41	ug/kg	0.422	1.41	
108-86-1	Bromobenzene	U	1.41	ug/kg	0.422	1.41	
103-65-1	n-Propylbenzene	U	1.41	ug/kg	0.422	1.41	
95-49-8	2-Chlorotoluene	U	1.41	ug/kg	0.422	1.41	
98-82-8	Isopropylbenzene	U	1.41	ug/kg	0.422	1.41	
108-67-8	1,3,5-Trimethylbenzene	U	1.41	ug/kg	0.422	1.41	
106-43-4	4-Chlorotoluene	U	1.41	ug/kg	0.422	1.41	
98-06-6	tert-Butylbenzene	U	1.41	ug/kg	0.422	1.41	
95-63-6	1,2,4-Trimethylbenzene	U	1.41	ug/kg	0.422	1.41	
135-98-8	sec-Butylbenzene	U	1.41	ug/kg	0.422	1.41	
99-87-6	4-Isopropyltoluene	U	1.41	ug/kg	0.422	1.41	
541-73-1	1,3-Dichlorobenzene	U	1.41	ug/kg	0.422	1.41	
106-46-7	1,4-Dichlorobenzene	U	1.41	ug/kg	0.422	1.41	
104-51-8	n-Butylbenzene	U	1.41	ug/kg	0.422	1.41	
96-12-8	1,2-Dibromo-3-chloropropane	U	1.41	ug/kg	0.422	1.41	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	7.04	ug/kg	2.25	7.04	R,V7b
	Trichlorotrifluoroethane						
630-20-6	1,1,1,2-Tetrachloroethane	U	1.41	ug/kg	0.422	1.41	
95-50-1	1,2-Dichlorobenzene	U	1.41	ug/kg	0.422	1.41	

## Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
No Tentatively Identified Compounds Found				ug/kg		

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**Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-2199  
Lab Sample ID: 248519008  
  
Client ID: RE36-10-8287  
Batch ID: 963809  
Run Date: 03/11/2010 17:18  
Prep Date: 03/11/2010 10:08  
Data File: 031110V5\5B425.D

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.1  
Analyst: CDS1  
Allquot: 5 g  
Column: DB-624

Matrix: R  
%Moisture: 32.9  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.49	ug/kg	0.507	1.49	UJ,V3c
74-87-3	Chloromethane	U	1.49	ug/kg	0.447	1.49	
75-01-4	Vinyl chloride	U	1.49	ug/kg	0.447	1.49	
74-83-9	Bromomethane	U	1.49	ug/kg	0.447	1.49	
75-00-3	Chloroethane	U	1.49	ug/kg	0.447	1.49	
75-69-4	Trichlorofluoromethane	U	1.49	ug/kg	0.447	1.49	
67-64-1	Acetone	J	5.89	ug/kg	2.48	7.46	U,V4d
75-35-4	1,1-Dichloroethylene	U	1.49	ug/kg	0.447	1.49	UJ,V3c
74-88-4	Iodomethane	U	7.46	ug/kg	2.39	7.46	
75-09-2	Methylene chloride	U	7.46	ug/kg	2.98	7.46	
75-15-0	Carbon disulfide	U	7.46	ug/kg	1.86	7.46	
156-60-5	trans-1,2-Dichloroethylene	U	1.49	ug/kg	0.447	1.49	
75-34-3	1,1-Dichloroethane	U	1.49	ug/kg	0.447	1.49	
78-93-3	2-Butanone	U	7.46	ug/kg	2.24	7.46	
156-59-2	cis-1,2-Dichloroethylene	U	1.49	ug/kg	0.447	1.49	
594-20-7	2,2-Dichloropropane	U	1.49	ug/kg	0.447	1.49	
67-66-3	Chloroform	U	1.49	ug/kg	0.447	1.49	
74-97-5	Bromochloromethane	U	1.49	ug/kg	0.492	1.49	
71-55-6	1,1,1-Trichloroethane	U	1.49	ug/kg	0.447	1.49	
563-58-6	1,1-Dichloropropene	U	1.49	ug/kg	0.447	1.49	
56-23-5	Carbon tetrachloride	U	1.49	ug/kg	0.447	1.49	
107-06-2	1,2-Dichloroethane	U	1.49	ug/kg	0.447	1.49	
71-43-2	Benzene	U	1.49	ug/kg	0.447	1.49	
79-01-6	Trichloroethylene	U	1.49	ug/kg	0.492	1.49	
78-87-5	1,2-Dichloropropane	U	1.49	ug/kg	0.447	1.49	
75-27-4	Bromodichloromethane	U	1.49	ug/kg	0.447	1.49	
74-95-3	Dibromomethane	U	1.49	ug/kg	0.447	1.49	
108-10-1	4-Methyl-2-pentanone	U	7.46	ug/kg	1.86	7.46	
10061-01-5	cis-1,3-Dichloropropylene	U	1.49	ug/kg	0.447	1.49	
108-88-3	Toluene	J	1.13	ug/kg	0.447	1.49	J,V3c
10061-02-6	trans-1,3-Dichloropropylene	U	1.49	ug/kg	0.447	1.49	UJ,V3c
79-00-5	1,1,2-Trichloroethane	U	1.49	ug/kg	0.447	1.49	UJ,V3c
591-78-6	2-Hexanone	U	7.46	ug/kg	2.24	7.46	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.49	ug/kg	0.447	1.49	UJ,V3c
127-18-4	Tetrachloroethylene	U	1.49	ug/kg	0.447	1.49	
124-48-1	Dibromochloromethane	U	1.49	ug/kg	0.447	1.49	
106-93-4	1,2-Dibromoethane	U	1.49	ug/kg	0.447	1.49	
108-90-7	Chlorobenzene	U	1.49	ug/kg	0.447	1.49	

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Volatile  
Certificate of Analysis  
Sample Summary

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SDG Number: 10-2199  
Lab Sample ID: 248519008

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: CDS1  
Allquot: 5 g  
Column: DB-624

Matrix: R  
%Moisture: 32.9  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

Client ID: RE36-10-8287  
Batch ID: 963809  
Run Date: 03/11/2010 17:18  
Prep Date: 03/11/2010 10:08  
Data File: 031110V55B425.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
100-41-4	Ethylbenzene	U	1.49	ug/kg	0.447	1.49	UJ,V3c
179601-23-1	m,p-Xylenes	U	2.98	ug/kg	0.447	2.98	
95-47-6	o-Xylene	U	1.49	ug/kg	0.447	1.49	
100-42-5	Styrene	U	1.49	ug/kg	0.447	1.49	
75-25-2	Bromoform	U	1.49	ug/kg	0.447	1.49	
79-34-5	1,1,2,2-Tetrachloroethane	U	1.49	ug/kg	0.447	1.49	
96-18-4	1,2,3-Trichloropropane	U	1.49	ug/kg	0.447	1.49	
108-86-1	Bromobenzene	U	1.49	ug/kg	0.447	1.49	
103-65-1	n-Propylbenzene	U	1.49	ug/kg	0.447	1.49	
95-49-8	2-Chlorotoluene	U	1.49	ug/kg	0.447	1.49	
98-82-8	Isopropylbenzene	U	1.49	ug/kg	0.447	1.49	
108-67-8	1,3,5-Trimethylbenzene	U	1.49	ug/kg	0.447	1.49	
106-43-4	4-Chlorotoluene	U	1.49	ug/kg	0.447	1.49	
98-06-6	tert-Butylbenzene	U	1.49	ug/kg	0.447	1.49	
95-63-6	1,2,4-Trimethylbenzene	U	1.49	ug/kg	0.447	1.49	
135-98-8	sec-Butylbenzene	U	1.49	ug/kg	0.447	1.49	
99-87-6	4-Isopropyltoluene		7.31	ug/kg	0.447	1.49	J,V3c
541-73-1	1,3-Dichlorobenzene	U	1.49	ug/kg	0.447	1.49	UJ,V3c
106-46-7	1,4-Dichlorobenzene	U	1.49	ug/kg	0.447	1.49	
104-51-8	n-Butylbenzene	U	1.49	ug/kg	0.447	1.49	
96-12-8	1,2-Dibromo-3-chloropropane	U	1.49	ug/kg	0.447	1.49	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	7.46	ug/kg	2.39	7.46	R,V7b
630-20-6	1,1,1,2-Tetrachloroethane	U	1.49	ug/kg	0.447	1.49	UJ,V3c
95-50-1	1,2-Dichlorobenzene	U	1.49	ug/kg	0.447	1.49	UJ,V3c

## Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
No Tentatively Identified Compounds Found				ug/kg		

LMF  
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Volatile  
Certificate of Analysis  
Sample Summary

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SDG Number: 10-2199  
Lab Sample ID: 248519009

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8260B  
Inst: VOAS.I  
Analyst: CDS1  
Allquot: 5 g  
Column: DB-624

Matrix: R  
%Moisture: 29  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

Client ID: RE36-10-8273  
Batch ID: 963809  
Run Date: 03/11/2010 17:44  
Prep Date: 03/11/2010 10:09  
Data File: 031110V5/5B426.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.41	ug/kg	0.479	1.41	
74-87-3	Chloromethane	U	1.41	ug/kg	0.423	1.41	
75-01-4	Vinyl chloride	U	1.41	ug/kg	0.423	1.41	
74-83-9	Bromomethane	U	1.41	ug/kg	0.423	1.41	
75-00-3	Chloroethane	U	1.41	ug/kg	0.423	1.41	
75-69-4	Trichlorofluoromethane	U	1.41	ug/kg	0.423	1.41	
67-64-1	Acetone	U	7.05	ug/kg	2.34	7.05	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.41	ug/kg	0.423	1.41	
74-88-4	Iodomethane	U	7.05	ug/kg	2.25	7.05	
75-09-2	Methylene chloride	U	7.05	ug/kg	2.82	7.05	
75-15-0	Carbon disulfide	U	7.05	ug/kg	1.76	7.05	
156-60-5	trans-1,2-Dichloroethylene	U	1.41	ug/kg	0.423	1.41	
75-34-3	1,1-Dichloroethane	U	1.41	ug/kg	0.423	1.41	
78-93-3	2-Butanone	U	7.05	ug/kg	2.11	7.05	
156-59-2	cis-1,2-Dichloroethylene	U	1.41	ug/kg	0.423	1.41	
594-20-7	2,2-Dichloropropane	U	1.41	ug/kg	0.423	1.41	
67-66-3	Chloroform	U	1.41	ug/kg	0.423	1.41	
74-97-5	Bromochloromethane	U	1.41	ug/kg	0.465	1.41	
71-55-6	1,1,1-Trichloroethane	U	1.41	ug/kg	0.423	1.41	
563-58-6	1,1-Dichloropropene	U	1.41	ug/kg	0.423	1.41	
56-23-5	Carbon tetrachloride	U	1.41	ug/kg	0.423	1.41	
107-06-2	1,2-Dichloroethane	U	1.41	ug/kg	0.423	1.41	
71-43-2	Benzene	U	1.41	ug/kg	0.423	1.41	
79-01-6	Trichloroethylene	U	1.41	ug/kg	0.465	1.41	
78-87-5	1,2-Dichloropropane	U	1.41	ug/kg	0.423	1.41	
75-27-4	Bromodichloromethane	U	1.41	ug/kg	0.423	1.41	
74-95-3	Dibromomethane	U	1.41	ug/kg	0.423	1.41	
108-10-1	4-Methyl-2-pentanone	U	7.05	ug/kg	1.76	7.05	
10061-01-5	cis-1,3-Dichloropropylene	U	1.41	ug/kg	0.423	1.41	
108-88-3	Toluene	J	1.00	ug/kg	0.423	1.41	J+,V3b
10061-02-6	trans-1,3-Dichloropropylene	U	1.41	ug/kg	0.423	1.41	
79-00-5	1,1,2-Trichloroethane	U	1.41	ug/kg	0.423	1.41	
591-78-6	2-Hexanone	U	7.05	ug/kg	2.11	7.05	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.41	ug/kg	0.423	1.41	
127-18-4	Tetrachloroethylene	U	1.41	ug/kg	0.423	1.41	
124-48-1	Dibromochloromethane	U	1.41	ug/kg	0.423	1.41	
106-93-4	1,2-Dibromoethane	U	1.41	ug/kg	0.423	1.41	
108-90-7	Chlorobenzene	U	1.41	ug/kg	0.423	1.41	

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**Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-2199  
Lab Sample ID: 248519009  
  
Client ID: RE36-10-8273  
Batch ID: 963809  
Run Date: 03/11/2010 17:44  
Prep Date: 03/11/2010 10:09  
Data File: 031110V55B426.D

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: CDS1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
%Moisture: 29  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.41	ug/kg	0.423	1.41
179601-23-1	m,p-Xylenes	U	2.82	ug/kg	0.423	2.82
95-47-6	o-Xylene	U	1.41	ug/kg	0.423	1.41
100-42-5	Styrene	U	1.41	ug/kg	0.423	1.41
75-25-2	Bromoform	U	1.41	ug/kg	0.423	1.41
79-34-5	1,1,2,2-Tetrachloroethane	U	1.41	ug/kg	0.423	1.41
96-18-4	1,2,3-Trichloropropane	U	1.41	ug/kg	0.423	1.41
108-86-1	Bromobenzene	U	1.41	ug/kg	0.423	1.41
103-65-1	n-Propylbenzene	U	1.41	ug/kg	0.423	1.41
95-49-8	2-Chlorotoluene	U	1.41	ug/kg	0.423	1.41
98-82-8	Isopropylbenzene	U	1.41	ug/kg	0.423	1.41
108-67-8	1,3,5-Trimethylbenzene	U	1.41	ug/kg	0.423	1.41
106-43-4	4-Chlorotoluene	U	1.41	ug/kg	0.423	1.41
98-06-6	tert-Butylbenzene	U	1.41	ug/kg	0.423	1.41
95-63-6	1,2,4-Trimethylbenzene	U	1.41	ug/kg	0.423	1.41
135-98-8	sec-Butylbenzene	U	1.41	ug/kg	0.423	1.41
99-87-6	4-Isopropyltoluene		2.35	ug/kg	0.423	1.41 J+,V3b
541-73-1	1,3-Dichlorobenzene	U	1.41	ug/kg	0.423	1.41
106-46-7	1,4-Dichlorobenzene	U	1.41	ug/kg	0.423	1.41
104-51-8	n-Butylbenzene	U	1.41	ug/kg	0.423	1.41
96-12-8	1,2-Dibromo-3-chloropropane	U	1.41	ug/kg	0.423	1.41
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	7.05	ug/kg	2.25	7.05 R,V7b
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.41	ug/kg	0.423	1.41
95-50-1	1,2-Dichlorobenzene	U	1.41	ug/kg	0.423	1.41

## Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
No Tentatively Identified Compounds Found				ug/kg		

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Volatile  
Certificate of Analysis  
Sample Summary

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SDG Number: 10-2199  
Lab Sample ID: 248519010

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: CDS1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
%Moisture: 40.1  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

Client ID: RE36-10-8275  
Batch ID: 963809  
Run Date: 03/11/2010 21:15  
Prep Date: 03/11/2010 10:10  
Data File: 031110V5\5B434.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.67	ug/kg	0.568	1.67	
74-87-3	Chloromethane	U	1.67	ug/kg	0.501	1.67	
75-01-4	Vinyl chloride	U	1.67	ug/kg	0.501	1.67	
74-83-9	Bromomethane	U	1.67	ug/kg	0.501	1.67	
75-00-3	Chloroethane	U	1.67	ug/kg	0.501	1.67	
75-69-4	Trichlorofluoromethane	U	1.67	ug/kg	0.501	1.67	
67-64-1	Acetone	U	8.35	ug/kg	2.77	8.35	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.67	ug/kg	0.501	1.67	
74-88-4	Iodomethane	U	8.35	ug/kg	2.67	8.35	
75-09-2	Methylene chloride	U	8.35	ug/kg	3.34	8.35	
75-15-0	Carbon disulfide	U	8.35	ug/kg	2.09	8.35	
156-60-5	trans-1,2-Dichloroethylene	U	1.67	ug/kg	0.501	1.67	
75-34-3	1,1-Dichloroethane	U	1.67	ug/kg	0.501	1.67	
78-93-3	2-Butanone	U	8.35	ug/kg	2.51	8.35	
156-59-2	cis-1,2-Dichloroethylene	U	1.67	ug/kg	0.501	1.67	
594-20-7	2,2-Dichloropropane	U	1.67	ug/kg	0.501	1.67	
67-66-3	Chloroform	U	1.67	ug/kg	0.501	1.67	
74-97-5	Bromochloromethane	U	1.67	ug/kg	0.551	1.67	
71-55-6	1,1,1-Trichloroethane	U	1.67	ug/kg	0.501	1.67	
563-58-6	1,1-Dichloropropene	U	1.67	ug/kg	0.501	1.67	
56-23-5	Carbon tetrachloride	U	1.67	ug/kg	0.501	1.67	
107-06-2	1,2-Dichloroethane	U	1.67	ug/kg	0.501	1.67	
71-43-2	Benzene	U	1.67	ug/kg	0.501	1.67	
79-01-6	Trichloroethylene	U	1.67	ug/kg	0.551	1.67	
78-87-5	1,2-Dichloropropane	U	1.67	ug/kg	0.501	1.67	
75-27-4	Bromodichloromethane	U	1.67	ug/kg	0.501	1.67	
74-95-3	Dibromomethane	U	1.67	ug/kg	0.501	1.67	
108-10-1	4-Methyl-2-pentanone	U	8.35	ug/kg	2.09	8.35	
10061-01-5	cis-1,3-Dichloropropylene	U	1.67	ug/kg	0.501	1.67	
108-88-3	Toluene	J	1.35	ug/kg	0.501	1.67	J+,V3b
10061-02-6	trans-1,3-Dichloropropylene	U	1.67	ug/kg	0.501	1.67	
79-00-5	1,1,2-Trichloroethane	U	1.67	ug/kg	0.501	1.67	
591-78-6	2-Hexanone	U	8.35	ug/kg	2.51	8.35	
142-28-9	1,3-Dichloropropane	U	1.67	ug/kg	0.501	1.67	
127-18-4	Tetrachloroethylene	U	1.67	ug/kg	0.501	1.67	
124-48-1	Dibromochloromethane	U	1.67	ug/kg	0.501	1.67	
106-93-4	1,2-Dibromoethane	U	1.67	ug/kg	0.501	1.67	
108-90-7	Chlorobenzene	U	1.67	ug/kg	0.501	1.67	

Volatile  
Certificate of Analysis  
Sample Summary

SDG Number: 10-2199  
Lab Sample ID: 248519010  
  
Client ID: RE36-10-8275  
Batch ID: 963809  
Run Date: 03/11/2010 21:15  
Prep Date: 03/11/2010 10:10  
Data File: 031110V55B434.D

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: CDS1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
%Moisture: 40.1  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.67	ug/kg	0.501	1.67
179601-23-1	m,p-Xylenes	U	3.34	ug/kg	0.501	3.34
95-47-6	o-Xylene	U	1.67	ug/kg	0.501	1.67
100-42-5	Styrene	U	1.67	ug/kg	0.501	1.67
75-25-2	Bromoform	U	1.67	ug/kg	0.501	1.67
79-34-5	1,1,2,2-Tetrachloroethane	U	1.67	ug/kg	0.501	1.67
96-18-4	1,2,3-Trichloropropane	U	1.67	ug/kg	0.501	1.67
108-86-1	Bromobenzene	U	1.67	ug/kg	0.501	1.67
103-65-1	n-Propylbenzene	U	1.67	ug/kg	0.501	1.67
95-49-8	2-Chlorotoluene	U	1.67	ug/kg	0.501	1.67
98-82-8	Isopropylbenzene	U	1.67	ug/kg	0.501	1.67
108-67-8	1,3,5-Trimethylbenzene	U	1.67	ug/kg	0.501	1.67
106-43-4	4-Chlorotoluene	U	1.67	ug/kg	0.501	1.67
98-06-6	tert-Butylbenzene	U	1.67	ug/kg	0.501	1.67
95-63-6	1,2,4-Trimethylbenzene	U	1.67	ug/kg	0.501	1.67
135-98-8	sec-Butylbenzene	U	1.67	ug/kg	0.501	1.67
99-87-6	4-Isopropyltoluene		10.1	ug/kg	0.501	1.67 J+,V3b
541-73-1	1,3-Dichlorobenzene	U	1.67	ug/kg	0.501	1.67
106-46-7	1,4-Dichlorobenzene	U	1.67	ug/kg	0.501	1.67
104-51-8	n-Butylbenzene	U	1.67	ug/kg	0.501	1.67
96-12-8	1,2-Dibromo-3-chloropropane	U	1.67	ug/kg	0.501	1.67
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	8.35	ug/kg	2.67	8.35 R,V7b
630-20-6	1,1,1,2-Tetrachloroethane	U	1.67	ug/kg	0.501	1.67
95-50-1	1,2-Dichlorobenzene	U	1.67	ug/kg	0.501	1.67

## Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
No Tentatively Identified Compounds Found				ug/kg		

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Volatile  
Certificate of Analysis  
Sample Summary

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SDG Number: 10-2199  
Lab Sample ID: 248519011  
  
Client ID: RE36-10-8276  
Batch ID: 963809  
Run Date: 03/11/2010 21:42  
Prep Date: 03/11/2010 10:11  
Data File: 031110V55B435.D

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: CDS1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
%Moisture: 14.6  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.17	ug/kg	0.398	1.17	
74-87-3	Chloromethane	U	1.17	ug/kg	0.351	1.17	
75-01-4	Vinyl chloride	U	1.17	ug/kg	0.351	1.17	
74-83-9	Bromomethane	U	1.17	ug/kg	0.351	1.17	
75-00-3	Chloroethane	U	1.17	ug/kg	0.351	1.17	
75-69-4	Trichlorofluoromethane	U	1.17	ug/kg	0.351	1.17	
67-64-1	Acetone	U	5.86	ug/kg	1.94	5.86	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.17	ug/kg	0.351	1.17	
74-88-4	Iodomethane	U	5.86	ug/kg	1.87	5.86	
75-09-2	Methylene chloride	U	5.86	ug/kg	2.34	5.86	
75-15-0	Carbon disulfide	U	5.86	ug/kg	1.46	5.86	
156-60-5	trans-1,2-Dichloroethylene	U	1.17	ug/kg	0.351	1.17	
75-34-3	1,1-Dichloroethane	U	1.17	ug/kg	0.351	1.17	
78-93-3	2-Butanone	U	5.86	ug/kg	1.76	5.86	
156-59-2	cis-1,2-Dichloroethylene	U	1.17	ug/kg	0.351	1.17	
594-20-7	2,2-Dichloropropane	U	1.17	ug/kg	0.351	1.17	
67-66-3	Chloroform	U	1.17	ug/kg	0.351	1.17	
74-97-5	Bromochloromethane	U	1.17	ug/kg	0.387	1.17	
71-55-6	1,1,1-Trichloroethane	U	1.17	ug/kg	0.351	1.17	
563-58-6	1,1-Dichloropropene	U	1.17	ug/kg	0.351	1.17	
56-23-5	Carbon tetrachloride	U	1.17	ug/kg	0.351	1.17	
107-06-2	1,2-Dichloroethane	U	1.17	ug/kg	0.351	1.17	
71-43-2	Benzene	U	1.17	ug/kg	0.351	1.17	
79-01-6	Trichloroethylene	U	1.17	ug/kg	0.387	1.17	
78-87-5	1,2-Dichloropropane	U	1.17	ug/kg	0.351	1.17	
75-27-4	Bromodichloromethane	U	1.17	ug/kg	0.351	1.17	
74-95-3	Dibromomethane	U	1.17	ug/kg	0.351	1.17	
108-10-1	4-Methyl-2-pentanone	U	5.86	ug/kg	1.46	5.86	
10061-01-5	cis-1,3-Dichloropropylene	U	1.17	ug/kg	0.351	1.17	
108-88-3	Toluene	U	1.17	ug/kg	0.351	1.17	
10061-02-6	trans-1,3-Dichloropropylene	U	1.17	ug/kg	0.351	1.17	
79-00-5	1,1,2-Trichloroethane	U	1.17	ug/kg	0.351	1.17	
591-78-6	2-Hexanone	U	5.86	ug/kg	1.76	5.86	
142-28-9	1,3-Dichloropropane	U	1.17	ug/kg	0.351	1.17	
127-18-4	Tetrachloroethylene	U	1.17	ug/kg	0.351	1.17	
124-48-1	Dibromochloromethane	U	1.17	ug/kg	0.351	1.17	
106-93-4	1,2-Dibromoethane	U	1.17	ug/kg	0.351	1.17	
108-90-7	Chlorobenzene	U	1.17	ug/kg	0.351	1.17	

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**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

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SDG Number: 10-2199  
 Lab Sample ID: 248519011

Date Collected: 02/25/2010 12:00  
 Date Received: 03/03/2010 08:50  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: CDS1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 14.6  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

Client ID: RE36-10-8276  
 Batch ID: 963809  
 Run Date: 03/11/2010 21:42  
 Prep Date: 03/11/2010 10:11  
 Data File: 031110V55B435.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.17	ug/kg	0.351	1.17
179601-23-1	m,p-Xylenes	U	2.34	ug/kg	0.351	2.34
95-47-6	o-Xylene	U	1.17	ug/kg	0.351	1.17
100-42-5	Styrene	U	1.17	ug/kg	0.351	1.17
75-25-2	Bromoform	U	1.17	ug/kg	0.351	1.17
79-34-5	1,1,2,2-Tetrachloroethane	U	1.17	ug/kg	0.351	1.17
96-18-4	1,2,3-Trichloropropane	U	1.17	ug/kg	0.351	1.17
108-86-1	Bromobenzene	U	1.17	ug/kg	0.351	1.17
103-65-1	n-Propylbenzene	U	1.17	ug/kg	0.351	1.17
95-49-8	2-Chlorotoluene	U	1.17	ug/kg	0.351	1.17
98-82-8	Isopropylbenzene	U	1.17	ug/kg	0.351	1.17
108-67-8	1,3,5-Trimethylbenzene	U	1.17	ug/kg	0.351	1.17
106-43-4	4-Chlorotoluene	U	1.17	ug/kg	0.351	1.17
98-06-6	tert-Butylbenzene	U	1.17	ug/kg	0.351	1.17
95-63-6	1,2,4-Trimethylbenzene	U	1.17	ug/kg	0.351	1.17
135-98-8	sec-Butylbenzene	U	1.17	ug/kg	0.351	1.17
99-87-6	4-Isopropyltoluene	U	1.17	ug/kg	0.351	1.17
541-73-1	1,3-Dichlorobenzene	U	1.17	ug/kg	0.351	1.17
106-46-7	1,4-Dichlorobenzene	U	1.17	ug/kg	0.351	1.17
104-51-8	n-Butylbenzene	U	1.17	ug/kg	0.351	1.17
96-12-8	1,2-Dibromo-3-chloropropane	U	1.17	ug/kg	0.351	1.17
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.86	ug/kg	1.87	5.86 R,V7b
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.17	ug/kg	0.351	1.17
95-50-1	1,2-Dichlorobenzene	U	1.17	ug/kg	0.351	1.17

## Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
No Tentatively Identified Compounds Found				ug/kg		

LMF  
5/5/10

Volatile  
Certificate of Analysis  
Sample Summary

Page 1 of 2

SDG Number: 10-2199  
Lab Sample ID: 248519012

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: CDS1  
Allquot: 5 g  
Column: DB-624

Matrix: S  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

Client ID: RE36-10-8295  
Batch ID: 963809  
Run Date: 03/11/2010 22:08  
Prep Date: 03/11/2010 10:12  
Data File: 031110V5\SB436.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone		5.96	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

LMF  
5/5/10

**Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-2199  
Lab Sample ID: 248519012

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50

Matrix: S

Client ID: RE36-10-8295  
Batch ID: 963809  
Run Date: 03/11/2010 22:08  
Prep Date: 03/11/2010 10:12  
Data File: 031110V5SB436.D

Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: CDS1  
Aliquot: 5 g  
Column: DB-624

Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00	
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00	
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00	
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00	
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00	
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00	
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00	
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00	
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00	
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00	
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00	
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00	
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00	
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00	
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00	
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00	
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00	
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00	
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00	
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00	
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane <i>Trichlorotrifluoroethane</i>	U	5.00	ug/kg	1.60	5.00	R,V7b
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00	
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00	

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
No Tentatively Identified Compounds Found				ug/kg		

LMF  
5/5/10

## DATA VALIDATION COVER SHEET

5115-1

Records Use only

## Data Validation Cover Sheet



## Section I.

REQUEST NUMBER: 10-2199 VALIDATION DATE: 5/6/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Larry Fukui 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 pyridine and 2-methyl-4,6-dinitrophenol. In the CCV associated with samples RE36-10-8273, -8276, -8278, and, -8287, the %Ds were >20% for bis(2-chloroethyl)ether; benzyl alcohol; bis(2-chloroisopropyl)ether; m,p-cresols; 2,4-dimethylphenol; 2-nitroaniline; and 2,4-dinitrophenol. In the CCV associated with all samples except -8273, -8276, -8278, and, -8287, the %Ds were >20% for pyridine; aniline; bis(2-chloroethyl)ether; benzyl alcohol; bis(2-chloroisopropyl)ether; and 2-methyl-4,6-dinitrophenol. The associated sample results were NDs and, thus, were qualified UJ,SV7c.
- The LCS %Rs were < the laboratory LALs but ≤10% for benzyl alcohol and 2,4-dimethylphenol. The associated sample results were NDs and, thus, were qualified UJ,SV12a.
- The MS/MSD %Rs and RPDs were outside of laboratory acceptance limits for numerous compounds. It should be noted that the MS and MSD parent sample was from another LANL RN and the raw data for the parent sample was not included in the package. Since an MS/MSD was not required, no sample results were qualified.


Reviewed by: ETM

Level: 1


Date: 5/7/10

VALIDATOR'S SIGNATURE:


DATE: 5/6/10

DATA VALIDATION COVER SHEET	
<b>5115-1</b>  <b>Data Validation Cover Sheet</b>	Records Use only   Los Alamos NATIONAL LABORATORY EST. 1942
Form 5115-1, Revision 0.0	LOS ALAMOS Environmental Restoration Project




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	
<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"/>	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**

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 checked="" type="checkbox"/>	<input 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

Page 1 of 3

SDG Number: 10-2199  
Lab Sample ID: 248519009

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Aliquot: 30.06 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 29  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE36-10-8273  
Batch ID: 963133  
Run Date: 03/21/2010 23:44  
Prep Date: 03/10/2010 12:14  
Data File: s6c2122.d

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	469	ug/kg	93.8	469
108-95-2	Phenol	U	469	ug/kg	93.8	469
95-57-8	2-Chlorophenol	U	469	ug/kg	93.8	469
106-46-7	1,4-Dichlorobenzene	U	469	ug/kg	93.8	469
621-64-7	N-Nitrosodipropylamine	U	469	ug/kg	93.8	469
59-50-7	4-Chloro-3-methylphenol	U	469	ug/kg	93.8	469
83-32-9	Acenaphthene	U	46.9	ug/kg	15.5	46.9
121-14-2	2,4-Dinitrotoluene	U	469	ug/kg	46.9	469
100-02-7	4-Nitrophenol	U	469	ug/kg	155	469
87-86-5	Pentachlorophenol	U	469	ug/kg	117	469
129-00-0	Pyrene	J	15.6	ug/kg	14.1	46.9
110-86-1	Pyridine	U	469	ug/kg	93.8	469 UJ,SV7c
62-53-3	Aniline	U	469	ug/kg	141	469
111-44-4	bis(2-Chloroethyl) ether	U	469	ug/kg	93.8	469 UJ,SV7c
541-73-1	1,3-Dichlorobenzene	U	469	ug/kg	93.8	469
100-51-6	Benzyl alcohol	U	469	ug/kg	141	469 UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	469	ug/kg	93.8	469
108-60-1	bis(2-Chloroisopropyl)ether	U	469	ug/kg	93.8	469 UJ,SV7c
95-48-7	o-Cresol	U	469	ug/kg	93.8	469
65794-96-9	m,p-Cresols	U	469	ug/kg	141	469 UJ,SV7c
67-72-1	Hexachloroethane	U	469	ug/kg	93.8	469
98-95-3	Nitrobenzene	U	469	ug/kg	93.8	469
78-59-1	Isophorone	U	469	ug/kg	93.8	469
88-75-5	2-Nitrophenol	U	469	ug/kg	93.8	469
105-67-9	2,4-Dimethylphenol	U	469	ug/kg	164	469 UJ,SV7c
111-91-1	bis(2-Chloroethoxy)methane	U	469	ug/kg	93.8	469
120-83-2	2,4-Dichlorophenol	U	469	ug/kg	93.8	469
65-85-0	Benzoic acid	U	938	ug/kg	234	938
91-20-3	Naphthalene	U	46.9	ug/kg	14.1	46.9
106-47-8	4-Chloroaniline	U	469	ug/kg	93.8	469
87-68-3	Hexachlorobutadiene	U	469	ug/kg	93.8	469
91-57-6	2-Methylnaphthalene	U	46.9	ug/kg	9.38	46.9
77-47-4	Hexachlorocyclopentadiene	U	469	ug/kg	93.8	469
88-06-2	2,4,6-Trichlorophenol	U	469	ug/kg	93.8	469
95-95-4	2,4,5-Trichlorophenol	U	469	ug/kg	93.8	469
91-58-7	2-Chloronaphthalene	U	46.9	ug/kg	15.5	46.9
88-74-4	2-Nitroaniline	U	469	ug/kg	93.8	469 UJ,SV7c
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	469	ug/kg	93.8	469

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Semi-Volatile  
Certificate of Analysis  
Sample Summary

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SDG Number: 10-2199  
Lab Sample ID: 248519009

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Allquot: 30.06 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 29  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE36-10-8273  
Batch ID: 963133  
Run Date: 03/21/2010 23:44  
Prep Date: 03/10/2010 12:14  
Data File: s6c2122.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	469	ug/kg	93.8	469
606-20-2	2,6-Dinitrotoluene	U	469	ug/kg	46.9	469
208-96-8	Acenaphthylene	U	46.9	ug/kg	14.1	46.9
51-28-5	2,4-Dinitrophenol	U	938	ug/kg	178	938 UJ,SV7c
132-64-9	Dibenzofuran	U	469	ug/kg	93.8	469
84-66-2	Diethylphthalate	U	469	ug/kg	93.8	469
86-73-7	Fluorene	U	46.9	ug/kg	14.1	46.9
7005-72-3	4-Chlorophenylphenylether	U	469	ug/kg	93.8	469
534-52-1	2-Methyl-4,6-dinitrophenol	U	469	ug/kg	93.8	469 UJ,SV7c
100-01-6	4-Nitroaniline	U	469	ug/kg	141	469
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	469	ug/kg	93.8	469
122-66-7	Azobenzene	U	469	ug/kg	93.8	469
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	469	ug/kg	93.8	469
118-74-1	Hexachlorobenzene	U	469	ug/kg	93.8	469
85-01-8	Phenanthrene	U	46.9	ug/kg	14.1	46.9
120-12-7	Anthracene	U	46.9	ug/kg	9.38	46.9
84-74-2	Di-n-butylphthalate	U	469	ug/kg	93.8	469
206-44-0	Fluoranthene	J	18.3	ug/kg	14.1	46.9
85-68-7	Butylbenzylphthalate	U	469	ug/kg	93.8	469
56-55-3	Benzo(a)anthracene	U	46.9	ug/kg	14.1	46.9
91-94-1	3,3'-Dichlorobenzidine	U	469	ug/kg	141	469
218-01-9	Chrysene	U	46.9	ug/kg	14.1	46.9
117-81-7	bis(2-Ethylhexyl)phthalate	U	469	ug/kg	93.8	469
117-84-0	Di-n-octylphthalate	U	469	ug/kg	93.8	469
205-99-2	Benzo(b)fluoranthene	U	46.9	ug/kg	14.1	46.9
207-08-9	Benzo(k)fluoranthene	U	46.9	ug/kg	14.1	46.9
50-32-8	Benzo(a)pyrene	U	46.9	ug/kg	14.1	46.9
193-39-5	Indeno(1,2,3-cd)pyrene	U	46.9	ug/kg	14.1	46.9
53-70-3	Dibenzo(a,h)anthracene	U	46.9	ug/kg	14.1	46.9
191-24-2	Benzo(ghi)perylene	U	46.9	ug/kg	14.1	46.9
120-82-1	1,2,4-Trichlorobenzene	U	469	ug/kg	93.8	469

## Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
55044-36-5	1H-Indene, 5-butyl-6-hexyloctahydro-	7.98	380	ug/kg	89	NJ
	Unknown	8.65	317	ug/kg		J

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

SDG Number: 10-2199  
Lab Sample ID: 248519009

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Allquot: 30.06 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 29  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE36-10-8273  
Batch ID: 963133  
Run Date: 03/21/2010 23:44  
Prep Date: 03/10/2010 12:14  
Data File: s6c2122.d

CAS No.	Paramname	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
	Unknown	8.74	439	ug/kg		J
	Unknown	8.86	377	ug/kg		J
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	8.89	325	ug/kg	98	NJ
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	8.94	279	ug/kg	97	NJ
	Unknown	9.03	404	ug/kg		J
	Unknown	9.11	482	ug/kg		J
	Unknown	9.2	816	ug/kg		J
	Unknown	9.29	454	ug/kg		J
	Unknown	9.38	1060	ug/kg		J
	Unknown	9.56	423	ug/kg		J
	Unknown	9.59	411	ug/kg		J
	Unknown	9.71	531	ug/kg		J
559-74-0	Friedelan-3-one	9.83	1550	ug/kg	92	NJ
	Unknown	9.91	542	ug/kg		J
	Unknown	10.03	1140	ug/kg		J
	Unknown	10.25	480	ug/kg		J
112-95-8	Eicosane	10.63	596	ug/kg	93	NJ
	Unknown	11.73	518	ug/kg		J
	Unknown	11.77	692	ug/kg		J
	Unknown	12.84	660	ug/kg		J
83-47-6	.gamma.-Sitosterol	13.64	854	ug/kg	91	NJ

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Semi-Volatile  
Certificate of Analysis  
Sample Summary

SDG Number: 10-2199  
Lab Sample ID: 248519006

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Aliquot: 30 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 10.2  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 4  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE36-10-8274  
Batch ID: 963133  
Run Date: 03/24/2010 01:26  
Prep Date: 03/10/2010 12:14  
Data File: s6c2329.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	1490	ug/kg	297	1490
108-95-2	Phenol	U	1490	ug/kg	297	1490
95-57-8	2-Chlorophenol	U	1490	ug/kg	297	1490
106-46-7	1,4-Dichlorobenzene	U	1490	ug/kg	297	1490
621-64-7	N-Nitrosodipropylamine	U	1490	ug/kg	297	1490
59-50-7	4-Chloro-3-methylphenol	U	1490	ug/kg	297	1490
83-32-9	Acenaphthene	U	149	ug/kg	49.0	149
121-14-2	2,4-Dinitrotoluene	U	1490	ug/kg	149	1490
100-02-7	4-Nitrophenol	U	1490	ug/kg	490	1490
87-86-5	Pentachlorophenol	U	1490	ug/kg	371	1490
129-00-0	Pyrene	U	149	ug/kg	44.6	149
110-86-1	Pyridine	U	1490	ug/kg	297	1490 UJ,SV7c
62-53-3	Aniline	U	1490	ug/kg	446	1490
111-44-4	bis(2-Chloroethyl) ether	U	1490	ug/kg	297	1490
541-73-1	1,3-Dichlorobenzene	U	1490	ug/kg	297	1490
100-51-6	Benzyl alcohol	U	1490	ug/kg	446	1490 UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	1490	ug/kg	297	1490
108-60-1	bis(2-Chloroisopropyl)ether	U	1490	ug/kg	297	1490 UJ,SV7c
95-48-7	o-Cresol	U	1490	ug/kg	297	1490
65794-96-9	m,p-Cresols	U	1490	ug/kg	446	1490
67-72-1	Hexachloroethane	U	1490	ug/kg	297	1490
98-95-3	Nitrobenzene	U	1490	ug/kg	297	1490
78-59-1	Isophorone	U	1490	ug/kg	297	1490
88-75-5	2-Nitrophenol	U	1490	ug/kg	297	1490
105-67-9	2,4-Dimethylphenol	U	1490	ug/kg	520	1490 UJ,SV12a
111-91-1	bis(2-Chloroethoxy)methane	U	1490	ug/kg	297	1490
120-83-2	2,4-Dichlorophenol	U	1490	ug/kg	297	1490
65-85-0	Benzoic acid	U	2970	ug/kg	743	2970
91-20-3	Naphthalene	U	149	ug/kg	44.6	149
106-47-8	4-Chloroaniline	U	1490	ug/kg	297	1490
87-68-3	Hexachlorobutadiene	U	1490	ug/kg	297	1490
91-57-6	2-Methylnaphthalene	U	149	ug/kg	29.7	149
77-47-4	Hexachlorocyclopentadiene	U	1490	ug/kg	297	1490
88-06-2	2,4,6-Trichlorophenol	U	1490	ug/kg	297	1490
95-95-4	2,4,5-Trichlorophenol	U	1490	ug/kg	297	1490
91-58-7	2-Chloronaphthalene	U	149	ug/kg	49.0	149
88-74-4	2-Nitroaniline	U	1490	ug/kg	297	1490
99-09-2	o-Nitroaniline					
	3-Nitroaniline	U	1490	ug/kg	297	1490

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Sample Summary

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SDG Number: 10-2199  
Lab Sample ID: 248519006

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Allquot: 30 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 10.2  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 4  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE36-10-8274  
Batch ID: 963133  
Run Date: 03/24/2010 01:26  
Prep Date: 03/10/2010 12:14  
Data File: s6c2329.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	1490	ug/kg	297	1490
606-20-2	2,6-Dinitrotoluene	U	1490	ug/kg	149	1490
208-96-8	Acenaphthylene	U	149	ug/kg	44.6	149
51-28-5	2,4-Dinitrophenol	U	2970	ug/kg	564	2970
132-64-9	Dibenzofuran	U	1490	ug/kg	297	1490
84-66-2	Diethylphthalate	U	1490	ug/kg	297	1490
86-73-7	Fluorene	U	149	ug/kg	44.6	149
7005-72-3	4-Chlorophenylphenylether	U	1490	ug/kg	297	1490
534-52-1	2-Methyl-4,6-dinitrophenol	U	1490	ug/kg	297	1490 UJ,SV7c
100-01-6	4-Nitroaniline	U	1490	ug/kg	446	1490
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	1490	ug/kg	297	1490
122-66-7	Azobenzene	U	1490	ug/kg	297	1490
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	1490	ug/kg	297	1490
118-74-1	Hexachlorobenzene	U	1490	ug/kg	297	1490
85-01-8	Phenanthrene	U	149	ug/kg	44.6	149
120-12-7	Anthracene	U	149	ug/kg	29.7	149
84-74-2	Di-n-butylphthalate	U	1490	ug/kg	297	1490
206-44-0	Fluoranthene	U	149	ug/kg	44.6	149
85-68-7	Butylbenzylphthalate	U	1490	ug/kg	297	1490
56-55-3	Benzo(a)anthracene	U	149	ug/kg	44.6	149
91-94-1	3,3'-Dichlorobenzidine	U	1490	ug/kg	446	1490
218-01-9	Chrysene	U	149	ug/kg	44.6	149
117-81-7	bis(2-Ethylhexyl)phthalate	U	1490	ug/kg	297	1490
117-84-0	Di-n-octylphthalate	U	1490	ug/kg	297	1490
205-99-2	Benzo(b)fluoranthene	U	149	ug/kg	44.6	149
207-08-9	Benzo(k)fluoranthene	U	149	ug/kg	44.6	149
50-32-8	Benzo(a)pyrene	U	149	ug/kg	44.6	149
193-39-5	Indeno(1,2,3-cd)pyrene	U	149	ug/kg	44.6	149
53-70-3	Dibenzo(a,h)anthracene	U	149	ug/kg	44.6	149
191-24-2	Benzo(ghi)perylene	U	149	ug/kg	44.6	149
120-82-1	1,2,4-Trichlorobenzene	U	1490	ug/kg	297	1490

## Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
20475-86-9	Urs-12-en-24-oic acid, 3-oxo-, methyl es	8.95	1170	ug/kg	91	NJ
	Unknown	10.33	918	ug/kg		J

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**Semi-Volatile  
Certificate of Analysis  
Sample Summary****SDG Number:** 10-2199  
**Lab Sample ID:** 248519006**Date Collected:** 02/25/2010 12:00  
**Date Received:** 03/03/2010 08:50  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD6.I  
**Analyst:** NAG1  
**Allquot:** 30 g  
**Column:** J&W DB-5MS**Matrix:** R  
**%Moisture:** 10.2  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 4  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**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		12.25	1370	ug/kg		J
	Unknown		13.01	1840	ug/kg		J

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Semi-Volatile  
Certificate of Analysis  
Sample Summary

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SDG Number: 10-2199  
Lab Sample ID: 248519010

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Allquot: 30.09 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 40.1  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 4  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE36-10-8275  
Batch ID: 963133  
Run Date: 03/24/2010 02:12  
Prep Date: 03/10/2010 12:14  
Data File: s6c2331.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	2220	ug/kg	444	2220	
108-95-2	Phenol	U	2220	ug/kg	444	2220	
95-57-8	2-Chlorophenol	U	2220	ug/kg	444	2220	
106-46-7	1,4-Dichlorobenzene	U	2220	ug/kg	444	2220	
621-64-7	N-Nitrosodipropylamine	U	2220	ug/kg	444	2220	
59-50-7	4-Chloro-3-methylphenol	U	2220	ug/kg	444	2220	
83-32-9	Acenaphthene	U	222	ug/kg	73.3	222	
121-14-2	2,4-Dinitrotoluene	U	2220	ug/kg	222	2220	
100-02-7	4-Nitrophenol	U	2220	ug/kg	733	2220	
87-86-5	Pentachlorophenol	U	2220	ug/kg	555	2220	
129-00-0	Pyrene	U	222	ug/kg	66.6	222	
110-86-1	Pyridine	U	2220	ug/kg	444	2220	UJ,SV7c
62-53-3	Aniline	U	2220	ug/kg	666	2220	↓
111-44-4	bis(2-Chloroethyl) ether	U	2220	ug/kg	444	2220	
541-73-1	1,3-Dichlorobenzene	U	2220	ug/kg	444	2220	
100-51-6	Benzyl alcohol	U	2220	ug/kg	666	2220	UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	2220	ug/kg	444	2220	
108-60-1	bis(2-Chloroisopropyl)ether	U	2220	ug/kg	444	2220	UJ,SV7c
95-48-7	o-Cresol	U	2220	ug/kg	444	2220	
65794-96-9	m,p-Cresols	U	2220	ug/kg	666	2220	
67-72-1	Hexachloroethane	U	2220	ug/kg	444	2220	
98-95-3	Nitrobenzene	U	2220	ug/kg	444	2220	
78-59-1	Isophorone	U	2220	ug/kg	444	2220	
88-75-5	2-Nitrophenol	U	2220	ug/kg	444	2220	
105-67-9	2,4-Dimethylphenol	U	2220	ug/kg	777	2220	UJ,SV12a
111-91-1	bis(2-Chloroethoxy)methane	U	2220	ug/kg	444	2220	
120-83-2	2,4-Dichlorophenol	U	2220	ug/kg	444	2220	
65-85-0	Benzoic acid	U	4440	ug/kg	1110	4440	
91-20-3	Naphthalene	U	222	ug/kg	66.6	222	
106-47-8	4-Chloroaniline	U	2220	ug/kg	444	2220	
87-68-3	Hexachlorobutadiene	U	2220	ug/kg	444	2220	
91-57-6	2-Methylnaphthalene	U	222	ug/kg	44.4	222	
77-47-4	Hexachlorocyclopentadiene	U	2220	ug/kg	444	2220	
88-06-2	2,4,6-Trichlorophenol	U	2220	ug/kg	444	2220	
95-95-4	2,4,5-Trichlorophenol	U	2220	ug/kg	444	2220	
91-58-7	2-Chloronaphthalene	U	222	ug/kg	73.3	222	
88-74-4	2-Nitroaniline	U	2220	ug/kg	444	2220	
	o-Nitroaniline						
99-09-2	3-Nitroaniline	U	2220	ug/kg	444	2220	

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

SDG Number: 10-2199  
Lab Sample ID: 248519010

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.1  
Analyst: NAG1  
Aliquot: 30.09 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 40.1  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 4  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE36-10-8275  
Batch ID: 963133  
Run Date: 03/24/2010 02:12  
Prep Date: 03/10/2010 12:14  
Data File: s6c2331.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
606-20-2	Dimethylphthalate	U	2220	ug/kg	444	2220
208-96-8	2,6-Dinitrotoluene	U	2220	ug/kg	222	2220
51-28-5	Acenaphthylene	U	222	ug/kg	66.6	222
132-64-9	2,4-Dinitrophenol	U	4440	ug/kg	844	4440
84-66-2	Dibenzofuran	U	2220	ug/kg	444	2220
86-73-7	Diethylphthalate	U	2220	ug/kg	444	2220
7005-72-3	Fluorene	U	222	ug/kg	66.6	222
534-52-1	4-Chlorophenylphenylether	U	2220	ug/kg	444	2220
100-01-6	2-Methyl-4,6-dinitrophenol	U	2220	ug/kg	444	2220 UJ,SV7c
122-39-4	4-Nitroaniline	U	2220	ug/kg	666	2220
122-66-7	<i>p</i> -Nitroaniline					
101-55-3	Diphenylamine	U	2220	ug/kg	444	2220
118-74-1	Azobenzene	U	2220	ug/kg	444	2220
85-01-8	<i>1,2</i> -Diphenylhydrazine					
120-12-7	4-Bromophenylphenylether	U	2220	ug/kg	444	2220
84-74-2	Hexachlorobenzene	U	2220	ug/kg	444	2220
206-44-0	Phenanthrene	U	222	ug/kg	66.6	222
85-68-7	Anthracene	U	222	ug/kg	44.4	222
56-55-3	Di-n-butylphthalate	U	2220	ug/kg	444	2220
91-94-1	Fluoranthene	U	222	ug/kg	66.6	222
218-01-9	Butylbenzylphthalate	U	2220	ug/kg	444	2220
117-81-7	Benzo(a)anthracene	U	222	ug/kg	66.6	222
117-84-0	3,3'-Dichlorobenzidine	U	2220	ug/kg	666	2220
205-99-2	Chrysene	U	222	ug/kg	66.6	222
207-08-9	bis(2-Ethylhexyl)phthalate	U	2220	ug/kg	444	2220
50-32-8	Di-n-octylphthalate	U	2220	ug/kg	444	2220
193-39-5	Benzo(b)fluoranthene	U	222	ug/kg	66.6	222
53-70-3	Benzo(k)fluoranthene	U	222	ug/kg	66.6	222
191-24-2	Benzo(a)pyrene	U	222	ug/kg	66.6	222
120-82-1	Indeno(1,2,3-cd)pyrene	U	222	ug/kg	66.6	222
	Dibenzo(a,h)anthracene	U	222	ug/kg	66.6	222
	Benzo(ghi)perylene	U	222	ug/kg	66.6	222
	1,2,4-Trichlorobenzene	U	2220	ug/kg	444	2220

## Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	10.33	1170	ug/kg		J

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Semi-Volatile  
Certificate of Analysis  
Sample Summary

SDG Number: 10-2199  
Lab Sample ID: 248519011

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Allquot: 30.03 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 14.6  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE36-10-8276  
Batch ID: 963133  
Run Date: 03/22/2010 00:31  
Prep Date: 03/10/2010 12:14  
Data File: s6c2124.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	390	ug/kg	78.0	390	
108-95-2	Phenol	U	390	ug/kg	78.0	390	
95-57-8	2-Chlorophenol	U	390	ug/kg	78.0	390	
106-46-7	1,4-Dichlorobenzene	U	390	ug/kg	78.0	390	
621-64-7	N-Nitrosodipropylamine	U	390	ug/kg	78.0	390	
59-50-7	4-Chloro-3-methylphenol	U	390	ug/kg	78.0	390	
83-32-9	Acenaphthene	U	39.0	ug/kg	12.9	39.0	
121-14-2	2,4-Dinitrotoluene	U	390	ug/kg	39.0	390	
100-02-7	4-Nitrophenol	U	390	ug/kg	129	390	
87-86-5	Pentachlorophenol	U	390	ug/kg	97.5	390	
129-00-0	Pyrene	U	39.0	ug/kg	11.7	39.0	
110-86-1	Pyridine	U	390	ug/kg	78.0	390	UJ,SV7c
62-53-3	Aniline	U	390	ug/kg	117	390	
111-44-4	bis(2-Chloroethyl) ether	U	390	ug/kg	78.0	390	UJ,SV7c
541-73-1	1,3-Dichlorobenzene	U	390	ug/kg	78.0	390	
100-51-6	Benzyl alcohol	U	390	ug/kg	117	390	UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	390	ug/kg	78.0	390	
108-60-1	bis(2-Chloroisopropyl)ether	U	390	ug/kg	78.0	390	UJ,SV7c
95-48-7	o-Cresol	U	390	ug/kg	78.0	390	
65794-96-9	m,p-Cresols	U	390	ug/kg	117	390	UJ,SV7c
67-72-1	Hexachloroethane	U	390	ug/kg	78.0	390	
98-95-3	Nitrobenzene	U	390	ug/kg	78.0	390	
78-59-1	Isophorone	U	390	ug/kg	78.0	390	
88-75-5	2-Nitrophenol	U	390	ug/kg	78.0	390	
105-67-9	2,4-Dimethylphenol	U	390	ug/kg	137	390	UJ,SV7c
111-91-1	bis(2-Chloroethoxy)methane	U	390	ug/kg	78.0	390	
120-83-2	2,4-Dichlorophenol	U	390	ug/kg	78.0	390	
65-85-0	Benzoic acid	U	780	ug/kg	195	780	
91-20-3	Naphthalene	U	39.0	ug/kg	11.7	39.0	
106-47-8	4-Chloroaniline	U	390	ug/kg	78.0	390	
87-68-3	Hexachlorobutadiene	U	390	ug/kg	78.0	390	
91-57-6	2-Methylnaphthalene	U	39.0	ug/kg	7.80	39.0	
77-47-4	Hexachlorocyclopentadiene	U	390	ug/kg	78.0	390	
88-06-2	2,4,6-Trichlorophenol	U	390	ug/kg	78.0	390	
95-95-4	2,4,5-Trichlorophenol	U	390	ug/kg	78.0	390	
91-58-7	2-Chloronaphthalene	U	39.0	ug/kg	12.9	39.0	
88-74-4	2-Nitroaniline	U	390	ug/kg	78.0	390	UJ,SV7c
	o-Nitroaniline						
99-09-2	3-Nitroaniline	U	390	ug/kg	78.0	390	

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Semi-Volatile  
Certificate of Analysis  
Sample Summary

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SDG Number: 10-2199  
Lab Sample ID: 248519011

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Aliquot: 30.03 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 14.6  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE36-10-8276  
Batch ID: 963133  
Run Date: 03/22/2010 00:31  
Prep Date: 03/10/2010 12:14  
Data File: s6c2124.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	390	ug/kg	78.0	390
606-20-2	2,6-Dinitrotoluene	U	390	ug/kg	39.0	390
208-96-8	Acenaphthylene	U	39.0	ug/kg	11.7	39.0
51-28-5	2,4-Dinitrophenol	U	780	ug/kg	148	780 UJ,SV7c
132-64-9	Dibenzofuran	U	390	ug/kg	78.0	390
84-66-2	Diethylphthalate	U	390	ug/kg	78.0	390
86-73-7	Fluorene	U	39.0	ug/kg	11.7	39.0
7005-72-3	4-Chlorophenylphenylether	U	390	ug/kg	78.0	390
534-52-1	2-Methyl-4,6-dinitrophenol	U	390	ug/kg	78.0	390 UJ,SV7c
100-01-6	4-Nitroaniline	U	390	ug/kg	117	390
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	390	ug/kg	78.0	390
122-66-7	Azobenzene	U	390	ug/kg	78.0	390
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	390	ug/kg	78.0	390
118-74-1	Hexachlorobenzene	U	390	ug/kg	78.0	390
85-01-8	Phenanthrene	U	39.0	ug/kg	11.7	39.0
120-12-7	Anthracene	U	39.0	ug/kg	7.80	39.0
84-74-2	Di-n-butylphthalate	U	390	ug/kg	78.0	390
206-44-0	Fluoranthene	U	39.0	ug/kg	11.7	39.0
85-68-7	Butylbenzylphthalate	U	390	ug/kg	78.0	390
56-55-3	Benzo(a)anthracene	U	39.0	ug/kg	11.7	39.0
91-94-1	3,3'-Dichlorobenzidine	U	390	ug/kg	117	390
218-01-9	Chrysene	U	39.0	ug/kg	11.7	39.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	390	ug/kg	78.0	390
117-84-0	Di-n-octylphthalate	U	390	ug/kg	78.0	390
205-99-2	Benzo(b)fluoranthene	U	39.0	ug/kg	11.7	39.0
207-08-9	Benzo(k)fluoranthene	U	39.0	ug/kg	11.7	39.0
50-32-8	Benzo(a)pyrene	U	39.0	ug/kg	11.7	39.0
193-39-5	Indeno(1,2,3-cd)pyrene	U	39.0	ug/kg	11.7	39.0
53-70-3	Dibenzo(a,h)anthracene	U	39.0	ug/kg	11.7	39.0
191-24-2	Benzo(ghi)perylene	U	39.0	ug/kg	11.7	39.0
120-82-1	1,2,4-Trichlorobenzene	U	390	ug/kg	78.0	390

## Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown Aldol Condensate	2.86	469	ug/kg		JA
	Unknown	7.98	190	ug/kg		J

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

SDG Number: 10-2199  
Lab Sample ID: 248519011

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Allquot: 30.03 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 14.6  
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
<b>Tentatively Identified Compound Summary</b>						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
18435-45-5	1-Nonadecene	9.39	174	ug/kg	95	NJ
288246-53-7	Pyridine-3-carboxamide, oxime, N-(2-trif	9.83	365	ug/kg	91	NJ
1599-67-3	1-Docosene	10.05	291	ug/kg	93	NJ
112-95-8	Eicosane	10.63	159	ug/kg	96	NJ
	Unknown	11.77	243	ug/kg		J
	Unknown	12.83	178	ug/kg		J
	Unknown	12.95	275	ug/kg		J
	Unknown	13.64	659	ug/kg		J

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Semi-Volatile  
Certificate of Analysis  
Sample Summary

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SDG Number: 10-2199  
Lab Sample ID: 248519003

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Allquot: 30.09 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 25.4  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 4  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE36-10-8277  
Batch ID: 963133  
Run Date: 03/24/2010 00:40  
Prep Date: 03/10/2010 12:14  
Data File: s6c2327.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	1780	ug/kg	356	1780
108-95-2	Phenol	U	1780	ug/kg	356	1780
95-57-8	2-Chlorophenol	U	1780	ug/kg	356	1780
106-46-7	1,4-Dichlorobenzene	U	1780	ug/kg	356	1780
621-64-7	N-Nitrosodipropylamine	U	1780	ug/kg	356	1780
59-50-7	4-Chloro-3-methylphenol	U	1780	ug/kg	356	1780
83-32-9	Acenaphthene	U	178	ug/kg	58.8	178
121-14-2	2,4-Dinitrotoluene	U	1780	ug/kg	178	1780
100-02-7	4-Nitrophenol	U	1780	ug/kg	588	1780
87-86-5	Pentachlorophenol	U	1780	ug/kg	446	1780
129-00-0	Pyrene	U	178	ug/kg	53.5	178
110-86-1	Pyridine	U	1780	ug/kg	356	1780 UJ,SV7c
62-53-3	Aniline	U	1780	ug/kg	535	1780
111-44-4	bis(2-Chloroethyl) ether	U	1780	ug/kg	356	1780
541-73-1	1,3-Dichlorobenzene	U	1780	ug/kg	356	1780
100-51-6	Benzyl alcohol	U	1780	ug/kg	535	1780 UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	1780	ug/kg	356	1780
108-60-1	bis(2-Chloroisopropyl)ether	U	1780	ug/kg	356	1780 UJ,SV7c
95-48-7	o-Cresol	U	1780	ug/kg	356	1780
65794-96-9	m,p-Cresols	U	1780	ug/kg	535	1780
67-72-1	Hexachloroethane	U	1780	ug/kg	356	1780
98-95-3	Nitrobenzene	U	1780	ug/kg	356	1780
78-59-1	Isophorone	U	1780	ug/kg	356	1780
88-75-5	2-Nitrophenol	U	1780	ug/kg	356	1780
105-67-9	2,4-Dimethylphenol	U	1780	ug/kg	624	1780 UJ,SV12a
111-91-1	bis(2-Chloroethoxy)methane	U	1780	ug/kg	356	1780
120-83-2	2,4-Dichlorophenol	U	1780	ug/kg	356	1780
65-85-0	Benzoic acid	U	3560	ug/kg	891	3560
91-20-3	Naphthalene	U	178	ug/kg	53.5	178
106-47-8	4-Chloroaniline	U	1780	ug/kg	356	1780
87-68-3	Hexachlorobutadiene	U	1780	ug/kg	356	1780
91-57-6	2-Methylnaphthalene	U	178	ug/kg	35.6	178
77-47-4	Hexachlorocyclopentadiene	U	1780	ug/kg	356	1780
88-06-2	2,4,6-Trichlorophenol	U	1780	ug/kg	356	1780
95-95-4	2,4,5-Trichlorophenol	U	1780	ug/kg	356	1780
91-58-7	2-Chloronaphthalene	U	178	ug/kg	58.8	178
88-74-4	2-Nitroaniline	U	1780	ug/kg	356	1780
99-09-2	o-Nitroaniline	U	1780	ug/kg	356	1780
	3-Nitroaniline	U	1780	ug/kg	356	1780

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Sample Summary

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SDG Number: 10-2199  
Lab Sample ID: 248519003

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Aliquot: 30.09 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 25.4  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 4  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE36-10-8277  
Batch ID: 963133  
Run Date: 03/24/2010 00:40  
Prep Date: 03/10/2010 12:14  
Data File: s6c2327.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
606-20-2	Dimethylphthalate	U	1780	ug/kg	356	1780
208-96-8	2,6-Dinitrotoluene	U	1780	ug/kg	178	1780
51-28-5	Acenaphthylene	U	178	ug/kg	53.5	178
132-64-9	2,4-Dinitrophenol	U	3560	ug/kg	677	3560
84-66-2	Dibenzofuran	U	1780	ug/kg	356	1780
86-73-7	Diethylphthalate	U	1780	ug/kg	356	1780
7005-72-3	Fluorene	U	178	ug/kg	53.5	178
534-52-1	4-Chlorophenylphenylether	U	1780	ug/kg	356	1780
100-01-6	2-Methyl-4,6-dinitrophenol	U	1780	ug/kg	356	1780 UJ,SV7c
122-39-4	4-Nitroaniline	U	1780	ug/kg	535	1780
122-66-7	<i>p</i> -Nitroaniline					
101-55-3	Diphenylamine	U	1780	ug/kg	356	1780
118-74-1	Azobenzene	U	1780	ug/kg	356	1780
85-01-8	1,2-Diphenylhydrazine					
120-12-7	4-Bromophenylphenylether	U	1780	ug/kg	356	1780
84-74-2	Hexachlorobenzene	U	1780	ug/kg	356	1780
206-44-0	Phenanthrene	U	178	ug/kg	53.5	178
85-68-7	Anthracene	U	178	ug/kg	35.6	178
56-55-3	Di-n-butylphthalate	U	1780	ug/kg	356	1780
91-94-1	Fluoranthene	U	178	ug/kg	53.5	178
218-01-9	Butylbenzylphthalate	U	1780	ug/kg	356	1780
117-81-7	Benzo(a)anthracene	U	178	ug/kg	53.5	178
117-84-0	3,3'-Dichlorobenzidine	U	1780	ug/kg	535	1780
205-99-2	Chrysene	U	178	ug/kg	53.5	178
207-08-9	bis(2-Ethylhexyl)phthalate	U	1780	ug/kg	356	1780
50-32-8	Di-n-octylphthalate	U	1780	ug/kg	356	1780
193-39-5	Benzo(b)fluoranthene	U	178	ug/kg	53.5	178
53-70-3	Benzo(k)fluoranthene	U	178	ug/kg	53.5	178
191-24-2	Benzo(a)pyrene	U	178	ug/kg	53.5	178
120-82-1	Indeno(1,2,3-cd)pyrene	U	178	ug/kg	53.5	178
	Dibenzo(a,h)anthracene	U	178	ug/kg	53.5	178
	Benzo(ghi)perylene	U	178	ug/kg	53.5	178
	1,2,4-Trichlorobenzene	U	1780	ug/kg	356	1780

## Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
106988-87-8	Biphenylene, 1,2,3,6,7,8,8a,8b-octahydro	5.75	871	ug/kg	87	NJ
24048-44-0	Spiro[4.5]dec-7-ene, 1,8-dimethyl-4-(1-m	5.91	1020	ug/kg	86	NJ

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Semi-Volatile  
Certificate of Analysis  
Sample Summary

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SDG Number: 10-2199  
Lab Sample ID: 248519003

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Aliquot: 30.09 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 25.4  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 4  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE36-10-8277  
Batch ID: 963133  
Run Date: 03/24/2010 00:40  
Prep Date: 03/10/2010 12:14  
Data File: s6c2327.d

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	5.97	720	ug/kg		J
	Unknown	6	1170	ug/kg		J
19870-75-8	Cedrane, 8-propoxy-	6.57	1340	ug/kg	94	NJ
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	9.03	4660	ug/kg	97	NJ
	Unknown	10.33	1180	ug/kg		J
	Unknown	12.24	1230	ug/kg		J
	Unknown	13.01	1700	ug/kg		J

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

SDG Number: 10-2199  
Lab Sample ID: 248519005

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Allquot: 30 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 6.4  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE36-10-8278  
Batch ID: 963133  
Run Date: 03/21/2010 22:09  
Prep Date: 03/10/2010 12:14  
Data File: s6c2118.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	356	ug/kg	71.2	356	
108-95-2	Phenol	U	356	ug/kg	71.2	356	
95-57-8	2-Chlorophenol	U	356	ug/kg	71.2	356	
106-46-7	1,4-Dichlorobenzene	U	356	ug/kg	71.2	356	
621-64-7	N-Nitrosodipropylamine	U	356	ug/kg	71.2	356	
59-50-7	4-Chloro-3-methylphenol	U	356	ug/kg	71.2	356	
83-32-9	Acenaphthene	U	35.6	ug/kg	11.7	35.6	
121-14-2	2,4-Dinitrotoluene	U	356	ug/kg	35.6	356	
100-02-7	4-Nitrophenol	U	356	ug/kg	117	356	
87-86-5	Pentachlorophenol	U	356	ug/kg	89.0	356	
129-00-0	Pyrene	U	35.6	ug/kg	10.7	35.6	
110-86-1	Pyridine	U	356	ug/kg	71.2	356	UJ,SV7c
62-53-3	Aniline	U	356	ug/kg	107	356	
111-44-4	bis(2-Chloroethyl) ether	U	356	ug/kg	71.2	356	UJ,SV7c
541-73-1	1,3-Dichlorobenzene	U	356	ug/kg	71.2	356	
100-51-6	Benzyl alcohol	U	356	ug/kg	107	356	UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	356	ug/kg	71.2	356	
108-60-1	bis(2-Chloroisopropyl)ether	U	356	ug/kg	71.2	356	UJ,SV7c
95-48-7	o-Cresol	U	356	ug/kg	71.2	356	
65794-96-9	m,p-Cresols	U	356	ug/kg	107	356	UJ,SV7c
67-72-1	Hexachloroethane	U	356	ug/kg	71.2	356	
98-95-3	Nitrobenzene	U	356	ug/kg	71.2	356	
78-59-1	Isophorone	U	356	ug/kg	71.2	356	
88-75-5	2-Nitrophenol	U	356	ug/kg	71.2	356	
105-67-9	2,4-Dimethylphenol	U	356	ug/kg	125	356	UJ,SV7c
111-91-1	bis(2-Chloroethoxy)methane	U	356	ug/kg	71.2	356	
120-83-2	2,4-Dichlorophenol	U	356	ug/kg	71.2	356	
65-85-0	Benzoic acid	U	712	ug/kg	178	712	
91-20-3	Naphthalene	U	35.6	ug/kg	10.7	35.6	
106-47-8	4-Chloroaniline	U	356	ug/kg	71.2	356	
87-68-3	Hexachlorobutadiene	U	356	ug/kg	71.2	356	
91-57-6	2-Methylnaphthalene	U	35.6	ug/kg	7.12	35.6	
77-47-4	Hexachlorocyclopentadiene	U	356	ug/kg	71.2	356	
88-06-2	2,4,6-Trichlorophenol	U	356	ug/kg	71.2	356	
95-95-4	2,4,5-Trichlorophenol	U	356	ug/kg	71.2	356	
91-58-7	2-Chloronaphthalene	U	35.6	ug/kg	11.7	35.6	
88-74-4	2-Nitroaniline	U	356	ug/kg	71.2	356	UJ,SV7c
	<i>o</i> -Nitroaniline						
99-09-2	3-Nitroaniline	U	356	ug/kg	71.2	356	

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

SDG Number: 10-2199  
Lab Sample ID: 248519005

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Allquot: 30 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 6.4  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE36-10-8278  
Batch ID: 963133  
Run Date: 03/21/2010 22:09  
Prep Date: 03/10/2010 12:14  
Data File: s6c2118.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	356	ug/kg	71.2	356
606-20-2	2,6-Dinitrotoluene	U	356	ug/kg	35.6	356
208-96-8	Acenaphthylene	U	35.6	ug/kg	10.7	35.6
51-28-5	2,4-Dinitrophenol	U	712	ug/kg	135	712 UJ,SV7c
132-64-9	Dibenzofuran	U	356	ug/kg	71.2	356
84-66-2	Diethylphthalate	U	356	ug/kg	71.2	356
86-73-7	Fluorene	U	35.6	ug/kg	10.7	35.6
7005-72-3	4-Chlorophenylphenylether	U	356	ug/kg	71.2	356
534-52-1	2-Methyl-4,6-dinitrophenol	U	356	ug/kg	71.2	356 UJ,SV7c
100-01-6	4-Nitroaniline	U	356	ug/kg	107	356
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	356	ug/kg	71.2	356
122-66-7	Azobenzene	U	356	ug/kg	71.2	356
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	356	ug/kg	71.2	356
118-74-1	Hexachlorobenzene	U	356	ug/kg	71.2	356
85-01-8	Phenanthrene	U	35.6	ug/kg	10.7	35.6
120-12-7	Anthracene	U	35.6	ug/kg	71.2	35.6
84-74-2	Di-n-butylphthalate	U	356	ug/kg	71.2	356
206-44-0	Fluoranthene	U	35.6	ug/kg	10.7	35.6
85-68-7	Butylbenzylphthalate	U	356	ug/kg	71.2	356
56-55-3	Benzo(a)anthracene	U	35.6	ug/kg	10.7	35.6
91-94-1	3,3'-Dichlorobenzidine	U	356	ug/kg	107	356
218-01-9	Chrysene	U	35.6	ug/kg	10.7	35.6
117-81-7	bis(2-Ethylhexyl)phthalate	U	356	ug/kg	71.2	356
117-84-0	Di-n-octylphthalate	U	356	ug/kg	71.2	356
205-99-2	Benzo(b)fluoranthene	U	35.6	ug/kg	10.7	35.6
207-08-9	Benzo(k)fluoranthene	U	35.6	ug/kg	10.7	35.6
50-32-8	Benzo(a)pyrene	U	35.6	ug/kg	10.7	35.6
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.6	ug/kg	10.7	35.6
53-70-3	Dibenzo(a,h)anthracene	U	35.6	ug/kg	10.7	35.6
191-24-2	Benzo(ghi)perylene	U	35.6	ug/kg	10.7	35.6
120-82-1	1,2,4-Trichlorobenzene	U	356	ug/kg	71.2	356

## Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.86	401	ug/kg		JA
106988-87-8	Biphenylene, 1,2,3,6,7,8,8a,8b-octahydro	5.62	366	ug/kg	87	NJ

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Semi-Volatile  
Certificate of Analysis  
Sample Summary

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SDG Number: 10-2199  
Lab Sample ID: 248519005

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Aliquot: 30 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 6.4  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE36-10-8278  
Batch ID: 963133  
Run Date: 03/21/2010 22:09  
Prep Date: 03/10/2010 12:14  
Data File: s6c2118.d

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	5.79	442	ug/kg		J
495-61-4	Cyclohexene, 1-methyl-4-(5-methyl-1-meth	5.85	384	ug/kg	83	NJ
24048-44-0	Spiro[4.5]dec-7-ene, 1,8-dimethyl-4-(1-m	5.88	632	ug/kg	93	NJ
23986-74-5	1,6-Cyclodecadiene, 1-methyl-5-methylene	5.9	227	ug/kg	99	NJ
3853-83-6	1H-Benzocycloheptene, 2,4a,5,6,7,8,9,9a-	6	288	ug/kg	92	NJ
	Unknown	6.56	259	ug/kg		J
1000188-66-5	2(1H)Naphthalenone, 3,5,6,7,8,8a-hexahyd	7.98	184	ug/kg	90	NJ
	Unknown	8.39	315	ug/kg		J
482-27-9	7H-Furo[3,2-g][1]benzopyran-7-one, 4,9-d	8.59	246	ug/kg	99	NJ
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	8.89	1710	ug/kg	97	NJ
484-08-2	Furo[2,3-b]quinoline, 4,6,7-trimethoxy-	9.28	264	ug/kg	90	NJ
506-51-4	1-Tetracosanol	9.4	160	ug/kg	89	NJ
3386-33-2	Octadecane, 1-chloro-	9.6	209	ug/kg	94	NJ
	Unknown	9.67	224	ug/kg		J
	Unknown	9.79	320	ug/kg		J
	Unknown	9.83	392	ug/kg		J
	Unknown	9.92	488	ug/kg		J
	Unknown	10.05	333	ug/kg		J
112-95-8	Eicosane	10.63	221	ug/kg	96	NJ
	Unknown	11.63	457	ug/kg		J
	Unknown	12.33	890	ug/kg		J
	Unknown	13.02	414	ug/kg		J
83-46-5	.beta.-Sitosterol	13.65	937	ug/kg	91	NJ

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Semi-Volatile  
Certificate of Analysis  
Sample Summary

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SDG Number: 10-2199  
Lab Sample ID: 248519002

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Allquot: 30.01 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 7.1  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 4  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE36-10-8279  
Batch ID: 963133  
Run Date: 03/24/2010 00:17  
Prep Date: 03/10/2010 12:14  
Data File: s6c2326.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	1430	ug/kg	287	1430	
108-95-2	Phenol	U	1430	ug/kg	287	1430	
95-57-8	2-Chlorophenol	U	1430	ug/kg	287	1430	
106-46-7	1,4-Dichlorobenzene	U	1430	ug/kg	287	1430	
621-64-7	N-Nitrosodipropylamine	U	1430	ug/kg	287	1430	
59-50-7	4-Chloro-3-methylphenol	U	1430	ug/kg	287	1430	
83-32-9	Acenaphthene	J	96.5	ug/kg	47.3	143	
121-14-2	2,4-Dinitrotoluene	U	1430	ug/kg	143	1430	
100-02-7	4-Nitrophenol	U	1430	ug/kg	473	1430	
87-86-5	Pentachlorophenol	U	1430	ug/kg	359	1430	
129-00-0	Pyrene		3310	ug/kg	43.0	143	
110-86-1	Pyridine	U	1430	ug/kg	287	1430	UJ,SV7c
62-53-3	Aniline	U	1430	ug/kg	430	1430	↓
111-44-4	bis(2-Chloroethyl) ether	U	1430	ug/kg	287	1430	
541-73-1	1,3-Dichlorobenzene	U	1430	ug/kg	287	1430	
100-51-6	Benzyl alcohol	U	1430	ug/kg	430	1430	UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	1430	ug/kg	287	1430	
108-60-1	bis(2-Chloroisopropyl)ether	U	1430	ug/kg	287	1430	UJ,SV7c
95-48-7	o-Cresol	U	1430	ug/kg	287	1430	
65794-96-9	m,p-Cresols	U	1430	ug/kg	430	1430	
67-72-1	Hexachloroethane	U	1430	ug/kg	287	1430	
98-95-3	Nitrobenzene	U	1430	ug/kg	287	1430	
78-59-1	Isophorone	U	1430	ug/kg	287	1430	
88-75-5	2-Nitrophenol	U	1430	ug/kg	287	1430	
105-67-9	2,4-Dimethylphenol	U	1430	ug/kg	502	1430	UJ,SV12a
111-91-1	bis(2-Chloroethoxy)methane	U	1430	ug/kg	287	1430	
120-83-2	2,4-Dichlorophenol	U	1430	ug/kg	287	1430	
65-85-0	Benzoic acid	U	2870	ug/kg	717	2870	
91-20-3	Naphthalene	U	143	ug/kg	43.0	143	
106-47-8	4-Chloroaniline	U	1430	ug/kg	287	1430	
87-68-3	Hexachlorobutadiene	U	1430	ug/kg	287	1430	
91-57-6	2-Methylnaphthalene	U	143	ug/kg	28.7	143	
77-47-4	Hexachlorocyclopentadiene	U	1430	ug/kg	287	1430	
88-06-2	2,4,6-Trichlorophenol	U	1430	ug/kg	287	1430	
95-95-4	2,4,5-Trichlorophenol	U	1430	ug/kg	287	1430	
91-58-7	2-Chloronaphthalene	U	143	ug/kg	47.3	143	
88-74-4	2-Nitroaniline	U	1430	ug/kg	287	1430	
	o-Nitroaniline						
99-09-2	3-Nitroaniline	U	1430	ug/kg	287	1430	

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

SDG Number: 10-2199  
Lab Sample ID: 248519002

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Allquot: 30.01 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 7.1  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 4  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE36-10-8279  
Batch ID: 963133  
Run Date: 03/24/2010 00:17  
Prep Date: 03/10/2010 12:14  
Data File: s6c2326.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	1430	ug/kg	287	1430
606-20-2	2,6-Dinitrotoluene	U	1430	ug/kg	143	1430
208-96-8	Acenaphthylene	U	143	ug/kg	43.0	143
51-28-5	2,4-Dinitrophenol	U	2870	ug/kg	545	2870
132-64-9	Dibenzofuran	U	1430	ug/kg	287	1430
84-66-2	Diethylphthalate	U	1430	ug/kg	287	1430
86-73-7	Fluorene	J	92.8	ug/kg	43.0	143
7005-72-3	4-Chlorophenylphenylether	U	1430	ug/kg	287	1430
534-52-1	2-Methyl-4,6-dinitrophenol	U	1430	ug/kg	287	1430 UJ,SV7c
100-01-6	4-Nitroaniline	U	1430	ug/kg	430	1430
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	1430	ug/kg	287	1430
122-66-7	Azobenzene	U	1430	ug/kg	287	1430
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	1430	ug/kg	287	1430
118-74-1	Hexachlorobenzene	U	1430	ug/kg	287	1430
85-01-8	Phenanthrene		1350	ug/kg	43.0	143
120-12-7	Anthracene		294	ug/kg	28.7	143
84-74-2	Di-n-butylphthalate	J	441	ug/kg	287	1430
206-44-0	Fluoranthene		3340	ug/kg	43.0	143
85-68-7	Butylbenzylphthalate	U	1430	ug/kg	287	1430
56-55-3	Benzo(a)anthracene		2030	ug/kg	43.0	143
91-94-1	3,3'-Dichlorobenzidine	U	1430	ug/kg	430	1430
218-01-9	Chrysene		2180	ug/kg	43.0	143
117-81-7	bis(2-Ethylhexyl)phthalate	U	1430	ug/kg	287	1430
117-84-0	Di-n-octylphthalate	U	1430	ug/kg	287	1430
205-99-2	Benzo(b)fluoranthene		4170	ug/kg	43.0	143
207-08-9	Benzo(k)fluoranthene	U	143	ug/kg	43.0	143
50-32-8	Benzo(a)pyrene		2240	ug/kg	43.0	143
193-39-5	Indeno(1,2,3-cd)pyrene		1210	ug/kg	43.0	143
53-70-3	Dibenzo(a,h)anthracene	U	143	ug/kg	43.0	143
191-24-2	Benzo(ghi)perylene		1290	ug/kg	43.0	143
120-82-1	1,2,4-Trichlorobenzene	U	1430	ug/kg	287	1430

## Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
7785-70-8	1R-.alpha.-Pinene	3.52	896	ug/kg	97	NJ
	Unknown	7.69	656	ug/kg		J

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

SDG Number: 10-2199  
Lab Sample ID: 248519002

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Allquot: 30.01 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 7.1  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 4  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE36-10-8279  
Batch ID: 963133  
Run Date: 03/24/2010 00:17  
Prep Date: 03/10/2010 12:14  
Data File: s6c2326.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
1000197-14-1	4b,8-Dimethyl-2-isopropylphenanthrene, 4	8.03	590	ug/kg	96	NJ
	Unknown	9.43	1180	ug/kg		J
479-79-8	11H-Benzo[a]fluoren-11-one	9.49	634	ug/kg	95	NJ
559-74-0	Friedelan-3-one	10.33	1360	ug/kg	99	NJ
	Unknown	10.51	1810	ug/kg		J
198-55-0	Perylene	11.17	1670	ug/kg	99	NJ
	Unknown	12.42	955	ug/kg		J
	Unknown	12.62	1020	ug/kg		J
	Unknown	13	1160	ug/kg		J
213-46-7	1,2:7,8-Dibenzophenanthrene	13.37	739	ug/kg	95	NJ

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Semi-Volatile  
Certificate of Analysis  
Sample Summary

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SDG Number: 10-2199  
Lab Sample ID: 248519004

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Allquot: 30.03 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 9.5  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 4  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE36-10-8280  
Batch ID: 963133  
Run Date: 03/24/2010 01:03  
Prep Date: 03/10/2010 12:14  
Data File: s6c2328.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	1470	ug/kg	294	1470
108-95-2	Phenol	U	1470	ug/kg	294	1470
95-57-8	2-Chlorophenol	U	1470	ug/kg	294	1470
106-46-7	1,4-Dichlorobenzene	U	1470	ug/kg	294	1470
621-64-7	N-Nitrosodipropylamine	U	1470	ug/kg	294	1470
59-50-7	4-Chloro-3-methylphenol	U	1470	ug/kg	294	1470
83-32-9	Acenaphthene	U	147	ug/kg	48.5	147
121-14-2	2,4-Dinitrotoluene	U	1470	ug/kg	147	1470
100-02-7	4-Nitrophenol	U	1470	ug/kg	485	1470
87-86-5	Pentachlorophenol	U	1470	ug/kg	368	1470
129-00-0	Pyrene		1570	ug/kg	44.1	147
110-86-1	Pyridine	U	1470	ug/kg	294	1470 UJ,SV7c
62-53-3	Aniline	U	1470	ug/kg	441	1470
111-44-4	bis(2-Chloroethyl) ether	U	1470	ug/kg	294	1470
541-73-1	1,3-Dichlorobenzene	U	1470	ug/kg	294	1470
100-51-6	Benzyl alcohol	U	1470	ug/kg	441	1470 UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	1470	ug/kg	294	1470
108-60-1	bis(2-Chloroisopropyl)ether	U	1470	ug/kg	294	1470 UJ,SV7c
95-48-7	o-Cresol	U	1470	ug/kg	294	1470
65794-96-9	m,p-Cresols	U	1470	ug/kg	441	1470
67-72-1	Hexachloroethane	U	1470	ug/kg	294	1470
98-95-3	Nitrobenzene	U	1470	ug/kg	294	1470
78-59-1	Isophorone	U	1470	ug/kg	294	1470
88-75-5	2-Nitrophenol	U	1470	ug/kg	294	1470
105-67-9	2,4-Dimethylphenol	U	1470	ug/kg	515	1470 UJ,SV12a
111-91-1	bis(2-Chloroethoxy)methane	U	1470	ug/kg	294	1470
120-83-2	2,4-Dichlorophenol	U	1470	ug/kg	294	1470
65-85-0	Benzoic acid	U	2940	ug/kg	736	2940
91-20-3	Naphthalene	U	147	ug/kg	44.1	147
106-47-8	4-Chloroaniline	U	1470	ug/kg	294	1470
87-68-3	Hexachlorobutadiene	U	1470	ug/kg	294	1470
91-57-6	2-Methylnaphthalene	U	147	ug/kg	29.4	147
77-47-4	Hexachlorocyclopentadiene	U	1470	ug/kg	294	1470
88-06-2	2,4,6-Trichlorophenol	U	1470	ug/kg	294	1470
95-95-4	2,4,5-Trichlorophenol	U	1470	ug/kg	294	1470
91-58-7	2-Chloronaphthalene	U	147	ug/kg	48.5	147
88-74-4	2-Nitroaniline	U	1470	ug/kg	294	1470
99-09-2	o-Nitroaniline					
	3-Nitroaniline	U	1470	ug/kg	294	1470

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Semi-Volatile  
Certificate of Analysis  
Sample Summary

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SDG Number: 10-2199  
Lab Sample ID: 248519004

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Allquot: 30.03 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 9.5  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 4  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE36-10-8280  
Batch ID: 963133  
Run Date: 03/24/2010 01:03  
Prep Date: 03/10/2010 12:14  
Data File: s6c2328.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	1470	ug/kg	294	1470
606-20-2	2,6-Dinitrotoluene	U	1470	ug/kg	147	1470
208-96-8	Acenaphthylene	U	147	ug/kg	44.1	147
51-28-5	2,4-Dinitrophenol	U	2940	ug/kg	559	2940
132-64-9	Dibenzofuran	U	1470	ug/kg	294	1470
84-66-2	Diethylphthalate	U	1470	ug/kg	294	1470
86-73-7	Fluorene	U	147	ug/kg	44.1	147
7005-72-3	4-Chlorophenylphenylether	U	1470	ug/kg	294	1470
534-52-1	2-Methyl-4,6-dinitrophenol	U	1470	ug/kg	294	1470 UJ,SV7c
100-01-6	4-Nitroaniline	U	1470	ug/kg	441	1470
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	1470	ug/kg	294	1470
122-66-7	Azobenzene	U	1470	ug/kg	294	1470
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	1470	ug/kg	294	1470
118-74-1	Hexachlorobenzene	U	1470	ug/kg	294	1470
85-01-8	Phenanthrene		608	ug/kg	44.1	147
120-12-7	Anthracene	J	133	ug/kg	29.4	147
84-74-2	Di-n-butylphthalate	U	1470	ug/kg	294	1470
206-44-0	Fluoranthene		1630	ug/kg	44.1	147
85-68-7	Butylbenzylphthalate	U	1470	ug/kg	294	1470
56-55-3	Benzo(a)anthracene		971	ug/kg	44.1	147
91-94-1	3,3'-Dichlorobenzidine	U	1470	ug/kg	441	1470
218-01-9	Chrysene		1210	ug/kg	44.1	147
117-81-7	bis(2-Ethylhexyl)phthalate	U	1470	ug/kg	294	1470
117-84-0	Di-n-octylphthalate	U	1470	ug/kg	294	1470
205-99-2	Benzo(b)fluoranthene		2310	ug/kg	44.1	147
207-08-9	Benzo(k)fluoranthene	U	147	ug/kg	44.1	147
50-32-8	Benzo(a)pyrene		1150	ug/kg	44.1	147
193-39-5	Indeno(1,2,3-cd)pyrene		641	ug/kg	44.1	147
53-70-3	Dibenzo(a,h)anthracene	U	147	ug/kg	44.1	147
191-24-2	Benzo(ghi)perylene		682	ug/kg	44.1	147
120-82-1	1,2,4-Trichlorobenzene	U	1470	ug/kg	294	1470

## Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	5.8	841	ug/kg	99	NJ
	Unknown	9.55	649	ug/kg		J

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Semi-Volatile  
Certificate of Analysis  
Sample Summary

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SDG Number: 10-2199  
Lab Sample ID: 248519004

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Allquot: 30.03 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 9.5  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 4  
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	Flt	Qual
	Unknown	9.73	1090	ug/kg		J
3351-32-4	Chrysene, 2-methyl-	10.03	679	ug/kg	96	NJ
3386-33-2	Octadecane, 1-chloro-	10.06	796	ug/kg	94	NJ
	Unknown	10.32	1210	ug/kg		J
	Unknown	10.47	903	ug/kg		J
604-53-5	1,1'-Binaphthalene	10.6	894	ug/kg	83	NJ
	Unknown	10.68	927	ug/kg		J
198-55-0	Perylene	11.16	1150	ug/kg	99	NJ
112-95-8	Eicosane	11.8	1120	ug/kg	98	NJ

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Certificate of Analysis  
Sample Summary

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SDG Number: 10-2199  
Lab Sample ID: 248519008

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Aliquot: 30.09 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 32.9  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE36-10-8287  
Batch ID: 963133  
Run Date: 03/21/2010 23:20  
Prep Date: 03/10/2010 12:14  
Data File: s6c2121.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	496	ug/kg	99.1	496	
108-95-2	Phenol	U	496	ug/kg	99.1	496	
95-57-8	2-Chlorophenol	U	496	ug/kg	99.1	496	
106-46-7	1,4-Dichlorobenzene	U	496	ug/kg	99.1	496	
621-64-7	N-Nitrosodipropylamine	U	496	ug/kg	99.1	496	
59-50-7	4-Chloro-3-methylphenol	U	496	ug/kg	99.1	496	
83-32-9	Acenaphthene	U	49.6	ug/kg	16.4	49.6	
121-14-2	2,4-Dinitrotoluene	U	496	ug/kg	49.6	496	
100-02-7	4-Nitrophenol	U	496	ug/kg	164	496	
87-86-5	Pentachlorophenol	U	496	ug/kg	124	496	
129-00-0	Pyrene	U	49.6	ug/kg	14.9	49.6	
110-86-1	Pyridine	U	496	ug/kg	99.1	496	UJ,SV7c
62-53-3	Aniline	U	496	ug/kg	149	496	
111-44-4	bis(2-Chloroethyl) ether	U	496	ug/kg	99.1	496	UJ,SV7c
541-73-1	1,3-Dichlorobenzene	U	496	ug/kg	99.1	496	
100-51-6	Benzyl alcohol	U	496	ug/kg	149	496	UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	496	ug/kg	99.1	496	
108-60-1	bis(2-Chloroisopropyl)ether	U	496	ug/kg	99.1	496	UJ,SV7c
95-48-7	o-Cresol	U	496	ug/kg	99.1	496	
65794-96-9	m,p-Cresols	U	496	ug/kg	149	496	UJ,SV7c
67-72-1	Hexachloroethane	U	496	ug/kg	99.1	496	
98-95-3	Nitrobenzene	U	496	ug/kg	99.1	496	
78-59-1	Isophorone	U	496	ug/kg	99.1	496	
88-75-5	2-Nitrophenol	U	496	ug/kg	99.1	496	
105-67-9	2,4-Dimethylphenol	U	496	ug/kg	173	496	UJ,SV7c
111-91-1	bis(2-Chloroethoxy)methane	U	496	ug/kg	99.1	496	
120-83-2	2,4-Dichlorophenol	U	496	ug/kg	99.1	496	
65-85-0	Benzoic acid	J	355	ug/kg	248	991	
91-20-3	Naphthalene	U	49.6	ug/kg	14.9	49.6	
106-47-8	4-Chloroaniline	U	496	ug/kg	99.1	496	
87-68-3	Hexachlorobutadiene	U	496	ug/kg	99.1	496	
91-57-6	2-Methylnaphthalene	U	49.6	ug/kg	9.91	49.6	
77-47-4	Hexachlorocyclopentadiene	U	496	ug/kg	99.1	496	
88-06-2	2,4,6-Trichlorophenol	U	496	ug/kg	99.1	496	
95-95-4	2,4,5-Trichlorophenol	U	496	ug/kg	99.1	496	
91-58-7	2-Chloronaphthalene	U	49.6	ug/kg	16.4	49.6	
88-74-4	2-Nitroaniline	U	496	ug/kg	99.1	496	UJ,SV7c
	<i>o</i> -Nitroaniline						
99-09-2	3-Nitroaniline	U	496	ug/kg	99.1	496	

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Sample Summary

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SDG Number: 10-2199  
Lab Sample ID: 248519008

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Aliquot: 30.09 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 32.9  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE36-10-8287  
Batch ID: 963133  
Run Date: 03/21/2010 23:20  
Prep Date: 03/10/2010 12:14  
Data File: s6c2121.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	496	ug/kg	99.1	496
606-20-2	2,6-Dinitrotoluene	U	496	ug/kg	49.6	496
208-96-8	Acenaphthylene	U	49.6	ug/kg	14.9	49.6
51-28-5	2,4-Dinitrophenol	U	991	ug/kg	188	991 UJ,SV7c
132-64-9	Dibenzofuran	U	496	ug/kg	99.1	496
84-66-2	Diethylphthalate	U	496	ug/kg	99.1	496
86-73-7	Fluorene	U	49.6	ug/kg	14.9	49.6
7005-72-3	4-Chlorophenylphenylether	U	496	ug/kg	99.1	496
534-52-1	2-Methyl-4,6-dinitrophenol	U	496	ug/kg	99.1	496 UJ,SV7c
100-01-6	4-Nitroaniline	U	496	ug/kg	149	496
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	496	ug/kg	99.1	496
122-66-7	Azobenzene	U	496	ug/kg	99.1	496
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	496	ug/kg	99.1	496
118-74-1	Hexachlorobenzene	U	496	ug/kg	99.1	496
85-01-8	Phenanthrene	U	49.6	ug/kg	14.9	49.6
120-12-7	Anthracene	U	49.6	ug/kg	9.91	49.6
84-74-2	Di-n-butylphthalate	U	496	ug/kg	99.1	496
206-44-0	Fluoranthene	U	49.6	ug/kg	14.9	49.6
85-68-7	Butylbenzylphthalate	U	496	ug/kg	99.1	496
56-55-3	Benzo(a)anthracene	U	49.6	ug/kg	14.9	49.6
91-94-1	3,3'-Dichlorobenzidine	U	496	ug/kg	149	496
218-01-9	Chrysene	U	49.6	ug/kg	14.9	49.6
117-81-7	bis(2-Ethylhexyl)phthalate	U	496	ug/kg	99.1	496
117-84-0	Di-n-octylphthalate	U	496	ug/kg	99.1	496
205-99-2	Benzo(b)fluoranthene	U	49.6	ug/kg	14.9	49.6
207-08-9	Benzo(k)fluoranthene	U	49.6	ug/kg	14.9	49.6
50-32-8	Benzo(a)pyrene	U	49.6	ug/kg	14.9	49.6
193-39-5	Indeno(1,2,3-cd)pyrene	U	49.6	ug/kg	14.9	49.6
53-70-3	Dibenzo(a,h)anthracene	U	49.6	ug/kg	14.9	49.6
191-24-2	Benzo(ghi)perylene	U	49.6	ug/kg	14.9	49.6
120-82-1	1,2,4-Trichlorobenzene	U	496	ug/kg	99.1	496

## Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown	4.49	644	ug/kg		J
629-62-9	Pentadecane	8.65	274	ug/kg	96	NJ

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Sample Summary

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SDG Number: 10-2199  
Lab Sample ID: 248519008

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Allquot: 30.09 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 32.9  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE36-10-8287  
Batch ID: 963133  
Run Date: 03/21/2010 23:20  
Prep Date: 03/10/2010 12:14  
Data File: s6c2121.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	Flt	Qual
	Unknown	8.74	280	ug/kg		J
	Unknown	8.86	273	ug/kg		J
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	8.94	413	ug/kg	98	NJ
112-95-8	Eicosane	8.97	227	ug/kg	98	NJ
	Unknown	9.03	294	ug/kg		J
	Unknown	9.11	531	ug/kg		J
	Unknown	9.2	854	ug/kg		J
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	9.3	1020	ug/kg	94	NJ
	Unknown	9.38	1170	ug/kg		J
	Unknown	9.56	610	ug/kg		J
	Unknown	9.59	511	ug/kg		J
1000193-07-4	Propanephosphonic acid, bis(trimethylsil	9.72	617	ug/kg	84	NJ
	Unknown	9.82	1560	ug/kg		J
3386-33-2	Octadecane, 1-chloro-	9.91	635	ug/kg	95	NJ
1599-67-3	1-Docosene	10.03	770	ug/kg	96	NJ
	Unknown	10.26	504	ug/kg		J
288246-53-7	Pyridine-3-carboxamide, oxime, N-(2-trif	10.35	944	ug/kg	93	NJ
	Unknown	10.63	793	ug/kg		J
	Unknown	11.57	398	ug/kg		J
	Unknown	11.77	681	ug/kg		J
83-47-6	.gamma.-Sitosterol	13.64	640	ug/kg	91	NJ

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Semi-Volatile  
Certificate of Analysis  
Sample Summary

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SDG Number: 10-2199  
Lab Sample ID: 248519001

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Allquot: 30 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 16.4  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 4  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE36-10-8288  
Batch ID: 963133  
Run Date: 03/23/2010 23:53  
Prep Date: 03/10/2010 12:14  
Data File: s6c2325.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	1600	ug/kg	319	1600	
108-95-2	Phenol	U	1600	ug/kg	319	1600	
95-57-8	2-Chlorophenol	U	1600	ug/kg	319	1600	
106-46-7	1,4-Dichlorobenzene	U	1600	ug/kg	319	1600	
621-64-7	N-Nitrosodipropylamine	U	1600	ug/kg	319	1600	
59-50-7	4-Chloro-3-methylphenol	U	1600	ug/kg	319	1600	
83-32-9	Acenaphthene	U	160	ug/kg	52.7	160	
121-14-2	2,4-Dinitrotoluene	U	1600	ug/kg	160	1600	
100-02-7	4-Nitrophenol	U	1600	ug/kg	527	1600	
87-86-5	Pentachlorophenol	U	1600	ug/kg	399	1600	
129-00-0	Pyrene	U	160	ug/kg	47.9	160	
110-86-1	Pyridine	U	1600	ug/kg	319	1600	UJ,SV7c
62-53-3	Aniline	U	1600	ug/kg	479	1600	↓
111-44-4	bis(2-Chloroethyl) ether	U	1600	ug/kg	319	1600	
541-73-1	1,3-Dichlorobenzene	U	1600	ug/kg	319	1600	
100-51-6	Benzyl alcohol	U	1600	ug/kg	479	1600	UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	1600	ug/kg	319	1600	
108-60-1	bis(2-Chloroisopropyl)ether	U	1600	ug/kg	319	1600	UJ,SV7c
95-48-7	o-Cresol	U	1600	ug/kg	319	1600	
65794-96-9	m,p-Cresols	U	1600	ug/kg	479	1600	
67-72-1	Hexachloroethane	U	1600	ug/kg	319	1600	
98-95-3	Nitrobenzene	U	1600	ug/kg	319	1600	
78-59-1	Isophorone	U	1600	ug/kg	319	1600	
88-75-5	2-Nitrophenol	U	1600	ug/kg	319	1600	
105-67-9	2,4-Dimethylphenol	U	1600	ug/kg	559	1600	UJ,SV12a
111-91-1	bis(2-Chloroethoxy)methane	U	1600	ug/kg	319	1600	
120-83-2	2,4-Dichlorophenol	U	1600	ug/kg	319	1600	
65-85-0	Benzoic acid	U	3190	ug/kg	798	3190	
91-20-3	Naphthalene	U	160	ug/kg	47.9	160	
106-47-8	4-Chloroaniline	U	1600	ug/kg	319	1600	
87-68-3	Hexachlorobutadiene	U	1600	ug/kg	319	1600	
91-57-6	2-Methylnaphthalene	U	160	ug/kg	31.9	160	
77-47-4	Hexachlorocyclopentadiene	U	1600	ug/kg	319	1600	
88-06-2	2,4,6-Trichlorophenol	U	1600	ug/kg	319	1600	
95-95-4	2,4,5-Trichlorophenol	U	1600	ug/kg	319	1600	
91-58-7	2-Chloronaphthalene	U	160	ug/kg	52.7	160	
88-74-4	2-Nitroaniline	U	1600	ug/kg	319	1600	
	o-Nitroaniline						
99-09-2	3-Nitroaniline	U	1600	ug/kg	319	1600	

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Semi-Volatile  
Certificate of Analysis  
Sample Summary

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SDG Number: 10-2199  
Lab Sample ID: 248519001

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Allquot: 30 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 16.4  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 4  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE36-10-8288  
Batch ID: 963133  
Run Date: 03/23/2010 23:53  
Prep Date: 03/10/2010 12:14  
Data File: s6c2325.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
606-20-2	Dimethylphthalate	U	1600	ug/kg	319	1600
208-96-8	2,6-Dinitrotoluene	U	1600	ug/kg	160	1600
51-28-5	Acenaphthylene	U	160	ug/kg	47.9	160
132-64-9	2,4-Dinitrophenol	U	3190	ug/kg	606	3190
84-66-2	Dibenzofuran	U	1600	ug/kg	319	1600
86-73-7	Diethylphthalate	U	1600	ug/kg	319	1600
7005-72-3	Fluorene	U	160	ug/kg	47.9	160
534-52-1	4-Chlorophenylphenylether	U	1600	ug/kg	319	1600
100-01-6	2-Methyl-4,6-dinitrophenol	U	1600	ug/kg	319	1600 UJ,SV7c
122-39-4	4-Nitroaniline	U	1600	ug/kg	479	1600
122-66-7	<i>p</i> -Nitroaniline					
101-55-3	Diphenylamine	U	1600	ug/kg	319	1600
118-74-1	Azobenzene	U	1600	ug/kg	319	1600
85-01-8	1,2-Diphenylhydrazine					
120-12-7	4-Bromophenylphenylether	U	1600	ug/kg	319	1600
84-74-2	Hexachlorobenzene	U	1600	ug/kg	319	1600
206-44-0	Phenanthrene	U	160	ug/kg	47.9	160
85-68-7	Anthracene	U	160	ug/kg	31.9	160
56-55-3	Di-n-butylphthalate	U	1600	ug/kg	319	1600
91-94-1	Fluoranthene	U	160	ug/kg	47.9	160
218-01-9	Butylbenzylphthalate	U	1600	ug/kg	319	1600
117-81-7	Benzo(a)anthracene	U	160	ug/kg	47.9	160
117-84-0	3,3'-Dichlorobenzidine	U	1600	ug/kg	479	1600
205-99-2	Chrysene	U	160	ug/kg	47.9	160
207-08-9	bis(2-Ethylhexyl)phthalate	U	1600	ug/kg	319	1600
50-32-8	Di-n-octylphthalate	U	1600	ug/kg	319	1600
193-39-5	Benzo(b)fluoranthene	U	160	ug/kg	47.9	160
53-70-3	Benzo(k)fluoranthene	U	160	ug/kg	47.9	160
191-24-2	Benzo(a)pyrene	U	160	ug/kg	47.9	160
120-82-1	Indeno(1,2,3-cd)pyrene	U	160	ug/kg	47.9	160
	Dibenzo(a,h)anthracene	U	160	ug/kg	47.9	160
	Benzo(ghi)perylene	U	160	ug/kg	47.9	160
	1,2,4-Trichlorobenzene	U	1600	ug/kg	319	1600

## Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
1058-61-3	Stigmast-4-en-3-one	8.84	1160	ug/kg	94	NJ
559-74-0	Friedelan-3-one	10.34	4090	ug/kg	95	NJ

LMF  
5/6/10



Semi-Volatile  
Certificate of Analysis  
Sample Summary

Page 3 of 3

SDG Number: 10-2199  
Lab Sample ID: 248519001Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Allquot: 30 g  
Column: J&W DB-5MSMatrix: R  
%Moisture: 16.4  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 4  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parmname	Qualfler	Result	Units	MDL/LOD	PQL/LOQ	
Tentatively Identified Compound Summary							
CAS No.	Tentatively Identified Compound (TIC)		RT	Estimated	Units	Flt	Qual
	Unknown		12.24	1000	ug/kg		J
	Unknown		13	838	ug/kg		J

LMF  
5/6/10

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

Page 1 of 3

SDG Number: 10-2199  
Lab Sample ID: 248519007

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Allquot: 30.09 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 28.9  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 4  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE36-10-8291  
Batch ID: 963133  
Run Date: 03/24/2010 01:50  
Prep Date: 03/10/2010 12:14  
Data File: s6c2330.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	1870	ug/kg	374	1870	
108-95-2	Phenol	U	1870	ug/kg	374	1870	
95-57-8	2-Chlorophenol	U	1870	ug/kg	374	1870	
106-46-7	1,4-Dichlorobenzene	U	1870	ug/kg	374	1870	
621-64-7	N-Nitrosodipropylamine	U	1870	ug/kg	374	1870	
59-50-7	4-Chloro-3-methylphenol	U	1870	ug/kg	374	1870	
83-32-9	Acenaphthene	U	187	ug/kg	61.7	187	
121-14-2	2,4-Dinitrotoluene	U	1870	ug/kg	187	1870	
100-02-7	4-Nitrophenol	U	1870	ug/kg	617	1870	
87-86-5	Pentachlorophenol	U	1870	ug/kg	468	1870	
129-00-0	Pyrene	U	187	ug/kg	56.1	187	
110-86-1	Pyridine	U	1870	ug/kg	374	1870	UJ,SV7c
62-53-3	Aniline	U	1870	ug/kg	561	1870	↓
111-44-4	bis(2-Chloroethyl) ether	U	1870	ug/kg	374	1870	
541-73-1	1,3-Dichlorobenzene	U	1870	ug/kg	374	1870	
100-51-6	Benzyl alcohol	U	1870	ug/kg	561	1870	UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	1870	ug/kg	374	1870	
108-60-1	bis(2-Chloroisopropyl)ether	U	1870	ug/kg	374	1870	UJ,SV7c
95-48-7	o-Cresol	U	1870	ug/kg	374	1870	
65794-96-9	m,p-Cresols	U	1870	ug/kg	561	1870	
67-72-1	Hexachloroethane	U	1870	ug/kg	374	1870	
98-95-3	Nitrobenzene	U	1870	ug/kg	374	1870	
78-59-1	Isophorone	U	1870	ug/kg	374	1870	
88-75-5	2-Nitrophenol	U	1870	ug/kg	374	1870	
105-67-9	2,4-Dimethylphenol	U	1870	ug/kg	655	1870	UJ,SV12a
111-91-1	bis(2-Chloroethoxy)methane	U	1870	ug/kg	374	1870	
120-83-2	2,4-Dichlorophenol	U	1870	ug/kg	374	1870	
65-85-0	Benzoic acid	U	3740	ug/kg	935	3740	
91-20-3	Naphthalene	U	187	ug/kg	56.1	187	
106-47-8	4-Chloroaniline	U	1870	ug/kg	374	1870	
87-68-3	Hexachlorobutadiene	U	1870	ug/kg	374	1870	
91-57-6	2-Methylnaphthalene	U	187	ug/kg	37.4	187	
77-47-4	Hexachlorocyclopentadiene	U	1870	ug/kg	374	1870	
88-06-2	2,4,6-Trichlorophenol	U	1870	ug/kg	374	1870	
95-95-4	2,4,5-Trichlorophenol	U	1870	ug/kg	374	1870	
91-58-7	2-Chloronaphthalene	U	187	ug/kg	61.7	187	
88-74-4	2-Nitroaniline	U	1870	ug/kg	374	1870	
	o-Nitroaniline						
99-09-2	3-Nitroaniline	U	1870	ug/kg	374	1870	

LMF  
5/6/10

Semi-Volatile  
Certificate of Analysis  
Sample Summary

Page 2 of 3

SDG Number: 10-2199  
Lab Sample ID: 248519007

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Allquot: 30.09 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 28.9  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 4  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE36-10-8291  
Batch ID: 963133  
Run Date: 03/24/2010 01:50  
Prep Date: 03/10/2010 12:14  
Data File: s6c2330.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	1870	ug/kg	374	1870
606-20-2	2,6-Dinitrotoluene	U	1870	ug/kg	187	1870
208-96-8	Acenaphthylene	U	187	ug/kg	56.1	187
51-28-5	2,4-Dinitrophenol	U	3740	ug/kg	711	3740
132-64-9	Dibenzofuran	U	1870	ug/kg	374	1870
84-66-2	Diethylphthalate	U	1870	ug/kg	374	1870
86-73-7	Fluorene	U	187	ug/kg	56.1	187
7005-72-3	4-Chlorophenylphenylether	U	1870	ug/kg	374	1870
534-52-1	2-Methyl-4,6-dinitrophenol	U	1870	ug/kg	374	1870 UJ,SV7c
100-01-6	4-Nitroaniline	U	1870	ug/kg	561	1870
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	1870	ug/kg	374	1870
122-66-7	Azobenzene	U	1870	ug/kg	374	1870
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	1870	ug/kg	374	1870
118-74-1	Hexachlorobenzene	U	1870	ug/kg	374	1870
85-01-8	Phenanthrene	U	187	ug/kg	56.1	187
120-12-7	Anthracene	U	187	ug/kg	37.4	187
84-74-2	Di-n-butylphthalate	U	1870	ug/kg	374	1870
206-44-0	Fluoranthene	U	187	ug/kg	56.1	187
85-68-7	Butylbenzylphthalate	U	1870	ug/kg	374	1870
56-55-3	Benzo(a)anthracene	U	187	ug/kg	56.1	187
91-94-1	3,3'-Dichlorobenzidine	U	1870	ug/kg	561	1870
218-01-9	Chrysene	U	187	ug/kg	56.1	187
117-81-7	bis(2-Ethylhexyl)phthalate	U	1870	ug/kg	374	1870
117-84-0	Di-n-octylphthalate	U	1870	ug/kg	374	1870
205-99-2	Benzo(b)fluoranthene	U	187	ug/kg	56.1	187
207-08-9	Benzo(k)fluoranthene	U	187	ug/kg	56.1	187
50-32-8	Benzo(a)pyrene	U	187	ug/kg	56.1	187
193-39-5	Indeno(1,2,3-cd)pyrene	U	187	ug/kg	56.1	187
53-70-3	Dibenzo(a,h)anthracene	U	187	ug/kg	56.1	187
191-24-2	Benzo(ghi)perylene	U	187	ug/kg	56.1	187
120-82-1	1,2,4-Trichlorobenzene	U	1870	ug/kg	374	1870

## Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	9.73	917	ug/kg		J
300574-36-1	5-Bromo-4-oxo-4,5,6,7-tetrahydrobenzofur	10.33	1510	ug/kg	90	NJ

LMF  
5/6/10

Semi-Volatile  
Certificate of Analysis  
Sample Summary

SDG Number: 10-2199  
Lab Sample ID: 248519007

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Allquot: 30.09 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 28.9  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 4  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
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
	Unknown		12.26	772	ug/kg	J

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5/6/10

## DATA VALIDATION COVER SHEET

5122-1

## Data Validation Cover Sheet

Records Use only



## Section I.

REQUEST NUMBER: 10-2199 VALIDATION DATE: 5/6/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Larry Fukui ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

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

## Section II. Completeness Check

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

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


- The LCS %R was <10% for tetryl. The associated sample results were NDs and, thus, were qualified R,HE12. The LCS %Rs were < the laboratory LAL but  $\geq 10\%$  for 4-amino-2,6-dinitrotoluene; 2-amino-4,6-dinitrotoluene; and 2,6-dinitrotoluene. The associated sample results were NDs and, thus, were qualified UJ,HE12a.
- All samples except RE36-10-8277, -8279, -8280, and -8288 were analyzed >1X but  $\leq 2$ X the method-specified HT for the primary analytes. The associated sample results were NDs and, thus, were qualified UJ,HE9.
- The ICAL RRF was <0.05 but  $\geq 0.01$  for 2-amino-4,6-dinitrotoluene. The associated sample results were NDs and, thus, were qualified UJ,HE7b.
- The MS %R was > the laboratory UAL for TATB. The associated sample results were NDs and, thus, were not qualified. It should be noted that the MS and MSD parent sample was from another LANL RN and the raw data for the parent sample was not included in the package. No sample data were qualified as a result.

Reviewed by: ETM Level: 1 Date: 5/7/10


VALIDATOR'S SIGNATURE:

DATE: 5/6/10




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	 <b>Los Alamos</b> <small>NATIONAL LABORATORY</small> <small>EST. 1943</small>

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 checked="" type="checkbox"/>	<input 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	20. The ICV and/or CCV were recovered outside the method limits.	UJ, R, HE7c	J, HE7c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	21. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, R, HE7d	J, HE7d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	22. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, HE7f	R, HE7f



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

Yes No N/A				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	23. The mass spectral documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, HE8a	R, HE8a
<input checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	26. The LCS percent recovery was <10%. Follow the external laboratory limits.	R, HE12	J-, HE12
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	27. The LCS percent recovery was < the Lower Acceptance Limit but >10%. Follow the external laboratory limits.	UJ, HE12a	J-, HE12a
<input 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	
<b>5122-2</b>  <b>LC/MS/MS High Explosive 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 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: RE36-10-8288

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 248519001

Sample Amount 2

Molsture: 16.4

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0415072.wiff

Date Analyzed: 16-APR-10 16:50

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene UJ,HE12a	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene UJ,HE7b	500	U
479-45-8	Tetryl R,HE12	500	U
606-20-2	2,6-Dinitrotoluene UJ,HE12a	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

LMF  
5/6/10

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# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-8288

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 248519001

Sample Amount 2

Moisture: 16.4

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04090054.wiff

Date Analyzed: 09-APR-10 21:07

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

LMF  
5/6/10

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-8279

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 248519002

Sample Amount 2

Moisture: 7.1

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0415073.wiff

Date Analyzed: 16-APR-10 17:17

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 UJ,HE12a	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene UJ,HE7b	500	U
479-45-8	Tetryl R,HE12	500	U
606-20-2	2,6-Dinitrotoluene UJ,HE12a	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

LMF  
5/6/10

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-8279

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 248519002

Sample Amount 2

Moisture: 7.1

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04090055.wiff

Date Analyzed: 09-APR-10 21:23

Units: ug/kg

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

\*Concentration =

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

LMF  
5/6/10

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-8277

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 248519003

Sample Amount 2

Moisture: 25.4

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0415074.wiff

Date Analyzed: 16-APR-10 17:43

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene UJ,HE12a	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene UJ,HE7b	500	U
479-45-8	Tetryl R,HE12	500	U
606-20-2	2,6-Dinitrotoluene UJ,HE12a	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

LMF  
5/6/10

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-8277

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 248519003

Sample Amount 2

Moisture: 25.4

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04090056.wiff

Date Analyzed: 09-APR-10 21:38

Units: ug/kg

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

\*Concentration =

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

LMF  
5/6/10



1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-8280

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 248519004

Sample Amount 2

Moisture: 9.5

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0415075.wiff

Date Analyzed: 16-APR-10 18:08

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 UJ,HE12a	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene UJ,HE7b	500	U
479-45-8	Tetryl R,HE12	500	U
606-20-2	2,6-Dinitrotoluene UJ,HE12a	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

LMF  
5/6/10

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-8280

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 248519004

Sample Amount 2

Moisture: 9.5

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04090057.wiff

Date Analyzed: 09-APR-10 21:54

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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5/6/10

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-8278

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 248519005

Sample Amount 2

Moisture: 6.4

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0420013.wiff

Date Analyzed: 20-APR-10 19:30

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene UJ.HE9	500	HU
121-14-2	2,4-Dinitrotoluene	500	HU
121-82-4	RDX	500	HU
19406-51-0	4-Amino-2,6-dinitrotoluene	500	HU
2691-41-0	HMX	500	HU
35572-78-2	2-Amino-4,6-dinitrotoluene	500	HU
479-45-8	Tetryl R.HE12	500	HU
606-20-2	2,6-Dinitrotoluene UJ.HE9	500	HU
78-11-5	PETN	1000	HU
88-72-2	o-Nitrotoluene	500	HU
98-95-3	Nitrobenzene	500	HU
99-08-1	m-Nitrotoluene	500	HU
99-35-4	1,3,5-Trinitrobenzene	500	HU
99-65-0	m-Dinitrobenzene	500	HU
99-99-0	p-Nitrotoluene	500	HU

\*Concentration =

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

LMF  
5/6/10

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-8278

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 248519005

Sample Amount 2

Moisture: 6.4

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04090058.wiff

Date Analyzed: 09-APR-10 22:10

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		

LMF  
5/6/10

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-8274

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 248519006

Sample Amount 2

Molsture: 10.2

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0420014.wiff

Date Analyzed: 20-APR-10 19:56

Units: ug/kg

Cas No.	Compound		Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	UJ.HE9	500	HU
121-14-2	2,4-Dinitrotoluene		500	HU
121-82-4	RDX		500	HU
19406-51-0	4-Amino-2,6-dinitrotoluene		500	HU
2691-41-0	HMX		500	HU
35572-78-2	2-Amino-4,6-dinitrotoluene	↓	500	HU
479-45-8	Tetryl	R.HE12	500	HU
606-20-2	2,6-Dinitrotoluene	UJ.HE9	500	HU
78-11-5	PETN		1000	HU
88-72-2	o-Nitrotoluene		500	HU
98-95-3	Nitrobenzene		500	HU
99-08-1	m-Nitrotoluene		500	HU
99-35-4	1,3,5-Trinitrobenzene		500	HU
99-65-0	m-Dinitrobenzene		500	HU
99-99-0	p-Nitrotoluene	↓	500	HU

\*Concentration =

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

LMF  
5/6/10

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-8274

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 248519006

Sample Amount 2

Moisture: 10.2

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04090059.wiff

Date Analyzed: 09-APR-10 22:25

Units: ug/kg

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

\*Concentration =

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

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1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-8291

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 248519007

Sample Amount 2

Moisture: 28.9

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0420015.wiff

Date Analyzed: 20-APR-10 20:22

Units: ug/kg

Cas No.	Compound		Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	UJ.HE9	500	HU
121-14-2	2,4-Dinitrotoluene		500	HU
121-82-4	RDX		500	HU
19406-51-0	4-Amino-2,6-dinitrotoluene		500	HU
2691-41-0	HMX		500	HU
35572-78-2	2-Amino-4,6-dinitrotoluene	↓	500	HU
479-45-8	Tetryl	R.HE12	500	HU
606-20-2	2,6-Dinitrotoluene	UJ.HE9	500	HU
78-11-5	PETN		1000	HU
88-72-2	o-Nitrotoluene		500	HU
98-95-3	Nitrobenzene		500	HU
99-08-1	m-Nitrotoluene		500	HU
99-35-4	1,3,5-Trinitrobenzene		500	HU
99-65-0	m-Dinitrobenzene		500	HU
99-99-0	p-Nitrotoluene	↓	500	HU

\*Concentration =

Instrument Value	X	Concentrated Extract Volume	X	Dilution Factor
		Sample Amount		

LMF  
5/6/10

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-8291

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 248519007

Sample Amount 2

Moisture: 28.9

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04090060.wiff

Date Analyzed: 09-APR-10 22:41

Units: ug/kg

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

\*Concentration =

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

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1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-8287

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 248519008

Sample Amount 2

Moisture: 32.9

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0420016.wiff

Date Analyzed: 20-APR-10 20:48

Units: ug/kg

Cas No.	Compound		Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	UJ.HE9	500	HU
121-14-2	2,4-Dinitrotoluene		500	HU
121-82-4	RDX		500	HU
19406-51-0	4-Amino-2,6-dinitrotoluene		500	HU
2691-41-0	HMX		500	HU
35572-78-2	2-Amino-4,6-dinitrotoluene	↓	500	HU
479-45-8	Tetryl	R.HE12	500	HU
606-20-2	2,6-Dinitrotoluene	UJ.HE9	500	HU
78-11-5	PETN		1000	HU
88-72-2	o-Nitrotoluene		500	HU
98-95-3	Nitrobenzene		500	HU
99-08-1	m-Nitrotoluene		500	HU
99-35-4	1,3,5-Trinitrobenzene		500	HU
99-65-0	m-Dinitrobenzene		500	HU
99-99-0	p-Nitrotoluene	↓	500	HU

\*Concentration =

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

LMF  
5/6/10

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-8287

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 248519008

Sample Amount 2

Molsture: 32.9

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04090061.wiff

Date Analyzed: 09-APR-10 22:57

Units: ug/kg

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

\*Concentration =

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

LMF  
5/6/10

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-8273

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 248519009

Sample Amount 2

Moisture: 29.0

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0420017.wiff

Date Analyzed: 20-APR-10 21:13

Units: ug/kg

Cas No.	Compound		Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	UJ.HE9	500	HU
121-14-2	2,4-Dinitrotoluene		500	HU
121-82-4	RDX		500	HU
19406-51-0	4-Amino-2,6-dinitrotoluene		500	HU
2691-41-0	HMX		500	HU
35572-78-2	2-Amino-4,6-dinitrotoluene	↓	500	HU
479-45-8	Tetryl	R.HE12	500	HU
606-20-2	2,6-Dinitrotoluene	UJ.HE9	500	HU
78-11-5	PETN		1000	HU
88-72-2	o-Nitrotoluene		500	HU
98-95-3	Nitrobenzene		500	HU
99-08-1	m-Nitrotoluene		500	HU
99-35-4	1,3,5-Trinitrobenzene		500	HU
99-65-0	m-Dinitrobenzene		500	HU
99-99-0	p-Nitrotoluene	↓	500	HU

\*Concentration =

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

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5/6/10

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-8273

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 248519009

Sample Amount 2

Moisture: 29.0

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04090062.wiff

Date Analyzed: 09-APR-10 23:12

Units: ug/kg

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

\*Concentration =

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

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5/6/10

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-8275

Lab Code: GEL

GEL Job No (SDG) 10-2192

Matrix: SOIL

GEL Sample ID: 248519010

Sample Amount 2

Moisture: 40.1

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0420018.wiff

Date Analyzed: 20-APR-10 21:39

Units: ug/kg

Cas No.	Compound		Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	UJ,HE9	500	HU
121-14-2	2,4-Dinitrotoluene		500	HU
121-82-4	RDX		500	HU
19406-51-0	4-Amino-2,6-dinitrotoluene		500	HU
2691-41-0	HMX		500	HU
35572-78-2	2-Amino-4,6-dinitrotoluene	↓	500	HU
479-45-8	Tetryl	R,HE12	500	HU
606-20-2	2,6-Dinitrotoluene	UJ,HE9	500	HU
78-11-5	PETN		1000	HU
88-72-2	o-Nitrotoluene		500	HU
98-95-3	Nitrobenzene		500	HU
99-08-1	m-Nitrotoluene		500	HU
99-35-4	1,3,5-Trinitrobenzene		500	HU
99-65-0	m-Dinitrobenzene		500	HU
99-99-0	p-Nitrotoluene	↓	500	HU

\*Concentration =

Instrument Value	X	Concentrated Extract Volume	X	Dilution Factor
		Sample Amount		

LMF  
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1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-8275

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 248519010

Sample Amount 2

Moisture: 40.1

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04090066.wiff

Date Analyzed: 10-APR-10 00:15

Units: ug/kg

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

\*Concentration =

Instrument Value	X	Concentrated Extract Volume	X	Dilution Factor
		Sample Amount		

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-8276

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 248519011

Sample Amount 2

Moisture: 14.6

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0420019.wiff

Date Analyzed: 20-APR-10 22:05

Units: ug/kg

Cas No.	Compound		Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	UJ.HE9	500	HU
121-14-2	2,4-Dinitrotoluene		500	HU
121-82-4	RDX		500	HU
19406-51-0	4-Amino-2,6-dinitrotoluene		500	HU
2691-41-0	HMX		500	HU
35572-78-2	2-Amino-4,6-dinitrotoluene	↓	500	HU
479-45-8	Tetryl	R.HE12	500	HU
606-20-2	2,6-Dinitrotoluene	UJ.HE9	500	HU
78-11-5	PETN		1000	HU
88-72-2	o-Nitrotoluene		500	HU
98-95-3	Nitrobenzene		500	HU
99-08-1	m-Nitrotoluene		500	HU
99-35-4	1,3,5-Trinitrobenzene		500	HU
99-65-0	m-Dinitrobenzene		500	HU
99-99-0	p-Nitrotoluene	↓	500	HU

\*Concentration =

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

LMF  
5/6/10

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-8276

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 248519011

Sample Amount 2

Moisture: 14.6

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04090067.wiff

Date Analyzed: 10-APR-10 00:31

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		

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## DATA VALIDATION COVER SHEET

5116-1

## Data Validation Cover Sheet

Records Use only



## Section I.

REQUEST NUMBER: 10-2199 VALIDATION DATE: 5/6/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Larry Fukui ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

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

## 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 %Rs and the MS/MSD RPDs were outside of laboratory acceptance criteria. It should be noted that the MS and MSD parent sample was from another LANL RN and the raw data for the parent sample was not included in the package. Since an MS/MSD was not required, no sample results were qualified.

Reviewed by: ETM

Level: 1

Date: 5/7/10

VALIDATOR'S SIGNATURE:

DATE: 5/6/10

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

5116-2

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

Records Use only



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

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

5116-2

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

Records Use only



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

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

5116-2

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

Records Use only



Yes No N/A (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 checked="" type="checkbox"/>	<input type="checkbox"/>	29. The analyte was not confirmed on a second dissimilar column.	N/A	R, P8
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	30. The second dissimilar column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P8a	R, P8a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	31. Duplicate, Dilution, or reanalysis.	UJ, P88	J, P88

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

5116-2

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

Records Use only



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

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

SDG Number: 10-2199  
Lab Sample ID: 248519009

Client ID: RE36-10-8273  
Batch ID: 966420  
Run Date: 03/19/2010 16:34  
Prep Date: 03/18/2010 10:57  
Data File: 046f4601.d  
046b4601.d

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8082  
Inst: ECD8A.J  
Analyst: JAOC  
Aliquot: 30.09 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
% Moisture: 29  
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	4.68	ug/kg	1.56	4.68	1
11104-28-2	Aroclor-1221	U	4.68	ug/kg	1.56	4.68	1
11141-16-5	Aroclor-1232	U	4.68	ug/kg	1.56	4.68	1
53469-21-9	Aroclor-1242	U	4.68	ug/kg	1.56	4.68	1
12672-29-6	Aroclor-1248	U	4.68	ug/kg	1.56	4.68	1
11097-69-1	Aroclor-1254	JP	4.42	ug/kg	1.56	4.68	1
11096-82-5	Aroclor-1260	U	4.68	ug/kg	1.56	4.68	1

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

SDG Number: 10-2199  
Lab Sample ID: 248519006

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8082  
Inst: ECD8A.I  
Analyst: JAOC  
Aliquot: 30.01 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
%Moisture: 10.2  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.71	ug/kg	1.24	3.71	1
11104-28-2	Aroclor-1221	U	3.71	ug/kg	1.24	3.71	1
11141-16-5	Aroclor-1232	U	3.71	ug/kg	1.24	3.71	1
53469-21-9	Aroclor-1242	U	3.71	ug/kg	1.24	3.71	1
12672-29-6	Aroclor-1248	U	3.71	ug/kg	1.24	3.71	1
11097-69-1	Aroclor-1254	U	3.71	ug/kg	1.24	3.71	1
11096-82-5	Aroclor-1260	U	3.71	ug/kg	1.24	3.71	1

LMF  
5/6/10

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

SDG Number: 10-2199  
Lab Sample ID: 248519010

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8082  
Inst: ECD8A.J  
Analyst: JAOC  
Aliquot: 30.02 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
%Moisture: 40.1  
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	5.57	ug/kg	1.85	5.57	1
11104-28-2	Aroclor-1221	U	5.57	ug/kg	1.85	5.57	1
11141-16-5	Aroclor-1232	U	5.57	ug/kg	1.85	5.57	1
53469-21-9	Aroclor-1242	U	5.57	ug/kg	1.85	5.57	1
12672-29-6	Aroclor-1248	U	5.57	ug/kg	1.85	5.57	1
11097-69-1	Aroclor-1254	U	5.57	ug/kg	1.85	5.57	1
11096-82-5	Aroclor-1260	U	5.57	ug/kg	1.85	5.57	1

LMF  
5/6/10



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

SDG Number: 10-2199  
Lab Sample ID: 248519011

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8082  
Inst: ECD8A.I  
Analyst: JAOC  
Aliquot: 30.01 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
%Moisture: 14.6  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

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

LMF  
5/6/10

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

SDG Number: 10-2199  
Lab Sample ID: 248519003

Client ID: RE36-10-8277  
Batch ID: 966420  
Run Date: 03/19/2010 15:20  
Prep Date: 03/18/2010 10:57  
Data File: 040f4001.d  
040b4001.d

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8082  
Inst: ECD8A.I  
Analyst: JAOC  
Aliquot: 30 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
% Moisture: 25.4  
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	4.47	ug/kg	1.49	4.47	1
11104-28-2	Aroclor-1221	U	4.47	ug/kg	1.49	4.47	1
11141-16-5	Aroclor-1232	U	4.47	ug/kg	1.49	4.47	1
53469-21-9	Aroclor-1242	U	4.47	ug/kg	1.49	4.47	1
12672-29-6	Aroclor-1248	U	4.47	ug/kg	1.49	4.47	1
11097-69-1	Aroclor-1254	U	4.47	ug/kg	1.49	4.47	1
11096-82-5	Aroclor-1260	U	4.47	ug/kg	1.49	4.47	1

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

SDG Number: 10-2199  
Lab Sample ID: 248519005

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8082  
Inst: ECD8A.I  
Analyst: JAOC  
Allquot: 30.03 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
%Moisture: 6.4  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

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

LMF  
5/6/10

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

SDG Number: 10-2199  
Lab Sample ID: 248519002

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8082  
Inst: ECD8A.I  
Analyst: JAOC  
Aliquot: 30.12 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
%Moisture: 7.1  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE36-10-8279  
Batch ID: 967817  
Run Date: 03/23/2010 11:27  
Prep Date: 03/22/2010 21:20  
Data File: 017f1701.d  
017b1701.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.57	ug/kg	1.19	3.57	1
11104-28-2	Aroclor-1221	U	3.57	ug/kg	1.19	3.57	1
11141-16-5	Aroclor-1232	U	3.57	ug/kg	1.19	3.57	1
53469-21-9	Aroclor-1242	U	3.57	ug/kg	1.19	3.57	1
12672-29-6	Aroclor-1248	U	3.57	ug/kg	1.19	3.57	1
11097-69-1	Aroclor-1254		31.5	ug/kg	1.19	3.57	2
11096-82-5	Aroclor-1260		17.6	ug/kg	1.19	3.57	2

LMF  
5/6/10

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

SDG Number: 10-2199  
Lab Sample ID: 248519004

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8082  
Inst: ECD8A.I  
Analyst: JAOC  
Aliquot: 30.14 g  
Column: 1 CLP1  
2 CLP2

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

CAS No.	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		65.5	ug/kg	1.22	3.66	2
11096-82-5	Aroclor-1260		36.9	ug/kg	1.22	3.66	2

LMF  
5/6/10

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

SDG Number: 10-2199  
Lab Sample ID: 248519008

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8082  
Inst: ECD8A.I  
Analyst: JAOC  
Allquot: 30 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
% Moisture: 32.9  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.97	ug/kg	1.66	4.97	1
11104-28-2	Aroclor-1221	U	4.97	ug/kg	1.66	4.97	1
11141-16-5	Aroclor-1232	U	4.97	ug/kg	1.66	4.97	1
53469-21-9	Aroclor-1242	U	4.97	ug/kg	1.66	4.97	1
12672-29-6	Aroclor-1248	U	4.97	ug/kg	1.66	4.97	1
11097-69-1	Aroclor-1254	U	4.97	ug/kg	1.66	4.97	1
11096-82-5	Aroclor-1260	U	4.97	ug/kg	1.66	4.97	1

LMF  
5/6/10

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

SDG Number: 10-2199  
Lab Sample ID: 248519001

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8082  
Inst: ECD8AJ  
Analyst: JAOC  
Aliquot: 30.09 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
%Moisture: 16.4  
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	3.98	ug/kg	1.32	3.98	1
11104-28-2	Aroclor-1221	U	3.98	ug/kg	1.32	3.98	1
11141-16-5	Aroclor-1232	U	3.98	ug/kg	1.32	3.98	1
53469-21-9	Aroclor-1242	U	3.98	ug/kg	1.32	3.98	1
12672-29-6	Aroclor-1248	U	3.98	ug/kg	1.32	3.98	1
11097-69-1	Aroclor-1254	U	3.98	ug/kg	1.32	3.98	1
11096-82-5	Aroclor-1260	U	3.98	ug/kg	1.32	3.98	1

LMF  
5/6/10

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

SDG Number: 10-2199  
Lab Sample ID: 248519007

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8082  
Inst: ECD8A.J  
Analyst: JAOC  
Aliquot: 30.05 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
%Moisture: 28.9  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.68	ug/kg	1.56	4.68	1
11104-28-2	Aroclor-1221	U	4.68	ug/kg	1.56	4.68	1
11141-16-5	Aroclor-1232	U	4.68	ug/kg	1.56	4.68	1
53469-21-9	Aroclor-1242	U	4.68	ug/kg	1.56	4.68	1
12672-29-6	Aroclor-1248	U	4.68	ug/kg	1.56	4.68	1
11097-69-1	Aroclor-1254	JP	4.60	ug/kg	1.56	4.68	1
11096-82-5	Aroclor-1260	U	4.68	ug/kg	1.56	4.68	1

LMF  
5/6/10



Thursday, March 04, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-2199C

LOS ALAMOS

REQUEST NUMBER: 10-2199

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 4/1/2010

General Engineering Laboratories, Inc., Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

248519

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE36-10-8288	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-8288	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-8279	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-8279	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-8277	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-8277	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-8280	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-8280	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-8278	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-8278	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-8274	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-8274	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-8291	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-8291	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-8287	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-8287	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-8273	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-8273	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-8275	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-8275	1	SEPTUM AMBER GLASS	8260B	Ice	R

Thursday, March 04, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-2199C

LOS ALAMOS

REQUEST NUMBER: 10-2199

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 4/1/2010

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
RE36-10-8276	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-8276	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-8295	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S

Relinquished By:


Date

Time


Received By:

Date

Time

  
Printed Name Signature

3/2/10 3:00

  
Printed Name Signature

3/3/10 08:50

Printed Name Signature

Printed Name Signature

Printed Name Signature

Printed Name Signature

Received for DISPOSAL By: Date Time

Remarks:

Printed Name Signature

Tuesday, March 02, 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: 3/2/2010**

**TURNAROUND/REPORT DUE: 4/1/2010**

**TURNAROUND REQ'D: 30 Days**

**RAD SCREENING: Yes, Below Background**

**LAB REQUEST COMMENTS:**

LANL ER SMO CONTACT:

Signature: 

Page 1 of 3

REQUEST NUMBER: 10-2199

These Samples are on:

LANL Request Number: 10-2199

Per Agreement Number: 126310011

Project Cost Code: MR3A05529E00

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8082	1	RE36-10-8273	R	2/25/2010	
		1	RE36-10-8274	R	2/25/2010	
		1	RE36-10-8275	R	2/25/2010	
		1	RE36-10-8276	R	2/25/2010	
		1	RE36-10-8277	R	2/25/2010	
		1	RE36-10-8278	R	2/25/2010	
		1	RE36-10-8279	R	2/25/2010	
		1	RE36-10-8280	R	2/25/2010	
		1	RE36-10-8287	R	2/25/2010	

Tuesday, March 02, 2010

REQUEST NUMBER: 10-2199

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8082	1	RE36-10-8288	R	2/25/2010	
		1	RE36-10-8291	R	2/25/2010	
	SW-846:8280B	1	RE36-10-8273	R	2/25/2010	
		1	RE36-10-8274	R	2/25/2010	
		1	RE36-10-8275	R	2/25/2010	
		1	RE36-10-8276	R	2/25/2010	
		1	RE36-10-8277	R	2/25/2010	
		1	RE36-10-8278	R	2/25/2010	
		1	RE36-10-8279	R	2/25/2010	
		1	RE36-10-8280	R	2/25/2010	
		1	RE36-10-8287	R	2/25/2010	
		1	RE36-10-8288	R	2/25/2010	
		1	RE36-10-8291	R	2/25/2010	
		1	RE36-10-8295	S	2/25/2010	
	SW-846:8270C	1	RE36-10-8273	R	2/25/2010	
		1	RE36-10-8274	R	2/25/2010	
		1	RE36-10-8275	R	2/25/2010	
		1	RE36-10-8276	R	2/25/2010	
		1	RE36-10-8277	R	2/25/2010	
		1	RE36-10-8278	R	2/25/2010	
		1	RE36-10-8279	R	2/25/2010	
		1	RE36-10-8280	R	2/25/2010	
		1	RE36-10-8287	R	2/25/2010	
		1	RE36-10-8288	R	2/25/2010	
		1	RE36-10-8291	R	2/25/2010	
	SW-846:8321A_MOD	1	RE36-10-8273	R	2/25/2010	
		1	RE36-10-8274	R	2/25/2010	
		1	RE36-10-8275	R	2/25/2010	

Tuesday, March 02, 2010

REQUEST NUMBER: 10-2199

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8321A_MOD	1	RE36-10-8276	R	2/25/2010	
		1	RE36-10-8277	R	2/25/2010	
		1	RE36-10-8278	R	2/25/2010	
		1	RE36-10-8279	R	2/25/2010	
		1	RE36-10-8280	R	2/25/2010	
		1	RE36-10-8287	R	2/25/2010	
		1	RE36-10-8288	R	2/25/2010	
		1	RE36-10-8291	R	2/25/2010	

Final Page of REQUEST NUMBER 10-2199



March 10, 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: 248519  
SDG: 10-2199

Dear Ms. Valdez:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on March 03, 2010, and analyzed for Explosives by LCMSMS, GC Semivolatile PCB, GC/MS Semivolatile and GC/MS Volatile. 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: 10-2199  
Enclosures

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

**LANL ER Project**

**Work Order #: 248519**

**SDG: 10-2199**

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# Case Narrative

**Case Narrative for  
Los Alamos National Laboratory (72733-001-09)  
LANL ER Project  
Workorder #: 248519  
SDG # : 10-2199**

**March 10, 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 March 03, 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:

<u>Laboratory ID</u>	<u>Client ID</u>
248519001	RE36-10-8288
248519002	RE36-10-8279
248519003	RE36-10-8277
248519004	RE36-10-8280
248519005	RE36-10-8278
248519006	RE36-10-8274
248519007	RE36-10-8291
248519008	RE36-10-8287
248519009	RE36-10-8273
248519010	RE36-10-8275
248519011	RE36-10-8276
248519012	RE36-10-8295

**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, GC/MS Semivolatile and GC/MS Volatile.

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.

Valerie Davis

Project Manager

**List of current GEL Certifications as of 10 March 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**

Thursday, March 04, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-2199C

LOS ALAMOS

REQUEST NUMBER: 10-2199

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 4/1/2010

General Engineering Laboratories, Inc., Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

248519

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE36-10-8288	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-8288	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-8279	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-8279	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-8277	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-8277	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-8280	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-8280	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-8278	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-8278	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-8274	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-8274	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-8291	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-8291	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-8287	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-8287	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-8273	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-8273	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-8275	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-8275	1	SEPTUM AMBER GLASS	8260B	Ice	R

Thursday, March 04, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-2199C

LOS ALAMOS

REQUEST NUMBER: 10-2199

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 4/1/2010

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
RE36-10-8276	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE36-10-8276	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE36-10-8295	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S

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



Tuesday, March 02, 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: 3/2/2010**

**TURNAROUND/REPORT DUE: 4/1/2010**

**TURNAROUND REQ'D: 30 Days**

**RAD SCREENING: Yes, Below Background**

**LAB REQUEST COMMENTS:**

LANL ER SMO CONTACT:

Signature:



REQUEST NUMBER: 10-2199

These Samples are on:

LANL Request Number: 10-2199  
Per Agreement Number: 126310011  
Project Cost Code: MR3A05529E00

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8082	1	RE36-10-8273	R	2/25/2010	
		1	RE36-10-8274	R	2/25/2010	
		1	RE36-10-8275	R	2/25/2010	
		1	RE36-10-8276	R	2/25/2010	
		1	RE36-10-8277	R	2/25/2010	
		1	RE36-10-8278	R	2/25/2010	
		1	RE36-10-8279	R	2/25/2010	
		1	RE36-10-8280	R	2/25/2010	
		1	RE36-10-8287	R	2/25/2010	

Tuesday, March 02, 2010

REQUEST NUMBER: 10-2199

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8082	1	RE36-10-8288	R	2/25/2010	
		1	RE36-10-8291	R	2/25/2010	
	SW-846:8260B	1	RE36-10-8273	R	2/25/2010	
		1	RE36-10-8274	R	2/25/2010	
		1	RE36-10-8275	R	2/25/2010	
		1	RE36-10-8276	R	2/25/2010	
		1	RE36-10-8277	R	2/25/2010	
		1	RE36-10-8278	R	2/25/2010	
		1	RE36-10-8279	R	2/25/2010	
		1	RE36-10-8280	R	2/25/2010	
		1	RE36-10-8287	R	2/25/2010	
		1	RE36-10-8288	R	2/25/2010	
		1	RE36-10-8291	R	2/25/2010	
		1	RE36-10-8295	S	2/25/2010	
	SW-846:8270C	1	RE36-10-8273	R	2/25/2010	
		1	RE36-10-8274	R	2/25/2010	
		1	RE36-10-8275	R	2/25/2010	
		1	RE36-10-8276	R	2/25/2010	
		1	RE36-10-8277	R	2/25/2010	
		1	RE36-10-8278	R	2/25/2010	
		1	RE36-10-8279	R	2/25/2010	
		1	RE36-10-8280	R	2/25/2010	
		1	RE36-10-8287	R	2/25/2010	
		1	RE36-10-8288	R	2/25/2010	
		1	RE36-10-8291	R	2/25/2010	
	SW-846:8321A_MOD	1	RE36-10-8273	R	2/25/2010	
		1	RE36-10-8274	R	2/25/2010	
		1	RE36-10-8275	R	2/25/2010	

Tuesday, March 02, 2010

Page 3 of 3

REQUEST NUMBER: 10-2199

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8321A_MOD	1	RE36-10-8276	R	2/25/2010	
		1	RE36-10-8277	R	2/25/2010	
		1	RE36-10-8278	R	2/25/2010	
		1	RE36-10-8279	R	2/25/2010	
		1	RE36-10-8280	R	2/25/2010	
		1	RE36-10-8287	R	2/25/2010	
		1	RE36-10-8288	R	2/25/2010	
		1	RE36-10-8291	R	2/25/2010	

Final Page of REQUEST NUMBER 10-2199



Laboratories LLC

## SAMPLE RECEIPT &amp; REVIEW FORM

Client: LANL			SDG/ARCO/Work Order: 10-2199		
Received By: Patricia Dover-Dent			Date Received: 3/3/10		
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 <b>blue ice</b> dry ice    none    other 1-5    14,15,17
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 7850 3083 1C    7209 7850 3061 2C    7209 7850 3028 17C

7209 7850 3040 1C    7209 7850 3072 3C

7209 7850 3094 1C    7209 7850 3120 4C

7209 7850 3109 2C    7209 7850 3110 5C

7209 7850 3039 2C    7209 7850 3153 5C

7209 7850 3050 2C    7209 7850 3006 14C

7209 7850 3142 2C    7209 7850 2992 14C

7209 7850 3131 2C    7209 7850 3071 15C

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

SHIP DATE: 02MAR10  
ACTWGT: 49.0 LB MAN  
CAD: 0014176/CAFE2450

LOS ALAMOS, NM 87545  
UNITED STATES US

BILL SENDER

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

SHIP DATE: 02MAR10  
ACTWGT: 47.9 LB MAN  
CAD: 0014176/CAFE2450

BILL SENDER

VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407

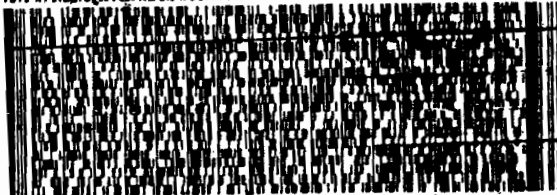
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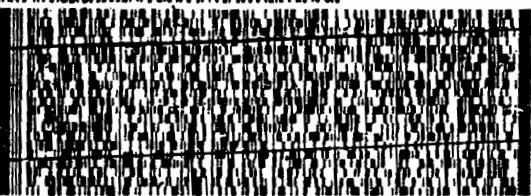
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0014176/CAFE2450

0014176/CAFE2450



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2 of 2  
PSH 7209 7850 3083  
2263  
1str 7209 7850 3072 0201

WED - 03MAR - A1  
PRIORITY OVERNIGHT

1 of 3  
TRK# 7209 7850 3040  
0201  
## MASTER ##

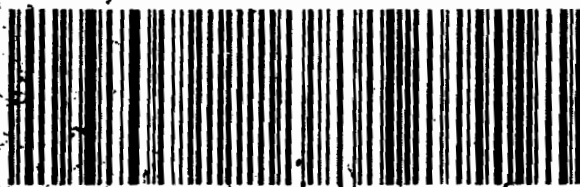
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XX CHSA

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SC-US  
CHS

XX CHSA

29407  
SC-US  
CHS



LOS ALAMOS NATL LAB  
TA00 BLDG 1237 DPU 03

CAD: 0014176/CAFE2450

LOS ALAMOS, NM 87545  
UNITED STATES US

BILL SENDER

LOS ALAMOS, NM 87545  
UNITED STATES US

BILL SENDER

VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171  
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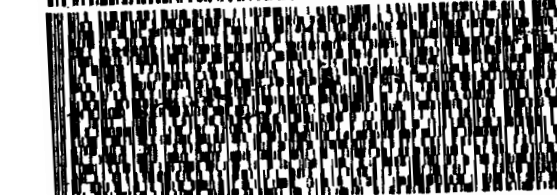
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CHARLESTON SC 29407

(843) 556-8171  
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1 of 3  
TRK# 7209 7850 3094  
1201  
IN MASTER ##

WED - 03MAR A1  
PRIORITY OVERNIGHT

2 of 3  
TRK# 7209 7850 3109  
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IN MASTER ##

WED - 03MAR A1  
PRIORITY OVERNIGHT

XX CHSA

29407  
SC-US  
CHS

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SC-US  
CHS

0014176/CAFE2450

0014176/CAFE2450

JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545  
UNITED STATES US

SHIP DATE: 02MAR10  
ACTWGT: 52.0 LB MAN  
CAD: 0014176/CAFE2450

BILL SENDER

LOS ALAMOS NATL LAB  
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545  
UNITED STATES US

ACTWGT: 49.0 LB MAN  
CAD: 0014176/CAFE2450

BILL SENDER

TO VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR3A0532VA00

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3 of 3  
S# 63 7209 7850 3039

WED - 03MAR A1  
PRIORITY OVERNIGHT

Matr# 7209 7850 3017 0201

29407  
SC-US  
CHS

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JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545  
UNITED STATES US

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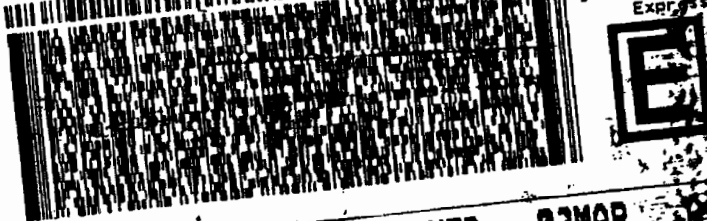
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CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR3A05529E00

0014176/CAFE2450



3 of 3  
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Matr# 7209 7850 3120 0201

WED - 03MAR  
PRIORITY OVERNIGHT

29407  
SC-US  
CHS

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TO VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

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0014176/CAFE2450



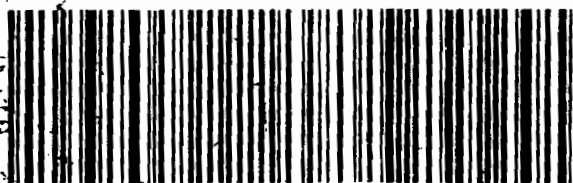
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WED - 03MAR A1  
PRIORITY OVERNIGHT

29407  
SC-US  
CHS

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LOS ALAMOS NATL LAB  
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545  
UNITED STATES US

BILL SENDER

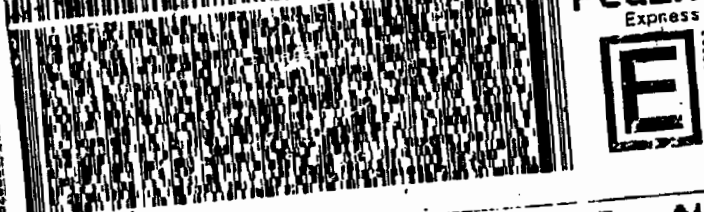
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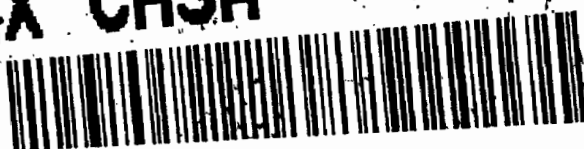
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WED - 03MAR A1  
PRIORITY OVERNIGHT

29407  
SC-US  
CHS

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

SHIP DATE: 02MAR10  
ACTWGT: 49.0 LB MAN  
CAD: 0014176/CAFE2

LOS ALAMOS, NM 87545  
UNITED STATES US

BILL SENDER

TO VALERIE DAVIS  
GENERAL ENGINEERING LAB  
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CHARLESTON SC 29407  
(843) 556-8171  
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WED 03 MAR A1  
PRIORITY OVERNIGHT

29407  
SC-US  
CHS

XX CHSA



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

SHIP DATE: 02MAR10  
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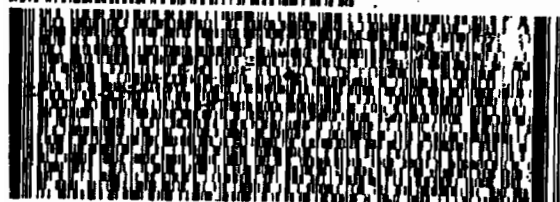
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TO VALERIE DAVIS  
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2040 SAVAGE RD

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(843) 556-8171  
REF: 6B010AMR3A05529E00

4c



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WED - 03MAR A1  
PRIORITY OVERNIGHT

1 of 3  
TRKH 7209 7850 3120  
MH MASTER MH

29407  
SC-US  
CHS

XX CHSA

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

SHIP DATE: 02MAR10  
ACTWGT: 49.0 LB MAN  
CAD: 0014176/CAFE2450

LOS ALAMOS, NM 87545  
UNITED STATES US

BILL SENDER

TO VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407  
(843) 556-8171  
REF: 6B010AMR3A0532VA00

3c



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WED - 03MAR A1  
PRIORITY OVERNIGHT

1 of 2  
TRKH 7209 7850 3072  
MH MASTER MH

29407  
SC-US  
CHS

XX CHSA



ORIGIN ID: SAFA (505) 665-9968  
JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
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SHIP DATE: 02MAR10  
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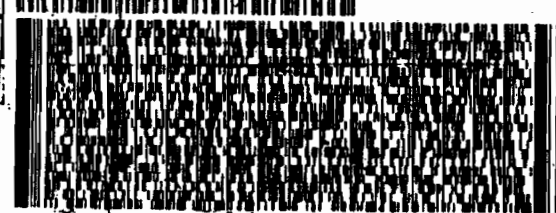
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GENERAL ENGINEERING LAB  
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CHARLESTON SC 29407  
(843) 556-8171  
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WED - 03MAR A1  
PRIORITY OVERNIGHT

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MPSH 7209 7850 3110  
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29407  
SC-US  
CHS

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ORIGIN ID: SAFA (505) 685-9968  
JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545  
UNITED STATES US

SHIP DATE: 02MAR10  
ACTWGT: 48.0 LB MAN  
CAD: 0014178/CAFE2450

BILL SENDER

VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR3A05529E00

5c

JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545  
UNITED STATES US

SHIP DATE: 02MAR10  
ACTWGT: 57.0 LB MAN  
CAD: 0014178/CAFE2450

BILL SENDER

TO VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR3A0532VA00

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TRKH 7209 7850 3153  
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WED - 03MAR A1  
PRIORITY OVERNIGHT

29407  
SC-US  
CHS

XX CHSA



ORIGIN ID:  
JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545  
UNITED STATES US

ACTWGT: 48.0 LB MAN  
CAD: 0014178/CAFE2450

BILL SENDER

TO VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR3A0532VA00

14c

3 of 3  
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WED - 03MAR A1  
PRIORITY OVERNIGHT

29407  
SC-US  
CHS

XX CHSA



LOS ALAMOS NATL LAB  
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545  
UNITED STATES US

ACTWGT: 54.0 LB MAN  
CAD: 0014178/CAFE2450

BILL SENDER

TO VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR3A0532VA00

15c

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2 of 3  
MPSH 7209 7850 2992  
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Matrx 7209 7850 2981 0201

WED - 03MAR  
PRIORITY OVERNIGHT

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1 of 3  
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WED - 03MAR A1  
PRIORITY OVERNIGHT

29407  
SC-US  
CHS

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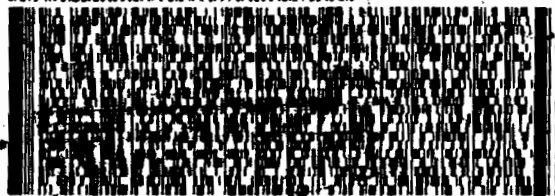
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JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
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LOS ALAMOS, NM 87545  
UNITED STATES US

SHIP DATE: 02MAR10  
ACTWGT: 21.0 LB MAN  
CRU: 00141767CAFE2450  
BILL SENDER

TO **VALERIE DAVIS**  
**GENERAL ENGINEERING LAB**  
**2040 SAVAGE RD**

**CHARLESTON SC 29407**  
(843) 556-8171  
REF: 68010AMR3A0532VA00

17C



FedEx  
Express

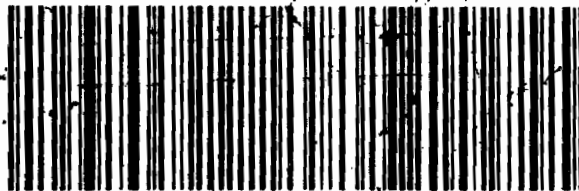


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WED 03MAR A1  
PRIORITY OVERNIGHT

**XX CHSA**

**29407**  
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 Volatile Analysis**

# Case Narrative

**ChemStation Case Narrative  
Los Alamos National Laboratory (LANL)  
SDG 10-2199**

**Method/Analysis Information**

Procedure: Volatile Organic Compounds (VOC) by Gas Chromatograph/Mass Spectrometer  
Analytical Method: SW846 8260B  
Prep Method: SW846 5030  
Analytical Batch Number: 963809  
Prep Batch Number: 963808

**Sample Analysis**

The following client and quality control samples were analyzed to complete this SDG using the methods referenced in the Analysis Information section:

<b>Sample ID</b>	<b>Client ID</b>
248519001	RE36-10-8288
248519002	RE36-10-8279
248519003	RE36-10-8277
248519004	RE36-10-8280
248519005	RE36-10-8278
248519006	RE36-10-8274
248519007	RE36-10-8291
248519008	RE36-10-8287
248519009	RE36-10-8273
248519010	RE36-10-8275
248519011	RE36-10-8276
248519012	RE36-10-8295
1202067627	Method Blank (MB)
1202067630	Laboratory Control Sample (LCS)
1202067631	Laboratory Control Sample (LCS)
1202076531	Method Blank (MB)
1202076532	Laboratory Control Sample (LCS)
1202076533	Laboratory Control Sample (LCS)
1202067628	248526001(RE36-10-8466) Post Spike (PS)
1202067629	248526001(RE36-10-8466) Post Spike Duplicate (PSD)

NOTE: For volatile organic analyses the matrix spike designations may be indicated as "PS" or "PSD". The "PS" designation (post spike) indicates that the matrix was fortified prior to analysis but after applying any prep factors, such as a dilution. The laboratory considers the MS/MSD and PS/PSD designations interchangeable.

Samples 248519 001, 002, 003, 004, 005, 006, 007, 008, 009, 010 and 011 in this SDG were analyzed on an "dry weight" basis. Sample 248519012 in this SDG was analyzed on a "as received" basis.

**Preparation/Analytical Method Verification**

**SOP Reference**

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-038 REV# 14.

Raw data reports are processed and reviewed by the analyst using the Chemstation software package. False positives have been removed from the quantitation reports per standard operating procedures (SOP) section 19.1.2. False positive analytes are designated on the quantitation report with a 'd' qualifier.

### **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 processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the 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.

The surrogate compounds were calibrated using a minimum five-point calibration curve. The surrogates were added by the auto sampler at a concentration of 50 ug/L. GEL Laboratories LLC will not have surrogate recoveries reported for Dibromofluoromethane. This is due to increased regulations for this analyte and an industry shortage.

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 groups (SDG). A second source initial calibration verification (ICV) was included in the standard section directly behind the initial calibration.

### **Continuing Calibration Verification Requirements**

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

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

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

The MBs analyzed with this SDG met the acceptance criteria.

#### **Surrogate Recoveries**

Several samples in this SDG did not have acceptable surrogate recoveries. The samples were re-analyzed and confirmed the results. Please see the Form II in the deliverable for a complete list of recoveries and the limits. See DER 807173.

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

The LCS spike recoveries met the acceptance limits.

#### **QC Sample Designation**

Sample 248526001 (RE36-10-8466) was designated for spike analysis.

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

The spike recoveries were within the required acceptance limits.

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

The spike duplicate recoveries were within the required acceptance limits.

#### **Relative Percent Difference (RPD) Statement**

The RPD(s) between the matrix spike pair met the acceptance limits.

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

Several samples in this SDG did not have acceptable internal standard responses. The samples were re-analyzed and confirmed the results. Please see the Form VIII in the deliverable for a complete list of the internal standard responses. See DER 807173.

### **Technical Information**

#### **Holding Time Specifications**

GEL assigns holding times based on the associated methodology, which assigns the date and time from

sample collection or sample receipt. Those holding times expressed in hours are calculated in the ALPHALIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All confirmation analyses for internal standard and/or surrogate recovery failures were performed outside of the 14 day holding time due to instrument capacity. The re-analyses were performed within two times the collection date.

#### **Sample Preservation and Integrity**

All samples met the sample preservation and integrity requirements.

#### **Sample Dilutions**

The samples in this SDG did not require dilutions.

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

Re-analyses were required for samples in this SDG due to unacceptable recoveries in the initial analysis.

#### **Miscellaneous Information**

##### **Electronic Packaging Comment**

This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted: Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative will include the data validator's signature and title. The signature page also includes the data qualifiers used in the fractional package. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

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

DER # 807173 was generated for samples in this

##### **Manual Integrations**

Data files associated with the initial calibration, continuing calibration check, and samples did not require manual integrations.

##### **TIC Comment**

Tentatively identified compounds (TIC) were required for this sample delivery group/work order. The tentatively identified compounds included some silanols. These compounds were due to column or septum bleed and were not native to the affected samples. Please note that non-requested target analytes that are reported on the quantitation reports will not be present on the Form I. These detected analytes are included in the calibrated method and as a result cannot be reported on the TIC quantitation report.

##### **Additional Comments**

Additional comments were not required for this SDG.

##### **Residual Chlorine**

Residual Chlorine was not detected in any of the samples in this SDG.

##### **System Configuration**

The Volatile-GC/MS 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>	<b>P &amp; T Trap</b>
VOA5.I	Gas Chromatograph/Mass Spectrometer	HP6890N/HP5975	DB-624	J&W, 60m x 0.25mm x 1.4um	Trap 10



**Certification Statement**

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

## GEL LABORATORIES LLC

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

### Certificate of Analysis Report for

LANL010 Los Alamos National Laboratory (72733-001-09)

Client SDG: 10-2199 GEL Work Order: 248519

**The Qualifiers in this report are defined as follows:**

- \* A quality control analyte recovery is outside of specified acceptance criteria
- \*\* Analyte is a surrogate compound
- J Value is estimated
- U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

**Review/Validation**

GEL requires all analytical data to be verified by a qualified data reviewer. In addition, all CLP-like deliverables receive a third level review of the fractional data package.

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

**Signature:** 

**Name:** Erin Haubert

**Date:** 30 MAR 2010

**Title:** Data Validator

# **Sample Data Summary**

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

**SDG Number:** 10-2199  
**Lab Sample ID:** 248519001

**Date Collected:** 02/25/2010 12:00  
**Date Received:** 03/03/2010 08:50  
**Client:** LANL010  
**Method:** SW846 8260B  
**Inst:** VOA5.I  
**Analyst:** CDS1  
**Aliquot:** 5 g  
**Column:** DB-624

**Matrix:** R  
**%Moisture:** 16.4  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-038  
**Dilution:** 1  
**Purge Vol:** 5 mL  
**Final Volume:** 5 mL

**Client ID:** RE36-10-8288  
**Batch ID:** 963809  
**Run Date:** 03/11/2010 14:12  
**Prep Date:** 03/11/2010 10:01  
**Data File:** 031110V55B418.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.20	ug/kg	0.407	1.20
74-87-3	Chloromethane	U	1.20	ug/kg	0.359	1.20
75-01-4	Vinyl chloride	U	1.20	ug/kg	0.359	1.20
74-83-9	Bromomethane	U	1.20	ug/kg	0.359	1.20
75-00-3	Chloroethane	U	1.20	ug/kg	0.359	1.20
75-69-4	Trichlorofluoromethane	U	1.20	ug/kg	0.359	1.20
67-64-1	Acetone	U	5.98	ug/kg	1.99	5.98
75-35-4	1,1-Dichloroethylene	U	1.20	ug/kg	0.359	1.20
74-88-4	Iodomethane	U	5.98	ug/kg	1.91	5.98
75-09-2	Methylene chloride	U	5.98	ug/kg	2.39	5.98
75-15-0	Carbon disulfide	U	5.98	ug/kg	1.50	5.98
156-60-5	trans-1,2-Dichloroethylene	U	1.20	ug/kg	0.359	1.20
75-34-3	1,1-Dichloroethane	U	1.20	ug/kg	0.359	1.20
78-93-3	2-Butanone	U	5.98	ug/kg	1.80	5.98
156-59-2	cis-1,2-Dichloroethylene	U	1.20	ug/kg	0.359	1.20
594-20-7	2,2-Dichloropropane	U	1.20	ug/kg	0.359	1.20
67-66-3	Chloroform	U	1.20	ug/kg	0.359	1.20
74-97-5	Bromochloromethane	U	1.20	ug/kg	0.395	1.20
71-55-6	1,1,1-Trichloroethane	U	1.20	ug/kg	0.359	1.20
563-58-6	1,1-Dichloropropene	U	1.20	ug/kg	0.359	1.20
56-23-5	Carbon tetrachloride	U	1.20	ug/kg	0.359	1.20
107-06-2	1,2-Dichloroethane	U	1.20	ug/kg	0.359	1.20
71-43-2	Benzene	U	1.20	ug/kg	0.359	1.20
79-01-6	Trichloroethylene	U	1.20	ug/kg	0.395	1.20
78-87-5	1,2-Dichloropropane	U	1.20	ug/kg	0.359	1.20
75-27-4	Bromodichloromethane	U	1.20	ug/kg	0.359	1.20
74-95-3	Dibromomethane	U	1.20	ug/kg	0.359	1.20
108-10-1	4-Methyl-2-pentanone	U	5.98	ug/kg	1.50	5.98
10061-01-5	cis-1,3-Dichloropropylene	U	1.20	ug/kg	0.359	1.20
108-88-3	Toluene	J	0.455	ug/kg	0.359	1.20
10061-02-6	trans-1,3-Dichloropropylene	U	1.20	ug/kg	0.359	1.20
79-00-5	1,1,2-Trichloroethane	U	1.20	ug/kg	0.359	1.20
591-78-6	2-Hexanone	U	5.98	ug/kg	1.80	5.98
142-28-9	1,3-Dichloropropane	U	1.20	ug/kg	0.359	1.20
127-18-4	Tetrachloroethylene	U	1.20	ug/kg	0.359	1.20
124-48-1	Dibromochloromethane	U	1.20	ug/kg	0.359	1.20
106-93-4	1,2-Dibromoethane	U	1.20	ug/kg	0.359	1.20
108-90-7	Chlorobenzene	U	1.20	ug/kg	0.359	1.20

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-2199  
 Lab Sample ID: 248519001

Date Collected: 02/25/2010 12:00  
 Date Received: 03/03/2010 08:50  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: CDS1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 % Moisture: 16.4  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

Client ID: RE36-10-8288  
 Batch ID: 963809  
 Run Date: 03/11/2010 14:12  
 Prep Date: 03/11/2010 10:01  
 Data File: 031110V5SB418.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.20	ug/kg	0.359	1.20
179601-23-1	m,p-Xylenes	U	2.39	ug/kg	0.359	2.39
95-47-6	o-Xylene	U	1.20	ug/kg	0.359	1.20
100-42-5	Styrene	U	1.20	ug/kg	0.359	1.20
75-25-2	Bromoform	U	1.20	ug/kg	0.359	1.20
79-34-5	1,1,2,2-Tetrachloroethane	U	1.20	ug/kg	0.359	1.20
96-18-4	1,2,3-Trichloropropane	U	1.20	ug/kg	0.359	1.20
108-86-1	Bromobenzene	U	1.20	ug/kg	0.359	1.20
103-65-1	n-Propylbenzene	U	1.20	ug/kg	0.359	1.20
95-49-8	2-Chlorotoluene	U	1.20	ug/kg	0.359	1.20
98-82-8	Isopropylbenzene	U	1.20	ug/kg	0.359	1.20
108-67-8	1,3,5-Trimethylbenzene	U	1.20	ug/kg	0.359	1.20
106-43-4	4-Chlorotoluene	U	1.20	ug/kg	0.359	1.20
98-06-6	tert-Butylbenzene	U	1.20	ug/kg	0.359	1.20
95-63-6	1,2,4-Trimethylbenzene	U	1.20	ug/kg	0.359	1.20
135-98-8	sec-Butylbenzene	U	1.20	ug/kg	0.359	1.20
99-87-6	4-Isopropyltoluene	U	1.20	ug/kg	0.359	1.20
541-73-1	1,3-Dichlorobenzene	U	1.20	ug/kg	0.359	1.20
106-46-7	1,4-Dichlorobenzene	U	1.20	ug/kg	0.359	1.20
104-51-8	n-Butylbenzene	U	1.20	ug/kg	0.359	1.20
96-12-8	1,2-Dibromo-3-chloropropane	U	1.20	ug/kg	0.359	1.20
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.98	ug/kg	1.91	5.98
630-20-6	1,1,1,2-Tetrachloroethane	U	1.20	ug/kg	0.359	1.20
95-50-1	1,2-Dichlorobenzene	U	1.20	ug/kg	0.359	1.20

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
No Tentatively Identified Compounds Found				ug/kg		

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-2199  
 Lab Sample ID: 248519002

Date Collected: 02/25/2010 12:00  
 Date Received: 03/03/2010 08:50  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.1  
 Analyst: CDS1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 7.1  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

Client ID: RE36-10-8279  
 Batch ID: 963809  
 Run Date: 03/11/2010 14:39  
 Prep Date: 03/11/2010 10:02  
 Data File: 031110V55B419.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.08	ug/kg	0.366	1.08
74-87-3	Chloromethane	U	1.08	ug/kg	0.323	1.08
75-01-4	Vinyl chloride	U	1.08	ug/kg	0.323	1.08
74-83-9	Bromomethane	U	1.08	ug/kg	0.323	1.08
75-00-3	Chloroethane	U	1.08	ug/kg	0.323	1.08
75-69-4	Trichlorofluoromethane	U	1.08	ug/kg	0.323	1.08
67-64-1	Acetone	U	5.38	ug/kg	1.79	5.38
75-35-4	1,1-Dichloroethylene	U	1.08	ug/kg	0.323	1.08
74-88-4	Iodomethane	U	5.38	ug/kg	1.72	5.38
75-09-2	Methylene chloride	U	5.38	ug/kg	2.15	5.38
75-15-0	Carbon disulfide	U	5.38	ug/kg	1.35	5.38
156-60-5	trans-1,2-Dichloroethylene	U	1.08	ug/kg	0.323	1.08
75-34-3	1,1-Dichloroethane	U	1.08	ug/kg	0.323	1.08
78-93-3	2-Butanone	U	5.38	ug/kg	1.61	5.38
156-59-2	cis-1,2-Dichloroethylene	U	1.08	ug/kg	0.323	1.08
594-20-7	2,2-Dichloropropane	U	1.08	ug/kg	0.323	1.08
67-66-3	Chloroform	U	1.08	ug/kg	0.323	1.08
74-97-5	Bromochloromethane	U	1.08	ug/kg	0.355	1.08
71-55-6	1,1,1-Trichloroethane	U	1.08	ug/kg	0.323	1.08
563-58-6	1,1-Dichloropropene	U	1.08	ug/kg	0.323	1.08
56-23-5	Carbon tetrachloride	U	1.08	ug/kg	0.323	1.08
107-06-2	1,2-Dichloroethane	U	1.08	ug/kg	0.323	1.08
71-43-2	Benzene	U	1.08	ug/kg	0.323	1.08
79-01-6	Trichloroethylene	U	1.08	ug/kg	0.355	1.08
78-87-5	1,2-Dichloropropane	U	1.08	ug/kg	0.323	1.08
75-27-4	Bromodichloromethane	U	1.08	ug/kg	0.323	1.08
74-95-3	Dibromomethane	U	1.08	ug/kg	0.323	1.08
108-10-1	4-Methyl-2-pentanone	U	5.38	ug/kg	1.35	5.38
10061-01-5	cis-1,3-Dichloropropylene	U	1.08	ug/kg	0.323	1.08
108-88-3	Toluene	J	0.334	ug/kg	0.323	1.08
10061-02-6	trans-1,3-Dichloropropylene	U	1.08	ug/kg	0.323	1.08
79-00-5	1,1,2-Trichloroethane	U	1.08	ug/kg	0.323	1.08
591-78-6	2-Hexanone	U	5.38	ug/kg	1.61	5.38
142-28-9	1,3-Dichloropropane	U	1.08	ug/kg	0.323	1.08
127-18-4	Tetrachloroethylene	U	1.08	ug/kg	0.323	1.08
124-48-1	Dibromochloromethane	U	1.08	ug/kg	0.323	1.08
106-93-4	1,2-Dibromoethane	U	1.08	ug/kg	0.323	1.08
108-90-7	Chlorobenzene	U	1.08	ug/kg	0.323	1.08

**Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-2199  
Lab Sample ID: 248519002

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: CDS1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
%Moisture: 7.1  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

Client ID: RE36-10-8279  
Batch ID: 963809  
Run Date: 03/11/2010 14:39  
Prep Date: 03/11/2010 10:02  
Data File: 031110V5\5B419.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.08	ug/kg	0.323	1.08
179601-23-1	m,p-Xylenes	U	2.15	ug/kg	0.323	2.15
95-47-6	o-Xylene	U	1.08	ug/kg	0.323	1.08
100-42-5	Styrene	U	1.08	ug/kg	0.323	1.08
75-25-2	Bromoform	U	1.08	ug/kg	0.323	1.08
79-34-5	1,1,2,2-Tetrachloroethane	U	1.08	ug/kg	0.323	1.08
96-18-4	1,2,3-Trichloropropane	U	1.08	ug/kg	0.323	1.08
108-86-1	Bromobenzene	U	1.08	ug/kg	0.323	1.08
103-65-1	n-Propylbenzene	U	1.08	ug/kg	0.323	1.08
95-49-8	2-Chlorotoluene	U	1.08	ug/kg	0.323	1.08
98-82-8	Isopropylbenzene	U	1.08	ug/kg	0.323	1.08
108-67-8	1,3,5-Trimethylbenzene	U	1.08	ug/kg	0.323	1.08
106-43-4	4-Chlorotoluene	U	1.08	ug/kg	0.323	1.08
98-06-6	tert-Butylbenzene	U	1.08	ug/kg	0.323	1.08
95-63-6	1,2,4-Trimethylbenzene	U	1.08	ug/kg	0.323	1.08
135-98-8	sec-Butylbenzene	U	1.08	ug/kg	0.323	1.08
99-87-6	4-Isopropyltoluene	U	1.08	ug/kg	0.323	1.08
541-73-1	1,3-Dichlorobenzene	U	1.08	ug/kg	0.323	1.08
106-46-7	1,4-Dichlorobenzene	U	1.08	ug/kg	0.323	1.08
104-51-8	n-Butylbenzene	U	1.08	ug/kg	0.323	1.08
96-12-8	1,2-Dibromo-3-chloropropane	U	1.08	ug/kg	0.323	1.08
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.38	ug/kg	1.72	5.38
630-20-6	1,1,1,2-Tetrachloroethane	U	1.08	ug/kg	0.323	1.08
95-50-1	1,2-Dichlorobenzene	U	1.08	ug/kg	0.323	1.08

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
No Tentatively Identified Compounds Found				ug/kg		

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-2199  
 Lab Sample ID: 248519003  
  
 Client ID: RE36-10-8277  
 Batch ID: 963809  
 Run Date: 03/11/2010 15:05  
 Prep Date: 03/11/2010 10:03  
 Data File: 031110V55B420.D

Date Collected: 02/25/2010 12:00  
 Date Received: 03/03/2010 08:50  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOAS.I  
 Analyst: CDS1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 25.4  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.34	ug/kg	0.456	1.34
74-87-3	Chloromethane	U	1.34	ug/kg	0.402	1.34
75-01-4	Vinyl chloride	U	1.34	ug/kg	0.402	1.34
74-83-9	Bromomethane	U	1.34	ug/kg	0.402	1.34
75-00-3	Chloroethane	U	1.34	ug/kg	0.402	1.34
75-69-4	Trichlorofluoromethane	U	1.34	ug/kg	0.402	1.34
67-64-1	Acetone	U	6.70	ug/kg	2.23	6.70
75-35-4	1,1-Dichloroethylene	U	1.34	ug/kg	0.402	1.34
74-88-4	Iodomethane	U	6.70	ug/kg	2.15	6.70
75-09-2	Methylene chloride	U	6.70	ug/kg	2.68	6.70
75-15-0	Carbon disulfide	U	6.70	ug/kg	1.68	6.70
156-60-5	trans-1,2-Dichloroethylene	U	1.34	ug/kg	0.402	1.34
75-34-3	1,1-Dichloroethane	U	1.34	ug/kg	0.402	1.34
78-93-3	2-Butanone	U	6.70	ug/kg	2.01	6.70
156-59-2	cis-1,2-Dichloroethylene	U	1.34	ug/kg	0.402	1.34
594-20-7	2,2-Dichloropropane	U	1.34	ug/kg	0.402	1.34
67-66-3	Chloroform	U	1.34	ug/kg	0.402	1.34
74-97-5	Bromochloromethane	U	1.34	ug/kg	0.442	1.34
71-55-6	1,1,1-Trichloroethane	U	1.34	ug/kg	0.402	1.34
563-58-6	1,1-Dichloropropene	U	1.34	ug/kg	0.402	1.34
56-23-5	Carbon tetrachloride	U	1.34	ug/kg	0.402	1.34
107-06-2	1,2-Dichloroethane	U	1.34	ug/kg	0.402	1.34
71-43-2	Benzene	U	1.34	ug/kg	0.402	1.34
79-01-6	Trichloroethylene	U	1.34	ug/kg	0.442	1.34
78-87-5	1,2-Dichloropropane	U	1.34	ug/kg	0.402	1.34
75-27-4	Bromodichloromethane	U	1.34	ug/kg	0.402	1.34
74-95-3	Dibromomethane	U	1.34	ug/kg	0.402	1.34
108-10-1	4-Methyl-2-pentanone	U	6.70	ug/kg	1.68	6.70
10061-01-5	cis-1,3-Dichloropropylene	U	1.34	ug/kg	0.402	1.34
108-88-3	Toluene	U	1.34	ug/kg	0.402	1.34
10061-02-6	trans-1,3-Dichloropropylene	U	1.34	ug/kg	0.402	1.34
79-00-5	1,1,2-Trichloroethane	U	1.34	ug/kg	0.402	1.34
591-78-6	2-Hexanone	U	6.70	ug/kg	2.01	6.70
142-28-9	1,3-Dichloropropane	U	1.34	ug/kg	0.402	1.34
127-18-4	Tetrachloroethylene	U	1.34	ug/kg	0.402	1.34
124-48-1	Dibromochloromethane	U	1.34	ug/kg	0.402	1.34
106-93-4	1,2-Dibromoethane	U	1.34	ug/kg	0.402	1.34
108-90-7	Chlorobenzene	U	1.34	ug/kg	0.402	1.34



**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-2199  
 Lab Sample ID: 248519003  
 Client ID: RE36-10-8277  
 Batch ID: 963809  
 Run Date: 03/11/2010 15:05  
 Prep Date: 03/11/2010 10:03  
 Data File: 031110V5SB420.D

Date Collected: 02/25/2010 12:00  
 Date Received: 03/03/2010 08:50  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: CDS1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 25.4  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.34	ug/kg	0.402	1.34
179601-23-1	m,p-Xylenes	U	2.68	ug/kg	0.402	2.68
95-47-6	o-Xylene	U	1.34	ug/kg	0.402	1.34
100-42-5	Styrene	U	1.34	ug/kg	0.402	1.34
75-25-2	Bromoform	U	1.34	ug/kg	0.402	1.34
79-34-5	1,1,2,2-Tetrachloroethane	U	1.34	ug/kg	0.402	1.34
96-18-4	1,2,3-Trichloropropane	U	1.34	ug/kg	0.402	1.34
108-86-1	Bromobenzene	U	1.34	ug/kg	0.402	1.34
103-65-1	n-Propylbenzene	U	1.34	ug/kg	0.402	1.34
95-49-8	2-Chlorotoluene	U	1.34	ug/kg	0.402	1.34
98-82-8	Isopropylbenzene	U	1.34	ug/kg	0.402	1.34
108-67-8	1,3,5-Trimethylbenzene	U	1.34	ug/kg	0.402	1.34
106-43-4	4-Chlorotoluene	U	1.34	ug/kg	0.402	1.34
98-06-6	tert-Butylbenzene	U	1.34	ug/kg	0.402	1.34
95-63-6	1,2,4-Trimethylbenzene	U	1.34	ug/kg	0.402	1.34
135-98-8	sec-Butylbenzene	U	1.34	ug/kg	0.402	1.34
99-87-6	4-Isopropyltoluene		12.4	ug/kg	0.402	1.34
541-73-1	1,3-Dichlorobenzene	U	1.34	ug/kg	0.402	1.34
106-46-7	1,4-Dichlorobenzene	U	1.34	ug/kg	0.402	1.34
104-51-8	n-Butylbenzene	U	1.34	ug/kg	0.402	1.34
96-12-8	1,2-Dibromo-3-chloropropane	U	1.34	ug/kg	0.402	1.34
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.70	ug/kg	2.15	6.70
630-20-6	1,1,1,2-Tetrachloroethane	U	1.34	ug/kg	0.402	1.34
95-50-1	1,2-Dichlorobenzene	U	1.34	ug/kg	0.402	1.34

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown hydrocarbon	11.99	9.49	ug/kg	0	J

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-2199  
 Lab Sample ID: 248519004  
 Client ID: RE36-10-8280  
 Batch ID: 963809  
 Run Date: 03/11/2010 15:32  
 Prep Date: 03/11/2010 10:04  
 Data File: 031110V55B421.D

Date Collected: 02/25/2010 12:00  
 Date Received: 03/03/2010 08:50  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: CDS1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 9.5  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.10	ug/kg	0.376	1.10
74-87-3	Chloromethane	U	1.10	ug/kg	0.331	1.10
75-01-4	Vinyl chloride	U	1.10	ug/kg	0.331	1.10
74-83-9	Bromomethane	U	1.10	ug/kg	0.331	1.10
75-00-3	Chloroethane	U	1.10	ug/kg	0.331	1.10
75-69-4	Trichlorofluoromethane	U	1.10	ug/kg	0.331	1.10
67-64-1	Acetone	U	5.52	ug/kg	1.83	5.52
75-35-4	1,1-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
74-88-4	Iodomethane	U	5.52	ug/kg	1.77	5.52
75-09-2	Methylene chloride	U	5.52	ug/kg	2.21	5.52
75-15-0	Carbon disulfide	U	5.52	ug/kg	1.38	5.52
156-60-5	trans-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
75-34-3	1,1-Dichloroethane	U	1.10	ug/kg	0.331	1.10
78-93-3	2-Butanone	U	5.52	ug/kg	1.66	5.52
156-59-2	cis-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
594-20-7	2,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10
67-66-3	Chloroform	U	1.10	ug/kg	0.331	1.10
74-97-5	Bromochloromethane	U	1.10	ug/kg	0.364	1.10
71-55-6	1,1,1-Trichloroethane	U	1.10	ug/kg	0.331	1.10
563-58-6	1,1-Dichloropropene	U	1.10	ug/kg	0.331	1.10
56-23-5	Carbon tetrachloride	U	1.10	ug/kg	0.331	1.10
107-06-2	1,2-Dichloroethane	U	1.10	ug/kg	0.331	1.10
71-43-2	Benzene	U	1.10	ug/kg	0.331	1.10
79-01-6	Trichloroethylene	U	1.10	ug/kg	0.364	1.10
78-87-5	1,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10
75-27-4	Bromodichloromethane	U	1.10	ug/kg	0.331	1.10
74-95-3	Dibromomethane	U	1.10	ug/kg	0.331	1.10
108-10-1	4-Methyl-2-pentanone	U	5.52	ug/kg	1.38	5.52
10061-01-5	cis-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10
108-88-3	Toluene	J	0.398	ug/kg	0.331	1.10
10061-02-6	trans-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10
79-00-5	1,1,2-Trichloroethane	U	1.10	ug/kg	0.331	1.10
591-78-6	2-Hexanone	U	5.52	ug/kg	1.66	5.52
142-28-9	1,3-Dichloropropane	U	1.10	ug/kg	0.331	1.10
127-18-4	Tetrachloroethylene	U	1.10	ug/kg	0.331	1.10
124-48-1	Dibromochloromethane	U	1.10	ug/kg	0.331	1.10
106-93-4	1,2-Dibromoethane	U	1.10	ug/kg	0.331	1.10
108-90-7	Chlorobenzene	U	1.10	ug/kg	0.331	1.10

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-2199  
 Lab Sample ID: 248519004

Date Collected: 02/25/2010 12:00  
 Date Received: 03/03/2010 08:50  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.1  
 Analyst: CDS1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 9.5  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

Client ID: RE36-10-8280  
 Batch ID: 963809  
 Run Date: 03/11/2010 15:32  
 Prep Date: 03/11/2010 10:04  
 Data File: 031110V55B421.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.10	ug/kg	0.331	1.10
179601-23-1	m,p-Xylenes	U	2.21	ug/kg	0.331	2.21
95-47-6	o-Xylene	U	1.10	ug/kg	0.331	1.10
100-42-5	Styrene	U	1.10	ug/kg	0.331	1.10
75-25-2	Bromoform	U	1.10	ug/kg	0.331	1.10
79-34-5	1,1,2,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
96-18-4	1,2,3-Trichloropropane	U	1.10	ug/kg	0.331	1.10
108-86-1	Bromobenzene	U	1.10	ug/kg	0.331	1.10
103-65-1	n-Propylbenzene	U	1.10	ug/kg	0.331	1.10
95-49-8	2-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-82-8	Isopropylbenzene	U	1.10	ug/kg	0.331	1.10
108-67-8	1,3,5-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
106-43-4	4-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-06-6	tert-Butylbenzene	U	1.10	ug/kg	0.331	1.10
95-63-6	1,2,4-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
135-98-8	sec-Butylbenzene	U	1.10	ug/kg	0.331	1.10
99-87-6	4-Isopropyltoluene	U	1.10	ug/kg	0.331	1.10
541-73-1	1,3-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
106-46-7	1,4-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
104-51-8	n-Butylbenzene	U	1.10	ug/kg	0.331	1.10
96-12-8	1,2-Dibromo-3-chloropropane	U	1.10	ug/kg	0.331	1.10
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.52	ug/kg	1.77	5.52
630-20-6	1,1,1,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
95-50-1	1,2-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown hydrocarbon	12.77	5.8	ug/kg	0	J

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

**SDG Number:** 10-2199  
**Lab Sample ID:** 248519005  
  
**Client ID:** RE36-10-8278  
**Batch ID:** 963809  
**Run Date:** 03/11/2010 15:58  
**Prep Date:** 03/11/2010 10:05  
**Data File:** 031110V55B422.D

**Date Collected:** 02/25/2010 12:00  
**Date Received:** 03/03/2010 08:50  
**Client:** LANL010  
**Method:** SW846 8260B  
**Inst:** VOA5.I  
**Analyst:** CDS1  
**Aliquot:** 5 g  
**Column:** DB-624

**Matrix:** R  
**%Moisture:** 6.4  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-038  
**Dilution:** 1  
**Purge Vol:** 5 mL  
**Final Volume:** 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.07	ug/kg	0.363	1.07
74-87-3	Chloromethane	U	1.07	ug/kg	0.320	1.07
75-01-4	Vinyl chloride	U	1.07	ug/kg	0.320	1.07
74-83-9	Bromomethane	U	1.07	ug/kg	0.320	1.07
75-00-3	Chloroethane	U	1.07	ug/kg	0.320	1.07
75-69-4	Trichlorofluoromethane	U	1.07	ug/kg	0.320	1.07
67-64-1	Acetone	U	5.34	ug/kg	1.77	5.34
75-35-4	1,1-Dichloroethylene	U	1.07	ug/kg	0.320	1.07
74-88-4	Iodomethane	U	5.34	ug/kg	1.71	5.34
75-09-2	Methylene chloride	U	5.34	ug/kg	2.14	5.34
75-15-0	Carbon disulfide	U	5.34	ug/kg	1.33	5.34
156-60-5	trans-1,2-Dichloroethylene	U	1.07	ug/kg	0.320	1.07
75-34-3	1,1-Dichloroethane	U	1.07	ug/kg	0.320	1.07
78-93-3	2-Butanone	U	5.34	ug/kg	1.60	5.34
156-59-2	cis-1,2-Dichloroethylene	U	1.07	ug/kg	0.320	1.07
594-20-7	2,2-Dichloropropane	U	1.07	ug/kg	0.320	1.07
67-66-3	Chloroform	U	1.07	ug/kg	0.320	1.07
74-97-5	Bromochloromethane	U	1.07	ug/kg	0.352	1.07
71-55-6	1,1,1-Trichloroethane	U	1.07	ug/kg	0.320	1.07
563-58-6	1,1-Dichloropropene	U	1.07	ug/kg	0.320	1.07
56-23-5	Carbon tetrachloride	U	1.07	ug/kg	0.320	1.07
107-06-2	1,2-Dichloroethane	U	1.07	ug/kg	0.320	1.07
71-43-2	Benzene	U	1.07	ug/kg	0.320	1.07
79-01-6	Trichloroethylene	U	1.07	ug/kg	0.352	1.07
78-87-5	1,2-Dichloropropane	U	1.07	ug/kg	0.320	1.07
75-27-4	Bromodichloromethane	U	1.07	ug/kg	0.320	1.07
74-95-3	Dibromomethane	U	1.07	ug/kg	0.320	1.07
108-10-1	4-Methyl-2-pentanone	U	5.34	ug/kg	1.33	5.34
10061-01-5	cis-1,3-Dichloropropylene	U	1.07	ug/kg	0.320	1.07
108-88-3	Toluene	J	0.331	ug/kg	0.320	1.07
10061-02-6	trans-1,3-Dichloropropylene	U	1.07	ug/kg	0.320	1.07
79-00-5	1,1,2-Trichloroethane	U	1.07	ug/kg	0.320	1.07
591-78-6	2-Hexanone	U	5.34	ug/kg	1.60	5.34
142-28-9	1,3-Dichloropropane	U	1.07	ug/kg	0.320	1.07
127-18-4	Tetrachloroethylene	U	1.07	ug/kg	0.320	1.07
124-48-1	Dibromochloromethane	U	1.07	ug/kg	0.320	1.07
106-93-4	1,2-Dibromoethane	U	1.07	ug/kg	0.320	1.07
108-90-7	Chlorobenzene	U	1.07	ug/kg	0.320	1.07

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-2199  
 Lab Sample ID: 248519005  
 Client ID: RE36-10-8278  
 Batch ID: 963809  
 Run Date: 03/11/2010 15:58  
 Prep Date: 03/11/2010 10:05  
 Data File: 031110V55B422.D

Date Collected: 02/25/2010 12:00  
 Date Received: 03/03/2010 08:50  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: CDS1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 6.4  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.07	ug/kg	0.320	1.07
179601-23-1	m,p-Xylenes	U	2.14	ug/kg	0.320	2.14
95-47-6	o-Xylene	U	1.07	ug/kg	0.320	1.07
100-42-5	Styrene	U	1.07	ug/kg	0.320	1.07
75-25-2	Bromoform	U	1.07	ug/kg	0.320	1.07
79-34-5	1,1,2,2-Tetrachloroethane	U	1.07	ug/kg	0.320	1.07
96-18-4	1,2,3-Trichloropropane	U	1.07	ug/kg	0.320	1.07
108-86-1	Bromobenzene	U	1.07	ug/kg	0.320	1.07
103-65-1	n-Propylbenzene	U	1.07	ug/kg	0.320	1.07
95-49-8	2-Chlorotoluene	U	1.07	ug/kg	0.320	1.07
98-82-8	Isopropylbenzene	U	1.07	ug/kg	0.320	1.07
108-67-8	1,3,5-Trimethylbenzene	U	1.07	ug/kg	0.320	1.07
106-43-4	4-Chlorotoluene	U	1.07	ug/kg	0.320	1.07
98-06-6	tert-Butylbenzene	U	1.07	ug/kg	0.320	1.07
95-63-6	1,2,4-Trimethylbenzene	U	1.07	ug/kg	0.320	1.07
135-98-8	sec-Butylbenzene	U	1.07	ug/kg	0.320	1.07
99-87-6	4-Isopropyltoluene	J	1.05	ug/kg	0.320	1.07
541-73-1	1,3-Dichlorobenzene	U	1.07	ug/kg	0.320	1.07
106-46-7	1,4-Dichlorobenzene	U	1.07	ug/kg	0.320	1.07
104-51-8	n-Butylbenzene	U	1.07	ug/kg	0.320	1.07
96-12-8	1,2-Dibromo-3-chloropropane	U	1.07	ug/kg	0.320	1.07
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.34	ug/kg	1.71	5.34
630-20-6	1,1,1,2-Tetrachloroethane	U	1.07	ug/kg	0.320	1.07
95-50-1	1,2-Dichlorobenzene	U	1.07	ug/kg	0.320	1.07

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
No Tentatively Identified Compounds Found				ug/kg		

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

<b>SDG Number:</b> 10-2199	<b>Date Collected:</b> 02/25/2010 12:00	<b>Matrix:</b> R
<b>Lab Sample ID:</b> 248519006	<b>Date Received:</b> 03/03/2010 08:50	<b>%Moisture:</b> 10.2
	<b>Client:</b> LANL010	<b>Project:</b> LANL01004
<b>Client ID:</b> RE36-10-8274	<b>Method:</b> SW846 8260B	<b>SOP Ref:</b> GL-OA-E-038
<b>Batch ID:</b> 963809	<b>Inst:</b> VOA5.I	<b>Dilution:</b> 1
<b>Run Date:</b> 03/11/2010 16:25	<b>Analyst:</b> CDS1	<b>Purge Vol:</b> 5 mL
<b>Prep Date:</b> 03/11/2010 10:06	<b>Aliquot:</b> 5 g	<b>Final Volume:</b> 5 mL
<b>Data File:</b> 031110V55B423.D	<b>Column:</b> DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.11	ug/kg	0.379	1.11
74-87-3	Chloromethane	U	1.11	ug/kg	0.334	1.11
75-01-4	Vinyl chloride	U	1.11	ug/kg	0.334	1.11
74-83-9	Bromomethane	U	1.11	ug/kg	0.334	1.11
75-00-3	Chloroethane	U	1.11	ug/kg	0.334	1.11
75-69-4	Trichlorofluoromethane	U	1.11	ug/kg	0.334	1.11
67-64-1	Acetone	U	5.57	ug/kg	1.85	5.57
75-35-4	1,1-Dichloroethylene	U	1.11	ug/kg	0.334	1.11
74-88-4	Iodomethane	U	5.57	ug/kg	1.78	5.57
75-09-2	Methylene chloride	U	5.57	ug/kg	2.23	5.57
75-15-0	Carbon disulfide	U	5.57	ug/kg	1.39	5.57
156-60-5	trans-1,2-Dichloroethylene	U	1.11	ug/kg	0.334	1.11
75-34-3	1,1-Dichloroethane	U	1.11	ug/kg	0.334	1.11
78-93-3	2-Butanone	U	5.57	ug/kg	1.67	5.57
156-59-2	cis-1,2-Dichloroethylene	U	1.11	ug/kg	0.334	1.11
594-20-7	2,2-Dichloropropane	U	1.11	ug/kg	0.334	1.11
67-66-3	Chloroform	U	1.11	ug/kg	0.334	1.11
74-97-5	Bromochloromethane	U	1.11	ug/kg	0.368	1.11
71-55-6	1,1,1-Trichloroethane	U	1.11	ug/kg	0.334	1.11
563-58-6	1,1-Dichloropropene	U	1.11	ug/kg	0.334	1.11
56-23-5	Carbon tetrachloride	U	1.11	ug/kg	0.334	1.11
107-06-2	1,2-Dichloroethane	U	1.11	ug/kg	0.334	1.11
71-43-2	Benzene	U	1.11	ug/kg	0.334	1.11
79-01-6	Trichloroethylene	U	1.11	ug/kg	0.368	1.11
78-87-5	1,2-Dichloropropane	U	1.11	ug/kg	0.334	1.11
75-27-4	Bromodichloromethane	U	1.11	ug/kg	0.334	1.11
74-95-3	Dibromomethane	U	1.11	ug/kg	0.334	1.11
108-10-1	4-Methyl-2-pentanone	U	5.57	ug/kg	1.39	5.57
10061-01-5	cis-1,3-Dichloropropylene	U	1.11	ug/kg	0.334	1.11
108-88-3	Toluene	U	1.11	ug/kg	0.334	1.11
10061-02-6	trans-1,3-Dichloropropylene	U	1.11	ug/kg	0.334	1.11
79-00-5	1,1,2-Trichloroethane	U	1.11	ug/kg	0.334	1.11
591-78-6	2-Hexanone	U	5.57	ug/kg	1.67	5.57
142-28-9	1,3-Dichloropropane	U	1.11	ug/kg	0.334	1.11
127-18-4	Tetrachloroethylene	U	1.11	ug/kg	0.334	1.11
124-48-1	Dibromochloromethane	U	1.11	ug/kg	0.334	1.11
106-93-4	1,2-Dibromoethane	U	1.11	ug/kg	0.334	1.11
108-90-7	Chlorobenzene	U	1.11	ug/kg	0.334	1.11

**Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-2199  
Lab Sample ID: 248519006  
  
Client ID: RE36-10-8274  
Batch ID: 963809  
Run Date: 03/11/2010 16:25  
Prep Date: 03/11/2010 10:06  
Data File: 031110V5SB423.D

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: CDS1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
%Moisture: 10.2  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.11	ug/kg	0.334	1.11
179601-23-1	m,p-Xylenes	U	2.23	ug/kg	0.334	2.23
95-47-6	o-Xylene	U	1.11	ug/kg	0.334	1.11
100-42-5	Styrene	U	1.11	ug/kg	0.334	1.11
75-25-2	Bromoform	U	1.11	ug/kg	0.334	1.11
79-34-5	1,1,2,2-Tetrachloroethane	U	1.11	ug/kg	0.334	1.11
96-18-4	1,2,3-Trichloropropane	U	1.11	ug/kg	0.334	1.11
108-86-1	Bromobenzene	U	1.11	ug/kg	0.334	1.11
103-65-1	n-Propylbenzene	U	1.11	ug/kg	0.334	1.11
95-49-8	2-Chlorotoluene	U	1.11	ug/kg	0.334	1.11
98-82-8	Isopropylbenzene	U	1.11	ug/kg	0.334	1.11
108-67-8	1,3,5-Trimethylbenzene	U	1.11	ug/kg	0.334	1.11
106-43-4	4-Chlorotoluene	U	1.11	ug/kg	0.334	1.11
98-06-6	tert-Butylbenzene	U	1.11	ug/kg	0.334	1.11
95-63-6	1,2,4-Trimethylbenzene	U	1.11	ug/kg	0.334	1.11
135-98-8	sec-Butylbenzene	U	1.11	ug/kg	0.334	1.11
99-87-6	4-Isopropyltoluene	U	1.11	ug/kg	0.334	1.11
541-73-1	1,3-Dichlorobenzene	U	1.11	ug/kg	0.334	1.11
106-46-7	1,4-Dichlorobenzene	U	1.11	ug/kg	0.334	1.11
104-51-8	n-Butylbenzene	U	1.11	ug/kg	0.334	1.11
96-12-8	1,2-Dibromo-3-chloropropane	U	1.11	ug/kg	0.334	1.11
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.57	ug/kg	1.78	5.57
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.11	ug/kg	0.334	1.11
95-50-1	1,2-Dichlorobenzene	U	1.11	ug/kg	0.334	1.11

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
No Tentatively Identified Compounds Found				ug/kg		

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-2199  
 Lab Sample ID: 248519007  
 Client ID: RE36-10-8291  
 Batch ID: 963809  
 Run Date: 03/11/2010 16:51  
 Prep Date: 03/11/2010 10:07  
 Data File: 031110V55B424.D

Date Collected: 02/25/2010 12:00  
 Date Received: 03/03/2010 08:50  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: CDS1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 28.9  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.41	ug/kg	0.478	1.41
74-87-3	Chloromethane	U	1.41	ug/kg	0.422	1.41
75-01-4	Vinyl chloride	U	1.41	ug/kg	0.422	1.41
74-83-9	Bromomethane	U	1.41	ug/kg	0.422	1.41
75-00-3	Chloroethane	U	1.41	ug/kg	0.422	1.41
75-69-4	Trichlorofluoromethane	U	1.41	ug/kg	0.422	1.41
67-64-1	Acetone	U	7.04	ug/kg	2.34	7.04
75-35-4	1,1-Dichloroethylene	U	1.41	ug/kg	0.422	1.41
74-88-4	Iodomethane	U	7.04	ug/kg	2.25	7.04
75-09-2	Methylene chloride	U	7.04	ug/kg	2.81	7.04
75-15-0	Carbon disulfide	U	7.04	ug/kg	1.76	7.04
156-60-5	trans-1,2-Dichloroethylene	U	1.41	ug/kg	0.422	1.41
75-34-3	1,1-Dichloroethane	U	1.41	ug/kg	0.422	1.41
78-93-3	2-Butanone	U	7.04	ug/kg	2.11	7.04
156-59-2	cis-1,2-Dichloroethylene	U	1.41	ug/kg	0.422	1.41
594-20-7	2,2-Dichloropropane	U	1.41	ug/kg	0.422	1.41
67-66-3	Chloroform	U	1.41	ug/kg	0.422	1.41
74-97-5	Bromochloromethane	U	1.41	ug/kg	0.464	1.41
71-55-6	1,1,1-Trichloroethane	U	1.41	ug/kg	0.422	1.41
563-58-6	1,1-Dichloropropene	U	1.41	ug/kg	0.422	1.41
56-23-5	Carbon tetrachloride	U	1.41	ug/kg	0.422	1.41
107-06-2	1,2-Dichloroethane	U	1.41	ug/kg	0.422	1.41
71-43-2	Benzene	U	1.41	ug/kg	0.422	1.41
79-01-6	Trichloroethylene	U	1.41	ug/kg	0.464	1.41
78-87-5	1,2-Dichloropropane	U	1.41	ug/kg	0.422	1.41
75-27-4	Bromodichloromethane	U	1.41	ug/kg	0.422	1.41
74-95-3	Dibromomethane	U	1.41	ug/kg	0.422	1.41
108-10-1	4-Methyl-2-pentanone	U	7.04	ug/kg	1.76	7.04
10061-01-5	cis-1,3-Dichloropropylene	U	1.41	ug/kg	0.422	1.41
108-88-3	Toluene	J	0.732	ug/kg	0.422	1.41
10061-02-6	trans-1,3-Dichloropropylene	U	1.41	ug/kg	0.422	1.41
79-00-5	1,1,2-Trichloroethane	U	1.41	ug/kg	0.422	1.41
591-78-6	2-Hexanone	U	7.04	ug/kg	2.11	7.04
142-28-9	1,3-Dichloropropane	U	1.41	ug/kg	0.422	1.41
127-18-4	Tetrachloroethylene	U	1.41	ug/kg	0.422	1.41
124-48-1	Dibromochloromethane	U	1.41	ug/kg	0.422	1.41
106-93-4	1,2-Dibromoethane	U	1.41	ug/kg	0.422	1.41
108-90-7	Chlorobenzene	U	1.41	ug/kg	0.422	1.41



**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-2199	Date Collected: 02/25/2010 12:00	Matrix: R
Lab Sample ID: 248519007	Date Received: 03/03/2010 08:50	%Moisture: 28.9
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-8291	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 963809	Inst: VOA5.1	Dilution: 1
Run Date: 03/11/2010 16:51	Analyst: CDS1	Purge Vol: 5 mL
Prep Date: 03/11/2010 10:07	Aliquot: 5 g	Final Volume: 5 mL
Data File: 031110V55B424.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.41	ug/kg	0.422	1.41
179601-23-1	m,p-Xylenes	U	2.81	ug/kg	0.422	2.81
95-47-6	o-Xylene	U	1.41	ug/kg	0.422	1.41
100-42-5	Styrene	U	1.41	ug/kg	0.422	1.41
75-25-2	Bromoform	U	1.41	ug/kg	0.422	1.41
79-34-5	1,1,2,2-Tetrachloroethane	U	1.41	ug/kg	0.422	1.41
96-18-4	1,2,3-Trichloropropane	U	1.41	ug/kg	0.422	1.41
108-86-1	Bromobenzene	U	1.41	ug/kg	0.422	1.41
103-65-1	n-Propylbenzene	U	1.41	ug/kg	0.422	1.41
95-49-8	2-Chlorotoluene	U	1.41	ug/kg	0.422	1.41
98-82-8	Isopropylbenzene	U	1.41	ug/kg	0.422	1.41
108-67-8	1,3,5-Trimethylbenzene	U	1.41	ug/kg	0.422	1.41
106-43-4	4-Chlorotoluene	U	1.41	ug/kg	0.422	1.41
98-06-6	tert-Butylbenzene	U	1.41	ug/kg	0.422	1.41
95-63-6	1,2,4-Trimethylbenzene	U	1.41	ug/kg	0.422	1.41
135-98-8	sec-Butylbenzene	U	1.41	ug/kg	0.422	1.41
99-87-6	4-Isopropyltoluene	U	1.41	ug/kg	0.422	1.41
541-73-1	1,3-Dichlorobenzene	U	1.41	ug/kg	0.422	1.41
106-46-7	1,4-Dichlorobenzene	U	1.41	ug/kg	0.422	1.41
104-51-8	n-Butylbenzene	U	1.41	ug/kg	0.422	1.41
96-12-8	1,2-Dibromo-3-chloropropane	U	1.41	ug/kg	0.422	1.41
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	7.04	ug/kg	2.25	7.04
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.41	ug/kg	0.422	1.41
95-50-1	1,2-Dichlorobenzene	U	1.41	ug/kg	0.422	1.41

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
No Tentatively Identified Compounds Found				ug/kg		

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-2199  
 Lab Sample ID: 248519008  
 Client ID: RE36-10-8287  
 Batch ID: 963809  
 Run Date: 03/11/2010 17:18  
 Prep Date: 03/11/2010 10:08  
 Data File: 031110V5\$B425.D

Date Collected: 02/25/2010 12:00  
 Date Received: 03/03/2010 08:50  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: CDS1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 32.9  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.49	ug/kg	0.507	1.49
74-87-3	Chloromethane	U	1.49	ug/kg	0.447	1.49
75-01-4	Vinyl chloride	U	1.49	ug/kg	0.447	1.49
74-83-9	Bromomethane	U	1.49	ug/kg	0.447	1.49
75-00-3	Chloroethane	U	1.49	ug/kg	0.447	1.49
75-69-4	Trichlorofluoromethane	U	1.49	ug/kg	0.447	1.49
67-64-1	Acetone	J	5.89	ug/kg	2.48	7.46
75-35-4	1,1-Dichloroethylene	U	1.49	ug/kg	0.447	1.49
74-88-4	Iodomethane	U	7.46	ug/kg	2.39	7.46
75-09-2	Methylene chloride	U	7.46	ug/kg	2.98	7.46
75-15-0	Carbon disulfide	U	7.46	ug/kg	1.86	7.46
156-60-5	trans-1,2-Dichloroethylene	U	1.49	ug/kg	0.447	1.49
75-34-3	1,1-Dichloroethane	U	1.49	ug/kg	0.447	1.49
78-93-3	2-Butanone	U	7.46	ug/kg	2.24	7.46
156-59-2	cis-1,2-Dichloroethylene	U	1.49	ug/kg	0.447	1.49
594-20-7	2,2-Dichloropropane	U	1.49	ug/kg	0.447	1.49
67-66-3	Chloroform	U	1.49	ug/kg	0.447	1.49
74-97-5	Bromochloromethane	U	1.49	ug/kg	0.492	1.49
71-55-6	1,1,1-Trichloroethane	U	1.49	ug/kg	0.447	1.49
563-58-6	1,1-Dichloropropene	U	1.49	ug/kg	0.447	1.49
56-23-5	Carbon tetrachloride	U	1.49	ug/kg	0.447	1.49
107-06-2	1,2-Dichloroethane	U	1.49	ug/kg	0.447	1.49
71-43-2	Benzene	U	1.49	ug/kg	0.447	1.49
79-01-6	Trichloroethylene	U	1.49	ug/kg	0.492	1.49
78-87-5	1,2-Dichloropropane	U	1.49	ug/kg	0.447	1.49
75-27-4	Bromodichloromethane	U	1.49	ug/kg	0.447	1.49
74-95-3	Dibromomethane	U	1.49	ug/kg	0.447	1.49
108-10-1	4-Methyl-2-pentanone	U	7.46	ug/kg	1.86	7.46
10061-01-5	cis-1,3-Dichloropropylene	U	1.49	ug/kg	0.447	1.49
108-88-3	Toluene	J	1.13	ug/kg	0.447	1.49
10061-02-6	trans-1,3-Dichloropropylene	U	1.49	ug/kg	0.447	1.49
79-00-5	1,1,2-Trichloroethane	U	1.49	ug/kg	0.447	1.49
591-78-6	2-Hexanone	U	7.46	ug/kg	2.24	7.46
142-28-9	1,3-Dichloropropane	U	1.49	ug/kg	0.447	1.49
127-18-4	Tetrachloroethylene	U	1.49	ug/kg	0.447	1.49
124-48-1	Dibromochloromethane	U	1.49	ug/kg	0.447	1.49
106-93-4	1,2-Dibromoethane	U	1.49	ug/kg	0.447	1.49
108-90-7	Chlorobenzene	U	1.49	ug/kg	0.447	1.49

**Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-2199  
Lab Sample ID: 248519008

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8260B  
Inst: VOAS.I  
Analyst: CDS1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
%Moisture: 32.9  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

Client ID: RE36-10-8287  
Batch ID: 963809  
Run Date: 03/11/2010 17:18  
Prep Date: 03/11/2010 10:08  
Data File: 031110VS5B425.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.49	ug/kg	0.447	1.49
179601-23-1	m,p-Xylenes	U	2.98	ug/kg	0.447	2.98
95-47-6	o-Xylene	U	1.49	ug/kg	0.447	1.49
100-42-5	Styrene	U	1.49	ug/kg	0.447	1.49
75-25-2	Bromoform	U	1.49	ug/kg	0.447	1.49
79-34-5	1,1,2,2-Tetrachloroethane	U	1.49	ug/kg	0.447	1.49
96-18-4	1,2,3-Trichloropropane	U	1.49	ug/kg	0.447	1.49
108-86-1	Bromobenzene	U	1.49	ug/kg	0.447	1.49
103-65-1	n-Propylbenzene	U	1.49	ug/kg	0.447	1.49
95-49-8	2-Chlorotoluene	U	1.49	ug/kg	0.447	1.49
98-82-8	Isopropylbenzene	U	1.49	ug/kg	0.447	1.49
108-67-8	1,3,5-Trimethylbenzene	U	1.49	ug/kg	0.447	1.49
106-43-4	4-Chlorotoluene	U	1.49	ug/kg	0.447	1.49
98-06-6	tert-Butylbenzene	U	1.49	ug/kg	0.447	1.49
95-63-6	1,2,4-Trimethylbenzene	U	1.49	ug/kg	0.447	1.49
135-98-8	sec-Butylbenzene	U	1.49	ug/kg	0.447	1.49
99-87-6	4-Isopropyltoluene		7.31	ug/kg	0.447	1.49
541-73-1	1,3-Dichlorobenzene	U	1.49	ug/kg	0.447	1.49
106-46-7	1,4-Dichlorobenzene	U	1.49	ug/kg	0.447	1.49
104-51-8	n-Butylbenzene	U	1.49	ug/kg	0.447	1.49
96-12-8	1,2-Dibromo-3-chloropropane	U	1.49	ug/kg	0.447	1.49
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	7.46	ug/kg	2.39	7.46
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.49	ug/kg	0.447	1.49
95-50-1	1,2-Dichlorobenzene	U	1.49	ug/kg	0.447	1.49

## Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
No Tentatively Identified Compounds Found				ug/kg		

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-2199  
 Lab Sample ID: 248519009

Date Collected: 02/25/2010 12:00  
 Date Received: 03/03/2010 08:50  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: CDS1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 29  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

Client ID: RE36-10-8273  
 Batch ID: 963809  
 Run Date: 03/11/2010 17:44  
 Prep Date: 03/11/2010 10:09  
 Data File: 031110V55B426.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.41	ug/kg	0.479	1.41
74-87-3	Chloromethane	U	1.41	ug/kg	0.423	1.41
75-01-4	Vinyl chloride	U	1.41	ug/kg	0.423	1.41
74-83-9	Bromomethane	U	1.41	ug/kg	0.423	1.41
75-00-3	Chloroethane	U	1.41	ug/kg	0.423	1.41
75-69-4	Trichlorofluoromethane	U	1.41	ug/kg	0.423	1.41
67-64-1	Acetone	U	7.05	ug/kg	2.34	7.05
75-35-4	1,1-Dichloroethylene	U	1.41	ug/kg	0.423	1.41
74-88-4	Iodomethane	U	7.05	ug/kg	2.25	7.05
75-09-2	Methylene chloride	U	7.05	ug/kg	2.82	7.05
75-15-0	Carbon disulfide	U	7.05	ug/kg	1.76	7.05
156-60-5	trans-1,2-Dichloroethylene	U	1.41	ug/kg	0.423	1.41
75-34-3	1,1-Dichloroethane	U	1.41	ug/kg	0.423	1.41
78-93-3	2-Butanone	U	7.05	ug/kg	2.11	7.05
156-59-2	cis-1,2-Dichloroethylene	U	1.41	ug/kg	0.423	1.41
594-20-7	2,2-Dichloropropane	U	1.41	ug/kg	0.423	1.41
67-66-3	Chloroform	U	1.41	ug/kg	0.423	1.41
74-97-5	Bromochloromethane	U	1.41	ug/kg	0.465	1.41
71-55-6	1,1,1-Trichloroethane	U	1.41	ug/kg	0.423	1.41
563-58-6	1,1-Dichloropropene	U	1.41	ug/kg	0.423	1.41
56-23-5	Carbon tetrachloride	U	1.41	ug/kg	0.423	1.41
107-06-2	1,2-Dichloroethane	U	1.41	ug/kg	0.423	1.41
71-43-2	Benzene	U	1.41	ug/kg	0.423	1.41
79-01-6	Trichloroethylene	U	1.41	ug/kg	0.465	1.41
78-87-5	1,2-Dichloropropane	U	1.41	ug/kg	0.423	1.41
75-27-4	Bromodichloromethane	U	1.41	ug/kg	0.423	1.41
74-95-3	Dibromomethane	U	1.41	ug/kg	0.423	1.41
108-10-1	4-Methyl-2-pentanone	U	7.05	ug/kg	1.76	7.05
10061-01-5	cis-1,3-Dichloropropylene	U	1.41	ug/kg	0.423	1.41
108-88-3	Toluene	J	1.00	ug/kg	0.423	1.41
10061-02-6	trans-1,3-Dichloropropylene	U	1.41	ug/kg	0.423	1.41
79-00-5	1,1,2-Trichloroethane	U	1.41	ug/kg	0.423	1.41
591-78-6	2-Hexanone	U	7.05	ug/kg	2.11	7.05
142-28-9	1,3-Dichloropropane	U	1.41	ug/kg	0.423	1.41
127-18-4	Tetrachloroethylene	U	1.41	ug/kg	0.423	1.41
124-48-1	Dibromochloromethane	U	1.41	ug/kg	0.423	1.41
106-93-4	1,2-Dibromoethane	U	1.41	ug/kg	0.423	1.41
108-90-7	Chlorobenzene	U	1.41	ug/kg	0.423	1.41

**Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-2199  
Lab Sample ID: 248519009  
  
Client ID: RE36-10-8273  
Batch ID: 963809  
Run Date: 03/11/2010 17:44  
Prep Date: 03/11/2010 10:09  
Data File: 031110V55B426.D

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: CDS1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
%Moisture: 29  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.41	ug/kg	0.423	1.41
179601-23-1	m,p-Xylenes	U	2.82	ug/kg	0.423	2.82
95-47-6	o-Xylene	U	1.41	ug/kg	0.423	1.41
100-42-5	Styrene	U	1.41	ug/kg	0.423	1.41
75-25-2	Bromoform	U	1.41	ug/kg	0.423	1.41
79-34-5	1,1,2,2-Tetrachloroethane	U	1.41	ug/kg	0.423	1.41
96-18-4	1,2,3-Trichloropropane	U	1.41	ug/kg	0.423	1.41
108-86-1	Bromobenzene	U	1.41	ug/kg	0.423	1.41
103-65-1	n-Propylbenzene	U	1.41	ug/kg	0.423	1.41
95-49-8	2-Chlorotoluene	U	1.41	ug/kg	0.423	1.41
98-82-8	Isopropylbenzene	U	1.41	ug/kg	0.423	1.41
108-67-8	1,3,5-Trimethylbenzene	U	1.41	ug/kg	0.423	1.41
106-43-4	4-Chlorotoluene	U	1.41	ug/kg	0.423	1.41
98-06-6	tert-Butylbenzene	U	1.41	ug/kg	0.423	1.41
95-63-6	1,2,4-Trimethylbenzene	U	1.41	ug/kg	0.423	1.41
135-98-8	sec-Butylbenzene	U	1.41	ug/kg	0.423	1.41
99-87-6	4-Isopropyltoluene		2.35	ug/kg	0.423	1.41
541-73-1	1,3-Dichlorobenzene	U	1.41	ug/kg	0.423	1.41
106-46-7	1,4-Dichlorobenzene	U	1.41	ug/kg	0.423	1.41
104-51-8	n-Butylbenzene	U	1.41	ug/kg	0.423	1.41
96-12-8	1,2-Dibromo-3-chloropropane	U	1.41	ug/kg	0.423	1.41
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	7.05	ug/kg	2.25	7.05
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.41	ug/kg	0.423	1.41
95-50-1	1,2-Dichlorobenzene	U	1.41	ug/kg	0.423	1.41

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
No Tentatively Identified Compounds Found				ug/kg		

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-2199  
 Lab Sample ID: 248519010

Date Collected: 02/25/2010 12:00  
 Date Received: 03/03/2010 08:50  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: CDS1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 40.1  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

Client ID: RE36-10-8275  
 Batch ID: 963809  
 Run Date: 03/11/2010 21:15  
 Prep Date: 03/11/2010 10:10  
 Data File: 031110V5USB434.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.67	ug/kg	0.568	1.67
74-87-3	Chloromethane	U	1.67	ug/kg	0.501	1.67
75-01-4	Vinyl chloride	U	1.67	ug/kg	0.501	1.67
74-83-9	Bromomethane	U	1.67	ug/kg	0.501	1.67
75-00-3	Chloroethane	U	1.67	ug/kg	0.501	1.67
75-69-4	Trichlorofluoromethane	U	1.67	ug/kg	0.501	1.67
67-64-1	Acetone	U	8.35	ug/kg	2.77	8.35
75-35-4	1,1-Dichloroethylene	U	1.67	ug/kg	0.501	1.67
74-88-4	Iodomethane	U	8.35	ug/kg	2.67	8.35
75-09-2	Methylene chloride	U	8.35	ug/kg	3.34	8.35
75-15-0	Carbon disulfide	U	8.35	ug/kg	2.09	8.35
156-60-5	trans-1,2-Dichloroethylene	U	1.67	ug/kg	0.501	1.67
75-34-3	1,1-Dichloroethane	U	1.67	ug/kg	0.501	1.67
78-93-3	2-Butanone	U	8.35	ug/kg	2.51	8.35
156-59-2	cis-1,2-Dichloroethylene	U	1.67	ug/kg	0.501	1.67
594-20-7	2,2-Dichloropropane	U	1.67	ug/kg	0.501	1.67
67-66-3	Chloroform	U	1.67	ug/kg	0.501	1.67
74-97-5	Bromochloromethane	U	1.67	ug/kg	0.551	1.67
71-55-6	1,1,1-Trichloroethane	U	1.67	ug/kg	0.501	1.67
563-58-6	1,1-Dichloropropene	U	1.67	ug/kg	0.501	1.67
56-23-5	Carbon tetrachloride	U	1.67	ug/kg	0.501	1.67
107-06-2	1,2-Dichloroethane	U	1.67	ug/kg	0.501	1.67
71-43-2	Benzene	U	1.67	ug/kg	0.501	1.67
79-01-6	Trichloroethylene	U	1.67	ug/kg	0.551	1.67
78-87-5	1,2-Dichloropropane	U	1.67	ug/kg	0.501	1.67
75-27-4	Bromodichloromethane	U	1.67	ug/kg	0.501	1.67
74-95-3	Dibromomethane	U	1.67	ug/kg	0.501	1.67
108-10-1	4-Methyl-2-pentanone	U	8.35	ug/kg	2.09	8.35
10061-01-5	cis-1,3-Dichloropropylene	U	1.67	ug/kg	0.501	1.67
108-88-3	Toluene	J	1.35	ug/kg	0.501	1.67
10061-02-6	trans-1,3-Dichloropropylene	U	1.67	ug/kg	0.501	1.67
79-00-5	1,1,2-Trichloroethane	U	1.67	ug/kg	0.501	1.67
591-78-6	2-Hexanone	U	8.35	ug/kg	2.51	8.35
142-28-9	1,3-Dichloropropane	U	1.67	ug/kg	0.501	1.67
127-18-4	Tetrachloroethylene	U	1.67	ug/kg	0.501	1.67
124-48-1	Dibromochloromethane	U	1.67	ug/kg	0.501	1.67
106-93-4	1,2-Dibromoethane	U	1.67	ug/kg	0.501	1.67
108-90-7	Chlorobenzene	U	1.67	ug/kg	0.501	1.67

**Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-2199  
Lab Sample ID: 248519010  
  
Client ID: RE36-10-8275  
Batch ID: 963809  
Run Date: 03/11/2010 21:15  
Prep Date: 03/11/2010 10:10  
Data File: 031110V5SB434.D

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.1  
Analyst: CDS1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
%Moisture: 40.1  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.67	ug/kg	0.501	1.67
179601-23-1	m,p-Xylenes	U	3.34	ug/kg	0.501	3.34
95-47-6	o-Xylene	U	1.67	ug/kg	0.501	1.67
100-42-5	Styrene	U	1.67	ug/kg	0.501	1.67
75-25-2	Bromoform	U	1.67	ug/kg	0.501	1.67
79-34-5	1,1,2,2-Tetrachloroethane	U	1.67	ug/kg	0.501	1.67
96-18-4	1,2,3-Trichloropropane	U	1.67	ug/kg	0.501	1.67
108-86-1	Bromobenzene	U	1.67	ug/kg	0.501	1.67
103-65-1	n-Propylbenzene	U	1.67	ug/kg	0.501	1.67
95-49-8	2-Chlorotoluene	U	1.67	ug/kg	0.501	1.67
98-82-8	Isopropylbenzene	U	1.67	ug/kg	0.501	1.67
108-67-8	1,3,5-Trimethylbenzene	U	1.67	ug/kg	0.501	1.67
106-43-4	4-Chlorotoluene	U	1.67	ug/kg	0.501	1.67
98-06-6	tert-Butylbenzene	U	1.67	ug/kg	0.501	1.67
95-63-6	1,2,4-Trimethylbenzene	U	1.67	ug/kg	0.501	1.67
135-98-8	sec-Butylbenzene	U	1.67	ug/kg	0.501	1.67
99-87-6	4-Isopropyltoluene		10.1	ug/kg	0.501	1.67
541-73-1	1,3-Dichlorobenzene	U	1.67	ug/kg	0.501	1.67
106-46-7	1,4-Dichlorobenzene	U	1.67	ug/kg	0.501	1.67
104-51-8	n-Butylbenzene	U	1.67	ug/kg	0.501	1.67
96-12-8	1,2-Dibromo-3-chloropropane	U	1.67	ug/kg	0.501	1.67
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	8.35	ug/kg	2.67	8.35
630-20-6	1,1,1,2-Tetrachloroethane	U	1.67	ug/kg	0.501	1.67
95-50-1	1,2-Dichlorobenzene	U	1.67	ug/kg	0.501	1.67

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
No Tentatively Identified Compounds Found				ug/kg		

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

**SDG Number:** 10-2199  
**Lab Sample ID:** 248519011

**Date Collected:** 02/25/2010 12:00  
**Date Received:** 03/03/2010 08:50  
**Client:** LANL010  
**Method:** SW846 8260B  
**Inst:** VOAS.I  
**Analyst:** CDS1  
**Aliquot:** 5 g  
**Column:** DB-624

**Matrix:** R  
**%Moisture:** 14.6  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-038  
**Dilution:** 1  
**Purge Vol:** 5 mL  
**Final Volume:** 5 mL

**Client ID:** RE36-10-8276  
**Batch ID:** 963809  
**Run Date:** 03/11/2010 21:42  
**Prep Date:** 03/11/2010 10:11  
**Data File:** 031110V5\5B435.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.17	ug/kg	0.398	1.17
74-87-3	Chloromethane	U	1.17	ug/kg	0.351	1.17
75-01-4	Vinyl chloride	U	1.17	ug/kg	0.351	1.17
74-83-9	Bromomethane	U	1.17	ug/kg	0.351	1.17
75-00-3	Chloroethane	U	1.17	ug/kg	0.351	1.17
75-69-4	Trichlorofluoromethane	U	1.17	ug/kg	0.351	1.17
67-64-1	Acetone	U	5.86	ug/kg	1.94	5.86
75-35-4	1,1-Dichloroethylene	U	1.17	ug/kg	0.351	1.17
74-88-4	Iodomethane	U	5.86	ug/kg	1.87	5.86
75-09-2	Methylene chloride	U	5.86	ug/kg	2.34	5.86
75-15-0	Carbon disulfide	U	5.86	ug/kg	1.46	5.86
156-60-5	trans-1,2-Dichloroethylene	U	1.17	ug/kg	0.351	1.17
75-34-3	1,1-Dichloroethane	U	1.17	ug/kg	0.351	1.17
78-93-3	2-Butanone	U	5.86	ug/kg	1.76	5.86
156-59-2	cis-1,2-Dichloroethylene	U	1.17	ug/kg	0.351	1.17
594-20-7	2,2-Dichloropropane	U	1.17	ug/kg	0.351	1.17
67-66-3	Chloroform	U	1.17	ug/kg	0.351	1.17
74-97-5	Bromochloromethane	U	1.17	ug/kg	0.387	1.17
71-55-6	1,1,1-Trichloroethane	U	1.17	ug/kg	0.351	1.17
563-58-6	1,1-Dichloropropene	U	1.17	ug/kg	0.351	1.17
56-23-5	Carbon tetrachloride	U	1.17	ug/kg	0.351	1.17
107-06-2	1,2-Dichloroethane	U	1.17	ug/kg	0.351	1.17
71-43-2	Benzene	U	1.17	ug/kg	0.351	1.17
79-01-6	Trichloroethylene	U	1.17	ug/kg	0.387	1.17
78-87-5	1,2-Dichloropropane	U	1.17	ug/kg	0.351	1.17
75-27-4	Bromodichloromethane	U	1.17	ug/kg	0.351	1.17
74-95-3	Dibromomethane	U	1.17	ug/kg	0.351	1.17
108-10-1	4-Methyl-2-pentanone	U	5.86	ug/kg	1.46	5.86
10061-01-5	cis-1,3-Dichloropropylene	U	1.17	ug/kg	0.351	1.17
108-88-3	Toluene	U	1.17	ug/kg	0.351	1.17
10061-02-6	trans-1,3-Dichloropropylene	U	1.17	ug/kg	0.351	1.17
79-00-5	1,1,2-Trichloroethane	U	1.17	ug/kg	0.351	1.17
591-78-6	2-Hexanone	U	5.86	ug/kg	1.76	5.86
142-28-9	1,3-Dichloropropane	U	1.17	ug/kg	0.351	1.17
127-18-4	Tetrachloroethylene	U	1.17	ug/kg	0.351	1.17
124-48-1	Dibromochloromethane	U	1.17	ug/kg	0.351	1.17
106-93-4	1,2-Dibromoethane	U	1.17	ug/kg	0.351	1.17
108-90-7	Chlorobenzene	U	1.17	ug/kg	0.351	1.17



**Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-2199  
Lab Sample ID: 248519011

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: CDS1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
%Moisture: 14.6  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.17	ug/kg	0.351	1.17
179601-23-1	m,p-Xylenes	U	2.34	ug/kg	0.351	2.34
95-47-6	o-Xylene	U	1.17	ug/kg	0.351	1.17
100-42-5	Styrene	U	1.17	ug/kg	0.351	1.17
75-25-2	Bromoform	U	1.17	ug/kg	0.351	1.17
79-34-5	1,1,2,2-Tetrachloroethane	U	1.17	ug/kg	0.351	1.17
96-18-4	1,2,3-Trichloropropane	U	1.17	ug/kg	0.351	1.17
108-86-1	Bromobenzene	U	1.17	ug/kg	0.351	1.17
103-65-1	n-Propylbenzene	U	1.17	ug/kg	0.351	1.17
95-49-8	2-Chlorotoluene	U	1.17	ug/kg	0.351	1.17
98-82-8	Isopropylbenzene	U	1.17	ug/kg	0.351	1.17
108-67-8	1,3,5-Trimethylbenzene	U	1.17	ug/kg	0.351	1.17
106-43-4	4-Chlorotoluene	U	1.17	ug/kg	0.351	1.17
98-06-6	tert-Butylbenzene	U	1.17	ug/kg	0.351	1.17
95-63-6	1,2,4-Trimethylbenzene	U	1.17	ug/kg	0.351	1.17
135-98-8	sec-Butylbenzene	U	1.17	ug/kg	0.351	1.17
99-87-6	4-Isopropyltoluene	U	1.17	ug/kg	0.351	1.17
541-73-1	1,3-Dichlorobenzene	U	1.17	ug/kg	0.351	1.17
106-46-7	1,4-Dichlorobenzene	U	1.17	ug/kg	0.351	1.17
104-51-8	n-Butylbenzene	U	1.17	ug/kg	0.351	1.17
96-12-8	1,2-Dibromo-3-chloropropane	U	1.17	ug/kg	0.351	1.17
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.86	ug/kg	1.87	5.86
630-20-6	1,1,1,2-Tetrachloroethane	U	1.17	ug/kg	0.351	1.17
95-50-1	1,2-Dichlorobenzene	U	1.17	ug/kg	0.351	1.17

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
No Tentatively Identified Compounds Found				ug/kg		

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

**SDG Number:** 10-2199  
**Lab Sample ID:** 248519012

**Date Collected:** 02/25/2010 12:00  
**Date Received:** 03/03/2010 08:50

**Matrix:** S

**Client ID:** RE36-10-8295  
**Batch ID:** 963809  
**Run Date:** 03/11/2010 22:08  
**Prep Date:** 03/11/2010 10:12  
**Data File:** 031110V55B436.D

**Client:** LANL010  
**Method:** SW846 8260B  
**Inst:** VOA5.I  
**Analyst:** CDS1  
**Aliquot:** 5 g  
**Column:** DB-624

**Project:** LANL01004  
**SOP Ref:** GL-OA-E-038  
**Dilution:** 1  
**Purge Vol:** 5 mL  
**Final Volume:** 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone		5.96	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

**Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-2199  
Lab Sample ID: 248519012  
  
Client ID: RE36-10-8295  
Batch ID: 963809  
Run Date: 03/11/2010 22:08  
Prep Date: 03/11/2010 10:12  
Data File: 031110V55B436.D

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.1  
Analyst: CDS1  
Aliquot: 5 g  
Column: DB-624

Matrix: S  
  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
No Tentatively Identified Compounds Found				ug/kg		

# **Quality Control Summary**

Volatile  
Surrogate Recovery Report

Page 1 of 1

SDG Number: 10-2199

Matrix Type: SOLID

Sample ID	Client ID	DCED4 %REC	TOL %REC	BFB %REC
1202067630	LCS for batch 963808	74	82	115
1202067631	LCS for batch 963808	74	83	115
1202067627	MB for batch 963808	70	84	120
248519001	RE36-10-8288	68	93	157 *
248519002	RE36-10-8279	78	86	137 *
248519003	RE36-10-8277	66	93	158 *
248519004	RE36-10-8280	69	99	169 *
248519005	RE36-10-8278	69	87	141 *
248519006	RE36-10-8274	70	87	145 *
248519007	RE36-10-8291	67	97	163 *
248519008	RE36-10-8287	65 *	99	172 *
248519009	RE36-10-8273	67	101	175 *
1202076532	LCS for batch 963808	70	80	119
1202076533	LCS for batch 963808	68	80	119
1202076531	MB for batch 963808	68	80	123
248519010	RE36-10-8275	66	89	146 *
248519011	RE36-10-8276	67	88	157 *
248519012	RE36-10-8295	68	82	129

**Surrogate****Acceptance Limits**

DCED4 = 1,2-Dichloroethane-d4 (66%-134%)  
TOL = Toluene-d8 (71%-128%)  
BFB = Bromofluorobenzene (65%-130%)

\* Recovery outside Acceptance Limits

# Column to be used to flag recovery values

D Sample Diluted

## Volatile

Page 1 of 6

Quality Control Summary  
Spike Recovery Report

SDG Number: 10-2199

Sample Type: Post Spike

Client ID: RE36-10-8466PS

Matrix: R

Lab Sample ID: 1202067628

%Moisture: 12.4

Instrument: VOA5.I

Analysis Date: 03/11/2010 23:01

Dilution: 1

Analyst: CDS1

Pred Batch II 963808

Purge Vol: 5 mL

Batch ID: 963809

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
75-71-8	PS Dichlorodifluoromethane	50.0	0.00	U 48.0	96	39-148
74-87-3	PS Chloromethane	50.0	0.00	U 49.5	99	42-131
75-01-4	PS Vinyl chloride	50.0	0.00	U 51.8	104	50-127
74-83-9	PS Bromomethane	50.0	0.00	U 50.6	101	26-135
75-00-3	PS Chloroethane	50.0	0.00	U 49.0	98	54-128
75-69-4	PS Trichlorofluoromethane	50.0	0.00	U 47.1	94	55-138
67-64-1	PS Acetone	250	0.00	U 119	48	20-144
75-35-4	PS 1,1-Dichloroethylene	50.0	0.00	U 45.9	92	55-128
74-88-4	PS Iodomethane	250	0.00	U 230	92	47-132
75-09-2	PS Methylene chloride	50.0	0.00	U 47.0	94	56-123
75-15-0	PS Carbon disulfide	250	0.00	U 237	95	53-133
156-60-5	PS trans-1,2-Dichloroethylene	50.0	0.00	U 47.3	95	57-119
75-34-3	PS 1,1-Dichloroethane	50.0	0.00	U 48.3	97	62-125
78-93-3	PS 2-Butanone	250	0.00	U 150	60	30-150
156-59-2	PS cis-1,2-Dichloroethylene	50.0	0.00	U 47.2	94	60-124
594-20-7	PS 2,2-Dichloropropane	50.0	0.00	U 44.3	89	56-129
67-66-3	PS Chloroform	50.0	0.00	U 46.7	93	62-120
74-97-5	PS Bromochloromethane	50.0	0.00	U 48.2	96	51-135
71-55-6	PS 1,1,1-Trichloroethane	50.0	0.00	U 45.3	91	58-129
563-58-6	PS 1,1-Dichloropropene	50.0	0.00	U 44.6	89	59-126
56-23-5	PS Carbon tetrachloride	50.0	0.00	U 44.5	89	55-132
107-06-2	PS 1,2-Dichloroethane	50.0	0.00	U 46.7	93	54-121

## Volatile

Page 2 of 6

Quality Control Summary  
Spike Recovery Report

SDG Number: 10-2199

Sample Type: Post Spike

Client ID: RE36-10-8466PS

Matrix: R

Lab Sample ID: 1202067628

%Moisture: 12.4

Instrument: VOA5.I

Analysis Date: 03/11/2010 23:01

Dilution: 1

Analyst: CDS1

Prep Batch ID: 963808

Purge Vol: 5 mL

Batch ID: 963809

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
71-43-2	PS Benzene	50.0	0.00 U	44.8	90	58-120
79-01-6	PS Trichloroethylene	50.0	0.00 U	42.7	85	54-130
78-87-5	PS 1,2-Dichloropropane	50.0	0.00 U	45.7	91	59-121
75-27-4	PS Bromodichloromethane	50.0	0.00 U	47.4	95	57-130
74-95-3	PS Dibromomethane	50.0	0.00 U	47.8	96	57-124
108-10-1	PS 4-Methyl-2-pentanone	250	0.00 U	224	90	40-137
10061-01-5	PS cis-1,3-Dichloropropylene	50.0	0.00 U	44.9	90	50-131
108-88-3	PS Toluene	50.0	0.00 U	41.8	84	54-119
10061-02-6	PS trans-1,3-Dichloropropylene	50.0	0.00 U	45.3	91	47-133
79-00-5	PS 1,1,2-Trichloroethane	50.0	0.00 U	44.6	89	60-130
591-78-6	PS 2-Hexanone	250	0.00 U	154	62	30-139
142-28-9	PS 1,3-Dichloropropane	50.0	0.00 U	44.9	90	59-125
127-18-4	PS Tetrachloroethylene	50.0	0.00 U	38.2	76	50-126
124-48-1	PS Dibromochloromethane	50.0	0.00 U	45.2	90	54-131
106-93-4	PS 1,2-Dibromoethane	50.0	0.00 U	43.9	88	55-127
108-90-7	PS Chlorobenzene	50.0	0.00 U	40.1	80	50-130
100-41-4	PS Ethylbenzene	50.0	0.00 U	37.5	75	50-121
179601-23-1	PS m,p-Xylenes	100	0.00 U	77.2	77	47-125
95-47-6	PS o-Xylene	50.0	0.00 U	37.8	76	51-127
100-42-5	PS Styrene	50.0	0.00 U	39.7	79	41-136
75-25-2	PS Bromoform	50.0	0.00 U	50.2	100	48-143
79-34-5	PS 1,1,2,2-Tetrachloroethane	50.0	0.00 U	44.4	89	52-129

Volatile  
Quality Control Summary  
Spike Recovery Report

Page 3 of 6

SDG Number: 10-2199

Sample Type: Post Spike

Client ID: RE36-10-8466PS

Matrix: R

Lab Sample ID: 1202067628

%Moisture: 12.4

Instrument: VOA5.I

Analysis Date: 03/11/2010 23:01

Dilution: 1

Analyst: CDS1

Prep Batch ID: 963808

Purge Vol: 5 mL

Batch ID: 963809

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
96-18-4	PS 1,2,3-Trichloropropane	50.0	0.00 U	47.9	96	56-139
108-86-1	PS Bromobenzene	50.0	0.00 U	40.5	81	54-125
103-65-1	PS n-Propylbenzene	50.0	0.00 U	38.6	77	46-127
95-49-8	PS 2-Chlorotoluene	50.0	0.00 U	39.5	79	47-130
98-82-8	PS Isopropylbenzene	50.0	0.00 U	41.5	83	42-126
108-67-8	PS 1,3,5-Trimethylbenzene	50.0	0.00 U	38.0	76	44-132
106-43-4	PS 4-Chlorotoluene	50.0	0.00 U	38.7	77	46-127
98-06-6	PS tert-Butylbenzene	50.0	0.00 U	35.4	71	48-136
95-63-6	PS 1,2,4-Trimethylbenzene	50.0	0.00 U	38.0	76	42-132
135-98-8	PS sec-Butylbenzene	50.0	0.00 U	34.6	69	47-130
99-87-6	PS 4-Isopropyltoluene	50.0	0.00 U	33.8	68	36-142
541-73-1	PS 1,3-Dichlorobenzene	50.0	0.00 U	35.1	70	41-130
106-46-7	PS 1,4-Dichlorobenzene	50.0	0.00 U	34.6	69	41-126
104-51-8	PS n-Butylbenzene	50.0	0.00 U	29.9	60	37-136
96-12-8	PS 1,2-Dibromo-3-chloropropane	50.0	0.00 U	37.3	75	42-143
630-20-6	PS 1,1,1,2-Tetrachloroethane	50.0	0.00 U	42.1	84	58-127
95-50-1	PS 1,2-Dichlorobenzene	50.0	0.00 U	34.3	69	42-128



Volatile  
Quality Control Summary  
Spike Recovery Report

Page 4 of 6

SDG Number: 10-2199

Sample Type: Post Spike Duplicate

Client ID: RE36-10-8466PSD

Matrix: R

Lab Sample ID: 1202067629

%Moisture: 12.4

Instrument: VOA5.I

Analysis Date: 03/11/2010 23:28

Dilution: 1

Analyst: CDS1

Pren Batch II 963808

Purge Vol: 5 mL

Batch ID: 963809

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits	Acceptance RPD %	Acceptance Limits
75-71-8	PSD Dichlorodifluoromethane	50.0	0.00 U	46.6	93	39-148	3	0-19
74-87-3	PSD Chloromethane	50.0	0.00 U	49.2	98	42-131	0	0-23
75-01-4	PSD Vinyl chloride	50.0	0.00 U	50.5	101	50-127	3	0-23
74-83-9	PSD Bromomethane	50.0	0.00 U	49.4	99	26-135	2	0-22
75-00-3	PSD Chloroethane	50.0	0.00 U	47.3	95	54-128	4	0-25
75-69-4	PSD Trichlorofluoromethane	50.0	0.00 U	46.3	93	55-138	2	0-21
67-64-1	PSD Acetone	250	0.00 U	110	44	20-144	8	0-22
75-35-4	PSD 1,1-Dichloroethylene	50.0	0.00 U	45.4	91	55-128	1	0-20
74-88-4	PSD Iodomethane	250	0.00 U	228	91	47-132	1	0-20
75-09-2	PSD Methylene chloride	50.0	0.00 U	46.0	92	56-123	2	0-20
75-15-0	PSD Carbon disulfide	250	0.00 U	233	93	53-133	2	0-22
156-60-5	PSD trans-1,2-Dichloroethylene	50.0	0.00 U	46.2	92	57-119	2	0-20
75-34-3	PSD 1,1-Dichloroethane	50.0	0.00 U	48.2	96	62-125	0	0-20
78-93-3	PSD 2-Butanone	250	0.00 U	139	55	30-150	8	0-21
156-59-2	PSD cis-1,2-Dichloroethylene	50.0	0.00 U	46.5	93	60-124	2	0-20
594-20-7	PSD 2,2-Dichloropropane	50.0	0.00 U	43.9	88	56-129	1	0-20
67-66-3	PSD Chloroform	50.0	0.00 U	46.3	93	62-120	1	0-25
74-97-5	PSD Bromochloromethane	50.0	0.00 U	47.1	94	51-135	2	0-20
71-55-6	PSD 1,1,1-Trichloroethane	50.0	0.00 U	44.9	90	58-129	1	0-20
563-58-6	PSD 1,1-Dichloropropene	50.0	0.00 U	44.1	88	59-126	1	0-20
56-23-5	PSD Carbon tetrachloride	50.0	0.00 U	43.9	88	55-132	1	0-20
107-06-2	PSD 1,2-Dichloroethane	50.0	0.00 U	46.4	93	54-121	1	0-20

**Volatile**  
**Quality Control Summary**  
**Spike Recovery Report**

Page 5 of 6

SDG Number: 10-2199

Sample Type: Post Spike Duplicate

Client ID: RE36-10-8466PSD

Matrix: R

Lab Sample ID: 1202067629

%Moisture: 12.4

Instrument: VOA5.I

Analysis Date: 03/11/2010 23:28

Dilution: 1

Analyst: CDS1

Prep Batch ID: 963808

Purge Vol: 5 mL

Batch ID: 963809

CAS No	Parname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits	Acceptance RPD %	Acceptance Limits
71-43-2	PSD Benzene	50.0	0.00 U	44.0	88	58-120	2	0-20
79-01-6	PSD Trichloroethylene	50.0	0.00 U	42.5	85	54-130	1	0-23
78-87-5	PSD 1,2-Dichloropropane	50.0	0.00 U	45.4	91	59-121	1	0-20
75-27-4	PSD Bromodichloromethane	50.0	0.00 U	46.9	94	57-130	1	0-20
74-95-3	PSD Dibromomethane	50.0	0.00 U	46.5	93	57-124	3	0-20
108-10-1	PSD 4-Methyl-2-pentanone	250	0.00 U	210	84	40-137	7	0-25
10061-01-5	PSD cis-1,3-Dichloropropylene	50.0	0.00 U	44.5	89	50-131	1	0-20
108-88-3	PSD Toluene	50.0	0.00 U	41.3	83	54-119	1	0-23
10061-02-6	PSD trans-1,3-Dichloropropylene	50.0	0.00 U	44.5	89	47-133	2	0-24
79-00-5	PSD 1,1,2-Trichloroethane	50.0	0.00 U	43.2	86	60-130	3	0-20
591-78-6	PSD 2-Hexanone	250	0.00 U	141	56	30-139	9	0-21
142-28-9	PSD 1,3-Dichloropropane	50.0	0.00 U	44.1	88	59-125	2	0-20
127-18-4	PSD Tetrachloroethylene	50.0	0.00 U	38.3	77	50-126	0	0-20
124-48-1	PSD Dibromochloromethane	50.0	0.00 U	44.6	89	54-131	1	0-23
106-93-4	PSD 1,2-Dibromoethane	50.0	0.00 U	43.0	86	55-127	2	0-23
108-90-7	PSD Chlorobenzene	50.0	0.00 U	39.9	80	50-130	1	0-24
100-41-4	PSD Ethylbenzene	50.0	0.00 U	37.5	75	50-121	0	0-24
179601-23-1	PSD m,p-Xylenes	100	0.00 U	77.8	78	47-125	1	0-25
95-47-6	PSD o-Xylene	50.0	0.00 U	38.3	77	51-127	1	0-24
100-42-5	PSD Styrene	50.0	0.00 U	39.5	79	41-136	1	0-24
75-25-2	PSD Bromoform	50.0	0.00 U	48.2	96	48-143	4	0-20
79-34-5	PSD 1,1,2,2-Tetrachloroethane	50.0	0.00 U	43.1	86	52-129	3	0-20

### Quality Control Summary Spike Recovery Report

SDG Number: 10-2199

Sample Type: Post Spike Duplicate

Client ID: RE36-10-8466PSD

Matrix: R

Lab Sample ID: 1202067629

%Moisture: 12.4

Instrument: VOA5.I

Analysis Date: 03/11/2010 23:28

Dilution: 1

Analyst: CDS1

Pre Batch ID: 963808

Purge Vol: 5 mL

Batch ID: 963809

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	U	Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
96-18-4	PSD 1,2,3-Trichloropropane	50.0	0.00	U	45.5	91	56-139	5	0-34
108-86-1	PSD Bromobenzene	50.0	0.00	U	41.3	83	54-125	2	0-22
103-65-1	PSD n-Propylbenzene	50.0	0.00	U	38.7	77	46-127	0	0-25
95-49-8	PSD 2-Chlorotoluene	50.0	0.00	U	40.6	81	47-130	3	0-24
98-82-8	PSD Isopropylbenzene	50.0	0.00	U	41.5	83	42-126	0	0-22
108-67-8	PSD 1,3,5-Trimethylbenzene	50.0	0.00	U	38.4	77	44-132	1	0-25
106-43-4	PSD 4-Chlorotoluene	50.0	0.00	U	39.2	78	46-127	1	0-26
98-06-6	PSD tert-Butylbenzene	50.0	0.00	U	35.6	71	48-136	0	0-24
95-63-6	PSD 1,2,4-Trimethylbenzene	50.0	0.00	U	37.9	76	42-132	0	0-26
135-98-8	PSD sec-Butylbenzene	50.0	0.00	U	34.6	69	47-130	0	0-27
99-87-6	PSD 4-Isopropyltoluene	50.0	0.00	U	34.3	69	36-142	2	0-27
541-73-1	PSD 1,3-Dichlorobenzene	50.0	0.00	U	35.0	70	41-130	0	0-25
106-46-7	PSD 1,4-Dichlorobenzene	50.0	0.00	U	35.4	71	41-126	2	0-25
104-51-8	PSD n-Butylbenzene	50.0	0.00	U	30.0	60	37-136	1	0-29
96-12-8	PSD 1,2-Dibromo-3-chloropropane	50.0	0.00	U	35.8	72	42-143	4	0-21
630-20-6	PSD 1,1,1,2-Tetrachloroethane	50.0	0.00	U	42.2	84	58-127	0	0-20
95-50-1	PSD 1,2-Dichlorobenzene	50.0	0.00	U	34.4	69	42-128	0	0-24

Volatile  
Quality Control Summary  
Spike Recovery Report

Page 1 of 3

SDG Number: 10-2199

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 963808

Matrix: SOIL

Lab Sample ID: 1202067630

Instrument: VOA5.1

Analysis Date: 03/11/2010 08:01

Dilution: 1

Analyst: CDS1

Pre Batch II 963808

Purge Vol: 5 mL

Batch ID: 963809

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
75-71-8	LCS Dichlorodifluoromethane	50.0	0.0	58.5	117	52-151
74-87-3	LCS Chloromethane	50.0	0.0	54.5	109	56-130
75-01-4	LCS Vinyl chloride	50.0	0.0	58.2	116	66-130
74-83-9	LCS Bromomethane	50.0	0.0	54.6	109	70-126
75-00-3	LCS Chloroethane	50.0	0.0	54.1	108	67-129
75-69-4	LCS Trichlorofluoromethane	50.0	0.0	58.7	117	73-143
67-64-1	LCS Acetone	250	0.0	232	93	30-140
75-35-4	LCS 1,1-Dichloroethylene	50.0	0.0	54.6	109	71-129
74-88-4	LCS Iodomethane	250	0.0	261	104	72-125
75-09-2	LCS Methylene chloride	50.0	0.0	51.9	104	64-121
75-15-0	LCS Carbon disulfide	250	0.0	282	113	70-133
156-60-5	LCS trans-1,2-Dichloroethylene	50.0	0.0	55.0	110	73-120
75-34-3	LCS 1,1-Dichloroethane	50.0	0.0	54.7	109	73-120
78-93-3	LCS 2-Butanone	250	0.0	240	96	32-145
156-59-2	LCS cis-1,2-Dichloroethylene	50.0	0.0	53.5	107	74-124
594-20-7	LCS 2,2-Dichloropropane	50.0	0.0	56.1	112	73-134
67-66-3	LCS Chloroform	50.0	0.0	53.2	106	74-120
74-97-5	LCS Bromochloromethane	50.0	0.0	53.4	107	73-122
71-55-6	LCS 1,1,1-Trichloroethane	50.0	0.0	56.3	113	74-132
563-58-6	LCS 1,1-Dichloropropene	50.0	0.0	56.2	112	79-128
56-23-5	LCS Carbon tetrachloride	50.0	0.0	57.7	115	75-135
107-06-2	LCS 1,2-Dichloroethane	50.0	0.0	52.1	104	65-120

Volatile  
Quality Control Summary  
Spike Recovery Report

Page 2 of 3

SDG Number: 10-2199

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 963808

Matrix: SOIL

Lab Sample ID: 1202067630

Instrument: VOA5.I

Analysis Date: 03/11/2010 08:01

Dilution: 1

Analyst: CDS1

Pren Batch II 963808

Purge Vol: 5 mL

Batch ID: 963809

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
71-43-2	LCS Benzene	50.0	0.0	51.7	103	74-120
79-01-6	LCS Trichloroethylene	50.0	0.0	53.7	107	77-124
78-87-5	LCS 1,2-Dichloropropane	50.0	0.0	52.4	105	73-120
75-27-4	LCS Bromodichloromethane	50.0	0.0	55.5	111	75-128
74-95-3	LCS Dibromomethane	50.0	0.0	53.8	108	75-120
108-10-1	LCS 4-Methyl-2-pentanone	250	0.0	256	102	63-133
10061-01-5	LCS cis-1,3-Dichloropropylene	50.0	0.0	53.4	107	78-127
108-88-3	LCS Toluene	50.0	0.0	49.6	99	74-120
10061-02-6	LCS trans-1,3-Dichloropropylene	50.0	0.0	51.9	104	70-125
79-00-5	LCS 1,1,2-Trichloroethane	50.0	0.0	49.4	99	75-120
591-78-6	LCS 2-Hexanone	250	0.0	235	94	40-153
142-28-9	LCS 1,3-Dichloropropane	50.0	0.0	49.7	99	73-120
127-18-4	LCS Tetrachloroethylene	50.0	0.0	51.6	103	72-126
124-48-1	LCS Dibromochloromethane	50.0	0.0	53.7	107	74-126
106-93-4	LCS 1,2-Dibromoethane	50.0	0.0	50.4	101	79-120
108-90-7	LCS Chlorobenzene	50.0	0.0	49.9	100	76-120
100-41-4	LCS Ethylbenzene	50.0	0.0	48.6	97	74-120
179601-23-1	LCS m,p-Xylenes	100	0.0	102	102	76-120
95-47-6	LCS o-Xylene	50.0	0.0	50.4	101	76-122
100-42-5	LCS Styrene	50.0	0.0	53.2	106	75-125
75-25-2	LCS Bromoform	50.0	0.0	54.4	109	68-135
79-34-5	LCS 1,1,2,2-Tetrachloroethane	50.0	0.0	47.7	95	72-122

Volatile  
Quality Control Summary  
Spike Recovery Report

SDG Number: 10-2199

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 963808

Matrix: SOIL

Lab Sample ID: 1202067630

Instrument: VOA5.I

Analysis Date: 03/11/2010 08:01

Dilution: 1

Analyst: CDS1

Prep Batch ID: 963808

Purge Vol: 5 mL

Batch ID: 963809

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
96-18-4	LCS 1,2,3-Trichloropropane	50.0	0.0	48.8	98	72-129
108-86-1	LCS Bromobenzene	50.0	0.0	48.0	96	74-120
103-65-1	LCS n-Propylbenzene	50.0	0.0	49.7	99	70-120
95-49-8	LCS 2-Chlorotoluene	50.0	0.0	49.2	98	70-120
98-82-8	LCS Isopropylbenzene	50.0	0.0	50.5	101	60-121
108-67-8	LCS 1,3,5-Trimethylbenzene	50.0	0.0	50.0	100	71-121
106-43-4	LCS 4-Chlorotoluene	50.0	0.0	48.3	97	71-120
98-06-6	LCS tert-Butylbenzene	50.0	0.0	48.9	98	75-123
95-63-6	LCS 1,2,4-Trimethylbenzene	50.0	0.0	49.8	100	73-120
135-98-8	LCS sec-Butylbenzene	50.0	0.0	50.8	102	74-123
99-87-6	LCS 4-Isopropyltoluene	50.0	0.0	51.1	102	76-127
541-73-1	LCS 1,3-Dichlorobenzene	50.0	0.0	48.7	97	75-120
106-46-7	LCS 1,4-Dichlorobenzene	50.0	0.0	48.5	97	73-120
104-51-8	LCS n-Butylbenzene	50.0	0.0	50.0	100	73-128
96-12-8	LCS 1,2-Dibromo-3-chloropropane	50.0	0.0	47.6	95	69-136
630-20-6	LCS 1,1,1,2-Tetrachloroethane	50.0	0.0	51.9	104	75-124
95-50-1	LCS 1,2-Dichlorobenzene	50.0	0.0	48.7	97	75-120

## Volatile

Page 1 of 1

Quality Control Summary  
Spike Recovery Report

SDG Number: 10-2199

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 963808

Matrix: SOIL

Lab Sample ID: 1202067631

Instrument: VOA5.I

Analysis Date: 03/11/2010 08:27

Dilution: 1

Analyst: CDS1

Prep Batch ID: 963808

Purge Vol: 5 mL

Batch ID: 963809

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
76-13-1	LCS 1,1,2-Trichloro-1,2,2-Trifluor Trichlorotrifluoroethane	250	0.0	336	134	67-140

## Volatile

Quality Control Summary  
Spike Recovery Report

SDG Number: 10-2199

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 963808

Matrix: SOIL

Lab Sample ID: 1202076532

Instrument: VOA5.I

Analysis Date: 03/11/2010 19:30

Dilution: 1

Analyst: CDS1

Prep Batch ID: 963808

Purge Vol: 5 mL

Batch ID: 963809

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
75-71-8	LCS Dichlorodifluoromethane	50.0	0.0	54.7	109	52-151
74-87-3	LCS Chloromethane	50.0	0.0	54.0	108	56-130
75-01-4	LCS Vinyl chloride	50.0	0.0	56.7	113	66-130
74-83-9	LCS Bromomethane	50.0	0.0	54.2	108	70-126
75-00-3	LCS Chloroethane	50.0	0.0	53.2	106	67-129
75-69-4	LCS Trichlorofluoromethane	50.0	0.0	54.8	110	73-143
67-64-1	LCS Acetone	250	0.0	225	90	30-140
75-35-4	LCS 1,1-Dichloroethylene	50.0	0.0	52.4	105	71-129
74-88-4	LCS Iodomethane	250	0.0	258	103	72-125
75-09-2	LCS Methylene chloride	50.0	0.0	52.1	104	64-121
75-15-0	LCS Carbon disulfide	250	0.0	271	109	70-133
156-60-5	LCS trans-1,2-Dichloroethylene	50.0	0.0	53.5	107	73-120
75-34-3	LCS 1,1-Dichloroethane	50.0	0.0	54.5	109	73-120
78-93-3	LCS 2-Butanone	250	0.0	238	95	32-145
156-59-2	LCS cis-1,2-Dichloroethylene	50.0	0.0	53.5	107	74-124
594-20-7	LCS 2,2-Dichloropropane	50.0	0.0	52.9	106	73-134
67-66-3	LCS Chloroform	50.0	0.0	53.2	106	74-120
74-97-5	LCS Bromochloromethane	50.0	0.0	54.5	109	73-122
71-55-6	LCS 1,1,1-Trichloroethane	50.0	0.0	54.1	108	74-132
563-58-6	LCS 1,1-Dichloropropene	50.0	0.0	53.6	107	79-128
56-23-5	LCS Carbon tetrachloride	50.0	0.0	55.0	110	75-135
107-06-2	LCS 1,2-Dichloroethane	50.0	0.0	53.4	107	65-120



## Volatile

Page 2 of 3

Quality Control Summary  
Spike Recovery Report

SDG Number: 10-2199

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 963808

Matrix: SOIL

Lab Sample ID: 1202076532

Instrument: VOA5.I

Analysis Date: 03/11/2010 19:30

Dilution: 1

Analyst: CDS1

Pre Batch II 963808

Purge Vol: 5 mL

Batch ID: 963809

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
71-43-2	LCS Benzene	50.0	0.0	51.5	103	74-120
79-01-6	LCS Trichloroethylene	50.0	0.0	52.0	104	77-124
78-87-5	LCS 1,2-Dichloropropane	50.0	0.0	52.9	106	73-120
75-27-4	LCS Bromodichloromethane	50.0	0.0	56.2	112	75-128
74-95-3	LCS Dibromomethane	50.0	0.0	55.6	111	75-120
108-10-1	LCS 4-Methyl-2-pentanone	250	0.0	259	104	63-133
10061-01-5	LCS cis-1,3-Dichloropropylene	50.0	0.0	53.9	108	78-127
108-88-3	LCS Toluene	50.0	0.0	48.8	98	74-120
10061-02-6	LCS trans-1,3-Dichloropropylene	50.0	0.0	53.3	107	70-125
79-00-5	LCS 1,1,2-Trichloroethane	50.0	0.0	50.7	101	75-120
591-78-6	LCS 2-Hexanone	250	0.0	230	92	40-153
142-28-9	LCS 1,3-Dichloropropane	50.0	0.0	51.6	103	73-120
127-18-4	LCS Tetrachloroethylene	50.0	0.0	48.7	97	72-126
124-48-1	LCS Dibromochloromethane	50.0	0.0	55.0	110	74-126
106-93-4	LCS 1,2-Dibromoethane	50.0	0.0	51.6	103	79-120
108-90-7	LCS Chlorobenzene	50.0	0.0	49.5	99	76-120
100-41-4	LCS Ethylbenzene	50.0	0.0	47.6	95	74-120
179601-23-1	LCS m,p-Xylenes	100	0.0	99.0	99	76-120
95-47-6	LCS o-Xylene	50.0	0.0	49.6	99	76-122
100-42-5	LCS Styrene	50.0	0.0	53.0	106	75-125
75-25-2	LCS Bromoform	50.0	0.0	55.6	111	68-135
79-34-5	LCS 1,1,2,2-Tetrachloroethane	50.0	0.0	48.9	98	72-122

## Volatile

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Quality Control Summary  
Spike Recovery Report

SDG Number: 10-2199

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 963808

Matrix: SOIL

Lab Sample ID: 1202076532

Instrument: VOA5.I

Analysis Date: 03/11/2010 19:30

Dilution: 1

Analyst: CDS1

Pren Batch II 963808

Purge Vol: 5 mL

Batch ID: 963809

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
96-18-4	LCS 1,2,3-Trichloropropane	50.0	0.0	49.9	100	72-129
108-86-1	LCS Bromobenzene	50.0	0.0	48.5	97	74-120
103-65-1	LCS n-Propylbenzene	50.0	0.0	47.7	95	70-120
95-49-8	LCS 2-Chlorotoluene	50.0	0.0	48.5	97	70-120
98-82-8	LCS Isopropylbenzene	50.0	0.0	48.9	98	60-121
108-67-8	LCS 1,3,5-Trimethylbenzene	50.0	0.0	49.0	98	71-121
106-43-4	LCS 4-Chlorotoluene	50.0	0.0	47.6	95	71-120
98-06-6	LCS tert-Butylbenzene	50.0	0.0	46.2	92	75-123
95-63-6	LCS 1,2,4-Trimethylbenzene	50.0	0.0	48.8	98	73-120
135-98-8	LCS sec-Butylbenzene	50.0	0.0	48.3	97	74-123
99-87-6	LCS 4-Isopropyltoluene	50.0	0.0	48.9	98	76-127
541-73-1	LCS 1,3-Dichlorobenzene	50.0	0.0	47.9	96	75-120
106-46-7	LCS 1,4-Dichlorobenzene	50.0	0.0	47.6	95	73-120
104-51-8	LCS n-Butylbenzene	50.0	0.0	46.9	94	73-128
96-12-8	LCS 1,2-Dibromo-3-chloropropane	50.0	0.0	48.9	98	69-136
630-20-6	LCS 1,1,1,2-Tetrachloroethane	50.0	0.0	52.1	104	75-124
95-50-1	LCS 1,2-Dichlorobenzene	50.0	0.0	48.4	97	75-120

Volatile

Page 1 of 1

Quality Control Summary  
Spike Recovery Report

SDG Number: 10-2199

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 963808

Matrix: SOIL

Lab Sample ID:1202076533

Instrument: VOA5.I

Analysis Date: 03/11/2010 19:56

Dilution: 1

Analyst: CDS1

Preo Batch II 963808

Purge Vol: 5 mL

Batch ID: 963809

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
76-13-1	LCS 1,1,2-Trichloro-1,2,2-Trifluor Trichlorotrifluoroethane	250	0.0	324	130	67-140

## Method Blank Summary

Page 1 of 1

SDG Number:	10-2199	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 963808	Instrument ID:	VOA5.I	Data File:	031110V5\5B407BS2.D
Lab Sample ID:	1202067627	Prep Date:	03/11/2010 06:00	Analyzed:	03/11/10 09:20
Column:	DB-624				

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 963808	1202067630	031110V5\5B404LS2.D	03/11/10	0801
02 LCS for batch 963808	1202067631	031110V5\5B405SLS2.D	03/11/10	0827
03 RE36-10-8288	248519001	031110V5\5B418.D	03/11/10	1412
04 RE36-10-8279	248519002	031110V5\5B419.D	03/11/10	1439
05 RE36-10-8277	248519003	031110V5\5B420.D	03/11/10	1505
06 RE36-10-8280	248519004	031110V5\5B421.D	03/11/10	1532
07 RE36-10-8278	248519005	031110V5\5B422.D	03/11/10	1558
08 RE36-10-8274	248519006	031110V5\5B423.D	03/11/10	1625
09 RE36-10-8291	248519007	031110V5\5B424.D	03/11/10	1651
10 RE36-10-8287	248519008	031110V5\5B425.D	03/11/10	1718
11 RE36-10-8273	248519009	031110V5\5B426.D	03/11/10	1744

## Method Blank Summary

Page 1 of 1

SDG Number:	10-2199	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 963808	Instrument ID:	VOA5.I	Data File:	031110V5\5B433BS2.D
Lab Sample ID:	1202076531	Prep Date:	03/11/2010 16:00	Analyzed:	03/11/10 20:49
Column:	DB-624				

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 963808	1202076532	031110V5\5B430L2.D	03/11/10	1930
02 LCS for batch 963808	1202076533	031110V5\5B431SHL2.D	03/11/10	1956
03 RE36-10-8275	248519010	031110V5\5B434.D	03/11/10	2115
04 RE36-10-8276	248519011	031110V5\5B435.D	03/11/10	2142
05 RE36-10-8295	248519012	031110V5\5B436.D	03/11/10	2208

## Instrument Performance Check

## BFB

Lab Name GEL Laboratories LLC

Client SDG: 10-2199

Instrument ID: VOA5.I

Injection Date/Time: 03-MAR-10 11:00

Column Description: DB-624

Lab File ID 030310V5\5A301.D

m/e	Ion Abundance Criteria	% Relative Abundance
50	15.0 - 40.0% of mass 95	20.2
75	30.0 - 60.0% of mass 95	45.2
95	Base Peak, 100% Relative Abundance	100
96	5.0 - 9.0% of mass 95	7.4
173	Less than 2.0% of mass 174	0.6
174	50.0 - 100.0% of mass 95	77.7
175	5.0 - 9.0% of mass 174	7.4
176	95.0 - 101.0% of mass 174	96.2
177	5.0 - 9.0% of mass 176	6.3

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
ICALMIX[A]	W5VM100303-01	030310V5\5A303.D	03-MAR-10 11:52
ICALMIX[A]	W5VM100303-02	030310V5\5A304.D	03-MAR-10 12:18
ICALMIX[A]	W5VM100303-03	030310V5\5A305.D	03-MAR-10 12:43
ICALMIX[A]	W5VM100303-04	030310V5\5A306.D	03-MAR-10 13:09
ICALMIX[A]	W5VM100303-05	030310V5\5A307.D	03-MAR-10 13:35
ICALMIX[A]	W5VM100303-06	030310V5\5A308.D	03-MAR-10 14:01
ICALMIX[A]	W5VM100303-07	030310V5\5A309.D	03-MAR-10 14:26
ICALMIX[A]	W5VM100303-08	030310V5\5A311.D	03-MAR-10 15:18
ICVMIX[A]01	W5VM100303-10	030310V5\5A313.D	03-MAR-10 16:10
ICALMIX[B]	W5VM100303-11	030310V5\5A315.D	03-MAR-10 17:01
ICALMIX[B]	W5VM100303-12	030310V5\5A316.D	03-MAR-10 17:27
ICALMIX[B]	W5VM100303-13	030310V5\5A317.D	03-MAR-10 17:52
ICALMIX[B]	W5VM100303-14	030310V5\5A318.D	03-MAR-10 18:18
ICALMIX[B]	W5VM100303-15	030310V5\5A319.D	03-MAR-10 18:44
ICALMIX[B]	W5VM100303-16	030310V5\5A320.D	03-MAR-10 19:10
ICALMIX[B]	W5VM100303-17	030310V5\5A321.D	03-MAR-10 19:35
ICVMIX[B]02	W5VM100303-18	030310V5\5A323.D	03-MAR-10 20:27

## Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC

Client SDG: 10-2199

Instrument ID: VOA5.I

Injection Date/Time: 11-MAR-10 06:41

Column Description: DB-624

Lab File ID 031110V5\5B401.D

m/e	Ion Abundance Criteria	% Relative Abundance
50	15.0 - 40.0% of mass 95	20.3
75	30.0 - 60.0% of mass 95	46
95	Base Peak, 100% Relative Abundance	100
96	5.0 - 9.0% of mass 95	7.5
173	Less than 2.0% of mass 174	0.5
174	50.0 - 100.0% of mass 95	78.8
175	5.0 - 9.0% of mass 174	6.8
176	95.0 - 101.0% of mass 174	96.8
177	5.0 - 9.0% of mass 176	7

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
CCVMIX[A]02	W5VM100311-01	031110V5\5B402.D	11-MAR-10 07:08
BLK01LCS	1202067630	031110V5\5B404LS2.D	11-MAR-10 08:01
CCVMIX[B ]03	W5VM100311-04	031110V5\5B405.D	11-MAR-10 08:27
BLK01SLCS	1202067631	031110V5\5B405SLS2.D	11-MAR-10 08:27
BLK01	1202067627	031110V5\5B407BS2.D	11-MAR-10 09:20
RE36-10-8288	248519001	031110V5\5B418.D	11-MAR-10 14:12
RE36-10-8279	248519002	031110V5\5B419.D	11-MAR-10 14:39
RE36-10-8277	248519003	031110V5\5B420.D	11-MAR-10 15:05
RE36-10-8280	248519004	031110V5\5B421.D	11-MAR-10 15:32
RE36-10-8278	248519005	031110V5\5B422.D	11-MAR-10 15:58
RE36-10-8274	248519006	031110V5\5B423.D	11-MAR-10 16:25
RE36-10-8291	248519007	031110V5\5B424.D	11-MAR-10 16:51
RE36-10-8287	248519008	031110V5\5B425.D	11-MAR-10 17:18
RE36-10-8273	248519009	031110V5\5B426.D	11-MAR-10 17:44

## Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC

Client SDG: 10-2199

Instrument ID: VOA5.I

Injection Date/Time: 11-MAR-10 18:10

Column Description: DB-624

Lab File ID 031110V5\5B427.D

m/e	Ion Abundance Criteria	% Relative Abundance
50	15.0 - 40.0% of mass 95	20.3
75	30.0 - 60.0% of mass 95	45.5
95	Base Peak, 100% Relative Abundance	100
96	5.0 - 9.0% of mass 95	7.5
173	Less than 2.0% of mass 174	0.6
174	50.0 - 100.0% of mass 95	76.9
175	5.0 - 9.0% of mass 174	7.1
176	95.0 - 101.0% of mass 174	97.9
177	5.0 - 9.0% of mass 176	6.7

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
CCVMIX[A]04	W5VM100311-05	031110V5\5B428.D	11-MAR-10 18:37
BLK02LCS	1202076532	031110V5\5B430L2.D	11-MAR-10 19:30
CCVCCV 5G - SOIL MIX[B]UV	W5VM100311-08	031110V5\5B431.D	11-MAR-10 19:56
BLK02SLCS	1202076533	031110V5\5B431SHL2.D	11-MAR-10 19:56
BLK02	1202076531	031110V5\5B433BS2.D	11-MAR-10 20:49
RE36-10-8275	248519010	031110V5\5B434.D	11-MAR-10 21:15
RE36-10-8276	248519011	031110V5\5B435.D	11-MAR-10 21:42
RE36-10-8295	248519012	031110V5\5B436.D	11-MAR-10 22:08



### Internal Standard Area and RT Summary

Lab Name : GEL Laboratories LLC

Client SDG: 10-2199

Instrument: VOA5.I

STD Analysis Time: 11-MAR-10 07:08

GC Column: DB-624

Data File: C:\msdchem\1\DATA\031110V5\SB402.D

	Fluorobenzene			Chlorobenzene-d5			1,4-Dichlorobenzene-d4		
	Area	#	RT #	Area	#	RT #	Area	#	RT #
12 Hour STD	1428247		8.39	1072946		11.1	550065		13.4
Upper Limit	2856494		8.89	2145892		11.6	1100130		13.9
Lower Limit	714124		7.89	536473		10.6	275033		12.9
Sample ID									
BLK01LCS	1393474		8.39	1064611		11.1	553083		13.4
BLK01SLCS	1397071		8.39	1054675		11.1	537423		13.4
BLK01	1402275		8.39	1039581		11.1	502993		13.4
RE36-10-8288	1348332		8.39	821482		11.1	240141		13.4
RE36-10-8279	1331620		8.39	913862		11.1	368596		13.4
RE36-10-8277	1378168		8.39	828011		11.1	235990		13.4
RE36-10-8280	1289601		8.39	708397		11.1	170134		13.4
RE36-10-8278	1382388		8.39	931234		11.1	338321		13.4
RE36-10-8274	1348044		8.39	897466		11.1	310547		13.4
RE36-10-8291	1275004		8.39	722536		11.1	189799		13.4
RE36-10-8287	1300274		8.39	720339		11.1	176616		13.4
RE36-10-8273	1290126		8.39	687284		11.1	159419		13.4

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: 10-2199

Instrument: VOA5.1

STD Analysis Time: 11-MAR-10 18:37

GC Column: DB-624

Data File: C:\msdchem\1\DATA\031110V5\5B428.D

	Fluorobenzene			Chlorobenzene-d5			1,4-Dichlorobenzene-d4		
	Area	#	RT #	Area	#	RT #	Area	#	RT #
12 Hour STD	1441756		8.39	1055756		11.1	524091		13.4
Upper Limit	2883512		8.89	2111512		11.6	1048182		13.9
Lower Limit	720878		7.89	527878		10.6	262046		12.9
Sample ID									
BLK02LCS	1386649		8.39	1061215		11.1	547349		13.4
BLK02SLCS	1439092		8.39	1070189		11.1	529829		13.4
BLK02	1409057		8.39	1049412		11.1	504287		13.4
RE36-10-8275	1318791		8.39	834463		11.1	280707		13.4
RE36-10-8276	1372520		8.39	876768		11.1	260945		13.4
RE36-10-8295	1302946		8.39	959122		11.1	440944		13.4

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

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-2199  
 Lab Sample ID: 248519001  
 Client ID: RE36-10-8288  
 Batch ID: 963809  
 Run Date: 03/11/2010 14:12  
 Prep Date: 03/11/2010 10:01  
 Data File: 031110V5\SB418.D

Date Collected: 02/25/2010 12:00  
 Date Received: 03/03/2010 08:50  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: CDS1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 16.4  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.20	ug/kg	0.407	1.20
74-87-3	Chloromethane	U	1.20	ug/kg	0.359	1.20
75-01-4	Vinyl chloride	U	1.20	ug/kg	0.359	1.20
74-83-9	Bromomethane	U	1.20	ug/kg	0.359	1.20
75-00-3	Chloroethane	U	1.20	ug/kg	0.359	1.20
75-69-4	Trichlorofluoromethane	U	1.20	ug/kg	0.359	1.20
67-64-1	Acetone	U	5.98	ug/kg	1.99	5.98
75-35-4	1,1-Dichloroethylene	U	1.20	ug/kg	0.359	1.20
74-88-4	Iodomethane	U	5.98	ug/kg	1.91	5.98
75-09-2	Methylene chloride	U	5.98	ug/kg	2.39	5.98
75-15-0	Carbon disulfide	U	5.98	ug/kg	1.50	5.98
156-60-5	trans-1,2-Dichloroethylene	U	1.20	ug/kg	0.359	1.20
75-34-3	1,1-Dichloroethane	U	1.20	ug/kg	0.359	1.20
78-93-3	2-Butanone	U	5.98	ug/kg	1.80	5.98
156-59-2	cis-1,2-Dichloroethylene	U	1.20	ug/kg	0.359	1.20
594-20-7	2,2-Dichloropropane	U	1.20	ug/kg	0.359	1.20
67-66-3	Chloroform	U	1.20	ug/kg	0.359	1.20
74-97-5	Bromochloromethane	U	1.20	ug/kg	0.395	1.20
71-55-6	1,1,1-Trichloroethane	U	1.20	ug/kg	0.359	1.20
563-58-6	1,1-Dichloropropene	U	1.20	ug/kg	0.359	1.20
56-23-5	Carbon tetrachloride	U	1.20	ug/kg	0.359	1.20
107-06-2	1,2-Dichloroethane	U	1.20	ug/kg	0.359	1.20
71-43-2	Benzene	U	1.20	ug/kg	0.359	1.20
79-01-6	Trichloroethylene	U	1.20	ug/kg	0.395	1.20
78-87-5	1,2-Dichloropropane	U	1.20	ug/kg	0.359	1.20
75-27-4	Bromodichloromethane	U	1.20	ug/kg	0.359	1.20
74-95-3	Dibromomethane	U	1.20	ug/kg	0.359	1.20
108-10-1	4-Methyl-2-pentanone	U	5.98	ug/kg	1.50	5.98
10061-01-5	cis-1,3-Dichloropropylene	U	1.20	ug/kg	0.359	1.20
108-88-3	Toluene	J	0.455	ug/kg	0.359	1.20
10061-02-6	trans-1,3-Dichloropropylene	U	1.20	ug/kg	0.359	1.20
79-00-5	1,1,2-Trichloroethane	U	1.20	ug/kg	0.359	1.20
591-78-6	2-Hexanone	U	5.98	ug/kg	1.80	5.98
142-28-9	1,3-Dichloropropane	U	1.20	ug/kg	0.359	1.20
127-18-4	Tetrachloroethylene	U	1.20	ug/kg	0.359	1.20
124-48-1	Dibromochloromethane	U	1.20	ug/kg	0.359	1.20
106-93-4	1,2-Dibromoethane	U	1.20	ug/kg	0.359	1.20
108-90-7	Chlorobenzene	U	1.20	ug/kg	0.359	1.20

**Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-2199  
Lab Sample ID: 248519001  
  
Client ID: RE36-10-8288  
Batch ID: 963809  
Run Date: 03/11/2010 14:12  
Prep Date: 03/11/2010 10:01  
Data File: 031110V55B418.D

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: CDS1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
%Moisture: 16.4  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.20	ug/kg	0.359	1.20
179601-23-1	m,p-Xylenes	U	2.39	ug/kg	0.359	2.39
95-47-6	o-Xylene	U	1.20	ug/kg	0.359	1.20
100-42-5	Styrene	U	1.20	ug/kg	0.359	1.20
75-25-2	Bromoform	U	1.20	ug/kg	0.359	1.20
79-34-5	1,1,2,2-Tetrachloroethane	U	1.20	ug/kg	0.359	1.20
96-18-4	1,2,3-Trichloropropane	U	1.20	ug/kg	0.359	1.20
108-86-1	Bromobenzene	U	1.20	ug/kg	0.359	1.20
103-65-1	n-Propylbenzene	U	1.20	ug/kg	0.359	1.20
95-49-8	2-Chlorotoluene	U	1.20	ug/kg	0.359	1.20
98-82-8	Isopropylbenzene	U	1.20	ug/kg	0.359	1.20
108-67-8	1,3,5-Trimethylbenzene	U	1.20	ug/kg	0.359	1.20
106-43-4	4-Chlorotoluene	U	1.20	ug/kg	0.359	1.20
98-06-6	tert-Butylbenzene	U	1.20	ug/kg	0.359	1.20
95-63-6	1,2,4-Trimethylbenzene	U	1.20	ug/kg	0.359	1.20
135-98-8	sec-Butylbenzene	U	1.20	ug/kg	0.359	1.20
99-87-6	4-Isopropyltoluene	U	1.20	ug/kg	0.359	1.20
541-73-1	1,3-Dichlorobenzene	U	1.20	ug/kg	0.359	1.20
106-46-7	1,4-Dichlorobenzene	U	1.20	ug/kg	0.359	1.20
104-51-8	n-Butylbenzene	U	1.20	ug/kg	0.359	1.20
96-12-8	1,2-Dibromo-3-chloropropane	U	1.20	ug/kg	0.359	1.20
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.98	ug/kg	1.91	5.98
630-20-6	1,1,1,2-Tetrachloroethane	U	1.20	ug/kg	0.359	1.20
95-50-1	1,2-Dichlorobenzene	U	1.20	ug/kg	0.359	1.20

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
No Tentatively Identified Compounds Found				ug/kg		

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B418.D  
Acq On : 11 Mar 2010 2:12 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |248519001|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Mar 17 15:08:55 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	8.391	8.387	1.000	96	1348332	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	821482	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	240141	50.00	ug/L	0.00
82) B Fluorobenzene	8.391	8.391	1.000	96	1348332	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	821482	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	240141	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.175	8.172	0.974	65	223059	34.18	ug/L	0.00
Spiked Amount 50.000	Range 66	- 134	Recovery	=	68.36%			
43) Toluene-d8	9.724	9.721	0.873	98	976734	46.49	ug/L	0.00
Spiked Amount 50.000	Range 71	- 128	Recovery	=	92.98%			
61) Bromofluorobenzene	12.260	12.260	0.914	95	377401	78.35	ug/L	0.00
Spiked Amount 50.000	Range 65	- 130	Recovery	=	156.70%#			
Target Compounds	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	4.668	0.000		0	N.D.		
3) Chloromethane	4.910	4.900	0.585	50	345	Below Cal		70
4) Vinyl chloride	0.000	5.041	0.000		0	N.D.		
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.695	0.000		0	N.D.		
8) Ethyl ether	5.877	5.866	0.700	59	171	N.D.		
9) Acetone	6.177	6.174	0.736	43	1751	N.D.		
10) 1,1-Dichloroethylene	6.255	6.156	0.745	61	110	N.D.		
11) Iodomethane	0.000	6.357	0.000		0	N.D.		
12) Acetonitrile	0.000	6.464	0.000		0	N.D.		
13) Methyl acetate	6.361	6.365	0.758	43	119	N.D.		
14) Carbon disulfide	6.439	6.435	0.767	76	429	N.D.		
15) Methylene chloride	6.545	6.538	0.780	84	3387	N.D.		
16) tert-Butyl methyl ether	0.000	6.640	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.715	0.000		0	N.D.		
18) Vinyl acetate	6.803	6.969	0.811	43	2607	N.D.		
19) 1,1-Dichloroethane	0.000	7.068	0.000		0	N.D.		
20) 2-Butanone	7.454	7.450	0.888	43	124	N.D.		
21) cis-1,2-Dichloroethylene	0.000	7.507	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	7.514	0.000		0	N.D.		
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	0.000	7.701	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	0.000	7.924	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	8.005	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.196	8.203	0.977	78	361	N.D.		
32) Cyclohexene	0.000	8.246	0.000		0m	N.D. d		
33) n-Butyl alcohol	8.387	8.377	1.000	56	7845	Below Cal	#	20
34) Trichloroethylene	8.681	8.677	1.035	95	372	N.D.		
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	0.000	8.826	0.000		0	N.D.		
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B418.D  
Acq On : 11 Mar 2010 2:12 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |248519001|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Mar 17 15:08:55 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	9.487	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	9.526	0.000		0	N.D.	
44) Toluene	9.784	9.788	0.878	91	6729	0.38 ug/L	97
45) trans-1,3-Dichloroprop...	0.000	9.968	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	10.173	0.000		0	N.D.	
47) 2-Hexanone	0.000	10.279	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000	10.364	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	10.290	0.000		0	N.D.	
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	10.771	0.000		0	N.D.	
52) Chlorobenzene	0.000	11.174	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	11.216	0.000		0	N.D.	
54) Ethylbenzene	11.174	11.181	1.003	91	2254	N.D.	
55) m,p-Xylenes	11.280	11.280	1.012	106	1708	N.D.	
56) o-Xylene	11.701	11.701	1.050	106	1535	N.D.	
57) Styrene	0.000	11.715	0.000		0	N.D.	
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	0.000	12.016	0.000		0	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	12.348	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	0.000	12.465	0.000		0	N.D.	
65) n-Propylbenzene	12.412	12.415	0.925	91	948	N.D.	
66) 1,3,5-Trimethylbenzene	12.557	12.564	0.936	105	179	N.D.	
67) 2-Chlorotoluene	0.000	12.596	0.000		0	N.D.	
68) 4-Chlorotoluene	12.695	12.698	0.946	91	587	N.D.	
69) tert-Butylbenzene	0.000	12.900	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	12.960	12.956	0.966	105	889	N.D.	
71) sec-Butylbenzene	13.108	13.119	0.977	105	118	N.D.	
72) 4-Isopropyltoluene	13.222	13.229	0.986	119	1294	N.D.	
73) 1,3-Dichlorobenzene	0.000	13.349	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	13.444	13.441	1.002	146	114	N.D.	
75) n-Butylbenzene	13.653	13.653	1.018	91	578	N.D.	
76) 1,2-Dichlorobenzene	0.000	13.858	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	14.704	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	0.000	15.619	0.000		0	N.D.	
79) Hexachlorobutadiene	0.000	15.686	0.000		0	N.D.	
80) Naphthalene	15.988	15.988	1.192	128	1298	N.D.	
81) 1,2,3-Trichlorobenzene	0.000	16.291	0.000		0	N.D.	
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	0.000	6.082	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.	
87) Isopropyl Alcohol	6.259	6.163	0.746	45	814	N.D.	
88) Allyl chloride	0.000	6.425	0.000		0	N.D.	
89) tert-Butyl Alcohol	6.460	6.460	0.770	59	121	N.D.	
90) Acrylonitrile	0.000	6.747	0.000		0	N.D.	
91) Isopropyl ether	0.000	6.920	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.104	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.192	0.000		0	N.D.	
94) Ethyl acetate	7.454	7.383	0.888	43	124	N.D.	

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B418.D  
Acq On : 11 Mar 2010 2:12 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |248519001|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Mar 17 15:08:55 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	7.585	0.000		0	N.D.	
96) Methacrylonitrile	7.691	7.680	0.917	41	108	N.D.	
97) Tetrahydrofuran	7.716	7.716	0.920	42	265	N.D.	
98) Isobutyl alcohol	7.691	7.857	0.917	41	108	N.D.	
99) Methyl tert-amyl ether	0.000	8.122	0.000		0	N.D.	
100) Methyl methacrylate	0.000	8.801	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	8.957	0.000		0	N.D.	
102) 2-Nitropropane	0.000	9.342	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	9.859	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	12.136	0.000		0	N.D.	
108) Cyclohexanone	0.000	12.267	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	12.412	0.000		0	N.D.	
110) Pentachloroethane	0.000	13.017	0.000		0	N.D.	
111) Benzyl chloride	13.572	13.565	1.012	91	396	N.D.	
112) bis(2-Chloroisopropyl)...	13.929	13.929	1.038	45	111	N.D.	

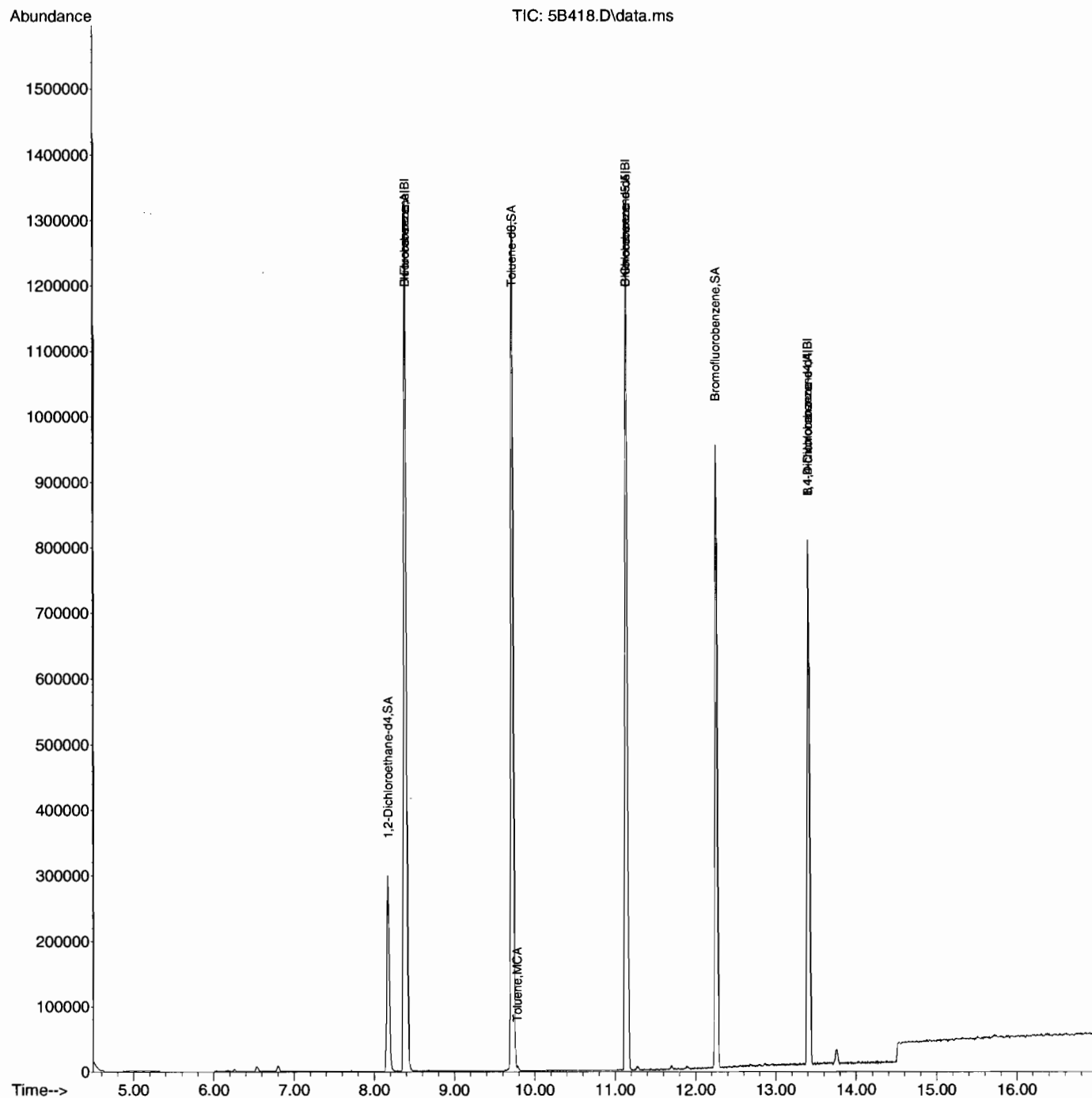
(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted

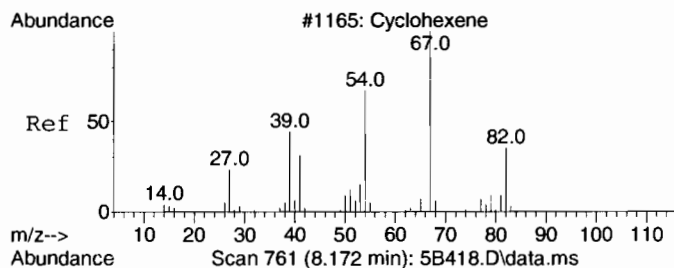


Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B418.D  
Acq On : 11 Mar 2010 2:12 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |248519001|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 18 Sample Multiplier: 1

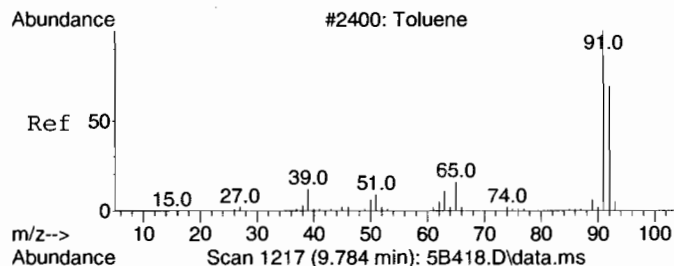
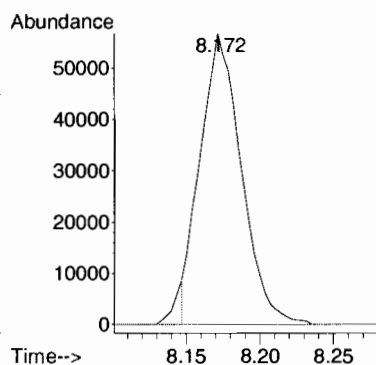
Quant Time: Mar 17 15:08:55 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE





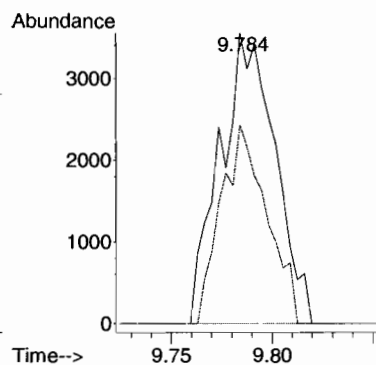
#32 BEFORE analyst DELETION  
Cyclohexene  
Concen: 12.19 ug/L  
RT: 8.172 min Scan# 761  
Delta R.T. -0.074 min  
Lab File: 5B418.D  
Acq: 11 Mar 2010 2:12 pm

Tgt Ion: 67 Resp: 110539  
Ion Ratio Lower Upper  
67 100  
54 0.0 46.3 106.3#



#44  
Toluene  
Concen: 0.38 ug/L  
RT: 9.784 min Scan# 1217  
Delta R.T. -0.004 min  
Lab File: 5B418.D  
Acq: 11 Mar 2010 2:12 pm

Tgt Ion: 91 Resp: 6729  
Ion Ratio Lower Upper  
91 100  
92 57.0 29.5 89.5



Library Search Compound Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B418.D  
Acq On : 11 Mar 2010 2:12 pm  
Operator : CDS1  
Sample : |248519001|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 18 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

No Library Search Compounds Detected

\*\*\*\*\*

Tentatively Identified Compound (LSC) summary  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B418.D  
Acq On : 11 Mar 2010 2:12 pm  
Operator : CDS1  
Sample : |248519001|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 18 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc

-----

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-2199  
 Lab Sample ID: 248519002

Date Collected: 02/25/2010 12:00  
 Date Received: 03/03/2010 08:50  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: CDS1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 7.1  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

Client ID: RE36-10-8279  
 Batch ID: 963809  
 Run Date: 03/11/2010 14:39  
 Prep Date: 03/11/2010 10:02  
 Data File: 031110V55B419.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.08	ug/kg	0.366	1.08
74-87-3	Chloromethane	U	1.08	ug/kg	0.323	1.08
75-01-4	Vinyl chloride	U	1.08	ug/kg	0.323	1.08
74-83-9	Bromomethane	U	1.08	ug/kg	0.323	1.08
75-00-3	Chloroethane	U	1.08	ug/kg	0.323	1.08
75-69-4	Trichlorofluoromethane	U	1.08	ug/kg	0.323	1.08
67-64-1	Acetone	U	5.38	ug/kg	1.79	5.38
75-35-4	1,1-Dichloroethylene	U	1.08	ug/kg	0.323	1.08
74-88-4	Iodomethane	U	5.38	ug/kg	1.72	5.38
75-09-2	Methylene chloride	U	5.38	ug/kg	2.15	5.38
75-15-0	Carbon disulfide	U	5.38	ug/kg	1.35	5.38
156-60-5	trans-1,2-Dichloroethylene	U	1.08	ug/kg	0.323	1.08
75-34-3	1,1-Dichloroethane	U	1.08	ug/kg	0.323	1.08
78-93-3	2-Butanone	U	5.38	ug/kg	1.61	5.38
156-59-2	cis-1,2-Dichloroethylene	U	1.08	ug/kg	0.323	1.08
594-20-7	2,2-Dichloropropane	U	1.08	ug/kg	0.323	1.08
67-66-3	Chloroform	U	1.08	ug/kg	0.323	1.08
74-97-5	Bromochloromethane	U	1.08	ug/kg	0.355	1.08
71-55-6	1,1,1-Trichloroethane	U	1.08	ug/kg	0.323	1.08
563-58-6	1,1-Dichloropropene	U	1.08	ug/kg	0.323	1.08
56-23-5	Carbon tetrachloride	U	1.08	ug/kg	0.323	1.08
107-06-2	1,2-Dichloroethane	U	1.08	ug/kg	0.323	1.08
71-43-2	Benzene	U	1.08	ug/kg	0.323	1.08
79-01-6	Trichloroethylene	U	1.08	ug/kg	0.355	1.08
78-87-5	1,2-Dichloropropane	U	1.08	ug/kg	0.323	1.08
75-27-4	Bromodichloromethane	U	1.08	ug/kg	0.323	1.08
74-95-3	Dibromomethane	U	1.08	ug/kg	0.323	1.08
108-10-1	4-Methyl-2-pentanone	U	5.38	ug/kg	1.35	5.38
10061-01-5	cis-1,3-Dichloropropylene	U	1.08	ug/kg	0.323	1.08
108-88-3	Toluene	J	0.334	ug/kg	0.323	1.08
10061-02-6	trans-1,3-Dichloropropylene	U	1.08	ug/kg	0.323	1.08
79-00-5	1,1,2-Trichloroethane	U	1.08	ug/kg	0.323	1.08
591-78-6	2-Hexanone	U	5.38	ug/kg	1.61	5.38
142-28-9	1,3-Dichloropropane	U	1.08	ug/kg	0.323	1.08
127-18-4	Tetrachloroethylene	U	1.08	ug/kg	0.323	1.08
124-48-1	Dibromochloromethane	U	1.08	ug/kg	0.323	1.08
106-93-4	1,2-Dibromoethane	U	1.08	ug/kg	0.323	1.08
108-90-7	Chlorobenzene	U	1.08	ug/kg	0.323	1.08

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-2199  
 Lab Sample ID: 248519002  
 Client ID: RE36-10-8279  
 Batch ID: 963809  
 Run Date: 03/11/2010 14:39  
 Prep Date: 03/11/2010 10:02  
 Data File: 031110V55B419.D

Date Collected: 02/25/2010 12:00  
 Date Received: 03/03/2010 08:50  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: CDS1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 7.1  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.08	ug/kg	0.323	1.08
179601-23-1	m,p-Xylenes	U	2.15	ug/kg	0.323	2.15
95-47-6	o-Xylene	U	1.08	ug/kg	0.323	1.08
100-42-5	Styrene	U	1.08	ug/kg	0.323	1.08
75-25-2	Bromoform	U	1.08	ug/kg	0.323	1.08
79-34-5	1,1,2,2-Tetrachloroethane	U	1.08	ug/kg	0.323	1.08
96-18-4	1,2,3-Trichloropropane	U	1.08	ug/kg	0.323	1.08
108-86-1	Bromobenzene	U	1.08	ug/kg	0.323	1.08
103-65-1	n-Propylbenzene	U	1.08	ug/kg	0.323	1.08
95-49-8	2-Chlorotoluene	U	1.08	ug/kg	0.323	1.08
98-82-8	Isopropylbenzene	U	1.08	ug/kg	0.323	1.08
108-67-8	1,3,5-Trimethylbenzene	U	1.08	ug/kg	0.323	1.08
106-43-4	4-Chlorotoluene	U	1.08	ug/kg	0.323	1.08
98-06-6	tert-Butylbenzene	U	1.08	ug/kg	0.323	1.08
95-63-6	1,2,4-Trimethylbenzene	U	1.08	ug/kg	0.323	1.08
135-98-8	sec-Butylbenzene	U	1.08	ug/kg	0.323	1.08
99-87-6	4-Isopropyltoluene	U	1.08	ug/kg	0.323	1.08
541-73-1	1,3-Dichlorobenzene	U	1.08	ug/kg	0.323	1.08
106-46-7	1,4-Dichlorobenzene	U	1.08	ug/kg	0.323	1.08
104-51-8	n-Butylbenzene	U	1.08	ug/kg	0.323	1.08
96-12-8	1,2-Dibromo-3-chloropropane	U	1.08	ug/kg	0.323	1.08
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.38	ug/kg	1.72	5.38
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.08	ug/kg	0.323	1.08
95-50-1	1,2-Dichlorobenzene	U	1.08	ug/kg	0.323	1.08

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
No Tentatively Identified Compounds Found				ug/kg		

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B419.D  
Acq On : 11 Mar 2010 2:39 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |248519002|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Mar 11 17:18:09 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	8.391	8.387	1.000	96	1331620	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	913862	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	368596	50.00	ug/L	0.00
82) B Fluorobenzene	8.391	8.391	1.000	96	1331620	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	913862	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	368596	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	250117	38.81	ug/L	0.00
Spiked Amount 50.000	Range 66	- 134	Recovery	=	77.62%			
43) Toluene-d8	9.721	9.721	0.872	98	1002280	42.89	ug/L	0.00
Spiked Amount 50.000	Range 71	- 128	Recovery	=	85.78%			
61) Bromofluorobenzene	12.260	12.260	0.914	95	505224	68.33	ug/L	0.00
Spiked Amount 50.000	Range 65	- 130	Recovery	=	136.66%#			
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	4.668	0.000		0	N.D.		
3) Chloromethane	4.910	4.900	0.585	50	316	Below Cal		59
4) Vinyl chloride	0.000	5.041	0.000		0	N.D.		
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.695	0.000		0	N.D.		
8) Ethyl ether	5.866	5.866	0.699	59	303	N.D.		
9) Acetone	6.177	6.174	0.736	43	4075	N.D.		
10) 1,1-Dichloroethylene	0.000	6.156	0.000		0	N.D.		
11) Iodomethane	0.000	6.357	0.000		0	N.D.		
12) Acetonitrile	6.467	6.464	0.771	41	515	N.D.		
13) Methyl acetate	6.425	6.365	0.766	43	134	N.D.		
14) Carbon disulfide	6.439	6.435	0.767	76	1847	N.D.		
15) Methylene chloride	6.534	6.538	0.779	84	9277	N.D.		
16) tert-Butyl methyl ether	0.000	6.640	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.715	0.000		0	N.D.		
18) Vinyl acetate	6.800	6.969	0.810	43	3975	N.D.		
19) 1,1-Dichloroethane	0.000	7.068	0.000		0	N.D.		
20) 2-Butanone	7.457	7.450	0.889	43	112	N.D.		
21) cis-1,2-Dichloroethylene	0.000	7.507	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	7.514	0.000		0	N.D.		
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	0.000	7.701	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	0.000	7.924	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	8.005	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.211	8.203	0.979	78	326	N.D.		
32) Cyclohexene	8.242	8.246	0.982	67	116	N.D.		
33) n-Butyl alcohol	8.391	8.377	1.000	56	7445	Below Cal	#	19
34) Trichloroethylene	0.000	8.677	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	0.000	8.826	0.000		0	N.D.		
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B419.D  
Acq On : 11 Mar 2010 2:39 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |248519002|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Mar 11 17:18:09 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	9.487	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	9.526	0.000		0	N.D.	
44) Toluene	9.784	9.788	0.878	91	6039	0.31	ug/L 99
45) trans-1,3-Dichloroprop...	0.000	9.968	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	10.173	0.000		0	N.D.	
47) 2-Hexanone	0.000	10.279	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000	10.364	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	10.290	0.000		0	N.D.	
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	10.771	0.000		0	N.D.	
52) Chlorobenzene	0.000	11.174	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	11.216	0.000		0	N.D.	
54) Ethylbenzene	11.174	11.181	1.003	91	1547	N.D.	
55) m,p-Xylenes	11.277	11.280	1.012	106	418	N.D.	
56) o-Xylene	0.000	11.701	0.000		0	N.D.	
57) Styrene	0.000	11.715	0.000		0	N.D.	
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	12.253	12.016	0.914	105	112	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	12.348	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	0.000	12.465	0.000		0	N.D.	
65) n-Propylbenzene	12.419	12.415	0.926	91	119	N.D.	
66) 1,3,5-Trimethylbenzene	12.560	12.564	0.936	105	522	N.D.	
67) 2-Chlorotoluene	0.000	12.596	0.000		0	N.D.	
68) 4-Chlorotoluene	12.691	12.698	0.946	91	433	N.D.	
69) tert-Butylbenzene	0.000	12.900	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	12.956	12.956	0.966	105	1605	N.D.	
71) sec-Butylbenzene	13.116	13.119	0.978	105	129	N.D.	
72) 4-Isopropyltoluene	13.225	13.229	0.986	119	3363	N.D.	
73) 1,3-Dichlorobenzene	0.000	13.349	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	13.430	13.441	1.001	146	116	N.D.	
75) n-Butylbenzene	13.653	13.653	1.018	91	275	N.D.	
76) 1,2-Dichlorobenzene	0.000	13.858	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	14.704	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	0.000	15.619	0.000		0	N.D.	
79) Hexachlorobutadiene	0.000	15.686	0.000		0	N.D.	
80) Naphthalene	15.981	15.988	1.191	128	2465	N.D.	
81) 1,2,3-Trichlorobenzene	0.000	16.291	0.000		0	N.D.	
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	0.000	6.082	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	6.163	0.000		0	N.D.	
88) Allyl chloride	6.467	6.425	0.771	41	515	N.D.	
89) tert-Butyl Alcohol	0.000	6.460	0.000		0	N.D.	
90) Acrylonitrile	0.000	6.747	0.000		0	N.D.	
91) Isopropyl ether	0.000	6.920	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.104	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.192	0.000		0	N.D.	
94) Ethyl acetate	7.457	7.383	0.889	43	112	N.D.	



Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B419.D  
Acq On : 11 Mar 2010 2:39 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |248519002|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Mar 11 17:18:09 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

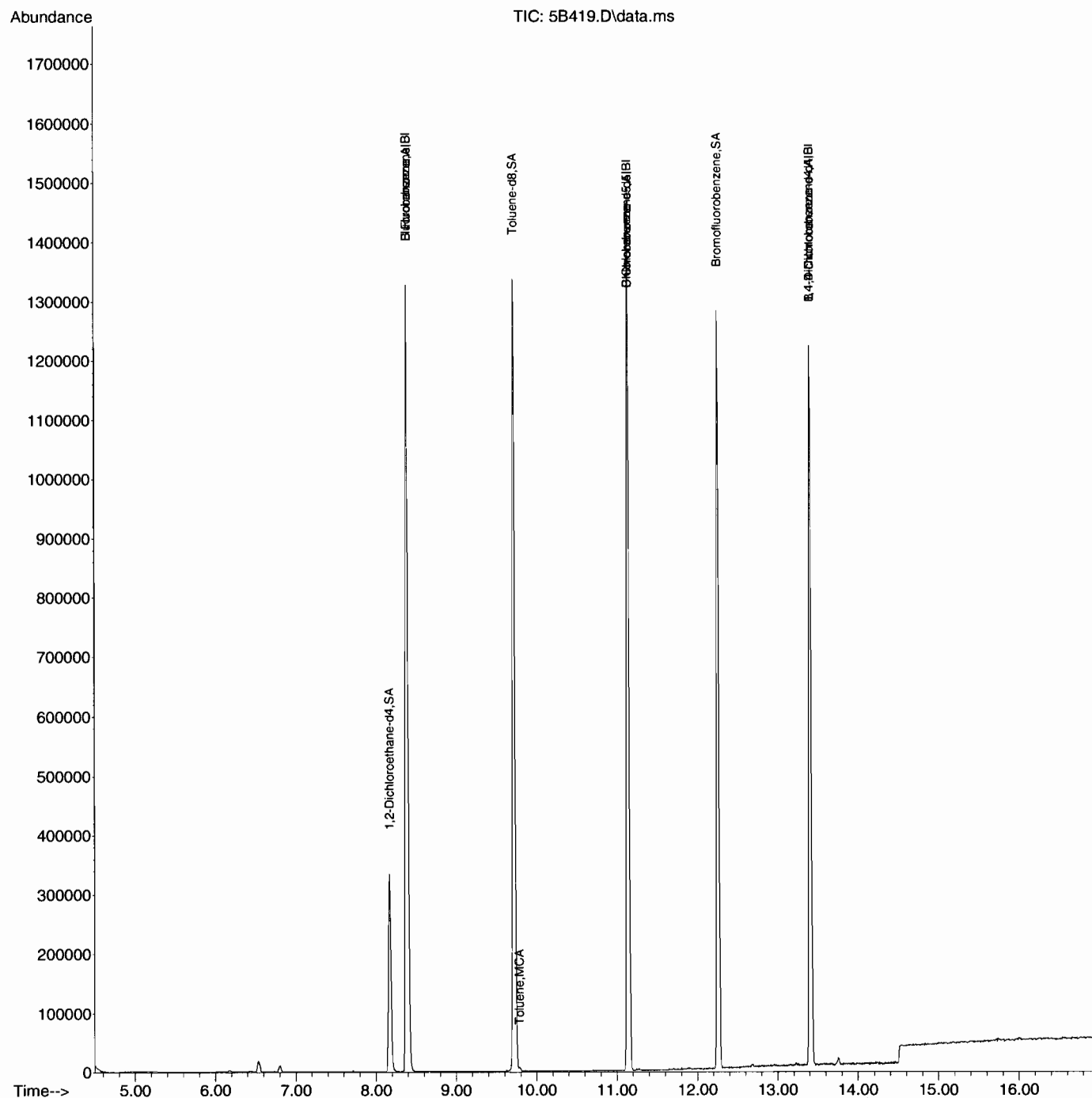
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	7.585	0.000		0	N.D.	
96) Methacrylonitrile	7.716	7.680	0.920	41	343	N.D.	
97) Tetrahydrofuran	7.716	7.716	0.920	42	888	N.D.	
98) Isobutyl alcohol	7.853	7.857	0.936	41	148	N.D.	
99) Methyl tert-amyl ether	0.000	8.122	0.000		0	N.D.	
100) Methyl methacrylate	0.000	8.801	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	8.957	0.000		0	N.D.	
102) 2-Nitropropane	0.000	9.342	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	9.859	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	12.136	0.000		0	N.D.	
108) Cyclohexanone	0.000	12.267	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	12.412	0.000		0	N.D.	
110) Pentachloroethane	0.000	13.017	0.000		0	N.D.	
111) Benzyl chloride	13.561	13.565	1.011	91	354	N.D.	
112) bis(2-Chloroisopropyl)...	13.883	13.929	1.035	45	120	N.D.	

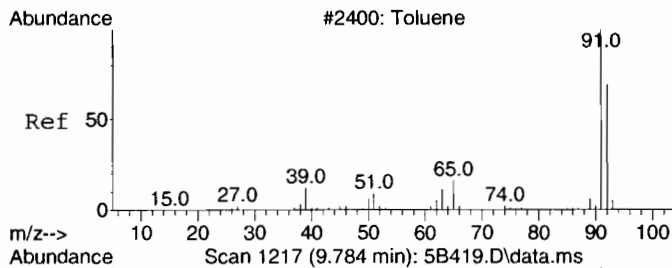
(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B419.D  
Acq On : 11 Mar 2010 2:39 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |248519002|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 19 Sample Multiplier: 1

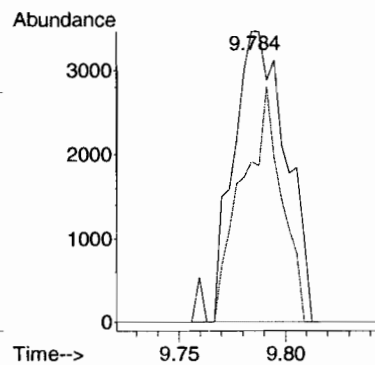
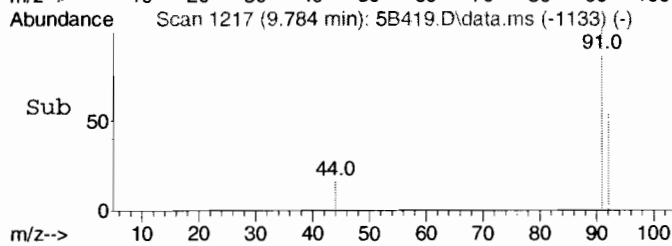
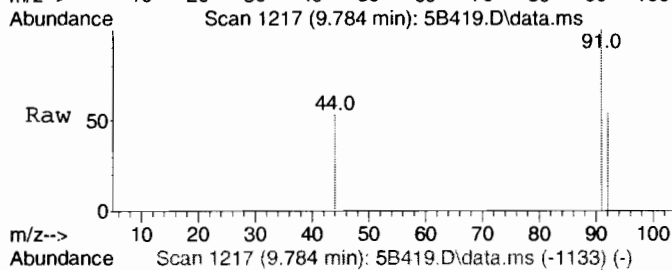
Quant Time: Mar 11 17:18:09 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE





#44  
Toluene  
Concen: 0.31 ug/L  
RT: 9.784 min Scan# 1217  
Delta R.T. -0.004 min  
Lab File: 5B419.D  
Acq: 11 Mar 2010 2:39 pm

Tgt Ion: 91 Resp: 6039  
Ion Ratio Lower Upper  
91 100  
92 60.0 29.5 89.5



Library Search Compound Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\

Data File : 5B419.D

Acq On : 11 Mar 2010 2:39 pm

Operator : CDS1

Sample : |248519002|963809|1|VOA|1|VOA8260BS|

Misc : LANL 5G - SOIL

ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M

Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L

TIC Integration Parameters: default.P

No Library Search Compounds Detected

\*\*\*\*\*

Tentatively Identified Compound (LSC) summary  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B419.D  
Acq On : 11 Mar 2010 2:39 pm  
Operator : CDS1  
Sample : |248519002|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc

---

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-2199  
 Lab Sample ID: 248519003

Date Collected: 02/25/2010 12:00  
 Date Received: 03/03/2010 08:50  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: CDS1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 25.4  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

Client ID: RE36-10-8277  
 Batch ID: 963809  
 Run Date: 03/11/2010 15:05  
 Prep Date: 03/11/2010 10:03  
 Data File: 031110V55B420.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.34	ug/kg	0.456	1.34
74-87-3	Chloromethane	U	1.34	ug/kg	0.402	1.34
75-01-4	Vinyl chloride	U	1.34	ug/kg	0.402	1.34
74-83-9	Bromomethane	U	1.34	ug/kg	0.402	1.34
75-00-3	Chloroethane	U	1.34	ug/kg	0.402	1.34
75-69-4	Trichlorofluoromethane	U	1.34	ug/kg	0.402	1.34
67-64-1	Acetone	U	6.70	ug/kg	2.23	6.70
75-35-4	1,1-Dichloroethylene	U	1.34	ug/kg	0.402	1.34
74-88-4	Iodomethane	U	6.70	ug/kg	2.15	6.70
75-09-2	Methylene chloride	U	6.70	ug/kg	2.68	6.70
75-15-0	Carbon disulfide	U	6.70	ug/kg	1.68	6.70
156-60-5	trans-1,2-Dichloroethylene	U	1.34	ug/kg	0.402	1.34
75-34-3	1,1-Dichloroethane	U	1.34	ug/kg	0.402	1.34
78-93-3	2-Butanone	U	6.70	ug/kg	2.01	6.70
156-59-2	cis-1,2-Dichloroethylene	U	1.34	ug/kg	0.402	1.34
594-20-7	2,2-Dichloropropane	U	1.34	ug/kg	0.402	1.34
67-66-3	Chloroform	U	1.34	ug/kg	0.402	1.34
74-97-5	Bromochloromethane	U	1.34	ug/kg	0.442	1.34
71-55-6	1,1,1-Trichloroethane	U	1.34	ug/kg	0.402	1.34
563-58-6	1,1-Dichloropropene	U	1.34	ug/kg	0.402	1.34
56-23-5	Carbon tetrachloride	U	1.34	ug/kg	0.402	1.34
107-06-2	1,2-Dichloroethane	U	1.34	ug/kg	0.402	1.34
71-43-2	Benzene	U	1.34	ug/kg	0.402	1.34
79-01-6	Trichloroethylene	U	1.34	ug/kg	0.442	1.34
78-87-5	1,2-Dichloropropane	U	1.34	ug/kg	0.402	1.34
75-27-4	Bromodichloromethane	U	1.34	ug/kg	0.402	1.34
74-95-3	Dibromomethane	U	1.34	ug/kg	0.402	1.34
108-10-1	4-Methyl-2-pentanone	U	6.70	ug/kg	1.68	6.70
10061-01-5	cis-1,3-Dichloropropylene	U	1.34	ug/kg	0.402	1.34
108-88-3	Toluene	U	1.34	ug/kg	0.402	1.34
10061-02-6	trans-1,3-Dichloropropylene	U	1.34	ug/kg	0.402	1.34
79-00-5	1,1,2-Trichloroethane	U	1.34	ug/kg	0.402	1.34
591-78-6	2-Hexanone	U	6.70	ug/kg	2.01	6.70
142-28-9	1,3-Dichloropropane	U	1.34	ug/kg	0.402	1.34
127-18-4	Tetrachloroethylene	U	1.34	ug/kg	0.402	1.34
124-48-1	Dibromochloromethane	U	1.34	ug/kg	0.402	1.34
106-93-4	1,2-Dibromoethane	U	1.34	ug/kg	0.402	1.34
108-90-7	Chlorobenzene	U	1.34	ug/kg	0.402	1.34

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-2199  
 Lab Sample ID: 248519003

Date Collected: 02/25/2010 12:00  
 Date Received: 03/03/2010 08:50  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: CDS1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 25.4  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

Client ID: RE36-10-8277  
 Batch ID: 963809  
 Run Date: 03/11/2010 15:05  
 Prep Date: 03/11/2010 10:03  
 Data File: 031110V5VB420.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.34	ug/kg	0.402	1.34
179601-23-1	m,p-Xylenes	U	2.68	ug/kg	0.402	2.68
95-47-6	o-Xylene	U	1.34	ug/kg	0.402	1.34
100-42-5	Styrene	U	1.34	ug/kg	0.402	1.34
75-25-2	Bromoform	U	1.34	ug/kg	0.402	1.34
79-34-5	1,1,2,2-Tetrachloroethane	U	1.34	ug/kg	0.402	1.34
96-18-4	1,2,3-Trichloropropane	U	1.34	ug/kg	0.402	1.34
108-86-1	Bromobenzene	U	1.34	ug/kg	0.402	1.34
103-65-1	n-Propylbenzene	U	1.34	ug/kg	0.402	1.34
95-49-8	2-Chlorotoluene	U	1.34	ug/kg	0.402	1.34
98-82-8	Isopropylbenzene	U	1.34	ug/kg	0.402	1.34
108-67-8	1,3,5-Trimethylbenzene	U	1.34	ug/kg	0.402	1.34
106-43-4	4-Chlorotoluene	U	1.34	ug/kg	0.402	1.34
98-06-6	tert-Butylbenzene	U	1.34	ug/kg	0.402	1.34
95-63-6	1,2,4-Trimethylbenzene	U	1.34	ug/kg	0.402	1.34
135-98-8	sec-Butylbenzene	U	1.34	ug/kg	0.402	1.34
99-87-6	4-Isopropyltoluene		12.4	ug/kg	0.402	1.34
541-73-1	1,3-Dichlorobenzene	U	1.34	ug/kg	0.402	1.34
106-46-7	1,4-Dichlorobenzene	U	1.34	ug/kg	0.402	1.34
104-51-8	n-Butylbenzene	U	1.34	ug/kg	0.402	1.34
96-12-8	1,2-Dibromo-3-chloropropane	U	1.34	ug/kg	0.402	1.34
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.70	ug/kg	2.15	6.70
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.34	ug/kg	0.402	1.34
95-50-1	1,2-Dichlorobenzene	U	1.34	ug/kg	0.402	1.34

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown hydrocarbon	11.99	9.49	ug/kg	0	J

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B420.D  
Acq On : 11 Mar 2010 3:05 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |248519003|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Mar 17 15:10:11 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	8.388	8.387	1.000	96	1378168	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	828011	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	235990	50.00	ug/L	0.00
82) B Fluorobenzene	8.388	8.391	1.000	96	1378168	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	828011	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	235990	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	219686	32.93	ug/L	0.00
Spiked Amount 50.000	Range 66	- 134	Recovery	=	65.86%#			
43) Toluene-d8	9.721	9.721	0.872	98	986345	46.58	ug/L	0.00
Spiked Amount 50.000	Range 71	- 128	Recovery	=	93.16%			
61) Bromofluorobenzene	12.260	12.260	0.914	95	374623	79.14	ug/L	0.00
Spiked Amount 50.000	Range 65	- 130	Recovery	=	158.28%#			
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	4.668	0.000		0	N.D.		
3) Chloromethane	4.960	4.900	0.591	50	651	Below Cal		92
4) Vinyl chloride	0.000	5.041	0.000		0	N.D.		
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.695	0.000		0	N.D.		
8) Ethyl ether	5.877	5.866	0.701	59	320	N.D.		
9) Acetone	6.174	6.174	0.736	43	3251	N.D.		
10) 1,1-Dichloroethylene	0.000	6.156	0.000		0	N.D.		
11) Iodomethane	0.000	6.357	0.000		0	N.D.		
12) Acetonitrile	6.460	6.464	0.770	41	238	N.D.		
13) Methyl acetate	6.174	6.365	0.736	43	3251	N.D.		
14) Carbon disulfide	6.439	6.435	0.768	76	446	N.D.		
15) Methylene chloride	6.545	6.538	0.780	84	2837	Below Cal		83
16) tert-Butyl methyl ether	0.000	6.640	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.715	0.000		0	N.D.		
18) Vinyl acetate	6.796	6.969	0.810	43	3671	N.D.		
19) 1,1-Dichloroethane	0.000	7.068	0.000		0	N.D.		
20) 2-Butanone	0.000	7.450	0.000		0	N.D.		
21) cis-1,2-Dichloroethylene	0.000	7.507	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	7.514	0.000		0	N.D.		
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	0.000	7.701	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	0.000	7.924	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	8.005	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.204	8.203	0.978	78	232	N.D.		
32) Cyclohexene	0.000	8.246	0.000		0m	N.D. d		
33) n-Butyl alcohol	8.388	8.377	1.000	56	7704	Below Cal	#	19
34) Trichloroethylene	8.670	8.677	1.034	95	821	N.D.		
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	0.000	8.826	0.000		0	N.D.		
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		



Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B420.D  
Acq On : 11 Mar 2010 3:05 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |248519003|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Mar 17 15:10:11 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	9.487	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	9.526	0.000		0	N.D.	
44) Toluene	9.788	9.788	0.878	91	5151	N.D.	
45) trans-1,3-Dichloroprop...	0.000	9.968	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	10.173	0.000		0	N.D.	
47) 2-Hexanone	0.000	10.279	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000	10.364	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	10.290	0.000		0	N.D.	
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	10.771	0.000		0	N.D.	
52) Chlorobenzene	0.000	11.174	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	11.216	0.000		0	N.D.	
54) Ethylbenzene	11.174	11.181	1.003	91	623	N.D.	
55) m,p-Xylenes	11.273	11.280	1.012	106	1177	N.D.	
56) o-Xylene	11.701	11.701	1.050	106	553	N.D.	
57) Styrene	0.000	11.715	0.000		0	N.D.	
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	0.000	12.016	0.000		0m	N.D.	d
62) 1,1,2,2-Tetrachloroethane	0.000	12.348	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	0.000	12.465	0.000		0	N.D.	
65) n-Propylbenzene	12.419	12.415	0.926	91	499	N.D.	
66) 1,3,5-Trimethylbenzene	12.557	12.564	0.936	105	107	N.D.	
67) 2-Chlorotoluene	0.000	12.596	0.000		0	N.D.	
68) 4-Chlorotoluene	12.695	12.698	0.946	91	510	N.D.	
69) tert-Butylbenzene	0.000	12.900	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	12.957	12.956	0.966	105	1881	N.D.	
71) sec-Butylbenzene	13.169	13.119	0.982	105	118	N.D.	
72) 4-Isopropyltoluene	13.225	13.229	0.986	119	88092	9.26 ug/L	99
73) 1,3-Dichlorobenzene	0.000	13.349	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	13.438	13.441	1.002	146	112	N.D.	
75) n-Butylbenzene	13.660	13.653	1.018	91	1230	N.D.	
76) 1,2-Dichlorobenzene	0.000	13.858	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	14.704	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	0.000	15.619	0.000		0	N.D.	
79) Hexachlorobutadiene	0.000	15.686	0.000		0	N.D.	
80) Naphthalene	15.989	15.988	1.192	128	1991	N.D.	
81) 1,2,3-Trichlorobenzene	0.000	16.291	0.000		0	N.D.	
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	0.000	6.082	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	6.163	0.000		0	N.D.	
88) Allyl chloride	6.446	6.425	0.769	41	116	N.D.	
89) tert-Butyl Alcohol	0.000	6.460	0.000		0	N.D.	
90) Acrylonitrile	0.000	6.747	0.000		0	N.D.	
91) Isopropyl ether	0.000	6.920	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.104	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.192	0.000		0	N.D.	
94) Ethyl acetate	0.000	7.383	0.000		0	N.D.	

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B420.D  
Acq On : 11 Mar 2010 3:05 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |248519003|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Mar 17 15:10:11 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

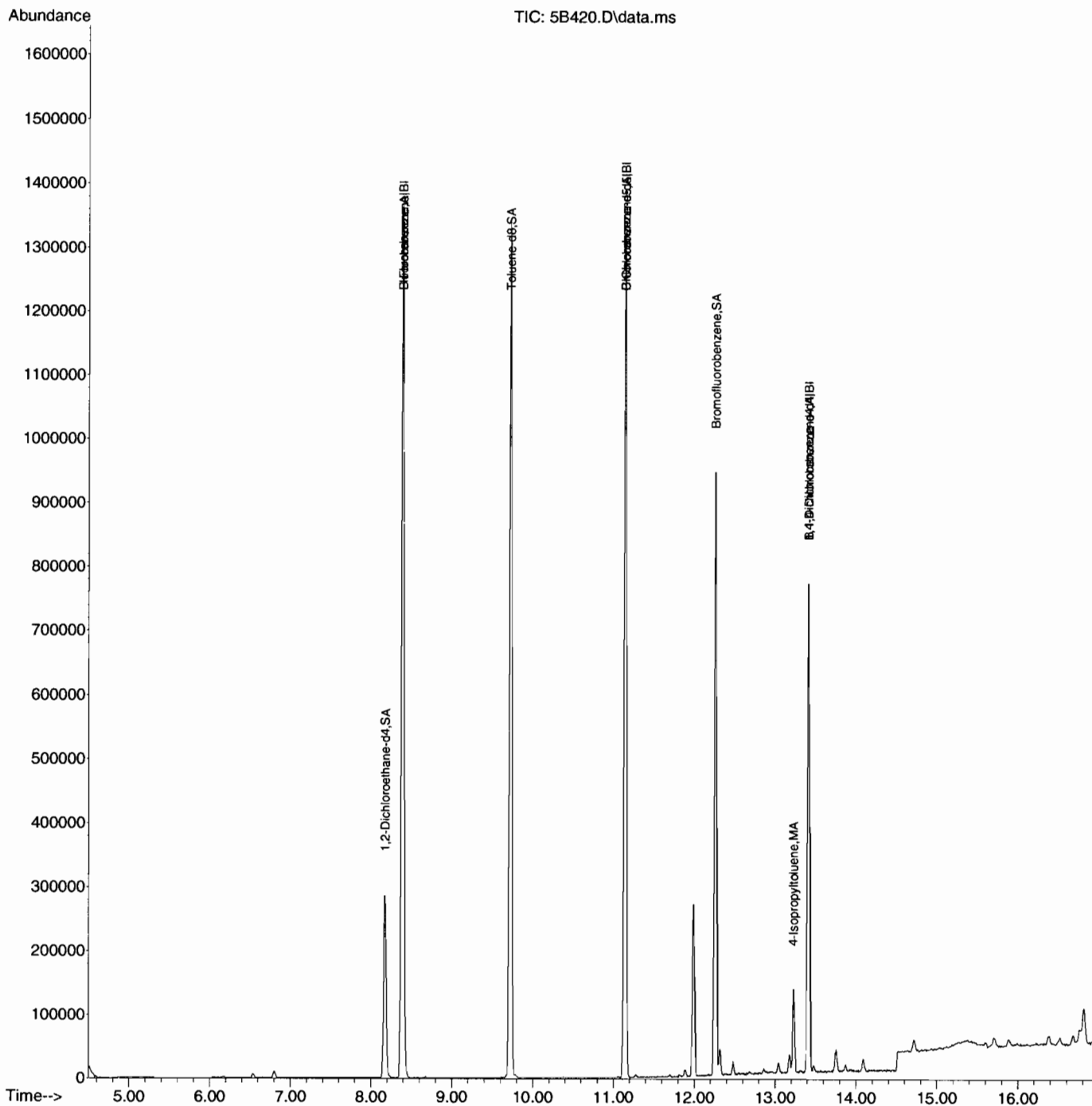
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	7.585	0.000		0	N.D.	
96) Methacrylonitrile	0.000	7.680	0.000		0	N.D.	
97) Tetrahydrofuran	0.000	7.716	0.000		0	N.D.	
98) Isobutyl alcohol	0.000	7.857	0.000		0	N.D.	
99) Methyl tert-amyl ether	0.000	8.122	0.000		0	N.D.	
100) Methyl methacrylate	0.000	8.801	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	8.957	0.000		0	N.D.	
102) 2-Nitropropane	0.000	9.342	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	9.859	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	12.136	0.000		0m	N.D.	d
108) Cyclohexanone	12.476	12.267	0.930	42	111	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	12.412	0.000		0m	N.D.	d
110) Pentachloroethane	0.000	13.017	0.000		0	N.D.	
111) Benzyl chloride	13.561	13.565	1.011	91	402	N.D.	
112) bis(2-Chloroisopropyl)...	13.819	13.929	1.030	45	111	N.D.	

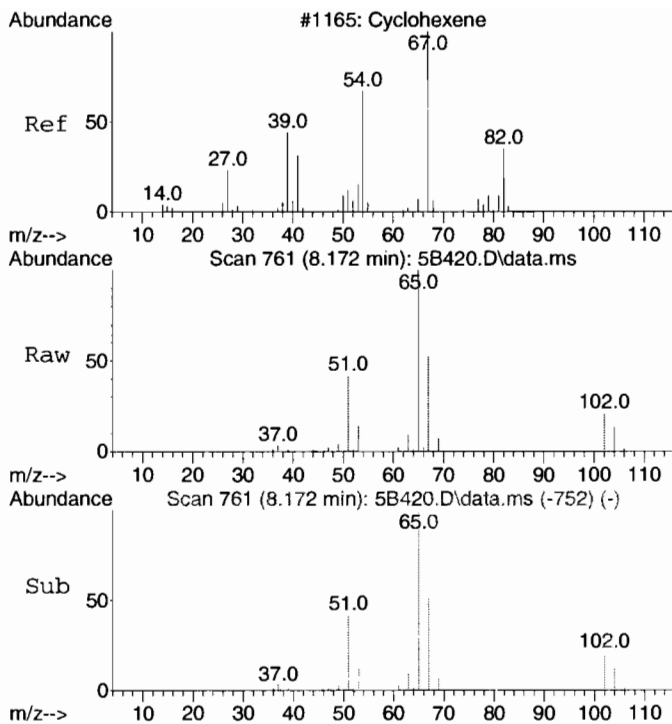
(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B420.D  
Acq On : 11 Mar 2010 3:05 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |248519003|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 20 Sample Multiplier: 1

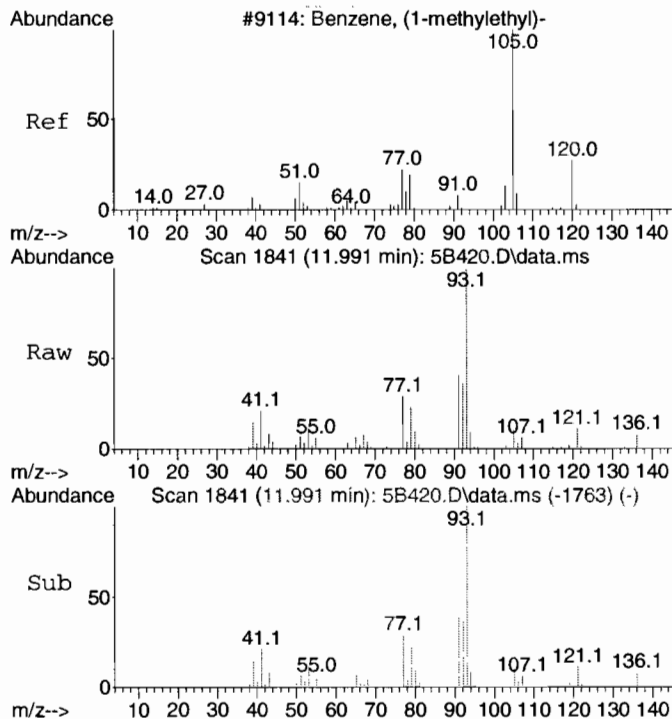
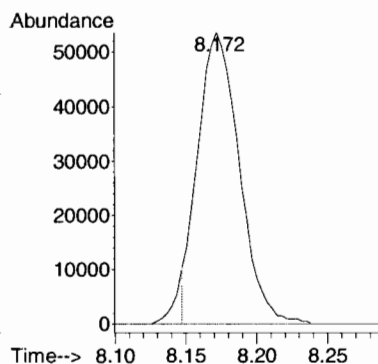
Quant Time: Mar 17 15:10:11 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE





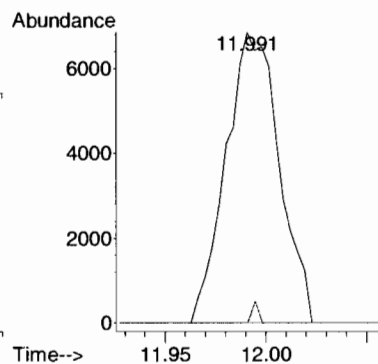
#32 BEFORE analyst DELETION  
Cyclohexene  
Concen: 11.75 ug/L  
RT: 8.172 min Scan# 761  
Delta R.T. -0.074 min  
Lab File: 5B420.D  
Acq: 11 Mar 2010 3:05 pm

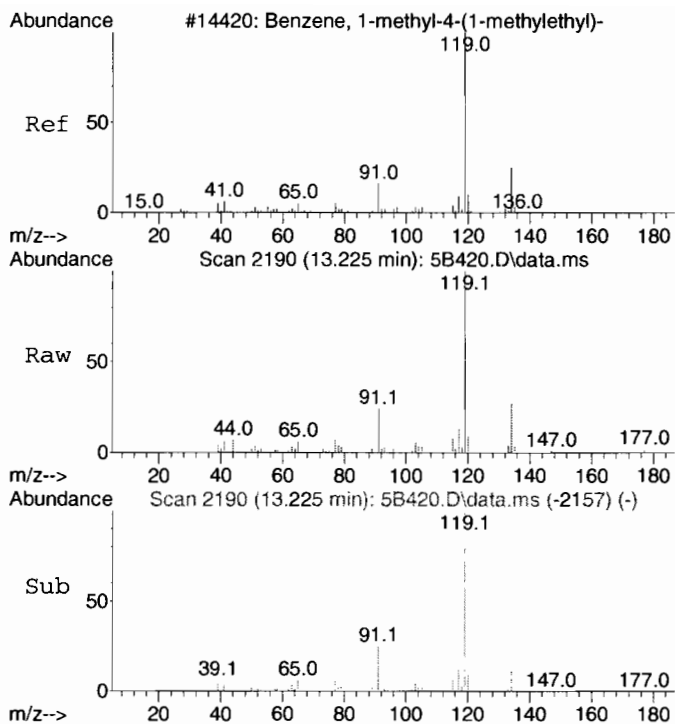
Tgt Ion	Ratio	Lower	Upper
67	100		
54	0.0	46.3	106.3



#60 BEFORE analyst DELETION  
Isopropylbenzene  
Concen: 1.16 ug/L  
RT: 11.991 min Scan# 1841  
Delta R.T. -0.025 min  
Lab File: 5B420.D  
Acq: 11 Mar 2010 3:05 pm

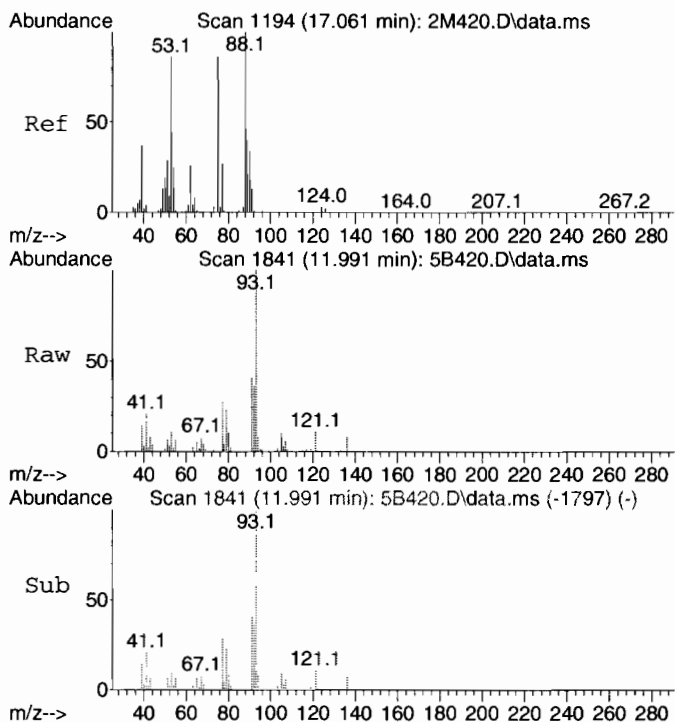
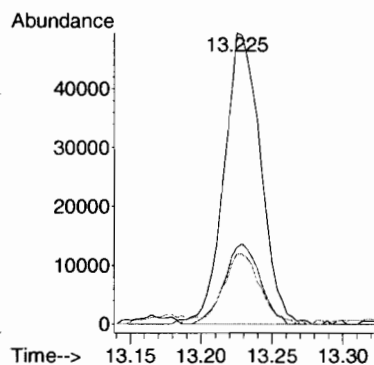
Tgt Ion	Ratio	Lower	Upper
105	100		
120	0.9	0.0	57.3





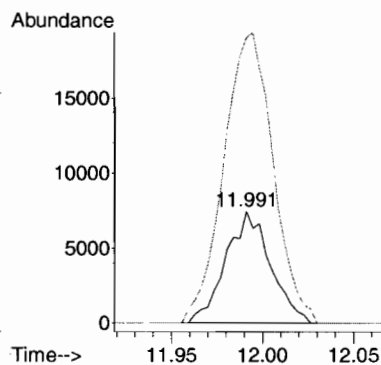
#72  
4-Isopropyltoluene  
Concen: 9.26 ug/L  
RT: 13.225 min Scan# 2190  
Delta R.T. -0.004 min  
Lab File: 5B420.D  
Acq: 11 Mar 2010 3:05 pm

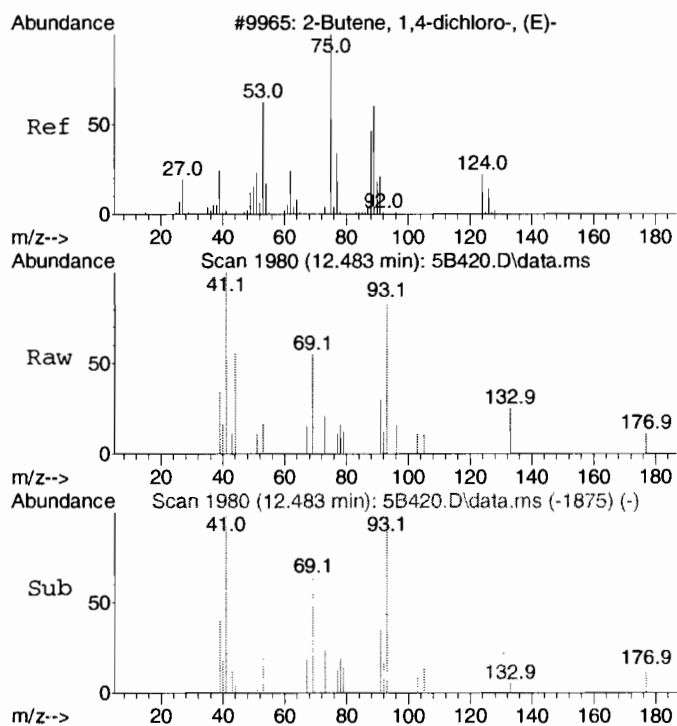
Tgt Ion:	119	Resp:	88092
Ion Ratio	100	Lower	Upper
134	27.3	0.0	57.2
91	24.4	0.0	53.0



#107 BEFORE analyst DELETION  
cis-1,4-Dichloro-2-butene  
Concen: 14.40 ug/L  
RT: 11.991 min Scan# 1841  
Delta R.T. -0.145 min  
Lab File: 5B420.D  
Acq: 11 Mar 2010 3:05 pm

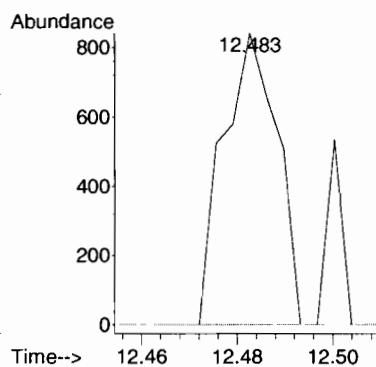
Tgt Ion:	53	Resp:	12707
Ion Ratio	100	Lower	Upper
88	0.0	67.1	127.1#
77	287.8	1.8	61.8#





#109 BEFORE analyst DELETION  
trans-1,4-Dichloro-2-butene  
Concen: 0.79 ug/L  
RT: 12.483 min Scan# 1980  
Delta R.T. 0.071 min  
Lab File: 5B420.D  
Acq: 11 Mar 2010 3:05 pm

Tgt Ion	Ratio	Lower	Upper
53	100		
88	0.0	15.5	75.5#
75	0.0	92.0	152.0#



Library Search Compound Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B420.D  
Acq On : 11 Mar 2010 3:05 pm  
Operator : CDS1  
Sample : |248519003|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 20 Sample Multiplier: 1

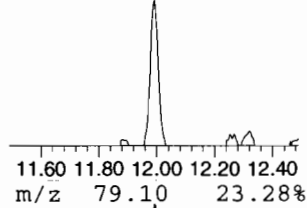
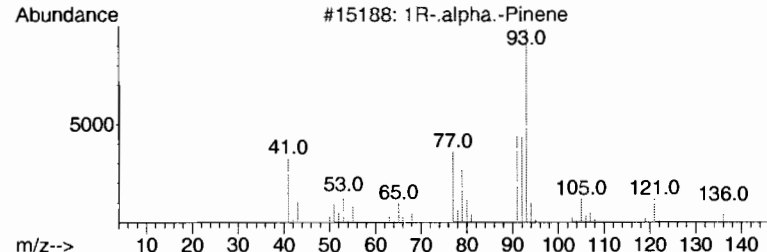
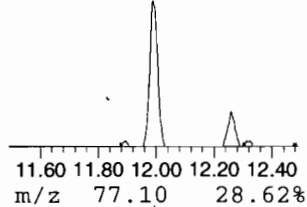
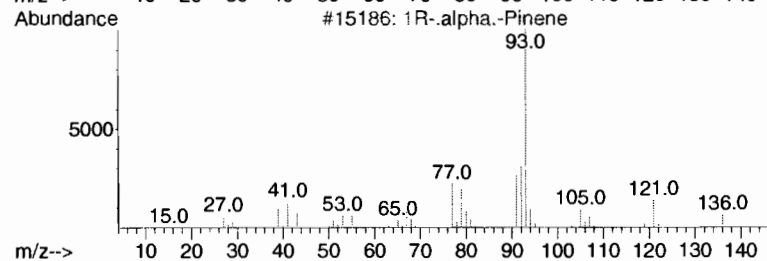
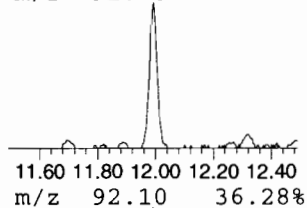
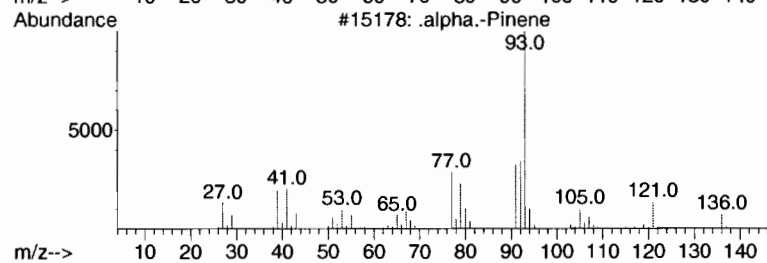
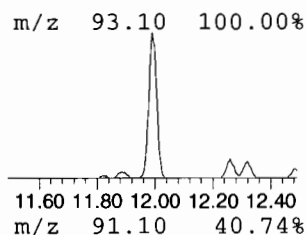
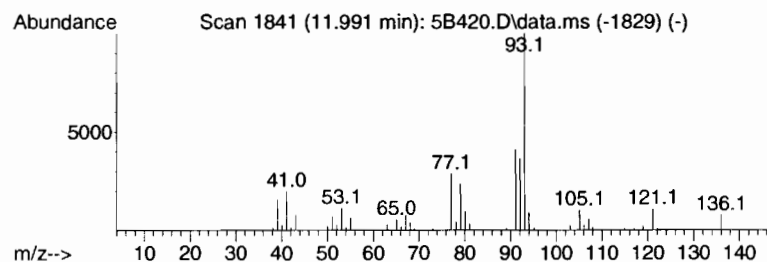
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

\*\*\*\*\*  
Peak Number 1 unknown hydrocarbon Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.991	7.08 ug/L	362269	B Chlorobenzene-d5	11.142

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1	.	alpha.-Pinene	136	C10H16	000080-56-8	96	
2	1R-.	alpha.-Pinene	136	C10H16	007785-70-8	95	
3	1R-.	alpha.-Pinene	136	C10H16	007785-70-8	94	
4	.	alpha.-Pinene	136	C10H16	000080-56-8	94	
5	Bicyclo[3.1.1]	hept-2-ene, 2,6,6-...	136	C10H16	002437-95-8	94	



Tentatively Identified Compound (LSC) summary  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B420.D  
Acq On : 11 Mar 2010 3:05 pm  
Operator : CDS1  
Sample : |248519003|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
unknown hydroca...	11.991	7.1	ug/L	362269	4	11.142	2559860	50.0



**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-2199  
 Lab Sample ID: 248519004

Date Collected: 02/25/2010 12:00  
 Date Received: 03/03/2010 08:50  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOAS.I  
 Analyst: CDS1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 9.5  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

Client ID: RE36-10-8280  
 Batch ID: 963809  
 Run Date: 03/11/2010 15:32  
 Prep Date: 03/11/2010 10:04  
 Data File: 031110V5\SB421.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.10	ug/kg	0.376	1.10
74-87-3	Chloromethane	U	1.10	ug/kg	0.331	1.10
75-01-4	Vinyl chloride	U	1.10	ug/kg	0.331	1.10
74-83-9	Bromomethane	U	1.10	ug/kg	0.331	1.10
75-00-3	Chloroethane	U	1.10	ug/kg	0.331	1.10
75-69-4	Trichlorofluoromethane	U	1.10	ug/kg	0.331	1.10
67-64-1	Acetone	U	5.52	ug/kg	1.83	5.52
75-35-4	1,1-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
74-88-4	Iodomethane	U	5.52	ug/kg	1.77	5.52
75-09-2	Methylene chloride	U	5.52	ug/kg	2.21	5.52
75-15-0	Carbon disulfide	U	5.52	ug/kg	1.38	5.52
156-60-5	trans-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
75-34-3	1,1-Dichloroethane	U	1.10	ug/kg	0.331	1.10
78-93-3	2-Butanone	U	5.52	ug/kg	1.66	5.52
156-59-2	cis-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
594-20-7	2,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10
67-66-3	Chloroform	U	1.10	ug/kg	0.331	1.10
74-97-5	Bromochloromethane	U	1.10	ug/kg	0.364	1.10
71-55-6	1,1,1-Trichloroethane	U	1.10	ug/kg	0.331	1.10
563-58-6	1,1-Dichloropropene	U	1.10	ug/kg	0.331	1.10
56-23-5	Carbon tetrachloride	U	1.10	ug/kg	0.331	1.10
107-06-2	1,2-Dichloroethane	U	1.10	ug/kg	0.331	1.10
71-43-2	Benzene	U	1.10	ug/kg	0.331	1.10
79-01-6	Trichloroethylene	U	1.10	ug/kg	0.364	1.10
78-87-5	1,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10
75-27-4	Bromodichloromethane	U	1.10	ug/kg	0.331	1.10
74-95-3	Dibromomethane	U	1.10	ug/kg	0.331	1.10
108-10-1	4-Methyl-2-pentanone	U	5.52	ug/kg	1.38	5.52
10061-01-5	cis-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10
108-88-3	Toluene	J	0.398	ug/kg	0.331	1.10
10061-02-6	trans-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10
79-00-5	1,1,2-Trichloroethane	U	1.10	ug/kg	0.331	1.10
591-78-6	2-Hexanone	U	5.52	ug/kg	1.66	5.52
142-28-9	1,3-Dichloropropane	U	1.10	ug/kg	0.331	1.10
127-18-4	Tetrachloroethylene	U	1.10	ug/kg	0.331	1.10
124-48-1	Dibromochloromethane	U	1.10	ug/kg	0.331	1.10
106-93-4	1,2-Dibromoethane	U	1.10	ug/kg	0.331	1.10
108-90-7	Chlorobenzene	U	1.10	ug/kg	0.331	1.10

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-2199  
 Lab Sample ID: 248519004

Date Collected: 02/25/2010 12:00  
 Date Received: 03/03/2010 08:50  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: CDS1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 9.5  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

Client ID: RE36-10-8280  
 Batch ID: 963809  
 Run Date: 03/11/2010 15:32  
 Prep Date: 03/11/2010 10:04  
 Data File: 031110V55B421.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.10	ug/kg	0.331	1.10
179601-23-1	m,p-Xylenes	U	2.21	ug/kg	0.331	2.21
95-47-6	o-Xylene	U	1.10	ug/kg	0.331	1.10
100-42-5	Styrene	U	1.10	ug/kg	0.331	1.10
75-25-2	Bromoform	U	1.10	ug/kg	0.331	1.10
79-34-5	1,1,2,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
96-18-4	1,2,3-Trichloropropane	U	1.10	ug/kg	0.331	1.10
108-86-1	Bromobenzene	U	1.10	ug/kg	0.331	1.10
103-65-1	n-Propylbenzene	U	1.10	ug/kg	0.331	1.10
95-49-8	2-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-82-8	Isopropylbenzene	U	1.10	ug/kg	0.331	1.10
108-67-8	1,3,5-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
106-43-4	4-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-06-6	tert-Butylbenzene	U	1.10	ug/kg	0.331	1.10
95-63-6	1,2,4-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
135-98-8	sec-Butylbenzene	U	1.10	ug/kg	0.331	1.10
99-87-6	4-Isopropyltoluene	U	1.10	ug/kg	0.331	1.10
541-73-1	1,3-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
106-46-7	1,4-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
104-51-8	n-Butylbenzene	U	1.10	ug/kg	0.331	1.10
96-12-8	1,2-Dibromo-3-chloropropane	U	1.10	ug/kg	0.331	1.10
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.52	ug/kg	1.77	5.52
630-20-6	1,1,1,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
95-50-1	1,2-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown hydrocarbon	12.77	5.8	ug/kg	0	J

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B421.D  
Acq On : 11 Mar 2010 3:32 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |248519004|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Mar 17 15:11:15 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	Dev (Min)
Internal Standards								
1) Fluorobenzene	8.388	8.387	1.000	96	1289601	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	708397	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	170134	50.00	ug/L	0.00
82) B Fluorobenzene	8.388	8.391	1.000	96	1289601	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	708397	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	170134	50.00	ug/L	0.00
System Monitoring Compounds								
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	215989	34.60	ug/L	0.00
Spiked Amount 50.000	Range 66 - 134		Recovery =		69.20%			
43) Toluene-d8	9.724	9.721	0.873	98	898250	49.58	ug/L	0.00
Spiked Amount 50.000	Range 71 - 128		Recovery =		99.16%			
61) Bromofluorobenzene	12.260	12.260	0.914	95	287627	84.28	ug/L	0.00
Spiked Amount 50.000	Range 65 - 130		Recovery =		168.56%#			
Target Compounds								
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	4.668	0.000		0	N.D.		
3) Chloromethane	4.900	4.900	0.584	50	686	Below Cal		75
4) Vinyl chloride	0.000	5.041	0.000		0	N.D.		
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.695	0.000		0	N.D.		
8) Ethyl ether	5.877	5.866	0.701	59	179	N.D.		
9) Acetone	6.177	6.174	0.736	43	2515	N.D.		
10) 1,1-Dichloroethylene	0.000	6.156	0.000		0	N.D.		
11) Iodomethane	0.000	6.357	0.000		0	N.D.		
12) Acetonitrile	6.460	6.464	0.770	41	355	N.D.		
13) Methyl acetate	6.177	6.365	0.736	43	2515	N.D.		
14) Carbon disulfide	6.439	6.435	0.768	76	3149	N.D.		
15) Methylene chloride	6.542	6.538	0.780	84	8698	N.D.		
16) tert-Butyl methyl ether	0.000	6.640	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.715	0.000		0	N.D.		
18) Vinyl acetate	6.800	6.969	0.811	43	3554	N.D.		
19) 1,1-Dichloroethane	0.000	7.068	0.000		0	N.D.		
20) 2-Butanone	0.000	7.450	0.000		0	N.D.		
21) cis-1,2-Dichloroethylene	0.000	7.507	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	7.514	0.000		0	N.D.		
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	0.000	7.701	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	0.000	7.924	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	8.005	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.204	8.203	0.978	78	373	N.D.		
32) Cyclohexene	0.000	8.246	0.000		0m	N.D.		
33) n-Butyl alcohol	8.388	8.377	1.000	56	7432	Below Cal	#	20
34) Trichloroethylene	0.000	8.677	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	0.000	8.826	0.000		0	N.D.		
37) Dibromomethane	8.996	9.059	1.073	93	248	N.D.		

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B421.D  
Acq On : 11 Mar 2010 3:32 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |248519004|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Mar 17 15:11:15 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	9.487	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	9.526	0.000		0	N.D.	
44) Toluene	9.791	9.788	0.879	91	5538	0.36 ug/L	97
45) trans-1,3-Dichloroprop...	0.000	9.968	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	10.173	0.000		0	N.D.	
47) 2-Hexanone	10.364	10.279	0.930	43	106	N.D.	
48) 1,3-Dichloropropane	0.000	10.364	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	10.290	0.000		0	N.D.	
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	10.686	10.771	0.959	107	179	N.D.	
52) Chlorobenzene	0.000	11.174	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	11.227	11.216	1.008	131	231	N.D.	
54) Ethylbenzene	0.000	11.181	0.000		0m	N.D. d	
55) m,p-Xylenes	0.000	11.280	0.000		0m	N.D. d	
56) o-Xylene	0.000	11.701	0.000		0	N.D.	
57) Styrene	0.000	11.715	0.000		0	N.D.	
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	12.019	12.016	0.896	105	411	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	12.348	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	0.000	12.465	0.000		0	N.D.	
65) n-Propylbenzene	12.433	12.415	0.927	91	2551	N.D.	
66) 1,3,5-Trimethylbenzene	12.575	12.564	0.938	105	1720	N.D.	
67) 2-Chlorotoluene	0.000	12.596	0.000		0	N.D.	
68) 4-Chlorotoluene	12.702	12.698	0.947	91	180	N.D.	
69) tert-Butylbenzene	12.939	12.900	0.965	134	108	N.D.	
70) 1,2,4-Trimethylbenzene	0.000	12.956	0.000		0m	N.D. d	
71) sec-Butylbenzene	0.000	13.119	0.000		0m	N.D. d	
72) 4-Isopropyltoluene	0.000	13.229	0.000		0m	N.D. d	
73) 1,3-Dichlorobenzene	0.000	13.349	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	0.000	13.441	0.000		0	N.D.	
75) n-Butylbenzene	13.657	13.653	1.018	91	279	N.D.	
76) 1,2-Dichlorobenzene	13.844	13.858	1.032	146	118	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	14.704	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	0.000	15.619	0.000		0	N.D.	
79) Hexachlorobutadiene	0.000	15.686	0.000		0	N.D.	
80) Naphthalene	15.981	15.988	1.191	128	1040	N.D.	
81) 1,2,3-Trichlorobenzene	0.000	16.291	0.000		0	N.D.	
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	0.000	6.082	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	6.163	0.000		0	N.D.	
88) Allyl chloride	6.446	6.425	0.769	41	112	N.D.	
89) tert-Butyl Alcohol	0.000	6.460	0.000		0	N.D.	
90) Acrylonitrile	0.000	6.747	0.000		0	N.D.	
91) Isopropyl ether	0.000	6.920	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.104	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.192	0.000		0	N.D.	
94) Ethyl acetate	0.000	7.383	0.000		0	N.D.	

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B421.D  
Acq On : 11 Mar 2010 3:32 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |248519004|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Mar 17 15:11:15 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

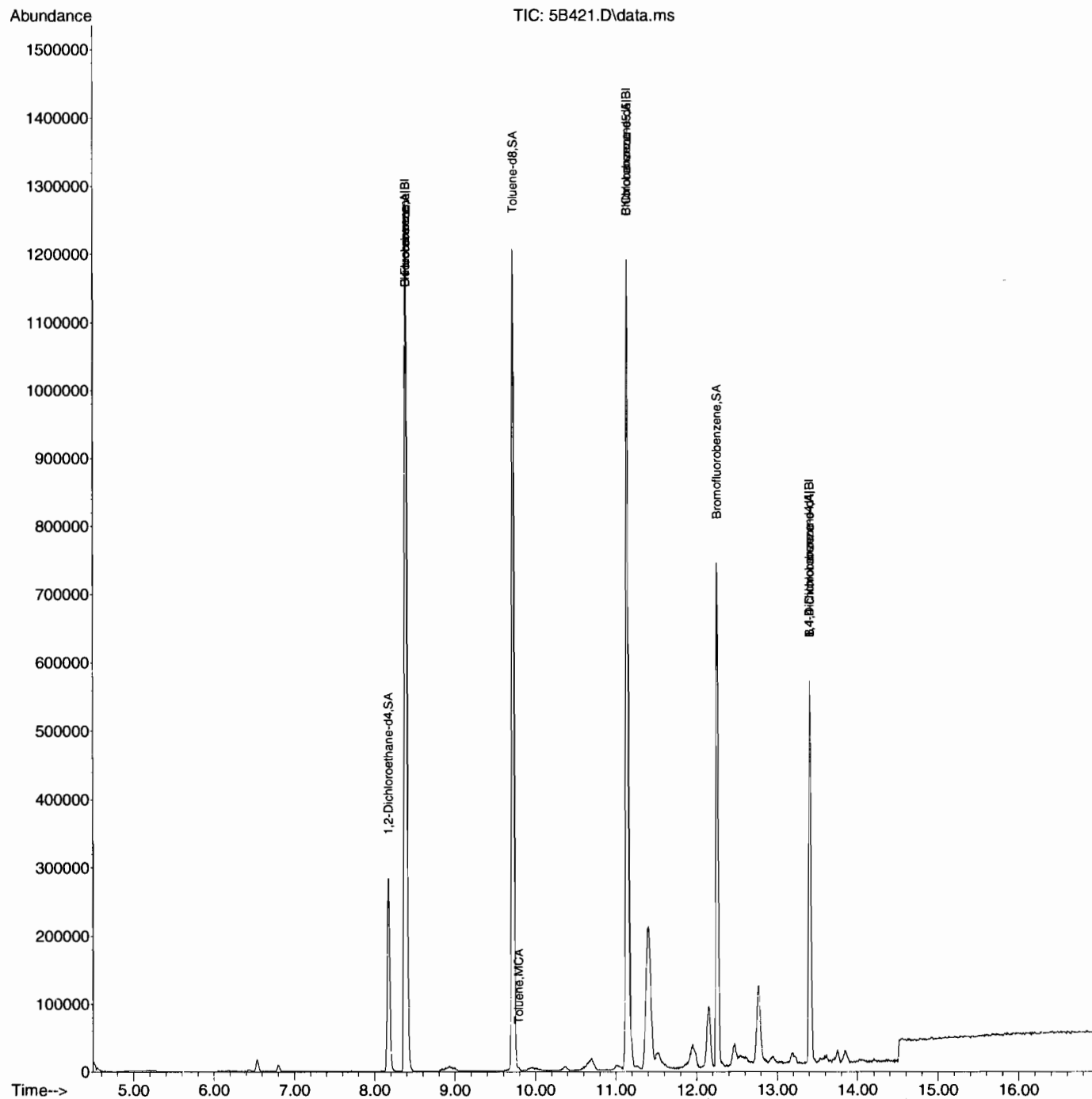
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	7.585	0.000		0	N.D.	
96) Methacrylonitrile	7.712	7.680	0.919	41	231	N.D.	
97) Tetrahydrofuran	7.719	7.716	0.920	42	110	N.D.	
98) Isobutyl alcohol	7.843	7.857	0.935	41	120	N.D.	
99) Methyl tert-amyl ether	0.000	8.122	0.000		0	N.D.	
100) Methyl methacrylate	0.000	8.801	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	8.957	0.000		0	N.D.	
102) 2-Nitropropane	0.000	9.342	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	9.859	0.000		0	N.D.	
106) 1-Chlorohexane	11.001	10.980	0.820	55	241	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	12.136	0.000		0m	N.D.	d
108) Cyclohexanone	12.164	12.267	0.907	42	356	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	12.412	0.000		0m	N.D.	d
110) Pentachloroethane	0.000	13.017	0.000		0	N.D.	
111) Benzyl chloride	13.572	13.565	1.012	91	413	N.D.	
112) bis(2-Chloroisopropyl)...	0.000	13.929	0.000		0m	N.D.	d

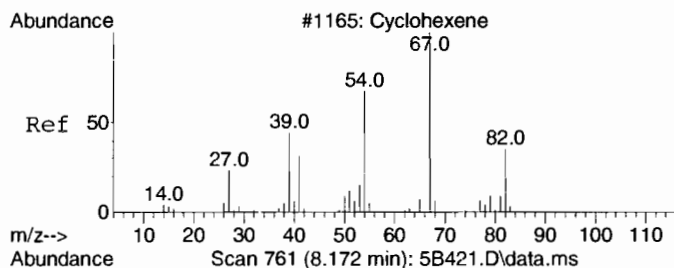
(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B421.D  
Acq On : 11 Mar 2010 3:32 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |248519004|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 21 Sample Multiplier: 1

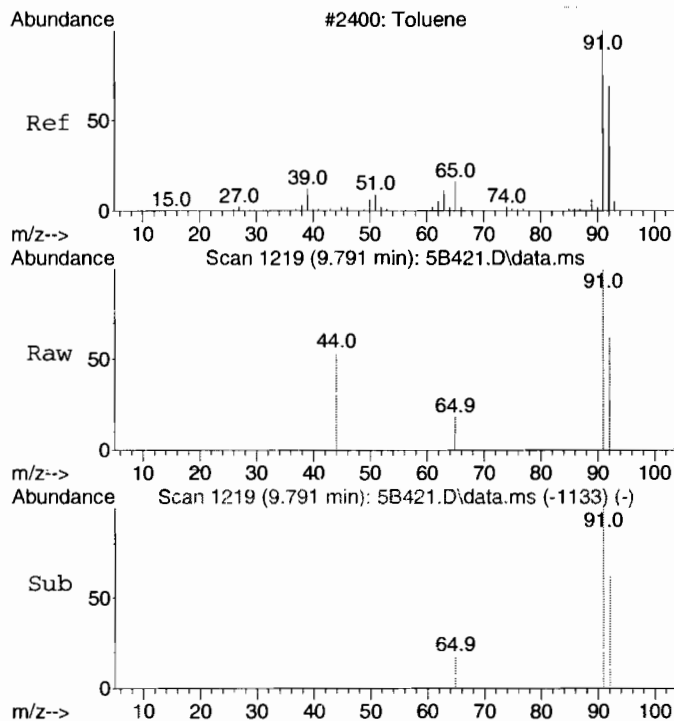
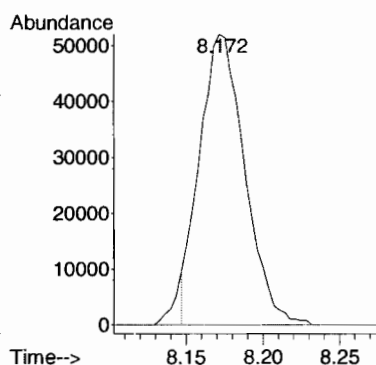
Quant Time: Mar 17 15:11:15 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE





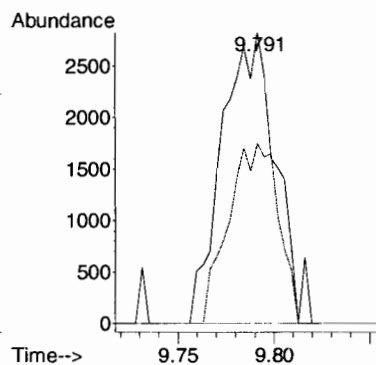
#32 BEFORE analyst DELETION  
Cyclohexene  
Concen: 12.23 ug/L  
RT: 8.172 min Scan# 761  
Delta R.T. -0.074 min  
Lab File: 5B421.D  
Acq: 11 Mar 2010 3:32 pm

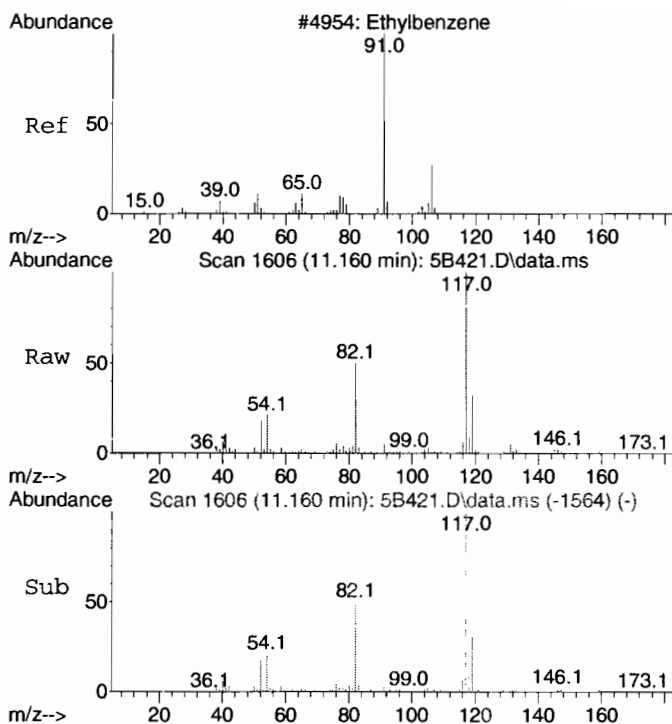
Tgt Ion: 67 Resp: 106075  
Ion Ratio Lower Upper  
67 100  
54 0.0 46.3 106.3#



#44  
Toluene  
Concen: 0.36 ug/L  
RT: 9.791 min Scan# 1219  
Delta R.T. 0.003 min  
Lab File: 5B421.D  
Acq: 11 Mar 2010 3:32 pm

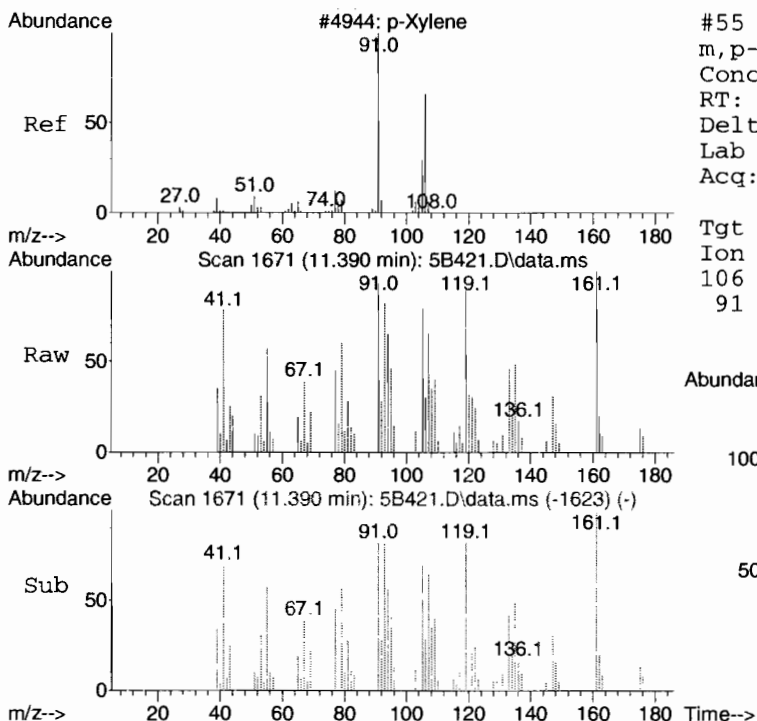
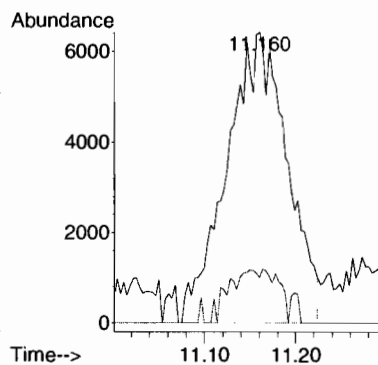
Tgt Ion: 91 Resp: 5538  
Ion Ratio Lower Upper  
91 100  
92 57.2 29.5 89.5





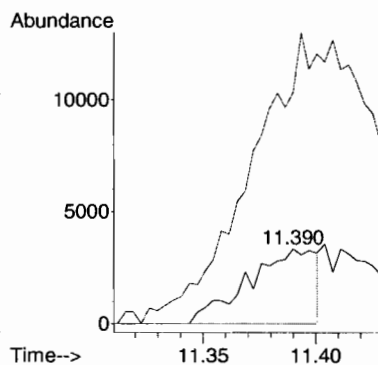
#54 BEFORE analyst DELETION  
Ethylbenzene  
Concen: 1.70 ug/L  
RT: 11.160 min Scan# 1606  
Delta R.T. -0.021 min  
Lab File: 5B421.D  
Acq: 11 Mar 2010 3:32 pm

Tgt Ion	Ratio	Lower	Upper
91	100		
106	11.1	2.6	62.6

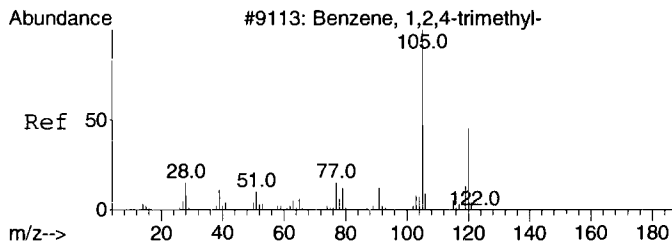


#55 BEFORE analyst DELETION  
m,p-Xylenes  
Concen: 1.07 ug/L  
RT: 11.390 min Scan# 1671  
Delta R.T. 0.110 min  
Lab File: 5B421.D  
Acq: 11 Mar 2010 3:32 pm

Tgt Ion	Ratio	Lower	Upper
106	100		
91	340.4	168.5	228.5#

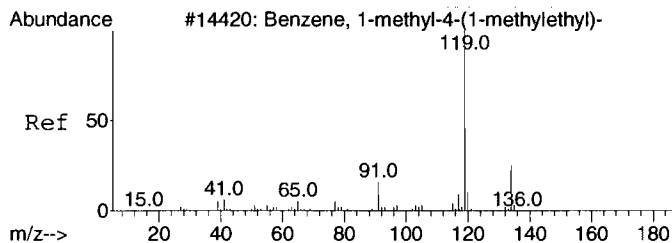
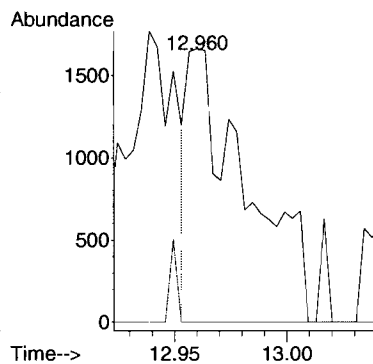






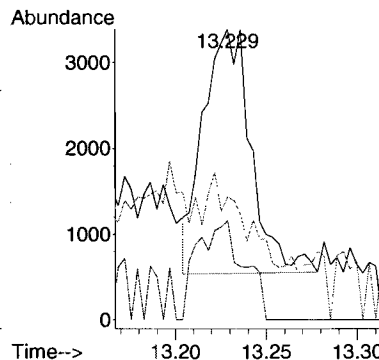
#70 BEFORE analyst DELETION  
1,2,4-Trimethylbenzene  
Concen: 0.45 ug/L  
RT: 12.960 min Scan# 2115  
Delta R.T. 0.004 min  
Lab File: 5B421.D  
Acq: 11 Mar 2010 3:32 pm

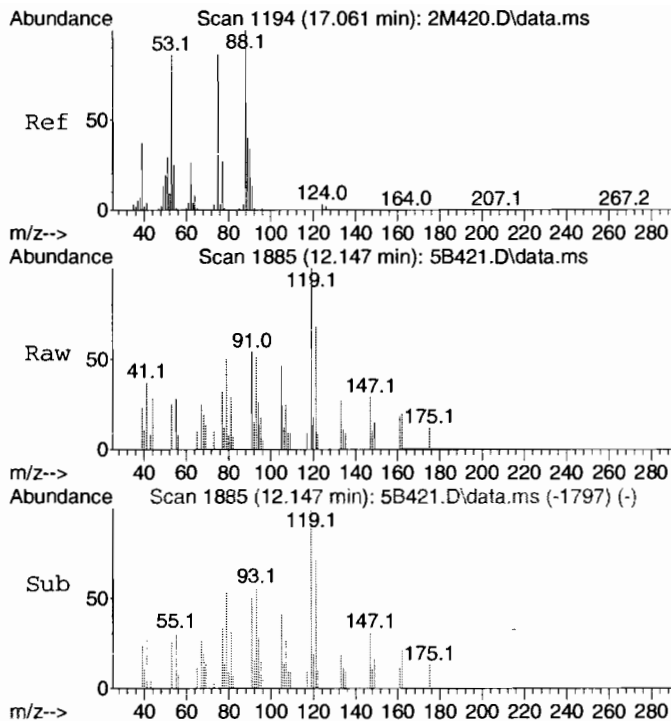
Tgt Ion:105 Resp: 3046  
Ion Ratio Lower Upper  
105 100  
120 3.5 17.4 77.4#



#72 BEFORE analyst DELETION  
4-Isopropyltoluene  
Concen: 0.76 ug/L  
RT: 13.229 min Scan# 2191  
Delta R.T. -0.000 min  
Lab File: 5B421.D  
Acq: 11 Mar 2010 3:32 pm

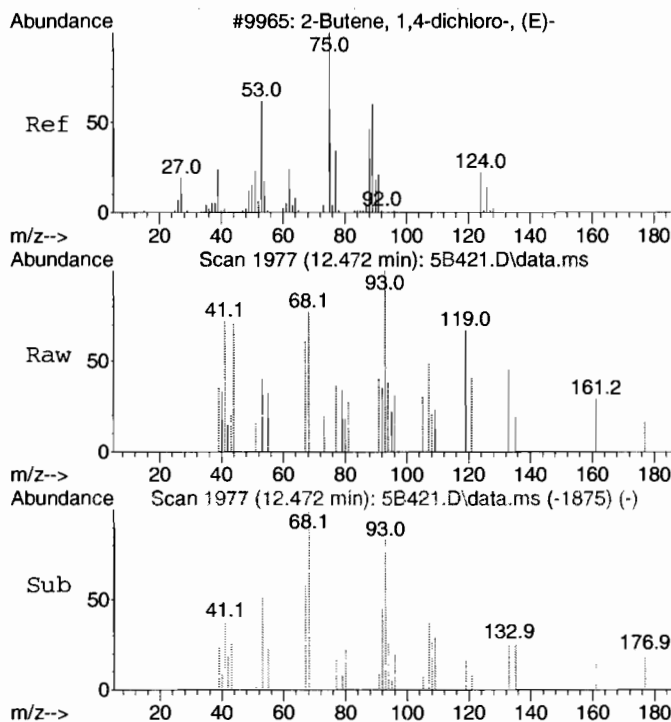
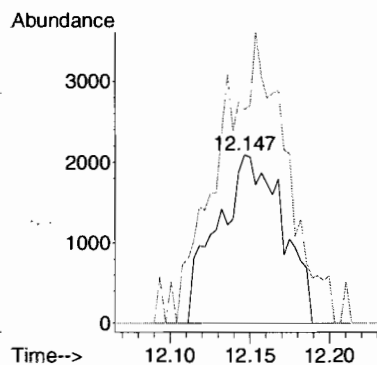
Tgt Ion:119 Resp: 5212  
Ion Ratio Lower Upper  
119 100  
134 39.7 0.0 57.2  
91 0.0 0.0 53.0





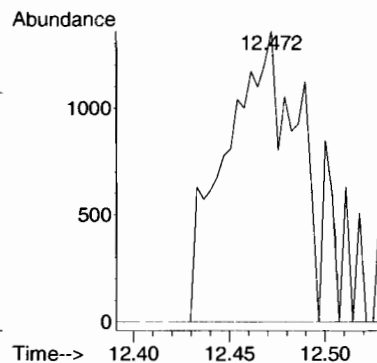
#107 BEFORE analyst DELETION  
cis-1,4-Dichloro-2-butene  
Concen: 9.34 ug/L  
RT: 12.147 min Scan# 1885  
Delta R.T. 0.011 min  
Lab File: 5B421.D  
Acq: 11 Mar 2010 3:32 pm

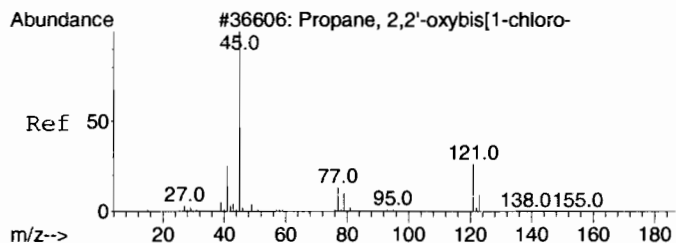
Tgt Ion	Ratio	Lower	Upper
53	100		
88	0.0	67.1	127.1#
77	178.3	1.8	61.8#



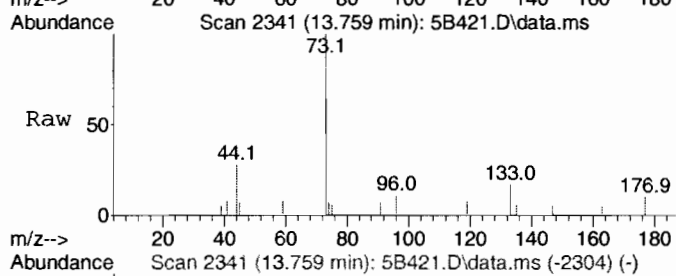
#109 BEFORE analyst DELETION  
trans-1,4-Dichloro-2-butene  
Concen: 5.79 ug/L  
RT: 12.472 min Scan# 1977  
Delta R.T. 0.060 min  
Lab File: 5B421.D  
Acq: 11 Mar 2010 3:32 pm

Tgt Ion	Ratio	Lower	Upper
53	100		
88	0.0	15.5	75.5#
75	0.0	92.0	152.0#

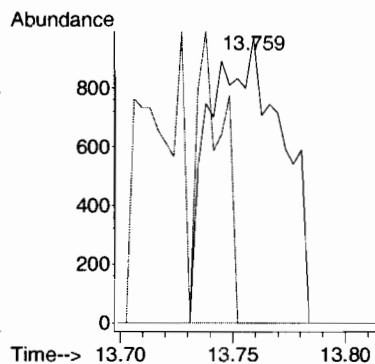
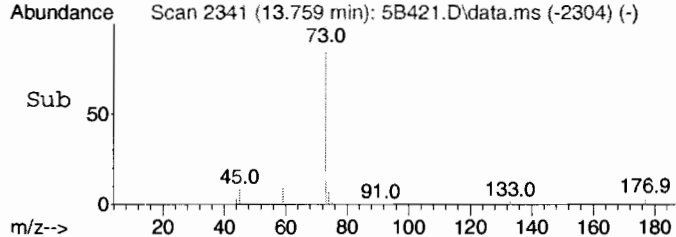




#112 BEFORE analyst DELETION  
 bis(2-Chloroisopropyl)ether  
 Concen: 1.92 ug/L  
 RT: 13.759 min Scan# 2341  
 Delta R.T. -0.170 min  
 Lab File: 5B421.D  
 Acq: 11 Mar 2010 3:32 pm



Tgt Ion: 45 Resp: 2156  
 Ion Ratio Lower Upper  
 45 100  
 121 37.2 0.0 51.5



Library Search Compound Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B421.D  
Acq On : 11 Mar 2010 3:32 pm  
Operator : CDS1  
Sample : |248519004|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 21 Sample Multiplier: 1

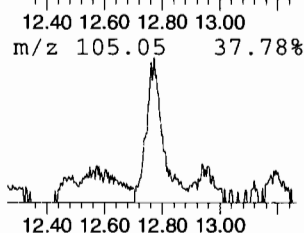
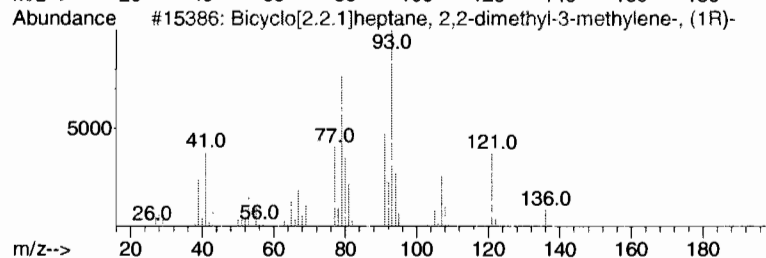
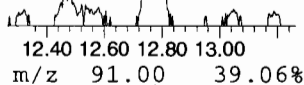
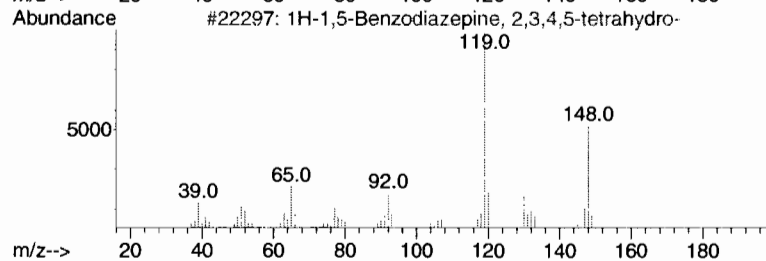
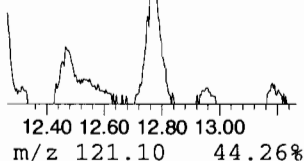
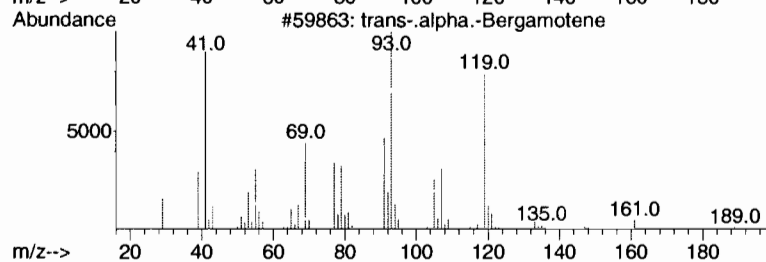
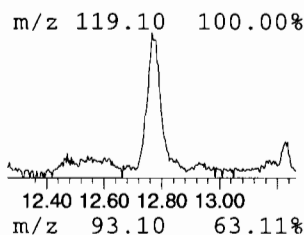
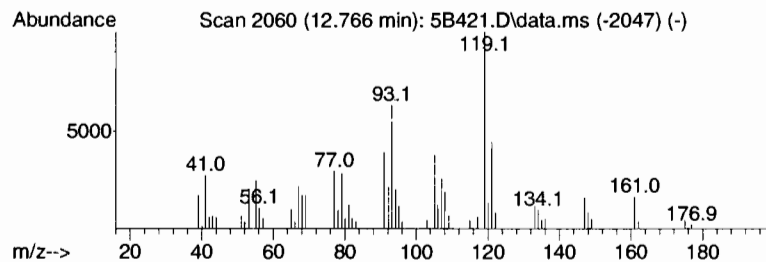
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

\*\*\*\*\*  
Peak Number 1 unknown hydrocarbon Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.765	5.25 ug/L	139627	1,4-Dichlorobenzene-d4	13.413

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			trans-.alpha.-Bergamotene	204	C15H24	1000293-01-5	53
2			1H-1,5-Benzodiazepine, 2,3,4,5-t...	148	C9H12N2	006516-89-8	35
3			Bicyclo[2.2.1]heptane, 2,2-dimet...	136	C10H16	005794-03-6	30
4			Benzene, 1-methyl-2-(1-methyleth...	134	C10H14	000527-84-4	27
5			Pyrrolo(2,3-b)pyrazine	119	C6H5N3	004745-93-1	27



Tentatively Identified Compound (LSC) summary  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B421.D  
Acq On : 11 Mar 2010 3:32 pm  
Operator : CDS1  
Sample : |248519004|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
unknown hydroca...	12.765	5.3	ug/L	139627	5	13.413	1329490	50.0

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-2199  
 Lab Sample ID: 248519005

Date Collected: 02/25/2010 12:00  
 Date Received: 03/03/2010 08:50  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.1  
 Analyst: CDS1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 6.4  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.07	ug/kg	0.363	1.07
74-87-3	Chloromethane	U	1.07	ug/kg	0.320	1.07
75-01-4	Vinyl chloride	U	1.07	ug/kg	0.320	1.07
74-83-9	Bromomethane	U	1.07	ug/kg	0.320	1.07
75-00-3	Chloroethane	U	1.07	ug/kg	0.320	1.07
75-69-4	Trichlorofluoromethane	U	1.07	ug/kg	0.320	1.07
67-64-1	Acetone	U	5.34	ug/kg	1.77	5.34
75-35-4	1,1-Dichloroethylene	U	1.07	ug/kg	0.320	1.07
74-88-4	Iodomethane	U	5.34	ug/kg	1.71	5.34
75-09-2	Methylene chloride	U	5.34	ug/kg	2.14	5.34
75-15-0	Carbon disulfide	U	5.34	ug/kg	1.33	5.34
156-60-5	trans-1,2-Dichloroethylene	U	1.07	ug/kg	0.320	1.07
75-34-3	1,1-Dichloroethane	U	1.07	ug/kg	0.320	1.07
78-93-3	2-Butanone	U	5.34	ug/kg	1.60	5.34
156-59-2	cis-1,2-Dichloroethylene	U	1.07	ug/kg	0.320	1.07
594-20-7	2,2-Dichloropropane	U	1.07	ug/kg	0.320	1.07
67-66-3	Chloroform	U	1.07	ug/kg	0.320	1.07
74-97-5	Bromochloromethane	U	1.07	ug/kg	0.352	1.07
71-55-6	1,1,1-Trichloroethane	U	1.07	ug/kg	0.320	1.07
563-58-6	1,1-Dichloropropene	U	1.07	ug/kg	0.320	1.07
56-23-5	Carbon tetrachloride	U	1.07	ug/kg	0.320	1.07
107-06-2	1,2-Dichloroethane	U	1.07	ug/kg	0.320	1.07
71-43-2	Benzene	U	1.07	ug/kg	0.320	1.07
79-01-6	Trichloroethylene	U	1.07	ug/kg	0.352	1.07
78-87-5	1,2-Dichloropropane	U	1.07	ug/kg	0.320	1.07
75-27-4	Bromodichloromethane	U	1.07	ug/kg	0.320	1.07
74-95-3	Dibromomethane	U	1.07	ug/kg	0.320	1.07
108-10-1	4-Methyl-2-pentanone	U	5.34	ug/kg	1.33	5.34
10061-01-5	cis-1,3-Dichloropropylene	U	1.07	ug/kg	0.320	1.07
108-88-3	Toluene	J	0.331	ug/kg	0.320	1.07
10061-02-6	trans-1,3-Dichloropropylene	U	1.07	ug/kg	0.320	1.07
79-00-5	1,1,2-Trichloroethane	U	1.07	ug/kg	0.320	1.07
591-78-6	2-Hexanone	U	5.34	ug/kg	1.60	5.34
142-28-9	1,3-Dichloropropane	U	1.07	ug/kg	0.320	1.07
127-18-4	Tetrachloroethylene	U	1.07	ug/kg	0.320	1.07
124-48-1	Dibromochloromethane	U	1.07	ug/kg	0.320	1.07
106-93-4	1,2-Dibromoethane	U	1.07	ug/kg	0.320	1.07
108-90-7	Chlorobenzene	U	1.07	ug/kg	0.320	1.07

**Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-2199  
Lab Sample ID: 248519005  
  
Client ID: RE36-10-8278  
Batch ID: 963809  
Run Date: 03/11/2010 15:58  
Prep Date: 03/11/2010 10:05  
Data File: 031110V55B422.D

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5I  
Analyst: CDS1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
%Moisture: 6.4  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.07	ug/kg	0.320	1.07
179601-23-1	m,p-Xylenes	U	2.14	ug/kg	0.320	2.14
95-47-6	o-Xylene	U	1.07	ug/kg	0.320	1.07
100-42-5	Styrene	U	1.07	ug/kg	0.320	1.07
75-25-2	Bromoform	U	1.07	ug/kg	0.320	1.07
79-34-5	1,1,2,2-Tetrachloroethane	U	1.07	ug/kg	0.320	1.07
96-18-4	1,2,3-Trichloropropane	U	1.07	ug/kg	0.320	1.07
108-86-1	Bromobenzene	U	1.07	ug/kg	0.320	1.07
103-65-1	n-Propylbenzene	U	1.07	ug/kg	0.320	1.07
95-49-8	2-Chlorotoluene	U	1.07	ug/kg	0.320	1.07
98-82-8	Isopropylbenzene	U	1.07	ug/kg	0.320	1.07
108-67-8	1,3,5-Trimethylbenzene	U	1.07	ug/kg	0.320	1.07
106-43-4	4-Chlorotoluene	U	1.07	ug/kg	0.320	1.07
98-06-6	tert-Butylbenzene	U	1.07	ug/kg	0.320	1.07
95-63-6	1,2,4-Trimethylbenzene	U	1.07	ug/kg	0.320	1.07
135-98-8	sec-Butylbenzene	U	1.07	ug/kg	0.320	1.07
99-87-6	4-Isopropyltoluene	J	1.05	ug/kg	0.320	1.07
541-73-1	1,3-Dichlorobenzene	U	1.07	ug/kg	0.320	1.07
106-46-7	1,4-Dichlorobenzene	U	1.07	ug/kg	0.320	1.07
104-51-8	n-Butylbenzene	U	1.07	ug/kg	0.320	1.07
96-12-8	1,2-Dibromo-3-chloropropane	U	1.07	ug/kg	0.320	1.07
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.34	ug/kg	1.71	5.34
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.07	ug/kg	0.320	1.07
95-50-1	1,2-Dichlorobenzene	U	1.07	ug/kg	0.320	1.07

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
No Tentatively Identified Compounds Found				ug/kg		

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B422.D  
Acq On : 11 Mar 2010 3:58 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |248519005|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Mar 17 15:12:19 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units		
Internal Standards								Dev (Min)	
1) Fluorobenzene	8.387	8.387	1.000	96	1382388	50.00	ug/L	0.00	
41) Chlorobenzene-d5	11.142	11.142	1.000	117	931234	50.00	ug/L	0.00	
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	338321	50.00	ug/L	0.00	
82) B Fluorobenzene	8.387	8.391	1.000	96	1382388	50.00	ug/L	0.00	
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	931234	50.00	ug/L	0.00	
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	338321	50.00	ug/L	0.00	
System Monitoring Compounds								Dev (Min)	
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	229708	34.33	ug/L	0.00	
Spiked Amount	50.000	Range	66 - 134	Recovery	= 68.66%				
43) Toluene-d8	9.721	9.721	0.872	98	1030956	43.29	ug/L	0.00	
Spiked Amount	50.000	Range	71 - 128	Recovery	= 86.58%				
61) Bromofluorobenzene	12.260	12.260	0.914	95	478536	70.52	ug/L	0.00	
Spiked Amount	50.000	Range	65 - 130	Recovery	= 141.04%#				
Target Compounds		R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	4.668	0.000			0	N.D.		
3) Chloromethane	4.890	4.900	0.583	50	529	Below Cal	#	43	
4) Vinyl chloride	0.000	5.041	0.000		0	N.D.			
5) Bromomethane	0.000	5.423	0.000		0	N.D.			
6) Chloroethane	0.000	5.504	0.000		0	N.D.			
7) Trichlorofluoromethane	0.000	5.695	0.000		0	N.D.			
8) Ethyl ether	5.876	5.866	0.701	59	409	N.D.			
9) Acetone	6.174	6.174	0.736	43	5982	N.D.			
10) 1,1-Dichloroethylene	0.000	6.156	0.000		0	N.D.			
11) Iodomethane	0.000	6.357	0.000		0	N.D.			
12) Acetonitrile	6.457	6.464	0.770	41	234	N.D.			
13) Methyl acetate	6.174	6.365	0.736	43	5982	N.D.			
14) Carbon disulfide	6.432	6.435	0.767	76	129	N.D.			
15) Methylene chloride	6.541	6.538	0.780	84	4302	N.D.			
16) tert-Butyl methyl ether	0.000	6.640	0.000		0	N.D.			
17) trans-1,2-Dichloroethy...	0.000	6.715	0.000		0	N.D.			
18) Vinyl acetate	6.803	6.969	0.811	43	3592	N.D.			
19) 1,1-Dichloroethane	0.000	7.068	0.000		0	N.D.			
20) 2-Butanone	0.000	7.450	0.000		0	N.D.			
21) cis-1,2-Dichloroethylene	0.000	7.507	0.000		0	N.D.			
22) 2,2-Dichloropropane	0.000	7.514	0.000		0	N.D.			
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.			
24) Chloroform	0.000	7.701	0.000		0	N.D.			
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.			
26) Cyclohexane	0.000	7.924	0.000		0	N.D.			
27) 1,1-Dichloropropene	0.000	8.005	0.000		0	N.D.			
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.			
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.			
31) Benzene	8.211	8.203	0.979	78	128	N.D.			
32) Cyclohexene	0.000	8.246	0.000		0m	N.D.	d		
33) n-Butyl alcohol	8.384	8.377	1.000	56	7651	Below Cal	#	19	
34) Trichloroethylene	8.670	8.677	1.034	95	234	N.D.			
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.			
36) Methylcyclohexane	0.000	8.826	0.000		0	N.D.			
37) Dibromomethane	0.000	9.059	0.000		0	N.D.			



Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B422.D  
Acq On : 11 Mar 2010 3:58 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |248519005|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Mar 17 15:12:19 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	9.487	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	9.526	0.000		0	N.D.	
44) Toluene	9.788	9.788	0.878	91	6237	0.31 ug/L	88
45) trans-1,3-Dichloroprop...	0.000	9.968	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	10.173	0.000		0	N.D.	
47) 2-Hexanone	0.000	10.279	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000	10.364	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	10.290	0.000		0	N.D.	
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	10.771	0.000		0	N.D.	
52) Chlorobenzene	0.000	11.174	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	11.216	0.000		0	N.D.	
54) Ethylbenzene	11.178	11.181	1.003	91	2544	N.D.	
55) m,p-Xylenes	0.000	11.280	0.000		0m	N.D.	d
56) o-Xylene	11.704	11.701	1.050	106	1546	N.D.	
57) Styrene	0.000	11.715	0.000		0	N.D.	
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	11.987	12.016	0.894	105	2036	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	12.348	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	0.000	12.465	0.000		0	N.D.	
65) n-Propylbenzene	12.412	12.415	0.925	91	1486	N.D.	
66) 1,3,5-Trimethylbenzene	12.560	12.564	0.936	105	1634	N.D.	
67) 2-Chlorotoluene	0.000	12.596	0.000		0	N.D.	
68) 4-Chlorotoluene	12.695	12.698	0.946	91	654	N.D.	
69) tert-Butylbenzene	0.000	12.900	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	0.000	12.956	0.000		0m	N.D.	d
71) sec-Butylbenzene	0.000	13.119	0.000		0	N.D.	
72) 4-Isopropyltoluene	13.229	13.229	0.986	119	13401	0.98 ug/L	87
73) 1,3-Dichlorobenzene	0.000	13.349	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	0.000	13.441	0.000		0	N.D.	
75) n-Butylbenzene	13.667	13.653	1.019	91	317	N.D.	
76) 1,2-Dichlorobenzene	0.000	13.858	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	14.704	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	15.612	15.619	1.164	180	132	N.D.	
79) Hexachlorobutadiene	0.000	15.686	0.000		0	N.D.	
80) Naphthalene	15.981	15.988	1.191	128	1978	N.D.	
81) 1,2,3-Trichlorobenzene	0.000	16.291	0.000		0	N.D.	
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	0.000	6.082	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	6.163	0.000		0	N.D.	
88) Allyl chloride	6.457	6.425	0.770	41	234	N.D.	
89) tert-Butyl Alcohol	0.000	6.460	0.000		0	N.D.	
90) Acrylonitrile	0.000	6.747	0.000		0	N.D.	
91) Isopropyl ether	0.000	6.920	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.104	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.192	0.000		0	N.D.	
94) Ethyl acetate	0.000	7.383	0.000		0	N.D.	

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B422.D  
Acq On : 11 Mar 2010 3:58 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |248519005|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Mar 17 15:12:19 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

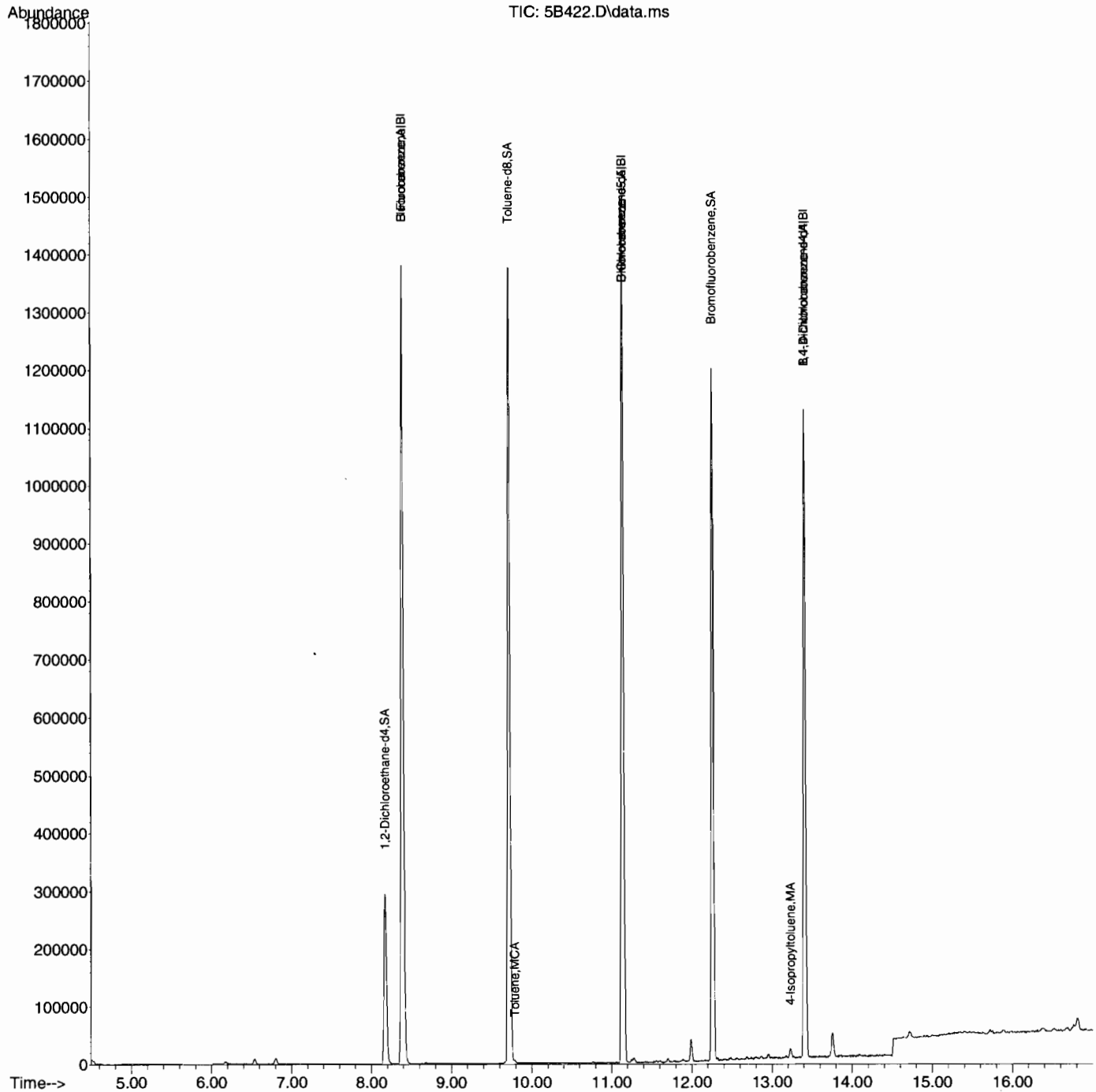
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	7.585	0.000		0	N.D.	
96) Methacrylonitrile	7.705	7.680	0.919	41	121	N.D.	
97) Tetrahydrofuran	7.719	7.716	0.920	42	135	N.D.	
98) Isobutyl alcohol	7.730	7.857	0.922	41	159	N.D.	
99) Methyl tert-amyl ether	0.000	8.122	0.000		0	N.D.	
100) Methyl methacrylate	0.000	8.801	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	8.957	0.000		0	N.D.	
102) 2-Nitropropane	0.000	9.342	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	9.859	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	12.136	0.000		0m	N.D.	d
108) Cyclohexanone	0.000	12.267	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	12.412	0.000		0	N.D.	
110) Pentachloroethane	0.000	13.017	0.000		0	N.D.	
111) Benzyl chloride	13.565	13.565	1.011	91	306	N.D.	
112) bis(2-Chloroisopropyl)...	13.954	13.929	1.040	45	114	N.D.	

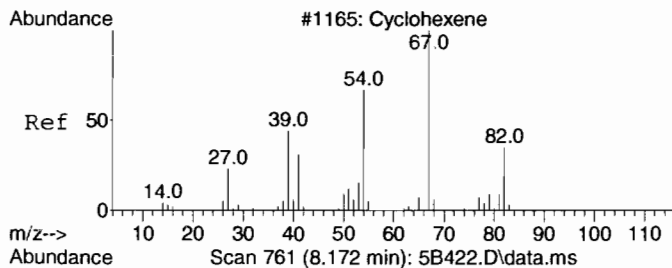
(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B422.D  
Acq On : 11 Mar 2010 3:58 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |248519005|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 22 Sample Multiplier: 1

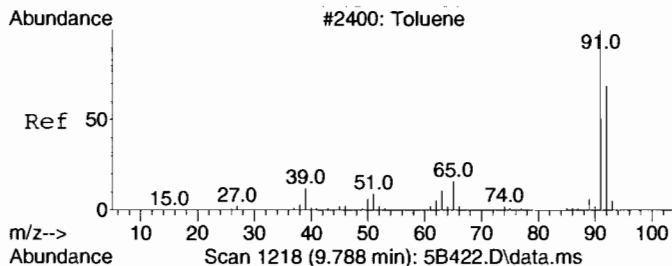
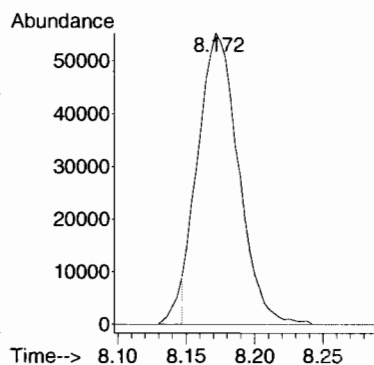
Quant Time: Mar 17 15:12:19 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE





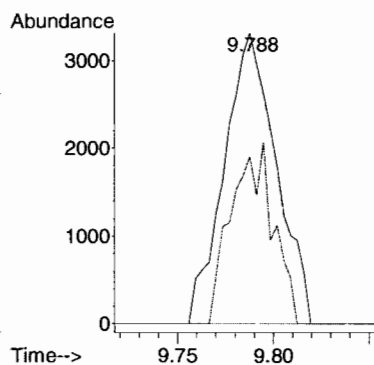
#32 BEFORE analyst DELETION  
Cyclohexene  
Concen: 12.19 ug/L  
RT: 8.172 min Scan# 761  
Delta R.T. -0.074 min  
Lab File: 5B422.D  
Acq: 11 Mar 2010 3:58 pm

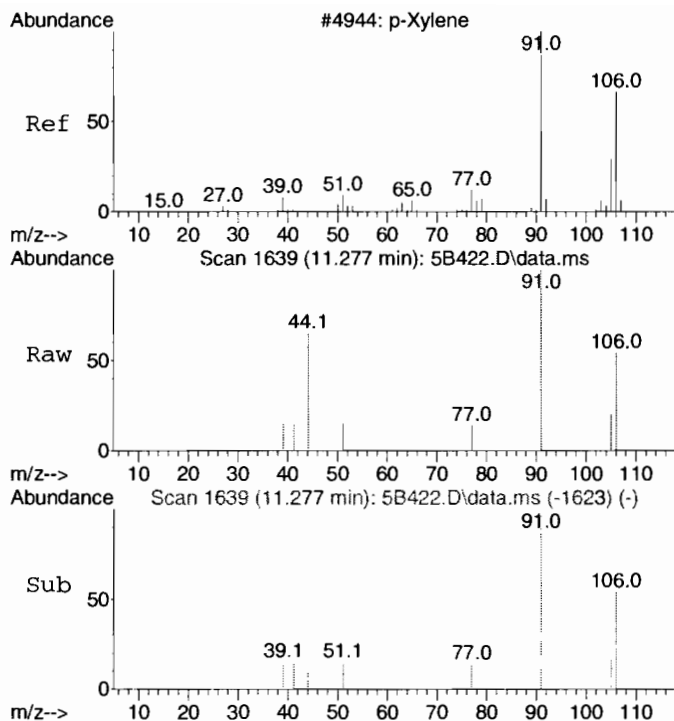
Tgt Ion: 67 Resp: 113413  
Ion Ratio Lower Upper  
67 100  
54 0.0 46.3 106.3#



#44  
Toluene  
Concen: 0.31 ug/L  
RT: 9.788 min Scan# 1218  
Delta R.T. -0.000 min  
Lab File: 5B422.D  
Acq: 11 Mar 2010 3:58 pm

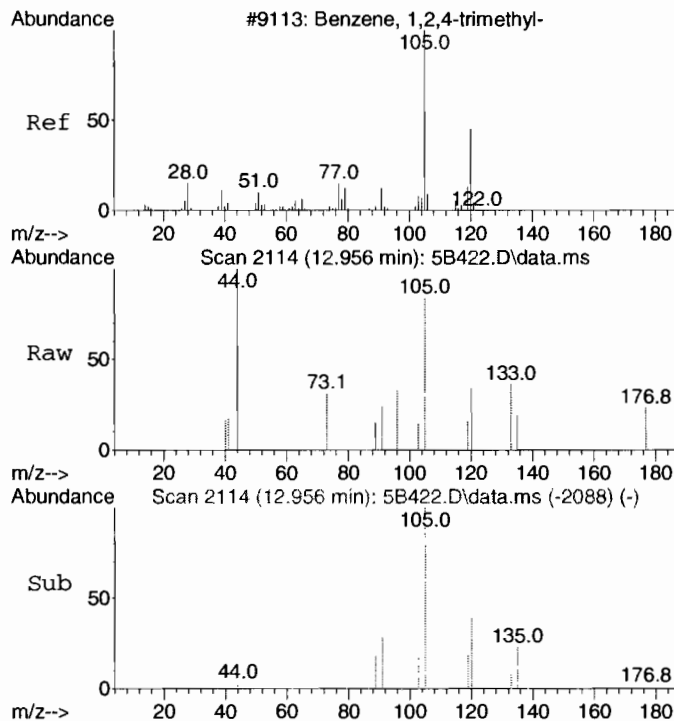
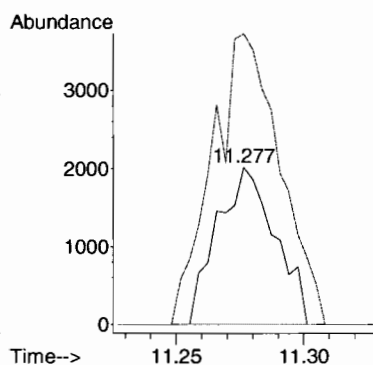
Tgt Ion: 91 Resp: 6237  
Ion Ratio Lower Upper  
91 100  
92 50.3 29.5 89.5





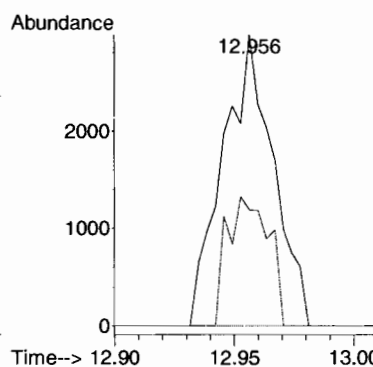
#55 BEFORE analyst DELETION  
m,p-Xylenes  
Concen: 0.37 ug/L  
RT: 11.277 min Scan# 1639  
Delta R.T. -0.003 min  
Lab File: 5B422.D  
Acq: 11 Mar 2010 3:58 pm

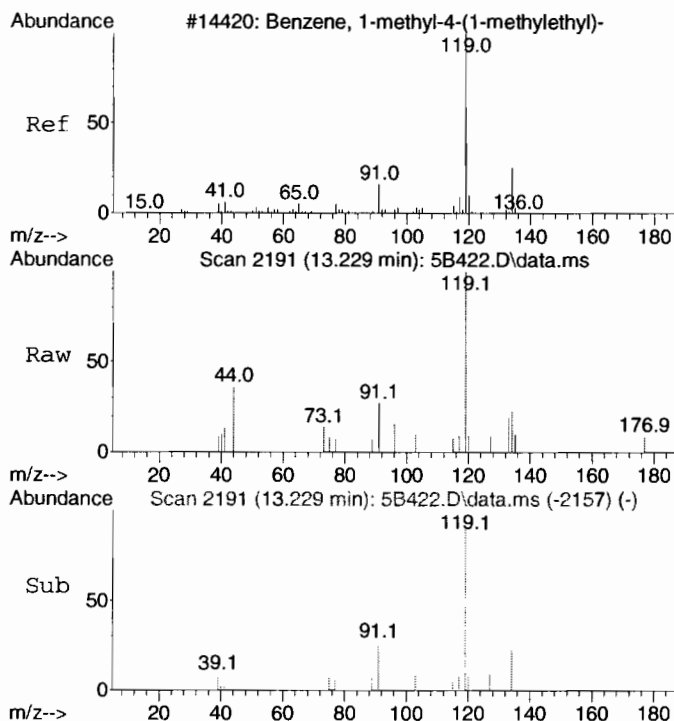
Tgt Ion:106 Resp: 3170  
Ion Ratio Lower Upper  
106 100  
91 216.8 168.5 228.5



#70 BEFORE analyst DELETION  
1,2,4-Trimethylbenzene  
Concen: 0.32 ug/L  
RT: 12.956 min Scan# 2114  
Delta R.T. 0.000 min  
Lab File: 5B422.D  
Acq: 11 Mar 2010 3:58 pm

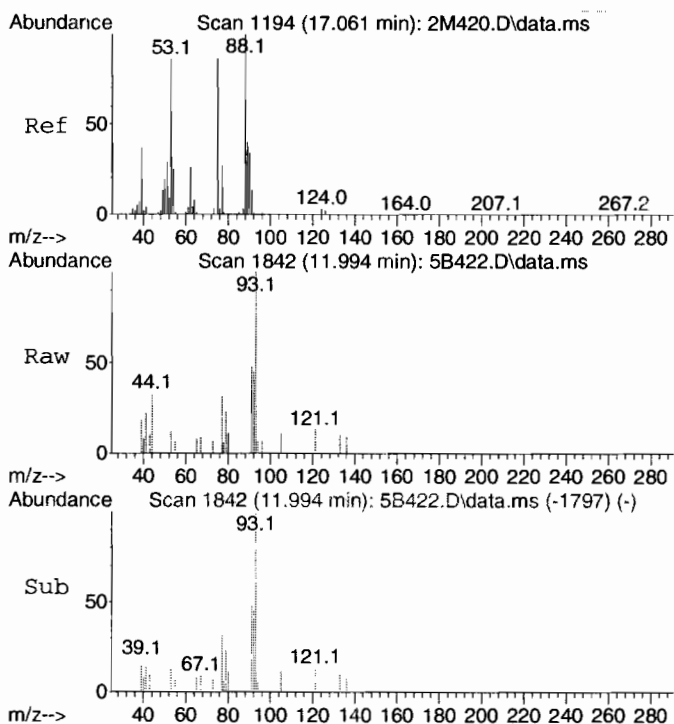
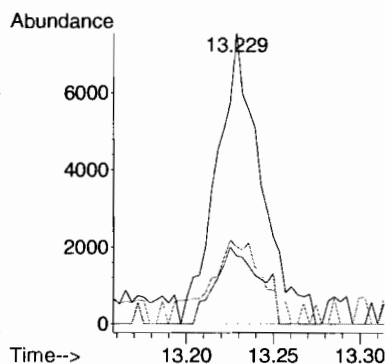
Tgt Ion:105 Resp: 4358  
Ion Ratio Lower Upper  
105 100  
120 36.7 17.4 77.4





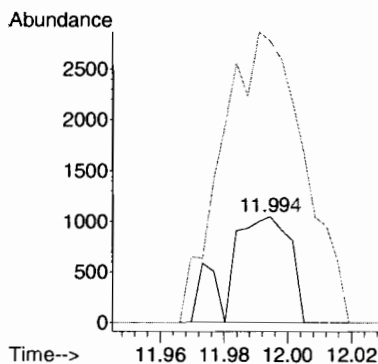
#72  
4-Isopropyltoluene  
Concen: 0.98 ug/L  
RT: 13.229 min Scan# 2191  
Delta R.T. -0.000 min  
Lab File: 5B422.D  
Acq: 11 Mar 2010 3:58 pm

Tgt Ion	Ratio	Lower	Upper
119	100		
134	26.6	0.0	57.2
91	36.4	0.0	53.0



#107 BEFORE analyst DELETION  
cis-1,4-Dichloro-2-butene  
Concen: 1.13 ug/L  
RT: 11.994 min Scan# 1842  
Delta R.T. -0.142 min  
Lab File: 5B422.D  
Acq: 11 Mar 2010 3:58 pm

Tgt Ion	Ratio	Lower	Upper
53	100		
88	0.0	67.1	127.1#
77	359.6	1.8	61.8#



Library Search Compound Report

GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\

Data File : 5B422.D

Acq On : 11 Mar 2010 3:58 pm

Operator : CDS1

Sample : |248519005|963809|1|VOA|1|VOA8260BS|

Misc : LANL 5G - SOIL

ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M

Quant Title : Volatile Organics 8260B

SubList :

TIC Library : C:\Database\NIST05.L

TIC Integration Parameters: default.P

No Library Search Compounds Detected

\*\*\*\*\*

Tentatively Identified Compound (LSC) summary  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B422.D  
Acq On : 11 Mar 2010 3:58 pm  
Operator : CDS1  
Sample : |248519005|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
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**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

Page 1 of 2

SDG Number: 10-2199  
 Lab Sample ID: 248519006  
 Client ID: RE36-10-8274  
 Batch ID: 963809  
 Run Date: 03/11/2010 16:25  
 Prep Date: 03/11/2010 10:06  
 Data File: 031110V55B423.D

Date Collected: 02/25/2010 12:00  
 Date Received: 03/03/2010 08:50  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: CDS1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 10.2  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.11	ug/kg	0.379	1.11
74-87-3	Chloromethane	U	1.11	ug/kg	0.334	1.11
75-01-4	Vinyl chloride	U	1.11	ug/kg	0.334	1.11
74-83-9	Bromomethane	U	1.11	ug/kg	0.334	1.11
75-00-3	Chloroethane	U	1.11	ug/kg	0.334	1.11
75-69-4	Trichlorofluoromethane	U	1.11	ug/kg	0.334	1.11
67-64-1	Acetone	U	5.57	ug/kg	1.85	5.57
75-35-4	1,1-Dichloroethylene	U	1.11	ug/kg	0.334	1.11
74-88-4	Iodomethane	U	5.57	ug/kg	1.78	5.57
75-09-2	Methylene chloride	U	5.57	ug/kg	2.23	5.57
75-15-0	Carbon disulfide	U	5.57	ug/kg	1.39	5.57
156-60-5	trans-1,2-Dichloroethylene	U	1.11	ug/kg	0.334	1.11
75-34-3	1,1-Dichloroethane	U	1.11	ug/kg	0.334	1.11
78-93-3	2-Butanone	U	5.57	ug/kg	1.67	5.57
156-59-2	cis-1,2-Dichloroethylene	U	1.11	ug/kg	0.334	1.11
594-20-7	2,2-Dichloropropane	U	1.11	ug/kg	0.334	1.11
67-66-3	Chloroform	U	1.11	ug/kg	0.334	1.11
74-97-5	Bromochloromethane	U	1.11	ug/kg	0.368	1.11
71-55-6	1,1,1-Trichloroethane	U	1.11	ug/kg	0.334	1.11
563-58-6	1,1-Dichloropropene	U	1.11	ug/kg	0.334	1.11
56-23-5	Carbon tetrachloride	U	1.11	ug/kg	0.334	1.11
107-06-2	1,2-Dichloroethane	U	1.11	ug/kg	0.334	1.11
71-43-2	Benzene	U	1.11	ug/kg	0.334	1.11
79-01-6	Trichloroethylene	U	1.11	ug/kg	0.368	1.11
78-87-5	1,2-Dichloropropane	U	1.11	ug/kg	0.334	1.11
75-27-4	Bromodichloromethane	U	1.11	ug/kg	0.334	1.11
74-95-3	Dibromomethane	U	1.11	ug/kg	0.334	1.11
108-10-1	4-Methyl-2-pentanone	U	5.57	ug/kg	1.39	5.57
10061-01-5	cis-1,3-Dichloropropylene	U	1.11	ug/kg	0.334	1.11
108-88-3	Toluene	U	1.11	ug/kg	0.334	1.11
10061-02-6	trans-1,3-Dichloropropylene	U	1.11	ug/kg	0.334	1.11
79-00-5	1,1,2-Trichloroethane	U	1.11	ug/kg	0.334	1.11
591-78-6	2-Hexanone	U	5.57	ug/kg	1.67	5.57
142-28-9	1,3-Dichloropropane	U	1.11	ug/kg	0.334	1.11
127-18-4	Tetrachloroethylene	U	1.11	ug/kg	0.334	1.11
124-48-1	Dibromochloromethane	U	1.11	ug/kg	0.334	1.11
106-93-4	1,2-Dibromoethane	U	1.11	ug/kg	0.334	1.11
108-90-7	Chlorobenzene	U	1.11	ug/kg	0.334	1.11

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-2199  
 Lab Sample ID: 248519006  
 Client ID: RE36-10-8274  
 Batch ID: 963809  
 Run Date: 03/11/2010 16:25  
 Prep Date: 03/11/2010 10:06  
 Data File: 031110V5\SB423.D

Date Collected: 02/25/2010 12:00  
 Date Received: 03/03/2010 08:50  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: CDS1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 10.2  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.11	ug/kg	0.334	1.11
179601-23-1	m,p-Xylenes	U	2.23	ug/kg	0.334	2.23
95-47-6	o-Xylene	U	1.11	ug/kg	0.334	1.11
100-42-5	Styrene	U	1.11	ug/kg	0.334	1.11
75-25-2	Bromoform	U	1.11	ug/kg	0.334	1.11
79-34-5	1,1,2,2-Tetrachloroethane	U	1.11	ug/kg	0.334	1.11
96-18-4	1,2,3-Trichloropropane	U	1.11	ug/kg	0.334	1.11
108-86-1	Bromobenzene	U	1.11	ug/kg	0.334	1.11
103-65-1	n-Propylbenzene	U	1.11	ug/kg	0.334	1.11
95-49-8	2-Chlorotoluene	U	1.11	ug/kg	0.334	1.11
98-82-8	Isopropylbenzene	U	1.11	ug/kg	0.334	1.11
108-67-8	1,3,5-Trimethylbenzene	U	1.11	ug/kg	0.334	1.11
106-43-4	4-Chlorotoluene	U	1.11	ug/kg	0.334	1.11
98-06-6	tert-Butylbenzene	U	1.11	ug/kg	0.334	1.11
95-63-6	1,2,4-Trimethylbenzene	U	1.11	ug/kg	0.334	1.11
135-98-8	sec-Butylbenzene	U	1.11	ug/kg	0.334	1.11
99-87-6	4-Isopropyltoluene	U	1.11	ug/kg	0.334	1.11
541-73-1	1,3-Dichlorobenzene	U	1.11	ug/kg	0.334	1.11
106-46-7	1,4-Dichlorobenzene	U	1.11	ug/kg	0.334	1.11
104-51-8	n-Butylbenzene	U	1.11	ug/kg	0.334	1.11
96-12-8	1,2-Dibromo-3-chloropropane	U	1.11	ug/kg	0.334	1.11
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.57	ug/kg	1.78	5.57
630-20-6	1,1,1,2-Tetrachloroethane	U	1.11	ug/kg	0.334	1.11
95-50-1	1,2-Dichlorobenzene	U	1.11	ug/kg	0.334	1.11

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
No Tentatively Identified Compounds Found				ug/kg		

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B423.D  
Acq On : 11 Mar 2010 4:25 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |248519006|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Mar 11 17:18:17 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	Dev (Min)
Internal Standards								
1) Fluorobenzene	8.391	8.387	1.000	96	1348044	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	897466	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	310547	50.00	ug/L	0.00
82) B Fluorobenzene	8.391	8.391	1.000	96	1348044	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	897466	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	310547	50.00	ug/L	0.00
System Monitoring Compounds								
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	228249	34.98	ug/L	0.00
Spiked Amount 50.000	Range 66 - 134		Recovery =		69.96%			
43) Toluene-d8	9.721	9.721	0.872	98	997570	43.46	ug/L	0.00
Spiked Amount 50.000	Range 71 - 128		Recovery =		86.92%			
61) Bromofluorobenzene	12.263	12.260	0.914	95	450859	72.38	ug/L	0.00
Spiked Amount 50.000	Range 65 - 130		Recovery =		144.76%#			
Target Compounds								
2) Dichlorodifluoromethane	0.000	4.668	0.000		0	N.D.		
3) Chloromethane	4.880	4.900	0.582	50	473	Below Cal		95
4) Vinyl chloride	0.000	5.041	0.000		0	N.D.		
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.695	0.000		0	N.D.		
8) Ethyl ether	0.000	5.866	0.000		0	N.D.		
9) Acetone	6.177	6.174	0.736	43	1489	N.D.		
10) 1,1-Dichloroethylene	0.000	6.156	0.000		0	N.D.		
11) Iodomethane	0.000	6.357	0.000		0	N.D.		
12) Acetonitrile	6.460	6.464	0.770	41	371	N.D.		
13) Methyl acetate	6.177	6.365	0.736	43	1489	N.D.		
14) Carbon disulfide	6.428	6.435	0.766	76	110	N.D.		
15) Methylene chloride	6.542	6.538	0.780	84	3477	N.D.		
16) tert-Butyl methyl ether	0.000	6.640	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.715	0.000		0	N.D.		
18) Vinyl acetate	6.803	6.969	0.811	43	3574	N.D.		
19) 1,1-Dichloroethane	0.000	7.068	0.000		0	N.D.		
20) 2-Butanone	7.457	7.450	0.889	43	108	N.D.		
21) cis-1,2-Dichloroethylene	0.000	7.507	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	7.514	0.000		0	N.D.		
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	0.000	7.701	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	0.000	7.924	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	8.005	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.197	8.203	0.977	78	109	N.D.		
32) Cyclohexene	8.246	8.246	0.983	67	140	N.D.		
33) n-Butyl alcohol	8.388	8.377	1.000	56	7843	Below Cal	#	19
34) Trichloroethylene	0.000	8.677	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	0.000	8.826	0.000		0	N.D.		
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B423.D  
Acq On : 11 Mar 2010 4:25 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |248519006|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Mar 11 17:18:17 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	9.487	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	9.526	0.000		0	N.D.	
44) Toluene	9.788	9.788	0.878	91	4697	N.D.	
45) trans-1,3-Dichloroprop...	0.000	9.968	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	10.173	0.000		0	N.D.	
47) 2-Hexanone	0.000	10.279	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000	10.364	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	10.290	0.000		0	N.D.	
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	10.771	0.000		0	N.D.	
52) Chlorobenzene	0.000	11.174	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	11.216	0.000		0	N.D.	
54) Ethylbenzene	11.178	11.181	1.003	91	1350	N.D.	
55) m,p-Xylenes	11.277	11.280	1.012	106	268	N.D.	
56) o-Xylene	0.000	11.701	0.000		0	N.D.	
57) Styrene	0.000	11.715	0.000		0	N.D.	
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	0.000	12.016	0.000		0	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	12.348	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	0.000	12.465	0.000		0	N.D.	
65) n-Propylbenzene	12.423	12.415	0.926	91	1458	N.D.	
66) 1,3,5-Trimethylbenzene	12.557	12.564	0.936	105	1488	N.D.	
67) 2-Chlorotoluene	0.000	12.596	0.000		0	N.D.	
68) 4-Chlorotoluene	12.695	12.698	0.946	91	1102	N.D.	
69) tert-Butylbenzene	0.000	12.900	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	12.957	12.956	0.966	105	1681	N.D.	
71) sec-Butylbenzene	13.116	13.119	0.978	105	112	N.D.	
72) 4-Isopropyltoluene	13.300	13.229	0.992	119	853	N.D.	
73) 1,3-Dichlorobenzene	0.000	13.349	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	0.000	13.441	0.000		0	N.D.	
75) n-Butylbenzene	13.657	13.653	1.018	91	726	N.D.	
76) 1,2-Dichlorobenzene	0.000	13.858	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	14.704	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	0.000	15.619	0.000		0	N.D.	
79) Hexachlorobutadiene	0.000	15.686	0.000		0	N.D.	
80) Naphthalene	15.989	15.988	1.192	128	1496	N.D.	
81) 1,2,3-Trichlorobenzene	0.000	16.291	0.000		0	N.D.	
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	0.000	6.082	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	6.163	0.000		0	N.D.	
88) Allyl chloride	6.435	6.425	0.767	41	112	N.D.	
89) tert-Butyl Alcohol	6.467	6.460	0.771	59	143	N.D.	
90) Acrylonitrile	0.000	6.747	0.000		0	N.D.	
91) Isopropyl ether	0.000	6.920	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.104	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.192	0.000		0	N.D.	
94) Ethyl acetate	7.457	7.383	0.889	43	108	N.D.	

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B423.D  
Acq On : 11 Mar 2010 4:25 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |248519006|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Mar 11 17:18:17 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

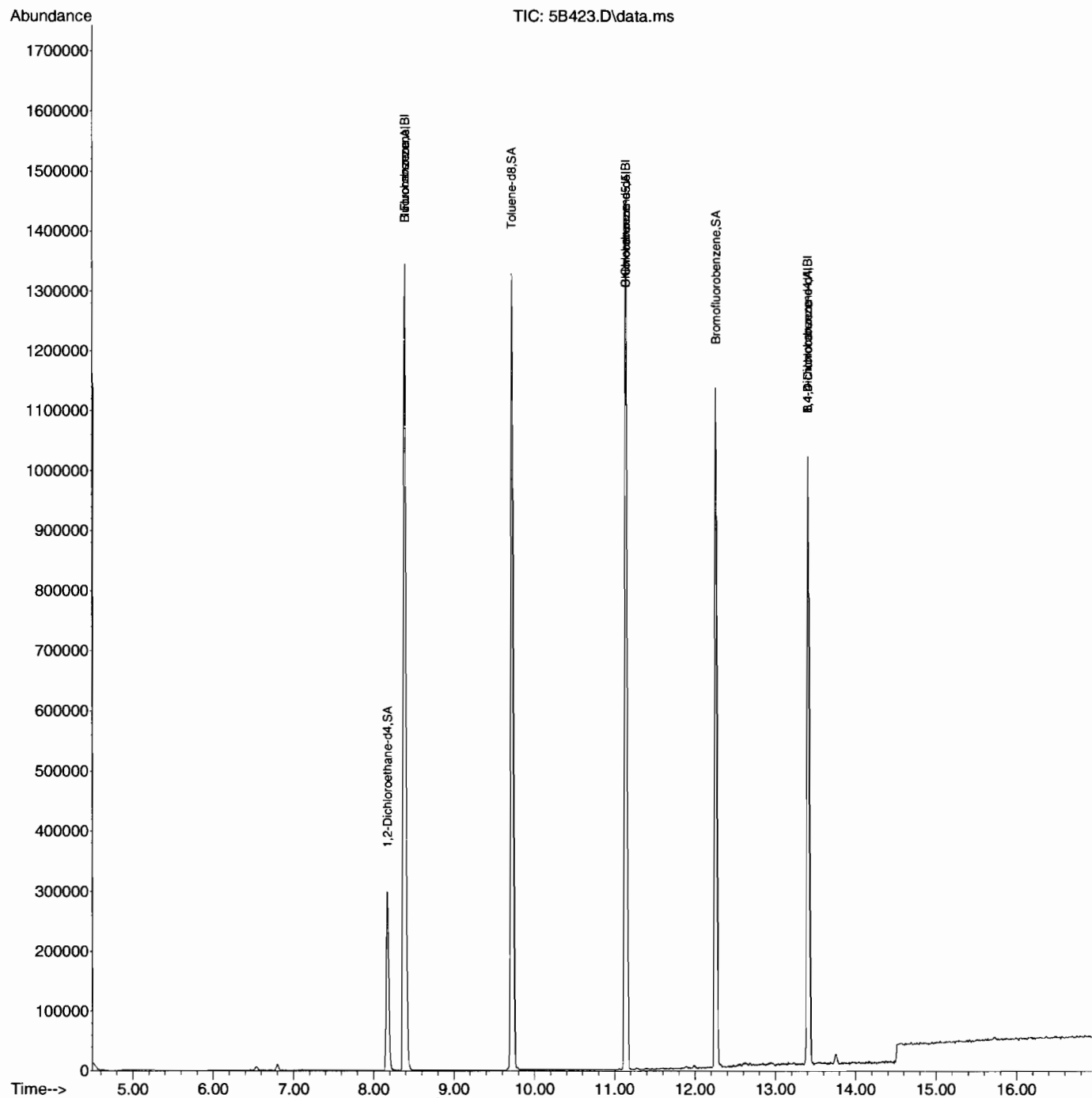
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	7.585	0.000		0	N.D.	
96) Methacrylonitrile	0.000	7.680	0.000		0	N.D.	
97) Tetrahydrofuran	7.716	7.716	0.920	42	596	N.D.	
98) Isobutyl alcohol	0.000	7.857	0.000		0	N.D.	
99) Methyl tert-amyl ether	0.000	8.122	0.000		0	N.D.	
100) Methyl methacrylate	0.000	8.801	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	8.957	0.000		0	N.D.	
102) 2-Nitropropane	0.000	9.342	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	9.859	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	12.136	0.000		0	N.D.	
108) Cyclohexanone	0.000	12.267	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	12.412	0.000		0	N.D.	
110) Pentachloroethane	0.000	13.017	0.000		0	N.D.	
111) Benzyl chloride	13.561	13.565	1.011	91	524	N.D.	
112) bis(2-Chloroisopropyl)...	13.954	13.929	1.040	45	109	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B423.D  
Acq On : 11 Mar 2010 4:25 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |248519006|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Mar 11 17:18:17 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE



Library Search Compound Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B423.D  
Acq On : 11 Mar 2010 4:25 pm  
Operator : CDS1  
Sample : |248519006|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

No Library Search Compounds Detected

\*\*\*\*\*

Tentatively Identified Compound (LSC) summary  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B423.D  
Acq On : 11 Mar 2010 4:25 pm  
Operator : CDS1  
Sample : |248519006|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc



**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-2199  
 Lab Sample ID: 248519007

Date Collected: 02/25/2010 12:00  
 Date Received: 03/03/2010 08:50  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: CDS1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 28.9  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

Client ID: RE36-10-8291  
 Batch ID: 963809  
 Run Date: 03/11/2010 16:51  
 Prep Date: 03/11/2010 10:07  
 Data File: 031110V5\$B424.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.41	ug/kg	0.478	1.41
74-87-3	Chloromethane	U	1.41	ug/kg	0.422	1.41
75-01-4	Vinyl chloride	U	1.41	ug/kg	0.422	1.41
74-83-9	Bromomethane	U	1.41	ug/kg	0.422	1.41
75-00-3	Chloroethane	U	1.41	ug/kg	0.422	1.41
75-69-4	Trichlorofluoromethane	U	1.41	ug/kg	0.422	1.41
67-64-1	Acetone	U	7.04	ug/kg	2.34	7.04
75-35-4	1,1-Dichloroethylene	U	1.41	ug/kg	0.422	1.41
74-88-4	Iodomethane	U	7.04	ug/kg	2.25	7.04
75-09-2	Methylene chloride	U	7.04	ug/kg	2.81	7.04
75-15-0	Carbon disulfide	U	7.04	ug/kg	1.76	7.04
156-60-5	trans-1,2-Dichloroethylene	U	1.41	ug/kg	0.422	1.41
75-34-3	1,1-Dichloroethane	U	1.41	ug/kg	0.422	1.41
78-93-3	2-Butanone	U	7.04	ug/kg	2.11	7.04
156-59-2	cis-1,2-Dichloroethylene	U	1.41	ug/kg	0.422	1.41
594-20-7	2,2-Dichloropropane	U	1.41	ug/kg	0.422	1.41
67-66-3	Chloroform	U	1.41	ug/kg	0.422	1.41
74-97-5	Bromochloromethane	U	1.41	ug/kg	0.464	1.41
71-55-6	1,1,1-Trichloroethane	U	1.41	ug/kg	0.422	1.41
563-58-6	1,1-Dichloropropene	U	1.41	ug/kg	0.422	1.41
56-23-5	Carbon tetrachloride	U	1.41	ug/kg	0.422	1.41
107-06-2	1,2-Dichloroethane	U	1.41	ug/kg	0.422	1.41
71-43-2	Benzene	U	1.41	ug/kg	0.422	1.41
79-01-6	Trichloroethylene	U	1.41	ug/kg	0.464	1.41
78-87-5	1,2-Dichloropropane	U	1.41	ug/kg	0.422	1.41
75-27-4	Bromodichloromethane	U	1.41	ug/kg	0.422	1.41
74-95-3	Dibromomethane	U	1.41	ug/kg	0.422	1.41
108-10-1	4-Methyl-2-pentanone	U	7.04	ug/kg	1.76	7.04
10061-01-5	cis-1,3-Dichloropropylene	U	1.41	ug/kg	0.422	1.41
108-88-3	Toluene	J	0.732	ug/kg	0.422	1.41
10061-02-6	trans-1,3-Dichloropropylene	U	1.41	ug/kg	0.422	1.41
79-00-5	1,1,2-Trichloroethane	U	1.41	ug/kg	0.422	1.41
591-78-6	2-Hexanone	U	7.04	ug/kg	2.11	7.04
142-28-9	1,3-Dichloropropane	U	1.41	ug/kg	0.422	1.41
127-18-4	Tetrachloroethylene	U	1.41	ug/kg	0.422	1.41
124-48-1	Dibromochloromethane	U	1.41	ug/kg	0.422	1.41
106-93-4	1,2-Dibromoethane	U	1.41	ug/kg	0.422	1.41
108-90-7	Chlorobenzene	U	1.41	ug/kg	0.422	1.41

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-2199  
 Lab Sample ID: 248519007  
 Client ID: RE36-10-8291  
 Batch ID: 963809  
 Run Date: 03/11/2010 16:51  
 Prep Date: 03/11/2010 10:07  
 Data File: 031110V5SB424.D

Date Collected: 02/25/2010 12:00  
 Date Received: 03/03/2010 08:50  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: CDS1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 28.9  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.41	ug/kg	0.422	1.41
179601-23-1	m,p-Xylenes	U	2.81	ug/kg	0.422	2.81
95-47-6	o-Xylene	U	1.41	ug/kg	0.422	1.41
100-42-5	Styrene	U	1.41	ug/kg	0.422	1.41
75-25-2	Bromoform	U	1.41	ug/kg	0.422	1.41
79-34-5	1,1,2,2-Tetrachloroethane	U	1.41	ug/kg	0.422	1.41
96-18-4	1,2,3-Trichloropropane	U	1.41	ug/kg	0.422	1.41
108-86-1	Bromobenzene	U	1.41	ug/kg	0.422	1.41
103-65-1	n-Propylbenzene	U	1.41	ug/kg	0.422	1.41
95-49-8	2-Chlorotoluene	U	1.41	ug/kg	0.422	1.41
98-82-8	Isopropylbenzene	U	1.41	ug/kg	0.422	1.41
108-67-8	1,3,5-Trimethylbenzene	U	1.41	ug/kg	0.422	1.41
106-43-4	4-Chlorotoluene	U	1.41	ug/kg	0.422	1.41
98-06-6	tert-Butylbenzene	U	1.41	ug/kg	0.422	1.41
95-63-6	1,2,4-Trimethylbenzene	U	1.41	ug/kg	0.422	1.41
135-98-8	sec-Butylbenzene	U	1.41	ug/kg	0.422	1.41
99-87-6	4-Isopropyltoluene	U	1.41	ug/kg	0.422	1.41
541-73-1	1,3-Dichlorobenzene	U	1.41	ug/kg	0.422	1.41
106-46-7	1,4-Dichlorobenzene	U	1.41	ug/kg	0.422	1.41
104-51-8	n-Butylbenzene	U	1.41	ug/kg	0.422	1.41
96-12-8	1,2-Dibromo-3-chloropropane	U	1.41	ug/kg	0.422	1.41
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	7.04	ug/kg	2.25	7.04
630-20-6	1,1,1,2-Tetrachloroethane	U	1.41	ug/kg	0.422	1.41
95-50-1	1,2-Dichlorobenzene	U	1.41	ug/kg	0.422	1.41

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
No Tentatively Identified Compounds Found				ug/kg		

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B424.D  
Acq On : 11 Mar 2010 4:51 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |248519007|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Mar 17 15:13:28 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	8.388	8.387	1.000	96	1275004	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	722536	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	189799	50.00	ug/L	0.00
82) B Fluorobenzene	8.388	8.391	1.000	96	1275004	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	722536	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	189799	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	207355	33.60	ug/L	0.00
Spiked Amount 50.000	Range 66	- 134	Recovery	=	67.20%			
43) Toluene-d8	9.721	9.721	0.872	98	898718	48.64	ug/L	0.00
Spiked Amount 50.000	Range 71	- 128	Recovery	=	97.28%			
61) Bromofluorobenzene	12.260	12.260	0.914	95	311043	81.70	ug/L	0.00
Spiked Amount 50.000	Range 65	- 130	Recovery	=	163.40%#			
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	4.668	0.000		0	N.D.		
3) Chloromethane	5.021	4.900	0.599	50	797	Below Cal		83
4) Vinyl chloride	5.041	5.041	0.601	62	172	N.D.		
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.695	0.000		0	N.D.		
8) Ethyl ether	5.877	5.866	0.701	59	386	N.D.		
9) Acetone	6.174	6.174	0.736	43	2483	N.D.		
10) 1,1-Dichloroethylene	0.000	6.156	0.000		0	N.D.		
11) Iodomethane	0.000	6.357	0.000		0	N.D.		
12) Acetonitrile	6.457	6.464	0.770	41	112	N.D.		
13) Methyl acetate	6.206	6.365	0.740	43	114	N.D.		
14) Carbon disulfide	6.432	6.435	0.767	76	401	N.D.		
15) Methylene chloride	6.538	6.538	0.779	84	5856	N.D.		
16) tert-Butyl methyl ether	0.000	6.640	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.715	0.000		0	N.D.		
18) Vinyl acetate	6.803	6.969	0.811	43	3601	N.D.		
19) 1,1-Dichloroethane	0.000	7.068	0.000		0	N.D.		
20) 2-Butanone	7.698	7.450	0.918	43	108	N.D.		
21) cis-1,2-Dichloroethylene	0.000	7.507	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	7.514	0.000		0	N.D.		
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	0.000	7.701	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	0.000	7.924	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	8.005	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.190	8.203	0.976	78	112	N.D.		
32) Cyclohexene	8.243	8.246	0.983	67	115	N.D.		
33) n-Butyl alcohol	8.388	8.377	1.000	56	7354	Below Cal	#	20
34) Trichloroethylene	8.681	8.677	1.035	95	1033	N.D.		
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	0.000	8.826	0.000		0	N.D.		
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B424.D  
Acq On : 11 Mar 2010 4:51 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |248519007|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Mar 17 15:13:28 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	9.487	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	9.526	0.000		0	N.D.	
44) Toluene	9.791	9.788	0.879	91	8060	0.52 ug/L	85
45) trans-1,3-Dichloroprop...	0.000	9.968	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	10.173	0.000		0	N.D.	
47) 2-Hexanone	0.000	10.279	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000	10.364	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	10.290	0.000		0	N.D.	
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	10.771	0.000		0	N.D.	
52) Chlorobenzene	0.000	11.174	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	11.216	0.000		0	N.D.	
54) Ethylbenzene	11.174	11.181	1.003	91	3327	N.D.	
55) m,p-Xylenes	0.000	11.280	0.000		0m	N.D.	d
56) o-Xylene	11.698	11.701	1.050	106	1361	N.D.	
57) Styrene	0.000	11.715	0.000		0	N.D.	
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	12.256	12.016	0.914	105	108	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	12.348	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	0.000	12.465	0.000		0	N.D.	
65) n-Propylbenzene	12.610	12.415	0.940	91	228	N.D.	
66) 1,3,5-Trimethylbenzene	12.568	12.564	0.937	105	1225	N.D.	
67) 2-Chlorotoluene	0.000	12.596	0.000		0	N.D.	
68) 4-Chlorotoluene	12.691	12.698	0.946	91	243	N.D.	
69) tert-Butylbenzene	0.000	12.900	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	0.000	12.956	0.000		0m	N.D.	d
71) sec-Butylbenzene	0.000	13.119	0.000		0	N.D.	
72) 4-Isopropyltoluene	0.000	13.229	0.000		0m	N.D.	d
73) 1,3-Dichlorobenzene	0.000	13.349	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	0.000	13.441	0.000		0	N.D.	
75) n-Butylbenzene	13.653	13.653	1.018	91	251	N.D.	
76) 1,2-Dichlorobenzene	0.000	13.858	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	14.704	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	0.000	15.619	0.000		0	N.D.	
79) Hexachlorobutadiene	0.000	15.686	0.000		0	N.D.	
80) Naphthalene	15.989	15.988	1.192	128	1366	N.D.	
81) 1,2,3-Trichlorobenzene	0.000	16.291	0.000		0	N.D.	
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	0.000	6.082	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	6.163	0.000		0	N.D.	
88) Allyl chloride	6.443	6.425	0.768	41	150	N.D.	
89) tert-Butyl Alcohol	0.000	6.460	0.000		0	N.D.	
90) Acrylonitrile	0.000	6.747	0.000		0	N.D.	
91) Isopropyl ether	0.000	6.920	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.104	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.192	0.000		0	N.D.	
94) Ethyl acetate	0.000	7.383	0.000		0	N.D.	

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B424.D  
Acq On : 11 Mar 2010 4:51 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |248519007|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Mar 17 15:13:28 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

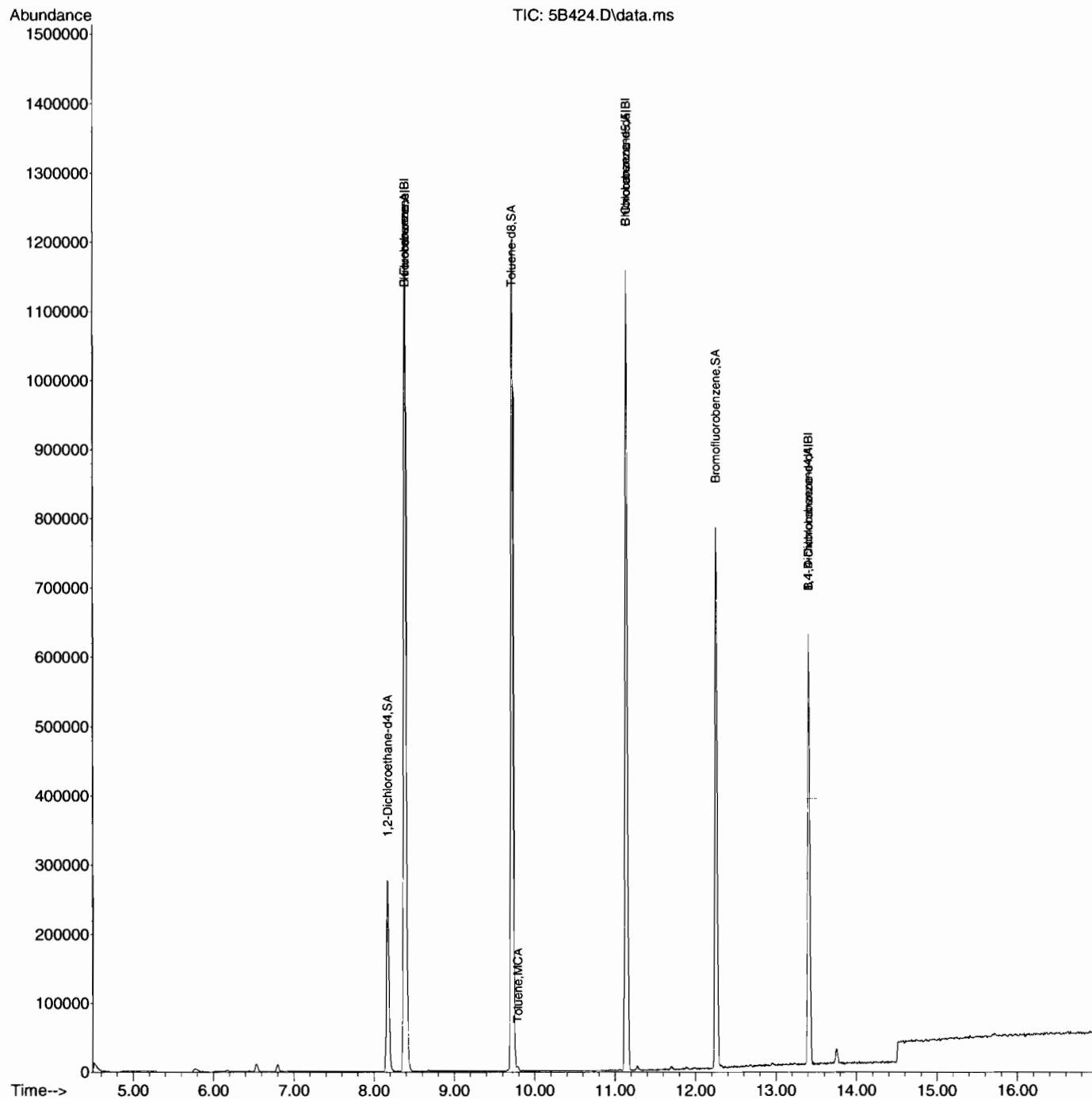
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	7.585	0.000		0	N.D.	
96) Methacrylonitrile	7.709	7.680	0.919	41	241	N.D.	
97) Tetrahydrofuran	7.726	7.716	0.921	42	478	N.D.	
98) Isobutyl alcohol	7.843	7.857	0.935	41	110	N.D.	
99) Methyl tert-amyl ether	0.000	8.122	0.000		0	N.D.	
100) Methyl methacrylate	0.000	8.801	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	8.957	0.000		0	N.D.	
102) 2-Nitropropane	0.000	9.342	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	9.859	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	12.136	0.000		0	N.D.	
108) Cyclohexanone	0.000	12.267	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	12.412	0.000		0	N.D.	
110) Pentachloroethane	0.000	13.017	0.000		0	N.D.	
111) Benzyl chloride	13.565	13.565	1.011	91	141	N.D.	
112) bis(2-Chloroisopropyl)...	13.901	13.929	1.036	45	131	N.D.	

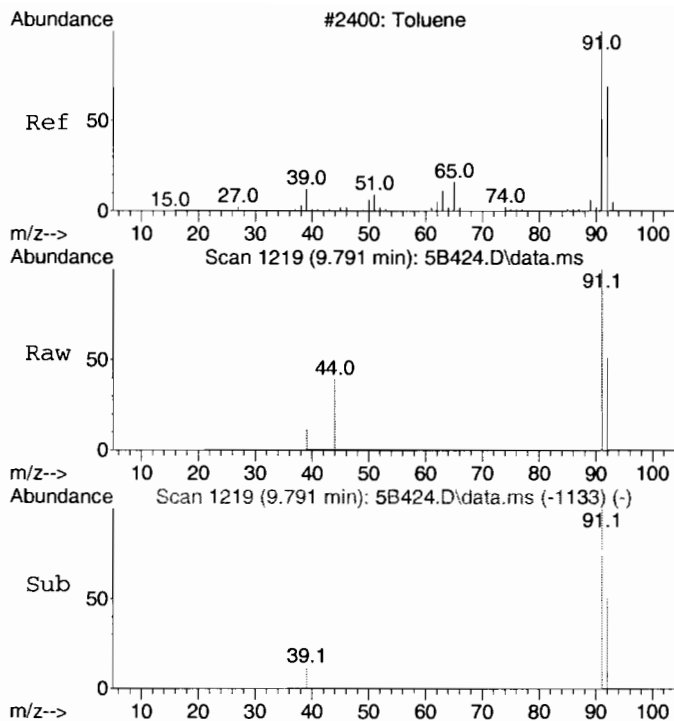
(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B424.D  
Acq On : 11 Mar 2010 4:51 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |248519007|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 24 Sample Multiplier: 1

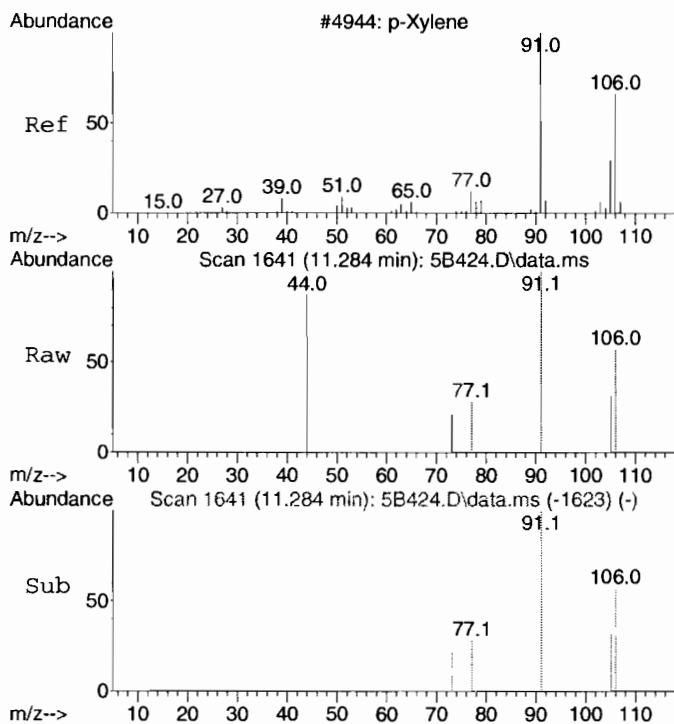
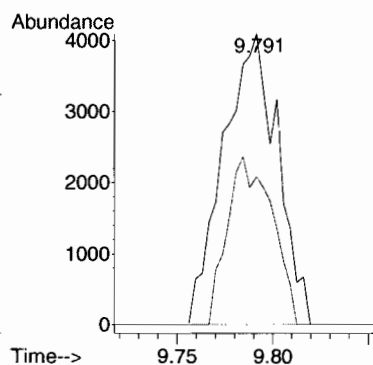
Quant Time: Mar 17 15:13:28 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE





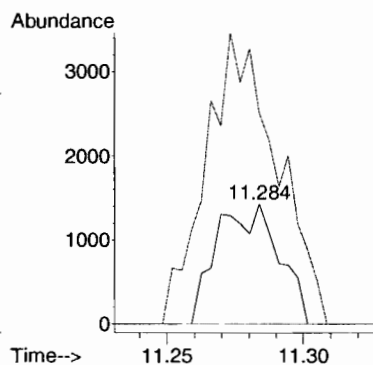
#44  
Toluene  
Concen: 0.52 ug/L  
RT: 9.791 min Scan# 1219  
Delta R.T. 0.003 min  
Lab File: 5B424.D  
Acq: 11 Mar 2010 4:51 pm

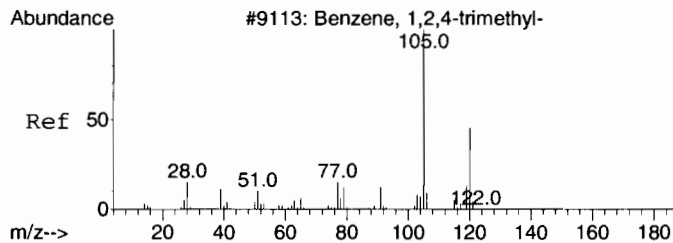
Tgt Ion: 91 Resp: 8060  
Ion Ratio Lower Upper  
91 100  
92 48.2 29.5 89.5



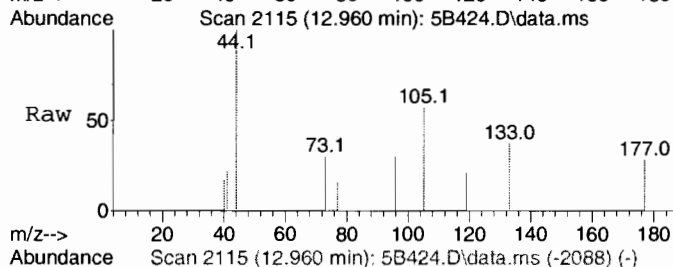
#55 BEFORE analyst DELETION  
m,p-Xylenes  
Concen: 0.34 ug/L  
RT: 11.284 min Scan# 1641  
Delta R.T. 0.004 min  
Lab File: 5B424.D  
Acq: 11 Mar 2010 4:51 pm

Tgt Ion: 106 Resp: 2247  
Ion Ratio Lower Upper  
106 100  
91 278.1 168.5 228.5#

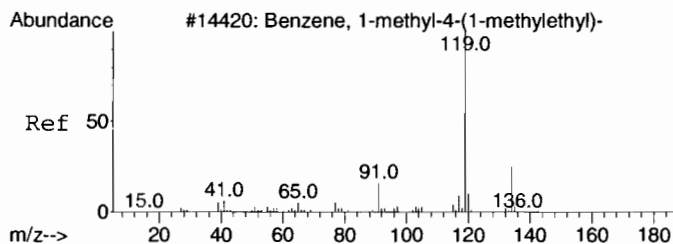
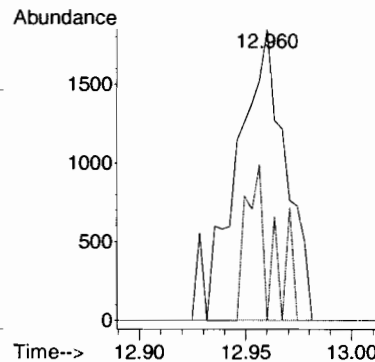
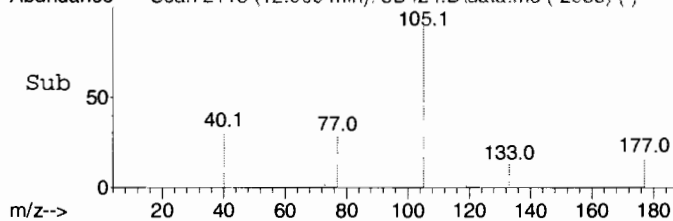




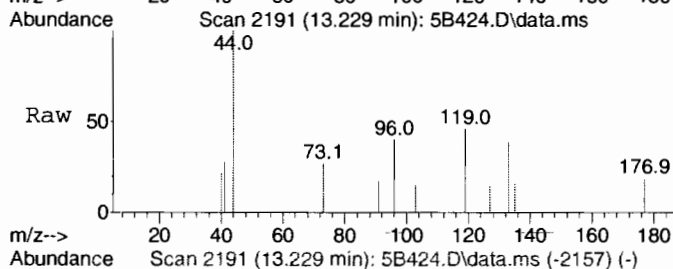
#70 BEFORE analyst DELETION  
1,2,4-Trimethylbenzene  
Concen: 0.39 ug/L  
RT: 12.960 min Scan# 2115  
Delta R.T. 0.004 min  
Lab File: 5B424.D  
Acq: 11 Mar 2010 4:51 pm



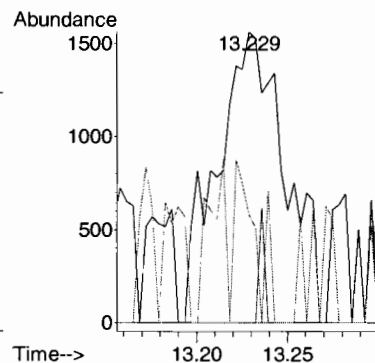
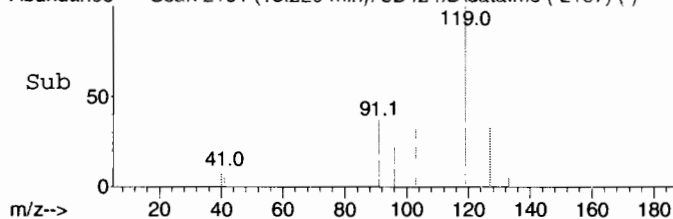
Tgt Ion:105 Resp: 2966  
Ion Ratio Lower Upper  
105 100  
120 27.6 17.4 77.4



#72 BEFORE analyst DELETION  
4-Isopropyltoluene  
Concen: 0.53 ug/L  
RT: 13.229 min Scan# 2191  
Delta R.T. -0.000 min  
Lab File: 5B424.D  
Acq: 11 Mar 2010 4:51 pm



Tgt Ion:119 Resp: 4068  
Ion Ratio Lower Upper  
119 100  
134 3.2 0.0 57.2  
91 14.1 0.0 53.0





Library Search Compound Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B424.D  
Acq On : 11 Mar 2010 4:51 pm  
Operator : CDS1  
Sample : |248519007|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 24 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

No Library Search Compounds Detected

\*\*\*\*\*

Tentatively Identified Compound (LSC) summary  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B424.D  
Acq On : 11 Mar 2010 4:51 pm  
Operator : CDS1  
Sample : |248519007|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 24 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc

-----

**Volatile  
Certificate of Analysis  
Sample Summary**

**SDG Number:** 10-2199  
**Lab Sample ID:** 248519008

**Date Collected:** 02/25/2010 12:00  
**Date Received:** 03/03/2010 08:50  
**Client:** LANL010  
**Method:** SW846 8260B  
**Inst:** VOAS.I  
**Analyst:** CDS1  
**Aliquot:** 5 g  
**Column:** DB-624

**Matrix:** R  
**%Moisture:** 32.9  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-038  
**Dilution:** 1  
**Purge Vol:** 5 mL  
**Final Volume:** 5 mL

**Client ID:** RE36-10-8287  
**Batch ID:** 963809  
**Run Date:** 03/11/2010 17:18  
**Prep Date:** 03/11/2010 10:08  
**Data File:** 031110V5\5B425.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.49	ug/kg	0.507	1.49
74-87-3	Chloromethane	U	1.49	ug/kg	0.447	1.49
75-01-4	Vinyl chloride	U	1.49	ug/kg	0.447	1.49
74-83-9	Bromomethane	U	1.49	ug/kg	0.447	1.49
75-00-3	Chloroethane	U	1.49	ug/kg	0.447	1.49
75-69-4	Trichlorofluoromethane	U	1.49	ug/kg	0.447	1.49
67-64-1	Acetone	J	5.89	ug/kg	2.48	7.46
75-35-4	1,1-Dichloroethylene	U	1.49	ug/kg	0.447	1.49
74-88-4	Iodomethane	U	7.46	ug/kg	2.39	7.46
75-09-2	Methylene chloride	U	7.46	ug/kg	2.98	7.46
75-15-0	Carbon disulfide	U	7.46	ug/kg	1.86	7.46
156-60-5	trans-1,2-Dichloroethylene	U	1.49	ug/kg	0.447	1.49
75-34-3	1,1-Dichloroethane	U	1.49	ug/kg	0.447	1.49
78-93-3	2-Butanone	U	7.46	ug/kg	2.24	7.46
156-59-2	cis-1,2-Dichloroethylene	U	1.49	ug/kg	0.447	1.49
594-20-7	2,2-Dichloropropane	U	1.49	ug/kg	0.447	1.49
67-66-3	Chloroform	U	1.49	ug/kg	0.447	1.49
74-97-5	Bromochloromethane	U	1.49	ug/kg	0.492	1.49
71-55-6	1,1,1-Trichloroethane	U	1.49	ug/kg	0.447	1.49
563-58-6	1,1-Dichloropropene	U	1.49	ug/kg	0.447	1.49
56-23-5	Carbon tetrachloride	U	1.49	ug/kg	0.447	1.49
107-06-2	1,2-Dichloroethane	U	1.49	ug/kg	0.447	1.49
71-43-2	Benzene	U	1.49	ug/kg	0.447	1.49
79-01-6	Trichloroethylene	U	1.49	ug/kg	0.492	1.49
78-87-5	1,2-Dichloropropane	U	1.49	ug/kg	0.447	1.49
75-27-4	Bromodichloromethane	U	1.49	ug/kg	0.447	1.49
74-95-3	Dibromomethane	U	1.49	ug/kg	0.447	1.49
108-10-1	4-Methyl-2-pentanone	U	7.46	ug/kg	1.86	7.46
10061-01-5	cis-1,3-Dichloropropylene	U	1.49	ug/kg	0.447	1.49
108-88-3	Toluene	J	1.13	ug/kg	0.447	1.49
10061-02-6	trans-1,3-Dichloropropylene	U	1.49	ug/kg	0.447	1.49
79-00-5	1,1,2-Trichloroethane	U	1.49	ug/kg	0.447	1.49
591-78-6	2-Hexanone	U	7.46	ug/kg	2.24	7.46
142-28-9	1,3-Dichloropropane	U	1.49	ug/kg	0.447	1.49
127-18-4	Tetrachloroethylene	U	1.49	ug/kg	0.447	1.49
124-48-1	Dibromochloromethane	U	1.49	ug/kg	0.447	1.49
106-93-4	1,2-Dibromoethane	U	1.49	ug/kg	0.447	1.49
108-90-7	Chlorobenzene	U	1.49	ug/kg	0.447	1.49

**Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-2199  
Lab Sample ID: 248519008  
  
Client ID: RE36-10-8287  
Batch ID: 963809  
Run Date: 03/11/2010 17:18  
Prep Date: 03/11/2010 10:08  
Data File: 031110V5SB425.D

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: CDS1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
%Moisture: 32.9  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.49	ug/kg	0.447	1.49
179601-23-1	m,p-Xylenes	U	2.98	ug/kg	0.447	2.98
95-47-6	o-Xylene	U	1.49	ug/kg	0.447	1.49
100-42-5	Styrene	U	1.49	ug/kg	0.447	1.49
75-25-2	Bromoform	U	1.49	ug/kg	0.447	1.49
79-34-5	1,1,2,2-Tetrachloroethane	U	1.49	ug/kg	0.447	1.49
96-18-4	1,2,3-Trichloropropane	U	1.49	ug/kg	0.447	1.49
108-86-1	Bromobenzene	U	1.49	ug/kg	0.447	1.49
103-65-1	n-Propylbenzene	U	1.49	ug/kg	0.447	1.49
95-49-8	2-Chlorotoluene	U	1.49	ug/kg	0.447	1.49
98-82-8	Isopropylbenzene	U	1.49	ug/kg	0.447	1.49
108-67-8	1,3,5-Trimethylbenzene	U	1.49	ug/kg	0.447	1.49
106-43-4	4-Chlorotoluene	U	1.49	ug/kg	0.447	1.49
98-06-6	tert-Butylbenzene	U	1.49	ug/kg	0.447	1.49
95-63-6	1,2,4-Trimethylbenzene	U	1.49	ug/kg	0.447	1.49
135-98-8	sec-Butylbenzene	U	1.49	ug/kg	0.447	1.49
99-87-6	4-Isopropyltoluene		7.31	ug/kg	0.447	1.49
541-73-1	1,3-Dichlorobenzene	U	1.49	ug/kg	0.447	1.49
106-46-7	1,4-Dichlorobenzene	U	1.49	ug/kg	0.447	1.49
104-51-8	n-Butylbenzene	U	1.49	ug/kg	0.447	1.49
96-12-8	1,2-Dibromo-3-chloropropane	U	1.49	ug/kg	0.447	1.49
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	7.46	ug/kg	2.39	7.46
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.49	ug/kg	0.447	1.49
95-50-1	1,2-Dichlorobenzene	U	1.49	ug/kg	0.447	1.49

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
No Tentatively Identified Compounds Found				ug/kg		

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B425.D  
Acq On : 11 Mar 2010 5:18 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |248519008|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Mar 17 15:14:09 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	Dev (Min)
Internal Standards								
1) Fluorobenzene	8.388	8.387	1.000	96	1300274	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	720339	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	176616	50.00	ug/L	0.00
82) B Fluorobenzene	8.388	8.391	1.000	96	1300274	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	720339	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	176616	50.00	ug/L	0.00
System Monitoring Compounds								
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	204372	32.47	ug/L	0.00
Spiked Amount 50.000	Range 66	- 134	Recovery	=	64.94%#			
43) Toluene-d8	9.721	9.721	0.872	98	908080	49.29	ug/L	0.00
Spiked Amount 50.000	Range 71	- 128	Recovery	=	98.58%			
61) Bromofluorobenzene	12.260	12.260	0.914	95	304551	85.97	ug/L	0.00
Spiked Amount 50.000	Range 65	- 130	Recovery	=	171.94%#			
Target Compounds								
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	4.668	0.000		0	N.D.		
3) Chloromethane	5.061	4.900	0.603	50	721	Below Cal		75
4) Vinyl chloride	5.041	5.041	0.601	62	154	N.D.		
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	5.927	5.695	0.707	101	1170	N.D.		
8) Ethyl ether	5.877	5.866	0.701	59	342	N.D.		
9) Acetone	6.170	6.174	0.736	43	15333	3.95	ug/L	92
10) 1,1-Dichloroethylene	6.160	6.156	0.734	61	944	N.D.		
11) Iodomethane	0.000	6.357	0.000		0	N.D.		
12) Acetonitrile	6.457	6.464	0.770	41	366	N.D.		
13) Methyl acetate	6.351	6.365	0.757	43	111	N.D.		
14) Carbon disulfide	6.428	6.435	0.766	76	1015	N.D.		
15) Methylene chloride	6.538	6.538	0.779	84	3567	N.D.		
16) tert-Butyl methyl ether	0.000	6.640	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.715	0.000		0	N.D.		
18) Vinyl acetate	6.803	6.969	0.811	43	4340	N.D.		
19) 1,1-Dichloroethane	0.000	7.068	0.000		0	N.D.		
20) 2-Butanone	7.458	7.450	0.889	43	2478	N.D.		
21) cis-1,2-Dichloroethylene	0.000	7.507	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	7.514	0.000		0	N.D.		
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	0.000	7.701	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	7.924	7.924	0.945	56	230	N.D.		
27) 1,1-Dichloropropene	0.000	8.005	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.197	8.203	0.977	78	1180	N.D.		
32) Cyclohexene	8.236	8.246	0.982	67	256	N.D.		
33) n-Butyl alcohol	8.391	8.377	1.000	56	7154	Below Cal	#	19
34) Trichloroethylene	0.000	8.677	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	0.000	8.826	0.000		0	N.D.		
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B425.D  
Acq On : 11 Mar 2010 5:18 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |248519008|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Mar 17 15:14:09 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.		
40) cis-1,3-Dichloropropylene	0.000	9.487	0.000		0	N.D.		
42) 4-Methyl-2-pentanone	0.000	9.526	0.000		0	N.D.		
44) Toluene	9.792	9.788	0.879	91	11699	0.76 ug/L		98
45) trans-1,3-Dichloroprop...	0.000	9.968	0.000		0	N.D.		
46) 1,1,2-Trichloroethane	0.000	10.173	0.000		0	N.D.		
47) 2-Hexanone	0.000	10.279	0.000		0	N.D.		
48) 1,3-Dichloropropane	0.000	10.364	0.000		0	N.D.		
49) Tetrachloroethylene	0.000	10.290	0.000		0	N.D.		
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.		
51) 1,2-Dibromoethane	0.000	10.771	0.000		0	N.D.		
52) Chlorobenzene	0.000	11.174	0.000		0	N.D.		
53) 1,1,1,2-Tetrachloroethane	0.000	11.216	0.000		0	N.D.		
54) Ethylbenzene	11.181	11.181	1.003	91	3043	N.D.		
55) m,p-Xylenes	11.284	11.280	1.013	106	1540	N.D.		
56) o-Xylene	0.000	11.701	0.000		0	N.D.		
57) Styrene	0.000	11.715	0.000		0	N.D.		
59) Bromoform	0.000	12.005	0.000		0	N.D.		
60) Isopropylbenzene	0.000	12.016	0.000		0m	N.D. d		
62) 1,1,2,2-Tetrachloroethane	0.000	12.348	0.000		0	N.D.		
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.		
64) Bromobenzene	0.000	12.465	0.000		0	N.D.		
65) n-Propylbenzene	12.419	12.415	0.926	91	592	N.D.		
66) 1,3,5-Trimethylbenzene	12.560	12.564	0.936	105	237	N.D.		
67) 2-Chlorotoluene	0.000	12.596	0.000		0	N.D.		
68) 4-Chlorotoluene	0.000	12.698	0.000		0m	N.D. d		
69) tert-Butylbenzene	0.000	12.900	0.000		0	N.D.		
70) 1,2,4-Trimethylbenzene	12.957	12.956	0.966	105	1942	N.D.		
71) sec-Butylbenzene	13.112	13.119	0.978	105	143	N.D.		
72) 4-Isopropyltoluene	13.229	13.229	0.986	119	34911	4.90 ug/L		95
73) 1,3-Dichlorobenzene	0.000	13.349	0.000		0	N.D.		
74) 1,4-Dichlorobenzene	0.000	13.441	0.000		0	N.D.		
75) n-Butylbenzene	13.653	13.653	1.018	91	961	N.D.		
76) 1,2-Dichlorobenzene	0.000	13.858	0.000		0	N.D.		
77) 1,2-Dibromo-3-chloropr...	0.000	14.704	0.000		0	N.D.		
78) 1,2,4-Trichlorobenzene	0.000	15.619	0.000		0	N.D.		
79) Hexachlorobutadiene	0.000	15.686	0.000		0	N.D.		
80) Naphthalene	15.996	15.988	1.193	128	1072	N.D.		
81) 1,2,3-Trichlorobenzene	0.000	16.291	0.000		0	N.D.		
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.		
85) Acrolein	0.000	6.082	0.000		0	N.D.		
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.		
87) Isopropyl Alcohol	6.160	6.163	0.734	45	1699	N.D.		
88) Allyl chloride	6.436	6.425	0.767	41	391	N.D.		
89) tert-Butyl Alcohol	0.000	6.460	0.000		0	N.D.		
90) Acrylonitrile	0.000	6.747	0.000		0	N.D.		
91) Isopropyl ether	0.000	6.920	0.000		0	N.D.		
92) 2-Chloro-1,3-butadiene	0.000	7.104	0.000		0	N.D.		
93) Ethyl tert-butyl ether	0.000	7.192	0.000		0	N.D.		
94) Ethyl acetate	7.458	7.383	0.889	43	2478	N.D.		

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B425.D  
Acq On : 11 Mar 2010 5:18 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |248519008|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Mar 17 15:14:09 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

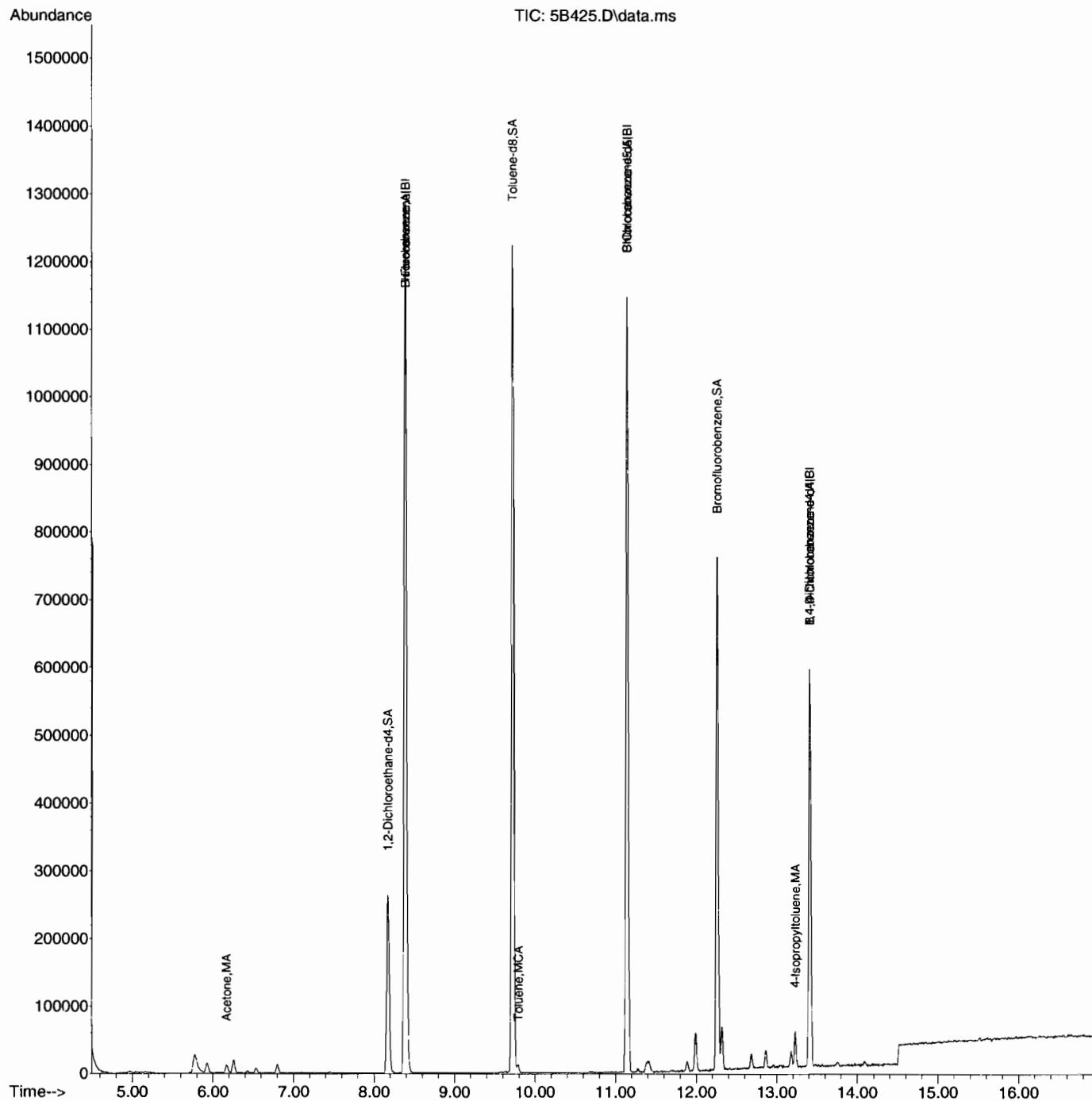
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	7.585	0.000		0	N.D.	
96) Methacrylonitrile	7.687	7.680	0.917	41	111	N.D.	
97) Tetrahydrofuran	7.716	7.716	0.920	42	216	N.D.	
98) Isobutyl alcohol	7.850	7.857	0.936	41	234	N.D.	
99) Methyl tert-amyl ether	0.000	8.122	0.000		0	N.D.	
100) Methyl methacrylate	0.000	8.801	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	8.957	0.000		0	N.D.	
102) 2-Nitropropane	0.000	9.342	0.000		0m	N.D.	d
104) Ethyl methacrylate	0.000	9.859	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	12.136	0.000		0m	N.D.	d
108) Cyclohexanone	12.306	12.267	0.917	42	127	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	12.412	0.000		0m	N.D.	d
110) Pentachloroethane	0.000	13.017	0.000		0	N.D.	
111) Benzyl chloride	13.561	13.565	1.011	91	384	N.D.	
112) bis(2-Chloroisopropyl)...	13.883	13.929	1.035	45	114	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted

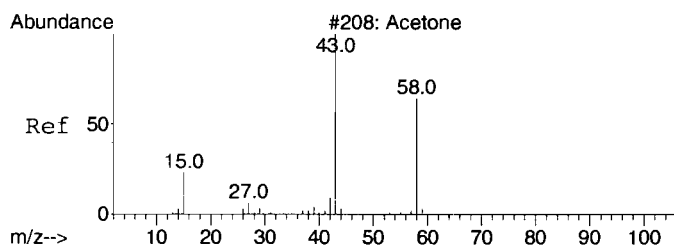
Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B425.D  
Acq On : 11 Mar 2010 5:18 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |248519008|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 25 Sample Multiplier: 1

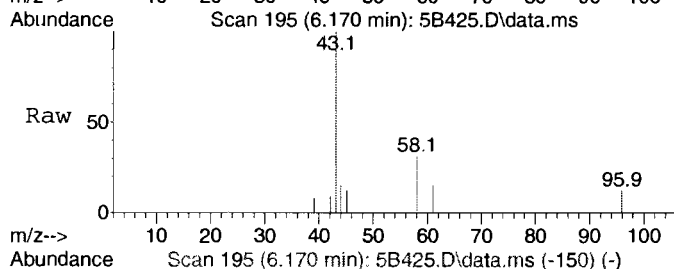
Quant Time: Mar 17 15:14:09 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE



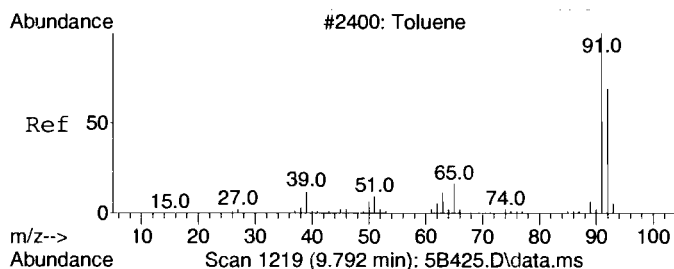
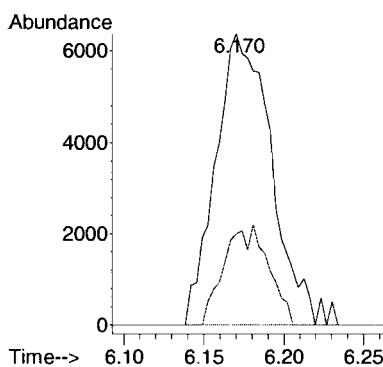
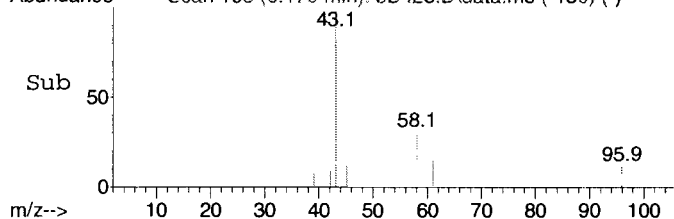




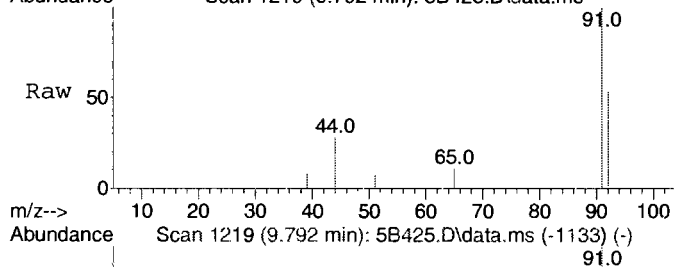
#9  
Acetone  
Concen: 3.95 ug/L  
RT: 6.170 min Scan# 195  
Delta R.T. -0.004 min  
Lab File: 5B425.D  
Acq: 11 Mar 2010 5:18 pm



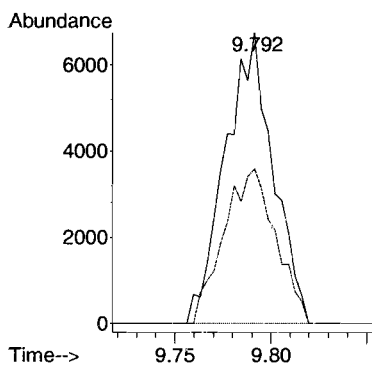
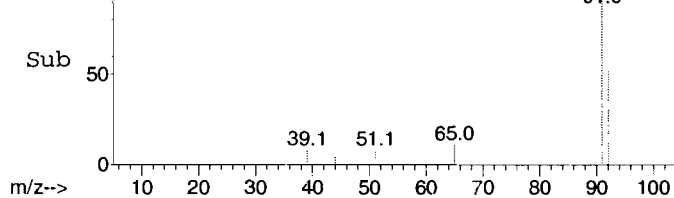
Tgt Ion: 43 Resp: 15333  
Ion Ratio Lower Upper  
43 100  
58 27.5 1.9 61.9

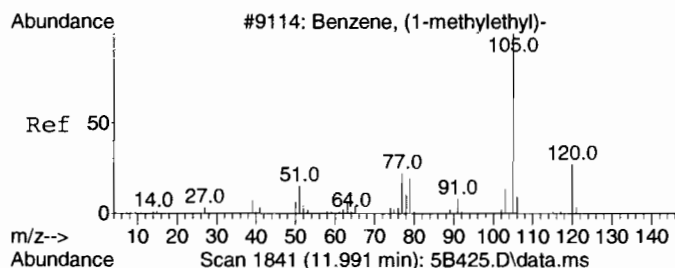


#44  
Toluene  
Concen: 0.76 ug/L  
RT: 9.792 min Scan# 1219  
Delta R.T. 0.004 min  
Lab File: 5B425.D  
Acq: 11 Mar 2010 5:18 pm



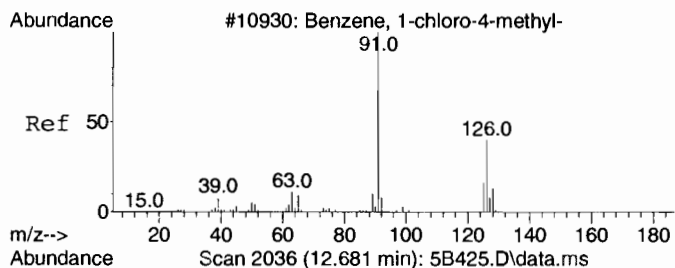
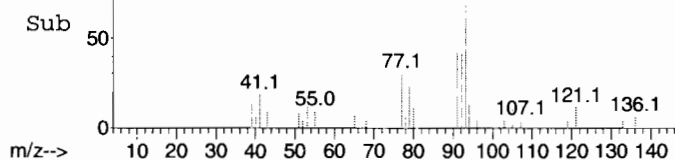
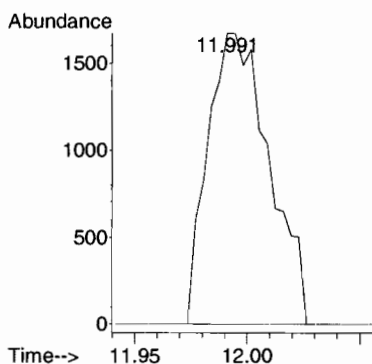
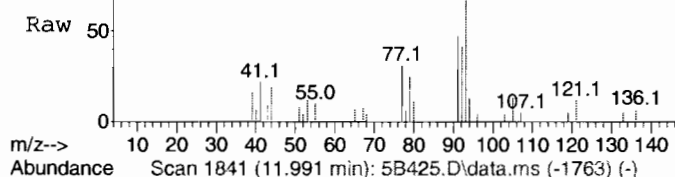
Tgt Ion: 91 Resp: 11699  
Ion Ratio Lower Upper  
91 100  
92 57.9 29.5 89.5





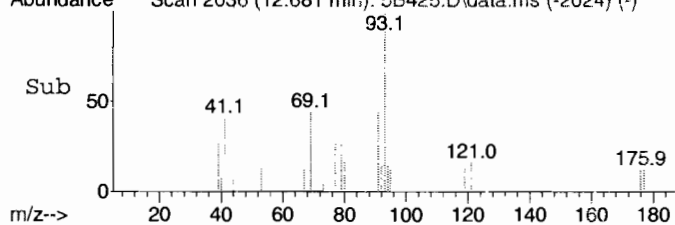
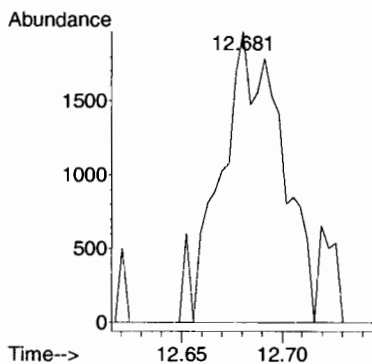
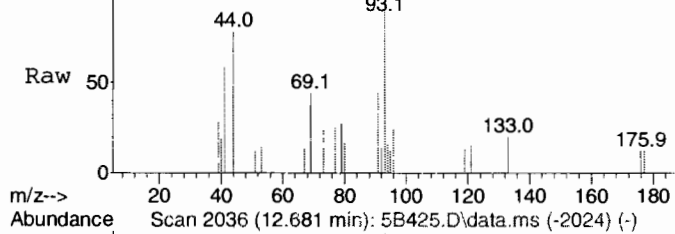
#60 BEFORE analyst DELETION  
Isopropylbenzene  
Concen: 0.39 ug/L  
RT: 11.991 min Scan# 1841  
Delta R.T. -0.025 min  
Lab File: 5B425.D  
Acq: 11 Mar 2010 5:18 pm

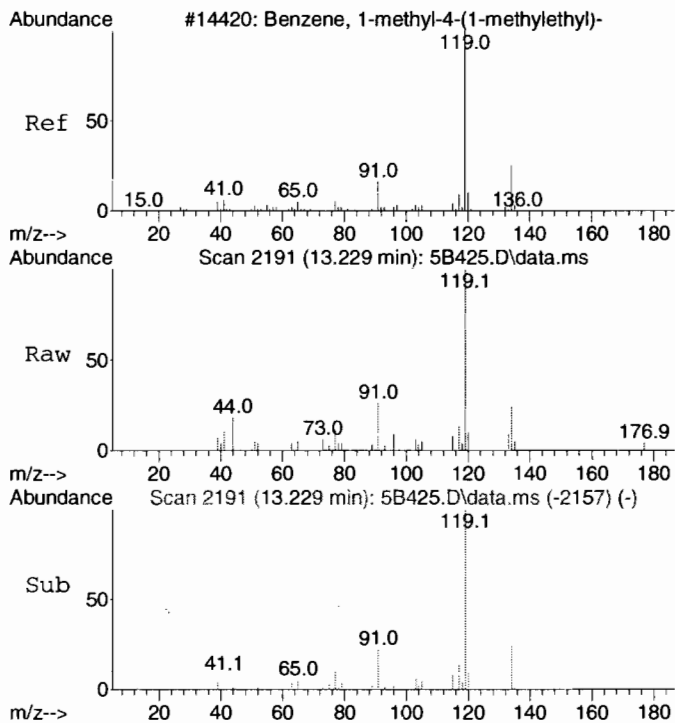
Tgt Ion	Ratio	Lower	Upper
105	100		
120	0.0	0.0	57.3



#68 BEFORE analyst DELETION  
4-Chlorotoluene  
Concen: 0.66 ug/L  
RT: 12.681 min Scan# 2036  
Delta R.T. -0.017 min  
Lab File: 5B425.D  
Acq: 11 Mar 2010 5:18 pm

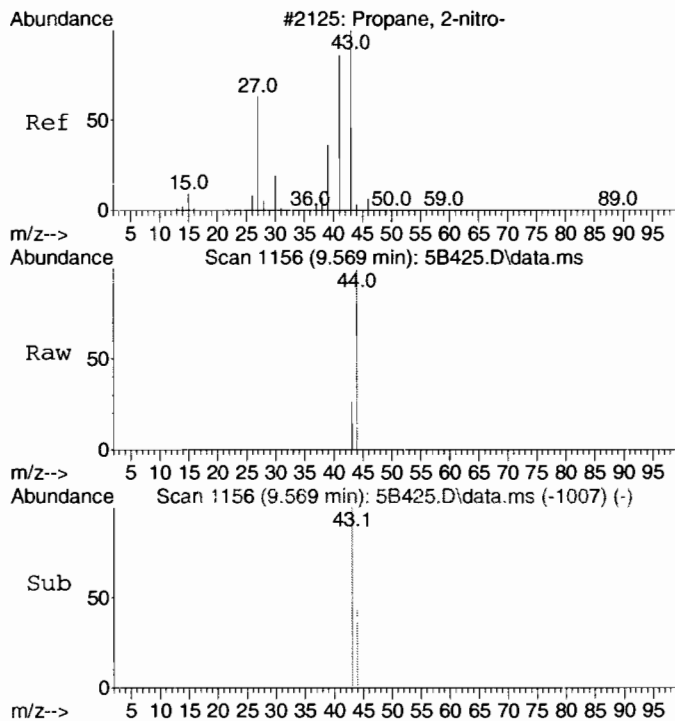
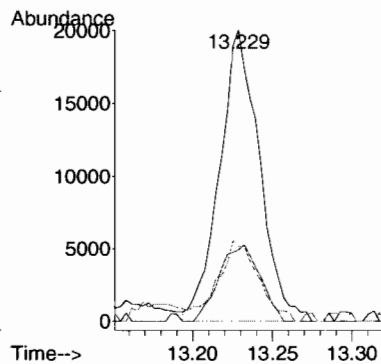
Tgt Ion	Ratio	Lower	Upper
91	100		
126	0.0	3.6	63.6#





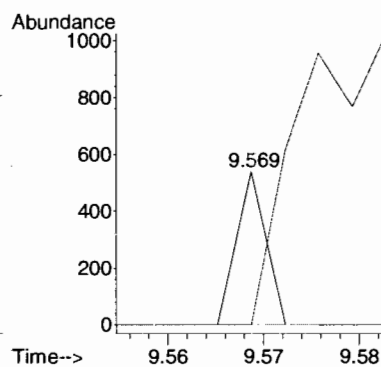
#72  
4-Isopropyltoluene  
Concen: 4.90 ug/L  
RT: 13.229 min Scan# 2191  
Delta R.T. -0.000 min  
Lab File: 5B425.D  
Acq: 11 Mar 2010 5:18 pm

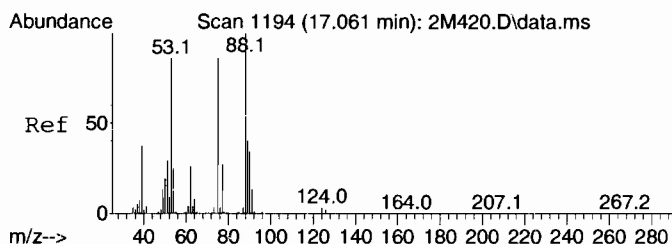
Tgt Ion	Ratio	Lower	Upper
119	100		
134	26.8	0.0	57.2
91	28.3	0.0	53.0



#102 BEFORE analyst DELETION  
2-Nitropropane  
Concen: 6.97 ug/L  
RT: 9.569 min Scan# 1156  
Delta R.T. 0.227 min  
Lab File: 5B425.D  
Acq: 11 Mar 2010 5:18 pm

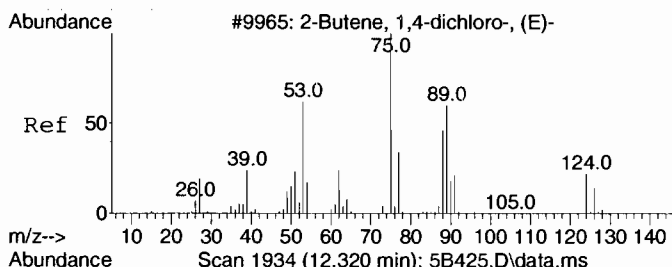
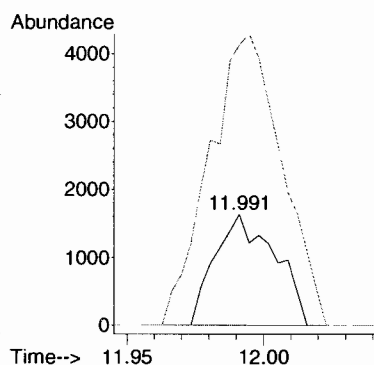
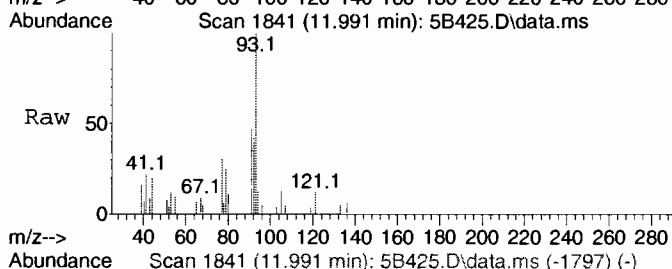
Tgt Ion	Ratio	Lower	Upper
43	100		
41	853.5	52.5	112.5#





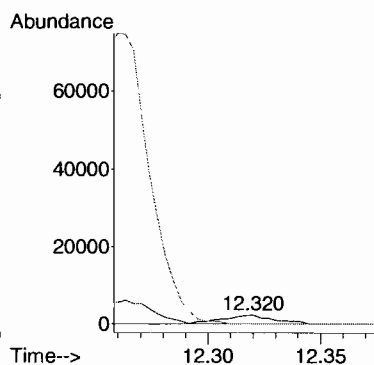
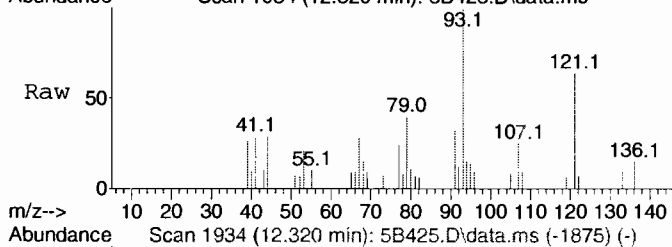
#107 BEFORE analyst DELETION  
 cis-1,4-Dichloro-2-butene  
 Concen: 3.79 ug/L  
 RT: 11.991 min Scan# 1841  
 Delta R.T. -0.145 min  
 Lab File: 5B425.D  
 Acq: 11 Mar 2010 5:18 pm

Tgt Ion	Ratio	Resp	Lower	Upper
53	100			
88	0.0	67.1	127.1#	
77	316.0	1.8	61.8#	



#109 BEFORE analyst DELETION  
 trans-1,4-Dichloro-2-butene  
 Concen: 5.53 ug/L  
 RT: 12.320 min Scan# 1934  
 Delta R.T. -0.092 min  
 Lab File: 5B425.D  
 Acq: 11 Mar 2010 5:18 pm

Tgt Ion	Ratio	Resp	Lower	Upper
53	100			
88	0.0	15.5	75.5#	
75	0.0	92.0	152.0#	



Library Search Compound Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B425.D  
Acq On : 11 Mar 2010 5:18 pm  
Operator : CDS1  
Sample : |248519008|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 25 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

No Library Search Compounds Detected

\*\*\*\*\*

Tentatively Identified Compound (LSC) summary  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B425.D  
Acq On : 11 Mar 2010 5:18 pm  
Operator : CDS1  
Sample : |248519008|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 25 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc

**Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-2199  
Lab Sample ID: 248519009

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: CDS1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
% Moisture: 29  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

Client ID: RE36-10-8273  
Batch ID: 963809  
Run Date: 03/11/2010 17:44  
Prep Date: 03/11/2010 10:09  
Data File: 031110V55B426.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.41	ug/kg	0.479	1.41
74-87-3	Chloromethane	U	1.41	ug/kg	0.423	1.41
75-01-4	Vinyl chloride	U	1.41	ug/kg	0.423	1.41
74-83-9	Bromomethane	U	1.41	ug/kg	0.423	1.41
75-00-3	Chloroethane	U	1.41	ug/kg	0.423	1.41
75-69-4	Trichlorofluoromethane	U	1.41	ug/kg	0.423	1.41
67-64-1	Acetone	U	7.05	ug/kg	2.34	7.05
75-35-4	1,1-Dichloroethylene	U	1.41	ug/kg	0.423	1.41
74-88-4	Iodomethane	U	7.05	ug/kg	2.25	7.05
75-09-2	Methylene chloride	U	7.05	ug/kg	2.82	7.05
75-15-0	Carbon disulfide	U	7.05	ug/kg	1.76	7.05
156-60-5	trans-1,2-Dichloroethylene	U	1.41	ug/kg	0.423	1.41
75-34-3	1,1-Dichloroethane	U	1.41	ug/kg	0.423	1.41
78-93-3	2-Butanone	U	7.05	ug/kg	2.11	7.05
156-59-2	cis-1,2-Dichloroethylene	U	1.41	ug/kg	0.423	1.41
594-20-7	2,2-Dichloropropane	U	1.41	ug/kg	0.423	1.41
67-66-3	Chloroform	U	1.41	ug/kg	0.423	1.41
74-97-5	Bromochloromethane	U	1.41	ug/kg	0.465	1.41
71-55-6	1,1,1-Trichloroethane	U	1.41	ug/kg	0.423	1.41
563-58-6	1,1-Dichloropropene	U	1.41	ug/kg	0.423	1.41
56-23-5	Carbon tetrachloride	U	1.41	ug/kg	0.423	1.41
107-06-2	1,2-Dichloroethane	U	1.41	ug/kg	0.423	1.41
71-43-2	Benzene	U	1.41	ug/kg	0.423	1.41
79-01-6	Trichloroethylene	U	1.41	ug/kg	0.465	1.41
78-87-5	1,2-Dichloropropane	U	1.41	ug/kg	0.423	1.41
75-27-4	Bromodichloromethane	U	1.41	ug/kg	0.423	1.41
74-95-3	Dibromomethane	U	1.41	ug/kg	0.423	1.41
108-10-1	4-Methyl-2-pentanone	U	7.05	ug/kg	1.76	7.05
10061-01-5	cis-1,3-Dichloropropylene	U	1.41	ug/kg	0.423	1.41
108-88-3	Toluene	J	1.00	ug/kg	0.423	1.41
10061-02-6	trans-1,3-Dichloropropylene	U	1.41	ug/kg	0.423	1.41
79-00-5	1,1,2-Trichloroethane	U	1.41	ug/kg	0.423	1.41
591-78-6	2-Hexanone	U	7.05	ug/kg	2.11	7.05
142-28-9	1,3-Dichloropropane	U	1.41	ug/kg	0.423	1.41
127-18-4	Tetrachloroethylene	U	1.41	ug/kg	0.423	1.41
124-48-1	Dibromochloromethane	U	1.41	ug/kg	0.423	1.41
106-93-4	1,2-Dibromoethane	U	1.41	ug/kg	0.423	1.41
108-90-7	Chlorobenzene	U	1.41	ug/kg	0.423	1.41

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-2199  
 Lab Sample ID: 248519009  
 Client ID: RE36-10-8273  
 Batch ID: 963809  
 Run Date: 03/11/2010 17:44  
 Prep Date: 03/11/2010 10:09  
 Data File: 031110V5VB426.D

Date Collected: 02/25/2010 12:00  
 Date Received: 03/03/2010 08:50  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: CDS1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 29  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.41	ug/kg	0.423	1.41
179601-23-1	m,p-Xylenes	U	2.82	ug/kg	0.423	2.82
95-47-6	o-Xylene	U	1.41	ug/kg	0.423	1.41
100-42-5	Styrene	U	1.41	ug/kg	0.423	1.41
75-25-2	Bromoform	U	1.41	ug/kg	0.423	1.41
79-34-5	1,1,2,2-Tetrachloroethane	U	1.41	ug/kg	0.423	1.41
96-18-4	1,2,3-Trichloropropane	U	1.41	ug/kg	0.423	1.41
108-86-1	Bromobenzene	U	1.41	ug/kg	0.423	1.41
103-65-1	n-Propylbenzene	U	1.41	ug/kg	0.423	1.41
95-49-8	2-Chlorotoluene	U	1.41	ug/kg	0.423	1.41
98-82-8	Isopropylbenzene	U	1.41	ug/kg	0.423	1.41
108-67-8	1,3,5-Trimethylbenzene	U	1.41	ug/kg	0.423	1.41
106-43-4	4-Chlorotoluene	U	1.41	ug/kg	0.423	1.41
98-06-6	tert-Butylbenzene	U	1.41	ug/kg	0.423	1.41
95-63-6	1,2,4-Trimethylbenzene	U	1.41	ug/kg	0.423	1.41
135-98-8	sec-Butylbenzene	U	1.41	ug/kg	0.423	1.41
99-87-6	4-Isopropyltoluene		2.35	ug/kg	0.423	1.41
541-73-1	1,3-Dichlorobenzene	U	1.41	ug/kg	0.423	1.41
106-46-7	1,4-Dichlorobenzene	U	1.41	ug/kg	0.423	1.41
104-51-8	n-Butylbenzene	U	1.41	ug/kg	0.423	1.41
96-12-8	1,2-Dibromo-3-chloropropane	U	1.41	ug/kg	0.423	1.41
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	7.05	ug/kg	2.25	7.05
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.41	ug/kg	0.423	1.41
95-50-1	1,2-Dichlorobenzene	U	1.41	ug/kg	0.423	1.41

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
No Tentatively Identified Compounds Found				ug/kg		



Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B426.D  
Acq On : 11 Mar 2010 5:44 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |248519009|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Mar 17 15:14:48 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	Dev(Min)
Internal Standards								
1) Fluorobenzene	8.387	8.387	1.000	96	1290126	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	687284	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	159419	50.00	ug/L	0.00
82) B Fluorobenzene	8.387	8.391	1.000	96	1290126	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	687284	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	159419	50.00	ug/L	0.00
System Monitoring Compounds								
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	209150	33.49	ug/L	0.00
Spiked Amount 50.000	Range 66	- 134	Recovery	=	66.98%			
43) Toluene-d8	9.721	9.721	0.872	98	891659	50.73	ug/L	0.00
Spiked Amount 50.000	Range 71	- 128	Recovery	=	101.46%			
61) Bromofluorobenzene	12.260	12.260	0.914	95	280099	87.59	ug/L	0.00
Spiked Amount 50.000	Range 65	- 130	Recovery	=	175.18%#			
Target Compounds								
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	4.668	0.000		0	N.D.		
3) Chloromethane	4.900	4.900	0.584	50	517	Below Cal		99
4) Vinyl chloride	0.000	5.041	0.000		0	N.D.		
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.695	0.000		0	N.D.		
8) Ethyl ether	5.867	5.866	0.699	59	194	N.D.		
9) Acetone	6.170	6.174	0.736	43	4030	N.D.		
10) 1,1-Dichloroethylene	0.000	6.156	0.000		0	N.D.		
11) Iodomethane	0.000	6.357	0.000		0	N.D.		
12) Acetonitrile	6.460	6.464	0.770	41	231	N.D.		
13) Methyl acetate	6.170	6.365	0.736	43	4030	N.D.		
14) Carbon disulfide	6.432	6.435	0.767	76	762	N.D.		
15) Methylene chloride	6.538	6.538	0.779	84	5034	N.D.		
16) tert-Butyl methyl ether	0.000	6.640	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.715	0.000		0	N.D.		
18) Vinyl acetate	6.796	6.969	0.810	43	3276	N.D.		
19) 1,1-Dichloroethane	0.000	7.068	0.000		0	N.D.		
20) 2-Butanone	7.457	7.450	0.889	43	122	N.D.		
21) cis-1,2-Dichloroethylene	0.000	7.507	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	7.514	0.000		0	N.D.		
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	0.000	7.701	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	7.917	7.924	0.944	56	2157	N.D.		
27) 1,1-Dichloropropene	0.000	8.005	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.211	8.203	0.979	78	759	N.D.		
32) Cyclohexene	0.000	8.246	0.000		0m	N.D.	d	
33) n-Butyl alcohol	8.387	8.377	1.000	56	7015	Below Cal	#	20
34) Trichloroethylene	8.667	8.677	1.033	95	1178	N.D.		
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	0.000	8.826	0.000		0	N.D.		
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B426.D  
Acq On : 11 Mar 2010 5:44 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |248519009|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Mar 17 15:14:48 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	9.487	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	9.526	0.000		0	N.D.	
44) Toluene	9.784	9.788	0.878	91	10446	0.71 ug/L	93
45) trans-1,3-Dichloroprop...	0.000	9.968	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	10.173	0.000		0	N.D.	
47) 2-Hexanone	0.000	10.279	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000	10.364	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	10.290	0.000		0	N.D.	
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	10.771	0.000		0	N.D.	
52) Chlorobenzene	0.000	11.174	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	11.216	0.000		0	N.D.	
54) Ethylbenzene	11.178	11.181	1.003	91	3035	N.D.	
55) m,p-Xylenes	0.000	11.280	0.000		0m	N.D. d	
56) o-Xylene	11.698	11.701	1.050	106	1729	N.D.	
57) Styrene	0.000	11.715	0.000		0	N.D.	
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	12.012	12.016	0.896	105	116	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	12.348	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	0.000	12.465	0.000		0	N.D.	
65) n-Propylbenzene	12.408	12.415	0.925	91	1220	N.D.	
66) 1,3,5-Trimethylbenzene	12.557	12.564	0.936	105	1555	N.D.	
67) 2-Chlorotoluene	0.000	12.596	0.000		0	N.D.	
68) 4-Chlorotoluene	12.702	12.698	0.947	91	281	N.D.	
69) tert-Butylbenzene	0.000	12.900	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	0.000	12.956	0.000		0m	N.D. d	
71) sec-Butylbenzene	0.000	13.119	0.000		0	N.D.	
72) 4-Isopropyltoluene	13.229	13.229	0.986	119	10725	1.67 ug/L	96
73) 1,3-Dichlorobenzene	0.000	13.349	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	0.000	13.441	0.000		0	N.D.	
75) n-Butylbenzene	13.650	13.653	1.018	91	430	N.D.	
76) 1,2-Dichlorobenzene	0.000	13.858	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	14.704	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	0.000	15.619	0.000		0	N.D.	
79) Hexachlorobutadiene	0.000	15.686	0.000		0	N.D.	
80) Naphthalene	15.989	15.988	1.192	128	827	N.D.	
81) 1,2,3-Trichlorobenzene	0.000	16.291	0.000		0	N.D.	
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	0.000	6.082	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.	
87) Isopropyl Alcohol	6.163	6.163	0.735	45	121	N.D.	
88) Allyl chloride	6.446	6.425	0.769	41	121	N.D.	
89) tert-Butyl Alcohol	6.467	6.460	0.771	59	337	N.D.	
90) Acrylonitrile	0.000	6.747	0.000		0	N.D.	
91) Isopropyl ether	0.000	6.920	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.104	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.192	0.000		0	N.D.	
94) Ethyl acetate	7.457	7.383	0.889	43	122	N.D.	

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B426.D  
Acq On : 11 Mar 2010 5:44 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |248519009|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Mar 17 15:14:48 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

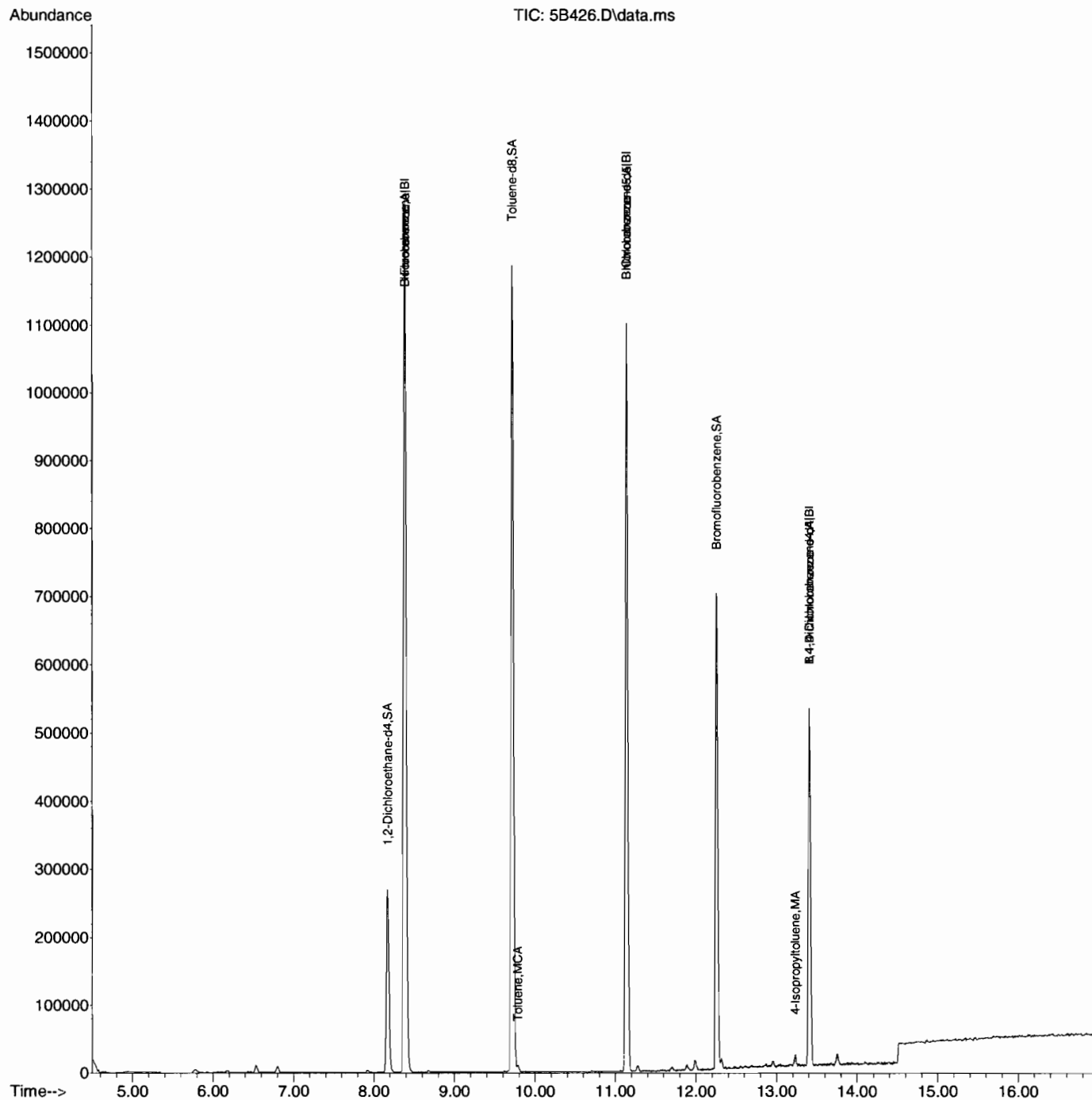
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	7.585	0.000		0	N.D.	
96) Methacrylonitrile	7.701	7.680	0.918	41	124	N.D.	
97) Tetrahydrofuran	7.712	7.716	0.919	42	120	N.D.	
98) Isobutyl alcohol	7.921	7.857	0.944	41	1125	N.D.	
99) Methyl tert-amyl ether	0.000	8.122	0.000		0	N.D.	
100) Methyl methacrylate	0.000	8.801	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	8.957	0.000		0	N.D.	
102) 2-Nitropropane	0.000	9.342	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	9.859	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	11.988	12.136	0.894	53	289	N.D.	
108) Cyclohexanone	0.000	12.267	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	12.412	0.000		0m	N.D.	d
110) Pentachloroethane	0.000	13.017	0.000		0	N.D.	
111) Benzyl chloride	13.561	13.565	1.011	91	108	N.D.	
112) bis(2-Chloroisopropyl)...	13.904	13.929	1.037	45	242	N.D.	

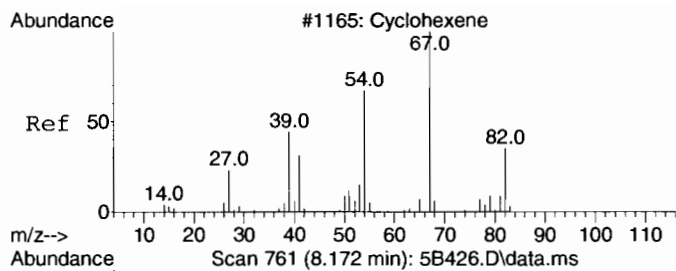
(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B426.D  
Acq On : 11 Mar 2010 5:44 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |248519009|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 26 Sample Multiplier: 1

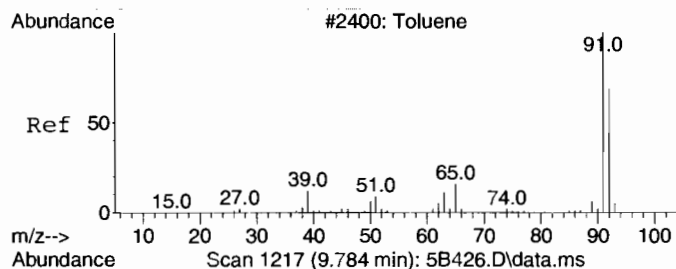
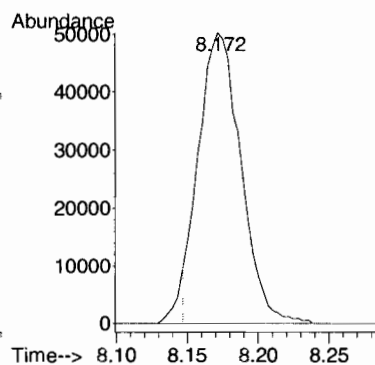
Quant Time: Mar 17 15:14:48 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE





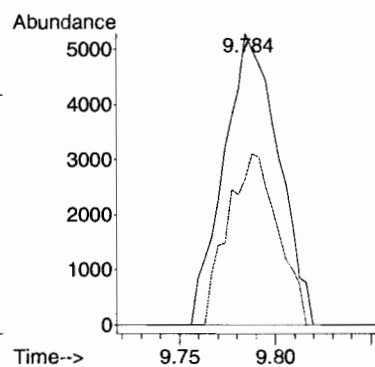
#32 BEFORE analyst DELETION  
Cyclohexene  
Concen: 11.92 ug/L  
RT: 8.172 min Scan# 761  
Delta R.T. -0.074 min  
Lab File: 5B426.D  
Acq: 11 Mar 2010 5:44 pm

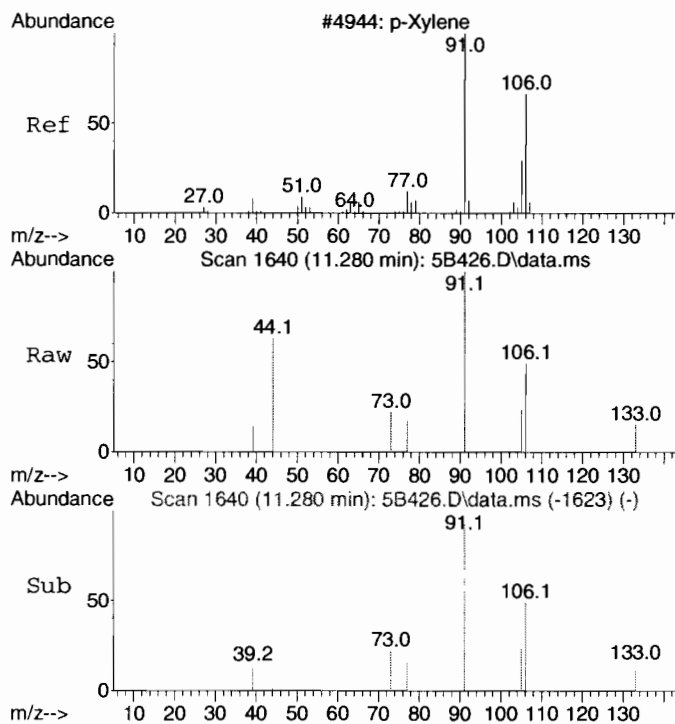
Tgt Ion: 67 Resp: 103464  
Ion Ratio Lower Upper  
67 100  
54 0.0 46.3 106.3#



#44  
Toluene  
Concen: 0.71 ug/L  
RT: 9.784 min Scan# 1217  
Delta R.T. -0.004 min  
Lab File: 5B426.D  
Acq: 11 Mar 2010 5:44 pm

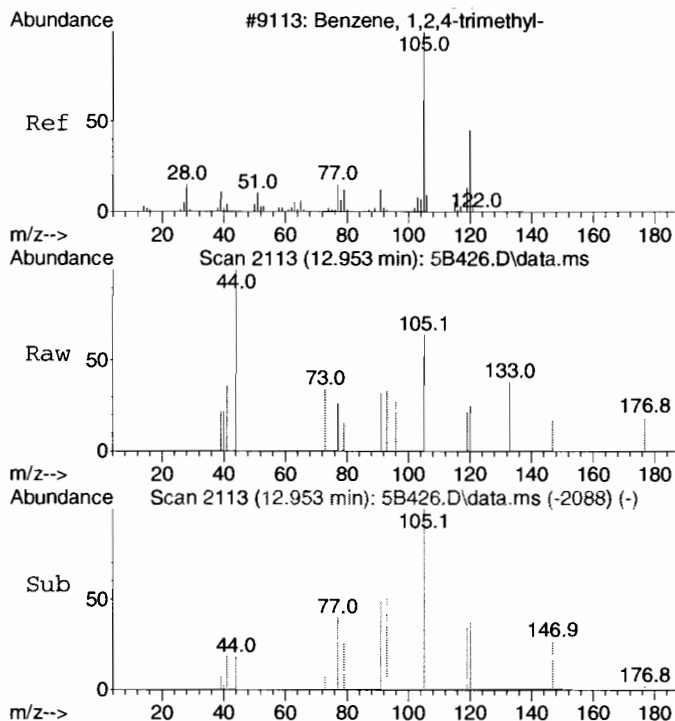
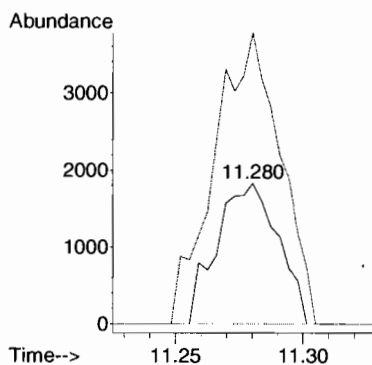
Tgt Ion: 91 Resp: 10446  
Ion Ratio Lower Upper  
91 100  
92 54.1 29.5 89.5





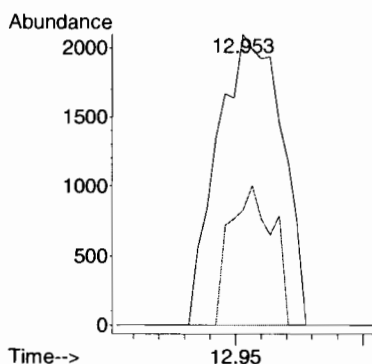
#55 BEFORE analyst DELETION  
m,p-Xylenes  
Concen: 0.48 ug/L  
RT: 11.280 min Scan# 1640  
Delta R.T. 0.000 min  
Lab File: 5B426.D  
Acq: 11 Mar 2010 5:44 pm

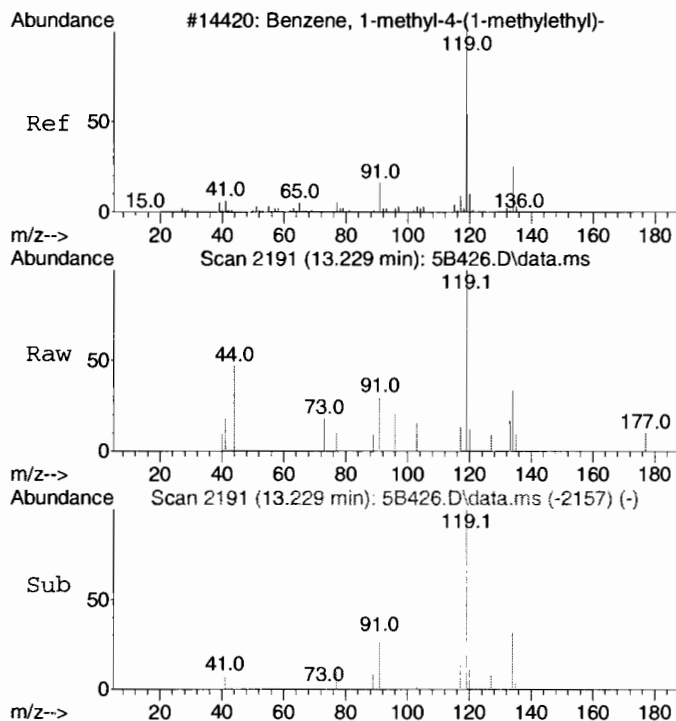
Tgt Ion:106 Resp: 3062  
Ion Ratio Lower Upper  
106 100  
91 222.2 168.5 228.5



#70 BEFORE analyst DELETION  
1,2,4-Trimethylbenzene  
Concen: 0.58 ug/L  
RT: 12.953 min Scan# 2113  
Delta R.T. -0.003 min  
Lab File: 5B426.D  
Acq: 11 Mar 2010 5:44 pm

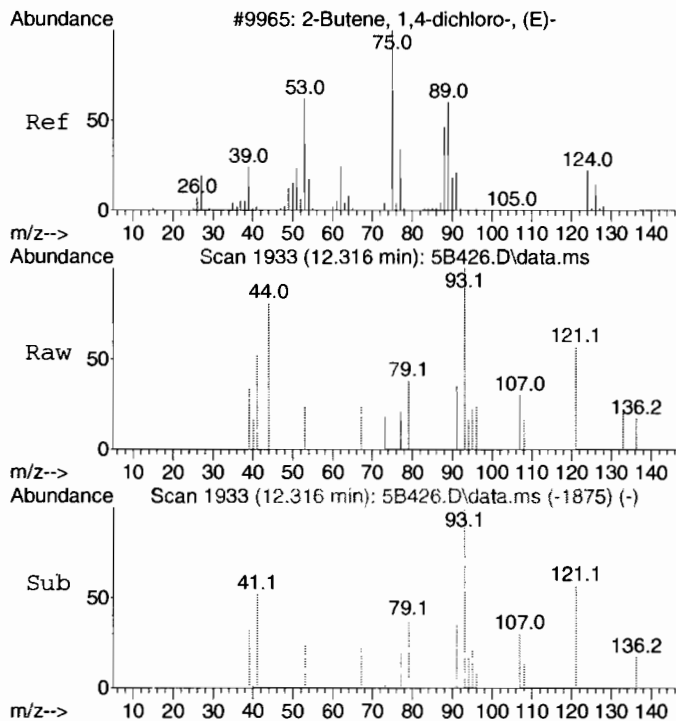
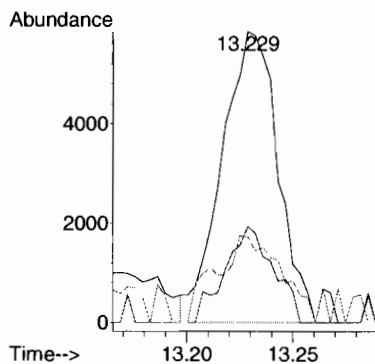
Tgt Ion:105 Resp: 3679  
Ion Ratio Lower Upper  
105 100  
120 31.8 17.4 77.4





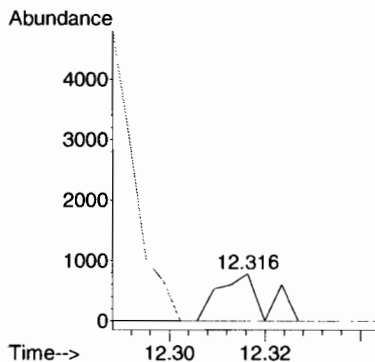
#72  
4-Isopropyltoluene  
Concen: 1.67 ug/L  
RT: 13.229 min Scan# 2191  
Delta R.T. -0.000 min  
Lab File: 5B426.D  
Acq: 11 Mar 2010 5:44 pm

Tgt Ion	Ratio	Resp	Lower	Upper
119	100	10725		
134	28.8	0.0	57.2	
91	25.6	0.0	53.0	



#109 BEFORE analyst DELETION  
trans-1,4-Dichloro-2-butene  
Concen: 0.95 ug/L  
RT: 12.316 min Scan# 1933  
Delta R.T. -0.096 min  
Lab File: 5B426.D  
Acq: 11 Mar 2010 5:44 pm

Tgt Ion	Ratio	Resp	Lower	Upper
53	100	534		
88	0.0	15.5	75.5#	
75	0.0	92.0	152.0#	



Library Search Compound Report

GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\

Data File : 5B426.D

Acq On : 11 Mar 2010 5:44 pm

Operator : CDS1

Sample : |248519009|963809|1|VOA|1|VOA8260BS|

Misc : LANL 5G - SOIL

ALS Vial : 26 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M

Quant Title : Volatile Organics 8260B

SubList :

TIC Library : C:\Database\NIST05.L

TIC Integration Parameters: default.P

No Library Search Compounds Detected

\*\*\*\*\*



Tentatively Identified Compound (LSC) summary  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B426.D  
Acq On : 11 Mar 2010 5:44 pm  
Operator : CDS1  
Sample : |248519009|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 26 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc

-----

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-2199  
 Lab Sample ID: 248519010

Date Collected: 02/25/2010 12:00  
 Date Received: 03/03/2010 08:50  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOAS.I  
 Analyst: CDS1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 40.1  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

Client ID: RE36-10-8275  
 Batch ID: 963809  
 Run Date: 03/11/2010 21:15  
 Prep Date: 03/11/2010 10:10  
 Data File: 031110V55B434.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.67	ug/kg	0.568	1.67
74-87-3	Chloromethane	U	1.67	ug/kg	0.501	1.67
75-01-4	Vinyl chloride	U	1.67	ug/kg	0.501	1.67
74-83-9	Bromomethane	U	1.67	ug/kg	0.501	1.67
75-00-3	Chloroethane	U	1.67	ug/kg	0.501	1.67
75-69-4	Trichlorofluoromethane	U	1.67	ug/kg	0.501	1.67
67-64-1	Acetone	U	8.35	ug/kg	2.77	8.35
75-35-4	1,1-Dichloroethylene	U	1.67	ug/kg	0.501	1.67
74-88-4	Iodomethane	U	8.35	ug/kg	2.67	8.35
75-09-2	Methylene chloride	U	8.35	ug/kg	3.34	8.35
75-15-0	Carbon disulfide	U	8.35	ug/kg	2.09	8.35
156-60-5	trans-1,2-Dichloroethylene	U	1.67	ug/kg	0.501	1.67
75-34-3	1,1-Dichloroethane	U	1.67	ug/kg	0.501	1.67
78-93-3	2-Butanone	U	8.35	ug/kg	2.51	8.35
156-59-2	cis-1,2-Dichloroethylene	U	1.67	ug/kg	0.501	1.67
594-20-7	2,2-Dichloropropane	U	1.67	ug/kg	0.501	1.67
67-66-3	Chloroform	U	1.67	ug/kg	0.501	1.67
74-97-5	Bromochloromethane	U	1.67	ug/kg	0.551	1.67
71-55-6	1,1,1-Trichloroethane	U	1.67	ug/kg	0.501	1.67
563-58-6	1,1-Dichloropropene	U	1.67	ug/kg	0.501	1.67
56-23-5	Carbon tetrachloride	U	1.67	ug/kg	0.501	1.67
107-06-2	1,2-Dichloroethane	U	1.67	ug/kg	0.501	1.67
71-43-2	Benzene	U	1.67	ug/kg	0.501	1.67
79-01-6	Trichloroethylene	U	1.67	ug/kg	0.551	1.67
78-87-5	1,2-Dichloropropane	U	1.67	ug/kg	0.501	1.67
75-27-4	Bromodichloromethane	U	1.67	ug/kg	0.501	1.67
74-95-3	Dibromomethane	U	1.67	ug/kg	0.501	1.67
108-10-1	4-Methyl-2-pentanone	U	8.35	ug/kg	2.09	8.35
10061-01-5	cis-1,3-Dichloropropylene	U	1.67	ug/kg	0.501	1.67
108-88-3	Toluene	J	1.35	ug/kg	0.501	1.67
10061-02-6	trans-1,3-Dichloropropylene	U	1.67	ug/kg	0.501	1.67
79-00-5	1,1,2-Trichloroethane	U	1.67	ug/kg	0.501	1.67
591-78-6	2-Hexanone	U	8.35	ug/kg	2.51	8.35
142-28-9	1,3-Dichloropropane	U	1.67	ug/kg	0.501	1.67
127-18-4	Tetrachloroethylene	U	1.67	ug/kg	0.501	1.67
124-48-1	Dibromochloromethane	U	1.67	ug/kg	0.501	1.67
106-93-4	1,2-Dibromoethane	U	1.67	ug/kg	0.501	1.67
108-90-7	Chlorobenzene	U	1.67	ug/kg	0.501	1.67

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-2199  
 Lab Sample ID: 248519010

Date Collected: 02/25/2010 12:00  
 Date Received: 03/03/2010 08:50  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: CDS1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 40.1  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

Client ID: RE36-10-8275  
 Batch ID: 963809  
 Run Date: 03/11/2010 21:15  
 Prep Date: 03/11/2010 10:10  
 Data File: 031110V55B434.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.67	ug/kg	0.501	1.67
179601-23-1	m,p-Xylenes	U	3.34	ug/kg	0.501	3.34
95-47-6	o-Xylene	U	1.67	ug/kg	0.501	1.67
100-42-5	Styrene	U	1.67	ug/kg	0.501	1.67
75-25-2	Bromoform	U	1.67	ug/kg	0.501	1.67
79-34-5	1,1,2,2-Tetrachloroethane	U	1.67	ug/kg	0.501	1.67
96-18-4	1,2,3-Trichloropropane	U	1.67	ug/kg	0.501	1.67
108-86-1	Bromobenzene	U	1.67	ug/kg	0.501	1.67
103-65-1	n-Propylbenzene	U	1.67	ug/kg	0.501	1.67
95-49-8	2-Chlorotoluene	U	1.67	ug/kg	0.501	1.67
98-82-8	Isopropylbenzene	U	1.67	ug/kg	0.501	1.67
108-67-8	1,3,5-Trimethylbenzene	U	1.67	ug/kg	0.501	1.67
106-43-4	4-Chlorotoluene	U	1.67	ug/kg	0.501	1.67
98-06-6	tert-Butylbenzene	U	1.67	ug/kg	0.501	1.67
95-63-6	1,2,4-Trimethylbenzene	U	1.67	ug/kg	0.501	1.67
135-98-8	sec-Butylbenzene	U	1.67	ug/kg	0.501	1.67
99-87-6	4-Isopropyltoluene		10.1	ug/kg	0.501	1.67
541-73-1	1,3-Dichlorobenzene	U	1.67	ug/kg	0.501	1.67
106-46-7	1,4-Dichlorobenzene	U	1.67	ug/kg	0.501	1.67
104-51-8	n-Butylbenzene	U	1.67	ug/kg	0.501	1.67
96-12-8	1,2-Dibromo-3-chloropropane	U	1.67	ug/kg	0.501	1.67
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	8.35	ug/kg	2.67	8.35
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.67	ug/kg	0.501	1.67
95-50-1	1,2-Dichlorobenzene	U	1.67	ug/kg	0.501	1.67

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
No Tentatively Identified Compounds Found				ug/kg		

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B434.D  
Acq On : 11 Mar 2010 9:15 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |248519010|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Mar 17 15:16:43 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	8.388	8.387	1.000	96	1318791	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	834463	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	280707	50.00	ug/L	0.00
82) B Fluorobenzene	8.388	8.391	1.000	96	1318791	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	834463	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	280707	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	210757	33.02	ug/L	0.00
Spiked Amount 50.000	Range 66	- 134	Recovery	=	66.04%			
43) Toluene-d8	9.721	9.721	0.872	98	950101	44.52	ug/L	0.00
Spiked Amount 50.000	Range 71	- 128	Recovery	=	89.04%			
61) Bromofluorobenzene	12.260	12.260	0.914	95	409813	72.78	ug/L	0.00
Spiked Amount 50.000	Range 65	- 130	Recovery	=	145.56%#			
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	4.668	0.000		0	N.D.		
3) Chloromethane	4.880	4.900	0.582	50	338	Below Cal		76
4) Vinyl chloride	0.000	5.041	0.000		0	N.D.		
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	5.927	5.695	0.707	101	590	N.D.		
8) Ethyl ether	5.877	5.866	0.701	59	473	N.D.		
9) Acetone	6.174	6.174	0.736	43	5191	N.D.		
10) 1,1-Dichloroethylene	6.163	6.156	0.735	61	427	N.D.		
11) Iodomethane	0.000	6.357	0.000		0	N.D.		
12) Acetonitrile	6.450	6.464	0.769	41	251	N.D.		
13) Methyl acetate	6.174	6.365	0.736	43	5191	N.D.		
14) Carbon disulfide	6.443	6.435	0.768	76	258	N.D.		
15) Methylene chloride	6.538	6.538	0.779	84	3800	N.D.		
16) tert-Butyl methyl ether	0.000	6.640	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.715	0.000		0	N.D.		
18) Vinyl acetate	6.800	6.969	0.811	43	3111	N.D.		
19) 1,1-Dichloroethane	0.000	7.068	0.000		0	N.D.		
20) 2-Butanone	7.468	7.450	0.890	43	333	N.D.		
21) cis-1,2-Dichloroethylene	0.000	7.507	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	7.514	0.000		0	N.D.		
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	0.000	7.701	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	7.924	7.924	0.945	56	1357	N.D.		
27) 1,1-Dichloropropene	0.000	8.005	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.193	8.203	0.977	78	268	N.D.		
32) Cyclohexene	0.000	8.246	0.000		0m	N.D.	d	
33) n-Butyl alcohol	8.391	8.377	1.000	56	7299	Below Cal	#	19
34) Trichloroethylene	8.670	8.677	1.034	95	109	N.D.		
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	0.000	8.826	0.000		0	N.D.		
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B434.D  
Acq On : 11 Mar 2010 9:15 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |248519010|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Mar 17 15:16:43 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.		
40) cis-1,3-Dichloropropylene	0.000	9.487	0.000		0	N.D.		
42) 4-Methyl-2-pentanone	0.000	9.526	0.000		0	N.D.		
44) Toluene	9.784	9.788	0.878	91	14503	0.81 ug/L		93
45) trans-1,3-Dichloroprop...	0.000	9.968	0.000		0	N.D.		
46) 1,1,2-Trichloroethane	0.000	10.173	0.000		0	N.D.		
47) 2-Hexanone	10.276	10.279	0.922	43	124	N.D.		
48) 1,3-Dichloropropane	0.000	10.364	0.000		0	N.D.		
49) Tetrachloroethylene	0.000	10.290	0.000		0	N.D.		
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.		
51) 1,2-Dibromoethane	0.000	10.771	0.000		0	N.D.		
52) Chlorobenzene	0.000	11.174	0.000		0	N.D.		
53) 1,1,1,2-Tetrachloroethane	0.000	11.216	0.000		0	N.D.		
54) Ethylbenzene	11.181	11.181	1.003	91	2681	N.D.		
55) m,p-Xylenes	11.277	11.280	1.012	106	2033	N.D.		
56) o-Xylene	11.701	11.701	1.050	106	631	N.D.		
57) Styrene	11.715	11.715	1.051	104	136	N.D.		
59) Bromoform	0.000	12.005	0.000		0	N.D.		
60) Isopropylbenzene	12.027	12.016	0.897	105	114	N.D.		
62) 1,1,2,2-Tetrachloroethane	0.000	12.348	0.000		0	N.D.		
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.		
64) Bromobenzene	0.000	12.465	0.000		0	N.D.		
65) n-Propylbenzene	12.408	12.415	0.925	91	2093	N.D.		
66) 1,3,5-Trimethylbenzene	12.550	12.564	0.936	105	825	N.D.		
67) 2-Chlorotoluene	0.000	12.596	0.000		0	N.D.		
68) 4-Chlorotoluene	0.000	12.698	0.000		0m	N.D. d		
69) tert-Butylbenzene	12.950	12.900	0.965	134	109	N.D.		
70) 1,2,4-Trimethylbenzene	0.000	12.956	0.000		0m	N.D. d		
71) sec-Butylbenzene	13.102	13.119	0.977	105	128	N.D.		
72) 4-Isopropyltoluene	13.229	13.229	0.986	119	68243	6.03 ug/L		95
73) 1,3-Dichlorobenzene	0.000	13.349	0.000		0	N.D.		
74) 1,4-Dichlorobenzene	13.441	13.441	1.002	146	127	N.D.		
75) n-Butylbenzene	13.646	13.653	1.017	91	986	N.D.		
76) 1,2-Dichlorobenzene	0.000	13.858	0.000		0	N.D.		
77) 1,2-Dibromo-3-chloropr...	0.000	14.704	0.000		0	N.D.		
78) 1,2,4-Trichlorobenzene	15.612	15.619	1.164	180	525	N.D.		
79) Hexachlorobutadiene	0.000	15.686	0.000		0	N.D.		
80) Naphthalene	15.981	15.988	1.191	128	2253	N.D.		
81) 1,2,3-Trichlorobenzene	16.284	16.291	1.214	180	280	N.D.		
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.		
85) Acrolein	0.000	6.082	0.000		0	N.D.		
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.		
87) Isopropyl Alcohol	6.255	6.163	0.746	45	2112	N.D.		
88) Allyl chloride	6.428	6.425	0.766	41	111	N.D.		
89) tert-Butyl Alcohol	6.464	6.460	0.771	59	112	N.D.		
90) Acrylonitrile	0.000	6.747	0.000		0	N.D.		
91) Isopropyl ether	0.000	6.920	0.000		0	N.D.		
92) 2-Chloro-1,3-butadiene	0.000	7.104	0.000		0	N.D.		
93) Ethyl tert-butyl ether	0.000	7.192	0.000		0	N.D.		
94) Ethyl acetate	7.468	7.383	0.890	43	333	N.D.		

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B434.D  
Acq On : 11 Mar 2010 9:15 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |248519010|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Mar 17 15:16:43 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

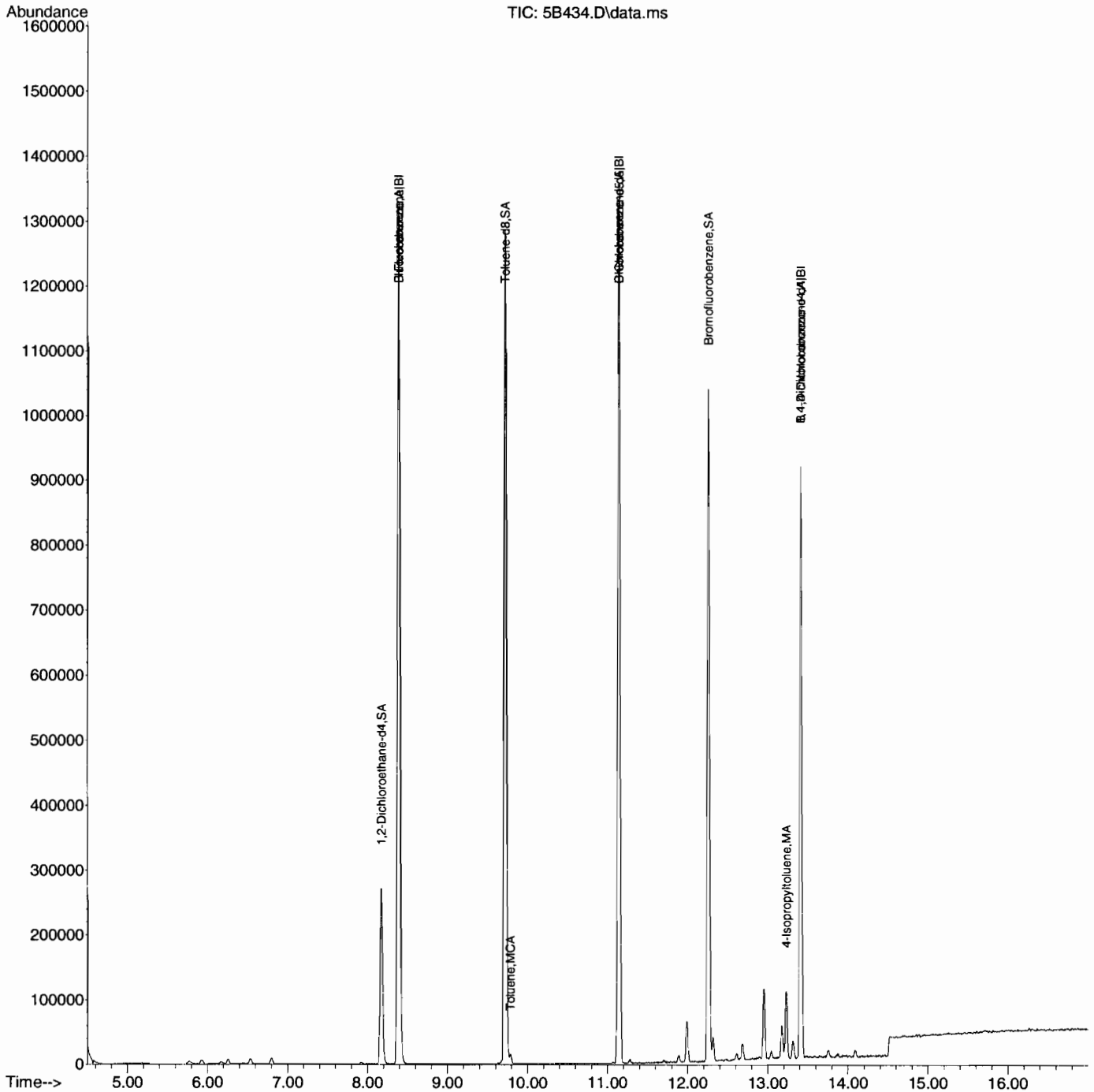
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	7.585	0.000		0	N.D.	
96) Methacrylonitrile	7.705	7.680	0.919	41	111	N.D.	
97) Tetrahydrofuran	7.723	7.716	0.921	42	253	N.D.	
98) Isobutyl alcohol	7.914	7.857	0.944	41	513	N.D.	
99) Methyl tert-amyl ether	0.000	8.122	0.000		0	N.D.	
100) Methyl methacrylate	0.000	8.801	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	8.957	0.000		0	N.D.	
102) 2-Nitropropane	0.000	9.342	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	9.859	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	12.136	0.000		0m	N.D.	d
108) Cyclohexanone	0.000	12.267	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	12.412	0.000		0m	N.D.	d
110) Pentachloroethane	0.000	13.017	0.000		0	N.D.	
111) Benzyl chloride	13.565	13.565	1.011	91	2037	N.D.	
112) bis(2-Chloroisopropyl)...	13.894	13.929	1.036	45	227	N.D.	

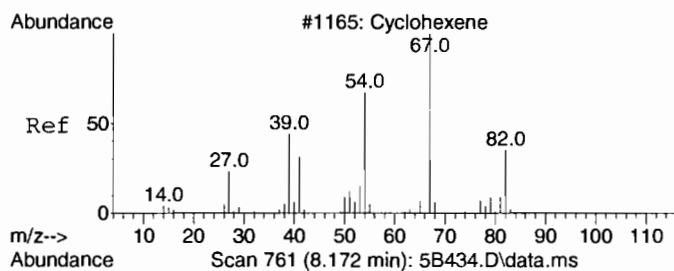
(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B434.D  
Acq On : 11 Mar 2010 9:15 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |248519010|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Mar 17 15:16:43 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

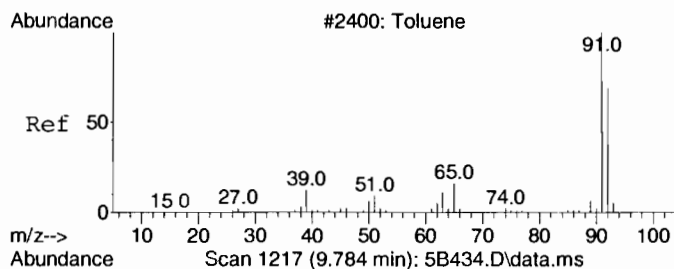
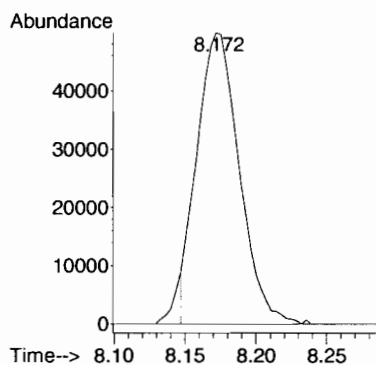




#32 BEFORE analyst DELETION  
Cyclohexene

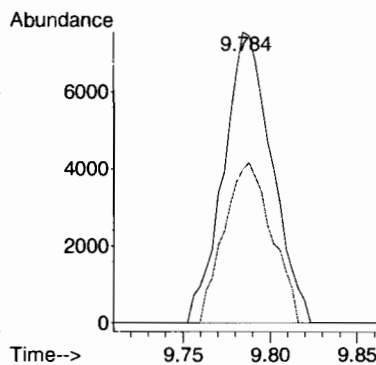
Concen: 11.62 ug/L  
RT: 8.172 min Scan# 761  
Delta R.T. -0.074 min  
Lab File: 5B434.D  
Acq: 11 Mar 2010 9:15 pm

Tgt Ion: 67 Resp: 103071  
Ion Ratio Lower Upper  
67 100  
54 0.0 46.3 106.3#

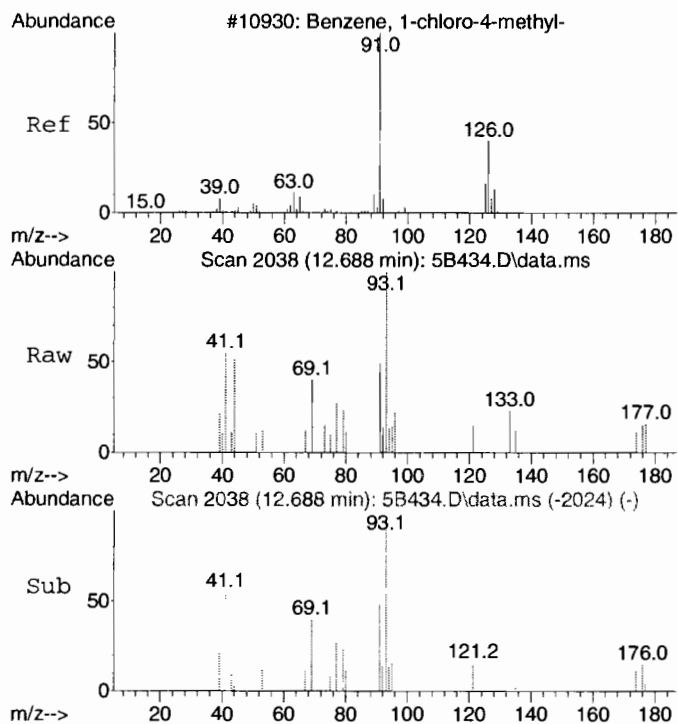


#44  
Toluene  
Concen: 0.81 ug/L  
RT: 9.784 min Scan# 1217  
Delta R.T. -0.004 min  
Lab File: 5B434.D  
Acq: 11 Mar 2010 9:15 pm

Tgt Ion: 91 Resp: 14503  
Ion Ratio Lower Upper  
91 100  
92 54.5 29.5 89.5

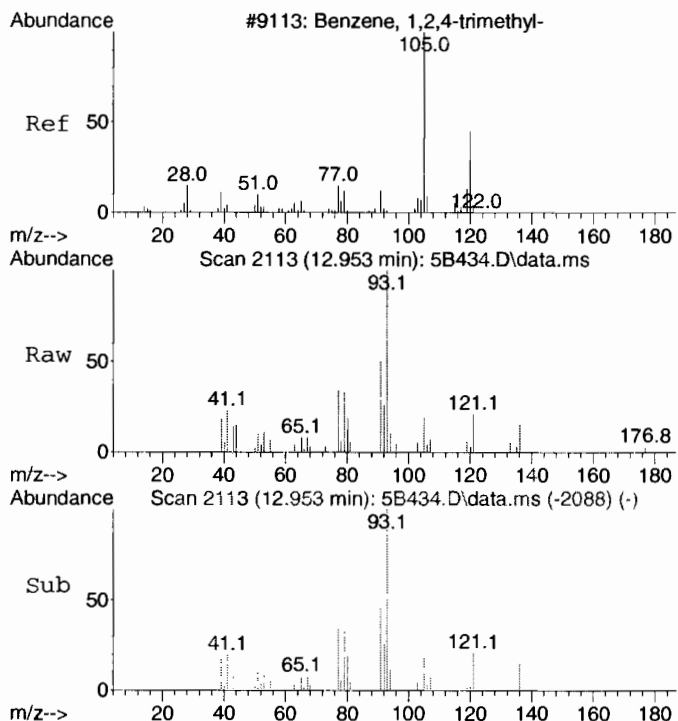
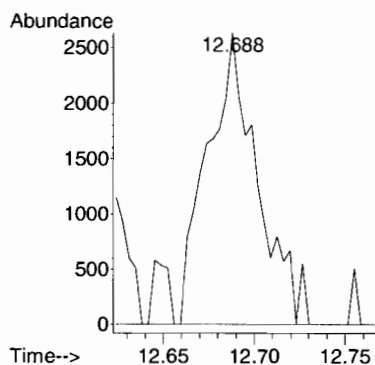






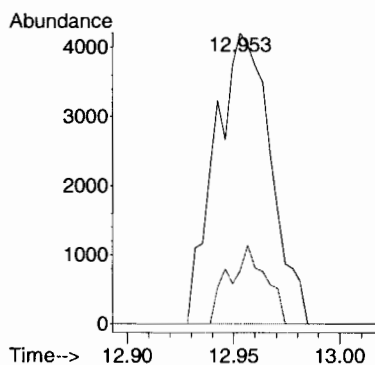
#68 BEFORE analyst DELETION  
4-Chlorotoluene  
Concen: 0.51 ug/L  
RT: 12.688 min Scan# 2038  
Delta R.T. -0.010 min  
Lab File: 5B434.D  
Acq: 11 Mar 2010 9:15 pm

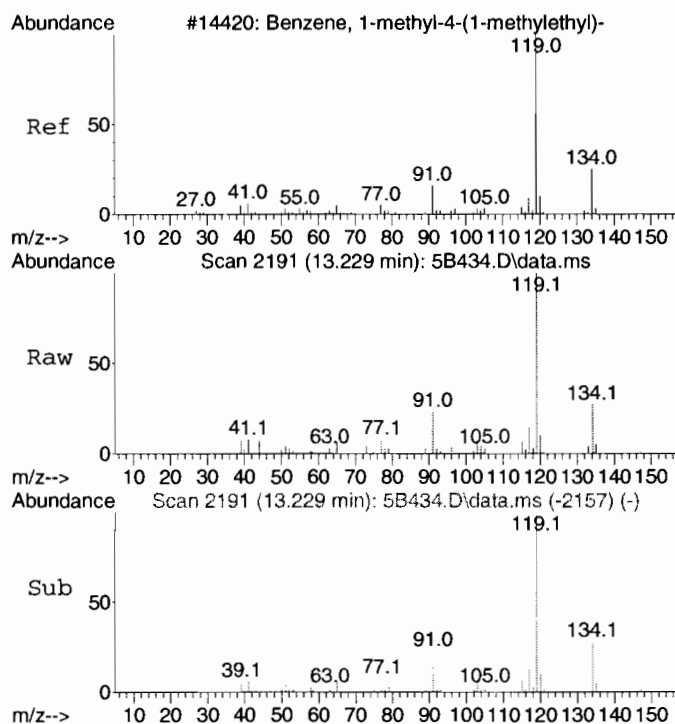
Tgt Ion: 91 Resp: 5073  
Ion Ratio Lower Upper  
91 100  
126 0.0 3.6 63.6#



#70 BEFORE analyst DELETION  
1,2,4-Trimethylbenzene  
Concen: 0.68 ug/L  
RT: 12.953 min Scan# 2113  
Delta R.T. -0.003 min  
Lab File: 5B434.D  
Acq: 11 Mar 2010 9:15 pm

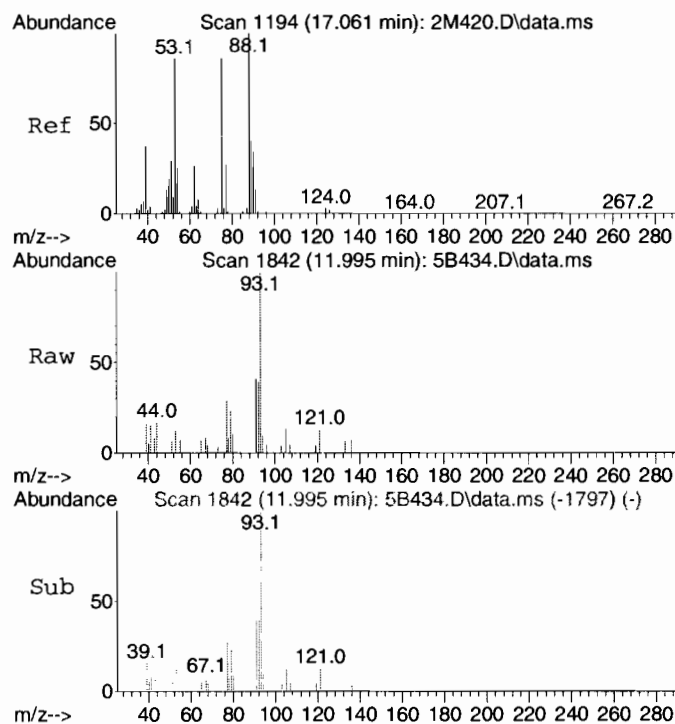
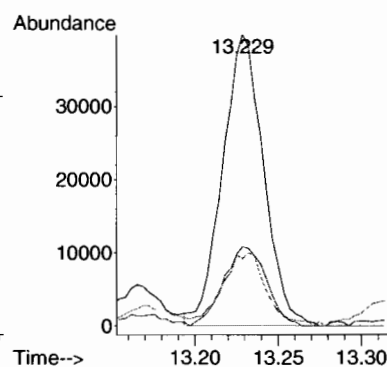
Tgt Ion: 105 Resp: 7641  
Ion Ratio Lower Upper  
105 100  
120 18.0 17.4 77.4





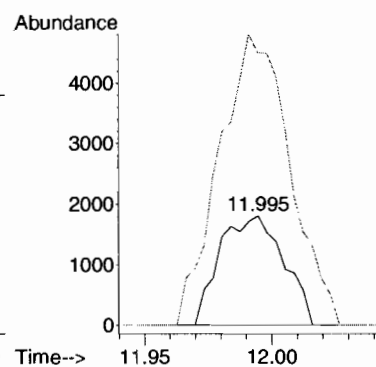
#72  
4-Isopropyltoluene  
Concen: 6.03 ug/L  
RT: 13.229 min Scan# 2191  
Delta R.T. -0.000 min  
Lab File: 5B434.D  
Acq: 11 Mar 2010 9:15 pm

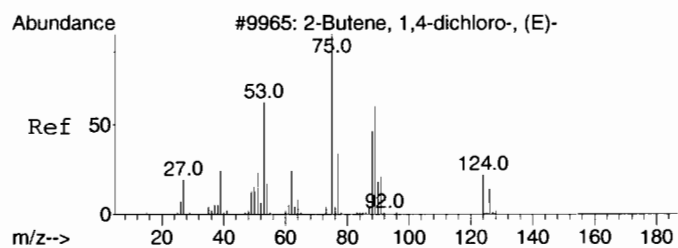
Tgt Ion:	119	Resp:	68243
Ion Ratio	Lower	Upper	
119	100		
134	28.3	0.0	57.2
91	26.9	0.0	53.0



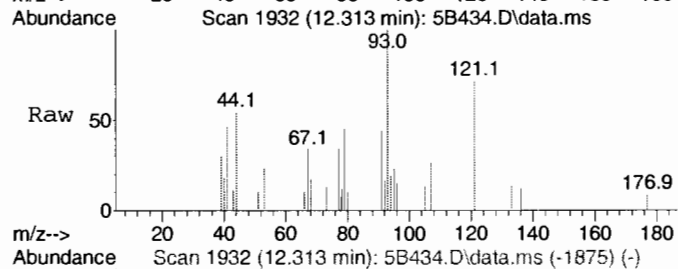
#107 BEFORE analyst DELETION  
cis-1,4-Dichloro-2-butene  
Concen: 3.00 ug/L  
RT: 11.995 min Scan# 1842  
Delta R.T. -0.141 min  
Lab File: 5B434.D  
Acq: 11 Mar 2010 9:15 pm

Tgt Ion:	53	Resp:	3147
Ion Ratio	Lower	Upper	
53	100		
88	0.0	67.1	127.1#
77	293.1	1.8	61.8#

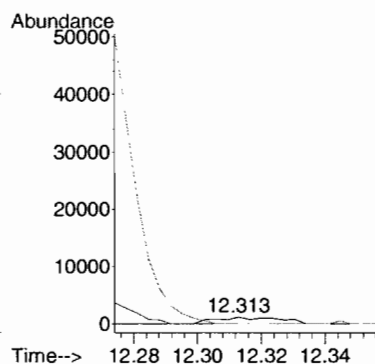
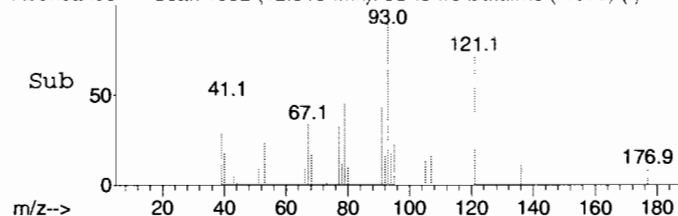




#109 BEFORE analyst DELETION  
trans-1,4-Dichloro-2-butene  
Concen: 1.69 ug/L  
RT: 12.313 min Scan# 1932  
Delta R.T. -0.099 min  
Lab File: 5B434.D  
Acq: 11 Mar 2010 9:15 pm



Tgt Ion: 53 Resp: 1671  
Ion Ratio Lower Upper  
53 100  
88 0.0 15.5 75.5#  
75 6.7 92.0 152.0#



Library Search Compound Report

GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\

Data File : 5B434.D

Acq On : 11 Mar 2010 9:15 pm

Operator : CDS1

Sample : |248519010|963809|1|VOA|1|VOA8260BS|

Misc : LANL 5G - SOIL

ALS Vial : 34 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M

Quant Title : Volatile Organics 8260B

SubList :

TIC Library : C:\Database\NIST05.L

TIC Integration Parameters: default.P

No Library Search Compounds Detected

\*\*\*\*\*

Tentatively Identified Compound (LSC) summary  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B434.D  
Acq On : 11 Mar 2010 9:15 pm  
Operator : CDS1  
Sample : |248519010|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 34 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc

-----

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-2199  
 Lab Sample ID: 248519011

Date Collected: 02/25/2010 12:00  
 Date Received: 03/03/2010 08:50  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOAS.I  
 Analyst: CDS1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 14.6  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

Client ID: RE36-10-8276  
 Batch ID: 963809  
 Run Date: 03/11/2010 21:42  
 Prep Date: 03/11/2010 10:11  
 Data File: 031110V5SB435.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.17	ug/kg	0.398	1.17
74-87-3	Chloromethane	U	1.17	ug/kg	0.351	1.17
75-01-4	Vinyl chloride	U	1.17	ug/kg	0.351	1.17
74-83-9	Bromomethane	U	1.17	ug/kg	0.351	1.17
75-00-3	Chloroethane	U	1.17	ug/kg	0.351	1.17
75-69-4	Trichlorofluoromethane	U	1.17	ug/kg	0.351	1.17
67-64-1	Acetone	U	5.86	ug/kg	1.94	5.86
75-35-4	1,1-Dichloroethylene	U	1.17	ug/kg	0.351	1.17
74-88-4	Iodomethane	U	5.86	ug/kg	1.87	5.86
75-09-2	Methylene chloride	U	5.86	ug/kg	2.34	5.86
75-15-0	Carbon disulfide	U	5.86	ug/kg	1.46	5.86
156-60-5	trans-1,2-Dichloroethylene	U	1.17	ug/kg	0.351	1.17
75-34-3	1,1-Dichloroethane	U	1.17	ug/kg	0.351	1.17
78-93-3	2-Butanone	U	5.86	ug/kg	1.76	5.86
156-59-2	cis-1,2-Dichloroethylene	U	1.17	ug/kg	0.351	1.17
594-20-7	2,2-Dichloropropane	U	1.17	ug/kg	0.351	1.17
67-66-3	Chloroform	U	1.17	ug/kg	0.351	1.17
74-97-5	Bromochloromethane	U	1.17	ug/kg	0.387	1.17
71-55-6	1,1,1-Trichloroethane	U	1.17	ug/kg	0.351	1.17
563-58-6	1,1-Dichloropropene	U	1.17	ug/kg	0.351	1.17
56-23-5	Carbon tetrachloride	U	1.17	ug/kg	0.351	1.17
107-06-2	1,2-Dichloroethane	U	1.17	ug/kg	0.351	1.17
71-43-2	Benzene	U	1.17	ug/kg	0.351	1.17
79-01-6	Trichloroethylene	U	1.17	ug/kg	0.387	1.17
78-87-5	1,2-Dichloropropane	U	1.17	ug/kg	0.351	1.17
75-27-4	Bromodichloromethane	U	1.17	ug/kg	0.351	1.17
74-95-3	Dibromomethane	U	1.17	ug/kg	0.351	1.17
108-10-1	4-Methyl-2-pentanone	U	5.86	ug/kg	1.46	5.86
10061-01-5	cis-1,3-Dichloropropylene	U	1.17	ug/kg	0.351	1.17
108-88-3	Toluene	U	1.17	ug/kg	0.351	1.17
10061-02-6	trans-1,3-Dichloropropylene	U	1.17	ug/kg	0.351	1.17
79-00-5	1,1,2-Trichloroethane	U	1.17	ug/kg	0.351	1.17
591-78-6	2-Hexanone	U	5.86	ug/kg	1.76	5.86
142-28-9	1,3-Dichloropropane	U	1.17	ug/kg	0.351	1.17
127-18-4	Tetrachloroethylene	U	1.17	ug/kg	0.351	1.17
124-48-1	Dibromochloromethane	U	1.17	ug/kg	0.351	1.17
106-93-4	1,2-Dibromoethane	U	1.17	ug/kg	0.351	1.17
108-90-7	Chlorobenzene	U	1.17	ug/kg	0.351	1.17

**Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-2199  
Lab Sample ID: 248519011  
  
Client ID: RE36-10-8276  
Batch ID: 963809  
Run Date: 03/11/2010 21:42  
Prep Date: 03/11/2010 10:11  
Data File: 031110V55B435.D

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: CDS1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
%Moisture: 14.6  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.17	ug/kg	0.351	1.17
179601-23-1	m,p-Xylenes	U	2.34	ug/kg	0.351	2.34
95-47-6	o-Xylene	U	1.17	ug/kg	0.351	1.17
100-42-5	Styrene	U	1.17	ug/kg	0.351	1.17
75-25-2	Bromoform	U	1.17	ug/kg	0.351	1.17
79-34-5	1,1,2,2-Tetrachloroethane	U	1.17	ug/kg	0.351	1.17
96-18-4	1,2,3-Trichloropropane	U	1.17	ug/kg	0.351	1.17
108-86-1	Bromobenzene	U	1.17	ug/kg	0.351	1.17
103-65-1	n-Propylbenzene	U	1.17	ug/kg	0.351	1.17
95-49-8	2-Chlorotoluene	U	1.17	ug/kg	0.351	1.17
98-82-8	Isopropylbenzene	U	1.17	ug/kg	0.351	1.17
108-67-8	1,3,5-Trimethylbenzene	U	1.17	ug/kg	0.351	1.17
106-43-4	4-Chlorotoluene	U	1.17	ug/kg	0.351	1.17
98-06-6	tert-Butylbenzene	U	1.17	ug/kg	0.351	1.17
95-63-6	1,2,4-Trimethylbenzene	U	1.17	ug/kg	0.351	1.17
135-98-8	sec-Butylbenzene	U	1.17	ug/kg	0.351	1.17
99-87-6	4-Isopropyltoluene	U	1.17	ug/kg	0.351	1.17
541-73-1	1,3-Dichlorobenzene	U	1.17	ug/kg	0.351	1.17
106-46-7	1,4-Dichlorobenzene	U	1.17	ug/kg	0.351	1.17
104-51-8	n-Butylbenzene	U	1.17	ug/kg	0.351	1.17
96-12-8	1,2-Dibromo-3-chloropropane	U	1.17	ug/kg	0.351	1.17
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.86	ug/kg	1.87	5.86
630-20-6	1,1,1,2-Tetrachloroethane	U	1.17	ug/kg	0.351	1.17
95-50-1	1,2-Dichlorobenzene	U	1.17	ug/kg	0.351	1.17

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
No Tentatively Identified Compounds Found				ug/kg		

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B435.D  
Acq On : 11 Mar 2010 9:42 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |248519011|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Mar 17 15:17:13 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	Dev (Min)
Internal Standards								
1) Fluorobenzene	8.387	8.387	1.000	96	1372520	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	876768	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	260945	50.00	ug/L	0.00
82) B Fluorobenzene	8.387	8.391	1.000	96	1372520	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	876768	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	260945	50.00	ug/L	0.00
System Monitoring Compounds								
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	220919	33.26	ug/L	0.00
Spiked Amount 50.000	Range 66	- 134	Recovery	=	66.52%			
43) Toluene-d8	9.721	9.721	0.872	98	988626	44.09	ug/L	0.00
Spiked Amount 50.000	Range 71	- 128	Recovery	=	88.18%			
61) Bromofluorobenzene	12.260	12.260	0.914	95	411736	78.66	ug/L	0.00
Spiked Amount 50.000	Range 65	- 130	Recovery	=	157.32%#			
Target Compounds								
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	4.668	0.000		0	N.D.		
3) Chloromethane	4.970	4.900	0.593	50	390	Below Cal	#	1
4) Vinyl chloride	0.000	5.041	0.000		0	N.D.		
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.695	0.000		0	N.D.		
8) Ethyl ether	5.866	5.866	0.699	59	374	N.D.		
9) Acetone	6.174	6.174	0.736	43	1026	N.D.		
10) 1,1-Dichloroethylene	0.000	6.156	0.000		0	N.D.		
11) Iodomethane	0.000	6.357	0.000		0	N.D.		
12) Acetonitrile	6.471	6.464	0.771	41	111	N.D.		
13) Methyl acetate	6.202	6.365	0.739	43	118	N.D.		
14) Carbon disulfide	0.000	6.435	0.000		0	N.D.		
15) Methylene chloride	6.531	6.538	0.779	84	1363	Below Cal	#	76
16) tert-Butyl methyl ether	0.000	6.640	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.715	0.000		0	N.D.		
18) Vinyl acetate	6.803	6.969	0.811	43	3012	N.D.		
19) 1,1-Dichloroethane	0.000	7.068	0.000		0	N.D.		
20) 2-Butanone	0.000	7.450	0.000		0	N.D.		
21) cis-1,2-Dichloroethylene	0.000	7.507	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	7.514	0.000		0	N.D.		
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	0.000	7.701	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	0.000	7.924	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	8.005	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.200	8.203	0.978	78	631	N.D.		
32) Cyclohexene	0.000	8.246	0.000		0m	N.D.	d	
33) n-Butyl alcohol	8.394	8.377	1.001	56	7639	Below Cal	#	20
34) Trichloroethylene	8.674	8.677	1.034	95	1538	N.D.		
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	0.000	8.826	0.000		0	N.D.		
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		



Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B435.D  
Acq On : 11 Mar 2010 9:42 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |248519011|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Mar 17 15:17:13 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	9.487	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	9.526	0.000		0	N.D.	
44) Toluene	9.791	9.788	0.879	91	4636	N.D.	
45) trans-1,3-Dichloroprop...	0.000	9.968	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	10.173	0.000		0	N.D.	
47) 2-Hexanone	0.000	10.279	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000	10.364	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	10.290	0.000		0	N.D.	
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	10.771	0.000		0	N.D.	
52) Chlorobenzene	0.000	11.174	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	11.216	0.000		0	N.D.	
54) Ethylbenzene	11.178	11.181	1.003	91	1727	N.D.	
55) m,p-Xylenes	11.273	11.280	1.012	106	992	N.D.	
56) o-Xylene	11.704	11.701	1.050	106	1656	N.D.	
57) Styrene	0.000	11.715	0.000		0	N.D.	
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	12.263	12.016	0.914	105	127	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	12.348	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	0.000	12.465	0.000		0	N.D.	
65) n-Propylbenzene	12.419	12.415	0.926	91	831	N.D.	
66) 1,3,5-Trimethylbenzene	12.560	12.564	0.936	105	122	N.D.	
67) 2-Chlorotoluene	0.000	12.596	0.000		0	N.D.	
68) 4-Chlorotoluene	12.698	12.698	0.947	91	596	N.D.	
69) tert-Butylbenzene	0.000	12.900	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	12.949	12.956	0.965	105	1650	N.D.	
71) sec-Butylbenzene	0.000	13.119	0.000		0	N.D.	
72) 4-Isopropyltoluene	0.000	13.229	0.000		0m	N.D.	d
73) 1,3-Dichlorobenzene	0.000	13.349	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	0.000	13.441	0.000		0	N.D.	
75) n-Butylbenzene	13.660	13.653	1.018	91	1374	N.D.	
76) 1,2-Dichlorobenzene	0.000	13.858	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	14.704	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	0.000	15.619	0.000		0	N.D.	
79) Hexachlorobutadiene	0.000	15.686	0.000		0	N.D.	
80) Naphthalene	15.996	15.988	1.193	128	1591	N.D.	
81) 1,2,3-Trichlorobenzene	0.000	16.291	0.000		0	N.D.	
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	0.000	6.082	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	6.163	0.000		0	N.D.	
88) Allyl chloride	6.425	6.425	0.766	41	106	N.D.	
89) tert-Butyl Alcohol	6.457	6.460	0.770	59	108	N.D.	
90) Acrylonitrile	0.000	6.747	0.000		0	N.D.	
91) Isopropyl ether	0.000	6.920	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.104	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.192	0.000		0	N.D.	
94) Ethyl acetate	0.000	7.383	0.000		0	N.D.	

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B435.D  
Acq On : 11 Mar 2010 9:42 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |248519011|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Mar 17 15:17:13 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

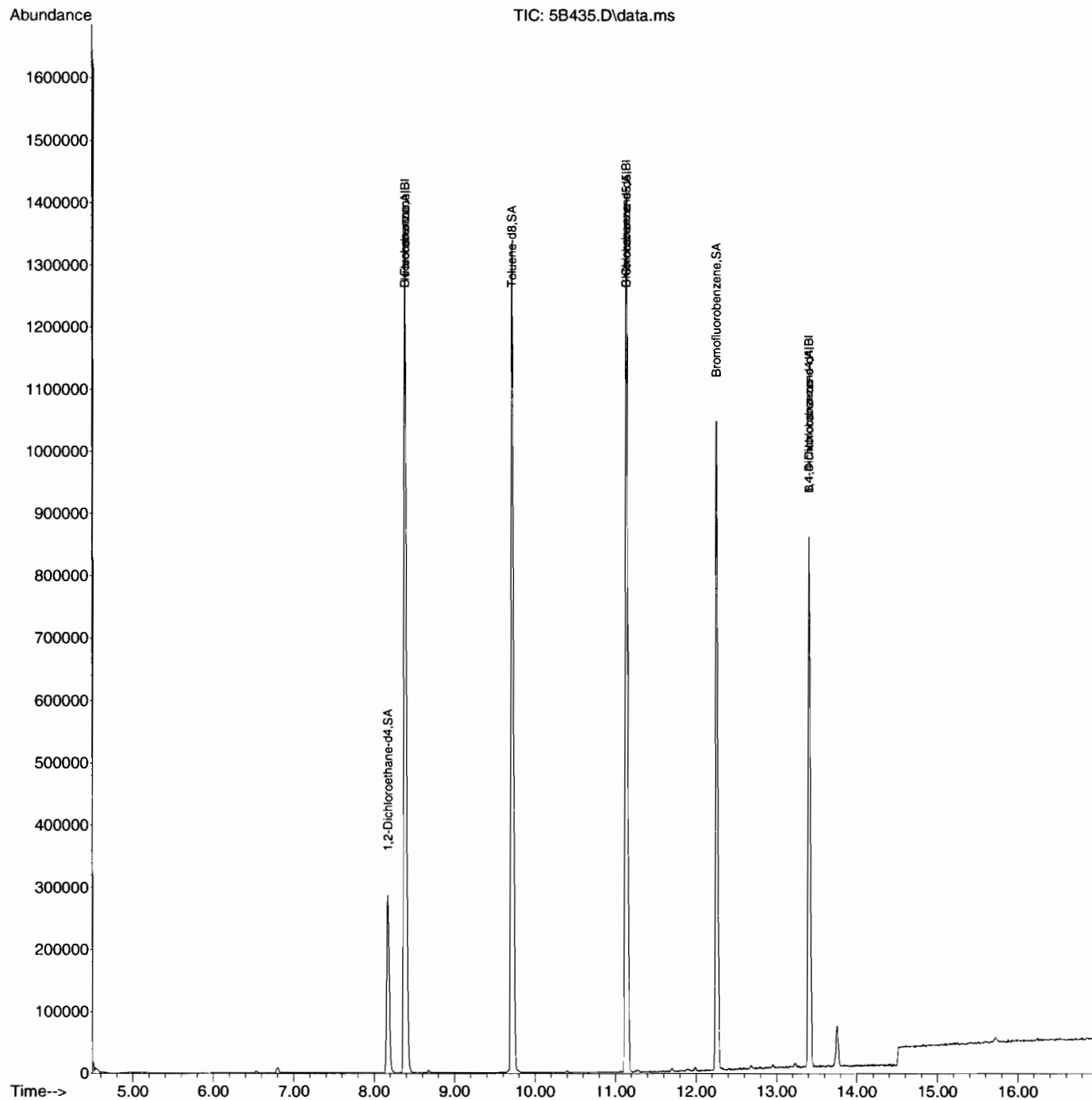
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	7.585	0.000		0	N.D.	
96) Methacrylonitrile	7.712	7.680	0.919	41	215	N.D.	
97) Tetrahydrofuran	7.726	7.716	0.921	42	107	N.D.	
98) Isobutyl alcohol	7.712	7.857	0.919	41	215	N.D.	
99) Methyl tert-amyl ether	0.000	8.122	0.000		0	N.D.	
100) Methyl methacrylate	0.000	8.801	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	8.957	0.000		0	N.D.	
102) 2-Nitropropane	0.000	9.342	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	9.859	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	12.136	0.000		0	N.D.	
108) Cyclohexanone	0.000	12.267	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	12.412	0.000		0	N.D.	
110) Pentachloroethane	0.000	13.017	0.000		0	N.D.	
111) Benzyl chloride	13.565	13.565	1.011	91	1697	N.D.	
112) bis(2-Chloroisopropyl)...	13.932	13.929	1.039	45	114	N.D.	

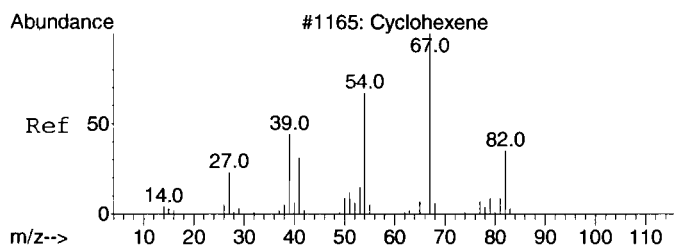
(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B435.D  
Acq On : 11 Mar 2010 9:42 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |248519011|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 35 Sample Multiplier: 1

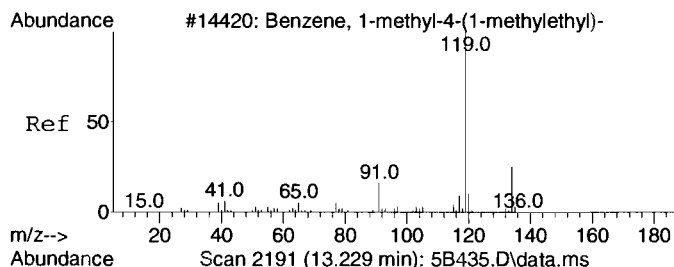
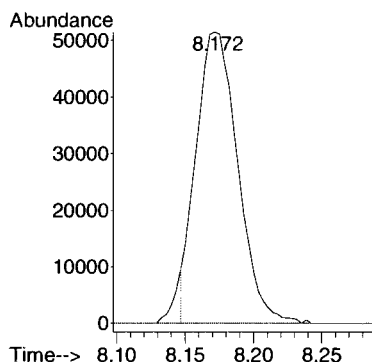
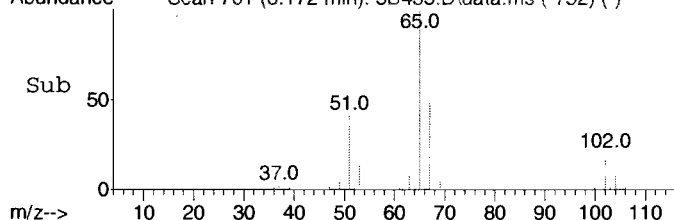
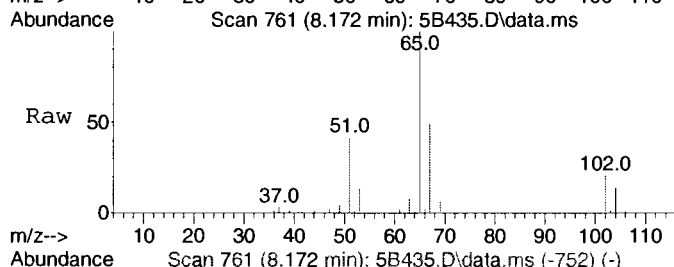
Quant Time: Mar 17 15:17:13 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE





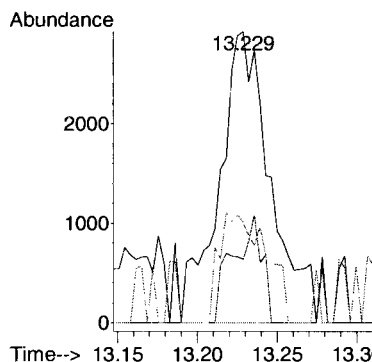
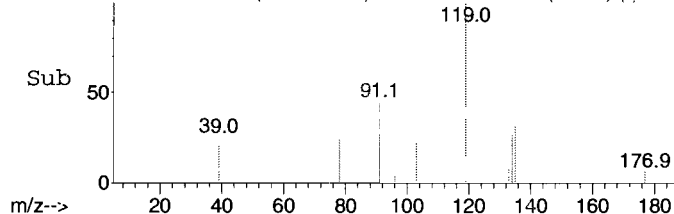
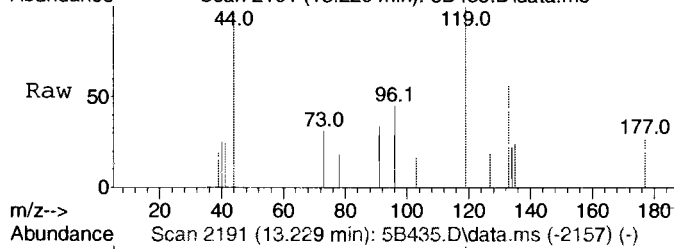
#32 BEFORE analyst DELETION  
Cyclohexene  
Concen: 11.80 ug/L  
RT: 8.172 min Scan# 761  
Delta R.T. -0.074 min  
Lab File: 5B435.D  
Acq: 11 Mar 2010 9:42 pm

Tgt Ion: 67 Resp: 108958  
Ion Ratio Lower Upper  
67 100  
54 0.0 46.3 106.3#



#72 BEFORE analyst DELETION  
4-Isopropyltoluene  
Concen: 0.62 ug/L  
RT: 13.229 min Scan# 2191  
Delta R.T. -0.000 min  
Lab File: 5B435.D  
Acq: 11 Mar 2010 9:42 pm

Tgt Ion: 119 Resp: 6508  
Ion Ratio Lower Upper  
119 100  
134 20.9 0.0 57.2  
91 34.6 0.0 53.0



Library Search Compound Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B435.D  
Acq On : 11 Mar 2010 9:42 pm  
Operator : CDS1  
Sample : |248519011|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 35 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

No Library Search Compounds Detected

\*\*\*\*\*

Tentatively Identified Compound (LSC) summary  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B435.D  
Acq On : 11 Mar 2010 9:42 pm  
Operator : CDS1  
Sample : |248519011|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 35 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--
					# RT Resp Conc

**Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-2199  
Lab Sample ID: 248519012

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: CDS1  
Aliquot: 5 g  
Column: DB-624

Matrix: S  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

Client ID: RE36-10-8295  
Batch ID: 963809  
Run Date: 03/11/2010 22:08  
Prep Date: 03/11/2010 10:12  
Data File: 031110V55B436.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone		5.96	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

**Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-2199  
Lab Sample ID: 248519012  
  
Client ID: RE36-10-8295  
Batch ID: 963809  
Run Date: 03/11/2010 22:08  
Prep Date: 03/11/2010 10:12  
Data File: 031110V55B436.D

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: CDS1  
Aliquot: 5 g  
Column: DB-624

Matrix: S  
  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
No Tentatively Identified Compounds Found				ug/kg		



Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B436.D  
Acq On : 11 Mar 2010 10:08 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |248519012|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Mar 17 15:20:12 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	8.387	8.387	1.000	96	1302946	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	959122	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	440944	50.00	ug/L	0.00
82) B Fluorobenzene	8.387	8.391	1.000	96	1302946	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	959122	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	440944	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	215224	34.13	ug/L	0.00
Spiked Amount 50.000	Range 66	- 134	Recovery	=	68.26%			
43) Toluene-d8	9.724	9.721	0.873	98	1006979	41.05	ug/L	0.00
Spiked Amount 50.000	Range 71	- 128	Recovery	=	82.10%			
61) Bromofluorobenzene	12.263	12.260	0.914	95	571283	64.59	ug/L	0.00
Spiked Amount 50.000	Range 65	- 130	Recovery	=	129.18%			
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	4.668	0.000		0	N.D.		
3) Chloromethane	4.900	4.900	0.584	50	537	Below Cal		87
4) Vinyl chloride	5.031	5.041	0.600	62	179	N.D.		
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.695	0.000		0	N.D.		
8) Ethyl ether	0.000	5.866	0.000		0	N.D.		
9) Acetone	6.177	6.174	0.736	43	23202	5.96	ug/L	96
10) 1,1-Dichloroethylene	0.000	6.156	0.000		0	N.D.		
11) Iodomethane	0.000	6.357	0.000		0	N.D.		
12) Acetonitrile	6.467	6.464	0.771	41	930	N.D.		
13) Methyl acetate	6.241	6.365	0.744	43	375	N.D.		
14) Carbon disulfide	6.439	6.435	0.768	76	118	N.D.		
15) Methylene chloride	6.538	6.538	0.779	84	3678	N.D.		
16) tert-Butyl methyl ether	6.633	6.640	0.791	73	1420	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.715	0.000		0	N.D.		
18) Vinyl acetate	6.796	6.969	0.810	43	3765	N.D.		
19) 1,1-Dichloroethane	0.000	7.068	0.000		0	N.D.		
20) 2-Butanone	7.457	7.450	0.889	43	232	N.D.		
21) cis-1,2-Dichloroethylene	0.000	7.507	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	7.514	0.000		0	N.D.		
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	0.000	7.701	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	0.000	7.924	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	8.005	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.214	8.203	0.979	78	122	N.D.		
32) Cyclohexene	0.000	8.246	0.000		0m	N.D.	d	
33) n-Butyl alcohol	8.380	8.377	0.999	56	7152	Below Cal	#	19
34) Trichloroethylene	0.000	8.677	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	0.000	8.826	0.000		0	N.D.		
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B436.D  
Acq On : 11 Mar 2010 10:08 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |248519012|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Mar 17 15:20:12 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	9.487	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	9.526	0.000		0	N.D.	
44) Toluene	9.788	9.788	0.878	91	5435	N.D.	
45) trans-1,3-Dichloroprop...	0.000	9.968	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	10.173	0.000		0	N.D.	
47) 2-Hexanone	10.286	10.279	0.923	43	135	N.D.	
48) 1,3-Dichloropropane	0.000	10.364	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	10.290	0.000		0	N.D.	
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	10.771	0.000		0	N.D.	
52) Chlorobenzene	0.000	11.174	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	11.216	0.000		0	N.D.	
54) Ethylbenzene	11.146	11.181	1.000	91	3850	N.D.	
55) m,p-Xylenes	11.277	11.280	1.012	106	160	N.D.	
56) o-Xylene	0.000	11.701	0.000		0	N.D.	
57) Styrene	0.000	11.715	0.000		0	N.D.	
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	12.256	12.016	0.914	105	220	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	12.348	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	0.000	12.465	0.000		0	N.D.	
65) n-Propylbenzene	12.412	12.415	0.925	91	1147	N.D.	
66) 1,3,5-Trimethylbenzene	12.575	12.564	0.938	105	109	N.D.	
67) 2-Chlorotoluene	0.000	12.596	0.000		0	N.D.	
68) 4-Chlorotoluene	12.695	12.698	0.946	91	1001	N.D.	
69) tert-Butylbenzene	0.000	12.900	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	12.956	12.956	0.966	105	890	N.D.	
71) sec-Butylbenzene	13.119	13.119	0.978	105	110	N.D.	
72) 4-Isopropyltoluene	13.232	13.229	0.987	119	2957	N.D.	
73) 1,3-Dichlorobenzene	0.000	13.349	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	0.000	13.441	0.000		0	N.D.	
75) n-Butylbenzene	13.653	13.653	1.018	91	532	N.D.	
76) 1,2-Dichlorobenzene	0.000	13.858	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	14.704	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	15.612	15.619	1.164	180	121	N.D.	
79) Hexachlorobutadiene	0.000	15.686	0.000		0	N.D.	
80) Naphthalene	15.996	15.988	1.193	128	3199	N.D.	
81) 1,2,3-Trichlorobenzene	0.000	16.291	0.000		0	N.D.	
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	0.000	6.082	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	6.163	0.000		0	N.D.	
88) Allyl chloride	6.435	6.425	0.767	41	224	N.D.	
89) tert-Butyl Alcohol	6.464	6.460	0.771	59	600	N.D.	
90) Acrylonitrile	0.000	6.747	0.000		0	N.D.	
91) Isopropyl ether	0.000	6.920	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.104	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.192	0.000		0	N.D.	
94) Ethyl acetate	7.457	7.383	0.889	43	232	N.D.	

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B436.D  
Acq On : 11 Mar 2010 10:08 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |248519012|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Mar 17 15:20:12 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

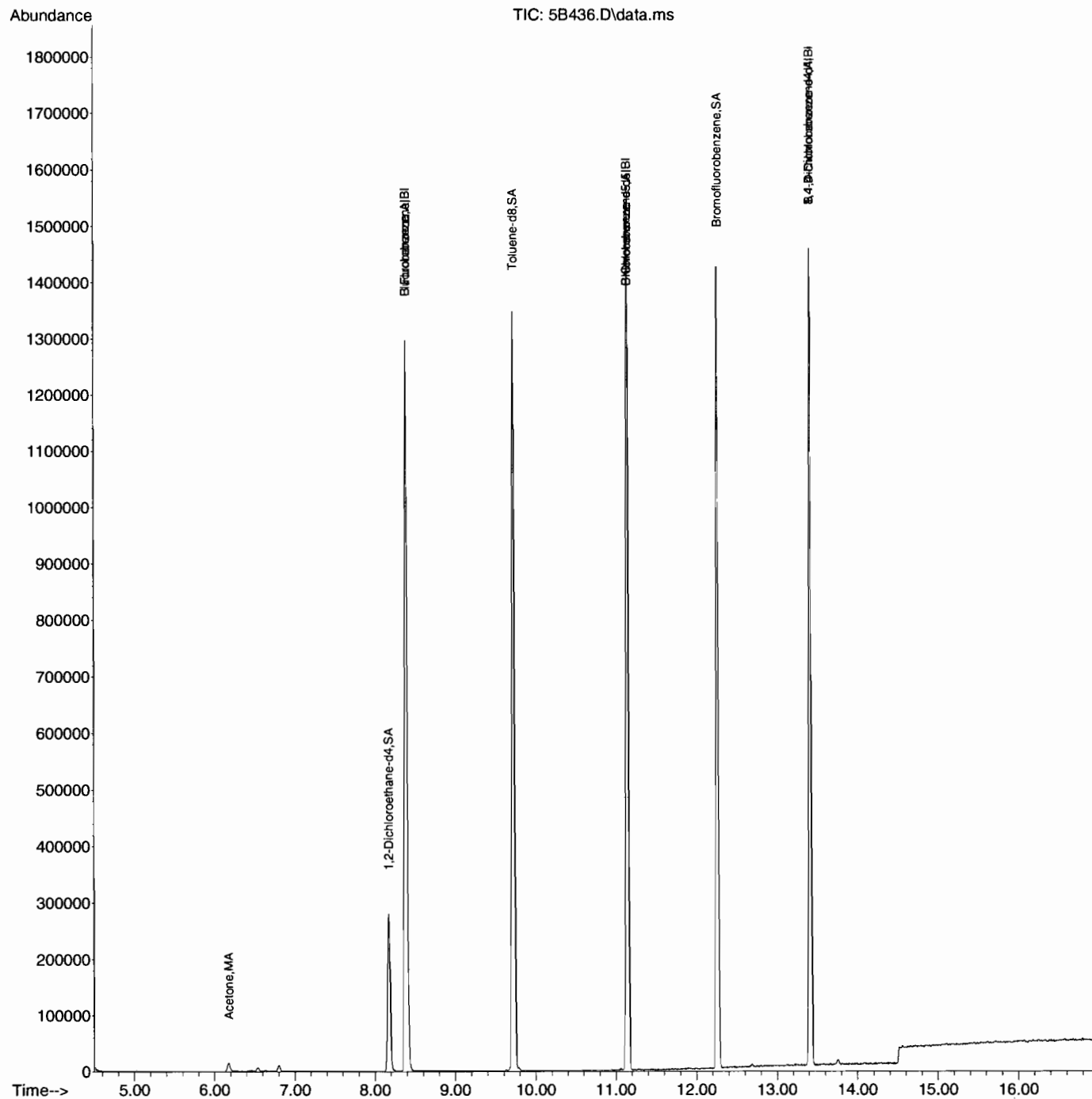
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	7.585	0.000		0	N.D.	
96) Methacrylonitrile	7.708	7.680	0.919	41	142	N.D.	
97) Tetrahydrofuran	7.723	7.716	0.921	42	254	N.D.	
98) Isobutyl alcohol	7.829	7.857	0.933	41	106	N.D.	
99) Methyl tert-amyl ether	0.000	8.122	0.000		0	N.D.	
100) Methyl methacrylate	0.000	8.801	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	8.957	0.000		0	N.D.	
102) 2-Nitropropane	0.000	9.342	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	9.859	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	12.136	0.000		0	N.D.	
108) Cyclohexanone	0.000	12.267	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	12.412	0.000		0	N.D.	
110) Pentachloroethane	0.000	13.017	0.000		0	N.D.	
111) Benzyl chloride	13.579	13.565	1.012	91	1572	N.D.	
112) bis(2-Chloroisopropyl)...	13.904	13.929	1.037	45	107	N.D.	

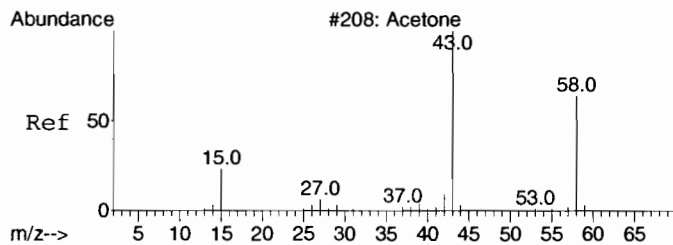
(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B436.D  
Acq On : 11 Mar 2010 10:08 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |248519012|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 36 Sample Multiplier: 1

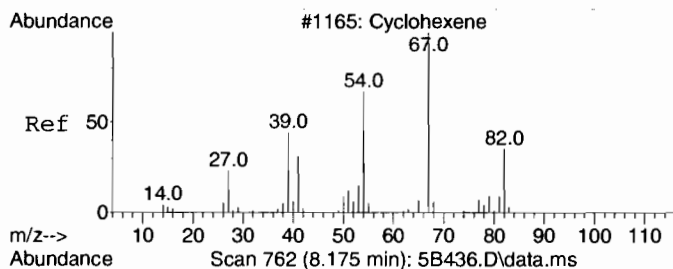
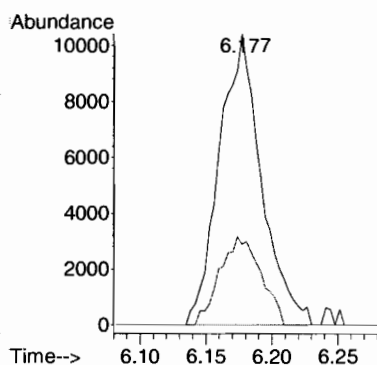
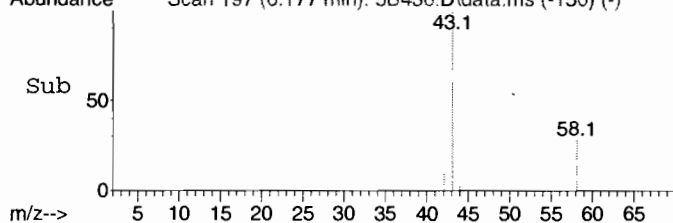
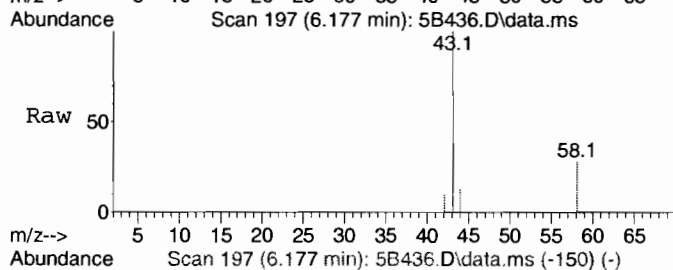
Quant Time: Mar 17 15:20:12 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE





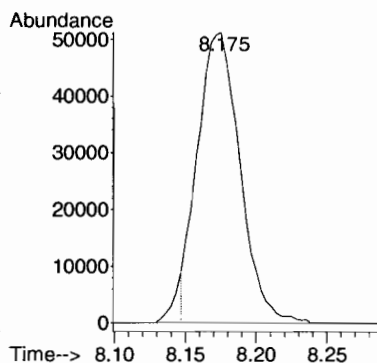
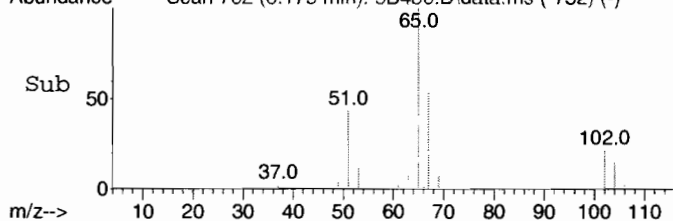
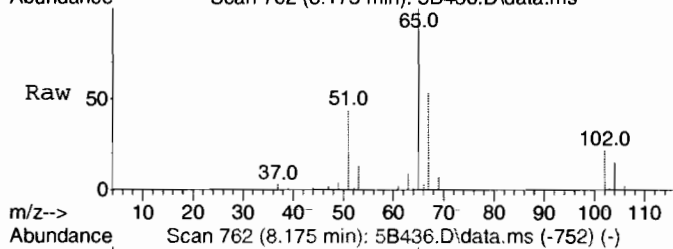
#9  
Acetone  
Concen: 5.96 ug/L  
RT: 6.177 min Scan# 197  
Delta R.T. 0.003 min  
Lab File: 5B436.D  
Acq: 11 Mar 2010 10:08 pm

Tgt Ion: 43 Resp: 23202  
Ion Ratio Lower Upper  
43 100  
58 29.5 1.9 61.9



#32 BEFORE analyst DELETION  
Cyclohexene  
Concen: 12.12 ug/L  
RT: 8.175 min Scan# 762  
Delta R.T. -0.071 min  
Lab File: 5B436.D  
Acq: 11 Mar 2010 10:08 pm

Tgt Ion: 67 Resp: 106235  
Ion Ratio Lower Upper  
67 100  
54 0.0 46.3 106.3#



Library Search Compound Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\

Data File : 5B436.D

Acq On : 11 Mar 2010 10:08 pm

Operator : CDS1

Sample : |248519012|963809|1|VOA|1|VOA8260BS|

Misc : LANL 5G - SOIL

ALS Vial : 36 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M

Quant Title : Volatile Organics 8260B

SubList :

TIC Library : C:\Database\NIST05.L

TIC Integration Parameters: default.P

No Library Search Compounds Detected

\*\*\*\*\*

Tentatively Identified Compound (LSC) summary  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B436.D  
Acq On : 11 Mar 2010 10:08 pm  
Operator : CDS1  
Sample : |248519012|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 36 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--
					# RT Resp Conc

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# Standards



## Calibration Standard Concentration Levels

	Level 1	Level 1a	Level 2	Level 3	Level 4 #	Level 5	Level 6	Level 7 !	Level 7a
Fluorobenzene (IS)									
1,2-Dichloroethane-d4(surr)		0.5	1	2	5	10	20	50	100
Dichlorodifluoromethane		0.5	1	2	5	10	20	50	100
Chloromethane		0.5	1	2	5	10	20	50	100
Vinyl chloride		0.5	1	2	5	10	20	50	100
Bromomethane		0.5	1	2	5	10	20	50	100
Chloroethane		0.5	1	2	5	10	20	50	100
Trichlorofluoromethane		0.5	1	2	5	10	20	50	100
1,1-Dichloroethene		0.5	1	2	5	10	20	50	100
Acetone	1	2.5	5	10	25	50	100	250	500
Iodomethane	1	2.5	5	10	25	50	100	250	500
Carbon disulfide	1	2.5	5	10	25	50	100	250	500
Methylene chloride		0.5	1	2	5	10	20	50	100
trans-1,2-Dichloroethene		0.5	1	2	5	10	20	50	100
1,1-Dichloroethane		0.5	1	2	5	10	20	50	100
Ethyl ether		0.5	1	2	5	10	20	50	100
Vinyl acetate	1	2.5	5	10	25	50	100	250	500
cis-1,2-Dichloroethene		0.5	1	2	5	10	20	50	100
1,2-Dichloroethene (total)		1	2	4	10	20	40	100	200
Cyclohexene		0.5	1	2	5	10	20	50	100
2-Chloroethylvinyl ether			5	10	25	50	100	250	500
2,2-Dichloropropane		0.5	1	2	5	10	20	50	100
2-Butanone	1	2.5	5	10	25	50	100	250	500
Bromochloromethane		0.5	1	2	5	10	20	50	100
Chloroform		0.5	1	2	5	10	20	50	100
1,1,1-Trichloroethane		0.5	1	2	5	10	20	50	100
1,1-Dichloropropene		0.5	1	2	5	10	20	50	100
Carbon tetrachloride		0.5	1	2	5	10	20	50	100
Benzene		0.5	1	2	5	10	20	50	100
1,2-Dichloroethane		0.5	1	2	5	10	20	50	100
Trichloroethene		0.5	1	2	5	10	20	50	100
1,2-Dichloropropane		0.5	1	2	5	10	20	50	100
Dibromomethane		0.5	1	2	5	10	20	50	100
Bromodichloromethane		0.5	1	2	5	10	20	50	100
cis-1,3-Dichloropropene		0.5	1	2	5	10	20	50	100
tert-Butylmethylether		0.5	1	2	5	10	20	50	100
Ethyl Ether			1	2	5	10	20	50	100
Acetonitrile			25	50	125	250	500	1250	2500
Methyl acetate			5	10	25	50	100	250	500
Cyclohexane			1	2	5	10	20	50	100
Methylcyclohexane			1	2	5	10	20	50	100
n-Butyl alcohol			50	100	250	500	1000	2500	5000
2-Nitropropane			5	10	25	50	100	250	500
Ethyl acetate			5	10	25	50	100	250	500
Acrolein			5	10	25	50	100	250	500
Trichlorotrifluoroethane			5	10	25	50	100	250	500
Allyl chloride			5	10	25	50	100	250	500
Acrylonitrile			5	10	25	50	100	250	500
1,4-Dioxane			50	100	250	500	1000	2500	5000
Isobutyl alcohol			50	100	250	500	1000	2500	5000
Methacrylonitrile			5	10	25	50	100	250	500
Propionitrile			5	10	25	50	100	250	500
Methyl methacrylate			5	10	25	50	100	250	500
Chlorotrifluoroethylene			5	10	25	50	100	250	500
2-Chloro-1,1,1-trifluoroethane			5	10	25	50	100	250	500

tert-Butyl alcohol			50	100	250	500	1000	2500	5000
Isopropyl ether			1	2	5	10	20	50	100
Ethyl tert-butyl ether			1	2	5	10	20	50	100
Isopropyl alcohol			50	100	250	500	1000	2500	5000
Methyl tert-amyl ether			1	2	5	10	20	50	100
1-Chlorohexane			1	2	5	10	20	50	100
2-Chloro-1,3-butadiene(chloroprene)			1	2	5	10	20	50	100
Chlorobenzene-d5 (IS)									
Toluene-d8 (surr)		0.5	1	2	5	10	20	50	100
4-Methyl-2-pentanone	1	2.5	5	10	25	50	100	250	500
Toluene		0.5	1	2	5	10	20	50	100
trans-1,3-Dichloropropene		0.5	1	2	5	10	20	50	100
1,1,2-Trichloroethane		0.5	1	2	5	10	20	50	100
Tetrachloroethene		0.5	1	2	5	10	20	50	100
1,3-Dichloropropane		0.5	1	2	5	10	20	50	100
2-Hexanone	1	2.5	5	10	25	50	20	250	500
Dibromochloromethane		0.5	1	2	5	10	20	50	100
1,2-Dibromoethane		0.5	1	2	5	10	20	50	100
Chlorobenzene		0.5	1	2	5	10	20	50	100
1,1,1,2-Tetrachloroethane		0.5	1	2	5	10	20	50	100
Ethylbenzene		0.5	1	2	5	10	20	50	100
m,p-Xylene		1	2	4	10	20	20	100	200
o-Xylene		0.5	1	2	5	10	20	50	100
Xylenes (total)		1.5	3	6	15	30	60	150	300
Stryene		0.5	1	2	5	10	20	50	100
Cyclohexanone			50	100	250	500	1000	2500	5000
Ethyl methacrylate			5	10	25	50	100	250	500
1,4-Dichlorobenzene-d4 (IS)									
Bromofluorobenzene (surr)		0.5	1	2	5	10	20	50	100
Bromoform		0.5	1	2	5	10	20	50	100
Isopropylbenzene		0.5	1	2	5	10	20	50	100
1,1,1,2-Tetrachloroethane		0.5	1	2	5	10	20	50	100
Bromobenzene		0.5	1	2	5	10	20	50	100
1,2,3-Trichloropropane		0.5	1	2	5	10	20	50	100
n-Propylbenzene		0.5	1	2	5	10	20	50	100
2-Chlorotoluene		0.5	1	2	5	10	20	50	100
1,3,5-Trimethylbenzene		0.5	1	2	5	10	20	50	100
4-Chlorotoluene		0.5	1	2	5	10	20	50	100
1,2,4-Trimethylbenzene		0.5	1	2	5	10	20	50	100
sec-Butylbenzene		0.5	1	2	5	10	20	50	100
1,3-Dichlorobenzene		0.5	1	2	5	10	20	50	100
tert-Butylbenzene		0.5	1	2	5	10	20	50	100
Isopropyltoluene		0.5	1	2	5	10	20	50	100
1,4-Dichlorobenzene		0.5	1	2	5	10	20	50	100
n-Butylbenzene		0.5	1	2	5	10	20	50	100
1,2-Dichlorobenzene		0.5	1	2	5	10	20	50	100
1,2-Dibromo-3-chloropropa		0.5	1	2	5	10	20	50	100
1,2,4-Trichlorobenzene		0.5	1	2	5	10	20	50	100
Hexachlorobutadiene		0.5	1	2	5	10	20	50	100
Naphthalene		0.5	1	2	5	10	20	50	100
1,2,3-Trichlorobenzene		0.5	1	2	5	10	20	50	100
cis-1,4-Dichloro-2-butene			5	10	25	50	100	250	500
trans-1,4-Dichloro-2-butene			5	10	25	50	100	250	500
Tetrahydrofuran			5	10	25	50	100	250	500
Pentachloroethane			5	10	25	50	100	250	500
Benzyl chloride			5	10	25	50	100	250	500
bis(2-Chloro-isopropyl)ether			5	10	25	50	100	250	500

---

Method	PQL	Concentration range
EPA 524.2	Level 1a	Levels 1a -> 7a
SW 846 8260B low level	Level 1a	Levels 1-> 7a
EPA 624	Level 2	Levels 2-> 7a
SW846 8260B	Level 2	Levels 2-> 7a

#: Indicates calibration verification concentration level used for low level analysis

!: Indicates calibration verification concentration level used for regular level analysis

## Calibration History Report VOA5

GEL Laboratories, LLC

Method File : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M

Last Update : Tue Mar 09 07:08:19 2010

Integrator : (RTE Integrator)

Response via : Initial Calibration

Cal Lvl:8 Amt:-1 Last Updated with: C:\msdchem\1\DATA\030310V5\5A311.D

Injection Date	Mix	Calibration File
3 Mar 2010 3:18 pm	A	C:\msdchem\1\DATA\030310V5\5A311.D

Cal Lvl:1 Amt:1 Last Updated with: C:\msdchem\1\DATA\030310V5\5A315.D

Injection Date	Mix	Calibration File
3 Mar 2010 11:52 am	A	C:\msdchem\1\DATA\030310V5\5A303.D
3 Mar 2010 5:01 pm	B	C:\msdchem\1\DATA\030310V5\5A315.D

Cal Lvl:2 Amt:2 Last Updated with: C:\msdchem\1\DATA\030310V5\5A316.D

Injection Date	Mix	Calibration File
3 Mar 2010 12:18 pm	A	C:\msdchem\1\DATA\030310V5\5A304.D
3 Mar 2010 5:27 pm	B	C:\msdchem\1\DATA\030310V5\5A316.D

Cal Lvl:3 Amt:5 Last Updated with: C:\msdchem\1\DATA\030310V5\5A317.D

Injection Date	Mix	Calibration File
3 Mar 2010 12:43 pm	A	C:\msdchem\1\DATA\030310V5\5A305.D
3 Mar 2010 5:52 pm	B	C:\msdchem\1\DATA\030310V5\5A317.D

Cal Lvl:4 Amt:10 Last Updated with: C:\msdchem\1\DATA\030310V5\5A318.D

Injection Date	Mix	Calibration File
3 Mar 2010 1:09 pm	A	C:\msdchem\1\DATA\030310V5\5A306.D
3 Mar 2010 6:18 pm	B	C:\msdchem\1\DATA\030310V5\5A318.D

Cal Lvl:5 Amt:20 Last Updated with: C:\msdchem\1\DATA\030310V5\5A319.D

Injection Date	Mix	Calibration File
3 Mar 2010 1:35 pm	A	C:\msdchem\1\DATA\030310V5\5A307.D
3 Mar 2010 6:44 pm	B	C:\msdchem\1\DATA\030310V5\5A319.D

Cal Lvl:6 Amt:50 Last Updated with: C:\msdchem\1\DATA\030310V5\5A320.D

Injection Date	Mix	Calibration File
3 Mar 2010 2:01 pm	A	C:\msdchem\1\DATA\030310V5\5A308.D
3 Mar 2010 7:10 pm	B	C:\msdchem\1\DATA\030310V5\5A320.D

Cal Lvl:7 Amt:100 Last Updated with: C:\msdchem\1\DATA\030310V5\5A321.D

Injection Date	Mix	Calibration File
3 Mar 2010 2:26 pm	A	C:\msdchem\1\DATA\030310V5\5A309.D
3 Mar 2010 7:35 pm	B	C:\msdchem\1\DATA\030310V5\5A321.D

VOA5-8260-030310.M Wed Mar 17 16:27:58 2010

VOA5-8260-030310.M Wed Mar 17 16:27:54 2010

Page: 1

# Response Factor Report VOA5

GEL Laboratories, LLC

Method File : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M

Last Update : Tue Mar 09 07:08:19 2010

Integrator : (RTE Integrator)

Response via : Initial Calibration

For Linear Calibration:  $y = \text{concentration ratio}$ ,  $x = \text{response ratio}$ .  $y = b + m_1(x) + m_2(xE_2)$

b		Compound		8	1	2	3	4	5	Avg	Curve	Exp	%RSD/r <sup>2</sup>
		m1	m2	6	7								
2)MA	Dichlorodifluoromethane			0.1071911	0.1343128 0.11106837	0.1140372	0.1271918	0.1076299	0.1161426	0.1167	AVRG		8.8231
3)MPA	Chloromethane				10037 510887	13766	31895	57674	114670		LINR		0.9998
4)MCA	Vinyl chloride	0.0020	0.1467	261159									
5)MA	Bromomethane			0.1157351	0.1366188 0.1183938	0.1281019	0.1255313	0.1197165	0.1183782	0.1232	AVRG		5.9617
6)MA	Chloroethane				0.1239625 0.1206884	0.1169147	0.1094959	0.1165166	0.1190689	0.1177	AVRG		3.7964
7)MA	Trichlorofluoromethane			0.1170655	0.1370210 0.1233229	0.1216074	0.1215156	0.1214055	0.1263787	0.1249	AVRG		4.4855
8)MA	Ethyl ether			0.1233612	0.2153456 0.2117388	0.2178553	0.2129630	0.2104313	0.2210791	0.2144	AVRG		1.8020
9)MA	Acetone			0.2117030	0.1871370 0.1794319	0.1767368	0.1717271	0.1985778	0.1841458	0.1846	AVRG		5.2291
10)MCA	1,1-Dichloroethylene			0.1463100	0.1866060 0.1376620	0.1644416	0.1375065	0.1478785	0.1253868	0.1494	AVRG		13.6035
11)MA	Iodomethane			0.2389821	0.2398002 0.2445433	0.2409558	0.2398242	0.2475025	0.2208403	0.2389	AVRG		3.5757
12)MA	Acetonitrile			0.2471140	0.2444391 0.2442657	0.2568896	0.2483905	0.2612671	0.2249439	0.2468	AVRG		4.6894
13)MA	Methyl acetate			0.0283547	0.0347170 0.0256546	0.0322725	0.0285058	0.0304863	0.0249732	0.0293	AVRG		11.9223
14)MA	Carbon disulfide			0.1652002	0.1815060 0.1485899	0.1773876	0.1581228	0.1758673	0.1361690	0.1633	AVRG		10.2209
15)MA	Methylene chloride			0.4578684	0.5050741 0.4584238	0.5194211	0.5014662	0.5065645	0.4033217	0.4789	AVRG		8.5995
16)MA	tert-Butyl methyl ether	0.0023	0.1884	347452	11571 651820	21218	39402	76880	131269		LINR		0.9995
				0.5036196	0.4725751 0.4964892	0.5978178	0.4559781	0.5175164	0.4382739	0.4975	AVRG		10.4953

# Response Factor Report VOA5

GEL Laboratories, LLC

Method File : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M

Last Update : Tue Mar 09 07:08:19 2010

Integrator : (RTE Integrator)

Response via : Initial Calibration

For Linear Calibration:  $y = \text{concentration ratio}$ ,  $x = \text{response ratio}$ .  $y = b + m_1(x) + m_2(xE2)$

b		Compound		8	1	2	3	4	5	Avg	Curve	Exp	%RSD/r <sup>2</sup>
		m1	m2	6	7								
17)MA	trans-1,2-Dichloroethylene			0.2628117	0.2484881	0.2741276	0.2591751	0.2691941	0.2403411	0.2598	AVRG		4.5316
18)MA	Vinyl acetate			0.4300924	0.4257145	0.3882024	0.3995826	0.4134088	0.4228412	0.4091	AVRG		4.5605
19)MPA	1,1-Dichloroethane			0.3302035	0.3142904	0.3229238	0.3125231	0.3367887	0.3058631	0.3217	AVRG		3.4802
20)MA	2-Butanone			0.1882036	0.1936957	0.1811767	0.1647833	0.1816863	0.1545487	0.1780	AVRG		7.6550
21)MA	cis-1,2-Dichloroethylene			0.3090002	0.2816842	0.3216599	0.2968513	0.3189112	0.2809374	0.3022	AVRG		5.4422
22)MA	2,2-Dichloropropane			0.2371246	0.2583557	0.2487143	0.2316248	0.2394110	0.2202251	0.2385	AVRG		5.1515
23)MA	Bromochloromethane			0.0955632	0.0843041	0.0899282	0.0830960	0.0936185	0.0838221	0.0893	AVRG		6.1291
24)MCA	Chloroform			0.2968630	0.2880392	0.2944044	0.2766864	0.2987853	0.2690593	0.2882	AVRG		3.8825
25)MA	1,1,1-Trichloroethane			0.2446109	0.2341424	0.2408483	0.2355644	0.2432168	0.2237423	0.2377	AVRG		3.0518
26)MA	Cyclohexane			0.3362899	0.3377261	0.3632086	0.3428843	0.3469778	0.3103599	0.3381	AVRG		4.8083
27)MA	1,1-Dichloropropene			0.2203338	0.2256423	0.2194822	0.2171957	0.2254819	0.2043886	0.2180	AVRG		3.3958
28)MA	Carbon tetrachloride			0.2111430	0.1982649	0.2143055	0.1985177	0.2044374	0.1914744	0.2039	AVRG		4.0179
29)SA	1,2-Dichloroethane-d4			0.2469049	0.2362522	0.2336174	0.2380253	0.2497712	0.2396695	0.2420	AVRG		2.6779
30)MA	1,2-Dichloroethane			0.2554033	0.2479518	0.2572257	0.2440949	0.2612232	0.2285764	0.2490	AVRG		4.3389
31)MA	Benzene			0.7207210	0.7418443	0.7731024	0.7153431	0.7479119	0.6649804	0.7238	AVRG		4.8270

Response Factor Report VOA5  
GEL Laboratories, LLC

Method File : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M

Last Update : Tue Mar 09 07:08:19 2010

Integrator : (RTE Integrator)

Response via : Initial Calibration

For Linear Calibration:  $y = \text{concentration ratio}$ ,  $x = \text{response ratio}$ .  $y = b + m_1(x) + m_2(xE2)$

b		Compound		8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r <sup>2</sup>
32)MA	Cyclohexene			0.3339520	0.3123061 0.3234949	0.3866319	0.3393842	0.3509290	0.3080677	0.3364	AVRG		7.9572
33)MA	n-Butyl alcohol			19260 1408012	34213 2352134	56344	121141	269492	466484		LINR	#	0.9947
34)MA	Trichloroethylene			0.1724887	0.1816132 0.1698750	0.1780411	0.1681998	0.1729789	0.1601051	0.1719	AVRG		4.0477
35)MA	1,2-Dichloropropane			0.2087711	0.2111626 0.2051990	0.2097606	0.1902748	0.2128689	0.1930853	0.2044	AVRG		4.4358
36)MA	Methylcyclohexane			0.3125154	0.3236754 0.2954954	0.3376340	0.3191597	0.3187083	0.2915431	0.3141	AVRG		5.1167
37)MA	Dibromomethane			0.1147921	0.0958611 0.1112747	0.1022045	0.0940684	0.1106872	0.0984524	0.1039	AVRG		7.9840
38)MA	Bromodichloromethane			0.2331295	0.1958516 0.2322850	0.2002811	0.2032170	0.2187202	0.2032823	0.2124	AVRG		7.3274
39)MA	2-Chloroethylvinyl ether			0.0686203	0.0564924 0.0652642	0.0601502	0.0771933	0.0701491	0.0593383	0.0653	AVRG		11.1044
40)MA	cis-1,3-Dichloropropylene			0.3125399	0.2818987 0.3029780	0.2841853	0.2759376	0.3026459	0.2752061	0.2908	AVRG		5.1555
42)MA	4-Methyl-2-pentanone			0.1271094	0.1231600 0.1177079	0.1229976	0.1118485	0.1258398	0.1083137	0.1196	AVRG		6.0173
43)SA	Toluene-d8			1.2721004	1.2715773 1.2960357	1.2614345	1.2794096	1.2985942	1.2717942	1.2787	AVRG		1.0765
44)MCA	Toluene			1.0348743	1.1518044 0.9819176	1.1664465	1.0787639	1.0942945	1.0060419	1.0734	AVRG		6.5499
45)MA	trans-1,3-Dichloropropyl			0.3858636	0.3568487 0.3673651	0.3722761	0.3512502	0.3821534	0.3436649	0.3656	AVRG		4.3186
46)MA	1,1,2-Trichloroethane			0.1865070	0.1809477 0.1759586	0.1909377	0.1747003	0.1892881	0.1696366	0.1811	AVRG		4.4615
47)MA	2-Hexanone			0.3467953	0.3284339 0.3313724	0.3316048	0.3042837	0.3395084	0.2907043	0.3247	AVRG		6.1423

Response Factor Report VOA5  
GEL Laboratories, LLC

Method File : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Last Update : Tue Mar 09 07:08:19 2010  
Integrator : (RTE Integrator)

Response via : Initial Calibration

For Linear Calibration:  $y = \text{concentration ratio}$ ,  $x = \text{response ratio}$ .  $y = b + m_1(x) + m_2(xE_2)$

b	Compound	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r <sup>2</sup>
48)MA	1,3-Dichloropropane	0.4018238	0.3986847 0.3753277	0.3941649	0.3766925	0.4132373	0.3644275	0.3892	AVRG		4.4680
49)MA	Tetrachloroethylene	0.1886479	0.2101304 0.1744663	0.2182619	0.2019552	0.1998049	0.1830335	0.1966	AVRG		7.8477
50)MA	Dibromochloromethane	0.2419406	0.2023411 0.2365549	0.2093074	0.1956150	0.2219088	0.2007112	0.2155	AVRG		8.4921
51)MA	1,2-Dibromoethane	0.2238521	0.2177735 0.2124675	0.2045353	0.1960736	0.2183057	0.1960958	0.2099	AVRG		5.3073
52)MPA	Chlorobenzene	0.6872590	0.7408323 0.6366570	0.7386193	0.6950357	0.7183845	0.6572330	0.6963	AVRG		5.6932
53)MA	1,1,1,2-Tetrachloroethane	0.2494816	0.2332060 0.2379202	0.2374976	0.2252816	0.2425499	0.2251908	0.2359	AVRG		3.7523
54)MCA	Ethylbenzene	1.1606703	1.3980293 1.0780788	1.3671495	1.2021431	1.2341387	1.1328429	1.2247	AVRG		9.7166
55)MA	m,p-Xylenes	0.4618127	0.4755362 0.4281219	0.4871003	0.4628331	0.4838482	0.4481627	0.4639	AVRG		4.4913
56)MA	o-Xylene	0.4689336	0.4805646 0.4384802	0.4947283	0.4674384	0.4872624	0.4439087	0.4688	AVRG		4.5189
57)MA	Styrene	0.7780846	0.6852095 0.7485180	0.6985634	0.6741433	0.7377851	0.6904055	0.7161	AVRG		5.4221
59)MPA	Bromoform	0.3074710	0.2425130 0.2932519	0.2628946	0.2525902	0.2877580	0.2590520	0.2722	AVRG		8.8146
60)MA	Isopropylbenzene	2.2318182	2.3943888 2.0444667	2.5037151	2.3076026	2.3716419	2.2055021	2.2942	AVRG		6.5198
61)SA	Bromofluorobenzene	0.9869307	1.0123469 0.9932836	1.0080037	1.0035486	1.0238053	0.9924612	1.0029	AVRG		1.2932
62)MPA	1,1,2,2-Tetrachloroethane	0.5917981	0.6871449 0.5341051	0.6275343	0.5716073	0.6108623	0.5337210	0.5938	AVRG		9.1753
63)MA	1,2,3-Trichloropropane	0.1663007	0.1542994 0.1462352	0.1701851	0.1567715	0.1717308	0.1442981	0.1585	AVRG		7.0291



Response Factor Report VOA5  
GEL Laboratories, LLC

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Last Update : Tue Mar 09 07:08:19 2010  
Integrator : (RTE Integrator)

Response via : Initial Calibration

For Linear Calibration:  $y = \text{concentration ratio}$ ,  $x = \text{response ratio}$ ,  $y = b + m_1(x) + m_2(xE2)$

b	Compound	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r <sup>2</sup>
64)MA	Bromobenzene	0.5547476	0.6486814 0.5243606	0.6270489	0.5549342	0.5944725	0.5351627	0.5771	AVRG		8.2053
65)MA	n-Propylbenzene	2.6188023	3.1428673 2.4230362	3.0740107	2.7659361	2.7519459	2.6123049	2.7698	AVRG		9.3207
66)MA	1,3,5-Trimethylbenzene	1.9147331	2.1140806 1.7809313	2.1176062	1.9345676	1.9838360	1.8693101	1.9593	AVRG		6.3245
67)MA	2-Chlorotoluene	0.5556979	0.6336821 0.5174526	0.6149888	0.5712532	0.5980658	0.5347064	0.5751	AVRG		7.4098
68)MA	4-Chlorotoluene	1.6724026	2.0033682 1.5676196	1.9506321	1.7393299	1.7773161	1.6165466	1.7610	AVRG		9.3178
69)MA	tert-Butylbenzene	0.4229275	0.5220044 0.3925972	0.5067096	0.4594991	0.4418889	0.4115510	0.4510	AVRG		10.7312
70)MA	1,2,4-Trimethylbenzene	1.9586218	2.1474948 1.8420857	2.1428091	1.9400417	2.0243304	1.8983398	1.9934	AVRG		5.9008
71)MA	sec-Butylbenzene	2.4689370	2.7713754 2.2728207	2.7409960	2.5556188	2.5245775	2.4127685	2.5353	AVRG		6.9611
72)MA	4-Isopropyltoluene	1.9874771	2.1276691 1.8512791	2.1644277	1.9988403	2.0283563	1.9476327	2.0151	AVRG		5.2660
73)MA	1,3-Dichlorobenzene	1.0613620	1.2393706 1.0114602	1.1735978	1.0546701	1.1091368	1.0209850	1.0958	AVRG		7.6742
74)MA	1,4-Dichlorobenzene	1.0794919	1.2623150 1.0206465	1.1764354	1.0887098	1.1479739	1.0224741	1.1140	AVRG		7.8575
75)MA	n-Butylbenzene	1.8731727	2.2862752 1.7525689	2.2057605	1.9471241	1.9465316	1.8399483	1.9788	AVRG		9.8883
76)MA	1,2-Dichlorobenzene	1.0422240	1.1619981 0.9895673	1.1046351	1.0096084	1.0812630	0.9841815	1.0534	AVRG		6.2618
77)MA	1,2-Dibromo-3-chloroprop	0.1172103	0.1466513 0.1082926	0.1103702	0.0987550	0.1134385	0.0964579	0.1130	AVRG		14.6986
78)MA	1,2,4-Trichlorobenzene	0.7207589	0.7703834 0.6948904	0.7294288	0.6781382	0.7096930	0.6624167	0.7094	AVRG		5.0317

Response via : Initial Calibration

For Linear Calibration:  $y = \text{concentration ratio}$ ,  $x = \text{response ratio}$ .  $y = b + m_1(x) + m_2(xE2)$

Compound			8	1	2	3	4	5	Avg	Curve	Exp	%RSD/r <sup>2</sup>
b	m1	m2	6	7								
79) MA Hexachlorobutadiene			0.4278299	0.4733681 0.4047082	0.4525326	0.4213133	0.4251323	0.4112408	0.4309	AVRG		5.5882
80) MA Naphthalene			1.7289583	1.6207382 1.6143553	1.6540963	1.4827854	1.6683802	1.5100228	1.6113	AVRG		5.4224
81) MA 1,2,3-Trichlorobenzene			0.6423302	0.6276676 0.6195878	0.6346658	0.5810652	0.6448961	0.5831963	0.6191	AVRG		4.3026
83) B Chlorotrifluoroethylene			0.0735216	0.0835210 0.0860804	0.0722722	0.0684897	0.0802235	0.0986873	0.0804	AVRG		12.7622
84) B 2-Chloro-1,1,1-trifluoro			0.1183741	0.1102455 0.1256300	0.1129374	0.1103017	0.1195944	0.1242927	0.1173	AVRG		5.4176
85) B Acrolein -0.0097   0.0306   0.00			221757	2624 537267	5641	16329	36743	72786		LINR		0.9903
86) B Trichlorotrifluoroethane			0.0405821	0.0459929 0.0499271	0.0456091	0.0440692	0.0471327	0.0405003	0.0448	AVRG		7.6523
87) B Isopropyl Alcohol			0.0156865	0.0132039 0.0168508	0.0133281	0.0136177	0.0152807	0.0167250	0.0150	AVRG		10.5258
88) B Allyl chloride			0.3013963	0.3545867 0.3247091	0.3325385	0.3315882	0.3447311	0.3139613	0.3291	AVRG		5.4472
89) B tert-Butyl Alcohol			0.0229193	0.0182895 0.0244880	0.0196806	0.0209845	0.0227963	0.0247242	0.0220	AVRG		11.0285
90) B Acrylonitrile			0.0699699	0.0715226 0.0753880	0.0684122	0.0745782	0.0754865	0.0711180	0.0724	AVRG		3.8849
91) B Isopropyl ether			0.7352384	0.7025458 0.7994663	0.6794811	0.6820459	0.7654787	0.7924311	0.7367	AVRG		6.8556
92) B 2-Chloro-1,3-butadiene			0.2159482	0.1980383 0.2496900	0.1966904	0.2032729	0.2213056	0.2015126	0.2124	AVRG		8.8880
93) B Ethyl tert-butyl ether			0.5377480	0.4313279 0.6133655	0.4816021	0.5236631	0.5726499	0.5688029	0.5327	AVRG		11.4695
94) B Ethyl acetate			0.1873901	0.2038656 0.1978070	0.1859171	0.1985214	0.2051710	0.1930163	0.1960	AVRG		3.8432

# Response Factor Report VOA5

GEL Laboratories, LLC

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Last Update : Tue Mar 09 07:08:19 2010

Integrator : (RTE Integrator)

Response via : Initial Calibration

For Linear Calibration:  $y = \text{concentration ratio}$ ,  $x = \text{response ratio}$ .  $y = b + m_1(x) + m_2(xE2)$

b		Compound		8	1	2	3	4	5	Avg	Curve	Exp	%RSD/r <sup>2</sup>
		m1	m2	6	7								
95)B	Propionitrile			0.0274167	0.0254057 0.0295674	0.0261084	0.0287780	0.0296110	0.0280571	0.0278	AVRG		5.8911
96)B	Methacrylonitrile			0.1462335	0.1576755 0.1544466	0.1461036	0.1559698	0.1612840	0.1496123	0.1530	AVRG		3.8305
97)B	Tetrahydrofuran			0.0649169	0.0717706 0.0687676	0.0675774	0.0711026	0.0723381	0.0676879	0.0692	AVRG		3.8938
98)B	Isobutyl alcohol			0.0077815	0.0071325 0.0076959	0.0063262	0.0072331	0.0073822	0.0074520	0.0073	AVRG	#	6.6246
99)B	Methyl tert-amyl ether			0.4244686	0.3693071 0.4894317	0.3868580	0.4285646	0.4452561	0.4538868	0.4283	AVRG		9.4811
100)B	Methyl methacrylate			0.1178945	0.1081095 0.1241707	0.1026339	0.1134532	0.1237597	0.1183364	0.1155	AVRG		6.9053
101)B	1,4-Dioxane			0.0021058	0.0019460 0.0022074	0.0018691	0.0020607	0.0021756	0.0020610	0.0021	AVRG	#	5.8304
102)B	2-Nitropropane			483598	8038 1057258	15631	44649	93248	187428		LINR		0.9974
104)B	Ethyl methacrylate	0.0083	0.0603	0.00	0.2614159 0.3151848	0.2550206	0.2945269	0.3244650	0.3086265	0.2951	AVRG		9.0970
106)B	1-Chlorohexane			0.4829755	0.5235250 0.5218822	0.4770701	0.4681758	0.5166419	0.5271408	0.5025	AVRG		5.0286
107)B	cis-1,4-Dichloro-2-buten			0.1870322	0.1796601 0.1976993	0.1700290	0.1860859	0.2007261	0.1875530	0.1870	AVRG		5.5493
108)B	Cyclohexanone				0.0139831	0.0143555	0.0153783	0.0164251	0.0167053	0.0154	AVRG		7.8679
109)B	trans-1,4-Dichloro-2-but			0.1744505	0.1664803 0.1845150	0.1640418	0.1749215	0.1913325	0.1771113	0.1761	AVRG		5.4159
110)B	Pentachloroethane			0.2461688	0.2534545 0.2701388	0.1993333	0.2360493	0.2598436	0.2423291	0.2439	AVRG		9.3035
111)B	Benzyl chloride			0.8579629	0.8960861 0.8906143	0.8542224	0.9170528	0.9675422	0.8839666	0.8953	AVRG		4.3075

# Response Factor Report VOA5

GEL Laboratories, LLC

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Integrator : (RTE Integrator)

Response via : Initial Calibration

For Linear Calibration:  $y = \text{concentration ratio}$ ,  $x = \text{response ratio}$ .  $y = b + m1(x) + m2(x^2)$

b	Compound	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r <sup>2</sup>
212)B	bis(2-Chloroisopropyl)et	0.3165820	0.3441093	0.3217389	0.3317707	0.3404966	0.3253184	0.3294	AVRG		3.0276

#) = Out of Range

## Continuing Calibration Summary

Client SDG: 10-2199

Instrument ID: VOA5.I

Injection Date 03-MAR-10 16:10

Data File: 030310V5\5A313.D

Init. Cal. Date(s) 03-MAR-10 11:52 - 03-MAR-10 19:3

Lab Sample ID W5VM100303-10

Quant Type ISTD

Method: 030310V5\VOA5-8260-030310.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
S 1,2-Dichloroethane-d4	0.242	0.24421		.01		0.91322	30		Averaged	
S Toluene-d8	1.2787	1.27452		.01		-0.32689	30		Averaged	
S Bromofluorobenzene	1.0029	0.99178		.01		-1.10878	30		Averaged	
Dichlorodifluoromethane	0.1167	0.10877		.01		-6.7952	30		Averaged	
Chloromethane	50	47.23	50			-5.54	30		Linear	spcc
Vinyl chloride	0.1232	0.11935		.01		-3.125	20		Averaged	ccc
Bromomethane	0.1177	0.1182		.01		0.42481	30		Averaged	
Chloroethane	0.1249	0.12029		.01		-3.69095	30		Averaged	
Trichlorofluoromethane	0.2144	0.21193		.01		-1.15205	30		Averaged	
Ethyl ether	0.1846	0.17033		.01		-7.73023	30		Averaged	
1,1-Dichloroethylene	0.2389	0.22217		.01		-7.00293	20		Averaged	ccc
Acetone	0.1494	0.11803		.01		-20.99732	40		Averaged	
Iodomethane	0.2468	0.23547		.01		-4.59076	30		Averaged	
Methyl acetate	0.1633	0.14216		.01		-12.9455	40		Averaged	
Carbon disulfide	0.4789	0.4718		.01		-1.48256	30		Averaged	
Acetonitrile	0.0293	0.02521		.01		-13.95904	30		Averaged	
Methylene chloride	50	47.91	50			-4.18	30		Linear	
tert-Butyl methyl ether	0.4975	0.4619		.01		-7.15578	30		Averaged	
trans-1,2-Dichloroethylene	0.2598	0.24929		.01		-4.04542	30		Averaged	
Vinyl acetate	0.4091	0.41961		.01		2.56905	40		Averaged	
1,1-Dichloroethane	0.3217	0.31699		.1		-1.4641	30		Averaged	spcc
2-Butanone	0.178	0.14855		.01		-16.54494	40		Averaged	
2,2-Dichloropropane	0.2385	0.22482		.01		-5.73585	30		Averaged	
cis-1,2-Dichloroethylene	0.3022	0.29612		.01		-2.01191	30		Averaged	
Chloroform	0.2882	0.28311		.01		-1.76613	20		Averaged	ccc
Bromochloromethane	0.0893	0.09141		.01		2.36282	30		Averaged	
1,1,1-Trichloroethane	0.2377	0.23371		.01		-1.67859	30		Averaged	
Cyclohexane	0.3381	0.32396		.01		-4.18219	30		Averaged	
1,1-Dichloropropene	0.218	0.20984		.01		-3.74312	30		Averaged	
Carbon tetrachloride	0.2039	0.20004		.01		-1.89308	30		Averaged	
Benzene	0.7238	0.68663		.01		-5.1354	30		Averaged	
1,2-Dichloroethane	0.249	0.23966		.01		-3.751	30		Averaged	
Cyclohexene	0.3364	0.31082		.01		-7.60404	30		Averaged	
n-Butyl alcohol	5000	4684.67	5000			-6.3066	40		Linear	
Trichloroethylene	0.1719	0.16611		.01		-3.36824	30		Averaged	
Methylcyclohexane	0.3141	0.28966		.01		-7.78096	30		Averaged	
1,2-Dichloropropane	0.2044	0.1998		.01		-2.25049	20		Averaged	ccc

## Continuing Calibration Summary

Instrument ID: VOA5.1

Injection Date 03-MAR-10 16:10

Data File: 030310V5\5A313.D

Init. Cal. Date(s) 03-MAR-10 11:52 03-MAR-10 19:3

Lab Sample ID W5VM100303-10

Quant Type ISTD

Method: 030310V5\VOA5-8260-030310.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	% D / %Drift	Max	Drift Q	Curve Type	
Dibromomethane	0.1039	0.10512		.01		1.17421	30		Averaged	
Bromodichloromethane	0.2124	0.22108		.01		4.08663	30		Averaged	
2-Chloroethylvinyl ether	0.0653	0.06282		.01		-3.79786	30		Averaged	
cis-1,3-Dichloropropylene	0.2908	0.28903		.01		-0.60867	30		Averaged	
4-Methyl-2-pentanone	0.1196	0.1091		.01		-8.77926	40		Averaged	
Toluene	1.0734	0.98913		.01		-7.85075	20		Averaged	ccc
trans-1,3-Dichloropropylene	0.3656	0.35772		.01		-2.15536	30		Averaged	
1,1,2-Trichloroethane	0.1811	0.17385		.01		-4.00331	30		Averaged	
2-Hexanone	0.3247	0.27267		.01		-16.02402	40		Averaged	
Tetrachloroethylene	0.1966	0.1809		.01		-7.98576	30		Averaged	
1,3-Dichloropropane	0.3892	0.36897		.01		-5.19784	30		Averaged	
Dibromochloromethane	0.2155	0.21995		.01		2.06497	30		Averaged	
1,2-Dibromoethane	0.2099	0.20474		.01		-2.45831	30		Averaged	
Chlorobenzene	0.6963	0.65948		.3		-5.28795	30		Averaged	spcc
Ethylbenzene	1.2247	1.10154		.01		-10.05634	20		Averaged	ccc
1,1,1,2-Tetrachloroethane	0.2359	0.23427		.01		-0.69097	30		Averaged	
m,p-Xylenes	0.4639	0.43751		.01		-5.68873	30		Averaged	
o-Xylene	0.4688	0.44327		.01		-5.44582	30		Averaged	
Styrene	0.7161	0.73277		.01		2.32789	30		Averaged	
Bromoform	0.2722	0.28094		.1		3.21087	30		Averaged	spcc
Isopropylbenzene	2.2942	2.10689		.01		-8.1645	30		Averaged	
1,1,2,2-Tetrachloroethane	0.5938	0.5349		.3		-9.91916	30		Averaged	spcc
n-Propylbenzene	2.7698	2.4928		.01		-10.00072	30		Averaged	
1,2,3-Trichloropropane	0.1585	0.14961		.01		-5.60883	30		Averaged	
Bromobenzene	0.5771	0.53865		.01		-6.66262	30		Averaged	
1,3,5-Trimethylbenzene	1.9593	1.81472		.01		-7.37917	30		Averaged	
2-Chlorotoluene	0.5751	0.532		.01		-7.49435	30		Averaged	
4-Chlorotoluene	1.761	1.61118		.01		-8.50767	30		Averaged	
tert-Butylbenzene	0.451	0.39993		.01		-11.32373	30		Averaged	
1,2,4-Trimethylbenzene	1.9934	1.86402		.01		-6.49042	30		Averaged	
sec-Butylbenzene	2.5353	2.31846		.01		-8.55283	30		Averaged	
4-Isopropyltoluene	2.0151	1.87648		.01		-6.87906	30		Averaged	
1,3-Dichlorobenzene	1.0958	1.02852		.01		-6.13981	30		Averaged	
1,4-Dichlorobenzene	1.114	1.04673		.01		-6.0386	30		Averaged	
n-Butylbenzene	1.9788	1.7573		.01		-11.19365	30		Averaged	
1,2-Dichlorobenzene	1.0534	0.99705		.01		-5.34934	30		Averaged	
1,2-Dibromo-3-chloropropane	0.113	0.10451		.01		-7.51327	30		Averaged	

## Continuing Calibration Summary

Page 3 of 3

Instrument ID: VOA5.I

Injection Date 03-MAR-10 16:10

Data File: 030310V5\5A313.D

Init. Cal. Date(s) 03-MAR-10 11:52 03-MAR-10 19:3

Lab Sample ID W5VM100303-10 Quant Type ISTD

Method: 030310V5\VOA5-8260-030310.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
1,2,4-Trichlorobenzene	0.7094	0.69168		.01		-2.49789	30		Averaged
Hexachlorobutadiene	0.4309	0.41116		.01		-4.58111	30		Averaged
Naphthalene	1.6113	1.57133		.01		-2.48061	30		Averaged
1,2,3-Trichlorobenzene	0.6191	0.62516		.01		0.97884	30		Averaged

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030310V5\  
Data File : 5A313.D  
Acq On : 3 Mar 2010 4:10 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |W5VM100303-10|ICV|1|VOA|1|  
Misc : ICV 5mL - MIX[A] 0220-01C+0301-01  
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 09 07:22:02 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	8.391	8.387	1.000	96	1746399	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1312296	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.416	13.413	1.000	152	682831	50.00	ug/L	0.00
82) B Fluorobenzene	8.391	8.391	1.000	96	1746399	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1312296	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.416	13.413	1.000	152	682831	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	426493	50.46	ug/L	0.00
43) Toluene-d8	9.724	9.721	0.873	98	1672551	49.84	ug/L	0.00
61) Bromofluorobenzene	12.260	12.260	0.914	95	677221	49.45	ug/L	0.00
Target Compounds								QValue
2) Dichlorodifluoromethane	4.668	4.668	0.556	85	189950	46.58	ug/L	96
3) Chloromethane	4.900	4.900	0.584	50	245590	47.23	ug/L	97
4) Vinyl chloride	5.041	5.041	0.601	62	208439	48.43	ug/L	97
5) Bromomethane	5.434	5.423	0.648	94	206417	50.22	ug/L	99
6) Chloroethane	5.504	5.504	0.656	64	210081	48.14	ug/L	99
7) Trichlorofluoromethane	5.705	5.695	0.680	101	370114	49.41	ug/L	99
8) Ethyl ether	5.867	5.866	0.699	59	297471	46.12	ug/L	97
9) Acetone	6.174	6.174	0.736	43	1030674	197.52	ug/L	99
10) 1,1-Dichloroethylene	6.156	6.156	0.734	61	387994	46.49	ug/L	99
11) Iodomethane	6.361	6.357	0.758	142	2056129	238.56	ug/L	99
12) Acetonitrile	6.464	6.464	0.770	41	1100599	1076.16	ug/L	98
13) Methyl acetate	6.365	6.365	0.759	43	1241350	217.69	ug/L	99
14) Carbon disulfide	6.435	6.435	0.767	76	4119792	246.31	ug/L	100
15) Methylene chloride	6.538	6.538	0.779	84	319169	47.91	ug/L	99
16) tert-Butyl methyl ether	6.641	6.640	0.791	73	806665	46.43	ug/L	99
17) trans-1,2-Dichloroethy...	6.715	6.715	0.800	61	435366	47.98	ug/L	99
18) Vinyl acetate	6.969	6.969	0.831	43	3664023	256.42	ug/L	100
19) 1,1-Dichloroethane	7.072	7.068	0.843	63	553584	49.26	ug/L	100
20) 2-Butanone	7.450	7.450	0.888	43	1297140	208.64	ug/L	100
21) cis-1,2-Dichloroethylene	7.507	7.507	0.895	61	517143	48.99	ug/L	100
22) 2,2-Dichloropropane	7.514	7.514	0.895	77	392633	47.14	ug/L	98
23) Bromochloromethane	7.723	7.719	0.920	128	159635	51.20	ug/L	98
24) Chloroform	7.702	7.701	0.918	83	494431	49.12	ug/L	100
25) 1,1,1-Trichloroethane	7.903	7.906	0.942	97	408147	49.16	ug/L	99
26) Cyclohexane	7.924	7.924	0.944	56	565761	47.91	ug/L	99
27) 1,1-Dichloropropene	8.009	8.005	0.954	75	366466	48.13	ug/L	99
28) Carbon tetrachloride	8.023	8.020	0.956	117	349351	49.06	ug/L	100
30) 1,2-Dichloroethane	8.235	8.235	0.981	62	418545	48.12	ug/L	100
31) Benzene	8.200	8.203	0.977	78	1199124	47.43	ug/L	100
32) Cyclohexene	8.250	8.246	0.983	67	542810	46.20	ug/L	99
33) n-Butyl alcohol	8.377	8.377	0.998	56	1150973	4684.67	ug/L	99
34) Trichloroethylene	8.678	8.677	1.034	95	290093	48.32	ug/L	99
35) 1,2-Dichloropropane	8.929	8.932	1.064	63	348926	48.86	ug/L	100
36) Methylcyclohexane	8.830	8.826	1.052	83	505866	46.11	ug/L	98
37) Dibromomethane	9.063	9.059	1.080	93	183578	50.58	ug/L	99
38) Bromodichloromethane	9.113	9.112	1.086	83	386094	52.04	ug/L	99
39) 2-Chloroethylvinyl ether	9.254	9.254	1.103	63	548585	240.47	ug/L	100
40) cis-1,3-Dichloropropylene	9.484	9.487	1.130	75	504766	49.70	ug/L	99



Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030310V5\  
Data File : 5A313.D  
Acq On : 3 Mar 2010 4:10 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |W5VM100303-10|ICV|1|VOA|1|  
Misc : ICV 5mL - MIX[A] 0220-01C+0301-01  
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 09 07:22:02 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
42) 4-Methyl-2-pentanone	9.530	9.526	0.855	58	715875	228.12	ug/L	99
44) Toluene	9.788	9.788	0.878	91	1298029	46.07	ug/L	100
45) trans-1,3-Dichloroprop...	9.968	9.968	0.895	75	469439	48.92	ug/L	99
46) 1,1,2-Trichloroethane	10.173	10.173	0.913	83	228140	47.99	ug/L	98
47) 2-Hexanone	10.280	10.279	0.923	43	1789138	209.96	ug/L	100
48) 1,3-Dichloropropane	10.364	10.364	0.930	76	484201	47.40	ug/L	99
49) Tetrachloroethylene	10.290	10.290	0.924	164	237399	46.00	ug/L	99
50) Dibromochloromethane	10.584	10.583	0.950	129	288635	51.04	ug/L	99
51) 1,2-Dibromoethane	10.775	10.771	0.967	107	268682	48.78	ug/L	98
52) Chlorobenzene	11.174	11.174	1.003	112	865428	47.36	ug/L	99
53) 1,1,1,2-Tetrachloroethane	11.217	11.216	1.007	131	307438	49.66	ug/L	100
54) Ethylbenzene	11.181	11.181	1.003	91	1445541	44.97	ug/L	99
55) m,p-Xylenes	11.280	11.280	1.012	106	1148282	94.31	ug/L	99
56) o-Xylene	11.701	11.701	1.050	106	581707	47.28	ug/L	99
57) Styrene	11.715	11.715	1.051	104	961606	51.16	ug/L	94
59) Bromoform	12.005	12.005	0.895	173	191832	51.60	ug/L	100
60) Isopropylbenzene	12.016	12.016	0.896	105	1438651	45.92	ug/L	100
62) 1,1,2,2-Tetrachloroethane	12.352	12.348	0.921	83	365248	45.04	ug/L	100
63) 1,2,3-Trichloropropane	12.451	12.454	0.928	110	102156	47.18	ug/L #	93
64) Bromobenzene	12.465	12.465	0.929	156	367810	46.67	ug/L	98
65) n-Propylbenzene	12.419	12.415	0.926	91	1702161	45.00	ug/L	99
66) 1,3,5-Trimethylbenzene	12.564	12.564	0.936	105	1239147	46.31	ug/L	100
67) 2-Chlorotoluene	12.599	12.596	0.939	126	363269	46.25	ug/L #	80
68) 4-Chlorotoluene	12.698	12.698	0.946	91	1100162	45.75	ug/L	100
69) tert-Butylbenzene	12.903	12.900	0.962	134	273083	44.34	ug/L	99
70) 1,2,4-Trimethylbenzene	12.957	12.956	0.966	105	1272813	46.76	ug/L	99
71) sec-Butylbenzene	13.119	13.119	0.978	105	1583116	45.72	ug/L	99
72) 4-Isopropyltoluene	13.232	13.229	0.986	119	1281322	46.56	ug/L	100
73) 1,3-Dichlorobenzene	13.353	13.349	0.995	146	702303	46.93	ug/L	100
74) 1,4-Dichlorobenzene	13.441	13.441	1.002	146	714738	46.98	ug/L	99
75) n-Butylbenzene	13.653	13.653	1.018	91	1199936	44.40	ug/L	100
76) 1,2-Dichlorobenzene	13.858	13.858	1.033	146	680815	47.33	ug/L	100
77) 1,2-Dibromo-3-chloropr...	14.705	14.704	1.096	157	71362	46.23	ug/L	97
78) 1,2,4-Trichlorobenzene	15.620	15.619	1.164	180	472299	48.75	ug/L	99
79) Hexachlorobutadiene	15.686	15.686	1.169	225	280754	47.71	ug/L	98
80) Naphthalene	15.989	15.988	1.192	128	1072953	48.76	ug/L	100
81) 1,2,3-Trichlorobenzene	16.291	16.291	1.214	180	426882	50.49	ug/L	99
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.		
85) Acrolein	5.967	6.082	0.711		0m	N.D.	d	
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.		
87) Isopropyl Alcohol	6.167	6.163	0.735		0m	N.D.	d	
88) Allyl chloride	6.464	6.425	0.770		0m	N.D.	d	
89) tert-Butyl Alcohol	6.460	6.460	0.770		0m	N.D.	d	
90) Acrylonitrile	6.683	6.747	0.796		0m	N.D.	d	
91) Isopropyl ether	6.916	6.920	0.824		0m	N.D.	d	
92) 2-Chloro-1,3-butadiene	7.033	7.104	0.838		0m	N.D.	d	
93) Ethyl tert-butyl ether	7.196	7.192	0.858		0m	N.D.	d	
94) Ethyl acetate	7.376	7.383	0.879		0m	N.D.	d	
95) Propionitrile	7.663	7.585	0.913		0m	N.D.	d	
96) Methacrylonitrile	7.673	7.680	0.914		0m	N.D.	d	
97) Tetrahydrofuran	7.712	7.716	0.919		0m	N.D.	d	

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030310V5\  
Data File : 5A313.D  
Acq On : 3 Mar 2010 4:10 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |W5VM100303-10|ICV|1|VOA|1|  
Misc : ICV 5mL - MIX[A] 0220-01C+0301-01  
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 09 07:22:02 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
98) Isobutyl alcohol	7.673	7.857	0.914		0m	N.D.	d
99) Methyl tert-amyl ether	8.119	8.122	0.968		0m	N.D.	d
100) Methyl methacrylate	8.830	8.801	1.052		0m	N.D.	d
101) 1,4-Dioxane	9.056	8.957	1.079		0m	N.D.	d
102) 2-Nitropropane	9.353	9.342	1.115		0m	N.D.	d
104) Ethyl methacrylate	9.869	9.859	0.886		0m	N.D.	d
106) 1-Chlorohexane	11.050	10.980	0.824		0m	N.D.	d
107) cis-1,4-Dichloro-2-butene	12.012	12.136	0.895		0m	N.D.	d
108) Cyclohexanone	12.267	12.267	0.914		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	12.415	12.412	0.925		0m	N.D.	d
110) Pentachloroethane	13.020	13.017	0.970		0m	N.D.	d
111) Benzyl chloride	13.558	13.565	1.011		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	13.926	13.929	1.038		0m	N.D.	d

(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted

```

Data Path   : C:\msdchem\1\DATA\030310V5\
Data File   : 5A313.D
Acq On      : 3 Mar 2010    4:10 pm
Operator    : CDS1
InstName    : VOA5
Sample      : |W5VM100303-10|ICV|1|VOA|1|
Misc        : ICV 5mL - MIX[A] 0220-01c+0301-01
ALS Vial    : 13      Sample Multiplier: 1

```

[illegible]

## Continuing Calibration Summary

Client SDG: 10-2199

Instrument ID: VOA5.1

Injection Date 03-MAR-10 20:27

Data File: 030310V5\5A323.D

Init. Cal. Date(s) 03-MAR-10 11:52 - 03-MAR-10 19:3

Lab Sample ID W5VM100303-18

Quant Type ISTD

Method: 030310V5\VOA5-8260-030310.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
S 1,2-Dichloroethane-d4	0.242	0.24732		.01		2.19835	30		Averaged
S Toluene-d8	1.2787	1.27239		.01		-0.49347	30		Averaged
S Bromofluorobenzene	1.0029	1.00377		.01		0.08675	30		Averaged
Chlorotrifluoroethylene	0.0804	0.08935		.01		11.13184	30		Averaged
2-Chloro-1,1,1-trifluoroethane	0.1173	0.12314		.01		4.97869	30		Averaged
Trichlorotrifluoroethane	0.0448	0.04225		.01		-5.69196	30		Averaged
Acrolein	250	209.83	250			-16.068	30		Linear
Isopropyl Alcohol	0.015	0.01636		.01		9.06667	40		Averaged
Allyl chloride	0.3291	0.29416		.01		-10.61683	30		Averaged
tert-Butyl Alcohol	0.022	0.02431		.01		10.5	40		Averaged
Acrylonitrile	0.0724	0.0686		.01		-5.24862	30		Averaged
Isopropyl ether	0.7367	0.73607		.01		-0.08552	30		Averaged
2-Chloro-1,3-butadiene	0.2124	0.22289		.01		4.93879	30		Averaged
Ethyl tert-butyl ether	0.5327	0.57757		.01		8.42313	30		Averaged
Ethyl acetate	0.196	0.17171		.01		-12.39286	40		Averaged
Propionitrile	0.0278	0.02682		.01		-3.52518	30		Averaged
Methacrylonitrile	0.153	0.14244		.01		-6.90196	30		Averaged
Tetrahydrofuran	0.0692	0.0645		.01		-6.79191	30		Averaged
Isobutyl alcohol	0.0073	0.00698		.01		-4.38356	40		Averaged
Methyl tert-amyl ether	0.4283	0.46461		.01		8.4777	30		Averaged
Methyl methacrylate	0.1155	0.1132		.01		-1.99134	30		Averaged
1,4-Dioxane	0.0021	0.00194		.01		-7.61905	40		Averaged
2-Nitropropane	250	229.4	250			-8.24	30		Linear
Ethyl methacrylate	0.2951	0.29405		.01		-0.35581	30		Averaged
1-Chlorohexane	0.5025	0.46939		.01		-6.58905	30		Averaged
cis-1,4-Dichloro-2-butene	0.187	0.18605		.01		-0.50802	30		Averaged
Cyclohexanone	0.0154	0.03579		.01		132.4026	40	*	Averaged
trans-1,4-Dichloro-2-butene	0.1761	0.17466		.01		-0.81772	30		Averaged
Pentachloroethane	0.2439	0.16659		.01		-31.69742	30	*	Averaged
Benzyl chloride	0.8953	0.78208		.01		-12.64604	30		Averaged
bis(2-Chloroisopropyl)ether	0.3294	0.30154		.01		-8.4578	30		Averaged

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030310V5\  
Data File : 5A323.D  
Acq On : 3 Mar 2010 8:27 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |W5VM100303-18|ICV|1|VOA|1|  
Misc : ICV 5mL - MIX[B] 0215-08A+0125-08E  
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Mar 09 07:08:25 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	8.387	8.387	1.000	96	1707267	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1280650	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	656283	50.00	ug/L	0.00
8) B Fluorobenzene	8.387	8.391	1.000	96	1707267	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1280650	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	656283	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.168	8.172	0.974	65	422235	51.10	ug/L	0.00
43) Toluene-d8	9.721	9.721	0.872	98	1629487	49.75	ug/L	0.00
61) Bromofluorobenzene	12.260	12.260	0.914	95	658756	50.04	ug/L	0.00
Target Compounds								QValue
2) Dichlorodifluoromethane	4.608	4.668	0.549		0m	N.D.	d	
3) Chloromethane	4.890	4.900	0.583		0m	N.D.	d	
4) Vinyl chloride	5.041	5.041	0.601		0m	N.D.	d	
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.695	0.000		0	N.D.		
8) Ethyl ether	5.866	5.866	0.699		0m	N.D.	d	
9) Acetone	6.160	6.174	0.734		0m	N.D.	d	
10) 1,1-Dichloroethylene	6.082	6.156	0.725		0m	N.D.	d	
11) Iodomethane	6.354	6.357	0.758		0m	N.D.	d	
12) Acetonitrile	6.340	6.464	0.756		0m	N.D.	d	
13) Methyl acetate	6.361	6.365	0.758		0m	N.D.	d	
14) Carbon disulfide	6.421	6.435	0.766		0m	N.D.	d	
15) Methylene chloride	6.538	6.538	0.779		0m	N.D.	d	
16) tert-Butyl methyl ether	6.644	6.640	0.792		0m	N.D.	d	
17) trans-1,2-Dichloroethy...	0.000	6.715	0.000		0	N.D.		
18) Vinyl acetate	6.793	6.969	0.810		0m	N.D.	d	
19) 1,1-Dichloroethane	7.100	7.068	0.847		0m	N.D.	d	
20) 2-Butanone	7.380	7.450	0.880		0m	N.D.	d	
21) cis-1,2-Dichloroethylene	7.482	7.507	0.892		0m	N.D.	d	
22) 2,2-Dichloropropane	7.514	7.514	0.896		0m	N.D.	d	
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	0.000	7.701	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	7.967	7.924	0.950		0m	N.D.	d	
27) 1,1-Dichloropropene	8.122	8.005	0.968		0m	N.D.	d	
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.207	8.203	0.978		0m	N.D.	d	
32) Cyclohexene	8.249	8.246	0.984		0m	N.D.	d	
33) n-Butyl alcohol	8.384	8.377	1.000		0m	N.D.	d	
34) Trichloroethylene	8.684	8.677	1.035		0m	N.D.	d	
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	8.840	8.826	1.054		0m	N.D.	d	
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.		
40) cis-1,3-Dichloropropylene	9.685	9.487	1.155		0m	N.D.	d	

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030310V5\  
Data File : 5A323.D  
Acq On : 3 Mar 2010 8:27 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |W5VM100303-18|ICV|1|VOA|1|  
Misc : ICV 5mL - MIX[B] 0215-08A+0125-08E  
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Mar 09 07:08:25 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
42) 4-Methyl-2-pentanone	9.519	9.526	0.854		0m	N.D.	d
44) Toluene	9.788	9.788	0.878		0m	N.D.	d
45) trans-1,3-Dichloroprop...	9.965	9.968	0.894		0m	N.D.	d
46) 1,1,2-Trichloroethane	10.290	10.173	0.924		0m	N.D.	d
47) 2-Hexanone	10.276	10.279	0.922		0m	N.D.	d
48) 1,3-Dichloropropane	10.364	10.364	0.930		0m	N.D.	d
49) Tetrachloroethylene	10.290	10.290	0.924		0m	N.D.	d
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	10.771	0.000		0	N.D.	
52) Chlorobenzene	11.178	11.174	1.003		0m	N.D.	d
53) 1,1,1,2-Tetrachloroethane	11.209	11.216	1.006		0m	N.D.	d
54) Ethylbenzene	11.209	11.181	1.006		0m	N.D.	d
55) m,p-Xylenes	11.284	11.280	1.013		0m	N.D.	d
56) o-Xylene	0.000	11.701	0.000		0	N.D.	
57) Styrene	11.712	11.715	1.051		0m	N.D.	d
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	12.019	12.016	0.896		0m	N.D.	d
62) 1,1,2,2-Tetrachloroethane	12.348	12.348	0.921		0m	N.D.	d
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	12.458	12.465	0.929		0m	N.D.	d
65) n-Propylbenzene	12.412	12.415	0.925		0m	N.D.	d
66) 1,3,5-Trimethylbenzene	12.567	12.564	0.937		0m	N.D.	d
67) 2-Chlorotoluene	12.599	12.596	0.939		0m	N.D.	d
68) 4-Chlorotoluene	12.702	12.698	0.947		0m	N.D.	d
69) tert-Butylbenzene	12.900	12.900	0.962		0m	N.D.	d
70) 1,2,4-Trimethylbenzene	12.953	12.956	0.966		0m	N.D.	d
71) sec-Butylbenzene	13.116	13.119	0.978		0m	N.D.	d
72) 4-Isopropyltoluene	13.324	13.229	0.993		0m	N.D.	d
73) 1,3-Dichlorobenzene	13.356	13.349	0.996		0m	N.D.	d
74) 1,4-Dichlorobenzene	13.434	13.441	1.002		0m	N.D.	d
75) n-Butylbenzene	13.650	13.653	1.018		0m	N.D.	d
76) 1,2-Dichlorobenzene	13.851	13.858	1.033		0m	N.D.	d
77) 1,2-Dibromo-3-chloropr...	0.000	14.704	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	15.620	15.619	1.165		0m	N.D.	d
79) Hexachlorobutadiene	0.000	15.686	0.000		0	N.D.	
80) Naphthalene	15.988	15.988	1.192		0m	N.D.	d
81) 1,2,3-Trichlorobenzene	16.284	16.291	1.214		0m	N.D.	d
83) Chlorotrifluoroethylene	4.608	4.608	0.549	116	457640	166.70	ug/L 98
84) 2-Chloro-1,1,1-trifluo...	5.111	5.111	0.609	118	630710	157.42	ug/L 99
85) Acrolein	6.078	6.082	0.725	56	203044	209.83	ug/L 100
86) Trichlorotrifluoroethane	6.071	6.071	0.724	85	360646	235.60	ug/L 99
87) Isopropyl Alcohol	6.163	6.163	0.735	45	1396118	2733.84	ug/L 100
88) Allyl chloride	6.425	6.425	0.766	41	2511086	223.48	ug/L 100
89) tert-Butyl Alcohol	6.457	6.460	0.770	59	2075409	2764.91	ug/L 91
90) Acrylonitrile	6.743	6.747	0.804	53	585578	237.02	ug/L 99
91) Isopropyl ether	6.916	6.920	0.825	45	1256662	49.96	ug/L 100
92) 2-Chloro-1,3-butadiene	7.104	7.104	0.847	53	380533	52.48	ug/L 99
93) Ethyl tert-butyl ether	7.192	7.192	0.857	59	986070	54.21	ug/L 100
94) Ethyl acetate	7.380	7.383	0.880	43	1465750	219.06	ug/L 100
95) Propionitrile	7.585	7.585	0.904	54	228923	240.74	ug/L 99
96) Methacrylonitrile	7.677	7.680	0.915	41	1215874	232.67	ug/L 99
97) Tetrahydrofuran	7.712	7.716	0.919	42	550635	233.15	ug/L 100

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030310V5\  
Data File : 5A323.D  
Acq On : 3 Mar 2010 8:27 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |W5VM100303-18|ICV|1|VOA|1|  
Misc : ICV 5mL - MIX[B] 0215-08A+0125-08E  
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Mar 09 07:08:25 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
98) Isobutyl alcohol	7.861	7.857	0.937	41	595640	2394.15	ug/L	98
99) Methyl tert-amyl ether	8.119	8.122	0.968	73	793220	54.25	ug/L	99
100) Methyl methacrylate	8.801	8.801	1.049	69	966318	245.07	ug/L	100
101) 1,4-Dioxane	8.957	8.957	1.068	88	165981	2358.78	ug/L	99
102) 2-Nitropropane	9.339	9.342	1.113	43	457968	229.40	ug/L	100
104) Ethyl methacrylate	9.859	9.859	0.885	69	1882867	249.08	ug/L	100
106) 1-Chlorohexane	10.976	10.980	0.818	55	308055	46.71	ug/L	100
107) cis-1,4-Dichloro-2-butene	12.136	12.136	0.905	53	610518	248.78	ug/L	99
108) Cyclohexanone	12.267	12.267	0.915	42	587226	2910.89	ug/L	99 E
109) trans-1,4-Dichloro-2-b...	12.412	12.412	0.925	53	573129	247.92	ug/L	99
110) Pentachloroethane	13.017	13.017	0.970	167	546649	170.75	ug/L	99
111) Benzyl chloride	13.565	13.565	1.011	91	2566329	218.37	ug/L	100
112) bis(2-Chloroisopropyl)...	13.925	13.929	1.038	45	989493	228.84	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted

```
Data Path : C:\msdchem\1\DATA\030310V5\  
Data File : 5A323.D  
Acq On : 3 Mar 2010 8:27 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |W5VM100303-18|ICV|1|VOA|1|  
Misc : ICV 5mL - MIX[B] 0215-08A+0125-08E  
ALS Vial : 23 Sample Multiplier: 1
```

Abundance

TIC: 5A323.D\data.ms

Time-->

Chlorotrifluoroethylene, B

2-Chloro-1,1,1-trifluoroethane, B

Isopropyl Alcohol, B

tert-Butyl Alcohol, B

Acrylonitrile, B

Isopropyl ether, B

2-Chloro-1,3-butadiene, B

Ethyl tert-butyl ether, B

Ethyl acetate, B

Propionitrile, B

Tetrahydrofuran, B

Methacrylonitrile, B

Isobutyl alcohol, B

Methyl tert-amyl ether, B

1,2-Dichloroethane, B

1,4-Dioxane, B

2-Nitropropane, B

Methyl methacrylate, B

Toluene-d8, SA

Ethyl methacrylate, B

1-Chlorohexane, B

Bromofluorobenzene, B

cis-1,4-Dichloro-2-butene, B

trans-1,4-Dichloro-2-butene, B

Pentachloroethane, B

Benzyl chloride, B

bis(2-Chloroisopropyl)ether, B



## Continuing Calibration Summary

Client SDG: 10-2199

Instrument ID: VOA5.I

Injection Date: 11-MAR-10 07:08

Data File: 031110V5\5B402.D

Init. Cal. Date(s) 03-MAR-10 11:52 - 03-MAR-10 19:3

Lab Sample ID W5VM100311-01

Quant Type ISTD

Method: 030310V5\VOA5-8260-030310.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
S 1,2-Dichloroethane-d4	0.242	0.17376		.01		-28.19835	30		Averaged	
S Toluene-d8	1.2787	1.06303		.01		-16.86635	30		Averaged	
S Bromofluorobenzene	1.0029	1.1393		.01		13.60056	30		Averaged	
Dichlorodifluoromethane	0.1167	0.12643		.01		8.33762	30		Averaged	
Chloromethane	50	54.56	50			9.12	30		Linear	spcc
Vinyl chloride	0.1232	0.13383		.01		8.62825	20		Averaged	ccc
Bromomethane	0.1177	0.12968		.01		10.17842	30		Averaged	
Chloroethane	0.1249	0.13049		.01		4.47558	30		Averaged	
Trichlorofluoromethane	0.2144	0.22904		.01		6.82836	30		Averaged	
Ethyl ether	0.1846	0.187		.01		1.30011	30		Averaged	
1,1-Dichloroethylene	0.2389	0.26778		.01		12.08874	20		Averaged	ccc
Acetone	0.1494	0.15952		.01		6.77376	40		Averaged	
Methyl acetate	0.1633	0.15954		.01		-2.30251	40		Averaged	
Iodomethane	0.2468	0.2636		.01		6.80713	30		Averaged	
Carbon disulfide	0.4789	0.52421		.01		9.46127	30		Averaged	
Acetonitrile	0.0293	0.02713		.01		-7.40614	30		Averaged	
Methylene chloride	50	50.7	50			1.4	30		Linear	
tert-Butyl methyl ether	0.4975	0.48299		.01		-2.91658	30		Averaged	
trans-1,2-Dichloroethylene	0.2598	0.28586		.01		10.03079	30		Averaged	
Vinyl acetate	0.4091	0.43942		.01		7.41139	40		Averaged	
1,1-Dichloroethane	0.3217	0.3495		.1		8.64159	30		Averaged	spcc
2-Butanone	0.178	0.21162		.01		18.88764	40		Averaged	
2,2-Dichloropropane	0.2385	0.26494		.01		11.08595	30		Averaged	
cis-1,2-Dichloroethylene	0.3022	0.3217		.01		6.45268	30		Averaged	
Chloroform	0.2882	0.3008		.01		4.37196	20		Averaged	ccc
Bromochloromethane	0.0893	0.09368		.01		4.90482	30		Averaged	
1,1,1-Trichloroethane	0.2377	0.26149		.01		10.00841	30		Averaged	
Cyclohexane	0.3381	0.38117		.01		12.73883	30		Averaged	
1,1-Dichloropropene	0.218	0.23983		.01		10.01376	30		Averaged	
Carbon tetrachloride	0.2039	0.23058		.01		13.08485	30		Averaged	
Benzene	0.7238	0.74333		.01		2.69826	30		Averaged	
1,2-Dichloroethane	0.249	0.25507		.01		2.43775	30		Averaged	
Cyclohexene	0.3364	0.36811		.01		9.42628	30		Averaged	
n-Butyl alcohol	5000	4961.07	5000			-0.7786	40		Linear	
Trichloroethylene	0.1719	0.17873		.01		3.97324	30		Averaged	
Methylcyclohexane	0.3141	0.33917		.01		7.98153	30		Averaged	
1,2-Dichloropropane	0.2044	0.21032		.01		2.89628	20		Averaged	ccc

## Continuing Calibration Summary

Instrument ID: VOA5.1

Injection Date 11-MAR-10 07:08

Data File: 031110V5\5B402.D

Init. Cal. Date(s) 03-MAR-10 11:52 03-MAR-10 19:3

Lab Sample ID W5VM100311-01

Quant Type 1STD

Method: 030310V5\VOA5-8260-030310.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
Dibromomethane	0.1039	0.11118		.01		7.00674	30		Averaged	
Bromodichloromethane	0.2124	0.22823		.01		7.45292	30		Averaged	
2-Chloroethylvinyl ether	0.0653	0.06227		.01		-4.64012	30		Averaged	
cis-1,3-Dichloropropylene	0.2908	0.30649		.01		5.39546	30		Averaged	
4-Methyl-2-pentanone	0.1196	0.13582		.01		13.56187	40		Averaged	
Toluene	1.0734	1.05847		.01		-1.39091	20		Averaged	ccc
trans-1,3-Dichloropropylene	0.3656	0.37657		.01		3.00055	30		Averaged	
1,1,2-Trichloroethane	0.1811	0.17707		.01		-2.22529	30		Averaged	
2-Hexanone	0.3247	0.3984		.01		22.69787	40		Averaged	
Tetrachloroethylene	0.1966	0.19737		.01		0.39166	30		Averaged	
1,3-Dichloropropane	0.3892	0.3832		.01		-1.54162	30		Averaged	
Dibromochloromethane	0.2155	0.22806		.01		5.82831	30		Averaged	
1,2-Dibromoethane	0.2099	0.20592		.01		-1.89614	30		Averaged	
Chlorobenzene	0.6963	0.68066		.3		-2.24616	30		Averaged	spcc
Ethylbenzene	1.2247	1.19182		.01		-2.68474	20		Averaged	ccc
1,1,1,2-Tetrachloroethane	0.2359	0.24382		.01		3.35735	30		Averaged	
m,p-Xylenes	0.4639	0.46855		.01		1.00237	30		Averaged	
o-Xylene	0.4688	0.46849		.01		-0.06613	30		Averaged	
Styrene	0.7161	0.75345		.01		5.21575	30		Averaged	
Bromoform	0.2722	0.2909		.1		6.86995	30		Averaged	spcc
Isopropylbenzene	2.2942	2.34093		.01		2.03688	30		Averaged	
1,1,2,2-Tetrachloroethane	0.5938	0.5569		.3		-6.21421	30		Averaged	spcc
n-Propylbenzene	2.7698	2.78278		.01		0.46863	30		Averaged	
1,2,3-Trichloropropane	0.1585	0.149		.01		-5.99369	30		Averaged	
Bromobenzene	0.5771	0.54546		.01		-5.48259	30		Averaged	
1,3,5-Trimethylbenzene	1.9593	1.97365		.01		0.7324	30		Averaged	
2-Chlorotoluene	0.5751	0.56871		.01		-1.11111	30		Averaged	
4-Chlorotoluene	1.761	1.69879		.01		-3.53265	30		Averaged	
tert-Butylbenzene	0.451	0.43948		.01		-2.55432	30		Averaged	
1,2,4-Trimethylbenzene	1.9934	2.00397		.01		0.53025	30		Averaged	
sec-Butylbenzene	2.5353	2.61728		.01		3.23354	30		Averaged	
4-Isopropyltoluene	2.0151	2.09278		.01		3.8549	30		Averaged	
1,3-Dichlorobenzene	1.0958	1.06026		.01		-3.24329	30		Averaged	
1,4-Dichlorobenzene	1.114	1.07102		.01		-3.85817	30		Averaged	
n-Butylbenzene	1.9788	2.00781		.01		1.46604	30		Averaged	
1,2-Dichlorobenzene	1.0534	1.00929		.01		-4.18739	30		Averaged	
1,2-Dibromo-3-chloropropane	0.113	0.10429		.01		-7.70796	30		Averaged	

## Continuing Calibration Summary

Instrument ID: VOA5.I

Injection Date 11-MAR-10 07:08

Data File: 031110V5\5B402.D

Init. Cal. Date(s) 03-MAR-10 11:52 03-MAR-10 19:3

Lab Sample ID W5VM100311-01 Quant Type ISTD

Method: 030310V5\VOA5-8260-030310.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
1,2,4-Trichlorobenzene	0.7094	0.7231		.01		1.93121	30		Averaged
Hexachlorobutadiene	0.4309	0.45124		.01		4.72035	30		Averaged
Naphthalene	1.6113	1.57746		.01		-2.10017	30		Averaged
1,2,3-Trichlorobenzene	0.6191	0.6246		.01		0.88839	30		Averaged

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B402.D  
Acq On : 11 Mar 2010 7:08 am  
Operator : CDS1  
InstName : VOA5  
Sample : |W5VM100311-01|CCV|1|VOA|1|  
Misc : CCV 5mL - MIX[A] 0222-07B+0106-07D  
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 11 07:21:23 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	8.388	8.387	1.000	96	1428247	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1072946	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	550065	50.00	ug/L	0.00
82) B Fluorobenzene	8.388	8.391	1.000	96	1428247	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1072946	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	550065	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	248173	35.90	ug/L	0.00
43) Toluene-d8	9.721	9.721	0.872	98	1140573	41.57	ug/L	0.00
61) Bromofluorobenzene	12.260	12.260	0.914	95	626687	56.80	ug/L	0.00
Target Compounds								QValue
2) Dichlorodifluoromethane	4.668	4.668	0.557	85	180577	54.15	ug/L	97
3) Chloromethane	4.900	4.900	0.584	50	231545	54.56	ug/L	98
4) Vinyl chloride	5.041	5.041	0.601	62	191148	54.31	ug/L	99
5) Bromomethane	5.423	5.423	0.647	94	185217	55.10	ug/L	99
6) Chloroethane	5.504	5.504	0.656	64	186367	52.22	ug/L	100
7) Trichlorofluoromethane	5.705	5.695	0.680	101	327129	53.40	ug/L	100
8) Ethyl ether	5.867	5.866	0.699	59	267078	50.64	ug/L	97
9) Acetone	6.170	6.174	0.736	43	1139153	266.93	ug/L	100
10) 1,1-Dichloroethylene	6.153	6.156	0.734	61	382453	56.04	ug/L	99
11) Iodomethane	6.358	6.357	0.758	142	1882423	267.06	ug/L	100
12) Acetonitrile	6.460	6.464	0.770	41	968733	1158.22	ug/L	97
13) Methyl acetate	6.361	6.365	0.758	43	1139323	244.30	ug/L	99
14) Carbon disulfide	6.435	6.435	0.767	76	3743515	273.67	ug/L	100
15) Methylene chloride	6.538	6.538	0.779	84	276081	50.70	ug/L	97
16) tert-Butyl methyl ether	6.637	6.640	0.791	73	689832	48.55	ug/L	100
17) trans-1,2-Dichloroethy...	6.711	6.715	0.800	61	408279	55.01	ug/L	98
18) Vinyl acetate	6.966	6.969	0.831	43	3138022	268.53	ug/L	99
19) 1,1-Dichloroethane	7.068	7.068	0.843	63	499179	54.32	ug/L	99
20) 2-Butanone	7.447	7.450	0.888	43	1511215	297.22	ug/L	99
21) cis-1,2-Dichloroethylene	7.507	7.507	0.895	61	459473	53.23	ug/L	98
22) 2,2-Dichloropropane	7.511	7.514	0.895	77	378395	55.55	ug/L	97
23) Bromochloromethane	7.719	7.719	0.920	128	133800	52.47	ug/L	96
24) Chloroform	7.701	7.701	0.918	83	429611	52.19	ug/L	100
25) 1,1,1-Trichloroethane	7.903	7.906	0.942	97	373475	55.01	ug/L	99
26) Cyclohexane	7.924	7.924	0.945	56	544405	56.37	ug/L	98
27) 1,1-Dichloropropene	8.006	8.005	0.954	75	342540	55.01	ug/L	98
28) Carbon tetrachloride	8.020	8.020	0.956	117	329324	56.55	ug/L	100
30) 1,2-Dichloroethane	8.235	8.235	0.982	62	364298	51.21	ug/L	98
31) Benzene	8.204	8.203	0.978	78	1061661	51.35	ug/L	96
32) Cyclohexene	8.246	8.246	0.983	67	525758	54.71	ug/L	100
33) n-Butyl alcohol	8.377	8.377	0.999	56	996336	4961.07	ug/L	98
34) Trichloroethylene	8.674	8.677	1.034	95	255271	51.99	ug/L	100
35) 1,2-Dichloropropane	8.929	8.932	1.065	63	300393	51.44	ug/L	100
36) Methylcyclohexane	8.830	8.826	1.053	83	484421	53.99	ug/L	98
37) Dibromomethane	9.059	9.059	1.080	93	158797	53.50	ug/L	98
38) Bromodichloromethane	9.113	9.112	1.086	83	325963	53.73	ug/L	99
39) 2-Chloroethylvinyl ether	9.254	9.254	1.103	63	444717	238.36	ug/L	99
40) cis-1,3-Dichloropropylene	9.487	9.487	1.131	75	437745	52.70	ug/L	100

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B402.D  
Acq On : 11 Mar 2010 7:08 am  
Operator : CDS1  
InstName : VOA5  
Sample : |W5VM100311-01|CCV|1|VOA|1|  
Misc : CCV 5mL - MIX[A] 0222-07B+0106-07D  
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 11 07:21:23 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
42) 4-Methyl-2-pentanone	9.526	9.526	0.855	58	728626	283.98	ug/L	97
44) Toluene	9.788	9.788	0.878	91	1135683	49.30	ug/L	100
45) trans-1,3-Dichloroprop...	9.965	9.968	0.894	75	404038	51.50	ug/L	100
46) 1,1,2-Trichloroethane	10.173	10.173	0.913	83	189984	48.88	ug/L	99
47) 2-Hexanone	10.280	10.279	0.923	43	2137325	306.77	ug/L	99
48) 1,3-Dichloropropane	10.364	10.364	0.930	76	411158	49.23	ug/L	98
49) Tetrachloroethylene	10.294	10.290	0.924	164	211765	50.19	ug/L	98
50) Dibromochloromethane	10.587	10.583	0.950	129	244701	52.92	ug/L	100
51) 1,2-Dibromoethane	10.771	10.771	0.967	107	220944	49.06	ug/L	99
52) Chlorobenzene	11.174	11.174	1.003	112	730310	48.88	ug/L	98
53) 1,1,1,2-Tetrachloroethane	11.213	11.216	1.006	131	261605	51.68	ug/L	99
54) Ethylbenzene	11.178	11.181	1.003	91	1278759	48.66	ug/L	99
55) m,p-Xylenes	11.280	11.280	1.012	106	1005462	101.00	ug/L	100
56) o-Xylene	11.701	11.701	1.050	106	502663	49.97	ug/L	99
57) Styrene	11.712	11.715	1.051	104	808412	52.61	ug/L	93
59) Bromoform	12.005	12.005	0.895	173	160013	53.43	ug/L	100
60) Isopropylbenzene	12.012	12.016	0.896	105	1287664	51.02	ug/L	100
62) 1,1,2,2-Tetrachloroethane	12.348	12.348	0.921	83	306333	46.89	ug/L	100
63) 1,2,3-Trichloropropane	12.454	12.454	0.929	110	81961	46.99	ug/L #	83
64) Bromobenzene	12.465	12.465	0.929	156	300038	47.26	ug/L	99
65) n-Propylbenzene	12.415	12.415	0.926	91	1530710	50.23	ug/L	99
66) 1,3,5-Trimethylbenzene	12.560	12.564	0.936	105	1085635	50.37	ug/L	100
67) 2-Chlorotoluene	12.596	12.596	0.939	126	312828	49.44	ug/L #	81
68) 4-Chlorotoluene	12.698	12.698	0.947	91	934443	48.23	ug/L	100
69) tert-Butylbenzene	12.903	12.900	0.962	134	241741	48.72	ug/L	100
70) 1,2,4-Trimethylbenzene	12.957	12.956	0.966	105	1102315	50.27	ug/L	99
71) sec-Butylbenzene	13.116	13.119	0.978	105	1439674	51.62	ug/L	100
72) 4-Isopropyltoluene	13.229	13.229	0.986	119	1151165	51.93	ug/L	99
73) 1,3-Dichlorobenzene	13.349	13.349	0.995	146	583210	48.38	ug/L	100
74) 1,4-Dichlorobenzene	13.437	13.441	1.002	146	589131	48.07	ug/L	100
75) n-Butylbenzene	13.653	13.653	1.018	91	1104427	50.73	ug/L	100
76) 1,2-Dichlorobenzene	13.858	13.858	1.033	146	555175	47.91	ug/L	100
77) 1,2-Dibromo-3-chloropr...	14.705	14.704	1.096	157	57365	46.13	ug/L	99
78) 1,2,4-Trichlorobenzene	15.612	15.619	1.164	180	397752	50.97	ug/L	100
79) Hexachlorobutadiene	15.686	15.686	1.169	225	248212	52.36	ug/L	99
80) Naphthalene	15.989	15.988	1.192	128	867708	48.95	ug/L	100
81) 1,2,3-Trichlorobenzene	16.291	16.291	1.215	180	343572	50.45	ug/L	99
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.		
85) Acrolein	0.000	6.082	0.000		0	N.D.		
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.		
87) Isopropyl Alcohol	6.177	6.163	0.736		0m	N.D.	d	
88) Allyl chloride	6.460	6.425	0.770		0m	N.D.	d	
89) tert-Butyl Alcohol	6.460	6.460	0.770		0m	N.D.	d	
90) Acrylonitrile	6.641	6.747	0.792		0m	N.D.	d	
91) Isopropyl ether	6.966	6.920	0.831		0m	N.D.	d	
92) 2-Chloro-1,3-butadiene	7.033	7.104	0.839		0m	N.D.	d	
93) Ethyl tert-butyl ether	7.051	7.192	0.841		0m	N.D.	d	
94) Ethyl acetate	7.376	7.383	0.879		0m	N.D.	d	
95) Propionitrile	7.670	7.585	0.914		0m	N.D.	d	
96) Methacrylonitrile	7.666	7.680	0.914		0m	N.D.	d	
97) Tetrahydrofuran	7.719	7.716	0.920		0m	N.D.	d	

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B402.D  
Acq On : 11 Mar 2010 7:08 am  
Operator : CDS1  
InstName : VOA5  
Sample : |W5VM100311-01|CCV|1|VOA|1|  
Misc : CCV 5mL - MIX[A] 0222-07B+0106-07D  
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 11 07:21:23 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

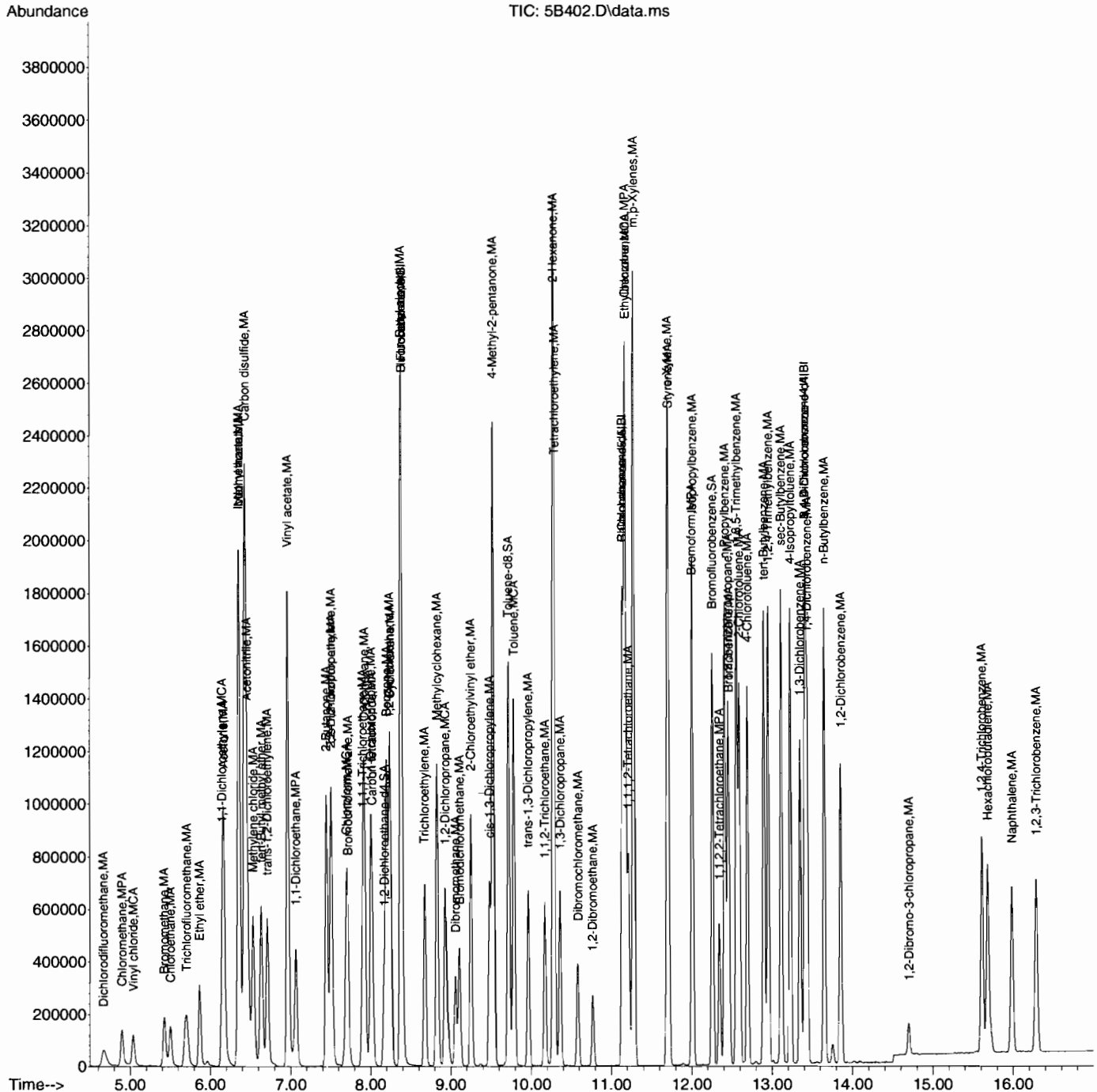
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
98) Isobutyl alcohol	7.747	7.857	0.924		0m	N.D.	d
99) Methyl tert-amyl ether	8.207	8.122	0.978		0m	N.D.	d
100) Methyl methacrylate	8.830	8.801	1.053		0m	N.D.	d
101) 1,4-Dioxane	9.063	8.957	1.081		0m	N.D.	d
102) 2-Nitropropane	9.371	9.342	1.117		0m	N.D.	d
104) Ethyl methacrylate	9.855	9.859	0.884		0m	N.D.	d
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	12.133	12.136	0.905		0m	N.D.	d
108) Cyclohexanone	12.263	12.267	0.914		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	12.415	12.412	0.926		0m	N.D.	d
110) Pentachloroethane	13.017	13.017	0.970		0m	N.D.	d
111) Benzyl chloride	13.568	13.565	1.012		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	13.915	13.929	1.037		0m	N.D.	d

(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B402.D  
Acq On : 11 Mar 2010 7:08 am  
Operator : CDS1  
InstName : VOA5  
Sample : |W5VM100311-01|CCV|1|VOA|1|  
Misc : CCV 5mL - MIX[A] 0222-07B+0106-07D  
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 11 07:21:23 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE



## Continuing Calibration Summary

Client SDG: 10-2199

Instrument ID: VOA5.I

Injection Date 11-MAR-10 08:27

Data File: 031110V5\5B405.D

Init. Cal. Date(s) 03-MAR-10 11:52 - 03-MAR-10 19:3

Lab Sample ID W5VM100311-04 Quant Type ISTD

Method: 030310V5\VOA5-8260-030310.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
S 1,2-Dichloroethane-d4	0.242	0.17886		.01		-26.09091	30		Averaged
S Toluene-d8	1.2787	1.06084		.01		-17.03762	30		Averaged
S Bromofluorobenzene	1.0029	1.15668		.01		15.33353	30		Averaged
Trichlorotrifluoroethane	0.0448	0.06026		.01		34.50893	30	*	Averaged
Acrolein	250	260.66	250			4.264	30		Linear
Allyl chloride	0.3291	0.29552		.01		-10.20359	30		Averaged
Acrylonitrile	0.0724	0.07077		.01		-2.25138	30		Averaged
2-Chloro-1,3-butadiene	0.2124	0.27591		.01		29.90113	30		Averaged
Ethyl acetate	0.196	0.179		.01		-8.67347	40		Averaged
Propionitrile	0.0278	0.0276		.01		-0.71942	30		Averaged
Methacrylonitrile	0.153	0.14848		.01		-2.95425	30		Averaged
Tetrahydrofuran	0.0692	0.06682		.01		-3.43931	30		Averaged
Isobutyl alcohol	0.0073	0.00693		.01		-5.06849	40		Averaged
Methyl methacrylate	0.1155	0.11451		.01		-0.85714	30		Averaged
1,4-Dioxane	0.0021	0.00181		.01		-13.80952	40		Averaged
2-Nitropropane	250	241.26	250			-3.496	30		Linear
Ethyl methacrylate	0.2951	0.29774		.01		0.89461	30		Averaged
cis-1,4-Dichloro-2-butene	0.187	0.2019		.01		7.96791	30		Averaged
Cyclohexanone	0.0154	0.0597		.01		287.66234	40	*	Averaged
trans-1,4-Dichloro-2-butene	0.1761	0.18941		.01		7.55821	30		Averaged
Pentachloroethane	0.2439	0.28721		.01		17.75728	30		Averaged
Benzyl chloride	0.8953	1.01427		.01		13.28828	30		Averaged
bis(2-Chloroisopropyl)ether	0.3294	0.29517		.01		-10.39162	30		Averaged



Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B405.D  
Acq On : 11 Mar 2010 8:27 am  
Operator : CDS1  
InstName : VOA5  
Sample : |W5VM100311-04|CCV|1|VOA|1|VOA8260BS|  
Misc : CCV 5G - SOIL MIX[B ]UVM100215-08B  
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 11 17:15:12 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	8.388	8.387	1.000	96	1397071	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1054675	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	537423	50.00	ug/L	0.00
82) B Fluorobenzene	8.388	8.391	1.000	96	1397071	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1054675	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	537423	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	249884	36.96	ug/L	0.00
43) Toluene-d8	9.721	9.721	0.872	98	1118838	41.48	ug/L	0.00
61) Bromofluorobenzene	12.260	12.260	0.914	95	621626	57.67	ug/L	0.00
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	4.668	0.000		0	N.D.		
3) Chloromethane	4.890	4.900	0.583		0m	N.D.	d	
4) Vinyl chloride	5.031	5.041	0.600		0m	N.D.	d	
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.695	0.000		0	N.D.		
8) Ethyl ether	5.867	5.866	0.699		0m	N.D.	d	
9) Acetone	6.170	6.174	0.736		0m	N.D.	d	
10) 1,1-Dichloroethylene	6.064	6.156	0.723		0m	N.D.	d	
11) Iodomethane	6.354	6.357	0.758		0m	N.D.	d	
12) Acetonitrile	6.421	6.464	0.766		0m	N.D.	d	
13) Methyl acetate	6.365	6.365	0.759		0m	N.D.	d	
14) Carbon disulfide	6.421	6.435	0.766		0m	N.D.	d	
15) Methylene chloride	6.542	6.538	0.780		0m	N.D.	d	
16) tert-Butyl methyl ether	6.634	6.640	0.791		0m	N.D.	d	
17) trans-1,2-Dichloroethy...	0.000	6.715	0.000		0	N.D.		
18) Vinyl acetate	6.973	6.969	0.831		0m	N.D.	d	
19) 1,1-Dichloroethane	7.104	7.068	0.847		0m	N.D.	d	
20) 2-Butanone	7.380	7.450	0.880		0m	N.D.	d	
21) cis-1,2-Dichloroethylene	7.380	7.507	0.880		0m	N.D.	d	
22) 2,2-Dichloropropane	0.000	7.514	0.000		0	N.D.		
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	0.000	7.701	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	7.854	7.924	0.936		0m	N.D.	d	
27) 1,1-Dichloropropene	8.122	8.005	0.968		0m	N.D.	d	
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.193	8.203	0.977		0m	N.D.	d	
32) Cyclohexene	8.250	8.246	0.984		0m	N.D.	d	
33) n-Butyl alcohol	8.384	8.377	1.000		0m	N.D.	d	
34) Trichloroethylene	8.692	8.677	1.036		0m	N.D.	d	
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	8.798	8.826	1.049		0m	N.D.	d	
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.		
40) cis-1,3-Dichloropropylene	9.480	9.487	1.130		0m	N.D.	d	

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B405.D  
Acq On : 11 Mar 2010 8:27 am  
Operator : CDS1  
InstName : VOA5  
Sample : |W5VM100311-04|CCV|1|VOA|1|VOA8260BS|  
Misc : CCV 5G - SOIL MIX[B ]UVM100215-08B  
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 11 17:15:12 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
42) 4-Methyl-2-pentanone	9.519	9.526	0.854		0m	N.D.	d
44) Toluene	9.792	9.788	0.879		0m	N.D.	d
45) trans-1,3-Dichloroprop...	9.972	9.968	0.895		0m	N.D.	d
46) 1,1,2-Trichloroethane	10.287	10.173	0.923		0m	N.D.	d
47) 2-Hexanone	10.276	10.279	0.922		0m	N.D.	d
48) 1,3-Dichloropropane	10.368	10.364	0.930		0m	N.D.	d
49) Tetrachloroethylene	10.290	10.290	0.924		0m	N.D.	d
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	10.764	10.771	0.966		0m	N.D.	d
52) Chlorobenzene	11.174	11.174	1.003		0m	N.D.	d
53) 1,1,1,2-Tetrachloroethane	0.000	11.216	0.000		0	N.D.	
54) Ethylbenzene	11.178	11.181	1.003		0m	N.D.	d
55) m,p-Xylenes	11.280	11.280	1.012		0m	N.D.	d
56) o-Xylene	11.701	11.701	1.050		0m	N.D.	d
57) Styrene	11.715	11.715	1.051		0m	N.D.	d
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	12.012	12.016	0.896		0m	N.D.	d
62) 1,1,2,2-Tetrachloroethane	12.408	12.348	0.925		0m	N.D.	d
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	12.461	12.465	0.929		0m	N.D.	d
65) n-Propylbenzene	12.408	12.415	0.925		0m	N.D.	d
66) 1,3,5-Trimethylbenzene	12.561	12.564	0.936		0m	N.D.	d
67) 2-Chlorotoluene	12.596	12.596	0.939		0m	N.D.	d
68) 4-Chlorotoluene	12.698	12.698	0.947		0m	N.D.	d
69) tert-Butylbenzene	12.907	12.900	0.962		0m	N.D.	d
70) 1,2,4-Trimethylbenzene	12.953	12.956	0.966		0m	N.D.	d
71) sec-Butylbenzene	13.116	13.119	0.978		0m	N.D.	d
72) 4-Isopropyltoluene	13.232	13.229	0.987		0m	N.D.	d
73) 1,3-Dichlorobenzene	13.356	13.349	0.996		0m	N.D.	d
74) 1,4-Dichlorobenzene	13.434	13.441	1.002		0m	N.D.	d
75) n-Butylbenzene	13.653	13.653	1.018		0m	N.D.	d
76) 1,2-Dichlorobenzene	13.858	13.858	1.033		0m	N.D.	d
77) 1,2-Dibromo-3-chloropr...	0.000	14.704	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	15.612	15.619	1.164		0m	N.D.	d
79) Hexachlorobutadiene	15.686	15.686	1.169		0m	N.D.	d
80) Naphthalene	15.981	15.988	1.191		0m	N.D.	d
81) 1,2,3-Trichlorobenzene	16.291	16.291	1.215		0m	N.D.	d
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	6.082	6.082	0.725	56	209673	260.66 ug/L	99
86) Trichlorotrifluoroethane	6.071	6.071	0.724	85	420908	336.02 ug/L	100
87) Isopropyl Alcohol	0.000	6.163	0.000		0m	N.D.	d
88) Allyl chloride	6.421	6.425	0.766	41	2064299	224.51 ug/L	93
89) tert-Butyl Alcohol	6.421	6.460	0.766	59	764	N.D.	
90) Acrylonitrile	6.743	6.747	0.804	53	494368	244.54 ug/L	100
91) Isopropyl ether	0.000	6.920	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	7.104	7.104	0.847	53	385462	64.96 ug/L	100
93) Ethyl tert-butyl ether	7.369	7.192	0.879	59	107	N.D.	
94) Ethyl acetate	7.380	7.383	0.880	43	1250386	228.37 ug/L	99
95) Propionitrile	7.585	7.585	0.904	54	192800	247.77 ug/L	99
96) Methacrylonitrile	7.677	7.680	0.915	41	1037180	242.54 ug/L	100
97) Tetrahydrofuran	7.709	7.716	0.919	42	466766	241.52 ug/L	99

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B405.D  
Acq On : 11 Mar 2010 8:27 am  
Operator : CDS1  
InstName : VOA5  
Sample : |W5VM100311-04|CCV|1|VOA|1|VOA8260BS|  
Misc : CCV 5G - SOIL MIX[B ]UVM100215-08B  
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 11 17:15:12 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

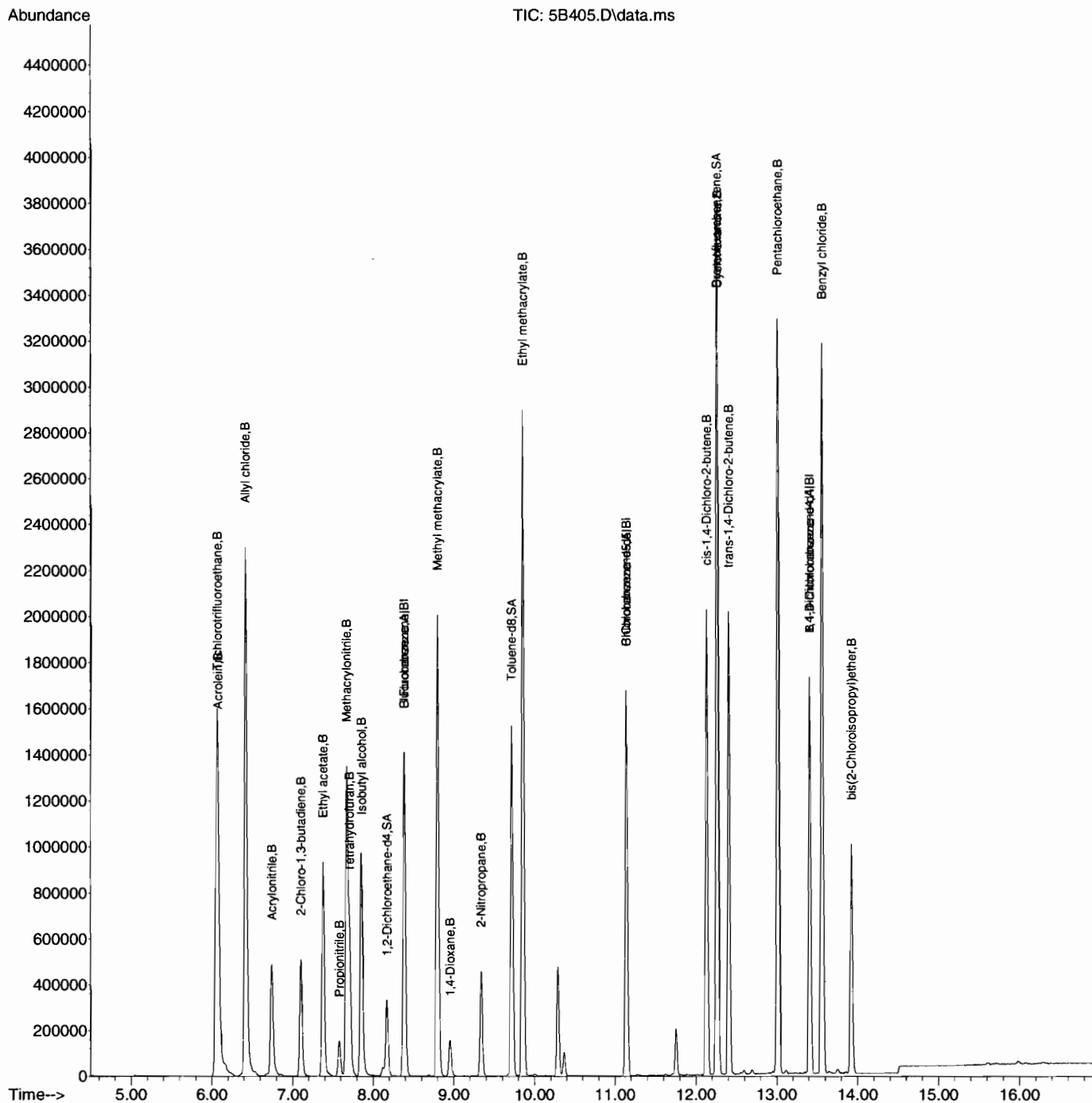
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
98) Isobutyl alcohol	7.861	7.857	0.937	41	483945	2377.09	ug/L	98
99) Methyl tert-amyl ether	0.000	8.122	0.000		0	N.D.		
100) Methyl methacrylate	8.801	8.801	1.049	69	799913	247.91	ug/L	97
101) 1,4-Dioxane	8.957	8.957	1.068	88	126561	2197.92	ug/L	99
102) 2-Nitropropane	9.342	9.342	1.114	43	394732	241.26	ug/L	99
104) Ethyl methacrylate	9.859	9.859	0.885	69	1570077	252.20	ug/L	98
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.		
107) cis-1,4-Dichloro-2-butene	12.136	12.136	0.905	53	542526	269.96	ug/L	100
108) Cyclohexanone	12.267	12.267	0.915	42	802097	4855.37	ug/L	97 E
109) trans-1,4-Dichloro-2-b...	12.408	12.412	0.925	53	508969	268.86	ug/L	98
110) Pentachloroethane	13.013	13.017	0.970	167	771770	294.39	ug/L	99
111) Benzyl chloride	13.565	13.565	1.011	91	2725462	283.21	ug/L	100
112) bis(2-Chloroisopropyl)...	13.926	13.929	1.038	45	793167	224.01	ug/L	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B405.D  
Acq On : 11 Mar 2010 8:27 am  
Operator : CDS1  
InstName : VOA5  
Sample : |W5VM100311-04|CCV|1|VOA|1|VOA8260BS|  
Misc : CCV 5G - SOIL MIX|B|UVM100215-08B  
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 11 17:15:12 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE



## Continuing Calibration Summary

Client SDG: 10-2199

Instrument ID: VOA5.I

Injection Date 11-MAR-10 18:37

Data File: 031110V5\5B428.D

Init. Cal. Date(s) 03-MAR-10 11:52 - 03-MAR-10 19:3

Lab Sample ID W5VM100311-05

Quant Type ISTD

Method: 030310V5\VOA5-8260-030310.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
S 1,2-Dichloroethane-d4	0.242	0.1588		.01		-34.38017	30	*	Averaged	
S Toluene-d8	1.2787	1.03273		.01		-19.23594	30		Averaged	
S Bromofluorobenzene	1.0029	1.18564		.01		18.22116	30		Averaged	
Dichlorodifluoromethane	0.1167	0.12674		.01		8.60326	30		Averaged	
Chloromethane	50	54.55	50			9.1	30		Linear	spcc
Vinyl chloride	0.1232	0.1345		.01		9.17208	20		Averaged	ccc
Bromomethane	0.1177	0.13076		.01		11.09601	30		Averaged	
Chloroethane	0.1249	0.13318		.01		6.6293	30		Averaged	
Trichlorofluoromethane	0.2144	0.23135		.01		7.90578	30		Averaged	
Ethyl ether	0.1846	0.18631		.01		0.92633	30		Averaged	
1,1-Dichloroethylene	0.2389	0.24867		.01		4.08958	20		Averaged	ccc
Acetone	0.1494	0.14261		.01		-4.54485	40		Averaged	
Iodomethane	0.2468	0.24412		.01		-1.0859	30		Averaged	
Methyl acetate	0.1633	0.15054		.01		-7.81384	40		Averaged	
Carbon disulfide	0.4789	0.48598		.01		1.47839	30		Averaged	
Acetonitrile	0.0293	0.02612		.01		-10.85324	30		Averaged	
Methylene chloride	50	47.34	50			-5.32	30		Linear	
tert-Butyl methyl ether	0.4975	0.44626		.01		-10.2995	30		Averaged	
trans-1,2-Dichloroethylene	0.2598	0.26354		.01		1.43957	30		Averaged	
Vinyl acetate	0.4091	0.43046		.01		5.22122	40		Averaged	
1,1-Dichloroethane	0.3217	0.32481		.1		0.96674	30		Averaged	spcc
2-Butanone	0.178	0.18798		.01		5.60674	40		Averaged	
2,2-Dichloropropane	0.2385	0.23705		.01		-0.60797	30		Averaged	
cis-1,2-Dichloroethylene	0.3022	0.29852		.01		-1.21774	30		Averaged	
Chloroform	0.2882	0.27976		.01		-2.92852	20		Averaged	ccc
Bromochloromethane	0.0893	0.08765		.01		-1.8477	30		Averaged	
1,1,1-Trichloroethane	0.2377	0.23914		.01		0.60581	30		Averaged	
Cyclohexane	0.3381	0.3444		.01		1.86335	30		Averaged	
1,1-Dichloropropene	0.218	0.21985		.01		0.84862	30		Averaged	
Carbon tetrachloride	0.2039	0.21003		.01		3.00638	30		Averaged	
Benzene	0.7238	0.68767		.01		-4.99171	30		Averaged	
1,2-Dichloroethane	0.249	0.23671		.01		-4.93574	30		Averaged	
Cyclohexene	0.3364	0.33926		.01		0.85018	30		Averaged	
n-Butyl alcohol	5000	4795.29	5000			-4.0942	40		Linear	
Trichloroethylene	0.1719	0.16532		.01		-3.82781	30		Averaged	
Methylcyclohexane	0.3141	0.30946		.01		-1.47724	30		Averaged	
1,2-Dichloropropane	0.2044	0.19532		.01		-4.44227	20		Averaged	ccc

## Continuing Calibration Summary

Instrument ID: VOA5.I

Injection Date 11-MAR-10 18:37

Data File: 031110V5\5B428.D

Init. Cal. Date(s) 03-MAR-10 11:52 03-MAR-10 19:3

Lab Sample ID W5VM100311-05

Quant Type ISTD

Method: 030310V5\VOA5-8260-030310.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
Dibromomethane	0.1039	0.10255		.01		-1.29933	30		Averaged	
Bromodichloromethane	0.2124	0.21037		.01		-0.95574	30		Averaged	
2-Chloroethylvinyl ether	0.0653	0.06018		.01		-7.84074	30		Averaged	
cis-1,3-Dichloropropylene	0.2908	0.28182		.01		-3.08803	30		Averaged	
4-Methyl-2-pentanone	0.1196	0.1212		.01		1.33779	40		Averaged	
Toluene	1.0734	0.99934		.01		-6.89957	20		Averaged	ccc
trans-1,3-Dichloropropylene	0.3656	0.35376		.01		-3.23851	30		Averaged	
1,1,2-Trichloroethane	0.1811	0.16751		.01		-7.50414	30		Averaged	
2-Hexanone	0.3247	0.35654		.01		9.80597	40		Averaged	
Tetrachloroethylene	0.1966	0.18478		.01		-6.01221	30		Averaged	
1,3-Dichloropropane	0.3892	0.36353		.01		-6.59558	30		Averaged	
Dibromochloromethane	0.2155	0.2129		.01		-1.2065	30		Averaged	
1,2-Dibromoethane	0.2099	0.19679		.01		-6.24583	30		Averaged	
Chlorobenzene	0.6963	0.64504		.3		-7.36177	30		Averaged	spcc
Ethylbenzene	1.2247	1.12128		.01		-8.44452	20		Averaged	ccc
1,1,1,2-Tetrachloroethane	0.2359	0.22846		.01		-3.15388	30		Averaged	
m,p-Xylenes	0.4639	0.43891		.01		-5.38694	30		Averaged	
o-Xylene	0.4688	0.43851		.01		-6.46118	30		Averaged	
Styrene	0.7161	0.7034		.01		-1.7735	30		Averaged	
Bromoform	0.2722	0.28132		.1		3.35048	30		Averaged	spcc
Isopropylbenzene	2.2942	2.23311		.01		-2.6628	30		Averaged	
1,1,2,2-Tetrachloroethane	0.5938	0.54218		.3		-8.69316	30		Averaged	spcc
n-Propylbenzene	2.7698	2.65017		.01		-4.31908	30		Averaged	
1,2,3-Trichloropropane	0.1585	0.14707		.01		-7.21136	30		Averaged	
Bromobenzene	0.5771	0.52316		.01		-9.34673	30		Averaged	
1,3,5-Trimethylbenzene	1.9593	1.89754		.01		-3.15215	30		Averaged	
2-Chlorotoluene	0.5751	0.54004		.01		-6.09633	30		Averaged	
4-Chlorotoluene	1.761	1.61917		.01		-8.05395	30		Averaged	
tert-Butylbenzene	0.451	0.4193		.01		-7.02882	30		Averaged	
1,2,4-Trimethylbenzene	1.9934	1.91793		.01		-3.78599	30		Averaged	
sec-Butylbenzene	2.5353	2.48132		.01		-2.12914	30		Averaged	
4-Isopropyltoluene	2.0151	1.97494		.01		-1.99295	30		Averaged	
1,3-Dichlorobenzene	1.0958	1.00532		.01		-8.25698	30		Averaged	
1,4-Dichlorobenzene	1.114	1.01786		.01		-8.63016	30		Averaged	
n-Butylbenzene	1.9788	1.88873		.01		-4.55175	30		Averaged	
1,2-Dichlorobenzene	1.0534	0.96363		.01		-8.52193	30		Averaged	
1,2-Dibromo-3-chloropropane	0.113	0.10007		.01		-11.44248	30		Averaged	

## Continuing Calibration Summary

Instrument ID: VOA5.I

Injection Date 11-MAR-10 18:37

Data File: 031110V5\5B428.D

Init. Cal. Date(s) 03-MAR-10 11:52 03-MAR-10 19:3

Lab Sample ID W5VM100311-05 Quant Type ISTD

Method: 030310V5\VOA5-8260-030310.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
1,2,4-Trichlorobenzene	0.7094	0.66802		.01		-5.8331	30		Averaged
Hexachlorobutadiene	0.4309	0.41897		.01		-2.76862	30		Averaged
Naphthalene	1.6113	1.4826		.01		-7.98734	30		Averaged
1,2,3-Trichlorobenzene	0.6191	0.58011		.01		-6.29785	30		Averaged

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B428.D  
Acq On : 11 Mar 2010 6:37 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |W5VM100311-05|CCV|1|VOA|1|  
Misc : CCV 5mL - MIX[A] 0222-07B+0106-07D  
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Mar 11 18:51:14 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	8.387	8.387	1.000	96	1441756	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1055756	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	524091	50.00	ug/L	0.00
82) B Fluorobenzene	8.387	8.391	1.000	96	1441756	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1055756	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	524091	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	228957	32.81	ug/L	0.00
43) Toluene-d8	9.721	9.721	0.872	98	1090314	40.38	ug/L	0.00
61) Bromofluorobenzene	12.260	12.260	0.914	95	621381	59.11	ug/L	0.00
Target Compounds								QValue
2) Dichlorodifluoromethane	4.668	4.668	0.557	85	182732	54.28	ug/L	98
3) Chloromethane	4.900	4.900	0.584	50	233701	54.55	ug/L	97
4) Vinyl chloride	5.041	5.041	0.601	62	193909	54.58	ug/L	99
5) Bromomethane	5.433	5.423	0.648	94	188527	55.56	ug/L	100
6) Chloroethane	5.504	5.504	0.656	64	192013	53.30	ug/L	100
7) Trichlorofluoromethane	5.695	5.695	0.679	101	333546	53.94	ug/L	100
8) Ethyl ether	5.866	5.866	0.699	59	268610	50.45	ug/L	100
9) Acetone	6.174	6.174	0.736	43	1028060	238.64	ug/L	99
10) 1,1-Dichloroethylene	6.152	6.156	0.734	61	358523	52.04	ug/L	99
11) Iodomethane	6.357	6.357	0.758	142	1759794	247.32	ug/L	99
12) Acetonitrile	6.464	6.464	0.771	41	941583	1115.21	ug/L	98
13) Methyl acetate	6.365	6.365	0.759	43	1085179	230.51	ug/L	99
14) Carbon disulfide	6.435	6.435	0.767	76	3503341	253.71	ug/L	100
15) Methylene chloride	6.538	6.538	0.779	84	260398	47.34	ug/L	95
16) tert-Butyl methyl ether	6.637	6.640	0.791	73	643399	44.85	ug/L	99
17) trans-1,2-Dichloroethy...	6.715	6.715	0.801	61	379954	50.72	ug/L	98
18) Vinyl acetate	6.969	6.969	0.831	43	3103087	263.05	ug/L	98
19) 1,1-Dichloroethane	7.068	7.068	0.843	63	468302	50.48	ug/L	99
20) 2-Butanone	7.450	7.450	0.888	43	1355138	264.03	ug/L	98
21) cis-1,2-Dichloroethylene	7.507	7.507	0.895	61	430398	49.39	ug/L	98
22) 2,2-Dichloropropane	7.510	7.514	0.895	77	341772	49.71	ug/L	96
23) Bromochloromethane	7.723	7.719	0.921	128	126373	49.09	ug/L	96
24) Chloroform	7.698	7.701	0.918	83	403350	48.54	ug/L	100
25) 1,1,1-Trichloroethane	7.903	7.906	0.942	97	344779	50.31	ug/L	99
26) Cyclohexane	7.924	7.924	0.945	56	496547	50.93	ug/L	99
27) 1,1-Dichloropropene	8.002	8.005	0.954	75	316965	50.42	ug/L	97
28) Carbon tetrachloride	8.020	8.020	0.956	117	302807	51.51	ug/L	100
30) 1,2-Dichloroethane	8.232	8.235	0.981	62	341271	47.53	ug/L	99
31) Benzene	8.200	8.203	0.978	78	991454	47.50	ug/L	96
32) Cyclohexene	8.246	8.246	0.983	67	489131	50.43	ug/L	99
33) n-Butyl alcohol	8.373	8.377	0.998	56	972434	4795.29	ug/L	98
34) Trichloroethylene	8.677	8.677	1.035	95	238358	48.09	ug/L	99
35) 1,2-Dichloropropane	8.928	8.932	1.065	63	281599	47.77	ug/L	100
36) Methylcyclohexane	8.829	8.826	1.053	83	446170	49.26	ug/L	98
37) Dibromomethane	9.063	9.059	1.081	93	147851	49.35	ug/L	99
38) Bromodichloromethane	9.109	9.112	1.086	83	303297	49.52	ug/L	99
39) 2-Chloroethylvinyl ether	9.254	9.254	1.103	63	433859	230.36	ug/L	99
40) cis-1,3-Dichloropropylene	9.487	9.487	1.131	75	406315	48.46	ug/L	96



Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B428.D  
Acq On : 11 Mar 2010 6:37 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |W5VM100311-05|CCV|1|VOA|1|  
Misc : CCV 5mL - MIX[A] 0222-07B+0106-07D  
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Mar 11 18:51:14 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
42) 4-Methyl-2-pentanone	9.526	9.526	0.855	58	639779	253.41	ug/L	97
44) Toluene	9.788	9.788	0.878	91	1055054	46.55	ug/L	100
45) trans-1,3-Dichloroprop...	9.968	9.968	0.895	75	373483	48.38	ug/L	98
46) 1,1,2-Trichloroethane	10.173	10.173	0.913	83	176853	46.24	ug/L	99
47) 2-Hexanone	10.279	10.279	0.923	43	1882072	274.54	ug/L	99
48) 1,3-Dichloropropane	10.364	10.364	0.930	76	383794	46.70	ug/L	97
49) Tetrachloroethylene	10.293	10.290	0.924	164	195084	46.99	ug/L	99
50) Dibromochloromethane	10.583	10.583	0.950	129	224766	49.40	ug/L	100
51) 1,2-Dibromoethane	10.771	10.771	0.967	107	207763	46.88	ug/L	99
52) Chlorobenzene	11.170	11.174	1.003	112	681003	46.32	ug/L	99
53) 1,1,1,2-Tetrachloroethane	11.216	11.216	1.007	131	241198	48.43	ug/L	99
54) Ethylbenzene	11.178	11.181	1.003	91	1183795	45.78	ug/L	99
55) m,p-Xylenes	11.280	11.280	1.012	106	926774	94.61	ug/L	100
56) o-Xylene	11.697	11.701	1.050	106	462963	46.77	ug/L	100
57) Styrene	11.712	11.715	1.051	104	742617	49.11	ug/L	93
59) Bromoform	12.005	12.005	0.895	173	147437	51.67	ug/L	100
60) Isopropylbenzene	12.012	12.016	0.896	105	1170353	48.67	ug/L	100
62) 1,1,2,2-Tetrachloroethane	12.348	12.348	0.921	83	284154	45.65	ug/L	100
63) 1,2,3-Trichloropropane	12.454	12.454	0.929	110	77079	46.38	ug/L #	85
64) Bromobenzene	12.465	12.465	0.929	156	274185	45.33	ug/L	98
65) n-Propylbenzene	12.415	12.415	0.926	91	1388930	47.84	ug/L	99
66) 1,3,5-Trimethylbenzene	12.560	12.564	0.936	105	994483	48.42	ug/L	100
67) 2-Chlorotoluene	12.596	12.596	0.939	126	283029	46.95	ug/L #	79
68) 4-Chlorotoluene	12.698	12.698	0.947	91	848594	45.97	ug/L	100
69) tert-Butylbenzene	12.903	12.900	0.962	134	219752	46.48	ug/L	98
70) 1,2,4-Trimethylbenzene	12.956	12.956	0.966	105	1005171	48.11	ug/L	99
71) sec-Butylbenzene	13.115	13.119	0.978	105	1300438	48.94	ug/L	99
72) 4-Isopropyltoluene	13.229	13.229	0.986	119	1035049	49.00	ug/L	99
73) 1,3-Dichlorobenzene	13.349	13.349	0.995	146	526880	45.87	ug/L	100
74) 1,4-Dichlorobenzene	13.437	13.441	1.002	146	533453	45.68	ug/L	100
75) n-Butylbenzene	13.653	13.653	1.018	91	989865	47.72	ug/L	100
76) 1,2-Dichlorobenzene	13.858	13.858	1.033	146	505028	45.74	ug/L	99
77) 1,2-Dibromo-3-chloropr...	14.704	14.704	1.096	157	52446	44.27	ug/L	94
78) 1,2,4-Trichlorobenzene	15.612	15.619	1.164	180	350102	47.08	ug/L	99
79) Hexachlorobutadiene	15.686	15.686	1.169	225	219576	48.62	ug/L	98
80) Naphthalene	15.988	15.988	1.192	128	777016	46.01	ug/L	100
81) 1,2,3-Trichlorobenzene	16.291	16.291	1.215	180	304032	46.85	ug/L	98
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.		
85) Acrolein	0.000	6.082	0.000		0	N.D.		
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.		
87) Isopropyl Alcohol	6.166	6.163	0.735		0m	N.D.	d	
88) Allyl chloride	6.464	6.425	0.771		0m	N.D.	d	
89) tert-Butyl Alcohol	6.467	6.460	0.771		0m	N.D.	d	
90) Acrylonitrile	6.640	6.747	0.792		0m	N.D.	d	
91) Isopropyl ether	6.966	6.920	0.831		0m	N.D.	d	
92) 2-Chloro-1,3-butadiene	7.044	7.104	0.840		0m	N.D.	d	
93) Ethyl tert-butyl ether	7.072	7.192	0.843		0m	N.D.	d	
94) Ethyl acetate	7.390	7.383	0.881		0m	N.D.	d	
95) Propionitrile	7.669	7.585	0.914		0m	N.D.	d	
96) Methacrylonitrile	7.680	7.680	0.916		0m	N.D.	d	
97) Tetrahydrofuran	7.691	7.716	0.917		0m	N.D.	d	

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B428.D  
Acq On : 11 Mar 2010 6:37 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |W5VM100311-05|CCV|1|VOA|1|  
Misc : CCV 5mL - MIX[A] 0222-07B+0106-07D  
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Mar 11 18:51:14 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
98) Isobutyl alcohol	7.680	7.857	0.916		0m	N.D.	d
99) Methyl tert-amyl ether	8.200	8.122	0.978		0m	N.D.	d
100) Methyl methacrylate	8.829	8.801	1.053		0m	N.D.	d
101) 1,4-Dioxane	9.063	8.957	1.081		0m	N.D.	d
102) 2-Nitropropane	9.119	9.342	1.087		0m	N.D.	d
104) Ethyl methacrylate	9.855	9.859	0.884		0m	N.D.	d
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	12.009	12.136	0.895		0m	N.D.	d
108) Cyclohexanone	12.412	12.267	0.925		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	12.415	12.412	0.926		0m	N.D.	d
110) Pentachloroethane	13.020	13.017	0.971		0m	N.D.	d
111) Benzyl chloride	13.575	13.565	1.012		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	13.922	13.929	1.038		0m	N.D.	d

(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted

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Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B428.D  
Acq On : 11 Mar 2010 6:37 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |W5VM100311-05|CCV|1|VOA|1|  
Misc : CCV 5mL - MIX[A] 0222-07B+0106-07D  
ALS Vial : 28 Sample Multiplier: 1
```

TIC: 5B428.D\data.ms

Abundance

Time-->

3400000

3200000

3000000

2800000

2600000

2400000

2200000

2000000

1800000

1600000

1400000

1200000

1000000

800000

600000

400000

200000

0

5.00

6.00

7.00

8.00

9.00

10.00

11.00

12.00

13.00

14.00

15.00

16.00

Dichlorodifluoromethane, MA

Chloromethane, MPA

Vinyl chloride, MCA

Chloroethane, MA

Trichlorofluoromethane, MA

Ethyl ether, MA

1,1-Dichloroethane, MCA

Methyl acetate, MA

Acetonitrile, MA

trans-1,2-Dichloroethylene, MA

1,1-Dichloroethane, MPA

2-Butoxyethanol, MA

Bromochloromethane, MA

1,1,1-Trichloroethane, MA

1,2-Dichloroethane, MA

1,2-Dichloroethane, d4, SA

1,2-Dichloropropane, MA

Trichloroethylene, MA

1,2-Dichloropropane, MCA

1,1,1-Trichloroethane, MA

2-Chloroethylvinyl ether, MA

cis-1,3-Dichloropropylene, MA

4-Methyl-2-pentanone, MA

Toluene, MCA

trans-1,3-Dichloropropylene, MA

1,1,2-Trichloroethane, MA

1,3-Dichloropropane, MA

Dibromochloromethane, MA

1,2-Dibromoethane, MA

1,1,1,2-Tetrachloroethane, MA

1,1,1,2-Tetrachloroethane, d4, MA

o-Xylene, MA

Bromodorm, MA

1,1,2,2-Tetrachloroethane, MPA

1,1,2,2-Tetrachloroethane, MA

3,5-Dimethylbenzene, MA

4-Chlorotoluene, MA

tert-Butylbenzene, MA

sec-Butylbenzene, MA

4-Isopropyltoluene, MA

1,3-Dichlorobenzene, MA

1,2-Dichlorobenzene, MA

1,2-Dibromo-3-chloropropane, MA

Hexachlorocyclopentadiene, MA

Naphthalene, MA

1,2,3-Trichlorobenzene, MA

Carbon disulfide, MA

Vinyl acetate, MA

n-Butylbenzene, MA

m,p-Xylenes, MA

## Continuing Calibration Summary

Client SDG: 10-2199

Instrument ID: VOA5.I

Injection Date 11-MAR-10 19:56

Data File: 031110V5\5B431.D

Init. Cal. Date(s) 03-MAR-10 11:52 - 03-MAR-10 19:3

Lab Sample ID W5VM100311-08

Quant Type ISTD

Method: 030310V5\VOA5-8260-030310.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
S1,2-Dichloroethane-d4	0.242	0.16373		.01		-32.34298	30	*	Averaged
SToluene-d8	1.2787	1.01687		.01		-20.47626	30		Averaged
SBromofluorobenzene	1.0029	1.18842		.01		18.49835	30		Averaged
Trichlorotrifluoroethane	0.0448	0.05813		.01		29.75446	30		Averaged
Acrolein	250	257.73	250			3.092	30		Linear
Allyl chloride	0.3291	0.29162		.01		-11.38864	30		Averaged
Acrylonitrile	0.0724	0.07195		.01		-0.62155	30		Averaged
2-Chloro-1,3-butadiene	0.2124	0.27049		.01		27.34934	30		Averaged
Ethyl acetate	0.196	0.18144		.01		-7.42857	40		Averaged
Propionitrile	0.0278	0.0283		.01		1.79856	30		Averaged
Methacrylonitrile	0.153	0.15087		.01		-1.39216	30		Averaged
Tetrahydrofuran	0.0692	0.06829		.01		-1.31503	30		Averaged
Isobutyl alcohol	0.0073	0.00752		.01		3.0137	40		Averaged
Methyl methacrylate	0.1155	0.11605		.01		0.47619	30		Averaged
1,4-Dioxane	0.0021	0.00199		.01		-5.2381	40		Averaged
2-Nitropropane	250	244.45	250			-2.22	30		Linear
Ethyl methacrylate	0.2951	0.30487		.01		3.31074	30		Averaged
cis-1,4-Dichloro-2-butene	0.187	0.20881		.01		11.6631	30		Averaged
Cyclohexanone	0.0154	0.06185		.01		301.62338	40	*	Averaged
trans-1,4-Dichloro-2-butene	0.1761	0.19457		.01		10.48836	30		Averaged
Pentachloroethane	0.2439	0.29092		.01		19.27839	30		Averaged
Benzyl chloride	0.8953	0.97985		.01		9.44376	30		Averaged
bis(2-Chloroisopropyl)ether	0.3294	0.31357		.01		-4.80571	30		Averaged

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B431.D  
Acq On : 11 Mar 2010 7:56 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |W5VM100311-08|CCV|1|VOA|1|VOA8260BS|  
Misc : CCV 5G - SOIL MIX[B]UVM100215-08B  
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Mar 11 22:16:51 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	8.388	8.387	1.000	96	1439092	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1070189	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	529829	50.00	ug/L	0.00
82) B Fluorobenzene	8.388	8.391	1.000	96	1439092	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1070189	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	529829	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	235628	33.83	ug/L	0.00
43) Toluene-d8	9.721	9.721	0.872	98	1088246	39.76	ug/L	0.00
61) Bromofluorobenzene	12.260	12.260	0.914	95	629657	59.25	ug/L	0.00
Target Compounds								QValue
2) Dichlorodifluoromethane	4.678	4.668	0.558		0m	N.D.	d	
3) Chloromethane	5.051	4.900	0.602		0m	N.D.	d	
4) Vinyl chloride	5.031	5.041	0.600		0m	N.D.	d	
5) Bromomethane	5.423	5.423	0.647		0m	N.D.	d	
6) Chloroethane	5.494	5.504	0.655		0m	N.D.	d	
7) Trichlorofluoromethane	5.695	5.695	0.679		0m	N.D.	d	
8) Ethyl ether	5.867	5.866	0.699		0m	N.D.	d	
9) Acetone	6.167	6.174	0.735		0m	N.D.	d	
10) 1,1-Dichloroethylene	6.149	6.156	0.733		0m	N.D.	d	
11) Iodomethane	6.354	6.357	0.758		0m	N.D.	d	
12) Acetonitrile	6.421	6.464	0.766		0m	N.D.	d	
13) Methyl acetate	6.365	6.365	0.759		0m	N.D.	d	
14) Carbon disulfide	6.425	6.435	0.766		0m	N.D.	d	
15) Methylene chloride	6.545	6.538	0.780		0m	N.D.	d	
16) tert-Butyl methyl ether	6.637	6.640	0.791		0m	N.D.	d	
17) trans-1,2-Dichloroethy...	6.701	6.715	0.799		0m	N.D.	d	
18) Vinyl acetate	6.962	6.969	0.830		0m	N.D.	d	
19) 1,1-Dichloroethane	7.111	7.068	0.848		0m	N.D.	d	
20) 2-Butanone	7.507	7.450	0.895		0m	N.D.	d	
21) cis-1,2-Dichloroethylene	7.507	7.507	0.895		0m	N.D.	d	
22) 2,2-Dichloropropane	0.000	7.514	0.000		0	N.D.		
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	7.698	7.701	0.918		0m	N.D.	d	
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	7.924	7.924	0.945		0m	N.D.	d	
27) 1,1-Dichloropropene	7.999	8.005	0.954		0m	N.D.	d	
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.204	8.203	0.978		0m	N.D.	d	
32) Cyclohexene	8.172	8.246	0.974		0m	N.D.	d	
33) n-Butyl alcohol	8.391	8.377	1.000		0m	N.D.	d	
34) Trichloroethylene	8.688	8.677	1.036		0m	N.D.	d	
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	8.805	8.826	1.050		0m	N.D.	d	
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	9.254	9.254	1.103		0m	N.D.	d	
40) cis-1,3-Dichloropropylene	9.477	9.487	1.130		0m	N.D.	d	

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B431.D  
Acq On : 11 Mar 2010 7:56 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |W5VM100311-08|CCV|1|VOA|1|VOA8260BS|  
Misc : CCV 5G - SOIL MIX[B]UVM100215-08B  
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Mar 11 22:16:51 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
42) 4-Methyl-2-pentanone	9.516	9.526	0.854		0m	N.D.	d
44) Toluene	9.791	9.788	0.879		0m	N.D.	d
45) trans-1,3-Dichloroprop...	9.968	9.968	0.895		0m	N.D.	d
46) 1,1,2-Trichloroethane	10.294	10.173	0.924		0m	N.D.	d
47) 2-Hexanone	10.283	10.279	0.923		0m	N.D.	d
48) 1,3-Dichloropropane	10.364	10.364	0.930		0m	N.D.	d
49) Tetrachloroethylene	10.290	10.290	0.924		0m	N.D.	d
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	10.771	0.000		0	N.D.	
52) Chlorobenzene	11.171	11.174	1.003		0m	N.D.	d
53) 1,1,1,2-Tetrachloroethane	11.217	11.216	1.007		0m	N.D.	d
54) Ethylbenzene	11.181	11.181	1.003		0m	N.D.	d
55) m,p-Xylenes	11.277	11.280	1.012		0m	N.D.	d
56) o-Xylene	11.698	11.701	1.050		0m	N.D.	d
57) Styrene	11.719	11.715	1.052		0m	N.D.	d
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	12.012	12.016	0.896		0m	N.D.	d
62) 1,1,2,2-Tetrachloroethane	12.348	12.348	0.921		0m	N.D.	d
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	12.461	12.465	0.929		0m	N.D.	d
65) n-Propylbenzene	12.412	12.415	0.925		0m	N.D.	d
66) 1,3,5-Trimethylbenzene	12.557	12.564	0.936		0m	N.D.	d
67) 2-Chlorotoluene	12.599	12.596	0.939		0m	N.D.	d
68) 4-Chlorotoluene	12.698	12.698	0.947		0m	N.D.	d
69) tert-Butylbenzene	12.907	12.900	0.962		0m	N.D.	d
70) 1,2,4-Trimethylbenzene	12.953	12.956	0.966		0m	N.D.	d
71) sec-Butylbenzene	13.116	13.119	0.978		0m	N.D.	d
72) 4-Isopropyltoluene	13.232	13.229	0.987		0m	N.D.	d
73) 1,3-Dichlorobenzene	13.342	13.349	0.995		0m	N.D.	d
74) 1,4-Dichlorobenzene	13.434	13.441	1.002		0m	N.D.	d
75) n-Butylbenzene	13.657	13.653	1.018		0m	N.D.	d
76) 1,2-Dichlorobenzene	13.851	13.858	1.033		0m	N.D.	d
77) 1,2-Dibromo-3-chloropr...	0.000	14.704	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	15.612	15.619	1.164		0m	N.D.	d
79) Hexachlorobutadiene	15.686	15.686	1.169		0m	N.D.	d
80) Naphthalene	15.981	15.988	1.191		0m	N.D.	d
81) 1,2,3-Trichlorobenzene	16.291	16.291	1.215		0m	N.D.	d
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	6.082	6.082	0.725	56	213396	257.73 ug/L	99
86) Trichlorotrifluoroethane	6.071	6.071	0.724	85	418293	324.18 ug/L	99
87) Isopropyl Alcohol	0.000	6.163	0.000		0m	N.D.	d
88) Allyl chloride	6.421	6.425	0.766	41	2098318	221.54 ug/L	93
89) tert-Butyl Alcohol	6.460	6.460	0.770	59	114	N.D.	
90) Acrylonitrile	6.743	6.747	0.804	53	517679	248.59 ug/L	99
91) Isopropyl ether	7.097	6.920	0.846	45	216	N.D.	
92) 2-Chloro-1,3-butadiene	7.104	7.104	0.847	53	389253	63.69 ug/L	99
93) Ethyl tert-butyl ether	7.373	7.192	0.879	59	106	N.D.	
94) Ethyl acetate	7.380	7.383	0.880	43	1305533	231.48 ug/L	99
95) Propionitrile	7.581	7.585	0.904	54	203662	254.08 ug/L	99
96) Methacrylonitrile	7.680	7.680	0.916	41	1085546	246.44 ug/L	100
97) Tetrahydrofuran	7.712	7.716	0.919	42	491383	246.84 ug/L	98

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B431.D  
Acq On : 11 Mar 2010 7:56 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |W5VM100311-08|CCV|1|VOA|1|VOA8260BS|  
Misc : CCV 5G - SOIL MIX[B]UVM100215-08B  
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Mar 11 22:16:51 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

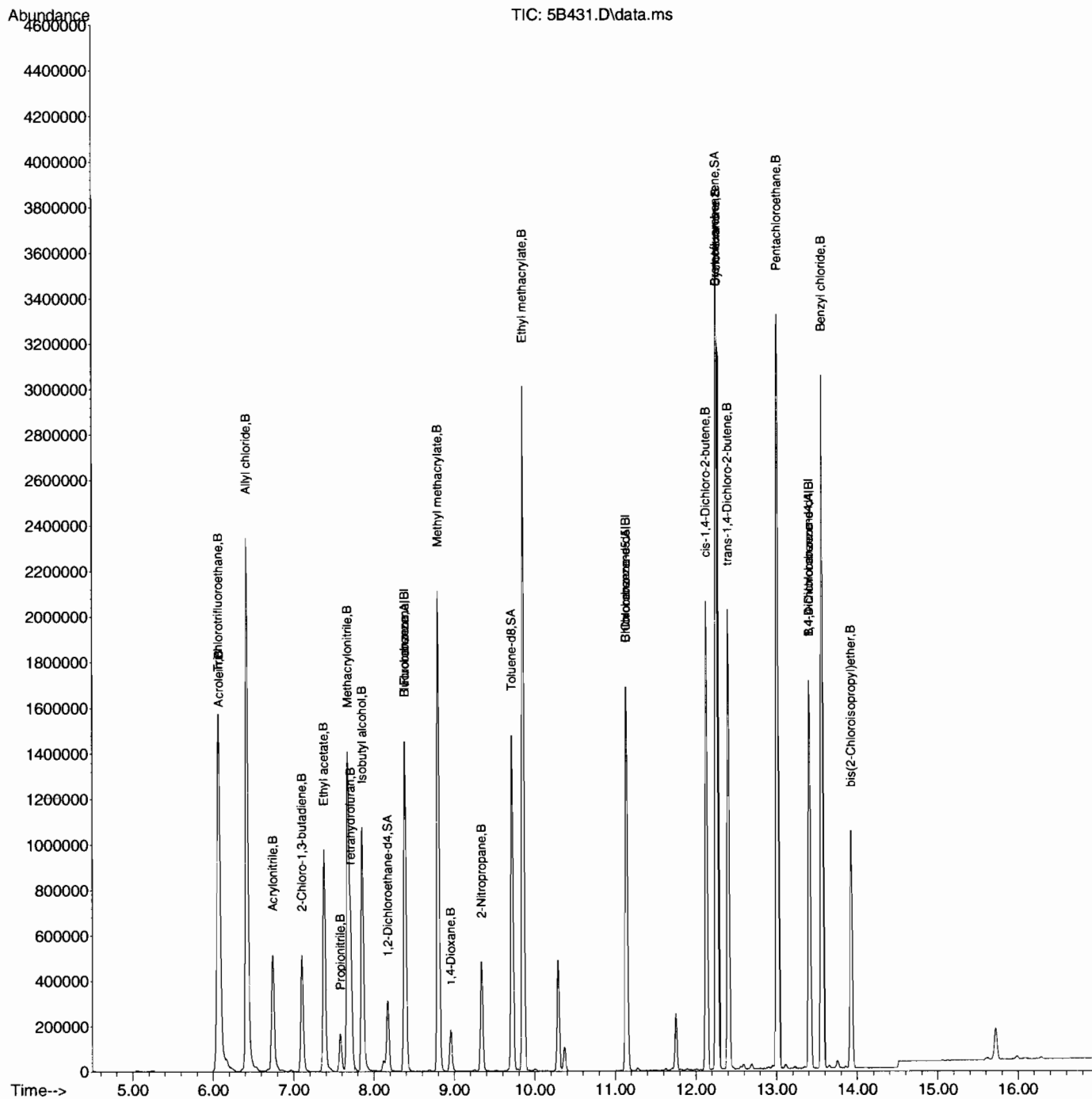
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
98) Isobutyl alcohol	7.857	7.857	0.937	41	541026	2579.87	ug/L	100
99) Methyl tert-amyl ether	0.000	8.122	0.000		0	N.D.		
100) Methyl methacrylate	8.801	8.801	1.049	69	835042	251.24	ug/L	97
101) 1,4-Dioxane	8.957	8.957	1.068	88	143234	2414.84	ug/L	99
102) 2-Nitropropane	9.342	9.342	1.114	43	412147	244.45	ug/L	100
104) Ethyl methacrylate	9.859	9.859	0.885	69	1631317	258.24	ug/L	98
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.		
107) cis-1,4-Dichloro-2-butene	12.136	12.136	0.905	53	553173	279.21	ug/L	99
108) Cyclohexanone	12.267	12.267	0.915	42	819306	5030.63	ug/L	96 E
109) trans-1,4-Dichloro-2-b...	12.408	12.412	0.925	53	515435	276.18	ug/L	99
110) Pentachloroethane	13.017	13.017	0.970	167	770694	298.19	ug/L	99
111) Benzyl chloride	13.565	13.565	1.011	91	2595755	273.59	ug/L	100
112) bis(2-Chloroisopropyl)...	13.925	13.929	1.038	45	830705	237.97	ug/L	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B431.D  
Acq On : 11 Mar 2010 7:56 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |W5VM100311-08|CCV|1|VOA|1|VOA8260BS|  
Misc : CCV 5G - SOIL MIX[B]UVM100215-08B  
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Mar 11 22:16:51 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE





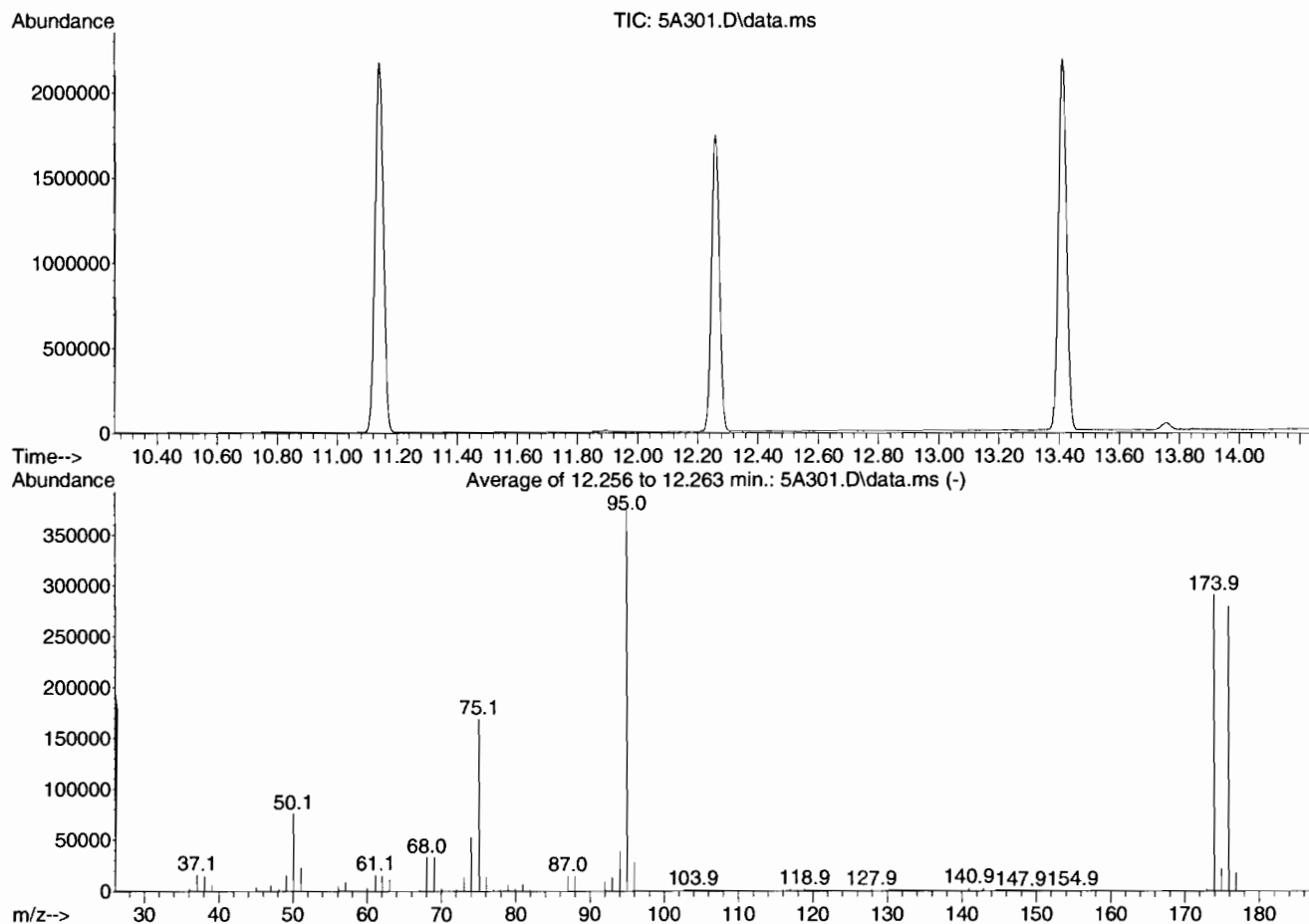
# Quality Control Data

Tune Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030310V5\  
Data File : 5A301.D  
Acq On : 3 Mar 2010 11:00 am  
Operator : CDS1  
Sample : |UVM100203-02|BFB|1|VOA|1|VOA8260BL|  
Misc : BFB 5mL N/A  
ALS Vial : 1 Sample Multiplier: 1

Integration File: default.P

Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Title : Volatile Organics 8260B SubList :  
Last Update : Fri Mar 05 15:47:51 2010



Spectrum Information: Average of 12.256 to 12.263 min.

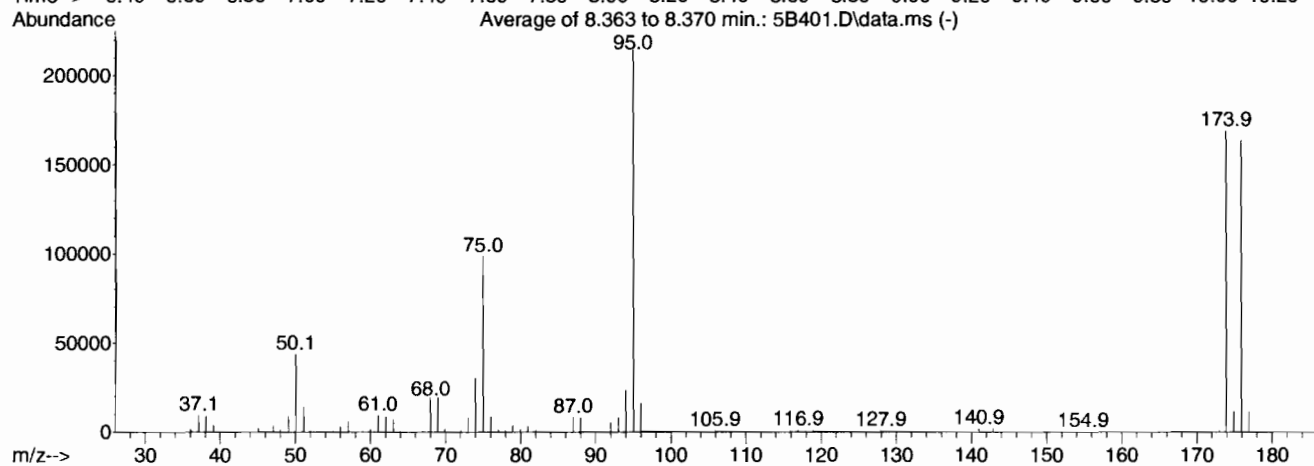
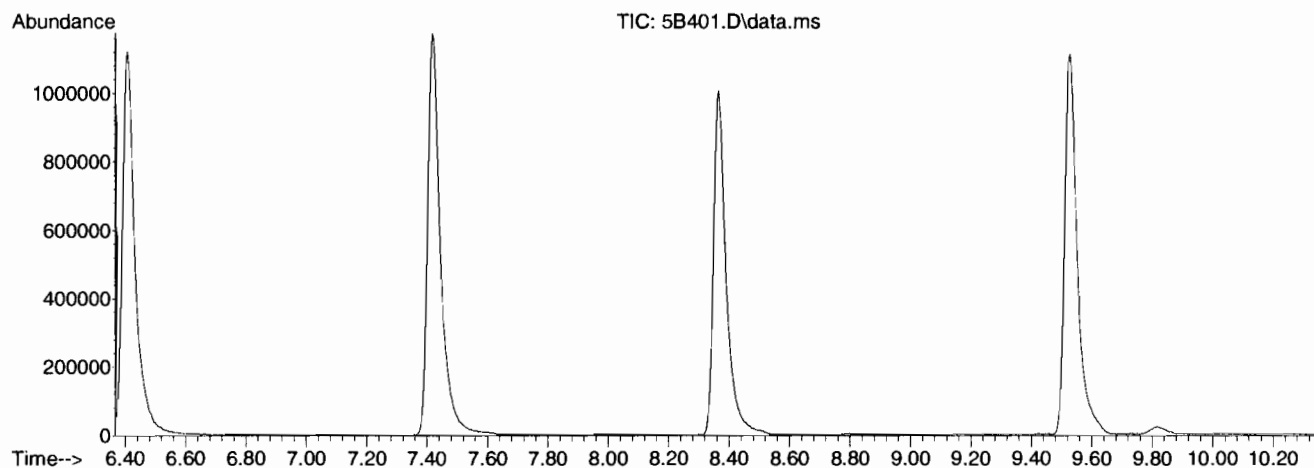
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.2	75616	PASS
75	95	30	60	45.2	169109	PASS
95	95	100	100	100.0	373952	PASS
96	95	5	9	7.4	27492	PASS
173	174	0.00	2	0.6	1817	PASS
174	95	50	100	77.7	290688	PASS
175	174	5	9	7.4	21371	PASS
176	174	95	101	96.2	279659	PASS
177	176	5	9	6.3	17646	PASS

Tune Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B401.D  
Acq On : 11 Mar 2010 6:41 am  
Operator : CDS1  
Sample : |UVM100217-02|BFB|1|VOA|1|VOA8260BL|  
Misc : BFB 5mL N/A  
ALS Vial : 1 Sample Multiplier: 1

Integration File: default.P

Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Title : Volatile Organics 8260B SubList :  
Last Update : Tue Mar 09 07:08:19 2010



Spectrum Information: Average of 8.363 to 8.370 min.

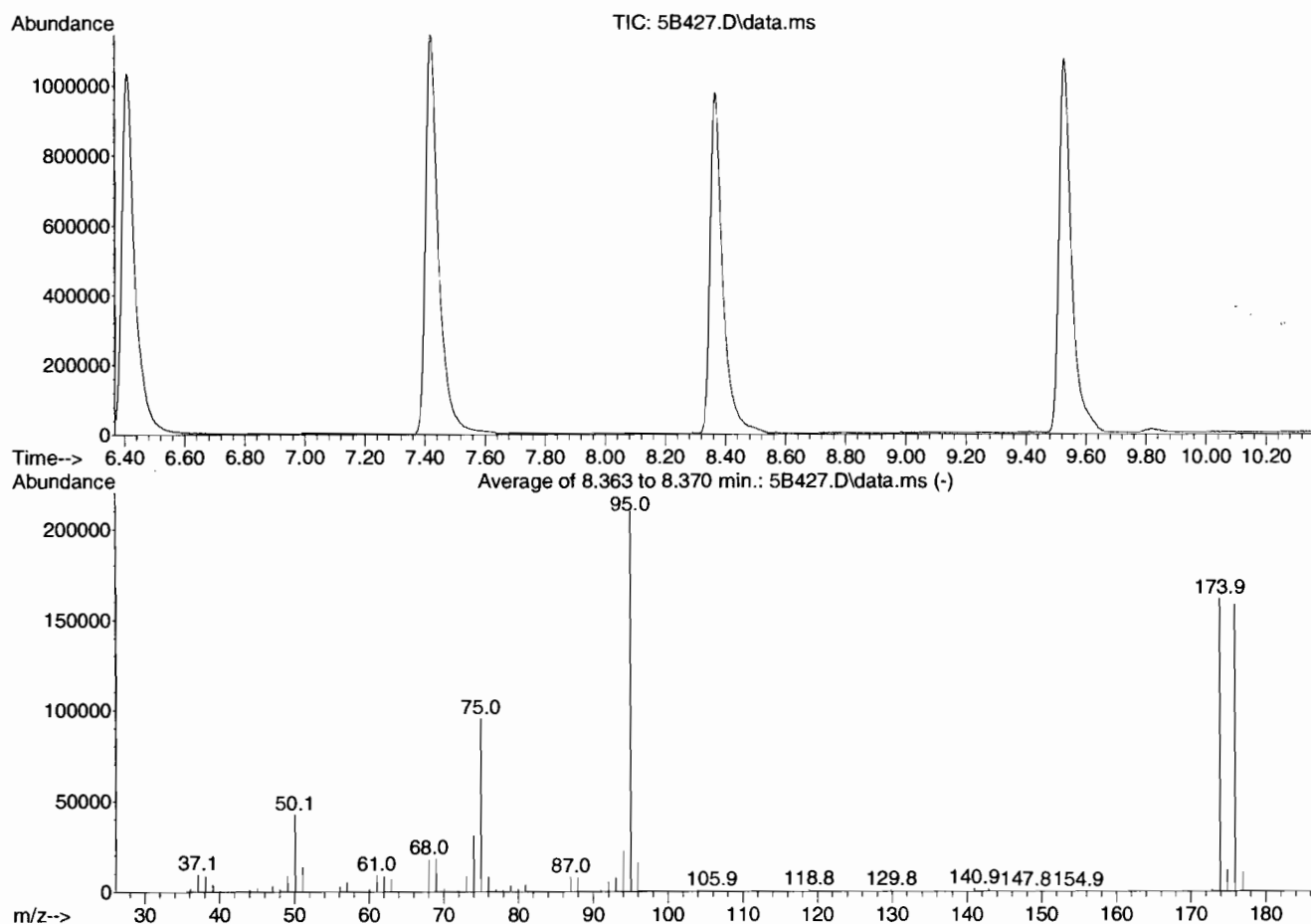
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.3	43597	PASS
75	95	30	60	46.0	98624	PASS
95	95	100	100	100.0	214549	PASS
96	95	5	9	7.5	16033	PASS
173	174	0.00	2	0.5	889	PASS
174	95	50	100	78.8	169067	PASS
175	174	5	9	6.8	11523	PASS
176	174	95	101	96.8	163669	PASS
177	176	5	9	7.0	11476	PASS

Tune Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B427.D  
Acq On : 11 Mar 2010 6:10 pm  
Operator : CDS1  
Sample : |UVM100217-02|BFB2|1|VOA|1|VOA8260BL|  
Misc : BFB 5mL N/A  
ALS Vial : 27 Sample Multiplier: 1

Integration File: default.P

Method : C:\msdchem\1\DATA\030310V5\Methods\VOA5-8260-030310.M  
Title : Volatile Organics 8260B SubList :  
Last Update : Tue Mar 09 07:08:19 2010



Spectrum Information: Average of 8.363 to 8.370 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.3	42483	PASS
75	95	30	60	45.5	95384	PASS
95	95	100	100	100.0	209792	PASS
96	95	5	9	7.5	15782	PASS
173	174	0.00	2	0.6	1035	PASS
174	95	50	100	76.9	161429	PASS
175	174	5	9	7.1	11511	PASS
176	174	95	101	97.9	158059	PASS
177	176	5	9	6.7	10528	PASS

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-2199  
 Lab Sample ID: 1202067627  
 Client Sample: QC for batch 963808  
 Client ID: MB for batch 963808  
 Batch ID: 963809  
 Run Date: 03/11/2010 09:20  
 Prep Date: 03/11/2010 06:00  
 Data File: 031110V5\SB407BS2.D

Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: CDS1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: SOIL  
 Project: QC  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-2199

Matrix: SOIL

Lab Sample ID: 1202067627

Client Sample: QC for batch 963808

Client: LANL010

Project: QC

Client ID: MB for batch 963808

Method: SW846 8260B

SOP Ref: GL-OA-E-038

Batch ID: 963809

Inst: VOA5.I

Dilution: 1

Run Date: 03/11/2010 09:20

Analyst: CDS1

Purge Vol: 5 mL

Prep Date: 03/11/2010 06:00

Aliquot: 5 g

Final Volume: 5 mL

Data File: 031110V55B407BS2.D

Column: DB-624

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.00	ug/kg	1.60	5.00
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
No Tentatively Identified Compounds Found				ug/kg		

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B407BS2.D  
Acq On : 11 Mar 2010 9:20 am  
Operator : CDS1  
InstName : VOA5  
Sample : |1202067627|963809|1|VOA|1|VOA8260BS|  
Misc : BLANK 5G - SOIL  
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 11 17:16:25 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	8.387	8.387	1.000	96	1402275	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1039581	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	502993	50.00	ug/L	0.00
82) B Fluorobenzene	8.387	8.391	1.000	96	1402275	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1039581	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	502993	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	239195	35.24	ug/L	0.00
Spiked Amount 50.000	Range 66	- 134	Recovery	=	70.48%			
43) Toluene-d8	9.721	9.721	0.872	98	1116666	42.00	ug/L	0.00
Spiked Amount 50.000	Range 71	- 128	Recovery	=	84.00%			
61) Bromofluorobenzene	12.260	12.260	0.914	95	606779	60.14	ug/L	0.00
Spiked Amount 50.000	Range 65	- 130	Recovery	=	120.28%			
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	4.668	0.000		0	N.D.		
3) Chloromethane	4.900	4.900	0.584	50	527	Below Cal		97
4) Vinyl chloride	0.000	5.041	0.000		0	N.D.		
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.695	0.000		0	N.D.		
8) Ethyl ether	0.000	5.866	0.000		0	N.D.		
9) Acetone	6.170	6.174	0.736	43	762	N.D.		
10) 1,1-Dichloroethylene	0.000	6.156	0.000		0	N.D.		
11) Iodomethane	0.000	6.357	0.000		0	N.D.		
12) Acetonitrile	6.467	6.464	0.771	41	373	N.D.		
13) Methyl acetate	6.191	6.365	0.738	43	245	N.D.		
14) Carbon disulfide	6.435	6.435	0.767	76	844	N.D.		
15) Methylene chloride	6.541	6.538	0.780	84	3919	N.D.		
16) tert-Butyl methyl ether	0.000	6.640	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.715	0.000		0	N.D.		
18) Vinyl acetate	6.800	6.969	0.811	43	2172	N.D.		
19) 1,1-Dichloroethane	0.000	7.068	0.000		0	N.D.		
20) 2-Butanone	0.000	7.450	0.000		0	N.D.		
21) cis-1,2-Dichloroethylene	0.000	7.507	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	7.514	0.000		0	N.D.		
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	0.000	7.701	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	0.000	7.924	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	8.005	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.196	8.203	0.977	78	118	N.D.		
32) Cyclohexene	0.000	8.246	0.000		0m	N.D. d		
33) n-Butyl alcohol	8.391	8.377	1.000	56	8241	Below Cal	#	20
34) Trichloroethylene	0.000	8.677	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	0.000	8.826	0.000		0	N.D.		
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B407BS2.D  
Acq On : 11 Mar 2010 9:20 am  
Operator : CDS1  
InstName : VOA5  
Sample : |1202067627|963809|1|VOA|1|VOA8260BS|  
Misc : BLANK 5G - SOIL  
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 11 17:16:25 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	9.487	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	9.526	0.000		0	N.D.	
44) Toluene	9.774	9.788	0.877	91	2188	N.D.	
45) trans-1,3-Dichloroprop...	0.000	9.968	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	10.173	0.000		0	N.D.	
47) 2-Hexanone	10.272	10.279	0.922	43	249	N.D.	
48) 1,3-Dichloropropane	0.000	10.364	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	10.290	0.000		0	N.D.	
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	10.771	0.000		0	N.D.	
52) Chlorobenzene	0.000	11.174	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	11.216	0.000		0	N.D.	
54) Ethylbenzene	11.178	11.181	1.003	91	244	N.D.	
55) m,p-Xylenes	0.000	11.280	0.000		0	N.D.	
56) o-Xylene	0.000	11.701	0.000		0	N.D.	
57) Styrene	0.000	11.715	0.000		0	N.D.	
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	0.000	12.016	0.000		0	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	12.348	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	0.000	12.465	0.000		0	N.D.	
65) n-Propylbenzene	12.412	12.415	0.925	91	1720	N.D.	
66) 1,3,5-Trimethylbenzene	12.560	12.564	0.936	105	215	N.D.	
67) 2-Chlorotoluene	0.000	12.596	0.000		0	N.D.	
68) 4-Chlorotoluene	12.695	12.698	0.946	91	1372	N.D.	
69) tert-Butylbenzene	0.000	12.900	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	12.960	12.956	0.966	105	671	N.D.	
71) sec-Butylbenzene	13.108	13.119	0.977	105	842	N.D.	
72) 4-Isopropyltoluene	13.299	13.229	0.992	119	1017	N.D.	
73) 1,3-Dichlorobenzene	13.342	13.349	0.995	146	108	N.D.	
74) 1,4-Dichlorobenzene	13.441	13.441	1.002	146	497	N.D.	
75) n-Butylbenzene	13.650	13.653	1.018	91	2339	N.D.	
76) 1,2-Dichlorobenzene	0.000	13.858	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	14.704	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	15.620	15.619	1.165	180	837	N.D.	
79) Hexachlorobutadiene	0.000	15.686	0.000		0	N.D.	
80) Naphthalene	0.000	15.988	0.000		0m	N.D.	d
81) 1,2,3-Trichlorobenzene	16.284	16.291	1.214	180	712	N.D.	
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	0.000	6.082	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	6.163	0.000		0	N.D.	
88) Allyl chloride	6.446	6.425	0.769	41	109	N.D.	
89) tert-Butyl Alcohol	0.000	6.460	0.000		0	N.D.	
90) Acrylonitrile	0.000	6.747	0.000		0	N.D.	
91) Isopropyl ether	0.000	6.920	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.104	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.192	0.000		0	N.D.	
94) Ethyl acetate	0.000	7.383	0.000		0	N.D.	



Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B407BS2.D  
Acq On : 11 Mar 2010 9:20 am  
Operator : CDS1  
InstName : VOA5  
Sample : |1202067627|963809|1|VOA|1|VOA8260BS|  
Misc : BLANK 5G - SOIL  
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 11 17:16:25 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

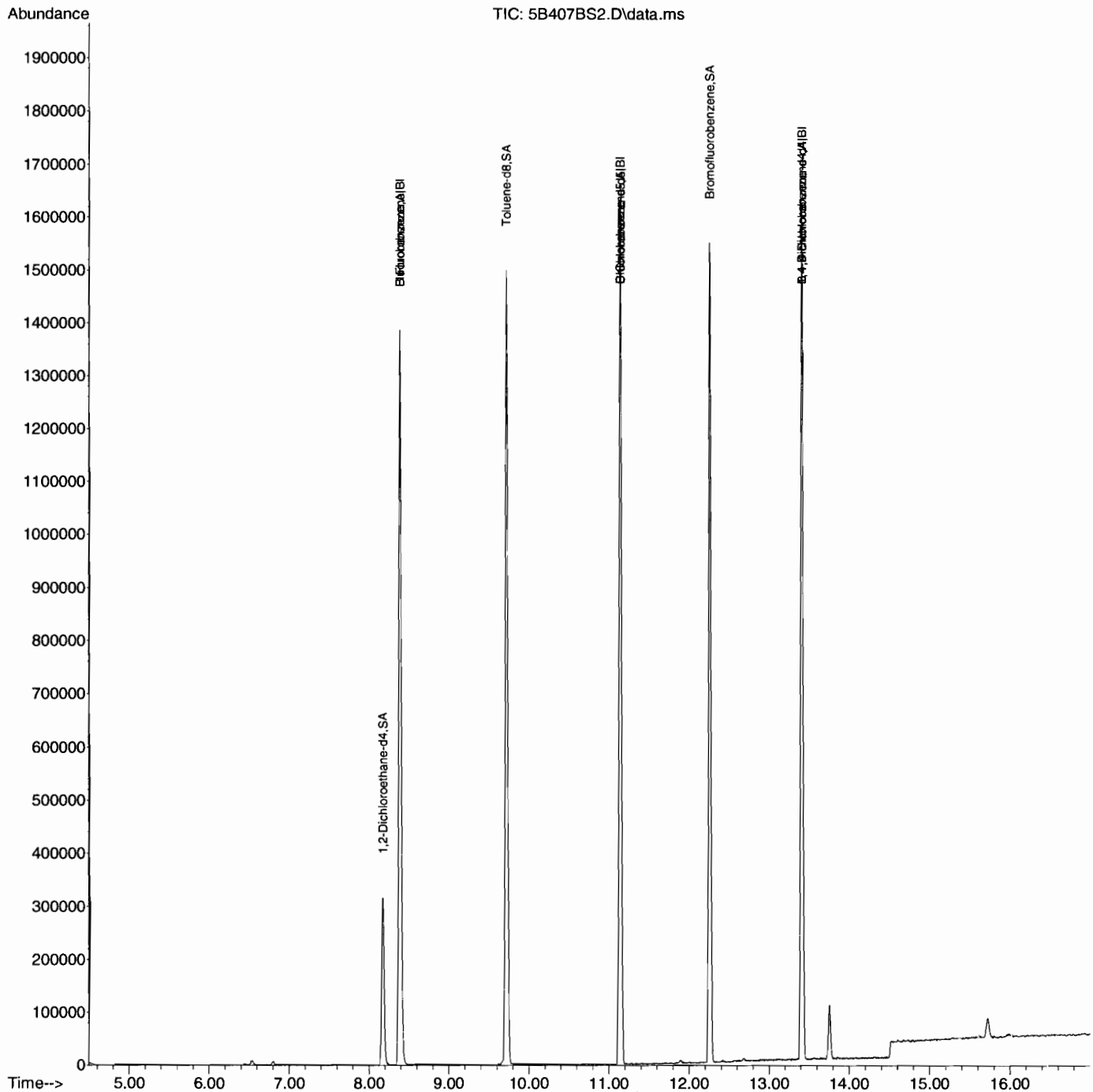
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	7.585	0.000		0	N.D.	
96) Methacrylonitrile	7.712	7.680	0.919	41	229	N.D.	
97) Tetrahydrofuran	7.705	7.716	0.919	42	113	N.D.	
98) Isobutyl alcohol	7.744	7.857	0.923	41	107	N.D.	
99) Methyl tert-amyl ether	0.000	8.122	0.000		0	N.D.	
100) Methyl methacrylate	0.000	8.801	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	8.957	0.000		0	N.D.	
102) 2-Nitropropane	0.000	9.342	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	9.859	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	12.136	0.000		0	N.D.	
108) Cyclohexanone	12.263	12.267	0.914	42	229	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	12.412	0.000		0	N.D.	
110) Pentachloroethane	0.000	13.017	0.000		0	N.D.	
111) Benzyl chloride	13.565	13.565	1.011	91	3422	N.D.	
112) bis(2-Chloroisopropyl)...	13.932	13.929	1.039	45	132	N.D.	

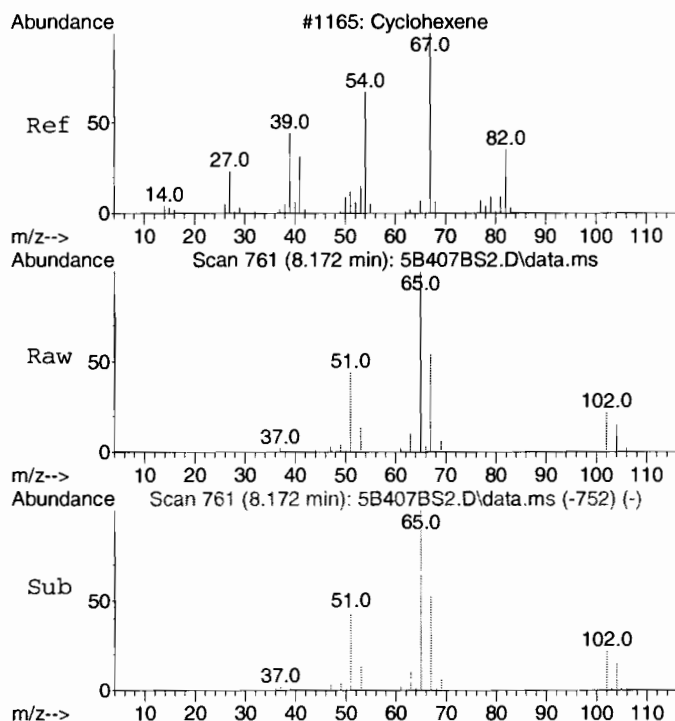
(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B407BS2.D  
Acq On : 11 Mar 2010 9:20 am  
Operator : CDS1  
InstName : VOA5  
Sample : |1202067627|963809|1|VOA|1|VOA8260BS|  
Misc : BLANK 5G - SOIL  
ALS Vial : 7 Sample Multiplier: 1

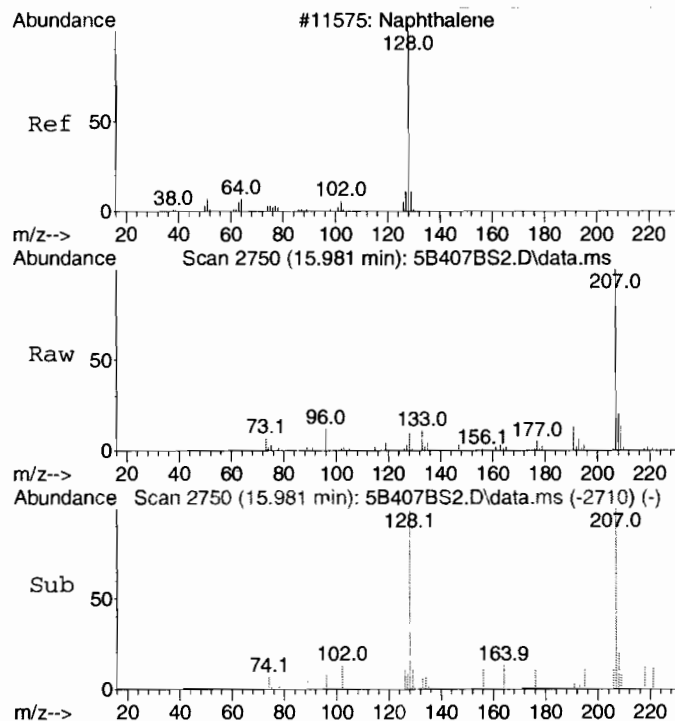
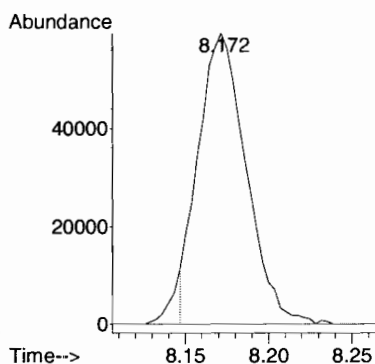
Quant Time: Mar 11 17:16:25 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE





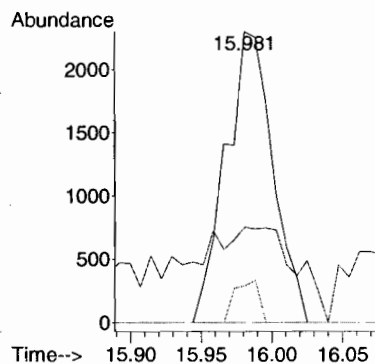
#32 BEFORE analyst DELETION  
Cyclohexene  
Concen: 12.52 ug/L  
RT: 8.172 min Scan# 761  
Delta R.T. -0.074 min  
Lab File: 5B407BS2.D  
Acq: 11 Mar 2010 9:20 am

Tgt Ion: 67 Resp: 118132  
Ion Ratio Lower Upper  
67 100  
54 0.0 46.3 106.3#



#80 BEFORE analyst DELETION  
Naphthalene  
Concen: 0.33 ug/L  
RT: 15.981 min Scan# 2750  
Delta R.T. -0.007 min  
Lab File: 5B407BS2.D  
Acq: 11 Mar 2010 9:20 am

Tgt Ion: 128 Resp: 5333  
Ion Ratio Lower Upper  
128 100  
127 77.1 0.0 42.4#  
129 7.4 0.0 40.8



Library Search Compound Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B407BS2.D  
Acq On : 11 Mar 2010 9:20 am  
Operator : CDS1  
Sample : |1202067627|963809|1|VOA|1|VOA8260BS|  
Misc : BLANK 5G - SOIL  
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

No Library Search Compounds Detected

\*\*\*\*\*

Tentatively Identified Compound (LSC) summary  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B407BS2.D  
Acq On : 11 Mar 2010 9:20 am  
Operator : CDS1  
Sample : |1202067627|963809|1|VOA|1|VOA8260BS|  
Misc : BLANK 5G - SOIL  
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
------------------	----	---------	-------	----------	---	----	------	------

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-2199  
 Lab Sample ID: 1202076531  
 Client Sample: QC for batch 963808  
 Client ID: MB for batch 963808  
 Batch ID: 963809  
 Run Date: 03/11/2010 20:49  
 Prep Date: 03/11/2010 16:00  
 Data File: 031110V55B433BS2.D

Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: CDS1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: SOIL  
 Project: QC  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-2199

Matrix: SOIL

Lab Sample ID: 1202076531

Client Sample: QC for batch 963808

Client: LANL010

Project: QC

Client ID: MB for batch 963808

Method: SW846 8260B

SOP Ref: GL-OA-E-038

Batch ID: 963809

Inst: VOA5.1

Dilution: 1

Run Date: 03/11/2010 20:49

Analyst: CDS1

Purge Vol: 5 mL

Prep Date: 03/11/2010 16:00

Aliquot: 5 g

Final Volume: 5 mL

Data File: 031110V5\SB433BS2.D

Column: DB-624

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.00	ug/kg	1.60	5.00
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
No Tentatively Identified Compounds Found				ug/kg		

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B433BS2.D  
Acq On : 11 Mar 2010 8:49 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |1202076531|963809|1|VOA|1|VOA8260BS|  
Misc : BLANK 5G - SOIL  
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Mar 19 16:48:49 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	8.388	8.387	1.000	96	1409057	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1049412	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	504287	50.00	ug/L	0.00
82) B Fluorobenzene	8.388	8.391	1.000	96	1409057	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1049412	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	504287	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	232334	34.07	ug/L	0.00
Spiked Amount 50.000	Range 66	- 134	Recovery	=	68.14%			
43) Toluene-d8	9.724	9.721	0.873	98	1075273	40.07	ug/L	0.00
Spiked Amount 50.000	Range 71	- 128	Recovery	=	80.14%			
61) Bromofluorobenzene	12.263	12.260	0.914	95	621482	61.44	ug/L	0.00
Spiked Amount 50.000	Range 65	- 130	Recovery	=	122.88%			
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	4.668	0.000		0	N.D.		
3) Chloromethane	4.890	4.900	0.583	50	550	Below Cal		97
4) Vinyl chloride	0.000	5.041	0.000		0	N.D.		
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.695	0.000		0	N.D.		
8) Ethyl ether	0.000	5.866	0.000		0	N.D.		
9) Acetone	6.181	6.174	0.737	43	1139	N.D.		
10) 1,1-Dichloroethylene	0.000	6.156	0.000		0	N.D.		
11) Iodomethane	0.000	6.357	0.000		0	N.D.		
12) Acetonitrile	6.464	6.464	0.771	41	233	N.D.		
13) Methyl acetate	6.202	6.365	0.739	43	107	N.D.		
14) Carbon disulfide	6.436	6.435	0.767	76	525	N.D.		
15) Methylene chloride	6.538	6.538	0.779	84	3681	N.D.		
16) tert-Butyl methyl ether	0.000	6.640	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.715	0.000		0	N.D.		
18) Vinyl acetate	6.789	6.969	0.809	43	112	N.D.		
19) 1,1-Dichloroethane	0.000	7.068	0.000		0	N.D.		
20) 2-Butanone	7.691	7.450	0.917	43	117	N.D.		
21) cis-1,2-Dichloroethylene	0.000	7.507	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	7.514	0.000		0	N.D.		
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	0.000	7.701	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	0.000	7.924	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	8.005	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.200	8.203	0.978	78	115	N.D.		
32) Cyclohexene	0.000	8.246	0.000		0m	N.D.	d	
33) n-Butyl alcohol	8.388	8.377	1.000	56	8386	N.D.		
34) Trichloroethylene	0.000	8.677	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	0.000	8.826	0.000		0	N.D.		
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		



Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B433BS2.D  
Acq On : 11 Mar 2010 8:49 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |1202076531|963809|1|VOA|1|VOA8260BS|  
Misc : BLANK 5G - SOIL  
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Mar 19 16:48:49 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	9.487	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	9.526	0.000		0	N.D.	
44) Toluene	9.792	9.788	0.879	91	5697	N.D.	
45) trans-1,3-Dichloroprop...	0.000	9.968	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	10.173	0.000		0	N.D.	
47) 2-Hexanone	10.276	10.279	0.922	43	366	N.D.	
48) 1,3-Dichloropropane	0.000	10.364	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	10.290	0.000		0	N.D.	
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	10.771	0.000		0	N.D.	
52) Chlorobenzene	0.000	11.174	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	11.216	0.000		0	N.D.	
54) Ethylbenzene	11.142	11.181	1.000	91	3625	N.D.	
55) m,p-Xylenes	0.000	11.280	0.000		0	N.D.	
56) o-Xylene	0.000	11.701	0.000		0	N.D.	
57) Styrene	0.000	11.715	0.000		0	N.D.	
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	12.263	12.016	0.914	105	400	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	12.348	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	0.000	12.465	0.000		0	N.D.	
65) n-Propylbenzene	12.412	12.415	0.925	91	629	N.D.	
66) 1,3,5-Trimethylbenzene	12.553	12.564	0.936	105	426	N.D.	
67) 2-Chlorotoluene	0.000	12.596	0.000		0	N.D.	
68) 4-Chlorotoluene	12.688	12.698	0.946	91	1413	N.D.	
69) tert-Butylbenzene	0.000	12.900	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	12.950	12.956	0.965	105	896	N.D.	
71) sec-Butylbenzene	13.109	13.119	0.977	105	662	N.D.	
72) 4-Isopropyltoluene	13.144	13.229	0.980	119	829	N.D.	
73) 1,3-Dichlorobenzene	0.000	13.349	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	13.448	13.441	1.003	146	363	N.D.	
75) n-Butylbenzene	13.646	13.653	1.017	91	2282	N.D.	
76) 1,2-Dichlorobenzene	13.858	13.858	1.033	146	106	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	14.704	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	15.612	15.619	1.164	180	505	N.D.	
79) Hexachlorobutadiene	0.000	15.686	0.000		0	N.D.	
80) Naphthalene	15.981	15.988	1.191	128	4948	0.30 ug/L	67
81) 1,2,3-Trichlorobenzene	16.284	16.291	1.214	180	262	N.D.	
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	0.000	6.082	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	6.163	0.000		0	N.D.	
88) Allyl chloride	6.453	6.425	0.769	41	363	N.D.	
89) tert-Butyl Alcohol	0.000	6.460	0.000		0	N.D.	
90) Acrylonitrile	0.000	6.747	0.000		0	N.D.	
91) Isopropyl ether	0.000	6.920	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.104	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.192	0.000		0	N.D.	
94) Ethyl acetate	0.000	7.383	0.000		0	N.D.	

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B433BS2.D  
Acq On : 11 Mar 2010 8:49 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |1202076531|963809|1|VOA|1|VOA8260BS|  
Misc : BLANK 5G - SOIL  
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Mar 19 16:48:49 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

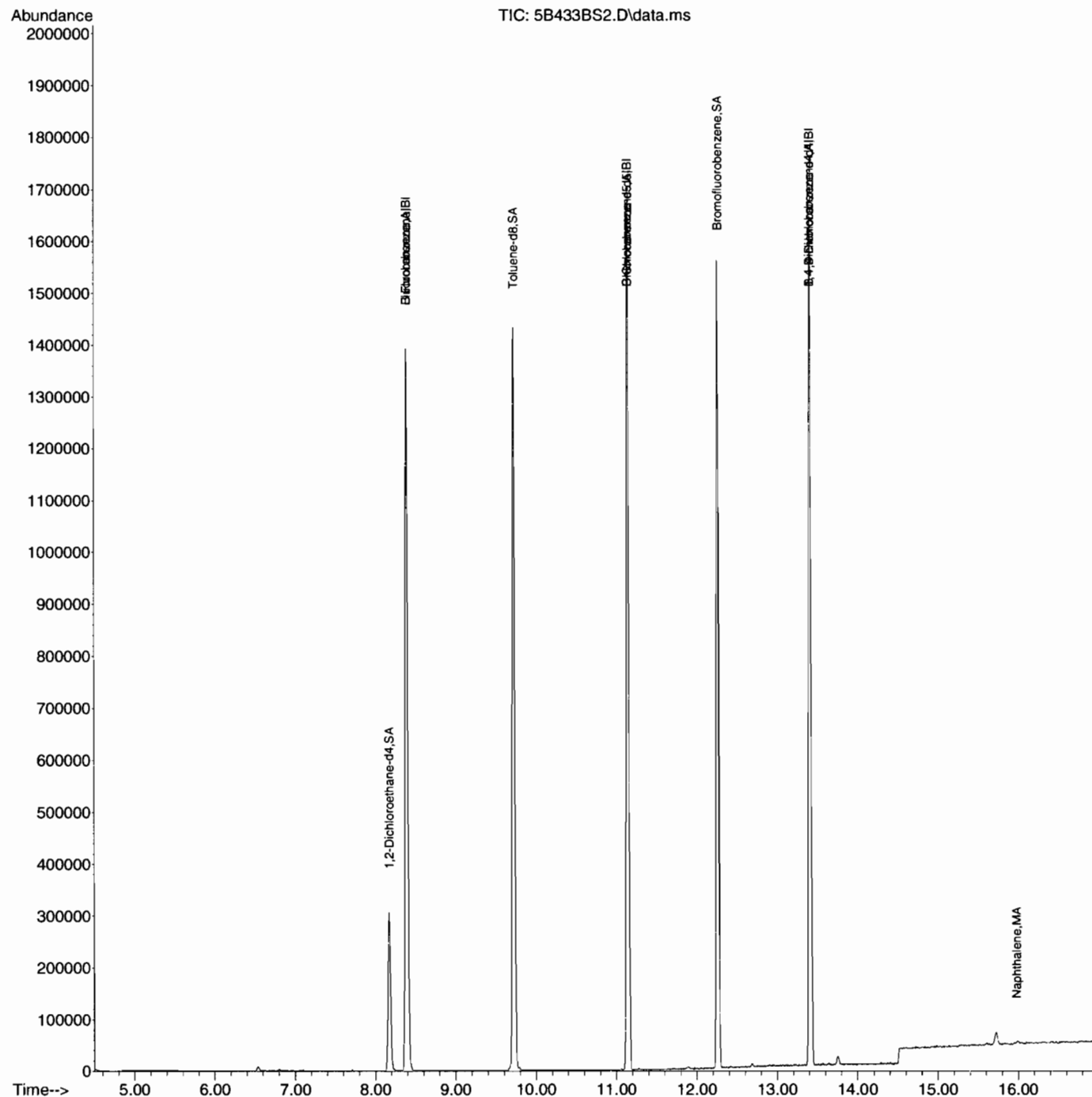
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	7.585	0.000		0	N.D.	
96) Methacrylonitrile	7.680	7.680	0.916	41	112	N.D.	
97) Tetrahydrofuran	7.712	7.716	0.919	42	296	N.D.	
98) Isobutyl alcohol	7.847	7.857	0.935	41	148	N.D.	
99) Methyl tert-amyl ether	0.000	8.122	0.000		0	N.D.	
100) Methyl methacrylate	0.000	8.801	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	8.957	0.000		0	N.D.	
102) 2-Nitropropane	0.000	9.342	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	9.859	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	12.136	0.000		0	N.D.	
108) Cyclohexanone	12.263	12.267	0.914	42	292	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	12.412	0.000		0	N.D.	
110) Pentachloroethane	0.000	13.017	0.000		0	N.D.	
111) Benzyl chloride	13.565	13.565	1.011	91	2789	N.D.	
112) bis(2-Chloroisopropyl)...	13.936	13.929	1.039	45	127	N.D.	

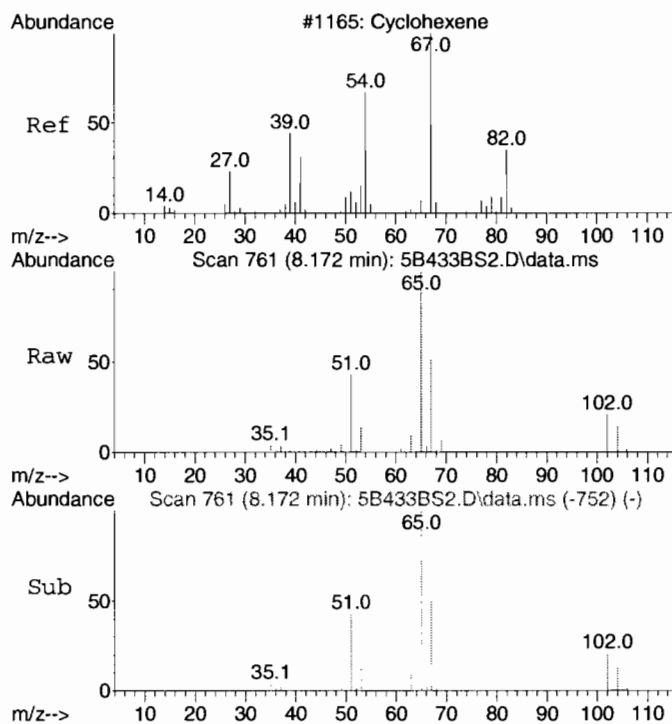
(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B433BS2.D  
Acq On : 11 Mar 2010 8:49 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |1202076531|963809|1|VOA|1|VOA8260BS|  
Misc : BLANK 5G - SOIL  
ALS Vial : 33 Sample Multiplier: 1

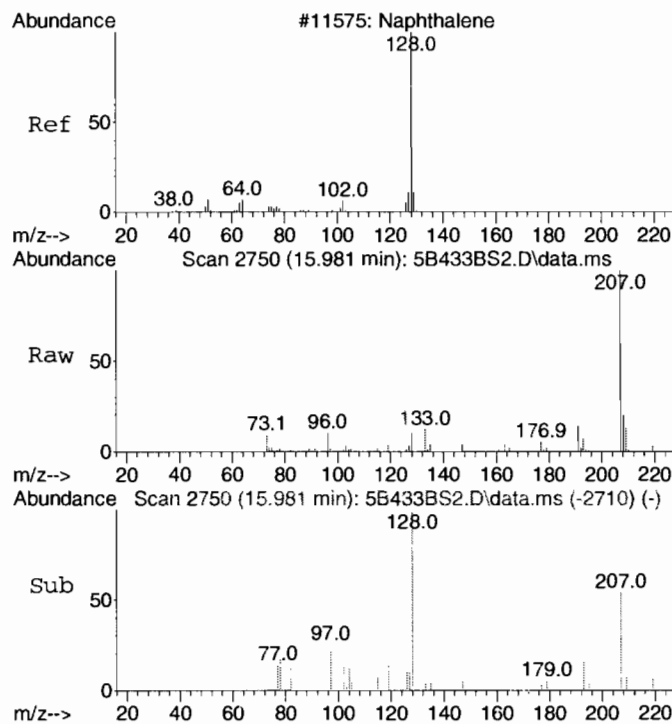
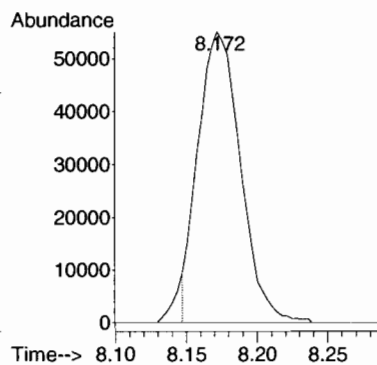
Quant Time: Mar 19 16:48:49 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE





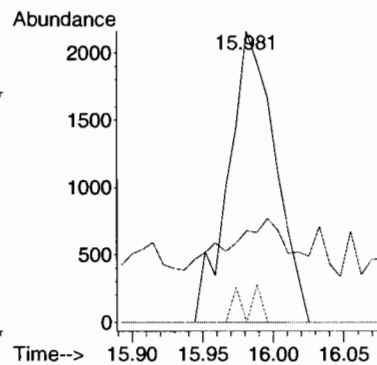
#32 BEFORE analyst DELETION  
Cyclohexene  
Concen: 12.08 ug/L  
RT: 8.172 min Scan# 761  
Delta R.T. -0.074 min  
Lab File: 5B433BS2.D  
Acq: 11 Mar 2010 8:49 pm

Tgt Ion: 67 Resp: 114552  
Ion Ratio Lower Upper  
67 100  
54 0.0 46.3 106.3#



#80  
Naphthalene  
Concen: 0.30 ug/L  
RT: 15.981 min Scan# 2750  
Delta R.T. -0.007 min  
Lab File: 5B433BS2.D  
Acq: 11 Mar 2010 8:49 pm

Tgt Ion: 128 Resp: 4948  
Ion Ratio Lower Upper  
128 100  
127 31.4 0.0 42.4  
129 4.7 0.0 40.8



Library Search Compound Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B433BS2.D  
Acq On : 11 Mar 2010 8:49 pm  
Operator : CDS1  
Sample : |1202076531|963809|1|VOA|1|VOA8260BS|  
Misc : BLANK 5G - SOIL  
ALS Vial : 33 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

No Library Search Compounds Detected

\*\*\*\*\*

Tentatively Identified Compound (LSC) summary  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B433BS2.D  
Acq On : 11 Mar 2010 8:49 pm  
Operator : CDS1  
Sample : |1202076531|963809|1|VOA|1|VOA8260BS|  
Misc : BLANK 5G - SOIL  
ALS Vial : 33 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--
					# RT Resp Conc

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-2199  
 Lab Sample ID: 1202067630  
 Client Sample: QC for batch 963808  
 Client ID: LCS for batch 963808  
 Batch ID: 963809  
 Run Date: 03/11/2010 08:01  
 Prep Date: 03/11/2010 06:00  
 Data File: 031110V5VB404LS2.D

Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: CDS1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: SOIL  
 Project: QC  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		58.5	ug/kg	0.340	1.00
74-87-3	Chloromethane		54.5	ug/kg	0.300	1.00
75-01-4	Vinyl chloride		58.2	ug/kg	0.300	1.00
74-83-9	Bromomethane		54.6	ug/kg	0.300	1.00
75-00-3	Chloroethane		54.1	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane		58.7	ug/kg	0.300	1.00
67-64-1	Acetone		232	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene		54.6	ug/kg	0.300	1.00
74-88-4	Iodomethane		261	ug/kg	1.60	5.00
75-09-2	Methylene chloride		51.9	ug/kg	2.00	5.00
75-15-0	Carbon disulfide		282	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene		55.0	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane		54.7	ug/kg	0.300	1.00
78-93-3	2-Butanone		240	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene		53.5	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane		56.1	ug/kg	0.300	1.00
67-66-3	Chloroform		53.2	ug/kg	0.300	1.00
74-97-5	Bromochloromethane		53.4	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane		56.3	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene		56.2	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride		57.7	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane		52.1	ug/kg	0.300	1.00
71-43-2	Benzene		51.7	ug/kg	0.300	1.00
79-01-6	Trichloroethylene		53.7	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane		52.4	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane		55.5	ug/kg	0.300	1.00
74-95-3	Dibromomethane		53.8	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone		256	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene		53.4	ug/kg	0.300	1.00
108-88-3	Toluene		49.6	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene		51.9	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane		49.4	ug/kg	0.300	1.00
591-78-6	2-Hexanone		235	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane		49.7	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene		51.6	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane		53.7	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane		50.4	ug/kg	0.300	1.00
108-90-7	Chlorobenzene		49.9	ug/kg	0.300	1.00

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-2199  
 Lab Sample ID: 1202067630  
 Client Sample: QC for batch 963808  
 Client ID: LCS for batch 963808  
 Batch ID: 963809  
 Run Date: 03/11/2010 08:01  
 Prep Date: 03/11/2010 06:00  
 Data File: 031110V5SB404LS2.D

Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA5.I  
 Analyst: CDS1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: SOIL  
 Project: QC  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		48.6	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes		102	ug/kg	0.300	2.00
95-47-6	o-Xylene		50.4	ug/kg	0.300	1.00
100-42-5	Styrene		53.2	ug/kg	0.300	1.00
75-25-2	Bromoform		54.4	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane		47.7	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane		48.8	ug/kg	0.300	1.00
108-86-1	Bromobenzene		48.0	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene		49.7	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene		49.2	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene		50.5	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene		50.0	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene		48.3	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene		48.9	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene		49.8	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene		50.8	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene		51.1	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene		48.7	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene		48.5	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene		50.0	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane		47.6	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane Trichlorotrifluoroethane	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane		51.9	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene		48.7	ug/kg	0.300	1.00



Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B404LS2.D  
Acq On : 11 Mar 2010 8:01 am  
Operator : CDS1  
InstName : VOA5  
Sample : |1202067630|963809|1|VOA|1|VOA8260BS|  
Misc : LCS 5G - SOIL MIX[A] 0305-01A+0310-01  
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 11 08:29:37 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	8.387	8.387	1.000	96	1393474	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1064611	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	553083	50.00	ug/L	0.00
82) B Fluorobenzene	8.387	8.391	1.000	96	1393474	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1064611	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	553083	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	250550	37.15	ug/L	0.00
Spiked Amount 50.000	Range 66	- 134	Recovery	=	74.30%			
43) Toluene-d8	9.721	9.721	0.872	98	1117775	41.05	ug/L	0.00
Spiked Amount 50.000	Range 71	- 128	Recovery	=	82.10%			
61) Bromofluorobenzene	12.260	12.260	0.914	95	639510	57.65	ug/L	0.00
Spiked Amount 50.000	Range 65	- 130	Recovery	=	115.30%			
Target Compounds								QValue
2) Dichlorodifluoromethane	4.668	4.668	0.557	85	190296	58.49	ug/L	97
3) Chloromethane	4.900	4.900	0.584	50	225677	54.50	ug/L	98
4) Vinyl chloride	5.041	5.041	0.601	62	199981	58.24	ug/L	99
5) Bromomethane	5.423	5.423	0.647	94	179015	54.59	ug/L	98
6) Chloroethane	5.504	5.504	0.656	64	188292	54.07	ug/L	100
7) Trichlorofluoromethane	5.695	5.695	0.679	101	350523	58.65	ug/L	100
8) Ethyl ether	5.866	5.866	0.699	59	268662	52.21	ug/L	95
9) Acetone	6.174	6.174	0.736	43	967895	232.46	ug/L	100
10) 1,1-Dichloroethylene	6.152	6.156	0.734	61	363711	54.62	ug/L	99
11) Iodomethane	6.357	6.357	0.758	142	1793802	260.84	ug/L	99
12) Acetonitrile	6.460	6.464	0.770	41	987210	1209.77	ug/L	98
13) Methyl acetate	6.361	6.365	0.758	43	1101573	242.10	ug/L	100
14) Carbon disulfide	6.435	6.435	0.767	76	3757922	281.58	ug/L	100
15) Methylene chloride	6.538	6.538	0.779	84	275595	51.89	ug/L	95
16) tert-Butyl methyl ether	6.637	6.640	0.791	73	696732	50.25	ug/L	100
17) trans-1,2-Dichloroethy...	6.715	6.715	0.801	61	398279	55.01	ug/L	98
18) Vinyl acetate	6.969	6.969	0.831	43	3417387	299.73	ug/L	99
19) 1,1-Dichloroethane	7.068	7.068	0.843	63	490347	54.69	ug/L	99
20) 2-Butanone	7.450	7.450	0.888	43	1190548	239.99	ug/L	99
21) cis-1,2-Dichloroethylene	7.503	7.507	0.895	61	450813	53.53	ug/L	98
22) 2,2-Dichloropropane	7.510	7.514	0.895	77	372785	56.10	ug/L	98
23) Bromochloromethane	7.719	7.719	0.920	128	132745	53.35	ug/L	96
24) Chloroform	7.698	7.701	0.918	83	427198	53.19	ug/L	100
25) 1,1,1-Trichloroethane	7.903	7.906	0.942	97	373048	56.32	ug/L	100
26) Cyclohexane	7.924	7.924	0.945	56	539360	57.24	ug/L	99
27) 1,1-Dichloropropene	8.002	8.005	0.954	75	341172	56.16	ug/L	99
28) Carbon tetrachloride	8.023	8.020	0.957	117	327561	57.65	ug/L	99
30) 1,2-Dichloroethane	8.235	8.235	0.982	62	361529	52.09	ug/L	99
31) Benzene	8.200	8.203	0.978	78	1043662	51.74	ug/L	96
32) Cyclohexene	8.246	8.246	0.983	67	507223	54.10	ug/L	99
33) n-Butyl alcohol	8.377	8.377	0.999	56	1024845	5232.66	ug/L	100
34) Trichloroethylene	8.677	8.677	1.035	95	257099	53.67	ug/L	100
35) 1,2-Dichloropropane	8.932	8.932	1.065	63	298548	52.40	ug/L	100
36) Methylcyclohexane	8.829	8.826	1.053	83	483678	55.25	ug/L	99
37) Dibromomethane	9.059	9.059	1.080	93	155659	53.75	ug/L	99

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B404LS2.D  
Acq On : 11 Mar 2010 8:01 am  
Operator : CDS1  
InstName : VOA5  
Sample : |1202067630|963809|1|VOA|1|VOA8260BS|  
Misc : LCS 5G - SOIL MIX[A] 0305-01A+0310-01  
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 11 08:29:37 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	9.109	9.112	1.086	83	328621	55.52	ug/L 99
39) 2-Chloroethylvinyl ether	9.254	9.254	1.103	63	410578	225.55	ug/L 99
40) cis-1,3-Dichloropropylene	9.487	9.487	1.131	75	432801	53.41	ug/L 97
42) 4-Methyl-2-pentanone	9.526	9.526	0.855	58	650794	255.63	ug/L 98
44) Toluene	9.788	9.788	0.878	91	1133278	49.58	ug/L 100
45) trans-1,3-Dichloroprop...	9.968	9.968	0.895	75	403747	51.86	ug/L 99
46) 1,1,2-Trichloroethane	10.173	10.173	0.913	83	190412	49.37	ug/L 99
47) 2-Hexanone	10.279	10.279	0.923	43	1621063	234.50	ug/L 100
48) 1,3-Dichloropropane	10.364	10.364	0.930	76	411792	49.69	ug/L 98
49) Tetrachloroethylene	10.293	10.290	0.924	164	216159	51.63	ug/L 99
50) Dibromochloromethane	10.587	10.583	0.950	129	246203	53.66	ug/L 99
51) 1,2-Dibromoethane	10.771	10.771	0.967	107	225419	50.44	ug/L 99
52) Chlorobenzene	11.174	11.174	1.003	112	740375	49.94	ug/L 99
53) 1,1,1,2-Tetrachloroethane	11.216	11.216	1.007	131	260574	51.88	ug/L 100
54) Ethylbenzene	11.178	11.181	1.003	91	1266225	48.56	ug/L 100
55) m,p-Xylenes	11.280	11.280	1.012	106	1008223	102.07	ug/L 99
56) o-Xylene	11.697	11.701	1.050	106	502903	50.39	ug/L 99
57) Styrene	11.712	11.715	1.051	104	811763	53.24	ug/L 93
59) Bromoform	12.005	12.005	0.895	173	163765	54.39	ug/L 99
60) Isopropylbenzene	12.012	12.016	0.896	105	1281854	50.51	ug/L 99
62) 1,1,2,2-Tetrachloroethane	12.348	12.348	0.921	83	313058	47.66	ug/L 100
63) 1,2,3-Trichloropropane	12.451	12.454	0.928	110	85587	48.80	ug/L # 90
64) Bromobenzene	12.461	12.465	0.929	156	306243	47.98	ug/L 99
65) n-Propylbenzene	12.415	12.415	0.926	91	1522034	49.68	ug/L 99
66) 1,3,5-Trimethylbenzene	12.560	12.564	0.936	105	1083770	50.01	ug/L 100
67) 2-Chlorotoluene	12.596	12.596	0.939	126	313234	49.24	ug/L # 80
68) 4-Chlorotoluene	12.698	12.698	0.947	91	940301	48.27	ug/L 100
69) tert-Butylbenzene	12.900	12.900	0.962	134	243826	48.87	ug/L 99
70) 1,2,4-Trimethylbenzene	12.956	12.956	0.966	105	1097407	49.77	ug/L 100
71) sec-Butylbenzene	13.115	13.119	0.978	105	1424819	50.81	ug/L 99
72) 4-Isopropyltoluene	13.229	13.229	0.986	119	1138818	51.09	ug/L 99
73) 1,3-Dichlorobenzene	13.349	13.349	0.995	146	590201	48.69	ug/L 100
74) 1,4-Dichlorobenzene	13.441	13.441	1.002	146	597250	48.47	ug/L 100
75) n-Butylbenzene	13.653	13.653	1.018	91	1094849	50.02	ug/L 99
76) 1,2-Dichlorobenzene	13.855	13.858	1.033	146	566891	48.65	ug/L 100
77) 1,2-Dibromo-3-chloropr...	14.704	14.704	1.096	157	59452	47.55	ug/L 99
78) 1,2,4-Trichlorobenzene	15.612	15.619	1.164	180	399320	50.89	ug/L 99
79) Hexachlorobutadiene	15.686	15.686	1.169	225	246575	51.73	ug/L 99
80) Naphthalene	15.988	15.988	1.192	128	897785	50.37	ug/L 100
81) 1,2,3-Trichlorobenzene	16.291	16.291	1.215	180	362064	52.87	ug/L 99
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	0.000	6.082	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.	
87) Isopropyl Alcohol	6.174	6.163	0.736		0m	N.D.	d
88) Allyl chloride	6.460	6.425	0.770		0m	N.D.	d
89) tert-Butyl Alcohol	6.471	6.460	0.771		0m	N.D.	d
90) Acrylonitrile	6.644	6.747	0.792		0m	N.D.	d
91) Isopropyl ether	6.909	6.920	0.824		0m	N.D.	d
92) 2-Chloro-1,3-butadiene	7.036	7.104	0.839		0m	N.D.	d
93) Ethyl tert-butyl ether	7.181	7.192	0.856		0m	N.D.	d
94) Ethyl acetate	7.387	7.383	0.881		0m	N.D.	d

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B404LS2.D  
Acq On : 11 Mar 2010 8:01 am  
Operator : CDS1  
InstName : VOA5  
Sample : |1202067630|963809|1|VOA|1|VOA8260BS|  
Misc : LCS 5G - SOIL MIX[A] 0305-01A+0310-01  
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 11 08:29:37 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	7.669	7.585	0.914		0m	N.D.	d
96) Methacrylonitrile	7.669	7.680	0.914		0m	N.D.	d
97) Tetrahydrofuran	7.712	7.716	0.919		0m	N.D.	d
98) Isobutyl alcohol	7.800	7.857	0.930		0m	N.D.	d
99) Methyl tert-amyl ether	8.126	8.122	0.969		0m	N.D.	d
100) Methyl methacrylate	8.829	8.801	1.053		0m	N.D.	d
101) 1,4-Dioxane	0.000	8.957	0.000		0	N.D.	
102) 2-Nitropropane	9.370	9.342	1.117		0m	N.D.	d
104) Ethyl methacrylate	0.000	9.859	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	12.012	12.136	0.896		0m	N.D.	d
108) Cyclohexanone	12.359	12.267	0.921		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	12.408	12.412	0.925		0m	N.D.	d
110) Pentachloroethane	13.016	13.017	0.970		0m	N.D.	d
111) Benzyl chloride	13.568	13.565	1.012		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	13.897	13.929	1.036		0m	N.D.	d

(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted

```
Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B404LS2.D  
Acq On : 11 Mar 2010 8:01 am  
Operator : CDS1  
InstName : VOA5  
Sample : |1202067630|963809|1|VOA|1|VOA8260BS|  
Misc : LCS 5G - SOIL MIX[A] 0305-01A+0310-01  
ALS Vial : 4 Sample Multiplier: 1
```

[illegible]

**Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-2199

Matrix: SOIL

Lab Sample ID: 1202067631

Client Sample: QC for batch 963808

Client: LANL010

Project: QC

Client ID: LCS for batch 963808

Method: SW846 8260B

SOP Ref: GL-OA-E-038

Batch ID: 963809

Inst: VOA5.I

Dilution: 1

Run Date: 03/11/2010 08:27

Analyst: CDS1

Purge Vol: 5 mL

Prep Date: 03/11/2010 06:00

Aliquot: 5 g

Final Volume: 5 mL

Data File: 031110V55B405SLS2.D

Column: DB-624

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

**Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-2199

Matrix: SOIL

Lab Sample ID: 1202067631

Client Sample: QC for batch 963808

Client: LANL010

Project: QC

Client ID: LCS for batch 963808

Method: SW846 8260B

SOP Ref: GL-OA-E-038

Batch ID: 963809

Inst: VOA5.I

Dilution: 1

Run Date: 03/11/2010 08:27

Analyst: CDS1

Purge Vol: 5 mL

Prep Date: 03/11/2010 06:00

Aliquot: 5 g

Final Volume: 5 mL

Data File: 031110V55B405SLS2.D

Column: DB-624

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane		336	ug/kg	1.60	5.00
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B405SLS2.D  
Acq On : 11 Mar 2010 8:27 am  
Operator : CDS1  
InstName : VOA5  
Sample : |1202067631|963809|1|VOA|1|VOA8260BS|  
Misc : LCS 5G - SOIL MIX[B ]UVM100215-08B  
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 11 17:15:12 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	8.388	8.387	1.000	96	1397071	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1054675	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	537423	50.00	ug/L	0.00
82) B Fluorobenzene	8.388	8.391	1.000	96	1397071	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1054675	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	537423	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	249884	36.96	ug/L	0.00
Spiked Amount 50.000	Range 66	- 134	Recovery	=	73.92%			
43) Toluene-d8	9.721	9.721	0.872	98	1118838	41.48	ug/L	0.00
Spiked Amount 50.000	Range 71	- 128	Recovery	=	82.96%			
61) Bromofluorobenzene	12.260	12.260	0.914	95	621626	57.67	ug/L	0.00
Spiked Amount 50.000	Range 65	- 130	Recovery	=	115.34%			
Target Compounds	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	4.668	0.000		0	N.D.		
3) Chloromethane	4.890	4.900	0.583		0m	N.D.	d	
4) Vinyl chloride	5.031	5.041	0.600		0m	N.D.	d	
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.695	0.000		0	N.D.		
8) Ethyl ether	5.867	5.866	0.699		0m	N.D.	d	
9) Acetone	6.170	6.174	0.736		0m	N.D.	d	
10) 1,1-Dichloroethylene	6.064	6.156	0.723		0m	N.D.	d	
11) Iodomethane	6.354	6.357	0.758		0m	N.D.	d	
12) Acetonitrile	6.421	6.464	0.766		0m	N.D.	d	
13) Methyl acetate	6.365	6.365	0.759		0m	N.D.	d	
14) Carbon disulfide	6.421	6.435	0.766		0m	N.D.	d	
15) Methylene chloride	6.542	6.538	0.780		0m	N.D.	d	
16) tert-Butyl methyl ether	6.634	6.640	0.791		0m	N.D.	d	
17) trans-1,2-Dichloroethy...	0.000	6.715	0.000		0	N.D.		
18) Vinyl acetate	6.973	6.969	0.831		0m	N.D.	d	
19) 1,1-Dichloroethane	7.104	7.068	0.847		0m	N.D.	d	
20) 2-Butanone	7.380	7.450	0.880		0m	N.D.	d	
21) cis-1,2-Dichloroethylene	7.380	7.507	0.880		0m	N.D.	d	
22) 2,2-Dichloropropane	0.000	7.514	0.000		0	N.D.		
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	0.000	7.701	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	7.854	7.924	0.936		0m	N.D.	d	
27) 1,1-Dichloropropene	8.122	8.005	0.968		0m	N.D.	d	
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.193	8.203	0.977		0m	N.D.	d	
32) Cyclohexene	8.250	8.246	0.984		0m	N.D.	d	
33) n-Butyl alcohol	8.384	8.377	1.000		0m	N.D.	d	
34) Trichloroethylene	8.692	8.677	1.036		0m	N.D.	d	
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	8.798	8.826	1.049		0m	N.D.	d	
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B405SLS2.D  
Acq On : 11 Mar 2010 8:27 am  
Operator : CDS1  
InstName : VOA5  
Sample : |1202067631|963809|1|VOA|1|VOA8260BS|  
Misc : LCS 5G - SOIL MIX[B ]UVM100215-08B  
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 11 17:15:12 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	9.480	9.487	1.130		0m	N.D.	d
42) 4-Methyl-2-pentanone	9.519	9.526	0.854		0m	N.D.	d
44) Toluene	9.792	9.788	0.879		0m	N.D.	d
45) trans-1,3-Dichloroprop...	9.972	9.968	0.895		0m	N.D.	d
46) 1,1,2-Trichloroethane	10.287	10.173	0.923		0m	N.D.	d
47) 2-Hexanone	10.276	10.279	0.922		0m	N.D.	d
48) 1,3-Dichloropropane	10.368	10.364	0.930		0m	N.D.	d
49) Tetrachloroethylene	10.290	10.290	0.924		0m	N.D.	d
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	10.764	10.771	0.966		0m	N.D.	d
52) Chlorobenzene	11.174	11.174	1.003		0m	N.D.	d
53) 1,1,1,2-Tetrachloroethane	0.000	11.216	0.000		0	N.D.	
54) Ethylbenzene	11.178	11.181	1.003		0m	N.D.	d
55) m,p-Xylenes	11.280	11.280	1.012		0m	N.D.	d
56) o-Xylene	11.701	11.701	1.050		0m	N.D.	d
57) Styrene	11.715	11.715	1.051		0m	N.D.	d
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	12.012	12.016	0.896		0m	N.D.	d
62) 1,1,2,2-Tetrachloroethane	12.408	12.348	0.925		0m	N.D.	d
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	12.461	12.465	0.929		0m	N.D.	d
65) n-Propylbenzene	12.408	12.415	0.925		0m	N.D.	d
66) 1,3,5-Trimethylbenzene	12.561	12.564	0.936		0m	N.D.	d
67) 2-Chlorotoluene	12.596	12.596	0.939		0m	N.D.	d
68) 4-Chlorotoluene	12.698	12.698	0.947		0m	N.D.	d
69) tert-Butylbenzene	12.907	12.900	0.962		0m	N.D.	d
70) 1,2,4-Trimethylbenzene	12.953	12.956	0.966		0m	N.D.	d
71) sec-Butylbenzene	13.116	13.119	0.978		0m	N.D.	d
72) 4-Isopropyltoluene	13.232	13.229	0.987		0m	N.D.	d
73) 1,3-Dichlorobenzene	13.356	13.349	0.996		0m	N.D.	d
74) 1,4-Dichlorobenzene	13.434	13.441	1.002		0m	N.D.	d
75) n-Butylbenzene	13.653	13.653	1.018		0m	N.D.	d
76) 1,2-Dichlorobenzene	13.858	13.858	1.033		0m	N.D.	d
77) 1,2-Dibromo-3-chloropr...	0.000	14.704	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	15.612	15.619	1.164		0m	N.D.	d
79) Hexachlorobutadiene	15.686	15.686	1.169		0m	N.D.	d
80) Naphthalene	15.981	15.988	1.191		0m	N.D.	d
81) 1,2,3-Trichlorobenzene	16.291	16.291	1.215		0m	N.D.	d
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	6.082	6.082	0.725	56	209673	260.66 ug/L	99
86) Trichlorotrifluoroethane	6.071	6.071	0.724	85	420908	336.02 ug/L	100
87) Isopropyl Alcohol	0.000	6.163	0.000		0m	N.D.	d
88) Allyl chloride	6.421	6.425	0.766	41	2064299	224.51 ug/L	93
89) tert-Butyl Alcohol	6.421	6.460	0.766	59	764	N.D.	
90) Acrylonitrile	6.743	6.747	0.804	53	494368	244.54 ug/L	100
91) Isopropyl ether	0.000	6.920	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	7.104	7.104	0.847	53	385462	64.96 ug/L	100
93) Ethyl tert-butyl ether	7.369	7.192	0.879	59	107	N.D.	
94) Ethyl acetate	7.380	7.383	0.880	43	1250386	228.37 ug/L	99



Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B405SLS2.D  
Acq On : 11 Mar 2010 8:27 am  
Operator : CDS1  
InstName : VOA5  
Sample : |1202067631|963809|1|VOA|1|VOA8260BS|  
Misc : LCS 5G - SOIL MIX[B ]UVM100215-08B  
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 11 17:15:12 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

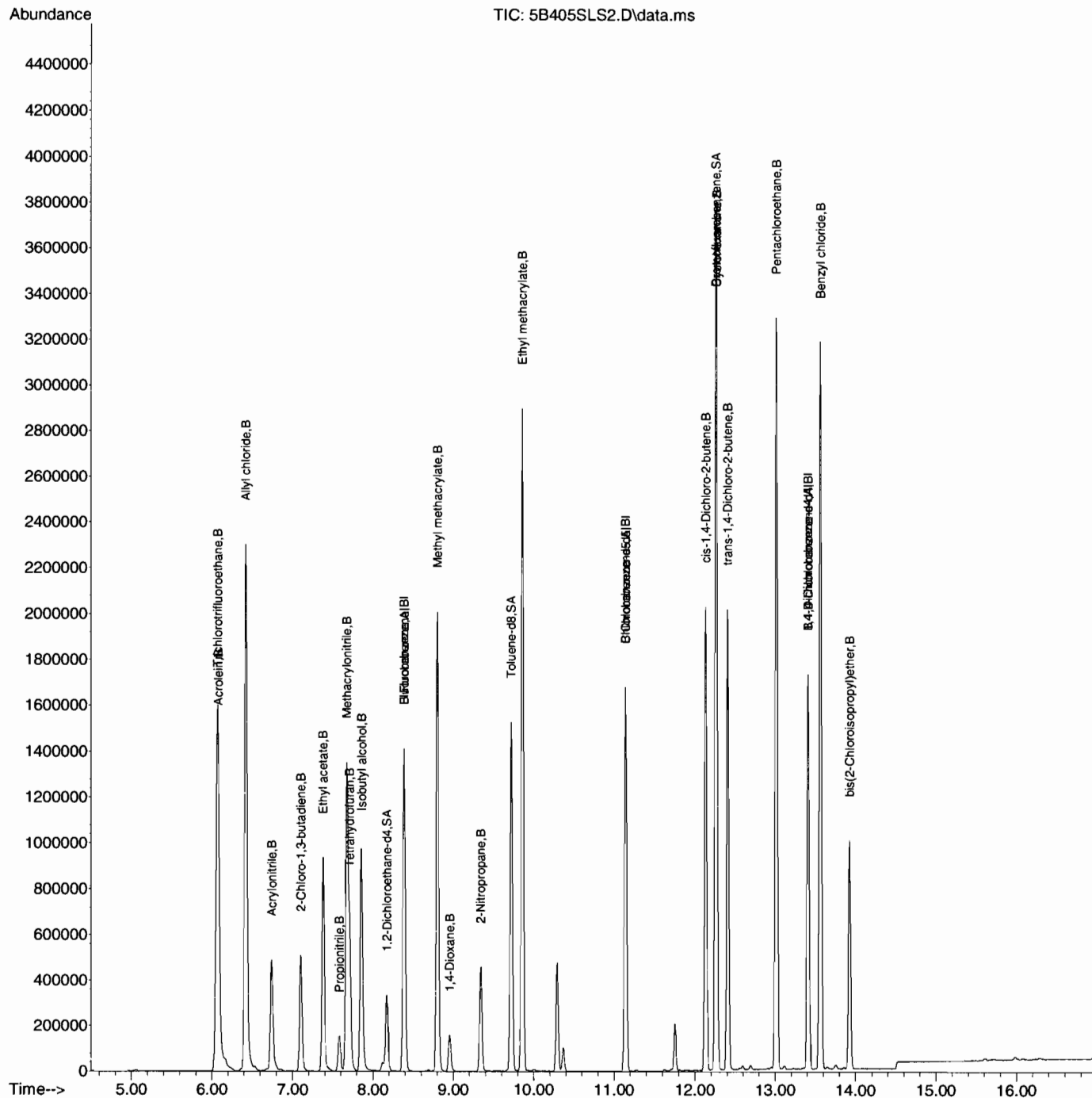
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
95) Propionitrile	7.585	7.585	0.904	54	192800	247.77	ug/L	99
96) Methacrylonitrile	7.677	7.680	0.915	41	1037180	242.54	ug/L	100
97) Tetrahydrofuran	7.709	7.716	0.919	42	466766	241.52	ug/L	99
98) Isobutyl alcohol	7.861	7.857	0.937	41	483945	2377.09	ug/L	98
99) Methyl tert-amyl ether	0.000	8.122	0.000		0	N.D.		
100) Methyl methacrylate	8.801	8.801	1.049	69	799913	247.91	ug/L	97
101) 1,4-Dioxane	8.957	8.957	1.068	88	126561	2197.92	ug/L	99
102) 2-Nitropropane	9.342	9.342	1.114	43	394732	241.26	ug/L	99
104) Ethyl methacrylate	9.859	9.859	0.885	69	1570077	252.20	ug/L	98
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.		
107) cis-1,4-Dichloro-2-butene	12.136	12.136	0.905	53	542526	269.96	ug/L	100
108) Cyclohexanone	12.267	12.267	0.915	42	802097	4855.37	ug/L	97 E
109) trans-1,4-Dichloro-2-b...	12.408	12.412	0.925	53	508969	268.86	ug/L	98
110) Pentachloroethane	13.013	13.017	0.970	167	771770	294.39	ug/L	99
111) Benzyl chloride	13.565	13.565	1.011	91	2725462	283.21	ug/L	100
112) bis(2-Chloroisopropyl)...	13.926	13.929	1.038	45	793167	224.01	ug/L	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B405SLS2.D  
Acq On : 11 Mar 2010 8:27 am  
Operator : CDS1  
InstName : VOA5  
Sample : |1202067631|963809|1|VOA|1|VOA8260BS|  
Misc : LCS 5G - SOIL MIX[B ]UVM100215-08B  
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 11 17:15:12 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE



**Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-2199  
Lab Sample ID: 1202076532  
Client Sample: QC for batch 963808  
Client ID: LCS for batch 963808  
Batch ID: 963809  
Run Date: 03/11/2010 19:30  
Prep Date: 03/11/2010 16:00  
Data File: 031110V55B430L2.D

Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: CDS1  
Aliquot: 5 g  
Column: DB-624

Matrix: SOIL  
Project: QC  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		54.7	ug/kg	0.340	1.00
74-87-3	Chloromethane		54.0	ug/kg	0.300	1.00
75-01-4	Vinyl chloride		56.7	ug/kg	0.300	1.00
74-83-9	Bromomethane		54.2	ug/kg	0.300	1.00
75-00-3	Chloroethane		53.2	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane		54.8	ug/kg	0.300	1.00
67-64-1	Acetone		225	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene		52.4	ug/kg	0.300	1.00
74-88-4	Iodomethane		258	ug/kg	1.60	5.00
75-09-2	Methylene chloride		52.1	ug/kg	2.00	5.00
75-15-0	Carbon disulfide		271	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene		53.5	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane		54.5	ug/kg	0.300	1.00
78-93-3	2-Butanone		238	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene		53.5	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane		52.9	ug/kg	0.300	1.00
67-66-3	Chloroform		53.2	ug/kg	0.300	1.00
74-97-5	Bromochloromethane		54.5	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane		54.1	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene		53.6	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride		55.0	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane		53.4	ug/kg	0.300	1.00
71-43-2	Benzene		51.5	ug/kg	0.300	1.00
79-01-6	Trichloroethylene		52.0	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane		52.9	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane		56.2	ug/kg	0.300	1.00
74-95-3	Dibromomethane		55.6	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone		259	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene		53.9	ug/kg	0.300	1.00
108-88-3	Toluene		48.8	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene		53.3	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane		50.7	ug/kg	0.300	1.00
591-78-6	2-Hexanone		230	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane		51.6	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene		48.7	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane		55.0	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane		51.6	ug/kg	0.300	1.00
108-90-7	Chlorobenzene		49.5	ug/kg	0.300	1.00

**Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-2199  
Lab Sample ID: 1202076532  
Client Sample: QC for batch 963808  
Client ID: LCS for batch 963808  
Batch ID: 963809  
Run Date: 03/11/2010 19:30  
Prep Date: 03/11/2010 16:00  
Data File: 031110V5SB430L2.D

Client: LANL010  
Method: SW846 8260B  
Inst: VOA5.I  
Analyst: CDS1  
Aliquot: 5 g  
Column: DB-624

Matrix: SOIL  
Project: QC  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		47.6	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes		99.0	ug/kg	0.300	2.00
95-47-6	o-Xylene		49.6	ug/kg	0.300	1.00
100-42-5	Styrene		53.0	ug/kg	0.300	1.00
75-25-2	Bromoform		55.6	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane		48.9	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane		49.9	ug/kg	0.300	1.00
108-86-1	Bromobenzene		48.5	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene		47.7	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene		48.5	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene		48.9	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene		49.0	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene		47.6	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene		46.2	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene		48.8	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene		48.3	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene		48.9	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene		47.9	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene		47.6	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene		46.9	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane		48.9	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane <i>Trichlorotrifluoroethane</i>	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane		52.1	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene		48.4	ug/kg	0.300	1.00

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B430L2.D  
Acq On : 11 Mar 2010 7:30 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |1202076532|963809|1|VOA|1|VOA8260BS|  
Misc : LCS 5G - SOIL MIX[A] 0305-01A+0310-01  
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Mar 11 20:01:58 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	8.391	8.387	1.000	96	1386649	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1061215	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	547349	50.00	ug/L	0.00
82) B Fluorobenzene	8.391	8.391	1.000	96	1386649	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1061215	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	547349	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	235720	35.12	ug/L	0.00
Spiked Amount 50.000	Range 66	- 134	Recovery	=	70.24%			
43) Toluene-d8	9.721	9.721	0.872	98	1087748	40.08	ug/L	0.00
Spiked Amount 50.000	Range 71	- 128	Recovery	=	80.16%			
61) Bromofluorobenzene	12.260	12.260	0.914	95	654795	59.64	ug/L	0.00
Spiked Amount 50.000	Range 65	- 130	Recovery	=	119.28%			
Target Compounds	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	4.668	4.668	0.556	85	176941	54.65	ug/L	96
3) Chloromethane	4.900	4.900	0.584	50	222681	54.04	ug/L	97
4) Vinyl chloride	5.041	5.041	0.601	62	193796	56.72	ug/L	98
5) Bromomethane	5.423	5.423	0.646	94	177016	54.24	ug/L	98
6) Chloroethane	5.504	5.504	0.656	64	184286	53.18	ug/L	100
7) Trichlorofluoromethane	5.695	5.695	0.679	101	326111	54.83	ug/L	99
8) Ethyl ether	5.867	5.866	0.699	59	269631	52.65	ug/L	98
9) Acetone	6.174	6.174	0.736	43	930185	224.50	ug/L	100
10) 1,1-Dichloroethylene	6.152	6.156	0.733	61	347472	52.44	ug/L	99
11) Iodomethane	6.358	6.357	0.758	142	1763200	257.65	ug/L	100
12) Acetonitrile	6.460	6.464	0.770	41	1026161	1263.69	ug/L	98
13) Methyl acetate	6.361	6.365	0.758	43	1169954	258.39	ug/L	99
14) Carbon disulfide	6.435	6.435	0.767	76	3604824	271.43	ug/L	100
15) Methylene chloride	6.538	6.538	0.779	84	275071	52.05	ug/L	96
16) tert-Butyl methyl ether	6.637	6.640	0.791	73	722954	52.40	ug/L	100
17) trans-1,2-Dichloroethy...	6.715	6.715	0.800	61	385486	53.50	ug/L	99
18) Vinyl acetate	6.969	6.969	0.831	43	3455496	304.57	ug/L	98
19) 1,1-Dichloroethane	7.068	7.068	0.842	63	485931	54.46	ug/L	100
20) 2-Butanone	7.450	7.450	0.888	43	1173879	237.80	ug/L	98
21) cis-1,2-Dichloroethylene	7.507	7.507	0.895	61	448226	53.48	ug/L	98
22) 2,2-Dichloropropane	7.514	7.514	0.895	77	349516	52.85	ug/L	97
23) Bromochloromethane	7.719	7.719	0.920	128	134920	54.50	ug/L	96
24) Chloroform	7.698	7.701	0.917	83	425070	53.19	ug/L	99
25) 1,1,1-Trichloroethane	7.903	7.906	0.942	97	356485	54.08	ug/L	99
26) Cyclohexane	7.924	7.924	0.944	56	507394	54.12	ug/L	98
27) 1,1-Dichloropropene	8.002	8.005	0.954	75	324202	53.63	ug/L	98
28) Carbon tetrachloride	8.020	8.020	0.956	117	311227	55.04	ug/L	100
30) 1,2-Dichloroethane	8.232	8.235	0.981	62	368974	53.43	ug/L	99
31) Benzene	8.200	8.203	0.977	78	1033953	51.51	ug/L	96
32) Cyclohexene	8.246	8.246	0.983	67	479480	51.40	ug/L	99
33) n-Butyl alcohol	8.377	8.377	0.998	56	1095478	5623.96	ug/L	100
34) Trichloroethylene	8.677	8.677	1.034	95	247664	51.95	ug/L	100
35) 1,2-Dichloropropane	8.932	8.932	1.064	63	299839	52.88	ug/L	100
36) Methylcyclohexane	8.830	8.826	1.052	83	442573	50.81	ug/L	98
37) Dibromomethane	9.063	9.059	1.080	93	160209	55.60	ug/L	100

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B430L2.D  
Acq On : 11 Mar 2010 7:30 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |1202076532|963809|1|VOA|1|VOA8260BS|  
Misc : LCS 5G - SOIL MIX[A] 0305-01A+0310-01  
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Mar 11 20:01:58 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	9.109	9.112	1.086	83	331213	56.23	ug/L 100
39) 2-Chloroethylvinyl ether	9.254	9.254	1.103	63	405524	223.87	ug/L 100
40) cis-1,3-Dichloropropylene	9.487	9.487	1.131	75	434541	53.89	ug/L 98
42) 4-Methyl-2-pentanone	9.530	9.526	0.855	58	657972	259.27	ug/L 98
44) Toluene	9.788	9.788	0.878	91	1111832	48.80	ug/L 100
45) trans-1,3-Dichloroprop...	9.968	9.968	0.895	75	413602	53.30	ug/L 99
46) 1,1,2-Trichloroethane	10.173	10.173	0.913	83	194928	50.70	ug/L 99
47) 2-Hexanone	10.279	10.279	0.923	43	1583538	229.80	ug/L 99
48) 1,3-Dichloropropane	10.364	10.364	0.930	76	426435	51.62	ug/L 99
49) Tetrachloroethylene	10.294	10.290	0.924	164	203170	48.69	ug/L 99
50) Dibromochloromethane	10.587	10.583	0.950	129	251556	55.00	ug/L 100
51) 1,2-Dibromoethane	10.771	10.771	0.967	107	229835	51.60	ug/L 100
52) Chlorobenzene	11.174	11.174	1.003	112	731586	49.50	ug/L 99
53) 1,1,1,2-Tetrachloroethane	11.217	11.216	1.007	131	260992	52.13	ug/L 99
54) Ethylbenzene	11.178	11.181	1.003	91	1236809	47.58	ug/L 99
55) m,p-Xylenes	11.280	11.280	1.012	106	974964	99.02	ug/L 100
56) o-Xylene	11.698	11.701	1.050	106	493292	49.58	ug/L 99
57) Styrene	11.715	11.715	1.051	104	805864	53.02	ug/L 93
59) Bromoform	12.005	12.005	0.895	173	165589	55.57	ug/L 100
60) Isopropylbenzene	12.012	12.016	0.896	105	1227006	48.86	ug/L 100
62) 1,1,2,2-Tetrachloroethane	12.348	12.348	0.921	83	317758	48.88	ug/L 100
63) 1,2,3-Trichloropropane	12.454	12.454	0.929	110	86607	49.90	ug/L # 89
64) Bromobenzene	12.461	12.465	0.929	156	306166	48.47	ug/L 100
65) n-Propylbenzene	12.415	12.415	0.926	91	1447514	47.74	ug/L 99
66) 1,3,5-Trimethylbenzene	12.560	12.564	0.936	105	1051321	49.02	ug/L 100
67) 2-Chlorotoluene	12.599	12.596	0.939	126	305617	48.54	ug/L # 80
68) 4-Chlorotoluene	12.698	12.698	0.947	91	918293	47.63	ug/L 99
69) tert-Butylbenzene	12.903	12.900	0.962	134	227982	46.17	ug/L 98
70) 1,2,4-Trimethylbenzene	12.956	12.956	0.966	105	1065461	48.83	ug/L 99
71) sec-Butylbenzene	13.116	13.119	0.978	105	1340969	48.32	ug/L 100
72) 4-Isopropyltoluene	13.229	13.229	0.986	119	1079075	48.92	ug/L 99
73) 1,3-Dichlorobenzene	13.353	13.349	0.996	146	574592	47.90	ug/L 100
74) 1,4-Dichlorobenzene	13.441	13.441	1.002	146	580494	47.60	ug/L 100
75) n-Butylbenzene	13.653	13.653	1.018	91	1015819	46.90	ug/L 100
76) 1,2-Dichlorobenzene	13.855	13.858	1.033	146	558496	48.43	ug/L 99
77) 1,2-Dibromo-3-chloropr...	14.705	14.704	1.096	157	60469	48.87	ug/L 98
78) 1,2,4-Trichlorobenzene	15.620	15.619	1.165	180	387147	49.85	ug/L 100
79) Hexachlorobutadiene	15.686	15.686	1.169	225	226659	48.05	ug/L 98
80) Naphthalene	15.988	15.988	1.192	128	898908	50.96	ug/L 100
81) 1,2,3-Trichlorobenzene	16.291	16.291	1.215	180	357824	52.80	ug/L 99
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	0.000	6.082	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.	
87) Isopropyl Alcohol	6.174	6.163	0.736		0m	N.D.	d
88) Allyl chloride	6.460	6.425	0.770		0m	N.D.	d
89) tert-Butyl Alcohol	6.471	6.460	0.771		0m	N.D.	d
90) Acrylonitrile	6.641	6.747	0.791		0m	N.D.	d
91) Isopropyl ether	6.927	6.920	0.826		0m	N.D.	d
92) 2-Chloro-1,3-butadiene	7.037	7.104	0.839		0m	N.D.	d
93) Ethyl tert-butyl ether	7.189	7.192	0.857		0m	N.D.	d
94) Ethyl acetate	7.383	7.383	0.880		0m	N.D.	d

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B430L2.D  
Acq On : 11 Mar 2010 7:30 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |1202076532|963809|1|VOA|1|VOA8260BS|  
Misc : LCS 5G - SOIL MIX[A] 0305-01A+0310-01  
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Mar 11 20:01:58 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	7.670	7.585	0.914		0m	N.D.	d
96) Methacrylonitrile	7.670	7.680	0.914		0m	N.D.	d
97) Tetrahydrofuran	7.705	7.716	0.918		0m	N.D.	d
98) Isobutyl alcohol	7.670	7.857	0.914		0m	N.D.	d
99) Methyl tert-amyl ether	8.126	8.122	0.968		0m	N.D.	d
100) Methyl methacrylate	8.830	8.801	1.052		0m	N.D.	d
101) 1,4-Dioxane	0.000	8.957	0.000		0	N.D.	
102) 2-Nitropropane	9.392	9.342	1.119		0m	N.D.	d
104) Ethyl methacrylate	0.000	9.859	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	12.009	12.136	0.895		0m	N.D.	d
108) Cyclohexanone	12.362	12.267	0.922		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	12.415	12.412	0.926		0m	N.D.	d
110) Pentachloroethane	13.017	13.017	0.970		0m	N.D.	d
111) Benzyl chloride	13.558	13.565	1.011		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	13.887	13.929	1.035		0m	N.D.	d

(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B430L2.D  
Acq On : 11 Mar 2010 7:30 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |1202076532|963809|1|VOA|1|VOA8260BS|  
Misc : LCS 5G - SOIL MIX[A] 0305-01A+0310-01  
ALS Vial : 30 Sample Multiplier: 1

Abundance

TIC: 5B430L2.D\data.ms

Time-->

3400000

3200000

3000000

2800000

2600000

2400000

2200000

2000000

1800000

1600000

1400000

1200000

1000000

800000

600000

400000

200000

0

5.00

6.00

7.00

8.00

9.00

10.00

11.00

12.00

13.00

14.00

15.00

16.00

Dichlorodifluoromethane, MA

Chloromethane, MPA

Vinyl chloride, MCA

Chloroethane, MA

Trichlorofluoromethane, MA

Ethyl ether, MA

1,1-Dichloroethane, MCA

Acetonitrile, MA

Methyl acetate, MA

Carbon disulfide, MA

1,1-Dichloroethane, MPA

trans-1,2-Dichloroethylene, MA

1,1-Dichloroethane, MA

2-Butanol, MA

2,2-Dichloropropane, MA

1,1-Dichloroethane, MA

1,1,1-Trichloroethane, MA

1,2-Dichloroethane, MA

1,2-Dichloroethane, d4, SA

1,2-Dichloropropane, MA

Trichloroethylene, MA

1,2-Dichloropropane, MCA

1,1,2-Trichloroethane, MA

2-Chloroethylvinyl ether, MA

6is-1,3-Dichloropropylene, MA

4-Methyl-2-pentanone, MA

Toluene, MA

trans-1,3-Dichloropropylene, MA

1,1,2-Trichloroethane, MA

1,3-Dichloropropane, MA

Dibromochloromethane, MA

1,2-Dibromoethane, MA

1,1,1,2-Tetrachloroethane, MA

1,1,2-Trichloroethane, MA

Styrene, MA

Bromochloromethane, MA

Bromochloroethane, MPA

1,1,2,2-Tetrachloroethane, MA

1,2,3-Trichloropropane, MA

2-Chloroethanol, MA

4-Chlorobutene, MA

tert-Butyl alcohol, MA

sec-Butyl alcohol, MA

4-Isopropyltoluene, MA

1,3-Dichlorobenzene, MA

1,2-Dichlorobenzene, MA

n-Butylbenzene, MA

1,2-Dichlorobenzene, MA

1,2-Dibromo-3-chloropropane, MA

Hexachlorocyclopentadiene, MA

Naphthalene, MA

1,2,3-Trichlorobenzene, MA



**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-2199

Matrix: SOIL

Lab Sample ID: 1202076533

Client Sample: QC for batch 963808

Client: LANL010

Project: QC

Client ID: LCS for batch 963808

Method: SW846 8260B

SOP Ref: GL-OA-E-038

Batch ID: 963809

Inst: VOA5.I

Dilution: 1

Run Date: 03/11/2010 19:56

Analyst: CDS1

Purge Vol: 5 mL

Prep Date: 03/11/2010 16:00

Aliquot: 5 g

Final Volume: 5 mL

Data File: 031110V55B431SHL2.D

Column: DB-624

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

**Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-2199

Matrix: SOIL

Lab Sample ID: 1202076533

Client Sample: QC for batch 963808

Client: LANL010

Project: QC

Client ID: LCS for batch 963808

Method: SW846 8260B

SOP Ref: GL-OA-E-038

Batch ID: 963809

Inst: VOA5.1

Dilution: 1

Run Date: 03/11/2010 19:56

Analyst: CDS1

Purge Vol: 5 mL

Prep Date: 03/11/2010 16:00

Aliquot: 5 g

Final Volume: 5 mL

Data File: 031110V55B431SHL2.D

Column: DB-624

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane		324	ug/kg	1.60	5.00
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B431SHL2.D  
Acq On : 11 Mar 2010 7:56 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |1202076533|963809|1|VOA|1|VOA8260BS|  
Misc : LCS 5G - SOIL MIX[B ]UVM100215-08B  
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Mar 11 22:16:51 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	8.388	8.387	1.000	96	1439092	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1070189	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	529829	50.00	ug/L	0.00
82) B Fluorobenzene	8.388	8.391	1.000	96	1439092	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1070189	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	529829	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	235628	33.83	ug/L	0.00
Spiked Amount 50.000	Range 66	- 134	Recovery	=	67.66%			
43) Toluene-d8	9.721	9.721	0.872	98	1088246	39.76	ug/L	0.00
Spiked Amount 50.000	Range 71	- 128	Recovery	=	79.52%			
61) Bromofluorobenzene	12.260	12.260	0.914	95	629657	59.25	ug/L	0.00
Spiked Amount 50.000	Range 65	- 130	Recovery	=	118.50%			
Target Compounds								QValue
2) Dichlorodifluoromethane	4.678	4.668	0.558		0m	N.D.	d	
3) Chloromethane	5.051	4.900	0.602		0m	N.D.	d	
4) Vinyl chloride	5.031	5.041	0.600		0m	N.D.	d	
5) Bromomethane	5.423	5.423	0.647		0m	N.D.	d	
6) Chloroethane	5.494	5.504	0.655		0m	N.D.	d	
7) Trichlorofluoromethane	5.695	5.695	0.679		0m	N.D.	d	
8) Ethyl ether	5.867	5.866	0.699		0m	N.D.	d	
9) Acetone	6.167	6.174	0.735		0m	N.D.	d	
10) 1,1-Dichloroethylene	6.149	6.156	0.733		0m	N.D.	d	
11) Iodomethane	6.354	6.357	0.758		0m	N.D.	d	
12) Acetonitrile	6.421	6.464	0.766		0m	N.D.	d	
13) Methyl acetate	6.365	6.365	0.759		0m	N.D.	d	
14) Carbon disulfide	6.425	6.435	0.766		0m	N.D.	d	
15) Methylene chloride	6.545	6.538	0.780		0m	N.D.	d	
16) tert-Butyl methyl ether	6.637	6.640	0.791		0m	N.D.	d	
17) trans-1,2-Dichloroethy...	6.701	6.715	0.799		0m	N.D.	d	
18) Vinyl acetate	6.962	6.969	0.830		0m	N.D.	d	
19) 1,1-Dichloroethane	7.111	7.068	0.848		0m	N.D.	d	
20) 2-Butanone	7.507	7.450	0.895		0m	N.D.	d	
21) cis-1,2-Dichloroethylene	7.507	7.507	0.895		0m	N.D.	d	
22) 2,2-Dichloropropane	0.000	7.514	0.000		0	N.D.		
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	7.698	7.701	0.918		0m	N.D.	d	
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	7.924	7.924	0.945		0m	N.D.	d	
27) 1,1-Dichloropropene	7.999	8.005	0.954		0m	N.D.	d	
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.204	8.203	0.978		0m	N.D.	d	
32) Cyclohexene	8.172	8.246	0.974		0m	N.D.	d	
33) n-Butyl alcohol	8.391	8.377	1.000		0m	N.D.	d	
34) Trichloroethylene	8.688	8.677	1.036		0m	N.D.	d	
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	8.805	8.826	1.050		0m	N.D.	d	
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B431SHL2.D  
Acq On : 11 Mar 2010 7:56 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |1202076533|963809|1|VOA|1|VOA8260BS|  
Misc : LCS 5G - SOIL MIX[B]UVM100215-08B  
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Mar 11 22:16:51 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	9.254	9.254	1.103		0m	N.D.	d
40) cis-1,3-Dichloropropylene	9.477	9.487	1.130		0m	N.D.	d
42) 4-Methyl-2-pentanone	9.516	9.526	0.854		0m	N.D.	d
44) Toluene	9.791	9.788	0.879		0m	N.D.	d
45) trans-1,3-Dichloroprop...	9.968	9.968	0.895		0m	N.D.	d
46) 1,1,2-Trichloroethane	10.294	10.173	0.924		0m	N.D.	d
47) 2-Hexanone	10.283	10.279	0.923		0m	N.D.	d
48) 1,3-Dichloropropane	10.364	10.364	0.930		0m	N.D.	d
49) Tetrachloroethylene	10.290	10.290	0.924		0m	N.D.	d
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	10.771	0.000		0	N.D.	
52) Chlorobenzene	11.171	11.174	1.003		0m	N.D.	d
53) 1,1,1,2-Tetrachloroethane	11.217	11.216	1.007		0m	N.D.	d
54) Ethylbenzene	11.181	11.181	1.003		0m	N.D.	d
55) m,p-Xylenes	11.277	11.280	1.012		0m	N.D.	d
56) o-Xylene	11.698	11.701	1.050		0m	N.D.	d
57) Styrene	11.719	11.715	1.052		0m	N.D.	d
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	12.012	12.016	0.896		0m	N.D.	d
62) 1,1,2,2-Tetrachloroethane	12.348	12.348	0.921		0m	N.D.	d
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	12.461	12.465	0.929		0m	N.D.	d
65) n-Propylbenzene	12.412	12.415	0.925		0m	N.D.	d
66) 1,3,5-Trimethylbenzene	12.557	12.564	0.936		0m	N.D.	d
67) 2-Chlorotoluene	12.599	12.596	0.939		0m	N.D.	d
68) 4-Chlorotoluene	12.698	12.698	0.947		0m	N.D.	d
69) tert-Butylbenzene	12.907	12.900	0.962		0m	N.D.	d
70) 1,2,4-Trimethylbenzene	12.953	12.956	0.966		0m	N.D.	d
71) sec-Butylbenzene	13.116	13.119	0.978		0m	N.D.	d
72) 4-Isopropyltoluene	13.232	13.229	0.987		0m	N.D.	d
73) 1,3-Dichlorobenzene	13.342	13.349	0.995		0m	N.D.	d
74) 1,4-Dichlorobenzene	13.434	13.441	1.002		0m	N.D.	d
75) n-Butylbenzene	13.657	13.653	1.018		0m	N.D.	d
76) 1,2-Dichlorobenzene	13.851	13.858	1.033		0m	N.D.	d
77) 1,2-Dibromo-3-chloropr...	0.000	14.704	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	15.612	15.619	1.164		0m	N.D.	d
79) Hexachlorobutadiene	15.686	15.686	1.169		0m	N.D.	d
80) Naphthalene	15.981	15.988	1.191		0m	N.D.	d
81) 1,2,3-Trichlorobenzene	16.291	16.291	1.215		0m	N.D.	d
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	6.082	6.082	0.725	56	213396	257.73 ug/L	99
86) Trichlorotrifluoroethane	6.071	6.071	0.724	85	418293	324.18 ug/L	99
87) Isopropyl Alcohol	0.000	6.163	0.000		0m	N.D.	d
88) Allyl chloride	6.421	6.425	0.766	41	2098318	221.54 ug/L	93
89) tert-Butyl Alcohol	6.460	6.460	0.770	59	114	N.D.	
90) Acrylonitrile	6.743	6.747	0.804	53	517679	248.59 ug/L	99
91) Isopropyl ether	7.097	6.920	0.846	45	216	N.D.	
92) 2-Chloro-1,3-butadiene	7.104	7.104	0.847	53	389253	63.69 ug/L	99
93) Ethyl tert-butyl ether	7.373	7.192	0.879	59	106	N.D.	
94) Ethyl acetate	7.380	7.383	0.880	43	1305533	231.48 ug/L	99

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B431SHL2.D  
Acq On : 11 Mar 2010 7:56 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |1202076533|963809|1|VOA|1|VOA8260BS|  
Misc : LCS 5G - SOIL MIX[B ]UVM100215-08B  
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Mar 11 22:16:51 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

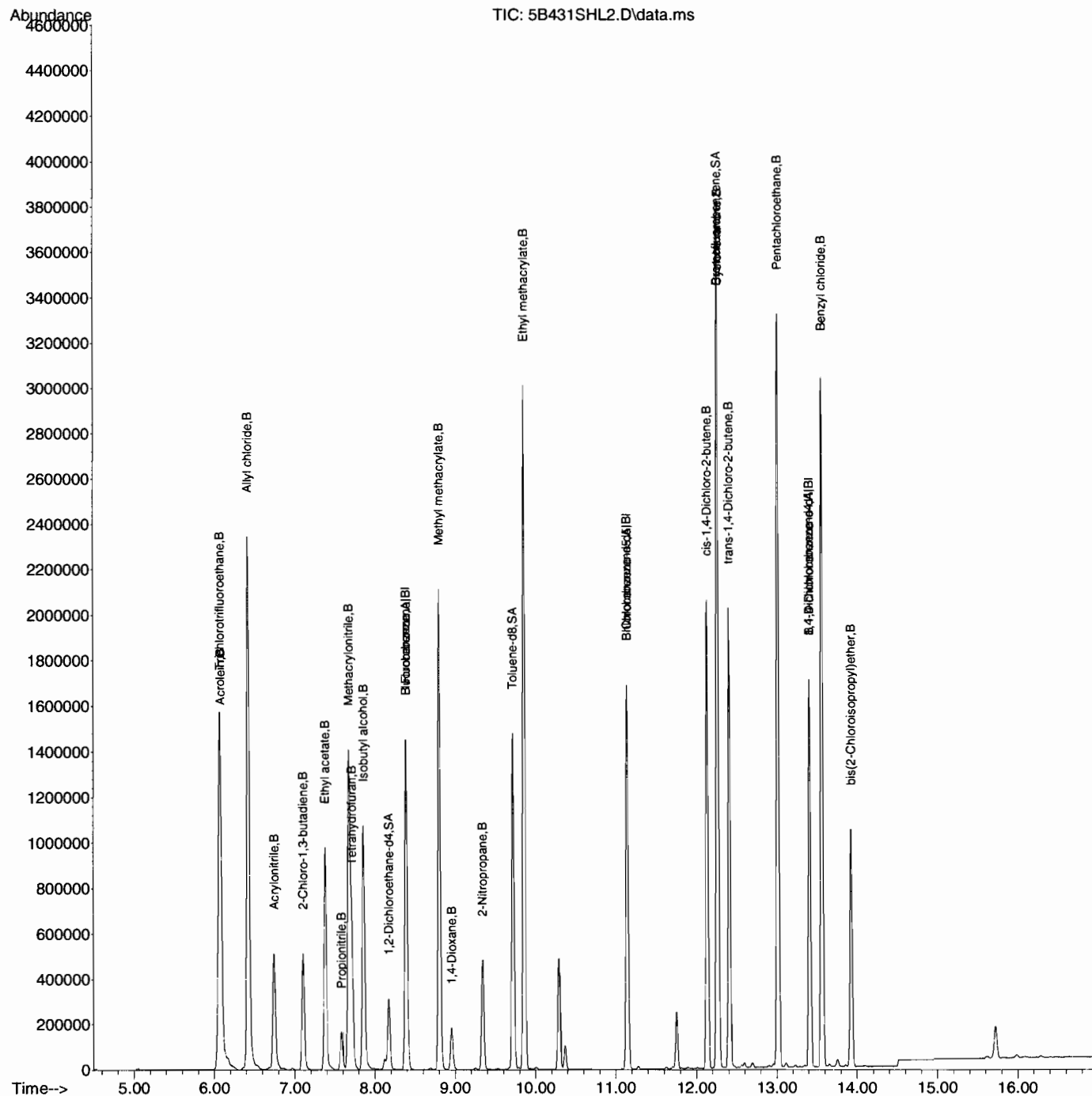
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
95) Propionitrile	7.581	7.585	0.904	54	203662	254.08	ug/L	99
96) Methacrylonitrile	7.680	7.680	0.916	41	1085546	246.44	ug/L	100
97) Tetrahydrofuran	7.712	7.716	0.919	42	491383	246.84	ug/L	98
98) Isobutyl alcohol	7.857	7.857	0.937	41	541026	2579.87	ug/L	100
99) Methyl tert-amyl ether	0.000	8.122	0.000		0	N.D.		
100) Methyl methacrylate	8.801	8.801	1.049	69	835042	251.24	ug/L	97
101) 1,4-Dioxane	8.957	8.957	1.068	88	143234	2414.84	ug/L	99
102) 2-Nitropropane	9.342	9.342	1.114	43	412147	244.45	ug/L	100
104) Ethyl methacrylate	9.859	9.859	0.885	69	1631317	258.24	ug/L	98
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.		
107) cis-1,4-Dichloro-2-butene	12.136	12.136	0.905	53	553173	279.21	ug/L	99
108) Cyclohexanone	12.267	12.267	0.915	42	819306	5030.63	ug/L	96 E
109) trans-1,4-Dichloro-2-b...	12.408	12.412	0.925	53	515435	276.18	ug/L	99
110) Pentachloroethane	13.017	13.017	0.970	167	770694	298.19	ug/L	99
111) Benzyl chloride	13.565	13.565	1.011	91	2595755	273.59	ug/L	100
112) bis(2-Chloroisopropyl)...	13.925	13.929	1.038	45	830705	237.97	ug/L	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B431SHL2.D  
Acq On : 11 Mar 2010 7:56 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |1202076533|963809|1|VOA|1|VOA8260BS|  
Misc : LCS 5G - SOIL MIX[B ]UVM100215-08B  
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Mar 11 22:16:51 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE



# Miscellaneous

# Prep Logbook

## Volatile Organic Compounds (VOC) by Gas Chromatograph/Mass Spectrometer

<b>Batch ID:</b> 963808	Verified by:	Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
<b>Analyst:</b> Crystal Stacey							
<b>Method:</b> SW846 5030							
<b>Lab SOP:</b> GL-OA-E-038 REV# 14							
<b>Instrument:</b> Sartorius Balance B-001							

Sample ID	Run Date	Matrix	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check 1
1202067627 MB	11-MAR-2010 06:00:00	Soil	5	5	1	
1202067630 LCS	11-MAR-2010 06:00:00	Soil	5	5	1	
1202067631 LCS	11-MAR-2010 06:00:00	Soil	5	5	1	
248517001	11-MAR-2010 10:00:00	Soil	5	5	1	
248519001	11-MAR-2010 10:01:00	Soil	5	5	1	
248519002	11-MAR-2010 10:02:00	Soil	5	5	1	
248519003	11-MAR-2010 10:03:00	Soil	5	5	1	
248519004	11-MAR-2010 10:04:00	Soil	5	5	1	
248519005	11-MAR-2010 10:05:00	Soil	5	5	1	
248519006	11-MAR-2010 10:06:00	Soil	5	5	1	
248519007	11-MAR-2010 10:07:00	Soil	5	5	1	
248519008	11-MAR-2010 10:08:00	Soil	5	5	1	
248519009	11-MAR-2010 10:09:00	Soil	5	5	1	
248519010	11-MAR-2010 10:10:00	Soil	5	5	1	
248519011	11-MAR-2010 10:11:00	Soil	5	5	1	
248519012	11-MAR-2010 10:12:00	Misc Solid	5	5	1	
248526001	11-MAR-2010 10:13:00	Soil	5	5	1	
1202067628 PS (248526001)	11-MAR-2010 10:14:00	Soil	5	5	1	
1202067629 PSD (248526001)	11-MAR-2010 10:15:00	Soil	5	5	1	
1202076531 MB	11-MAR-2010 16:00:00	Soil	5	5	1	
1202076532 LCS	11-MAR-2010 16:00:00	Soil	5	5	1	
1202076533 LCS	11-MAR-2010 16:00:00	Soil	5	5	1	

Reagent/Solvent Lot ID	Description	Amount	Comments:
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Analytical Logbook version 1 11-04-2002

GEL Laboratories LLC



Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B438.D  
Acq On : 11 Mar 2010 11:01 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |1202067628|963809|1|VOA|D|VOA8260BS|  
Misc : LANL 5G - SOIL MS 248526001 MIX[A]  
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Mar 12 07:26:20 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	8.387	8.387	1.000	96	1406465	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1018044	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	448747	50.00	ug/L	0.00
82) B Fluorobenzene	8.387	8.391	1.000	96	1406465	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1018044	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	448747	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	225156	33.08	ug/L	0.00
Spiked Amount 50.000	Range 66	- 134	Recovery	=	66.16%			
43) Toluene-d8	9.721	9.721	0.872	98	1042281	40.03	ug/L	0.00
Spiked Amount 50.000	Range 71	- 128	Recovery	=	80.06%			
61) Bromofluorobenzene	12.260	12.260	0.914	95	589348	65.48	ug/L	0.00
Spiked Amount 50.000	Range 65	- 130	Recovery	=	130.96%#			
Target Compounds								QValue
2) Dichlorodifluoromethane	4.668	4.668	0.557	85	157628	48.00	ug/L	97
3) Chloromethane	4.900	4.900	0.584	50	207049	49.48	ug/L	97
4) Vinyl chloride	5.041	5.041	0.601	62	179424	51.77	ug/L	100
5) Bromomethane	5.423	5.423	0.647	94	167490	50.60	ug/L	99
6) Chloroethane	5.504	5.504	0.656	64	172215	49.00	ug/L	100
7) Trichlorofluoromethane	5.695	5.695	0.679	101	283908	47.07	ug/L	100
8) Ethyl ether	5.866	5.866	0.699	59	250517	48.23	ug/L	100
9) Acetone	6.170	6.174	0.736	43	500370	119.07	ug/L	99
10) 1,1-Dichloroethylene	6.156	6.156	0.734	61	308555	45.91	ug/L	100
11) Iodomethane	6.358	6.357	0.758	142	1598908	230.35	ug/L	99
12) Acetonitrile	6.460	6.464	0.770	41	893284	1084.55	ug/L	98
13) Methyl acetate	6.365	6.365	0.759	43	1253721	272.99	ug/L	99
14) Carbon disulfide	6.435	6.435	0.767	76	3198258	237.43	ug/L	100
15) Methylene chloride	6.534	6.538	0.779	84	252294	47.01	ug/L	95
16) tert-Butyl methyl ether	6.637	6.640	0.791	73	636254	45.47	ug/L	100
17) trans-1,2-Dichloroethy...	6.715	6.715	0.801	61	345725	47.31	ug/L	98
18) Vinyl acetate	6.969	6.969	0.831	43	376786	32.74	ug/L	99
19) 1,1-Dichloroethane	7.068	7.068	0.843	63	437401	48.33	ug/L	99
20) 2-Butanone	7.450	7.450	0.888	43	749573	149.71	ug/L	99
21) cis-1,2-Dichloroethylene	7.507	7.507	0.895	61	401252	47.20	ug/L	98
22) 2,2-Dichloropropane	7.510	7.514	0.895	77	297433	44.34	ug/L	96
23) Bromochloromethane	7.719	7.719	0.920	128	120972	48.17	ug/L	97
24) Chloroform	7.698	7.701	0.918	83	378118	46.65	ug/L	100
25) 1,1,1-Trichloroethane	7.903	7.906	0.942	97	302931	45.31	ug/L	99
26) Cyclohexane	7.924	7.924	0.945	56	384041	40.38	ug/L	98
27) 1,1-Dichloropropene	8.009	8.005	0.955	75	273315	44.57	ug/L	97
28) Carbon tetrachloride	8.020	8.020	0.956	117	254949	44.45	ug/L	100
30) 1,2-Dichloroethane	8.235	8.235	0.982	62	327166	46.71	ug/L	99
31) Benzene	8.204	8.203	0.978	78	911621	44.78	ug/L	96
32) Cyclohexene	8.246	8.246	0.983	67	392973	41.53	ug/L	99
33) n-Butyl alcohol	8.377	8.377	0.999	56	877062	4430.33	ug/L	97
34) Trichloroethylene	8.677	8.677	1.035	95	206680	42.74	ug/L	99
35) 1,2-Dichloropropane	8.928	8.932	1.065	63	262701	45.68	ug/L	99
36) Methylcyclohexane	8.829	8.826	1.053	83	296417	33.55	ug/L	99
37) Dibromomethane	9.059	9.059	1.080	93	139550	47.75	ug/L	99

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B438.D  
Acq On : 11 Mar 2010 11:01 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |1202067628|963809|1|VOA|D|VOA8260BS|  
Misc : LANL 5G - SOIL MS 248526001 MIX[A]  
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Mar 12 07:26:20 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
38) Bromodichloromethane	9.109	9.112	1.086	83	283288	47.42	ug/L	99
39) 2-Chloroethylvinyl ether	9.254	9.254	1.103	63	325119	176.96	ug/L	99
40) cis-1,3-Dichloropropylene	9.484	9.487	1.131	75	367485	44.93	ug/L	97
42) 4-Methyl-2-pentanone	9.530	9.526	0.855	58	545547	224.09	ug/L	96
44) Toluene	9.788	9.788	0.878	91	913917	41.81	ug/L	100
45) trans-1,3-Dichloroprop...	9.968	9.968	0.895	75	336983	45.27	ug/L	98
46) 1,1,2-Trichloroethane	10.173	10.173	0.913	83	164303	44.55	ug/L	98
47) 2-Hexanone	10.279	10.279	0.923	43	1016866	153.82	ug/L	98
48) 1,3-Dichloropropane	10.361	10.364	0.930	76	355729	44.89	ug/L	97
49) Tetrachloroethylene	10.290	10.290	0.924	164	152884	38.19	ug/L	99
50) Dibromochloromethane	10.584	10.583	0.950	129	198389	45.22	ug/L	100
51) 1,2-Dibromoethane	10.771	10.771	0.967	107	187435	43.86	ug/L	100
52) Chlorobenzene	11.174	11.174	1.003	112	568804	40.12	ug/L	99
53) 1,1,1,2-Tetrachloroethane	11.217	11.216	1.007	131	202008	42.06	ug/L	99
54) Ethylbenzene	11.178	11.181	1.003	91	935189	37.50	ug/L	99
55) m,p-Xylenes	11.280	11.280	1.012	106	729535	77.23	ug/L	100
56) o-Xylene	11.701	11.701	1.050	106	360405	37.76	ug/L	98
57) Styrene	11.715	11.715	1.051	104	578681	39.69	ug/L	93
59) Bromoform	12.002	12.005	0.895	173	122627	50.19	ug/L	99
60) Isopropylbenzene	12.012	12.016	0.896	105	853682	41.46	ug/L	100
62) 1,1,2,2-Tetrachloroethane	12.348	12.348	0.921	83	236447	44.37	ug/L	100
63) 1,2,3-Trichloropropane	12.454	12.454	0.929	110	68142	47.89	ug/L	93
64) Bromobenzene	12.461	12.465	0.929	156	209869	40.52	ug/L	96
65) n-Propylbenzene	12.415	12.415	0.926	91	958746	38.57	ug/L	99
66) 1,3,5-Trimethylbenzene	12.560	12.564	0.936	105	668360	38.01	ug/L	100
67) 2-Chlorotoluene	12.596	12.596	0.939	126	204039	39.53	ug/L #	79
68) 4-Chlorotoluene	12.695	12.698	0.946	91	611914	38.72	ug/L	99
69) tert-Butylbenzene	12.900	12.900	0.962	134	143478	35.44	ug/L	99
70) 1,2,4-Trimethylbenzene	12.956	12.956	0.966	105	680147	38.02	ug/L	98
71) sec-Butylbenzene	13.116	13.119	0.978	105	787031	34.59	ug/L	99
72) 4-Isopropyltoluene	13.229	13.229	0.986	119	611370	33.80	ug/L	99
73) 1,3-Dichlorobenzene	13.349	13.349	0.995	146	344948	35.07	ug/L	99
74) 1,4-Dichlorobenzene	13.441	13.441	1.002	146	345949	34.60	ug/L	99
75) n-Butylbenzene	13.653	13.653	1.018	91	530408	29.87	ug/L	99
76) 1,2-Dichlorobenzene	13.855	13.858	1.033	146	324178	34.29	ug/L	100
77) 1,2-Dibromo-3-chloropr...	14.705	14.704	1.096	157	37852	37.31	ug/L	94
78) 1,2,4-Trichlorobenzene	15.612	15.619	1.164	180	138185	21.70	ug/L	99
79) Hexachlorobutadiene	15.686	15.686	1.169	225	66663	17.24	ug/L	99
80) Naphthalene	15.988	15.988	1.192	128	380636	26.32	ug/L	99
81) 1,2,3-Trichlorobenzene	16.291	16.291	1.215	180	112005	20.16	ug/L	99
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.		
85) Acrolein	0.000	6.082	0.000		0	N.D.		
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.		
87) Isopropyl Alcohol	6.167	6.163	0.735		0m	N.D.	d	
88) Allyl chloride	6.460	6.425	0.770		0m	N.D.	d	
89) tert-Butyl Alcohol	6.464	6.460	0.771		0m	N.D.	d	
90) Acrylonitrile	6.633	6.747	0.791		0m	N.D.	d	
91) Isopropyl ether	6.916	6.920	0.825		0m	N.D.	d	
92) 2-Chloro-1,3-butadiene	0.000	7.104	0.000		0	N.D.		
93) Ethyl tert-butyl ether	7.061	7.192	0.842		0m	N.D.	d	
94) Ethyl acetate	7.334	7.383	0.874		0m	N.D.	d	

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B438.D  
Acq On : 11 Mar 2010 11:01 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |1202067628|963809|1|VOA|D|VOA8260BS|  
Misc : LANL 5G - SOIL MS 248526001 MIX[A]  
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Mar 12 07:26:20 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

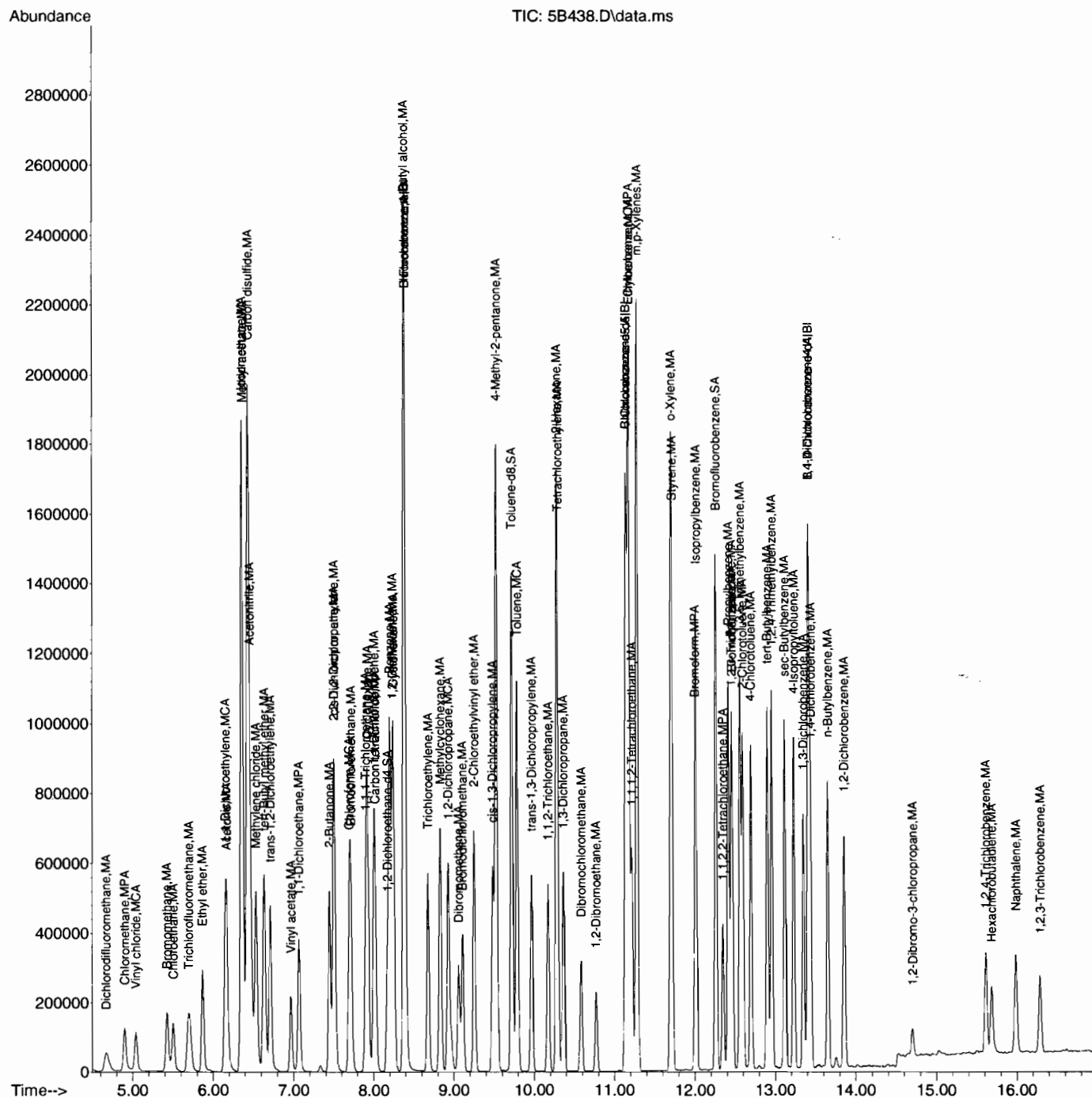
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	7.447	7.585	0.888		0m	N.D.	d
96) Methacrylonitrile	7.510	7.680	0.895		0m	N.D.	d
97) Tetrahydrofuran	7.705	7.716	0.919		0m	N.D.	d
98) Isobutyl alcohol	7.864	7.857	0.938		0m	N.D.	d
99) Methyl tert-amyl ether	8.119	8.122	0.968		0m	N.D.	d
100) Methyl methacrylate	8.829	8.801	1.053		0m	N.D.	d
101) 1,4-Dioxane	0.000	8.957	0.000		0	N.D.	
102) 2-Nitropropane	9.321	9.342	1.111		0m	N.D.	d
104) Ethyl methacrylate	0.000	9.859	0.000		0	N.D.	
106) 1-Chlorohexane	11.047	10.980	0.824		0m	N.D.	d
107) cis-1,4-Dichloro-2-butene	12.012	12.136	0.896		0m	N.D.	d
108) Cyclohexanone	12.408	12.267	0.925		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	12.412	12.412	0.925		0m	N.D.	d
110) Pentachloroethane	13.017	13.017	0.970		0m	N.D.	d
111) Benzyl chloride	13.565	13.565	1.011		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	13.932	13.929	1.039		0m	N.D.	d

(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B438.D  
Acq On : 11 Mar 2010 11:01 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |1202067628|963809|1|VOA|D|VOA8260BS|  
Misc : LANL 5G - SOIL MS 248526001 MIX[A]  
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Mar 12 07:26:20 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE



Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B439.D  
Acq On : 11 Mar 2010 11:28 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |1202067629|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL MSD 248526001 MIX[A]  
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Mar 12 07:26:22 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	Dev(Min)
Internal Standards								
1) Fluorobenzene	8.387	8.387	1.000	96	1397470	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1014836	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	448622	50.00	ug/L	0.00
82) B Fluorobenzene	8.387	8.391	1.000	96	1397470	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1014836	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	448622	50.00	ug/L	0.00
System Monitoring Compounds								
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	225275	33.31	ug/L	0.00
Spiked Amount 50.000	Range 66	- 134	Recovery	=	66.62%			
43) Toluene-d8	9.721	9.721	0.872	98	1051412	40.51	ug/L	0.00
Spiked Amount 50.000	Range 71	- 128	Recovery	=	81.02%			
61) Bromofluorobenzene	12.260	12.260	0.914	95	587938	65.34	ug/L	0.00
Spiked Amount 50.000	Range 65	- 130	Recovery	=	130.68%#			
Target Compounds	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	4.678	4.668	0.558	85	151974	46.58	ug/L	97
3) Chloromethane	4.900	4.900	0.584	50	204728	49.24	ug/L	97
4) Vinyl chloride	5.041	5.041	0.601	62	173849	50.48	ug/L	98
5) Bromomethane	5.433	5.423	0.648	94	162572	49.43	ug/L	98
6) Chloroethane	5.504	5.504	0.656	64	165072	47.27	ug/L	100
7) Trichlorofluoromethane	5.705	5.695	0.680	101	277515	46.30	ug/L	99
8) Ethyl ether	5.866	5.866	0.699	59	242372	46.96	ug/L	99
9) Acetone	6.170	6.174	0.736	43	457627	109.60	ug/L	99
10) 1,1-Dichloroethylene	6.152	6.156	0.734	61	303148	45.40	ug/L	99
11) Iodomethane	6.361	6.357	0.758	142	1574147	228.24	ug/L	99
12) Acetonitrile	6.460	6.464	0.770	41	836131	1021.70	ug/L	98
13) Methyl acetate	6.365	6.365	0.759	43	1196120	262.13	ug/L	99
14) Carbon disulfide	6.435	6.435	0.767	76	3118813	233.02	ug/L	100
15) Methylene chloride	6.538	6.538	0.779	84	245546	46.03	ug/L	95
16) tert-Butyl methyl ether	6.637	6.640	0.791	73	614459	44.19	ug/L	100
17) trans-1,2-Dichloroethy...	6.715	6.715	0.801	61	335170	46.16	ug/L	98
18) Vinyl acetate	6.969	6.969	0.831	43	330052	28.87	ug/L	97
19) 1,1-Dichloroethane	7.068	7.068	0.843	63	433530	48.21	ug/L	100
20) 2-Butanone	7.450	7.450	0.888	43	689581	138.61	ug/L	99
21) cis-1,2-Dichloroethylene	7.507	7.507	0.895	61	392369	46.46	ug/L	98
22) 2,2-Dichloropropane	7.510	7.514	0.895	77	292525	43.89	ug/L	96
23) Bromochloromethane	7.723	7.719	0.921	128	117505	47.09	ug/L	97
24) Chloroform	7.701	7.701	0.918	83	372806	46.29	ug/L	99
25) 1,1,1-Trichloroethane	7.906	7.906	0.943	97	298297	44.90	ug/L	99
26) Cyclohexane	7.928	7.924	0.945	56	379143	40.12	ug/L	98
27) 1,1-Dichloropropene	8.005	8.005	0.954	75	268816	44.12	ug/L	97
28) Carbon tetrachloride	8.020	8.020	0.956	117	250001	43.87	ug/L	98
30) 1,2-Dichloroethane	8.235	8.235	0.982	62	322667	46.36	ug/L	99
31) Benzene	8.200	8.203	0.978	78	889984	43.99	ug/L	96
32) Cyclohexene	8.246	8.246	0.983	67	384983	40.95	ug/L	99
33) n-Butyl alcohol	8.377	8.377	0.999	56	818631	4159.24	ug/L	99
34) Trichloroethylene	8.677	8.677	1.035	95	204201	42.50	ug/L	99
35) 1,2-Dichloropropane	8.928	8.932	1.065	63	259393	45.39	ug/L	100
36) Methylcyclohexane	8.829	8.826	1.053	83	292313	33.30	ug/L	98
37) Dibromomethane	9.059	9.059	1.080	93	135100	46.52	ug/L	99

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B439.D  
Acq On : 11 Mar 2010 11:28 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |1202067629|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL MSD 248526001 MIX[A]  
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Mar 12 07:26:22 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
38) Bromodichloromethane	9.109	9.112	1.086	83	278404	46.90	ug/L	99
39) 2-Chloroethylvinyl ether	9.254	9.254	1.103	63	309964	169.79	ug/L	99
40) cis-1,3-Dichloropropylene	9.484	9.487	1.131	75	361985	44.54	ug/L	98
42) 4-Methyl-2-pentanone	9.526	9.526	0.855	58	508608	209.58	ug/L	97
44) Toluene	9.788	9.788	0.878	91	899930	41.30	ug/L	100
45) trans-1,3-Dichloroprop...	9.965	9.968	0.894	75	330525	44.54	ug/L	99
46) 1,1,2-Trichloroethane	10.173	10.173	0.913	83	158695	43.16	ug/L	98
47) 2-Hexanone	10.279	10.279	0.923	43	929644	141.07	ug/L	98
48) 1,3-Dichloropropane	10.364	10.364	0.930	76	348716	44.14	ug/L	98
49) Tetrachloroethylene	10.290	10.290	0.924	164	152953	38.33	ug/L	100
50) Dibromochloromethane	10.583	10.583	0.950	129	195099	44.61	ug/L	100
51) 1,2-Dibromoethane	10.771	10.771	0.967	107	183163	43.00	ug/L	100
52) Chlorobenzene	11.171	11.174	1.003	112	563323	39.86	ug/L	99
53) 1,1,1,2-Tetrachloroethane	11.216	11.216	1.007	131	202110	42.22	ug/L	99
54) Ethylbenzene	11.178	11.181	1.003	91	932341	37.51	ug/L	99
55) m,p-Xylenes	11.280	11.280	1.012	106	732194	77.76	ug/L	99
56) o-Xylene	11.701	11.701	1.050	106	364277	38.29	ug/L	100
57) Styrene	11.715	11.715	1.051	104	573639	39.47	ug/L	92
59) Bromoform	12.005	12.005	0.895	173	117778	48.22	ug/L	100
60) Isopropylbenzene	12.012	12.016	0.896	105	853475	41.46	ug/L	98
62) 1,1,2,2-Tetrachloroethane	12.348	12.348	0.921	83	229384	43.05	ug/L	99
63) 1,2,3-Trichloropropane	12.454	12.454	0.929	110	64672	45.46	ug/L	98
64) Bromobenzene	12.465	12.465	0.929	156	213842	41.30	ug/L	99
65) n-Propylbenzene	12.415	12.415	0.926	91	962225	38.72	ug/L	99
66) 1,3,5-Trimethylbenzene	12.560	12.564	0.936	105	674874	38.39	ug/L	100
67) 2-Chlorotoluene	12.596	12.596	0.939	126	209421	40.58	ug/L	# 83
68) 4-Chlorotoluene	12.698	12.698	0.947	91	619238	39.19	ug/L	99
69) tert-Butylbenzene	12.900	12.900	0.962	134	143864	35.55	ug/L	99
70) 1,2,4-Trimethylbenzene	12.953	12.956	0.966	105	677980	37.91	ug/L	99
71) sec-Butylbenzene	13.116	13.119	0.978	105	787488	34.62	ug/L	99
72) 4-Isopropyltoluene	13.229	13.229	0.986	119	620588	34.32	ug/L	99
73) 1,3-Dichlorobenzene	13.349	13.349	0.995	146	344380	35.03	ug/L	99
74) 1,4-Dichlorobenzene	13.437	13.441	1.002	146	353645	35.38	ug/L	99
75) n-Butylbenzene	13.653	13.653	1.018	91	533389	30.04	ug/L	99
76) 1,2-Dichlorobenzene	13.855	13.858	1.033	146	325191	34.41	ug/L	99
77) 1,2-Dibromo-3-chloropr...	14.705	14.704	1.096	157	36300	35.79	ug/L	97
78) 1,2,4-Trichlorobenzene	15.612	15.619	1.164	180	140070	22.01	ug/L	99
79) Hexachlorobutadiene	15.686	15.686	1.169	225	68673	17.76	ug/L	96
80) Naphthalene	15.988	15.988	1.192	128	376750	26.06	ug/L	99
81) 1,2,3-Trichlorobenzene	16.284	16.291	1.214	180	112697	20.29	ug/L	99
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.		
85) Acrolein	0.000	6.082	0.000		0	N.D.		
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.		
87) Isopropyl Alcohol	6.170	6.163	0.736		0m	N.D.	d	
88) Allyl chloride	6.460	6.425	0.770		0m	N.D.	d	
89) tert-Butyl Alcohol	6.467	6.460	0.771		0m	N.D.	d	
90) Acrylonitrile	6.633	6.747	0.791		0m	N.D.	d	
91) Isopropyl ether	6.920	6.920	0.825		0m	N.D.	d	
92) 2-Chloro-1,3-butadiene	0.000	7.104	0.000		0	N.D.		
93) Ethyl tert-butyl ether	7.068	7.192	0.843		0m	N.D.	d	
94) Ethyl acetate	7.383	7.383	0.880		0m	N.D.	d	

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B439.D  
Acq On : 11 Mar 2010 11:28 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |1202067629|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL MSD 248526001 MIX[A]  
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Mar 12 07:26:22 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

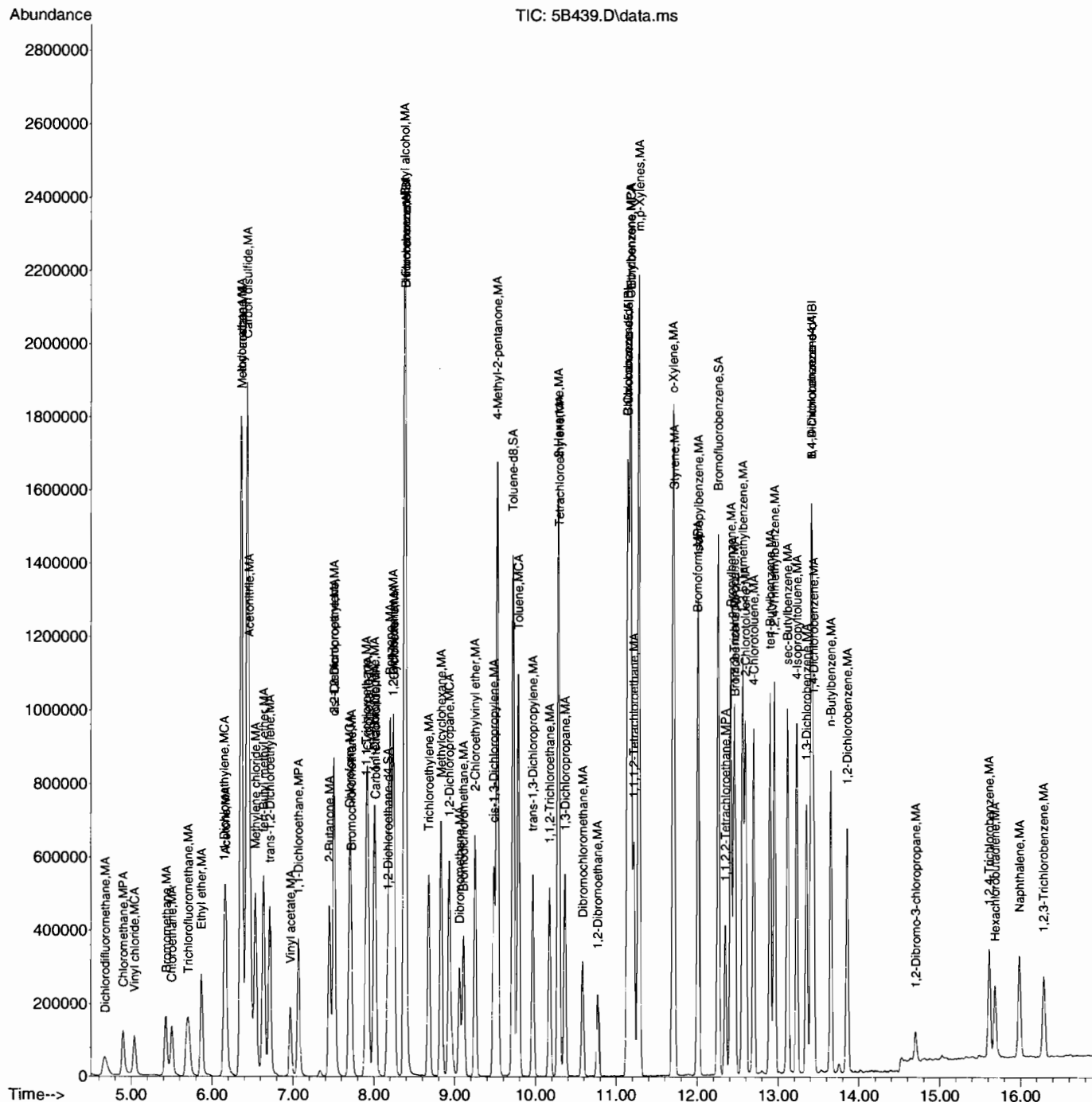
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	7.454	7.585	0.889		0m	N.D.	d
96) Methacrylonitrile	7.602	7.680	0.906		0m	N.D.	d
97) Tetrahydrofuran	7.705	7.716	0.919		0m	N.D.	d
98) Isobutyl alcohol	7.680	7.857	0.916		0m	N.D.	d
99) Methyl tert-amyl ether	8.122	8.122	0.968		0m	N.D.	d
100) Methyl methacrylate	8.829	8.801	1.053		0m	N.D.	d
101) 1,4-Dioxane	0.000	8.957	0.000		0	N.D.	
102) 2-Nitropropane	9.356	9.342	1.116		0m	N.D.	d
104) Ethyl methacrylate	0.000	9.859	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	12.016	12.136	0.896		0m	N.D.	d
108) Cyclohexanone	12.415	12.267	0.926		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	12.412	12.412	0.925		0m	N.D.	d
110) Pentachloroethane	13.024	13.017	0.971		0m	N.D.	d
111) Benzyl chloride	13.568	13.565	1.012		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	13.929	13.929	1.038		0m	N.D.	d

(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B439.D  
Acq On : 11 Mar 2010 11:28 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |1202067629|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL MSD 248526001 MIX[A]  
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Mar 12 07:26:22 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE





Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B437.D  
Acq On : 11 Mar 2010 10:35 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |248526001|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Mar 17 15:24:13 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	Dev (Min)
Internal Standards								
1) Fluorobenzene	8.391	8.387	1.000	96	1421542	50.00	ug/L	0.00
41) Chlorobenzene-d5	11.142	11.142	1.000	117	1051754	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	496058	50.00	ug/L	0.00
82) B Fluorobenzene	8.391	8.391	1.000	96	1421542	50.00	ug/L	0.00
103) B Chlorobenzene-d5	11.142	11.142	1.000	117	1051754	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	13.413	13.413	1.000	152	496058	50.00	ug/L	0.00
System Monitoring Compounds								
29) 1,2-Dichloroethane-d4	8.172	8.172	0.974	65	230487	33.50	ug/L	0.00
Spiked Amount 50.000	Range 66	- 134	Recovery	=	67.00%			
43) Toluene-d8	9.721	9.721	0.872	98	1055557	39.24	ug/L	0.00
Spiked Amount 50.000	Range 71	- 128	Recovery	=	78.48%			
61) Bromofluorobenzene	12.260	12.260	0.914	95	613506	61.66	ug/L	0.00
Spiked Amount 50.000	Range 65	- 130	Recovery	=	123.32%			
Target Compounds								
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	4.668	0.000		0	N.D.		
3) Chloromethane	4.960	4.900	0.591	50	377	Below Cal		83
4) Vinyl chloride	0.000	5.041	0.000		0	N.D.		
5) Bromomethane	0.000	5.423	0.000		0	N.D.		
6) Chloroethane	0.000	5.504	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.695	0.000		0	N.D.		
8) Ethyl ether	5.867	5.866	0.699	59	353	N.D.		
9) Acetone	6.184	6.174	0.737	43	2100	N.D.		
10) 1,1-Dichloroethylene	0.000	6.156	0.000		0	N.D.		
11) Iodomethane	0.000	6.357	0.000		0	N.D.		
12) Acetonitrile	6.467	6.464	0.771	41	1063	N.D.		
13) Methyl acetate	6.184	6.365	0.737	43	2100	N.D.		
14) Carbon disulfide	6.439	6.435	0.767	76	453	N.D.		
15) Methylene chloride	6.542	6.538	0.780	84	5368	N.D.		
16) tert-Butyl methyl ether	0.000	6.640	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.715	0.000		0	N.D.		
18) Vinyl acetate	6.807	6.969	0.811	43	3408	N.D.		
19) 1,1-Dichloroethane	0.000	7.068	0.000		0	N.D.		
20) 2-Butanone	7.461	7.450	0.889	43	122	N.D.		
21) cis-1,2-Dichloroethylene	0.000	7.507	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	7.514	0.000		0	N.D.		
23) Bromochloromethane	0.000	7.719	0.000		0	N.D.		
24) Chloroform	0.000	7.701	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	7.906	0.000		0	N.D.		
26) Cyclohexane	0.000	7.924	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	8.005	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.020	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	8.235	0.000		0	N.D.		
31) Benzene	8.207	8.203	0.978	78	238	N.D.		
32) Cyclohexene	0.000	8.246	0.000		0m	N.D.	d	
33) n-Butyl alcohol	8.384	8.377	0.999	56	7987	Below Cal	#	19
34) Trichloroethylene	0.000	8.677	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	8.932	0.000		0	N.D.		
36) Methylcyclohexane	0.000	8.826	0.000		0	N.D.		
37) Dibromomethane	0.000	9.059	0.000		0	N.D.		

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B437.D  
Acq On : 11 Mar 2010 10:35 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |248526001|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Mar 17 15:24:13 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	9.112	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	9.254	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	9.487	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	9.526	0.000		0	N.D.	
44) Toluene	9.791	9.788	0.879	91	5065	N.D.	
45) trans-1,3-Dichloroprop...	0.000	9.968	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	10.173	0.000		0	N.D.	
47) 2-Hexanone	10.294	10.279	0.924	43	109	N.D.	
48) 1,3-Dichloropropane	0.000	10.364	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	10.290	0.000		0	N.D.	
50) Dibromochloromethane	0.000	10.583	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	10.771	0.000		0	N.D.	
52) Chlorobenzene	0.000	11.174	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	11.216	0.000		0	N.D.	
54) Ethylbenzene	11.146	11.181	1.000	91	4642	N.D.	
55) m,p-Xylenes	11.280	11.280	1.012	106	910	N.D.	
56) o-Xylene	11.708	11.701	1.051	106	109	N.D.	
57) Styrene	0.000	11.715	0.000		0	N.D.	
59) Bromoform	0.000	12.005	0.000		0	N.D.	
60) Isopropylbenzene	12.246	12.016	0.913	105	112	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	12.348	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	12.454	0.000		0	N.D.	
64) Bromobenzene	0.000	12.465	0.000		0	N.D.	
65) n-Propylbenzene	12.415	12.415	0.926	91	562	N.D.	
66) 1,3,5-Trimethylbenzene	12.564	12.564	0.937	105	1029	N.D.	
67) 2-Chlorotoluene	0.000	12.596	0.000		0	N.D.	
68) 4-Chlorotoluene	12.702	12.698	0.947	91	404	N.D.	
69) tert-Butylbenzene	0.000	12.900	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	12.953	12.956	0.966	105	3139	N.D.	
71) sec-Butylbenzene	13.112	13.119	0.978	105	637	N.D.	
72) 4-Isopropyltoluene	13.232	13.229	0.987	119	1950	N.D.	
73) 1,3-Dichlorobenzene	0.000	13.349	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	0.000	13.441	0.000		0	N.D.	
75) n-Butylbenzene	13.653	13.653	1.018	91	1469	N.D.	
76) 1,2-Dichlorobenzene	0.000	13.858	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	14.704	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	15.612	15.619	1.164	180	244	N.D.	
79) Hexachlorobutadiene	0.000	15.686	0.000		0	N.D.	
80) Naphthalene	15.989	15.988	1.192	128	6039	0.38 ug/L	70
81) 1,2,3-Trichlorobenzene	16.298	16.291	1.215	180	244	N.D.	
83) Chlorotrifluoroethylene	0.000	4.608	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.111	0.000		0	N.D.	
85) Acrolein	0.000	6.082	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.071	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	6.163	0.000		0	N.D.	
88) Allyl chloride	6.450	6.425	0.769	41	163	N.D.	
89) tert-Butyl Alcohol	6.464	6.460	0.770	59	142	N.D.	
90) Acrylonitrile	0.000	6.747	0.000		0	N.D.	
91) Isopropyl ether	0.000	6.920	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.104	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.192	0.000		0	N.D.	
94) Ethyl acetate	7.461	7.383	0.889	43	122	N.D.	

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B437.D  
Acq On : 11 Mar 2010 10:35 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |248526001|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Mar 17 15:24:13 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE

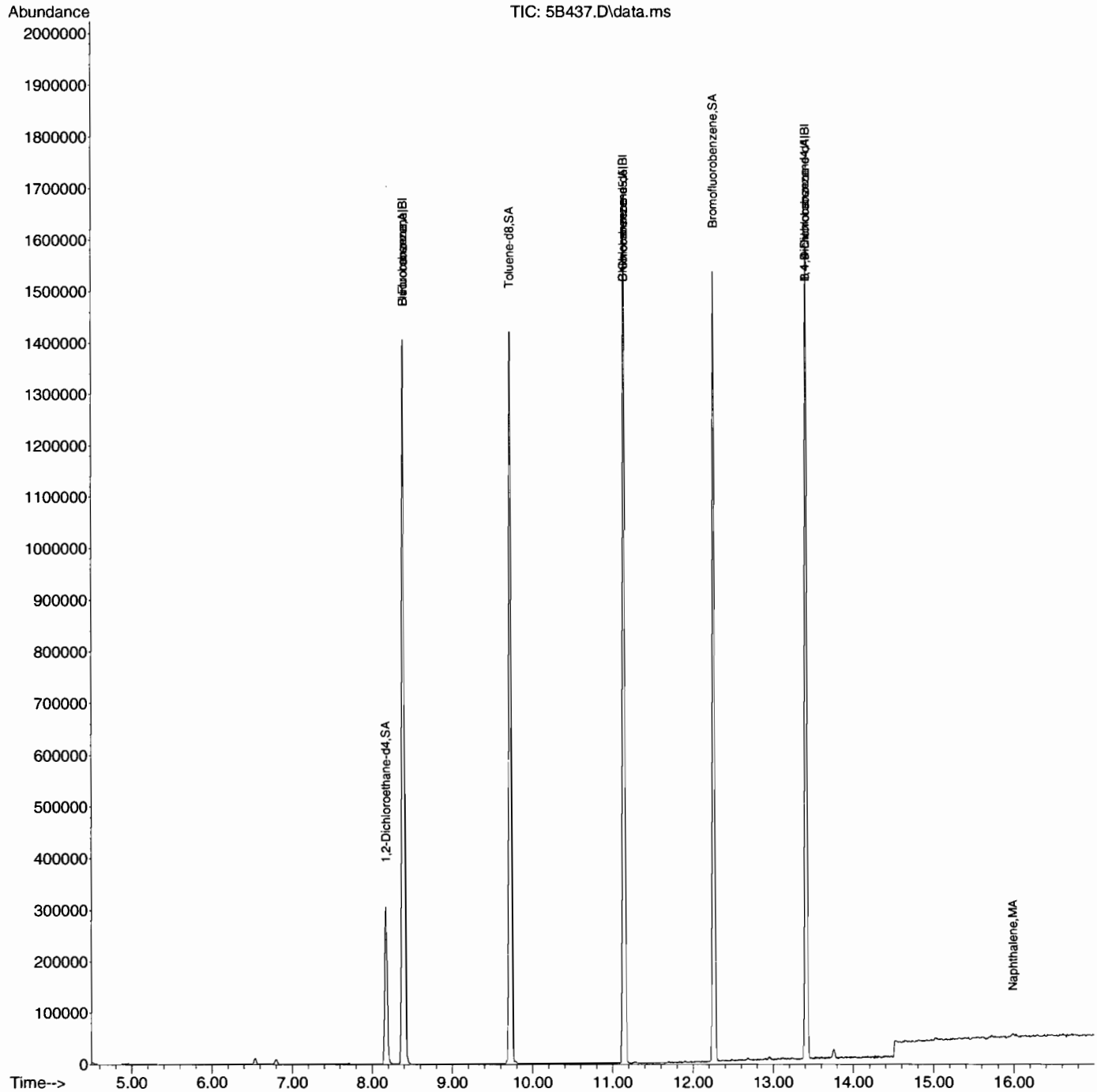
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	7.585	0.000		0	N.D.	
96) Methacrylonitrile	7.698	7.680	0.917	41	266	N.D.	
97) Tetrahydrofuran	7.719	7.716	0.920	42	1200	N.D.	
98) Isobutyl alcohol	7.733	7.857	0.922	41	107	N.D.	
99) Methyl tert-amyl ether	0.000	8.122	0.000		0	N.D.	
100) Methyl methacrylate	0.000	8.801	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	8.957	0.000		0	N.D.	
102) 2-Nitropropane	0.000	9.342	0.000		0m	N.D.	d
104) Ethyl methacrylate	0.000	9.859	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	10.980	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	12.136	0.000		0	N.D.	
108) Cyclohexanone	0.000	12.267	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	12.412	0.000		0	N.D.	
110) Pentachloroethane	0.000	13.017	0.000		0	N.D.	
111) Benzyl chloride	13.551	13.565	1.010	91	1141	N.D.	
112) bis(2-Chloroisopropyl)...	13.936	13.929	1.039	45	119	N.D.	

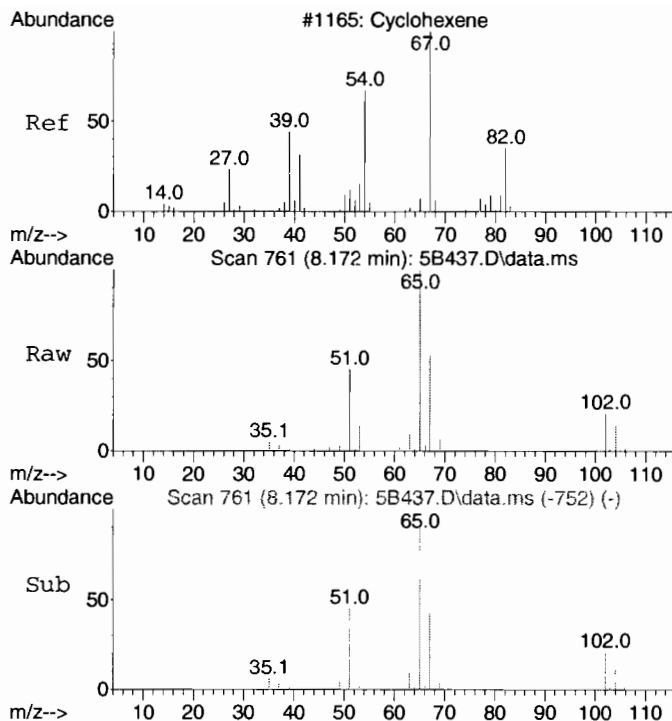
(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B437.D  
Acq On : 11 Mar 2010 10:35 pm  
Operator : CDS1  
InstName : VOA5  
Sample : |248526001|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 37 Sample Multiplier: 1

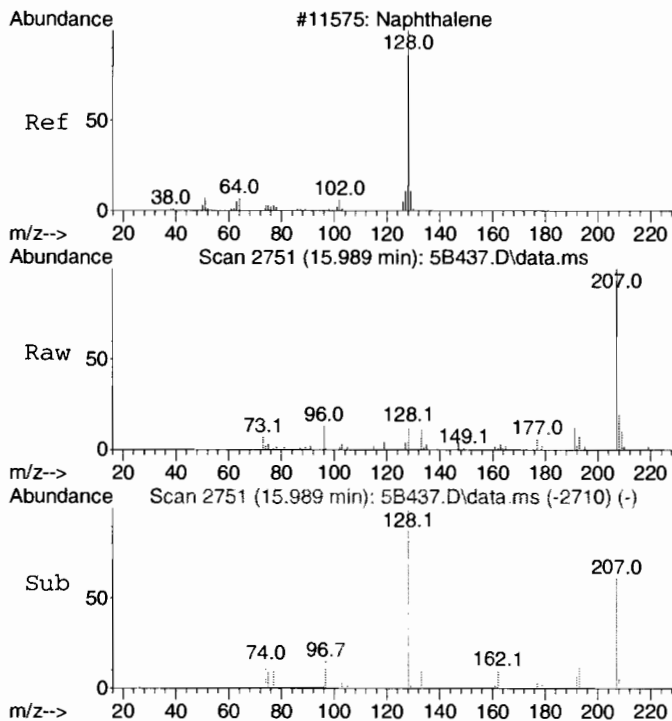
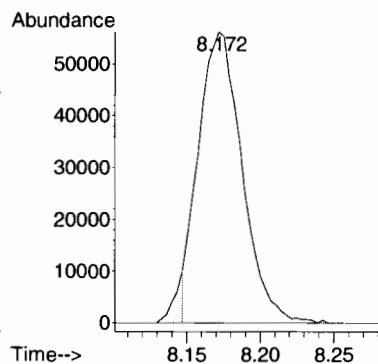
Quant Time: Mar 17 15:24:13 2010  
Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Tue Mar 09 07:08:19 2010  
Response via : Initial Calibration  
Integrator: RTE





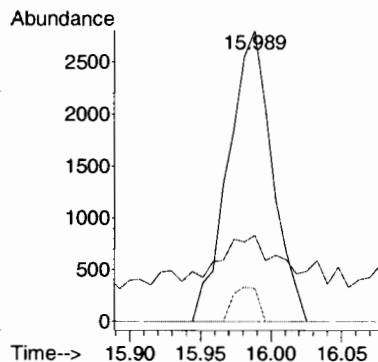
#32 BEFORE analyst DELETION  
Cyclohexene  
Concen: 12.13 ug/L  
RT: 8.172 min Scan# 761  
Delta R.T. -0.074 min  
Lab File: 5B437.D  
Acq: 11 Mar 2010 10:35 pm

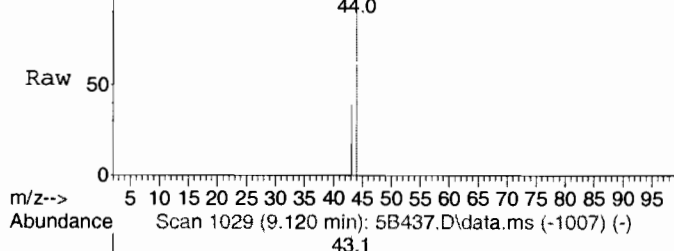
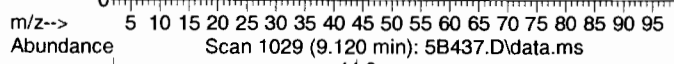
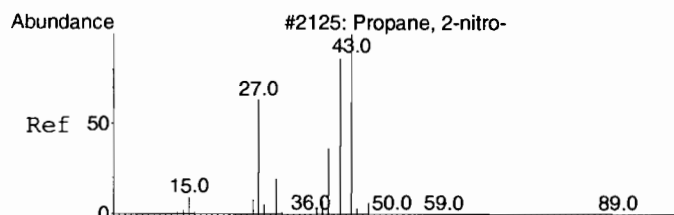
Tgt Ion: 67 Resp: 115964  
Ion Ratio Lower Upper  
67 100  
54 0.0 46.3 106.3#



#80  
Naphthalene  
Concen: 0.38 ug/L  
RT: 15.989 min Scan# 2751  
Delta R.T. 0.001 min  
Lab File: 5B437.D  
Acq: 11 Mar 2010 10:35 pm

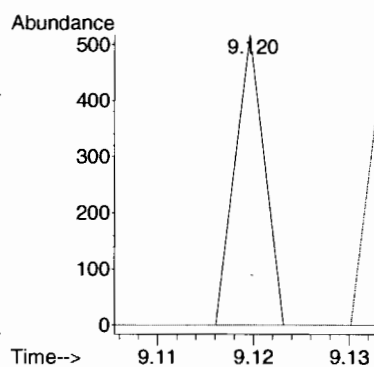
Tgt Ion: 128 Resp: 6039  
Ion Ratio Lower Upper  
128 100  
127 30.5 0.0 42.4  
129 6.7 0.0 40.8





#102 BEFORE analyst DELETION  
 2-Nitropropane  
 Concen: 6.96 ug/L  
 RT: 9.120 min Scan# 1029  
 Delta R.T. -0.222 min  
 Lab File: 5B437.D  
 Acq: 11 Mar 2010 10:35 pm

Tgt Ion	Ratio	Lower	Upper
43	100		
41	99.1	52.5	112.5



Library Search Compound Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B437.D  
Acq On : 11 Mar 2010 10:35 pm  
Operator : CDS1  
Sample : |248526001|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 37 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

No Library Search Compounds Detected

\*\*\*\*\*

Tentatively Identified Compound (LSC) summary  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\031110V5\  
Data File : 5B437.D  
Acq On : 11 Mar 2010 10:35 pm  
Operator : CDS1  
Sample : |248526001|963809|1|VOA|1|VOA8260BS|  
Misc : LANL 5G - SOIL  
ALS Vial : 37 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030310V5\VOA5-8260-030310.M  
Quant Title : Volatile Organics 8260B SubList :

TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: default.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc

-----



Date: 3/3/2010 Method 8260/624 Operator: cds1 REVIEWED BY: \_\_\_\_\_  
 HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1 DATE: \_\_\_\_\_  
 Daily Instrument Readings: \_\_\_\_\_ Multiplier Voltage: 1412

**CALIBRATION & CC INFORMATION:**

Initial Calibration Date: \_\_\_\_\_ Purge Amount  
 (See pg. \_\_\_\_\_ for ICAL Std. Sci. Ids) 5 Water Purge Vol:  
 N/A Soil Purge Wt.  
 N/A Mid level ext. MeOH Vol:  
 N/A ul  
 N/A Methanol Lot #  
 X Heated Purge

Daily Standard	Volume Added for Purge (ul)	MS/
Solution ID#	Smpl	CCV
IS UVM100203-01	1	1
SS UVM100203-02	1	1
Long ICV W5VM100303-10		5+5
BFB UVM100203-02		1
Short ICV W5VM100303-18		5+5

Sequence Number: 03310V5

Analysis Date	Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol.(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Accepta ble (O/X)	Comments
3 Mar 2010	11:00	5A301.D	UVM100203-02	BLANK	BFB	5ML	1	N/A	1	w	CDS1	N/A	O	clean-up blank
3 Mar 2010	11:26	5A302.D	120206-0000	BLANK	BLANK	5uL ea.	1	N/A	2	w	CDS1	N/A	X	UVM100106-02D+UVM100222-02A
3 Mar 2010	11:52	5A303.D	W5VM100303-01	VSTD001L	ICAL	5uL ea.	1	N/A	3	w	CDS1	N/A	O	UVM100106-03D+UVM100222-03A
3 Mar 2010	12:18	5A304.D	W5VM100303-02	VSTD002L	ICAL	5uL ea.	1	N/A	4	w	CDS1	N/A	O	UVM100106-04D+UVM100222-04A
3 Mar 2010	12:43	5A305.D	W5VM100303-03	VSTD005L	ICAL	5uL ea.	1	N/A	5	w	CDS1	N/A	O	UVM100106-05D+UVM100222-05A
3 Mar 2010	13:09	5A306.D	W5VM100303-04	VSTD010L	ICAL	5uL ea.	1	N/A	6	w	CDS1	N/A	O	UVM100106-06D+UVM100222-06A
3 Mar 2010	13:35	5A307.D	W5VM100303-05	VSTD020L	ICAL	5uL ea.	1	N/A	7	w	CDS1	N/A	O	UVM100106-07D+UVM100222-07A
3 Mar 2010	14:01	5A308.D	W5VM100303-06	VSTD050L	ICAL	5uL ea.	1	N/A	8	w	CDS1	N/A	O	UVM100106-08D+UVM100222-08A
3 Mar 2010	14:26	5A309.D	W5VM100303-07	VSTD100L	ICAL	5uL ea.	1	N/A	9	w	CDS1	N/A	O	clean-up blank
3 Mar 2010	14:52	5A310.D	120206-0000	BLANK	BLANK	5mL	1	N/A	10	w	CDS1	N/A	X	UVM100106-01D+UVM100222-01A
3 Mar 2010	15:18	5A311.D	W5VM100303-08	VSTD0005L	ICAL	5uL ea.	1	N/A	11	w	CDS1	N/A	O	UVM100126-02E+UVM100301-01 ketones low
3 Mar 2010	15:44	5A312.D	W5VM100303-09	ICV	LCS	5uL ea.	1	N/A	12	w	CDS1	N/A	X	UVM100220-01C+UVM100301-01
3 Mar 2010	16:10	5A313.D	W5VM100303-10	ICV	LCS	5uL ea.	1	N/A	13	w	CDS1	N/A	O	clean-up blank
3 Mar 2010	16:35	5A314.D	120206-0000	BLANK	BLANK	5ML	1	N/A	14	w	CDS1	N/A	X	UVM100215-01+UVM100227-01A
3 Mar 2010	17:01	5A315.D	W5VM100303-11	VSTD005S	ICAL	5uL ea.	1	N/A	15	w	CDS1	N/A	O	UVM100215-02+UVM100227-02A
3 Mar 2010	17:27	5A316.D	W5VM100303-12	VSTD010S	ICAL	5uL ea.	1	N/A	16	w	CDS1	N/A	O	UVM100215-03+UVM100227-03A
3 Mar 2010	17:52	5A317.D	W5VM100303-13	VSTD025S	ICAL	5uL ea.	1	N/A	17	w	CDS1	N/A	O	UVM100215-04+UVM100227-04A
3 Mar 2010	18:18	5A318.D	W5VM100303-14	VSTD050S	ICAL	5uL ea.	1	N/A	18	w	CDS1	N/A	O	UVM100215-05+UVM100227-05A
3 Mar 2010	18:44	5A319.D	W5VM100303-15	VSTD100S	ICAL	5uL ea.	1	N/A	19	w	CDS1	N/A	O	UVM100215-06+UVM100227-06A
3 Mar 2010	19:10	5A320.D	W5VM100303-16	VSTD250S	ICAL	5uL ea.	1	N/A	20	w	CDS1	N/A	O	UVM100215-07+UVM100227-07A
3 Mar 2010	19:35	5A321.D	W5VM100303-17	VSTD500S	ICAL	5uL ea.	1	N/A	21	w	CDS1	N/A	O	clean-up blank
3 Mar 2010	20:01	5A322.D	120206-0000	BLANK	BLANK	5mL	1	N/A	22	w	CDS1	N/A	X	UVM100215-08A+UVM100125-08E
3 Mar 2010	20:27	5A323.D	W5VM100303-18	ICV	ICAL	5uL ea.	1	N/A	23	w	CDS1	N/A	O	

Date: 3/11/2010 Method 8260/624 Operator: CDS1  
REVIEWED BY: \_\_\_\_\_  
DATE: \_\_\_\_\_  
Daily Instrument Readings: \_\_\_\_\_  
Multiplier Voltage: 1412

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 3/3/2010 Daily Standard Volume Added for Purge (ul) MS/Blk/Smpl CCV LCS BFB  
(See pg. 43 for ICAL Std. Sci. Ids)  
Solution ID# W5VM100311-01 5+5  
IS UVM100203-01 1 1 1  
SS UVM100217-02 1 1 1  
LCS/MS W5VM100311-02/03 5+5  
BFB UVM100217-02 1  
SHORT W5VM100311-04 5 5  
NaHSO4 lot # n/a  
Cl test lot # n/a  
Sequence Number: 031110V5

Purge Amount  
5 Water Purge Vol:  
5 Soil Purge Wt.  
Mid level ext. MeOH Vol:  
ul  
Methanol Lot #  
X Heated Purge

Analysis Date	Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol.(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Accepta ble(O/X)	Comments
3/11/2010	6:41	5B401.D	UVM100217-02	-----	BFB	5ML	1	N/A	1	w	CDS1	N/A	O	
3/11/2010	7:08	5B402.D	W5VM100311-01	-----	CCV	5ML	1	N/A	2	w	CDS1	N/A	O	UVM100222-07B+UVM100106-07D
3/11/2010	7:34	5B403.D	W5VM100311-02	-----	LCS	5ML	1	N/A	3	w	CDS1	N/A	O	UVM100305-01A+IVM100310-01
3/11/2010	8:01	5B404.D	W5VM100311-03	-----	LCS	5g	1	N/A	4	s	CDS1	N/A	O	UVM100305-01A+IVM100310-01
3/11/2010	8:27	5B405.D	W5VM100311-04	-----	CCV/lcs	5g	1	N/A	5	s	CDS1	N/A	O	UVM100215-08B
3/11/2010	8:54	5B406.D	120206-----	-----	BLANK	5ML	1	N/A	6	w	CDS1	N/A	O	
3/11/2010	9:20	5B407.D	120206-----	-----	BLANK	5G	1	N/A	7	s	CDS1	N/A	O	
3/11/2010	9:47	5B408.D	248249001	LANL	962697	5G	1	N/A	8	s	CDS1	N/A	X	IS low, SS high--conf. of 5B334
3/11/2010	10:13	5B409.D	248249002	LANL	962697	5G	1	N/A	9	s	CDS1	N/A	O	SS high--conf. by 5B535
3/11/2010	10:40	5B410.D	248249003	LANL	962697	5G	1	N/A	10	s	CDS1	N/A	O	IS low, SS high--conf. by 5B336
3/11/2010	11:07	5B411.D	248249004	LANL	962697	5G	1	N/A	11	s	CDS1	N/A	O	
3/11/2010	11:33	5B412.D	248370014	LANL	963122	5G	1	N/A	12	s	CDS1	N/A	X	SS high--conf. of 5B313
3/11/2010	11:59	5B413.D	248370016	LANL	963122	5G	1	N/A	13	s	CDS1	N/A	O	H'
3/11/2010	12:26	5B414.D	248370017	LANL	963122	5G	1	N/A	14	s	CDS1	N/A	X	SS high--conf. of 5B316
3/11/2010	12:53	5B415.D	248370018	LANL	963122	5G	1	N/A	15	s	CDS1	N/A	X	SS high--conf. of 5B317
3/11/2010	13:19	5B416.D	248370020	LANL	963122	5G	1	N/A	16	s	CDS1	N/A	X	IS low, SS high--conf. of 5B319
3/11/2010	13:45	5B417.D	248517001	LANL	963809	5G	1	N/A	17	s	CDS1	N/A	O	IS low, SS high--conf. by 3D417
3/11/2010	14:12	5B418.D	248519001	LANL	963809	5G	1	N/A	18	s	CDS1	N/A	O	IS low, SS high--conf. by 5B514
3/11/2010	14:39	5B419.D	248519002	LANL	963809	5G	1	N/A	19	s	CDS1	N/A	O	SS high--conf. by 5B515
3/11/2010	15:05	5B420.D	248519003	LANL	963809	5G	1	N/A	20	s	CDS1	N/A	O	IS low, SS high--conf. by 5B516
3/11/2010	15:32	5B421.D	248519004	LANL	963809	5G	1	N/A	21	s	CDS1	N/A	O	IS low, SS high--conf. by 5B517
3/11/2010	15:58	5B422.D	248519005	LANL	963809	5G	1	N/A	22	s	CDS1	N/A	O	SS high--conf. by 5B518
3/11/2010	16:25	5B423.D	248519006	LANL	963809	5G	1	N/A	23	s	CDS1	N/A	O	SS high--conf. by 5B526
3/11/2010	16:51	5B424.D	248519007	LANL	963809	5G	1	N/A	24	s	CDS1	N/A	O	IS low, SS high--conf. by 5B527
3/11/2010	17:18	5B425.D	248519008	LANL	963809	5G	1	N/A	25	s	CDS1	N/A	O	IS low, SS high--conf. by 5B528
3/11/2010	17:44	5B426.D	248519009	LANL	963809	5G	1	N/A	26	s	CDS1	N/A	O	IS low, SS high--conf. by 5B529

Date: 3/11/2010 Method 8260/624 Operator: CDS1  
REVIEWED BY: \_\_\_\_\_  
DATE: \_\_\_\_\_  
Daily Instrument Readings: \_\_\_\_\_  
Multiplier Voltage: 1412

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 3/3/2010 Daily Standard Volume Added for Purge (ul) MS/ BFB

Solution ID#	CCV	W5VM100311-05	IS	UVM100203-01	1	5+5	1	1
CCV	W5VM100311-05	IS	UVM100203-01	1	5+5	1	1	1
SS	UVM100217-02	SS	UVM100217-02	1	1	1	1	1
LCS/MS	W5VM100311-06/07	LCS/MS	W5VM100311-06/07			5+5		
BFB	UVM100217-02	BFB	UVM100217-02				1	
SHORT	W5VM100311-08	SHORT	W5VM100311-08		5	5		

(See pg. 43 for ICAL Std. Sci. Ids)

NaHSO4 lot # n/a

Cl test lot # n/a

Sequence Number: 031110V5pm

Purge Amount

5 Water Purge Vol:

5 Soil Purge Wt.

Mid level ext. MeOH Vol:

ul

Methanol Lot #

X Heated Purge

Analysis Date	Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol.(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	CI test (Y/N)	Accepta ble(O/X)	Comments
3/11/2010	18:10	5B427.D	UVM100217-02	-----	BFB2	5ML	1	N/A	27	w	CDS1	N/A	O	
3/11/2010	18:37	5B428.D	W5VM100311-05	-----	CCV	5ML	1	N/A	28	w	CDS1	N/A	O	UVM100222-07B+UVM100106-07D
3/11/2010	19:03	5B429.D	W5VM100311-06	-----	LCS	5ML	1	N/A	29	w	CDS1	N/A	O	UVM100305-01A+UVM100310-01
3/11/2010	19:30	5B430.D	W5VM100311-07	-----	LCS	5G	1	N/A	30	s	CDS1	N/A	O	UVM100305-01A+UVM100310-01
3/11/2010	19:56	5B431.D	W5VM100311-08	-----	CCV/lcs	5G	1	N/A	31	s	CDS1	N/A	O	UVM100215-08B
3/11/2010	20:23	5B432.D	120206-----	-----	BLANK	5ML	1	N/A	32	w	CDS1	N/A	O	
3/11/2010	20:49	5B433.D	120206-----	-----	BLANK	5G	1	N/A	33	s	CDS1	N/A	O	
3/11/2010	21:15	5B434.D	248519010	LANL	963809	5G	1	N/A	34	s	CDS1	N/A	O	SS high--conf. by 5B530
3/11/2010	21:42	5B435.D	248519011	LANL	963809	5G	1	N/A	35	s	CDS1	N/A	O	IS low, SS high--conf. by 5B531
3/11/2010	22:08	5B436.D	248519012	LANL	963809	5G	1	N/A	36	s	CDS1	N/A	O	
3/11/2010	22:35	5B437.D	248526001	LANL	963809	5G	1	N/A	37	s	CDS1	N/A	O	
3/11/2010	23:01	5B438.D	1202067628	LANL	963809	5G	1	N/A	38	s	CDS1	N/A	O	MS 248526001 SS high conf. in MSD
3/11/2010	23:28	5B439.D	1202067629	LANL	963809	5G	1	N/A	39	s	CDS1	N/A	O	MSD 248526001 SS high conf. in MS
3/11/2010	23:54	5B440.D	1202068375	LANL	964134	5G	1	N/A	40	s	CDS1	N/A	O	MS 248394001
3/12/2010	0:20	5B441.D	1202068376	LANL	964134	5G	1	N/A	41	s	CDS1	N/A	O	MSD 248394001
3/12/2010	0:46	5B442.D	120206-----	-----	BLANK	5ML	1	N/A	42	w	CDS1	N/A	X	clean-up blank
3/12/2010	1:13	5B443.D	248394001	LANL	964134	5G	1	N/A	43	s	CDS1	N/A	X	SS high--see 5B508
3/12/2010	1:39	5B444.D	248394002	LANL	964134	5G	1	N/A	44	s	CDS1	N/A	X	SS high--see 5B509
3/12/2010	2:05	5B445.D	248394003	LANL	964134	5G	1	N/A	45	s	CDS1	N/A	X	SS high--see 5B510
3/12/2010	2:32	5B446.D	248394004	LANL	964134	5G	1	N/A	46	s	CDS1	N/A	X	SS high--see 5B511
3/12/2010	2:58	5B447.D	248394005	LANL	964134	5G	1	N/A	47	s	CDS1	N/A	X	SS high--see 5B512
3/12/2010	3:24	5B448.D	248394006	LANL	964134	5G	1	N/A	48	s	CDS1	N/A	X	SS high--see 5B513

### DATA EXCEPTION REPORT

<b>Mo.Day Yr.</b> 20-MAR-10	<b>Division:</b> Federal	<b>Quality Criteria:</b> SOP	<b>Type:</b> Process
<b>Instrument Type:</b> VOA GC/MS	<b>Test / Method:</b> 8260	<b>Matrix Type:</b> Solid	<b>Client Code:</b> LANL010
<b>Batch ID:</b> 963809	<b>Sample Numbers:</b> See Below		
<b>Potentially affected work order(s)(SDG):</b> 248517(10-2198),248519(10-2199),248526(10-2202) <b>Application Issues:</b> Failed Recovery for Surrogate or Tracer Other			
<b>Specification and Requirements</b>		<b>DER Disposition:</b>	
<b>Exception Description:</b>  1. The recovery for one or more surrogates was outside of acceptance limits in the following samples: 248519001-011, 248517001, 248526001MS, 248526001MSD  2. The recovery for one or more internal standards was outside of acceptance limits in the following samples: 248519001, 248519003, 248519004, 248519007, 248519008, 248519009, 248519011, 248517001		1,2. All samples were re-analyzed with similar recoveries for internal standards and/or surrogates. It is believed that matrix interference was demonstrated. The data were reported.	

**Originator's Name:**

Crystal Stacey 20-MAR-10

**Data Validator/Group Leader:**

Kelle Bellamy 22-MAR-10

# **GC/MS Semivolatile Analysis**

**Semi-Volatile Case Narrative  
Los Alamos National Laboratory (LANL)  
SDG 10-2199**

**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:	963133
Prep Batch Number:	963130

**Sample Analysis**

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

<b>Sample ID</b>	<b>Client ID</b>
248519001	RE36-10-8288
248519002	RE36-10-8279
248519003	RE36-10-8277
248519004	RE36-10-8280
248519005	RE36-10-8278
248519006	RE36-10-8274
248519007	RE36-10-8291
248519008	RE36-10-8287
248519009	RE36-10-8273
248519010	RE36-10-8275
248519011	RE36-10-8276
1202066181	Method Blank (MB)
1202066182	Laboratory Control Sample (LCS)
1202066183	248526001(RE36-10-8466) Matrix Spike (MS)
1202066184	248526001(RE36-10-8466) 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.

Initial calibration and continuing calibration requirements may not be satisfied for all requested target analytes analyzed according to Method 8270D. However, the method allows for a designated number of outliers dependent on the requested analyte list. Please see the Initial Calibration and/or CCV Requirements Section of the case narrative for any samples impacted by calibration failures.

When calibrations are performed for Appendix IX compounds some of the compounds may not be calibrated exactly according to the criteria in Method 8270C. If the %RSD is greater than 15% or the correlation coefficient is less than 0.99 then the analyte is quantitated using the response factor. If the analyte is detected then the sample is re-analyzed for that analyte on an instrument that is compliant with the criteria of the method.

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(1202066182) recovered 2,4-Dimethylphenol at 26% (limits are 32%-112%) and Benzyl alcohol

at 26% (limits are 27%-108%). The LCS failures represent less than 5% of the total requested spike analyte list. That satisfied the acceptance criteria for the client and the data results have been reported. Please note that Benzyl alcohol is stated in the Method as displaying erratic chromatographic behavior. This may account for the low recoveries of the analytes in the LCS (as well as in the MS and MSD).

#### **QC Sample Designation**

The non-SDG sample 248526001 (RE36-10-8466) was selected for analysis as the matrix spike/matrix spike duplicate. Please see the associated raw data files located in the Miscellaneous Section of the data report.

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

The MS(1202066183) and MSD(1202066184) recovered multiple spike analytes outside of the established acceptance limits. Please see the QC Summary report for the specific failures. Since the MSD displayed similar recoveries to the MS, the failures were attributed to matrix interference and the data were reported. Please note that Benzyl alcohol is known to be a poor responder as stated in the Method and is subject to erratic chromatography behavior. This may account for the low recoveries of the analytes in the MS and MSD (as well as in the LCS).

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

The MS(1202066183) and MSD(1202066184) recovered multiple spike analytes outside of the established acceptance limits. Please see the QC Summary report for the specific failures. Since the MSD displayed similar recoveries to the MS, the failures were attributed to matrix interference and the data were reported. Please note that Benzyl alcohol is known to be a poor responder as stated in the Method and is subject to erratic chromatography behavior. This may account for the low recoveries of the analytes in the MS and MSD (as well as in the LCS).

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

The relative percent differences (RPD) were not within the acceptance limits. The failures were attributed to sample matrix interference.

#### **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**

Samples 248519001 (RE36-10-8288), 248519002 (RE36-10-8279), 248519003 (RE36-10-8277), 248519004 (RE36-10-8280), 248519006 (RE36-10-8274), 248519007 (RE36-10-8291), 248519010 (RE36-10-8275) and 248519011 (RE36-10-8276) were diluted because the extracts were very dark and viscous.

##### **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: 809972. 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:

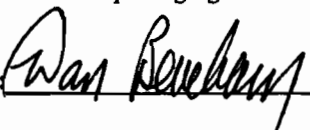
<b>Instrument ID</b>	<b>Instrument</b>	<b>System Configuration</b>	<b>Column ID</b>	<b>Column Description</b>
MSD6.I	HP Mass Spectrometer	HP6890/HP5973	DB-5MS	25m x 0.20mm x 0.33 um (5% Phenylmethylpolysiloxane)

### **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:  Date: 3-30-10

## Roadmap for LANL 10-2199 SVOA

This roadmap was analyzed by llo00884 on 03-25-2010, 20:06.  
 This roadmap was reviewed by bar00895 on 03-29-2010, 08:38.  
 This roadmap was packaged by CHA01131 on 03-29-2010, 15:21.

Sample										
exclude	manual	datafile	smpid	injdate	injtime	sublist	clientid	dilution	batchid	comment
■	N	/chem/MSD6.i/s032110.b/s6c2114.d	248519001	21-MAR-2010	20:35	10-2199.sub	RE36-10-8288	1	963133	DUSE fail istd-rr 4x
■	N	/chem/MSD6.i/s032110.b/s6c2115.d	248519002	21-MAR-2010	20:58	10-2199.sub	RE36-10-8279	1	963133	DUSE fail istd-rr 4x
■	N	/chem/MSD6.i/s032110.b/s6c2116.d	248519003	21-MAR-2010	21:22	10-2199.sub	RE36-10-8277	1	963133	DUSE fail istd-rr 4x
■	N	/chem/MSD6.i/s032110.b/s6c2117.d	248519004	21-MAR-2010	21:46	10-2199.sub	RE36-10-8280	1	963133	DUSE fail istd-rr 4x
□	N	/chem/MSD6.i/s032110.b/s6c2118.d	248519005	21-MAR-2010	22:09	10-2199.sub	RE36-10-8278	1	963133	
■	N	/chem/MSD6.i/s032110.b/s6c2119.d	248519006	21-MAR-2010	22:33	10-2199.sub	RE36-10-8274	1	963133	DUSE fail istd-rr 4x
■	N	/chem/MSD6.i/s032110.b/s6c2120.d	248519007	21-MAR-2010	22:57	10-2199.sub	RE36-10-8291	1	963133	DUSE fail istd-rr 4x
□	N	/chem/MSD6.i/s032110.b/s6c2121.d	248519008	21-MAR-2010	23:20	10-2199.sub	RE36-10-8287	1	963133	
□	N	/chem/MSD6.i/s032110.b/s6c2122.d	248519009	21-MAR-2010	23:44	10-2199.sub	RE36-10-8273	1	963133	
■	N	/chem/MSD6.i/s032110.b/s6c2123.d	248519010	22-MAR-2010	00:07	10-2199.sub	RE36-10-8275	1	963133	DUSE fail istd
□	N	/chem/MSD6.i/s032110.b/s6c2124.d	248519011	22-MAR-2010	00:31	10-2199.sub	RE36-10-8276	1	963133	
□	N	/chem/MSD6.i/s032310.b/s6c2325.d	248519001	23-MAR-2010	23:53	10-2199.sub	RE36-10-8288	4	963133	USE; RR OF S6C2114
□	N	/chem/MSD6.i/s032310.b/s6c2326.d	248519002	24-MAR-2010	00:17	10-2199.sub	RE36-10-8279	4	963133	USE; RR OF S6C2115
□	N	/chem/MSD6.i/s032310.b/s6c2327.d	248519003	24-MAR-2010	00:40	10-2199.sub	RE36-10-8277	4	963133	USE; RR OF S6C2116
□	N	/chem/MSD6.i/s032310.b/s6c2328.d	248519004	24-MAR-2010	01:03	10-2199.sub	RE36-10-8280	4	963133	USE; RR OF S6C2117
□	N	/chem/MSD6.i/s032310.b/s6c2329.d	248519006	24-MAR-2010	01:26	10-2199.sub	RE36-10-8274	4	963133	USE; RR OF S6C2119
□	N	/chem/MSD6.i/s032310.b/s6c2330.d	248519007	24-MAR-2010	01:50	10-2199.sub	RE36-10-8291	4	963133	USE; RR OF S6C2120
□	N	/chem/MSD6.i/s032310.b/s6c2331.d	248519010	24-MAR-2010	02:12	10-2199.sub	RE36-10-8275	4	963133	USE; RR OF S6C2123
■	N	/chem/MSD6.i/s032310.b/s6c2332.d	248519011	24-MAR-2010	02:35	10-2199.sub	RE36-10-8276	4	963133	USE; RR OF S6C2124

QC Sample

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	batchid	comment
<input type="checkbox"/>	N	/chem/MSD6.i/s032110.b/s6c2109-2.d	1202066182	lcs	21-MAR-2010	18:37	10-2199.sub	SBLK01LCS	1	963133	<5% fail
<input type="checkbox"/>	Y	/chem/MSD6.i/s032110.b/s6c2108-2.d	1202066181	mb	21-MAR-2010	18:13	10-2199.sub	SBLK01	1.00000	963133	

# **Sample Data Summary**

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

SDG Number: 10-2199  
Lab Sample ID: 248519009

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Aliquot: 30.06 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 29  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE36-10-8273  
Batch ID: 963133  
Run Date: 03/21/2010 23:44  
Prep Date: 03/10/2010 12:14  
Data File: s6c2122.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	469	ug/kg	93.8	469
108-95-2	Phenol	U	469	ug/kg	93.8	469
95-57-8	2-Chlorophenol	U	469	ug/kg	93.8	469
106-46-7	1,4-Dichlorobenzene	U	469	ug/kg	93.8	469
621-64-7	N-Nitrosodipropylamine	U	469	ug/kg	93.8	469
59-50-7	4-Chloro-3-methylphenol	U	469	ug/kg	93.8	469
83-32-9	Acenaphthene	U	46.9	ug/kg	15.5	46.9
121-14-2	2,4-Dinitrotoluene	U	469	ug/kg	46.9	469
100-02-7	4-Nitrophenol	U	469	ug/kg	155	469
87-86-5	Pentachlorophenol	U	469	ug/kg	117	469
129-00-0	Pyrene	J	15.6	ug/kg	14.1	46.9
110-86-1	Pyridine	U	469	ug/kg	93.8	469
62-53-3	Aniline	U	469	ug/kg	141	469
111-44-4	bis(2-Chloroethyl) ether	U	469	ug/kg	93.8	469
541-73-1	1,3-Dichlorobenzene	U	469	ug/kg	93.8	469
100-51-6	Benzyl alcohol	U	469	ug/kg	141	469
95-50-1	1,2-Dichlorobenzene	U	469	ug/kg	93.8	469
108-60-1	bis(2-Chloroisopropyl)ether	U	469	ug/kg	93.8	469
95-48-7	o-Cresol	U	469	ug/kg	93.8	469
65794-96-9	m,p-Cresols	U	469	ug/kg	141	469
67-72-1	Hexachloroethane	U	469	ug/kg	93.8	469
98-95-3	Nitrobenzene	U	469	ug/kg	93.8	469
78-59-1	Isophorone	U	469	ug/kg	93.8	469
88-75-5	2-Nitrophenol	U	469	ug/kg	93.8	469
105-67-9	2,4-Dimethylphenol	U	469	ug/kg	164	469
111-91-1	bis(2-Chloroethoxy)methane	U	469	ug/kg	93.8	469
120-83-2	2,4-Dichlorophenol	U	469	ug/kg	93.8	469
65-85-0	Benzoic acid	U	938	ug/kg	234	938
91-20-3	Naphthalene	U	46.9	ug/kg	14.1	46.9
106-47-8	4-Chloroaniline	U	469	ug/kg	93.8	469
87-68-3	Hexachlorobutadiene	U	469	ug/kg	93.8	469
91-57-6	2-Methylnaphthalene	U	46.9	ug/kg	9.38	46.9
77-47-4	Hexachlorocyclopentadiene	U	469	ug/kg	93.8	469
88-06-2	2,4,6-Trichlorophenol	U	469	ug/kg	93.8	469
95-95-4	2,4,5-Trichlorophenol	U	469	ug/kg	93.8	469
91-58-7	2-Chloronaphthalene	U	46.9	ug/kg	15.5	46.9
88-74-4	2-Nitroaniline	U	469	ug/kg	93.8	469
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	469	ug/kg	93.8	469

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

SDG Number: 10-2199  
Lab Sample ID: 248519009

Client ID: RE36-10-8273  
Batch ID: 963133  
Run Date: 03/21/2010 23:44  
Prep Date: 03/10/2010 12:14  
Data File: s6c2122.d

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Aliquot: 30.06 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 29  
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	469	ug/kg	93.8	469
606-20-2	2,6-Dinitrotoluene	U	469	ug/kg	46.9	469
208-96-8	Acenaphthylene	U	46.9	ug/kg	14.1	46.9
51-28-5	2,4-Dinitrophenol	U	938	ug/kg	178	938
132-64-9	Dibenzofuran	U	469	ug/kg	93.8	469
84-66-2	Diethylphthalate	U	469	ug/kg	93.8	469
86-73-7	Fluorene	U	46.9	ug/kg	14.1	46.9
7005-72-3	4-Chlorophenylphenylether	U	469	ug/kg	93.8	469
534-52-1	2-Methyl-4,6-dinitrophenol	U	469	ug/kg	93.8	469
100-01-6	4-Nitroaniline	U	469	ug/kg	141	469
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	469	ug/kg	93.8	469
122-66-7	Azobenzene	U	469	ug/kg	93.8	469
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	469	ug/kg	93.8	469
118-74-1	Hexachlorobenzene	U	469	ug/kg	93.8	469
85-01-8	Phenanthrene	U	46.9	ug/kg	14.1	46.9
120-12-7	Anthracene	U	46.9	ug/kg	9.38	46.9
84-74-2	Di-n-butylphthalate	U	469	ug/kg	93.8	469
206-44-0	Fluoranthene	J	18.3	ug/kg	14.1	46.9
85-68-7	Butylbenzylphthalate	U	469	ug/kg	93.8	469
56-55-3	Benzo(a)anthracene	U	46.9	ug/kg	14.1	46.9
91-94-1	3,3'-Dichlorobenzidine	U	469	ug/kg	141	469
218-01-9	Chrysene	U	46.9	ug/kg	14.1	46.9
117-81-7	bis(2-Ethylhexyl)phthalate	U	469	ug/kg	93.8	469
117-84-0	Di-n-octylphthalate	U	469	ug/kg	93.8	469
205-99-2	Benzo(b)fluoranthene	U	46.9	ug/kg	14.1	46.9
207-08-9	Benzo(k)fluoranthene	U	46.9	ug/kg	14.1	46.9
50-32-8	Benzo(a)pyrene	U	46.9	ug/kg	14.1	46.9
193-39-5	Indeno(1,2,3-cd)pyrene	U	46.9	ug/kg	14.1	46.9
53-70-3	Dibenzo(a,h)anthracene	U	46.9	ug/kg	14.1	46.9
191-24-2	Benzo(ghi)perylene	U	46.9	ug/kg	14.1	46.9
120-82-1	1,2,4-Trichlorobenzene	U	469	ug/kg	93.8	469

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
55044-36-5	1H-Indene, 5-butyl-6-hexyloctahydro-	7.98	380	ug/kg	89	NJ
	Unknown	8.65	317	ug/kg		J

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

SDG Number: 10-2199  
Lab Sample ID: 248519009

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Aliquot: 30.06 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 29  
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	8.74	439	ug/kg		J
	Unknown	8.86	377	ug/kg		J
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	8.89	325	ug/kg	98	NJ
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	8.94	279	ug/kg	97	NJ
	Unknown	9.03	404	ug/kg		J
	Unknown	9.11	482	ug/kg		J
	Unknown	9.2	816	ug/kg		J
	Unknown	9.29	454	ug/kg		J
	Unknown	9.38	1060	ug/kg		J
	Unknown	9.56	423	ug/kg		J
	Unknown	9.59	411	ug/kg		J
	Unknown	9.71	531	ug/kg		J
559-74-0	Friedelan-3-one	9.83	1550	ug/kg	92	NJ
	Unknown	9.91	542	ug/kg		J
	Unknown	10.03	1140	ug/kg		J
	Unknown	10.25	480	ug/kg		J
112-95-8	Eicosane	10.63	596	ug/kg	93	NJ
	Unknown	11.73	518	ug/kg		J
	Unknown	11.77	692	ug/kg		J
	Unknown	12.84	660	ug/kg		J
83-47-6	.gamma.-Sitosterol	13.64	854	ug/kg	91	NJ



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

Page 1 of 3

SDG Number: 10-2199  
Lab Sample ID: 248519006

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.1  
Analyst: NAG1  
Aliquot: 30 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 10.2  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 4  
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	1490	ug/kg	297	1490
108-95-2	Phenol	U	1490	ug/kg	297	1490
95-57-8	2-Chlorophenol	U	1490	ug/kg	297	1490
106-46-7	1,4-Dichlorobenzene	U	1490	ug/kg	297	1490
621-64-7	N-Nitrosodipropylamine	U	1490	ug/kg	297	1490
59-50-7	4-Chloro-3-methylphenol	U	1490	ug/kg	297	1490
83-32-9	Acenaphthene	U	149	ug/kg	49.0	149
121-14-2	2,4-Dinitrotoluene	U	1490	ug/kg	149	1490
100-02-7	4-Nitrophenol	U	1490	ug/kg	490	1490
87-86-5	Pentachlorophenol	U	1490	ug/kg	371	1490
129-00-0	Pyrene	U	149	ug/kg	44.6	149
110-86-1	Pyridine	U	1490	ug/kg	297	1490
62-53-3	Aniline	U	1490	ug/kg	446	1490
111-44-4	bis(2-Chloroethyl) ether	U	1490	ug/kg	297	1490
541-73-1	1,3-Dichlorobenzene	U	1490	ug/kg	297	1490
100-51-6	Benzyl alcohol	U	1490	ug/kg	446	1490
95-50-1	1,2-Dichlorobenzene	U	1490	ug/kg	297	1490
108-60-1	bis(2-Chloroisopropyl)ether	U	1490	ug/kg	297	1490
95-48-7	o-Cresol	U	1490	ug/kg	297	1490
65794-96-9	m,p-Cresols	U	1490	ug/kg	446	1490
67-72-1	Hexachloroethane	U	1490	ug/kg	297	1490
98-95-3	Nitrobenzene	U	1490	ug/kg	297	1490
78-59-1	Isophorone	U	1490	ug/kg	297	1490
88-75-5	2-Nitrophenol	U	1490	ug/kg	297	1490
105-67-9	2,4-Dimethylphenol	U	1490	ug/kg	520	1490
111-91-1	bis(2-Chloroethoxy)methane	U	1490	ug/kg	297	1490
120-83-2	2,4-Dichlorophenol	U	1490	ug/kg	297	1490
65-85-0	Benzoic acid	U	2970	ug/kg	743	2970
91-20-3	Naphthalene	U	149	ug/kg	44.6	149
106-47-8	4-Chloroaniline	U	1490	ug/kg	297	1490
87-68-3	Hexachlorobutadiene	U	1490	ug/kg	297	1490
91-57-6	2-Methylnaphthalene	U	149	ug/kg	29.7	149
77-47-4	Hexachlorocyclopentadiene	U	1490	ug/kg	297	1490
88-06-2	2,4,6-Trichlorophenol	U	1490	ug/kg	297	1490
95-95-4	2,4,5-Trichlorophenol	U	1490	ug/kg	297	1490
91-58-7	2-Chloronaphthalene	U	149	ug/kg	49.0	149
88-74-4	2-Nitroaniline	U	1490	ug/kg	297	1490
99-09-2	<i>o</i> -Nitroaniline	U	1490	ug/kg	297	1490
	3-Nitroaniline					

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

SDG Number: 10-2199  
Lab Sample ID: 248519006

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Aliquot: 30 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 10.2  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 4  
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	1490	ug/kg	297	1490
606-20-2	2,6-Dinitrotoluene	U	1490	ug/kg	149	1490
208-96-8	Acenaphthylene	U	149	ug/kg	44.6	149
51-28-5	2,4-Dinitrophenol	U	2970	ug/kg	564	2970
132-64-9	Dibenzofuran	U	1490	ug/kg	297	1490
84-66-2	Diethylphthalate	U	1490	ug/kg	297	1490
86-73-7	Fluorene	U	149	ug/kg	44.6	149
7005-72-3	4-Chlorophenylphenylether	U	1490	ug/kg	297	1490
534-52-1	2-Methyl-4,6-dinitrophenol	U	1490	ug/kg	297	1490
100-01-6	4-Nitroaniline	U	1490	ug/kg	446	1490
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	1490	ug/kg	297	1490
122-66-7	Azobenzene	U	1490	ug/kg	297	1490
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	1490	ug/kg	297	1490
118-74-1	Hexachlorobenzene	U	1490	ug/kg	297	1490
85-01-8	Phenanthrene	U	149	ug/kg	44.6	149
120-12-7	Anthracene	U	149	ug/kg	29.7	149
84-74-2	Di-n-butylphthalate	U	1490	ug/kg	297	1490
206-44-0	Fluoranthene	U	149	ug/kg	44.6	149
85-68-7	Butylbenzylphthalate	U	1490	ug/kg	297	1490
56-55-3	Benzo(a)anthracene	U	149	ug/kg	44.6	149
91-94-1	3,3'-Dichlorobenzidine	U	1490	ug/kg	446	1490
218-01-9	Chrysene	U	149	ug/kg	44.6	149
117-81-7	bis(2-Ethylhexyl)phthalate	U	1490	ug/kg	297	1490
117-84-0	Di-n-octylphthalate	U	1490	ug/kg	297	1490
205-99-2	Benzo(b)fluoranthene	U	149	ug/kg	44.6	149
207-08-9	Benzo(k)fluoranthene	U	149	ug/kg	44.6	149
50-32-8	Benzo(a)pyrene	U	149	ug/kg	44.6	149
193-39-5	Indeno(1,2,3-cd)pyrene	U	149	ug/kg	44.6	149
53-70-3	Dibenzo(a,h)anthracene	U	149	ug/kg	44.6	149
191-24-2	Benzo(ghi)perylene	U	149	ug/kg	44.6	149
120-82-1	1,2,4-Trichlorobenzene	U	1490	ug/kg	297	1490

## Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
20475-86-9	Urs-12-en-24-oic acid, 3-oxo-, methyl es	8.95	1170	ug/kg	91	NJ
	Unknown	10.33	918	ug/kg		J

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

SDG Number: 10-2199	Date Collected: 02/25/2010 12:00	Matrix: R
Lab Sample ID: 248519006	Date Received: 03/03/2010 08:50	%Moisture: 10.2
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-8274	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 963133	Inst: MSD6.I	Dilution: 4
Run Date: 03/24/2010 01:26	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 03/10/2010 12:14	Aliquot: 30 g	Final Volume: 1 mL
Data File: s6c2329.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
	Unknown		12.25	1370	ug/kg	J
	Unknown		13.01	1840	ug/kg	J

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

SDG Number: 10-2199  
Lab Sample ID: 248519010

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Aliquot: 30.09 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 40.1  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 4  
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	2220	ug/kg	444	2220
108-95-2	Phenol	U	2220	ug/kg	444	2220
95-57-8	2-Chlorophenol	U	2220	ug/kg	444	2220
106-46-7	1,4-Dichlorobenzene	U	2220	ug/kg	444	2220
621-64-7	N-Nitrosodipropylamine	U	2220	ug/kg	444	2220
59-50-7	4-Chloro-3-methylphenol	U	2220	ug/kg	444	2220
83-32-9	Acenaphthene	U	222	ug/kg	73.3	222
121-14-2	2,4-Dinitrotoluene	U	2220	ug/kg	222	2220
100-02-7	4-Nitrophenol	U	2220	ug/kg	733	2220
87-86-5	Pentachlorophenol	U	2220	ug/kg	555	2220
129-00-0	Pyrene	U	222	ug/kg	66.6	222
110-86-1	Pyridine	U	2220	ug/kg	444	2220
62-53-3	Aniline	U	2220	ug/kg	666	2220
111-44-4	bis(2-Chloroethyl) ether	U	2220	ug/kg	444	2220
541-73-1	1,3-Dichlorobenzene	U	2220	ug/kg	444	2220
100-51-6	Benzyl alcohol	U	2220	ug/kg	666	2220
95-50-1	1,2-Dichlorobenzene	U	2220	ug/kg	444	2220
108-60-1	bis(2-Chloroisopropyl)ether	U	2220	ug/kg	444	2220
95-48-7	o-Cresol	U	2220	ug/kg	444	2220
65794-96-9	m,p-Cresols	U	2220	ug/kg	666	2220
67-72-1	Hexachloroethane	U	2220	ug/kg	444	2220
98-95-3	Nitrobenzene	U	2220	ug/kg	444	2220
78-59-1	Isophorone	U	2220	ug/kg	444	2220
88-75-5	2-Nitrophenol	U	2220	ug/kg	444	2220
105-67-9	2,4-Dimethylphenol	U	2220	ug/kg	777	2220
111-91-1	bis(2-Chloroethoxy)methane	U	2220	ug/kg	444	2220
120-83-2	2,4-Dichlorophenol	U	2220	ug/kg	444	2220
65-85-0	Benzoic acid	U	4440	ug/kg	1110	4440
91-20-3	Naphthalene	U	222	ug/kg	66.6	222
106-47-8	4-Chloroaniline	U	2220	ug/kg	444	2220
87-68-3	Hexachlorobutadiene	U	2220	ug/kg	444	2220
91-57-6	2-Methylnaphthalene	U	222	ug/kg	44.4	222
77-47-4	Hexachlorocyclopentadiene	U	2220	ug/kg	444	2220
88-06-2	2,4,6-Trichlorophenol	U	2220	ug/kg	444	2220
95-95-4	2,4,5-Trichlorophenol	U	2220	ug/kg	444	2220
91-58-7	2-Chloronaphthalene	U	222	ug/kg	73.3	222
88-74-4	2-Nitroaniline	U	2220	ug/kg	444	2220
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	2220	ug/kg	444	2220

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

SDG Number: 10-2199	Date Collected: 02/25/2010 12:00	Matrix: R
Lab Sample ID: 248519010	Date Received: 03/03/2010 08:50	%Moisture: 40.1
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-8275	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 963133	Inst: MSD6.I	Dilution: 4
Run Date: 03/24/2010 02:12	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 03/10/2010 12:14	Aliquot: 30.09 g	Final Volume: 1 mL
Data File: s6c2331.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	2220	ug/kg	444	2220
606-20-2	2,6-Dinitrotoluene	U	2220	ug/kg	222	2220
208-96-8	Acenaphthylene	U	222	ug/kg	66.6	222
51-28-5	2,4-Dinitrophenol	U	4440	ug/kg	844	4440
132-64-9	Dibenzofuran	U	2220	ug/kg	444	2220
84-66-2	Diethylphthalate	U	2220	ug/kg	444	2220
86-73-7	Fluorene	U	222	ug/kg	66.6	222
7005-72-3	4-Chlorophenylphenylether	U	2220	ug/kg	444	2220
534-52-1	2-Methyl-4,6-dinitrophenol	U	2220	ug/kg	444	2220
100-01-6	4-Nitroaniline	U	2220	ug/kg	666	2220
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	2220	ug/kg	444	2220
122-66-7	Azobenzene	U	2220	ug/kg	444	2220
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	2220	ug/kg	444	2220
118-74-1	Hexachlorobenzene	U	2220	ug/kg	444	2220
85-01-8	Phenanthrene	U	222	ug/kg	66.6	222
120-12-7	Anthracene	U	222	ug/kg	44.4	222
84-74-2	Di-n-butylphthalate	U	2220	ug/kg	444	2220
206-44-0	Fluoranthene	U	222	ug/kg	66.6	222
85-68-7	Butylbenzylphthalate	U	2220	ug/kg	444	2220
56-55-3	Benzo(a)anthracene	U	222	ug/kg	66.6	222
91-94-1	3,3'-Dichlorobenzidine	U	2220	ug/kg	666	2220
218-01-9	Chrysene	U	222	ug/kg	66.6	222
117-81-7	bis(2-Ethylhexyl)phthalate	U	2220	ug/kg	444	2220
117-84-0	Di-n-octylphthalate	U	2220	ug/kg	444	2220
205-99-2	Benzo(b)fluoranthene	U	222	ug/kg	66.6	222
207-08-9	Benzo(k)fluoranthene	U	222	ug/kg	66.6	222
50-32-8	Benzo(a)pyrene	U	222	ug/kg	66.6	222
193-39-5	Indeno(1,2,3-cd)pyrene	U	222	ug/kg	66.6	222
53-70-3	Dibenzo(a,h)anthracene	U	222	ug/kg	66.6	222
191-24-2	Benzo(ghi)perylene	U	222	ug/kg	66.6	222
120-82-1	1,2,4-Trichlorobenzene	U	2220	ug/kg	444	2220

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	10.33	1170	ug/kg		J

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

**SDG Number:** 10-2199  
**Lab Sample ID:** 248519011

**Client ID:** RE36-10-8276  
**Batch ID:** 963133  
**Run Date:** 03/22/2010 00:31  
**Prep Date:** 03/10/2010 12:14  
**Data File:** s6c2124.d

**Date Collected:** 02/25/2010 12:00  
**Date Received:** 03/03/2010 08:50  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD6.I  
**Analyst:** NAG1  
**Aliquot:** 30.03 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**% Moisture:** 14.6  
**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	390	ug/kg	78.0	390
108-95-2	Phenol	U	390	ug/kg	78.0	390
95-57-8	2-Chlorophenol	U	390	ug/kg	78.0	390
106-46-7	1,4-Dichlorobenzene	U	390	ug/kg	78.0	390
621-64-7	N-Nitrosodipropylamine	U	390	ug/kg	78.0	390
59-50-7	4-Chloro-3-methylphenol	U	390	ug/kg	78.0	390
83-32-9	Acenaphthene	U	39.0	ug/kg	12.9	39.0
121-14-2	2,4-Dinitrotoluene	U	390	ug/kg	39.0	390
100-02-7	4-Nitrophenol	U	390	ug/kg	129	390
87-86-5	Pentachlorophenol	U	390	ug/kg	97.5	390
129-00-0	Pyrene	U	39.0	ug/kg	11.7	39.0
110-86-1	Pyridine	U	390	ug/kg	78.0	390
62-53-3	Aniline	U	390	ug/kg	117	390
111-44-4	bis(2-Chloroethyl) ether	U	390	ug/kg	78.0	390
541-73-1	1,3-Dichlorobenzene	U	390	ug/kg	78.0	390
100-51-6	Benzyl alcohol	U	390	ug/kg	117	390
95-50-1	1,2-Dichlorobenzene	U	390	ug/kg	78.0	390
108-60-1	bis(2-Chloroisopropyl)ether	U	390	ug/kg	78.0	390
95-48-7	o-Cresol	U	390	ug/kg	78.0	390
65794-96-9	m,p-Cresols	U	390	ug/kg	117	390
67-72-1	Hexachloroethane	U	390	ug/kg	78.0	390
98-95-3	Nitrobenzene	U	390	ug/kg	78.0	390
78-59-1	Isophorone	U	390	ug/kg	78.0	390
88-75-5	2-Nitrophenol	U	390	ug/kg	78.0	390
105-67-9	2,4-Dimethylphenol	U	390	ug/kg	137	390
111-91-1	bis(2-Chloroethoxy)methane	U	390	ug/kg	78.0	390
120-83-2	2,4-Dichlorophenol	U	390	ug/kg	78.0	390
65-85-0	Benzoic acid	U	780	ug/kg	195	780
91-20-3	Naphthalene	U	39.0	ug/kg	11.7	39.0
106-47-8	4-Chloroaniline	U	390	ug/kg	78.0	390
87-68-3	Hexachlorobutadiene	U	390	ug/kg	78.0	390
91-57-6	2-Methylnaphthalene	U	39.0	ug/kg	7.80	39.0
77-47-4	Hexachlorocyclopentadiene	U	390	ug/kg	78.0	390
88-06-2	2,4,6-Trichlorophenol	U	390	ug/kg	78.0	390
95-95-4	2,4,5-Trichlorophenol	U	390	ug/kg	78.0	390
91-58-7	2-Chloronaphthalene	U	39.0	ug/kg	12.9	39.0
88-74-4	2-Nitroaniline	U	390	ug/kg	78.0	390
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	390	ug/kg	78.0	390

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

SDG Number: 10-2199  
Lab Sample ID: 248519011

Client ID: RE36-10-8276  
Batch ID: 963133  
Run Date: 03/22/2010 00:31  
Prep Date: 03/10/2010 12:14  
Data File: s6c2124.d

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Aliquot: 30.03 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 14.6  
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
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	390	ug/kg	78.0	390
606-20-2	2,6-Dinitrotoluene	U	390	ug/kg	39.0	390
208-96-8	Acenaphthylene	U	39.0	ug/kg	11.7	39.0
51-28-5	2,4-Dinitrophenol	U	780	ug/kg	148	780
132-64-9	Dibenzofuran	U	390	ug/kg	78.0	390
84-66-2	Diethylphthalate	U	390	ug/kg	78.0	390
86-73-7	Fluorene	U	39.0	ug/kg	11.7	39.0
7005-72-3	4-Chlorophenylphenylether	U	390	ug/kg	78.0	390
534-52-1	2-Methyl-4,6-dinitrophenol	U	390	ug/kg	78.0	390
100-01-6	4-Nitroaniline	U	390	ug/kg	117	390
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	390	ug/kg	78.0	390
122-66-7	Azobenzene	U	390	ug/kg	78.0	390
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	390	ug/kg	78.0	390
118-74-1	Hexachlorobenzene	U	390	ug/kg	78.0	390
85-01-8	Phenanthrene	U	39.0	ug/kg	11.7	39.0
120-12-7	Anthracene	U	39.0	ug/kg	7.80	39.0
84-74-2	Di-n-butylphthalate	U	390	ug/kg	78.0	390
206-44-0	Fluoranthene	U	39.0	ug/kg	11.7	39.0
85-68-7	Butylbenzylphthalate	U	390	ug/kg	78.0	390
56-55-3	Benzo(a)anthracene	U	39.0	ug/kg	11.7	39.0
91-94-1	3,3'-Dichlorobenzidine	U	390	ug/kg	117	390
218-01-9	Chrysene	U	39.0	ug/kg	11.7	39.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	390	ug/kg	78.0	390
117-84-0	Di-n-octylphthalate	U	390	ug/kg	78.0	390
205-99-2	Benzo(b)fluoranthene	U	39.0	ug/kg	11.7	39.0
207-08-9	Benzo(k)fluoranthene	U	39.0	ug/kg	11.7	39.0
50-32-8	Benzo(a)pyrene	U	39.0	ug/kg	11.7	39.0
193-39-5	Indeno(1,2,3-cd)pyrene	U	39.0	ug/kg	11.7	39.0
53-70-3	Dibenzo(a,h)anthracene	U	39.0	ug/kg	11.7	39.0
191-24-2	Benzo(ghi)perylene	U	39.0	ug/kg	11.7	39.0
120-82-1	1,2,4-Trichlorobenzene	U	390	ug/kg	78.0	390

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.86	469	ug/kg		JA
	Unknown	7.98	190	ug/kg		J

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

<b>SDG Number:</b> 10-2199	<b>Date Collected:</b> 02/25/2010 12:00	<b>Matrix:</b> R
<b>Lab Sample ID:</b> 248519011	<b>Date Received:</b> 03/03/2010 08:50	<b>%Moisture:</b> 14.6
	<b>Client:</b> LANL010	<b>Project:</b> LANL01004
<b>Client ID:</b> RE36-10-8276	<b>Method:</b> SW846 8270C	<b>SOP Ref:</b> GL-OA-E-009
<b>Batch ID:</b> 963133	<b>Inst:</b> MSD6.I	<b>Dilution:</b> 1
<b>Run Date:</b> 03/22/2010 00:31	<b>Analyst:</b> NAG1	<b>Inj. Vol:</b> .5 uL
<b>Prep Date:</b> 03/10/2010 12:14	<b>Aliquot:</b> 30.03 g	<b>Final Volume:</b> 1 mL
<b>Data File:</b> s6c2124.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
18435-45-5	1-Nonadecene	9.39	174	ug/kg	95	NJ
288246-53-7	Pyridine-3-carboxamide, oxime, N-(2-trif	9.83	365	ug/kg	91	NJ
1599-67-3	1-Docosene	10.05	291	ug/kg	93	NJ
112-95-8	Eicosane	10.63	159	ug/kg	96	NJ
	Unknown	11.77	243	ug/kg		J
	Unknown	12.83	178	ug/kg		J
	Unknown	12.95	275	ug/kg		J
	Unknown	13.64	659	ug/kg		J



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

SDG Number: 10-2199  
Lab Sample ID: 248519003

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Aliquot: 30.09 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 25.4  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 4  
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	1780	ug/kg	356	1780
108-95-2	Phenol	U	1780	ug/kg	356	1780
95-57-8	2-Chlorophenol	U	1780	ug/kg	356	1780
106-46-7	1,4-Dichlorobenzene	U	1780	ug/kg	356	1780
621-64-7	N-Nitrosodipropylamine	U	1780	ug/kg	356	1780
59-50-7	4-Chloro-3-methylphenol	U	1780	ug/kg	356	1780
83-32-9	Acenaphthene	U	178	ug/kg	58.8	178
121-14-2	2,4-Dinitrotoluene	U	1780	ug/kg	178	1780
100-02-7	4-Nitrophenol	U	1780	ug/kg	588	1780
87-86-5	Pentachlorophenol	U	1780	ug/kg	446	1780
129-00-0	Pyrene	U	178	ug/kg	53.5	178
110-86-1	Pyridine	U	1780	ug/kg	356	1780
62-53-3	Aniline	U	1780	ug/kg	535	1780
111-44-4	bis(2-Chloroethyl) ether	U	1780	ug/kg	356	1780
541-73-1	1,3-Dichlorobenzene	U	1780	ug/kg	356	1780
100-51-6	Benzyl alcohol	U	1780	ug/kg	535	1780
95-50-1	1,2-Dichlorobenzene	U	1780	ug/kg	356	1780
108-60-1	bis(2-Chloroisopropyl)ether	U	1780	ug/kg	356	1780
95-48-7	o-Cresol	U	1780	ug/kg	356	1780
65794-96-9	m,p-Cresols	U	1780	ug/kg	535	1780
67-72-1	Hexachloroethane	U	1780	ug/kg	356	1780
98-95-3	Nitrobenzene	U	1780	ug/kg	356	1780
78-59-1	Isophorone	U	1780	ug/kg	356	1780
88-75-5	2-Nitrophenol	U	1780	ug/kg	356	1780
105-67-9	2,4-Dimethylphenol	U	1780	ug/kg	624	1780
111-91-1	bis(2-Chloroethoxy)methane	U	1780	ug/kg	356	1780
120-83-2	2,4-Dichlorophenol	U	1780	ug/kg	356	1780
65-85-0	Benzoic acid	U	3560	ug/kg	891	3560
91-20-3	Naphthalene	U	178	ug/kg	53.5	178
106-47-8	4-Chloroaniline	U	1780	ug/kg	356	1780
87-68-3	Hexachlorobutadiene	U	1780	ug/kg	356	1780
91-57-6	2-Methylnaphthalene	U	178	ug/kg	35.6	178
77-47-4	Hexachlorocyclopentadiene	U	1780	ug/kg	356	1780
88-06-2	2,4,6-Trichlorophenol	U	1780	ug/kg	356	1780
95-95-4	2,4,5-Trichlorophenol	U	1780	ug/kg	356	1780
91-58-7	2-Chloronaphthalene	U	178	ug/kg	58.8	178
88-74-4	2-Nitroaniline	U	1780	ug/kg	356	1780
99-09-2	<i>o</i> -Nitroaniline					
	3-Nitroaniline	U	1780	ug/kg	356	1780

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

SDG Number: 10-2199  
Lab Sample ID: 248519003

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Aliquot: 30.09 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 25.4  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 4  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE36-10-8277  
Batch ID: 963133  
Run Date: 03/24/2010 00:40  
Prep Date: 03/10/2010 12:14  
Data File: s6c2327.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	1780	ug/kg	356	1780
606-20-2	2,6-Dinitrotoluene	U	1780	ug/kg	178	1780
208-96-8	Acenaphthylene	U	178	ug/kg	53.5	178
51-28-5	2,4-Dinitrophenol	U	3560	ug/kg	677	3560
132-64-9	Dibenzofuran	U	1780	ug/kg	356	1780
84-66-2	Diethylphthalate	U	1780	ug/kg	356	1780
86-73-7	Fluorene	U	178	ug/kg	53.5	178
7005-72-3	4-Chlorophenylphenylether	U	1780	ug/kg	356	1780
534-52-1	2-Methyl-4,6-dinitrophenol	U	1780	ug/kg	356	1780
100-01-6	4-Nitroaniline	U	1780	ug/kg	535	1780
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	1780	ug/kg	356	1780
122-66-7	Azobenzene	U	1780	ug/kg	356	1780
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	1780	ug/kg	356	1780
118-74-1	Hexachlorobenzene	U	1780	ug/kg	356	1780
85-01-8	Phenanthrene	U	178	ug/kg	53.5	178
120-12-7	Anthracene	U	178	ug/kg	35.6	178
84-74-2	Di-n-butylphthalate	U	1780	ug/kg	356	1780
206-44-0	Fluoranthene	U	178	ug/kg	53.5	178
85-68-7	Butylbenzylphthalate	U	1780	ug/kg	356	1780
56-55-3	Benzo(a)anthracene	U	178	ug/kg	53.5	178
91-94-1	3,3'-Dichlorobenzidine	U	1780	ug/kg	535	1780
218-01-9	Chrysene	U	178	ug/kg	53.5	178
117-81-7	bis(2-Ethylhexyl)phthalate	U	1780	ug/kg	356	1780
117-84-0	Di-n-octylphthalate	U	1780	ug/kg	356	1780
205-99-2	Benzo(b)fluoranthene	U	178	ug/kg	53.5	178
207-08-9	Benzo(k)fluoranthene	U	178	ug/kg	53.5	178
50-32-8	Benzo(a)pyrene	U	178	ug/kg	53.5	178
193-39-5	Indeno(1,2,3-cd)pyrene	U	178	ug/kg	53.5	178
53-70-3	Dibenzo(a,h)anthracene	U	178	ug/kg	53.5	178
191-24-2	Benzo(ghi)perylene	U	178	ug/kg	53.5	178
120-82-1	1,2,4-Trichlorobenzene	U	1780	ug/kg	356	1780

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
106988-87-8	Biphenylene, 1,2,3,6,7,8,8a,8b-octahydro	5.75	871	ug/kg	87	NJ
24048-44-0	Spiro[4.5]dec-7-ene, 1,8-dimethyl-4-(1-m	5.91	1020	ug/kg	86	NJ

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

SDG Number: 10-2199  
Lab Sample ID: 248519003

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Aliquot: 30.09 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 25.4  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 4  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE36-10-8277  
Batch ID: 963133  
Run Date: 03/24/2010 00:40  
Prep Date: 03/10/2010 12:14  
Data File: s6c2327.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
	Unknown	5.97	720	ug/kg		J
	Unknown	6	1170	ug/kg		J
19870-75-8	Cedrane, 8-propoxy-	6.57	1340	ug/kg	94	NJ
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	9.03	4660	ug/kg	97	NJ
	Unknown	10.33	1180	ug/kg		J
	Unknown	12.24	1230	ug/kg		J
	Unknown	13.01	1700	ug/kg		J

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

SDG Number: 10-2199  
Lab Sample ID: 248519005  
  
Client ID: RE36-10-8278  
Batch ID: 963133  
Run Date: 03/21/2010 22:09  
Prep Date: 03/10/2010 12:14  
Data File: s6c2118.d

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Aliquot: 30 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 6.4  
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
62-75-9	N-Methyl-N-nitrosomethylamine	U	356	ug/kg	71.2	356
108-95-2	Phenol	U	356	ug/kg	71.2	356
95-57-8	2-Chlorophenol	U	356	ug/kg	71.2	356
106-46-7	1,4-Dichlorobenzene	U	356	ug/kg	71.2	356
621-64-7	N-Nitrosodipropylamine	U	356	ug/kg	71.2	356
59-50-7	4-Chloro-3-methylphenol	U	356	ug/kg	71.2	356
83-32-9	Acenaphthene	U	35.6	ug/kg	11.7	35.6
121-14-2	2,4-Dinitrotoluene	U	356	ug/kg	35.6	356
100-02-7	4-Nitrophenol	U	356	ug/kg	117	356
87-86-5	Pentachlorophenol	U	356	ug/kg	89.0	356
129-00-0	Pyrene	U	35.6	ug/kg	10.7	35.6
110-86-1	Pyridine	U	356	ug/kg	71.2	356
62-53-3	Aniline	U	356	ug/kg	107	356
111-44-4	bis(2-Chloroethyl) ether	U	356	ug/kg	71.2	356
541-73-1	1,3-Dichlorobenzene	U	356	ug/kg	71.2	356
100-51-6	Benzyl alcohol	U	356	ug/kg	107	356
95-50-1	1,2-Dichlorobenzene	U	356	ug/kg	71.2	356
108-60-1	bis(2-Chloroisopropyl)ether	U	356	ug/kg	71.2	356
95-48-7	o-Cresol	U	356	ug/kg	71.2	356
65794-96-9	m,p-Cresols	U	356	ug/kg	107	356
67-72-1	Hexachloroethane	U	356	ug/kg	71.2	356
98-95-3	Nitrobenzene	U	356	ug/kg	71.2	356
78-59-1	Isophorone	U	356	ug/kg	71.2	356
88-75-5	2-Nitrophenol	U	356	ug/kg	71.2	356
105-67-9	2,4-Dimethylphenol	U	356	ug/kg	125	356
111-91-1	bis(2-Chloroethoxy)methane	U	356	ug/kg	71.2	356
120-83-2	2,4-Dichlorophenol	U	356	ug/kg	71.2	356
65-85-0	Benzoic acid	U	712	ug/kg	178	712
91-20-3	Naphthalene	U	35.6	ug/kg	10.7	35.6
106-47-8	4-Chloroaniline	U	356	ug/kg	71.2	356
87-68-3	Hexachlorobutadiene	U	356	ug/kg	71.2	356
91-57-6	2-Methylnaphthalene	U	35.6	ug/kg	7.12	35.6
77-47-4	Hexachlorocyclopentadiene	U	356	ug/kg	71.2	356
88-06-2	2,4,6-Trichlorophenol	U	356	ug/kg	71.2	356
95-95-4	2,4,5-Trichlorophenol	U	356	ug/kg	71.2	356
91-58-7	2-Chloronaphthalene	U	35.6	ug/kg	11.7	35.6
88-74-4	2-Nitroaniline	U	356	ug/kg	71.2	356
99-09-2	<i>o</i> -Nitroaniline	U	356	ug/kg	71.2	356
	3-Nitroaniline					

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

SDG Number: 10-2199  
Lab Sample ID: 248519005

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Aliquot: 30 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 6.4  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE36-10-8278  
Batch ID: 963133  
Run Date: 03/21/2010 22:09  
Prep Date: 03/10/2010 12:14  
Data File: s6c2118.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline Dimethylphthalate	U	356	ug/kg	71.2	356
606-20-2	2,6-Dinitrotoluene	U	356	ug/kg	35.6	356
208-96-8	Acenaphthylene	U	35.6	ug/kg	10.7	35.6
51-28-5	2,4-Dinitrophenol	U	712	ug/kg	135	712
132-64-9	Dibenzofuran	U	356	ug/kg	71.2	356
84-66-2	Diethylphthalate	U	356	ug/kg	71.2	356
86-73-7	Fluorene	U	35.6	ug/kg	10.7	35.6
7005-72-3	4-Chlorophenylphenylether	U	356	ug/kg	71.2	356
534-52-1	2-Methyl-4,6-dinitrophenol	U	356	ug/kg	71.2	356
100-01-6	4-Nitroaniline	U	356	ug/kg	107	356
122-39-4	<i>p</i> -Nitroaniline Diphenylamine	U	356	ug/kg	71.2	356
122-66-7	Azobenzene	U	356	ug/kg	71.2	356
101-55-3	<i>1,2</i> -Diphenylhydrazine 4-Bromophenylphenylether	U	356	ug/kg	71.2	356
118-74-1	Hexachlorobenzene	U	356	ug/kg	71.2	356
85-01-8	Phenanthrene	U	35.6	ug/kg	10.7	35.6
120-12-7	Anthracene	U	35.6	ug/kg	7.12	35.6
84-74-2	Di-n-butylphthalate	U	356	ug/kg	71.2	356
206-44-0	Fluoranthene	U	35.6	ug/kg	10.7	35.6
85-68-7	Butylbenzylphthalate	U	356	ug/kg	71.2	356
56-55-3	Benzo(a)anthracene	U	35.6	ug/kg	10.7	35.6
91-94-1	3,3'-Dichlorobenzidine	U	356	ug/kg	107	356
218-01-9	Chrysene	U	35.6	ug/kg	10.7	35.6
117-81-7	bis(2-Ethylhexyl)phthalate	U	356	ug/kg	71.2	356
117-84-0	Di-n-octylphthalate	U	356	ug/kg	71.2	356
205-99-2	Benzo(b)fluoranthene	U	35.6	ug/kg	10.7	35.6
207-08-9	Benzo(k)fluoranthene	U	35.6	ug/kg	10.7	35.6
50-32-8	Benzo(a)pyrene	U	35.6	ug/kg	10.7	35.6
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.6	ug/kg	10.7	35.6
53-70-3	Dibenzo(a,h)anthracene	U	35.6	ug/kg	10.7	35.6
191-24-2	Benzo(ghi)perylene	U	35.6	ug/kg	10.7	35.6
120-82-1	1,2,4-Trichlorobenzene	U	356	ug/kg	71.2	356

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.86	401	ug/kg		JA
106988-87-8	Biphenylene, 1,2,3,6,7,8,8a,8b-octahydro	5.62	366	ug/kg	87	NJ

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

SDG Number: 10-2199  
Lab Sample ID: 248519005

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Aliquot: 30 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 6.4  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE36-10-8278  
Batch ID: 963133  
Run Date: 03/21/2010 22:09  
Prep Date: 03/10/2010 12:14  
Data File: s6c2118.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
	Unknown	5.79	442	ug/kg		J
495-61-4	Cyclohexene, 1-methyl-4-(5-methyl-1-meth	5.85	384	ug/kg	83	NJ
24048-44-0	Spiro[4.5]dec-7-ene, 1,8-dimethyl-4-(1-m	5.88	632	ug/kg	93	NJ
23986-74-5	1,6-Cyclodecadiene, 1-methyl-5-methylene	5.9	227	ug/kg	99	NJ
3853-83-6	1H-Benzocycloheptene, 2,4a,5,6,7,8,9,9a-	6	288	ug/kg	92	NJ
	Unknown	6.56	259	ug/kg		J
1000188-66-5	2(1H)Naphthalenone, 3,5,6,7,8,8a-hexahyd	7.98	184	ug/kg	90	NJ
	Unknown	8.39	315	ug/kg		J
482-27-9	7H-Furo[3,2-g][1]benzopyran-7-one, 4,9-d	8.59	246	ug/kg	99	NJ
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	8.89	1710	ug/kg	97	NJ
484-08-2	Furo[2,3-b]quinoline, 4,6,7-trimethoxy-	9.28	264	ug/kg	90	NJ
506-51-4	1-Tetracosanol	9.4	160	ug/kg	89	NJ
3386-33-2	Octadecane, 1-chloro-	9.6	209	ug/kg	94	NJ
	Unknown	9.67	224	ug/kg		J
	Unknown	9.79	320	ug/kg		J
	Unknown	9.83	392	ug/kg		J
	Unknown	9.92	488	ug/kg		J
	Unknown	10.05	333	ug/kg		J
112-95-8	Eicosane	10.63	221	ug/kg	96	NJ
	Unknown	11.63	457	ug/kg		J
	Unknown	12.33	890	ug/kg		J
	Unknown	13.02	414	ug/kg		J
83-46-5	.beta.-Sitosterol	13.65	937	ug/kg	91	NJ

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

SDG Number: 10-2199  
Lab Sample ID: 248519002

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Aliquot: 30.01 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 7.1  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 4  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE36-10-8279  
Batch ID: 963133  
Run Date: 03/24/2010 00:17  
Prep Date: 03/10/2010 12:14  
Data File: s6c2326.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	1430	ug/kg	287	1430
108-95-2	Phenol	U	1430	ug/kg	287	1430
95-57-8	2-Chlorophenol	U	1430	ug/kg	287	1430
106-46-7	1,4-Dichlorobenzene	U	1430	ug/kg	287	1430
621-64-7	N-Nitrosodipropylamine	U	1430	ug/kg	287	1430
59-50-7	4-Chloro-3-methylphenol	U	1430	ug/kg	287	1430
83-32-9	Acenaphthene	J	96.5	ug/kg	47.3	143
121-14-2	2,4-Dinitrotoluene	U	1430	ug/kg	143	1430
100-02-7	4-Nitrophenol	U	1430	ug/kg	473	1430
87-86-5	Pentachlorophenol	U	1430	ug/kg	359	1430
129-00-0	Pyrene		3310	ug/kg	43.0	143
110-86-1	Pyridine	U	1430	ug/kg	287	1430
62-53-3	Aniline	U	1430	ug/kg	430	1430
111-44-4	bis(2-Chloroethyl) ether	U	1430	ug/kg	287	1430
541-73-1	1,3-Dichlorobenzene	U	1430	ug/kg	287	1430
100-51-6	Benzyl alcohol	U	1430	ug/kg	430	1430
95-50-1	1,2-Dichlorobenzene	U	1430	ug/kg	287	1430
108-60-1	bis(2-Chloroisopropyl)ether	U	1430	ug/kg	287	1430
95-48-7	o-Cresol	U	1430	ug/kg	287	1430
65794-96-9	m,p-Cresols	U	1430	ug/kg	430	1430
67-72-1	Hexachloroethane	U	1430	ug/kg	287	1430
98-95-3	Nitrobenzene	U	1430	ug/kg	287	1430
78-59-1	Isophorone	U	1430	ug/kg	287	1430
88-75-5	2-Nitrophenol	U	1430	ug/kg	287	1430
105-67-9	2,4-Dimethylphenol	U	1430	ug/kg	502	1430
111-91-1	bis(2-Chloroethoxy)methane	U	1430	ug/kg	287	1430
120-83-2	2,4-Dichlorophenol	U	1430	ug/kg	287	1430
65-85-0	Benzoic acid	U	2870	ug/kg	717	2870
91-20-3	Naphthalene	U	143	ug/kg	43.0	143
106-47-8	4-Chloroaniline	U	1430	ug/kg	287	1430
87-68-3	Hexachlorobutadiene	U	1430	ug/kg	287	1430
91-57-6	2-Methylnaphthalene	U	143	ug/kg	28.7	143
77-47-4	Hexachlorocyclopentadiene	U	1430	ug/kg	287	1430
88-06-2	2,4,6-Trichlorophenol	U	1430	ug/kg	287	1430
95-95-4	2,4,5-Trichlorophenol	U	1430	ug/kg	287	1430
91-58-7	2-Chloronaphthalene	U	143	ug/kg	47.3	143
88-74-4	2-Nitroaniline	U	1430	ug/kg	287	1430
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	1430	ug/kg	287	1430

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

SDG Number: 10-2199  
Lab Sample ID: 248519002

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Aliquot: 30.01 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 7.1  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 4  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE36-10-8279  
Batch ID: 963133  
Run Date: 03/24/2010 00:17  
Prep Date: 03/10/2010 12:14  
Data File: s6c2326.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	1430	ug/kg	287	1430
606-20-2	2,6-Dinitrotoluene	U	1430	ug/kg	143	1430
208-96-8	Acenaphthylene	U	143	ug/kg	43.0	143
51-28-5	2,4-Dinitrophenol	U	2870	ug/kg	545	2870
132-64-9	Dibenzofuran	U	1430	ug/kg	287	1430
84-66-2	Diethylphthalate	U	1430	ug/kg	287	1430
86-73-7	Fluorene	J	92.8	ug/kg	43.0	143
7005-72-3	4-Chlorophenylphenylether	U	1430	ug/kg	287	1430
534-52-1	2-Methyl-4,6-dinitrophenol	U	1430	ug/kg	287	1430
100-01-6	4-Nitroaniline	U	1430	ug/kg	430	1430
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	1430	ug/kg	287	1430
122-66-7	Azobenzene	U	1430	ug/kg	287	1430
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	1430	ug/kg	287	1430
118-74-1	Hexachlorobenzene	U	1430	ug/kg	287	1430
85-01-8	Phenanthrene		1350	ug/kg	43.0	143
120-12-7	Anthracene		294	ug/kg	28.7	143
84-74-2	Di-n-butylphthalate	J	441	ug/kg	287	1430
206-44-0	Fluoranthene		3340	ug/kg	43.0	143
85-68-7	Butylbenzylphthalate	U	1430	ug/kg	287	1430
56-55-3	Benzo(a)anthracene		2030	ug/kg	43.0	143
91-94-1	3,3'-Dichlorobenzidine	U	1430	ug/kg	430	1430
218-01-9	Chrysene		2180	ug/kg	43.0	143
117-81-7	bis(2-Ethylhexyl)phthalate	U	1430	ug/kg	287	1430
117-84-0	Di-n-octylphthalate	U	1430	ug/kg	287	1430
205-99-2	Benzo(b)fluoranthene		4170	ug/kg	43.0	143
207-08-9	Benzo(k)fluoranthene	U	143	ug/kg	43.0	143
50-32-8	Benzo(a)pyrene		2240	ug/kg	43.0	143
193-39-5	Indeno(1,2,3-cd)pyrene		1210	ug/kg	43.0	143
53-70-3	Dibenzo(a,h)anthracene	U	143	ug/kg	43.0	143
191-24-2	Benzo(ghi)perylene		1290	ug/kg	43.0	143
120-82-1	1,2,4-Trichlorobenzene	U	1430	ug/kg	287	1430

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
7785-70-8	1R-.alpha.-Pinene	3.52	896	ug/kg	97	NJ
	Unknown	7.69	656	ug/kg		J



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

SDG Number: 10-2199  
Lab Sample ID: 248519002

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Aliquot: 30.01 g  
Column: J&W DB-5MS

Matrix: R  
% Moisture: 7.1  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 4  
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
1000197-14-1	4b,8-Dimethyl-2-isopropylphenanthrene, 4	8.03	590	ug/kg	96	NJ
	Unknown	9.43	1180	ug/kg		J
479-79-8	11H-Benzo[a]fluoren-11-one	9.49	634	ug/kg	95	NJ
559-74-0	Friedelan-3-one	10.33	1360	ug/kg	99	NJ
	Unknown	10.51	1810	ug/kg		J
198-55-0	Perylene	11.17	1670	ug/kg	99	NJ
	Unknown	12.42	955	ug/kg		J
	Unknown	12.62	1020	ug/kg		J
	Unknown	13	1160	ug/kg		J
213-46-7	1,2:7,8-Dibenzophenanthrene	13.37	739	ug/kg	95	NJ

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

SDG Number: 10-2199  
Lab Sample ID: 248519004

Client ID: RE36-10-8280  
Batch ID: 963133  
Run Date: 03/24/2010 01:03  
Prep Date: 03/10/2010 12:14  
Data File: s6c2328.d

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.1  
Analyst: NAG1  
Aliquot: 30.03 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 9.5  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 4  
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	1470	ug/kg	294	1470
108-95-2	Phenol	U	1470	ug/kg	294	1470
95-57-8	2-Chlorophenol	U	1470	ug/kg	294	1470
106-46-7	1,4-Dichlorobenzene	U	1470	ug/kg	294	1470
621-64-7	N-Nitrosodipropylamine	U	1470	ug/kg	294	1470
59-50-7	4-Chloro-3-methylphenol	U	1470	ug/kg	294	1470
83-32-9	Acenaphthene	U	147	ug/kg	48.5	147
121-14-2	2,4-Dinitrotoluene	U	1470	ug/kg	147	1470
100-02-7	4-Nitrophenol	U	1470	ug/kg	485	1470
87-86-5	Pentachlorophenol	U	1470	ug/kg	368	1470
129-00-0	Pyrene		1570	ug/kg	44.1	147
110-86-1	Pyridine	U	1470	ug/kg	294	1470
62-53-3	Aniline	U	1470	ug/kg	441	1470
111-44-4	bis(2-Chloroethyl) ether	U	1470	ug/kg	294	1470
541-73-1	1,3-Dichlorobenzene	U	1470	ug/kg	294	1470
100-51-6	Benzyl alcohol	U	1470	ug/kg	441	1470
95-50-1	1,2-Dichlorobenzene	U	1470	ug/kg	294	1470
108-60-1	bis(2-Chloroisopropyl)ether	U	1470	ug/kg	294	1470
95-48-7	o-Cresol	U	1470	ug/kg	294	1470
65794-96-9	m,p-Cresols	U	1470	ug/kg	441	1470
67-72-1	Hexachloroethane	U	1470	ug/kg	294	1470
98-95-3	Nitrobenzene	U	1470	ug/kg	294	1470
78-59-1	Isophorone	U	1470	ug/kg	294	1470
88-75-5	2-Nitrophenol	U	1470	ug/kg	294	1470
105-67-9	2,4-Dimethylphenol	U	1470	ug/kg	515	1470
111-91-1	bis(2-Chloroethoxy)methane	U	1470	ug/kg	294	1470
120-83-2	2,4-Dichlorophenol	U	1470	ug/kg	294	1470
65-85-0	Benzoic acid	U	2940	ug/kg	736	2940
91-20-3	Naphthalene	U	147	ug/kg	44.1	147
106-47-8	4-Chloroaniline	U	1470	ug/kg	294	1470
87-68-3	Hexachlorobutadiene	U	1470	ug/kg	294	1470
91-57-6	2-Methylnaphthalene	U	147	ug/kg	29.4	147
77-47-4	Hexachlorocyclopentadiene	U	1470	ug/kg	294	1470
88-06-2	2,4,6-Trichlorophenol	U	1470	ug/kg	294	1470
95-95-4	2,4,5-Trichlorophenol	U	1470	ug/kg	294	1470
91-58-7	2-Chloronaphthalene	U	147	ug/kg	48.5	147
88-74-4	2-Nitroaniline	U	1470	ug/kg	294	1470
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	1470	ug/kg	294	1470

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

SDG Number: 10-2199  
Lab Sample ID: 248519004

Client ID: RE36-10-8280  
Batch ID: 963133  
Run Date: 03/24/2010 01:03  
Prep Date: 03/10/2010 12:14  
Data File: s6c2328.d

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Aliquot: 30.03 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 9.5  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 4  
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	1470	ug/kg	294	1470
606-20-2	2,6-Dinitrotoluene	U	1470	ug/kg	147	1470
208-96-8	Acenaphthylene	U	147	ug/kg	44.1	147
51-28-5	2,4-Dinitrophenol	U	2940	ug/kg	559	2940
132-64-9	Dibenzofuran	U	1470	ug/kg	294	1470
84-66-2	Diethylphthalate	U	1470	ug/kg	294	1470
86-73-7	Fluorene	U	147	ug/kg	44.1	147
7005-72-3	4-Chlorophenylphenylether	U	1470	ug/kg	294	1470
534-52-1	2-Methyl-4,6-dinitrophenol	U	1470	ug/kg	294	1470
100-01-6	4-Nitroaniline	U	1470	ug/kg	441	1470
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	1470	ug/kg	294	1470
122-66-7	Azobenzene	U	1470	ug/kg	294	1470
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	1470	ug/kg	294	1470
118-74-1	Hexachlorobenzene	U	1470	ug/kg	294	1470
85-01-8	Phenanthrene		608	ug/kg	44.1	147
120-12-7	Anthracene	J	133	ug/kg	29.4	147
84-74-2	Di-n-butylphthalate	U	1470	ug/kg	294	1470
206-44-0	Fluoranthene		1630	ug/kg	44.1	147
85-68-7	Butylbenzylphthalate	U	1470	ug/kg	294	1470
56-55-3	Benzo(a)anthracene		971	ug/kg	44.1	147
91-94-1	3,3'-Dichlorobenzidine	U	1470	ug/kg	441	1470
218-01-9	Chrysene		1210	ug/kg	44.1	147
117-81-7	bis(2-Ethylhexyl)phthalate	U	1470	ug/kg	294	1470
117-84-0	Di-n-octylphthalate	U	1470	ug/kg	294	1470
205-99-2	Benzo(b)fluoranthene		2310	ug/kg	44.1	147
207-08-9	Benzo(k)fluoranthene	U	147	ug/kg	44.1	147
50-32-8	Benzo(a)pyrene		1150	ug/kg	44.1	147
193-39-5	Indeno(1,2,3-cd)pyrene		641	ug/kg	44.1	147
53-70-3	Dibenzo(a,h)anthracene	U	147	ug/kg	44.1	147
191-24-2	Benzo(ghi)perylene		682	ug/kg	44.1	147
120-82-1	1,2,4-Trichlorobenzene	U	1470	ug/kg	294	1470

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	5.8	841	ug/kg	99	NJ
	Unknown	9.55	649	ug/kg		J

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

SDG Number: 10-2199	Date Collected: 02/25/2010 12:00	Matrix: R
Lab Sample ID: 248519004	Date Received: 03/03/2010 08:50	%Moisture: 9.5
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-8280	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 963133	Inst: MSD6.I	Dilution: 4
Run Date: 03/24/2010 01:03	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 03/10/2010 12:14	Aliquot: 30.03 g	Final Volume: 1 mL
Data File: s6c2328.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			Estimated			
CAS No.	Tentatively Identified Compound (TIC)	RT		Units	Fit	Qual
	Unknown	9.73	1090	ug/kg		J
3351-32-4	Chrysene, 2-methyl-	10.03	679	ug/kg	96	NJ
3386-33-2	Octadecane, 1-chloro-	10.06	796	ug/kg	94	NJ
	Unknown	10.32	1210	ug/kg		J
	Unknown	10.47	903	ug/kg		J
604-53-5	1,1'-Binaphthalene	10.6	894	ug/kg	83	NJ
	Unknown	10.68	927	ug/kg		J
198-55-0	Perylene	11.16	1150	ug/kg	99	NJ
112-95-8	Eicosane	11.8	1120	ug/kg	98	NJ

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

**SDG Number:** 10-2199  
**Lab Sample ID:** 248519008

**Date Collected:** 02/25/2010 12:00  
**Date Received:** 03/03/2010 08:50  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD6.I  
**Analyst:** NAG1  
**Aliquot:** 30.09 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 32.9  
**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	496	ug/kg	99.1	496
108-95-2	Phenol	U	496	ug/kg	99.1	496
95-57-8	2-Chlorophenol	U	496	ug/kg	99.1	496
106-46-7	1,4-Dichlorobenzene	U	496	ug/kg	99.1	496
621-64-7	N-Nitrosodipropylamine	U	496	ug/kg	99.1	496
59-50-7	4-Chloro-3-methylphenol	U	496	ug/kg	99.1	496
83-32-9	Acenaphthene	U	49.6	ug/kg	16.4	49.6
121-14-2	2,4-Dinitrotoluene	U	496	ug/kg	49.6	496
100-02-7	4-Nitrophenol	U	496	ug/kg	164	496
87-86-5	Pentachlorophenol	U	496	ug/kg	124	496
129-00-0	Pyrene	U	49.6	ug/kg	14.9	49.6
110-86-1	Pyridine	U	496	ug/kg	99.1	496
62-53-3	Aniline	U	496	ug/kg	149	496
111-44-4	bis(2-Chloroethyl) ether	U	496	ug/kg	99.1	496
541-73-1	1,3-Dichlorobenzene	U	496	ug/kg	99.1	496
100-51-6	Benzyl alcohol	U	496	ug/kg	149	496
95-50-1	1,2-Dichlorobenzene	U	496	ug/kg	99.1	496
108-60-1	bis(2-Chloroisopropyl)ether	U	496	ug/kg	99.1	496
95-48-7	o-Cresol	U	496	ug/kg	99.1	496
65794-96-9	m,p-Cresols	U	496	ug/kg	149	496
67-72-1	Hexachloroethane	U	496	ug/kg	99.1	496
98-95-3	Nitrobenzene	U	496	ug/kg	99.1	496
78-59-1	Isophorone	U	496	ug/kg	99.1	496
88-75-5	2-Nitrophenol	U	496	ug/kg	99.1	496
105-67-9	2,4-Dimethylphenol	U	496	ug/kg	173	496
111-91-1	bis(2-Chloroethoxy)methane	U	496	ug/kg	99.1	496
120-83-2	2,4-Dichlorophenol	U	496	ug/kg	99.1	496
65-85-0	Benzoic acid	J	355	ug/kg	248	991
91-20-3	Naphthalene	U	49.6	ug/kg	14.9	49.6
106-47-8	4-Chloroaniline	U	496	ug/kg	99.1	496
87-68-3	Hexachlorobutadiene	U	496	ug/kg	99.1	496
91-57-6	2-Methylnaphthalene	U	49.6	ug/kg	9.91	49.6
77-47-4	Hexachlorocyclopentadiene	U	496	ug/kg	99.1	496
88-06-2	2,4,6-Trichlorophenol	U	496	ug/kg	99.1	496
95-95-4	2,4,5-Trichlorophenol	U	496	ug/kg	99.1	496
91-58-7	2-Chloronaphthalene	U	49.6	ug/kg	16.4	49.6
88-74-4	2-Nitroaniline	U	496	ug/kg	99.1	496
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	496	ug/kg	99.1	496

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

SDG Number: 10-2199	Date Collected: 02/25/2010 12:00	Matrix: R
Lab Sample ID: 248519008	Date Received: 03/03/2010 08:50	%Moisture: 32.9
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-8287	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 963133	Inst: MSD6.I	Dilution: 1
Run Date: 03/21/2010 23:20	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 03/10/2010 12:14	Aliquot: 30.09 g	Final Volume: 1 mL
Data File: s6c2121.d	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	496	ug/kg	99.1	496
606-20-2	2,6-Dinitrotoluene	U	496	ug/kg	49.6	496
208-96-8	Acenaphthylene	U	49.6	ug/kg	14.9	49.6
51-28-5	2,4-Dinitrophenol	U	991	ug/kg	188	991
132-64-9	Dibenzofuran	U	496	ug/kg	99.1	496
84-66-2	Diethylphthalate	U	496	ug/kg	99.1	496
86-73-7	Fluorene	U	49.6	ug/kg	14.9	49.6
7005-72-3	4-Chlorophenylphenylether	U	496	ug/kg	99.1	496
534-52-1	2-Methyl-4,6-dinitrophenol	U	496	ug/kg	99.1	496
100-01-6	4-Nitroaniline	U	496	ug/kg	149	496
	<i>p-Nitroaniline</i>					
122-39-4	Diphenylamine	U	496	ug/kg	99.1	496
122-66-7	Azobenzene	U	496	ug/kg	99.1	496
	<i>1,2-Diphenylhydrazine</i>					
101-55-3	4-Bromophenylphenylether	U	496	ug/kg	99.1	496
118-74-1	Hexachlorobenzene	U	496	ug/kg	99.1	496
85-01-8	Phenanthrene	U	49.6	ug/kg	14.9	49.6
120-12-7	Anthracene	U	49.6	ug/kg	9.91	49.6
84-74-2	Di-n-butylphthalate	U	496	ug/kg	99.1	496
206-44-0	Fluoranthene	U	49.6	ug/kg	14.9	49.6
85-68-7	Butylbenzylphthalate	U	496	ug/kg	99.1	496
56-55-3	Benzo(a)anthracene	U	49.6	ug/kg	14.9	49.6
91-94-1	3,3'-Dichlorobenzidine	U	496	ug/kg	149	496
218-01-9	Chrysene	U	49.6	ug/kg	14.9	49.6
117-81-7	bis(2-Ethylhexyl)phthalate	U	496	ug/kg	99.1	496
117-84-0	Di-n-octylphthalate	U	496	ug/kg	99.1	496
205-99-2	Benzo(b)fluoranthene	U	49.6	ug/kg	14.9	49.6
207-08-9	Benzo(k)fluoranthene	U	49.6	ug/kg	14.9	49.6
50-32-8	Benzo(a)pyrene	U	49.6	ug/kg	14.9	49.6
193-39-5	Indeno(1,2,3-cd)pyrene	U	49.6	ug/kg	14.9	49.6
53-70-3	Dibenzo(a,h)anthracene	U	49.6	ug/kg	14.9	49.6
191-24-2	Benzo(ghi)perylene	U	49.6	ug/kg	14.9	49.6
120-82-1	1,2,4-Trichlorobenzene	U	496	ug/kg	99.1	496

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	4.49	644	ug/kg		J
629-62-9	Pentadecane	8.65	274	ug/kg	96	NJ

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

SDG Number: 10-2199  
Lab Sample ID: 248519008

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Aliquot: 30.09 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 32.9  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE36-10-8287  
Batch ID: 963133  
Run Date: 03/21/2010 23:20  
Prep Date: 03/10/2010 12:14  
Data File: s6c2121.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
	Unknown	8.74	280	ug/kg		J
	Unknown	8.86	273	ug/kg		J
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	8.94	413	ug/kg	98	NJ
112-95-8	Eicosane	8.97	227	ug/kg	98	NJ
	Unknown	9.03	294	ug/kg		J
	Unknown	9.11	531	ug/kg		J
	Unknown	9.2	854	ug/kg		J
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	9.3	1020	ug/kg	94	NJ
	Unknown	9.38	1170	ug/kg		J
	Unknown	9.56	610	ug/kg		J
	Unknown	9.59	511	ug/kg		J
1000193-07-4	Propanephosphonic acid, bis(trimethylsil	9.72	617	ug/kg	84	NJ
	Unknown	9.82	1560	ug/kg		J
3386-33-2	Octadecane, 1-chloro-	9.91	635	ug/kg	95	NJ
1599-67-3	1-Docosene	10.03	770	ug/kg	96	NJ
	Unknown	10.26	504	ug/kg		J
288246-53-7	Pyridine-3-carboxamide, oxime, N-(2-trif	10.35	944	ug/kg	93	NJ
	Unknown	10.63	793	ug/kg		J
	Unknown	11.57	398	ug/kg		J
	Unknown	11.77	681	ug/kg		J
83-47-6	.gamma.-Sitosterol	13.64	640	ug/kg	91	NJ

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

SDG Number: 10-2199  
Lab Sample ID: 248519001

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Aliquot: 30 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 16.4  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 4  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE36-10-8288  
Batch ID: 963133  
Run Date: 03/23/2010 23:53  
Prep Date: 03/10/2010 12:14  
Data File: s6c2325.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	1600	ug/kg	319	1600
108-95-2	Phenol	U	1600	ug/kg	319	1600
95-57-8	2-Chlorophenol	U	1600	ug/kg	319	1600
106-46-7	1,4-Dichlorobenzene	U	1600	ug/kg	319	1600
621-64-7	N-Nitrosodipropylamine	U	1600	ug/kg	319	1600
59-50-7	4-Chloro-3-methylphenol	U	1600	ug/kg	319	1600
83-32-9	Acenaphthene	U	160	ug/kg	52.7	160
121-14-2	2,4-Dinitrotoluene	U	1600	ug/kg	160	1600
100-02-7	4-Nitrophenol	U	1600	ug/kg	527	1600
87-86-5	Pentachlorophenol	U	1600	ug/kg	399	1600
129-00-0	Pyrene	U	160	ug/kg	47.9	160
110-86-1	Pyridine	U	1600	ug/kg	319	1600
62-53-3	Aniline	U	1600	ug/kg	479	1600
111-44-4	bis(2-Chloroethyl) ether	U	1600	ug/kg	319	1600
541-73-1	1,3-Dichlorobenzene	U	1600	ug/kg	319	1600
100-51-6	Benzyl alcohol	U	1600	ug/kg	479	1600
95-50-1	1,2-Dichlorobenzene	U	1600	ug/kg	319	1600
108-60-1	bis(2-Chloroisopropyl)ether	U	1600	ug/kg	319	1600
95-48-7	o-Cresol	U	1600	ug/kg	319	1600
65794-96-9	m,p-Cresols	U	1600	ug/kg	479	1600
67-72-1	Hexachloroethane	U	1600	ug/kg	319	1600
98-95-3	Nitrobenzene	U	1600	ug/kg	319	1600
78-59-1	Isophorone	U	1600	ug/kg	319	1600
88-75-5	2-Nitrophenol	U	1600	ug/kg	319	1600
105-67-9	2,4-Dimethylphenol	U	1600	ug/kg	559	1600
111-91-1	bis(2-Chloroethoxy)methane	U	1600	ug/kg	319	1600
120-83-2	2,4-Dichlorophenol	U	1600	ug/kg	319	1600
65-85-0	Benzoic acid	U	3190	ug/kg	798	3190
91-20-3	Naphthalene	U	160	ug/kg	47.9	160
106-47-8	4-Chloroaniline	U	1600	ug/kg	319	1600
87-68-3	Hexachlorobutadiene	U	1600	ug/kg	319	1600
91-57-6	2-Methylnaphthalene	U	160	ug/kg	31.9	160
77-47-4	Hexachlorocyclopentadiene	U	1600	ug/kg	319	1600
88-06-2	2,4,6-Trichlorophenol	U	1600	ug/kg	319	1600
95-95-4	2,4,5-Trichlorophenol	U	1600	ug/kg	319	1600
91-58-7	2-Chloronaphthalene	U	160	ug/kg	52.7	160
88-74-4	2-Nitroaniline	U	1600	ug/kg	319	1600
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	1600	ug/kg	319	1600



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

SDG Number: 10-2199  
Lab Sample ID: 248519001

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Aliquot: 30 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 16.4  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 4  
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	1600	ug/kg	319	1600
606-20-2	2,6-Dinitrotoluene	U	1600	ug/kg	160	1600
208-96-8	Acenaphthylene	U	160	ug/kg	47.9	160
51-28-5	2,4-Dinitrophenol	U	3190	ug/kg	606	3190
132-64-9	Dibenzofuran	U	1600	ug/kg	319	1600
84-66-2	Diethylphthalate	U	1600	ug/kg	319	1600
86-73-7	Fluorene	U	160	ug/kg	47.9	160
7005-72-3	4-Chlorophenylphenylether	U	1600	ug/kg	319	1600
534-52-1	2-Methyl-4,6-dinitrophenol	U	1600	ug/kg	319	1600
100-01-6	4-Nitroaniline	U	1600	ug/kg	479	1600
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	1600	ug/kg	319	1600
122-66-7	Azobenzene	U	1600	ug/kg	319	1600
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	1600	ug/kg	319	1600
118-74-1	Hexachlorobenzene	U	1600	ug/kg	319	1600
85-01-8	Phenanthrene	U	160	ug/kg	47.9	160
120-12-7	Anthracene	U	160	ug/kg	31.9	160
84-74-2	Di-n-butylphthalate	U	1600	ug/kg	319	1600
206-44-0	Fluoranthene	U	160	ug/kg	47.9	160
85-68-7	Butylbenzylphthalate	U	1600	ug/kg	319	1600
56-55-3	Benzo(a)anthracene	U	160	ug/kg	47.9	160
91-94-1	3,3'-Dichlorobenzidine	U	1600	ug/kg	479	1600
218-01-9	Chrysene	U	160	ug/kg	47.9	160
117-81-7	bis(2-Ethylhexyl)phthalate	U	1600	ug/kg	319	1600
117-84-0	Di-n-octylphthalate	U	1600	ug/kg	319	1600
205-99-2	Benzo(b)fluoranthene	U	160	ug/kg	47.9	160
207-08-9	Benzo(k)fluoranthene	U	160	ug/kg	47.9	160
50-32-8	Benzo(a)pyrene	U	160	ug/kg	47.9	160
193-39-5	Indeno(1,2,3-cd)pyrene	U	160	ug/kg	47.9	160
53-70-3	Dibenzo(a,h)anthracene	U	160	ug/kg	47.9	160
191-24-2	Benzo(ghi)perylene	U	160	ug/kg	47.9	160
120-82-1	1,2,4-Trichlorobenzene	U	1600	ug/kg	319	1600

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
1058-61-3	Stigmast-4-en-3-one	8.84	1160	ug/kg	94	NJ
559-74-0	Friedelan-3-one	10.34	4090	ug/kg	95	NJ

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

SDG Number: 10-2199  
Lab Sample ID: 248519001  
  
Client ID: RE36-10-8288  
Batch ID: 963133  
Run Date: 03/23/2010 23:53  
Prep Date: 03/10/2010 12:14  
Data File: s6c2325.d

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Aliquot: 30 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 16.4  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 4  
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		12.24	1000	ug/kg	J
	Unknown		13	838	ug/kg	J

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

SDG Number: 10-2199  
Lab Sample ID: 248519007

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Aliquot: 30.09 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 28.9  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 4  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE36-10-8291  
Batch ID: 963133  
Run Date: 03/24/2010 01:50  
Prep Date: 03/10/2010 12:14  
Data File: s6c2330.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	1870	ug/kg	374	1870
108-95-2	Phenol	U	1870	ug/kg	374	1870
95-57-8	2-Chlorophenol	U	1870	ug/kg	374	1870
106-46-7	1,4-Dichlorobenzene	U	1870	ug/kg	374	1870
621-64-7	N-Nitrosodipropylamine	U	1870	ug/kg	374	1870
59-50-7	4-Chloro-3-methylphenol	U	1870	ug/kg	374	1870
83-32-9	Acenaphthene	U	187	ug/kg	61.7	187
121-14-2	2,4-Dinitrotoluene	U	1870	ug/kg	187	1870
100-02-7	4-Nitrophenol	U	1870	ug/kg	617	1870
87-86-5	Pentachlorophenol	U	1870	ug/kg	468	1870
129-00-0	Pyrene	U	187	ug/kg	56.1	187
110-86-1	Pyridine	U	1870	ug/kg	374	1870
62-53-3	Aniline	U	1870	ug/kg	561	1870
111-44-4	bis(2-Chloroethyl) ether	U	1870	ug/kg	374	1870
541-73-1	1,3-Dichlorobenzene	U	1870	ug/kg	374	1870
100-51-6	Benzyl alcohol	U	1870	ug/kg	561	1870
95-50-1	1,2-Dichlorobenzene	U	1870	ug/kg	374	1870
108-60-1	bis(2-Chloroisopropyl)ether	U	1870	ug/kg	374	1870
95-48-7	o-Cresol	U	1870	ug/kg	374	1870
65794-96-9	m,p-Cresols	U	1870	ug/kg	561	1870
67-72-1	Hexachloroethane	U	1870	ug/kg	374	1870
98-95-3	Nitrobenzene	U	1870	ug/kg	374	1870
78-59-1	Isophorone	U	1870	ug/kg	374	1870
88-75-5	2-Nitrophenol	U	1870	ug/kg	374	1870
105-67-9	2,4-Dimethylphenol	U	1870	ug/kg	655	1870
111-91-1	bis(2-Chloroethoxy)methane	U	1870	ug/kg	374	1870
120-83-2	2,4-Dichlorophenol	U	1870	ug/kg	374	1870
65-85-0	Benzoic acid	U	3740	ug/kg	935	3740
91-20-3	Naphthalene	U	187	ug/kg	56.1	187
106-47-8	4-Chloroaniline	U	1870	ug/kg	374	1870
87-68-3	Hexachlorobutadiene	U	1870	ug/kg	374	1870
91-57-6	2-Methylnaphthalene	U	187	ug/kg	37.4	187
77-47-4	Hexachlorocyclopentadiene	U	1870	ug/kg	374	1870
88-06-2	2,4,6-Trichlorophenol	U	1870	ug/kg	374	1870
95-95-4	2,4,5-Trichlorophenol	U	1870	ug/kg	374	1870
91-58-7	2-Chloronaphthalene	U	187	ug/kg	61.7	187
88-74-4	2-Nitroaniline	U	1870	ug/kg	374	1870
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	1870	ug/kg	374	1870

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

Page 2 of 3

SDG Number: 10-2199  
Lab Sample ID: 248519007

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Aliquot: 30.09 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 28.9  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 4  
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	1870	ug/kg	374	1870
606-20-2	2,6-Dinitrotoluene	U	1870	ug/kg	187	1870
208-96-8	Acenaphthylene	U	187	ug/kg	56.1	187
51-28-5	2,4-Dinitrophenol	U	3740	ug/kg	711	3740
132-64-9	Dibenzofuran	U	1870	ug/kg	374	1870
84-66-2	Diethylphthalate	U	1870	ug/kg	374	1870
86-73-7	Fluorene	U	187	ug/kg	56.1	187
7005-72-3	4-Chlorophenylphenylether	U	1870	ug/kg	374	1870
534-52-1	2-Methyl-4,6-dinitrophenol	U	1870	ug/kg	374	1870
100-01-6	4-Nitroaniline	U	1870	ug/kg	561	1870
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	1870	ug/kg	374	1870
122-66-7	Azobenzene	U	1870	ug/kg	374	1870
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	1870	ug/kg	374	1870
118-74-1	Hexachlorobenzene	U	1870	ug/kg	374	1870
85-01-8	Phenanthrene	U	187	ug/kg	56.1	187
120-12-7	Anthracene	U	187	ug/kg	37.4	187
84-74-2	Di-n-butylphthalate	U	1870	ug/kg	374	1870
206-44-0	Fluoranthene	U	187	ug/kg	56.1	187
85-68-7	Butylbenzylphthalate	U	1870	ug/kg	374	1870
56-55-3	Benzo(a)anthracene	U	187	ug/kg	56.1	187
91-94-1	3,3'-Dichlorobenzidine	U	1870	ug/kg	561	1870
218-01-9	Chrysene	U	187	ug/kg	56.1	187
117-81-7	bis(2-Ethylhexyl)phthalate	U	1870	ug/kg	374	1870
117-84-0	Di-n-octylphthalate	U	1870	ug/kg	374	1870
205-99-2	Benzo(b)fluoranthene	U	187	ug/kg	56.1	187
207-08-9	Benzo(k)fluoranthene	U	187	ug/kg	56.1	187
50-32-8	Benzo(a)pyrene	U	187	ug/kg	56.1	187
193-39-5	Indeno(1,2,3-cd)pyrene	U	187	ug/kg	56.1	187
53-70-3	Dibenzo(a,h)anthracene	U	187	ug/kg	56.1	187
191-24-2	Benzo(ghi)perylene	U	187	ug/kg	56.1	187
120-82-1	1,2,4-Trichlorobenzene	U	1870	ug/kg	374	1870

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	9.73	917	ug/kg		J
300574-36-1	5-Bromo-4-oxo-4,5,6,7-tetrahydrobenzofur	10.33	1510	ug/kg	90	NJ

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

SDG Number: 10-2199  
Lab Sample ID: 248519007  
  
Client ID: RE36-10-8291  
Batch ID: 963133  
Run Date: 03/24/2010 01:50  
Prep Date: 03/10/2010 12:14  
Data File: s6c2330.d

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Aliquot: 30.09 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 28.9  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 4  
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		12.26	772	ug/kg	J

Semi-Volatile  
Surrogate Recovery Report

Page 1 of 1

SDG Number: 10-2199

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
1202066181	MB for batch 963130	54	53	49	62	74	79
1202066182	LCS for batch 963130	50	47	48	56	69	67
248519005	RE36-10-8278	62	64	62	76	93	91
248519008	RE36-10-8287	45	43	40	47	63	54
248519009	RE36-10-8273	47	46	44	55	65	63
248519011	RE36-10-8276	53	53	51	64	75	69
248519001	RE36-10-8288	52 D	54 D	49 D	67 D	70 D	77 D
248519002	RE36-10-8279	69 D	67 D	62 D	79 D	78 D	86 D
248519003	RE36-10-8277	55 D	56 D	49 D	66 D	70 D	74 D
248519004	RE36-10-8280	73 D	73 D	68 D	85 D	86 D	87 D
248519006	RE36-10-8274	57 D	56 D	52 D	66 D	71 D	78 D
248519007	RE36-10-8291	48 D	49 D	46 D	56 D	61 D	56 D
248519010	RE36-10-8275	58 D	59 D	50 D	65 D	72 D	72 D

**Surrogate****Acceptance Limits**

2FP	= 2-Fluorophenol	(29%-99%)
PHL	= Phenol-d5	(33%-98%)
NBZ	= Nitrobenzene-d5	(31%-105%)
FBP	= 2-Fluorobiphenyl	(25%-109%)
TBP	= 2,4,6-Tribromophenol	(37%-106%)
TPH	= p-Terphenyl-d14	(13%-150%)

\* 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: 10-2199

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 963130

Matrix: SOIL

Lab Sample ID: 1202066182

Instrument: MSD6.I

Analysis Date: 03/21/2010 18:37

Dilution: 1

Analyst: NAG1

Pred Batch II 963130

Inj. Vol: .5 uL

Batch ID: 963133

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	662	40	22-114
108-95-2	LCS Phenol	1670	0.0	796	48	39-104
95-57-8	LCS 2-Chlorophenol	1670	0.0	856	51	40-107
106-46-7	LCS 1,4-Dichlorobenzene	1670	0.0	851	51	33-108
621-64-7	LCS N-Nitrosodipropylamine	1670	0.0	769	46	34-113
59-50-7	LCS 4-Chloro-3-methylphenol	1670	0.0	891	53	42-114
83-32-9	LCS Acenaphthene	1670	0.0	838	50	40-105
121-14-2	LCS 2,4-Dinitrotoluene	1670	0.0	947	57	49-112
100-02-7	LCS 4-Nitrophenol	1670	0.0	659	40	24-113
87-86-5	LCS Pentachlorophenol	1670	0.0	1130	68	27-116
129-00-0	LCS Pyrene	1670	0.0	972	58	42-113
110-86-1	LCS Pyridine	1670	0.0	679	41	8-125
62-53-3	LCS Aniline	1670	0.0	747	45	18-126
111-44-4	LCS bis(2-Chloroethyl) ether	1670	0.0	738	44	32-103
541-73-1	LCS 1,3-Dichlorobenzene	1670	0.0	842	50	32-108
100-51-6	LCS Benzyl alcohol	1670	0.0	428	26 *	27-108
95-50-1	LCS 1,2-Dichlorobenzene	1670	0.0	915	55	35-111
108-60-1	LCS bis(2-Chloroisopropyl)ether	1670	0.0	707	42	28-117
95-48-7	LCS o-Cresol	1670	0.0	798	48	39-111
65794-96-9	LCS m,p-Cresols	1670	0.0	912	55	45-121
67-72-1	LCS Hexachloroethane	1670	0.0	748	45	30-109
98-95-3	LCS Nitrobenzene	1670	0.0	863	52	33-116

Semi-Volatile  
Quality Control Summary  
Spike Recovery Report

SDG Number: 10-2199

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 963130

Matrix: SOIL

Lab Sample ID: 1202066182

Instrument: MSD6.I

Analysis Date: 03/21/2010 18:37

Dilution: 1

Analyst: NAG1

Pren Batch II 963130

Inj. Vol: .5 uL

Batch ID: 963133

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	844	51	35-113
88-75-5	LCS 2-Nitrophenol	1670	0.0	872	52	31-117
105-67-9	LCS 2,4-Dimethylphenol	1670	0.0	440	26 *	32-112
111-91-1	LCS bis(2-Chloroethoxy)methane	1670	0.0	804	48	34-110
120-83-2	LCS 2,4-Dichlorophenol	1670	0.0	894	54	34-116
65-85-0	LCS Benzoic acid	3330	0.0	1760	53	22-138
91-20-3	LCS Naphthalene	1670	0.0	814	49	35-103
106-47-8	LCS 4-Chloroaniline	1670	0.0	831	50	20-118
87-68-3	LCS Hexachlorobutadiene	1670	0.0	1020	61	31-117
91-57-6	LCS 2-Methylnaphthalene	1670	0.0	868	52	38-115
77-47-4	LCS Hexachlorocyclopentadiene	1670	0.0	763	46	22-140
88-06-2	LCS 2,4,6-Trichlorophenol	1670	0.0	943	57	40-110
95-95-4	LCS 2,4,5-Trichlorophenol	1670	0.0	980	59	43-113
91-58-7	LCS 2-Chloronaphthalene	1670	0.0	883	53	37-111
88-74-4	LCS 2-Nitroaniline <i>o</i> -Nitroaniline	1670	0.0	713	43	41-113
99-09-2	LCS 3-Nitroaniline <i>m</i> -Nitroaniline	1670	0.0	754	45	34-125
131-11-3	LCS Dimethylphthalate	1670	0.0	1070	64	48-122
606-20-2	LCS 2,6-Dinitrotoluene	1670	0.0	990	59	47-107
208-96-8	LCS Acenaphthylene	1670	0.0	947	57	44-110
51-28-5	LCS 2,4-Dinitrophenol	1670	0.0	937	56	18-127
132-64-9	LCS Dibenzofuran	1670	0.0	971	58	49-115
84-66-2	LCS Diethylphthalate	1670	0.0	1100	66	51-126



Semi-Volatile  
Quality Control Summary  
Spike Recovery Report

SDG Number: 10-2199

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 963130

Matrix: SOIL

Lab Sample ID: 1202066182

Instrument: MSD6.I

Analysis Date: 03/21/2010 18:37

Dilution: 1

Analyst: NAG1

Prep Batch II 963130

Inj. Vol: .5 uL

Batch ID: 963133

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
86-73-7	LCS Fluorene	1670	0.0	925	56	43-109
7005-72-3	LCS 4-Chlorophenylphenylether	1670	0.0	1040	62	45-115
534-52-1	LCS 2-Methyl-4,6-dinitrophenol	1670	0.0	964	58	32-117
100-01-6	LCS 4-Nitroaniline <i>p-Nitroaniline</i>	1670	0.0	908	54	33-148
122-39-4	LCS Diphenylamine	1670	0.0	975	59	46-114
122-66-7	LCS Azobenzene <i>1,2-Diphenylhydrazine</i>	1670	0.0	883	53	38-123
101-55-3	LCS 4-Bromophenylphenylether	1670	0.0	1080	65	40-119
118-74-1	LCS Hexachlorobenzene	1670	0.0	1140	68	43-111
85-01-8	LCS Phenanthrene	1670	0.0	954	57	46-107
120-12-7	LCS Anthracene	1670	0.0	913	55	46-110
84-74-2	LCS Di-n-butylphthalate	1670	0.0	1040	62	52-132
206-44-0	LCS Fluoranthene	1670	0.0	1030	62	51-115
85-68-7	LCS Butylbenzylphthalate	1670	0.0	961	58	47-137
56-55-3	LCS Benzo(a)anthracene	1670	0.0	959	58	50-108
91-94-1	LCS 3,3'-Dichlorobenzidine	1670	0.0	944	57	36-103
218-01-9	LCS Chrysene	1670	0.0	989	59	48-111
117-81-7	LCS bis(2-Ethylhexyl)phthalate	1670	0.0	950	57	48-139
117-84-0	LCS Di-n-octylphthalate	1670	0.0	895	54	42-141
205-99-2	LCS Benzo(b)fluoranthene	1670	0.0	942	57	49-114
207-08-9	LCS Benzo(k)fluoranthene	1670	0.0	1070	64	50-116
50-32-8	LCS Benzo(a)pyrene	1670	0.0	989	59	54-114
193-39-5	LCS Indeno(1,2,3-cd)pyrene	1670	0.0	1090	65	53-120

Semi-Volatile  
Quality Control Summary  
Spike Recovery Report

SDG Number: 10-2199

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 963130

Matrix: SOIL

Lab Sample ID: 1202066182

Instrument: MSD6.I

Analysis Date: 03/21/2010 18:37

Dilution: 1

Analyst: NAG1

Prep Batch ID: 963130

Inj. Vol: .5 uL

Batch ID: 963133

CAS No	Parmname	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	1100	66	53-121
191-24-2	LCS Benzo(ghi)perylene	1670	0.0	1070	64	50-121
120-82-1	LCS 1,2,4-Trichlorobenzene	1670	0.0	963	58	32-114

Semi-Volatile  
Quality Control Summary  
Spike Recovery Report

SDG Number: 10-2199

Sample Type: Matrix Spike

Client ID: RE36-10-8466MS

Matrix: R

Lab Sample ID:1202066183

%Moisture: 12.4

Instrument: MSD6.I

Analysis Date: 03/22/2010 01:18

Dilution: 1

Analyst: NAG1

Prep Batch ID: 963130

Inj. Vol: .5 uL

Batch ID: 963133

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	1900	0.00 U	435	23 *	27-98
108-95-2	MS Phenol	1900	0.00 U	586	31 *	33-94
95-57-8	MS 2-Chlorophenol	1900	0.00 U	617	32	29-96
106-46-7	MS 1,4-Dichlorobenzene	1900	0.00 U	422	22 *	27-96
621-64-7	MS N-Nitrosodipropylamine	1900	0.00 U	561	29	29-102
59-50-7	MS 4-Chloro-3-methylphenol	1900	0.00 U	710	37	29-110
83-32-9	MS Acenaphthene	1900	0.00 U	597	31	17-109
121-14-2	MS 2,4-Dinitrotoluene	1900	0.00 U	709	37	33-107
100-02-7	MS 4-Nitrophenol	1900	0.00 U	639	34	15-110
87-86-5	MS Pentachlorophenol	1900	0.00 U	781	41	23-110
129-00-0	MS Pyrene	1900	23.1 J	663	34	24-118
110-86-1	MS Pyridine	1900	0.00 U	408	21 *	25-102
62-53-3	MS Aniline	1900	0.00 U	447	24	18-109
111-44-4	MS bis(2-Chloroethyl) ether	1900	0.00 U	451	24 *	29-96
541-73-1	MS 1,3-Dichlorobenzene	1900	0.00 U	405	21 *	26-97
100-51-6	MS Benzyl alcohol	1900	0.00 U	0.00	0 *	19-112
95-50-1	MS 1,2-Dichlorobenzene	1900	0.00 U	482	25 *	30-97
108-60-1	MS bis(2-Chloroisopropyl)ether	1900	0.00 U	448	24 *	28-103
95-48-7	MS o-Cresol	1900	0.00 U	1040	55	32-107
65794-96-9	MS m,p-Cresols	1900	0.00 U	743	39	33-115
67-72-1	MS Hexachloroethane	1900	0.00 U	318	17 *	25-100
98-95-3	MS Nitrobenzene	1900	0.00 U	542	28	27-106

Semi-Volatile  
Quality Control Summary  
Spike Recovery Report

SDG Number: 10-2199

Sample Type: Matrix Spike

Client ID: RE36-10-8466MS

Matrix: R

Lab Sample ID: 1202066183

%Moisture: 12.4

Instrument: MSD6.I

Analysis Date: 03/22/2010 01:18

Dilution: 1

Analyst: NAG1

Prep Batch ID: 963130

Inj. Vol: .5 uL

Batch ID: 963133

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
78-59-1	MS Isophorone	1900	0.00 U	587	31	29-104
88-75-5	MS 2-Nitrophenol	1900	0.00 U	657	35	26-102
105-67-9	MS 2,4-Dimethylphenol	1900	0.00 U	539	28	22-104
111-91-1	MS bis(2-Chloroethoxy)methane	1900	0.00 U	590	31	27-101
120-83-2	MS 2,4-Dichlorophenol	1900	0.00 U	734	39	26-103
65-85-0	MS Benzoic acid	3800	0.00 U	1540	40	13-131
91-20-3	MS Naphthalene	1900	0.00 U	544	29	23-103
106-47-8	MS 4-Chloroaniline	1900	0.00 U	600	32	26-103
87-68-3	MS Hexachlorobutadiene	1900	0.00 U	565	30	28-101
91-57-6	MS 2-Methylnaphthalene	1900	0.00 U	628	33	27-106
77-47-4	MS Hexachlorocyclopentadiene	1900	0.00 U	360	19 *	24-117
88-06-2	MS 2,4,6-Trichlorophenol	1900	0.00 U	720	38	26-105
95-95-4	MS 2,4,5-Trichlorophenol	1900	0.00 U	755	40	30-110
91-58-7	MS 2-Chloronaphthalene	1900	0.00 U	653	34	28-102
88-74-4	MS 2-Nitroaniline o-Nitroaniline	1900	0.00 U	580	31 *	33-106
99-09-2	MS 3-Nitroaniline m-Nitroaniline	1900	0.00 U	614	32 *	33-116
131-11-3	MS Dimethylphthalate	1900	0.00 U	771	41	38-113
606-20-2	MS 2,6-Dinitrotoluene	1900	0.00 U	709	37	29-107
208-96-8	MS Acenaphthylene	1900	0.00 U	686	36	25-108
51-28-5	MS 2,4-Dinitrophenol	1900	0.00 U	858	45	14-102
132-64-9	MS Dibenzofuran	1900	0.00 U	749	39	35-112
84-66-2	MS Diethylphthalate	1900	0.00 U	757	40	36-122

Semi-Volatile  
Quality Control Summary  
Spike Recovery Report

SDG Number: 10-2199

Sample Type: Matrix Spike

Client ID: RE36-10-8466MS

Matrix: R

Lab Sample ID: 1202066183

% Moisture: 12.4

Instrument: MSD6.I

Analysis Date: 03/22/2010 01:18

Dilution: 1

Analyst: NAG1

Prep Batch ID: 963130

Inj. Vol: .5 uL

Batch ID: 963133

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
86-73-7	MS Fluorene	1900	0.00 U	676	36	33-105
7005-72-3	MS 4-Chlorophenylphenylether	1900	0.00 U	771	41	30-110
534-52-1	MS 2-Methyl-4,6-dinitrophenol	1900	0.00 U	800	42	26-97
100-01-6	MS 4-Nitroaniline <i>p-Nitroaniline</i>	1900	0.00 U	793	42	28-135
122-39-4	MS Diphenylamine	1900	0.00 U	710	37	33-109
122-66-7	MS Azobenzene <i>1,2-Diphenylhydrazine</i>	1900	0.00 U	651	34	31-113
101-55-3	MS 4-Bromophenylphenylether	1900	0.00 U	781	41	31-109
118-74-1	MS Hexachlorobenzene	1900	0.00 U	702	37	37-99
85-01-8	MS Phenanthrene	1900	0.00 U	667	35	29-109
120-12-7	MS Anthracene	1900	0.00 U	698	37	19-118
84-74-2	MS Di-n-butylphthalate	1900	0.00 U	698	37 *	39-123
206-44-0	MS Fluoranthene	1900	12.3 J	713	37	33-114
85-68-7	MS Butylbenzylphthalate	1900	0.00 U	645	34 *	35-131
56-55-3	MS Benzo(a)anthracene	1900	0.00 U	653	34	30-111
91-94-1	MS 3,3'-Dichlorobenzidine	1900	0.00 U	531	28 *	30-124
218-01-9	MS Chrysene	1900	0.00 U	656	34	32-108
117-81-7	MS bis(2-Ethylhexyl)phthalate	1900	0.00 U	638	34 *	37-129
117-84-0	MS Di-n-octylphthalate	1900	0.00 U	758	40	31-143
205-99-2	MS Benzo(b)fluoranthene	1900	0.00 U	683	36	29-118
207-08-9	MS Benzo(k)fluoranthene	1900	0.00 U	769	40	32-118
50-32-8	MS Benzo(a)pyrene	1900	0.00 U	678	36	33-115
193-39-5	MS Indeno(1,2,3-cd)pyrene	1900	0.00 U	529	28 *	29-114

## Semi-Volatile

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Quality Control Summary  
Spike Recovery Report

SDG Number: 10-2199

Sample Type: Matrix Spike

Client ID: RE36-10-8466MS

Matrix: R

Lab Sample ID:1202066183

%Moisture: 12.4

Instrument: MSD6.I

Analysis Date: 03/22/2010 01:18

Dilution: 1

Analyst: NAG1

Prep Batch ID: 963130

Inj. Vol: .5 uL

Batch ID: 963133

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	1900	0.00 U	576	30	27-119
191-24-2	MS Benzo(ghi)perylene	1900	0.00 U	457	24 *	28-112
120-82-1	MS 1,2,4-Trichlorobenzene	1900	0.00 U	591	31	28-99

## Semi-Volatile

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Quality Control Summary  
Spike Recovery Report

SDG Number: 10-2199

Sample Type: Matrix Spike Duplicate

Client ID: RE36-10-8466MSD

Matrix: R

Lab Sample ID: 1202066184

% Moisture: 12.4

Instrument: MSD6.I

Analysis Date: 03/22/2010 01:42

Dilution: 1

Analyst: NAG1

Prep Batch ID: 963130

Inj. Vol: .5 uL

Batch ID: 963133

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	1900	0.00	U	598	31	27-98	31 *	0-30
108-95-2	MSD Phenol	1900	0.00	U	763	40	33-94	26	0-30
95-57-8	MSD 2-Chlorophenol	1900	0.00	U	773	41	29-96	23	0-30
106-46-7	MSD 1,4-Dichlorobenzene	1900	0.00	U	523	28	27-96	21	0-30
621-64-7	MSD N-Nitrosodipropylamine	1900	0.00	U	695	37	29-102	21	0-30
59-50-7	MSD 4-Chloro-3-methylphenol	1900	0.00	U	774	41	29-110	9	0-30
83-32-9	MSD Acenaphthene	1900	0.00	U	633	33	17-109	6	0-30
121-14-2	MSD 2,4-Dinitrotoluene	1900	0.00	U	770	41	33-107	8	0-30
100-02-7	MSD 4-Nitrophenol	1900	0.00	U	675	36	15-110	6	0-30
87-86-5	MSD Pentachlorophenol	1900	0.00	U	866	46	23-110	10	0-30
129-00-0	MSD Pyrene	1900	23.1	J	721	37	24-118	8	0-30
110-86-1	MSD Pyridine	1900	0.00	U	323	17 *	25-102	23	0-30
62-53-3	MSD Aniline	1900	0.00	U	356	19	18-109	23	0-30
111-44-4	MSD bis(2-Chloroethyl) ether	1900	0.00	U	581	31	29-96	25	0-30
541-73-1	MSD 1,3-Dichlorobenzene	1900	0.00	U	532	28	26-97	27	0-30
100-51-6	MSD Benzyl alcohol	1900	0.00	U	0.00	0 *	19-112	0	0-30
95-50-1	MSD 1,2-Dichlorobenzene	1900	0.00	U	605	32	30-97	23	0-30
108-60-1	MSD bis(2-Chloroisopropyl)ether	1900	0.00	U	542	29	28-103	19	0-30
95-48-7	MSD o-Cresol	1900	0.00	U	1200	63	32-107	15	0-30
65794-96-9	MSD m,p-Cresols	1900	0.00	U	798	42	33-115	7	0-30
67-72-1	MSD Hexachloroethane	1900	0.00	U	402	21 *	25-100	23	0-30
98-95-3	MSD Nitrobenzene	1900	0.00	U	698	37	27-106	25	0-30

## Semi-Volatile

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Quality Control Summary  
Spike Recovery Report

SDG Number: 10-2199

Sample Type: Matrix Spike Duplicate

Client ID: RE36-10-8466MSD

Matrix: R

Lab Sample ID: 1202066184

%Moisture: 12.4

Instrument: MSD6.I

Analysis Date: 03/22/2010 01:42

Dilution: 1

Analyst: NAG1

Prep Batch ID: 963130

Inj. Vol: .5 uL

Batch ID: 963133

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	1900	0.00	U	711	37	29-104	19	0-30
88-75-5	MSD 2-Nitrophenol	1900	0.00	U	797	42	26-102	19	0-30
105-67-9	MSD 2,4-Dimethylphenol	1900	0.00	U	826	43	22-104	42 *	0-30
111-91-1	MSD bis(2-Chloroethoxy)methane	1900	0.00	U	724	38	27-101	20	0-30
120-83-2	MSD 2,4-Dichlorophenol	1900	0.00	U	760	40	26-103	4	0-30
65-85-0	MSD Benzoic acid	3800	0.00	U	1980	52	13-131	25	0-30
91-20-3	MSD Naphthalene	1900	0.00	U	623	33	23-103	14	0-30
106-47-8	MSD 4-Chloroaniline	1900	0.00	U	249	13 *	26-103	83 *	0-30
87-68-3	MSD Hexachlorobutadiene	1900	0.00	U	652	34	28-101	14	0-30
91-57-6	MSD 2-Methylnaphthalene	1900	0.00	U	687	36	27-106	9	0-30
77-47-4	MSD Hexachlorocyclopentadiene	1900	0.00	U	432	23 *	24-117	18	0-30
88-06-2	MSD 2,4,6-Trichlorophenol	1900	0.00	U	826	43	26-105	14	0-30
95-95-4	MSD 2,4,5-Trichlorophenol	1900	0.00	U	797	42	30-110	5	0-30
91-58-7	MSD 2-Chloronaphthalene	1900	0.00	U	708	37	28-102	8	0-30
88-74-4	MSD 2-Nitroaniline o-Nitroaniline	1900	0.00	U	634	33	33-106	9	0-30
99-09-2	MSD 3-Nitroaniline m-Nitroaniline	1900	0.00	U	538	28 *	33-116	13	0-30
131-11-3	MSD Dimethylphthalate	1900	0.00	U	865	46	38-113	12	0-30
606-20-2	MSD 2,6-Dinitrotoluene	1900	0.00	U	773	41	29-107	9	0-30
208-96-8	MSD Acenaphthylene	1900	0.00	U	734	39	25-108	7	0-30
51-28-5	MSD 2,4-Dinitrophenol	1900	0.00	U	939	49	14-102	9	0-30
132-64-9	MSD Dibenzofuran	1900	0.00	U	799	42	35-112	7	0-30
84-66-2	MSD Diethylphthalate	1900	0.00	U	823	43	36-122	8	0-30



Semi-Volatile  
Quality Control Summary  
Spike Recovery Report

Page 7 of 8

SDG Number: 10-2199

Sample Type: Matrix Spike Duplicate

Client ID: RE36-10-8466MSD

Matrix: R

Lab Sample ID: 1202066184

%Moisture: 12.4

Instrument: MSD6.I

Analysis Date: 03/22/2010 01:42

Dilution: 1

Analyst: NAG1

Prep Batch II 963130

Inj. Vol: .5 uL

Batch ID: 963133

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	1900	0.00 U	703	37	33-105	4	0-30
7005-72-3	MSD 4-Chlorophenylphenylether	1900	0.00 U	825	43	30-110	7	0-30
534-52-1	MSD 2-Methyl-4,6-dinitrophenol	1900	0.00 U	817	43	26-97	2	0-30
100-01-6	MSD 4-Nitroaniline <i>p</i> -Nitroaniline	1900	0.00 U	777	41	28-135	2	0-30
122-39-4	MSD Diphenylamine	1900	0.00 U	711	37	33-109	0	0-30
122-66-7	MSD Azobenzene <i>1,2</i> -Diphenylhydrazine	1900	0.00 U	676	36	31-113	4	0-30
101-55-3	MSD 4-Bromophenylphenylether	1900	0.00 U	782	41	31-109	0	0-30
118-74-1	MSD Hexachlorobenzene	1900	0.00 U	655	34 *	37-99	7	0-30
85-01-8	MSD Phenanthrene	1900	0.00 U	675	36	29-109	1	0-30
120-12-7	MSD Anthracene	1900	0.00 U	696	37	19-118	0	0-30
84-74-2	MSD Di-n-butylphthalate	1900	0.00 U	705	37 *	39-123	1	0-30
206-44-0	MSD Fluoranthene	1900	12.3 J	680	35	33-114	5	0-30
85-68-7	MSD Butylbenzylphthalate	1900	0.00 U	741	39	35-131	14	0-30
56-55-3	MSD Benzo(a)anthracene	1900	0.00 U	648	34	30-111	1	0-30
91-94-1	MSD 3,3'-Dichlorobenzidine	1900	0.00 U	369	19 *	30-124	36 *	0-30
218-01-9	MSD Chrysene	1900	0.00 U	672	35	32-108	2	0-30
117-81-7	MSD bis(2-Ethylhexyl)phthalate	1900	0.00 U	697	37	37-129	9	0-30
117-84-0	MSD Di-n-octylphthalate	1900	0.00 U	1060	56	31-143	33 *	0-30
205-99-2	MSD Benzo(b)fluoranthene	1900	0.00 U	727	38	29-118	6	0-30
207-08-9	MSD Benzo(k)fluoranthene	1900	0.00 U	843	44	32-118	9	0-30
50-32-8	MSD Benzo(a)pyrene	1900	0.00 U	660	35	33-115	3	0-30
193-39-5	MSD Indeno(1,2,3-cd)pyrene	1900	0.00 U	390	21 *	29-114	30	0-30

## Semi-Volatile

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Quality Control Summary  
Spike Recovery Report

SDG Number: 10-2199

Sample Type: Matrix Spike Duplicate

Client ID: RE36-10-8466MSD

Matrix: R

Lab Sample ID:1202066184

% Moisture: 12.4

Instrument: MSD6.I

Analysis Date: 03/22/2010 01:42

Dilution: 1

Analyst: NAG1

Prep Batch ID: 963130

Inj. Vol: .5 uL

Batch ID: 963133

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits	
53-70-3	MSD Dibenzo(a,h)anthracene	1900	0.00	U	436	23 *	27-119	28	0-30
191-24-2	MSD Benzo(ghi)perylene	1900	0.00	U	314	17 *	28-112	37 *	0-30
120-82-1	MSD 1,2,4-Trichlorobenzene	1900	0.00	U	682	36	28-99	14	0-30

## Method Blank Summary

Page 1 of 1

SDG Number:	10-2199	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 963130	Instrument ID:	MSD6.I	Data File:	s6c2108-1.d
Lab Sample ID:	1202066181	Prep Date:	03/10/2010 12:14	Analyzed:	03/21/10 18:13
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 963130	1202066182	s6c2109-1.d	03/21/10	1837
02 RE36-10-8278	248519005	s6c2118.d	03/21/10	2209
03 RE36-10-8287	248519008	s6c2121.d	03/21/10	2320
04 RE36-10-8273	248519009	s6c2122.d	03/21/10	2344
05 RE36-10-8276	248519011	s6c2124.d	03/22/10	0031
08 RE36-10-8288	248519001	s6c2325.d	03/23/10	2353
09 RE36-10-8279	248519002	s6c2326.d	03/24/10	0017
10 RE36-10-8277	248519003	s6c2327.d	03/24/10	0040
11 RE36-10-8280	248519004	s6c2328.d	03/24/10	0103
12 RE36-10-8274	248519006	s6c2329.d	03/24/10	0126
13 RE36-10-8291	248519007	s6c2330.d	03/24/10	0150
14 RE36-10-8275	248519010	s6c2331.d	03/24/10	0212

## Instrument Performance Check

## DFTPP

Lab Name GEL Laboratories LLC

Client SDG: 10-2199

Instrument ID: MSD6.I

Injection Date/Time: 16-MAR-10 08:42

Column Description: Phenomenex ZB-5MS

Lab File ID /chem/MSD6.i/s031610.b/s6c1601.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	53.3
68	Less than 2% of mass 69	1.5
69	Mass 69 Relative Abundance	50.4
70	Less than 2% of mass 69	0.6
127	40 - 60% of mass 198	52
197	0 - 1% of mass 198	0.8
199	5 - 9% of mass 198	6.8
275	10 - 30% of mass 198	22.3
365	Greater than 1% of mass 198	2.2
441	Present, but less than mass 443	76.8
442	Greater than 40% of mass 198	55.2
443	17 - 23% of mass 442	18.9

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	WBN100309-08	s6c1603.d	16-MAR-10 09:18
MEGA010	WBN100309-07	s6c1604.d	16-MAR-10 09:47
MEGA020	WBN100309-06	s6c1605.d	16-MAR-10 10:17
MEGA040	WBN100309-05.1	s6c1606.d	16-MAR-10 10:48
MEGA050	WBN100309-04	s6c1607.d	16-MAR-10 11:18
MEGA080	WBN100309-03	s6c1608.d	16-MAR-10 11:48
MEGA100	WBN100309-02	s6c1609.d	16-MAR-10 12:18
MEGA120	WBN100309-01	s6c1610.d	16-MAR-10 12:48
MEGAICV	WBN100309-09.1	s6c1612.d	16-MAR-10 13:40

## Instrument Performance Check

## DFTPP

Lab Name GEL Laboratories LLC

Client SDG: 10-2199

Instrument ID: MSD6.I

Injection Date/Time: 16-MAR-10 16:06

Column Description: Phenomenex ZB-5MS

Lab File ID /chem/MSD6.i/s031610.b/s6c1613.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	46.4
68	Less than 2% of mass 69	1.6
69	Mass 69 Relative Abundance	43.8
70	Less than 2% of mass 69	0.6
127	40 - 60% of mass 198	48.2
197	0 - 1% of mass 198	0.7
199	5 - 9% of mass 198	6.9
275	10 - 30% of mass 198	23.4
365	Greater than 1% of mass 198	2.1
441	Present, but less than mass 443	74.3
442	Greater than 40% of mass 198	65.5
443	17 - 23% of mass 442	19.6

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
AP010	WBN100312-01	s6c1615.d	16-MAR-10 16:42
AP020	WBN100312-02	s6c1616.d	16-MAR-10 17:06
AP040	WBN100312-03.1	s6c1617.d	16-MAR-10 17:30
AP050	WBN100312-04	s6c1618.d	16-MAR-10 17:53
AP080	WBN100312-05	s6c1619.d	16-MAR-10 18:16
AP100	WBN100312-06	s6c1620.d	16-MAR-10 18:40
AP120	WBN100312-07	s6c1621.d	16-MAR-10 19:04
APICV	WBN100312-08.1	s6c1635.d	17-MAR-10 00:41

## Instrument Performance Check

## DFTPP

Lab Name GEL Laboratories LLC

Client SDG: 10-2199

Instrument ID: MSD6.I

Injection Date/Time: 21-MAR-10 16:41

Column Description: Phenomenex ZB-5MS

Lab File ID /chem/MSD6.i/s032110.b/s6c2104.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	38.5
68	Less than 2% of mass 69	1.7
69	Mass 69 Relative Abundance	38.8
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	45.6
197	0 - 1% of mass 198	0.7
199	5 - 9% of mass 198	6.8
275	10 - 30% of mass 198	25.5
365	Greater than 1% of mass 198	2.2
441	Present, but less than mass 443	74.5
442	Greater than 40% of mass 198	81.6
443	17 - 23% of mass 442	19.5

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	WBN100309-05.3	s6c2105.d	21-MAR-10 16:55
APCVS	WBN100312-03.3	s6c2106.d	21-MAR-10 17:25
SBLK01	1202066181	s6c2108-1.d	21-MAR-10 18:13
SBLK01LCS	1202066182	s6c2109-1.d	21-MAR-10 18:37
RE36-10-8278	248519005	s6c2118.d	21-MAR-10 22:09
RE36-10-8287	248519008	s6c2121.d	21-MAR-10 23:20
RE36-10-8273	248519009	s6c2122.d	21-MAR-10 23:44
RE36-10-8276	248519011	s6c2124.d	22-MAR-10 00:31

## Instrument Performance Check

## DFTPP

Lab Name GEL Laboratories LLC

Client SDG: 10-2199

Instrument ID: MSD6.I

Injection Date/Time: 23-MAR-10 16:10

Column Description: Phenomenex ZB-5MS

Lab File ID /chem/MSD6.i/s032310.b/s6c2306.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	39.2
68	Less than 2% of mass 69	1.9
69	Mass 69 Relative Abundance	39
70	Less than 2% of mass 69	0.6
127	40 - 60% of mass 198	45.5
197	0 - 1% of mass 198	0.7
199	5 - 9% of mass 198	6.9
275	10 - 30% of mass 198	25.2
365	Greater than 1% of mass 198	2.1
441	Present, but less than mass 443	72.9
442	Greater than 40% of mass 198	77
443	17 - 23% of mass 442	19.7

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
APCVS	WBN100312-03.3	s6c2308.d	23-MAR-10 17:02
MEGACVS	WBN100309-05.3	s6c2309.d	23-MAR-10 17:25
RE36-10-8288	248519001	s6c2325.d	23-MAR-10 23:53
RE36-10-8279	248519002	s6c2326.d	24-MAR-10 00:17
RE36-10-8277	248519003	s6c2327.d	24-MAR-10 00:40
RE36-10-8280	248519004	s6c2328.d	24-MAR-10 01:03
RE36-10-8274	248519006	s6c2329.d	24-MAR-10 01:26
RE36-10-8291	248519007	s6c2330.d	24-MAR-10 01:50
RE36-10-8275	248519010	s6c2331.d	24-MAR-10 02:12

### Internal Standard Area and RT Summary

Lab Name : GEL Laboratories LLC

Client SDG: 10-2199

Instrument: MSD6.I

STD Analysis Time: 21-MAR-10 16:55

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

Data File: s6c2105.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	534666		3.82	1941232		4.69	1147252		5.93	1917801		7.09	1700059		9.49	1455801		11.1
Upper Limit	1069332		4.32	3882464		5.19	2294504		6.43	3835602		7.59	3400118		9.99	2911602		11.6
Lower Limit	267333		3.32	970616		4.19	573626		5.43	958901		6.59	850030		8.99	727901		10.6
Sample ID																		
BLK01	295580		3.82	1018109		4.69	646278		5.93	1121980		7.09	1078901		9.49	985086		11.1
BLK01LCS	284919		3.83	1047683		4.69	641307		5.94	1110497		7.1	1005420		9.49	866256		11.1
RE36-10-8278	386725		3.83	1403933		4.69	878419		5.94	1584663		7.1	1324886		9.49	759875		11.1
RE36-10-8287	338696		3.83	1243587		4.69	792677		5.94	1444831		7.1	1270522		9.5	848970		11.1
RE36-10-8273	321134		3.83	1178961		4.69	755613		5.94	1327287		7.1	1063579		9.5	763543		11.1
RE36-10-8276	379721		3.82	1395806		4.69	879349		5.94	1580927		7.1	1392348		9.5	1036020		11.1

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: 10-2199

Instrument: MSD6.1

STD Analysis Time: 23-MAR-10 17:25

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

Data File: s6c2309.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	304917		3.95	1164981		4.8	659784		6.06	1172427		7.23	972017		9.63	816579		11.3
Upper Limit	609834		4.45	2329962		5.3	1319568		6.56	2344854		7.73	1944034		10.1	1633158		11.8
Lower Limit	152459		3.45	582491		4.3	329892		5.56	586214		6.73	486009		9.13	408290		10.8
Sample ID																		
RE36-10-8288	352904		3.95	1247737		4.82	768374		6.07	1302801		7.23	1089543		9.64	880222		11.3
RE36-10-8279	330718		3.95	1183153		4.82	730456		6.07	1260786		7.23	1012863		9.65	769124		11.3
RE36-10-8277	305708		3.95	1080590		4.82	658007		6.07	1154428		7.23	910212		9.64	720679		11.3
RE36-10-8280	338817		3.95	1220745		4.82	752525		6.07	1308707		7.23	1100381		9.64	787406		11.3
RE36-10-8274	305495		3.95	1104964		4.82	680294		6.07	1201921		7.23	1027432		9.64	777949		11.3
RE36-10-8291	380198		3.95	1373376		4.82	848257		6.07	1506043		7.23	1392520		9.64	1159019		11.3
RE36-10-8275	353973		3.95	1254718		4.82	776404		6.07	1391660		7.23	1227509		9.64	932409		11.3

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: 10-2199  
Lab Sample ID: 248519009

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Aliquot: 30.06 g  
Column: J&W DB-5MS

Matrix: R  
% Moisture: 29  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE36-10-8273  
Batch ID: 963133  
Run Date: 03/21/2010 23:44  
Prep Date: 03/10/2010 12:14  
Data File: s6c2122.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	469	ug/kg	93.8	469
108-95-2	Phenol	U	469	ug/kg	93.8	469
95-57-8	2-Chlorophenol	U	469	ug/kg	93.8	469
106-46-7	1,4-Dichlorobenzene	U	469	ug/kg	93.8	469
621-64-7	N-Nitrosodipropylamine	U	469	ug/kg	93.8	469
59-50-7	4-Chloro-3-methylphenol	U	469	ug/kg	93.8	469
83-32-9	Acenaphthene	U	46.9	ug/kg	15.5	46.9
121-14-2	2,4-Dinitrotoluene	U	469	ug/kg	46.9	469
100-02-7	4-Nitrophenol	U	469	ug/kg	155	469
87-86-5	Pentachlorophenol	U	469	ug/kg	117	469
129-00-0	Pyrene	J	15.6	ug/kg	14.1	46.9
110-86-1	Pyridine	U	469	ug/kg	93.8	469
62-53-3	Aniline	U	469	ug/kg	141	469
111-44-4	bis(2-Chloroethyl) ether	U	469	ug/kg	93.8	469
541-73-1	1,3-Dichlorobenzene	U	469	ug/kg	93.8	469
100-51-6	Benzyl alcohol	U	469	ug/kg	141	469
95-50-1	1,2-Dichlorobenzene	U	469	ug/kg	93.8	469
108-60-1	bis(2-Chloroisopropyl)ether	U	469	ug/kg	93.8	469
95-48-7	o-Cresol	U	469	ug/kg	93.8	469
65794-96-9	m,p-Cresols	U	469	ug/kg	141	469
67-72-1	Hexachloroethane	U	469	ug/kg	93.8	469
98-95-3	Nitrobenzene	U	469	ug/kg	93.8	469
78-59-1	Isophorone	U	469	ug/kg	93.8	469
88-75-5	2-Nitrophenol	U	469	ug/kg	93.8	469
105-67-9	2,4-Dimethylphenol	U	469	ug/kg	164	469
111-91-1	bis(2-Chloroethoxy)methane	U	469	ug/kg	93.8	469
120-83-2	2,4-Dichlorophenol	U	469	ug/kg	93.8	469
65-85-0	Benzoic acid	U	938	ug/kg	234	938
91-20-3	Naphthalene	U	46.9	ug/kg	14.1	46.9
106-47-8	4-Chloroaniline	U	469	ug/kg	93.8	469
87-68-3	Hexachlorobutadiene	U	469	ug/kg	93.8	469
91-57-6	2-Methylnaphthalene	U	46.9	ug/kg	9.38	46.9
77-47-4	Hexachlorocyclopentadiene	U	469	ug/kg	93.8	469
88-06-2	2,4,6-Trichlorophenol	U	469	ug/kg	93.8	469
95-95-4	2,4,5-Trichlorophenol	U	469	ug/kg	93.8	469
91-58-7	2-Chloronaphthalene	U	46.9	ug/kg	15.5	46.9
88-74-4	2-Nitroaniline	U	469	ug/kg	93.8	469
99-09-2	<i>o</i> -Nitroaniline	U	469	ug/kg	93.8	469
	3-Nitroaniline					

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

SDG Number: 10-2199	Date Collected: 02/25/2010 12:00	Matrix: R
Lab Sample ID: 248519009	Date Received: 03/03/2010 08:50	%Moisture: 29
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-8273	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 963133	Inst: MSD6.I	Dilution: 1
Run Date: 03/21/2010 23:44	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 03/10/2010 12:14	Aliquot: 30.06 g	Final Volume: 1 mL
Data File: s6c2122.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	469	ug/kg	93.8	469
606-20-2	2,6-Dinitrotoluene	U	469	ug/kg	46.9	469
208-96-8	Acenaphthylene	U	46.9	ug/kg	14.1	46.9
51-28-5	2,4-Dinitrophenol	U	938	ug/kg	178	938
132-64-9	Dibenzofuran	U	469	ug/kg	93.8	469
84-66-2	Diethylphthalate	U	469	ug/kg	93.8	469
86-73-7	Fluorene	U	46.9	ug/kg	14.1	46.9
7005-72-3	4-Chlorophenylphenylether	U	469	ug/kg	93.8	469
534-52-1	2-Methyl-4,6-dinitrophenol	U	469	ug/kg	93.8	469
100-01-6	4-Nitroaniline	U	469	ug/kg	141	469
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	469	ug/kg	93.8	469
122-66-7	Azobenzene	U	469	ug/kg	93.8	469
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	469	ug/kg	93.8	469
118-74-1	Hexachlorobenzene	U	469	ug/kg	93.8	469
85-01-8	Phenanthrene	U	46.9	ug/kg	14.1	46.9
120-12-7	Anthracene	U	46.9	ug/kg	9.38	46.9
84-74-2	Di-n-butylphthalate	U	469	ug/kg	93.8	469
206-44-0	Fluoranthene	J	18.3	ug/kg	14.1	46.9
85-68-7	Butylbenzylphthalate	U	469	ug/kg	93.8	469
56-55-3	Benzo(a)anthracene	U	46.9	ug/kg	14.1	46.9
91-94-1	3,3'-Dichlorobenzidine	U	469	ug/kg	141	469
218-01-9	Chrysene	U	46.9	ug/kg	14.1	46.9
117-81-7	bis(2-Ethylhexyl)phthalate	U	469	ug/kg	93.8	469
117-84-0	Di-n-octylphthalate	U	469	ug/kg	93.8	469
205-99-2	Benzo(b)fluoranthene	U	46.9	ug/kg	14.1	46.9
207-08-9	Benzo(k)fluoranthene	U	46.9	ug/kg	14.1	46.9
50-32-8	Benzo(a)pyrene	U	46.9	ug/kg	14.1	46.9
193-39-5	Indeno(1,2,3-cd)pyrene	U	46.9	ug/kg	14.1	46.9
53-70-3	Dibenzo(a,h)anthracene	U	46.9	ug/kg	14.1	46.9
191-24-2	Benzo(ghi)perylene	U	46.9	ug/kg	14.1	46.9
120-82-1	1,2,4-Trichlorobenzene	U	469	ug/kg	93.8	469

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
55044-36-5	1H-Indene, 5-butyl-6-hexyloctahydro-	7.98	380	ug/kg	89	NJ
	Unknown	8.65	317	ug/kg		J

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

SDG Number: 10-2199	Date Collected: 02/25/2010 12:00	Matrix: R
Lab Sample ID: 248519009	Date Received: 03/03/2010 08:50	%Moisture: 29
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-8273	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 963133	Inst: MSD6.I	Dilution: 1
Run Date: 03/21/2010 23:44	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 03/10/2010 12:14	Aliquot: 30.06 g	Final Volume: 1 mL
Data File: s6c2122.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
	Unknown	8.74	439	ug/kg		J
	Unknown	8.86	377	ug/kg		J
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	8.89	325	ug/kg	98	NJ
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	8.94	279	ug/kg	97	NJ
	Unknown	9.03	404	ug/kg		J
	Unknown	9.11	482	ug/kg		J
	Unknown	9.2	816	ug/kg		J
	Unknown	9.29	454	ug/kg		J
	Unknown	9.38	1060	ug/kg		J
	Unknown	9.56	423	ug/kg		J
	Unknown	9.59	411	ug/kg		J
	Unknown	9.71	531	ug/kg		J
559-74-0	Friedelan-3-one	9.83	1550	ug/kg	92	NJ
	Unknown	9.91	542	ug/kg		J
	Unknown	10.03	1140	ug/kg		J
	Unknown	10.25	480	ug/kg		J
112-95-8	Eicosane	10.63	596	ug/kg	93	NJ
	Unknown	11.73	518	ug/kg		J
	Unknown	11.77	692	ug/kg		J
	Unknown	12.84	660	ug/kg		J
83-47-6	.gamma.-Sitosterol	13.64	854	ug/kg	91	NJ

Data File: /chem/MSD6.i/s032110.b/s6c2122.d  
Report Date: 23-Mar-2010 11:13

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GEL Laboratories LLC

Data file : /chem/MSD6.i/s032110.b/s6c2122.d  
Lab Smp Id: 248519009 Client Smp ID: RE36-10-8273  
Inj Date : 21-MAR-2010 23:44  
Operator : nagl Inst ID: MSD6.i  
Smp Info : |248519009|963133|1|SVM|1|LANL  
Misc Info : |MSD8270\_S|WBN100319-01  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD6.i/s032110.b/MSD6-M8270C-AQA-031610.m  
Meth Date : 23-Mar-2010 10:53 nat00999 Quant Type: ISTD  
Cal Date : 17-MAR-2010 04:51 Cal File: s6c1646.d  
Als bottle: 19  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-2199.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	30.06000	weight of sample
M	29.03790	% 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	3.828	3.822 (1.000)	321134	40.0000	
* 29 Naphthalene-d8	136	4.693	4.687 (1.000)	1178961	40.0000	
* 46 Acenaphthene-d10	164	5.940	5.934 (1.000)	755613	40.0000	
* 67 Phenanthrene-d10	188	7.098	7.093 (1.000)	1327287	40.0000	
* 91 Chrysene-d12	240	9.498	9.486 (1.000)	1063579	40.0000	
* 98 Perylene-d12	264	11.092	11.075 (1.000)	763543	40.0000	
\$ 3 2-Fluorophenol	112	3.022	3.005 (0.789)	419104	46.9468	2200
\$ 5 Phenol-d5	99	3.546	3.534 (0.926)	517163	45.5529	2140
\$ 20 Nitrobenzene-d5	82	4.187	4.181 (0.892)	247987	22.0040	1030
\$ 39 2-Fluorobiphenyl	172	5.434	5.422 (0.915)	534305	27.4073	1280
\$ 60 2,4,6-Tribromophenol	329	6.534	6.522 (1.100)	138500	65.3192	3060
\$ 81 p-Terphenyl-d14	244	8.475	8.463 (0.892)	579990	31.2936	1470

Compounds	QUANT SIG	CONCENTRATIONS					
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
79 Pyrene	202	8.363	8.357	(0.880)	10775	0.33233	15.6 (a)
76 Fluoranthene	202	8.151	8.139	(1.148)	12818	0.39082	18.3 (a)

#### QC Flag Legend

a - Target compound detected but, quantitated amount  
Below Limit Of Quantitation(BLOQ).

## ION RATIO REPORT

## SV REPORT

Data file: s6c2l22.d

Report Date: 03/22/2010 20:27

Lab. ID: 248519009

SampleType: SAMPLE

Injection Date: 21-MAR-2010 23:44

Operator: nagl

Instrument: MSD6.i

Sample Info: |248519009|963133|1|SVM|1|LANL

Miscellaneous Info: |MSD8270\_S|WBN100319-01

Comment:

Method used: /chem/MSD6.i/s032110.b/MSD6-M8270C-AQA-031610.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-2199

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
1	N-Methyl-N-nitrosomethylamine			CAS#: 62-75-9		
74	16796	2.03	2.31	80-120	100	(T)
42	2907	2.03	2.31	72-132	17	(QT)
43	12008	2.02	2.31	12- 72	71	(T)
-----						
4	Aniline			CAS#: 62-53-3		
66	26833	3.55	3.60	80-120	100	( )
93	20529	3.50	3.60	402-462	77	(QT)
-----						
17	N-Nitrosodipropylamine			CAS#: 621-64-7		
70	36549	4.19	4.06	80-120	100	(T)
42	21690	4.19	4.06	40-100	59	(T)
-----						
22	Isophorone			CAS#: 78-59-1		
82	247987	4.19	4.35	80-120	100	(T)
138	167	4.46	4.35	0- 50	0	(T)
-----						
40	2-Chloronaphthalene			CAS#: 91-58-7		
162	696823	5.94	5.53	80-120	100	(T)
164	755613	5.94	5.53	4- 64	108	(QT)
127	985	5.95	5.53	8- 68	0	(QT)
-----						
43	Dimethylphthalate			CAS#: 131-11-3		
163	137722	5.94	5.70	80-120	100	(T)
164	755613	5.94	5.70	0- 41	549	(QT)
-----						



MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
45 Acenaphthylene			CAS#: 208-96-8			
152	23894	5.53	5.83	80-120	100	(T)
151	25877	5.53	5.83	0- 50	108	(QT)
153	3151	5.53	5.83	0- 44	13	(T)
-----						
48 2,4-Dinitrophenol			CAS#: 51-28-5			
184	437	6.28	5.96	80-120	100	(T)
154	442	6.29	5.96	718-778	101	(QT)
-----						
50 2,4-Dinitrotoluene			CAS#: 121-14-2			
165	99400	5.94	6.05	80-120	100	(T)
89	1419	5.94	6.05	39- 99	1	(QT)
63	1421	5.94	6.05	20- 80	1	(QT)
-----						
53 Fluorene			CAS#: 86-73-7			
166	8556	6.53	6.34	80-120	100	(T)
165	8544	6.53	6.34	60-120	100	(T)
167	2815	6.53	6.34	0- 44	33	(T)
-----						
55 2-Methyl-4,6-dinitrophenol			CAS#: 534-52-1			
198	536	6.53	6.36	80-120	100	(T)
105	1016	6.53	6.36	9- 69	189	(QT)
51	988	6.53	6.35	28- 88	184	(QT)
-----						
69 Anthracene			CAS#: 120-12-7			
178	8318	7.12	7.15	80-120	100	( )
179	2236	7.12	7.15	0- 47	27	( )
176	1598	7.12	7.15	0- 49	19	( )
-----						
76 Fluoranthene			CAS#: 206-44-0			
202	12818	8.15	8.14	80-120	100	( )
203	2568	8.15	8.14	0- 48	20	( )
101	1633	8.15	8.14	0- 41	13	( )
-----						
79 Pyrene			CAS#: 129-00-0			
202	10775	8.36	8.36	80-120	100	( )
200	2782	8.36	8.36	0- 51	26	( )
101	1372	8.36	8.36	0- 43	13	( )
-----						
95 Benzo(b)fluoranthene			CAS#: 205-99-2			
252	6871	10.60	10.59	80-120	100	( )
253	1498	10.60	10.59	0- 52	22	( )
125	1820	10.60	10.59	0- 40	26	( )
-----						
96 Benzo(k)fluoranthene			CAS#: 207-08-9			
252	6871	10.60	10.62	80-120	100	( )
253	1498	10.60	10.62	0- 52	22	( )
125	1307	10.60	10.62	0- 39	19	( )

Q qualifier indicates ion failed ratio requirement

Data File: /chem/MSD6.i/s032110.b/s6c2122.d  
Report Date: 23-Mar-2010 11:13

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GEL Laboratories LLC

Data file : /chem/MSD6.i/s032110.b/s6c2122.d  
Lab Smp Id: 248519009 Client Smp ID: RE36-10-8273  
Inj Date : 21-MAR-2010 23:44  
Operator : nagl Inst ID: MSD6.i  
Smp Info : |248519009|963133|1|SVM|1|LANL  
Misc Info : |MSD8270\_S|WBN100319-01  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD6.i/s032110.b/MSD6-M8270C-AQA-031610.m  
Meth Date : 23-Mar-2010 10:53 nat00999 Quant Type: ISTD  
Cal Date : 17-MAR-2010 04:51 Cal File: s6c1646.d  
Als bottle: 19  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-2199.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	30.06000	weight of sample
M	29.03790	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 67 Phenanthrene-d10	7.098	3279681	40.000
* 91 Chrysene-d12	9.498	4565680	40.000
* 98 Perylene-d12	11.092	2320020	40.000

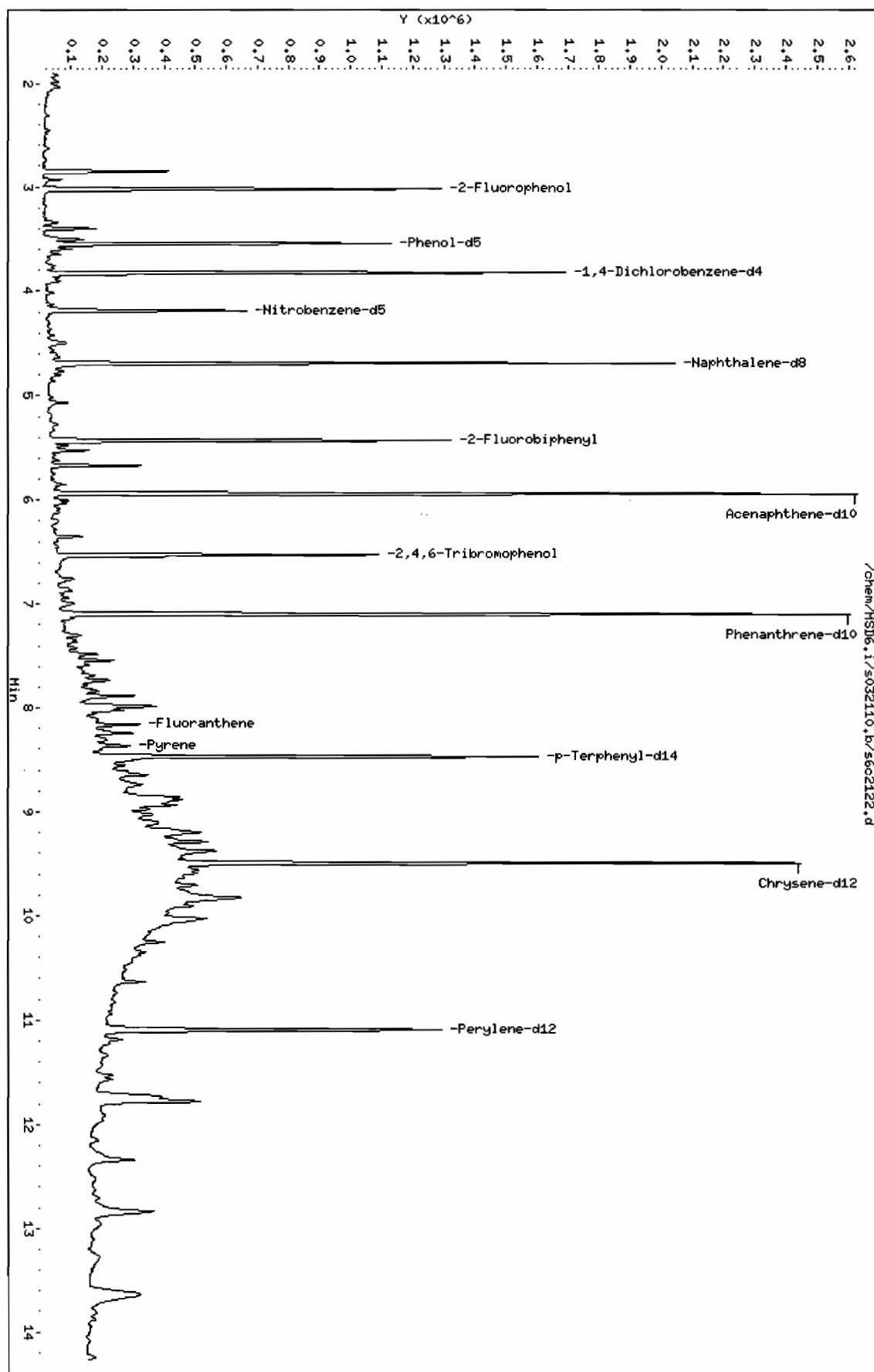
CONCENTRATIONS					QUANT		
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
1H-Indene, 5-butyl-6-hexyloctahydro-					CAS #: 55044-36-5		
7.981	665161	8.11251200	380	89	NIST05.L	101522	67
Unknown					CAS #:		
8.645	772656	6.76925419	317	0		0	91
Unknown					CAS #:		
8.739	1068320	9.35956595	439	0		0	91
Unknown					CAS #:		
8.857	917095	8.03468560	377	0		0	91
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa					CAS #: 511-15-9		
8.886	790534	6.92588392	325	98	NIST05.L	116238	91
1-Phenanthrenecarboxylic acid, 1,2,3,4,4					CAS #: 1235-74-1		
8.939	680224	5.95945485	279	97	NIST05.L	133620	91
Unknown					CAS #:		
9.028	984479	8.62503925	404	0		0	91
Unknown					CAS #:		
9.110	1174732	10.2918452	482	0		0	91
Unknown					CAS #:		
9.198	1985927	17.3987338	816	0		0	91
Unknown					CAS #:		
9.286	1106193	9.69137783	454	0		0	91
Unknown					CAS #:		
9.381	2587401	22.6682643	1060	0		0	91
Unknown					CAS #:		
9.563	1030539	9.02857146	423	0		0	91
Unknown					CAS #:		
9.592	1001402	8.77329730	411	0		0	91
Unknown					CAS #:		
9.710	1293252	11.3301981	531	0		0	91
Friedelan-3-one					CAS #: 559-74-0		
9.828	3774976	33.0726199	1550	92	NIST05.L	176566	91

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
====	====	=====	=====	=====	=====	=====	=====
Unknown					CAS #:		
9.910	1319622	11.5612321	542	0		0	91
Unknown					CAS #:		
10.028	2766055	24.2334500	1140	0		0	91
Unknown					CAS #:		
10.251	1168816	10.2400155	480	0		0	91
Eicosane					CAS #: 112-95-8		
10.633	737413	12.7139122	596	93	NIST05.L	113489	98
Unknown					CAS #:		
11.733	641023	11.0520159	518	0		0	98
Unknown					CAS #:		
11.775	856200	14.7619302	692	0		0	98
Unknown					CAS #:		
12.839	816189	14.0720919	660	0		0	98
.gamma.-Sitosterol					CAS #: 83-47-6		
13.639	1057081	18.2253700	854	91	NIST05.L	174402	98

Data File: /chem/MSD6.i/s032110.b/s6c2122.d  
Date : 21-MAR-2010 23:44  
Client ID: RE36--10-8273  
Sample Info: 12485190091963133111SVH111LANL  
Volume Injected (uL): 0.5  
Column phase: 3uM DB-SHS

Instrument: MSD6.i  
Operator: nag1  
Column diameter: 0.20



Date : 21-MAR-2010 23:44

Client ID: RE36-10-8273

Instrument: MSD6.i

Sample Info: 12485190091963133111SVMI11LANL

Volume Injected (uL): 0.5

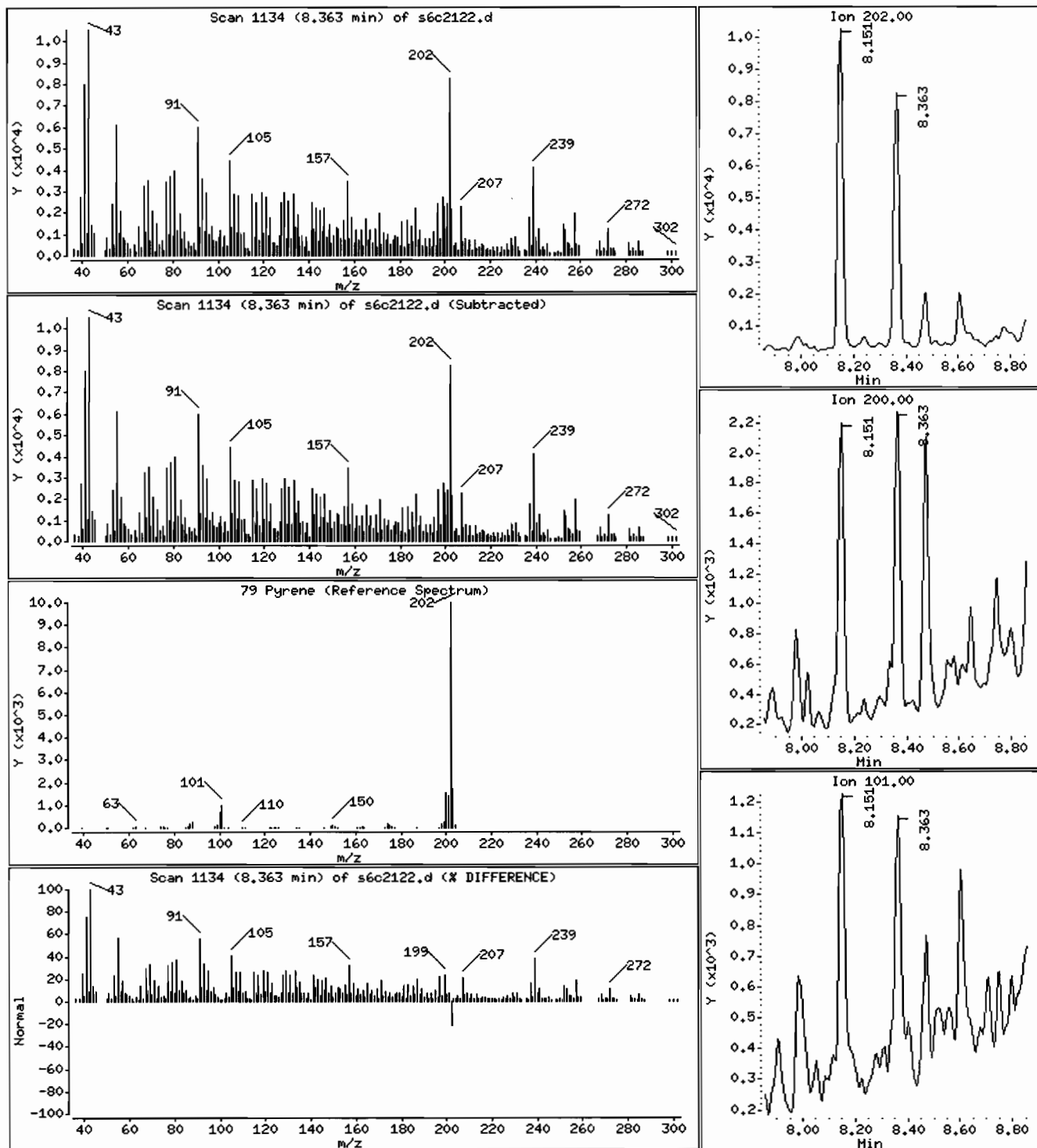
Operator: nag1

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

Column diameter: 0.20

79 Pyrene

Concentration: 15.6 ug/Kg



Date : 21-MAR-2010 23:44

Client ID: RE36-10-8273

Instrument: MSD6.i

Sample Info: 1248519009196313311SVMI11LANL

Volume Injected (uL): 0.5

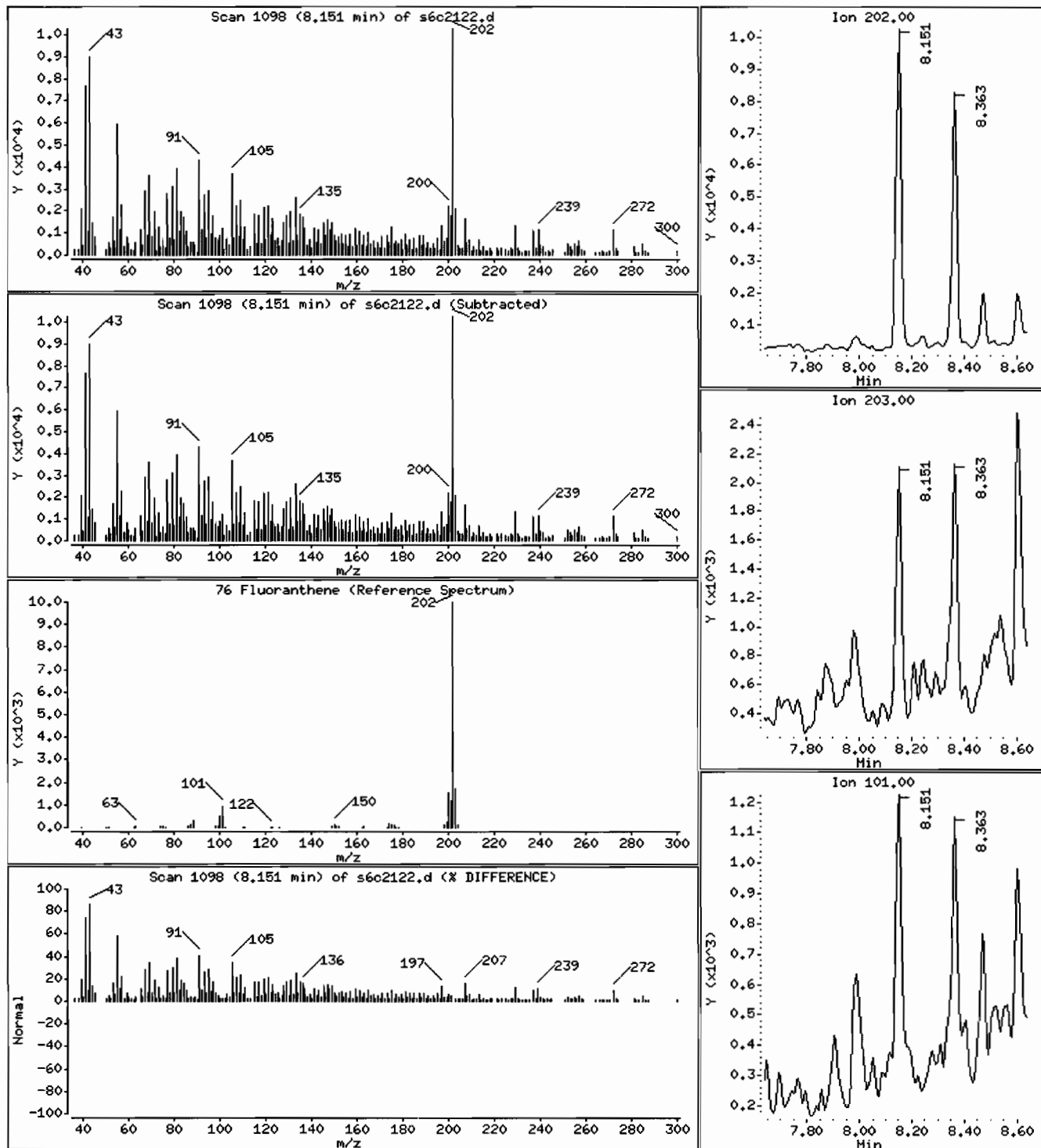
Operator: nag1

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

Column diameter: 0.20

76 Fluoranthene

Concentration: 18.3 ug/Kg



Date : 21-MAR-2010 23:44

Client ID: RE36-10-8273

Instrument: MSD6.i

Sample Info: I248519009196313311ISVM11ILANL

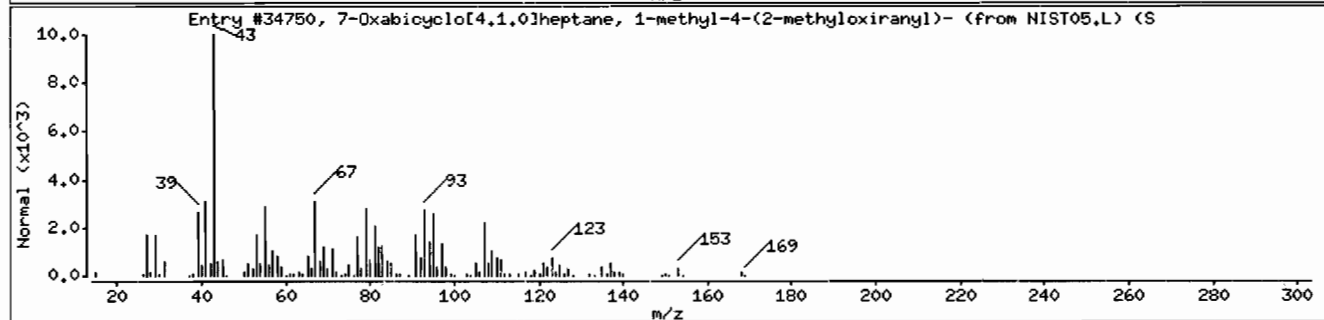
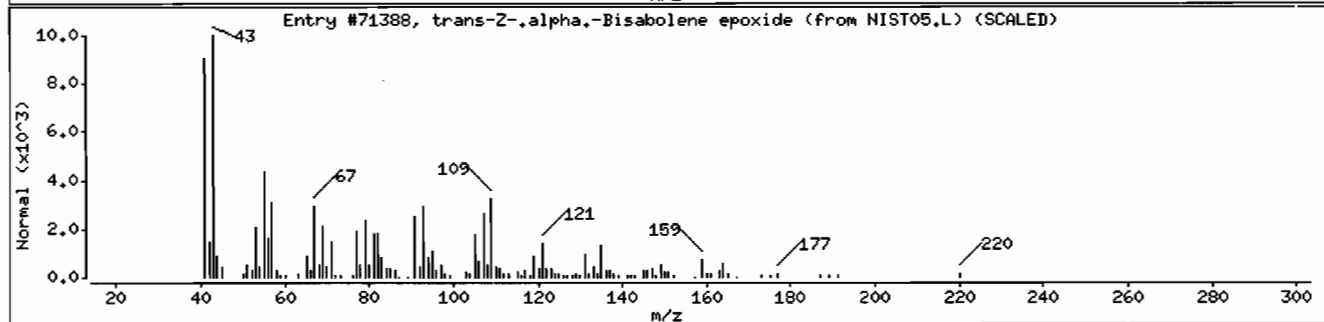
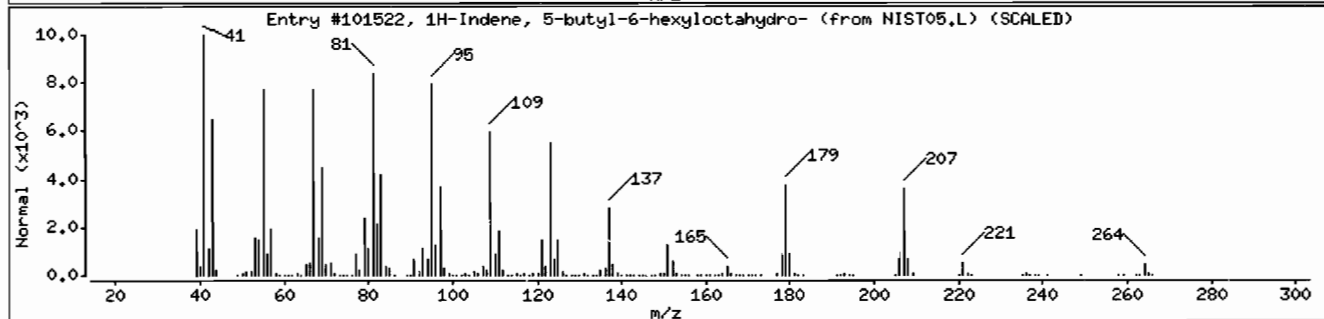
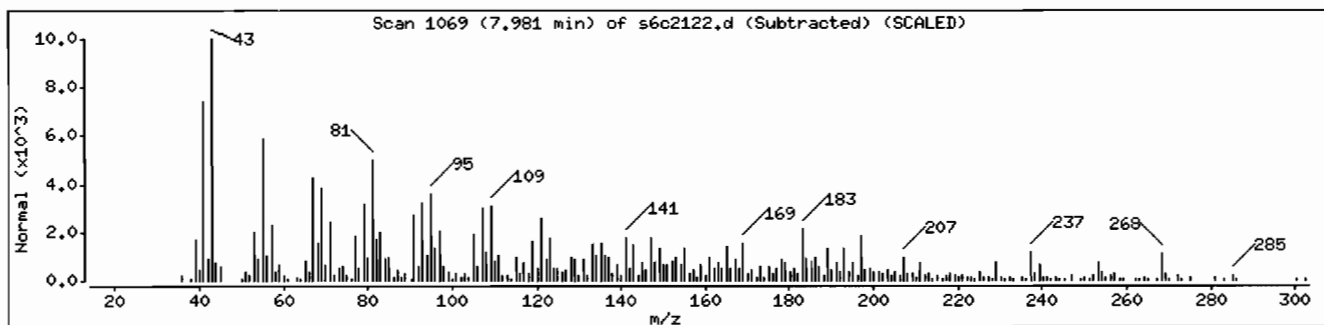
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1H-Indene, 5-butyl-6-hexyloctahydro-	55044-36-5	NIST05.L	101522	89	C19H36	264
trans-Z-.alpha.-Bisabolene epoxide	1000131-71-1	NIST05.L	71388	80	C15H24O	220
7-Oxabicyclo[4.1.0]heptane, 1-methyl-4-(	96-08-2	NIST05.L	34750	60	C10H16O2	168





Date : 21-MAR-2010 23:44

Client ID: RE36-10-8273

Instrument: MSD6.i

Sample Info: 1248519009196313311SVH111LANL

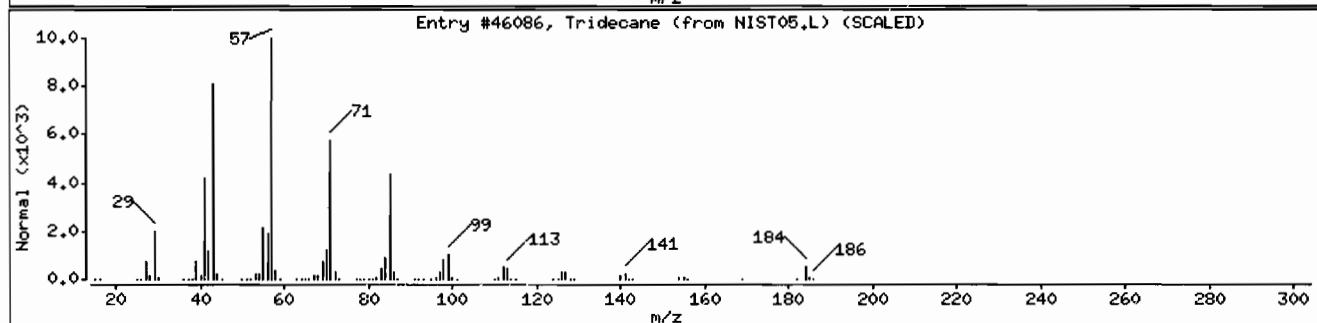
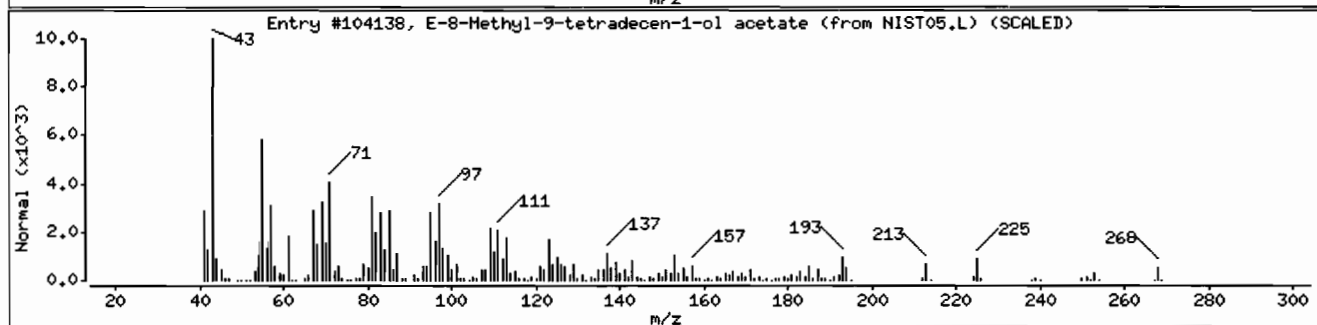
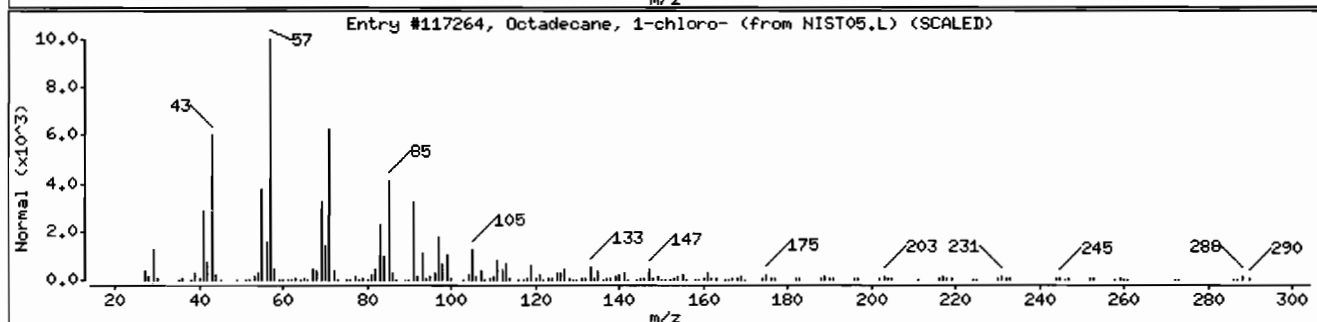
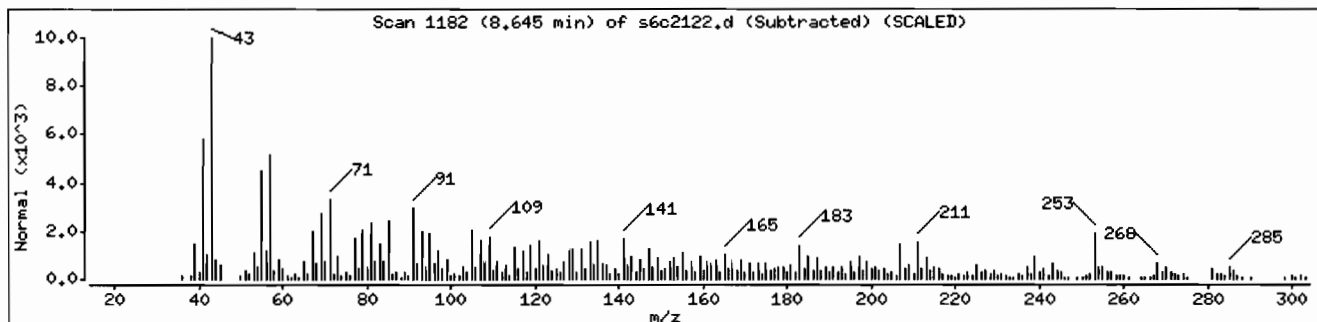
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Octadecane, 1-chloro-	3386-33-2	NIST05.L	117264	56	C18H37Cl	288
E-8-Methyl-9-tetradecen-1-ol acetate	1000130-81-4	NIST05.L	104138	55	C17H32O2	268
Tridecane	629-50-5	NIST05.L	46086	53	C13H28	184



Date : 21-MAR-2010 23:44

Client ID: RE36-10-8273

Instrument: MSD6.i

Sample Info: I2485190091963133111SVH111LANL

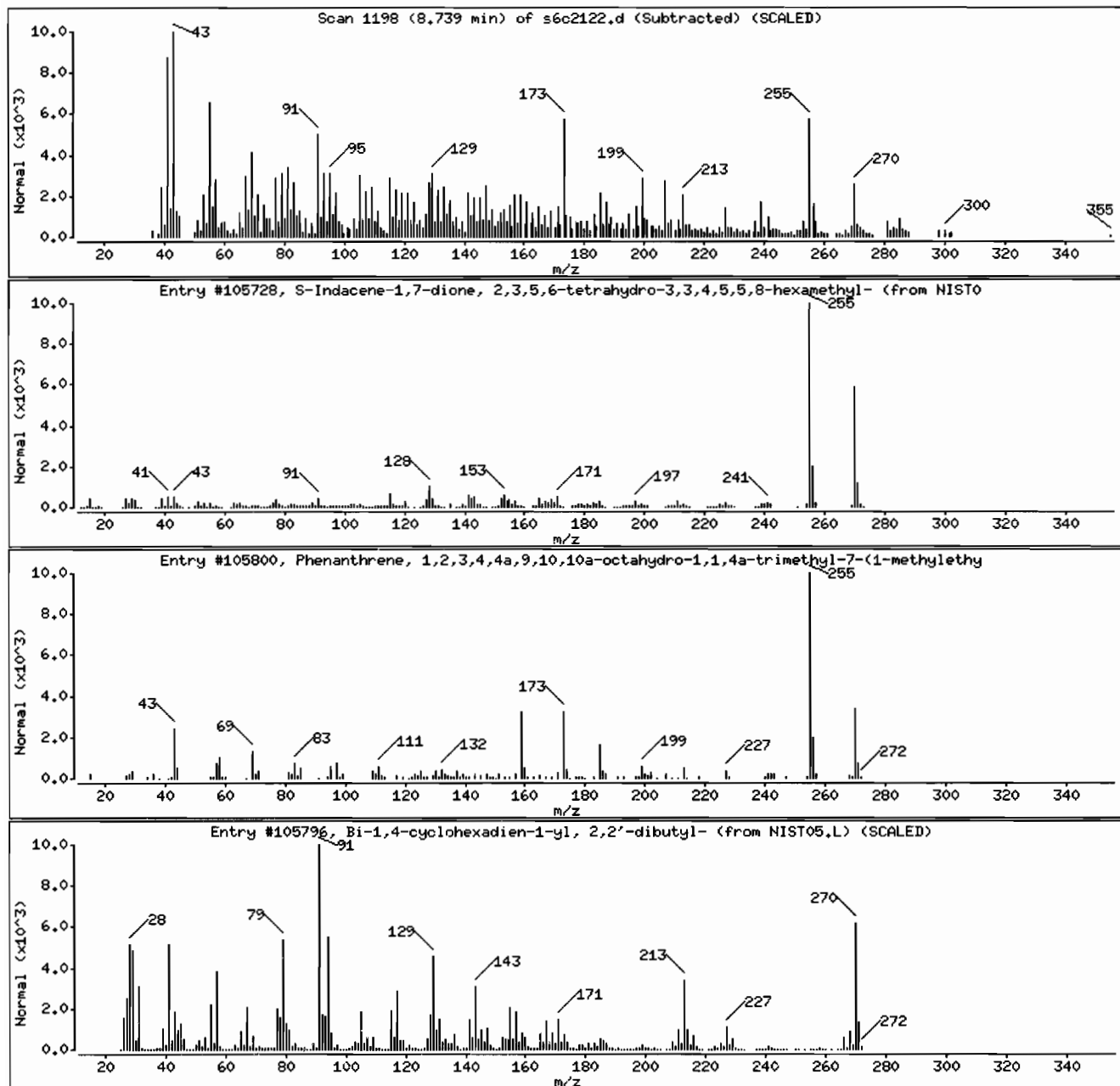
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
S-Indacene-1,7-dione, 2,3,5,6-tetrahydro	55591-16-7	NIST05.L	105728	59	C18H22O2	270
Phenanthrene, 1,2,3,4,4a,9,10,10a-octahy	19407-28-4	NIST05.L	105800	38	C20H30	270
Bi-1,4-cyclohexadien-1-yl, 2,2'-dibutyl-	61142-53-8	NIST05.L	105796	25	C20H30	270



Date : 21-MAR-2010 23:44

Client ID: RE36-10-8273

Instrument: MSD6.i

Sample Info: I248519009196313311SVH111LANL

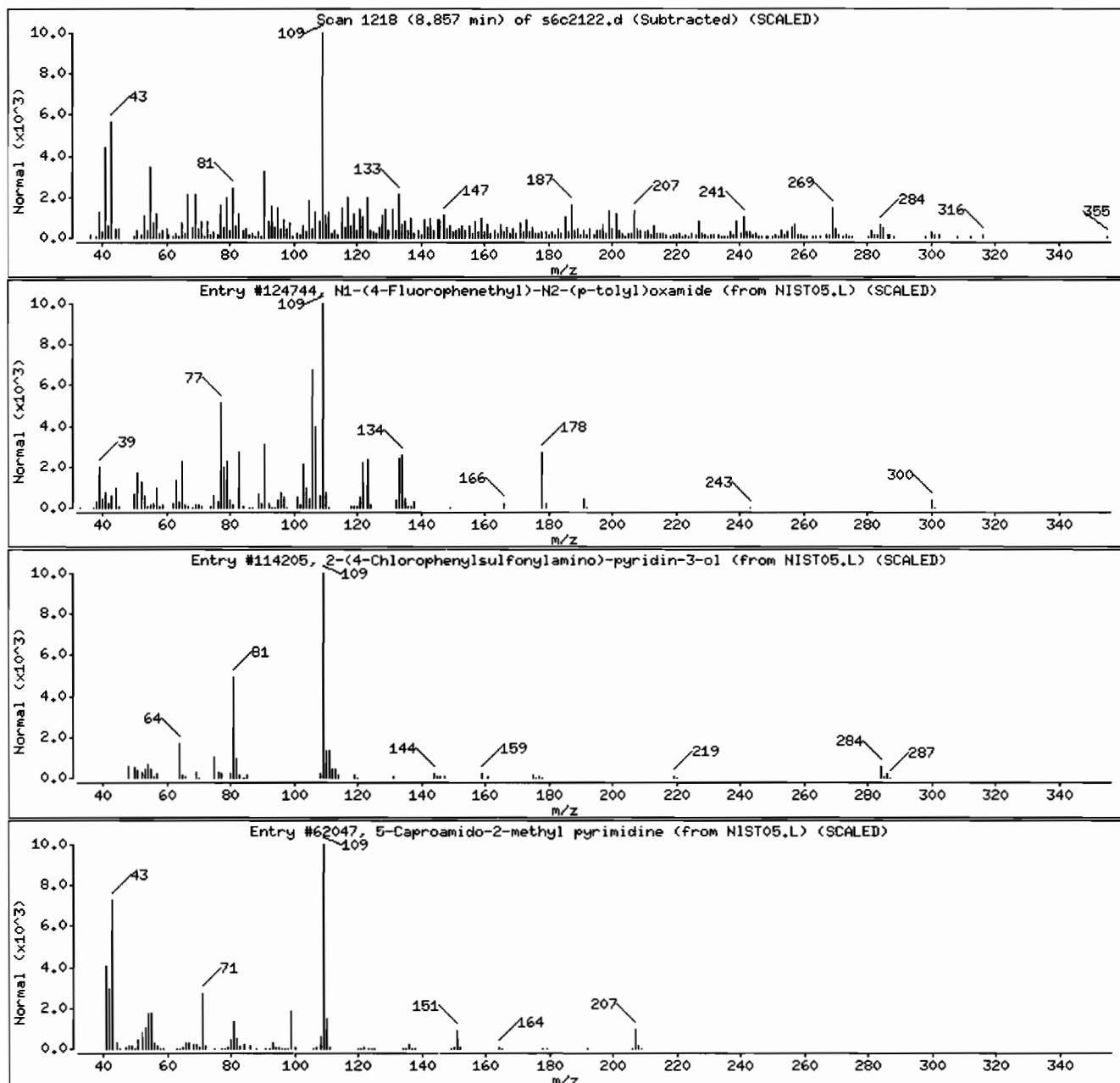
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
N1-(4-Fluorophenethyl)-N2-(p-tolyl)oxami	339239-52-0	NIST05.L	124744	49	C17H17FN2O2	300
2-(4-Chlorophenylsulfonylamino)-pyridin-	296772-59-3	NIST05.L	114205	41	C11H9ClN2O3S	284
5-Caproamido-2-methyl pyrimidine	1000213-95-8	NIST05.L	62047	38	C11H17N3O	207



Date : 21-MAR-2010 23:44

Client ID: RE36-10-8273

Instrument: MSD6.i

Sample Info: I248519009196313311SVMI1ILANL

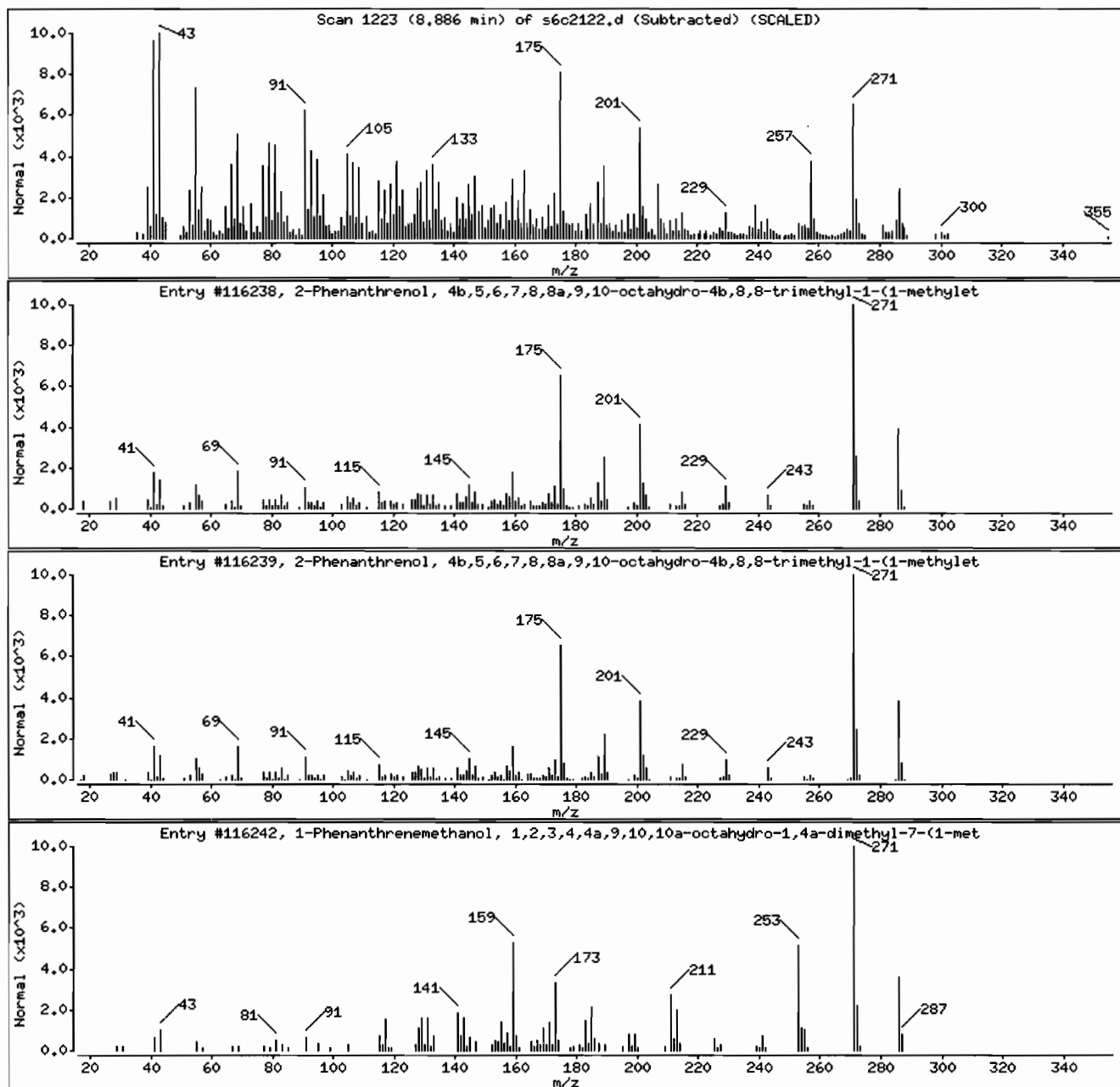
Volume Injected (uL): 0.5

Operator: nag1

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	116238	98	C20H30O	286
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116239	96	C20H30O	286
1-Phenanthrenemethanol, 1,2,3,4,4a,9,10,	24035-43-6	NIST05.L	116242	44	C20H30O	286



Date : 21-MAR-2010 23:44

Client ID: RE36-10-8273

Instrument: MSD6.i

Sample Info: 12485190091963133111SVMI11LANL

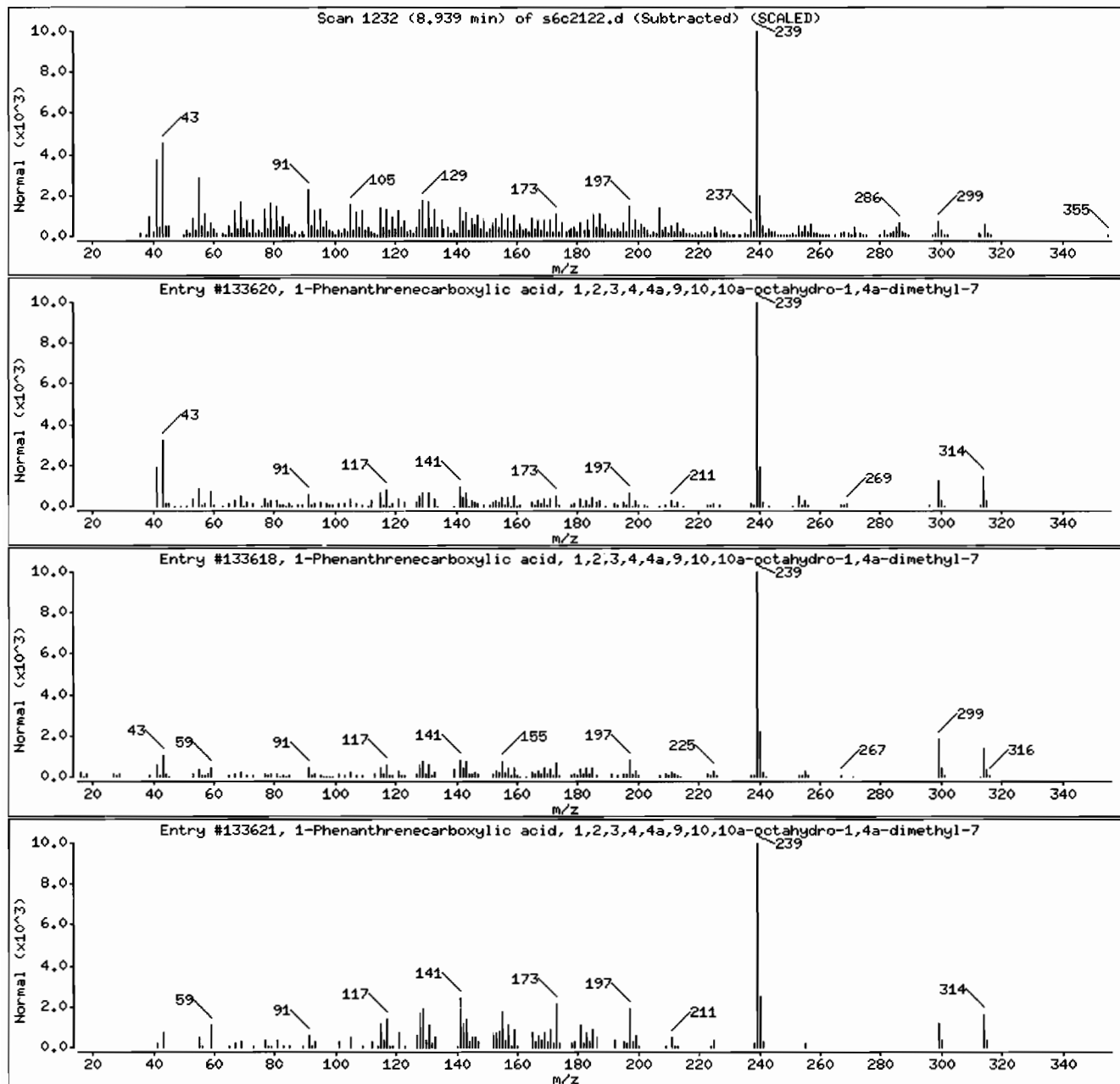
Volume Injected (uL): 0.5

Operator: nag1

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	133620	97	C21H30O2	314
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133618	97	C21H30O2	314
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133621	94	C21H30O2	314



Date : 21-MAR-2010 23:44

Client ID: RE36-10-8273

Instrument: MSD6.i

Sample Info: 1248519009196313311SVH111LANL

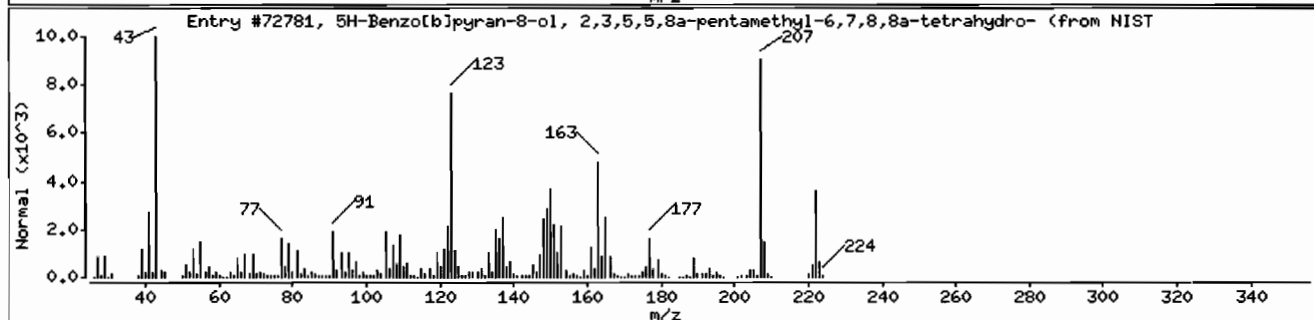
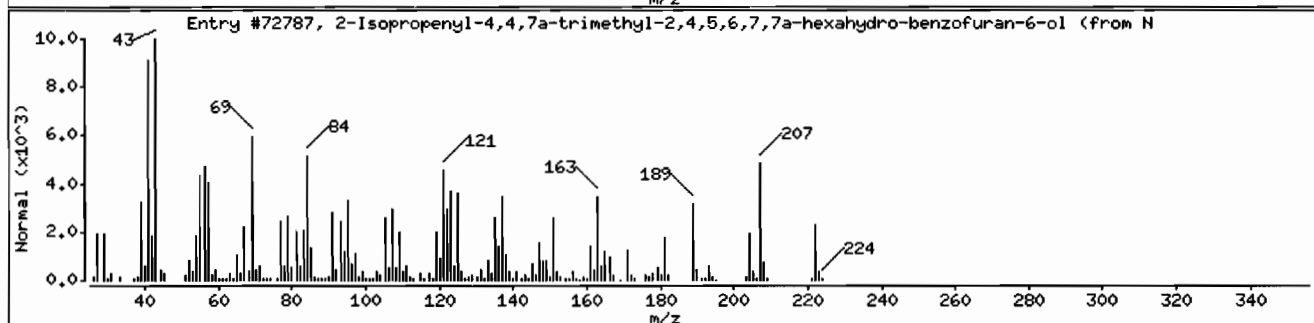
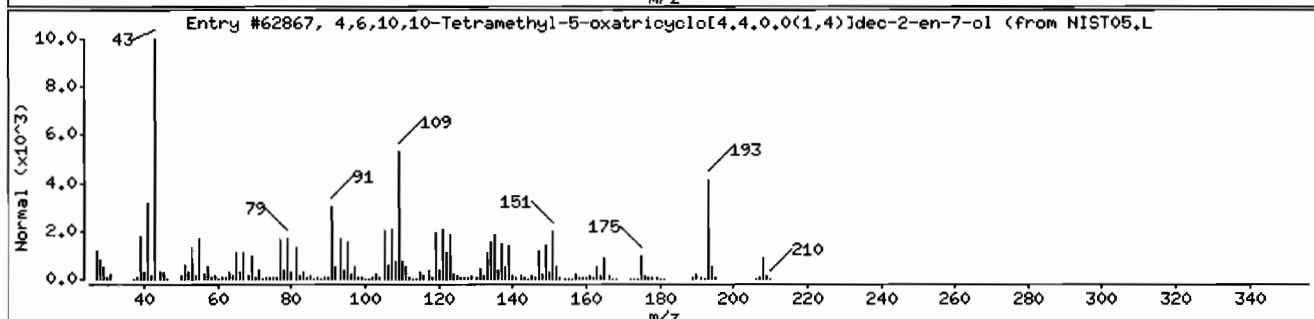
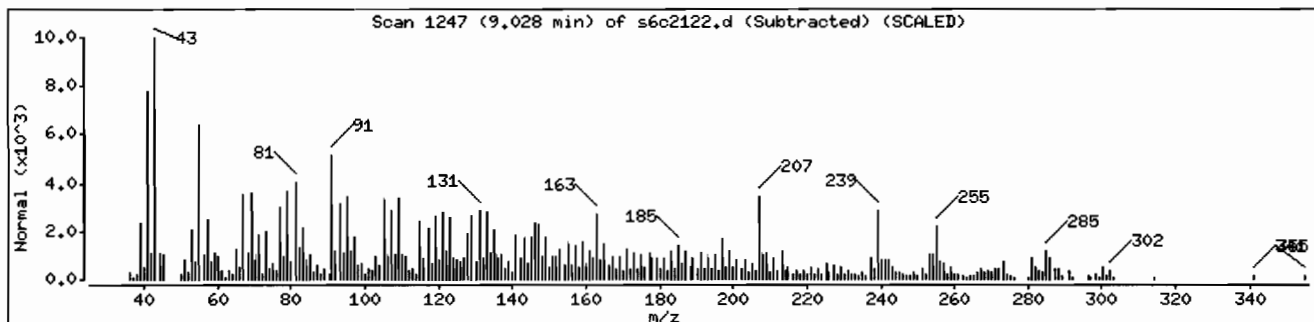
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
4,6,10,10-Tetramethyl-5-oxatricyclo[4.4.4,2-Isopropenyl-4,4,7a-trimethyl-2,4,5,6,7	97371-50-1	NIST05.L	62867	11	C13H20O2	208
5H-Benzo[b]pyran-8-ol, 2,3,5,5,8a-pentam	1000189-13-5	NIST05.L	72787	10	C14H22O2	222
	97306-66-6	NIST05.L	72781	10	C14H22O2	222



Date : 21-MAR-2010 23:44

Client ID: RE36-10-8273

Instrument: MSD6.i

Sample Info: I2485190091963133111SVH111LANL

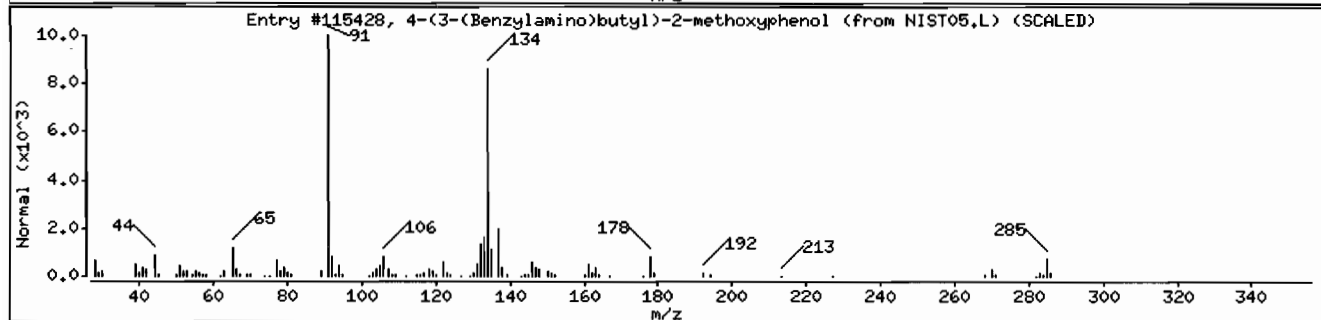
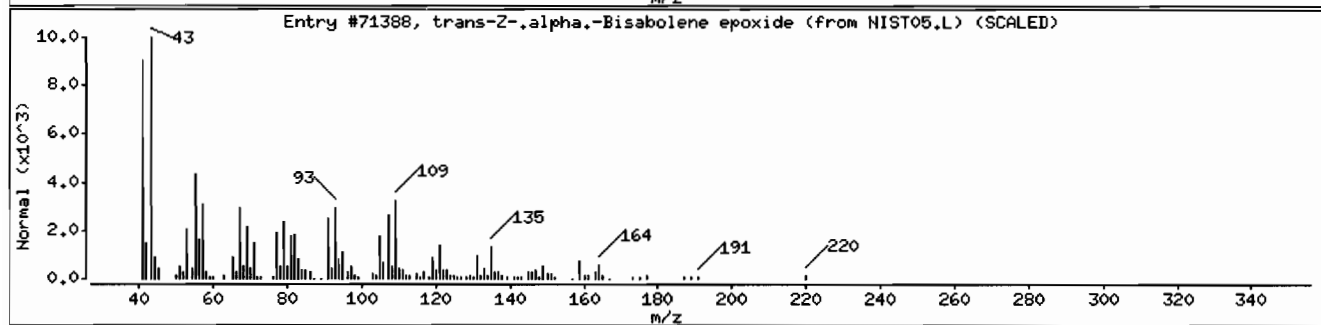
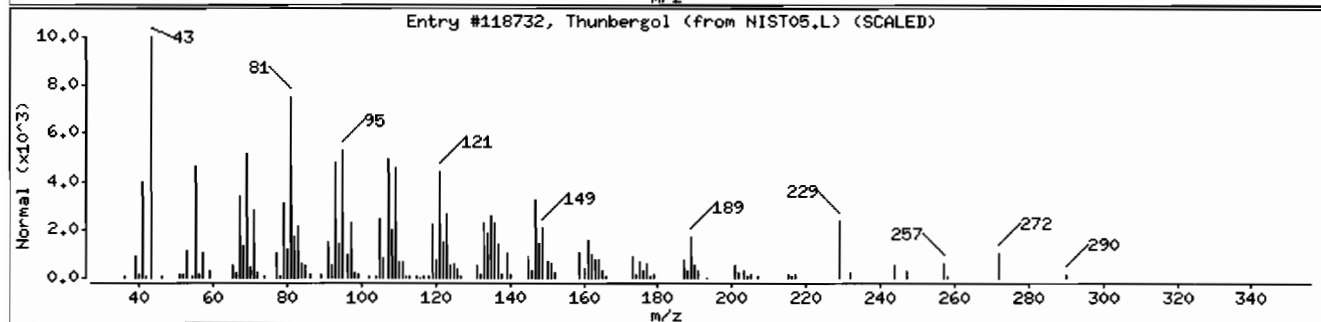
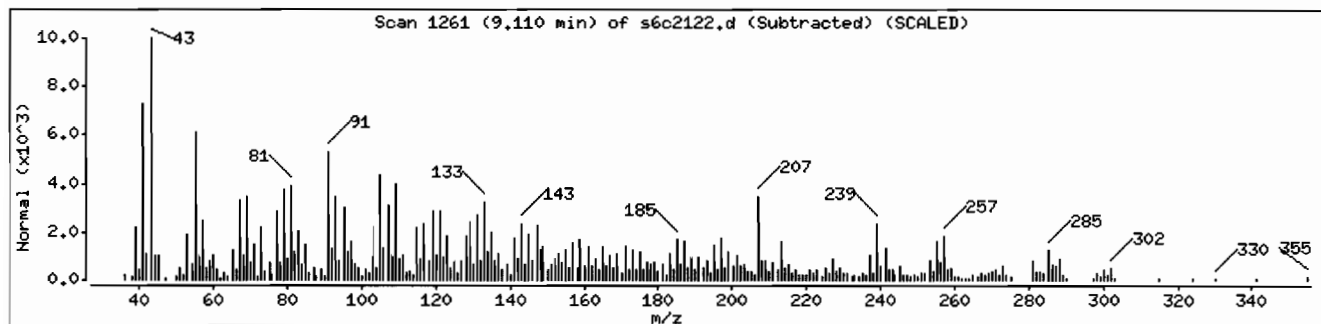
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Thunbergol	25269-17-4	NIST05.L	118732	50	C20H34O	290
trans-Z-.alpha.-Bisabolene epoxide	1000131-71-1	NIST05.L	71388	38	C15H24O	220
4-(3-(Benzylamino)butyl)-2-methoxyphenol	1000297-97-0	NIST05.L	115428	25	C18H23NO2	285



Date : 21-MAR-2010 23:44

Client ID: RE36-10-8273

Instrument: MSD6.i

Sample Info: I248519009I963133I1ISVH11ILANL

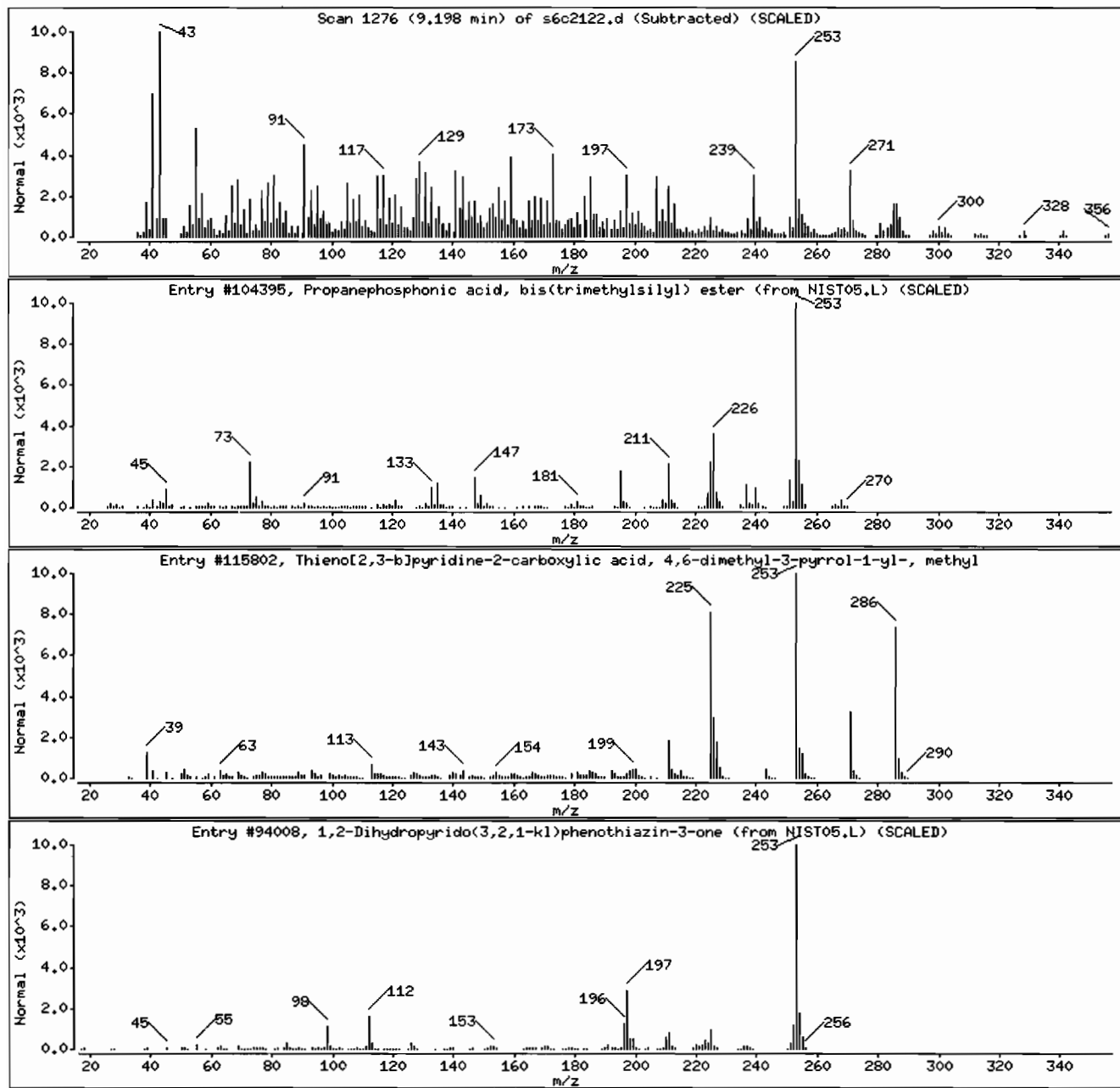
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propanephosphonic acid, bis(trimethylsilyl	1000193-07-4	NIST05.L	104395	50	C9H25O3PSi2	268
Thieno[2,3-b]pyridine-2-carboxylic acid,	1000310-81-2	NIST05.L	115802	43	C15H14N2O2S	286
1,2-Dihydropyrido(3,2,1-k)phenothiazin-	69513-42-4	NIST05.L	94008	38	C15H11NOS	253





Date : 21-MAR-2010 23:44

Client ID: RE36-10-8273

Instrument: MSD6.i

Sample Info: 1248519009196313311SVH11ILANL

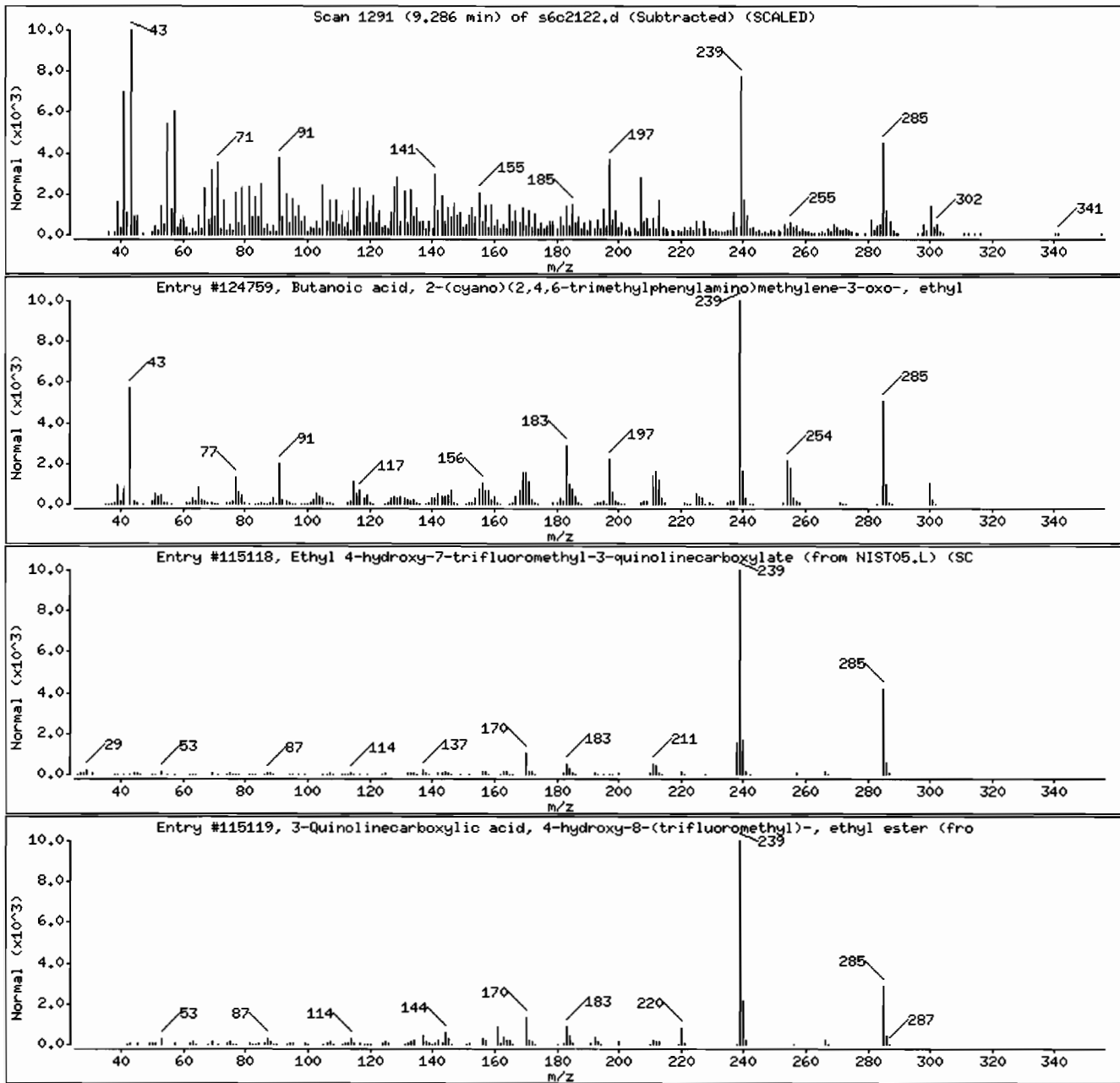
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Butanoic acid, 2-(cyano)(2,4,6-trimethyl	1000267-71-7	NIST05.L	124759	64	C17H20N2O3	300
Ethyl 4-hydroxy-7-trifluoromethyl-3-quin	391-02-6	NIST05.L	115118	49	C13H10F3NO3	285
3-Quinolinecarboxylic acid, 4-hydroxy-8-	23851-84-5	NIST05.L	115119	46	C13H10F3NO3	285



Date : 21-MAR-2010 23:44

Client ID: RE36-10-8273

Instrument: HSD6.i

Sample Info: 12485190091963133111SVH111LANL

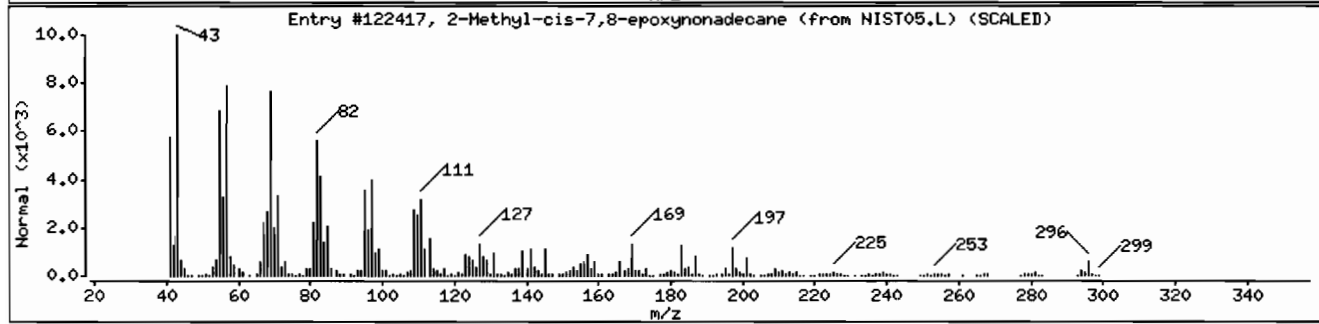
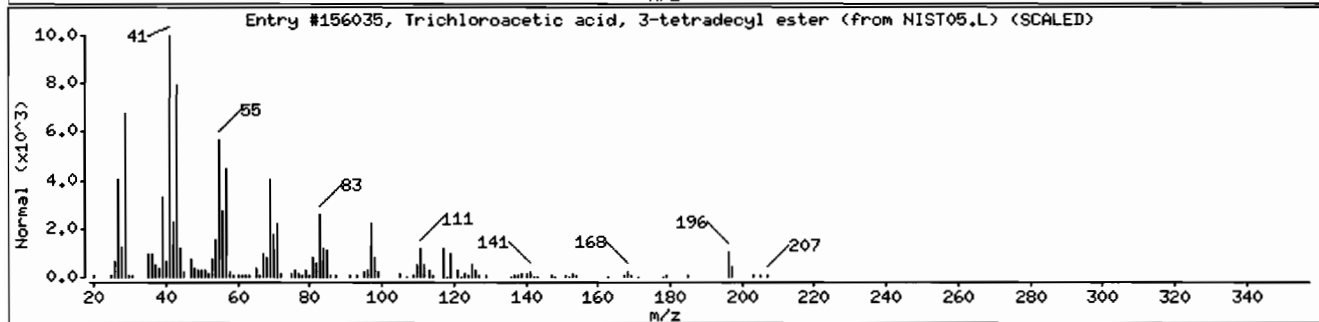
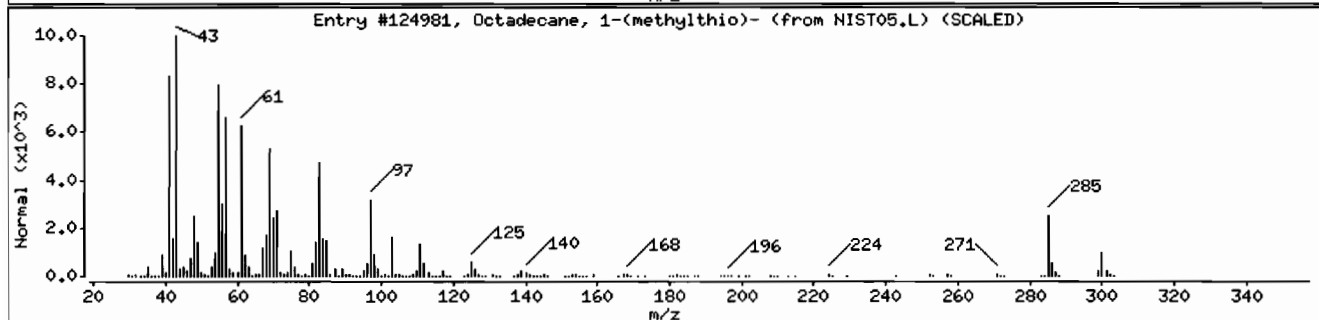
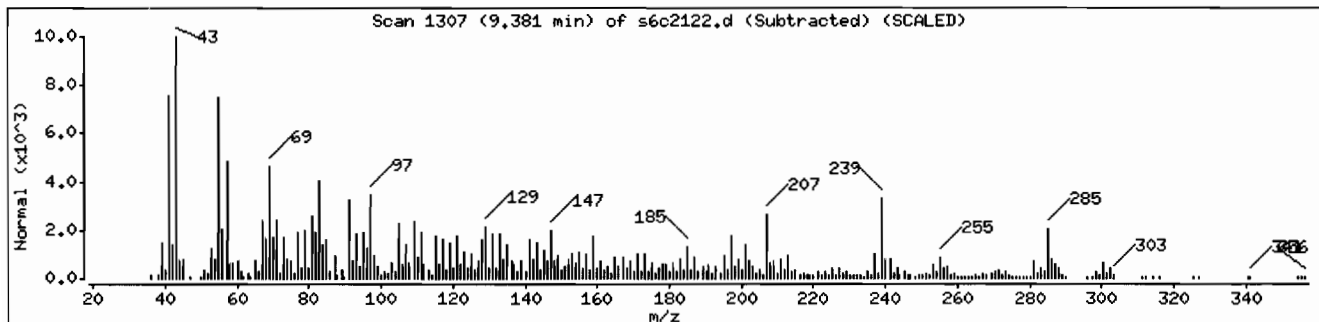
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Octadecane, 1-(methylthio)-	40289-98-3	NIST05.L	124981	25	C19H40S	300
Trichloroacetic acid, 3-tetradecyl ester	1000282-06-7	NIST05.L	156035	15	C16H29Cl3O2	358
2-Methyl-cis-7,8-epoxynonadecane	1000130-93-3	NIST05.L	122417	12	C20H40O	296



Date : 21-MAR-2010 23:44

Client ID: RE36-10-8273

Instrument: MSD6.i

Sample Info: 1248519009196313311SVH111LANL

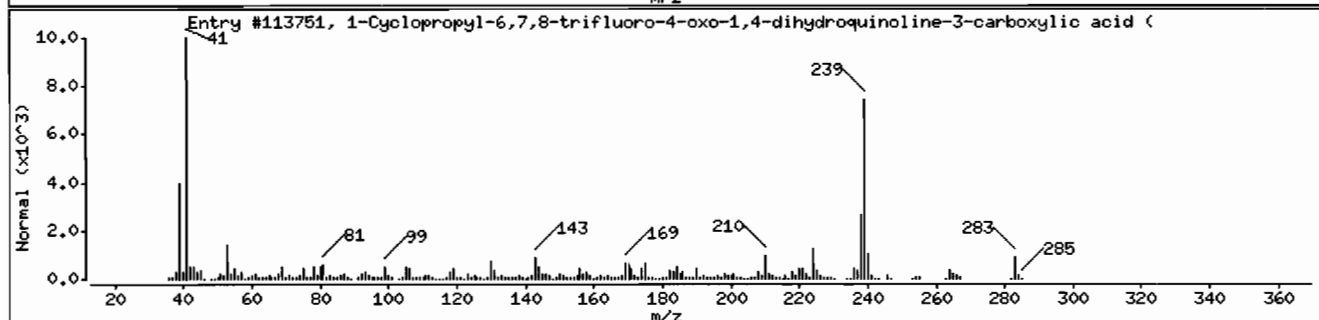
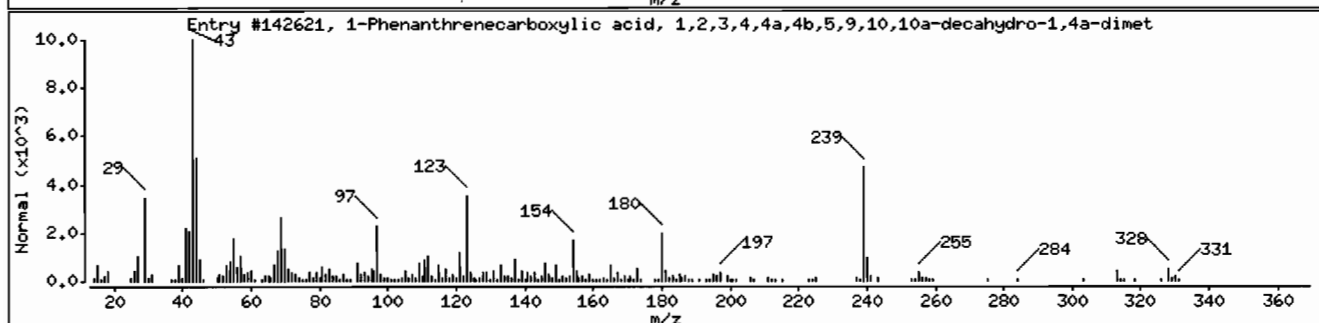
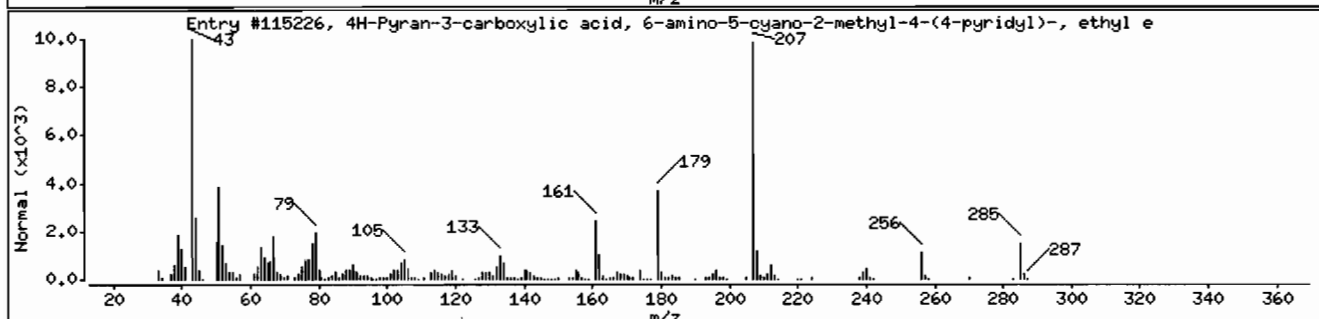
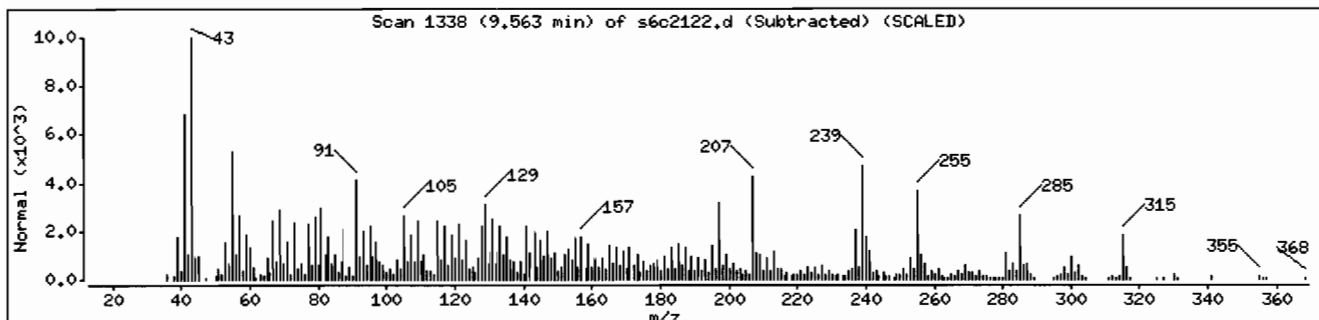
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
4H-Pyran-3-carboxylic acid, 6-amino-5-cy	227177-00-6	NIST05.L	115226	22	C15H15N3O3	285
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	57274-59-6	NIST05.L	142621	14	C22H34O2	330
1-Cyclopropyl-6,7,8-trifluoro-4-oxo-1,4-	94695-52-0	NIST05.L	113751	11	C13H8F3NO3	283



Date : 21-MAR-2010 23:44

Client ID: RE36-10-8273

Instrument: MSD6.i

Sample Info: I248519009196313311ISVH11ILANL

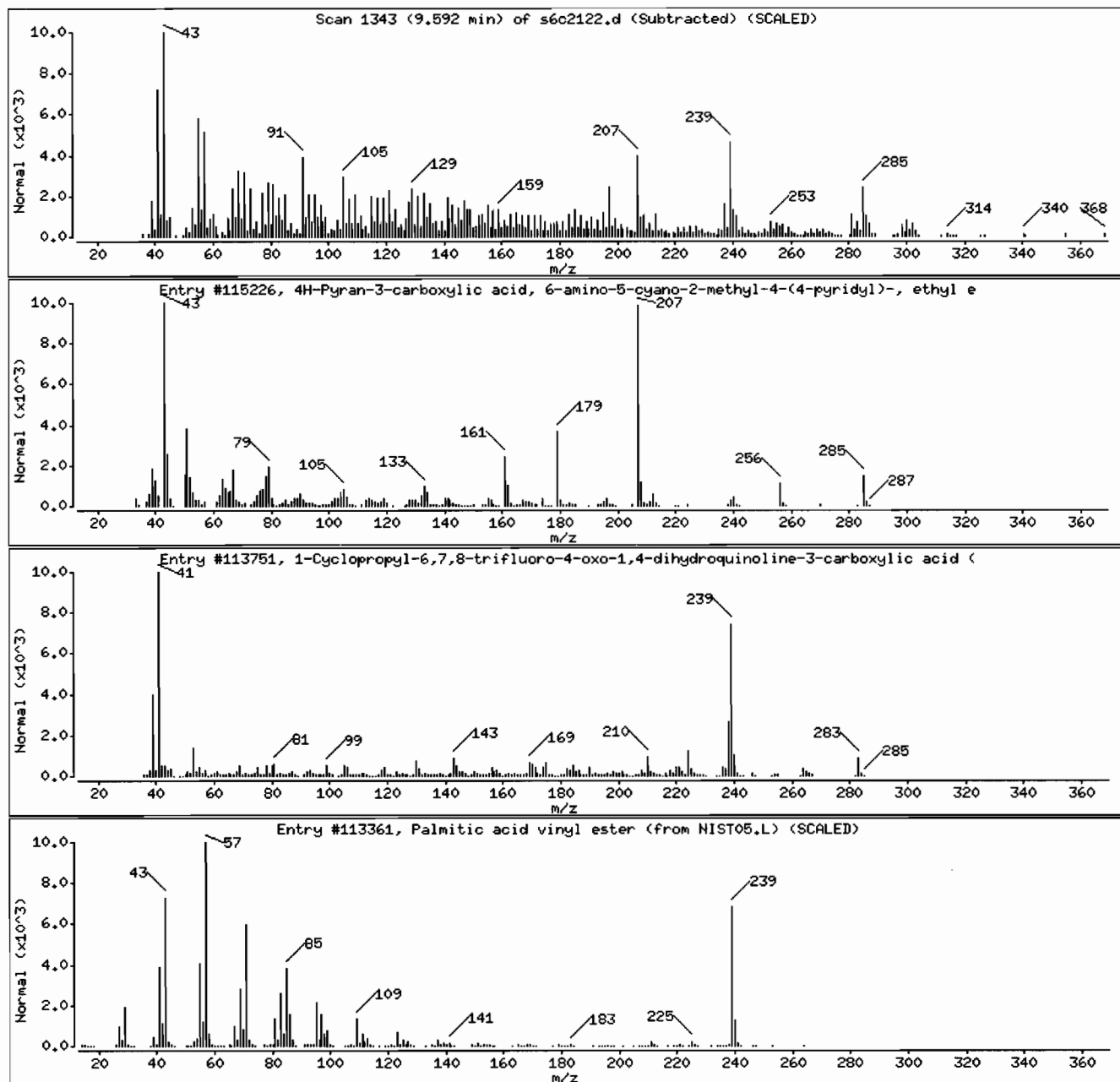
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
4H-Pyran-3-carboxylic acid, 6-amino-5-cy	227177-00-6	NIST05.L	115226	12	C15H15N3O3	285
1-Cyclopropyl-6,7,8-trifluoro-4-oxo-1,4-	94695-52-0	NIST05.L	113751	11	C13H8F3NO3	283
Palmitic acid vinyl ester	693-38-9	NIST05.L	113361	10	C18H34O2	282



Date : 21-MAR-2010 23:44

Client ID: RE36-10-8273

Instrument: MSD6.i

Sample Info: 1248519009196313311SVMI11LANL

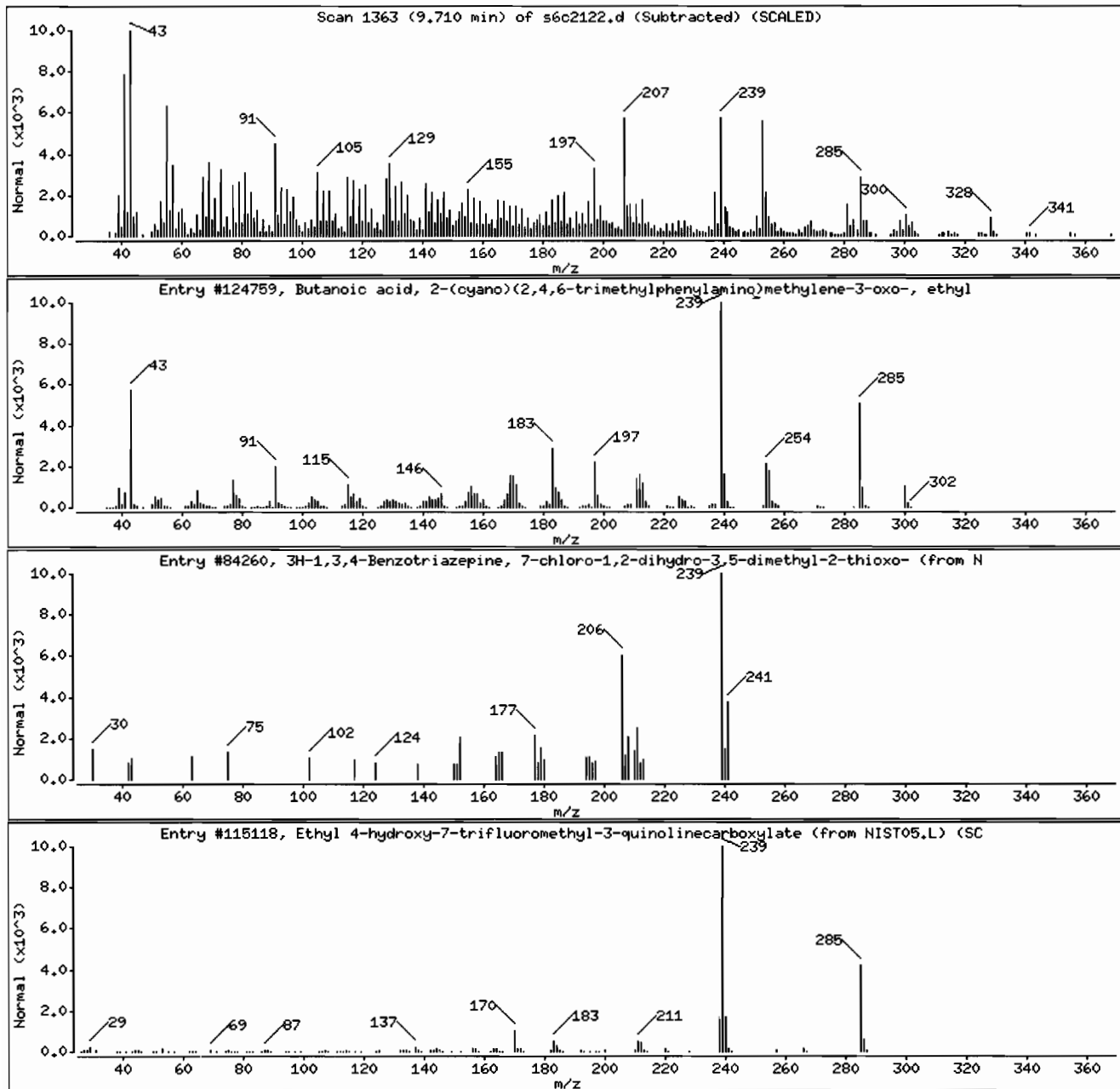
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Butanoic acid, 2-(cyano)(2,4,6-trimethyl	1000267-71-7	NIST05.L	124759	50	C17H20N2O3	300
3H-1,3,4-Benzotriazepine, 7-chloro-1,2-d	105999-04-0	NIST05.L	84260	25	C10H10ClN3S	239
Ethyl 4-hydroxy-7-trifluoromethyl-3-quin	391-02-6	NIST05.L	115118	25	C13H10F3NO3	285



Date : 21-MAR-2010 23:44

Client ID: RE36-10-8273

Instrument: MSD6.i

Sample Info: 1248519009196313311SVMI11LANL

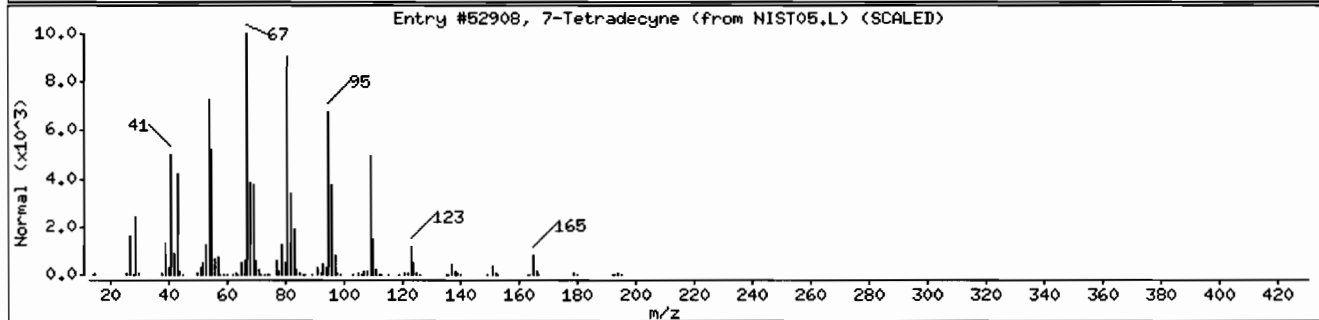
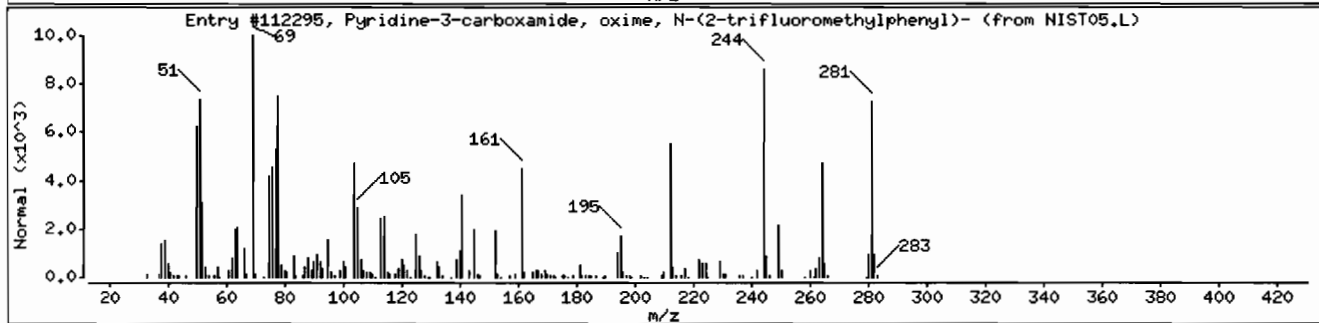
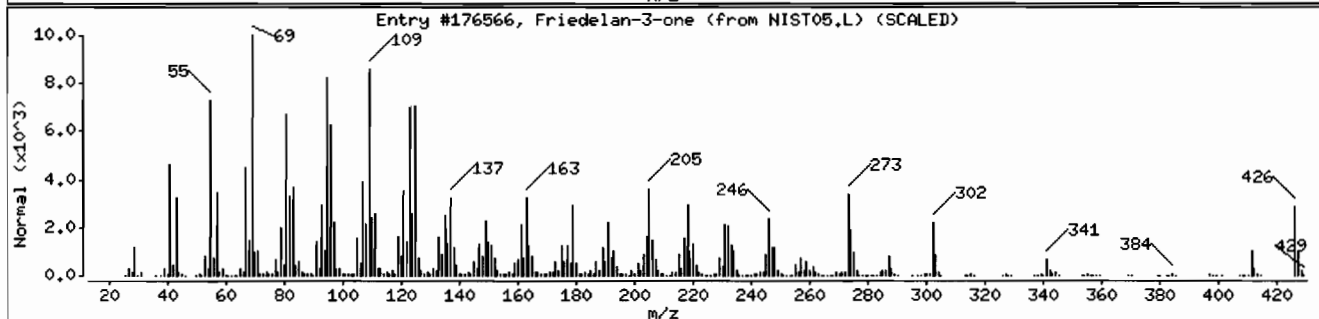
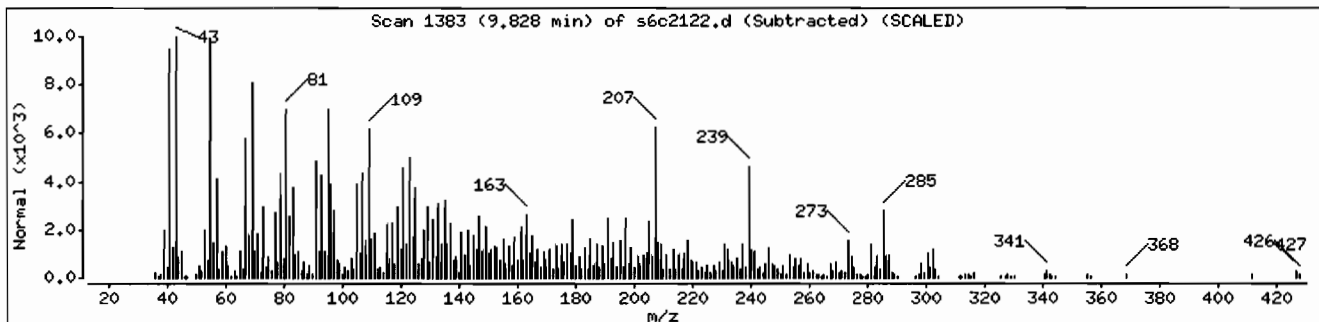
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Friedelan-3-one	559-74-0	NIST05.L	176566	92	C30H50O	426
Pyridine-3-carboxamide, oxime, N-(2-trif	288246-53-7	NIST05.L	112295	91	C13H10F3N3O	281
7-Tetradecyne	35216-11-6	NIST05.L	52908	53	C14H26	194



Date : 21-MAR-2010 23:44

Client ID: RE36-10-8273

Instrument: HSD6.i

Sample Info: 1248519009196313311SVH111LANL

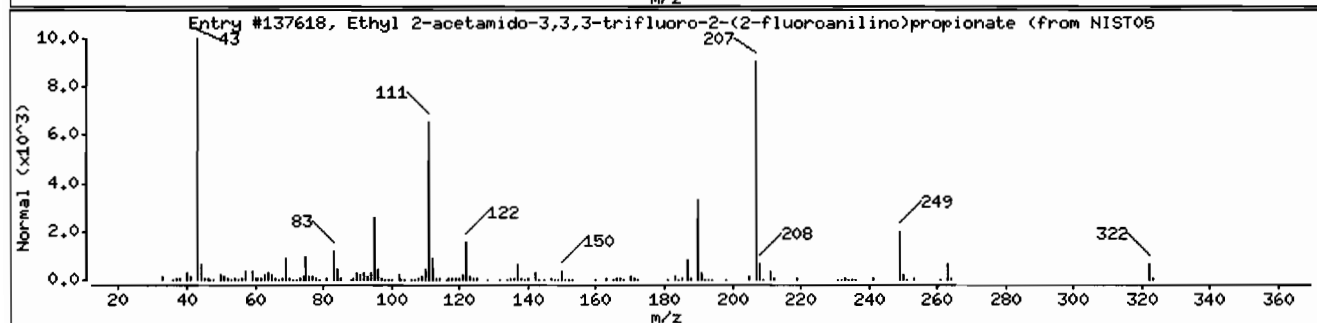
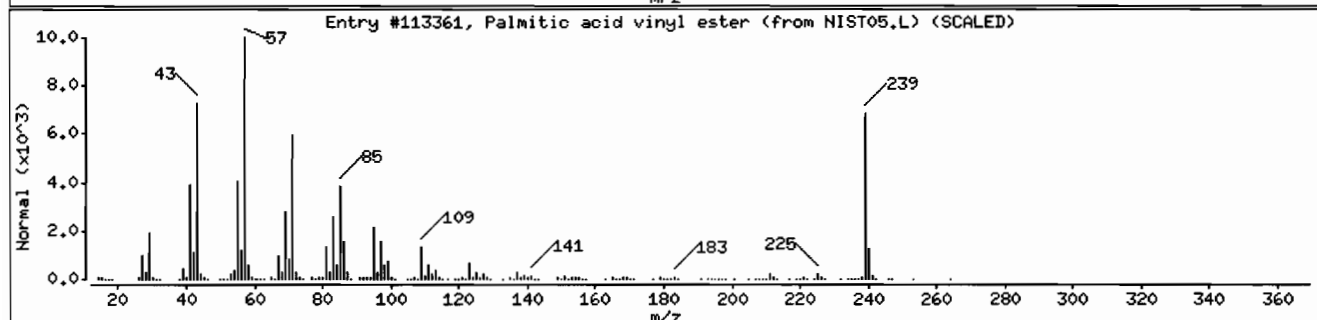
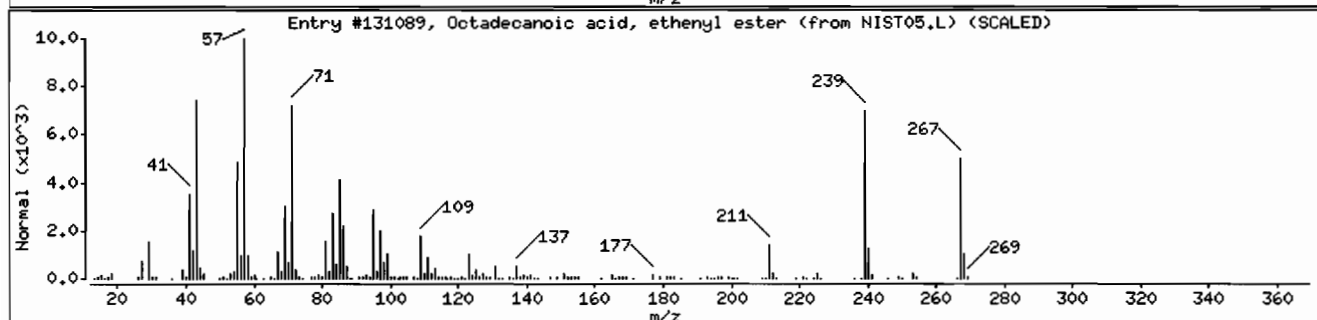
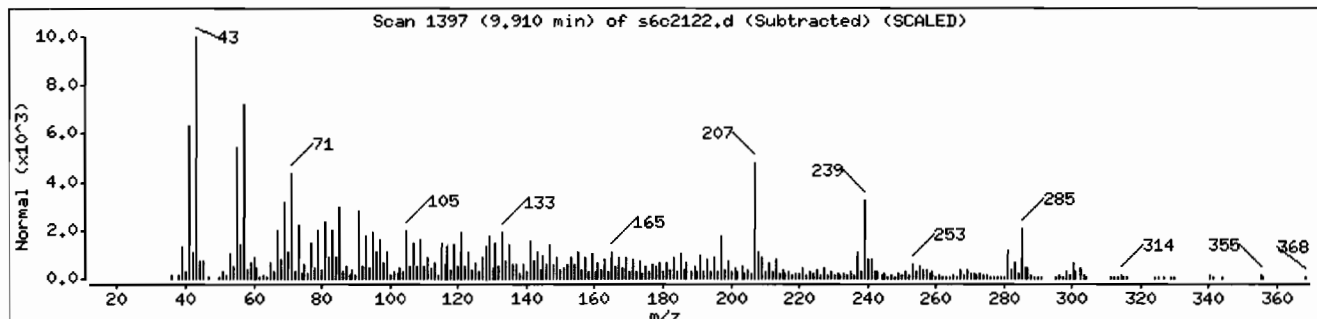
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Octadecanoic acid, ethenyl ester	111-63-7	NIST05.L	131089	20	C20H38O2	310
Palmitic acid vinyl ester	693-38-9	NIST05.L	113361	14	C18H34O2	282
Ethyl 2-acetamido-3,3,3-trifluoro-2-(2-f	328270-14-0	NIST05.L	137618	12	C13H14F4N2O3	322



Date : 21-MAR-2010 23:44

Client ID: RE36-10-8273

Instrument: MSD6.i

Sample Info: 12485190091963133111SVH111LANL

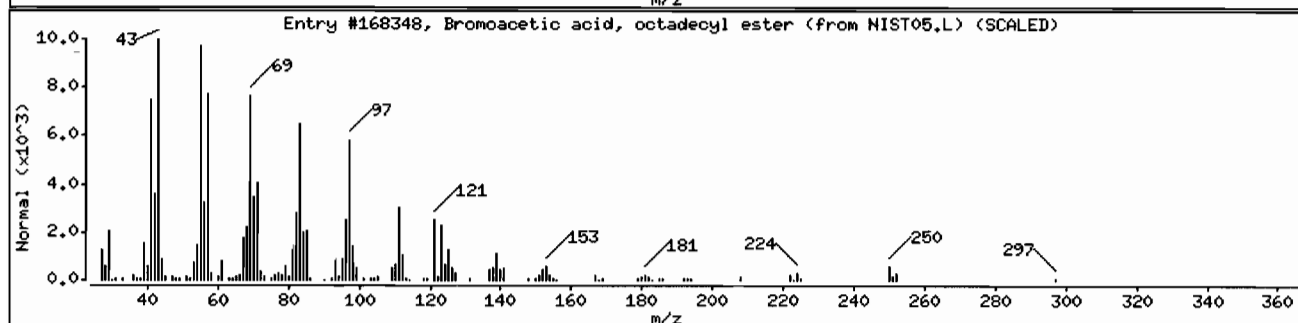
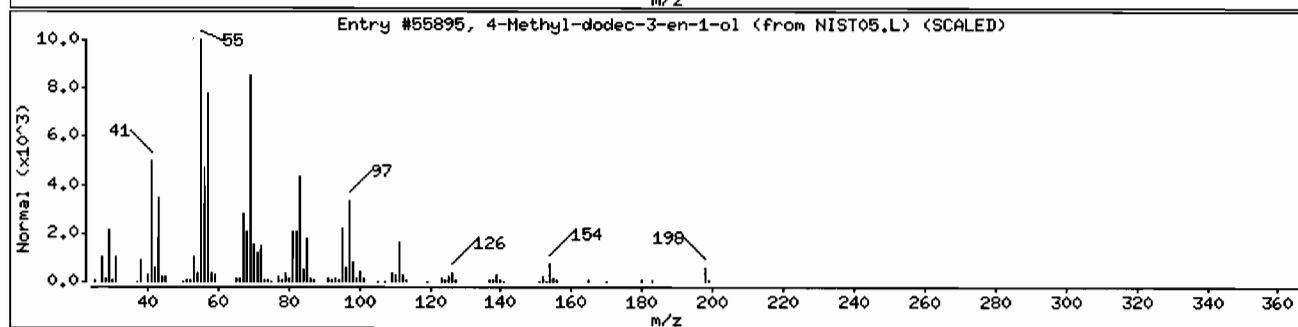
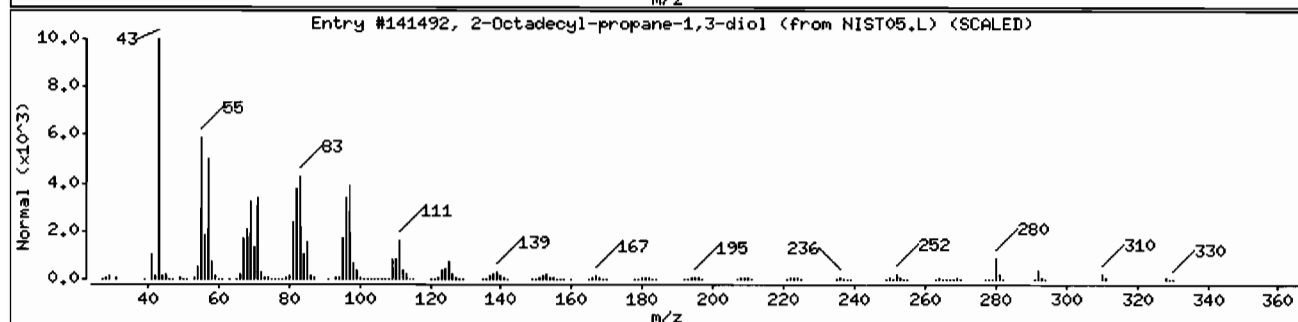
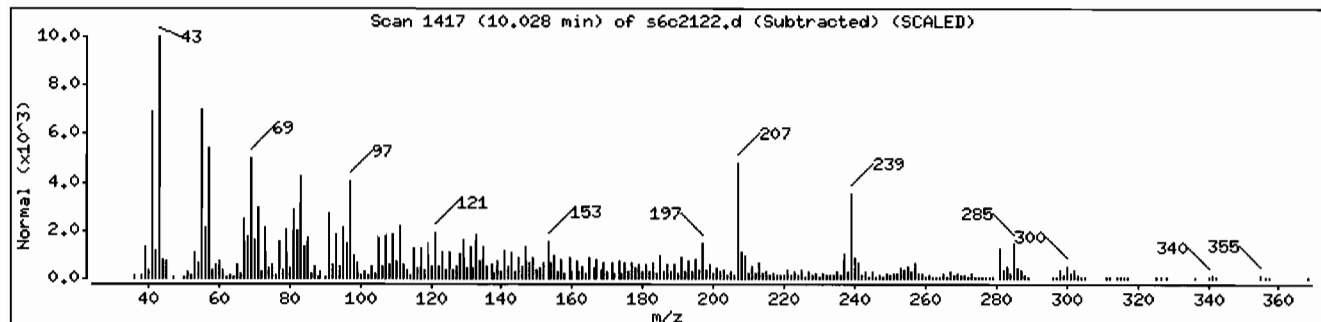
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Octadecyl-propane-1,3-diol	5337-61-1	NIST05.L	141492	58	C21H44O2	328
4-Methyl-dodec-3-en-1-ol	1000192-41-0	NIST05.L	55895	51	C13H26O	198
Bromoacetic acid, octadecyl ester	18992-03-5	NIST05.L	168348	46	C20H39BrO2	390





Date : 21-MAR-2010 23:44

Client ID: RE36-10-8273

Instrument: MSD6.i

Sample Info: I2485190091963133111SVH111LANL

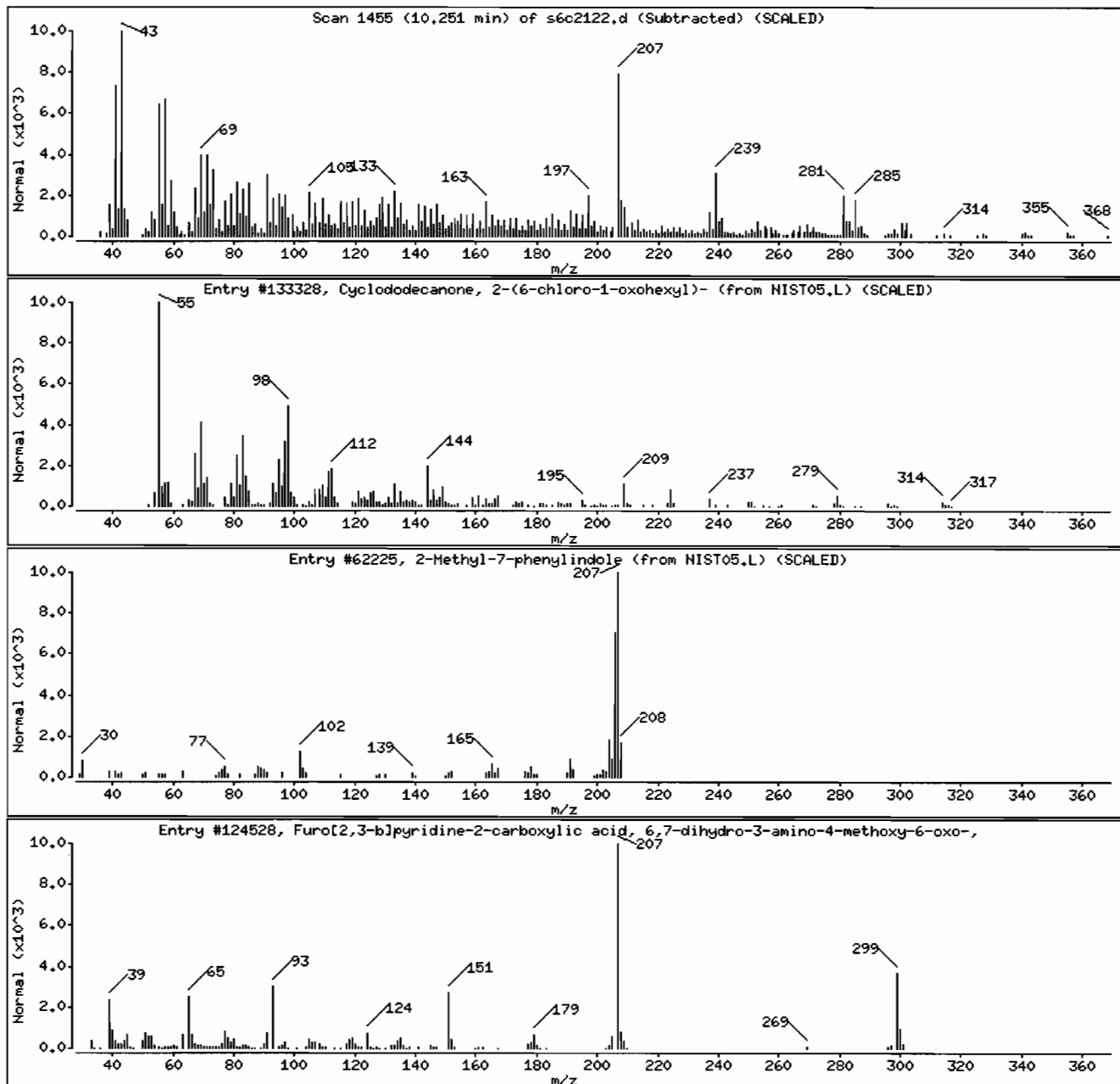
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cyclododecanone, 2-(6-chloro-1-oxohexyl)	1000115-85-4	NIST05.L	133328	46	C18H31ClO2	314
2-Methyl-7-phenylindole	1140-08-5	NIST05.L	62225	38	C15H13N	207
Furo[2,3-b]pyridine-2-carboxylic acid, 6	350795-29-8	NIST05.L	124528	38	C15H12N2O5	300



Date : 21-MAR-2010 23:44

Client ID: RE36-10-8273

Instrument: MSD6.i

Sample Info: 12485190091963133111SVH111LANL

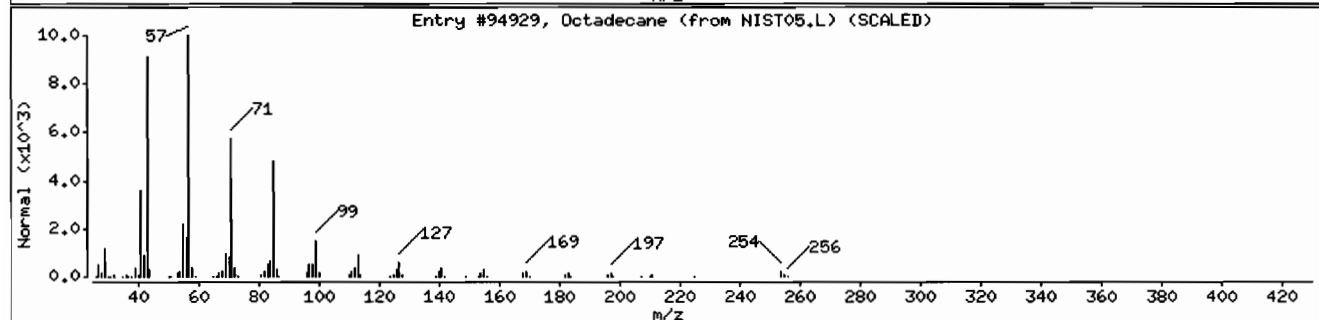
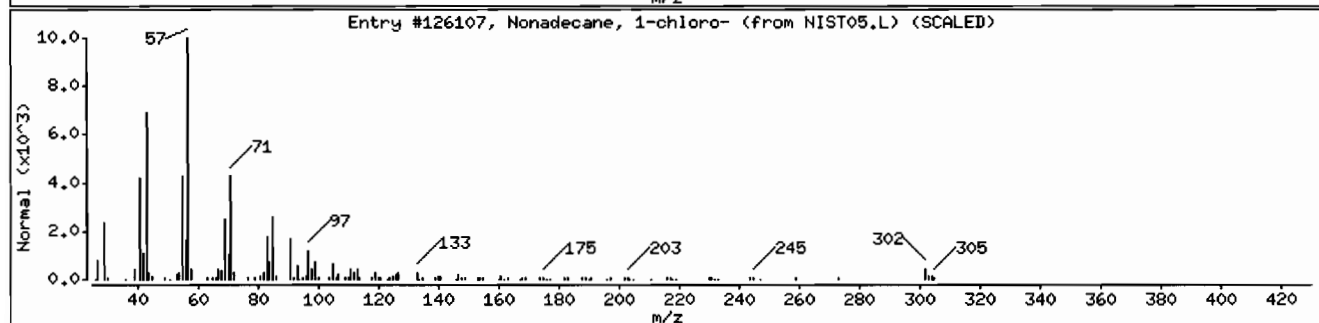
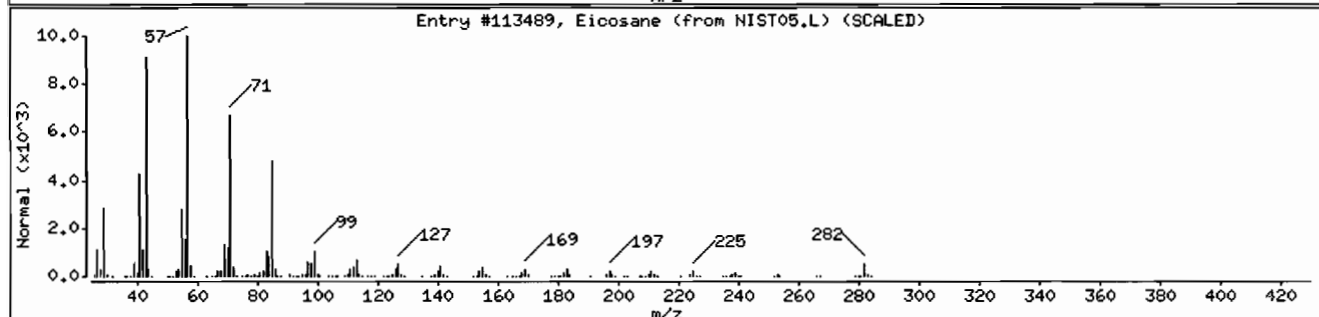
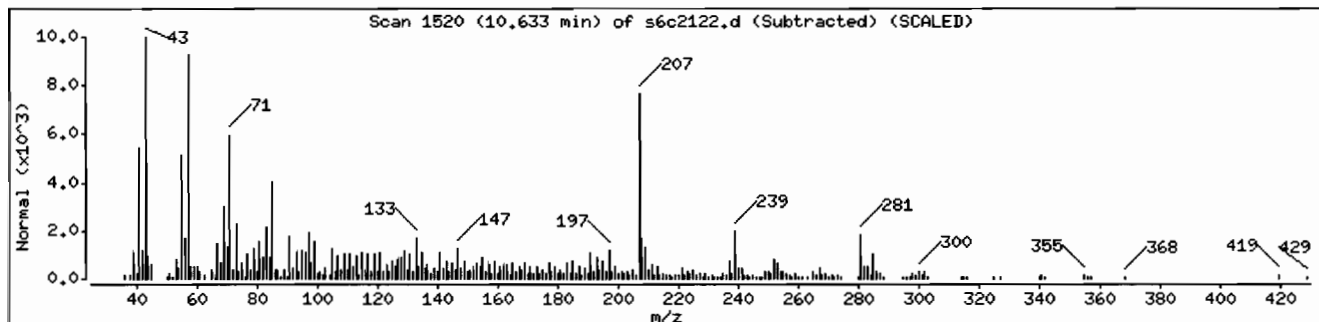
Volume Injected (uL): 0.5

Operator: nag1

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	93	C20H42	282
Nonadecane, 1-chloro-	62016-76-6	NIST05.L	126107	91	C19H39Cl	302
Octadecane	593-45-3	NIST05.L	94929	68	C18H38	254



Date : 21-MAR-2010 23:44

Client ID: RE36-10-8273

Instrument: MSD6.i

Sample Info: I248519009I9631331IISVM11ILANL

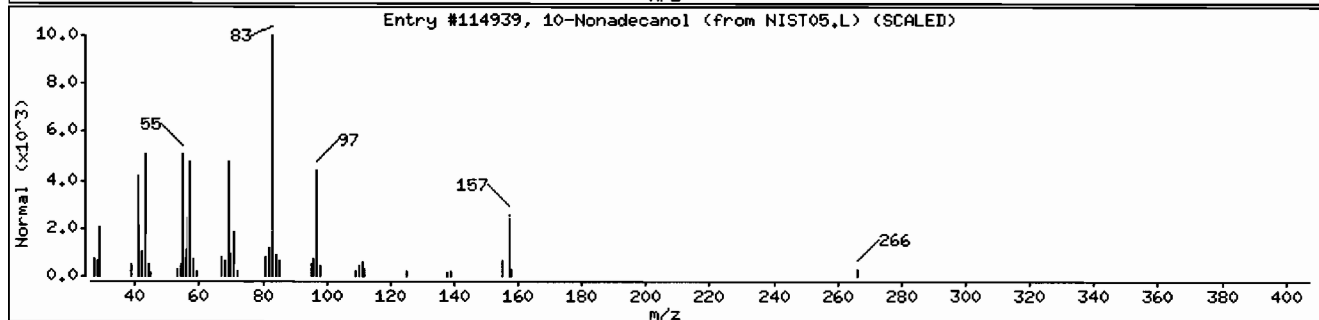
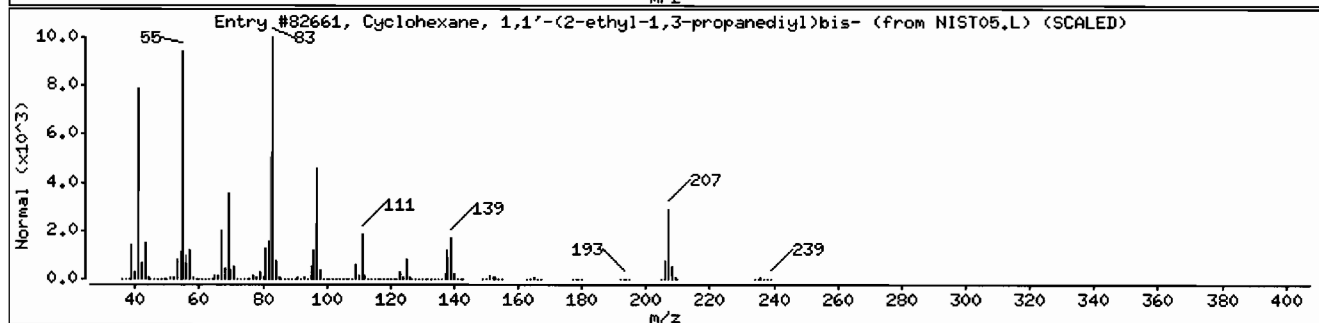
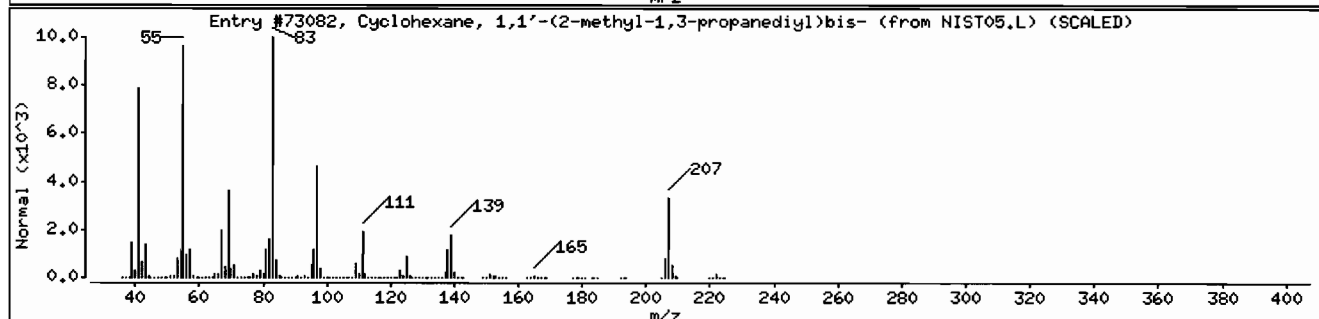
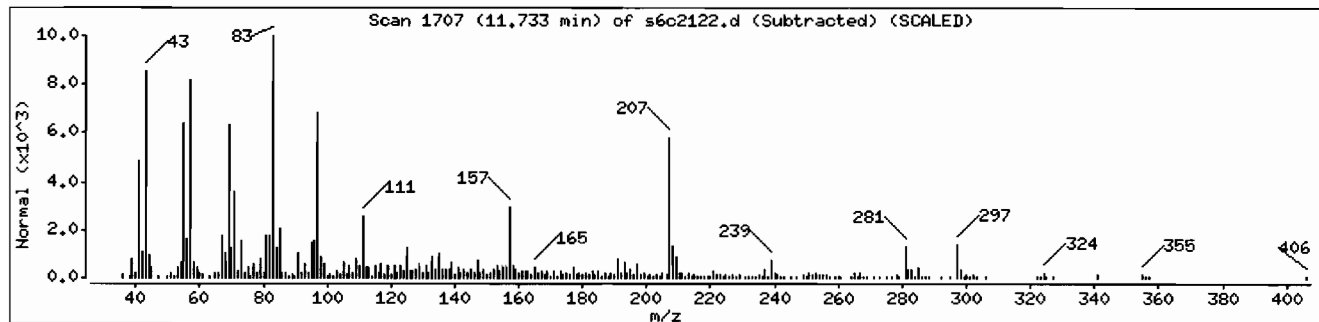
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cyclohexane, 1,1'-(2-methyl-1,3-propanedi	2883-08-1	NIST05.L	73082	49	C16H30	222
Cyclohexane, 1,1'-(2-ethyl-1,3-propanedi	54833-34-0	NIST05.L	82661	49	C17H32	236
10-Nonadecanol	16840-84-9	NIST05.L	114939	46	C19H40O	284



Date : 21-MAR-2010 23:44

Client ID: RE36-10-8273

Instrument: HSD6.i

Sample Info: 1248519009196313311SVH11ILANL

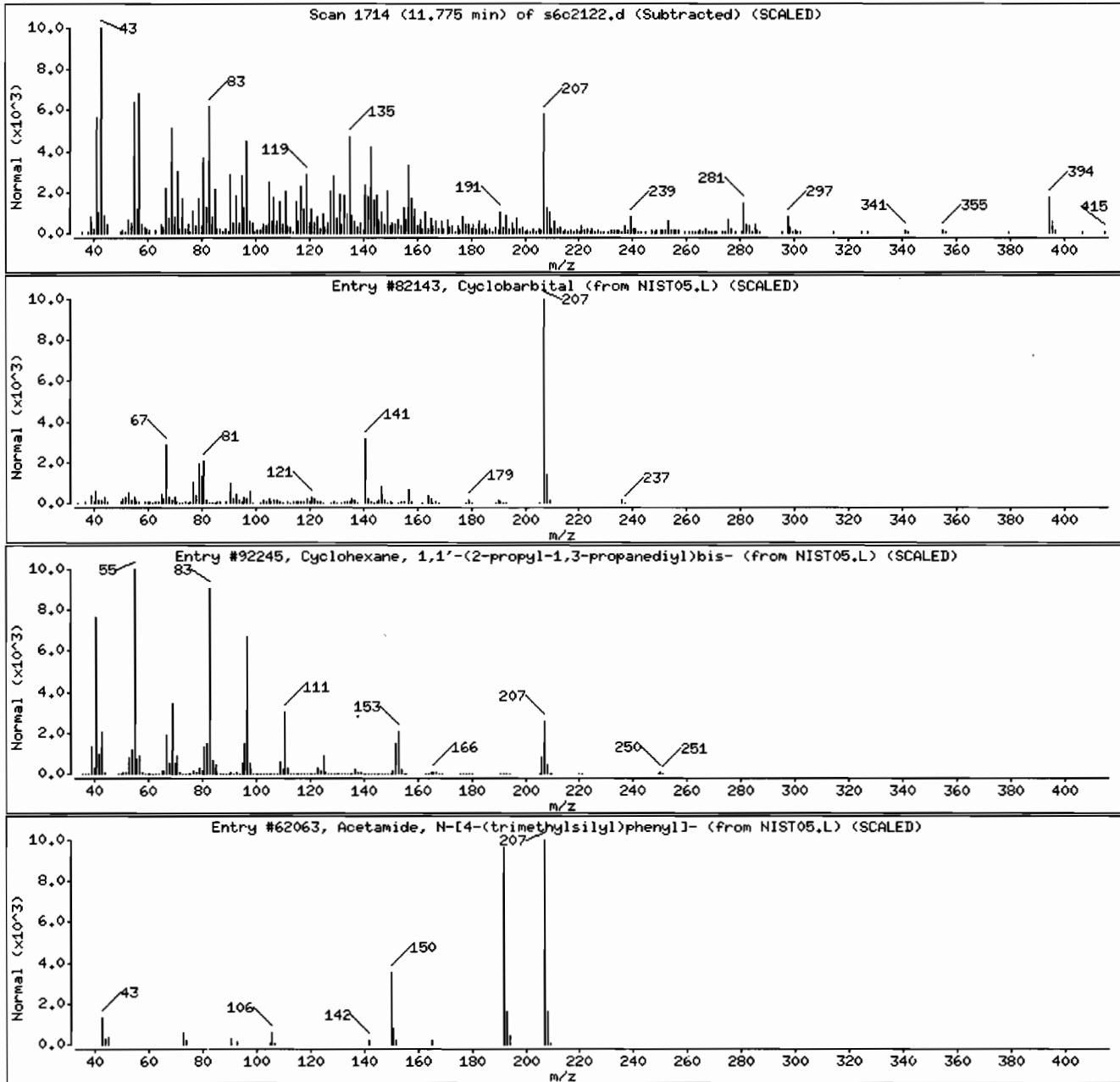
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cyclobarbital	52-31-3	NIST05.L	82143	20	C12H16N2O3	236
Cyclohexane, 1,1'-(2-propyl-1,3-propanediol)-	55030-21-2	NIST05.L	92245	15	C18H34	250
Acetamide, N-[4-(trimethylsilyl)phenyl]-	17983-71-0	NIST05.L	62063	11	C11H17NO3Si	207



Date : 21-MAR-2010 23:44

Client ID: RE36-10-8273

Instrument: MSD6.i

Sample Info: I248519009196313311SVMI11LANL

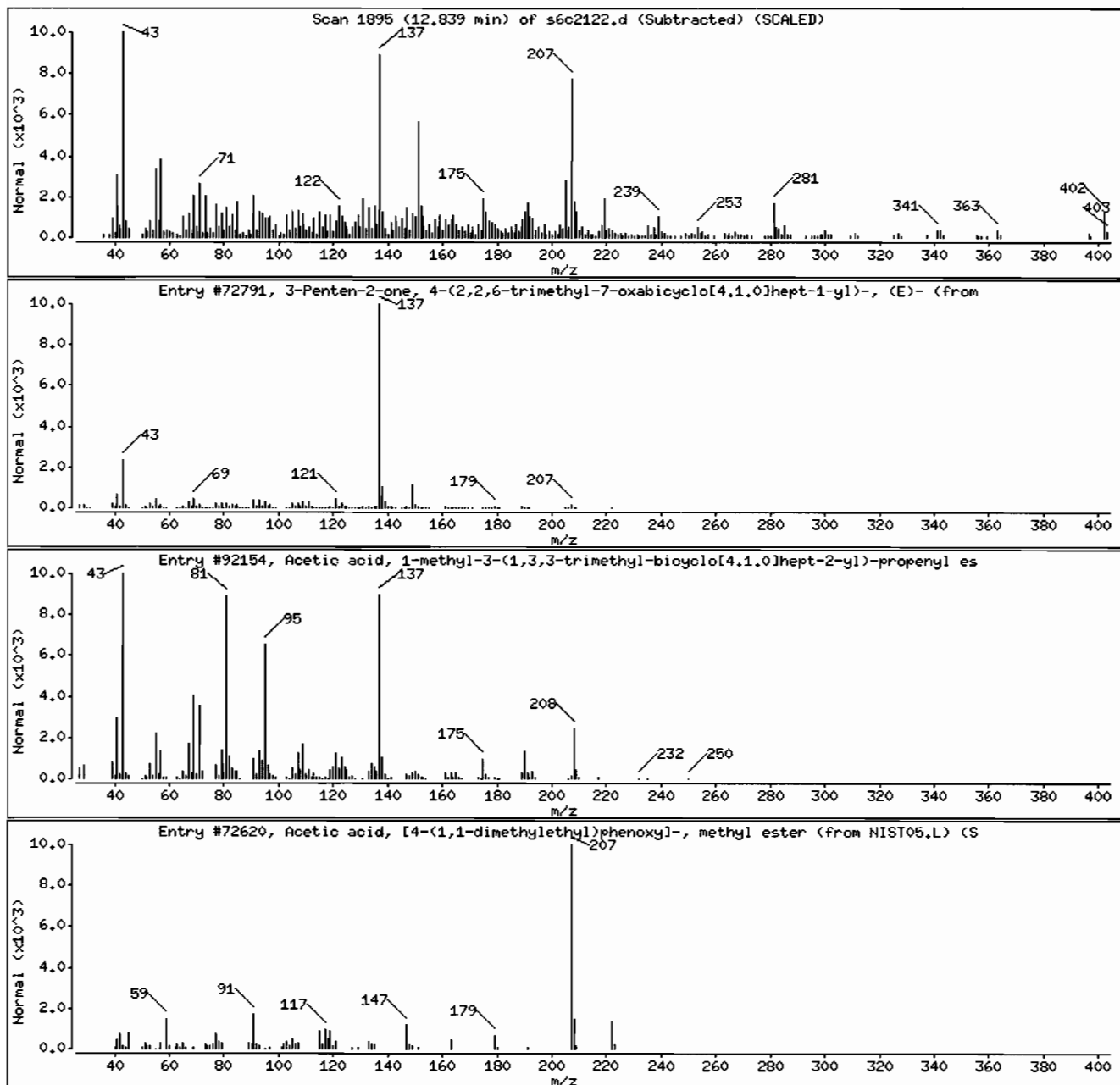
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
3-Penten-2-one, 4-(2,2,6-trimethyl-7-oxa	89128-12-1	NIST05.L	72791	50	C14H22O2	222
Acetic acid, 1-methyl-3-(1,3,3-trimethyl	1000192-22-3	NIST05.L	92154	35	C16H26O2	250
Acetic acid, [4-(1,1-dimethylethyl)pheno	88530-52-3	NIST05.L	72620	35	C13H18O3	222



Date : 21-MAR-2010 23:44

Client ID: RE36-10-8273

Instrument: MSD6.i

Sample Info: 1248519009196313311SVH11|LANL

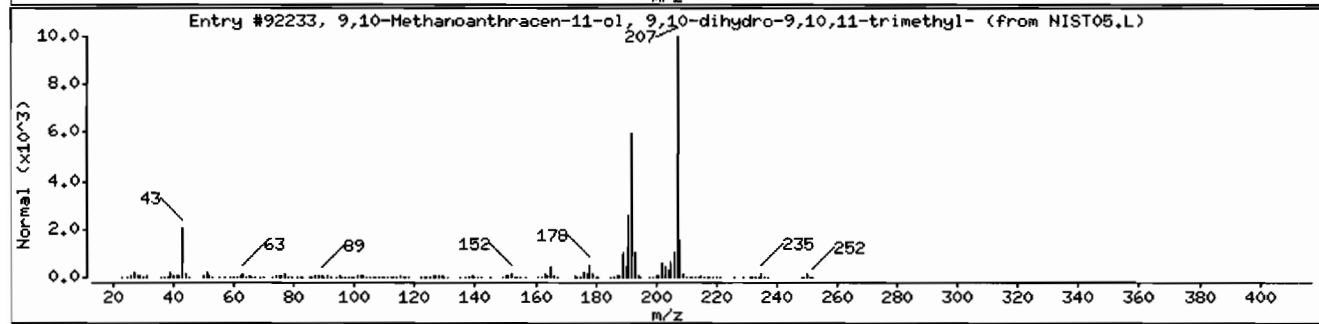
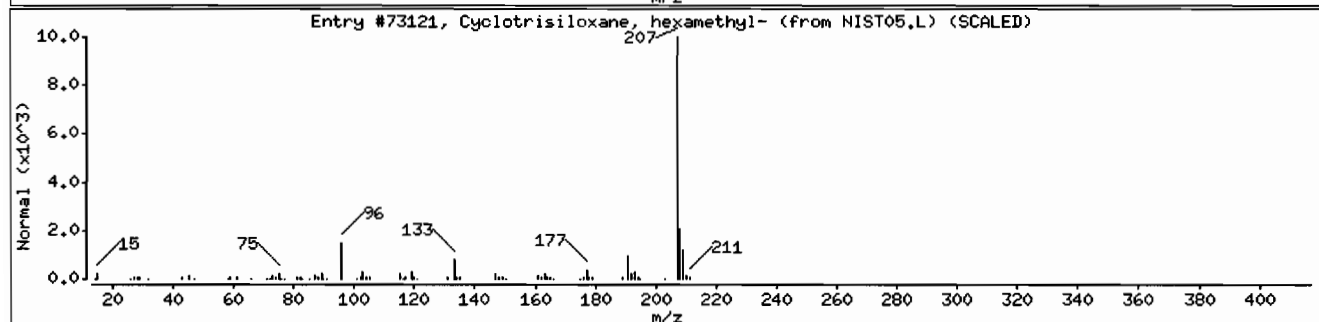
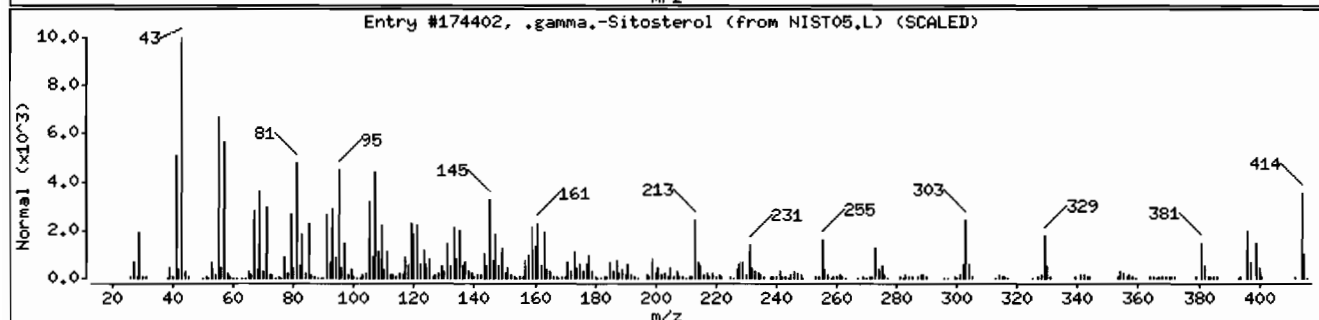
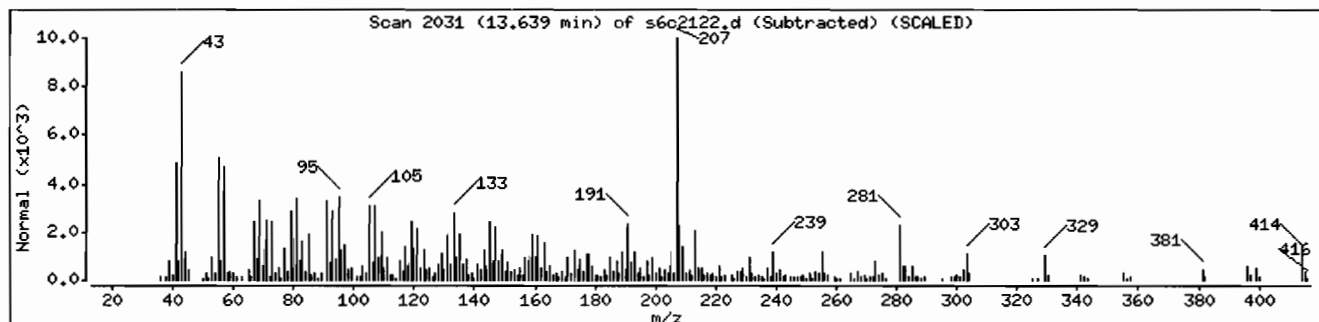
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
.gamma.-Sitosterol	83-47-6	NIST05.L	174402	91	C <sub>29</sub> H <sub>50</sub> O	414
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
9,10-Methanoanthracen-11-ol, 9,10-dihydr	126615-74-5	NIST05.L	92233	46	C <sub>18</sub> H <sub>18</sub> O	250



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

SDG Number: 10-2199  
Lab Sample ID: 248519006

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Aliquot: 30 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 10.2  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 4  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE36-10-8274  
Batch ID: 963133  
Run Date: 03/24/2010 01:26  
Prep Date: 03/10/2010 12:14  
Data File: s6c2329.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	1490	ug/kg	297	1490
108-95-2	Phenol	U	1490	ug/kg	297	1490
95-57-8	2-Chlorophenol	U	1490	ug/kg	297	1490
106-46-7	1,4-Dichlorobenzene	U	1490	ug/kg	297	1490
621-64-7	N-Nitrosodipropylamine	U	1490	ug/kg	297	1490
59-50-7	4-Chloro-3-methylphenol	U	1490	ug/kg	297	1490
83-32-9	Acenaphthene	U	149	ug/kg	49.0	149
121-14-2	2,4-Dinitrotoluene	U	1490	ug/kg	149	1490
100-02-7	4-Nitrophenol	U	1490	ug/kg	490	1490
87-86-5	Pentachlorophenol	U	1490	ug/kg	371	1490
129-00-0	Pyrene	U	149	ug/kg	44.6	149
110-86-1	Pyridine	U	1490	ug/kg	297	1490
62-53-3	Aniline	U	1490	ug/kg	446	1490
111-44-4	bis(2-Chloroethyl) ether	U	1490	ug/kg	297	1490
541-73-1	1,3-Dichlorobenzene	U	1490	ug/kg	297	1490
100-51-6	Benzyl alcohol	U	1490	ug/kg	446	1490
95-50-1	1,2-Dichlorobenzene	U	1490	ug/kg	297	1490
108-60-1	bis(2-Chloroisopropyl)ether	U	1490	ug/kg	297	1490
95-48-7	o-Cresol	U	1490	ug/kg	297	1490
65794-96-9	m,p-Cresols	U	1490	ug/kg	446	1490
67-72-1	Hexachloroethane	U	1490	ug/kg	297	1490
98-95-3	Nitrobenzene	U	1490	ug/kg	297	1490
78-59-1	Isophorone	U	1490	ug/kg	297	1490
88-75-5	2-Nitrophenol	U	1490	ug/kg	297	1490
105-67-9	2,4-Dimethylphenol	U	1490	ug/kg	520	1490
111-91-1	bis(2-Chloroethoxy)methane	U	1490	ug/kg	297	1490
120-83-2	2,4-Dichlorophenol	U	1490	ug/kg	297	1490
65-85-0	Benzoic acid	U	2970	ug/kg	743	2970
91-20-3	Naphthalene	U	149	ug/kg	44.6	149
106-47-8	4-Chloroaniline	U	1490	ug/kg	297	1490
87-68-3	Hexachlorobutadiene	U	1490	ug/kg	297	1490
91-57-6	2-Methylnaphthalene	U	149	ug/kg	29.7	149
77-47-4	Hexachlorocyclopentadiene	U	1490	ug/kg	297	1490
88-06-2	2,4,6-Trichlorophenol	U	1490	ug/kg	297	1490
95-95-4	2,4,5-Trichlorophenol	U	1490	ug/kg	297	1490
91-58-7	2-Chloronaphthalene	U	149	ug/kg	49.0	149
88-74-4	2-Nitroaniline	U	1490	ug/kg	297	1490
99-09-2	<i>o</i> -Nitroaniline					
	3-Nitroaniline	U	1490	ug/kg	297	1490

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

SDG Number: 10-2199	Date Collected: 02/25/2010 12:00	Matrix: R
Lab Sample ID: 248519006	Date Received: 03/03/2010 08:50	%Moisture: 10.2
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-8274	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 963133	Inst: MSD6.I	Dilution: 4
Run Date: 03/24/2010 01:26	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 03/10/2010 12:14	Aliquot: 30 g	Final Volume: 1 mL
Data File: s6c2329.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	1490	ug/kg	297	1490
606-20-2	2,6-Dinitrotoluene	U	1490	ug/kg	149	1490
208-96-8	Acenaphthylene	U	149	ug/kg	44.6	149
51-28-5	2,4-Dinitrophenol	U	2970	ug/kg	564	2970
132-64-9	Dibenzofuran	U	1490	ug/kg	297	1490
84-66-2	Diethylphthalate	U	1490	ug/kg	297	1490
86-73-7	Fluorene	U	149	ug/kg	44.6	149
7005-72-3	4-Chlorophenylphenylether	U	1490	ug/kg	297	1490
534-52-1	2-Methyl-4,6-dinitrophenol	U	1490	ug/kg	297	1490
100-01-6	4-Nitroaniline	U	1490	ug/kg	446	1490
122-39-4	<i>p</i> -Nitroaniline Diphenylamine	U	1490	ug/kg	297	1490
122-66-7	Azobenzene	U	1490	ug/kg	297	1490
101-55-3	<i>1,2</i> -Diphenylhydrazine 4-Bromophenylphenylether	U	1490	ug/kg	297	1490
118-74-1	Hexachlorobenzene	U	1490	ug/kg	297	1490
85-01-8	Phenanthrene	U	149	ug/kg	44.6	149
120-12-7	Anthracene	U	149	ug/kg	29.7	149
84-74-2	Di-n-butylphthalate	U	1490	ug/kg	297	1490
206-44-0	Fluoranthene	U	149	ug/kg	44.6	149
85-68-7	Butylbenzylphthalate	U	1490	ug/kg	297	1490
56-55-3	Benzo(a)anthracene	U	149	ug/kg	44.6	149
91-94-1	3,3'-Dichlorobenzidine	U	1490	ug/kg	446	1490
218-01-9	Chrysene	U	149	ug/kg	44.6	149
117-81-7	bis(2-Ethylhexyl)phthalate	U	1490	ug/kg	297	1490
117-84-0	Di-n-octylphthalate	U	1490	ug/kg	297	1490
205-99-2	Benzo(b)fluoranthene	U	149	ug/kg	44.6	149
207-08-9	Benzo(k)fluoranthene	U	149	ug/kg	44.6	149
50-32-8	Benzo(a)pyrene	U	149	ug/kg	44.6	149
193-39-5	Indeno(1,2,3-cd)pyrene	U	149	ug/kg	44.6	149
53-70-3	Dibenzo(a,h)anthracene	U	149	ug/kg	44.6	149
191-24-2	Benzo(ghi)perylene	U	149	ug/kg	44.6	149
120-82-1	1,2,4-Trichlorobenzene	U	1490	ug/kg	297	1490

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
20475-86-9	Urs-12-en-24-oic acid, 3-oxo-, methyl es	8.95	1170	ug/kg	91	NJ
	Unknown	10.33	918	ug/kg		J



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

SDG Number: 10-2199  
Lab Sample ID: 248519006  
  
Client ID: RE36-10-8274  
Batch ID: 963133  
Run Date: 03/24/2010 01:26  
Prep Date: 03/10/2010 12:14  
Data File: s6c2329.d

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Aliquot: 30 g  
Column: J&W DB-5MS

Matrix: R  
% Moisture: 10.2  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 4  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
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		12.25	1370	ug/kg		J
	Unknown		13.01	1840	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD6.i/s032310.b/s6c2329.d  
Lab Smp Id: 248519006 Client Smp ID: RE36-10-8274  
Inj Date : 24-MAR-2010 01:26  
Operator : nagl Inst ID: MSD6.i  
Smp Info : |248519006|963133|4|SVM|1|LANL  
Misc Info : |MSD8270\_S|WBN100319-01  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD6.i/s032310.b/MSD6-M8270C-AQA-031610.m  
Meth Date : 24-Mar-2010 09:23 jen00986 Quant Type: ISTD  
Cal Date : 17-MAR-2010 04:51 Cal File: s6c1646.d  
Als bottle: 24  
Dil Factor: 4.00000  
Integrator: HP RTE Compound Sublist: 10-2199.sub  
Target Version: 3.50  
Processing Host: hpc1pl

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

Name	Value	Description
DF	4.00000	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	10.21610	% 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	3.952	3.946	(1.000)	305495	40.0000	
* 29 Naphthalene-d8		136	4.816	4.804	(1.000)	1104964	40.0000	
* 46 Acenaphthene-d10		164	6.069	6.057	(1.000)	680294	40.0000	
* 67 Phenanthrene-d10		188	7.234	7.228	(1.000)	1201921	40.0000	
* 91 Chrysene-d12		240	9.639	9.628	(1.000)	1027432	40.0000	
* 98 Perylene-d12		264	11.316	11.298	(1.000)	777949	40.0000	
\$ 3 2-Fluorophenol		112	3.140	3.128	(0.795)	120320	14.1679	2100
\$ 5 Phenol-d5		99	3.663	3.657	(0.927)	152544	14.1243	2100
\$ 20 Nitrobenzene-d5		82	4.310	4.304	(0.895)	68033	6.44085	956
\$ 39 2-Fluorobiphenyl		172	5.551	5.546	(0.915)	144745	8.24676	1220
\$ 60 2,4,6-Tribromophenol		329	6.663	6.651	(1.098)	33986	17.8030	2640
\$ 81 p-Terphenyl-d14		244	8.610	8.604	(0.893)	174295	9.73503	1440

## ION RATIO REPORT

## SV REPORT

Data file: s6c2329.d

Report Date: 03/24/2010 10:06

Lab. ID: 248519006

SampleType: SAMPLE

Injection Date: 24-MAR-2010 01:26

Operator: nagl

Instrument: MSD6.i

Sample Info: |248519006|963133|4|SVM|1|LANL

Miscellaneous Info: |MSD8270\_S|WBN100319-01

Comment:

Method used: /chem/MSD6.i/s032310.b/MSD6-M8270C-AQA-031610.m

Dilution Factor= 4.0

Integrator: HP RTE

Compound Sublist: 10-2199

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
22	Isophorone			CAS#: 78-59-1		
82	68033	4.31	4.47	80-120	100	(T)
138	6049	4.82	4.47	0- 48	9	(T)
-----						
40	2-Chloronaphthalene			CAS#: 91-58-7		
162	639962	6.07	5.66	80-120	100	(T)
164	680294	6.07	5.66	3- 63	106	(QT)
127	515	5.55	5.66	7- 67	0	(QT)
-----						
43	Dimethylphthalate			CAS#: 131-11-3		
163	122796	6.07	5.82	80-120	100	(T)
164	680294	6.07	5.82	0- 41	554	(QT)
-----						
50	2,4-Dinitrotoluene			CAS#: 121-14-2		
165	88752	6.07	6.17	80-120	100	(T)
89	979	6.06	6.17	38- 98	1	(QT)
63	937	6.06	6.17	18- 78	1	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD6.i/s032310.b/s6c2329.d  
Lab Smp Id: 248519006 Client Smp ID: RE36-10-8274  
Inj Date : 24-MAR-2010 01:26  
Operator : nag1 Inst ID: MSD6.i  
Smp Info : |248519006|963133|4|SVM|1|LANL  
Misc Info : |MSD8270 S|WBN100319-01  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD6.i/s032310.b/MSD6-M8270C-AQA-031610.m  
Meth Date : 24-Mar-2010 09:23 jen00986 Quant Type: ISTD  
Cal Date : 17-MAR-2010 04:51 Cal File: s6c1646.d  
Als bottle: 24  
Dil Factor: 4.00000  
Integrator: HP RTE Compound Sublist: 10-2199.sub  
Target Version: 3.50  
Processing Host: hpclp1

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

Name	Value	Description
DF	4.00000	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	10.21610	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 91 Chrysene-d12	9.639	2768151	40.000
* 98 Perylene-d12	11.316	2102714	40.000

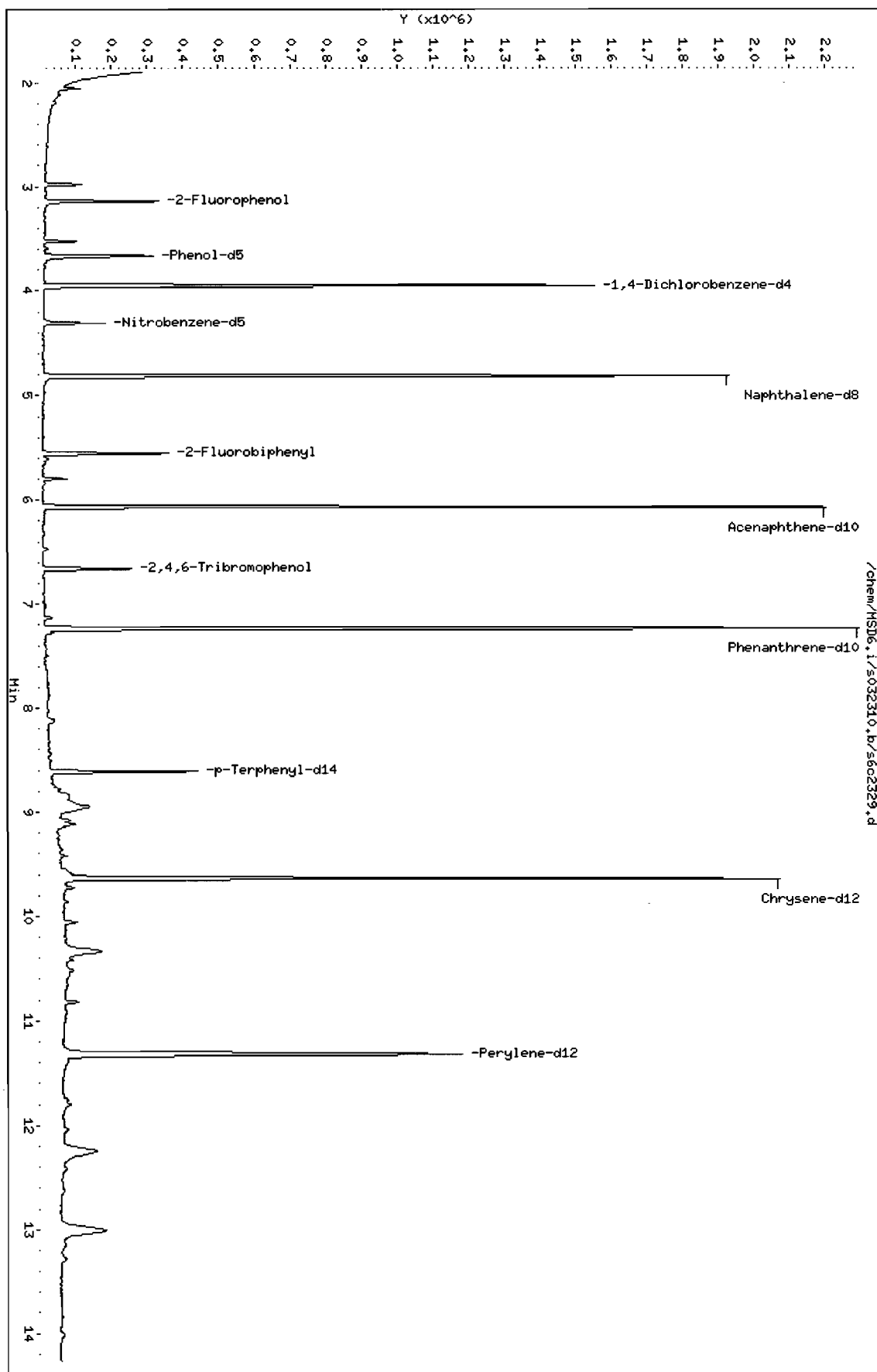
CONCENTRATIONS				QUANT			
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====
Urs-12-en-24-oic acid, 3-oxo-, methyl es					CAS #: 20475-86-9		
8.945	544556	7.86887416	1170	91	NIST05.L	181925	91

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
Unknown					CAS #:		
10.333	427578	6.17854174	918	0		0	91
Unknown					CAS #:		
12.245	484686	9.22020116	1370	0		0	98
Unknown					CAS #:		
13.010	652293	12.4085794	1840	0		0	98

Data File: /chem/MSD6.1/s032310.b/s6c2329.d  
Date : 24-MAR-2010 01:26  
Client ID: RE36-10-8274  
Sample Info: 12485190061963133141SMH11L1ANL  
Volume Injected (uL): 0.5  
Column phase: J&W DB-5MS

Instrument: MSD6.1  
Operator: nag1  
Column diameter: 0.20

Page 1



Date : 24-MAR-2010 01:26

Client ID: RE36-10-8274

Instrument: MSD6.i

Sample Info: I2485190061963133141SVMI11LANL

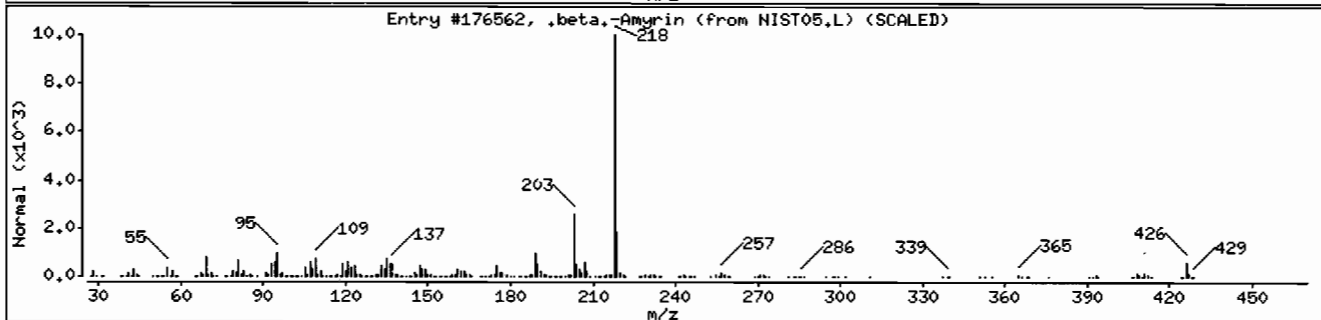
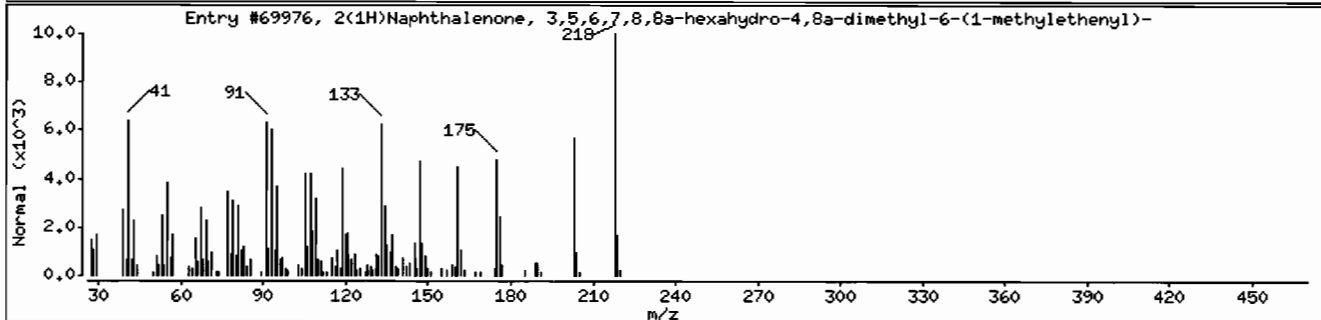
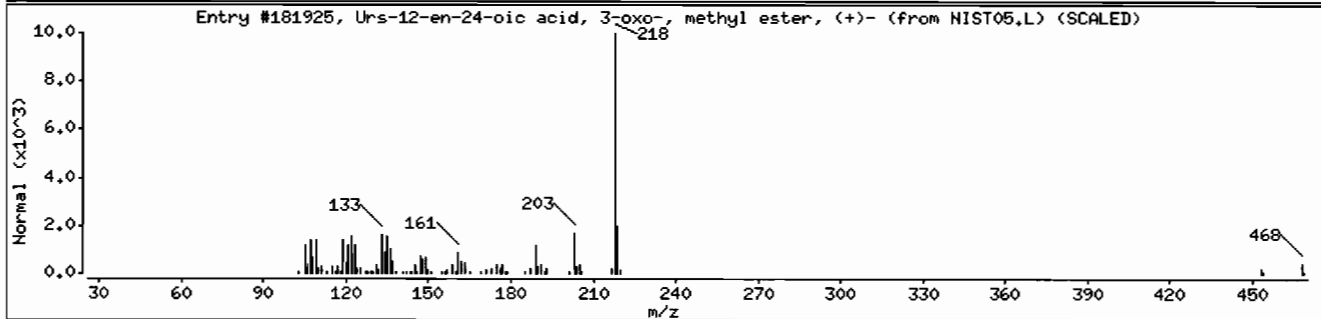
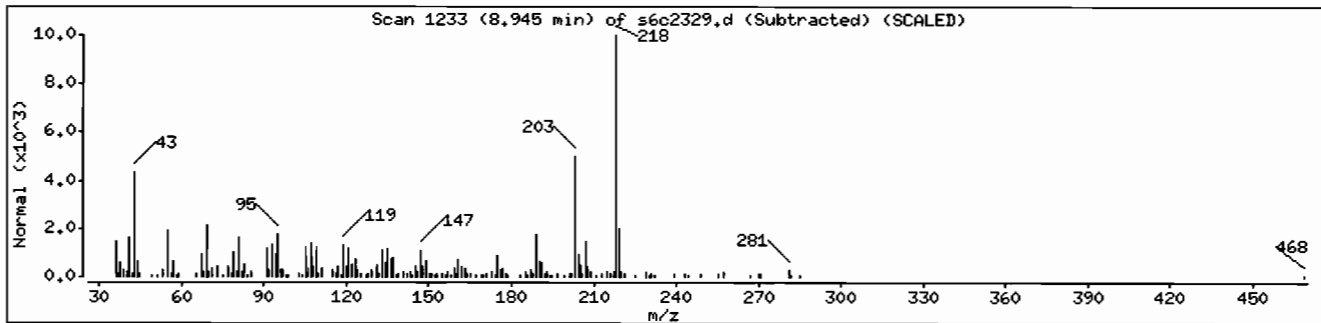
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Urs-12-en-24-oic acid, 3-oxo-, methyl es	20475-86-9	NIST05.L	181925	91	C31H48O3	468
2(1H)naphthalenone, 3,5,6,7,8,8a-hexahyd	1000188-66-5	NIST05.L	69976	81	C15H22O	218
,beta,-Amyrin	559-70-6	NIST05.L	176562	72	C30H50O	426



Date : 24-MAR-2010 01:26

Client ID: RE36-10-8274

Instrument: MSD6.i

Sample Info: 12485190061963133141SVMI11LANL

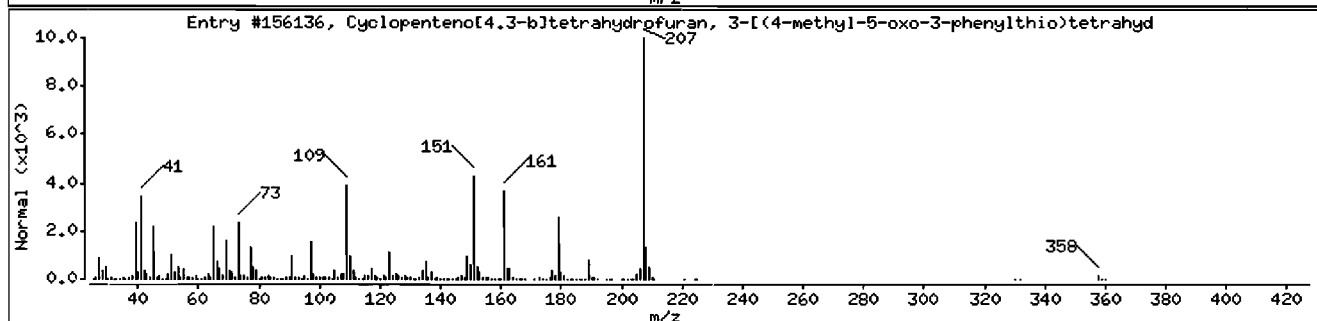
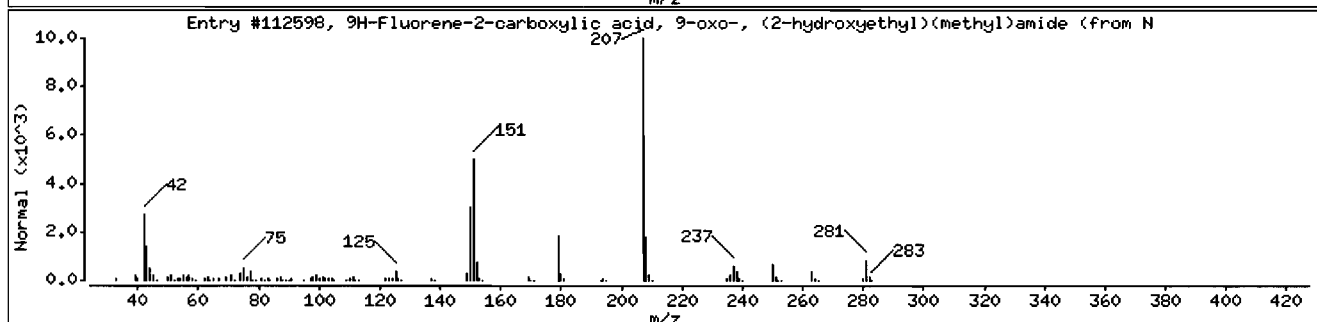
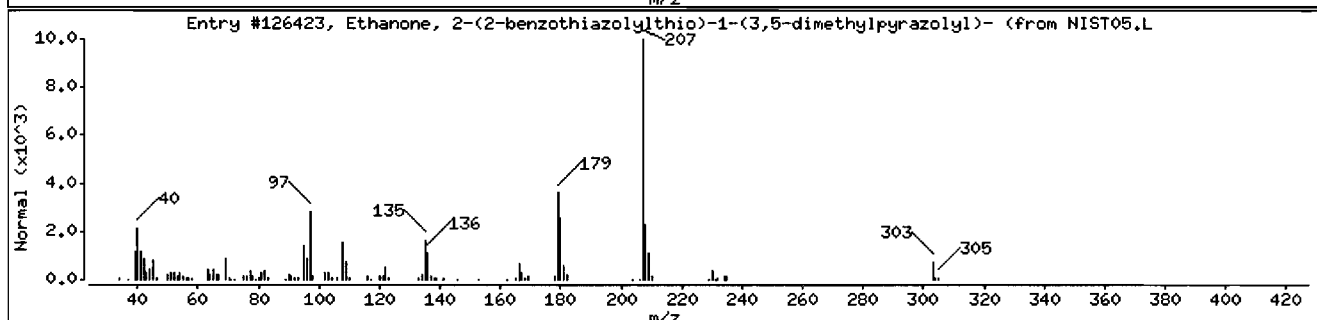
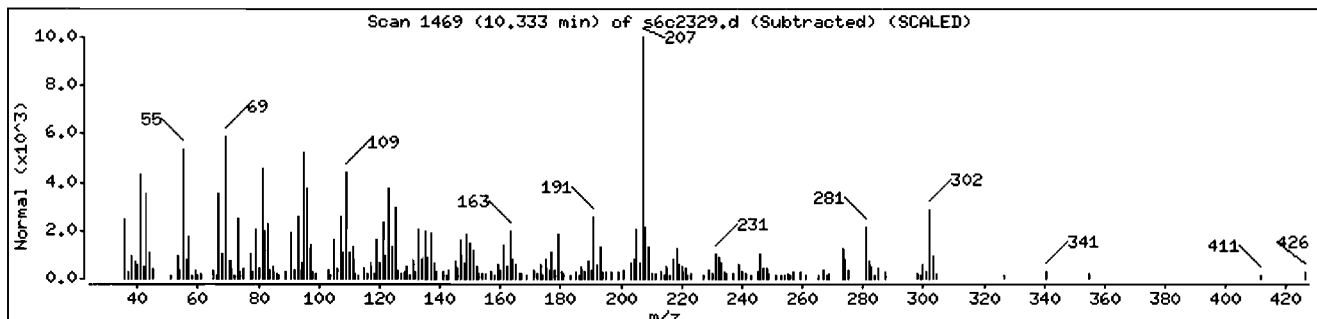
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Ethanone, 2-(2-benzothiazolylthio)-1-(3,	155670-84-1	NIST05.L	126423	38	C14H13N3OS2	303
9H-Fluorene-2-carboxylic acid, 9-oxo-, (	1000316-02-1	NIST05.L	112598	38	C17H15NO3	281
Cyclopenteno[4,3-b]tetrahydrofuran, 3-[(	1000211-22-7	NIST05.L	156136	35	C19H18O5S	358





Date : 24-MAR-2010 01:26

Client ID: RE36-10-8274

Instrument: MSD6.i

Sample Info: I2485190061963133141SVH111LANL

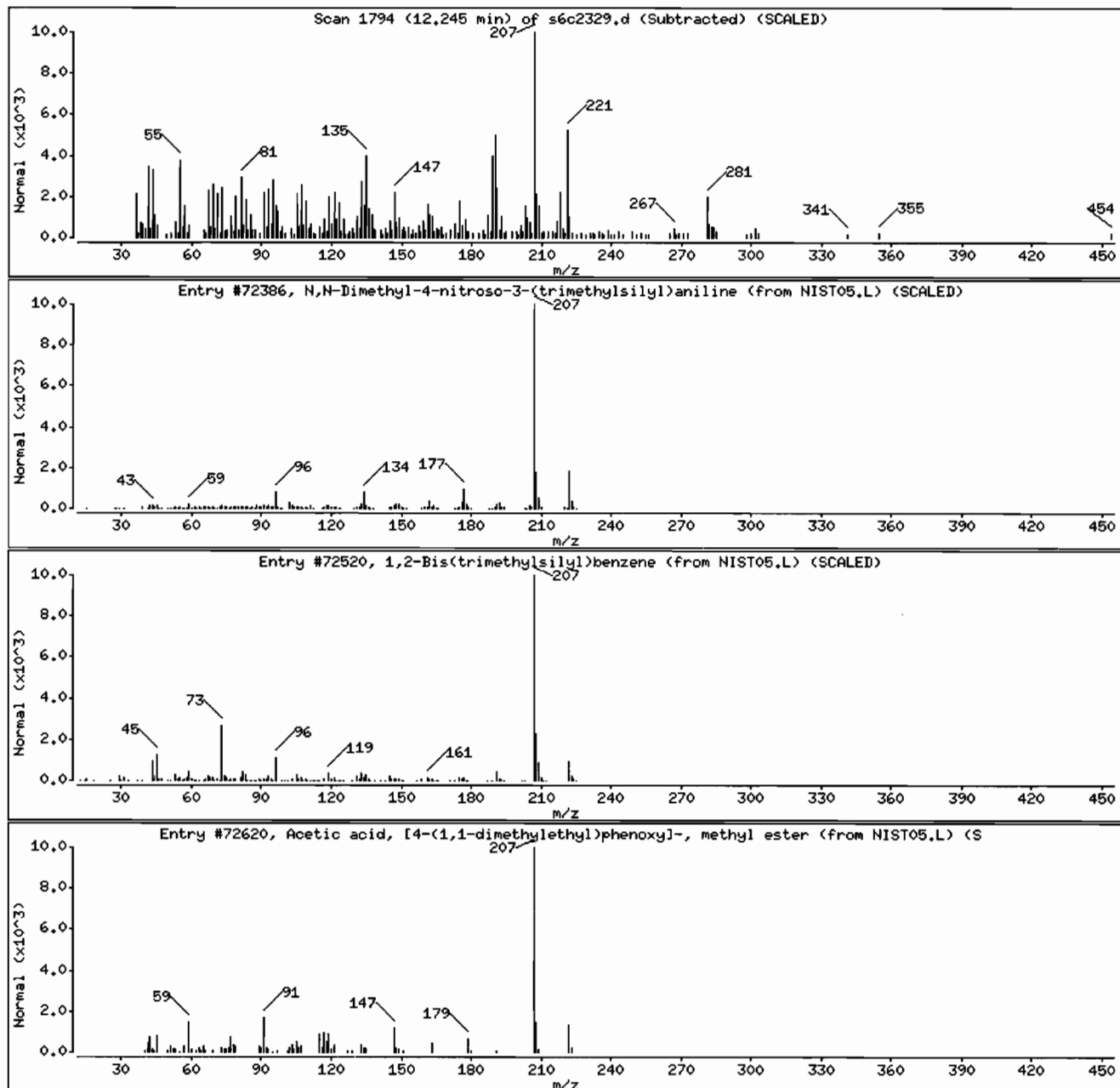
Volume Injected (uL): 0.5

Operator: nag1

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	38	C11H18N2OSi	222
1,2-Bis(trimethylsilyl)benzene	17151-09-6	NIST05.L	72520	30	C12H22Si2	222
Acetic acid, [4-(1,1-dimethylethyl)pheno	88530-52-3	NIST05.L	72620	30	C13H18O3	222



Date : 24-MAR-2010 01:26

Client ID: RE36-10-8274

Instrument: MSD6.i

Sample Info: 12485190061963133141SVMI11LANL

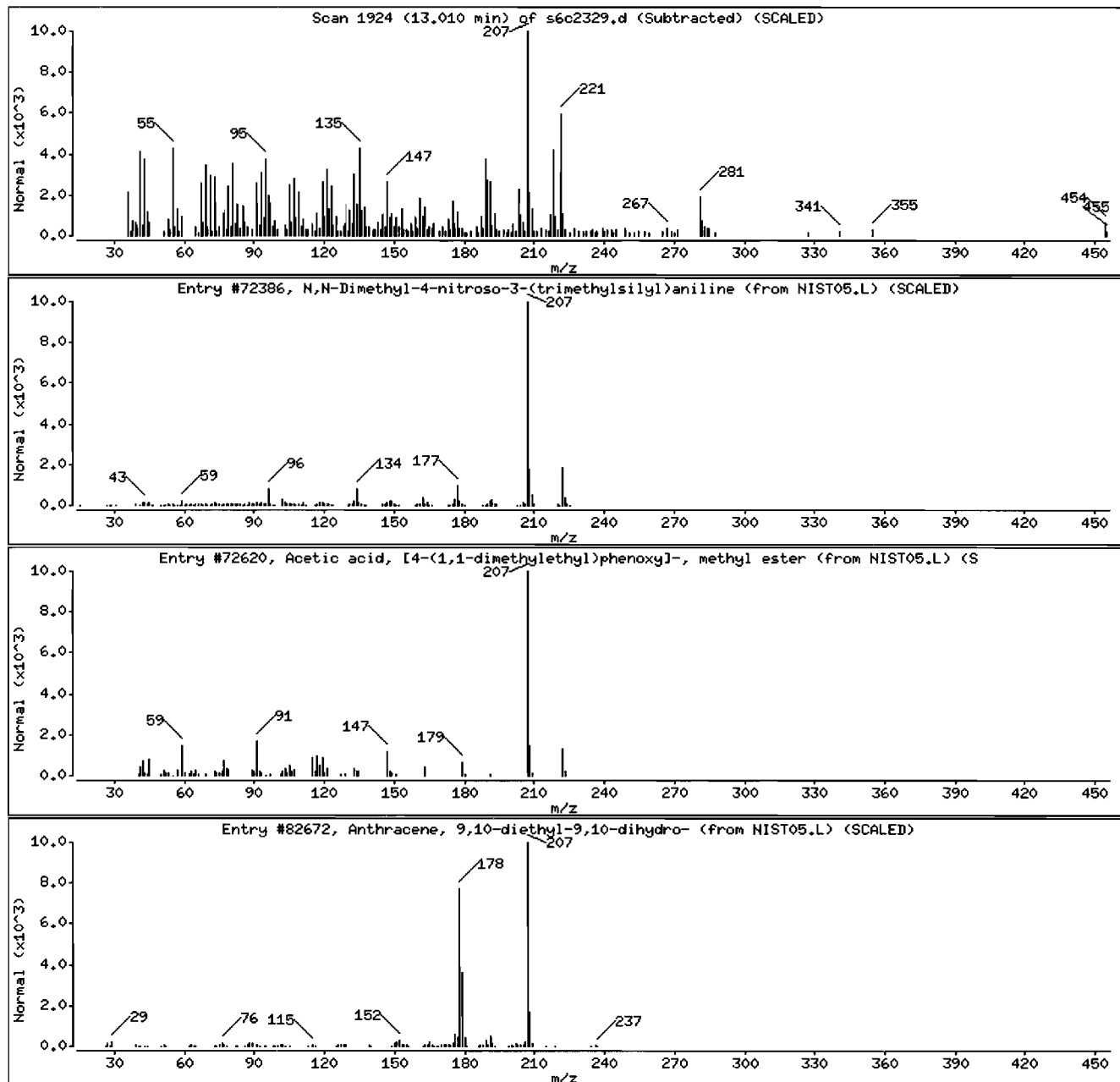
Volume Injected (uL): 0.5

Operator: nag1

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	30	C11H18N2OSi	222
Acetic acid, [4-(1,1-dimethylethyl)pheno	88530-52-3	NIST05.L	72620	25	C13H18O3	222
Anthracene, 9,10-diethyl-9,10-dihydro-	46868-29-5	NIST05.L	82672	25	C18H20	236



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

SDG Number: 10-2199  
Lab Sample ID: 248519010

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Aliquot: 30.09 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 40.1  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 4  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE36-10-8275  
Batch ID: 963133  
Run Date: 03/24/2010 02:12  
Prep Date: 03/10/2010 12:14  
Data File: s6c2331.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	2220	ug/kg	444	2220
108-95-2	Phenol	U	2220	ug/kg	444	2220
95-57-8	2-Chlorophenol	U	2220	ug/kg	444	2220
106-46-7	1,4-Dichlorobenzene	U	2220	ug/kg	444	2220
621-64-7	N-Nitrosodipropylamine	U	2220	ug/kg	444	2220
59-50-7	4-Chloro-3-methylphenol	U	2220	ug/kg	444	2220
83-32-9	Acenaphthene	U	222	ug/kg	73.3	222
121-14-2	2,4-Dinitrotoluene	U	2220	ug/kg	222	2220
100-02-7	4-Nitrophenol	U	2220	ug/kg	733	2220
87-86-5	Pentachlorophenol	U	2220	ug/kg	555	2220
129-00-0	Pyrene	U	222	ug/kg	66.6	222
110-86-1	Pyridine	U	2220	ug/kg	444	2220
62-53-3	Aniline	U	2220	ug/kg	666	2220
111-44-4	bis(2-Chloroethyl) ether	U	2220	ug/kg	444	2220
541-73-1	1,3-Dichlorobenzene	U	2220	ug/kg	444	2220
100-51-6	Benzyl alcohol	U	2220	ug/kg	666	2220
95-50-1	1,2-Dichlorobenzene	U	2220	ug/kg	444	2220
108-60-1	bis(2-Chloroisopropyl)ether	U	2220	ug/kg	444	2220
95-48-7	o-Cresol	U	2220	ug/kg	444	2220
65794-96-9	m,p-Cresols	U	2220	ug/kg	666	2220
67-72-1	Hexachloroethane	U	2220	ug/kg	444	2220
98-95-3	Nitrobenzene	U	2220	ug/kg	444	2220
78-59-1	Isophorone	U	2220	ug/kg	444	2220
88-75-5	2-Nitrophenol	U	2220	ug/kg	444	2220
105-67-9	2,4-Dimethylphenol	U	2220	ug/kg	777	2220
111-91-1	bis(2-Chloroethoxy)methane	U	2220	ug/kg	444	2220
120-83-2	2,4-Dichlorophenol	U	2220	ug/kg	444	2220
65-85-0	Benzoic acid	U	4440	ug/kg	1110	4440
91-20-3	Naphthalene	U	222	ug/kg	66.6	222
106-47-8	4-Chloroaniline	U	2220	ug/kg	444	2220
87-68-3	Hexachlorobutadiene	U	2220	ug/kg	444	2220
91-57-6	2-Methylnaphthalene	U	222	ug/kg	44.4	222
77-47-4	Hexachlorocyclopentadiene	U	2220	ug/kg	444	2220
88-06-2	2,4,6-Trichlorophenol	U	2220	ug/kg	444	2220
95-95-4	2,4,5-Trichlorophenol	U	2220	ug/kg	444	2220
91-58-7	2-Chloronaphthalene	U	222	ug/kg	73.3	222
88-74-4	2-Nitroaniline	U	2220	ug/kg	444	2220
99-09-2	<i>o</i> -Nitroaniline					
	3-Nitroaniline	U	2220	ug/kg	444	2220

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

SDG Number: 10-2199	Date Collected: 02/25/2010 12:00	Matrix: R
Lab Sample ID: 248519010	Date Received: 03/03/2010 08:50	% Moisture: 40.1
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-8275	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 963133	Inst: MSD6.I	Dilution: 4
Run Date: 03/24/2010 02:12	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 03/10/2010 12:14	Aliquot: 30.09 g	Final Volume: 1 mL
Data File: s6c2331.d	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	2220	ug/kg	444	2220
606-20-2	2,6-Dinitrotoluene	U	2220	ug/kg	222	2220
208-96-8	Acenaphthylene	U	222	ug/kg	66.6	222
51-28-5	2,4-Dinitrophenol	U	4440	ug/kg	844	4440
132-64-9	Dibenzofuran	U	2220	ug/kg	444	2220
84-66-2	Diethylphthalate	U	2220	ug/kg	444	2220
86-73-7	Fluorene	U	222	ug/kg	66.6	222
7005-72-3	4-Chlorophenylphenylether	U	2220	ug/kg	444	2220
534-52-1	2-Methyl-4,6-dinitrophenol	U	2220	ug/kg	444	2220
100-01-6	4-Nitroaniline	U	2220	ug/kg	666	2220
	<i>p-Nitroaniline</i>					
122-39-4	Diphenylamine	U	2220	ug/kg	444	2220
122-66-7	Azobenzene	U	2220	ug/kg	444	2220
	<i>1,2-Diphenylhydrazine</i>					
101-55-3	4-Bromophenylphenylether	U	2220	ug/kg	444	2220
118-74-1	Hexachlorobenzene	U	2220	ug/kg	444	2220
85-01-8	Phenanthrene	U	222	ug/kg	66.6	222
120-12-7	Anthracene	U	222	ug/kg	44.4	222
84-74-2	Di-n-butylphthalate	U	2220	ug/kg	444	2220
206-44-0	Fluoranthene	U	222	ug/kg	66.6	222
85-68-7	Butylbenzylphthalate	U	2220	ug/kg	444	2220
56-55-3	Benzo(a)anthracene	U	222	ug/kg	66.6	222
91-94-1	3,3'-Dichlorobenzidine	U	2220	ug/kg	666	2220
218-01-9	Chrysene	U	222	ug/kg	66.6	222
117-81-7	bis(2-Ethylhexyl)phthalate	U	2220	ug/kg	444	2220
117-84-0	Di-n-octylphthalate	U	2220	ug/kg	444	2220
205-99-2	Benzo(b)fluoranthene	U	222	ug/kg	66.6	222
207-08-9	Benzo(k)fluoranthene	U	222	ug/kg	66.6	222
50-32-8	Benzo(a)pyrene	U	222	ug/kg	66.6	222
193-39-5	Indeno(1,2,3-cd)pyrene	U	222	ug/kg	66.6	222
53-70-3	Dibenzo(a,h)anthracene	U	222	ug/kg	66.6	222
191-24-2	Benzo(ghi)perylene	U	222	ug/kg	66.6	222
120-82-1	1,2,4-Trichlorobenzene	U	2220	ug/kg	444	2220

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	10.33	1170	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD6.i/s032310.b/s6c2331.d  
Lab Smp Id: 248519010 Client Smp ID: RE36-10-8275  
Inj Date : 24-MAR-2010 02:12  
Operator : nagl Inst ID: MSD6.i  
Smp Info : |248519010|963133|4|SVM|1|LANL  
Misc Info : |MSD8270\_S|WBN100319-01  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD6.i/s032310.b/MSD6-M8270C-AQA-031610.m  
Meth Date : 24-Mar-2010 09:23 jen00986 Quant Type: ISTD  
Cal Date : 17-MAR-2010 04:51 Cal File: s6c1646.d  
Als bottle: 26  
Dil Factor: 4.00000  
Integrator: HP RTE Compound Sublist: 10-2199.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	4.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.09000	weight of sample
M	40.14950	% 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	3.952	3.946	(1.000)	353973	40.0000	
* 29 Naphthalene-d8	136	4.816	4.804	(1.000)	1254718	40.0000	
* 46 Acenaphthene-d10	164	6.069	6.057	(1.000)	776404	40.0000	
* 67 Phenanthrene-d10	188	7.234	7.228	(1.000)	1391660	40.0000	
* 91 Chrysene-d12	240	9.639	9.628	(1.000)	1227509	40.0000	
* 98 Perylene-d12	264	11.322	11.298	(1.000)	932409	40.0000	
\$ 3 2-Fluorophenol	112	3.140	3.128	(0.795)	143132	14.5458	3230
\$ 5 Phenol-d5	99	3.663	3.657	(0.927)	183036	14.6265	3250
\$ 20 Nitrobenzene-d5	82	4.310	4.304	(0.895)	75683	6.30992	1400
\$ 39 2-Fluorobiphenyl	172	5.551	5.546	(0.915)	162654	8.11995	1800
\$ 60 2,4,6-Tribromophenol	329	6.663	6.651	(1.098)	39471	18.1168	4020
\$ 81 p-Terphenyl-d14	244	8.610	8.604	(0.893)	192684	9.00796	2000

## ION RATIO REPORT

## SV REPORT

Data file: s6c2331.d

Report Date: 03/24/2010 10:06

Lab. ID: 248519010

SampleType: SAMPLE

Injection Date: 24-MAR-2010 02:12

Operator: nagl

Instrument: MSD6.i

Sample Info: |248519010|963133|4|SVM|1|LANL

Miscellaneous Info: |MSD8270\_S|WBN100319-01

Comment:

Method used: /chem/MSD6.i/s032310.b/MSD6-M8270C-AQA-031610.m

Dilution Factor= 4.0

Integrator: HP RTE

Compound Sublist: 10-2199

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
22	Isophorone			CAS#: 78-59-1		
82	75683	4.31	4.47	80-120	100	(T)
138	7277	4.82	4.47	0- 48	10	(T)
-----						
40	2-Chloronaphthalene			CAS#: 91-58-7		
162	723594	6.07	5.66	80-120	100	(T)
164	776404	6.07	5.66	3- 63	107	(QT)
127	522	5.55	5.66	7- 67	0	(QT)
-----						
43	Dimethylphthalate			CAS#: 131-11-3		
163	140267	6.07	5.82	80-120	100	(T)
164	776404	6.07	5.82	0- 41	554	(QT)
-----						
48	2,4-Dinitrophenol			CAS#: 51-28-5		
184	562	6.36	6.07	80-120	100	(T)
154	518	6.47	6.07	843-903	92	(QT)
-----						
50	2,4-Dinitrotoluene			CAS#: 121-14-2		
165	102484	6.07	6.17	80-120	100	(T)
89	1075	6.07	6.17	38- 98	1	(QT)
63	1154	6.06	6.17	18- 78	1	(QT)

Q qualifier indicates ion failed ratio requirement

Data File: /chem/MSD6.i/s032310.b/s6c2331.d  
Report Date: 24-Mar-2010 11:15

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GEL Laboratories LLC

Data file : /chem/MSD6.i/s032310.b/s6c2331.d  
Lab Smp Id: 248519010 Client Smp ID: RE36-10-8275  
Inj Date : 24-MAR-2010 02:12  
Operator : nagl Inst ID: MSD6.i  
Smp Info : |248519010|963133|4|SVM|1|LANL  
Misc Info : |MSD8270 S|WBN100319-01  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD6.i/s032310.b/MSD6-M8270C-AQA-031610.m  
Meth Date : 24-Mar-2010 09:23 jen00986 Quant Type: ISTD  
Cal Date : 17-MAR-2010 04:51 Cal File: s6c1646.d  
Als bottle: 26  
Dil Factor: 4.00000  
Integrator: HP RTE Compound Sublist: 10-2199.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	4.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.09000	weight of sample
M	40.14950	% moisture

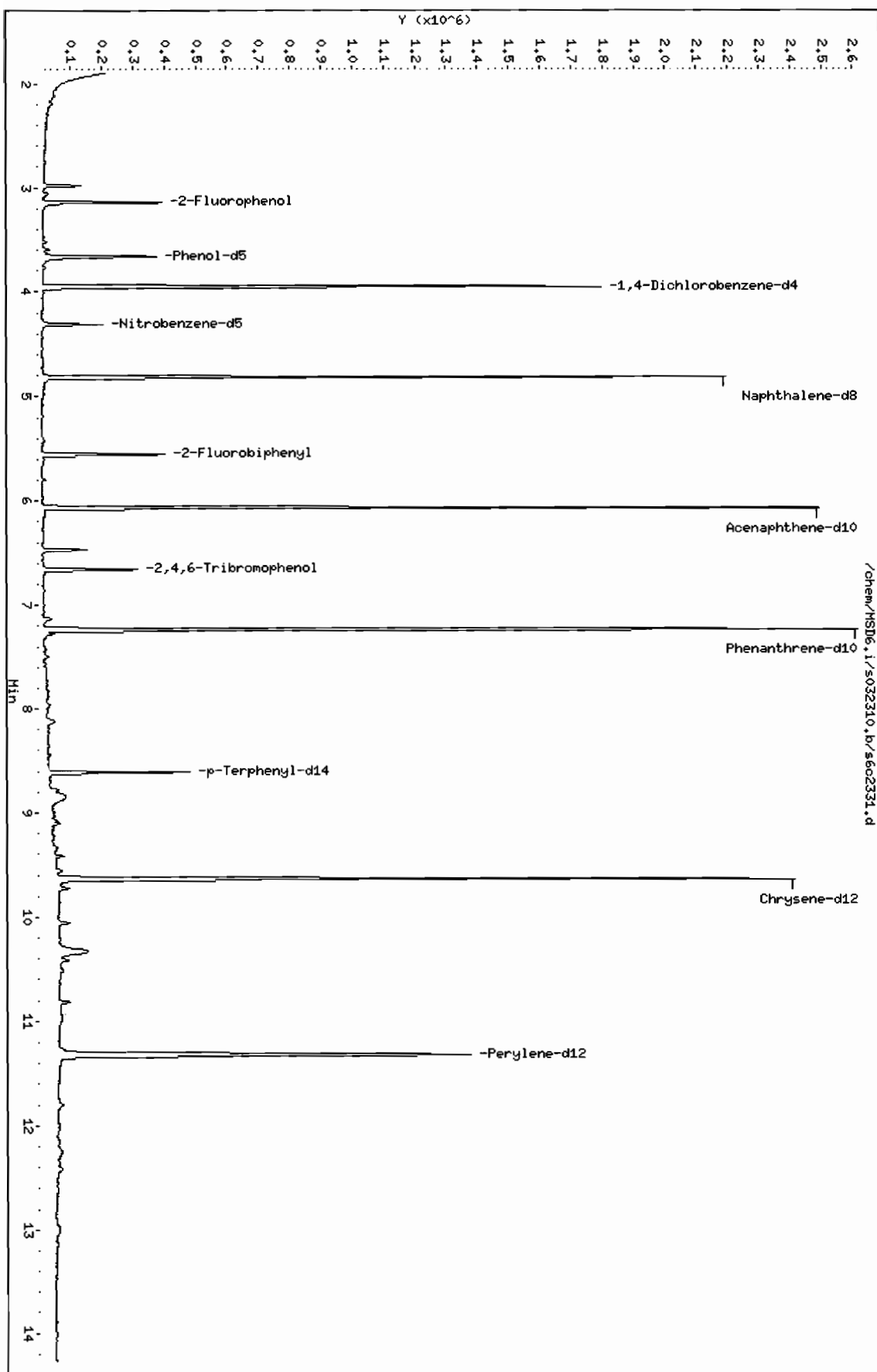
Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 91 Chrysene-d12	9.639	3288367	40.000

CONCENTRATIONS					QUANT		
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
====	====	=====	=====	=====	=====	=====	=====
Unknown					CAS #:		
10.328	433099	5.26825230	1170	0		0	91

Data File: /chem/HSD6.i/s032310.b/s6c2331.d  
Date : 24-MAR-2010 02:12  
Client ID: RE36-10-8275  
Sample Info: 12485190101963133141SVH11LRLN  
Volume Injected (uL): 0.5  
Column Phase: J&W DB-5MS

Instrument: HSD6.i  
Operator: nag1  
Column diameter: 0.20





Data File: /chem/MSD6.i/s032310.b/s6c2331.d

Page 1

Date : 24-MAR-2010 02:12

Client ID: RE36-10-8275

Instrument: MSD6.i

Sample Info: I2485190101963133141SVH11/LANL

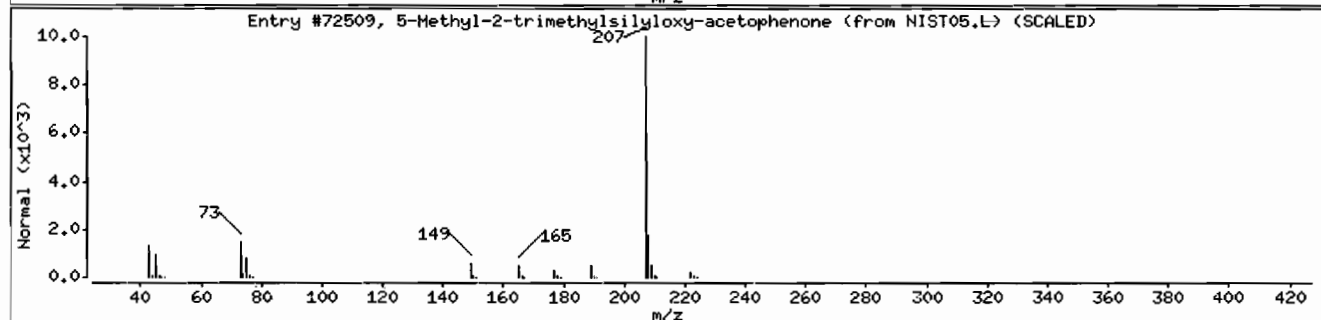
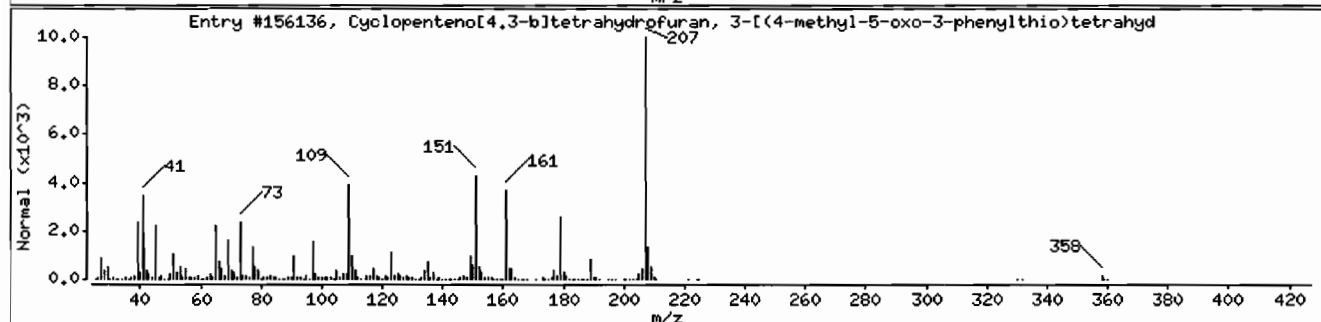
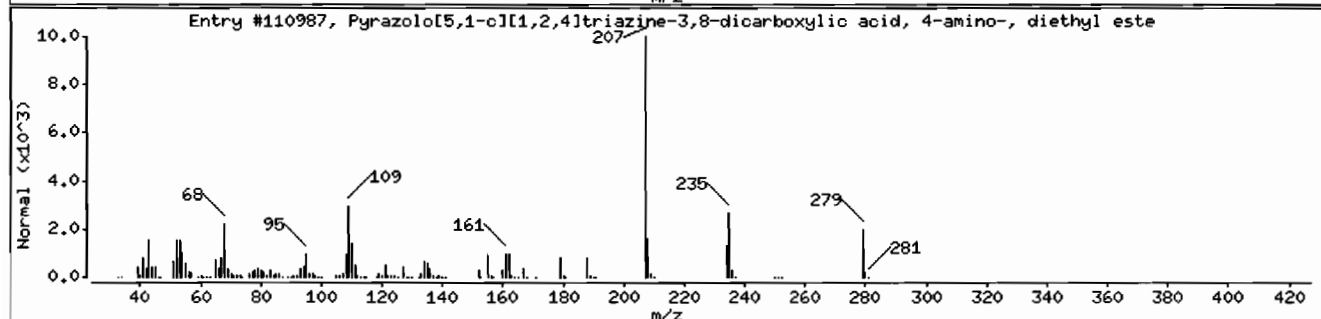
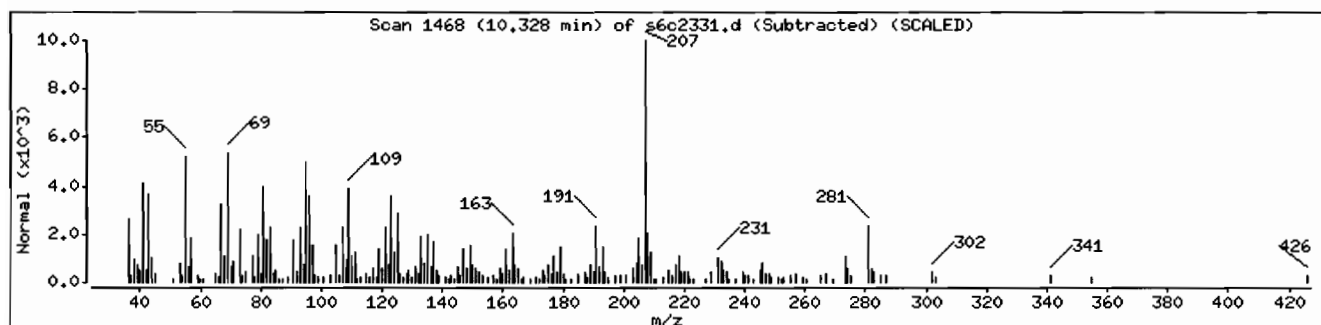
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Pyrazolo[5,1-c][1,2,4]triazine-3,8-dicar	1000302-77-3	NIST05.L	110987	38	C11H13N5O4	279
Cyclopenteno[4,3-b]tetrahydrofuran, 3-[(	1000211-22-7	NIST05.L	156136	35	C19H18O5S	358
5-Methyl-2-trimethylsilyloxy-acetophenon	97389-69-0	NIST05.L	72509	25	C12H18O2Si	222



Semi-Volatile  
Certificate of Analysis  
Sample Summary

SDG Number: 10-2199	Date Collected: 02/25/2010 12:00	Matrix: R
Lab Sample ID: 248519011	Date Received: 03/03/2010 08:50	%Moisture: 14.6
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-8276	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 963133	Inst: MSD6.I	Dilution: 1
Run Date: 03/22/2010 00:31	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 03/10/2010 12:14	Aliquot: 30.03 g	Final Volume: 1 mL
Data File: s6c2124.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	390	ug/kg	78.0	390
108-95-2	Phenol	U	390	ug/kg	78.0	390
95-57-8	2-Chlorophenol	U	390	ug/kg	78.0	390
106-46-7	1,4-Dichlorobenzene	U	390	ug/kg	78.0	390
621-64-7	N-Nitrosodipropylamine	U	390	ug/kg	78.0	390
59-50-7	4-Chloro-3-methylphenol	U	390	ug/kg	78.0	390
83-32-9	Acenaphthene	U	39.0	ug/kg	12.9	39.0
121-14-2	2,4-Dinitrotoluene	U	390	ug/kg	39.0	390
100-02-7	4-Nitrophenol	U	390	ug/kg	129	390
87-86-5	Pentachlorophenol	U	390	ug/kg	97.5	390
129-00-0	Pyrene	U	39.0	ug/kg	11.7	39.0
110-86-1	Pyridine	U	390	ug/kg	78.0	390
62-53-3	Aniline	U	390	ug/kg	117	390
111-44-4	bis(2-Chloroethyl) ether	U	390	ug/kg	78.0	390
541-73-1	1,3-Dichlorobenzene	U	390	ug/kg	78.0	390
100-51-6	Benzyl alcohol	U	390	ug/kg	117	390
95-50-1	1,2-Dichlorobenzene	U	390	ug/kg	78.0	390
108-60-1	bis(2-Chloroisopropyl)ether	U	390	ug/kg	78.0	390
95-48-7	o-Cresol	U	390	ug/kg	78.0	390
65794-96-9	m,p-Cresols	U	390	ug/kg	117	390
67-72-1	Hexachloroethane	U	390	ug/kg	78.0	390
98-95-3	Nitrobenzene	U	390	ug/kg	78.0	390
78-59-1	Isophorone	U	390	ug/kg	78.0	390
88-75-5	2-Nitrophenol	U	390	ug/kg	78.0	390
105-67-9	2,4-Dimethylphenol	U	390	ug/kg	137	390
111-91-1	bis(2-Chloroethoxy)methane	U	390	ug/kg	78.0	390
120-83-2	2,4-Dichlorophenol	U	390	ug/kg	78.0	390
65-85-0	Benzoic acid	U	780	ug/kg	195	780
91-20-3	Naphthalene	U	39.0	ug/kg	11.7	39.0
106-47-8	4-Chloroaniline	U	390	ug/kg	78.0	390
87-68-3	Hexachlorobutadiene	U	390	ug/kg	78.0	390
91-57-6	2-Methylnaphthalene	U	39.0	ug/kg	7.80	39.0
77-47-4	Hexachlorocyclopentadiene	U	390	ug/kg	78.0	390
88-06-2	2,4,6-Trichlorophenol	U	390	ug/kg	78.0	390
95-95-4	2,4,5-Trichlorophenol	U	390	ug/kg	78.0	390
91-58-7	2-Chloronaphthalene	U	39.0	ug/kg	12.9	39.0
88-74-4	2-Nitroaniline	U	390	ug/kg	78.0	390
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	390	ug/kg	78.0	390

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

SDG Number: 10-2199	Date Collected: 02/25/2010 12:00	Matrix: R
Lab Sample ID: 248519011	Date Received: 03/03/2010 08:50	%Moisture: 14.6
Client ID: RE36-10-8276	Client: LANL010	Project: LANL01004
Batch ID: 963133	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/22/2010 00:31	Inst: MSD6.I	Dilution: 1
Prep Date: 03/10/2010 12:14	Analyst: NAG1	Inj. Vol: .5 uL
Data File: s6c2124.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
131-11-3	<i>m</i> -Nitroaniline Dimethylphthalate	U	390	ug/kg	78.0	390
606-20-2	2,6-Dinitrotoluene	U	390	ug/kg	39.0	390
208-96-8	Acenaphthylene	U	39.0	ug/kg	11.7	39.0
51-28-5	2,4-Dinitrophenol	U	780	ug/kg	148	780
132-64-9	Dibenzofuran	U	390	ug/kg	78.0	390
84-66-2	Diethylphthalate	U	390	ug/kg	78.0	390
86-73-7	Fluorene	U	39.0	ug/kg	11.7	39.0
7005-72-3	4-Chlorophenylphenylether	U	390	ug/kg	78.0	390
534-52-1	2-Methyl-4,6-dinitrophenol	U	390	ug/kg	78.0	390
100-01-6	4-Nitroaniline	U	390	ug/kg	117	390
122-39-4	<i>p</i> -Nitroaniline Diphenylamine	U	390	ug/kg	78.0	390
122-66-7	Azobenzene	U	390	ug/kg	78.0	390
101-55-3	<i>1,2</i> -Diphenylhydrazine 4-Bromophenylphenylether	U	390	ug/kg	78.0	390
118-74-1	Hexachlorobenzene	U	390	ug/kg	78.0	390
85-01-8	Phenanthrene	U	39.0	ug/kg	11.7	39.0
120-12-7	Anthracene	U	39.0	ug/kg	7.80	39.0
84-74-2	Di-n-butylphthalate	U	390	ug/kg	78.0	390
206-44-0	Fluoranthene	U	39.0	ug/kg	11.7	39.0
85-68-7	Butylbenzylphthalate	U	390	ug/kg	78.0	390
56-55-3	Benzo(a)anthracene	U	39.0	ug/kg	11.7	39.0
91-94-1	3,3'-Dichlorobenzidine	U	390	ug/kg	117	390
218-01-9	Chrysene	U	39.0	ug/kg	11.7	39.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	390	ug/kg	78.0	390
117-84-0	Di-n-octylphthalate	U	390	ug/kg	78.0	390
205-99-2	Benzo(b)fluoranthene	U	39.0	ug/kg	11.7	39.0
207-08-9	Benzo(k)fluoranthene	U	39.0	ug/kg	11.7	39.0
50-32-8	Benzo(a)pyrene	U	39.0	ug/kg	11.7	39.0
193-39-5	Indeno(1,2,3-cd)pyrene	U	39.0	ug/kg	11.7	39.0
53-70-3	Dibenzo(a,h)anthracene	U	39.0	ug/kg	11.7	39.0
191-24-2	Benzo(ghi)perylene	U	39.0	ug/kg	11.7	39.0
120-82-1	1,2,4-Trichlorobenzene	U	390	ug/kg	78.0	390

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.86	469	ug/kg		JA
	Unknown	7.98	190	ug/kg		J

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

<b>SDG Number:</b> 10-2199	<b>Date Collected:</b> 02/25/2010 12:00	<b>Matrix:</b> R
<b>Lab Sample ID:</b> 248519011	<b>Date Received:</b> 03/03/2010 08:50	<b>%Moisture:</b> 14.6
	<b>Client:</b> LANL010	<b>Project:</b> LANL01004
<b>Client ID:</b> RE36-10-8276	<b>Method:</b> SW846 8270C	<b>SOP Ref:</b> GL-OA-E-009
<b>Batch ID:</b> 963133	<b>Inst:</b> MSD6.I	<b>Dilution:</b> 1
<b>Run Date:</b> 03/22/2010 00:31	<b>Analyst:</b> NAG1	<b>Inj. Vol:</b> .5 uL
<b>Prep Date:</b> 03/10/2010 12:14	<b>Aliquot:</b> 30.03 g	<b>Final Volume:</b> 1 mL
<b>Data File:</b> s6c2124.d	<b>Column:</b> J&W DB-5MS	<b>Level:</b> 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
18435-45-5	1-Nonadecene	9.39	174	ug/kg	95	NJ
288246-53-7	Pyridine-3-carboxamide, oxime, N-(2-trif	9.83	365	ug/kg	91	NJ
1599-67-3	1-Docosene	10.05	291	ug/kg	93	NJ
112-95-8	Eicosane	10.63	159	ug/kg	96	NJ
	Unknown	11.77	243	ug/kg		J
	Unknown	12.83	178	ug/kg		J
	Unknown	12.95	275	ug/kg		J
	Unknown	13.64	659	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD6.i/s032110.b/s6c2124.d  
Lab Smp Id: 248519011 Client Smp ID: RE36-10-8276  
Inj Date : 22-MAR-2010 00:31  
Operator : nag1 Inst ID: MSD6.i  
Smp Info : |248519011|963133|1|SVM|1|LANL  
Misc Info : |MSD8270\_S|WBN100319-01  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD6.i/s032110.b/MSD6-M8270C-AQA-031610.m  
Meth Date : 23-Mar-2010 10:53 nat00999 Quant Type: ISTD  
Cal Date : 17-MAR-2010 04:51 Cal File: s6c1646.d  
Als bottle: 21  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-2199.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	30.03000	weight of sample
M	14.63520	% 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	3.822	3.822	(1.000)	379721		40.0000	
* 29 Naphthalene-d8	136	4.687	4.687	(1.000)	1395806		40.0000	
* 46 Acenaphthene-d10	164	5.939	5.934	(1.000)	879349		40.0000	
* 67 Phenanthrene-d10	188	7.098	7.093	(1.000)	1580927		40.0000	
* 91 Chrysene-d12	240	9.498	9.486	(1.000)	1392348		40.0000	
* 98 Perylene-d12	264	11.098	11.075	(1.000)	1036020		40.0000	
\$ 3 2-Fluorophenol	112	3.022	3.005	(0.791)	556094		52.6811	2060
\$ 5 Phenol-d5	99	3.545	3.534	(0.928)	709810		52.8752	2060
\$ 20 Nitrobenzene-d5	82	4.187	4.181	(0.893)	339366		25.4340	992
\$ 39 2-Fluorobiphenyl	172	5.434	5.422	(0.915)	720457		31.7558	1240
\$ 60 2,4,6-Tribromophenol	329	6.534	6.522	(1.100)	185450		75.1547	2930
\$ 81 p-Terphenyl-d14	244	8.475	8.463	(0.892)	835285		34.4264	1340

## ION RATIO REPORT

## SV REPORT

Data file: s6c2124.d

Report Date: 03/22/2010 20:28

Lab. ID: 248519011

SampleType: SAMPLE

Injection Date: 22-MAR-2010 00:31

Operator: nagl

Instrument: MSD6.i

Sample Info: |248519011|963133|1|SVM|1|LANL

Miscellaneous Info: |MSD8270\_S|WBN100319-01

Comment:

Method used: /chem/MSD6.i/s032110.b/MSD6-M8270C-AQA-031610.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-2199

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4	Aniline		CAS#: 62-53-3			
66	39013	3.55	3.60	80-120	100	( )
93	7644	3.50	3.60	402-462	20	(QT)
-----						
17	N-Nitrosodipropylamine		CAS#: 621-64-7			
70	49442	4.19	4.06	80-120	100	(T)
42	29400	4.19	4.06	40-100	59	(T)
-----						
22	Isophorone		CAS#: 78-59-1			
82	339366	4.19	4.35	80-120	100	(T)
138	7688	4.69	4.35	0- 50	2	(T)
-----						
40	2-Chloronaphthalene		CAS#: 91-58-7			
162	822236	5.94	5.53	80-120	100	(T)
164	879349	5.94	5.53	4- 64	107	(QT)
127	350	5.95	5.53	8- 68	0	(QT)
-----						
43	Dimethylphthalate		CAS#: 131-11-3			
163	158710	5.94	5.70	80-120	100	(T)
164	879349	5.94	5.70	0- 41	554	(QT)
-----						
45	Acenaphthylene		CAS#: 208-96-8			
152	38428	5.43	5.83	80-120	100	(T)
151	39253	5.43	5.83	0- 50	102	(QT)
153	12629	5.43	5.83	0- 44	33	(T)
-----						

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
50	2,4-Dinitrotoluene		CAS#: 121-14-2			
165	117432	5.94	6.05	80-120	100	(T)
89	1430	5.94	6.05	39- 99	1	(QT)
63	1388	5.94	6.05	20- 80	1	(QT)
-----						
53	Fluorene		CAS#: 86-73-7			
166	10398	6.53	6.34	80-120	100	(T)
165	12089	6.53	6.34	60-120	116	(T)
167	3814	6.53	6.34	0- 44	37	(T)
-----						
55	2-Methyl-4,6-dinitrophenol		CAS#: 534-52-1			
198	671	6.53	6.36	80-120	100	(T)
105	1569	6.53	6.36	9- 69	234	(QT)
51	1643	6.53	6.35	28- 88	245	(QT)
-----						
61	4-Bromophenylphenylether		CAS#: 101-55-3			
248	14315	6.53	6.70	80-120	100	(T)
141	85016	6.53	6.70	42-102	594	(QT)
250	27711	6.53	6.70	68-128	194	(QT)

-----  
Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD6.i/s032110.b/s6c2124.d  
Lab Smp Id: 248519011 Client Smp ID: RE36-10-8276  
Inj Date : 22-MAR-2010 00:31  
Operator : nag1 Inst ID: MSD6.i  
Smp Info : |248519011|963133|1|SVM|1|LANL  
Misc Info : |MSD8270\_S|WBN100319-01  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD6.i/s032110.b/MSD6-M8270C-AQA-031610.m  
Meth Date : 23-Mar-2010 10:53 nat00999 Quant Type: ISTD  
Cal Date : 17-MAR-2010 04:51 Cal File: s6c1646.d  
Als bottle: 21  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-2199.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	30.03000	weight of sample
M	14.63520	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.822	2281123	40.000
* 67 Phenanthrene-d10	7.098	3891862	40.000
* 91 Chrysene-d12	9.498	3802015	40.000
* 98 Perylene-d12	11.098	2718575	40.000

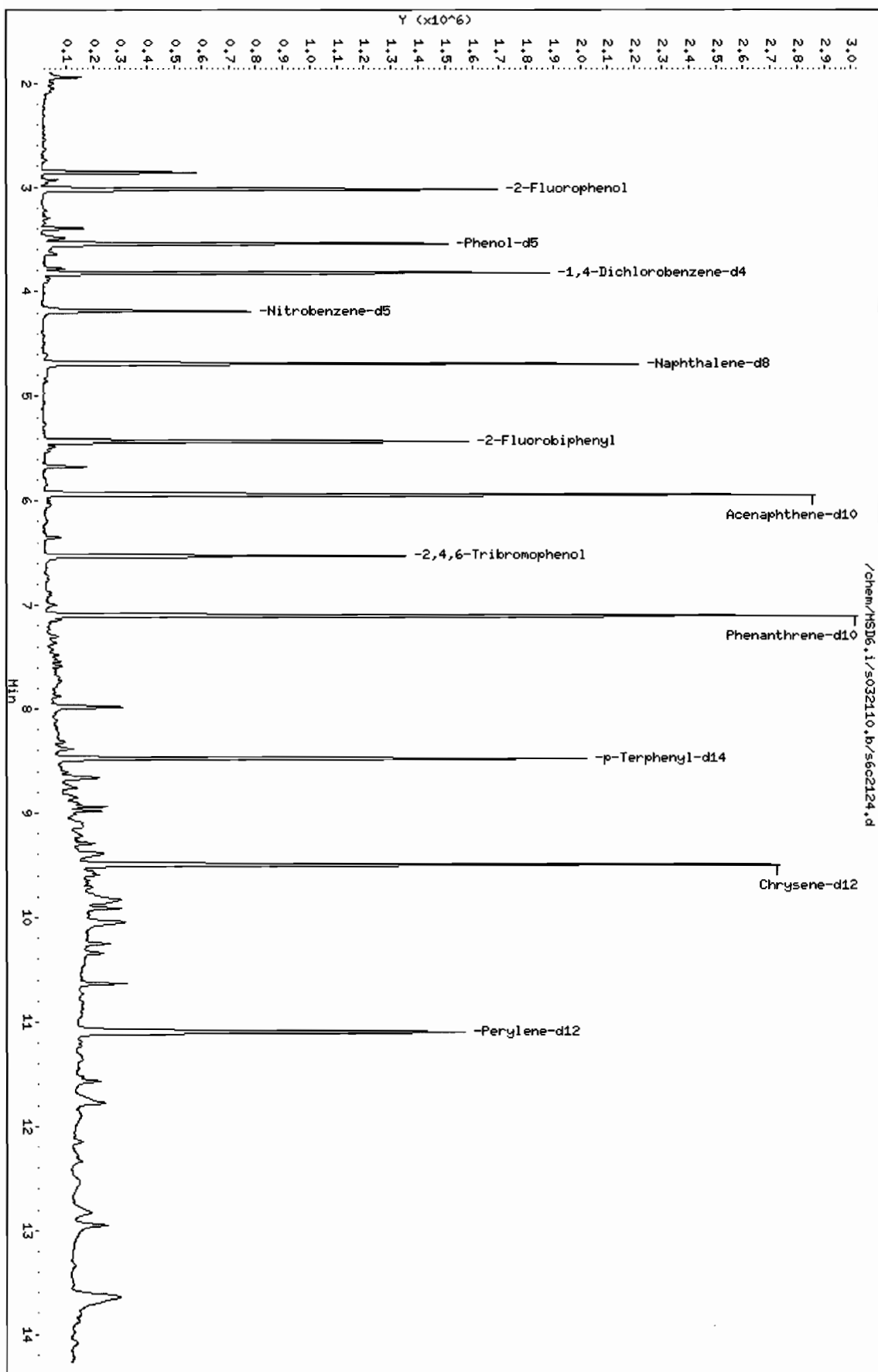
CONCENTRATIONS					QUANT		
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
====	====	=====	=====	====	=====	=====	=====



RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
Unknown Aldol Condensate					CAS #:		
2.857	685780	12.0252986	469	0		0	10
Unknown					CAS #:		
7.980	473218	4.86366445	190	0		0	67
1-Nonadecene					CAS #: 18435-45-5		
9.392	424888	4.47013002	174	95	NIST05.L	102858	91
Pyridine-3-carboxamide, oxime, N-(2-trif					CAS #: 288246-53-7		
9.827	889716	9.36046840	365	91	NIST05.L	112295	91
1-Docosene					CAS #: 1599-67-3		
10.045	709868	7.46833634	291	93	NIST05.L	129889	91
Eicosane					CAS #: 112-95-8		
10.633	276969	4.07521254	159	96	NIST05.L	113492	98
Unknown					CAS #:		
11.774	422904	6.22243627	243	0		0	98
Unknown					CAS #:		
12.827	309428	4.55279775	178	0		0	98
Unknown					CAS #:		
12.951	478321	7.03782049	274	0		0	98
Unknown					CAS #:		
13.639	1148858	16.9038257	659	0		0	98

Data File: /chem/HSD6.i/s032110.b/s6c2124.d  
Date : 22-MAR-2010 00:31  
Client ID: RE36-10-8276  
Sample Info: 124851901196313311SVH11L1ANL  
Volume Injected (uL): 0.5  
Column phase: 3M DB-SHS

Instrument: HSD6.i  
Operator: nag1  
Column diameter: 0.20



Date : 22-MAR-2010 00:31

Client ID: RE36-10-8276

Instrument: MSD6.i

Sample Info: I248819011/963133111SVH111LANL

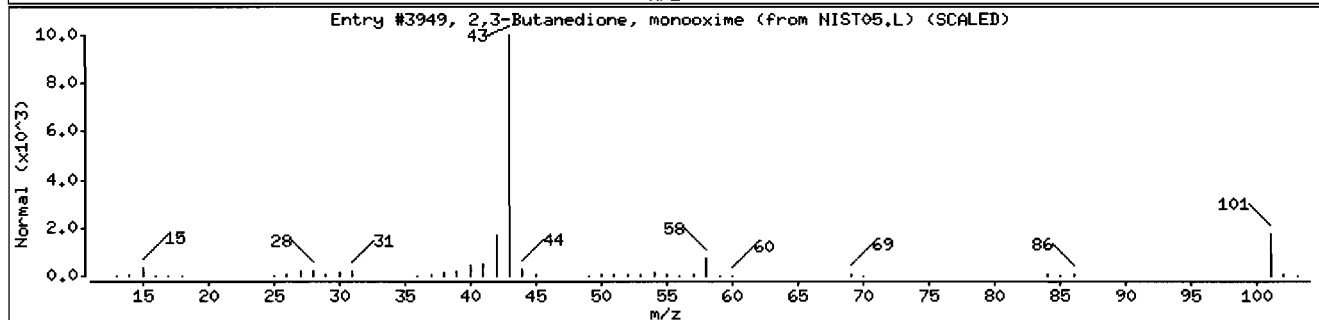
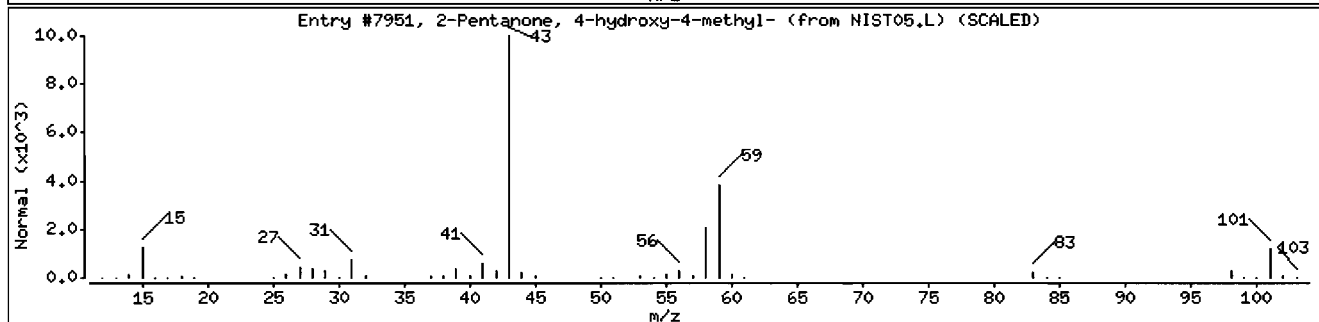
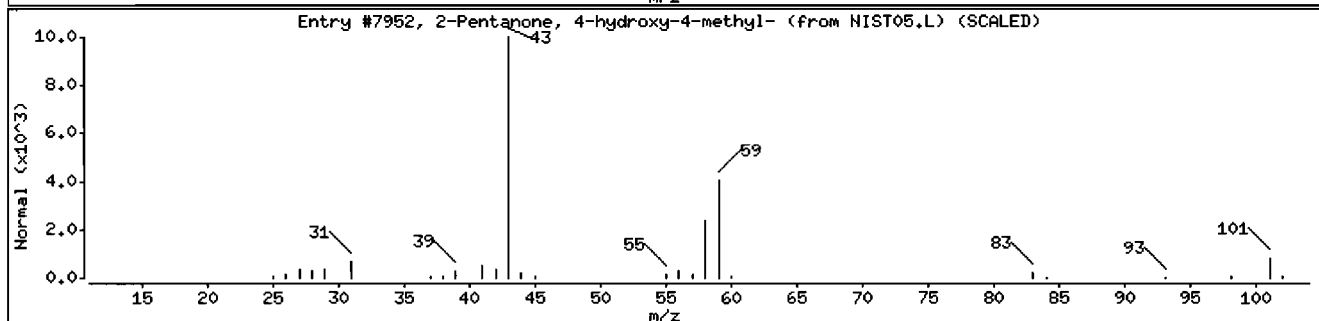
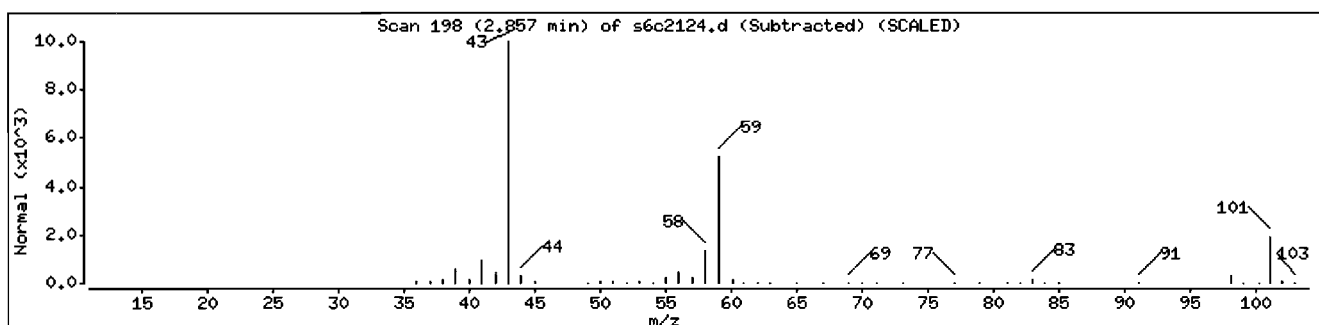
Volume Injected (uL): 0.5

Operator: nag1

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	56	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	45	C6H12O2	116
2,3-Butanedione, monooxime	57-71-6	NIST05.L	3949	35	C4H7NO2	101



Date : 22-MAR-2010 00:31

Client ID: RE36-10-8276

Instrument: MSD6.i

Sample Info: 12485190111963133111SVMI11LANL

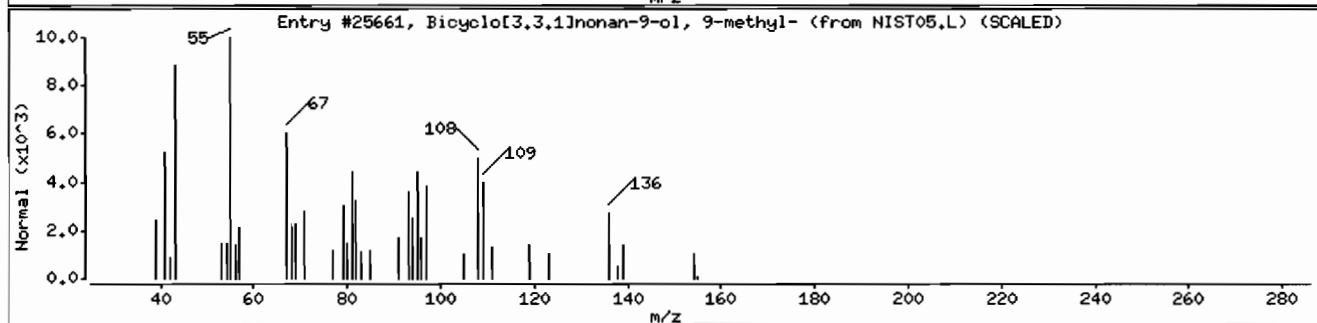
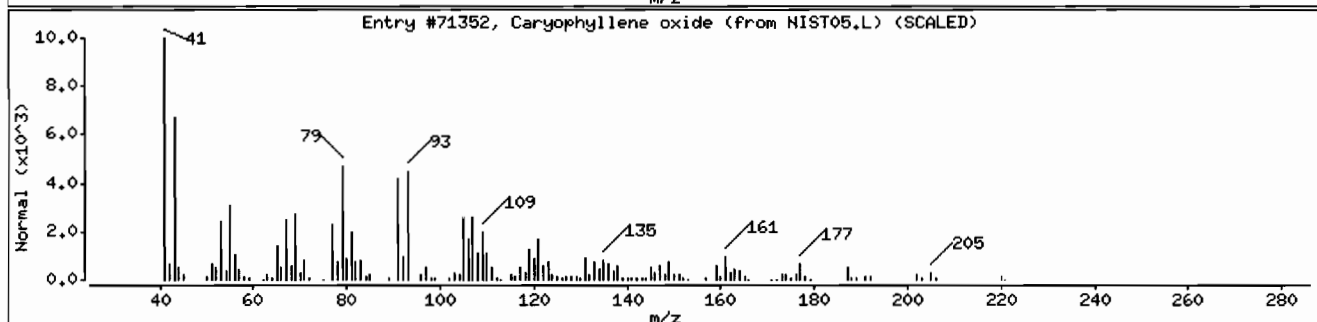
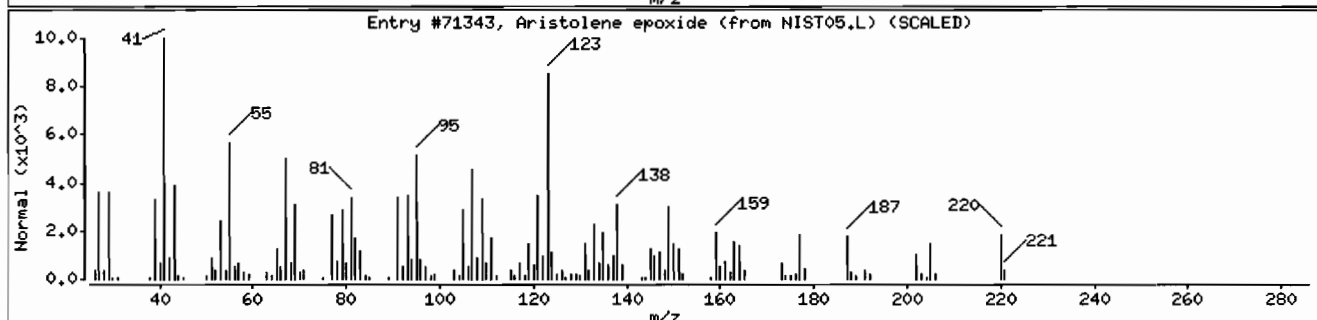
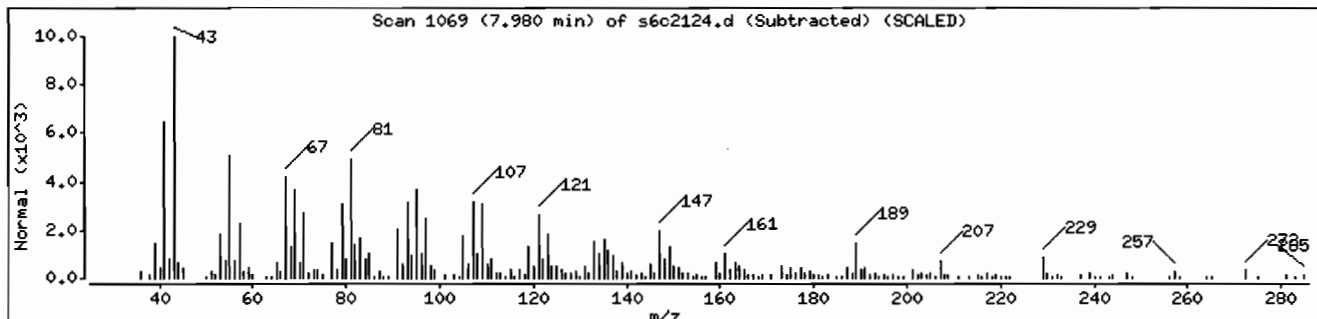
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Aristolene epoxide	1000151-48-9	NIST05.L	71343	70	C15H24O	220
Caryophyllene oxide	1139-30-6	NIST05.L	71352	55	C15H24O	220
Bicyclo[3.3.1]nonan-9-ol, 9-methyl-	33832-25-6	NIST05.L	25661	55	C10H18O	154



Date : 22-MAR-2010 00:31

Client ID: RE36-10-8276

Instrument: MSD6.i

Sample Info: 1248519011/96313311/SVH11/LANL

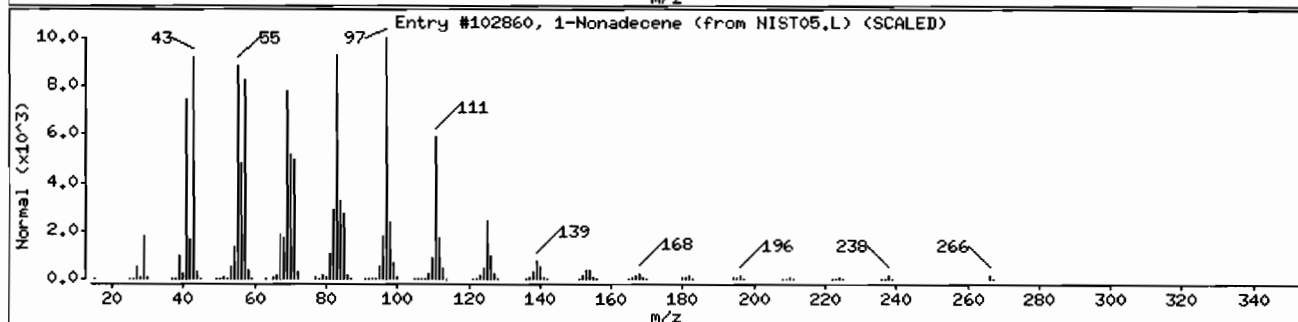
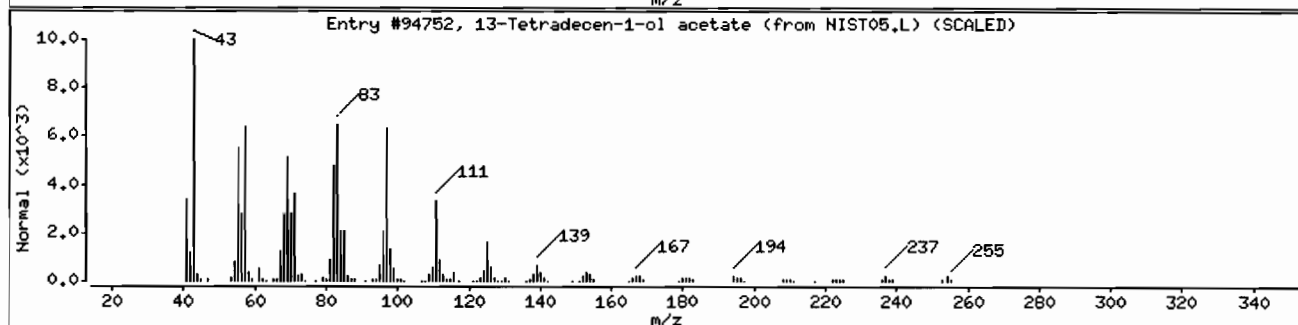
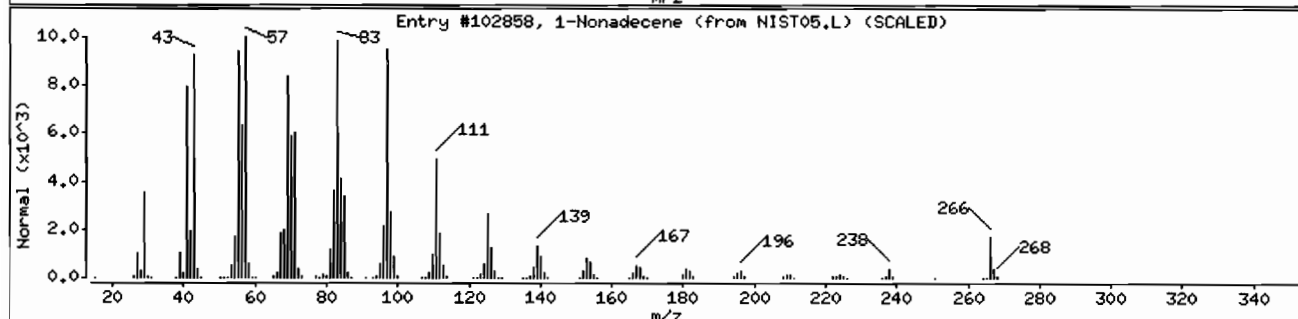
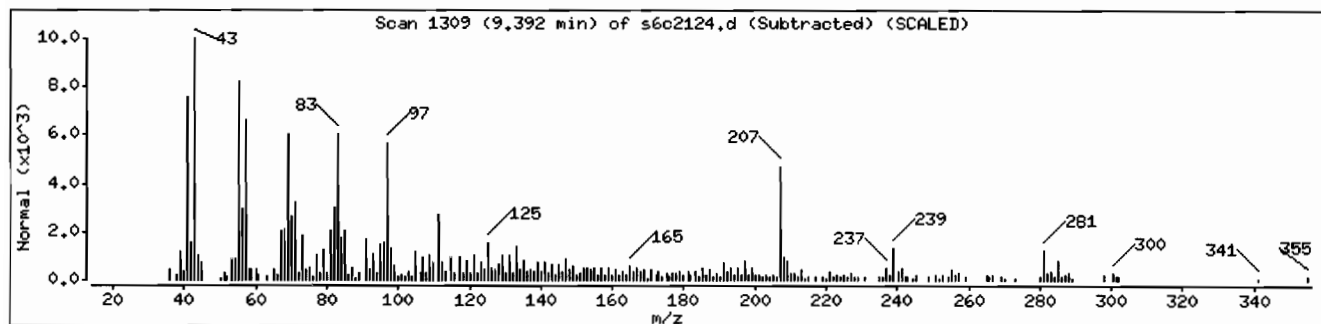
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Nonadecene	18435-45-5	NIST05.L	102858	95	C19H38	266
13-Tetradecen-1-ol acetate	56221-91-1	NIST05.L	94752	95	C16H30O2	254
1-Nonadecene	18435-45-5	NIST05.L	102860	90	C19H38	266



Date : 22-MAR-2010 00:31

Client ID: RE36-10-8276

Instrument: MSD6.i

Sample Info: I248519011/9631331/1SVH11/LANL

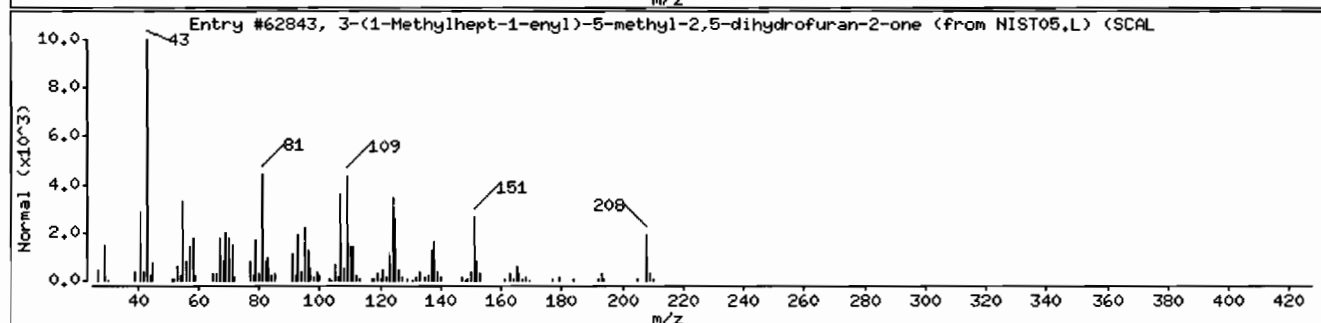
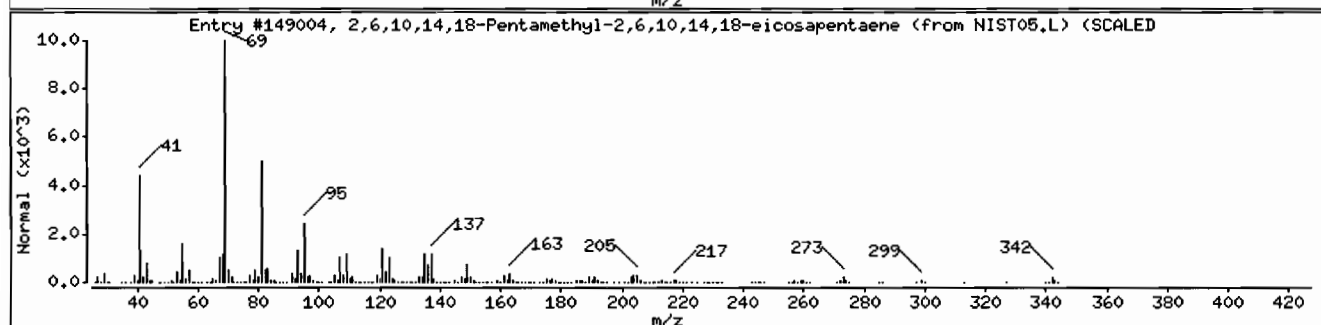
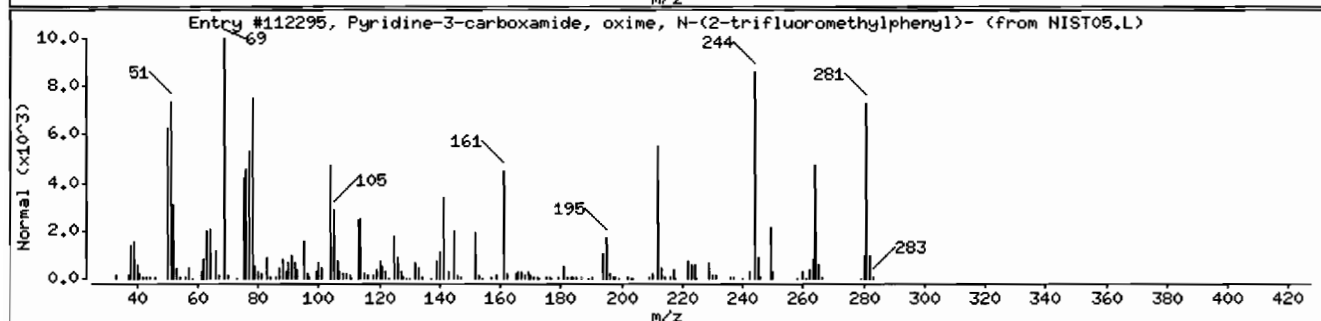
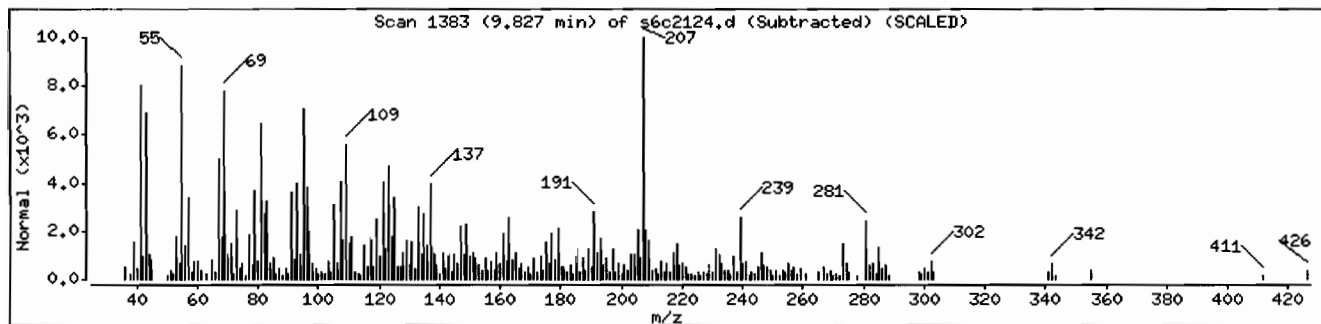
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Pyridine-3-carboxamide, oxime, N-(2-trif	288246-53-7	NIST05.L	112295	91	C13H10F3N3O	281
2,6,10,14,18-Pentamethyl-2,6,10,14,18-ei	75581-03-2	NIST05.L	149004	38	C25H42	342
3-(1-Methylhept-1-enyl)-5-methyl-2,5-dih	1000284-50-5	NIST05.L	62843	30	C13H20O2	208



Date : 22-MAR-2010 00:31

Client ID: RE36-10-8276

Instrument: HSD6.i

Sample Info: 1248519011|963133|1|SVH11|LANL

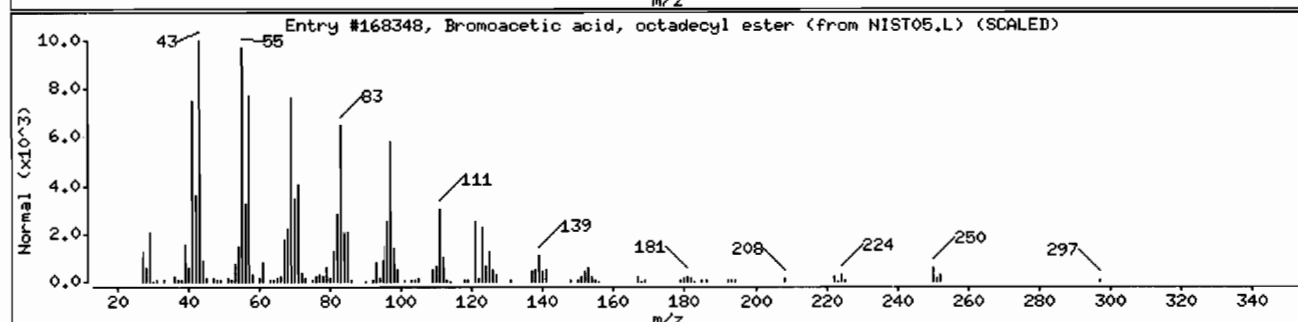
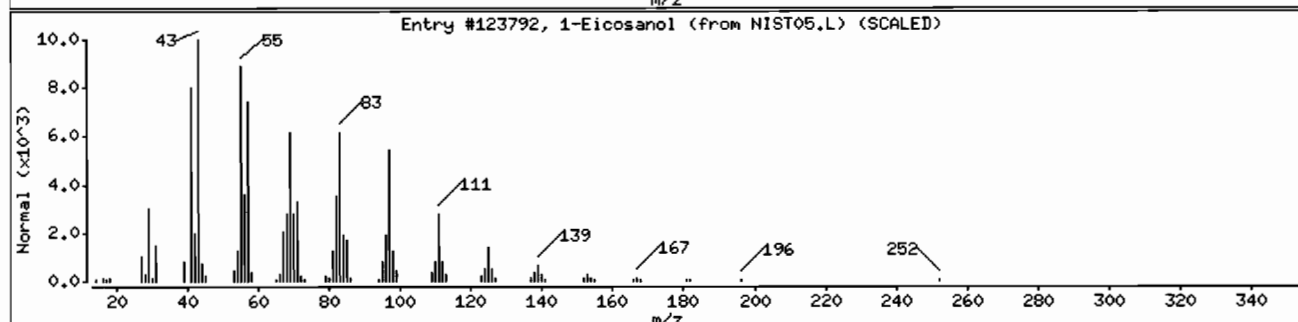
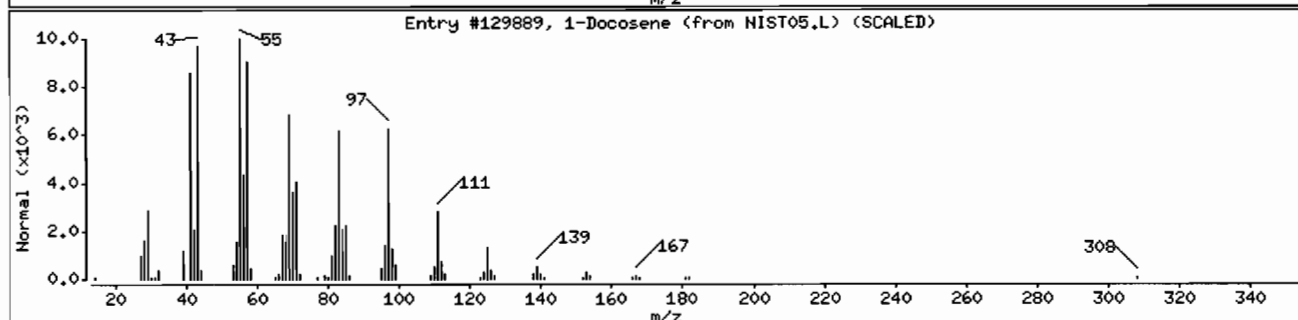
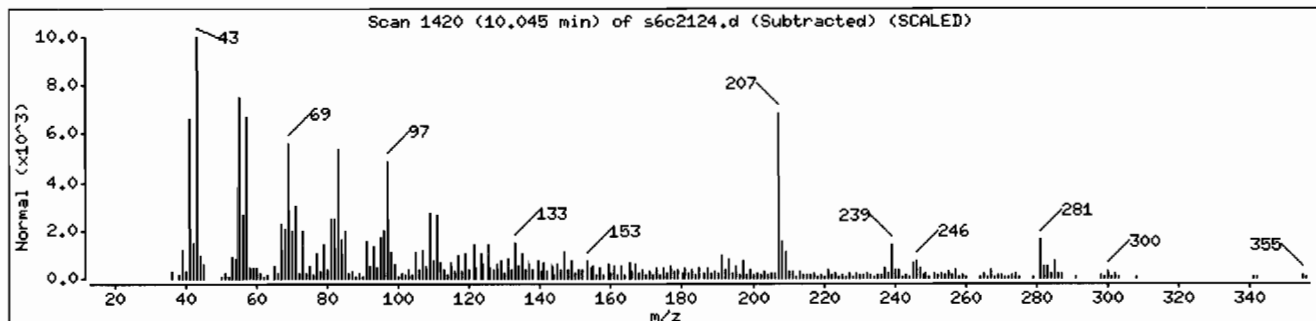
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Docosene	1599-67-3	NIST05.L	129889	93	C22H44	308
1-Eicosanol	629-96-9	NIST05.L	123792	89	C20H42O	298
Bromoacetic acid, octadecyl ester	18992-03-5	NIST05.L	168348	55	C20H39BrO2	390



Date : 22-MAR-2010 00:31

Client ID: RE36-10-8276

Instrument: MSD6.i

Sample Info: I248519011/9631331/1SVH11/LANL

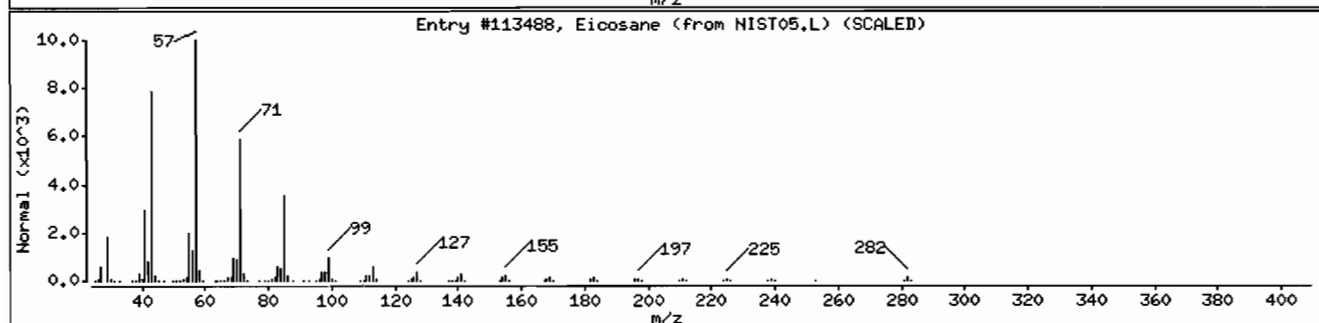
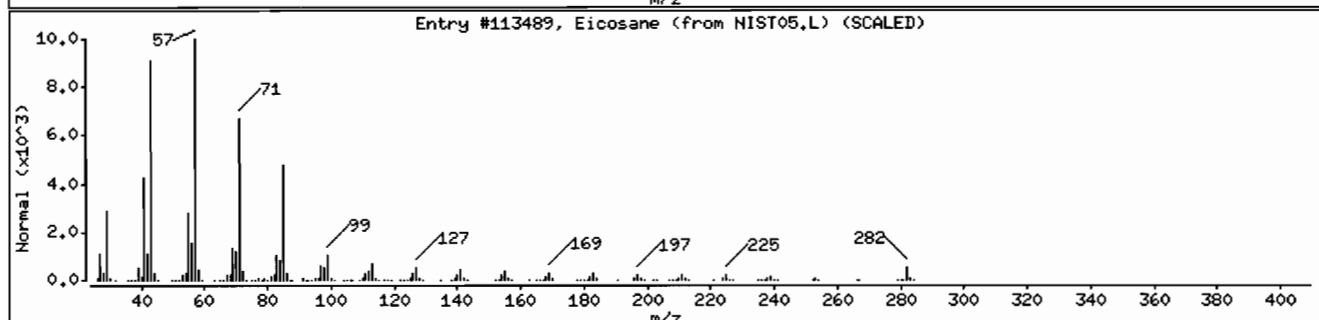
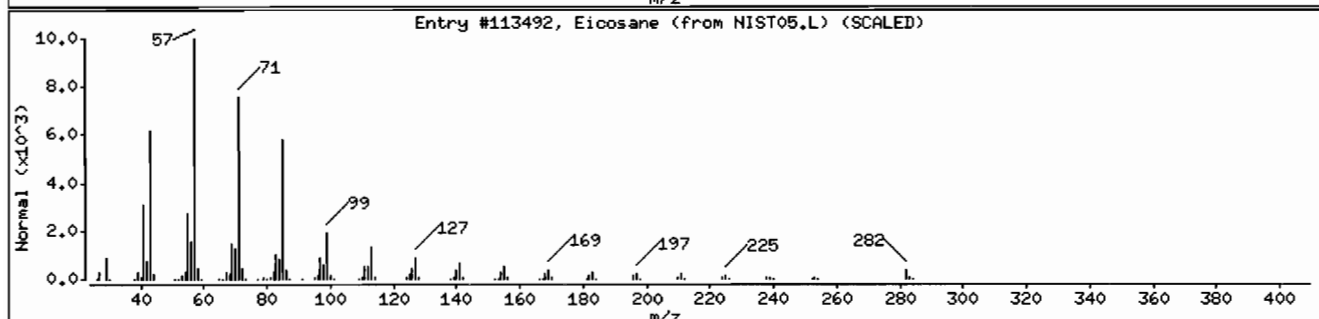
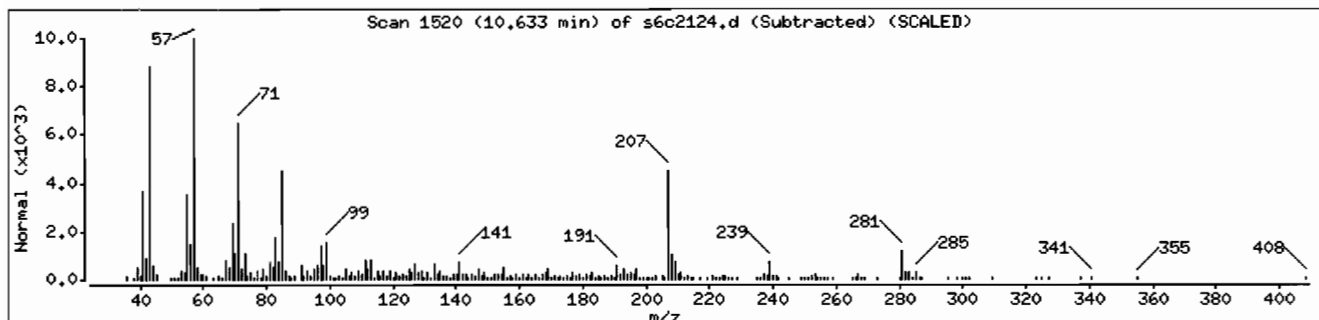
Volume Injected (uL): 0.5

Operator: nag1

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	113492	96	C20H42	282
Eicosane	112-95-8	NIST05.L	113489	95	C20H42	282
Eicosane	112-95-8	NIST05.L	113488	91	C20H42	282





Date : 22-MAR-2010 00:31

Client ID: RE36-10-8276

Instrument: MSD6.i

Sample Info: 12485190111963133111SVH111LANL

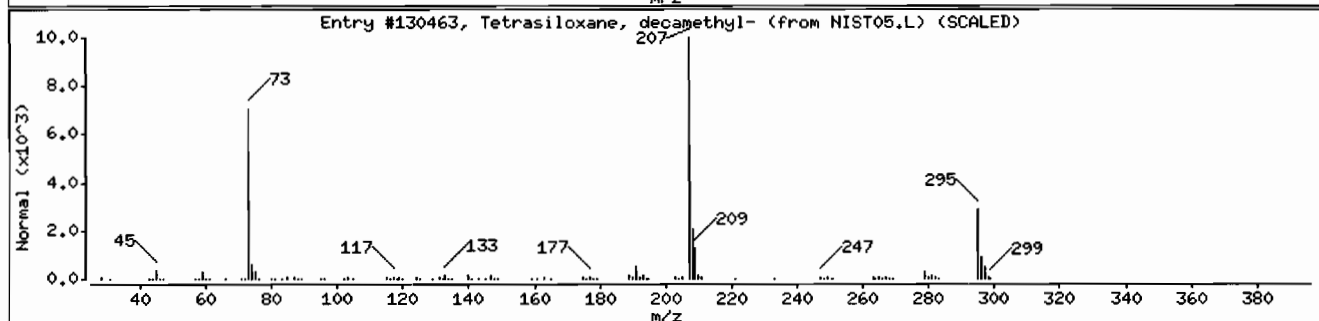
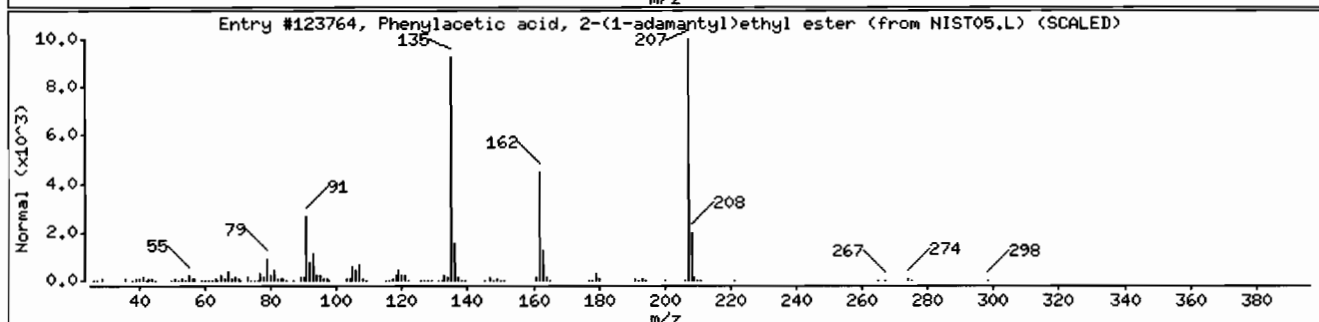
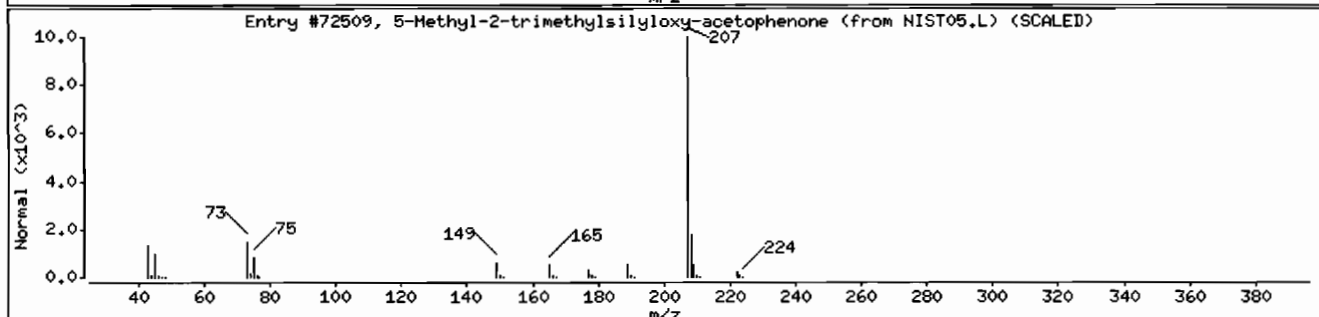
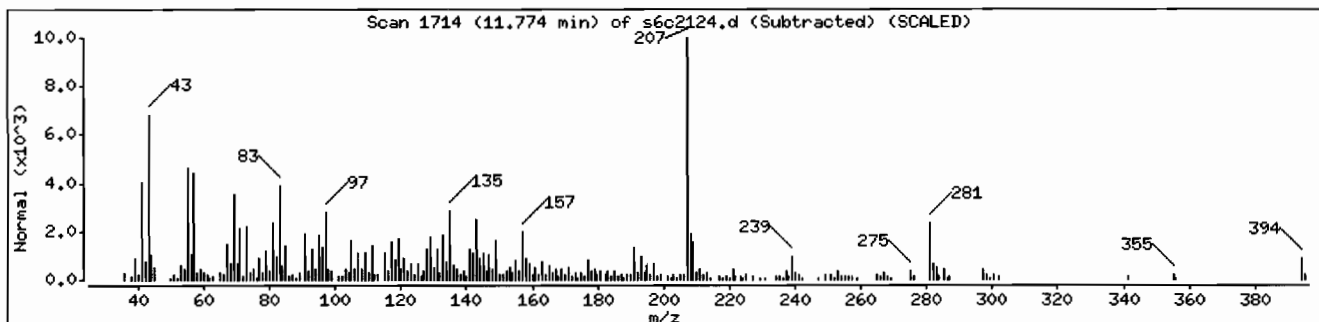
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
5-Methyl-2-trimethylsilyloxy-acetophenon	97389-69-0	NIST05.L	72509	41	C <sub>12</sub> H <sub>18</sub> O <sub>2</sub> Si	222
Phenylacetic acid, 2-(1-adamantyl)ethyl	1000282-91-2	NIST05.L	123764	35	C <sub>20</sub> H <sub>26</sub> O <sub>2</sub>	298
Tetrasiloxane, decamethyl-	141-62-8	NIST05.L	130463	35	C <sub>10</sub> H <sub>30</sub> O <sub>3</sub> Si <sub>4</sub>	310



Date : 22-MAR-2010 00:31

Client ID: RE36-10-8276

Instrument: MSD6.i

Sample Info: I248519011|9631331|1|SVH11|LANL

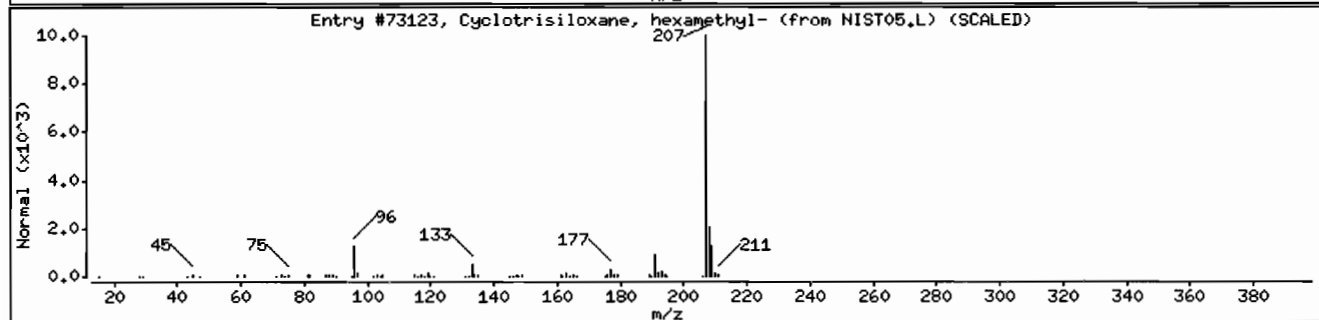
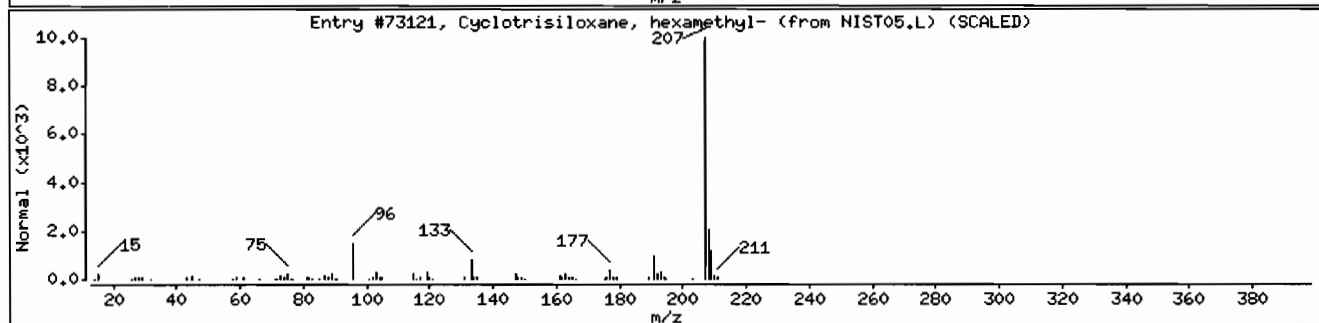
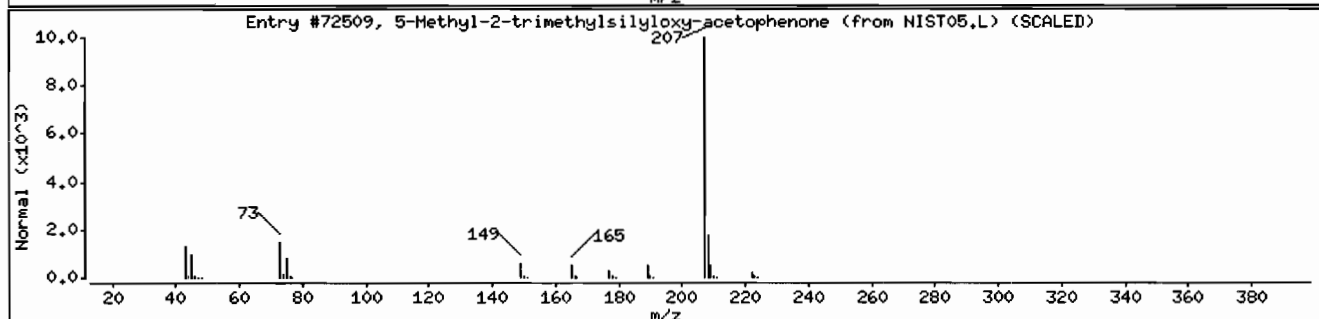
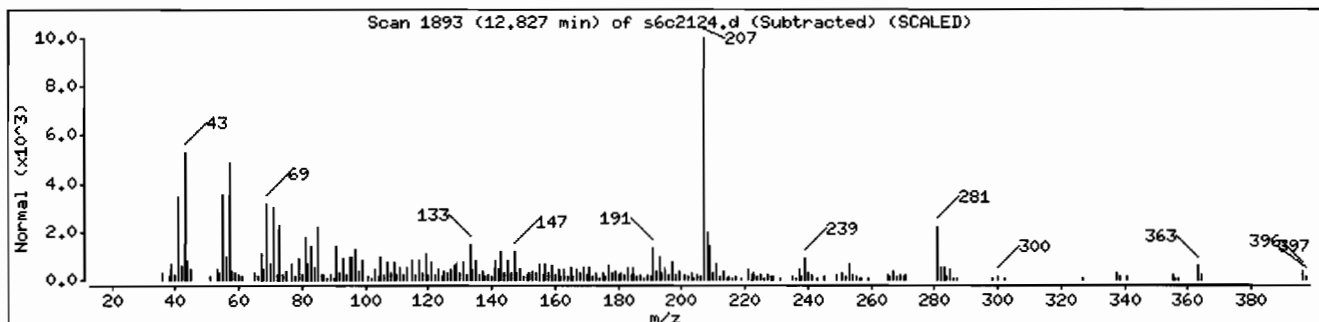
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
5-Methyl-2-trimethylsilyloxy-acetophenon	97389-69-0	NIST05.L	72509	47	C <sub>12</sub> H <sub>18</sub> O <sub>2</sub> Si	222
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



Date : 22-MAR-2010 00:31

Client ID: RE36-10-8276

Instrument: MSD6.i

Sample Info: 1248519011196313311ISVH11ILANL

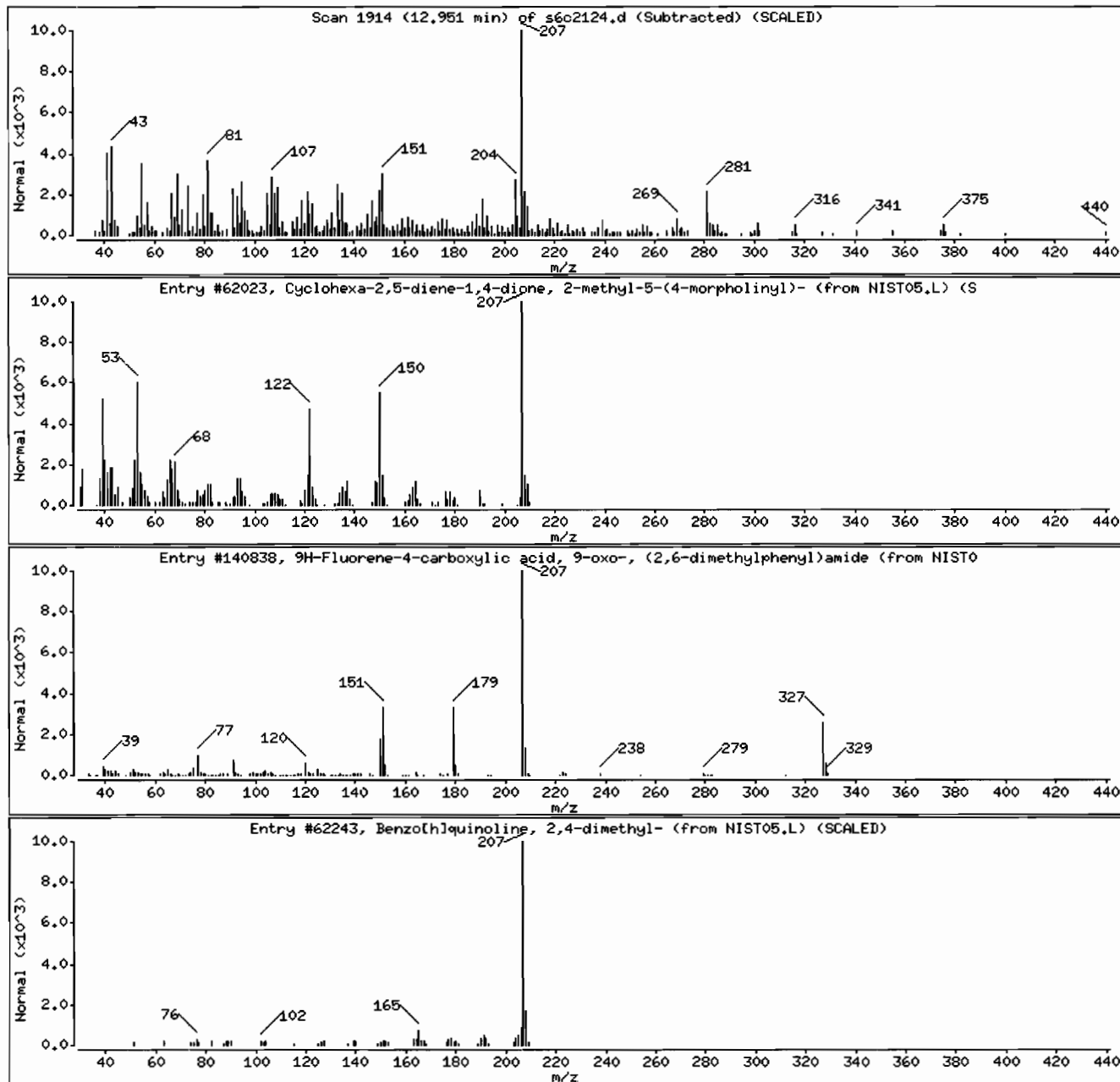
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cyclohexa-2,5-diene-1,4-dione, 2-methyl-	2158-89-6	NIST05.L	62023	38	C11H13NO3	207
9H-Fluorene-4-carboxylic acid, 9-oxo-, (	1000304-78-2	NIST05.L	140838	32	C22H17NO2	327
Benzo[h]quinoline, 2,4-dimethyl-	605-67-4	NIST05.L	62243	30	C15H13N	207



Date : 22-MAR-2010 00:31

Client ID: RE36-10-8276

Instrument: MSD6.i

Sample Info: I248519011196313311SVH111LANL

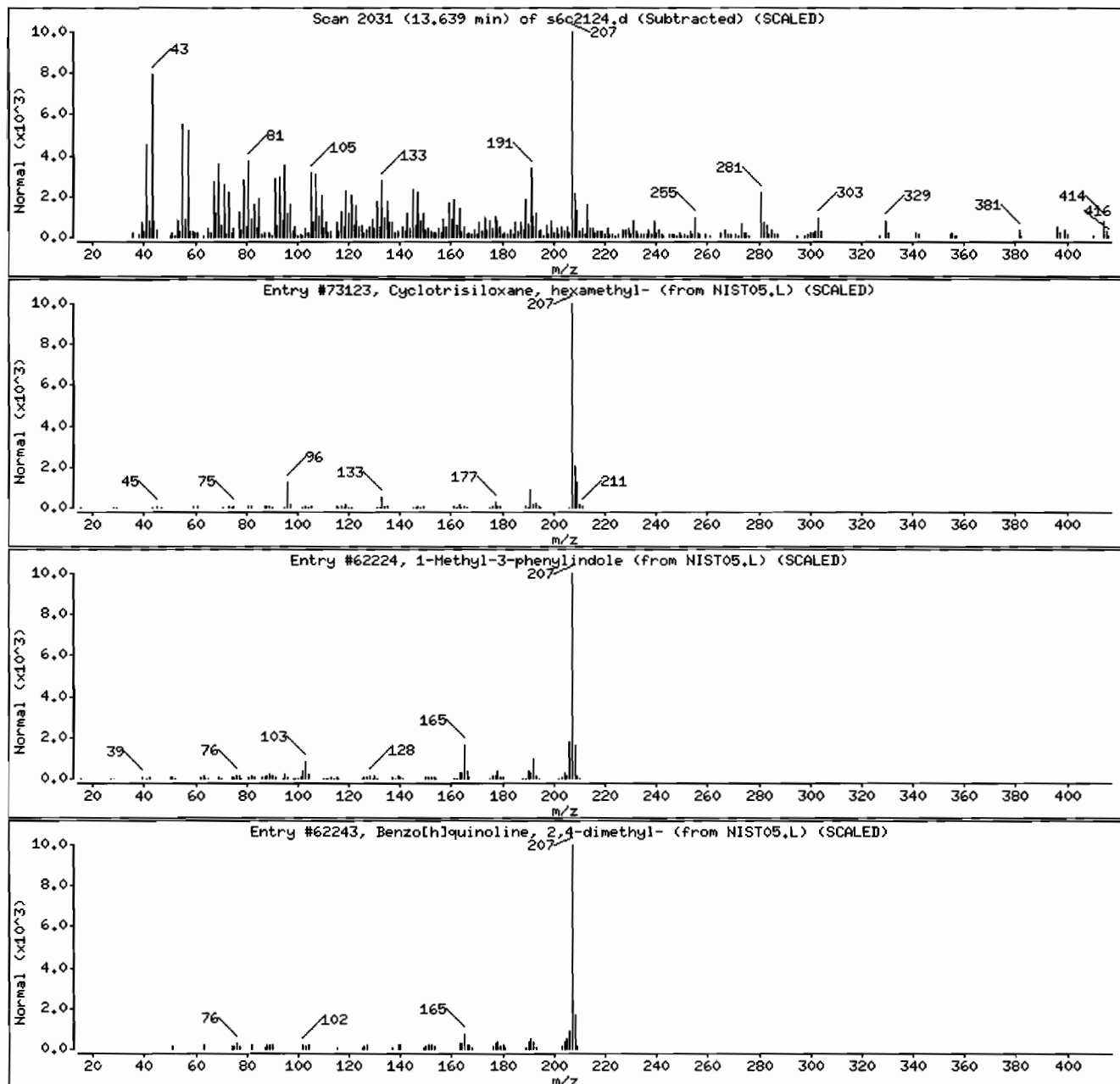
Volume Injected (uL): 0.5

Operator: nag1

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	73123	47	C6H18O3Si3	222
1-Methyl-3-phenylindole	30020-98-5	NIST05.L	62224	43	C15H13N	207
Benzo[h]quinoline, 2,4-dimethyl-	605-67-4	NIST05.L	62243	41	C15H13N	207



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

SDG Number: 10-2199  
Lab Sample ID: 248519003

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Aliquot: 30.09 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 25.4  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 4  
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	1780	ug/kg	356	1780
108-95-2	Phenol	U	1780	ug/kg	356	1780
95-57-8	2-Chlorophenol	U	1780	ug/kg	356	1780
106-46-7	1,4-Dichlorobenzene	U	1780	ug/kg	356	1780
621-64-7	N-Nitrosodipropylamine	U	1780	ug/kg	356	1780
59-50-7	4-Chloro-3-methylphenol	U	1780	ug/kg	356	1780
83-32-9	Acenaphthene	U	178	ug/kg	58.8	178
121-14-2	2,4-Dinitrotoluene	U	1780	ug/kg	178	1780
100-02-7	4-Nitrophenol	U	1780	ug/kg	588	1780
87-86-5	Pentachlorophenol	U	1780	ug/kg	446	1780
129-00-0	Pyrene	U	178	ug/kg	53.5	178
110-86-1	Pyridine	U	1780	ug/kg	356	1780
62-53-3	Aniline	U	1780	ug/kg	535	1780
111-44-4	bis(2-Chloroethyl) ether	U	1780	ug/kg	356	1780
541-73-1	1,3-Dichlorobenzene	U	1780	ug/kg	356	1780
100-51-6	Benzyl alcohol	U	1780	ug/kg	535	1780
95-50-1	1,2-Dichlorobenzene	U	1780	ug/kg	356	1780
108-60-1	bis(2-Chloroisopropyl)ether	U	1780	ug/kg	356	1780
95-48-7	o-Cresol	U	1780	ug/kg	356	1780
65794-96-9	m,p-Cresols	U	1780	ug/kg	535	1780
67-72-1	Hexachloroethane	U	1780	ug/kg	356	1780
98-95-3	Nitrobenzene	U	1780	ug/kg	356	1780
78-59-1	Isophorone	U	1780	ug/kg	356	1780
88-75-5	2-Nitrophenol	U	1780	ug/kg	356	1780
105-67-9	2,4-Dimethylphenol	U	1780	ug/kg	624	1780
111-91-1	bis(2-Chloroethoxy)methane	U	1780	ug/kg	356	1780
120-83-2	2,4-Dichlorophenol	U	1780	ug/kg	356	1780
65-85-0	Benzoic acid	U	3560	ug/kg	891	3560
91-20-3	Naphthalene	U	178	ug/kg	53.5	178
106-47-8	4-Chloroaniline	U	1780	ug/kg	356	1780
87-68-3	Hexachlorobutadiene	U	1780	ug/kg	356	1780
91-57-6	2-Methylnaphthalene	U	178	ug/kg	35.6	178
77-47-4	Hexachlorocyclopentadiene	U	1780	ug/kg	356	1780
88-06-2	2,4,6-Trichlorophenol	U	1780	ug/kg	356	1780
95-95-4	2,4,5-Trichlorophenol	U	1780	ug/kg	356	1780
91-58-7	2-Chloronaphthalene	U	178	ug/kg	58.8	178
88-74-4	2-Nitroaniline	U	1780	ug/kg	356	1780
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	1780	ug/kg	356	1780

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

SDG Number: 10-2199	Date Collected: 02/25/2010 12:00	Matrix: R
Lab Sample ID: 248519003	Date Received: 03/03/2010 08:50	%Moisture: 25.4
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-8277	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 963133	Inst: MSD6.I	Dilution: 4
Run Date: 03/24/2010 00:40	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 03/10/2010 12:14	Aliquot: 30.09 g	Final Volume: 1 mL
Data File: s6c2327.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	1780	ug/kg	356	1780
606-20-2	2,6-Dinitrotoluene	U	1780	ug/kg	178	1780
208-96-8	Acenaphthylene	U	178	ug/kg	53.5	178
51-28-5	2,4-Dinitrophenol	U	3560	ug/kg	677	3560
132-64-9	Dibenzofuran	U	1780	ug/kg	356	1780
84-66-2	Diethylphthalate	U	1780	ug/kg	356	1780
86-73-7	Fluorene	U	178	ug/kg	53.5	178
7005-72-3	4-Chlorophenylphenylether	U	1780	ug/kg	356	1780
534-52-1	2-Methyl-4,6-dinitrophenol	U	1780	ug/kg	356	1780
100-01-6	4-Nitroaniline	U	1780	ug/kg	535	1780
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	1780	ug/kg	356	1780
122-66-7	Azobenzene	U	1780	ug/kg	356	1780
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	1780	ug/kg	356	1780
118-74-1	Hexachlorobenzene	U	1780	ug/kg	356	1780
85-01-8	Phenanthrene	U	178	ug/kg	53.5	178
120-12-7	Anthracene	U	178	ug/kg	35.6	178
84-74-2	Di-n-butylphthalate	U	1780	ug/kg	356	1780
206-44-0	Fluoranthene	U	178	ug/kg	53.5	178
85-68-7	Butylbenzylphthalate	U	1780	ug/kg	356	1780
56-55-3	Benzo(a)anthracene	U	178	ug/kg	53.5	178
91-94-1	3,3'-Dichlorobenzidine	U	1780	ug/kg	535	1780
218-01-9	Chrysene	U	178	ug/kg	53.5	178
117-81-7	bis(2-Ethylhexyl)phthalate	U	1780	ug/kg	356	1780
117-84-0	Di-n-octylphthalate	U	1780	ug/kg	356	1780
205-99-2	Benzo(b)fluoranthene	U	178	ug/kg	53.5	178
207-08-9	Benzo(k)fluoranthene	U	178	ug/kg	53.5	178
50-32-8	Benzo(a)pyrene	U	178	ug/kg	53.5	178
193-39-5	Indeno(1,2,3-cd)pyrene	U	178	ug/kg	53.5	178
53-70-3	Dibenzo(a,h)anthracene	U	178	ug/kg	53.5	178
191-24-2	Benzo(ghi)perylene	U	178	ug/kg	53.5	178
120-82-1	1,2,4-Trichlorobenzene	U	1780	ug/kg	356	1780

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
106988-87-8	Biphenylene, 1,2,3,6,7,8,8a,8b-octahydro	5.75	871	ug/kg	87	NJ
24048-44-0	Spiro[4.5]dec-7-ene, 1,8-dimethyl-4-(1-m	5.91	1020	ug/kg	86	NJ

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

SDG Number: 10-2199	Date Collected: 02/25/2010 12:00	Matrix: R
Lab Sample ID: 248519003	Date Received: 03/03/2010 08:50	%Moisture: 25.4
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-8277	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 963133	Inst: MSD6.I	Dilution: 4
Run Date: 03/24/2010 00:40	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 03/10/2010 12:14	Aliquot: 30.09 g	Final Volume: 1 mL
Data File: s6c2327.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
	Unknown	5.97	720	ug/kg		J
	Unknown	6	1170	ug/kg		J
19870-75-8	Cedrane, 8-propoxy-	6.57	1340	ug/kg	94	NJ
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	9.03	4660	ug/kg	97	NJ
	Unknown	10.33	1180	ug/kg		J
	Unknown	12.24	1230	ug/kg		J
	Unknown	13.01	1700	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD6.i/s032310.b/s6c2327.d  
Lab Smp Id: 248519003 Client Smp ID: RE36-10-8277  
Inj Date : 24-MAR-2010 00:40  
Operator : nag1 Inst ID: MSD6.i  
Smp Info : |248519003|963133|4|SVM|1|LANL  
Misc Info : |MSD8270\_S|WBN100319-01  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD6.i/s032310.b/MSD6-M8270C-AQA-031610.m  
Meth Date : 24-Mar-2010 09:23 jen00986 Quant Type: ISTD  
Cal Date : 17-MAR-2010 04:51 Cal File: s6c1646.d  
Als bottle: 22  
Dil Factor: 4.00000  
Integrator: HP RTE Compound Sublist: 10-2199.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	4.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.09000	weight of sample
M	25.40910	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT	SIG					CONCENTRATIONS	
			RT	EXP RT	REL RT	RESPONSE	ON-COLUMN	FINAL
	MASS						(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152		3.951	3.946	(1.000)	305708	40.0000	
* 29 Naphthalene-d8	136		4.816	4.804	(1.000)	1080590	40.0000	
* 46 Acenaphthene-d10	164		6.069	6.057	(1.000)	658007	40.0000	
* 67 Phenanthrene-d10	188		7.234	7.228	(1.000)	1154428	40.0000	
* 91 Chrysene-d12	240		9.639	9.628	(1.000)	910212	40.0000	
* 98 Perylene-d12	264		11.316	11.298	(1.000)	720679	40.0000	
\$ 3 2-Fluorophenol	112		3.140	3.128	(0.795)	116179	13.6707	2440
\$ 5 Phenol-d5	99		3.663	3.657	(0.927)	151967	14.0610	2500
\$ 20 Nitrobenzene-d5	82		4.310	4.304	(0.895)	63311	6.12900	1090
\$ 39 2-Fluorobiphenyl	172		5.551	5.546	(0.915)	140647	8.28469	1480
\$ 60 2,4,6-Tribromophenol	329		6.663	6.651	(1.098)	32190	17.4334	3110
\$ 81 p-Terphenyl-d14	244		8.610	8.604	(0.893)	147125	9.27575	1650



## ION RATIO REPORT

## SV REPORT

Data file: s6c2327.d

Report Date: 03/24/2010 10:05

Lab. ID: 248519003

SampleType: SAMPLE

Injection Date: 24-MAR-2010 00:40

Operator: nagl

Instrument: MSD6.i

Sample Info: |248519003|963133|4|SVM|1|LANL

Miscellaneous Info: |MSD8270\_S|WBN100319-01

Comment:

Method used: /chem/MSD6.i/s032310.b/MSD6-M8270C-AQA-031610.m

Dilution Factor= 4.0

Integrator: HP RTE

Compound Sublist: 10-2199

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
22	Isophorone			CAS#: 78-59-1		
82	63311	4.31	4.47	80-120	100	(T)
138	5988	4.82	4.47	0- 48	9	(T)
-----						
40	2-Chloronaphthalene			CAS#: 91-58-7		
162	10935	5.80	5.66	80-120	100	(T)
164	306	5.80	5.66	3- 63	3	(QT)
127	615	5.80	5.66	7- 67	6	(QT)
-----						
43	Dimethylphthalate			CAS#: 131-11-3		
163	120382	6.07	5.82	80-120	100	(T)
164	658007	6.07	5.82	0- 41	547	(QT)
-----						
50	2,4-Dinitrotoluene			CAS#: 121-14-2		
165	88259	6.07	6.17	80-120	100	(T)
89	1063	6.07	6.17	38- 98	1	(QT)
63	1079	6.06	6.17	18- 78	1	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD6.i/s032310.b/s6c2327.d  
 Lab Smp Id: 248519003 Client Smp ID: RE36-10-8277  
 Inj Date : 24-MAR-2010 00:40  
 Operator : nagl Inst ID: MSD6.i  
 Smp Info : |248519003|963133|4|SVM|1|LANL  
 Misc Info : |MSD8270 S|WBN100319-01  
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
 Method : /chem/MSD6.i/s032310.b/MSD6-M8270C-AQA-031610.m  
 Meth Date : 24-Mar-2010 09:23 jen00986 Quant Type: ISTD  
 Cal Date : 17-MAR-2010 04:51 Cal File: s6c1646.d  
 Als bottle: 22  
 Dil Factor: 4.00000  
 Integrator: HP RTE Compound Sublist: 10-2199.sub  
 Target Version: 3.50  
 Processing Host: hpclp1

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

Name	Value	Description
DF	4.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.09000	weight of sample
M	25.40910	% moisture

Cpnd Variable Local Compound Variable

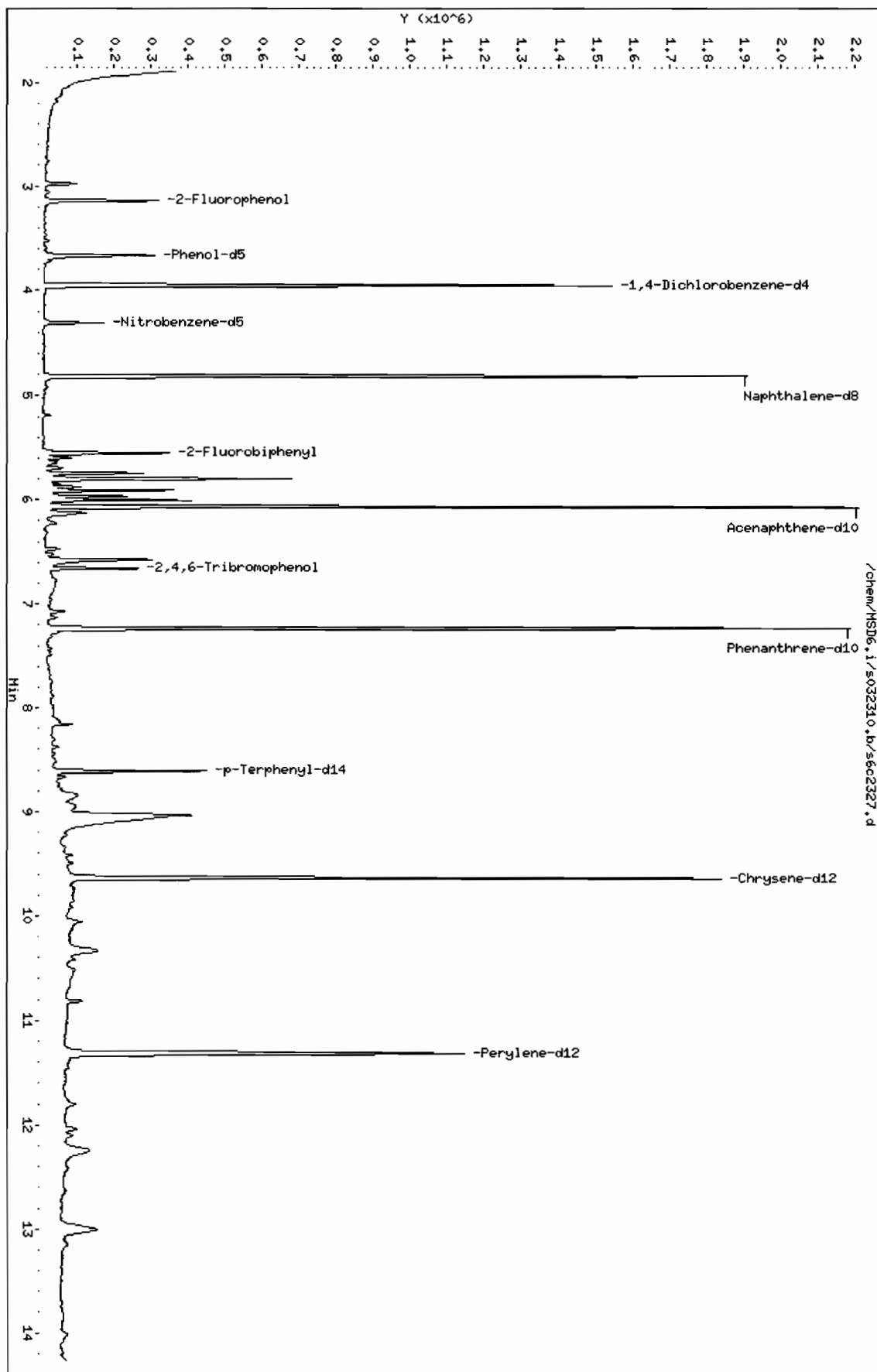
ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 46 Acenaphthene-d10	6.069	2720235	40.000
* 91 Chrysene-d12	9.639	2635762	40.000
* 98 Perylene-d12	11.316	1957602	40.000

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	
=====	=====	=====	=====	=====	=====	=====	=====
Biphenylene, 1,2,3,6,7,8,8a,8b-octahydro					CAS #: 106988-87-8		
5.745	332235	4.88538090	871	87	NIST05.L	48796	46
Spiro[4.5]dec-7-ene, 1,8-dimethyl-4-(1-m					CAS #: 24048-44-0		
5.910	388410	5.71142461	1020	86	NIST05.L	59996	46
Unknown					CAS #:		
5.969	274712	4.03953793	720	0		0	46
Unknown					CAS #:		
6.004	447124	6.57477846	1170	0		0	46
Cedrane, 8-propoxy-					CAS #: 19870-75-8		
6.575	512569	7.53712725	1340	94	NIST05.L	101502	46
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa					CAS #: 511-15-9		
9.033	1724004	26.1632607	4660	97	NIST05.L	116239	91
Unknown					CAS #:		
10.333	437903	6.64555473	1180	0		0	91
Unknown					CAS #:		
12.245	338946	6.92574238	1230	0		0	98
Unknown					CAS #:		
13.010	466859	9.53940092	1700	0		0	98

Data File: /chem/MSD6.i/s032310.b/s6c2327.d  
 Date : 24-MAR-2010 00:40  
 Client ID: RE36-10-8277  
 Sample Info: 1248519003196313141SVH11LLNL  
 Volume Injected (uL): 0.5  
 Column phase: J&W DB-5MS

Instrument: MSD6.i  
 Operator: nag1  
 Column diameter: 0.20



Date : 24-MAR-2010 00:40

Client ID: RE36-10-8277

Instrument: MSD6.i

Sample Info: I2485190031963133141SVM111LANL

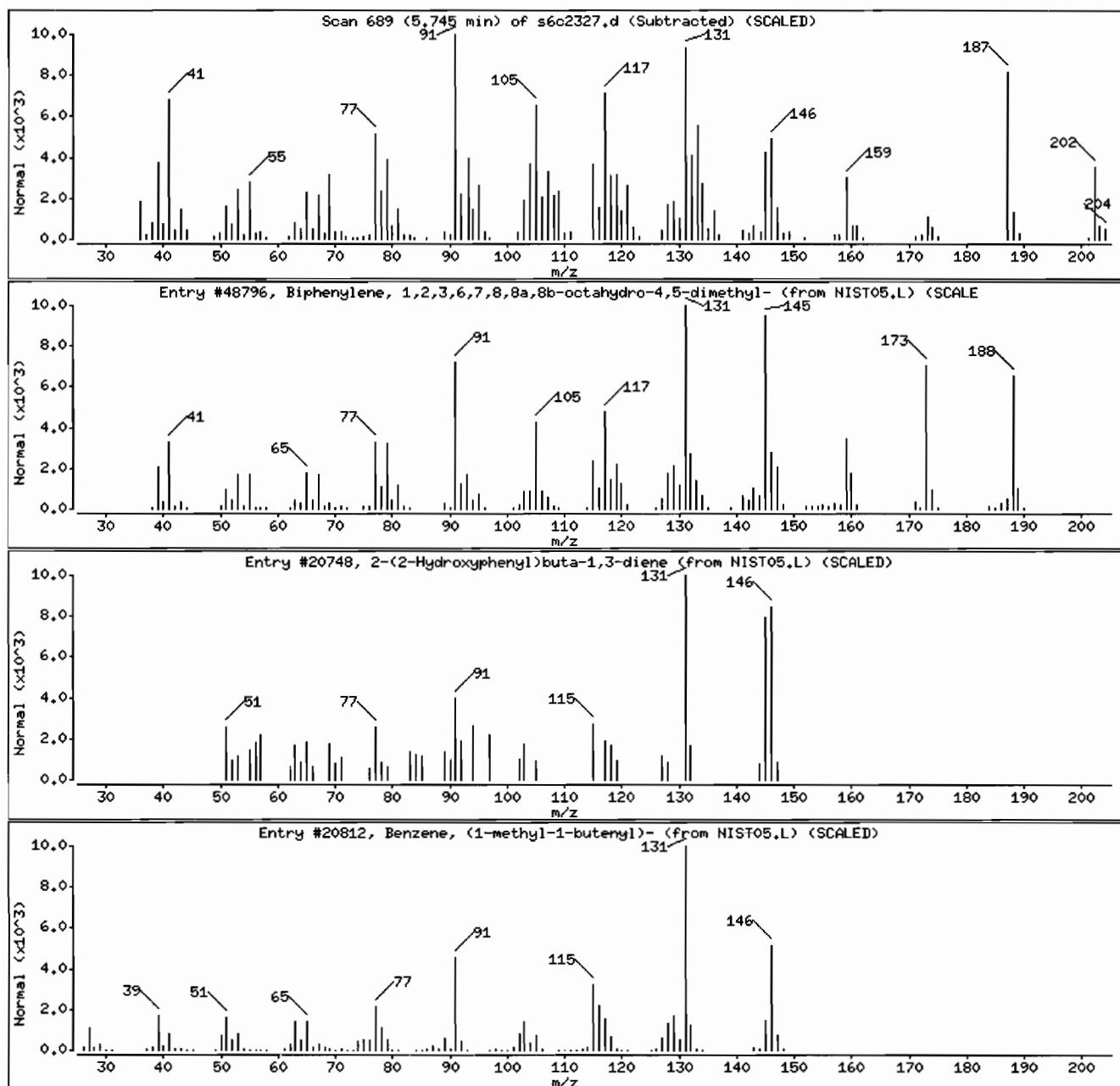
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Biphenylene, 1,2,3,6,7,8,8a,8b-octahydro	106988-87-8	NIST05.L	48796	87	C14H20	188
2-(2-Hydroxyphenyl)buta-1,3-diene	38865-47-3	NIST05.L	20748	30	C10H10O	146
Benzene, (1-methyl-1-butenyl)-	53172-84-2	NIST05.L	20812	30	C11H14	146



Date : 24-MAR-2010 00:40

Client ID: RE36-10-8277

Instrument: MSD6.i

Sample Info: I2485190031963133141SVMI11LANL

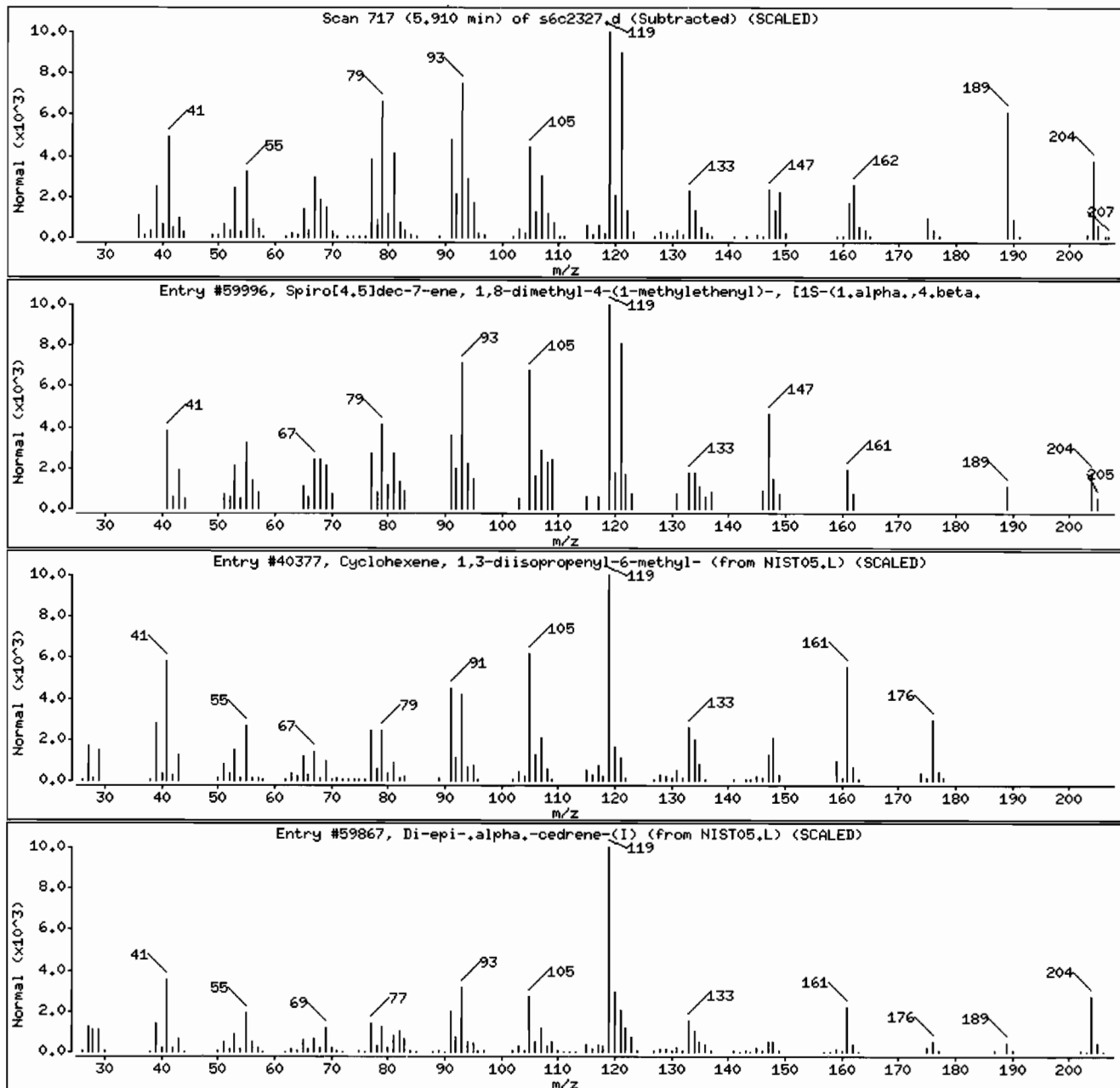
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Spiro[4.5]dec-7-ene, 1,8-dimethyl-4-(1-m	24048-44-0	NIST05.L	59996	86	C15H24	204
Cyclohexene, 1,3-diisopropenyl-6-methyl-	1000151-28-9	NIST05.L	40377	50	C13H20	176
Di-epi-.alpha.-cedrene-(I)	21996-77-0	NIST05.L	59867	50	C15H24	204



Date : 24-MAR-2010 00:40

Client ID: RE36-10-8277

Instrument: MSD6.i

Sample Info: 12485190031963133141SVH111LANL

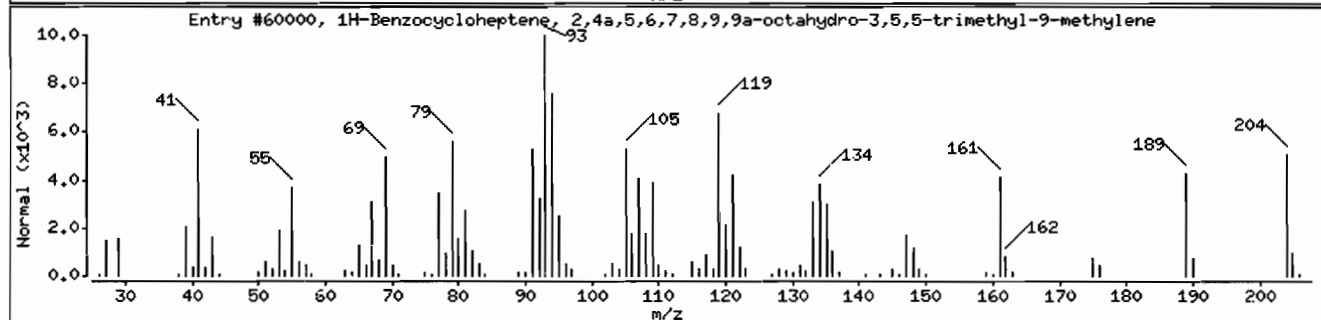
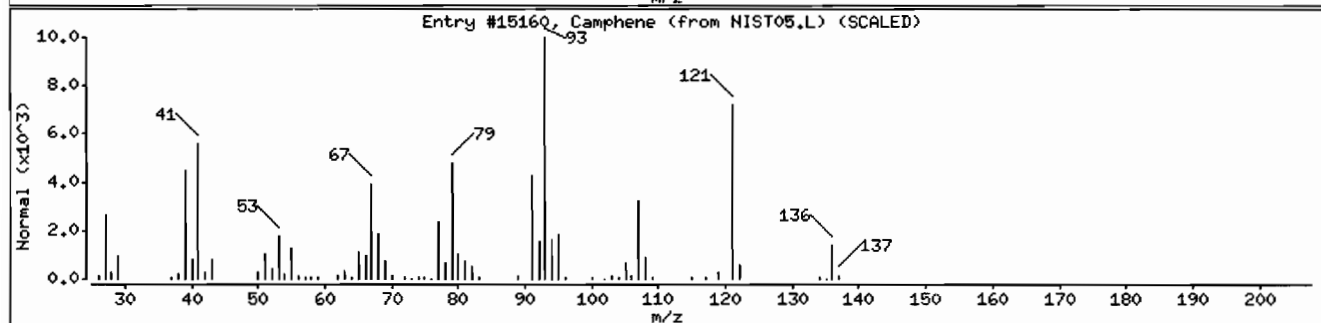
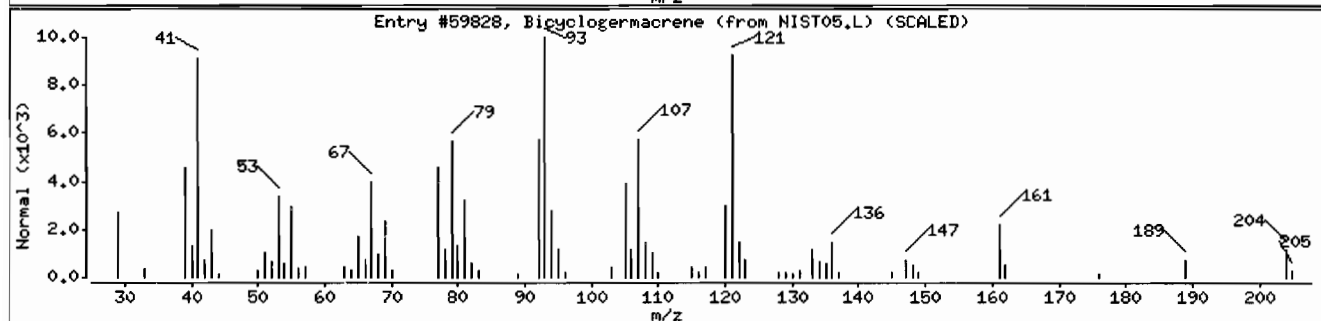
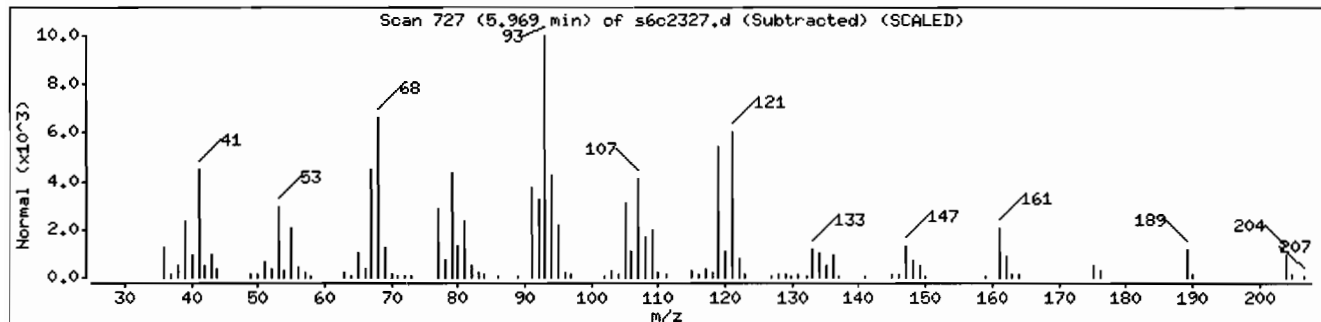
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Bicyclogermacrene	67650-90-2	NIST05.L	59828	60	C15H24	204
Camphene	79-92-5	NIST05.L	15160	55	C10H16	136
1H-Benzocycloheptene, 2,4a,5,6,7,8,9,9a-	3853-83-6	NIST05.L	60000	53	C15H24	204



Date : 24-MAR-2010 00:40

Client ID: RE36-10-8277

Instrument: MSD6.i

Sample Info: I2485190031963133141SVMI11LANL

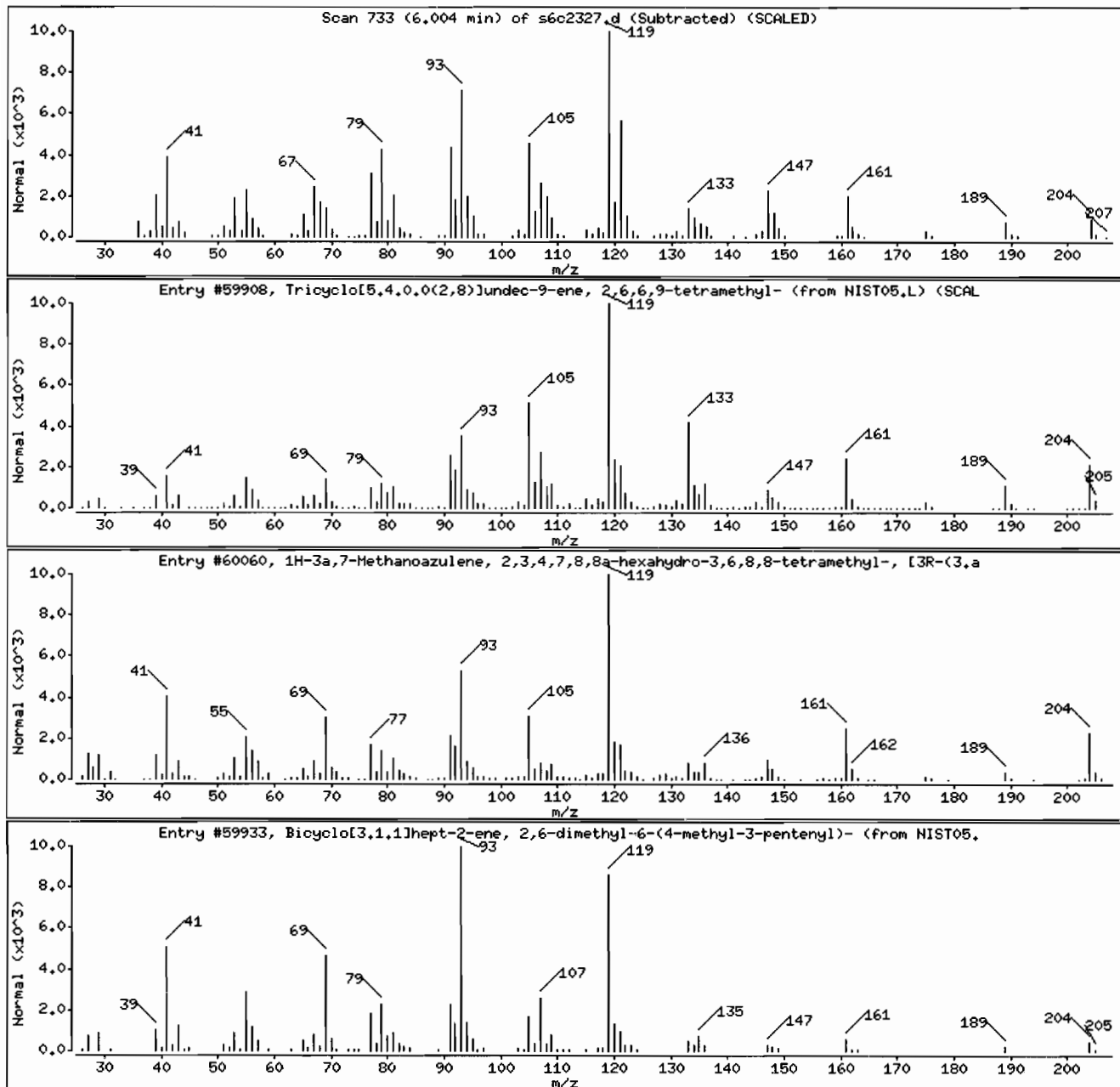
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Tricyclo[5.4.0.0(2,8)]undec-9-ene, 2,6,6	5989-08-2	NIST05.L	59908	49	C15H24	204
1H-3a,7-Methanoazulene, 2,3,4,7,8,8a-hex	469-61-4	NIST05.L	60060	46	C15H24	204
Bicyclo[3.1.1]hept-2-ene, 2,6-dimethyl-6	17699-05-7	NIST05.L	59933	45	C15H24	204





Date : 24-MAR-2010 00:40

Client ID: RE36-10-8277

Instrument: MSD6.i

Sample Info: I2485190031963133141SVM111LANL

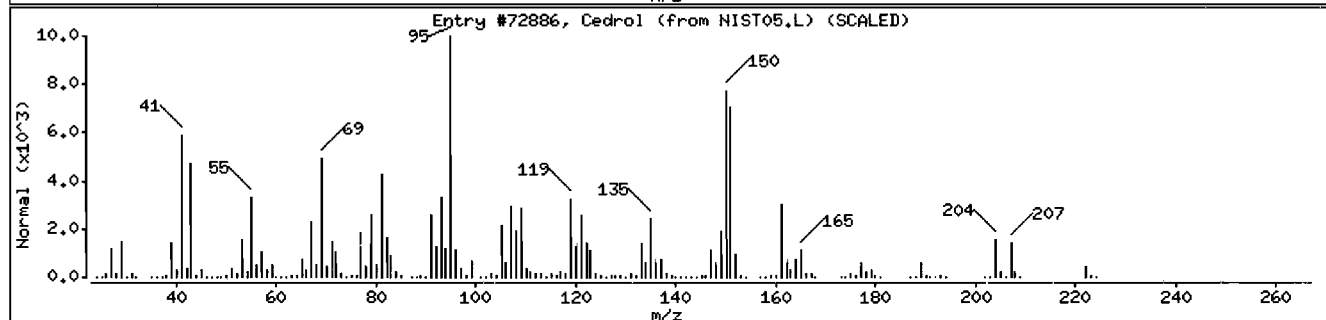
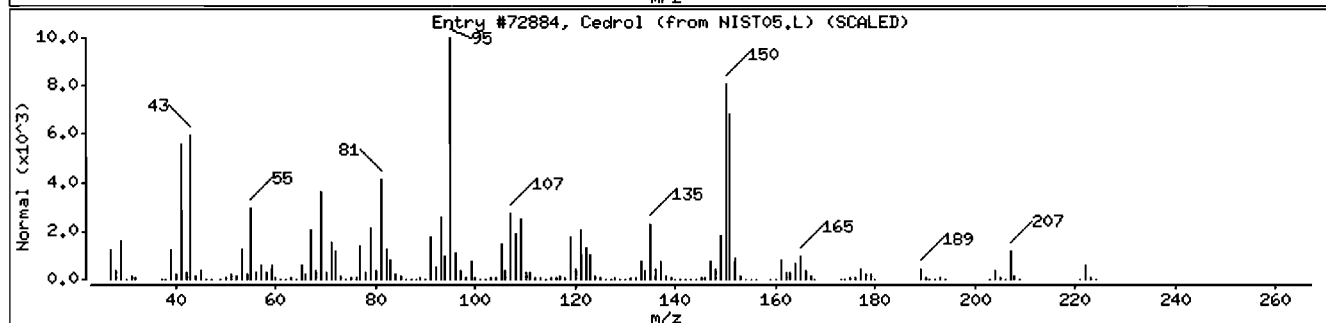
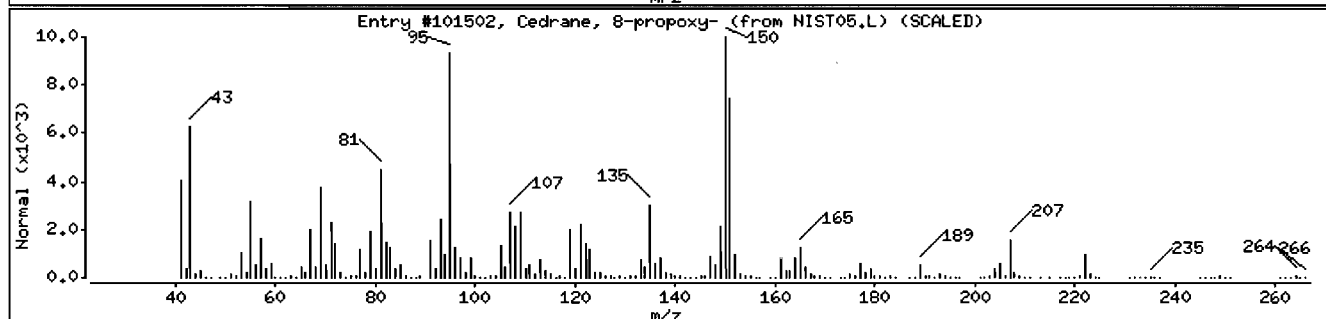
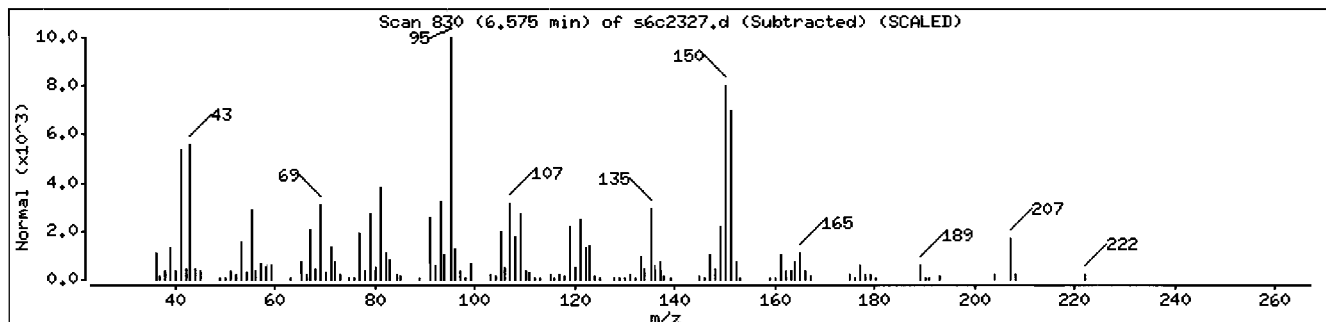
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cedrane, 8-propoxy-	19870-75-8	NIST05.L	101502	94	C18H32O	264
Cedrol	77-53-2	NIST05.L	72884	94	C15H26O	222
Cedrol	77-53-2	NIST05.L	72886	93	C15H26O	222



Date : 24-MAR-2010 00:40

Client ID: RE36-10-8277

Instrument: HSD6.i

Sample Info: I2485190031963133141SVH111LANL

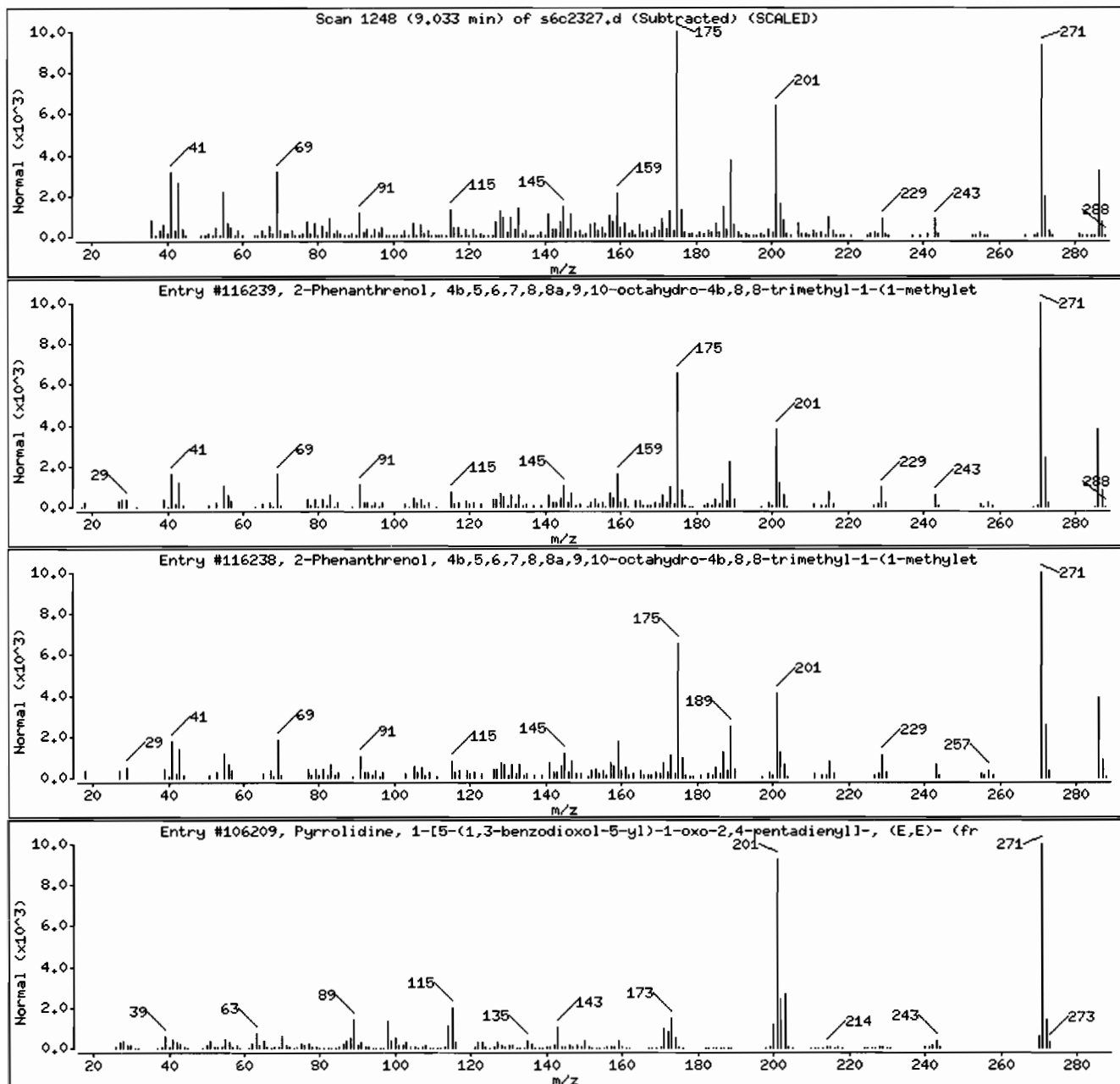
Volume Injected (uL): 0.5

Operator: nag1

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	97	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	46	C16H17NO3	271



Date : 24-MAR-2010 00:40

Client ID: RE36-10-8277

Instrument: MSD6.i

Sample Info: 12485190031963133141SVH111LANL

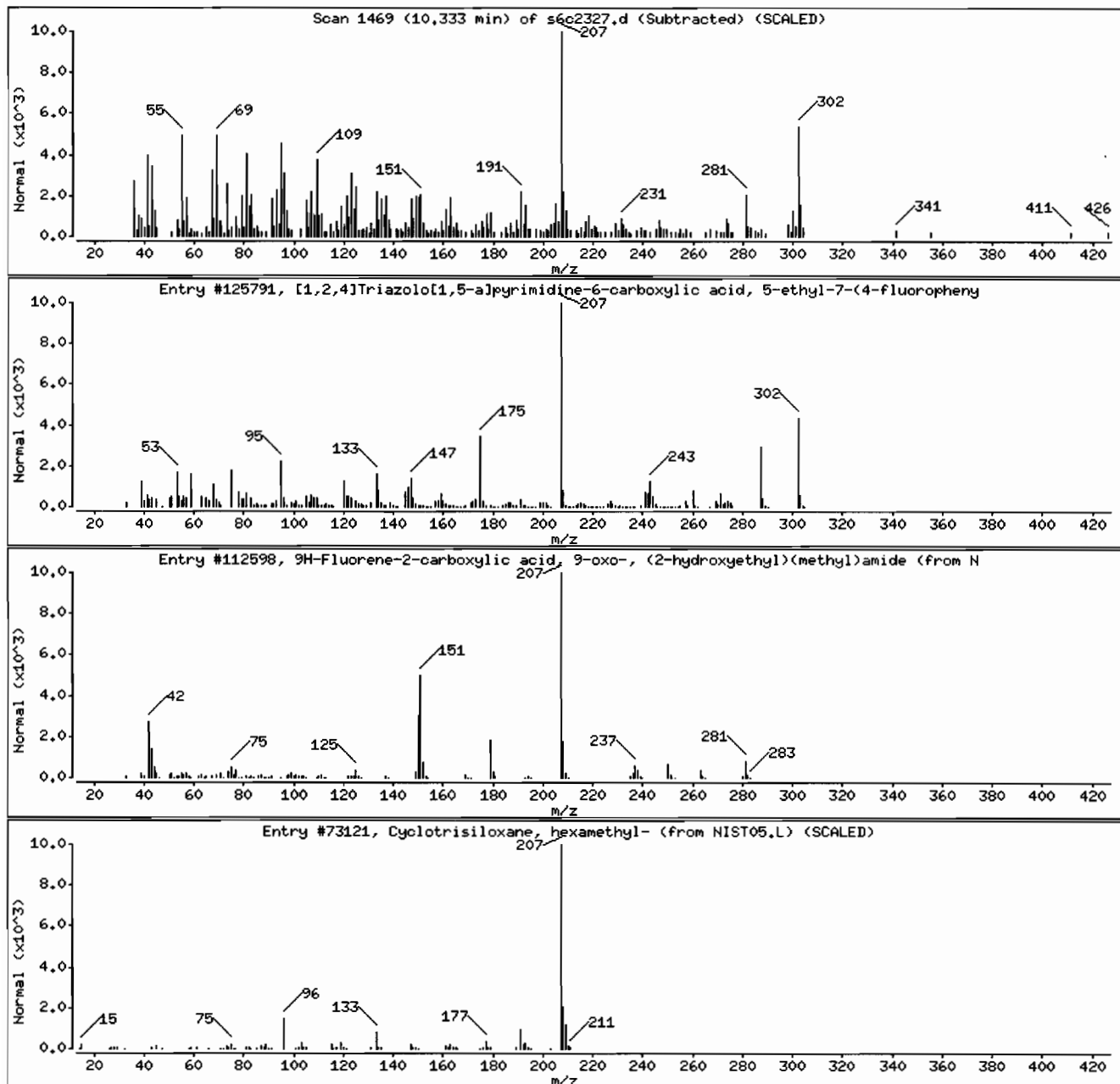
Volume Injected (uL): 0.5

Operator: nag1

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]Triazolo[1,5-a]pyrimidine-6-carbo	1000317-15-2	NIST05.L	125791	46	C15H15FN4O2	302
9H-Fluorene-2-carboxylic acid, 9-oxo-, (	1000316-02-1	NIST05.L	112598	38	C17H15NO3	281
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73121	38	C6H18O3Si3	222



Date : 24-MAR-2010 00:40

Client ID: RE36-10-8277

Instrument: MSD6.i

Sample Info: I2485190031963133141SVM111LANL

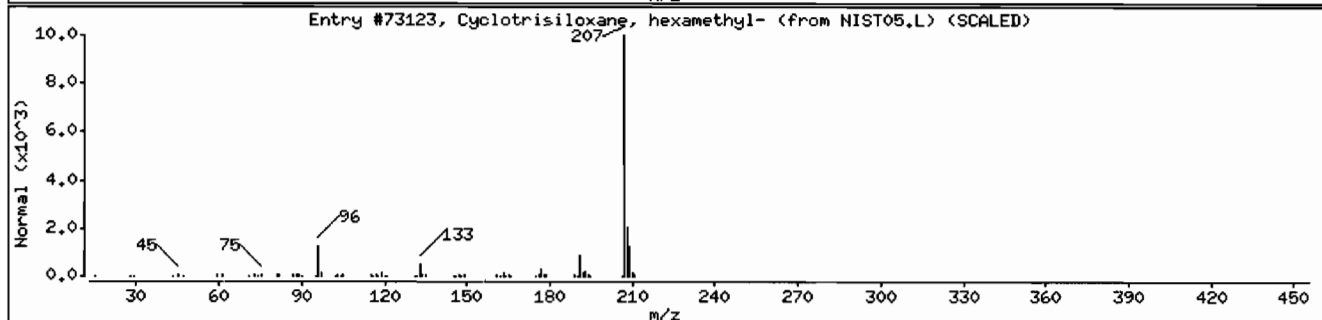
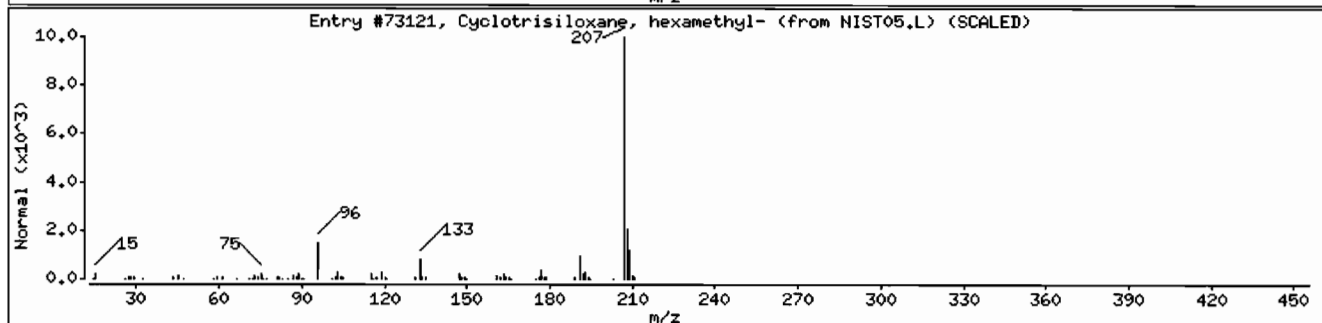
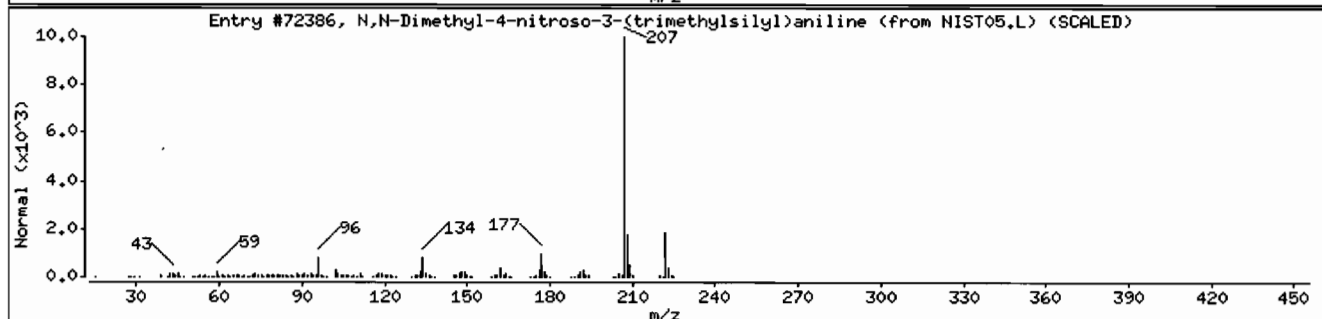
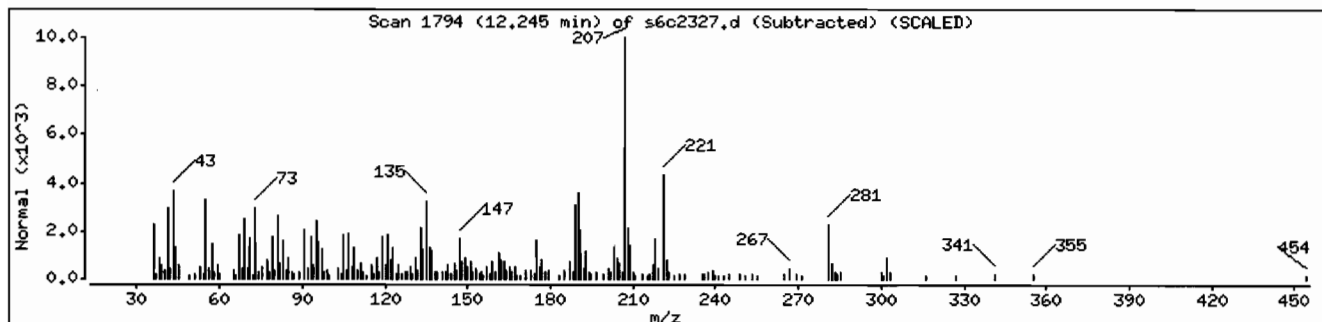
Volume Injected (uL): 0.5

Operator: nag1

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	38	C11H18N2OSi	222
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73121	38	C6H18O3Si3	222
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73123	38	C6H18O3Si3	222



Date : 24-MAR-2010 00:40

Client ID: RE36-10-8277

Instrument: MSD6.i

Sample Info: I2485190031963133141SVMI1ILANL

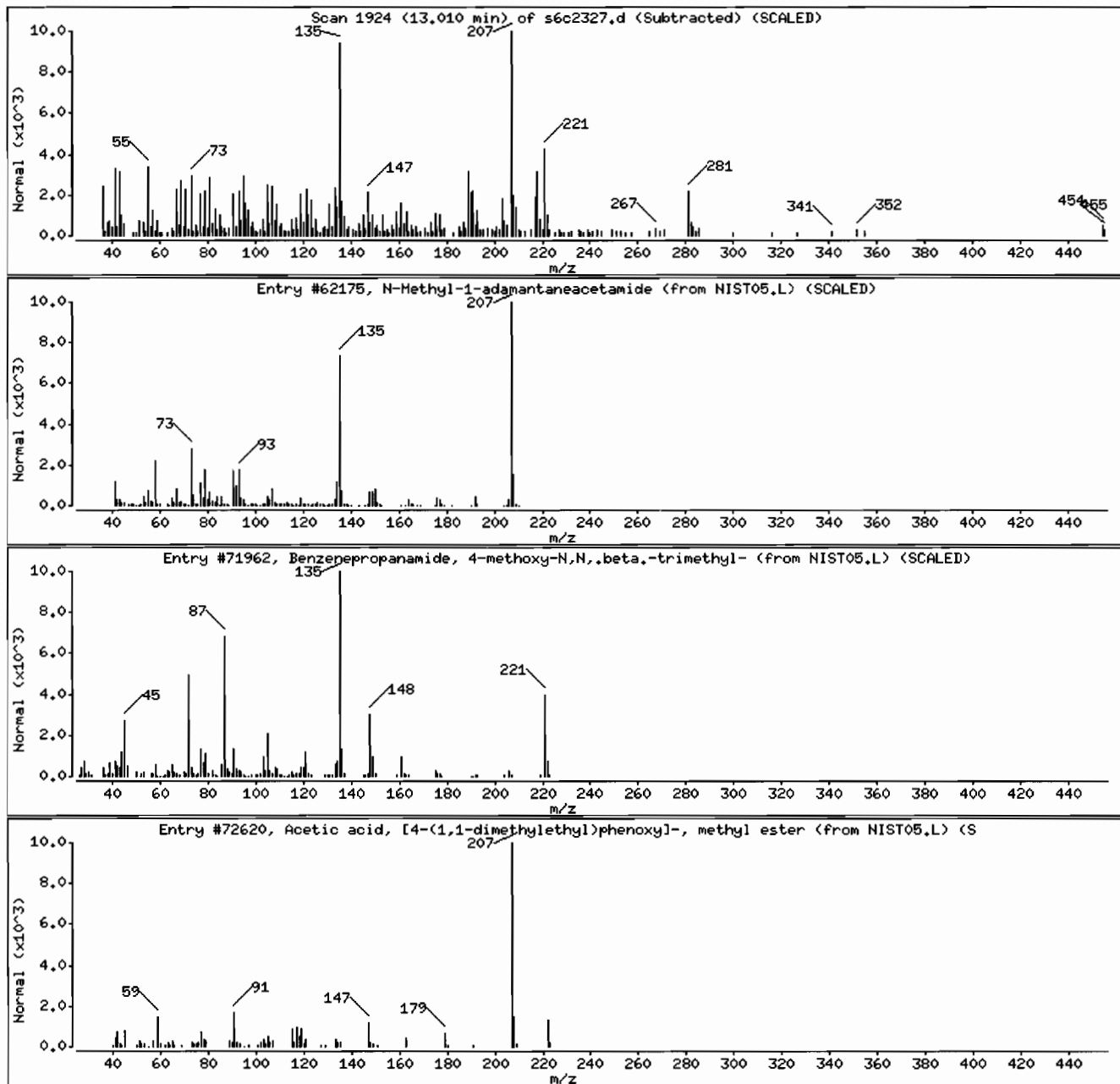
Volume Injected (uL): 0.5

Operator: nag1

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	70	C13H21NO	207
Benzenepropanamide, 4-methoxy-N,N,.beta.,	90316-50-0	NIST05.L	71962	38	C13H19NO2	221
Acetic acid, [4-(1,1-dimethylethyl)pheno	88530-52-3	NIST05.L	72620	30	C13H18O3	222



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

**SDG Number:** 10-2199  
**Lab Sample ID:** 248519005

**Client ID:** RE36-10-8278  
**Batch ID:** 963133  
**Run Date:** 03/21/2010 22:09  
**Prep Date:** 03/10/2010 12:14  
**Data File:** s6c2118.d

**Date Collected:** 02/25/2010 12:00  
**Date Received:** 03/03/2010 08:50  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD6.I  
**Analyst:** NAG1  
**Aliquot:** 30 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 6.4  
**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
62-75-9	N-Methyl-N-nitrosomethylamine	U	356	ug/kg	71.2	356
108-95-2	Phenol	U	356	ug/kg	71.2	356
95-57-8	2-Chlorophenol	U	356	ug/kg	71.2	356
106-46-7	1,4-Dichlorobenzene	U	356	ug/kg	71.2	356
621-64-7	N-Nitrosodipropylamine	U	356	ug/kg	71.2	356
59-50-7	4-Chloro-3-methylphenol	U	356	ug/kg	71.2	356
83-32-9	Acenaphthene	U	35.6	ug/kg	11.7	35.6
121-14-2	2,4-Dinitrotoluene	U	356	ug/kg	35.6	356
100-02-7	4-Nitrophenol	U	356	ug/kg	117	356
87-86-5	Pentachlorophenol	U	356	ug/kg	89.0	356
129-00-0	Pyrene	U	35.6	ug/kg	10.7	35.6
110-86-1	Pyridine	U	356	ug/kg	71.2	356
62-53-3	Aniline	U	356	ug/kg	107	356
111-44-4	bis(2-Chloroethyl) ether	U	356	ug/kg	71.2	356
541-73-1	1,3-Dichlorobenzene	U	356	ug/kg	71.2	356
100-51-6	Benzyl alcohol	U	356	ug/kg	107	356
95-50-1	1,2-Dichlorobenzene	U	356	ug/kg	71.2	356
108-60-1	bis(2-Chloroisopropyl)ether	U	356	ug/kg	71.2	356
95-48-7	o-Cresol	U	356	ug/kg	71.2	356
65794-96-9	m,p-Cresols	U	356	ug/kg	107	356
67-72-1	Hexachloroethane	U	356	ug/kg	71.2	356
98-95-3	Nitrobenzene	U	356	ug/kg	71.2	356
78-59-1	Isophorone	U	356	ug/kg	71.2	356
88-75-5	2-Nitrophenol	U	356	ug/kg	71.2	356
105-67-9	2,4-Dimethylphenol	U	356	ug/kg	125	356
111-91-1	bis(2-Chloroethoxy)methane	U	356	ug/kg	71.2	356
120-83-2	2,4-Dichlorophenol	U	356	ug/kg	71.2	356
65-85-0	Benzoic acid	U	712	ug/kg	178	712
91-20-3	Naphthalene	U	35.6	ug/kg	10.7	35.6
106-47-8	4-Chloroaniline	U	356	ug/kg	71.2	356
87-68-3	Hexachlorobutadiene	U	356	ug/kg	71.2	356
91-57-6	2-Methylnaphthalene	U	35.6	ug/kg	7.12	35.6
77-47-4	Hexachlorocyclopentadiene	U	356	ug/kg	71.2	356
88-06-2	2,4,6-Trichlorophenol	U	356	ug/kg	71.2	356
95-95-4	2,4,5-Trichlorophenol	U	356	ug/kg	71.2	356
91-58-7	2-Chloronaphthalene	U	35.6	ug/kg	11.7	35.6
88-74-4	2-Nitroaniline	U	356	ug/kg	71.2	356
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	356	ug/kg	71.2	356

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

SDG Number: 10-2199	Date Collected: 02/25/2010 12:00	Matrix: R
Lab Sample ID: 248519005	Date Received: 03/03/2010 08:50	%Moisture: 6.4
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-8278	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 963133	Inst: MSD6.I	Dilution: 1
Run Date: 03/21/2010 22:09	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 03/10/2010 12:14	Aliquot: 30 g	Final Volume: 1 mL
Data File: s6c2118.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					
606-20-2	Dimethylphthalate	U	356	ug/kg	71.2	356
208-96-8	2,6-Dinitrotoluene	U	356	ug/kg	35.6	356
51-28-5	Acenaphthylene	U	35.6	ug/kg	10.7	35.6
132-64-9	2,4-Dinitrophenol	U	712	ug/kg	135	712
84-66-2	Dibenzofuran	U	356	ug/kg	71.2	356
86-73-7	Diethylphthalate	U	356	ug/kg	71.2	356
7005-72-3	Fluorene	U	35.6	ug/kg	10.7	35.6
534-52-1	4-Chlorophenylphenylether	U	356	ug/kg	71.2	356
100-01-6	2-Methyl-4,6-dinitrophenol	U	356	ug/kg	71.2	356
122-39-4	4-Nitroaniline	U	356	ug/kg	107	356
122-66-7	<i>p</i> -Nitroaniline					
101-55-3	Diphenylamine	U	356	ug/kg	71.2	356
118-74-1	Azobenzene	U	356	ug/kg	71.2	356
85-01-8	<i>1,2</i> -Diphenylhydrazine					
120-12-7	4-Bromophenylphenylether	U	356	ug/kg	71.2	356
84-74-2	Hexachlorobenzene	U	356	ug/kg	71.2	356
206-44-0	Phenanthrene	U	35.6	ug/kg	10.7	35.6
85-68-7	Anthracene	U	35.6	ug/kg	7.12	35.6
56-55-3	Di-n-butylphthalate	U	356	ug/kg	71.2	356
91-94-1	Fluoranthene	U	35.6	ug/kg	10.7	35.6
218-01-9	Butylbenzylphthalate	U	356	ug/kg	71.2	356
117-81-7	Benzo(a)anthracene	U	35.6	ug/kg	10.7	35.6
117-84-0	3,3'-Dichlorobenzidine	U	356	ug/kg	107	356
205-99-2	Chrysene	U	35.6	ug/kg	10.7	35.6
207-08-9	bis(2-Ethylhexyl)phthalate	U	356	ug/kg	71.2	356
50-32-8	Di-n-octylphthalate	U	356	ug/kg	71.2	356
193-39-5	Benzo(b)fluoranthene	U	35.6	ug/kg	10.7	35.6
53-70-3	Benzo(k)fluoranthene	U	35.6	ug/kg	10.7	35.6
191-24-2	Benzo(a)pyrene	U	35.6	ug/kg	10.7	35.6
120-82-1	Indeno(1,2,3-cd)pyrene	U	35.6	ug/kg	10.7	35.6
	Dibenzo(a,h)anthracene	U	35.6	ug/kg	10.7	35.6
	Benzo(ghi)perylene	U	35.6	ug/kg	10.7	35.6
	1,2,4-Trichlorobenzene	U	356	ug/kg	71.2	356

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.86	401	ug/kg		JA
106988-87-8	Biphenylene, 1,2,3,6,7,8,8a,8b-octahydro	5.62	366	ug/kg	87	NJ

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

SDG Number: 10-2199  
Lab Sample ID: 248519005

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Aliquot: 30 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 6.4  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE36-10-8278  
Batch ID: 963133  
Run Date: 03/21/2010 22:09  
Prep Date: 03/10/2010 12:14  
Data File: s6c2118.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
	Unknown	5.79	442	ug/kg		J
495-61-4	Cyclohexene, 1-methyl-4-(5-methyl-1-meth	5.85	384	ug/kg	83	NJ
24048-44-0	Spiro[4.5]dec-7-ene, 1,8-dimethyl-4-(1-m	5.88	632	ug/kg	93	NJ
23986-74-5	1,6-Cyclodecadiene, 1-methyl-5-methylene	5.9	227	ug/kg	99	NJ
3853-83-6	1H-Benzocycloheptene, 2,4a,5,6,7,8,9,9a-	6	288	ug/kg	92	NJ
	Unknown	6.56	259	ug/kg		J
1000188-66-5	2(1H)Naphthalenone, 3,5,6,7,8,8a-hexahyd	7.98	184	ug/kg	90	NJ
	Unknown	8.39	315	ug/kg		J
482-27-9	7H-Furo[3,2-g][1]benzopyran-7-one, 4,9-d	8.59	246	ug/kg	99	NJ
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	8.89	1710	ug/kg	97	NJ
484-08-2	Furo[2,3-b]quinoline, 4,6,7-trimethoxy-	9.28	264	ug/kg	90	NJ
506-51-4	1-Tetracosanol	9.4	160	ug/kg	89	NJ
3386-33-2	Octadecane, 1-chloro-	9.6	209	ug/kg	94	NJ
	Unknown	9.67	224	ug/kg		J
	Unknown	9.79	320	ug/kg		J
	Unknown	9.83	392	ug/kg		J
	Unknown	9.92	488	ug/kg		J
	Unknown	10.05	333	ug/kg		J
112-95-8	Eicosane	10.63	221	ug/kg	96	NJ
	Unknown	11.63	457	ug/kg		J
	Unknown	12.33	890	ug/kg		J
	Unknown	13.02	414	ug/kg		J
83-46-5	.beta.-Sitosterol	13.65	937	ug/kg	91	NJ



Data File: /chem/MSD6.i/s032110.b/s6c2118.d  
Report Date: 23-Mar-2010 11:02

Page 1

GEL Laboratories LLC

Data file : /chem/MSD6.i/s032110.b/s6c2118.d  
Lab Smp Id: 248519005 Client Smp ID: RE36-10-8278  
Inj Date : 21-MAR-2010 22:09  
Operator : nag1 Inst ID: MSD6.i  
Smp Info : |248519005|963133|1|SVM|1|LANL  
Misc Info : |MSD8270\_S|WBN100319-01  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD6.i/s032110.b/MSD6-M8270C-AQA-031610.m  
Meth Date : 23-Mar-2010 10:53 nat00999 Quant Type: ISTD  
Cal Date : 17-MAR-2010 04:51 Cal File: s6c1646.d  
Als bottle: 15  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-2199.sub  
Target Version: 3.50  
Processing Host: hpcpl1

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	6.35440	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG				RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT		ON-COLUMN	FINAL
						(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.828	3.822	(1.000)	386725	40.0000	
* 29 Naphthalene-d8	136	4.687	4.687	(1.000)	1403933	40.0000	
* 46 Acenaphthene-d10	164	5.940	5.934	(1.000)	878419	40.0000	
* 67 Phenanthrene-d10	188	7.098	7.093	(1.000)	1584663	40.0000	
* 91 Chrysene-d12	240	9.492	9.486	(1.000)	1324886	40.0000	
* 98 Perylene-d12	264	11.092	11.075	(1.000)	759875	40.0000	
\$ 3 2-Fluorophenol	112	3.022	3.005	(0.789)	671899	62.4989	2220
\$ 5 Phenol-d5	99	3.546	3.534	(0.926)	876956	64.1431	2280
\$ 20 Nitrobenzene-d5	82	4.187	4.181	(0.893)	412964	30.7707	1100
\$ 39 2-Fluorobiphenyl	172	5.434	5.422	(0.915)	856252	37.7812	1340
\$ 60 2,4,6-Tribromophenol	329	6.534	6.522	(1.100)	228032	92.5092	3290
\$ 81 p-Terphenyl-d14	244	8.475	8.463	(0.893)	1049658	45.4647	1620

## ION RATIO REPORT

## SV REPORT

Data file: s6c2118.d

Report Date: 03/22/2010 20:26

Lab. ID: 248519005

SampleType: SAMPLE

Injection Date: 21-MAR-2010 22:09

Operator: nagl

Instrument: MSD6.i

Sample Info: |248519005|963133|1|SVM|1|LANL

Miscellaneous Info: |MSD8270\_S|WBN100319-01

Comment:

Method used: /chem/MSD6.i/s032110.b/MSD6-M8270C-AQA-031610.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-2199

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
1	N-Methyl-N-nitrosomethylamine			CAS#: 62-75-9		
74	39671	1.95	2.31	80-120	100	(T)
42	71729	1.95	2.31	72-132	181	(QT)
43	521597	1.95	2.31	12- 72	1315	(QT)
-----						
4	Aniline			CAS#: 62-53-3		
66	47824	3.55	3.60	80-120	100	( )
93	951	3.50	3.60	402-462	2	(QT)
-----						
17	N-Nitrosodipropylamine			CAS#: 621-64-7		
70	60308	4.19	4.06	80-120	100	(T)
42	35999	4.19	4.06	40-100	60	(T)
-----						
22	Isophorone			CAS#: 78-59-1		
82	412964	4.19	4.35	80-120	100	(T)
138	804	4.50	4.35	0- 50	0	(T)
-----						
40	2-Chloronaphthalene			CAS#: 91-58-7		
162	38355	5.67	5.53	80-120	100	(T)
164	1618	5.67	5.53	4- 64	4	(T)
127	2774	5.67	5.53	8- 68	7	(QT)
-----						
42	o-Nitroaniline			CAS#: 88-74-4		
65	39166	5.67	5.59	80-120	100	(T)
92	68085	5.68	5.59	38- 98	174	(QT)
138	2333	5.67	5.59	80-140	6	(QT)
-----						

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
43 Dimethylphthalate				CAS#: 131-11-3		
163	158687	5.94	5.70	80-120	100	(T)
164	878419	5.94	5.70	0- 41	554	(QT)
-----						
45 Acenaphthylene				CAS#: 208-96-8		
152	46952	5.43	5.83	80-120	100	(T)
151	46095	5.43	5.83	0- 50	98	(QT)
153	14335	5.43	5.83	0- 44	31	(T)
-----						
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	117601	5.94	6.05	80-120	100	(T)
89	2120	5.94	6.05	39- 99	2	(QT)
63	1789	5.94	6.05	20- 80	2	(QT)
-----						
51 Diethylphthalate				CAS#: 84-66-2		
149	65279	6.45	6.20	80-120	100	(T)
177	17977	6.45	6.20	0- 54	28	(T)
150	244577	6.45	6.20	0- 43	375	(QT)
-----						
53 Fluorene				CAS#: 86-73-7		
166	12363	6.45	6.34	80-120	100	(T)
165	36464	6.45	6.34	60-120	295	(QT)
167	3720	6.45	6.34	0- 44	30	(T)
-----						
55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	961	6.53	6.36	80-120	100	(T)
105	25230	6.57	6.36	9- 69	2625	(QT)
51	1812	6.53	6.35	28- 88	189	(QT)
-----						
58 1,2-Diphenylhydrazine				CAS#: 122-66-7		
77	61655	6.45	6.44	80-120	100	( )
105	59798	6.45	6.44	0- 47	97	(Q)
182	357	6.47	6.44	1- 61	1	(Q)
-----						
61 4-Bromophenylphenylether				CAS#: 101-55-3		
248	17498	6.53	6.70	80-120	100	(T)
141	102450	6.53	6.70	42-102	585	(QT)
250	34308	6.53	6.70	68-128	196	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD6.i/s032110.b/s6c2118.d  
 Lab Smp Id: 248519005 Client Smp ID: RE36-10-8278  
 Inj Date : 21-MAR-2010 22:09  
 Operator : nagl Inst ID: MSD6.i  
 Smp Info : |248519005|963133|1|SVM|1|LANL  
 Misc Info : |MSD8270\_S|WBN100319-01  
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
 Method : /chem/MSD6.i/s032110.b/MSD6-M8270C-AQA-031610.m  
 Meth Date : 23-Mar-2010 10:53 nat00999 Quant Type: ISTD  
 Cal Date : 17-MAR-2010 04:51 Cal File: s6c1646.d  
 Als bottle: 15  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: 10-2199.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	6.35440	% moisture

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.828	2359454	40.000
* 46 Acenaphthene-d10	5.940	3826718	40.000
* 67 Phenanthrene-d10	7.098	3903299	40.000
* 91 Chrysene-d12	9.492	3467573	40.000
* 98 Perylene-d12	11.092	2033119	40.000

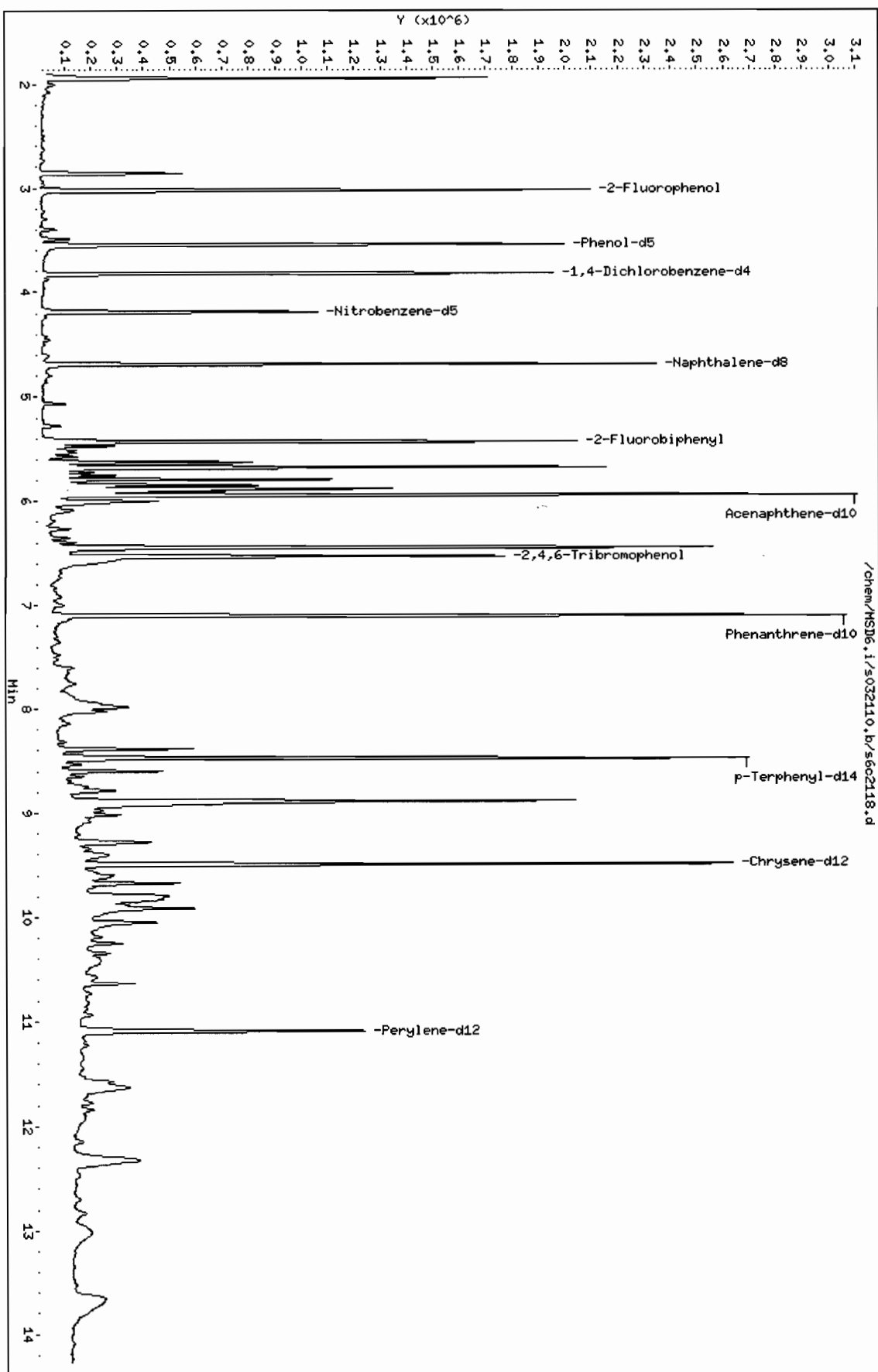
CONCENTRATIONS					QUANT		
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
Unknown Aldol Condensate					CAS #:		
2.857	664235	11.2608309	401	0		0	10
Biphenylene, 1,2,3,6,7,8,8a,8b-octahydro					CAS #: 106988-87-8		
5.622	984135	10.2869905	366	87	NIST05.L	48796	46
Unknown					CAS #:		
5.787	1187847	12.4163548	442	0		0	46
Cyclohexene, 1-methyl-4-(5-methyl-1-meth					CAS #: 495-61-4		
5.845	1032147	10.7888464	384	83	NIST05.L	59931	46
Spiro[4.5]dec-7-ene, 1,8-dimethyl-4-(1-m					CAS #: 24048-44-0		
5.881	1698739	17.7566136	632	93	NIST05.L	59996	46
1,6-Cyclodecadiene, 1-methyl-5-methylene					CAS #: 23986-74-5		
5.904	610103	6.37729290	227	99	NIST05.L	59960	46
1H-Benzocycloheptene, 2,4a,5,6,7,8,9,9a-					CAS #: 3853-83-6		
5.998	772850	8.07846594	288	92	NIST05.L	60000	46
Unknown					CAS #:		
6.563	711164	7.28782472	259	0		0	67
2(1H)Naphthalenone, 3,5,6,7,8,8a-hexahyd					CAS #: 1000188-66-5		
7.981	505689	5.18217080	184	90	NIST05.L	69976	67
Unknown					CAS #:		
8.386	767102	8.84886540	315	0		0	91
7H-Furo[3,2-g][1]benzopyran-7-one, 4,9-d					CAS #: 482-27-9		
8.592	598316	6.90183833	246	99	NIST05.L	88976	91
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa					CAS #: 511-15-9		
8.886	4173658	48.1449975	1710	97	NIST05.L	116239	91
Furo[2,3-b]quinoline, 4,6,7-trimethoxy-					CAS #: 484-08-2		
9.281	643136	7.41886360	264	90	NIST05.L	97963	91
1-Tetracosanol					CAS #: 506-51-4		
9.404	388910	4.48624845	160	89	NIST05.L	154682	91
Octadecane, 1-chloro-					CAS #: 3386-33-2		
9.598	509812	5.88090309	209	94	NIST05.L	117264	91

RT	CONCENTRATIONS			QUAL	QUANT		
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	CPND #
Unknown					CAS #:		
9.675	544706	6.28342245	224	0		0	91
Unknown					CAS #:		
9.792	779055	8.98674517	320	0		0	91
Unknown					CAS #:		
9.828	955359	11.0204917	392	0		0	91
Unknown					CAS #:		
9.916	1189289	13.7189727	488	0		0	91
Unknown					CAS #:		
10.051	811038	9.35567865	333	0		0	91
Eicosane					CAS #: 112-95-8		
10.633	315300	6.20328288	221	96	NIST05.L	113492	98
Unknown					CAS #:		
11.627	652196	12.8314244	457	0		0	98
Unknown					CAS #:		
12.327	1270728	25.0005470	890	0		0	98
Unknown					CAS #:		
13.016	591376	11.6348512	414	0		0	98
.beta.-Sitosterol					CAS #: 83-46-5		
13.651	1337353	26.3113454	936	91	NIST05.L	174400	98

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Date: 21-MAR-2010 22:09  
Client ID: REC6-10-8278  
Sample Info: 1248519005196313311SVH11LRLNL  
Volume Injected (uL): 0.5  
Column phase: J&W DB-5MS

Instrument: MSD6.i  
Operator: nag1  
Column diameter: 0.20



Date : 21-MAR-2010 22:09

Client ID: RE36-10-8278

Instrument: MSD6.i

Sample Info: 1248519005196313311ISVMI11LANL

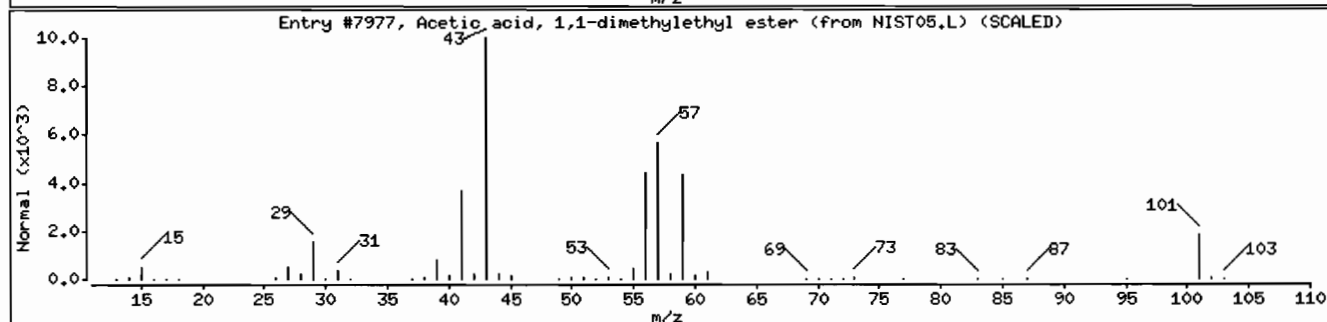
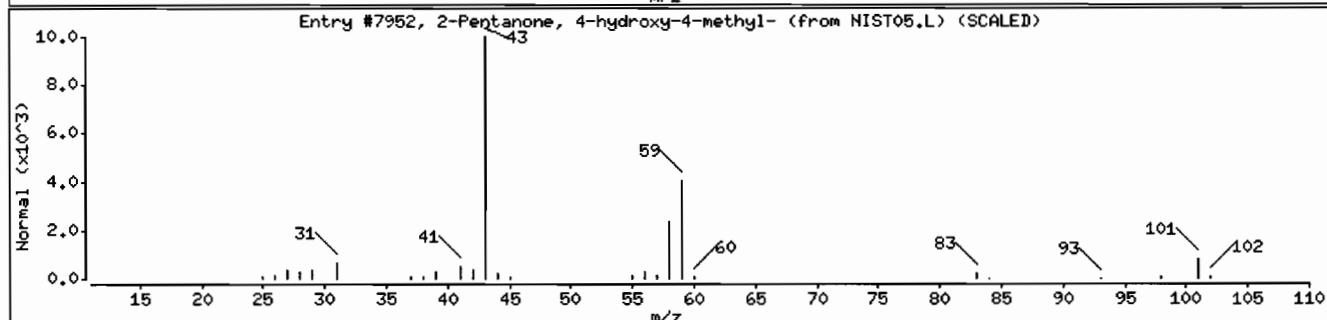
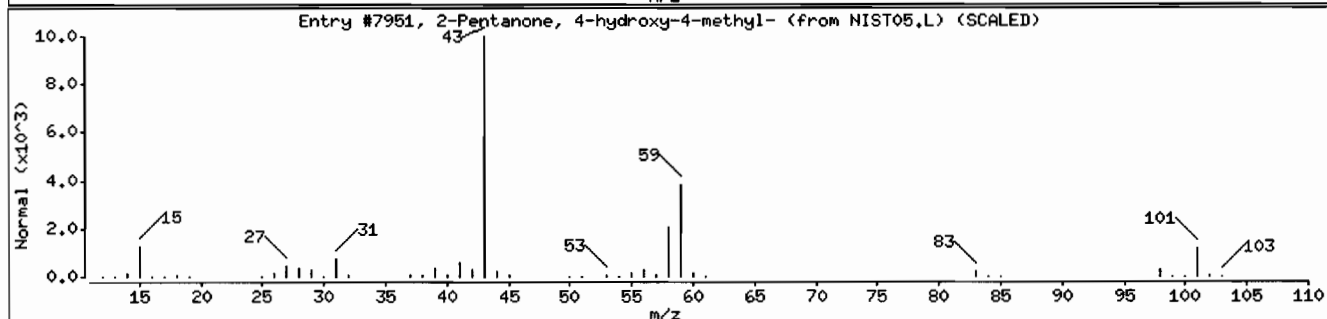
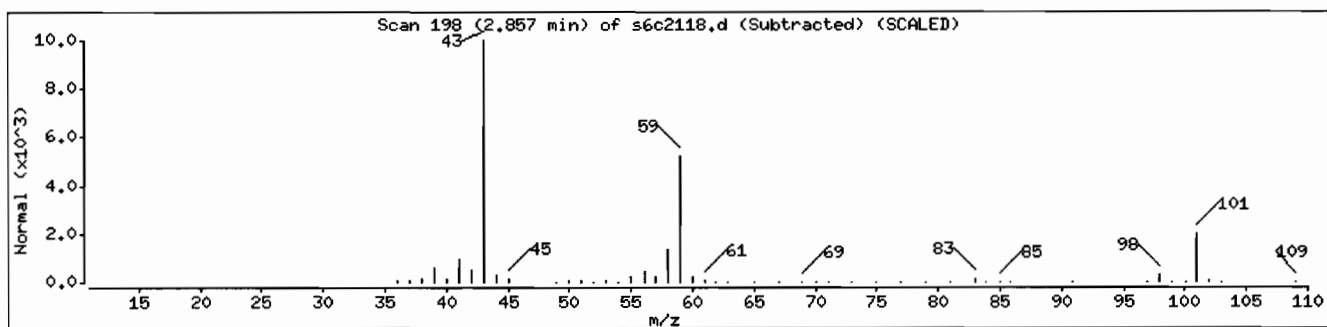
Volume Injected (uL): 0.5

Operator: nag1

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	45	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	40	C6H12O2	116
Acetic acid, 1,1-dimethylethyl ester	540-88-5	NIST05.L	7977	39	C6H12O2	116





Date : 21-MAR-2010 22:09

Client ID: RE36-10-8278

Instrument: MSD6.i

Sample Info: I248519005I963133I1ISVMH1ILANL

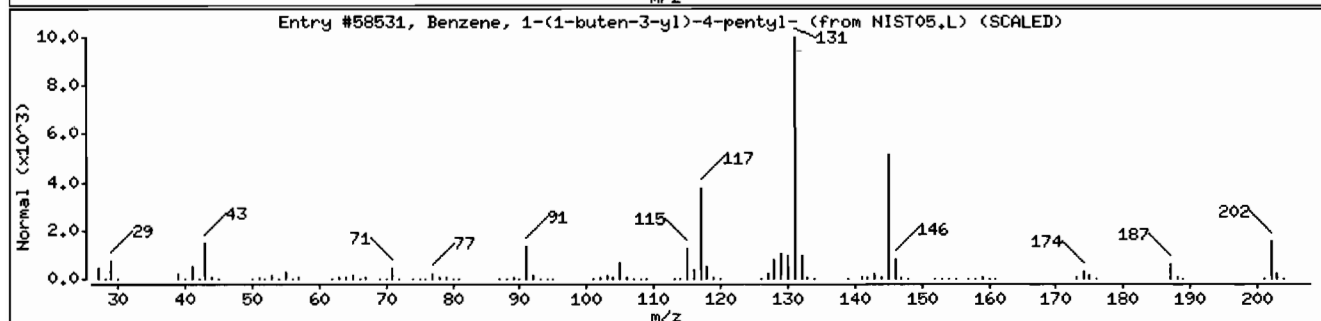
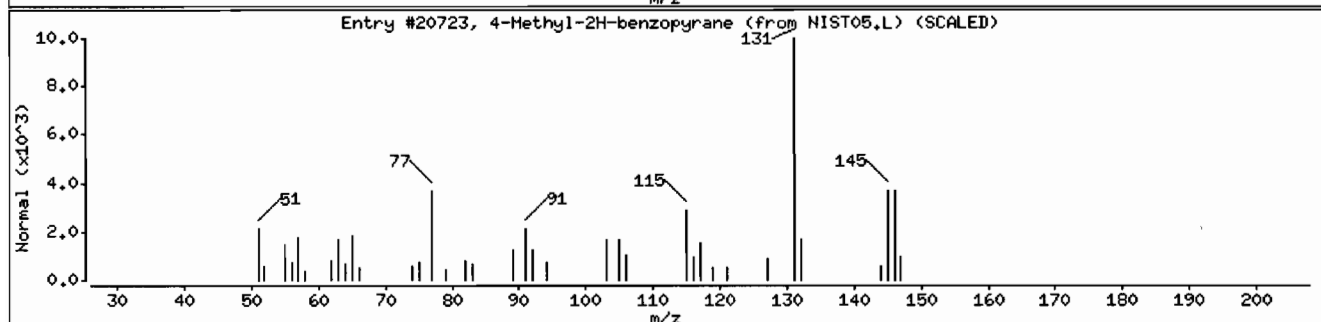
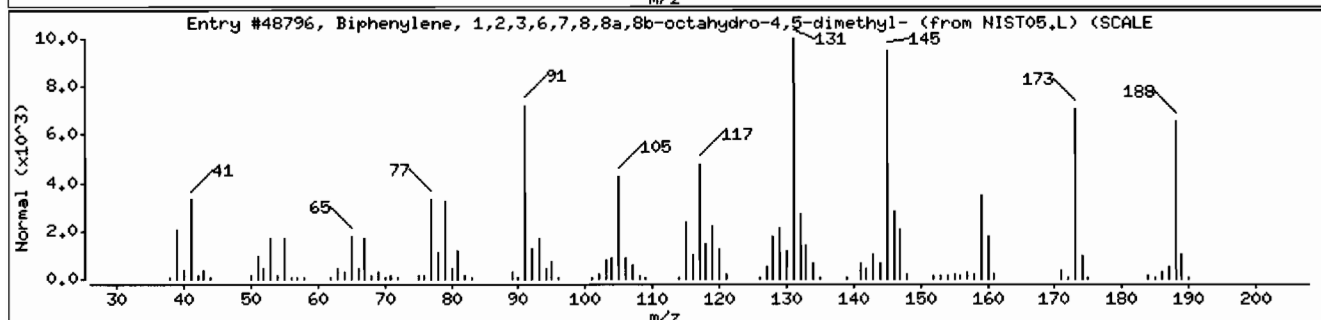
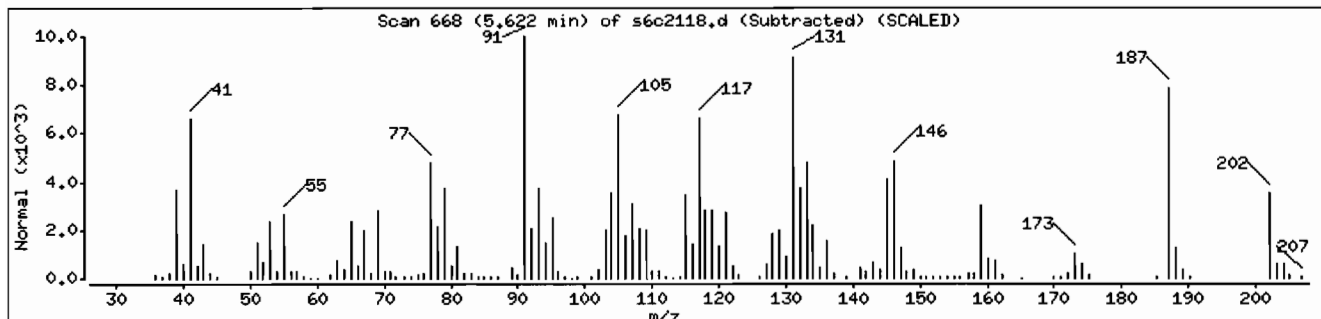
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Biphenylene, 1,2,3,6,7,8,8a,8b-octahydro	106988-87-8	NIST05.L	48796	87	C14H20	188
4-Methyl-2H-benzopyrane	21776-94-3	NIST05.L	20723	38	C10H10O	146
Benzene, 1-(1-buten-3-yl)-4-pentyl-	1000161-70-6	NIST05.L	58531	30	C15H22	202



Date : 21-MAR-2010 22:09

Client ID: RE36-10-8278

Instrument: HSD6.i

Sample Info: 1248519005196313311SVH111LANL

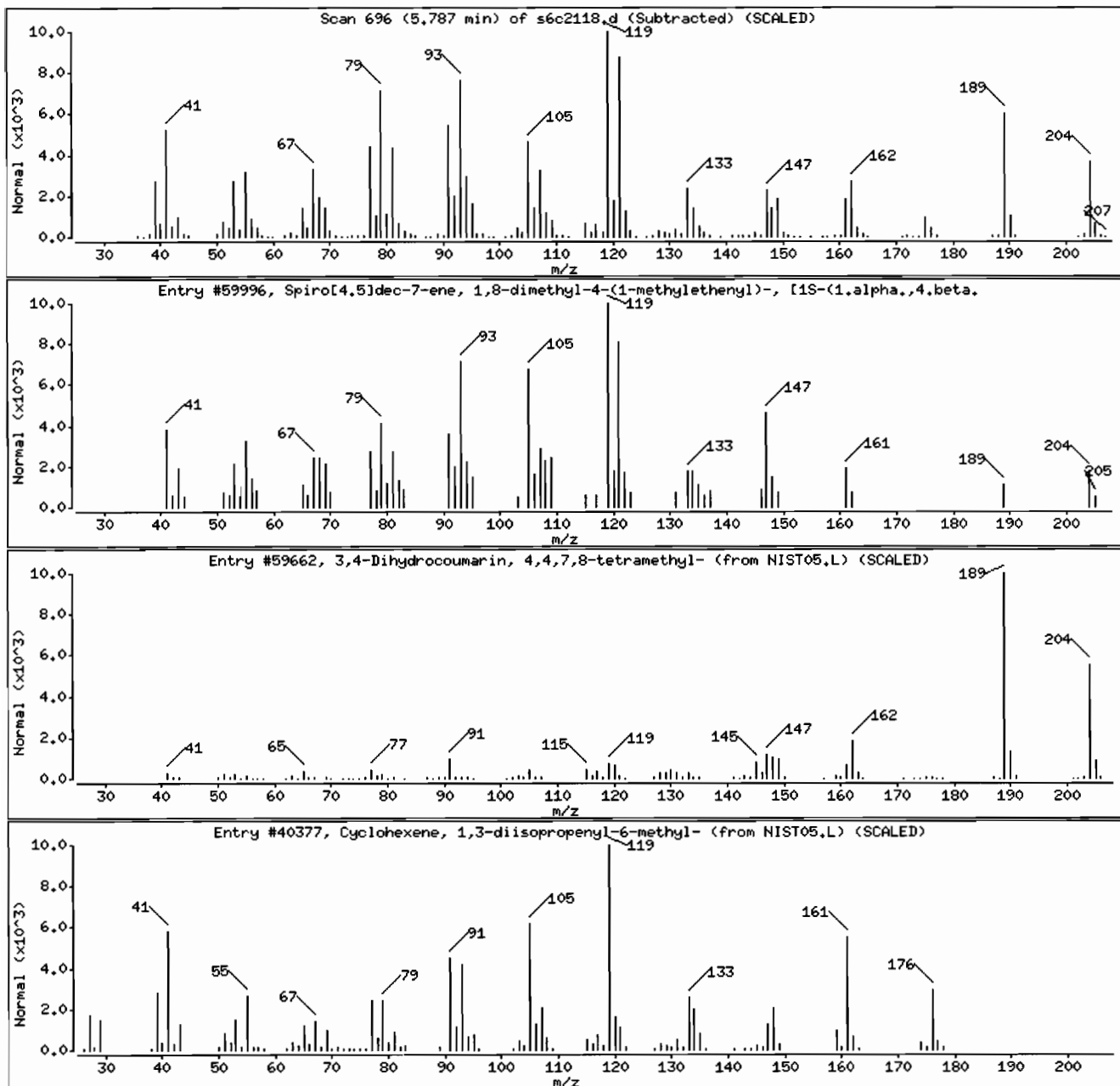
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Spiro[4.5]dec-7-ene, 1,8-dimethyl-4-(1-m	24048-44-0	NIST05.L	59996	81	C15H24	204
3,4-Dihydrocoumarin, 4,4,7,8-tetramethyl	40614-36-6	NIST05.L	59662	66	C13H16O2	204
Cyclohexene, 1,3-diisopropenyl-6-methyl-	1000151-28-9	NIST05.L	40377	64	C13H20	176



Date : 21-MAR-2010 22:09

Client ID: RE36-10-8278

Instrument: MSD6.i

Sample Info: 1248519005196313311SVMI1ILANL

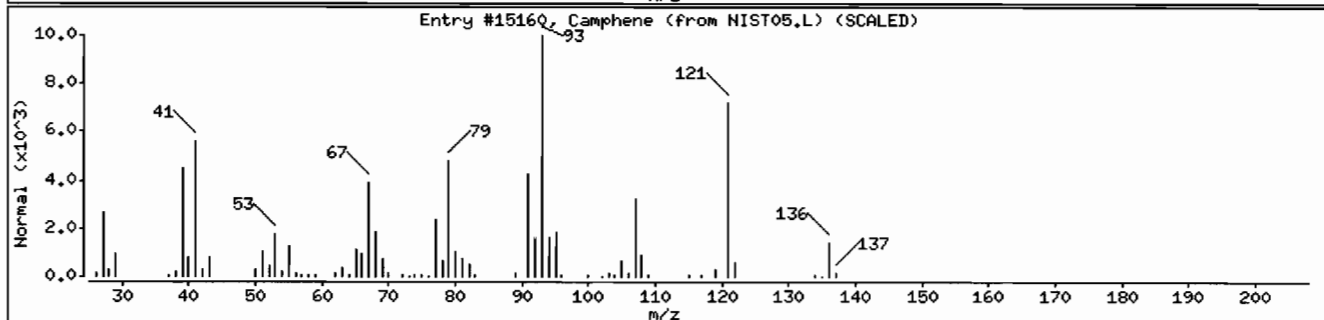
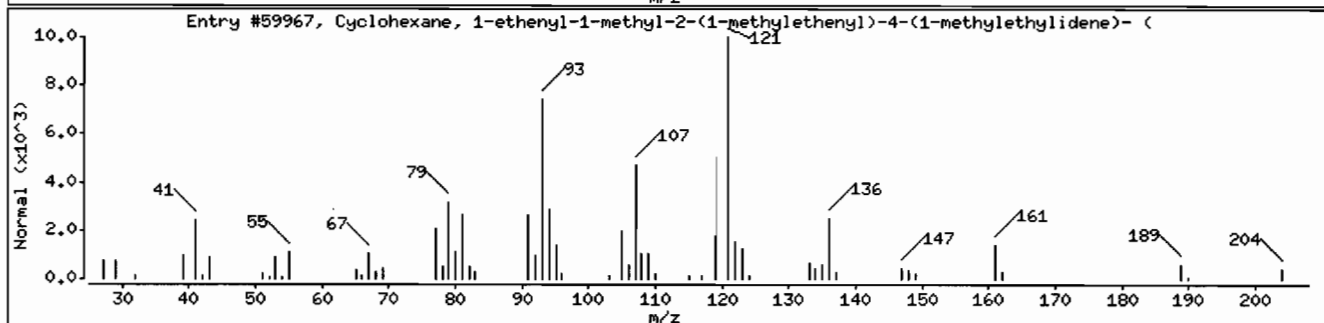
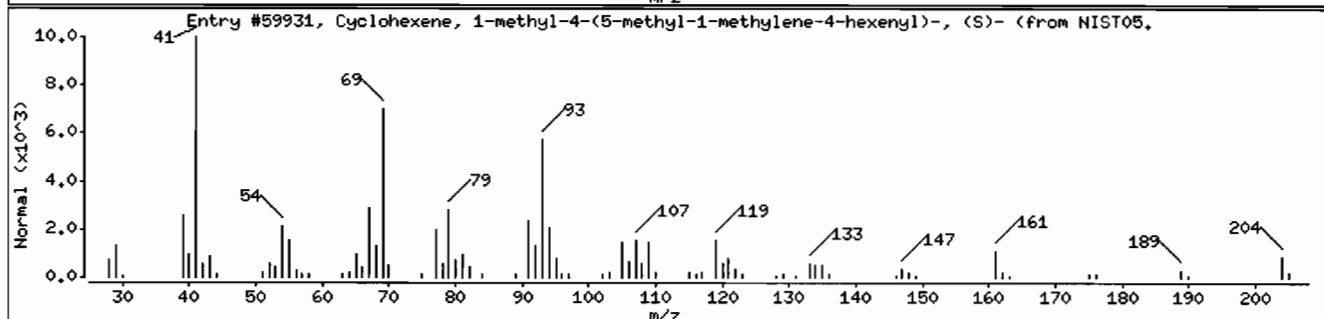
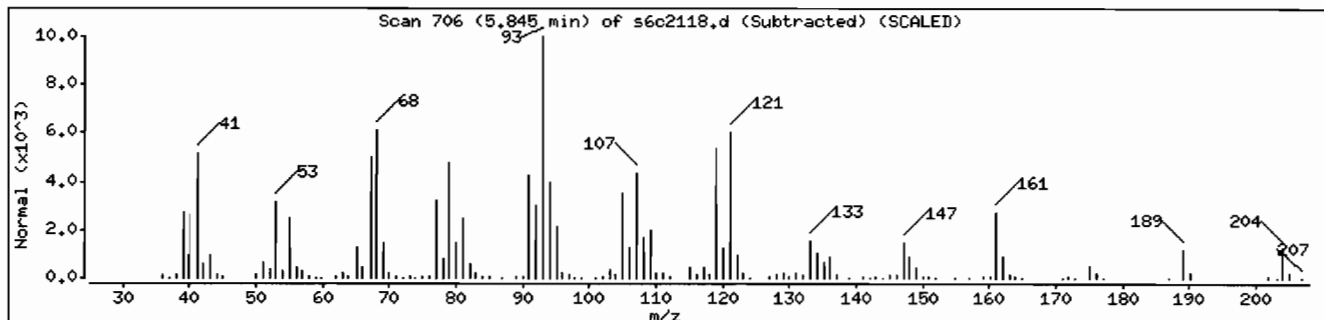
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclohexene, 1-methyl-4-(5-methyl-1-meth	495-61-4	NIST05.L	59931	83	C15H24	204
Cyclohexane, 1-ethenyl-1-methyl-2-(1-met	3242-08-8	NIST05.L	59967	62	C15H24	204
Camphene	79-92-5	NIST05.L	15160	55	C10H16	136



Date : 21-MAR-2010 22:09

Client ID: RE36-10-8278

Instrument: MSD6.i

Sample Info: I248519005196313311SVH111LANL

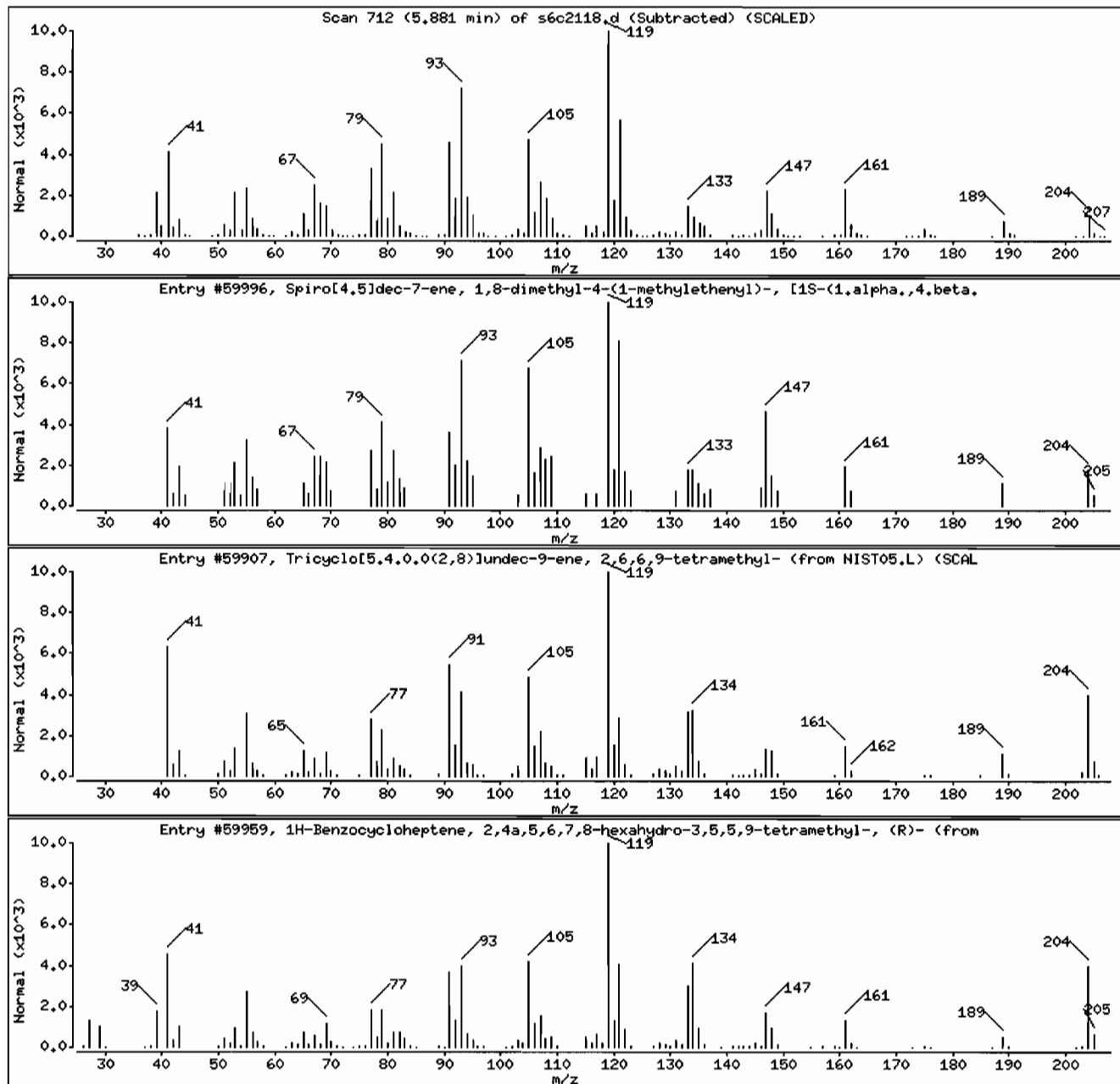
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Spiro[4.5]dec-7-ene, 1,8-dimethyl-4-(1-m	24048-44-0	NIST05.L	59996	93	C15H24	204
Tricyclo[5.4.0.0(2,8)]undec-9-ene, 2,6,6	5989-08-2	NIST05.L	59907	74	C15H24	204
1H-Benzocycloheptene, 2,4a,5,6,7,8-hexah	1461-03-6	NIST05.L	59959	60	C15H24	204



Date : 21-MAR-2010 22:09

Client ID: RE36-10-8278

Instrument: MSD6.i

Sample Info: I248519005196313311SVH111LANL

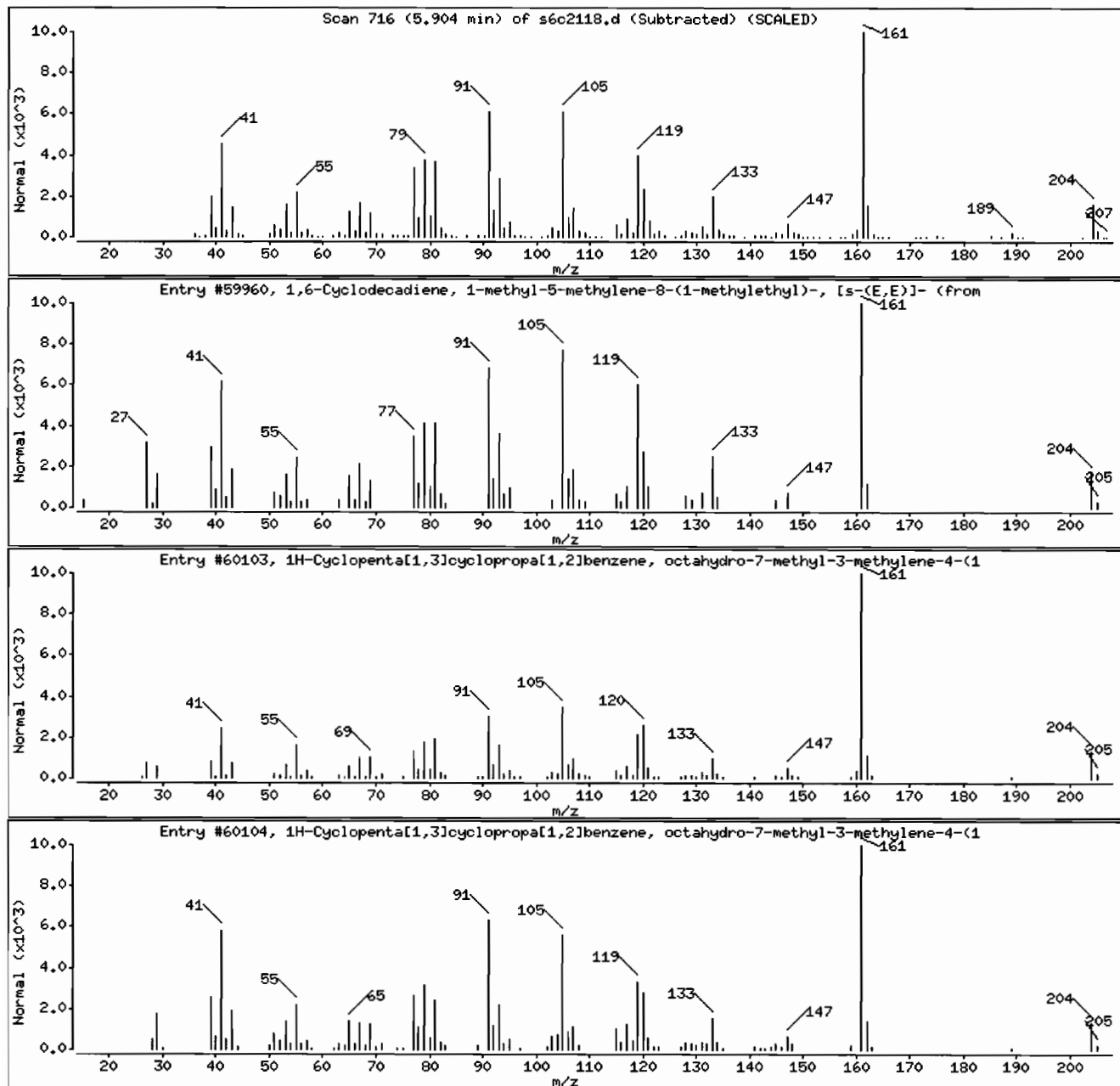
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,6-Cyclodecadiene, 1-methyl-5-methylene	23986-74-5	NIST05.L	59960	99	C15H24	204
1H-Cyclopenta[1,3]cyclopropa[1,2]benzene	13744-15-5	NIST05.L	60103	95	C15H24	204
1H-Cyclopenta[1,3]cyclopropa[1,2]benzene	13744-15-5	NIST05.L	60104	91	C15H24	204



Date : 21-MAR-2010 22:09

Client ID: RE36-10-8278

Instrument: HSD6.i

Sample Info: 1248519005196313311SVMI11LANL

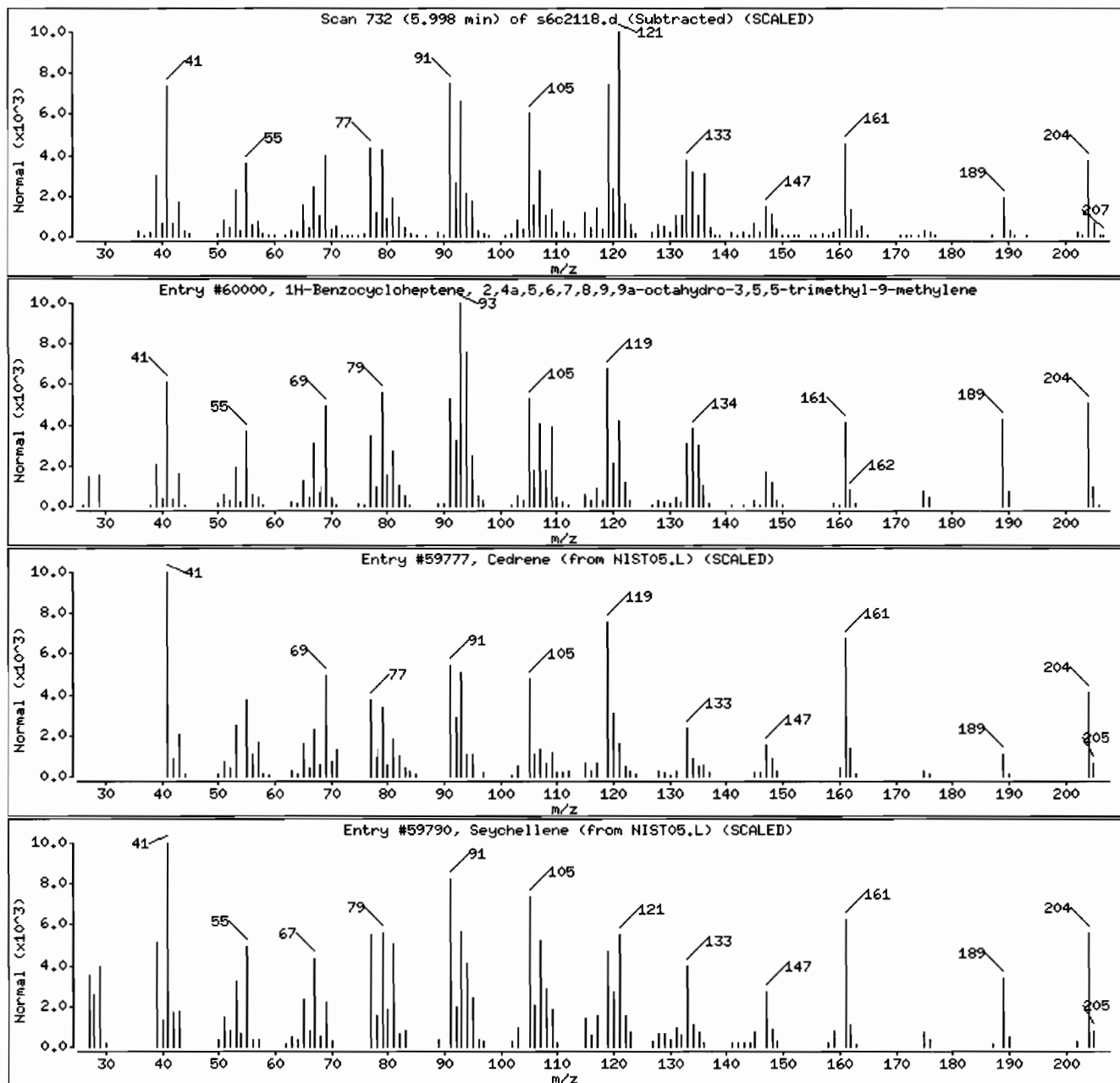
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1H-Benzocycloheptene, 2,4a,5,6,7,8,9,9a-	3853-83-6	NIST05.L	60000	92	C15H24	204
Cedrene	11028-42-5	NIST05.L	59777	91	C15H24	204
Seychellene	20085-93-2	NIST05.L	59790	58	C15H24	204



Date : 21-MAR-2010 22:09

Client ID: RE36-10-8278

Instrument: MSD6.i

Sample Info: 1248519005196313311SVH111LANL

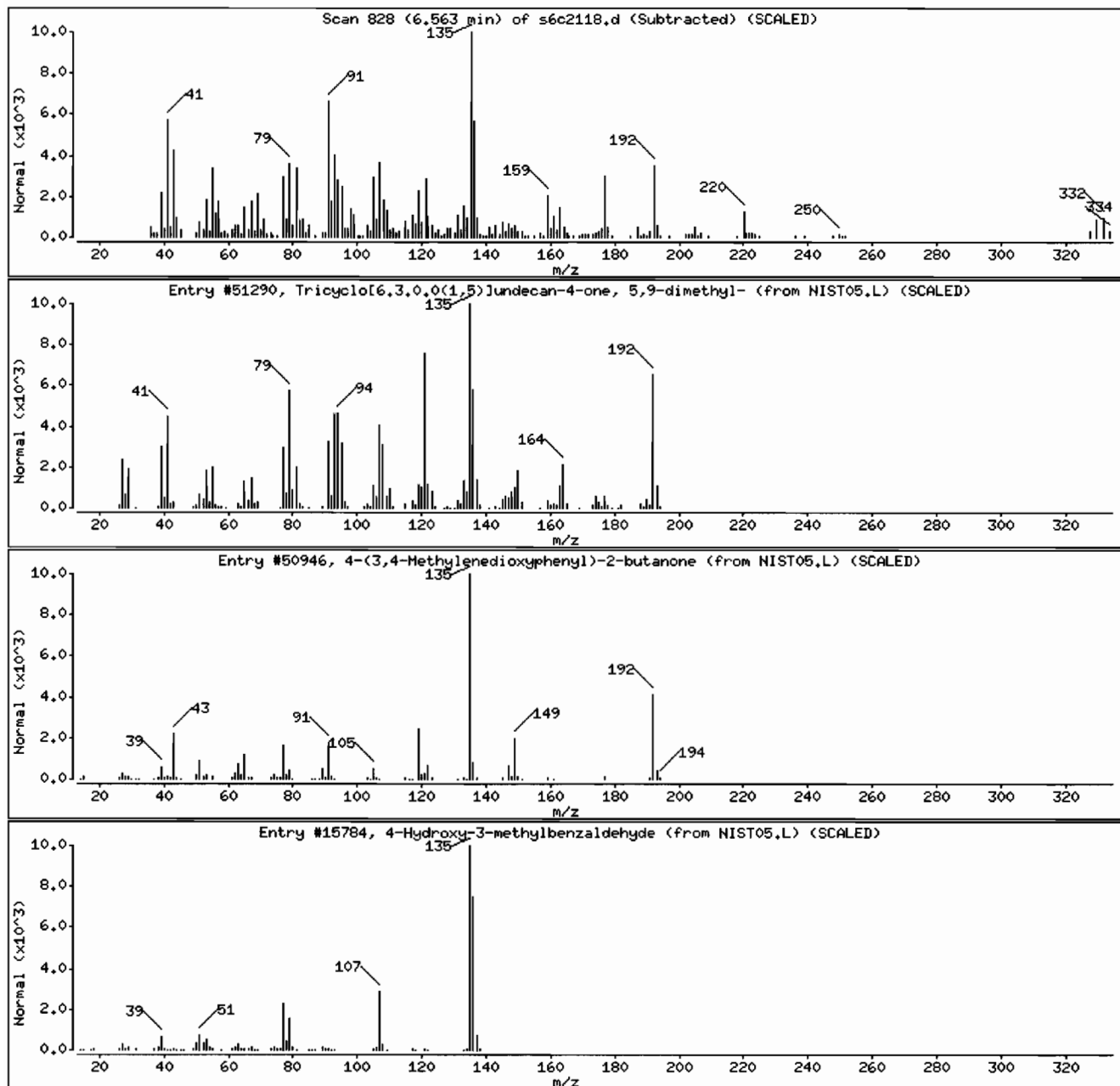
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Tricyclo[6.3.0.0(1,5)]undecan-4-one, 5,9	1000153-99-8	NIST05.L	51290	46	C13H20O	192
4-(3,4-Methylenedioxyphenyl)-2-butanone	55418-52-5	NIST05.L	50946	45	C11H12O3	192
4-Hydroxy-3-methylbenzaldehyde	15174-69-3	NIST05.L	15784	43	C8H8O2	136



Date : 21-MAR-2010 22:09

Client ID: RE36-10-8278

Instrument: MSD6.i

Sample Info: 1248519005196313111SVH111LANL

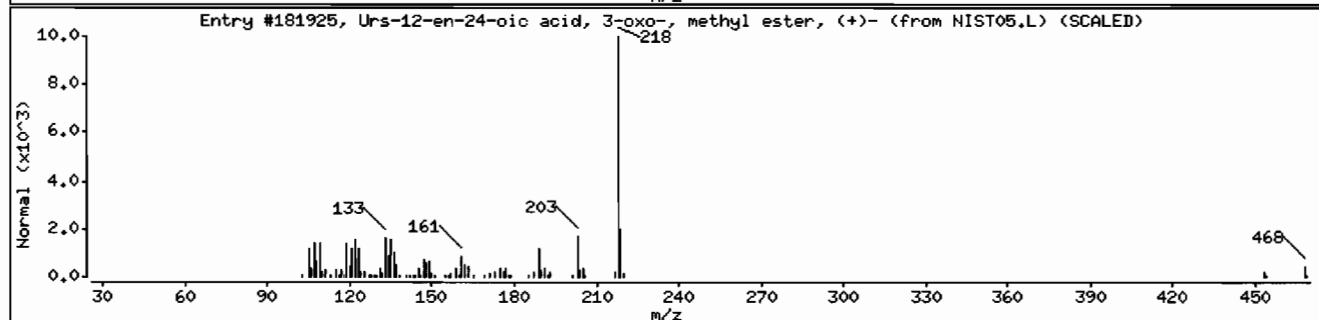
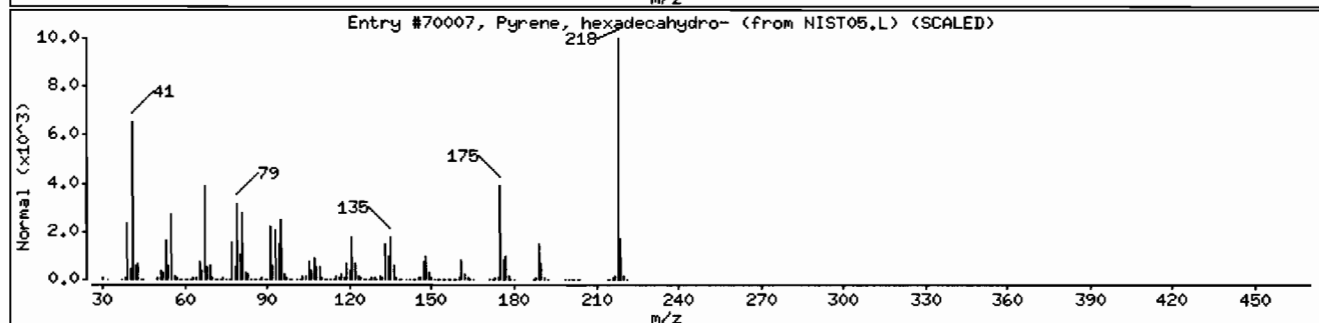
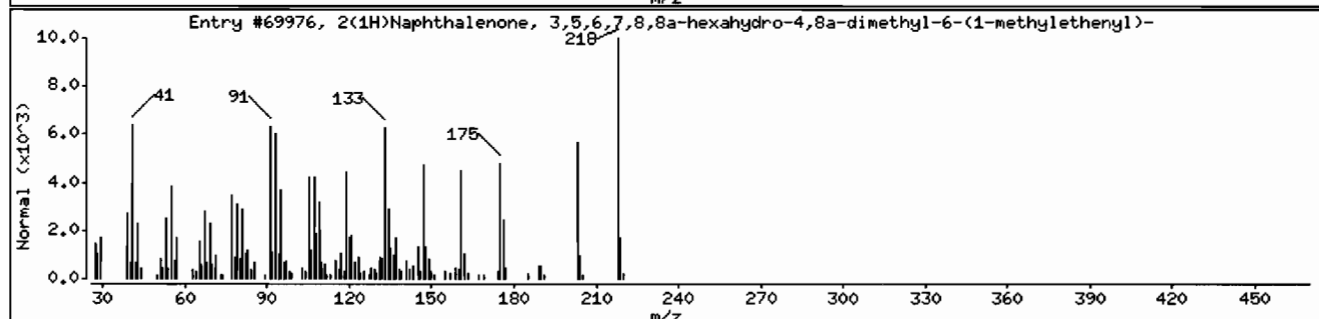
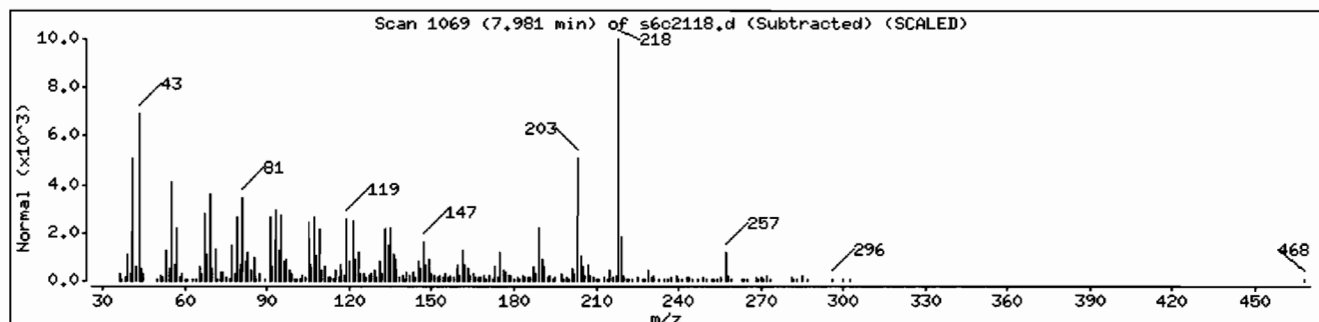
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2(1H)Naphthalenone, 3,5,6,7,8,8a-hexahyd	1000188-66-5	NIST05.L	69976	90	C15H22O	218
Pyrene, hexadecahydro-	2435-85-0	NIST05.L	70007	78	C16H26	218
Urs-12-en-24-oic acid, 3-oxo-, methyl es	20475-86-9	NIST05.L	181925	72	C31H48O3	468





Date : 21-MAR-2010 22:09

Client ID: RE36-10-8278

Instrument: MSD6.i

Sample Info: I248519005196313311SVH11LANL

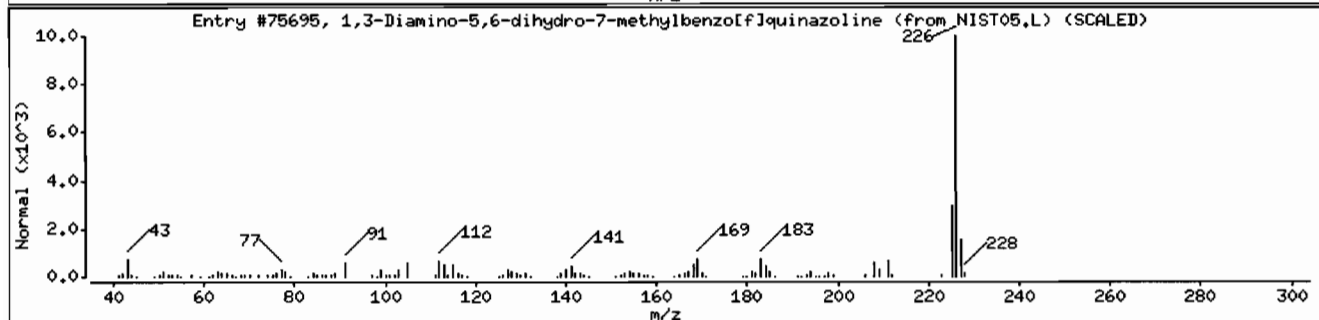
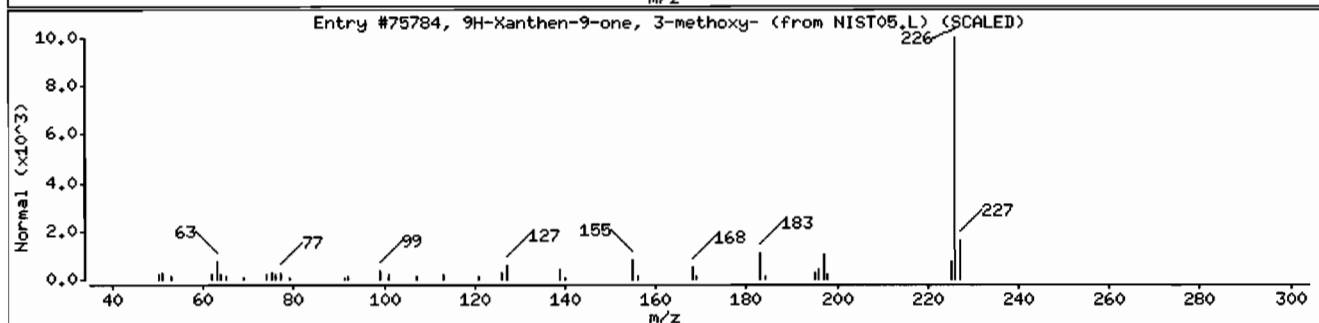
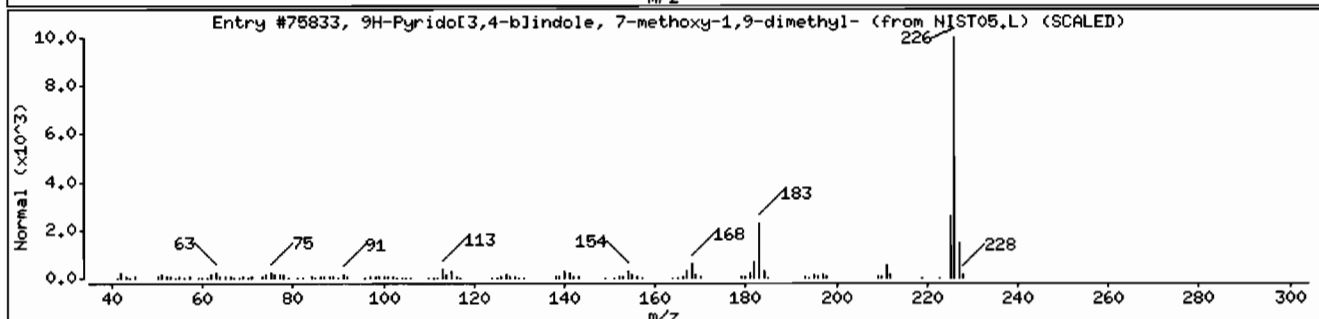
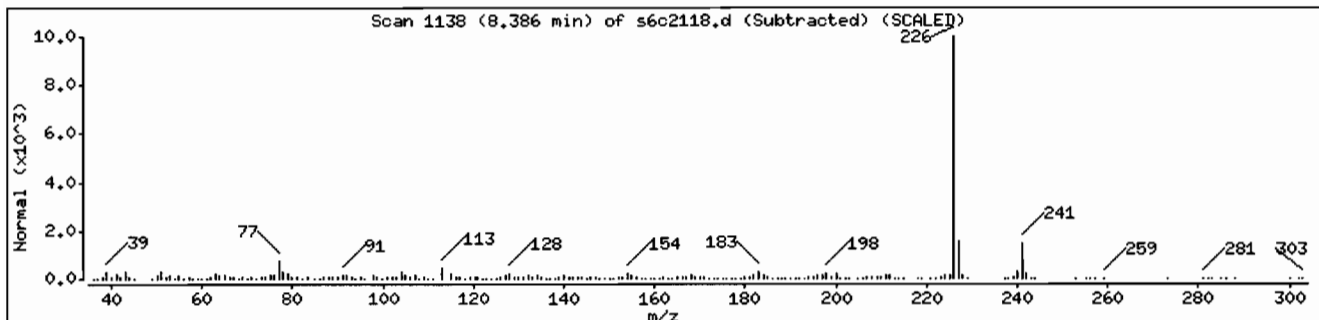
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
9H-Pyrido[3,4-b]indole, 7-methoxy-1,9-di	143502-37-8	NIST05.L	75833	64	C14H14N2O	226
9H-Xanthen-9-one, 3-methoxy-	3722-52-9	NIST05.L	75784	59	C14H10O3	226
1,3-Diamino-5,6-dihydro-7-methylbenzo[f]	37436-37-6	NIST05.L	75695	50	C13H14N4	226



Date : 21-MAR-2010 22:09

Client ID: RE36-10-8278

Instrument: MSD6.i

Sample Info: 12485190051963133111SVMI11LANL

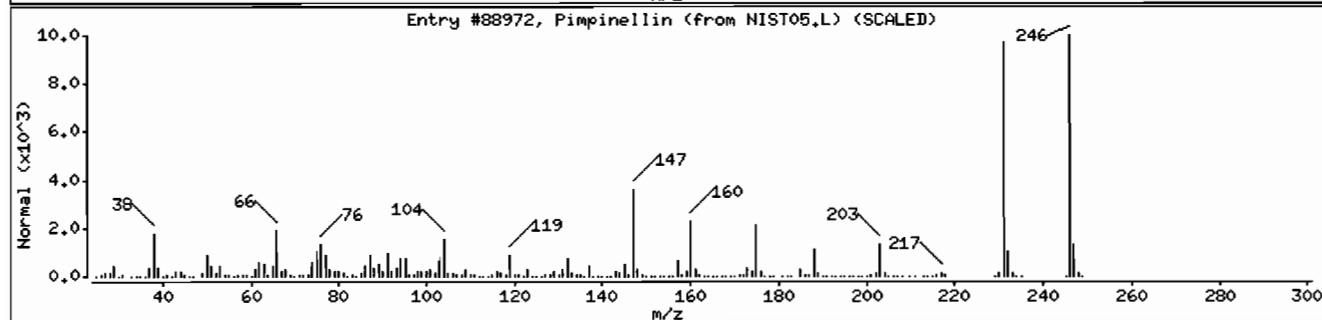
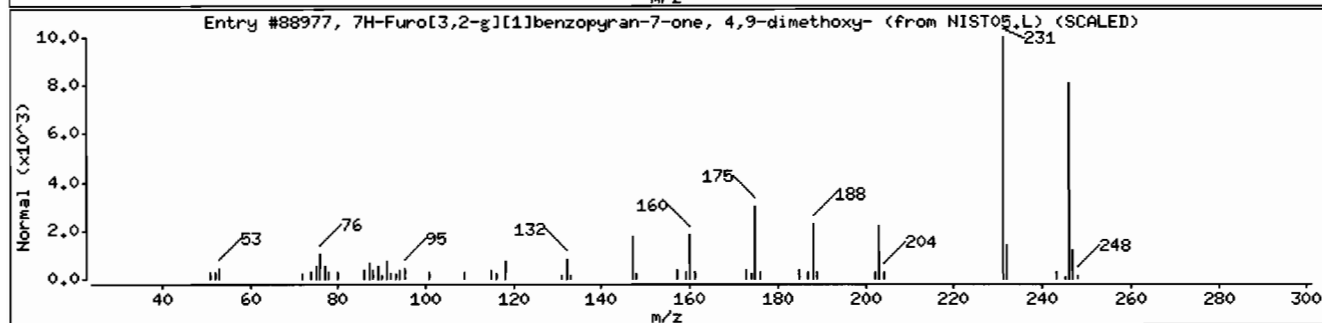
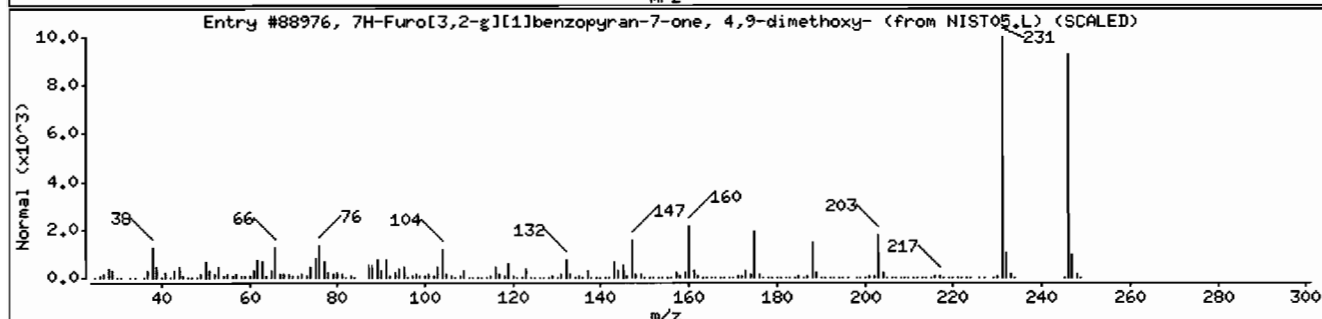
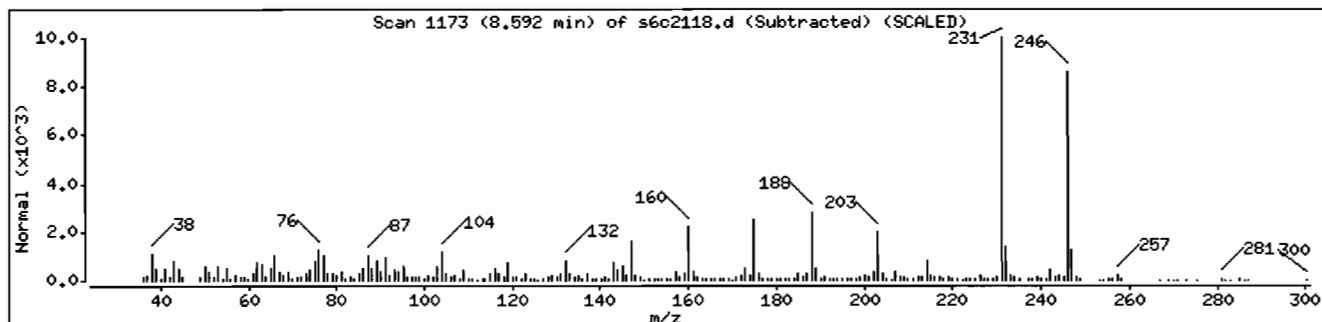
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
7H-Furo[3,2-g][1]benzopyran-7-one, 4,9-d	482-27-9	NIST05.L	88976	99	C13H10O5	246
7H-Furo[3,2-g][1]benzopyran-7-one, 4,9-d	482-27-9	NIST05.L	88977	98	C13H10O5	246
Pimpinellin	131-12-4	NIST05.L	88972	91	C13H10O5	246



Date : 21-MAR-2010 22:09

Client ID: RE36-10-8278

Instrument: MSD6.i

Sample Info: 1248519005196313311ISVMI1ILANL

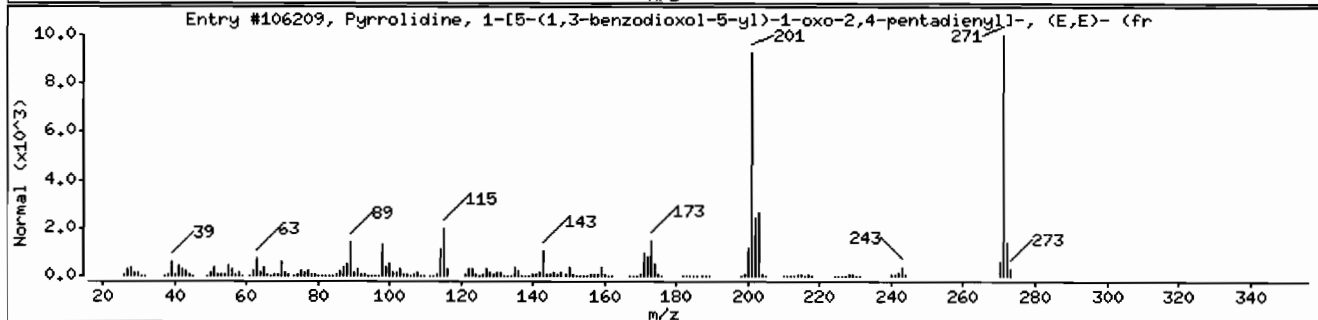
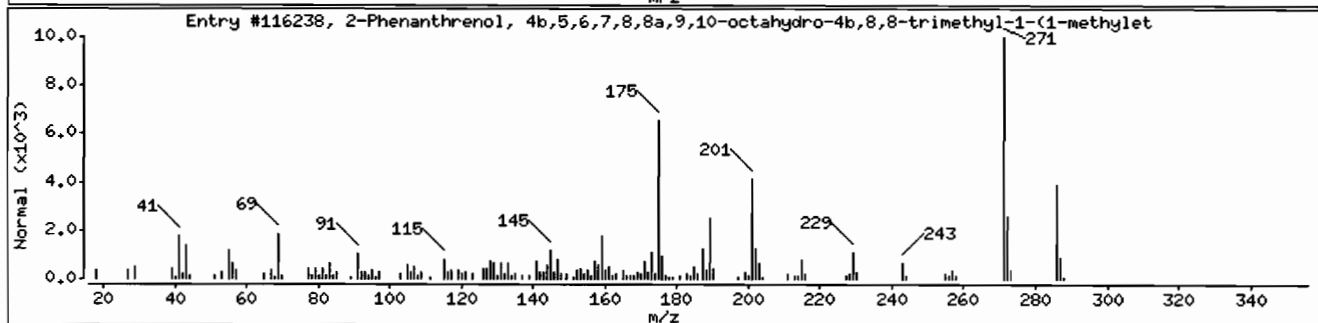
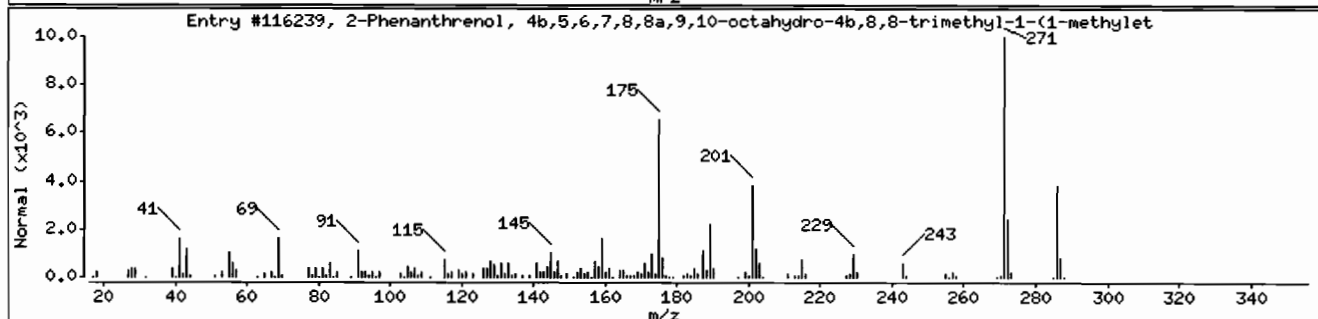
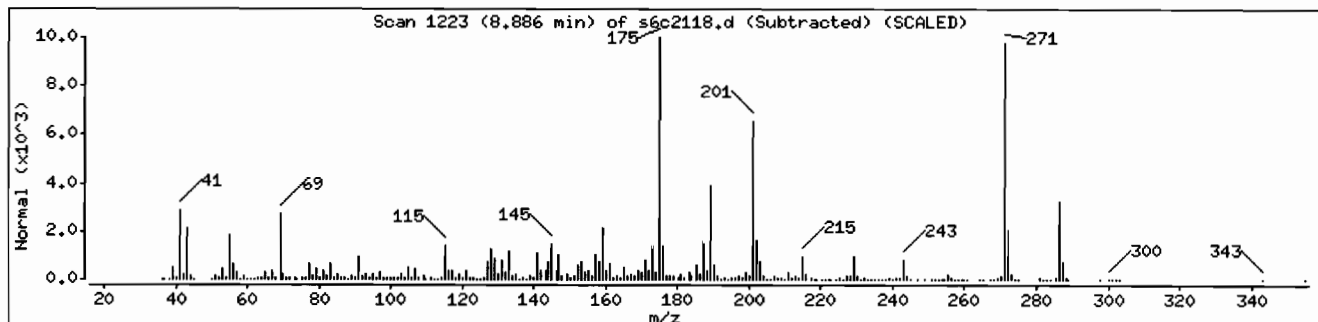
Volume Injected (uL): 0.5

Operator: nag1

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	97	C20H30O	286
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116238	64	C20H30O	286
Pyrrolidine, 1-[5-(1,3-benzodioxol-5-yl)]	25924-78-1	NIST05.L	106209	38	C16H17NO3	271



Date : 21-MAR-2010 22:09

Client ID: RE36-10-8278

Instrument: MSD6.i

Sample Info: I248519005196313311ISVMI11LANL

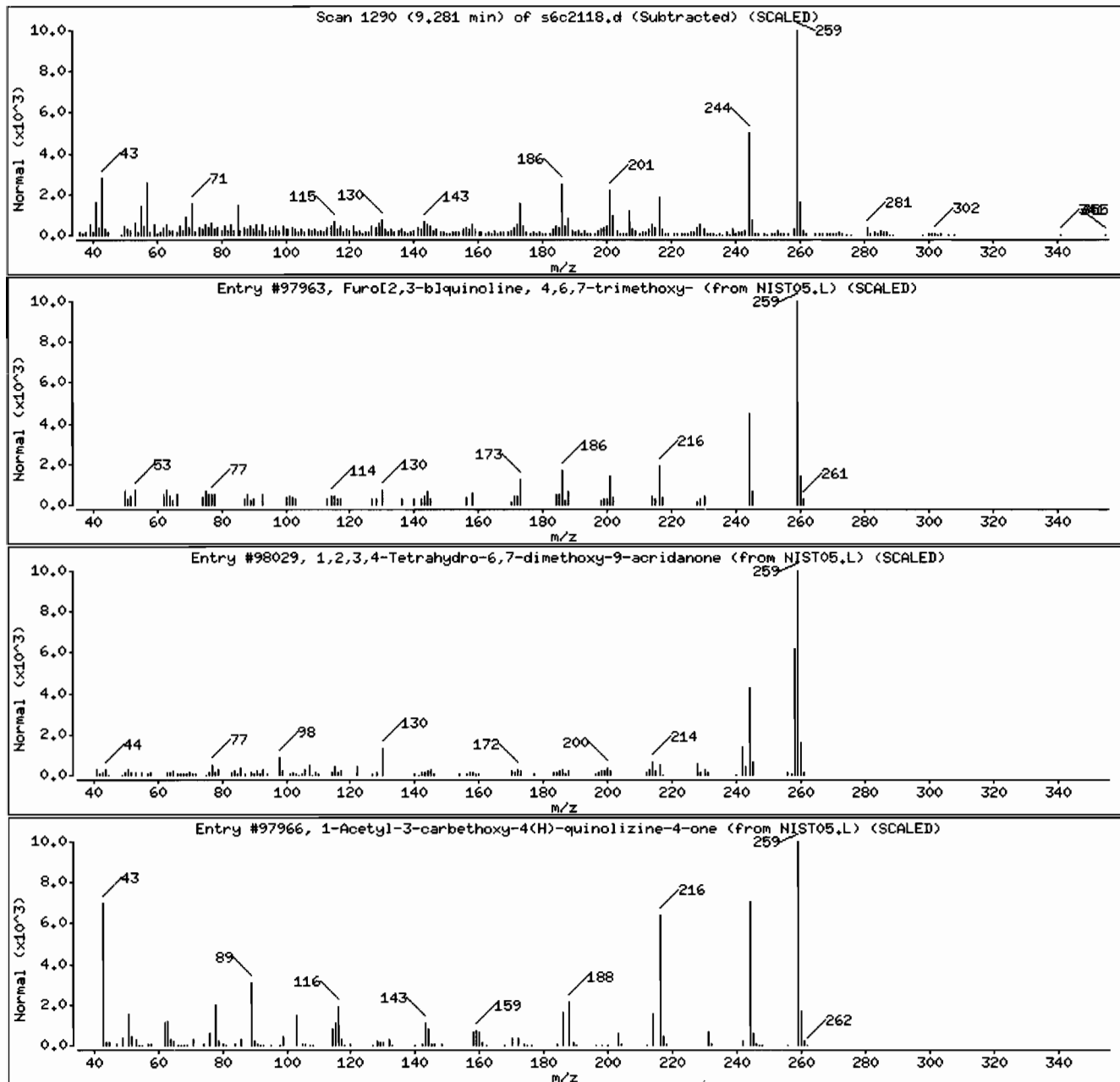
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Furo[2,3-b]quinoline, 4,6,7-trimethoxy-	484-08-2	NIST05.L	97963	90	C14H13NO4	259
1,2,3,4-Tetrahydro-6,7-dimethoxy-9-acrid	187960-33-4	NIST05.L	98029	58	C15H17NO3	259
1-Acetyl-3-carbethoxy-4(H)-quinolizine-4	1928-06-9	NIST05.L	97966	53	C14H13NO4	259



Date : 21-MAR-2010 22:09

Client ID: RE36-10-8278

Instrument: MSD6.i

Sample Info: I248519005196313311SVMI1ILANL

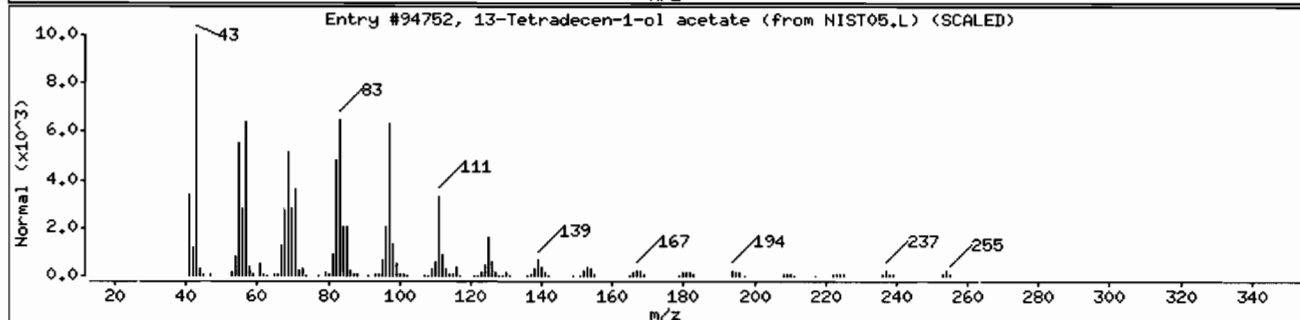
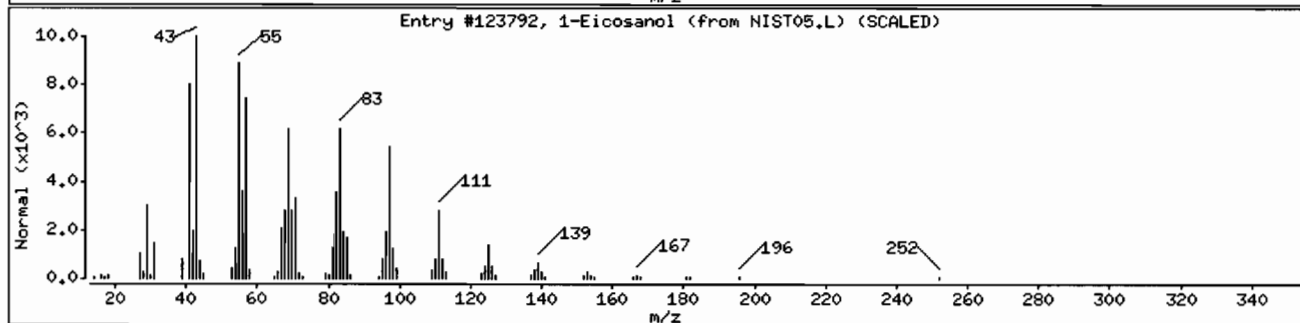
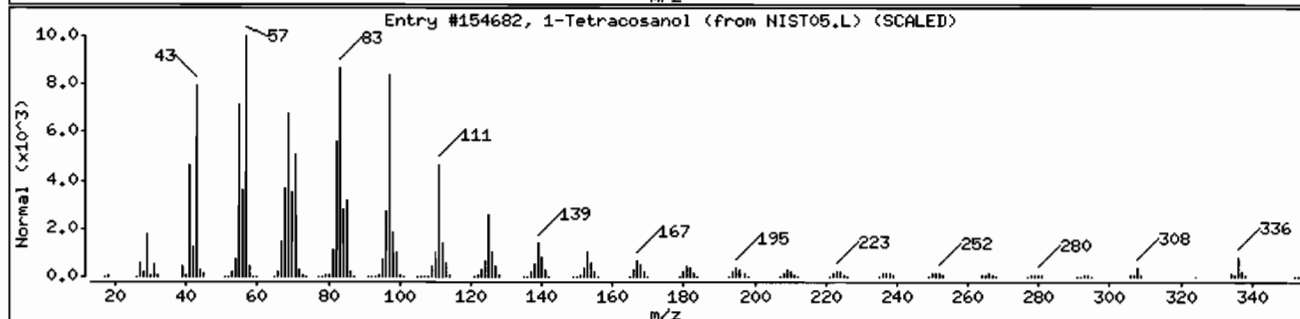
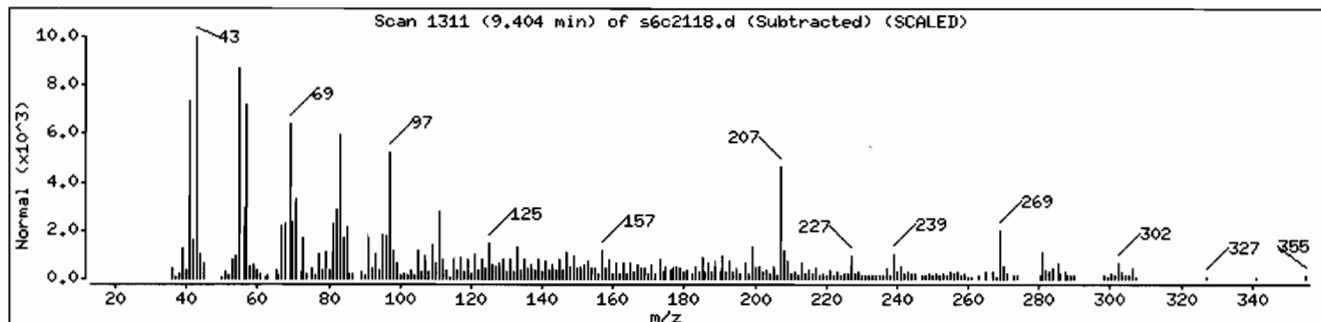
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Tetracosanol	506-51-4	NIST05.L	154682	89	C24H50O	354
1-Eicosanol	629-96-9	NIST05.L	123792	87	C20H42O	298
13-Tetradecen-1-ol acetate	56221-91-1	NIST05.L	94752	86	C16H30O2	254



Date : 21-MAR-2010 22:09

Client ID: RE36-10-8278

Instrument: MSD6.i

Sample Info: 1248519005196313311ISVH11ILANL

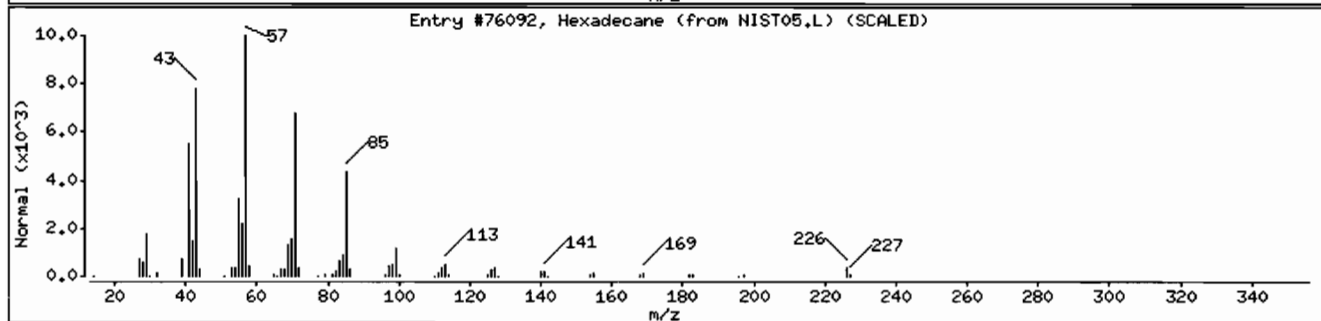
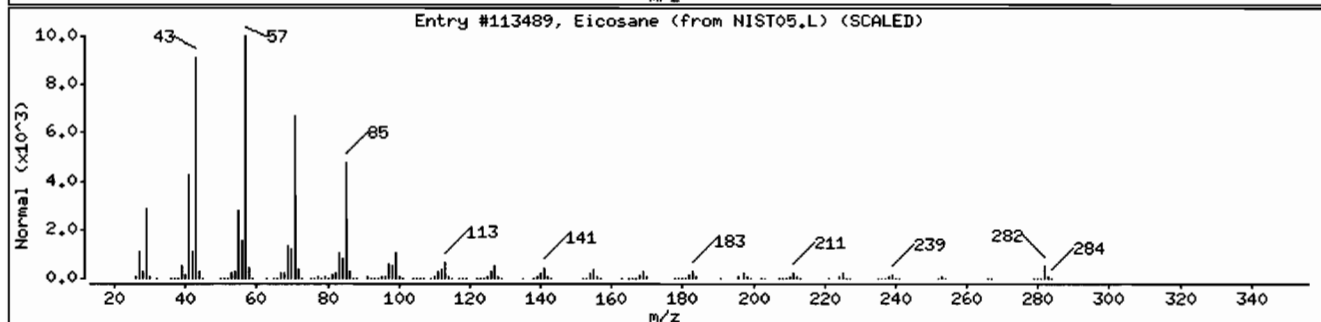
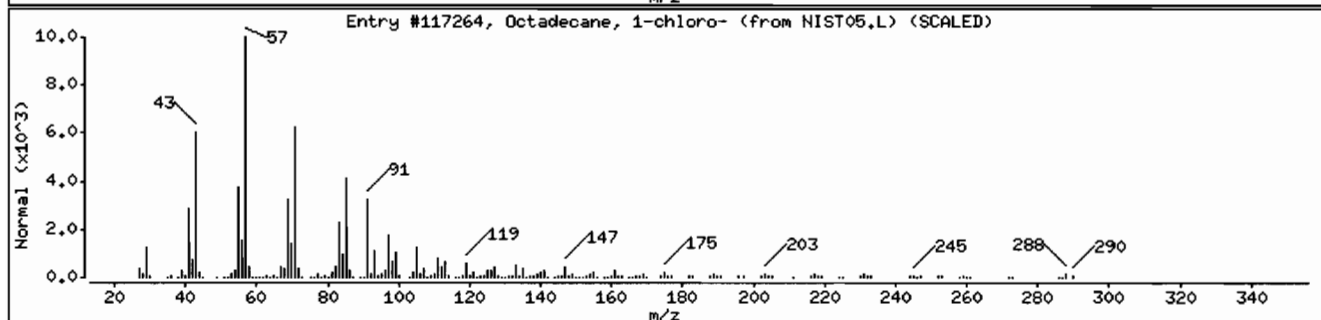
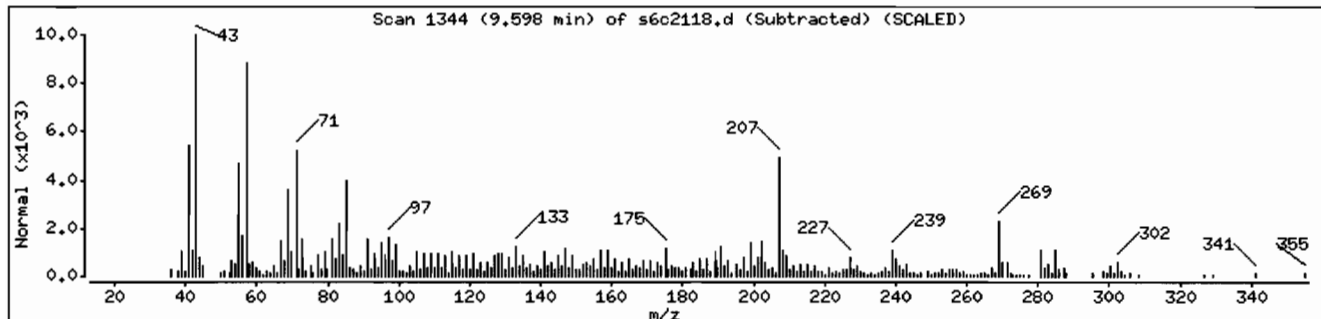
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Octadecane, 1-chloro-	3386-33-2	NIST05.L	117264	94	C18H37Cl	288
Eicosane	112-95-8	NIST05.L	113489	93	C20H42	282
Hexadecane	544-76-3	NIST05.L	76092	83	C16H34	226



Date : 21-MAR-2010 22:09

Client ID: RE36-10-8278

Instrument: MSD6.i

Sample Info: 12485190051963133111SVH111LANL

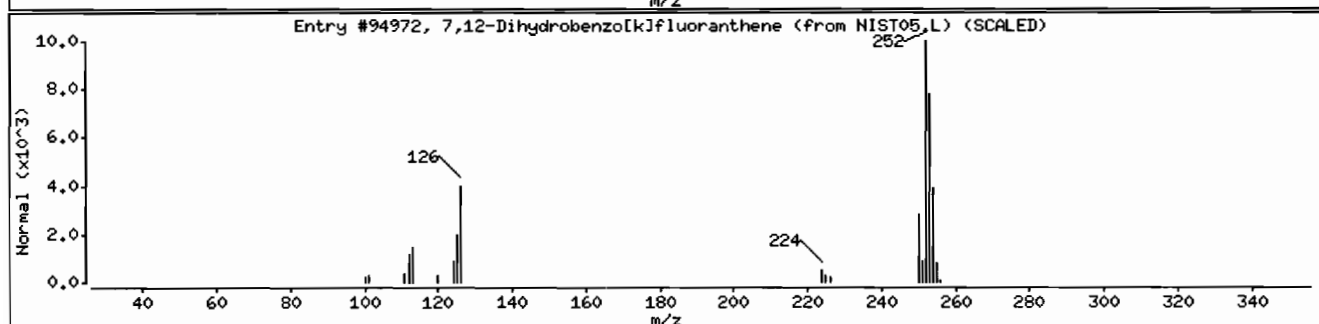
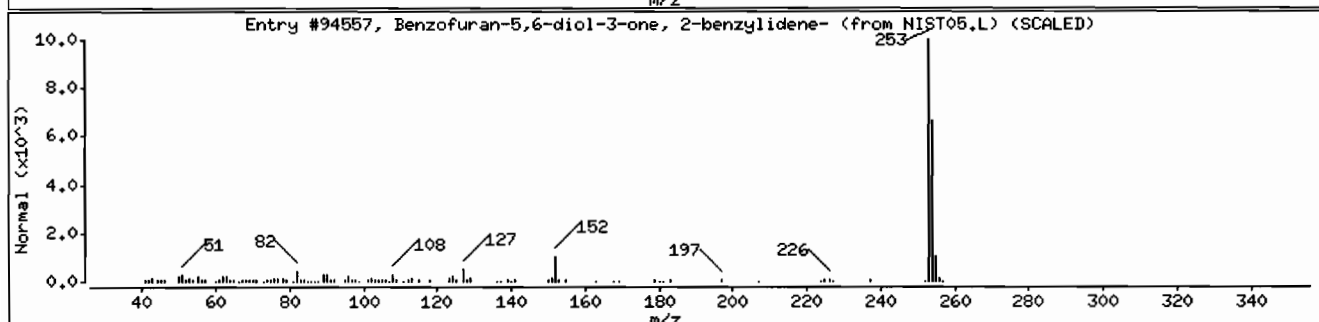
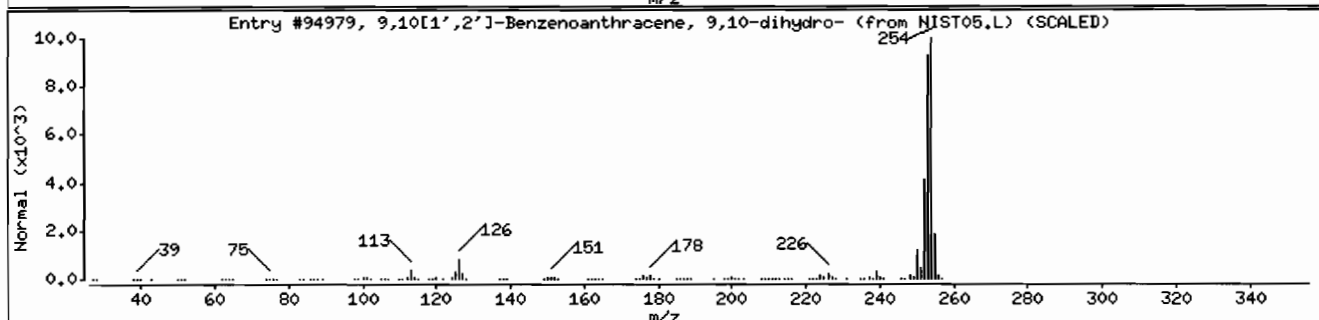
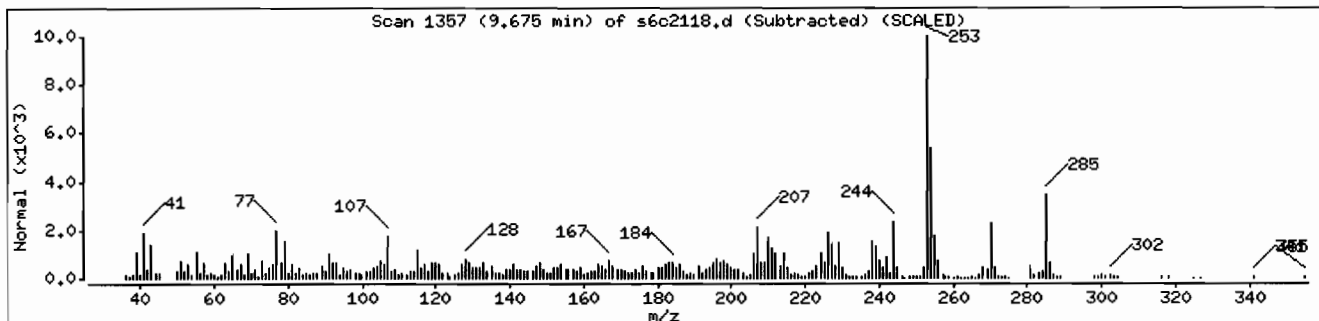
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
9,10[1',2']-Benzenoanthracene, 9,10-dihy	477-75-8	NIST05.L	94979	46	C20H14	254
Benzofuran-5,6-diol-3-one, 2-benzylidene	1000128-65-2	NIST05.L	94557	45	C15H10O4	254
7,12-Dihydrobenzo[k]fluoranthene	1000080-17-7	NIST05.L	94972	43	C20H14	254



Date : 21-MAR-2010 22:09

Client ID: RE36-10-8278

Instrument: MSD6.i

Sample Info: I248519005196313311SVH11ILANL

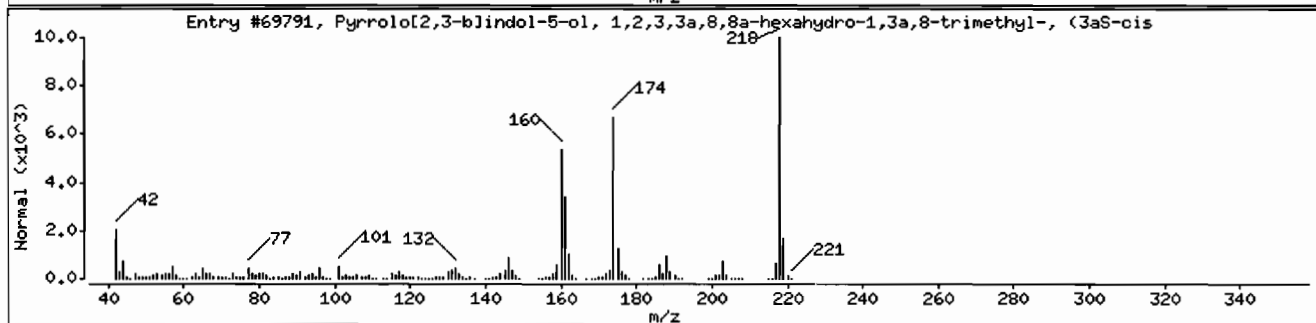
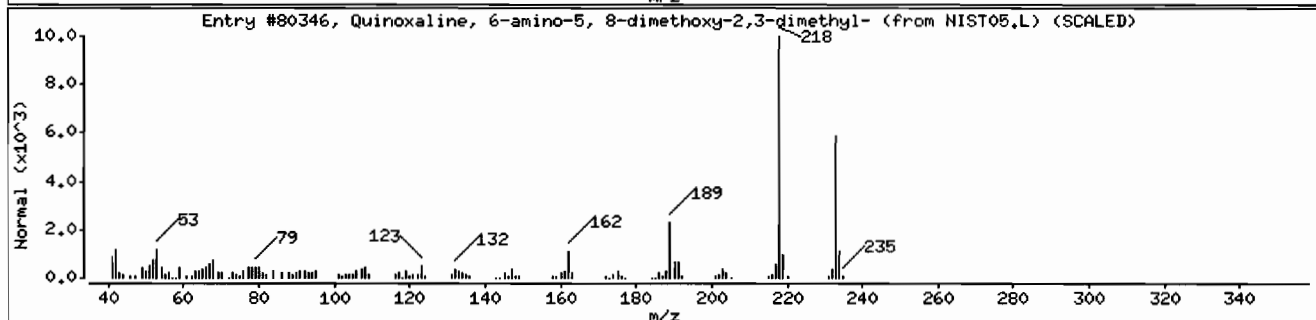
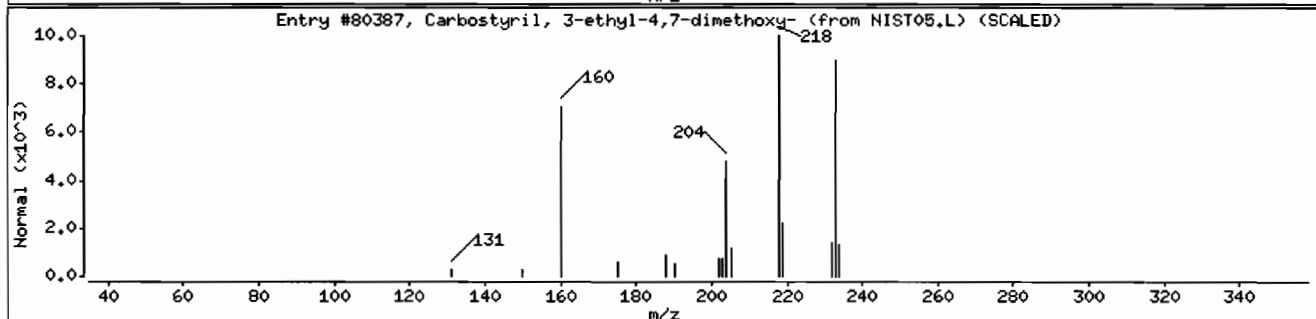
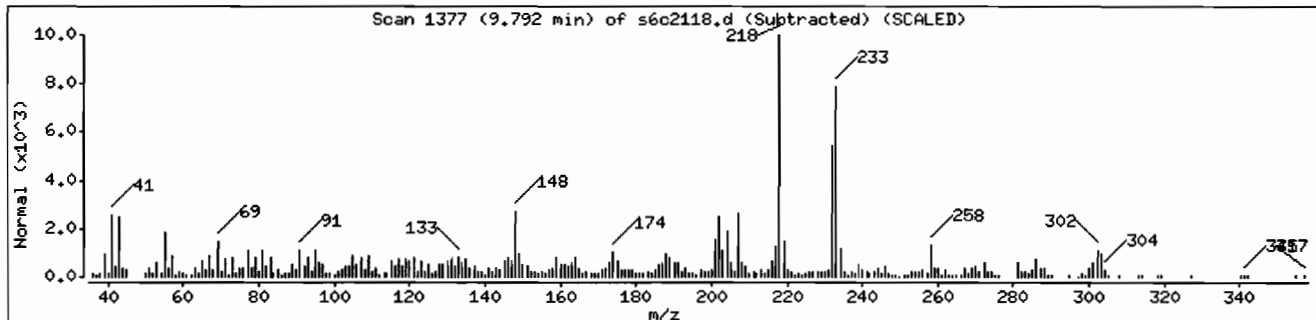
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Carbostyryl, 3-ethyl-4,7-dimethoxy-	22048-13-1	NIST05.L	80387	53	C13H15N03	233
Quinoxaline, 6-amino-5, 8-dimethoxy-2,3-	56393-25-0	NIST05.L	80346	46	C12H15N3O2	233
Pyrrolo[2,3-b]indol-5-ol, 1,2,3,3a,8,8a-	469-22-7	NIST05.L	69791	45	C13H18N2O	218





Date : 21-MAR-2010 22:09

Client ID: RE36-10-8278

Instrument: MSD6.i

Sample Info: 12485190051963133111SVH111LANL

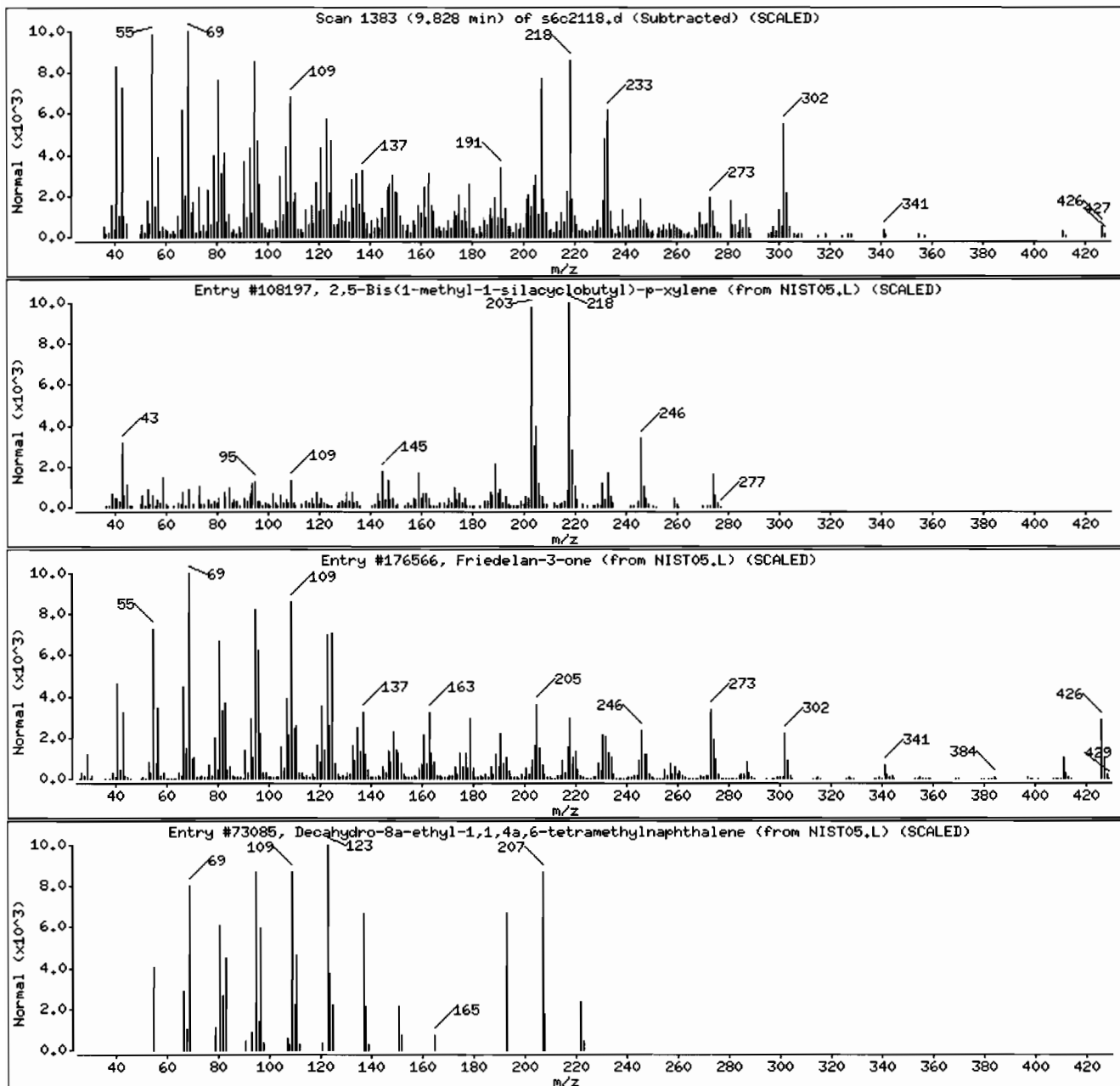
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2,5-Bis(1-methyl-1-silacyclobutyl)-p-xyl	1000280-74-9	NIST05.L	108197	55	C <sub>16</sub> H <sub>26</sub> Si <sub>2</sub>	274
Friedelan-3-one	559-74-0	NIST05.L	176566	30	C <sub>30</sub> H <sub>50</sub> O	426
Decahydro-8a-ethyl-1,1,4a,6-tetramethyln	1000100-23-6	NIST05.L	73085	27	C <sub>16</sub> H <sub>30</sub>	222



Date : 21-MAR-2010 22:09

Client ID: RE36-10-8278

Instrument: MSD6.i

Sample Info: I248519005196313311SVH111LANL

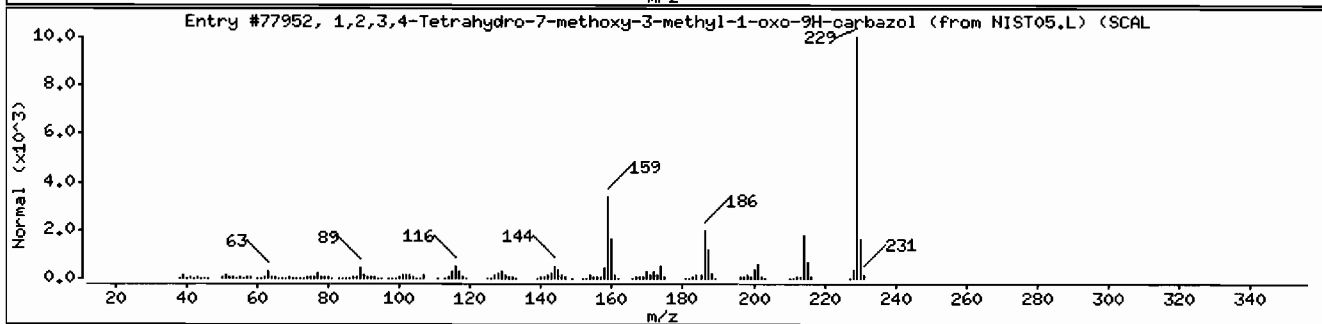
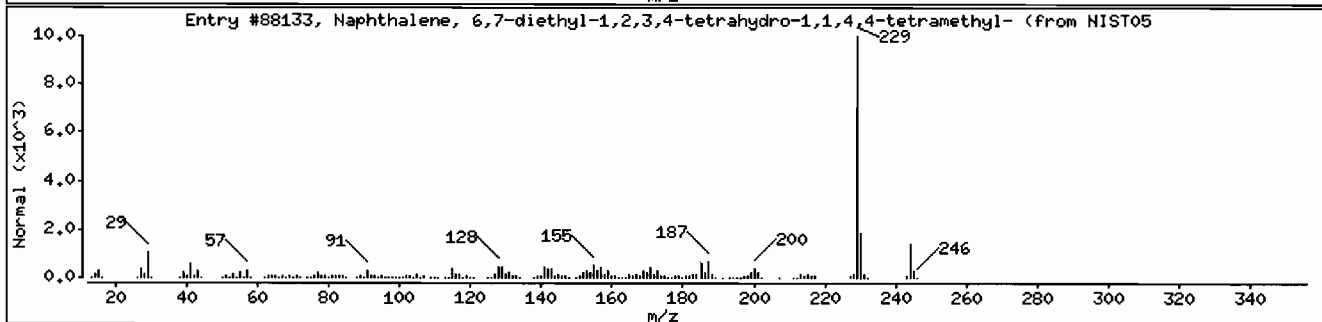
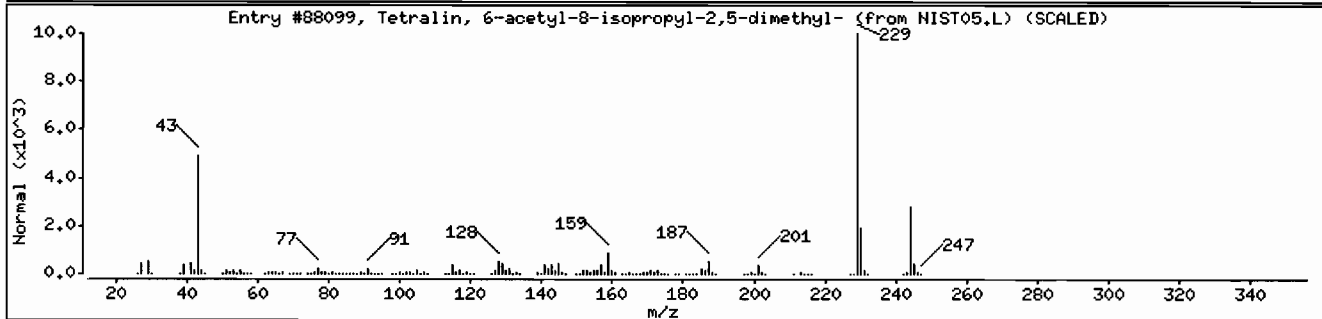
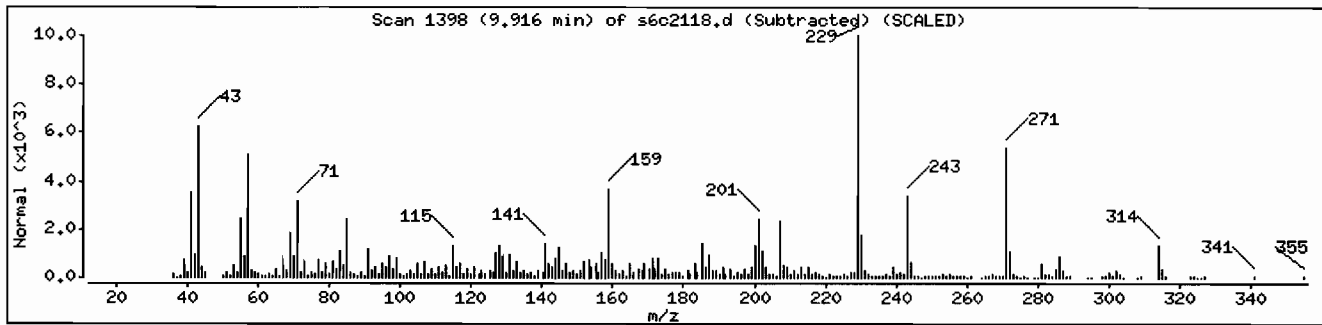
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Tetralin, 6-acetyl-8-isopropyl-2,5-dimet	1000155-43-5	NIST05.L	88099	60	C17H24O	244
Naphthalene, 6,7-diethyl-1,2,3,4-tetrahy	55741-10-1	NIST05.L	88133	52	C18H28	244
1,2,3,4-Tetrahydro-7-methoxy-3-methyl-1-	32550-51-9	NIST05.L	77952	46	C14H15NO2	229



Date : 21-MAR-2010 22:09

Client ID: RE36-10-8278

Instrument: MSD6.i

Sample Info: I248519005196313311SVH111LANL

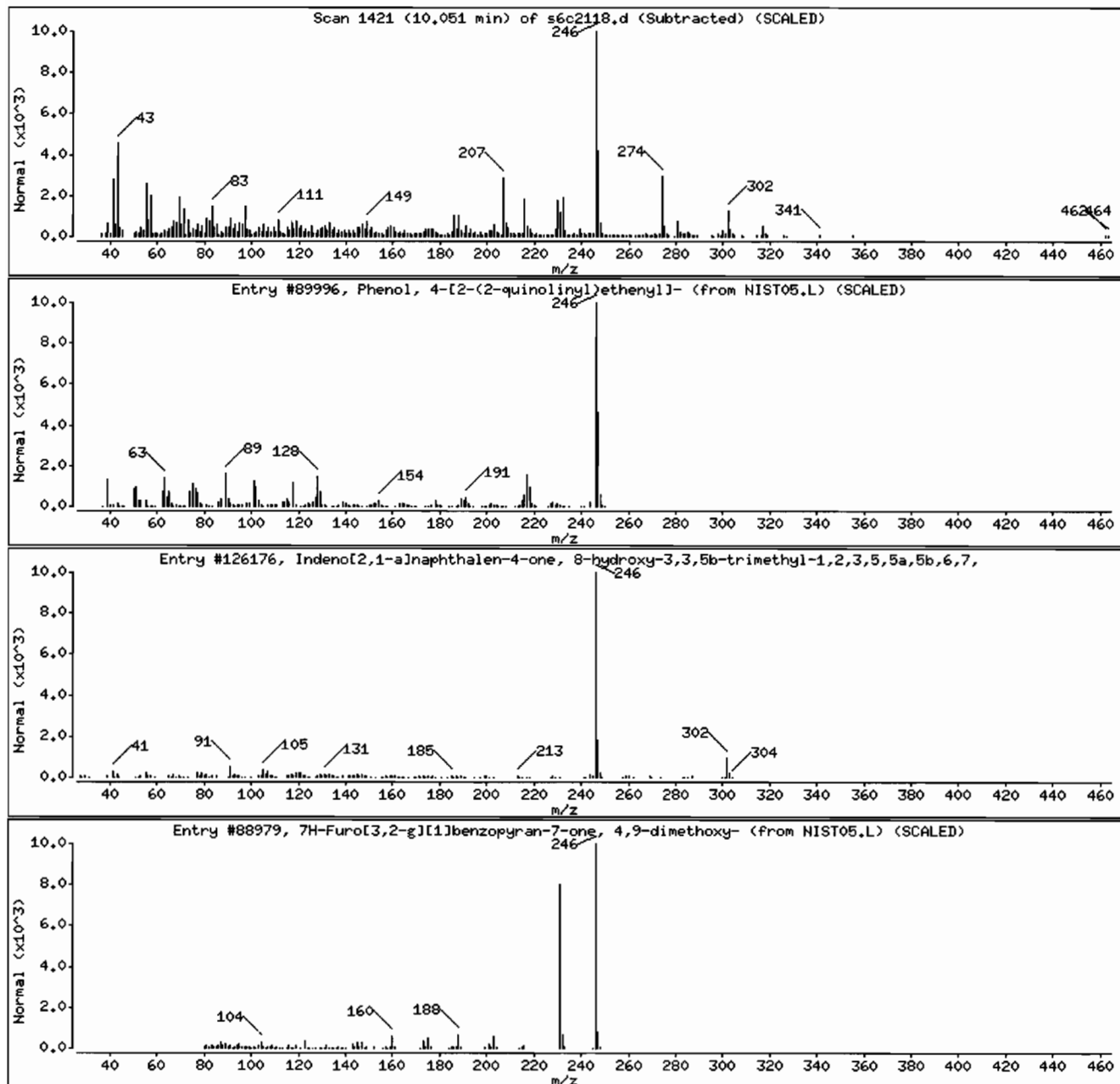
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Phenol, 4-[2-(2-quinolinyl)ethenyl]-	4752-58-3	NIST05.L	89996	49	C17H13NO	247
Indeno[2,1-a]naphthalen-4-one, 8-hydroxy	1000195-73-5	NIST05.L	126176	38	C20H30O2	302
7H-Furo[3,2-g][1]benzopyran-7-one, 4,9-d	482-27-9	NIST05.L	88979	38	C13H10O5	246



Date : 21-MAR-2010 22:09

Client ID: RE36-10-8278

Instrument: MSD6.i

Sample Info: 12485190051963133111SVH111LANL

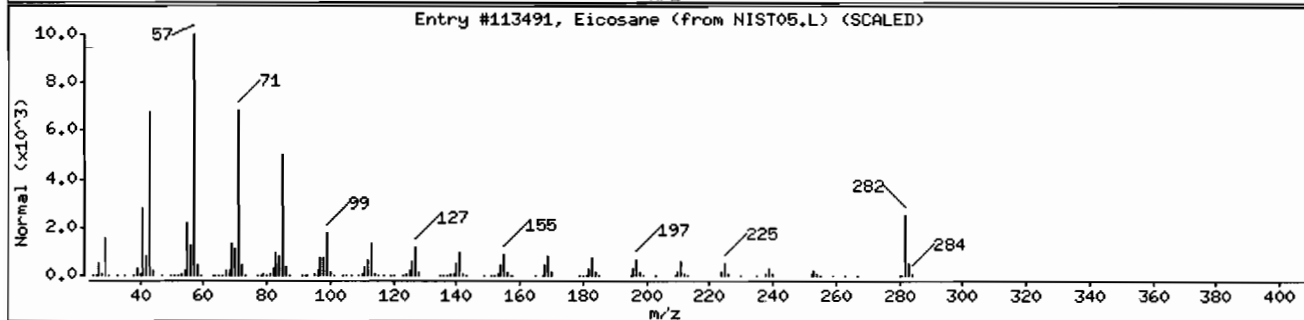
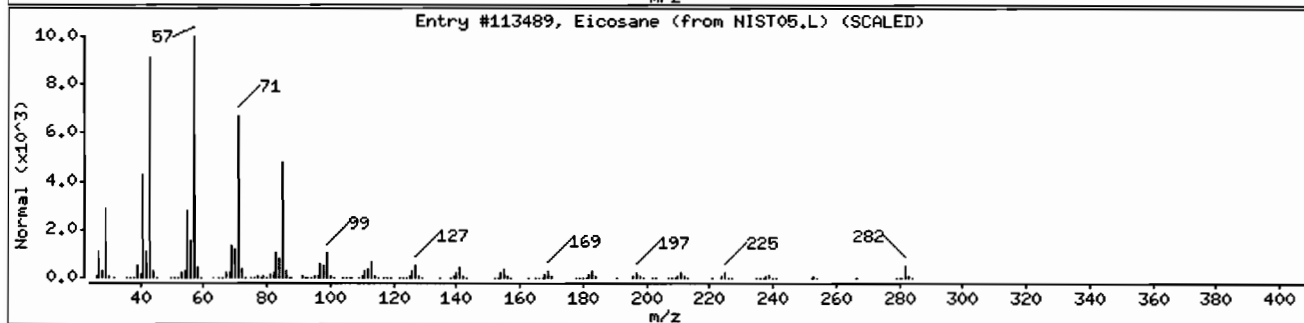
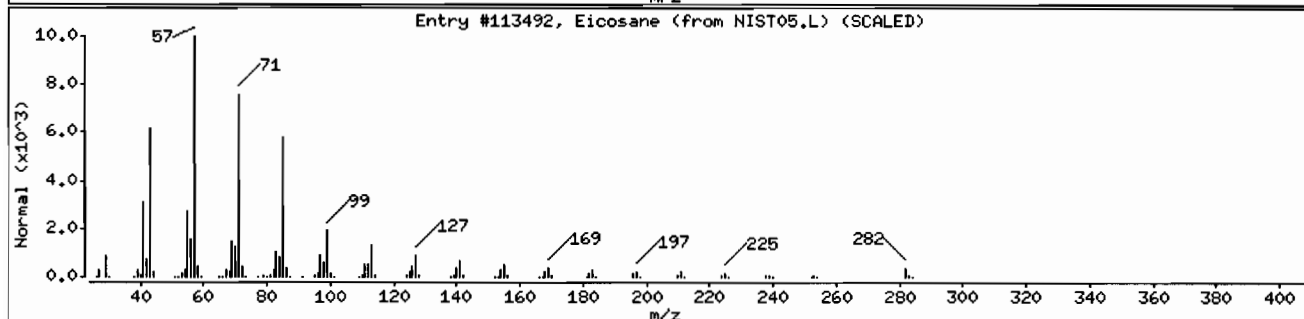
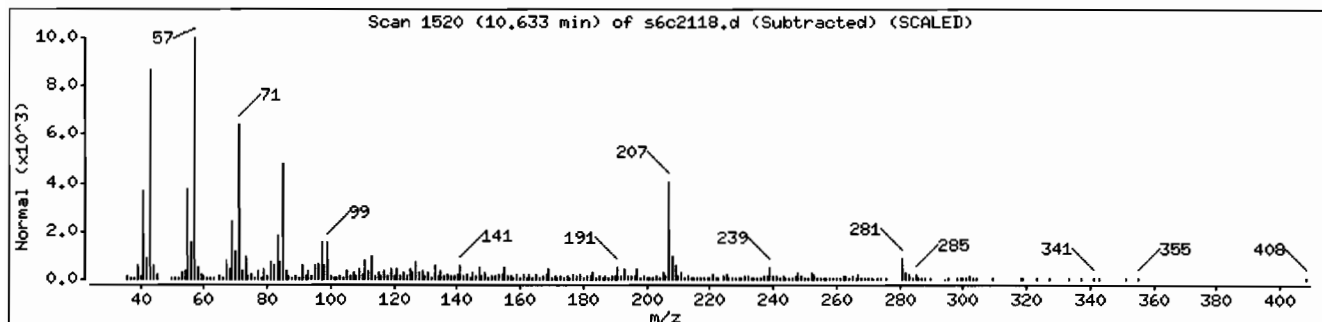
Volume Injected (uL): 0.5

Operator: nag1

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	113492	96	C20H42	282
Eicosane	112-95-8	NIST05.L	113489	95	C20H42	282
Eicosane	112-95-8	NIST05.L	113491	95	C20H42	282



Date: 21-MAR-2010 22:09

Client ID: RE36-10-8278

Instrument: HSD6.i

Sample Info: 1248519005196313311SVH111LANL

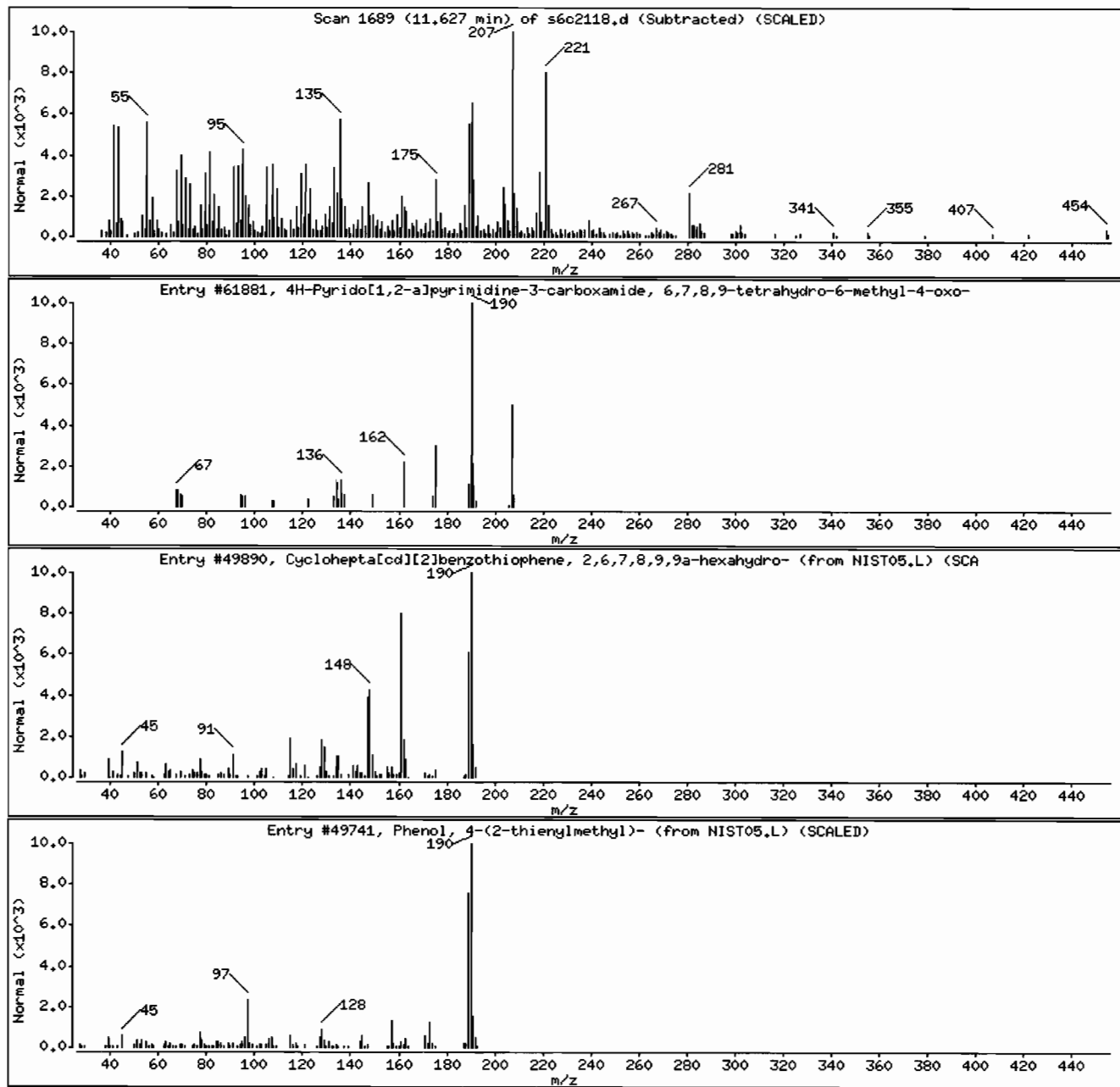
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
4H-Pyrido[1,2-a]pyrimidine-3-carboxamide	33484-45-6	NIST05.L	61881	30	C10H13N3O2	207
Cyclohepta[cd][2]benzothiophene, 2,6,7,8	199807-57-3	NIST05.L	49890	25	C12H14S	190
Phenol, 4-(2-thienylmethyl)-	91680-55-6	NIST05.L	49741	25	C11H10OS	190



Date : 21-MAR-2010 22:09

Client ID: RE36-10-8278

Instrument: HSD6.i

Sample Info: I2485190051963133111SVH111LANL

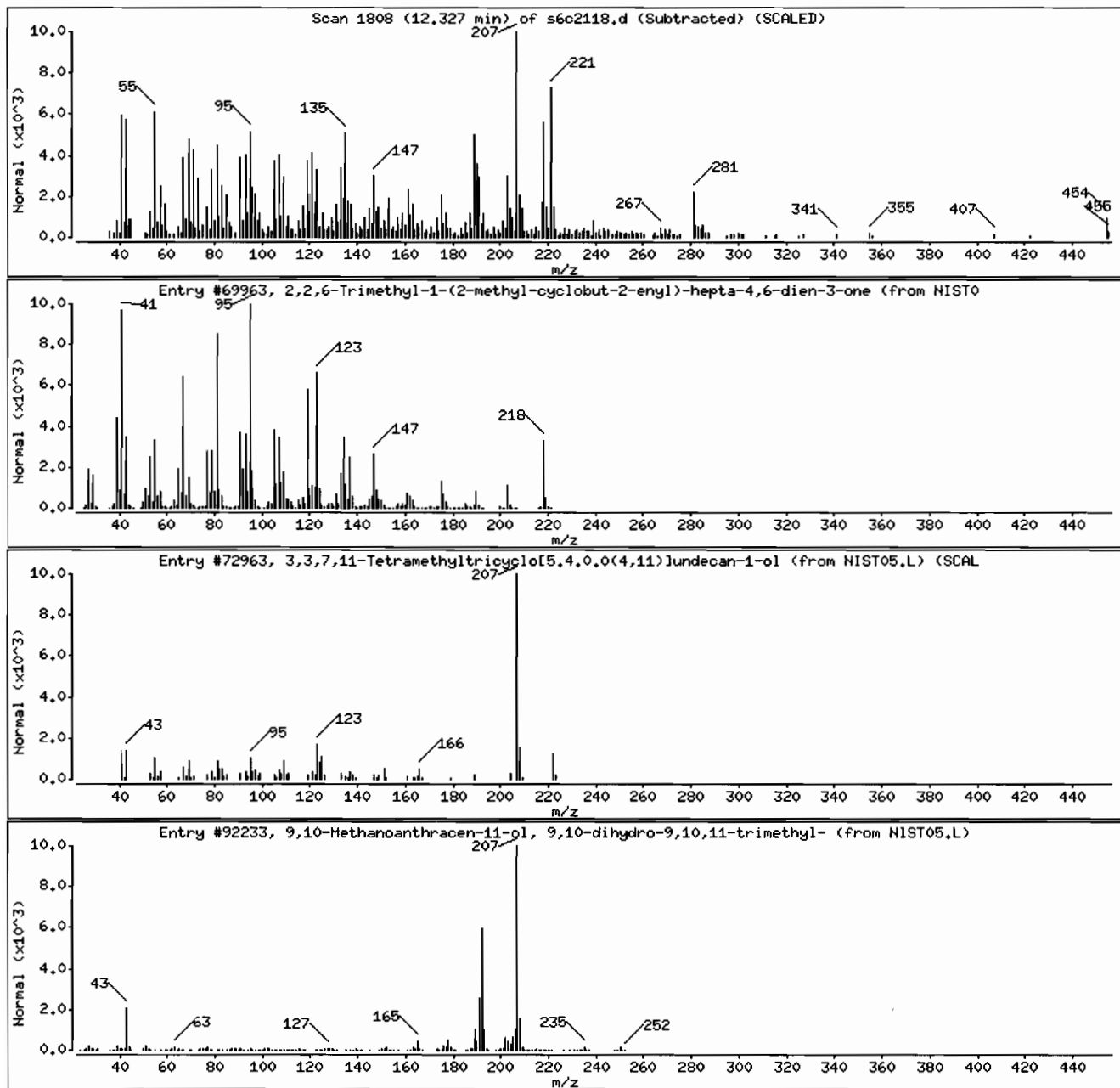
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2,2,6-Trimethyl-1-(2-methyl-cyclobut-2-yl)-hepta-4,6-dien-3-one	1000188-72-8	NIST05.L	69963	25	C15H22O	218
3,3,7,11-Tetramethyltricyclo[5.4.0.0(4,1)]undecan-1-ol	117591-80-7	NIST05.L	72963	25	C15H26O	222
9,10-Methanoanthracen-11-ol, 9,10-dihydro	126615-74-5	NIST05.L	92233	18	C18H18O	250



Date : 21-MAR-2010 22:09

Client ID: RE36-10-8278

Instrument: MSD6.i

Sample Info: 1248519005196313311SVH111LANL

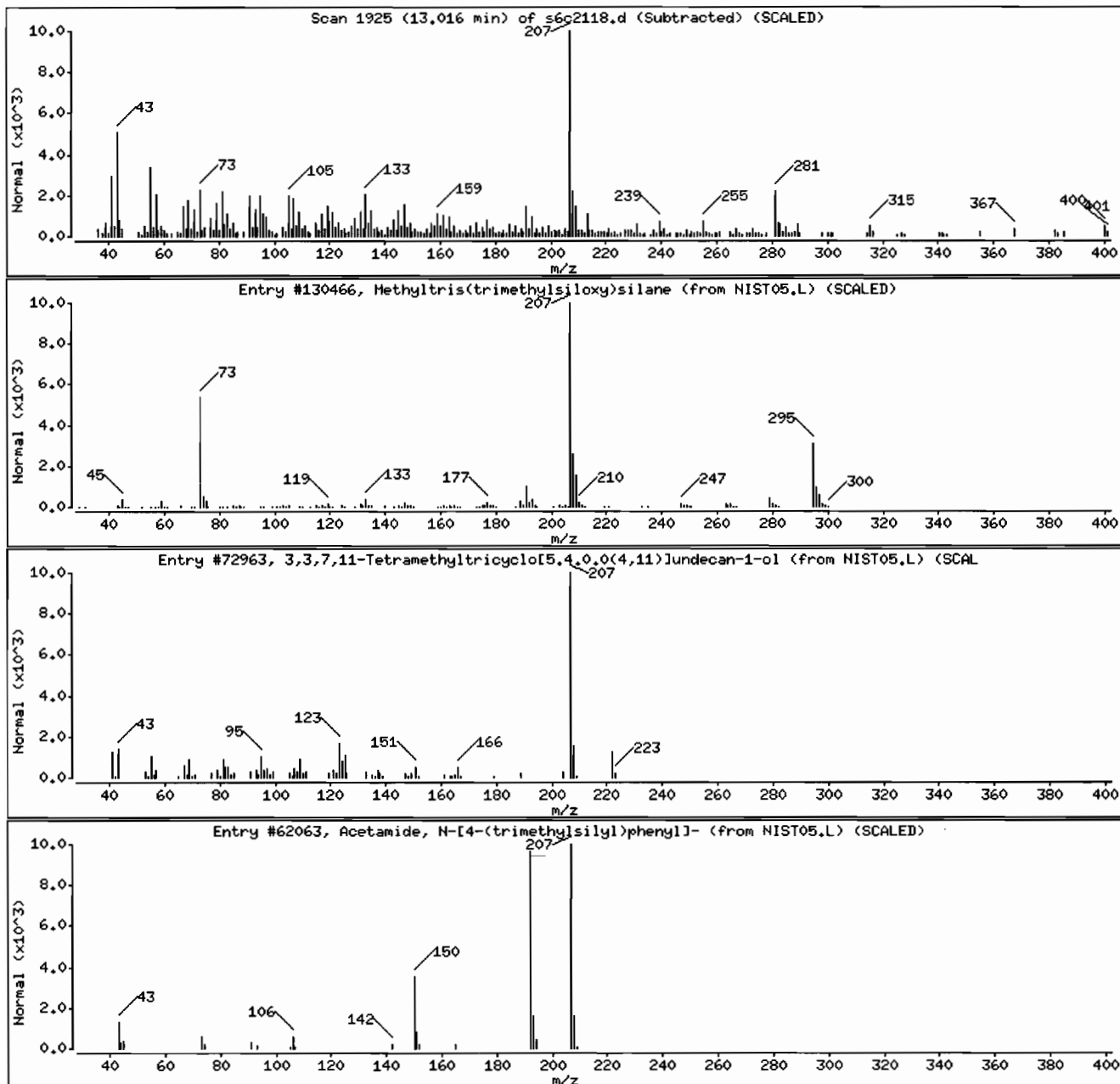
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Methyltris(trimethylsiloxy)silane	17928-28-8	NIST05.L	130466	47	C10H30O3Si4	310
3,3,7,11-Tetramethyltricyclo[5.4.0.0(4,1	117591-80-7	NIST05.L	72963	47	C15H26O	222
Acetamide, N-[4-(trimethylsilyl)phenyl]-	17983-71-0	NIST05.L	62063	47	C11H17NOSi	207



Date : 21-MAR-2010 22:09

Client ID: RE36-10-8278

Instrument: MSD6.i

Sample Info: I248519005I963133I1ISVM1I1LANL

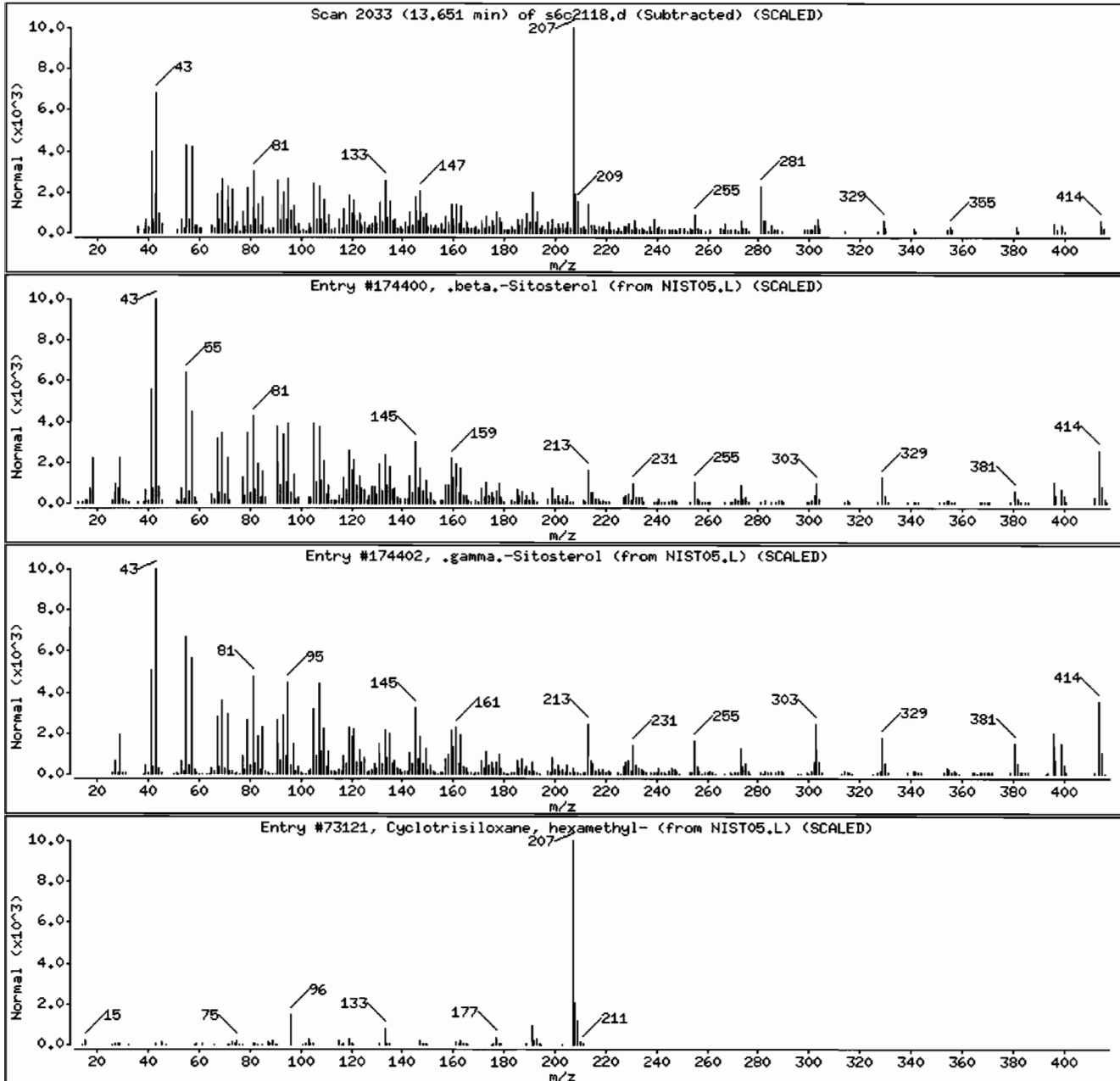
Volume Injected (uL): 0.5

Operator: nag1

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	91	C29H50O	414
.gamma.-Sitosterol	83-47-6	NIST05.L	174402	91	C29H50O	414
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73121	46	C6H18O3Si3	222





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

SDG Number: 10-2199  
Lab Sample ID: 248519002

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Aliquot: 30.01 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 7.1  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 4  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE36-10-8279  
Batch ID: 963133  
Run Date: 03/24/2010 00:17  
Prep Date: 03/10/2010 12:14  
Data File: s6c2326.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	1430	ug/kg	287	1430
108-95-2	Phenol	U	1430	ug/kg	287	1430
95-57-8	2-Chlorophenol	U	1430	ug/kg	287	1430
106-46-7	1,4-Dichlorobenzene	U	1430	ug/kg	287	1430
621-64-7	N-Nitrosodipropylamine	U	1430	ug/kg	287	1430
59-50-7	4-Chloro-3-methylphenol	U	1430	ug/kg	287	1430
83-32-9	Acenaphthene	J	96.5	ug/kg	47.3	143
121-14-2	2,4-Dinitrotoluene	U	1430	ug/kg	143	1430
100-02-7	4-Nitrophenol	U	1430	ug/kg	473	1430
87-86-5	Pentachlorophenol	U	1430	ug/kg	359	1430
129-00-0	Pyrene		3310	ug/kg	43.0	143
110-86-1	Pyridine	U	1430	ug/kg	287	1430
62-53-3	Aniline	U	1430	ug/kg	430	1430
111-44-4	bis(2-Chloroethyl) ether	U	1430	ug/kg	287	1430
541-73-1	1,3-Dichlorobenzene	U	1430	ug/kg	287	1430
100-51-6	Benzyl alcohol	U	1430	ug/kg	430	1430
95-50-1	1,2-Dichlorobenzene	U	1430	ug/kg	287	1430
108-60-1	bis(2-Chloroisopropyl)ether	U	1430	ug/kg	287	1430
95-48-7	o-Cresol	U	1430	ug/kg	287	1430
65794-96-9	m,p-Cresols	U	1430	ug/kg	430	1430
67-72-1	Hexachloroethane	U	1430	ug/kg	287	1430
98-95-3	Nitrobenzene	U	1430	ug/kg	287	1430
78-59-1	Isophorone	U	1430	ug/kg	287	1430
88-75-5	2-Nitrophenol	U	1430	ug/kg	287	1430
105-67-9	2,4-Dimethylphenol	U	1430	ug/kg	502	1430
111-91-1	bis(2-Chloroethoxy)methane	U	1430	ug/kg	287	1430
120-83-2	2,4-Dichlorophenol	U	1430	ug/kg	287	1430
65-85-0	Benzoic acid	U	2870	ug/kg	717	2870
91-20-3	Naphthalene	U	143	ug/kg	43.0	143
106-47-8	4-Chloroaniline	U	1430	ug/kg	287	1430
87-68-3	Hexachlorobutadiene	U	1430	ug/kg	287	1430
91-57-6	2-Methylnaphthalene	U	143	ug/kg	28.7	143
77-47-4	Hexachlorocyclopentadiene	U	1430	ug/kg	287	1430
88-06-2	2,4,6-Trichlorophenol	U	1430	ug/kg	287	1430
95-95-4	2,4,5-Trichlorophenol	U	1430	ug/kg	287	1430
91-58-7	2-Chloronaphthalene	U	143	ug/kg	47.3	143
88-74-4	2-Nitroaniline	U	1430	ug/kg	287	1430
99-09-2	o-Nitroaniline					
	3-Nitroaniline	U	1430	ug/kg	287	1430

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

SDG Number: 10-2199  
Lab Sample ID: 248519002

Client ID: RE36-10-8279  
Batch ID: 963133  
Run Date: 03/24/2010 00:17  
Prep Date: 03/10/2010 12:14  
Data File: s6c2326.d

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Aliquot: 30.01 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 7.1  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 4  
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	1430	ug/kg	287	1430
606-20-2	2,6-Dinitrotoluene	U	1430	ug/kg	143	1430
208-96-8	Acenaphthylene	U	143	ug/kg	43.0	143
51-28-5	2,4-Dinitrophenol	U	2870	ug/kg	545	2870
132-64-9	Dibenzofuran	U	1430	ug/kg	287	1430
84-66-2	Diethylphthalate	U	1430	ug/kg	287	1430
86-73-7	Fluorene	J	92.8	ug/kg	43.0	143
7005-72-3	4-Chlorophenylphenylether	U	1430	ug/kg	287	1430
534-52-1	2-Methyl-4,6-dinitrophenol	U	1430	ug/kg	287	1430
100-01-6	4-Nitroaniline	U	1430	ug/kg	430	1430
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	1430	ug/kg	287	1430
122-66-7	Azobenzene	U	1430	ug/kg	287	1430
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	1430	ug/kg	287	1430
118-74-1	Hexachlorobenzene	U	1430	ug/kg	287	1430
85-01-8	Phenanthrene		1350	ug/kg	43.0	143
120-12-7	Anthracene		294	ug/kg	28.7	143
84-74-2	Di-n-butylphthalate	J	441	ug/kg	287	1430
206-44-0	Fluoranthene		3340	ug/kg	43.0	143
85-68-7	Butylbenzylphthalate	U	1430	ug/kg	287	1430
56-55-3	Benzo(a)anthracene		2030	ug/kg	43.0	143
91-94-1	3,3'-Dichlorobenzidine	U	1430	ug/kg	430	1430
218-01-9	Chrysene		2180	ug/kg	43.0	143
117-81-7	bis(2-Ethylhexyl)phthalate	U	1430	ug/kg	287	1430
117-84-0	Di-n-octylphthalate	U	1430	ug/kg	287	1430
205-99-2	Benzo(b)fluoranthene		4170	ug/kg	43.0	143
207-08-9	Benzo(k)fluoranthene	U	143	ug/kg	43.0	143
50-32-8	Benzo(a)pyrene		2240	ug/kg	43.0	143
193-39-5	Indeno(1,2,3-cd)pyrene		1210	ug/kg	43.0	143
53-70-3	Dibenzo(a,h)anthracene	U	143	ug/kg	43.0	143
191-24-2	Benzo(ghi)perylene		1290	ug/kg	43.0	143
120-82-1	1,2,4-Trichlorobenzene	U	1430	ug/kg	287	1430

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
7785-70-8	IR-.alpha.-Pinene	3.52	896	ug/kg	97	NJ
	Unknown	7.69	656	ug/kg		J

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

SDG Number: 10-2199	Date Collected: 02/25/2010 12:00	Matrix: R
Lab Sample ID: 248519002	Date Received: 03/03/2010 08:50	%Moisture: 7.1
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-8279	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 963133	Inst: MSD6.I	Dilution: 4
Run Date: 03/24/2010 00:17	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 03/10/2010 12:14	Aliquot: 30.01 g	Final Volume: 1 mL
Data File: s6c2326.d	Column: J&W DB-5MS	Level: 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
1000197-14-1	4b,8-Dimethyl-2-isopropylphenanthrene, 4	8.03	590	ug/kg	96	NJ
	Unknown	9.43	1180	ug/kg		J
479-79-8	11H-Benzo[a]fluoren-11-one	9.49	634	ug/kg	95	NJ
559-74-0	Friedelan-3-one	10.33	1360	ug/kg	99	NJ
	Unknown	10.51	1810	ug/kg		J
198-55-0	Perylene	11.17	1670	ug/kg	99	NJ
	Unknown	12.42	955	ug/kg		J
	Unknown	12.62	1020	ug/kg		J
	Unknown	13	1160	ug/kg		J
213-46-7	1,2:7,8-Dibenzophenanthrene	13.37	739	ug/kg	95	NJ

Data File: /chem/MSD6.i/s032310.b/s6c2326.d  
Report Date: 24-Mar-2010 11:02

Page 1

GEL Laboratories LLC

Data file : /chem/MSD6.i/s032310.b/s6c2326.d  
Lab Smp Id: 248519002 Client Smp ID: RE36-10-8279  
Inj Date : 24-MAR-2010 00:17  
Operator : nagl Inst ID: MSD6.i  
Smp Info : |248519002|963133|4|SVM|1|LANL  
Misc Info : |MSD8270\_S|WBN100319-01  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD6.i/s032310.b/MSD6-M8270C-AQA-031610.m  
Meth Date : 24-Mar-2010 09:23 jen00986 Quant Type: ISTD  
Cal Date : 17-MAR-2010 04:51 Cal File: s6c1646.d  
Als bottle: 21  
Dil Factor: 4.00000  
Integrator: HP RTE Compound Sublist: 10-2199.sub  
Target Version: 3.50  
Processing Host: hpclp1

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

Name	Value	Description
DF	4.00000	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	7.10180	% 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	3.951	3.946	(1.000)	330718	40.0000	
* 29 Naphthalene-d8		136	4.816	4.804	(1.000)	1183153	40.0000	
* 46 Acenaphthene-d10		164	6.069	6.057	(1.000)	730456	40.0000	
* 67 Phenanthrene-d10		188	7.234	7.228	(1.000)	1260786	40.0000	
* 91 Chrysene-d12		240	9.645	9.628	(1.000)	1012863	40.0000	
* 98 Perylene-d12		264	11.322	11.298	(1.000)	769124	40.0000	
\$ 3 2-Fluorophenol		112	3.140	3.128	(0.795)	157985	17.1842	2460
\$ 5 Phenol-d5		99	3.663	3.657	(0.927)	194882	16.6682	2390
\$ 20 Nitrobenzene-d5		82	4.310	4.304	(0.895)	87183	7.70837	1100
\$ 39 2-Fluorobiphenyl		172	5.551	5.546	(0.915)	185708	9.85401	1410
\$ 60 2,4,6-Tribromophenol		329	6.663	6.651	(1.098)	40114	19.5701	2810
\$ 81 p-Terphenyl-d14		244	8.610	8.604	(0.893)	189358	10.7285	1540

Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN	FINAL	
=====	=====	==	=====	=====	=====	(ng/ul)	(ug/Kg)	
47 Acenaphthene	154	6.087	6.081	(1.003)	12751	0.67280	96.5(a)	
79 Pyrene	202	8.510	8.498	(0.882)	713291	23.1014	3310	
53 Fluorene	166	6.475	6.469	(1.067)	13201	0.64670	92.8(a)	
68 Phenanthrene	178	7.257	7.245	(1.003)	288878	9.40332	1350	
69 Anthracene	178	7.298	7.292	(1.009)	63438	2.04977	294	
72 Di-n-butylphthalate	149	7.657	7.645	(1.059)	109962	3.07219	441(a)	
76 Fluoranthene	202	8.298	8.287	(1.147)	725154	23.2759	3340	
89 Benzo(a)anthracene	228	9.633	9.616	(0.999)	374747	14.1695	2030	
92 Chrysene	228	9.669	9.657	(1.002)	383544	15.1828	2180	
95 Benzo(b)fluoranthene	252	10.804	10.786	(0.954)	607573	29.0573	4170	
97 Benzo(a)pyrene	252	11.245	11.222	(0.993)	276200	15.5969	2240	
99 Indeno(1,2,3-cd)pyrene	276	13.086	13.063	(1.156)	137505	8.46199	1210	
101 Benzo(ghi)perylene	276	13.627	13.604	(1.204)	125207	9.02390	1290	

#### QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).

## ION RATIO REPORT

## SV REPORT

Data file: s6c2326.d

Report Date: 03/24/2010 10:05

Lab. ID: 248519002

SampleType: SAMPLE

Injection Date: 24-MAR-2010 00:17

Operator: nagl

Instrument: MSD6.i

Sample Info: |248519002|963133|4|SVM|1|LANL

Miscellaneous Info: |MSD8270\_S|WBN100319-01

Comment:

Method used: /chem/MSD6.i/s032310.b/MSD6-M8270C-AQA-031610.m

Dilution Factor= 4.0

Integrator: HP RTE

Compound Sublist: 10-2199

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
22	Isophorone		CAS#: 78-59-1			
82	87258	4.31	4.47	80-120	100	(T)
138	168	4.01	4.47	0- 48	0	(T)
-----						
40	2-Chloronaphthalene		CAS#: 91-58-7			
162	9995	5.80	5.66	80-120	100	(T)
164	721	5.80	5.66	3- 63	7	(T)
127	894	5.80	5.66	7- 67	9	(T)
-----						
43	Dimethylphthalate		CAS#: 131-11-3			
163	133774	6.07	5.82	80-120	100	(T)
164	730456	6.07	5.82	0- 41	546	(QT)
-----						
45	Acenaphthylene		CAS#: 208-96-8			
152	11737	5.65	5.96	80-120	100	(T)
151	12093	5.65	5.96	0- 50	103	(QT)
153	2109	5.65	5.96	0- 44	18	(T)
-----						
47	Acenaphthene		CAS#: 83-32-9			
154	12751	6.09	6.08	80-120	100	( )
153	12885	6.09	6.08	70-130	101	( )
152	5506	6.09	6.08	17- 77	43	( )
-----						
48	2,4-Dinitrophenol		CAS#: 51-28-5			
184	423	6.41	6.07	80-120	100	(T)
154	297	6.41	6.07	843-903	70	(QT)
-----						

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
50	2,4-Dinitrotoluene			CAS#: 121-14-2		
165	96413	6.07	6.17	80-120	100	(T)
89	1373	6.06	6.17	38- 98	1	(QT)
63	1785	6.06	6.17	18- 78	2	(QT)
-----						
53	Fluorene			CAS#: 86-73-7		
166	13201	6.47	6.47	80-120	100	( )
165	12525	6.47	6.47	60-120	95	( )
167	3840	6.47	6.47	0- 44	29	( )
-----						
55	2-Methyl-4,6-dinitrophenol			CAS#: 534-52-1		
198	108	6.66	6.48	80-120	100	(T)
105	1042	6.66	6.48	10- 70	959	(QT)
51	1013	6.66	6.48	27- 87	932	(QT)
-----						
68	Phenanthrene			CAS#: 85-01-8		
178	288878	7.26	7.25	80-120	100	( )
179	46368	7.26	7.25	0- 46	16	( )
176	53063	7.26	7.25	0- 49	18	( )
-----						
69	Anthracene			CAS#: 120-12-7		
178	63438	7.30	7.29	80-120	100	( )
179	17574	7.30	7.29	0- 46	28	( )
176	10784	7.30	7.29	0- 49	17	( )
-----						
72	Di-n-butylphthalate			CAS#: 84-74-2		
149	109962	7.66	7.65	80-120	100	( )
150	11162	7.66	7.65	0- 40	10	( )
104	5435	7.66	7.65	0- 35	5	( )
-----						
76	Fluoranthene			CAS#: 206-44-0		
202	725154	8.30	8.29	80-120	100	( )
203	128615	8.30	8.29	0- 48	18	( )
101	82401	8.29	8.29	0- 42	11	( )
-----						
79	Pyrene			CAS#: 129-00-0		
202	713291	8.51	8.50	80-120	100	( )
200	147892	8.51	8.50	0- 51	21	( )
101	103295	8.51	8.50	0- 44	14	( )
-----						
89	Benzo(a)anthracene			CAS#: 56-55-3		
228	374747	9.63	9.62	80-120	100	( )
226	99370	9.63	9.62	0- 55	27	( )
229	102882	9.63	9.62	0- 50	27	( )
-----						
92	Chrysene			CAS#: 218-01-9		
228	383544	9.67	9.66	80-120	100	( )
229	92457	9.67	9.66	0- 50	24	( )
226	107200	9.67	9.66	0- 60	28	( )
-----						

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
-----						
95 Benzo(b)fluoranthene				CAS#: 205-99-2		
252	607573	10.80	10.79	80-120	100	( )
253	135712	10.80	10.79	0- 52	22	( )
125	70435	10.80	10.79	0- 40	12	( )
-----						
96 Benzo(k)fluoranthene				CAS#: 207-08-9		
252	607573	10.80	10.82	80-120	100	( )
253	141539	10.80	10.82	0- 52	23	( )
125	70435	10.80	10.82	0- 42	12	( )
-----						
97 Benzo(a)pyrene				CAS#: 50-32-8		
252	276200	11.25	11.22	80-120	100	( )
253	64094	11.25	11.22	0- 52	23	( )
125	32524	11.24	11.22	0- 43	12	( )
-----						
99 Indeno(1,2,3-cd)pyrene				CAS#: 193-39-5		
276	137505	13.09	13.06	80-120	100	( )
138	34686	13.09	13.06	0- 59	25	( )
-----						
100 Dibenzo(a,h)anthracene				CAS#: 53-70-3		
278	38567	13.09	13.08	80-120	100	( )
139	5846	13.09	13.08	0- 50	15	( )
-----						
101 Benzo(ghi)perylene				CAS#: 191-24-2		
276	125207	13.63	13.60	80-120	100	( )
138	31730	13.63	13.60	0- 59	25	( )

-----  
Q qualifier indicates ion failed ratio requirement



GEL Laboratories LLC

Data file : /chem/MSD6.i/s032310.b/s6c2326.d  
Lab Smp Id: 248519002 Client Smp ID: RE36-10-8279  
Inj Date : 24-MAR-2010 00:17  
Operator : nag1 Inst ID: MSD6.i  
Smp Info : |248519002|963133|4|SVM|1|LANL  
Misc Info : |MSD8270\_S|WBN100319-01  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD6.i/s032310.b/MSD6-M8270C-AQA-031610.m  
Meth Date : 24-Mar-2010 09:23 jen00986 Quant Type: ISTD  
Cal Date : 17-MAR-2010 04:51 Cal File: s6c1646.d  
Als bottle: 21  
Dil Factor: 4.00000  
Integrator: HP RTE Compound Sublist: 10-2199.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	4.00000	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	7.10180	% moisture

Cpnd Variable

Local Compound Variable

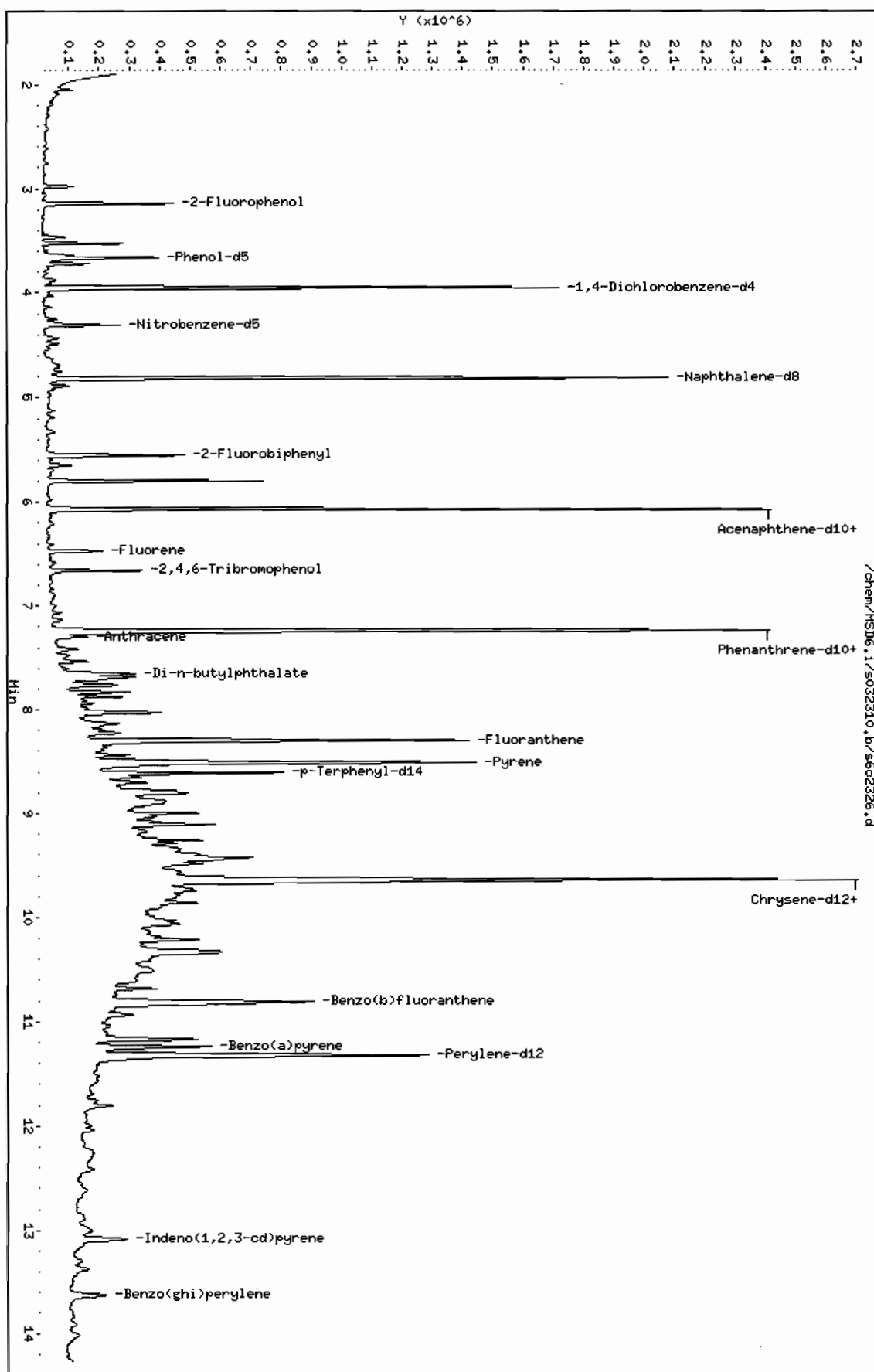
ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.951	2062269	40.000
* 67 Phenanthrene-d10	7.234	3792525	40.000
* 91 Chrysene-d12	9.645	5708807	40.000
* 98 Perylene-d12	11.322	2192182	40.000

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	
=====	=====	=====	=====	=====	=====	=====	=====
1R-.alpha.-Pinene					CAS #: 7785-70-8		
3.522	321892	6.24344718	896	97	NIST05.L	15188	10
Unknown					CAS #:		
7.686	433781	4.57511562	656	0		0	67
4b,8-Dimethyl-2-isopropylphenanthrene, 4					CAS #: 1000197-14-1		
8.028	389761	4.11083104	590	96	NIST05.L	96373	67
Unknown					CAS #:		
9.428	1178699	8.25881040	1180	0		0	91
11H-Benzo[a]fluoren-11-one					CAS #: 479-79-8		
9.486	631046	4.42156104	634	95	NIST05.L	78768	91
Friedelan-3-one					CAS #: 559-74-0		
10.333	1352344	9.47549157	1360	99	NIST05.L	176566	91
Unknown					CAS #:		
10.510	689792	12.5863875	1800	0		0	98
Perylene					CAS #: 198-55-0		
11.169	638095	11.6430957	1670	99	NIST05.L	93574	98
Unknown					CAS #:		
12.416	364653	6.65369528	955	0		0	98
Unknown					CAS #:		
12.616	390713	7.12921234	1020	0		0	98
Unknown					CAS #:		
13.004	444291	8.10681493	1160	0		0	98
1,2:7,8-Dibenzophenanthrene					CAS #: 213-46-7		
13.374	282368	5.15227514	739	95	NIST05.L	110884	98

Data File: /chem/HSD6.i/s032310.b/s6c2326.d  
 Date: 24-MAR-2010 00:17  
 Client ID: RE36-10-8279  
 Sample Info: 12486190021963133141SVH11L1LNL  
 Volume Injected (uL): 0.5  
 Column phase: JSM DB-SHS

Instrument: HSD6.i  
 Operator: nag1  
 Column diameter: 0.20



Date : 24-MAR-2010 00:17

Client ID: RE36-10-8279

Instrument: MSD6.i

Sample Info: 12485190021963133141SVMI11LANL

Volume Injected (uL): 0.5

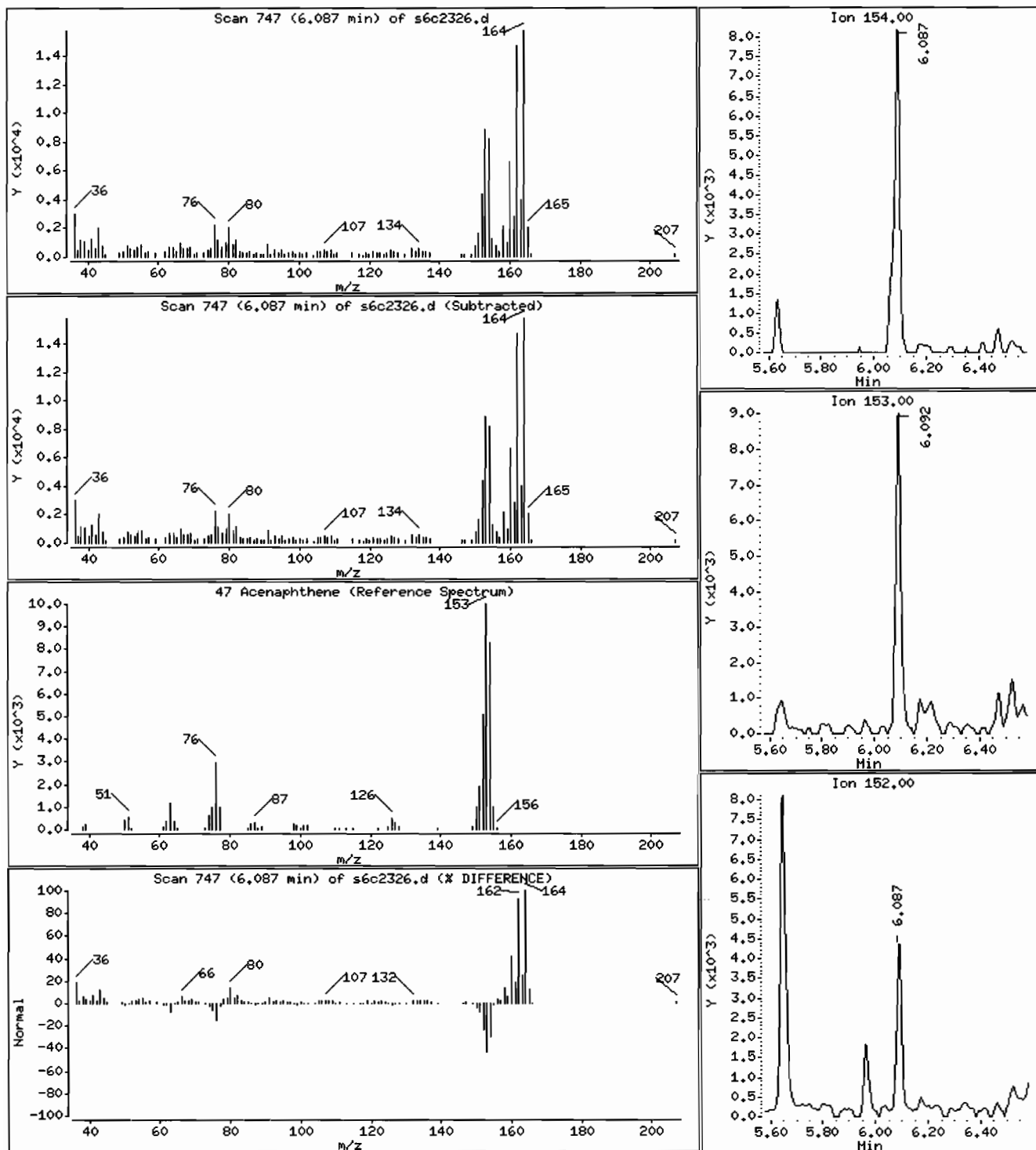
Operator: nag1

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

Column diameter: 0.20

47 Acenaphthene

Concentration: 96.5 ug/Kg



Date : 24-MAR-2010 00:17

Client ID: RE36-10-8279

Instrument: MSD6.i

Sample Info: 12485190021963133141SVMI1ILANL

Volume Injected (uL): 0.5

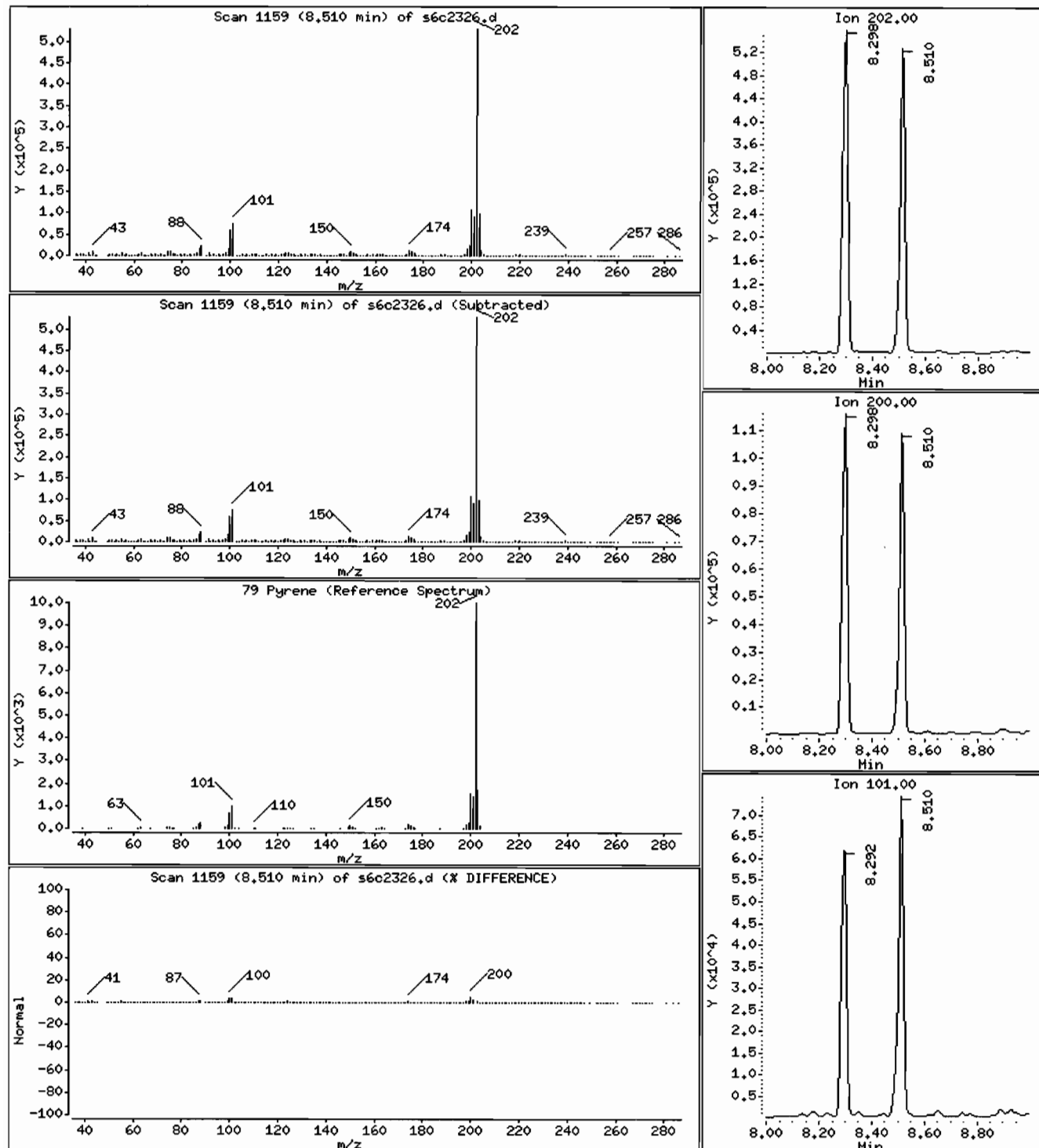
Operator: nag1

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

Column diameter: 0.20

79 Pyrene

Concentration: 3310 ug/Kg



Date : 24-MAR-2010 00:17

Client ID: RE36-10-8279

Instrument: MSD6.i

Sample Info: 12485190021963133141SVH111LANL

Volume Injected (uL): 0.5

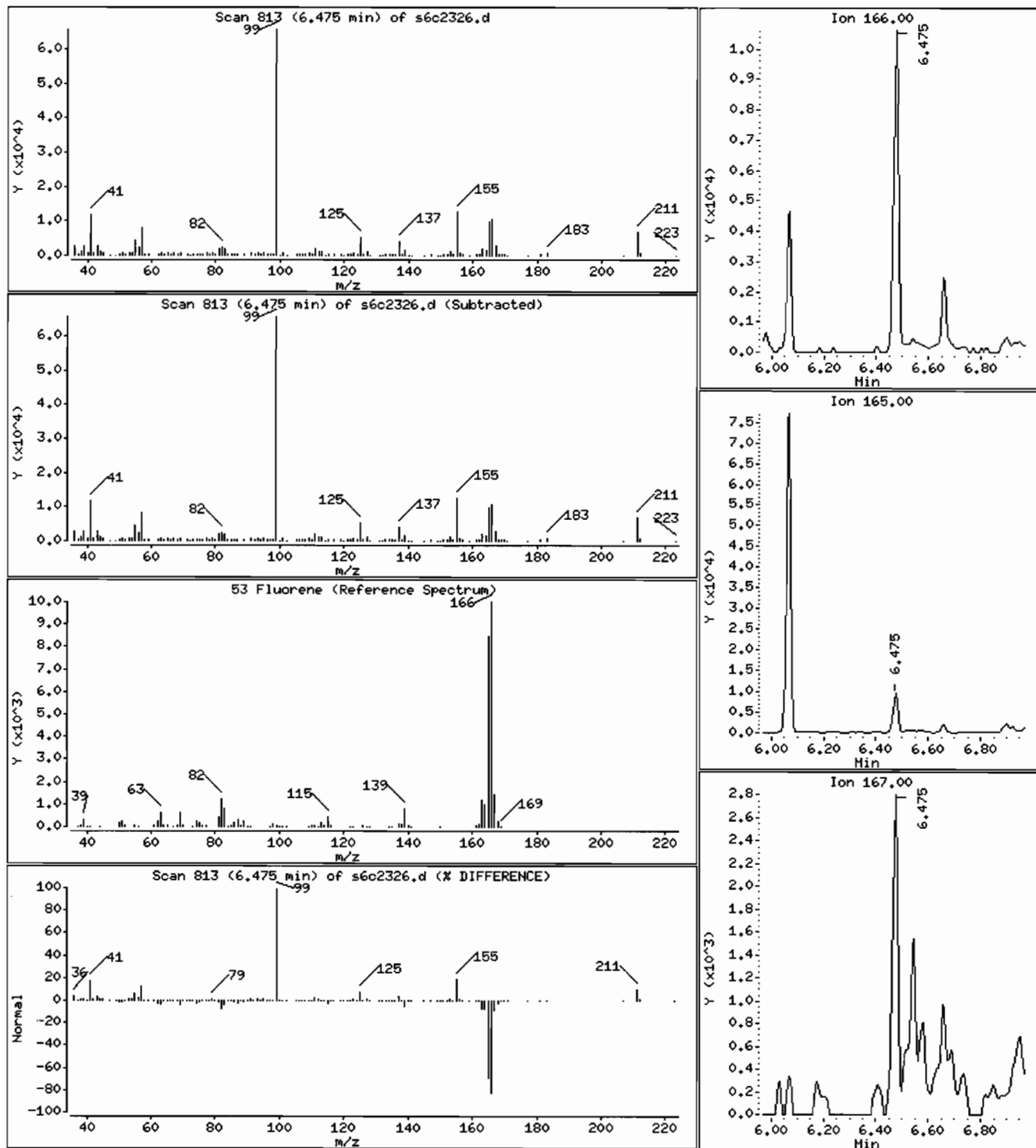
Operator: nag1

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

Column diameter: 0.20

53 Fluorene

Concentration: 92.8 ug/Kg



Date : 24-MAR-2010 00:17

Client ID: RE36-10-8279

Instrument: MSD6.i

Sample Info: I2485190021963133141SVH111LANL

Volume Injected (uL): 0.5

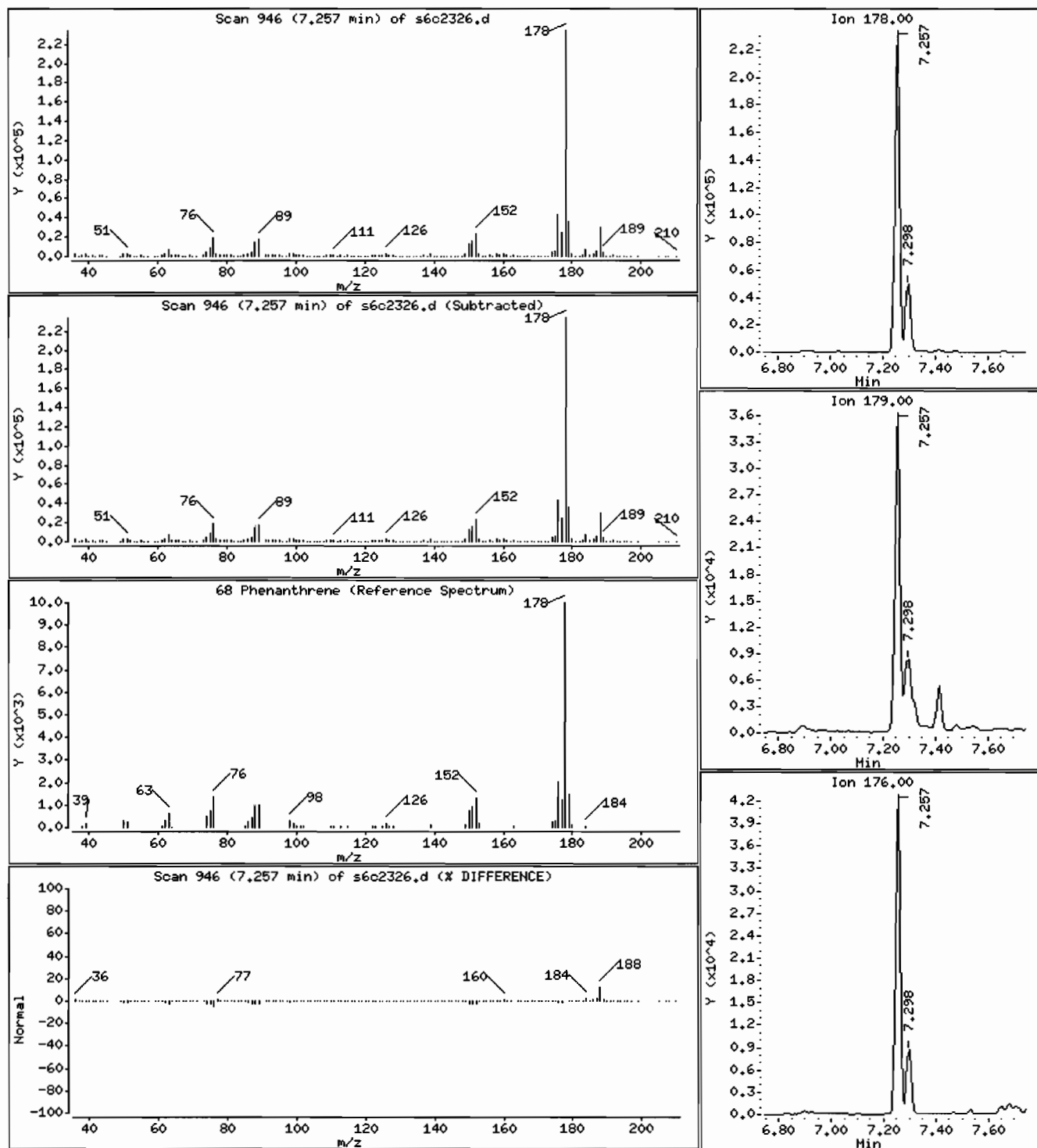
Operator: nag1

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

Column diameter: 0.20

68 Phenanthrene

Concentration: 1350 ug/Kg



Date : 24-MAR-2010 00:17

Client ID: RE36-10-8279

Instrument: MSD6.i

Sample Info: I2485190021963133141SVMI11LANL

Volume Injected (uL): 0.5

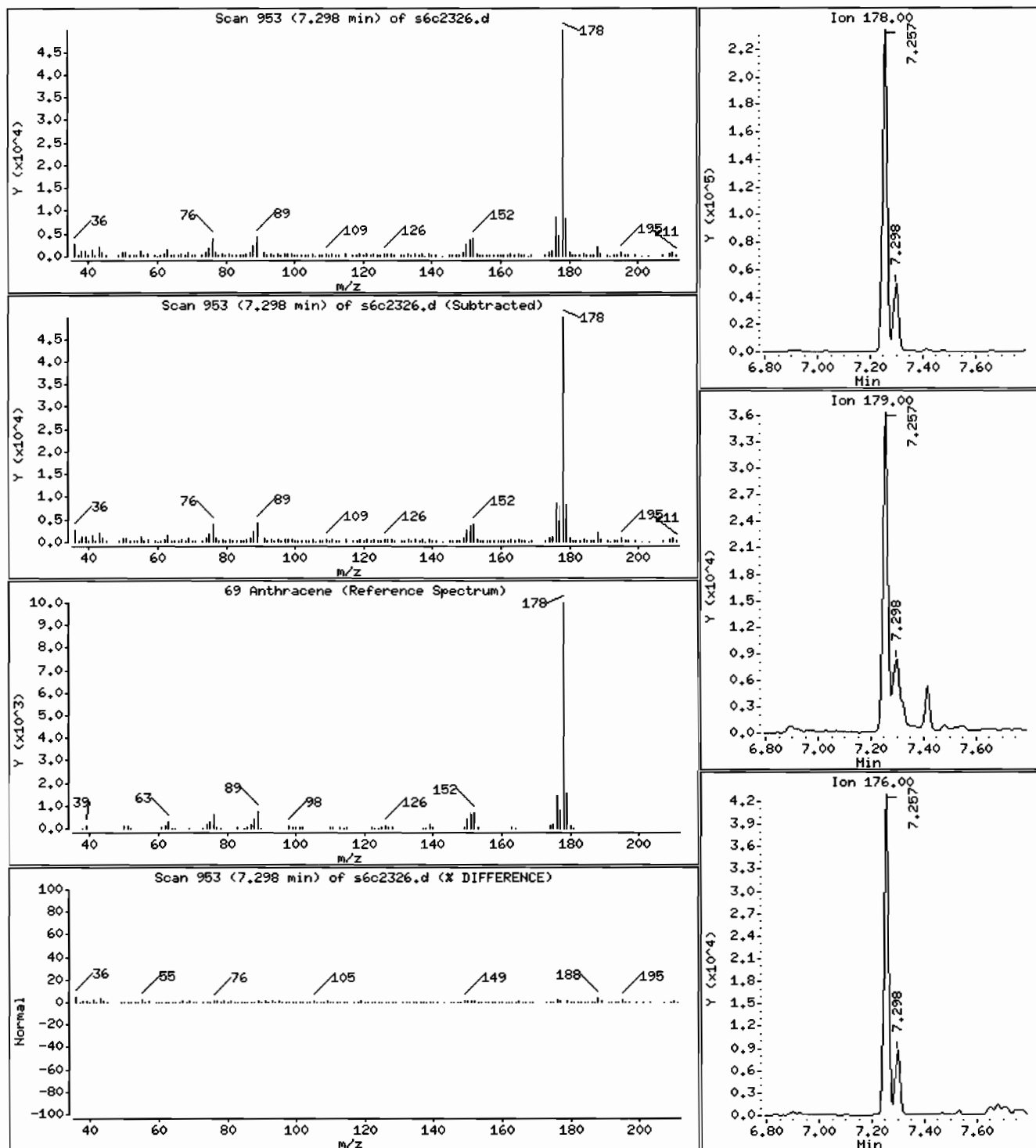
Operator: nag1

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

Column diameter: 0.20

69 Anthracene

Concentration: 294 ug/Kg





Date : 24-MAR-2010 00:17

Client ID: RE36-10-8279

Instrument: MSD6.i

Sample Info: I2485190021963133141SVH111LANL

Volume Injected (uL): 0.5

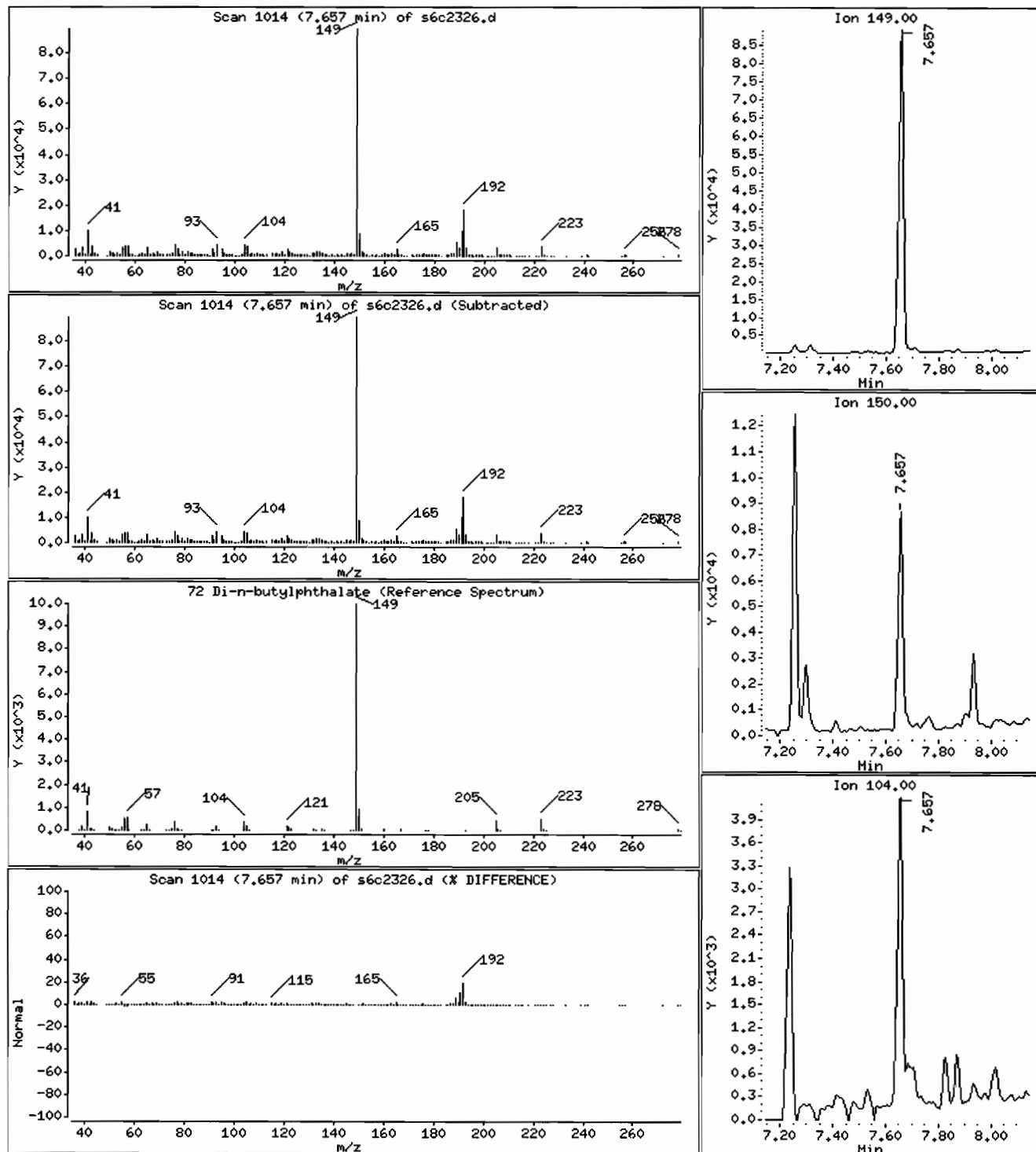
Operator: nag1

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

Column diameter: 0.20

72 Di-n-butylphthalate

Concentration: 441 ug/Kg



Date : 24-MAR-2010 00:17

Client ID: RE36-10-8279

Instrument: MSD6.i

Sample Info: I2485190021963133141SVH11ILANL

Volume Injected (uL): 0.5

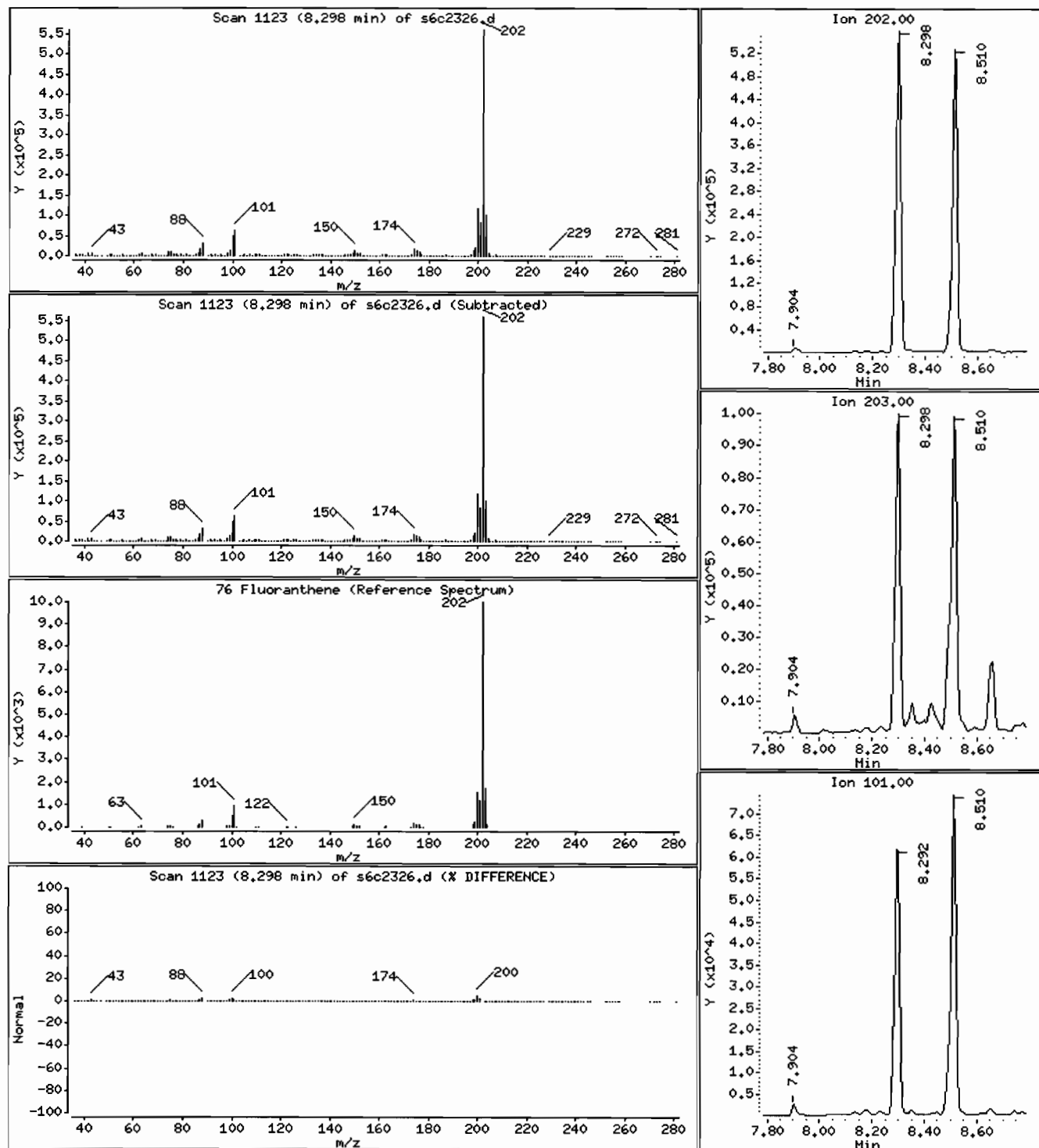
Operator: nag1

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

Column diameter: 0.20

76 Fluoranthene

Concentration: 3340 ug/Kg



Date : 24-MAR-2010 00:17

Client ID: RE36-10-8279

Instrument: MSD6.i

Sample Info: 12485190021963133141SVMI11LANL

Volume Injected (uL): 0.5

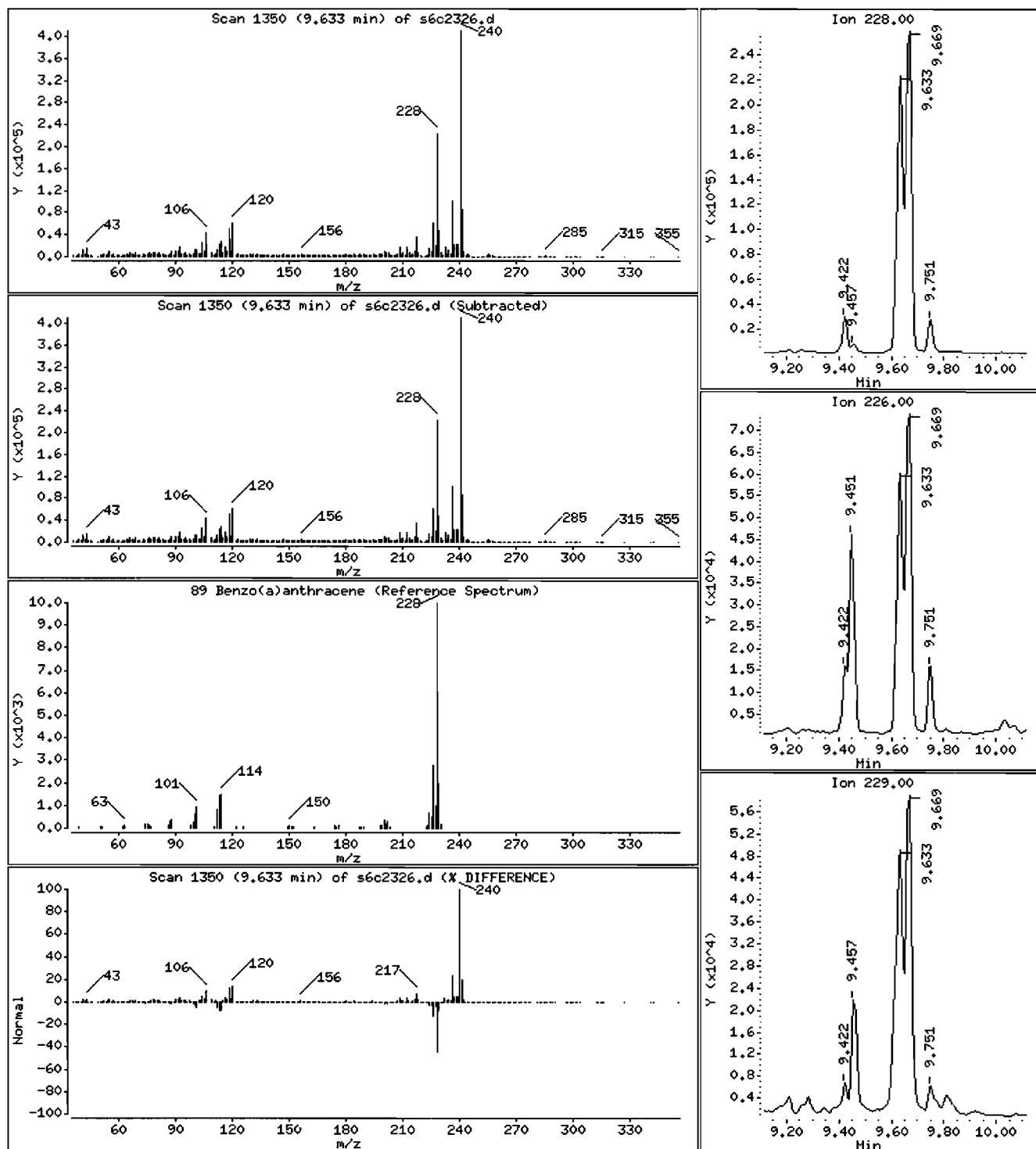
Operator: nag1

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

Column diameter: 0.20

89 Benzo(a)anthracene

Concentration: 2030 ug/Kg



Date : 24-MAR-2010 00:17

Client ID: RE36-10-8279

Instrument: MSD6.i

Sample Info: I248519002I963133I4ISVMI1IILANL

Volume Injected (uL): 0.5

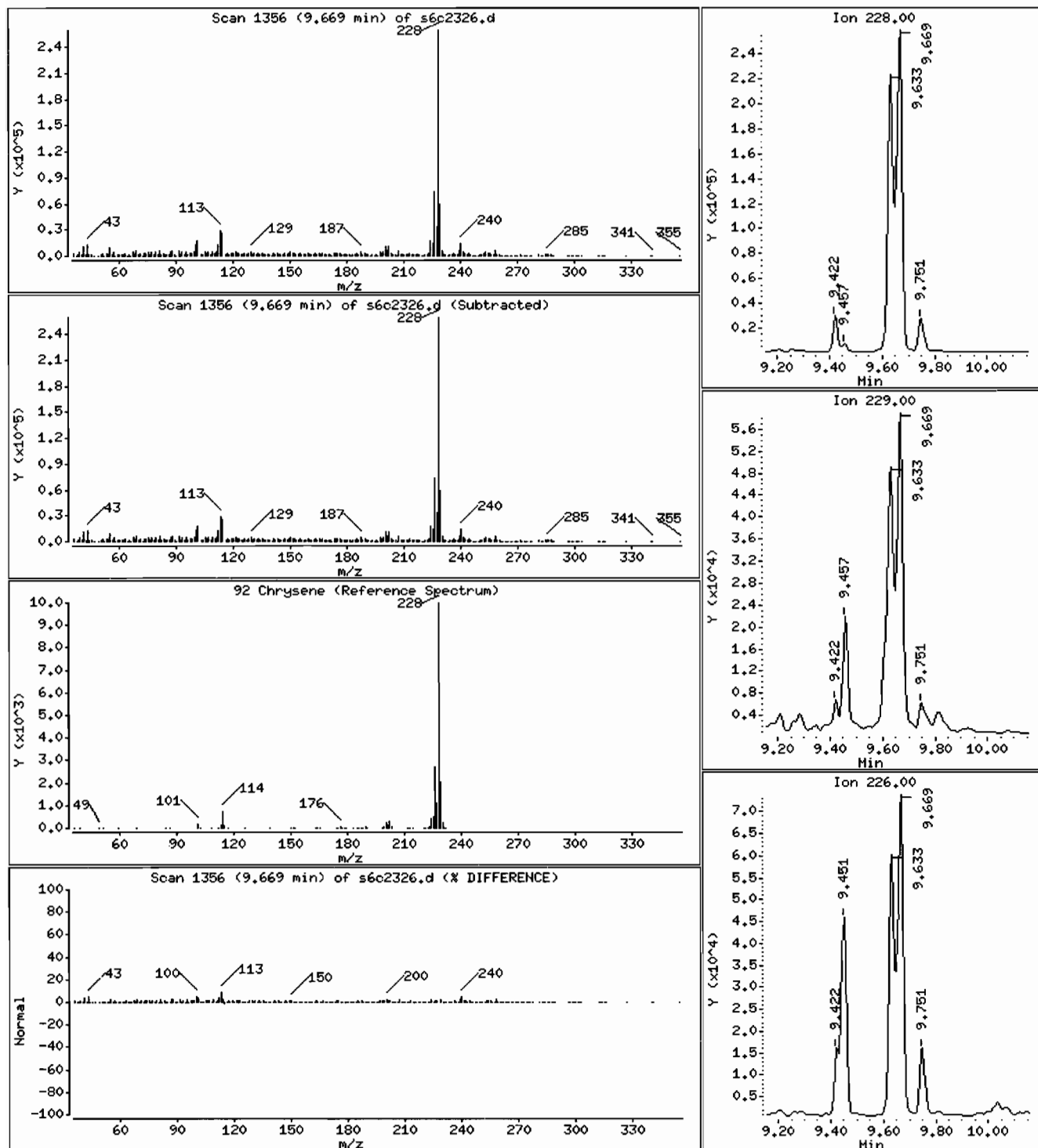
Operator: nag1

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

Column diameter: 0.20

92 Chrysene

Concentration: 2180 ug/Kg



Date : 24-MAR-2010 00:17

Client ID: RE36-10-8279

Instrument: HSD6.i

Sample Info: I248519002196313314ISVM11ILANL

Volume Injected (uL): 0.5

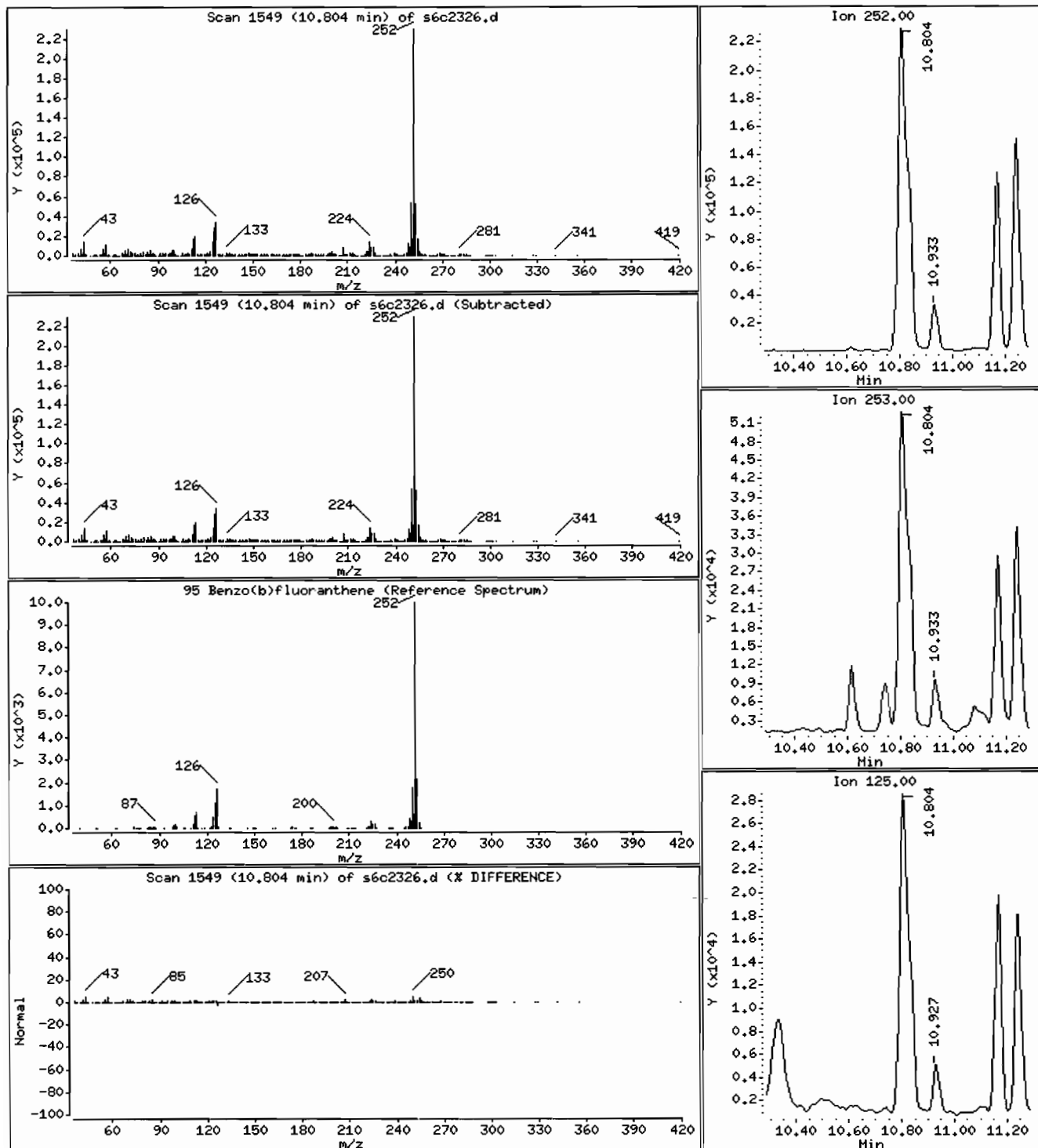
Operator: nag1

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

Column diameter: 0.20

95 Benzo(b)fluoranthene

Concentration: 4170 ug/Kg



Date : 24-MAR-2010 00:17

Client ID: RE36-10-8279

Instrument: MSD6.i

Sample Info: 12485190021963133141SVH111LANL

Volume Injected (uL): 0.5

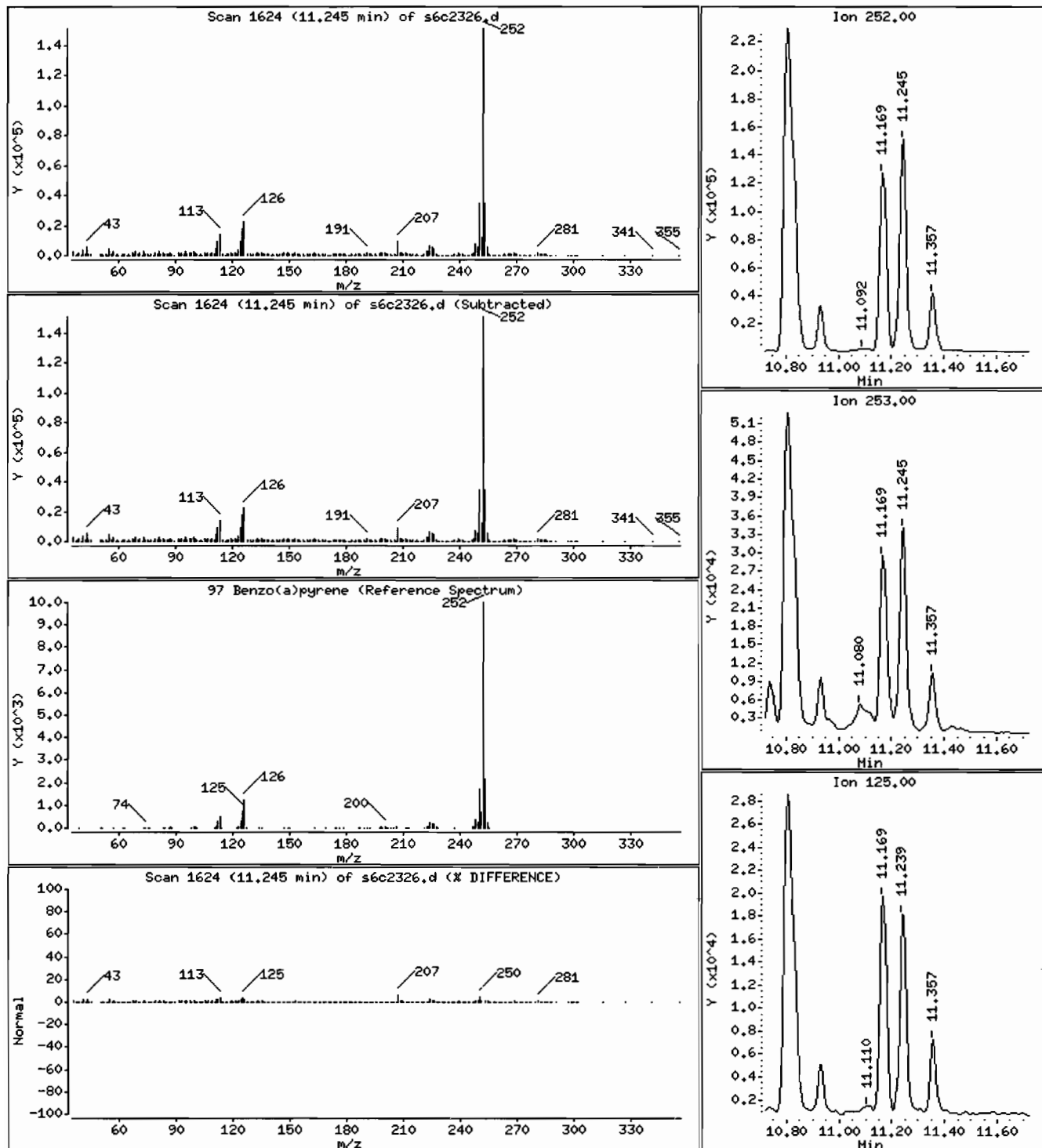
Operator: nag1

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

Column diameter: 0.20

97 Benzo(a)pyrene

Concentration: 2240 ug/Kg



Date : 24-MAR-2010 00:17

Client ID: RE36-10-8279

Instrument: MSD6.i

Sample Info: I2485190021963133141SVMI11LANL

Volume Injected (uL): 0.5

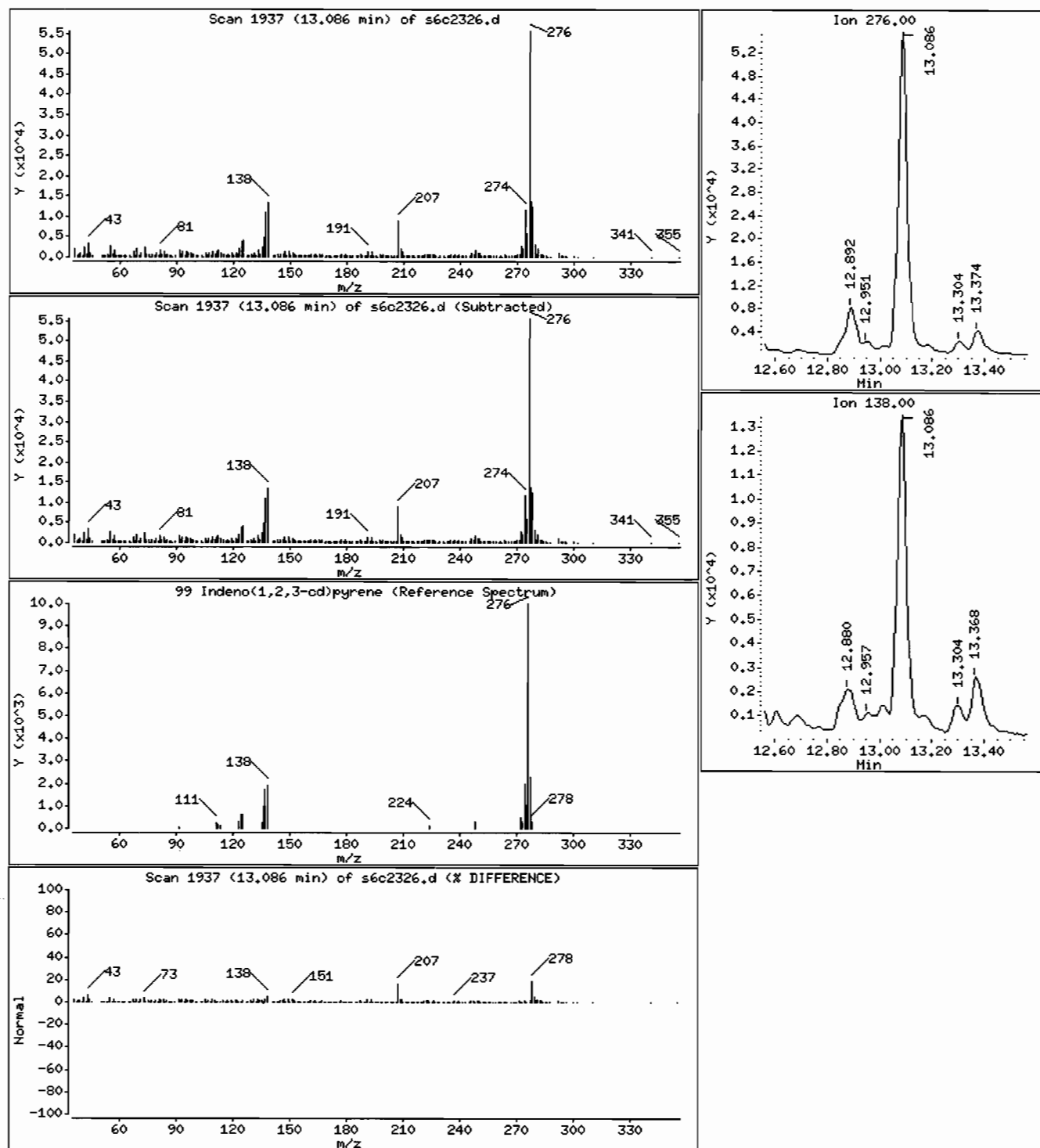
Operator: nag1

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

Column diameter: 0.20

99 Indeno(1,2,3-cd)pyrene

Concentration: 1210 ug/Kg



Date : 24-MAR-2010 00:17

Client ID: RE36-10-8279

Instrument: MSD6.i

Sample Info: 1248519002|96313314|SVH11|LANL

Volume Injected (uL): 0.5

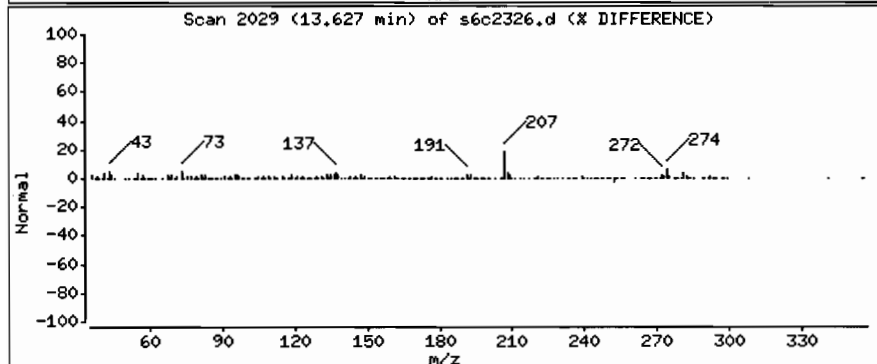
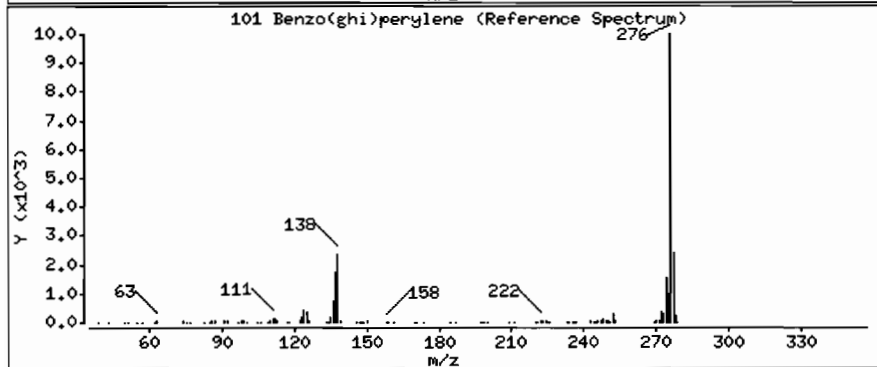
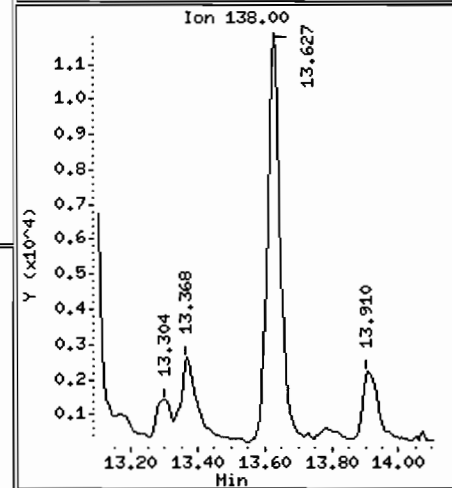
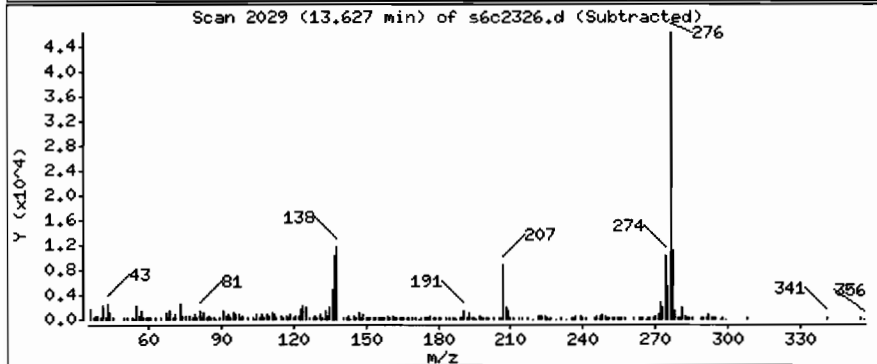
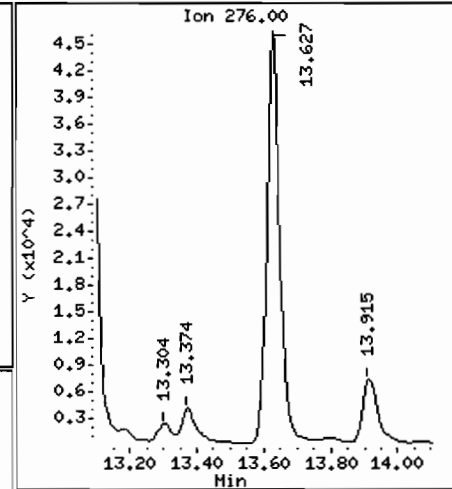
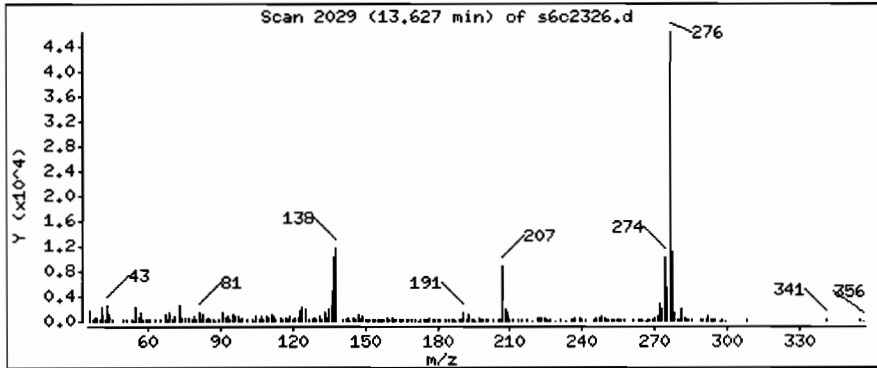
Operator: nag1

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

Column diameter: 0.20

101 Benzo(ghi)perylene

Concentration: 1290 ug/Kg





Date : 24-MAR-2010 00:17

Client ID: RE36-10-8279

Instrument: MSD6.i

Sample Info: I2485190021963133141SVH11ILANL

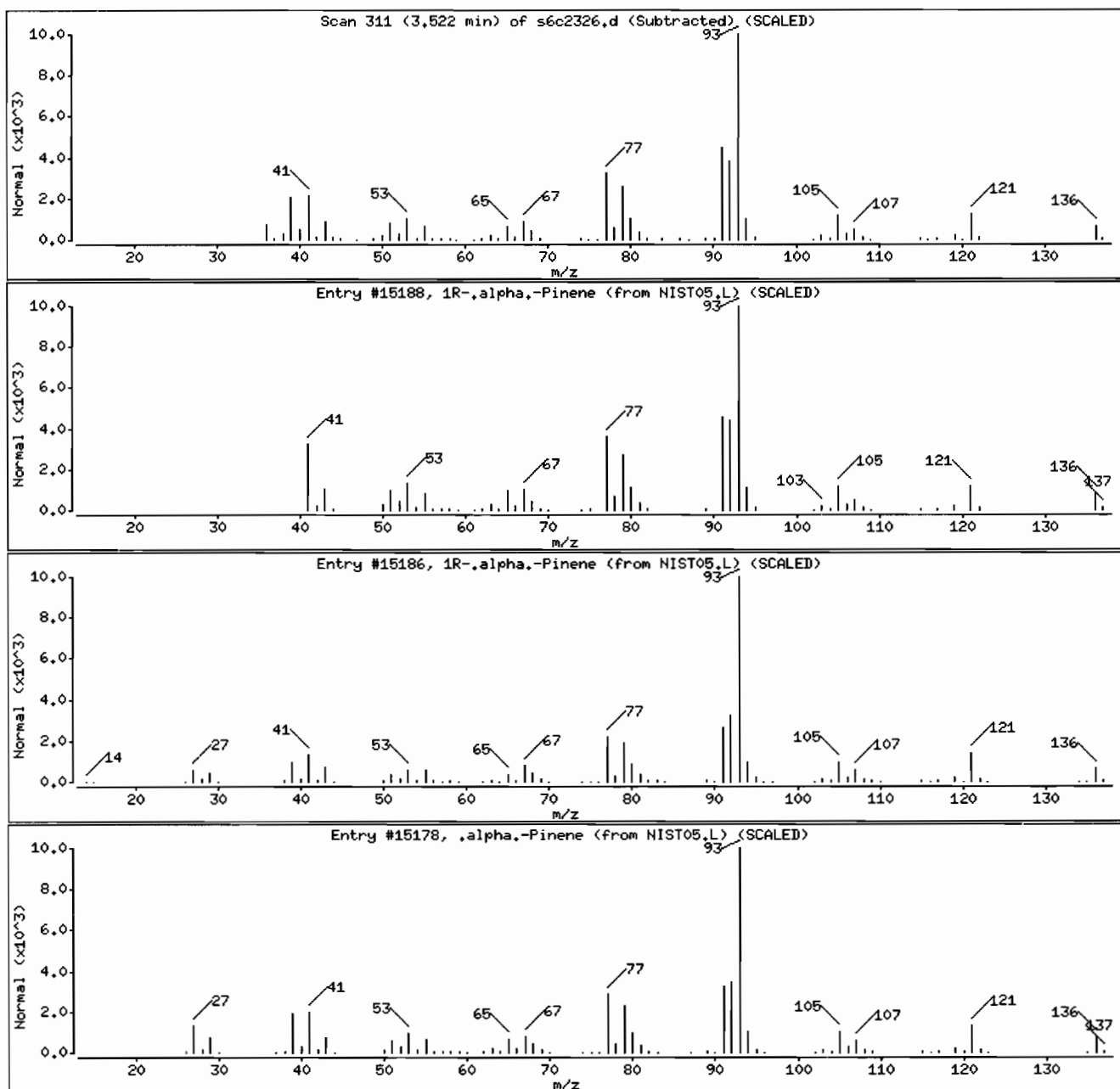
Volume Injected (uL): 0.5

Operator: nag1

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
1R-.alpha.-Pinene	7785-70-8	NIST05.L	15186	96	C10H16	136
.alpha.-Pinene	80-56-8	NIST05.L	15178	96	C10H16	136



Date : 24-MAR-2010 00:17

Client ID: RE36-10-8279

Instrument: MSD6.i

Sample Info: I2485190021963133141SVMI11LANL

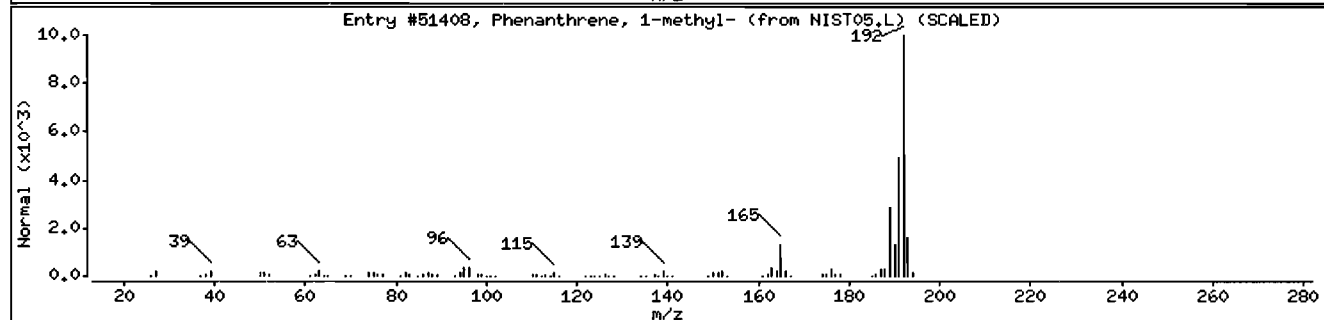
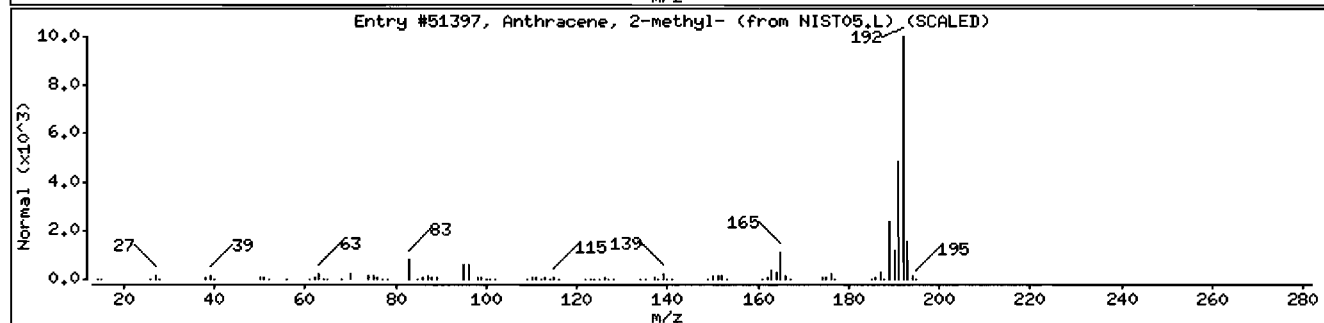
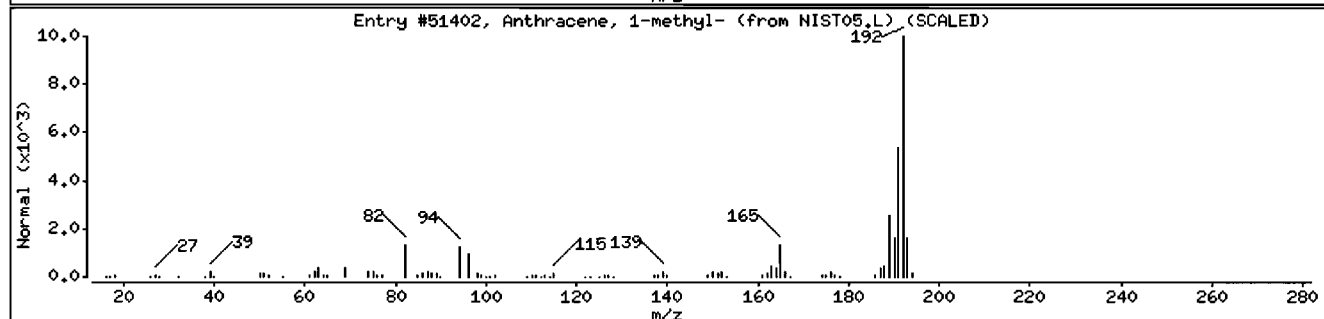
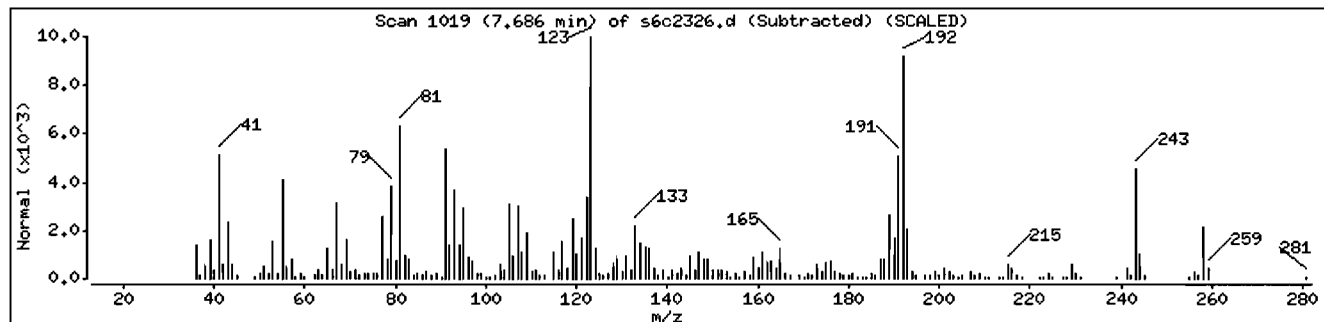
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Anthracene, 1-methyl-	610-48-0	NIST05.L	51402	55	C15H12	192
Anthracene, 2-methyl-	613-12-7	NIST05.L	51397	42	C15H12	192
Phenanthrene, 1-methyl-	832-69-9	NIST05.L	51408	42	C15H12	192



Date : 24-MAR-2010 00:17

Client ID: RE36-10-8279

Instrument: MSD6.i

Sample Info: I248519002I963133I4ISVM1I1LANL

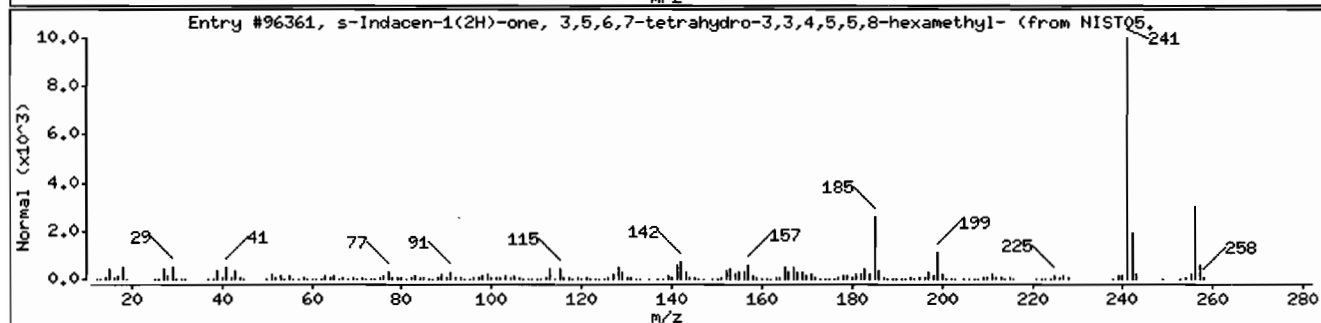
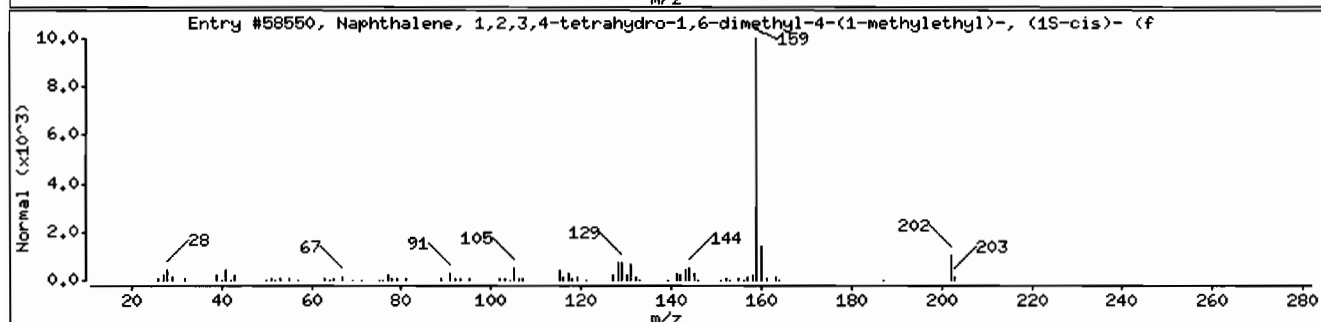
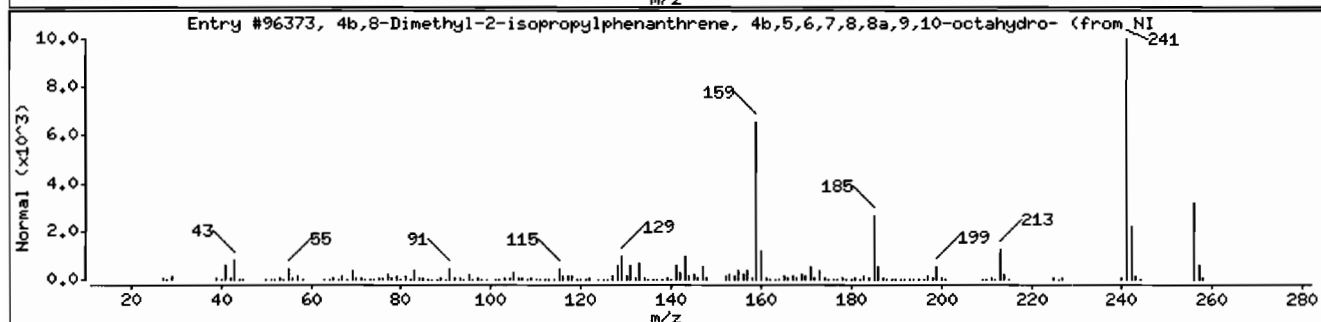
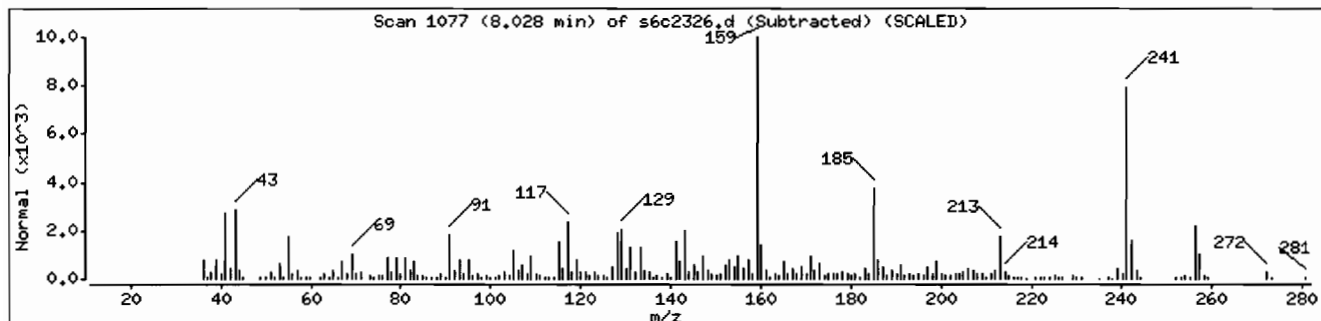
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
4b,8-Dimethyl-2-isopropylphenanthrene, 4	1000197-14-1	NIST05.L	96373	96	C19H28	256
Naphthalene, 1,2,3,4-tetrahydro-1,6-dime	483-77-2	NIST05.L	58550	42	C15H22	202
s-Indacen-1(2H)-one, 3,5,6,7-tetrahydro-	38754-94-8	NIST05.L	96361	42	C18H24O	256



Date : 24-MAR-2010 00:17

Client ID: RE36-10-8279

Instrument: MSD6.i

Sample Info: 12485190021963133141SVMI1ILANL

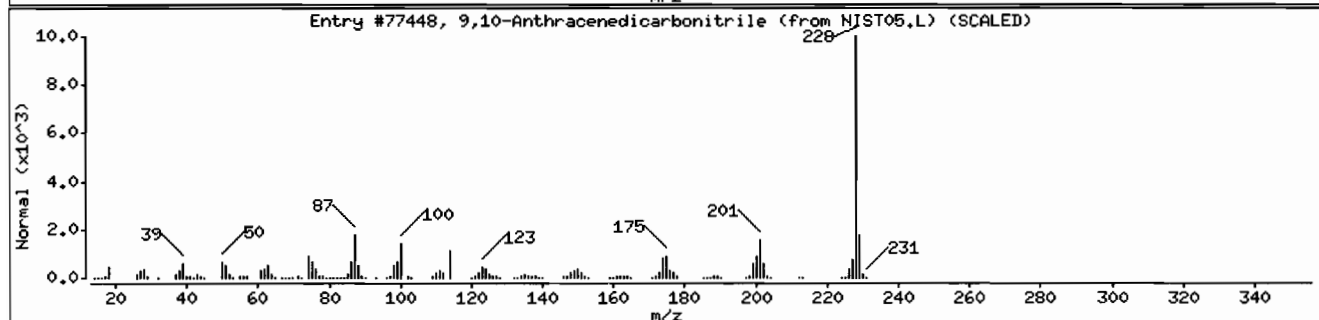
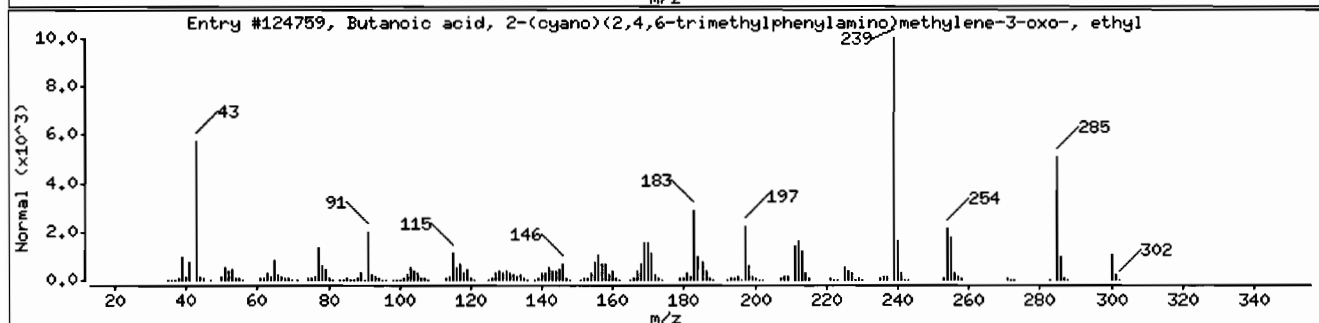
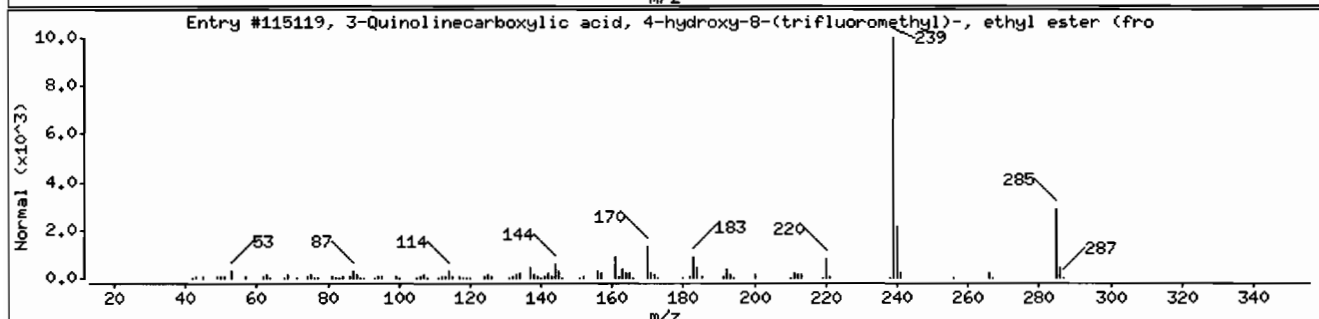
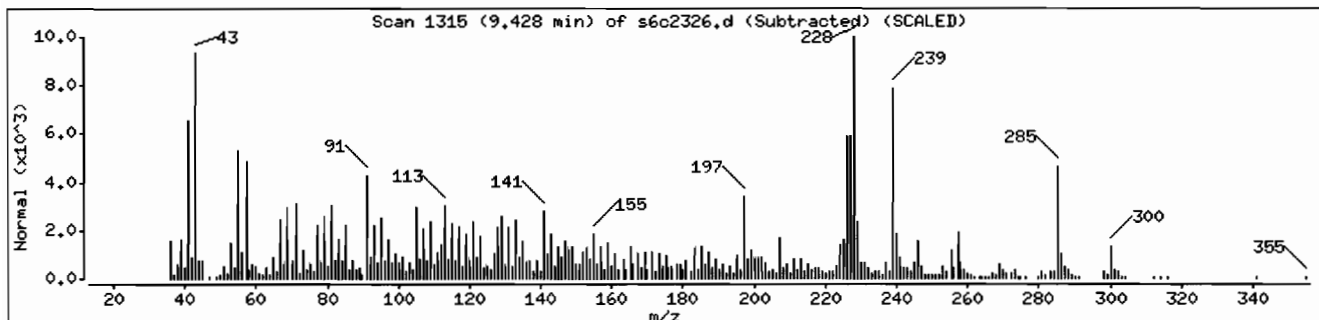
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
3-Quinolinedicarboxylic acid, 4-hydroxy-8-	23851-84-5	NIST05.L	115119	55	C13H10F3N03	285
Butanoic acid, 2-(cyano)(2,4,6-trimethyl	1000267-71-7	NIST05.L	124759	55	C17H20N2O3	300
9,10-Anthracenedicarbonitrile	1217-45-4	NIST05.L	77448	35	C16H8N2	228



Date : 24-MAR-2010 00:17

Client ID: RE36-10-8279

Instrument: MSD6.i

Sample Info: I2485190021963133141SVH111LANL

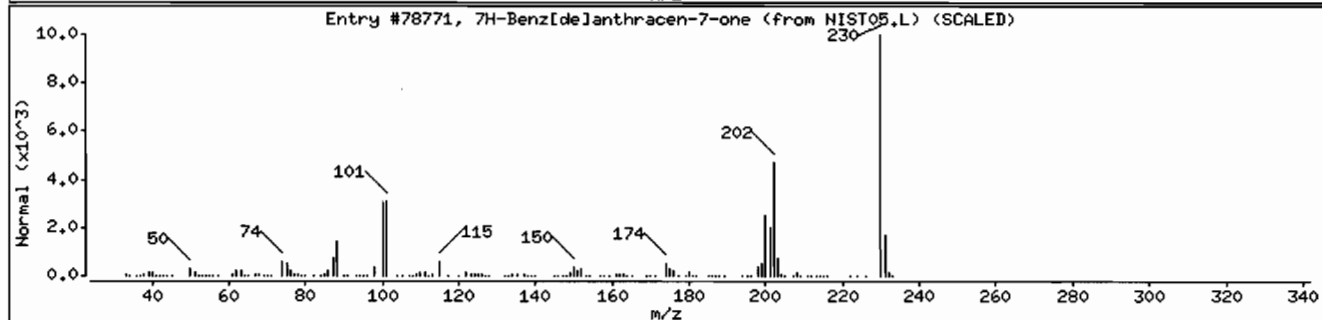
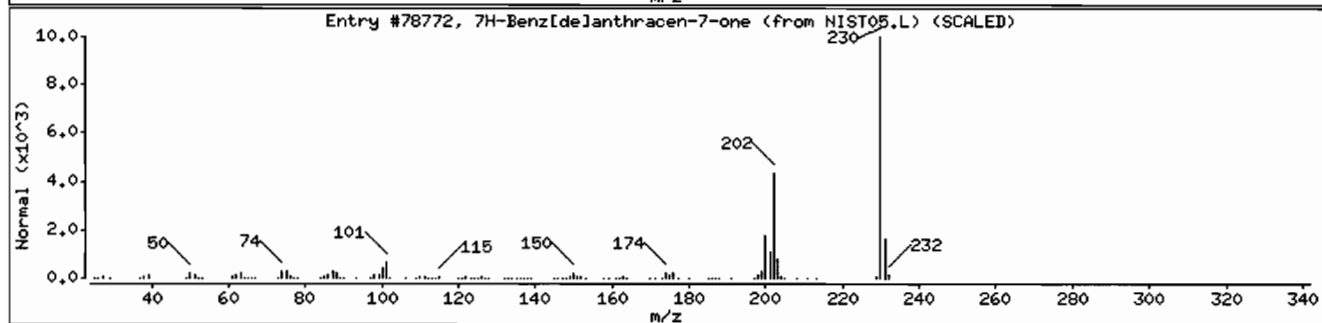
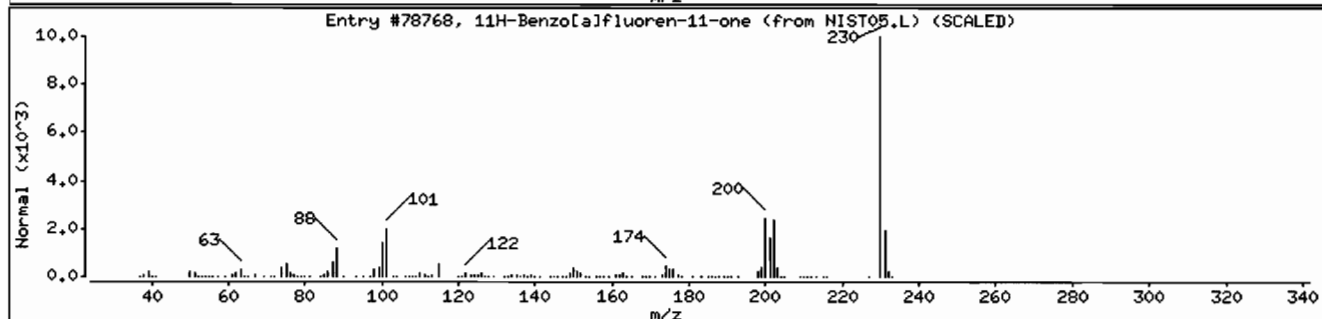
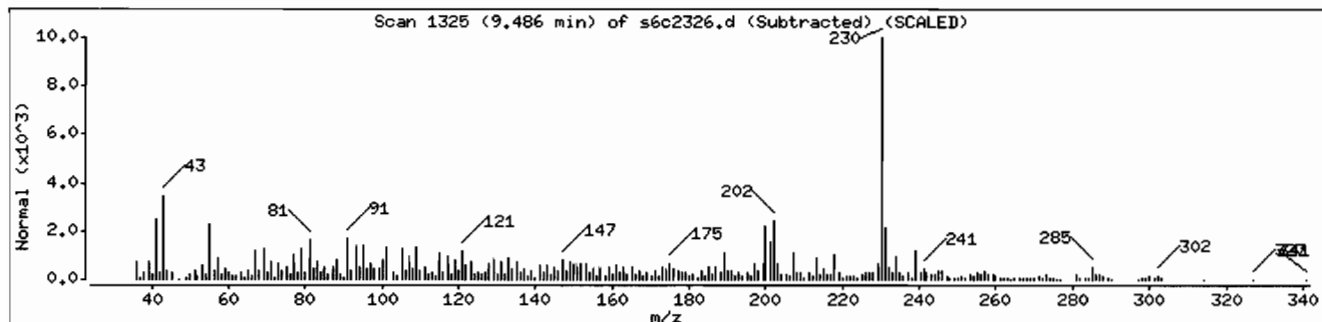
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
11H-Benzo[a]fluoren-11-one	479-79-8	NIST05.L	78768	95	C17H10O	230
7H-Benz[de]anthracen-7-one	82-05-3	NIST05.L	78772	83	C17H10O	230
7H-Benz[de]anthracen-7-one	82-05-3	NIST05.L	78771	64	C17H10O	230



Date : 24-MAR-2010 00:17

Client ID: RE36-10-8279

Instrument: MSD6.i

Sample Info: 12485190021963133141SVMI11ILANL

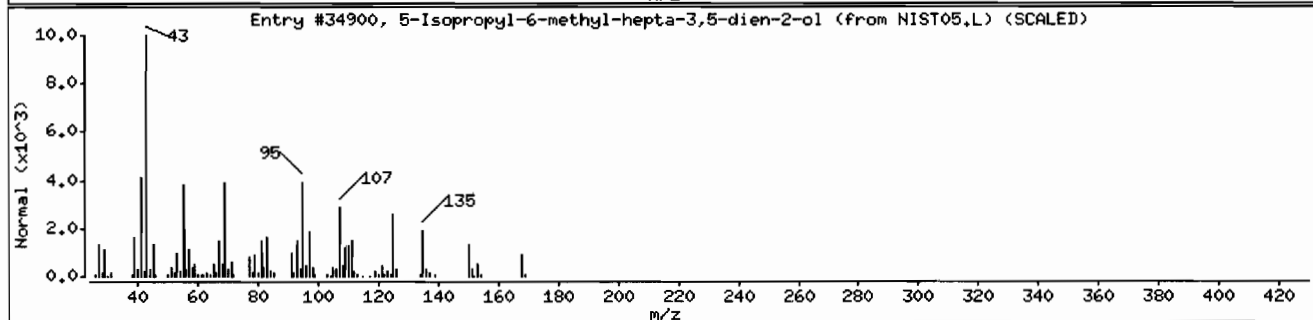
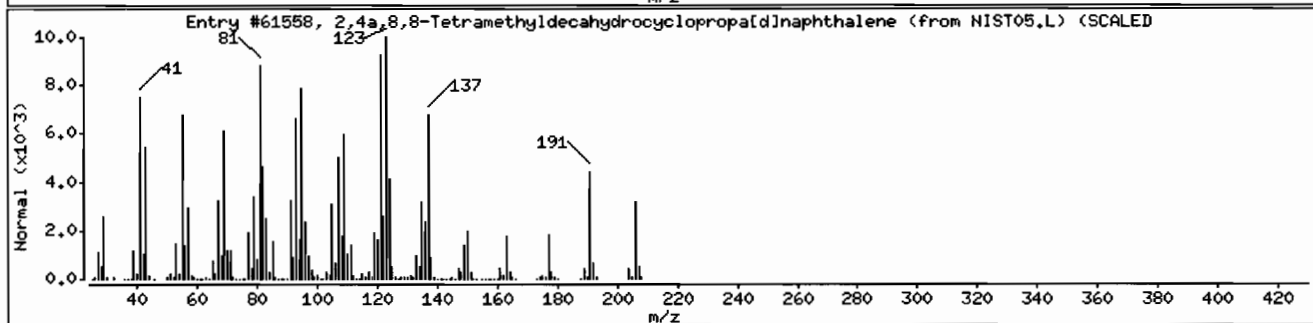
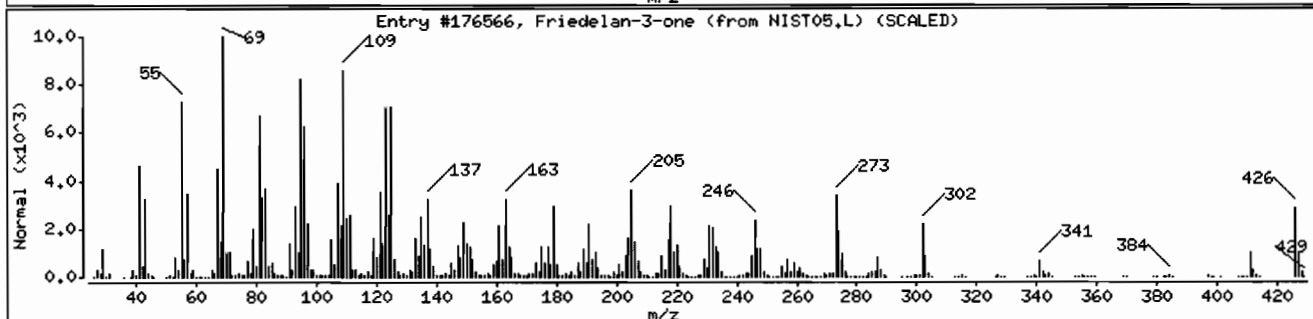
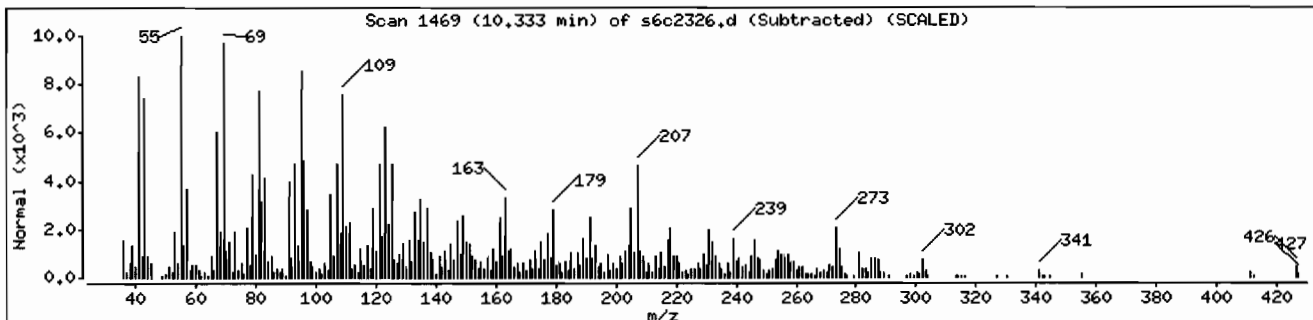
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Friedelan-3-one	559-74-0	NIST05.L	176566	99	C30H50O	426
2,4a,8,8-Tetramethyldecahydrocyclopropa	74022-04-1	NIST05.L	61558	74	C15H26	206
5-Isopropyl-6-methyl-hepta-3,5-dien-2-ol	1000187-77-8	NIST05.L	34900	64	C11H20O	168



Date : 24-MAR-2010 00:17

Client ID: RE36-10-8279

Instrument: HSD6.i

Sample Info: I248519002|963133|4|SVMI1|LANL

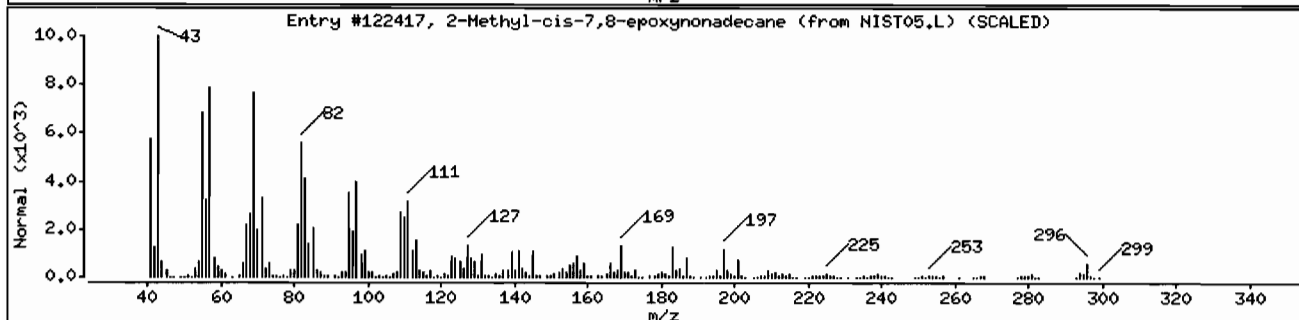
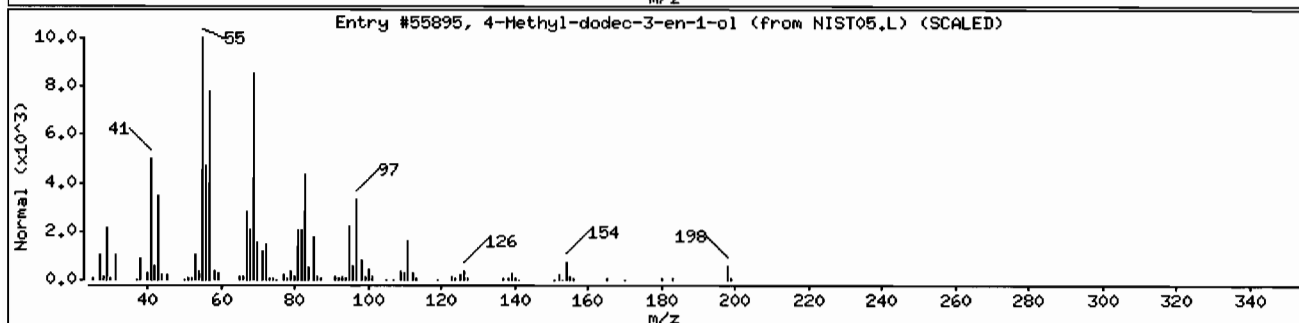
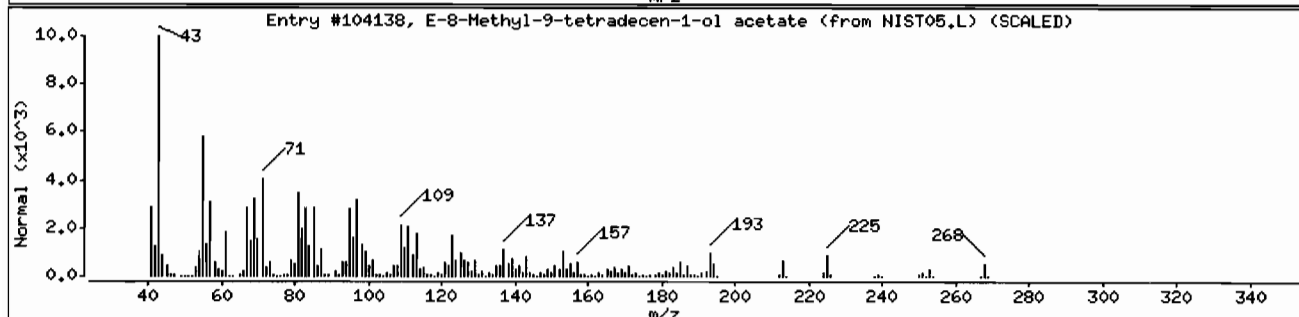
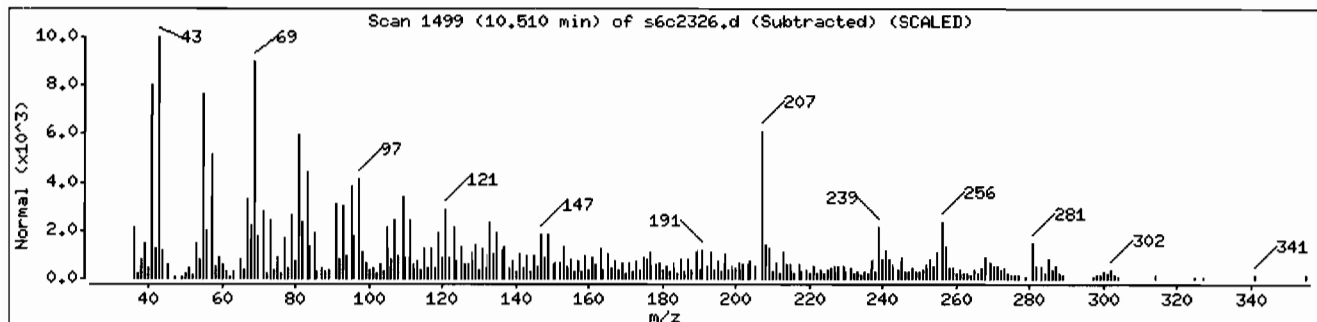
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
E-8-Methyl-9-tetradecen-1-ol acetate	1000130-81-4	NIST05.L	104138	53	C17H32O2	268
4-Methyl-dodec-3-en-1-ol	1000192-41-0	NIST05.L	55895	46	C13H26O	198
2-Methyl-cis-7,8-epoxynonadecane	1000130-93-3	NIST05.L	122417	43	C20H40O	296



Date : 24-MAR-2010 00:17

Client ID: RE36-10-8279

Instrument: MSD6.i

Sample Info: I248519002I963133I4ISVMI1ILANL

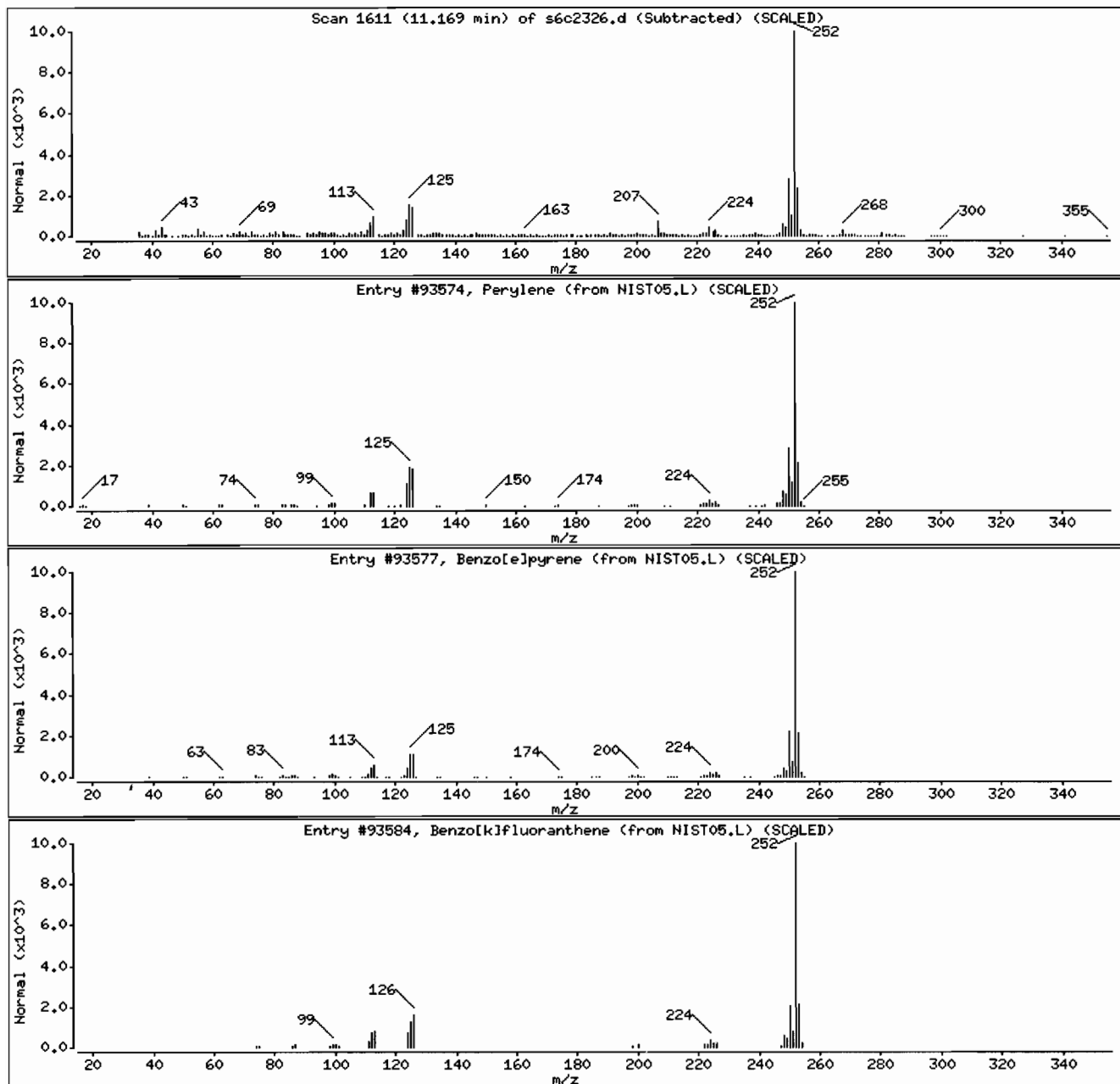
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Perylene	198-55-0	NIST05.L	93574	99	C20H12	252
Benzo[ <i>a</i> ]pyrene	192-97-2	NIST05.L	93577	99	C20H12	252
Benzo[ <i>k</i> ]fluoranthene	207-08-9	NIST05.L	93584	98	C20H12	252





Date : 24-MAR-2010 00:17

Client ID: RE36-10-8279

Instrument: MSD6.i

Sample Info: 12485190021963133141SVH111LANL

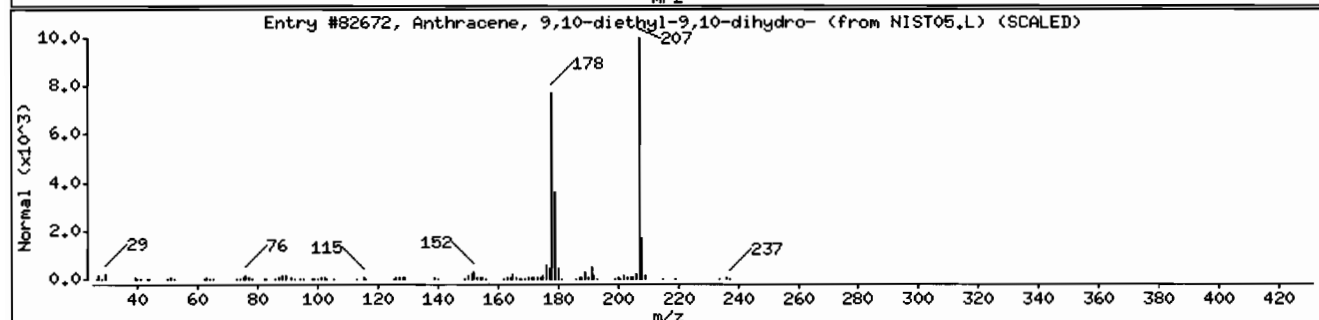
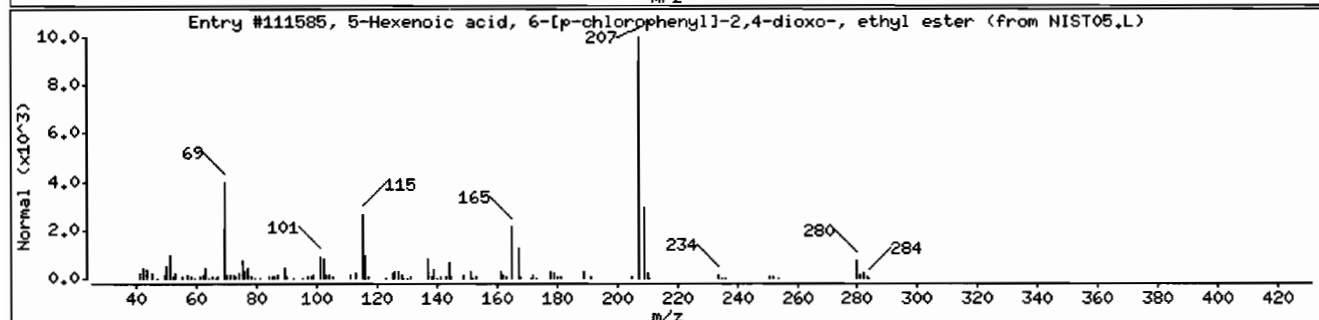
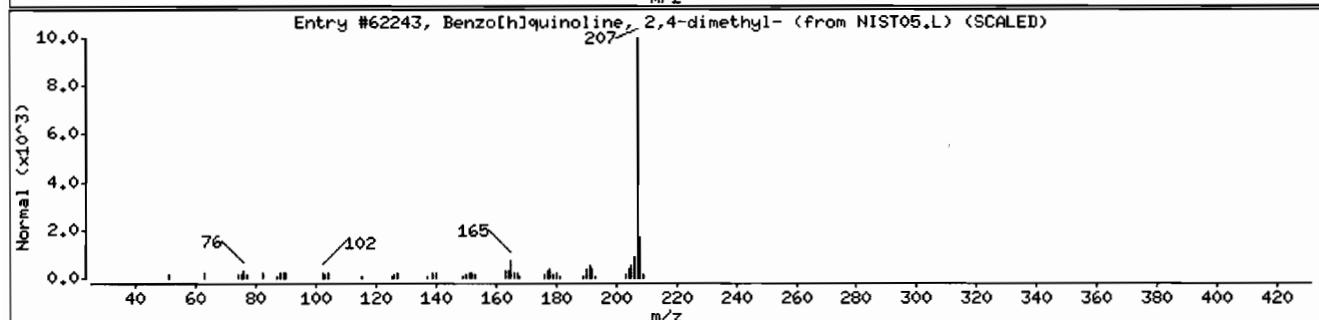
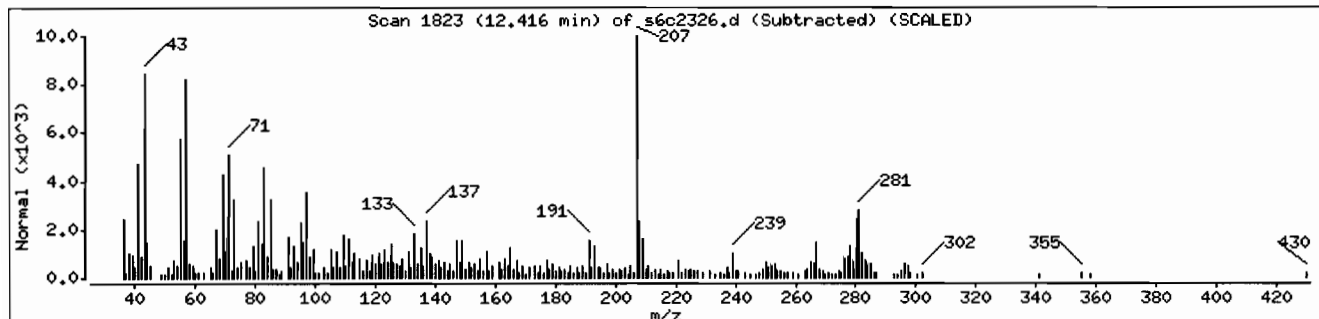
Volume Injected (uL): 0.5

Operator: nag1

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	38	C15H13N	207
5-Hexenoic acid, 6-[p-chlorophenyl]-2,4-	76781-59-4	NIST05.L	111585	38	C14H13ClO4	280
Anthracene, 9,10-diethyl-9,10-dihydro-	46868-29-5	NIST05.L	82672	30	C18H20	236



Date : 24-MAR-2010 00:17

Client ID: RE36-10-8279

Instrument: MSD6.i

Sample Info: I248519002|963133|4|SVMI1|LANL

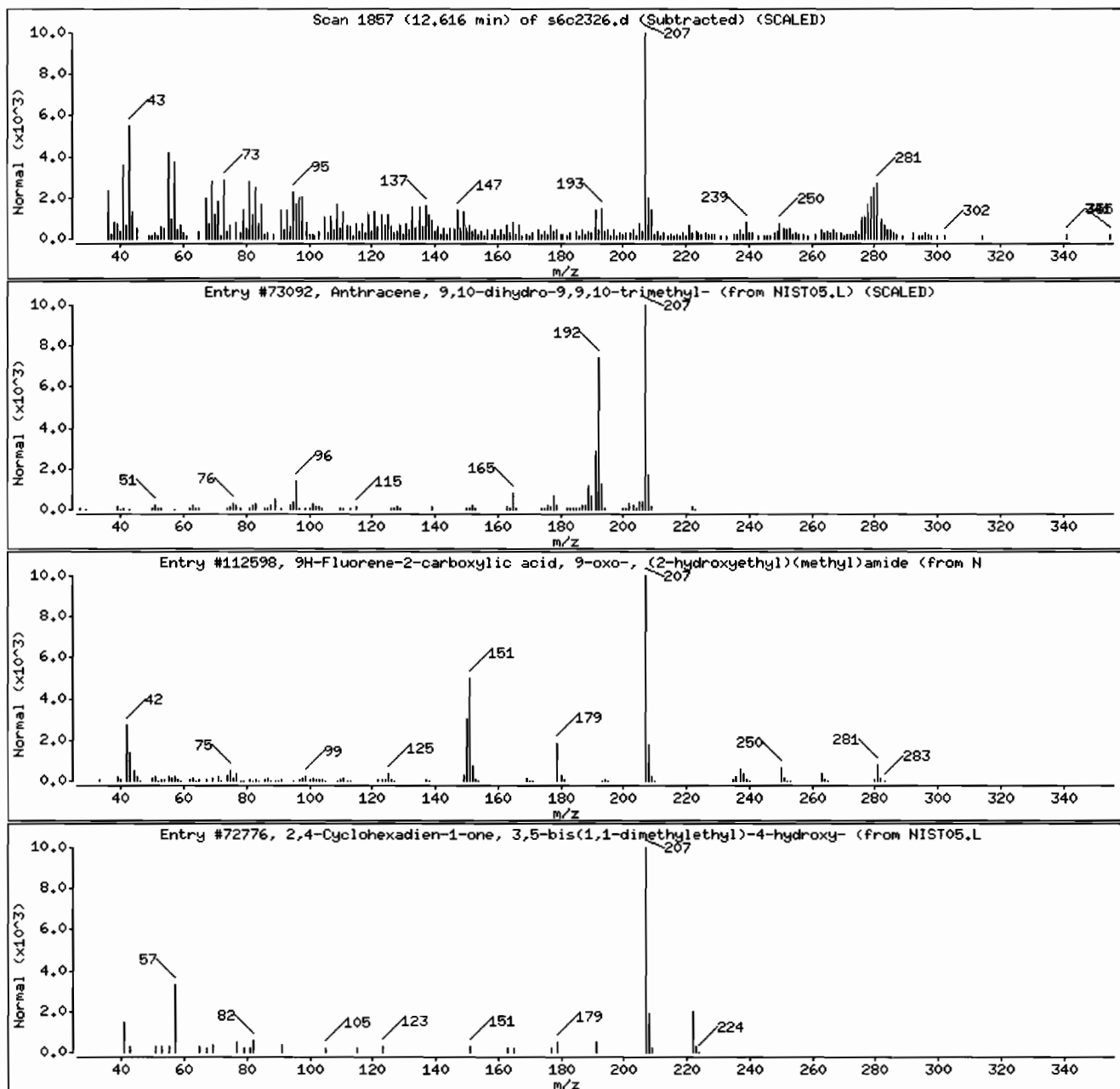
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Anthracene, 9,10-dihydro-9,9,10-trimethy	14923-29-6	NIST05.L	73092	46	C17H18	222
9H-Fluorene-2-carboxylic acid, 9-oxo-, (	1000316-02-1	NIST05.L	112598	43	C17H15NO3	281
2,4-Cyclohexadien-1-one, 3,5-bis(1,1-dim	54965-43-4	NIST05.L	72776	42	C14H22O2	222



Date : 24-MAR-2010 00:17

Client ID: RE36-10-8279

Instrument: HSD6.i

Sample Info: 12485190021963133141SVMI1|LANL

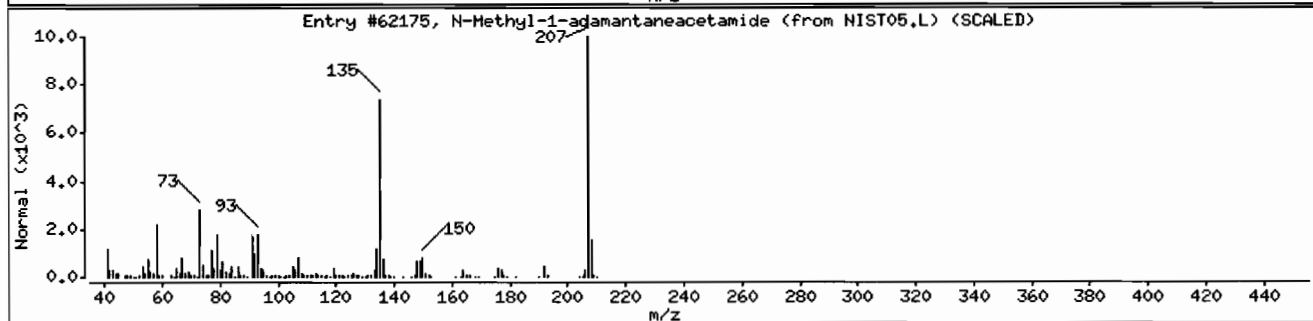
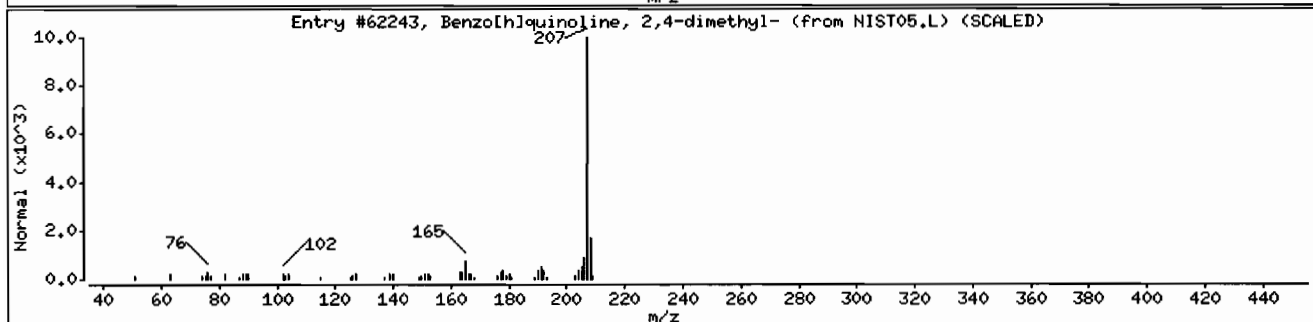
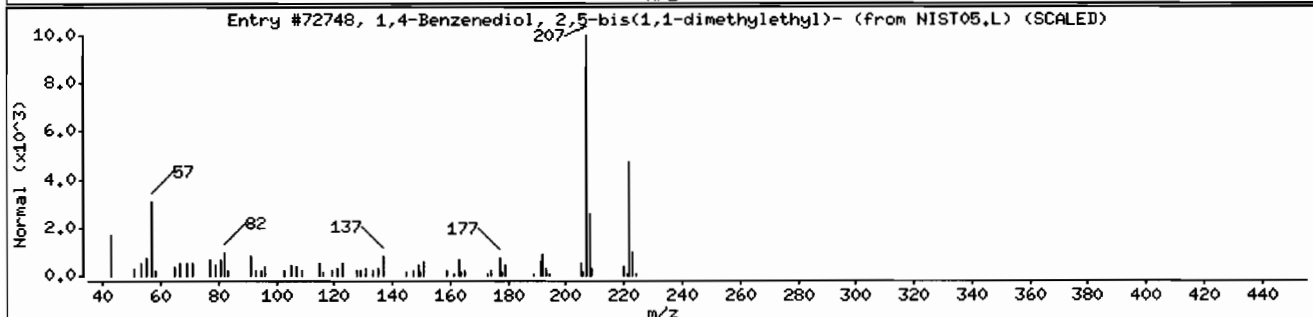
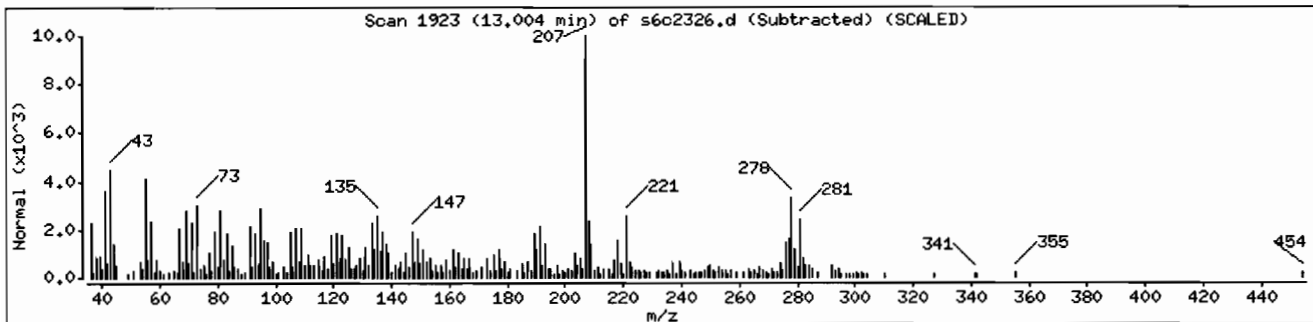
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,4-Benzenediol, 2,5-bis(1,1-dimethylethyl)	88-58-4	NIST05.L	72748	46	C14H22O2	222
Benzo[h]quinoline, 2,4-dimethyl-	605-67-4	NIST05.L	62243	46	C15H13N	207
N-Methyl-1-adamantaneacetamide	31897-93-5	NIST05.L	62175	42	C13H21NO	207



Date : 24-MAR-2010 00:17

Client ID: RE36-10-8279

Instrument: MSD6.i

Sample Info: 12485190021963133141SVH111LANL

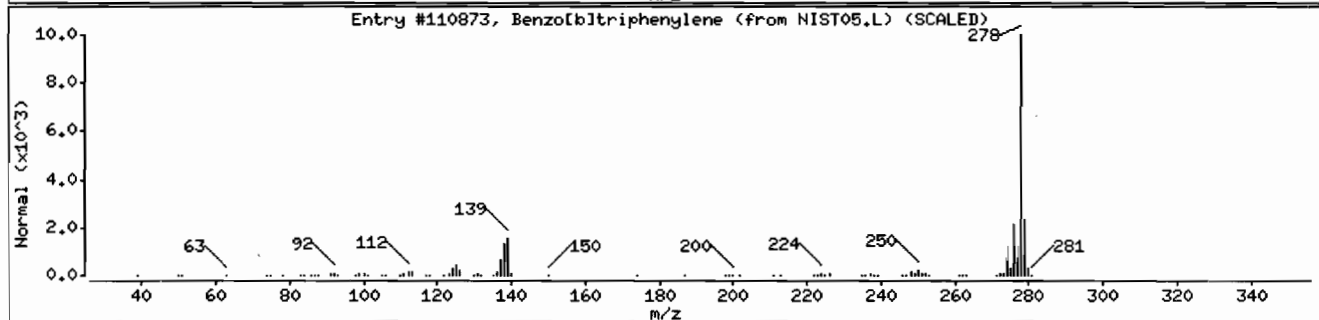
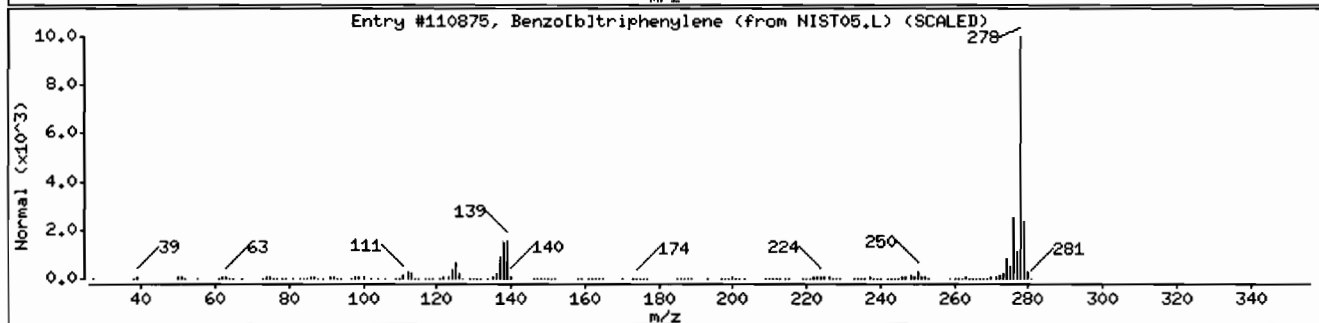
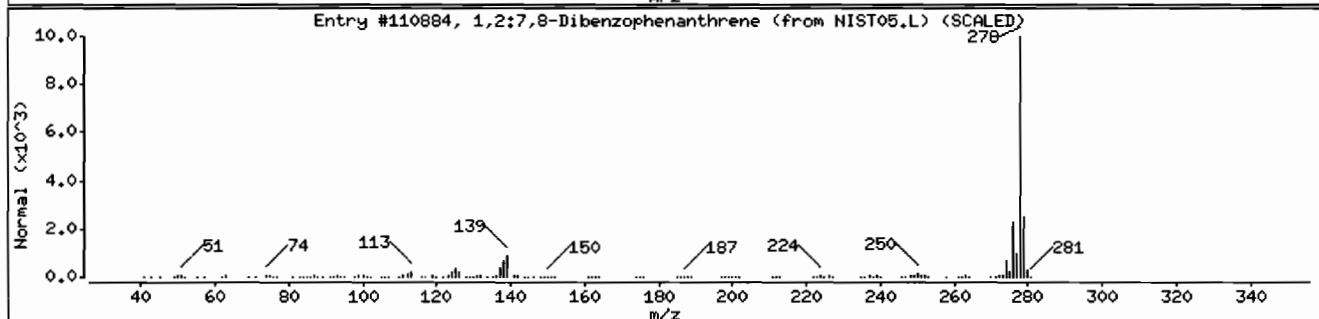
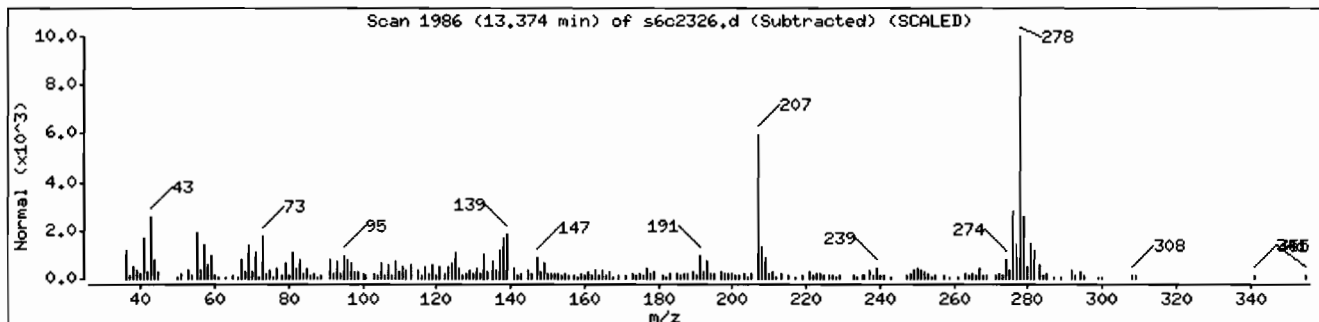
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,2:7,8-Dibenzophenanthrene	213-46-7	NIST05.L	110884	95	C22H14	278
Benzo[b]triphenylene	215-58-7	NIST05.L	110875	91	C22H14	278
Benzo[b]triphenylene	215-58-7	NIST05.L	110873	90	C22H14	278



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

**SDG Number:** 10-2199  
**Lab Sample ID:** 248519004

**Client ID:** RE36-10-8280  
**Batch ID:** 963133  
**Run Date:** 03/24/2010 01:03  
**Prep Date:** 03/10/2010 12:14  
**Data File:** s6c2328.d

**Date Collected:** 02/25/2010 12:00  
**Date Received:** 03/03/2010 08:50  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD6J  
**Analyst:** NAG1  
**Aliquot:** 30.03 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 9.5  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 4  
**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	1470	ug/kg	294	1470
108-95-2	Phenol	U	1470	ug/kg	294	1470
95-57-8	2-Chlorophenol	U	1470	ug/kg	294	1470
106-46-7	1,4-Dichlorobenzene	U	1470	ug/kg	294	1470
621-64-7	N-Nitrosodipropylamine	U	1470	ug/kg	294	1470
59-50-7	4-Chloro-3-methylphenol	U	1470	ug/kg	294	1470
83-32-9	Acenaphthene	U	147	ug/kg	48.5	147
121-14-2	2,4-Dinitrotoluene	U	1470	ug/kg	147	1470
100-02-7	4-Nitrophenol	U	1470	ug/kg	485	1470
87-86-5	Pentachlorophenol	U	1470	ug/kg	368	1470
129-00-0	Pyrene		1570	ug/kg	44.1	147
110-86-1	Pyridine	U	1470	ug/kg	294	1470
62-53-3	Aniline	U	1470	ug/kg	441	1470
111-44-4	bis(2-Chloroethyl) ether	U	1470	ug/kg	294	1470
541-73-1	1,3-Dichlorobenzene	U	1470	ug/kg	294	1470
100-51-6	Benzyl alcohol	U	1470	ug/kg	441	1470
95-50-1	1,2-Dichlorobenzene	U	1470	ug/kg	294	1470
108-60-1	bis(2-Chloroisopropyl) ether	U	1470	ug/kg	294	1470
95-48-7	o-Cresol	U	1470	ug/kg	294	1470
65794-96-9	m,p-Cresols	U	1470	ug/kg	441	1470
67-72-1	Hexachloroethane	U	1470	ug/kg	294	1470
98-95-3	Nitrobenzene	U	1470	ug/kg	294	1470
78-59-1	Isophorone	U	1470	ug/kg	294	1470
88-75-5	2-Nitrophenol	U	1470	ug/kg	294	1470
105-67-9	2,4-Dimethylphenol	U	1470	ug/kg	515	1470
111-91-1	bis(2-Chloroethoxy)methane	U	1470	ug/kg	294	1470
120-83-2	2,4-Dichlorophenol	U	1470	ug/kg	294	1470
65-85-0	Benzoic acid	U	2940	ug/kg	736	2940
91-20-3	Naphthalene	U	147	ug/kg	44.1	147
106-47-8	4-Chloroaniline	U	1470	ug/kg	294	1470
87-68-3	Hexachlorobutadiene	U	1470	ug/kg	294	1470
91-57-6	2-Methylnaphthalene	U	147	ug/kg	29.4	147
77-47-4	Hexachlorocyclopentadiene	U	1470	ug/kg	294	1470
88-06-2	2,4,6-Trichlorophenol	U	1470	ug/kg	294	1470
95-95-4	2,4,5-Trichlorophenol	U	1470	ug/kg	294	1470
91-58-7	2-Chloronaphthalene	U	147	ug/kg	48.5	147
88-74-4	2-Nitroaniline	U	1470	ug/kg	294	1470
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	1470	ug/kg	294	1470

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

SDG Number: 10-2199  
Lab Sample ID: 248519004

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Aliquot: 30.03 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 9.5  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 4  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE36-10-8280  
Batch ID: 963133  
Run Date: 03/24/2010 01:03  
Prep Date: 03/10/2010 12:14  
Data File: s6c2328.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	1470	ug/kg	294	1470
606-20-2	2,6-Dinitrotoluene	U	1470	ug/kg	147	1470
208-96-8	Acenaphthylene	U	147	ug/kg	44.1	147
51-28-5	2,4-Dinitrophenol	U	2940	ug/kg	559	2940
132-64-9	Dibenzofuran	U	1470	ug/kg	294	1470
84-66-2	Diethylphthalate	U	1470	ug/kg	294	1470
86-73-7	Fluorene	U	147	ug/kg	44.1	147
7005-72-3	4-Chlorophenylphenylether	U	1470	ug/kg	294	1470
534-52-1	2-Methyl-4,6-dinitrophenol	U	1470	ug/kg	294	1470
100-01-6	4-Nitroaniline	U	1470	ug/kg	441	1470
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	1470	ug/kg	294	1470
122-66-7	Azobenzene	U	1470	ug/kg	294	1470
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	1470	ug/kg	294	1470
118-74-1	Hexachlorobenzene	U	1470	ug/kg	294	1470
85-01-8	Phenanthrene		608	ug/kg	44.1	147
120-12-7	Anthracene	J	133	ug/kg	29.4	147
84-74-2	Di-n-butylphthalate	U	1470	ug/kg	294	1470
206-44-0	Fluoranthene		1630	ug/kg	44.1	147
85-68-7	Butylbenzylphthalate	U	1470	ug/kg	294	1470
56-55-3	Benzo(a)anthracene		971	ug/kg	44.1	147
91-94-1	3,3'-Dichlorobenzidine	U	1470	ug/kg	441	1470
218-01-9	Chrysene		1210	ug/kg	44.1	147
117-81-7	bis(2-Ethylhexyl)phthalate	U	1470	ug/kg	294	1470
117-84-0	Di-n-octylphthalate	U	1470	ug/kg	294	1470
205-99-2	Benzo(b)fluoranthene		2310	ug/kg	44.1	147
207-08-9	Benzo(k)fluoranthene	U	147	ug/kg	44.1	147
50-32-8	Benzo(a)pyrene		1150	ug/kg	44.1	147
193-39-5	Indeno(1,2,3-cd)pyrene		641	ug/kg	44.1	147
53-70-3	Dibenzo(a,h)anthracene	U	147	ug/kg	44.1	147
191-24-2	Benzo(ghi)perylene		682	ug/kg	44.1	147
120-82-1	1,2,4-Trichlorobenzene	U	1470	ug/kg	294	1470

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	5.8	841	ug/kg	99	NJ
	Unknown	9.55	649	ug/kg		J

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

SDG Number: 10-2199  
Lab Sample ID: 248519004  
  
Client ID: RE36-10-8280  
Batch ID: 963133  
Run Date: 03/24/2010 01:03  
Prep Date: 03/10/2010 12:14  
Data File: s6c2328.d

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6J  
Analyst: NAG1  
Aliquot: 30.03 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 9.5  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 4  
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	9.73	1090	ug/kg		J
3351-32-4	Chrysene, 2-methyl-	10.03	679	ug/kg	96	NJ
3386-33-2	Octadecane, 1-chloro-	10.06	796	ug/kg	94	NJ
	Unknown	10.32	1210	ug/kg		J
	Unknown	10.47	903	ug/kg		J
604-53-5	1,1'-Binaphthalene	10.6	894	ug/kg	83	NJ
	Unknown	10.68	927	ug/kg		J
198-55-0	Perylene	11.16	1150	ug/kg	99	NJ
112-95-8	Eicosane	11.8	1120	ug/kg	98	NJ

GEL Laboratories LLC

Data file : /chem/MSD6.i/s032310.b/s6c2328.d  
Lab Smp Id: 248519004 Client Smp ID: RE36-10-8280  
Inj Date : 24-MAR-2010 01:03  
Operator : nagl Inst ID: MSD6.i  
Smp Info : |248519004|963133|4|SVM|1|LANL  
Misc Info : |MSD8270\_S|WBN100319-01  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD6.i/s032310.b/MSD6-M8270C-AQA-031610.m  
Meth Date : 24-Mar-2010 09:23 jen00986 Quant Type: ISTD  
Cal Date : 17-MAR-2010 04:51 Cal File: s6cl646.d  
Als bottle: 23  
Dil Factor: 4.00000  
Integrator: HP RTE Compound Sublist: 10-2199.sub  
Target Version: 3.50  
Processing Host: hpc1p1

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

Name	Value	Description
DF	4.00000	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	9.45610	% 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	3.952	3.946	(1.000)	338817	40.0000	
* 29 Naphthalene-d8		136	4.816	4.804	(1.000)	1220745	40.0000	
* 46 Acenaphthene-d10		164	6.069	6.057	(1.000)	752525	40.0000	
* 67 Phenanthrene-d10		188	7.234	7.228	(1.000)	1308707	40.0000	
* 91 Chrysene-d12		240	9.639	9.628	(1.000)	1100381	40.0000	
* 98 Perylene-d12		264	11.322	11.298	(1.000)	787406	40.0000	
\$ 3 2-Fluorophenol		112	3.146	3.128	(0.796)	172820	18.3485	2700
\$ 5 Phenol-d5		99	3.663	3.657	(0.927)	219848	18.3540	2700
\$ 20 Nitrobenzene-d5		82	4.310	4.304	(0.895)	99108	8.49288	1250
\$ 39 2-Fluorobiphenyl		172	5.551	5.546	(0.915)	206272	10.6242	1560
\$ 60 2,4,6-Tribromophenol		329	6.663	6.651	(1.098)	45414	21.5060	3160
\$ 81 p-Terphenyl-d14		244	8.610	8.604	(0.893)	208741	10.8860	1600



Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
=====		=====	==	=====	=====	=====	=====	=====
79 Pyrene		202	8.510	8.498	(0.883)	357236	10.6496	1570
68 Phenanthrene		178	7.257	7.245	(1.003)	131823	4.13387	608
69 Anthracene		178	7.298	7.292	(1.009)	29149	0.90736	133(a)
76 Fluoranthene		202	8.292	8.287	(1.146)	357987	11.0699	1630
89 Benzo(a)anthracene		228	9.628	9.616	(0.999)	189685	6.60174	971
92 Chrysene		228	9.663	9.657	(1.002)	226086	8.23794	1210
95 Benzo(b)fluoranthene		252	10.804	10.786	(0.954)	335562	15.6757	2310
97 Benzo(a)pyrene		252	11.239	11.222	(0.993)	141853	7.82440	1150
99 Indeno(1,2,3-cd)pyrene		276	13.080	13.063	(1.155)	72520	4.35922	641
101 Benzo(ghi)perylene		276	13.622	13.604	(1.203)	65877	4.63764	682

# QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).

## ION RATIO REPORT

## SV REPORT

Data file: s6c2328.d

Report Date: 03/24/2010 10:05

Lab. ID: 248519004

SampleType: SAMPLE

Injection Date: 24-MAR-2010 01:03

Operator: nagl

Instrument: MSD6.i

Sample Info: |248519004|963133|4|SVM|1|LANL

Miscellaneous Info: |MSD8270\_S|WBN100319-01

Comment:

Method used: /chem/MSD6.i/s032310.b/MSD6-M8270C-AQA-031610.m

Dilution Factor= 4.0

Integrator: HP RTE

Compound Sublist: 10-2199

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
22 Isophorone			CAS#: 78-59-1			
82	99108	4.31	4.47	80-120	100	(T)
138	322	4.76	4.47	0- 48	0	(T)
-----						
40 2-Chloronaphthalene			CAS#: 91-58-7			
162	699496	6.07	5.66	80-120	100	(T)
164	752525	6.07	5.66	3- 63	108	(QT)
127	383	6.08	5.66	7- 67	0	(QT)
-----						
43 Dimethylphthalate			CAS#: 131-11-3			
163	135038	6.07	5.82	80-120	100	(T)
164	752525	6.07	5.82	0- 41	557	(QT)
-----						
45 Acenaphthylene			CAS#: 208-96-8			
152	11280	5.55	5.96	80-120	100	(T)
151	10667	5.55	5.96	0- 50	95	(QT)
153	3688	5.55	5.96	0- 44	33	(T)
-----						
48 2,4-Dinitrophenol			CAS#: 51-28-5			
184	331	6.41	6.07	80-120	100	(T)
154	263	6.41	6.07	843-903	80	(QT)
-----						
50 2,4-Dinitrotoluene			CAS#: 121-14-2			
165	99965	6.07	6.17	80-120	100	(T)
89	1246	6.06	6.17	38- 98	1	(QT)
63	1159	6.06	6.17	18- 78	1	(QT)
-----						

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	184	6.66	6.48	80-120	100	(T)
105	708	6.66	6.48	10- 70	384	(QT)
51	417	6.66	6.48	27- 87	226	(QT)
-----						
68 Phenanthrene				CAS#: 85-01-8		
178	131823	7.26	7.25	80-120	100	( )
179	21105	7.26	7.25	0- 46	16	( )
176	24891	7.26	7.25	0- 49	19	( )
-----						
69 Anthracene				CAS#: 120-12-7		
178	29149	7.30	7.29	80-120	100	( )
179	6201	7.29	7.29	0- 46	21	( )
176	5157	7.30	7.29	0- 49	18	( )
-----						
76 Fluoranthene				CAS#: 206-44-0		
202	357987	8.29	8.29	80-120	100	( )
203	63338	8.29	8.29	0- 48	18	( )
101	40176	8.29	8.29	0- 42	11	( )
-----						
79 Pyrene				CAS#: 129-00-0		
202	357236	8.51	8.50	80-120	100	( )
200	74276	8.51	8.50	0- 51	21	( )
101	49205	8.51	8.50	0- 44	14	( )
-----						
89 Benzo(a)anthracene				CAS#: 56-55-3		
228	189685	9.63	9.62	80-120	100	( )
226	50258	9.63	9.62	0- 55	26	( )
229	53483	9.63	9.62	0- 50	28	( )
-----						
92 Chrysene				CAS#: 218-01-9		
228	226086	9.66	9.66	80-120	100	( )
229	52735	9.66	9.66	0- 50	23	( )
226	63905	9.66	9.66	0- 60	28	( )
-----						
95 Benzo(b)fluoranthene				CAS#: 205-99-2		
252	335562	10.80	10.79	80-120	100	( )
253	74298	10.80	10.79	0- 52	22	( )
125	40089	10.80	10.79	0- 40	12	( )
-----						
96 Benzo(k)fluoranthene				CAS#: 207-08-9		
252	335562	10.80	10.82	80-120	100	( )
253	76631	10.80	10.82	0- 52	23	( )
125	40089	10.80	10.82	0- 42	12	( )
-----						
97 Benzo(a)pyrene				CAS#: 50-32-8		
252	141853	11.24	11.22	80-120	100	( )
253	32829	11.24	11.22	0- 52	23	( )
125	17141	11.24	11.22	0- 43	12	( )
-----						

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
99 Indeno(1,2,3-cd)pyrene				CAS#: 193-39-5		
276	72520	13.08	13.06	80-120	100	( )
138	17538	13.08	13.06	0- 59	24	( )

-----						
100 Dibenzo(a,h)anthracene				CAS#: 53-70-3		
278	19620	13.09	13.08	80-120	100	( )
139	3537	13.09	13.08	0- 50	18	( )

-----						
101 Benzo(ghi)perylene				CAS#: 191-24-2		
276	65877	13.62	13.60	80-120	100	( )
138	15980	13.62	13.60	0- 59	24	( )

-----

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD6.i/s032310.b/s6c2328.d  
 Lab Smp Id: 248519004 Client Smp ID: RE36-10-8280  
 Inj Date : 24-MAR-2010 01:03  
 Operator : nag1 Inst ID: MSD6.i  
 Smp Info : |248519004|963133|4|SVM|1|LANL  
 Misc Info : |MSD8270\_S|WBN100319-01  
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
 Method : /chem/MSD6.i/s032310.b/MSD6-M8270C-AQA-031610.m  
 Meth Date : 24-Mar-2010 09:23 jen00986 Quant Type: ISTD  
 Cal Date : 17-MAR-2010 04:51 Cal File: s6c1646.d  
 Als bottle: 23  
 Dil Factor: 4.00000  
 Integrator: HP RTE Compound Sublist: 10-2199.sub  
 Target Version: 3.50  
 Processing Host: hpc1p1

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

Name	Value	Description
DF	4.00000	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	9.45610	% moisture

Cpnd Variable

Local Compound Variable

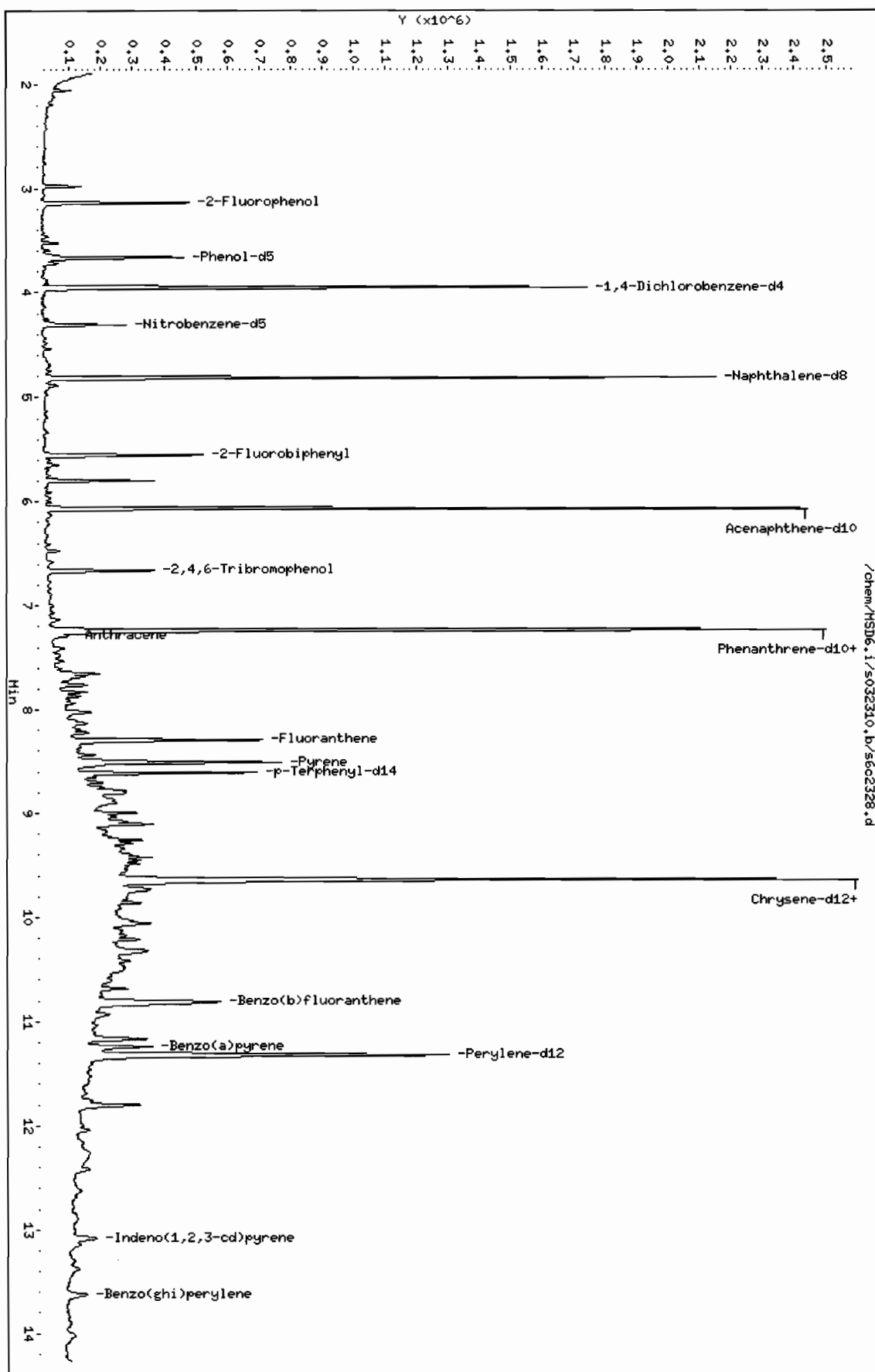
ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 46 Acenaphthene-d10	6.069	3071119	40.000
* 91 Chrysene-d12	9.639	4820467	40.000
* 98 Perylene-d12	11.322	2234595	40.000

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

RT	CONCENTRATIONS			QUAL	QUANT		
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	CPND #
1,4-Methanoazulene, decahydro-4,8,8-trim					CAS #:		
5.798	439015	5.71797977	841	99	NIST05.L	60024	46
Unknown					CAS #:		
9.545	531508	4.41042459	649	0		0	91
Unknown					CAS #:		
9.728	888970	7.37662776	1080	0		0	91
Chrysene, 2-methyl-					CAS #:		
10.034	555884	4.61270137	678	96	NIST05.L	86904	91
Octadecane, 1-chloro-					CAS #:		
10.057	652022	5.41045044	796	94	NIST05.L	117264	91
Unknown					CAS #:		
10.322	990572	8.21971857	1210	0		0	91
Unknown					CAS #:		
10.475	739859	6.13931175	903	0		0	91
1,1'-Binaphthalene					CAS #:		
10.604	339392	6.07523672	894	83	NIST05.L	94958	98
Unknown					CAS #:		
10.681	352206	6.30460668	927	0		0	98
Perylene					CAS #:		
11.163	435721	7.79955643	1150	99	NIST05.L	93574	98
Eicosane					CAS #:		
11.804	425274	7.61254023	1120	98	NIST05.L	113492	98

Data File: /chem/MSD6.i/s032310.b/s6c2328.d  
 Date: 24-MAR-2010 01:03  
 Client ID: RE36-10-8280  
 Sample Info: 12485190041963133141SVH11LNL  
 Volume Injected (uL): 0.5  
 Column phase: J&W DB-5MS

Instrument: MSD6.i  
 Operator: nag1  
 Column diameter: 0.20



Date : 24-MAR-2010 01:03

Client ID: RE36-10-8280

Instrument: MSD6.i

Sample Info: 12485190041963133141SVH111LANL

Volume Injected (uL): 0.5

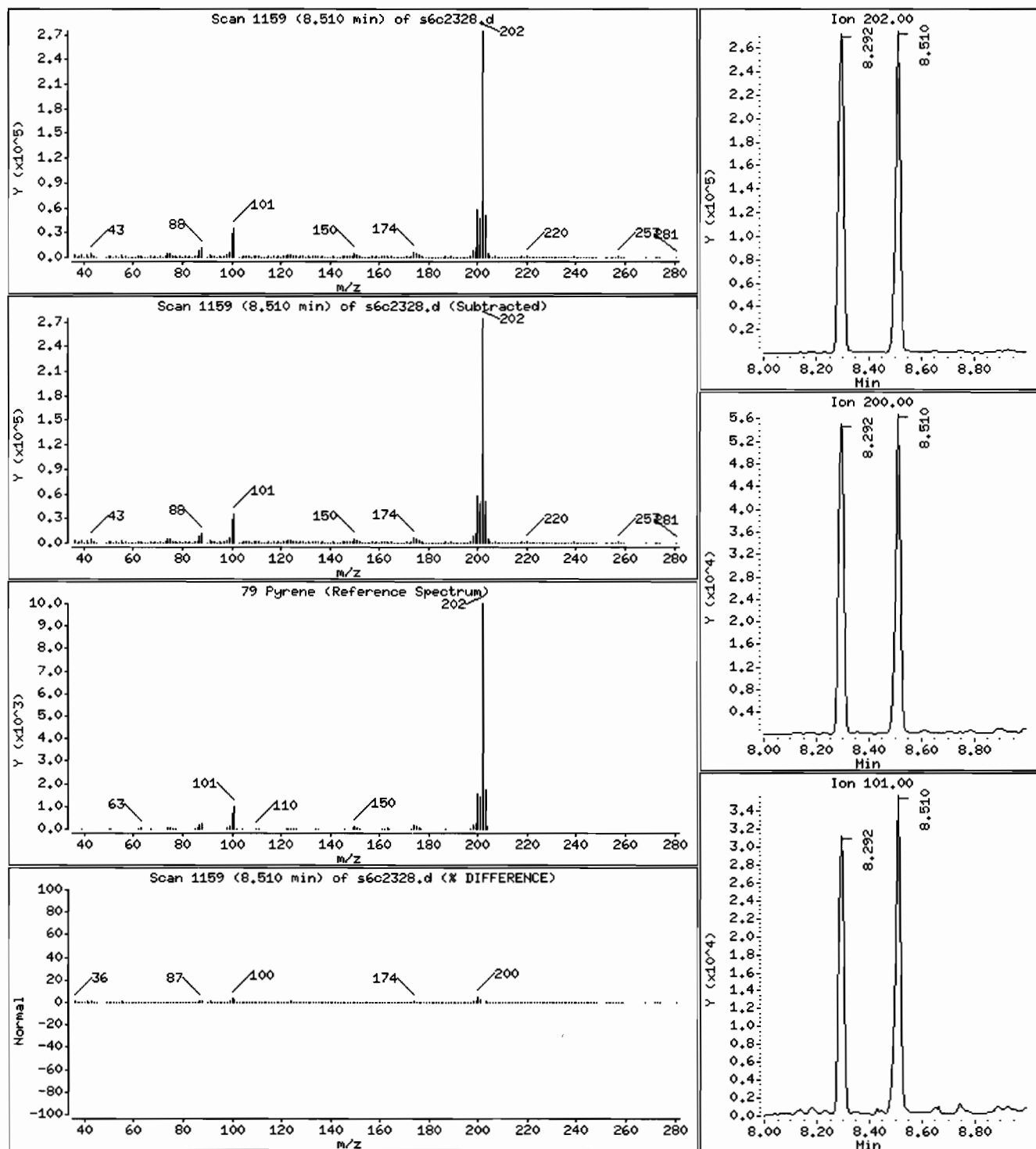
Operator: nag1

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

Column diameter: 0.20

79 Pyrene

Concentration: 1570 ug/Kg





Date : 24-MAR-2010 01:03

Client ID: RE36-10-8280

Instrument: MSD6.i

Sample Info: 12485190041963133141SVMI11LANL

Volume Injected (uL): 0.5

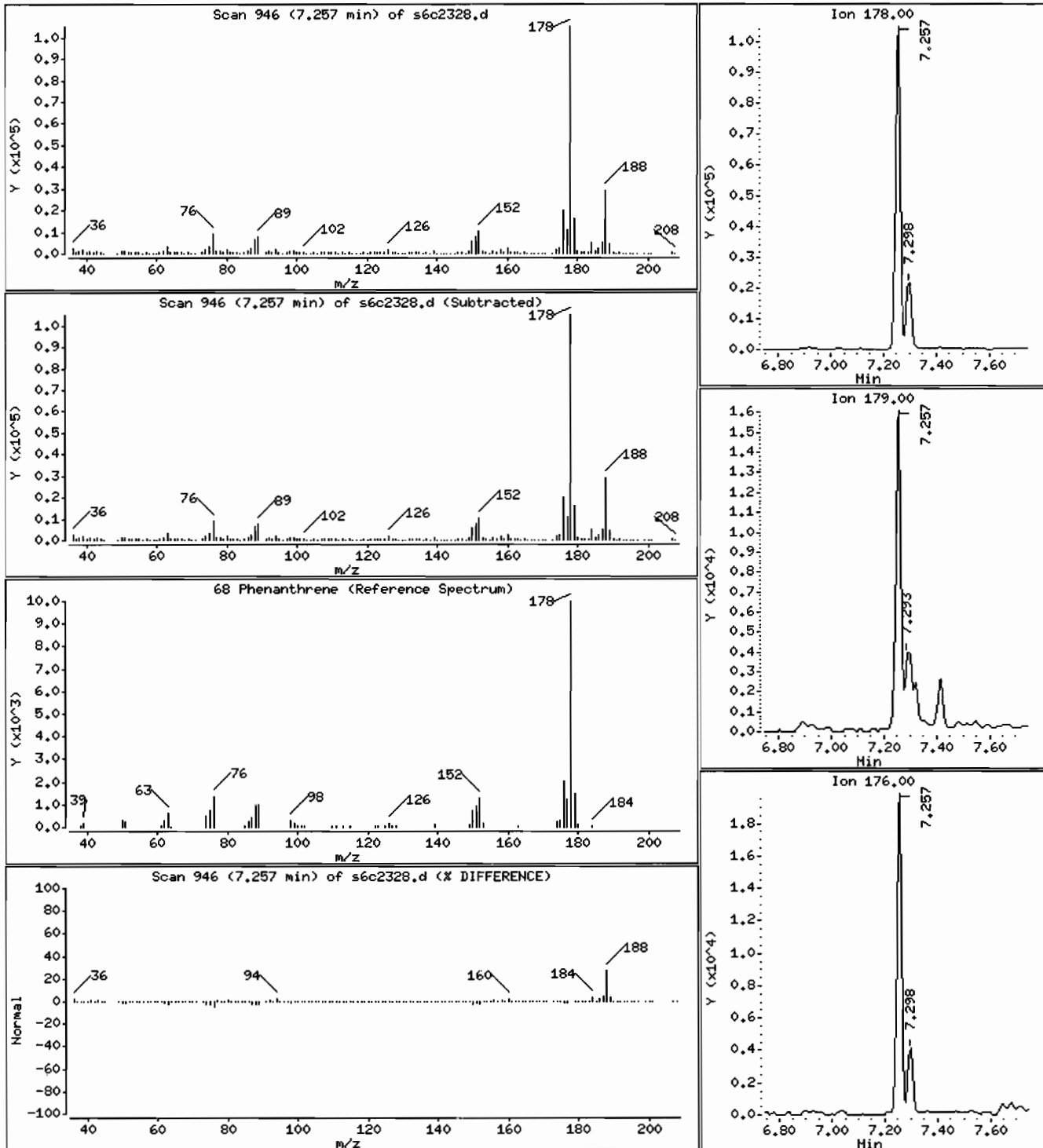
Operator: nag1

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

Column diameter: 0.20

68 Phenanthrene

Concentration: 608 ug/Kg



Date : 24-MAR-2010 01:03

Client ID: RE36-10-8280

Instrument: MSD6.i

Sample Info: 12485190041963133141SVH111LANL

Volume Injected (uL): 0.5

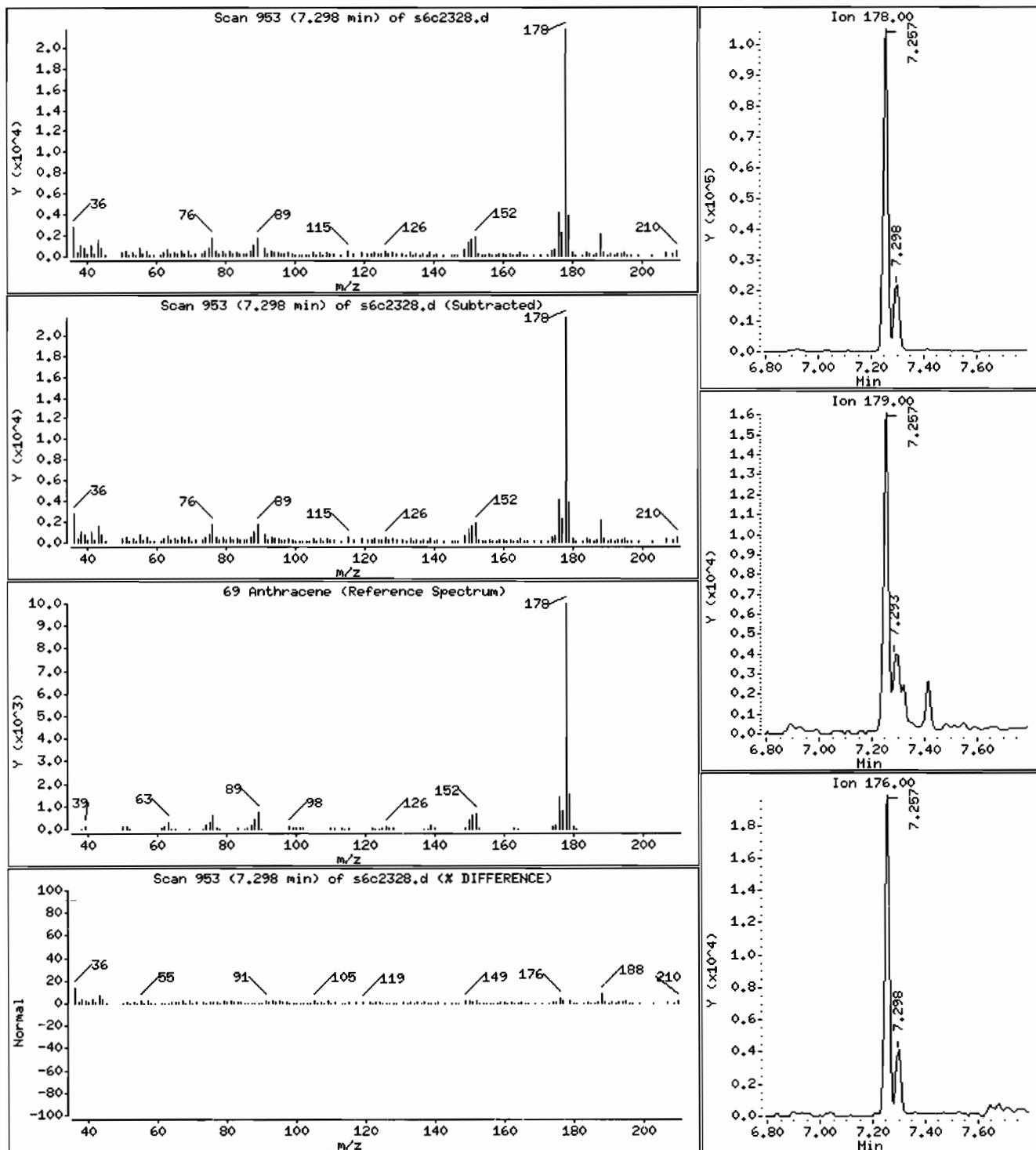
Operator: nag1

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

Column diameter: 0.20

69 Anthracene

Concentration: 133 ug/Kg



Date : 24-MAR-2010 01:03

Client ID: RE36-10-8280

Instrument: MSD6.i

Sample Info: 12485190041963133141SVMI11LANL

Volume Injected (uL): 0.5

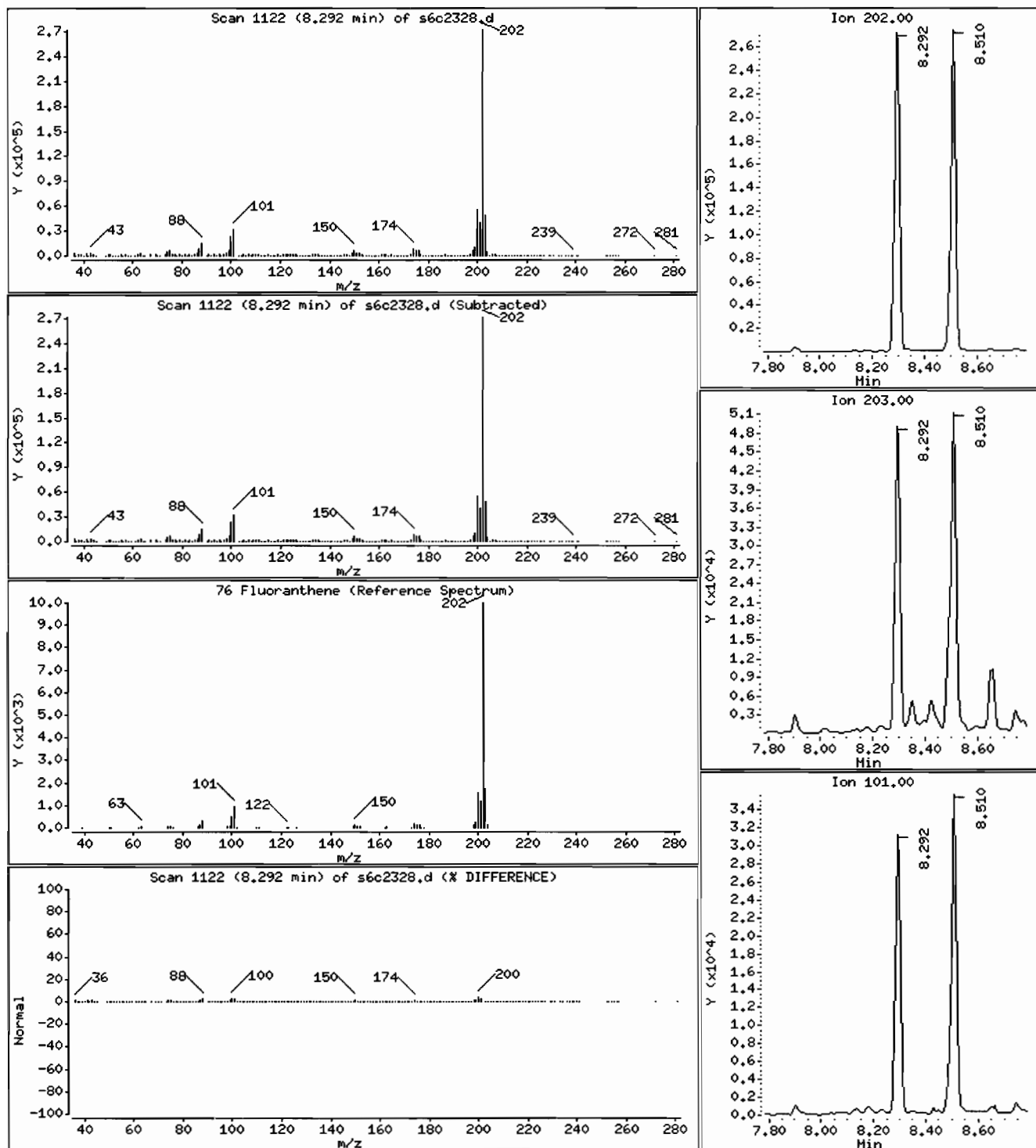
Operator: nag1

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

Column diameter: 0.20

76 Fluoranthene

Concentration: 1630 ug/Kg



Date : 24-MAR-2010 01:03

Client ID: RE36-10-8280

Instrument: MSD6.i

Sample Info: I248519004I963133I4ISVMI1ILANL

Volume Injected (uL): 0.5

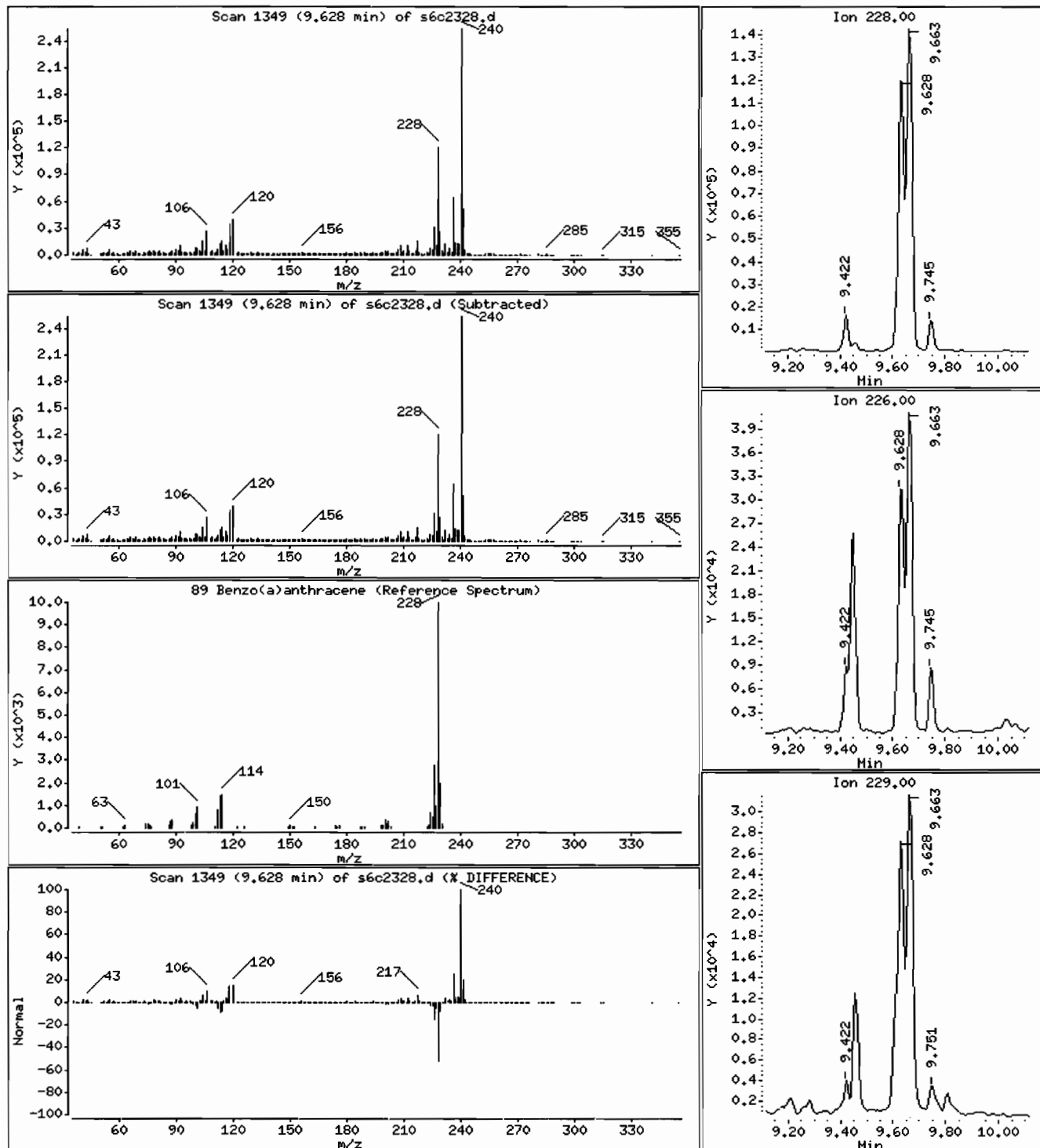
Operator: nag1

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

Column diameter: 0.20

89 Benzo(a)anthracene

Concentration: 971 ug/Kg



Date : 24-MAR-2010 01:03

Client ID: RE36-10-8280

Instrument: MSD6.i

Sample Info: I2485190041963133141SVH111LANL

Volume Injected (uL): 0.5

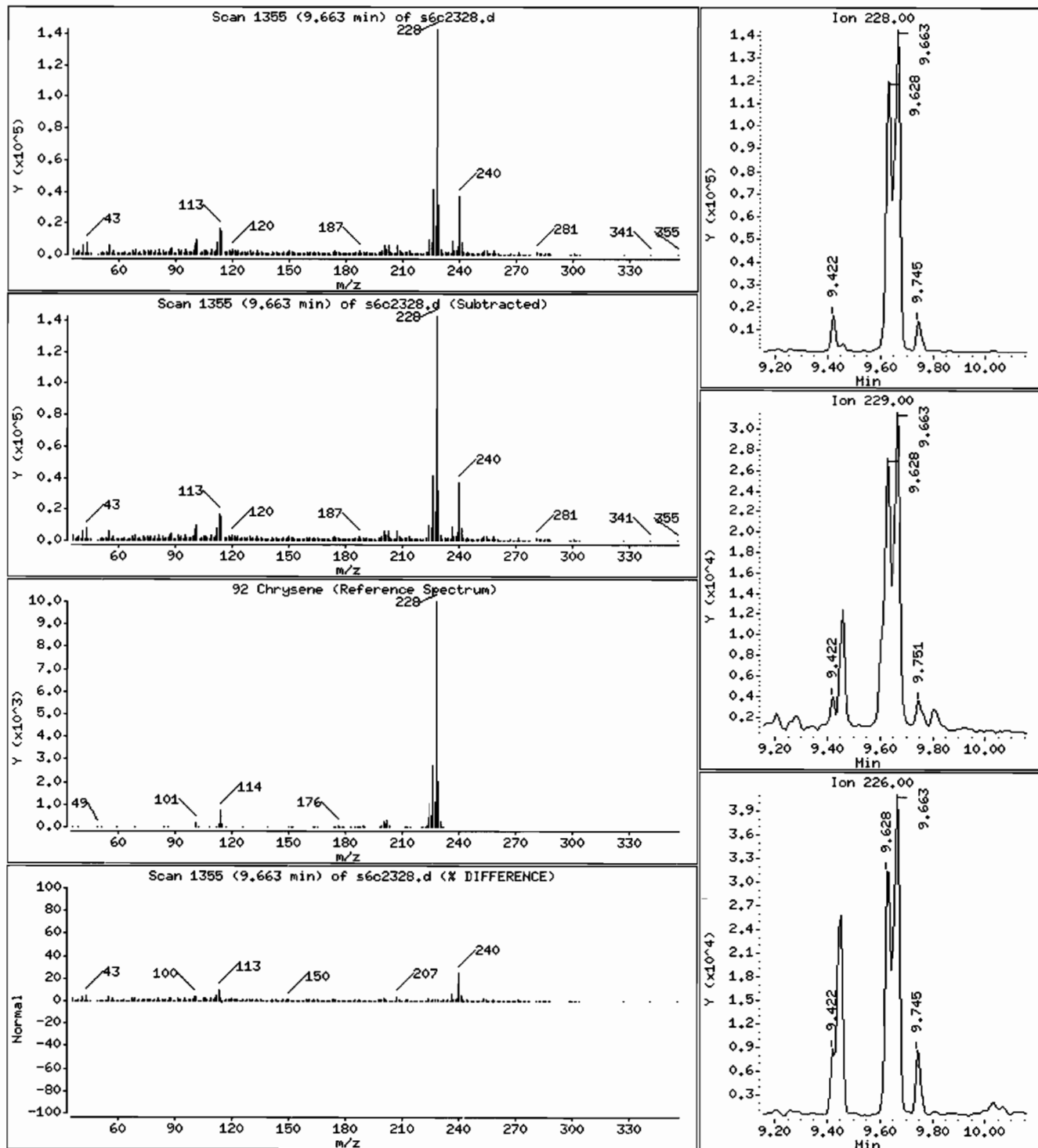
Operator: nag1

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

Column diameter: 0.20

92 Chrysene

Concentration: 1210 ug/Kg



Date : 24-MAR-2010 01:03

Client ID: RE36-10-8280

Instrument: MSD6.i

Sample Info: 12485190041963133141SVH111LANL

Volume Injected (uL): 0.5

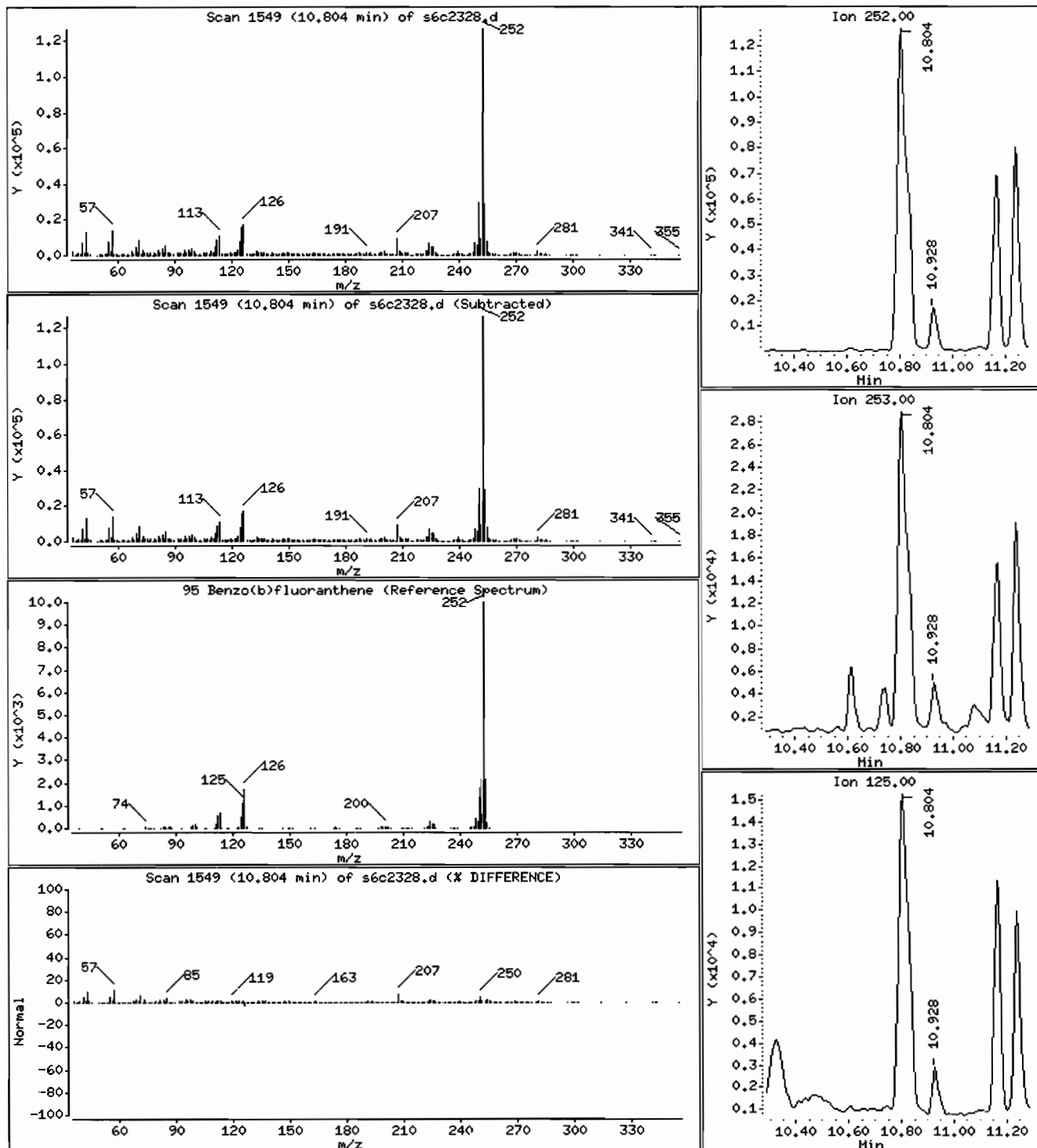
Operator: nag1

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

Column diameter: 0.20

95 Benzo(b)fluoranthene

Concentration: 2310 ug/Kg



Date : 24-MAR-2010 01:03

Client ID: RE36-10-8280

Instrument: MSD6.i

Sample Info: I2485190041963133141SVH111LANL

Volume Injected (uL): 0.5

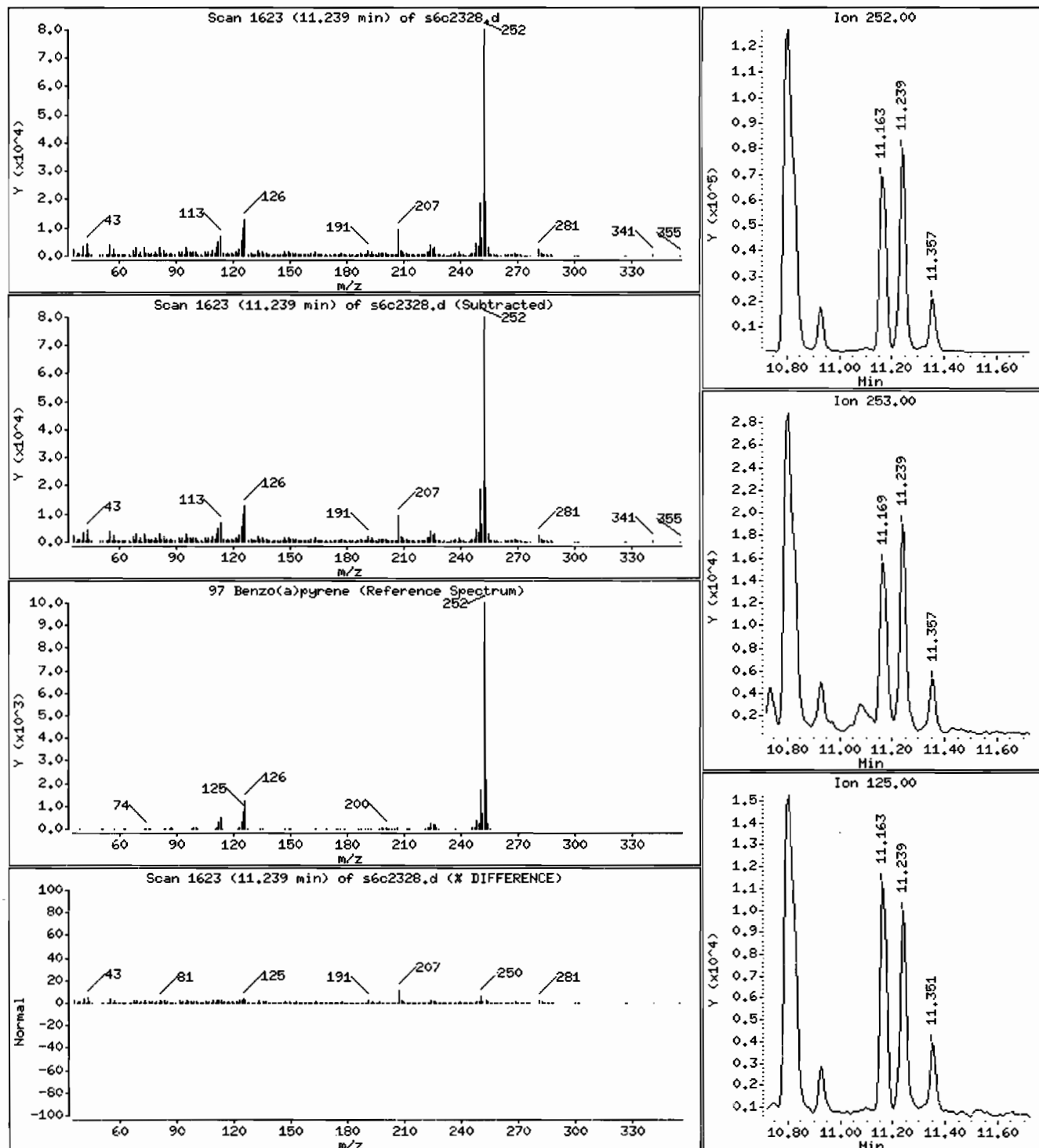
Operator: nag1

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

Column diameter: 0.20

97 Benzo(a)pyrene

Concentration: 1150 ug/Kg



Date: 24-MAR-2010 01:03

Client ID: RE36-10-8280

Instrument: MSD6.i

Sample Info: 12485190041963133141SVH111LANL

Volume Injected (uL): 0.5

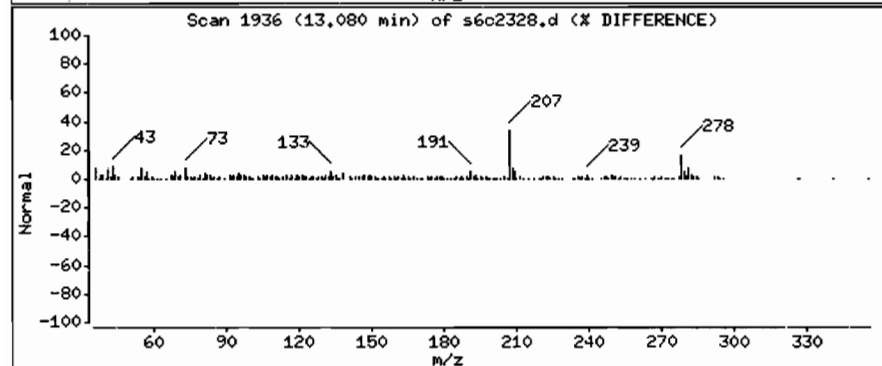
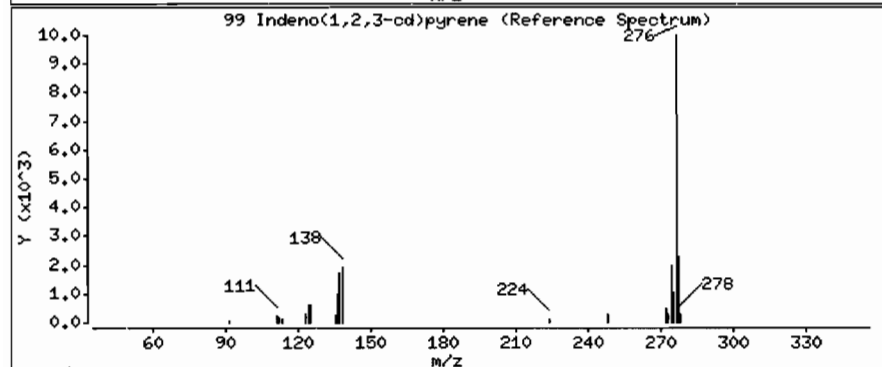
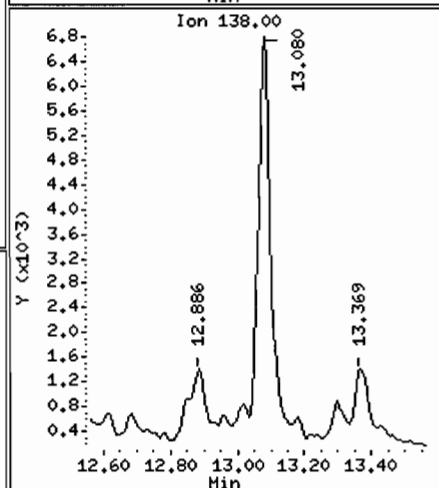
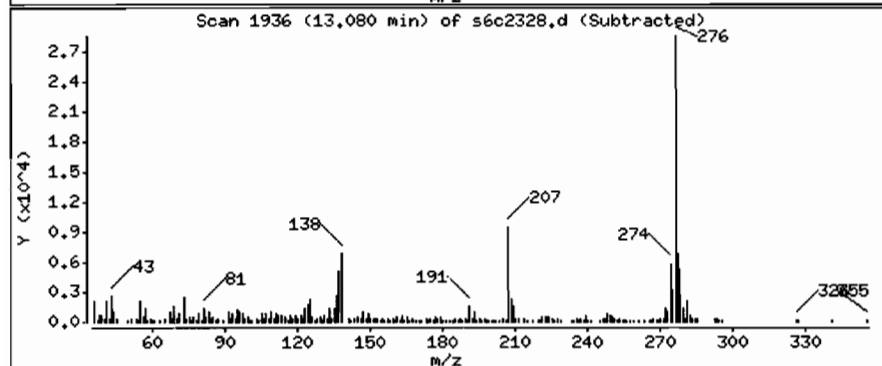
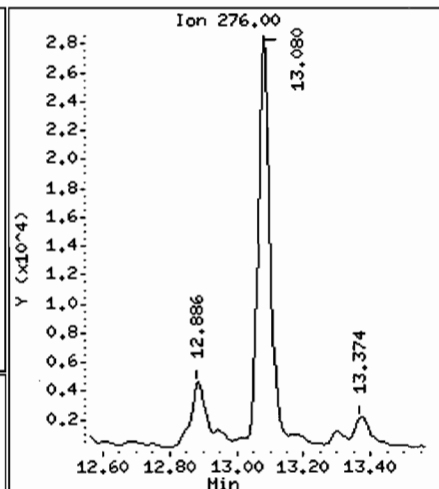
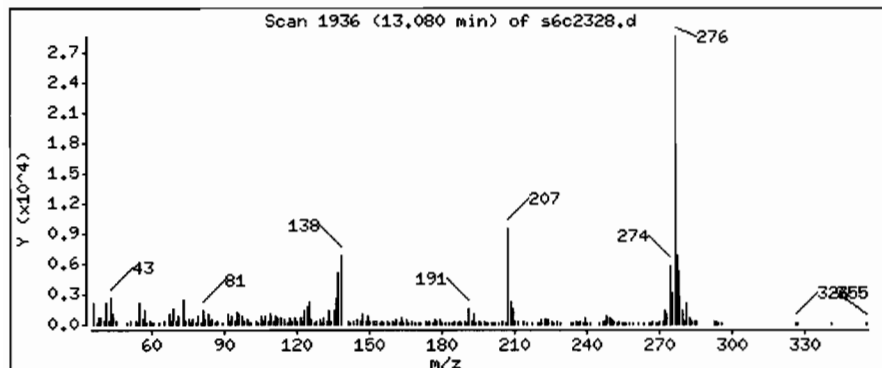
Operator: nag1

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

Column diameter: 0.20

99 Indeno(1,2,3-cd)pyrene

Concentration: 641 ug/Kg





Date : 24-MAR-2010 01:03

Client ID: RE36-10-8280

Instrument: MSD6.i

Sample Info: I248519004I963133I4ISVHI1ILANL

Volume Injected (uL): 0.5

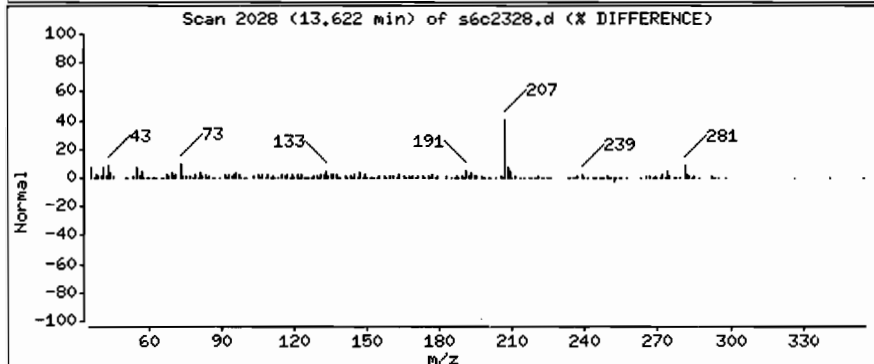
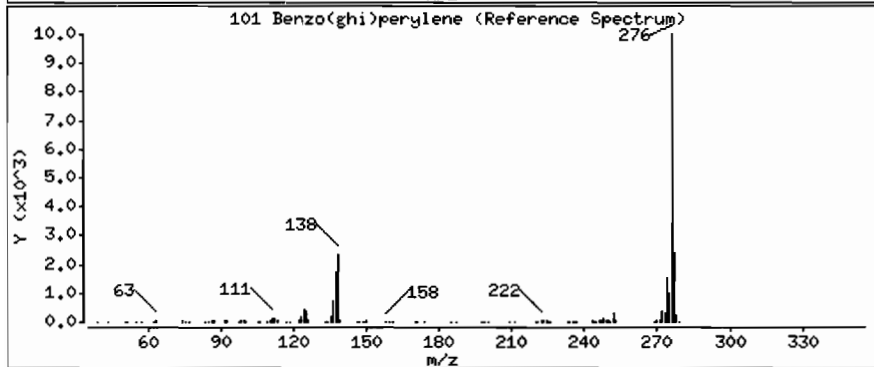
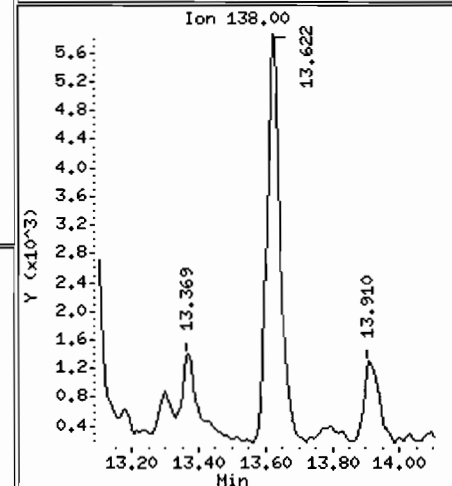
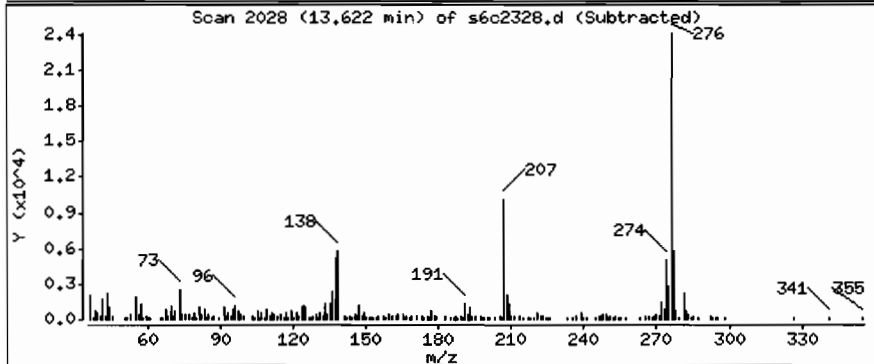
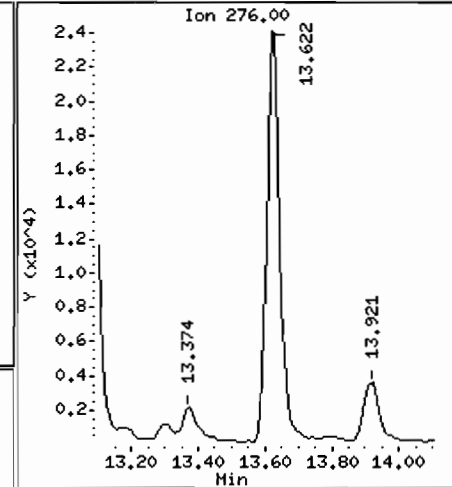
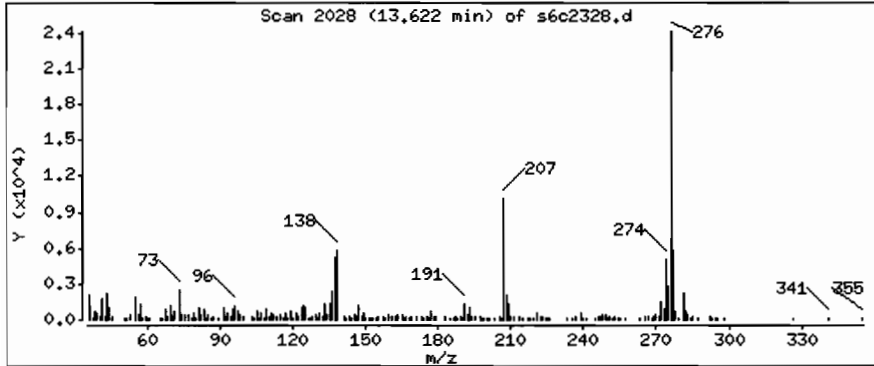
Operator: nag1

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

Column diameter: 0.20

101 Benzo(ghi)perylene

Concentration: 682 ug/Kg



Date : 24-MAR-2010 01:03

Client ID: RE36-10-8280

Instrument: MSD6.i

Sample Info: 12485190041963133141SVH111LANL

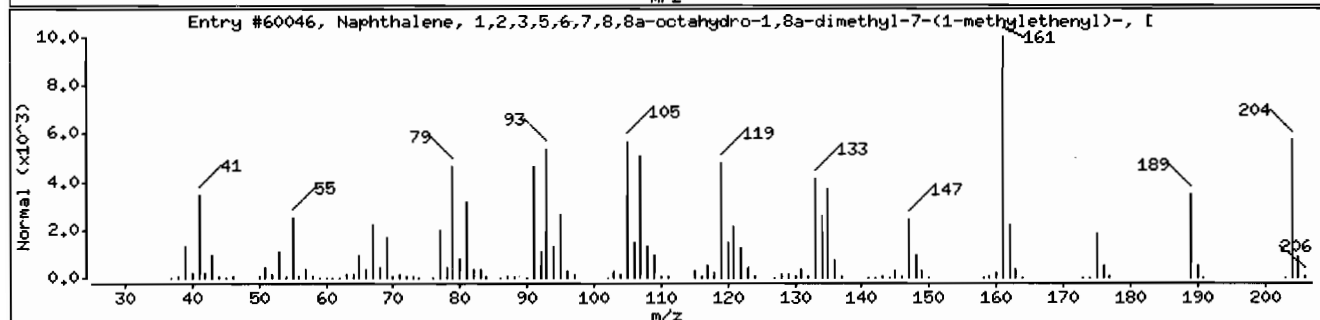
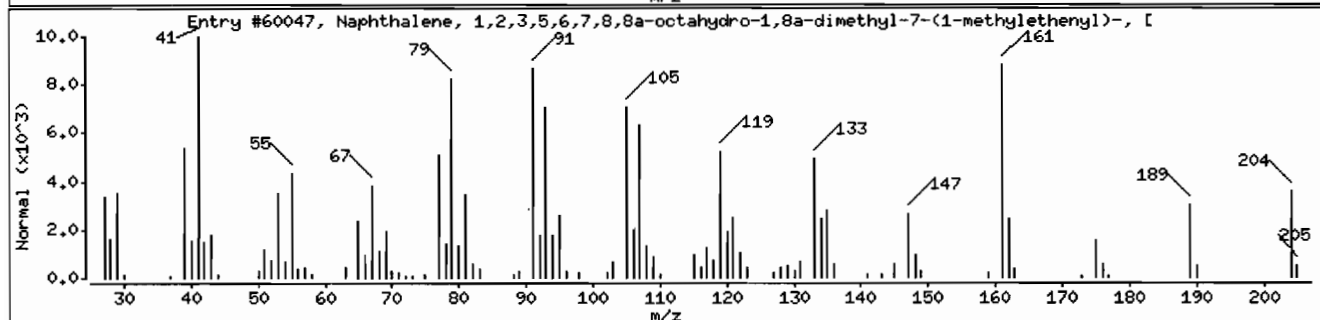
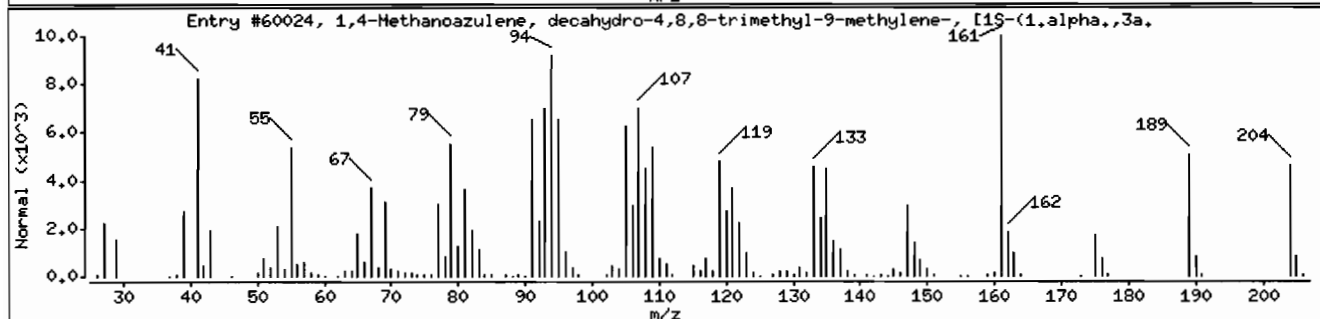
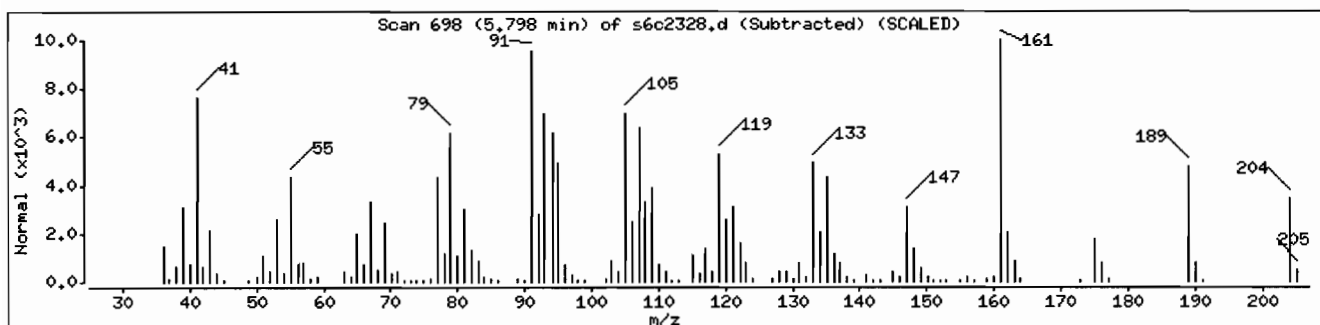
Volume Injected (uL): 0.5

Operator: nag1

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	60024	99	C15H24	204
Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	4630-07-3	NIST05.L	60047	97	C15H24	204
Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	4630-07-3	NIST05.L	60046	96	C15H24	204



Date : 24-MAR-2010 01:03

Client ID: RE36-10-8280

Instrument: MSD6.i

Sample Info: 12485190041963133141SVH111LANL

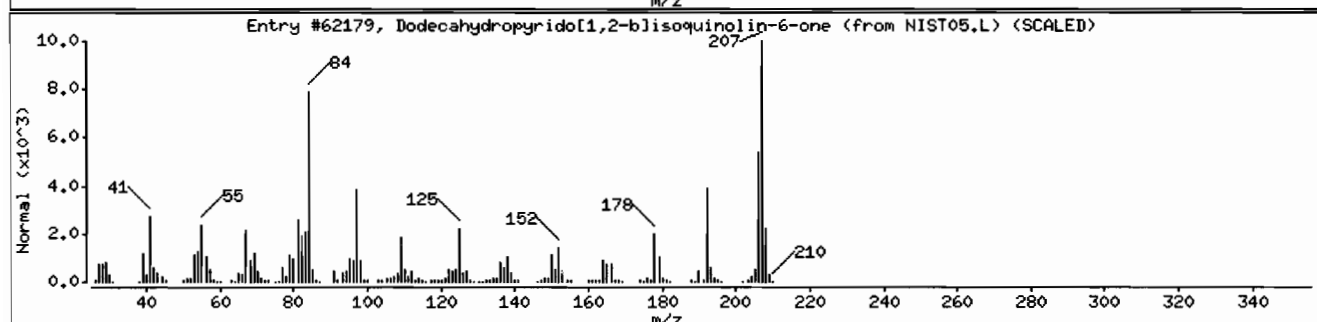
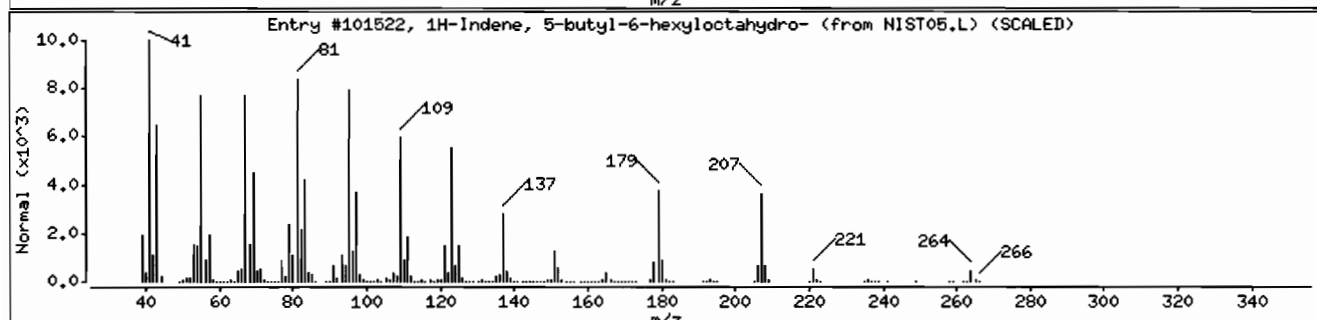
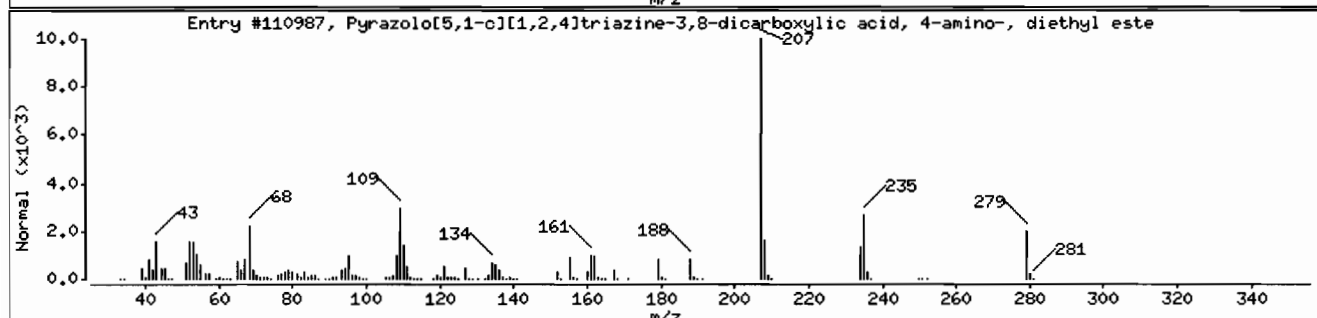
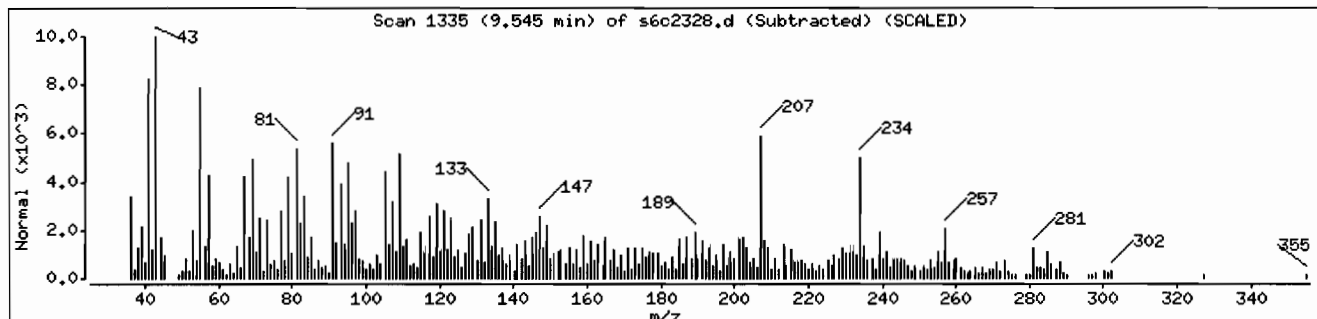
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Pyrazolo[5,1-c][1,2,4]triazine-3,8-dicar	1000302-77-3	NIST05.L	110987	47	C11H13N5O4	279
1H-Indene, 5-butyl-6-hexyloctahydro-	55044-36-5	NIST05.L	101522	47	C19H36	264
Dodecahydropyrido[1,2-b]isoquinolin-6-on	108873-36-5	NIST05.L	62179	44	C13H21NO	207



Date : 24-MAR-2010 01:03

Client ID: RE36-10-8280

Instrument: MSD6.i

Sample Info: 1248519004196313141SVH111LANL

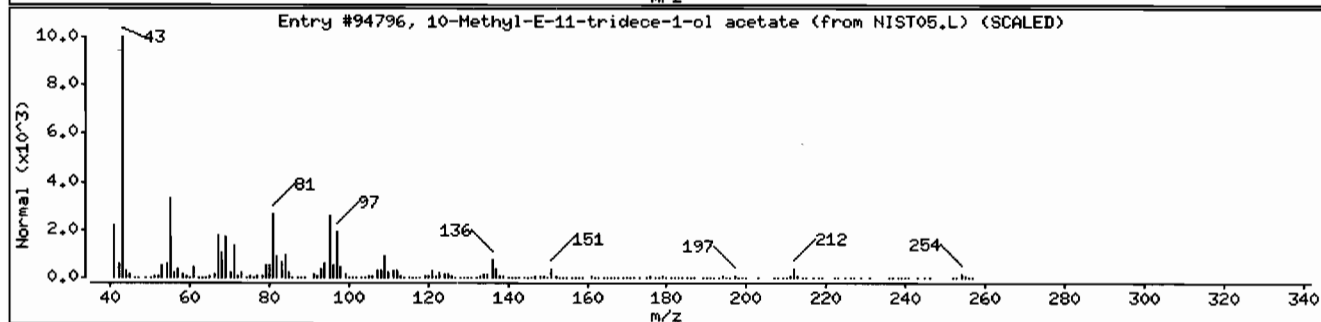
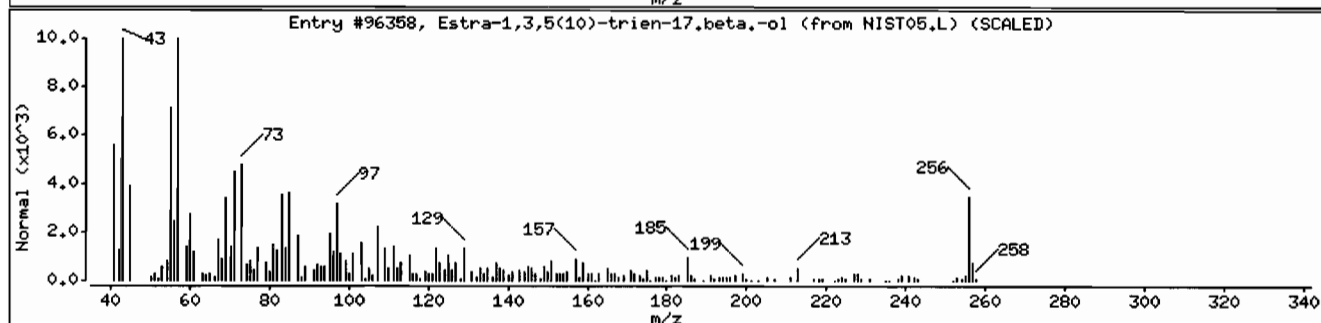
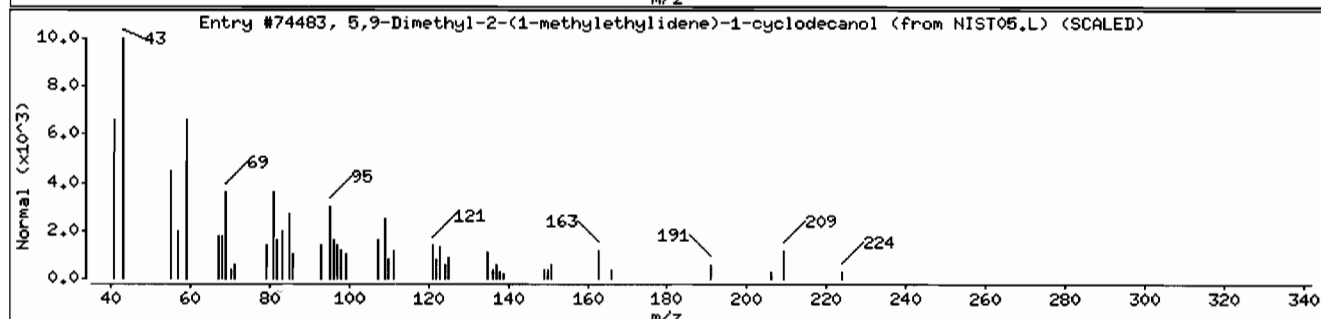
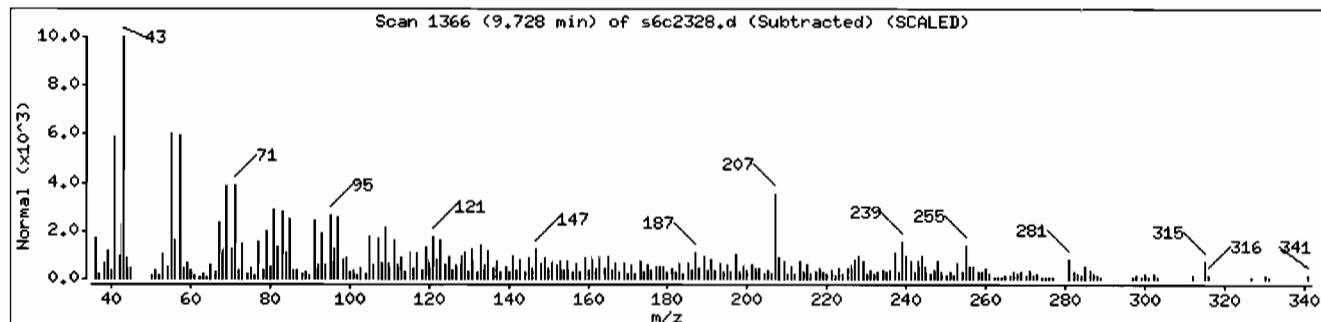
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
5,9-Dimethyl-2-(1-methylethylidene)-1-cy	69239-72-1	NIST05.L	74483	72	C15H28O	224
Estra-1,3,5(10)-trien-17,β-ol	2529-64-8	NIST05.L	96358	70	C18H24O	256
10-Methyl-E-11-tridece-1-ol acetate	1000130-97-3	NIST05.L	94796	47	C16H30O2	254



Date : 24-MAR-2010 01:03

Client ID: RE36-10-8280

Instrument: MSD6.i

Sample Info: 12485190041963133141SVH111LANL

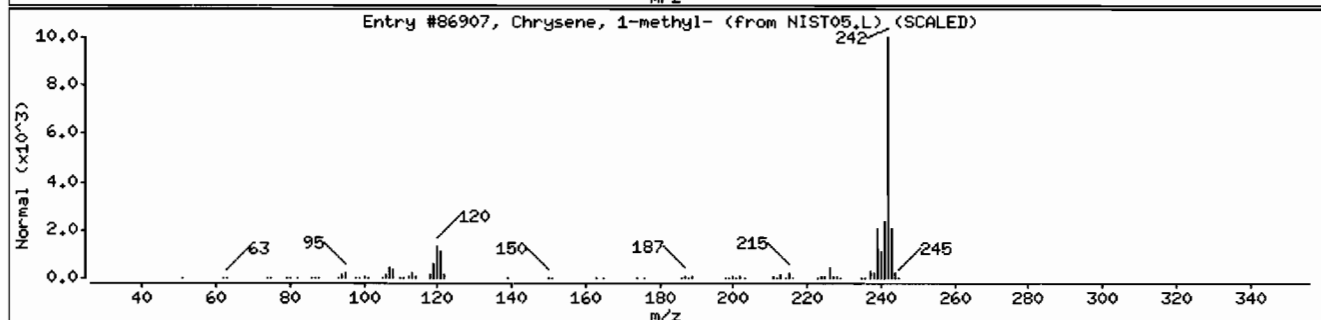
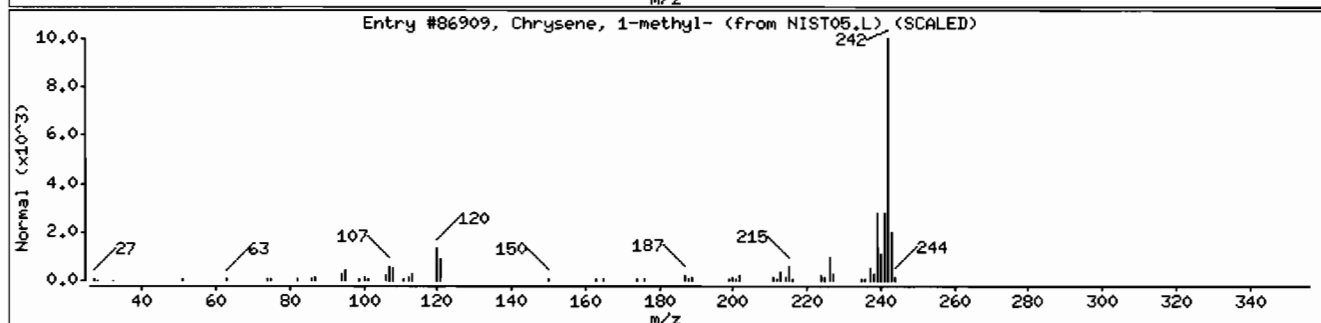
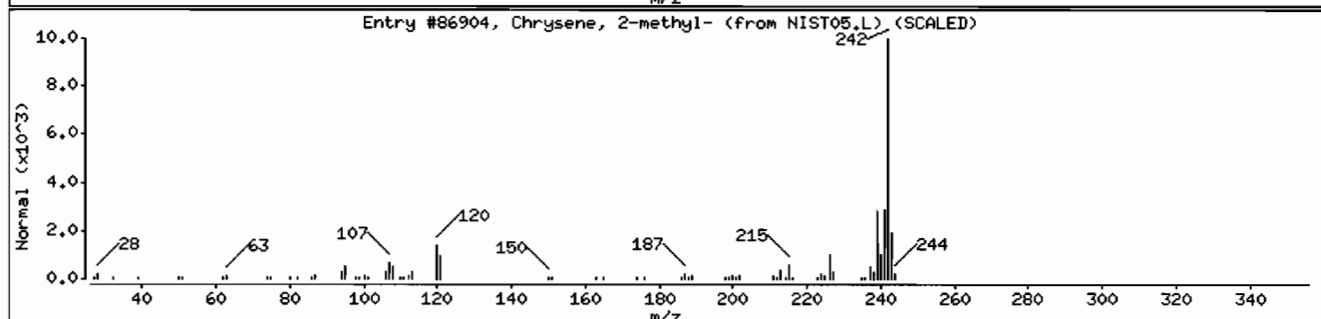
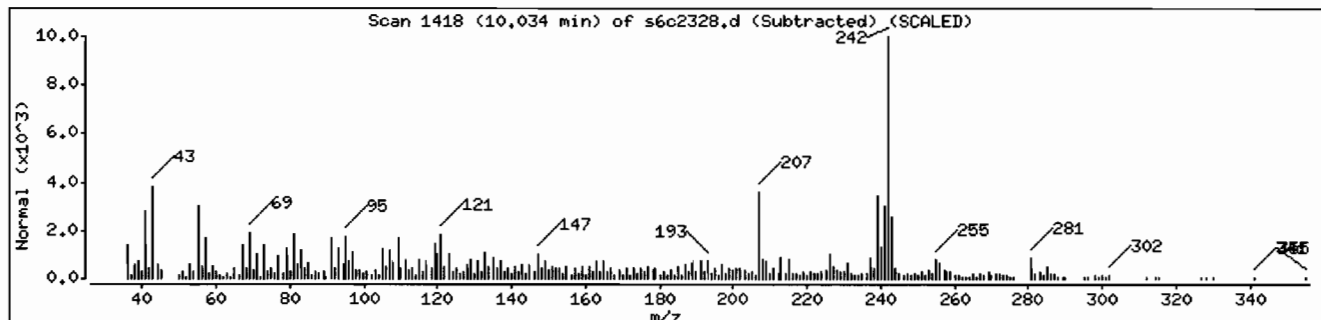
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Chrysene, 2-methyl-	3351-32-4	NIST05.L	86904	96	C19H14	242
Chrysene, 1-methyl-	3351-28-8	NIST05.L	86909	96	C19H14	242
Chrysene, 1-methyl-	3351-28-8	NIST05.L	86907	93	C19H14	242



Date : 24-MAR-2010 01:03

Client ID: RE36-10-8280

Instrument: MSD6.i

Sample Info: 12485190041963133141SVMI11LANL

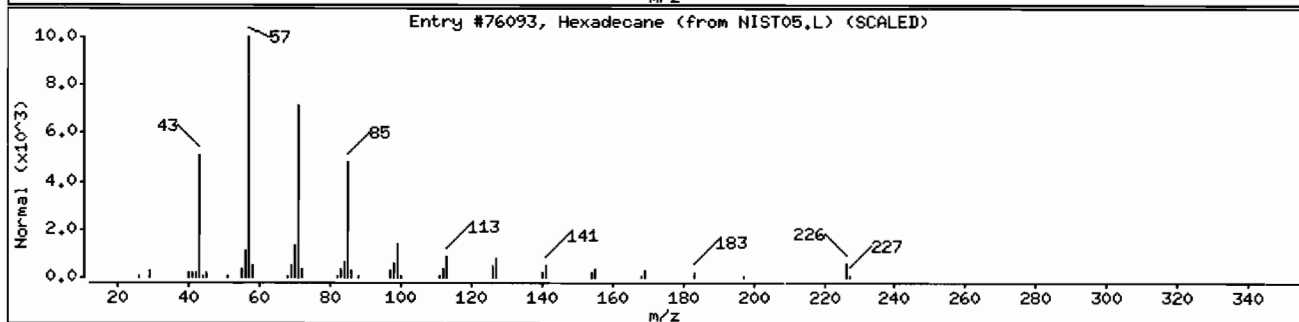
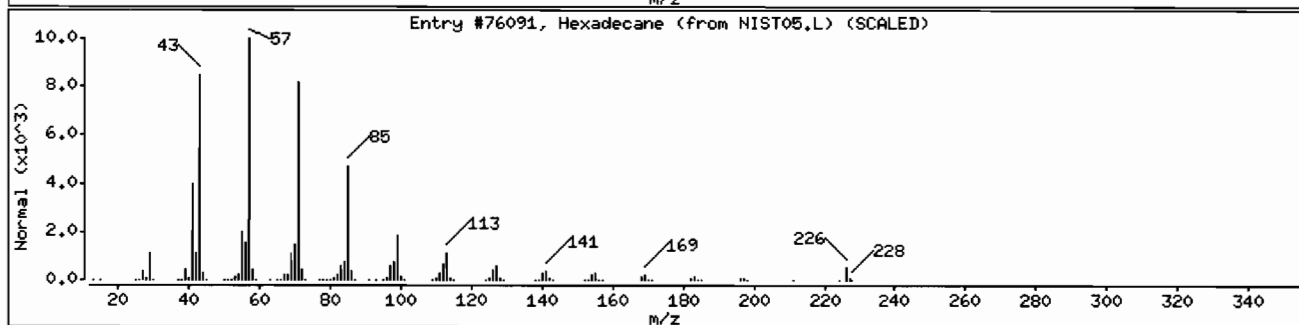
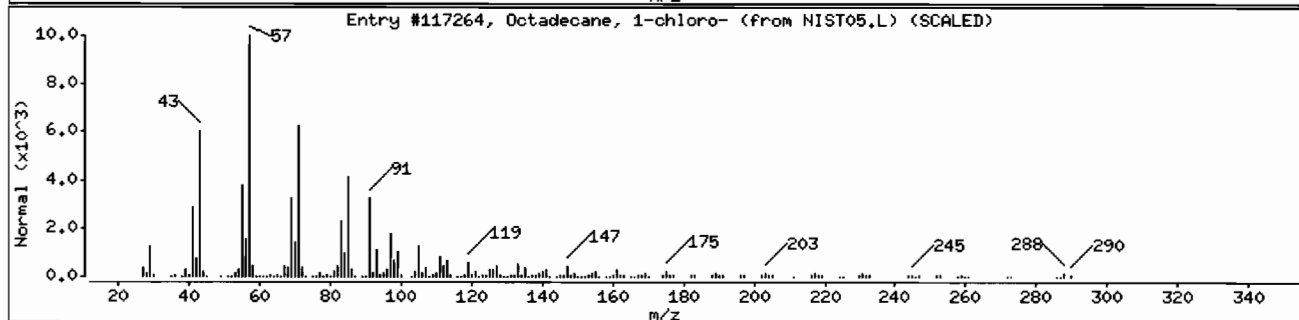
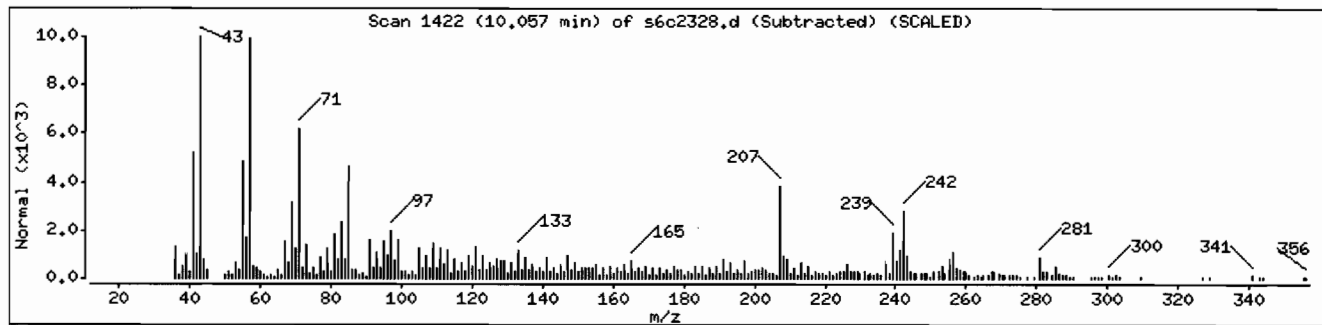
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Octadecane, 1-chloro-	3386-33-2	NIST05.L	117264	94	C18H37Cl	288
Hexadecane	544-76-3	NIST05.L	76091	94	C16H34	226
Hexadecane	544-76-3	NIST05.L	76093	92	C16H34	226



Date : 24-MAR-2010 01:03

Client ID: RE36-10-8280

Instrument: MSD6.i

Sample Info: I248519004I963133I4ISVMI1ILANL

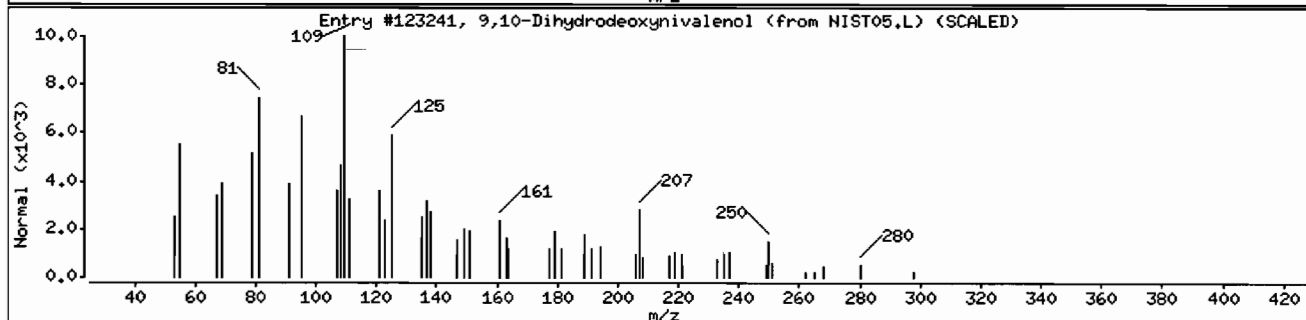
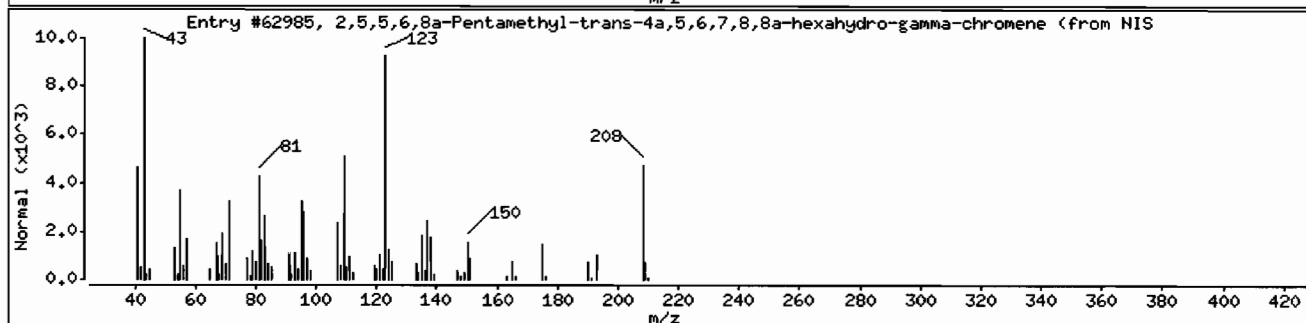
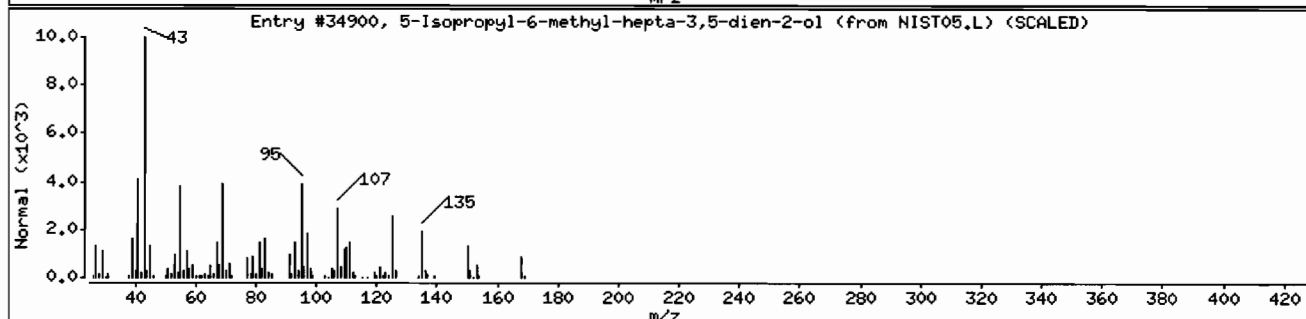
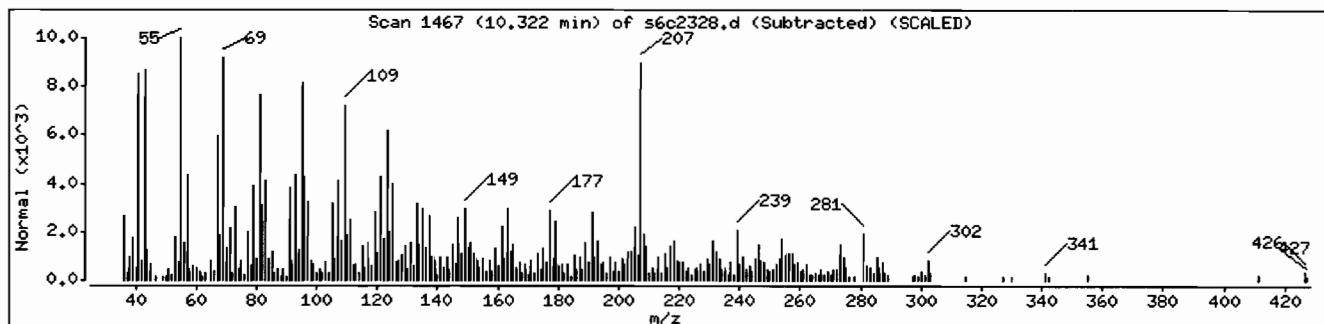
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
5-Isopropyl-6-methyl-hepta-3,5-dien-2-ol	1000187-77-8	NIST05.L	34900	74	C11H20O	168
2,5,5,6,8a-Pentamethyl-trans-4a,5,6,7,8,	1000215-77-8	NIST05.L	62985	38	C14H24O	208
9,10-Dihydrodeoxynivalenol	123505-36-2	NIST05.L	123241	38	C15H22O6	298



Date : 24-MAR-2010 01:03

Client ID: RE36-10-8280

Instrument: MSD6.i

Sample Info: I248519004I963133I4ISVHI1ILANL

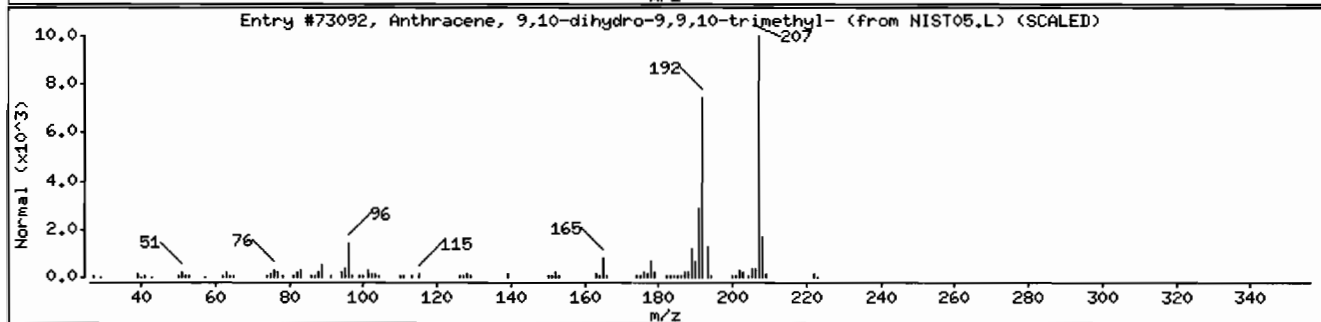
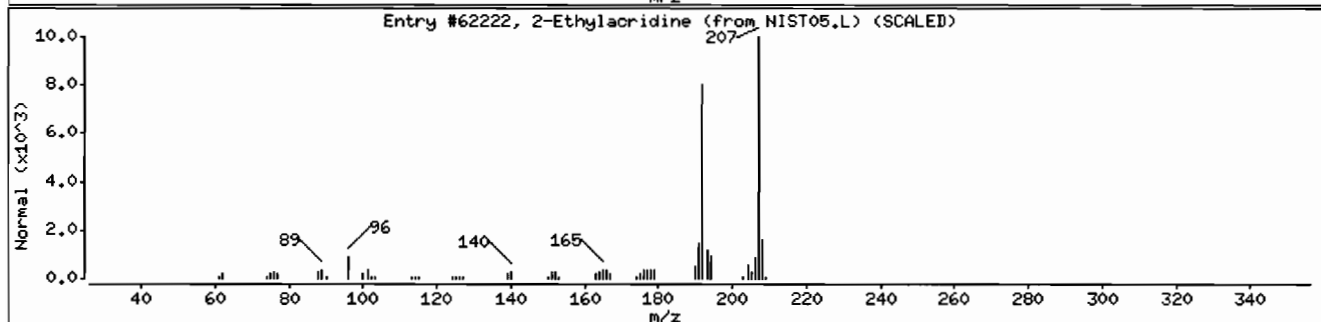
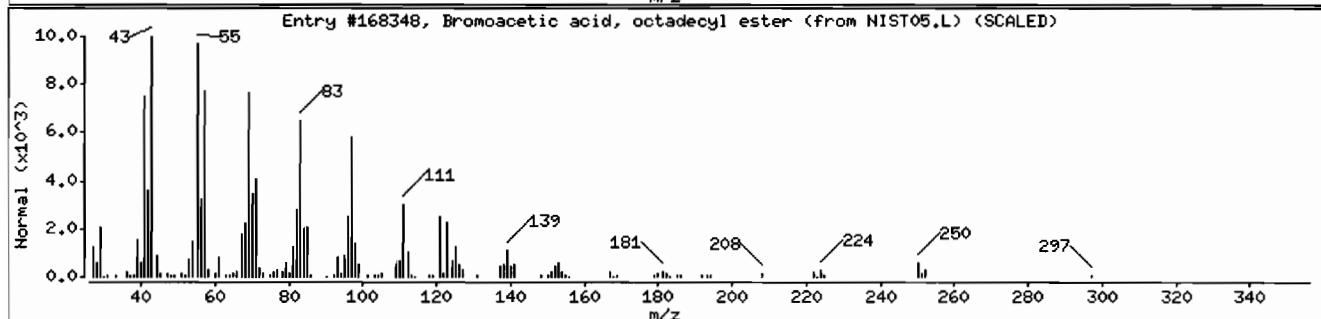
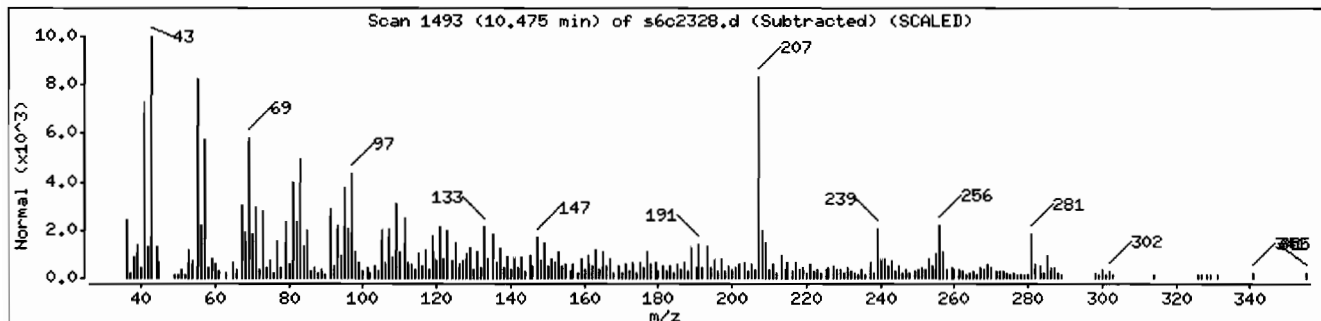
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Bromoacetic acid, octadecyl ester	18992-03-5	NIST05.L	168348	47	C20H39BrO2	390
2-Ethylacridine	55751-83-2	NIST05.L	62222	38	C15H13N	207
Anthracene, 9,10-dihydro-9,9,10-trimethyl-	14923-29-6	NIST05.L	73092	35	C17H18	222





Date : 24-MAR-2010 01:03

Client ID: RE36-10-8280

Instrument: HSD6.i

Sample Info: 12485190041963133141SVH111LANL

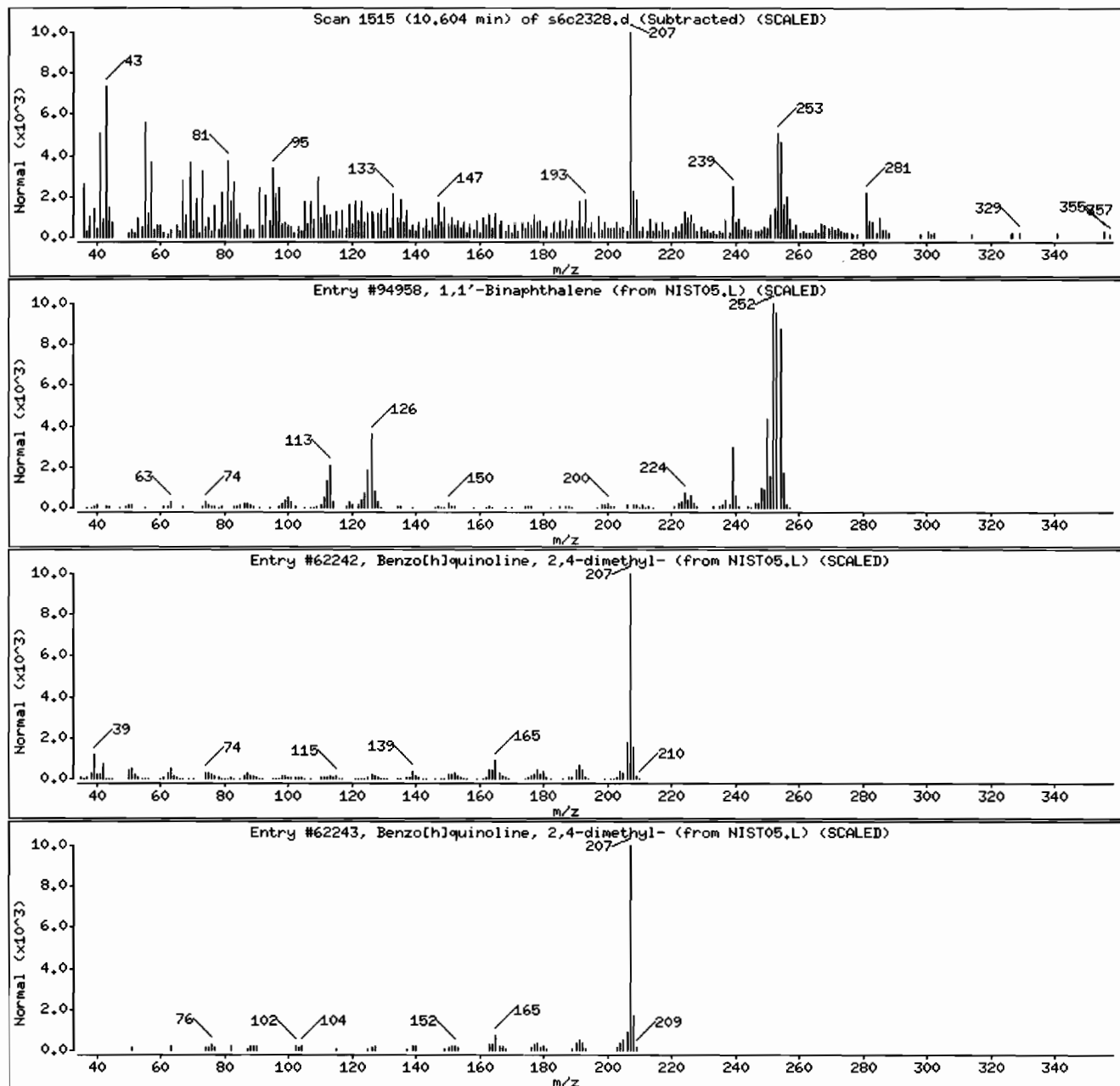
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,1'-Binaphthalene	604-53-5	NIST05.L	94958	83	C20H14	254
Benzo[h]quinoline, 2,4-dimethyl-	605-67-4	NIST05.L	62242	35	C15H13N	207
Benzo[h]quinoline, 2,4-dimethyl-	605-67-4	NIST05.L	62243	30	C15H13N	207



Date : 24-MAR-2010 01:03

Client ID: RE36-10-8280

Instrument: HSD6.i

Sample Info: 12485190041963133141SVH111LANL

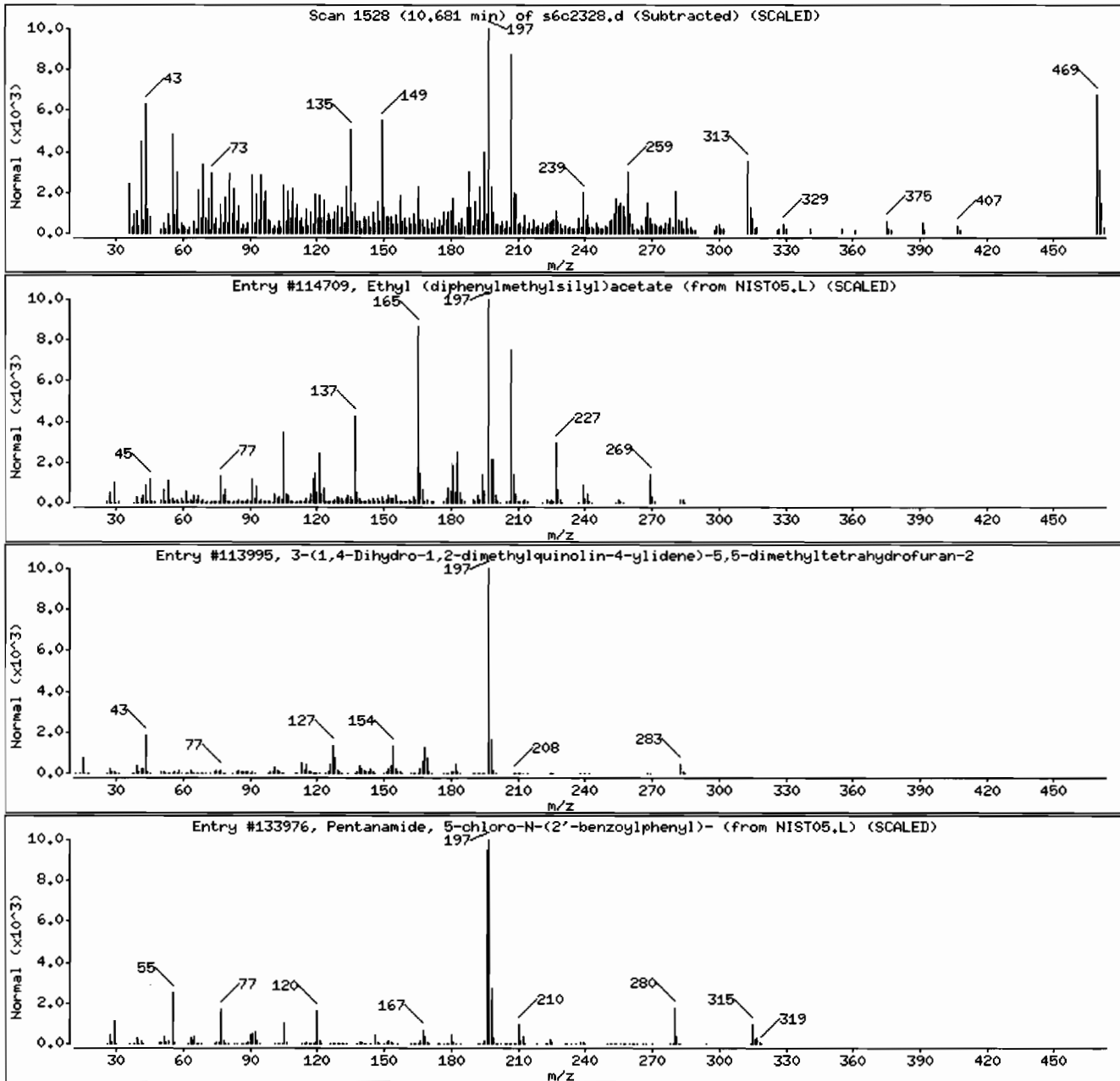
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Ethyl (diphenylmethylsilyl)acetate	13950-57-7	NIST05.L	114709	55	C17H20O2Si	284
3-(1,4-Dihydro-1,2-dimethylquinolin-4-yl	155953-40-5	NIST05.L	113995	25	C17H17N03	283
Pentanamide, 5-chloro-N-(2'-benzoylphenyl)-	163064-46-8	NIST05.L	133976	20	C18H18ClN02	315



Date : 24-MAR-2010 01:03

Client ID: RE36-10-8280

Instrument: MSD6.i

Sample Info: I248519004I963133I4ISVM11ILANL

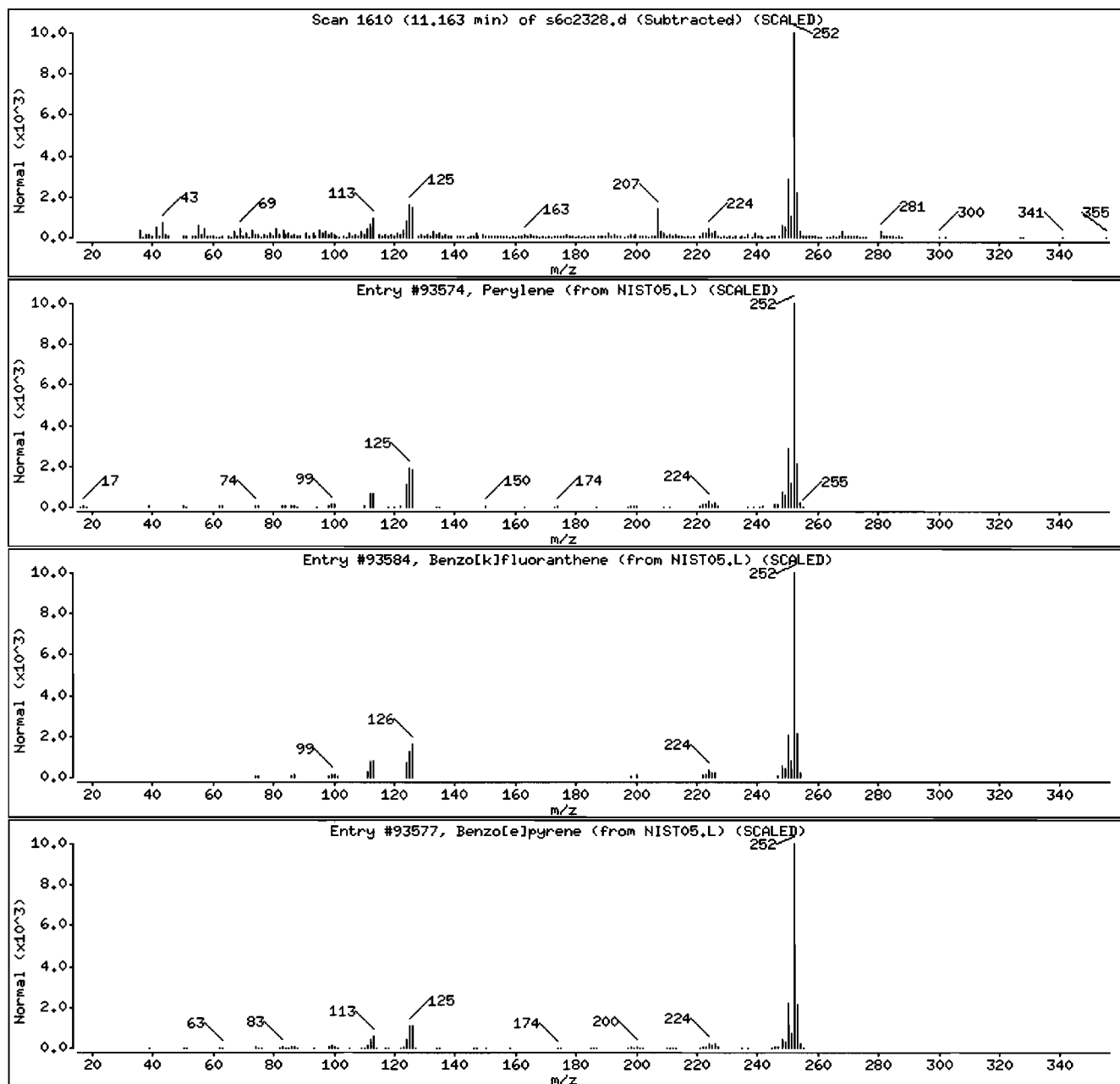
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Perylene	198-55-0	NIST05.L	93574	99	C20H12	252
Benzo[k]fluoranthene	207-08-9	NIST05.L	93584	98	C20H12	252
Benzo[e]pyrene	192-97-2	NIST05.L	93577	98	C20H12	252



Date : 24-MAR-2010 01:03

Client ID: RE36-10-8280

Instrument: HSD6.i

Sample Info: I248519004I963133I4ISVHI1ILANL

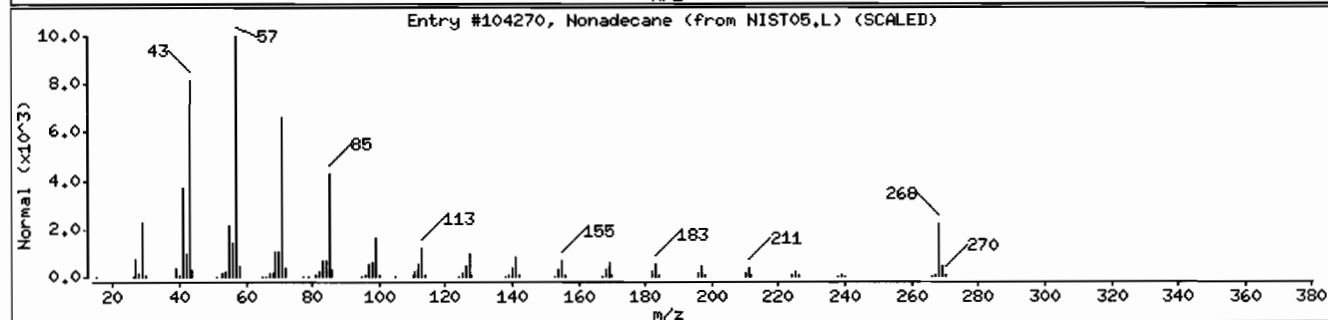
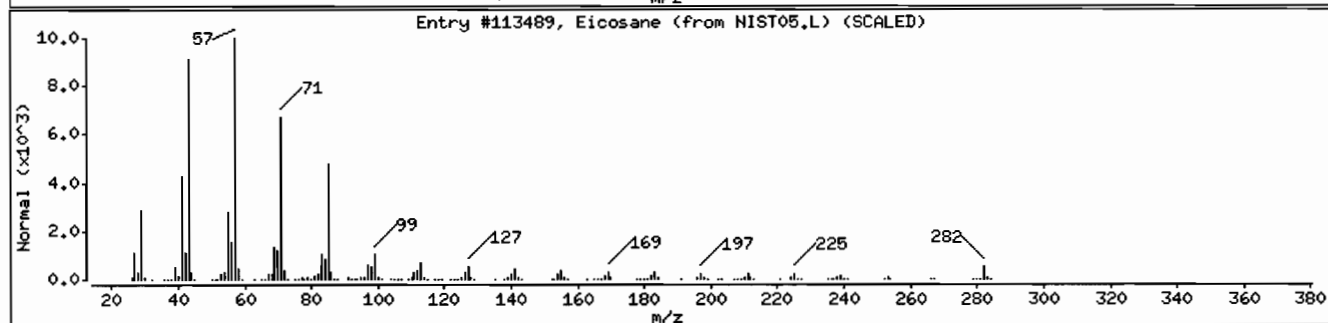
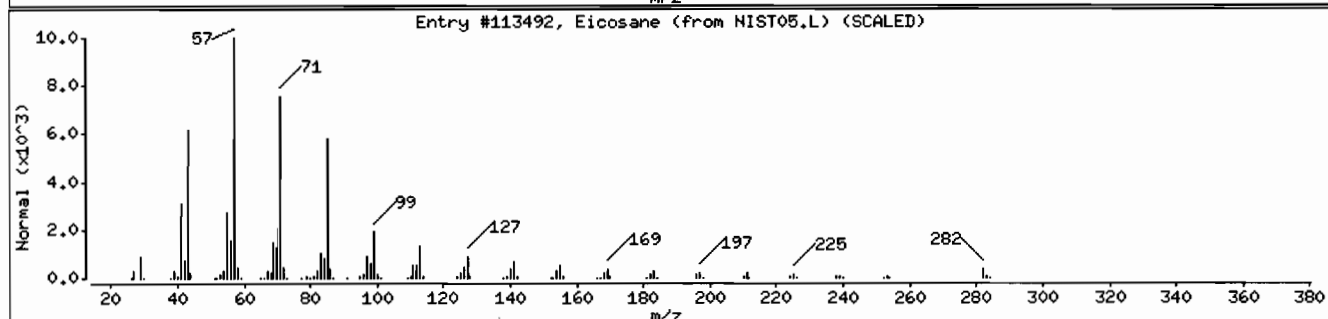
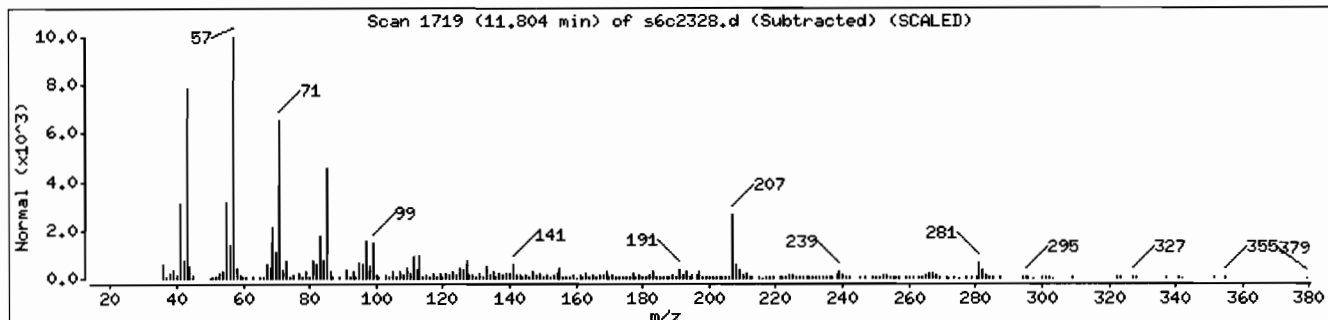
Volume Injected (uL): 0.5

Operator: nag1

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	113492	98	C20H42	282
Eicosane	112-95-8	NIST05.L	113489	96	C20H42	282
Nonadecane	629-92-5	NIST05.L	104270	93	C19H40	268



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

<b>SDG Number:</b> 10-2199	<b>Date Collected:</b> 02/25/2010 12:00	<b>Matrix:</b> R
<b>Lab Sample ID:</b> 248519008	<b>Date Received:</b> 03/03/2010 08:50	<b>%Moisture:</b> 32.9
	<b>Client:</b> LANL010	<b>Project:</b> LANL01004
<b>Client ID:</b> RE36-10-8287	<b>Method:</b> SW846 8270C	<b>SOP Ref:</b> GL-OA-E-009
<b>Batch ID:</b> 963133	<b>Inst:</b> MSD6.I	<b>Dilution:</b> 1
<b>Run Date:</b> 03/21/2010 23:20	<b>Analyst:</b> NAG1	<b>Inj. Vol:</b> .5 uL
<b>Prep Date:</b> 03/10/2010 12:14	<b>Aliquot:</b> 30.09 g	<b>Final Volume:</b> 1 mL
<b>Data File:</b> s6c2121.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	496	ug/kg	99.1	496
108-95-2	Phenol	U	496	ug/kg	99.1	496
95-57-8	2-Chlorophenol	U	496	ug/kg	99.1	496
106-46-7	1,4-Dichlorobenzene	U	496	ug/kg	99.1	496
621-64-7	N-Nitrosodipropylamine	U	496	ug/kg	99.1	496
59-50-7	4-Chloro-3-methylphenol	U	496	ug/kg	99.1	496
83-32-9	Acenaphthene	U	49.6	ug/kg	16.4	49.6
121-14-2	2,4-Dinitrotoluene	U	496	ug/kg	49.6	496
100-02-7	4-Nitrophenol	U	496	ug/kg	164	496
87-86-5	Pentachlorophenol	U	496	ug/kg	124	496
129-00-0	Pyrene	U	49.6	ug/kg	14.9	49.6
110-86-1	Pyridine	U	496	ug/kg	99.1	496
62-53-3	Aniline	U	496	ug/kg	149	496
111-44-4	bis(2-Chloroethyl) ether	U	496	ug/kg	99.1	496
541-73-1	1,3-Dichlorobenzene	U	496	ug/kg	99.1	496
100-51-6	Benzyl alcohol	U	496	ug/kg	149	496
95-50-1	1,2-Dichlorobenzene	U	496	ug/kg	99.1	496
108-60-1	bis(2-Chloroisopropyl)ether	U	496	ug/kg	99.1	496
95-48-7	o-Cresol	U	496	ug/kg	99.1	496
65794-96-9	m,p-Cresols	U	496	ug/kg	149	496
67-72-1	Hexachloroethane	U	496	ug/kg	99.1	496
98-95-3	Nitrobenzene	U	496	ug/kg	99.1	496
78-59-1	Isophorone	U	496	ug/kg	99.1	496
88-75-5	2-Nitrophenol	U	496	ug/kg	99.1	496
105-67-9	2,4-Dimethylphenol	U	496	ug/kg	173	496
111-91-1	bis(2-Chloroethoxy)methane	U	496	ug/kg	99.1	496
120-83-2	2,4-Dichlorophenol	U	496	ug/kg	99.1	496
65-85-0	Benzoic acid	J	355	ug/kg	248	991
91-20-3	Naphthalene	U	49.6	ug/kg	14.9	49.6
106-47-8	4-Chloroaniline	U	496	ug/kg	99.1	496
87-68-3	Hexachlorobutadiene	U	496	ug/kg	99.1	496
91-57-6	2-Methylnaphthalene	U	49.6	ug/kg	9.91	49.6
77-47-4	Hexachlorocyclopentadiene	U	496	ug/kg	99.1	496
88-06-2	2,4,6-Trichlorophenol	U	496	ug/kg	99.1	496
95-95-4	2,4,5-Trichlorophenol	U	496	ug/kg	99.1	496
91-58-7	2-Chloronaphthalene	U	49.6	ug/kg	16.4	49.6
88-74-4	2-Nitroaniline	U	496	ug/kg	99.1	496
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	496	ug/kg	99.1	496

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

<b>SDG Number:</b> 10-2199	<b>Date Collected:</b> 02/25/2010 12:00	<b>Matrix:</b> R
<b>Lab Sample ID:</b> 248519008	<b>Date Received:</b> 03/03/2010 08:50	<b>%Moisture:</b> 32.9
	<b>Client:</b> LANL010	<b>Project:</b> LANL01004
<b>Client ID:</b> RE36-10-8287	<b>Method:</b> SW846 8270C	<b>SOP Ref:</b> GL-OA-E-009
<b>Batch ID:</b> 963133	<b>Inst:</b> MSD6.I	<b>Dilution:</b> 1
<b>Run Date:</b> 03/21/2010 23:20	<b>Analyst:</b> NAG1	<b>Inj. Vol:</b> .5 uL
<b>Prep Date:</b> 03/10/2010 12:14	<b>Aliquot:</b> 30.09 g	<b>Final Volume:</b> 1 mL
<b>Data File:</b> s6c2121.d	<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	496	ug/kg	99.1	496
606-20-2	2,6-Dinitrotoluene	U	496	ug/kg	49.6	496
208-96-8	Acenaphthylene	U	49.6	ug/kg	14.9	49.6
51-28-5	2,4-Dinitrophenol	U	991	ug/kg	188	991
132-64-9	Dibenzofuran	U	496	ug/kg	99.1	496
84-66-2	Diethylphthalate	U	496	ug/kg	99.1	496
86-73-7	Fluorene	U	49.6	ug/kg	14.9	49.6
7005-72-3	4-Chlorophenylphenylether	U	496	ug/kg	99.1	496
534-52-1	2-Methyl-4,6-dinitrophenol	U	496	ug/kg	99.1	496
100-01-6	4-Nitroaniline	U	496	ug/kg	149	496
	<i>p-Nitroaniline</i>					
122-39-4	Diphenylamine	U	496	ug/kg	99.1	496
122-66-7	Azobenzene	U	496	ug/kg	99.1	496
	<i>1,2-Diphenylhydrazine</i>					
101-55-3	4-Bromophenylphenylether	U	496	ug/kg	99.1	496
118-74-1	Hexachlorobenzene	U	496	ug/kg	99.1	496
85-01-8	Phenanthrene	U	49.6	ug/kg	14.9	49.6
120-12-7	Anthracene	U	49.6	ug/kg	9.91	49.6
84-74-2	Di-n-butylphthalate	U	496	ug/kg	99.1	496
206-44-0	Fluoranthene	U	49.6	ug/kg	14.9	49.6
85-68-7	Butylbenzylphthalate	U	496	ug/kg	99.1	496
56-55-3	Benzo(a)anthracene	U	49.6	ug/kg	14.9	49.6
91-94-1	3,3'-Dichlorobenzidine	U	496	ug/kg	149	496
218-01-9	Chrysene	U	49.6	ug/kg	14.9	49.6
117-81-7	bis(2-Ethylhexyl)phthalate	U	496	ug/kg	99.1	496
117-84-0	Di-n-octylphthalate	U	496	ug/kg	99.1	496
205-99-2	Benzo(b)fluoranthene	U	49.6	ug/kg	14.9	49.6
207-08-9	Benzo(k)fluoranthene	U	49.6	ug/kg	14.9	49.6
50-32-8	Benzo(a)pyrene	U	49.6	ug/kg	14.9	49.6
193-39-5	Indeno(1,2,3-cd)pyrene	U	49.6	ug/kg	14.9	49.6
53-70-3	Dibenzo(a,h)anthracene	U	49.6	ug/kg	14.9	49.6
191-24-2	Benzo(ghi)perylene	U	49.6	ug/kg	14.9	49.6
120-82-1	1,2,4-Trichlorobenzene	U	496	ug/kg	99.1	496

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	4.49	644	ug/kg		J
629-62-9	Pentadecane	8.65	274	ug/kg	96	NJ

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

SDG Number: 10-2199	Date Collected: 02/25/2010 12:00	Matrix: R
Lab Sample ID: 248519008	Date Received: 03/03/2010 08:50	%Moisture: 32.9
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-8287	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 963133	Inst: MSD6.I	Dilution: 1
Run Date: 03/21/2010 23:20	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 03/10/2010 12:14	Aliquot: 30.09 g	Final Volume: 1 mL
Data File: s6c2121.d	Column: J&W DB-5MS	Level: 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	8.74	280	ug/kg		J
	Unknown	8.86	273	ug/kg		J
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	8.94	413	ug/kg	98	NJ
112-95-8	Eicosane	8.97	227	ug/kg	98	NJ
	Unknown	9.03	294	ug/kg		J
	Unknown	9.11	531	ug/kg		J
	Unknown	9.2	854	ug/kg		J
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	9.3	1020	ug/kg	94	NJ
	Unknown	9.38	1170	ug/kg		J
	Unknown	9.56	610	ug/kg		J
	Unknown	9.59	511	ug/kg		J
1000193-07-4	Propanephosphonic acid, bis(trimethylsil	9.72	617	ug/kg	84	NJ
	Unknown	9.82	1560	ug/kg		J
3386-33-2	Octadecane, 1-chloro-	9.91	635	ug/kg	95	NJ
1599-67-3	1-Docosene	10.03	770	ug/kg	96	NJ
	Unknown	10.26	504	ug/kg		J
288246-53-7	Pyridine-3-carboxamide, oxime, N-(2-trif	10.35	944	ug/kg	93	NJ
	Unknown	10.63	793	ug/kg		J
	Unknown	11.57	398	ug/kg		J
	Unknown	11.77	681	ug/kg		J
83-47-6	.gamma.-Sitosterol	13.64	640	ug/kg	91	NJ

GEL Laboratories LLC

Data file : /chem/MSD6.i/s032110.b/s6c2121.d  
Lab Smp Id: 248519008 Client Smp ID: RE36-10-8287  
Inj Date : 21-MAR-2010 23:20  
Operator : nag1 Inst ID: MSD6.i  
Smp Info : |248519008|963133|1|SVM|1|LANL  
Misc Info : |MSD8270\_S|WBN100319-01  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD6.i/s032110.b/MSD6-M8270C-AQA-031610.m  
Meth Date : 23-Mar-2010 10:53 nat00999 Quant Type: ISTD  
Cal Date : 17-MAR-2010 04:51 Cal File: s6c1646.d  
Als bottle: 18  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-2199.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	30.09000	weight of sample
M	32.94800	% 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		3.828	3.822	(1.000)	338696	40.0000	
* 29 Naphthalene-d8	136		4.687	4.687	(1.000)	1243587	40.0000	
* 46 Acenaphthene-d10	164		5.940	5.934	(1.000)	792677	40.0000	
* 67 Phenanthrene-d10	188		7.098	7.093	(1.000)	1444831	40.0000	
* 91 Chrysene-d12	240		9.498	9.486	(1.000)	1270522	40.0000	
* 98 Perylene-d12	264		11.098	11.075	(1.000)	848970	40.0000	
\$ 3 2-Fluorophenol	112		3.022	3.005	(0.789)	421455	44.7623	2220
\$ 5 Phenol-d5	99		3.546	3.534	(0.926)	509882	42.5828	2110
\$ 20 Nitrobenzene-d5	82		4.187	4.181	(0.893)	236235	19.8719	985
\$ 39 2-Fluorobiphenyl	172		5.434	5.422	(0.915)	483043	23.6192	1170
\$ 60 2,4,6-Tribromophenol	329		6.534	6.522	(1.100)	139357	62.6503	3100
\$ 81 p-Terphenyl-d14	244		8.475	8.463	(0.892)	592613	26.7667	1330



Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE		ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
27 Benzoic acid	105	4.434	4.463	(0.946)	41764	7.16325		355 (aQH)

#### QC Flag Legend

- a - Target compound detected but, quantitated amount  
Below Limit Of Quantitation(BLOQ).
- Q - Qualifier signal failed the ratio test.
- H - Operator selected an alternate compound hit.

## ION RATIO REPORT

## SV REPORT

Data file: s6c2121.d

Report Date: 03/22/2010 20:27

Lab. ID: 248519008

SampleType: SAMPLE

Injection Date: 21-MAR-2010 23:20

Operator: nagl

Instrument: MSD6.i

Sample Info: |248519008|963133|1|SVM|1|LANL

Miscellaneous Info: |MSD8270\_S|WBN100319-01

Comment:

Method used: /chem/MSD6.i/s032110.b/MSD6-M8270C-AQA-031610.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-2199

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4 Aniline		CAS#: 62-53-3				
66	26685	3.55	3.60	80-120	100	( )
93	18456	3.50	3.60	402-462	69	(QT)
-----						
17 N-Nitrosodipropylamine		CAS#: 621-64-7				
70	34514	4.19	4.06	80-120	100	(T)
42	20574	4.19	4.06	40-100	60	(T)
-----						
21 Nitrobenzene		CAS#: 98-95-3				
77	31392	4.43	4.20	80-120	100	(T)
65	1405	4.43	4.20	0- 45	4	(T)
123	2402	4.43	4.20	16- 76	8	(QT)
-----						
22 Isophorone		CAS#: 78-59-1				
82	236235	4.19	4.35	80-120	100	(T)
138	238	4.31	4.35	0- 50	0	( )
-----						
25 bis(2-Chloroethoxy)methane		CAS#: 111-91-1				
93	23016	4.36	4.47	80-120	100	(T)
123	1660	4.33	4.47	0- 48	7	(T)
95	7716	4.37	4.47	3- 63	34	(T)
-----						
27 Benzoic acid		CAS#: 65-85-0				
105	41764	4.43	4.46	80-120	100	( )
122	33750	4.43	4.46	114-174	81	(Q)
77	32044	4.43	4.46	71-131	77	( )
-----						

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
33	4-Chloro-3-methylphenol			CAS#: 59-50-7		
107	50964	4.76	5.03	80-120	100	(T)
144	10264	5.43	5.03	0- 56	20	(T)
142	457	5.04	5.03	49-109	1	(Q)
-----						
40	2-Chloronaphthalene			CAS#: 91-58-7		
162	731008	5.94	5.53	80-120	100	(T)
164	792677	5.94	5.53	4- 64	108	(QT)
127	341	5.95	5.53	8- 68	0	(QT)
-----						
43	Dimethylphthalate			CAS#: 131-11-3		
163	143980	5.94	5.70	80-120	100	(T)
164	792677	5.94	5.70	0- 41	551	(QT)
-----						
45	Acenaphthylene			CAS#: 208-96-8		
152	10867	5.53	5.83	80-120	100	(T)
151	10817	5.53	5.83	0- 50	100	(QT)
153	1263	5.53	5.83	0- 44	12	(T)
-----						
48	2,4-Dinitrophenol			CAS#: 51-28-5		
184	554	6.22	5.96	80-120	100	(T)
154	147	6.21	5.96	718-778	27	(QT)
-----						
50	2,4-Dinitrotoluene			CAS#: 121-14-2		
165	104338	5.94	6.05	80-120	100	(T)
89	1179	5.94	6.05	39- 99	1	(QT)
63	1275	5.94	6.05	20- 80	1	(QT)
-----						
53	Fluorene			CAS#: 86-73-7		
166	8075	6.53	6.34	80-120	100	(T)
165	8791	6.53	6.34	60-120	109	(T)
167	3630	6.53	6.34	0- 44	45	(QT)
-----						
55	2-Methyl-4,6-dinitrophenol			CAS#: 534-52-1		
198	444	6.53	6.36	80-120	100	(T)
105	1032	6.53	6.36	9- 69	232	(QT)
51	856	6.53	6.35	28- 88	193	(QT)

Q qualifier indicates ion failed ratio requirement

Data File: /chem/MSD6.i/s032110.b/s6c2121.d  
Report Date: 23-Mar-2010 11:14

Page 1

GEL Laboratories LLC

Data file : /chem/MSD6.i/s032110.b/s6c2121.d  
Lab Smp Id: 248519008 Client Smp ID: RE36-10-8287  
Inj Date : 21-MAR-2010 23:20  
Operator : nag1 Inst ID: MSD6.i  
Smp Info : |248519008|963133|1|SVM|1|LANL  
Misc Info : |MSD8270\_S|WBN100319-01  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD6.i/s032110.b/MSD6-M8270C-AQA-031610.m  
Meth Date : 23-Mar-2010 10:53 nat00999 Quant Type: ISTD  
Cal Date : 17-MAR-2010 04:51 Cal File: s6c1646.d  
Als bottle: 18  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-2199.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	30.09000	weight of sample
M	32.94800	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 29 Naphthalene-d8	4.687	2878119	40.000
* 91 Chrysene-d12	9.498	5510882	40.000
* 98 Perylene-d12	11.098	2642654	40.000

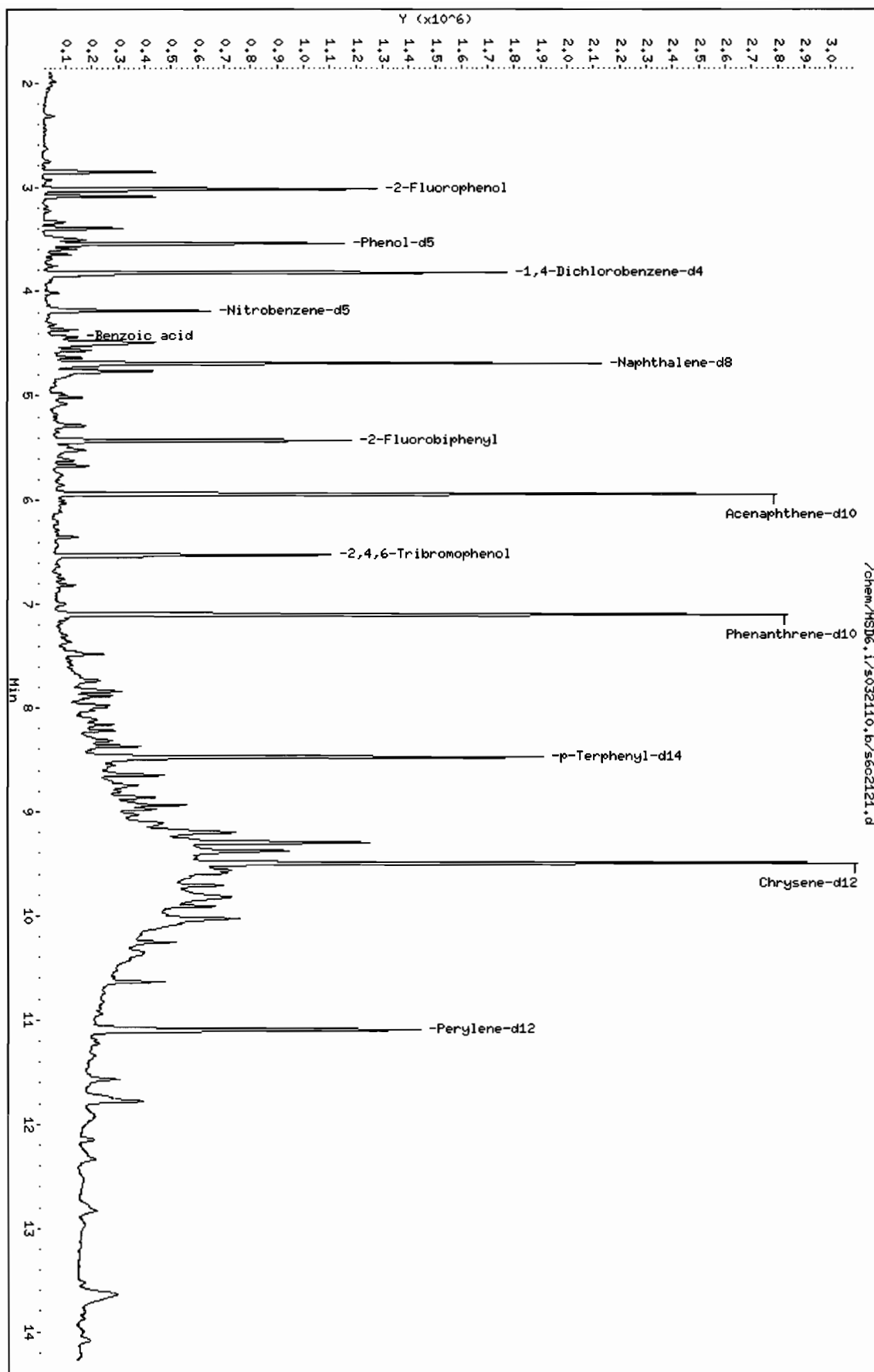
CONCENTRATIONS				QUANT			
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/u1)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
Unknown					CAS #:		
4.487	935238	12.9978997	644	0		0	29
Pentadecane					CAS #: 629-62-9		
8.645	762694	5.53591358	274	96	NIST05.L	66066	91
Unknown					CAS #:		
8.739	777246	5.64153596	280	0		0	91
Unknown					CAS #:		
8.857	759475	5.51254889	273	0		0	91
1-Phenanthrenecarboxylic acid, 1,2,3,4,4					CAS #: 1235-74-1		
8.939	1146801	8.32390462	412	98	NIST05.L	133618	91
Eicosane					CAS #: 112-95-8		
8.975	631342	4.58251033	227	98	NIST05.L	113489	91
Unknown					CAS #:		
9.028	817452	5.93336811	294	0		0	91
Unknown					CAS #:		
9.110	1475277	10.7080999	531	0		0	91
Unknown					CAS #:		
9.198	2374499	17.2349807	854	0		0	91
1-Phenanthrenecarboxylic acid, 1,2,3,4,4					CAS #: 1740-19-8		
9.298	2822558	20.4871566	1020	94	NIST05.L	125034	91
Unknown					CAS #:		
9.380	3244002	23.5461514	1170	0		0	91
Unknown					CAS #:		
9.563	1694683	12.3006310	610	0		0	91
Unknown					CAS #:		
9.592	1421206	10.3156348	511	0		0	91
Propanephosphonic acid, bis(trimethylsil					CAS #: 1000193-07-4		
9.716	1714307	12.4430689	617	84	NIST05.L	104395	91
Unknown					CAS #:		
9.822	4348886	31.5658053	1560	0		0	91

CONCENTRATIONS					QUANT		
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====
Octadecane, 1-chloro-				CAS #: 3386-33-2			
9.910	1763812	12.8023917	634	95	NIST05.L	117264	91
1-Docosene				CAS #: 1599-67-3			
10.027	2139183	15.5269704	770	96	NIST05.L	129889	91
Unknown				CAS #:			
10.257	1399721	10.1596863	504	0		0	91
Pyridine-3-carboxamide, oxime, N-(2-trif				CAS #: 288246-53-7			
10.351	1258250	19.0452374	944	93	NIST05.L	112295	98
Unknown				CAS #:			
10.633	1057135	16.0011048	793	0		0	98
Unknown				CAS #:			
11.569	530102	8.02377726	398	0		0	98
Unknown				CAS #:			
11.774	907928	13.7426598	681	0		0	98
.gamma.-Sitosterol				CAS #: 83-47-6			
13.639	853588	12.9201665	640	91	NIST05.L	174402	98

Data File: /chem/MSD6.1/s032110.b/s6c2121.d  
Date: 21-MAR-2010 23:20  
Client ID: RE36-10-8287  
Sample Info: 124851900819631311SWH11LANL  
Volume Injected (uL): 0.5  
Column phase: J&W DB-5MS

Instrument: MSD6.1  
Operator: nag1  
Column diameter: 0.20



Date : 21-MAR-2010 23:20

Client ID: RE36-10-8287

Instrument: MSD6.i

Sample Info: 1248519008196313311SVMI1ILANL

Volume Injected (uL): 0.5

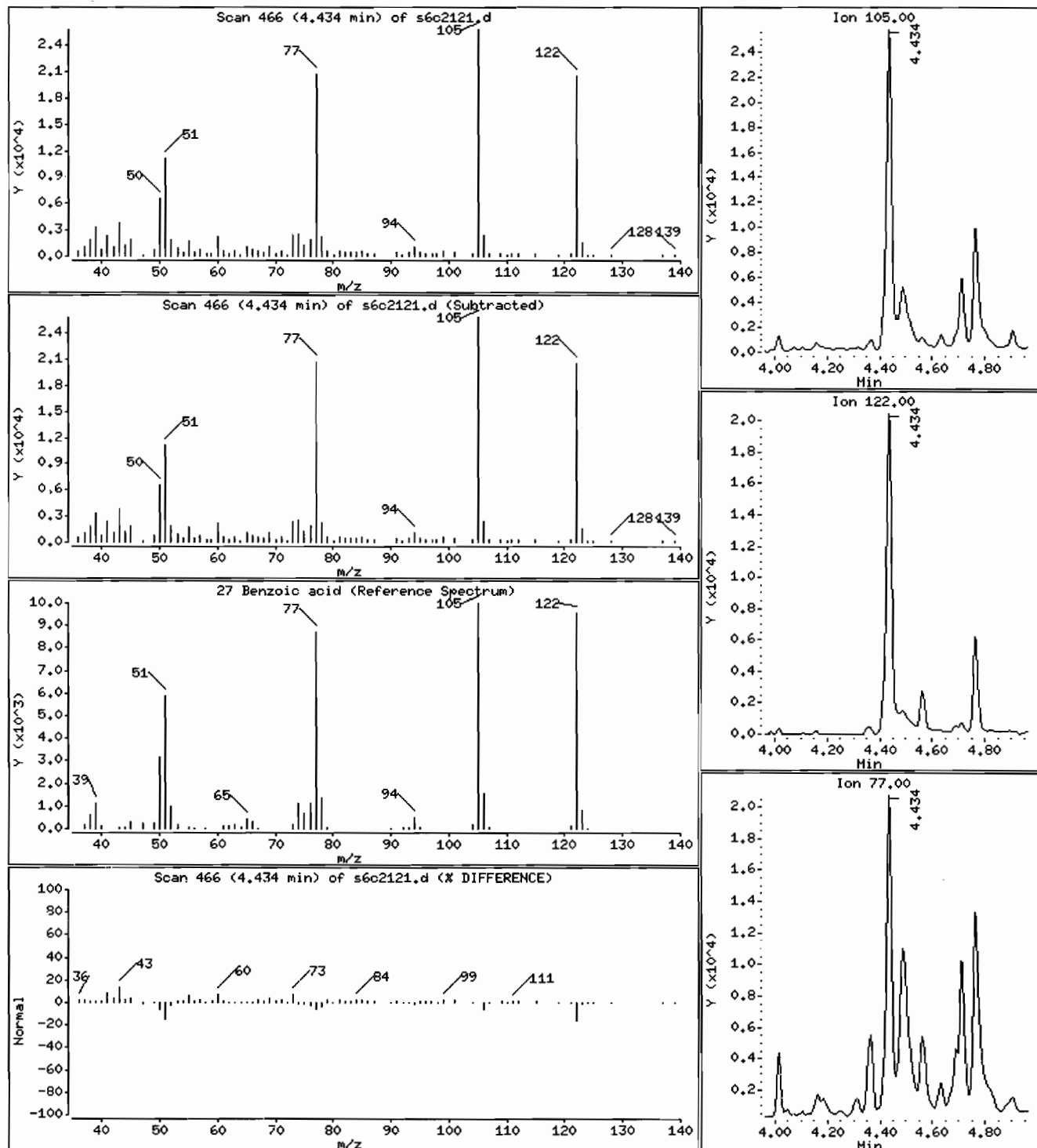
Operator: nag1

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

Column diameter: 0.20

27 Benzoic acid

Concentration: 355 ug/Kg





Date : 21-MAR-2010 23:20

Client ID: RE36-10-8287

Instrument: MSD6.i

Sample Info: 12485190081963133111SVH111LANL

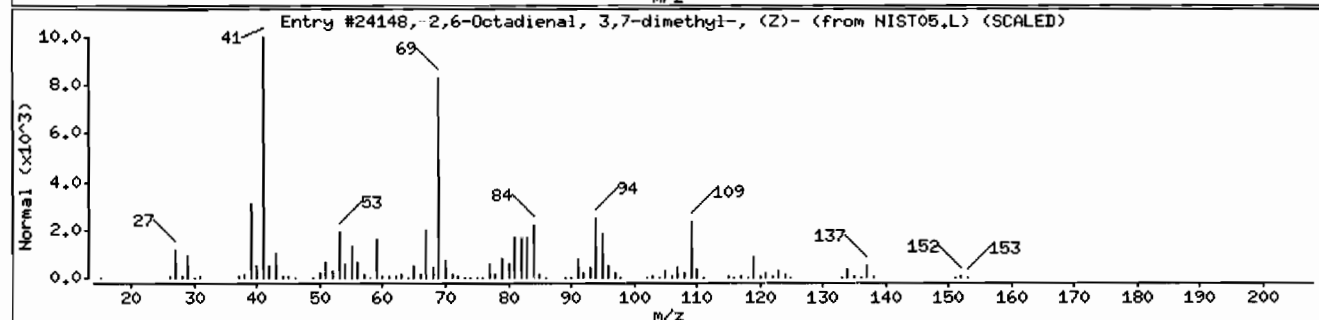
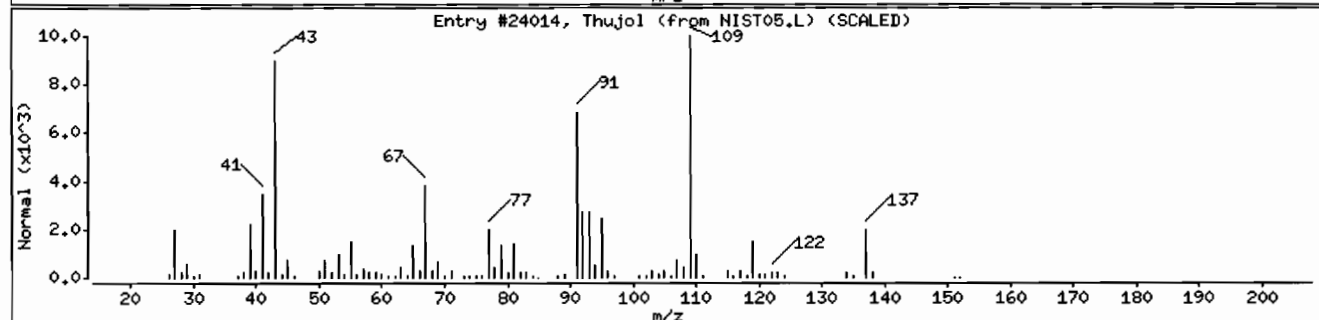
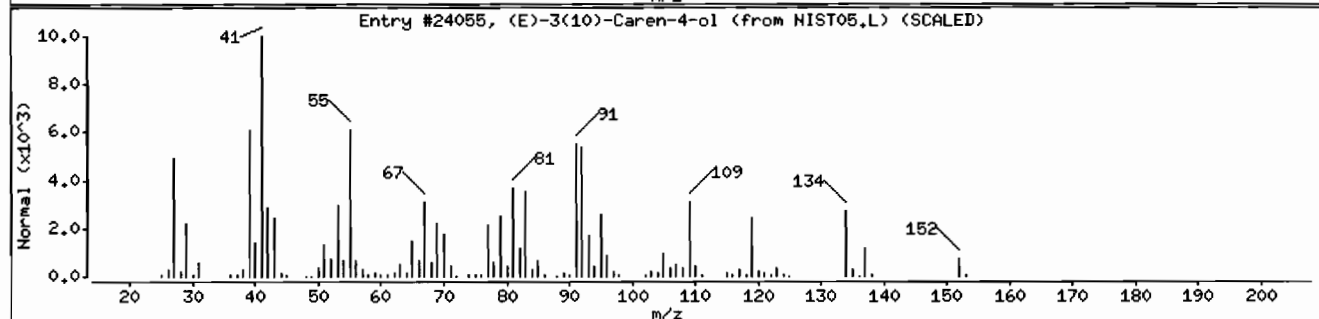
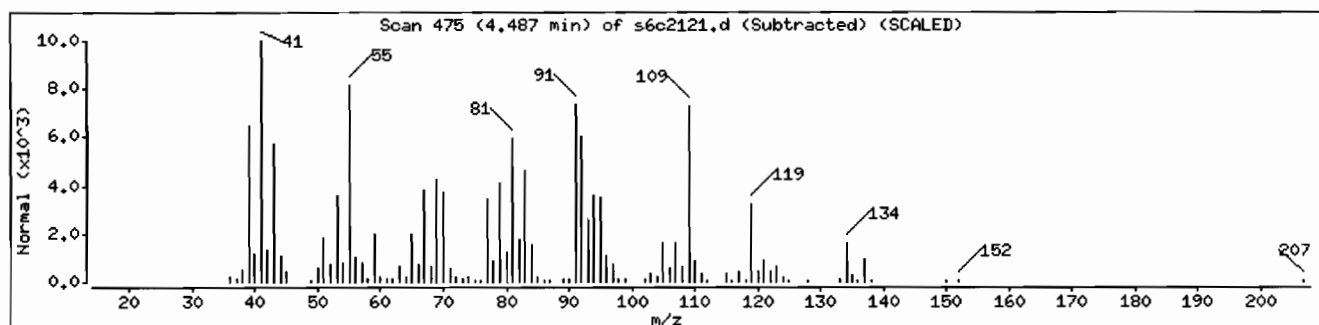
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
(E)-3(10)-Caren-4-ol	1753-35-1	NIST05.L	24055	52	C10H16O	152
Thujol	1000152-08-2	NIST05.L	24014	35	C10H16O	152
2,6-Octadienal, 3,7-dimethyl-, (Z)-	106-26-3	NIST05.L	24148	35	C10H16O	152



Date : 21-MAR-2010 23:20

Client ID: RE36-10-8287

Instrument: MSD6.i

Sample Info: 12485190081963133111SVH111LANL

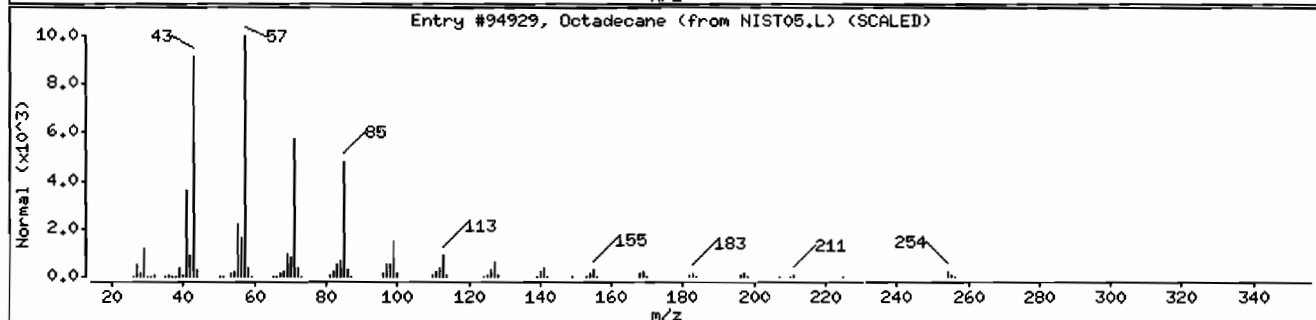
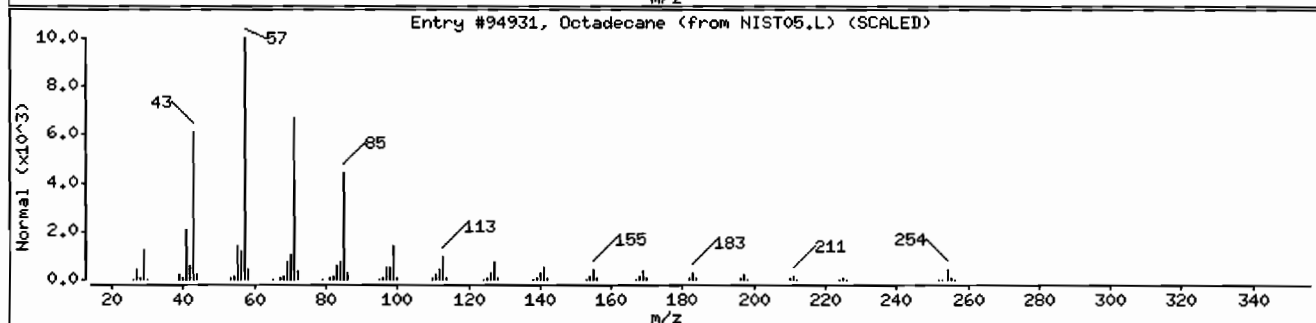
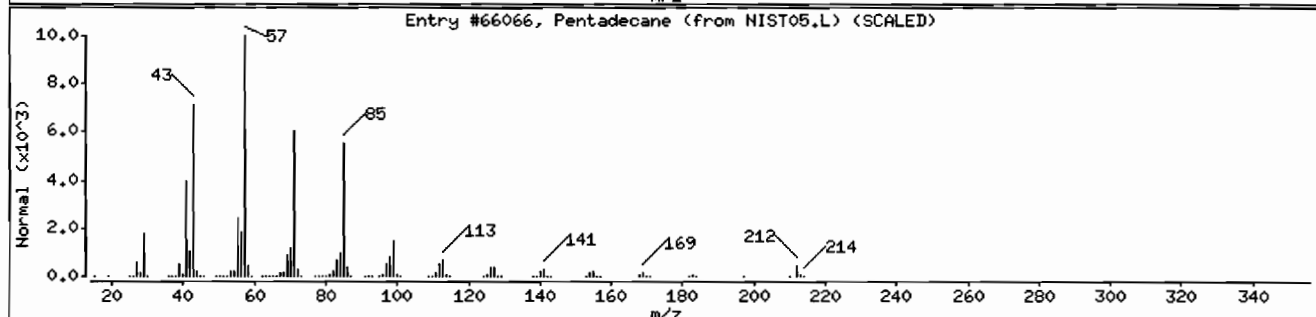
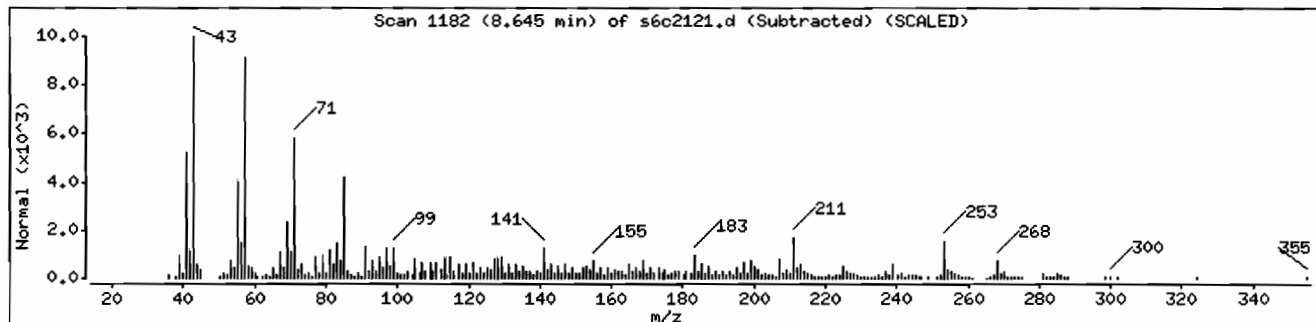
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Pentadecane	629-62-9	NIST05.L	66066	96	C <sub>15</sub> H <sub>32</sub>	212
Octadecane	593-45-3	NIST05.L	94931	95	C <sub>18</sub> H <sub>38</sub>	254
Octadecane	593-45-3	NIST05.L	94929	93	C <sub>18</sub> H <sub>38</sub>	254



Date : 21-MAR-2010 23:20

Client ID: RE36-10-8287

Instrument: HSD6.i

Sample Info: 1248519008196313311SVH111LANL

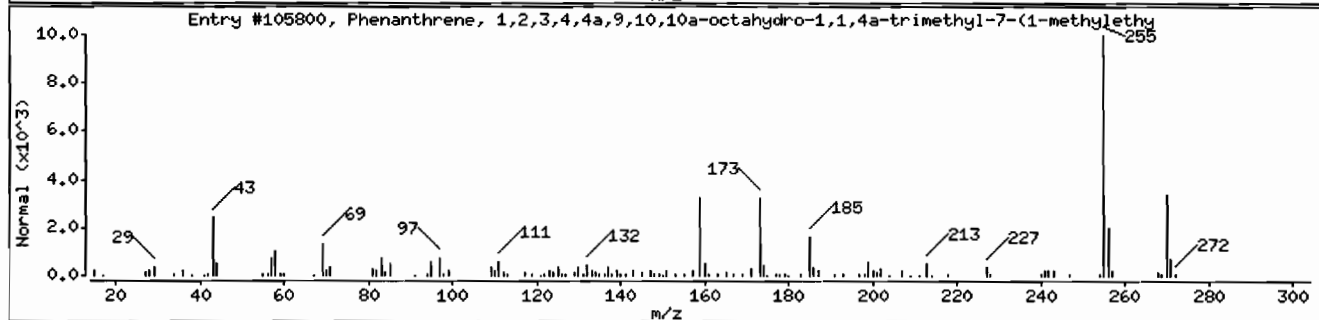
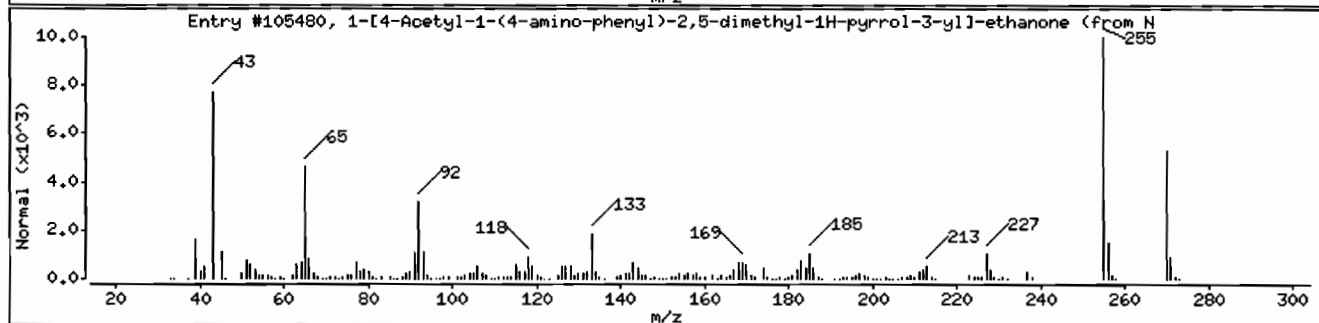
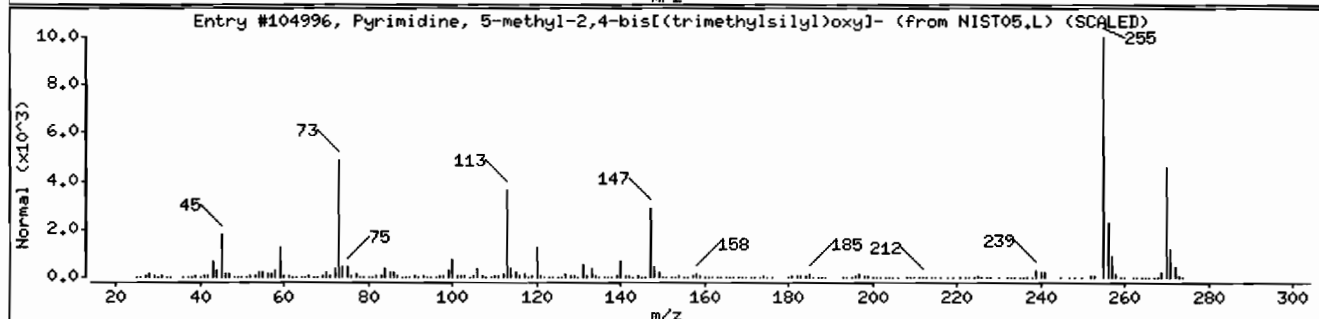
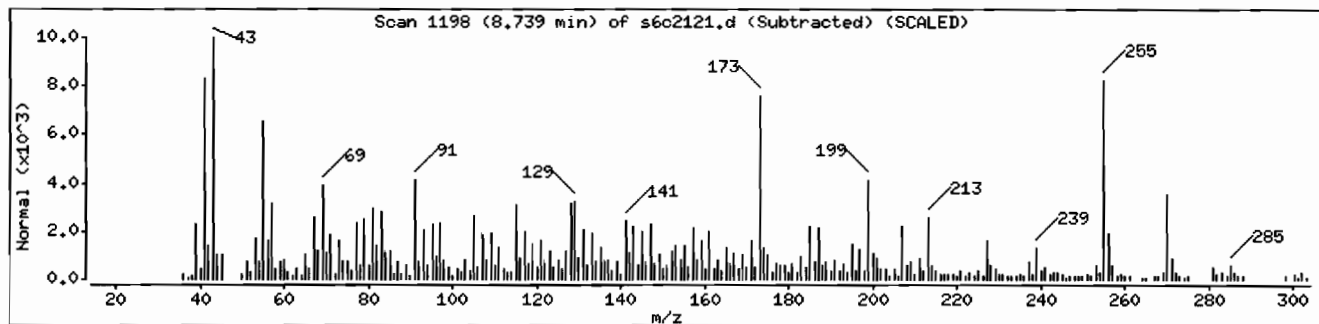
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Pyrimidine, 5-methyl-2,4-bis[(trimethylsilyl)oxy]-	7288-28-0	NIST05.L	104996	47	C <sub>11</sub> H <sub>22</sub> N <sub>2</sub> O <sub>2</sub> Si <sub>2</sub>	270
1-[4-Acetyl-1-(4-amino-phenyl)-2,5-dimet	1000300-67-2	NIST05.L	105480	38	C <sub>16</sub> H <sub>18</sub> N <sub>2</sub> O <sub>2</sub>	270
Phenanthrene, 1,2,3,4,4a,9,10,10a-octahy	19407-28-4	NIST05.L	105800	38	C <sub>20</sub> H <sub>12</sub>	270



Date : 21-MAR-2010 23:20

Client ID: RE36-10-8287

Instrument: MSD6.i

Sample Info: 1248519008196313311SVMI1ILANL

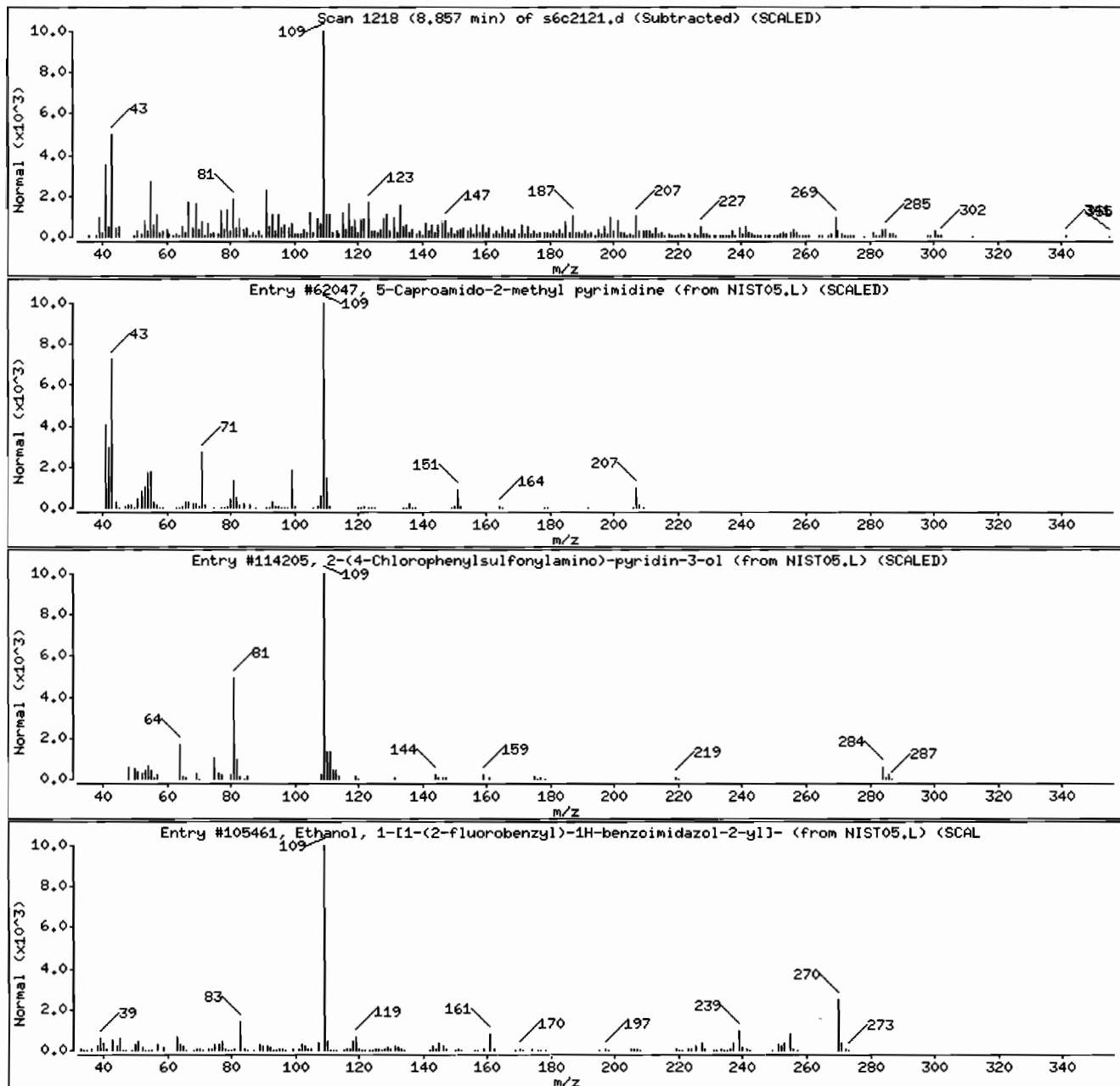
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
5-Caproamido-2-methyl pyrimidine	1000213-95-8	NIST05.L	62047	43	C11H17N3O	207
2-(4-Chlorophenylsulfonylamino)-pyridin-	296772-59-3	NIST05.L	114205	43	C11H9ClN2O3S	284
Ethanol, 1-[1-(2-fluorobenzyl)-1H-benzoi	1000305-05-0	NIST05.L	105461	41	C16H15FN2O	270



Date : 21-MAR-2010 23:20

Client ID: RE36-10-8287

Instrument: HSD6.i

Sample Info: I248519008196313311SVH111LANL

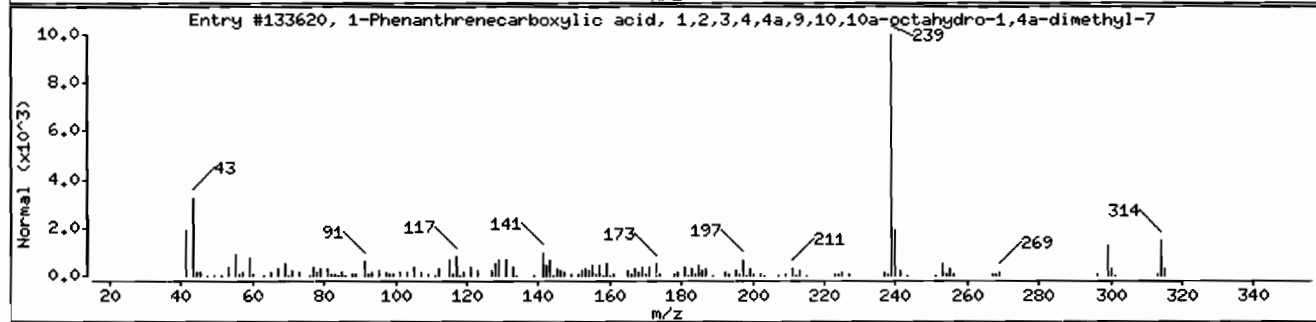
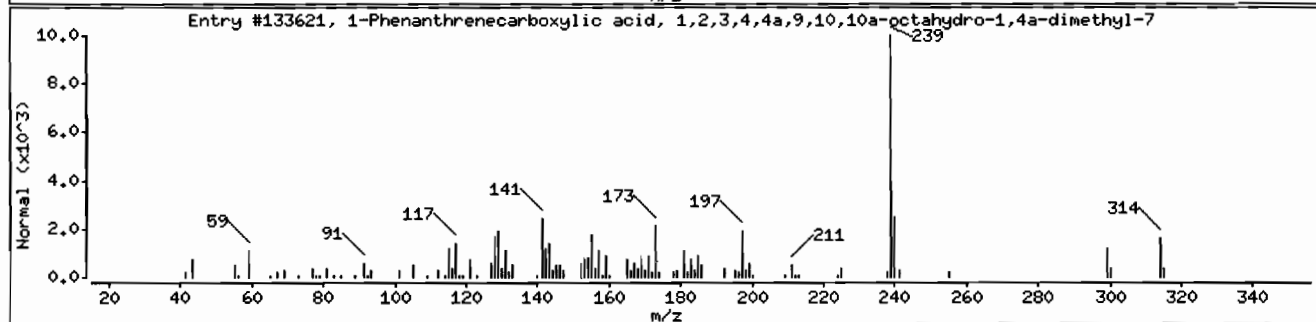
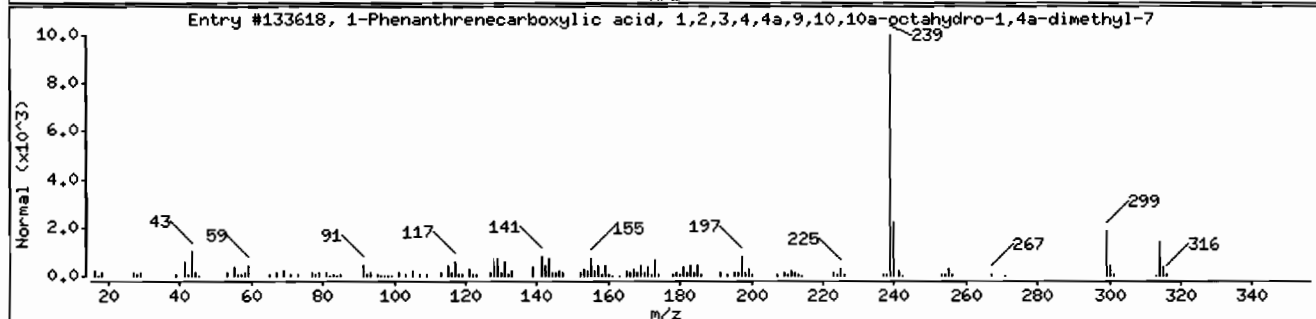
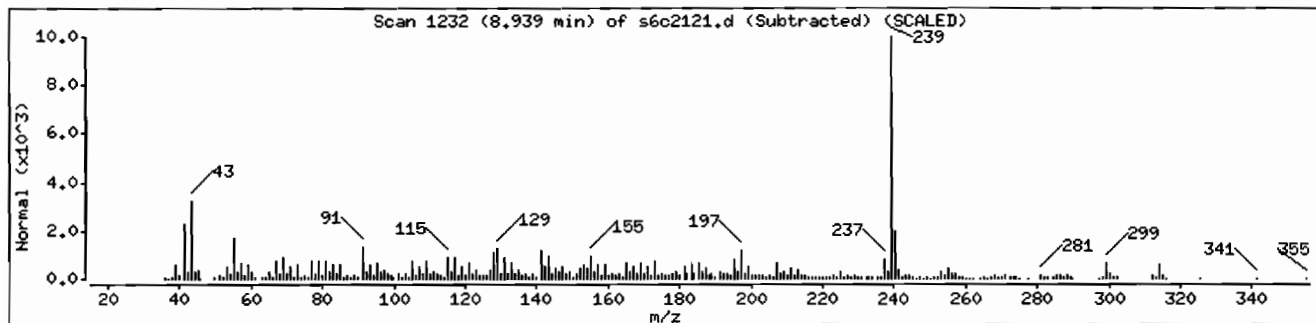
Volume Injected (uL): 0.5

Operator: nag1

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	96	C21H30O2	314
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133620	90	C21H30O2	314



Date : 21-MAR-2010 23:20

Client ID: RE36-10-8287

Instrument: MSD6.i

Sample Info: I248519008196313311SVMI11LANL

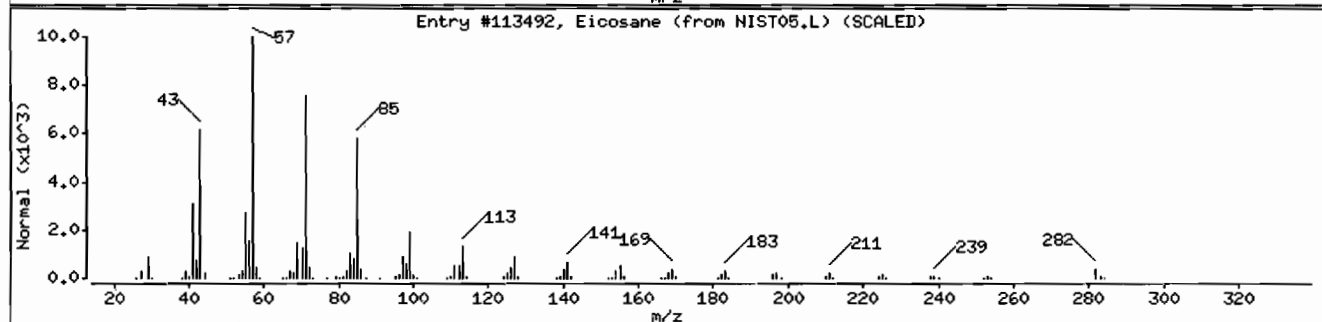
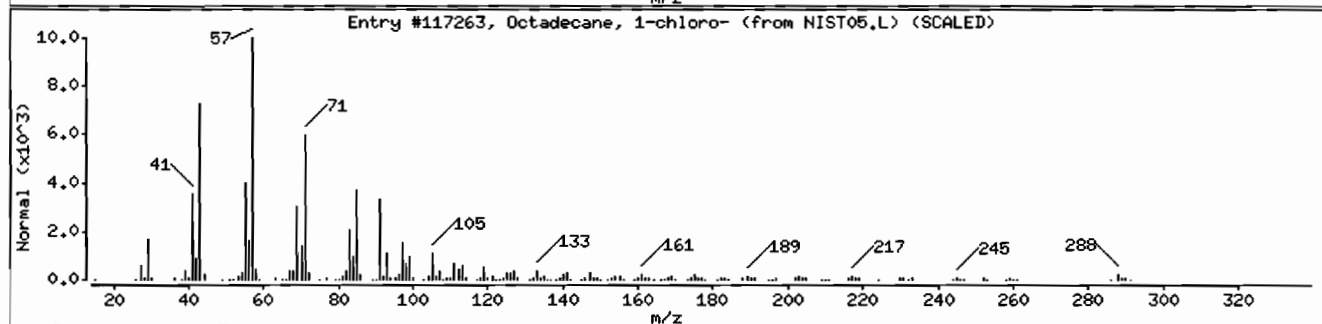
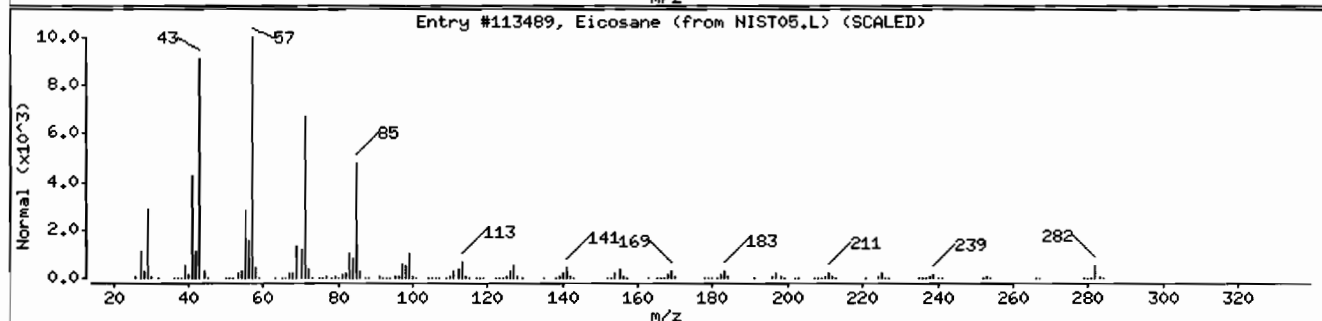
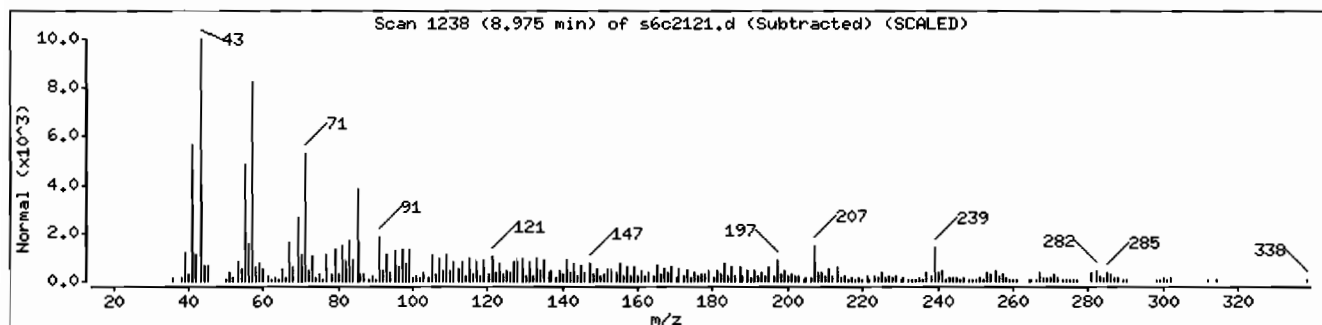
Volume Injected (uL): 0.5

Operator: nag1

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	98	C20H42	282
Octadecane, 1-chloro-	3386-33-2	NIST05.L	117263	96	C18H37Cl	288
Eicosane	112-95-8	NIST05.L	113492	96	C20H42	282



Date : 21-MAR-2010 23:20

Client ID: RE36-10-8287

Instrument: MSD6.i

Sample Info: 12485190081963133111SVMI11LANL

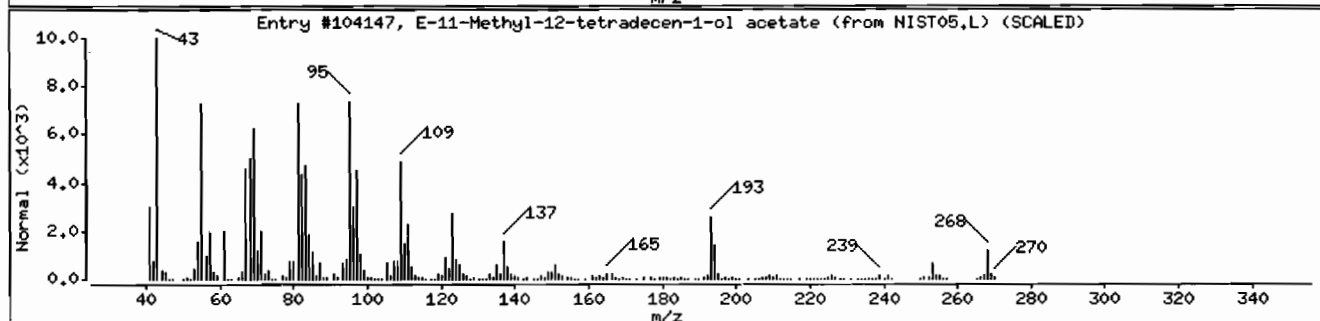
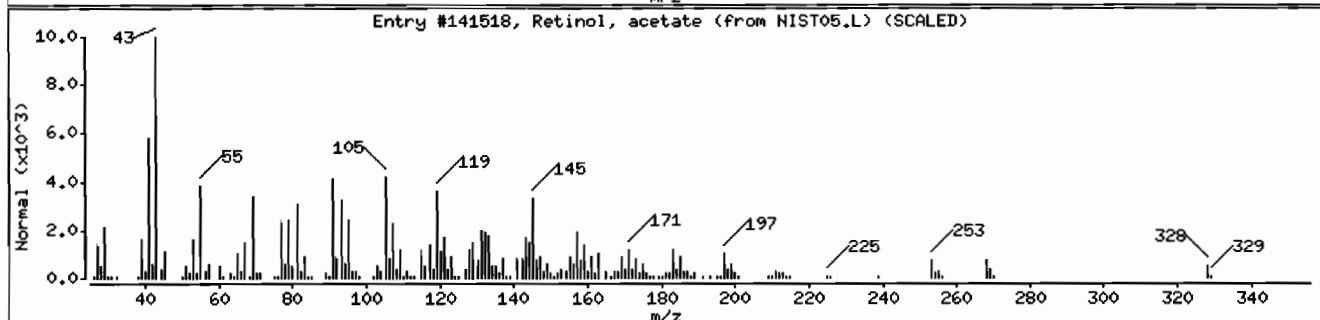
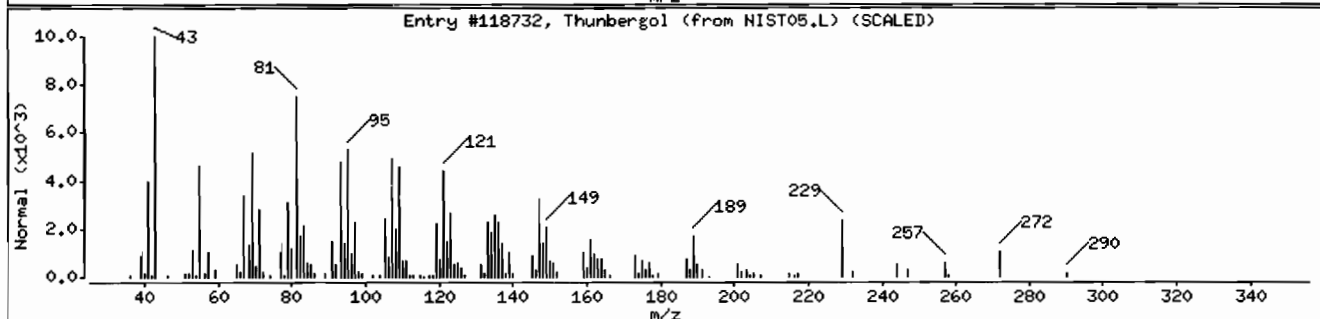
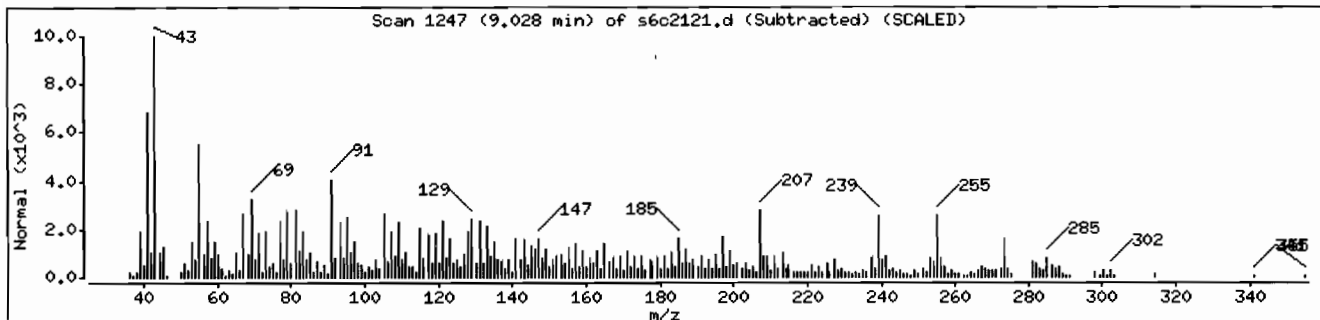
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Thunbergol	25269-17-4	NIST05.L	118732	46	C20H34O	290
Retinol, acetate	127-47-9	NIST05.L	141518	16	C22H32O2	328
E-11-Methyl-12-tetradecen-1-ol acetate	1000130-80-7	NIST05.L	104147	15	C17H32O2	268



Date : 21-MAR-2010 23:20

Client ID: RE36-10-8287

Instrument: MSD6.i

Sample Info: I248519008196313311ISVH111LANL

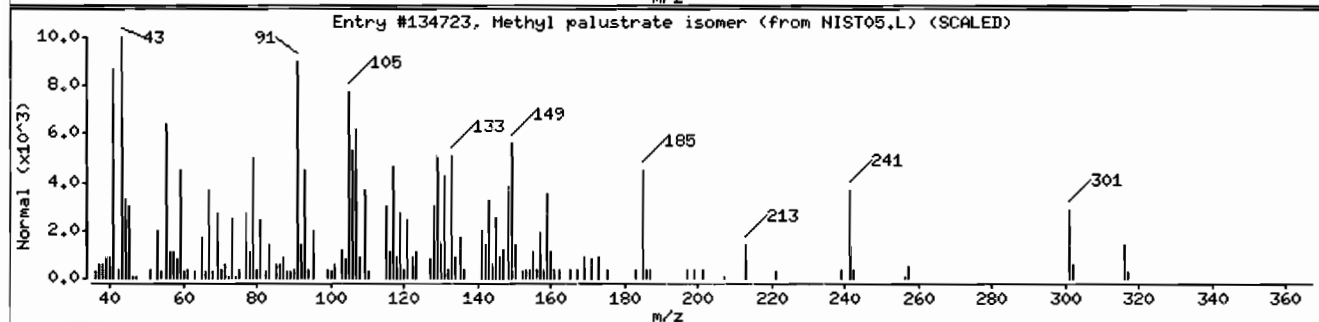
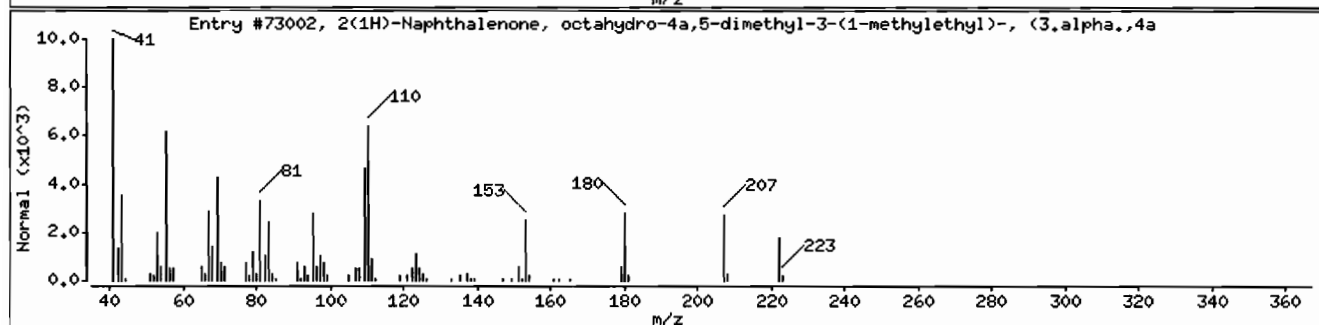
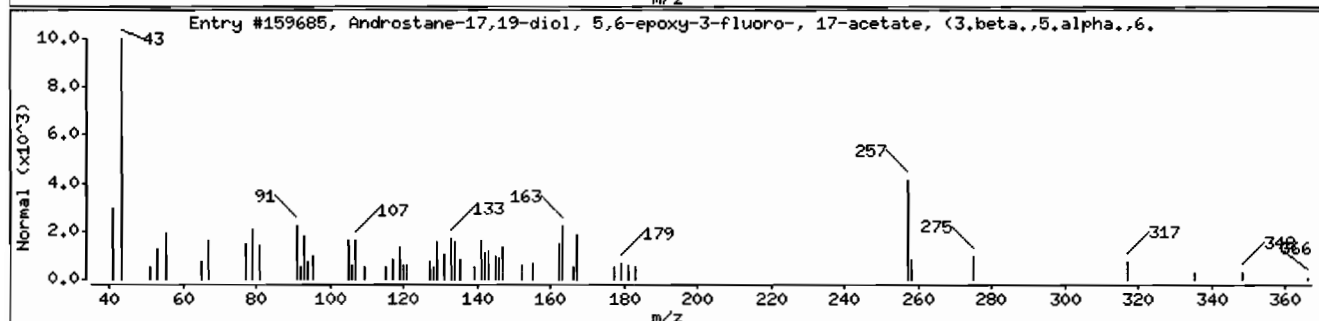
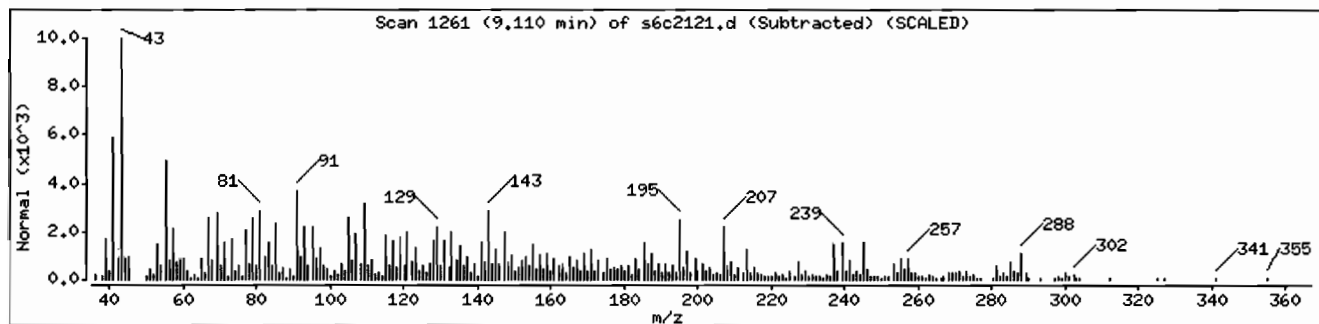
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Androstane-17,19-diol, 5,6-epoxy-3-fluor	40242-94-2	NIST05.L	159685	12	C21H31F04	366
2(1H)-Naphthalenone, octahydro-4a,5-dime	55332-04-2	NIST05.L	73002	11	C15H26O	222
Methyl palustrate isomer	3310-94-9	NIST05.L	134723	10	C21H32O2	316





Date : 21-MAR-2010 23:20

Client ID: RE36-10-8287

Instrument: MSD6.i

Sample Info: I248519008196313311SVMI1ILANL

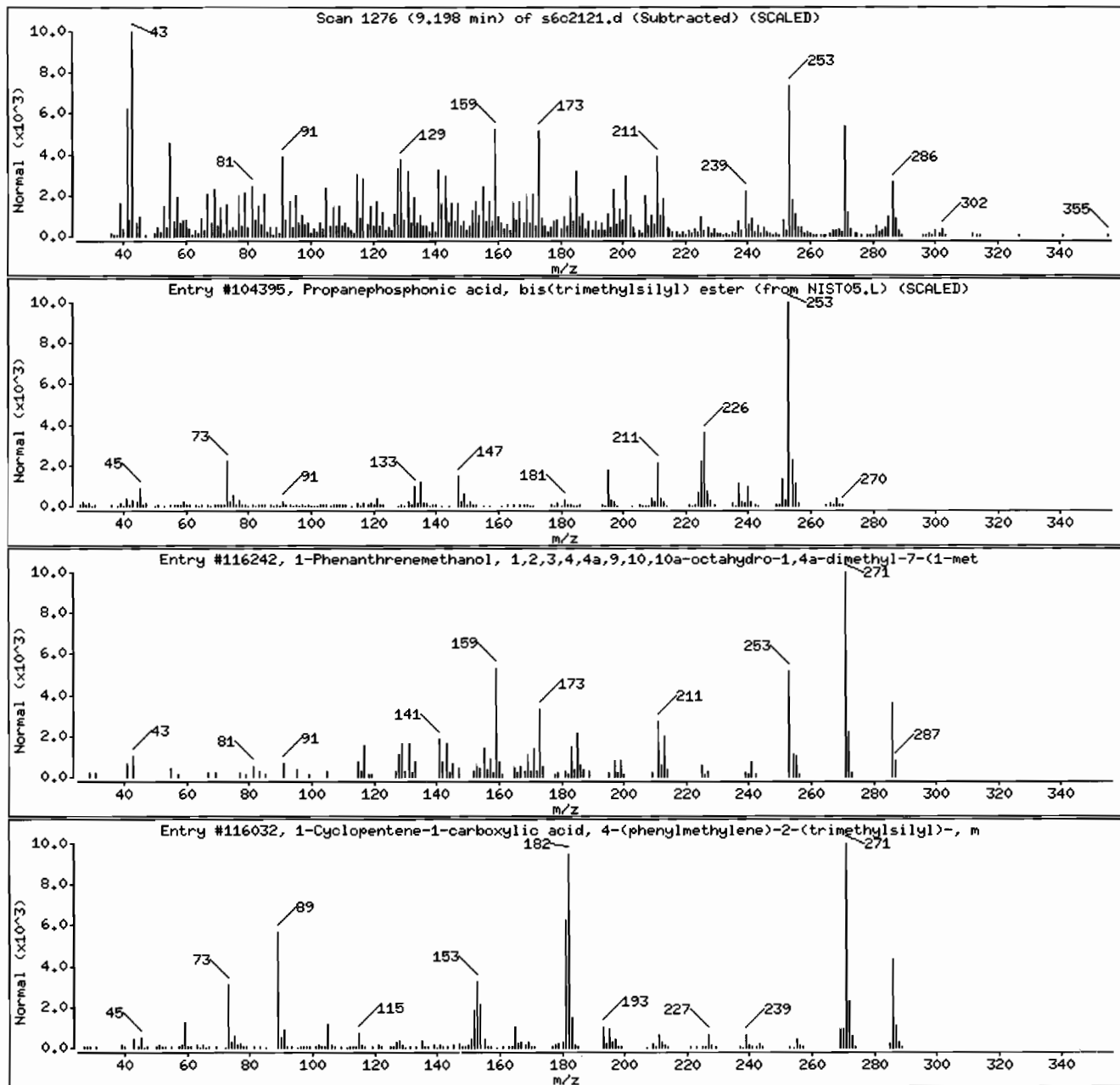
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propanephosphonic acid, bis(trimethylsilyl	1000193-07-4	NIST05.L	104395	47	C9H25O3PSi2	268
1-Phenanthrenemethanol, 1,2,3,4,4a,9,10,	24035-43-6	NIST05.L	116242	46	C20H30O	286
1-Cyclopentene-1-carboxylic acid, 4-(phe	95797-98-1	NIST05.L	116032	41	C17H22O2Si	286



Date: 21-MAR-2010 23:20

Client ID: RE36-10-8287

Instrument: MSD6.i

Sample Info: 1248519008196313311SVMI11LANL

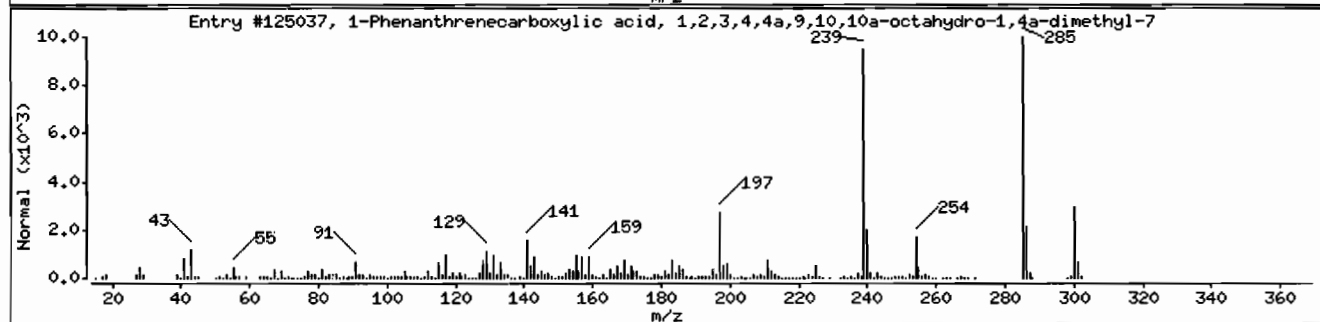
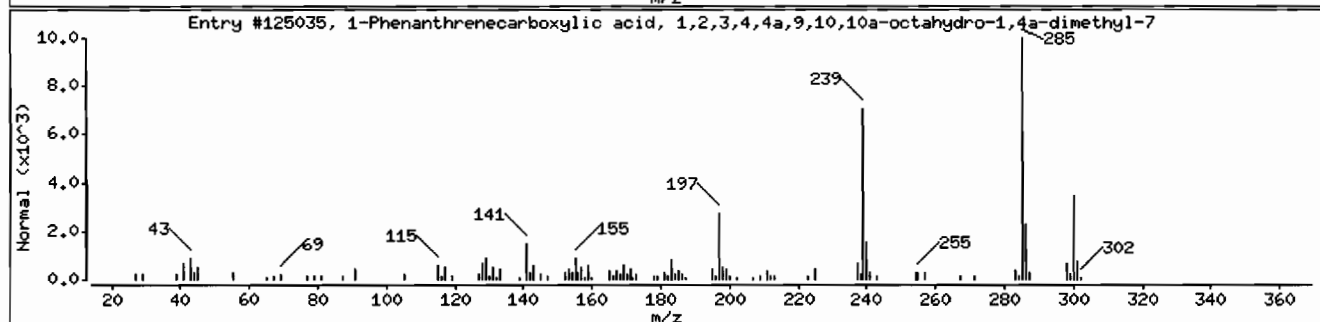
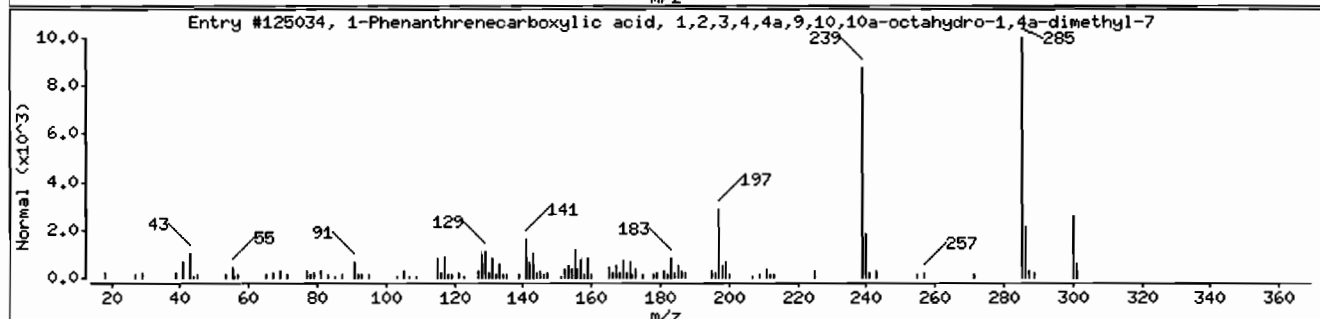
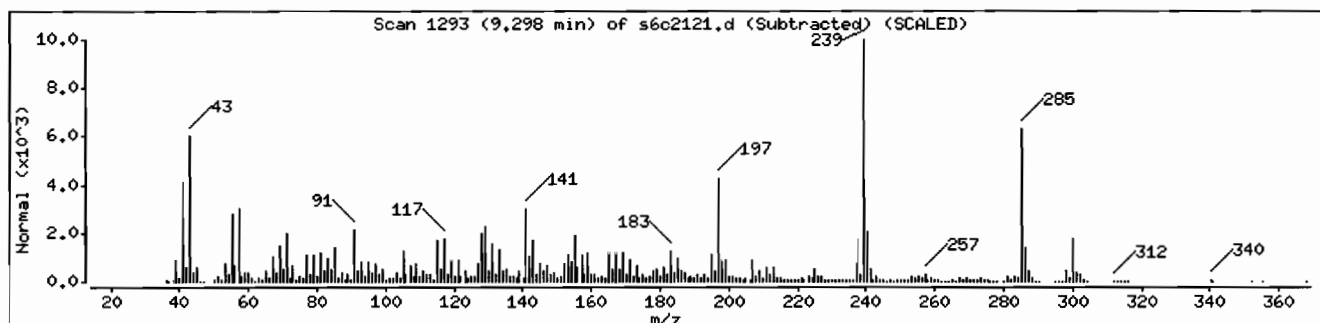
Volume Injected (uL): 0.5

Operator: nag1

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	1740-19-8	NIST05.L	125034	94	C20H28O2	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	5155-70-4	NIST05.L	125035	87	C20H28O2	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125037	87	C20H28O2	300



Date : 21-MAR-2010 23:20

Client ID: RE36-10-8287

Instrument: MSD6.i

Sample Info: 1248519008196313311ISVH11ILANL

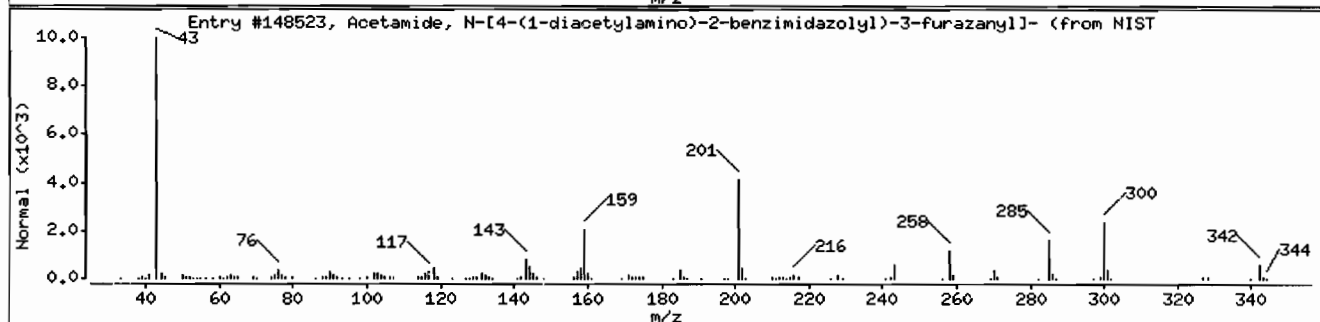
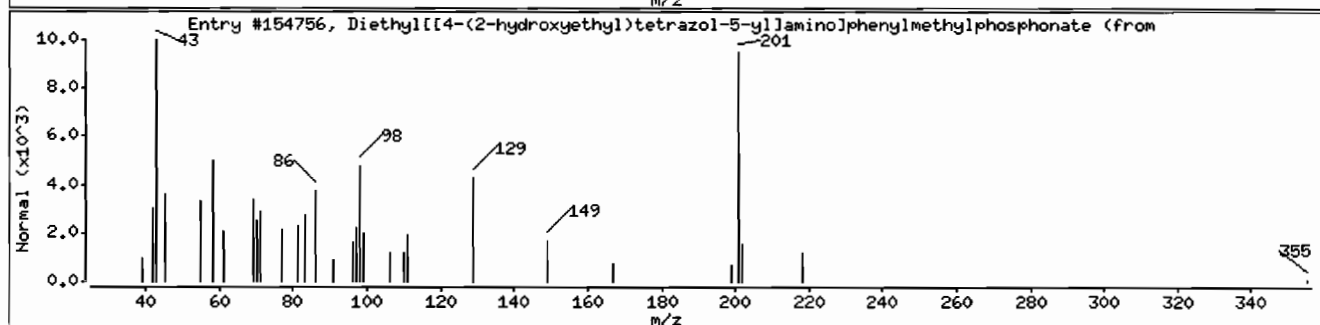
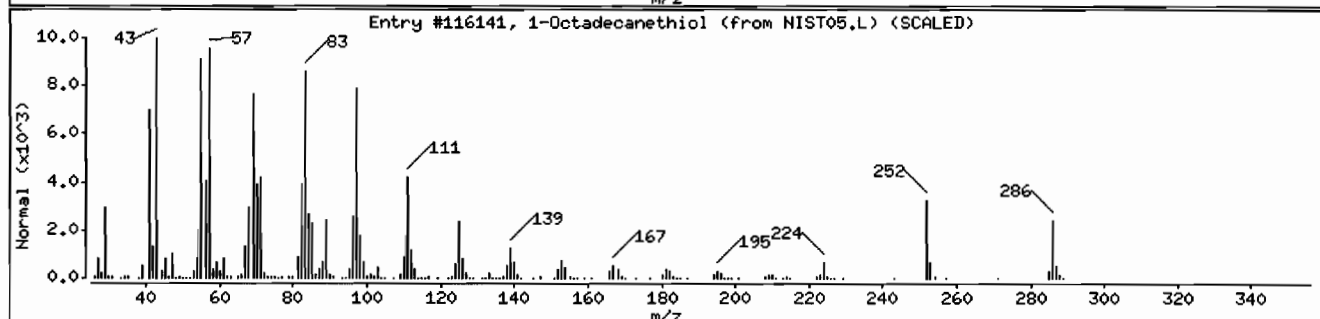
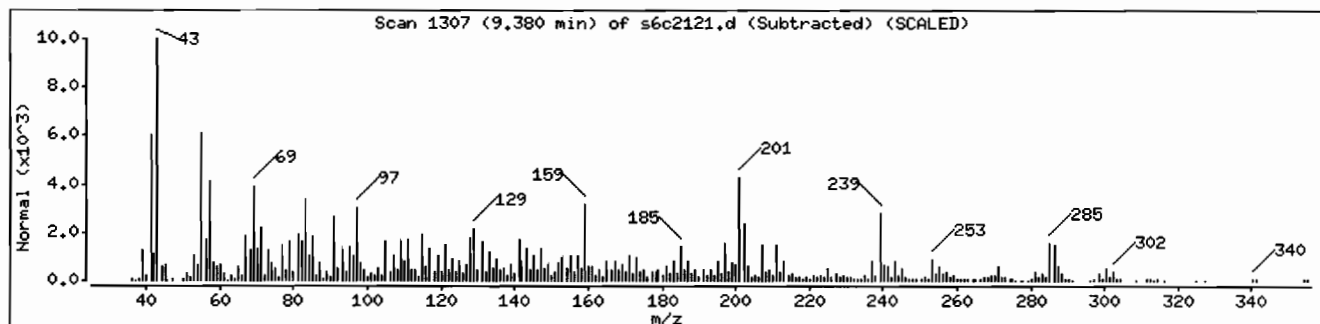
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1-Octadecanethiol	2885-00-9	NIST05.L	116141	44	C18H38S	286
Diethyl[[4-(2-hydroxyethyl)tetrazol-5-yl	1000298-98-8	NIST05.L	154756	12	C14H22N5O4P	355
Acetamide, N-[4-(1-diacetylamino)-2-benz	299923-18-5	NIST05.L	148523	12	C15H14N6O4	342



Date : 21-MAR-2010 23:20

Client ID: RE36-10-8287

Instrument: MSD6.i

Sample Info: I248519008I963133I1ISVH11ILANL

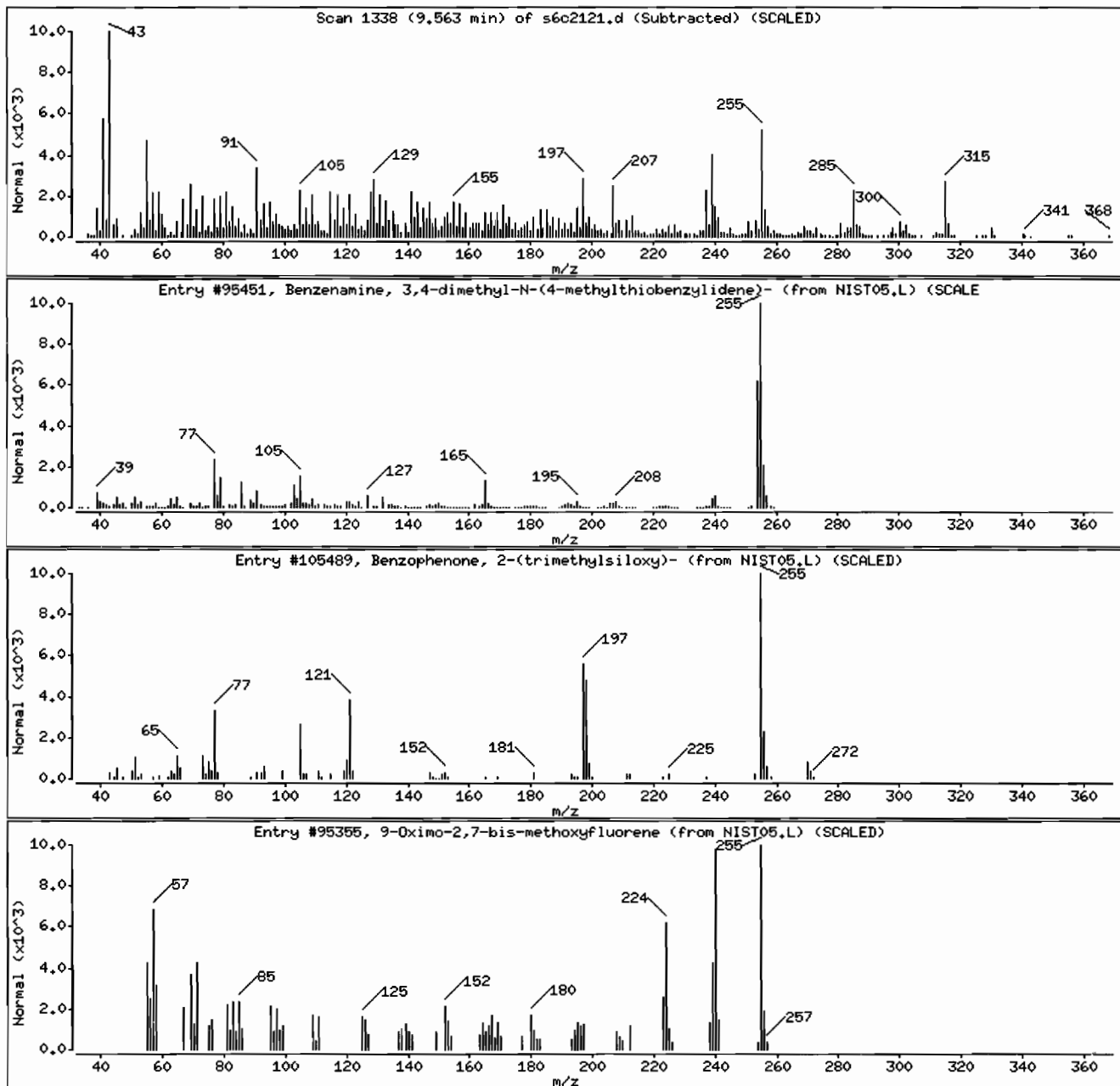
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Benzenamine, 3,4-dimethyl-N-(4-methylthi	315670-90-7	NIST05.L	95451	25	C16H17NS	255
Benzophenone, 2-(trimethylsiloxy)-	33342-95-9	NIST05.L	105489	25	C16H18O2Si	270
9-Oximo-2,7-bis-methoxyfluorene	299443-44-0	NIST05.L	95355	15	C15H13NO3	255



Date : 21-MAR-2010 23:20

Client ID: RE36-10-8287

Instrument: MSD6.i

Sample Info: I248519008196313311SVMI1ILANL

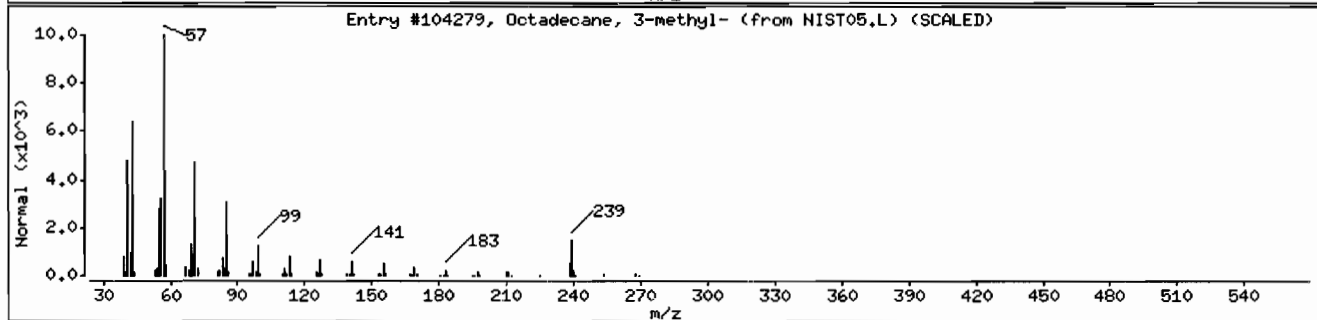
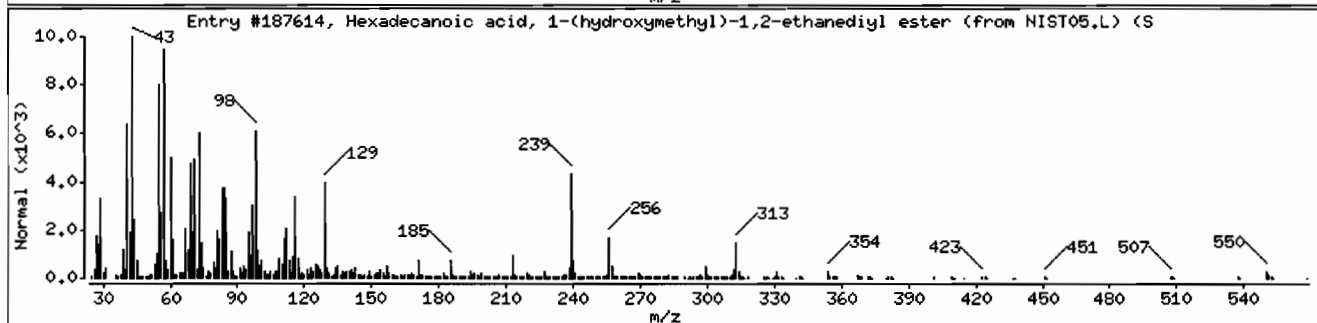
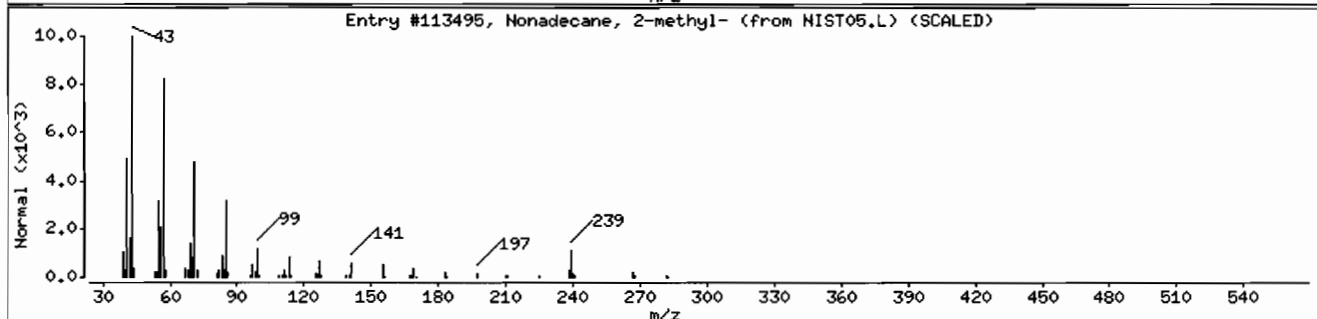
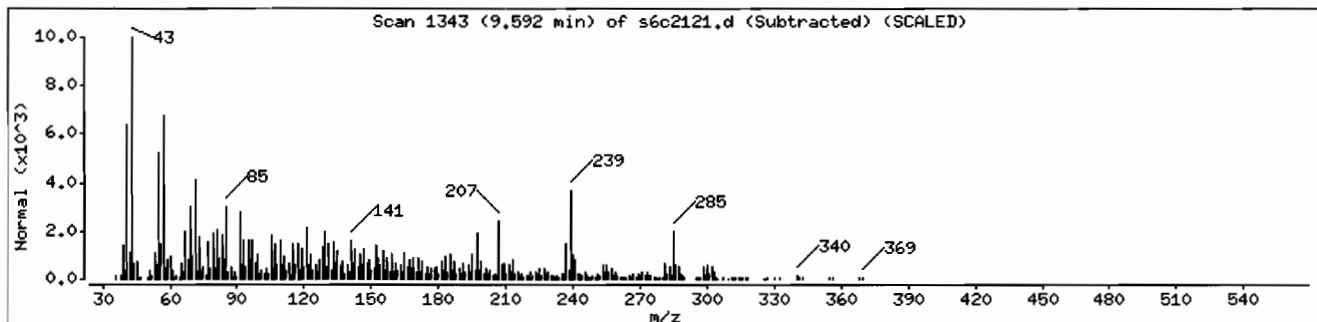
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Nonadecane, 2-methyl-	1560-86-7	NIST05.L	113495	50	C <sub>20</sub> H <sub>42</sub>	282
Hexadecanoic acid, 1-(hydroxymethyl)-1,2	761-35-3	NIST05.L	187614	38	C <sub>35</sub> H <sub>68</sub> O <sub>5</sub>	569
Octadecane, 3-methyl-	6561-44-0	NIST05.L	104279	32	C <sub>19</sub> H <sub>40</sub>	268



Date : 21-MAR-2010 23:20

Client ID: RE36-10-8287

Instrument: MSD6.i

Sample Info: I248519008196313311SVH111LANL

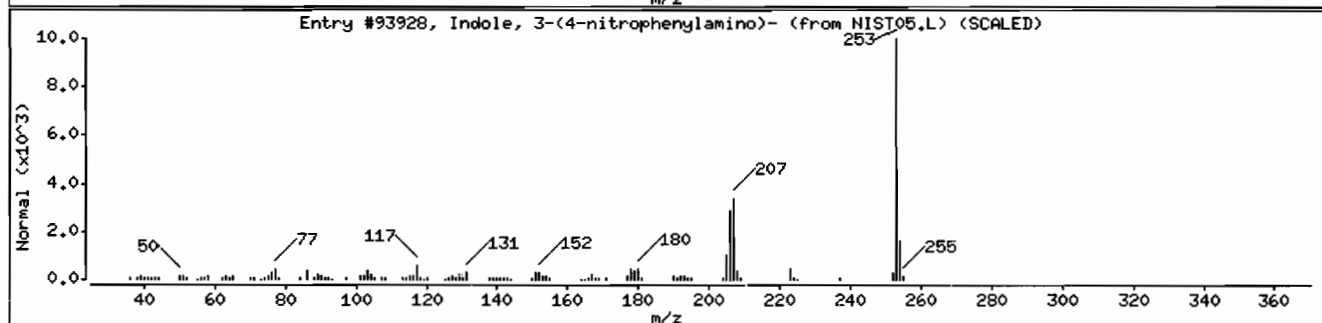
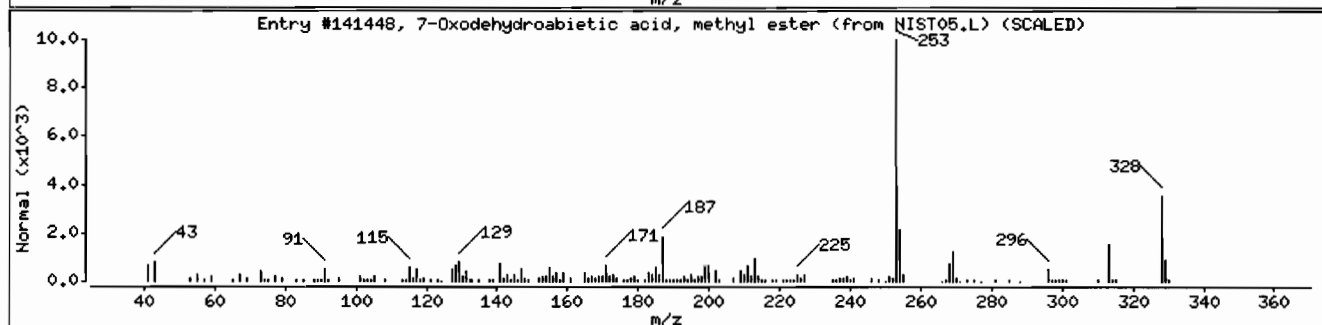
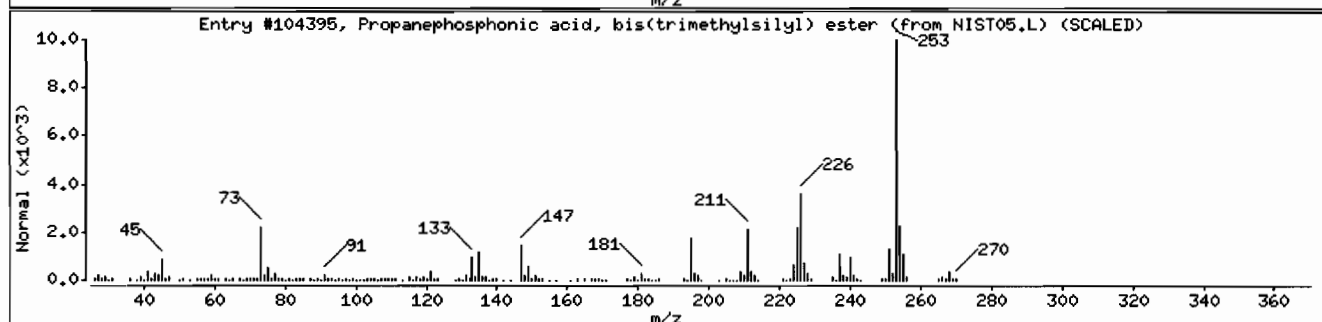
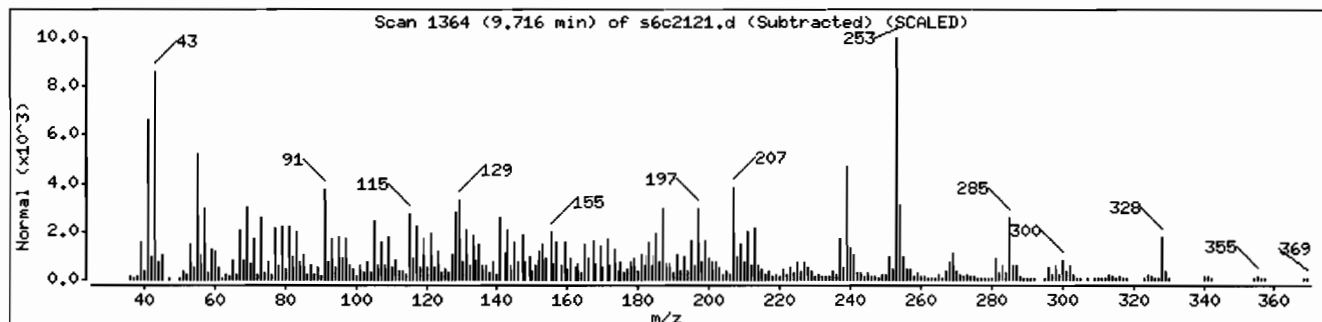
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Propanephosphonic acid, bis(trimethylsil	1000193-07-4	NIST05.L	104395	84	C9H25O3PSi2	268
7-Oxodehydroabiatic acid, methyl ester	110936-78-2	NIST05.L	141448	46	C21H28O3	328
Indole, 3-(4-nitrophenylamino)-	167954-19-0	NIST05.L	93928	43	C14H11N3O2	253



Date : 21-MAR-2010 23:20

Client ID: RE36-10-8287

Instrument: MSD6.i

Sample Info: 1248519008196313311SVH111LANL

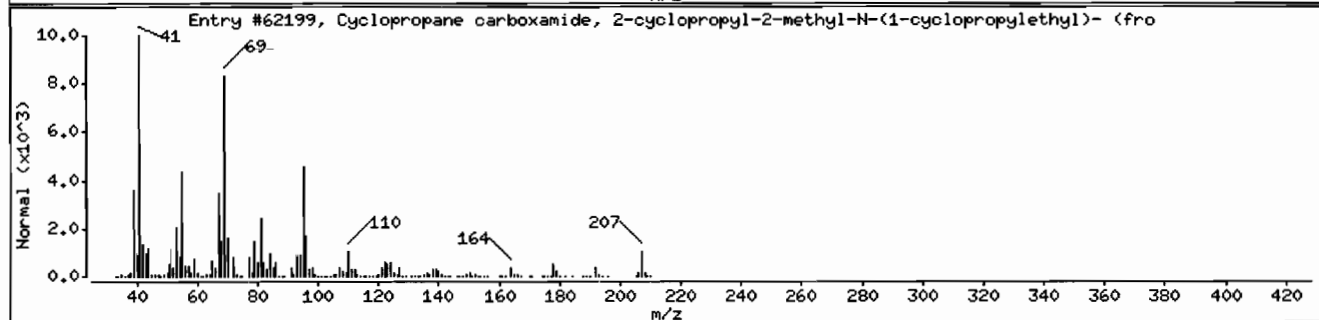
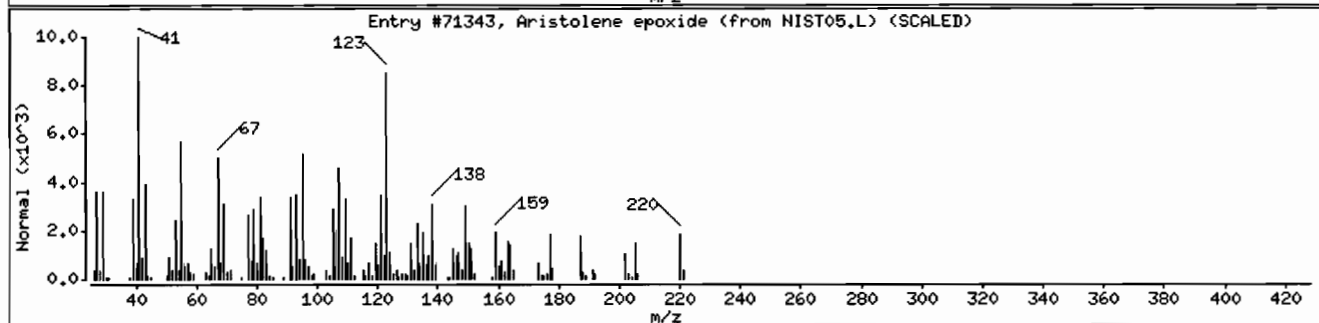
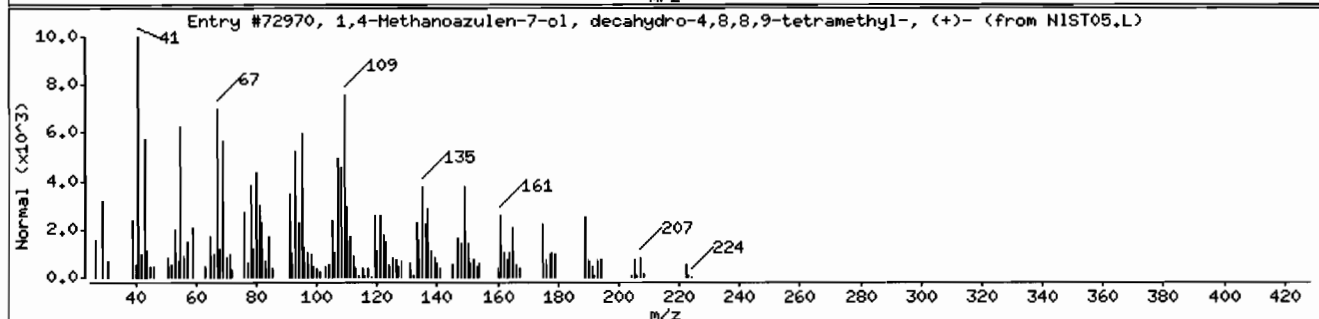
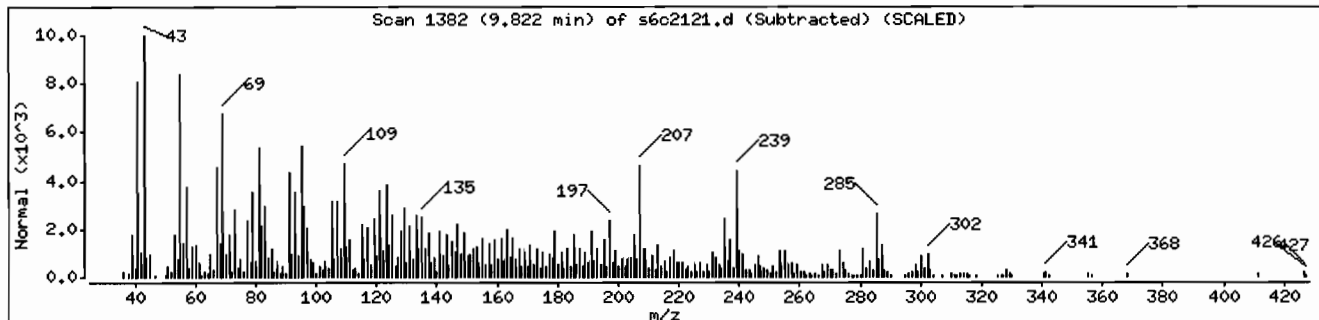
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,4-Methanoazulen-7-ol, decahydro-4,8,8,	18319-27-2	NIST05.L	72970	45	C15H26O	222
Aristolene epoxide	1000151-48-9	NIST05.L	71343	45	C15H24O	220
Cyclopropane carboxamide, 2-cyclopropyl-	331416-19-4	NIST05.L	62199	45	C13H21NO	207



Date : 21-MAR-2010 23:20

Client ID: RE36-10-8287

Instrument: MSD6.i

Sample Info: I248519008I9631331I1SVMI1ILANL

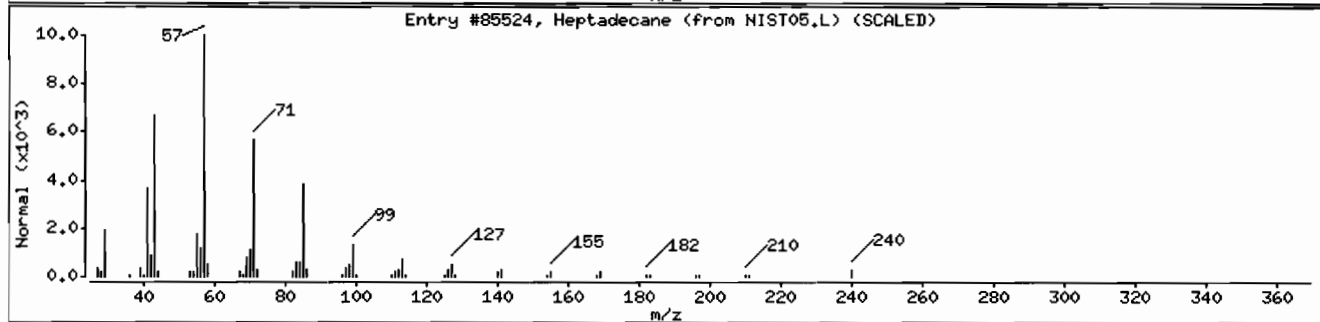
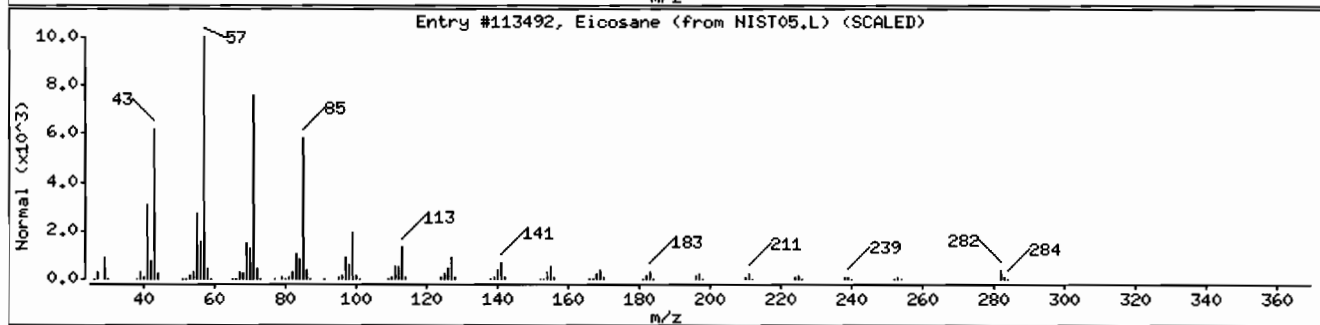
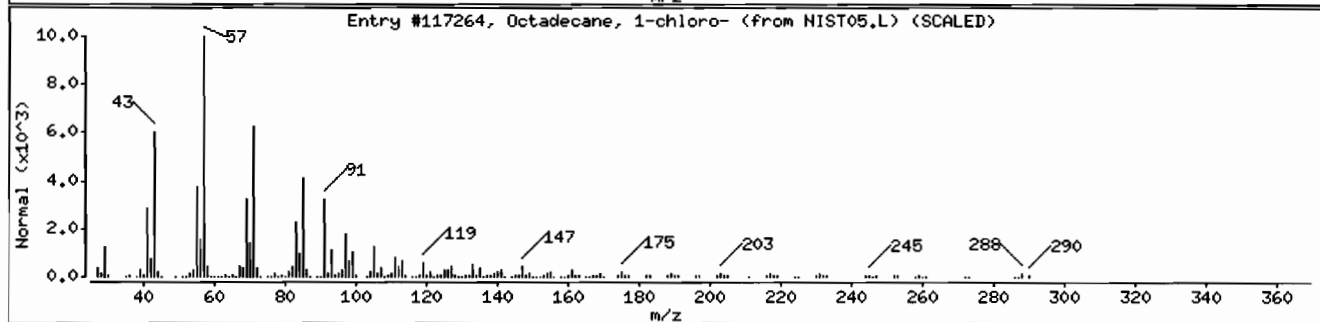
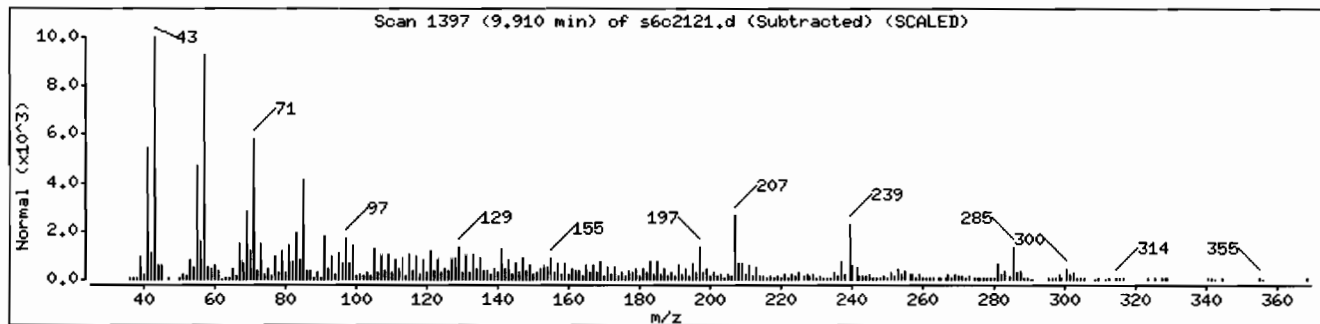
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Octadecane, 1-chloro-	3386-33-2	NIST05.L	117264	95	C18H37Cl	288
Eicosane	112-95-8	NIST05.L	113492	95	C20H42	282
Heptadecane	629-78-7	NIST05.L	85524	91	C17H36	240





Date : 21-MAR-2010 23:20

Client ID: RE36-10-8287

Instrument: MSD6.i

Sample Info: I248519008196313311SVHI11LANL

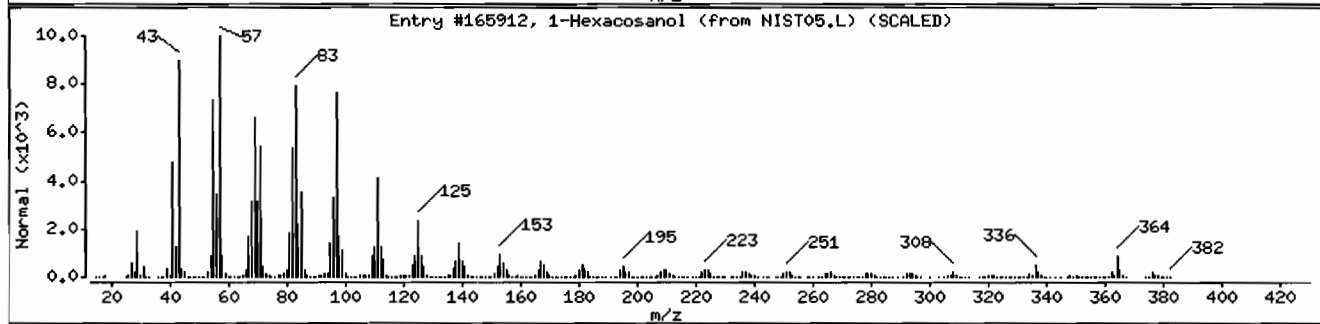
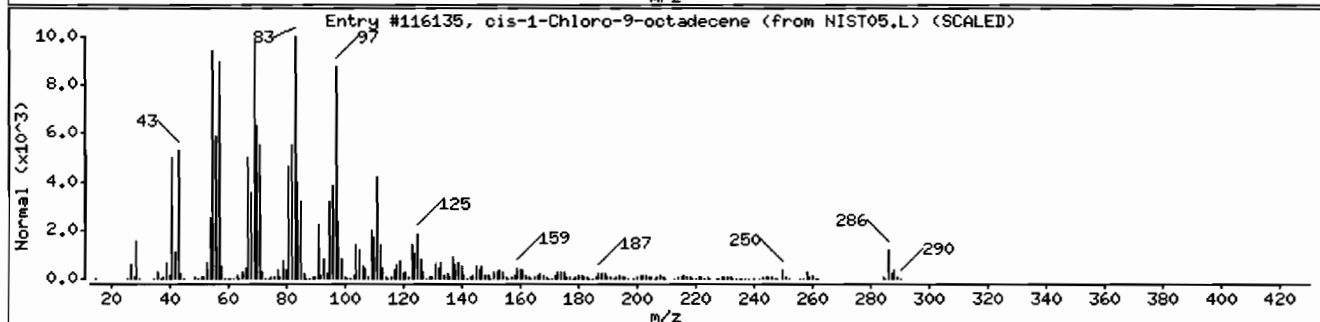
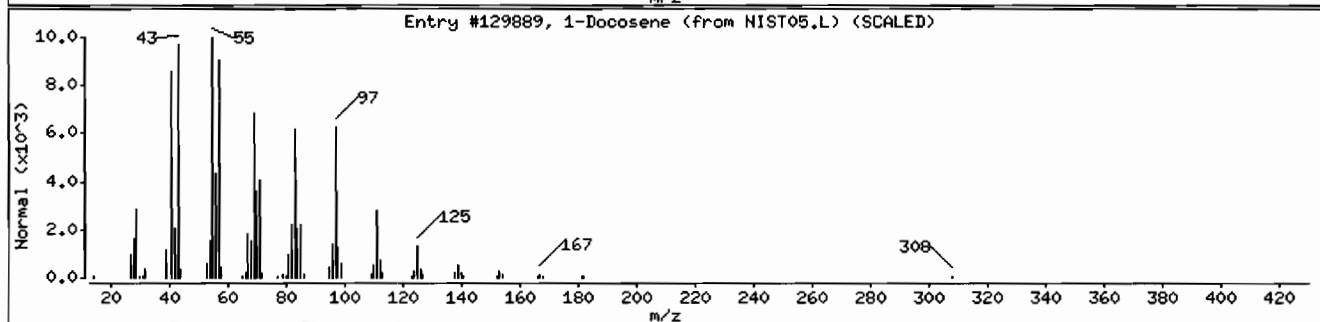
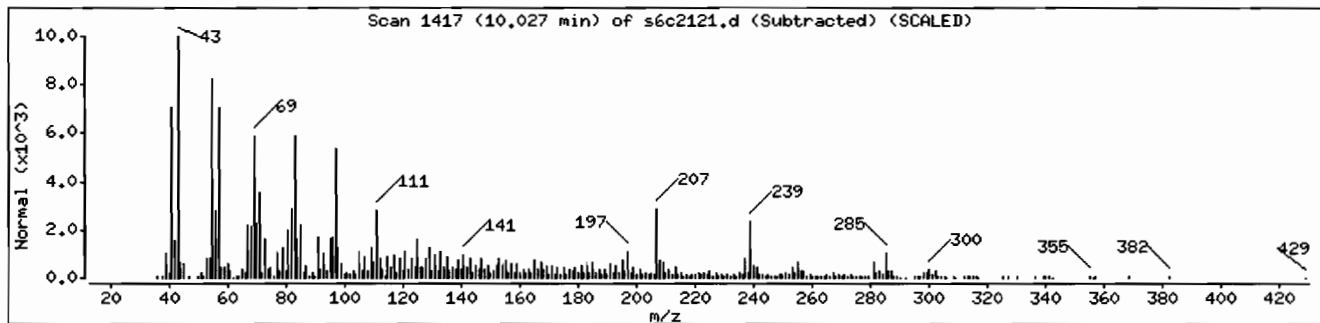
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Docosene	1599-67-3	NIST05.L	129889	96	C22H44	308
cis-1-Chloro-9-octadecene	16507-61-2	NIST05.L	116135	95	C18H35Cl	286
1-Hexacosanol	506-52-5	NIST05.L	165912	91	C26H54O	382



Date : 21-MAR-2010 23:20

Client ID: RE36-10-8287

Instrument: MSD6.i

Sample Info: I248519008196313311ISVH11ILANL

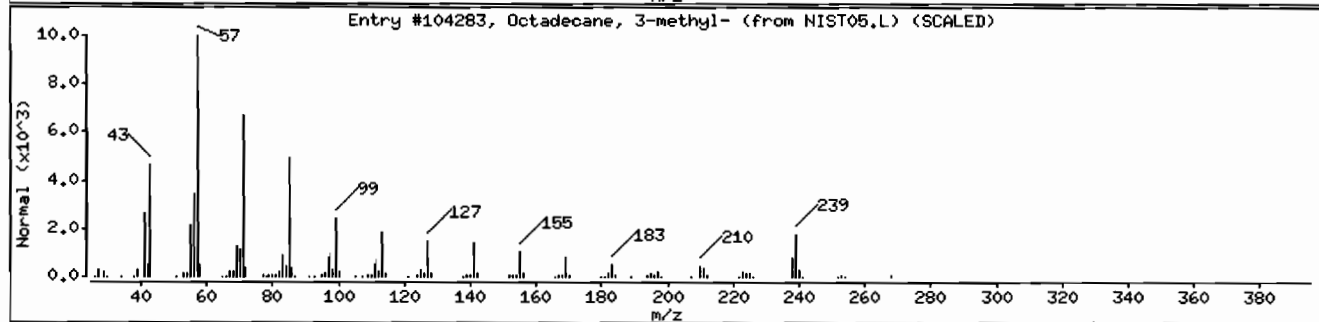
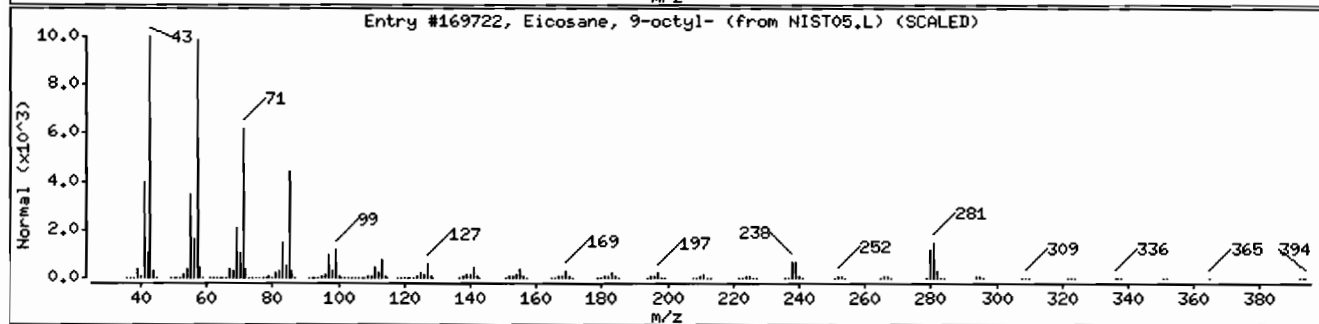
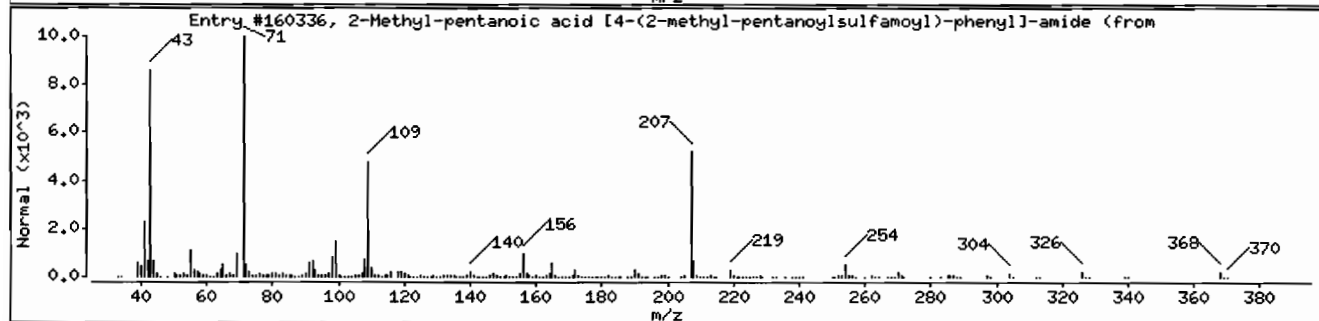
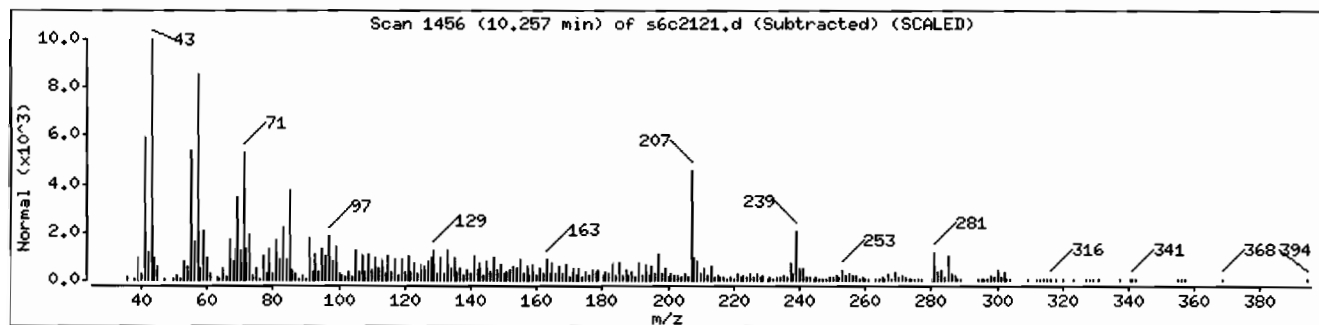
Volume Injected (uL): 0.5

Operator: nag1

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-pentanoic acid [4-(2-methyl-pen	1000296-31-0	NIST05.L	160336	35	C18H28N2O4S	368
Eicosane, 9-octyl-	13475-77-9	NIST05.L	169722	30	C28H58	394
Octadecane, 3-methyl-	6561-44-0	NIST05.L	104283	30	C19H40	268



Date : 21-MAR-2010 23:20

Client ID: RE36-10-8287

Instrument: MSD6.i

Sample Info: 1248519008196313311SVMI11LANL

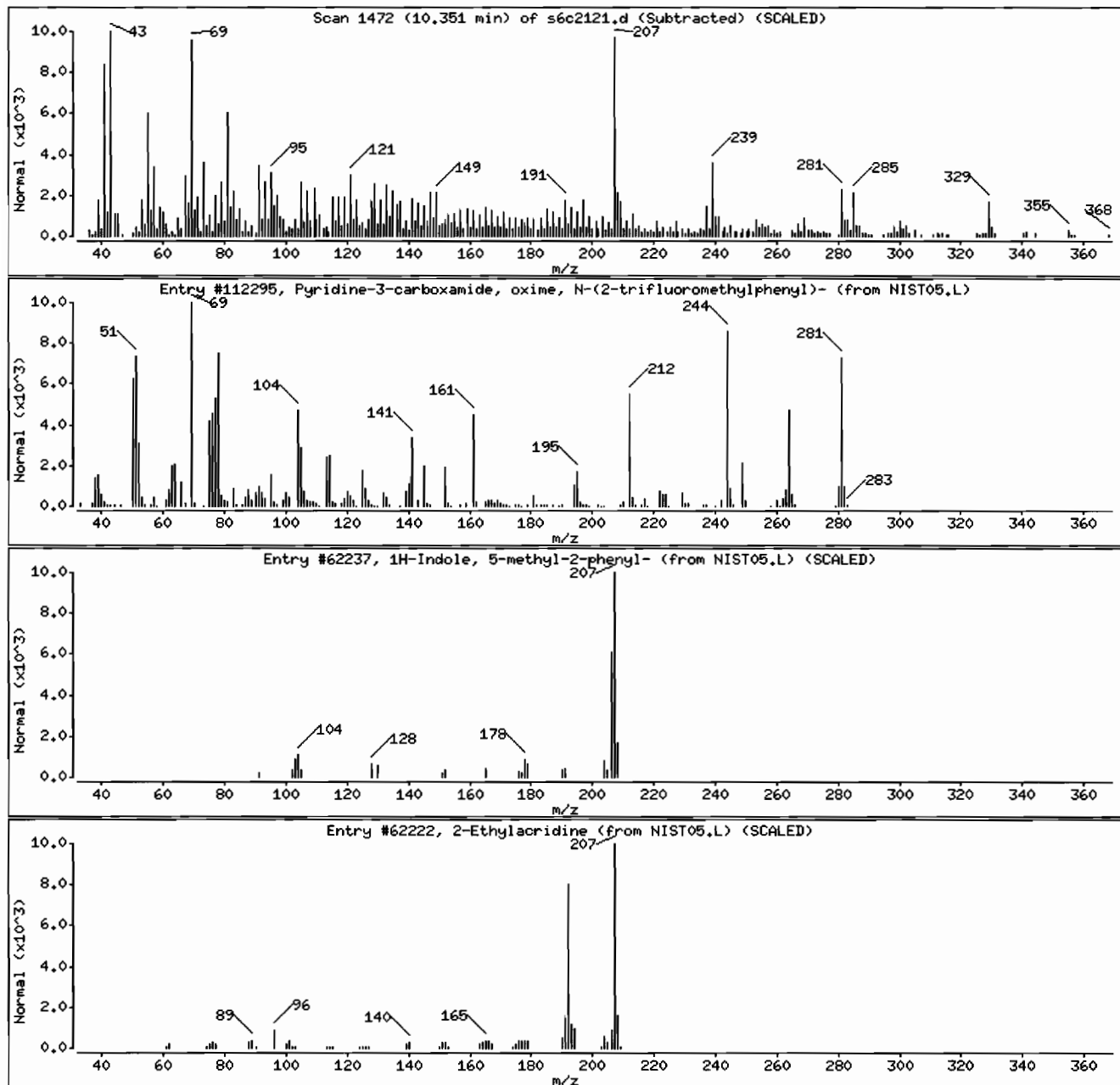
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Pyridine-3-carboxamide, oxime, N-(2-trif	288246-53-7	NIST05.L	112295	93	C13H10F3N3O	281
1H-Indole, 5-methyl-2-phenyl-	13228-36-9	NIST05.L	62237	41	C15H13N	207
2-Ethylacridine	55751-83-2	NIST05.L	62222	38	C15H13N	207



Date : 21-MAR-2010 23:20

Client ID: RE36-10-8287

Instrument: MSD6.i

Sample Info: I248519008196313311ISVH11ILANL

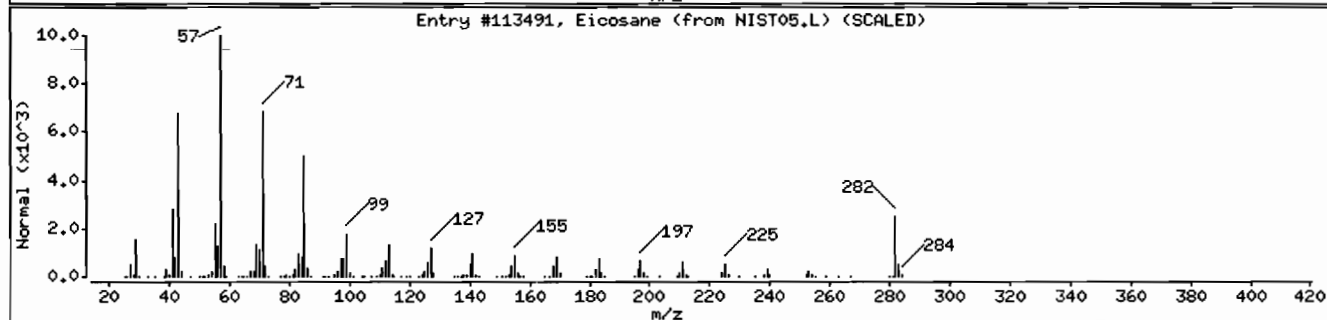
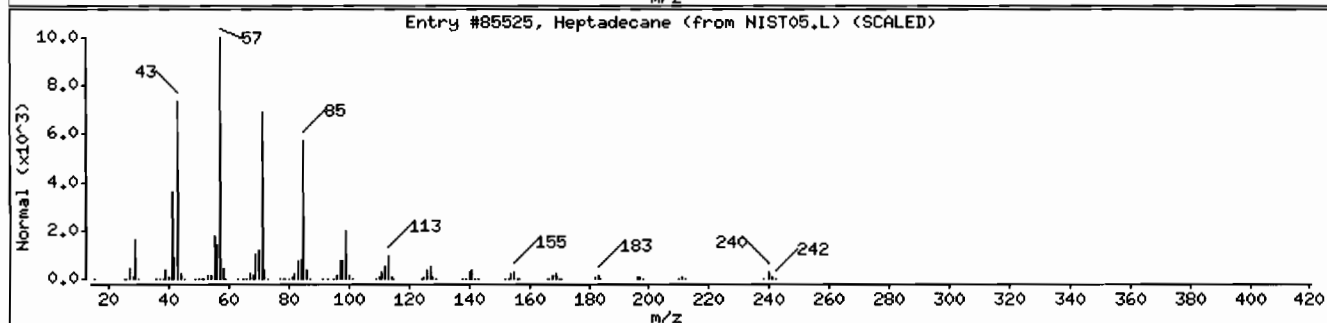
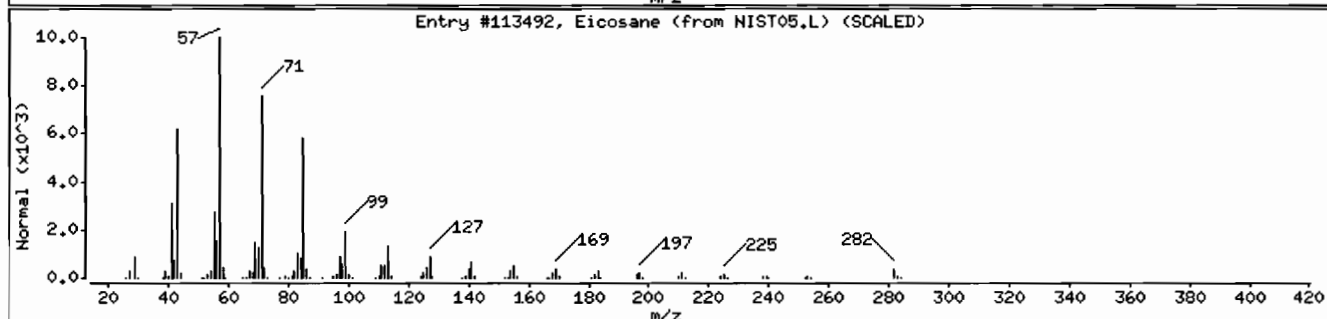
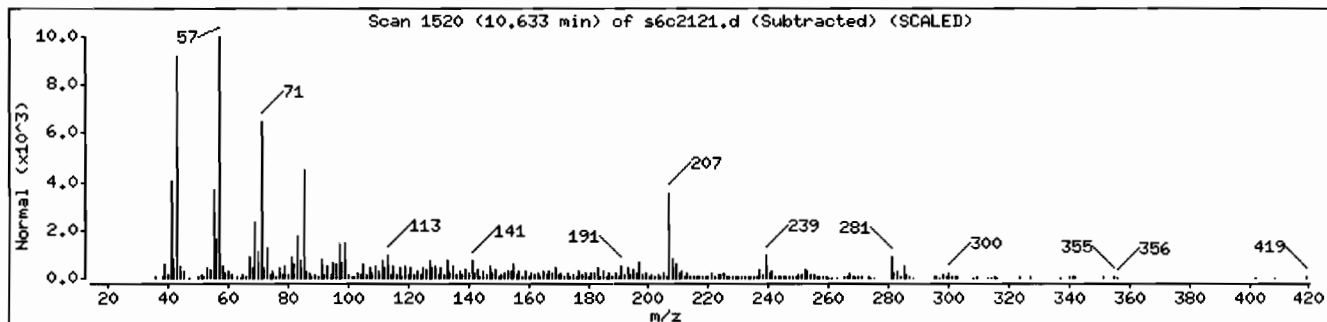
Volume Injected (uL): 0.5

Operator: nag1

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	113492	98	C <sub>20</sub> H <sub>42</sub>	282
Heptadecane	629-78-7	NIST05.L	85525	96	C <sub>17</sub> H <sub>36</sub>	240
Eicosane	112-95-8	NIST05.L	113491	92	C <sub>20</sub> H <sub>42</sub>	282



Date : 21-MAR-2010 23:20

Client ID: RE36-10-8287

Instrument: MSD6.i

Sample Info: 1248519008196313311SVH111LANL

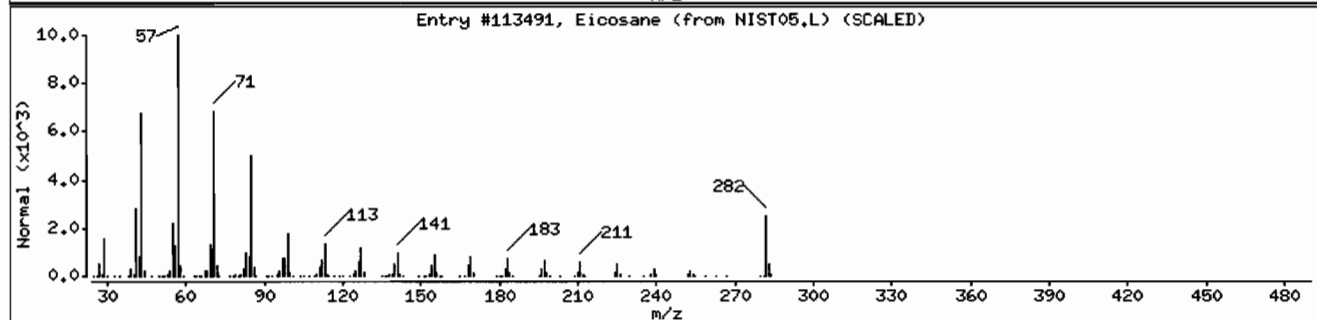
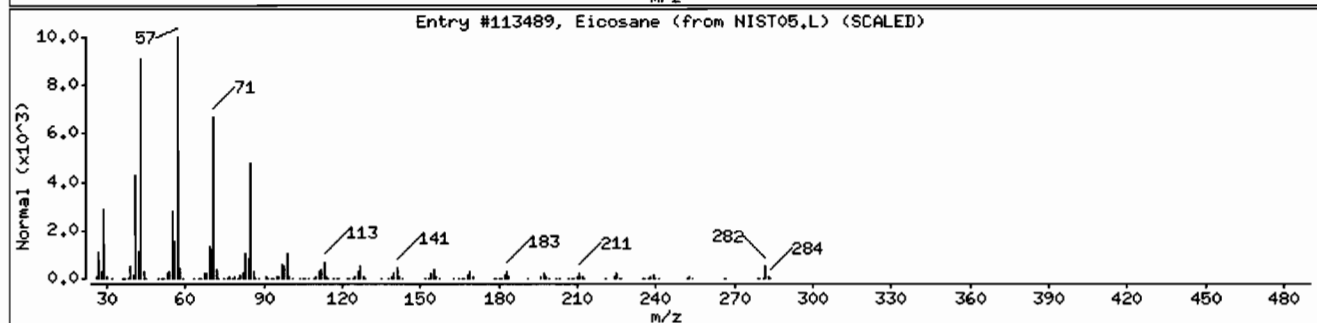
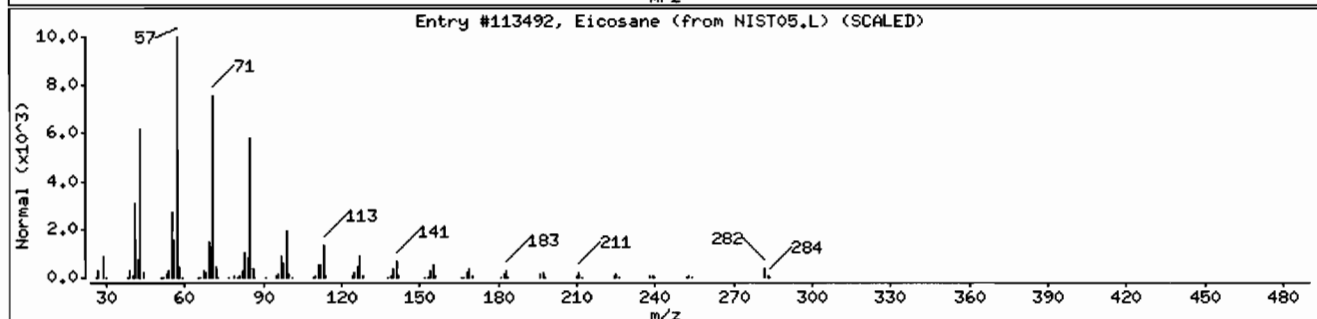
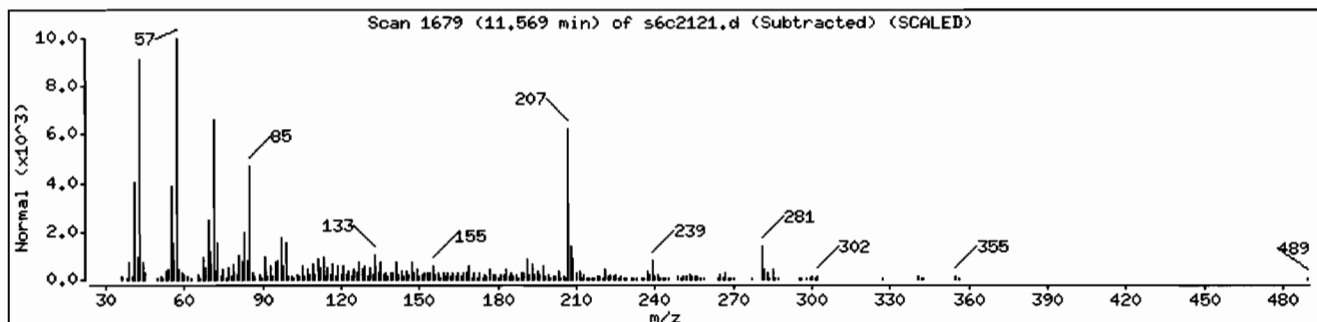
Volume Injected (uL): 0.5

Operator: nag1

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	113492	96	C20H42	282
Eicosane	112-95-8	NIST05.L	113489	96	C20H42	282
Eicosane	112-95-8	NIST05.L	113491	95	C20H42	282



Date : 21-MAR-2010 23:20

Client ID: RE36-10-8287

Instrument: MSD6.i

Sample Info: I248519008|963133|1|SVH|1|LANL

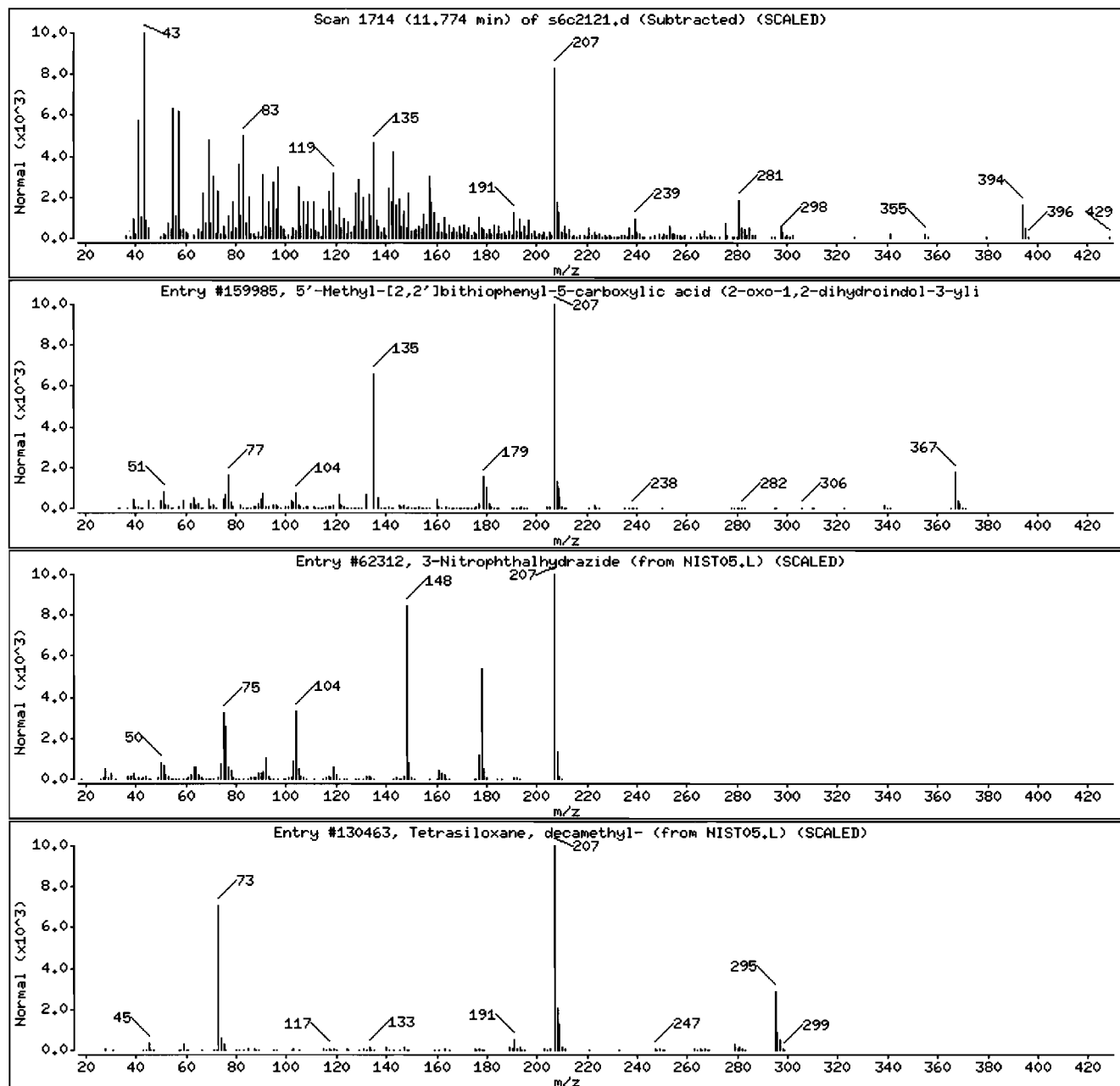
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
5'-Methyl-[2,2']bithiophenyl-5-carboxyli	1000303-07-4	NIST05.L	159985	35	C18H13N3O2S2	367
3-Nitrophthalhydrazide	3682-15-3	NIST05.L	62312	25	C8H5N3O4	207
Tetrasiloxane, decamethyl-	141-62-8	NIST05.L	130463	22	C10H30O3Si4	310



Date : 21-MAR-2010 23:20

Client ID: RE36-10-8287

Instrument: MSD6.i

Sample Info: I2485190081963133111SVH111LANL

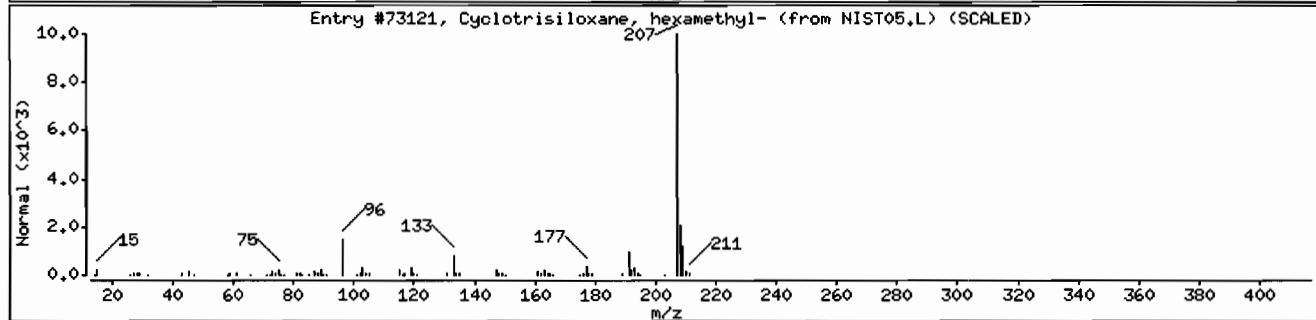
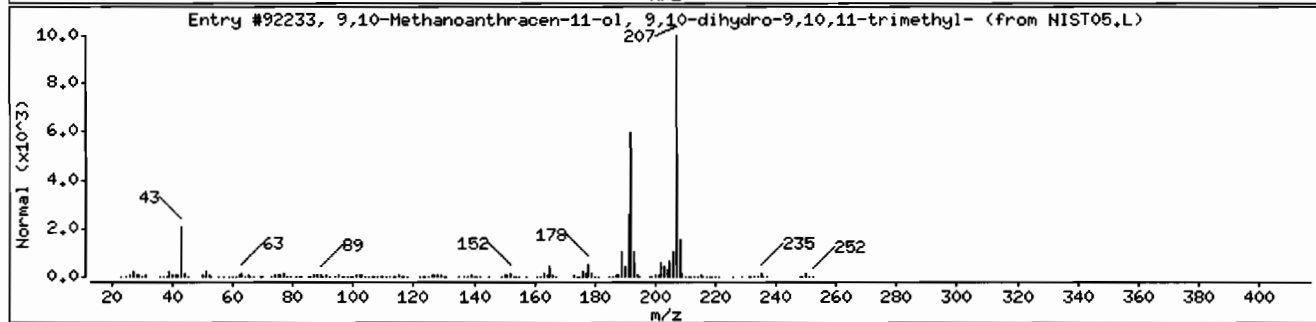
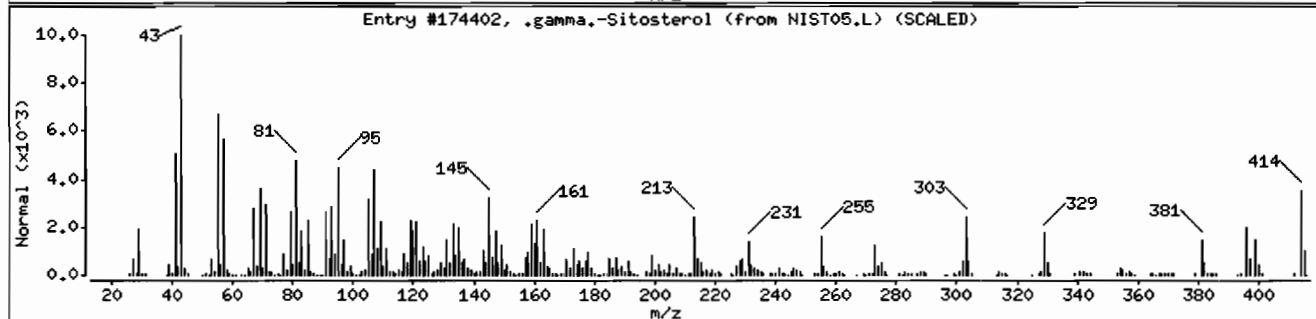
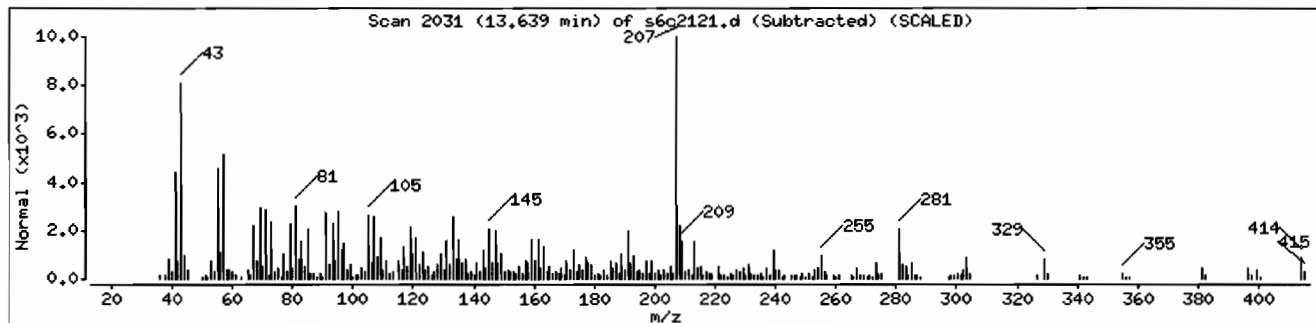
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
.gamma.-Sitosterol	83-47-6	NIST05.L	174402	91	C <sub>29</sub> H <sub>50</sub> O	414
9,10-Methanoanthracen-11-ol, 9,10-dihydro	126615-74-5	NIST05.L	92233	60	C <sub>18</sub> H <sub>18</sub> O	250
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73121	49	C <sub>6</sub> H <sub>18</sub> O <sub>3</sub> Si <sub>3</sub>	222



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

**SDG Number:** 10-2199  
**Lab Sample ID:** 248519001

**Date Collected:** 02/25/2010 12:00  
**Date Received:** 03/03/2010 08:50  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD6.I  
**Analyst:** NAG1  
**Aliquot:** 30 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 16.4  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 4  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

**Client ID:** RE36-10-8288  
**Batch ID:** 963133  
**Run Date:** 03/23/2010 23:53  
**Prep Date:** 03/10/2010 12:14  
**Data File:** s6c2325.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	1600	ug/kg	319	1600
108-95-2	Phenol	U	1600	ug/kg	319	1600
95-57-8	2-Chlorophenol	U	1600	ug/kg	319	1600
106-46-7	1,4-Dichlorobenzene	U	1600	ug/kg	319	1600
621-64-7	N-Nitrosodipropylamine	U	1600	ug/kg	319	1600
59-50-7	4-Chloro-3-methylphenol	U	1600	ug/kg	319	1600
83-32-9	Acenaphthene	U	160	ug/kg	52.7	160
121-14-2	2,4-Dinitrotoluene	U	1600	ug/kg	160	1600
100-02-7	4-Nitrophenol	U	1600	ug/kg	527	1600
87-86-5	Pentachlorophenol	U	1600	ug/kg	399	1600
129-00-0	Pyrene	U	160	ug/kg	47.9	160
110-86-1	Pyridine	U	1600	ug/kg	319	1600
62-53-3	Aniline	U	1600	ug/kg	479	1600
111-44-4	bis(2-Chloroethyl) ether	U	1600	ug/kg	319	1600
541-73-1	1,3-Dichlorobenzene	U	1600	ug/kg	319	1600
100-51-6	Benzyl alcohol	U	1600	ug/kg	479	1600
95-50-1	1,2-Dichlorobenzene	U	1600	ug/kg	319	1600
108-60-1	bis(2-Chloroisopropyl)ether	U	1600	ug/kg	319	1600
95-48-7	o-Cresol	U	1600	ug/kg	319	1600
65794-96-9	m,p-Cresols	U	1600	ug/kg	479	1600
67-72-1	Hexachloroethane	U	1600	ug/kg	319	1600
98-95-3	Nitrobenzene	U	1600	ug/kg	319	1600
78-59-1	Isophorone	U	1600	ug/kg	319	1600
88-75-5	2-Nitrophenol	U	1600	ug/kg	319	1600
105-67-9	2,4-Dimethylphenol	U	1600	ug/kg	559	1600
111-91-1	bis(2-Chloroethoxy)methane	U	1600	ug/kg	319	1600
120-83-2	2,4-Dichlorophenol	U	1600	ug/kg	319	1600
65-85-0	Benzoic acid	U	3190	ug/kg	798	3190
91-20-3	Naphthalene	U	160	ug/kg	47.9	160
106-47-8	4-Chloroaniline	U	1600	ug/kg	319	1600
87-68-3	Hexachlorobutadiene	U	1600	ug/kg	319	1600
91-57-6	2-Methylnaphthalene	U	160	ug/kg	31.9	160
77-47-4	Hexachlorocyclopentadiene	U	1600	ug/kg	319	1600
88-06-2	2,4,6-Trichlorophenol	U	1600	ug/kg	319	1600
95-95-4	2,4,5-Trichlorophenol	U	1600	ug/kg	319	1600
91-58-7	2-Chloronaphthalene	U	160	ug/kg	52.7	160
88-74-4	2-Nitroaniline	U	1600	ug/kg	319	1600
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	1600	ug/kg	319	1600



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

SDG Number: 10-2199  
Lab Sample ID: 248519001

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Aliquot: 30 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 16.4  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 4  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE36-10-8288  
Batch ID: 963133  
Run Date: 03/23/2010 23:53  
Prep Date: 03/10/2010 12:14  
Data File: s6c2325.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	1600	ug/kg	319	1600
606-20-2	2,6-Dinitrotoluene	U	1600	ug/kg	160	1600
208-96-8	Acenaphthylene	U	160	ug/kg	47.9	160
51-28-5	2,4-Dinitrophenol	U	3190	ug/kg	606	3190
132-64-9	Dibenzofuran	U	1600	ug/kg	319	1600
84-66-2	Diethylphthalate	U	1600	ug/kg	319	1600
86-73-7	Fluorene	U	160	ug/kg	47.9	160
7005-72-3	4-Chlorophenylphenylether	U	1600	ug/kg	319	1600
534-52-1	2-Methyl-4,6-dinitrophenol	U	1600	ug/kg	319	1600
100-01-6	4-Nitroaniline	U	1600	ug/kg	479	1600
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	1600	ug/kg	319	1600
122-66-7	Azobenzene	U	1600	ug/kg	319	1600
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	1600	ug/kg	319	1600
118-74-1	Hexachlorobenzene	U	1600	ug/kg	319	1600
85-01-8	Phenanthrene	U	160	ug/kg	47.9	160
120-12-7	Anthracene	U	160	ug/kg	31.9	160
84-74-2	Di-n-butylphthalate	U	1600	ug/kg	319	1600
206-44-0	Fluoranthene	U	160	ug/kg	47.9	160
85-68-7	Butylbenzylphthalate	U	1600	ug/kg	319	1600
56-55-3	Benzo(a)anthracene	U	160	ug/kg	47.9	160
91-94-1	3,3'-Dichlorobenzidine	U	1600	ug/kg	479	1600
218-01-9	Chrysene	U	160	ug/kg	47.9	160
117-81-7	bis(2-Ethylhexyl)phthalate	U	1600	ug/kg	319	1600
117-84-0	Di-n-octylphthalate	U	1600	ug/kg	319	1600
205-99-2	Benzo(b)fluoranthene	U	160	ug/kg	47.9	160
207-08-9	Benzo(k)fluoranthene	U	160	ug/kg	47.9	160
50-32-8	Benzo(a)pyrene	U	160	ug/kg	47.9	160
193-39-5	Indeno(1,2,3-cd)pyrene	U	160	ug/kg	47.9	160
53-70-3	Dibenzo(a,h)anthracene	U	160	ug/kg	47.9	160
191-24-2	Benzo(ghi)perylene	U	160	ug/kg	47.9	160
120-82-1	1,2,4-Trichlorobenzene	U	1600	ug/kg	319	1600

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
1058-61-3	Stigmast-4-en-3-one	8.84	1160	ug/kg	94	NJ
559-74-0	Friedelan-3-one	10.34	4090	ug/kg	95	NJ

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

SDG Number: 10-2199	Date Collected: 02/25/2010 12:00	Matrix: R
Lab Sample ID: 248519001	Date Received: 03/03/2010 08:50	%Moisture: 16.4
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-8288	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 963133	Inst: MSD6.I	Dilution: 4
Run Date: 03/23/2010 23:53	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 03/10/2010 12:14	Aliquot: 30 g	Final Volume: 1 mL
Data File: s6c2325.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		12.24	1000	ug/kg		J
	Unknown		13	838	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD6.i/s032310.b/s6c2325.d  
Lab Smp Id: 248519001 Client Smp ID: RE36-10-8288  
Inj Date : 23-MAR-2010 23:53  
Operator : nagl Inst ID: MSD6.i  
Smp Info : |248519001|963133|4|SVM|1|LANL  
Misc Info : |MSD8270\_S|WBN100319-01  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD6.i/s032310.b/MSD6-M8270C-AQA-031610.m  
Meth Date : 24-Mar-2010 09:23 jen00986 Quant Type: ISTD  
Cal Date : 17-MAR-2010 04:51 Cal File: s6c1646.d  
Als bottle: 20  
Dil Factor: 4.00000  
Integrator: HP RTE Compound Sublist: 10-2199.sub  
Target Version: 3.50  
Processing Host: hpclp1

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

Name	Value	Description
DF	4.00000	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	16.44340	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG	CONCENTRATIONS					
		MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.951	3.946	(1.000)	352904	40.0000	
* 29 Naphthalene-d8	136	4.816	4.804	(1.000)	1247737	40.0000	
* 46 Acenaphthene-d10	164	6.069	6.057	(1.000)	768374	40.0000	
* 67 Phenanthrene-d10	188	7.233	7.228	(1.000)	1302801	40.0000	
* 91 Chrysene-d12	240	9.639	9.628	(1.000)	1089543	40.0000	
* 98 Perylene-d12	264	11.316	11.298	(1.000)	880222	40.0000	
\$ 3 2-Fluorophenol	112	3.140	3.128	(0.795)	128130	13.0607	2080
\$ 5 Phenol-d5	99	3.663	3.657	(0.927)	169859	13.6146	2170
\$ 20 Nitrobenzene-d5	82	4.310	4.304	(0.895)	72541	6.08180	970
\$ 39 2-Fluorobiphenyl	172	5.551	5.546	(0.915)	164958	8.32103	1330
\$ 60 2,4,6-Tribromophenol	329	6.663	6.651	(1.098)	37957	17.6039	2810
\$ 81 p-Terphenyl-d14	244	8.610	8.604	(0.893)	182448	9.60948	1530

## ION RATIO REPORT

## SV REPORT

Data file: s6c2325.d

Report Date: 03/24/2010 09:31

Lab. ID: 248519001

SampleType: SAMPLE

Injection Date: 23-MAR-2010 23:53

Operator: nagl

Instrument: MSD6.i

Sample Info: |248519001|963133|4|SVM|1|LANL

Miscellaneous Info: |MSD8270\_S|WBN100319-01

Comment:

Method used: /chem/MSD6.i/s032310.b/MSD6-M8270C-AQA-031610.m

Dilution Factor= 4.0

Integrator: HP RTE

Compound Sublist: 10-2199

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
22	Isophorone			CAS#: 78-59-1		
82	72541	4.31	4.47	80-120	100	(T)
138	6841	4.82	4.47	0- 48	9	(T)
-----						
40	2-Chloronaphthalene			CAS#: 91-58-7		
162	710248	6.07	5.66	80-120	100	(T)
164	768374	6.07	5.66	3- 63	108	(QT)
127	498	5.55	5.66	7- 67	0	(QT)
-----						
43	Dimethylphthalate			CAS#: 131-11-3		
163	139959	6.07	5.82	80-120	100	(T)
164	768374	6.07	5.82	0- 41	549	(QT)
-----						
50	2,4-Dinitrotoluene			CAS#: 121-14-2		
165	103018	6.07	6.17	80-120	100	(T)
89	1201	6.07	6.17	38- 98	1	(QT)
63	1200	6.06	6.17	18- 78	1	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD6.i/s032310.b/s6c2325.d  
 Lab Smp Id: 248519001 Client Smp ID: RE36-10-8288  
 Inj Date : 23-MAR-2010 23:53  
 Operator : nagl Inst ID: MSD6.i  
 Smp Info : |248519001|963133|4|SVM|1|LANL  
 Misc Info : |MSD8270 S|WBN100319-01  
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
 Method : /chem/MSD6.i/s032310.b/MSD6-M8270C-AQA-031610.m  
 Meth Date : 24-Mar-2010 09:23 jen00986 Quant Type: ISTD  
 Cal Date : 17-MAR-2010 04:51 Cal File: s6c1646.d  
 Als bottle: 20  
 Dil Factor: 4.00000  
 Integrator: HP RTE Compound Sublist: 10-2199.sub  
 Target Version: 3.50  
 Processing Host: hpc1p1

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

Name	Value	Description
DF	4.00000	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	16.44340	% moisture

Cpnd Variable Local Compound Variable

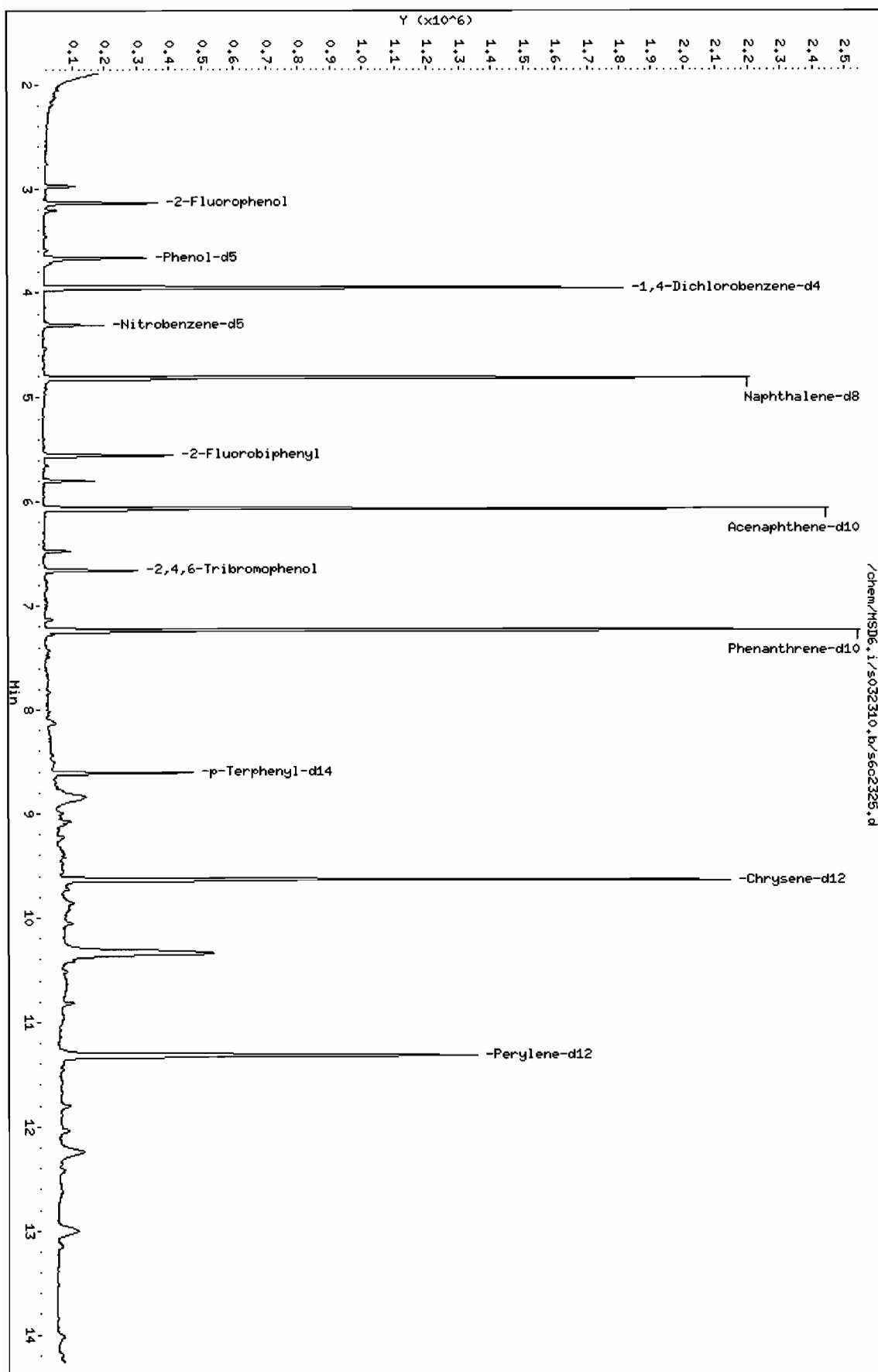
ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 91 Chrysene-d12	9.639	2963623	40.000
* 98 Perylene-d12	11.316	2382478	40.000

CONCENTRATIONS				QUANT			
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====
Stigmast-4-en-3-one				CAS #: 1058-61-3			
8.839	539799	7.28565941	1160	94	NIST05.L	173936	91

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
====	=====	=====	=====	=====	=====	=====	=====
Friedelan-3-one					CAS #: 559-74-0		
10.339	1897037	25.6042932	4080	95	NIST05.L	176566	91
Unknown					CAS #:		
12.245	374224	6.28294312	1000	0		0	98
Unknown					CAS #:		
12.998	312969	5.25450453	838	0		0	98

Data File: /chem/MSD6.i/s032310.b/s6c2325.d  
Date : 23-MAR-2010 23:53  
Client ID: RE36-10-8288  
Sample Info: 12485190011963133141SVH11L1ANL  
Volume Injected (uL): 0.5  
Column phase: J&W DB-SHS

Instrument: MSD6.i  
Operator: nag1  
Column diameter: 0.20



Date : 23-MAR-2010 23:53

Client ID: RE36-10-8288

Instrument: MSD6.i

Sample Info: 12485190011963133141SVH111LANL

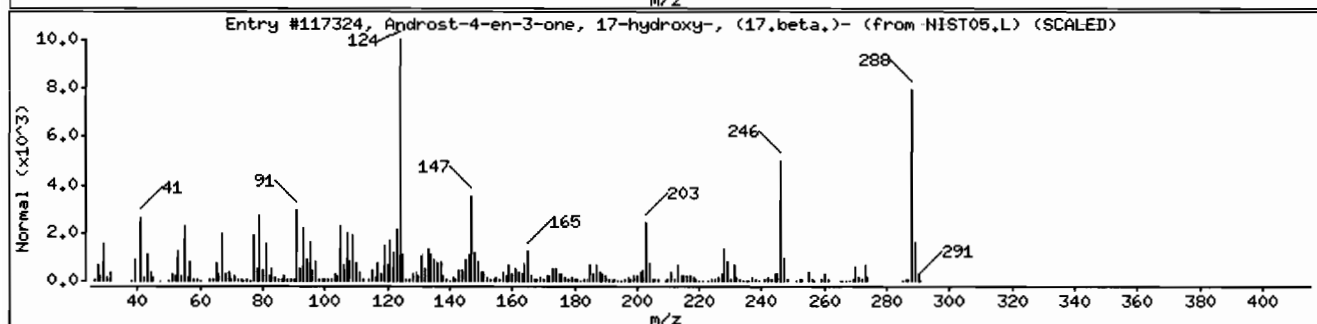
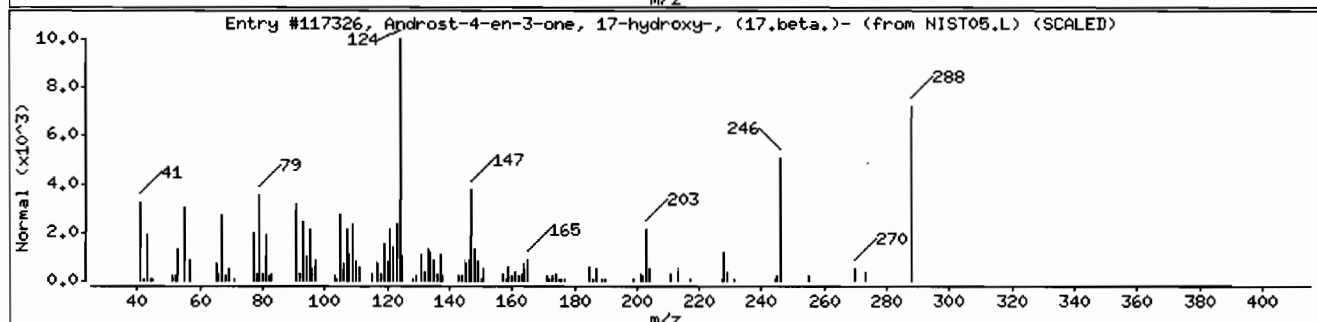
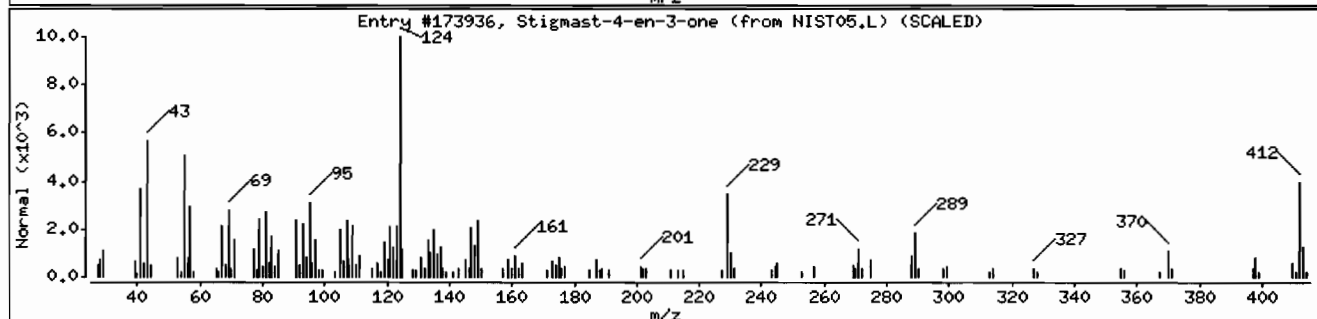
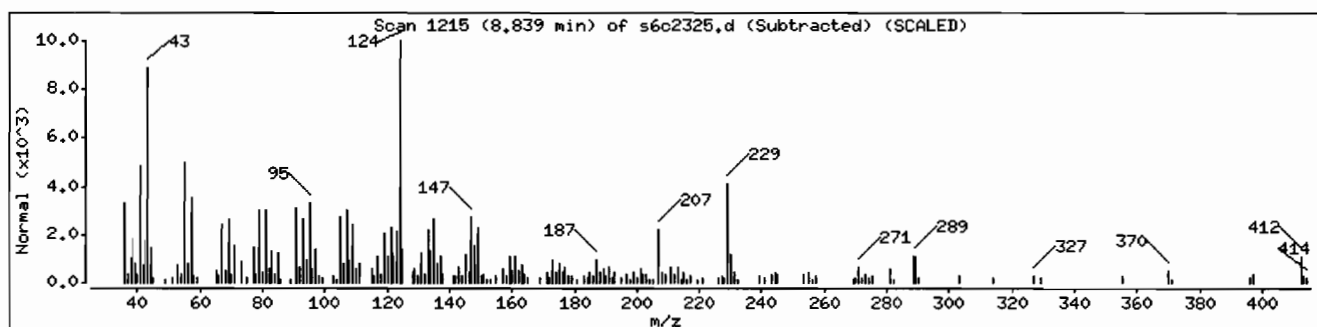
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Stigmast-4-en-3-one	1058-61-3	NIST05.L	173936	94	C29H48O	412
Androst-4-en-3-one, 17-hydroxy-, (17,bet	58-22-0	NIST05.L	117326	86	C19H28O2	288
Androst-4-en-3-one, 17-hydroxy-, (17,bet	58-22-0	NIST05.L	117324	46	C19H28O2	288





Date : 23-MAR-2010 23:53

Client ID: RE36-10-8288

Instrument: MSD6.i

Sample Info: I2485190011963133141SVMI11LANL

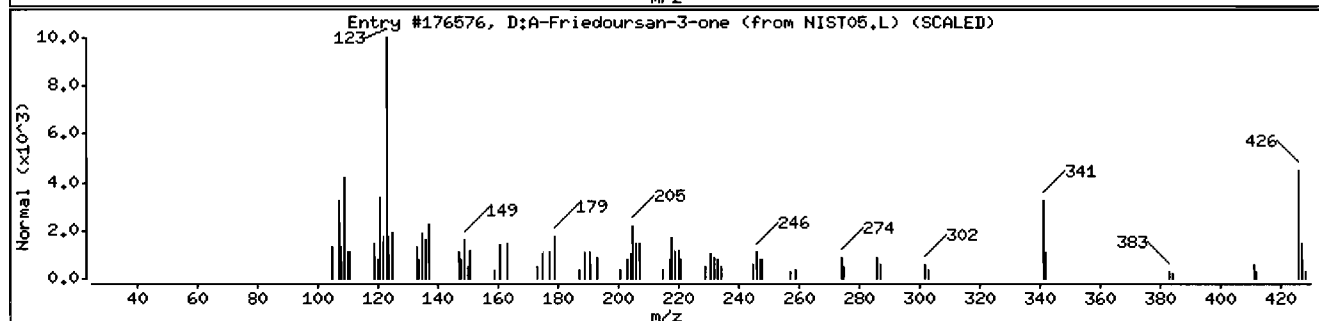
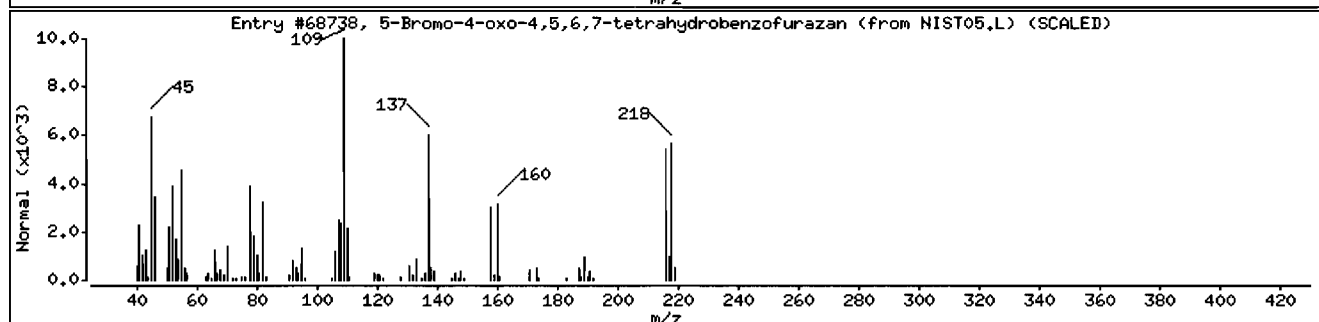
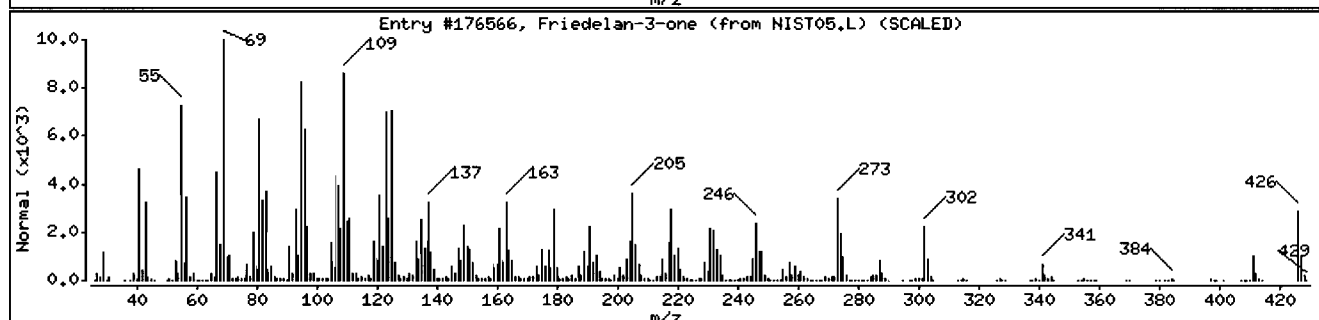
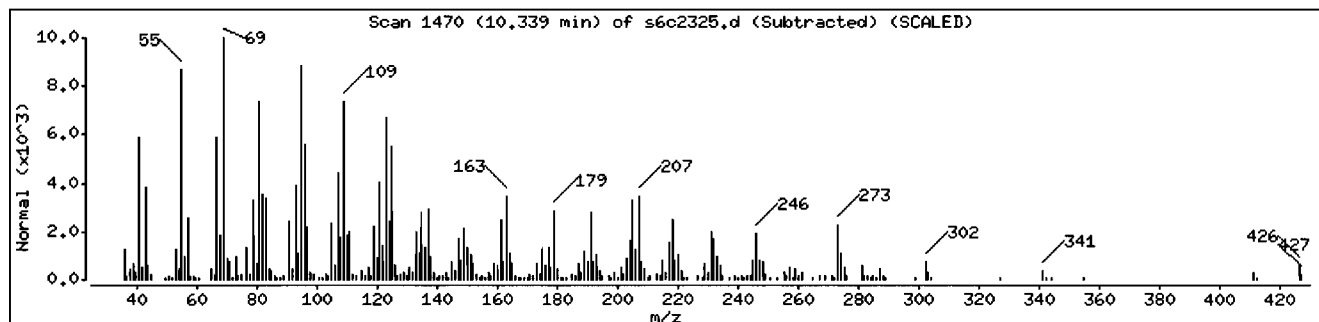
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Friedelan-3-one	559-74-0	NIST05.L	176566	95	C30H50O	426
5-Bromo-4-oxo-4,5,6,7-tetrahydrobenzofur	300574-36-1	NIST05.L	68738	59	C6H5BrN2O2	216
D:A-Friedoursan-3-one	89950-00-5	NIST05.L	176576	55	C30H50O	426



Date : 23-MAR-2010 23:53

Client ID: RE36-10-8288

Instrument: MSD6.i

Sample Info: I248519001I963133I4ISVHI1IILANL

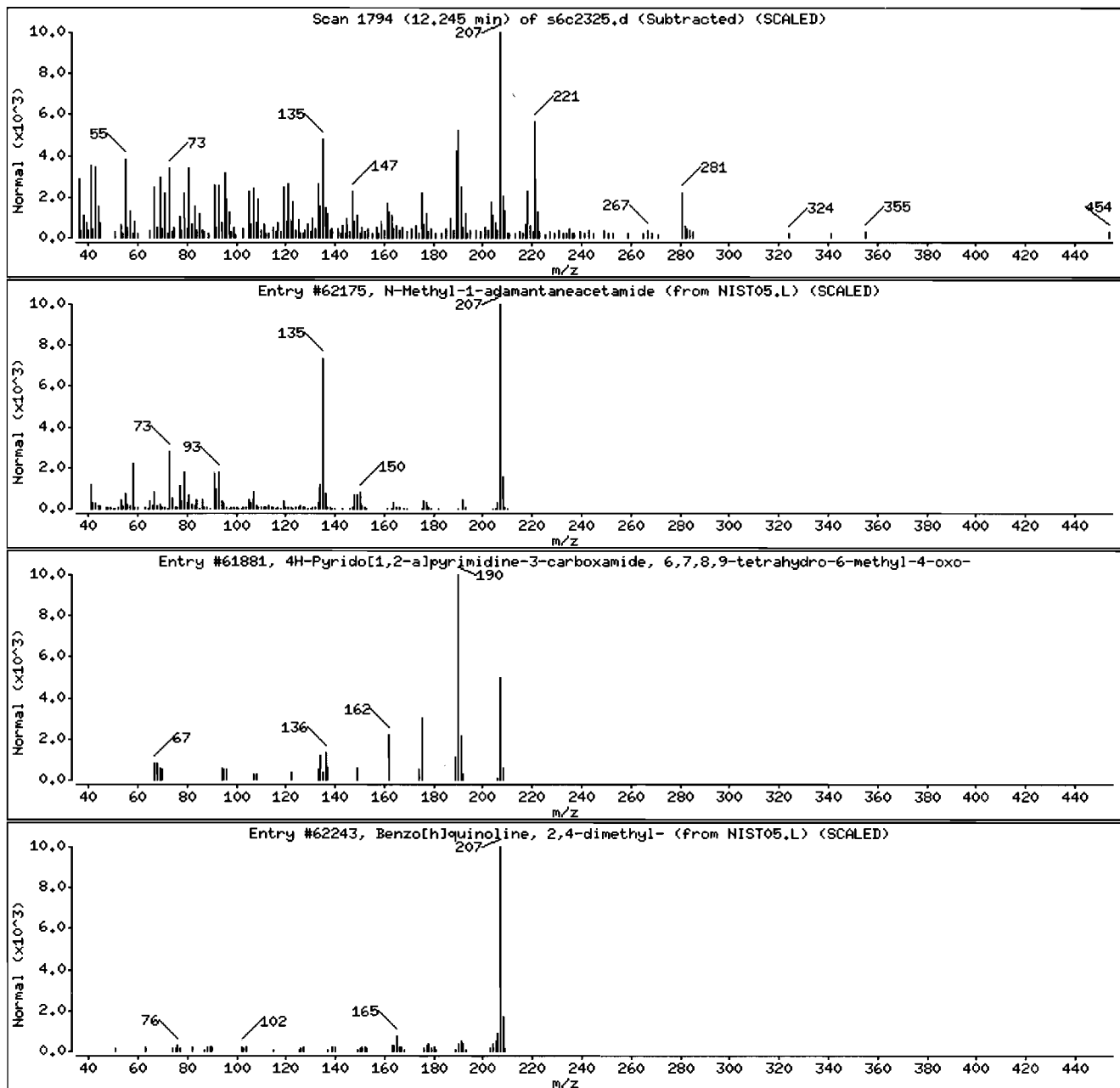
Volume Injected (uL): 0.5

Operator: nag1

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	44	C <sub>13</sub> H <sub>21</sub> N	207
4H-Pyrido[1,2-a]pyrimidine-3-carboxamide	33484-45-6	NIST05.L	61881	30	C <sub>10</sub> H <sub>13</sub> N <sub>3</sub> O <sub>2</sub>	207
Benzo[h]quinoline, 2,4-dimethyl-	605-67-4	NIST05.L	62243	30	C <sub>15</sub> H <sub>13</sub> N	207



Date : 23-MAR-2010 23:53

Client ID: RE36-10-8288

Instrument: HSD6.i

Sample Info: 1248519001|963133|4|SVMI1|LANL

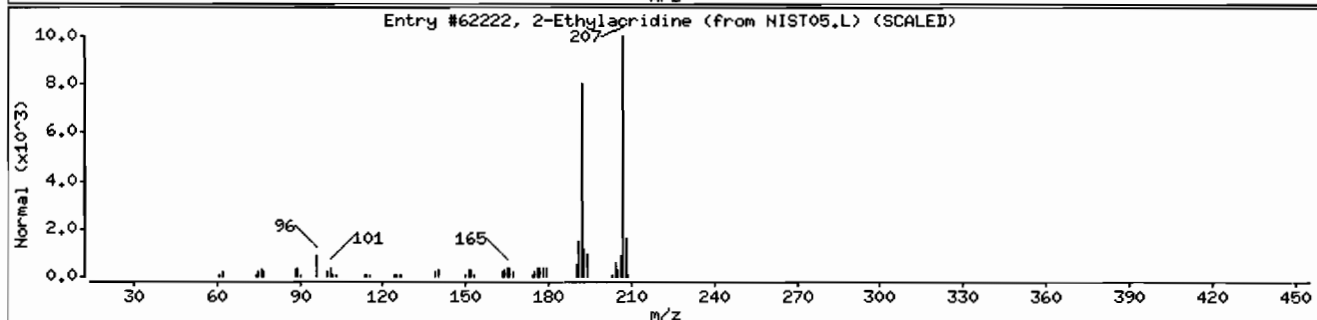
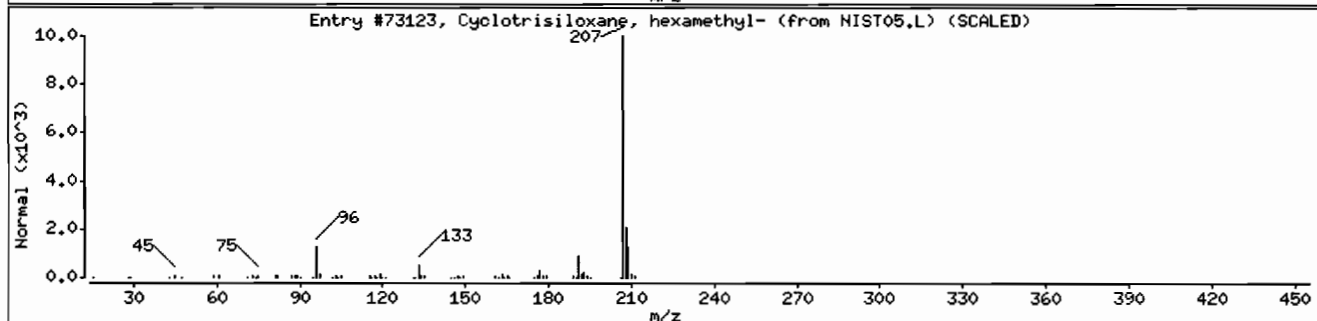
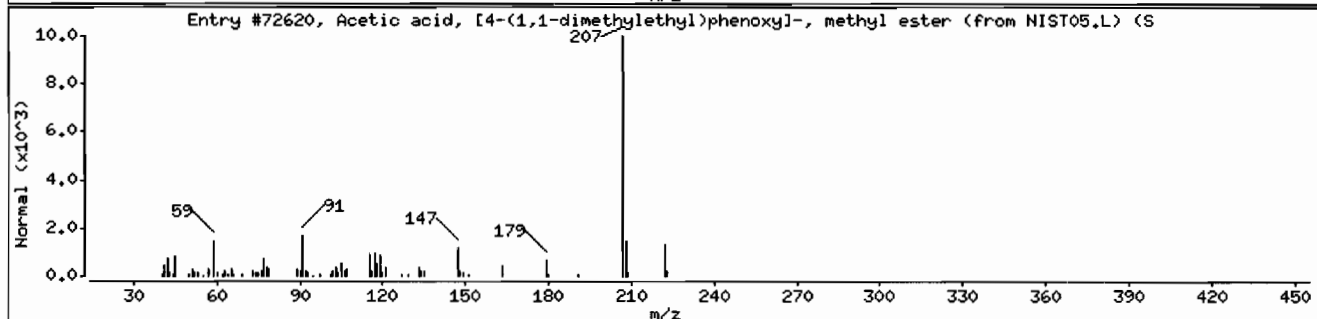
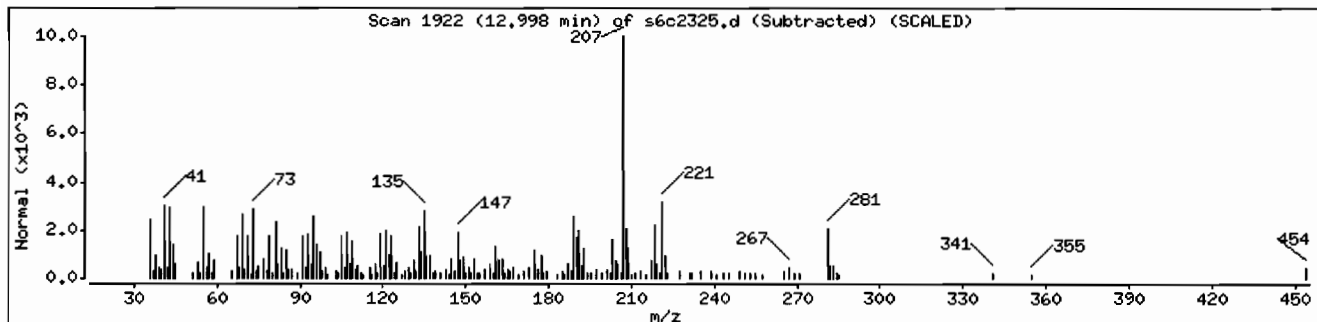
Volume Injected (uL): 0.5

Operator: nag1

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, [4-(1,1-dimethylethyl)pheno	88530-52-3	NIST05.L	72620	46	C13H18O3	222
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73123	43	C6H18O3Si3	222
2-Ethylacridine	55751-83-2	NIST05.L	62222	43	C15H13N	207



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

SDG Number: 10-2199  
Lab Sample ID: 248519007

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Aliquot: 30.09 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 28.9  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 4  
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	1870	ug/kg	374	1870
108-95-2	Phenol	U	1870	ug/kg	374	1870
95-57-8	2-Chlorophenol	U	1870	ug/kg	374	1870
106-46-7	1,4-Dichlorobenzene	U	1870	ug/kg	374	1870
621-64-7	N-Nitrosodipropylamine	U	1870	ug/kg	374	1870
59-50-7	4-Chloro-3-methylphenol	U	1870	ug/kg	374	1870
83-32-9	Acenaphthene	U	187	ug/kg	61.7	187
121-14-2	2,4-Dinitrotoluene	U	1870	ug/kg	187	1870
100-02-7	4-Nitrophenol	U	1870	ug/kg	617	1870
87-86-5	Pentachlorophenol	U	1870	ug/kg	468	1870
129-00-0	Pyrene	U	187	ug/kg	56.1	187
110-86-1	Pyridine	U	1870	ug/kg	374	1870
62-53-3	Aniline	U	1870	ug/kg	561	1870
111-44-4	bis(2-Chloroethyl) ether	U	1870	ug/kg	374	1870
541-73-1	1,3-Dichlorobenzene	U	1870	ug/kg	374	1870
100-51-6	Benzyl alcohol	U	1870	ug/kg	561	1870
95-50-1	1,2-Dichlorobenzene	U	1870	ug/kg	374	1870
108-60-1	bis(2-Chloroisopropyl)ether	U	1870	ug/kg	374	1870
95-48-7	o-Cresol	U	1870	ug/kg	374	1870
65794-96-9	m,p-Cresols	U	1870	ug/kg	561	1870
67-72-1	Hexachloroethane	U	1870	ug/kg	374	1870
98-95-3	Nitrobenzene	U	1870	ug/kg	374	1870
78-59-1	Isophorone	U	1870	ug/kg	374	1870
88-75-5	2-Nitrophenol	U	1870	ug/kg	374	1870
105-67-9	2,4-Dimethylphenol	U	1870	ug/kg	655	1870
111-91-1	bis(2-Chloroethoxy)methane	U	1870	ug/kg	374	1870
120-83-2	2,4-Dichlorophenol	U	1870	ug/kg	374	1870
65-85-0	Benzoic acid	U	3740	ug/kg	935	3740
91-20-3	Naphthalene	U	187	ug/kg	56.1	187
106-47-8	4-Chloroaniline	U	1870	ug/kg	374	1870
87-68-3	Hexachlorobutadiene	U	1870	ug/kg	374	1870
91-57-6	2-Methylnaphthalene	U	187	ug/kg	37.4	187
77-47-4	Hexachlorocyclopentadiene	U	1870	ug/kg	374	1870
88-06-2	2,4,6-Trichlorophenol	U	1870	ug/kg	374	1870
95-95-4	2,4,5-Trichlorophenol	U	1870	ug/kg	374	1870
91-58-7	2-Chloronaphthalene	U	187	ug/kg	61.7	187
88-74-4	2-Nitroaniline	U	1870	ug/kg	374	1870
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	1870	ug/kg	374	1870

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

SDG Number: 10-2199  
Lab Sample ID: 248519007

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD6.I  
Analyst: NAG1  
Aliquot: 30.09 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 28.9  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 4  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE36-10-8291  
Batch ID: 963133  
Run Date: 03/24/2010 01:50  
Prep Date: 03/10/2010 12:14  
Data File: s6c2330.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	1870	ug/kg	374	1870
606-20-2	2,6-Dinitrotoluene	U	1870	ug/kg	187	1870
208-96-8	Acenaphthylene	U	187	ug/kg	56.1	187
51-28-5	2,4-Dinitrophenol	U	3740	ug/kg	711	3740
132-64-9	Dibenzofuran	U	1870	ug/kg	374	1870
84-66-2	Diethylphthalate	U	1870	ug/kg	374	1870
86-73-7	Fluorene	U	187	ug/kg	56.1	187
7005-72-3	4-Chlorophenylphenylether	U	1870	ug/kg	374	1870
534-52-1	2-Methyl-4,6-dinitrophenol	U	1870	ug/kg	374	1870
100-01-6	4-Nitroaniline	U	1870	ug/kg	561	1870
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	1870	ug/kg	374	1870
122-66-7	Azobenzene	U	1870	ug/kg	374	1870
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	1870	ug/kg	374	1870
118-74-1	Hexachlorobenzene	U	1870	ug/kg	374	1870
85-01-8	Phenanthrene	U	187	ug/kg	56.1	187
120-12-7	Anthracene	U	187	ug/kg	37.4	187
84-74-2	Di-n-butylphthalate	U	1870	ug/kg	374	1870
206-44-0	Fluoranthene	U	187	ug/kg	56.1	187
85-68-7	Butylbenzylphthalate	U	1870	ug/kg	374	1870
56-55-3	Benzo(a)anthracene	U	187	ug/kg	56.1	187
91-94-1	3,3'-Dichlorobenzidine	U	1870	ug/kg	561	1870
218-01-9	Chrysene	U	187	ug/kg	56.1	187
117-81-7	bis(2-Ethylhexyl)phthalate	U	1870	ug/kg	374	1870
117-84-0	Di-n-octylphthalate	U	1870	ug/kg	374	1870
205-99-2	Benzo(b)fluoranthene	U	187	ug/kg	56.1	187
207-08-9	Benzo(k)fluoranthene	U	187	ug/kg	56.1	187
50-32-8	Benzo(a)pyrene	U	187	ug/kg	56.1	187
193-39-5	Indeno(1,2,3-cd)pyrene	U	187	ug/kg	56.1	187
53-70-3	Dibenzo(a,h)anthracene	U	187	ug/kg	56.1	187
191-24-2	Benzo(ghi)perylene	U	187	ug/kg	56.1	187
120-82-1	1,2,4-Trichlorobenzene	U	1870	ug/kg	374	1870

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	9.73	917	ug/kg		J
300574-36-1	5-Bromo-4-oxo-4,5,6,7-tetrahydrobenzofur	10.33	1510	ug/kg	90	NJ

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

SDG Number: 10-2199	Date Collected: 02/25/2010 12:00	Matrix: R
Lab Sample ID: 248519007	Date Received: 03/03/2010 08:50	%Moisture: 28.9
	Client: LANL010	Project: LANL01004
Client ID: RE36-10-8291	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 963133	Inst: MSD6.I	Dilution: 4
Run Date: 03/24/2010 01:50	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 03/10/2010 12:14	Aliquot: 30.09 g	Final Volume: 1 mL
Data File: s6c2330.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		12.26	772	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD6.i/s032310.b/s6c2330.d  
Lab Smp Id: 248519007 Client Smp ID: RE36-10-8291  
Inj Date : 24-MAR-2010 01:50  
Operator : nagl Inst ID: MSD6.i  
Smp Info : |248519007|963133|4|SVM|1|LANL  
Misc Info : |MSD8270\_S|WBN100319-01  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD6.i/s032310.b/MSD6-M8270C-AQA-031610.m  
Meth Date : 24-Mar-2010 09:23 jen00986 Quant Type: ISTD  
Cal Date : 17-MAR-2010 04:51 Cal File: s6c1646.d  
Als bottle: 25  
Dil Factor: 4.00000  
Integrator: HP RTE Compound Sublist: 10-2199.sub  
Target Version: 3.50  
Processing Host: hpclpl

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

Name	Value	Description
DF	4.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.09000	weight of sample
M	28.94070	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG		RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
	MASS						ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152		3.951	3.946	(1.000)	380198	40.0000	
* 29 Naphthalene-d8	136		4.816	4.804	(1.000)	1373376	40.0000	
* 46 Acenaphthene-d10	164		6.069	6.057	(1.000)	848257	40.0000	
* 67 Phenanthrene-d10	188		7.233	7.228	(1.000)	1506043	40.0000	
* 91 Chrysene-d12	240		9.639	9.628	(1.000)	1392520	40.0000	
* 98 Perylene-d12	264		11.321	11.298	(1.000)	1159019	40.0000	
\$ 3 2-Fluorophenol	112		3.140	3.128	(0.795)	126136	11.9344	2230
\$ 5 Phenol-d5	99		3.663	3.657	(0.927)	165660	12.3249	2300
\$ 20 Nitrobenzene-d5	82		4.310	4.304	(0.895)	75701	5.76612	1080
\$ 39 2-Fluorobiphenyl	172		5.551	5.546	(0.915)	154385	7.05430	1320
\$ 60 2,4,6-Tribromophenol	329		6.663	6.651	(1.098)	36533	15.3479	2870
\$ 81 p-Terphenyl-d14	244		8.610	8.604	(0.893)	170350	7.02014	1310

## ION RATIO REPORT

## SV REPORT

Data file: s6c2330.d

Report Date: 03/24/2010 10:06

Lab. ID: 248519007

SampleType: SAMPLE

Injection Date: 24-MAR-2010 01:50

Operator: nagl

Instrument: MSD6.i

Sample Info: |248519007|963133|4|SVM|1|LANL

Miscellaneous Info: |MSD8270\_S|WBN100319-01

Comment:

Method used: /chem/MSD6.i/s032310.b/MSD6-M8270C-AQA-031610.m

Dilution Factor= 4.0

Integrator: HP RTE

Compound Sublist: 10-2199

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
22	Isophorone			CAS#: 78-59-1		
82	75701	4.31	4.47	80-120	100	(T)
138	7412	4.82	4.47	0- 48	10	(T)
-----						
40	2-Chloronaphthalene			CAS#: 91-58-7		
162	788108	6.07	5.66	80-120	100	(T)
164	848257	6.07	5.66	3- 63	108	(QT)
127	261	6.07	5.66	7- 67	0	(QT)
-----						
43	Dimethylphthalate			CAS#: 131-11-3		
163	154572	6.07	5.82	80-120	100	(T)
164	848257	6.07	5.82	0- 41	549	(QT)
-----						
50	2,4-Dinitrotoluene			CAS#: 121-14-2		
165	111962	6.07	6.17	80-120	100	(T)
89	1285	6.07	6.17	38- 98	1	(QT)
63	1230	6.07	6.17	18- 78	1	(QT)
-----						
55	2-Methyl-4,6-dinitrophenol			CAS#: 534-52-1		
198	550	6.73	6.48	80-120	100	(T)
105	312	6.80	6.48	10- 70	57	(T)
51	658	6.72	6.48	27- 87	120	(QT)

-----  
Q qualifier indicates ion failed ratio requirement



GEL Laboratories LLC

Data file : /chem/MSD6.i/s032310.b/s6c2330.d  
 Lab Smp Id: 248519007 Client Smp ID: RE36-10-8291  
 Inj Date : 24-MAR-2010 01:50  
 Operator : nagl Inst ID: MSD6.i  
 Smp Info : |248519007|963133|4|SVM|1|LANL  
 Misc Info : |MSD8270\_S|WBN100319-01  
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
 Method : /chem/MSD6.i/s032310.b/MSD6-M8270C-AQA-031610.m  
 Meth Date : 24-Mar-2010 09:23 jen00986 Quant Type: ISTD  
 Cal Date : 17-MAR-2010 04:51 Cal File: s6c1646.d  
 Als bottle: 25  
 Dil Factor: 4.00000  
 Integrator: HP RTE Compound Sublist: 10-2199.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	4.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.09000	weight of sample
M	28.94070	% moisture

Cpnd Variable Local Compound Variable

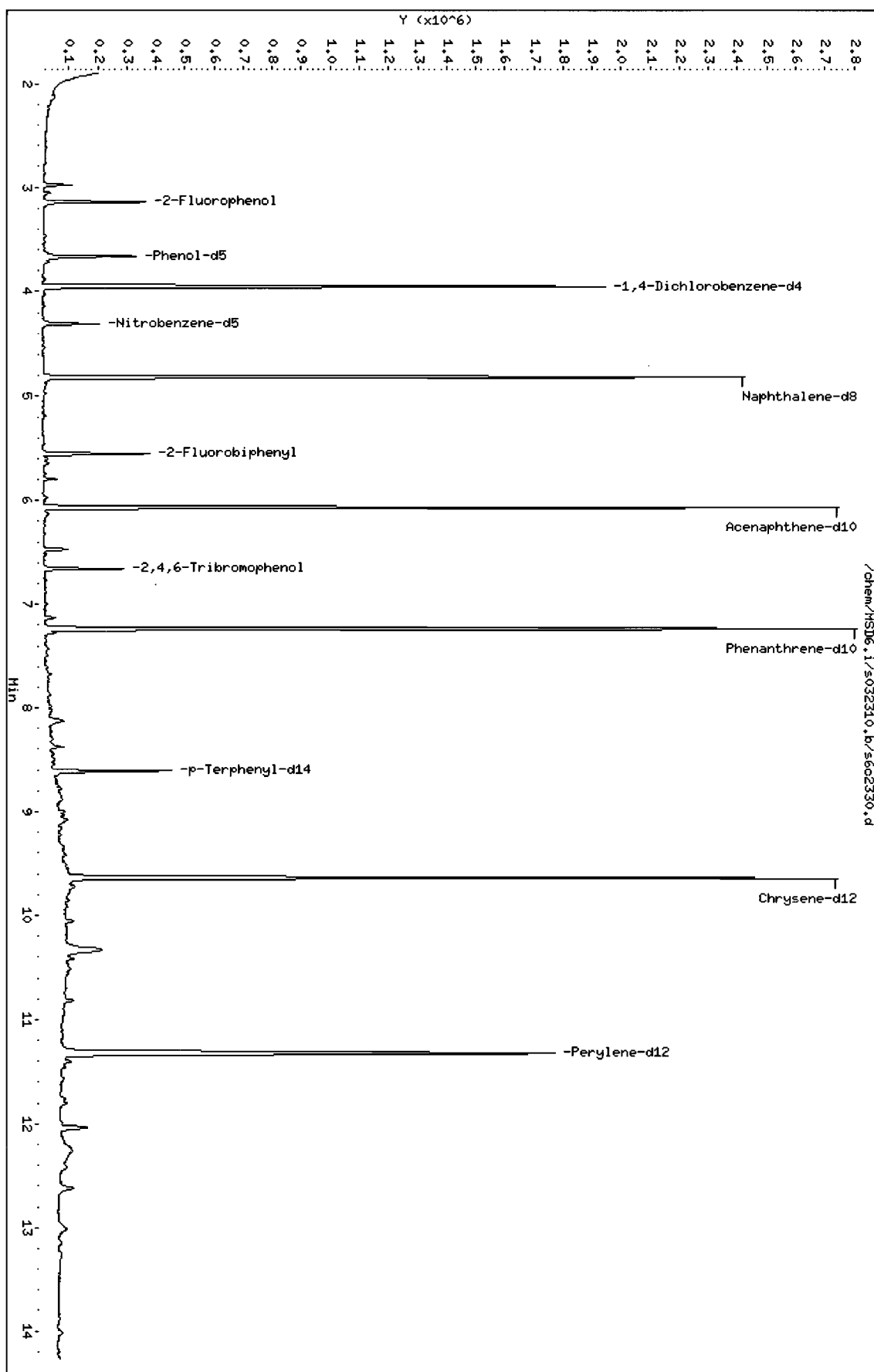
ISTD	RT	AREA	AMOUNT
* 91 Chrysene-d12	9.639	4062592	40.000
* 98 Perylene-d12	11.321	3183301	40.000

CONCENTRATIONS				QUANT			
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown							
9.727	498046	4.90372444	917	0		0	91

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
====	====	=====	=====	=====	=====	=====	=====
5-Bromo-4-oxo-4,5,6,7-tetrahydrobenzofur					CAS #: 300574-36-1		
10.327	818490	8.05879030	1510	90	NIST05.L	68738	91
Unknown					CAS #:		
12.257	328247	4.12461559	772	0		0	98

Data File: /chem/HSD6.i/s032310.b/s602330.d  
Date : 24-MAR-2010 01:50  
Client ID: RE36-10-8291  
Sample Info: 1248519007196313141SVH11.LANL  
Volume Injected (uL): 0.5  
Column phase: 3uM DB-SHS

Instrument: HSD6.i  
Operator: nag1  
Column diameter: 0.20



Date : 24-MAR-2010 01:50

Client ID: RE36-10-8291

Instrument: MSD6.i

Sample Info: I2485190071963133141SVH111LANL

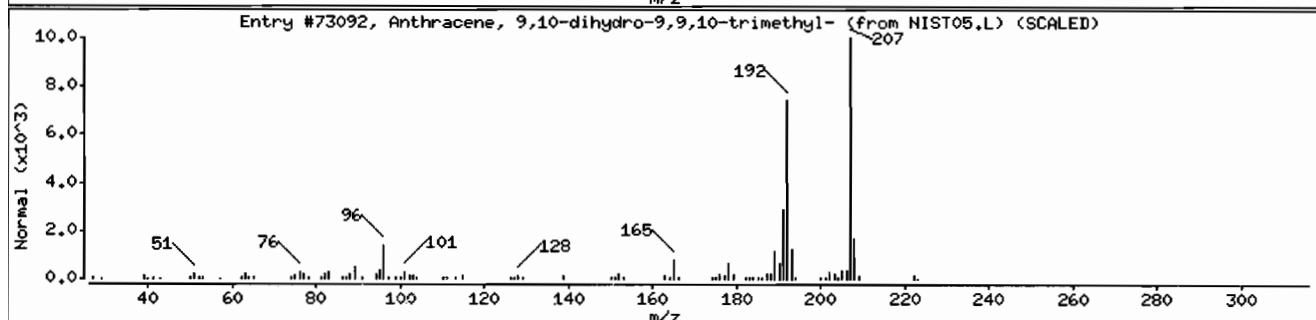
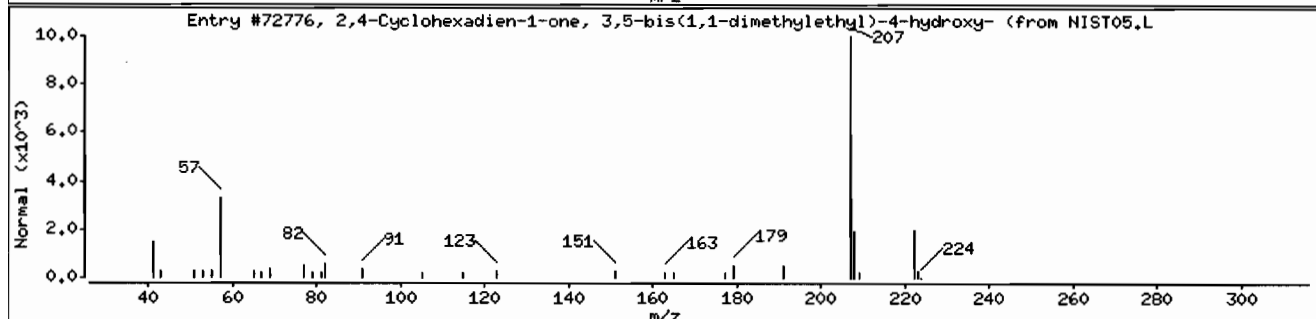
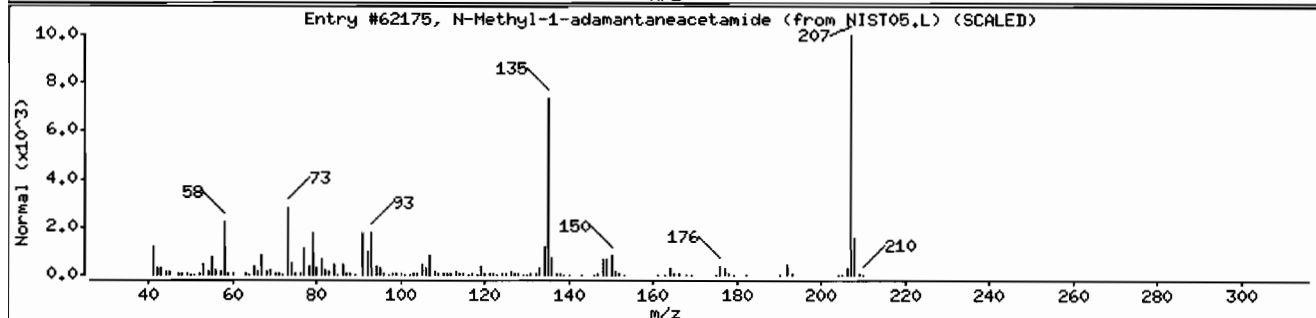
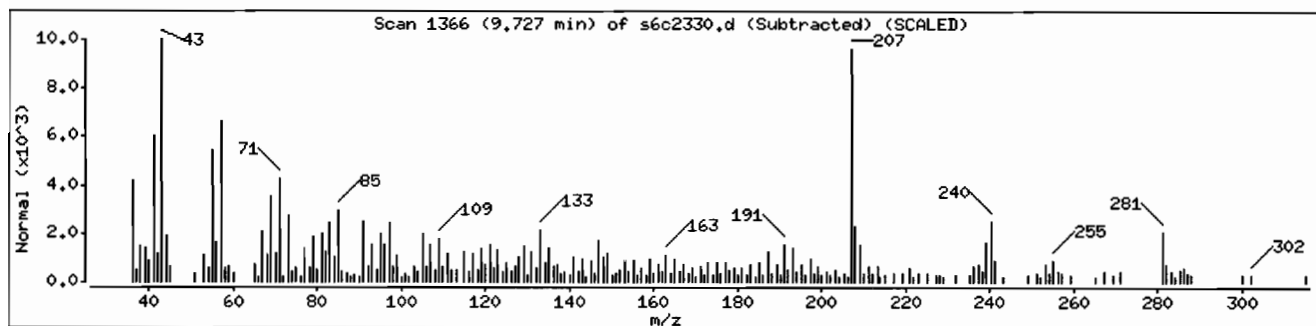
Volume Injected (uL): 0.5

Operator: nag1

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	42	C <sub>13</sub> H <sub>21</sub> NO	207
2,4-Cyclohexadien-1-one, 3,5-bis(1,1-dimethyl-2-propenyl)-	54965-43-4	NIST05.L	72776	38	C <sub>14</sub> H <sub>22</sub> O <sub>2</sub>	222
Anthracene, 9,10-dihydro-9,9,10-trimethyl-	14923-29-6	NIST05.L	73092	38	C <sub>17</sub> H <sub>18</sub>	222



Date : 24-MAR-2010 01:50

Client ID: RE36-10-8291

Instrument: MSD6.i

Sample Info: 12485190071963133141SVH111LANL

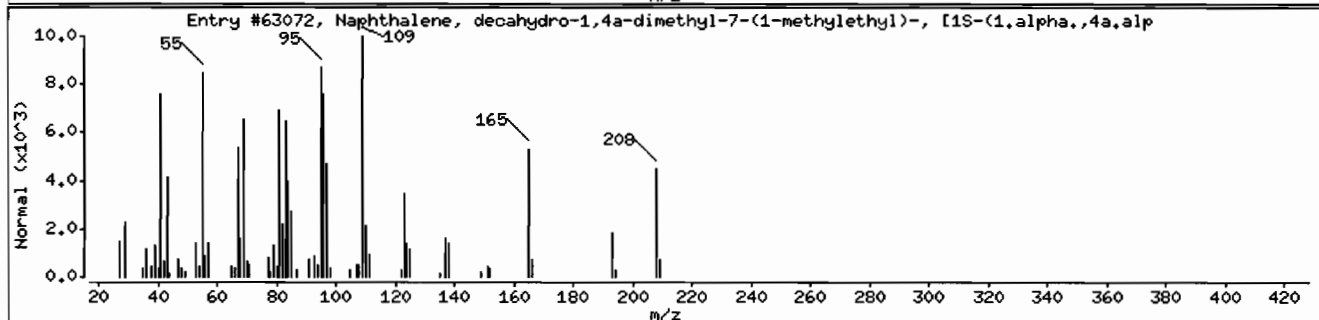
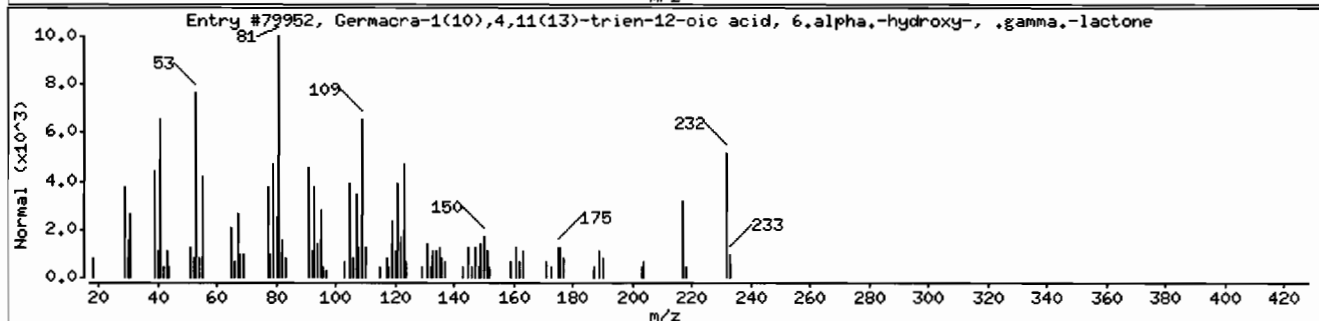
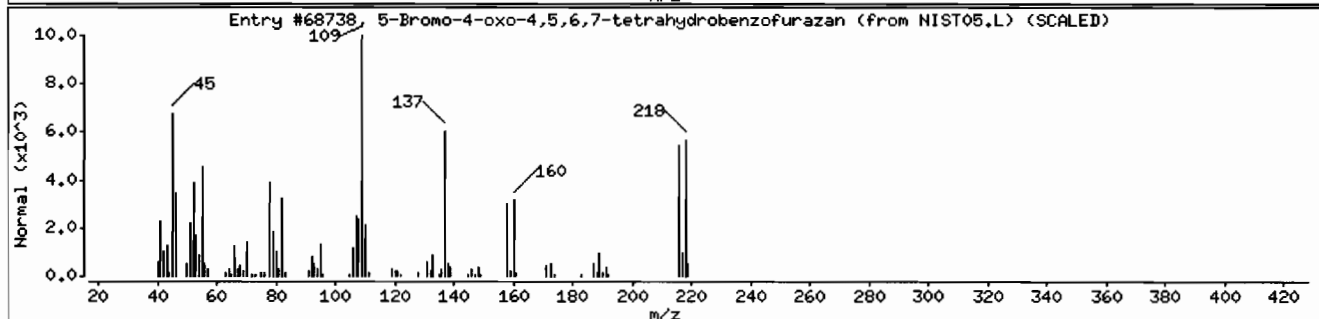
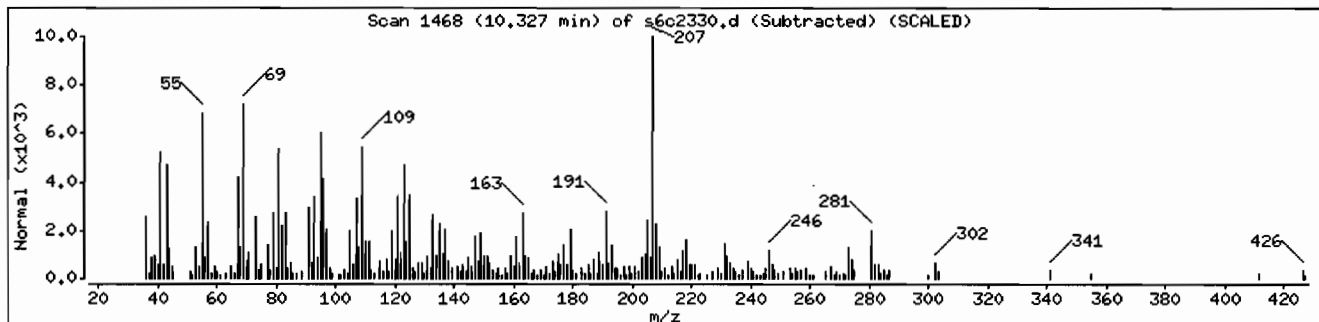
Volume Injected (uL): 0.5

Operator: nag1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
5-Bromo-4-oxo-4,5,6,7-tetrahydrobenzofur	300574-36-1	NIST05.L	68738	90	C6H5BrN2O2	216
Germacra-1(10),4,11(13)-trien-12-oic aci	553-21-9	NIST05.L	79952	46	C15H20O2	232
Naphthalene, decahydro-1,4a-dimethyl-7-(	30824-81-8	NIST05.L	63072	43	C15H28	208



Date : 24-MAR-2010 01:50

Client ID: RE36-10-8291

Instrument: MSD6.i

Sample Info: I2485190071963133141SVH111LANL

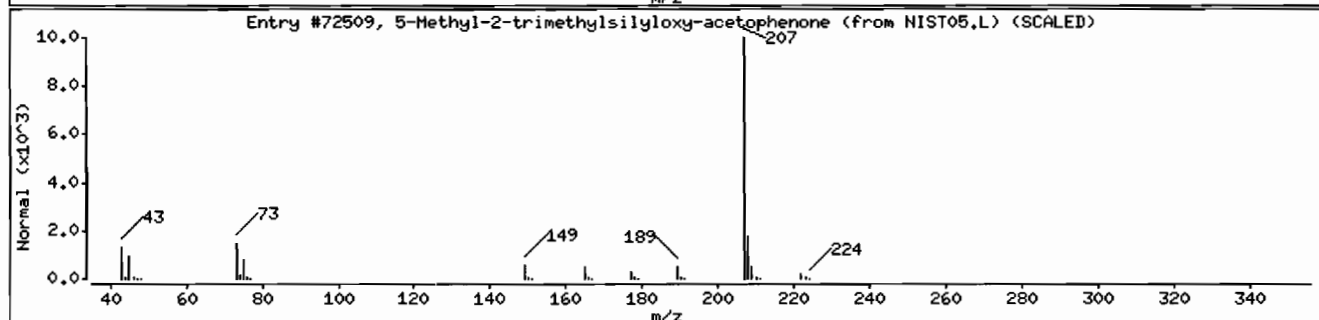
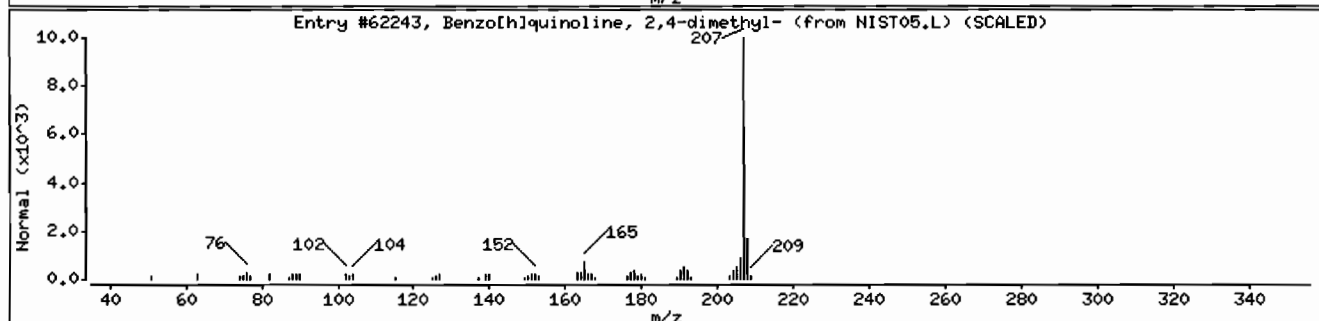
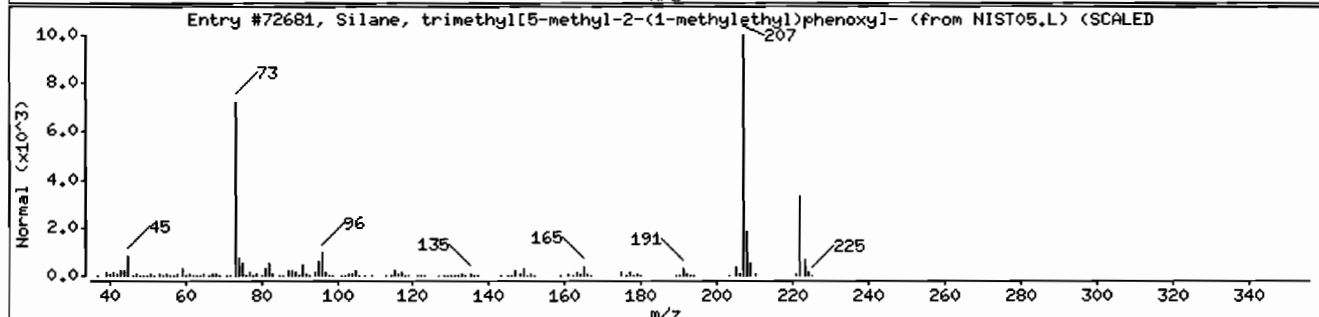
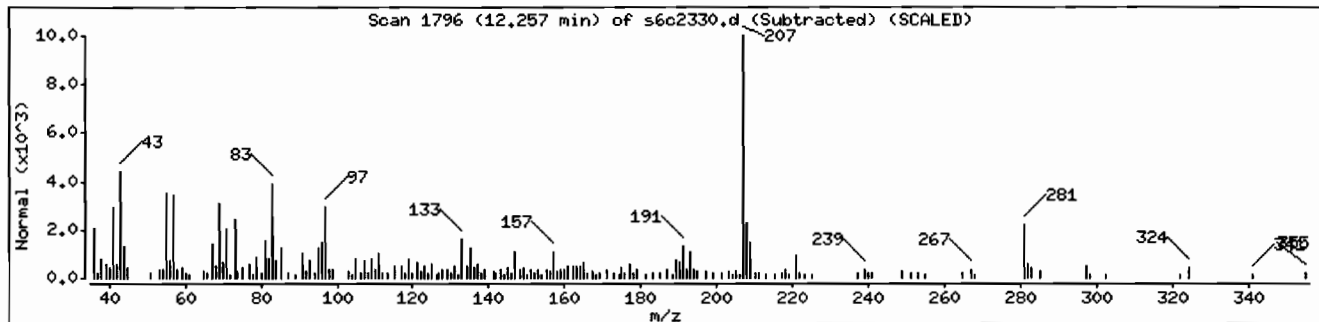
Volume Injected (uL): 0.5

Operator: nag1

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	72681	50	C13H22OSi	222
Benzo[h]quinoline, 2,4-dimethyl-	605-67-4	NIST05.L	62243	41	C15H13N	207
5-Methyl-2-trimethylsilyloxy-acetophenon	97389-69-0	NIST05.L	72509	38	C12H18O2Si	222



# 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	
Safole	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(j)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,i)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: 22-Mar-2010 16:37

### Calibration History

Method : /chem/MSD6.i/s032110.b/MSD6-M8270C-AQA-031610.m

Start Cal Date: 16-MAR-2010 09:18

End Cal Date : 17-MAR-2010 04:51

#### Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
16-MAR-2010 09:18	MEGA	/chem/MSD6.i/s031610.b/s6c1603.d
Cal Level: 2 , Cal Amount: 10.00000		
17-MAR-2010 02:32	NEV	/chem/MSD6.i/s031610.b/s6c1640.d
16-MAR-2010 22:16	HEX	/chem/MSD6.i/s031610.b/s6c1629.d
16-MAR-2010 19:27	PEST	/chem/MSD6.i/s031610.b/s6c1622.d
16-MAR-2010 16:42	AP12	/chem/MSD6.i/s031610.b/s6c1615.d
16-MAR-2010 09:47	MEGA	/chem/MSD6.i/s031610.b/s6c1604.d
Cal Level: 3 , Cal Amount: 20.00000		
17-MAR-2010 02:55	NEV	/chem/MSD6.i/s031610.b/s6c1641.d
16-MAR-2010 22:40	HEX	/chem/MSD6.i/s031610.b/s6c1630.d
16-MAR-2010 19:51	PEST	/chem/MSD6.i/s031610.b/s6c1623.d
16-MAR-2010 17:06	AP12	/chem/MSD6.i/s031610.b/s6c1616.d
16-MAR-2010 10:17	MEGA	/chem/MSD6.i/s031610.b/s6c1605.d
Cal Level: 4 , Cal Amount: 40.00000		
17-MAR-2010 03:19	NEV	/chem/MSD6.i/s031610.b/s6c1642.d
16-MAR-2010 23:05	HEX	/chem/MSD6.i/s031610.b/s6c1631.d
16-MAR-2010 20:16	PEST	/chem/MSD6.i/s031610.b/s6c1624.d
16-MAR-2010 17:30	AP12	/chem/MSD6.i/s031610.b/s6c1617.d
16-MAR-2010 10:48	MEGA	/chem/MSD6.i/s031610.b/s6c1606.d
Cal Level: 5 , Cal Amount: 50.00000		
17-MAR-2010 03:42	NEV	/chem/MSD6.i/s031610.b/s6c1643.d
16-MAR-2010 23:30	HEX	/chem/MSD6.i/s031610.b/s6c1632.d
16-MAR-2010 20:39	PEST	/chem/MSD6.i/s031610.b/s6c1625.d
16-MAR-2010 17:53	AP12	/chem/MSD6.i/s031610.b/s6c1618.d
16-MAR-2010 11:18	MEGA	/chem/MSD6.i/s031610.b/s6c1607.d
Cal Level: 6 , Cal Amount: 80.00000		
17-MAR-2010 04:05	NEV	/chem/MSD6.i/s031610.b/s6c1644.d
16-MAR-2010 23:53	HEX	/chem/MSD6.i/s031610.b/s6c1633.d
16-MAR-2010 21:04	PEST	/chem/MSD6.i/s031610.b/s6c1626.d
16-MAR-2010 18:16	AP12	/chem/MSD6.i/s031610.b/s6c1619.d
16-MAR-2010 11:48	MEGA	/chem/MSD6.i/s031610.b/s6c1608.d
Cal Level: 7 , Cal Amount: 100.00000		

17-MAR-2010 04:28	NEV	/chem/MSD6.i/s031610.b/s6c1645.d
17-MAR-2010 00:17	HEX	/chem/MSD6.i/s031610.b/s6c1634.d
16-MAR-2010 21:29	PEST	/chem/MSD6.i/s031610.b/s6c1627.d
16-MAR-2010 18:40	AP12	/chem/MSD6.i/s031610.b/s6c1620.d
16-MAR-2010 12:18	MEGA	/chem/MSD6.i/s031610.b/s6c1609.d

Cal Level: 8 , Cal Amount: 120.00000

17-MAR-2010 04:51	NEV	/chem/MSD6.i/s031610.b/s6c1646.d
16-MAR-2010 21:52	PEST	/chem/MSD6.i/s031610.b/s6c1628.d
16-MAR-2010 19:04	AP12	/chem/MSD6.i/s031610.b/s6c1621.d
16-MAR-2010 12:48	MEGA	/chem/MSD6.i/s031610.b/s6c1610.d

# Continuing Calibration

Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 40.0

21-MAR-2010 17:25	AP12	/chem/MSD6.i/s032110.b/s6c2106.d
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Ccal Level: 4 , Ccal Amount: 40.0

21-MAR-2010 16:55	MEGA	/chem/MSD6.i/s032110.b/s6c2105.d
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Ccal Level: 4 , Ccal Amount: 40.0

21-MAR-2010 09:45	MEGA	/chem/MSD6.i/s032110.b/s6c2103.d
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Ccal Level: 4 , Ccal Amount: 40.0

21-MAR-2010 09:12	MEGA	/chem/MSD6.i/s032110.b/s6c2102.d
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## GEL Laboratories LLC

## INITIAL CALIBRATION DATA

Start Cal Date : 16-MAR-2010 09:18  
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 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /chem/MSD6.i/s032110.b/MSD6-M8270C-AQA-031610.m  
 Cal Date : 22-Mar-2010 16:37 jen00986

## Calibration File Names:

Level 1: /chem/MSD6.i/s031610.b/s6c1603.d  
 Level 2: /chem/MSD6.i/s031610.b/s6c1640.d  
 Level 3: /chem/MSD6.i/s031610.b/s6c1641.d  
 Level 4: /chem/MSD6.i/s031610.b/s6c1642.d  
 Level 5: /chem/MSD6.i/s031610.b/s6c1643.d  
 Level 6: /chem/MSD6.i/s031610.b/s6c1644.d  
 Level 7: /chem/MSD6.i/s031610.b/s6c1645.d  
 Level 8: /chem/MSD6.i/s031610.b/s6c1646.d

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Coefficients b	m1	m2	\$RSD or R^2
1 N-Methyl-N-nitrosomethylamine	++++ 0.72590	0.81792 0.72296	0.82056	0.78930	0.79192	0.76046	AVRG	0.77557		5.19380
2 Pyridine	++++ 1.05148	1.11606 1.15602	1.14524	1.09549	1.10183	1.07067	AVRG	1.10526		3.40288
4 Aniline	++++ 0.62930	0.72133 0.62826	0.70476	0.66890	0.68894	0.64499	AVRG	0.66950		5.53075
209 Benzaldehyde	++++ 0.83244	1.13309 0.82430	1.08471	1.00392	0.97767	0.86499	AVRG	0.96016		12.85923
6 Phenol	++++ 1.30346	1.61272 1.28275	1.56254	1.44105	1.45641	1.36160	AVRG	1.43150		8.74973

## GEL Laboratories LLC

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 Cal Date : 22-Mar-2010 16:37 jen00986

Compound	1	10	20	40	50	80	Curve	b	Coefficients ml	m2	%RSD or R^2
7 bis(2-Chloroethyl) ether	++++ 0.95191	1.19254 0.93692	1.18236	1.09028	1.09625	1.00058	AVRG		1.06440		9.77817
8 2-Chlorophenol	++++ 1.06189	1.26962 1.06261	1.28222	1.17814	1.18825	1.10696	AVRG		1.16424		7.83127
203 n-Decane	++++ 1.37227	1.96779 ++++	1.93918	1.70280	1.68456	1.47743	AVRG		1.69067		14.13608
9 1,3-Dichlorobenzene	++++ 1.15341	1.44879 1.11325	1.44947	1.30584	1.30842	1.19897	AVRG		1.28259		10.51030
11 1,4-Dichlorobenzene	++++ 1.09866	1.42133 1.09543	1.40639	1.25708	1.27799	1.16100	AVRG		1.24541		10.83313
12 Benzyl alcohol	++++ 0.79193	0.85394 0.78165	0.86245	0.80492	0.83695	0.79588	AVRG		0.81825		3.95576
13 1,2-Dichlorobenzene	++++ 0.99051	1.34498 0.98974	1.29593	1.11046	1.13364	1.03705	AVRG		1.12890		12.62648
14 bis(2-Chloroisopropyl)ether	++++ 1.96542	2.53022 1.89769	2.53492	2.29878	2.31844	2.11439	AVRG		2.23712		11.38315
15 o-Cresol	++++ 0.81771	1.01324 0.80283	0.99090	0.86659	0.89293	0.83096	AVRG		0.88788		9.44602



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 Cal Date : 22-Mar-2010 16:37 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	120									
	Level 7	Level 8									
16 Acetophenone	++++ 1.11097	1.46180 1.11114	1.39429	1.25730	1.25356	1.14795	AVRG		1.24814		11.07970
17 N-Nitrosodipropylamine	++++ 0.89995	1.04632 0.90020	1.03866	0.98744	1.01348	0.95067	AVRG		0.97668		6.28044
18 m,p-Cresols	++++ 1.21737	1.32601 1.21749	1.35004	1.26915	1.31796	1.25447	AVRG		1.27893		4.16878
19 Hexachloroethane	++++ 0.48359	0.59901 0.46860	0.59645	0.55146	0.55577	0.50879	AVRG		0.53767		9.68345
21 Nitrobenzene	++++ 0.30203	0.41616 0.28967	0.40868	0.35909	0.36547	0.32858	AVRG		0.35281		13.92765
22 Isophorone	++++ 0.60504	0.76756 0.57972	0.76141	0.67508	0.70486	0.64538	AVRG		0.67701		10.74431
23 2-Nitrophenol	++++ 0.13113	0.18755 0.12806	0.16925	0.15697	0.15800	0.13948	AVRG		0.15292		14.07952
24 2,4-Dimethylphenol	++++ 966250	128503 ++++	217256	416723	533570	827995	WLNIR	-0.14975	0.25299		0.99406
25 bis(2-Chloroethoxy)methane	++++ 0.32172	0.43560 0.30463	0.42444	0.37400	0.37627	0.33980	AVRG		0.36806		13.49875

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 Method file : /chem/MSD6.i/s032110.b/MSD6-M8270C-AQA-031610.m  
 Cal Date : 22-Mar-2010 16:37 jen00986

Compound	1	10	20	40	50	80	Curve	b	Coefficients m1	m2	%RSD or R^2
26 2,4-Dichlorophenol	++++ 0.22233	0.29833 0.21321	0.28887	0.25784	0.26048	0.23660	AVRG		0.25252		11.88589
27 Benzoic acid	++++ 0.19885	++++ 0.20819	0.15188	0.16162	0.20350	0.20115	AVRG		0.18753		12.92549
28 1,2,4-Trichlorobenzene	++++ 0.24757	0.33900 0.23474	0.33884	0.29761	0.29991	0.26567	AVRG		0.28905		14.39082
30 Naphthalene	1.17741 ++++	1.03786 ++++	1.00687	0.84879	0.85336	++++	AVRG		0.98486		14.01214
204 alpha-Terpineol	++++ 0.24448	0.33608 0.23009	0.33453	0.25084	0.25286	0.26114	AVRG		0.28429		14.63166
31 4-Chloroaniline	++++ 0.38534	0.47746 0.36929	0.49291	0.44934	0.45825	0.40866	AVRG		0.43446		10.86864
189 Caprolactam	++++ 0.09092	0.10378 0.09292	0.10570	0.09999	0.09912	0.09284	AVRG		0.09790		5.90407
32 Hexachlorobutadiene	++++ 0.14051	0.19255 0.13534	0.18969	0.16950	0.16919	0.15167	AVRG		0.16407		13.75956
33 4-Chloro-3-methylphenol	++++ 0.24213	0.32043 0.23028	0.30822	0.27683	0.28548	0.25715	AVRG		0.27436		12.15912

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 Integrator : HP RTE  
 Method file : /chem/MSD6.i/s032110.b/MSD6-M8270C-AQA-031610.m  
 Cal Date : 22-Mar-2010 16:37 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									
34 2-Methylnaphthalene	0.72925 ++++	0.65481 ++++	0.63621	0.55294	0.56663	0.49402	AVRG		0.60564		13.89123
35 1-Methylnaphthalene	0.70436 ++++	0.66500 ++++	0.61927	0.53454	0.53753	0.47391	AVRG		0.58910		14.96497
36 Hexachlorocyclopentadiene	++++ 0.18872	0.25218 ++++	0.24426	0.26357	0.23616	0.19125	AVRG		0.22936		13.87544
208 1,1'-Biphenyl	++++ 0.96643	1.34441 0.94136	1.27102	1.12196	1.11758	1.01987	AVRG		1.11180		13.65187
205 2,3-Dichloroaniline	++++ 0.45417	0.61240 0.44760	0.60292	0.54053	0.53714	0.47736	AVRG		0.52459		12.87597
37 2,4,6-Trichlorophenol	++++ 0.28219	0.38108 0.30558	0.37793	0.32193	0.36706	0.30741	AVRG		0.33474		11.93741
38 2,4,5-Trichlorophenol	++++ 0.34748	0.37129 0.30293	0.37911	0.38732	0.34179	0.35266	AVRG		0.35465		8.00704
40 2-Chloronaphthalene	1.19201 0.80529	1.10470 0.79483	1.08122	0.97966	0.96619	0.86532	AVRG		0.97365		14.96311
42 o-Nitroaniline	++++ 0.31294	0.36102 0.31605	0.36661	0.34980	0.35607	0.33160	AVRG		0.34201		6.37491

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 Method file : /chem/MSD6.i/s032110.b/MSD6-M8270C-AQA-031610.m  
 Cal Date : 22-Mar-2010 16:37 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	SRSD or R <sup>2</sup>
	100	120									
	Level 7	Level 8									
41 m-Nitroaniline	++++ 0.24489	0.23455 0.23973	0.26751	0.26609	0.27182	0.25408	AVRG		0.25409		5.81743
43 Dimethylphthalate	++++ 0.99525	1.30419 0.96796	1.28387	1.15700	1.15779	1.04419	AVRG		1.13004		11.83407
44 2,6-Dinitrotoluene	++++ 0.23916	0.30420 0.23864	0.29865	0.27654	0.28158	0.25526	AVRG		0.27058		9.91397
45 Acenaphthylene	1.85647 1.24637	1.73104 ++++	1.67326	1.48789	1.47507	1.32790	AVRG		1.54257		14.31335
47 Acenaphthene	1.28627 ++++	1.05044 ++++	1.03429	0.91274	0.90543	++++	AVRG		1.03783		14.85478
48 2,4-Dinitrophenol	++++ 226466	++++ 280792	23383	83099	110420	178844	LINR	0.14548	0.11086		0.99537
49 Dibenzofuran	++++ 1.08151	1.49805 1.05151	1.45690	1.29929	1.28456	1.15301	AVRG		1.26069		13.90416
50 2,4-Dinitrotoluene	++++ 0.32724	0.36954 0.33221	0.37982	0.36276	0.37594	0.34784	AVRG		0.35648		5.89787
51 Diethylphthalate	++++ 0.94857	1.30298 0.91864	1.28452	1.13974	1.14323	1.01648	AVRG		1.10774		13.84255

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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									
52 4-Nitrophenol	++++	0.20176	0.19292	0.19251	0.19939	0.18710	AVRG		0.19236		3.37304
	0.18356	0.18929									
53 Fluorene	1.38576	1.24024	1.19555	1.05553	1.05905	0.97044	AVRG		1.11781		14.68974
	0.91808	++++									
54 4-Chlorophenylphenylether	++++	0.61669	0.60649	0.55132	0.54613	0.49714	AVRG		0.53621		11.44943
	0.46826	0.46745									
55 2-Methyl-4,6-dinitrophenol	++++	19709	42715	133111	183242	300925	LINR	0.11116	0.10470		0.99841
	377022	458868									
56 p-Nitroaniline	++++	0.18685	0.19668	0.22186	0.22558	0.21140	AVRG		0.20835		6.60344
	0.20310	0.21295									
133 Diphenylamine	++++	0.59755	0.58488	0.51490	0.52719	0.49057	AVRG		0.51902		10.72829
	0.45816	0.45986									
58 1,2-Diphenylhydrazine	++++	0.81379	0.80943	0.71643	0.71366	0.64914	AVRG		0.69767		13.33528
	0.59712	0.58414									
59 Tributylphosphate	++++	1.48756	1.31745	1.19079	1.17530	1.07632	AVRG		1.20585		14.71177
	0.98767	++++									
61 4-Bromophenylphenylether	++++	0.18913	0.19414	0.17251	0.17518	0.16699	AVRG		0.17368		7.95612
	0.15758	0.16024									

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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	SRSD or R <sup>2</sup>
	100	120									
	Level 7	Level 8									
63 Hexachlorobenzene	++++ 0.15325	0.17986 0.15146	0.18314	0.16397	0.16914	0.16087	AVRG		0.16595		7.37947
207 Atrazine	++++ ++++	0.05303 ++++	0.05040	0.04601	0.04433	0.03650	AVRG		0.04606		13.80997
65 Pentachlorophenol	++++ 0.09437	0.08594 0.09548	0.09329	0.09347	0.09827	0.09698	AVRG		0.09397		4.23639
206 n-Octadecane	++++ ++++	0.53452 ++++	0.53921	0.46736	0.45674	0.40532	AVRG		0.48063		11.74926
68 Phenanthrene	1.18955 ++++	1.04058 ++++	1.01586	0.88259	0.91454	0.80483	AVRG		0.97466		14.00439
69 Anthracene	1.17774 ++++	1.06636 ++++	1.01144	0.91703	0.90561	0.81316	AVRG		0.98189		13.26811
72 Di-n-butylphthalate	++++ ++++	1.28361 ++++	1.29174	1.09885	1.06066	0.94298	AVRG		1.13557		13.23540
76 Fluoranthene	1.20011 0.79997	1.09187 ++++	1.06525	0.96204	0.95592	0.84379	AVRG		0.98842		14.28401
77 Benzidine	++++ 0.43042	0.40621 0.42719	0.45200	0.39954	0.40216	0.42655	AVRG		0.42058		4.50256

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Compound	1	10	20	40	50	80	Curve	b	mi	m2	SRSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					
	100	120									
	Level 7	Level 8									
79 Pyrene	1.35186	1.32429	1.37915	1.14942	1.19852	1.19422	AVRG		1.21938		9.78236
	1.08124	1.07630									
85 Butylbenzylphthalate	++++	0.60942	0.68418	0.57419	0.59563	0.59071	AVRG		0.58998		8.46660
	0.53615	0.53958									
89 Benzo(a)anthracene	1.23844	1.07586	1.08943	0.99635	1.02654	0.99275	AVRG		1.04446		8.71633
	0.98276	0.95356									
90 3,3'-Dichlorobenzidine	++++	0.28634	0.34000	0.31737	0.30439	0.29332	AVRG		0.30172		6.84952
	0.28534	0.28530									
92 Chrysene	1.21905	1.11052	1.09284	0.99293	1.00791	0.89389	AVRG		0.99764		14.00287
	0.83298	0.83097									
93 bis(2-Ethylhexyl)phthalate	++++	0.87792	0.94166	0.75843	0.78894	0.76390	AVRG		0.78860		11.64783
	0.69996	0.68939									
94 Di-n-octylphthalate	++++	1.50498	1.84996	1.38120	1.53446	1.53965	AVRG		1.53062		10.51568
	1.35710	1.54699									
95 Benzo(b)fluoranthene	1.06453	1.04231	1.18249	1.05565	1.10684	1.12171	AVRG		1.08744		4.38133
	1.04658	1.07946									
96 Benzo(k)fluoranthene	1.13857	1.15145	1.13298	1.00215	1.05846	0.96843	AVRG		1.04328		8.61578
	0.91790	0.97630									

## GEL Laboratories LLC

## INITIAL CALIBRATION DATA

Start Cal Date : 16-MAR-2010 09:18  
End Cal Date : 17-MAR-2010 04:51  
Quant Method : ISTD  
Target Version : 3.50  
Integrator : HP RTE  
Method file : /chem/MSD6.i/s032110.b/MSD6-M8270C-AQA-031610.m  
Cal Date : 22-Mar-2010 16:37 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									
97 Benzo(a)pyrene	0.91272	0.95091	0.96305	0.93841	0.94477	0.90966	AVRG		0.92098		3.70068
	0.87668	0.87161									
99 Indeno(1,2,3-cd)pyrene	0.82214	0.91774	0.83742	0.89629	0.86445	0.85264	AVRG		0.84510		6.01764
	0.81655	0.75359									
100 Dibenzo(a,h)anthracene	0.65413	0.74504	0.67287	0.73440	0.69759	0.67777	AVRG		0.68068		6.53700
	0.65411	0.60951									
101 Benzo(ghi)perylene	0.72104	0.79945	0.72249	0.76566	0.71838	0.73009	AVRG		0.72160		7.04885
	0.68866	0.62705									
102 1,4-Dioxane	++++	0.40364	0.39108	0.35833	0.36073	0.32452	AVRG		0.35119		10.77795
	0.31161	0.30837									
103 Methyl methacrylate	++++	0.21508	0.20768	0.19444	0.19248	0.17684	AVRG		0.18979		9.29691
	0.16911	0.17292									
104 Ethyl methacrylate	++++	0.94302	0.90271	0.84859	0.85171	0.77200	AVRG		0.82709		9.86302
	0.73535	0.73626									
105 2-Picoline	++++	1.41751	1.35879	1.23892	1.24366	1.11707	AVRG		1.21280		11.79135
	1.05418	1.05943									
106 N-Nitrosomethylethylamine	++++	0.58418	0.57876	0.54352	0.54304	0.51432	AVRG		0.53810		6.38520
	0.50151	0.50138									



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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Coefficients b	m1	m2	%RSD or R^2
107 Methyl methanesulfonate	++++ 0.55158	0.64507 0.54936	0.64908	0.61336	0.60691	0.56546		0.59726		7.07556
108 N-Nitrosodiethylamine	++++ 0.50185	0.60002 0.50111	0.59792	0.54460	0.55515	0.50996		0.54437		7.84567
109 Ethyl Methanesulfonate	++++ 0.67400	0.77937 0.67651	0.78398	0.73252	0.74517	0.68922		0.72583		6.44394
110 Pentachloroethane	++++ 0.30477	0.36537 0.30069	0.35868	0.33978	0.34412	0.31859		0.33314		7.67816
111 N-Nitrosopyrrolidine	++++ 0.52363	0.65147 0.52349	0.65118	0.60564	0.59568	0.54014		0.58446		9.60255
113 N-Nitrosomorpholine	++++ 0.60862	0.77690 0.59644	0.75720	0.69860	0.69697	0.63076		0.68078		10.46970
114 o-Toluidine	++++ 1.51078	2.05374 1.51005	1.96418	1.78212	1.74117	1.58116		1.73474		12.47332
115 N-Nitrosopiperidine	++++ 0.14357	0.16517 0.14183	0.16671	0.15400	0.15626	0.14779		0.15362		6.43146
116 a,a-Dimethylphenethylamine	++++ 0.84727	0.84998 0.81794	0.91437	0.90226	0.91158	0.87133		0.87353		4.25275

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Compound	1	10	20	40	50	80	Curve	b	ml	m2	RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					
	100	120									
	Level 7	Level 8									
117 Triethylphosphorothioate	++++	0.16227	0.15179	0.14508	0.14517	0.13799					
	0.13034	0.12625				AVRG			0.14270		8.68942
118 2,6-Dichlorophenol	++++	0.27261	0.26747	0.24661	0.24973	0.23288					
	0.22683	0.22120				AVRG			0.24533		8.04029
119 Hexachloropropene	++++	0.12422	0.14505	0.13455	0.13486	0.13756					
	0.13062	0.12490				AVRG			0.13311		5.48816
120 p-Phenylenediamine	++++	0.34413	0.36083	0.31398	0.29301	0.26154					
	0.24844	++++				AVRG			0.30365		14.69115
121 N-Nitrosodi-n-butylamine	++++	0.30402	0.30501	0.24131	0.24260	0.22117					
	++++	++++				AVRG			0.26282		14.83811
122 Saffrole	++++	0.24219	0.23822	0.21649	0.21692	0.20189					
	0.19239	0.18963				AVRG			0.21396		9.73528
123 1,2,4,5-Tetrachlorobenzene	++++	0.51062	0.49855	0.44614	0.45393	0.42366					
	0.40150	0.39571				AVRG			0.44716		10.00072
124 Isosafrole	++++	0.39056	0.38828	0.35693	0.35264	0.33685					
	0.32525	0.32217				AVRG			0.35324		7.88298
125 1,4-Naphthoquinone	++++	0.44627	0.42913	0.36710	0.34310	0.27951					
	0.26871	0.26396				AVRG			0.34254		22.12484

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Compound	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Curve	b	Coefficients m1	m2	%RSD or R <sup>2</sup>
	100	120									
	Level 7	Level 8									
126 m-Dinitrobenzene	++++ 0.17688	0.19457 0.17754	0.20451	0.19900	0.20530	0.18435	AVRG		0.19174		6.33347
127 Pentachlorobenzene	++++ 0.33716	0.43110 0.33489	0.41421	0.37919	0.37551	0.35401	AVRG		0.37515		9.84443
128 1-Naphthylamine	++++ 0.80481	1.01413 0.80092	1.02551	0.91517	0.89074	0.84391	AVRG		0.89931		10.26327
129 2-Naphthylamine	++++ 0.81714	1.06923 0.82229	1.09028	0.96961	0.93134	0.88633	AVRG		0.94089		11.64761
130 2,3,4,6-Tetrachlorophenol	++++ 0.26048	0.28320 0.26802	0.29838	0.27851	0.29220	0.26438	AVRG		0.27788		5.16598
131 5-Nitro-o-toluidine	++++ 0.28937	0.30371 0.29520	0.33910	0.30524	0.30826	0.30565	AVRG		0.30665		5.15108
132 Thionazin	++++ 0.15141	0.18517 0.14819	0.17934	0.16941	0.16728	0.15846	AVRG		0.16561		8.34122
134 Sulfotepp	++++ 0.07503	0.08460 0.07583	0.08173	0.08195	0.08009	0.07824	AVRG		0.07964		4.35673
135 Phorate	++++ 0.35382	0.45146 0.34151	0.42713	0.42213	0.39953	0.37573	AVRG		0.39590		10.25989

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Compound	1	10	20	40	50	80	Curve	b	Coefficients	m2	%RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					or R <sup>2</sup>
	100	120									
	Level 7	Level 8									
136 1,3,5-Trinitrobenzene	++++ 0.15027	0.14215 0.14373	0.17801	0.16278	0.16019	0.15578	AVRG		0.15613		7.94442
137 Phenacetin	++++ 0.27803	0.31318 0.27408	0.31793	0.28873	0.29334	0.28901	AVRG		0.29347		5.64036
138 Diallyate	++++ 0.22095	0.28920 0.21741	0.27813	0.25090	0.24969	0.23408	AVRG		0.24862		10.98494
139 Dimethoate	++++ 0.24705	0.27336 0.24235	0.26946	0.26875	0.26784	0.25717	AVRG		0.26085		4.66441
140 4-Aminobiphenyl	++++ 0.49732	0.55261 0.48294	0.60071	0.58243	0.60084	0.53773	AVRG		0.55066		8.65686
141 Pentachloronitrobenzene	++++ 0.05467	0.07818 ++++	0.07606	0.06875	0.06554	0.05850	AVRG		0.06695		13.96038
142 Pronamide	++++ ++++	0.30552 ++++	0.28970	0.25313	0.24216	0.21416	AVRG		0.26094		14.10331
143 Dinoseb	++++ 550419	26789 666120	59526	194494	260402	434843	ILINR	0.12393	0.15282		0.99867
144 Disulfoton	++++ 0.26612	0.33440 0.25293	0.31848	0.31065	0.30032	0.28000	AVRG		0.29470		9.99476

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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>
		Level 7	120	Level 8															
145 Methyl parathion	++++		0.23174	0.22766		0.22643	0.22704				0.21420		AVRG			0.21934			5.38336
	0.20697		0.20133																
146 4-Nitroquinoline-1-oxide	++++		0.03620	0.04258		0.03229	0.02624				0.02359		AVRG						
	0.02090		0.01975													0.02879			29.56738
147 Methapyrilene	++++		0.50709	0.51231		0.47429	0.44273				0.38752		AVRG			0.43748			14.35658
	0.37265		0.36578																
148 Isodrin	++++		0.12789	0.12550		0.11252	0.11113				0.10270		AVRG			0.11028			11.76979
	0.09732		0.09486																
149 Aramite	++++		0.04987	0.05241		0.05098	0.04801				0.04511		AVRG			0.04746			8.18427
	0.04334		0.04247																
150 Kepone	++++		0.08033	0.08350		0.07854	0.07324				0.07530		AVRG			0.07668			5.48032
	0.07353		0.07232																
151 p-(Dimethylamino)azobenzene	++++		0.35661	0.32327		0.31849	0.32153				0.28722		AVRG			0.31031			8.98103
	0.28883		0.27624																
152 Chlorobenzilate	++++		0.34601	0.29739		0.29945	0.30335				0.27160		AVRG			0.29472			9.12242
	0.27932		0.26590																
153 3,3'-Dimethylbenzidine	++++		0.63324	0.65171		0.60049	0.59103				0.56476		AVRG			0.59350			6.40934
	0.56416		0.54908																

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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									
154 Famphur	++++ 0.41231	0.44294 0.39369	0.43580	0.46237	0.43998	0.43138	AVRG		0.43121		5.16049
155 2-Acetylaminofluorene	++++ 0.35179	0.28561 0.35001	0.37666	0.36505	0.36381	0.34665	AVRG		0.34851		8.50665
157 7,12Dimethylbenz(a)anthracene	++++ 0.46390	0.51449 0.44355	0.49379	0.48383	0.50239	0.49617	AVRG		0.48545		5.00153
158 3-Methylcholanthrene	++++ 0.39610	0.35367 0.40256	0.42677	0.41143	0.40554	0.40467	AVRG		0.40010		5.65129
26 Phthalic anhydride	++++ 556029	27295 682236	870361	200557	277210	460400	LINR	0.03349	0.14624		0.99669
173 Carbazole	1.01509	0.74843	0.72374	0.75388	0.76522	0.69273	AVRG		0.76672		14.99112
174 Hexachlorophene	++++ 0.05947	0.04741 ++++	0.06158	++++	0.06384	0.06162	AVRG		0.05878		11.13226
179 Dibenzo(a,e)pyrene	++++ 0.31678	0.36049 0.29389	0.28249	0.34513	0.30393	0.34223	AVRG		0.32071		9.10777
185 (2,3-Dibromopropyl)phosphate	++++ ++++	++++ ++++	++++	++++	++++	++++	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
184 p-Benzquinone	++++ 0.22851	0.20897 0.25291	0.35254	0.17686	0.22912	0.25164	AVRG		0.24293		22.61358<-
191 Parathion	++++ 0.05714	0.06141 0.05627	0.06185	0.06208	0.06168	0.05986	AVRG		0.06004		3.99838
192 Methoxychlor	++++ 0.60574	0.71007 0.57499	0.76187	0.67557	0.67506	0.65556	AVRG		0.66555		9.36899
210 m-Toluidine	++++ 1.82362	1.67718 ++++	1.91596	1.79952	2.07052	1.85391	AVRG		1.85679		7.05627
211 p-Toluidine	++++ 1.16108	1.47044 ++++	1.37288	1.42100	1.28519	1.31427	AVRG		1.33748		8.21058
212 Cis Diallate	++++ 0.27521	0.29467 0.27193	0.31145	0.29067	0.29841	0.28191	AVRG		0.28918		4.80566
213 Trans Diallate	++++ 0.25994	0.34024 0.25578	0.32722	0.29518	0.29375	0.27539	AVRG		0.29250		10.98494
214 1,4-Dinitrobenzene	++++ 0.25743	0.27003 0.25119	0.28077	0.27490	0.28781	0.26587	AVRG		0.26971		4.75195
215 2-Ethoxyethanol	++++ 0.66248	0.75153 0.66748	0.75427	0.72199	0.73882	0.68817	AVRG		0.71211		5.48996

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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
216 Methylenebis(2-chloroaniline)	++++ 0.16353	0.14670 0.15734	0.14448 0.15734	0.16081 0.16367	0.16367 0.16247	0.16247 AVRG	AVRG		0.15700		5.16494
229 2,2'-Dichlorobenzil	++++ 0.60843	0.75519 0.58423	0.72438 0.58423	0.63746 0.67020	0.67020 ++++	++++ AVRG	AVRG		0.66332		10.03522
230 4-Chlorothiophenol	++++ 0.24846	0.25858 0.24389	0.25840 0.24389	0.25992 0.26979	0.26979 ++++	++++ AVRG	AVRG		0.25651		3.57209
231 4-Chlorothiophenol	++++ 924542	20380 1190062	113799 319351	319351 419370	419370 ++++	++++ LINR	LINR	0.19963	0.21635		0.99920
232 bis(p-Chlorophenyl)sulfone	++++ 0.35821	0.42993 0.34208	0.41812 0.34208	0.36485 0.38196	0.38196 ++++	++++ AVRG	AVRG		0.38252		9.09627
233 bis(p-Chlorophenyl)disulfide	++++ 0.13916	0.18867 0.13446	0.16361 0.13446	0.14247 0.15771	0.15771 ++++	++++ AVRG	AVRG		0.15435		13.09397
234 Diphenyl disulfide	++++ 0.20985	0.25253 0.20621	0.23711 0.20621	0.22392 0.22770	0.22770 ++++	++++ AVRG	AVRG		0.22622		7.62190
235 Diphenyl sulfide	++++ 0.67001	0.81794 0.65856	0.80171 0.65856	0.75220 0.43617	0.72922 ++++	++++ AVRG	AVRG		0.73827		8.91554
236 Phenyl sulfone	++++ 0.40374	0.47552 0.40017	0.46096 0.40017	0.43737 0.43617	0.43617 ++++	++++ AVRG	AVRG		0.43565		6.89465



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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
237 Hydroxymethyl phthalimide	++++ 292598	38588 364853	80856	126016	157606	++++	LINR	-0.21210	0.09455		0.99652
238 Phthalic acid	++++ 603096	19671 ++++	59106	176058	250394	++++	LINR	0.26696	0.14514		0.99255
239 Thiophenol	++++ 1367181	62327 1721186	207465	508832	672604	++++	LINR	0.09119	1.06115		0.99838
240 bis(Chloromethyl)ether	++++ 0.80538	0.97516 0.76021	0.91313	0.87686	0.87662	++++	AVRG		0.86789		8.80685
241 Octachlorostyrene	++++ 0.05689	0.05974 0.05659	0.05913	0.05893	0.06005	++++	AVRG		0.05855		2.50376
M 225 Trichlorophenols	++++ 0.31483	0.37618 0.30425	0.37852	0.35462	0.35443	0.33004	AVRG		0.34470		8.43399
M 226 Tetrachlorophenols	++++ 0.26048	0.28320 0.26802	0.29838	0.27851	0.29220	0.26438	AVRG		0.27788		5.16598
M 227 Benzo(b,k)fluoranthene	1.10155	1.09688	1.15773	1.02890	1.08265	1.04507	AVRG		1.06536		5.16433
M 228 TTO Sum Semivolatiles	0.98224	1.02788	++++	++++	++++	++++	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 ml	m2	\$RSD or R^2
	100	120									
	Level 7	Level 8									
\$ 3 2-Fluorophenol	++++ 1.02412	1.17799 1.01478	1.21081 1.16530	1.12585 1.06488	1.16530 1.06488	1.06488 1.11196	AVRG		1.11196		7.01882
\$ 5 Phenol-d5	++++ 1.31463	1.53055 1.30976	1.52276 1.44854	1.42264 1.34995	1.44854 1.34995	1.34995 1.41412	AVRG		1.41412		6.55306
\$ 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	++++ 0.33590	0.43556 0.32456	0.43337 1.18747	0.38834 1.05919	0.39802 1.04982	0.36088 0.94356	AVRG		0.38237		11.53560
\$ 39 2-Fluorobiphenyl	++++ 0.89495	1.22526 0.86381	1.18747 0.11537	1.05919 0.11089	1.04982 0.11508	0.94356 0.11113	AVRG		1.03201		13.55845
\$ 60 2,4,6-Tribromophenol	++++ 0.10877	0.11014 0.11433	0.11537 0.77308	0.11089 0.65971	0.11508 0.68870	0.11113 0.71170	AVRG		0.11225		2.35114
\$ 81 p-Terphenyl-d14	++++ 0.64309	0.73264 0.67033	0.77308 0.67033	0.65971 0.67033	0.68870 0.67033	0.71170 0.69704	AVRG		0.69704		6.50888

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INITIAL CALIBRATION DATA

Start Cal Date : 16-MAR-2010 09:18  
End Cal Date : 17-MAR-2010 04:51  
Quant Method : ISTD  
Target Version : 3.50  
Integrator : HP RTE  
Method file : /chem/MSD6.i/s032110.b/MSD6-M8270C-AQA-031610.m  
Cal Date : 22-Mar-2010 16:37 jen00986

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Linear	Amt = b + Rsp/ml	Response
Wt Linear	Amt = b + Rsp/ml	Response

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 16-MAR-2010 13:40  
Lab File ID: s6c1612.d Init. Cal. Date(s): 16-MAR-2010 17-MAR-2010  
Analysis Type: Init. Cal. Times: 09:18 03:19  
Lab Sample ID: WBN100309-09.1 Quant Type: ISTD  
Method: /chem/MSD6.i/s031610.b/MSD6-M8270C-AQA-031610.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
3 2-Fluorophenol	1.11196	1.12168	1.12168	0.000	0.87417	60.00000	Averaged
5 Phenol-d5	1.41412	1.37076	1.37076	0.000	-3.06618	60.00000	Averaged
20 Nitrobenzene-d5	0.38237	0.38375	0.38375	0.000	0.36085	60.00000	Averaged
39 2-Fluorobiphenyl	1.03201	1.06678	1.06678	0.000	3.36917	60.00000	Averaged
60 2,4,6-Tribromophenol	0.11225	0.11519	0.11519	0.000	2.62633	60.00000	Averaged
81 p-Terphenyl-d14	0.69704	0.79497	0.79497	0.000	14.04962	60.00000	Averaged
1 N-Methyl-N-nitrosomethylami	0.77557	0.72913	0.72913	0.000	-5.98844	60.00000	Averaged
2 Pyridine	1.10526	0.87234	0.87234	0.000	-21.07309	60.00000	Averaged
4 Aniline	0.66950	0.60777	0.60777	0.000	-9.21935	60.00000	Averaged
6 Phenol	1.43150	1.41995	1.41995	0.001	-0.80724	20.00000	Averaged ccc
7 bis(2-Chloroethyl) ether	1.06440	0.94128	0.94128	0.000	-11.56744	60.00000	Averaged
8 2-Chlorophenol	1.16424	1.11829	1.11829	0.000	-3.94731	60.00000	Averaged
203 n-Decane	1.69067	1.54455	1.54455	0.000	-8.64282	60.00000	Averaged
9 1,3-Dichlorobenzene	1.28259	1.28904	1.28904	0.000	0.50225	60.00000	Averaged
11 1,4-Dichlorobenzene	1.24541	1.21952	1.21952	0.001	-2.07919	20.00000	Averaged ccc
13 1,2-Dichlorobenzene	1.12890	1.06600	1.06600	0.000	-5.57188	60.00000	Averaged
14 bis(2-Chloroisopropyl)ether	2.23712	2.09235	2.09235	0.000	-6.47116	60.00000	Averaged
12 Benzyl alcohol	0.81825	0.80249	0.80249	0.000	-1.92556	60.00000	Averaged
15 o-Cresol	0.88788	0.81788	0.81788	0.000	-7.88416	60.00000	Averaged
18 m,p-Cresols	1.27893	1.27505	1.27505	0.000	-0.30315	60.00000	Averaged
17 N-Nitrosodipropylamine	0.97668	0.94425	0.94425	0.050	-3.31985	60.00000	Averaged spcc
19 Hexachloroethane	0.53767	0.51894	0.51894	0.000	-3.48261	60.00000	Averaged
21 Nitrobenzene	0.35281	0.34682	0.34682	0.000	-1.69798	60.00000	Averaged
22 Isophorone	0.67701	0.62895	0.62895	0.000	-7.09880	60.00000	Averaged
23 2-Nitrophenol	0.15292	0.16307	0.16307	0.001	6.63474	20.00000	Averaged ccc
24 2,4-Dimethylphenol	41.38180	40.00000	0.29961	0.000	3.45451	60.00000	Wt Linear
25 bis(2-Chloroethoxy)methane	0.36806	0.34233	0.34233	0.000	-6.99093	60.00000	Averaged
26 2,4-Dichlorophenol	0.25252	0.26160	0.26160	0.001	3.59413	20.00000	Averaged ccc
27 Benzoic acid	0.18753	0.19379	0.19379	0.000	3.33592	60.00000	Averaged
28 1,2,4-Trichlorobenzene	0.28905	0.28858	0.28858	0.000	-0.16362	60.00000	Averaged
30 Naphthalene	0.98486	0.79921	0.79921	0.000	-18.85032	60.00000	Averaged
204 alpha-Terpineol	0.28429	0.25507	0.25507	0.000	-10.27705	60.00000	Averaged
31 4-Chloroaniline	0.43446	0.43164	0.43164	0.000	-0.64988	60.00000	Averaged
32 Hexachlorobutadiene	0.16407	0.16530	0.16530	0.001	0.75184	20.00000	Averaged ccc
33 4-Chloro-3-methylphenol	0.27436	0.27921	0.27921	0.001	1.76856	20.00000	Averaged ccc
34 2-Methylnaphthalene	0.60564	0.55335	0.55335	0.000	-8.63470	60.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 16-MAR-2010 13:40  
Lab File ID: s6c1612.d Init. Cal. Date(s): 16-MAR-2010 17-MAR-2010  
Analysis Type: Init. Cal. Times: 09:18 03:19  
Lab Sample ID: WBN100309-09.1 Quant Type: ISTD  
Method: /chem/MSD6.i/s031610.b/MSD6-M8270C-AQA-031610.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
35 1-Methylnaphthalene	0.58910	0.52291	0.52291	0.000	-11.23674	60.00000	Averaged
36 Hexachlorocyclopentadiene	0.22936	0.18652	0.18652	0.050	-18.67482	60.00000	Averaged spcc
205 2,3-Dichloroaniline	0.52459	0.51110	0.51110	0.000	-2.57171	60.00000	Averaged
37 2,4,6-Trichlorophenol	0.33474	0.32662	0.32662	0.001	-2.42453	20.00000	Averaged ccc
38 2,4,5-Trichlorophenol	0.35465	0.40021	0.40021	0.000	12.84507	60.00000	Averaged
40 2-Chloronaphthalene	0.97365	0.93597	0.93597	0.000	-3.87057	60.00000	Averaged
42 o-Nitroaniline	0.34201	0.32847	0.32847	0.000	-3.95892	60.00000	Averaged
41 m-Nitroaniline	0.25409	0.25677	0.25677	0.000	1.05507	60.00000	Averaged
43 Dimethylphthalate	1.13004	1.08997	1.08997	0.000	-3.54579	60.00000	Averaged
44 2,6-Dinitrotoluene	0.27058	0.26832	0.26832	0.000	-0.83186	60.00000	Averaged
50 2,4-Dinitrotoluene	0.35648	0.35493	0.35493	0.000	-0.43442	60.00000	Averaged
45 Acenaphthylene	1.54257	1.46080	1.46080	0.000	-5.30128	60.00000	Averaged
47 Acenaphthene	1.03783	0.85181	0.85181	0.001	-17.92376	20.00000	Averaged ccc
48 2,4-Dinitrophenol	46.32757	40.00000	0.11227	0.050	15.81891	60.00000	Linear spcc
49 Dibenzofuran	1.26069	1.27158	1.27158	0.000	0.86401	60.00000	Averaged
51 Diethylphthalate	1.10774	1.08784	1.08784	0.000	-1.79621	60.00000	Averaged
52 4-Nitrophenol	0.19236	0.19555	0.19555	0.050	1.66021	60.00000	Averaged spcc
53 Fluorene	1.11781	1.00173	1.00173	0.000	-10.38406	60.00000	Averaged
54 4-Chlorophenylphenylether	0.53621	0.52718	0.52718	0.000	-1.68531	60.00000	Averaged
55 2-Methyl-4,6-dinitrophenol	53.31509	40.00000	0.12791	0.000	33.28773	60.00000	Linear
56 p-Nitroaniline	0.20835	0.21709	0.21709	0.000	4.19498	60.00000	Averaged
133 Diphenylamine	0.51902	0.51728	0.51728	0.001	-0.33469	20.00000	Averaged ccc
58 1,2-Diphenylhydrazine	0.69767	0.67966	0.67966	0.000	-2.58092	60.00000	Averaged
61 4-Bromophenylphenylether	0.17368	0.16740	0.16740	0.000	-3.61790	60.00000	Averaged
63 Hexachlorobenzene	0.16595	0.16267	0.16267	0.000	-1.98022	60.00000	Averaged
65 Pentachlorophenol	0.09397	0.10258	0.10258	0.001	9.16648	20.00000	Averaged ccc
206 n-Octadecane	0.48063	0.43611	0.43611	0.000	-9.26268	60.00000	Averaged
68 Phenanthrene	0.97466	0.84202	0.84202	0.000	-13.60887	60.00000	Averaged
69 Anthracene	0.98189	0.86400	0.86400	0.000	-12.00660	60.00000	Averaged
72 Di-n-butylphthalate	1.13557	1.00857	1.00857	0.000	-11.18389	60.00000	Averaged
76 Fluoranthene	0.98842	0.88230	0.88230	0.001	-10.73646	20.00000	Averaged ccc
79 Pyrene	1.21938	1.19482	1.19482	0.000	-2.01369	60.00000	Averaged
85 Butylbenzylphthalate	0.58998	0.57132	0.57132	0.000	-3.16294	60.00000	Averaged
89 Benzo(a)anthracene	1.04446	0.93343	0.93343	0.000	-10.63003	60.00000	Averaged
92 Chrysene	0.99764	0.88878	0.88878	0.000	-10.91116	60.00000	Averaged
93 bis(2-Ethylhexyl)phthalate	0.78860	0.68724	0.68724	0.000	-12.85331	60.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 16-MAR-2010 13:40  
 Lab File ID: s6c1612.d Init. Cal. Date(s): 16-MAR-2010 17-MAR-2010  
 Analysis Type: Init. Cal. Times: 09:18 03:19  
 Lab Sample ID: WBN100309-09.1 Quant Type: ISTD  
 Method: /chem/MSD6.i/s031610.b/MSD6-M8270C-AQA-031610.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
94 Di-n-octylphthalate	1.53062	1.45980	1.45980	0.001	-4.62716	20.00000	Averaged ccc
95 Benzo(b)fluoranthene	1.08744	1.04680	1.04680	0.000	-3.73780	60.00000	Averaged
96 Benzo(k)fluoranthene	1.04328	1.00268	1.00268	0.000	-3.89200	60.00000	Averaged
97 Benzo(a)pyrene	0.92098	0.86170	0.86170	0.001	-6.43663	20.00000	Averaged ccc
99 Indeno(1,2,3-cd)pyrene	0.84510	0.68869	0.68869	0.000	-18.50875	60.00000	Averaged
100 Dibenzo(a,h)anthracene	0.68068	0.54838	0.54838	0.000	-19.43674	60.00000	Averaged
101 Benzo(ghi)perylene	0.72160	0.57432	0.57432	0.000	-20.41069	60.00000	Averaged
126 m-Dinitrobenzene	0.19174	0.20089	0.20089	0.000	4.77491	60.00000	Averaged
130 2,3,4,6-Tetrachlorophenol	0.27788	0.27031	0.27031	0.000	-2.72357	60.00000	Averaged
143 Dinoseb	45.06416	40.00000	0.15323	0.000	12.66041	60.00000	Linear
173 Carbazole	0.76672	0.77286	0.77286	0.000	0.80138	60.00000	Averaged
184 p-Benzoquinone	0.24293	0.15889	0.15889	0.000	-34.59747	60.00000	Averaged
192 Methoxychlor	0.66555	0.59810	0.59810	0.000	-10.13445	60.00000	Averaged
211 p-Toluidine	1.33748	1.16997	1.16997	0.000	-12.52380	60.00000	Averaged
210 m-Toluidine	1.85679	1.79116	1.79116	0.000	-3.53432	60.00000	Averaged
215 2-Ethoxyethanol	0.71211	0.71416	0.71416	0.000	0.28894	60.00000	Averaged
179 Dibenzo(a,e)pyrene	0.32071	0.16099	0.16099	0.000	-49.80217	60.00000	Averaged
26 Phthalic anhydride	53.63299	40.00000	0.19118	0.000	34.08247	60.00000	Linear
214 1,4-Dinitrobenzene	0.26971	0.26900	0.26900	0.000	-0.26254	60.00000	Averaged
216 Methylenebis(2-chloroanilin	0.15700	0.15460	0.15460	0.000	-1.53152	60.00000	Averaged
M 225 Trichlorophenols	0.34470	0.36342	0.36342	0.000	5.43080	60.00000	Averaged
M 226 Tetrachlorophenols	0.27788	0.27031	0.27031	0.000	-2.72357	60.00000	Averaged
M 227 Benzo(b,k)fluoranthene	1.06536	1.02474	1.02474	0.000	-3.81330	60.00000	Averaged

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Data file : /chem/MSD6.i/s031610.b/s6c1612.d  
Lab Smp Id: WBN100309-09.1 Client Smp ID: MEGAICV  
Inj Date : 16-MAR-2010 13:40  
Operator : nagl Inst ID: MSD6.i  
Smp Info : |WBN100309-09.1|040 PPM|1|SVM|1|MEGAICV  
Misc Info : |MSD8270|WBN100310-01  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD6.i/s031610.b/MSD6-M8270C-AQA-031610.m  
Meth Date : 17-Mar-2010 09:42 nat00999 Quant Type: ISTD  
Cal Date : 17-MAR-2010 03:19 Cal File: s6c1642.d  
Als bottle: 11 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 (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.963	3.963	(1.000)	456524	40.0000	
* 29 Naphthalene-d8	136	4.834	4.834	(1.000)	1718025	40.0000	
* 46 Acenaphthene-d10	164	6.093	6.093	(1.000)	1004258	40.0000	
* 67 Phenanthrene-d10	188	7.269	7.269	(1.000)	1718283	40.0000	
* 91 Chrysene-d12	240	9.698	9.698	(1.000)	1300638	40.0000	
* 98 Perylene-d12	264	11.398	11.398	(1.000)	952660	40.0000	
\$ 3 2-Fluorophenol	112	3.140	3.140	(0.792)	512074	40.0000	40.3
\$ 5 Phenol-d5	99	3.669	3.669	(0.926)	625784	40.0000	38.8
\$ 20 Nitrobenzene-d5	82	4.328	4.328	(0.895)	659299	40.0000	40.1
\$ 39 2-Fluorobiphenyl	172	5.575	5.575	(0.915)	1071322	40.0000	41.3
\$ 60 2,4,6-Tribromophenol	329	6.692	6.692	(1.098)	115684	40.0000	41.0
\$ 81 p-Terphenyl-d14	244	8.657	8.657	(0.893)	1033963	40.0000	45.6
1 N-Methyl-N-nitrosomethylamine	74	2.452	2.452	(0.619)	332865	40.0000	37.6
2 Pyridine	79	2.481	2.481	(0.626)	398246	40.0000	31.6
4 Aniline	66	3.746	3.746	(0.945)	277463	40.0000	36.3
6 Phenol	94	3.681	3.681	(0.929)	648240	40.0000	39.7
7 bis(2-Chloroethyl) ether	63	3.763	3.763	(0.950)	429717	40.0000	35.4
8 2-Chlorophenol	128	3.828	3.828	(0.966)	510524	40.0000	38.4
203 n-Decane	43	3.810	3.810	(0.961)	705124	40.0000	36.5
9 1,3-Dichlorobenzene	146	3.928	3.928	(0.991)	588476	40.0000	40.2
11 1,4-Dichlorobenzene	146	3.975	3.975	(1.003)	556738	40.0000	39.2
13 1,2-Dichlorobenzene	146	4.081	4.081	(1.030)	486655	40.0000	37.8
14 bis(2-Chloroisopropyl)ether	45	4.104	4.104	(1.036)	955210	40.0000	37.4
12 Benzyl alcohol	108	4.028	4.028	(1.016)	366356	40.0000	39.2
15 o-Cresol	107	4.075	4.075	(1.028)	373380	40.0000	36.8
18 m,p-Cresols	107	4.181	4.181	(1.055)	582091	40.0000	39.9

Compounds	QUANT SIG			RESPONSE	AMOUNTS	
	MASS	RT	EXP RT REL RT		CAL-AMT (ng/ul)	ON-COL (ng/ul)
17 N-Nitrosodipropylamine	70	4.204	4.204 (1.061)	431074	40.0000	38.7
19 Hexachloroethane	117	4.310	4.310 (1.088)	236910	40.0000	38.6
21 Nitrobenzene	77	4.340	4.340 (0.898)	595845	40.0000	39.3
22 Isophorone	82	4.498	4.498 (0.931)	1080551	40.0000	37.2
23 2-Nitrophenol	139	4.557	4.557 (0.943)	280151	40.0000	42.6
24 2,4-Dimethylphenol	122	4.546	4.546 (0.940)	514742	40.0000	41.4
25 bis(2-Chloroethoxy)methane	93	4.616	4.616 (0.955)	588138	40.0000	37.2
26 2,4-Dichlorophenol	162	4.716	4.716 (0.976)	449433	40.0000	41.4
27 Benzoic acid	105	4.604	4.604 (0.953)	332933	40.0000	41.3
28 1,2,4-Trichlorobenzene	180	4.781	4.781 (0.989)	495781	40.0000	39.9
30 Naphthalene	128	4.851	4.851 (1.004)	1373063	40.0000	32.4
204 alpha-Terpineol	59	4.822	4.822 (0.998)	438221	40.0000	35.9
31 4-Chloroaniline	127	4.863	4.863 (1.006)	741569	40.0000	39.7
32 Hexachlorobutadiene	225	4.910	4.910 (1.016)	283988	40.0000	40.3
33 4-Chloro-3-methylphenol	107	5.169	5.169 (1.069)	479692	40.0000	40.7
34 2-Methylnaphthalene	142	5.328	5.328 (1.102)	950663	40.0000	36.5
35 1-Methylnaphthalene	142	5.404	5.404 (1.118)	898368	40.0000	35.5
36 Hexachlorocyclopentadiene	237	5.434	5.434 (0.892)	187318	40.0000	32.5
205 2,3-Dichloroaniline	161	5.528	5.528 (0.907)	513274	40.0000	39.0
37 2,4,6-Trichlorophenol	196	5.516	5.516 (0.905)	328015	40.0000	39.0
38 2,4,5-Trichlorophenol	196	5.545	5.545 (0.910)	401913	40.0000	45.1
40 2-Chloronaphthalene	162	5.687	5.687 (0.933)	939951	40.0000	38.4
42 o-Nitroaniline	65	5.740	5.740 (0.942)	329871	40.0000	38.4
41 m-Nitroaniline	138	6.040	6.040 (0.991)	257868	40.0000	40.4
43 Dimethylphthalate	163	5.851	5.851 (0.960)	1094609	40.0000	38.6
44 2,6-Dinitrotoluene	165	5.910	5.910 (0.970)	269467	40.0000	39.7
50 2,4-Dinitrotoluene	165	6.204	6.204 (1.018)	356439	40.0000	39.8
45 Acenaphthylene	152	5.993	5.993 (0.984)	1467016	40.0000	37.9
47 Acenaphthene	154	6.116	6.116 (1.004)	855440	40.0000	32.8
48 2,4-Dinitrophenol	184	6.110	6.110 (1.003)	112751	40.0000	46.3
49 Dibenzofuran	168	6.245	6.245 (1.025)	1276999	40.0000	40.3
51 Diethylphthalate	149	6.363	6.363 (1.044)	1092470	40.0000	39.3
52 4-Nitrophenol	139	6.122	6.122 (1.005)	196387	40.0000	40.7
53 Fluorene	166	6.504	6.504 (1.068)	1005998	40.0000	35.8
54 4-Chlorophenylphenylether	204	6.481	6.481 (1.064)	529421	40.0000	39.3
55 2-Methyl-4,6-dinitrophenol	198	6.522	6.522 (0.897)	219793	40.0000	53.3
56 p-Nitroaniline	138	6.504	6.504 (1.068)	218010	40.0000	41.7
133 Diphenylamine	169	6.569	6.569 (0.904)	888833	40.0000	39.9
58 1,2-Diphenylhydrazine	77	6.604	6.604 (0.909)	1167855	40.0000	39.0
61 4-Bromophenylphenylether	248	6.869	6.869 (0.945)	287633	40.0000	38.6
63 Hexachlorobenzene	284	6.940	6.940 (0.955)	279510	40.0000	39.2
65 Pentachlorophenol	266	7.087	7.087 (0.975)	176266	40.0000	43.7
206 n-Octadecane	57	7.081	7.081 (0.974)	749361	40.0000	36.3
68 Phenanthrene	178	7.292	7.292 (1.003)	1446824	40.0000	34.6
69 Anthracene	178	7.334	7.334 (1.009)	1484597	40.0000	35.2
72 Di-n-butylphthalate	149	7.692	7.692 (1.058)	1733003	40.0000	35.5
76 Fluoranthene	202	8.339	8.339 (1.147)	1516040	40.0000	35.7



Compounds	QUANT SIG			EXP RT	REL RT	RESPONSE	AMOUNTS	
	MASS	RT					CAL-AMT (ng/ul)	ON-COL (ng/ul)
79 Pyrene	202	8.557	8.557 (0.882)			1554030	40.0000	39.2
85 Butylbenzylphthalate	149	9.092	9.092 (0.938)			743080	40.0000	38.7
89 Benzo(a)anthracene	228	9.681	9.681 (0.998)			1214059	40.0000	35.7
92 Chrysene	228	9.722	9.722 (1.002)			1155983	40.0000	35.6
93 bis(2-Ethylhexyl)phthalate	149	9.616	9.616 (0.992)			893848	40.0000	34.8
94 Di-n-octylphthalate	149	10.280	10.280 (0.902)			1390689	40.0000	38.1
95 Benzo(b)fluoranthene	252	10.875	10.875 (0.954)			997243	40.0000	38.5
96 Benzo(k)fluoranthene	252	10.910	10.910 (0.957)			955210	40.0000	38.4
97 Benzo(a)pyrene	252	11.322	11.322 (0.993)			820904	40.0000	37.4
99 Indeno(1,2,3-cd)pyrene	276	13.204	13.204 (1.158)			656083	40.0000	32.6
100 Dibenzo(a,h)anthracene	278	13.221	13.221 (1.160)			522415	40.0000	32.2
101 Benzo(ghi)perylene	276	13.757	13.757 (1.207)			547130	40.0000	31.8
126 m-Dinitrobenzene	168	5.893	5.893 (0.967)			201747	40.0000	41.9
130 2,3,4,6-Tetrachlorophenol	232	6.316	6.316 (1.037)			271462	40.0000	38.9
143 Dinoseb	211	7.210	7.210 (0.992)			263293	40.0000	45.1
173 Carbazole	167	7.451	7.451 (1.025)			1327998	40.0000	40.3
184 p-Benzoquinone	54	3.446	3.446 (0.869)			72535	40.0000	26.2
192 Methoxychlor	227	9.569	9.569 (0.987)			777910	40.0000	35.9
211 p-Toluidine	106	4.246	4.246 (1.071)			534121	40.0000	35.0 (H)
210 m-Toluidine	106	4.263	4.263 (1.076)			817708	40.0000	38.6
215 2-Ethoxyethanol	59	2.293	2.293 (0.578)			326033	40.0000	40.1
179 Dibenzo(a,e)pyrene	302	17.974	17.974 (1.577)			153366	40.0000	20.1
26 Phthalic anhydride	104	5.369	5.369 (1.111)			328450	40.0000	53.6
214 1,4-Dinitrobenzene	75	5.834	5.834 (0.958)			270150	40.0000	39.9
216 Methylenebis(2-chloroaniline)	231	9.628	9.628 (0.993)			201073	40.0000	39.4
M 225 Trichlorophenols	196					729928	80.0000	84.3
M 226 Tetrachlorophenols	232					271462	40.0000	38.9
M 227 Benzo(b,k)fluoranthene	252					1952453	80.0000	76.9

#### QC Flag Legend

H - Operator selected an alternate compound hit.

Data File: /chem/HSD6.i/s031610.b/s6c1612.d

Date : 16-MAR-2010 13:40

Client ID: HEGAICV

Sample Info: IBER100309-09.11040 PPH111SVH11HEGAICV

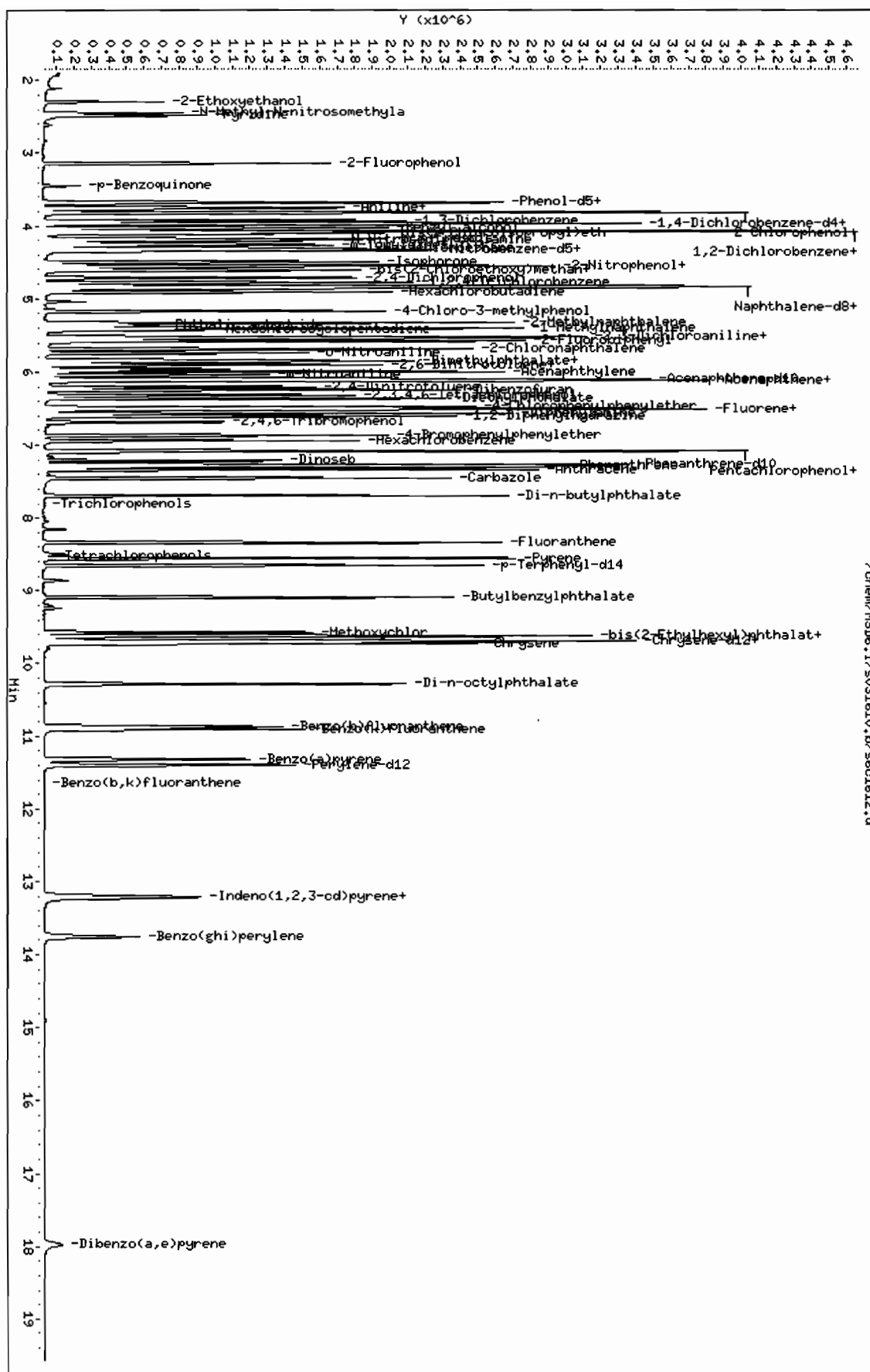
Column phase: J&W DB-SHS

Instrument: HSD6.i

Operator: nag1

Column diameter: 0.20

/chem/HSD6.i/s031610.b/s6c1612.d



Data File: /chem/MSD6.i/s031610.b/s6c1635.d  
Report Date: 17-Mar-2010 09:44

Page 4

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 17-MAR-2010 00:41  
Lab File ID: s6c1635.d Init. Cal. Date(s): 16-MAR-2010 17-MAR-2010  
Analysis Type: Init. Cal. Times: 09:18 03:19  
Lab Sample ID: WBN100312-08.1 Quant Type: ISTD  
Method: /chem/MSD6.i/s031610.b/MSD6-M8270C-AQA-031610.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
209 Benzaldehyde	0.96016	0.81875	0.81875	0.000	-14.72761	60.00000	Averaged
16 Acetophenone	1.24814	1.25263	1.25263	0.000	0.35947	60.00000	Averaged
189 Caprolactam	0.09790	0.10379	0.10379	0.000	6.01713	60.00000	Averaged
208 1,1'-Biphenyl	1.11180	1.18809	1.18809	0.000	6.86162	60.00000	Averaged
207 Atrazine	0.04606	0.04863	0.04863	0.000	5.59576	60.00000	Averaged
77 Benzidine	0.42058	0.38100	0.38100	0.000	-9.41199	60.00000	Averaged
90 3,3'-Dichlorobenzidine	0.30172	0.29115	0.29115	0.000	-3.50494	60.00000	Averaged
102 1,4-Dioxane	0.35119	0.42489	0.42489	0.000	20.98835	60.00000	Averaged
103 Methyl methacrylate	0.18979	0.23586	0.23586	0.000	24.27101	60.00000	Averaged
104 Ethyl methacrylate	0.82709	0.99246	0.99246	0.000	19.99468	60.00000	Averaged
105 2-Picoline	1.21280	1.17717	1.17717	0.000	-2.93779	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.53810	0.51671	0.51671	0.000	-3.97561	60.00000	Averaged
107 Methyl methanesulfonate	0.59726	0.64303	0.64303	0.000	7.66352	60.00000	Averaged
108 N-Nitrosodiethylamine	0.54437	0.51427	0.51427	0.000	-5.53074	60.00000	Averaged
109 Ethyl Methanesulfonate	0.72583	0.86252	0.86252	0.000	18.83349	60.00000	Averaged
110 Pentachloroethane	0.33314	0.46050	0.46050	0.000	38.22991	60.00000	Averaged
111 N-Nitrosopyrrolidine	0.58446	0.54601	0.54601	0.000	-6.57949	60.00000	Averaged
113 N-Nitrosomorpholine	0.68078	0.67817	0.67817	0.000	-0.38364	60.00000	Averaged
114 o-Toluidine	1.73474	1.71282	1.71282	0.000	-1.26373	60.00000	Averaged
115 N-Nitrosopiperidine	0.15362	0.15537	0.15537	0.000	1.14048	60.00000	Averaged
116 a,a-Dimethylphenethylamine	0.87353	0.84296	0.84296	0.000	-3.49989	60.00000	Averaged
118 2,6-Dichlorophenol	0.24533	0.25532	0.25532	0.000	4.07128	60.00000	Averaged
119 Hexachloropropene	0.13311	0.21102	0.21102	0.000	58.53040	60.00000	Averaged
120 p-Phenylenediamine	0.30365	0.25418	0.25418	0.000	-16.29271	60.00000	Averaged
121 N-Nitrosodi-n-butylamine	0.26282	0.23622	0.23622	0.000	-10.12220	60.00000	Averaged
122 Safrole	0.21396	0.24803	0.24803	0.000	15.92258	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.44716	0.49965	0.49965	0.000	11.73987	60.00000	Averaged
124 Isosafrole	0.35324	0.46919	0.46919	0.000	32.82296	60.00000	Averaged
125 1,4-Naphthoquinone	0.34254	0.36074	0.36074	0.000	5.31328	60.00000	Averaged
127 Pentachlorobenzene	0.37515	0.39513	0.39513	0.000	5.32511	60.00000	Averaged
128 1-Naphthylamine	0.89931	0.86590	0.86590	0.000	-3.71571	60.00000	Averaged
129 2-Naphthylamine	0.94089	0.95153	0.95153	0.000	1.13110	60.00000	Averaged
131 5-Nitro-o-toluidine	0.30665	0.29799	0.29799	0.000	-2.82387	60.00000	Averaged
136 1,3,5-Trinitrobenzene	0.15613	0.20859	0.20859	0.000	33.60060	60.00000	Averaged
137 Phenacetin	0.29347	0.31337	0.31337	0.000	6.77907	60.00000	Averaged
138 Diallylate	0.24862	0.23882	0.23882	0.000	-3.94194	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 17-MAR-2010 00:41  
Lab File ID: s6cl635.d Init. Cal. Date(s): 16-MAR-2010 17-MAR-2010  
Analysis Type: Init. Cal. Times: 09:18 03:19  
Lab Sample ID: WBN100312-08.1 Quant Type: ISTD  
Method: /chem/MSD6.i/s031610.b/MSD6-M8270C-AQA-031610.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
212 Cis Diallate	0.28918	0.35766	0.35766	0.000	23.68031	60.00000	Averaged
213 Trans Diallate	0.29250	0.28097	0.28097	0.000	-3.94194	60.00000	Averaged
140 4-Aminobiphenyl	0.55066	0.60803	0.60803	0.000	10.41902	60.00000	Averaged
141 Pentachloronitrobenzene	0.06695	0.07174	0.07174	0.000	7.16089	60.00000	Averaged
142 Pronamide	0.26094	0.27195	0.27195	0.000	4.22099	60.00000	Averaged
146 4-Nitroquinoline-1-oxide	0.02879	0.02702	0.02702	0.000	-6.14630	60.00000	Averaged
147 Methapyrilene	0.43748	0.36011	0.36011	0.000	-17.68475	60.00000	Averaged
148 Isodrin	0.11028	0.10672	0.10672	0.000	-3.22110	60.00000	Averaged
149 Aramite	0.04746	0.04804	0.04804	0.000	1.23400	60.00000	Averaged
150 Kepone	0.07668	0.07470	0.07470	0.000	-2.58614	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.31031	0.32655	0.32655	0.000	5.23269	60.00000	Averaged
152 Chlorobenzilate	0.29472	0.31516	0.31516	0.000	6.93640	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.59350	0.56147	0.56147	0.000	-5.39699	60.00000	Averaged
155 2-Acetylaminofluorene	0.34851	0.33367	0.33367	0.000	-4.25802	60.00000	Averaged
157 7,12Dimethylbenz(a)anthrace	0.48545	0.50464	0.50464	0.000	3.95471	60.00000	Averaged
158 3-Methylcholanthrene	0.40010	0.40383	0.40383	0.000	0.93137	60.00000	Averaged

GEL Laboratories LLC

Data file : /chem/MSD6.i/s031610.b/s6c1635.d  
Lab Smp Id: WBN100312-08.1 Client Smp ID: APICV  
Inj Date : 17-MAR-2010 00:41  
Operator : nag1 Inst ID: MSD6.i  
Smp Info : |WBN100312-08.1|40 PPM|1|SVM|1|APICV  
Misc Info : |MSD8270|WBN100310-01  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD6.i/s031610.b/MSD6-M8270C-AQA-031610.m  
Meth Date : 17-Mar-2010 09:44 nat00999 Quant Type: ISTD  
Cal Date : 17-MAR-2010 03:19 Cal File: s6c1642.d  
Als bottle: 34 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		3.969	3.969	(1.000)	439915	40.0000	
* 29 Naphthalene-d8	136		4.840	4.840	(1.000)	1539251	40.0000	
* 46 Acenaphthene-d10	164		6.098	6.098	(1.000)	929656	40.0000	
* 67 Phenanthrene-d10	188		7.281	7.281	(1.000)	1586415	40.0000	
* 91 Chrysene-d12	240		9.704	9.704	(1.000)	1243348	40.0000	
* 98 Perylene-d12	264		11.422	11.422	(1.000)	840077	40.0000	
209 Benzaldehyde	77		3.698	3.698	(0.932)	360181	40.0000	34.1
16 Acetophenone	105		4.222	4.222	(1.064)	551051	40.0000	40.1
189 Caprolactam	113		5.116	5.116	(1.057)	159753	40.0000	42.4
208 1,1'-Biphenyl	154		5.663	5.663	(0.929)	1104517	40.0000	42.7
207 Atrazine	173		6.981	6.981	(0.959)	77154	40.0000	42.2
77 Benzidine	184		8.439	8.439	(0.870)	473712	40.0000	36.2
90 3,3'-Dichlorobenzidine	252		9.639	9.639	(0.993)	361998	40.0000	38.6
102 1,4-Dioxane	88		2.310	2.310	(0.582)	186917	40.0000	48.4
103 Methyl methacrylate	100		2.304	2.304	(0.581)	103758	40.0000	49.7
104 Ethyl methacrylate	69		2.669	2.669	(0.672)	436599	40.0000	48.0
105 2-Picoline	93		2.863	2.863	(0.721)	517853	40.0000	38.8
106 N-Nitrosomethylethylamine	88		2.904	2.904	(0.732)	227308	40.0000	38.4
107 Methyl methanesulfonate	80		3.063	3.063	(0.772)	282879	40.0000	43.1
108 N-Nitrosodiethylamine	102		3.299	3.299	(0.831)	226233	40.0000	37.8
109 Ethyl Methanesulfonate	79		3.457	3.457	(0.871)	379437	40.0000	47.5
110 Pentachloroethane	167		3.798	3.798	(0.957)	202582	40.0000	55.3
111 N-Nitrosopyrrolidine	100		4.210	4.210	(1.061)	240197	40.0000	37.4 (Q)
113 N-Nitrosomorpholine	56		4.234	4.234	(1.067)	298338	40.0000	39.8
114 o-Toluidine	106		4.251	4.251	(1.071)	753495	40.0000	39.5
115 N-Nitrosopiperidine	114		4.451	4.451	(0.920)	239154	40.0000	40.4

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
116 a,a-Dimethylphenethylamine	58	4.710	4.710	(0.973)	1297528	40.0000	38.6
118 2,6-Dichlorophenol	162	4.881	4.881	(1.008)	393003	40.0000	41.6
119 Hexachloropropene	213	4.910	4.910	(1.015)	324808	40.0000	63.4
120 p-Phenylenediamine	108	5.122	5.122	(1.058)	391247	40.0000	33.5
121 N-Nitrosodi-n-butylamine	84	5.087	5.087	(1.051)	363602	40.0000	36.0(Q)
122 Safrole	162	5.251	5.251	(1.085)	381780	40.0000	46.4
123 1,2,4,5-Tetrachlorobenzene	216	5.457	5.457	(0.895)	464506	40.0000	44.7
124 Isosafrole	162	5.622	5.622	(0.922)	436182	40.0000	53.1
125 1,4-Naphthoquinone	158	5.816	5.816	(0.954)	335363	40.0000	42.1
127 Pentachlorobenzene	250	6.216	6.216	(1.019)	367336	40.0000	42.1
128 1-Naphthylamine	143	6.310	6.310	(1.035)	804986	40.0000	38.5
129 2-Naphthylamine	143	6.363	6.363	(1.043)	884595	40.0000	40.4
131 5-Nitro-o-toluidine	152	6.504	6.504	(1.067)	277025	40.0000	38.9
136 1,3,5-Trinitrobenzene	75	6.757	6.757	(0.928)	330916	40.0000	53.4
137 Phenacetin	108	6.798	6.798	(0.934)	497127	40.0000	42.7(Q)
138 Diallate	86	6.787	6.787	(0.932)	378872	40.0000	38.4
212 Cis Diallate	86	6.863	6.863	(0.943)	85109	6.00000	7.4
213 Trans Diallate	86	6.787	6.787	(0.932)	378872	34.0000	32.6
140 4-Aminobiphenyl	169	7.092	7.092	(0.974)	964585	40.0000	44.2
141 Pentachloronitrobenzene	237	7.110	7.110	(0.977)	113813	40.0000	42.9(Q)
142 Pronamide	173	7.110	7.110	(0.977)	431425	40.0000	41.7
146 4-Nitroquinoline-1-oxide	101	7.951	7.951	(1.092)	42870	40.0000	37.5
147 Methapyrilene	58	7.986	7.986	(1.097)	571288	40.0000	32.9
148 Isodrin	193	8.210	8.210	(1.128)	169307	40.0000	38.7
149 Aramite	185	8.616	8.616	(1.183)	76213	40.0000	40.5
150 Kepone	272	9.204	9.204	(1.264)	118500	40.0000	39.0
151 p-(Dimethylamino)azobenzene	120	8.792	8.792	(0.906)	406018	40.0000	42.1
152 Chlorobenzilate	251	8.828	8.828	(0.910)	391852	40.0000	42.8
153 3,3'-Dimethylbenzidine	212	9.116	9.116	(0.939)	698099	40.0000	37.8
155 2-Acetylaminofluorene	181	9.363	9.363	(0.965)	414870	40.0000	38.3
157 7,12Dimethylbenz(a)anthracene	256	10.869	10.869	(0.952)	423939	40.0000	41.6
158 3-Methylcholanthrene	268	11.839	11.839	(1.037)	339249	40.0000	40.4(Q)

# QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD6.i/s031610.b/sec1635.d

Date: 17-MAR-2010 00:41

Client ID: APICV

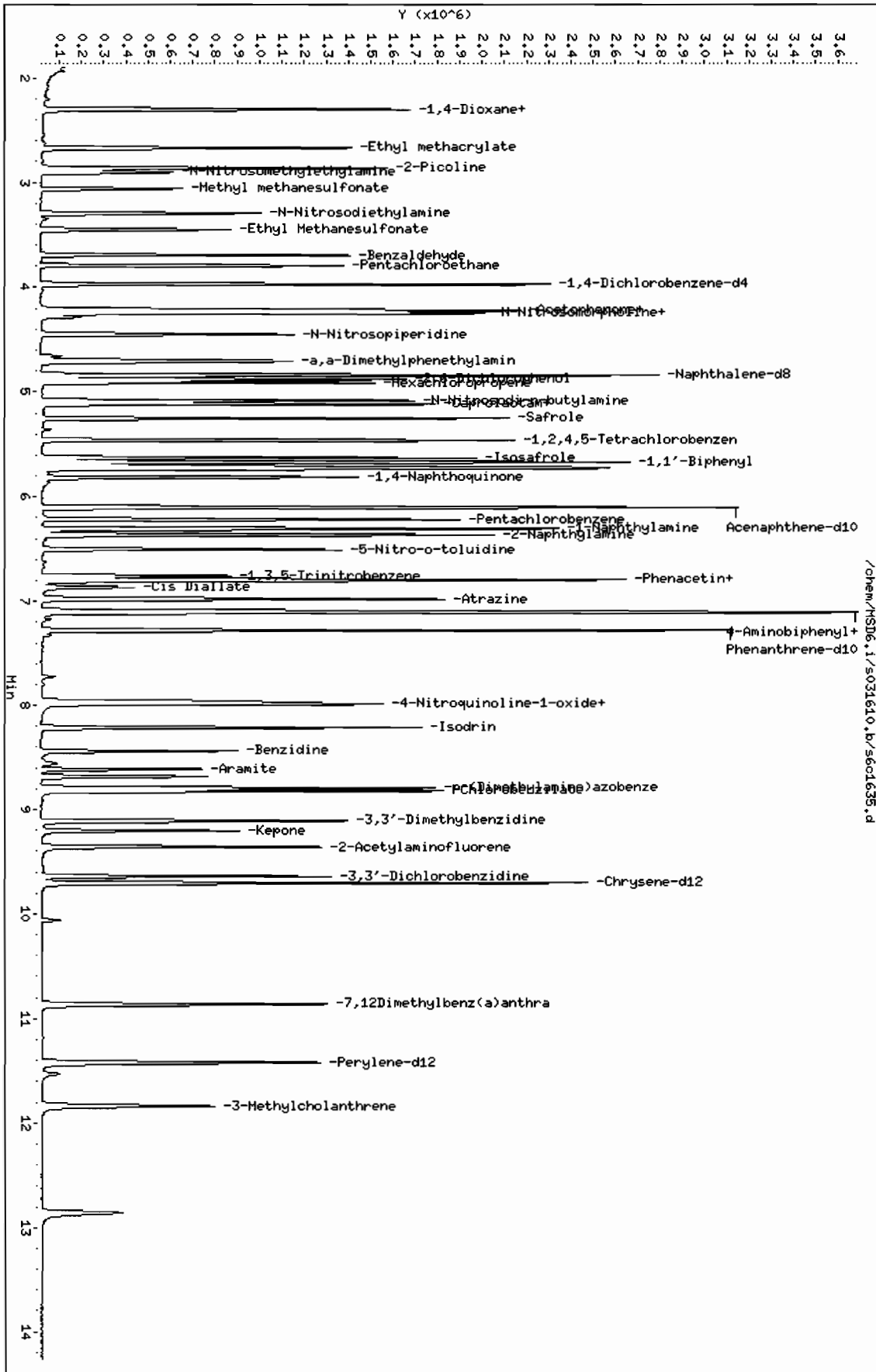
Sample Info: MBN100312-08.1140 PPH11SVH11APICV

Column phase: J&W DB-5HS

Instrument: MSD6.i

Operator: nag1

Column diameter: 0.20



GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 21-MAR-2010 16:55  
 Lab File ID: s6c2105.d Init. Cal. Date(s): 16-MAR-2010 17-MAR-2010  
 Analysis Type: Init. Cal. Times: 09:18 04:51  
 Lab Sample ID: WBN100309-05.3 Quant Type: ISTD  
 Method: /chem/MSD6.i/s032110.b/MSD6-M8270C-AQA-031610.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
3 2-Fluorophenol	1.11196	0.96065	0.96065	0.000	-13.60715	60.00000	Averaged
5 Phenol-d5	1.41412	1.16974	1.16974	0.000	-17.28117	60.00000	Averaged
20 Nitrobenzene-d5	0.38237	0.32731	0.32731	0.000	-14.40069	60.00000	Averaged
39 2-Fluorobiphenyl	1.03201	1.00349	1.00349	0.000	-2.76315	60.00000	Averaged
60 2,4,6-Tribromophenol	0.11225	0.11301	0.11301	0.000	0.68496	60.00000	Averaged
81 p-Terphenyl-d14	0.69704	0.66428	0.66428	0.000	-4.69965	60.00000	Averaged
1 N-Methyl-N-nitrosomethylami	0.77557	0.63282	0.63282	0.000	-18.40584	60.00000	Averaged
2 Pyridine	1.10526	0.88236	0.88236	0.000	-20.16652	60.00000	Averaged
4 Aniline	0.66950	0.53240	0.53240	0.000	-20.47730	60.00000	Averaged
6 Phenol	1.43150	1.16058	1.16058	0.001	-18.92560	20.00000	Averaged ccc
7 bis(2-Chloroethyl) ether	1.06440	0.82856	0.82856	0.000	-22.15722	60.00000	Averaged
8 2-Chlorophenol	1.16424	1.02048	1.02048	0.000	-12.34839	60.00000	Averaged
203 n-Decane	1.69067	1.17894	1.17894	0.000	-30.26796	60.00000	Averaged
9 1,3-Dichlorobenzene	1.28259	1.19910	1.19910	0.000	-6.50966	60.00000	Averaged
11 1,4-Dichlorobenzene	1.24541	1.19175	1.19175	0.001	-4.30833	20.00000	Averaged ccc
13 1,2-Dichlorobenzene	1.12890	1.09847	1.09847	0.000	-2.69597	60.00000	Averaged
14 bis(2-Chloroisopropyl)ether	2.23712	1.58250	1.58250	0.000	-29.26188	60.00000	Averaged
12 Benzyl alcohol	0.81825	0.52838	0.52838	0.000	-35.42479	60.00000	Averaged
15 o-Cresol	0.88788	0.78193	0.78193	0.000	-11.93277	60.00000	Averaged
18 m,p-Cresols	1.27893	1.00178	1.00178	0.000	-21.67010	60.00000	Averaged
17 N-Nitrosodipropylamine	0.97668	0.78596	0.78596	0.050	-19.52676	60.00000	Averaged spcc
19 Hexachloroethane	0.53767	0.46827	0.46827	0.000	-12.90759	60.00000	Averaged
21 Nitrobenzene	0.35281	0.31106	0.31106	0.000	-11.83375	60.00000	Averaged
22 Isophorone	0.67701	0.58258	0.58258	0.000	-13.94865	60.00000	Averaged
23 2-Nitrophenol	0.15292	0.14359	0.14359	0.001	-6.09830	20.00000	Averaged ccc
24 2,4-Dimethylphenol	22.00765	40.00000	0.17708	0.000	-44.98088	60.00000	Wt Linear
25 bis(2-Chloroethoxy)methane	0.36806	0.31623	0.31623	0.000	-14.08209	60.00000	Averaged
26 2,4-Dichlorophenol	0.25252	0.23742	0.23742	0.001	-5.97996	20.00000	Averaged ccc
27 Benzoic acid	0.18753	0.16659	0.16659	0.000	-11.16588	60.00000	Averaged
28 1,2,4-Trichlorobenzene	0.28905	0.29550	0.29550	0.000	2.23141	60.00000	Averaged
30 Naphthalene	0.98486	0.79476	0.79476	0.000	-19.30257	60.00000	Averaged
204 alpha-Terpineol	0.28429	0.23014	0.23014	0.000	-19.04631	60.00000	Averaged
31 4-Chloroaniline	0.43446	0.40753	0.40753	0.000	-6.20020	60.00000	Averaged
32 Hexachlorobutadiene	0.16407	0.17721	0.17721	0.001	8.01114	20.00000	Averaged ccc
33 4-Chloro-3-methylphenol	0.27436	0.25140	0.25140	0.001	-8.36934	20.00000	Averaged ccc
34 2-Methylnaphthalene	0.60564	0.51205	0.51205	0.000	-15.45399	60.00000	Averaged



GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 21-MAR-2010 16:55  
Lab File ID: s6c2105.d Init. Cal. Date(s): 16-MAR-2010 17-MAR-2010  
Analysis Type: Init. Cal. Times: 09:18 04:51  
Lab Sample ID: WBN100309-05.3 Quant Type: ISTD  
Method: /chem/MSD6.i/s032110.b/MSD6-M8270C-AQA-031610.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
35 1-Methylnaphthalene	0.58910	0.51601	0.51601	0.000	-12.40785	60.00000	Averaged
36 Hexachlorocyclopentadiene	0.22936	0.21991	0.21991	0.050	-4.11646	60.00000	Averaged spcc
205 2,3-Dichloroaniline	0.52459	0.51051	0.51051	0.000	-2.68386	60.00000	Averaged
37 2,4,6-Trichlorophenol	0.33474	0.34583	0.34583	0.001	3.31164	20.00000	Averaged ccc
38 2,4,5-Trichlorophenol	0.35465	0.35514	0.35514	0.000	0.13718	60.00000	Averaged
40 2-Chloronaphthalene	0.97365	0.89595	0.89595	0.000	-7.98001	60.00000	Averaged
42 o-Nitroaniline	0.34201	0.26639	0.26639	0.000	-22.10984	60.00000	Averaged
41 m-Nitroaniline	0.25409	0.21215	0.21215	0.000	-16.50876	60.00000	Averaged
43 Dimethylphthalate	1.13004	1.08467	1.08467	0.000	-4.01476	60.00000	Averaged
44 2,6-Dinitrotoluene	0.27058	0.25949	0.25949	0.000	-4.09836	60.00000	Averaged
50 2,4-Dinitrotoluene	0.35648	0.33044	0.33044	0.000	-7.30330	60.00000	Averaged
45 Acenaphthylene	1.54257	1.36377	1.36377	0.000	-11.59144	60.00000	Averaged
47 Acenaphthene	1.03783	0.88922	0.88922	0.001	-14.31979	20.00000	Averaged ccc
48 2,4-Dinitrophenol	48.68772	40.00000	0.11881	0.050	21.71930	60.00000	Linear spcc
49 Dibenzofuran	1.26069	1.18033	1.18033	0.000	-6.37444	60.00000	Averaged
51 Diethylphthalate	1.10774	1.04469	1.04469	0.000	-5.69133	60.00000	Averaged
52 4-Nitrophenol	0.19236	0.16742	0.16742	0.050	-12.96467	60.00000	Averaged spcc
53 Fluorene	1.11781	1.01115	1.01115	0.000	-9.54196	60.00000	Averaged
54 4-Chlorophenylphenylether	0.53621	0.53643	0.53643	0.000	0.04054	60.00000	Averaged
55 2-Methyl-4,6-dinitrophenol	46.73119	40.00000	0.11068	0.000	16.82799	60.00000	Linear
56 p-Nitroaniline	0.20835	0.17551	0.17551	0.000	-15.76024	60.00000	Averaged
133 Diphenylamine	0.51902	0.48547	0.48547	0.001	-6.46302	20.00000	Averaged ccc
58 1,2-Diphenylhydrazine	0.69767	0.57245	0.57245	0.000	-17.94821	60.00000	Averaged
61 4-Bromophenylphenylether	0.17368	0.18458	0.18458	0.000	6.27834	60.00000	Averaged
63 Hexachlorobenzene	0.16595	0.18708	0.18708	0.000	12.72714	60.00000	Averaged
65 Pentachlorophenol	0.09397	0.10239	0.10239	0.001	8.95779	20.00000	Averaged ccc
206 n-Octadecane	0.48063	0.36644	0.36644	0.000	-23.75735	60.00000	Averaged
68 Phenanthrene	0.97466	0.86751	0.86751	0.000	-10.99367	60.00000	Averaged
69 Anthracene	0.98189	0.86532	0.86532	0.000	-11.87243	60.00000	Averaged
72 Di-n-butylphthalate	1.13557	1.00013	1.00013	0.000	-11.92686	60.00000	Averaged
76 Fluoranthene	0.98842	0.93683	0.93683	0.001	-5.21901	20.00000	Averaged ccc
79 Pyrene	1.21938	1.10459	1.10459	0.000	-9.41325	60.00000	Averaged
85 Butylbenzylphthalate	0.58998	0.51119	0.51119	0.000	-13.35426	60.00000	Averaged
89 Benzo(a)anthracene	1.04446	0.94875	0.94875	0.000	-9.16379	60.00000	Averaged
92 Chrysene	0.99764	0.91662	0.91662	0.000	-8.12083	60.00000	Averaged
93 bis(2-Ethylhexyl)phthalate	0.78860	0.67230	0.67230	0.000	-14.74710	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 21-MAR-2010 16:55  
Lab File ID: s6c2105.d Init. Cal. Date(s): 16-MAR-2010 17-MAR-2010  
Analysis Type: Init. Cal. Times: 09:18 04:51  
Lab Sample ID: WBN100309-05.3 Quant Type: ISTD  
Method: /chem/MSD6.i/s032110.b/MSD6-M8270C-AQA-031610.m

COMPOUND	RRF / AMOUNT	RF40	CCAL	MIN	MAX	CURVE TYPE
			RRF40	RRF	%D / %DRIFT	
94 Di-n-octylphthalate	1.53062	1.27015	1.27015	0.001	-17.01758	Averaged ccc
95 Benzo(b)fluoranthene	1.08744	1.04326	1.04326	0.000	-4.06318	Averaged
96 Benzo(k)fluoranthene	1.04328	0.99113	0.99113	0.000	-4.99890	Averaged
97 Benzo(a)pyrene	0.92098	0.88547	0.88547	0.001	-3.85532	Averaged ccc
99 Indeno(1,2,3-cd)pyrene	0.84510	0.78027	0.78027	0.000	-7.67189	Averaged
100 Dibenzo(a,h)anthracene	0.68068	0.64000	0.64000	0.000	-5.97574	Averaged
101 Benzo(ghi)perylene	0.72160	0.64543	0.64543	0.000	-10.55585	Averaged
126 m-Dinitrobenzene	0.19174	0.18013	0.18013	0.000	-6.05534	Averaged
130 2,3,4,6-Tetrachlorophenol	0.27788	0.25389	0.25389	0.000	-8.63324	Averaged
143 Dinoseb	47.77820	40.00000	0.16360	0.000	19.44549	Linear
173 Carbazole	0.76672	0.70459	0.70459	0.000	-8.10367	Averaged
184 p-Benzoquinone	0.24293	0.18226	0.18226	0.000	-24.97665	Averaged
192 Methoxychlor	0.66555	0.66828	0.66828	0.000	0.41083	Averaged
211 p-Toluidine	1.33748	1.22738	1.22738	0.000	-8.23170	Averaged
210 m-Toluidine	1.85679	1.31370	1.31370	0.000	-29.24888	Averaged
215 2-Ethoxyethanol	0.71211	0.50810	0.50810	0.000	-28.64825	Averaged
179 Dibenzo(a,e)pyrene	0.32071	0.28713	0.28713	0.000	-10.46797	Averaged
26 Phthalic anhydride	22.21587	40.00000	0.07632	0.000	-44.46033	Linear
214 1,4-Dinitrobenzene	0.26971	0.21240	0.21240	0.000	-21.25093	Averaged
216 Methylenebis(2-chloroanilin	0.15700	0.10365	0.10365	0.000	-33.98100	Averaged
M 225 Trichlorophenols	0.34470	0.35048	0.35048	0.000	1.67856	Averaged
M 226 Tetrachlorophenols	0.27788	0.25389	0.25389	0.000	-8.63324	Averaged
M 227 Benzo(b,k)fluoranthene	1.06536	1.01719	1.01719	0.000	-4.52134	Averaged

Data File: /chem/MSD6.i/s032110.b/s6c2105.d  
Report Date: 22-Mar-2010 16:50

Page 1

GEL Laboratories LLC

Data file : /chem/MSD6.i/s032110.b/s6c2105.d  
Lab Smp Id: WBN100309-05.3 Client Smp ID: MEGACVS  
Inj Date : 21-MAR-2010 16:55  
Operator : nag1 Inst ID: MSD6.i  
Smp Info : |WBN100309-05.3|40 PPM|1|SVM|1|MEGACVS  
Misc Info : |MSD8270|WBN100319-01  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD6.i/s032110.b/MSD6-M8270C-AQA-031610.m  
Meth Date : 22-Mar-2010 16:50 jen00986 Quant Type: ISTD  
Cal Date : 17-MAR-2010 04:51 Cal File: s6c1646.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
=====	=====	=====	=====	=====	=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	152	3.822	3.822	(1.000)	534666	40.0000		
* 29 Naphthalene-d8	136	4.687	4.687	(1.000)	1941232	40.0000		
* 46 Acenaphthene-d10	164	5.934	5.934	(1.000)	1147252	40.0000		
* 67 Phenanthrene-d10	188	7.093	7.093	(1.000)	1917801	40.0000		
* 91 Chrysene-d12	240	9.486	9.486	(1.000)	1700059	40.0000		
* 98 Perylene-d12	264	11.075	11.075	(1.000)	1455801	40.0000		
\$ 3 2-Fluorophenol	112	3.005	3.005	(0.786)	513629	40.0000	34.6	
\$ 5 Phenol-d5	99	3.534	3.534	(0.925)	625421	40.0000	33.1	
\$ 20 Nitrobenzene-d5	82	4.181	4.181	(0.892)	635384	40.0000	34.2	
\$ 39 2-Fluorobiphenyl	172	5.422	5.422	(0.914)	1151260	40.0000	38.9	
\$ 60 2,4,6-Tribromophenol	329	6.522	6.522	(1.099)	129656	40.0000	40.3	
\$ 81 p-Terphenyl-d14	244	8.463	8.463	(0.892)	1129310	40.0000	38.1	
1 N-Methyl-N-nitrosomethylamine	74	2.310	2.310	(0.604)	338349	40.0000	32.6	
2 Pyridine	79	2.340	2.340	(0.612)	471770	40.0000	31.9	
4 Aniline	66	3.604	3.604	(0.943)	284657	40.0000	31.8	
6 Phenol	94	3.546	3.546	(0.928)	620524	40.0000	32.4	
7 bis(2-Chloroethyl) ether	63	3.622	3.622	(0.948)	443004	40.0000	31.1	
8 2-Chlorophenol	128	3.681	3.681	(0.963)	545614	40.0000	35.1	
203 n-Decane	43	3.669	3.669	(0.960)	630339	40.0000	27.9	
9 1,3-Dichlorobenzene	146	3.787	3.787	(0.991)	641119	40.0000	37.4	
11 1,4-Dichlorobenzene	146	3.834	3.834	(1.003)	637190	40.0000	38.3	
13 1,2-Dichlorobenzene	146	3.934	3.934	(1.029)	587313	40.0000	38.9	
14 bis(2-Chloroisopropyl) ether	45	3.963	3.963	(1.037)	846108	40.0000	28.3	
12 Benzyl alcohol	108	3.887	3.887	(1.017)	282509	40.0000	25.8	
15 o-Cresol	107	3.940	3.940	(1.031)	418071	40.0000	35.2	
18 m,p-Cresols	107	4.040	4.040	(1.057)	535619	40.0000	31.3	

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
=====	=====	==	=====	=====	=====	=====	=====
17 N-Nitrosodipropylamine	70	4.063	4.063	(1.063)	420228	40.0000	32.2
19 Hexachloroethane	117	4.163	4.163	(1.089)	250367	40.0000	34.8
21 Nitrobenzene	77	4.199	4.199	(0.896)	603839	40.0000	35.3
22 Isophorone	82	4.352	4.352	(0.928)	1130914	40.0000	34.4
23 2-Nitrophenol	139	4.410	4.410	(0.941)	278750	40.0000	37.6
24 2,4-Dimethylphenol	122	4.404	4.404	(0.940)	343748	40.0000	22.0 (H)
25 bis(2-Chloroethoxy)methane	93	4.469	4.469	(0.954)	613883	40.0000	34.4
26 2,4-Dichlorophenol	162	4.569	4.569	(0.975)	460891	40.0000	37.6
27 Benzoic acid	105	4.463	4.463	(0.952)	323395	40.0000	35.5
28 1,2,4-Trichlorobenzene	180	4.634	4.634	(0.989)	573632	40.0000	40.9
30 Naphthalene	128	4.699	4.699	(1.002)	1542806	40.0000	32.3
204 alpha-Terpineol	59	4.681	4.681	(0.999)	446760	40.0000	32.4
31 4-Chloroaniline	127	4.716	4.716	(1.006)	791103	40.0000	37.5
32 Hexachlorobutadiene	225	4.763	4.763	(1.016)	344004	40.0000	43.2
33 4-Chloro-3-methylphenol	107	5.028	5.028	(1.073)	488020	40.0000	36.6
34 2-Methylnaphthalene	142	5.181	5.181	(1.105)	994000	40.0000	33.8
35 1-Methylnaphthalene	142	5.251	5.251	(1.120)	1001692	40.0000	35.0
36 Hexachlorocyclopentadiene	237	5.281	5.281	(0.890)	252297	40.0000	38.4
205 2,3-Dichloroaniline	161	5.375	5.375	(0.906)	585683	40.0000	38.9
37 2,4,6-Trichlorophenol	196	5.369	5.369	(0.905)	396749	40.0000	41.3
38 2,4,5-Trichlorophenol	196	5.393	5.393	(0.909)	407435	40.0000	40.0
40 2-Chloronaphthalene	162	5.528	5.528	(0.932)	1027885	40.0000	36.8
42 o-Nitroaniline	65	5.587	5.587	(0.942)	305621	40.0000	31.2
41 m-Nitroaniline	138	5.887	5.887	(0.992)	243385	40.0000	33.4
43 Dimethylphthalate	163	5.704	5.704	(0.961)	1244388	40.0000	38.4
44 2,6-Dinitrotoluene	165	5.757	5.757	(0.970)	297696	40.0000	38.4
50 2,4-Dinitrotoluene	165	6.051	6.051	(1.020)	379100	40.0000	37.1
45 Acenaphthylene	152	5.834	5.834	(0.983)	1564583	40.0000	35.4
47 Acenaphthene	154	5.957	5.957	(1.004)	1020155	40.0000	34.3
48 2,4-Dinitrophenol	184	5.957	5.957	(1.004)	136310	40.0000	48.7
49 Dibenzofuran	168	6.081	6.081	(1.025)	1354136	40.0000	37.4
51 Diethylphthalate	149	6.204	6.204	(1.046)	1198523	40.0000	37.7
52 4-Nitrophenol	139	5.975	5.975	(1.007)	192075	40.0000	34.8
53 Fluorene	166	6.340	6.340	(1.068)	1160039	40.0000	36.2
54 4-Chlorophenylphenylether	204	6.316	6.316	(1.064)	615421	40.0000	40.0
55 2-Methyl-4,6-dinitrophenol	198	6.357	6.357	(0.896)	212264	40.0000	46.7
56 p-Nitroaniline	138	6.340	6.340	(1.068)	201354	40.0000	33.7
133 Diphenylamine	169	6.404	6.404	(0.903)	931040	40.0000	37.4
58 1,2-Diphenylhydrazine	77	6.440	6.440	(0.908)	1097847	40.0000	32.8
61 4-Bromophenylphenylether	248	6.704	6.704	(0.945)	353994	40.0000	42.5
63 Hexachlorobenzene	284	6.769	6.769	(0.954)	358774	40.0000	45.1
65 Pentachlorophenol	266	6.916	6.916	(0.975)	196357	40.0000	43.6
206 n-Octadecane	57	6.916	6.916	(0.975)	702768	40.0000	30.5
68 Phenanthrene	178	7.110	7.110	(1.002)	1663705	40.0000	35.6
69 Anthracene	178	7.151	7.151	(1.008)	1659507	40.0000	35.2
72 Di-n-butylphthalate	149	7.516	7.516	(1.060)	1918050	40.0000	35.2
76 Fluoranthene	202	8.139	8.139	(1.148)	1796663	40.0000	37.9

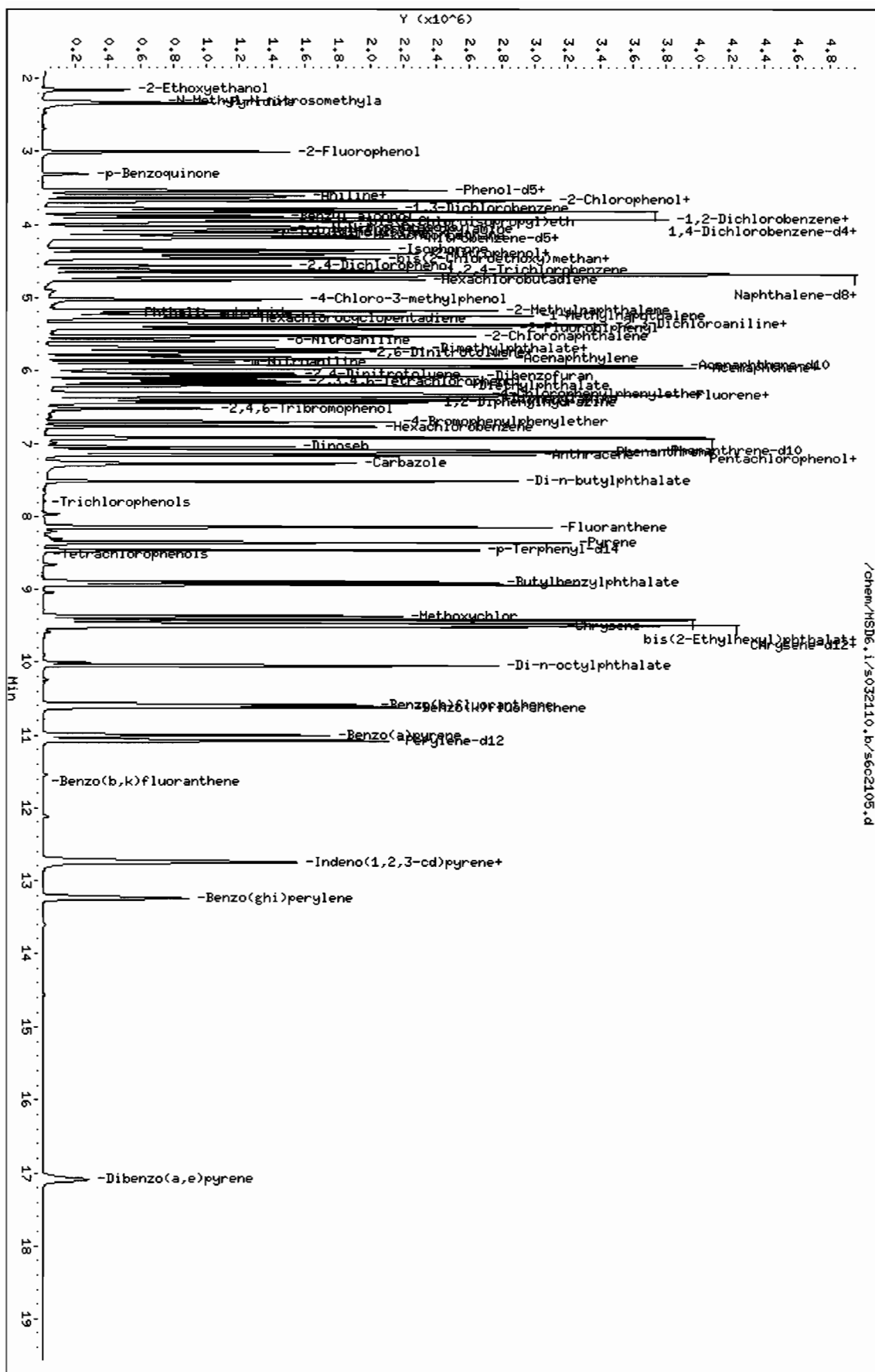
Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
=====	=====	==	=====	=====	=====	=====	=====
79 Pyrene	202	8.357	8.357	(0.881)	1877873	40.0000	36.2
85 Butylbenzylphthalate	149	8.892	8.892	(0.937)	869058	40.0000	34.6
89 Benzo(a)anthracene	228	9.475	9.475	(0.999)	1612927	40.0000	36.3
92 Chrysene	228	9.510	9.510	(1.002)	1558306	40.0000	36.8
93 bis(2-Ethylhexyl)phthalate	149	9.416	9.416	(0.993)	1142956	40.0000	34.1
94 Di-n-octylphthalate	149	10.045	10.045	(0.907)	1849079	40.0000	33.2
95 Benzo(b)fluoranthene	252	10.586	10.586	(0.956)	1518779	40.0000	38.4
96 Benzo(k)fluoranthene	252	10.622	10.622	(0.959)	1442886	40.0000	38.0
97 Benzo(a)pyrene	252	11.004	11.004	(0.994)	1289068	40.0000	38.4
99 Indeno(1,2,3-cd)pyrene	276	12.733	12.733	(1.150)	1135915	40.0000	36.9
100 Dibenzo(a,h)anthracene	278	12.751	12.751	(1.151)	931714	40.0000	37.6
101 Benzo(ghi)perylene	276	13.245	13.245	(1.196)	939619	40.0000	35.8
126 m-Dinitrobenzene	168	5.740	5.740	(0.967)	206650	40.0000	37.6
130 2,3,4,6-Tetrachlorophenol	232	6.157	6.157	(1.038)	291275	40.0000	36.5
143 Dinoseb	211	7.040	7.040	(0.993)	313751	40.0000	47.8
173 Carbazole	167	7.269	7.269	(1.025)	1351257	40.0000	36.8
184 p-Benzoquinone	54	3.310	3.310	(0.866)	97447	40.0000	30.0
192 Methoxychlor	227	9.363	9.363	(0.987)	1136120	40.0000	40.2
211 p-Toluidine	106	4.099	4.099	(1.072)	656238	40.0000	36.7
210 m-Toluidine	106	4.122	4.122	(1.078)	702389	40.0000	28.3
215 2-Ethoxyethanol	59	2.152	2.152	(0.563)	271664	40.0000	28.5
179 Dibenzo(a,e)pyrene	302	17.092	17.092	(1.543)	418010	40.0000	35.8
26 Phthalic anhydride	104	5.216	5.216	(1.113)	148158	40.0000	22.2
214 1,4-Dinitrobenzene	75	5.681	5.681	(0.957)	243672	40.0000	31.5
216 Methylenebis(2-chloroaniline)	231	9.422	9.422	(0.993)	176211	40.0000	26.4
M 225 Trichlorophenols	196				804184	80.0000	81.3
M 226 Tetrachlorophenols	232				291275	40.0000	36.5
M 227 Benzo(b,k)fluoranthene	252				2961665	80.0000	76.4

# QC Flag Legend

H - Operator selected an alternate compound hit.

Data File: /chem/MSD6.i/s032110.b/s6c2105.d  
 Date : 21-MAR-2010 16:55  
 Client ID: MEGACVS  
 Sample Info: IABN100309-05.3140 PPH11SVH11.MEGACVS  
 Column phase: 30M DB-SHS

Instrument: MSD6.i  
 Operator: nag1  
 Column diameter: 0.20



GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 21-MAR-2010 17:25  
Lab File ID: s6c2106.d Init. Cal. Date(s): 16-MAR-2010 17-MAR-2010  
Analysis Type: Init. Cal. Times: 09:18 04:51  
Lab Sample ID: WBN100312-03.3 Quant Type: ISTD  
Method: /chem/MSD6.i/s032110.b/MSD6-M8270C-AQA-031610.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
209 Benzaldehyde	0.96016	0.82971	0.82971	0.000	-13.58644	60.00000	Averaged
16 Acetophenone	1.24814	1.10817	1.10817	0.000	-11.21462	60.00000	Averaged
189 Caprolactam	0.09790	0.08510	0.08510	0.000	-13.06826	60.00000	Averaged
208 1,1'-Biphenyl	1.11180	1.03258	1.03258	0.000	-7.12590	60.00000	Averaged
207 Atrazine	0.04606	0.04307	0.04307	0.000	-6.48930	60.00000	Averaged
77 Benzidine	0.42058	0.32338	0.32338	0.000	-23.11220	60.00000	Averaged
90 3,3'-Dichlorobenzidine	0.30172	0.30501	0.30501	0.000	1.08782	60.00000	Averaged
102 1,4-Dioxane	0.35119	0.31412	0.31412	0.000	-10.55380	60.00000	Averaged
103 Methyl methacrylate	0.18979	0.17904	0.17904	0.000	-5.66374	60.00000	Averaged
104 Ethyl methacrylate	0.82709	0.70443	0.70443	0.000	-14.83028	60.00000	Averaged
105 2-Picoline	1.21280	1.07113	1.07113	0.000	-11.68111	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.53810	0.43620	0.43620	0.000	-18.93719	60.00000	Averaged
107 Methyl methanesulfonate	0.59726	0.50777	0.50777	0.000	-14.98385	60.00000	Averaged
108 N-Nitrosodiethylamine	0.54437	0.46036	0.46036	0.000	-15.43237	60.00000	Averaged
109 Ethyl Methanesulfonate	0.72583	0.58375	0.58375	0.000	-19.57389	60.00000	Averaged
110 Pentachloroethane	0.33314	0.32493	0.32493	0.000	-2.46565	60.00000	Averaged
111 N-Nitrosopyrrolidine	0.58446	0.48322	0.48322	0.000	-17.32271	60.00000	Averaged
113 N-Nitrosomorpholine	0.68078	0.56865	0.56865	0.000	-16.47190	60.00000	Averaged
114 o-Toluidine	1.73474	1.53414	1.53414	0.000	-11.56395	60.00000	Averaged
115 N-Nitrosopiperidine	0.15362	0.13579	0.13579	0.000	-11.60327	60.00000	Averaged
116 a,a-Dimethylphenethylamine	0.87353	0.69602	0.69602	0.000	-20.32165	60.00000	Averaged
118 2,6-Dichlorophenol	0.24533	0.22751	0.22751	0.000	-7.26428	60.00000	Averaged
119 Hexachloropropene	0.13311	0.13428	0.13428	0.000	0.88136	60.00000	Averaged
120 p-Phenylenediamine	0.30365	0.26583	0.26583	0.000	-12.45526	60.00000	Averaged
121 N-Nitrosodi-n-butylamine	0.26282	0.21147	0.21147	0.000	-19.53920	60.00000	Averaged
122 Safrrole	0.21396	0.20376	0.20376	0.000	-4.76733	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.44716	0.45265	0.45265	0.000	1.22739	60.00000	Averaged
124 Isosafrole	0.35324	0.30917	0.30917	0.000	-12.47602	60.00000	Averaged
125 1,4-Naphthoquinone	0.34254	0.31757	0.31757	0.000	-7.28919	60.00000	Averaged
127 Pentachlorobenzene	0.37515	0.38944	0.38944	0.000	3.80820	60.00000	Averaged
128 1-Naphthylamine	0.89931	0.77893	0.77893	0.000	-13.38571	60.00000	Averaged
129 2-Naphthylamine	0.94089	0.83899	0.83899	0.000	-10.82941	60.00000	Averaged
131 5-Nitro-o-toluidine	0.30665	0.25938	0.25938	0.000	-15.41355	60.00000	Averaged
136 1,3,5-Trinitrobenzene	0.15613	0.13028	0.13028	0.000	-16.56095	60.00000	Averaged
137 Phenacetin	0.29347	0.24455	0.24455	0.000	-16.66896	60.00000	Averaged
138 Diallate	0.24862	0.21271	0.21271	0.000	-14.44434	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 21-MAR-2010 17:25  
Lab File ID: s6c2106.d Init. Cal. Date(s): 16-MAR-2010 17-MAR-2010  
Analysis Type: Init. Cal. Times: 09:18 04:51  
Lab Sample ID: WBN100312-03.3 Quant Type: ISTD  
Method: /chem/MSD6.i/s032110.b/MSD6-M8270C-AQA-031610.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
212 Cis Diallate	0.28918	0.22085	0.22085	0.000	-23.62867	60.00000	Averaged
213 Trans Diallate	0.29250	0.25025	0.25025	0.000	-14.44434	60.00000	Averaged
140 4-Aminobiphenyl	0.55066	0.46267	0.46267	0.000	-15.97776	60.00000	Averaged
141 Pentachloronitrobenzene	0.06695	0.06834	0.06834	0.000	2.08638	60.00000	Averaged
142 Pronamide	0.26094	0.25459	0.25459	0.000	-2.43292	60.00000	Averaged
146 4-Nitroquinoline-1-oxide	0.02879	0.02770	0.02770	0.000	-3.78261	60.00000	Averaged
147 Methapyrilene	0.43748	0.35715	0.35715	0.000	-18.36230	60.00000	Averaged
148 Isodrin	0.11028	0.10820	0.10820	0.000	-1.88610	60.00000	Averaged
149 Aramite	0.04746	0.04501	0.04501	0.000	-5.16338	60.00000	Averaged
150 Kepone	0.07668	0.07686	0.07686	0.000	0.23499	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.31031	0.25155	0.25155	0.000	-18.93676	60.00000	Averaged
152 Chlorobenzilate	0.29472	0.28379	0.28379	0.000	-3.70640	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.59350	0.55013	0.55013	0.000	-7.30690	60.00000	Averaged
155 2-Acetylaminofluorene	0.34851	0.35273	0.35273	0.000	1.21131	60.00000	Averaged
157 7,12Dimethylbenz(a)anthrace	0.48545	0.44976	0.44976	0.000	-7.35187	60.00000	Averaged
158 3-Methylcholanthrene	0.40010	0.39792	0.39792	0.000	-0.54712	60.00000	Averaged



GEL Laboratories LLC

Data file : /chem/MSD6.i/s032110.b/s6c2106.d  
 Lab Smp Id: WBN100312-03.3 Client Smp ID: APCVS  
 Inj Date : 21-MAR-2010 17:25  
 Operator : nagl Inst ID: MSD6.i  
 Smp Info : |WBN100312-03.3|40 PPM|1|SVM|1|APCVS  
 Misc Info : |MSD8270|WBN100319-01  
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
 Method : /chem/MSD6.i/s032110.b/MSD6-M8270C-AQA-031610.m  
 Meth Date : 22-Mar-2010 16:46 jen00986 Quant Type: ISTD  
 Cal Date : 17-Mar-2010 04:51 Cal File: s6c1646.d  
 Als bottle: 3 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: AP12.sub  
 Target Version: 3.50  
 Processing Host: hpclpl1

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	3.828	3.828	(1.000)	416421	40.0000
* 29 Naphthalene-d8	136	4.692	4.692	(1.000)	1419043	40.0000
* 46 Acenaphthene-d10	164	5.939	5.939	(1.000)	898081	40.0000
* 67 Phenanthrene-d10	188	7.098	7.098	(1.000)	1555023	40.0000
* 91 Chrysene-d12	240	9.492	9.492	(1.000)	1427556	40.0000
* 98 Perylene-d12	264	11.086	11.086	(1.000)	1248253	40.0000
209 Benzaldehyde	77	3.557	3.557	(0.929)	345508	40.0000 34.6
16 Acetophenone	105	4.081	4.081	(1.066)	461465	40.0000 35.5 (H)
189 Caprolactam	113	4.963	4.963	(1.058)	120764	40.0000 34.8
208 1,1'-Biphenyl	154	5.510	5.510	(0.928)	927339	40.0000 37.1
207 Atrazine	173	6.810	6.810	(0.959)	66972	40.0000 37.4
77 Benzidine	184	8.245	8.245	(0.869)	461638	40.0000 30.8
90 3,3'-Dichlorobenzidine	252	9.433	9.433	(0.994)	435412	40.0000 40.4 (H)
102 1,4-Dioxane	88	2.163	2.163	(0.565)	130807	40.0000 35.8
103 Methyl methacrylate	100	2.157	2.157	(0.564)	74558	40.0000 37.7
104 Ethyl methacrylate	69	2.534	2.534	(0.662)	293339	40.0000 34.1
105 2-Picoline	93	2.728	2.728	(0.713)	446040	40.0000 35.3
106 N-Nitrosomethylethylamine	88	2.769	2.769	(0.723)	181643	40.0000 32.4
107 Methyl methanesulfonate	80	2.928	2.928	(0.765)	211445	40.0000 34.0
108 N-Nitrosodiethylamine	102	3.163	3.163	(0.826)	191705	40.0000 33.8
109 Ethyl Methanesulfonate	79	3.316	3.316	(0.866)	243087	40.0000 32.2 (H)
110 Pentachloroethane	167	3.651	3.651	(0.954)	135307	40.0000 39.0
111 N-Nitrosopyrrolidine	100	4.069	4.069	(1.063)	201222	40.0000 33.1 (Q)
113 N-Nitrosomorpholine	56	4.087	4.087	(1.068)	236796	40.0000 33.4 (H)
114 o-Toluidine	106	4.104	4.104	(1.072)	638847	40.0000 35.4 (H)
115 N-Nitrosopiperidine	114	4.304	4.304	(0.917)	192697	40.0000 35.4

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
=====	=====	==	=====	=====	=====	=====	=====
116 a,a-Dimethylphenethylamine	58	4.551	4.551	(0.970)	987678	40.0000	31.9
118 2,6-Dichlorophenol	162	4.734	4.734	(1.009)	322848	40.0000	37.1
119 Hexachloropropene	213	4.757	4.757	(1.014)	190551	40.0000	40.4
120 p-Phenylenediamine	108	4.969	4.969	(1.059)	377228	40.0000	35.0
121 N-Nitrosodi-n-butylamine	84	4.939	4.939	(1.053)	300085	40.0000	32.2 (QH)
122 Safrole	162	5.104	5.104	(1.088)	289146	40.0000	38.1
123 1,2,4,5-Tetrachlorobenzene	216	5.304	5.304	(0.893)	406513	40.0000	40.5
124 Isosafrole	162	5.469	5.469	(0.921)	277661	40.0000	35.0 (H)
125 1,4-Naphthoquinone	158	5.657	5.657	(0.952)	285204	40.0000	37.1
127 Pentachlorobenzene	250	6.051	6.051	(1.019)	349749	40.0000	41.5 (H)
128 1-Naphthylamine	143	6.145	6.145	(1.035)	699545	40.0000	34.6 (H)
129 2-Naphthylamine	143	6.198	6.198	(1.044)	753485	40.0000	35.7 (H)
131 5-Nitro-o-toluidine	152	6.339	6.339	(1.067)	232945	40.0000	33.8 (H)
136 1,3,5-Trinitrobenzene	75	6.592	6.592	(0.929)	202581	40.0000	33.4
137 Phenacetin	108	6.633	6.633	(0.935)	380284	40.0000	33.3 (QH)
138 Diallate	86	6.616	6.616	(0.932)	330771	40.0000	34.2 (H)
212 Cis Diallate	86	6.692	6.692	(0.943)	51514	6.00000	4.6
213 Trans Diallate	86	6.616	6.616	(0.932)	330771	34.0000	29.1 (H)
140 4-Aminobiphenyl	169	6.922	6.922	(0.975)	719467	40.0000	33.6
141 Pentachloronitrobenzene	237	6.933	6.933	(0.977)	106278	40.0000	40.8 (Q)
142 Pronamide	173	6.933	6.933	(0.977)	395889	40.0000	39.0 (H)
146 4-Nitroquinoline-1-oxide	101	7.763	7.763	(1.094)	43080	40.0000	38.5 (H)
147 Methapyrilene	58	7.798	7.798	(1.099)	555374	40.0000	32.6 (H)
148 Isodrin	193	8.016	8.016	(1.129)	168246	40.0000	39.2 (H)
149 Aramite	185	8.422	8.422	(1.186)	69984	40.0000	37.9 (H)
150 Kepone	272	8.998	8.998	(1.268)	119519	40.0000	40.1
151 p-(Dimethylamino)azobenzene	120	8.598	8.598	(0.906)	359103	40.0000	32.4 (H)
152 Chlorobenzilate	251	8.627	8.627	(0.909)	405130	40.0000	38.5
153 3,3'-Dimethylbenzidine	212	8.910	8.910	(0.939)	785344	40.0000	37.1 (H)
155 2-Acetylaminofluorene	181	9.157	9.157	(0.965)	503546	40.0000	40.5
157 7,12Dimethylbenz(a)anthracene	256	10.574	10.574	(0.954)	561409	40.0000	37.0 (H)
158 3-Methylcholanthrene	268	11.468	11.468	(1.034)	496699	40.0000	39.8 (QH)

#### QC Flag Legend

Q - Qualifier signal failed the ratio test.  
 H - Operator selected an alternate compound hit.

Data File: /chem/HSD6.i/s032110.b/sec2106.d

Date : 21-MAR-2010 17:25

Client ID: APCVS

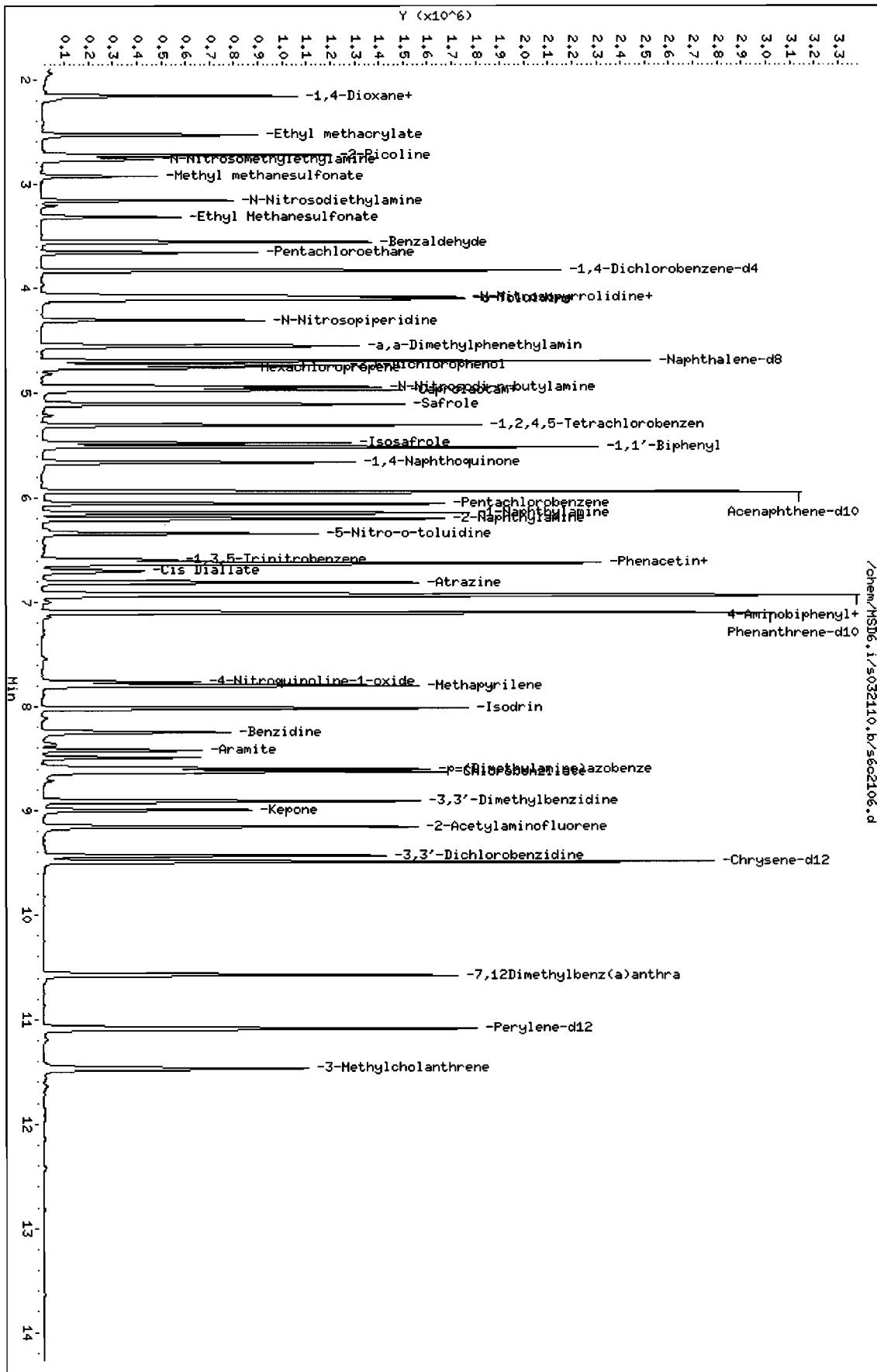
Sample Info: IABN100312-03.3140 PPH111SVH11APCVS

Column phase: J&W DB-5MS

Instrument: HSD6.i

Operator: nag1

Column diameter: 0.20



GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 23-MAR-2010 17:02  
Lab File ID: s6c2308.d Init. Cal. Date(s): 16-MAR-2010 17-MAR-2010  
Analysis Type: Init. Cal. Times: 09:18 04:51  
Lab Sample ID: WBN100312-03.3 Quant Type: ISTD  
Method: /chem/MSD6.i/s032310.b/MSD6-M8270C-AQA-031610.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
209 Benzaldehyde	0.96016	0.87287	0.87287	0.000	-9.09093	60.00000	Averaged
16 Acetophenone	1.24814	1.16938	1.16938	0.000	-6.31014	60.00000	Averaged
189 Caprolactam	0.09790	0.08727	0.08727	0.000	-10.85479	60.00000	Averaged
208 1,1'-Biphenyl	1.11180	1.05701	1.05701	0.000	-4.92863	60.00000	Averaged
207 Atrazine	0.04606	0.04374	0.04374	0.000	-5.03828	60.00000	Averaged
77 Benzidine	0.42058	0.21777	0.21777	0.000	-48.22241	60.00000	Averaged
90 3,3'-Dichlorobenzidine	0.30172	0.29011	0.29011	0.000	-3.84967	60.00000	Averaged
102 1,4-Dioxane	0.35119	0.29629	0.29629	0.000	-15.63082	60.00000	Averaged
103 Methyl methacrylate	0.18979	0.16744	0.16744	0.000	-11.77814	60.00000	Averaged
104 Ethyl methacrylate	0.82709	0.70538	0.70538	0.000	-14.71567	60.00000	Averaged
105 2-Picoline	1.21280	1.08920	1.08920	0.000	-10.19130	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.53810	0.44262	0.44262	0.000	-17.74472	60.00000	Averaged
107 Methyl methanesulfonate	0.59726	0.51055	0.51055	0.000	-14.51713	60.00000	Averaged
108 N-Nitrosodiethylamine	0.54437	0.48157	0.48157	0.000	-11.53729	60.00000	Averaged
109 Ethyl Methanesulfonate	0.72583	0.60718	0.60718	0.000	-16.34603	60.00000	Averaged
110 Pentachloroethane	0.33314	0.30985	0.30985	0.000	-6.99026	60.00000	Averaged
111 N-Nitrosopyrrolidine	0.58446	0.50502	0.50502	0.000	-13.59315	60.00000	Averaged
113 N-Nitrosomorpholine	0.68078	0.57954	0.57954	0.000	-14.87197	60.00000	Averaged
114 o-Toluidine	1.73474	1.60883	1.60883	0.000	-7.25812	60.00000	Averaged
115 N-Nitrosopiperidine	0.15362	0.13690	0.13690	0.000	-10.88376	60.00000	Averaged
116 a,a-Dimethylphenethylamine	0.87353	0.72476	0.72476	0.000	-17.03089	60.00000	Averaged
118 2,6-Dichlorophenol	0.24533	0.22741	0.22741	0.000	-7.30394	60.00000	Averaged
119 Hexachloropropene	0.13311	0.10467	0.10467	0.000	-21.36605	60.00000	Averaged
120 p-Phenylenediamine	0.30365	0.23979	0.23979	0.000	-21.03191	60.00000	Averaged
121 N-Nitrosodi-n-butylamine	0.26282	0.21138	0.21138	0.000	-19.57342	60.00000	Averaged
122 Safrole	0.21396	0.20168	0.20168	0.000	-5.74175	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.44716	0.44188	0.44188	0.000	-1.18101	60.00000	Averaged
124 Isosafrole	0.35324	0.31824	0.31824	0.000	-9.91013	60.00000	Averaged
125 1,4-Naphthoquinone	0.34254	0.31407	0.31407	0.000	-8.31089	60.00000	Averaged
127 Pentachlorobenzene	0.37515	0.37880	0.37880	0.000	0.97312	60.00000	Averaged
128 1-Naphthylamine	0.89931	0.79913	0.79913	0.000	-11.14029	60.00000	Averaged
129 2-Naphthylamine	0.94089	0.79658	0.79658	0.000	-15.33780	60.00000	Averaged
131 5-Nitro-o-toluidine	0.30665	0.25879	0.25879	0.000	-15.60747	60.00000	Averaged
136 1,3,5-Trinitrobenzene	0.15613	0.11868	0.11868	0.000	-23.98885	60.00000	Averaged
137 Phenacetin	0.29347	0.24395	0.24395	0.000	-16.87273	60.00000	Averaged
138 Diallate	0.24862	0.22299	0.22299	0.000	-10.31149	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 23-MAR-2010 17:02  
 Lab File ID: s6c2308.d Init. Cal. Date(s): 16-MAR-2010 17-MAR-2010  
 Analysis Type: Init. Cal. Times: 09:18 04:51  
 Lab Sample ID: WBN100312-03.3 Quant Type: ISTD  
 Method: /chem/MSD6.i/s032310.b/MSD6-M8270C-AQA-031610.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
212 Cis Diallate	0.28918	0.23526	0.23526	0.000	-18.64727	60.00000	Averaged
213 Trans Diallate	0.29250	0.26234	0.26234	0.000	-10.31149	60.00000	Averaged
140 4-Aminobiphenyl	0.55066	0.46118	0.46118	0.000	-16.24929	60.00000	Averaged
141 Pentachloronitrobenzene	0.06695	0.06373	0.06373	0.000	-4.81289	60.00000	Averaged
142 Pronamide	0.26094	0.23908	0.23908	0.000	-8.37728	60.00000	Averaged
146 4-Nitroquinoline-1-oxide	0.02879	0.01757	0.01757	0.000	-38.97987	60.00000	Averaged
147 Methapyrilene	0.43748	0.32441	0.32441	0.000	-25.84679	60.00000	Averaged
148 Isodrin	0.11028	0.10843	0.10843	0.000	-1.67181	60.00000	Averaged
149 Aramite	0.04746	0.04387	0.04387	0.000	-7.54647	60.00000	Averaged
150 Kepone	0.07668	0.07251	0.07251	0.000	-5.43645	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.31031	0.26560	0.26560	0.000	-14.41023	60.00000	Averaged
152 Chlorobenzilate	0.29472	0.29580	0.29580	0.000	0.36640	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.59350	0.47899	0.47899	0.000	-19.29448	60.00000	Averaged
155 2-Acetylaminofluorene	0.34851	0.34014	0.34014	0.000	-2.40146	60.00000	Averaged
157 7,12Dimethylbenz(a)anthrace	0.48545	0.45915	0.45915	0.000	-5.41696	60.00000	Averaged
158 3-Methylcholanthrene	0.40010	0.39251	0.39251	0.000	-1.89806	60.00000	Averaged

GEL Laboratories LLC

Data file : /chem/MSD6.i/s032310.b/s6c2308.d  
 Lab Smp Id: WBN100312-03.3 Client Smp ID: APCVS  
 Inj Date : 23-MAR-2010 17:02  
 Operator : nag1 Inst ID: MSD6.i  
 Smp Info : |WBN100312-03.3|40 PPM|1|SVM|1|APCVS  
 Misc Info : |MSD8270|WBN100319-01  
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
 Method : /chem/MSD6.i/s032310.b/MSD6-M8270C-AQA-031610.m  
 Meth Date : 23-Mar-2010 18:45 llo00884 Quant Type: ISTD  
 Cal Date : 17-MAR-2010 04:51 Cal File: s6c1646.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	3.951	3.951	(1.000)	378022	40.0000
* 29 Naphthalene-d8	136	4.816	4.816	(1.000)	1335372	40.0000
* 46 Acenaphthene-d10	164	6.069	6.069	(1.000)	840922	40.0000
* 67 Phenanthrene-d10	188	7.239	7.239	(1.000)	1466465	40.0000
* 91 Chrysene-d12	240	9.639	9.639	(1.000)	1279301	40.0000
* 98 Perylene-d12	264	11.322	11.322	(1.000)	1090945	40.0000
209 Benzaldehyde	77	3.681	3.681	(0.932)	329965	40.0000 36.4(H)
16 Acetophenone	105	4.204	4.204	(1.064)	442053	40.0000 37.5(H)
189 Caprolactam	113	5.093	5.093	(1.057)	116537	40.0000 35.6
208 1,1'-Biphenyl	154	5.634	5.634	(0.928)	888861	40.0000 38.0(H)
207 Atrazine	173	6.940	6.940	(0.959)	64138	40.0000 38.0(H)
77 Benzidine	184	8.392	8.392	(0.871)	278590	40.0000 20.7(H)
90 3,3'-Dichlorobenzidine	252	9.581	9.581	(0.994)	371135	40.0000 38.5
102 1,4-Dioxane	88	2.305	2.305	(0.583)	112005	40.0000 33.7(H)
103 Methyl methacrylate	100	2.293	2.293	(0.580)	63296	40.0000 35.3
104 Ethyl methacrylate	69	2.657	2.657	(0.673)	266648	40.0000 34.1(H)
105 2-Picoline	93	2.857	2.857	(0.723)	411740	40.0000 35.9(H)
106 N-Nitrosomethylethylamine	88	2.899	2.899	(0.734)	167319	40.0000 32.9(H)
107 Methyl methanesulfonate	80	3.052	3.052	(0.772)	193001	40.0000 34.2
108 N-Nitrosodiethylamine	102	3.287	3.287	(0.832)	182043	40.0000 35.4
109 Ethyl Methanesulfonate	79	3.440	3.440	(0.870)	229528	40.0000 33.5(H)
110 Pentachloroethane	167	3.775	3.775	(0.955)	117132	40.0000 37.2
111 N-Nitrosopyrrolidine	100	4.193	4.193	(1.061)	190907	40.0000 34.6(QH)
113 N-Nitrosomorpholine	56	4.210	4.210	(1.065)	219078	40.0000 34.0(H)
114 o-Toluidine	106	4.228	4.228	(1.070)	608174	40.0000 37.1
115 N-Nitrosopiperidine	114	4.428	4.428	(0.919)	182811	40.0000 35.6

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
=====	====	==	=====	=====	=====	=====	=====
116 a,a-Dimethylphenethylamine	58	4.704	4.704	(0.977)	967828	40.0000	33.2 (H)
118 2,6-Dichlorophenol	162	4.857	4.857	(1.009)	303682	40.0000	37.1
119 Hexachloropropene	213	4.887	4.887	(1.015)	139771	40.0000	31.4
120 p-Phenylenediamine	108	5.098	5.098	(1.059)	320208	40.0000	31.6 (H)
121 N-Nitrosodi-n-butylamine	84	5.057	5.057	(1.050)	282271	40.0000	32.2 (QH)
122 Safrole	162	5.228	5.228	(1.085)	269313	40.0000	37.7 (H)
123 1,2,4,5-Tetrachlorobenzene	216	5.428	5.428	(0.894)	371584	40.0000	39.5
124 Isosafrole	162	5.593	5.593	(0.921)	267611	40.0000	36.0 (H)
125 1,4-Naphthoquinone	158	5.781	5.781	(0.952)	264109	40.0000	36.7
127 Pentachlorobenzene	250	6.187	6.187	(1.019)	318545	40.0000	40.4
128 1-Naphthylamine	143	6.275	6.275	(1.034)	672003	40.0000	35.5 (H)
129 2-Naphthylamine	143	6.334	6.334	(1.044)	669858	40.0000	33.9 (H)
131 5-Nitro-o-toluidine	152	6.469	6.469	(1.066)	217619	40.0000	33.8 (H)
136 1,3,5-Trinitrobenzene	75	6.722	6.722	(0.928)	174037	40.0000	30.4 (H)
137 Phenacetin	108	6.763	6.763	(0.934)	357750	40.0000	33.2 (QH)
138 Diallate	86	6.751	6.751	(0.933)	327002	40.0000	35.9 (H)
212 Cis Diallate	86	6.828	6.828	(0.943)	51749	6.00000	4.9 (H)
213 Trans Diallate	86	6.751	6.751	(0.933)	327002	34.0000	30.5 (H)
140 4-Aminobiphenyl	169	7.057	7.057	(0.975)	676301	40.0000	33.5 (H)
141 Pentachloronitrobenzene	237	7.075	7.075	(0.977)	93452	40.0000	38.1 (QH)
142 Pronamide	173	7.069	7.069	(0.976)	350597	40.0000	36.6 (H)
146 4-Nitroquinoline-1-oxide	101	7.910	7.910	(1.093)	25765	40.0000	24.4 (H)
147 Methapyrilene	58	7.939	7.939	(1.097)	475729	40.0000	29.7
148 Isodrin	193	8.163	8.163	(1.128)	159011	40.0000	39.3 (H)
149 Aramite	185	8.563	8.563	(1.183)	64340	40.0000	37.0 (H)
150 Kepone	272	9.145	9.145	(1.263)	106335	40.0000	37.8 (H)
151 p-(Dimethylamino)azobenzene	120	8.739	8.739	(0.907)	339779	40.0000	34.2 (H)
152 Chlorobenzilate	251	8.769	8.769	(0.910)	378412	40.0000	40.1 (H)
153 3,3'-Dimethylbenzidine	212	9.057	9.057	(0.940)	612767	40.0000	32.3 (H)
155 2-Acetylaminofluorene	181	9.304	9.304	(0.965)	435144	40.0000	39.0 (H)
157 7,12Dimethylbenz(a)anthracene	256	10.780	10.780	(0.952)	500906	40.0000	37.8 (H)
158 3-Methylcholanthrene	268	11.727	11.727	(1.036)	428207	40.0000	39.2 (QH)

#### QC Flag Legend

Q - Qualifier signal failed the ratio test.  
H - Operator selected an alternate compound hit.

Data File: /chem/MSD6.i/s032310.b/s6c2308.d

Date : 23-MAR-2010 17:02

Client ID: APCVS

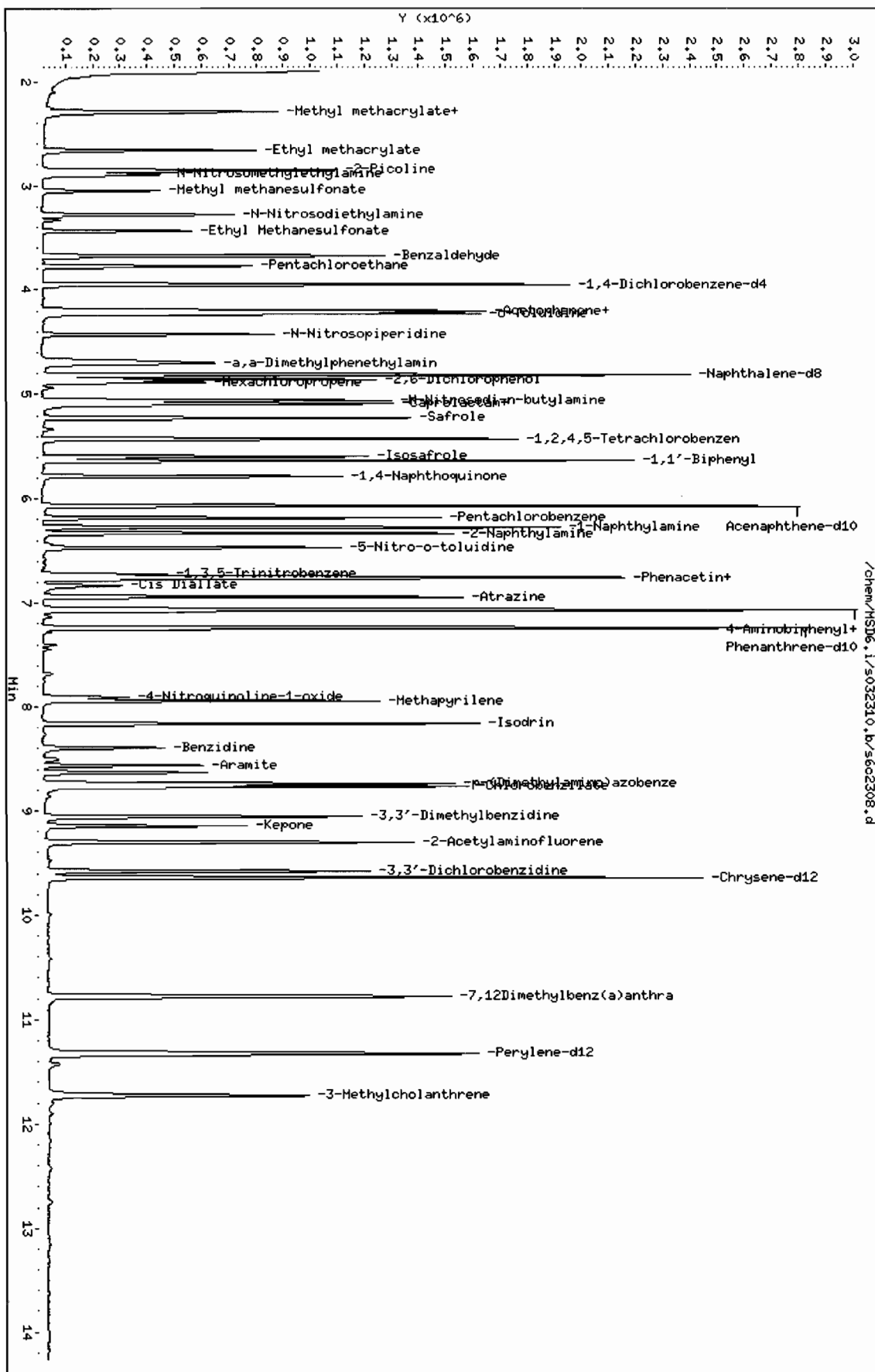
Sample Info: I18N100312-03.3140 PPH111SVH11.IAPCVS

Column phase: J&W DB-5MS

Instrument: MSD6.i

Operator: nag1

Column diameter: 0.20





GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 23-MAR-2010 17:25  
Lab File ID: s6c2309.d Init. Cal. Date(s): 16-MAR-2010 17-MAR-2010  
Analysis Type: Init. Cal. Times: 09:18 04:51  
Lab Sample ID: WBN100309-05.3 Quant Type: ISTD  
Method: /chem/MSD6.i/s032310.b/MSD6-M8270C-AQA-031610.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
3 2-Fluorophenol	1.11196	1.04225	1.04225	0.000	-6.26903	60.00000	Averaged
5 Phenol-d5	1.41412	1.28572	1.28572	0.000	-9.07966	60.00000	Averaged
20 Nitrobenzene-d5	0.38237	0.34056	0.34056	0.000	-10.93473	60.00000	Averaged
39 2-Fluorobiphenyl	1.03201	1.10386	1.10386	0.000	6.96261	60.00000	Averaged
60 2,4,6-Tribromophenol	0.11225	0.12797	0.12797	0.000	14.00956	60.00000	Averaged
81 p-Terphenyl-d14	0.69704	0.78467	0.78467	0.000	12.57316	60.00000	Averaged
1 N-Methyl-N-nitrosomethylami	0.77557	0.62007	0.62007	0.000	-20.05014	60.00000	Averaged
2 Pyridine	1.10526	0.70485	0.70485	0.000	-36.22705	60.00000	Averaged
4 Aniline	0.66950	0.52144	0.52144	0.000	-22.11503	60.00000	Averaged
6 Phenol	1.43150	1.30088	1.30088	0.001	-9.12475	20.00000	Averaged ccc
7 bis(2-Chloroethyl) ether	1.06440	0.84028	0.84028	0.000	-21.05654	60.00000	Averaged
8 2-Chlorophenol	1.16424	1.11357	1.11357	0.000	-4.35215	60.00000	Averaged
203 n-Decane	1.69067	1.35145	1.35145	0.000	-20.06412	60.00000	Averaged
9 1,3-Dichlorobenzene	1.28259	1.31406	1.31406	0.000	2.45296	60.00000	Averaged
11 1,4-Dichlorobenzene	1.24541	1.28224	1.28224	0.001	2.95761	20.00000	Averaged ccc
13 1,2-Dichlorobenzene	1.12890	1.15412	1.15412	0.000	2.23362	60.00000	Averaged
14 bis(2-Chloroisopropyl)ether	2.23712	1.73353	1.73353	0.000	-22.51068	60.00000	Averaged
12 Benzyl alcohol	0.81825	0.53330	0.53330	0.000	-34.82449	60.00000	Averaged
15 o-Cresol	0.88788	0.82026	0.82026	0.000	-7.61536	60.00000	Averaged
18 m,p-Cresols	1.27893	1.15498	1.15498	0.000	-9.69177	60.00000	Averaged
17 N-Nitrosodipropylamine	0.97668	0.81765	0.81765	0.050	-16.28224	60.00000	Averaged spcc
19 Hexachloroethane	0.53767	0.47771	0.47771	0.000	-11.15204	60.00000	Averaged
21 Nitrobenzene	0.35281	0.31110	0.31110	0.000	-11.82125	60.00000	Averaged
22 Isophorone	0.67701	0.57487	0.57487	0.000	-15.08625	60.00000	Averaged
23 2-Nitrophenol	0.15292	0.14712	0.14712	0.001	-3.79389	20.00000	Averaged ccc
24 2,4-Dimethylphenol	36.68767	40.00000	0.26992	0.000	-8.28083	60.00000	Wt Linear
25 bis(2-Chloroethoxy)methane	0.36806	0.31768	0.31768	0.000	-13.68825	60.00000	Averaged
26 2,4-Dichlorophenol	0.25252	0.25247	0.25247	0.001	-0.02247	20.00000	Averaged ccc
27 Benzoic acid	0.18753	0.17012	0.17012	0.000	-9.28613	60.00000	Averaged
28 1,2,4-Trichlorobenzene	0.28905	0.29031	0.29031	0.000	0.43604	60.00000	Averaged
30 Naphthalene	0.98486	0.82189	0.82189	0.000	-16.54731	60.00000	Averaged
204 alpha-Terpineol	0.28429	0.22876	0.22876	0.000	-19.53172	60.00000	Averaged
31 4-Chloroaniline	0.43446	0.38128	0.38128	0.000	-12.24047	60.00000	Averaged
32 Hexachlorobutadiene	0.16407	0.17434	0.17434	0.001	6.26039	20.00000	Averaged ccc
33 4-Chloro-3-methylphenol	0.27436	0.26888	0.26888	0.001	-1.99708	20.00000	Averaged ccc
34 2-Methylnaphthalene	0.60564	0.54996	0.54996	0.000	-9.19342	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 23-MAR-2010 17:25  
Lab File ID: s6c2309.d Init. Cal. Date(s): 16-MAR-2010 17-MAR-2010  
Analysis Type: Init. Cal. Times: 09:18 04:51  
Lab Sample ID: WBN100309-05.3 Quant Type: ISTD  
Method: /chem/MSD6.i/s032310.b/MSD6-M8270C-AQA-031610.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
35 1-Methylnaphthalene	0.58910	0.52029	0.52029	0.000	-11.68148	60.00000	Averaged
36 Hexachlorocyclopentadiene	0.22936	0.20970	0.20970	0.050	-8.56771	60.00000	Averaged spcc
205 2,3-Dichloroaniline	0.52459	0.52211	0.52211	0.000	-0.47158	60.00000	Averaged
37 2,4,6-Trichlorophenol	0.33474	0.38030	0.38030	0.001	13.61195	20.00000	Averaged ccc
38 2,4,5-Trichlorophenol	0.35465	0.36460	0.36460	0.000	2.80320	60.00000	Averaged
40 2-Chloronaphthalene	0.97365	0.98361	0.98361	0.000	1.02231	60.00000	Averaged
42 o-Nitroaniline	0.34201	0.27833	0.27833	0.000	-18.62020	60.00000	Averaged
41 m-Nitroaniline	0.25409	0.20418	0.20418	0.000	-19.64307	60.00000	Averaged
43 Dimethylphthalate	1.13004	1.12355	1.12355	0.000	-0.57407	60.00000	Averaged
44 2,6-Dinitrotoluene	0.27058	0.26836	0.26836	0.000	-0.81853	60.00000	Averaged
50 2,4-Dinitrotoluene	0.35648	0.34202	0.34202	0.000	-4.05548	60.00000	Averaged
45 Acenaphthylene	1.54257	1.47358	1.47358	0.000	-4.47258	60.00000	Averaged
47 Acenaphthene	1.03783	0.90558	0.90558	0.001	-12.74323	20.00000	Averaged ccc
48 2,4-Dinitrophenol	43.25379	40.00000	0.10375	0.050	8.13446	60.00000	Linear spcc
49 Dibenzofuran	1.26069	1.31704	1.31704	0.000	4.46961	60.00000	Averaged
51 Diethylphthalate	1.10774	1.12181	1.12181	0.000	1.27042	60.00000	Averaged
52 4-Nitrophenol	0.19236	0.18900	0.18900	0.050	-1.74803	60.00000	Averaged spcc
53 Fluorene	1.11781	1.06571	1.06571	0.000	-4.66064	60.00000	Averaged
54 4-Chlorophenylphenylether	0.53621	0.56257	0.56257	0.000	4.91489	60.00000	Averaged
55 2-Methyl-4,6-dinitrophenol	48.40600	40.00000	0.11506	0.000	21.01499	60.00000	Linear
56 p-Nitroaniline	0.20835	0.16862	0.16862	0.000	-19.06700	60.00000	Averaged
133 Diphenylamine	0.51902	0.46926	0.46926	0.001	-9.58643	20.00000	Averaged ccc
58 1,2-Diphenylhydrazine	0.69767	0.61676	0.61676	0.000	-11.59746	60.00000	Averaged
61 4-Bromophenylphenylether	0.17368	0.17547	0.17547	0.000	1.03126	60.00000	Averaged
63 Hexachlorobenzene	0.16595	0.17974	0.17974	0.000	8.30731	60.00000	Averaged
65 Pentachlorophenol	0.09397	0.10600	0.10600	0.001	12.80293	20.00000	Averaged ccc
206 n-Octadecane	0.48063	0.41194	0.41194	0.000	-14.29239	60.00000	Averaged
68 Phenanthrene	0.97466	0.86842	0.86842	0.000	-10.90022	60.00000	Averaged
69 Anthracene	0.98189	0.86393	0.86393	0.000	-12.01331	60.00000	Averaged
72 Di-n-butylphthalate	1.13557	1.07463	1.07463	0.000	-5.36641	60.00000	Averaged
76 Fluoranthene	0.98842	0.92505	0.92505	0.001	-6.41119	20.00000	Averaged ccc
79 Pyrene	1.21938	1.14194	1.14194	0.000	-6.35079	60.00000	Averaged
85 Butylbenzylphthalate	0.58998	0.55715	0.55715	0.000	-5.56470	60.00000	Averaged
89 Benzo(a)anthracene	1.04446	0.99462	0.99462	0.000	-4.77178	60.00000	Averaged
92 Chrysene	0.99764	0.93169	0.93169	0.000	-6.61009	60.00000	Averaged
93 bis(2-Ethylhexyl)phthalate	0.78860	0.74083	0.74083	0.000	-6.05752	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 23-MAR-2010 17:25  
 Lab File ID: s6c2309.d Init. Cal. Date(s): 16-MAR-2010 17-MAR-2010  
 Analysis Type: Init. Cal. Times: 09:18 04:51  
 Lab Sample ID: WBN100309-05.3 Quant Type: ISTD  
 Method: /chem/MSD6.i/s032310.b/MSD6-M8270C-AQA-031610.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
94 Di-n-octylphthalate	1.53062	1.38416	1.38416	0.001	-9.56843	20.00000	Averaged ccc
95 Benzo(b)fluoranthene	1.08744	1.08983	1.08983	0.000	0.21896	60.00000	Averaged
96 Benzo(k)fluoranthene	1.04328	1.01794	1.01794	0.000	-2.42939	60.00000	Averaged
97 Benzo(a)pyrene	0.92098	0.91247	0.91247	0.001	-0.92362	20.00000	Averaged ccc
99 Indeno(1,2,3-cd)pyrene	0.84510	0.79867	0.79867	0.000	-5.49414	60.00000	Averaged
100 Dibenzo(a,h)anthracene	0.68068	0.63575	0.63575	0.000	-6.60081	60.00000	Averaged
101 Benzo(ghi)perylene	0.72160	0.66600	0.66600	0.000	-7.70514	60.00000	Averaged
126 m-Dinitrobenzene	0.19174	0.18773	0.18773	0.000	-2.08734	60.00000	Averaged
130 2,3,4,6-Tetrachlorophenol	0.27788	0.28551	0.28551	0.000	2.74719	60.00000	Averaged
143 Dinoseb	39.36388	40.00000	0.13145	0.000	-1.59031	60.00000	Linear
173 Carbazole	0.76672	0.62660	0.62660	0.000	-18.27467	60.00000	Averaged
184 p-Benzquinone	0.24293	0.15290	0.15290	0.000	-37.06101	60.00000	Averaged
192 Methoxychlor	0.66555	0.58522	0.58522	0.000	-12.06994	60.00000	Averaged
211 p-Toluidine	1.33748	0.84318	0.84318	0.000	-36.95761	60.00000	Averaged
210 m-Toluidine	1.85679	1.42840	1.42840	0.000	-23.07162	60.00000	Averaged
215 2-Ethoxyethanol	0.71211	0.50821	0.50821	0.000	-28.63234	60.00000	Averaged
179 Dibenzo(a,e)pyrene	0.32071	0.21334	0.21334	0.000	-33.47673	60.00000	Averaged
26 Phthalic anhydride	29.41158	40.00000	0.10263	0.000	-26.47105	60.00000	Linear
214 1,4-Dinitrobenzene	0.26971	0.22658	0.22658	0.000	-15.99088	60.00000	Averaged
216 Methylenebis(2-chloroanilin	0.15700	0.13099	0.13099	0.000	-16.56861	60.00000	Averaged
M 225 Trichlorophenols	0.34470	0.37245	0.37245	0.000	8.05147	60.00000	Averaged
M 226 Tetrachlorophenols	0.27788	0.28551	0.28551	0.000	2.74719	60.00000	Averaged
M 227 Benzo(b,k)fluoranthene	1.06536	1.05388	1.05388	0.000	-1.07777	60.00000	Averaged

GEL Laboratories LLC

Data file : /chem/MSD6.i/s032310.b/s6c2309.d  
Lab Smp Id: WBN100309-05.3 Client Smp ID: MEGACVS  
Inj Date : 23-MAR-2010 17:25  
Operator : nag1 Inst ID: MSD6.i  
Smp Info : |WBN100309-05.3|40 PPM|1|SVM|1|MEGACVS  
Misc Info : |MSD8270|WBN100319-01  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD6.i/s032310.b/MSD6-M8270C-AQA-031610.m  
Meth Date : 23-Mar-2010 20:54 llo00884 Quant Type: ISTD  
Cal Date : 17-MAR-2010 04:51 Cal File: s6c1646.d  
Als bottle: 4 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 (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.946	3.946	(1.000)	304917	40.0000	
* 29 Naphthalene-d8	136	4.804	4.804	(1.000)	1164981	40.0000	
* 46 Acenaphthene-d10	164	6.057	6.057	(1.000)	659784	40.0000	
* 67 Phenanthrene-d10	188	7.228	7.228	(1.000)	1172427	40.0000	
* 91 Chrysene-d12	240	9.628	9.628	(1.000)	972017	40.0000	
* 98 Perylene-d12	264	11.298	11.298	(1.000)	816579	40.0000	
\$ 3 2-Fluorophenol	112	3.128	3.128	(0.793)	317800	40.0000	37.5
\$ 5 Phenol-d5	99	3.657	3.657	(0.927)	392038	40.0000	36.4
\$ 20 Nitrobenzene-d5	82	4.304	4.304	(0.896)	396749	40.0000	35.6
\$ 39 2-Fluorobiphenyl	172	5.546	5.546	(0.916)	728312	40.0000	42.8
\$ 60 2,4,6-Tribromophenol	329	6.651	6.651	(1.098)	84433	40.0000	45.6
\$ 81 p-Terphenyl-d14	244	8.604	8.604	(0.894)	762717	40.0000	45.0
1 N-Methyl-N-nitrosomethylamine	74	2.446	2.446	(0.620)	189070	40.0000	32.0
2 Pyridine	79	2.481	2.481	(0.629)	214922	40.0000	25.5
4 Aniline	66	3.728	3.728	(0.945)	158995	40.0000	31.2
6 Phenol	94	3.663	3.663	(0.928)	396661	40.0000	36.4
7 bis(2-Chloroethyl) ether	63	3.746	3.746	(0.949)	256215	40.0000	31.6
8 2-Chlorophenol	128	3.804	3.804	(0.964)	339547	40.0000	38.2
203 n-Decane	43	3.787	3.787	(0.960)	412081	40.0000	32.0
9 1,3-Dichlorobenzene	146	3.910	3.910	(0.991)	400678	40.0000	41.0
11 1,4-Dichlorobenzene	146	3.951	3.951	(1.001)	390978	40.0000	41.2
13 1,2-Dichlorobenzene	146	4.057	4.057	(1.028)	351910	40.0000	40.9
14 bis(2-Chloroisopropyl) ether	45	4.087	4.087	(1.036)	528583	40.0000	31.0
12 Benzyl alcohol	108	4.010	4.010	(1.016)	162611	40.0000	26.1
15 o-Cresol	107	4.057	4.057	(1.028)	250112	40.0000	37.0
18 m,p-Cresols	107	4.157	4.157	(1.054)	352172	40.0000	36.1

Compounds	QUANT SIG	AMOUNTS						
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
							(ng/ul)	(ng/ul)
=====	=====	==	=====	=====	=====	=====	=====	
17 N-Nitrosodipropylamine	70	4.181	4.181	(1.060)	249316	40.0000	33.5	
19 Hexachloroethane	117	4.287	4.287	(1.086)	145661	40.0000	35.5	
21 Nitrobenzene	77	4.316	4.316	(0.898)	362430	40.0000	35.3	
22 Isophorone	82	4.469	4.469	(0.930)	669717	40.0000	34.0	
23 2-Nitrophenol	139	4.528	4.528	(0.942)	171390	40.0000	38.5	
24 2,4-Dimethylphenol	122	4.522	4.522	(0.941)	314456	40.0000	36.7	
25 bis(2-Chloroethoxy)methane	93	4.593	4.593	(0.956)	370095	40.0000	34.5	
26 2,4-Dichlorophenol	162	4.693	4.693	(0.977)	294118	40.0000	40.0	
27 Benzoic acid	105	4.569	4.569	(0.951)	198184	40.0000	36.3	
28 1,2,4-Trichlorobenzene	180	4.757	4.757	(0.990)	338205	40.0000	40.2	
30 Naphthalene	128	4.822	4.822	(1.004)	957488	40.0000	33.4	
204 alpha-Terpineol	59	4.798	4.798	(0.999)	266504	40.0000	32.2	
31 4-Chloroaniline	127	4.834	4.834	(1.006)	444188	40.0000	35.1	
32 Hexachlorobutadiene	225	4.887	4.887	(1.017)	203099	40.0000	42.5	
33 4-Chloro-3-methylphenol	107	5.146	5.146	(1.071)	313240	40.0000	39.2	
34 2-Methylnaphthalene	142	5.304	5.304	(1.104)	640696	40.0000	36.3	
35 1-Methylnaphthalene	142	5.375	5.375	(1.119)	606125	40.0000	35.3	
36 Hexachlorocyclopentadiene	237	5.404	5.404	(0.892)	138360	40.0000	36.6	
205 2,3-Dichloroaniline	161	5.498	5.498	(0.908)	344483	40.0000	39.8	
37 2,4,6-Trichlorophenol	196	5.487	5.487	(0.906)	250919	40.0000	45.4	
38 2,4,5-Trichlorophenol	196	5.516	5.516	(0.911)	240554	40.0000	41.1	
40 2-Chloronaphthalene	162	5.657	5.657	(0.934)	648967	40.0000	40.4	
42 o-Nitroaniline	65	5.710	5.710	(0.943)	183637	40.0000	32.6	
41 m-Nitroaniline	138	6.004	6.004	(0.991)	134716	40.0000	32.1	
43 Dimethylphthalate	163	5.822	5.822	(0.961)	741300	40.0000	39.8	
44 2,6-Dinitrotoluene	165	5.875	5.875	(0.970)	177060	40.0000	39.7	
50 2,4-Dinitrotoluene	165	6.169	6.169	(1.018)	225659	40.0000	38.4	
45 Acenaphthylene	152	5.957	5.957	(0.983)	972244	40.0000	38.2	
47 Acenaphthene	154	6.081	6.081	(1.004)	597486	40.0000	34.9	
48 2,4-Dinitrophenol	184	6.075	6.075	(1.003)	68455	40.0000	43.2	
49 Dibenzofuran	168	6.210	6.210	(1.025)	868962	40.0000	41.8	
51 Diethylphthalate	149	6.328	6.328	(1.045)	740151	40.0000	40.5	
52 4-Nitrophenol	139	6.093	6.093	(1.006)	124698	40.0000	39.3	
53 Fluorene	166	6.469	6.469	(1.068)	703138	40.0000	38.1	
54 4-Chlorophenylphenylether	204	6.445	6.445	(1.064)	371173	40.0000	42.0	
55 2-Methyl-4,6-dinitrophenol	198	6.481	6.481	(0.897)	134905	40.0000	48.4	
56 p-Nitroaniline	138	6.463	6.463	(1.067)	111253	40.0000	32.4	
133 Diphenylamine	169	6.534	6.534	(0.904)	550175	40.0000	36.2	
58 1,2-Diphenylhydrazine	77	6.569	6.569	(0.909)	723104	40.0000	35.4	
61 4-Bromophenylphenylether	248	6.834	6.834	(0.945)	205726	40.0000	40.4	
63 Hexachlorobenzene	284	6.898	6.898	(0.954)	210733	40.0000	43.3	
65 Pentachlorophenol	266	7.051	7.051	(0.976)	124277	40.0000	45.1	
206 n-Octadecane	57	7.040	7.040	(0.974)	482965	40.0000	34.3	
68 Phenanthrene	178	7.245	7.245	(1.002)	1018156	40.0000	35.6	
69 Anthracene	178	7.292	7.292	(1.009)	1012900	40.0000	35.2	
72 Di-n-butylphthalate	149	7.645	7.645	(1.058)	1259923	40.0000	37.8	
76 Fluoranthene	202	8.287	8.287	(1.146)	1084555	40.0000	37.4	

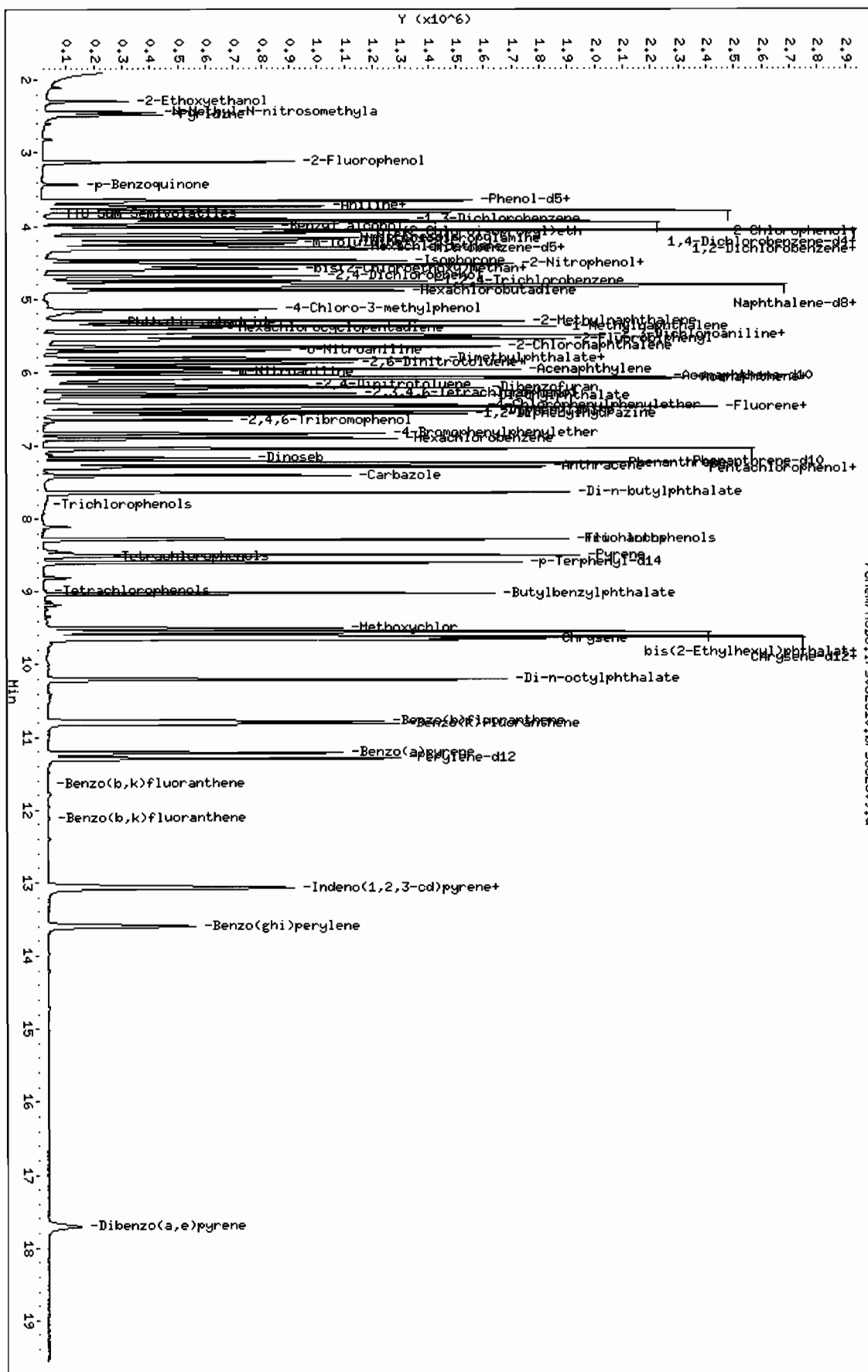
Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
=====	=====	==	=====	=====	=====	=====	=====
79 Pyrene	202	8.498	8.498	(0.883)	1109981	40.0000	37.4
85 Butylbenzylphthalate	149	9.034	9.034	(0.938)	541559	40.0000	37.8
89 Benzo(a)anthracene	228	9.616	9.616	(0.999)	966788	40.0000	38.1
92 Chrysene	228	9.657	9.657	(1.003)	905619	40.0000	37.4
93 bis(2-Ethylhexyl)phthalate	149	9.551	9.551	(0.992)	720099	40.0000	37.6
94 Di-n-octylphthalate	149	10.204	10.204	(0.903)	1130279	40.0000	36.2
95 Benzo(b)fluoranthene	252	10.786	10.786	(0.955)	889929	40.0000	40.1
96 Benzo(k)fluoranthene	252	10.822	10.822	(0.958)	831225	40.0000	39.0
97 Benzo(a)pyrene	252	11.222	11.222	(0.993)	745104	40.0000	39.6
99 Indeno(1,2,3-cd)pyrene	276	13.063	13.063	(1.156)	652179	40.0000	37.8
100 Dibenzo(a,h)anthracene	278	13.080	13.080	(1.158)	519137	40.0000	37.4
101 Benzo(ghi)perylene	276	13.604	13.604	(1.204)	543843	40.0000	36.9
126 m-Dinitrobenzene	168	5.857	5.857	(0.967)	123864	40.0000	39.2
130 2,3,4,6-Tetrachlorophenol	232	6.287	6.287	(1.038)	188377	40.0000	41.1
143 Dinoseb	211	7.169	7.169	(0.992)	154118	40.0000	39.4
173 Carbazole	167	7.404	7.404	(1.024)	734647	40.0000	32.7
184 p-Benzoquinone	54	3.434	3.434	(0.870)	46622	40.0000	25.2
192 Methoxychlor	227	9.504	9.504	(0.987)	568841	40.0000	35.2
211 p-Toluidine	106	4.222	4.222	(1.070)	257099	40.0000	25.2 (H)
210 m-Toluidine	106	4.240	4.240	(1.075)	435542	40.0000	30.8
215 2-Ethoxyethanol	59	2.287	2.287	(0.580)	154963	40.0000	28.5
179 Dibenzo(a,e)pyrene	302	17.709	17.709	(1.567)	174212	40.0000	26.6
26 Phthalic anhydride	104	5.340	5.340	(1.111)	119560	40.0000	29.4
214 1,4-Dinitrobenzene	75	5.804	5.804	(0.958)	149496	40.0000	33.6
216 Methylenebis(2-chloroaniline)	231	9.563	9.563	(0.993)	127322	40.0000	33.4
M 225 Trichlorophenols	196				491473	80.0000	86.4
M 226 Tetrachlorophenols	232				188377	40.0000	41.1
M 227 Benzo(b,k)fluoranthene	252				1721154	80.0000	79.1

# QC Flag Legend

H - Operator selected an alternate compound hit.

Data File: /chem/MSD6.i/s032310.b/s6c2309.d  
 Date : 23-MAR-2010 17:25  
 Client ID: MEGACVS  
 Sample Info: IABN00309-05.3140 PPH111SVH11.MEGACVS  
 Column phase: J&W DB-SMS

Instrument: MSD6.i  
 Operator: nag1  
 Column diameter: 0.20



# QC Data



Data File: /chem/MSD6.i/s031610.b/s6c1601.d

Page 1

Date : 16-MAR-2010 08:42

Client ID: DFTPP

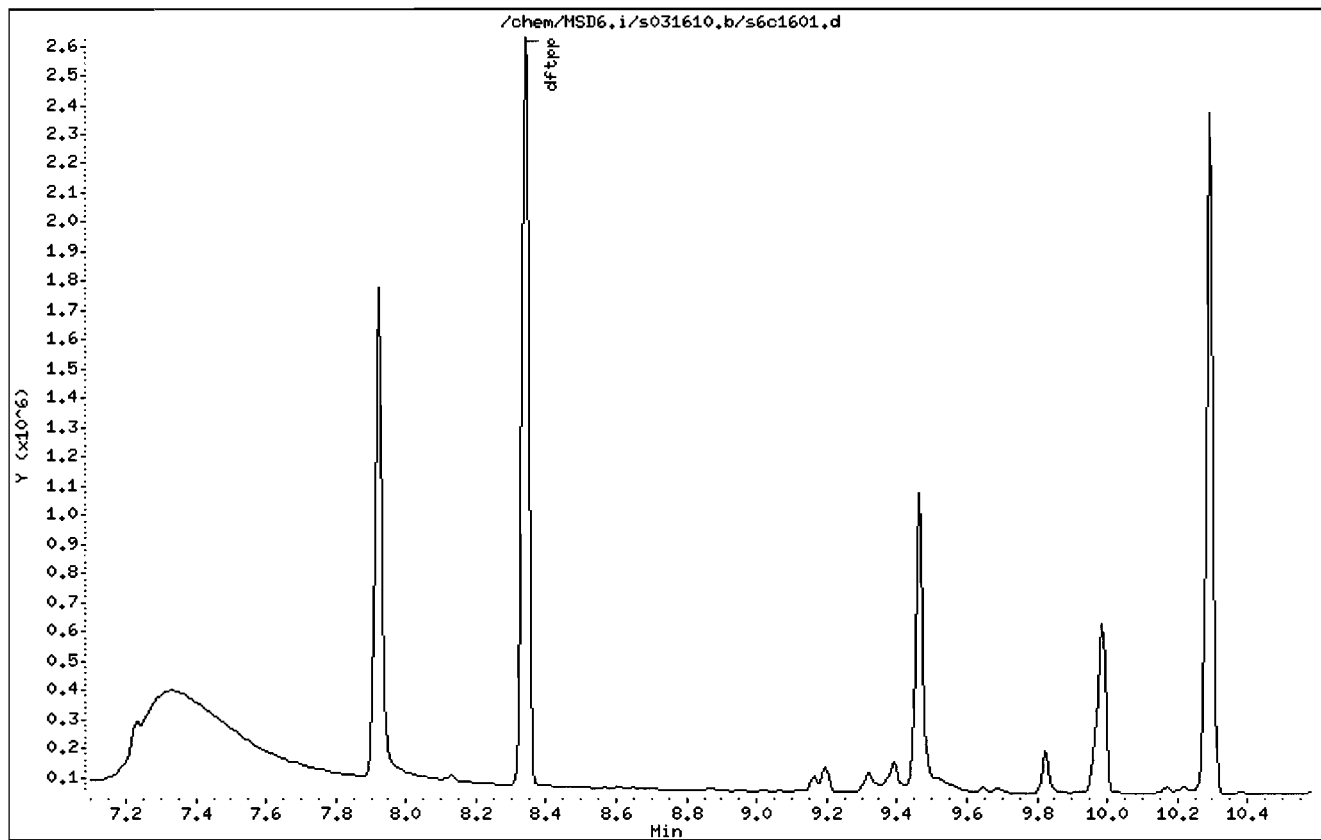
Instrument: MSD6.i

Sample Info: IWBNI00306-01.21DFTPP11SVMF11DFTPP

Operator: nag1

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20



Date : 16-MAR-2010 08:42

Client ID: DFTPP

Instrument: MSD6.i

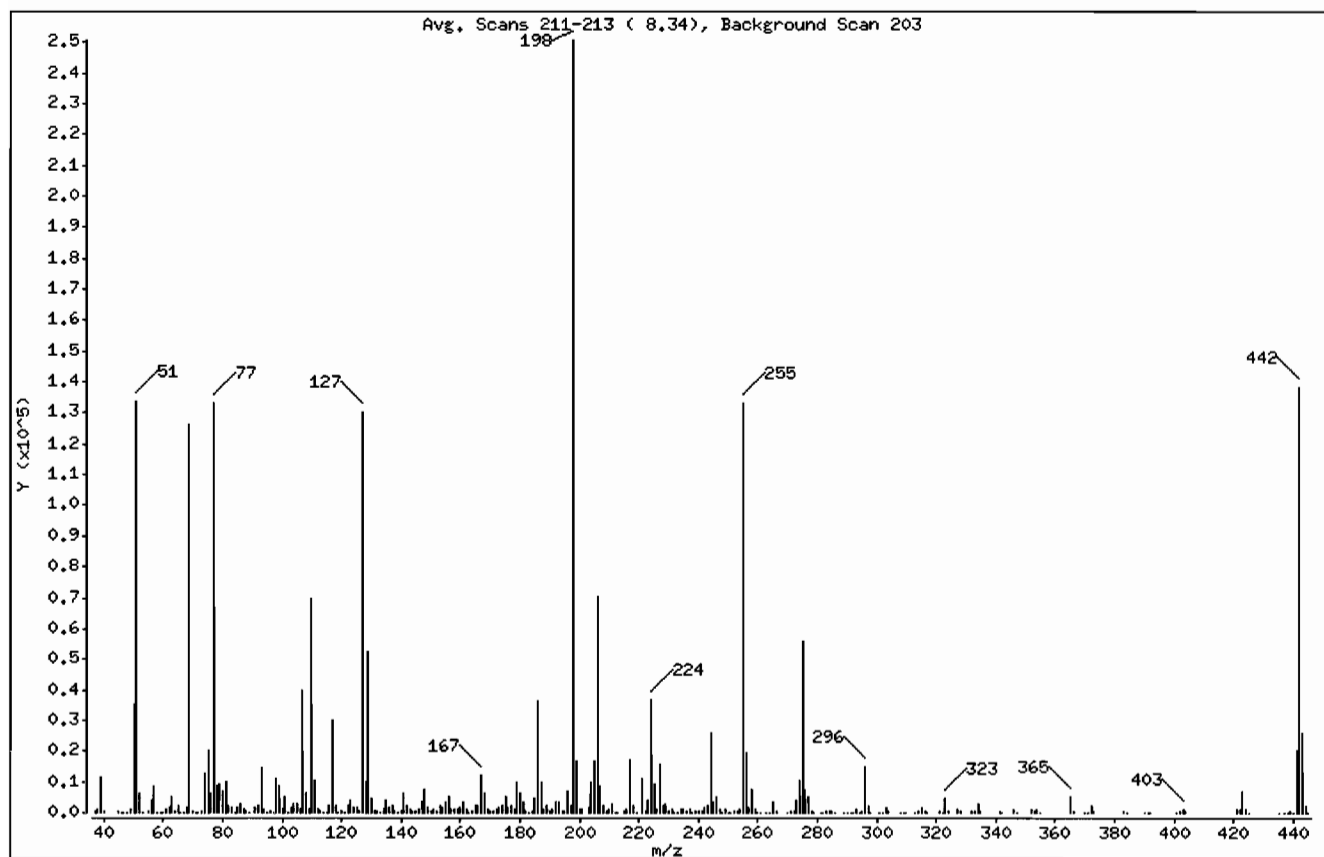
Sample Info: IWBH100306-01.21DFTPP11SVHF111DFTPP

Operator: nag1

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	53.30
68	Less than 2.00% of mass 69	0.78 ( 1.54)
69	Mass 69 relative abundance	50.41
70	Less than 2.00% of mass 69	0.28 ( 0.56)
127	40.00 - 60.00% of mass 198	52.01
197	Less than 1.00% of mass 198	0.84
199	5.00 - 9.00% of mass 198	6.75
275	10.00 - 30.00% of mass 198	22.34
365	Greater than 1.00% of mass 198	2.18
441	Present, but less than mass 443	8.03
442	Greater than 40.00% of mass 198	55.21
443	17.00 - 23.00% of mass 442	10.46 ( 18.94)

Date : 16-MAR-2010 08:42

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: IWBNI00306-01,21DFTPP11SVHF11DFTPP

Operator: nag1

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s6c1601.d

Spectrum: Avg. Scans 211-213 ( 8.34), Background Scan 203

Location of Maximum: 198.00

Number of points: 306

m/z	Y	m/z	Y	m/z	Y	m/z	Y
-----							
37.00	539	120.00	690	197.00	2101	282.00	175
38.00	1021	121.00	284	198.00	250688	283.00	581
39.00	11554	122.00	2497	199.00	16920	284.00	435
40.00	474	123.00	4070	200.00	1419	285.00	830
45.00	300	124.00	1835	201.00	1008	286.00	97
-----							
46.00	46	125.00	1582	203.00	2006	289.00	199
47.00	60	126.00	769	204.00	9820	290.00	99
48.00	25	127.00	130384	205.00	16848	291.00	153
49.00	905	128.00	9814	206.00	70072	292.00	220
50.00	35064	129.00	52280	207.00	8715	293.00	1013
-----							
51.00	133568	130.00	4484	208.00	2324	294.00	236
52.00	6515	131.00	816	209.00	743	295.00	313
53.00	284	132.00	347	210.00	990	296.00	14707
55.00	376	133.00	28	211.00	2712	297.00	2266
56.00	3828	134.00	1402	212.00	148	298.00	198
-----							
57.00	8839	135.00	3990	213.00	284	301.00	142
58.00	228	136.00	1606	215.00	822	302.00	270
59.00	27	137.00	2099	216.00	1420	303.00	1812
60.00	108	138.00	482	217.00	17528	304.00	512
61.00	1396	139.00	258	218.00	2263	308.00	203
-----							
62.00	1919	140.00	663	219.00	261	309.00	114
63.00	5112	141.00	6250	221.00	11113	310.00	110
64.00	635	142.00	2224	222.00	580	313.00	93
65.00	2325	143.00	1420	223.00	3783	314.00	744
66.00	149	144.00	488	224.00	36608	315.00	1650
-----							
67.00	103	145.00	350	225.00	8974	316.00	843
68.00	1952	146.00	1154	226.00	893	317.00	116
69.00	126368	147.00	3460	227.00	15730	321.00	466
70.00	702	148.00	7480	228.00	2314	322.00	243
71.00	66	149.00	1592	229.00	3106	323.00	4480
-----							
72.00	95	150.00	434	230.00	397	324.00	777
73.00	837	151.00	889	231.00	1211	327.00	865
74.00	12548	152.00	496	232.00	91	328.00	383
75.00	20072	153.00	2051	233.00	286	332.00	333
76.00	6493	154.00	1643	234.00	1082	333.00	429

Date : 16-MAR-2010 08:42

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: IWBNI00306-01.2IDFTPP11ISVMF11IDFTPP

Operator: nag1

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s6c1601.d

Spectrum: Avg. Scans 211-213 ( 8.34), Background Scan 203

Location of Maximum: 198.00

Number of points: 306

m/z	Y	m/z	Y	m/z	Y	m/z	Y
-----							
77.00	133056	155.00	3537	235.00	1238	334.00	2708
78.00	8864	156.00	5472	236.00	768	335.00	749
79.00	8991	157.00	1057	237.00	1331	341.00	581
80.00	6867	158.00	1121	238.00	239	342.00	43
81.00	9608	159.00	928	239.00	633	346.00	972
-----							
82.00	2327	160.00	1972	240.00	459	347.00	145
83.00	1949	161.00	3180	241.00	862	352.00	1224
84.00	261	162.00	886	242.00	1802	353.00	739
85.00	1469	163.00	271	243.00	2025	354.00	1267
86.00	2809	164.00	438	244.00	26176	355.00	268
-----							
87.00	1114	165.00	2425	245.00	3604	365.00	5468
88.00	433	166.00	2061	246.00	5257	366.00	789
89.00	231	167.00	12297	247.00	1192	370.00	107
91.00	1935	168.00	6571	248.00	227	371.00	268
92.00	2326	169.00	1233	249.00	956	372.00	2160
-----							
93.00	14334	170.00	433	250.00	234	373.00	460
94.00	1077	171.00	659	251.00	256	383.00	543
95.00	133	172.00	1265	252.00	384	384.00	118
96.00	674	173.00	1486	253.00	717	390.00	253
97.00	121	174.00	2557	254.00	1407	391.00	132
-----							
98.00	11118	175.00	5058	255.00	133184	392.00	111
99.00	8880	176.00	1554	256.00	19792	401.00	115
100.00	944	177.00	2489	257.00	1568	402.00	760
101.00	5006	178.00	902	258.00	7663	403.00	1027
102.00	281	179.00	9717	259.00	1235	404.00	326
-----							
103.00	1616	180.00	6606	260.00	239	421.00	927
104.00	3089	181.00	3260	261.00	257	422.00	875
105.00	2736	182.00	564	263.00	87	423.00	6945
106.00	1065	183.00	288	264.00	119	424.00	1275
107.00	39496	184.00	841	265.00	3196	425.00	105
-----							
108.00	6480	185.00	4847	266.00	506	435.00	219
109.00	1157	186.00	36512	270.00	248	437.00	226
110.00	69912	187.00	10075	271.00	298	438.00	232
111.00	10462	188.00	1064	272.00	473	439.00	357
112.00	1431	189.00	2374	273.00	3934	440.00	227

Date : 16-MAR-2010 08:42

Client ID: DFTPP

Instrument: HSD6.i

Sample Info: IWBH100306-01.2IDFTPP11SVHF11IDFTPP

Operator: nag1

Column phase: Phenomenex ZB-5HS

Column diameter: 0,20

Data File: s6c1601.d

Spectrum: Avg. Scans 211-213 ( 8,34), Background Scan 203

Location of Maximum: 198,00

Number of points: 306

m/z	Y	m/z	Y	m/z	Y	m/z	Y
113,00	400	190,00	463	274,00	10466	441,00	20128
114,00	154	191,00	1185	275,00	55992	442,00	138368
115,00	109	192,00	3223	276,00	7246	443,00	26216
116,00	2178	193,00	3395	277,00	4967	444,00	2405
117,00	30184	194,00	756	278,00	826	445,00	105
118,00	2298	195,00	517	279,00	213		
119,00	256	196,00	7034	281,00	100		

Data File: /chem/HSD6.i/s031610.b/s6c1613.d

Page 1

Date : 16-MAR-2010 16:06

Client ID: DFTPP

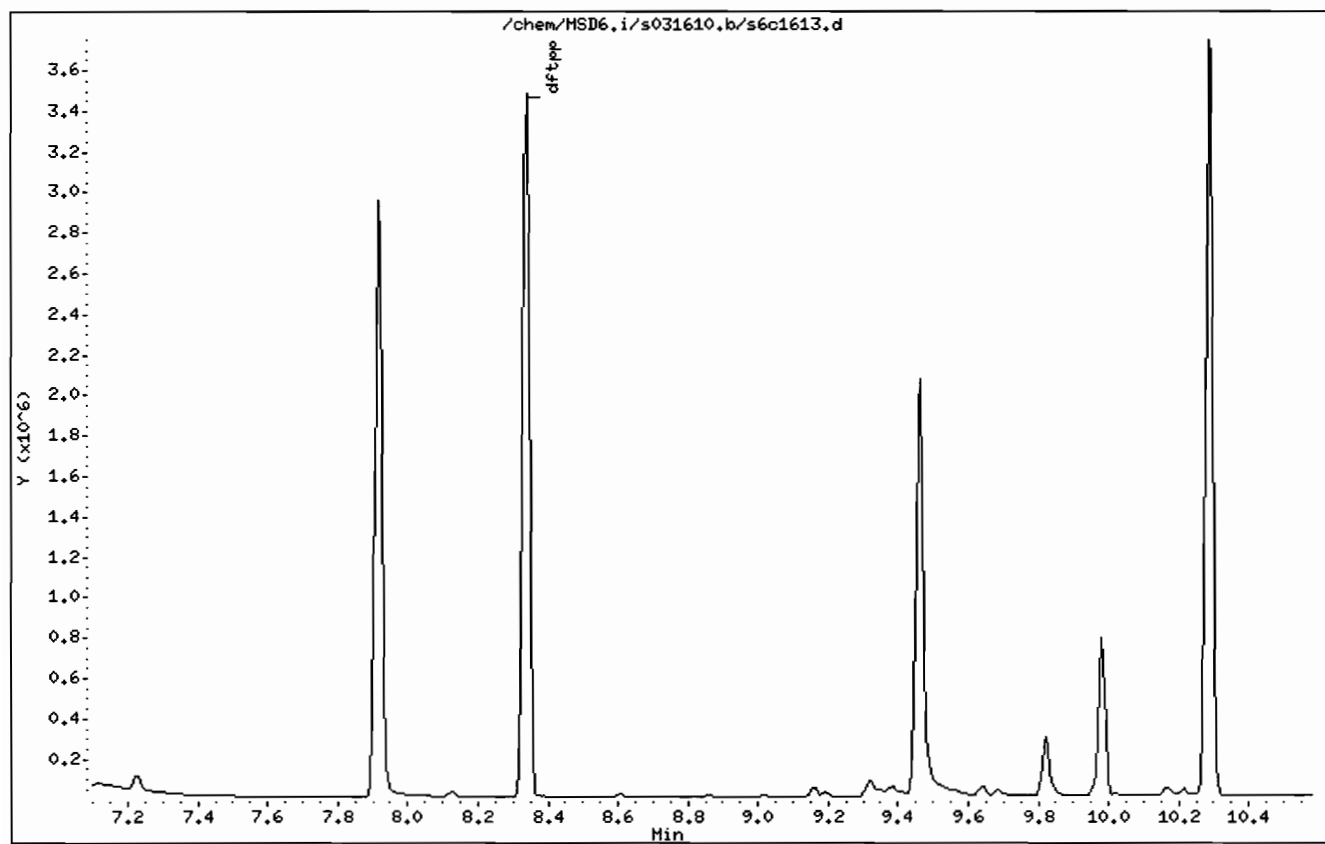
Instrument: HSD6.i

Sample Info: INBN100306-01.2IDFTPP11ISVMF11IDFTPP

Operator: nag1

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20



Date : 16-MAR-2010 16:06

Client ID: DFTPP

Instrument: MSD6.i

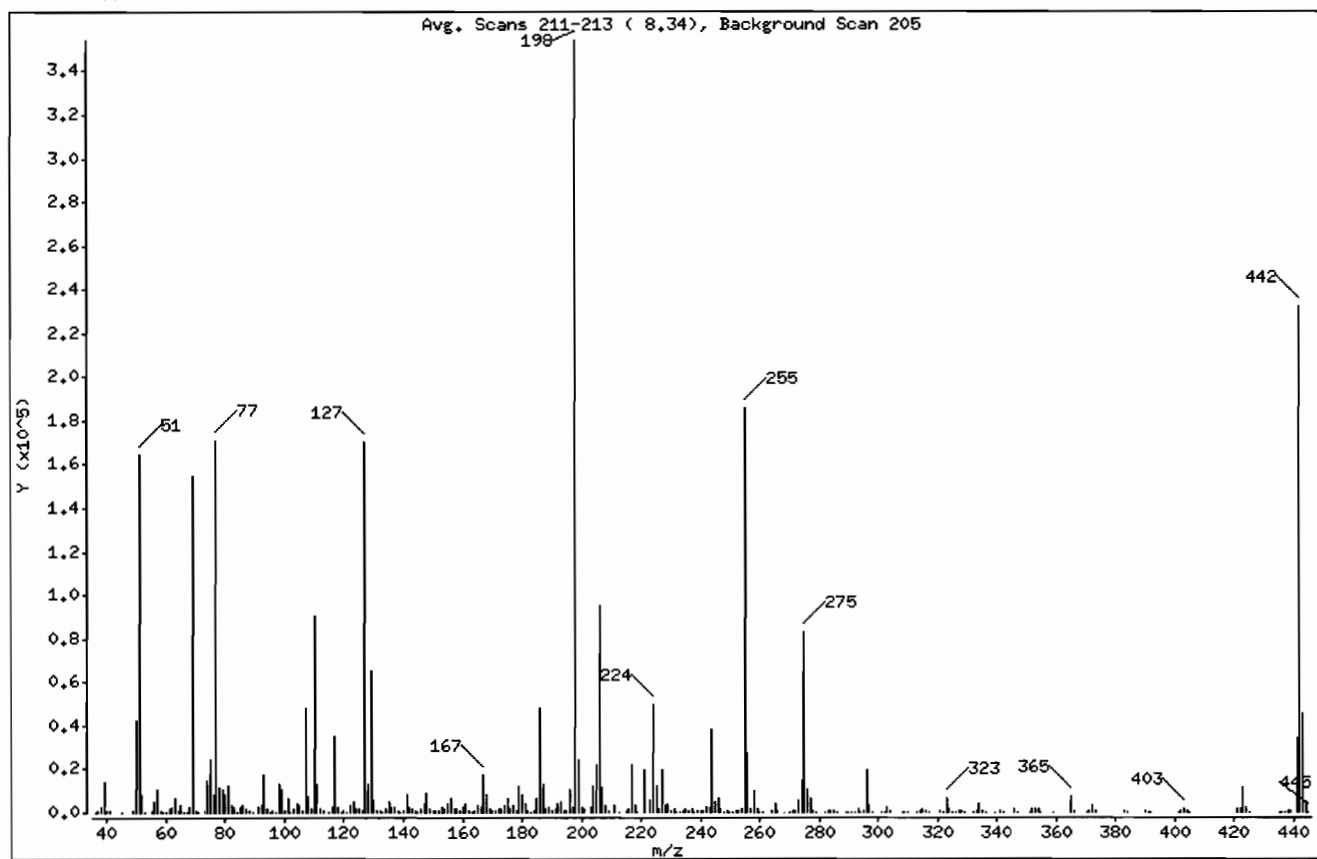
Sample Info: IWBH100306-01.2\DFTPP1\SVHF11\DFTPP

Operator: nag1

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	46.37
68	Less than 2.00% of mass 69	0.69 ( 1.58)
69	Mass 69 relative abundance	43.77
70	Less than 2.00% of mass 69	0.27 ( 0.61)
127	40.00 - 60.00% of mass 198	48.16
197	Less than 1.00% of mass 198	0.72
199	5.00 - 9.00% of mass 198	6.92
275	10.00 - 30.00% of mass 198	23.38
365	Greater than 1.00% of mass 198	2.06
441	Present, but less than mass 443	9.55
442	Greater than 40.00% of mass 198	65.47
443	17.00 - 23.00% of mass 442	12.86 ( 19.65)

Date : 16-MAR-2010 16:06

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: IWBNI00306-01,2IDFTPP11SVHF11IDFTPP

Operator: nag1

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s6c1613.d

Spectrum: Avg. Scans 211-213 ( 8,34), Background Scan 205

Location of Maximum: 198.00

Number of points: 307

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	365	123.00	4688	200.00	2049	291.00	95
37.00	686	124.00	1969	201.00	1887	292.00	268
38.00	2219	125.00	2034	203.00	2289	293.00	1469
39.00	14217	126.00	969	204.00	12413	294.00	360
40.00	662	127.00	170560	205.00	22120	295.00	415
41.00	451	128.00	12972	206.00	94880	296.00	19192
45.00	343	129.00	65336	207.00	11802	297.00	2923
49.00	1033	130.00	5614	208.00	3327	298.00	205
50.00	42256	131.00	1072	209.00	988	301.00	261
51.00	164224	132.00	586	211.00	3614	302.00	347
52.00	8273	133.00	265	213.00	247	303.00	2358
53.00	361	134.00	1727	215.00	826	304.00	634
55.00	615	135.00	4970	216.00	1782	308.00	279
56.00	4569	136.00	2207	217.00	22368	309.00	172
57.00	10965	137.00	2269	218.00	2954	310.00	279
58.00	541	138.00	648	219.00	312	313.00	172
59.00	160	139.00	341	221.00	19520	314.00	916
60.00	185	140.00	679	223.00	5297	315.00	2018
61.00	1949	141.00	7898	224.00	49688	316.00	1164
62.00	2059	142.00	2664	225.00	12403	317.00	239
63.00	6240	143.00	1748	226.00	1307	321.00	668
64.00	905	144.00	480	227.00	19504	322.00	322
65.00	3077	145.00	407	228.00	2871	323.00	6305
66.00	225	146.00	1518	229.00	4196	324.00	1298
67.00	216	147.00	4305	230.00	634	325.00	44
68.00	2445	148.00	9003	231.00	1804	326.00	156
69.00	155008	149.00	1778	232.00	342	327.00	1043
70.00	947	150.00	449	233.00	316	328.00	530
71.00	201	151.00	1098	234.00	1167	329.00	108
73.00	1127	152.00	658	235.00	1577	332.00	394
74.00	14976	153.00	2511	236.00	873	333.00	734
75.00	24336	154.00	1999	237.00	1570	334.00	3934
76.00	8200	155.00	4297	238.00	231	335.00	1090
77.00	171200	156.00	6528	239.00	790	336.00	90
78.00	11711	157.00	1348	240.00	604	339.00	45



Date : 16-MAR-2010 16:06

Client ID: DFTPP

Instrument: HSD6.i

Sample Info: IWBH100306-01,2IDFTPP11SVHF11IDFTPP

Operator: nag1

Column phase: Phenomenex ZB-5MS

Column diameter: 0,20

Data File: s6c1613.d

Spectrum: Avg. Scans 211-213 ( 8,34), Background Scan 205

Location of Maximum: 198,00

Number of points: 307

m/z	Y	m/z	Y	m/z	Y	m/z	Y
-----							
79,00	10991	158,00	1467	241,00	1051	341,00	791
80,00	8089	159,00	1196	242,00	2678	342,00	112
81,00	12006	160,00	2557	243,00	2830	346,00	1303
82,00	3062	161,00	3725	244,00	38552	347,00	236
83,00	2754	162,00	1103	245,00	5015	351,00	51
-----							
84,00	311	163,00	384	246,00	6837	352,00	1714
85,00	2148	164,00	520	247,00	1386	353,00	1258
86,00	2960	165,00	2927	248,00	316	354,00	1807
87,00	1512	166,00	2460	249,00	1167	355,00	303
88,00	490	167,00	16936	250,00	324	359,00	50
-----							
89,00	261	168,00	7860	251,00	332	365,00	7286
91,00	2590	169,00	1424	252,00	511	366,00	1134
92,00	2914	170,00	561	253,00	815	370,00	153
93,00	17192	171,00	668	254,00	1800	371,00	455
94,00	1273	172,00	1340	255,00	185344	372,00	2898
-----							
95,00	330	173,00	1876	256,00	27576	373,00	675
96,00	904	174,00	3377	257,00	1895	383,00	836
97,00	358	175,00	6789	258,00	10115	384,00	240
98,00	12960	176,00	2015	259,00	1699	390,00	414
99,00	10708	177,00	3013	260,00	258	391,00	350
-----							
100,00	942	178,00	1036	261,00	383	392,00	234
101,00	6393	179,00	11838	264,00	435	401,00	184
102,00	360	180,00	8500	265,00	3865	402,00	1191
103,00	1979	181,00	4159	266,00	588	403,00	1692
104,00	4113	182,00	603	268,00	160	404,00	639
-----							
105,00	3560	183,00	335	270,00	275	405,00	87
106,00	1067	184,00	1026	271,00	443	421,00	1562
107,00	48096	185,00	6230	272,00	556	422,00	1423
108,00	7432	186,00	48112	273,00	5738	423,00	11200
109,00	1348	187,00	13352	274,00	15003	424,00	2246
-----							
110,00	90080	188,00	1313	275,00	82816	425,00	236
111,00	13316	189,00	2686	276,00	10769	435,00	42
112,00	1579	190,00	445	277,00	6686	436,00	161
113,00	490	191,00	1473	278,00	1075	437,00	275
115,00	181	192,00	4225	279,00	229	438,00	434

Date : 16-MAR-2010 16:06

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: IWBNI00306-01,21DFTPP11ISVMF111DFTPP

Operator: nag1

Column phase: Phenomenex ZB-5MS

Column diameter: 0,20

Data File: s6c1613.d

Spectrum: Avg. Scans 211-213 ( 8,34), Background Scan 205

Location of Maximum: 198,00

Number of points: 307

m/z	Y	m/z	Y	m/z	Y	m/z	Y
116,00	2631	193,00	4772	282,00	109	439,00	605
117,00	34760	194,00	868	283,00	778	441,00	33840
118,00	2557	195,00	649	284,00	498	442,00	231872
119,00	366	196,00	10847	285,00	1031	443,00	45560
120,00	634	197,00	2536	286,00	215	444,00	4334
121,00	221	198,00	354176	289,00	202	445,00	211
122,00	3127	199,00	24520	290,00	227		

Data File: /chem/MSD6.i/s032110.b/s6c2104.d

Page 1

Date : 21-MAR-2010 16:41

Client ID: DFTPP

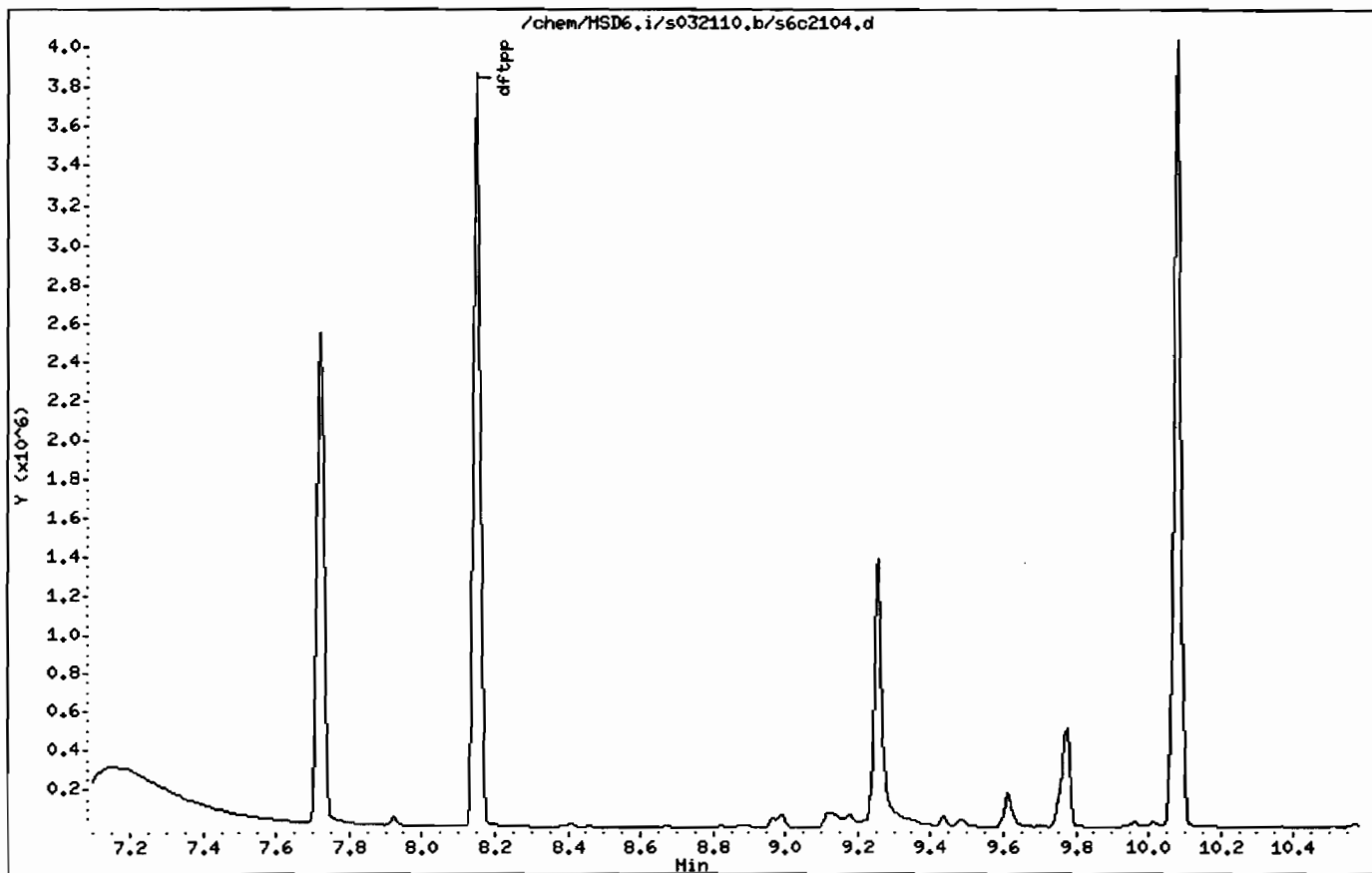
Instrument: MSD6.i

Sample Info: IWBH100306-01,21DFTPP11SVHF111DFTPP

Operator: nag1

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20



Data File: /chem/MSD6.i/s032110.b/s6c2104.d

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Date : 21-MAR-2010 16:41

Client ID: DFTPP

Instrument: MSD6.i

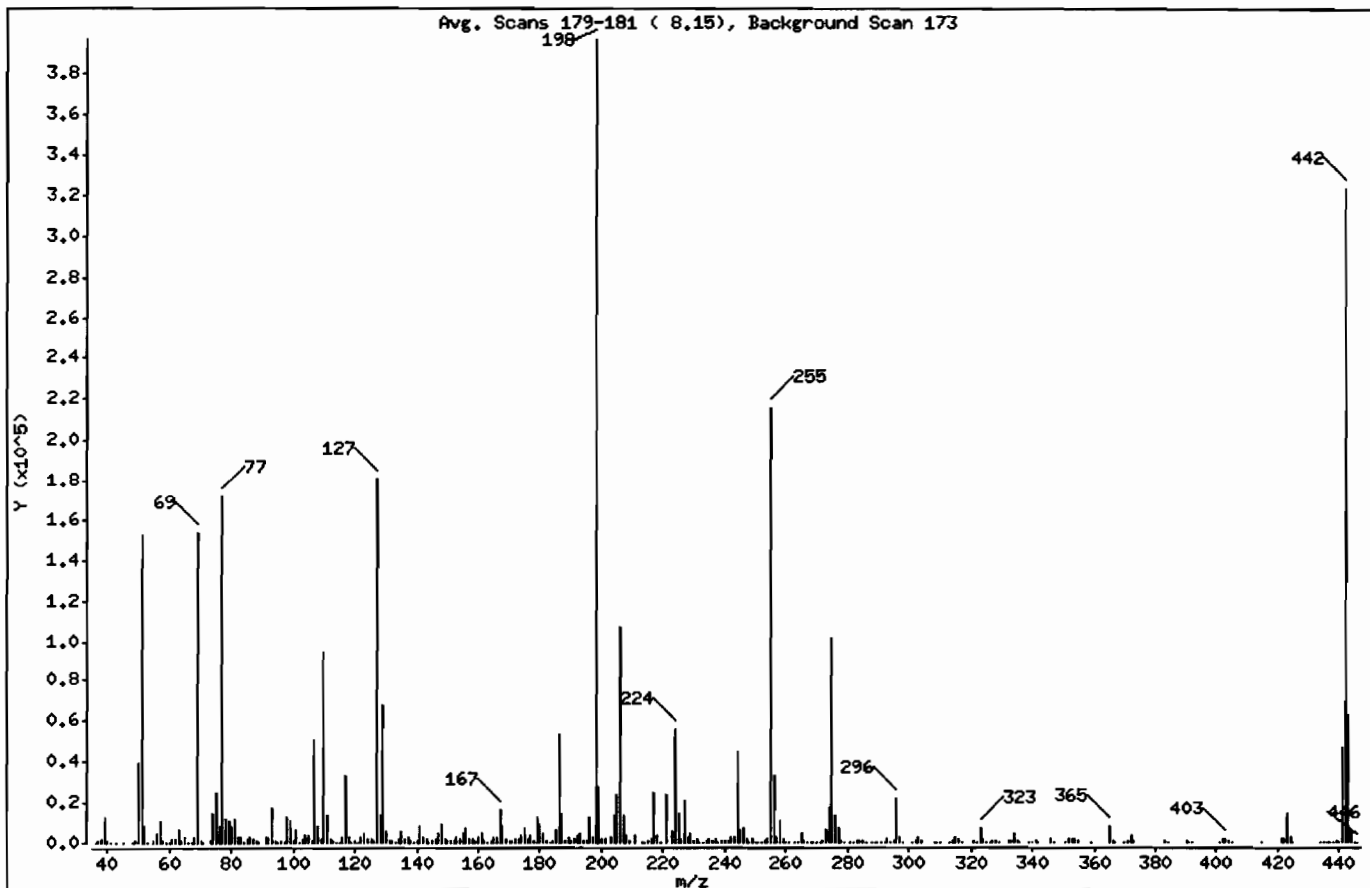
Sample Info: IWBH100306-01.2\DFTPP\1\SVNF\1\1\DFTPP

Operator: nag1

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	38.47
68	Less than 2.00% of mass 69	0.68 ( 1.75)
69	Mass 69 relative abundance	38.77
70	Less than 2.00% of mass 69	0.19 ( 0.50)
127	40.00 - 60.00% of mass 198	45.57
197	Less than 1.00% of mass 198	0.68
199	5.00 - 9.00% of mass 198	6.81
275	10.00 - 30.00% of mass 198	25.52
365	Greater than 1.00% of mass 198	2.19
441	Present, but less than mass 443	11.82
442	Greater than 40.00% of mass 198	81.56
443	17.00 - 23.00% of mass 442	15.88 ( 19.47)

Data File: /chem/HSD6.i/s032110.b/s6c2104.d

Page 3

Date : 21-MAR-2010 16:41

Client ID: DFTPP

Instrument: HSD6.i

Sample Info: IWBH100306-01.21DFTPP11|SVHF11|DFTPP

Operator: nag1

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s6c2104.d

Spectrum: Avg. Scans 179-181 ( 8.15), Background Scan 173

Location of Maximum: 198.00

Number of points: 322

m/z	Y	m/z	Y	m/z	Y	m/z	Y
-----							
36.00	81	124.00	2103	206.00	106904	294.00	441
37.00	701	125.00	2083	207.00	13526	295.00	528
38.00	2017	126.00	1001	208.00	3236	296.00	22152
39.00	13113	127.00	180800	209.00	1048	297.00	3023
40.00	721	128.00	13793	211.00	4008	298.00	238
-----							
41.00	323	129.00	67928	213.00	342	301.00	347
43.00	108	130.00	5779	214.00	46	302.00	474
45.00	374	131.00	1109	215.00	1032	303.00	2864
48.00	46	132.00	699	216.00	2047	304.00	871
49.00	985	133.00	201	217.00	24688	308.00	309
-----							
50.00	39480	134.00	1871	218.00	3230	309.00	206
51.00	152576	135.00	5321	219.00	327	310.00	277
52.00	7867	136.00	2003	221.00	23536	313.00	222
53.00	419	137.00	2686	223.00	5923	314.00	1161
55.00	694	138.00	600	224.00	56112	315.00	2782
-----							
56.00	4494	139.00	368	225.00	14430	316.00	1473
57.00	10715	140.00	930	226.00	1519	317.00	280
58.00	494	141.00	8108	227.00	21160	321.00	677
59.00	249	142.00	2647	228.00	3059	322.00	415
60.00	119	143.00	1758	229.00	4754	323.00	7650
-----							
61.00	1957	144.00	446	230.00	699	324.00	1496
62.00	2013	145.00	518	231.00	2157	325.00	169
63.00	6340	146.00	1555	232.00	404	326.00	165
64.00	752	147.00	4264	233.00	428	327.00	1303
65.00	2875	148.00	9072	234.00	1261	328.00	778
-----							
66.00	220	149.00	1980	235.00	1544	329.00	103
67.00	132	150.00	587	236.00	1150	332.00	521
68.00	2688	151.00	1159	237.00	1996	333.00	737
69.00	153792	152.00	833	238.00	260	334.00	4836
70.00	771	153.00	2762	239.00	819	335.00	1281
-----							
71.00	222	154.00	2099	240.00	649	336.00	159
73.00	1309	155.00	4846	241.00	1308	339.00	184
74.00	14751	156.00	7246	242.00	2736	340.00	91
75.00	24712	157.00	1548	243.00	2993	341.00	758
76.00	8555	158.00	1676	244.00	44400	342.00	259

Date : 21-MAR-2010 16:41

Client ID: DFTPP

Instrument: HSD6.i

Sample Info: IWBNI00306-01,2IDFTPP11SVMF11IDFTPP

Operator: nag1

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s6c2104.d

Spectrum: Avg. Scans 179-181 ( 8.15), Background Scan 173

Location of Maximum: 198.00

Number of points: 322

m/z	Y	m/z	Y	m/z	Y	m/z	Y
-----							
77.00	171648	159.00	1236	245.00	6054	346.00	1510
78.00	11757	160.00	2531	246.00	7582	347.00	324
79.00	10956	161.00	4313	247.00	1498	351.00	170
80.00	8503	162.00	1187	248.00	365	352.00	2239
81.00	12214	163.00	359	249.00	1500	353.00	1538
-----							
82.00	2874	164.00	508	250.00	345	354.00	2281
83.00	2924	165.00	3049	251.00	393	355.00	593
84.00	185	166.00	2867	252.00	422	359.00	91
85.00	1986	167.00	16656	253.00	1010	365.00	8679
86.00	3188	168.00	7776	254.00	1796	366.00	1364
-----							
87.00	1516	169.00	1508	255.00	215808	367.00	86
88.00	617	170.00	575	256.00	32600	370.00	187
89.00	319	171.00	781	257.00	2512	371.00	597
91.00	2520	172.00	1632	258.00	11031	372.00	3461
92.00	3011	173.00	1920	259.00	1735	373.00	960
-----							
93.00	17104	174.00	3473	260.00	323	383.00	1078
94.00	1210	175.00	7097	261.00	372	384.00	311
95.00	257	176.00	2135	263.00	101	390.00	538
96.00	1159	177.00	3606	264.00	335	391.00	375
97.00	432	178.00	1281	265.00	4531	392.00	214
-----							
98.00	12656	179.00	12835	266.00	568	401.00	269
99.00	10579	180.00	9029	267.00	156	402.00	1389
100.00	984	181.00	4583	268.00	139	403.00	2077
101.00	6389	182.00	760	269.00	120	404.00	771
102.00	405	183.00	349	270.00	342	405.00	45
-----							
103.00	2134	184.00	1027	271.00	454	415.00	174
104.00	4056	185.00	6457	272.00	615	421.00	2041
105.00	3931	186.00	52768	273.00	6535	422.00	2078
106.00	1261	187.00	14655	274.00	17496	423.00	14798
107.00	49904	188.00	1303	275.00	101256	424.00	3007
-----							
108.00	8054	189.00	2967	276.00	13311	425.00	338
109.00	1776	190.00	690	277.00	7621	434.00	47
110.00	94152	191.00	1559	278.00	1284	435.00	106
111.00	14147	192.00	4080	279.00	318	436.00	325
112.00	1760	193.00	4590	281.00	28	437.00	243

Data File: /chem/MSD6.i/s032110.b/s6c2104.d

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Date : 21-MAR-2010 16:41

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: INBN100306-01.2\DFTPP\1\SVHF\1\1\DFTPP

Operator: nag1

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s6c2104.d

Spectrum: Avg. Scans 179-181 ( 8.15), Background Scan 173

Location of Maximum: 198.00

Number of points: 322

m/z	Y	m/z	Y	m/z	Y	m/z	Y
113.00	569	194.00	1170	282.00	321	438.00	199
114.00	160	195.00	829	283.00	983	439.00	596
115.00	287	196.00	12543	284.00	736	440.00	283
116.00	2775	197.00	2707	285.00	1304	441.00	46912
117.00	32632	198.00	396736	286.00	253	442.00	323584
118.00	2548	199.00	27032	288.00	41	443.00	62992
119.00	434	200.00	2185	289.00	282	444.00	5731
120.00	629	201.00	2056	290.00	267	445.00	335
121.00	259	203.00	2622	291.00	184	446.00	43
122.00	2905	204.00	13557	292.00	449		
123.00	4814	205.00	23616	293.00	1572		

Data File: /chem/HSD6.i/s032310.b/s6c2306.d

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Date : 23-MAR-2010 16:10

Client ID: DFTPP

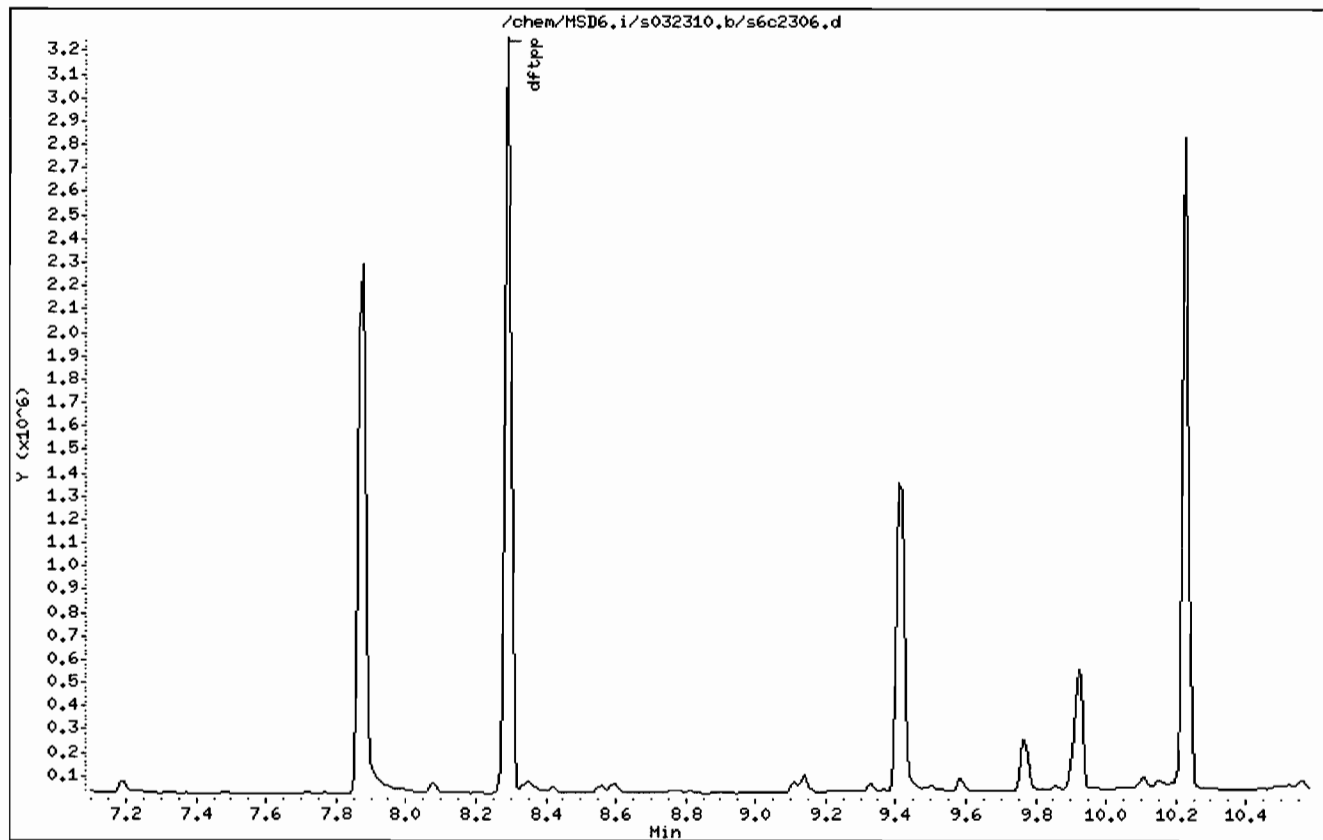
Instrument: HSD6.i

Sample Info: IWBNI00306-01.2IDFTPP11SVMF11IDFTPP

Operator: nag1

Column phase: Phenomenex ZB-5HS

Column diameter: 0.20





Date : 23-MAR-2010 16:10

Client ID: DFTPP

Instrument: MSD6.i

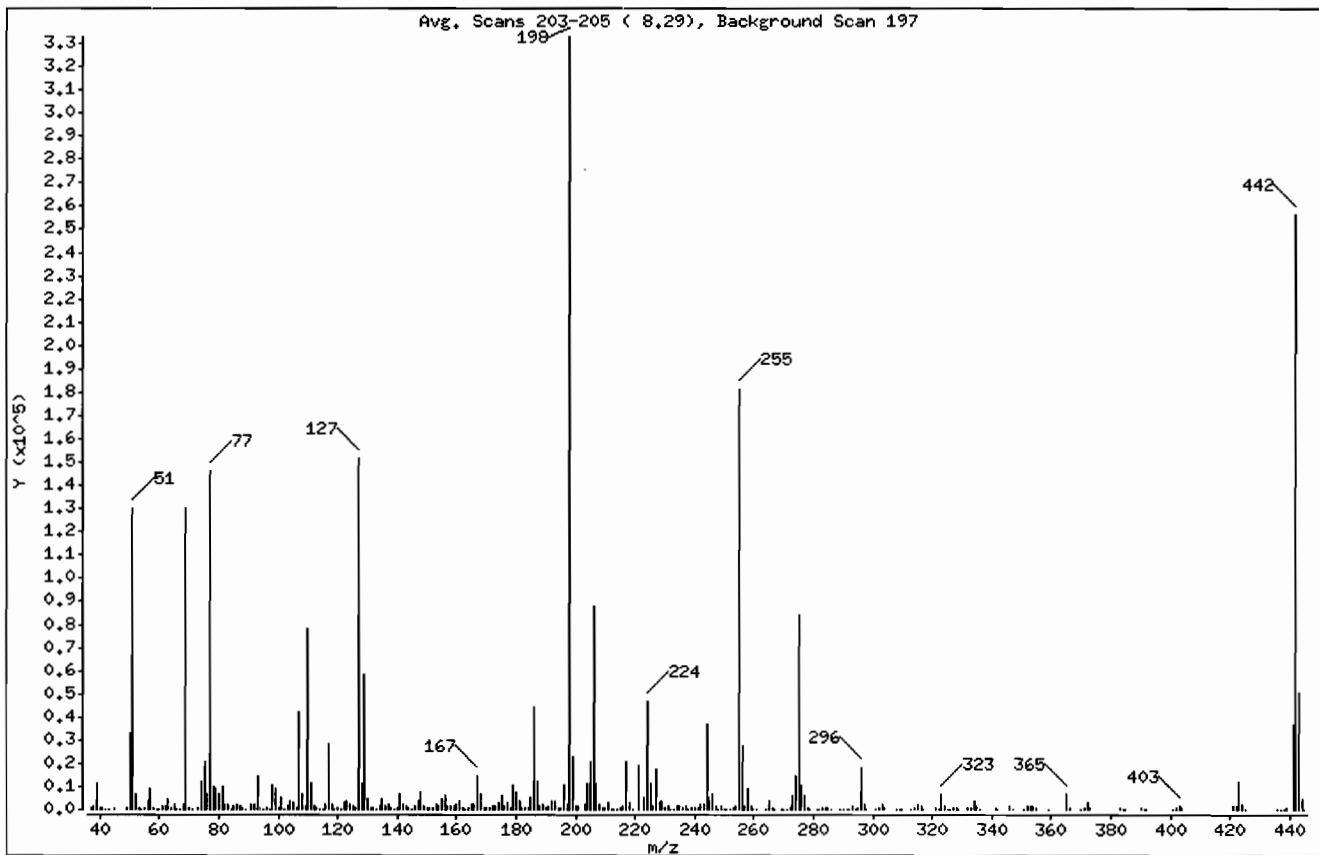
Sample Info: IWBNI00306-01.2IDFTPP11SVHF11IDFTPP

Operator: nag1

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	39.19
68	Less than 2.00% of mass 69	0.72 ( 1.85)
69	Mass 69 relative abundance	38.97
70	Less than 2.00% of mass 69	0.22 ( 0.57)
127	40.00 - 60.00% of mass 198	45.53
197	Less than 1.00% of mass 198	0.70
199	5.00 - 9.00% of mass 198	6.93
275	10.00 - 30.00% of mass 198	25.22
365	Greater than 1.00% of mass 198	2.12
441	Present, but less than mass 443	11.06
442	Greater than 40.00% of mass 198	77.03
443	17.00 - 23.00% of mass 442	15.17 ( 19.70)

Date : 23-MAR-2010 16:10

Client ID: DFTPP

Instrument: HSD6.i

Sample Info: IWBH100306-01,2IDFTPP11ISVHF11IDFTPP

Operator: nag1

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s6c2306.d

Spectrum: Avg. Scans 203-205 ( 8,29), Background Scan 197

Location of Maximum: 198.00

Number of points: 313

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	468	122.00	2711	201.00	1814	289.00	293
38.00	1559	123.00	4182	203.00	2291	290.00	209
39.00	11495	124.00	1927	204.00	11384	291.00	48
40.00	564	125.00	1868	205.00	20504	292.00	279
41.00	520	126.00	1064	206.00	88168	293.00	1354
42.00	11	127.00	151616	207.00	11673	294.00	320
43.00	236	128.00	11426	208.00	2635	295.00	467
45.00	394	129.00	57872	209.00	764	296.00	18032
49.00	521	130.00	4744	210.00	891	297.00	2603
50.00	32888	131.00	1069	211.00	3433	298.00	211
51.00	130528	132.00	560	212.00	315	301.00	275
52.00	7079	133.00	171	213.00	225	302.00	413
53.00	394	134.00	1756	214.00	109	303.00	2457
54.00	43	135.00	4786	215.00	922	304.00	568
55.00	782	136.00	1905	216.00	1832	308.00	339
56.00	3872	137.00	2227	217.00	20456	309.00	184
57.00	9393	138.00	592	218.00	2730	310.00	225
58.00	460	139.00	327	219.00	275	313.00	209
59.00	186	140.00	799	221.00	19120	314.00	795
60.00	126	141.00	6742	223.00	5100	315.00	2063
61.00	1633	142.00	2379	224.00	46752	316.00	1242
62.00	1678	143.00	1879	225.00	11739	317.00	226
63.00	4972	144.00	457	226.00	1207	321.00	691
64.00	653	145.00	356	227.00	17304	322.00	291
65.00	2462	146.00	1339	228.00	2936	323.00	6672
66.00	219	147.00	3556	229.00	3937	324.00	1293
67.00	222	148.00	7634	230.00	615	325.00	51
68.00	2404	149.00	1679	231.00	1629	326.00	158
69.00	129808	150.00	491	232.00	225	327.00	1128
70.00	742	151.00	932	233.00	363	328.00	603
71.00	115	152.00	687	234.00	1233	329.00	101
73.00	866	153.00	2219	235.00	1237	332.00	409
74.00	12560	154.00	1869	236.00	874	333.00	609
75.00	20400	155.00	4213	237.00	1455	334.00	4017
76.00	6905	156.00	5954	238.00	178	335.00	1166

Date : 23-MAR-2010 16:10

Client ID: DFTPP

Instrument: HSD6.i

Sample Info: INBN100306-01,2IDFTPP11SVMF11IDFTPP

Operator: nag1

Column phase: Phenomenex ZB-SHS

Column diameter: 0.20

Data File: s6c2306.d

Spectrum: Avg. Scans 203-205 ( 8.29), Background Scan 197

Location of Maximum: 198.00

Number of points: 313

m/z	Y	m/z	Y	m/z	Y	m/z	Y
77.00	146304	157.00	1216	239.00	964	336.00	176
78.00	9744	158.00	1388	240.00	621	341.00	835
79.00	8912	159.00	1197	241.00	1087	342.00	222
80.00	6898	160.00	2254	242.00	2449	346.00	1425
81.00	9900	161.00	3526	243.00	2621	347.00	209
82.00	2584	162.00	987	244.00	36696	351.00	93
83.00	2472	163.00	299	245.00	5058	352.00	1668
84.00	75	164.00	588	246.00	6620	353.00	1275
85.00	1685	165.00	2457	247.00	1392	354.00	1853
86.00	2565	166.00	2323	248.00	293	355.00	437
87.00	1272	167.00	14224	249.00	1167	359.00	180
88.00	479	168.00	6635	250.00	312	365.00	7074
89.00	288	169.00	1029	251.00	289	366.00	985
91.00	2181	170.00	506	252.00	309	370.00	231
92.00	2501	171.00	659	253.00	931	371.00	510
93.00	14278	172.00	1427	254.00	1681	372.00	3263
94.00	970	173.00	1614	255.00	181504	373.00	770
95.00	275	174.00	3002	256.00	27344	383.00	773
96.00	766	175.00	6095	257.00	1870	384.00	247
97.00	286	176.00	1642	258.00	9336	385.00	42
98.00	10836	177.00	2726	259.00	1544	390.00	443
99.00	8959	178.00	1038	260.00	192	391.00	284
100.00	665	179.00	10669	261.00	293	392.00	201
101.00	5265	180.00	7826	264.00	240	401.00	227
102.00	189	181.00	3484	265.00	3767	402.00	1120
103.00	1818	182.00	573	266.00	563	403.00	1755
104.00	3489	183.00	441	267.00	156	404.00	618
105.00	3237	184.00	934	269.00	46	421.00	1540
106.00	1147	185.00	5572	270.00	291	422.00	1642
107.00	42400	186.00	44080	271.00	344	423.00	11934
108.00	6883	187.00	12563	272.00	500	424.00	2428
109.00	1281	188.00	1389	273.00	5805	425.00	247
110.00	78192	189.00	2629	274.00	14774	436.00	117
111.00	11787	190.00	471	275.00	84016	437.00	239
112.00	1498	191.00	1334	276.00	11019	438.00	261

Date : 23-MAR-2010 16:10

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: IWBH100306-01,2IDFTPP11SVHF11IDFTPP

Operator: nag1

Column phase: Phenomenex ZB-5MS

Column diameter: 0,20

Data File: s6c2306.d

Spectrum: Avg. Scans 203-205 ( 8,29), Background Scan 197

Location of Maximum: 198,00

Number of points: 313

m/z	Y	m/z	Y	m/z	Y	m/z	Y
113,00	421	192,00	3547	277,00	6075	439,00	668
114,00	161	193,00	4052	278,00	961	441,00	36840
115,00	253	194,00	820	279,00	181	442,00	256576
116,00	1994	195,00	680	281,00	167	443,00	50544
117,00	28328	196,00	10650	282,00	254	444,00	4745
118,00	2228	197,00	2334	283,00	762	445,00	211
119,00	339	198,00	333056	284,00	458		
120,00	574	199,00	23096	285,00	1050		
121,00	268	200,00	1863	286,00	229		

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

SDG Number: 10-2199

Matrix: SOIL

Lab Sample ID: 1202066181

Client Sample: QC for batch 963130

Client: LANL010

Project: QC

Client ID: MB for batch 963130

Method: SW846 8270C

SOP Ref: GL-OA-E-009

Batch ID: 963133

Inst: MSD6.I

Dilution: 1

Run Date: 03/21/2010 18:13

Analyst: NAG1

Inj. Vol: .5 uL

Prep Date: 03/10/2010 12:14

Aliquot: 30 g

Final Volume: 1 mL

Data File: s6c2108-1.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
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	333	ug/kg	66.7	333

Semi-Volatile  
Certificate of Analysis  
Sample Summary

SDG Number: 10-2199		Matrix: SOIL
Lab Sample ID: 1202066181		
Client Sample: QC for batch 963130	Client: LANL010	Project: QC
Client ID: MB for batch 963130	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 963133	Inst: MSD6.I	Dilution: 1
Run Date: 03/21/2010 18:13	Analyst: NAG1	Inj. Vol: .5 uL
Prep Date: 03/10/2010 12:14	Aliquot: 30 g	Final Volume: 1 mL
Data File: s6c2108-1.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	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 Aldol Condensate	2.85	397	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD6.i/s032110.b/s6c2108-2.d  
Lab Smp Id: 1202066181 Client Smp ID: SBLK01  
Inj Date : 21-MAR-2010 18:13  
Operator : nag1 Inst ID: MSD6.i  
Smp Info : |1202066181|963133|1|SVM|1|MB  
Misc Info : |MSD8270\_S|WBN100319-01  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD6.i/s032110.b/MSD6-M8270C-AQA-031610.m  
Meth Date : 22-Mar-2010 16:50 jen00986 Quant Type: ISTD  
Cal Date : 17-MAR-2010 04:51 Cal File: s6c1646.d  
Als bottle: 5 QC Sample: BLANK  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-2199.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	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG				RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT		ON-COLUMN	FINAL
						(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.822	3.822	(1.000)	295580	40.0000	
* 29 Naphthalene-d8	136	4.687	4.687	(1.000)	1018109	40.0000	
* 46 Acenaphthene-d10	164	5.934	5.934	(1.000)	646278	40.0000	
* 67 Phenanthrene-d10	188	7.092	7.093	(1.000)	1121980	40.0000	
* 91 Chrysene-d12	240	9.486	9.486	(1.000)	1078901	40.0000	
* 98 Perylene-d12	264	11.086	11.075	(1.000)	985086	40.0000	
\$ 3 2-Fluorophenol	112	3.016	3.005	(0.789)	440172	53.5696	1780
\$ 5 Phenol-d5	99	3.540	3.534	(0.926)	548940	52.5320	1750
\$ 20 Nitrobenzene-d5	82	4.181	4.181	(0.892)	236192	24.2685	809
\$ 39 2-Fluorobiphenyl	172	5.428	5.422	(0.915)	515292	30.9037	1030
\$ 60 2,4,6-Tribromophenol	329	6.528	6.522	(1.100)	133431	73.5746	2450
\$ 81 p-Terphenyl-d14	244	8.469	8.463	(0.893)	740985	39.4124	1310

Data File: /chem/MSD6.i/s032110.b/s6c2108-2.d  
Report Date: 22-Mar-2010 16:58

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GEL Laboratories LLC

Data file : /chem/MSD6.i/s032110.b/s6c2108-2.d  
Lab Smp Id: 1202066181 Client Smp ID: SBLK01  
Inj Date : 21-MAR-2010 18:13  
Operator : nagl Inst ID: MSD6.i  
Smp Info : |1202066181|963133|1|SVM|1|MB  
Misc Info : |MSD8270\_S|WBN100319-01  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD6.i/s032110.b/MSD6-M8270C-AQA-031610.m  
Meth Date : 22-Mar-2010 16:50 jen00986 Quant Type: ISTD  
Cal Date : 17-MAR-2010 04:51 Cal File: s6c1646.d  
Als bottle: 5 QC Sample: BLANK  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-2199.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	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

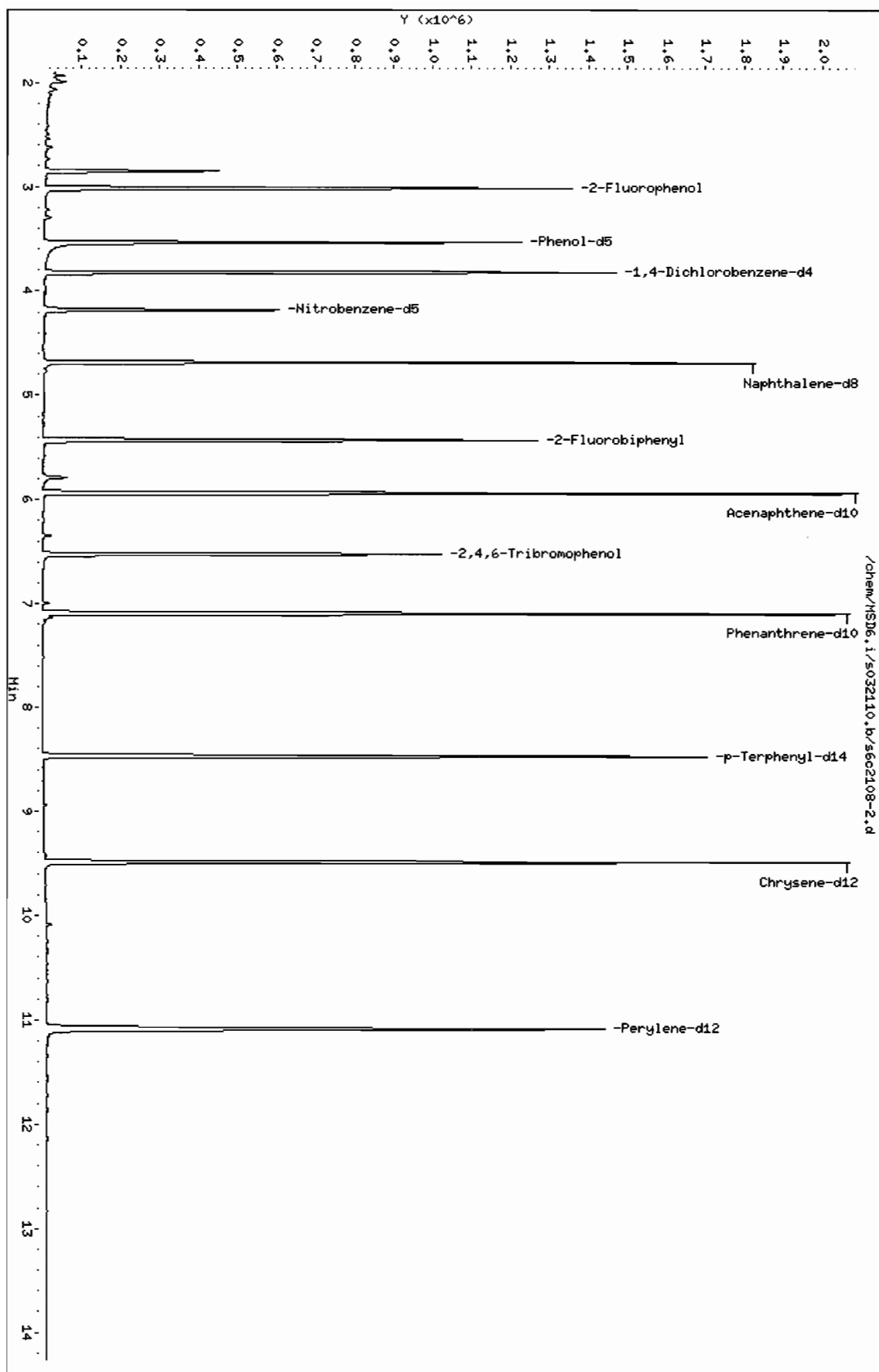
ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.822	1793238	40.000

CONCENTRATIONS				QUANT			
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
----	----	-----	-----	----	-----	-----	-----
Unknown Aldol Condensate				CAS #:			
2.851	534337	11.9189295	397	0		0	10



Data File: /chem/MSD6.i/s032110.b/s6c2108-2.d  
Date: 21-MAR-2010 18:13  
Client ID: SBLK01  
Sample Info: 112020618119631311SVH11HB  
Volume Injected (uL): 0.5  
Column phase: J&W DB-5MS

Instrument: MSD6.i  
Operator: nag1  
Column diameter: 0.20



Date : 21-MAR-2010 18:13

Client ID: SBLK01

Instrument: MSD6.i

Sample Info: I1202066181I963133I1ISVM11MB

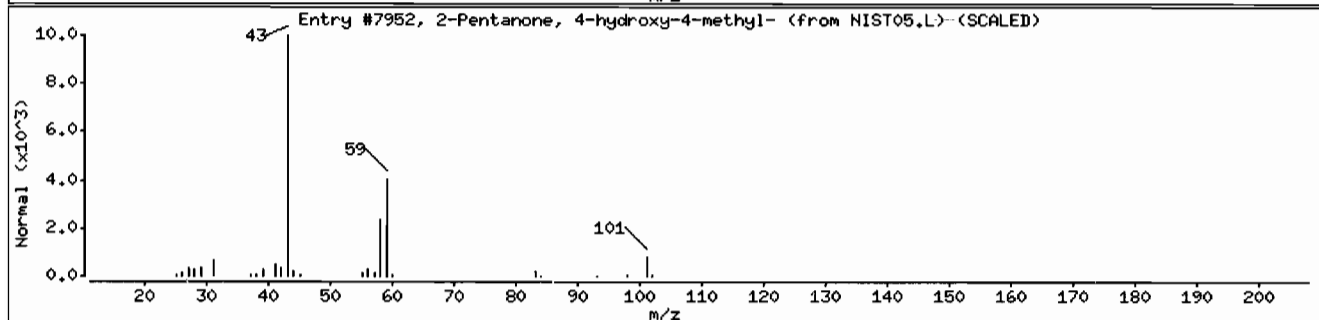
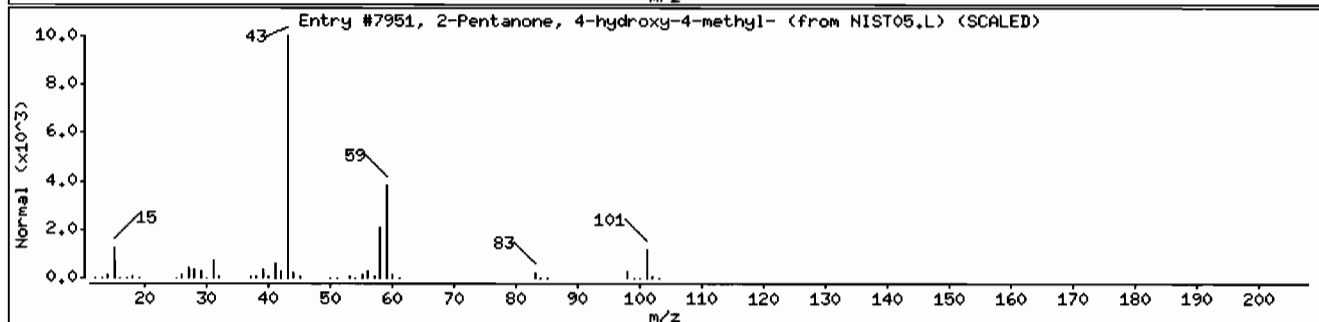
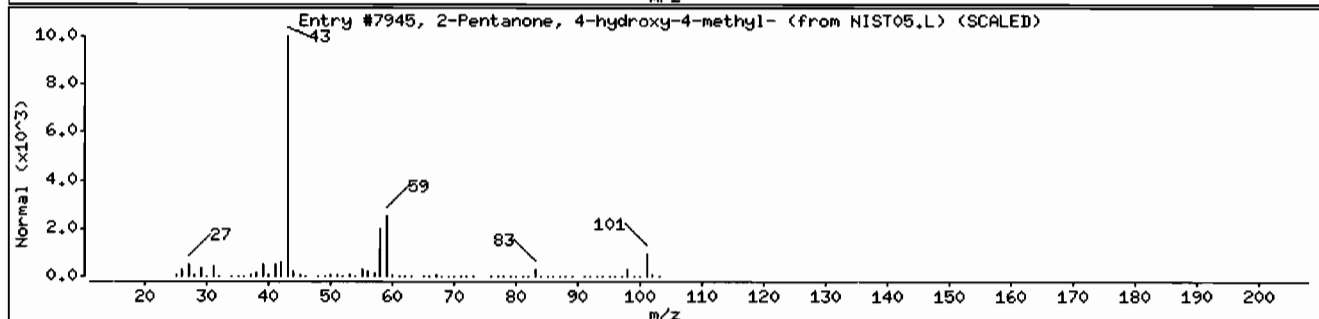
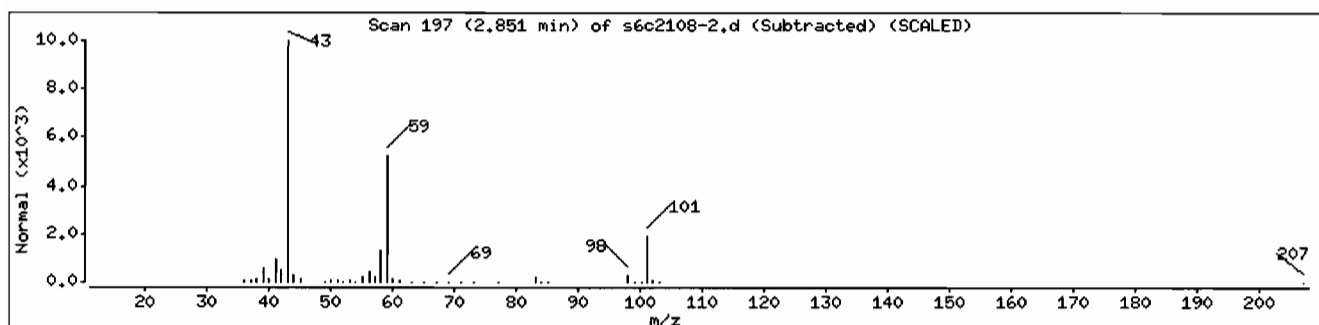
Volume Injected (uL): 0.5

Operator: nag1

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	7945	56	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	45	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	40	C6H12O2	116



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

SDG Number: 10-2199

Matrix: SOIL

Lab Sample ID: 1202066182

Client Sample: QC for batch 963130

Client: LANL010

Project: QC

Client ID: LCS for batch 963130

Method: SW846 8270C

SOP Ref: GL-OA-E-009

Batch ID: 963133

Inst: MSD6.I

Dilution: 1

Run Date: 03/21/2010 18:37

Analyst: NAG1

Inj. Vol: .5 uL

Prep Date: 03/10/2010 12:14

Aliquot: 30 g

Final Volume: 1 mL

Data File: s6c2109-1.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		662	ug/kg	66.7	333
108-95-2	Phenol		796	ug/kg	66.7	333
95-57-8	2-Chlorophenol		856	ug/kg	66.7	333
106-46-7	1,4-Dichlorobenzene		851	ug/kg	66.7	333
621-64-7	N-Nitrosodipropylamine		769	ug/kg	66.7	333
59-50-7	4-Chloro-3-methylphenol		891	ug/kg	66.7	333
83-32-9	Acenaphthene		838	ug/kg	11.0	33.3
121-14-2	2,4-Dinitrotoluene		947	ug/kg	33.3	333
100-02-7	4-Nitrophenol		659	ug/kg	110	333
87-86-5	Pentachlorophenol		1130	ug/kg	83.3	333
129-00-0	Pyrene		972	ug/kg	10.0	33.3
110-86-1	Pyridine		679	ug/kg	66.7	333
62-53-3	Aniline		747	ug/kg	100	333
111-44-4	bis(2-Chloroethyl) ether		738	ug/kg	66.7	333
541-73-1	1,3-Dichlorobenzene		842	ug/kg	66.7	333
100-51-6	Benzyl alcohol		428	ug/kg	100	333
95-50-1	1,2-Dichlorobenzene		915	ug/kg	66.7	333
108-60-1	bis(2-Chloroisopropyl)ether		707	ug/kg	66.7	333
95-48-7	o-Cresol		798	ug/kg	66.7	333
65794-96-9	m,p-Cresols		912	ug/kg	100	333
67-72-1	Hexachloroethane		748	ug/kg	66.7	333
98-95-3	Nitrobenzene		863	ug/kg	66.7	333
78-59-1	Isophorone		844	ug/kg	66.7	333
88-75-5	2-Nitrophenol		872	ug/kg	66.7	333
105-67-9	2,4-Dimethylphenol		440	ug/kg	117	333
111-91-1	bis(2-Chloroethoxy)methane		804	ug/kg	66.7	333
120-83-2	2,4-Dichlorophenol		894	ug/kg	66.7	333
65-85-0	Benzoic acid		1760	ug/kg	167	667
91-20-3	Naphthalene		814	ug/kg	10.0	33.3
106-47-8	4-Chloroaniline		831	ug/kg	66.7	333
87-68-3	Hexachlorobutadiene		1020	ug/kg	66.7	333
91-57-6	2-Methylnaphthalene		868	ug/kg	6.67	33.3
77-47-4	Hexachlorocyclopentadiene		763	ug/kg	66.7	333
88-06-2	2,4,6-Trichlorophenol		943	ug/kg	66.7	333
95-95-4	2,4,5-Trichlorophenol		980	ug/kg	66.7	333
91-58-7	2-Chloronaphthalene		883	ug/kg	11.0	33.3
88-74-4	2-Nitroaniline		713	ug/kg	66.7	333
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline		754	ug/kg	66.7	333

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

SDG Number: 10-2199

Matrix: SOIL

Lab Sample ID: 1202066182

Client Sample: QC for batch 963130

Client: LANL010

Project: QC

Client ID: LCS for batch 963130

Method: SW846 8270C

SOP Ref: GL-OA-E-009

Batch ID: 963133

Inst: MSD6.I

Dilution: 1

Run Date: 03/21/2010 18:37

Analyst: NAG1

Inj. Vol: .5 uL

Prep Date: 03/10/2010 12:14

Aliquot: 30 g

Final Volume: 1 mL

Data File: s6c2109-1.d

Column: J&amp;W DB-5MS

Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate		1070	ug/kg	66.7	333
606-20-2	2,6-Dinitrotoluene		990	ug/kg	33.3	333
208-96-8	Acenaphthylene		947	ug/kg	10.0	33.3
51-28-5	2,4-Dinitrophenol		937	ug/kg	127	667
132-64-9	Dibenzofuran		971	ug/kg	66.7	333
84-66-2	Diethylphthalate		1100	ug/kg	66.7	333
86-73-7	Fluorene		925	ug/kg	10.0	33.3
7005-72-3	4-Chlorophenylphenylether		1040	ug/kg	66.7	333
534-52-1	2-Methyl-4,6-dinitrophenol		964	ug/kg	66.7	333
100-01-6	4-Nitroaniline		908	ug/kg	100	333
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine		975	ug/kg	66.7	333
122-66-7	Azobenzene		883	ug/kg	66.7	333
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether		1080	ug/kg	66.7	333
118-74-1	Hexachlorobenzene		1140	ug/kg	66.7	333
85-01-8	Phenanthrene		954	ug/kg	10.0	33.3
120-12-7	Anthracene		913	ug/kg	6.67	33.3
84-74-2	Di-n-butylphthalate		1040	ug/kg	66.7	333
206-44-0	Fluoranthene		1030	ug/kg	10.0	33.3
85-68-7	Butylbenzylphthalate		961	ug/kg	66.7	333
56-55-3	Benzo(a)anthracene		959	ug/kg	10.0	33.3
91-94-1	3,3'-Dichlorobenzidine		944	ug/kg	100	333
218-01-9	Chrysene		989	ug/kg	10.0	33.3
117-81-7	bis(2-Ethylhexyl)phthalate		950	ug/kg	66.7	333
117-84-0	Di-n-octylphthalate		895	ug/kg	66.7	333
205-99-2	Benzo(b)fluoranthene		942	ug/kg	10.0	33.3
207-08-9	Benzo(k)fluoranthene		1070	ug/kg	10.0	33.3
50-32-8	Benzo(a)pyrene		989	ug/kg	10.0	33.3
193-39-5	Indeno(1,2,3-cd)pyrene		1090	ug/kg	10.0	33.3
53-70-3	Dibenzo(a,h)anthracene		1100	ug/kg	10.0	33.3
191-24-2	Benzo(ghi)perylene		1070	ug/kg	10.0	33.3
120-82-1	1,2,4-Trichlorobenzene		963	ug/kg	66.7	333

GEL Laboratories LLC

Data file : /chem/MSD6.i/s032110.b/s6c2109-2.d  
 Lab Smp Id: 1202066182 Client Smp ID: SBLK01LCS  
 Inj Date : 21-MAR-2010 18:37  
 Operator : nag1 Inst ID: MSD6.i  
 Smp Info : |1202066182|963133|1|SVM|1|LCS  
 Misc Info : |MSD8270\_S|WBN100319-01  
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
 Method : /chem/MSD6.i/s032110.b/MSD6-M8270C-AQA-031610.m  
 Meth Date : 22-Mar-2010 16:50 jen00986 Quant Type: ISTD  
 Cal Date : 17-MAR-2010 04:51 Cal File: s6c1646.d  
 Als bottle: 6 QC Sample: LCS  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: 10-2199.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	30.00000	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	3.828	3.822	(1.000)	284919	40.0000
* 29 Naphthalene-d8	136	4.687	4.687	(1.000)	1047683	40.0000
* 46 Acenaphthene-d10	164	5.939	5.934	(1.000)	641307	40.0000
* 67 Phenanthrene-d10	188	7.098	7.093	(1.000)	1110497	40.0000
* 91 Chrysene-d12	240	9.492	9.486	(1.000)	1005420	40.0000
* 98 Perylene-d12	264	11.086	11.075	(1.000)	866256	40.0000
\$ 3 2-Fluorophenol	112	3.016	3.005	(0.788)	399040	50.3809 1680
\$ 5 Phenol-d5	99	3.540	3.534	(0.925)	468715	46.5331 1550
\$ 20 Nitrobenzene-d5	82	4.187	4.181	(0.893)	241202	24.0837 803
\$ 39 2-Fluorobiphenyl	172	5.428	5.422	(0.914)	466061	28.1678 939
\$ 60 2,4,6-Tribromophenol	329	6.528	6.522	(1.099)	124322	69.0833 2300
\$ 81 p-Terphenyl-d14	244	8.469	8.463	(0.892)	583801	33.3214 1110

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
6 Phenol	94	3.551	3.546	(0.928)	243396	23.8704	796
8 2-Chlorophenol	128	3.693	3.681	(0.965)	212896	25.6722	856
11 1,4-Dichlorobenzene	146	3.840	3.834	(1.003)	226528	25.5357	851
17 N-Nitrosodipropylamine	70	4.063	4.063	(1.061)	160401	23.0566	768 (Q)
28 1,2,4-Trichlorobenzene	180	4.640	4.634	(0.990)	218634	28.8786	963
33 4-Chloro-3-methylphenol	107	5.040	5.028	(1.075)	192142	26.7383	891
47 Acenaphthene	154	5.963	5.957	(1.004)	418401	25.1455	838
50 2,4-Dinitrotoluene	165	6.051	6.051	(1.019)	162304	28.3983	947
52 4-Nitrophenol	139	5.981	5.975	(1.007)	60952	19.7636	659
65 Pentachlorophenol	266	6.922	6.916	(0.975)	88305	33.8488	1130
79 Pyrene	202	8.363	8.357	(0.881)	893714	29.1591	972
2 Pyridine	79	2.363	2.340	(0.617)	160394	20.3734	679
4 Aniline	66	3.610	3.604	(0.943)	106922	22.4211	747
7 bis(2-Chloroethyl) ether	63	3.628	3.622	(0.948)	167923	22.1484	738
9 1,3-Dichlorobenzene	146	3.793	3.787	(0.991)	230647	25.2463	842
12 Benzyl alcohol	108	3.893	3.887	(1.017)	74774	12.8294	428 (R)
13 1,2-Dichlorobenzene	146	3.940	3.934	(1.029)	220657	27.4410	915
14 bis(2-Chloroisopropyl)ether	45	3.969	3.963	(1.037)	337984	21.2102	707
15 o-Cresol	107	3.945	3.940	(1.031)	151324	23.9273	798
18 m,p-Cresols	107	4.040	4.040	(1.055)	249200	27.3553	912
19 Hexachloroethane	117	4.169	4.163	(1.089)	85986	22.4518	748
21 Nitrobenzene	77	4.198	4.199	(0.896)	239149	25.8796	863
22 Isophorone	82	4.351	4.352	(0.928)	448832	25.3116	844
23 2-Nitrophenol	139	4.410	4.410	(0.941)	104739	26.1502	872
24 2,4-Dimethylphenol	122	4.404	4.404	(0.940)	127250	13.2137	440 (QR)
25 bis(2-Chloroethoxy)methane	93	4.475	4.469	(0.955)	232458	24.1129	804
26 2,4-Dichlorophenol	162	4.581	4.569	(0.977)	177406	26.8224	894
27 Benzoic acid	105	4.457	4.463	(0.951)	259019	52.7334	1760 (Q)
30 Naphthalene	128	4.704	4.699	(1.004)	630068	24.4255	814
31 4-Chloroaniline	127	4.722	4.716	(1.008)	283634	24.9250	831
32 Hexachlorobutadiene	225	4.769	4.763	(1.018)	130984	30.4811	1020
34 2-Methylnaphthalene	142	5.187	5.181	(1.107)	413080	26.0404	868
36 Hexachlorocyclopentadiene	237	5.287	5.281	(0.890)	84135	22.8803	763
37 2,4,6-Trichlorophenol	196	5.375	5.369	(0.905)	151851	28.2946	943
38 2,4,5-Trichlorophenol	196	5.404	5.393	(0.910)	167108	29.3892	980
40 2-Chloronaphthalene	162	5.539	5.528	(0.933)	413745	26.5047	883
42 o-Nitroaniline	65	5.592	5.587	(0.942)	117270	21.3865	713
41 m-Nitroaniline	138	5.886	5.887	(0.991)	92155	22.6214	754
43 Dimethylphthalate	163	5.704	5.704	(0.960)	583306	32.1957	1070
44 2,6-Dinitrotoluene	165	5.757	5.757	(0.969)	128833	29.6984	990
45 Acenaphthylene	152	5.839	5.834	(0.983)	702314	28.3975	946
48 2,4-Dinitrophenol	184	5.957	5.957	(1.003)	39641	28.1214	937 (Q)
49 Dibenzofuran	168	6.086	6.081	(1.025)	588505	29.1162	970
51 Diethylphthalate	149	6.210	6.204	(1.046)	585147	32.9475	1100
53 Fluorene	166	6.345	6.340	(1.068)	497348	27.7516	925
54 4-Chlorophenylphenylether	204	6.322	6.316	(1.064)	267676	31.1362	1040
55 2-Methyl-4,6-dinitrophenol	198	6.357	6.357	(0.896)	71180	28.9343	964

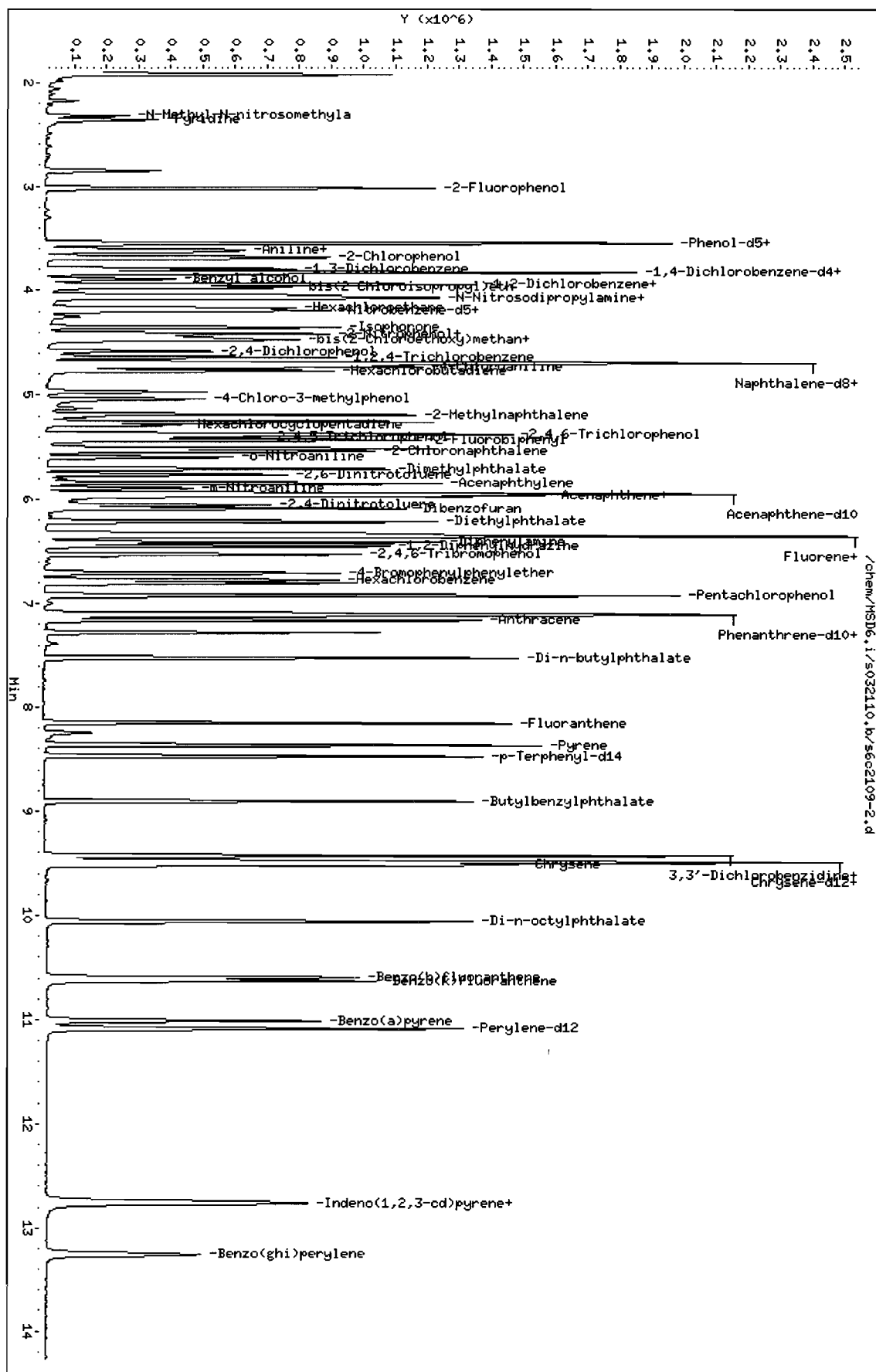
Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
=====	=====	=====	=====	=====	=====	=====	=====	=====
56 p-Nitroaniline		138	6.339	6.340	(1.067)	90974	27.2350	908
133 Diphenylamine		169	6.410	6.404	(0.903)	421472	29.2503	975
58 1,2-Diphenylhydrazine		77	6.445	6.440	(0.908)	513127	26.4922	883
61 4-Bromophenylphenylether		248	6.710	6.704	(0.945)	155588	32.2679	1080
63 Hexachlorobenzene		284	6.775	6.769	(0.954)	157492	34.1832	1140
68 Phenanthrene		178	7.116	7.110	(1.002)	774738	28.6316	954
69 Anthracene		178	7.157	7.151	(1.008)	746575	27.3875	913
72 Di-n-butylphthalate		149	7.522	7.516	(1.060)	980682	31.1070	1040
76 Fluoranthene		202	8.151	8.139	(1.148)	850116	30.9798	1030
85 Butylbenzylphthalate		149	8.904	8.892	(0.938)	427434	28.8233	961
89 Benzo (a) anthracene		228	9.480	9.475	(0.999)	755447	28.7756	959
90 3,3'-Dichlorobenzidine		252	9.433	9.433	(0.994)	214702	28.3100	944
92 Chrysene		228	9.516	9.510	(1.002)	743679	29.6569	988
93 bis (2-Ethylhexyl) phthalate		149	9.427	9.416	(0.993)	564925	28.5001	950
94 Di-n-octylphthalate		149	10.057	10.045	(0.907)	890365	26.8605	895
95 Benzo (b) fluoranthene		252	10.598	10.586	(0.956)	665368	28.2532	942
96 Benzo (k) fluoranthene		252	10.627	10.622	(0.959)	726342	32.1480	1070
97 Benzo (a) pyrene		252	11.010	11.004	(0.993)	592027	29.6829	989
99 Indeno (1,2,3-cd) pyrene		276	12.751	12.733	(1.150)	596599	32.5977	1090
100 Dibenzo (a,h) anthracene		278	12.768	12.751	(1.152)	488279	33.1239	1100
101 Benzo (ghi) perylene		276	13.257	13.245	(1.196)	500943	32.0556	1070
1 N-Methyl-N-nitrosomethylamine		74	2.328	2.310	(0.608)	109787	19.8731	662

#### QC Flag Legend

Q - Qualifier signal failed the ratio test.  
R - Spike/Surrogate failed recovery limits.

Data File: /chem/MSD6.i/5032110.b/s6c2109-2.d  
 Date : 21-MAR-2010 18:37  
 Client ID: SBLK01LCS  
 Sample Info: 1120206482196313311SVH11LCS  
 Volume Injected (uL): 0.5  
 Column phase: J&W DB-5MS

Instrument: MSD6.i  
 Operator: nag1  
 Column diameter: 0.20





# Miscellaneous Data

# Prep Logbook

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

Batch ID: 963130 Verified by: \_\_\_\_\_  
 Analyst: Joshua McCartney  
 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)
1202066181 MB	10-MAR-2010 12:14:00	30	1	0.03333
1202066182 LCS	10-MAR-2010 12:14:00	30	1	0.03333
248514001	10-MAR-2010 12:14:00	30.02	1	0.03331
248514002	10-MAR-2010 12:14:00	30.04	1	0.03329
248514003	10-MAR-2010 12:14:00	30.07	1	0.03326
248517001	10-MAR-2010 12:14:00	30.03	1	0.0333
248519001	10-MAR-2010 12:14:00	30	1	0.03333
248519002	10-MAR-2010 12:14:00	30.01	1	0.03332
248519003	10-MAR-2010 12:14:00	30.09	1	0.03323
248519004	10-MAR-2010 12:14:00	30.03	1	0.0333
248519005	10-MAR-2010 12:14:00	30	1	0.03333
248519006	10-MAR-2010 12:14:00	30	1	0.03333
248519007	10-MAR-2010 12:14:00	30.09	1	0.03323
248519008	10-MAR-2010 12:14:00	30.09	1	0.03323
248519009	10-MAR-2010 12:14:00	30.06	1	0.03327
248519010	10-MAR-2010 12:14:00	30.09	1	0.03323
248519011	10-MAR-2010 12:14:00	30.03	1	0.0333
248526001	10-MAR-2010 12:14:00	30	1	0.03333
1202066183 MS (248526001)	10-MAR-2010 12:14:00	30	1	0.03333
1202066184 MSD (248526001)	10-MAR-2010 12:14:00	30.03	1	0.0333

Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:
LCS	1202066182	BNA LCS w/o Benzidine 50ppm	UEI00302-14	1	mL	Verified By: RWH
LCS	1202066182	BENZIDINE LCS	UEI00302-22	1	mL	Final Solvent: CH2Cl2
MS	1202066183	BNA LCS w/o Benzidine 50ppm	UEI00302-14	1	mL	
MS	1202066183	BENZIDINE LCS	UEI00302-22	1	mL	
MSD	1202066184	BNA LCS w/o Benzidine 50ppm	UEI00302-14	1	mL	
MSD	1202066184	BENZIDINE LCS	UEI00302-22	1	mL	
SURR	All	BNA for all Surrogate	UEI00301-10	1	mL	
REGNT	All	Acetone	1273739-B1	150	mL	
REGNT	All	Methylene Chloride	1281955-D	150	mL	
SOURC	All	SODIUM SULFATE	1274910	30	g	

## GEL ORGANIC RUN LOG

INSTRUMENT ID: MSD6

DATE: 03/16/2010 METHOD: See raw data OPERATOR: nag1  
REVIEWED BY: \_\_\_\_\_  
DATE: \_\_\_\_\_

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT: 1239699-D  
Multiplier Voltage: 1576 Emv Extr. Injection Volume: 0.5, 1.0 ul  
DFTPP Solution ID: WBN100306-01.2 Internal Std ID: WBN100310-01  
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/MSD6.i/s031610.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SQG	Dilution	Client	Comments
Is6c1601-D.d	WBN100306-01.2	Inag1	16-MAR-2010 08:42	DFTPP	s031610	1.0	DFTPP	MEGA
Is6c1601.d	WBN100306-01.2	Inag1	16-MAR-2010 08:42	DFTPP	s031610	1.0	DFTPP	MEGA
Is6c1602.d	INSTBLK	Inag1	16-MAR-2010 08:55		s031610	1.0		
Is6c1603.d	WBN100309-08	Inag1	16-MAR-2010 09:18	001 PPM	s031610	1.0	MEGA001	
Is6c1604-RQ.d	WBN100309-07	Inag1	16-MAR-2010 09:47	010 PPM	s031610	1.0	MEGA010	
Is6c1604.d	WBN100309-07	Inag1	16-MAR-2010 09:47	010 PPM	s031610	1.0	MEGA010	
Is6c1605.d	WBN100309-06	Inag1	16-MAR-2010 10:17	020 PPM	s031610	1.0	MEGA020	
Is6c1606.d	WBN100309-05.1	Inag1	16-MAR-2010 10:48	040 PPM	s031610	1.0	MEGA040	
Is6c1607.d	WBN100309-04	Inag1	16-MAR-2010 11:18	050 PPM	s031610	1.0	MEGA050	
Is6c1608.d	WBN100309-03	Inag1	16-MAR-2010 11:48	080 PPM	s031610	1.0	MEGA080	
Is6c1609.d	WBN100309-02	Inag1	16-MAR-2010 12:18	100 PPM	s031610	1.0	MEGA100	
Is6c1610.d	WBN100309-01	Inag1	16-MAR-2010 12:48	120 PPM	s031610	1.0	MEGA120	
Is6c1611.d	INSTBLK	Inag1	16-MAR-2010 13:16		s031610	1.0		
Is6c1612-BOE.d	WBN100309-09.1	Inag1	16-MAR-2010 13:40	040 PPM	s031610	1.0	MEGA1CV	
Is6c1612-D.d	WBN100309-09.1	Inag1	16-MAR-2010 13:40	040 PPM	s031610	1.0	MEGA1CV	
Is6c1612.d	WBN100309-09.1	Inag1	16-MAR-2010 13:40	040 PPM	s031610	1.0	MEGA1CV	
Is6c1613-D.d	WBN100306-01.2	Inag1	16-MAR-2010 16:06	DFTPP	s031610	1.0	DFTPP	IAP/PEST/HEX
Is6c1613.d	WBN100306-01.2	Inag1	16-MAR-2010 16:06	DFTPP	s031610	1.0	DFTPP	IAP/PEST/HEX
Is6c1614.d	INSTBLK	Inag1	16-MAR-2010 16:19		s031610	1.0		

Is6c1615.d	WBN100312-01	Inag1	16-MAR-2010	16:42	10 PPM	Is031610	1.0 AP010	1
Is6c1616.d	WBN100312-02	Inag1	16-MAR-2010	17:06	120 PPM	Is031610	1.0 AP020	1
Is6c1617.d	WBN100312-03.1	Inag1	16-MAR-2010	17:30	140 PPM	Is031610	1.0 AP040	1
Is6c1618.d	WBN100312-04	Inag1	16-MAR-2010	17:53	150 PPM	Is031610	1.0 AP050	1
Is6c1619.d	WBN100312-05	Inag1	16-MAR-2010	18:16	180 PPM	Is031610	1.0 AP080	1
Is6c1620.d	WBN100312-06	Inag1	16-MAR-2010	18:40	1100 PPM	Is031610	1.0 AP100	1
Is6c1621.d	WBN100312-07	Inag1	16-MAR-2010	19:04	1120 PPM	Is031610	1.0 AP120	1
Is6c1622.d	WBN100304-25	Inag1	16-MAR-2010	19:27	110 PPM	Is031610	1.0 PEST010	1
Is6c1623.d	WBN100304-24	Inag1	16-MAR-2010	19:51	120 PPM	Is031610	1.0 PEST020	1
Is6c1624.d	WBN100304-23.1	Inag1	16-MAR-2010	20:16	140 PPM	Is031610	1.0 PEST040	1
Is6c1625.d	WBN100304-22	Inag1	16-MAR-2010	20:39	150 PPM	Is031610	1.0 PEST050	1
Is6c1626.d	WBN100304-21	Inag1	16-MAR-2010	21:04	180 PPM	Is031610	1.0 PEST080	1
Is6c1627.d	WBN100304-20	Inag1	16-MAR-2010	21:29	1100 PPM	Is031610	1.0 PEST100	1
Is6c1628.d	WBN100304-19	Inag1	16-MAR-2010	21:52	1120 PPM	Is031610	1.0 PEST120	1
Is6c1629.d	WBN100304-16	Inag1	16-MAR-2010	22:16	1500 PPM	Is031610	1.0 HEX500	1
Is6c1630.d	WBN100304-15	Inag1	16-MAR-2010	22:40	11000 PPM	Is031610	1.0 HEX1000	1
Is6c1631.d	WBN100304-14	Inag1	16-MAR-2010	23:05	11250 PPM	Is031610	1.0 HEX1250	1
Is6c1632.d	WBN100304-15	Inag1	16-MAR-2010	23:30	11500 PPM	Is031610	1.0 HEX1500	1
Is6c1633.d	WBN100304-16	Inag1	16-MAR-2010	23:53	11750 PPM	Is031610	1.0 HEX1750	1
Is6c1634.d	WBN100304-16	Inag1	17-MAR-2010	00:17	12000 PPM	Is031610	1.0 HEX2000	1
Is6c1635-D.d	WBN100312-08.1	Inag1	17-MAR-2010	00:41	140 PPM	Is031710	1.0 APICV	1
Is6c1635.d	WBN100312-08.1	Inag1	17-MAR-2010	00:41	140 PPM	Is031710	1.0 APICV	1
Is6c1636-D.d	WBN100304-26.1	Inag1	17-MAR-2010	01:05	140 PPM	Is031710	1.0 PESTICV	1
Is6c1636.d	WBN100304-26.1	Inag1	17-MAR-2010	01:05	140 PPM	Is031710	1.0 PESTICV	1
Is6c1637-D.d	WBN100304-14	Inag1	17-MAR-2010	01:30	11250 PPM	Is031710	1.0 HEX1250	1
Is6c1637.d	WBN100304-14	Inag1	17-MAR-2010	01:30	11250 PPM	Is031710	1.0 HEX1250	1
Is6c1638-D.d	WBN100306-01.2	Inag1	17-MAR-2010	01:55	11250 PPM	Is031610	1.0 DFTPP	1

Is6c1638.d	WBN100306-01.2	inag1	17-MAR-2010 01:55	10FTPP	s031610	1.0	10FTPP	NEV	
Is6c1639.d	INSTBLK	inag1	17-MAR-2010 02:08		s031610	1.0			
Is6c1640.d	WBN100127-01	inag1	17-MAR-2010 02:32	10 PPM	s031610	1.0	NEV010		
Is6c1641.d	WBN100127-02	inag1	17-MAR-2010 02:55	120 PPM	s031610	1.0	NEV020		
Is6c1642.d	WBN100127-03	inag1	17-MAR-2010 03:19	140 PPM	s031610	1.0	NEV040		
Is6c1643.d	WBN100127-04	inag1	17-MAR-2010 03:42	150 PPM	s031610	1.0	NEV050		
Is6c1644.d	WBN100127-05	inag1	17-MAR-2010 04:05	180 PPM	s031610	1.0	NEV080		
Is6c1645.d	WBN100127-06	inag1	17-MAR-2010 04:28	100 PPM	s031610	1.0	NEV100		
Is6c1646.d	WBN100127-07	inag1	17-MAR-2010 04:51	1120 PPM	s031610	1.0	NEV120		
Is6c1647.d	WBN100127-03	inag1	17-MAR-2010 05:14	140 PPM	s031610	1.0	NEVcvs		

Instrument Batch: /chem/MSD6.i/s031610.b

## GEL ORGANIC RUN LOG

INSTRUMENT ID: MSD6

DATE: 03/21/2010

METHOD: See raw data

OPERATOR: nag1

REVIEWED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

## HARDWARE CONFIGURATION &amp; METHOD SUMMARY:

No. 1 on pg. 1

SOLVENT LOT: 1239699-D

Multiplier Voltage: 1576 Emv

Extr. Injection Volume: 0.5, 1.0 ul

DFTPP Solution ID: WBN100306-01.2 Internal Std ID: WBN100310-01

## 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/MSD6.i/s032110.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s6c2101.d	WBN100306-01.2	nag1	121-MAR-2010 08:53	DFTPP	s032110	1.0	DFTPP	DUSE
s6c2102.d	WBN100309-05.3	nag1	121-MAR-2010 09:12	140 PPM	s032110	1.0	MEGACVS	DUSE
s6c2103.d	WBN100309-05.3	nag1	121-MAR-2010 09:45	140 PPM	s032110	1.0	MEGACVS	DUSE
s6c2104.d	WBN100306-01.2	nag1	121-MAR-2010 16:41	DFTPP	s032110	1.0	DFTPP	
s6c2105.d	WBN100309-05.3	nag1	121-MAR-2010 16:55	140 PPM	s032110	1.0	MEGACVS	pass 534666
s6c2106.d	WBN100312-03.3	nag1	121-MAR-2010 17:25	140 PPM	s032110	1.0	APCVS	
s6c2107.d	WBN100304-26.3	nag1	121-MAR-2010 17:49	140 PPM	s032110	1.0	PESTCVS	
s6c2108-1.d	1202066181	nag1	121-MAR-2010 18:13	963133	10-2198	1.0	MB	
s6c2108-2.d	1202066181	nag1	121-MAR-2010 18:13	963133	10-2199	1.0	MB	
s6c2108-3.d	1202066181	nag1	121-MAR-2010 18:13	963133	10-2302	1.0	MB	
s6c2108.d	1202066181	nag1	121-MAR-2010 18:13	963133	10-2196	1.0	MB	
s6c2109-1.d	1202066182	nag1	121-MAR-2010 18:37	963133	10-2198	1.0	LCS	<5% fail
s6c2109-2.d	1202066182	nag1	121-MAR-2010 18:37	963133	10-2199	1.0	LCS	<5% fail
s6c2109-3.d	1202066182	nag1	121-MAR-2010 18:37	963133	10-2302	1.0	LCS	<5% fail
s6c2109.d	1202066182	nag1	121-MAR-2010 18:37	963133	10-2196	1.0	LCS	<5% fail
s6c2110.d	1248514001	nag1	121-MAR-2010 19:00	963133	10-2196	1.0	LANL	
s6c2111.d	1248514002	nag1	121-MAR-2010 19:24	963133	10-2196	1.0	LANL	DUSE fail istd-rf 4x
s6c2112.d	1248514003	nag1	121-MAR-2010 19:48	963133	10-2196	1.0	LANL	DUSE fail istd-rf 4x
s6c2113.d	1248517001	nag1	121-MAR-2010 20:12	963133	10-2198	1.0	LANL	

s6c2114.d	248519001	nag1	21-MAR-2010 20:35	963133	10-2199	1.0 LANL	DOSE fail istd-rr 4x	
+	+	+	+	+	+	+	+	+
s6c2115.d	248519002	nag1	21-MAR-2010 20:58	963133	10-2199	1.0 LANL	DOSE fail istd-rr 4x	
+	+	+	+	+	+	+	+	+
s6c2116.d	248519003	nag1	21-MAR-2010 21:22	963133	10-2199	1.0 LANL	DOSE fail istd-rr 4x	
+	+	+	+	+	+	+	+	+
s6c2117.d	248519004	nag1	21-MAR-2010 21:46	963133	10-2199	1.0 LANL	DOSE fail istd-rr 4x	
+	+	+	+	+	+	+	+	+
s6c2118.d	248519005	nag1	21-MAR-2010 22:09	963133	10-2199	1.0 LANL		
+	+	+	+	+	+	+	+	+
s6c2119.d	248519006	nag1	21-MAR-2010 22:33	963133	10-2199	1.0 LANL	DOSE fail istd-rr 4x	
+	+	+	+	+	+	+	+	+
s6c2120.d	248519007	nag1	21-MAR-2010 22:57	963133	10-2199	1.0 LANL	DOSE fail istd-rr 4x	
+	+	+	+	+	+	+	+	+
s6c2121.d	248519008	nag1	21-MAR-2010 23:20	963133	10-2199	1.0 LANL		
+	+	+	+	+	+	+	+	+
s6c2122.d	248519009	nag1	21-MAR-2010 23:44	963133	10-2199	1.0 LANL		
+	+	+	+	+	+	+	+	+
s6c2123.d	248519010	nag1	22-MAR-2010 00:07	963133	10-2199	1.0 LANL	DOSE fail istd	
+	+	+	+	+	+	+	+	+
s6c2124.d	248519011	nag1	22-MAR-2010 00:31	963133	10-2199	1.0 LANL		
+	+	+	+	+	+	+	+	+
s6c2125.d	248526001	nag1	22-MAR-2010 00:55	963133	10-2202	1.0 LANL	fail istd,surr-MS/MSD confirm	
+	+	+	+	+	+	+	+	+
s6c2126.d	1202066183	nag1	22-MAR-2010 01:18	963133	10-2202	1.0 MS	fail istd,surr	
+	+	+	+	+	+	+	+	+
s6c2127.d	1202066184	nag1	22-MAR-2010 01:42	963133	10-2202	1.0 MSD	fail istd,surr	
+	+	+	+	+	+	+	+	+
s6c2128.d	248842004	nag1	22-MAR-2010 02:06	965425	10-2302	10.0 LANL	DOSE-fail istd s6c2318	
+	+	+	+	+	+	+	+	+
s6c2129.d	248842005	nag1	22-MAR-2010 02:29	965425	10-2302	1.0 LANL	DOSE-rr of s6c2026-still fail surr-RX	
+	+	+	+	+	+	+	+	+
s6c2130.d	248842006	nag1	22-MAR-2010 02:53	965425	10-2302	1.0 LANL	DOSE-rr of s6c2027-still fail surr-RX	
+	+	+	+	+	+	+	+	+
s6c2131.d	248842007	nag1	22-MAR-2010 03:17	965425	10-2302	10.0 LANL	DOSE-fail istd s6c2319	
+	+	+	+	+	+	+	+	+
s6c2132.d	248842008	nag1	22-MAR-2010 03:40	965425	10-2302	10.0 LANL	DOSE-fail istd s6c2320	
+	+	+	+	+	+	+	+	+
s6c2133.d	248842009	nag1	22-MAR-2010 04:03	965425	10-2302	10.0 LANL	DOSE-fail istd s6c2321	
+	+	+	+	+	+	+	+	+
s6c2134.d	248842010	nag1	22-MAR-2010 04:27	965425	10-2302	10.0 LANL	DOSE- fail istd s6c2322	
+	+	+	+	+	+	+	+	+

## GEL ORGANIC RUN LOG

INSTRUMENT ID: MSD6

DATE: 03/23/2010

METHOD: See raw data

OPERATOR: nag1

REVIEWED BY: \_\_\_\_\_

HARDWARE CONFIGURATION &amp; METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:1239699-D

Multiplier Voltage: 1576 Emv Extr. Injection Volume: 0.5, 1.0 ul

DFTPP Solution ID: WBN100306-01.2 Internal Std ID: WBN100319-01

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/MSD6.i/s032310.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s6c2301.d	WBN100306-01.2	nag1	123-MAR-2010 13:49	DFTPP	s032310	1.0	DFTPP	DUSE
s6c2302.d	WBN100309-05.3	nag1	123-MAR-2010 14:02	140 PPM	s032310	1.0	MEGACVS	DUSE
s6c2303.d	WBN100312-03.3	nag1	123-MAR-2010 14:34	140 PPM	s032310	1.0	APCVS	DUSE
s6c2304.d	WBN100304-26.3	nag1	123-MAR-2010 14:59	140 PPM	s032310	1.0	PESTCVS	DUSE; MAINTENANCE
s6c2305.d	WBN100306-01.2	nag1	123-MAR-2010 15:53	DFTPP	s032310	1.0	DFTPP	DUSE
s6c2306.d	WBN100306-01.2	nag1	123-MAR-2010 16:10	DFTPP	s032310	1.0	DFTPP	DUSE
s6c2307.d	WBN100309-05.3	nag1	123-MAR-2010 16:23	140 PPM	s032310	1.0	MEGACVS	DUSE
s6c2308.d	WBN100312-03.3	nag1	123-MAR-2010 17:02	140 PPM	s032310	1.0	APCVS	DUSE
s6c2309.d	WBN100309-05.3	nag1	123-MAR-2010 17:25	140 PPM	s032310	1.0	MEGACVS	DUSE; 304917
s6c2310.d	INST BLK	nag1	123-MAR-2010 17:57	-----	s032310	1.0	INST BLK	1B
s6c2311.d	1202069973	nag1	123-MAR-2010 18:20	1964843	1249222	1.0	MB	DUSE
s6c2312.d	1202069974	nag1	123-MAR-2010 18:45	1964843	1249222	1.0	LCS	DUSE
s6c2313.d	1202069975	nag1	123-MAR-2010 19:09	1964843	1249222	1.0	LCSD	MEASURE VOLUME/SPIKES HIGH???
s6c2314.d	1249222001	nag1	123-MAR-2010 19:33	1964843	1249222	1.0	GEEL	DUSE
s6c2315.d	1249222002	nag1	123-MAR-2010 19:57	1964843	1249222	1.0	GEEL	DUSE
s6c2316.d	1249222004	nag1	123-MAR-2010 20:20	1964843	1249222	1.0	GEEL	DUSE; SURR LOW; CONSUMED
s6c2317.d	1249222005	nag1	123-MAR-2010 20:44	1964843	1249222	1.0	GEEL	DUSE; SURR LOW; CONSUMED
s6c2318.d	1248842004	nag1	123-MAR-2010 21:08	1965425	110-2302	10.0	LANL	DUSE; RR OF S6C2128
s6c2319.d	1248842007	nag1	123-MAR-2010 21:32	1965425	110-2302	10.0	LANL	DUSE; RR OF S6C2131



s6c2320.d	1248842008	1nag1	123-MAR-2010 21:55	965425	10-2302	10.0 LANL	USE; RR OF S6C2132
s6c2321.d	1248842009	1nag1	123-MAR-2010 22:19	965425	10-2302	10.0 LANL	USE; RR OF S6C2133
s6c2322.d	1248842010	1nag1	123-MAR-2010 22:42	965425	10-2302	10.0 LANL	USE; RR OF S6C2134
s6c2323.d	1248514002	1nag1	123-MAR-2010 23:06	963133	10-2196	4.0 LANL	USE; RR OF S6C2111
s6c2324.d	1248514003	1nag1	123-MAR-2010 23:30	963133	10-2196	4.0 LANL	USE; RR OF S6C2112
s6c2325.d	1248519001	1nag1	123-MAR-2010 23:53	963133	10-2199	4.0 LANL	USE; RR OF S6C2114
s6c2326.d	1248519002	1nag1	124-MAR-2010 00:17	963133	10-2199	4.0 LANL	USE; RR OF S6C2115
s6c2327.d	1248519003	1nag1	124-MAR-2010 00:40	963133	10-2199	4.0 LANL	USE; RR OF S6C2116
s6c2328.d	1248519004	1nag1	124-MAR-2010 01:03	963133	10-2199	4.0 LANL	USE; RR OF S6C2117
s6c2329.d	1248519006	1nag1	124-MAR-2010 01:26	963133	10-2199	4.0 LANL	USE; RR OF S6C2119
s6c2330.d	1248519007	1nag1	124-MAR-2010 01:50	963133	10-2199	4.0 LANL	USE; RR OF S6C2120
s6c2331.d	1248519010	1nag1	124-MAR-2010 02:12	963133	10-2199	4.0 LANL	USE; RR OF S6C2123
s6c2332.d	1248519011	1nag1	124-MAR-2010 02:35	963133	10-2199	4.0 LANL	USE; RR OF S6C2124
s6c2333.d	1249222004	1nag1	124-MAR-2010 02:57	964843	1249222	1.0 GEEL	DOSE; SURR STILL LOW
s6c2334.d	1249222005	1nag1	124-MAR-2010 03:20	964843	1249222	1.0 GEEL	DOSE; SURR STILL LOW

### DATA EXCEPTION REPORT

<b>Mo. Day Yr.</b> 25-MAR-10	<b>Division:</b> Industrial	<b>Quality Criteria:</b> Specifications	<b>Type:</b> Process
<b>Instrument Type:</b> SEMIVOA GC/MS	<b>Test / Method:</b> SW846 8270C	<b>Matrix Type:</b> Solid	<b>Client Code:</b> LANL
<b>Batch ID:</b> 963133	<b>Sample Numbers:</b> See Below		
<b>Potentially affected work order(s)(SDG):</b> 248514(10-2196),248517(10-2198),248519(10-2199),248526(10-2202) <b>Application Issues:</b> Failed Recovery for MS/PS Failed RPD for MS/MSD, or PS/PSD Failed Recovery for LCS/LCSD Failed Yield for Surrogates Failed Recovery for MSD/PSD			
<b>Specification and Requirements</b> <b>Exception Description:</b>		<b>DER Disposition:</b>	
1. Sample 248526001 and the MS(1202066183) recovered surrogates outside of the established acceptance limits. Please see the QC Summary report for the specific failures.  2. The LCS(1202066182) recovered 2,4-Dimethylphenol at 26% (limits are 32%-112%) and Benzyl alcohol at 26% (limits are 27%-108%).  3. The MS(1202066183) and MSD(1202066184) recovered multiple spike analytes outside of the established acceptance limits. Please see the QC Summary report for the specific failures.  4. Multiple MS(1202066183)/MSD(1202066184) RPD values were outside of the established acceptance limits. Please see the QC Summary report for the specific failures.		1. Since the MS displayed similar surrogate recoveries to the associated parent sample and the MS and MSD both displayed multiple spike failures, the surrogate failures were attributed to matrix interference and the data were reported.  2. The LCS failures represent less than 5% of the total requested spike analyte list. That satisfied the acceptance criteria for the client and the data results have been reported. Please note that Benzyl alcohol is stated in the Method as displaying erratic chromatographic behavior. This may account for the low recoveries of the analytes in the LCS (as well as in the MS and MSD).  3. Since the MSD displayed similar recoveries to the MS, the failures were attributed to matrix interference and the data were reported. Please note that Benzyl alcohol is known to be a poor responder as stated in the Method and is subject to erratic chromatography behavior. This may account for the low recoveries of the analytes in the MS and MSD (as well as in the LCS).  4. The RPD failures were attributed to matrix interference and the data were reported.	

**Originator's Name:**

Lloyd O Fox

25-MAR-10

**Data Validator/Group Leader:**

Daniel Beacham

30-MAR-10

GEL Laboratories LLC

Data file : /chem/MSD6.i/s032110.b/s6c2126.d  
Lab Smp Id: 1202066183 Client Smp ID: RE36-10-8466MS  
Inj Date : 22-MAR-2010 01:18  
Operator : nagl Inst ID: MSD6.i  
Smp Info : |1202066183|963133|1|SVM|1|MS  
Misc Info : |MSD8270\_S|WBN100319-01  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD6.i/s032110.b/MSD6-M8270C-AQA-031610.m  
Meth Date : 23-Mar-2010 10:53 nat00999 Quant Type: ISTD  
Cal Date : 17-MAR-2010 04:51 Cal File: s6c1646.d  
Als bottle: 23 QC Sample: MS  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-2202.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	30.00000	weight of sample
M	12.38630	% 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	3.828	3.822 (1.000)	301304	40.0000	
* 29 Naphthalene-d8	136	4.692	4.687 (1.000)	1168255	40.0000	
* 46 Acenaphthene-d10	164	5.939	5.934 (1.000)	729368	40.0000	
* 67 Phenanthrene-d10	188	7.098	7.093 (1.000)	1290719	40.0000	
* 91 Chrysene-d12	240	9.498	9.486 (1.000)	1135062	40.0000	
* 98 Perylene-d12	264	11.092	11.075 (1.000)	771370	40.0000	
\$ 3 2-Fluorophenol	112	3.022	3.005 (0.789)	260338	31.0816	1180
\$ 5 Phenol-d5	99	3.545	3.534 (0.926)	327263	30.7232	1170 (R)
\$ 20 Nitrobenzene-d5	82	4.187	4.181 (0.892)	149918	13.4242	511 (R)
\$ 39 2-Fluorobiphenyl	172	5.434	5.422 (0.915)	335877	17.8488	679
\$ 60 2,4,6-Tribromophenol	329	6.533	6.522 (1.100)	91786	44.8457	1710
\$ 81 p-Terphenyl-d14	244	8.475	8.463 (0.892)	410656	20.7617	790

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/u1)	FINAL (ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
6 Phenol	94	3.557	3.546	(0.929)	166212	15.4143	586 (R)
8 2-Chlorophenol	128	3.692	3.681	(0.965)	142113	16.2049	616
11 1,4-Dichlorobenzene	146	3.840	3.834	(1.003)	103941	11.0797	422 (R)
17 N-Nitrosodipropylamine	70	4.063	4.063	(1.061)	108477	14.7449	561 (Q)
28 1,2,4-Trichlorobenzene	180	4.639	4.634	(0.989)	131104	15.5298	591
33 4-Chloro-3-methylphenol	107	5.045	5.028	(1.075)	149470	18.6534	710
47 Acenaphthene	154	5.963	5.957	(1.004)	296891	15.6886	597
50 2,4-Dinitrotoluene	165	6.057	6.051	(1.020)	121123	18.6341	709
52 4-Nitrophenol	139	5.998	5.975	(1.010)	58915	16.7967	639
65 Pentachlorophenol	266	6.928	6.916	(0.976)	62275	20.5380	781
79 Pyrene	202	8.369	8.357	(0.881)	602596	17.4152	662
2 Pyridine	79	2.357	2.340	(0.616)	89302	10.7264	408 (R)
4 Aniline	66	3.610	3.604	(0.943)	59313	11.7613	447
7 bis(2-Chloroethyl) ether	63	3.628	3.622	(0.948)	95039	11.8536	451 (R)
9 1,3-Dichlorobenzene	146	3.792	3.787	(0.991)	102816	10.6421	405 (R)
13 1,2-Dichlorobenzene	146	3.940	3.934	(1.029)	107804	12.6775	482 (R)
14 bis(2-Chloroisopropyl)ether	45	3.969	3.963	(1.037)	198352	11.7707	448 (QR)
15 o-Cresol	107	3.951	3.940	(1.032)	182422	27.2759	1040 (Q)
18 m,p-Cresols	107	4.045	4.040	(1.057)	188246	19.5405	743
19 Hexachloroethane	117	4.169	4.163	(1.089)	33831	8.35325	318 (aR)
21 Nitrobenzene	77	4.204	4.199	(0.896)	146695	14.2363	542
22 Isophorone	82	4.351	4.352	(0.927)	304850	15.4175	586
23 2-Nitrophenol	139	4.416	4.410	(0.941)	77069	17.2559	656
24 2,4-Dimethylphenol	122	4.416	4.404	(0.941)	148854	14.1556	538 (Q)
25 bis(2-Chloroethoxy)methane	93	4.475	4.469	(0.954)	166718	15.5089	590
26 2,4-Dichlorophenol	162	4.575	4.569	(0.975)	142199	19.2805	734
27 Benzoic acid	105	4.463	4.463	(0.951)	221597	40.4585	1540 (Q)
30 Naphthalene	128	4.704	4.699	(1.002)	411015	14.2891	544
31 4-Chloroaniline	127	4.722	4.716	(1.006)	200123	15.7712	600
32 Hexachlorobutadiene	225	4.769	4.763	(1.016)	71194	14.8576	565
34 2-Methylnaphthalene	142	5.187	5.181	(1.105)	292174	16.5176	628
36 Hexachlorocyclopentadiene	237	5.287	5.281	(0.890)	39568	9.46124	360 (aR)
37 2,4,6-Trichlorophenol	196	5.375	5.369	(0.905)	115521	18.9263	720
38 2,4,5-Trichlorophenol	196	5.410	5.393	(0.911)	128296	19.8391	755
40 2-Chloronaphthalene	162	5.539	5.528	(0.933)	304646	17.1595	653
42 o-Nitroaniline	65	5.598	5.587	(0.943)	95123	15.2531	580 (R)
41 m-Nitroaniline	138	5.892	5.887	(0.992)	74766	16.1370	614 (R)
43 Dimethylphthalate	163	5.704	5.704	(0.960)	417457	20.2597	771
44 2,6-Dinitrotoluene	165	5.763	5.757	(0.970)	91926	18.6322	709
45 Acenaphthylene	152	5.839	5.834	(0.983)	507310	18.0360	686
48 2,4-Dinitrophenol	184	5.963	5.957	(1.004)	33813	22.5458	858 (Q)
49 Dibenzofuran	168	6.086	6.081	(1.025)	452538	19.6861	749
51 Diethylphthalate	149	6.210	6.204	(1.046)	401823	19.8935	757
53 Fluorene	166	6.345	6.340	(1.068)	362375	17.7789	676
54 4-Chlorophenylphenylether	204	6.328	6.316	(1.065)	198120	20.2630	771
55 2-Methyl-4,6-dinitrophenol	198	6.363	6.357	(0.896)	56016	21.0266	800
56 p-Nitroaniline	138	6.345	6.340	(1.068)	79224	20.8538	793

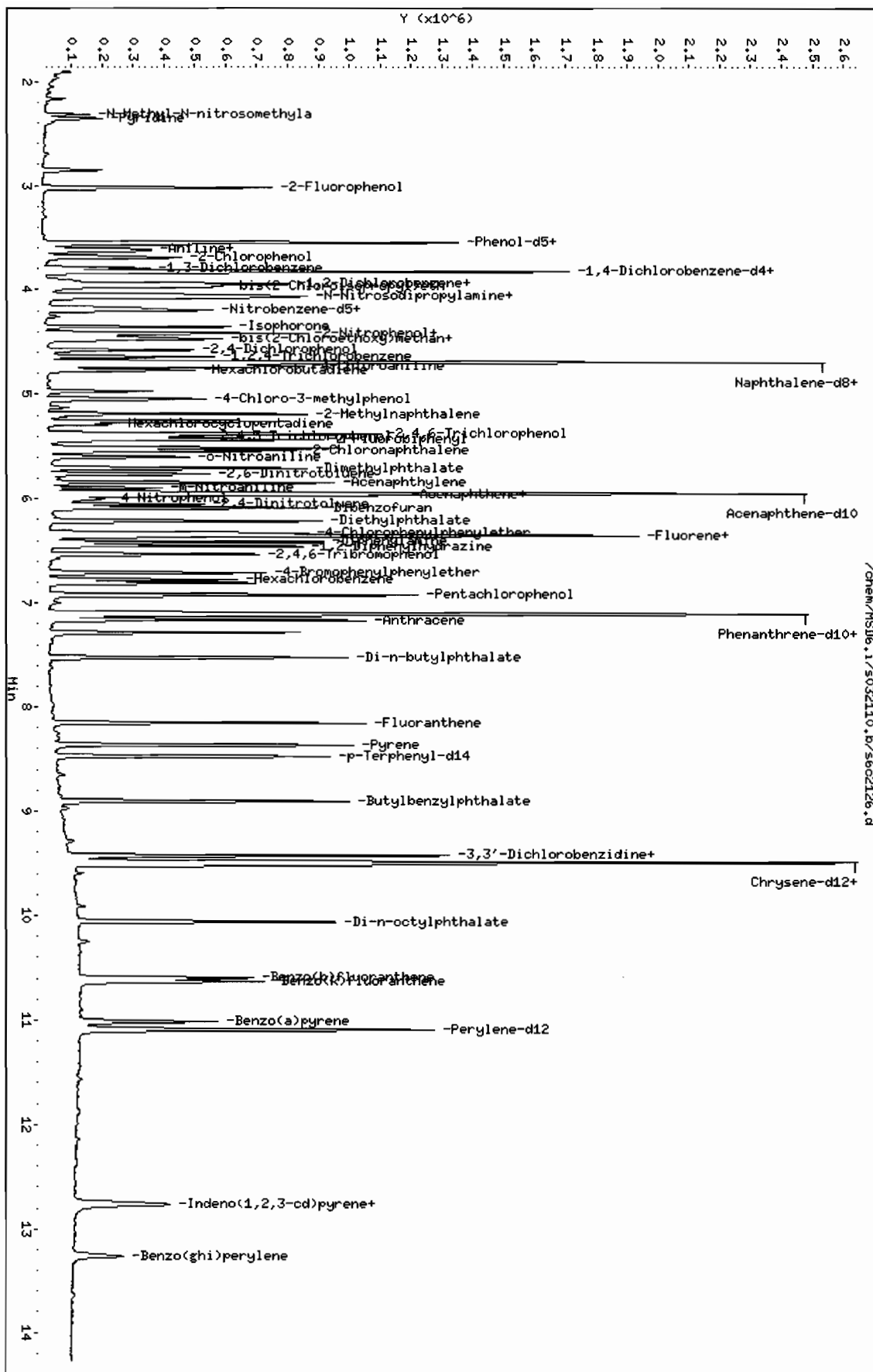
Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
133 Diphenylamine	169	6.416	6.404	(0.904)	312538	18.6616	710
58 1,2-Diphenylhydrazine	77	6.451	6.440	(0.909)	385441	17.1213	651
61 4-Bromophenylphenylether	248	6.710	6.704	(0.945)	115084	20.5350	781
63 Hexachlorobenzene	284	6.775	6.769	(0.954)	98842	18.4578	702 (R)
68 Phenanthrene	178	7.122	7.110	(1.003)	550983	17.5192	666
69 Anthracene	178	7.163	7.151	(1.009)	581227	18.3447	698
72 Di-n-butylphthalate	149	7.522	7.516	(1.060)	671998	18.3393	698 (R)
76 Fluoranthene	202	8.151	8.139	(1.148)	597592	18.7366	713
85 Butylbenzylphthalate	149	8.904	8.892	(0.937)	283866	16.9557	645 (R)
89 Benzo(a)anthracene	228	9.486	9.475	(0.999)	508429	17.1545	653
90 3,3'-Dichlorobenzidine	252	9.439	9.433	(0.994)	119418	13.9477	531 (R)
92 Chrysene	228	9.522	9.510	(1.002)	487805	17.2312	656
93 bis(2-Ethylhexyl)phthalate	149	9.427	9.416	(0.993)	375435	16.7772	638 (R)
94 Di-n-octylphthalate	149	10.063	10.045	(0.907)	587982	19.9202	758
95 Benzo(b)fluoranthene	252	10.598	10.586	(0.955)	376361	17.9471	683
96 Benzo(k)fluoranthene	252	10.633	10.622	(0.959)	406814	20.2205	769
97 Benzo(a)pyrene	252	11.016	11.004	(0.993)	316599	17.8262	678
99 Indeno(1,2,3-cd)pyrene	276	12.757	12.733	(1.150)	226466	13.8960	529 (R)
100 Dibenzo(a,h)anthracene	278	12.774	12.751	(1.152)	198811	15.1460	576
101 Benzo(ghi)perylene	276	13.262	13.245	(1.196)	167247	12.0187	457 (R)
1 N-Methyl-N-nitrosomethylamine	74	2.322	2.310	(0.607)	66864	11.4452	435 (R)

QC Flag Legend

- a - Target compound detected but, quantitated amount  
Below Limit Of Quantitation(BLOQ).
- Q - Qualifier signal failed the ratio test.
- R - Spike/Surrogate failed recovery limits.

Data File: /chem/MSD6.i/s032110.b/s6c2126.d  
 Date : 22-MAR-2010 01:18  
 Client ID: RE36-10-846MS  
 Sample Info: 1202066183196313311SVN11MS  
 Volume Injected (uL): 0.5  
 Column Phase: 3M DB-SMS

Instrument: MSD6.i  
 Operator: nag1  
 Column diameter: 0.20



GEL Laboratories LLC

Data file : /chem/MSD6.i/s032110.b/s6c2127.d  
 Lab Smp Id: 1202066184 Client Smp ID: RE36-10-8466MSD  
 Inj Date : 22-MAR-2010 01:42  
 Operator : nagl Inst ID: MSD6.i  
 Smp Info : |1202066184|963133|1|SVM|1|MSD  
 Misc Info : |MSD8270\_S|WBN100319-01  
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
 Method : /chem/MSD6.i/s032110.b/MSD6-M8270C-AQA-031610.m  
 Meth Date : 23-Mar-2010 10:53 nat00999 Quant Type: ISTD  
 Cal Date : 17-MAR-2010 04:51 Cal File: s6c1646.d  
 Als bottle: 24 QC Sample: MSD  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: 10-2202.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	30.03000	weight of sample
M	12.38630	% 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	3.822	3.822	(1.000)	391553		40.0000	
* 29 Naphthalene-d8	136	4.692	4.687	(1.000)	1498428		40.0000	
* 46 Acenaphthene-d10	164	5.939	5.934	(1.000)	896237		40.0000	
* 67 Phenanthrene-d10	188	7.104	7.093	(1.000)	1588885		40.0000	
* 91 Chrysene-d12	240	9.498	9.486	(1.000)	1235314		40.0000	
* 98 Perylene-d12	264	11.092	11.075	(1.000)	636926		40.0000	
\$ 3 2-Fluorophenol	112	3.022	3.005	(0.791)	427215		39.2488	1490
\$ 5 Phenol-d5	99	3.546	3.534	(0.928)	515828		37.2639	1420
\$ 20 Nitrobenzene-d5	82	4.187	4.181	(0.892)	239114		16.6932	634
\$ 39 2-Fluorobiphenyl	172	5.434	5.422	(0.915)	448458		19.3943	737
\$ 60 2,4,6-Tribromophenol	329	6.534	6.522	(1.100)	113826		45.2595	1720
\$ 81 p-Terphenyl-d14	244	8.475	8.463	(0.892)	477817		22.1968	844

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
6 Phenol	94	3.557	3.546	(0.931)	281360	20.0789	763
8 2-Chlorophenol	128	3.693	3.681	(0.966)	231715	20.3320	773
11 1,4-Dichlorobenzene	146	3.834	3.834	(1.003)	167663	13.7529	523
17 N-Nitrosodipropylamine	70	4.063	4.063	(1.063)	174778	18.2812	695 (Q)
28 1,2,4-Trichlorobenzene	180	4.640	4.634	(0.989)	194314	17.9455	682
33 4-Chloro-3-methylphenol	107	5.045	5.028	(1.075)	209404	20.3746	774
47 Acenaphthene	154	5.963	5.957	(1.004)	387535	16.6656	633
50 2,4-Dinitrotoluene	165	6.057	6.051	(1.020)	161862	20.2652	770
52 4-Nitrophenol	139	5.998	5.975	(1.010)	76565	17.7644	675
65 Pentachlorophenol	266	6.934	6.916	(0.976)	85024	22.7785	866
79 Pyrene	202	8.369	8.357	(0.881)	714633	18.9770	721
2 Pyridine	79	2.381	2.340	(0.623)	91916	8.49567	323 (aR)
4 Aniline	66	3.634	3.604	(0.951)	61350	9.36129	356 (aQ)
7 bis(2-Chloroethyl) ether	63	3.622	3.622	(0.948)	159240	15.2832	581 (Q)
9 1,3-Dichlorobenzene	146	3.787	3.787	(0.991)	175780	14.0007	532
13 1,2-Dichlorobenzene	146	3.940	3.934	(1.031)	175880	15.9158	605
14 bis(2-Chloroisopropyl)ether	45	3.969	3.963	(1.038)	312069	14.2505	542 (Q)
15 o-Cresol	107	3.951	3.940	(1.034)	274614	31.5965	1200 (Q)
18 m,p-Cresols	107	4.045	4.040	(1.058)	262774	20.9897	798
19 Hexachloroethane	117	4.163	4.163	(1.089)	55617	10.5673	402 (R)
21 Nitrobenzene	77	4.198	4.199	(0.895)	242621	18.3574	698
22 Isophorone	82	4.351	4.352	(0.927)	474596	18.7134	711
23 2-Nitrophenol	139	4.416	4.410	(0.941)	120064	20.9591	797
24 2,4-Dimethylphenol	122	4.416	4.404	(0.941)	262846	21.7448	826 (Q)
25 bis(2-Chloroethoxy)methane	93	4.475	4.469	(0.954)	262572	19.0436	724
26 2,4-Dichlorophenol	162	4.581	4.569	(0.976)	189243	20.0052	760
27 Benzoic acid	105	4.475	4.463	(0.954)	365071	51.9667	1980 (Q)
30 Naphthalene	128	4.704	4.699	(1.002)	604998	16.3985	623 (Q)
31 4-Chloroaniline	127	4.710	4.716	(1.004)	106758	6.55950	249 (aR)
32 Hexachlorobutadiene	225	4.769	4.763	(1.016)	105456	17.1584	652
34 2-Methylnaphthalene	142	5.187	5.181	(1.105)	410202	18.0803	687
36 Hexachlorocyclopentadiene	237	5.287	5.281	(0.890)	58386	11.3615	432 (R)
37 2,4,6-Trichlorophenol	196	5.375	5.369	(0.905)	162979	21.7301	826
38 2,4,5-Trichlorophenol	196	5.410	5.393	(0.911)	166656	20.9727	797
40 2-Chloronaphthalene	162	5.540	5.528	(0.933)	406653	18.6405	708
42 o-Nitroaniline	65	5.598	5.587	(0.943)	127925	16.6936	634
41 m-Nitroaniline	138	5.892	5.887	(0.992)	80598	14.1569	538 (R)
43 Dimethylphthalate	163	5.704	5.704	(0.960)	576454	22.7672	865
44 2,6-Dinitrotoluene	165	5.763	5.757	(0.970)	123244	20.3289	773
45 Acenaphthylene	152	5.839	5.834	(0.983)	667663	19.3174	734
48 2,4-Dinitrophenol	184	5.963	5.957	(1.004)	46944	24.7177	939 (Q)
49 Dibenzofuran	168	6.087	6.081	(1.025)	594169	21.0348	799
51 Diethylphthalate	149	6.210	6.204	(1.046)	537350	21.6500	823
53 Fluorene	166	6.345	6.340	(1.068)	463259	18.4967	703
54 4-Chlorophenylphenylether	204	6.328	6.316	(1.065)	260935	21.7186	825
55 2-Methyl-4,6-dinitrophenol	198	6.363	6.357	(0.896)	70904	21.4950	817
56 p-Nitroaniline	138	6.345	6.340	(1.068)	95489	20.4553	777



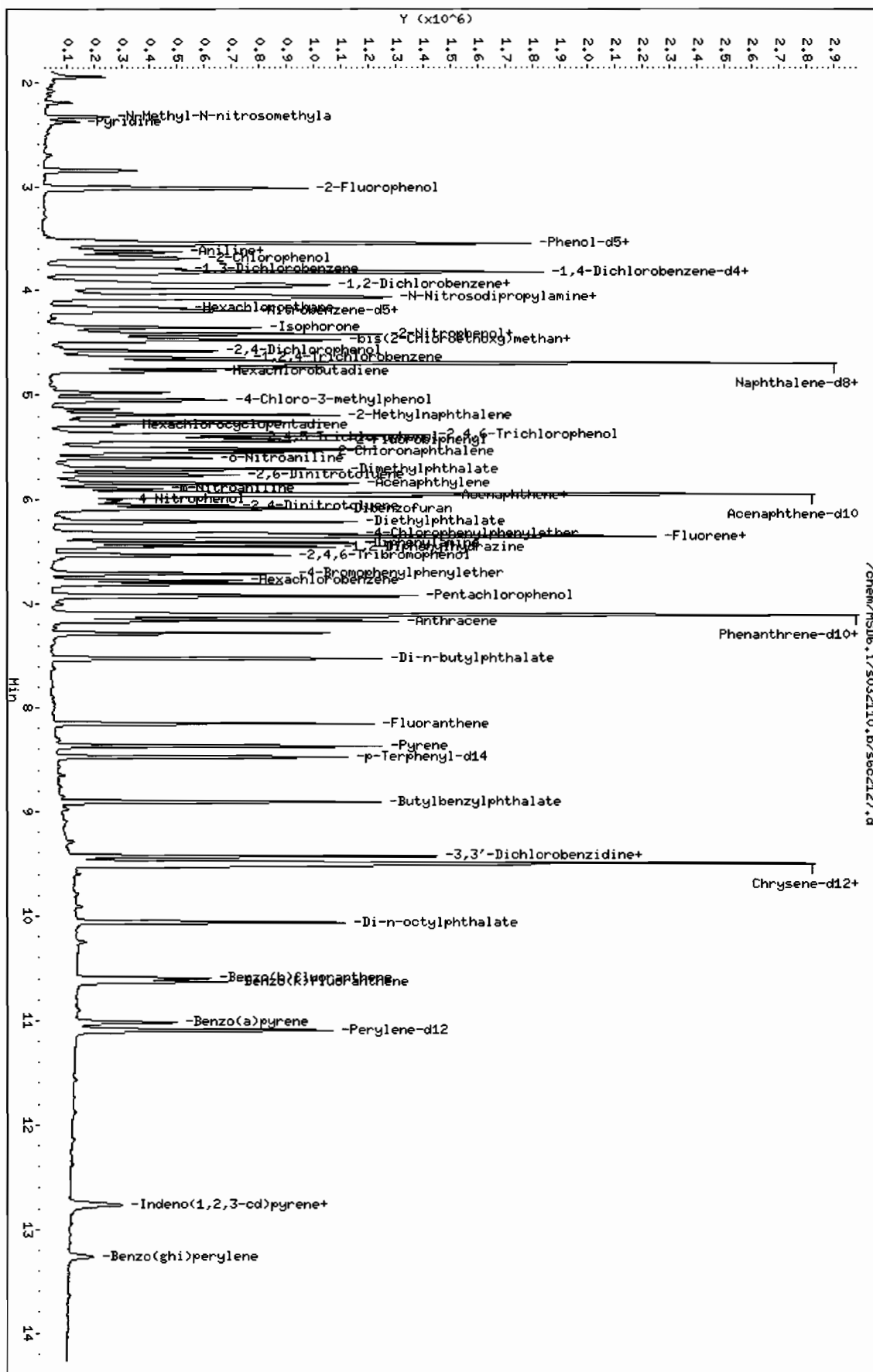
Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
133 Diphenylamine	169	6.416	6.404	(0.903)	385462	18.6968	711
58 1,2-Diphenylhydrazine	77	6.451	6.440	(0.908)	492994	17.7893	676
61 4-Bromophenylphenylether	248	6.710	6.704	(0.945)	141952	20.5760	782
63 Hexachlorobenzene	284	6.775	6.769	(0.954)	113641	17.2391	655(R)
68 Phenanthrene	178	7.122	7.110	(1.002)	687486	17.7574	675
69 Anthracene	178	7.163	7.151	(1.008)	713779	18.3007	696
72 Di-n-butylphthalate	149	7.528	7.516	(1.060)	836234	18.5388	705(R)
76 Fluoranthene	202	8.151	8.139	(1.147)	702111	17.8826	680
85 Butylbenzylphthalate	149	8.904	8.892	(0.937)	355016	19.4847	740
89 Benzo(a)anthracene	228	9.486	9.475	(0.999)	549951	17.0496	648
90 3,3'-Dichlorobenzidine	252	9.439	9.433	(0.994)	90489	9.71114	369(aR)
92 Chrysene	228	9.522	9.510	(1.002)	544803	17.6828	672
93 bis(2-Ethylhexyl)phthalate	149	9.427	9.416	(0.993)	446743	18.3436	697(R)
94 Di-n-octylphthalate	149	10.063	10.045	(0.907)	676798	27.7692	1060
95 Benzo(b)fluoranthene	252	10.598	10.586	(0.955)	331144	19.1241	727
96 Benzo(k)fluoranthene	252	10.633	10.622	(0.959)	368645	22.1911	843
97 Benzo(a)pyrene	252	11.016	11.004	(0.993)	254793	17.3744	660
99 Indeno(1,2,3-cd)pyrene	276	12.757	12.733	(1.150)	138062	10.2597	390(R)
100 Dibenzo(a,h)anthracene	278	12.774	12.751	(1.152)	124469	11.4840	436(R)
101 Benzo(ghi)perylene	276	13.263	13.245	(1.196)	94984	8.26654	314(R)
1 N-Methyl-N-nitrosomethylamine	74	2.340	2.310	(0.612)	119394	15.7264	598

#### QC Flag Legend

- a - Target compound detected but, quantitated amount  
Below Limit Of Quantitation(BLOQ).
- Q - Qualifier signal failed the ratio test.
- R - Spike/Surrogate failed recovery limits.

Data File: /chem/MSD6.i/s032110.b/s6c2127.d  
 Date : 22-MAR-2010 01:42  
 Client ID: RE36-10-846MSD  
 Sample Info: 1120206184196313311SVH11MSD  
 Volume Injected (uL): 0.5  
 Column phase: J&W DB-5MS

Instrument: MSD6.i  
 Operator: nag1  
 Column diameter: 0.20



# LC/MS/MS EXPLOSIVES ANALYSIS

**LC/MS/MS Case Narrative  
Los Alamos National Laboratory (LANL)  
SDG 10-2199**

**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: 961033

Prep Batch Number: 961016

**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>
248519001	RE36-10-8288
248519002	RE36-10-8279
248519003	RE36-10-8277
248519004	RE36-10-8280
248519005	RE36-10-8278
248519006	RE36-10-8274
248519007	RE36-10-8291
248519008	RE36-10-8287
248519009	RE36-10-8273
248519010	RE36-10-8275
248519011	RE36-10-8276
1202061319	Method Blank (MB)
1202061320	Laboratory Control Sample (LCS)
1202061321	248526001(RE36-10-8466) Matrix Spike (MS)
1202061322	248526001(RE36-10-8466) Matrix Spike Duplicate (MSD)

**Preparation/Analytical Method Verification**

**SOP Reference**

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

## **Primary Analyte Analysis**

### **Calibration Information**

#### **Initial Calibration**

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

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

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

#### **Calibration Blank Requirements**

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

#### **CRI Requirements**

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

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

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

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

#### **Surrogate Recoveries**

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

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

The LCS did not meet acceptance criteria for the recovery of multiple spiked analytes. Please refer to Form 3 of the data package for a list of recoveries. The MS and MSD had passing recoveries for these analytes. The data are reported. Please see data exception report 822434.

#### **QC Sample Designation**

Client sample 248526001 (RE36-10-8466) from SDG 10-2202 was chosen for matrix spike and matrix spike duplicate analysis. Please see the raw data in the Miscellaneous Section.

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

The MS 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 in this SDG.

## **Technical Information**

### **Holding Time Specifications**

Samples 248519005 (RE36-10-8278), 248519006 (RE36-10-8274), 248519007 (RE36-10-8291), 248519008 (RE36-10-8287), 248519009 (RE36-10-8273), 248519010 (RE36-10-8275) and 248519011 (RE36-10-8276) were analyzed out of holding for the Primary analyte analysis. The analytical holding times for the samples in this batch were exceeded due to limitations of instrument capacity. However, these samples were analyzed within two times the analytical holding time of the method. The client was notified of this situation and is in agreement to receive these qualified data. The data are reported. Please see data exception report 822434. 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 248519005 (RE36-10-8278), 248519006 (RE36-10-8274), 248519007 (RE36-10-8291), 248519008 (RE36-10-8287), 248519009 (RE36-10-8273), 248519010 (RE36-10-8275) and 248519011 (RE36-10-8276) were re-analyzed for failing Internal Standard Recoveries in the CRI in the initial analyses. The re-analysis passed acceptance criteria and is reported.

### **Secondary Analyte Analysis**

## **Calibration Information**

### **Initial Calibration**

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

### **Calibration Verification Standard Requirements**

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

### **Calibration Blank Requirements**

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

### **CRI Requirements**

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

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

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

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

**Surrogate Recoveries**

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

**Laboratory Control Sample (LCS) Recovery**

The LCS spike recoveries were within the established acceptance limits.

**QC Sample Designation**

Client sample 248526001 (RE36-10-8466) from SDG 10-2202 was chosen for matrix spike and matrix spike duplicate analysis. Please see the raw data in the Miscellaneous Section.

**Matrix Spike (MS) Recovery Statement**

The MS recovered TATB at 161%. The limits are 29-155%. The LCS and the MSD had passing criteria for TATB. TATB was not detected in the parent sample. The data are considered unaffected and are reported. Please see data exception report 822434.

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

The MSD spike recoveries were within the established acceptance limits.

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

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

**Internal Standard (ISTD) Acceptance**

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

**Technical Information****Holding Time Specifications**

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

**Preparation/Analytical Method Verification**

All procedures were performed as stated in the SOP.

**Sample Dilutions**

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

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

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

### **Miscellaneous Information**

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

Data exception report 822434 was generated for this SDG.

The LCS did not meet acceptance criteria for the recovery of multiple spiked analytes. Please refer to Form 3 of the data package for a list of recoveries. The MS and MSD had passing recoveries for these analytes. The data are reported.

The MS recovered TATB at 161%. The limits are 29-155%. The LCS and the MSD had passing criteria for TATB. TATB was not detected in the parent sample. The data are considered unaffected and are reported.

Samples 248519005 (RE36-10-8278), 248519006 (RE36-10-8274), 248519007 (RE36-10-8291), 248519008 (RE36-10-8287), 248519009 (RE36-10-8273), 248519010 (RE36-10-8275) and 248519011 (RE36-10-8276) were analyzed out of holding for the Primary analyte analysis. The analytical holding times for the samples in this batch were exceeded due to limitations of instrument capacity. However, these samples were analyzed within two times the analytical holding time of the method. The client was notified of this situation and is in agreement to receive these qualified data. 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: Heidi K. Maurer Date: 04/30/10

# SAMPLE DATA SUMMARY

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-8288

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 248519001

Sample Amount 2

Moisture: 16.4

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0415072.wiff

Date Analyzed: 16-APR-10 16:50

Units: ug/kg

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

\*Concentration =

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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-8288

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 248519001

Sample Amount 2

Moisture: 16.4

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04090054.wiff

Date Analyzed: 09-APR-10 21:07

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: RE36-10-8279

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 248519002

Sample Amount 2

Moisture: 7.1

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0415073.wiff

Date Analyzed: 16-APR-10 17:17

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: RE36-10-8279

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 248519002

Sample Amount 2

Moisture: 7.1

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04090055.wiff

Date Analyzed: 09-APR-10 21:23

Units: ug/kg

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

\*Concentration =

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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-8277

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 248519003

Sample Amount 2

Moisture: 25.4

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0415074.wiff

Date Analyzed: 16-APR-10 17:43

Units: ug/kg

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

\*Concentration =

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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-8277

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 248519003

Sample Amount 2

Moisture: 25.4

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04090056.wiff

Date Analyzed: 09-APR-10 21:38

Units: ug/kg

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

\*Concentration =

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



1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-8280

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 248519004

Sample Amount 2

Moisture: 9.5

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0415075.wiff

Date Analyzed: 16-APR-10 18:08

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: RE36-10-8280

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 248519004

Sample Amount 2

Moisture: 9.5

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04090057.wiff

Date Analyzed: 09-APR-10 21:54

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: RE36-10-8278

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 248519005

Sample Amount 2

Moisture: 6.4

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0420013.wiff

Date Analyzed: 20-APR-10 19:30

Units: ug/kg

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

\*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: RE36-10-8278

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 248519005

Sample Amount 2

Moisture: 6.4

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04090058.wiff

Date Analyzed: 09-APR-10 22:10

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 Amoun</u>		Factor

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-8274

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 248519006

Sample Amount 2

Moisture: 10.2

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0420014.wiff

Date Analyzed: 20-APR-10 19:56

Units: ug/kg

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

\*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: RE36-10-8274

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 248519006

Sample Amount 2

Moisture: 10.2

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04090059.wiff

Date Analyzed: 09-APR-10 22:25

Units: ug/kg

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

\*Concentration =

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

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-8291

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 248519007

Sample Amount 2

Moisture: 28.9

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0420015.wiff

Date Analyzed: 20-APR-10 20:22

Units: ug/kg

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

\*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: RE36-10-8291

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 248519007

Sample Amount 2

Moisture: 28.9

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04090060.wiff

Date Analyzed: 09-APR-10 22:41

Units: ug/kg

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

\*Concentration =

Instrument 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: RE36-10-8287

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 248519008

Sample Amount 2

Moisture: 32.9

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0420016.wiff

Date Analyzed: 20-APR-10 20:48

Units: ug/kg

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

\*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: RE36-10-8287

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 248519008

Sample Amount 2

Moisture: 32.9

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04090061.wiff

Date Analyzed: 09-APR-10 22:57

Units: ug/kg

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

\*Concentration =

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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-8273

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 248519009

Sample Amount 2

Moisture: 29.0

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0420017.wiff

Date Analyzed: 20-APR-10 21:13

Units: ug/kg

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

\*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: RE36-10-8273

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 248519009

Sample Amount 2

Moisture: 29.0

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04090062.wiff

Date Analyzed: 09-APR-10 23:12

Units: ug/kg

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

\*Concentration =

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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-8275

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 248519010

Sample Amount 2

Moisture: 40.1

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0420018.wiff

Date Analyzed: 20-APR-10 21:39

Units: ug/kg

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

\*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: RE36-10-8275

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 248519010

Sample Amount 2

Moisture: 40.1

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04090066.wiff

Date Analyzed: 10-APR-10 00:15

Units: ug/kg

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

\*Concentration =

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

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-8276

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 248519011

Sample Amount 2

Moisture: 14.6

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0420019.wiff

Date Analyzed: 20-APR-10 22:05

Units: ug/kg

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

\*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: RE36-10-8276

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 248519011

Sample Amount 2

Moisture: 14.6

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04090067.wiff

Date Analyzed: 10-APR-10 00:31

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



# QUALITY CONTROL SUMMARY

# High Explosives Surrogate Recovery Summary

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2199

Lab Code: GEL

HPLC Column: Phenomenex Ultracarb 5u ODS(20)

Lab Sample ID	Client Sample ID	DNT	QC Limits	Flg
248519001	RE36-10-8288	88.8	70 - 144	
248519001	RE36-10-8288	101	70 - 144	
248519002	RE36-10-8279	99.2	70 - 144	
248519002	RE36-10-8279	102	70 - 144	
248519003	RE36-10-8277	91.6	70 - 144	
248519003	RE36-10-8277	105	70 - 144	
248519004	RE36-10-8280	104	70 - 144	
248519004	RE36-10-8280	105	70 - 144	
248519005	RE36-10-8278	97.2	70 - 144	
248519005	RE36-10-8278	98.8	70 - 144	
248519006	RE36-10-8274	96.8	70 - 144	
248519006	RE36-10-8274	98.4	70 - 144	
248519007	RE36-10-8291	102	70 - 144	
248519007	RE36-10-8291	109	70 - 144	
248519008	RE36-10-8287	90	70 - 144	
248519008	RE36-10-8287	94.4	70 - 144	
248519009	RE36-10-8273	99.6	70 - 144	
248519009	RE36-10-8273	93.6	70 - 144	
248519010	RE36-10-8275	100	70 - 144	
248519010	RE36-10-8275	97.6	70 - 144	
248519011	RE36-10-8276	96.4	70 - 144	
248519011	RE36-10-8276	91.2	70 - 144	
1202061319	MB for batch 961016	104	70 - 144	
1202061319	MB for batch 961016	108	70 - 144	
1202061320	LCS for batch 961016	83.6	70 - 144	
1202061320	LCS for batch 961016	99.2	70 - 144	

DNT = 3,4-Dinitrotoluene

3B  
High Explosives LCS/LCS Duplicate Summary

Lab Name: GEL Laboratories LLC

Client ID: LCS

Lab Code: GEL

GEL Job No (SDG) 10-2199

Extract Batch Code: 961016

Date Extracted: 10-MAR-10

GEL LCS ID: 1202061320

GEL LCSDUP ID:

Analysis Date/Time: 16-APR-10 14:41

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	3530	70.6								69 - 126
2,4,6-Trinitrotoluene	5000	4030	80.6								73 - 149
2,4-Dinitrotoluene	5000	4770	95.4								87 - 137
2,6-Dinitrotoluene	5000	4230	84.6	*							89 - 120
2-Amino-4,6-dinitrotoluene	5000	4000	80	*							90 - 130
4-Amino-2,6-dinitrotoluene	5000	3920	78.4	*							84 - 130
HMX	5000	4990	99.8								58 - 138
Nitrobenzene	5000	4530	90.6								71 - 122
PETN	5000	5320	106								64 - 137
RDX	5000	6110	122								81 - 137
Tetryl	5000	204	4.08	*							51 - 112
m-Dinitrobenzene	5000	5290	106								83 - 122
m-Nitrotoluene	5000	4880	97.6								73 - 118
o-Nitrotoluene	5000	5170	103								72 - 119
p-Nitrotoluene	5000	4920	98.4								67 - 131

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

\* Values outside of QC limits

**3B**  
**High Explosives LCS/LCS Duplicate Summary**

Lab Name: GEL Laboratories LLC

Client ID: LCS

Lab Code: GEL

GEL Job No (SDG) 10-2199

Extract Batch Code: 961016

Date Extracted: 10-MAR-10

GEL LCS ID: 1202061320

GEL LCSDUP ID:

Analysis Date/Time: 09-APR-10 19:01

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
2,6-Diamino-4-nitrotoluene	5000	5090	102					64 - 122
3,5-Dinitroaniline	5000	4980	99.6					70 - 127
TATB	5000	4710	94.2					28 - 162
2,4-Diamino-6-nitrotoluene	5000	4790	95.8					52 - 114
tris(o-cresyl) phosphate	5000	4920	98.4					84 - 119

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

\* Values outside of QC limits

# High Explosives MS/MSD Summary

Lab Name: GEL Laboratories LLC

Client ID: RE36-10-8466

Lab Code: GEL

GEL Job No (SDG) 10-2199

Extract Batch Code: 961016

Date Extracted: 10-MAR-10

GEL Spike ID: 1202061321

GEL SpikeDup ID: 1202061322

Analysis Date/Time: 20-APR-10 22:57

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
m-Nitrotoluene	5000	0	4210	84.2	4500	90	6.66	30	70 - 120
2,6-Dinitrotoluene	5000	13.4	4930	98.3	4920	98.1	.203	30	90 - 118
4-Amino-2,6-dinitrotoluene	5000	0	5710	114	5680	114	.527	30	72 - 143
Nitrobenzene	5000	0	4510	90.2	4660	93.2	3.27	30	70 - 122
m-Dinitrobenzene	5000	2.76	5350	107	4930	98.5	8.17	30	85 - 118
Tetryl	5000	0	5010	100	4160	83.2	18.5	30	36 - 124
RDX	5000	0	5880	118	4980	99.6	16.6	30	59 - 152
PETN	5000	0	5400	108	5020	100	7.29	30	60 - 140
HMX	5000	0	4820	96.4	5020	100	4.07	30	51 - 144
2-Amino-4,6-dinitrotoluene	5000	0	5360	107	5350	107	.187	30	85 - 137
2,4-Dinitrotoluene	5000	0	5500	110	5010	100	9.32	30	86 - 135
o-Nitrotoluene	5000	0	4710	94.2	4680	93.6	.639	30	69 - 123
1,3,5-Trinitrobenzene	5000	0	5520	110	5010	100	9.69	30	50 - 140
2,4,6-Trinitrotoluene	5000	0	5190	104	4810	96.2	7.6	30	76 - 144
p-Nitrotoluene	5000	0	4360	87.2	4640	92.8	6.22	30	65 - 133

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

3  
High Explosives MS/MSD Summary

Lab Name: GEL Laboratories LLC

Client ID: RE36-10-8466

Lab Code: GEL

GEL Job No (SDG) 10-2199

Extract Batch Code: 961016

Date Extracted: 10-MAR-10

GEL Spike ID: 1202061321

GEL SpikeDup ID: 1202061322

Analysis Date/Time: 10-APR-10 01:02

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	4070	81.4	3670	73.4	10.3	26	34 - 135
2,6-Diamino-4-nitrotoluene	5000	0	4340	86.8	4330	86.6	.231	30	55 - 130
TATB	5000	0	8040	161 *	7080	142	12.7	30	29 - 155
3,5-Dinitroaniline	5000	0	4040	80.8	4330	86.6	6.93	30	73 - 129
tris(o-cresyl) phosphate	5000	0	5170	103	5100	102	1.36	30	72 - 127

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

Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2199

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 15-APR-10 10:07

GEL Data File: EXP0415001.wiff

Instrument ID: LCMSMS

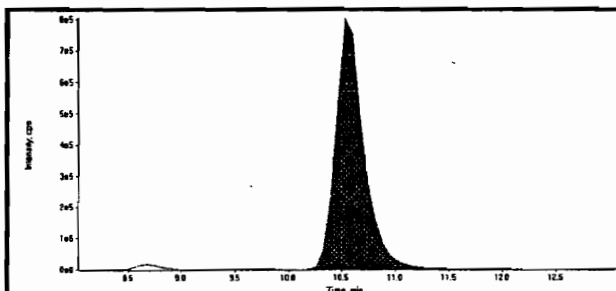
Column: Phenomenex Ultracarb 5u ODS(20)

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

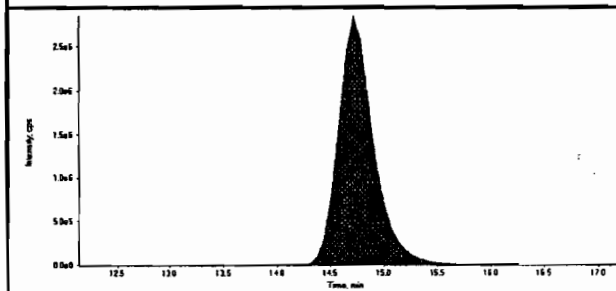
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

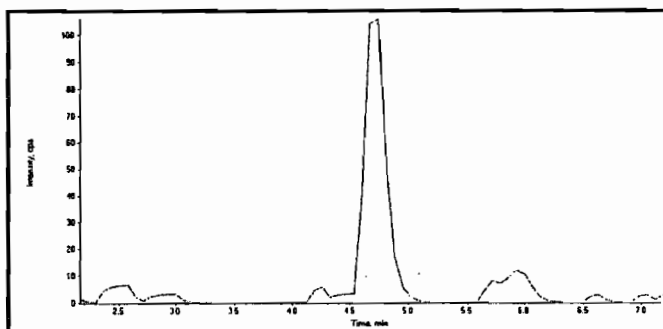
Data File	EXP0415001.wiff	Acquisition Date	4/15/2010 10:07:41 AM
Sample Name	XIBLK01	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown



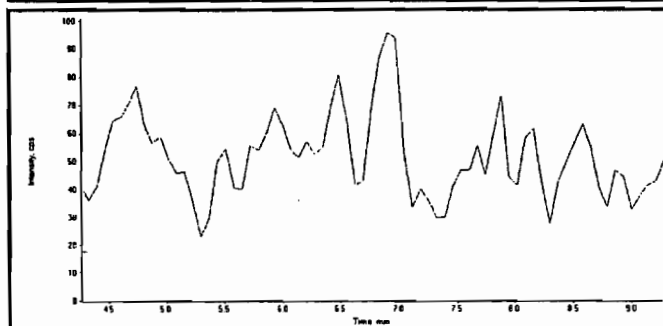
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.50
Actual RT:	10.50
Area Counts:	14900000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.60
Actual RT:	14.70
Area Counts:	66100000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.67
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.77
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

*lar*  
*4/23/10* *dlm*  
*04/23/10*



GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415001.wiff	<b>Acquisition Date</b>	4/15/2010 10:07:41 AM
<b>Sample Name</b>	XIBLK01	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	Expected RT:	9.00
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	Expected RT:	10.7
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	Expected RT:	10.7
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

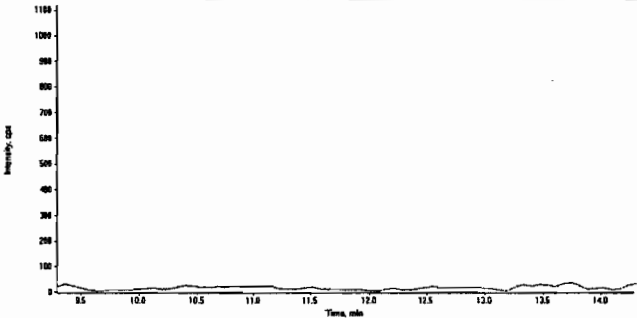
	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	Expected RT:	13.1
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

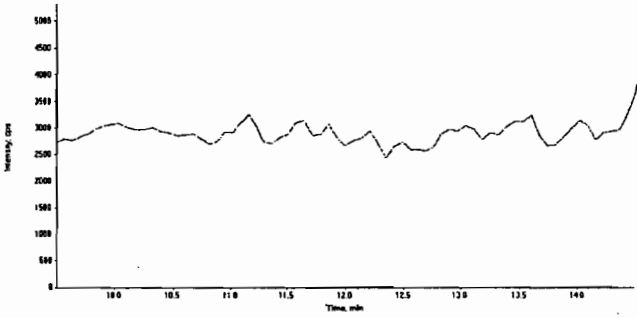
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<b>Sample Name</b>	XIBLK01	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

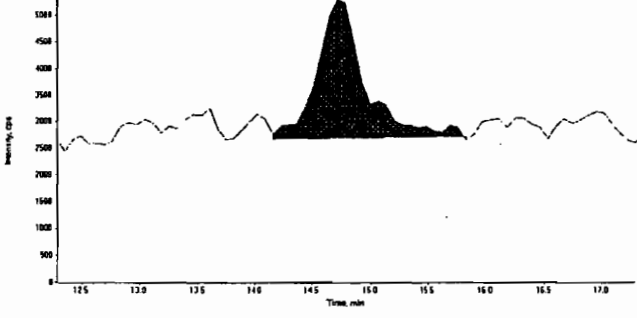
  

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	<b>Expected RT:</b>	11.8
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

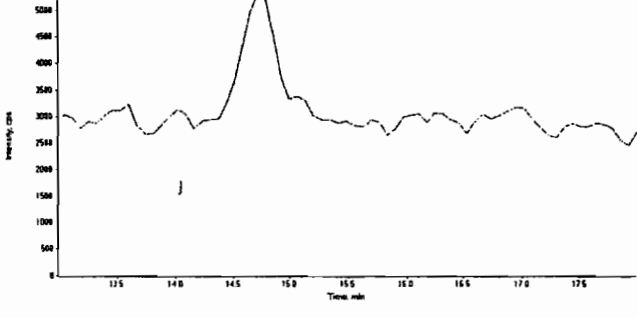
  

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	<b>Expected RT:</b>	12.0
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	<b>Expected RT:</b>	14.8
	<b>Actual RT:</b>	14.7
	<b>Area Counts:</b>	7.61e+004
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

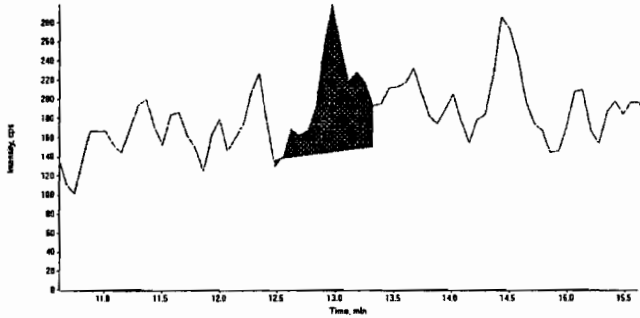
	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	<b>Expected RT:</b>	15.5
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

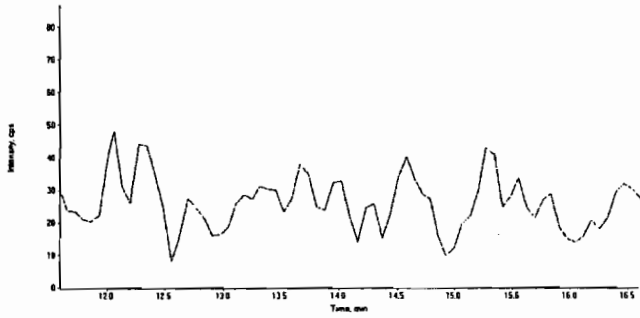
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415001.wiff	<b>Acquisition Date</b>	4/15/2010 10:07:41 AM
<b>Sample Name</b>	XIBLK01	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

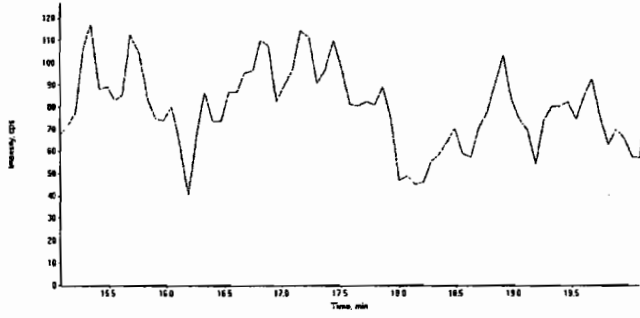
  

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.1
	Actual RT:	13.0
	Area Counts:	3.16e+003
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

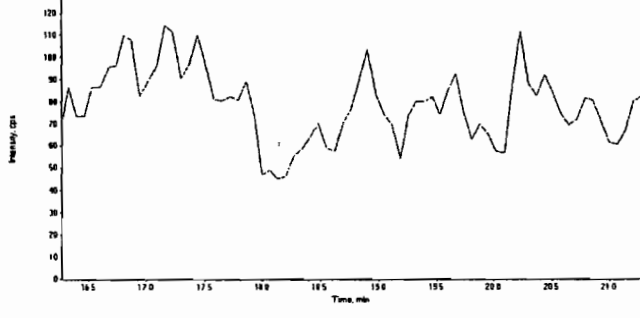
  

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.1
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	17.6
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	18.8
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415001.wiff	<b>Acquisition Date</b>	4/15/2010 10:07:41 AM
<b>Sample Name</b>	XIBLK01	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	20.1
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	<b>Expected RT:</b>	19.7
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2199

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 15-APR-10 10:33

GEL Data File: EXP0415002.wiff

Instrument ID: LCMSMS

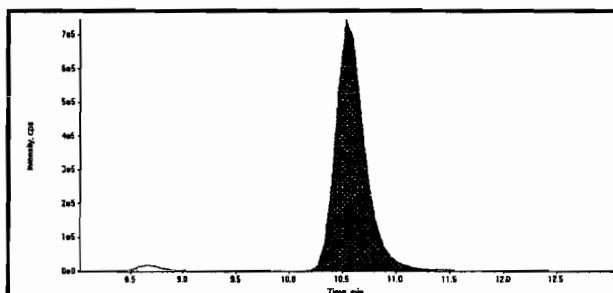
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
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

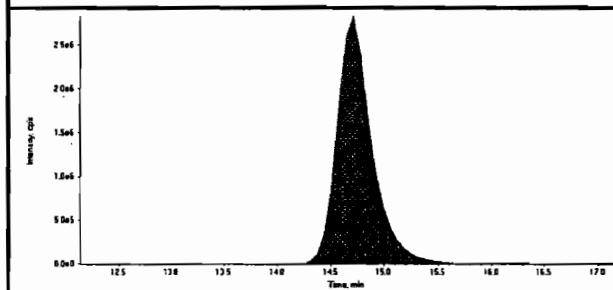
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

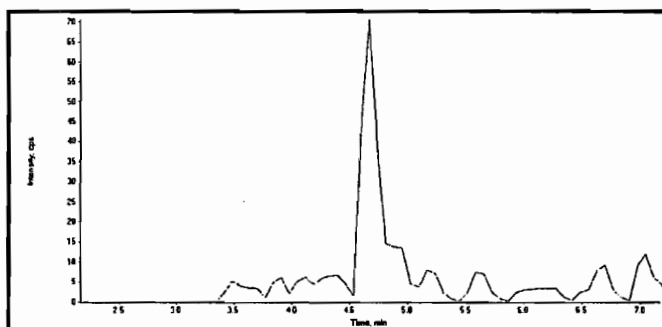
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Sample Name	XIBLK01	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown



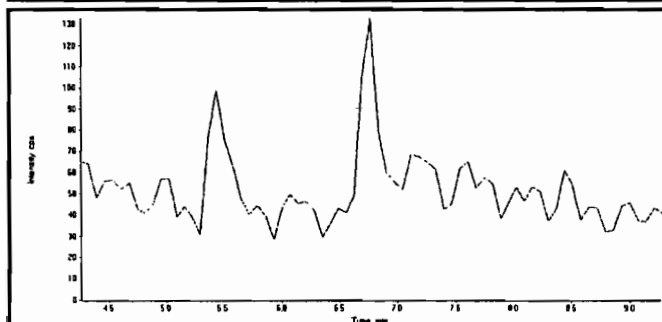
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.50
Actual RT:	10.50
Area Counts:	14400000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.60
Actual RT:	14.70
Area Counts:	65600000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.67
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.77
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

*Handwritten signature: JER 4/23/10*

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

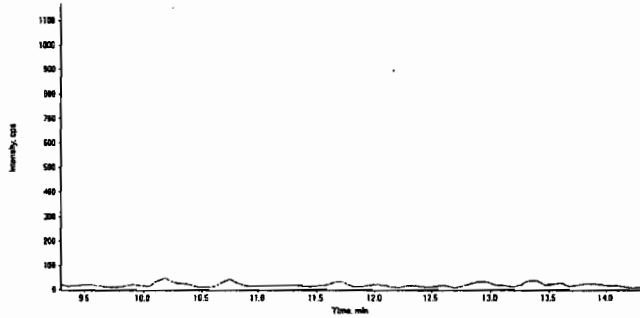
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Sample Name		XIBLK01		Acquisition Method		8321.dam	
Batch Dilution Analyst		1 LER		Result Table		041510.rdb	
Procedure Code		LCMSEXP_B		Sample Type		Unknown	
				Compound Name:		135-Trinitrobenzene (213.0/182.8 amu)	
				Expected RT:		9.00	
				Actual RT:		0.00	
				Area Counts:		0.00e+000	
				Manual Modification		No	
				Amount:		N/A (ng/mL)	
				% Accuracy:		N/A	
				Compound Name:		13-Dinitrobenzene (168.0/137.9 amu)	
				Expected RT:		10.7	
				Actual RT:		0.00	
				Area Counts:		0.00e+000	
				Manual Modification		No	
				Amount:		N/A (ng/mL)	
				% Accuracy:		N/A	
				Compound Name:		Tetryl (241.0/180.8 amu)	
				Expected RT:		10.7	
				Actual RT:		0.00	
				Area Counts:		0.00e+000	
				Manual Modification		No	
				Amount:		N/A (ng/mL)	
				% Accuracy:		N/A	
				Compound Name:		246-Trinitrotoluene (227.1/209.8 amu)	
				Expected RT:		13.1	
				Actual RT:		0.00	
				Area Counts:		0.00e+000	
				Manual Modification		No	
				Amount:		N/A (ng/mL)	
				% Accuracy:		N/A	

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

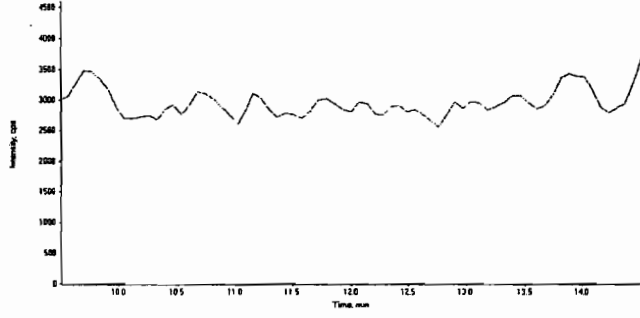
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415002.wiff	<b>Acquisition Date</b>	4/15/2010 10:33:25 AM
<b>Sample Name</b>	XIBLK01	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

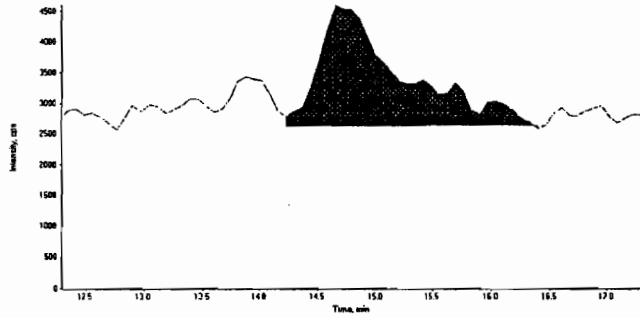
  

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	11.8
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

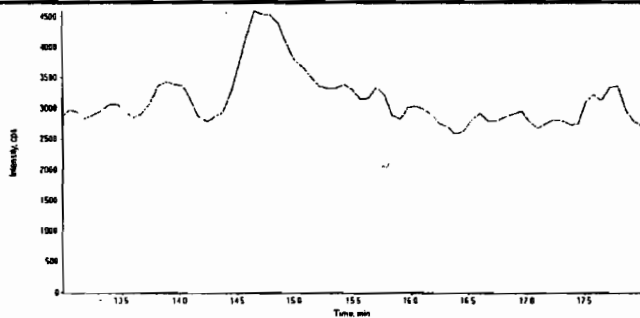
  

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.0
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	14.8
	Actual RT:	14.6
	Area Counts:	1.01e+005
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.5
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A



GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415002.wiff	<b>Acquisition Date</b>	4/15/2010 10:33:25 AM
<b>Sample Name</b>	XIBLK01	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	<b>Expected RT:</b>	13.1
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	<b>Expected RT:</b>	14.1
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	17.6
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

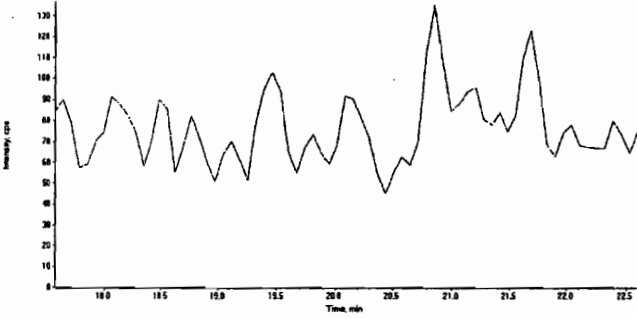
  

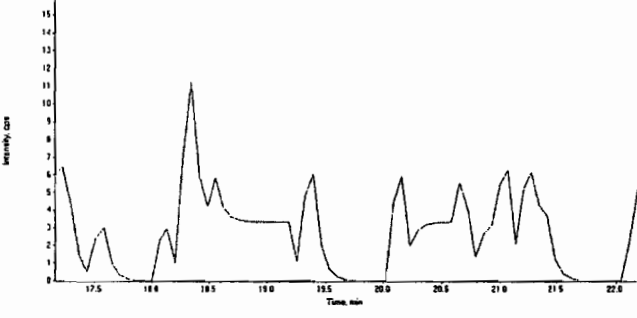
	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	18.8
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

Data File	EXP0415002.wiff	Acquisition Date	4/15/2010 10:33:25 AM
Sample Name	XIBLK01	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown

	Compound Name:	3-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	20.1
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	Compound Name:	PETN (361.1/62.0 amu)
	Expected RT:	19.7
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2199

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 20-APR-10 14:19

GEL Data File: EXP0420001.wiff

Instrument ID: LCMSMS

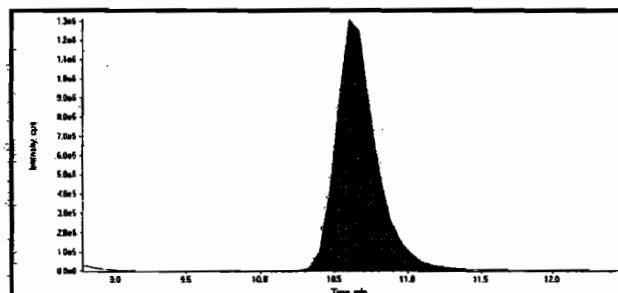
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	1.61
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	.257
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

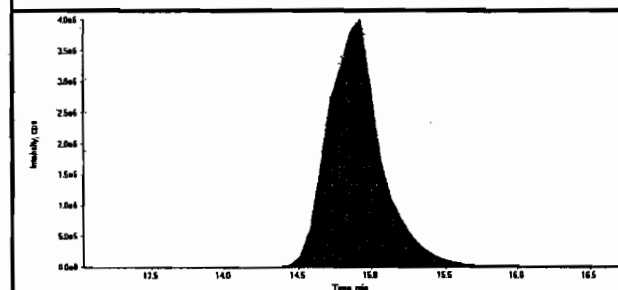
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

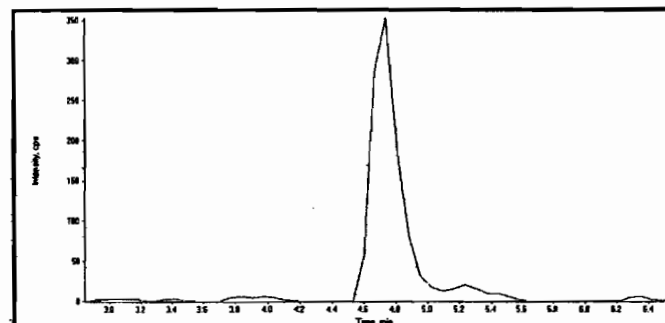
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Sample Name	XIBLK01	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	042010.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown



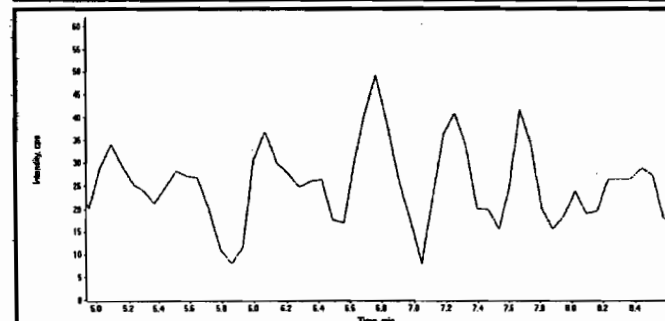
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.60
Actual RT:	10.60
Area Counts:	25300000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.90
Actual RT:	14.90
Area Counts:	102000000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.67
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.77
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

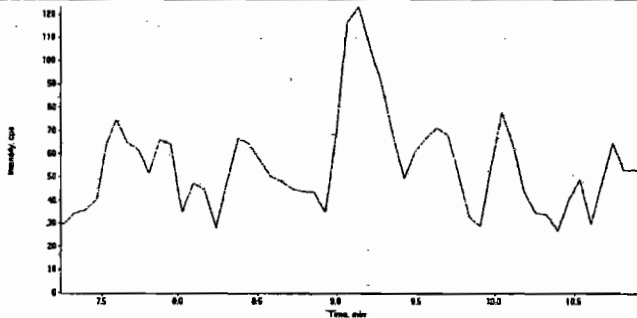
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HMX 04/29/10  
LER 4/28/10

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

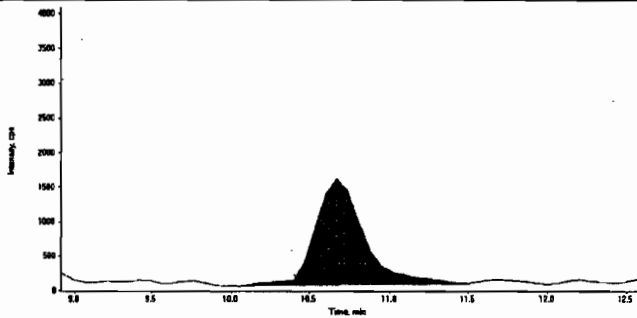
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LCMSMS#3

<b>Data File</b>	EXP0420001.wiff	<b>Acquisition Date</b>	4/20/2010 2:19:05 PM
<b>Sample Name</b>	XIBLK01	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	042010.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

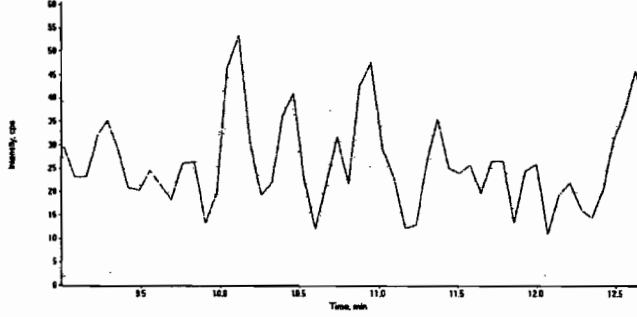
  

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	<b>Expected RT:</b>	9.07
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

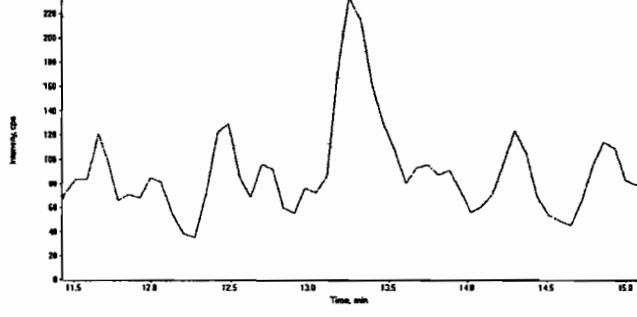
  

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	<b>Expected RT:</b>	10.7
	<b>Actual RT:</b>	10.7
	<b>Area Counts:</b>	3.35e+004
	<b>Manual Modification</b>	No
	<b>Amount:</b>	0.257 (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	<b>Expected RT:</b>	10.8
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

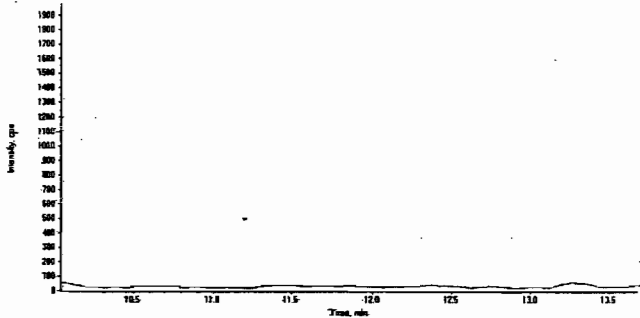
	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	<b>Expected RT:</b>	13.3
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

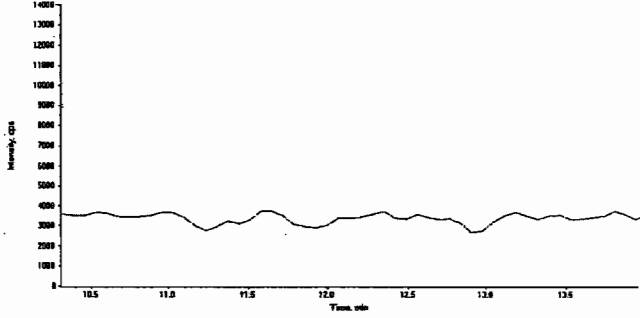
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LCMSMS#3

<b>Data File</b>	EXP0420001.wiff	<b>Acquisition Date</b>	4/20/2010 2:19:05 PM
<b>Sample Name</b>	XIBLK01	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	042010.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

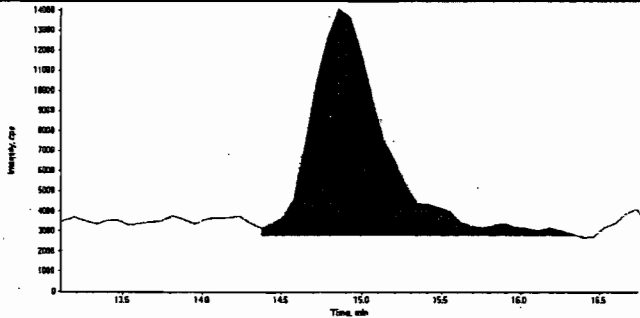
  

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	<b>Expected RT:</b>	11.9
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

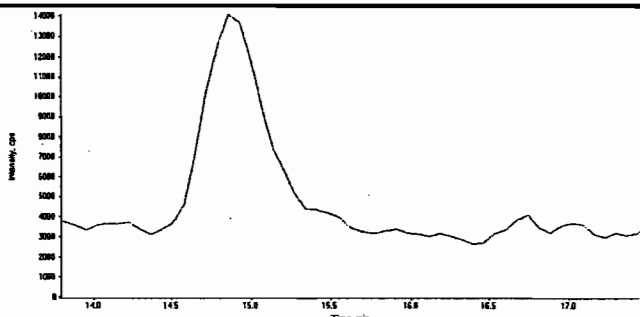
  

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	<b>Expected RT:</b>	12.1
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	<b>Expected RT:</b>	14.9
	<b>Actual RT:</b>	14.9
	<b>Area Counts:</b>	3.56e+005
	<b>Manual Modification</b>	No
	<b>Amount:</b>	1.61 (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	<b>Expected RT:</b>	15.6
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0420001.wiff	<b>Acquisition Date</b>	4/20/2010 2:19:05 PM
<b>Sample Name</b>	XIBLK01	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	042010.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.3
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.2
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	17.7
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	19.0
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0420001.wiff	<b>Acquisition Date</b>	4/20/2010 2:19:05 PM
<b>Sample Name</b>	XIBLK01	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	042010.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	20.4
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	<b>Expected RT:</b>	20.0
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A



Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2199

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 20-APR-10 14:44

GEL Data File: EXP0420002.wiff

Instrument ID: LCMSMS

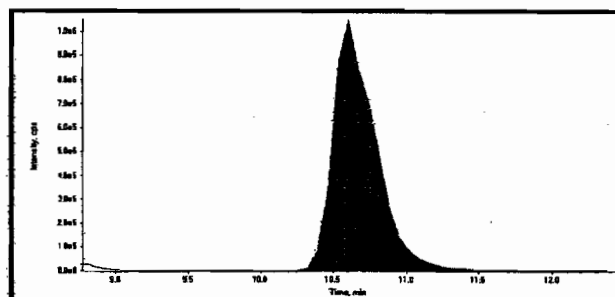
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	.765
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	.341
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0

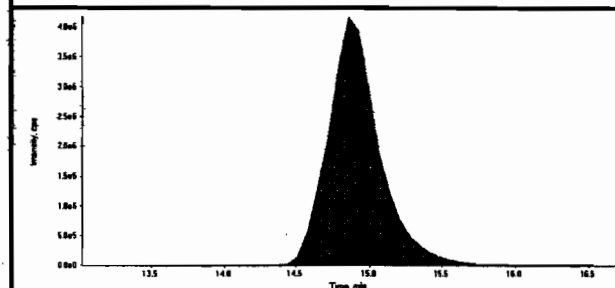
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321 A-Modified

Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

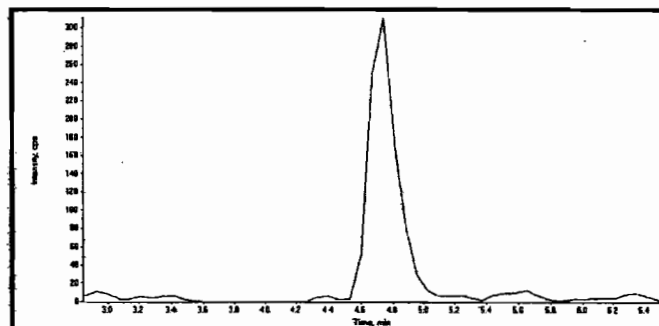
Data File	EXP0420002.wiff	Acquisition Date	4/20/2010 2:44:57 PM
Sample Name	XIBLK01	Acquisition Method	8321.dam
Batch/Dilution/Analyst	11/1/ER	Result Table	042010.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown



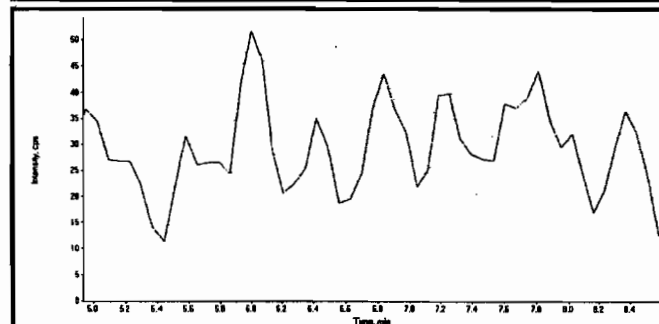
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.60
Actual RT:	10.60
Area Counts:	21100000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.90
Actual RT:	14.90
Area Counts:	101000000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.67
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	RDY (267.0/46.1 amu)
Expected RT:	6.77
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

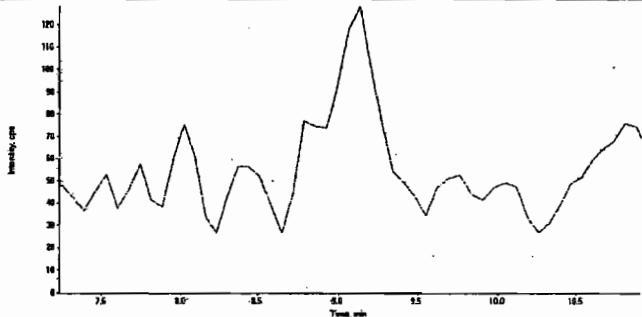
*Handwritten signatures and dates:*  
04/24/10  
4/28/10

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

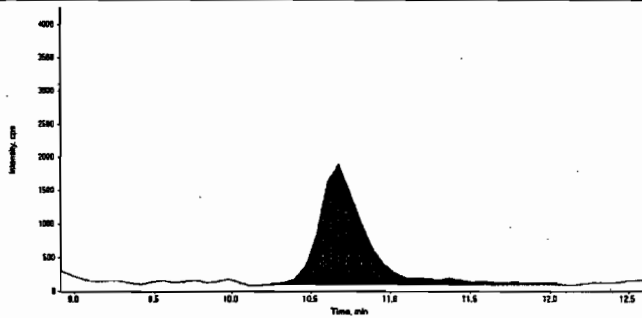
Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0420002.wiff	<b>Acquisition Date</b>	4/20/2010 2:44:57 PM
<b>Sample Name</b>	XIBLK01	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	042010.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

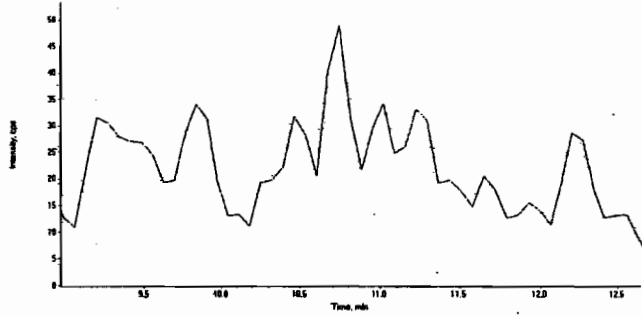
  

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	<b>Expected RT:</b>	9.07
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

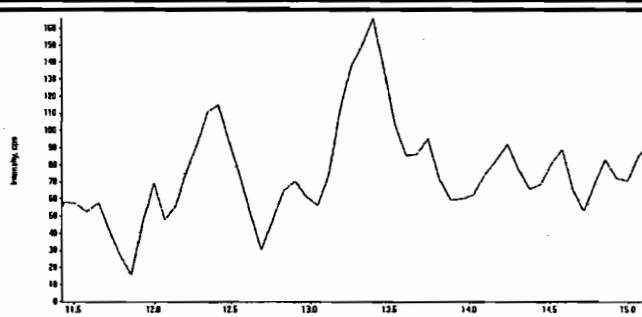
  

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	<b>Expected RT:</b>	10.7
	<b>Actual RT:</b>	10.7
	<b>Area Counts:</b>	3.71e+004
	<b>Manual Modification</b>	No
	<b>Amount:</b>	0.341 (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	<b>Expected RT:</b>	10.8
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

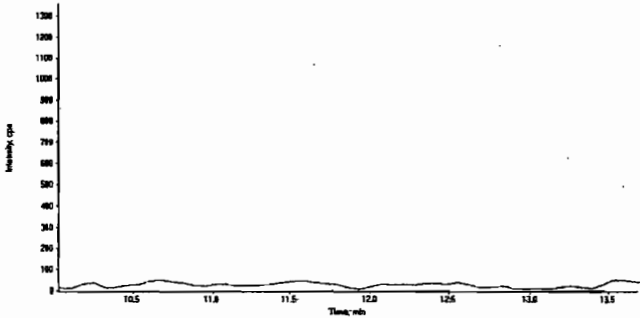
	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	<b>Expected RT:</b>	13.3
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

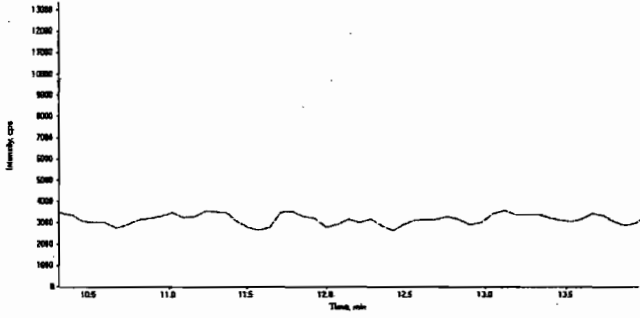
Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0420002.wiff	<b>Acquisition Date</b>	4/20/2010 2:44:57 PM
<b>Sample Name</b>	XIBLK01	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	042010.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

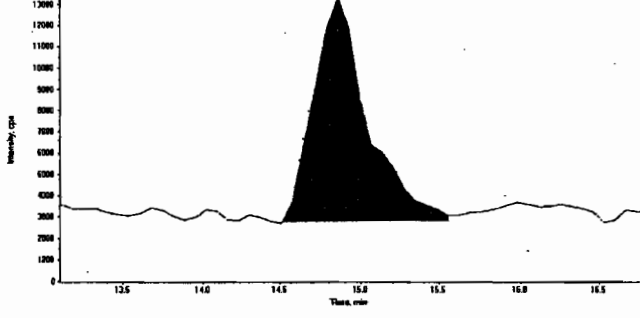
  

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	<b>Expected RT:</b>	11.9
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

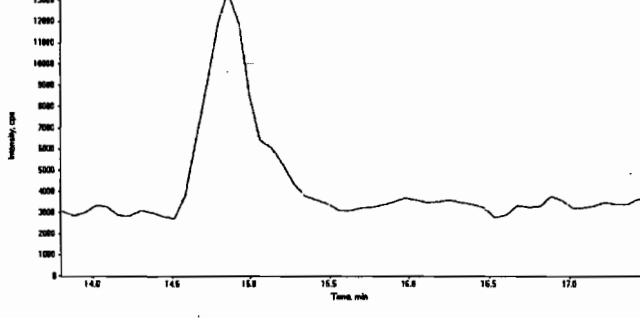
  

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	<b>Expected RT:</b>	12.1
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	<b>Expected RT:</b>	14.9
	<b>Actual RT:</b>	14.9
	<b>Area Counts:</b>	2.47e+005
	<b>Manual Modification</b>	No
	<b>Amount:</b>	0.765 (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	<b>Expected RT:</b>	15.6
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0420002.wiff	<b>Acquisition Date</b>	4/20/2010 2:44:57 PM
<b>Sample Name</b>	XIBLK01	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	042010.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	4-Amino-2,6-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.3
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	2-Amino-4,6-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.2
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	17.7
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

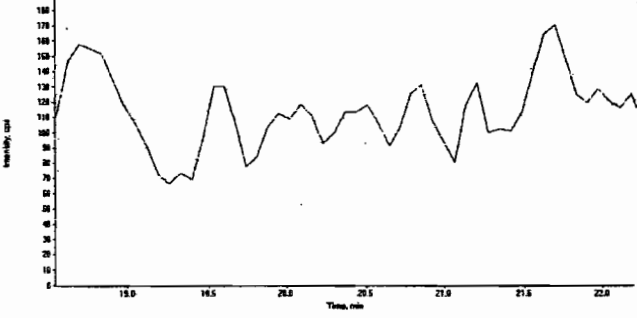
	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	19.0
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
 GEL SOP GL-OA-E-056, Method 8321A-Modified

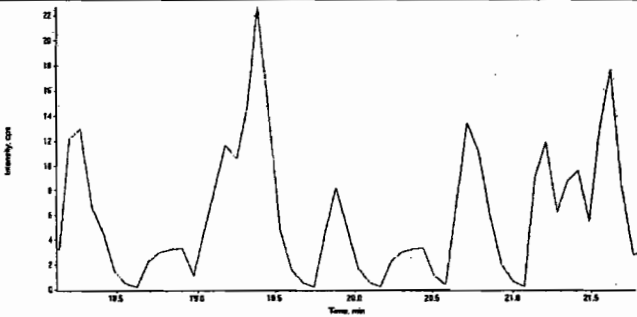
Printed: 28/04/2010 4:35:00 PM  
 LCMSMS#3

<b>Data File</b>	EXP0420002.wiff	<b>Acquisition Date</b>	4/20/2010 2:44:57 PM
<b>Sample Name</b>	XIBLK01	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	042010.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	20.4
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	<b>Expected RT:</b>	20.0
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2199

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 09-APR-10 07:14

GEL Data File: EXS04090001.wiff

Instrument ID: LCMSMS

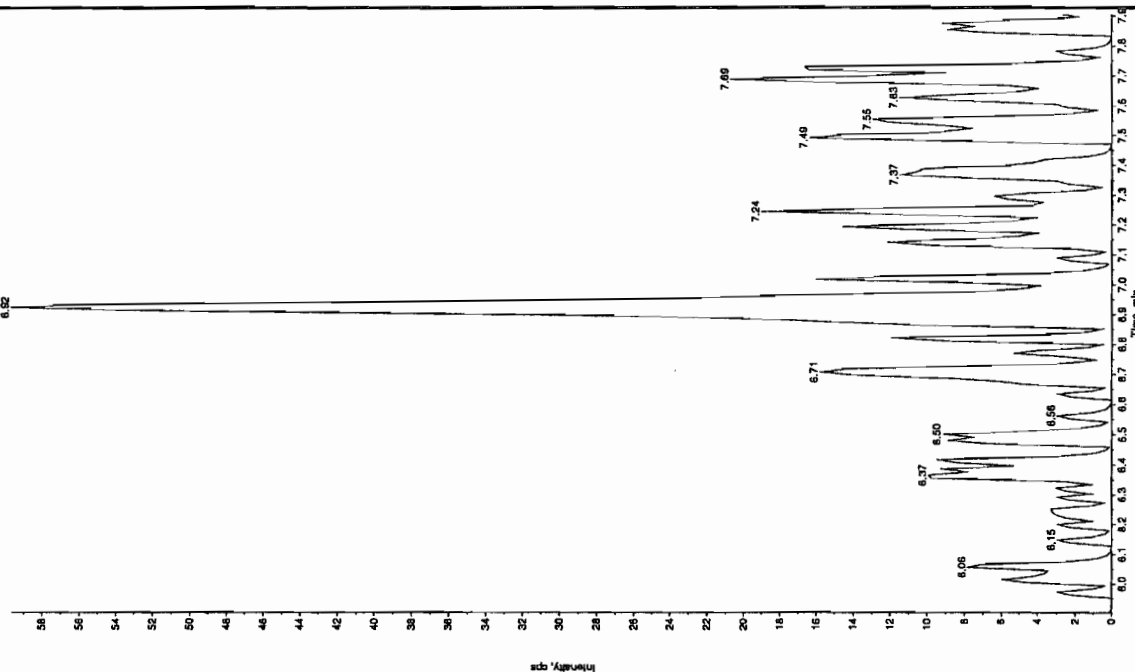
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	2.08
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

See 4/12/10

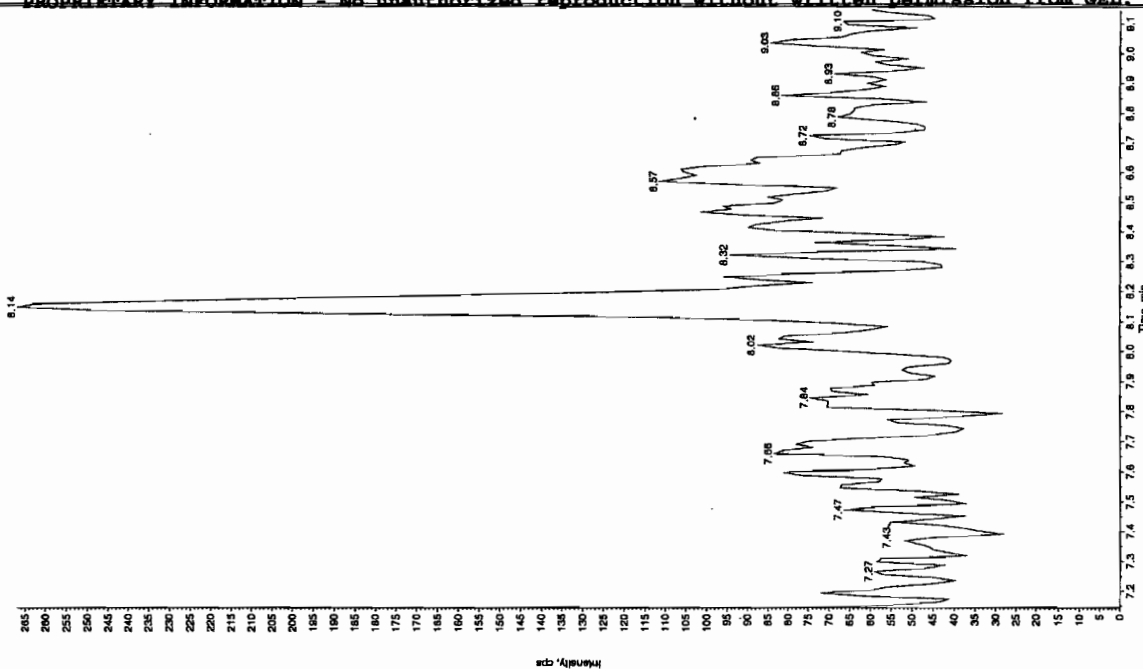
Sample Name: "XBLK01" Sample ID: "11LER" File: "EXS04090001.wif"  
Peak Name: "TATB" Mass(es): "257/2204.9 amu"  
Comment: "LCMSEXP\_B" Annotation: "

Sample Index: 1  
Sample Type: Unknown  
Concentration: N/A  
Calculated Conc: 0.00 ng/mL  
Acq. Date: 4/9/2010  
Acq. Time: 7:14:41 AM  
Modified: NO



Sample Name: "XBLK01" Sample ID: "11LER" File: "EXS04090001.wif"  
Peak Name: "3S-Dinitroaniline" 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: 4/9/2010  
Acq. Time: 7:14:41 AM  
Modified: NO



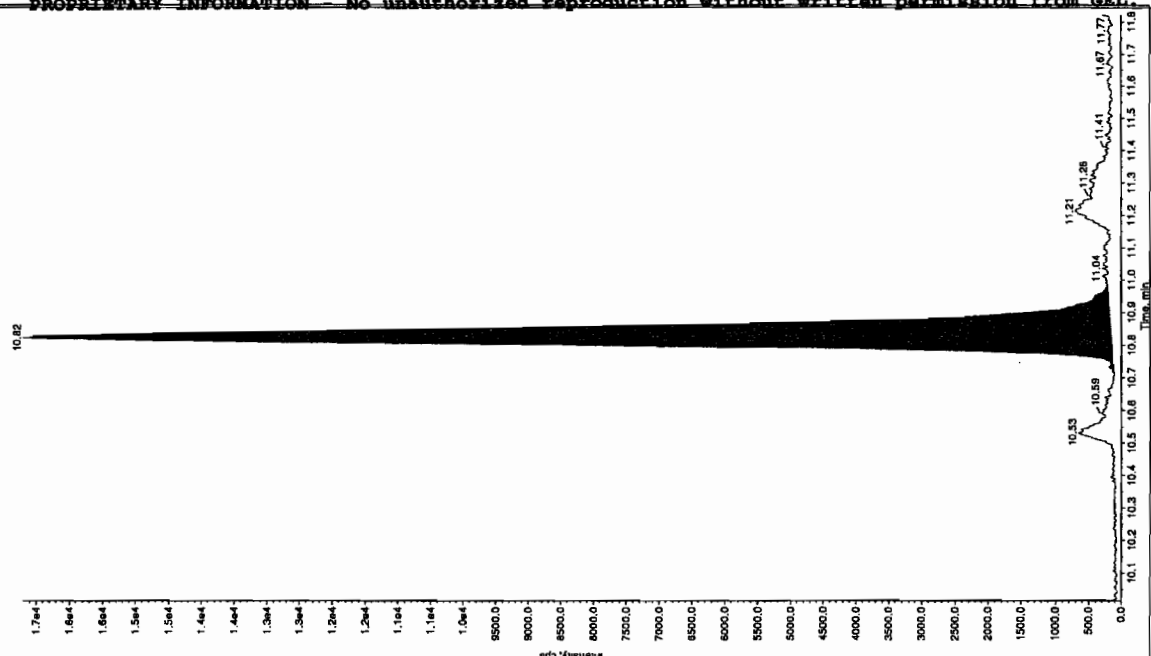
4/12/10





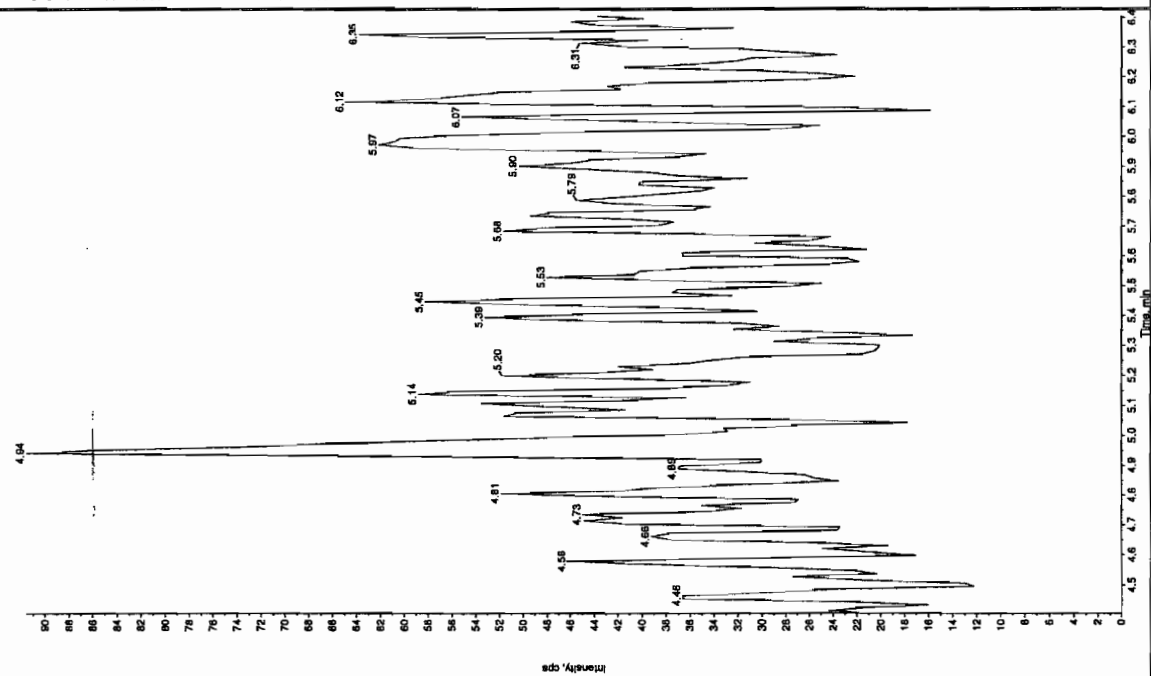
Sample Name: 'XIBU01' Sample ID: '11LER' File: 'EXS04090001.wif'  
Peak Name: 'tris(cresyl) phosphate' Mass(es): '369.191.0 amu'  
Comment: 'LCMSEXP\_B' Annotation: ''

Sample Index: 1  
Sample Type: Unknown  
Concentration: N/A  
Calculated Conc: 2.08 ng/mL  
Acq. Date: 4/9/2010  
Acq. Time: 7:14:41 AM  
Modified: No  
Proc. Algorithm: IntelliQuan - IOA  
Min. Peak Height: 8000.00 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: 64760.0 counts  
Height: 16517.569 cps  
Start Time: 10.7 min  
End Time: 11.0 min



Sample Name: 'XIBU01' Sample ID: '11LER' File: 'EXS04090001.wif'  
Peak Name: '24-Diamino-6-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: 4/9/2010  
Acq. Time: 7:14:41 AM  
Modified: No



Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2199

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 09-APR-10 07:30

GEL Data File: EXS04090002.wiff

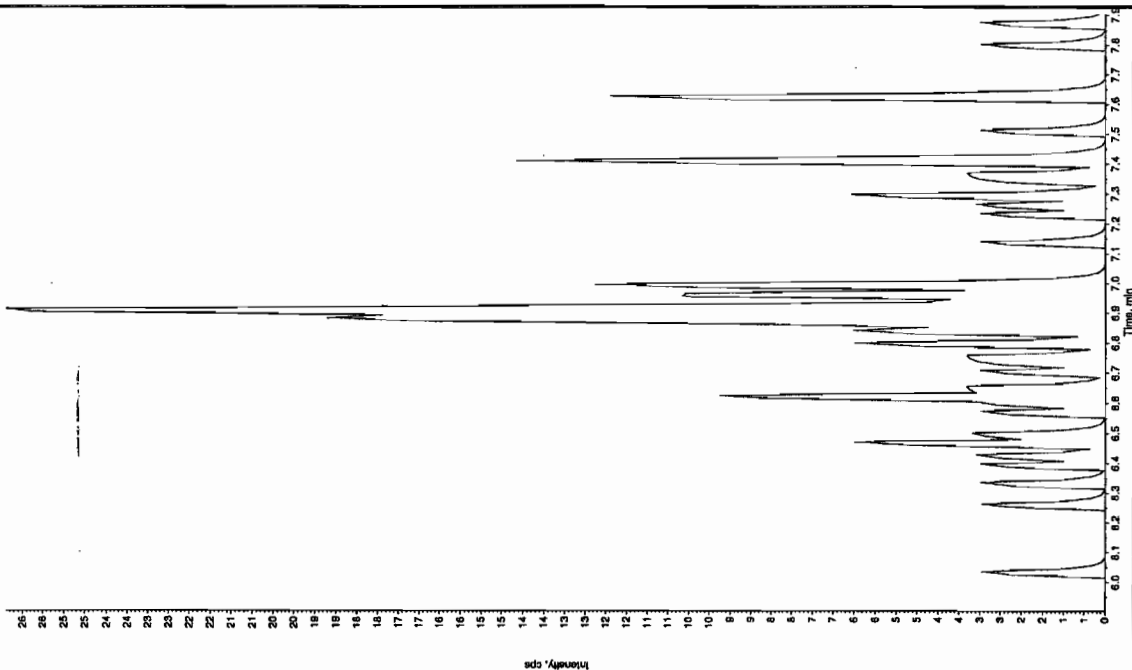
Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

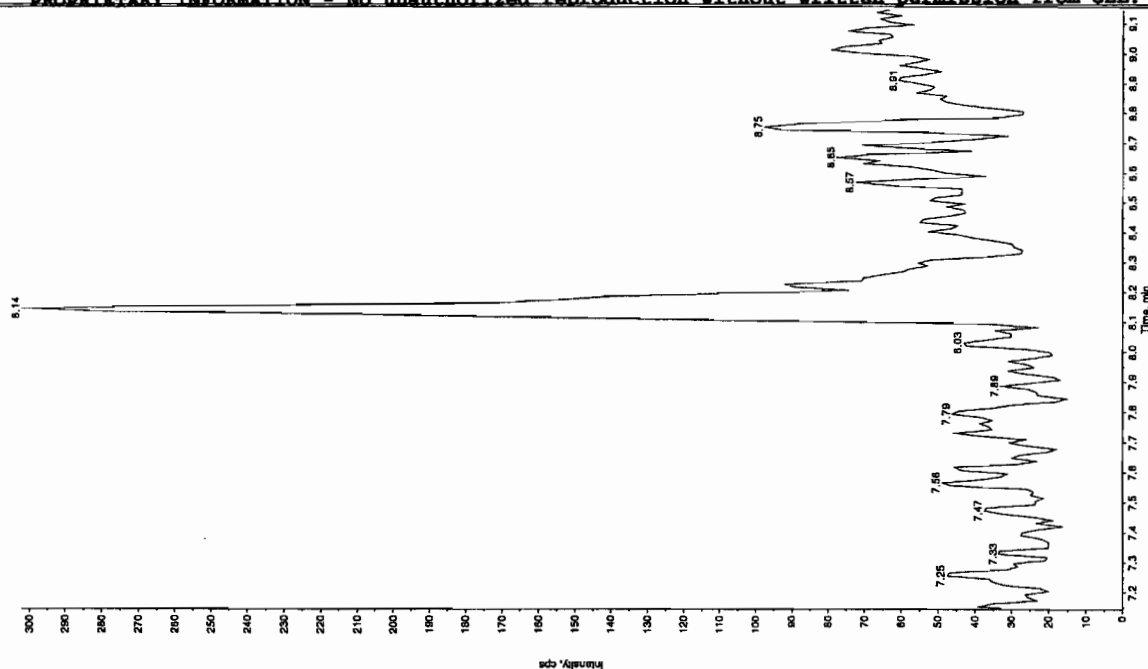
Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	1.56
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

See 4/12/10

Sample Name: "XIBLK01" Sample ID: "T1LER" File: "EXS04090002.wif"  
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"  
Comment: "LCMSEXP\_B" Annotation: ""  
Sample Index: 1  
Sample Type: Unknown  
Concentration: N/A  
Calculated Conc: 0.00 ng/mL  
Acq. Date: 4/9/2010  
Acq. Time: 7:30:29 AM  
Modified: No



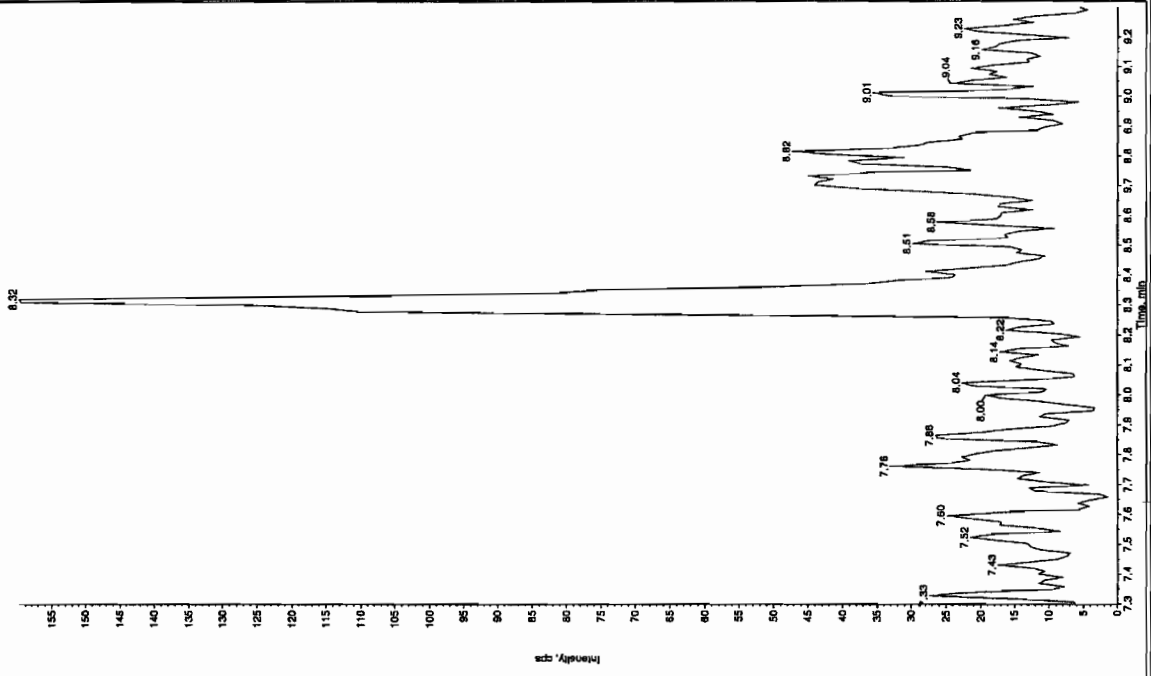
Sample Name: "XIBLK01" Sample ID: "T1LER" File: "EXS04090002.wif"  
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/166.0 amu"  
Comment: "LCMSEXP\_B" Annotation: ""  
Sample Index: 1  
Sample Type: Unknown  
Concentration: N/A  
Calculated Conc: 0.00 ng/mL  
Acq. Date: 4/9/2010  
Acq. Time: 7:30:29 AM  
Modified: No



See 4/12/10

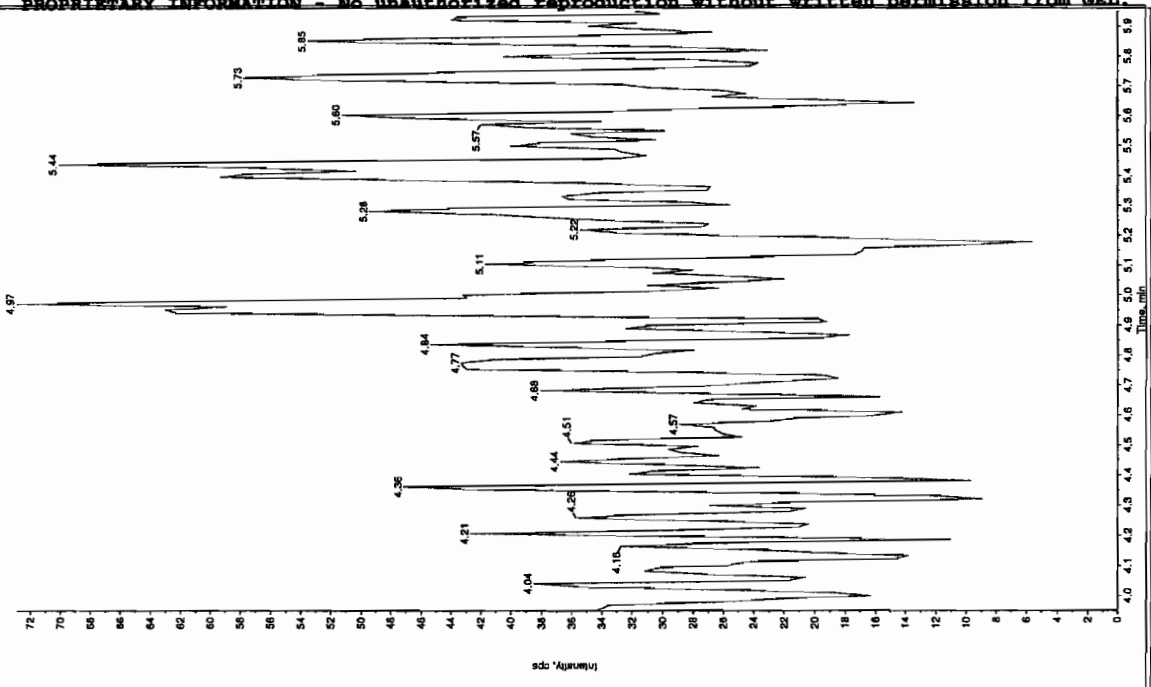
Sample Name: 'XIBLX01' Sample ID: '11LER' File: 'EXS04090002.wif'  
Peak Name: '34-Dinitrofluorene' Mass(es): '182.1/151.9 amu'  
Comment: 'LCMSEXP\_B' Annotation: ''

Sample Index: 1  
Sample Type: Unknown  
Concentration: 0.00 ng/mL  
Calculated Conc: 0.00  
Acq. Date: 4/9/2010  
Acq. Time: 7:30:29 AM  
Modified: No



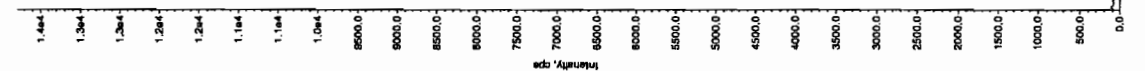
Sample Name: 'XIBLX01' Sample ID: '11LER' File: 'EXS04090002.wif'  
Peak Name: '25-Dinitro-4-nitrofluorene' Mass(es): '166.0/146.0 amu'  
Comment: 'LCMSEXP\_B' Annotation: ''

Sample Index: 1  
Sample Type: Unknown  
Concentration: 0.00 ng/mL  
Calculated Conc: 0.00  
Acq. Date: 4/9/2010  
Acq. Time: 7:30:29 AM  
Modified: No



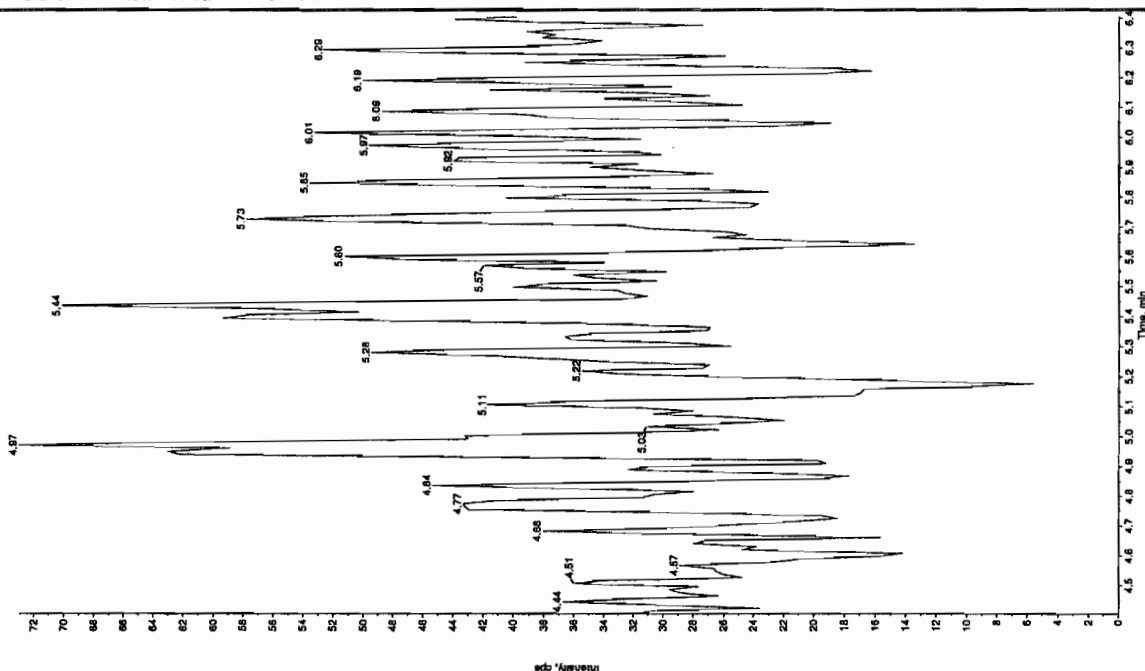
Sample Name: "XIBLX01" Sample ID: "111ER" File: "EXS04090002.wif"  
 Peak Name: "tris(4-cresyl) phosphate" Mass(es): "369.1/91.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A ng/mL  
 Calculated Conc: 1.36  
 Acq. Date: 4/9/2010  
 Acq. Time: 7:30:29 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 8000.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 10.8 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.8 min  
 Area: 5.40e+004 counts  
 Height: 13667.690 cps  
 Start Time: 10.7 min  
 End Time: 11.0 min



Sample Name: "XIBLX01" Sample ID: "111ER" File: "EXS04090002.wif"  
 Peak Name: "24-Diamino-6-nitrobluene" Mass(es): "166.0/46.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A ng/mL  
 Calculated Conc: 0.80  
 Acq. Date: 4/9/2010  
 Acq. Time: 7:30:29 AM  
 Modified: No



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2199

Lab Code: GEL

Lab Sample ID: XIBLK02

Analysis Date: 15-APR-10 13:35

GEL Data File: EXP0415009.wiff

Instrument ID: LCMSMS

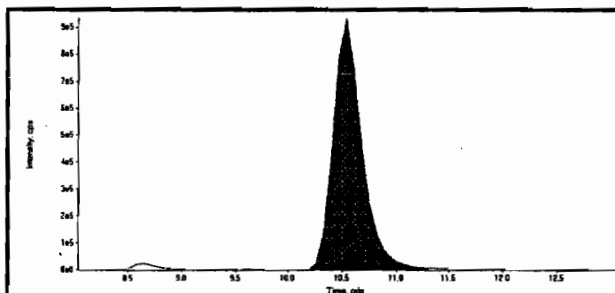
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
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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GEL SOP GL-OA-E-056, Method 8321A-Modified

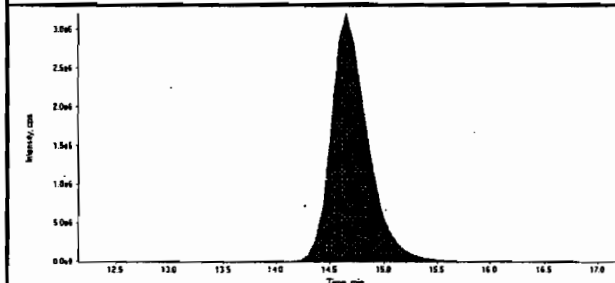
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

Data File	EXP0415009.wiff	Acquisition Date	4/15/2010 1:35:02 PM
Sample Name	XIBLK02	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown



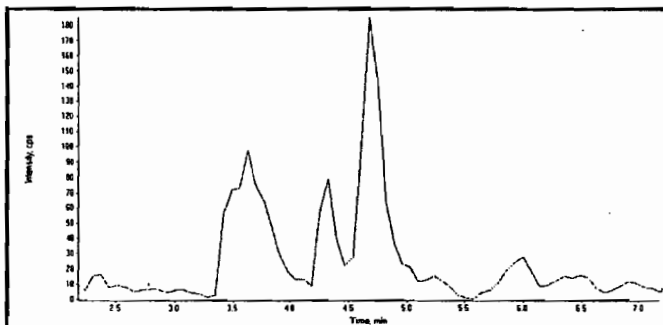
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.50
Actual RT:	10.50
Area Counts:	17200000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries

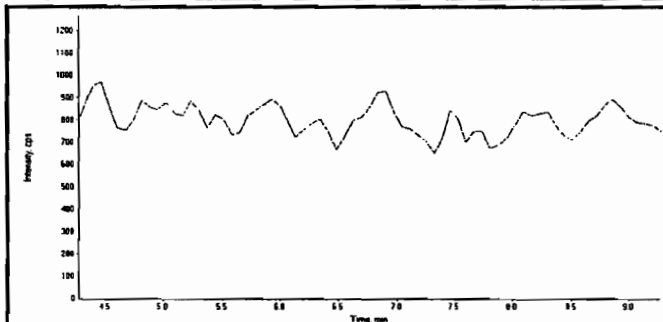


Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.60
Actual RT:	14.60
Area Counts:	75000000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.67
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.77
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

*thac 04/23/10*  
*ler 4/23/10*

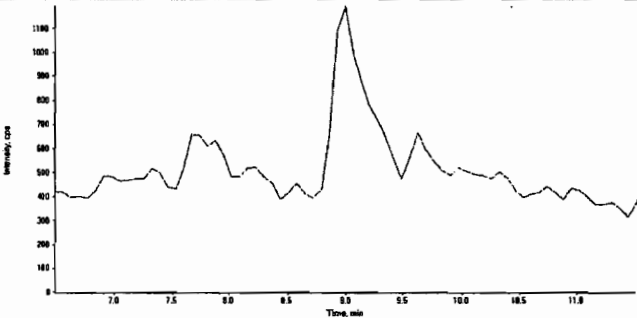


GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

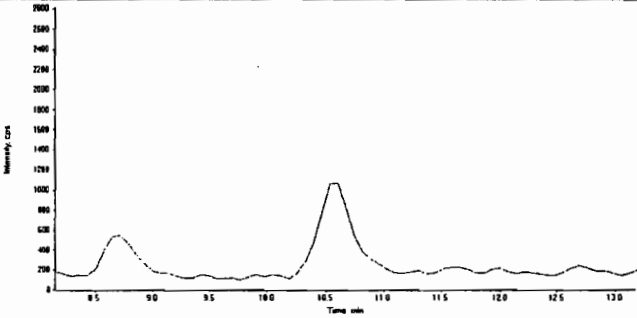
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415009.wiff	<b>Acquisition Date</b>	4/15/2010 1:35:02 PM
<b>Sample Name</b>	XIBLK02	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

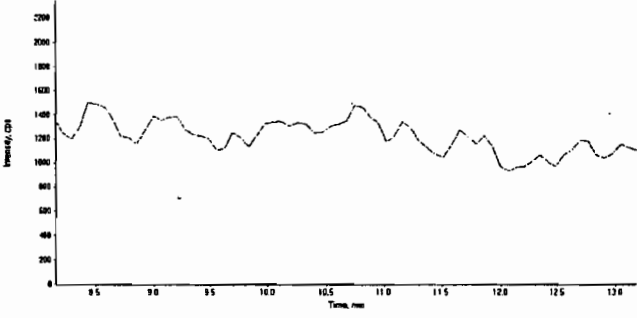
  

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	<b>Expected RT:</b>	9.00
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

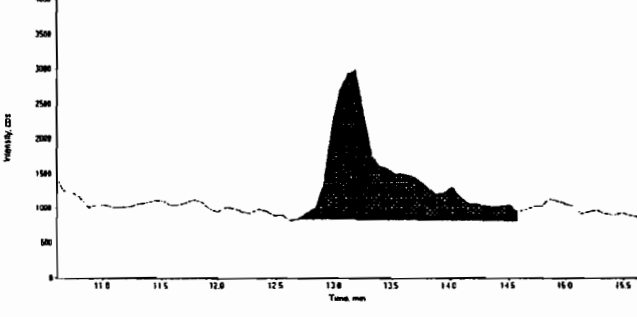
  

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	<b>Expected RT:</b>	10.7
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	<b>Expected RT:</b>	10.7
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

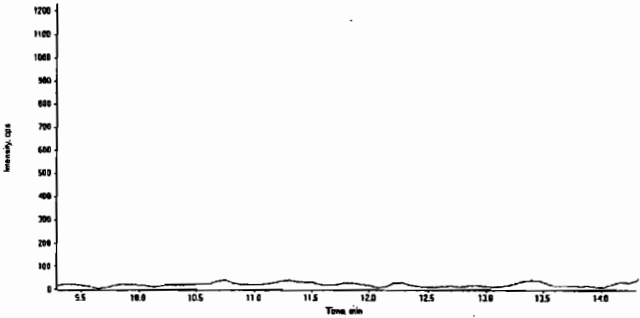
	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	<b>Expected RT:</b>	13.1
	<b>Actual RT:</b>	13.2
	<b>Area Counts:</b>	7.76e+004
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

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GEL SOP GL-OA-E-056, Method 8321A-Modified

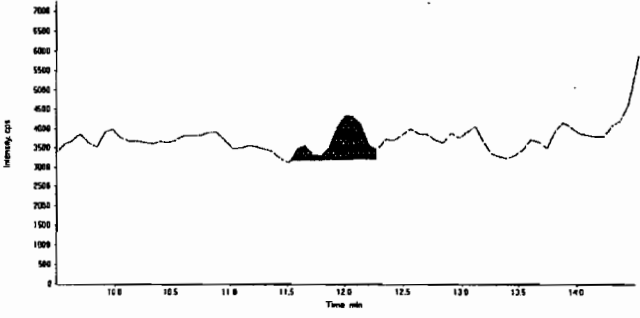
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415009.wiff	<b>Acquisition Date</b>	4/15/2010 1:35:02 PM
<b>Sample Name</b>	XIBLK02	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

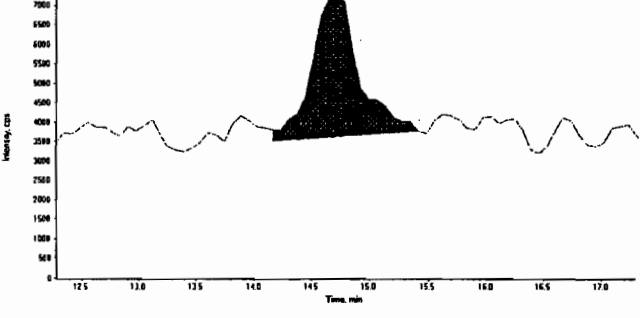
  

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	11.8
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

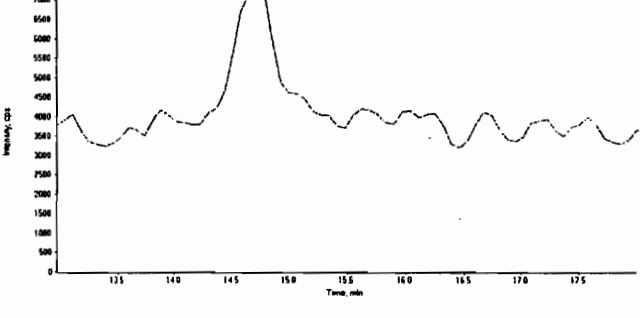
  

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.0
	Actual RT:	12.0
	Area Counts:	2.48e+004
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	14.8
	Actual RT:	14.7
	Area Counts:	1.08e+005
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.5
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415009.wiff	<b>Acquisition Date</b>	4/15/2010 1:35:02 PM
<b>Sample Name</b>	XIBLK02	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	4-Amino-2,6-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.1
	Actual RT:	13.1
	Area Counts:	1.11e+004
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	2-Amino-4,6-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.1
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	17.6
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	18.8
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415009.wiff	<b>Acquisition Date</b>	4/15/2010 1:35:02 PM
<b>Sample Name</b>	XIBLK02	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	20.1
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	<b>Expected RT:</b>	19.7
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2199

Lab Code: GEL

Lab Sample ID: XIBLK03

Analysis Date: 15-APR-10 14:27

GEL Data File: EXP0415011.wiff

Instrument ID: LCMSMS

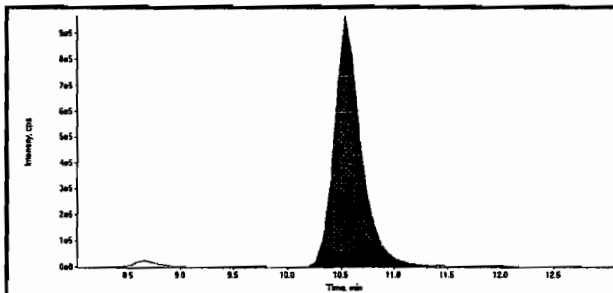
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
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	4.37
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

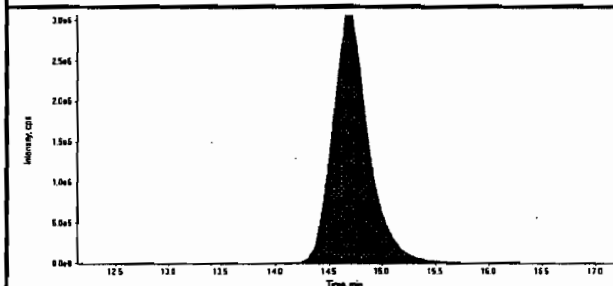
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

Data File	EXP0415011.wiff	Acquisition Date	4/15/2010 2:27:07 PM
Sample Name	XIBLK03	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown



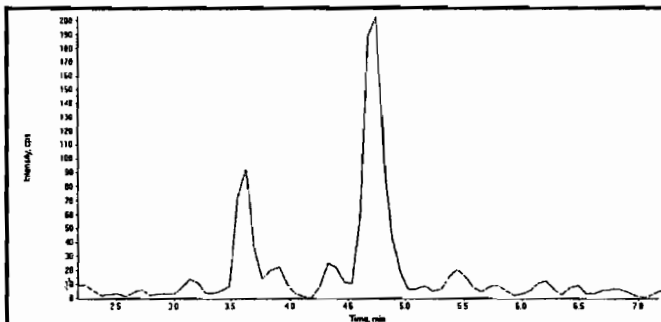
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.50
Actual RT:	10.50
Area Counts:	17200000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries

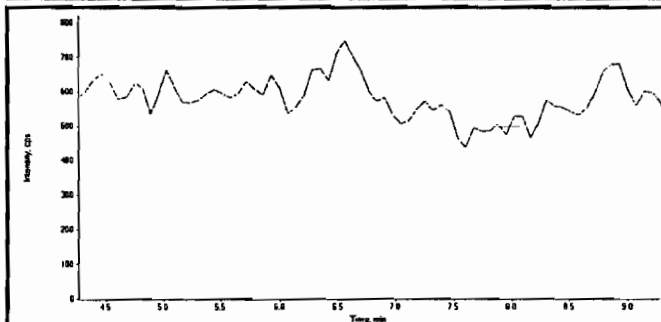


Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.60
Actual RT:	14.60
Area Counts:	74900000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.67
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.77
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

*Handwritten:*  
#HMX 04/23/10  
LER 4/22/10

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415011.wiff	<b>Acquisition Date</b>	4/15/2010 2:27:07 PM
<b>Sample Name</b>	XIBLK03	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	<b>Expected RT:</b>	9.00
	<b>Actual RT:</b>	9.00
	<b>Area Counts:</b>	1.86e+004
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	<b>Expected RT:</b>	10.7
	<b>Actual RT:</b>	10.6
	<b>Area Counts:</b>	2.36e+004
	<b>Manual Modification</b>	No
	<b>Amount:</b>	4.37 (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	<b>Expected RT:</b>	10.7
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	<b>Expected RT:</b>	13.1
	<b>Actual RT:</b>	13.1
	<b>Area Counts:</b>	5.58e+004
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415011.wiff	<b>Acquisition Date</b>	4/15/2010 2:27:07 PM
<b>Sample Name</b>	XIBLK03	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	11.8
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.0
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	14.8
	Actual RT:	14.7
	Area Counts:	1.16e+005
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.5
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A



GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415011.wiff	<b>Acquisition Date</b>	4/15/2010 2:27:07 PM
<b>Sample Name</b>	XIBLK03	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	<b>Expected RT:</b>	13.1
	<b>Actual RT:</b>	13.1
	<b>Area Counts:</b>	1.23e+004
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	<b>Expected RT:</b>	14.1
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	17.6
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	18.8
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

Data File	EXP0415011.wiff	Acquisition Date	4/15/2010 2:27:07 PM
Sample Name	XIBLK03	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown

	Compound Name:	3-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	20.1
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	Compound Name:	PETN (361.1/62.0 amu)
	Expected RT:	19.7
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2199

Lab Code: GEL

Lab Sample ID: XIBLK04

Analysis Date: 15-APR-10 16:10

GEL Data File: EXP0415015.wiff

Instrument ID: LCMSMS

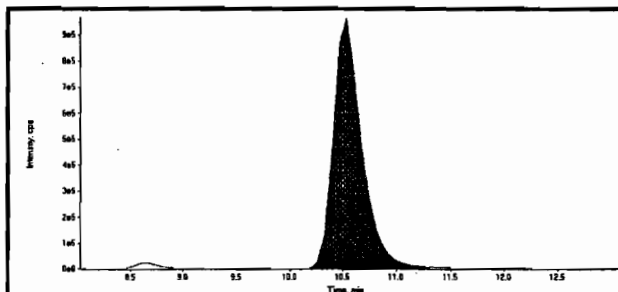
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
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	4.34
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

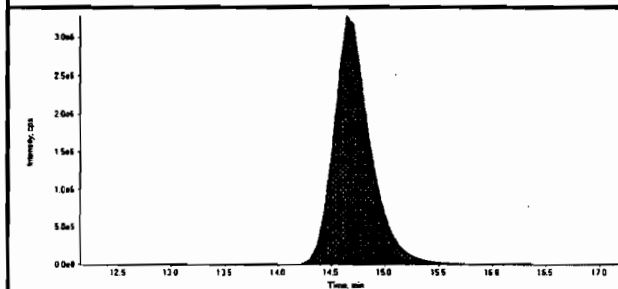
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

Data File	EXP0415015.wiff	Acquisition Date	4/15/2010 4:10:55 PM
Sample Name	XIBLK04	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown



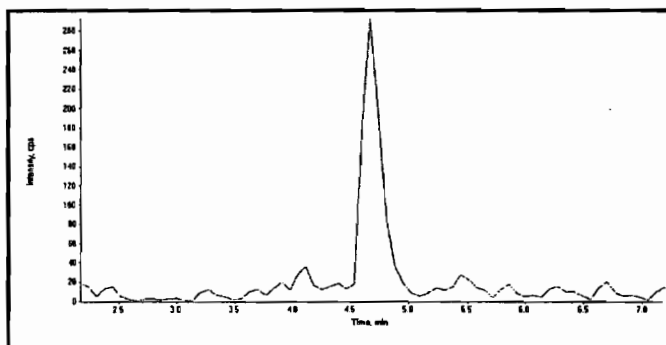
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.50
Actual RT:	10.50
Area Counts:	18200000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries

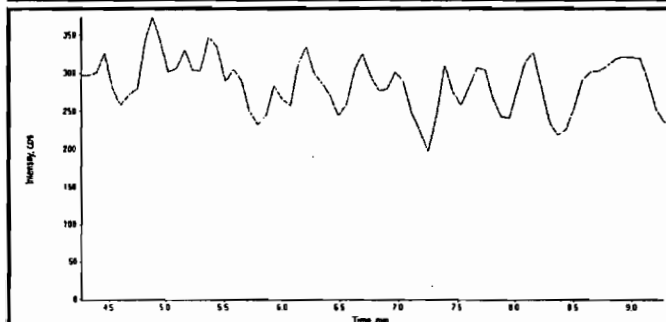


Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.60
Actual RT:	14.60
Area Counts:	79300000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.67
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.77
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

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GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415015.wiff	<b>Acquisition Date</b>	4/15/2010 4:10:55 PM
<b>Sample Name</b>	XIBLK04	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	<b>Expected RT:</b>	9.00
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	<b>Expected RT:</b>	10.7
	<b>Actual RT:</b>	10.6
	<b>Area Counts:</b>	2.11e+004
	<b>Manual Modification</b>	No
	<b>Amount:</b>	4.34 (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	<b>Expected RT:</b>	10.7
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

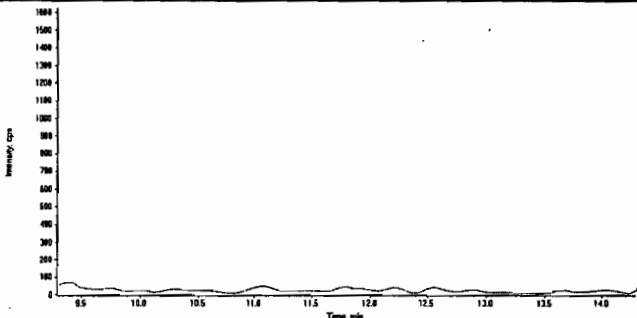
	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	<b>Expected RT:</b>	13.1
	<b>Actual RT:</b>	13.1
	<b>Area Counts:</b>	2.79e+004
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

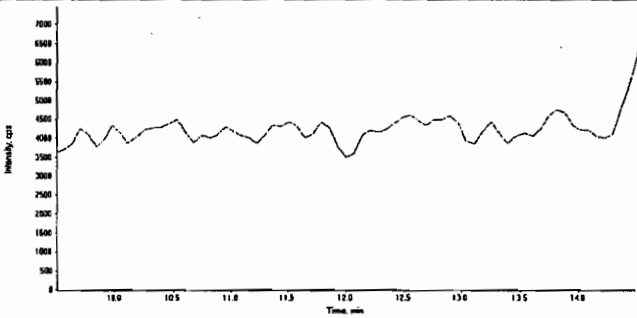
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415015.wiff	<b>Acquisition Date</b>	4/15/2010 4:10:55 PM
<b>Sample Name</b>	XIBLK04	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

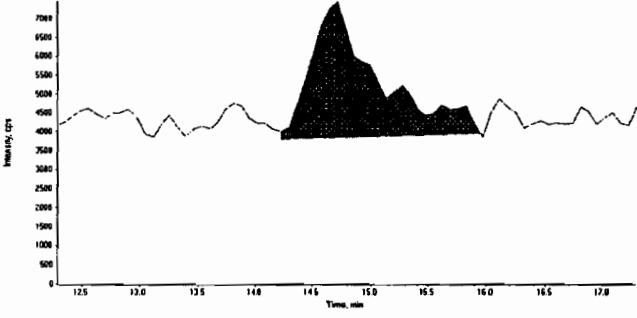
  

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	11.8
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

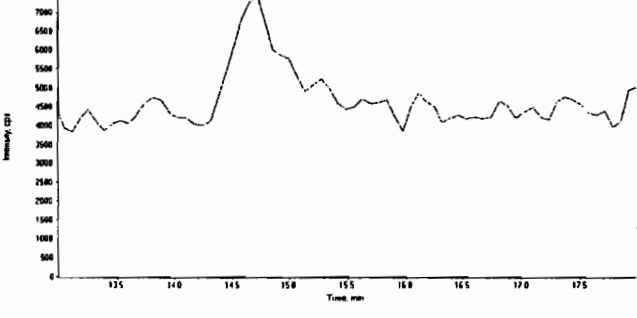
  

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.0
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	14.8
	Actual RT:	14.7
	Area Counts:	1.49e+005
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

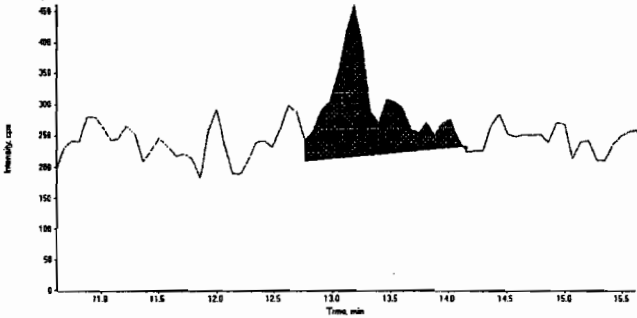
	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.5
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

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GEL SOP GL-OA-E-056, Method 8321A-Modified

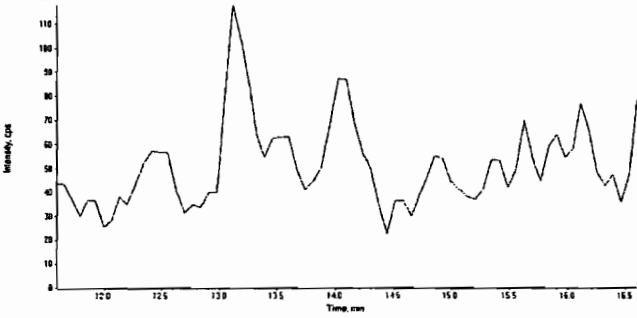
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415015.wiff	<b>Acquisition Date</b>	4/15/2010 4:10:55 PM
<b>Sample Name</b>	XIBLK04	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

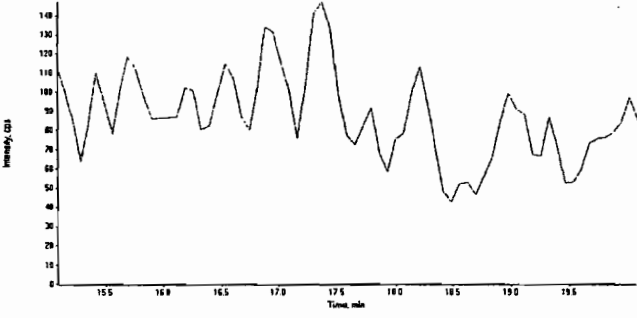
  

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	<b>Expected RT:</b>	13.1
	<b>Actual RT:</b>	13.2
	<b>Area Counts:</b>	6.69e+003
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

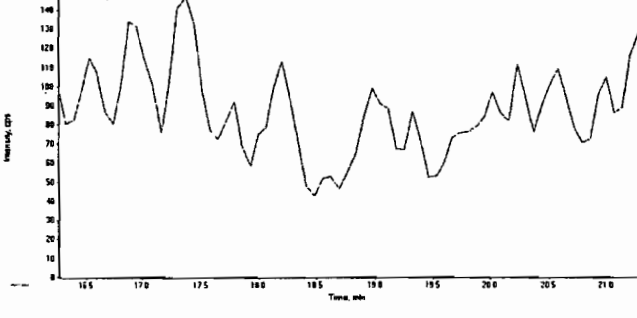
  

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	<b>Expected RT:</b>	14.1
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	17.6
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	18.8
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415015.wiff	<b>Acquisition Date</b>	4/15/2010 4:10:55 PM
<b>Sample Name</b>	XIBLK04	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	20.1
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	<b>Expected RT:</b>	19.7
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2199

Lab Code: GEL

Lab Sample ID: XIBLK05

Analysis Date: 15-APR-10 17:02

GEL Data File: EXP0415017.wiff

Instrument ID: LCMSMS

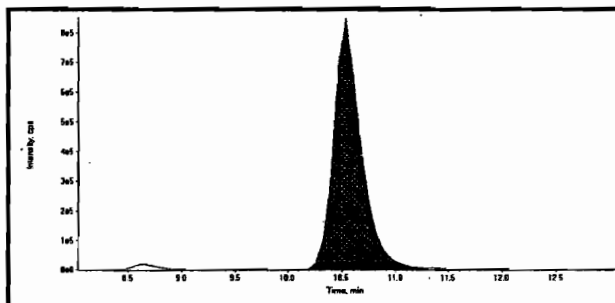
Column: Phenomenex Ultracarb 5u ODS(20)

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

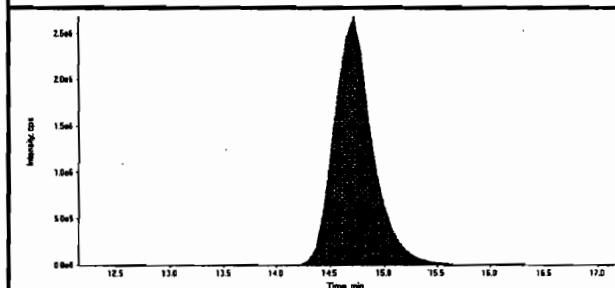
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

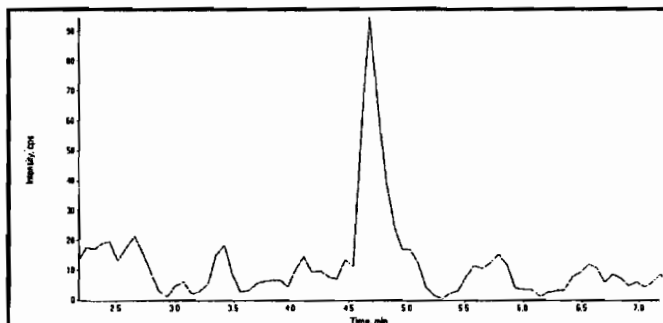
Data File	EXP0415017.wiff	Acquisition Date	4/15/2010 5:02:43 PM
Sample Name	XIBLK05	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown



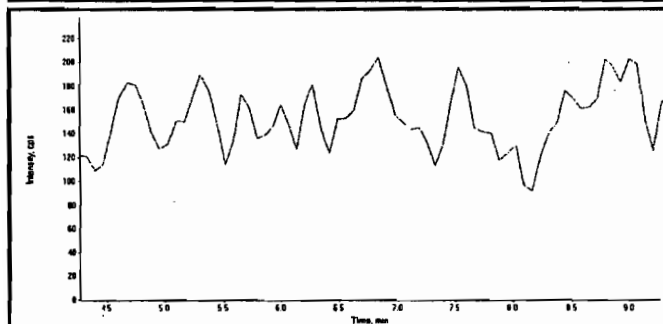
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.50
Actual RT:	10.50
Area Counts:	15200000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.60
Actual RT:	14.70
Area Counts:	66500000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.67
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.77
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

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GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415017.wiff	<b>Acquisition Date</b>	4/15/2010 5:02:43 PM
<b>Sample Name</b>	XIBLK05	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	Expected RT:	9.00
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	Expected RT:	10.7
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	Expected RT:	10.7
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

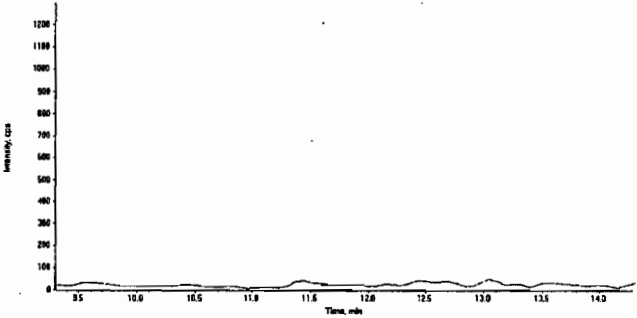
	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	Expected RT:	13.1
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

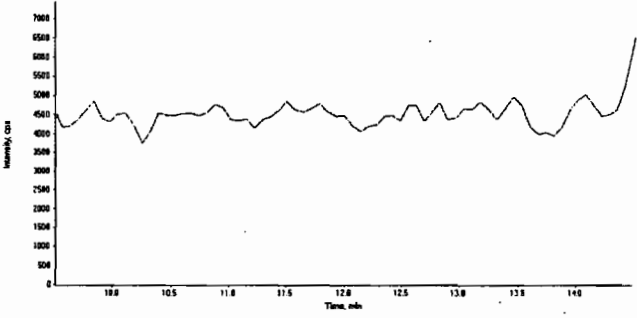
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415017.wiff	<b>Acquisition Date</b>	4/15/2010 5:02:43 PM
<b>Sample Name</b>	XIBLK05	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

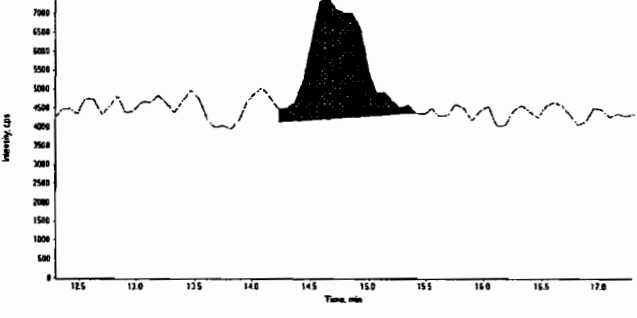
  

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	<b>Expected RT:</b>	11.8
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

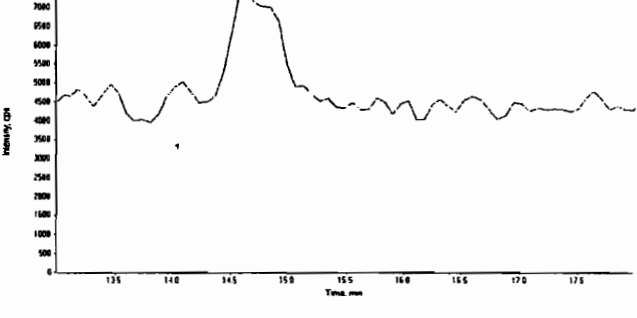
  

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	<b>Expected RT:</b>	12.0
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	<b>Expected RT:</b>	14.8
	<b>Actual RT:</b>	14.6
	<b>Area Counts:</b>	1.04e+005
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	<b>Expected RT:</b>	15.5
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415017.wiff	<b>Acquisition Date</b>	4/15/2010 5:02:43 PM
<b>Sample Name</b>	XIBLK05	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.1
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.1
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	17.6
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	18.8
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415017.wiff	<b>Acquisition Date</b>	4/15/2010 5:02:43 PM
<b>Sample Name</b>	XIBLK05	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	20.1
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	<b>Expected RT:</b>	19.7
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2199

Lab Code: GEL

Lab Sample ID: XIBLK06

Analysis Date: 15-APR-10 17:54

GEL Data File: EXP0415019.wiff

Instrument ID: LCMSMS

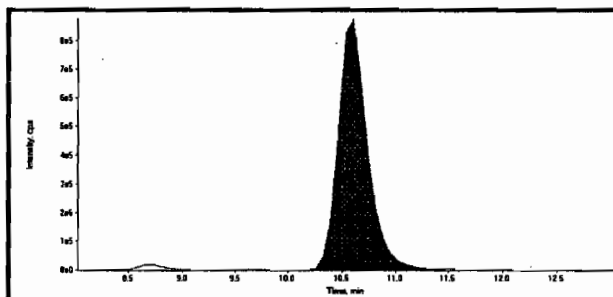
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
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	4.35
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

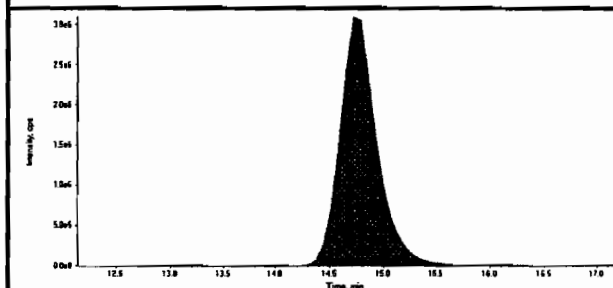
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

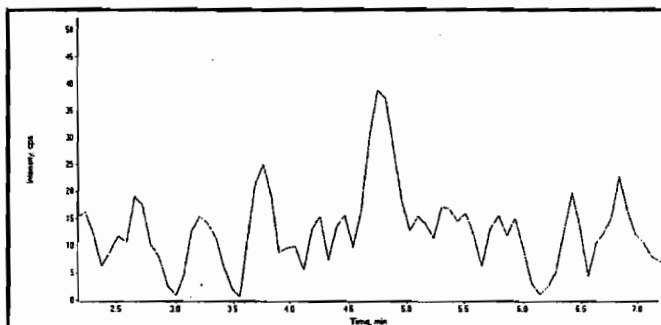
Data File	EXP0415019.wiff	Acquisition Date	4/15/2010 5:54:33 PM
Sample Name	XIBLK06	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown



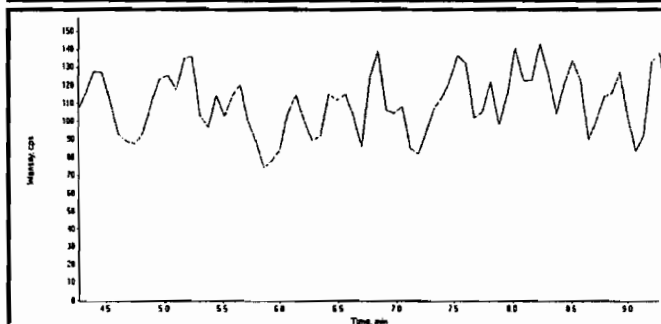
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.50
Actual RT:	10.60
Area Counts:	16700000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.60
Actual RT:	14.70
Area Counts:	75000000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.67
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.77
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

*Handwritten signature: HMX 04/15/10 LER 4/15/10*



GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415019.wiff	<b>Acquisition Date</b>	4/15/2010 5:54:33 PM
<b>Sample Name</b>	XIBLK06	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	<b>Expected RT:</b>	9.00
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	<b>Expected RT:</b>	10.7
	<b>Actual RT:</b>	10.6
	<b>Area Counts:</b>	2.08e+004
	<b>Manual Modification</b>	No
	<b>Amount:</b>	4.35 (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	<b>Expected RT:</b>	10.7
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

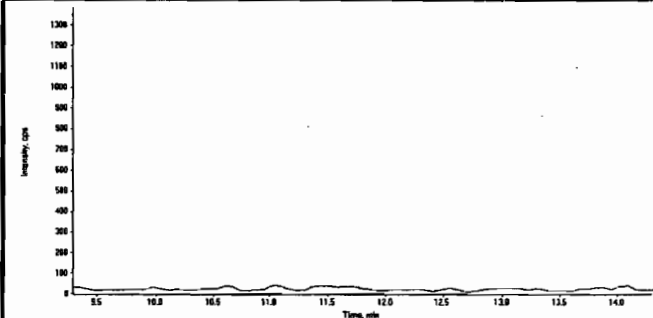
	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	<b>Expected RT:</b>	13.1
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

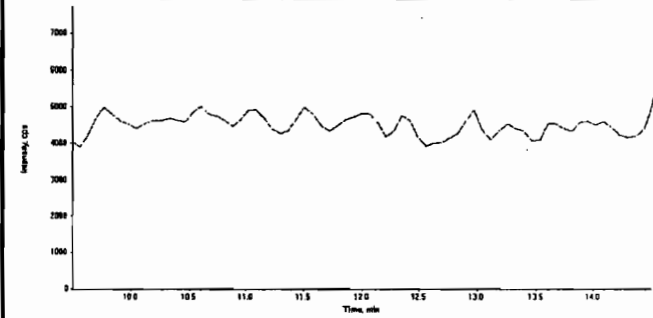
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415019.wiff	<b>Acquisition Date</b>	4/15/2010 5:54:33 PM
<b>Sample Name</b>	XIBLK06	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

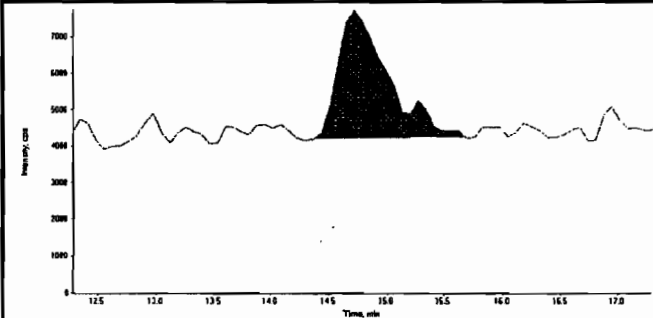
  

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	11.8
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

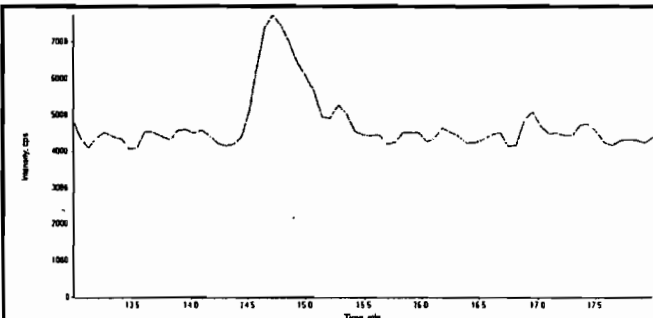
  

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.0
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	14.8
	Actual RT:	14.7
	Area Counts:	1.07e+005
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.5
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415019.wiff	<b>Acquisition Date</b>	4/15/2010 5:54:33 PM
<b>Sample Name</b>	XIBLK06	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	<b>Expected RT:</b>	13.1
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	<b>Expected RT:</b>	14.1
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	17.6
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	18.8
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415019.wiff	<b>Acquisition Date</b>	4/15/2010 5:54:33 PM
<b>Sample Name</b>	XIBLK06	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	20.1
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	<b>Expected RT:</b>	19.7
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2199

Lab Code: GEL

Lab Sample ID: XIBLK07

Analysis Date: 15-APR-10 18:46

GEL Data File: EXP0415021.wiff

Instrument ID: LCMSMS

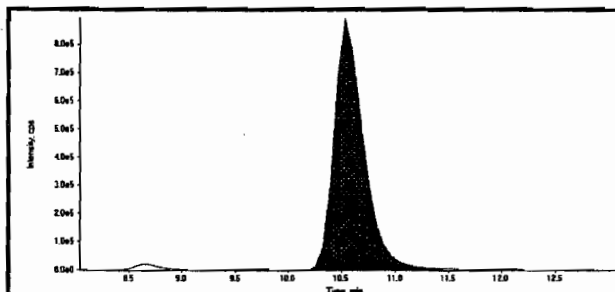
Column: Phenomenex Ultracarb 5u ODS(20)

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

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

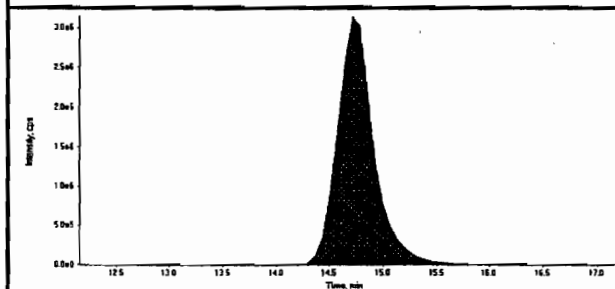
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

Data File	EXP0415021.wiff	Acquisition Date	4/15/2010 6:46:25 PM
Sample Name	XIBLK07	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown



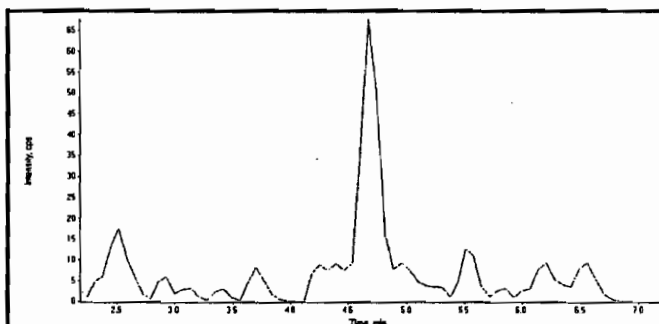
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.50
Actual RT:	10.50
Area Counts:	17100000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries

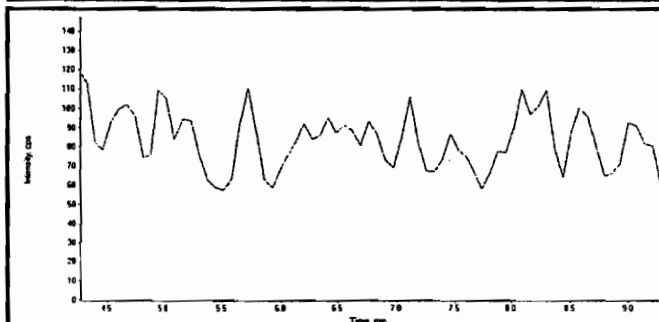


Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.60
Actual RT:	14.70
Area Counts:	74400000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.67
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.77
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

*Handwritten signature:* Hinc 4/23/10  
Jas 4/23/10

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415021.wiff	<b>Acquisition Date</b>	4/15/2010 6:46:25 PM
<b>Sample Name</b>	XIBLK07	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	<b>Expected RT:</b>	9.00
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	<b>Expected RT:</b>	10.7
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	<b>Expected RT:</b>	10.7
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

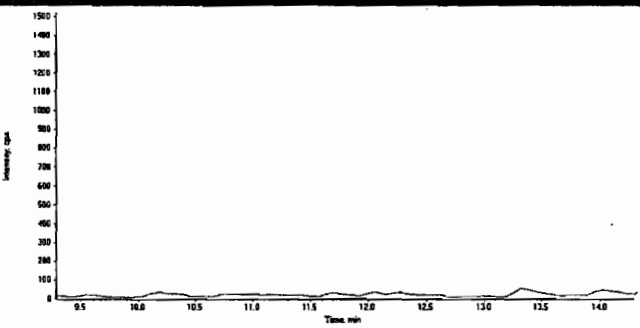
	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	<b>Expected RT:</b>	13.1
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

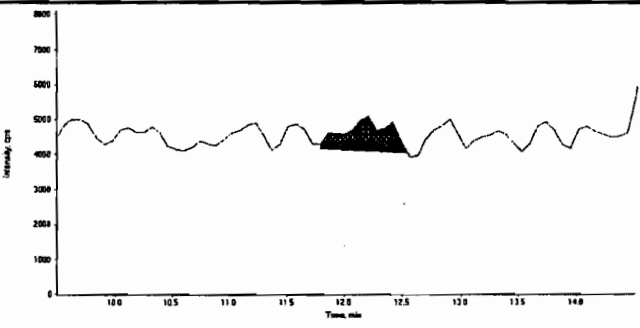
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415021.wiff	<b>Acquisition Date</b>	4/15/2010 6:46:25 PM
<b>Sample Name</b>	XIBLK07	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

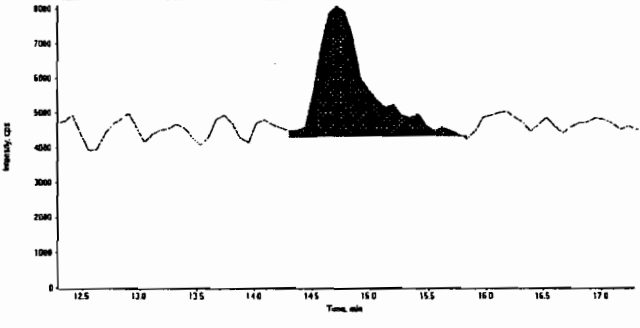
  

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	<b>Expected RT:</b>	11.8
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

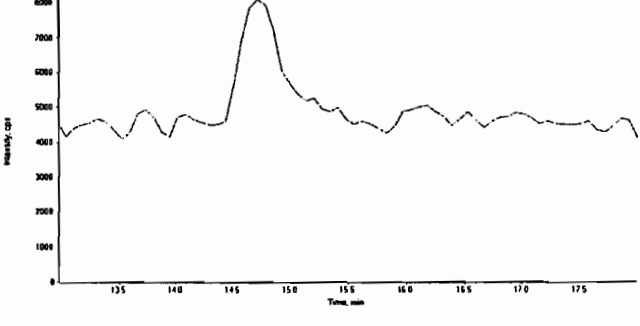
  

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	<b>Expected RT:</b>	12.0
	<b>Actual RT:</b>	12.2
	<b>Area Counts:</b>	2.76e+004
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	<b>Expected RT:</b>	14.8
	<b>Actual RT:</b>	14.7
	<b>Area Counts:</b>	1.14e+005
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	<b>Expected RT:</b>	15.5
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A



GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415021.wiff	<b>Acquisition Date</b>	4/15/2010 6:46:25 PM
<b>Sample Name</b>	XIBLK07	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.1
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.1
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	17.6
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

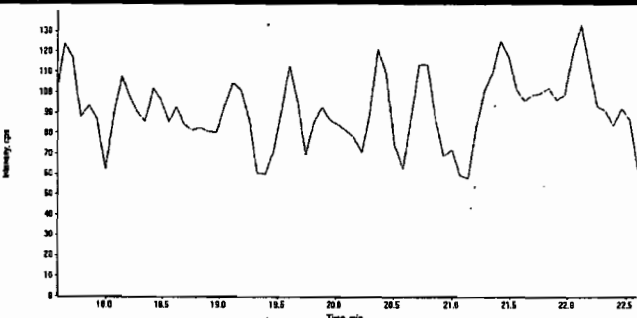
	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	18.8
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

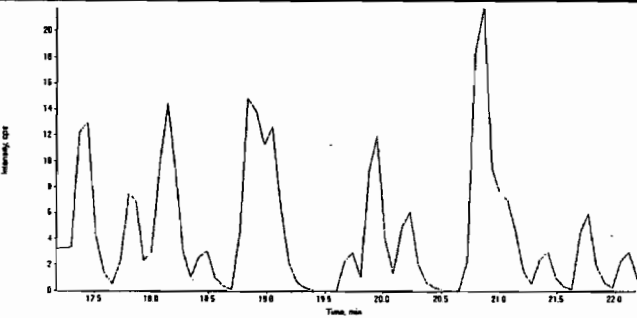
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LCMSMS#3

Data File      EXP0415021.wiff		Acquisition Date      4/15/2010 6:46:25 PM
Sample Name      XIBLK07		Acquisition Method      8321.dam
Batch Dilution Analyst       1 LER		Result Table      041510.rdb
Procedure Code      LCMSEXP_B		Sample Type      Unknown

	Compound Name:	3-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	20.1
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	Compound Name:	PETN (361.1/62.0 amu)
	Expected RT:	19.7
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2199

Lab Code: GEL

Lab Sample ID: XIBLK08

Analysis Date: 15-APR-10 20:04

GEL Data File: EXP0415024.wiff

Instrument ID: LCMSMS

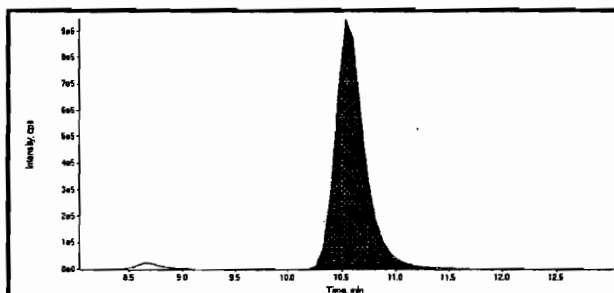
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
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	4.38
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

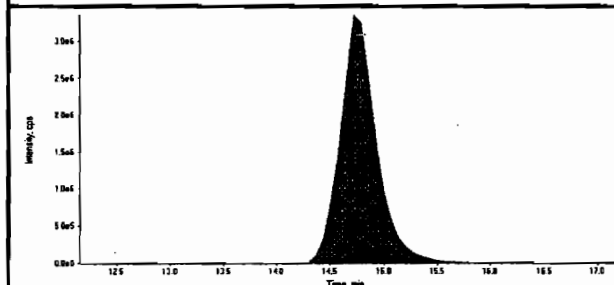
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

Data File	EXP0415024.wiff	Acquisition Date	4/15/2010 8:04:18 PM
Sample Name	XIBLK08	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown



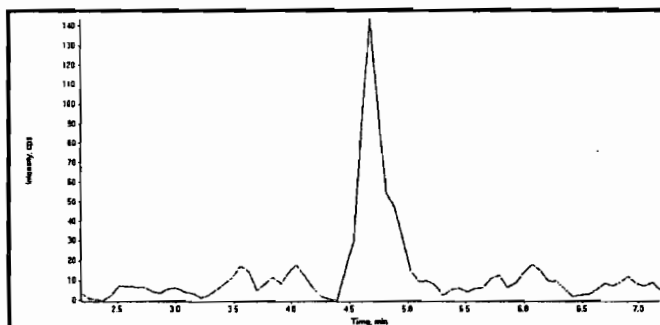
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.50
Actual RT:	10.50
Area Counts:	17900000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries

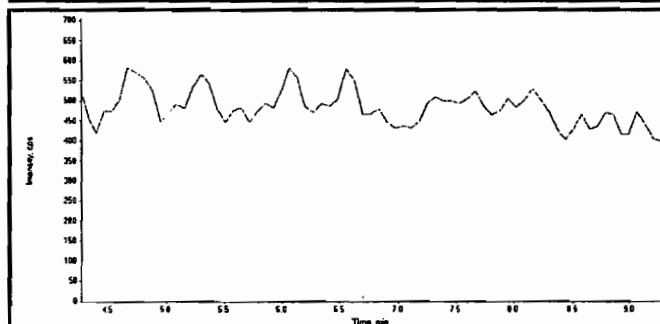


Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.60
Actual RT:	14.70
Area Counts:	78900000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.67
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



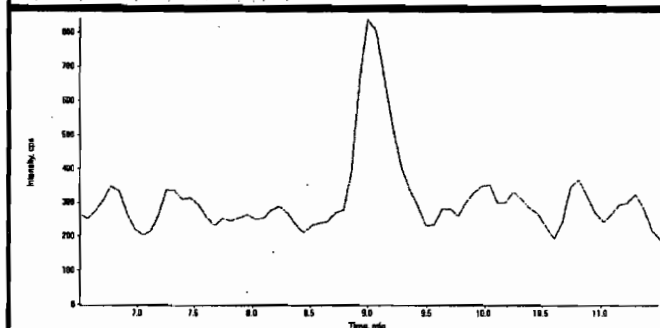
Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.77
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

*Shimadzu  
JAN  
4/15/2010*

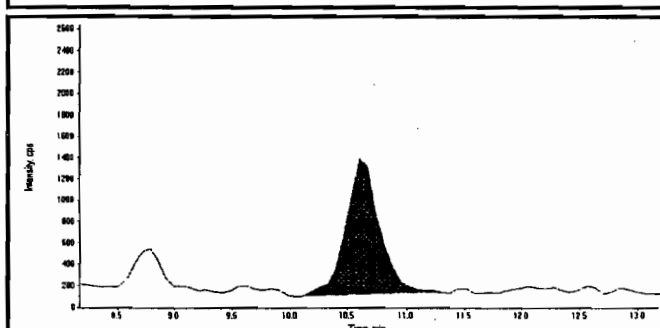
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

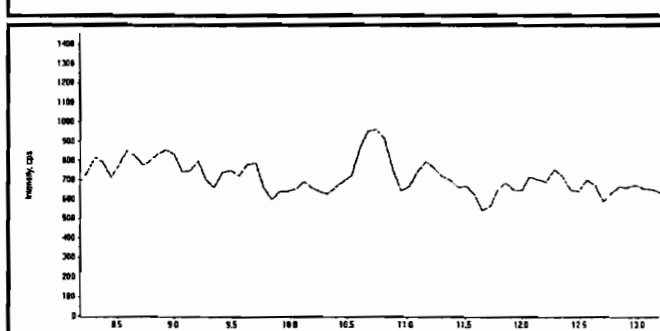
Data File	EXP0415024.wiff	Acquisition Date	4/15/2010 8:04:18 PM
Sample Name	XIBLK08	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown



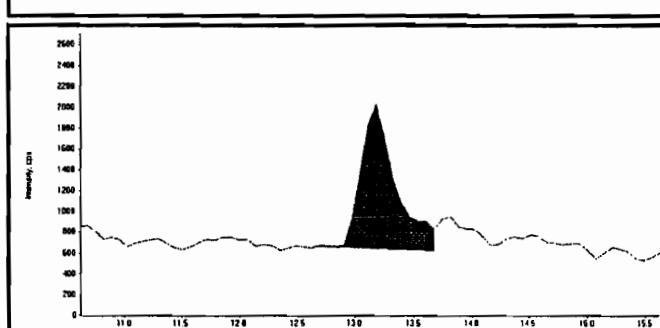
Compound Name:	135-Trinitrobenzene (213.0/182.8 amu)
Expected RT:	9.00
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	13-Dinitrobenzene (168.0/137.9 amu)
Expected RT:	10.7
Actual RT:	10.6
Area Counts:	2.58e+004
Manual Modification	No
Amount:	4.38 (ng/mL)
% Accuracy:	N/A



Compound Name:	Tetryl (241.0/180.8 amu)
Expected RT:	10.7
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

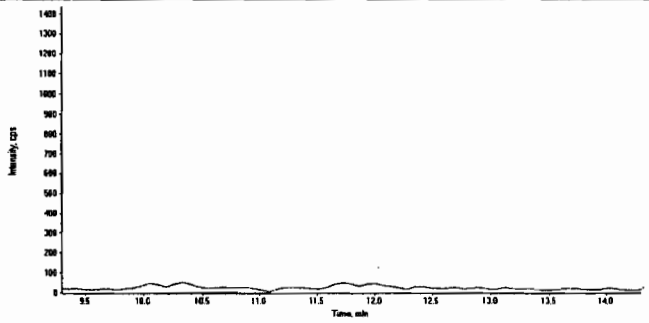


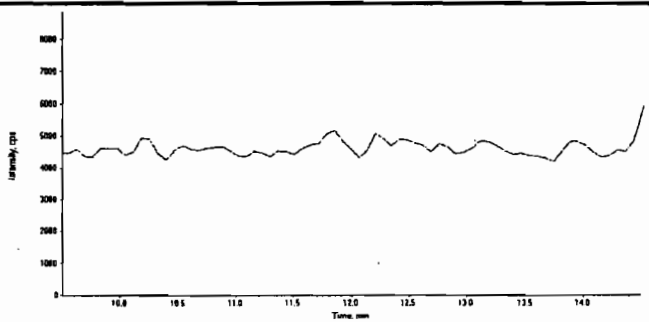
Compound Name:	246-Trinitrotoluene (227.1/209.8 amu)
Expected RT:	13.1
Actual RT:	13.2
Area Counts:	2.92e+004
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

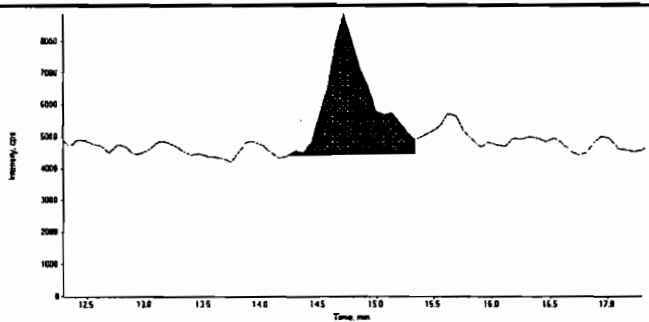
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

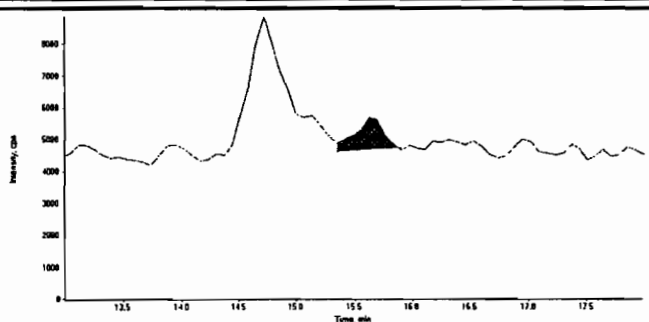
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

Data File	EXP0415024.wiff	Acquisition Date	4/15/2010 8:04:18 PM
Sample Name	XIBLK08	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown

	Compound Name:	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	11.8
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	Compound Name:	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.0
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	Compound Name:	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	14.8
	Actual RT:	14.7
	Area Counts:	1.12e+005
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	Compound Name:	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.5
	Actual RT:	15.6
	Area Counts:	1.80e+004
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415024.wiff	<b>Acquisition Date</b>	4/15/2010 8:04:18 PM
<b>Sample Name</b>	XIBLK08	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.1
	Actual RT:	13.1
	Area Counts:	6.87e+003
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.1
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	17.6
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

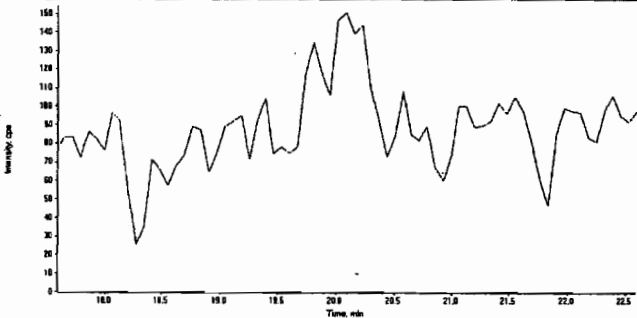
	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	18.8
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

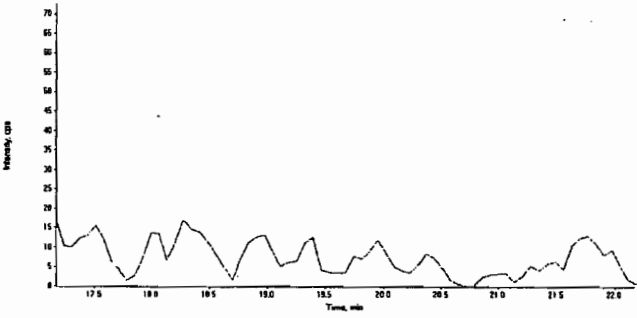
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415024.wiff	<b>Acquisition Date</b>	4/15/2010 8:04:18 PM
<b>Sample Name</b>	XIBLK08	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	20.1
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	<b>Expected RT:</b>	19.7
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2199

Lab Code: GEL

Lab Sample ID: XIBLK09

Analysis Date: 15-APR-10 23:05

GEL Data File: EXP0415031.wiff

Instrument ID: LCMSMS

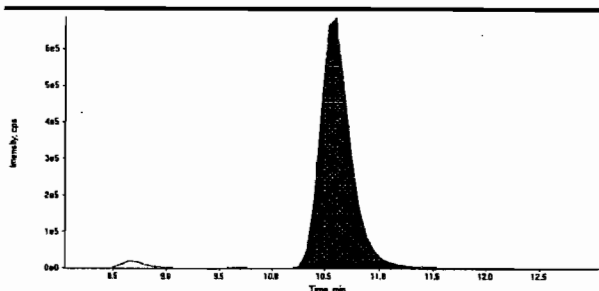
Column: Phenomenex Ultracarb 5u ODS(20)

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

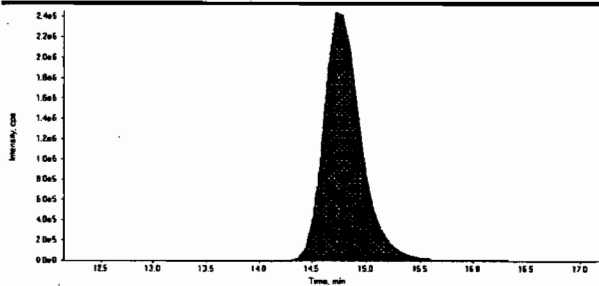
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

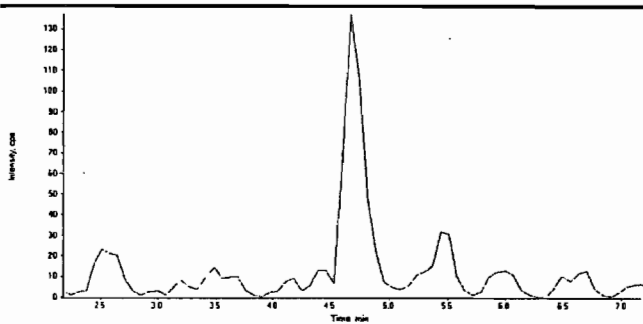
Data File	EXP0415031.wiff	Acquisition Date	4/15/2010 11:05:36 PM
Sample Name	XIBLK09	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown



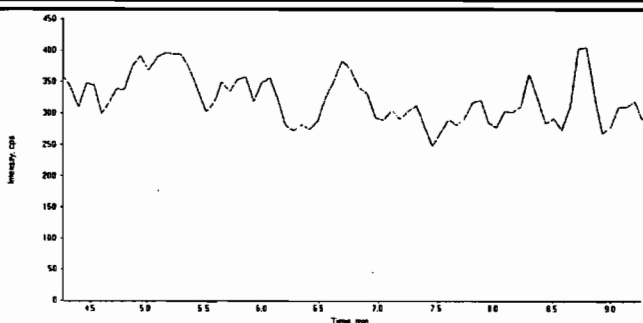
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.50
Actual RT:	10.60
Area Counts:	13600000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.60
Actual RT:	14.70
Area Counts:	59500000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.67
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



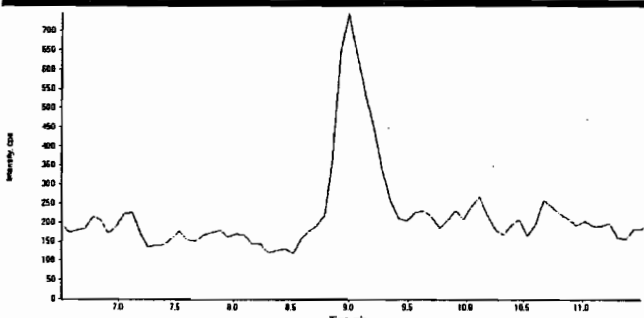
Compound Name:	RDY (267.0/46.1 amu)
Expected RT:	6.77
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

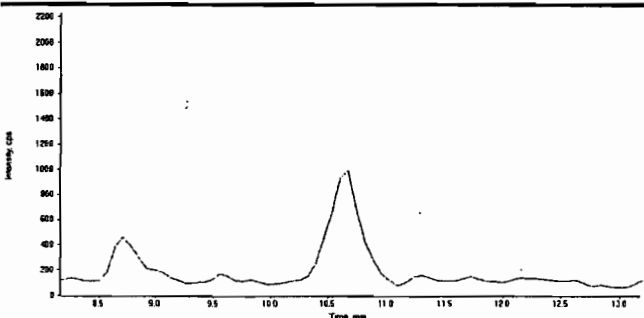
*Handwritten:*  
4/15/10  
4/23/10  
Jax

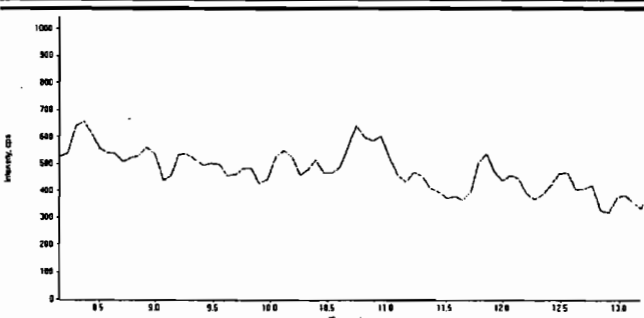
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

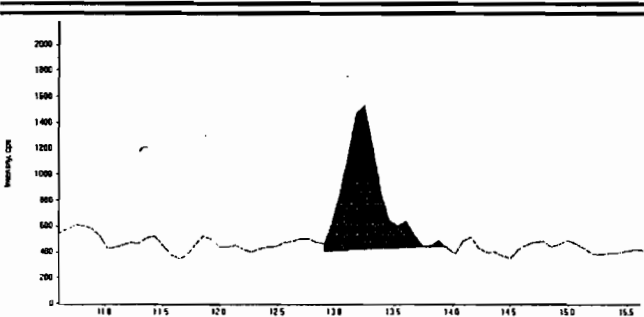
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LCMSMS#3

Data File	EXP0415031.wiff	Acquisition Date	4/15/2010 11:05:36 PM
Sample Name	XIBLK09	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown

	Compound Name:	135-Trinitrobenzene (213.0/182.8 amu)
	Expected RT:	9.00
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	Compound Name:	13-Dinitrobenzene (168.0/137.9 amu)
	Expected RT:	10.7
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	Compound Name:	Tetryl (241.0/180.8 amu)
	Expected RT:	10.7
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

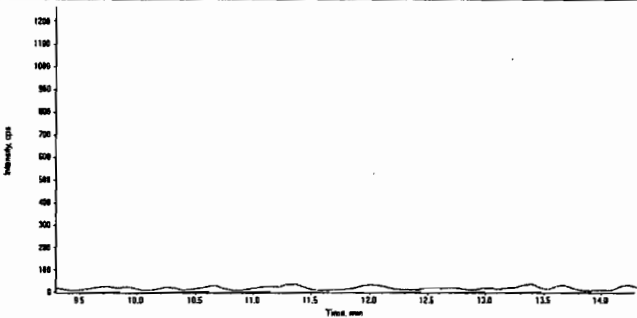
	Compound Name:	246-Trinitrotoluene (227.1/209.8 amu)
	Expected RT:	13.1
	Actual RT:	13.3
	Area Counts:	2.37e+004
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

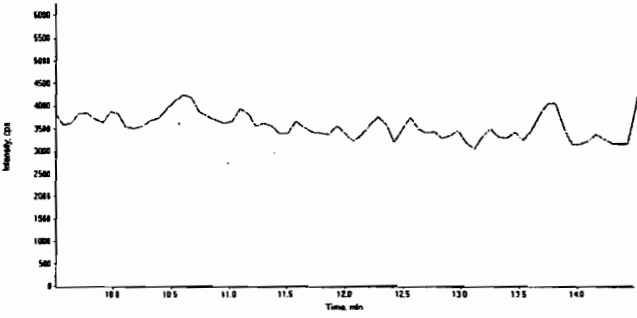
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415031.wiff	<b>Acquisition Date</b>	4/15/2010 11:05:36 PM
<b>Sample Name</b>	XIBLK09	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

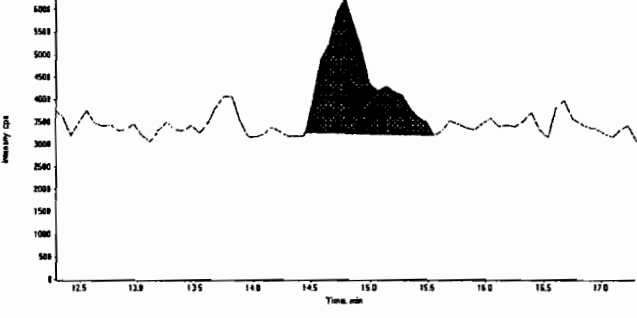
  

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	11.8
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

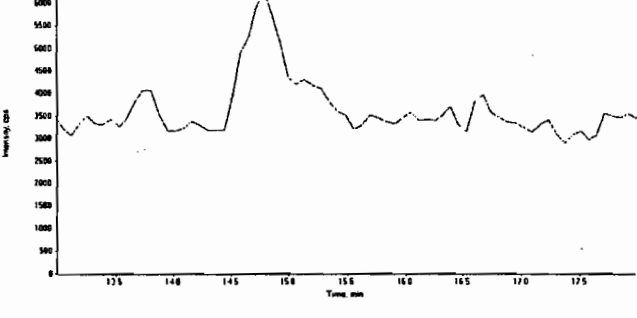
  

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.0
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	14.8
	Actual RT:	14.8
	Area Counts:	8.79e+004
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

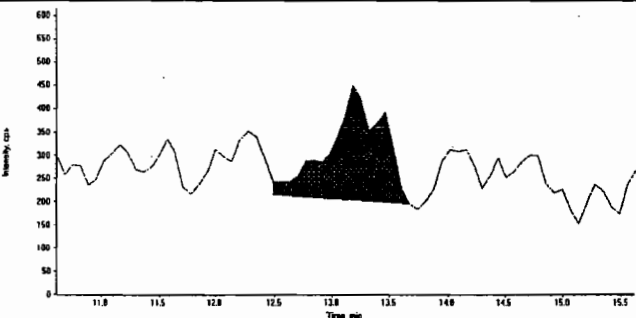
	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.5
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

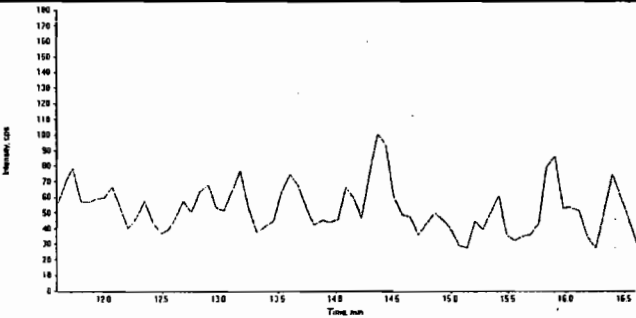
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415031.wiff	<b>Acquisition Date</b>	4/15/2010 11:05:36 PM
<b>Sample Name</b>	XIBLK09	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

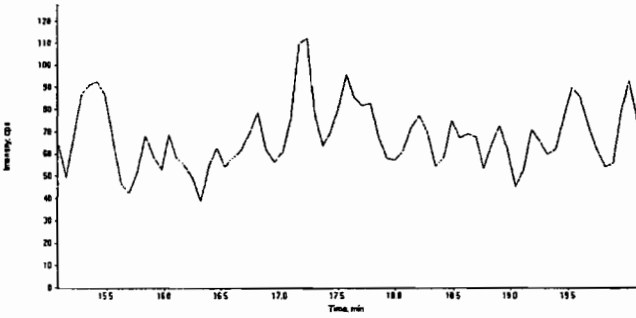
  

	<b>Compound Name:</b>	4-Amino-2,6-dinitrotoluene (197.0/167.0 amu)
	<b>Expected RT:</b>	13.1
	<b>Actual RT:</b>	13.2
	<b>Area Counts:</b>	8.08e+003
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

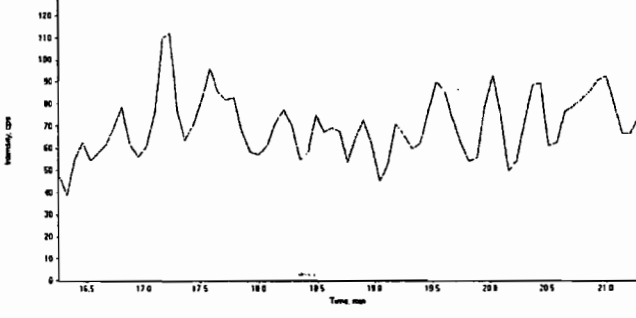
  

	<b>Compound Name:</b>	2-Amino-4,6-dinitrotoluene (197.0/180.0 amu)
	<b>Expected RT:</b>	14.1
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	17.6
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

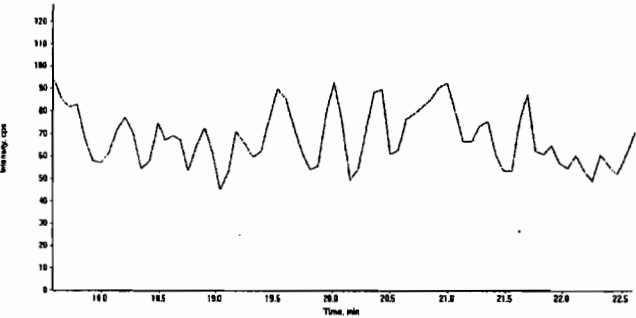
  

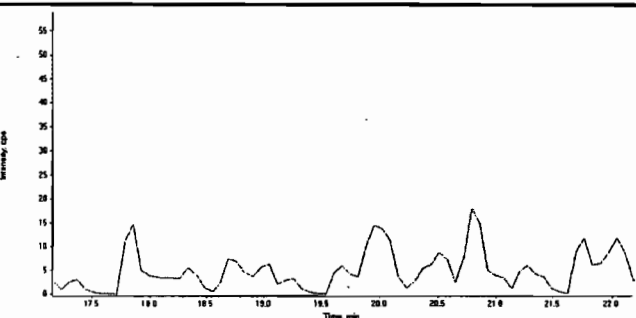
	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	18.8
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

Data File	EXP0415031.wiff	Acquisition Date	4/15/2010 11:05:36 PM
Sample Name	XIBLK09	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown

	Compound Name:	3-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	20.1
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	Compound Name:	PETN (361.1/62.0 amu)
	Expected RT:	19.7
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2199

Lab Code: GEL

Lab Sample ID: XIBLK10

Analysis Date: 16-APR-10 04:43

GEL Data File: EXP0415044.wiff

Instrument ID: LCMSMS

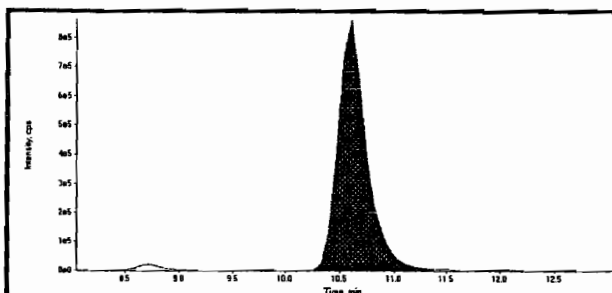
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
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	4.4
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

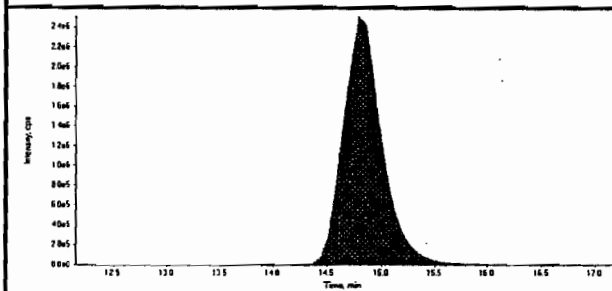
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

Data File	EXP0415044.wiff	Acquisition Date	4/16/2010 4:43:22 AM
Sample Name	XIBLK10	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown



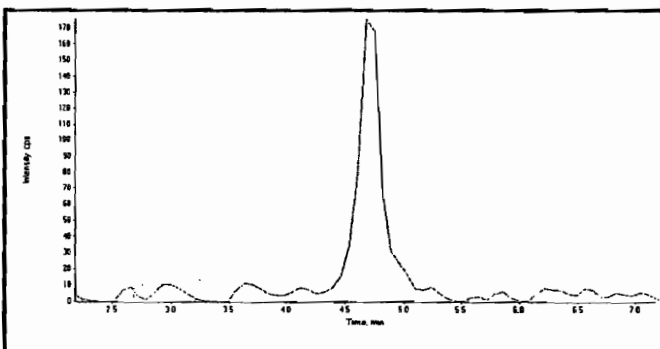
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.50
Actual RT:	10.60
Area Counts:	15700000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries

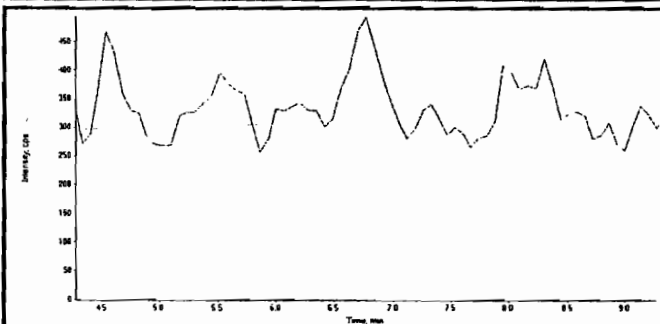


Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.60
Actual RT:	14.80
Area Counts:	62400000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.67
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.77
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

*Handwritten:*  
4/16/2010  
LER  
4/16/2010



GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415044.wiff	<b>Acquisition Date</b>	4/16/2010 4:43:22 AM
<b>Sample Name</b>	XIBLK10	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	Expected RT:	9.00
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	Expected RT:	10.7
	Actual RT:	10.6
	Area Counts:	2.46e+004
	Manual Modification	No
	Amount:	4.40 (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	Expected RT:	10.7
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

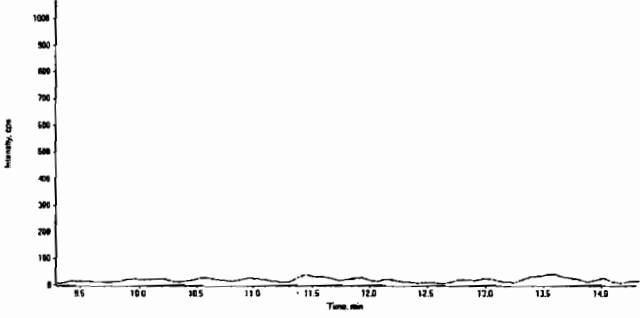
	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	Expected RT:	13.1
	Actual RT:	13.2
	Area Counts:	3.19e+004
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

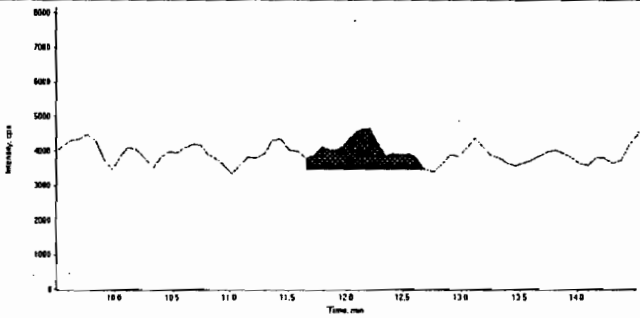
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415044.wiff	<b>Acquisition Date</b>	4/16/2010 4:43:22 AM
<b>Sample Name</b>	XIBLK10	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

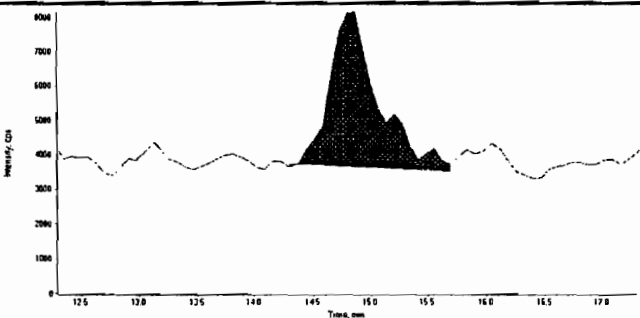
  

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	11.8
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

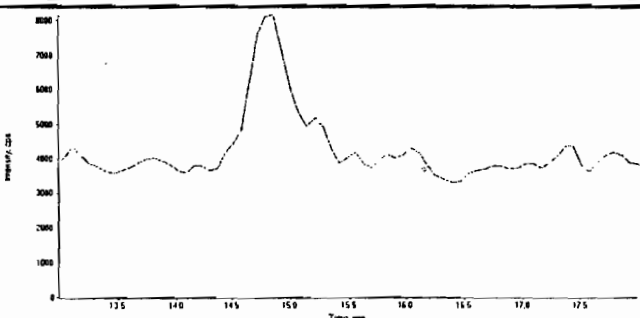
  

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.0
	Actual RT:	12.2
	Area Counts:	4.12e+004
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	14.8
	Actual RT:	14.9
	Area Counts:	1.36e+005
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

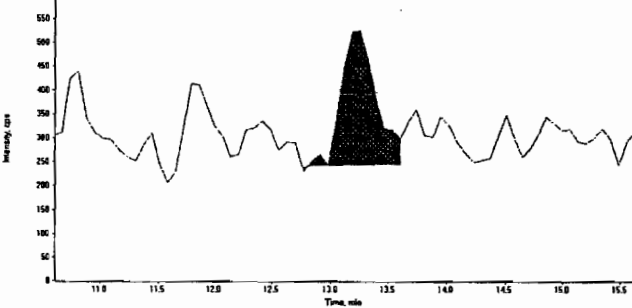
	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.5
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified


Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415044.wiff	<b>Acquisition Date</b>	4/16/2010 4:43:22 AM
<b>Sample Name</b>	XIBLK10	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

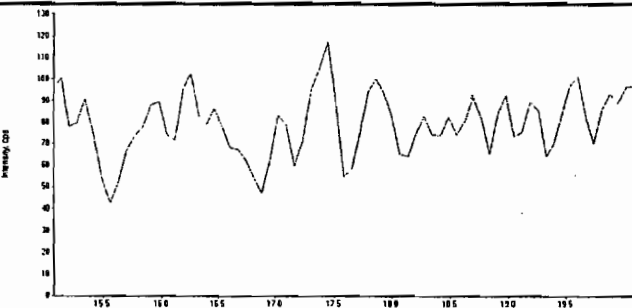
  

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.1
	Actual RT:	13.3
	Area Counts:	6.06e+003
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

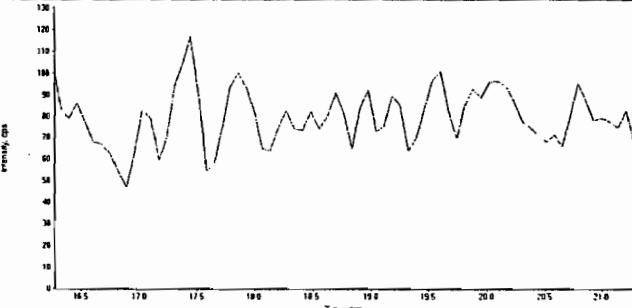
  

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.1
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	17.6
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	18.8
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415044.wiff	<b>Acquisition Date</b>	4/16/2010 4:43:22 AM
<b>Sample Name</b>	XIBLK10	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	20.1
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	<b>Expected RT:</b>	19.7
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2199

Lab Code: GEL

Lab Sample ID: XIBLK11

Analysis Date: 16-APR-10 10:20

GEL Data File: EXP0415057.wiff

Instrument ID: LCMSMS

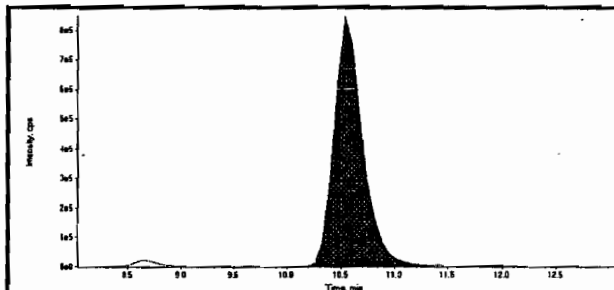
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
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	4.4
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

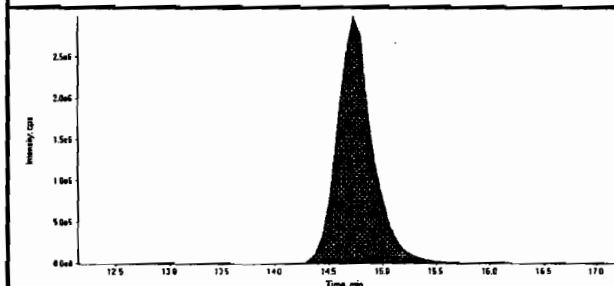
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

Data File	EXP0415057.wiff	Acquisition Date	4/16/2010 10:20:56 AM
Sample Name	XIBLK11	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown



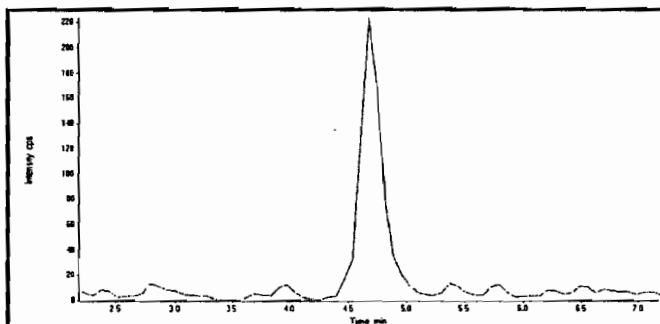
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.50
Actual RT:	10.50
Area Counts:	15800000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries

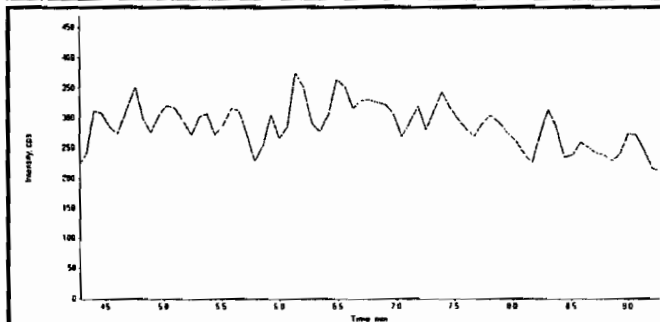


Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.60
Actual RT:	14.70
Area Counts:	69200000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.67
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.77
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

*Handwritten signature: Anne 4/23/10*

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415057.wiff	<b>Acquisition Date</b>	4/16/2010 10:20:56 AM
<b>Sample Name</b>	XIBLK11	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	Expected RT:	9.00
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	Expected RT:	10.7
	Actual RT:	10.6
	Area Counts:	2.47e+004
	Manual Modification	No
	Amount:	4.40 (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	Expected RT:	10.7
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

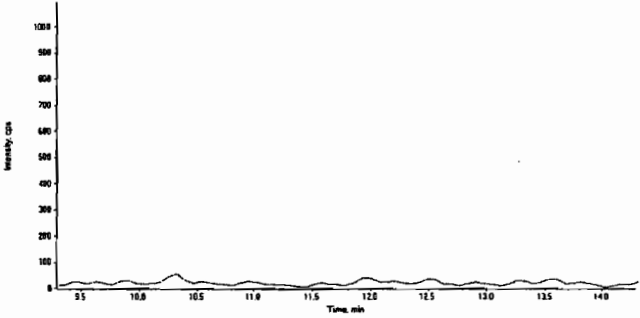
	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	Expected RT:	13.1
	Actual RT:	13.2
	Area Counts:	3.48e+004
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

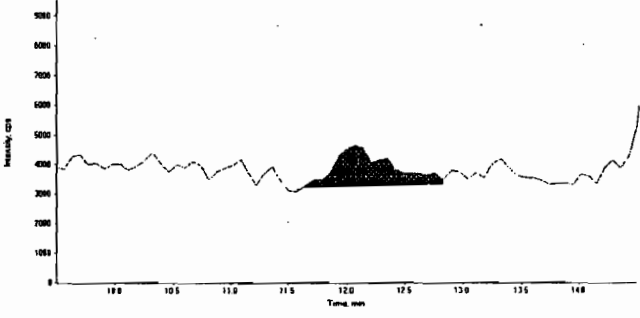
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

Data File	EXP0415057.wiff	Acquisition Date	4/16/2010 10:20:56 AM
Sample Name	XIBLK11	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown

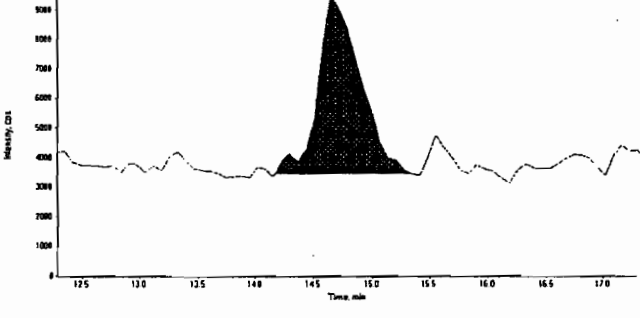
  

	Compound Name:	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	11.8
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

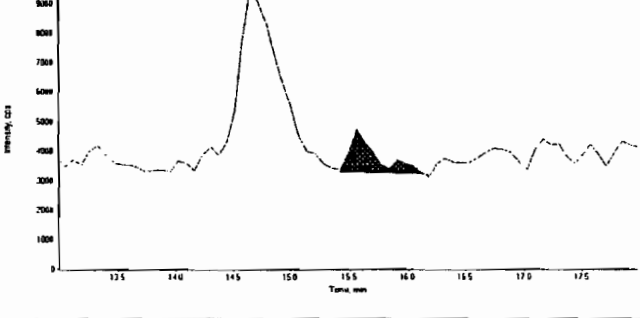
  

	Compound Name:	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.0
	Actual RT:	12.1
	Area Counts:	5.00e+004
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	Compound Name:	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	14.8
	Actual RT:	14.6
	Area Counts:	1.53e+005
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

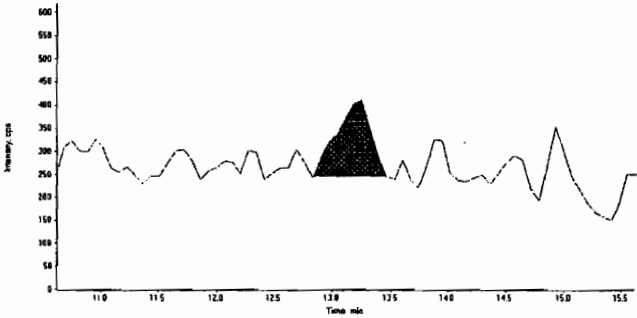
	Compound Name:	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.5
	Actual RT:	15.6
	Area Counts:	2.41e+004
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

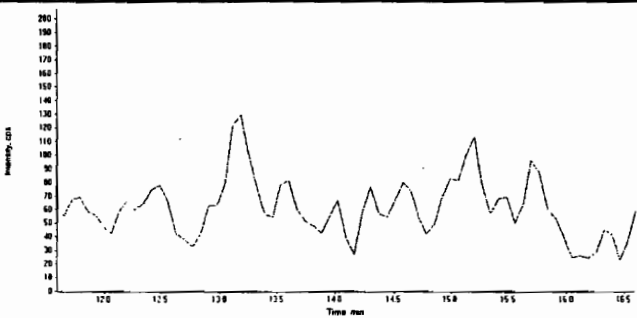


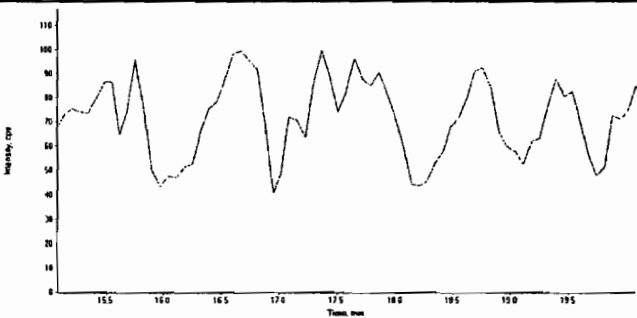
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

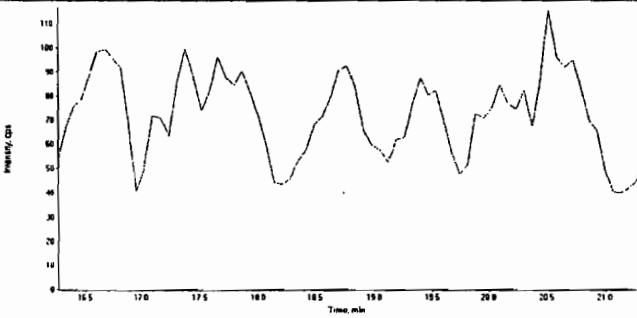
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

Data File	EXP0415057.wiff	Acquisition Date	4/16/2010 10:20:56 AM
Sample Name	XIBLK11	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown

	Compound Name:	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.1
	Actual RT:	13.3
	Area Counts:	3.37e+003
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	Compound Name:	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.1
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	Compound Name:	2-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	17.6
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

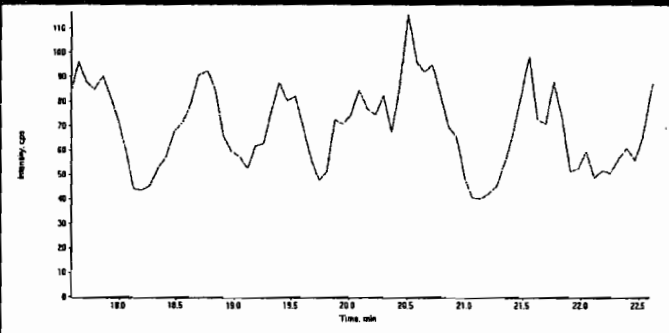
	Compound Name:	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	18.8
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

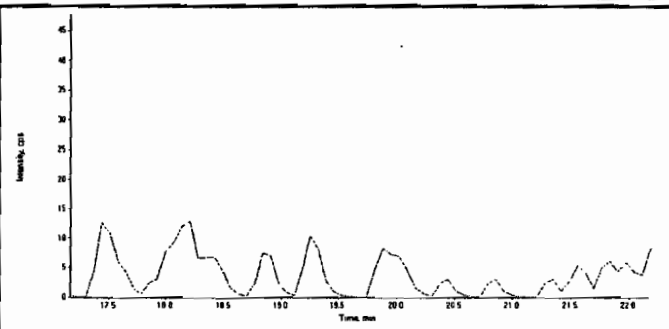
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415057.wiff	<b>Acquisition Date</b>	4/16/2010 10:20:56 AM
<b>Sample Name</b>	XIBLK11	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	20.1
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	Expected RT:	19.7
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2199

Lab Code: GEL

Lab Sample ID: XIBLK12

Analysis Date: 16-APR-10 13:23

GEL Data File: EXP0415064.wiff

Instrument ID: LCMSMS

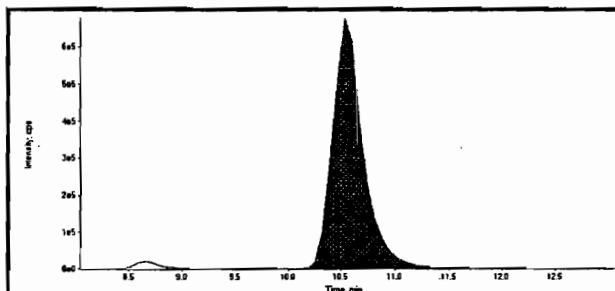
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	4.41
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0

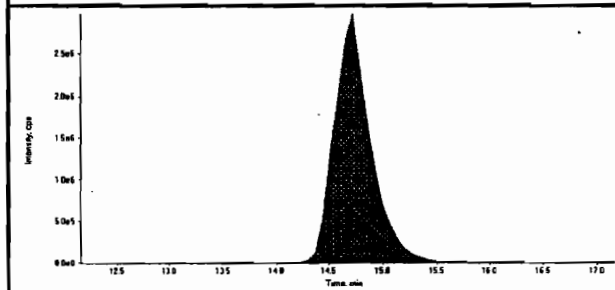
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

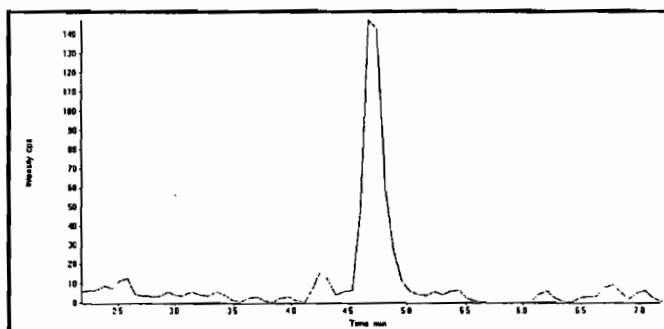
Data File	EXP0415064.wiff	Acquisition Date	4/16/2010 1:23:06 PM
Sample Name	XIBLK12	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown



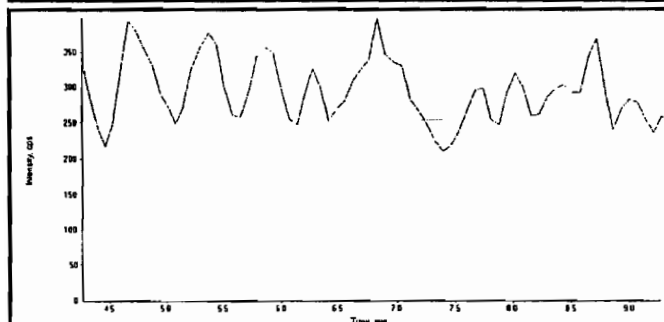
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.50
Actual RT:	10.50
Area Counts:	13500000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.60
Actual RT:	14.70
Area Counts:	70400000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.67
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.77
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

*Handwritten signature and date: 4/16/2010*

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415064.wiff	<b>Acquisition Date</b>	4/16/2010 1:23:06 PM
<b>Sample Name</b>	XIBLK12	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	<b>Expected RT:</b>	9.00
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	<b>Expected RT:</b>	10.7
	<b>Actual RT:</b>	10.6
	<b>Area Counts:</b>	2.21e+004
	<b>Manual Modification</b>	No
	<b>Amount:</b>	4.41 (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	<b>Expected RT:</b>	10.7
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

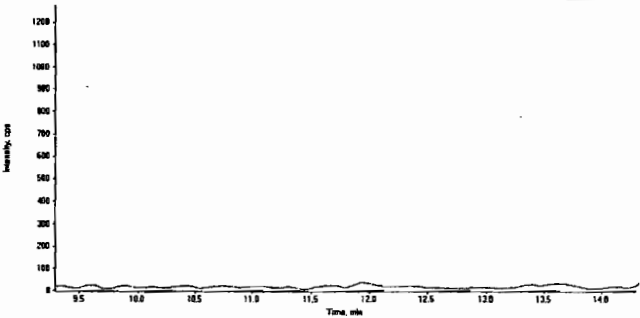
	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	<b>Expected RT:</b>	13.1
	<b>Actual RT:</b>	13.2
	<b>Area Counts:</b>	3.14e+004
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

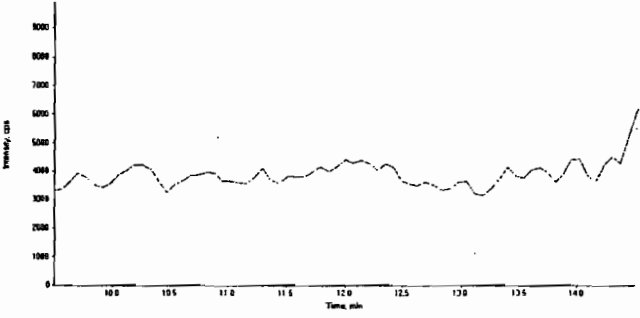
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LCMSMS#3

<b>Data File</b>	EXP0415064.wiff	<b>Acquisition Date</b>	4/16/2010 1:23:06 PM
<b>Sample Name</b>	XIBLK12	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

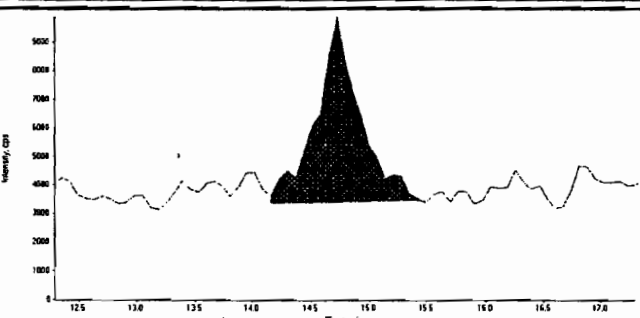
  

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	11.8
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

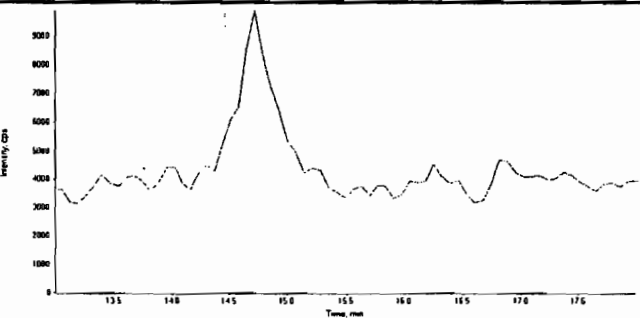
  

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.0
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	14.8
	Actual RT:	14.7
	Area Counts:	1.72e+005
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.5
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415064.wiff	<b>Acquisition Date</b>	4/16/2010 1:23:06 PM
<b>Sample Name</b>	XIBLK12	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	<b>Expected RT:</b>	13.1
	<b>Actual RT:</b>	13.1
	<b>Area Counts:</b>	6.78e+003
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	<b>Expected RT:</b>	14.1
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	17.6
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

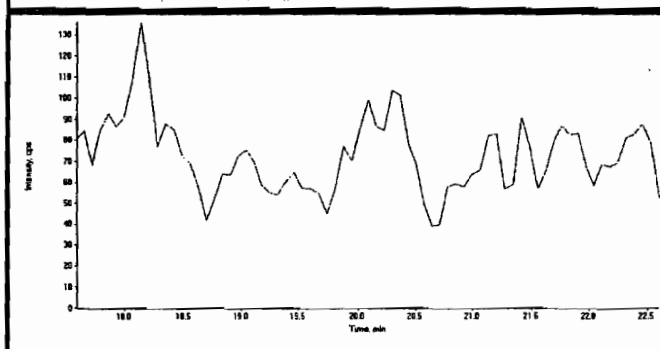
  

	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	18.8
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

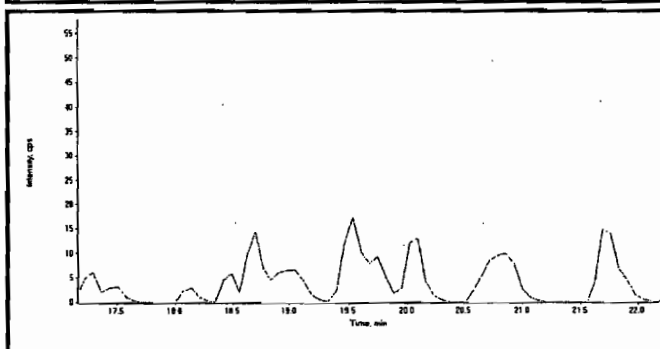
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

Data File	EXP0415064.wiff	Acquisition Date	4/16/2010 1:23:06 PM
Sample Name	XIBLK12	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown



Compound Name:	3-Nitrotoluene (137.0/46.0 amu)
Expected RT:	20.1
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	PETN (361.1/62.0 amu)
Expected RT:	19.7
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2199

Lab Code: GEL

Lab Sample ID: XIBLK13

Analysis Date: 16-APR-10 19:00

GEL Data File: EXP0415077.wiff

Instrument ID: LCMSMS

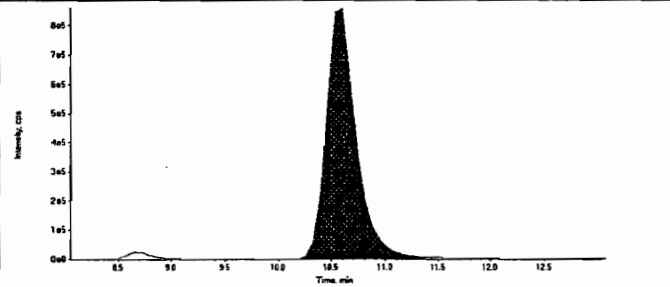
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
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	4.36
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

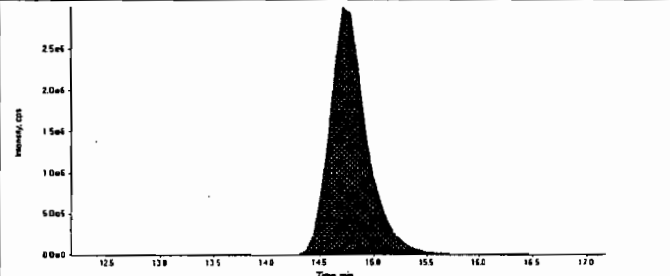
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

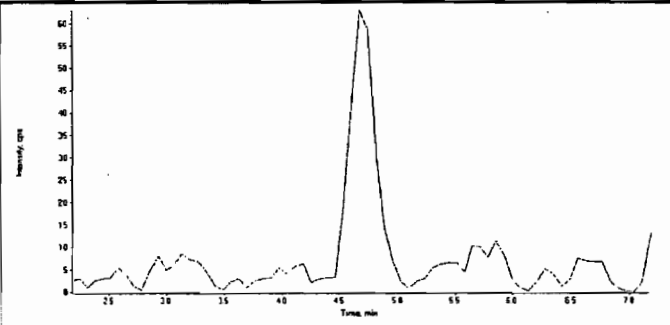
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Sample Name	XIBLK13	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown

	Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
	Expected RT:	10.50
	Actual RT:	10.60
	Area Counts:	16700000.00
	Manual Modification	No
	Amount:	500.00(ng/mL)

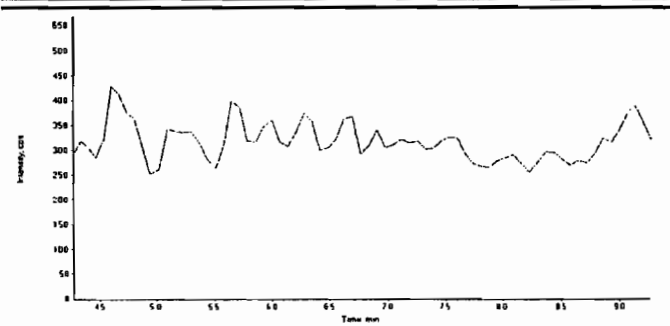
Please refer to Form 8 for a list of Internal Standard Recoveries

	Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
	Expected RT:	14.60
	Actual RT:	14.70
	Area Counts:	72500000.00
	Manual Modification	No
	Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries

	Compound Name:	HMX (341.2/46.0 amu)
	Expected RT:	4.67
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)

% Accuracy: N/A

	Compound Name:	RDX (267.0/46.1 amu)
	Expected RT:	6.77
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)

% Accuracy: N/A

*Handwritten signatures and dates:*  
 4/23/10  
 4/23/10

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415077.wiff	<b>Acquisition Date</b>	4/16/2010 7:00:54 PM
<b>Sample Name</b>	XIBLK13	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	Expected RT:	9.00
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	Expected RT:	10.7
	Actual RT:	10.6
	Area Counts:	2.14e+004
	Manual Modification	No
	Amount:	4.36 (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	Expected RT:	10.7
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

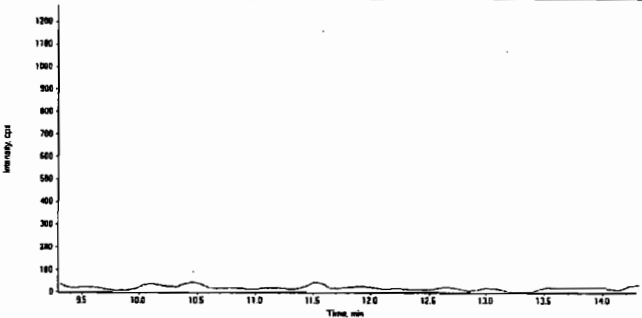
	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	Expected RT:	13.1
	Actual RT:	13.2
	Area Counts:	2.55e+004
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

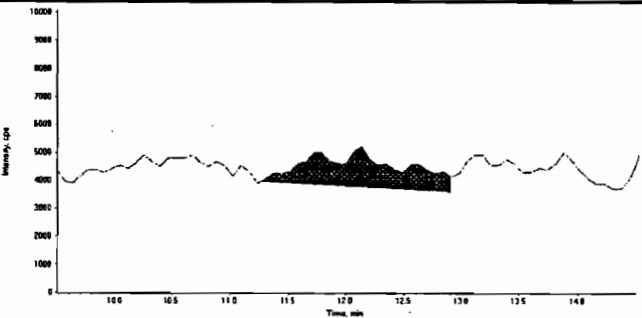
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415077.wiff	<b>Acquisition Date</b>	4/16/2010 7:00:54 PM
<b>Sample Name</b>	XIBLK13	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

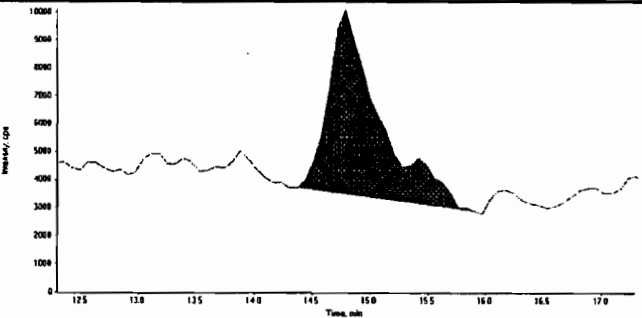
  

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	11.8
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

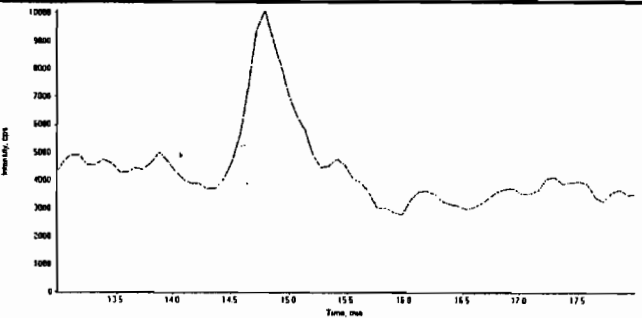
  

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.0
	Actual RT:	12.1
	Area Counts:	8.06e+004
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	14.8
	Actual RT:	14.8
	Area Counts:	2.06e+005
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

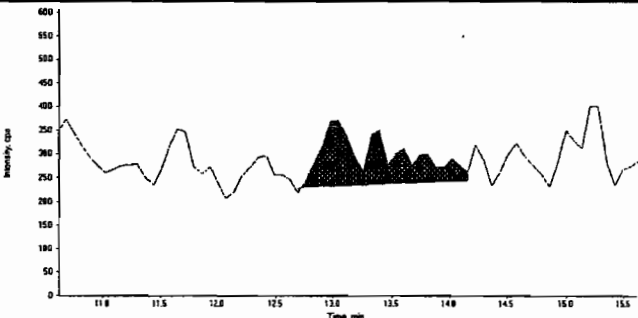
	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.5
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

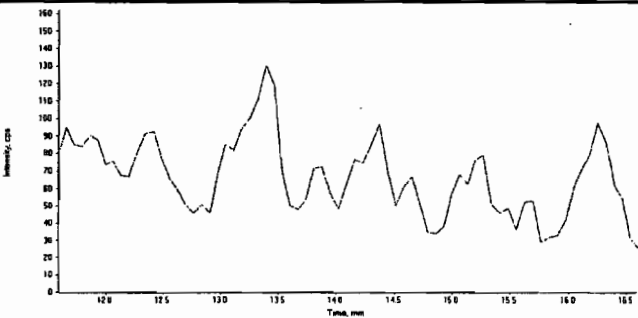
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415077.wiff	<b>Acquisition Date</b>	4/16/2010 7:00:54 PM
<b>Sample Name</b>	XIBLK13	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

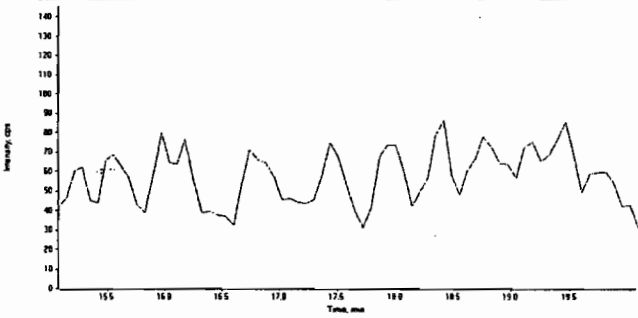
  

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.1
	Actual RT:	13.0
	Area Counts:	5.60e+003
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

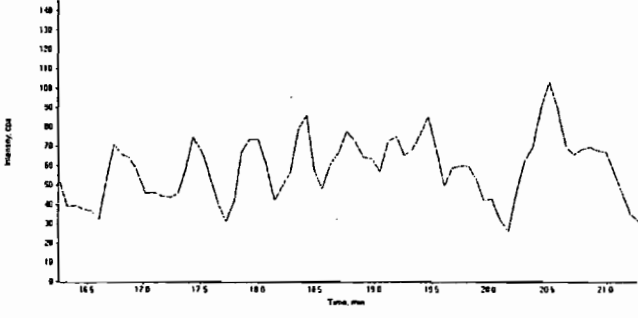
  

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.1
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	17.6
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

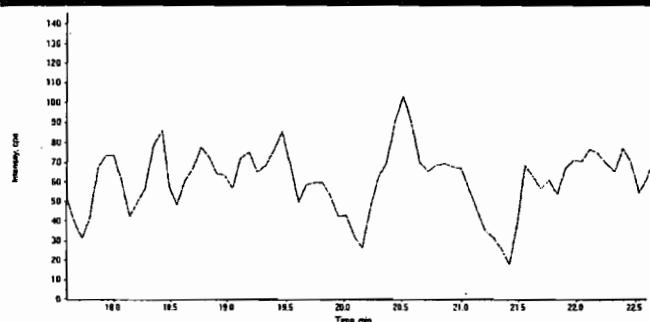
  

	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	18.8
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

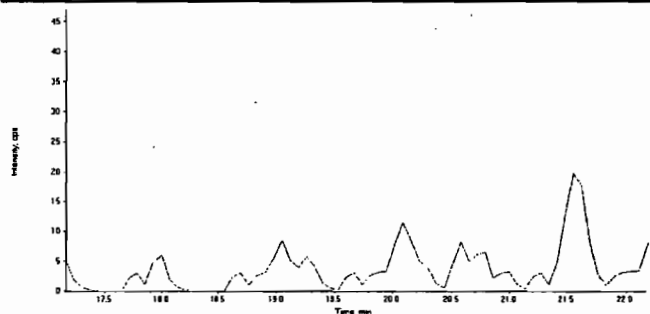
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

Data File	EXP0415077.wiff	Acquisition Date	4/16/2010 7:00:54 PM
Sample Name	XIBLK13	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown



Compound Name:	3-Nitrotoluene (137.0/46.0 amu)
Expected RT:	20.1
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	PETN (361.1/62.0 amu)
Expected RT:	19.7
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2199

Lab Code: GEL

Lab Sample ID: XIBLK02

Analysis Date: 20-APR-10 17:46

GEL Data File: EXP0420009.wiff

Instrument ID: LCMSMS

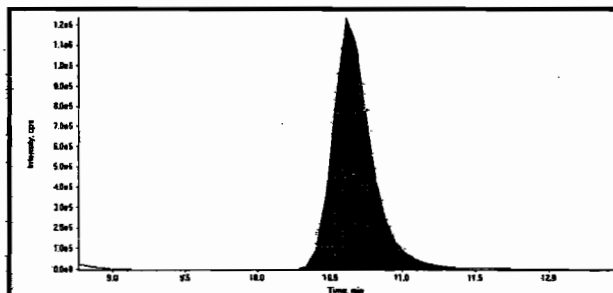
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	.28
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	.929
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

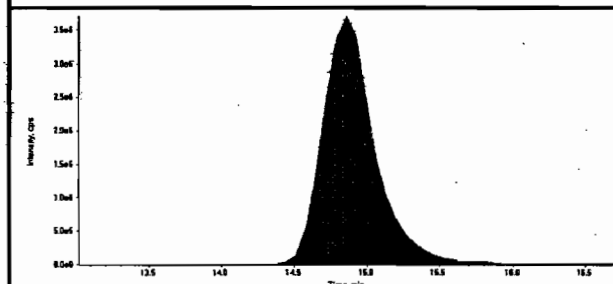
Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

Data File	EXP0420009.wiff	Acquisition Date	4/20/2010 5:46:16 PM
Sample Name	XIBLK02	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	042010.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown



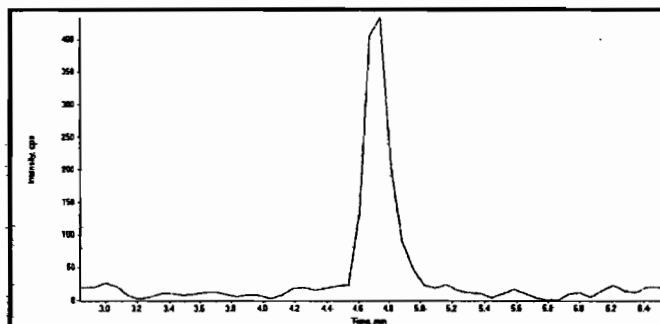
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.60
Actual RT:	10.60
Area Counts:	22900000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries

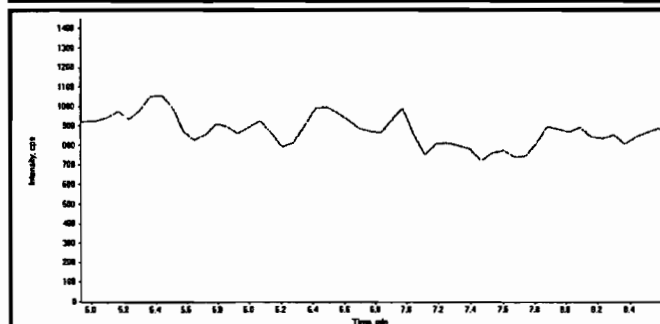


Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.90
Actual RT:	14.90
Area Counts:	93600000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.67
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.77
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

*See 4/29/10 Hmx 0429/10*



GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0420009.wiff	<b>Acquisition Date</b>	4/20/2010 5:46:16 PM
<b>Sample Name</b>	XIBLK02	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	042010.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	<b>Expected RT:</b>	9.07
	<b>Actual RT:</b>	9.07
	<b>Area Counts:</b>	3.30e+004
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	<b>Expected RT:</b>	10.7
	<b>Actual RT:</b>	10.7
	<b>Area Counts:</b>	3.30e+004
	<b>Manual Modification</b>	No
	<b>Amount:</b>	0.280 (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	<b>Expected RT:</b>	10.8
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	<b>Expected RT:</b>	13.3
	<b>Actual RT:</b>	13.3
	<b>Area Counts:</b>	4.16e+004
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0420009.wiff	<b>Acquisition Date</b>	4/20/2010 5:46:16 PM
<b>Sample Name</b>	XIBLK02	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	042010.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	<b>Expected RT:</b>	11.9
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	<b>Expected RT:</b>	12.1
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	<b>Expected RT:</b>	14.9
	<b>Actual RT:</b>	14.9
	<b>Area Counts:</b>	2.48e+005
	<b>Manual Modification</b>	No
	<b>Amount:</b>	0.929 (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	<b>Expected RT:</b>	15.6
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0420009.wiff	<b>Acquisition Date</b>	4/20/2010 5:46:16 PM
<b>Sample Name</b>	XIBLK02	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	042010.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	<b>Expected RT:</b>	13.3
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	<b>Expected RT:</b>	14.2
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	17.7
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

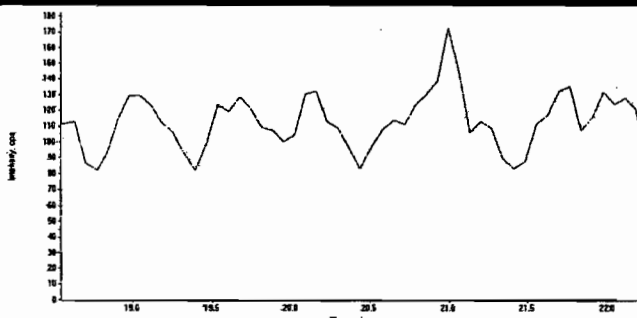
	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	19.0
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

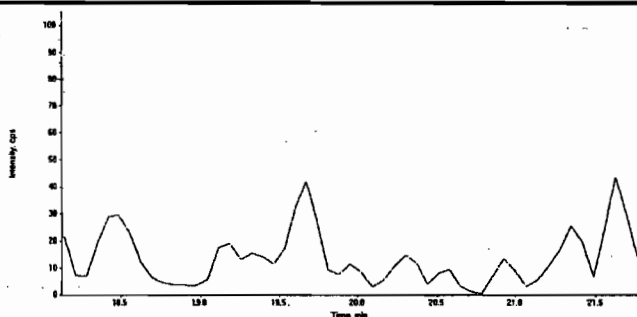
Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0420009.wiff	<b>Acquisition Date</b>	4/20/2010 5:46:16 PM
<b>Sample Name</b>	XIBLK02	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	042010.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	20.4
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	<b>Expected RT:</b>	20.0
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2199

Lab Code: GEL

Lab Sample ID: XIBLK03

Analysis Date: 20-APR-10 18:38

GEL Data File: EXP0420011.wiff

Instrument ID: LCMSMS

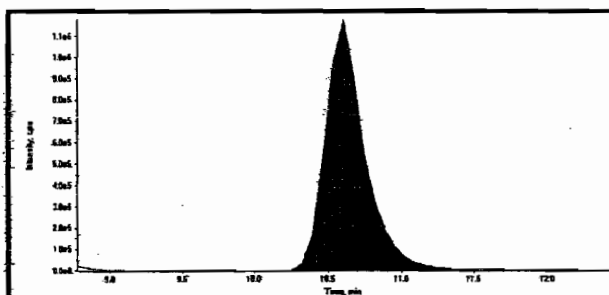
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	1.09
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	.266
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

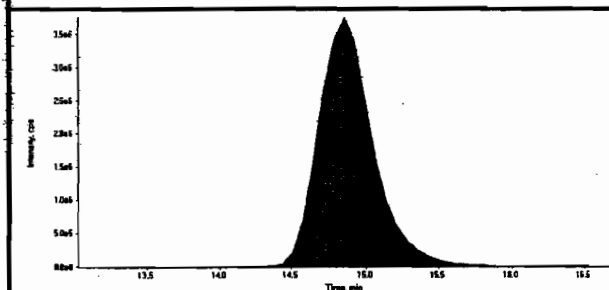
Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

Data File	EXP0420011.wiff	Acquisition Date	4/20/2010 6:38:17 PM
Sample Name	XIBLK03	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	042010.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown



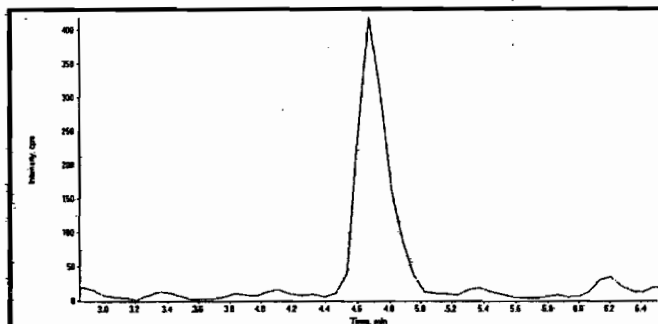
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.60
Actual RT:	10.60
Area Counts:	21800000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries

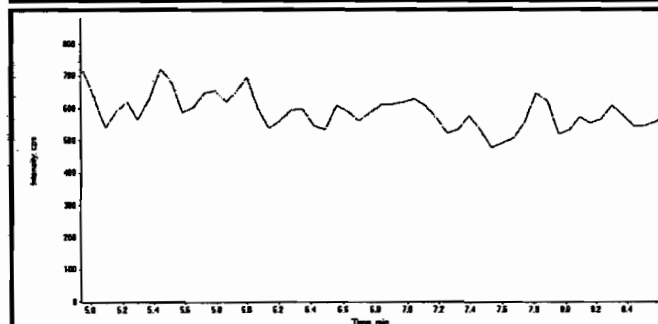


Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.90
Actual RT:	14.90
Area Counts:	96200000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.67
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.77
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

*Handwritten:*  
HMX 4/29/10  
RDX 4/29/10

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0420011.wiff	<b>Acquisition Date</b>	4/20/2010 6:38:17 PM
<b>Sample Name</b>	XIBLK03	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	042010.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	<b>Expected RT:</b>	9.07
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	<b>Expected RT:</b>	10.7
	<b>Actual RT:</b>	10.7
	<b>Area Counts:</b>	2.98e+004
	<b>Manual Modification</b>	No
	<b>Amount:</b>	0.266 (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	<b>Expected RT:</b>	10.8
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

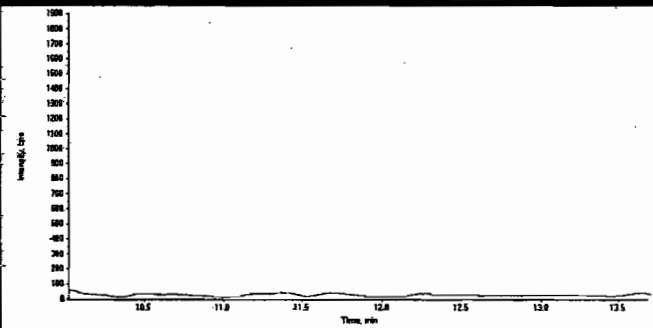
	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	<b>Expected RT:</b>	13.3
	<b>Actual RT:</b>	13.3
	<b>Area Counts:</b>	4.64e+004
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

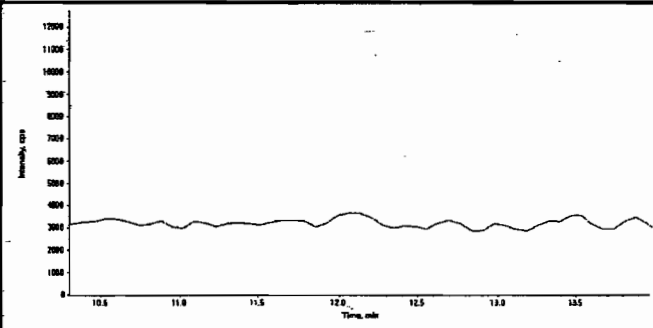
Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0420011.wiff	<b>Acquisition Date</b>	4/20/2010 6:38:17 PM
<b>Sample Name</b>	XIBLK03	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	042010.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

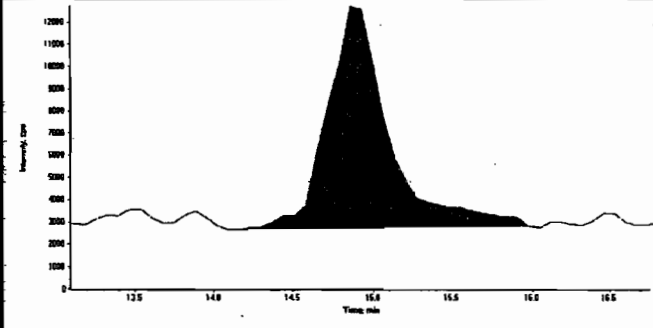
  

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	<b>Expected RT:</b>	11.9
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

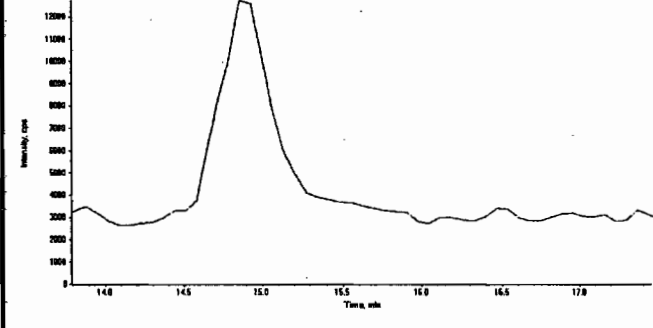
  

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	<b>Expected RT:</b>	12.1
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	<b>Expected RT:</b>	14.9
	<b>Actual RT:</b>	14.9
	<b>Area Counts:</b>	2.74e+005
	<b>Manual Modification</b>	No
	<b>Amount:</b>	1.09 (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	<b>Expected RT:</b>	15.6
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A



GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0420011.wiff	<b>Acquisition Date</b>	4/20/2010 6:38:17 PM
<b>Sample Name</b>	XIBLK03	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 1 LER	<b>Result Table</b>	042010.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.3
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.2
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	17.7
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	19.0
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0420011.wiff	<b>Acquisition Date</b>	4/20/2010 6:38:17 PM
<b>Sample Name</b>	XIBLK03	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	042010.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	20.4
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	<b>Expected RT:</b>	20.0
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2199

Lab Code: GEL

Lab Sample ID: XIBLK04

Analysis Date: 21-APR-10 00:15

GEL Data File: EXP0420024.wiff

Instrument ID: LCMSMS

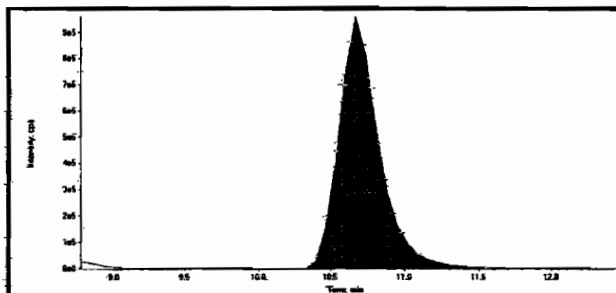
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	.812
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	.326
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

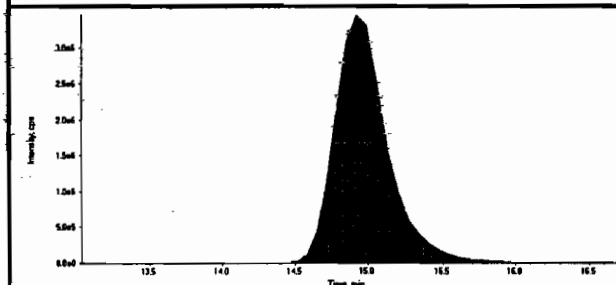
Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

Data File	EXP0420024.wiff	Acquisition Date	4/21/2010 12:15:34 AM
Sample Name	XIBLK04	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	042010.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown



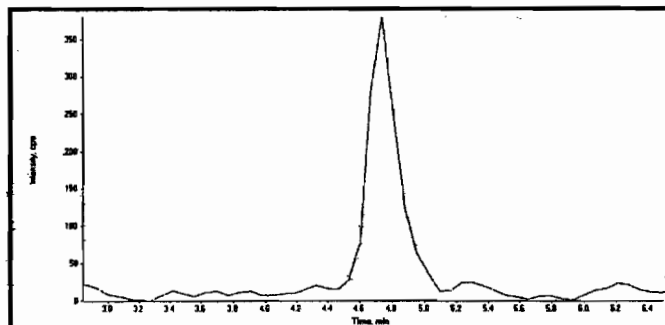
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.60
Actual RT:	10.70
Area Counts:	18300000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries

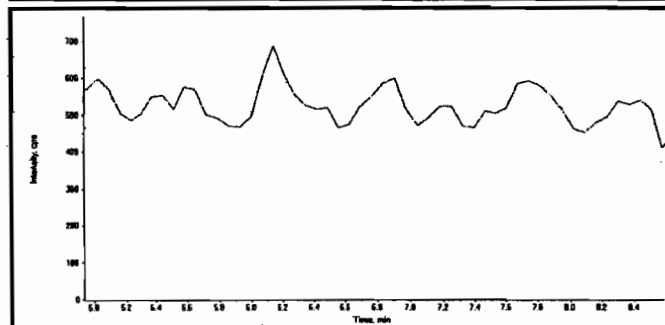


Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.90
Actual RT:	14.90
Area Counts:	86800000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.67
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.77
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

*Handwritten:*  
4/21/10  
LER  
4/22/10

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0420024.wiff	<b>Acquisition Date</b>	4/21/2010 12:15:34 AM
<b>Sample Name</b>	XIBLK04	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	042010.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	Expected RT:	9.07
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	Expected RT:	10.7
	Actual RT:	10.7
	Area Counts:	3.07e+004
	Manual Modification	No
	Amount:	0.326 (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	Expected RT:	10.8
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

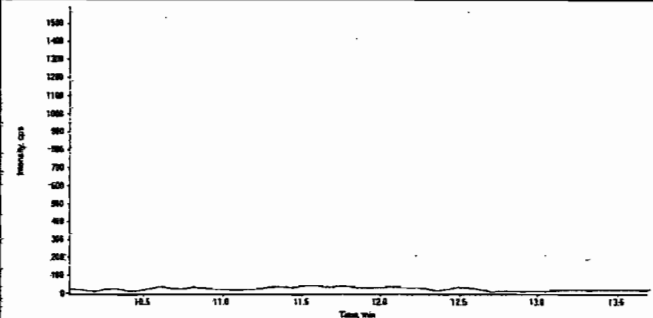
	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	Expected RT:	13.3
	Actual RT:	13.3
	Area Counts:	3.61e+004
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

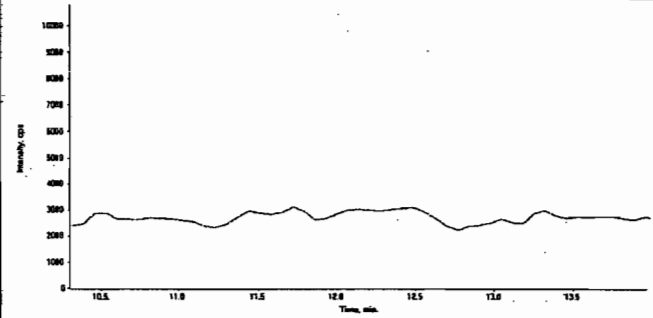
Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0420024.wiff	<b>Acquisition Date</b>	4/21/2010 12:15:34 AM
<b>Sample Name</b>	XIBLK04	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	042010.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

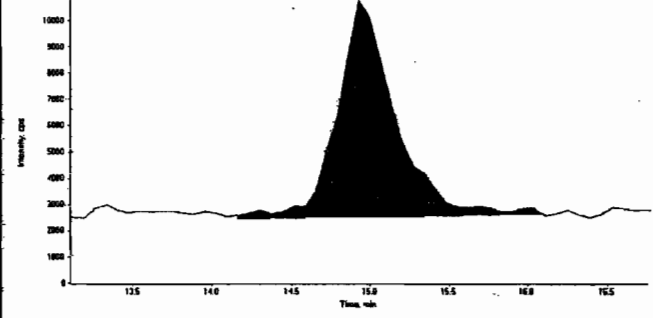
  

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	<b>Expected RT:</b>	11.9
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

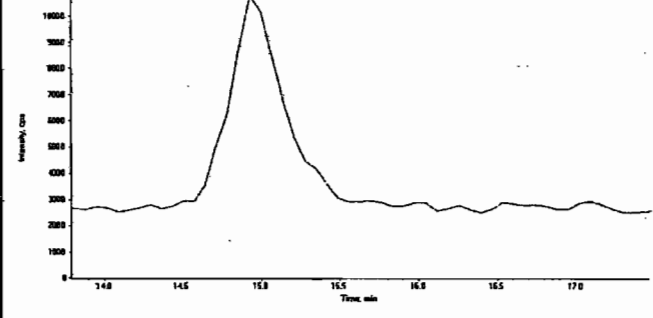
  

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	<b>Expected RT:</b>	12.1
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	<b>Expected RT:</b>	14.9
	<b>Actual RT:</b>	14.9
	<b>Area Counts:</b>	2.17e+005
	<b>Manual Modification</b>	No
	<b>Amount:</b>	0.812 (ng/mL)
	<b>% Accuracy:</b>	N/A

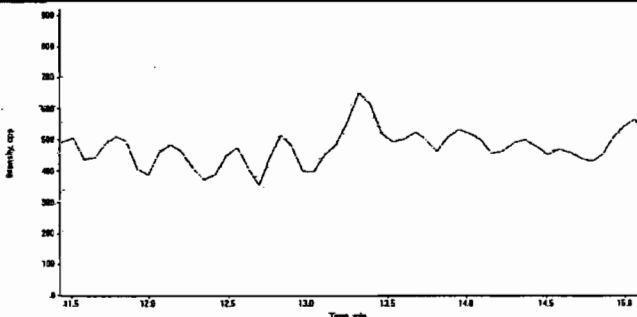
	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	<b>Expected RT:</b>	15.6
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

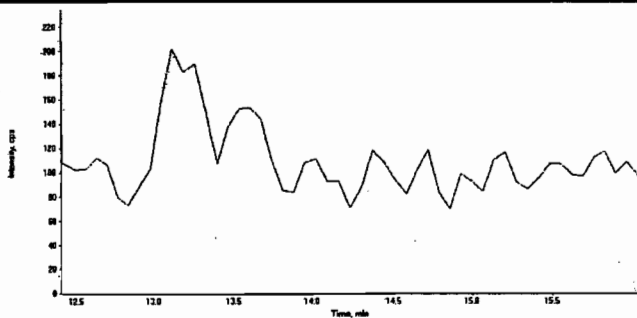
Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0420024.wiff	<b>Acquisition Date</b>	4/21/2010 12:15:34 AM
<b>Sample Name</b>	XIBLK04	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	042010.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

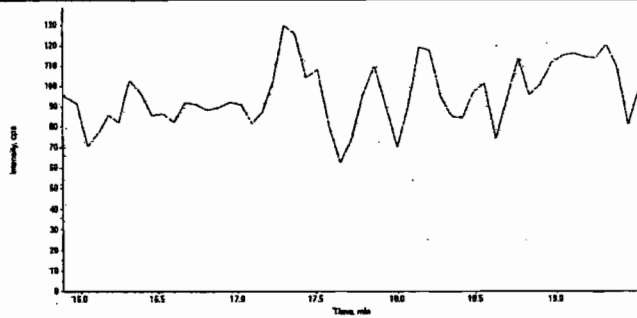
  

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	<b>Expected RT:</b>	13.3
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

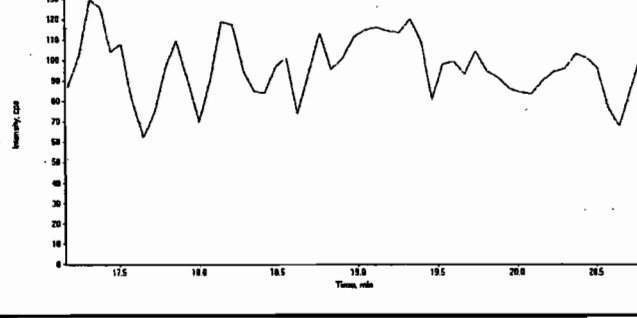
  

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	<b>Expected RT:</b>	14.2
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	17.7
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	19.0
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0420024.wiff	<b>Acquisition Date</b>	4/21/2010 12:15:34 AM
<b>Sample Name</b>	XIBLK04	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	042010.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	20.4
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	<b>Expected RT:</b>	20.0
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2199

Lab Code: GEL

Lab Sample ID: XIBLK02

Analysis Date: 09-APR-10 09:36

GEL Data File: EXS04090010.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	13
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Jan 4/12/10

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Sample Name: "XIBLK02" Sample ID: "11LER" File: "EX504060010.wif"

Peak Name: "35-Dinitrobenzyl" Mass(es): "182.0460 amu"

Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1

Sample Type: Unknown

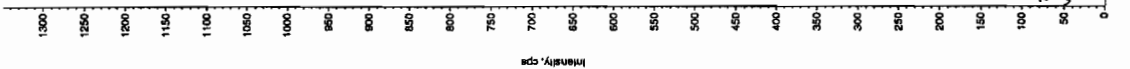
Concentration: N/A

Calculated Conc: 0.00 ng/mL

Acq. Date: 4/9/2010

Acq. Time: 9:36:11 AM

Modified: No



HW-04/12/10

Sample Name: "XIBLK02" Sample ID: "11LER" File: "EX504060010.wif"

Peak Name: "TATB" Mass(es): "257.22049 amu"

Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1

Sample Type: Unknown

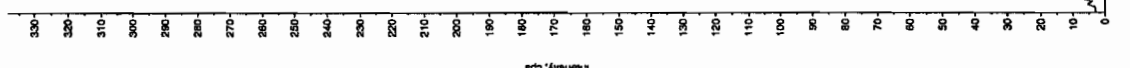
Concentration: N/A

Calculated Conc: 0.00 ng/mL

Acq. Date: 4/9/2010

Acq. Time: 9:36:11 AM

Modified: No

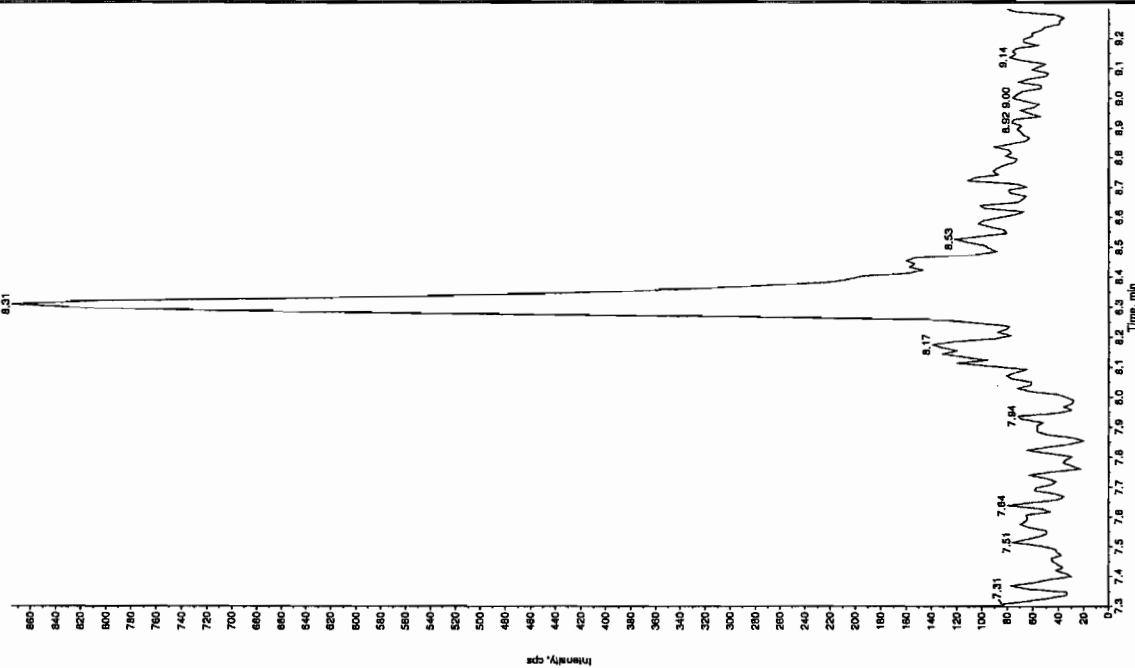


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\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

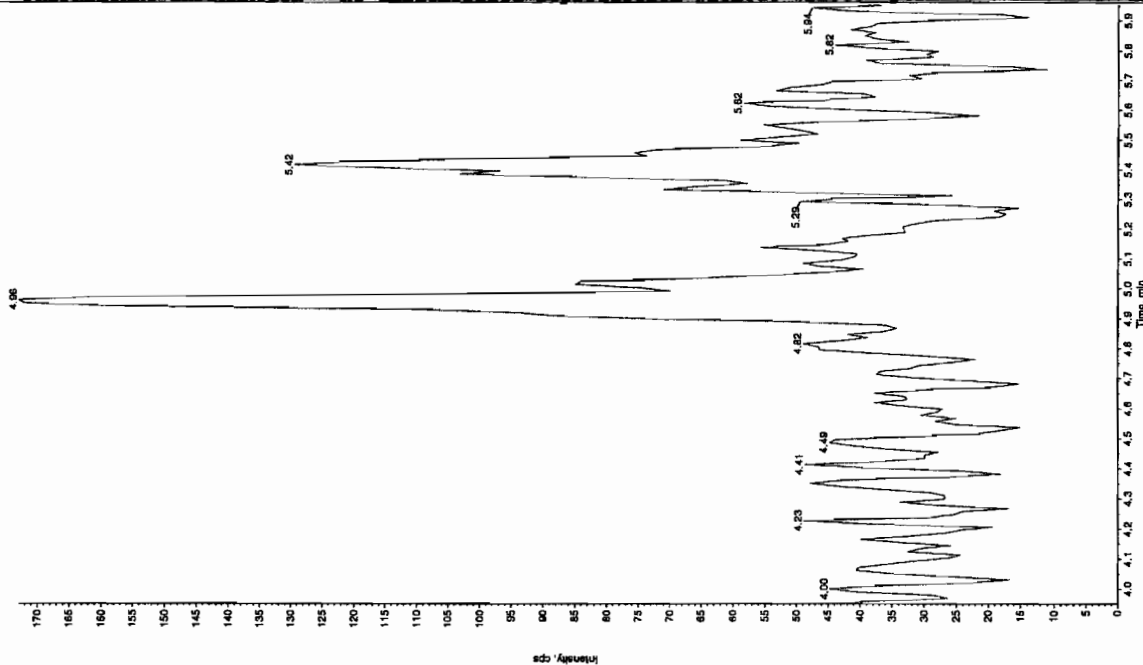
Sample Name: "XBLU02" Sample ID: "11LER" File: "EXS04090010.wif"  
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.1/151.3 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 0.00  
 Acq. Date: 4/9/2010  
 Acq. Time: 9:36:11 AM  
 Modified: No



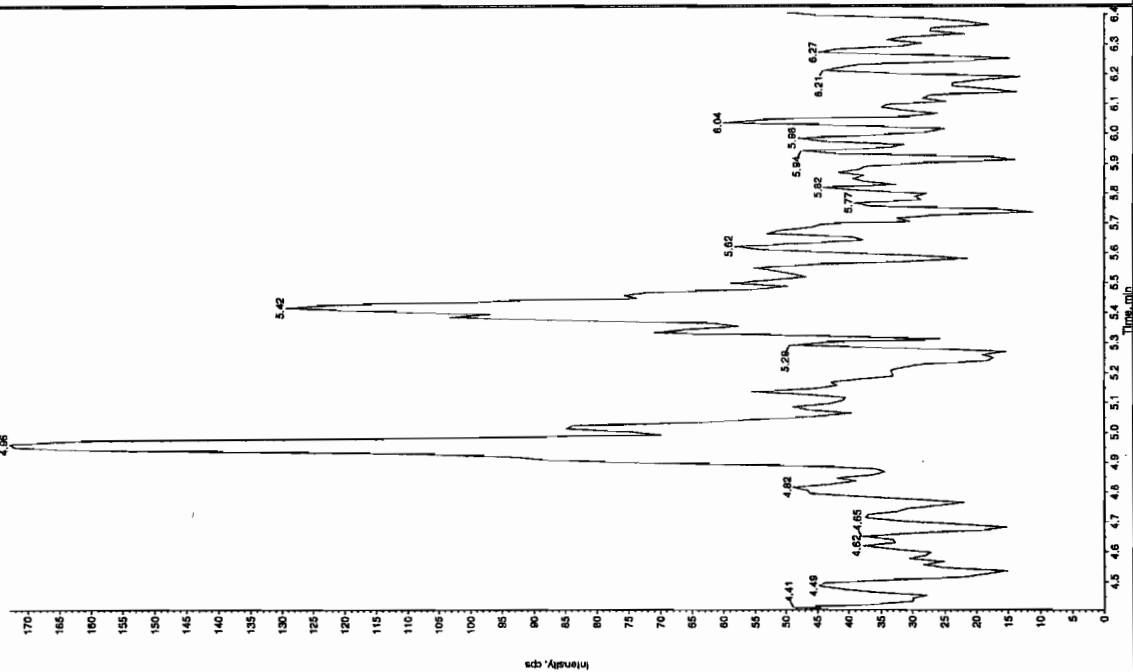
Sample Name: "XBLU02" Sample ID: "11LER" File: "EXS04090010.wif"  
 Peak Name: "26-Dinitro-4-nitrofluorene" Mass(es): "166.0/146.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 0.00  
 Acq. Date: 4/9/2010  
 Acq. Time: 9:36:11 AM  
 Modified: No



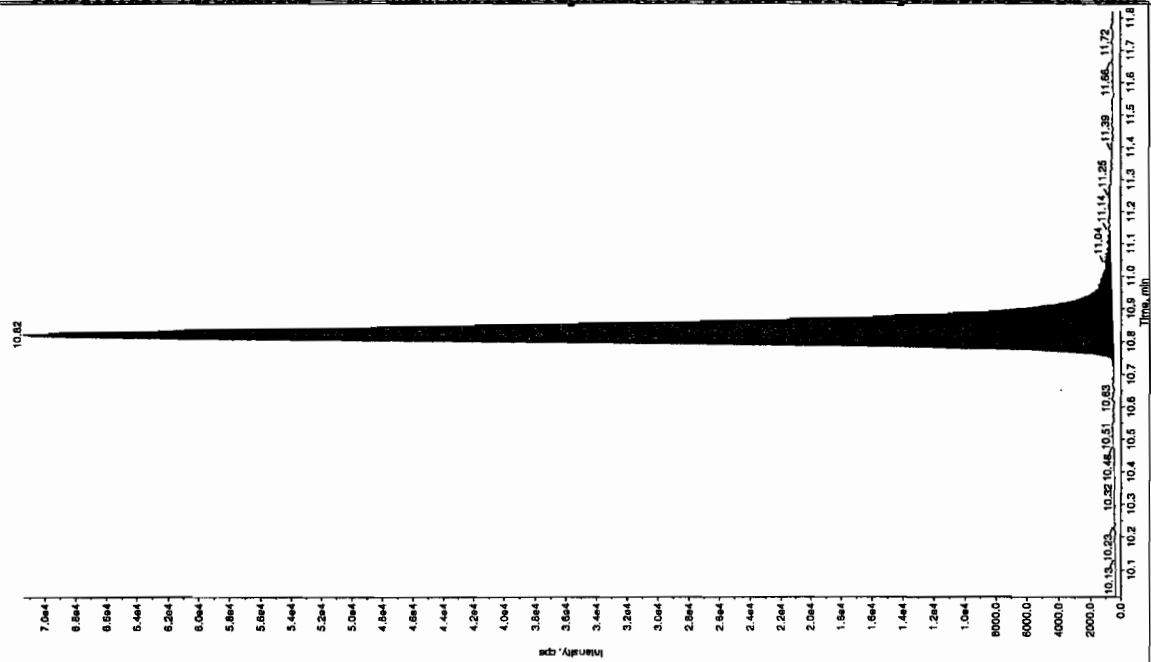
Sample Name: 'XIBLK02' Sample ID: '111LER' File: 'EXS04080010.wif'  
 Peak Name: '24-Diamino-5-nitrotoluene' Mass(es): '166.048.0 amu'  
 Comment: 'LCMSXEP\_B' Annotation: ''

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 4/9/2010  
 Acq. Time: 9:36:11 AM  
 Modified: No



Sample Name: 'XIBLK02' Sample ID: '111LER' File: 'EXS04080010.wif'  
 Peak Name: 'tris(o-cresyl) phosphite' Mass(es): '369.191.0 amu'  
 Comment: 'LCMSXEP\_B' Annotation: ''

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 13.0 ng/mL  
 Acq. Date: 4/9/2010  
 Acq. Time: 9:36:11 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 8000.00 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  
 Peak Height: 2.90e+005 counts  
 Start Time: 10.7 min  
 End Time: 11.1 min



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2199

Lab Code: GEL

Lab Sample ID: XIBLK03

Analysis Date: 09-APR-10 10:07

GEL Data File: EXS04090012.wiff

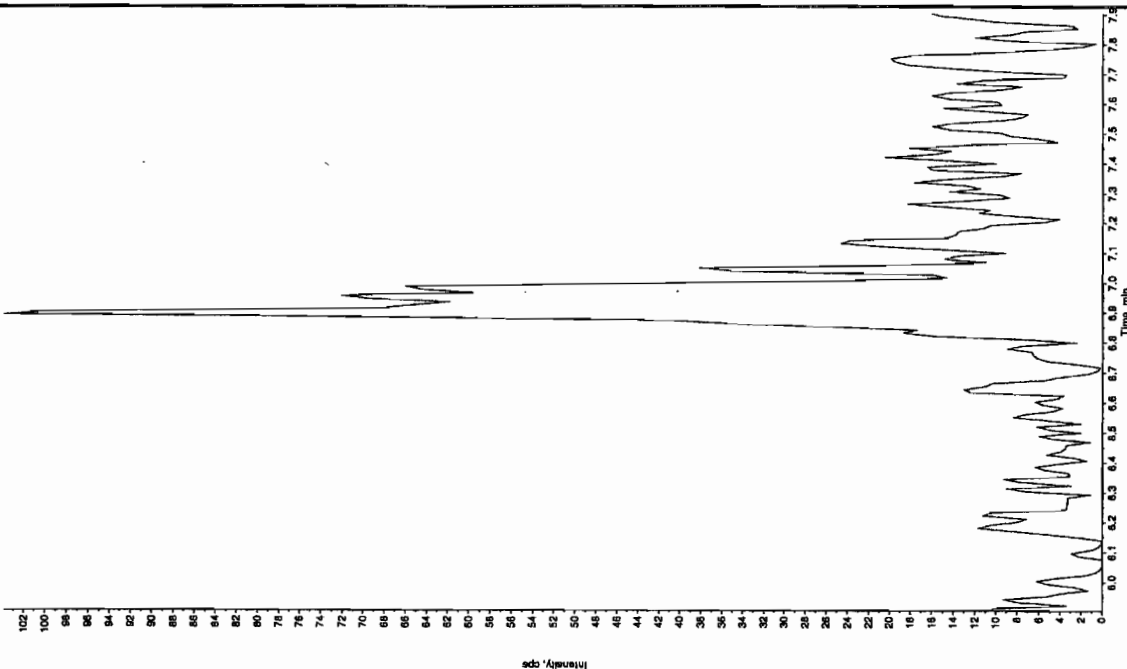
Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	7.48
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

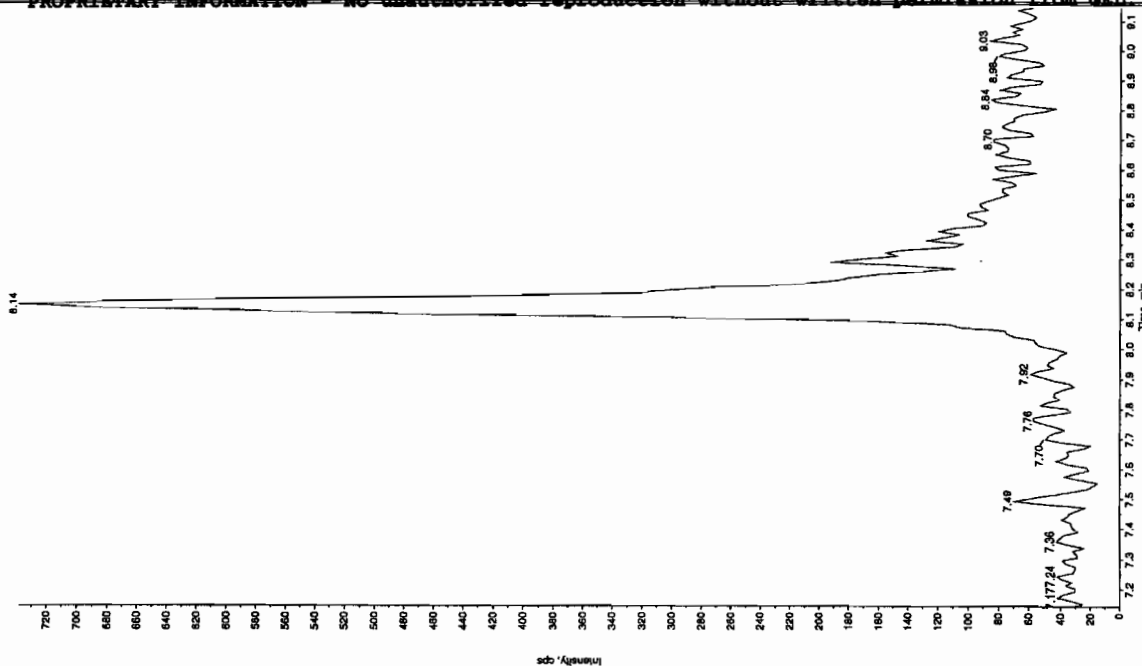
Scan 4/12/10

Sample Name: "XIBLK03" Sample ID: "111LER" File: "EXS04090012.wif"  
Peak Name: "1ATB" Mass(es): "257.2/204.9 amu"  
Comment: "LCMSEXP\_B" Annotation: ""  
Sample Index: 1  
Sample Type: Unknown  
Concentration: N/A  
Calculated Conc: 0.00 ng/mL  
Acq. Date: 4/9/2010  
Acq. Time: 10:07:35 AM  
Modified: No



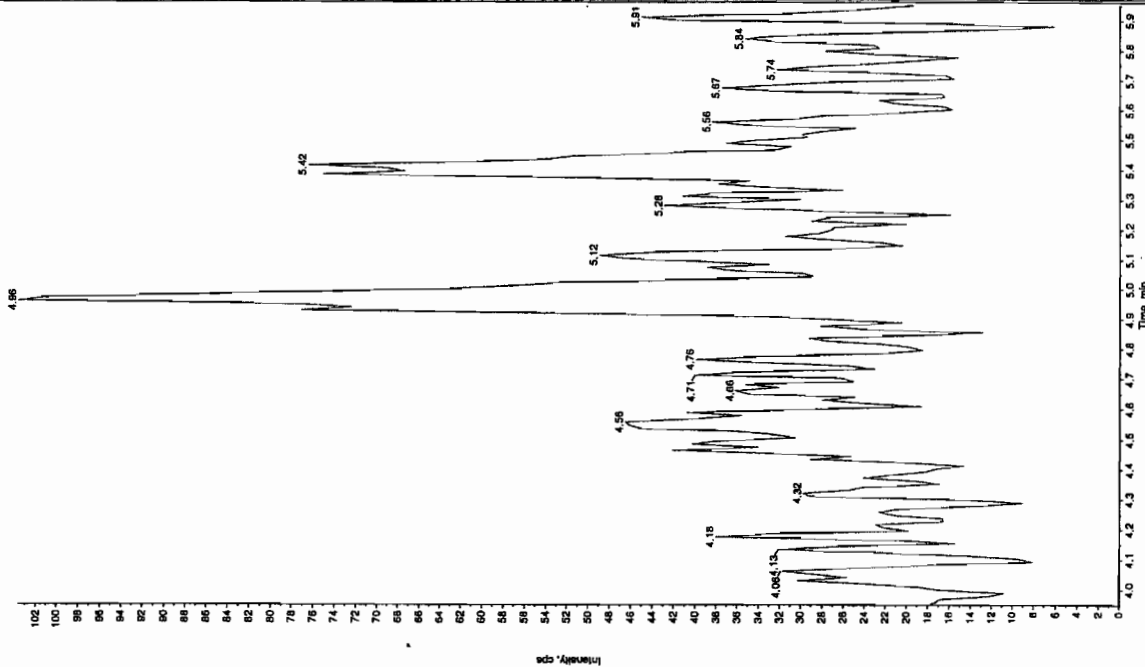
Page 909 of 1771

Sample Name: "XIBLK03" Sample ID: "111LER" File: "EXS04090012.wif"  
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/160.0 amu"  
Comment: "LCMSEXP\_B" Annotation: ""  
Sample Index: 1  
Sample Type: Unknown  
Concentration: N/A  
Calculated Conc: 0.00 ng/mL  
Acq. Date: 4/9/2010  
Acq. Time: 10:07:35 AM  
Modified: No

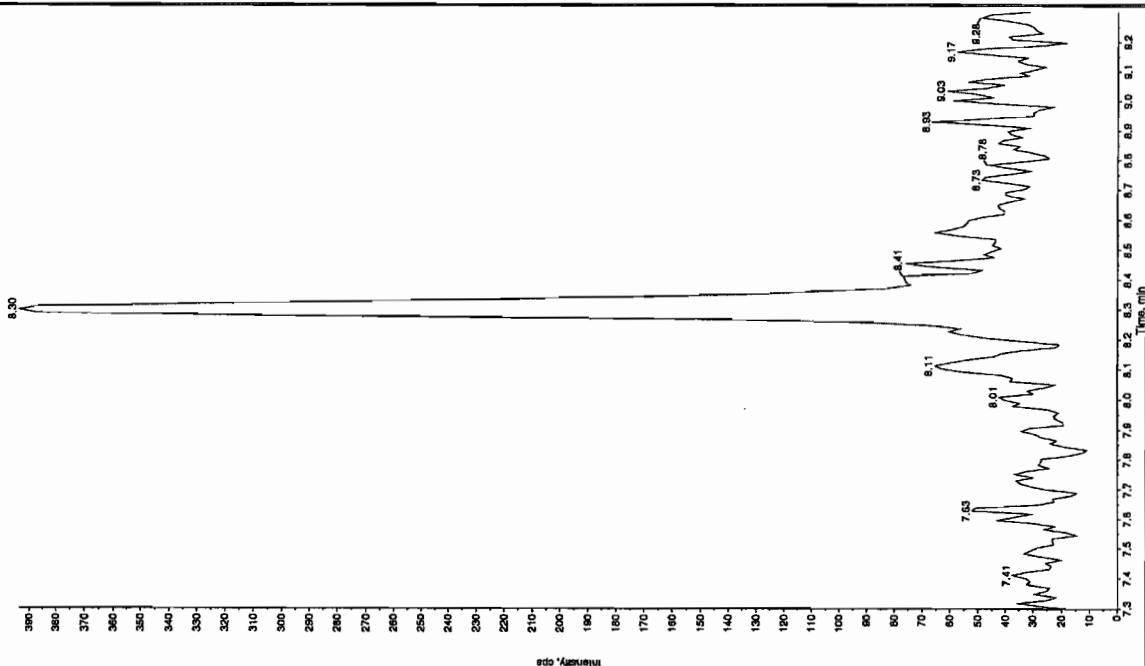


Ann 04/12/10

Sample Name: "YIELK03" Sample ID: "111EP" File: "EXS04090012.wif"  
 Peak Name: "26-Dimethoxy-4-nitrofluorene" Mass(es): "166.0/166.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""  
 Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 0.00  
 Acq. Date: 4/9/2010  
 Acq. Time: 10:07:35 AM  
 Modified: No

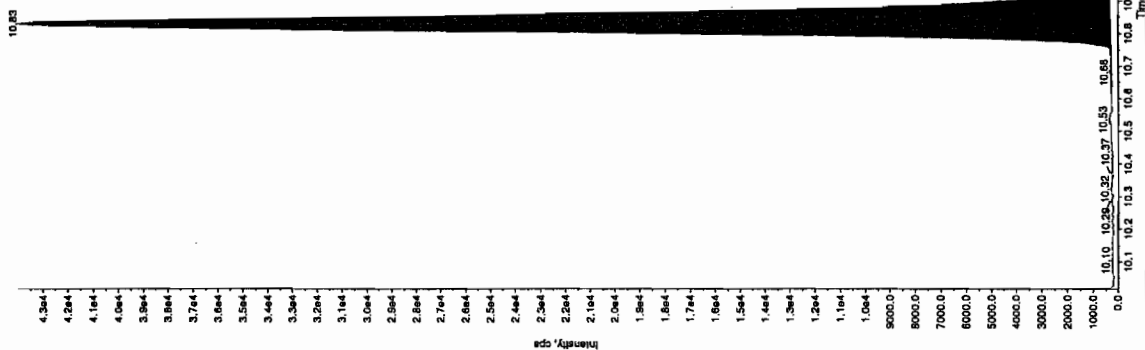


Sample Name: "YIELK03" Sample ID: "111EP" File: "EXS04090012.wif"  
 Peak Name: "34-Dimethoxy-4-nitrofluorene" Mass(es): "182.1/181.9 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""  
 Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 0.00  
 Acq. Date: 4/9/2010  
 Acq. Time: 10:07:35 AM  
 Modified: No



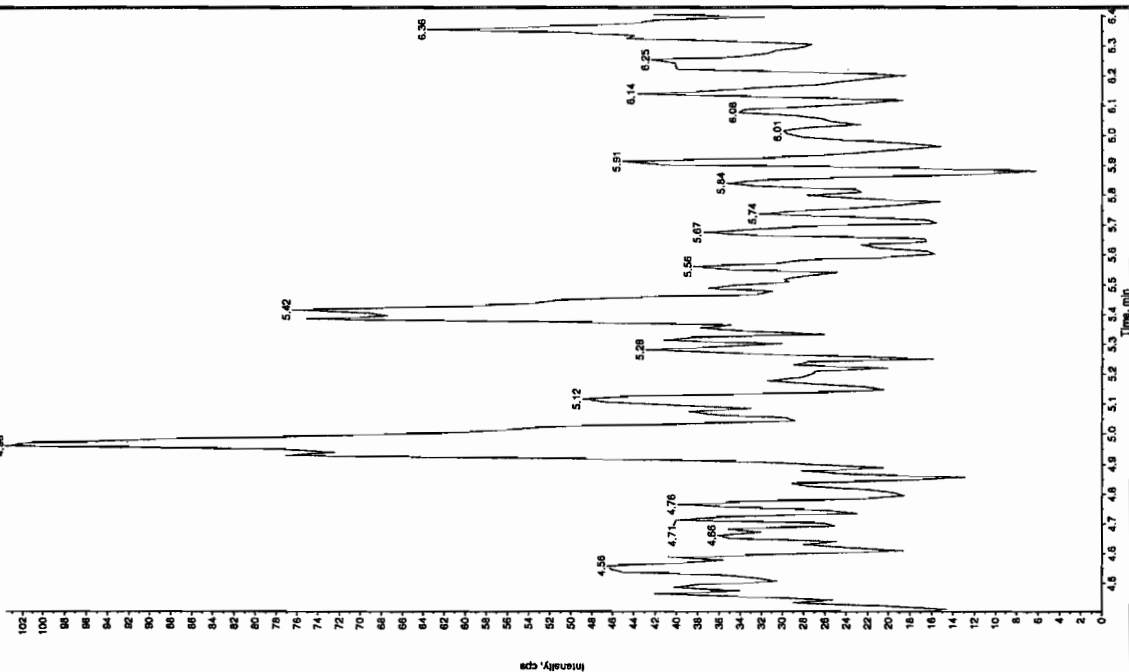
Sample Name: "XIBLX03" Sample ID: "11LER" File: "EXS04090012.wif"  
 Peak Name: "bis(2-oxo-1-phenyl) phosphine" Mass(es): "369.1791.0 amu"  
 Comment: "LOWEXP\_B" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.78 ng/mL  
 Calculated Conc: 7.48 ng/mL  
 Acq. Date: 4/9/2010  
 Acq. Time: 10:07:35 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 8000.00 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: 1.76e+005 counts  
 Height: 43686192 cps  
 Start Time: 10.7 min  
 End Time: 11.1 min



Sample Name: "XIBLX03" Sample ID: "11LER" File: "EXS04090012.wif"  
 Peak Name: "24-Diamino-5-nitrotoluene" Mass(es): "186.046.0 amu"  
 Comment: "LOWEXP\_B" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.78 ng/mL  
 Calculated Conc: 0.78 ng/mL  
 Acq. Date: 4/9/2010  
 Acq. Time: 10:07:35 AM  
 Modified: No





4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2199

Lab Code: GEL

Lab Sample ID: XIBLK04

Analysis Date: 09-APR-10 13:31

GEL Data File: EXS04090025.wiff

Instrument ID: LCMSMS

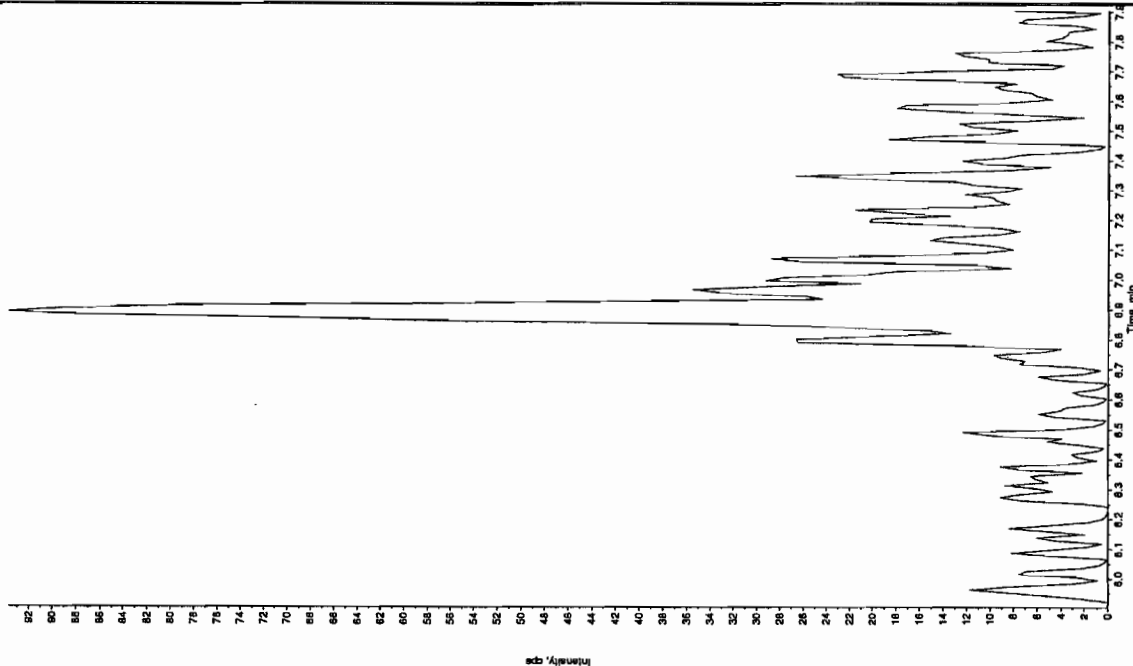
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	4.56

Rec 4/12/10

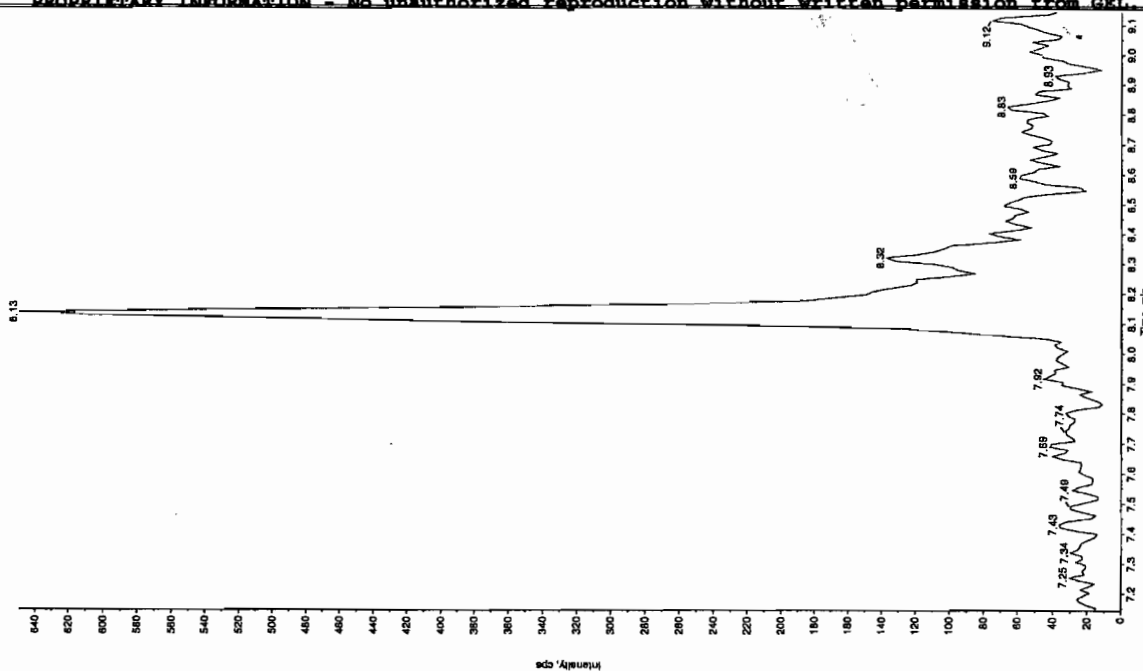
Sample Name: "XBLX04" Sample ID: "TILER" File: "EXS04090025.wif"  
Peak Name: "TATB" Mass(es): "257.204.9 amu"  
Comment: "LCMSEXP\_B" Annotation: "

Sample Index: 1  
Sample Type: Unknown  
Concentration: N/A  
Calculated Conc: 0.00 ng/mL  
Acq. Date: 4/9/2010  
Acq. Time: 1:31:51 PM  
Modified: No



Sample Name: "XBLX04" Sample ID: "TILER" File: "EXS04090025.wif"  
Peak Name: "3C-Dinitroaniline" Mass(es): "182.046.0 amu"  
Comment: "LCMSEXP\_B" Annotation: "

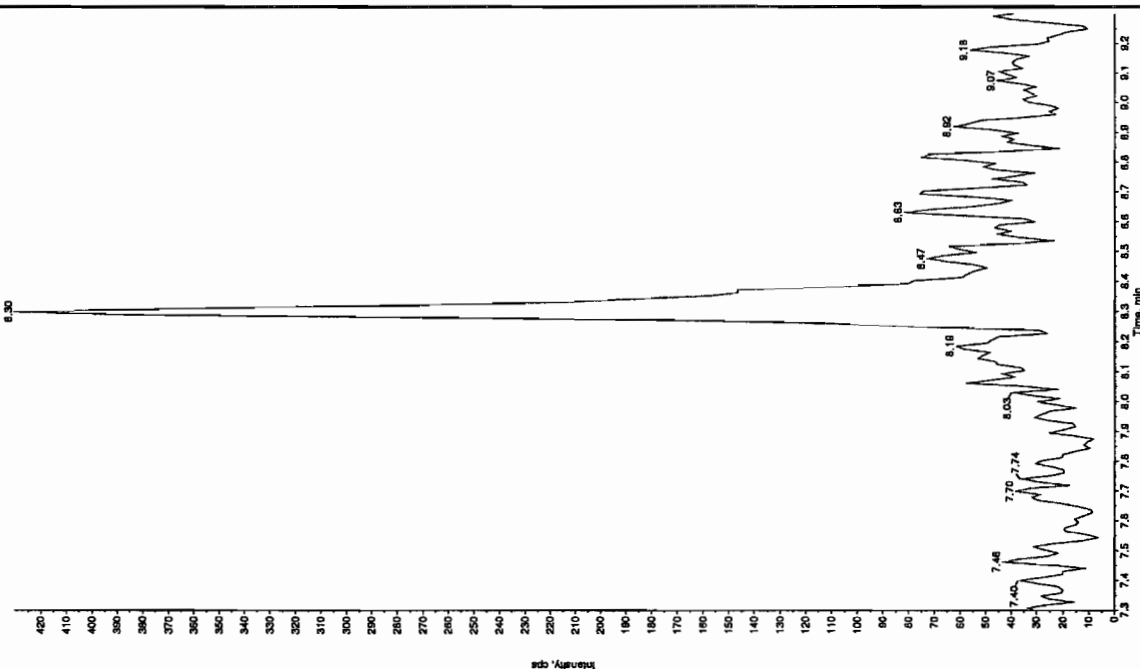
Sample Index: 1  
Sample Type: Unknown  
Concentration: N/A  
Calculated Conc: 0.00 ng/mL  
Acq. Date: 4/9/2010  
Acq. Time: 1:31:51 PM  
Modified: No



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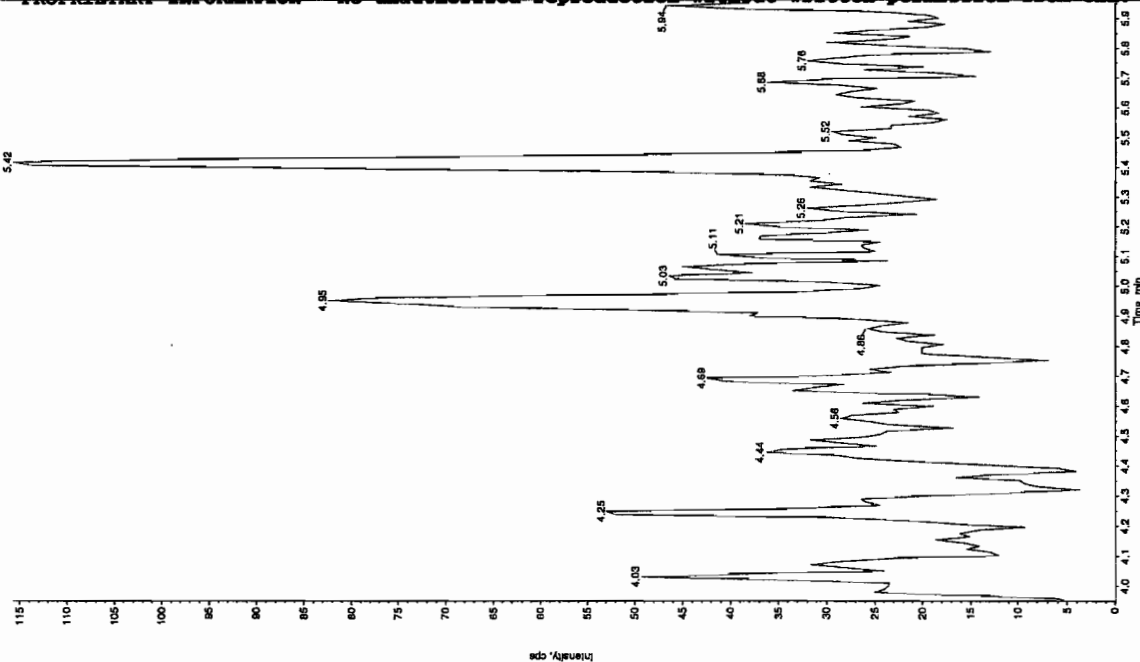
Sample Name: "XIBUK04" Sample ID: "111LER" File: "EX504080025.wif"  
Peak Name: "34-Dinitrofluorene" Mass(es): "182.1/151.9 amu"  
Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
Sample Type: Unknown  
Concentration: N/A ng/mL  
Calculated Conc: 0.00  
Acq. Date: 4/9/2010  
Acq. Time: 1:31:51 PM  
Modified: No



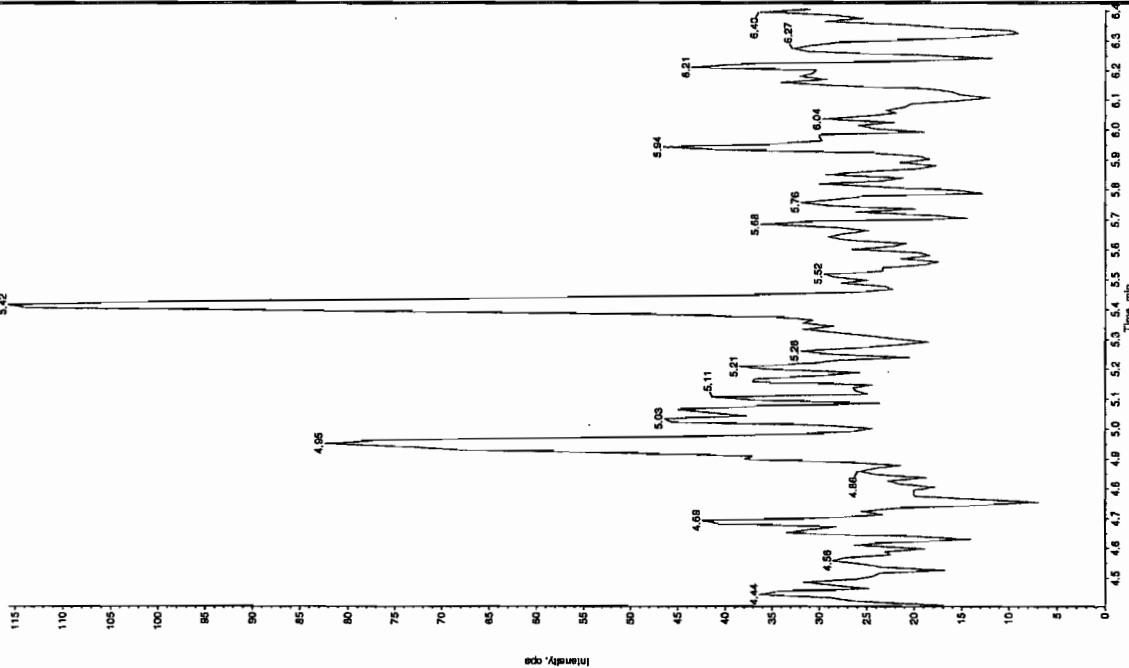
Sample Name: "XIBUK04" Sample ID: "111LER" File: "EX504080025.wif"  
Peak Name: "25-Dinitro-4-nitrofluorene" Mass(es): "166.0/166.0 amu"  
Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
Sample Type: Unknown  
Concentration: N/A ng/mL  
Calculated Conc: 0.00  
Acq. Date: 4/9/2010  
Acq. Time: 1:31:51 PM  
Modified: No



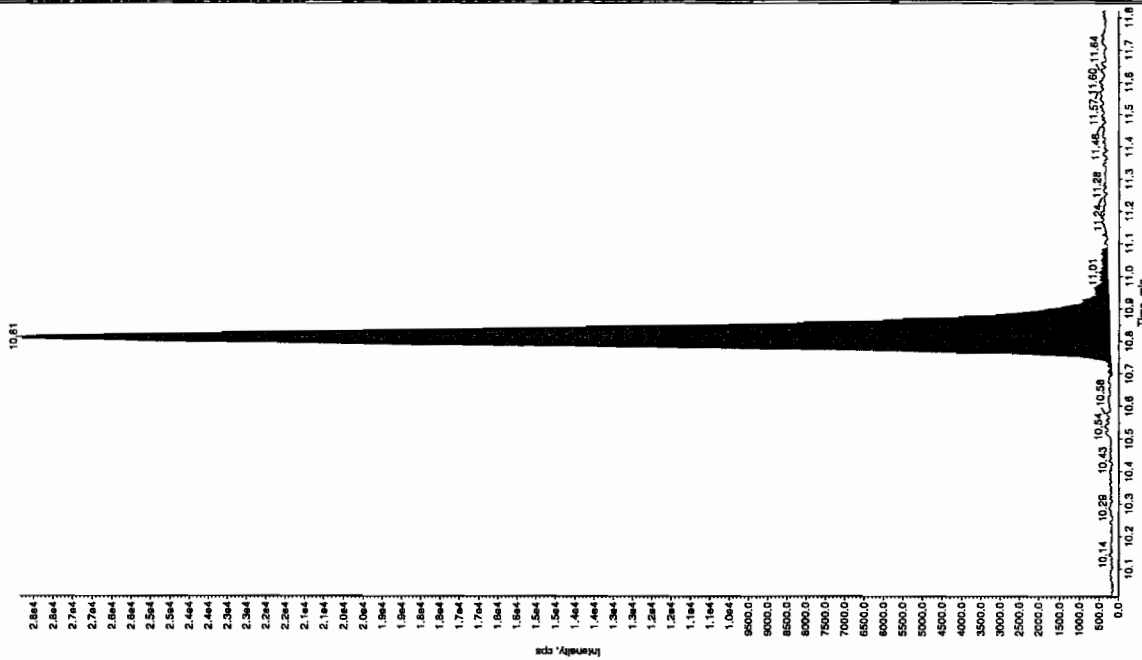
Sample Name: "XIBUX04" Sample ID: "11LER" File: "EXS04090025.wif"  
 Peak Name: "24-Diamino-6-nitrothiophene" Mass(es): "166.045.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A ng/mL  
 Calculated Conc: 0.00  
 Acq. Date: 4/9/2010  
 Acq. Time: 1:31:51 PM  
 Modified: No



Sample Name: "XIBUX04" Sample ID: "11LER" File: "EXS04090025.wif"  
 Peak Name: "tris(O-cresyl) phosphate" Mass(es): "389.191.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A ng/mL  
 Calculated Conc: 0.00  
 Acq. Date: 4/9/2010  
 Acq. Time: 1:31:51 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 8000.00 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: 1.16e+005 counts  
 Height: 28150.688 cps  
 Start Time: 10.7 min  
 End Time: 11.1 min



4A  
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2199

Lab Code: GEL

Lab Sample ID: XIBLK05

Analysis Date: 09-APR-10 16:56

GEL Data File: EXS04090038.wiff

Instrument ID: LCMSMS

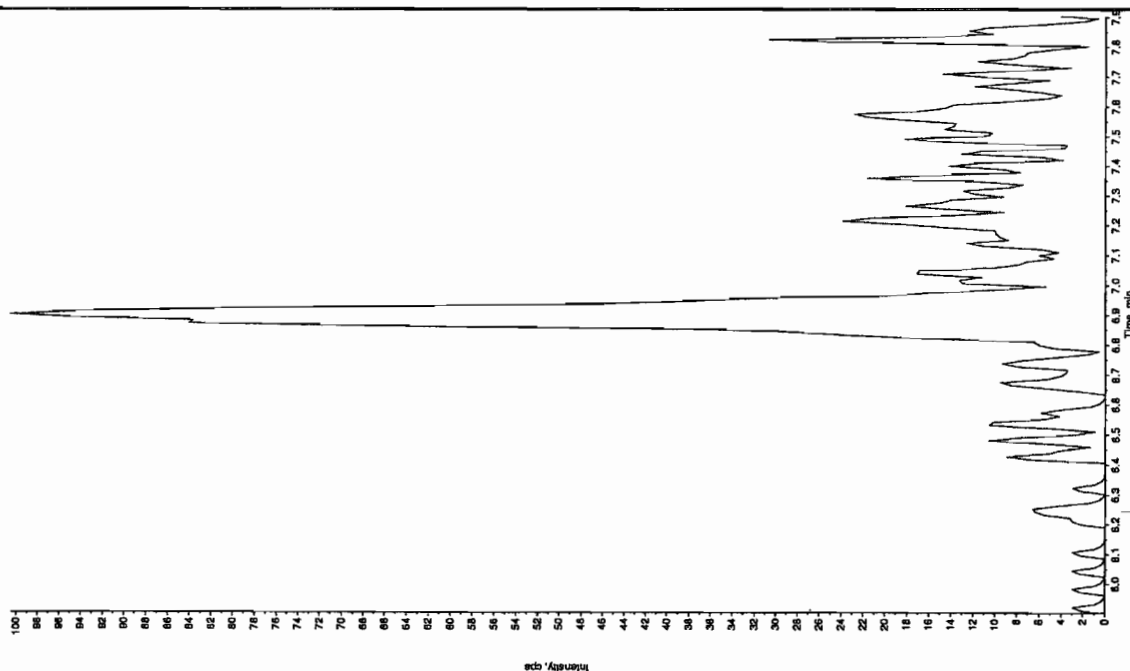
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	3.81
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

San 4/12/10

Sample Name: "XIBLK05" Sample ID: "111ER" File: "EX504090038.wif"  
Peak Name: "TATB" Mass(es): "257.2204.9 amu"  
Comment: "LCMSEXP\_B" Annotation: ""

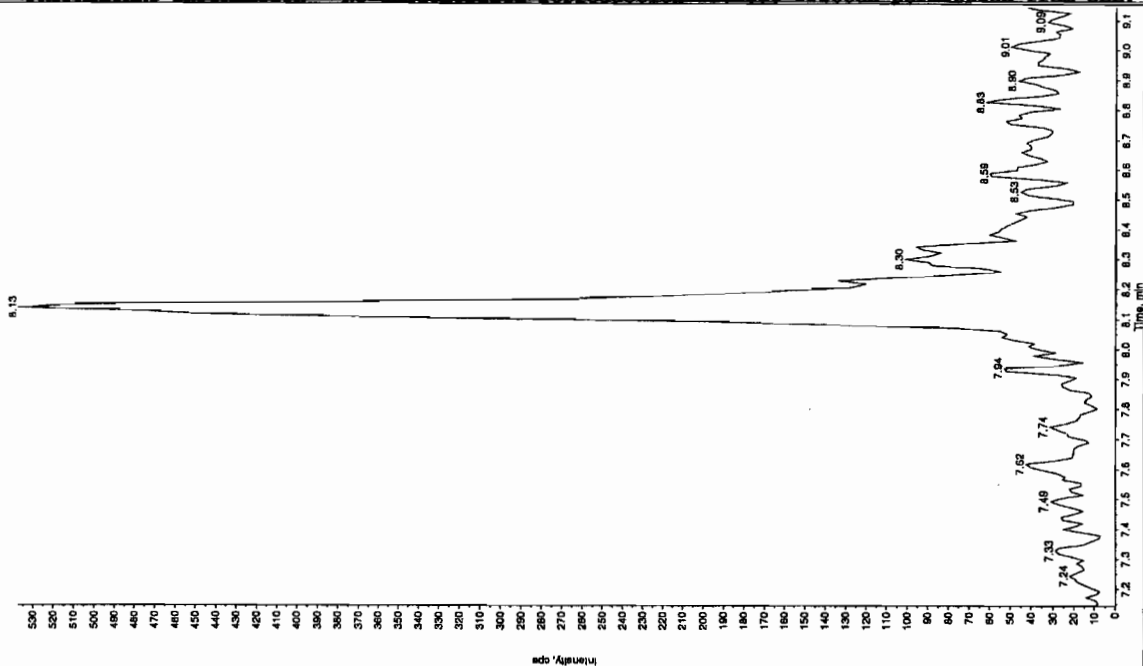
Sample Index: 1  
Sample Type: Unknown  
Concentration: N/A  
Calculated Conc: 0.00 ng/mL  
Acq. Date: 4/9/2010  
Acq. Time: 4:56:00 PM  
Modified: No



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Sample Name: "XIBLK05" Sample ID: "111ER" File: "EX504090038.wif"  
Peak Name: "3S-Dinitrogrilling" 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: 4/9/2010  
Acq. Time: 4:56:00 PM  
Modified: No



San 4/12/10

Sample Name: "XIBLX05" Sample ID: "11LEF" File: "EXS04090038.wiff"  
Peak Name: "34-Dinitrofluorene" Mass(es): "182.1/151.9 amu"

Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1

Sample Type: Unknown

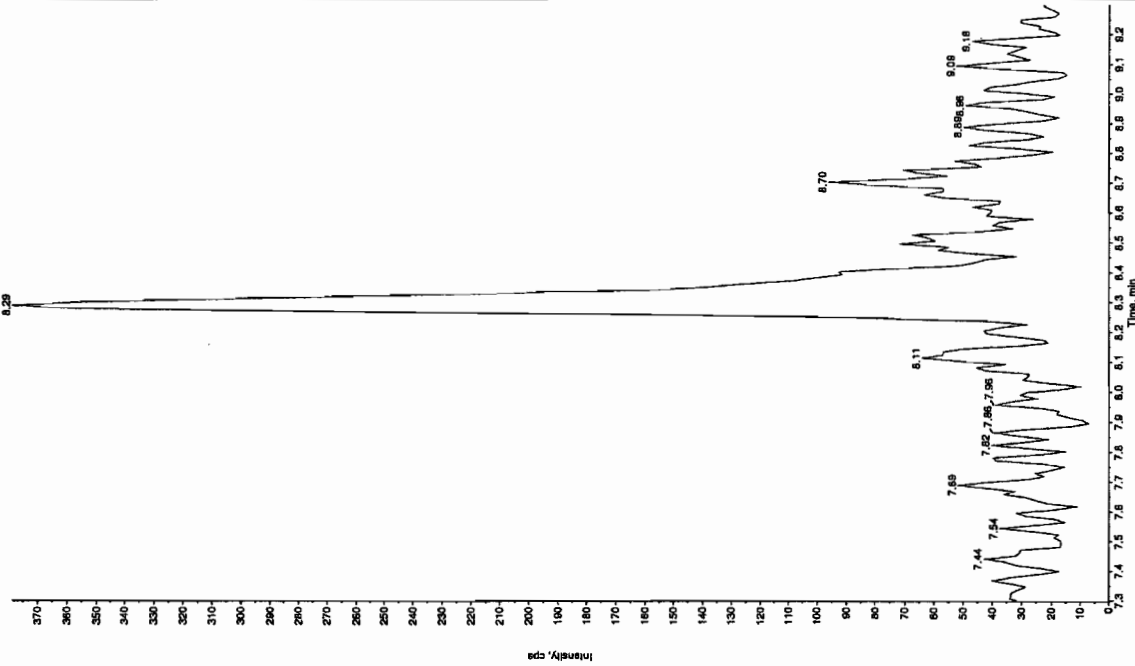
Concentration: N/A ng/mL

Calculated Conc: 0.00

Acq. Date: 4/9/2010

Acq. Time: 4:56:00 PM

Modified: No



Sample Name: "XIBLX05" Sample ID: "11LEF" File: "EXS04090038.wiff"  
Peak Name: "26-Diamino-4-nitrofluorene" Mass(es): "165.0/46.0 amu"

Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1

Sample Type: Unknown

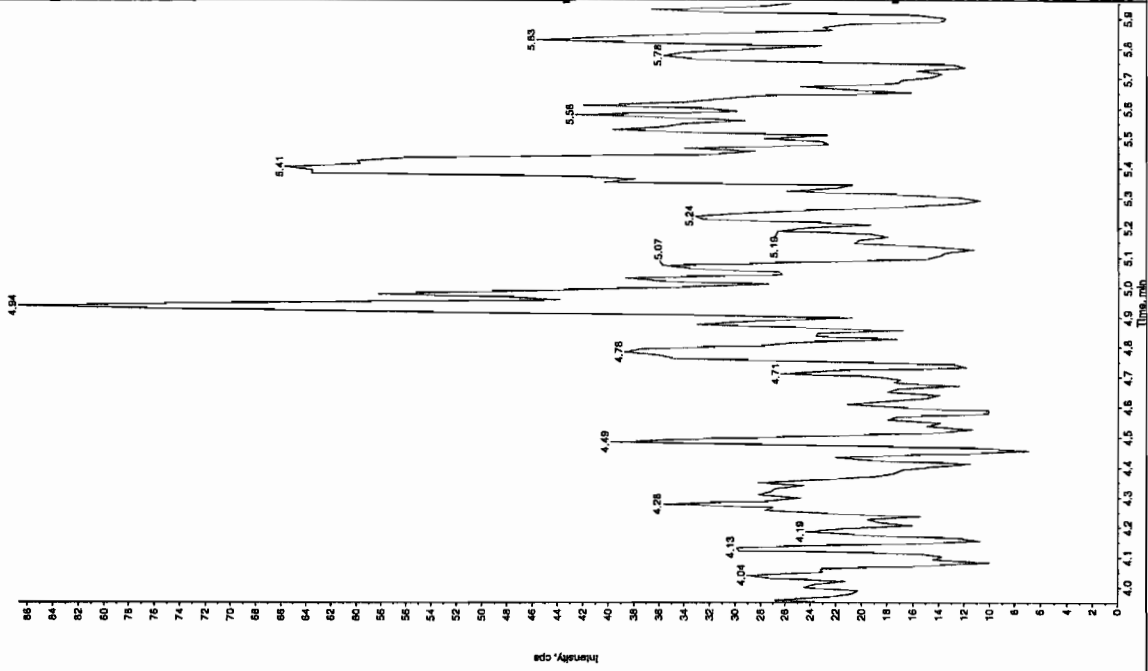
Concentration: N/A ng/mL

Calculated Conc: 0.00

Acq. Date: 4/9/2010

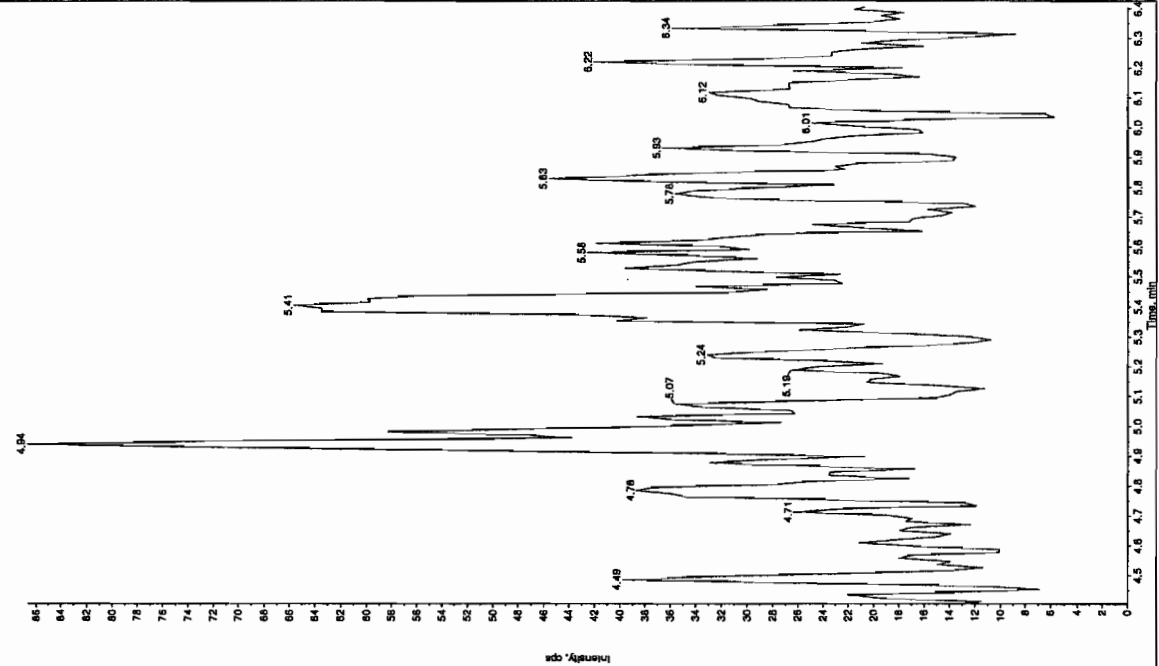
Acq. Time: 4:56:00 PM

Modified: No



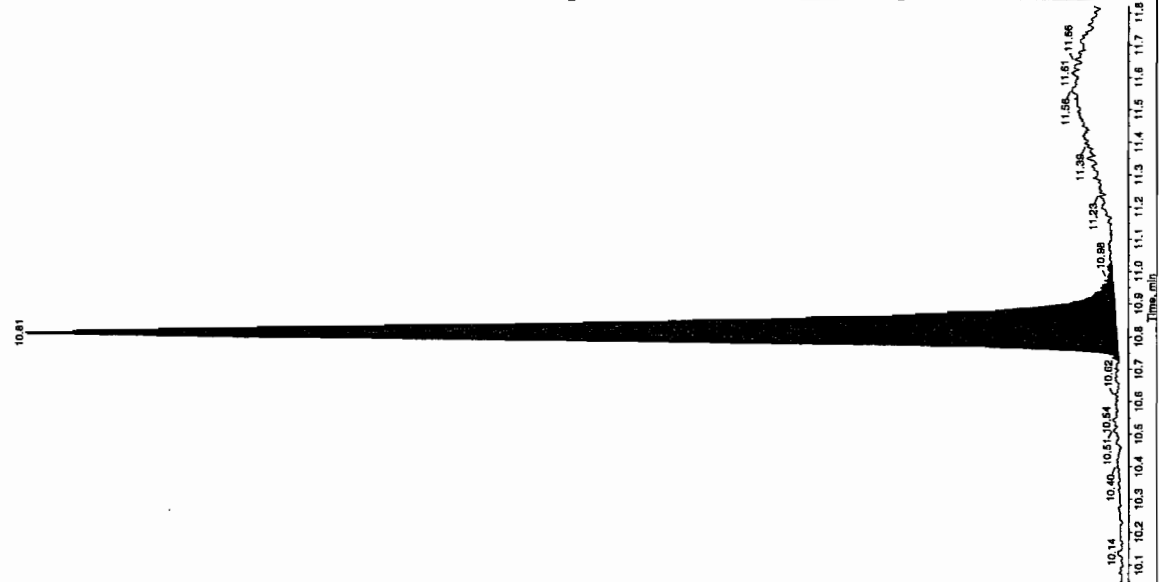
Sample Name: "XIBUK05" Sample ID: "11LER" File: "EX304090038.wif"  
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.046.0 amu"  
Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
Sample Type: Unknown  
Concentration: 0.00 ng/mL  
Calculated Conc: 4/9/2010  
Acq. Date: 4/9/2010  
Acq. Time: 4:56:00 PM  
Modified: No



Sample Name: "XIBUK05" Sample ID: "11LER" File: "EX304090038.wif"  
Peak Name: "Tris(o-cresyl) phosphate" Mass(es): "385.1791.0 amu"  
Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
Sample Type: Unknown  
Concentration: 0.00 ng/mL  
Calculated Conc: 4/9/2010  
Acq. Date: 4/9/2010  
Acq. Time: 4:56:00 PM  
Modified: No





4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2199

Lab Code: GEL

Lab Sample ID: XIBLK06

Analysis Date: 09-APR-10 18:30

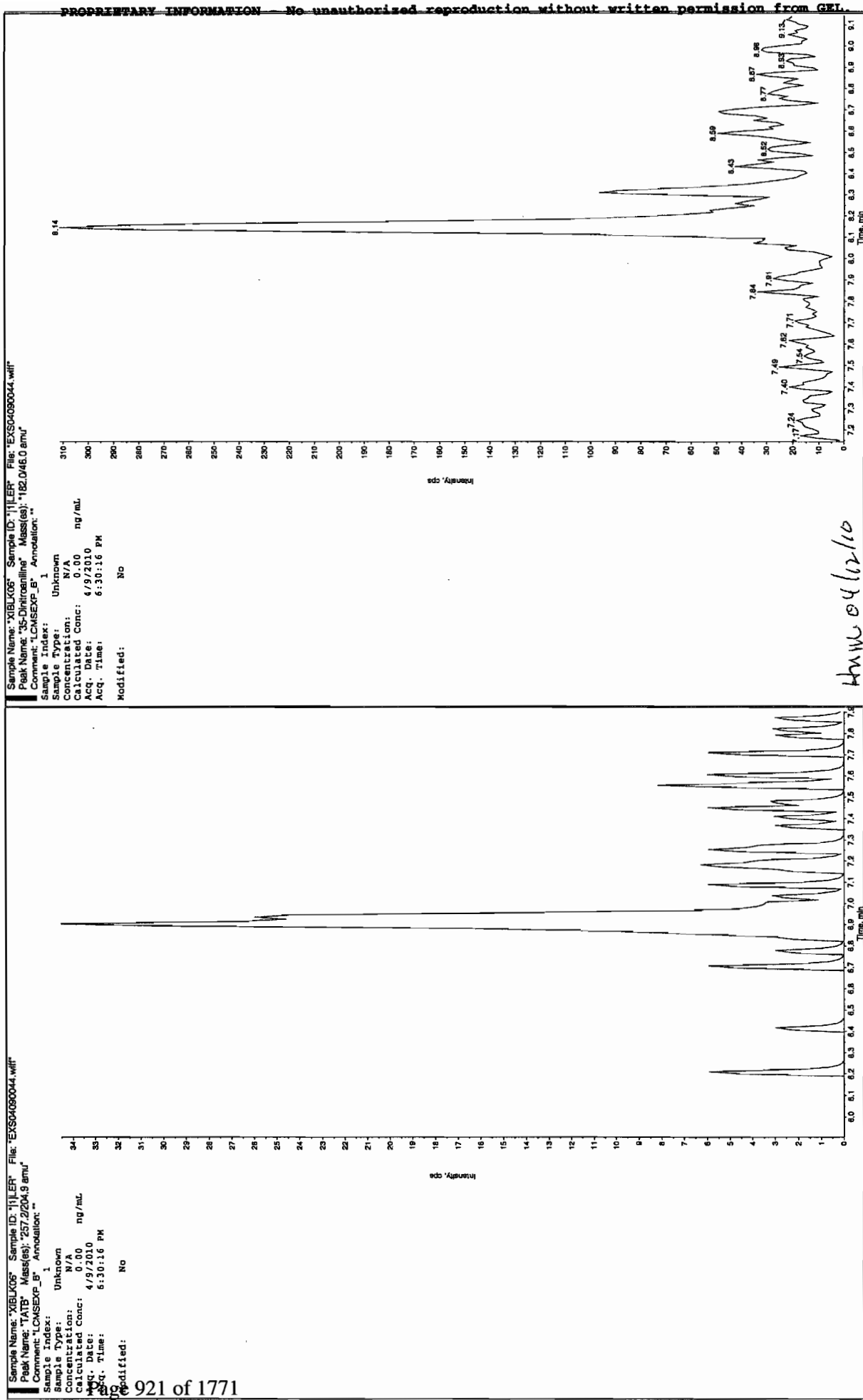
GEL Data File: EXS04090044.wiff

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	1.88
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

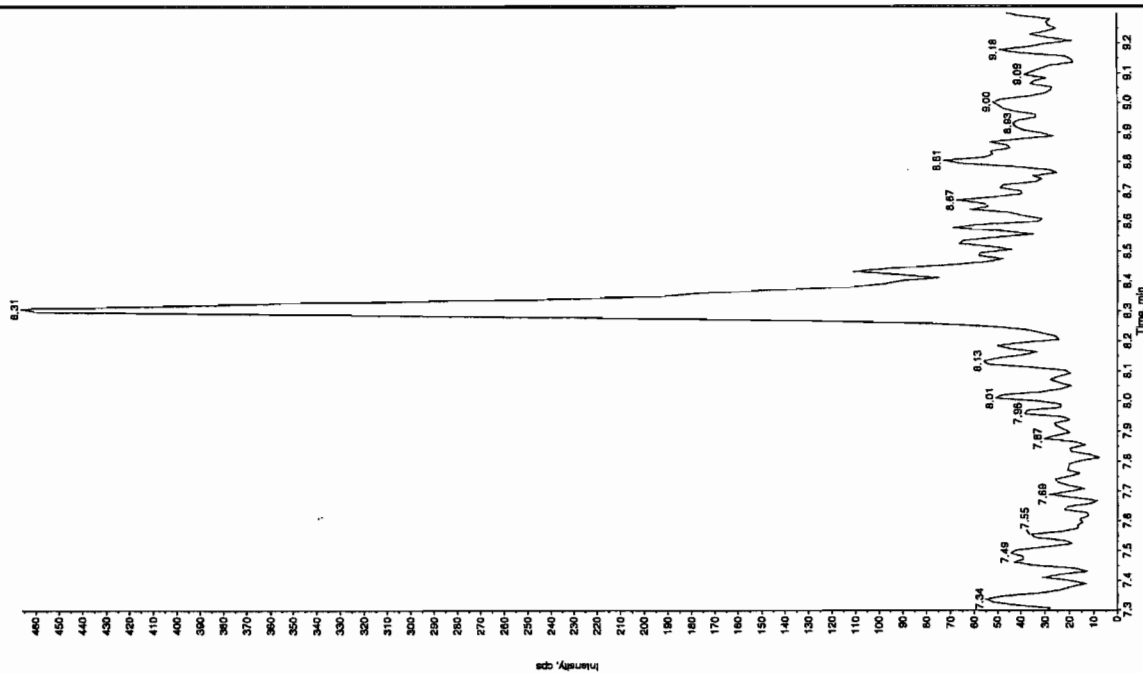
Jan 4/12/10



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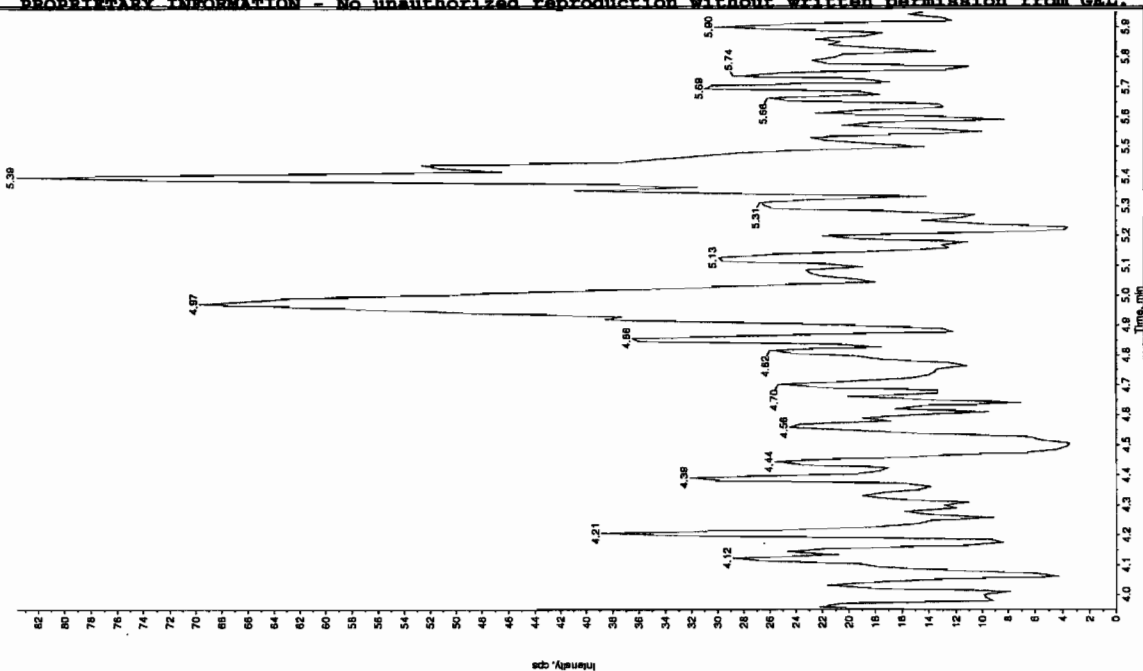
Sample Name: "XIBLK06" Sample ID: "111LER" File: "EXS04090044.wif"  
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1751.9 amu"  
Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
Sample Type: Unknown  
Concentration: N/A  
Calculated Conc: 0.00 ng/mL  
Acq. Date: 4/9/2010  
Acq. Time: 6:30:16 PM  
Modified: No



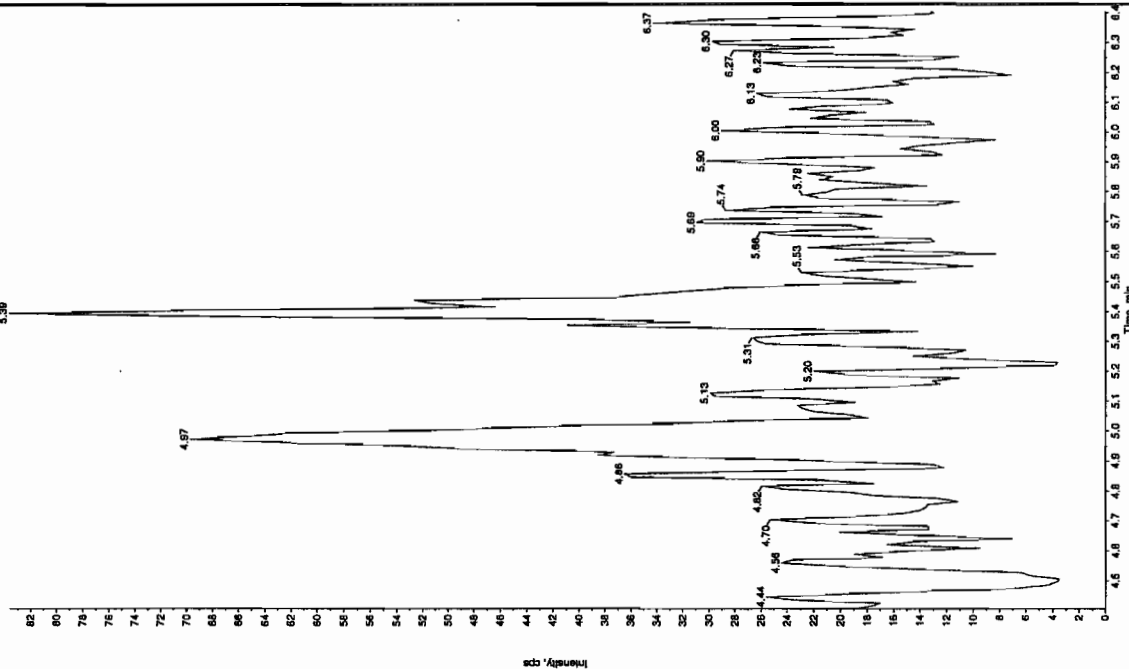
Sample Name: "XIBLK06" Sample ID: "111LER" File: "EXS04090044.wif"  
Peak Name: "26-Dinitro-4-nitrotoluene" Mass(es): "166.046.0 amu"  
Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
Sample Type: Unknown  
Concentration: N/A  
Calculated Conc: 0.00 ng/mL  
Acq. Date: 4/9/2010  
Acq. Time: 6:30:16 PM  
Modified: No



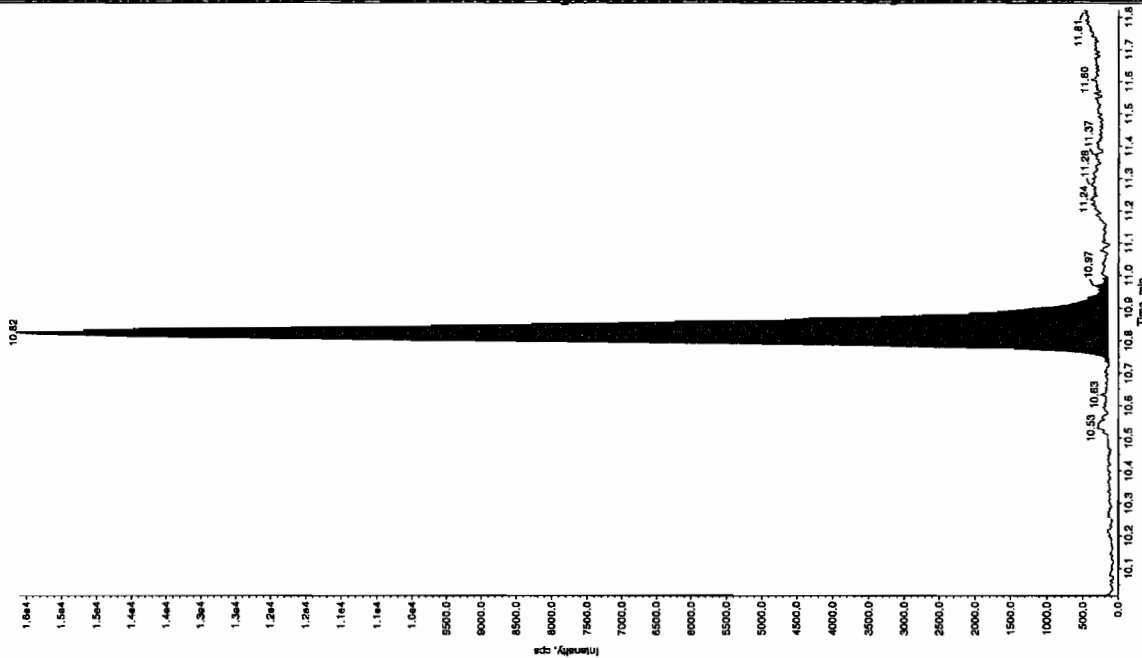
Sample Name: "XIBLX06" Sample ID: "111" File: "EXS04090044.wif"  
 Peak Name: "2,4-Diamino-6-nitrotoluene" Mass(es): "166.046.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 4/9/2010  
 Acq. Time: 6:30:16 PM  
 Modified: No



Sample Name: "XIBLX06" Sample ID: "111" File: "EXS04090044.wif"  
 Peak Name: "tris(c-creyl) phosphate" Mass(es): "368.181.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 4.97200 ng/mL  
 Acq. Date: 4/9/2010  
 Acq. Time: 6:30:16 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 8000.00 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: 6.06e+004 counts  
 Height: 13433.811 cps  
 Start Time: 10.7 min  
 End Time: 11.0 min



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2199

Lab Code: GEL

Lab Sample ID: XIBLK07

Analysis Date: 09-APR-10 20:20

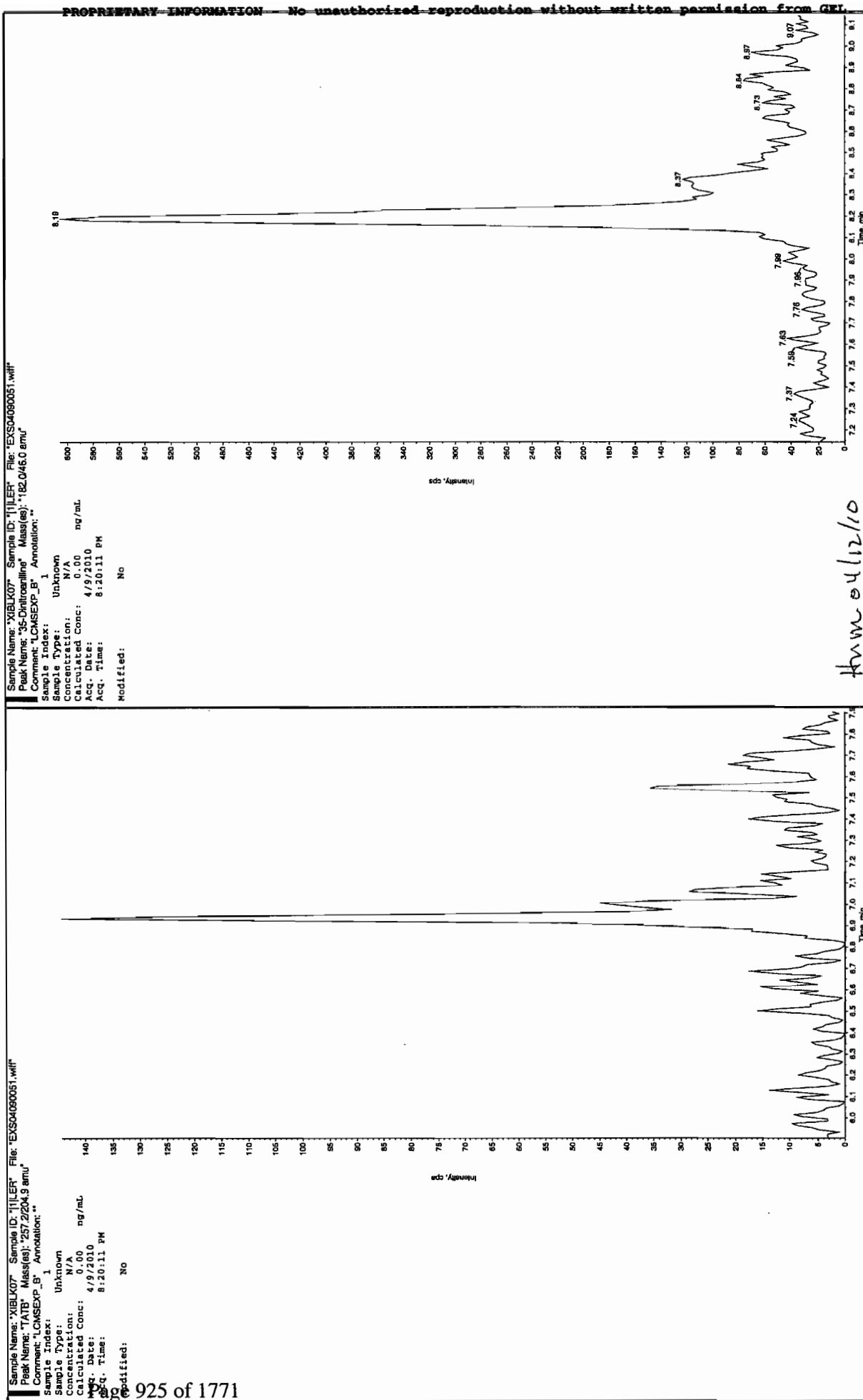
GEL Data File: EXS04090051.wiff

Instrument ID: LCMSMS

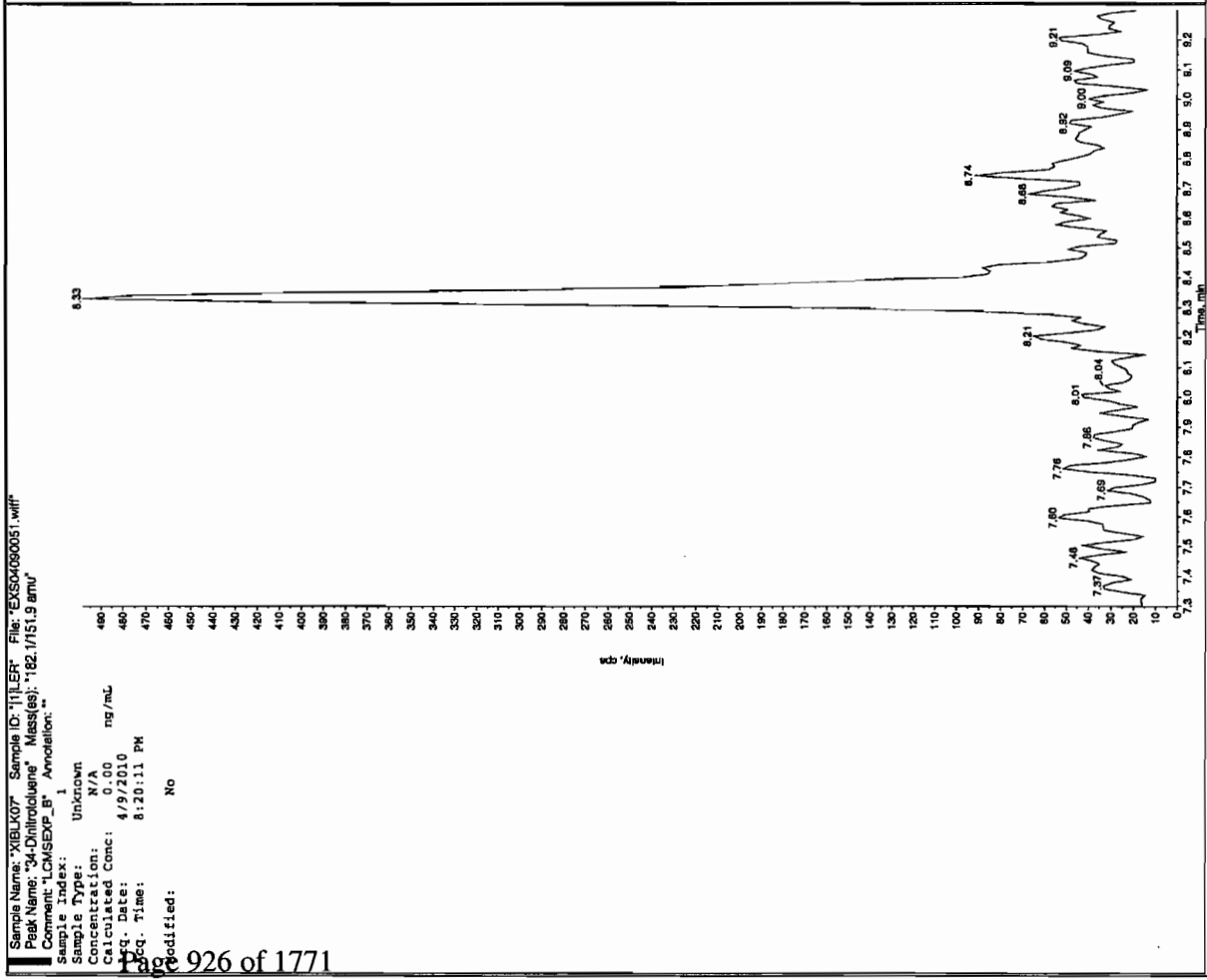
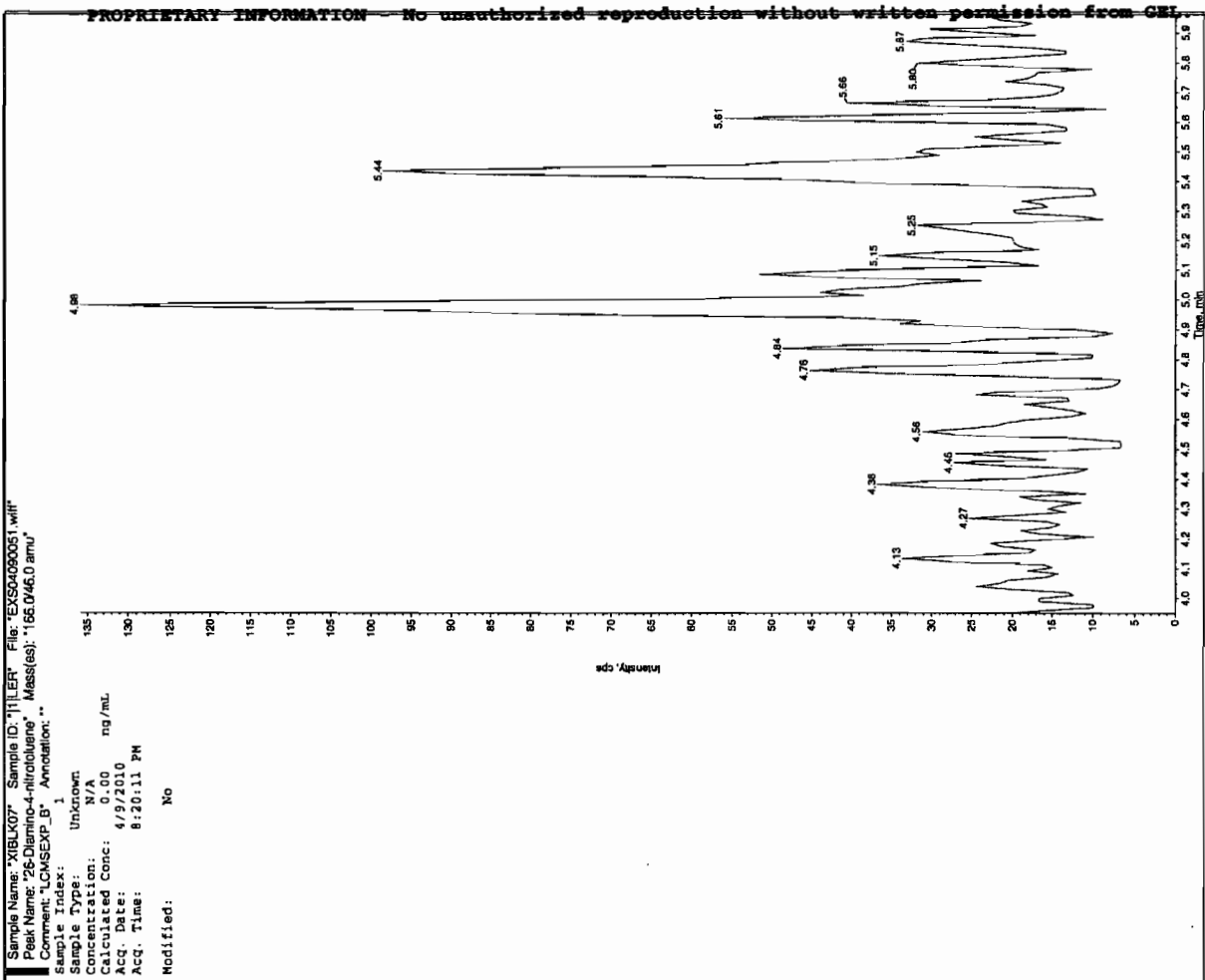
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	4.71
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Don 4/12/10



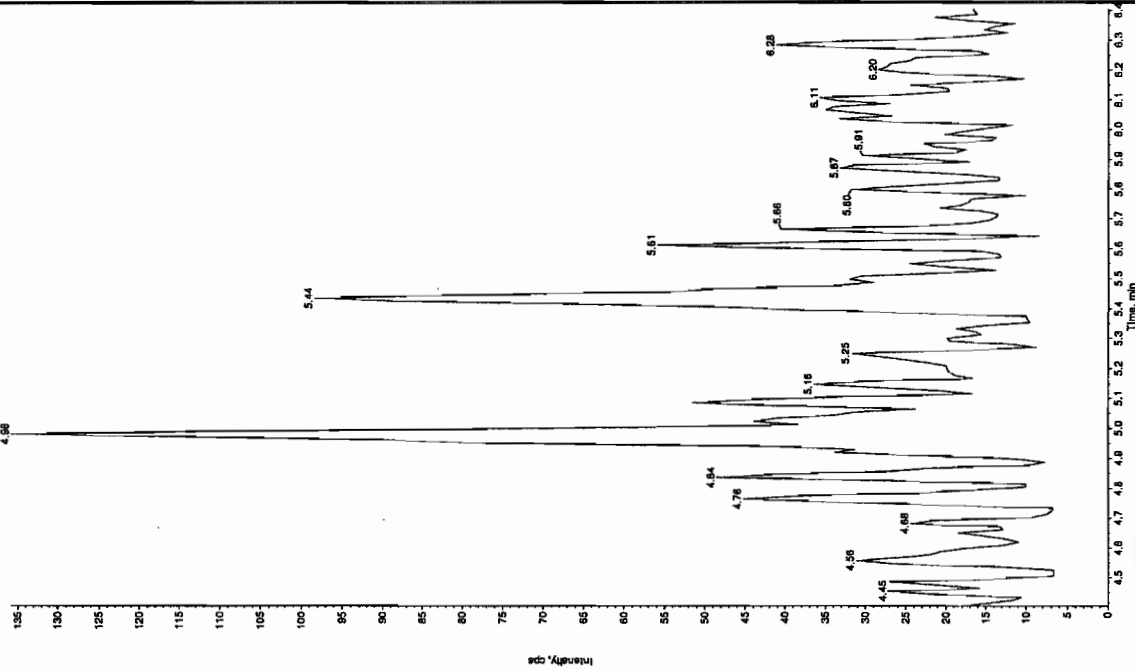
Don 4/12/10



Sample Name: "XBLK07" Sample ID: "11LER" File: "EXS04080051.wif"  
 Peak Name: "24-Dinitro-6-nitrotoluene" Mass(es): "166.046.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Acq. Date: 4/9/2010  
 Acq. Time: 8:20:11 PM

Modified: No

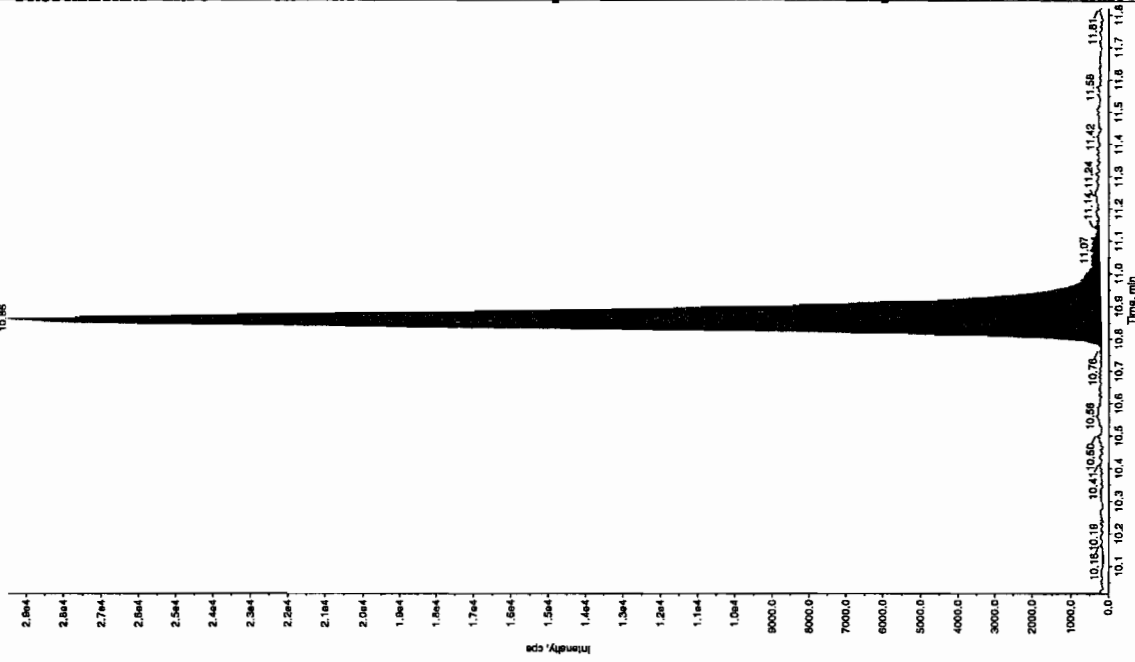


Sample Name: "XBLK07" Sample ID: "11LER" File: "EXS04080051.wif"  
 Peak Name: "Tris(2-cyano) phosphite" Mass(es): "369.191.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 4.71 ng/mL  
 Acq. Date: 4/9/2010  
 Acq. Time: 8:20:11 PM

Modified: No

Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 8000.00 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: 1.19e+05 counts  
 Height: 29275.728 cps  
 Start Time: 10.8 min  
 End Time: 11.2 min





4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2199

Lab Code: GEL

Lab Sample ID: XIBLK08

Analysis Date: 09-APR-10 23:44

GEL Data File: EXS04090064.wiff

Instrument ID: LCMSMS

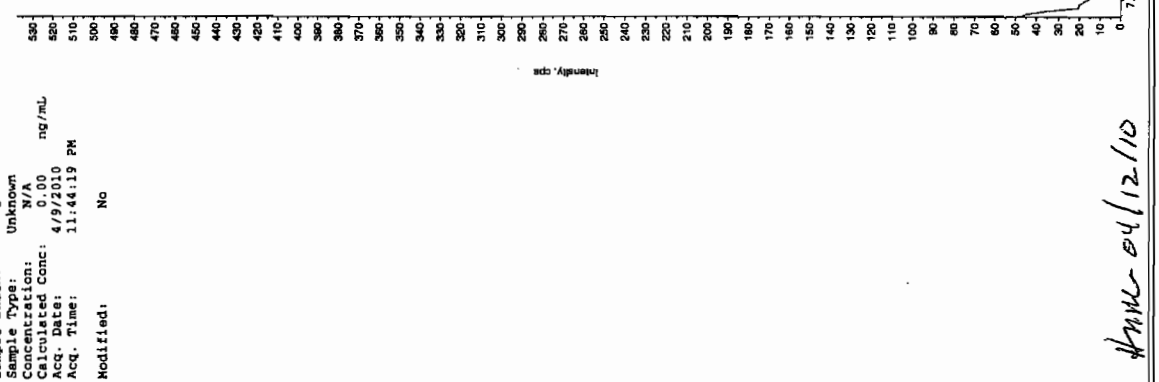
Column: Phenomenex Ultracarb 5u ODS(20)

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

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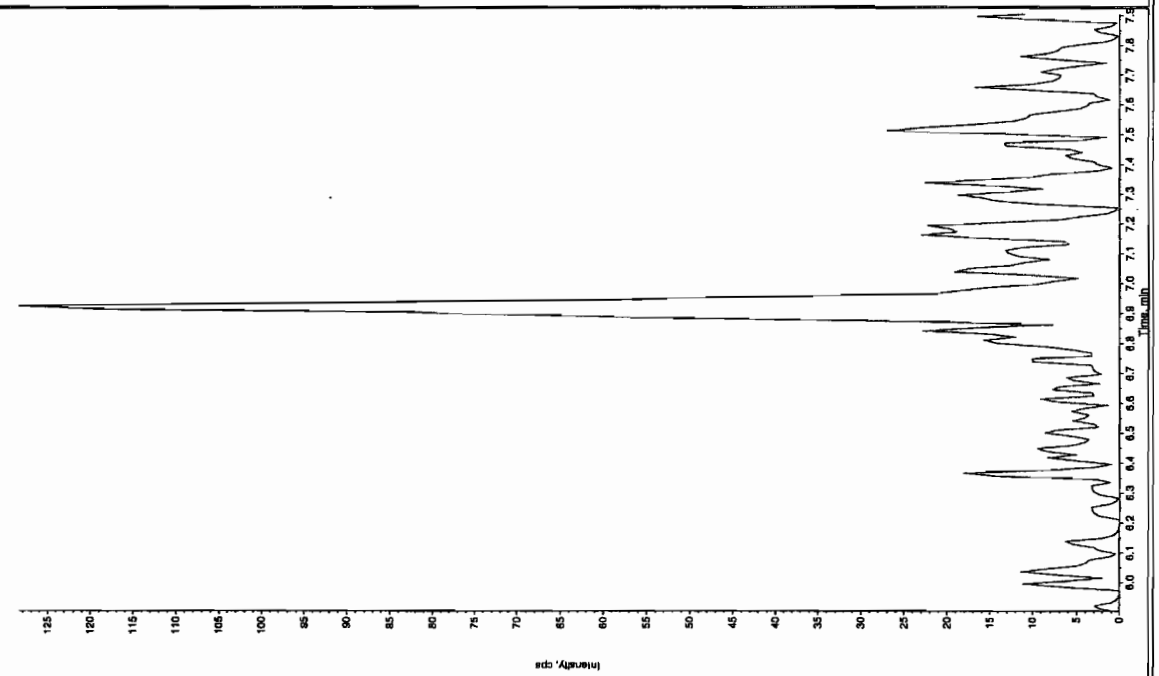
PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL

Sample Name: "XIBLK08" Sample ID: "11LER" File: "EXS04090064.wif"  
Peak Name: "3S-Dinitroaniline" Mass(es): "192.046.0 amu"  
Comment: "LCMSEXP\_B" Annotation: ""  
Sample Index: 1  
Sample Type: Unknown  
Concentration: N/A  
Calculated Conc: 0.00 ng/mL  
Acq. Date: 4/9/2010  
Acq. Time: 11:44:19 PM  
Modified: No

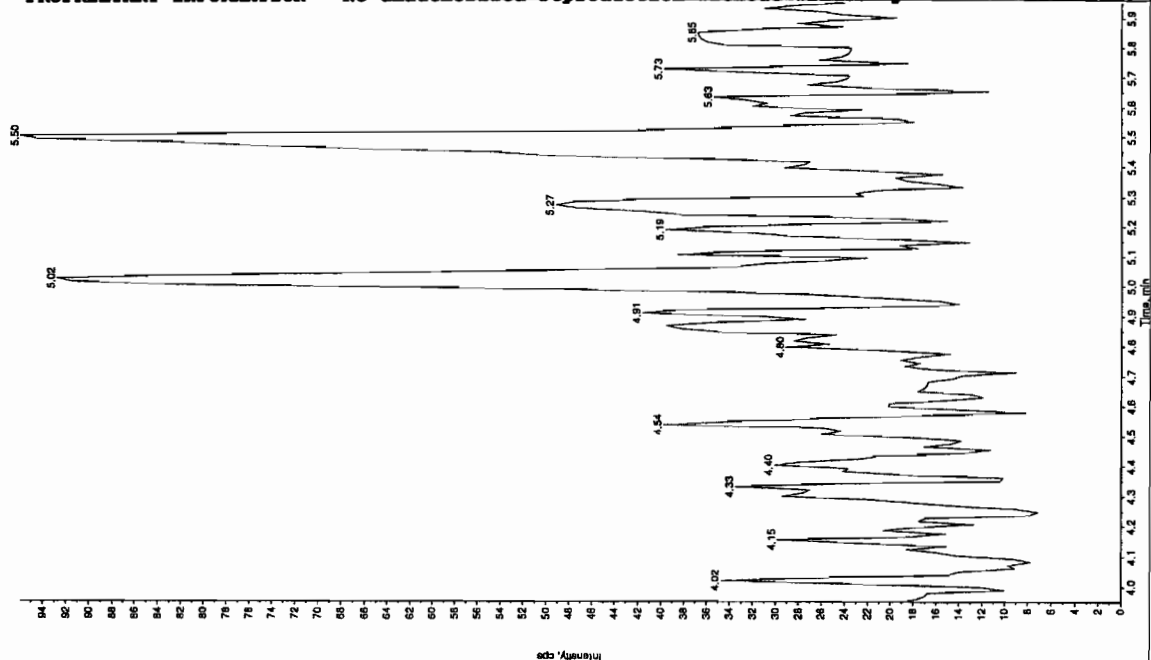


Jan 4/12/10

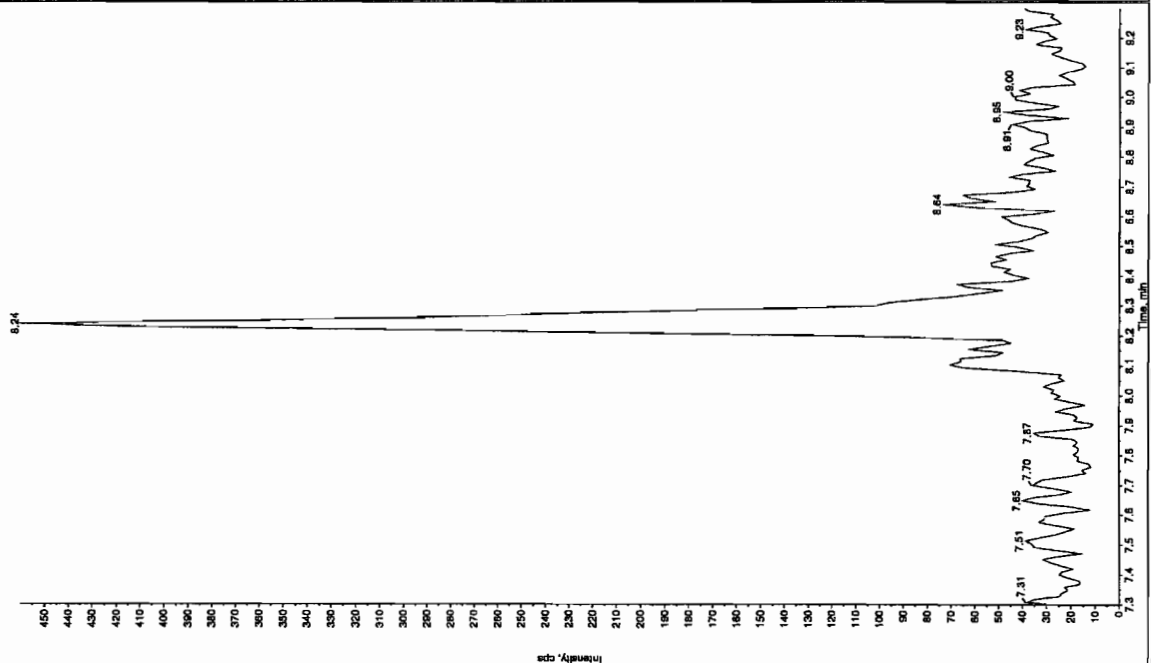
Sample Name: "XIBLK08" Sample ID: "11LER" File: "EXS04090064.wif"  
Peak Name: "TATB" Mass(es): "257.2204.9 amu"  
Comment: "LCMSEXP\_B" Annotation: ""  
Sample Index: 1  
Sample Type: Unknown  
Concentration: N/A  
Calculated Conc: 0.00 ng/mL  
Acq. Date: 4/9/2010  
Acq. Time: 11:44:19 PM  
Modified: No



Sample Name: "XBLK08" Sample ID: "1111ER" File: "EX504090064.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: 4/9/2010  
Acq. Time: 11:44:19 PM  
Modified: No

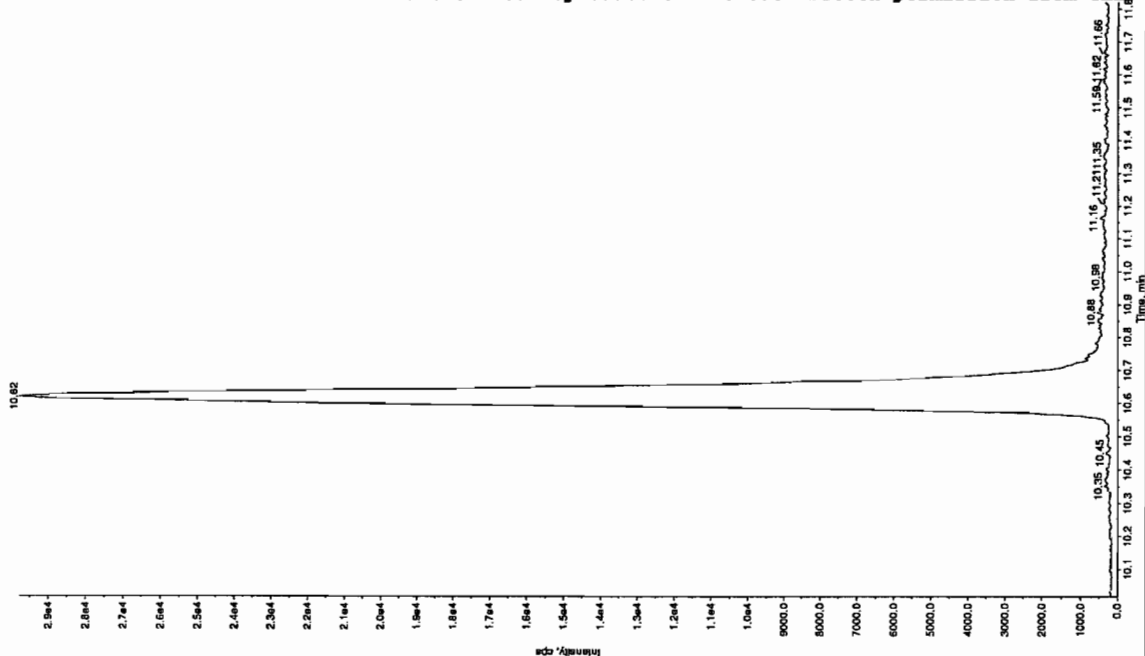


Sample Name: "XBLK08" Sample ID: "1111ER" File: "EX504090064.wif"  
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"  
Comment: "LCMSEXP\_B" Annotation: ""  
Sample Index: 1  
Sample Type: Unknown  
Concentration: N/A  
Calculated Conc: 0.00 ng/mL  
Acq. Date: 4/9/2010  
Acq. Time: 11:44:19 PM  
Modified: No



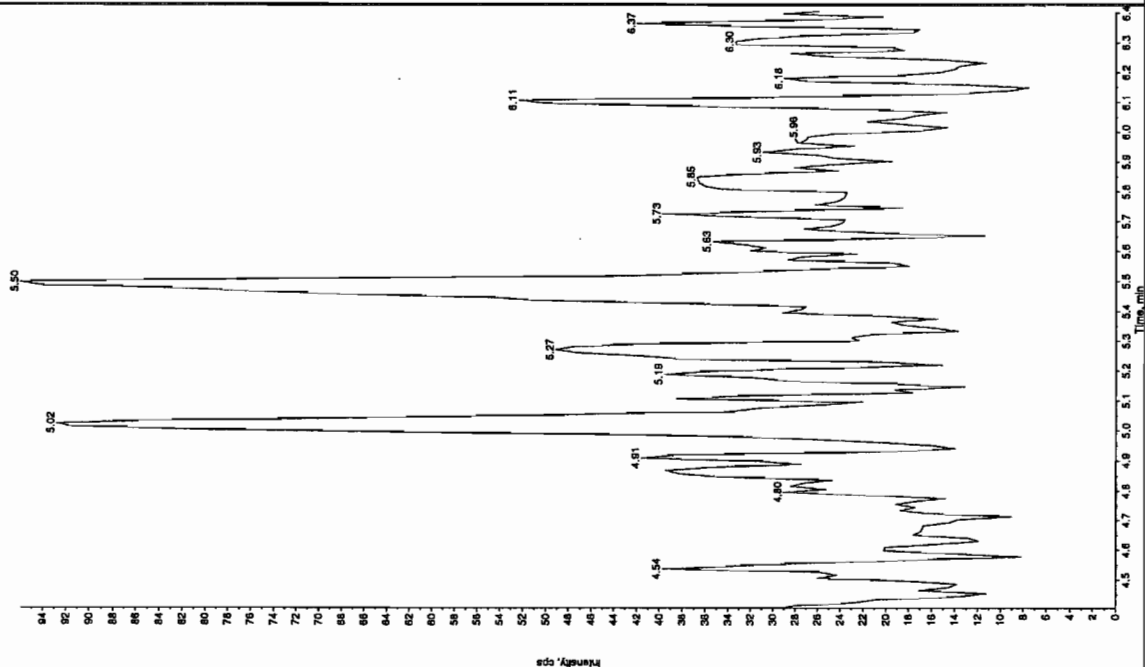
Sample Name: "XBLK08" Sample ID: "11LER" File: "EXS0408064.wif"  
 Peak Name: "tris(2-chloroethyl) phosphate" Mass(es): "369.191.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 4/9/2010  
 Acq. Time: 11:44:19 PM  
 Modified: No



Sample Name: "XBLK08" Sample ID: "11LER" File: "EXS0408064.wif"  
 Peak Name: "2,4-Dinitro-6-nitrofluorene" Mass(es): "165.046.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 4/9/2010  
 Acq. Time: 11:44:19 PM  
 Modified: No



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-2199

Lab Code: GEL

Lab Sample ID: XIBLK09

Analysis Date: 10-APR-10 01:49

GEL Data File: EXS04090072.wiff

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	6.03
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

See 4/12/10

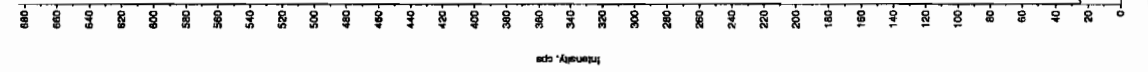
PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Sample Name: "XIELK09" Sample ID: "111ER" File: "EX504090072.wif"

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

Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
Sample Type: Unknown  
Concentration: N/A  
Calculated Conc: 0.00 ng/mL  
Acq. Date: 4/10/2010  
Acq. Time: 1:49:58 AM  
Modified: No



Sample Name: "XIELK09" Sample ID: "111ER" File: "EX504090072.wif"

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

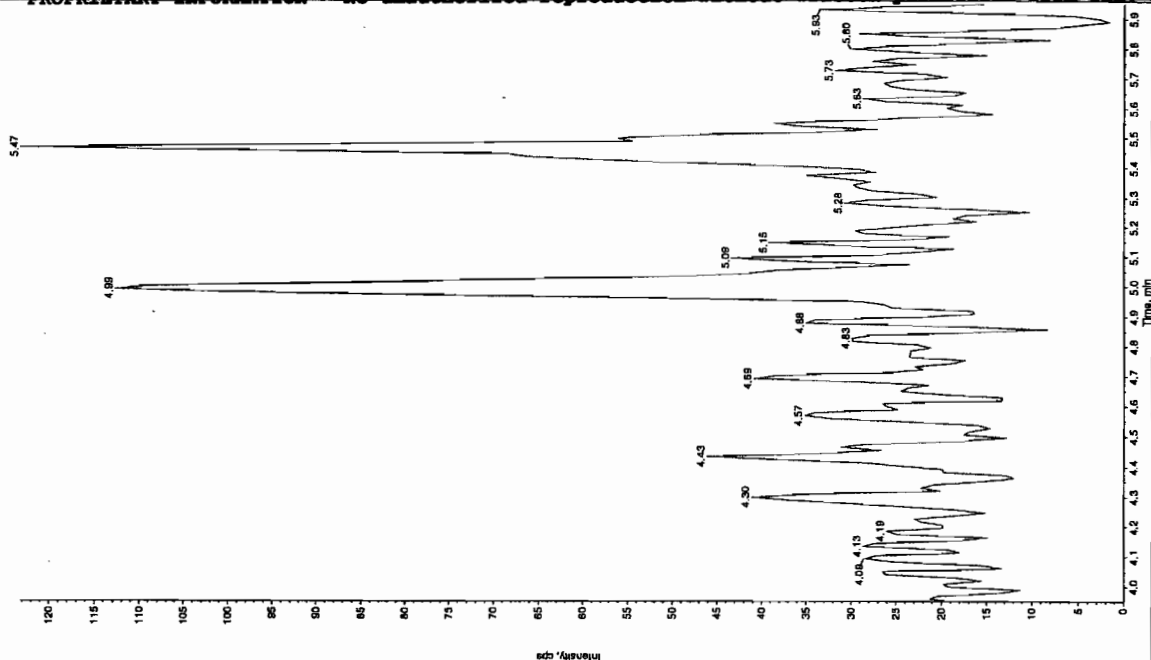
Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
Sample Type: Unknown  
Concentration: N/A  
Calculated Conc: 0.00 ng/mL  
Acq. Date: 4/10/2010  
Acq. Time: 1:49:58 AM  
Modified: No

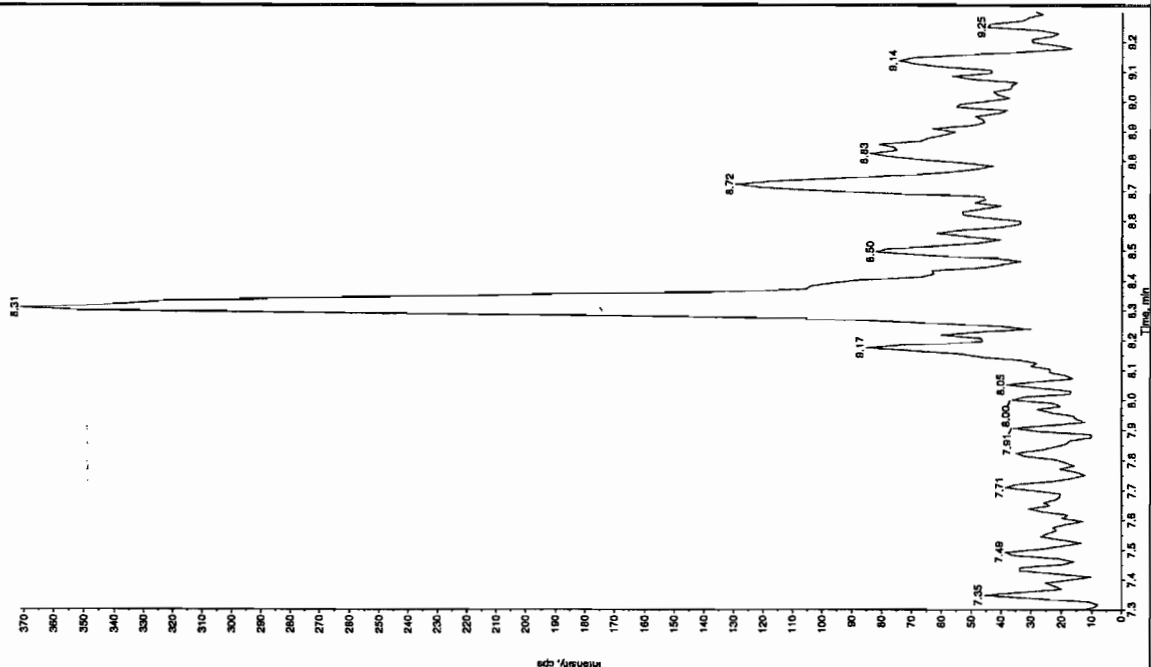


See 04/12/10

Sample Name: "XIBLX09" Sample ID: "J11LER" File: "EXS04090072.wif"  
 Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""  
 Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 4/10/2010  
 Acq. Time: 1:49:58 AM  
 Modified: No



Sample Name: "XIBLX09" Sample ID: "J11LER" File: "EXS04090072.wif"  
 Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/51.9 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""  
 Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 4/10/2010  
 Acq. Time: 1:49:58 AM  
 Modified: No



Sample Name: "XIBLK09" Sample ID: "JILER" File: "EXS04090072.wif"

Peak Name: "tris(o-cresyl) phosphite" Mass(es): "399.1791.0 amu"

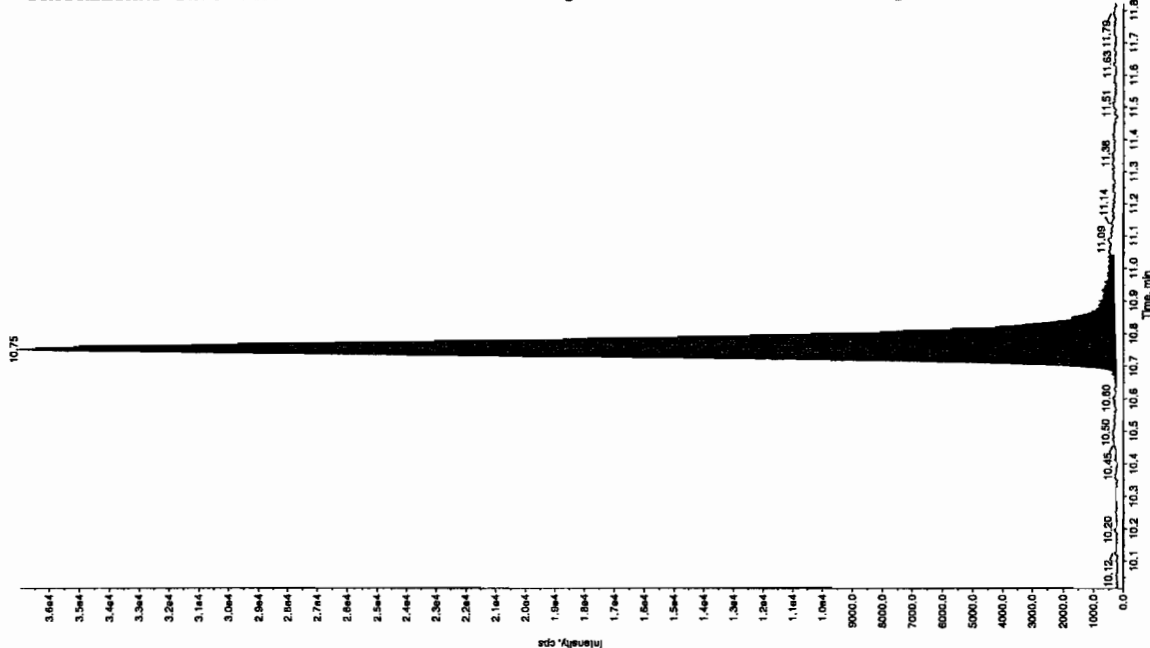
Comment: "LCMSEXP\_B" Annotation: "

Sample Index: 1

Sample Type: Unknown  
Concentration: N/A  
Calculated Conc: 6.03 ng/mL  
Acq. Date: 4/10/2010  
Acq. Time: 1:49:58 AM

Modified: No  
Proc. Algorithm: IntelliQuan - IQA  
Min. Peak Height: 8000.00 cps  
Min. Peak Width: 3.00 points  
Smoothing Width: 30.0 sec  
RT Window: 10.8 min  
Expected RT: No  
Use Relative RT: No

Int. Type: Valley  
Retention Time: 10.7 min  
Area: 1.46e+005 counts  
Height: 36728.577 cps  
Start Time: 10.6 min  
End Time: 11.0 min



Sample Name: "XIBLK09" Sample ID: "JILER" File: "EXS04090072.wif"

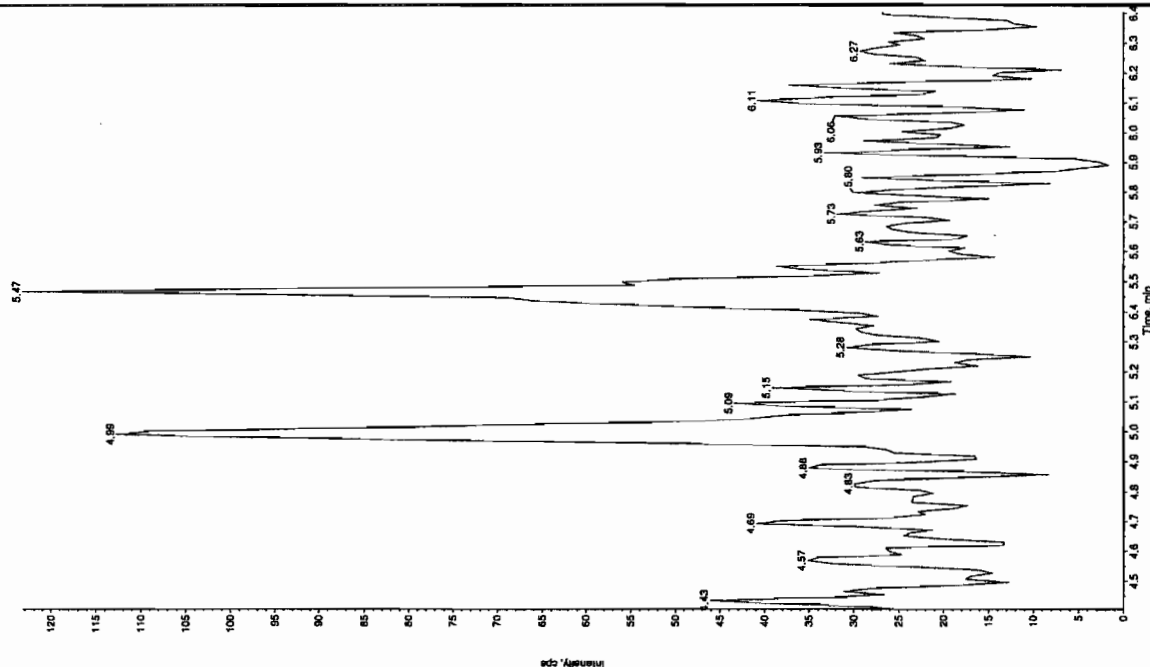
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "165.046.0 amu"

Comment: "LCMSEXP\_B" Annotation: "

Sample Index: 1

Sample Type: Unknown  
Concentration: N/A  
Calculated Conc: 0.00 ng/mL  
Acq. Date: 4/10/2010  
Acq. Time: 1:49:58 AM

Modified: No





Nairb.ref

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

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

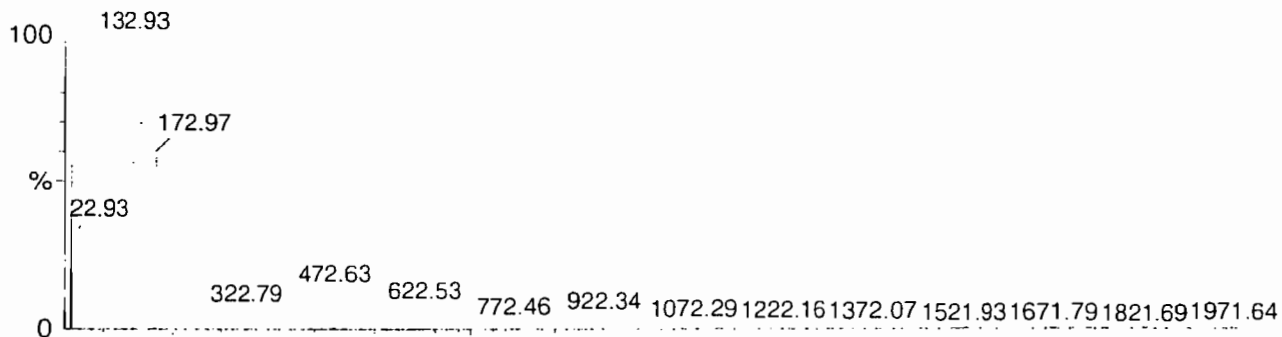
Calibration Report - MS1 Static

Page 1 of 1

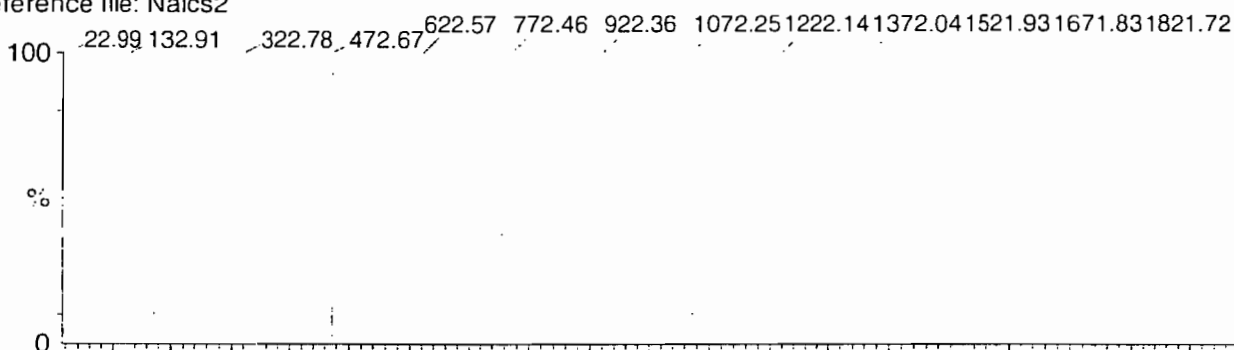
Printed: Fri Aug 25 10:50:01 2006

Data file: STATMS1 - Calibrated

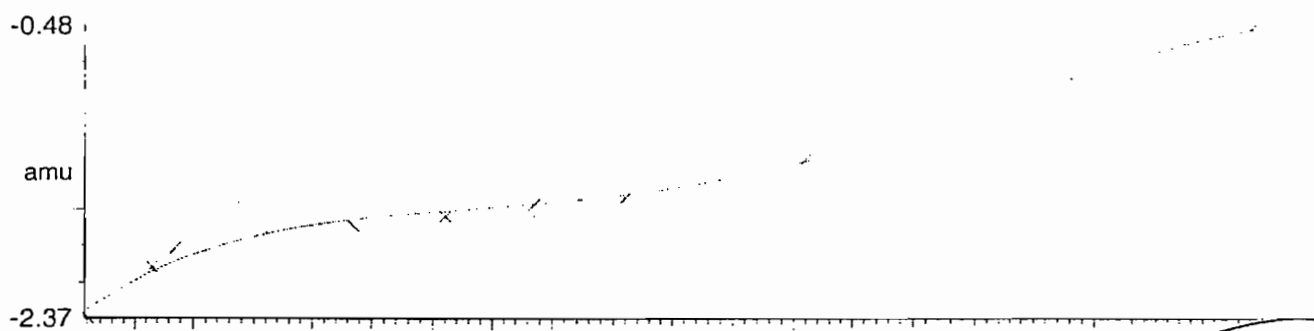
15 matches of 15 tested references



Reference file: Naics2

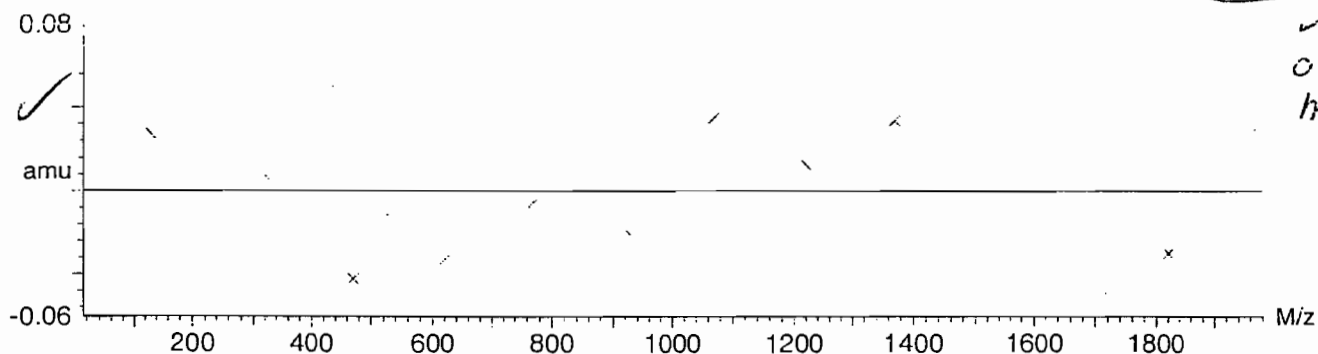


Mass difference (Raw - Ref mass)



Residuals

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



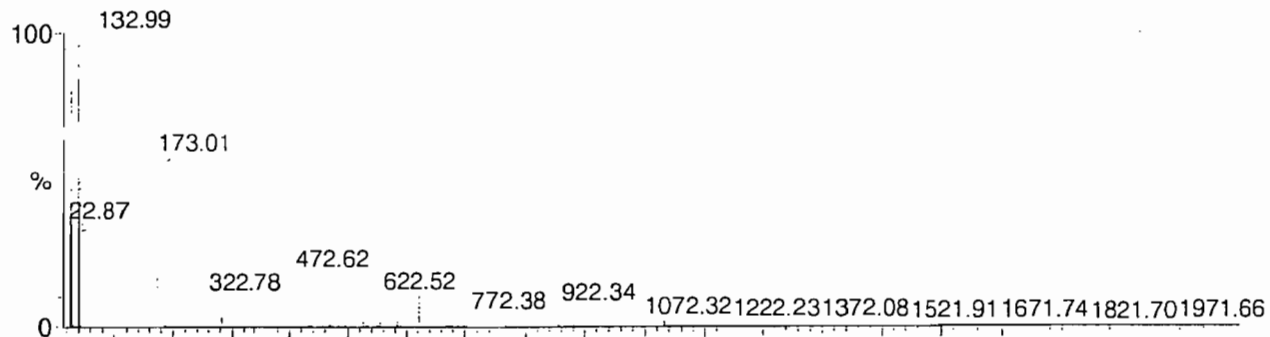
Calibration Report - MS1 Scanning

Page 1 of 1

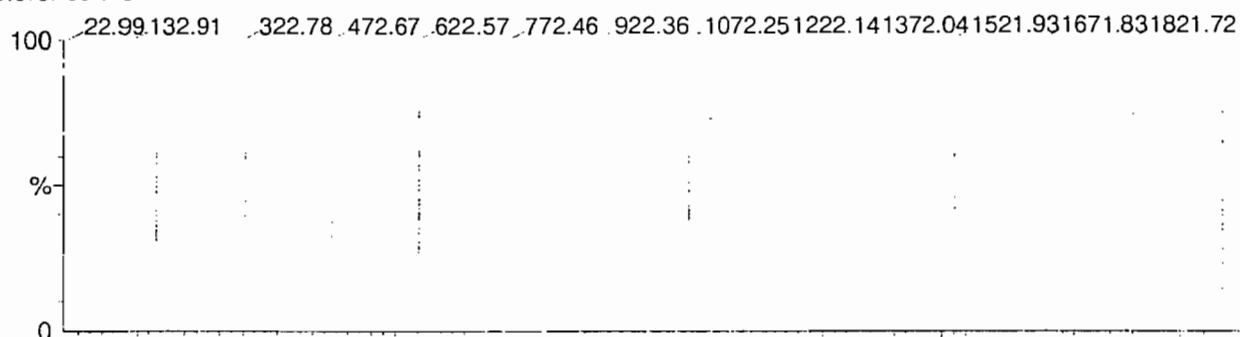
Printed: Fri Aug 25 10:51:06 2006

Data file: SCNMS1 - Calibrated

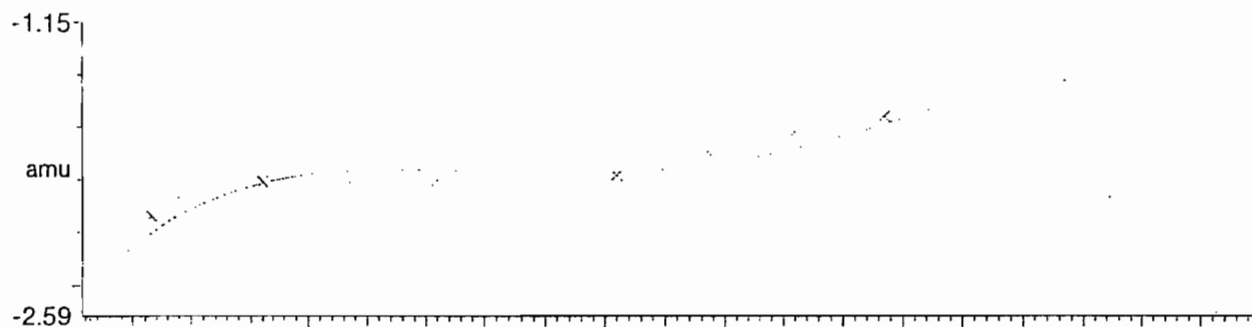
15 matches of 15 tested references



Reference file: Naics2

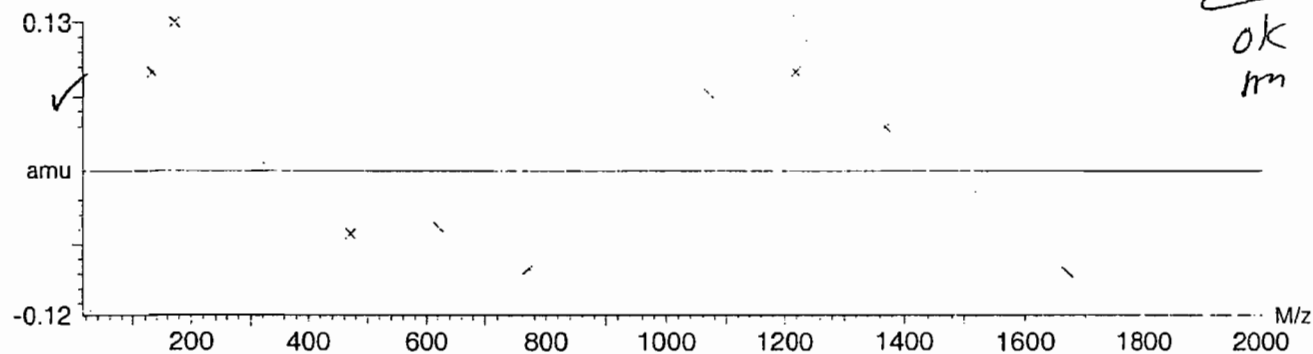


Mass difference (Raw - Ref mass)



Residuals

Mean residual =  $-5.432715e-9 \pm 0.069858$



ok  
m

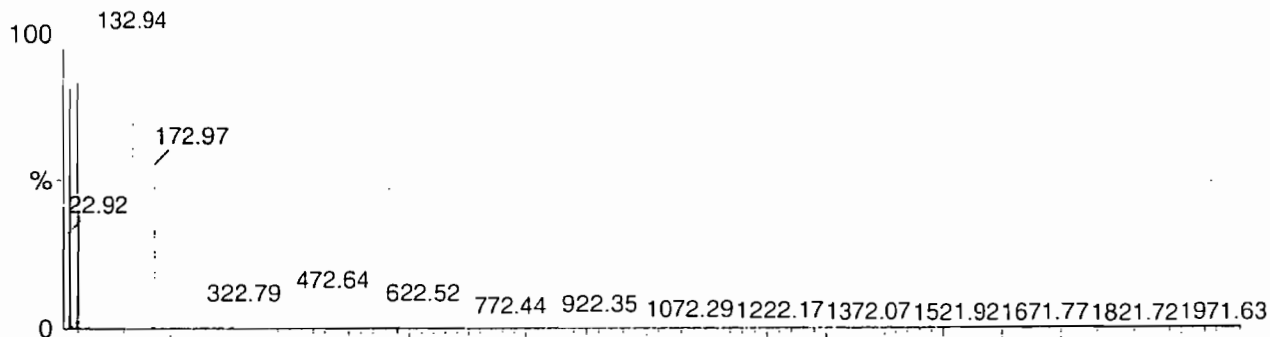
Calibration Report - MS1 Scan Speed Compensation

Page 1 of 1

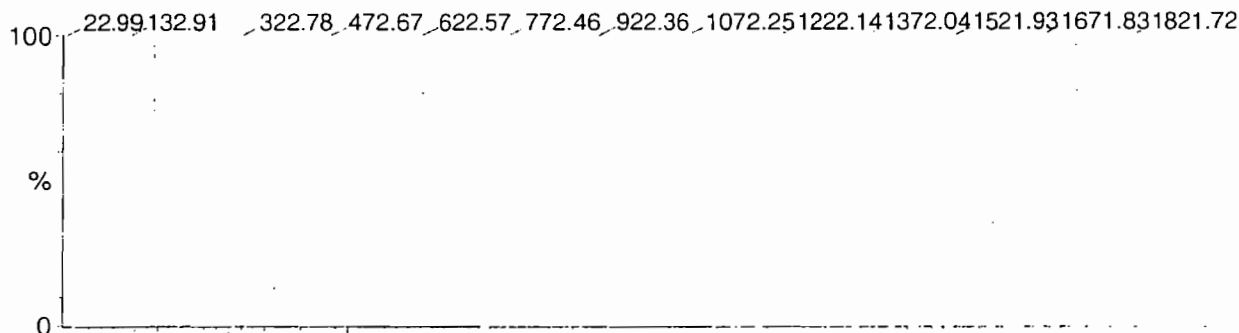
Printed: Fri Aug 25 10:52:01 2006

Data file: FASTMS1 - Calibrated

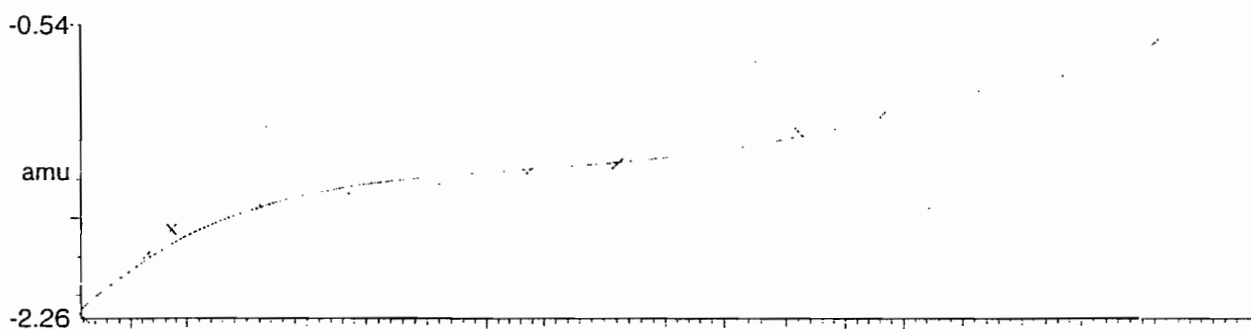
15 matches of 15 tested references



Reference file: Naics2

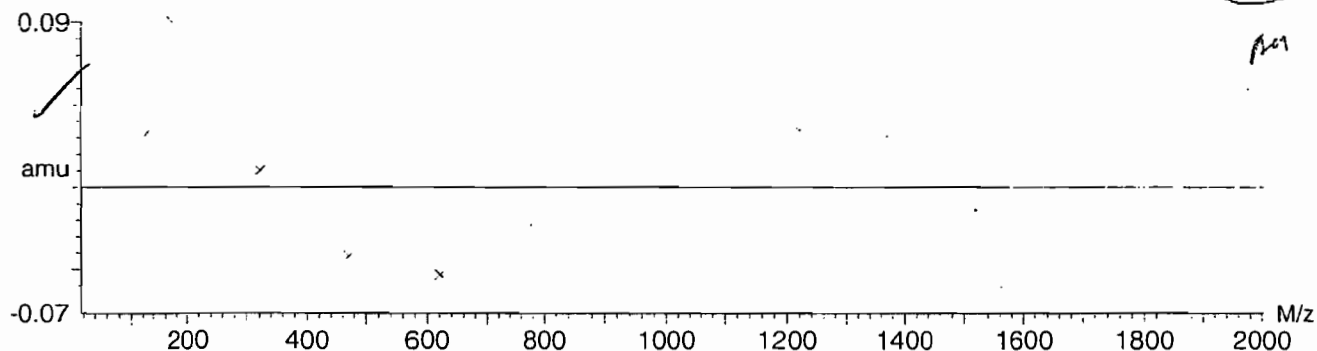


Mass difference (Raw - Ref mass)



Residuals

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



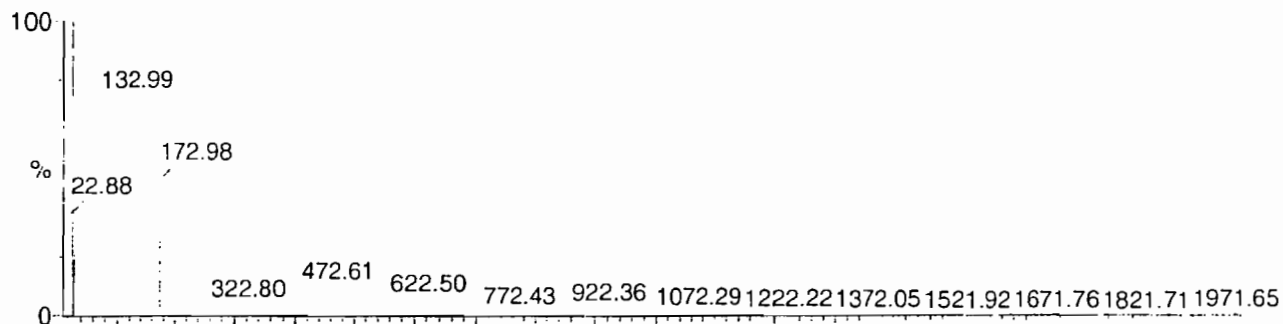
Calibration Report - MS2 Static

Page 1 of 1

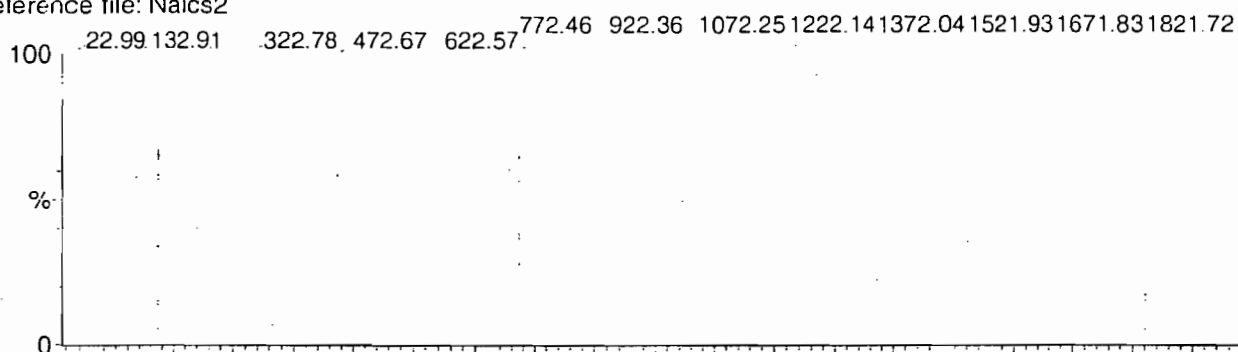
Printed: Fri Aug 25 10:52:54 2006

Data file: STATMS2 - Calibrated

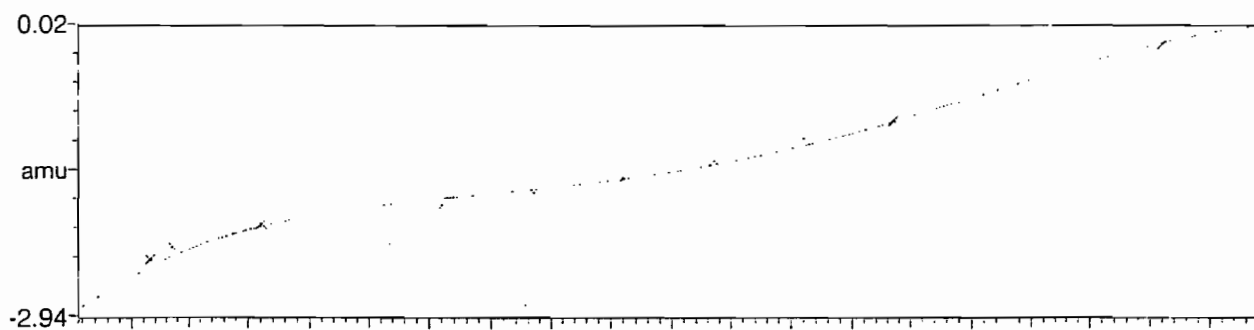
15 matches of 15 tested references



Reference file: Naics2

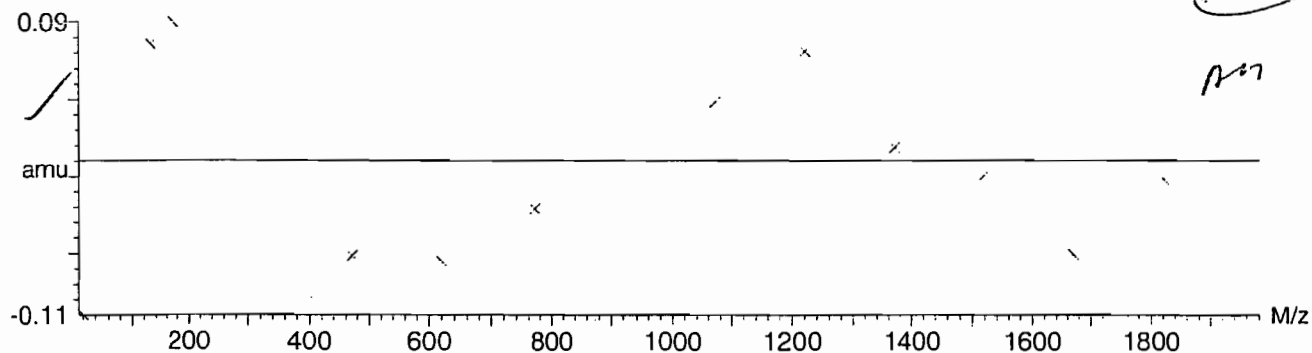


Mass difference (Raw - Ref mass)



Residuals

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



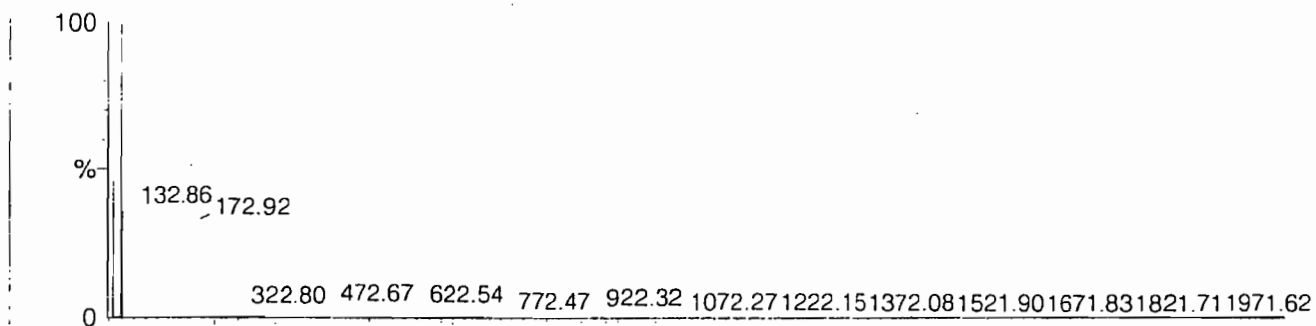
Calibration Report - MS2 Scanning

Page 1 of 1

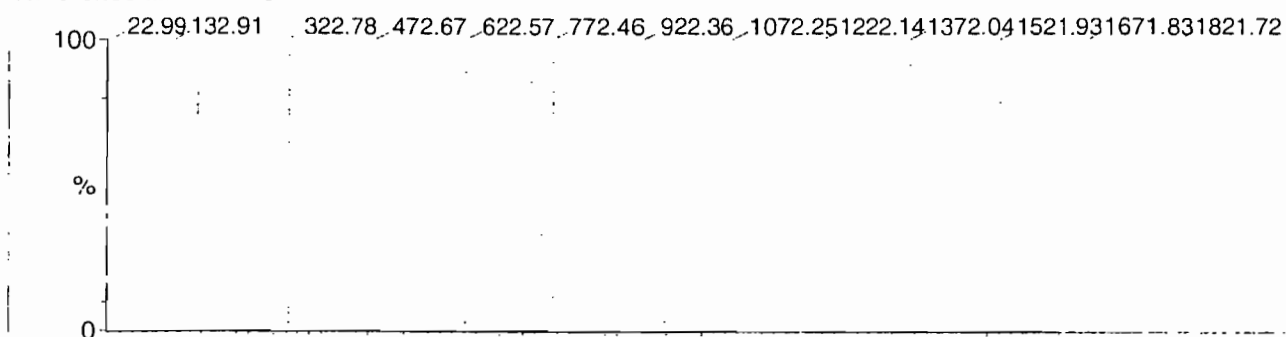
Printed: Fri Aug 25 10:54:00 2006

Data file: SCNMS2 - Calibrated

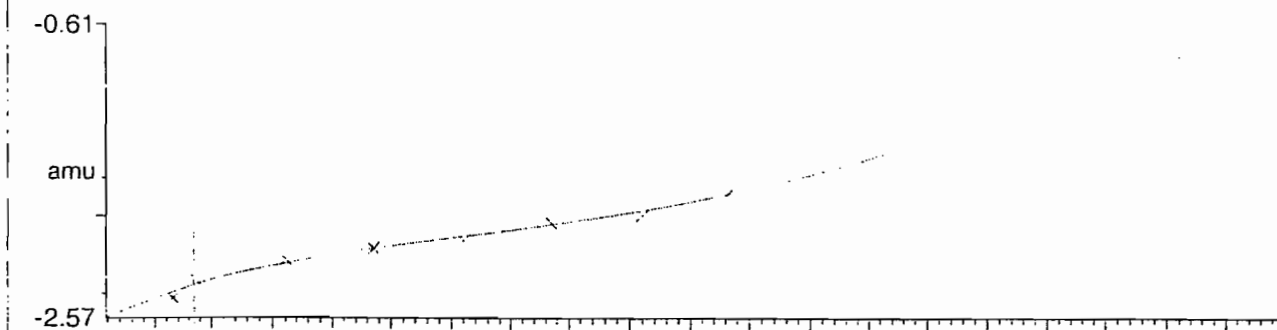
14 matches of 15 tested references



Reference file: Naics2

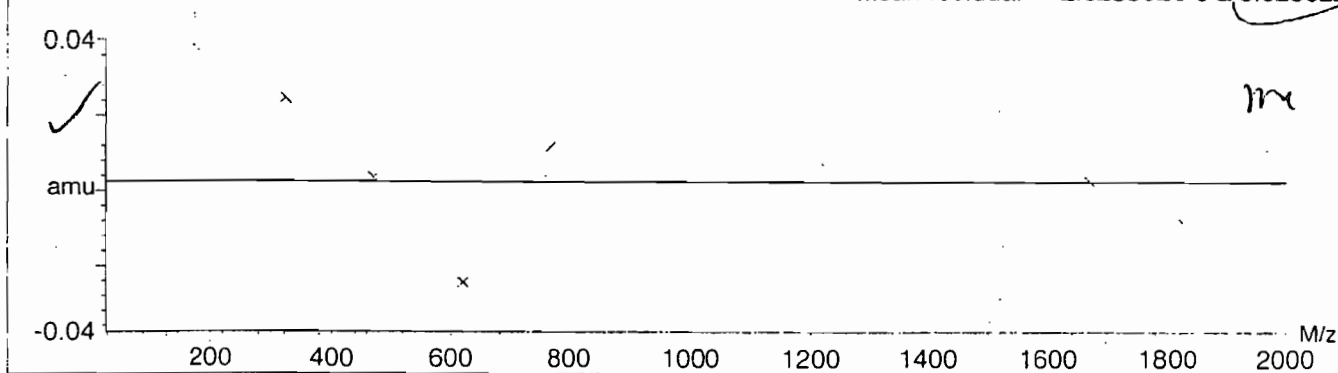


Mass difference (Raw - Ref mass)



Residuals

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



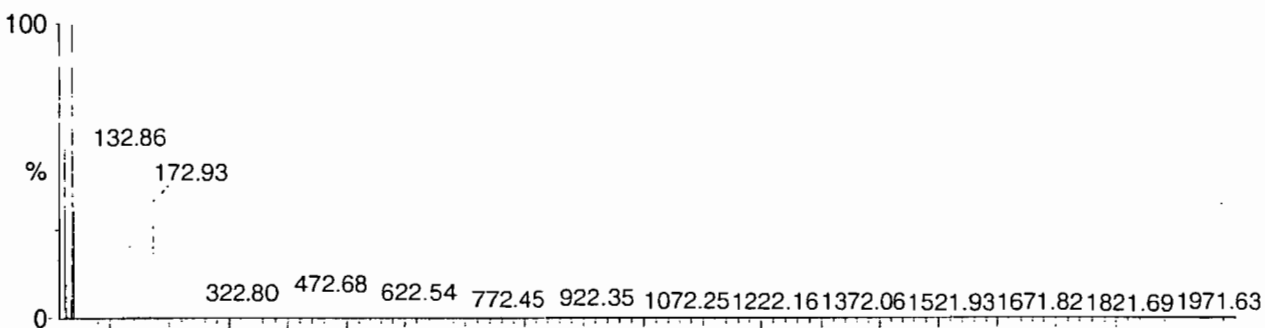
Calibration Report - MS2 Scan Speed Compensation

Page 1 of 1

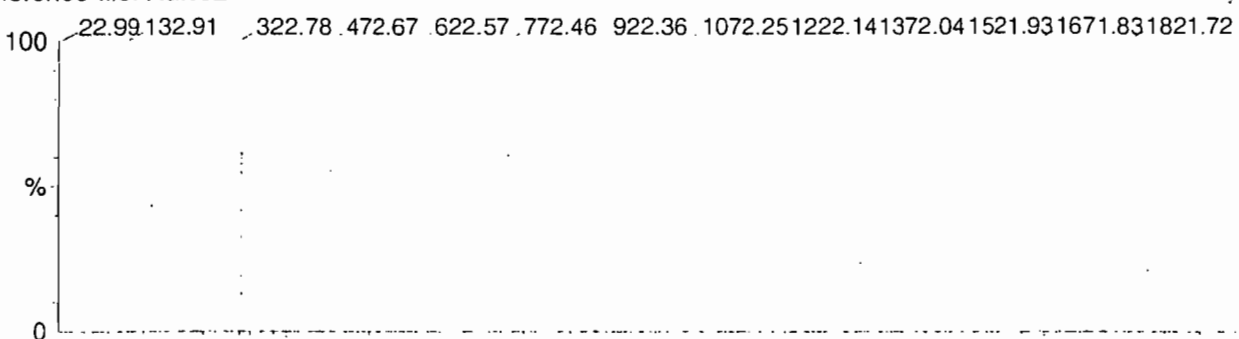
Printed: Fri Aug 25 10:54:54 2006

Data file: FASTMS2 - Calibrated

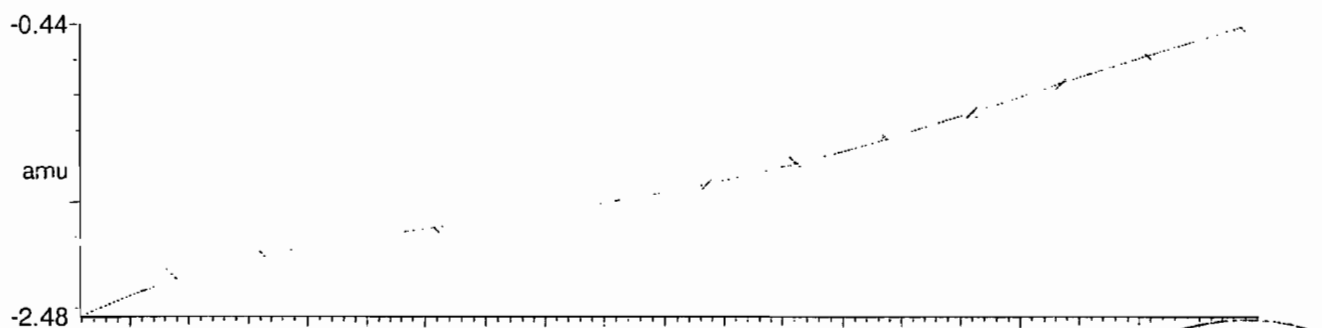
14 matches of 15 tested references



Reference file: Naics2

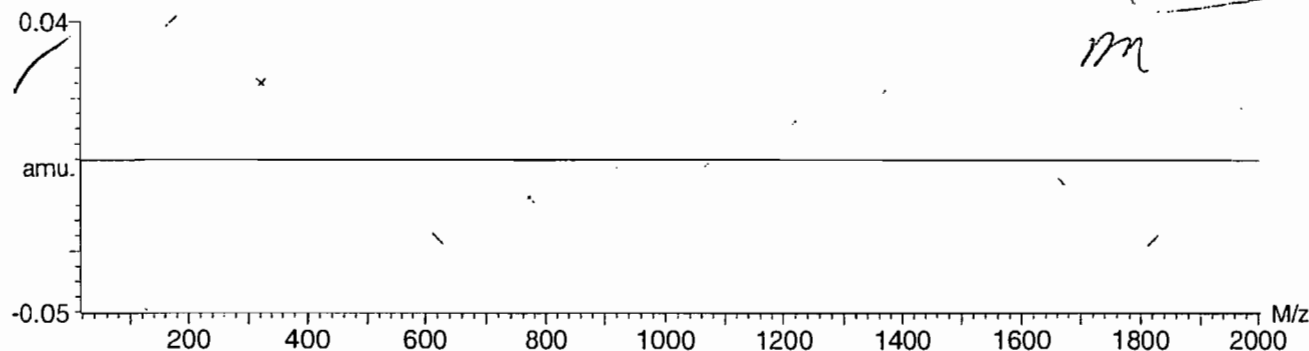


Mass difference (Raw - Ref mass)



Residuals

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



# High Explosives Internal Standard Summary

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2199

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) #
			16516666.667	10.5	73466666.667	14.65
Upper Limit			21471666.6671	11	95506666.6671	15.15
Lower Limit			11561666.6669	10	51426666.6669	14.15
MB for batch 961016	16-apr-10 14:15	EXP0415066.w	13900000	10.5	59200000	14.7
LCS for batch 961016	16-apr-10 14:41	EXP0415067.w	13600000	10.5	67200000	14.6
RE36-10-8288	16-apr-10 16:50	EXP0415072.w	13100000	10.5	65900000	14.6
RE36-10-8279	16-apr-10 17:17	EXP0415073.w	15900000	10.5	67600000	14.6
RE36-10-8277	16-apr-10 17:43	EXP0415074.w	18200000	10.5	74400000	14.7
RE36-10-8280	16-apr-10 18:08	EXP0415075.w	18600000	10.5	76200000	14.8
	Analysis Date/Time	GEL Data File	IS1 (DNB) (Area) #	RT (min) #	IS2 (DNT) (Area) #	RT2 (min) #
			23400000	10.617	102216666.667	14.867
Upper Limit			30420000	11.117	132881666.667	15.367
Lower Limit			16380000	10.117	71551666.6669	14.367
RE36-10-8278	20-apr-10 19:30	EXP0420013.w	20100000	10.7	94000000	14.9
RE36-10-8274	20-apr-10 19:56	EXP0420014.w	20400000	10.6	90300000	14.9
RE36-10-8291	20-apr-10 20:22	EXP0420015.w	19600000	10.7	87500000	14.9
RE36-10-8287	20-apr-10 20:48	EXP0420016.w	20500000	10.7	90200000	14.9
RE36-10-8273	20-apr-10 21:13	EXP0420017.w	19200000	10.7	86900000	14.9
RE36-10-8275	20-apr-10 21:39	EXP0420018.w	17800000	10.7	83600000	14.9
RE36-10-8276	20-apr-10 22:05	EXP0420019.w	18600000	10.6	87700000	14.9

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: RE36-10-8288

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 248519001

Sample Amount 2

Moisture: 16.4

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0415072.wiff

Date Analyzed: 16-APR-10 16:50

Units: ug/kg

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

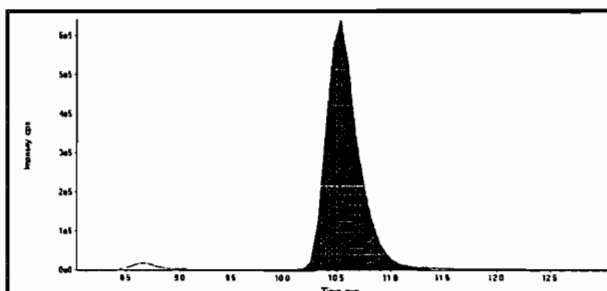
\*Concentration =

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

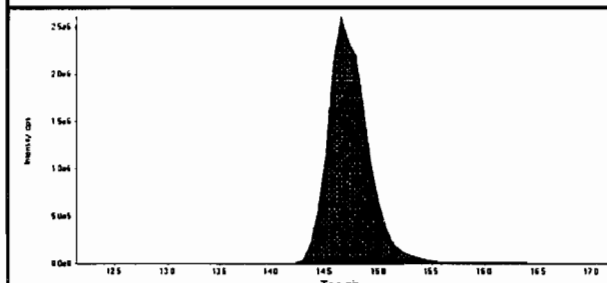
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

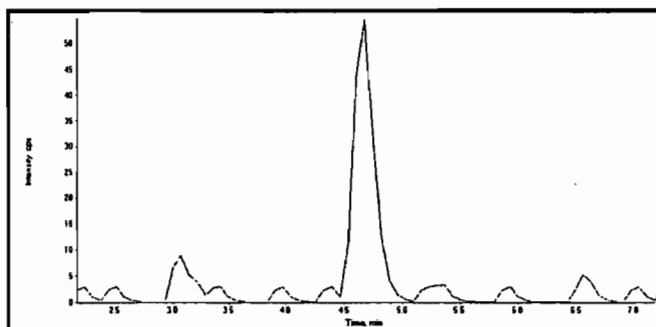
Data File	EXP0415072.wiff	Acquisition Date	4/16/2010 4:50:53 PM
Sample Name	248519001	Acquisition Method	8321.dam
Batch Dilution Analyst	961033 2 LER	Result Table	041510.rdb
Procedure Code	LCX8321_S	Sample Type	Unknown



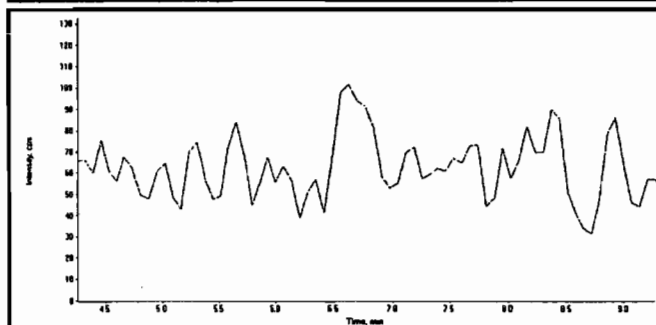
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.50
Actual RT:	10.50
Area Counts:	13100000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.60
Actual RT:	14.60
Area Counts:	65900000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.67
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.77
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

*See 4/23/10*

*4/23/10*

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415072.wiff	<b>Acquisition Date</b>	4/16/2010 4:50:53 PM
<b>Sample Name</b>	248519001	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	961033 2 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	<b>Expected RT:</b>	9.00
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	<b>Expected RT:</b>	10.7
	<b>Actual RT:</b>	10.5
	<b>Area Counts:</b>	2.20e+004
	<b>Manual Modification</b>	No
	<b>Amount:</b>	4.42 (ng/mL)
	<b>% Accuracy:</b>	N/A

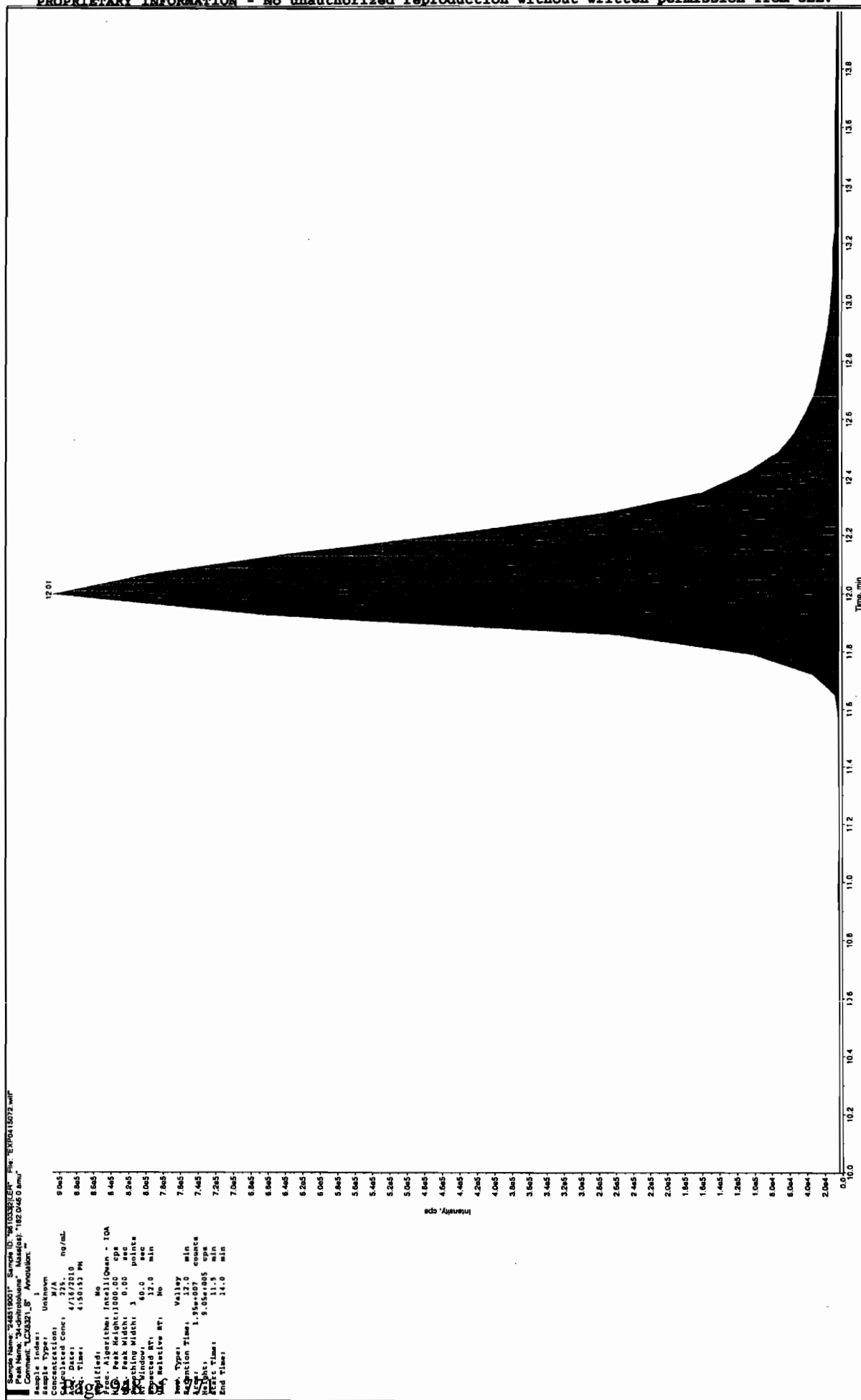
  

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	<b>Expected RT:</b>	10.7
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

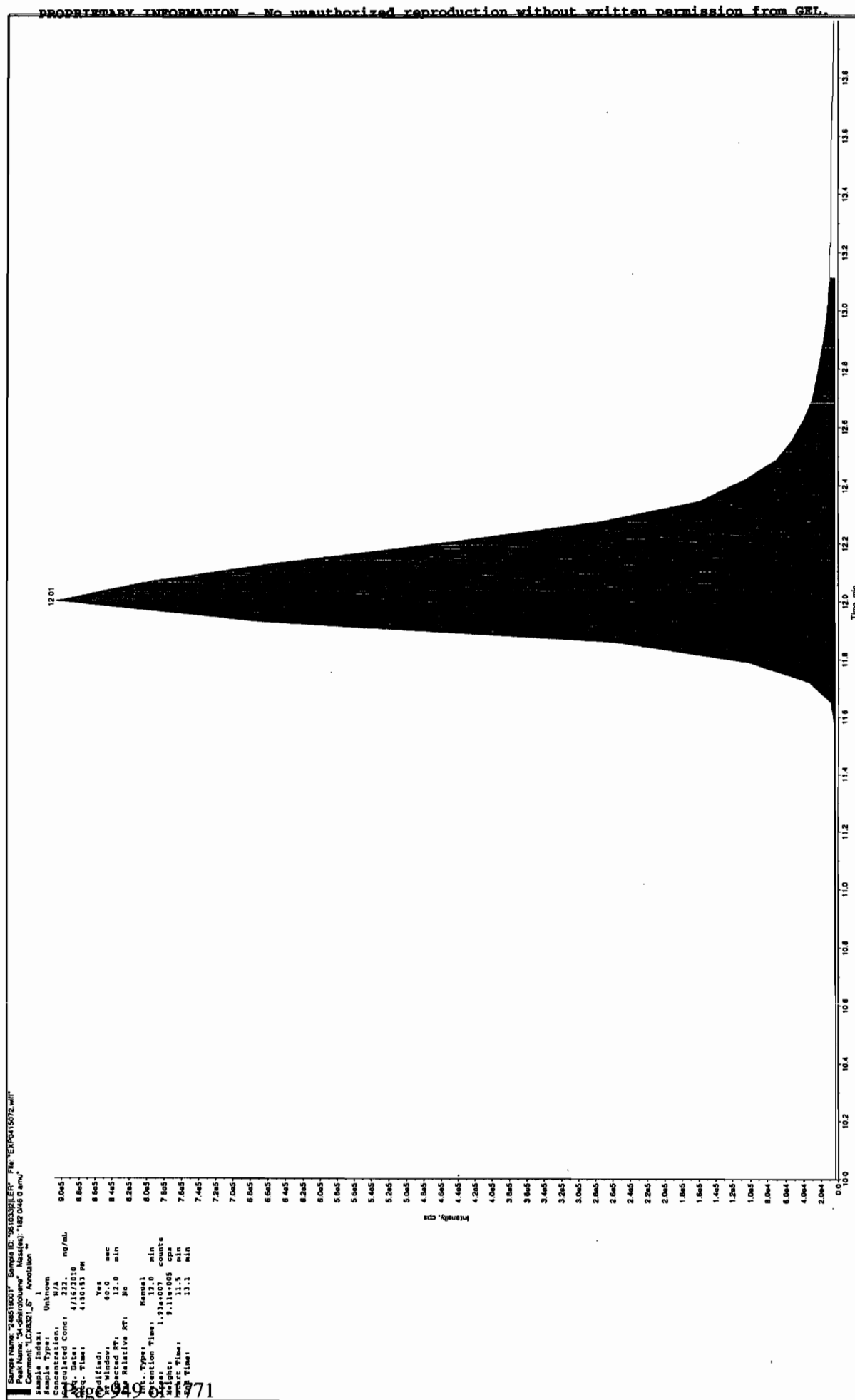
	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	<b>Expected RT:</b>	13.1
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

Before Jan 4/23/10



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

after Dec 4/23/10



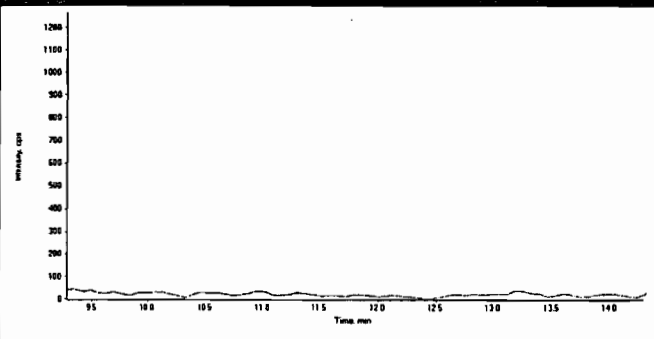
\*GEL SOP GL-0A-E-056, Method 8321A-Modified LCMSMS#3

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

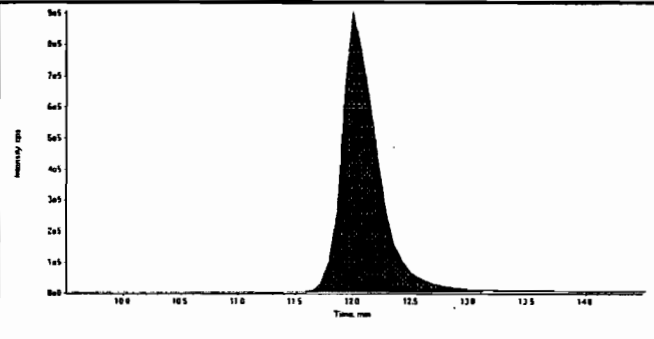
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415072.wiff	<b>Acquisition Date</b>	4/16/2010 4:50:53 PM
<b>Sample Name</b>	248519001	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	961033 2 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

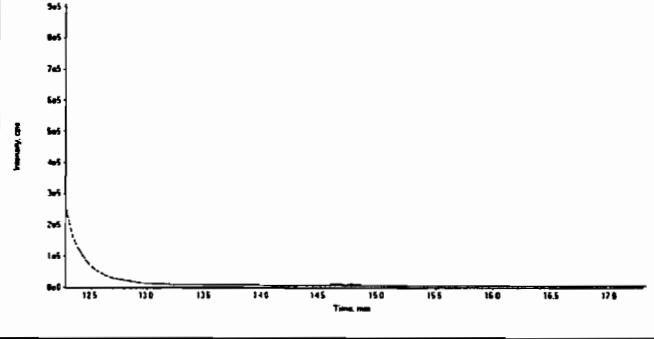
  

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	11.8
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

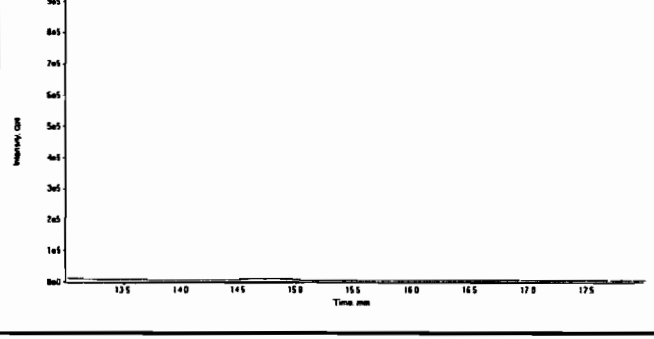
  

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.0
	Actual RT:	12.0
	Area Counts:	1.93e+007
	Manual Modification	Yes
	Amount:	222. (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	14.8
	Actual RT:	14.6
	Area Counts:	3.03e+005
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

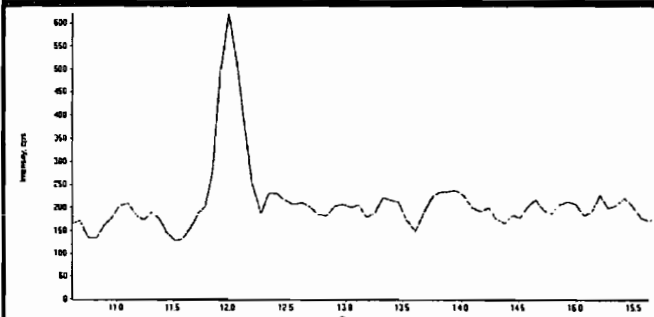
	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.5
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

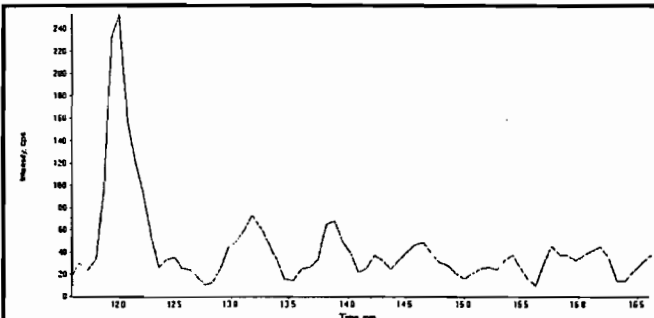
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415072.wiff	<b>Acquisition Date</b>	4/16/2010 4:50:53 PM
<b>Sample Name</b>	248519001	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	961033 2 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

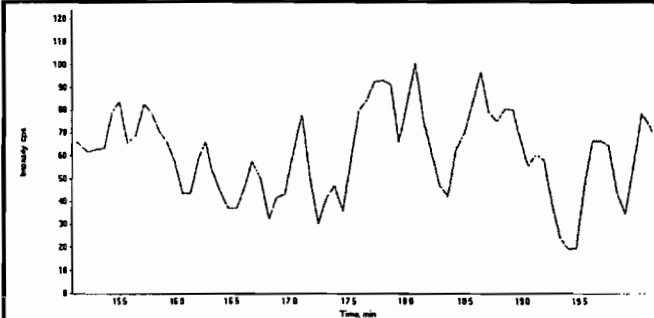
  

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	<b>Expected RT:</b>	13.1
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

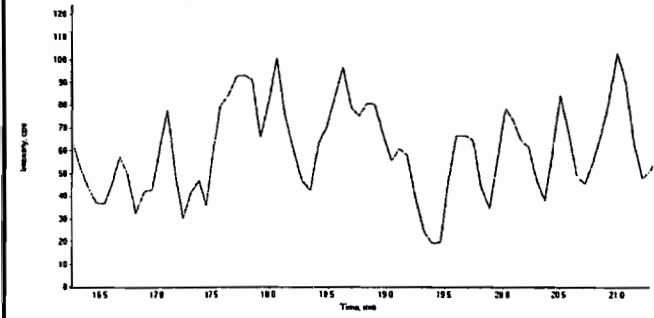
  

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	<b>Expected RT:</b>	14.1
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	17.6
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	18.8
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A



GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415072.wiff	<b>Acquisition Date</b>	4/16/2010 4:50:53 PM
<b>Sample Name</b>	248519001	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	961033 2 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	20.1
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	<b>Expected RT:</b>	19.7
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-8288

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 248519001

Sample Amount 2

Moisture: 16.4

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04090054.wiff

Date Analyzed: 09-APR-10 21:07

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

San 4/12/10

Sample Name: "248519001" Sample ID: "96103321LER" File: "EXS04090054.wif"

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

Comment: "LCX83212S" Annotation: "

Sample Index: 1

Sample Type: Unknown

Concentration: N/A ng/mL

Calculated Conc: 0.00

Acq. Date: 4/9/2010

Acq. Time: 9:07:18 PM

Modified: No

Sample Name: "248519001" Sample ID: "96103321LER" File: "EXS04090054.wif"

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

Comment: "LCX83212S" Annotation: "

Sample Index: 1

Sample Type: Unknown

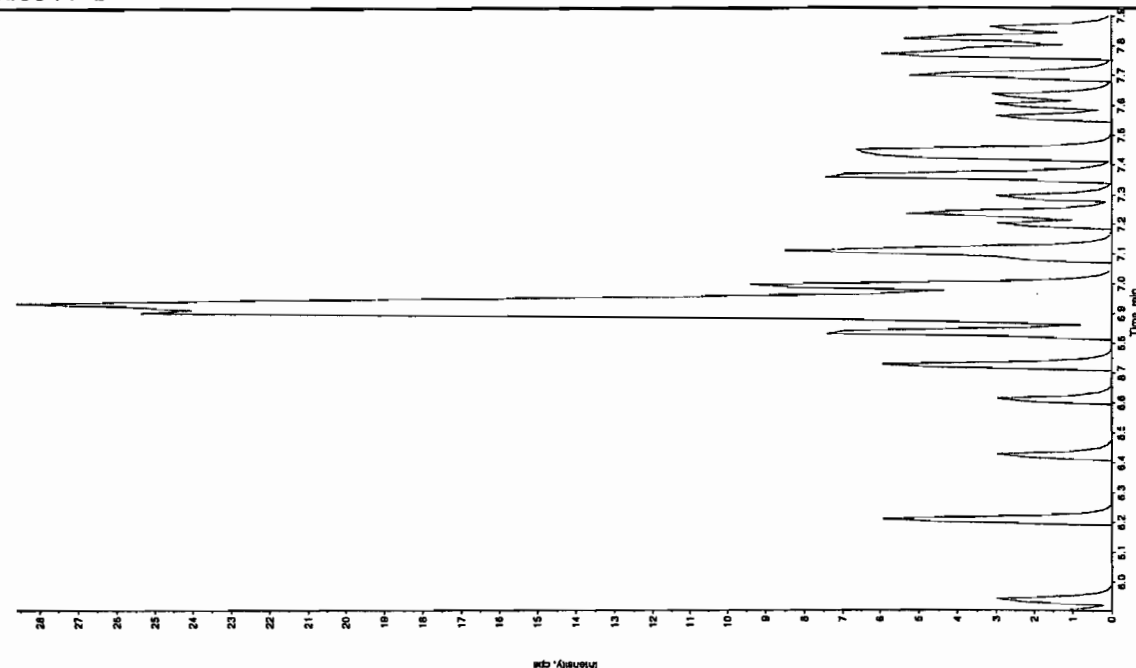
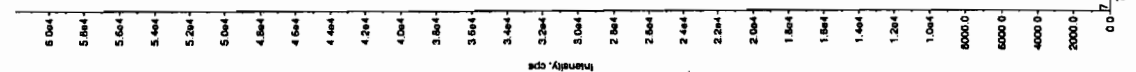
Concentration: N/A ng/mL

Calculated Conc: 0.00

Acq. Date: 4/9/2010

Acq. Time: 9:07:18 PM

Modified: No

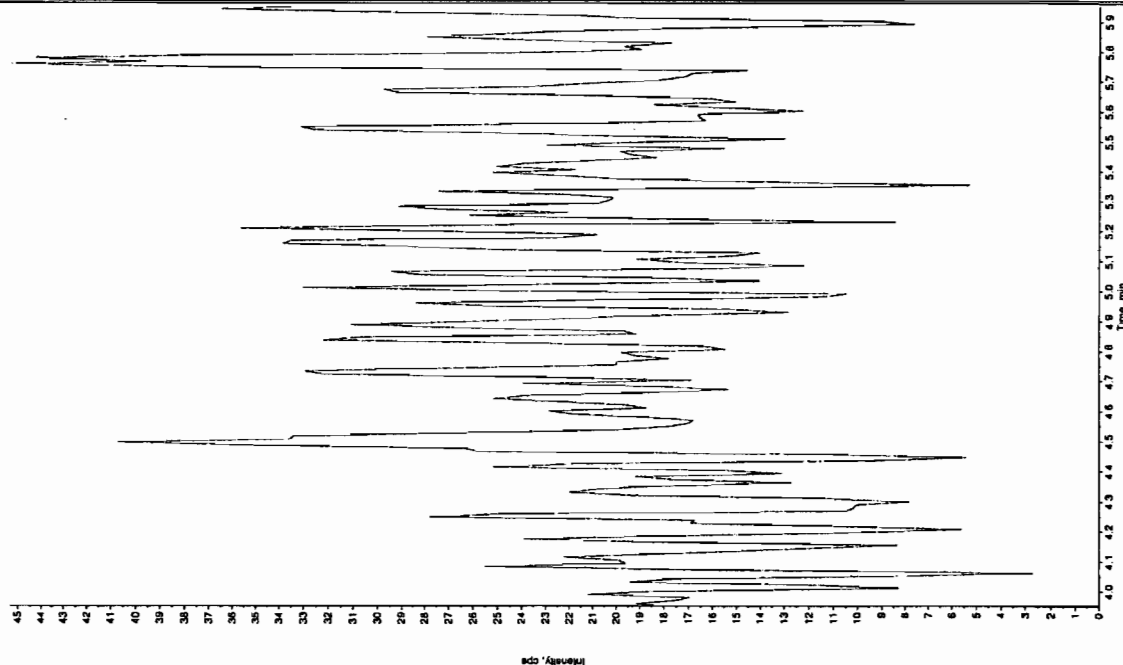
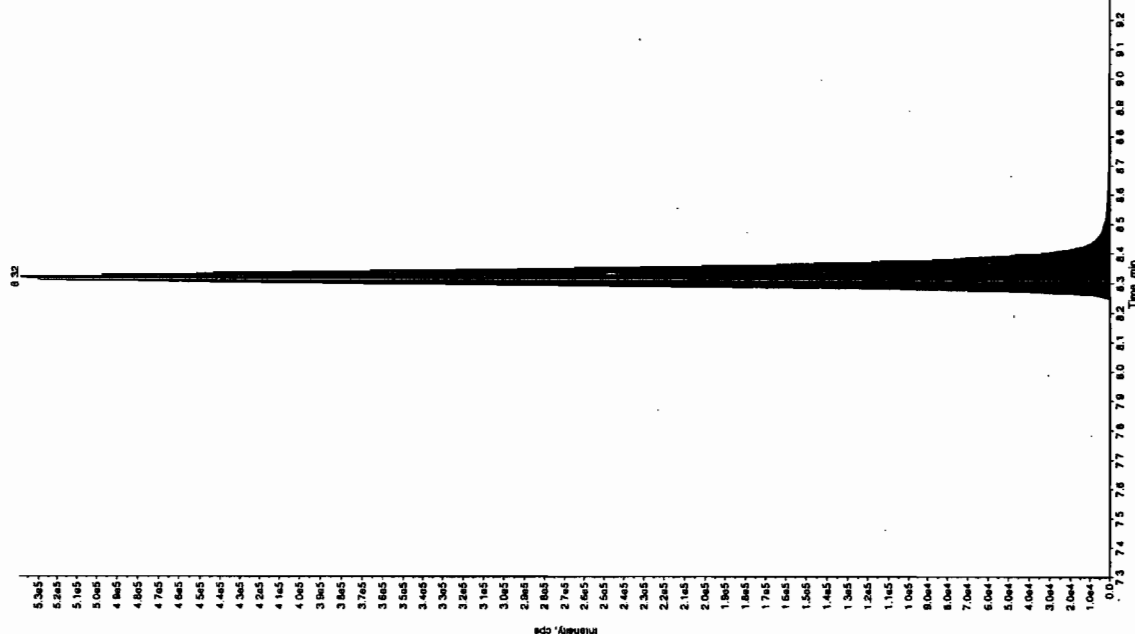


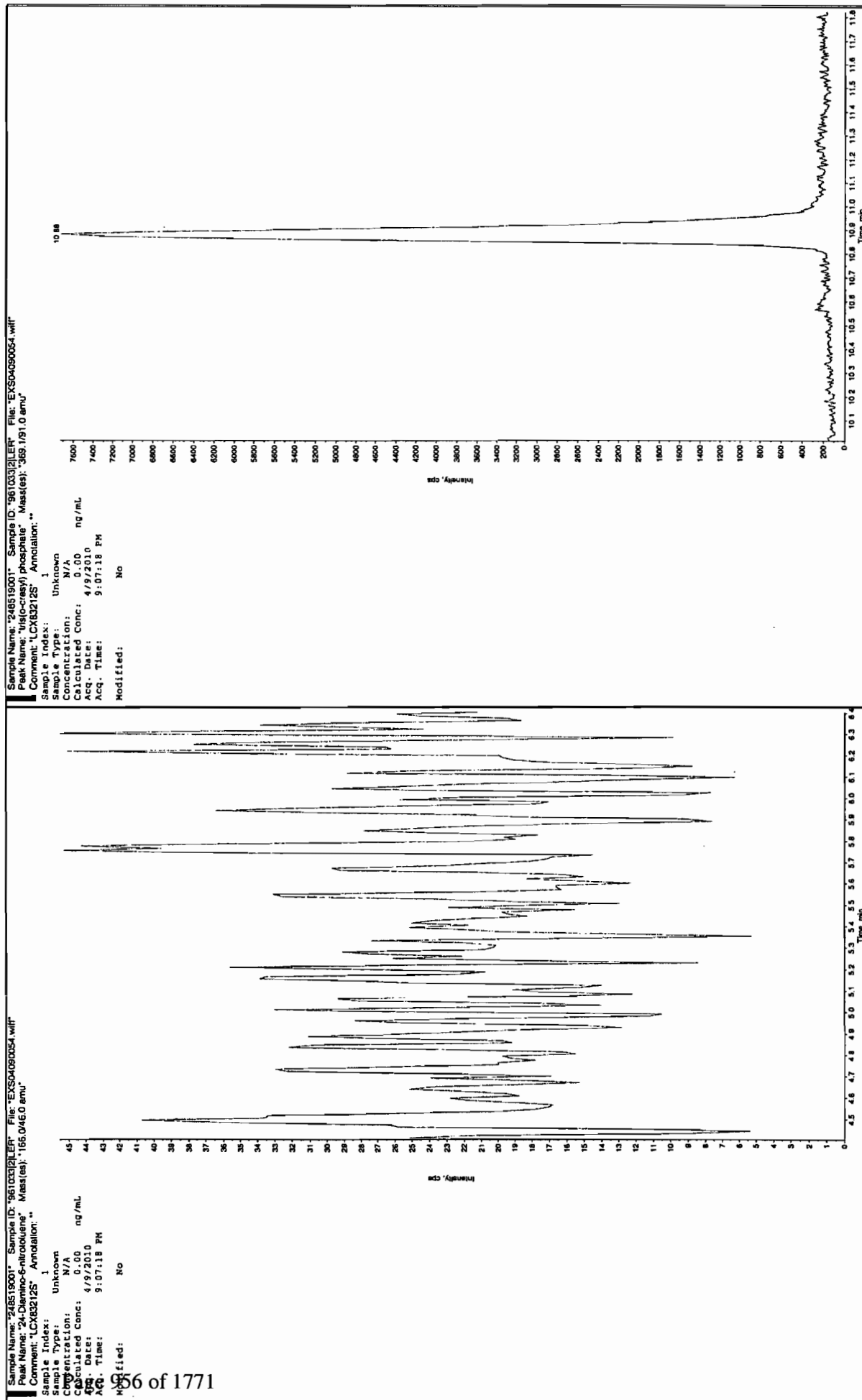
San 4/12/10

Sample Name: "248519001" Sample ID: "961033|2|LER" File: "EXS04090054.will"  
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"  
Comment: "LCX83212S" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00
Acq. Date:	4/9/2010
Acq. Time:	9:07:16 PM
Modified:	No

Sample ID:	Unknown	Concentration:	N/A	ng/mL
Sample Type:	Unknown	Calculated Conc:	252.	
Sample Index:	1	Acq Date:	4/9/2010	
		Acq Time:	9:07:18 PM	
		Acq Day:	4/9/2010	
		Acq Week:	17	
		Acq Month:	4	
		Acq Year:	2010	
		Acq File:	490718.D	
		Acq Path:	C:\Program Files\Agilent\MSDCHEM\DATA\490718.D	
		Acq Method:	MSDCHEM.M	
		Acq Parameters:	MSDCHEM.M	
		Acq Software:	MSDCHEM.M	
		Acq Hardware:	MSDCHEM.M	
		Acq Firmware:	MSDCHEM.M	
		Acq Driver:	MSDCHEM.M	
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		Acq Card:	MSDCHEM.M	
		Acq Port:	MSDCHEM.M	
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		Acq Run:	MSDCHEM.M	
		Acq Batch:	MSDCHEM.M	
		Acq Lot:	MSDCHEM.M	
		Acq Exp:	MSDCHEM.M	
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		Acq Dis:	MSDCHEM.M	
		Acq Ret:	MSDCHEM.M	
		Acq Rec:	MSDCHEM.M	
		Acq Arch:	MSDCHEM.M	
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		Acq Pur:	MSDCHEM.M	
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		Acq Tra:	MSDCHEM.M	
		Acq Dis:	MSDCHEM.M	
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		Acq Dis:	MSDCHEM.M	
		Acq Ret:	MSDCHEM.M	
		Acq Rec:	MSDCHEM.M	
		Acq Arch:	MSDCHEM.M	
		Acq Del		





1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-8279

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 248519002

Sample Amount 2

Moisture: 7.1

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0415073.wiff

Date Analyzed: 16-APR-10 17:17

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

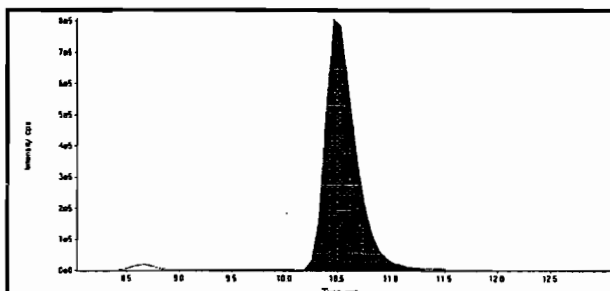
\*Concentration =

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

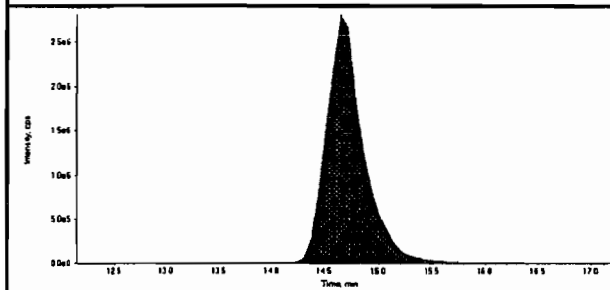
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

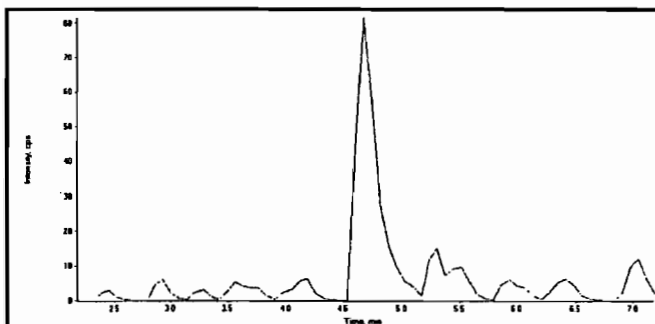
Data File	EXP0415073.wiff	Acquisition Date	4/16/2010 5:17:01 PM
Sample Name	248519002	Acquisition Method	8321.dam
Batch Dilution Analyst	961033 2 LER	Result Table	041510.rdb
Procedure Code	LCX8321_S	Sample Type	Unknown



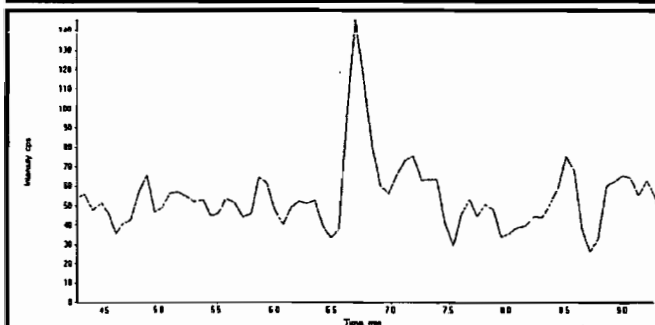
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.50
Actual RT:	10.50
Area Counts:	15900000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.60
Actual RT:	14.60
Area Counts:	67600000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.67
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.77
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

*LER*  
4/23/10

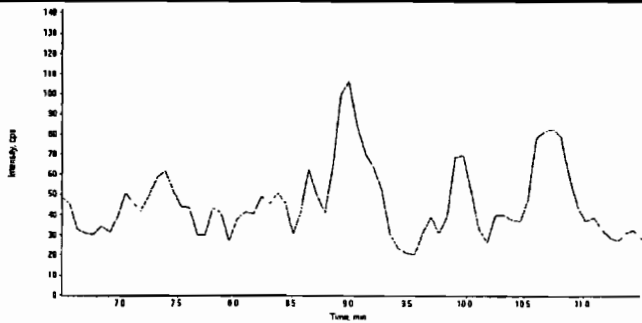
*Hmm*  
04/23/10

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

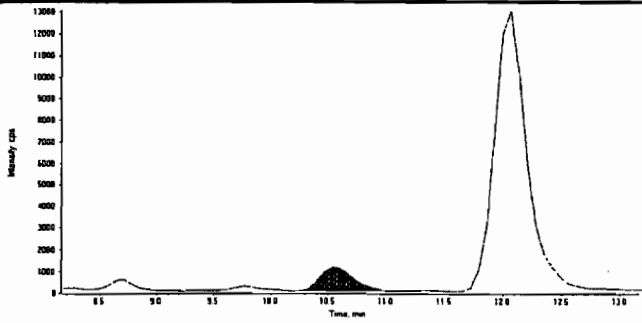
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415073.wiff	<b>Acquisition Date</b>	4/16/2010 5:17:01 PM
<b>Sample Name</b>	248519002	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	961033 2 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

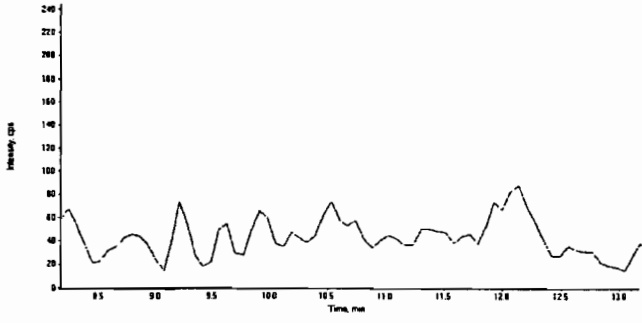
  

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	<b>Expected RT:</b>	9.00
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

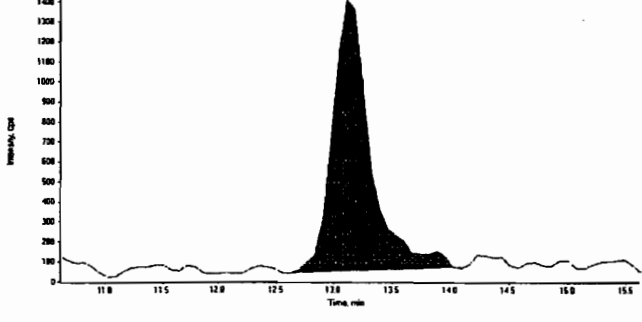
  

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	<b>Expected RT:</b>	10.7
	<b>Actual RT:</b>	10.5
	<b>Area Counts:</b>	2.36e+004
	<b>Manual Modification</b>	No
	<b>Amount:</b>	4.39 (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	<b>Expected RT:</b>	10.7
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

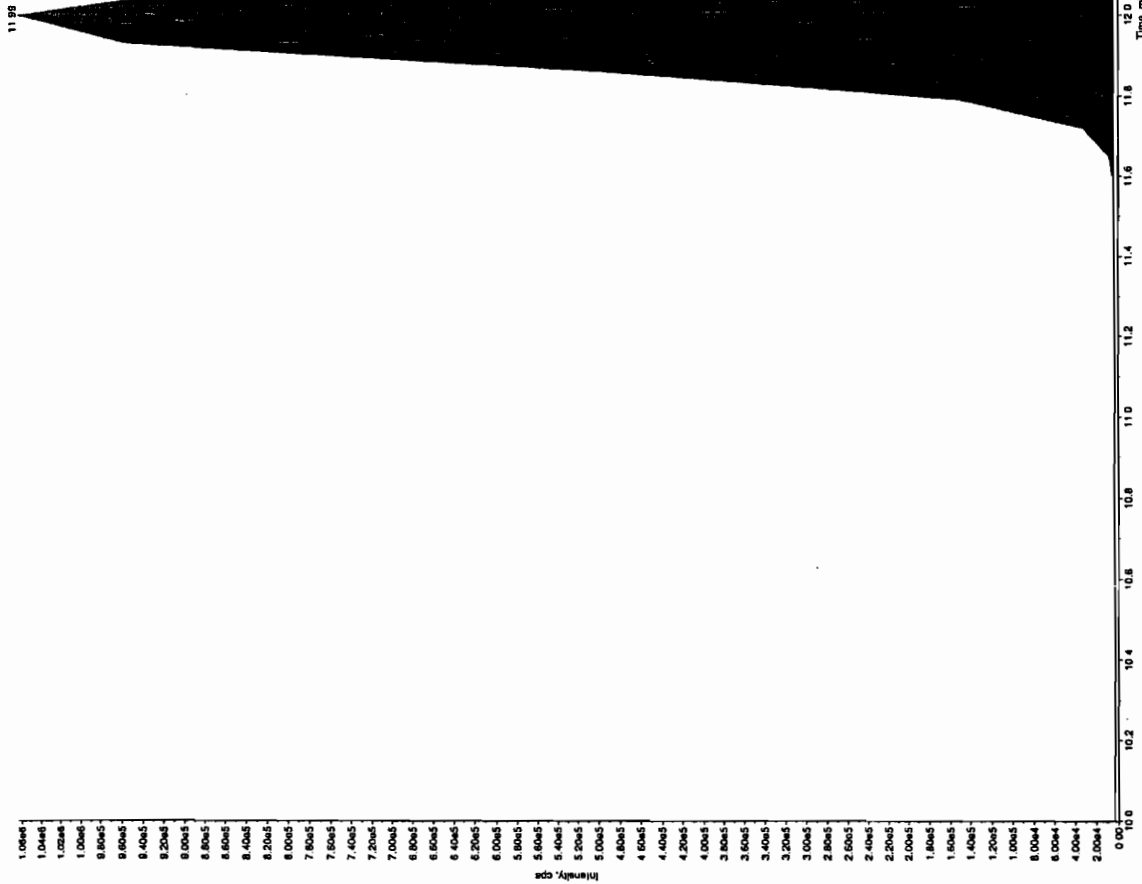
	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	<b>Expected RT:</b>	13.1
	<b>Actual RT:</b>	13.1
	<b>Area Counts:</b>	3.12e+004
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A



Before Jan 4/23/10

Sample Name: 24815027 - Source ID: 24815027 - File: EPG15073.wif  
 Sample Type: Unknown  
 Comment: LDC821\_SF Annotation: --

Sample Index: 1  
 Sample Type: Unknown  
 Sample Concentration: 210.0 ng/mL  
 Acquisition Date: 4/11/2010  
 Acquisition Time: 5:17:01 PM  
 Acquisition Method: No  
 Acquisition Software: No  
 Acquisition Hardware: No  
 Acquisition Location: Valley  
 Acquisition Time: 12.0 min  
 Acquisition Delay: 2.22 sec  
 Acquisition Rate: 1.00 sec  
 Acquisition End Time: 11.5 min  
 Acquisition End Time: 13.8 min



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

after dec 4/23/10

Sample Name: 24510027 Sample ID: 24510027 File: EXP015073.wif

Peak Name: 24-dinitrochlorobenzene Mass(es): 182.046 0 amu

Comment: LCM321\_55 Annotation: --

Sample Index: 1

Concentration: 1.00e6

Unlabeled Conc: 1.00e6

Acq Date: 4/15/2010

Acq Time: 5:11:01 PM

Acq Window: 60.0 sec

Acq Rate: 1000000 cps

Acq Selective RT: No

Int. Type: Manual

Integration Time: 3.00 min

Height: 1.06e+006 cps

Acq Time: 11.6 min

Acq Time: 13.0 min

Intensity, cps

0.00 10.0 10.2 10.4 10.6 10.8 11.0 11.2 11.4 11.6 11.8 12.0 12.2 12.4 12.6 12.8 13.0 13.2 13.4 13.6 13.8

Time, min

11.99

1.00e6

1.00e5

1.00e4

1.00e3

1.00e2

1.00e1

1.00e0

1.00e-1

1.00e-2

1.00e-3

1.00e-4

1.00e-5

1.00e-6

1.00e-7

1.00e-8

1.00e-9

1.00e-10

1.00e-11

1.00e-12

1.00e-13

1.00e-14

1.00e-15

1.00e-16

1.00e-17

1.00e-18

1.00e-19

1.00e-20

1.00e-21

1.00e-22

1.00e-23

1.00e-24

1.00e-25

1.00e-26

1.00e-27

1.00e-28

1.00e-29

1.00e-30

1.00e-31

1.00e-32

1.00e-33

1.00e-34

1.00e-35

1.00e-36

1.00e-37

1.00e-38

1.00e-39

1.00e-40

1.00e-41

1.00e-42

1.00e-43

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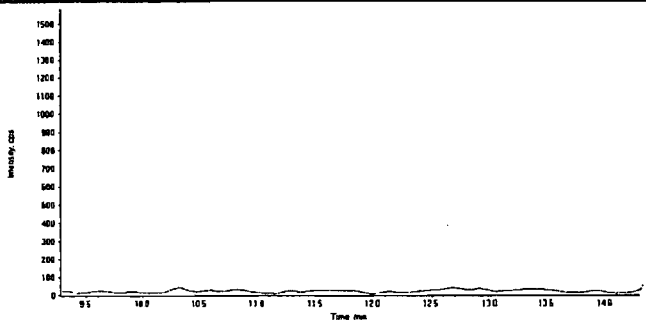
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GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

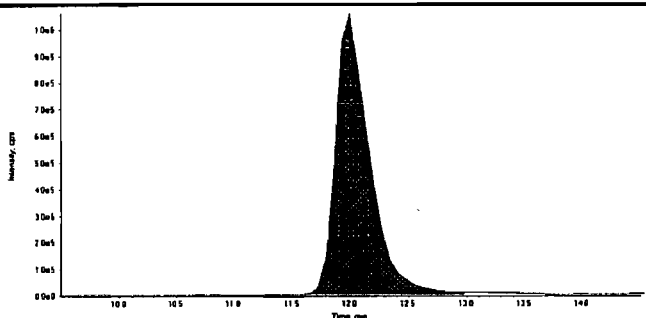
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415073.wiff	<b>Acquisition Date</b>	4/16/2010 5:17:01 PM
<b>Sample Name</b>	248519002	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	961033 2 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

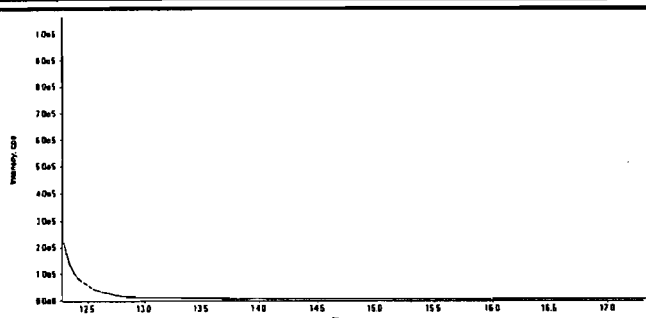
  

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	11.8
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

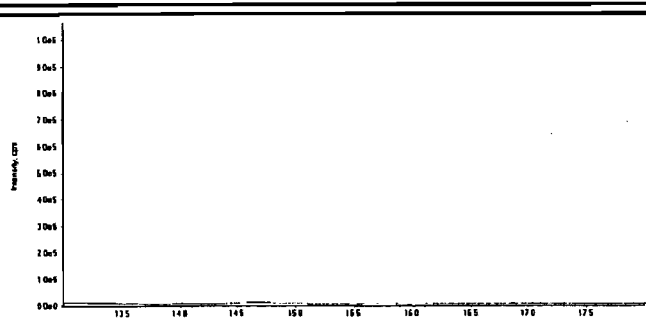
  

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.0
	Actual RT:	12.0
	Area Counts:	2.20e+007
	Manual Modification	Yes
	Amount:	248. (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	14.8
	Actual RT:	14.7
	Area Counts:	2.57e+005
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

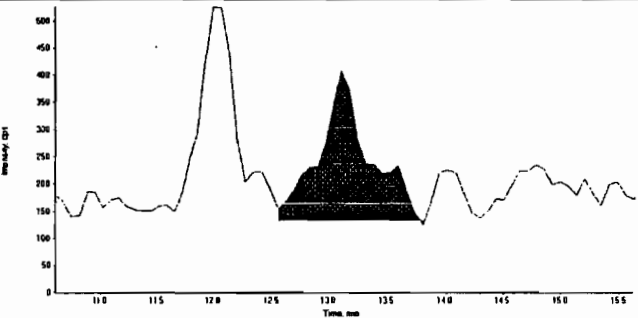
	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.5
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

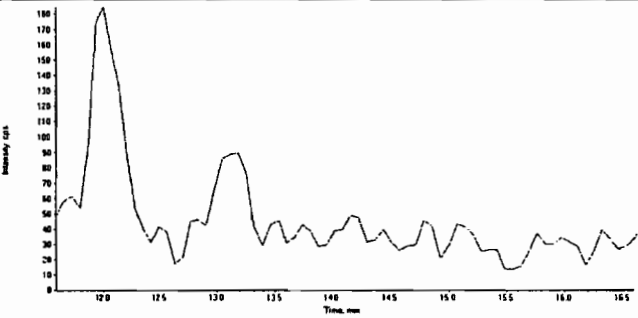
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415073.wiff	<b>Acquisition Date</b>	4/16/2010 5:17:01 PM
<b>Sample Name</b>	248519002	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	961033 2 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

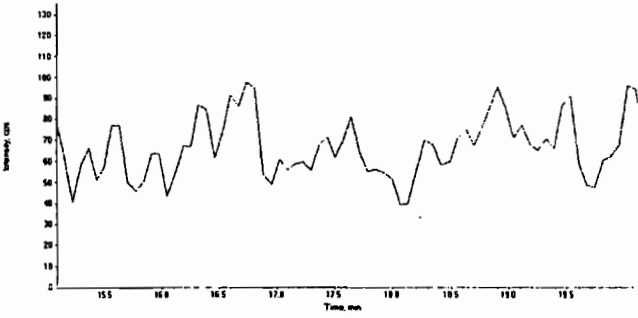
  

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	<b>Expected RT:</b>	13.1
	<b>Actual RT:</b>	13.1
	<b>Area Counts:</b>	8.11e+003
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

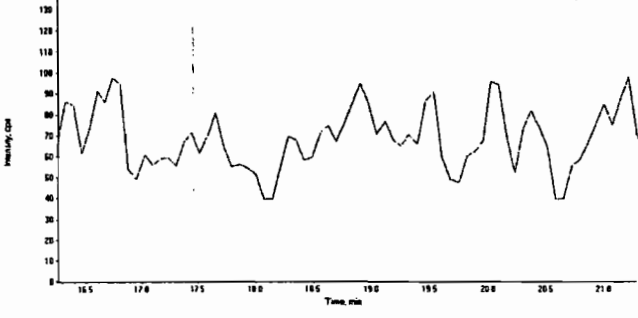
  

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	<b>Expected RT:</b>	14.1
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	17.6
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	18.8
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415073.wiff	<b>Acquisition Date</b>	4/16/2010 5:17:01 PM
<b>Sample Name</b>	248519002	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	961033 2 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	20.1
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	<b>Expected RT:</b>	19.7
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-8279

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 248519002

Sample Amount 2

Moisture: 7.1

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04090055.wiff

Date Analyzed: 09-APR-10 21:23

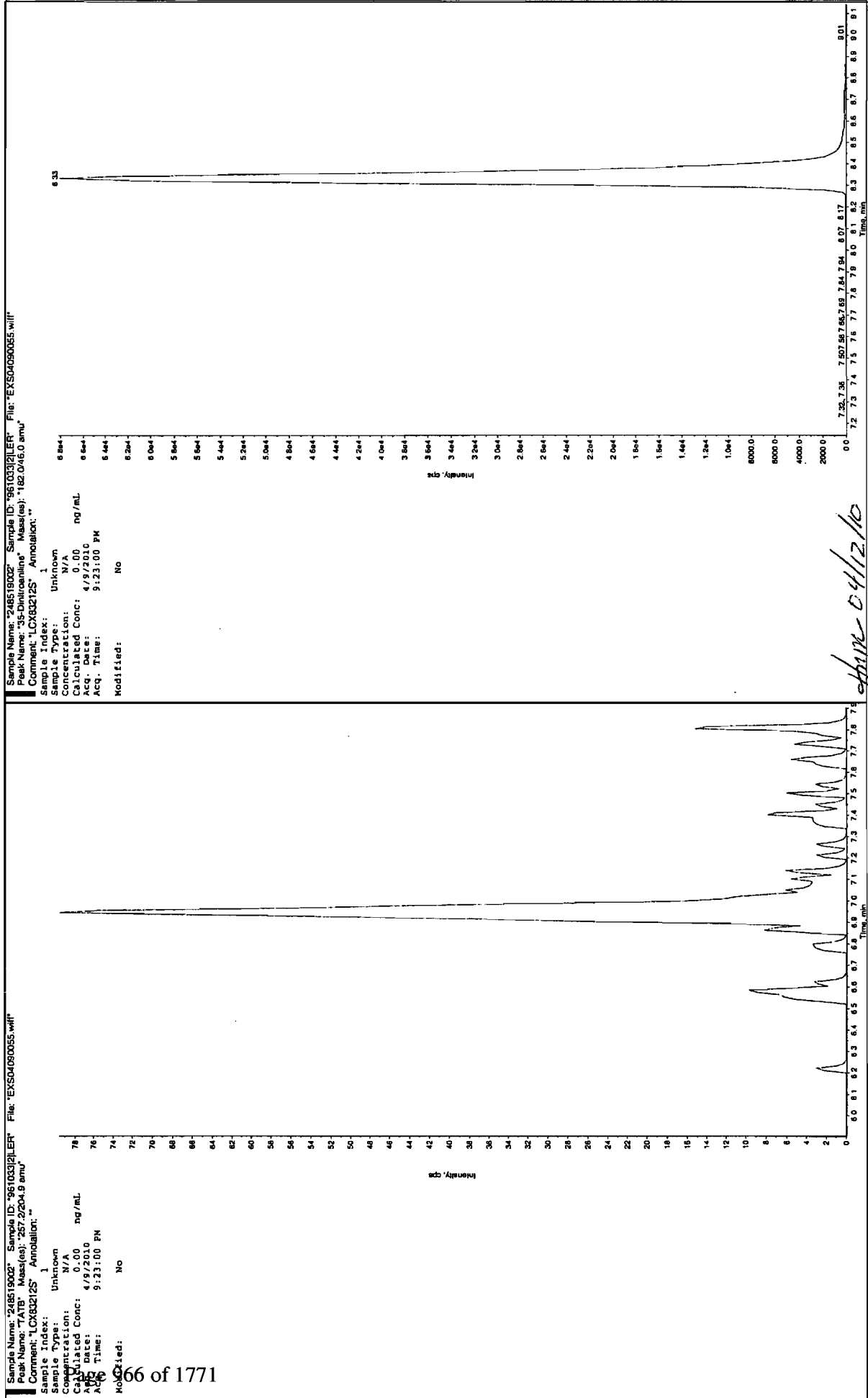
Units: ug/kg

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

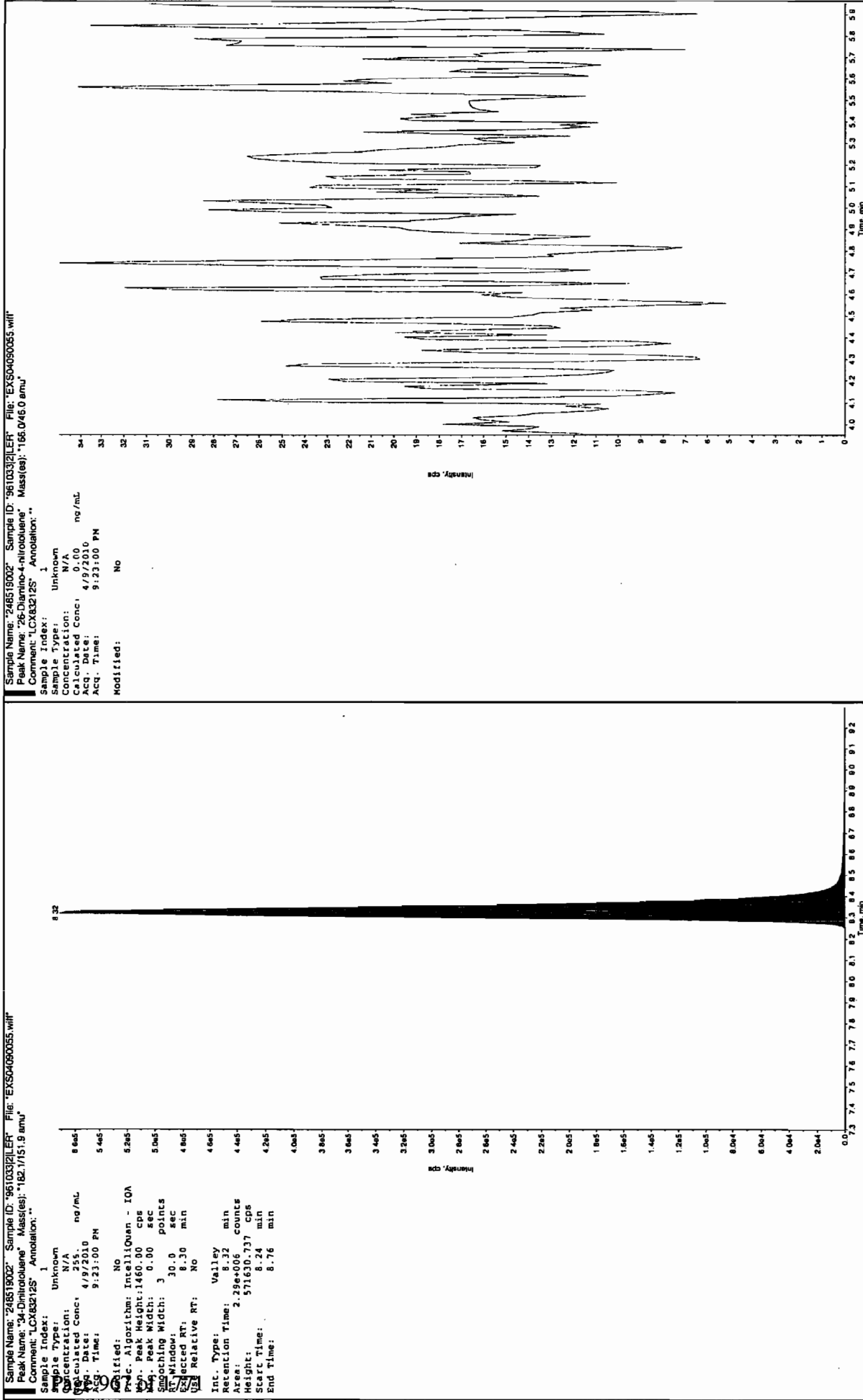
\*Concentration =

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

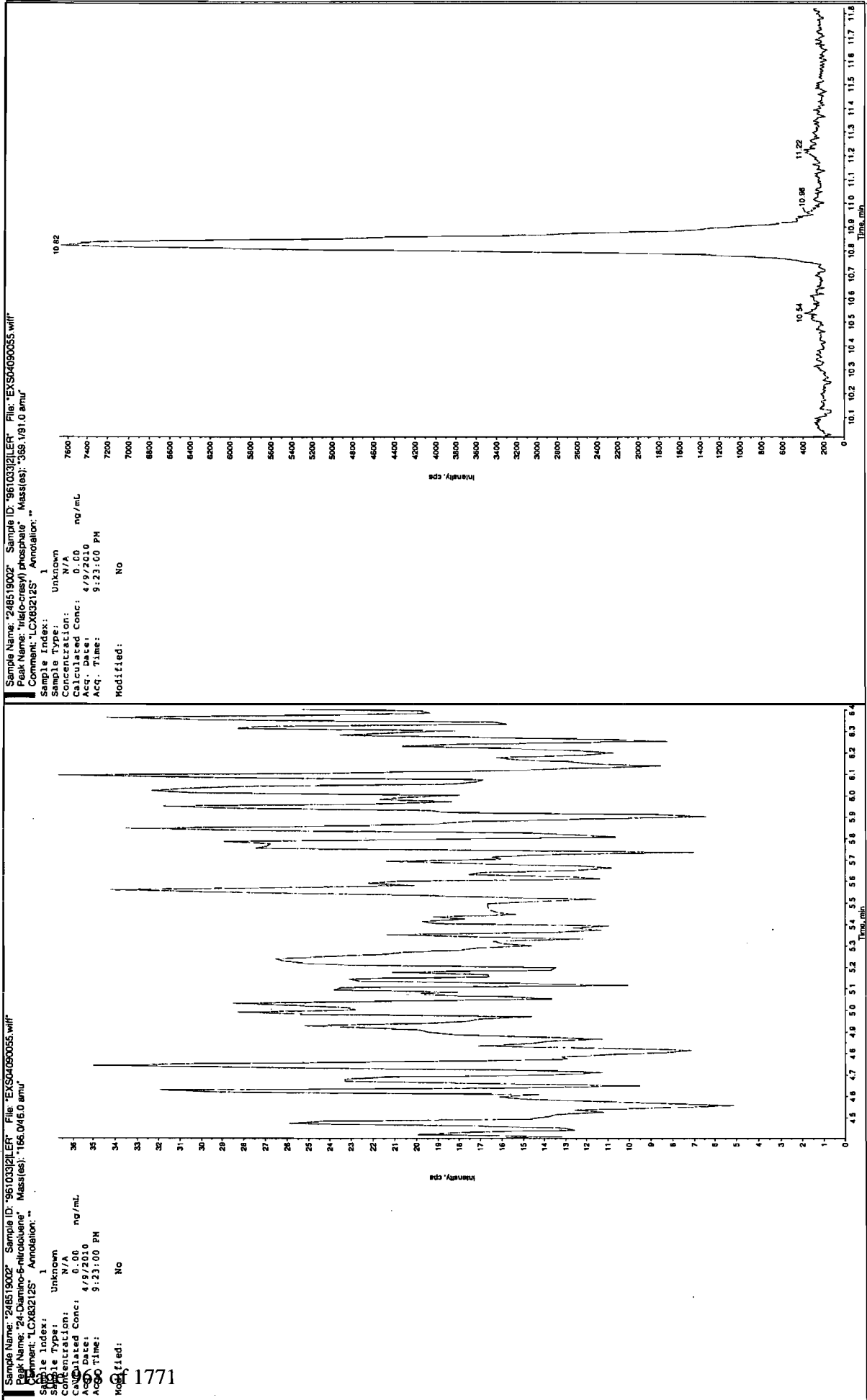
Jan 4/12/10



Jan 4/12/10







1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-8277

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 248519003

Sample Amount 2

Moisture: 25.4

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0415074.wiff

Date Analyzed: 16-APR-10 17:43

Units: ug/kg

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

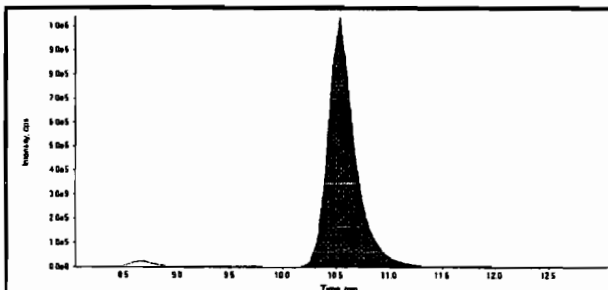
\*Concentration =

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

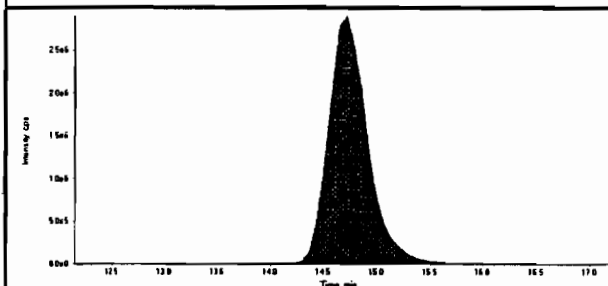
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

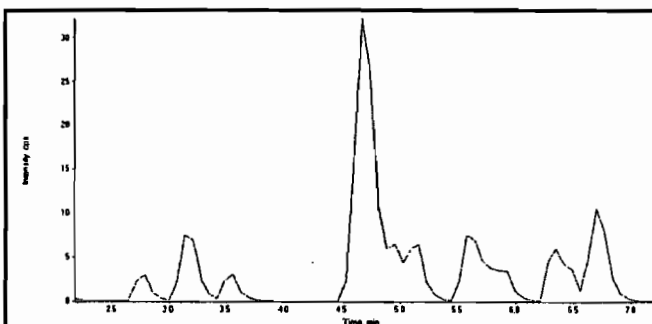
Data File	EXP0415074.wiff	Acquisition Date	4/16/2010 5:43:01 PM
Sample Name	248519003	Acquisition Method	8321.dam
Batch Dilution Analyst	961033 2 LER	Result Table	041510.rdb
Procedure Code	LCX8321_S	Sample Type	Unknown



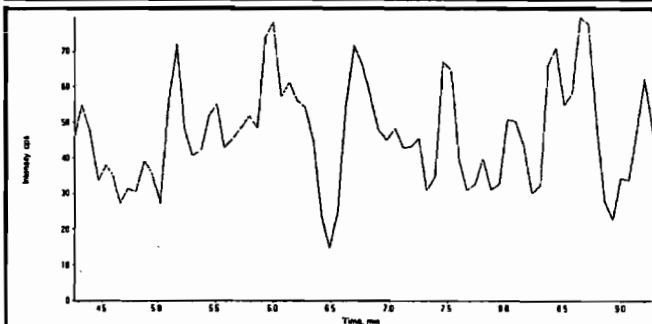
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.50
Actual RT:	10.50
Area Counts:	18200000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.60
Actual RT:	14.70
Area Counts:	74400000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.67
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.77
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

*See 4/23/10* *Time 04/23/10*

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415074.wiff	<b>Acquisition Date</b>	4/16/2010 5:43:01 PM
<b>Sample Name</b>	248519003	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	961033 2 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	Expected RT:	9.00
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	Expected RT:	10.7
	Actual RT:	10.6
	Area Counts:	1.71e+004
	Manual Modification	No
	Amount:	4.30 (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	Expected RT:	10.7
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

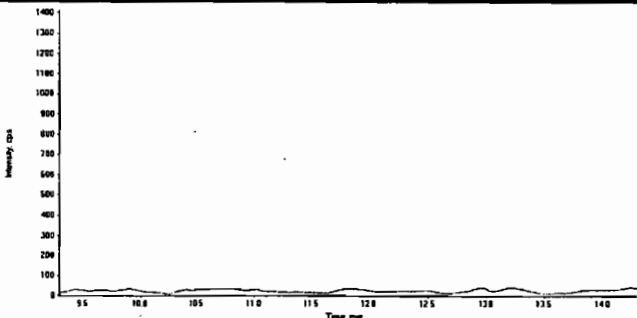
	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	Expected RT:	13.1
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

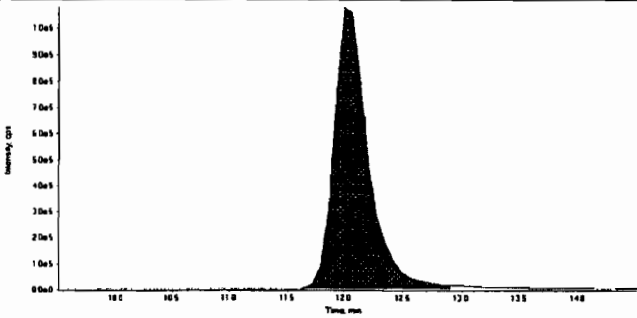
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415074.wiff	<b>Acquisition Date</b>	4/16/2010 5:43:01 PM
<b>Sample Name</b>	248519003	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	961033 2 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

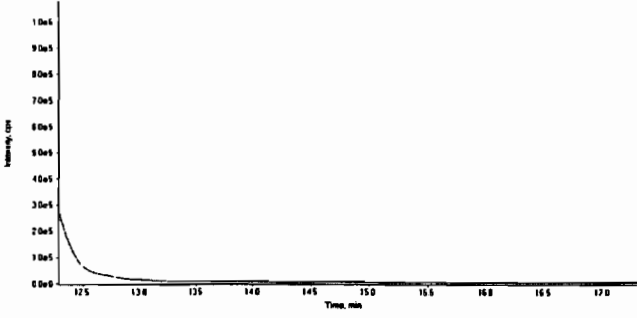
  

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	11.8
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

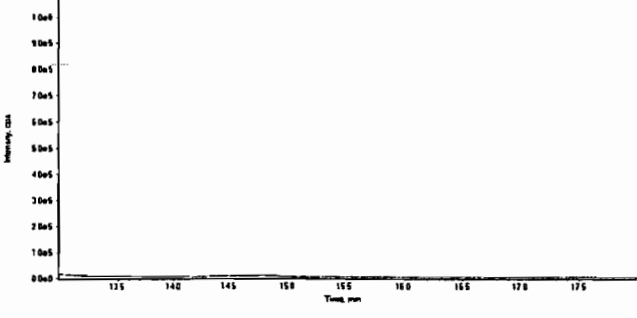
  

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.0
	Actual RT:	12.0
	Area Counts:	2.24e+007
	Manual Modification	No
	Amount:	229. (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	14.8
	Actual RT:	14.8
	Area Counts:	1.63e+005
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

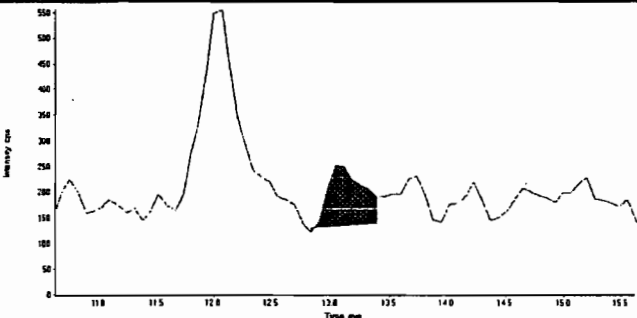
	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.5
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

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GEL SOP GL-OA-E-056, Method 8321A-Modified

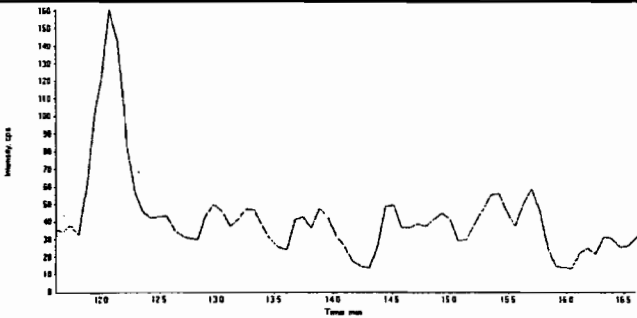
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LCMSMS#3

<b>Data File</b>	EXP0415074.wiff	<b>Acquisition Date</b>	4/16/2010 5:43:01 PM
<b>Sample Name</b>	248519003	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	961033 2 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

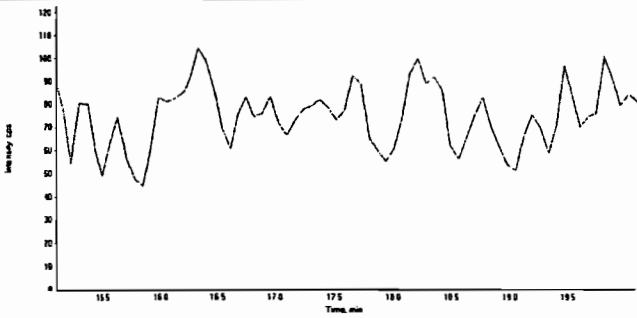
  

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.1
	Actual RT:	13.0
	Area Counts:	2.48e+003
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

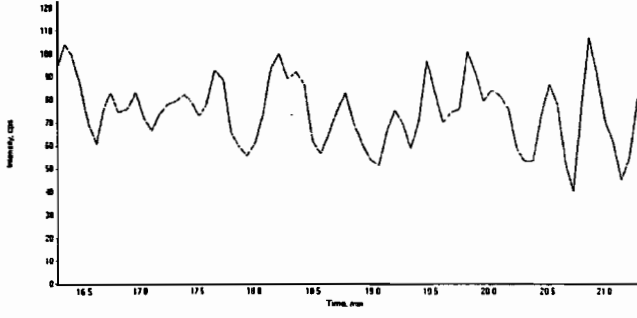
  

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.1
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	17.6
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	18.8
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415074.wiff	<b>Acquisition Date</b>	4/16/2010 5:43:01 PM
<b>Sample Name</b>	248519003	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	961033 2 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	20.1
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	<b>Expected RT:</b>	19.7
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-8277

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 248519003

Sample Amount 2

Moisture: 25.4

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04090056.wiff

Date Analyzed: 09-APR-10 21:38

Units: ug/kg

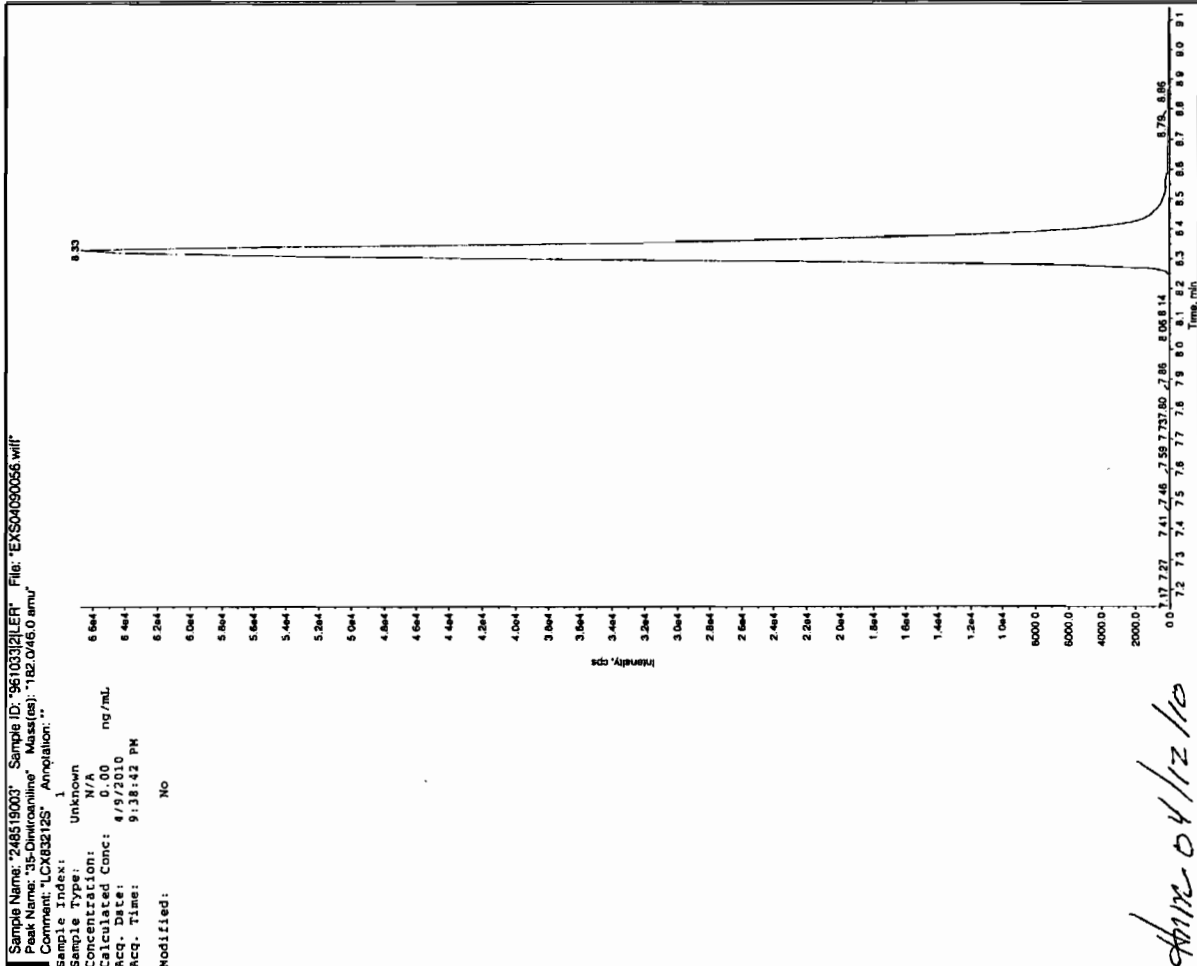
Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

\*Concentration =

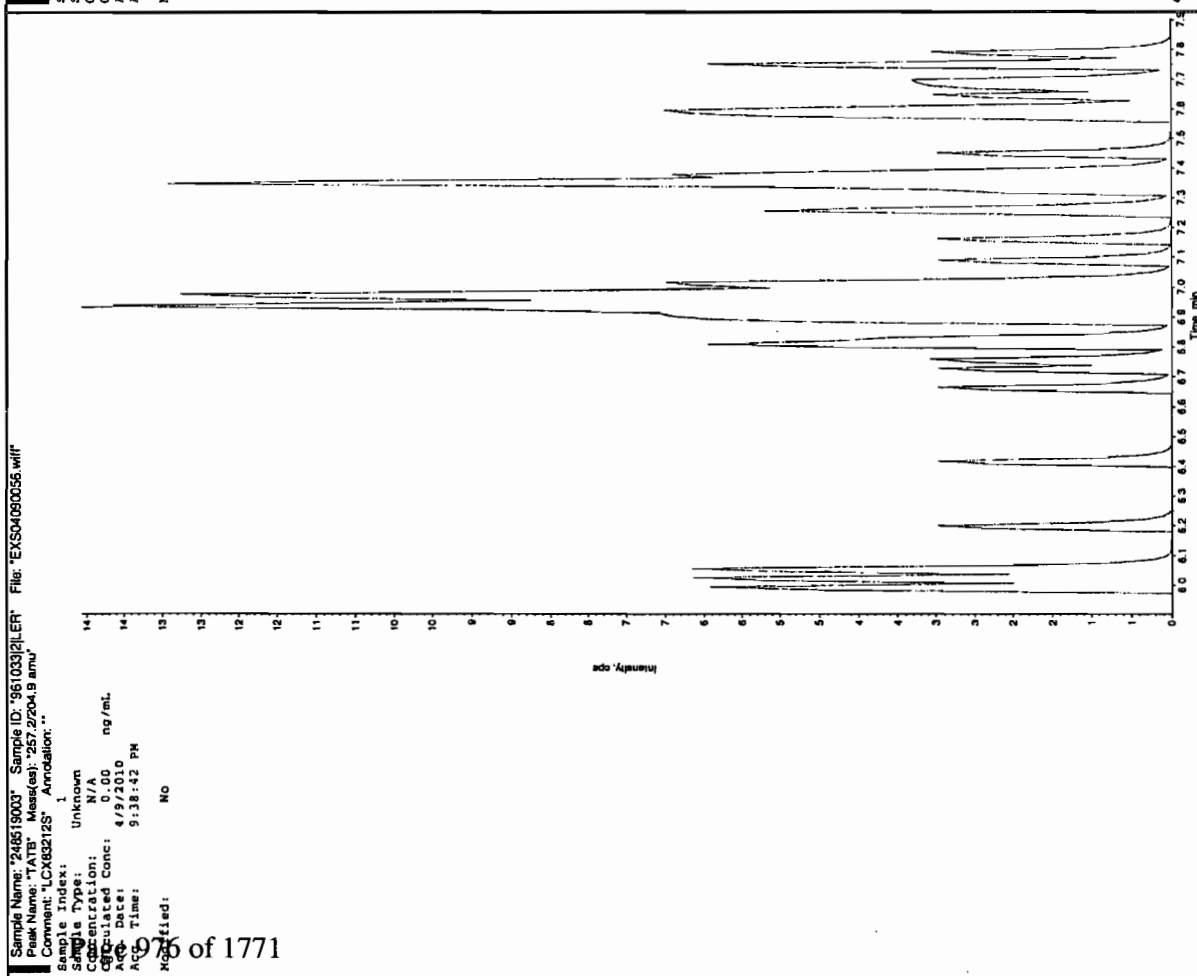
Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

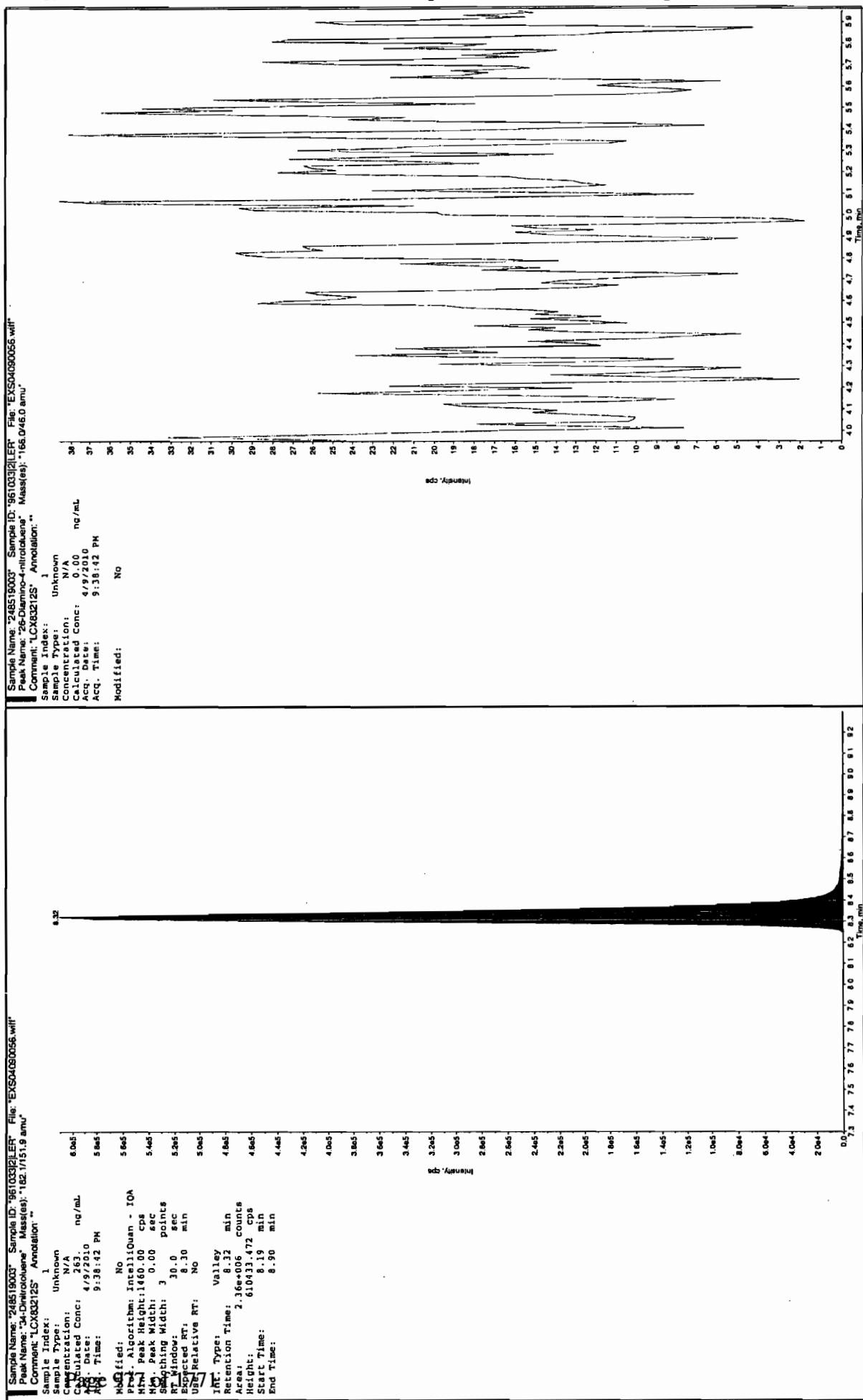


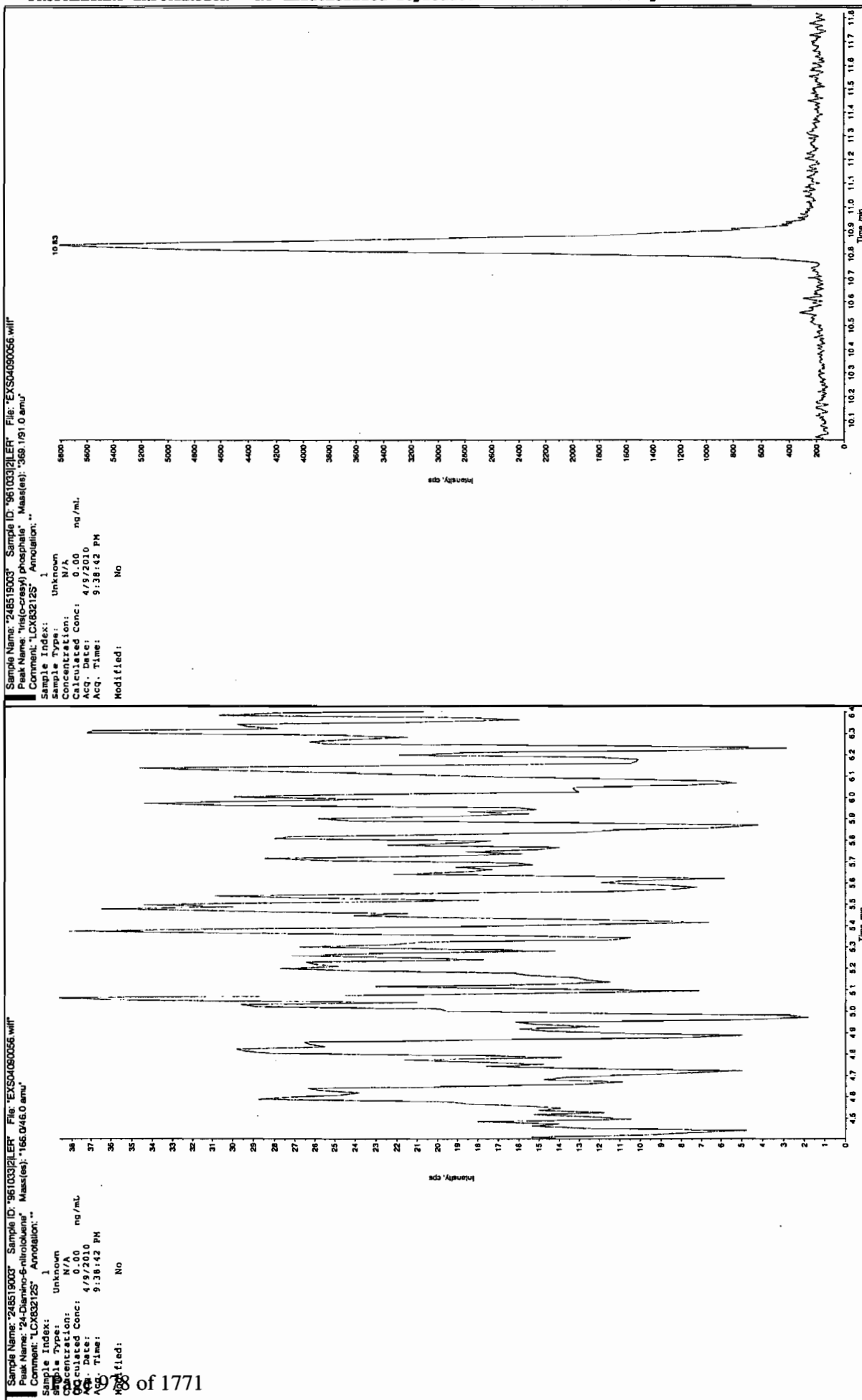
Run 4/12/10



Run 04/12/10







1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-8280

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 248519004

Sample Amount 2

Moisture: 9.5

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0415075.wiff

Date Analyzed: 16-APR-10 18:08

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

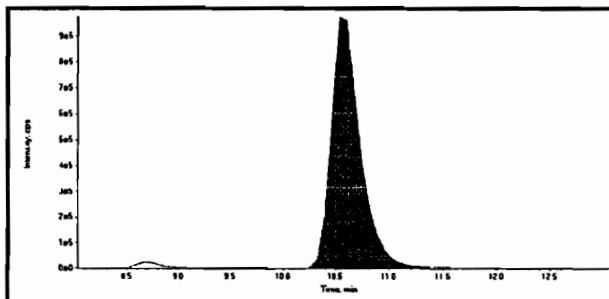
\*Concentration =

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

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

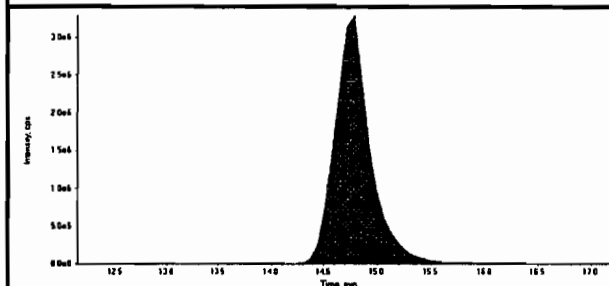
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

Data File	EXP0415075.wiff	Acquisition Date	4/16/2010 6:08:59 PM
Sample Name	248519004	Acquisition Method	8321.dam
Batch Dilution Analyst	961033 2 LER	Result Table	041510.rdb
Procedure Code	LCX8321_S	Sample Type	Unknown



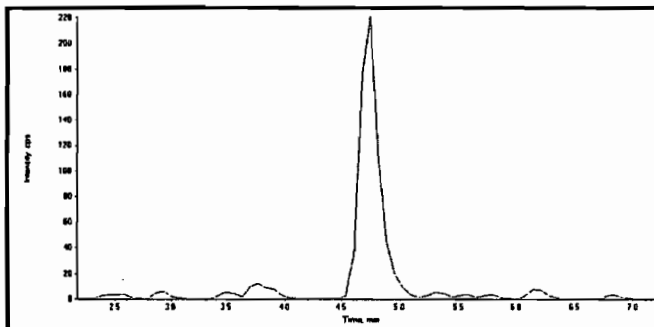
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.50
Actual RT:	10.50
Area Counts:	18600000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries

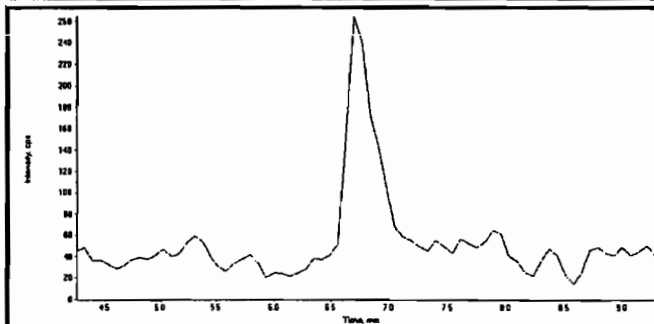


Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.60
Actual RT:	14.80
Area Counts:	76200000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.67
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.77
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

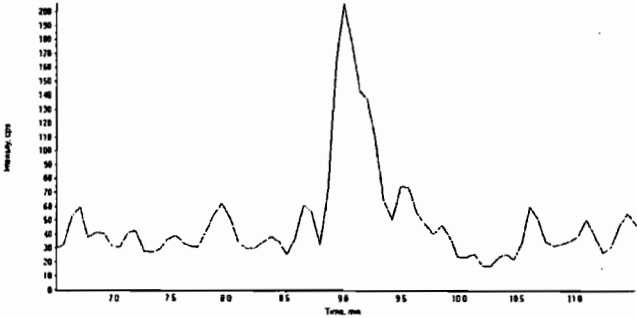
*Jan*  
*4/23/10*  
*H11111*  
*04/23/10*

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

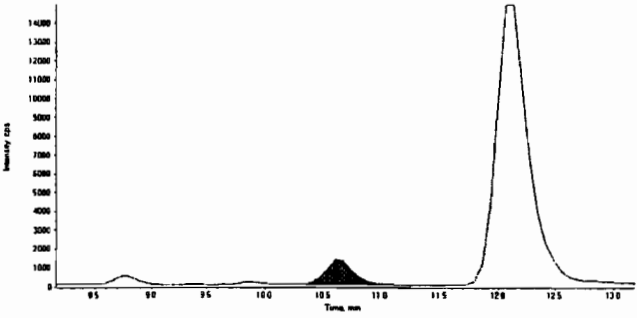
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415075.wiff	<b>Acquisition Date</b>	4/16/2010 6:08:59 PM
<b>Sample Name</b>	248519004	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	961033 2 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

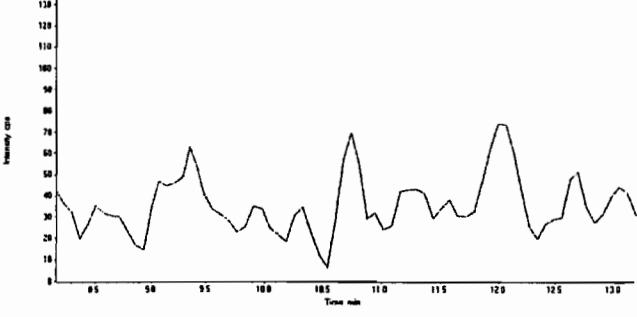
  

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	<b>Expected RT:</b>	9.00
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

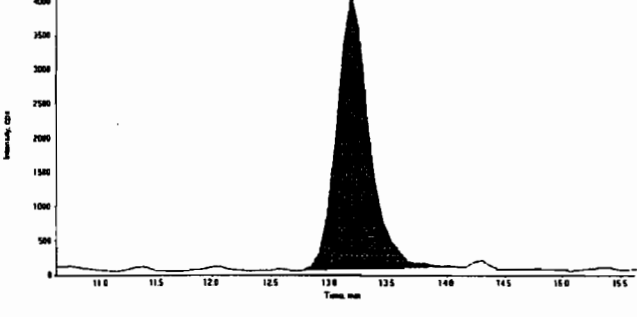
  

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	<b>Expected RT:</b>	10.7
	<b>Actual RT:</b>	10.6
	<b>Area Counts:</b>	2.41e+004
	<b>Manual Modification</b>	No
	<b>Amount:</b>	4.36 (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	<b>Expected RT:</b>	10.7
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

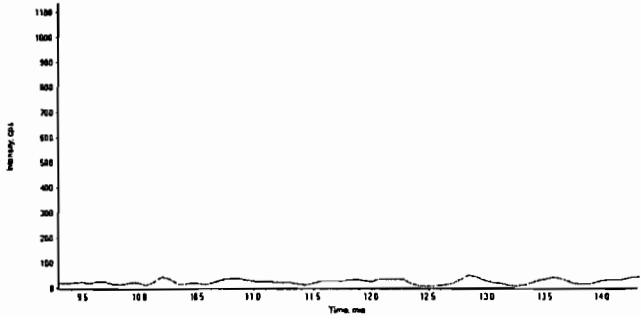
	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	<b>Expected RT:</b>	13.1
	<b>Actual RT:</b>	13.2
	<b>Area Counts:</b>	7.97e+004
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

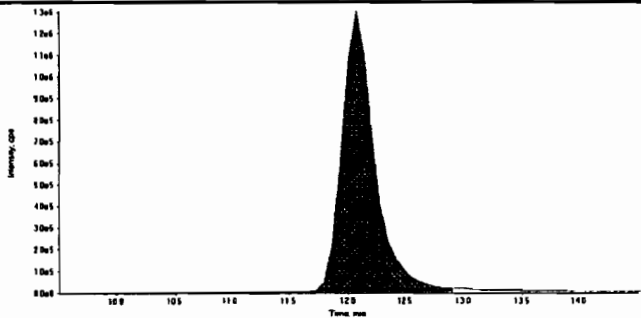
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415075.wiff	<b>Acquisition Date</b>	4/16/2010 6:08:59 PM
<b>Sample Name</b>	248519004	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	961033 2 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

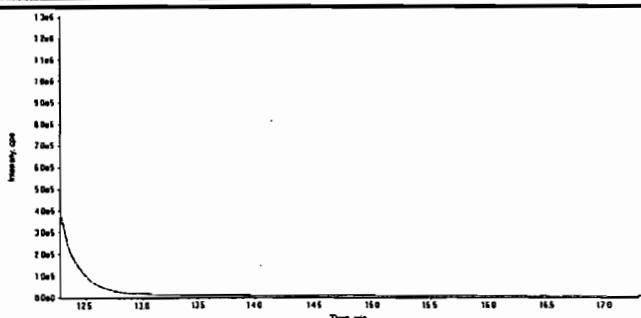
  

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	11.8
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

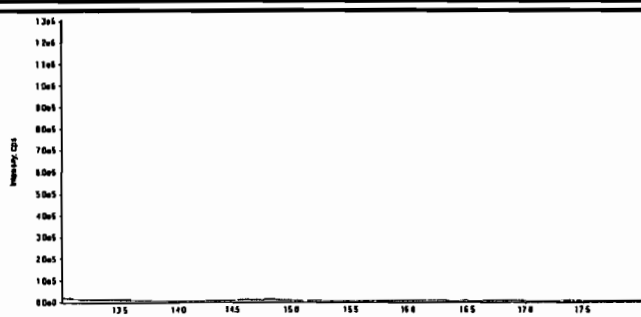
  

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.0
	Actual RT:	12.1
	Area Counts:	2.59e+007
	Manual Modification	No
	Amount:	259. (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	14.8
	Actual RT:	14.8
	Area Counts:	1.69e+005
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.5
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415075.wiff	<b>Acquisition Date</b>	4/16/2010 6:08:59 PM
<b>Sample Name</b>	248519004	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	961033 2 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.1
	Actual RT:	13.2
	Area Counts:	1.28e+004
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.1
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	17.6
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	18.8
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

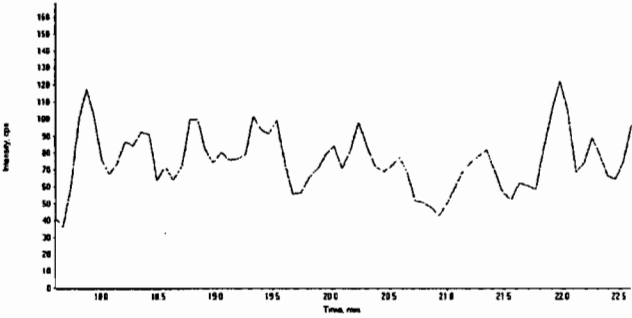


GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

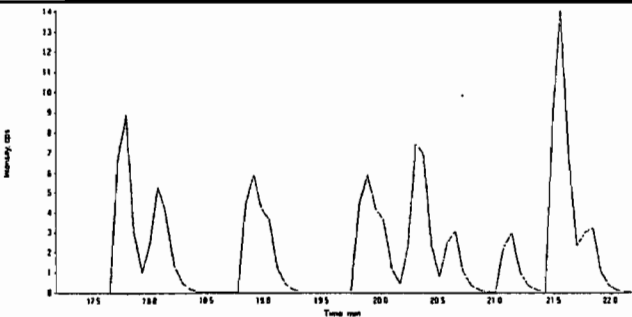
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LCMSMS#3

<b>Data File</b>	EXP0415075.wiff	<b>Acquisition Date</b>	4/16/2010 6:08:59 PM
<b>Sample Name</b>	248519004	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	961033 2 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	20.1
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	Expected RT:	19.7
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-8280

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 248519004

Sample Amount 2

Moisture: 9.5

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04090057.wiff

Date Analyzed: 09-APR-10 21:54

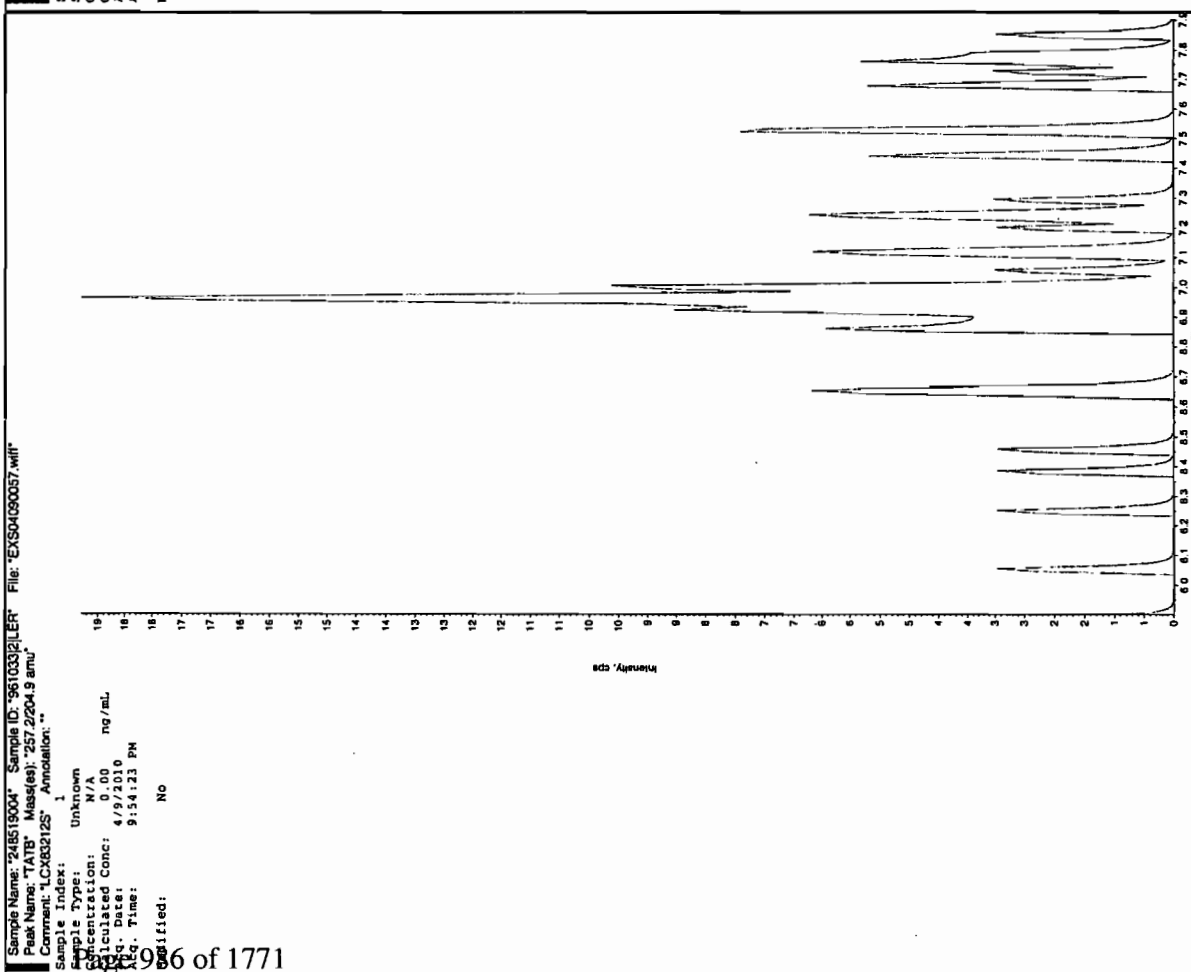
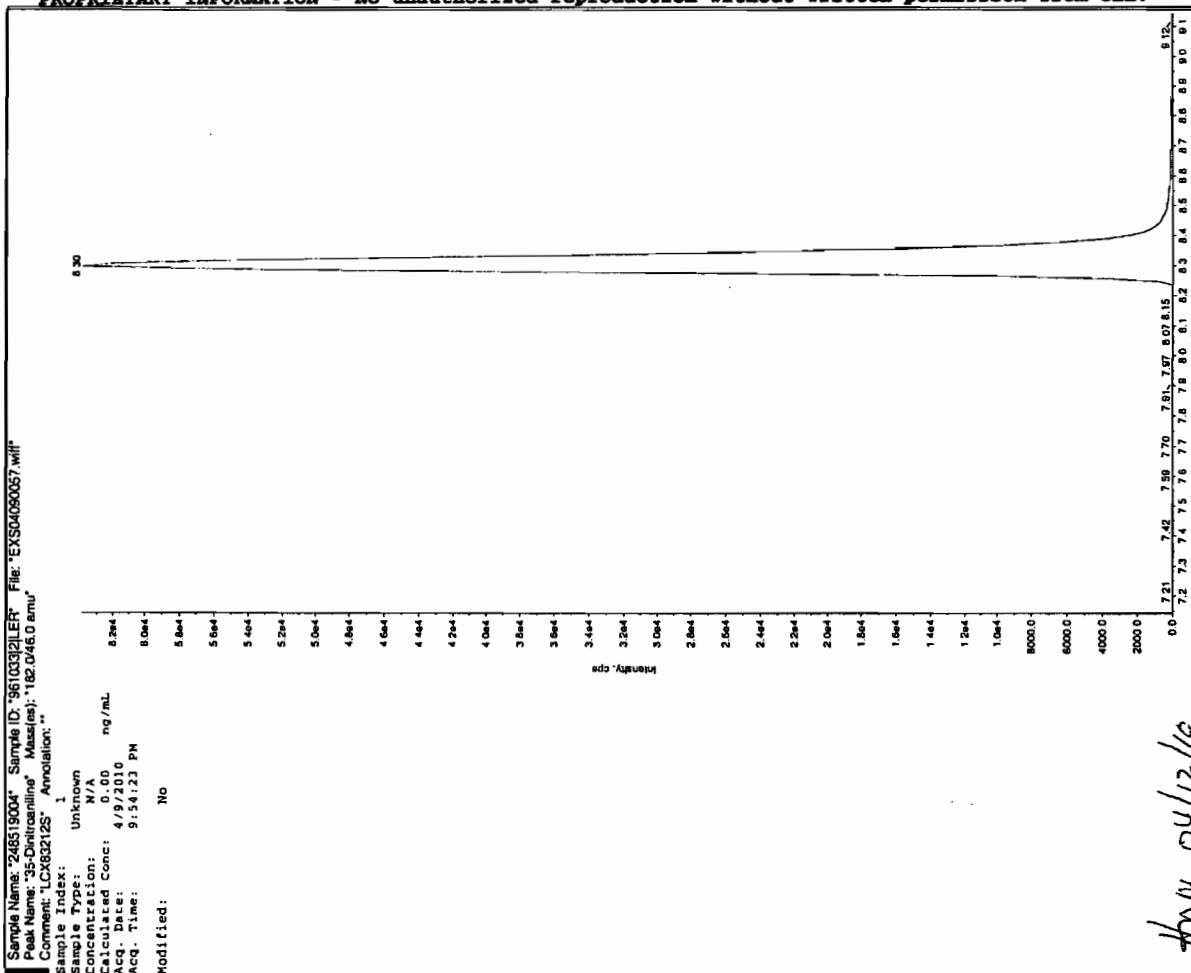
Units: ug/kg

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

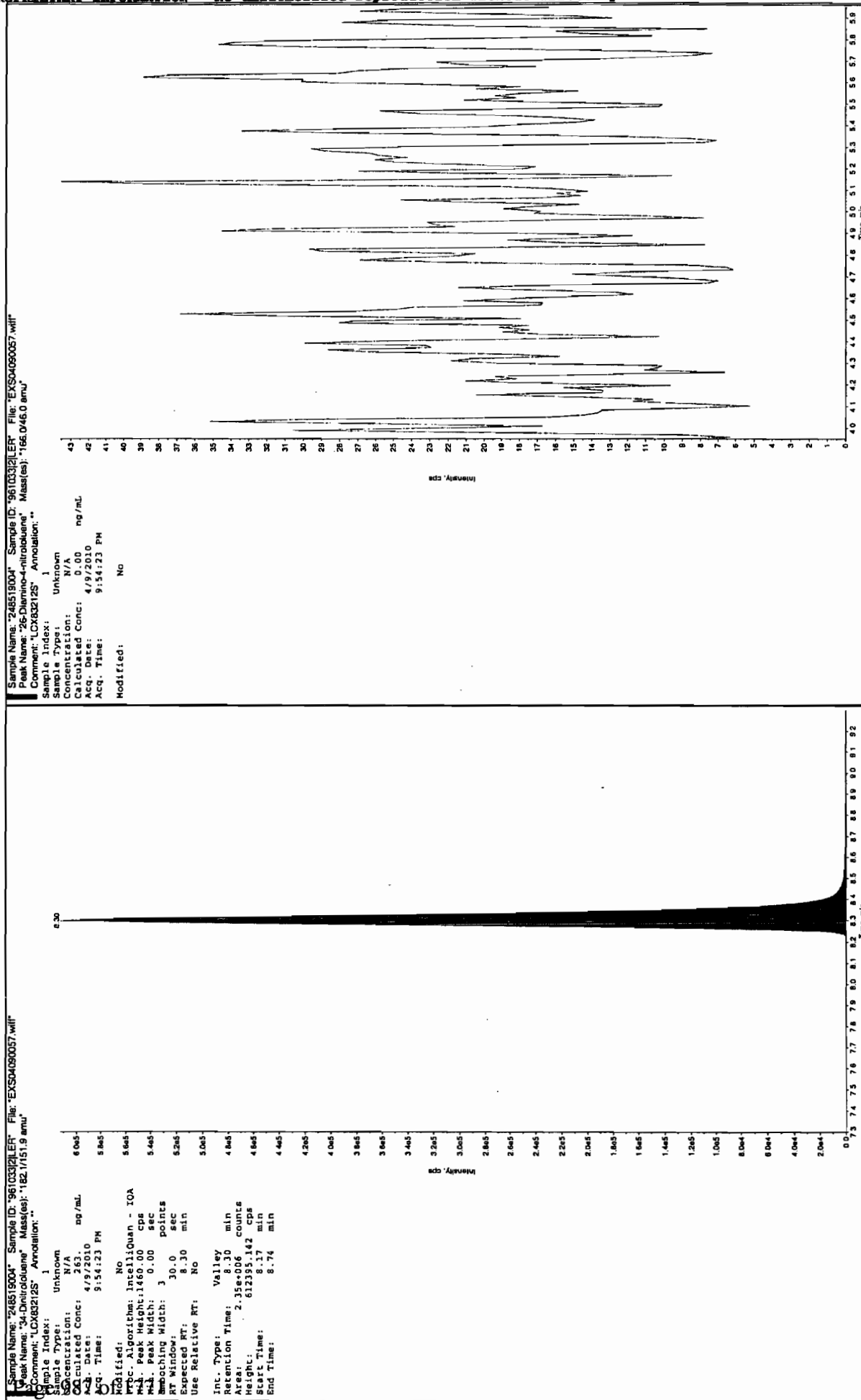
\*Concentration =

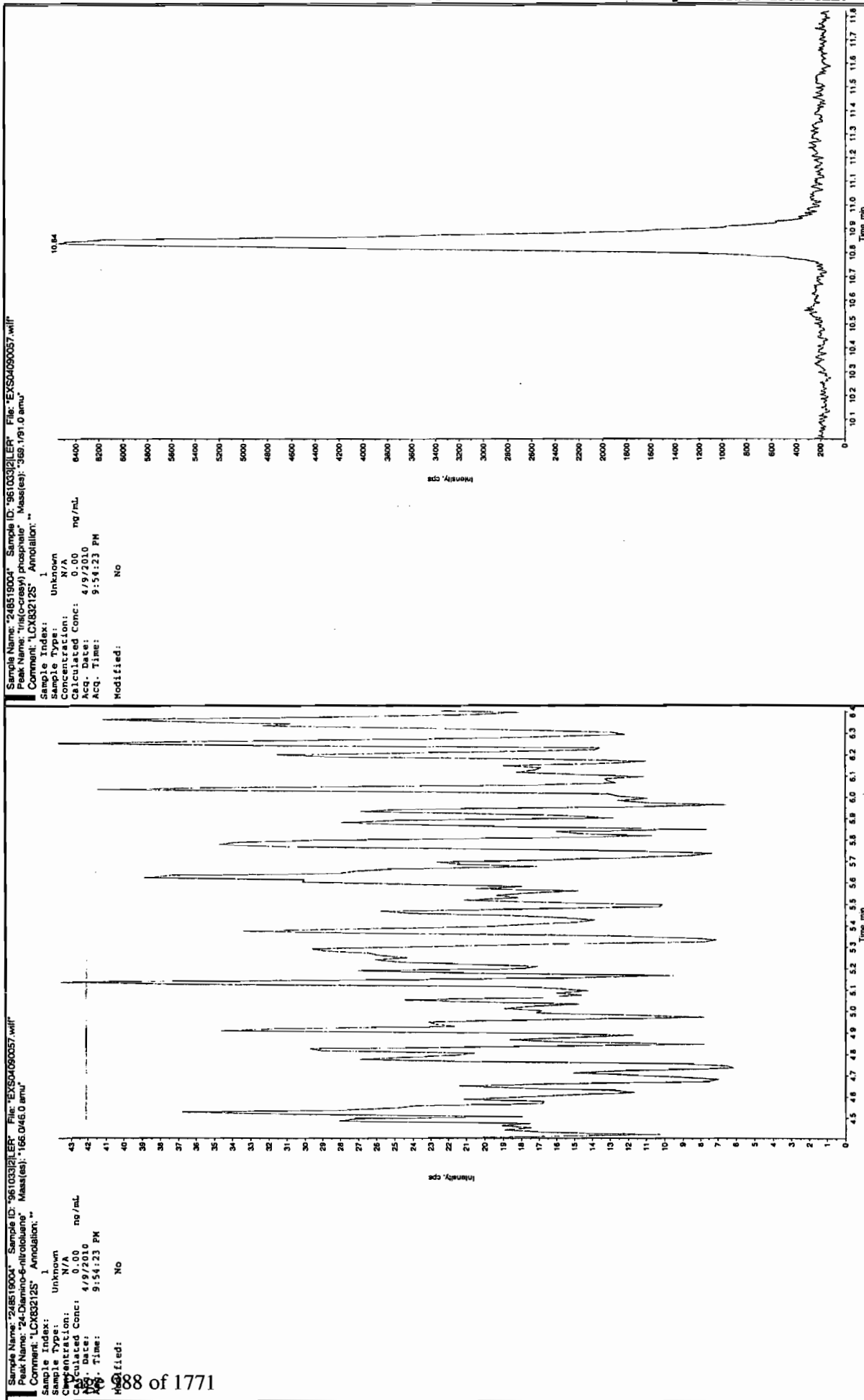
Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

See 4/12/10



See 04/12/10





1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-8278

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 248519005

Sample Amount 2

Moisture: 6.4

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0420013.wiff

Date Analyzed: 20-APR-10 19:30

Units: ug/kg

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

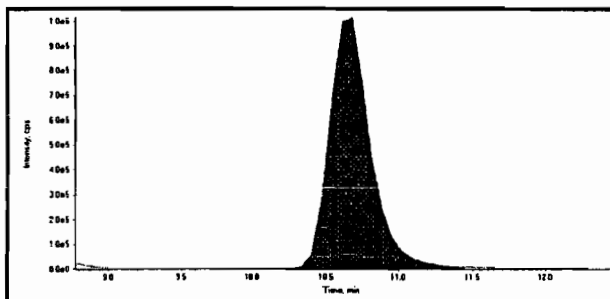
\*Concentration =

Instrument Value	X	$\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$	X	Dilution Factor
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GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

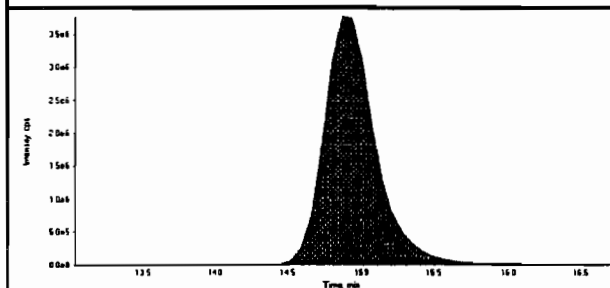
Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

Data File	EXP0420013.wiff	Acquisition Date	4/20/2010 7:30:16 PM
Sample Name	248519005	Acquisition Method	8321.dam
Batch Dilution Analyst	961033 2 LER	Result Table	042010.rdb
Procedure Code	LCX8321_S	Sample Type	Unknown



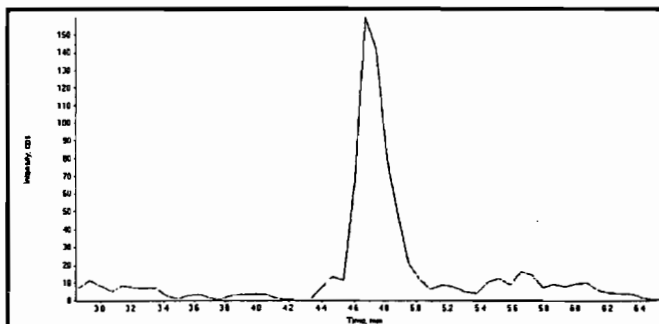
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.60
Actual RT:	10.70
Area Counts:	20100000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries

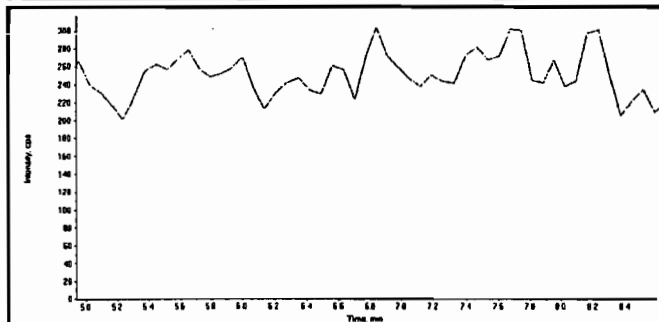


Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.90
Actual RT:	14.90
Area Counts:	94000000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.67
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.77
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

*Lar*  
4/29/10 HMX  
04/29/10

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0420013.wiff	<b>Acquisition Date</b>	4/20/2010 7:30:16 PM
<b>Sample Name</b>	248519005	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	961033 2 LER	<b>Result Table</b>	042010.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	<b>Expected RT:</b>	9.07
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	<b>Expected RT:</b>	10.7
	<b>Actual RT:</b>	10.7
	<b>Area Counts:</b>	2.75e+004
	<b>Manual Modification</b>	No
	<b>Amount:</b>	0.265 (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	<b>Expected RT:</b>	10.8
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	<b>Expected RT:</b>	13.5
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

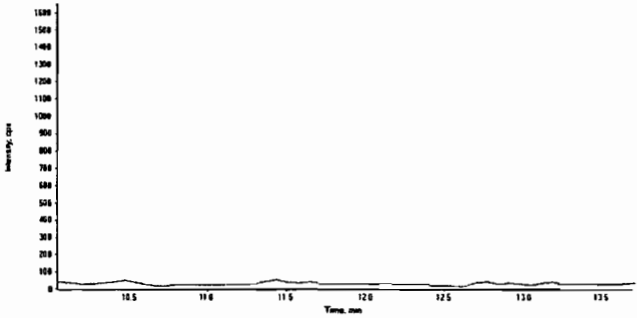


GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

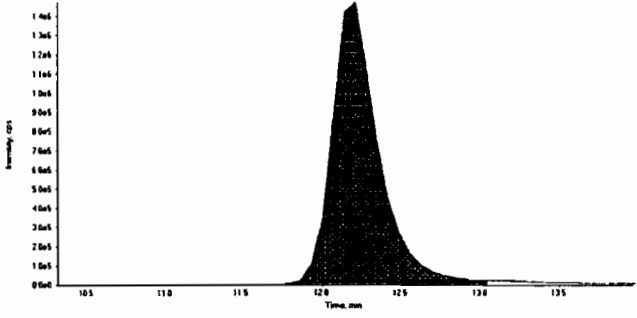
Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0420013.wiff	<b>Acquisition Date</b>	4/20/2010 7:30:16 PM
<b>Sample Name</b>	248519005	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	961033 2 LER	<b>Result Table</b>	042010.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

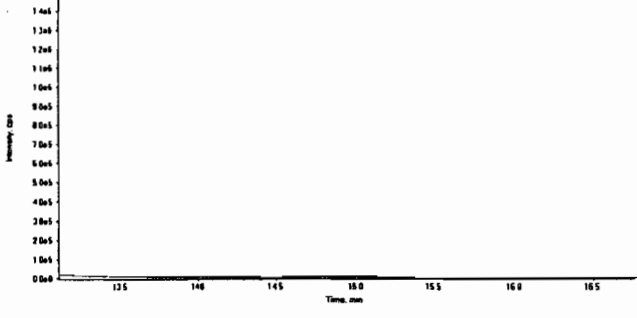
  

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	11.9
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

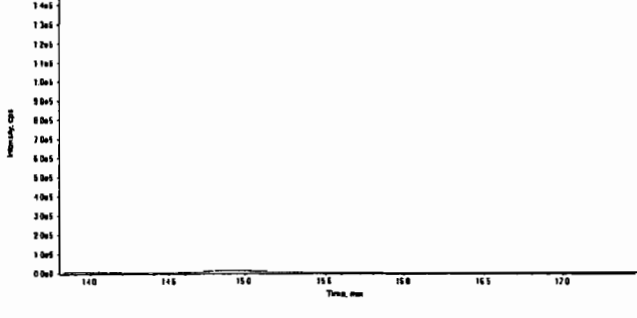
  

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.1
	Actual RT:	12.2
	Area Counts:	3.08e+007
	Manual Modification	No
	Amount:	243. (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	14.9
	Actual RT:	14.9
	Area Counts:	3.01e+005
	Manual Modification	No
	Amount:	1.38 (ng/mL)
	% Accuracy:	N/A

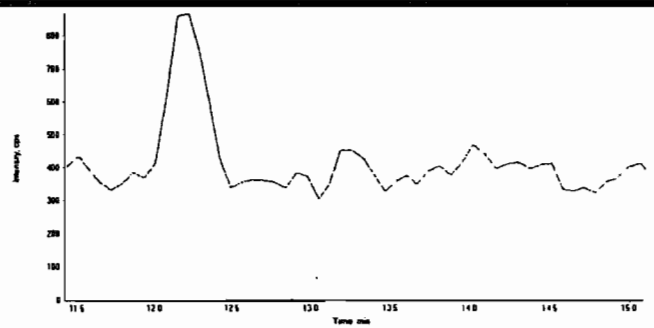
	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.6
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

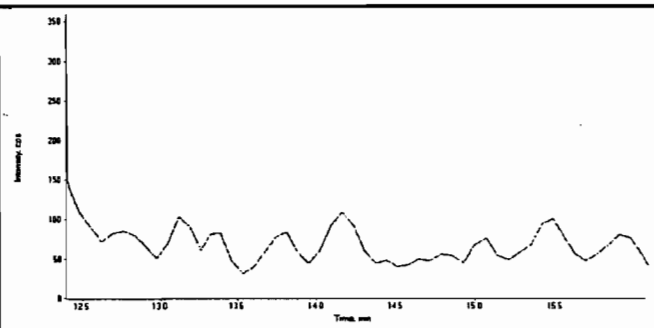
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LCMSMS#3

<b>Data File</b>	EXP0420013.wiff	<b>Acquisition Date</b>	4/20/2010 7:30:16 PM
<b>Sample Name</b>	248519005	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	961033 2 LER	<b>Result Table</b>	042010.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

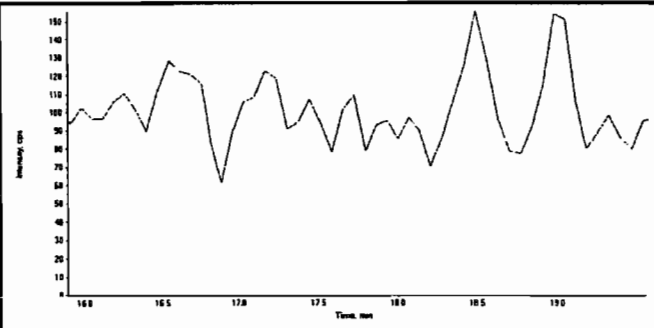
  

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.3
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

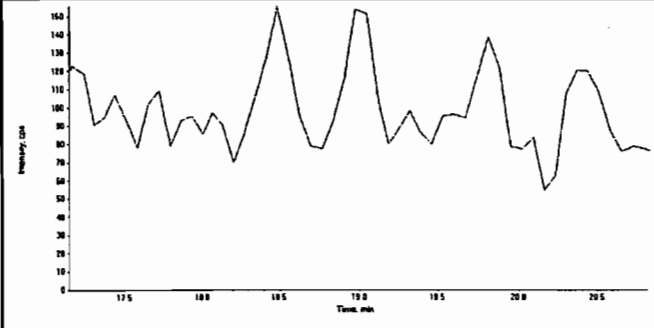
  

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.2
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	17.7
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

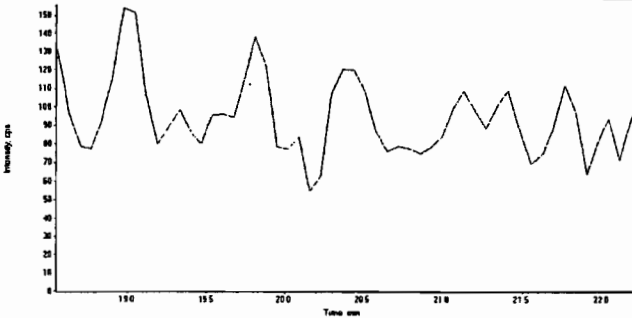
	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	19.0
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

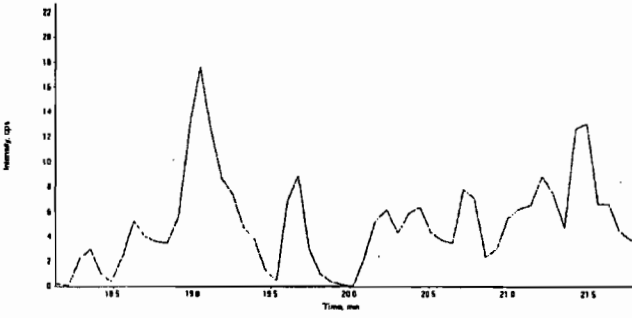
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LCMSMS#3

<b>Data File</b>	EXP0420013.wiff	<b>Acquisition Date</b>	4/20/2010 7:30:16 PM
<b>Sample Name</b>	248519005	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	961033 2 LER	<b>Result Table</b>	042010.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	20.4
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	<b>Expected RT:</b>	20.0
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-8278

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 248519005

Sample Amount 2

Moisture: 6.4

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04090058.wiff

Date Analyzed: 09-APR-10 22:10

Units: ug/kg

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

\*Concentration =

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

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0420015.wiff	<b>Acquisition Date</b>	4/20/2010 8:22:07 PM
<b>Sample Name</b>	248519007	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	961033 2 LER	<b>Result Table</b>	042010.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	<b>Expected RT:</b>	9.07
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	<b>Expected RT:</b>	10.7
	<b>Actual RT:</b>	10.7
	<b>Area Counts:</b>	2.95e+004
	<b>Manual Modification</b>	No
	<b>Amount:</b>	0.292 (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	<b>Expected RT:</b>	10.8
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

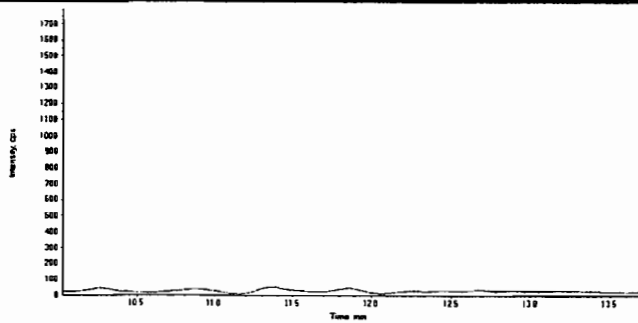
	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	<b>Expected RT:</b>	13.3
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

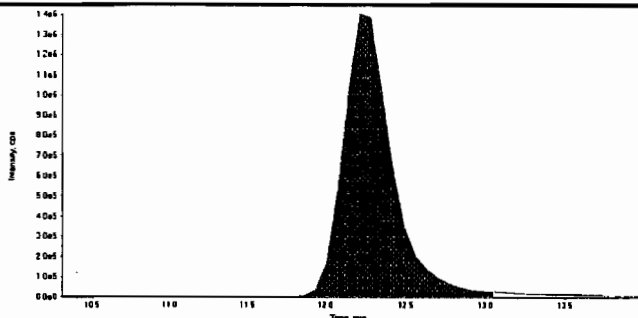
Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0420015.wiff	<b>Acquisition Date</b>	4/20/2010 8:22:07 PM
<b>Sample Name</b>	248519007	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	961033 2 LER	<b>Result Table</b>	042010.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

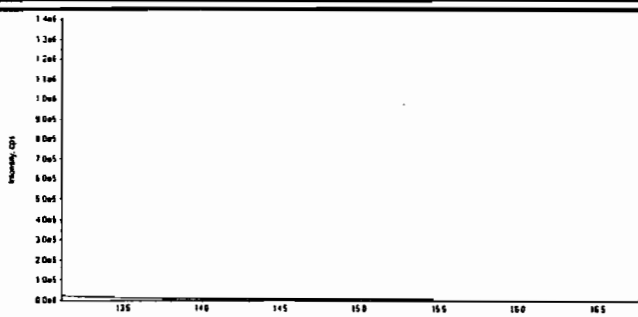
  

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	<b>Expected RT:</b>	11.9
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

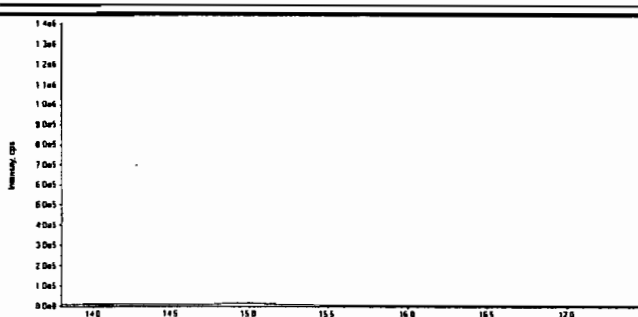
  

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	<b>Expected RT:</b>	12.1
	<b>Actual RT:</b>	12.2
	<b>Area Counts:</b>	2.99e+007
	<b>Manual Modification</b>	No
	<b>Amount:</b>	254. (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	<b>Expected RT:</b>	14.9
	<b>Actual RT:</b>	14.9
	<b>Area Counts:</b>	3.35e+005
	<b>Manual Modification</b>	No
	<b>Amount:</b>	1.89 (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	<b>Expected RT:</b>	15.6
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0420015.wiff	<b>Acquisition Date</b>	4/20/2010 8:22:07 PM
<b>Sample Name</b>	248519007	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	961033 2 LER	<b>Result Table</b>	042010.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.3
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.2
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	17.7
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	19.0
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

Data File	EXP0420015.wiff	Acquisition Date	4/20/2010 8:22:07 PM
Sample Name	248519007	Acquisition Method	8321.dam
Batch Dilution Analyst	961033 2 LER	Result Table	042010.rdb
Procedure Code	LCX8321_S	Sample Type	Unknown

	Compound Name:	3-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	20.4
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	Compound Name:	PETN (361.1/62.0 amu)
	Expected RT:	20.0
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A



1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-8291

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 248519007

Sample Amount 2

Moisture: 28.9

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04090060.wiff

Date Analyzed: 09-APR-10 22:41

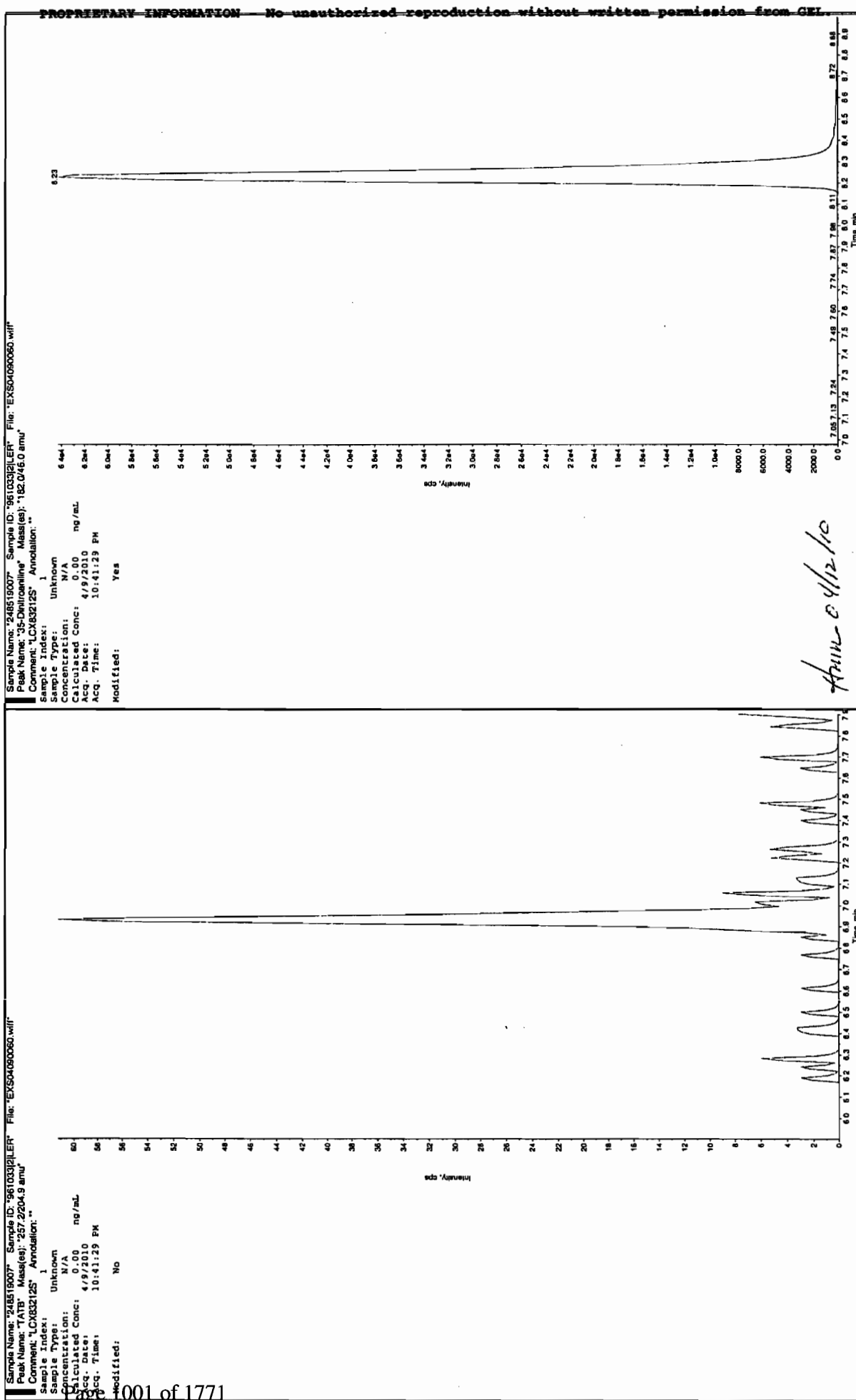
Units: ug/kg

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

\*Concentration =

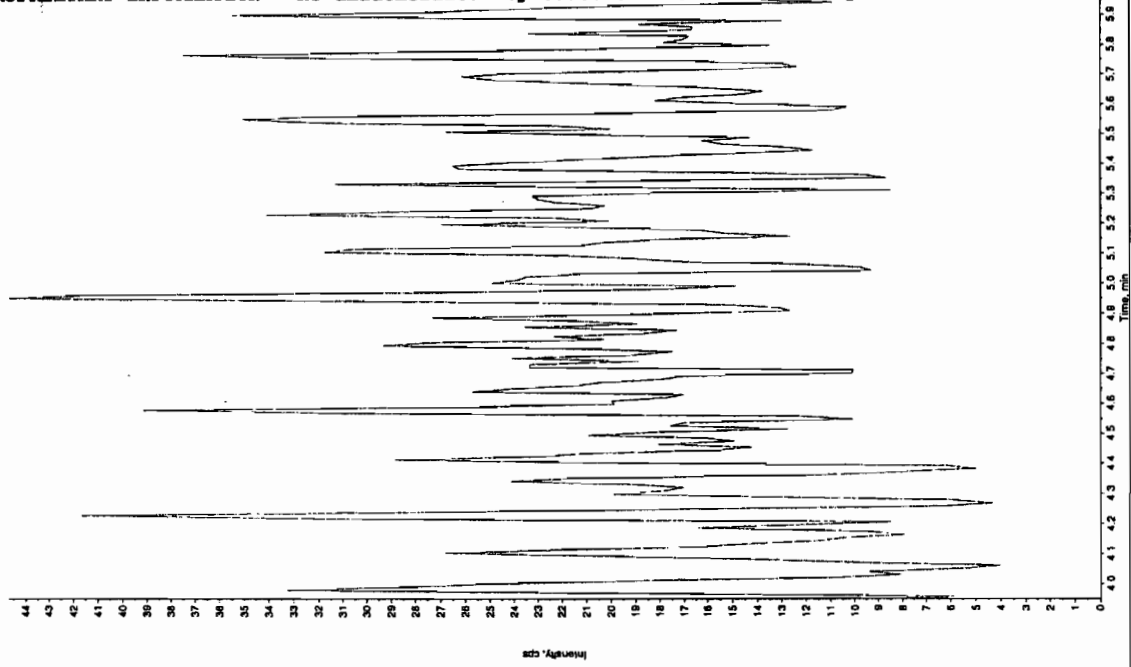
Instrument		X	<u>Concentrated Extract Volume</u>		X	Dilution
Value			<u>Sample Amount</u>			Factor

LC 4/12/10



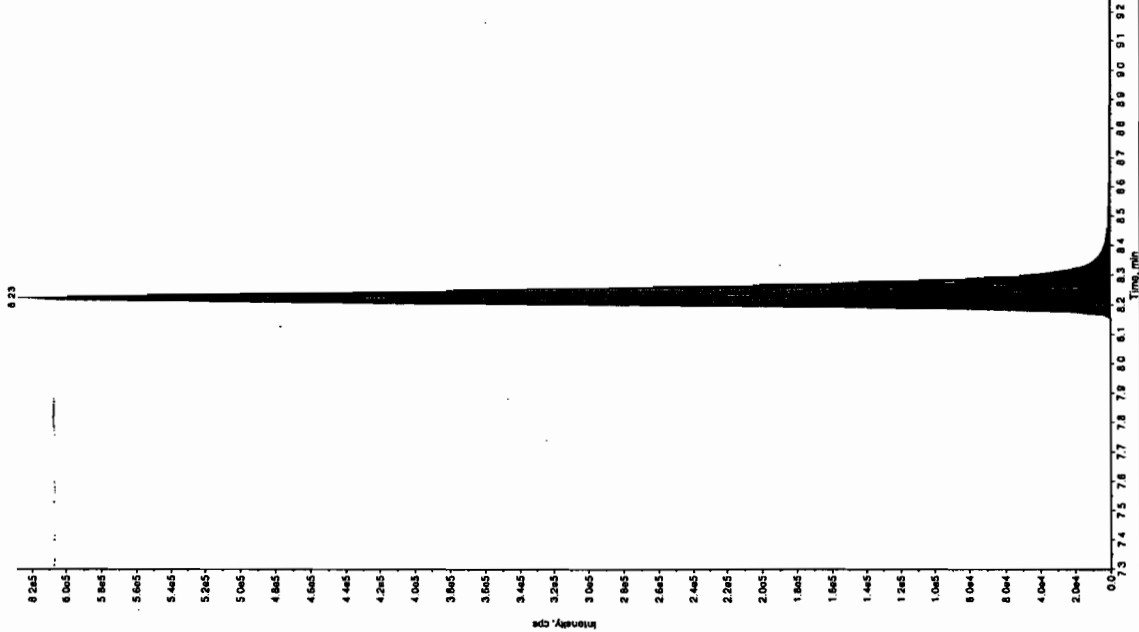
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 Peak Name: '26-Dianino-4-nitrofluene' Mass(es): '166.046.0 amu'  
 Comment: 'LCX83212S' Annotation: ''

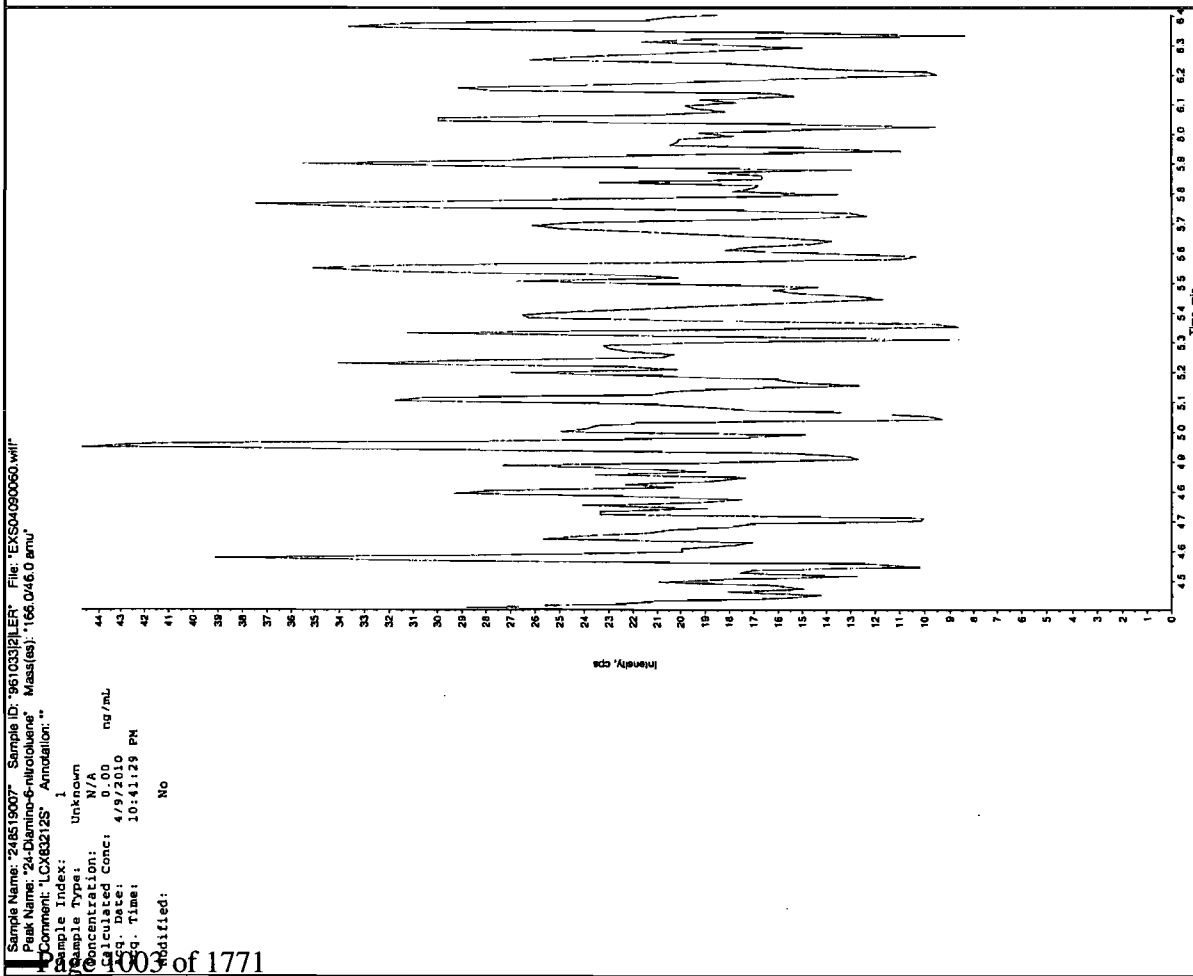
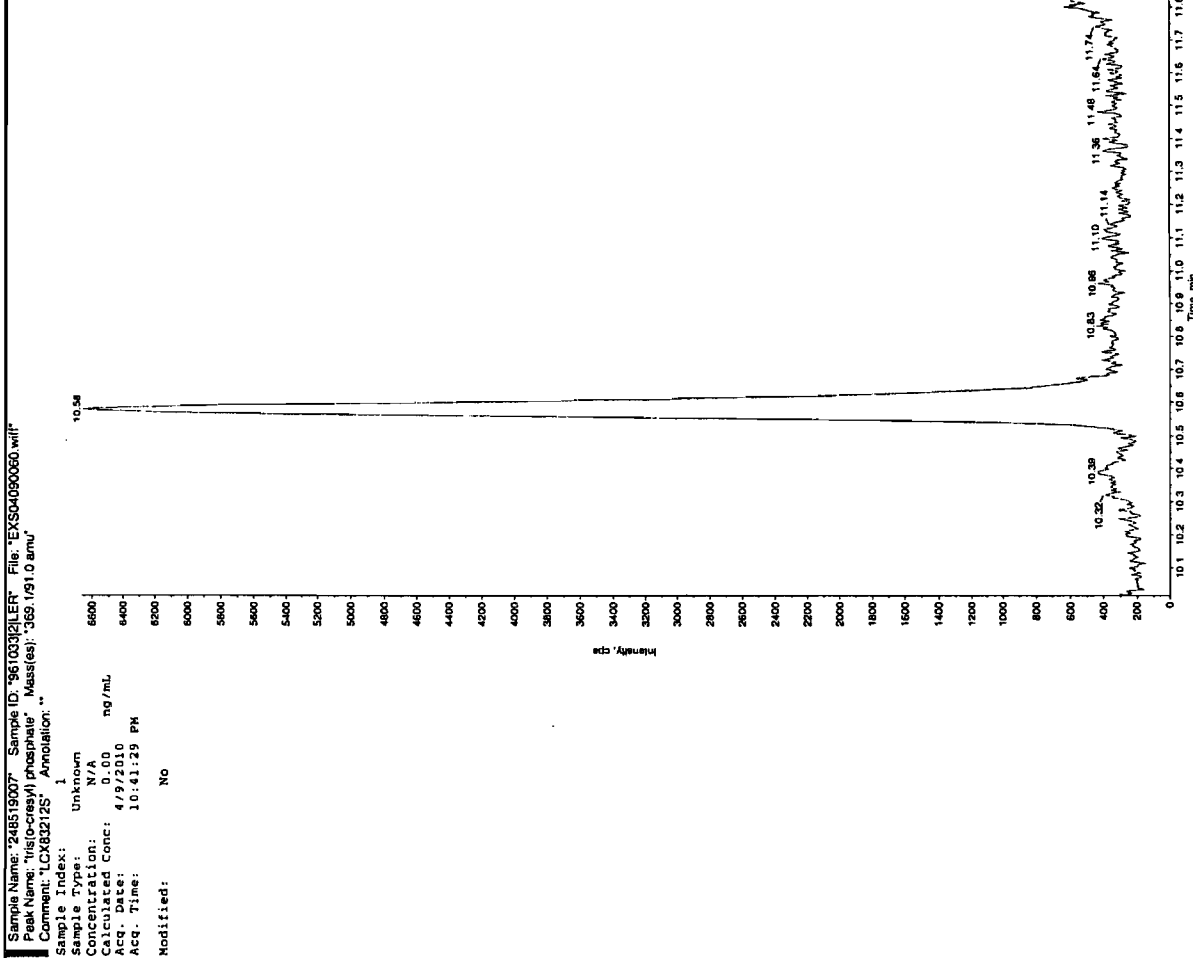
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 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 4/9/2010  
 Acq. Time: 10:41:29 PM  
 Modified: No



Sample Name: '248519007' Sample ID: '96103321LER' File: 'EX504050060.wit'  
 Peak Name: '34-Dinitrofluene' Mass(es): '182.1751.9 amu'  
 Comment: 'LCX83212S' Annotation: ''

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 272. ng/mL  
 Acq. Date: 4/9/2010  
 Acq. Time: 10:41:29 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 1460.00 cps  
 Min. Peak Width: 3.00 sec  
 Retention Time: 8.30 min  
 Expected RT: 8.30 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.23 min  
 Area: 2.43e+006 counts  
 Height: 629141.418 cps  
 Start Time: 8.11 min  
 End Time: 8.73 min





1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-8287

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 248519008

Sample Amount 2

Moisture: 32.9

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0420016.wiff

Date Analyzed: 20-APR-10 20:48

Units: ug/kg

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

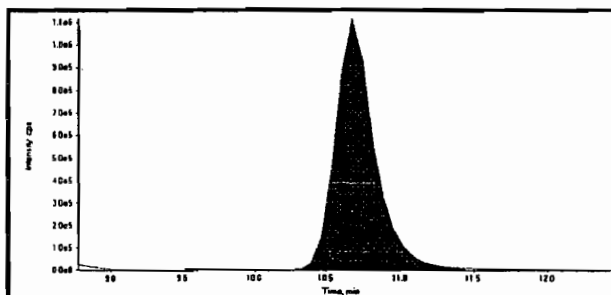
\*Concentration =

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

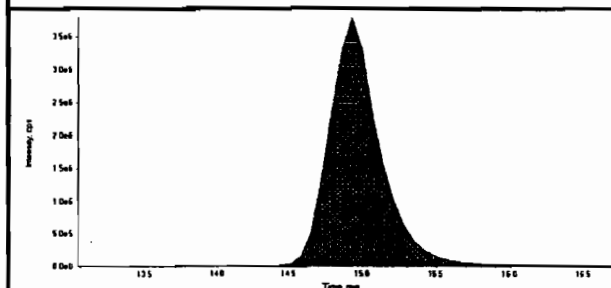
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

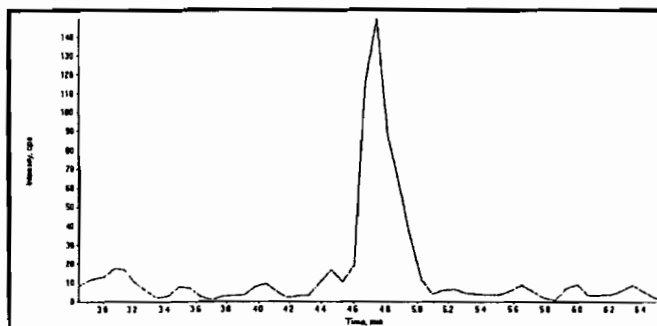
Data File	EXP0420016.wiff	Acquisition Date	4/20/2010 8:48:03 PM
Sample Name	248519008	Acquisition Method	8321.dam
Batch Dilution Analyst	961033 2 LER	Result Table	042010.rdb
Procedure Code	LCX8321_S	Sample Type	Unknown



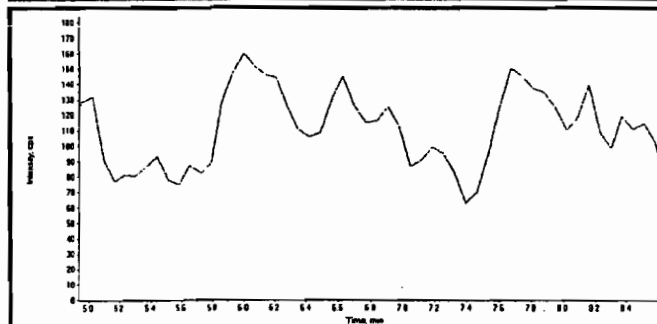
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.60
Actual RT:	10.70
Area Counts:	20500000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.90
Actual RT:	14.90
Area Counts:	90200000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.67
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.77
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

*LER*  
*4/20/10*  
*Hmw*  
*04/29/10*

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GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 28/04/2010 4:35:00 PM  
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<b>Data File</b>	EXP0420016.wiff	<b>Acquisition Date</b>	4/20/2010 8:48:03 PM
<b>Sample Name</b>	248519008	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	961033 2 LER	<b>Result Table</b>	042010.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	<b>Expected RT:</b>	9.07
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	<b>Expected RT:</b>	10.7
	<b>Actual RT:</b>	10.7
	<b>Area Counts:</b>	2.69e+004
	<b>Manual Modification</b>	No
	<b>Amount:</b>	0.254 (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	<b>Expected RT:</b>	10.8
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

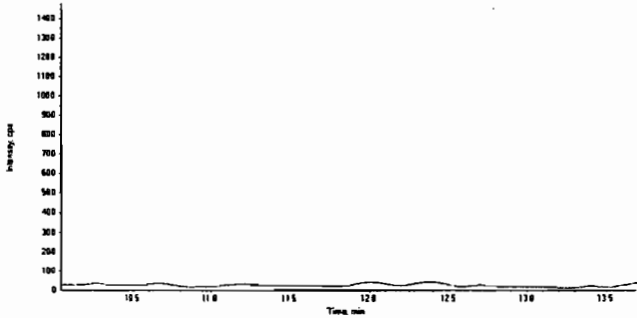
	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	<b>Expected RT:</b>	13.3
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

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GEL SOP GL-OA-E-056, Method 8321A-Modified

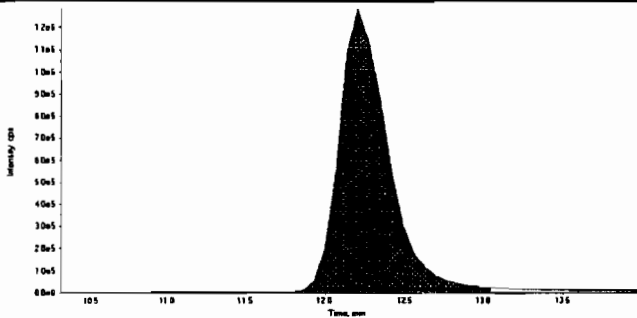
Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0420016.wiff	<b>Acquisition Date</b>	4/20/2010 8:48:03 PM
<b>Sample Name</b>	248519008	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	961033 2 LER	<b>Result Table</b>	042010.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

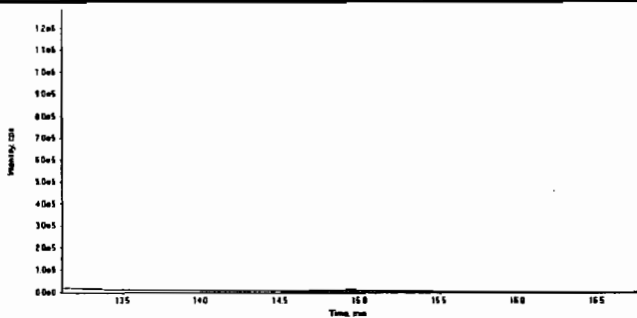
  

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	11.9
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

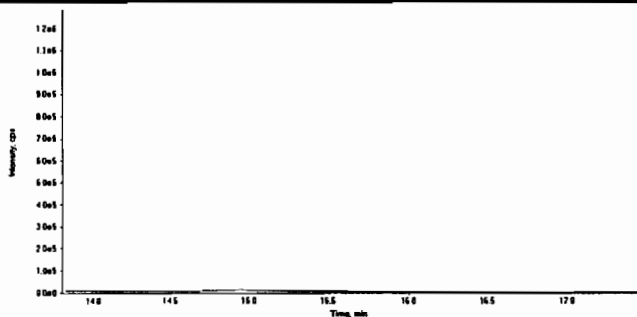
  

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.1
	Actual RT:	12.2
	Area Counts:	2.74e+007
	Manual Modification	No
	Amount:	225. (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	14.9
	Actual RT:	14.9
	Area Counts:	2.60e+005
	Manual Modification	No
	Amount:	1.12 (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.6
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A



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GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0420016.wiff	<b>Acquisition Date</b>	4/20/2010 8:48:03 PM
<b>Sample Name</b>	248519008	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	961033 2 LER	<b>Result Table</b>	042010.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.3
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.2
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	17.7
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	19.0
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0420016.wiff	<b>Acquisition Date</b>	4/20/2010 8:48:03 PM
<b>Sample Name</b>	248519008	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	961033 2 LER	<b>Result Table</b>	042010.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	20.4
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	<b>Expected RT:</b>	20.0
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-8287

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 248519008

Sample Amount 2

Moisture: 32.9

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04090061.wiff

Date Analyzed: 09-APR-10 22:57

Units: ug/kg

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

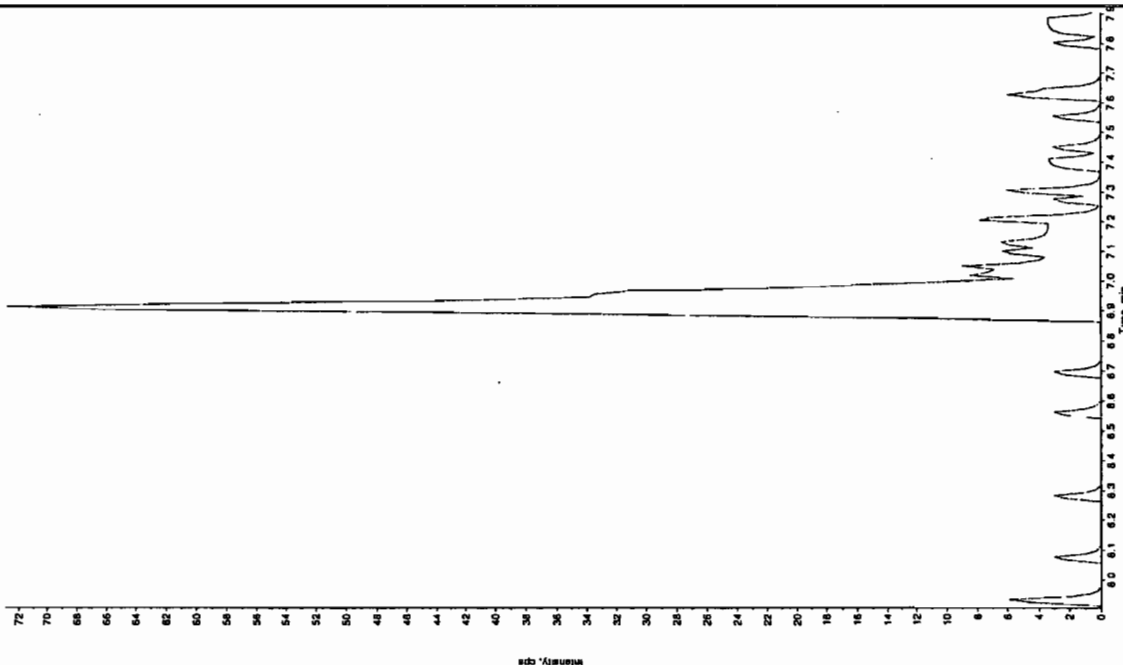
\*Concentration =

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

Scan 4/12/10

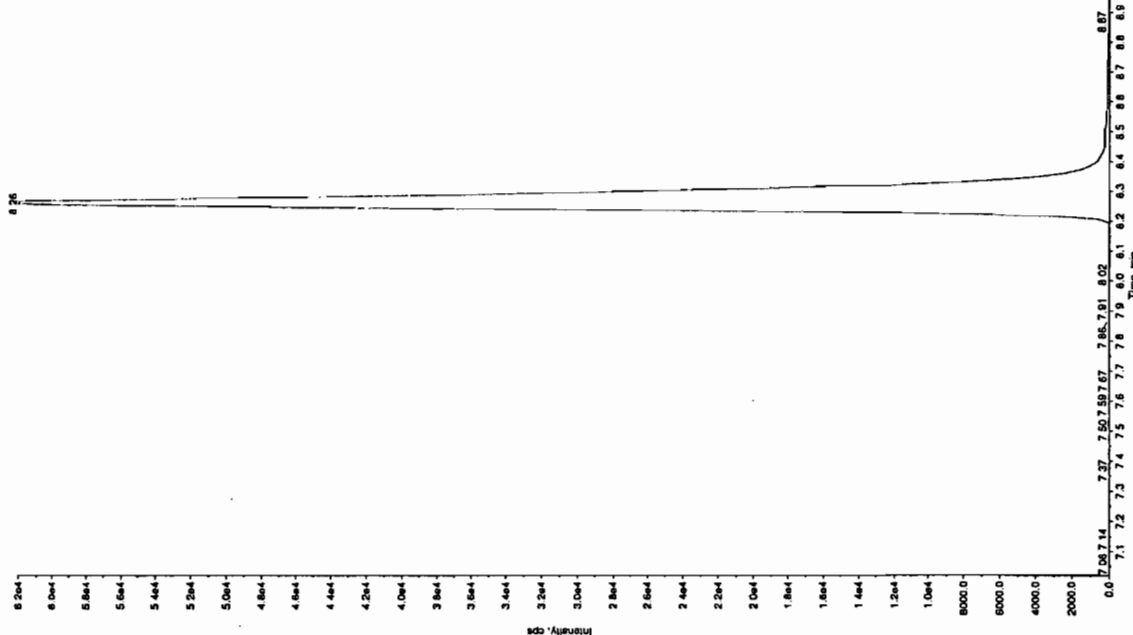
Sample Name: "248519008" Sample ID: "96103321LER" File: "EX504090061.wif"  
 Peak Name: "TATB" Mass(es): "257.2204.9 amu"  
 Comment: "LCX832125" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 4/9/2010  
 Acq. Time: 10:57:11 PM  
 Modified: No



Sample Name: "248519008" Sample ID: "96103321LER" File: "EX504090061.wif"  
 Peak Name: "35-Dinitroaniline" Mass(es): "182.0418.0 amu"  
 Comment: "LCX832125" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 4/9/2010  
 Acq. Time: 10:57:11 PM  
 Modified: Yes



Scan 04/12/10

Sample Name: "248519008" Sample ID: "95103321LER" File: "EXS04090061.wit"  
 Peak Name: "26-Diamino-4-nitrofluorene" Mass(es): "166.046.0 amu"  
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 4/9/2010  
 Acq. Time: 10:57:11 PM  
 Modified: No

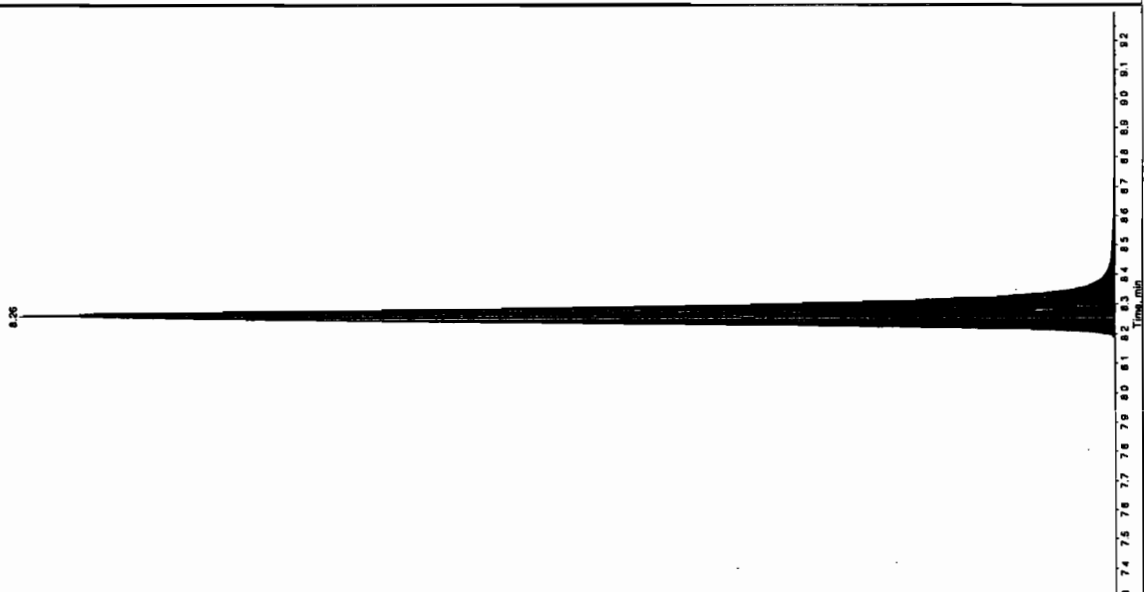
Intensity, cps

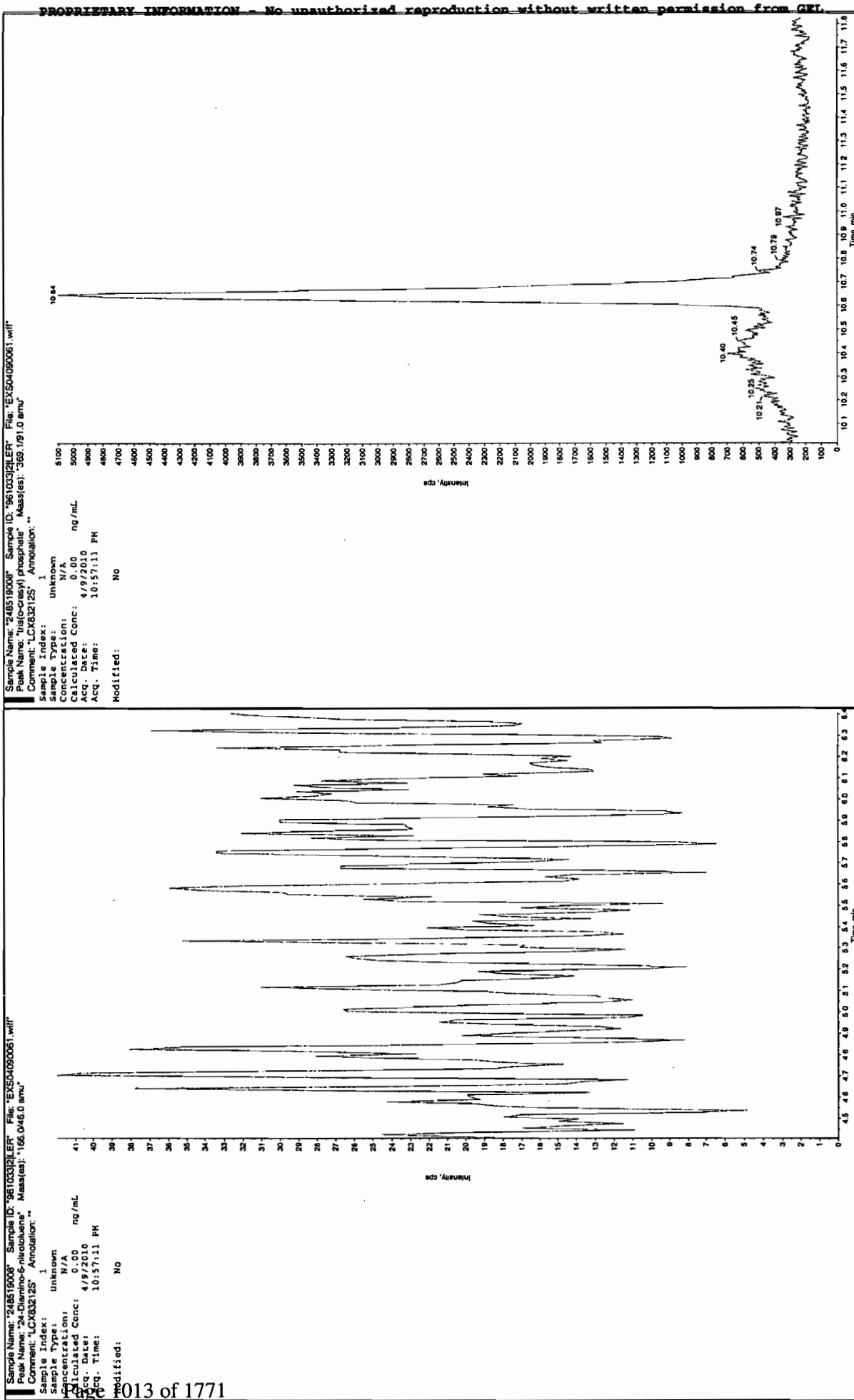


Sample Name: "248519008" Sample ID: "95103321LER" File: "EXS04090061.wit"  
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.1151.9 amu"  
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 236. ng/mL  
 Acq. Date: 4/9/2010  
 Acq. Time: 10:57:11 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 160.00 cps  
 Min. Peak Width: 0.00 sec  
 Max. Peak Width: 3.00 sec  
 RT Window: 30.0 sec  
 Expected RT: 8.30 min  
 Valve Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.26 min  
 Area: 2.12e+006 counts  
 Height: 563118.530 cps  
 Start Time: 8.13 min  
 End Time: 8.67 min

Intensity, cps





1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-8273

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 248519009

Sample Amount 2

Moisture: 29.0

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0420017.wiff

Date Analyzed: 20-APR-10 21:13

Units: ug/kg

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

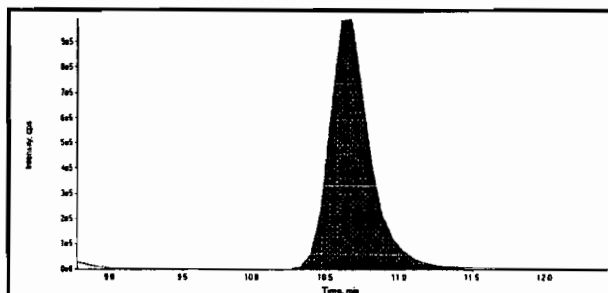
\*Concentration =

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

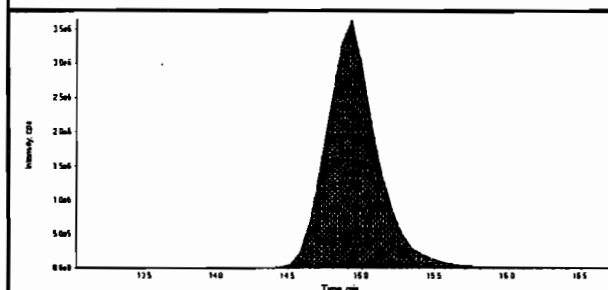
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

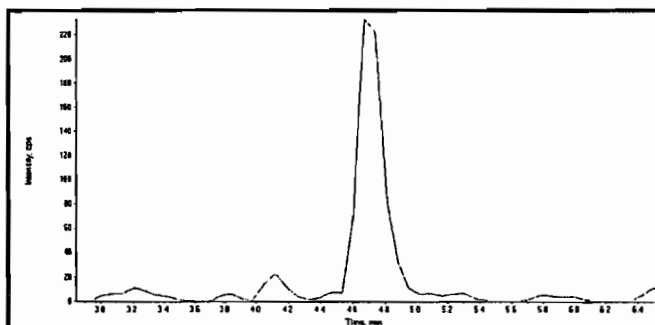
Data File	EXP0420017.wiff	Acquisition Date	4/20/2010 9:13:56 PM
Sample Name	248519009	Acquisition Method	8321.dam
Batch Dilution Analyst	961033 2 LER	Result Table	042010.rdb
Procedure Code	LCX8321_S	Sample Type	Unknown



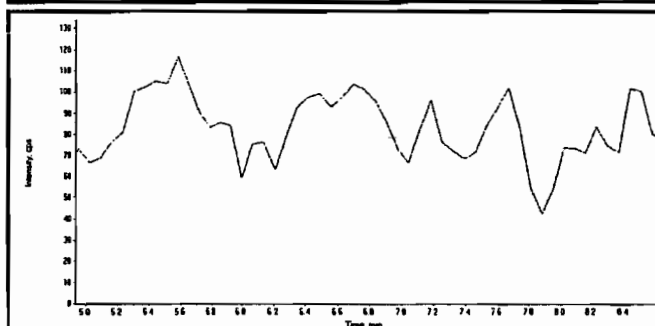
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.60
Actual RT:	10.70
Area Counts:	19200000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.90
Actual RT:	14.90
Area Counts:	86900000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.67
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.77
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

*Handwritten:* LER 4/29/10

*Handwritten:* HMX 04/29/10



GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0420017.wiff	<b>Acquisition Date</b>	4/20/2010 9:13:56 PM
<b>Sample Name</b>	248519009	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	961033 2 LER	<b>Result Table</b>	042010.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	Expected RT:	9.07
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	Expected RT:	10.7
	Actual RT:	10.7
	Area Counts:	2.80e+004
	Manual Modification	No
	Amount:	0.283 (ng/mL)
	% Accuracy:	N/A

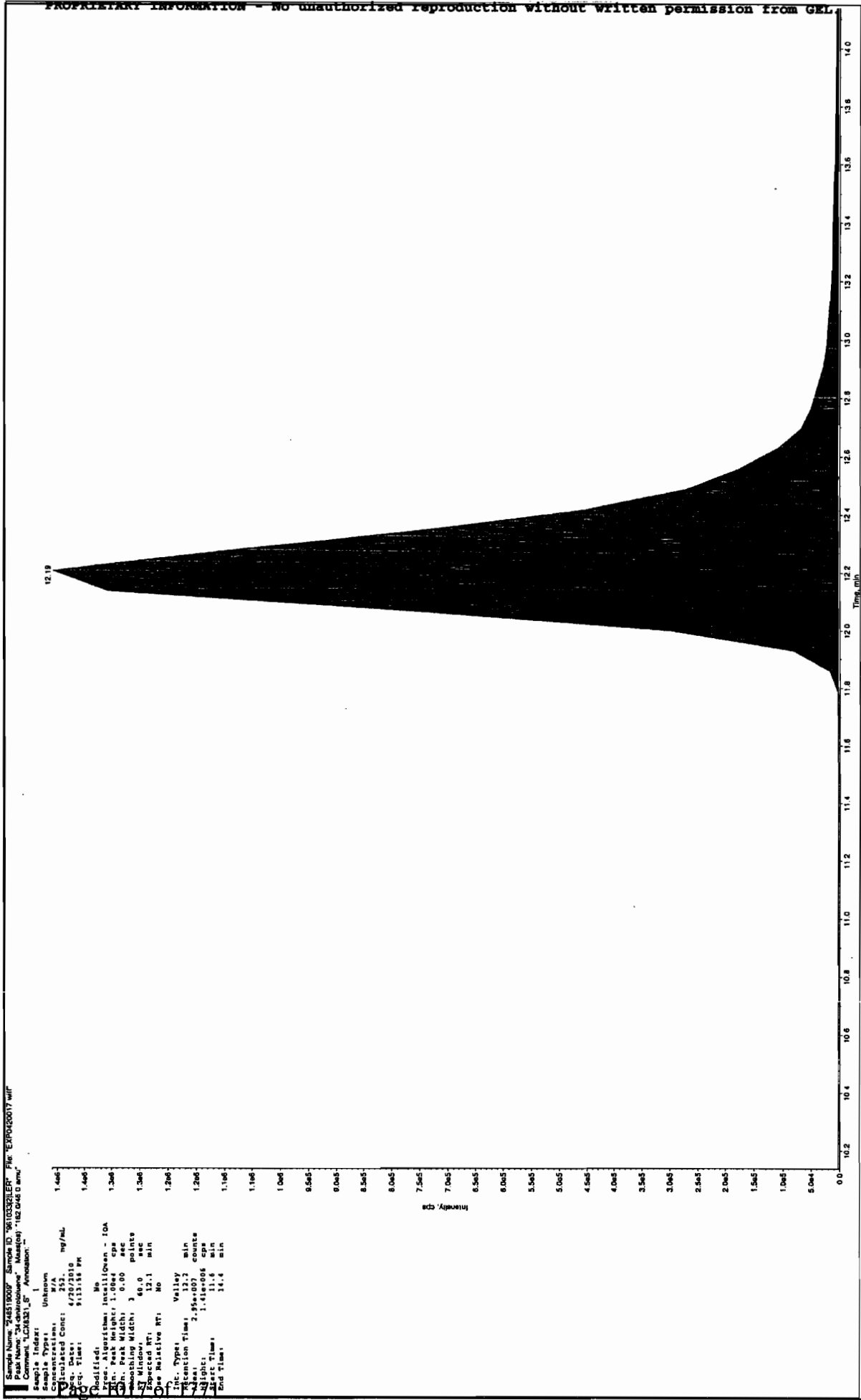
  

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	Expected RT:	10.8
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	Expected RT:	13.3
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

Before for 4/28/10



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3



GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0420017.wiff	<b>Acquisition Date</b>	4/20/2010 9:13:56 PM
<b>Sample Name</b>	248519009	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	961033 2 LER	<b>Result Table</b>	042010.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	<b>Expected RT:</b>	11.9
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	<b>Expected RT:</b>	12.1
	<b>Actual RT:</b>	12.2
	<b>Area Counts:</b>	2.91e+007
	<b>Manual Modification</b>	Yes
	<b>Amount:</b>	249. (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	<b>Expected RT:</b>	14.9
	<b>Actual RT:</b>	14.9
	<b>Area Counts:</b>	3.41e+005
	<b>Manual Modification</b>	No
	<b>Amount:</b>	1.97 (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	<b>Expected RT:</b>	15.6
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0420017.wiff	<b>Acquisition Date</b>	4/20/2010 9:13:56 PM
<b>Sample Name</b>	248519009	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	961033 2 LER	<b>Result Table</b>	042010.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.3
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.2
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	17.7
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

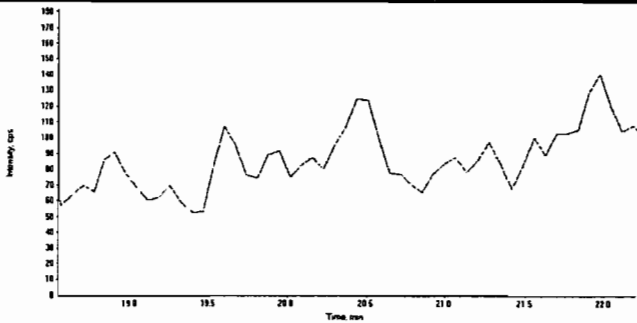
	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	19.0
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

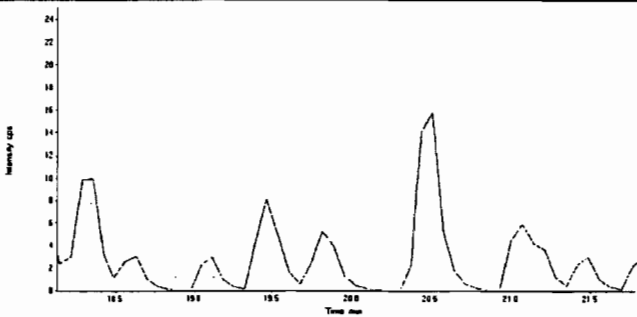
Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0420017.wiff	<b>Acquisition Date</b>	4/20/2010 9:13:56 PM
<b>Sample Name</b>	248519009	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	961033 2 LER	<b>Result Table</b>	042010.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	20.4
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	<b>Expected RT:</b>	20.0
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-8273

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 248519009

Sample Amount 2

Moisture: 29.0

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04090062.wiff

Date Analyzed: 09-APR-10 23:12

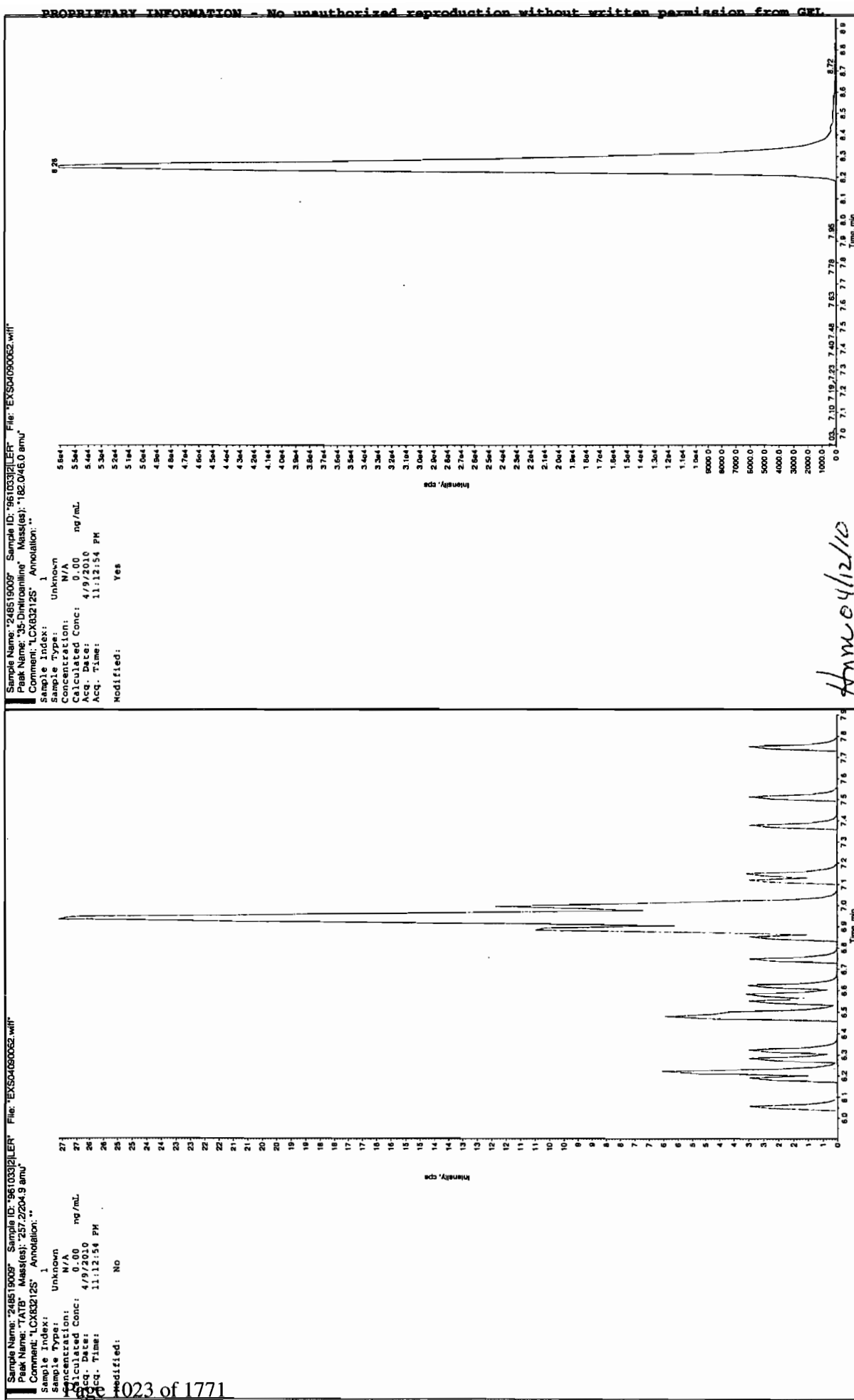
Units: ug/kg

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

\*Concentration =

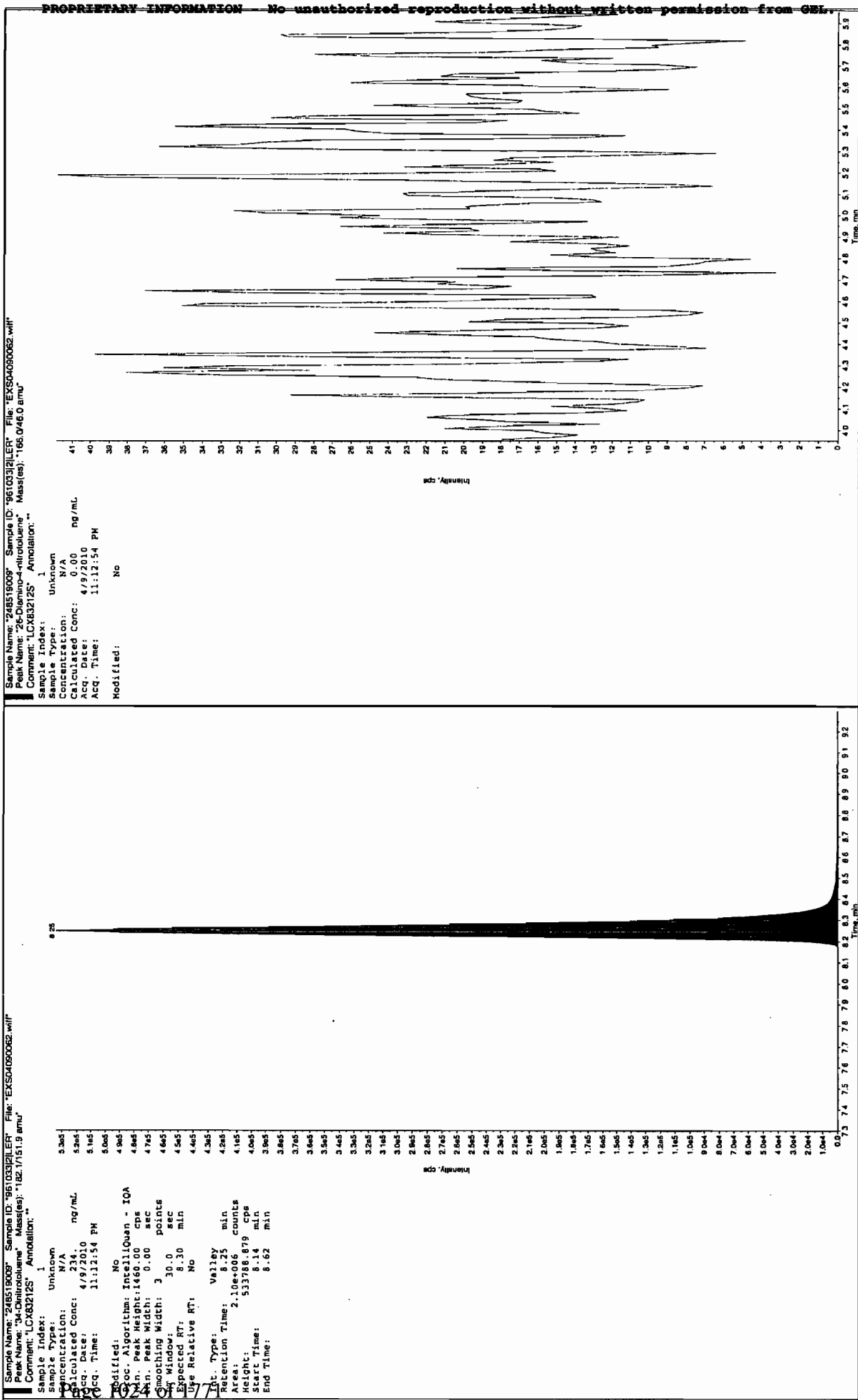
Instrument	X	<u>Concentrated Extract Volume</u>	X	Dilution
Value		<u>Sample Amoun</u>		Factor

2023-04-12/10

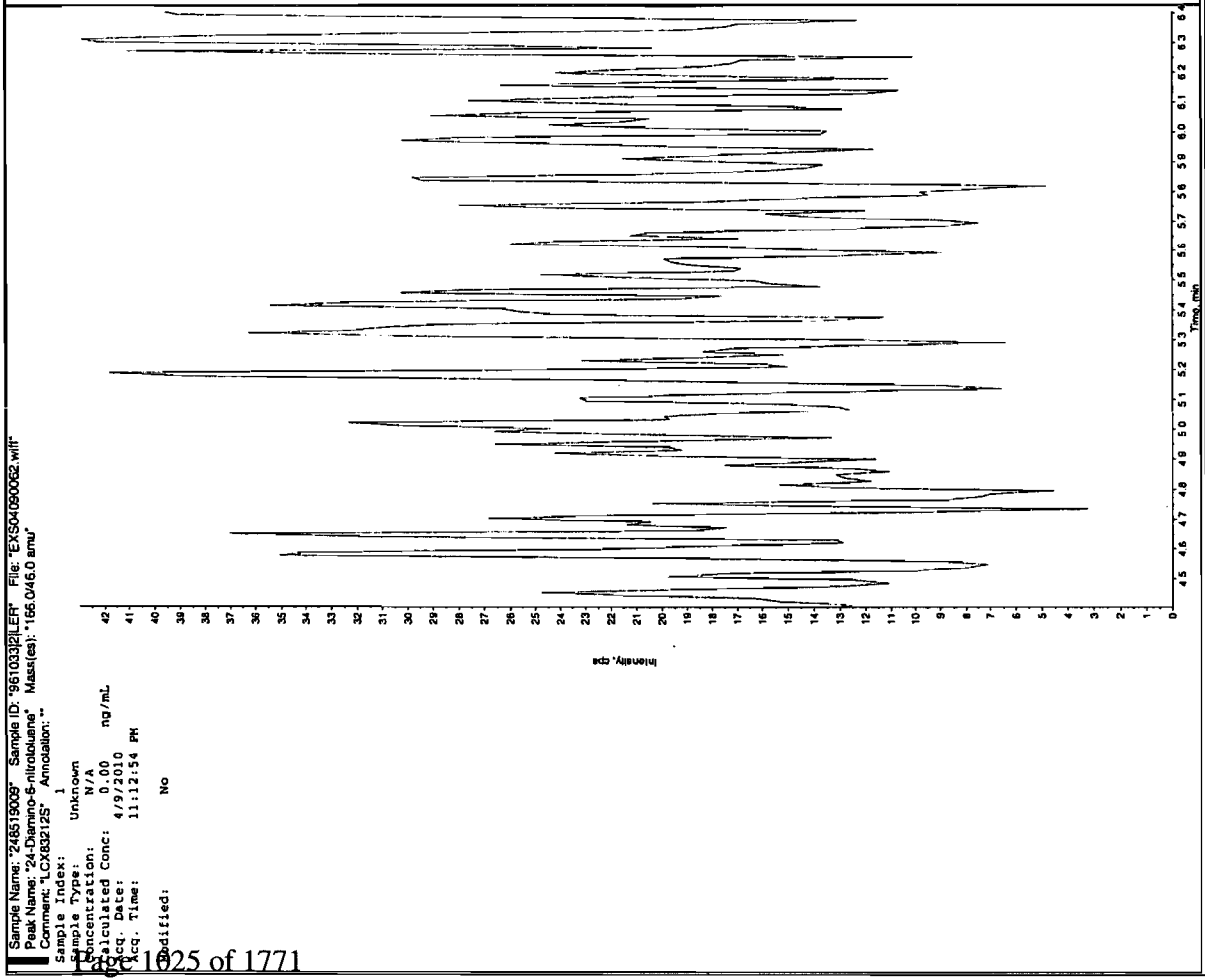
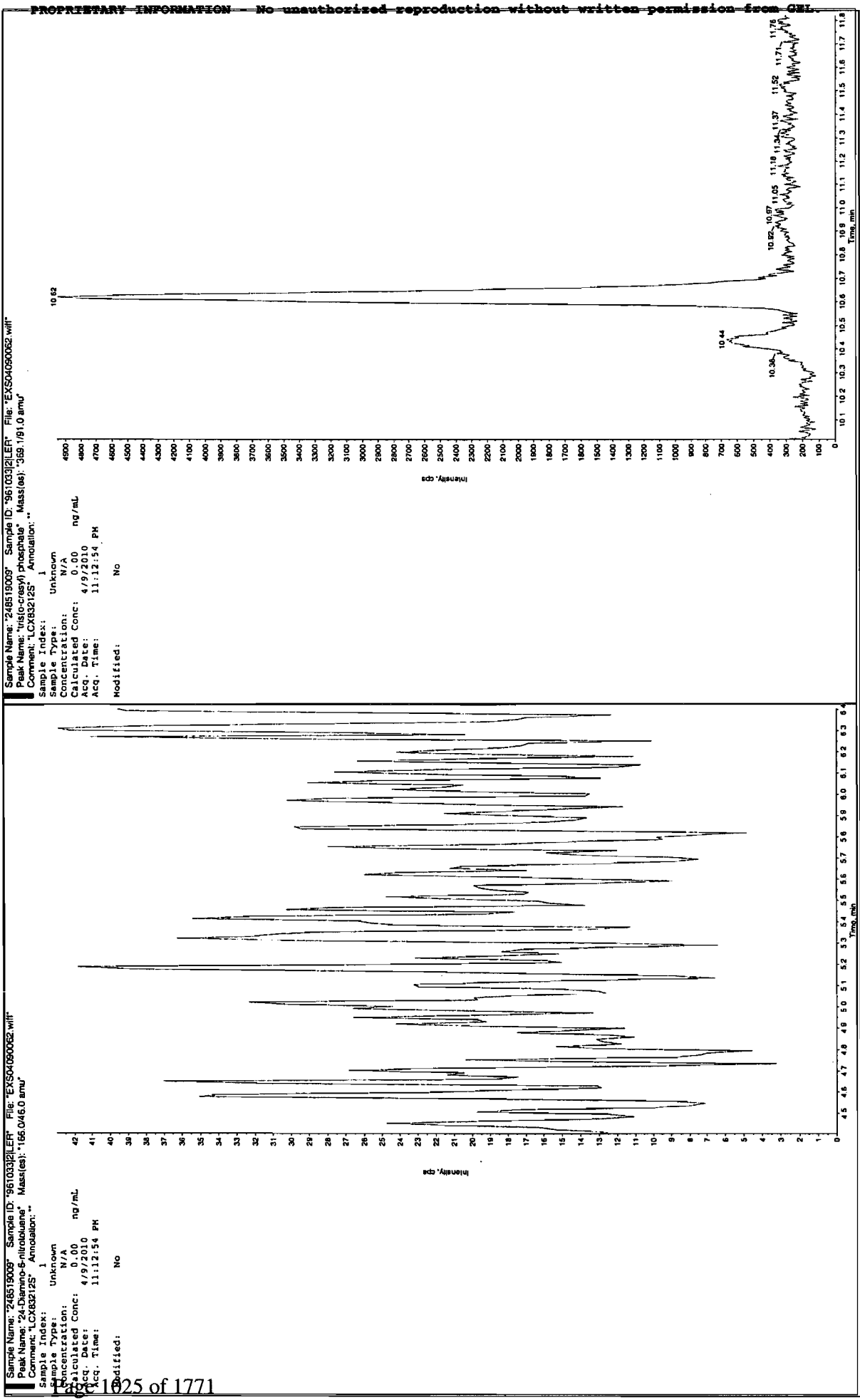


2023-04-12/10





\*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: RE36-10-8275

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 248519010

Sample Amount 2

Moisture: 40.1

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0420018.wiff

Date Analyzed: 20-APR-10 21:39

Units: ug/kg

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

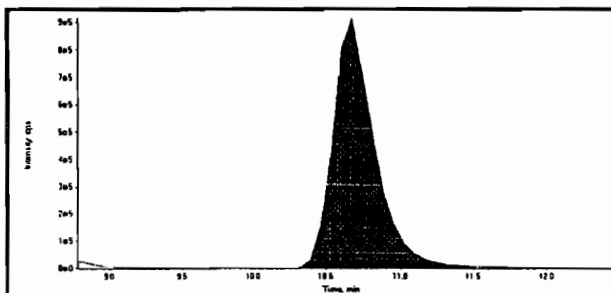
\*Concentration =

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

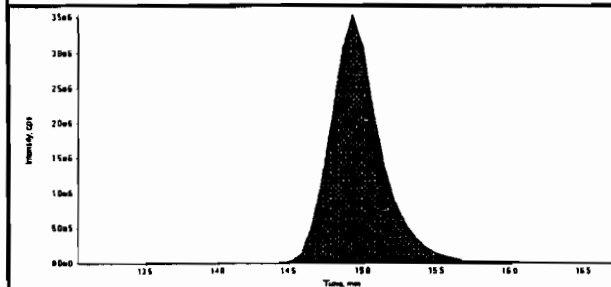
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

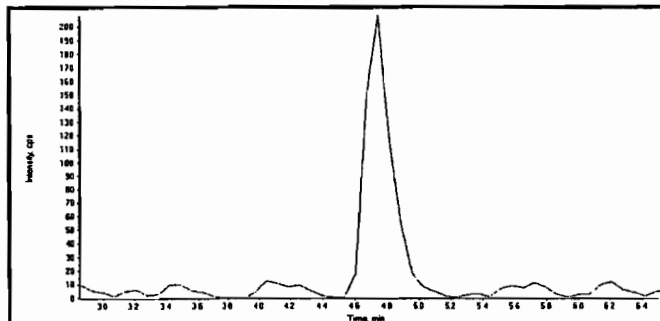
Data File	EXP0420018.wiff	Acquisition Date	4/20/2010 9:39:51 PM
Sample Name	248519010	Acquisition Method	8321.dam
Batch Dilution Analyst	961033 2 LER	Result Table	042010.rdb
Procedure Code	LCX8321_S	Sample Type	Unknown



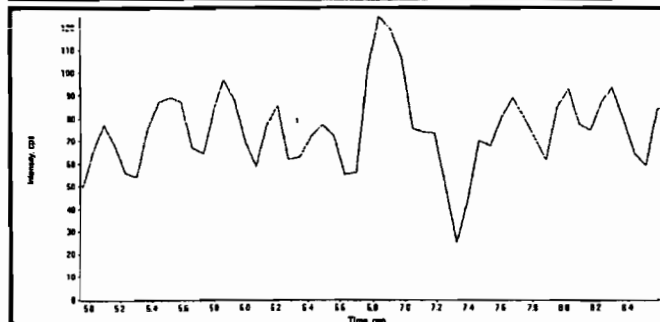
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.60
Actual RT:	10.70
Area Counts:	17800000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.90
Actual RT:	14.90
Area Counts:	83600000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.67
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.77
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

*Star*  
*4/29/10*  
*thm*  
*04/29/10*

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0420018.wiff	<b>Acquisition Date</b>	4/20/2010 9:39:51 PM
<b>Sample Name</b>	248519010	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	961033 2 LER	<b>Result Table</b>	042010.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	<b>Expected RT:</b>	9.07
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	<b>Expected RT:</b>	10.7
	<b>Actual RT:</b>	10.7
	<b>Area Counts:</b>	2.34e+004
	<b>Manual Modification</b>	No
	<b>Amount:</b>	0.255 (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	<b>Expected RT:</b>	10.8
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	<b>Expected RT:</b>	13.3
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

Before Jan 4/28/10

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Sample Name: 8321A-056 Sample ID: 8321A-056 File: 8321A-056.wif

Peak Name: "Acetaminophen" Mass: 152.0460 amu

Comment: "LCMS321A" Annotation: "

Sample Index: 1

Sample Type: Unknown

Acq. Date: 4/22/2010

Acq. Time: 9:39:51 PM

Modif: No

Proc. Algorithm: IntelliQwen - ICA

Min. Peak Height: 1.00e4 cps

Min. Peak Width: 0.10 min

Min. Peak Area: 1.00e4 cps

Min. Peak Width: 0.10 min

Min. Peak Area: 1.00e4 cps

Min. Peak Width: 0.10 min

Min. Peak Area: 1.00e4 cps

Min. Peak Width: 0.10 min

Min. Peak Area: 1.00e4 cps

Min. Peak Width: 0.10 min

Min. Peak Area: 1.00e4 cps

Min. Peak Width: 0.10 min

Min. Peak Area: 1.00e4 cps

Min. Peak Width: 0.10 min

Min. Peak Area: 1.00e4 cps

Min. Peak Width: 0.10 min

Min. Peak Area: 1.00e4 cps

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Min. Peak Area: 1.00e4 cps

Min. Peak Width: 0.10 min

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Min. Peak Area: 1.00e4 cps

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Min. Peak Width: 0.10 min

Min. Peak Area: 1.00e4 cps

Min. Peak Width: 0.10 min

Min. Peak Area: 1.00e4 cps

Min. Peak Width: 0.10 min

Min. Peak Area: 1.00e4 cps

Min. Peak Width: 0.10 min

Min. Peak Area: 1.00e4 cps

Min. Peak Width: 0.10 min

Min. Peak Area: 1.00e4 cps

Min. Peak Width: 0.10 min

Min. Peak Area: 1.00e4 cps

Min. Peak Width: 0.10 min

Min. Peak Area: 1.00e4 cps

Min. Peak Width: 0.10 min

Min. Peak Area: 1.00e4 cps

Min. Peak Width: 0.10 min

Min. Peak Area: 1.00e4 cps

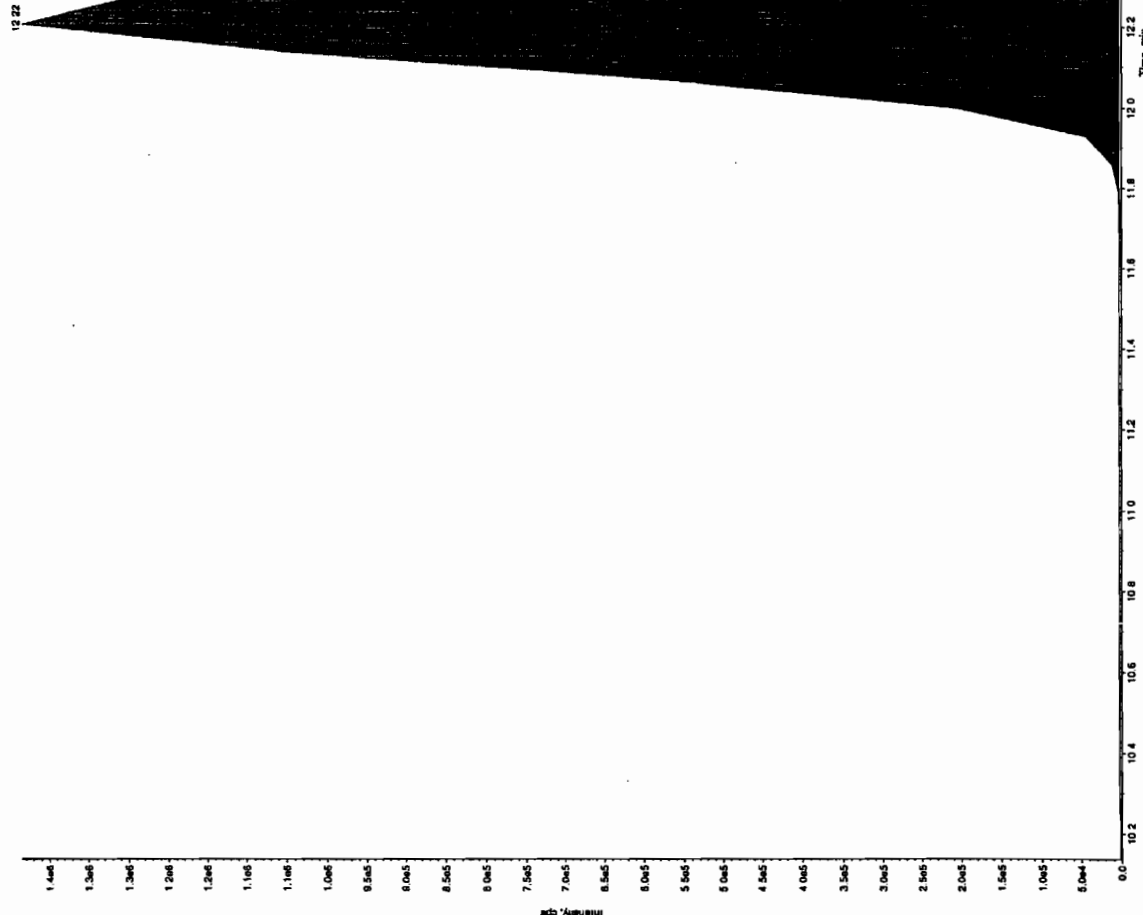
Min. Peak Width: 0.10 min

Min. Peak Area: 1.00e4 cps

Min. Peak Width: 0.10 min

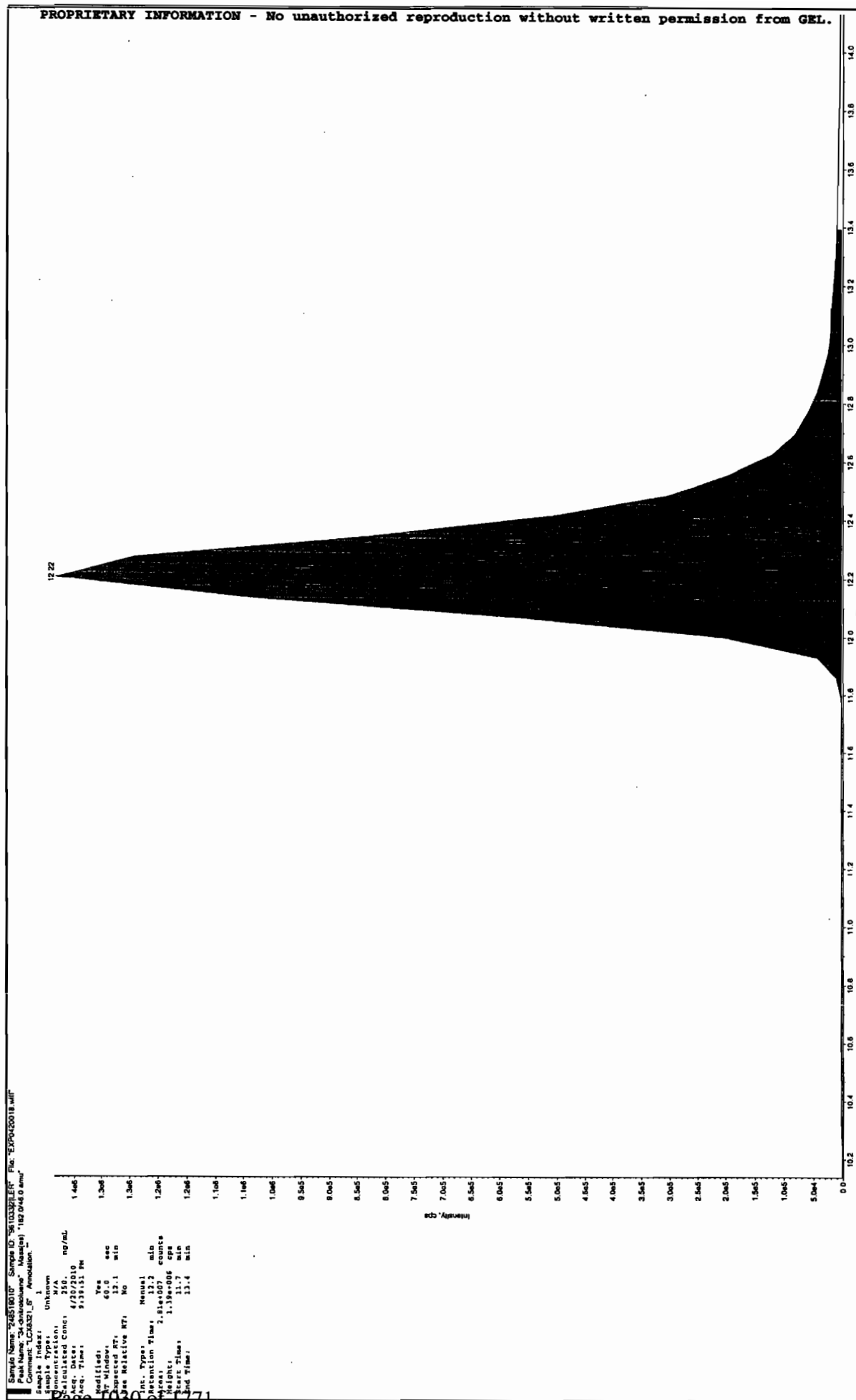
Min. Peak Area: 1.00e4 cps

Min. Peak Width: 0.10 min



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

after Jan 4/28/10

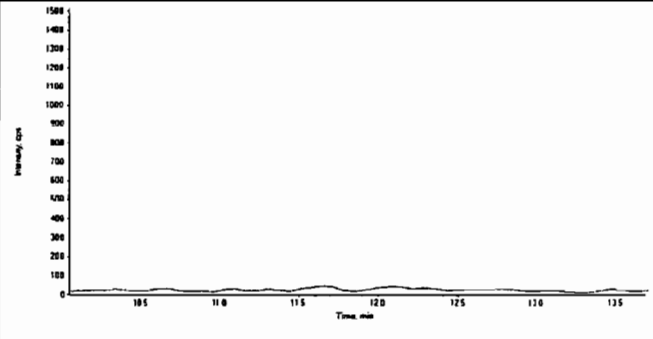


GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

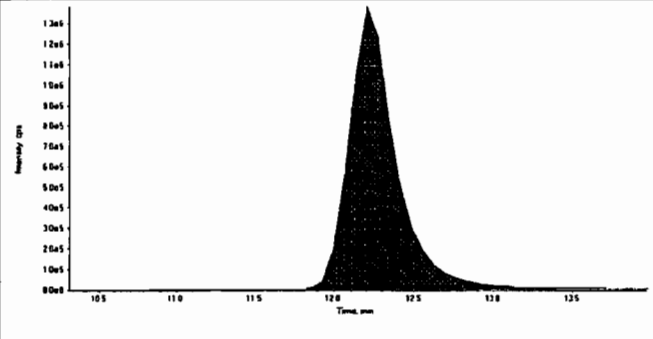
Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0420018.wiff	<b>Acquisition Date</b>	4/20/2010 9:39:51 PM
<b>Sample Name</b>	248519010	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	961033 2 LER	<b>Result Table</b>	042010.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

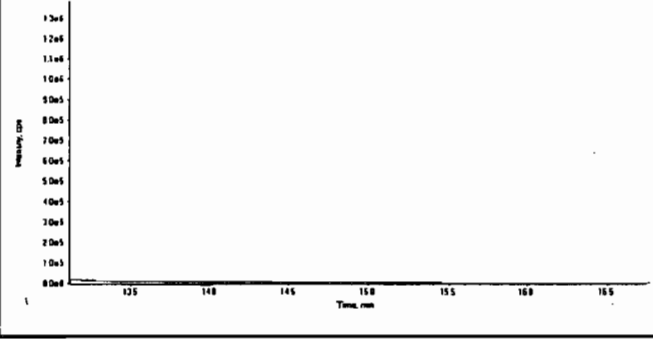
  

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	11.9
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

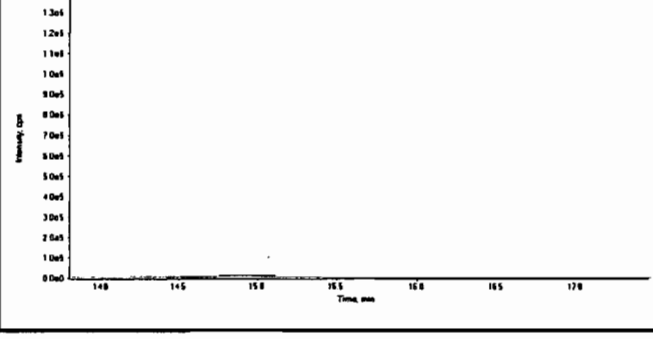
  

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.1
	Actual RT:	12.2
	Area Counts:	2.81e+007
	Manual Modification	Yes
	Amount:	250. (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	14.9
	Actual RT:	14.9
	Area Counts:	3.28e+005
	Manual Modification	No
	Amount:	1.97 (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.6
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A



GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0420018.wiff	<b>Acquisition Date</b>	4/20/2010 9:39:51 PM
<b>Sample Name</b>	248519010	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	961033 2 LER	<b>Result Table</b>	042010.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	<b>Expected RT:</b>	13.3
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	<b>Expected RT:</b>	14.2
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	17.7
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	19.0
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0420018.wiff	<b>Acquisition Date</b>	4/20/2010 9:39:51 PM
<b>Sample Name</b>	248519010	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	961033 2 LER	<b>Result Table</b>	042010.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	20.4
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	<b>Expected RT:</b>	20.0
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-8275

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 248519010

Sample Amount 2

Moisture: 40.1

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04090066.wiff

Date Analyzed: 10-APR-10 00:15

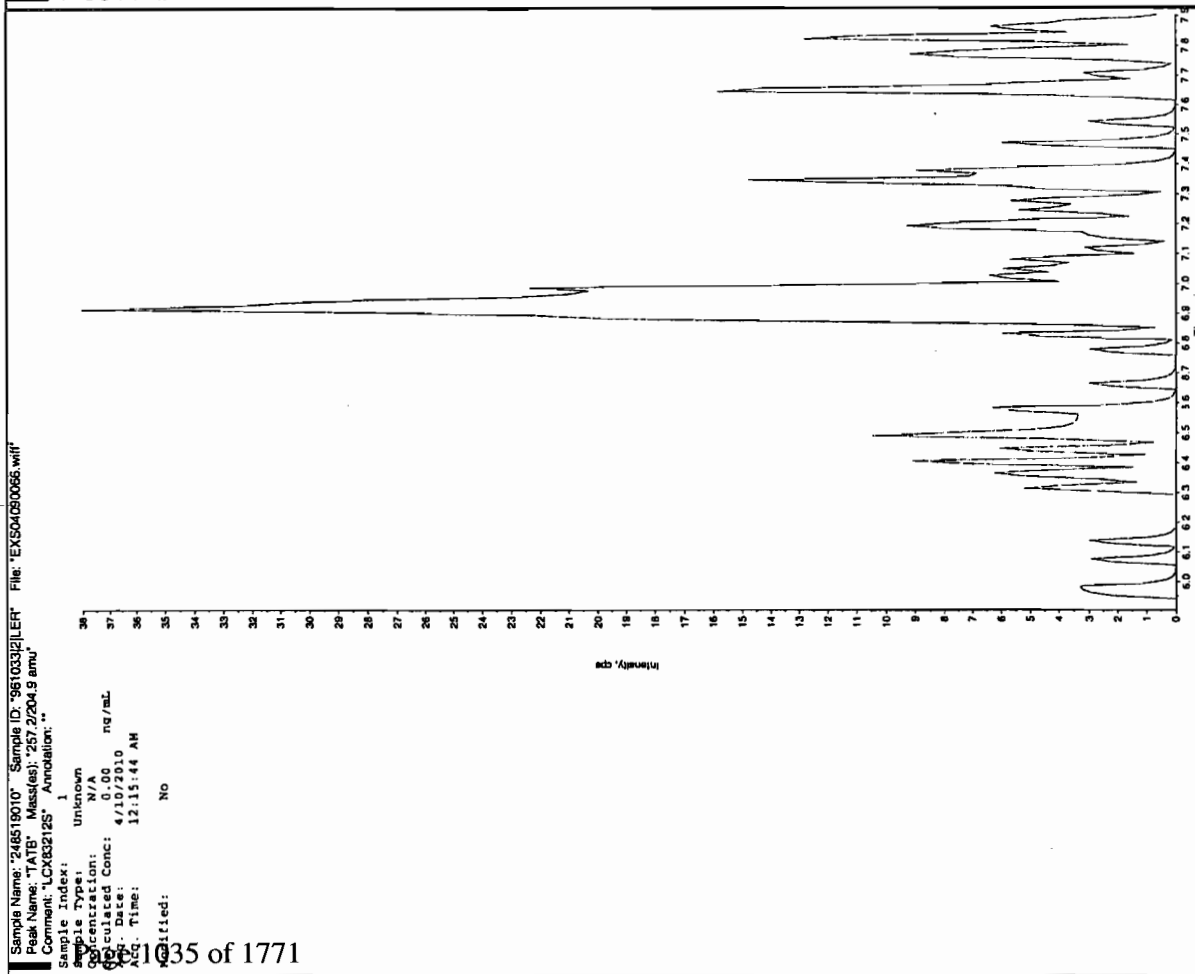
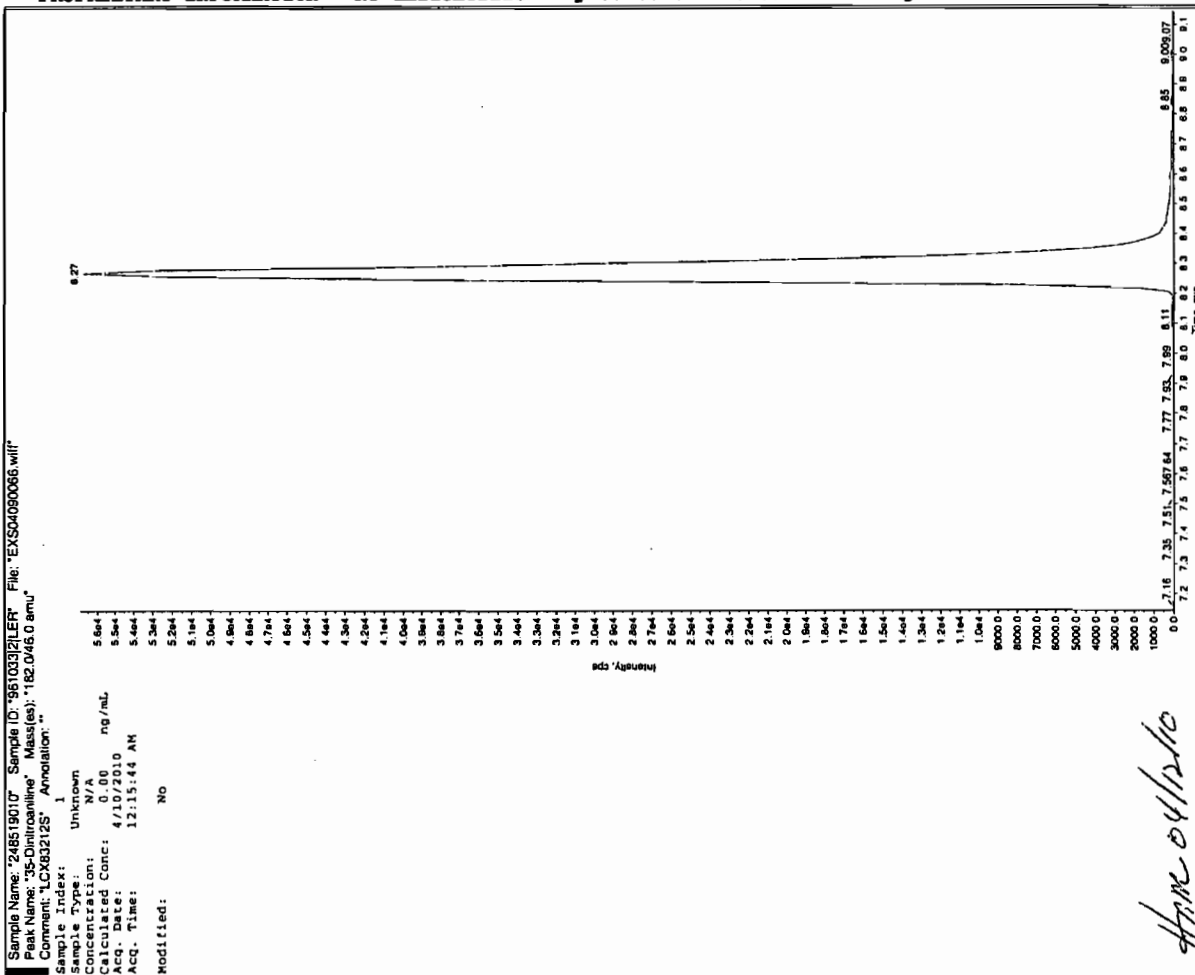
Units: ug/kg

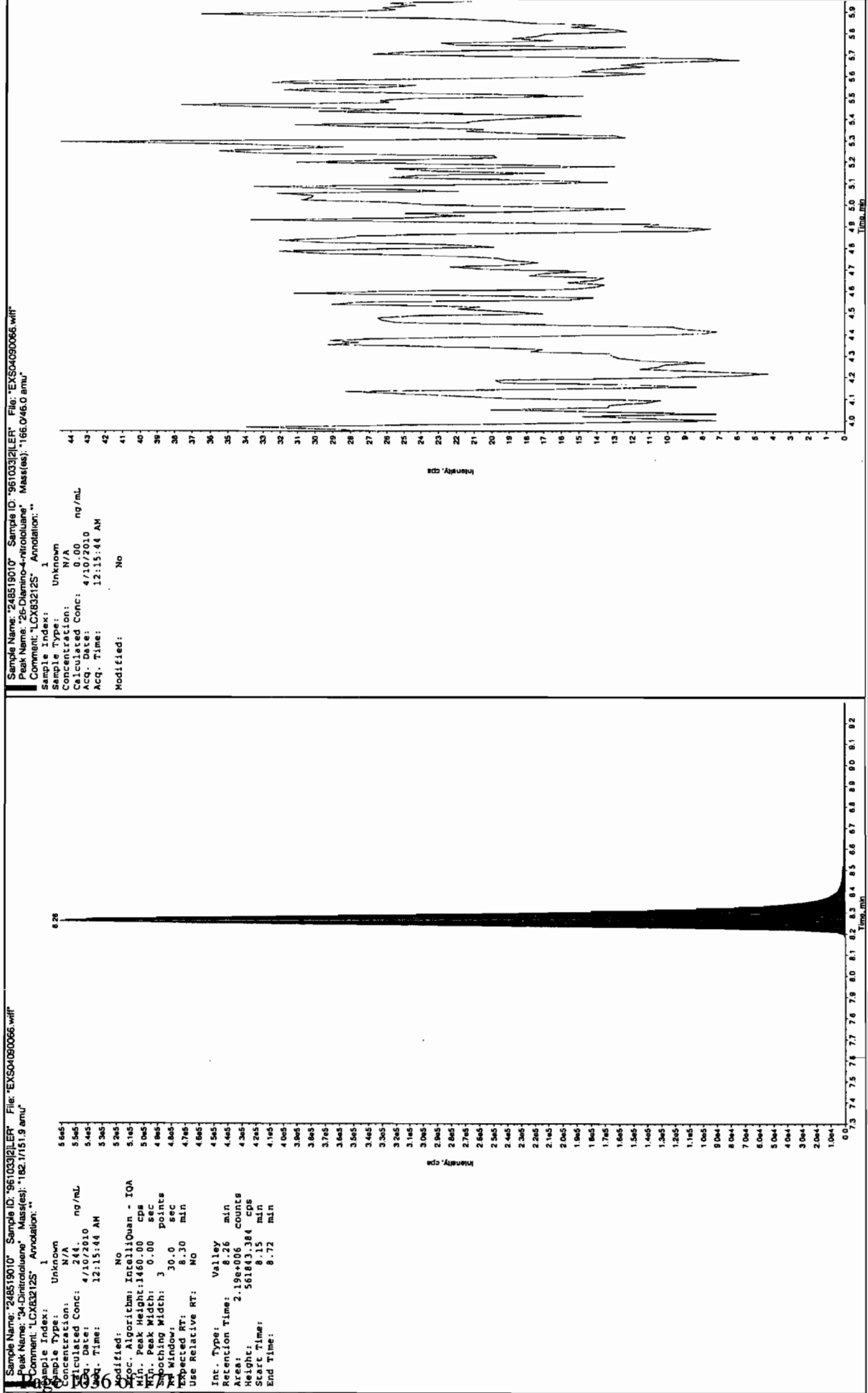
Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

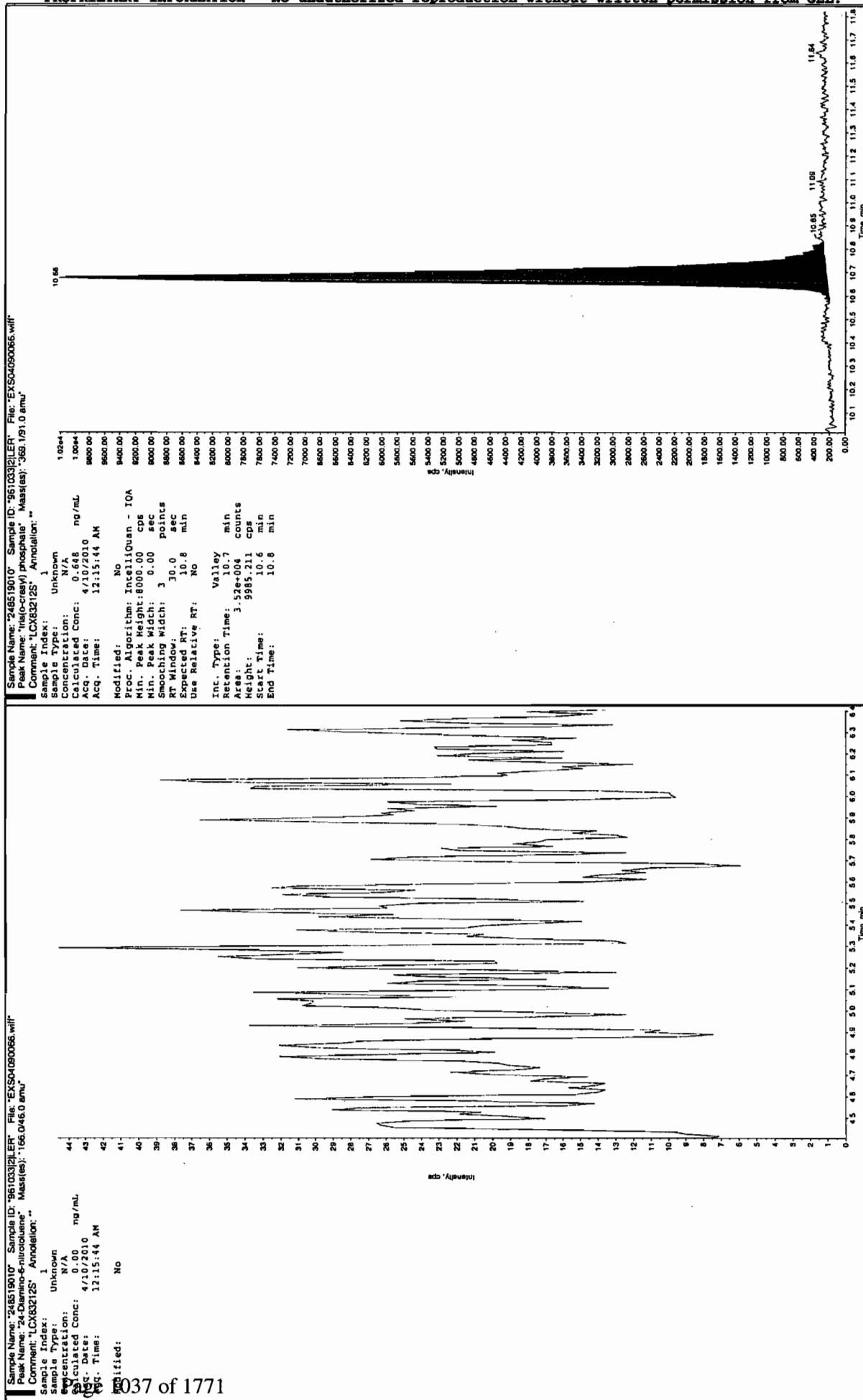
\*Concentration =

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

See 4/12/10







1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-8276

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 248519011

Sample Amount 2

Moisture: 14.6

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0420019.wiff

Date Analyzed: 20-APR-10 22:05

Units: ug/kg

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

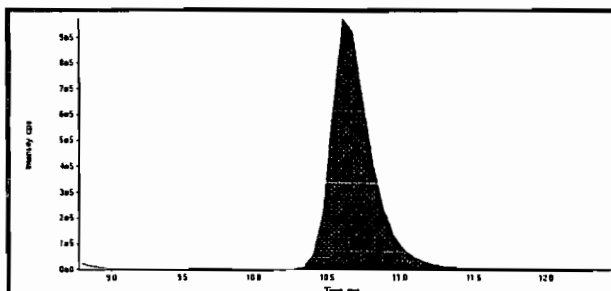
\*Concentration =

Instrument Value	X	Concentrated Extract Volume	X	Dilution Factor
		Sample Amount		

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

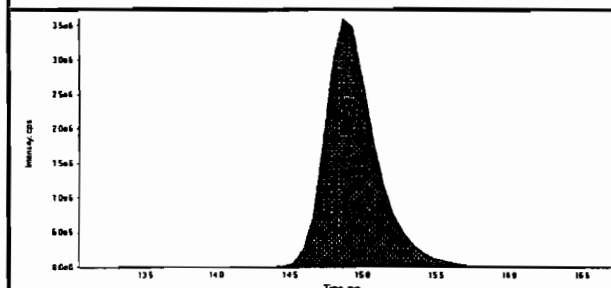
Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

Data File	EXP0420019.wiff	Acquisition Date	4/20/2010 10:05:50 PM
Sample Name	248519011	Acquisition Method	8321.dam
Batch Dilution Analyst	961033 2 LER	Result Table	042010.rdb
Procedure Code	LCX8321_S	Sample Type	Unknown



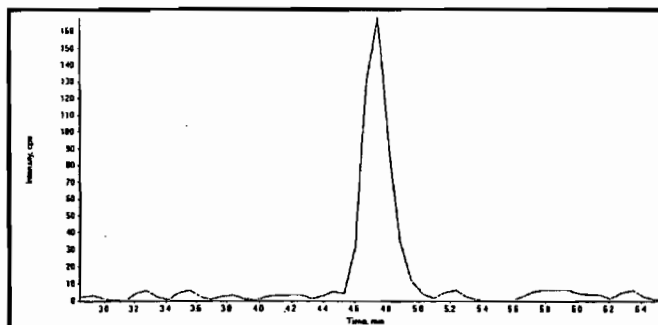
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.60
Actual RT:	10.60
Area Counts:	18600000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries

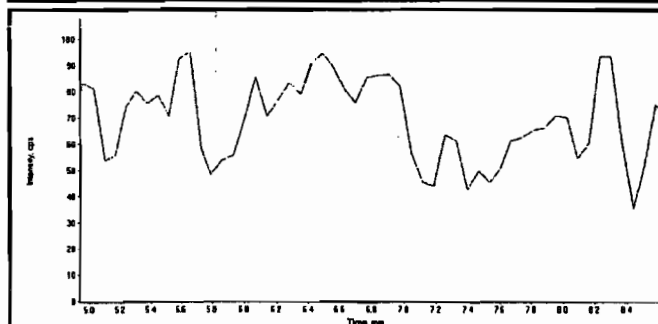


Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.90
Actual RT:	14.90
Area Counts:	87700000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.67
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.77
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

*Jan*  
4/29/10

*Hrm*  
04/29/10



GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0420019.wiff	<b>Acquisition Date</b>	4/20/2010 10:05:50 PM
<b>Sample Name</b>	248519011	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	961033 2 LER	<b>Result Table</b>	042010.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	<b>Expected RT:</b>	9.07
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	<b>Expected RT:</b>	10.7
	<b>Actual RT:</b>	10.7
	<b>Area Counts:</b>	2.46e+004
	<b>Manual Modification</b>	No
	<b>Amount:</b>	0.256 (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	<b>Expected RT:</b>	10.8
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

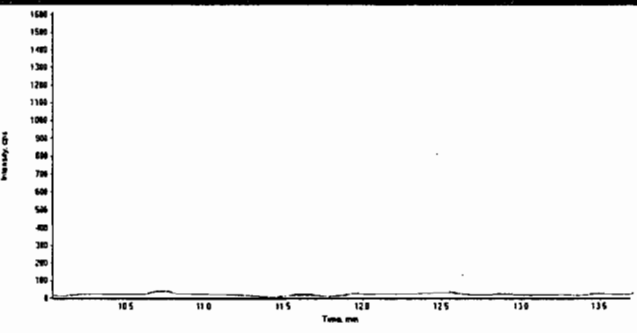
	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	<b>Expected RT:</b>	13.3
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

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GEL SOP GL-OA-E-056, Method 8321A-Modified

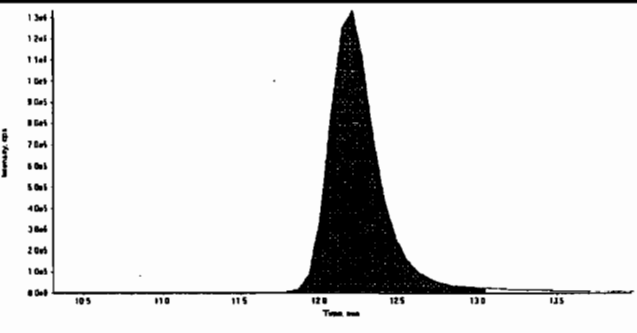
Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0420019.wiff	<b>Acquisition Date</b>	4/20/2010 10:05:50 PM
<b>Sample Name</b>	248519011	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	961033 2 LER	<b>Result Table</b>	042010.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

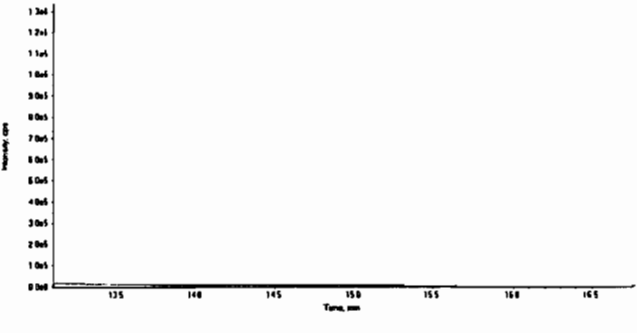
  

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	11.9
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

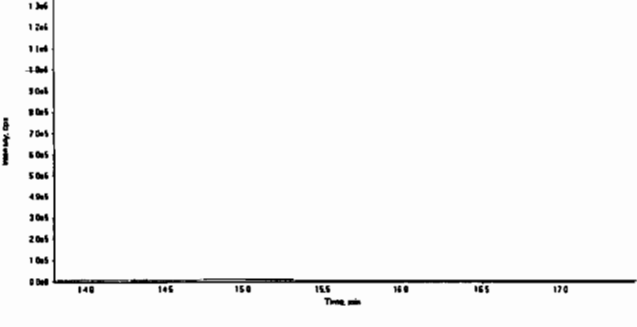
  

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.1
	Actual RT:	12.2
	Area Counts:	2.85e+007
	Manual Modification	No
	Amount:	241. (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	14.9
	Actual RT:	14.9
	Area Counts:	2.83e+005
	Manual Modification	No
	Amount:	1.40 (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.6
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

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GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0420019.wiff	<b>Acquisition Date</b>	4/20/2010 10:05:50 PM
<b>Sample Name</b>	248519011	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	961033 2 LER	<b>Result Table</b>	042010.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.3
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.2
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	17.7
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

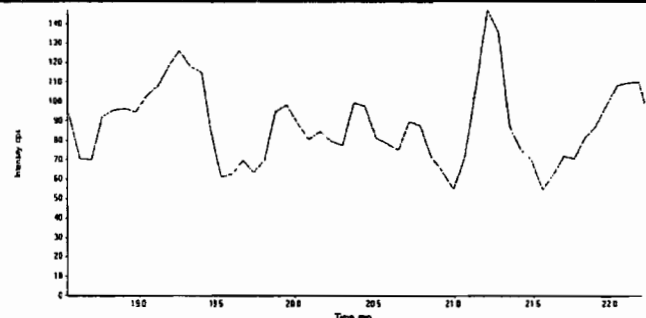
	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	19.0
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

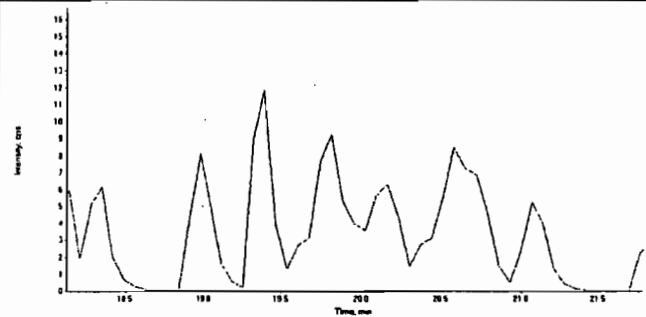
Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0420019.wiff	<b>Acquisition Date</b>	4/20/2010 10:05:50 PM
<b>Sample Name</b>	248519011	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	961033 2 LER	<b>Result Table</b>	042010.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	20.4
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	<b>Expected RT:</b>	20.0
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE36-10-8276

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 248519011

Sample Amount 2

Moisture: 14.6

Amount Units g

Date Received: 03-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04090067.wiff

Date Analyzed: 10-APR-10 00:31

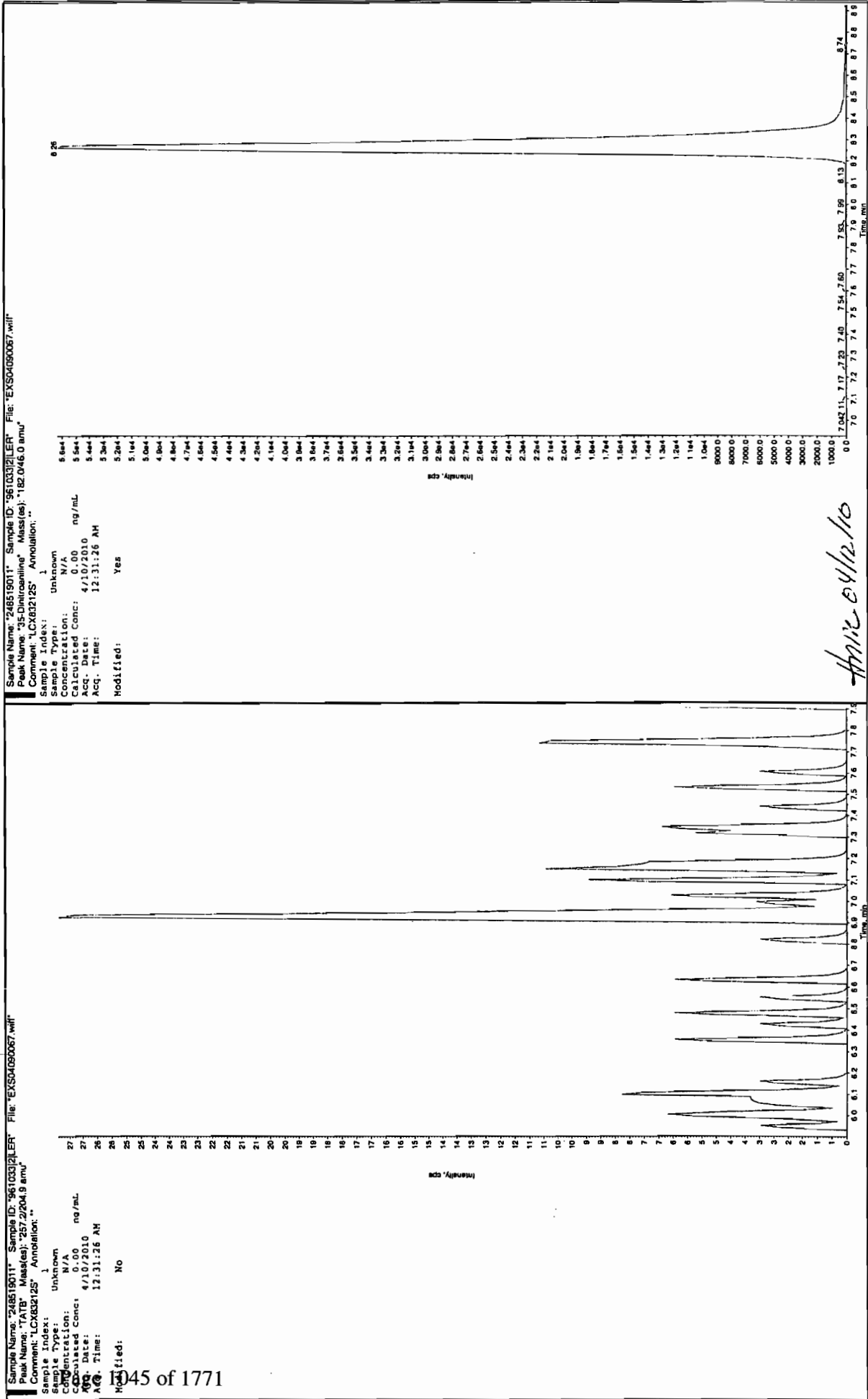
Units: ug/kg

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

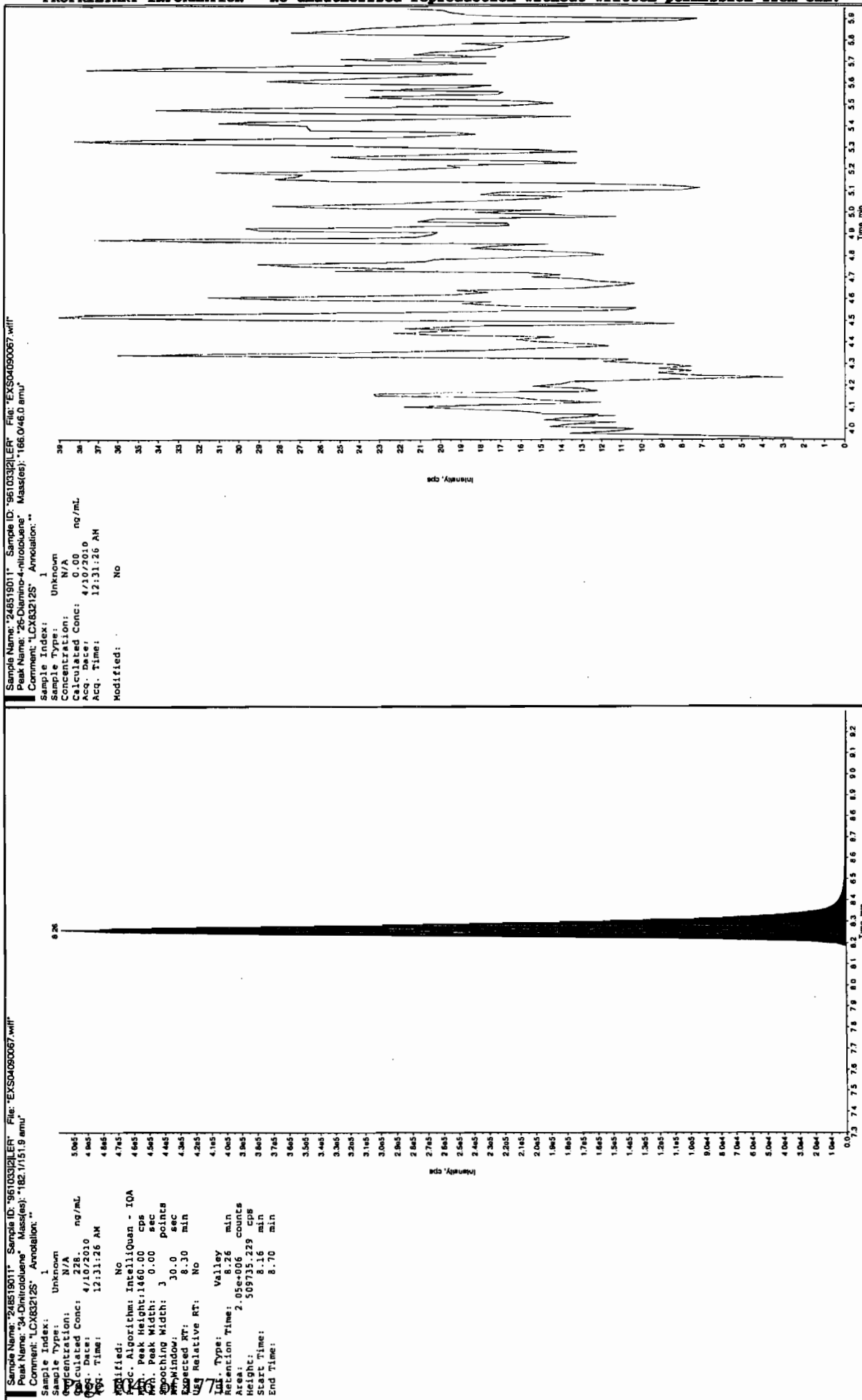
\*Concentration =

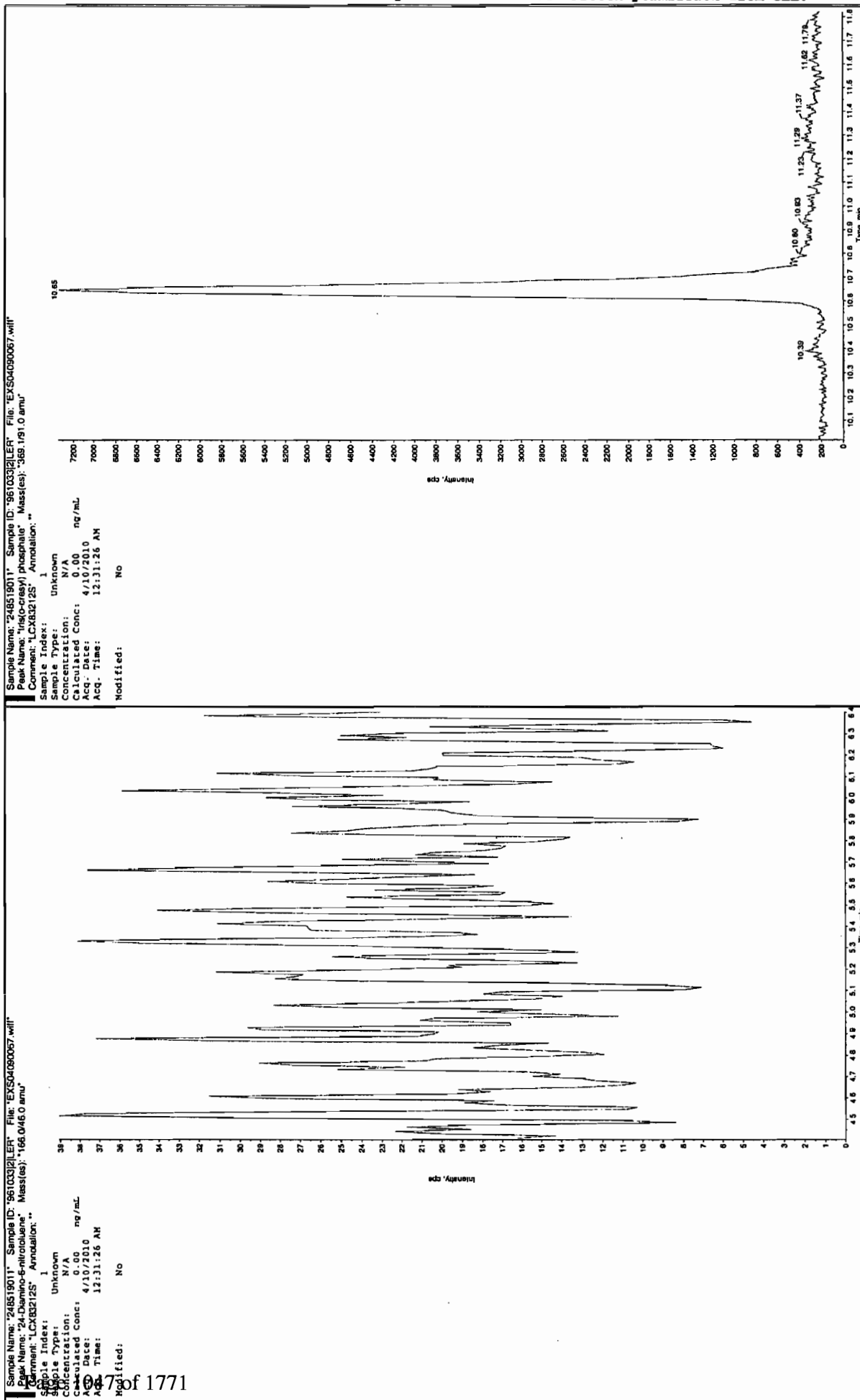
Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}}$  X Dilution Factor

Lat 4/12/10



Lat 4/12/10







# STANDARDS DATA

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

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

All values are ug/L without the prep factor

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

Calibration Levels 8321A-Modified-EXPL.xls

Explosives Initial Calibration

Lab Name: GEL Laboratories LLC GEL Job No: 10-2199  
 Lab Code: GEL Run Date: 09-APR-10 15-APR-10 20-APR-10  
 LCM SMS Instrument ID: LCMSMS3 Method: 8321A Modified HPLC Column: Phenomenex Ultracarb 5 ODS(20)

Calibration Type: Average RF

Calibration Level:		50	51	52	53	54	55	Ave RF	RSD	Q
Data File:		EXP0415003.w	EXP0415004.w	EXP0415005.w	EXP0415006.w	EXP0415007.w	EXP0415008.w			
Parname										
2-Amino-4,6-dinitrotoluene		.017	.018	.019	.02	.019	.02	0.019	5.27	

Q column used to flag RSD values outside of Limit (>20%)  
 \* Values outside of QC Limit

Explosives Initial Calibration

Lab Name: GEL Laboratories LLC

GEL Job No: 10-2199

Lab Code: GEL

Run Date: 09-APR-10.15-APR-10.20-APR-10

LCMSMS Instrument ID: LCMSMS3

Method: 8321A Modified

HPLC Column: Phenomenex Ultracarb 5 ODS(20)

Calibration Type: Linear

Calibration Level:		50	51	52	53	54	55	Slope	Intercept	COD	Q
Data File:		EXP0415003.w	EXP0415004.w	EXP0415005.w	EXP0415006.w	EXP0415007.w	EXP0415008.w				
Parname											
2,4-Dinitrotoluene		867000	1320000	6590000	12700000	23100000	31000000	.201	.004	.9975	
2,6-Dinitrotoluene		2230000	4090000	16300000	32600000	64900000	76800000	.519	.015	.9989	
3,4-Dinitrotoluene		1280000	2680000	10100000	19600000	38300000	49000000	.645	.006	.9996	
4-Amino-2,6-dinitrotoluene		1700000	3380000	12800000	27100000	51600000	67400000	.442	.004	.9991	
HMX		831000	1760000	6640000	13400000	26200000	35900000	1.02	.003	.9994	
Nitrobenzene		77500	169000	654000	1230000	2760000	3530000	.103	-.001	.9995	
PETN		14800	29600	126000	246000	478000	609000	.004	0	.9995	
RDX		453000	926000	3250000	6800000	13900000	17500000	.513	.005	.9996	

Linear fit:  $Y=mx+b$   
where b is Intercept and m is slope

COD is Coefficient of Determination

Q column used to flag COD values outside of Limit (<0.990)

\* Values outside of QC Limit

# Explosives Initial Calibration

Lab Name: GEL Laboratories LLC

GEL Job No: 10-2199

Lab Code: GEL

Run Date: 09-APR-10.15-APR-10.20-APR-10

LCMSMS Instrument ID: LCMSMS3

Method: 8321A Modified

HPLC Column: Phenomenex Ultracarb 5 ODS(20)

Calibration Type: 2nd Order

Calibration Level:	50	51	52	53	54	55	X	X^2	Intercept	COD	Q
Data File:	EXP0415003.wiff	EXP0415004.wiff	EXP0415005.wiff	EXP0415006.wiff	EXP0415007.wiff	EXP0415008.wiff					
Parname:											
1,3,5-Trinitrobenzene	6270000	12600000	47100000	84900000	139000000	167000000	.035	7.66	-1.44	.9996	
2,4,6-Trinitrotoluene	12200000	23700000	80500000	146000000	227000000	262000000	.045	2.88	-.594	.999	
Tetryl	2050000	4060000	14900000	29900000	60000000	74300000	-.02	2.53	-.176	.9998	
m-Dinitrobenzene	2530000	5200000	18300000	35700000	68300000	80900000	-.027	3.2	-.41	.9996	
m-Nitrotoluene	21000	42200	167000	350000	704000	912000	0	.00581	0	.9997	
o-Nitrotoluene	27900	53800	227000	473000	918000	1170000	0	.0082	0	.9996	
p-Nitrotoluene	14800	30500	123000	256000	492000	601000	0	.00471	0	.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

041510ICAL

Peak Name: 13-Dinitrobenzene-d4  
 Use as Internal Standard  
 Q1/Q3 Masses: 172.05/46.10 amu  
 Peak Name: 26-Dinitrotoluene-d3  
 Use as Internal Standard  
 Q1/Q3 Masses: 184.99/155.00 amu

Peak Name: HMX  
 Internal Standard: 13-Dinitrobenzene-d4  
 Q1/Q3 Masses: 341.20/46.00 amu

Fit	Linear	Weighting	None	Iterate	No
Intercept		0.00321			
Slope		1.02			
Correlation coefficient		0.9994			
Use Area					

Peak Name: RDX  
 Internal Standard: 13-Dinitrobenzene-d4  
 Q1/Q3 Masses: 267.01/46.10 amu

Fit	Linear	Weighting	None	Iterate	No
Intercept		0.00478			
Slope		0.513			
Correlation coefficient		0.9996			
Use Area					

Peak Name: 135-Trinitrobenzene  
 Internal Standard: 13-Dinitrobenzene-d4  
 Q1/Q3 Masses: 212.97/182.80 amu

Fit	Quadratic	Weighting	None	Iterate	No
a0		0.035			
a1		7.66			
a2		-1.44			
Correlation coefficient		0.9996			
Use Area					

Peak Name: 13-Dinitrobenzene  
 Internal Standard: 13-Dinitrobenzene-d4  
 Q1/Q3 Masses: 167.95/137.90 amu

Fit	Quadratic	Weighting	None	Iterate	No
a0		-0.0265			

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*Handwritten:* 04/23/10

041510ICAL

a1	3.2				
a2	-0.41				
Correlation coefficient 0.9996					
Use Area					
Peak Name: Teteryl					
Internal Standard: 13-Dinitrobenzene-d4					
Q1/Q3 Masses: 240.95/180.80 amu					
Fit	Quadratic	Weighting	None	Iterate	No
a0	-0.0195				
a1	2.53				
a2	-0.176				
Correlation coefficient 0.9998					
Use Area					
Peak Name: 246-Trinitrotoluene					
Internal Standard: 26-Dinitrotoluene-d3					
Q1/Q3 Masses: 227.12/209.80 amu					
Fit	Quadratic	Weighting	None	Iterate	No
a0	0.0447				
a1	2.88				
a2	-0.594				
Correlation coefficient 0.9990					
Use Area					
Peak Name: Nitrobenzene					
Internal Standard: 13-Dinitrobenzene-d4					
Q1/Q3 Masses: 123.04/46.00 amu					
Fit	Linear	Weighting	None	Iterate	No
Intercept	-0.00109				
Slope	0.103				
Correlation coefficient 0.9995					
Use Area					
Peak Name: 34-dinitrotoluene					
Internal Standard: 26-Dinitrotoluene-d3					
Q1/Q3 Masses: 182.00/46.00 amu					
Fit	Linear	Weighting	None	Iterate	No
Intercept	0.00614				
Slope	0.645				

Page 2

041510ICAL

Correlation coefficient 0.9996  
Use Area

Peak Name: 26-dinitrotoluene  
Internal Standard: 26-Dinitrotoluene-d3  
Q1/Q3 Masses: 182.00/46.00 amu

Fit	Linear	Weighting	None	Iterate	No
Intercept		0.0148			
Slope		0.519			
Correlation coefficient		0.9989			
Use Area					

Peak Name: 24-dinitrotoluene  
Internal Standard: 26-Dinitrotoluene-d3  
Q1/Q3 Masses: 182.00/46.00 amu

Fit	Linear	Weighting	None	Iterate	No
Intercept		0.00445			
Slope		0.201			
Correlation coefficient		0.9975			
Use Area					

Peak Name: 4-Amino-26-dinitrotoluene  
Internal Standard: 26-Dinitrotoluene-d3  
Q1/Q3 Masses: 197.02/167.00 amu

Fit	Linear	Weighting	None	Iterate	No
Intercept		0.00386			
Slope		0.442			
Correlation coefficient		0.9991			
Use Area					

Peak Name: 2-Amino-46-dinitrotoluene  
Internal Standard: 26-Dinitrotoluene-d3  
Q1/Q3 Masses: 197.02/180.00 amu

Fit	Mean Response Factor	Weighting	None	Iterate	No
Factor	0.0187				
Standard deviation	0.000985				
%RSD	5.27				
Use Area					

Peak Name: 2-Nitrotoluene



041510ICAL

Internal Standard: 26-Dinitrotoluene-d3  
Q1/Q3 Masses: 137.00/46.00 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	-4.27e-005			
a1	0.0082			
a2	-0.000221			
Correlation coefficient 0.9996				
Use Area				

Peak Name: 4-Nitrotoluene  
Internal Standard: 26-Dinitrotoluene-d3  
Q1/Q3 Masses: 137.00/46.00 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	-5.61e-005			
a1	0.00471			
a2	-0.000341			
Correlation coefficient 0.9998				
Use Area				

Peak Name: 3-Nitrotoluene  
Internal Standard: 26-Dinitrotoluene-d3  
Q1/Q3 Masses: 137.00/46.00 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	6.71e-006			
a1	0.00581			
a2	0.000115			
Correlation coefficient 0.9997				
Use Area				

Peak Name: PETN  
Internal Standard: 26-Dinitrotoluene-d3  
Q1/Q3 Masses: 361.06/62.00 amu

Fit	Linear	Weighting	None	Iterate No
Intercept		6.18e-005		
Slope	0.00403			
Correlation coefficient 0.9995				
Use Area				

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

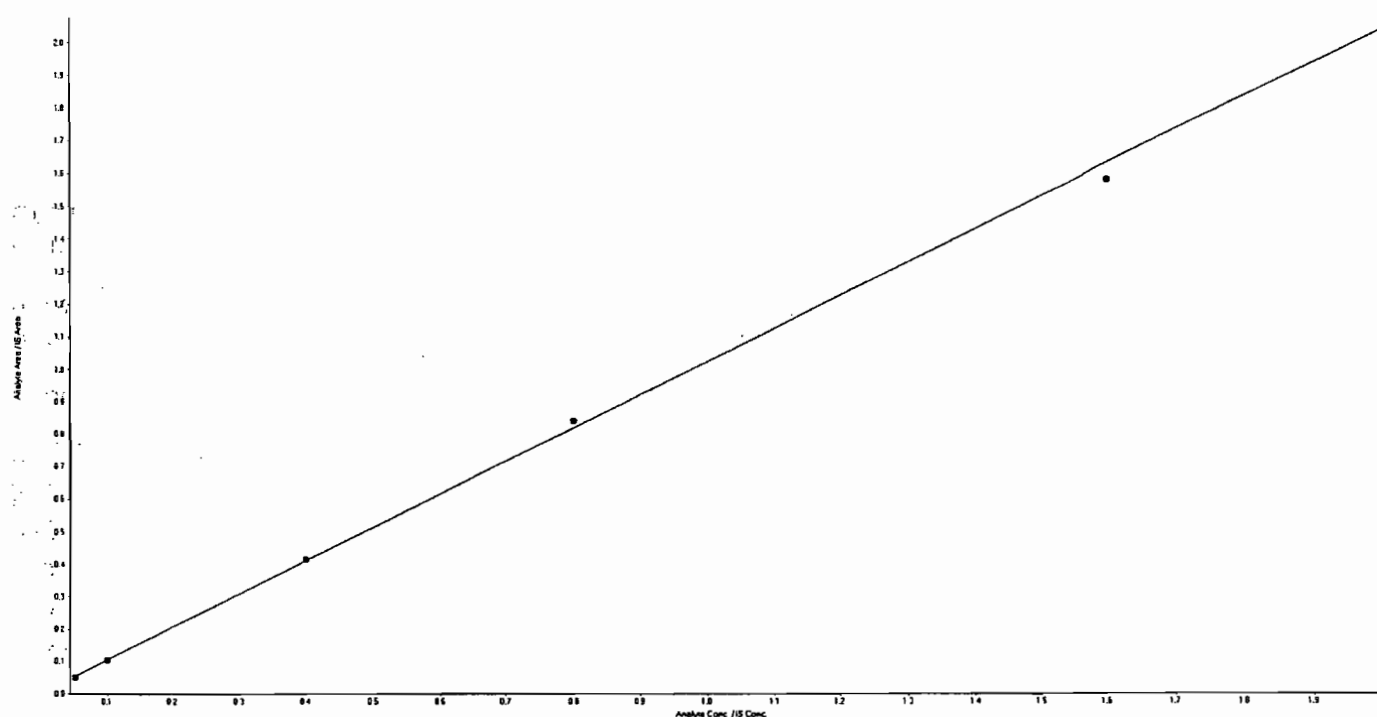
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

041510.rdb

Analyte Name: HMX

Regression Equation:  $y = 1.02x + 0.00321$  ( $r = 0.9994$ )

Expected Concentration	Calculated Concentration	% Accuracy
25	23.21	92.8
50	49.57	99.1
200	201.75	100.9
400	409.94	102.5
800	773.96	96.7
1000	1016.57	101.7



*Handwritten:* Hmx 04/23/10

*Handwritten:* Jan 4/22/10

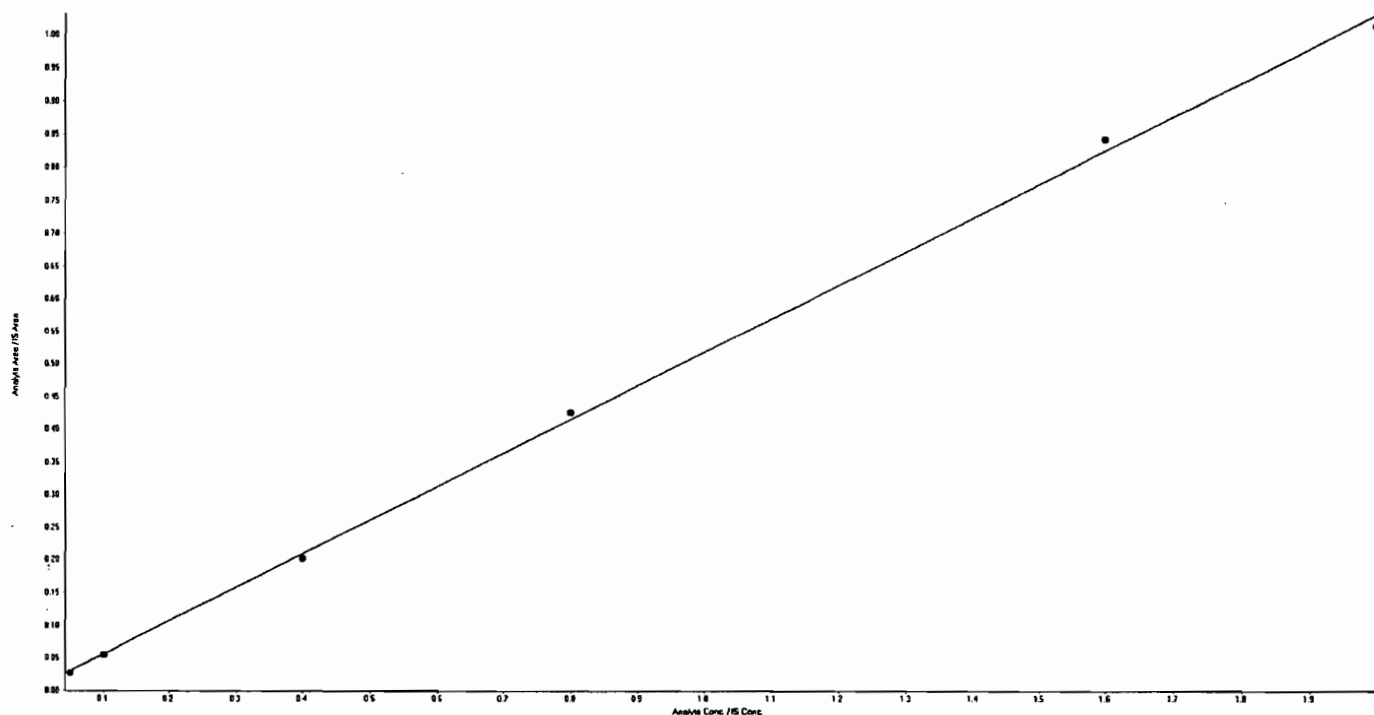
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

Analyte Name: RDX

Regression Equation:  $y = 0.513x + 0.00478$  ( $r = 0.9996$ )

Expected Concentration	Calculated Concentration	% Accuracy
25	22.20	88.8
50	48.80	97.6
200	192.85	96.4
400	410.51	102.6
800	816.45	102.1
1000	984.20	98.4



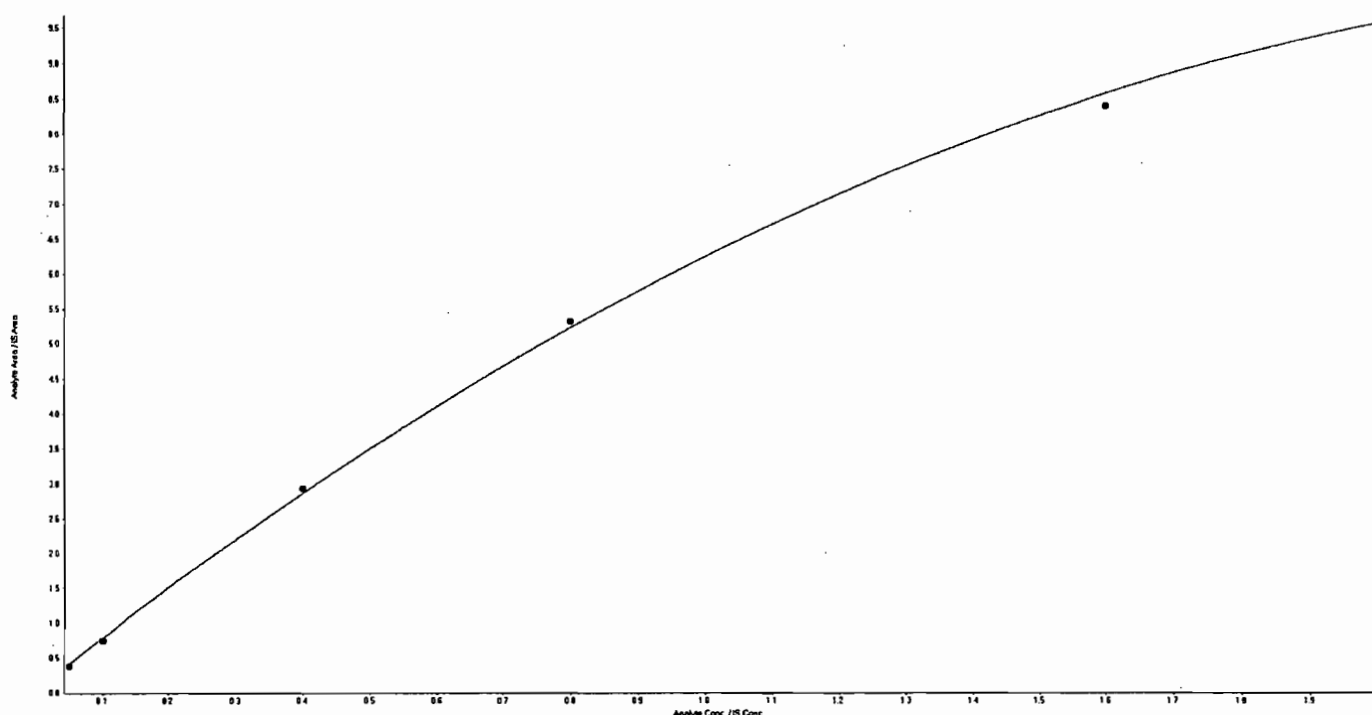
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

Analyte Name: 135-Trinitrobenzene

Regression Equation:  $y = -1.44 x^2 + 7.66 x + 0.035$  ( $r = 0.9996$ )

Expected Concentration	Calculated Concentration	% Accuracy
25	22.81	91.2
50	47.16	94.3
200	205.62	102.8
400	407.70	101.9
800	771.39	96.4
1000	1027.28	102.7



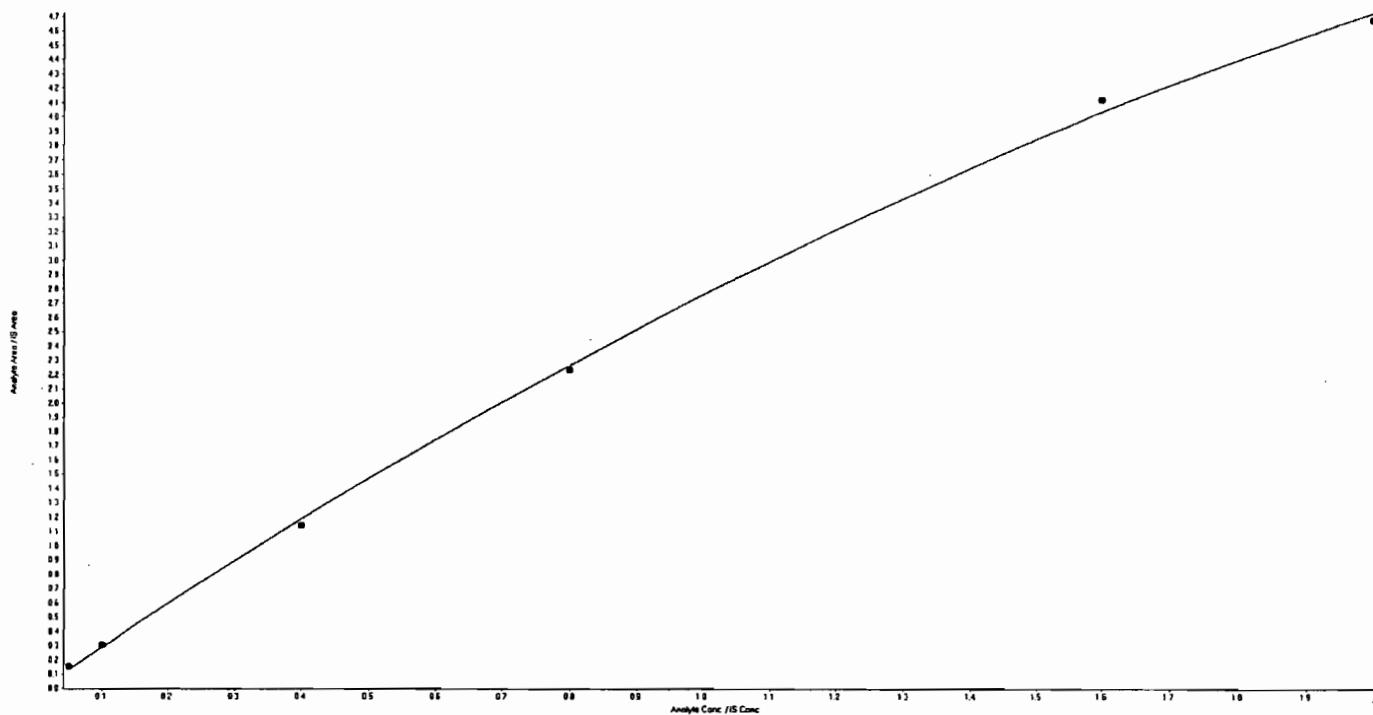
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

Analyte Name: 13-Dinitrobenzene

Regression Equation:  $y = -0.41 x^2 + 3.2 x + -0.0265$  ( $r = 0.9996$ )

Expected Concentration	Calculated Concentration	% Accuracy
25	28.40	113.6
50	53.05	106.1
200	192.08	96.0
400	393.60	98.4
800	822.94	102.9
1000	984.77	98.5



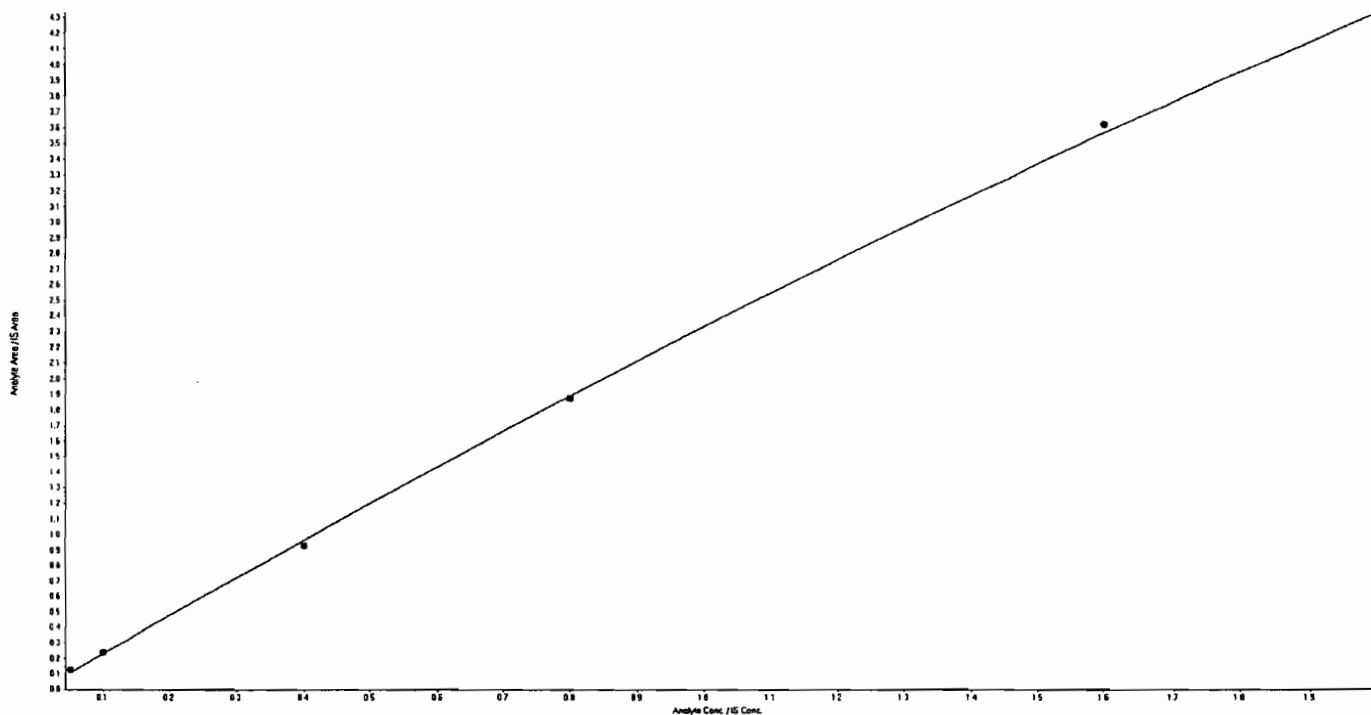
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

Analyte Name: Tetryl

Regression Equation:  $y = -0.176 x^2 + 2.53 x - 0.0195$  ( $r = 0.9998$ )

Expected Concentration	Calculated Concentration	% Accuracy
25	28.71	114.8
50	51.78	103.6
200	192.93	96.5
400	396.12	99.0
800	813.89	101.7
1000	991.58	99.2



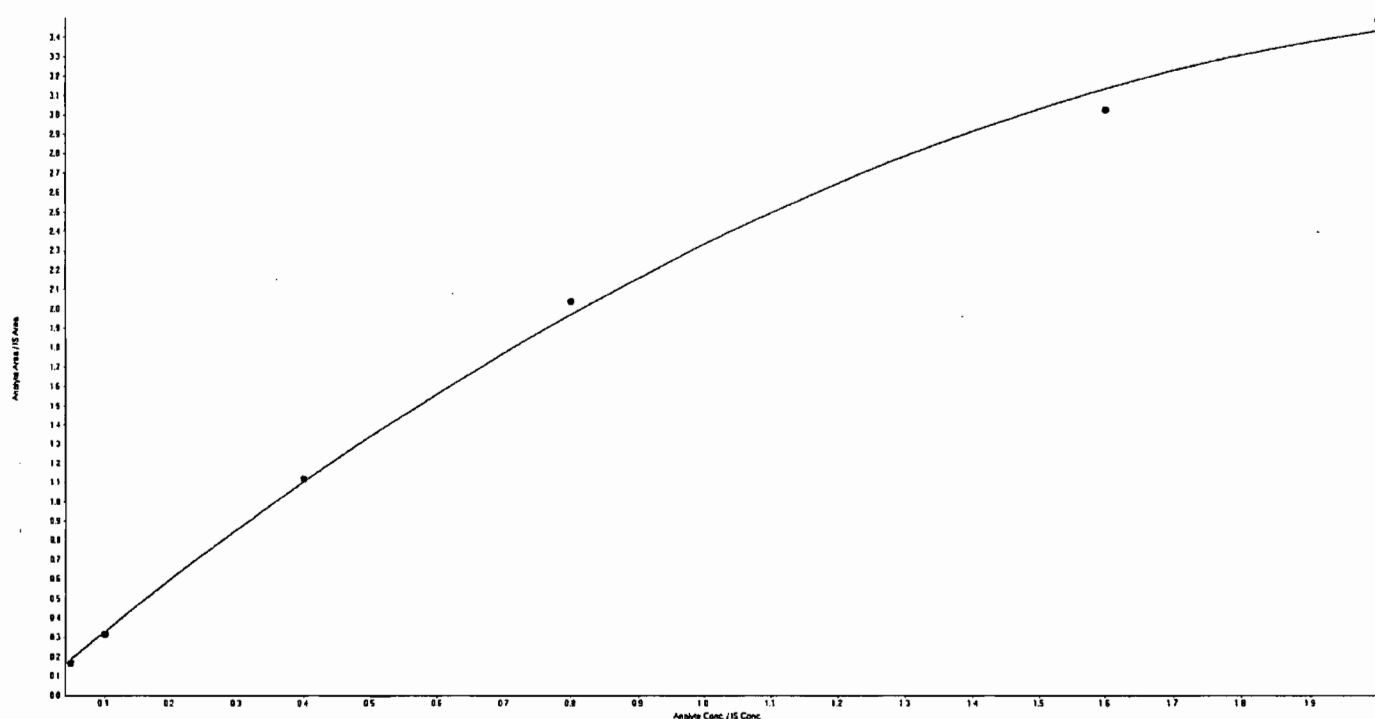
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

Analyte Name: 246-Trinitrotoluene

Regression Equation:  $y = -0.594 x^2 + 2.88 x + 0.0447$  ( $r = 0.9990$ )

Expected Concentration	Calculated Concentration	% Accuracy
25	21.79	87.1
50	47.74	95.5
200	202.87	101.4
400	417.45	104.4
800	748.56	93.6
1000	1067.10	106.7



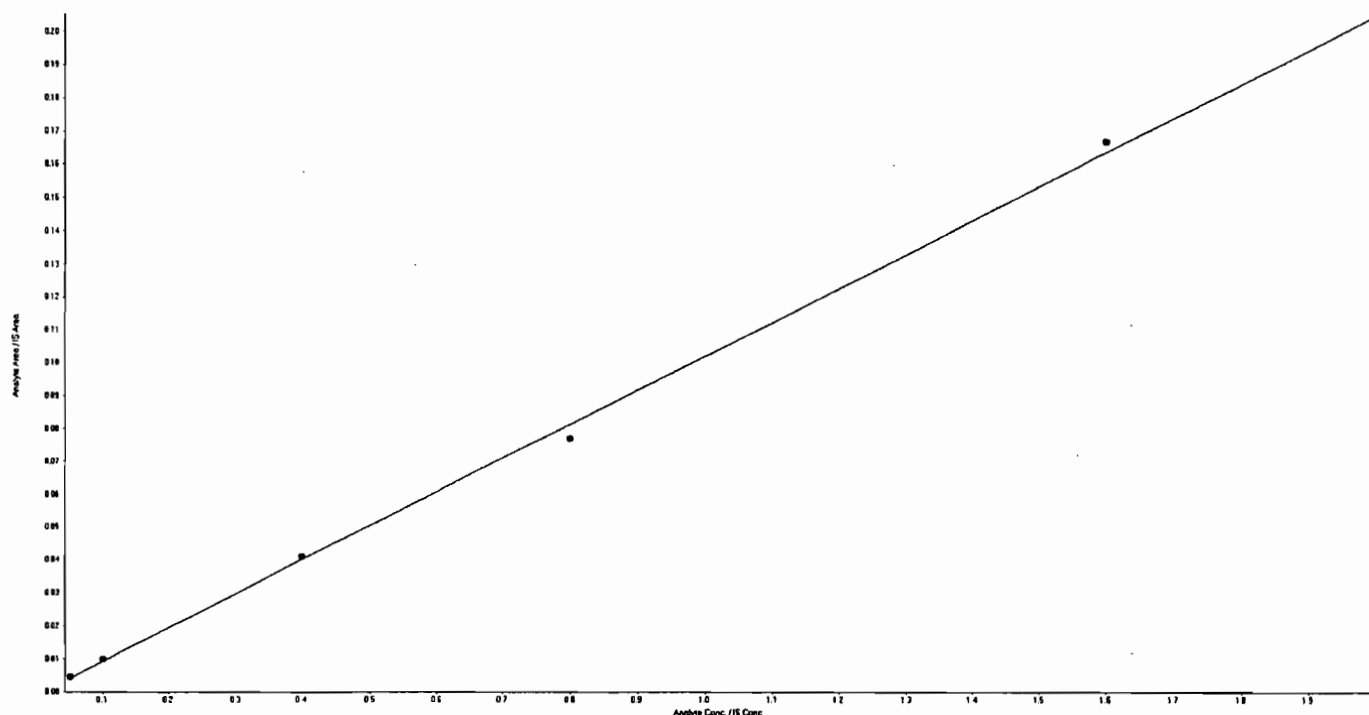
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GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

Analyte Name: Nitrobenzene

Regression Equation:  $y = 0.103x + -0.00109$  ( $r = 0.9995$ )

Expected Concentration	Calculated Concentration	% Accuracy
25	28.17	112.7
50	53.97	107.9
200	203.53	101.8
400	378.57	94.6
800	815.80	102.0
1000	994.95	99.5





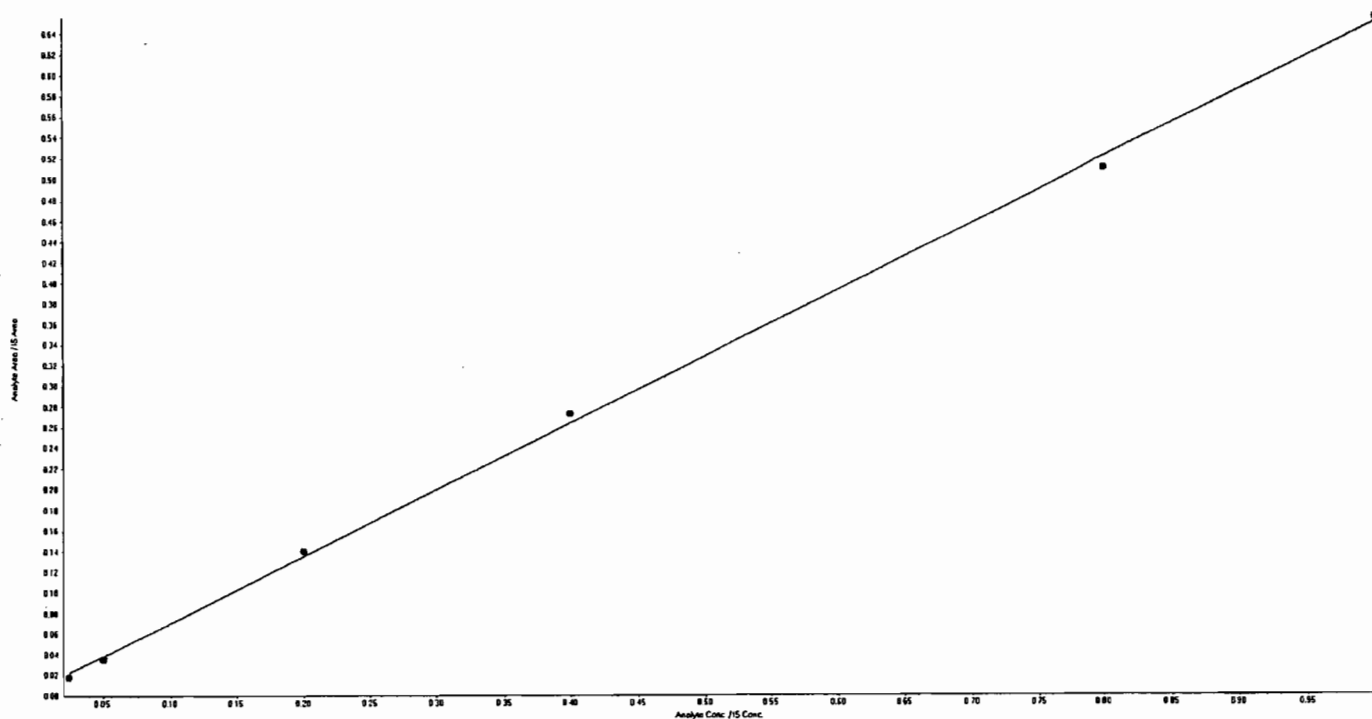
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

Analyte Name: 34-dinitrotoluene

Regression Equation:  $y = 0.645x + 0.00614$  ( $r = 0.9996$ )

Expected Concentration	Calculated Concentration	% Accuracy
12.5	8.95	71.6
25	22.89	91.6
100	103.77	103.8
200	206.98	103.5
400	391.32	97.8
500	503.60	100.7



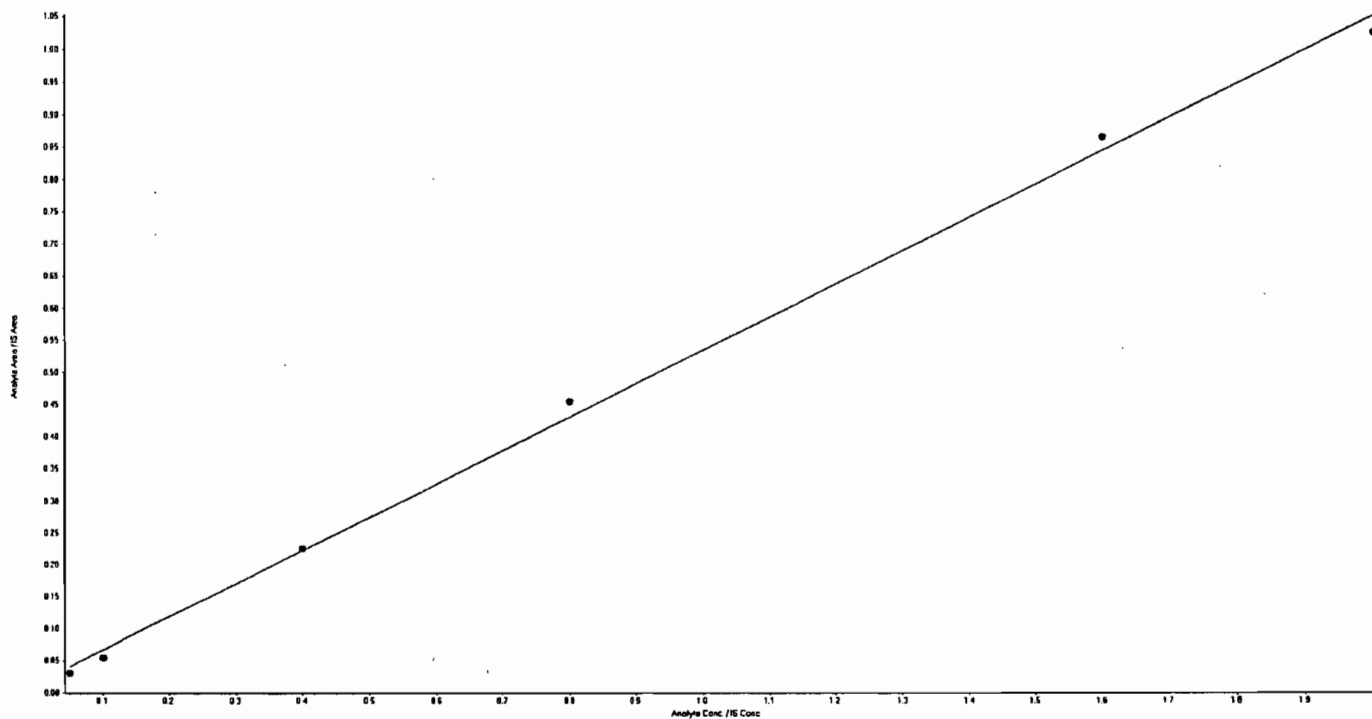
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

Analyte Name: 26-dinitrotoluene

Regression Equation:  $y = 0.519x + 0.0148$  ( $r = 0.9989$ )

Expected Concentration	Calculated Concentration	% Accuracy
25	15.37	61.5
50	38.13	76.3
200	203.13	101.6
400	423.68	105.9
800	819.75	102.5
1000	974.94	97.5



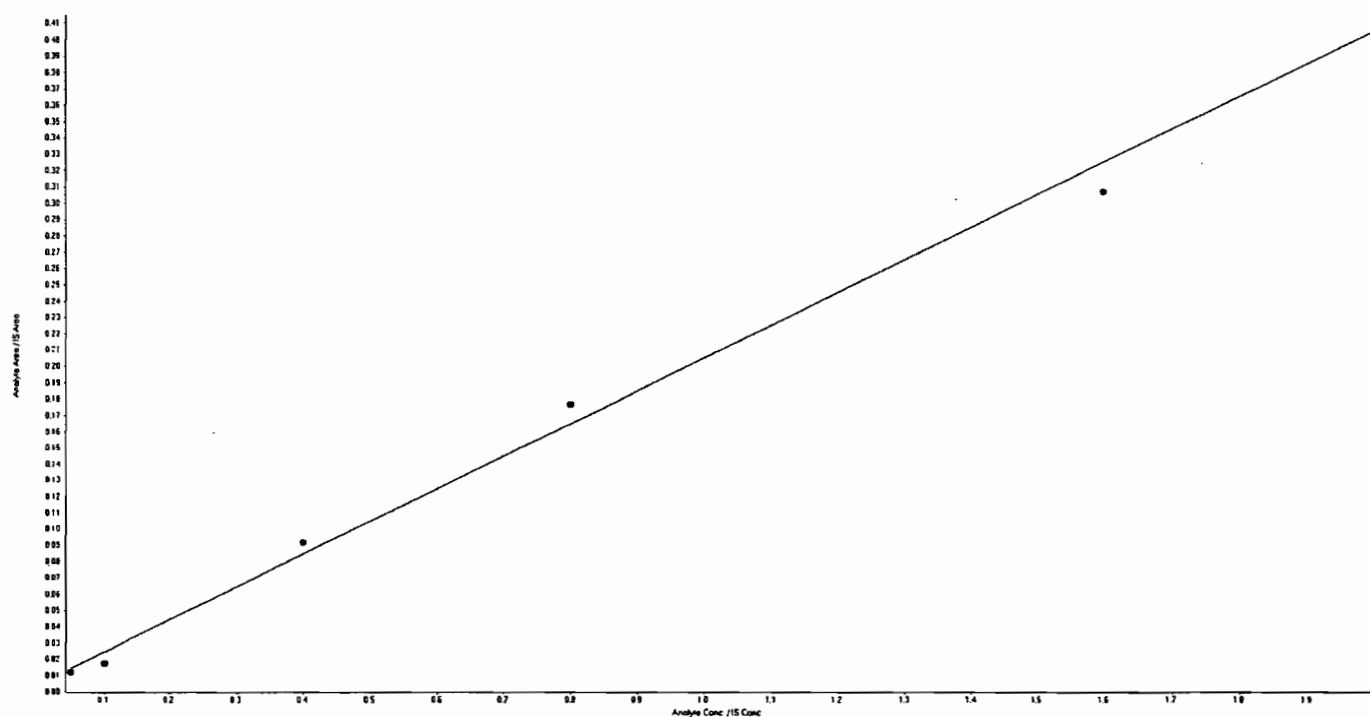
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

Analyte Name: 24-dinitrotoluene

Regression Equation:  $y = 0.201x + 0.00445$  ( $r = 0.9975$ )

Expected Concentration	Calculated Concentration	% Accuracy
25	18.76	75.0
50	32.56	65.1
200	216.87	108.4
400	430.36	107.6
800	754.67	94.3
1000	1021.77	102.2



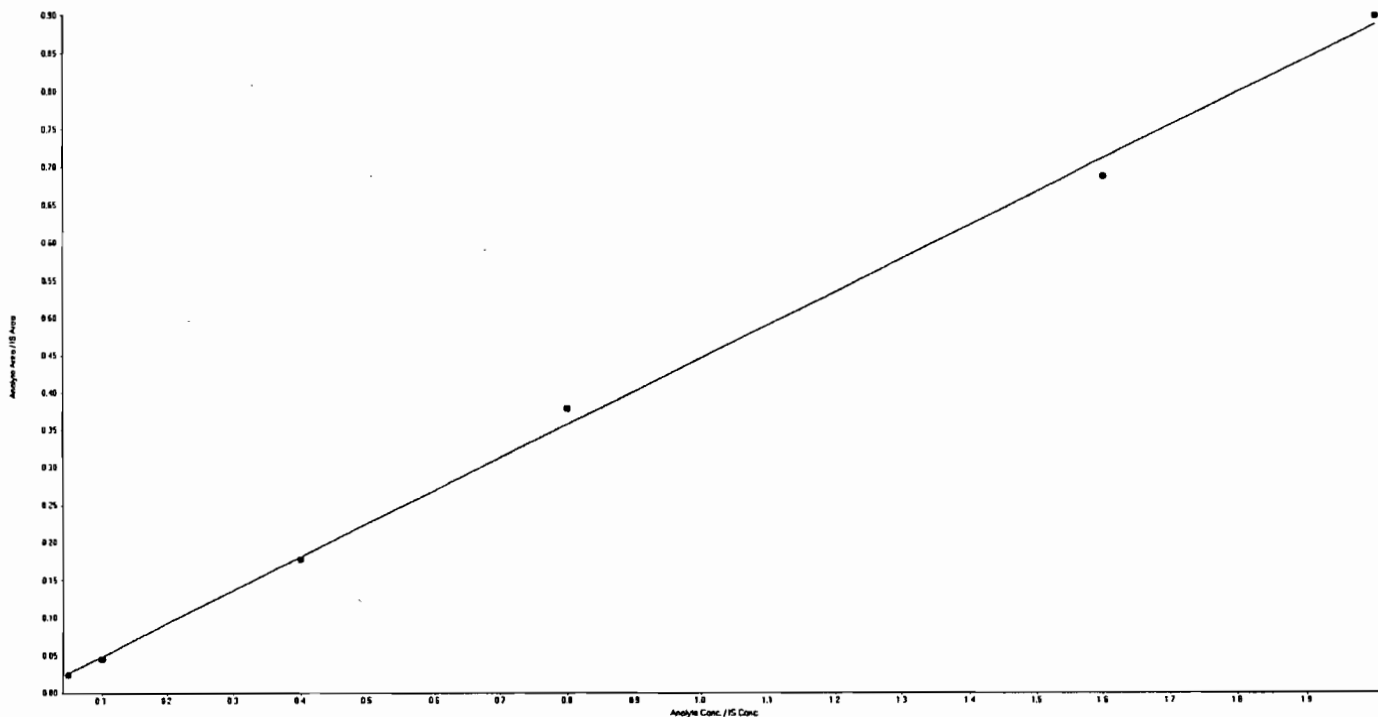
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

Analyte Name: 4-Amino-2,6-dinitrotoluene

Regression Equation:  $y = 0.442x + 0.00386$  ( $r = 0.9991$ )

Expected Concentration	Calculated Concentration	% Accuracy
25	22.27	89.1
50	46.50	93.0
200	196.33	98.2
400	423.88	106.0
800	772.93	96.6
1000	1013.08	101.3



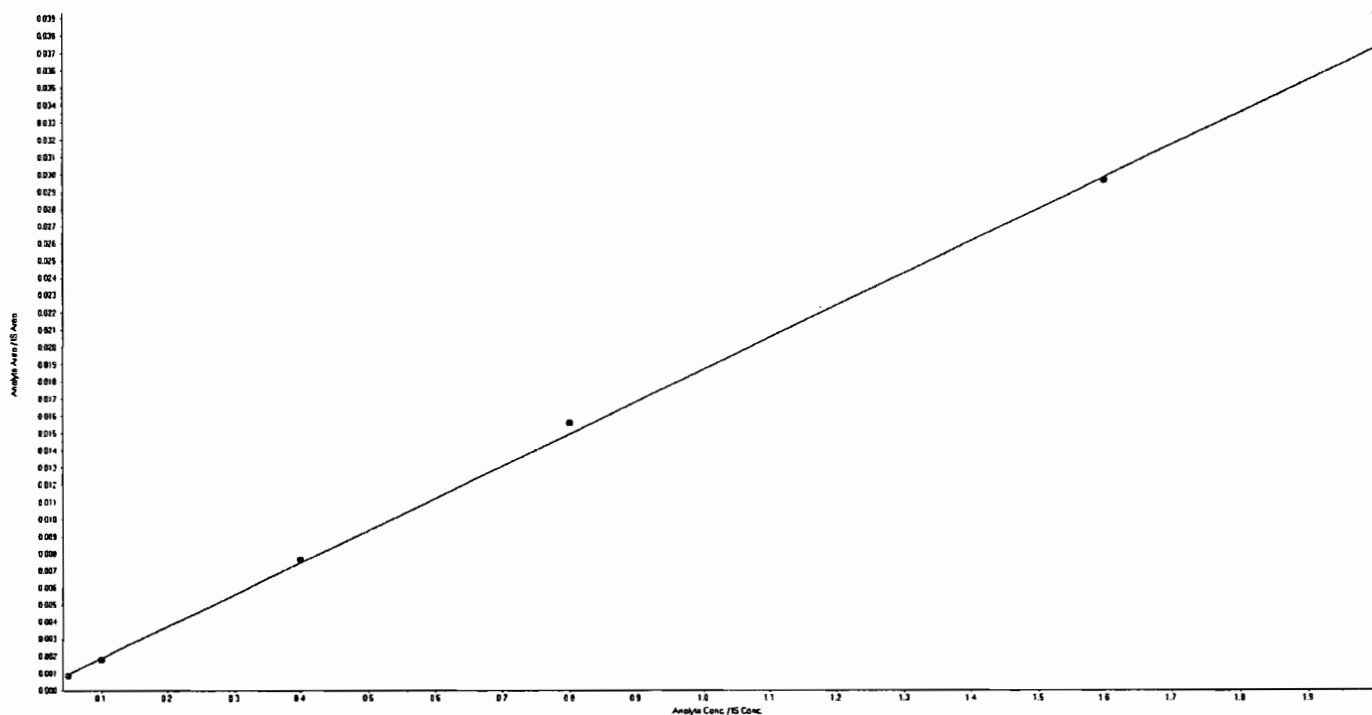
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GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

Analyte Name: 2-Amino-4,6-dinitrotoluene

Regression Equation:  $y = 0.0187x$  (std. dev. = 0.000985)

Expected Concentration	Calculated Concentration	% Accuracy
25	22.74	91.0
50	48.81	97.6
200	204.97	102.5
400	417.42	104.4
800	795.55	99.4
1000	1051.25	105.1



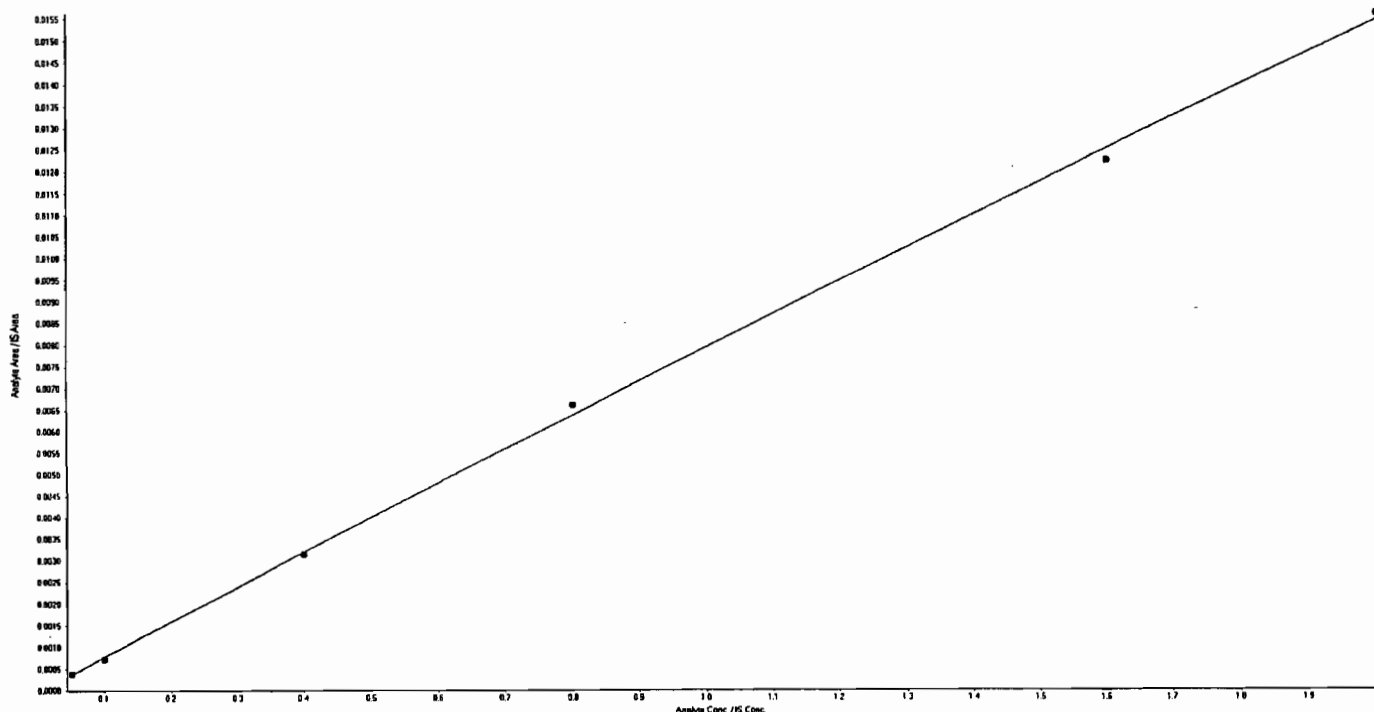
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GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

Analyte Name: 2-Nitrotoluene

Regression Equation:  $y = -0.000221 x^2 + 0.0082 x + -4.27e-005$  ( $r = 0.9996$ )

Expected Concentration	Calculated Concentration	% Accuracy
25	26.12	104.5
50	46.36	92.7
200	196.64	98.3
400	414.45	103.6
800	781.93	97.7
1000	1009.54	101.0



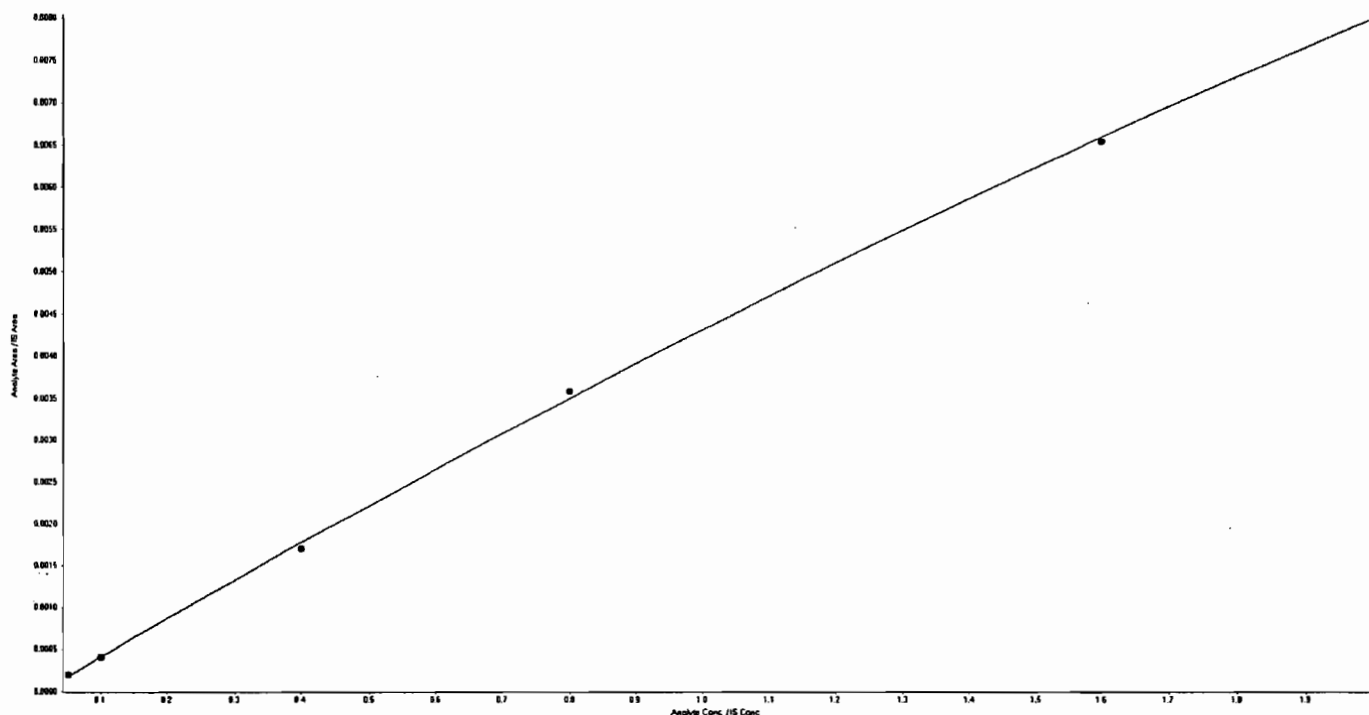
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

Analyte Name: 4-Nitrotoluene

Regression Equation:  $y = -0.000341 x^2 + 0.00471 x + -5.61e-005$  ( $r = 0.9998$ )

Expected Concentration	Calculated Concentration	% Accuracy
25	27.70	110.8
50	49.39	98.8
200	191.73	95.9
400	410.15	102.5
800	792.37	99.0
1000	1003.71	100.4



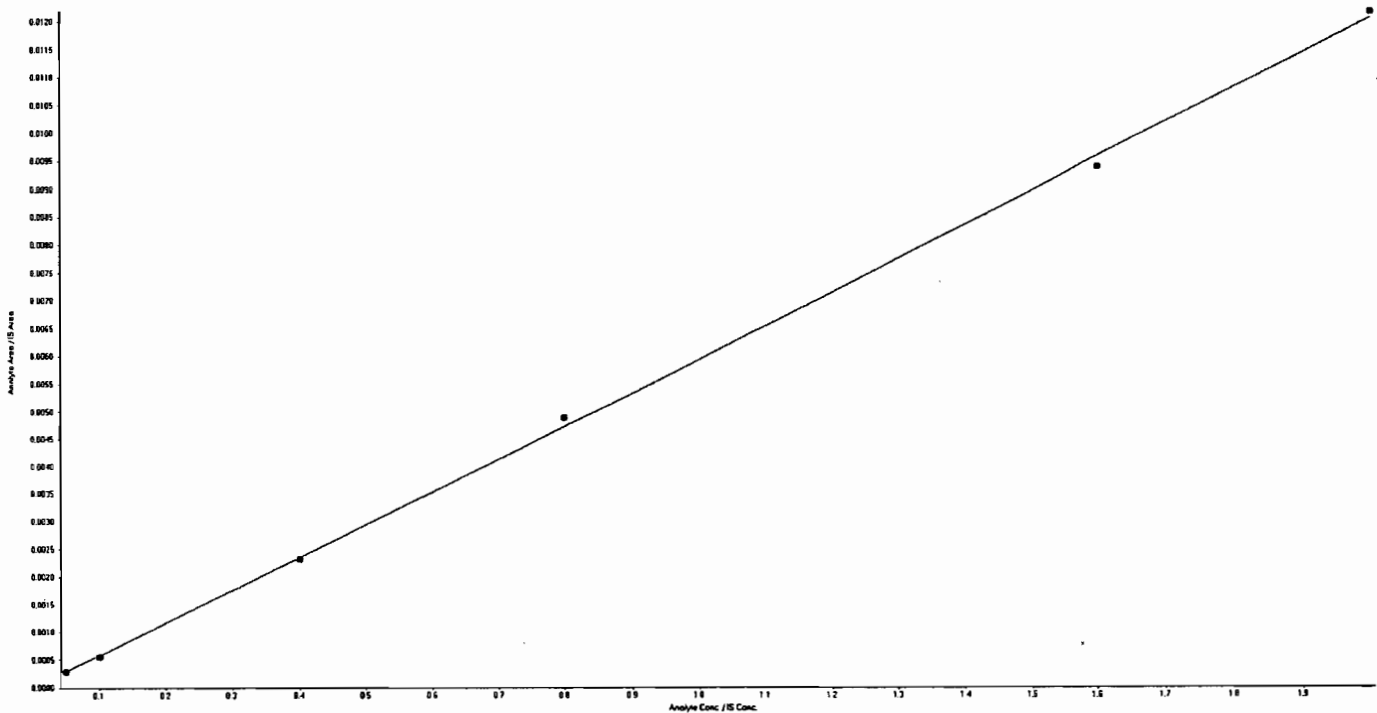
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GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

Analyte Name: 3-Nitrotoluene

Regression Equation:  $y = 0.000115 x^2 + 0.00581 x + 6.71e-006$  ( $r = 0.9997$ )

Expected Concentration	Calculated Concentration	% Accuracy
25	24.38	97.5
50	47.62	95.2
200	197.68	98.8
400	413.33	103.3
800	783.56	97.9
1000	1008.41	100.8





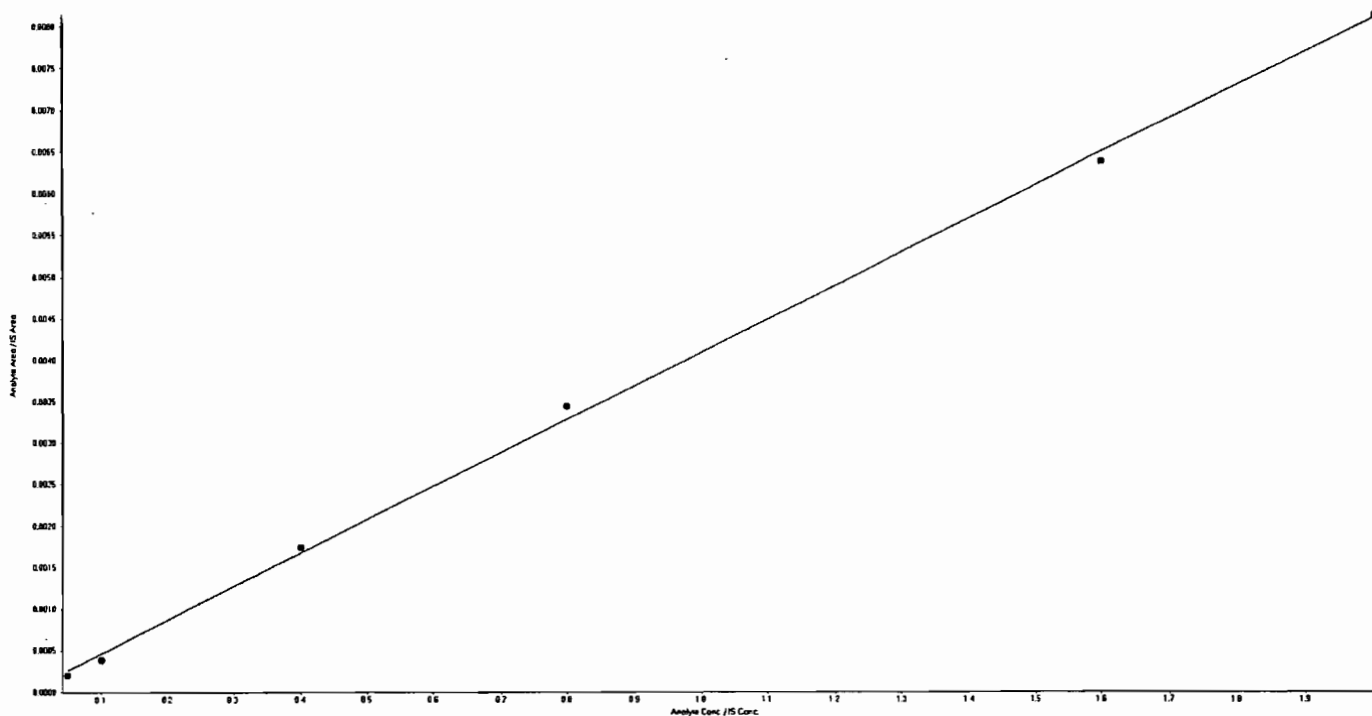
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

Analyte Name: PETN

Regression Equation:  $y = 0.00403x + 6.18e-005$  ( $r = 0.9995$ )

Expected Concentration	Calculated Concentration	% Accuracy
25	17.73	70.9
50	41.26	82.5
200	208.61	104.3
400	419.29	104.8
800	784.66	98.1
1000	1003.45	100.3



GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

Explosives Initial Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2199

Lab Code: GEL

GEL Sample ID: WXXICV

GEL Data File EXP0415010.wiff

Analysis Date: 15-APR-10 14:01

LCMSMS ID: 1189

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	577	96	
2,4,6-Trinitrotoluene	600	546	91	
2,4-Dinitrotoluene	600	585	98	
2,6-Dinitrotoluene	600	553	92	
2-Amino-4,6-dinitrotoluene	600	500	83	
3,4-Dinitrotoluene	300	294	98	
4-Amino-2,6-dinitrotoluene	600	575	96	
HMX	600	488	81	
Nitrobenzene	600	623	104	
PETN	600	536	89	
RDX	600	589	98	
Tetryl	600	585	98	
m-Dinitrobenzene	600	591	99	
m-Nitrotoluene	600	495	83	
o-Nitrotoluene	600	526	88	
p-Nitrotoluene	600	570	95	

Recovery Limits:

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

Other Target Analytes 80-120%

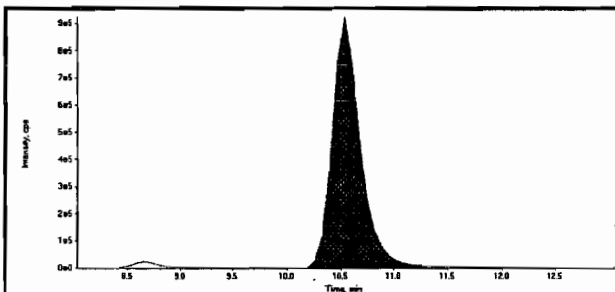
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

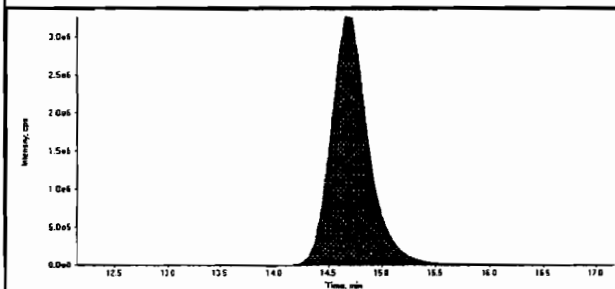
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

Data File	EXP0415010.wiff	Acquisition Date	4/15/2010 2:01:01 PM
Sample Name	WXX100415-56ICV	Acquisition Method	8321.dam
Batch/Dilution/Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



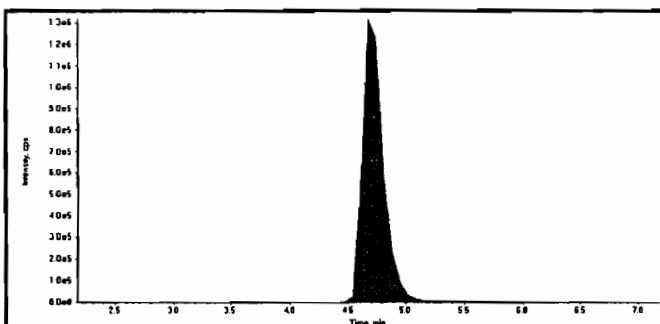
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.50
Actual RT:	10.50
Area Counts:	16900000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries

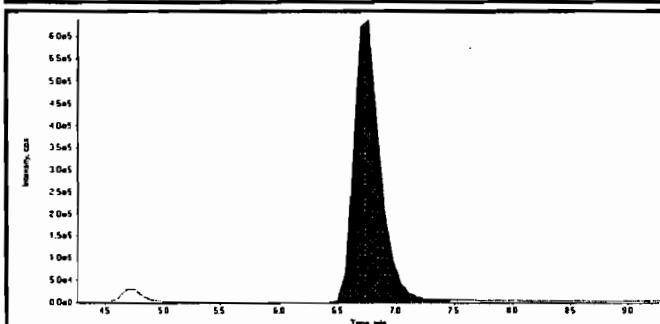


Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.60
Actual RT:	14.60
Area Counts:	80800000.00
Manual Modification	Yes
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries



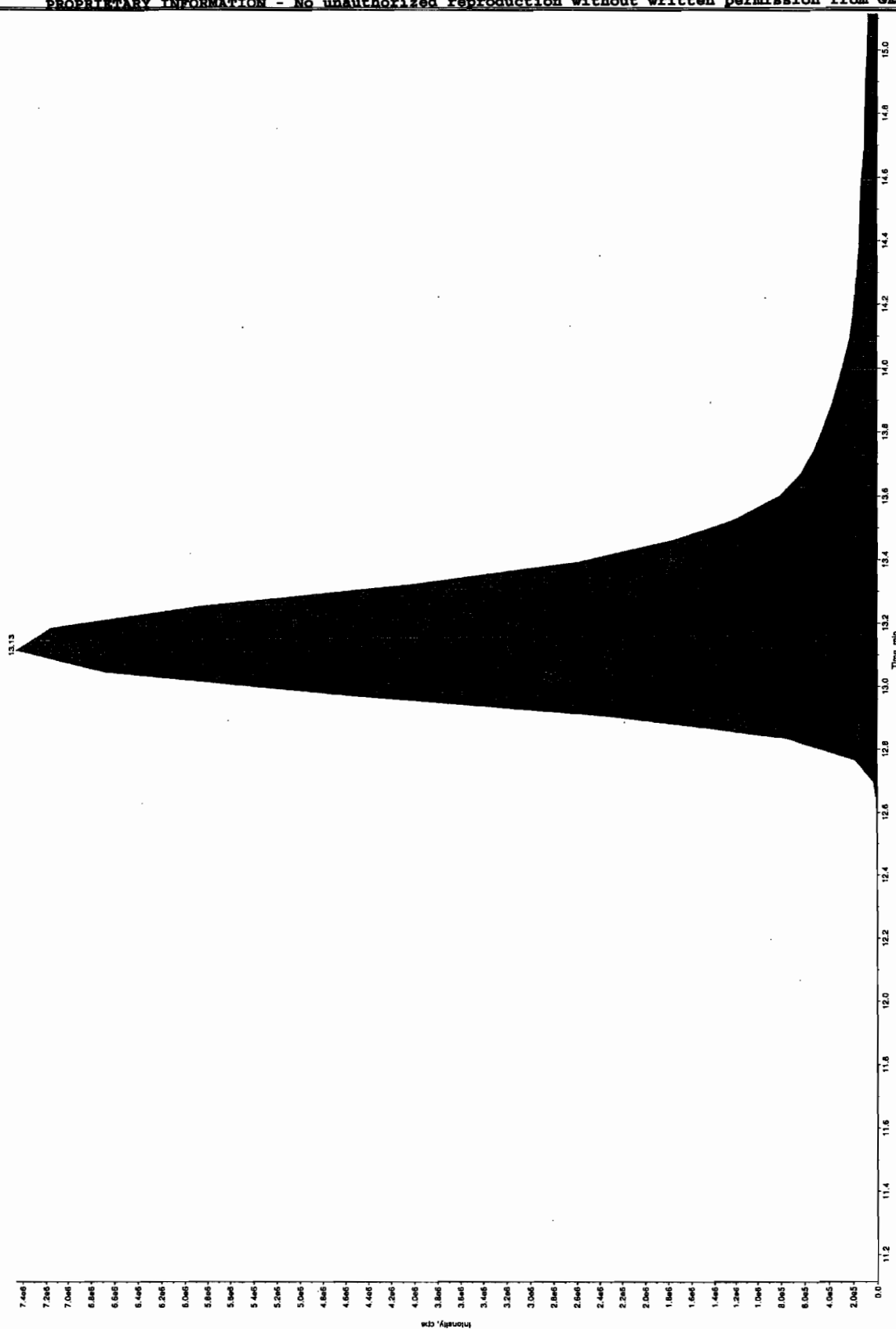
Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.67
Actual RT:	4.67
Area Counts:	1.69e+007
Manual Modification	No
Amount:	488. (ng/mL)
% Accuracy:	81.40



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.77
Actual RT:	6.77
Area Counts:	1.03e+007
Manual Modification	No
Amount:	589. (ng/mL)
% Accuracy:	98.20

*Handwritten signature and date:*  
4/23/10

Before Jan 4/23/10



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

after scan 4/23/10

Sample Name: WAX100415.560V Sample ID: JILIR File: EXP0415010.wif

Peak Name: 744.7Tributylamine Mass(es): 227.17093.8 amu

Command: LCMSER.C Annotation: -

Sample Type: 1 QC

Concentration: 600. ng/mL

Calculated Conc: 471.72010 ng/mL

Acq. Time: 2:01:01 PM

744.7

7086

6846

6686

6466

6206

6006

5806

5606

5406

5206

5006

4806

4606

4406

4206

4006

3806

3606

3406

3206

3006

2806

2606

2406

2206

2006

1806

1606

1406

1206

1006

8005

6005

4005

2005

13.13

13.0

12.8

12.6

12.4

12.2

12.0

11.8

11.6

11.4

11.2

11.0

10.8

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1206

1006

8005

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3006

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2606

2406

2206

2006

1806

1606

1406

1206

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8005

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2005

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6846

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6466

6206

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5806

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415010.wiff	<b>Acquisition Date</b>	4/15/2010 2:01:01 PM
<b>Sample Name</b>	WXX100415-56ICV	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	Expected RT:	9.00
	Actual RT:	9.00
	Area Counts:	1.18e+008
	Manual Modification	No
	Amount:	577. (ng/mL)
	% Accuracy:	96.20

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	Expected RT:	10.7
	Actual RT:	10.7
	Area Counts:	5.39e+007
	Manual Modification	No
	Amount:	591. (ng/mL)
	% Accuracy:	98.60

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	Expected RT:	10.7
	Actual RT:	10.7
	Area Counts:	4.57e+007
	Manual Modification	No
	Amount:	585. (ng/mL)
	% Accuracy:	97.50

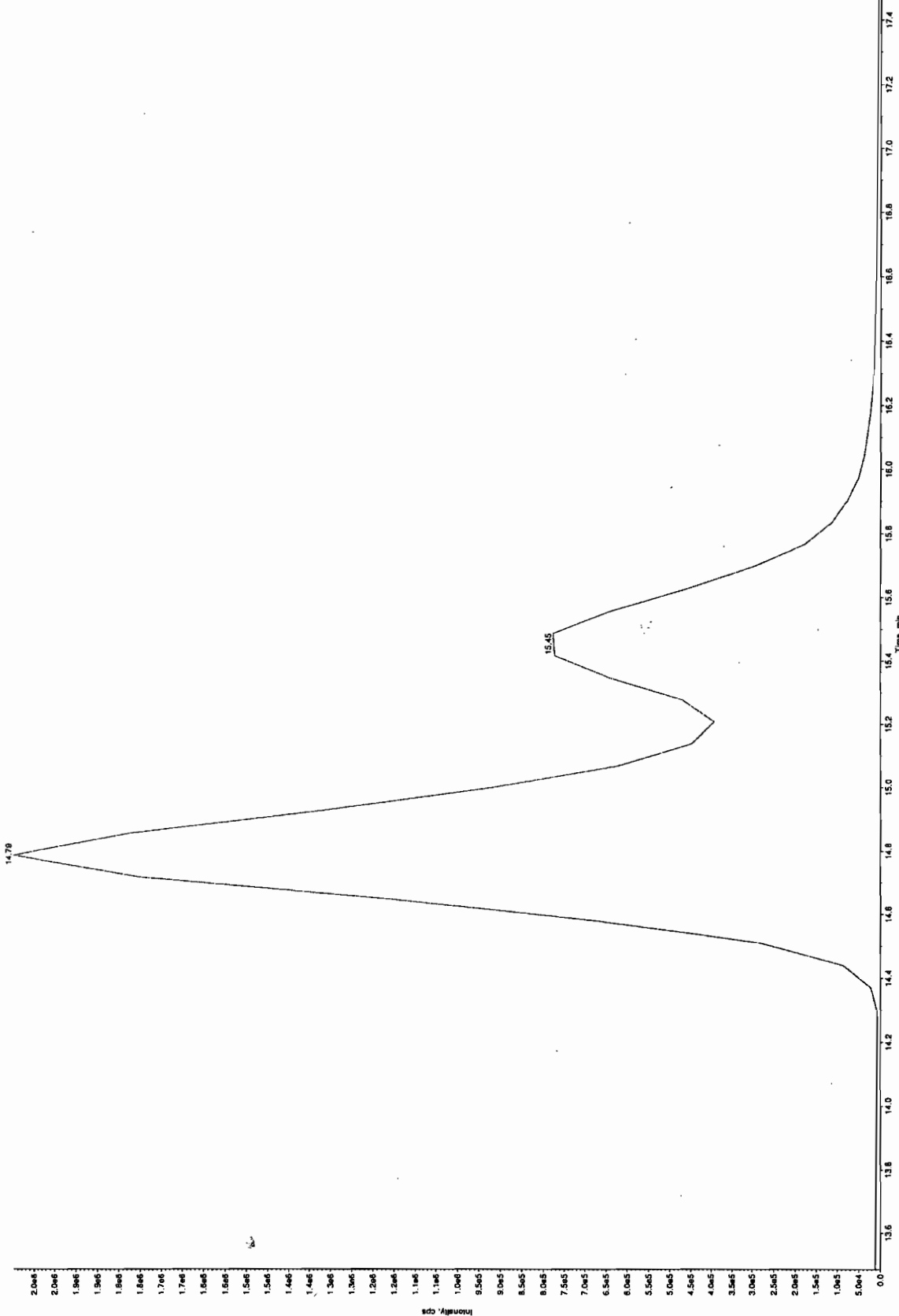
  

	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	Expected RT:	13.1
	Actual RT:	13.1
	Area Counts:	2.01e+008
	Manual Modification	Yes
	Amount:	546. (ng/mL)
	% Accuracy:	91.00

Before 4/23/10

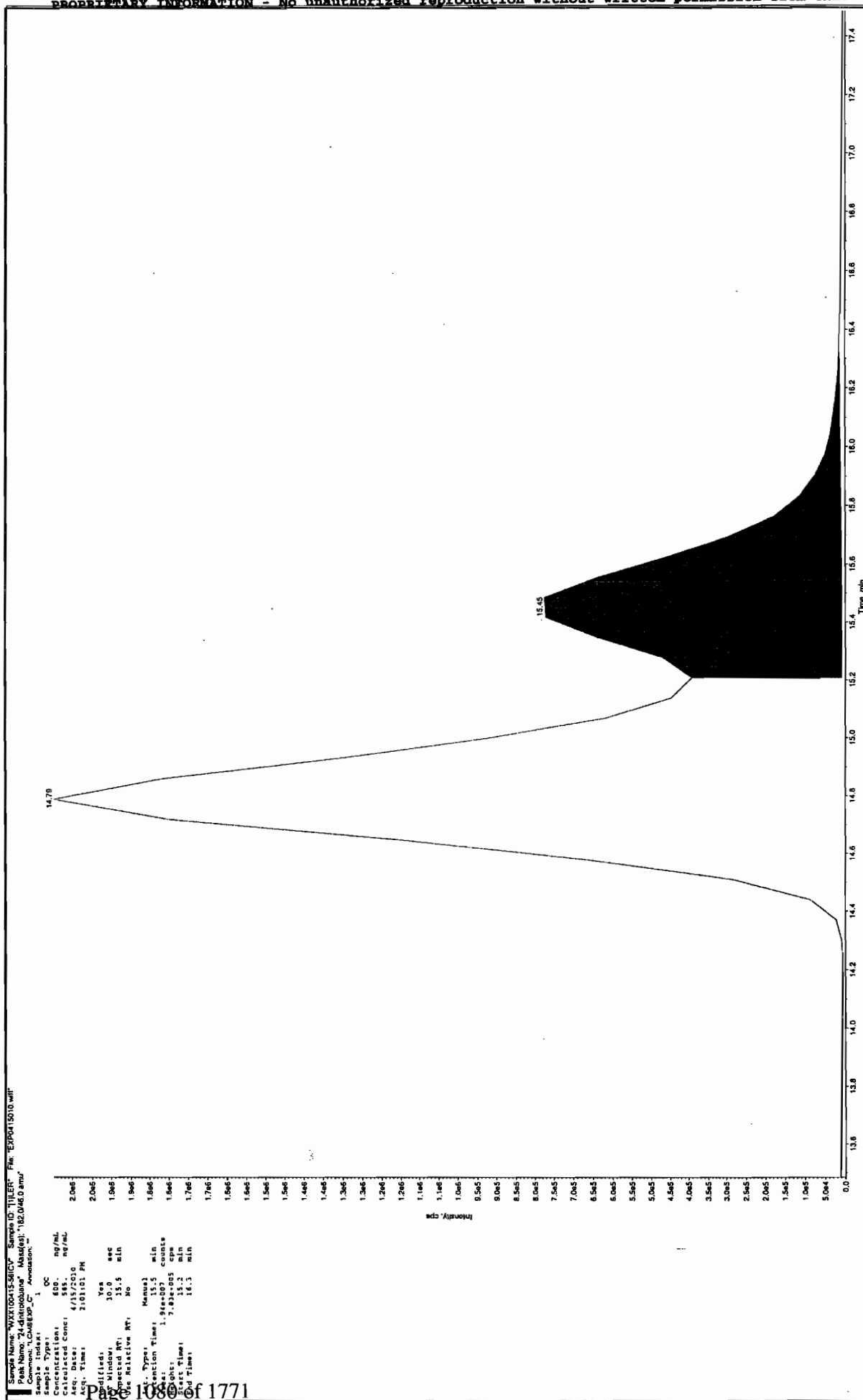
Sample Name: "WYV0015-5007" Sample ID: "JULIF" File: "EXP0415010.mif"  
 Peak Name: "24,4-dichlorobenzene" Method: "182.0460 0.00"  
 Comment: "LCMS-ESP\_C" Annotation: "

Sample Index: 1  
 Sample Type: GC  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 4/15/2010  
 Acq. Time: 2:01:01 PM  
 Valid: No





after scan 4/23/10



GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415010.wiff	<b>Acquisition Date</b>	4/15/2010 2:01:01 PM
<b>Sample Name</b>	WXX100415-56ICV	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	<b>Expected RT:</b>	11.8
	<b>Actual RT:</b>	11.8
	<b>Area Counts:</b>	2.16e+006
	<b>Manual Modification</b>	No
	<b>Amount:</b>	623. (ng/mL)
	<b>% Accuracy:</b>	104.00

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	<b>Expected RT:</b>	12.0
	<b>Actual RT:</b>	12.0
	<b>Area Counts:</b>	3.11e+007
	<b>Manual Modification</b>	No
	<b>Amount:</b>	294. (ng/mL)
	<b>% Accuracy:</b>	98.00

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	<b>Expected RT:</b>	14.8
	<b>Actual RT:</b>	14.8
	<b>Area Counts:</b>	4.76e+007
	<b>Manual Modification</b>	No
	<b>Amount:</b>	553. (ng/mL)
	<b>% Accuracy:</b>	92.10

	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	<b>Expected RT:</b>	15.5
	<b>Actual RT:</b>	15.5
	<b>Area Counts:</b>	1.94e+007
	<b>Manual Modification</b>	Yes
	<b>Amount:</b>	585. (ng/mL)
	<b>% Accuracy:</b>	97.50

Before Jan 4/23/10

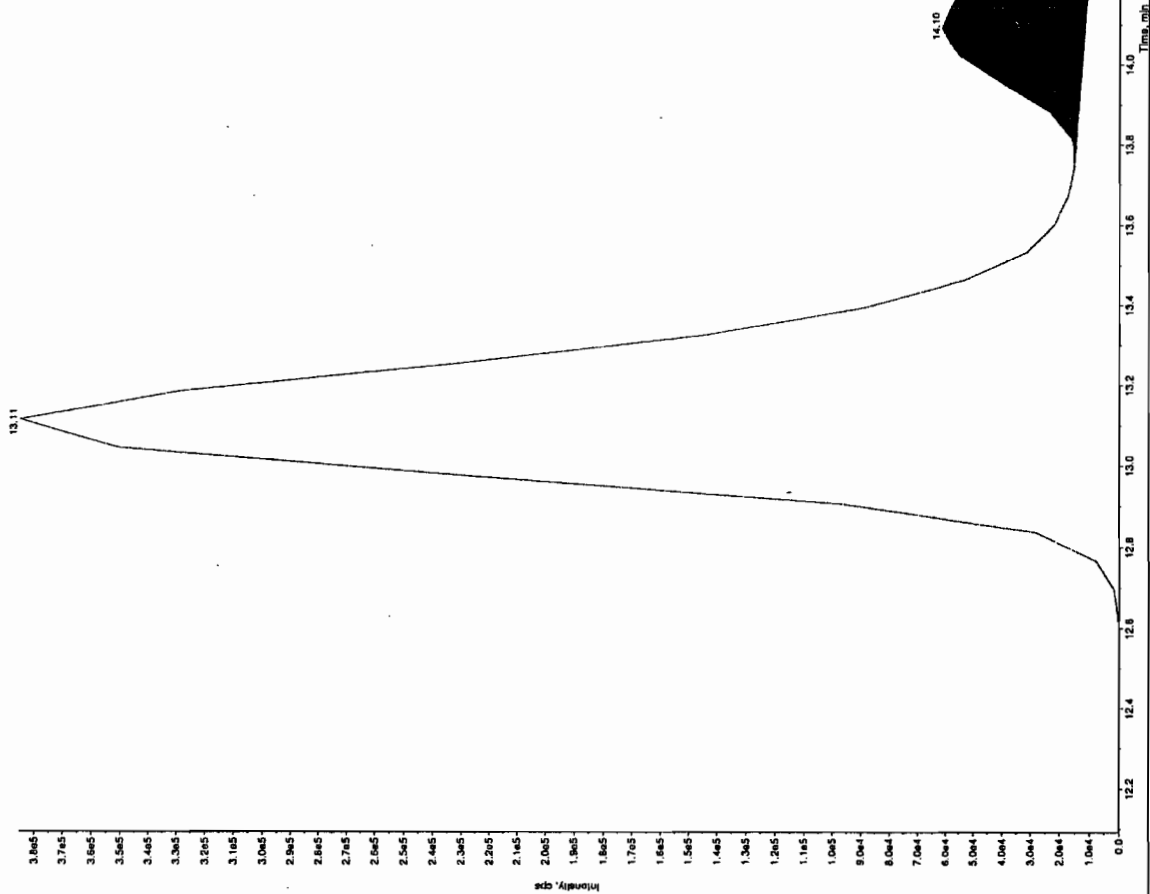
Sample Name: "WXX10015-560V" Sample ID: "JULIEP" File: "EXP0415010.wif"  
 Sample Path: "C:\Program Files\Agilent\MSDCHEM\Sample" Method: "197.0100.00.ms" Annotation: "

Sample Index:  
 Sample Type: GC  
 Concentration: 600 ng/mL  
 Acquisition Date: 4/15/2010  
 Acquisition Time: 2:01:01 PM  
 Acquisition Time: 3:7:55

Peak:  
 Peak Name: InertialOven - 10A  
 n. Peak Height: 100.00 cps  
 n. Peak Width: 0.00 sec  
 Peak Width: 10.0 sec  
 Peak Area: 14.1 min  
 Peak RT: 14.1 min  
 Relative RT: No

Retention Time: 14.1 min  
 Weight: 1.01e+006 counts  
 Weight: 5.00e+004 cps  
 Weight: 11.1 min  
 Weight: 14.6 min

Page 1/3

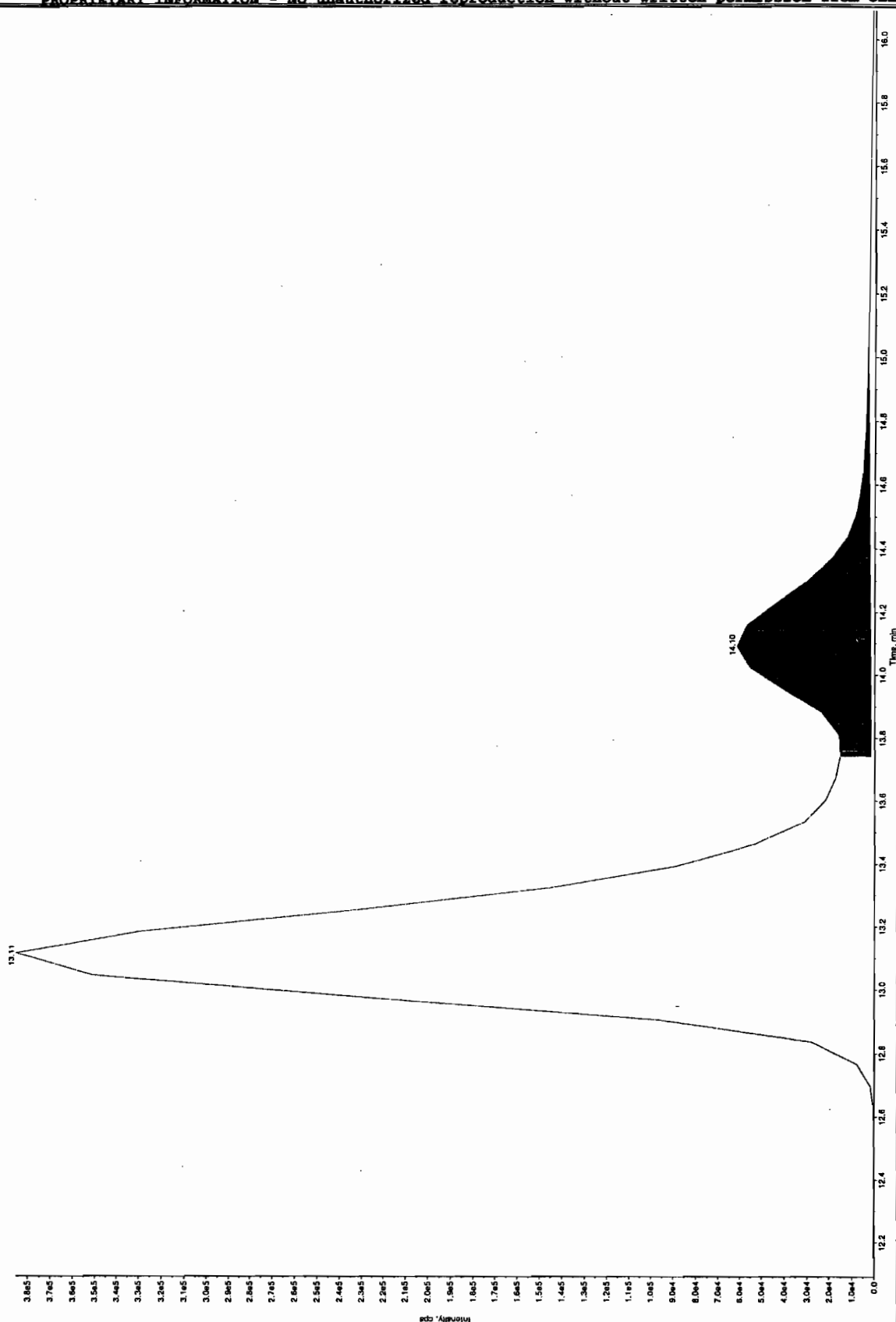


\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

after Jan 4/23/10

Sample Name: WAXT00115-560V Sample ID: TILIER File: EXP0115010.MIF  
 Peak Name: 2-Amino-46-dimethylbenzene Mass(es): 197.0180.0 amu  
 Comment: LCMSMS\_C Annotation: "

Sample Index: 1  
 Concentration: 500.0 ng/mL  
 Acq. Date: 4/11/2010  
 Acq. Time: 21:01:01 PM  
 Amplified: Yes  
 MS Window: 30.0 sec  
 Expected RT: 11.1 min  
 Observed RT: 11.7 min  
 MS Resolution: 10000  
 Int. Type: Manual  
 Acquisition Time: 11.7 min  
 Delay Time: 5.96e+004 cps  
 Wait Time: 15.0 min



GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415010.wiff	<b>Acquisition Date</b>	4/15/2010 2:01:01 PM
<b>Sample Name</b>	WXX100415-56ICV	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.1
	Actual RT:	13.1
	Area Counts:	4.14e+007
	Manual Modification	No
	Amount:	575. (ng/mL)
	% Accuracy:	95.80

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.1
	Actual RT:	14.1
	Area Counts:	1.51e+006
	Manual Modification	Yes
	Amount:	500. (ng/mL)
	% Accuracy:	83.30

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	17.6
	Actual RT:	17.6
	Area Counts:	6.74e+005
	Manual Modification	No
	Amount:	526. (ng/mL)
	% Accuracy:	87.70

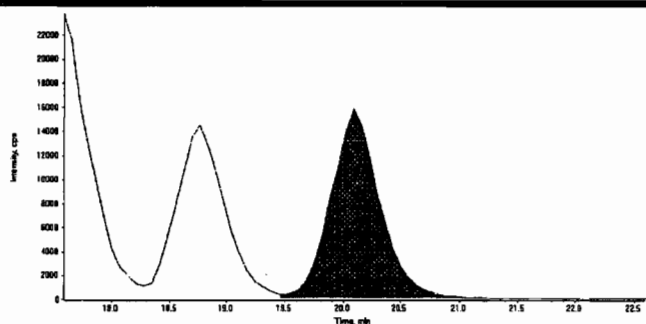
  

	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	18.8
	Actual RT:	18.8
	Area Counts:	3.94e+005
	Manual Modification	No
	Amount:	570. (ng/mL)
	% Accuracy:	95.00

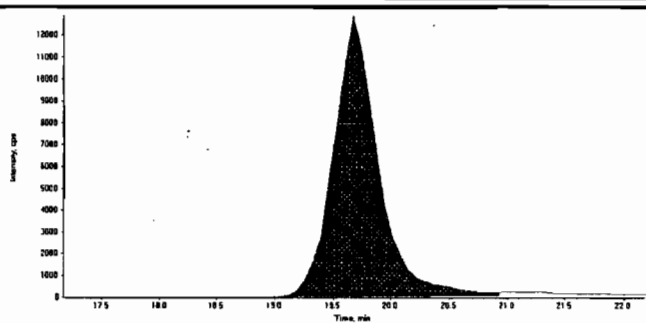
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GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

Data File	EXP0415010.wiff	Acquisition Date	4/15/2010 2:01:01 PM
Sample Name	WXX100415-56ICV	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



Compound Name:	3-Nitrotoluene (137.0/46.0 amu)
Expected RT:	20.1
Actual RT:	20.1
Area Counts:	4.75e+005
Manual Modification	No
Amount:	495. (ng/mL)
% Accuracy:	82.50



Compound Name:	PETN (361.1/62.0 amu)
Expected RT:	19.7
Actual RT:	19.7
Area Counts:	3.54e+005
Manual Modification	No
Amount:	536. (ng/mL)
% Accuracy:	89.30

GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis 04/15/10  
 Time of Injection 1401  
 Standard Number WXX100415-56ICV  
 Data File EXP0415010a

HMX	81.4
RDX	98.2
135-Trinitrobenzene	96.2
13-Dinitrobenzene	98.6
Tetryl	97.5
246-Trinitrotoluene	91.0
Nitrobenzene	104.0
34-dinitrotoluene	98.0
26-dinitrotoluene	92.1
24-dinitrotoluene	97.5
4-Amino-26-dinitrotoluene	95.8
2-Amino-46-dinitrotoluene	83.3
2-Nitrotoluene	87.7
4-Nitrotoluene	95.0
3-Nitrotoluene	82.5
PETN	89.3

TOTAL

✓ 1488.1

*Handwritten:* 1488.1 04/23/10

AVERAGE

✓ 93.0

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

*Handwritten:* Jan 4/22/10

# Explosives Initial Calibration

Lab Name: GEL Laboratories LLC

GEL Job No: 10-2199

Lab Code: GEL

Run Date: 09-APR-10 15-APR-10 20-APR-10

LCMSMS Instrument ID: LCMSMS3

Method: 8321A Modified

HPLC Column: Phenomenex Ultracarb 5 ODS(20)

Calibration Type: Average RF

	50	51	52	53	54	55	Ave RF	RSD	Q
Calibration Level:	EXP0420003.wi	EXP0420004.wi	EXP0420005.wi	EXP0420006.wi	EXP0420007.wi	EXP0420008.wi			
Data File:									
Parname									
2,4-Dinitrotoluene	.239	.203	.195	.209	.21	.174	0.205	10.3	
2-Amino-4,6-dinitrotoluene	.016	.014	.016	.015	.016	.016	0.016	5.56	
HMX	.944	1.21	1.05	1.01	1.27	.97	1.076	12.4	
RDX	.446	.506	.631	.55	.678	.508	0.553	15.7	
Tetryl	2.09	2.06	2.2	1.97	2.29	1.88	2.082	7.28	
m-Dinitrobenzene	2.45	2.69	3.02	2.61	2.46	2.23	2.577	10.5	

Q column used to flag RSD values outside of Limit (>20%)  
\* Values outside of QC Limit



# Explosives Initial Calibration

Lab Name: GEL Laboratories LLC

GEL Job No: 10-2199

Lab Code: GEL

Run Date: 09-APR-10.15-APR-10.20-APR-10

LCMSMS Instrument ID: LCMSMS3

Method: 8321A Modified

HPLC Column: Phenomenex Ultracarb 5 ODS(20)

Calibration Type: Linear

Parname	50	51	52	53	54	55	Slope	Intercept	COD	Q
Calibration Level:	EXP0420003.w	EXP0420004.w	EXP0420005.w	EXP0420006.w	EXP0420007.w	EXP0420008.w				
Data File:										
1,3,5-Trinitrobenzene	8870000	17200000	57700000	102000000	170000000	188000000	5.36	.169	.9995	
3,4-Dinitrotoluene	1720000	3960000	14000000	28600000	51900000	65800000	.66	.006	.9983	
4-Amino-2,6-dinitrotoluene	2090000	5020000	17600000	37200000	61500000	87700000	.423	.005	.9988	
Nitrobenzene	118000	272000	917000	2120000	3840000	4770000	.112	0	.9928	
PETN	20800	46500	180000	330000	700000	939000	.005	0	.999	
m-Nitrotoluene	31700	65200	271000	522000	1090000	1380000	.007	0	.9982	
o-Nitrotoluene	42200	99700	340000	647000	1470000	1910000	.01	0	.9975	
p-Nitrotoluene	23800	49100	181000	379000	742000	954000	.005	0	.9989	

Linear fit :  $Y=mx +b$

where b is Intercept and m is slope

COD is Coefficient of Determination

Q column used to flag COD values outside of Limit (<0.990)

\* Values outside of QC Limit

Explosives Initial Calibration

Lab Name: GEL Laboratories LLC

GEL Job No: 10-2199

Lab Code: GEL

Run Date: 09-APR-10.15-APR-10.20-APR-10

LCMSMS Instrument ID: LCMSMS3

Method: 8321A Modified

HPLC Column: Phenomenex Ultracarb 5 ODS(20)

Calibration Type: 2nd Order

Calibration Level:	50	51	52	53	54	55	X	X^2	Intercept	COD	Q
Data File:	EXP0420003.wiff	EXP0420004.wiff	EXP0420005.wiff	EXP0420006.wiff	EXP0420007.wiff	EXP0420008.wiff					
Parname:											
2,4,6-Trinitrotoluene	16300000	32000000	113000000	190000000	267000000	299000000	.001	3	-.766	.9999	
2,6-Dinitrotoluene	3090000	6530000	25700000	45300000	77100000	102000000	.002	.612	-.059	.9999	

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

042010ICAL

Peak Name: 13-Dinitrobenzene-d4  
Use as Internal Standard  
Q1/Q3 Masses: 172.05/46.10 amu  
Peak Name: 26-Dinitrotoluene-d3  
Use as Internal Standard  
Q1/Q3 Masses: 184.99/155.00 amu

Peak Name: HMX  
Internal Standard: 13-Dinitrobenzene-d4  
Q1/Q3 Masses: 341.20/46.00 amu

Fit Factor	Mean Response	Factor	Weighting	None	Iterate	No
Standard deviation		0.133				
%RSD		12.4				
Use Area						

Peak Name: RDX  
Internal Standard: 13-Dinitrobenzene-d4  
Q1/Q3 Masses: 267.01/46.10 amu

Fit Factor	Mean Response	Factor	Weighting	None	Iterate	No
Standard deviation		0.0866				
%RSD		15.7				
Use Area						

Peak Name: 135-Trinitrobenzene  
Internal Standard: 13-Dinitrobenzene-d4  
Q1/Q3 Masses: 212.97/182.80 amu

Fit Intercept	Linear	Weighting	None	Iterate	No
Slope		0.169			
Correlation coefficient		5.36			
Use Area		0.9995			

Peak Name: 13-Dinitrobenzene  
Internal Standard: 13-Dinitrobenzene-d4  
Q1/Q3 Masses: 167.95/137.90 amu

Fit Factor	Mean Response	Factor	Weighting	None	Iterate	No
Standard deviation		0.271				

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01/28/14  
HMM 04/12/9/10

042010ICAL

%RSD 10.5  
Use Area

Peak Name: Tetra  
Internal Standard: 13-Dinitrobenzene-d4  
Q1/Q3 Masses: 240.95/180.80 amu

Fit	Mean Response Factor	Weighting	None	Iterate No
Factor	2.08			
Standard deviation	0.152			
%RSD	7.28			
Use Area				

Peak Name: 246-Trinitrotoluene  
Internal Standard: 26-Dinitrotoluene-d3  
Q1/Q3 Masses: 227.12/209.80 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	0.00125			
a1	3			
a2	-0.766			
Correlation coefficient	0.9999			
Use Area				

Peak Name: Nitrobenzene  
Internal Standard: 13-Dinitrobenzene-d4  
Q1/Q3 Masses: 123.04/46.00 amu

Fit	Linear	Weighting	None	Iterate No
Intercept	-7.36e-005			
Slope	0.112			
Correlation coefficient	0.9928			
Use Area				

Peak Name: 34-dinitrotoluene  
Internal Standard: 26-Dinitrotoluene-d3  
Q1/Q3 Masses: 182.00/46.00 amu

Fit	Linear	Weighting	None	Iterate No
Intercept	0.00621			
Slope	0.66			
Correlation coefficient	0.9983			
Use Area				

042010ICAL

Peak Name: 26-dinitrotoluene  
Internal Standard: 26-Dinitrotoluene-d3  
Q1/Q3 Masses: 182.00/46.00 amu

Fit	Quadratic	Weighting	None	Iterate	No
a0	0.00151				
a1	0.612				
a2	-0.0585				
Correlation coefficient 0.9999					
Use Area					

Peak Name: 24-dinitrotoluene  
Internal Standard: 26-Dinitrotoluene-d3  
Q1/Q3 Masses: 182.00/46.00 amu

Fit	Mean Response Factor	Weighting	None	Iterate	No
Factor	0.205				
Standard deviation	0.0212				
%RSD	10.3				
Use Area					

Peak Name: 4-Amino-26-dinitrotoluene  
Internal Standard: 26-Dinitrotoluene-d3  
Q1/Q3 Masses: 197.02/167.00 amu

Fit	Linear	Weighting	None	Iterate	No
Intercept	0.00487				
Slope	0.423				
Correlation coefficient 0.9988					
Use Area					

Peak Name: 2-Amino-46-dinitrotoluene  
Internal Standard: 26-Dinitrotoluene-d3  
Q1/Q3 Masses: 197.02/180.00 amu

Fit	Mean Response Factor	Weighting	None	Iterate	No
Factor	0.0155				
Standard deviation	0.000861				
%RSD	5.56				
Use Area					

Peak Name: 2-Nitrotoluene  
Internal Standard: 26-Dinitrotoluene-d3  
Q1/Q3 Masses: 137.00/46.00 amu

042010ICAL

Fit Linear Weighting None Iterate No

Intercept -0.000364  
Slope 0.00961  
Correlation coefficient 0.9975  
Use Area

Peak Name: 4-Nitrotoluene  
Internal Standard: 26-Dinitrotoluene-d3  
Q1/Q3 Masses: 137.00/46.00 amu

Fit Linear Weighting None Iterate No

Intercept -5.35e-005  
Slope 0.00481  
Correlation coefficient 0.9989  
Use Area

Peak Name: 3-Nitrotoluene  
Internal Standard: 26-Dinitrotoluene-d3  
Q1/Q3 Masses: 137.00/46.00 amu

Fit Linear Weighting None Iterate No

Intercept -0.000131  
Slope 0.007  
Correlation coefficient 0.9982  
Use Area

Peak Name: PETN  
Internal Standard: 26-Dinitrotoluene-d3  
Q1/Q3 Masses: 361.06/62.00 amu

Fit Linear Weighting None Iterate No

Intercept -0.000128  
Slope 0.00467  
Correlation coefficient 0.9990  
Use Area

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GEL SOP GL-OA-E-056, Method 8321A-Modified

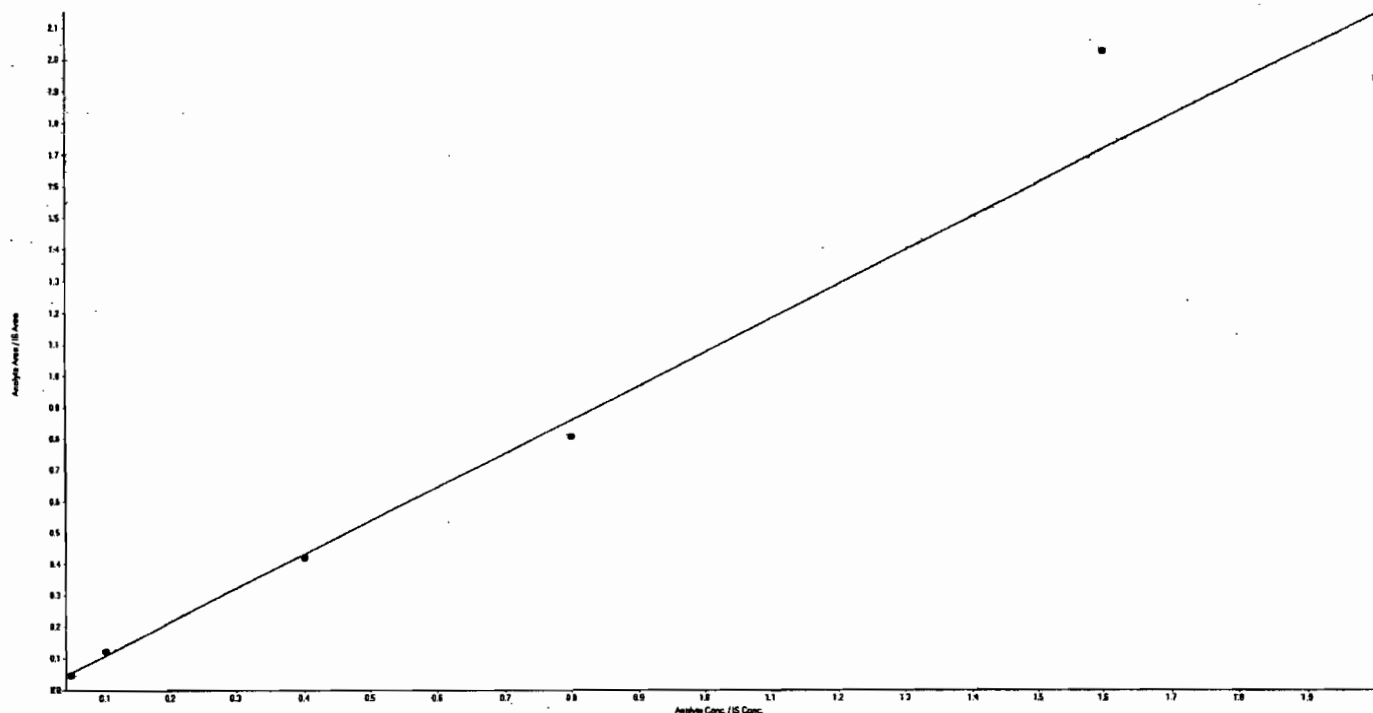
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LCMSMS#3

042010.rdb

Analyte Name: HMX

Regression Equation:  $y = 1.07 x$  (std. dev. = 0.133)

Expected Concentration	Calculated Concentration	% Accuracy
25	21.97	87.9
50	56.29	112.6
200	195.16	97.6
400	374.92	93.7
800	943.21	117.9
1000	903.20	90.3



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04/29/10

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4/28/10

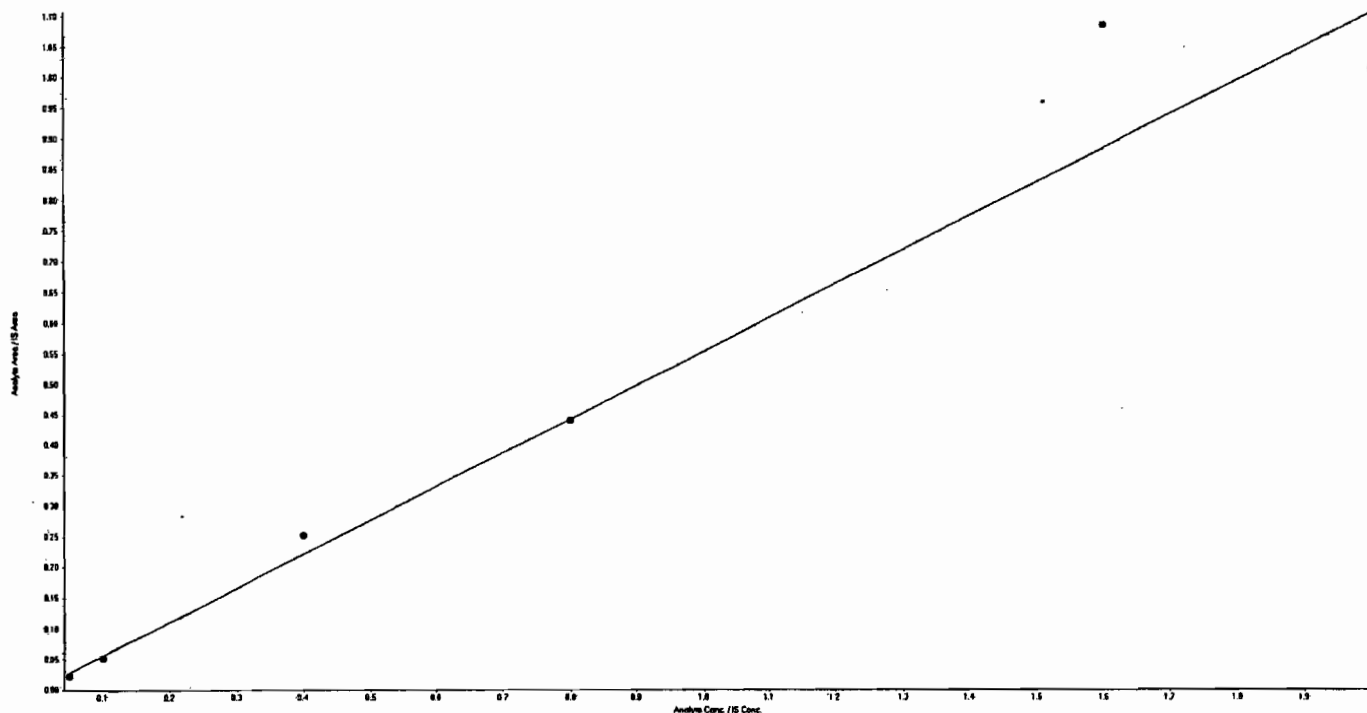
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Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

Analyte Name: RDX

Regression Equation:  $y = 0.553x$  (std. dev. = 0.0866)

Expected Concentration	Calculated Concentration	% Accuracy
25	20.15	80.6
50	45.74	91.5
200	227.96	114.0
400	397.87	99.5
800	981.23	122.7
1000	918.34	91.8





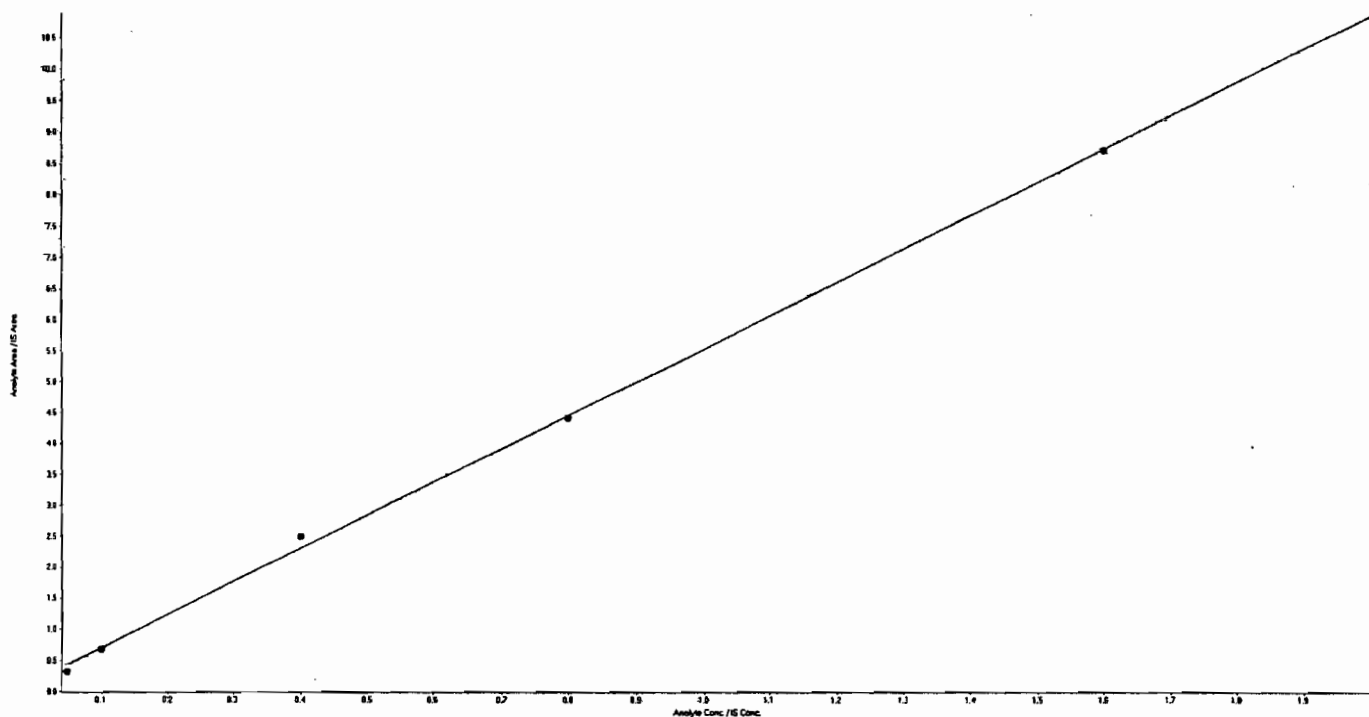
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Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

Analyte Name: 135-Trinitrobenzene

Regression Equation:  $y = 5.36x + 0.169$  ( $r = 0.9995$ )

Expected Concentration	Calculated Concentration	% Accuracy
25	15.11	60.5
50	48.52	97.0
200	217.02	108.5
400	396.40	99.1
800	797.95	99.7



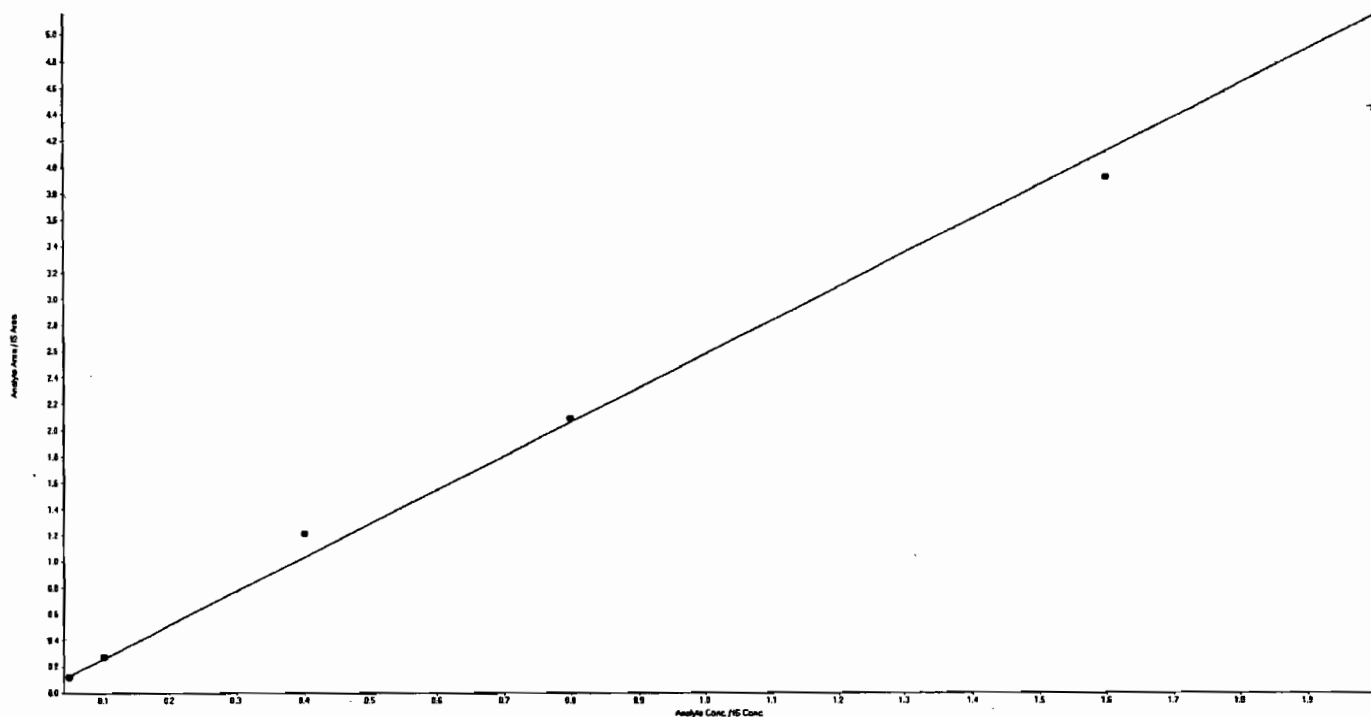
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GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

Analyte Name: 13-Dinitrobenzene

Regression Equation:  $y = 2.58 x$  (std. dev. = 0.271)

Expected Concentration	Calculated Concentration	% Accuracy
25	23.78	95.1
50	52.24	104.5
200	234.72	117.4
400	405.22	101.3
800	762.14	95.3
1000	864.77	86.5



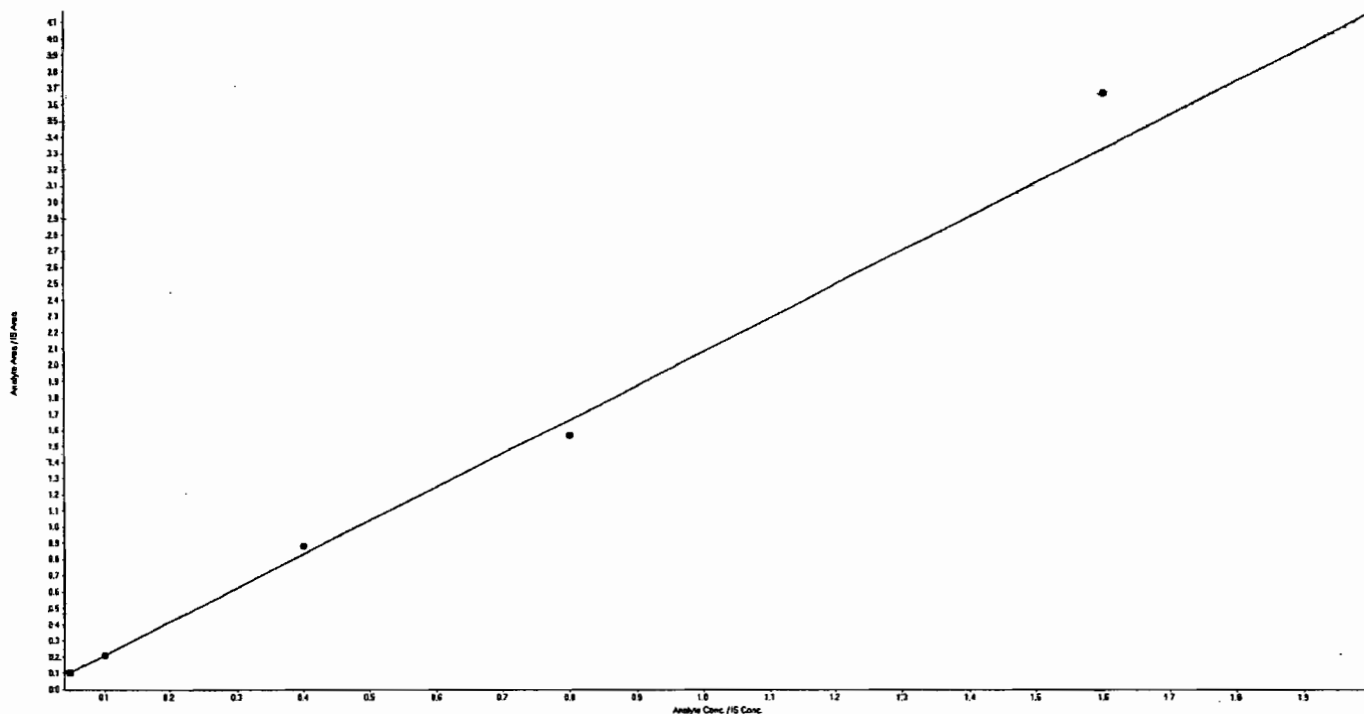
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GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

Analyte Name: Tetryl

Regression Equation:  $y = 2.08x$  (std. dev. = 0.152)

Expected Concentration	Calculated Concentration	% Accuracy
25	25.13	100.5
50	49.47	98.9
200	211.40	105.7
400	377.69	94.4
800	881.74	110.2
1000	902.01	90.2



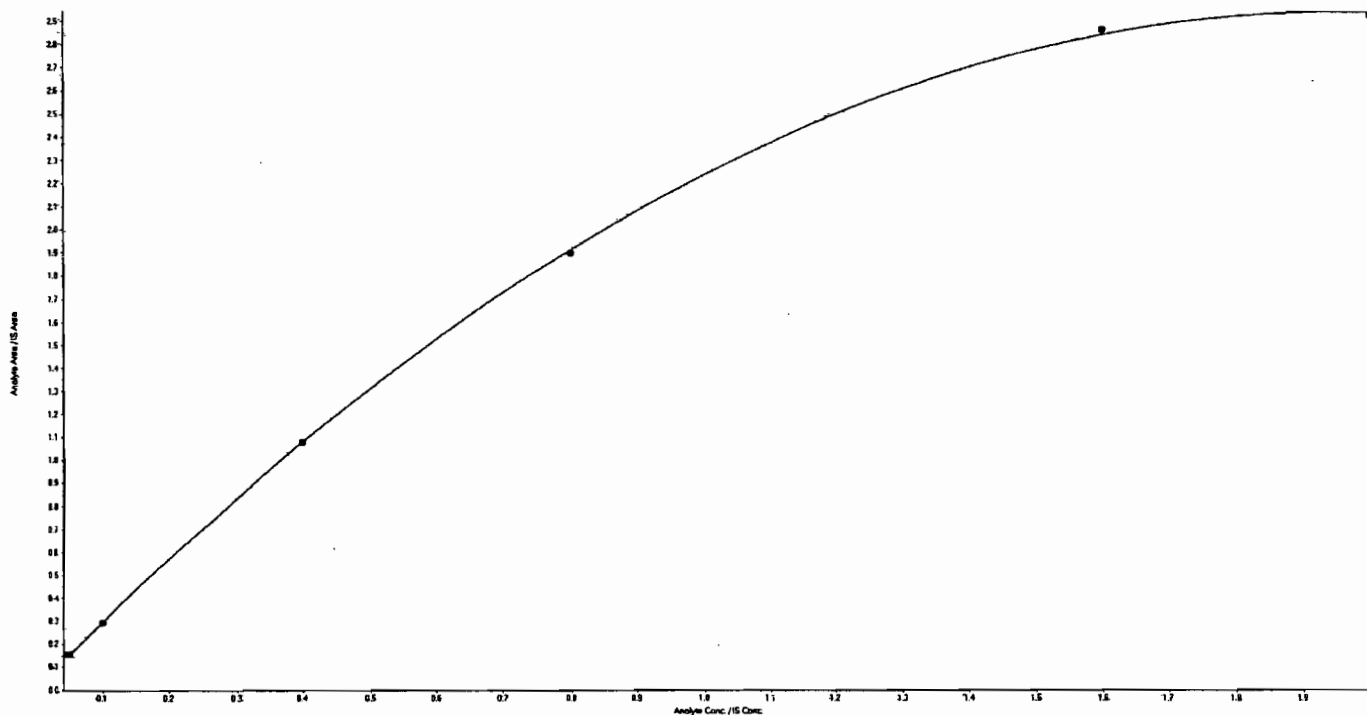
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GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

Analyte Name: 246-Trinitrotoluene

Regression Equation:  $y = -0.766 x^2 + 3 x + 0.00125$  ( $r = 0.9999$ )

Expected Concentration	Calculated Concentration	% Accuracy
25	26.14	104.6
50	49.80	99.6
200	199.55	99.8
400	396.28	99.1
800	820.60	102.6
1000	914.99	91.5



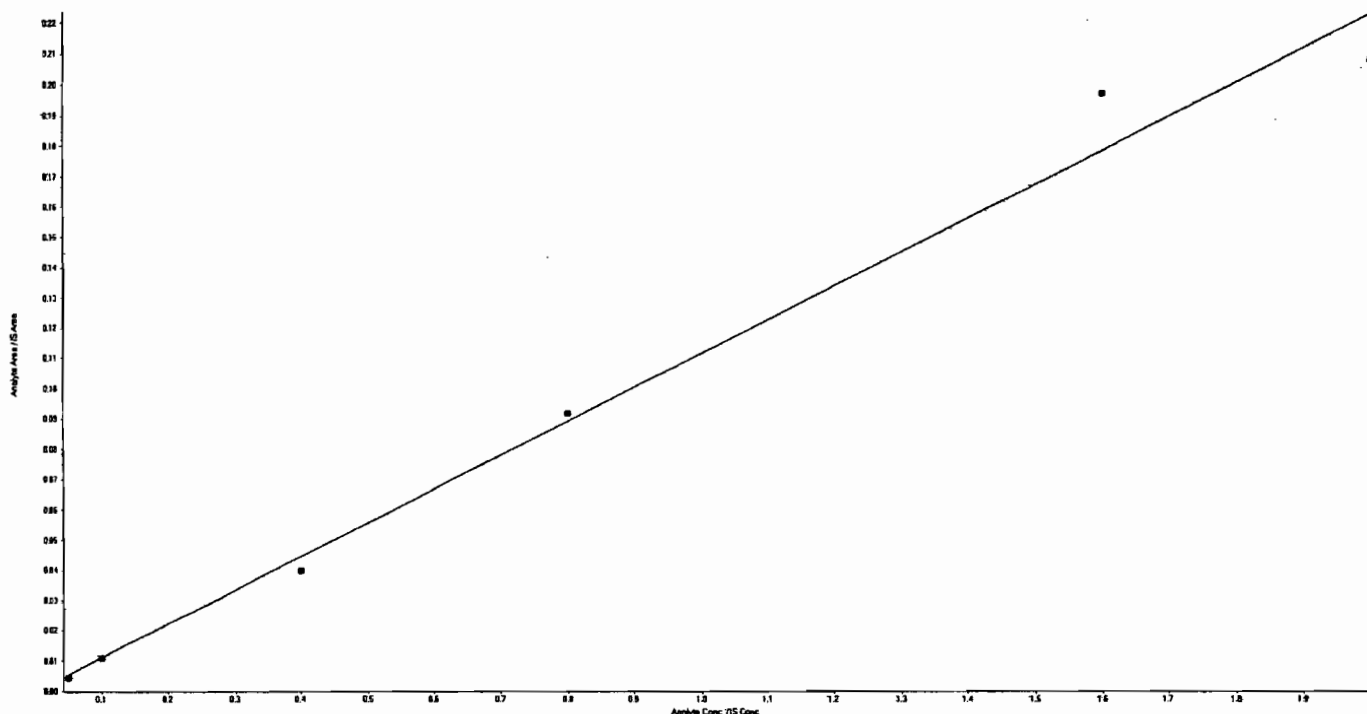
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

Analyte Name: Nitrobenzene

Regression Equation:  $y = 0.112x + -7.36e-005$  ( $r = 0.9928$ )

Expected Concentration	Calculated Concentration	% Accuracy
25	20.12	80.5
50	49.14	98.3
200	177.86	88.9
400	411.03	102.8
800	883.32	110.4
1000	933.52	93.4



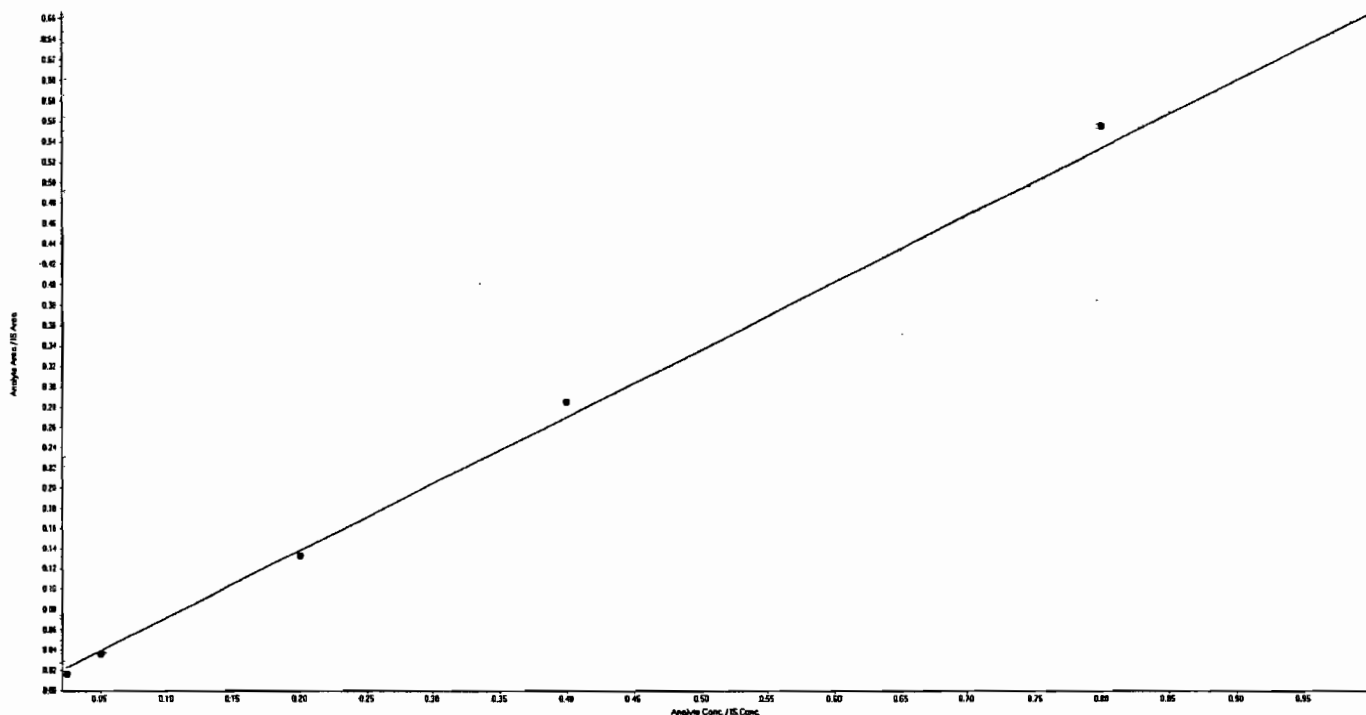
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

Analyte Name: 34-dinitrotoluene

Regression Equation:  $y = 0.66x + 0.00621$  ( $r = 0.9983$ )

Expected Concentration	Calculated Concentration	% Accuracy
12.5	7.78	62.2
25	22.73	90.9
100	95.92	95.9
200	211.19	105.6
400	416.54	104.1
500	483.34	96.7



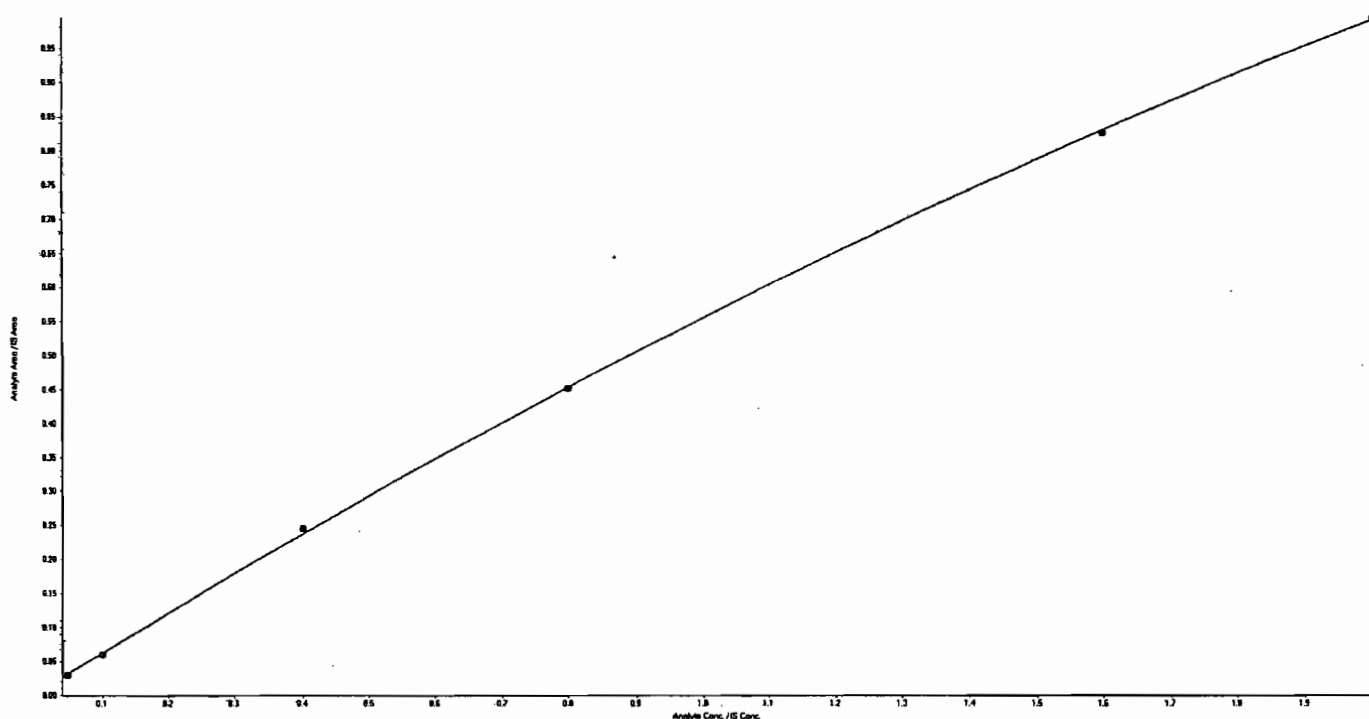
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

Analyte Name: 26-dinitrotoluene

Regression Equation:  $y = -0.0585 x^2 + 0.612 x + 0.00151$  ( $r = 0.9999$ )

Expected Concentration	Calculated Concentration	% Accuracy
25	23.08	92.3
50	48.08	96.2
200	206.95	103.5
400	398.53	99.6
800	794.68	99.3
1000	1003.75	100.4



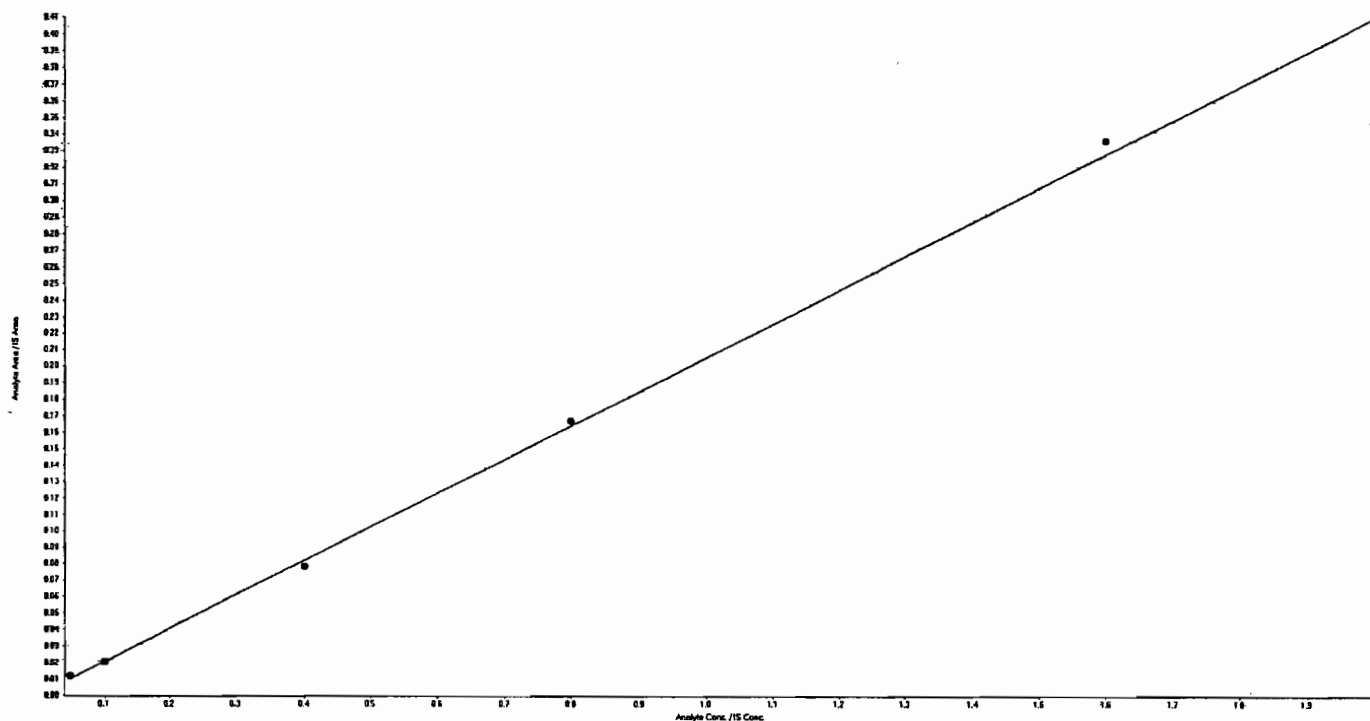
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

Analyte Name: 24-dinitrotoluene

Regression Equation:  $y = 0.205 x$  (std. dev. = 0.0212)

Expected Concentration	Calculated Concentration	% Accuracy
25	29.12	116.5
50	49.48	99.0
200	190.53	95.3
400	407.68	101.9
800	819.95	102.5
1000	848.75	84.9





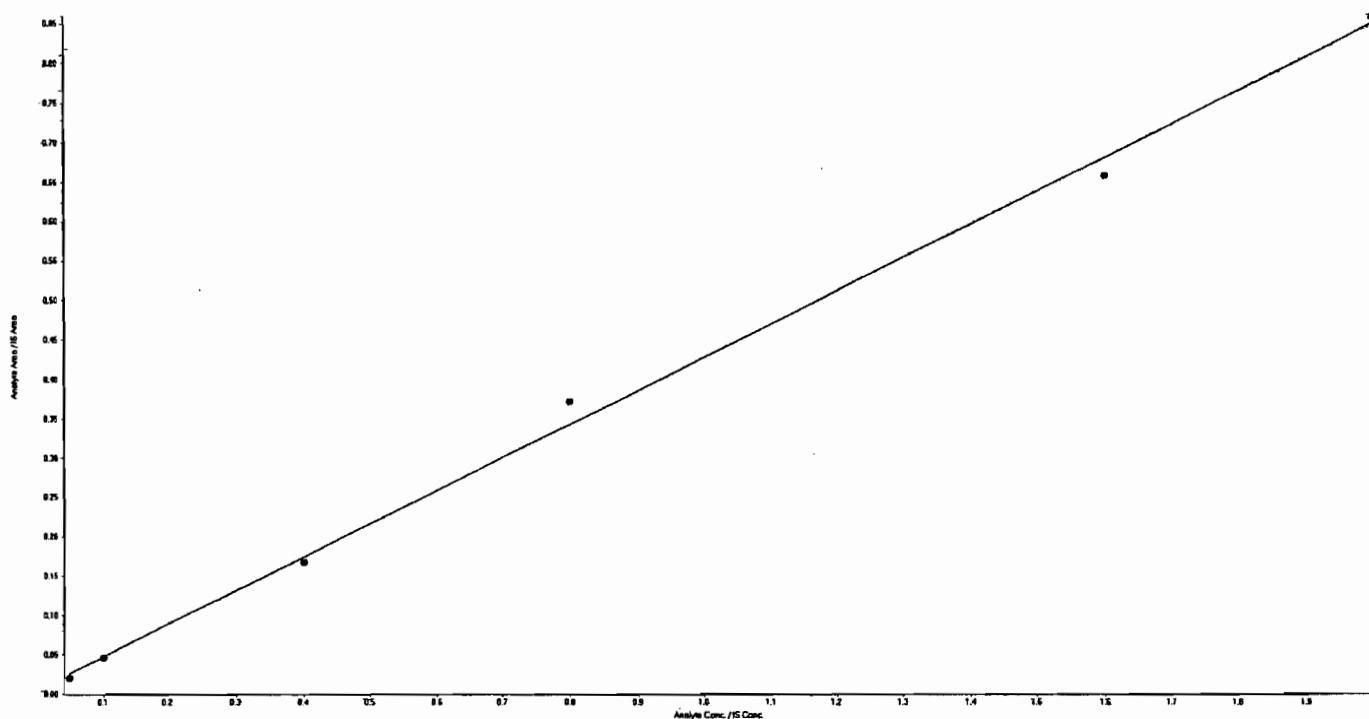
GEL Laboratories, LLC  
 GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 28/04/2010 4:35:00 PM  
 LCMSMS#3

Analyte Name: 4-Amino-2,6-dinitrotoluene

Regression Equation:  $y = 0.423x + 0.00487$  ( $r = 0.9988$ )

Expected Concentration	Calculated Concentration	% Accuracy
25	17.94	71.8
50	48.56	97.1
200	191.88	95.9
400	433.47	108.4
800	773.30	96.7
1000	1009.84	101.0



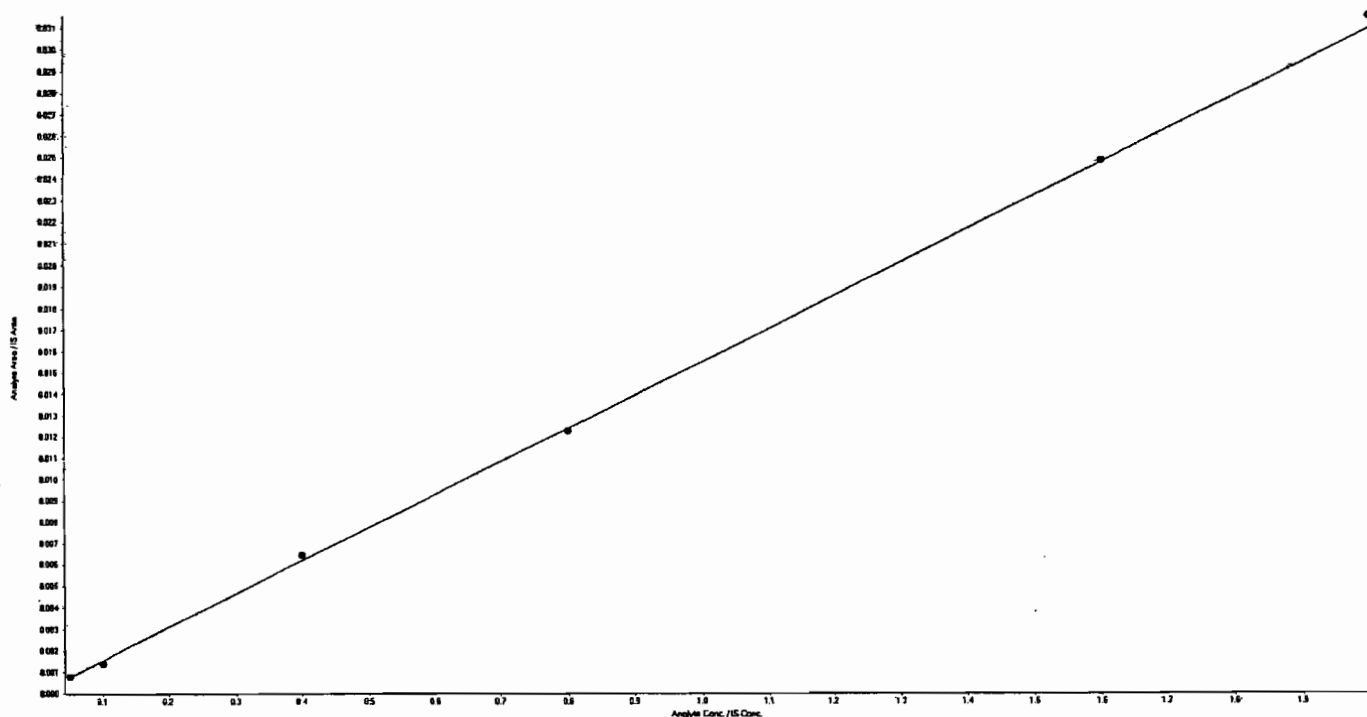
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

Analyte Name: 2-Amino-4,6-dinitrotoluene

Regression Equation:  $y = 0.0155 x$  (std. dev. = 0.000861)

Expected Concentration	Calculated Concentration	% Accuracy
25	26.30	105.2
50	44.85	89.7
200	208.15	104.1
400	395.59	98.9
800	801.88	100.2
1000	1018.99	101.9



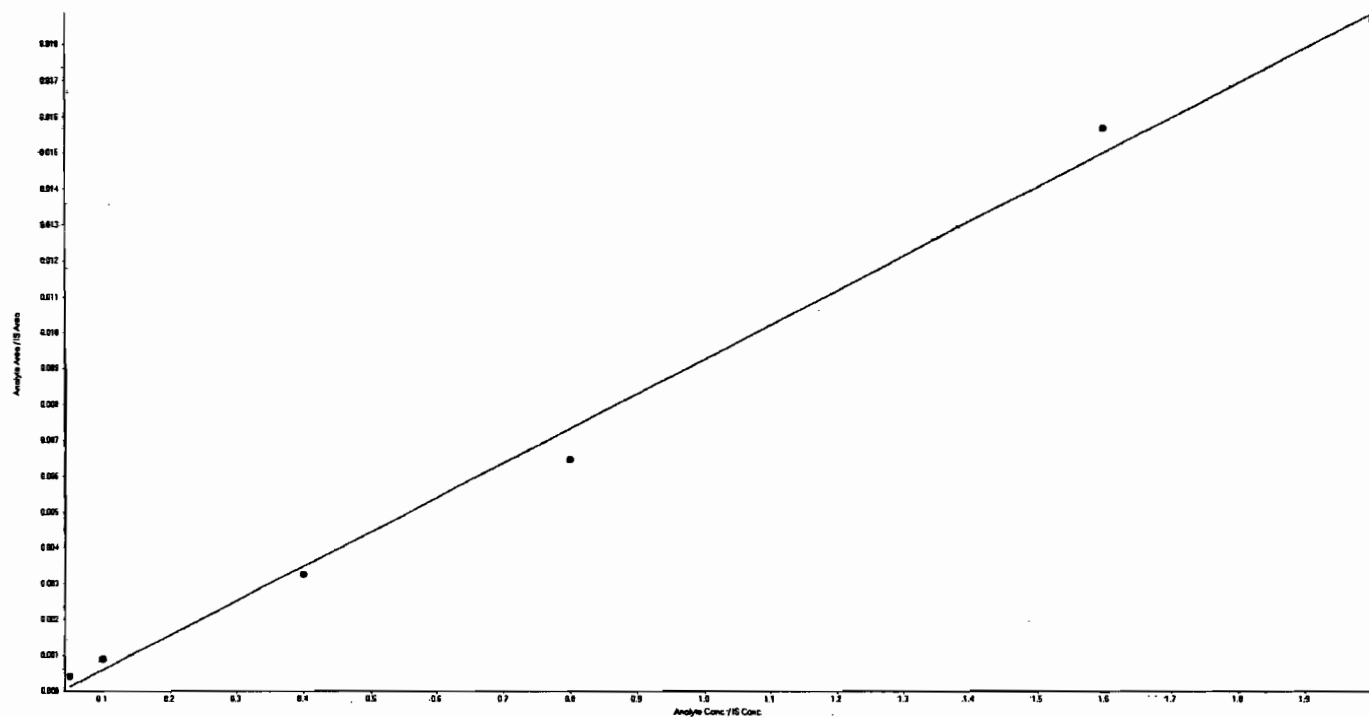
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

Analyte Name: 2-Nitrotoluene

Regression Equation:  $y = 0.00961x + -0.000364$  ( $r = 0.9975$ )

Expected Concentration	Calculated Concentration	% Accuracy
25	40.01	160.0
50	66.43	132.9
200	187.42	93.7
400	354.47	88.6
800	835.68	104.5
1000	990.98	99.1



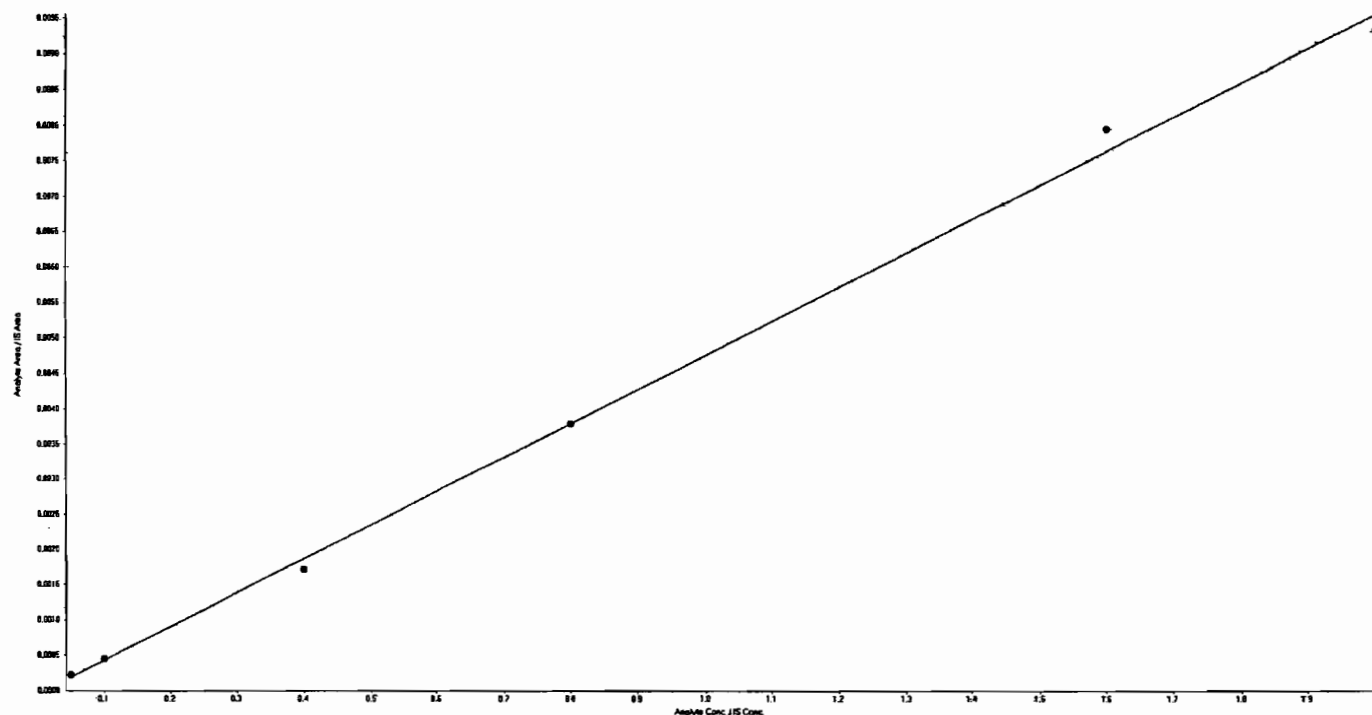
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

Analyte Name: 4-Nitrotoluene

Regression Equation:  $y = 0.00481x + -5.35e-005$  ( $r = 0.9989$ )

Expected Concentration	Calculated Concentration	% Accuracy
25	29.27	117.1
50	52.35	104.7
200	184.53	92.3
400	399.15	99.8
800	832.47	104.1
1000	977.23	97.7



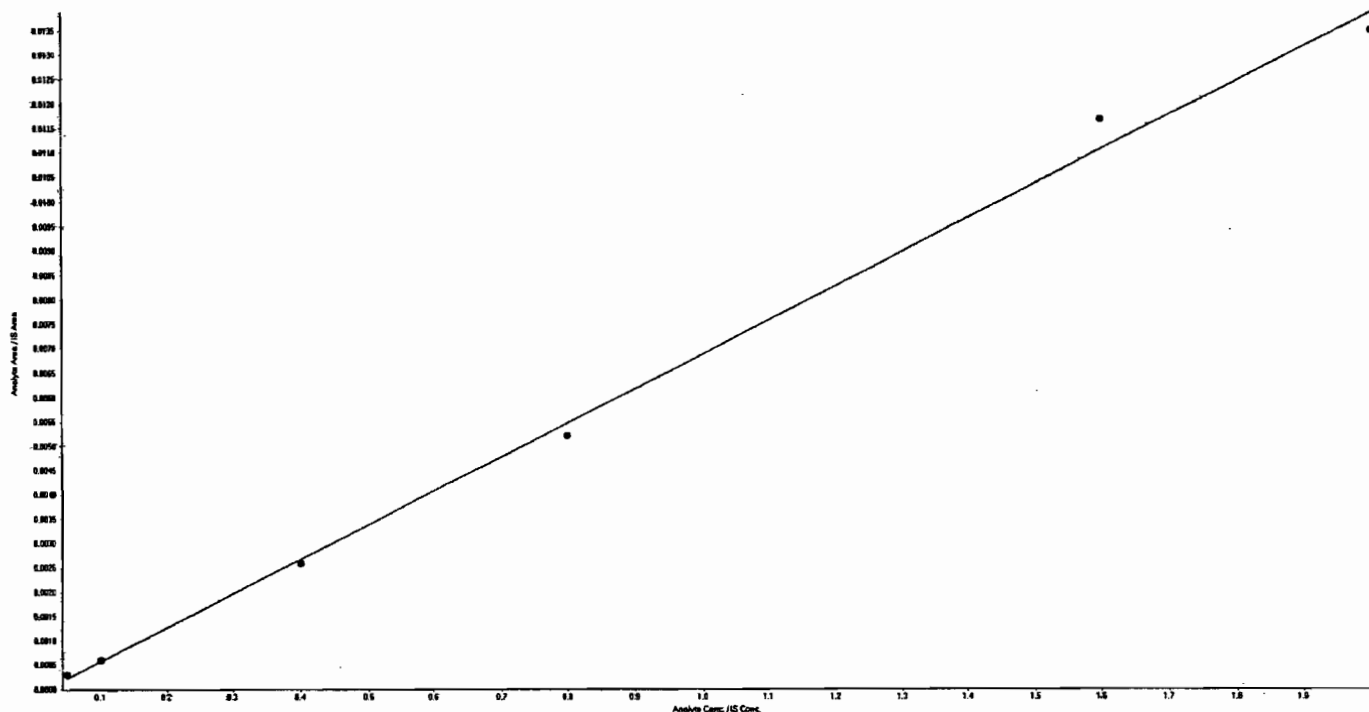
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

Analyte Name: 3-Nitrotoluene

Regression Equation:  $y = 0.007x + -0.000131$  ( $r = 0.9982$ )

Expected Concentration	Calculated Concentration	% Accuracy
25	31.06	124.2
50	51.93	103.9
200	193.71	96.9
400	381.07	95.3
800	843.24	105.4
1000	973.99	97.4



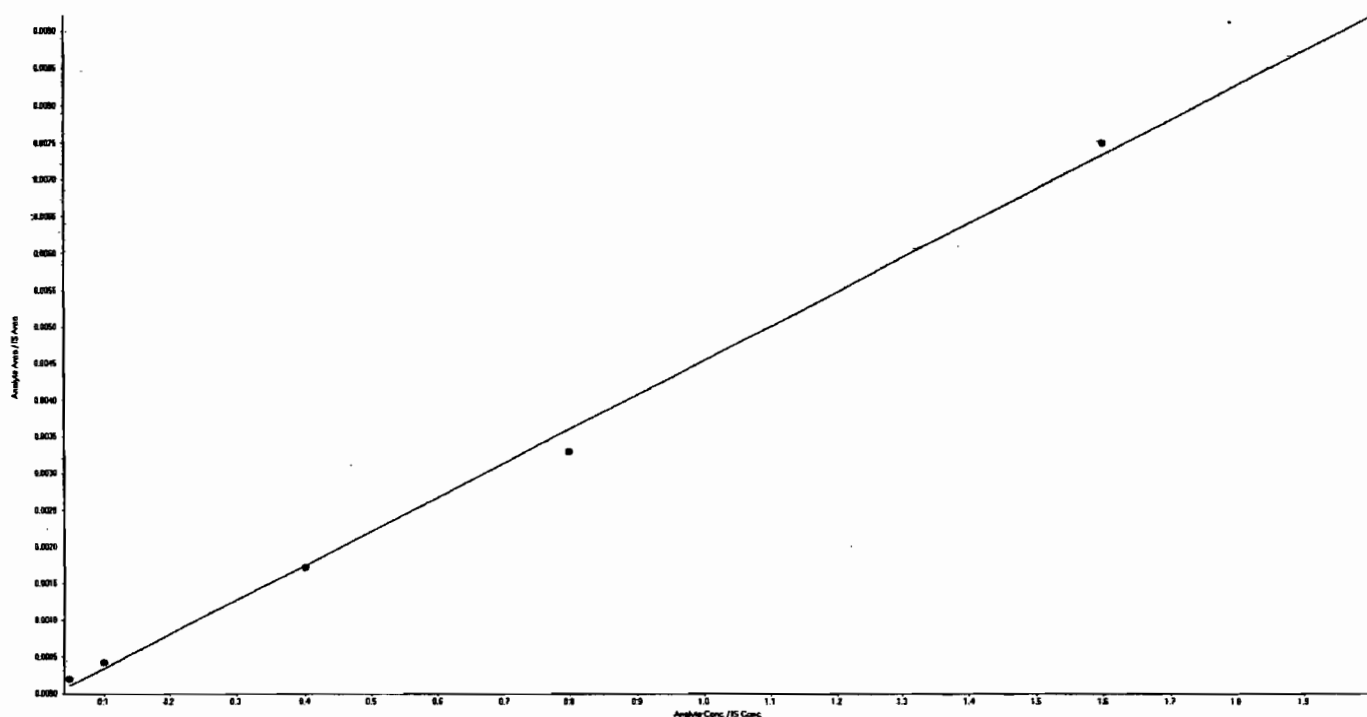
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

Analyte Name: PETN

Regression Equation:  $y = 0.00467x + -0.000128$  ( $r = 0.9990$ )

Expected Concentration	Calculated Concentration	% Accuracy
25	35.10	140.4
50	59.36	118.7
200	197.38	98.7
400	366.63	91.7
800	816.93	102.1
1000	999.61	100.0



GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

Explosives Initial Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2199

Lab Code: GEL

GEL Sample ID: WXXICV

GEL Data File EXP0420010.wiff

Analysis Date: 20-APR-10 18:12

LCMSMS ID: 1189

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	542	90	
2,4,6-Trinitrotoluene	600	557	93	
2,4-Dinitrotoluene	600	620	103	
2,6-Dinitrotoluene	600	571	95	
2-Amino-4,6-dinitrotoluene	600	624	104	
3,4-Dinitrotoluene	300	295	98	
4-Amino-2,6-dinitrotoluene	600	675	113	
HMX	600	503	84	
Nitrobenzene	600	583	97	
PETN	600	587	98	
RDX	600	557	93	
Tetryl	600	611	102	
m-Dinitrobenzene	600	564	94	
m-Nitrotoluene	600	622	104	
o-Nitrotoluene	600	601	100	
p-Nitrotoluene	600	659	110	

Recovery Limits:

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

Other Target Analytes 80-120%

# Column used to flag Recovery outside of Limits

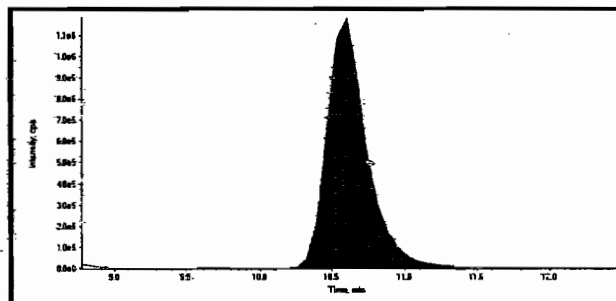
\* Value outside of Recovery Limits



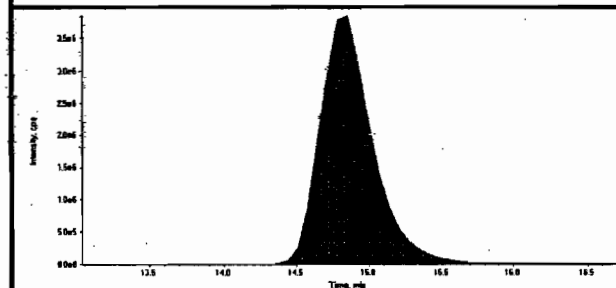
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

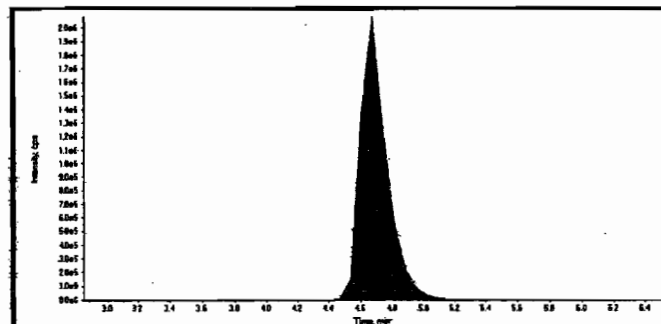
Data File	EXP0420010.wiff	Acquisition Date	4/20/2010 6:12:10 PM
Sample Name	WXX100420-56ICV	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	042010.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



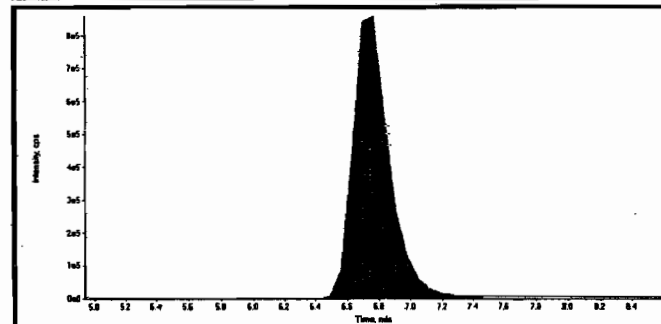
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.60
Actual RT:	10.60
Area Counts:	22500000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.90
Actual RT:	14.90
Area Counts:	97300000.00
Manual Modification	Yes
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



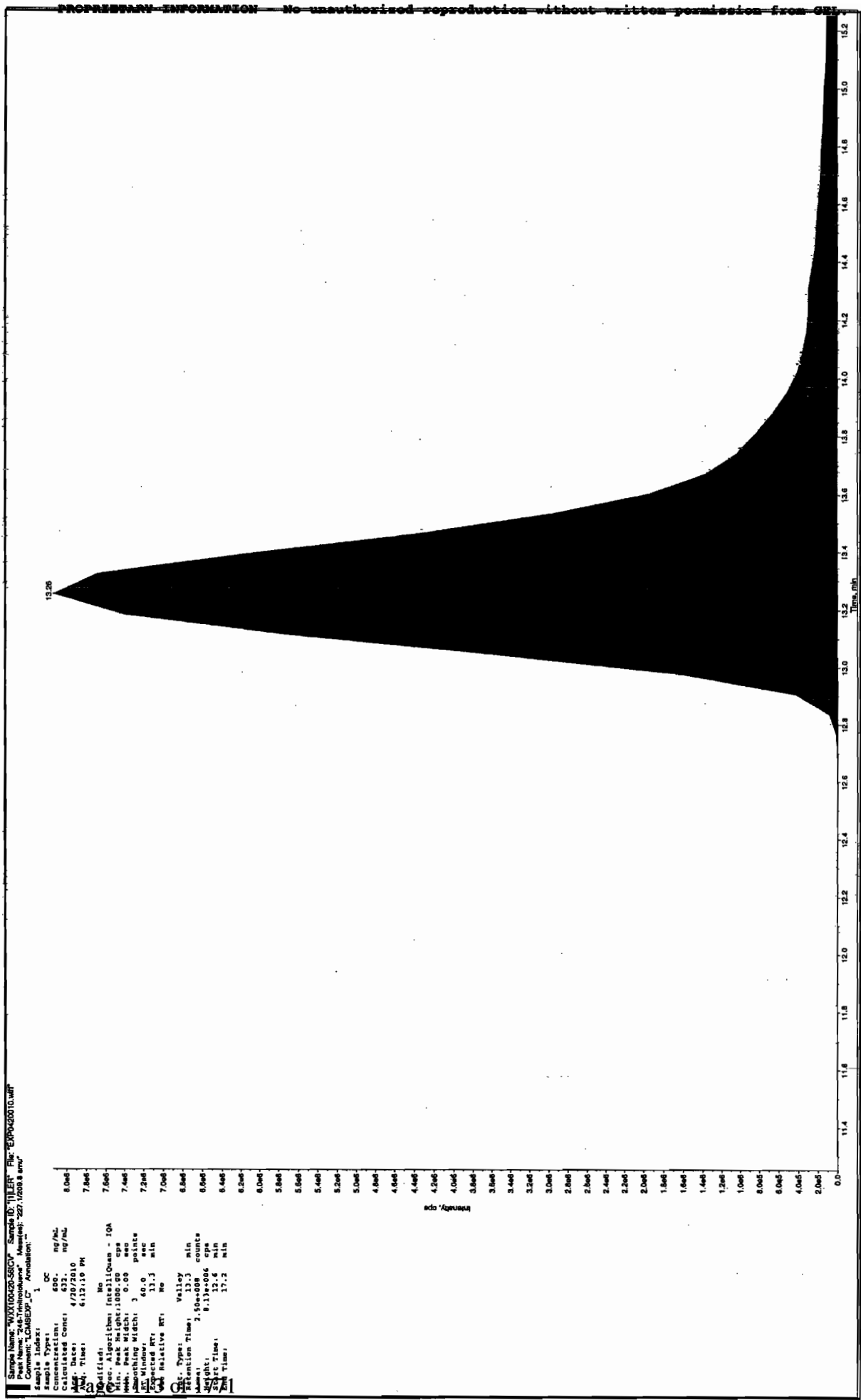
Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.67
Actual RT:	4.67
Area Counts:	2.43e+007
Manual Modification	No
Amount:	503. (ng/mL)
% Accuracy:	83.80



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.77
Actual RT:	6.77
Area Counts:	1.39e+007
Manual Modification	No
Amount:	557. (ng/mL)
% Accuracy:	92.80

*See 4/20/10 thru 04/24/10*

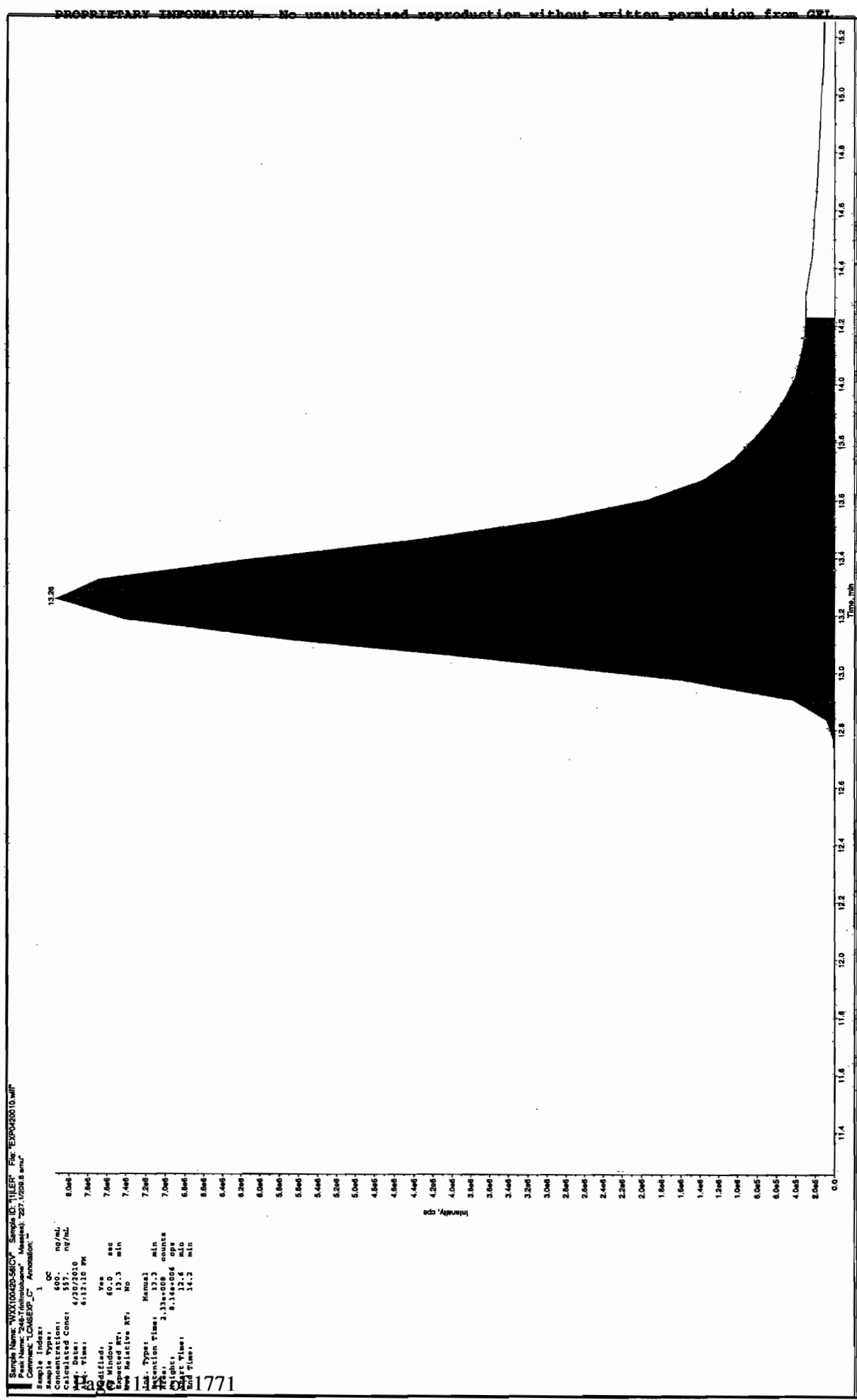
Before Jan 4/28/10



Sample Name: WXX100426-56CV Sample ID: 111ER File: EPP003010.wif  
 Peak Name: 245-Triethanolamine\* Method: 8321A-Modified LCMSMS#3  
 Concentration: 1.0000000000000000  
 Sample Type: 1 QC  
 Calculated Conc: 800.0000000000000000  
 Calc. Conc: 800.0000000000000000  
 Calc. Time: 6.12110 PM  
 Modified: No  
 Spec. Algorithm: Intallious - 10A  
 Spec. Peak Width: 0.50 sec  
 Spec. Peak Width: 0.50 points  
 Spec. Window: 60.0 sec  
 Spec. Window: 11.3 min  
 Spec. Relative RT: No  
 Ret. Type: Valley  
 Retention Time: 13.26 min  
 Retention Time: 13.26 min  
 Height: 8.13e+005 cps  
 Start Time: 12.6 min  
 End Time: 13.2 min

\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

after Jan 4/28/10



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0420010.wiff	<b>Acquisition Date</b>	4/20/2010 6:12:10 PM
<b>Sample Name</b>	WXX100420-56ICV	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	042010.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	Expected RT:	9.07
	Actual RT:	9.07
	Area Counts:	1.35e+008
	Manual Modification	No
	Amount:	542. (ng/mL)
	% Accuracy:	90.40

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	Expected RT:	10.7
	Actual RT:	10.7
	Area Counts:	6.54e+007
	Manual Modification	No
	Amount:	564. (ng/mL)
	% Accuracy:	94.00

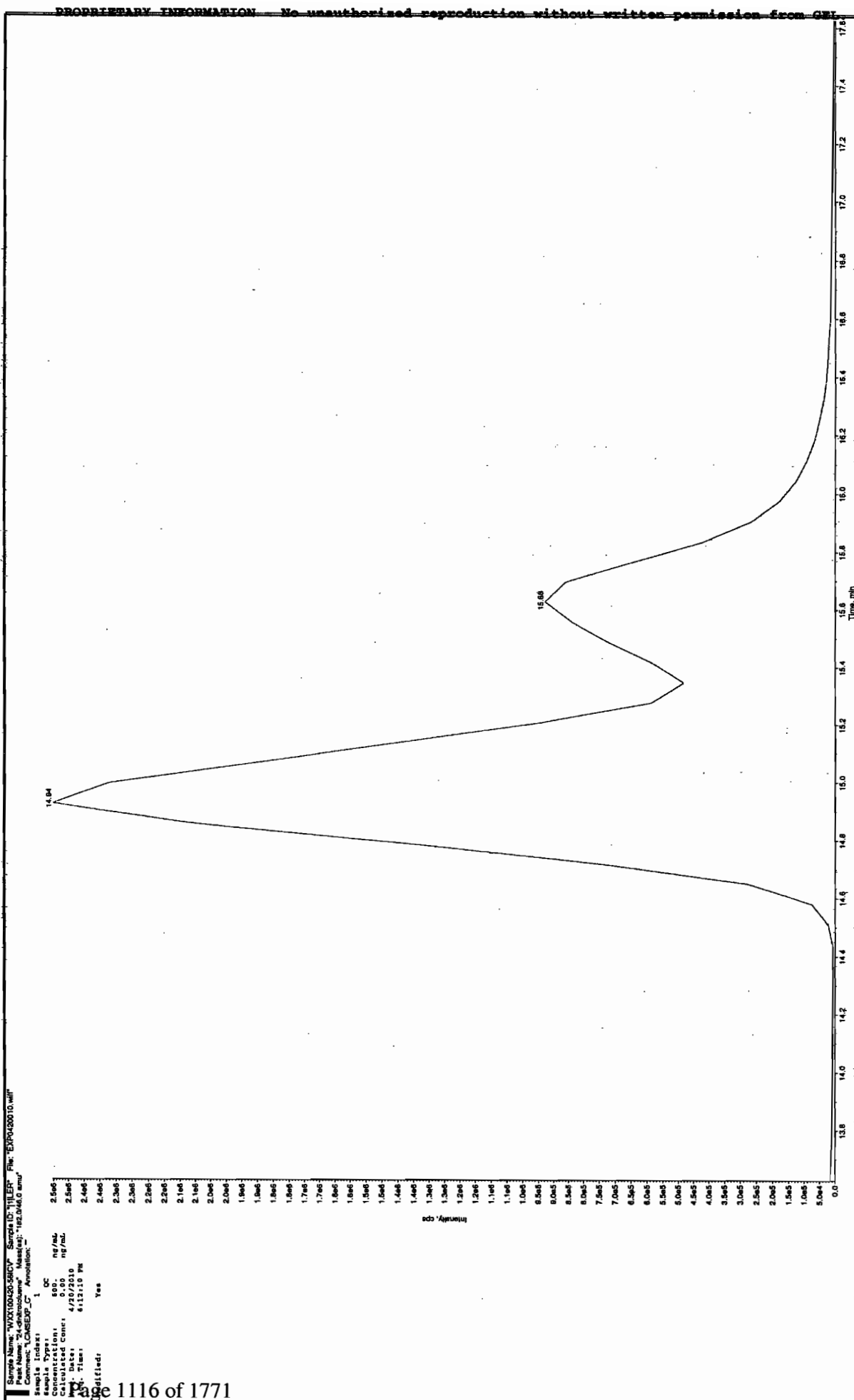
  

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	Expected RT:	10.8
	Actual RT:	10.8
	Area Counts:	5.72e+007
	Manual Modification	No
	Amount:	611. (ng/mL)
	% Accuracy:	102.00

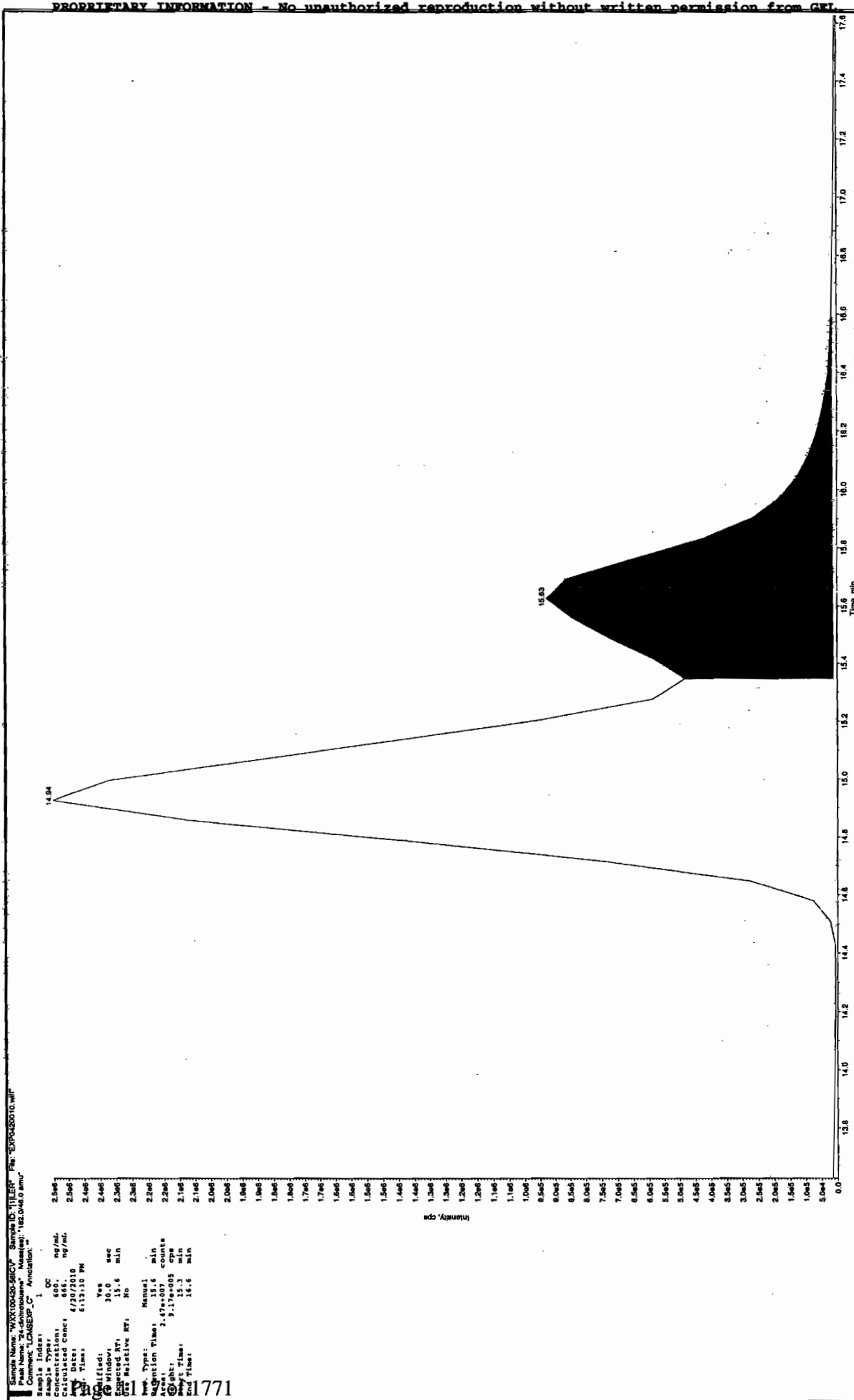
	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	Expected RT:	13.3
	Actual RT:	13.3
	Area Counts:	2.33e+008
	Manual Modification	Yes
	Amount:	557. (ng/mL)
	% Accuracy:	92.80

Before Jan 4/28/10



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

after dec 4/28/10



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0420010.wiff	<b>Acquisition Date</b>	4/20/2010 6:12:10 PM
<b>Sample Name</b>	WXX100420-56ICV	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	042010.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	<b>Expected RT:</b>	11.9
	<b>Actual RT:</b>	11.9
	<b>Area Counts:</b>	2.93e+006
	<b>Manual Modification</b>	No
	<b>Amount:</b>	583. (ng/mL)
	<b>% Accuracy:</b>	97.20

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	<b>Expected RT:</b>	12.1
	<b>Actual RT:</b>	12.1
	<b>Area Counts:</b>	3.85e+007
	<b>Manual Modification</b>	No
	<b>Amount:</b>	295. (ng/mL)
	<b>% Accuracy:</b>	98.30

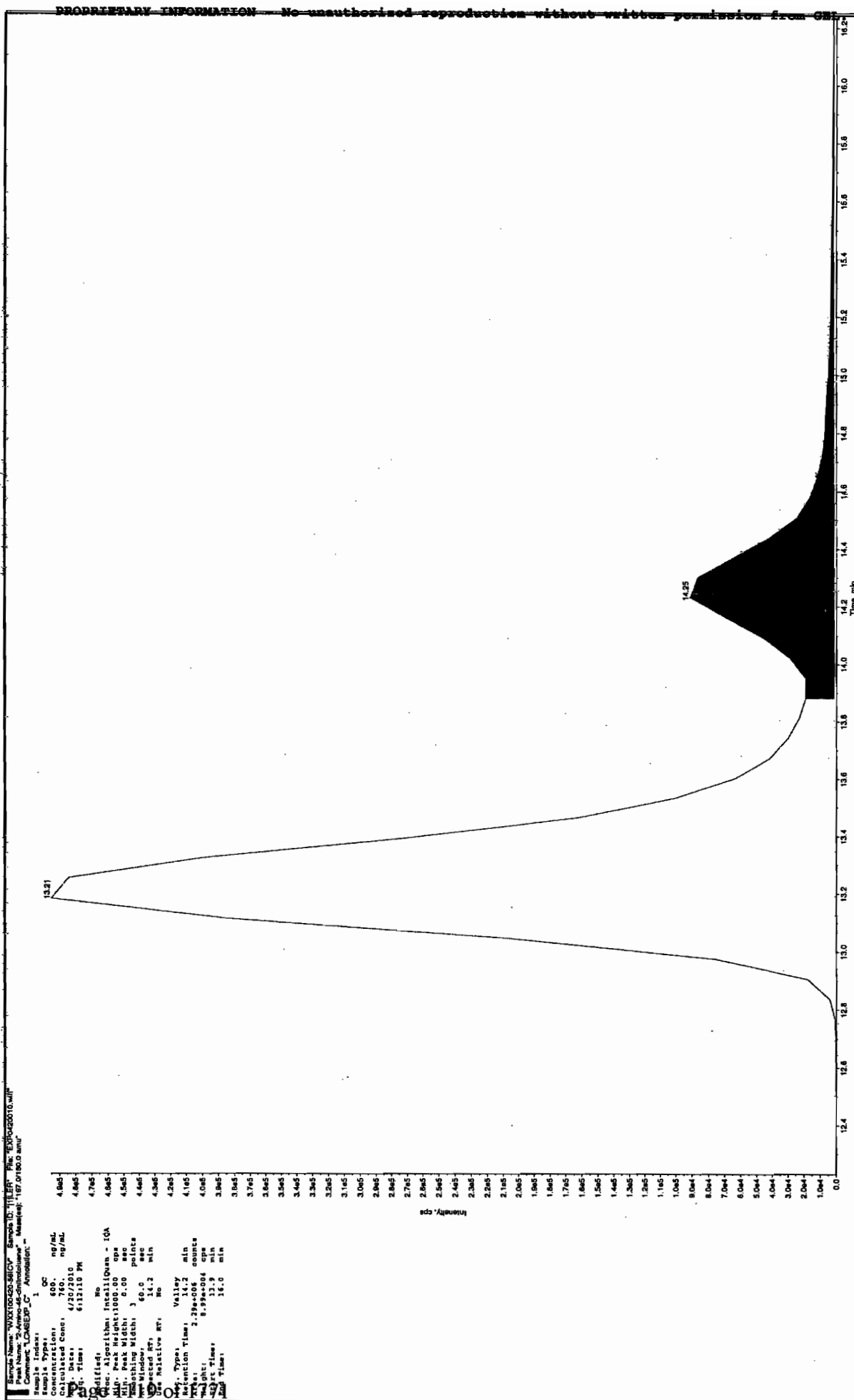
  

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	<b>Expected RT:</b>	14.9
	<b>Actual RT:</b>	14.9
	<b>Area Counts:</b>	6.08e+007
	<b>Manual Modification</b>	No
	<b>Amount:</b>	571. (ng/mL)
	<b>% Accuracy:</b>	95.20

	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	<b>Expected RT:</b>	15.6
	<b>Actual RT:</b>	15.6
	<b>Area Counts:</b>	2.47e+007
	<b>Manual Modification</b>	Yes
	<b>Amount:</b>	620. (ng/mL)
	<b>% Accuracy:</b>	103.00

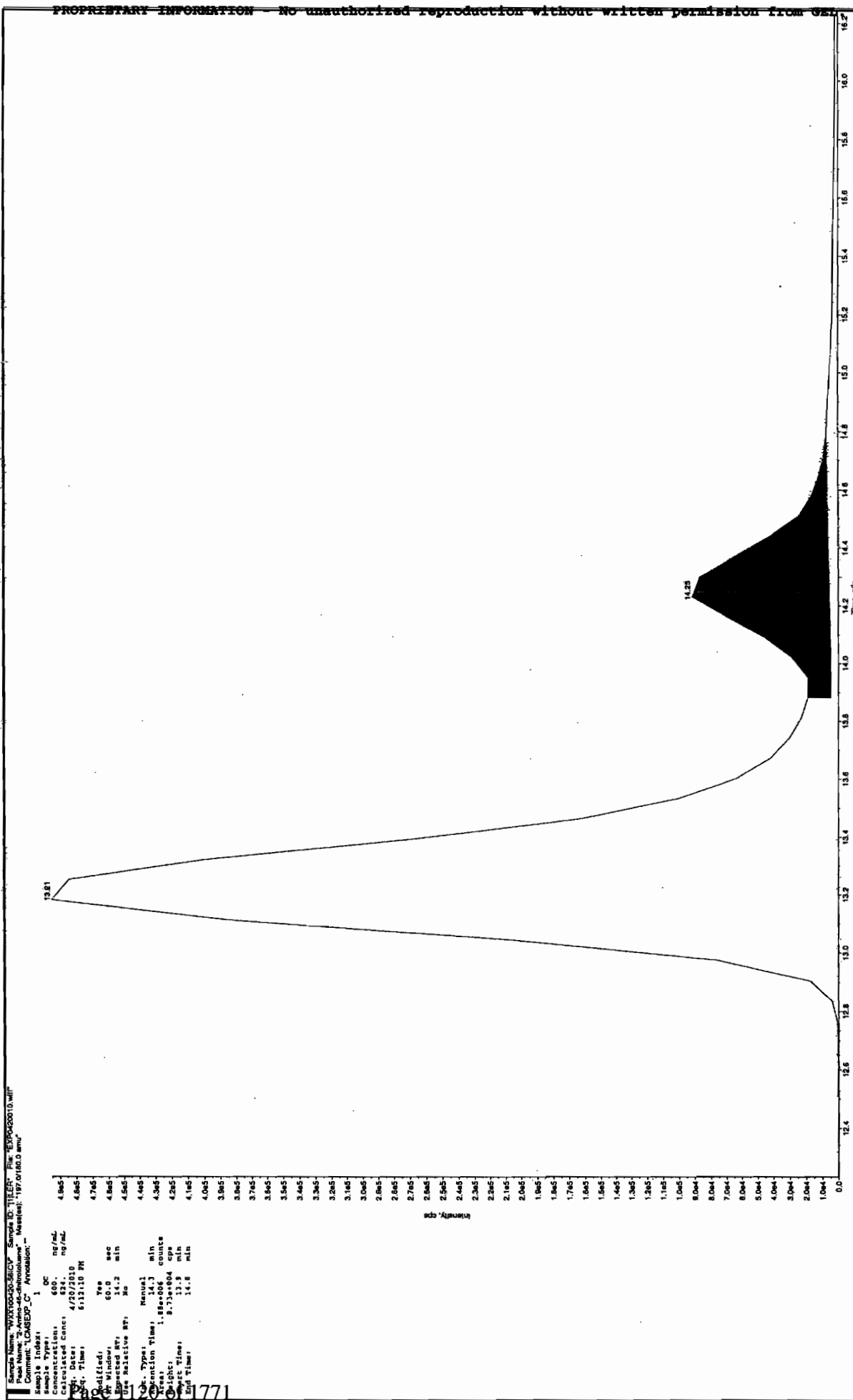
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\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3



after scan 4/28/00



Sample Name: 8321A-E-056  
 Peak Name: 2-Amino-2-deoxyribose  
 Retention: 13.21 min

Sample Index: 1  
 Sample Type: 600  
 Calculated Conc: 624 ng/mL  
 Date: 4/20/2010  
 Time: 6:12:10 PM  
 Modified: Yes  
 Expected RT: 60.0 sec  
 Use Relative RT: No  
 Ret. Type: Manual  
 Retention Time: 14.3 min  
 Peak: 1.88e+006 counts  
 Start Time: 13.9 min  
 End Time: 14.8 min

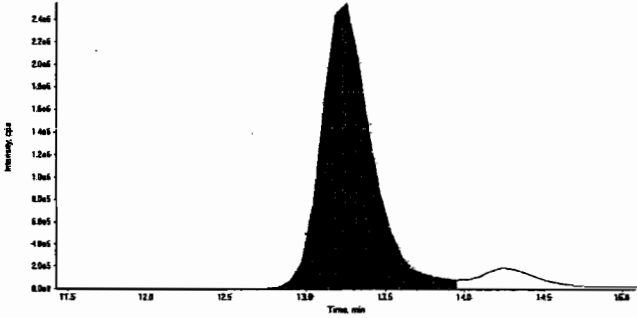
\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

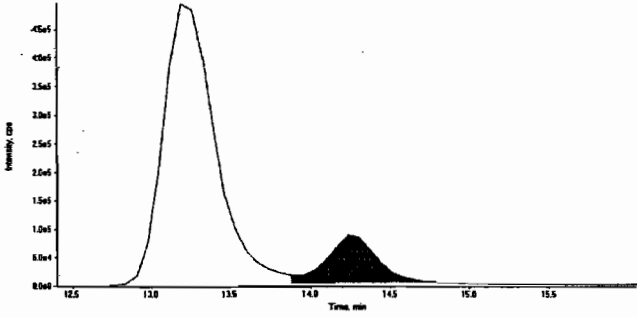
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LCMSMS#3

<b>Data File</b>	EXP0420010.wiff	<b>Acquisition Date</b>	4/20/2010 6:12:10 PM
<b>Sample Name</b>	WXX100420-56ICV	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	042010.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

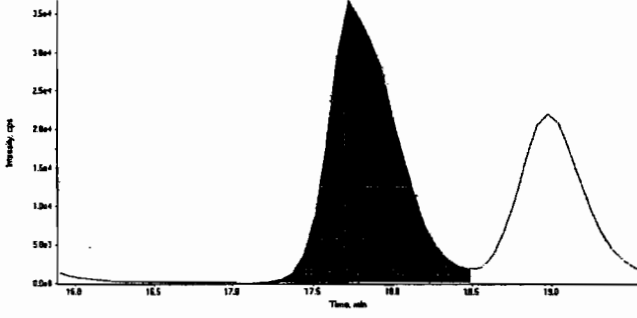
  

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.3
	Actual RT:	13.3
	Area Counts:	5.61e+007
	Manual Modification	No
	Amount:	675. (ng/mL)
	% Accuracy:	113.00

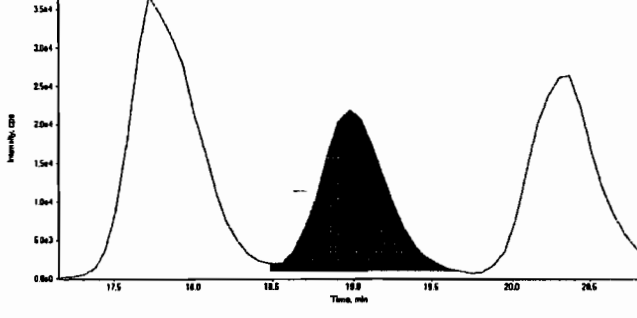
  

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.2
	Actual RT:	14.3
	Area Counts:	1.88e+006
	Manual Modification	Yes
	Amount:	624. (ng/mL)
	% Accuracy:	104.00

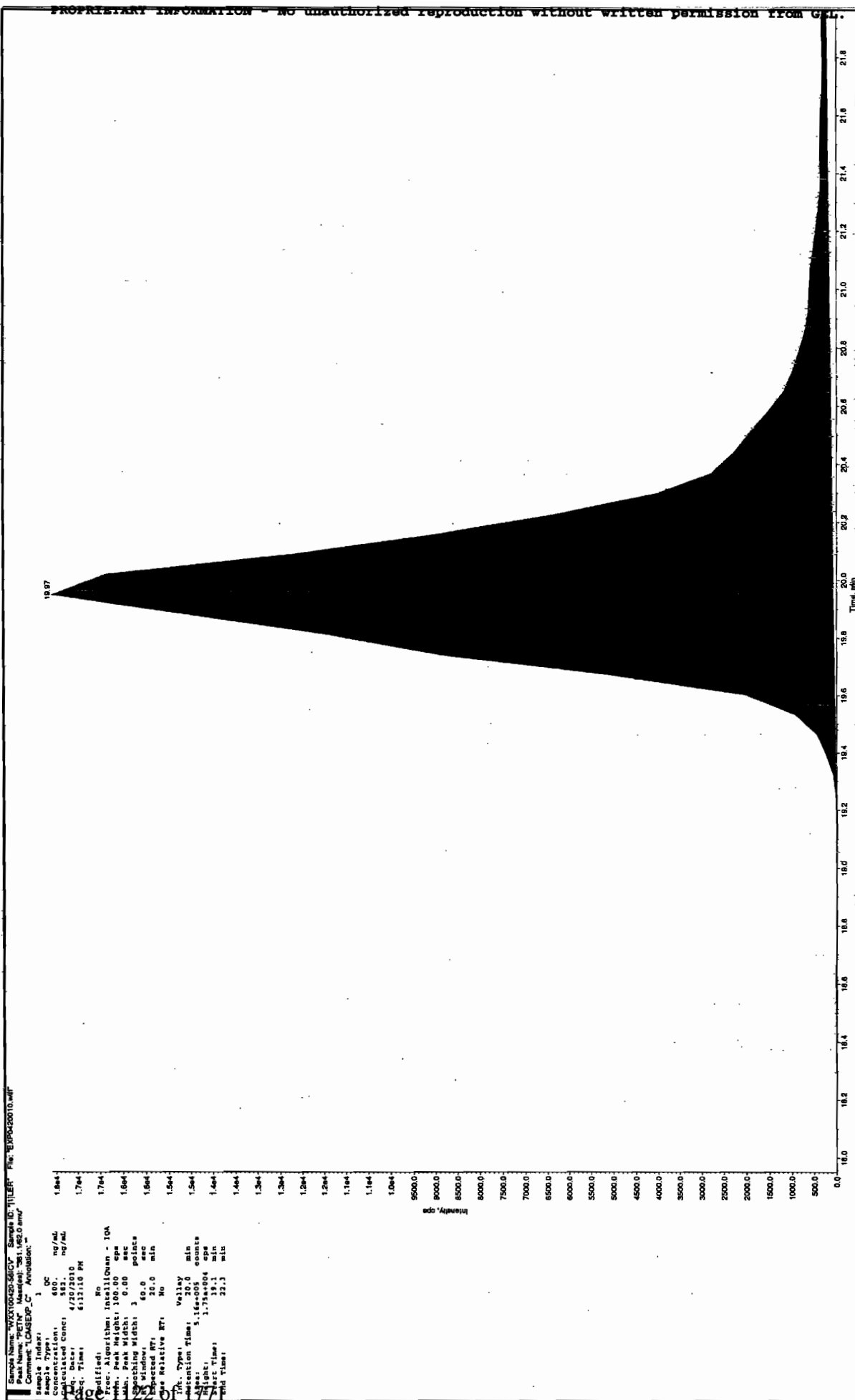
  

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	17.7
	Actual RT:	17.7
	Area Counts:	1.09e+006
	Manual Modification	No
	Amount:	601. (ng/mL)
	% Accuracy:	100.00

	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	19.0
	Actual RT:	19.0
	Area Counts:	6.12e+005
	Manual Modification	No
	Amount:	659. (ng/mL)
	% Accuracy:	110.00

Before Dec 4/25/10



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

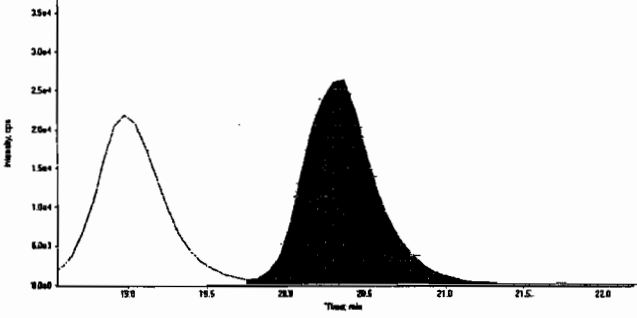


GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

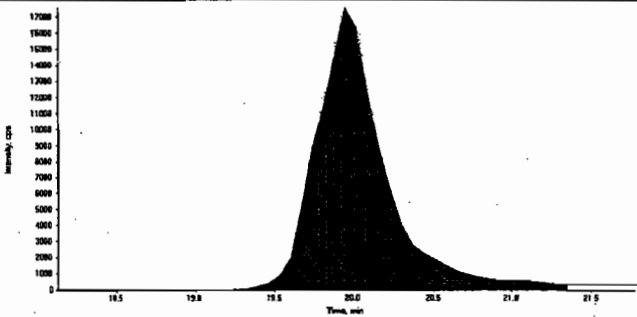
Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0420010.wiff	<b>Acquisition Date</b>	4/20/2010 6:12:10 PM
<b>Sample Name</b>	WXX100420-56ICV	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	042010.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	20.4
	<b>Actual RT:</b>	20.4
	<b>Area Counts:</b>	8.35e+005
	<b>Manual Modification</b>	No
	<b>Amount:</b>	622. (ng/mL)
	<b>% Accuracy:</b>	104.00

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	<b>Expected RT:</b>	20.0
	<b>Actual RT:</b>	20.0
	<b>Area Counts:</b>	5.20e+005
	<b>Manual Modification</b>	Yes
	<b>Amount:</b>	587. (ng/mL)
	<b>% Accuracy:</b>	97.80

GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis 04/20/10  
 Time of Injection 1812  
 Standard Number WXX100420-56ICV  
 Data File EXP0420010a

HMX	83.8
RDX	92.8
135-Trinitrobenzene	90.4
13-Dinitrobenzene	94.0
Tetryl	102.0
246-Trinitrotoluene	92.8
Nitrobenzene	97.2
34-dinitrotoluene	98.3
26-dinitrotoluene	95.2
24-dinitrotoluene	103.0
4-Amino-26-dinitrotoluene	113.0
2-Amino-46-dinitrotoluene	104.0
2-Nitrotoluene	100.0
4-Nitrotoluene	110.0
3-Nitrotoluene	104.0
PETN	97.8

TOTAL

✓ 1578.3

*done 04/24/10*

AVERAGE

✓ 98.6

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

*Jan  
4/20/10*

# Explosives Initial Calibration

Lab Name: GEL Laboratories LLC

GEL Job No: 10-2192

Lab Code: GEL

Run Date: 09-APR-10 15-APR-10 20-APR-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:	EXS04090003.wiff	EXS04090004.wiff	EXS04090005.wiff	EXS04090006.wiff	EXS04090007.wiff	EXS04090008.wiff	EXS04090009.wiff					
Parname:												
2,4-Diamino-6-nitrotoluene	112000	220000	544000	1100000	1620000	2230000	4010000	-24500	2380	-1.179	.9997	
2,6-Diamino-4-nitrotoluene	147000	294000	719000	1410000	1970000	2660000	4780000	11600	2860	-.237	.9999	
3,4-Dinitrotoluene	210000	426000	1050000	2120000	3190000	4160000	7740000	-52900	9640	-1.85	.9984	
3,5-Dinitroaniline	359000	708000	1780000	3300000	5260000	6700000	11100000	-93100	7830	-1.11	.9995	
TATB	38200	78800	218000	443000	728000	975000	1920000	-24000	1000	-.014	.9997	
tris(o-cresyl) phosphate	1060000	2050000	5040000	9430000	13600000	17700000	28800000	21900	20600	-3.12	1	

Quadratic Fit:  $y = Ax^2 + Bx + C$   
 where  $X^2$  column above is coefficient A  
 $X$  column above is coefficient B  
 intercept is C

COD is Coefficient of Determination

Q column used to flag COD outside of Limit (<0.990)

\* Values outside of QC Limit

040910ICAL

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

Fit	Quadratic	Weighting	None	Iterate	No
a0	-2.4e+004				
a1	1e+003				
a2	-0.0139				
Correlation coefficient 0.9997					
Use Area					

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

Fit	Quadratic	Weighting	None	Iterate	No
a0	-9.31e+004				
a1	7.83e+003				
a2	-1.11				
Correlation coefficient 0.9995					
Use Area					

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

Fit	Quadratic	Weighting	None	Iterate	No
a0	-5.29e+004				
a1	9.64e+003				
a2	-1.85				
Correlation coefficient 0.9984					
Use Area					

Peak Name: 26-Diamino-4-nitrotoluene  
No Internal Standard  
Q1/Q3 Masses: 165.97/46.00 amu

Fit	Quadratic	Weighting	None	Iterate	No
a0	1.16e+004				
a1	2.86e+003				
a2	-0.237				
Correlation coefficient 0.9999					
Use Area					

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

*See*  
*4/12/10*

*Attn: 04/12/10*



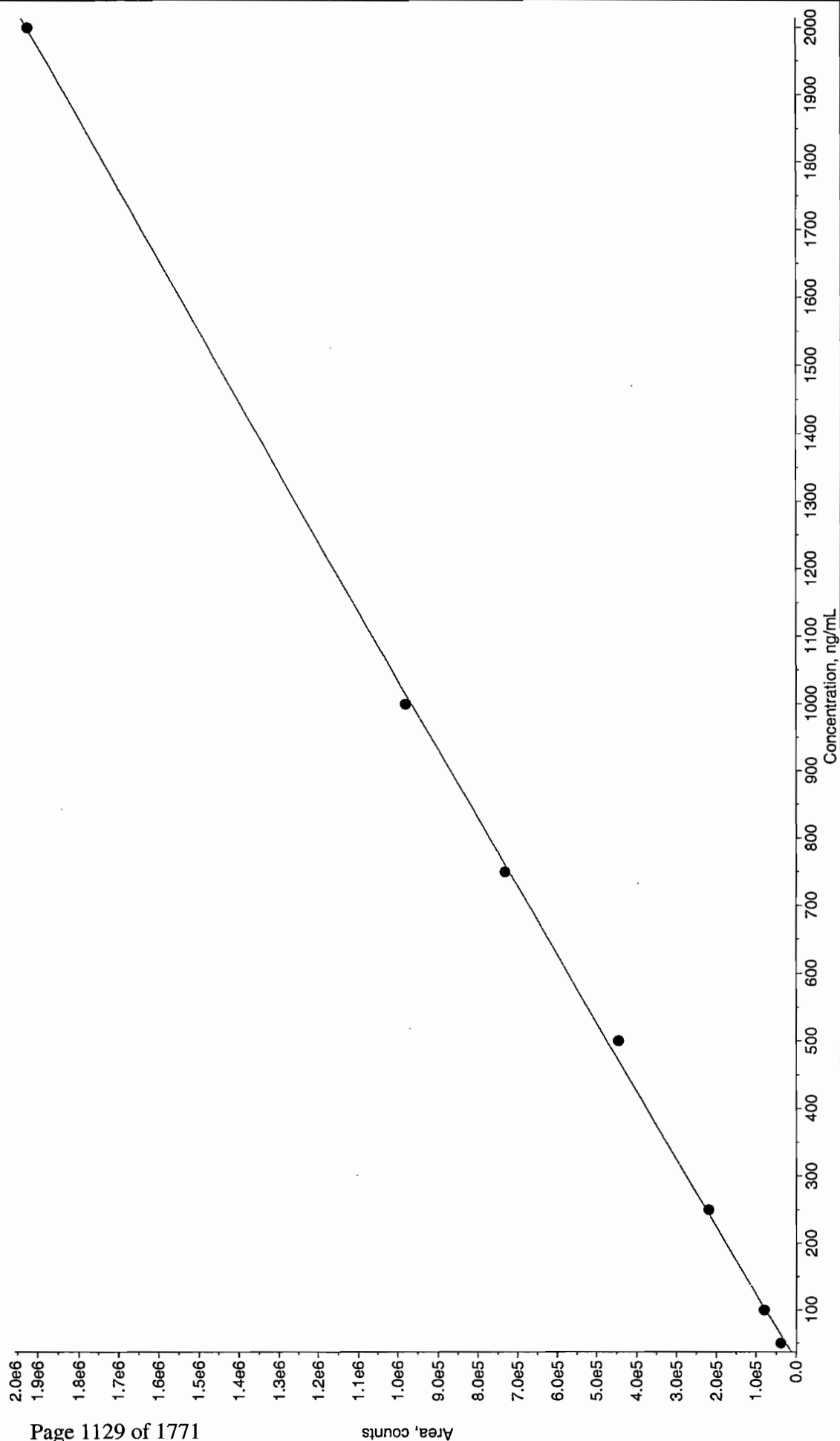
040910ICAL

Fit Quadratic Weighting Iterate No  
a0 -2.45e+004  
a1 2.38e+003  
a2 -0.179  
Correlation coefficient 0.9997  
Use Area

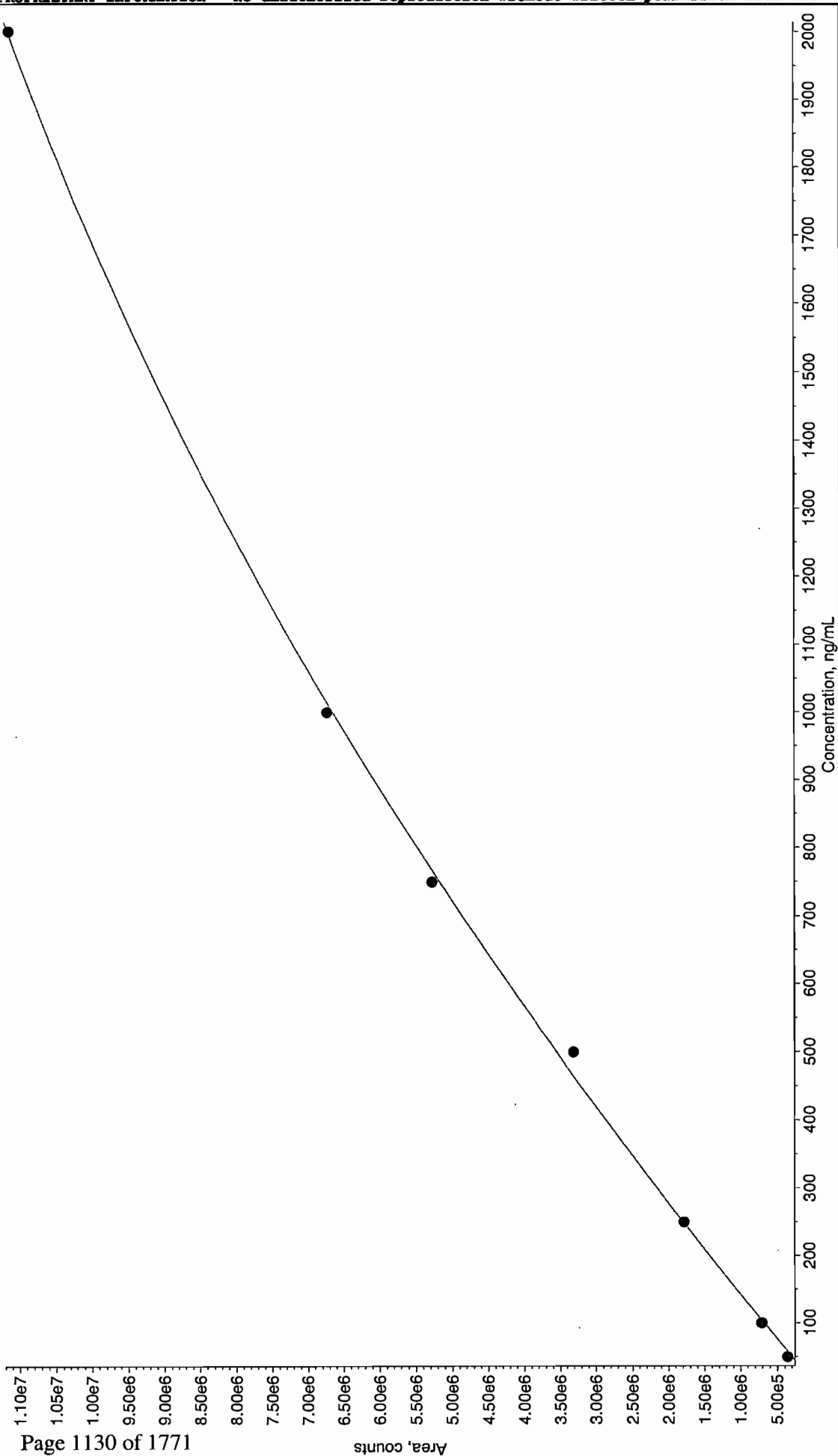
Peak Name: tris(o-cresyl) phosphate  
No Internal Standard  
Q1/Q3 Masses: 369.15/91.00 amu

Fit Quadratic Weighting Iterate No  
a0 2.19e+004  
a1 2.06e+004  
a2 -3.12  
Correlation coefficient 1.0000  
Use Area

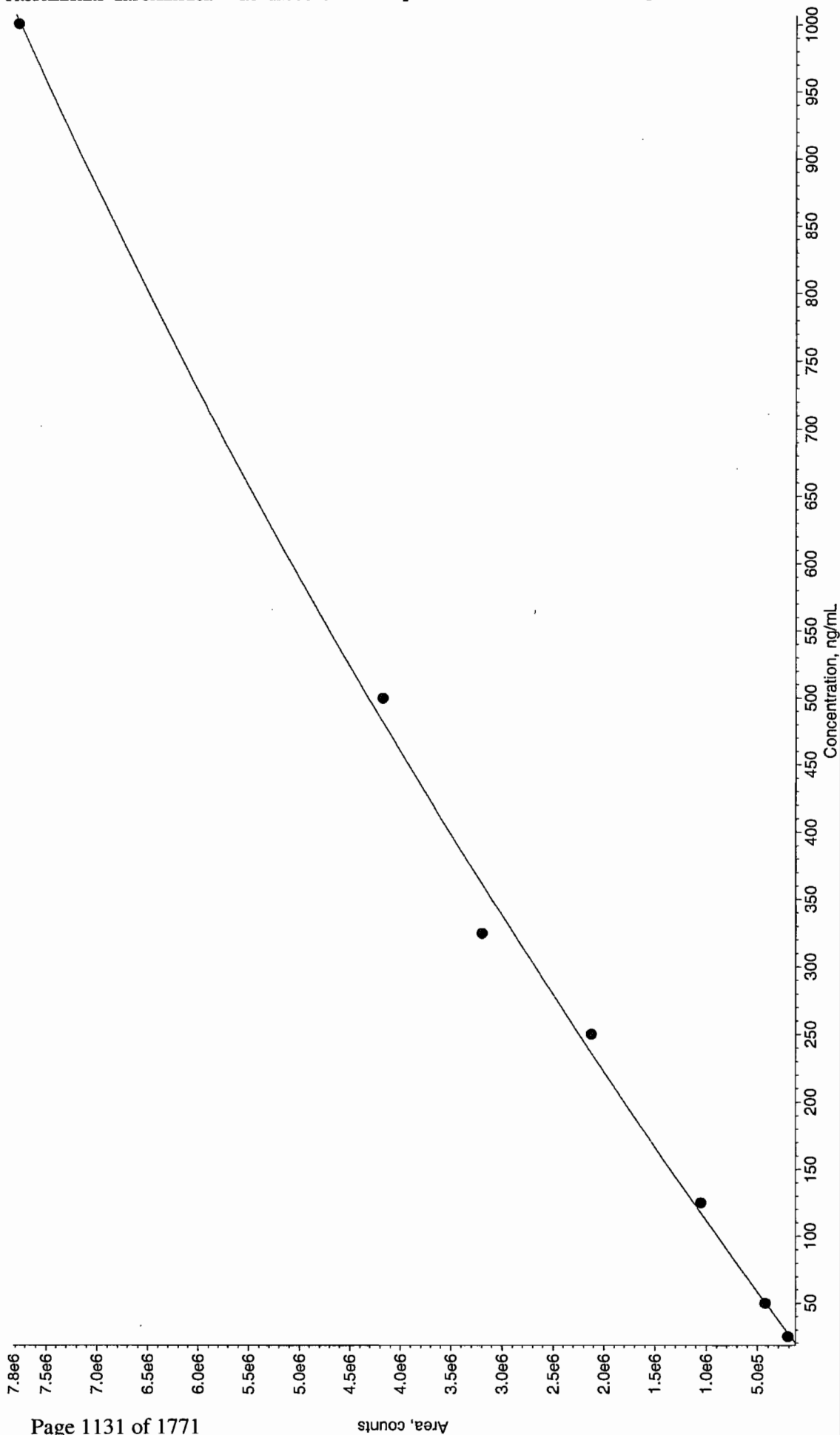
040910.rdb (TATB): "Quadratic" Regression ("No" weighting):  $y = -0.0139 x^2 + 1e+003 x + -2.4e+004$  ( $r = 0.9997$ )



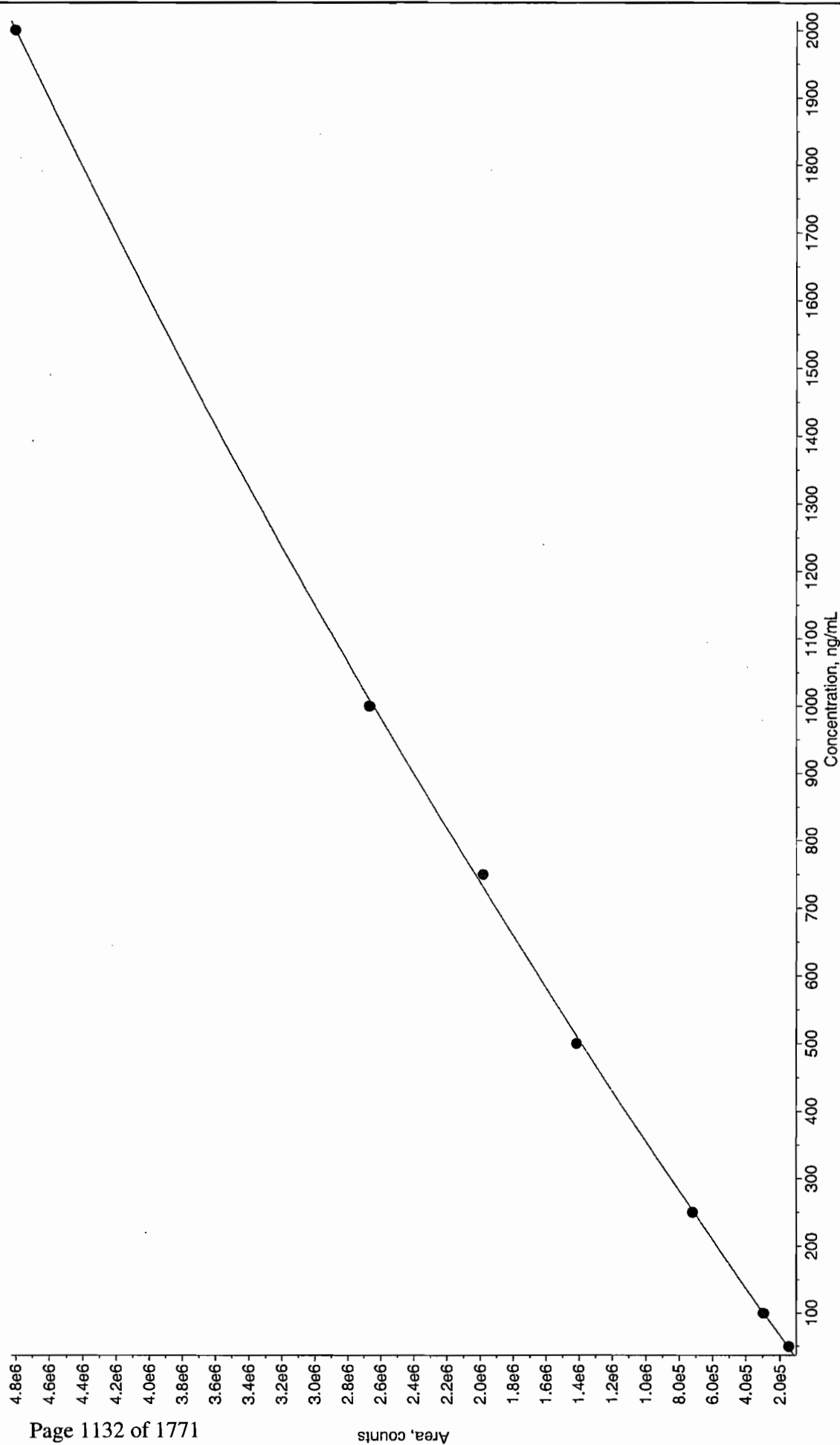
040910.rdb (35-Dinitroaniline): "Quadratic" Regression ("No" weighting):  $y = -1.11 x^2 + 7.83e+003 x + -9.31e+004$  ( $r = 0.9995$ )



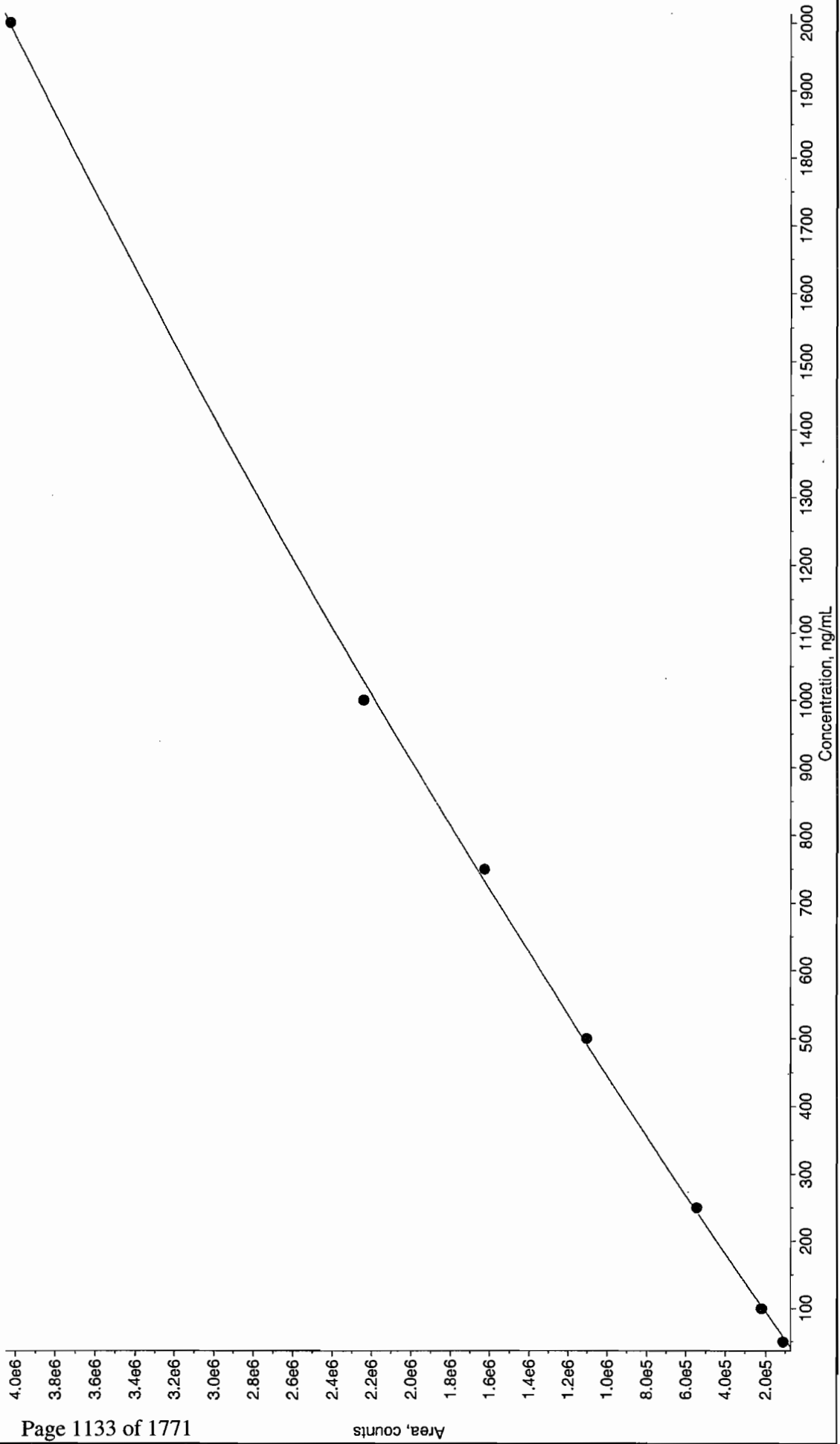
040910.rdb (34-Dinitrotoluene): "Quadratic" Regression ("No" weighting):  $y = -1.85 x^2 + 9.64e+003 x + -5.29e+004$  ( $r = 0.9984$ )



040910.rdb (26-Diamino-4-nitrotoluene): "Quadratic" Regression ("No" weighting):  $y = -0.237 x^2 + 2.86e+003 x + 1.16e+004$  ( $r = 0.9999$ )

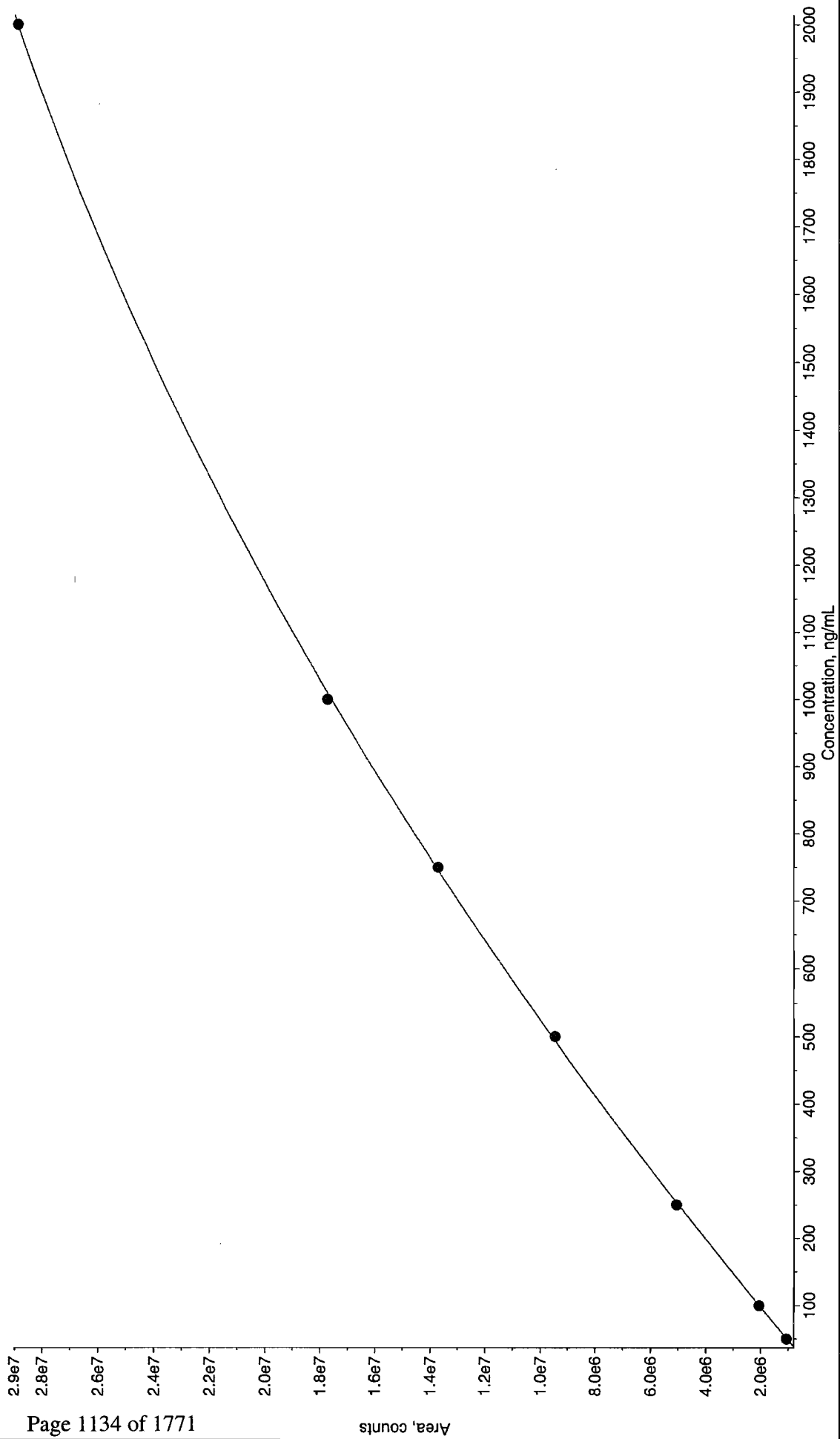


040910.rdb (24-Diamino-6-nitrotoluene): "Quadratic" Regression ("No" weighting):  $y = -0.179x^2 + 2.38e+003x + -2.45e+004$  ( $r = 0.9997$ ).



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

040910.rdb (tris(o-cresyl) phosphate): "Quadratic" Regression ("No" weighting):  $y = -3.12 \times 10^{-4} x^2 + 2.06 \times 10^{-4} x + 2.19 \times 10^4$  ( $r = 1.0000$ )



# Explosives Initial Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2199

Lab Code: GEL

GEL Sample ID: WXXICV

GEL Data File EXS04090011.wiff

Analysis Date: 09-APR-10 09:51

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	462	92	
2,6-Diamino-4-nitrotoluene	500	477	95	
3,4-Dinitrotoluene	250	230	92	
3,5-Dinitroaniline	500	456	91	
TATB	500	482	97	
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



for 4/12/10

Sample Name: "WXX100409-26(CV)" Sample ID: "JILLER" File: "EXS04090011.wif"

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

Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1

Sample Type: OC

Concentration: 500. ng/mL

Calculated Conc: 456. ng/mL

Acq. Date: 4/9/2010

Acq. Time: 9:51:53 AM

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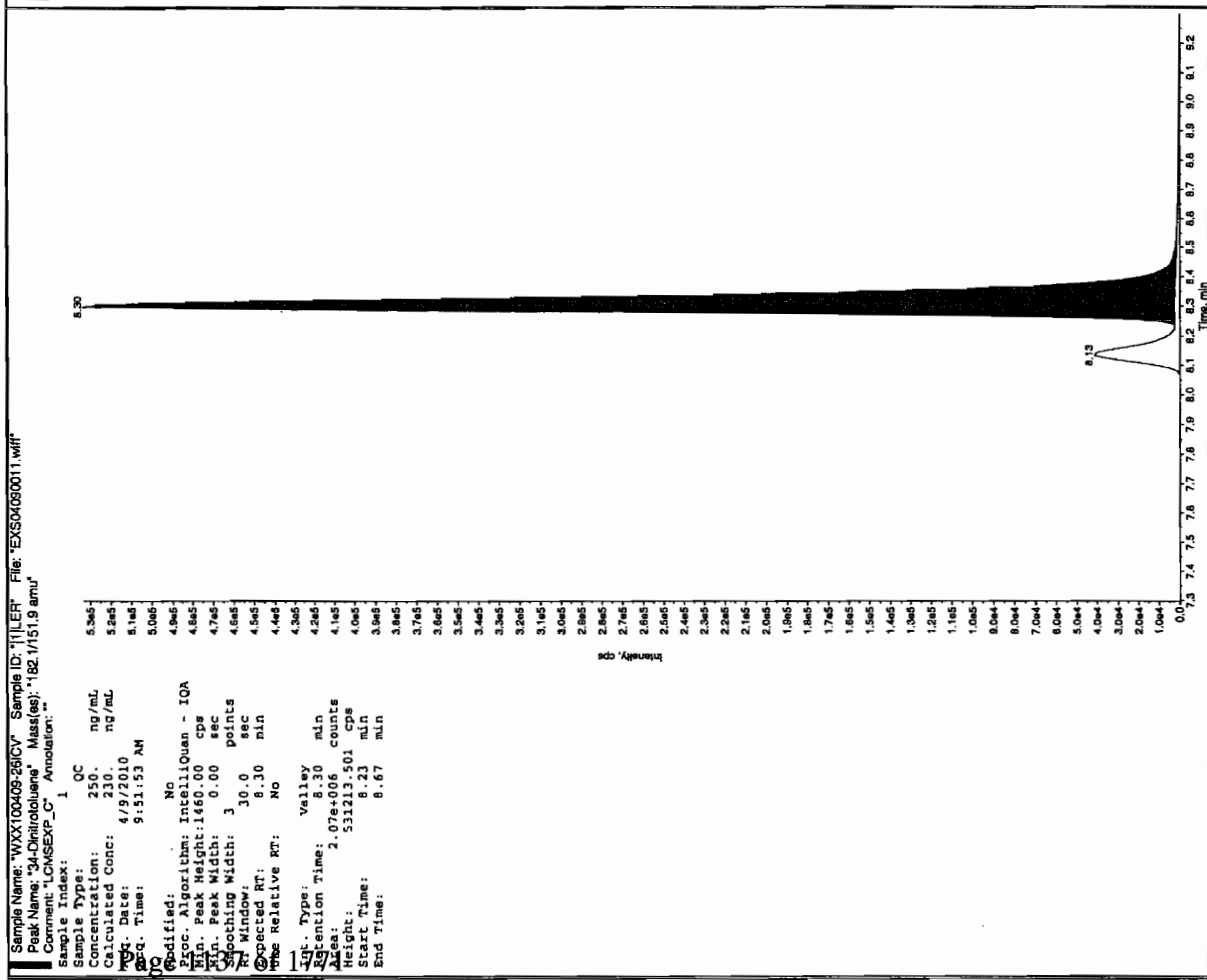
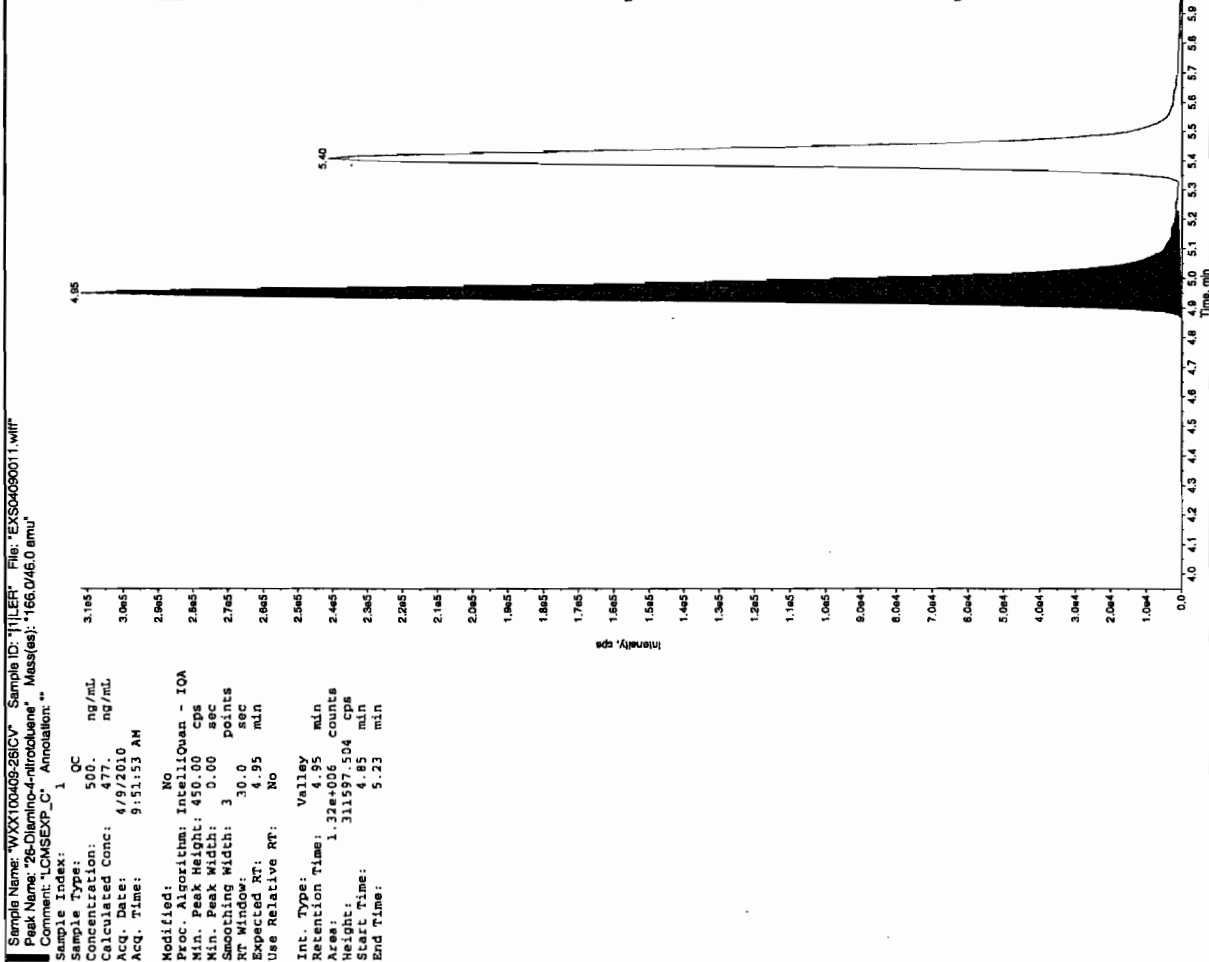
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Sample Name: WXX100409-26(CV) Sample ID: 111ER File: EXS04090011.wif

Peak Name: 1,3,5-trisubstituted benzene Mass(es): 369.1791.0 amu

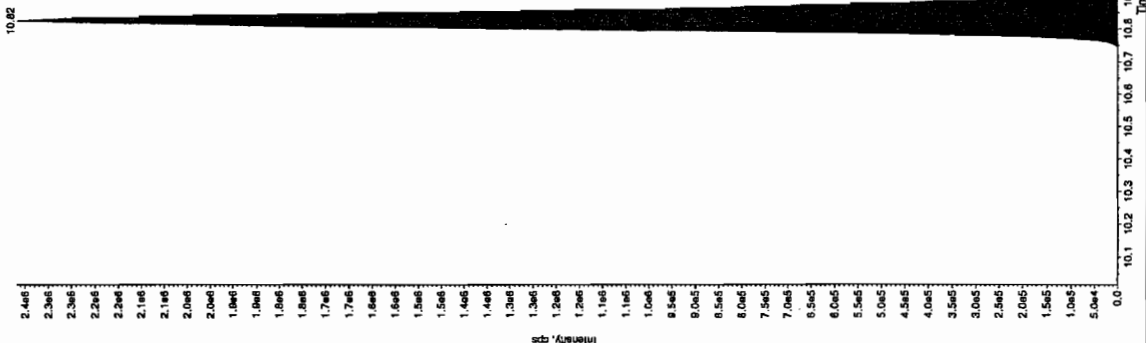
Comment: LCMSEXP\_C Annotation: "

Sample Index: 1

Sample Type: QC  
Concentration: 500. ng/mL  
Calculated Conc: 504. ng/mL  
Acq. Date: 4/9/2010  
Acq. Time: 9:51:53 AM

Modified: No  
Proc. Algorithm: IntelliQuan - IOA  
Min. Peak Height: 8000.00 cps  
Min. Peak Width: 3.00 sec  
Sweeping Width: 30.0 points  
RT Window: 30.0 sec  
Expected RT: 10.8 min  
Use Relative RT: No

Int. Type: Valley  
Retention Time: 10.8 min  
Area: 9.61e+006 counts  
Height: 2366707.275 cps  
Start Time: 10.7 min  
End Time: 11.2 min



Sample Name: WXX100409-26(CV) Sample ID: 111ER File: EXS04090011.wif

Peak Name: 2,4-Dinitro-6-nitrotoluene Mass(es): 166.0460.0 amu

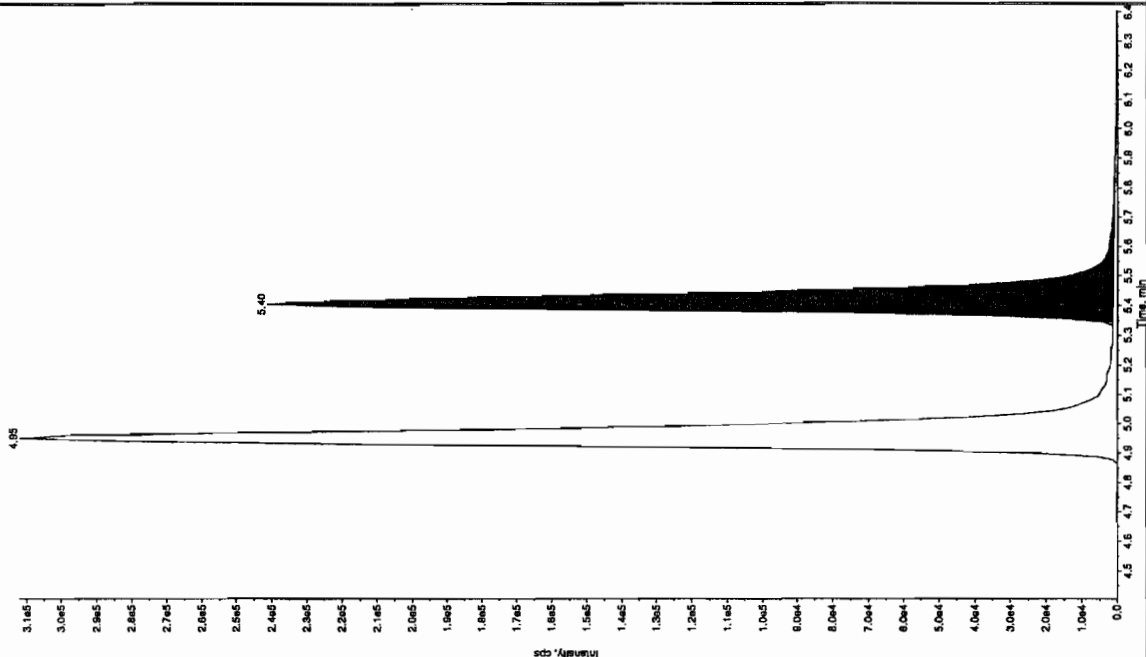
Comment: LCMSEXP\_C Annotation: "

Sample Index: 1

Sample Type: QC  
Concentration: 500. ng/mL  
Calculated Conc: 462. ng/mL  
Acq. Date: 4/9/2010  
Acq. Time: 9:51:53 AM

Modified: No  
Proc. Algorithm: IntelliQuan - IOA  
Min. Peak Height: 350.00 cps  
Min. Peak Width: 3.00 sec  
Sweeping Width: 30.0 points  
RT Window: 30.0 sec  
Expected RT: 5.40 min  
Use Relative RT: No

Int. Type: Valley  
Retention Time: 5.40 min  
Area: 1.04e+006 counts  
Height: 239965.345 cps  
Start Time: 5.32 min  
End Time: 5.83 min



7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2199

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0415012.wiff

Analysis Date: 15-APR-10 14:53

LCMSMS ID: 1189

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	36.2	91	
2,4,6-Trinitrotoluene	40	38	95	
2,4-Dinitrotoluene	40	31.4	79	
2,6-Dinitrotoluene	40	33.2	83	
2-Amino-4,6-dinitrotoluene	40	33.9	85	
3,4-Dinitrotoluene	20	16.9	85	
4-Amino-2,6-dinitrotoluene	40	35.7	89	
HMX	40	38	95	
Nitrobenzene	40	43.3	108	
PETN	40	36.7	92	
RDX	40	37	93	
Tetryl	40	38.5	96	
m-Dinitrobenzene	40	38.9	97	
m-Nitrotoluene	40	38.1	95	
o-Nitrotoluene	40	41.4	104	
p-Nitrotoluene	40	40.9	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%

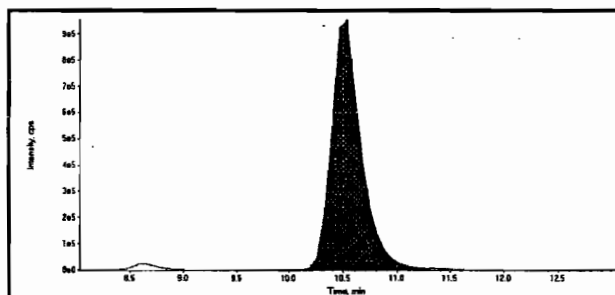
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

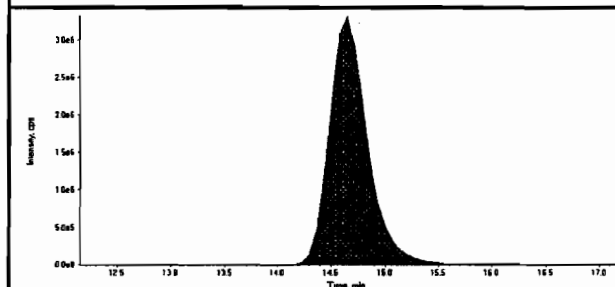
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

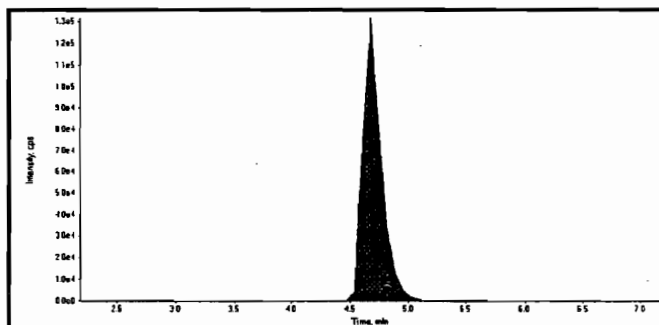
Data File	EXP0415012.wiff	Acquisition Date	4/15/2010 2:53:00 PM
Sample Name	WXX100415-57CRI	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



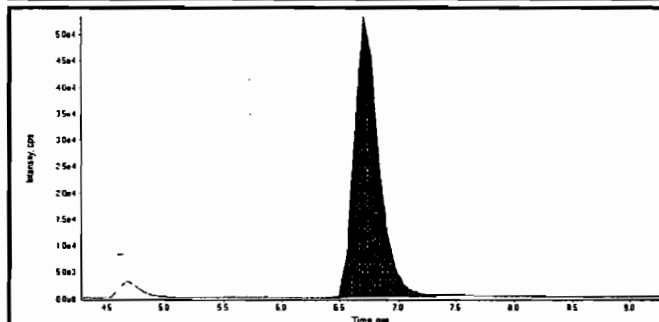
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.50
Actual RT:	10.50
Area Counts:	18300000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.60
Actual RT:	14.60
Area Counts:	81400000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.67
Actual RT:	4.67
Area Counts:	1.47e+006
Manual Modification	No
Amount:	38.0 (ng/mL)
% Accuracy:	94.90



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.77
Actual RT:	6.70
Area Counts:	7.82e+005
Manual Modification	No
Amount:	37.0 (ng/mL)
% Accuracy:	92.60

*Handwritten:*  
HMC 4/12/10  
Lar 4/12/10

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

Data File	EXP0415012.wiff	Acquisition Date	4/15/2010 2:53:00 PM
Sample Name	WXX100415-57CRI	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control

	Compound Name:	135-Trinitrobenzene (213.0/182.8 amu)
	Expected RT:	9.00
	Actual RT:	9.00
	Area Counts:	1.06e+007
	Manual Modification	No
	Amount:	36.2 (ng/mL)
	% Accuracy:	90.60

	Compound Name:	13-Dinitrobenzene (168.0/137.9 amu)
	Expected RT:	10.7
	Actual RT:	10.6
	Area Counts:	4.02e+006
	Manual Modification	No
	Amount:	38.9 (ng/mL)
	% Accuracy:	97.30

	Compound Name:	Tetryl (241.0/180.8 amu)
	Expected RT:	10.7
	Actual RT:	10.7
	Area Counts:	3.18e+006
	Manual Modification	No
	Amount:	38.5 (ng/mL)
	% Accuracy:	96.30

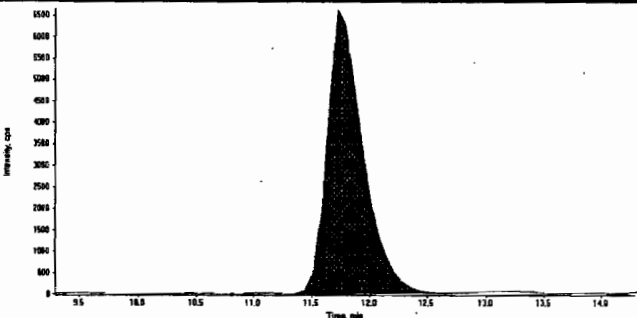
	Compound Name:	246-Trinitrotoluene (227.1/209.8 amu)
	Expected RT:	13.1
	Actual RT:	13.1
	Area Counts:	2.12e+007
	Manual Modification	No
	Amount:	38.0 (ng/mL)
	% Accuracy:	95.00

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

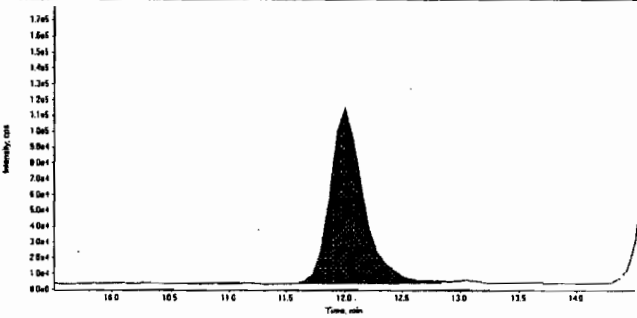
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LCMSMS#3

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<b>Sample Name</b>	WXX100415-57CRI	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

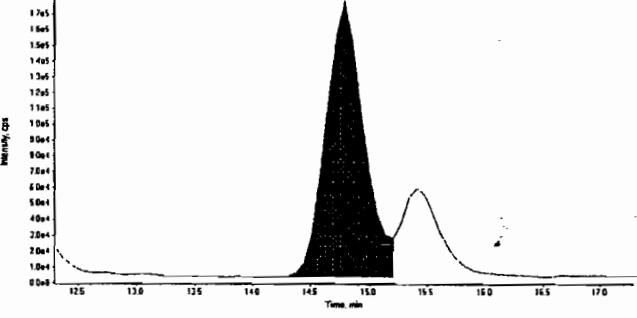
  

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	11.8
	Actual RT:	11.7
	Area Counts:	1.43e+005
	Manual Modification	No
	Amount:	43.3 (ng/mL)
	% Accuracy:	108.00

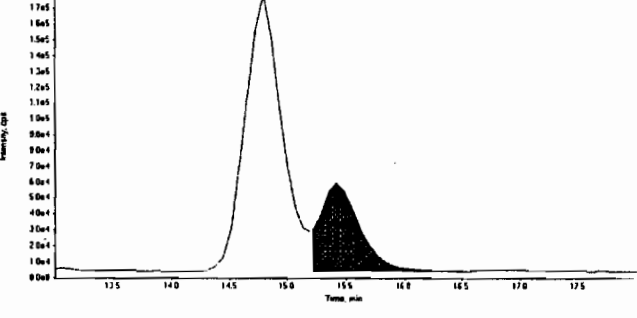
  

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.0
	Actual RT:	12.0
	Area Counts:	2.28e+006
	Manual Modification	No
	Amount:	16.9 (ng/mL)
	% Accuracy:	84.60

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	14.8
	Actual RT:	14.8
	Area Counts:	4.01e+006
	Manual Modification	No
	Amount:	33.2 (ng/mL)
	% Accuracy:	82.90

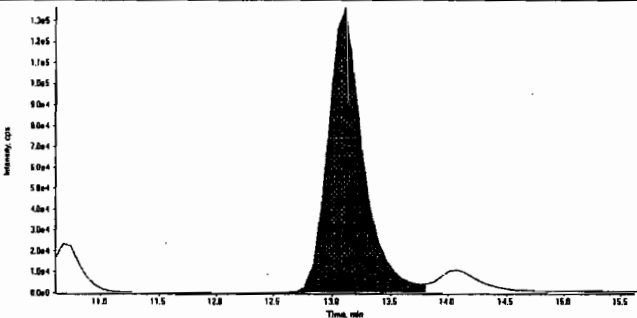
	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.5
	Actual RT:	15.4
	Area Counts:	1.39e+006
	Manual Modification	No
	Amount:	31.4 (ng/mL)
	% Accuracy:	78.50

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

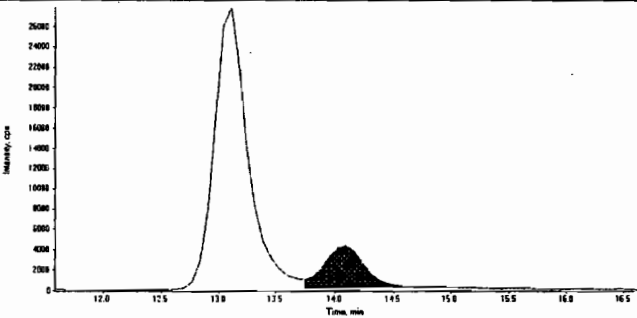
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415012.wiff	<b>Acquisition Date</b>	4/15/2010 2:53:00 PM
<b>Sample Name</b>	WXX100415-57CRI	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

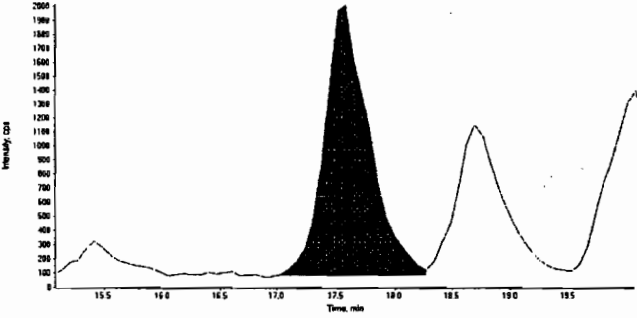
  

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.1
	Actual RT:	13.1
	Area Counts:	2.89e+006
	Manual Modification	No
	Amount:	35.7 (ng/mL)
	% Accuracy:	89.30

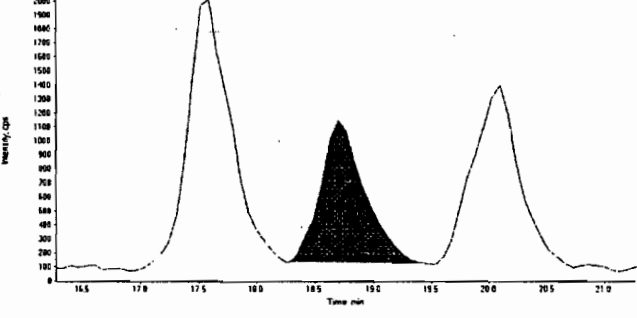
  

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.1
	Actual RT:	14.1
	Area Counts:	1.03e+005
	Manual Modification	No
	Amount:	33.9 (ng/mL)
	% Accuracy:	84.60

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	17.6
	Actual RT:	17.6
	Area Counts:	5.17e+004
	Manual Modification	No
	Amount:	41.4 (ng/mL)
	% Accuracy:	104.00

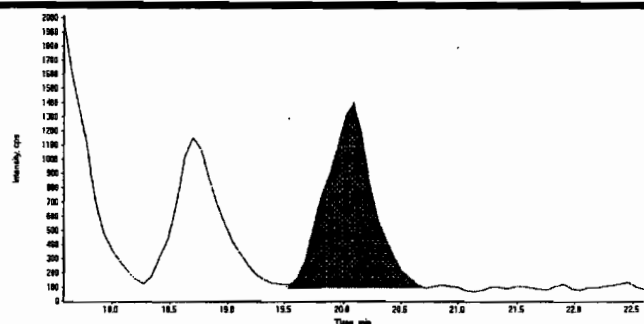
	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	18.8
	Actual RT:	18.7
	Area Counts:	2.66e+004
	Manual Modification	No
	Amount:	40.9 (ng/mL)
	% Accuracy:	102.00



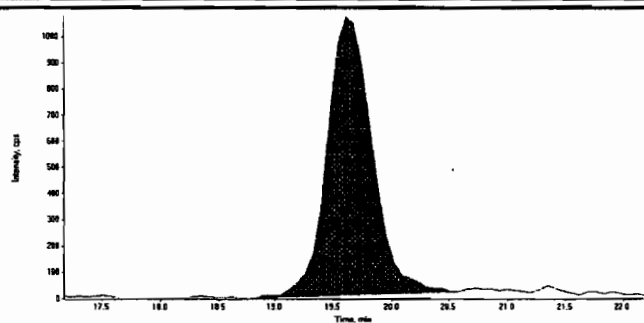
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

Data File	EXP0415012.wiff	Acquisition Date	4/15/2010 2:53:00 PM
Sample Name	WXX100415-57CRI	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



Compound Name:	3-Nitrotoluene (137.0/46.0 amu)
Expected RT:	20.1
Actual RT:	20.1
Area Counts:	3.67e+004
Manual Modification	No
Amount:	38.1 (ng/mL)
% Accuracy:	95.40



Compound Name:	PETN (361.1/62.0 amu)
Expected RT:	19.7
Actual RT:	19.6
Area Counts:	2.91e+004
Manual Modification	No
Amount:	36.7 (ng/mL)
% Accuracy:	91.80

GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis 04/15/10  
 Time of Injection 1453  
 Standard Number WXX100415-57CRI  
 Data File EXP0415012a

HMX	94.9
RDX	92.6
135-Trinitrobenzene	90.6
13-Dinitrobenzene	97.3
Tetryl	96.3
246-Trinitrotoluene	95.0
Nitrobenzene	108.0
34-dinitrotoluene	84.6
26-dinitrotoluene	82.9
24-dinitrotoluene	78.5
4-Amino-26-dinitrotoluene	89.3
2-Amino-46-dinitrotoluene	84.6
2-Nitrotoluene	104.0
4-Nitrotoluene	102.0
3-Nitrotoluene	95.4
PETN	91.8

TOTAL

✓ 1487.8

*Hmm-04/23/10*

AVERAGE

✓ 93.0

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

*OK*  
*4/23/10*

7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2199

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0415023.wiff

Analysis Date: 15-APR-10 19:38

LCMSMS ID: 1189

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	525	87	
2,4,6-Trinitrotoluene	600	545	91	
2,4-Dinitrotoluene	600	570	95	
2,6-Dinitrotoluene	600	570	95	
2-Amino-4,6-dinitrotoluene	600	593	99	
3,4-Dinitrotoluene	300	291	97	
4-Amino-2,6-dinitrotoluene	600	640	107	
HMX	600	520	87	
Nitrobenzene	600	601	100	
PETN	600	663	111	
RDX	600	629	105	
Tetryl	600	529	88	
m-Dinitrobenzene	600	543	91	
m-Nitrotoluene	600	613	102	
o-Nitrotoluene	600	592	99	
p-Nitrotoluene	600	629	105	

Recovery Limits:

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

Other Target Analytes 80-120%

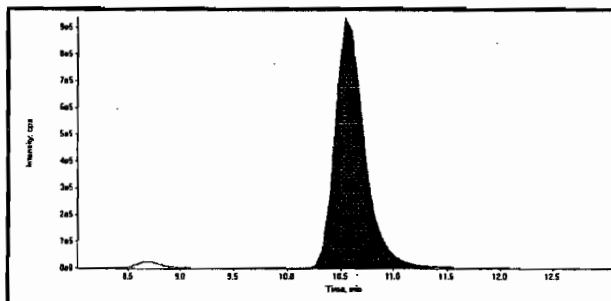
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

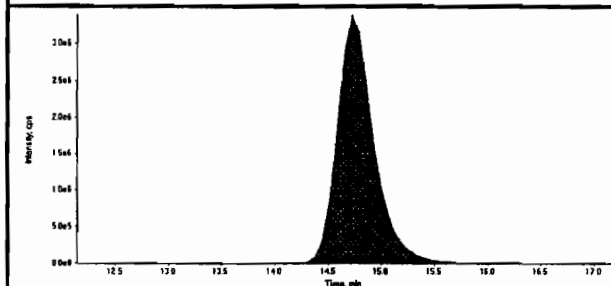
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

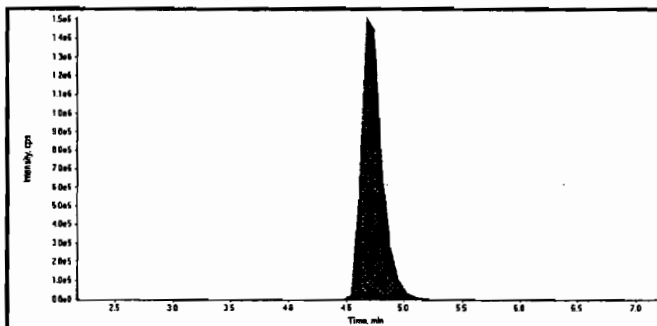
Data File	EXP0415023.wiff	Acquisition Date	4/15/2010 7:38:20 PM
Sample Name	WXX100415-56CCV	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



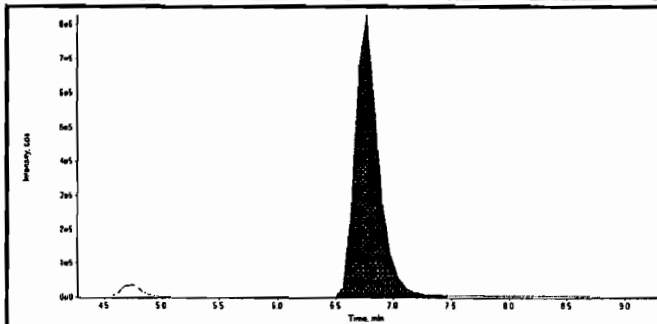
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.50
Actual RT:	10.50
Area Counts:	18500000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.60
Actual RT:	14.70
Area Counts:	82900000.00
Manual Modification	Yes
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.67
Actual RT:	4.67
Area Counts:	1.97e+007
Manual Modification	No
Amount:	520. (ng/mL)
% Accuracy:	86.70



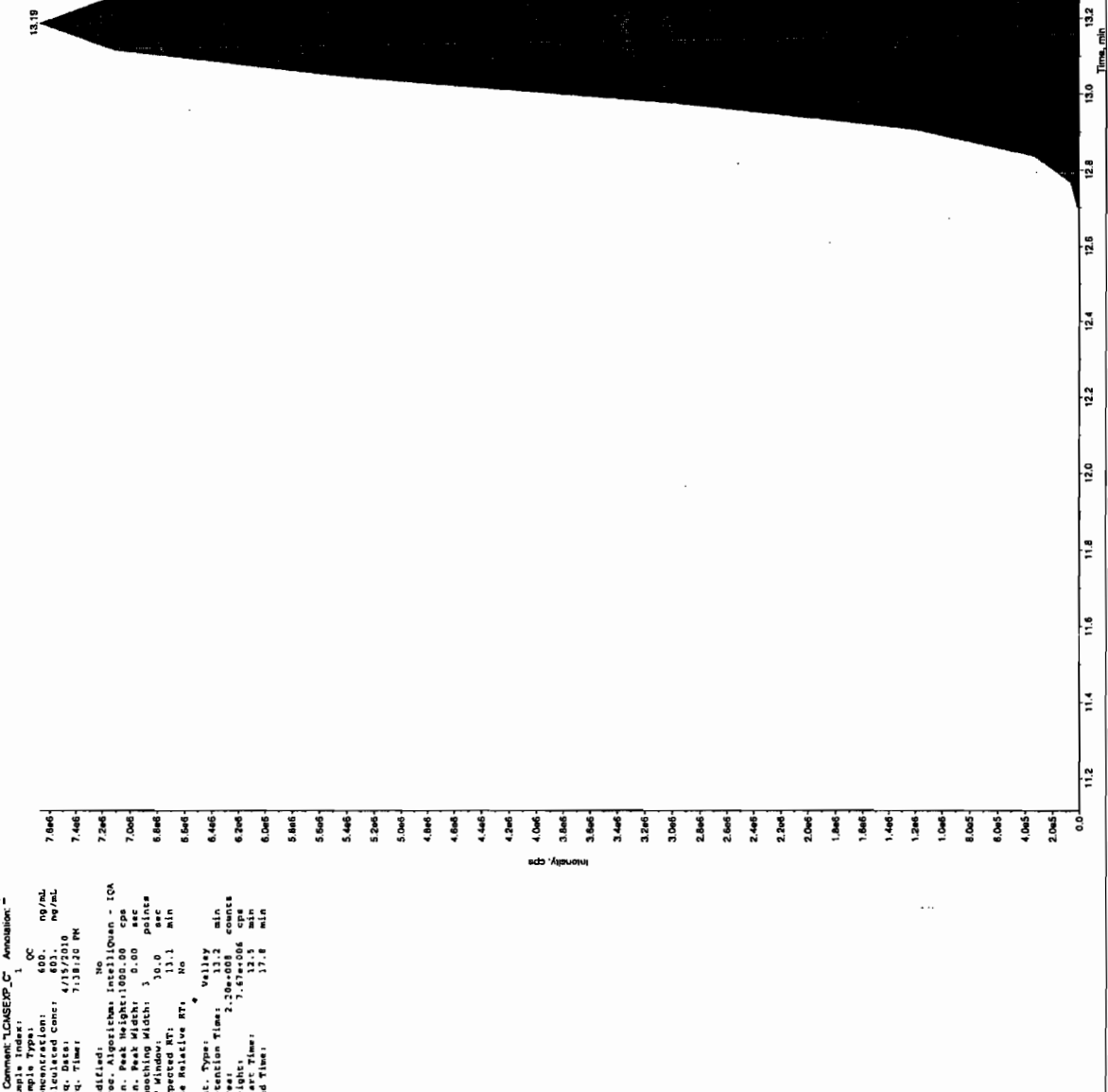
Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.77
Actual RT:	6.77
Area Counts:	1.21e+007
Manual Modification	No
Amount:	629. (ng/mL)
% Accuracy:	105.00

*Shm 04/23/10*

*Shm 4/23/10*

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

Sample Name: "WXX100415-56CCV" Sample ID: "J1LER" File: "EXP0415023.wiff"  
Peak Name: "248-Trinitrofluorene" Mass(es): "227.1/209.8 amu"



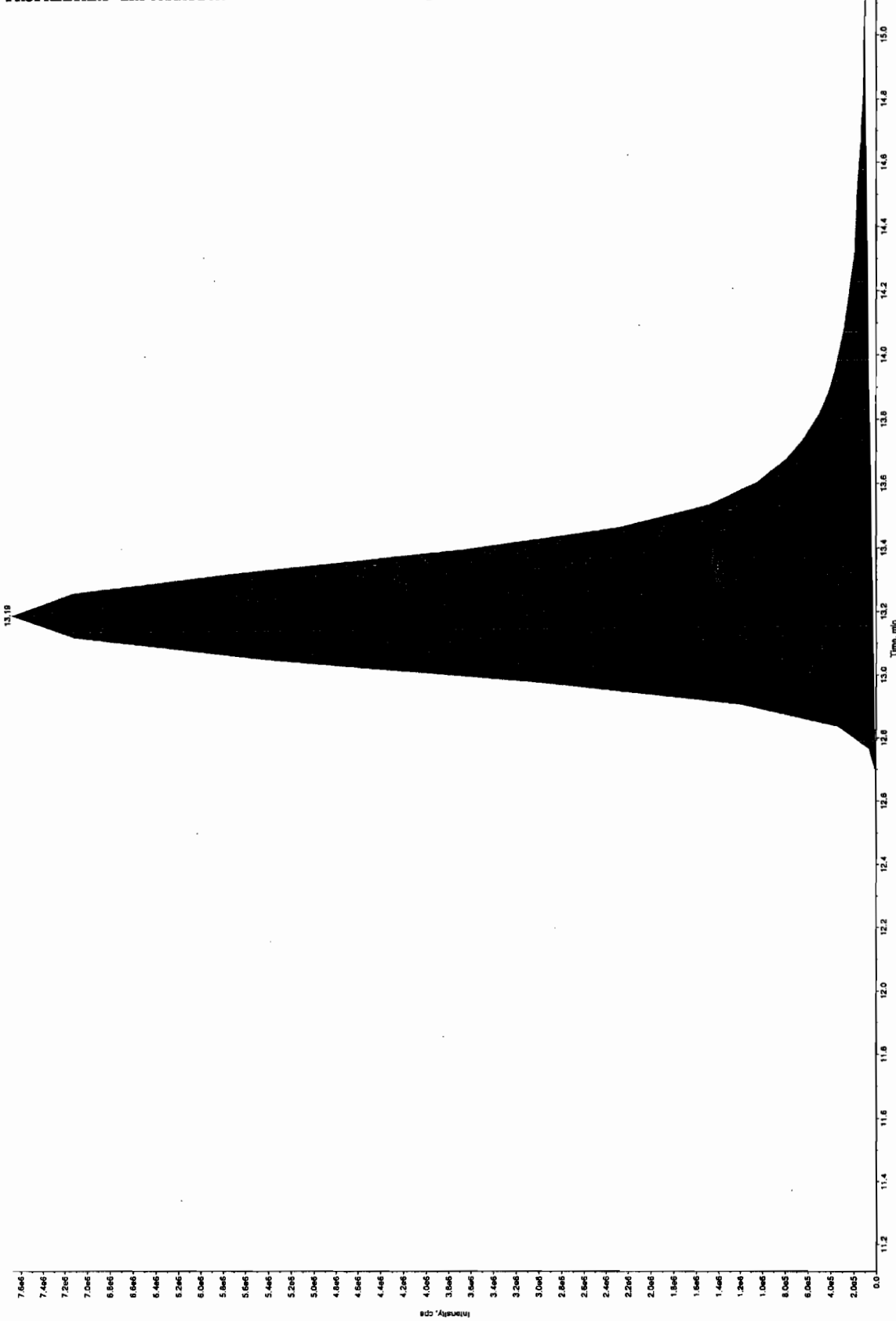
\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

after run 4/23/10

PROPRIETARY INFORMATION No unauthorized reproduction without written permission from GWT.

Sample Name: WXYZ10015560V Sample ID: T1LER File: E20015223.wif  
 Peak Name: 246.7-tetraolene Molecular Weight: 227.1208 g/mol  
 Comment: "LCMS-EXP\_C" Annotation: 1

Sample Index:  
 Sample Type: GC  
 Sample Name: WXYZ10015560V  
 Calculated Conc: 515 ng/ml  
 Acq. Date: 4/13/2010  
 Acq. Time: 7:58:20 PM  
 Peak Window: 30.0 sec  
 Expected RT: 13.1 min  
 Observed RT: 13.1 min  
 Ret. Type: Manual  
 Retention Time: 13.2 min  
 Area: 3.06e+009 counts  
 Height: 7.18e+008 counts  
 Start Time: 12.6 min  
 End Time: 14.9 min



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

Data File	EXP0415023.wiff	Acquisition Date	4/15/2010 7:38:20 PM
Sample Name	WXX100415-56CCV	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control

	Compound Name:	135-Trinitrobenzene (213.0/182.8 amu)
	Expected RT:	9.00
	Actual RT:	9.00
	Area Counts:	1.20e+008
	Manual Modification	No
	Amount:	525. (ng/mL)
	% Accuracy:	87.40

	Compound Name:	13-Dinitrobenzene (168.0/137.9 amu)
	Expected RT:	10.7
	Actual RT:	10.7
	Area Counts:	5.50e+007
	Manual Modification	No
	Amount:	543. (ng/mL)
	% Accuracy:	90.60

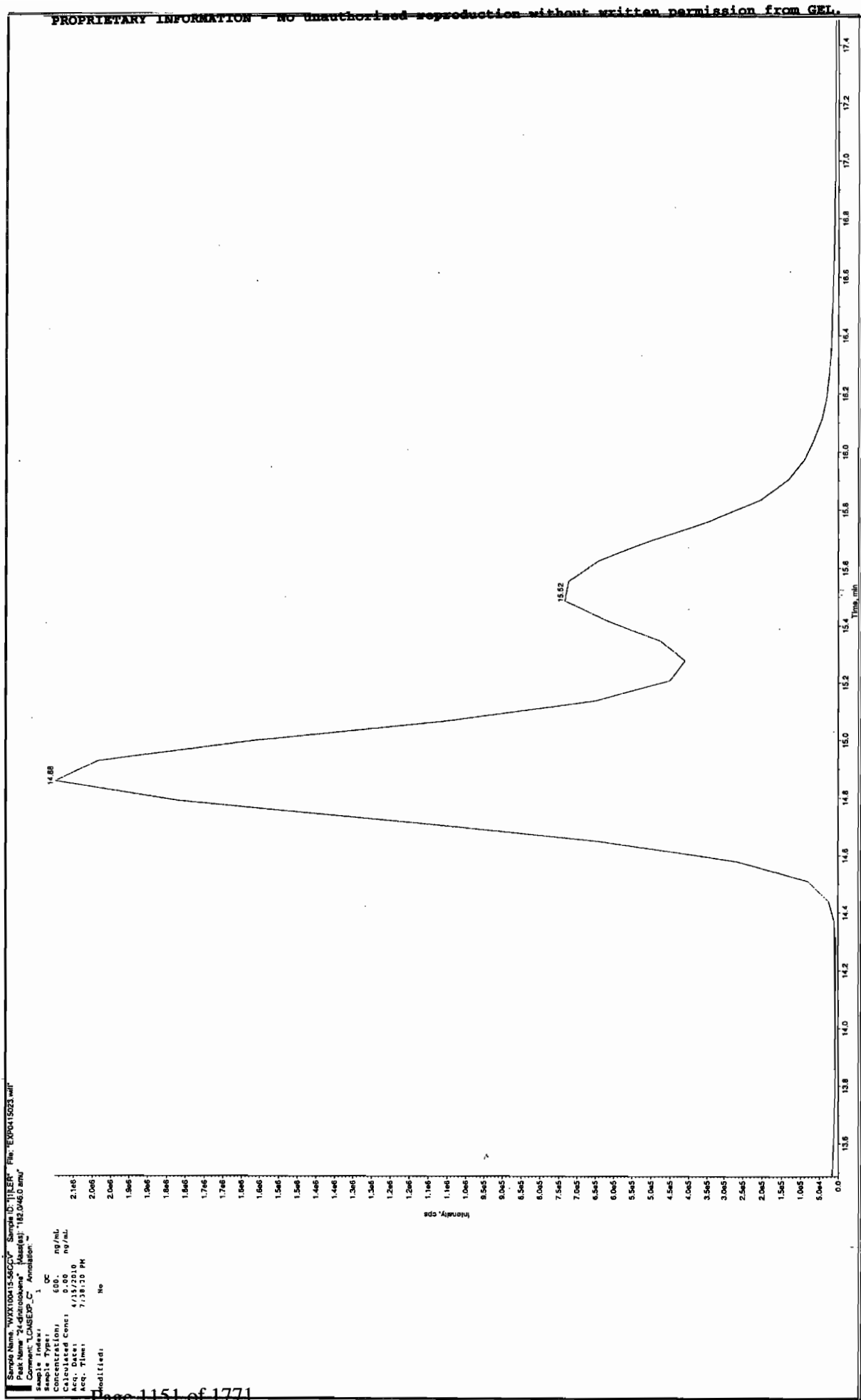
  

	Compound Name:	Tetryl (241.0/180.8 amu)
	Expected RT:	10.7
	Actual RT:	10.7
	Area Counts:	4.56e+007
	Manual Modification	No
	Amount:	529. (ng/mL)
	% Accuracy:	88.20

	Compound Name:	246-Trinitrotoluene (227.1/209.8 amu)
	Expected RT:	13.1
	Actual RT:	13.2
	Area Counts:	2.06e+008
	Manual Modification	Yes
	Amount:	545. (ng/mL)
	% Accuracy:	90.80

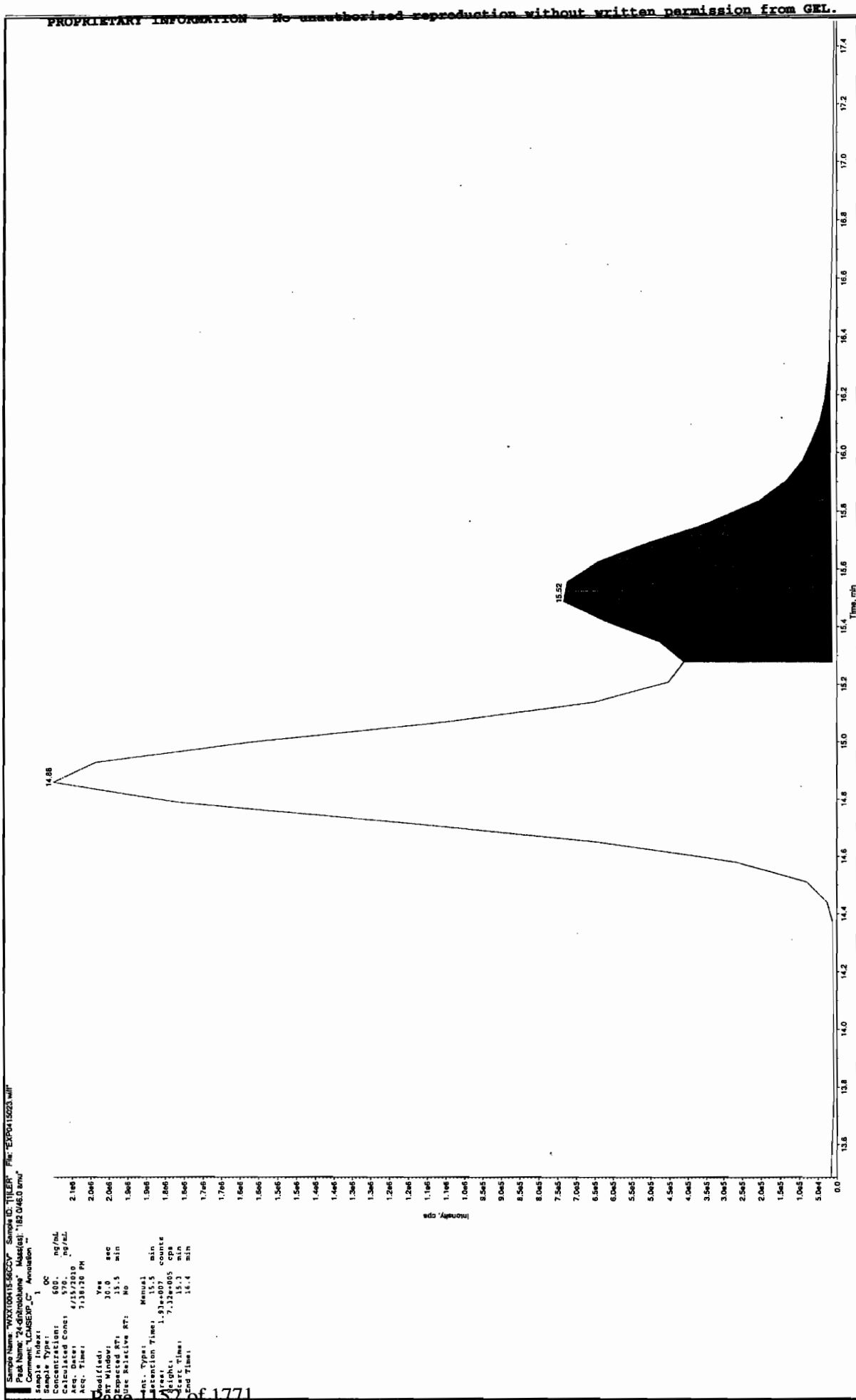
Before Jan 4/23/10



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3



after Jan 4/23/10



GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415023.wiff	<b>Acquisition Date</b>	4/15/2010 7:38:20 PM
<b>Sample Name</b>	WXX100415-56CCV	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	11.8
	Actual RT:	11.8
	Area Counts:	2.28e+006
	Manual Modification	No
	Amount:	601. (ng/mL)
	% Accuracy:	100.00

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.0
	Actual RT:	12.1
	Area Counts:	3.16e+007
	Manual Modification	No
	Amount:	291. (ng/mL)
	% Accuracy:	97.10

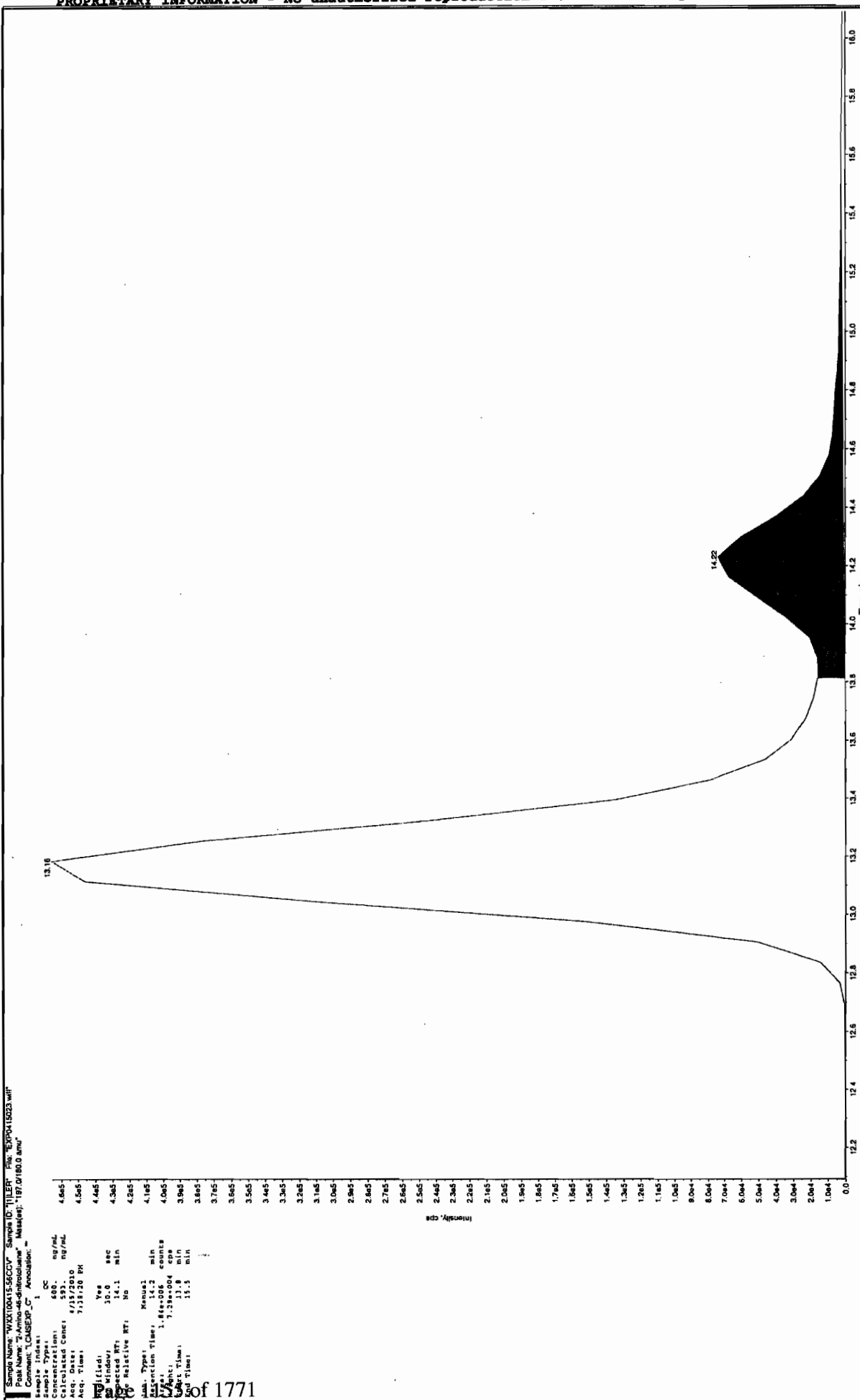
  

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	14.8
	Actual RT:	14.9
	Area Counts:	5.03e+007
	Manual Modification	No
	Amount:	570. (ng/mL)
	% Accuracy:	95.00

	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.5
	Actual RT:	15.5
	Area Counts:	1.93e+007
	Manual Modification	Yes
	Amount:	570. (ng/mL)
	% Accuracy:	95.00





\*GEL SOP GL-0A-E-056, Method 8321A-Modified LCMSMS#3

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415023.wiff	<b>Acquisition Date</b>	4/15/2010 7:38:20 PM
<b>Sample Name</b>	WXX100415-56CCV	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.1
	Actual RT:	13.2
	Area Counts:	4.73e+007
	Manual Modification	No
	Amount:	640. (ng/mL)
	% Accuracy:	107.00

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.1
	Actual RT:	14.2
	Area Counts:	1.84e+006
	Manual Modification	Yes
	Amount:	593. (ng/mL)
	% Accuracy:	98.80

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	17.6
	Actual RT:	17.6
	Area Counts:	7.76e+005
	Manual Modification	No
	Amount:	592. (ng/mL)
	% Accuracy:	98.70

	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	18.8
	Actual RT:	18.8
	Area Counts:	4.42e+005
	Manual Modification	No
	Amount:	629. (ng/mL)
	% Accuracy:	105.00

Before Jan 4/23/10

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

Sample Name: WAX100415-5620V Sample ID: TILER File: EXP0415023.MIF

Peak Name: PCTN Mass(es): 901.162.0 amu

Concentration: 600. ng/mL

Calculated Conc: 4/19/2010 ng/mL

Acq. Time: 7:18:20 PM

Sample Type: QC

Concentration: 600. ng/mL

Calculated Conc: 4/19/2010 ng/mL

Acq. Time: 7:18:20 PM

Sample Type: QC

Concentration: 600. ng/mL

Calculated Conc: 4/19/2010 ng/mL

Acq. Time: 7:18:20 PM

Sample Type: QC

Concentration: 600. ng/mL

Calculated Conc: 4/19/2010 ng/mL

Acq. Time: 7:18:20 PM

Sample Type: QC

Concentration: 600. ng/mL

Calculated Conc: 4/19/2010 ng/mL

Acq. Time: 7:18:20 PM

Sample Type: QC

Concentration: 600. ng/mL

Calculated Conc: 4/19/2010 ng/mL

Acq. Time: 7:18:20 PM

Sample Type: QC

Concentration: 600. ng/mL

Calculated Conc: 4/19/2010 ng/mL

Acq. Time: 7:18:20 PM

Sample Type: QC

Concentration: 600. ng/mL

Calculated Conc: 4/19/2010 ng/mL

Acq. Time: 7:18:20 PM

Sample Type: QC

Concentration: 600. ng/mL

Calculated Conc: 4/19/2010 ng/mL

Acq. Time: 7:18:20 PM

Sample Type: QC

Concentration: 600. ng/mL

Calculated Conc: 4/19/2010 ng/mL

Acq. Time: 7:18:20 PM

Sample Type: QC

Concentration: 600. ng/mL

Calculated Conc: 4/19/2010 ng/mL

Acq. Time: 7:18:20 PM

Sample Type: QC

Concentration: 600. ng/mL

Calculated Conc: 4/19/2010 ng/mL

Acq. Time: 7:18:20 PM

Sample Type: QC

Concentration: 600. ng/mL

Calculated Conc: 4/19/2010 ng/mL

Acq. Time: 7:18:20 PM

Sample Type: QC

Concentration: 600. ng/mL

Calculated Conc: 4/19/2010 ng/mL

Acq. Time: 7:18:20 PM

Sample Type: QC

Concentration: 600. ng/mL

Calculated Conc: 4/19/2010 ng/mL

Acq. Time: 7:18:20 PM

Sample Type: QC

Concentration: 600. ng/mL

Calculated Conc: 4/19/2010 ng/mL

Acq. Time: 7:18:20 PM

Sample Type: QC

Concentration: 600. ng/mL

Calculated Conc: 4/19/2010 ng/mL

Acq. Time: 7:18:20 PM

Sample Type: QC

Concentration: 600. ng/mL

Calculated Conc: 4/19/2010 ng/mL

Acq. Time: 7:18:20 PM

Sample Type: QC

Concentration: 600. ng/mL

Calculated Conc: 4/19/2010 ng/mL

Acq. Time: 7:18:20 PM

Sample Type: QC

Concentration: 600. ng/mL

Calculated Conc: 4/19/2010 ng/mL

Acq. Time: 7:18:20 PM

Sample Type: QC

Concentration: 600. ng/mL

Calculated Conc: 4/19/2010 ng/mL

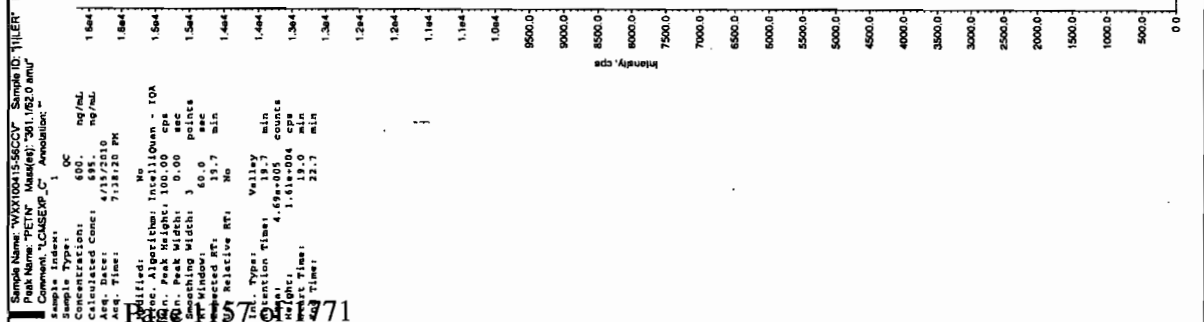
Acq. Time: 7:18:20 PM

Sample Type: QC

Concentration: 600. ng/mL

Calculated Conc: 4/19/2010 ng/mL

Acq. Time: 7:18:20 PM



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

after run 4/23/10

Sample Name: WXX100415-SEC0Y Sample ID: TILER File: EXP015023.MIF

Peak Name: PETN Masses: 361.1620 amu

Comment: LCMS-EXP-C Annotation:

Sample Type: CC  
Concentration: 500 ng/mL  
Calculated Conc: 46750 ng/mL  
Acq. Date: 4/23/10  
Acq. Time: 7:18:20 PM

Injection Volume: 1.0 µL  
Injection Speed: 15.7 µL/min  
Injection Pressure: 15.7 MPa  
Injection Temperature: 15.7 °C

Injection Type: Manual  
Injection Time: 19.8 min  
Injection Volume: 1.0 µL  
Injection Speed: 15.7 µL/min  
Injection Pressure: 15.7 MPa  
Injection Temperature: 15.7 °C

Injection Type: Manual  
Injection Time: 19.8 min  
Injection Volume: 1.0 µL  
Injection Speed: 15.7 µL/min  
Injection Pressure: 15.7 MPa  
Injection Temperature: 15.7 °C

Injection Type: Manual  
Injection Time: 19.8 min  
Injection Volume: 1.0 µL  
Injection Speed: 15.7 µL/min  
Injection Pressure: 15.7 MPa  
Injection Temperature: 15.7 °C

Injection Type: Manual  
Injection Time: 19.8 min  
Injection Volume: 1.0 µL  
Injection Speed: 15.7 µL/min  
Injection Pressure: 15.7 MPa  
Injection Temperature: 15.7 °C

Injection Type: Manual  
Injection Time: 19.8 min  
Injection Volume: 1.0 µL  
Injection Speed: 15.7 µL/min  
Injection Pressure: 15.7 MPa  
Injection Temperature: 15.7 °C

Injection Type: Manual  
Injection Time: 19.8 min  
Injection Volume: 1.0 µL  
Injection Speed: 15.7 µL/min  
Injection Pressure: 15.7 MPa  
Injection Temperature: 15.7 °C

Injection Type: Manual  
Injection Time: 19.8 min  
Injection Volume: 1.0 µL  
Injection Speed: 15.7 µL/min  
Injection Pressure: 15.7 MPa  
Injection Temperature: 15.7 °C

Injection Type: Manual  
Injection Time: 19.8 min  
Injection Volume: 1.0 µL  
Injection Speed: 15.7 µL/min  
Injection Pressure: 15.7 MPa  
Injection Temperature: 15.7 °C

Injection Type: Manual  
Injection Time: 19.8 min  
Injection Volume: 1.0 µL  
Injection Speed: 15.7 µL/min  
Injection Pressure: 15.7 MPa  
Injection Temperature: 15.7 °C

Injection Type: Manual  
Injection Time: 19.8 min  
Injection Volume: 1.0 µL  
Injection Speed: 15.7 µL/min  
Injection Pressure: 15.7 MPa  
Injection Temperature: 15.7 °C

Injection Type: Manual  
Injection Time: 19.8 min  
Injection Volume: 1.0 µL  
Injection Speed: 15.7 µL/min  
Injection Pressure: 15.7 MPa  
Injection Temperature: 15.7 °C

Injection Type: Manual  
Injection Time: 19.8 min  
Injection Volume: 1.0 µL  
Injection Speed: 15.7 µL/min  
Injection Pressure: 15.7 MPa  
Injection Temperature: 15.7 °C

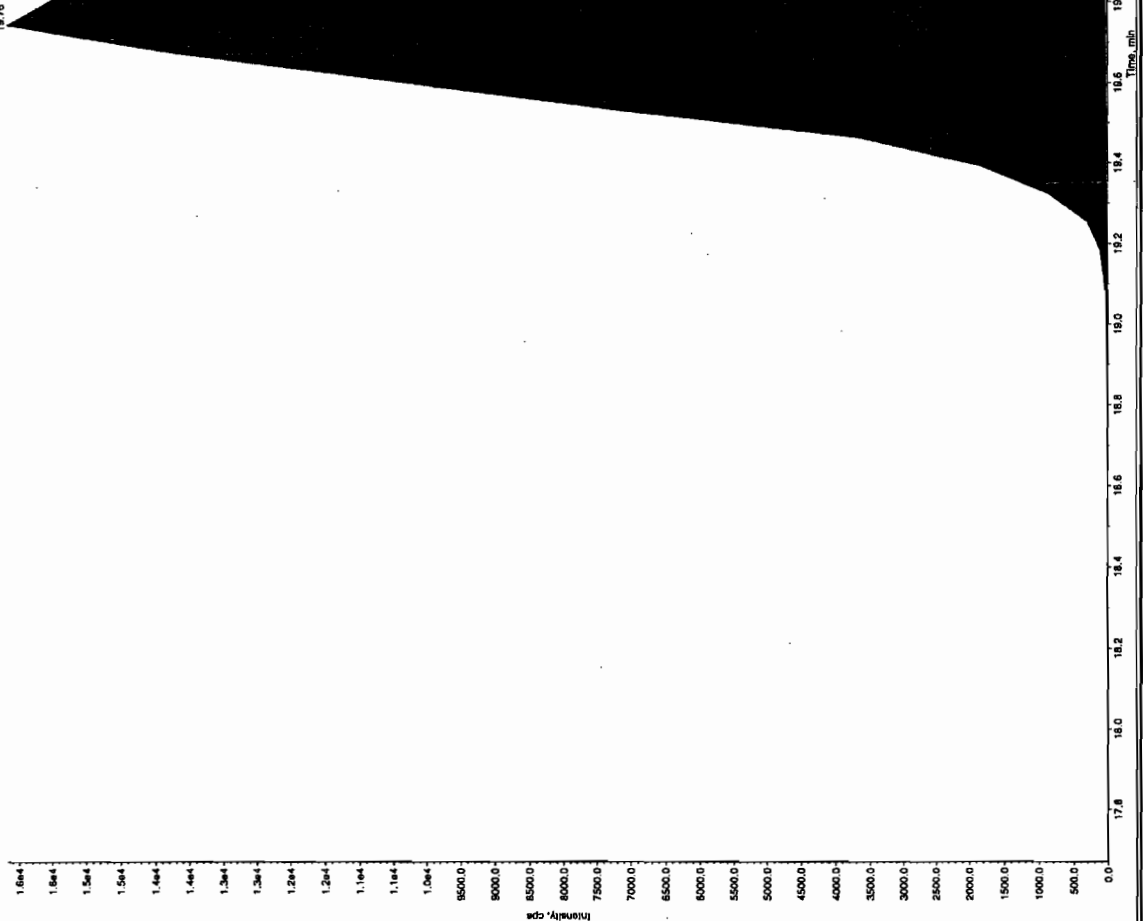
Injection Type: Manual  
Injection Time: 19.8 min  
Injection Volume: 1.0 µL  
Injection Speed: 15.7 µL/min  
Injection Pressure: 15.7 MPa  
Injection Temperature: 15.7 °C

Injection Type: Manual  
Injection Time: 19.8 min  
Injection Volume: 1.0 µL  
Injection Speed: 15.7 µL/min  
Injection Pressure: 15.7 MPa  
Injection Temperature: 15.7 °C

Injection Type: Manual  
Injection Time: 19.8 min  
Injection Volume: 1.0 µL  
Injection Speed: 15.7 µL/min  
Injection Pressure: 15.7 MPa  
Injection Temperature: 15.7 °C

Injection Type: Manual  
Injection Time: 19.8 min  
Injection Volume: 1.0 µL  
Injection Speed: 15.7 µL/min  
Injection Pressure: 15.7 MPa  
Injection Temperature: 15.7 °C

Injection Type: Manual  
Injection Time: 19.8 min  
Injection Volume: 1.0 µL  
Injection Speed: 15.7 µL/min  
Injection Pressure: 15.7 MPa  
Injection Temperature: 15.7 °C

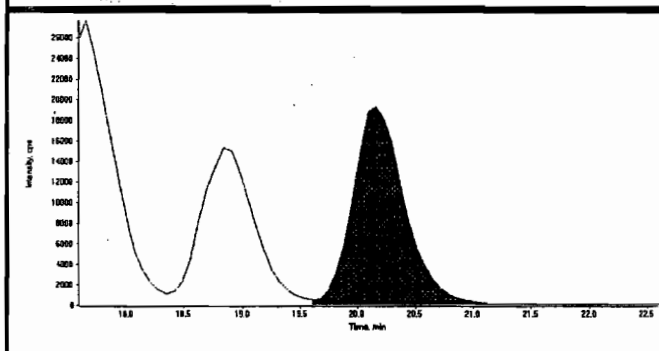


\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

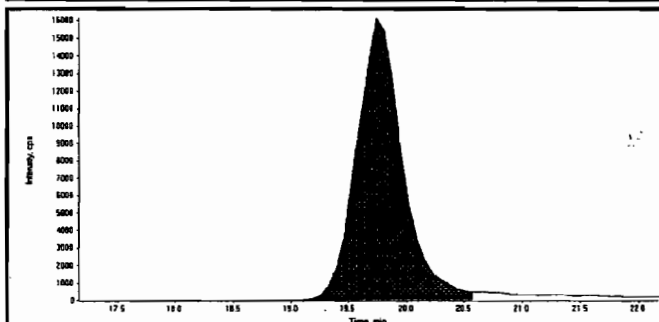
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

Data File	EXP0415023.wiff	Acquisition Date	4/15/2010 7:38:20 PM
Sample Name	WXX100415-56CCV	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



Compound Name:	3-Nitrotoluene (137.0/46.0 amu)
Expected RT:	20.1
Actual RT:	20.2
Area Counts:	6.05e+005
Manual Modification	No
Amount:	613. (ng/mL)
% Accuracy:	102.00



Compound Name:	PETN (361.1/62.0 amu)
Expected RT:	19.7
Actual RT:	19.8
Area Counts:	4.48e+005
Manual Modification	Yes
Amount:	663. (ng/mL)
% Accuracy:	111.00



# GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis 04/15/10  
 Time of Injection 1938  
 Standard Number WXX100415-56CCV  
 Data File EXP0415023a

HMX	86.7
RDX	105.0
135-Trinitrobenzene	87.4
13-Dinitrobenzene	90.6
Tetryl	88.2
246-Trinitrotoluene	90.8
Nitrobenzene	100.0
34-dinitrotoluene	97.1
26-dinitrotoluene	95.0
24-dinitrotoluene	95.0
4-Amino-26-dinitrotoluene	107.0
2-Amino-46-dinitrotoluene	98.8
2-Nitrotoluene	98.7
4-Nitrotoluene	105.0
3-Nitrotoluene	102.0
PETN	111.0

TOTAL

✓ 1558.3 *Sum 04/15/10*

AVERAGE

✓ 97.4	ICV Limits 85-115%
	CRI Limits 70-130%
	CCV Limits 85-115%
No single analyte > +/- 60%	

*Lar*  
*4/15/10*

7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2199

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0415025.wiff

Analysis Date: 15-APR-10 20:30

LCMSMS ID: 1189

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	38.5	96	
2,4,6-Trinitrotoluene	40	37.9	95	
2,4-Dinitrotoluene	40	34.4	86	
2,6-Dinitrotoluene	40	29.9	75	
2-Amino-4,6-dinitrotoluene	40	36.5	91	
3,4-Dinitrotoluene	20	16.9	85	
4-Amino-2,6-dinitrotoluene	40	38.1	95	
HMX	40	41.3	103	
Nitrobenzene	40	44.6	112	
PETN	40	36	90	
RDX	40	41.4	104	
Tetryl	40	38.9	97	
m-Dinitrobenzene	40	41.3	103	
m-Nitrotoluene	40	38.5	96	
o-Nitrotoluene	40	44.9	112	
p-Nitrotoluene	40	45.7	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%

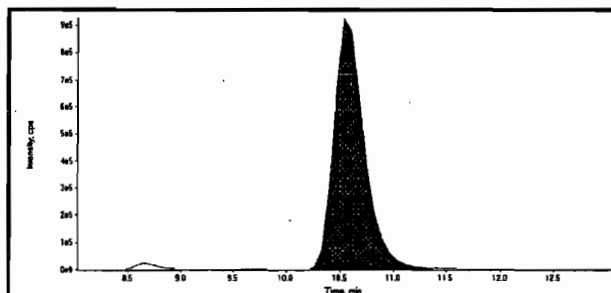
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

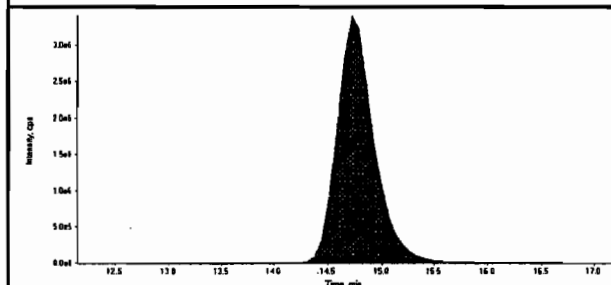
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

Data File	EXP0415025.wiff	Acquisition Date	4/15/2010 8:30:11 PM
Sample Name	WXX100415-57CRI	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



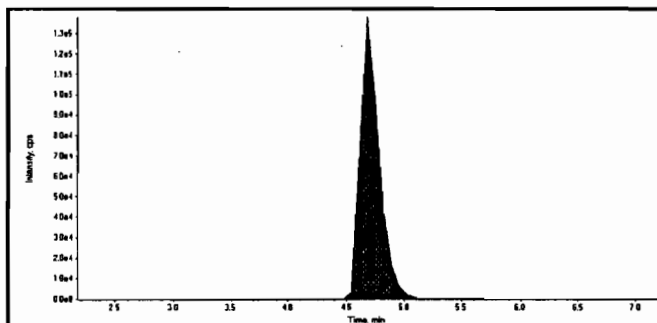
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.50
Actual RT:	10.50
Area Counts:	18400000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries

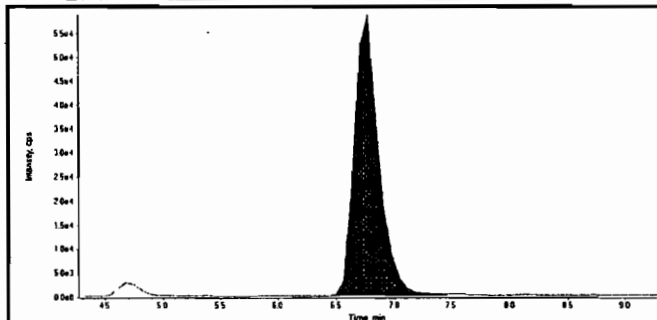


Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.60
Actual RT:	14.70
Area Counts:	82600000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.67
Actual RT:	4.67
Area Counts:	1.61e+006
Manual Modification	No
Amount:	41.3 (ng/mL)
% Accuracy:	103.00



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.77
Actual RT:	6.77
Area Counts:	8.72e+005
Manual Modification	No
Amount:	41.4 (ng/mL)
% Accuracy:	104.00

Hmw  
04/27/10

LER  
4/27/10

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415025.wiff	<b>Acquisition Date</b>	4/15/2010 8:30:11 PM
<b>Sample Name</b>	WXX100415-57CRI	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	Expected RT:	9.00
	Actual RT:	9.00
	Area Counts:	1.14e+007
	Manual Modification	No
	Amount:	38.5 (ng/mL)
	% Accuracy:	96.20

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	Expected RT:	10.7
	Actual RT:	10.7
	Area Counts:	4.32e+006
	Manual Modification	No
	Amount:	41.3 (ng/mL)
	% Accuracy:	103.00

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	Expected RT:	10.7
	Actual RT:	10.7
	Area Counts:	3.25e+006
	Manual Modification	No
	Amount:	38.9 (ng/mL)
	% Accuracy:	97.30

	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	Expected RT:	13.1
	Actual RT:	13.2
	Area Counts:	2.15e+007
	Manual Modification	No
	Amount:	37.9 (ng/mL)
	% Accuracy:	94.70

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415025.wiff	<b>Acquisition Date</b>	4/15/2010 8:30:11 PM
<b>Sample Name</b>	WXX100415-57CRI	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	<b>Expected RT:</b>	11.8
	<b>Actual RT:</b>	11.8
	<b>Area Counts:</b>	1.49e+005
	<b>Manual Modification</b>	No
	<b>Amount:</b>	44.6 (ng/mL)
	<b>% Accuracy:</b>	112.00

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	<b>Expected RT:</b>	12.0
	<b>Actual RT:</b>	12.1
	<b>Area Counts:</b>	2.31e+006
	<b>Manual Modification</b>	No
	<b>Amount:</b>	16.9 (ng/mL)
	<b>% Accuracy:</b>	84.50

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	<b>Expected RT:</b>	14.8
	<b>Actual RT:</b>	14.9
	<b>Area Counts:</b>	3.79e+006
	<b>Manual Modification</b>	No
	<b>Amount:</b>	29.9 (ng/mL)
	<b>% Accuracy:</b>	74.60

	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	<b>Expected RT:</b>	15.5
	<b>Actual RT:</b>	15.6
	<b>Area Counts:</b>	1.51e+006
	<b>Manual Modification</b>	No
	<b>Amount:</b>	34.4 (ng/mL)
	<b>% Accuracy:</b>	86.10

Before Jan 4/23/10

Sample Name: "WXX100415370" Sample ID: "TILER" File: "EXP015022.wif"

Peak Name: "2-Amino-6-chloroquinoline" Mass(es): "187.0/180.0 amu"

Comment: "LACERW" C: "ANALYST"

Sample Type: "OC"

Concentration: 40.0 ng/mL

Calculated Conc: 24.710 ng/mL

Acq. Date: 4/1/2010

Acq. Time: 8:10:11 PM

Regified: No

Peak: 187.0

Peak Height: 180.00 cps

Peak Width: 0.00 sec

Baseline Width: 3.00 points

Baseline: 10.0

Baseline RT: 14.1 min

Relative RT: No

2.464

2.464

2.164

2.164

2.064

2.064

1.964

1.964

1.864

1.864

1.764

1.764

1.664

1.664

1.564

1.564

1.464

1.464

1.364

1.364

1.264

1.264

1.164

1.164

1.064

1.064

8500.0

8500.0

8000.0

8000.0

7500.0

7500.0

6500.0

6500.0

6000.0

6000.0

5500.0

5500.0

5000.0

5000.0

4500.0

4500.0

4000.0

4000.0

3500.0

3500.0

3000.0

3000.0

2500.0

2500.0

2000.0

2000.0

1500.0

1500.0

1000.0

1000.0

500.0

500.0

0.0

0.0

Intensity, cps

13.16

13.16

13.0

13.0

12.8

12.8

12.6

12.6

12.4

12.4

12.2

12.2

12.0

12.0

11.8

11.8

11.6

11.6

11.4

11.4

11.2

11.2

11.0

11.0

10.8

10.8

10.6

10.6

10.4

10.4

10.2

10.2

10.0

10.0

9.8

9.8

13.16

Time, min

16.0

15.8

15.6

15.4

15.2

15.0

14.8

14.6

14.4

14.2

14.0

13.8

13.6

13.4

13.2

13.0

12.8

12.6

12.4

12.2

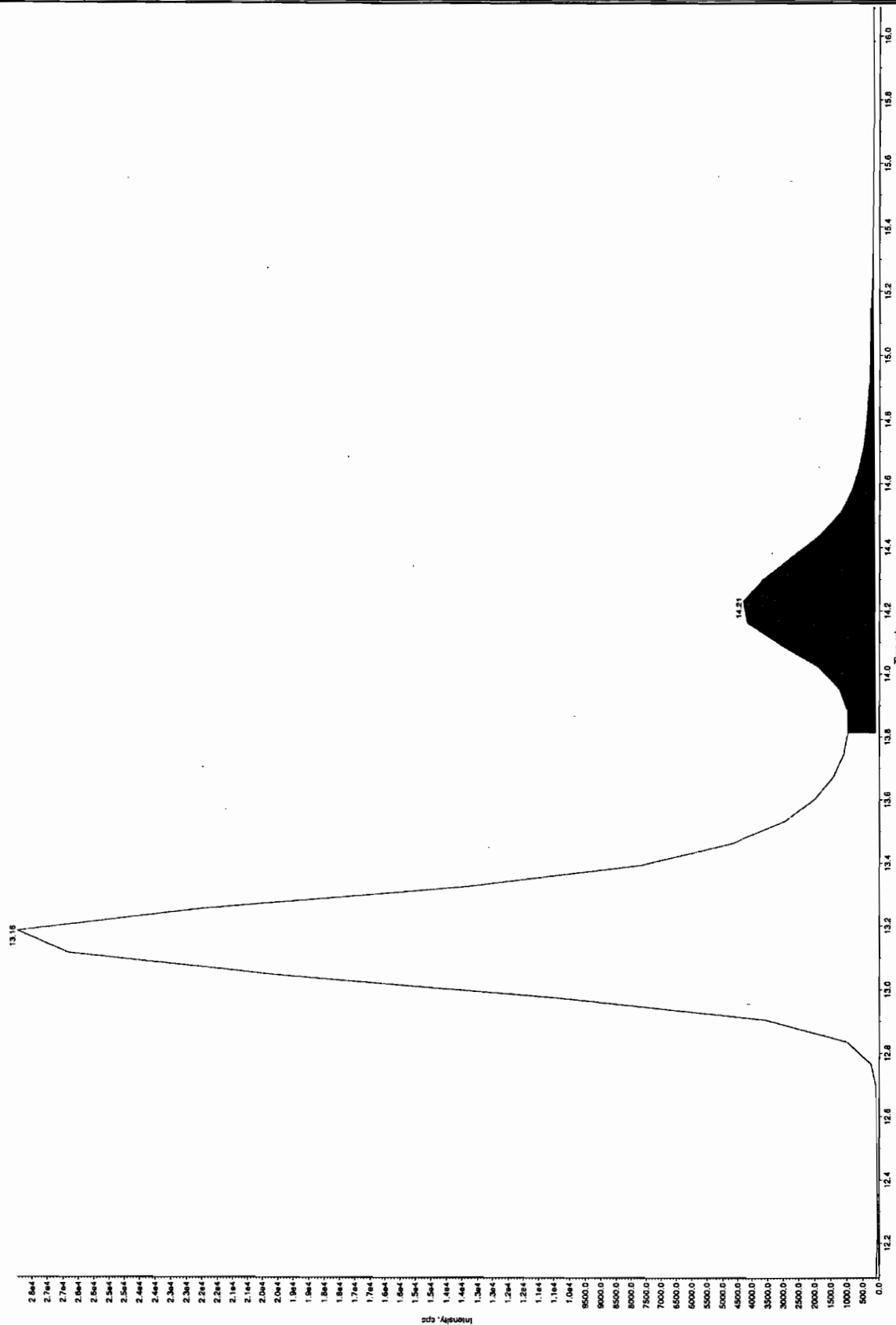
12.0

11.8

11.6

11.4

\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3



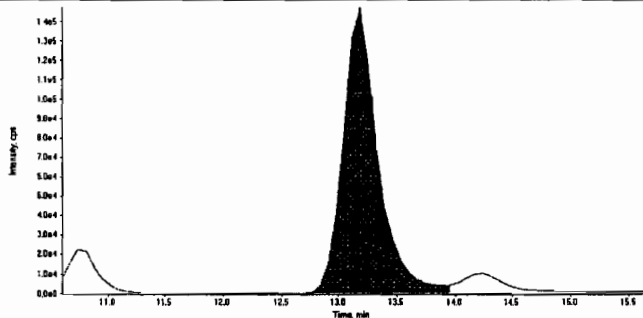
\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

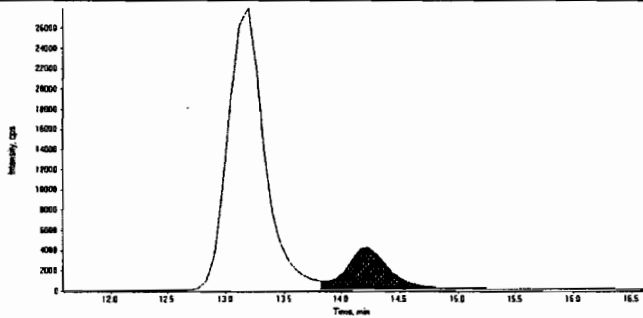
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415025.wiff	<b>Acquisition Date</b>	4/15/2010 8:30:11 PM
<b>Sample Name</b>	WXX100415-57CRI	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

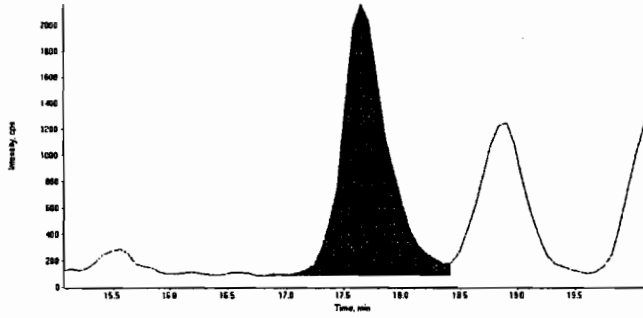
  

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.1
	Actual RT:	13.2
	Area Counts:	3.10e+006
	Manual Modification	No
	Amount:	38.1 (ng/mL)
	% Accuracy:	95.20

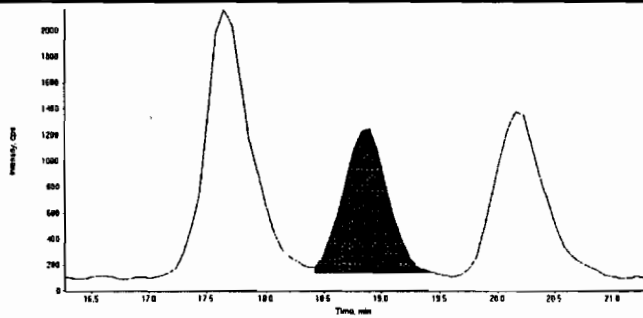
  

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.1
	Actual RT:	14.2
	Area Counts:	1.13e+005
	Manual Modification	Yes
	Amount:	36.5 (ng/mL)
	% Accuracy:	91.30

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	17.6
	Actual RT:	17.6
	Area Counts:	5.72e+004
	Manual Modification	No
	Amount:	44.9 (ng/mL)
	% Accuracy:	112.00

	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	18.8
	Actual RT:	18.9
	Area Counts:	3.08e+004
	Manual Modification	No
	Amount:	45.7 (ng/mL)
	% Accuracy:	114.00

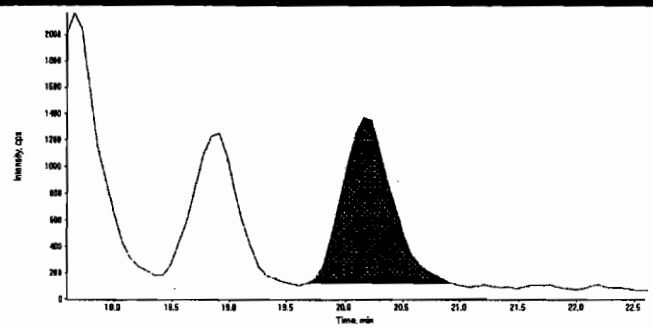


GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

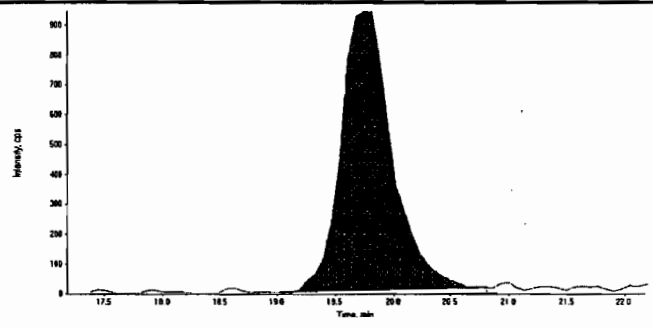
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LCMSMS#3

Data File	EXP0415025.wiff	Acquisition Date	4/15/2010 8:30:11 PM
Sample Name	WXX100415-57CRI	Acquisition Method	8321.dam
Batch/Dilution/Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control

	Compound Name:	3-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	20.1
	Actual RT:	20.2
	Area Counts:	3.76e+004
	Manual Modification	No
	Amount:	38.5 (ng/mL)
	% Accuracy:	96.30

	Compound Name:	PETN (361.1/62.0 amu)
	Expected RT:	19.7
	Actual RT:	19.7
	Area Counts:	2.91e+004
	Manual Modification	No
	Amount:	36.0 (ng/mL)
	% Accuracy:	90.00

GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis 04/15/10  
 Time of Injection 2030  
 Standard Number WXX100415-57CRI  
 Data File EXP0415025a

HMX	103.0
RDX	104.0
135-Trinitrobenzene	96.2
13-Dinitrobenzene	103.0
Tetryl	97.3
246-Trinitrotoluene	94.7
Nitrobenzene	112.0
34-dinitrotoluene	84.5
26-dinitrotoluene	74.6
24-dinitrotoluene	86.1
4-Amino-26-dinitrotoluene	95.2
2-Amino-46-dinitrotoluene	91.3
2-Nitrotoluene	112.0
4-Nitrotoluene	114.0
3-Nitrotoluene	96.3
PETN	90.0

TOTAL

✓ 1554.2 *Hmm 04/23/10*

AVERAGE

✓ 97.1	ICV Limits 85-115%
	CRI Limits 70-130%
	CCV Limits 85-115%
No single analyte > +/- 60%	

*Far 4/23/10*

7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2199

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0415030.wiff

Analysis Date: 15-APR-10 22:39

LCMSMS ID: 1189

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	635	106	
2,4,6-Trinitrotoluene	600	620	103	
2,4-Dinitrotoluene	600	631	105	
2,6-Dinitrotoluene	600	558	93	
2-Amino-4,6-dinitrotoluene	600	607	101	
3,4-Dinitrotoluene	300	289	96	
4-Amino-2,6-dinitrotoluene	600	660	110	
HMX	600	563	94	
Nitrobenzene	600	623	104	
PETN	600	708	118	
RDX	600	672	112	
Tetryl	600	647	108	
m-Dinitrobenzene	600	618	103	
m-Nitrotoluene	600	545	91	
o-Nitrotoluene	600	586	98	
p-Nitrotoluene	600	618	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%

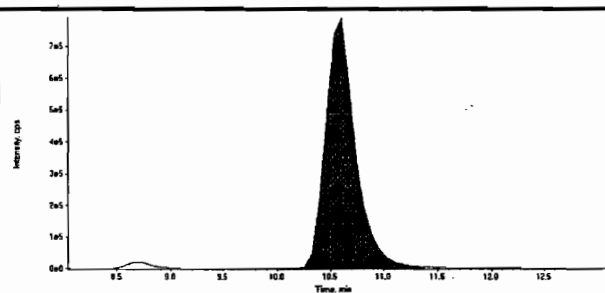
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

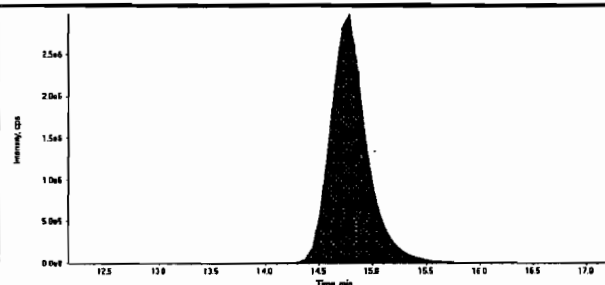
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

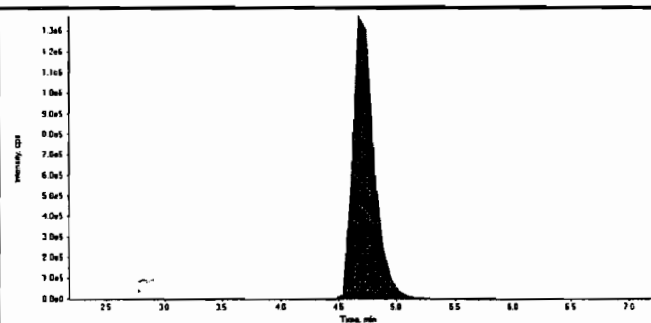
Data File	EXP0415030.wiff	Acquisition Date	4/15/2010 10:39:38 PM
Sample Name	WXX100415-56CCV	Acquisition Method	8321.dam
Batch/Dilution/Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



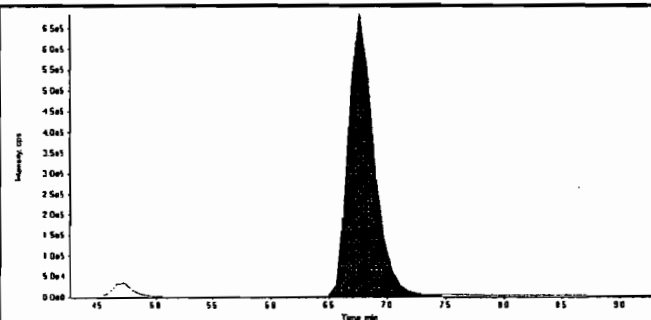
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.50
Actual RT:	10.60
Area Counts:	15500000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.60
Actual RT:	14.80
Area Counts:	71300000.00
Manual Modification	Yes
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.67
Actual RT:	4.67
Area Counts:	1.79e+007
Manual Modification	No
Amount:	563. (ng/mL)
% Accuracy:	93.80



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.77
Actual RT:	6.77
Area Counts:	1.08e+007
Manual Modification	No
Amount:	672. (ng/mL)
% Accuracy:	112.00

*Handwritten:* Anne 04/23/10

*Handwritten:* Lar 4/23/10

Before Ken 4/23/10

Sample Name: WXX100415-562V Sample ID: T101R File: EPRM15033.will

Peak Name: 746-Tripropylene Masses: 227.1209.8 amu

Comment: LCASEP\_C Acquisition: 1

Sample Index: 1

Concentration: 600 ng/mL

Acq. Date: 4/15/2010

Acq. Time: 10:19:18 PM

Method: No

Peak: Peak Height: 1000.00 cps

Peak Width: 3.00 points

Acquiring Width: 30.0 sec

Expected RT: 13.1 min

Unlabeled RT: No

IR Type: Valley

Retention Time: 13.2 min

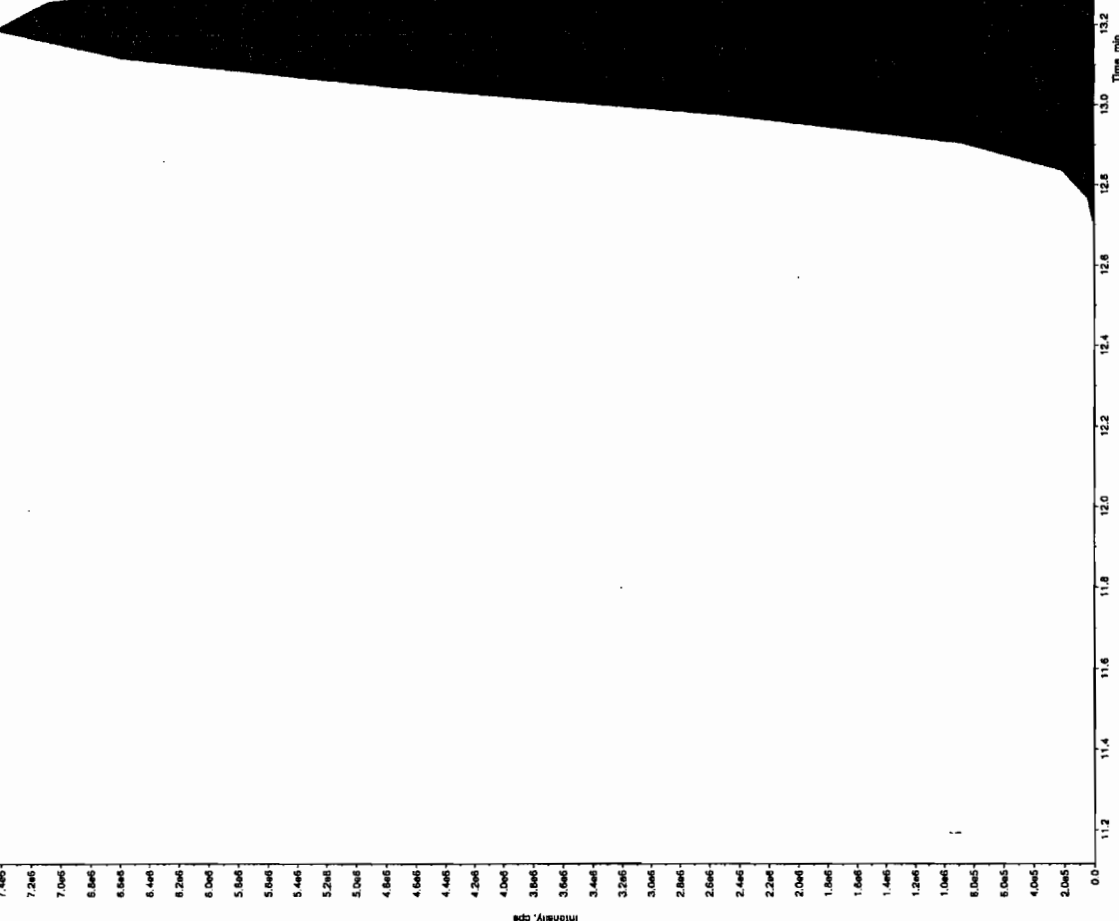
Area: 2.09e+006 counts

Height: 7.14e+006 cps

Start Time: 12.5 min

End Time: 17.4 min

13.20

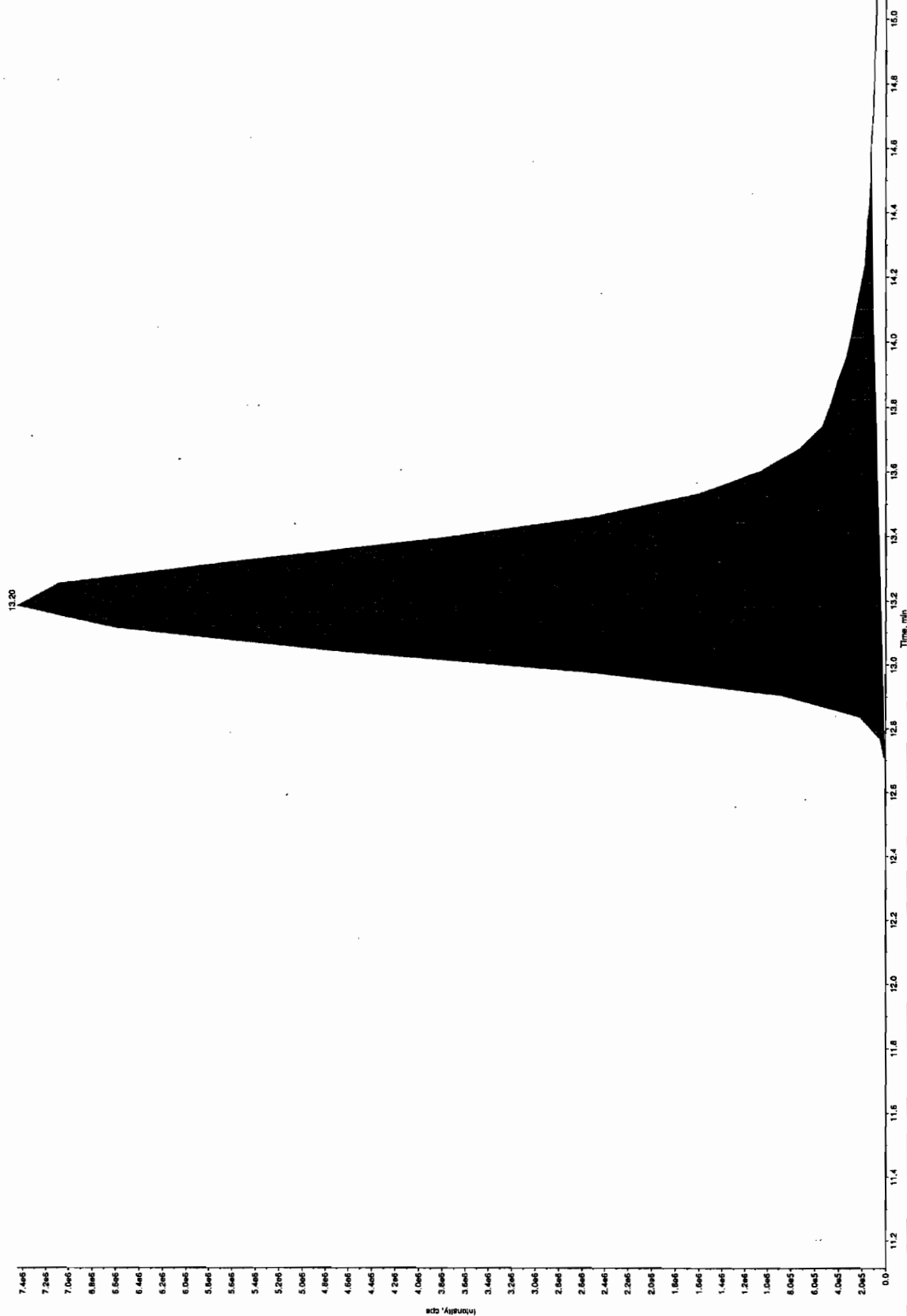


\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

after Ken 4/23/10

Sample Name: WXYZ0015-5607 Sample ID: T11ER File: E:\P015530.wif  
 Peak Name: 246.7 (methylcyclohexane) Masses: 227 1209.8 amu  
 Comment: "LCMS-EXP\_C" Annotation: "

Sample Index: 1  
 Sample Type: GC  
 Sample Concentration: 500 ng/mL  
 Calculated Conc: 520 ng/mL  
 Acq. Date: 4/15/2010  
 Acq. Time: 10:35:18 PM  
 Modified: Yes  
 Acquisition Window: 30.0 sec  
 Expected RT: 11.1 min  
 RT Relative RT: No  
 MS Type: Manual  
 Retention Time: 13.2 min  
 Counts: 1.9e+006  
 Noise: 7.1e+005  
 Start Time: 12.6 min  
 End Time: 14.4 min



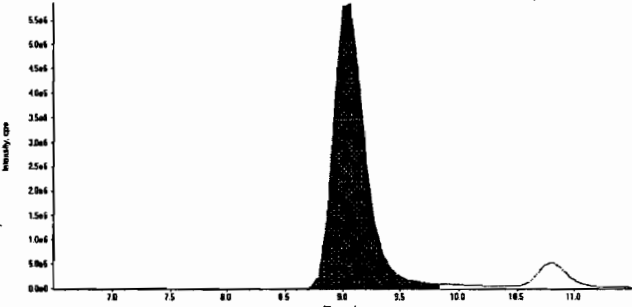
\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

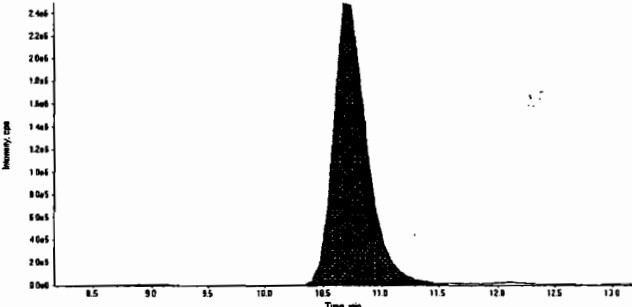
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415030.wiff	<b>Acquisition Date</b>	4/15/2010 10:39:38 PM
<b>Sample Name</b>	WXX100415-56CCV	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

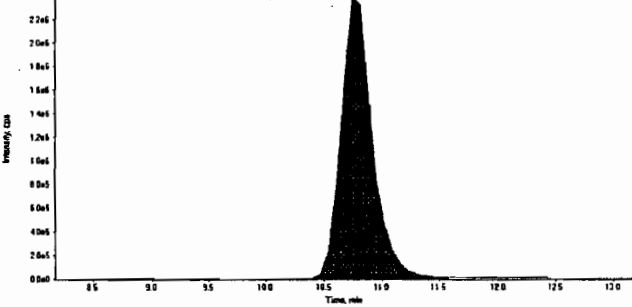
  

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	<b>Expected RT:</b>	9.00
	<b>Actual RT:</b>	9.07
	<b>Area Counts:</b>	1.16e+008
	<b>Manual Modification</b>	No
	<b>Amount:</b>	635. (ng/mL)
	<b>% Accuracy:</b>	106.00

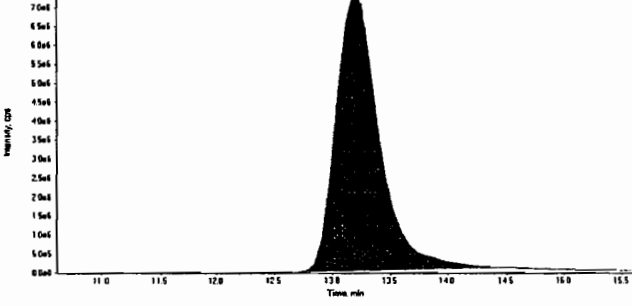
  

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	<b>Expected RT:</b>	10.7
	<b>Actual RT:</b>	10.7
	<b>Area Counts:</b>	5.13e+007
	<b>Manual Modification</b>	No
	<b>Amount:</b>	618. (ng/mL)
	<b>% Accuracy:</b>	103.00

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	<b>Expected RT:</b>	10.7
	<b>Actual RT:</b>	10.7
	<b>Area Counts:</b>	4.60e+007
	<b>Manual Modification</b>	No
	<b>Amount:</b>	647. (ng/mL)
	<b>% Accuracy:</b>	108.00

	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	<b>Expected RT:</b>	13.1
	<b>Actual RT:</b>	13.2
	<b>Area Counts:</b>	1.93e+008
	<b>Manual Modification</b>	Yes
	<b>Amount:</b>	620. (ng/mL)
	<b>% Accuracy:</b>	103.00

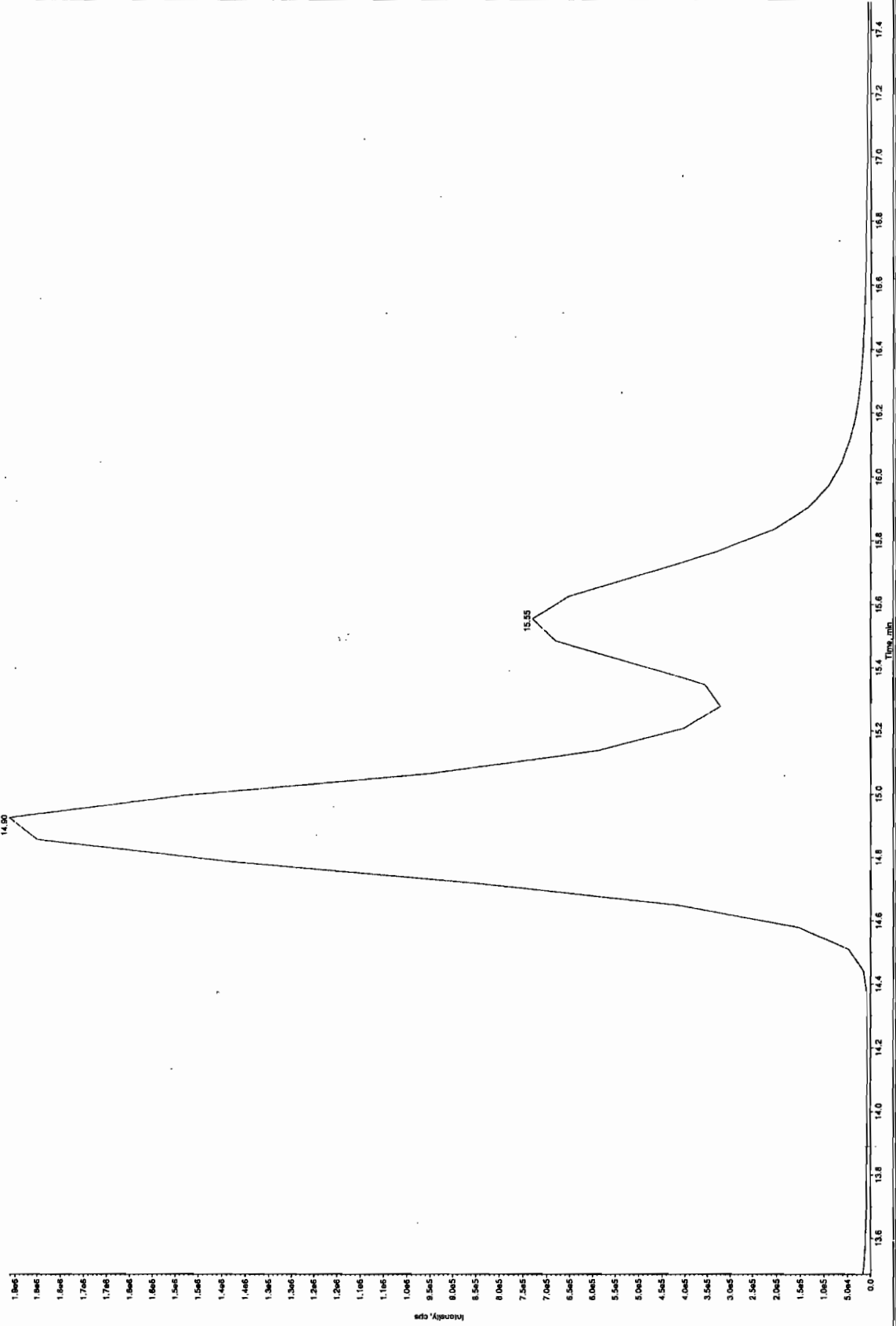
Before Run 4/23/10

Sample Name: WXX10015-562CV Sample ID: 111ER File: EXP015030.wif

Peak Name: 24-dinitrofluorene Mass(es): 182.046.0 amu

Comment: LCMS-EXP-C Association:

Sample Index: 1  
 Concentration: 600 ng/mL  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 4/15/2010  
 Acq. Time: 10:19:18 PM  
 Diluted: No



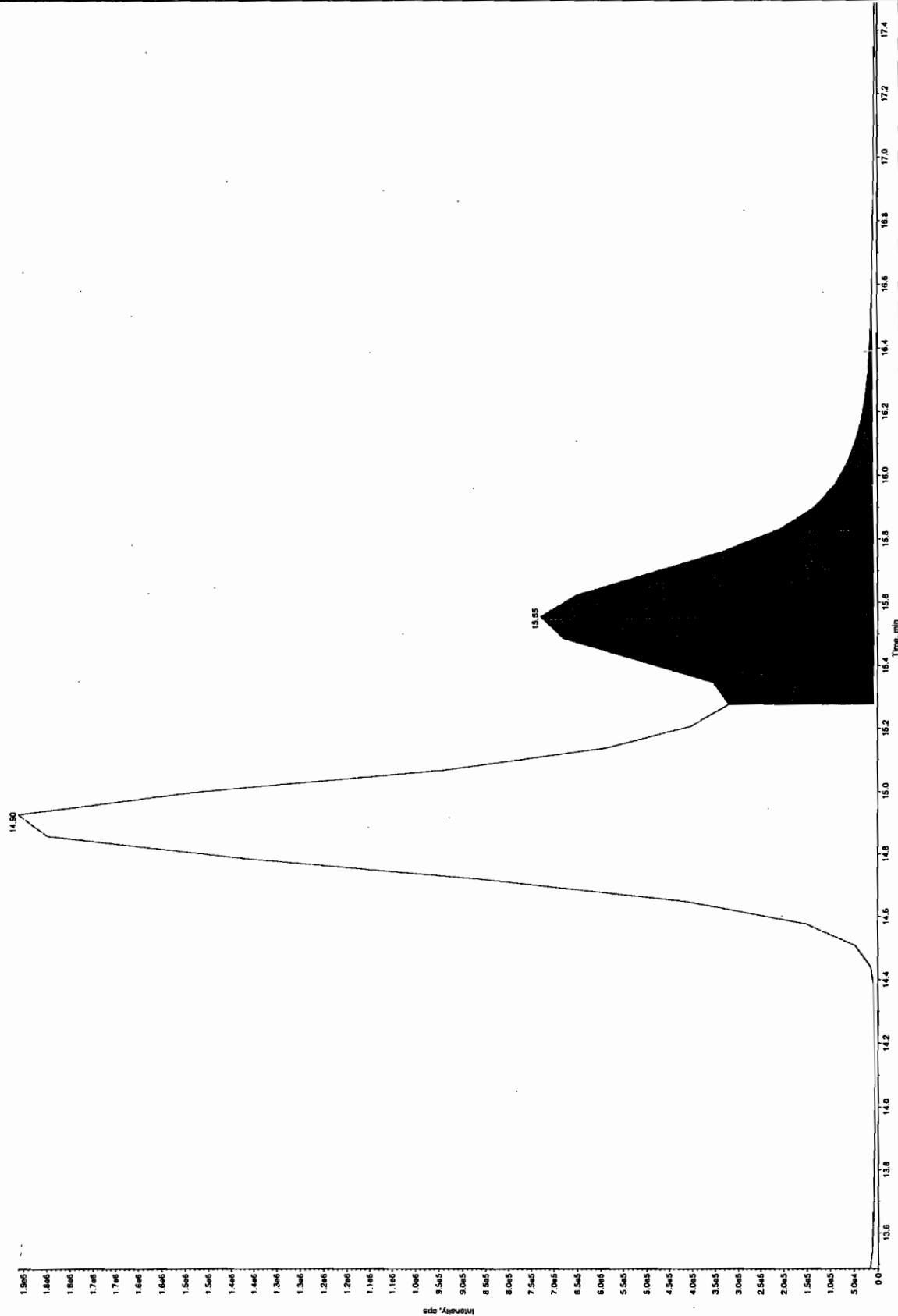


after Jan 4/23/10

Sample Name: "WJ010015-5620" Sample ID: "1111" File: "EXP015030.wif"  
 Peak Name: "24-dinitrotoluene" Mass(es): "182.046.0 amu"  
 Comment: "LCMS-EXP-C" Annotation: "2"

Sample Type: 1  
 Concentration: 600. ng/mL  
 Calculated Conc: 47110.0 ng/mL  
 Acquisition Time: 10:29:38 PM  
 Diluted: Yes  
 Sample Relative RT: 15.5 min

Peak Type: Manual  
 Retention Time: 15.5 min  
 Area: 1.84e+007 counts  
 Height: 7.21e+005 cps  
 Width: 15.3 min  
 Width Time: 16.6 min

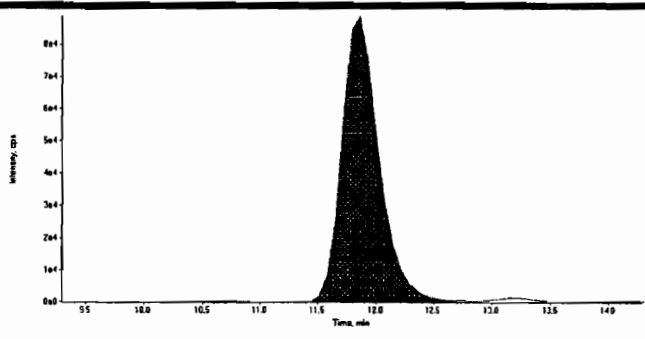


GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

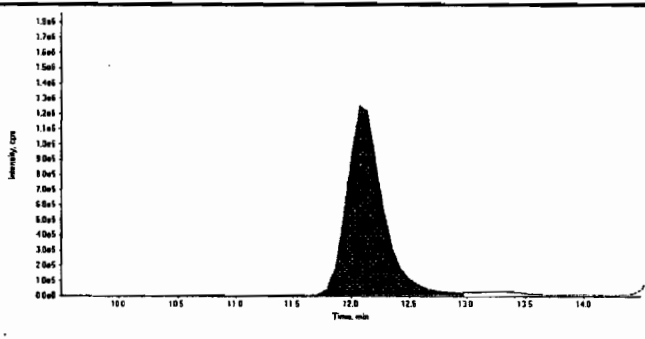
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415030.wiff	<b>Acquisition Date</b>	4/15/2010 10:39:38 PM
<b>Sample Name</b>	WXX100415-56CCV	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

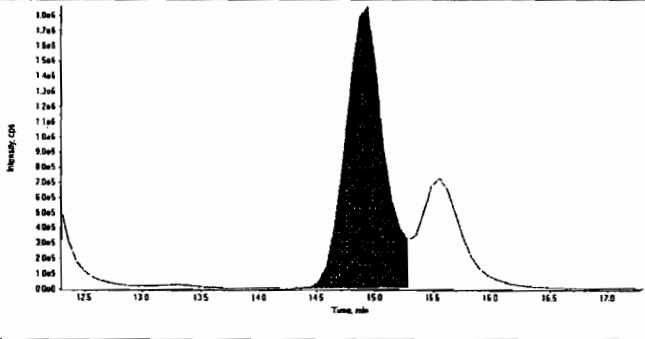
  

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	11.8
	Actual RT:	11.9
	Area Counts:	1.98e+006
	Manual Modification	No
	Amount:	623. (ng/mL)
	% Accuracy:	104.00

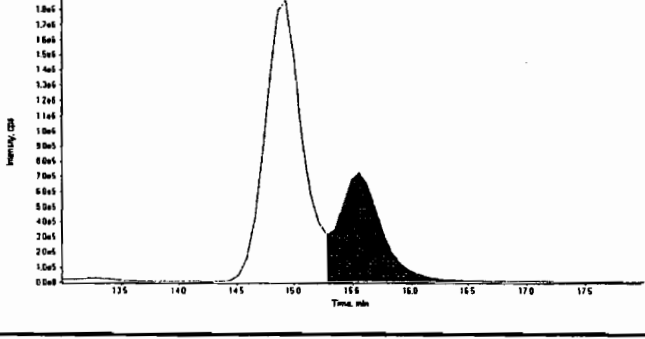
  

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.0
	Actual RT:	12.1
	Area Counts:	2.70e+007
	Manual Modification	No
	Amount:	289. (ng/mL)
	% Accuracy:	96.20

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	14.8
	Actual RT:	14.9
	Area Counts:	4.23e+007
	Manual Modification	No
	Amount:	558. (ng/mL)
	% Accuracy:	93.00

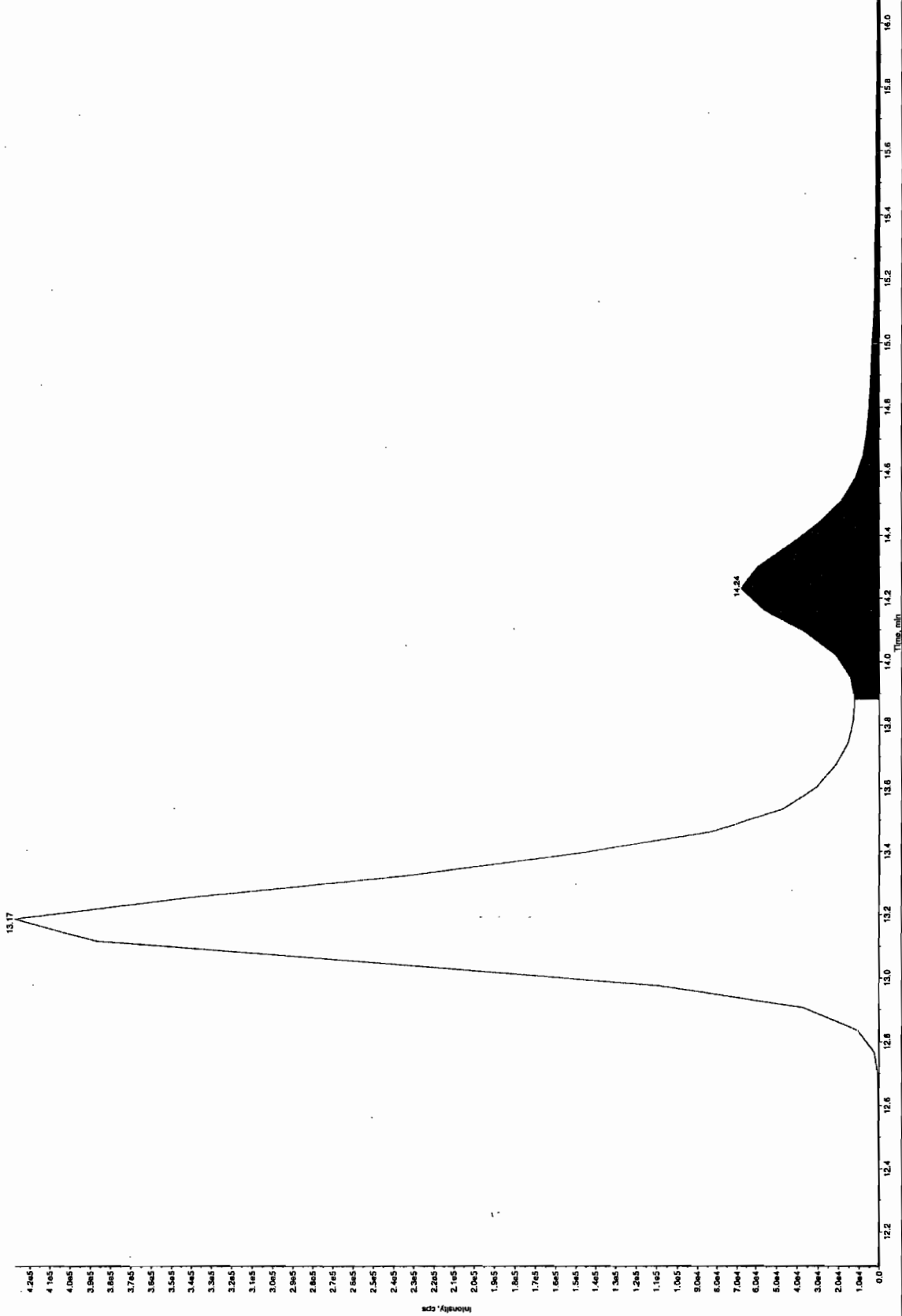
  

	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.5
	Actual RT:	15.5
	Area Counts:	1.84e+007
	Manual Modification	Yes
	Amount:	631. (ng/mL)
	% Accuracy:	105.00

Before Run 4/23/10

Sample Name: WXX10015-56CCY Sample ID: TILER File: EXP015030.wif  
 Peak Name: 2-Amino-4-nitrothiophene Mass(es): 197.07100.0 amu  
 Comment: LCMS-EXP-C Annotation: ~

1 CC  
 Concentration: 600. ng/mL  
 Calculated Conc: 1070. ng/mL  
 Peak Width: 10.00 sec  
 Acq. Time: 10:19:18 PM  
 No. of Peaks: 104  
 Peak Height: 100.00 cps  
 Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 Peak Window: 30.0 sec  
 Peak Offset: 0.1 min  
 No. of Peaks: 104  
 Relative RT: No  
 RT Type: Valley  
 Retention Time: 3.585 min  
 Peak Height: 7.33e+006 counts  
 Peak Width: 13.9 min  
 Peak Offset: 17.1 min



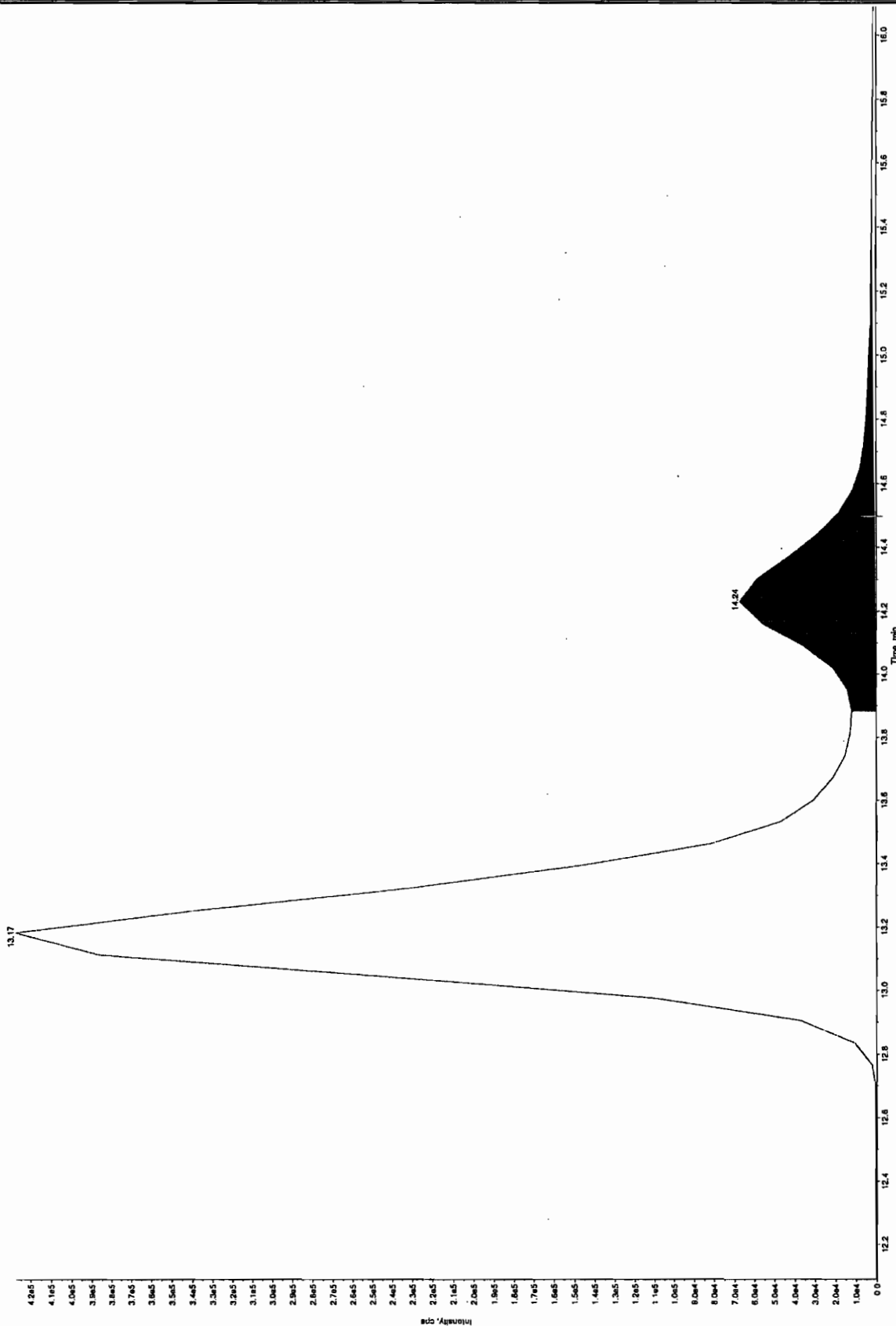
\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

after run 4/23/10

Sample Name: "WXX100415-5600" Sample ID: "111ER" File: "EXP015030.wif"  
 Peak Name: "2-Amino-6-dichlorobenzene" Mass(es): "197.0180.0 amu"  
 Comment: "LCMS-EXP-C" Annotation: -

Sample Index: 1  
 Concentration: 400. ng/mL  
 Acq. Date: 4/13/2010  
 Acq. Time: 10:33:18 PM  
 Method: Yes  
 Window: 30.0 sec  
 Retention Time: 14.1 min  
 Relative RT: 80

LC Type: Manual  
 Acquisition Time: 1.62e+02 min  
 Injection Volume: 1.00 µL  
 Mass: 6.64e+008 cps  
 Start Time: 13.9 min  
 End Time: 15.6 min



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415030.wiff	<b>Acquisition Date</b>	4/15/2010 10:39:38 PM
<b>Sample Name</b>	WXX100415-56CCV	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	<b>Expected RT:</b>	13.1
	<b>Actual RT:</b>	13.2
	<b>Area Counts:</b>	4.19e+007
	<b>Manual Modification</b>	No
	<b>Amount:</b>	660. (ng/mL)
	<b>% Accuracy:</b>	110.00

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	<b>Expected RT:</b>	14.1
	<b>Actual RT:</b>	14.2
	<b>Area Counts:</b>	1.62e+006
	<b>Manual Modification</b>	Yes
	<b>Amount:</b>	607. (ng/mL)
	<b>% Accuracy:</b>	101.00

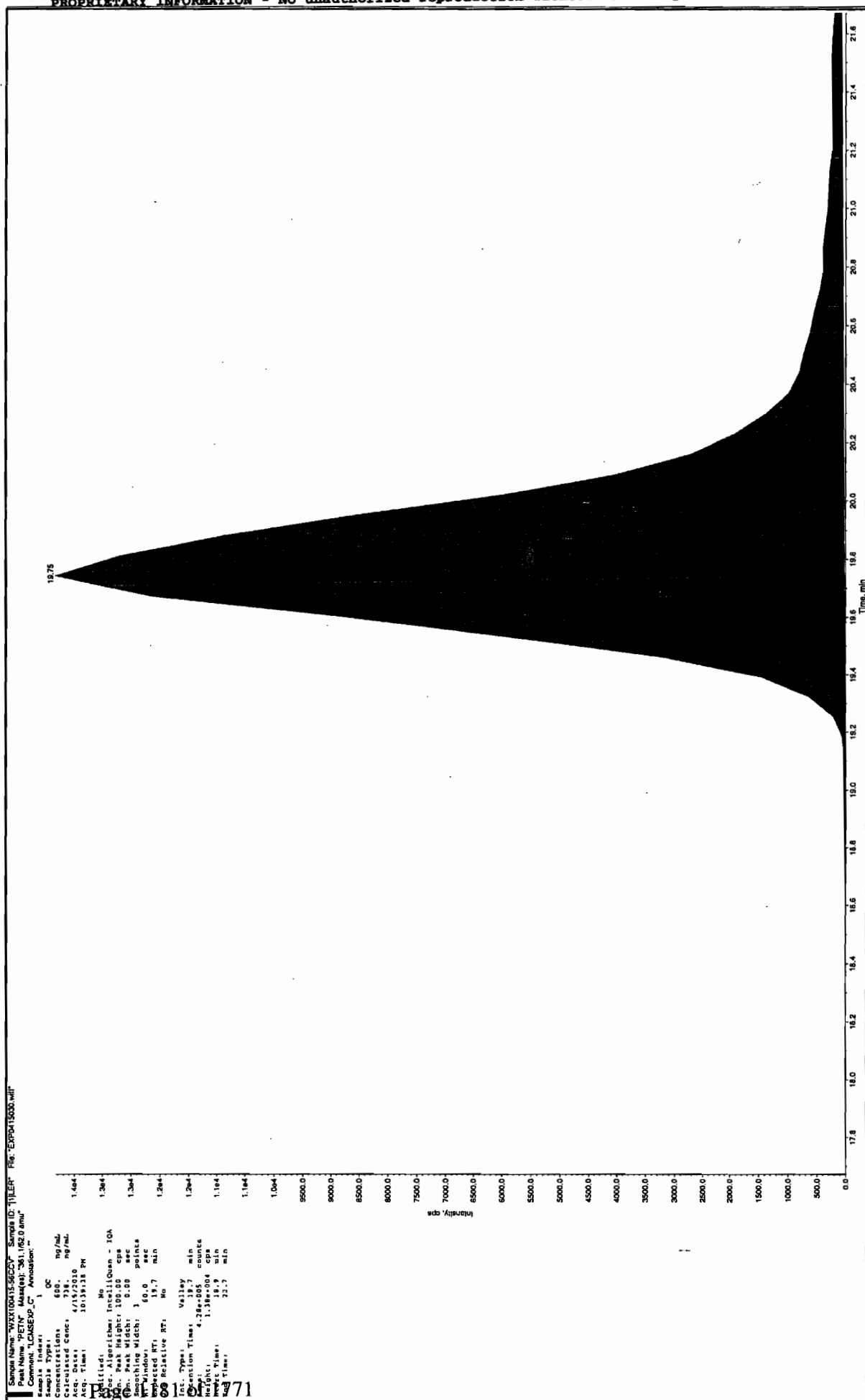
  

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	17.6
	<b>Actual RT:</b>	17.6
	<b>Area Counts:</b>	6.60e+005
	<b>Manual Modification</b>	No
	<b>Amount:</b>	586. (ng/mL)
	<b>% Accuracy:</b>	97.60

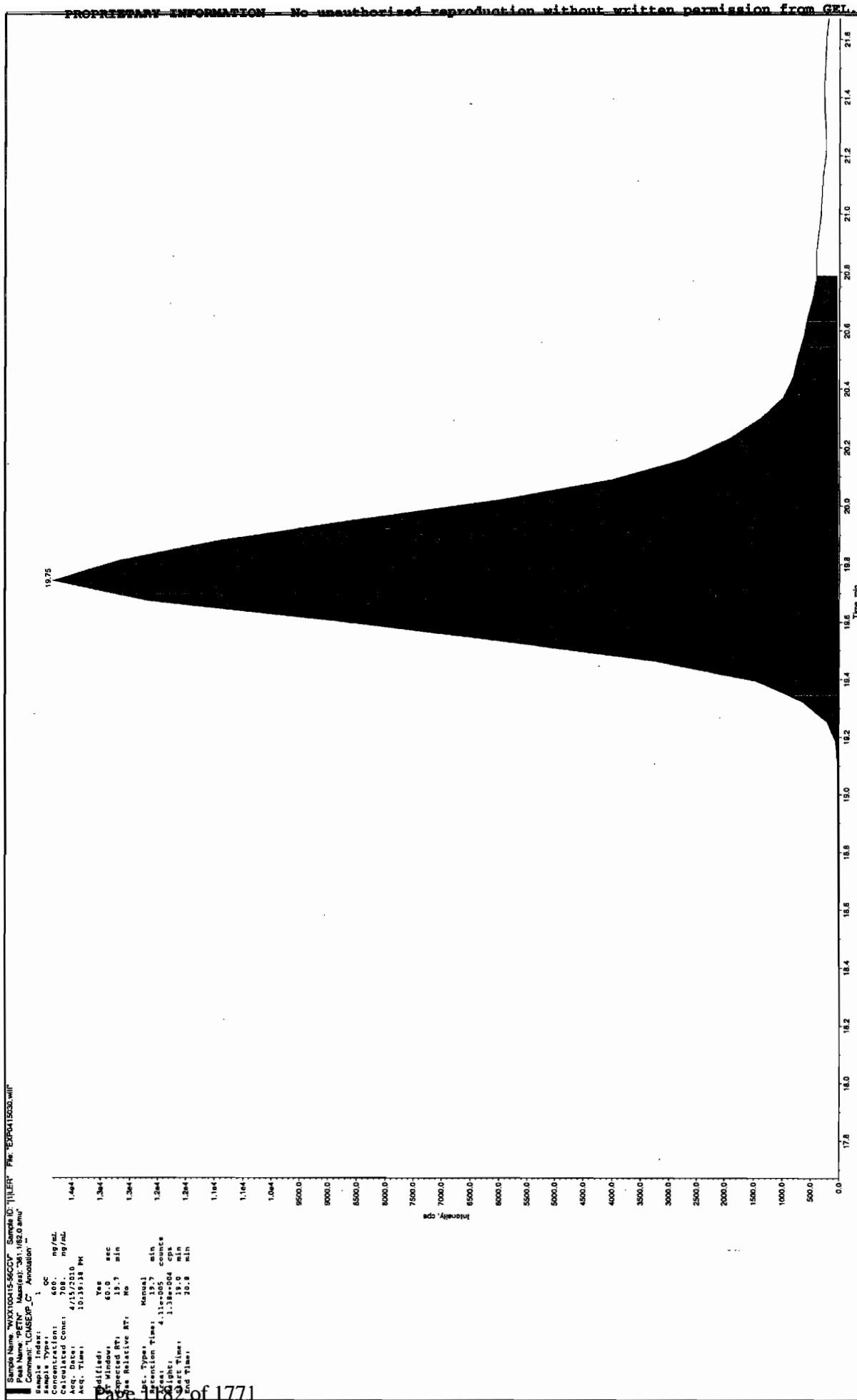
	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	18.8
	<b>Actual RT:</b>	18.9
	<b>Area Counts:</b>	3.74e+005
	<b>Manual Modification</b>	No
	<b>Amount:</b>	618. (ng/mL)
	<b>% Accuracy:</b>	103.00

Bufo den 4/23/10



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

after Jan 4/23/10



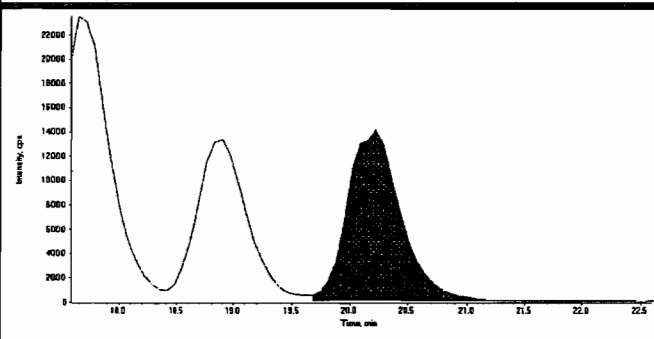
\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

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GEL SOP GL-OA-E-056, Method 8321A-Modified

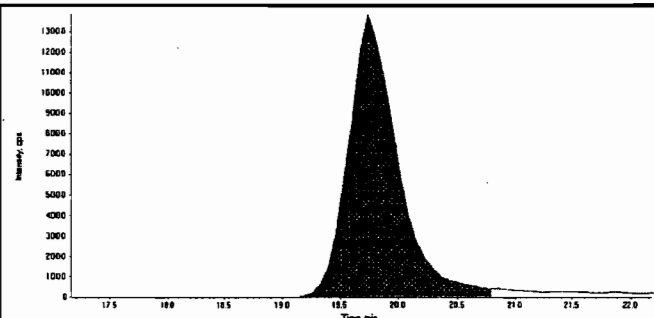
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415030.wiff	<b>Acquisition Date</b>	4/15/2010 10:39:38 PM
<b>Sample Name</b>	WXX100415-56CCV	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	20.1
	<b>Actual RT:</b>	20.2
	<b>Area Counts:</b>	4.62e+005
	<b>Manual Modification</b>	No
	<b>Amount:</b>	545. (ng/mL)
	<b>% Accuracy:</b>	90.90

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	<b>Expected RT:</b>	19.7
	<b>Actual RT:</b>	19.7
	<b>Area Counts:</b>	4.11e+005
	<b>Manual Modification</b>	Yes
	<b>Amount:</b>	708. (ng/mL)
	<b>% Accuracy:</b>	118.00



# GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis 04/15/10  
 Time of Injection 2239  
 Standard Number WXX100415-56CCV  
 Data File EXP0415030a

HMX	93.8
RDX	112.0
135-Trinitrobenzene	106.0
13-Dinitrobenzene	103.0
Tetryl	108.0
246-Trinitrotoluene	103.0
Nitrobenzene	104.0
34-dinitrotoluene	96.2
26-dinitrotoluene	93.0
24-dinitrotoluene	105.0
4-Amino-26-dinitrotoluene	110.0
2-Amino-46-dinitrotoluene	101.0
2-Nitrotoluene	97.6
4-Nitrotoluene	103.0
3-Nitrotoluene	90.9
PETN	118.0

TOTAL

✓ 1644.5 *hmm 04/15/10*

AVERAGE

✓ 102.8	ICV Limits 85-115%
	CRI Limits 70-130%
	CCV Limits 85-115%
No single analyte > +/- 60%	

*Jan 4/15/10*

7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2199

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0415032.wiff

Analysis Date: 15-APR-10 23:31

LCMSMS ID: 1189

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	40	100	
2,4,6-Trinitrotoluene	40	40.3	101	
2,4-Dinitrotoluene	40	28.6	72	
2,6-Dinitrotoluene	40	33.6	84	
2-Amino-4,6-dinitrotoluene	40	37.9	95	
3,4-Dinitrotoluene	20	17.2	86	
4-Amino-2,6-dinitrotoluene	40	42.6	107	
HMX	40	48.3	121	
Nitrobenzene	40	47.8	119	
PETN	40	46.6	116	
RDX	40	41.6	104	
Tetryl	40	41	103	
m-Dinitrobenzene	40	43.7	109	
m-Nitrotoluene	40	44.7	112	
o-Nitrotoluene	40	44.7	112	
p-Nitrotoluene	40	46.3	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%

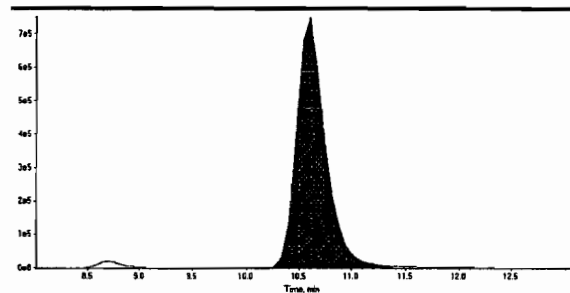
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

EL Laboratories, LLC  
 EL SOP GL-OA-E-056, Method 8321A-Modified

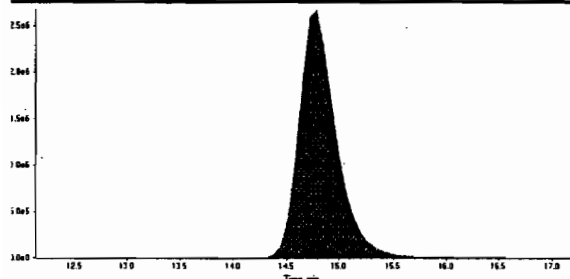
Printed: 22/04/2010 4:04:00 PM  
 LCMSMS#3

File	EXP0415032.wiff	Acquisition Date	4/15/2010 11:31:31 PM
Sample Name	WXX100415-57CRI	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



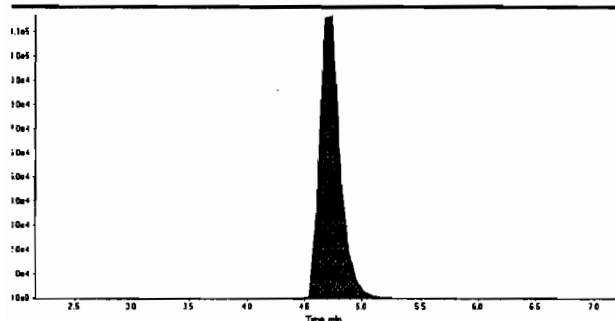
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.50
Actual RT:	10.60
Area Counts:	14800000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries

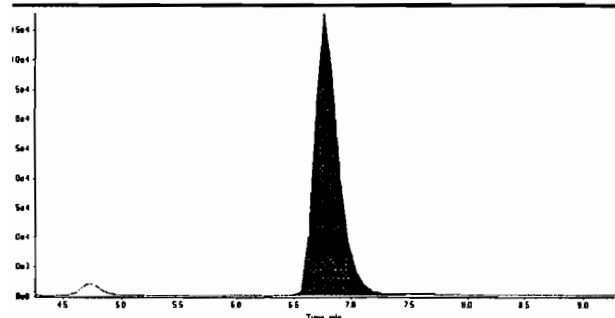


Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.60
Actual RT:	14.80
Area Counts:	66800000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.67
Actual RT:	4.74
Area Counts:	1.50e+006
Manual Modification	No
Amount:	48.3 (ng/mL)
% Accuracy:	121.00



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.77
Actual RT:	6.77
Area Counts:	7.00e+005
Manual Modification	No
Amount:	41.6 (ng/mL)
% Accuracy:	104.00

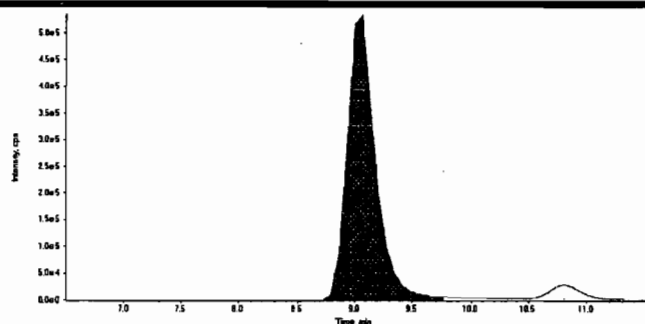
*show 04/23/10*

*Jan 4/23/10*

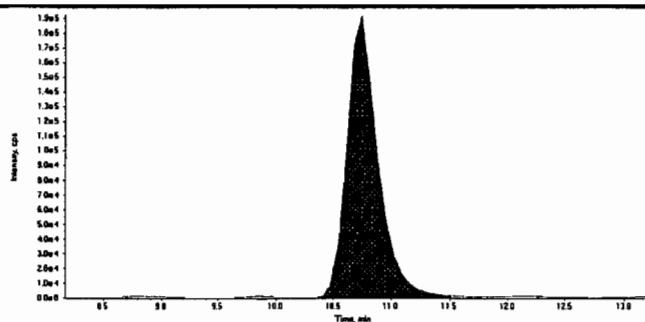
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

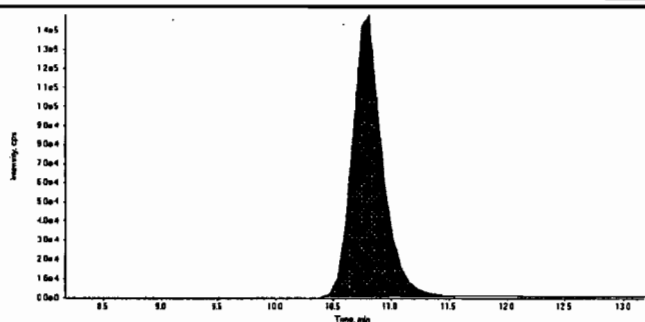
Data File	EXP0415032.wiff	Acquisition Date	4/15/2010 11:31:31 PM
Sample Name	WXX100415-57CRI	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



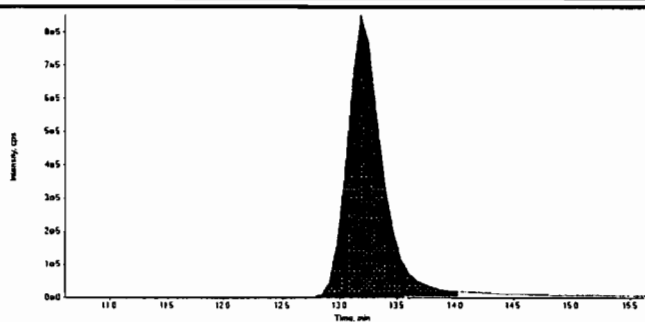
Compound Name:	135-Trinitrobenzene (213.0/182.8 amu)
Expected RT:	9.00
Actual RT:	9.07
Area Counts:	9.42e+006
Manual Modification	No
Amount:	40.0 (ng/mL)
% Accuracy:	100.00



Compound Name:	13-Dinitrobenzene (168.0/137.9 amu)
Expected RT:	10.7
Actual RT:	10.7
Area Counts:	3.68e+006
Manual Modification	No
Amount:	43.7 (ng/mL)
% Accuracy:	109.00



Compound Name:	Tetryl (241.0/180.8 amu)
Expected RT:	10.7
Actual RT:	10.8
Area Counts:	2.75e+006
Manual Modification	No
Amount:	41.0 (ng/mL)
% Accuracy:	103.00



Compound Name:	246-Trinitrotoluene (227.1/209.8 amu)
Expected RT:	13.1
Actual RT:	13.2
Area Counts:	1.82e+007
Manual Modification	No
Amount:	40.3 (ng/mL)
% Accuracy:	101.00

Before Jan 4/23/10

Sample Name: WAX100415-5708 Sample ID: 111111 File: EXP0415002.wif

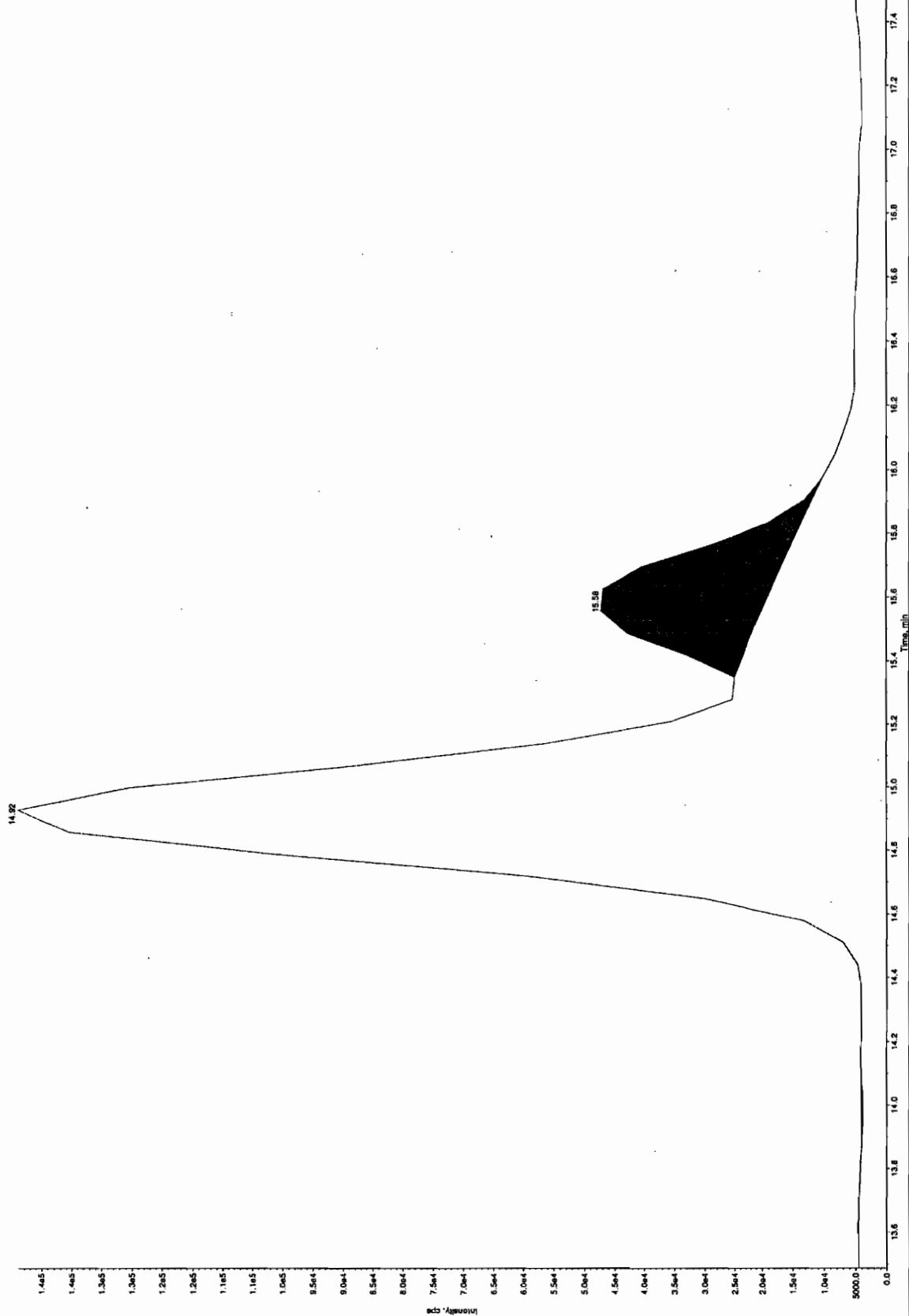
Sample Index: 1

Sample Type: OC  
Concentration: 40.0 ng/mL  
Acq. Date: 4/15/2010  
Acq. Time: 11:11:11 PM

Method: No

Pre-Algorithm: InCelliQues - IQA  
Min. Peak Height: 1000.00 cps  
Min. Peak Width: 0.00 sec  
Max. Peak Width: 30.0 sec  
Expected RT: 15.5 min

Valley  
Retention Time: 15.6 min  
Height: 5.46e+005 counts  
Area: 2.72e+004 cps  
Width: 1.11 min  
S/N: 18.0 min



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

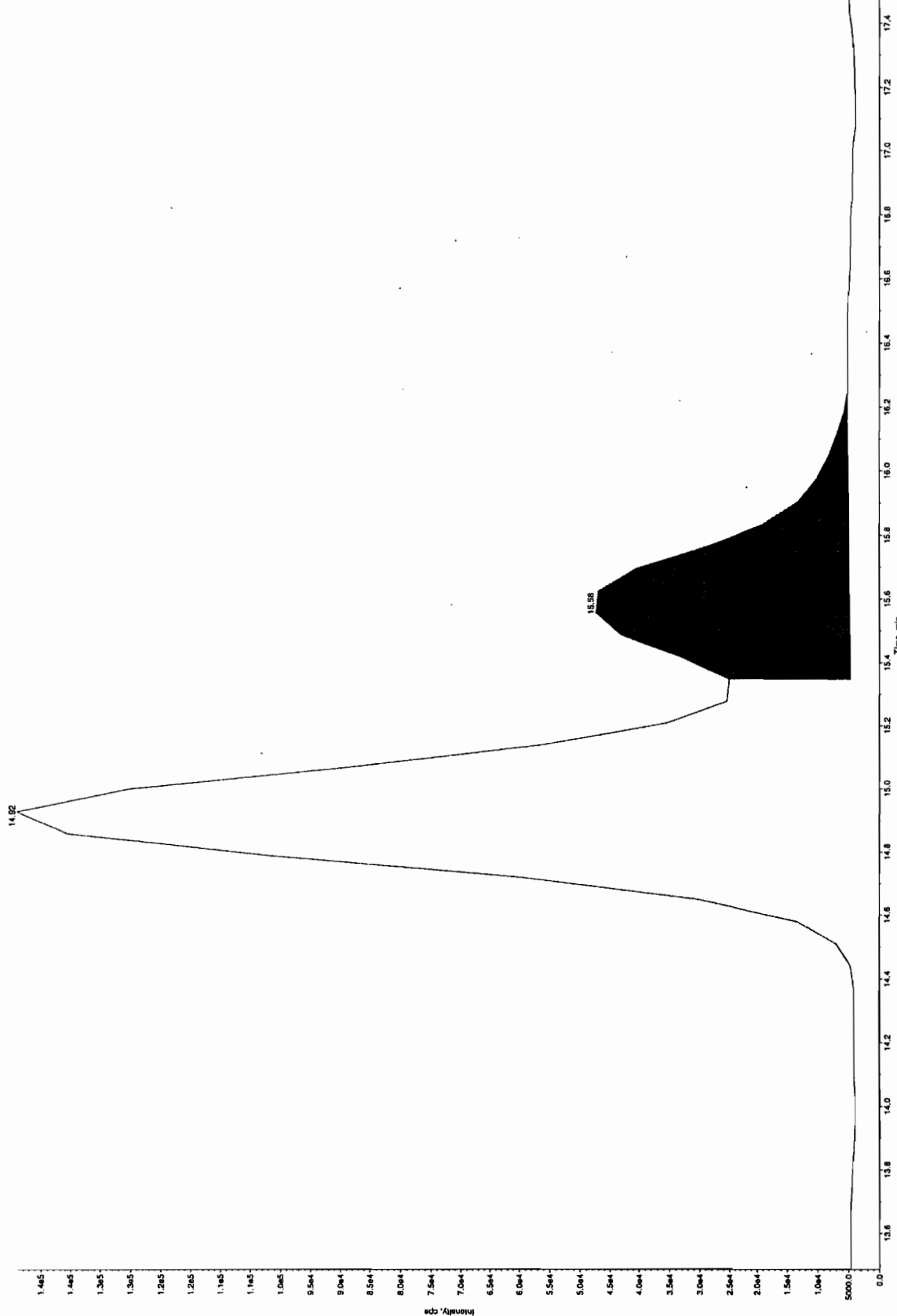
after lag 4/23/10

Sample Name: WAX10015-20501 Sample ID: 911ER File: EPP0116032.mpl  
 Comment: LCMSEPP\_C Annotation: -

Sample Index: 1  
 Sample Type: QC  
 Concentration: 40.0 ng/mL  
 Acq. Date: 4/15/2010  
 Acq. Time: 11:31:31 PM  
 Modified: Yes  
 RT Min/Sec: 10.0 sec  
 RT Min: 15.5 min  
 RT Max: 16.3 min  
 RT Type: Manual  
 Retention Time: 15.6 min  
 Counts: 1.06e+008 counts  
 Mass: 4.23e+004 cps  
 Mass Time: 15.5 min  
 Mass Time: 16.3 min

14.92

15.98

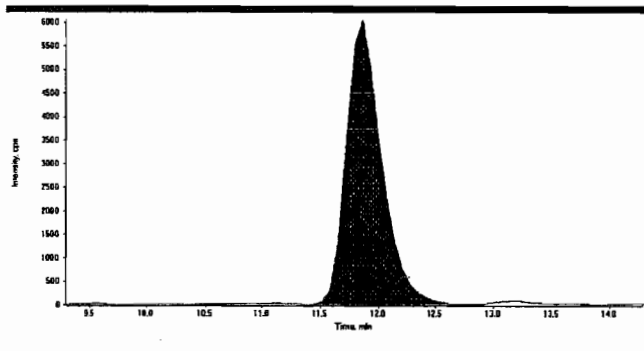


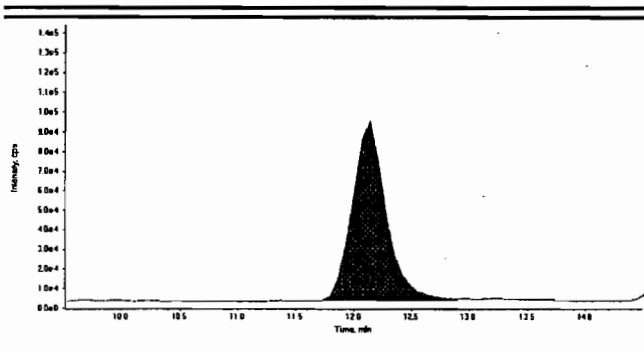
\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

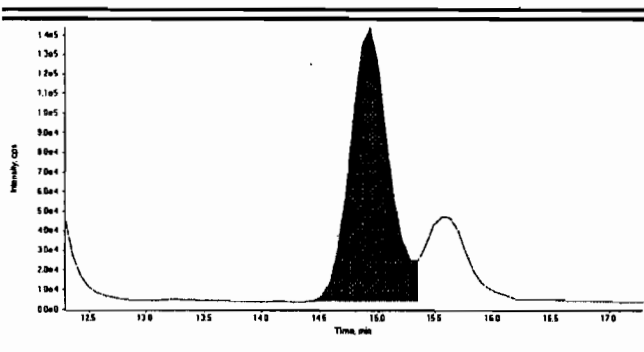
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

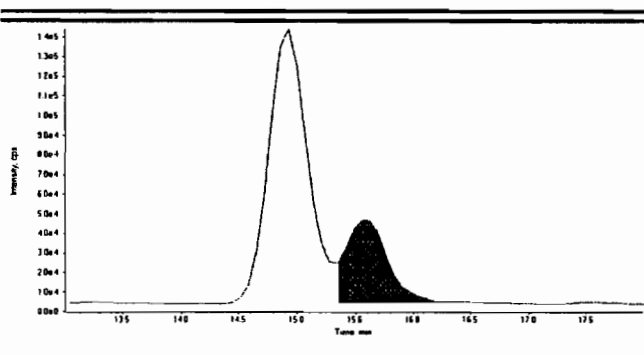
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

Data File	EXP0415032.wiff	Acquisition Date	4/15/2010 11:31:31 PM
Sample Name	WXX100415-57CRI	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	11.8
	Actual RT:	11.9
	Area Counts:	1.29e+005
	Manual Modification	No
	Amount:	47.8 (ng/mL)
	% Accuracy:	119.00

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.0
	Actual RT:	12.1
	Area Counts:	1.89e+006
	Manual Modification	No
	Amount:	17.2 (ng/mL)
	% Accuracy:	85.80

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	14.8
	Actual RT:	14.9
	Area Counts:	3.32e+006
	Manual Modification	No
	Amount:	33.6 (ng/mL)
	% Accuracy:	84.00

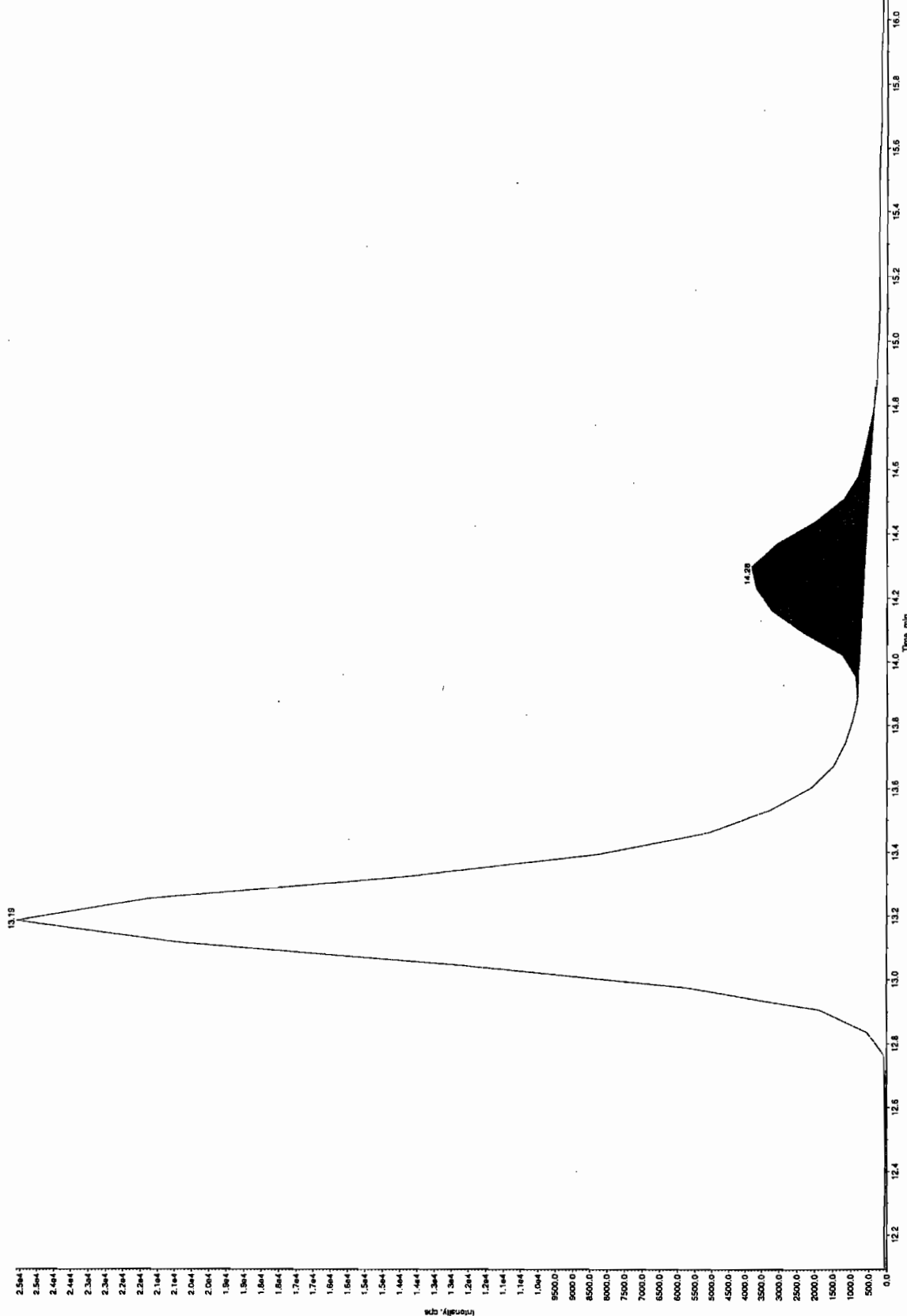
	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.5
	Actual RT:	15.6
	Area Counts:	1.06e+006
	Manual Modification	Yes
	Amount:	28.6 (ng/mL)
	% Accuracy:	71.50

Byron Jan 4/23/10

Sample Name: WXX100415-5701R Sample ID: HILER File: EXP015032.wif  
 Comment: "LCMS-EXP-1" Acquisition: "187.0180.0 emu"

Sample Name: WXX100415-5701R  
 Sample ID: HILER  
 File: EXP015032.wif  
 Comment: "LCMS-EXP-1" Acquisition: "187.0180.0 emu"

Concentration:	45.0	ng/mL
Calculated Conc:	47.75	ng/mL
Acq. Time:	11:13:13	PM
Sample Type:	1	QC
Modified:	Yes	
Peak Height:	100.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3.00	points
Baseline:	30.0	sec
Retention Time:	14.3	min
Relative RT:	No	
Int. Type:	Valley	
Retention Time:	2.184	min
Height:	6.79e+004	counts
Start Time:	3.20e+003	cps
End Time:	11.9	min
Acq. Time:	14.3	min

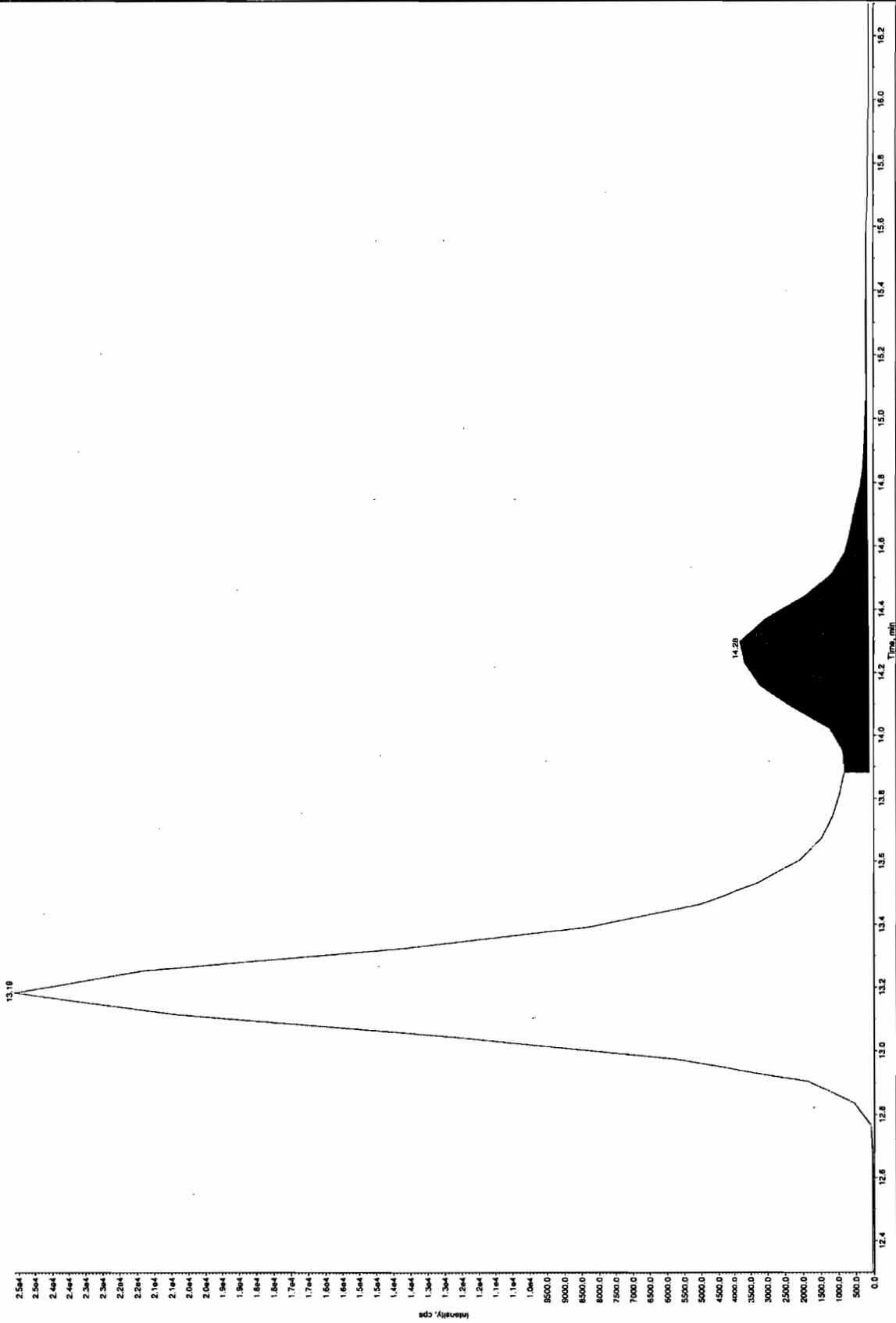


\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3



after Jan 4/23/00

Sample Name: WXX100415.57C.RT Sample ID: TILER File: EXP0415032.wif  
 Peak Name: 2-Amino-6-chlorobutane Mass(es): 197.0/180.0 amu  
 Comment: LCMEXP\_C Annotation: -  
 Sample Type: 1 OC  
 Concentration: 40.0 ng/mL  
 Calculated Conc: 37.9 ng/mL  
 Acq. Time: 11:13:11 PM  
 Modified: Yes  
 Verified: Yes  
 Reported RT: 14.3 min  
 Relative RT: No  
 Type: Manual  
 Acquisition Time: 14.3 min  
 Weight: 9.47e+003 counts  
 Start Time: 13.9 min  
 End Time: 15.1 min



GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415032.wiff	<b>Acquisition Date</b>	4/15/2010 11:31:31 PM
<b>Sample Name</b>	WXX100415-57CRI	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.1
	Actual RT:	13.2
	Area Counts:	2.78e+006
	Manual Modification	No
	Amount:	42.6 (ng/mL)
	% Accuracy:	107.00

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.3
	Actual RT:	14.3
	Area Counts:	9.47e+004
	Manual Modification	Yes
	Amount:	37.9 (ng/mL)
	% Accuracy:	94.80

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	17.6
	Actual RT:	17.7
	Area Counts:	4.60e+004
	Manual Modification	No
	Amount:	44.7 (ng/mL)
	% Accuracy:	112.00

	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	18.8
	Actual RT:	18.9
	Area Counts:	2.52e+004
	Manual Modification	No
	Amount:	46.3 (ng/mL)
	% Accuracy:	116.00

Before Jan 4/23/00

Sample Name: "WXX100415-57CH" Sample ID: "HILIER" File: "EXP0415032.wif"

Peak Name: "PE1M" Mass(es): "361.1420 amu"

Concentration: "COASER\_C" Annotation: "

Sample Type: "QC"

Concentration: 48.0 ng/mL

Calculated Conc: 47.8 ng/mL

Acq. Time: 11/31/01 PM

Modified: "No"

Method: "HillQuas - 10A"

Peak Height: 100.00 cps

Peak Width: 0.00 sec

Smoothing Width: 3 points

Window: 60.0 sec

Resolution: 18.7 min

Unit Relative RT: "No"

IS Type: "Valley"

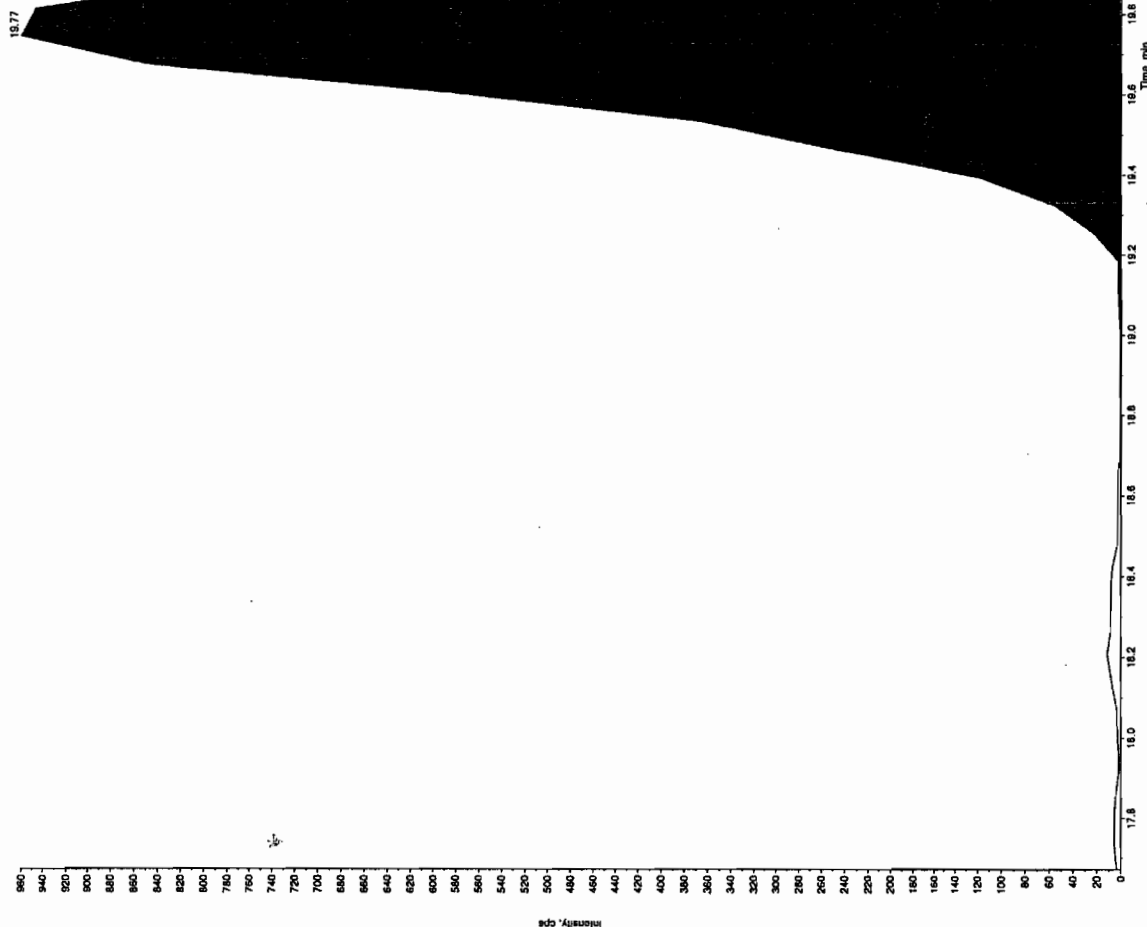
Retention Time: 18.7 min

Height: 3.03e-004 cps

Weight: 9.59e-002 cps

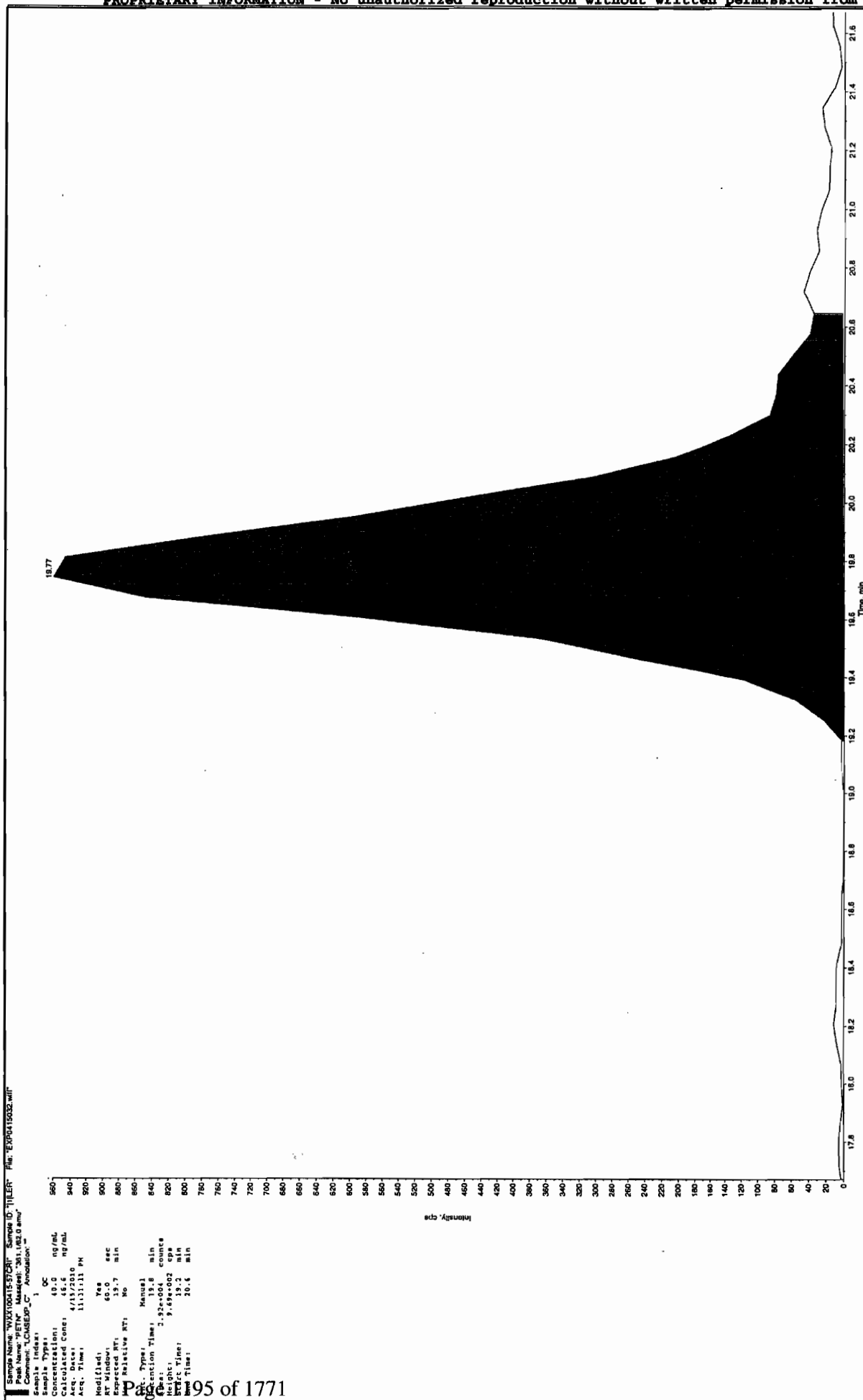
Height: 18.0 min

Empty Time: 21.5 min



\*GEL SOP GL-0A-E-056, Method 8321A-Modified LCMSMS#3

after Jan 4/23/10



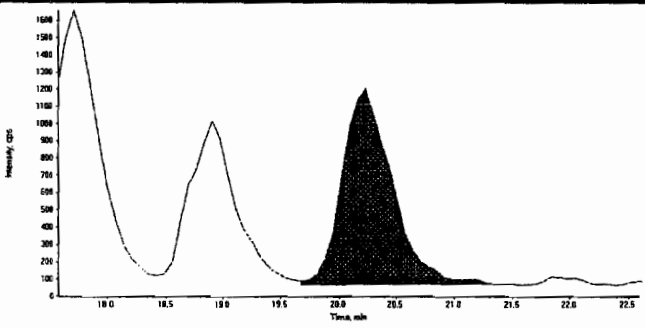
\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

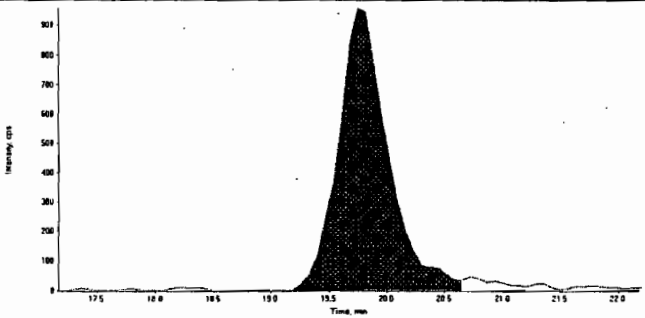
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

Data File	EXP0415032.wiff	Acquisition Date	4/15/2010 11:31:31 PM
Sample Name	WXX100415-57CRI	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control

	Compound Name:	3-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	20.1
	Actual RT:	20.2
	Area Counts:	3.52e+004
	Manual Modification	No
	Amount:	44.7 (ng/mL)
	% Accuracy:	112.00

	Compound Name:	PETN (361.1/62.0 amu)
	Expected RT:	19.7
	Actual RT:	19.8
	Area Counts:	2.92e+004
	Manual Modification	Yes
	Amount:	46.6 (ng/mL)
	% Accuracy:	116.00

GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis 04/15/10  
 Time of Injection 2331  
 Standard Number WXX100415-57CRI  
 Data File EXP0415032a

HMX	121.0
RDX	104.0
135-Trinitrobenzene	100.0
13-Dinitrobenzene	109.0
Tetryl	103.0
246-Trinitrotoluene	101.0
Nitrobenzene	119.0
34-dinitrotoluene	85.8
26-dinitrotoluene	84.0
24-dinitrotoluene	71.5
4-Amino-26-dinitrotoluene	107.0
2-Amino-46-dinitrotoluene	94.8
2-Nitrotoluene	112.0
4-Nitrotoluene	116.0
3-Nitrotoluene	112.0
PETN	116.0

TOTAL

✓ 1656.1

*done 04/12/10*

AVERAGE

✓ 103.5

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

*Done  
4/15/10*

7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2199

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0415043.wiff

Analysis Date: 16-APR-10 04:17

LCMSMS ID: 1189

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	653	109	
2,4,6-Trinitrotoluene	600	588	98	
2,4-Dinitrotoluene	600	592	99	
2,6-Dinitrotoluene	600	572	95	
2-Amino-4,6-dinitrotoluene	600	602	100	
3,4-Dinitrotoluene	300	261	87	
4-Amino-2,6-dinitrotoluene	600	624	104	
HMX	600	608	101	
Nitrobenzene	600	628	105	
PETN	600	756	126	
RDX	600	680	113	
Tetryl	600	640	107	
m-Dinitrobenzene	600	588	98	
m-Nitrotoluene	600	568	95	
o-Nitrotoluene	600	584	97	
p-Nitrotoluene	600	660	110	

Recovery Limits:

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

Other Target Analytes 80-120%

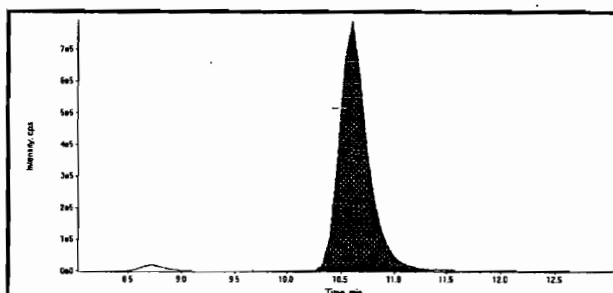
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

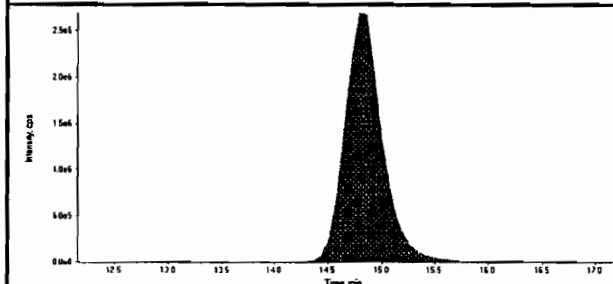
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

Data File	EXP0415043.wiff	Acquisition Date	4/16/2010 4:17:22 AM
Sample Name	WXX100415-56CCV	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



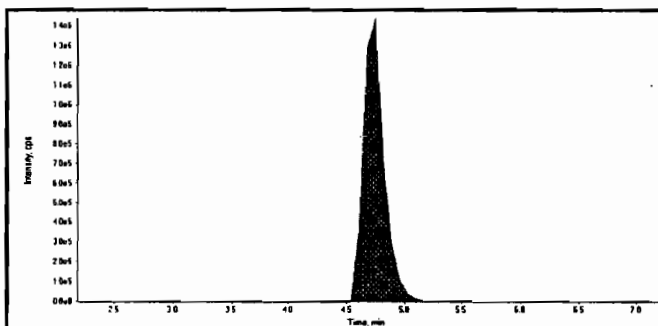
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.50
Actual RT:	10.60
Area Counts:	14500000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries

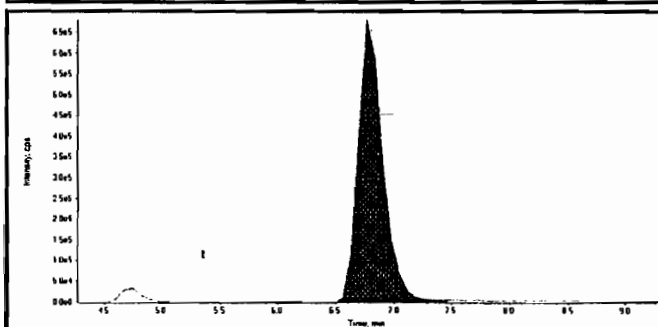


Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.60
Actual RT:	14.80
Area Counts:	66000000.00
Manual Modification	Yes
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.67
Actual RT:	4.74
Area Counts:	1.81e+007
Manual Modification	No
Amount:	608. (ng/mL)
% Accuracy:	101.00



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.77
Actual RT:	6.77
Area Counts:	1.02e+007
Manual Modification	No
Amount:	680. (ng/mL)
% Accuracy:	113.00

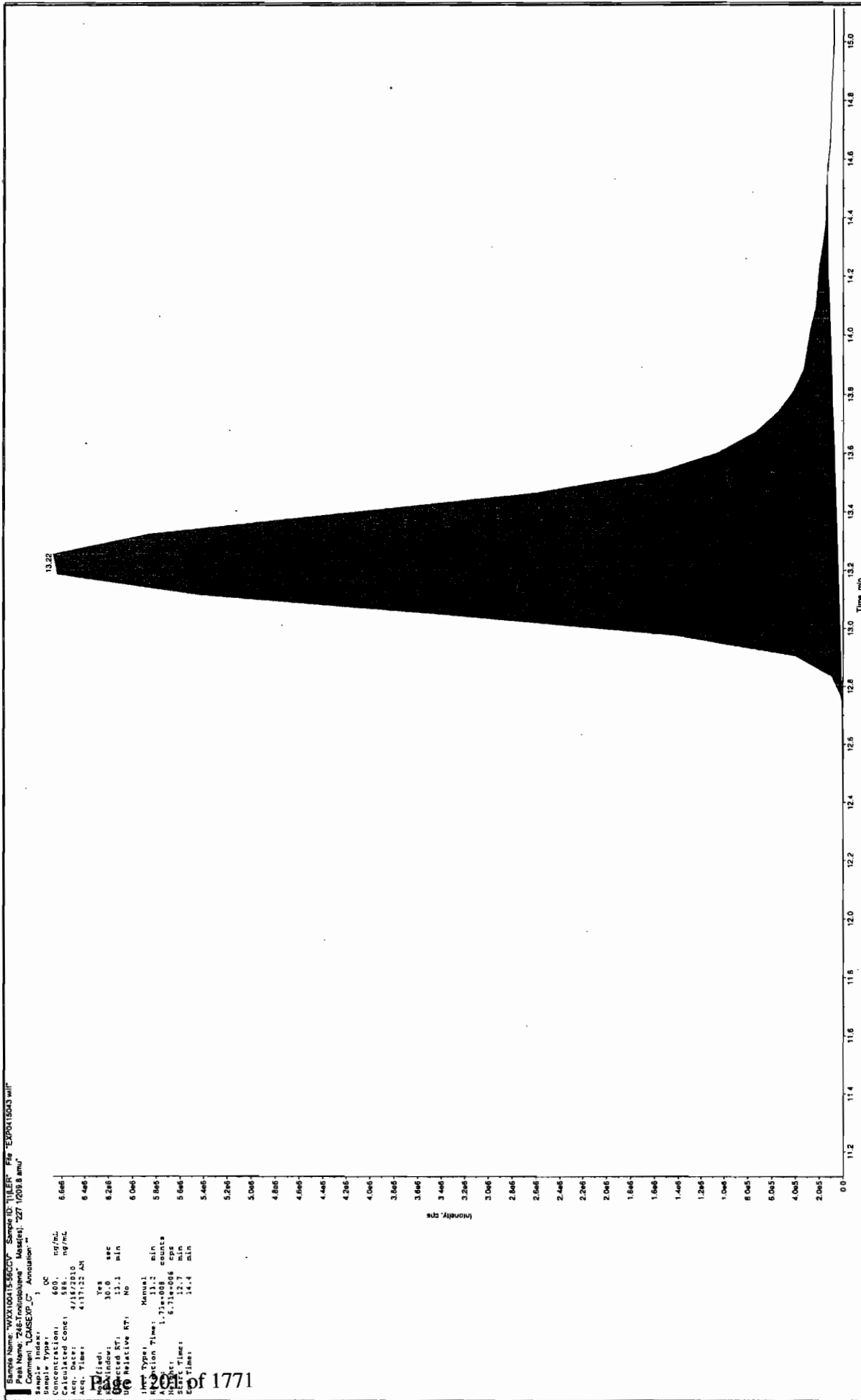
*Handwritten:* Hmx 04/23/10

*Handwritten:* Lax 4/23/10





after Jan 4/23/10



Sample Name: WXX10015-5620V Sample ID: TULER File: E25015043.mf  
 Peak Name: 74E-Triiodobenzene Mass(es): 227 1000.8 amu  
 Comment: LCMS-EXP\_C Association: "

Sample Index: 1 QC  
 Sample Type: 600 ng/mL  
 Concentration: 588 ng/mL  
 Calculated Conc: 4/18/2010  
 Acq. Date: 4/17/12 AN  
 Acq. Time: 6.4e6  
 Neg. Ind: Yes  
 Neg. Window: 10.0 sec  
 Neg. RT: 13.1 min  
 Neg. Relative RT: No  
 Neg. Manual  
 Neg. Selection Time: 13.2 min  
 Neg. Selection Count: 1.2e6  
 Neg. Selection Time: 12.7 min  
 Neg. Selection Time: 14.4 min

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415043.wiff	<b>Acquisition Date</b>	4/16/2010 4:17:22 AM
<b>Sample Name</b>	WXX100415-56CCV	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	<b>Expected RT:</b>	9.00
	<b>Actual RT:</b>	9.07
	<b>Area Counts:</b>	1.10e+008
	<b>Manual Modification</b>	No
	<b>Amount:</b>	653. (ng/mL)
	<b>% Accuracy:</b>	109.00

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	<b>Expected RT:</b>	10.7
	<b>Actual RT:</b>	10.7
	<b>Area Counts:</b>	4.60e+007
	<b>Manual Modification</b>	No
	<b>Amount:</b>	588. (ng/mL)
	<b>% Accuracy:</b>	98.00

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	<b>Expected RT:</b>	10.7
	<b>Actual RT:</b>	10.8
	<b>Area Counts:</b>	4.25e+007
	<b>Manual Modification</b>	No
	<b>Amount:</b>	640. (ng/mL)
	<b>% Accuracy:</b>	107.00

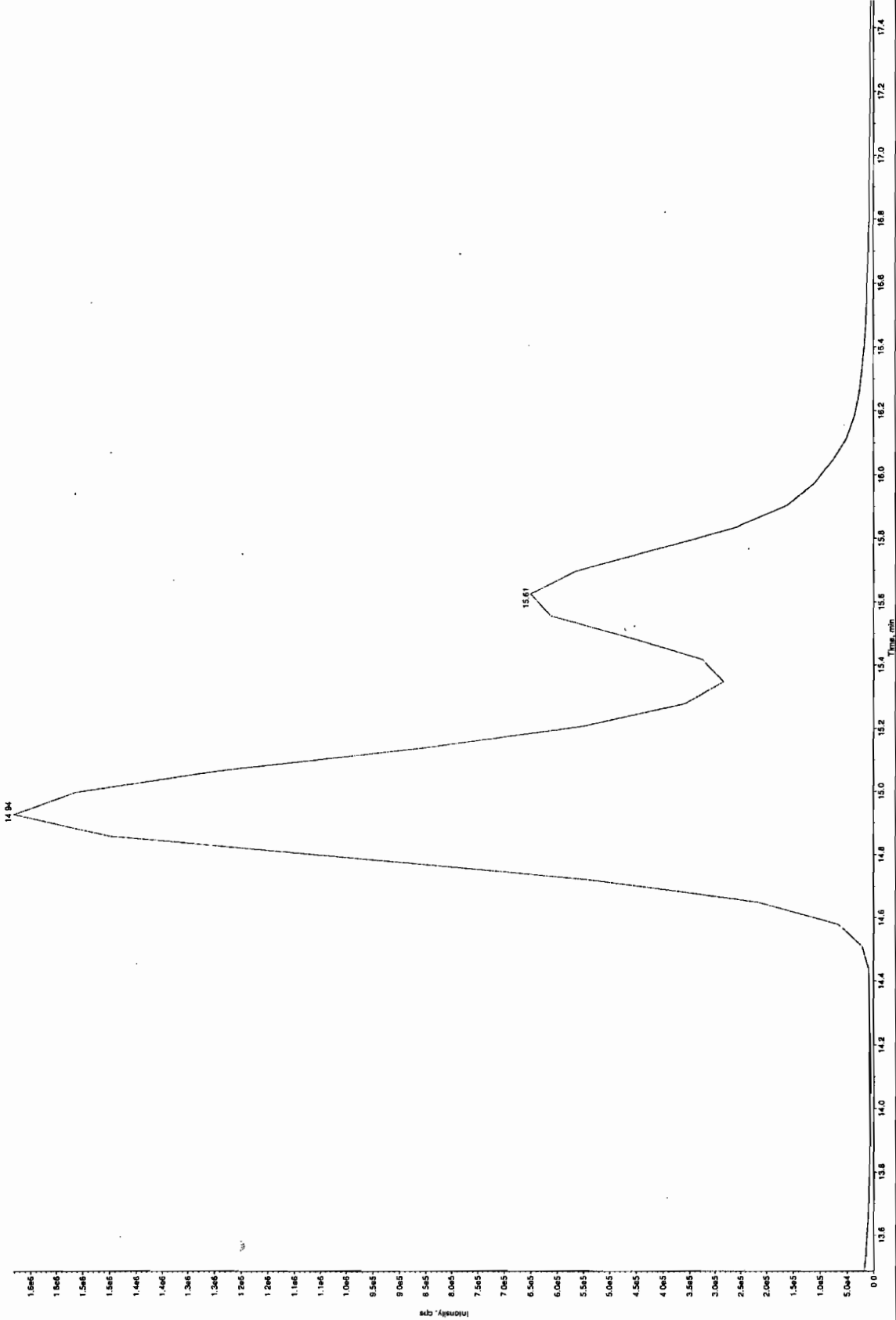
  

	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	<b>Expected RT:</b>	13.1
	<b>Actual RT:</b>	13.2
	<b>Area Counts:</b>	1.73e+008
	<b>Manual Modification</b>	Yes
	<b>Amount:</b>	588. (ng/mL)
	<b>% Accuracy:</b>	98.00

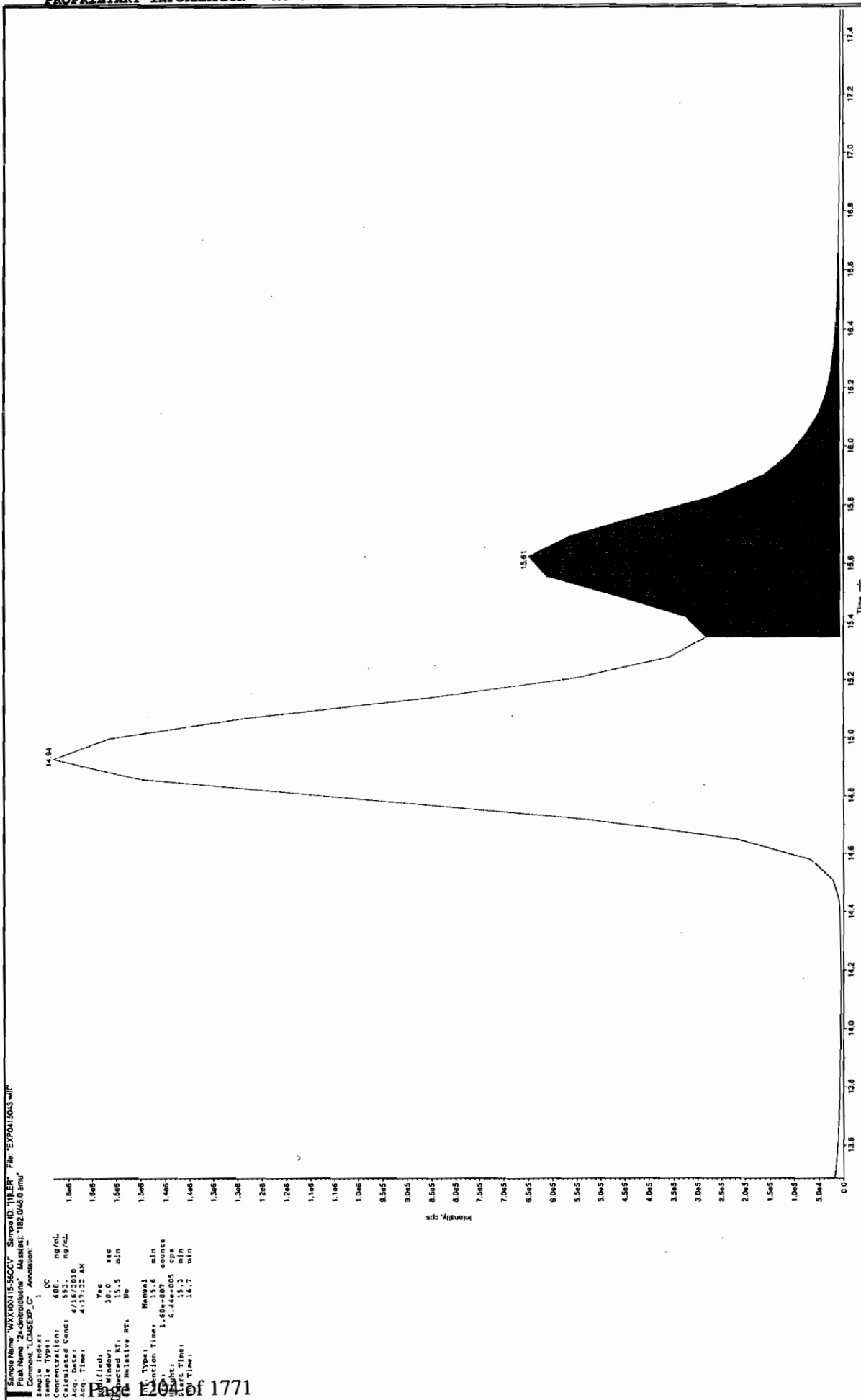
Before Jan 4/23/10

Sample Name: WXX100415-56007 Sample ID: T1LER File: EXP0415043.wif  
 Peak Name: 74-dihydrodione Mass(es): 182.048.0 amu  
 Comment: LCMSXP\_C Annotation: =

Sample Index: 1  
 Concentration: 600 ng/mL  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 4/16/2010  
 Acq. Time: 4:17:22 AM  
 Modified: No



after Jan 4/23/10



Sample Name: "VXX100115-562CV" Sample ID: "11118" File: "EXP0115043.wif"

Peak Name: "24-dinitrotoluene" Method: "182.046.0 amu"

Comment: "LCMS-EXP-C" Annotation: "

Sample Index: 1

Concentration: 600. ng/mL

Acq. Date: 4/18/2010

Acq. Time: 4:11:22 AM

Integrator: Yes

Window: 30.0 sec

Acquired RT: 15.5 min

Retention Time: 15.6 min

Peak Time: 15.3 min

Start Time: 14.7 min

End Time: 16.7 min

Peak Type: Manual

Integration Time: 15.6 min

Integration: 1.44e+005 cps

Peak Area: 6.44e+005 cps

Peak Time: 15.3 min

Start Time: 14.7 min

End Time: 16.7 min

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415043.wiff	<b>Acquisition Date</b>	4/16/2010 4:17:22 AM
<b>Sample Name</b>	WXX100415-56CCV	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	11.8
	Actual RT:	11.9
	Area Counts:	1.86e+006
	Manual Modification	No
	Amount:	628. (ng/mL)
	% Accuracy:	105.00

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.0
	Actual RT:	12.1
	Area Counts:	2.26e+007
	Manual Modification	No
	Amount:	261. (ng/mL)
	% Accuracy:	86.90

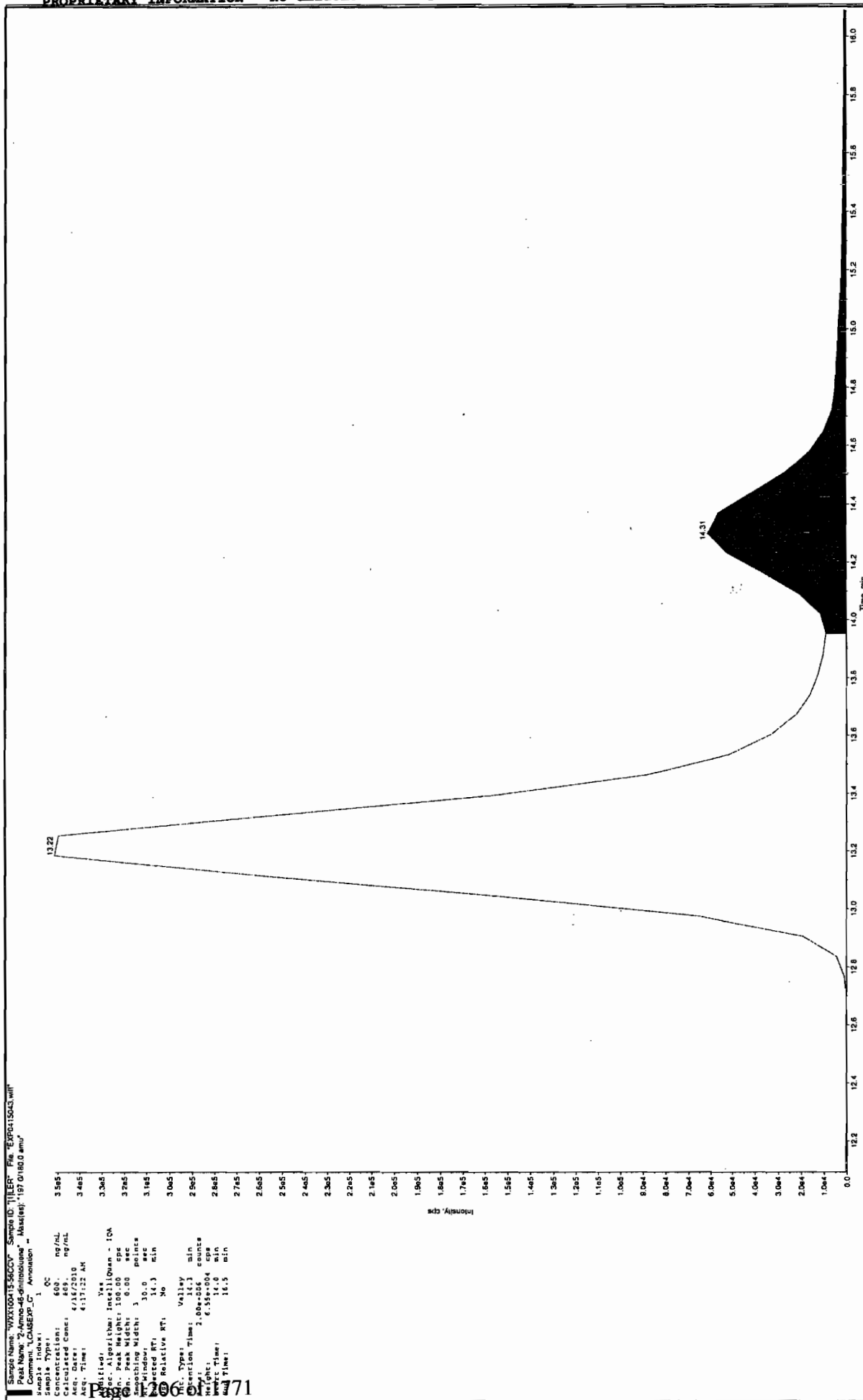
  

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	14.8
	Actual RT:	14.9
	Area Counts:	4.02e+007
	Manual Modification	No
	Amount:	572. (ng/mL)
	% Accuracy:	95.30

	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.5
	Actual RT:	15.6
	Area Counts:	1.60e+007
	Manual Modification	Yes
	Amount:	592. (ng/mL)
	% Accuracy:	98.60

Byron Jan 4/23/10



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3





GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415043.wiff	<b>Acquisition Date</b>	4/16/2010 4:17:22 AM
<b>Sample Name</b>	WXX100415-56CCV	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.1
	Actual RT:	13.2
	Area Counts:	3.67e+007
	Manual Modification	No
	Amount:	624. (ng/mL)
	% Accuracy:	104.00

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.3
	Actual RT:	14.3
	Area Counts:	1.49e+006
	Manual Modification	Yes
	Amount:	602. (ng/mL)
	% Accuracy:	100.00

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	17.6
	Actual RT:	17.7
	Area Counts:	6.10e+005
	Manual Modification	No
	Amount:	584. (ng/mL)
	% Accuracy:	97.30

	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	18.8
	Actual RT:	18.9
	Area Counts:	3.68e+005
	Manual Modification	No
	Amount:	660. (ng/mL)
	% Accuracy:	110.00

Before Scan 4123/10

Sample Name: "WAX10013-5600" Sample ID: "TILER" File: "EXP015043.wif"

Peak Name: "PENT" Mass(es): "381.182.0 amu"

Sample Index: 1

Sample Type: QC

Concentration: 600. ng/mL

Calculated Conc: 4/14/2010 ng/mL

Acq. Time: 4/17/22 AM

Acq. Time: 4/17/22 AM

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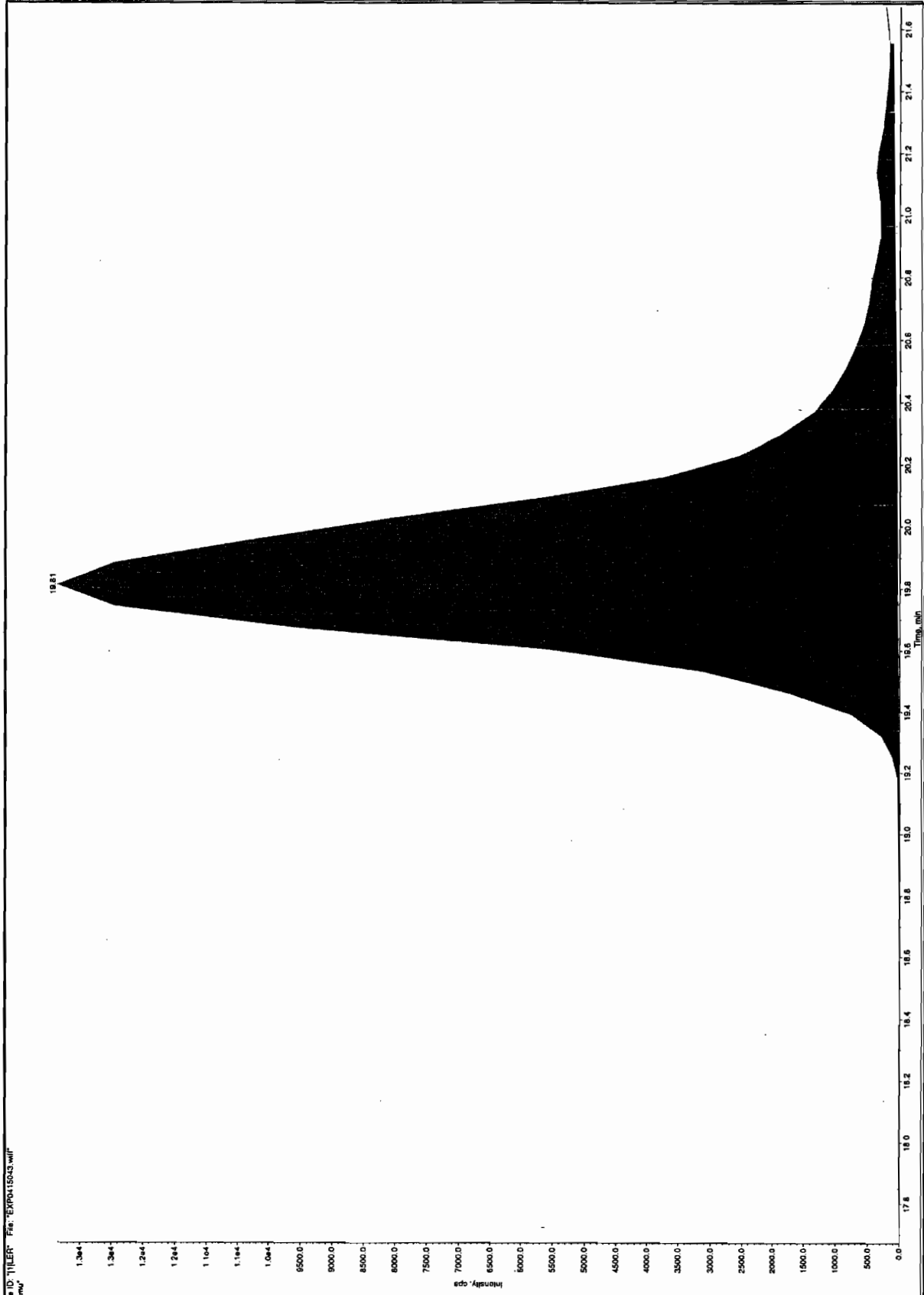
Acq. Time: 4/17/22 AM

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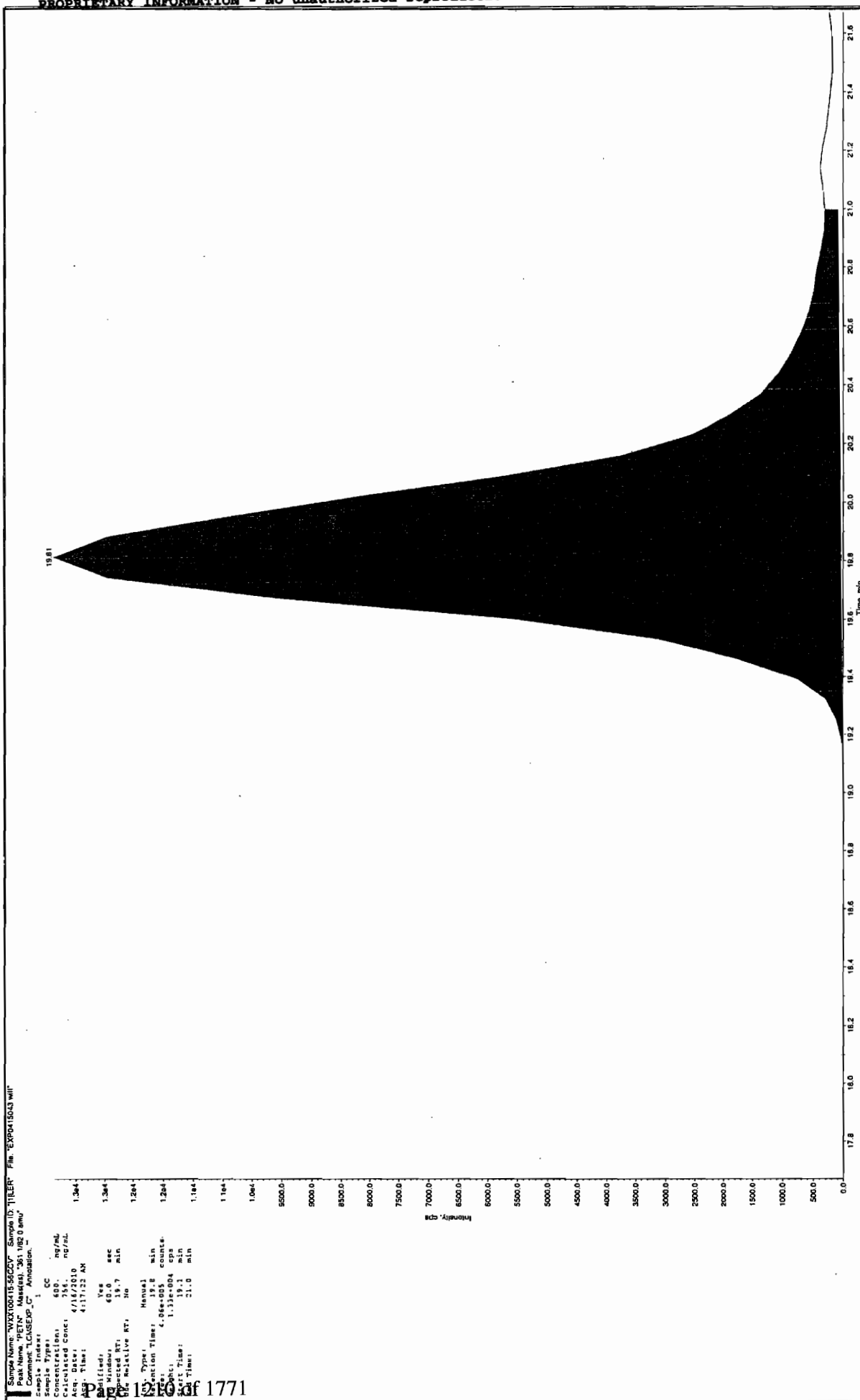
Acq. Time: 4/17/22 AM

Acq. Time: 4/17/22 AM



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

after Scan 4123110



Sample Name: 8321A-E-056, Scan 4123110, File: EXP041503.wml

Comment: LCASEXP\_C, Annotation: -

Sample Index: 1

Sample Type: CC

Concentration: 50.0 mg/mL

Calculated Conc: 396.0 mg/mL

Acq. Date: 4/16/2010

Acq. Time: 4:17:22 AM

Acq. Method: Yes

Acq. Min/Sec: 60.0 sec

Acq. Relative RT: 19.7 min

Acq. Type: Manual

Acq. Type: Manual

Retention Time: 19.8 min

Counts: 4.06e+005 counts

Counts: 1.13e+004 counts

Start Time: 19.1 min

Stop Time: 21.0 min

Page 1771

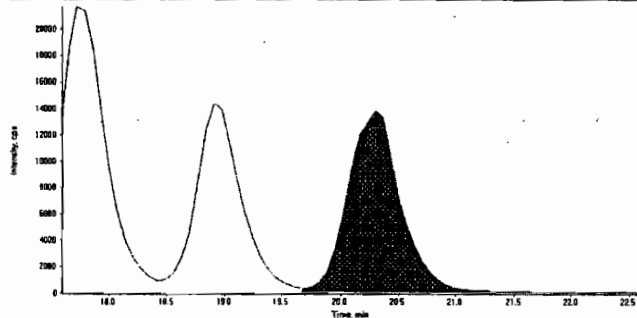
\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

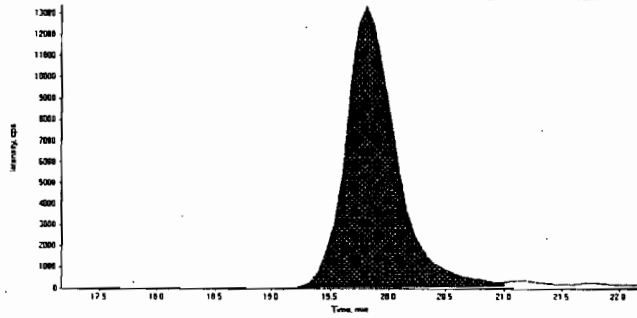
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

Data File	EXP0415043.wiff	Acquisition Date	4/16/2010 4:17:22 AM
Sample Name	WXX100415-56CCV	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control

	Compound Name:	3-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	20.1
	Actual RT:	20.3
	Area Counts:	4.46e+005
	Manual Modification	No
	Amount:	568. (ng/mL)
	% Accuracy:	94.70

	Compound Name:	PETN (361.1/62.0 amu)
	Expected RT:	19.7
	Actual RT:	19.8
	Area Counts:	4.06e+005
	Manual Modification	Yes
	Amount:	756. (ng/mL)
	% Accuracy:	126.00

GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis 04/16/10  
 Time of Injection 0417  
 Standard Number WXX100415-56CCV  
 Data File EXP0415043a

HMX	101.0
RDX	113.0
135-Trinitrobenzene	109.0
13-Dinitrobenzene	98.0
Tetryl	107.0
246-Trinitrotoluene	98.0
Nitrobenzene	105.0
34-dinitrotoluene	86.9
26-dinitrotoluene	95.3
24-dinitrotoluene	98.6
4-Amino-26-dinitrotoluene	104.0
2-Amino-46-dinitrotoluene	100.0
2-Nitrotoluene	97.3
4-Nitrotoluene	110.0
3-Nitrotoluene	94.7
PETN	126.0

TOTAL

✓ 1643.8

*hmm 04/23/10*

AVERAGE

✓ 102.7

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

*Jan 4/23/10*

7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2199

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0415045.wiff

Analysis Date: 16-APR-10 05:09

LCMSMS ID: 1189

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	40.2	100	
2,4,6-Trinitrotoluene	40	39.1	98	
2,4-Dinitrotoluene	40	34.2	86	
2,6-Dinitrotoluene	40	32.6	82	
2-Amino-4,6-dinitrotoluene	40	38.6	97	
3,4-Dinitrotoluene	20	18.2	91	
4-Amino-2,6-dinitrotoluene	40	41.4	104	
HMX	40	45.4	114	
Nitrobenzene	40	46.4	116	
PETN	40	47.4	118	
RDX	40	44.6	112	
Tetryl	40	43.3	108	
m-Dinitrobenzene	40	44.3	111	
m-Nitrotoluene	40	44.7	112	
o-Nitrotoluene	40	43.9	110	
p-Nitrotoluene	40	46.7	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%

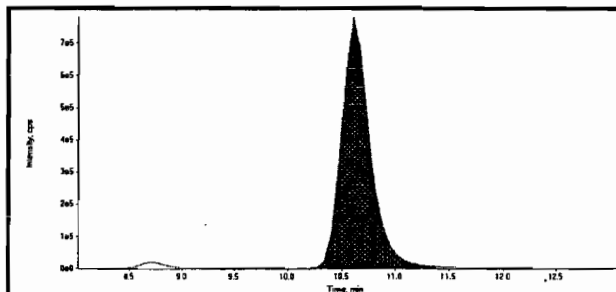
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

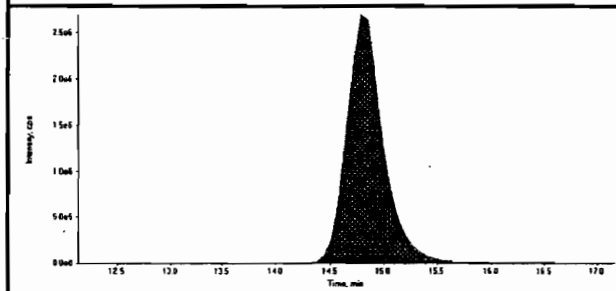
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

Data File	EXP0415045.wiff	Acquisition Date	4/16/2010 5:09:20 AM
Sample Name	WXX100415-57CRI	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



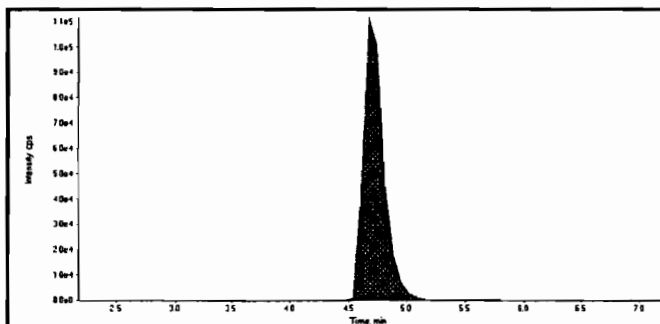
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.50
Actual RT:	10.60
Area Counts:	14700000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries

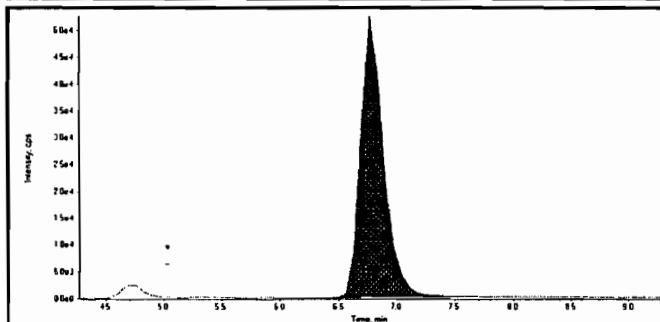


Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.60
Actual RT:	14.80
Area Counts:	65400000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.67
Actual RT:	4.67
Area Counts:	1.41e+006
Manual Modification	No
Amount:	45.4 (ng/mL)
% Accuracy:	114.00



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.77
Actual RT:	6.77
Area Counts:	7.44e+005
Manual Modification	No
Amount:	44.6 (ng/mL)
% Accuracy:	112.00

*Handwritten signature: LER 4/23/10*

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415045.wiff	<b>Acquisition Date</b>	4/16/2010 5:09:20 AM
<b>Sample Name</b>	WXX100415-57CRI	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	Expected RT:	9.00
	Actual RT:	9.07
	Area Counts:	9.42e+006
	Manual Modification	No
	Amount:	40.2 (ng/mL)
	% Accuracy:	100.00

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	Expected RT:	10.7
	Actual RT:	10.7
	Area Counts:	3.73e+006
	Manual Modification	No
	Amount:	44.3 (ng/mL)
	% Accuracy:	111.00

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	Expected RT:	10.7
	Actual RT:	10.8
	Area Counts:	2.91e+006
	Manual Modification	No
	Amount:	43.3 (ng/mL)
	% Accuracy:	108.00

	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	Expected RT:	13.1
	Actual RT:	13.2
	Area Counts:	1.74e+007
	Manual Modification	No
	Amount:	39.1 (ng/mL)
	% Accuracy:	97.70



GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415045.wiff	<b>Acquisition Date</b>	4/16/2010 5:09:20 AM
<b>Sample Name</b>	WXX100415-57CRI	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	11.8
	Actual RT:	11.9
	Area Counts:	1.25e+005
	Manual Modification	No
	Amount:	46.4 (ng/mL)
	% Accuracy:	116.00

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.0
	Actual RT:	12.1
	Area Counts:	1.93e+006
	Manual Modification	No
	Amount:	18.2 (ng/mL)
	% Accuracy:	90.90

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	14.8
	Actual RT:	14.9
	Area Counts:	3.18e+006
	Manual Modification	No
	Amount:	32.6 (ng/mL)
	% Accuracy:	81.50

	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.5
	Actual RT:	15.6
	Area Counts:	1.19e+006
	Manual Modification	No
	Amount:	34.2 (ng/mL)
	% Accuracy:	85.50



after Jan 4/23/10

Sample Name: WXX100415-57CHP Sample ID: 111111 File: E:\P04150415.wif

Peak Name: 13.20 min

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GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415045.wiff	<b>Acquisition Date</b>	4/16/2010 5:09:20 AM
<b>Sample Name</b>	WXX100415-57CRI	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	<b>Expected RT:</b>	13.1
	<b>Actual RT:</b>	13.2
	<b>Area Counts:</b>	2.65e+006
	<b>Manual Modification</b>	No
	<b>Amount:</b>	41.4 (ng/mL)
	<b>% Accuracy:</b>	104.00

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	<b>Expected RT:</b>	14.3
	<b>Actual RT:</b>	14.3
	<b>Area Counts:</b>	9.45e+004
	<b>Manual Modification</b>	Yes
	<b>Amount:</b>	38.6 (ng/mL)
	<b>% Accuracy:</b>	96.60

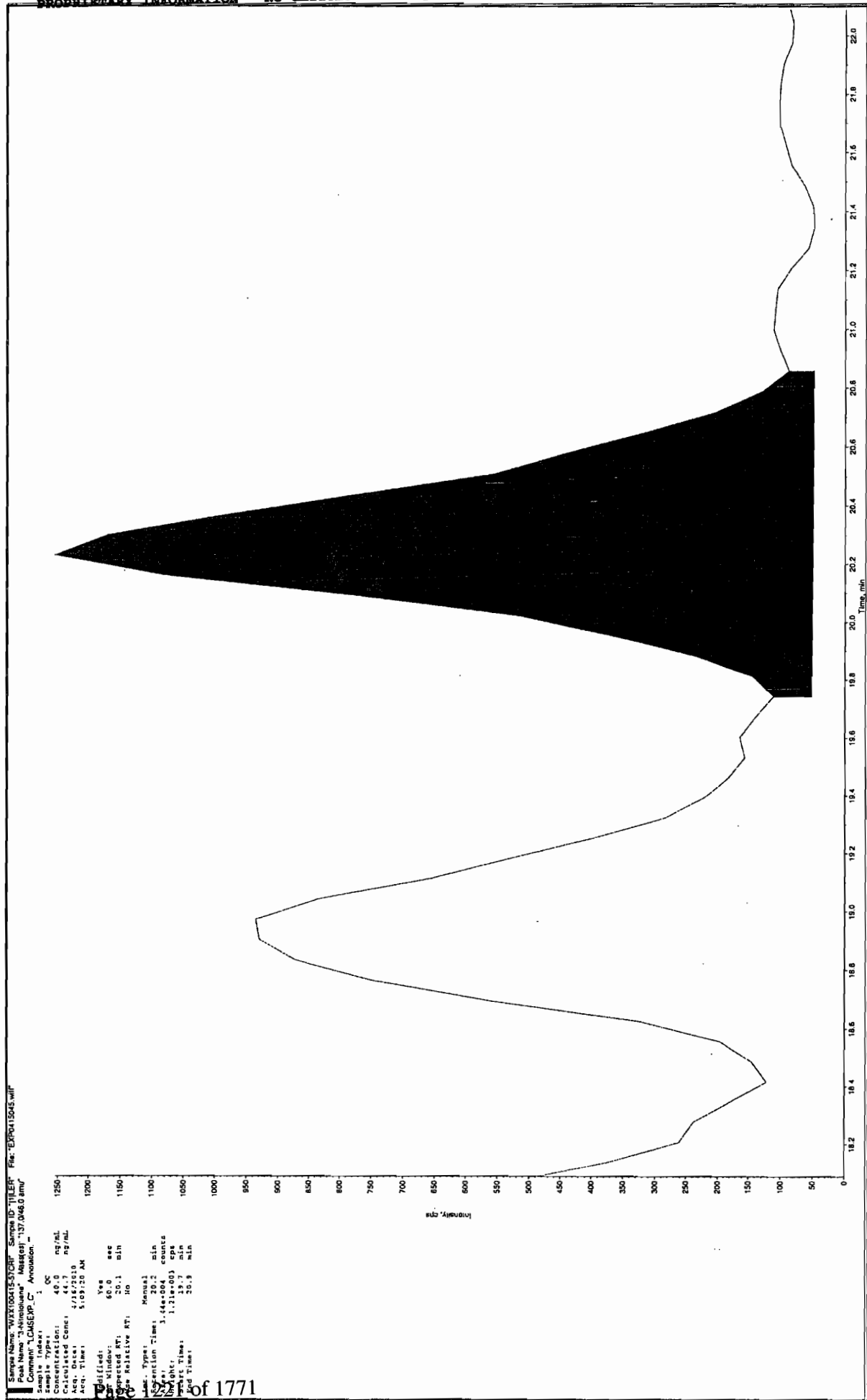
	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	17.6
	<b>Actual RT:</b>	17.7
	<b>Area Counts:</b>	4.42e+004
	<b>Manual Modification</b>	No
	<b>Amount:</b>	43.9 (ng/mL)
	<b>% Accuracy:</b>	110.00

	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	18.8
	<b>Actual RT:</b>	19.0
	<b>Area Counts:</b>	2.49e+004
	<b>Manual Modification</b>	No
	<b>Amount:</b>	46.7 (ng/mL)
	<b>% Accuracy:</b>	117.00



after Dec 4/23/10



Sample Name: "WAX10015-570R" Sample ID: "TILER" File: "EXP015045.wif"

Peak Name: "Chloroform" Masses: "137.046.0 amu"

Acq. Method: "GC/MS/MS" Acquisition: "Acquisition"

Sample Index: 1

Sample Type: QC

Concentration: 40.0 ng/mL

Acq. Date: 4/16/2010

Acq. Time: 5:09:20 AM

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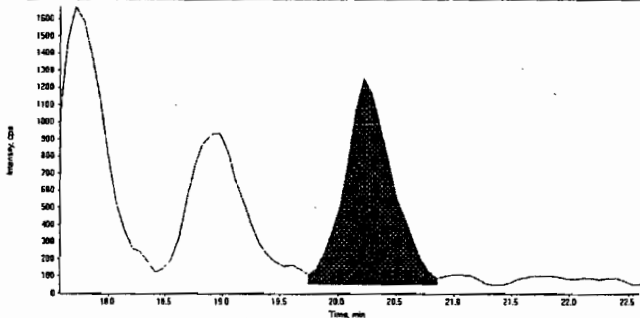
Acq. Time: 5:09:20 AM

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

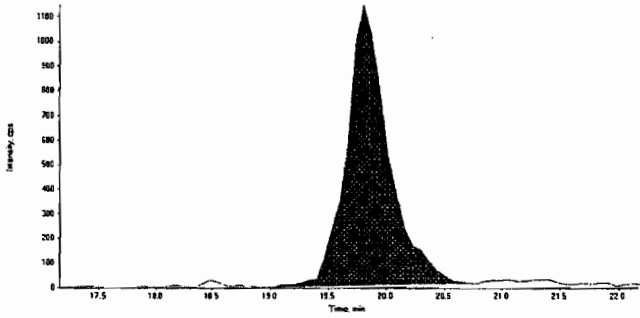
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415045.wiff	<b>Acquisition Date</b>	4/16/2010 5:09:20 AM
<b>Sample Name</b>	WXX100415-57CRI	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	20.1
	Actual RT:	20.2
	Area Counts:	3.44e+004
	Manual Modification	Yes
	Amount:	44.7 (ng/mL)
	% Accuracy:	112.00

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	Expected RT:	19.7
	Actual RT:	19.8
	Area Counts:	2.90e+004
	Manual Modification	No
	Amount:	47.4 (ng/mL)
	% Accuracy:	118.00

GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis 04/16/10  
 Time of Injection 0509  
 Standard Number WXX100415-57CRI  
 Data File EXP0415045a

HMX	114.0
RDX	112.0
135-Trinitrobenzene	100.0
13-Dinitrobenzene	111.0
Tetryl	108.0
246-Trinitrotoluene	97.7
Nitrobenzene	116.0
34-dinitrotoluene	90.9
26-dinitrotoluene	81.5
24-dinitrotoluene	85.5
4-Amino-26-dinitrotoluene	104.0
2-Amino-46-dinitrotoluene	96.6
2-Nitrotoluene	110.0
4-Nitrotoluene	117.0
3-Nitrotoluene	112.0
PETN	118.0

TOTAL

1674.2

*Handwritten: HMM 04/23/10*

AVERAGE

✓ 104.6

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

*Handwritten signature: Jax 4/23/10*



7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2199

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0415056.wiff

Analysis Date: 16-APR-10 09:54

LCMSMS ID: 1189

Column ID: Sphere ODS-H80

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	636	106	
2,4,6-Trinitrotoluene	600	617	103	
2,4-Dinitrotoluene	600	623	104	
2,6-Dinitrotoluene	600	588	98	
2-Amino-4,6-dinitrotoluene	600	632	105	
3,4-Dinitrotoluene	300	292	97	
4-Amino-2,6-dinitrotoluene	600	685	114	
HMX	600	662	110	
Nitrobenzene	600	573	96	
PETN	600	719	120	
RDX	600	704	117	
Tetryl	600	674	112	
m-Dinitrobenzene	600	560	93	
m-Nitrotoluene	600	648	108	
o-Nitrotoluene	600	647	108	
p-Nitrotoluene	600	696	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 70-130%

Other Target Analytes 80-120%

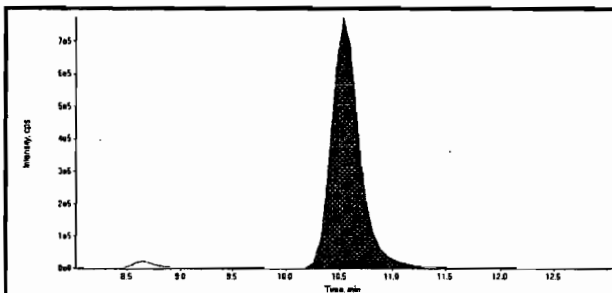
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

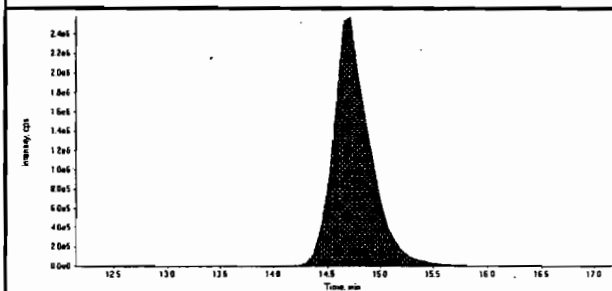
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

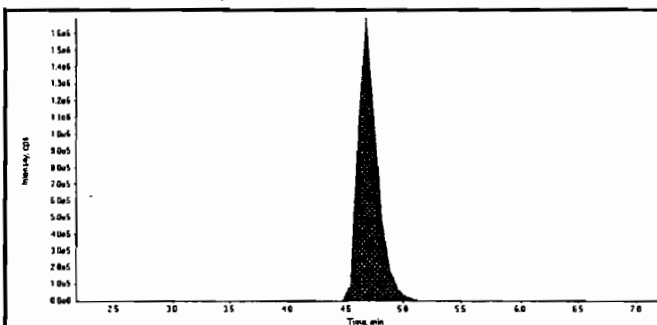
Data File	EXP0415056.wiff	Acquisition Date	4/16/2010 9:54:54 AM
Sample Name	WXX100415-56CCV	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



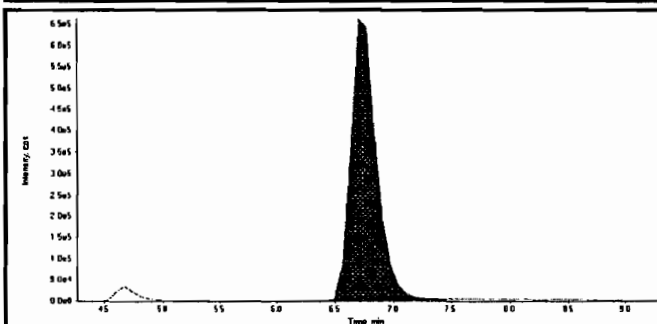
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.50
Actual RT:	10.50
Area Counts:	14500000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.60
Actual RT:	14.70
Area Counts:	62300000.00
Manual Modification	Yes
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.67
Actual RT:	4.67
Area Counts:	1.96e+007
Manual Modification	No
Amount:	662. (ng/mL)
% Accuracy:	110.00



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.77
Actual RT:	6.70
Area Counts:	1.05e+007
Manual Modification	No
Amount:	704. (ng/mL)
% Accuracy:	117.00

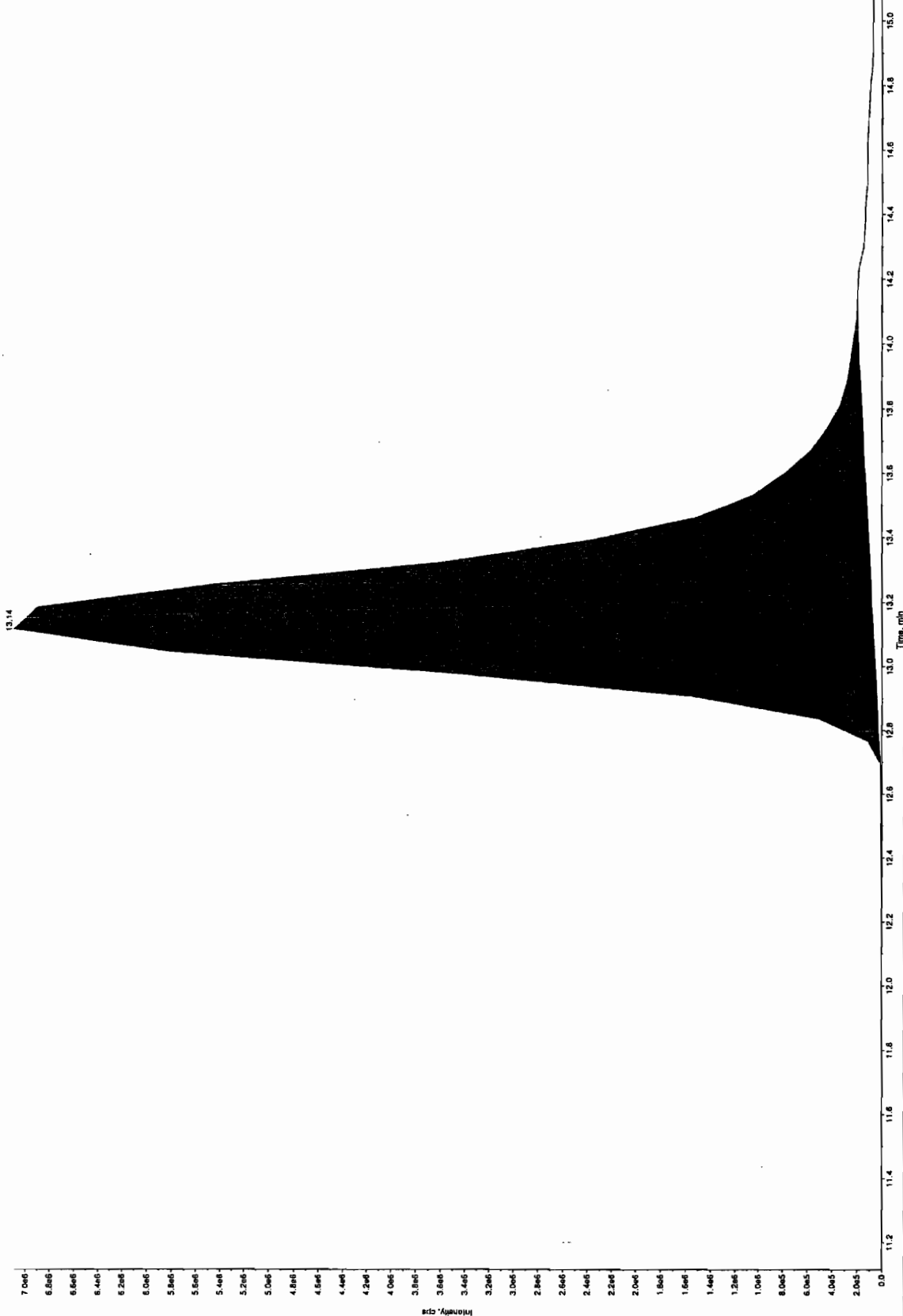
*Handwritten notes:*  
HMX 04/23/10  
Lar 4/23/10



after Jan 4/23/10

Sample Name: "WV100115 SECOP" Sample ID: "JLIER" File: "EPO0115028.wif"  
 Peak Name: "248-Tetraolane" Mass(es): "227.12038 amu"  
 Comment: "LCMS-EXP\_C" Acquisition: "

Sample Index:  
 Sample Type: QC  
 Concentration: 60.00 ng/mL  
 Calculated Conc: 61.7 ng/mL  
 Acq. Date: 4/16/2010  
 Acq. Time: 9:14:54 AM  
 Diluted: Yes  
 Window: 30.0 sec  
 Detected RT: 12.1 min  
 Manual: No  
 Inj. Type: Manual  
 Inj. Volume: 10.0 µL  
 Inj. Time: 12.1 min  
 Inj. Pressure: 1.00e+05 psi  
 Inj. Temperature: 12.6 min  
 Inj. Time: 14.1 min

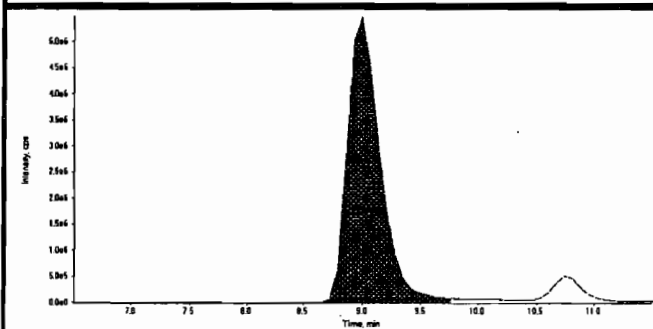


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GEL SOP GL-OA-E-056, Method 8321A-Modified

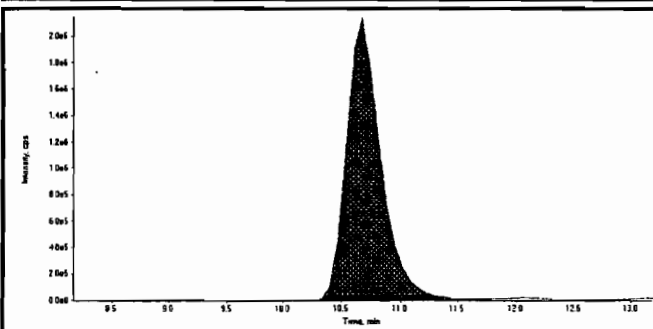
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415056.wiff	<b>Acquisition Date</b>	4/16/2010 9:54:54 AM
<b>Sample Name</b>	WXX100415-56CCV	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

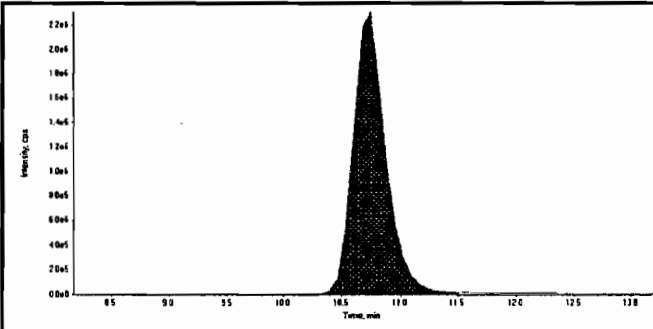
  

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	Expected RT:	9.00
	Actual RT:	9.00
	Area Counts:	1.08e+008
	Manual Modification	No
	Amount:	636. (ng/mL)
	% Accuracy:	106.00

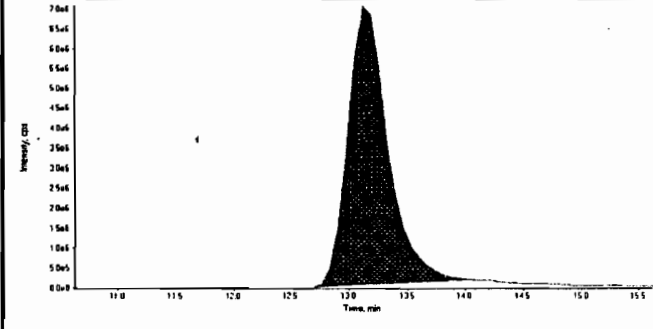
  

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	Expected RT:	10.7
	Actual RT:	10.7
	Area Counts:	4.41e+007
	Manual Modification	No
	Amount:	560. (ng/mL)
	% Accuracy:	93.40

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	Expected RT:	10.7
	Actual RT:	10.7
	Area Counts:	4.45e+007
	Manual Modification	No
	Amount:	674. (ng/mL)
	% Accuracy:	112.00

	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	Expected RT:	13.1
	Actual RT:	13.1
	Area Counts:	1.68e+008
	Manual Modification	Yes
	Amount:	617. (ng/mL)
	% Accuracy:	103.00

Before Jan 4/23/10

Sample Name: WY1001550017 Sample ID: T1117 File: EXP01555E.wif

Peak Name: 2-Deoxyribose Mass(es): 182.048 (1 and 2)

Comment: LCMS-EXP\_01 Annotation: 1

Sample Index: 1

Sample Type: GC

Concentration: 500 ng/mL

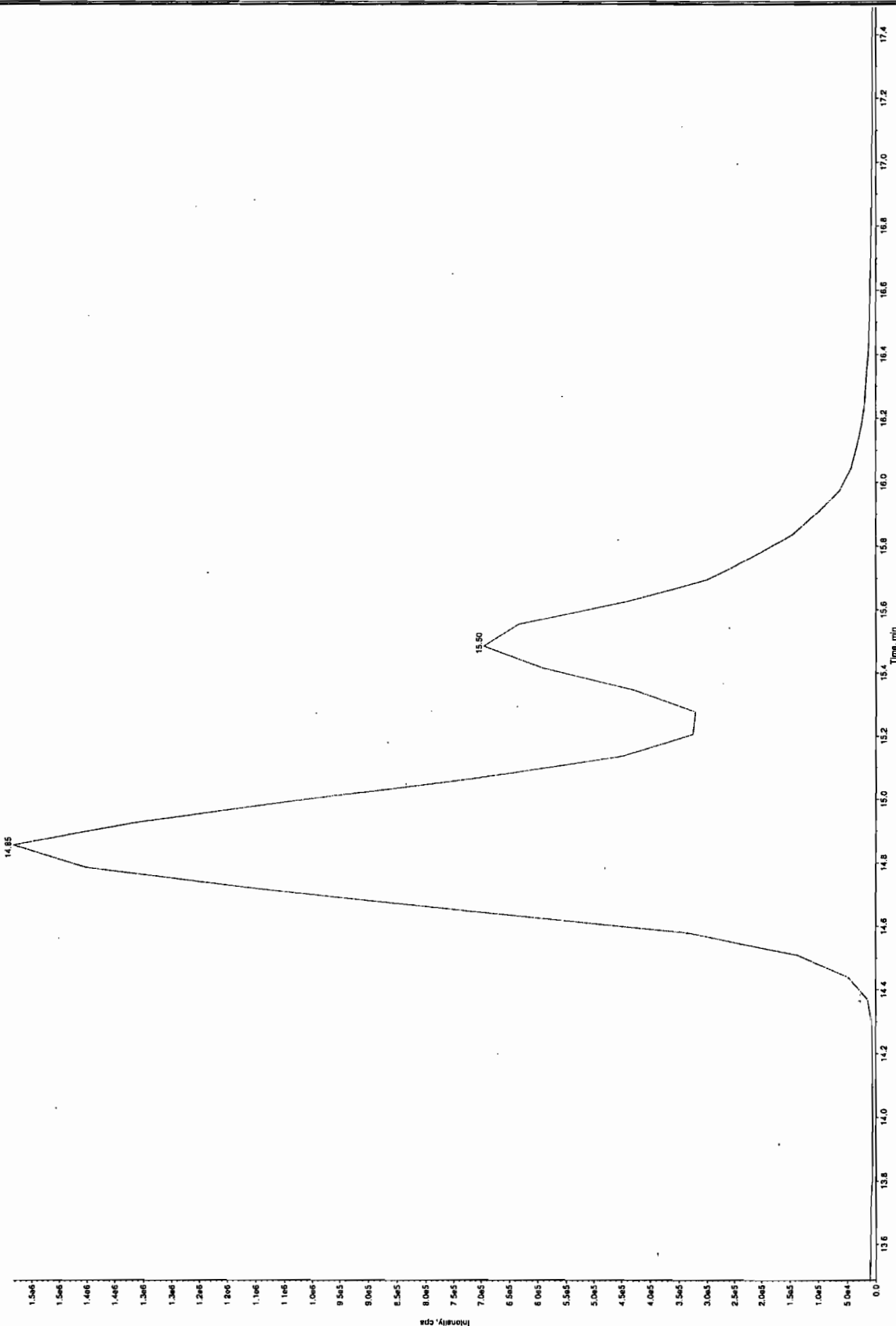
Calculated Conc: 0.00 ng/mL

Acq. Date: 4/16/2010

Acq. Time: 9:54:14 AM

Injection: 1

Injection Volume: 10



after Day 4/23/10

Sample Name: "WAX100415-5000" Sample ID: "TLER" File: "EXP015056.wif"

Peak Name: "24-ethylcholesterol" Masses: "182.046.0 amu"

Sample Index: 1

Sample Type: QC

Concentration: 600. ng/mL

Acq. Date: 4/16/2010

Acq. Time: 9:54:15 AM

Method: Yes

Injection: 10.0 sec

Injection Volume: 15.5 µL

Injection Rate: 1.466 µL/min

Injection Type: Manual

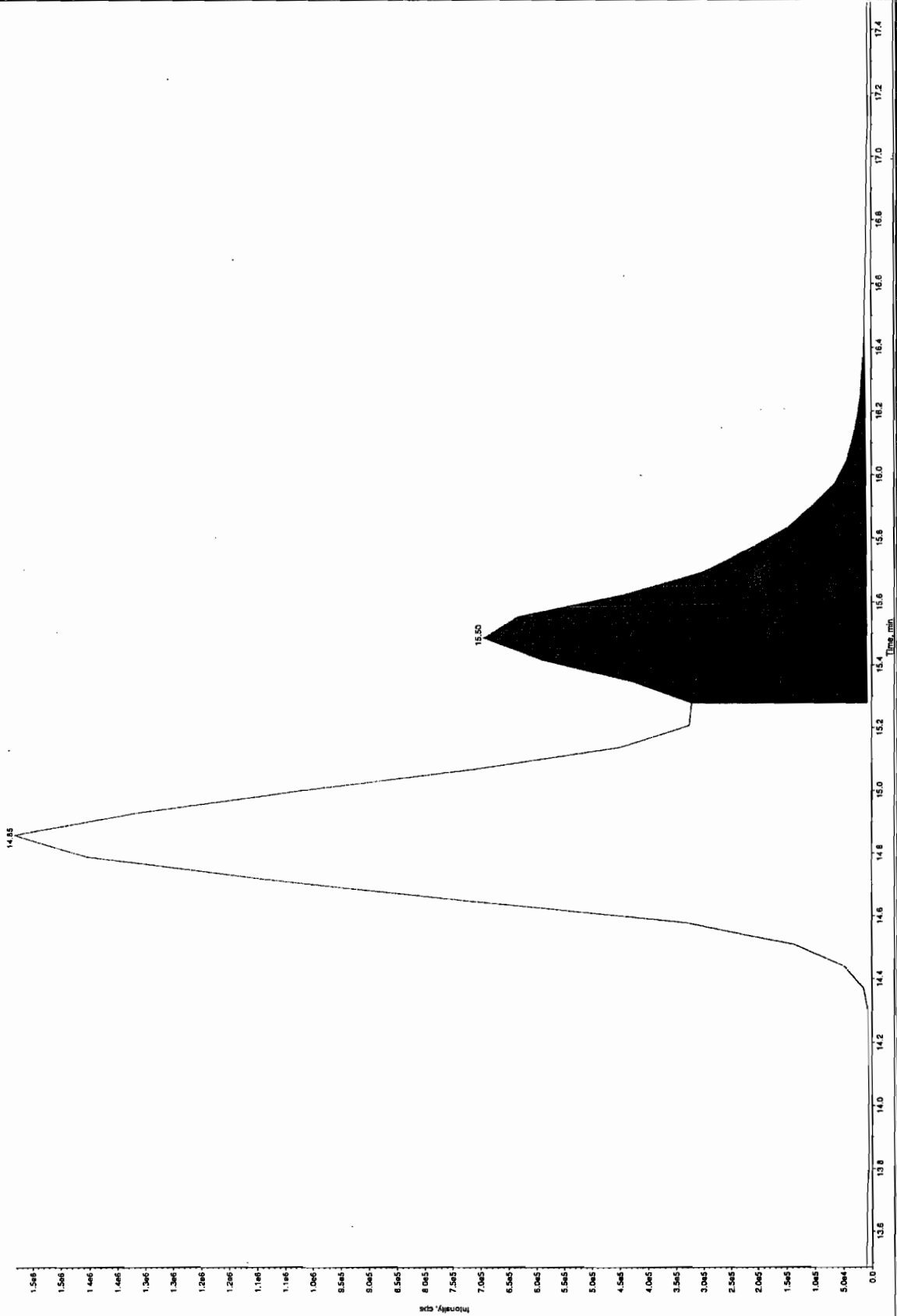
Injection Time: 15.5 min

Acquisition Time: 1.55e+007 counts

Height: 6.98e+005 cps

Width: 1.1e+005 cps

ExTime: 16.5 min



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GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415056.wiff	<b>Acquisition Date</b>	4/16/2010 9:54:54 AM
<b>Sample Name</b>	WXX100415-56CCV	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	11.8
	Actual RT:	11.8
	Area Counts:	1.70e+006
	Manual Modification	No
	Amount:	573. (ng/mL)
	% Accuracy:	95.50

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.0
	Actual RT:	12.0
	Area Counts:	2.39e+007
	Manual Modification	No
	Amount:	292. (ng/mL)
	% Accuracy:	97.40

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	14.8
	Actual RT:	14.9
	Area Counts:	3.90e+007
	Manual Modification	No
	Amount:	588. (ng/mL)
	% Accuracy:	98.10

	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.5
	Actual RT:	15.5
	Area Counts:	1.59e+007
	Manual Modification	Yes
	Amount:	623. (ng/mL)
	% Accuracy:	104.00



Before Jan 4/23/10

Sample Name: "WV100115500" Run ID: "1155" Run "EXP0115056.wif"  
 Peak Name: "Amino-4-oxopentanoic" Mass(es): "197.0180.0 amu"

Comment: "LCMS-EXP\_C" Annotation: "

Sample Index: 1

Sample Type: CC

Concentration: 600 ng/mL

Calculated Conc: 700 ng/mL

Acq. Date: 4/16/2010

Acq. Time: 9:54:54 AM

File Name: No

File Path: No

File Size: No

File Type: No

File Format: No

File Content: No

File Location: No

File Name: No

File Path: No

File Size: No

File Type: No

File Format: No

File Content: No

File Location: No

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File Type: No

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File Name: No

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File Format: No

File Content: No

File Location: No

File Name: No

File Path: No

File Size: No

File Type: No

File Format: No

File Content: No

File Location: No

File Name: No

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File Content: No

File Location: No

File Name: No

File Path: No

File Size: No

File Type: No

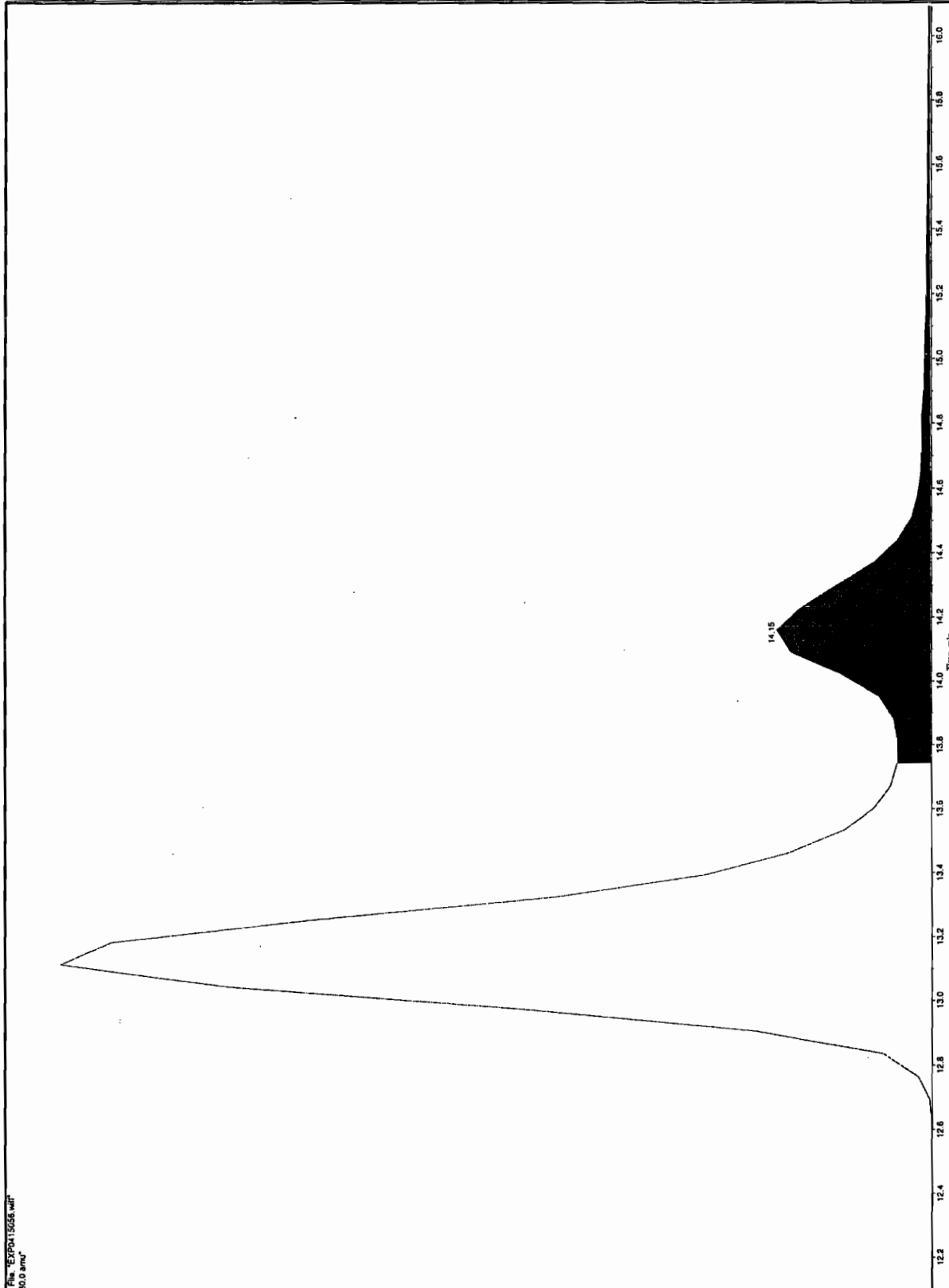
File Format: No

File Content: No

File Location: No

File Name: No

File Path: No



after Jan 4/23/10

Sample Name: "WAX100115-562CV" Sample ID: "11562CV" File: "EXP0115036.wif"

Peak Name: "2-Amino-46-dinitrochloroethane" Mass(es): "197.0/180.0 amu"

Comment: "LCMSSEP\_C" Annotation: "

Sample Type: "OC"

Concentration: 600. ng/mL

Calculated Conc: 632. ng/mL

ACS: 632. ng/mL

Time: 9.111514 min

Modified: Yes

Window: 30.0 sec

Start Time: 9.11 min

End Time: 9.21 min

Relative RT: No

Type: Manual

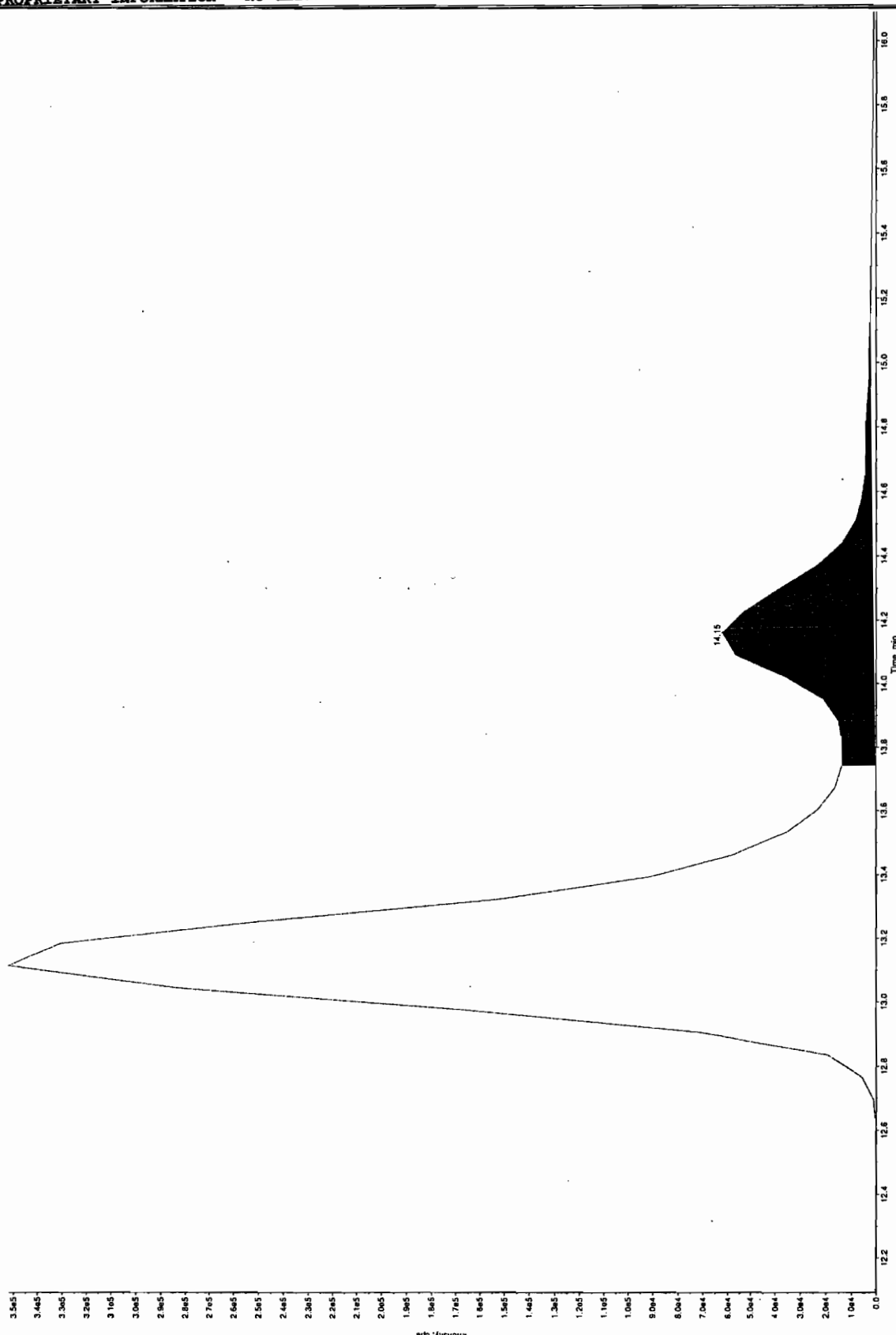
Injection Time: 3.165 min

Injection Volume: 1.475-006 counts

Height: 6.14e+004 cps

Area: 13.7 min

Time: 15.1 min

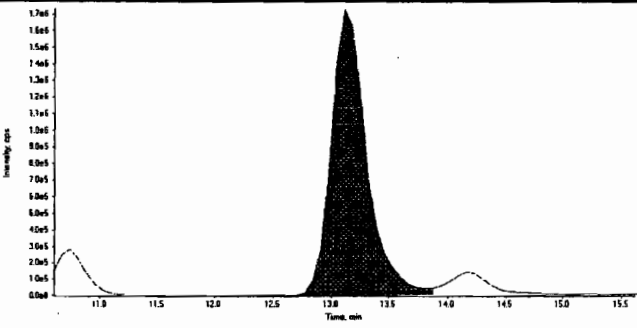


GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

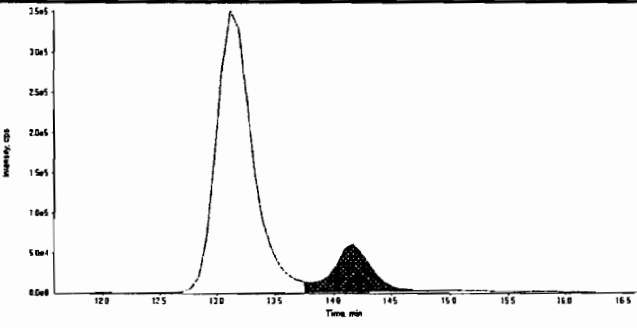
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415056.wiff	<b>Acquisition Date</b>	4/16/2010 9:54:54 AM
<b>Sample Name</b>	WXX100415-56CCV	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

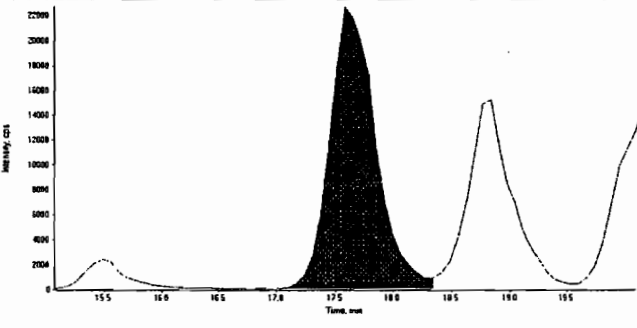
  

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.1
	Actual RT:	13.1
	Area Counts:	3.80e+007
	Manual Modification	No
	Amount:	685. (ng/mL)
	% Accuracy:	114.00

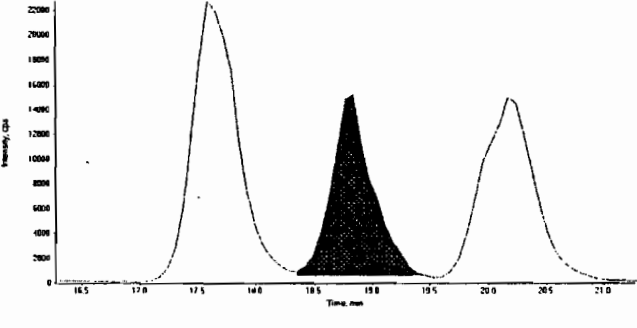
  

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.1
	Actual RT:	14.2
	Area Counts:	1.47e+006
	Manual Modification	Yes
	Amount:	632. (ng/mL)
	% Accuracy:	105.00

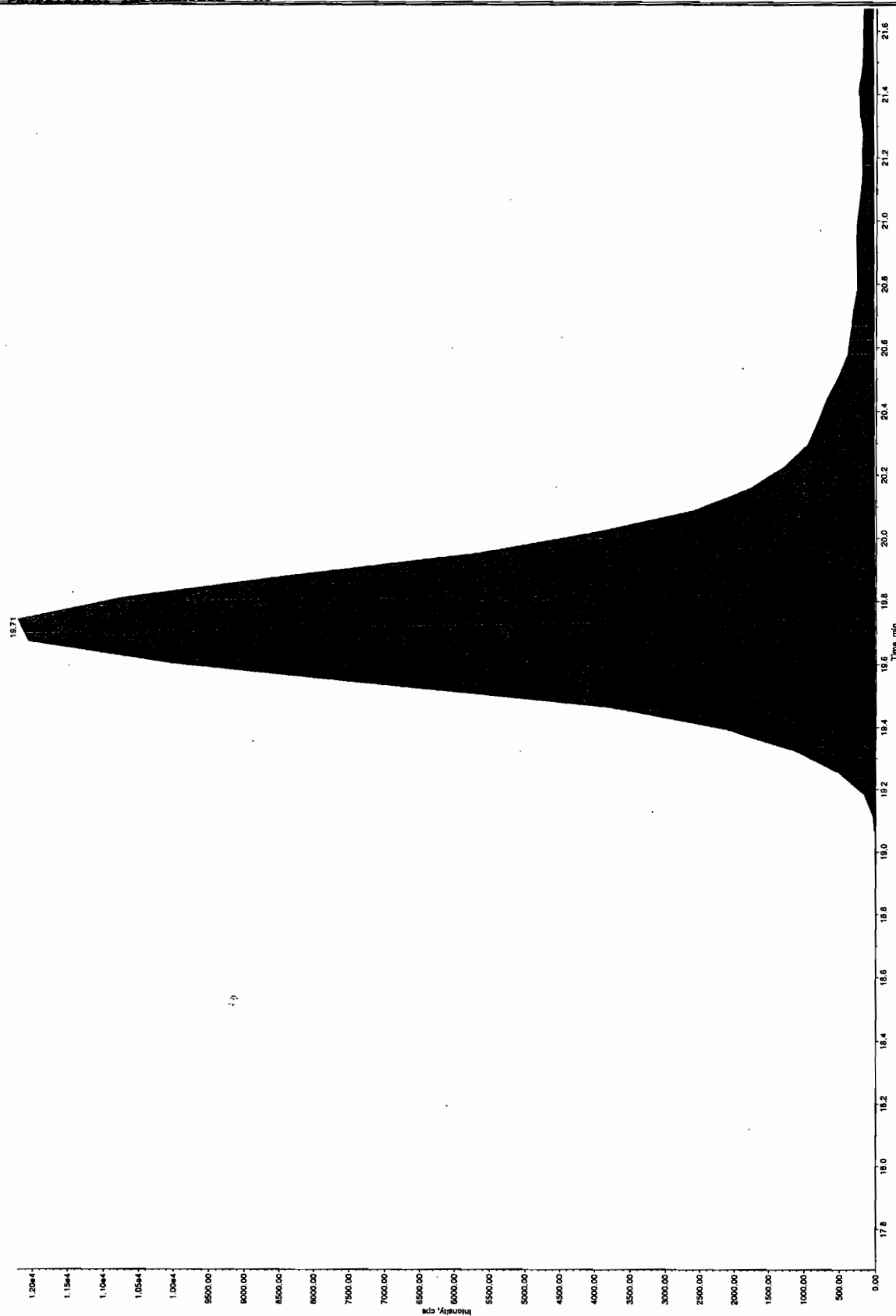
  

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	17.6
	Actual RT:	17.6
	Area Counts:	6.35e+005
	Manual Modification	No
	Amount:	647. (ng/mL)
	% Accuracy:	108.00

	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	18.8
	Actual RT:	18.8
	Area Counts:	3.64e+005
	Manual Modification	No
	Amount:	696. (ng/mL)
	% Accuracy:	116.00

Before Jan 4/23/10



Sample Name: "WXX100415-56CCV" Sample ID: "111ER" File "EXP0415056.wif"  
Peak Name: "PETN" Mass(es): "351.1/62.0 amu"

```

sample index: 1 QC
sample type:
concentration: 600. ng/mL
calculated conc: 747. ng/mL
eq. date: 4/16/2010
eq. time: 9:54:54 AM

```

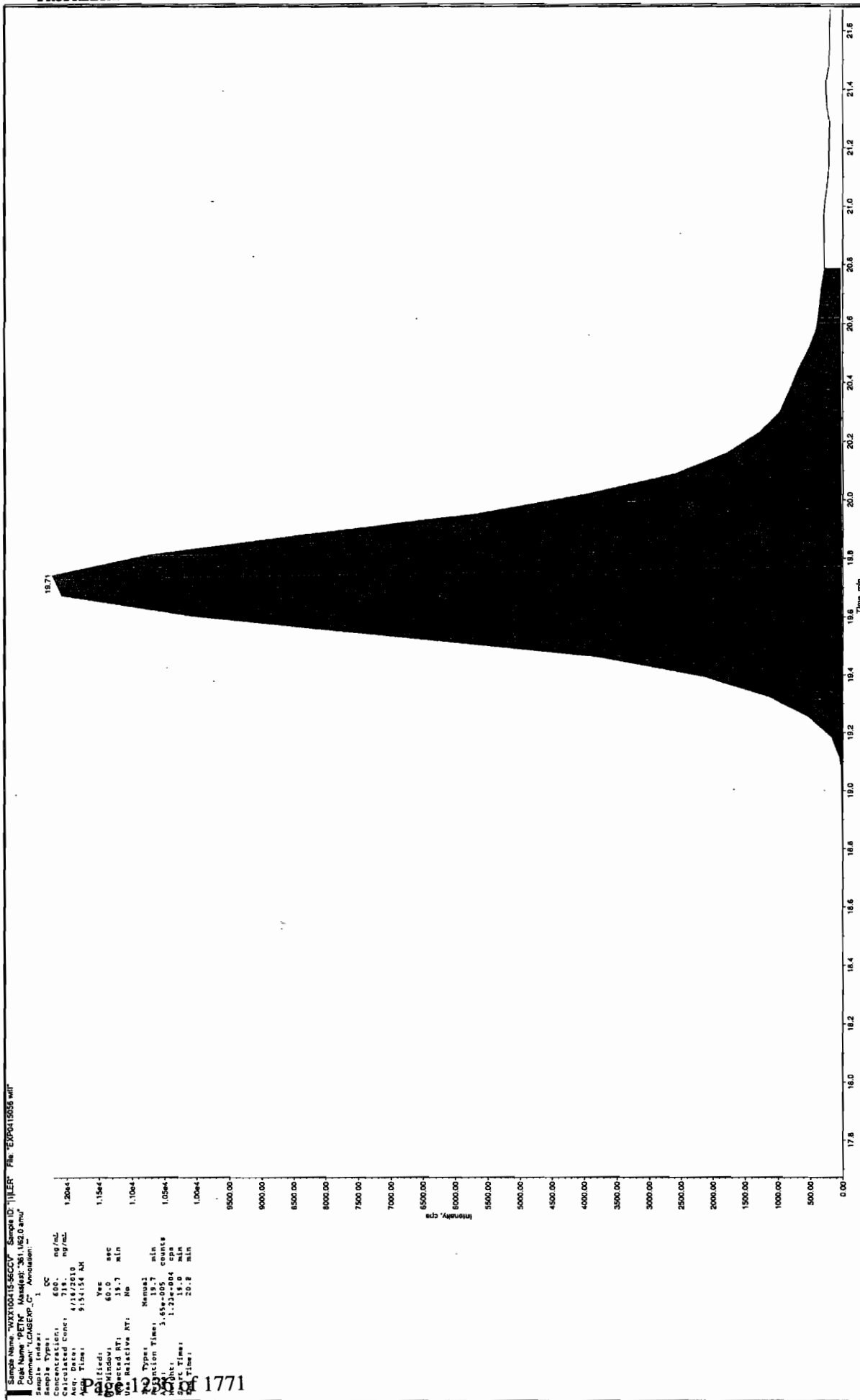
Modified: No  
Proc. Algorithm: Intelliquan - 10A  
In. Peak Height: 100.00 cps  
In. Peak Width: 0.00 sec  
Smoothing Width: 3 points  
In. Window: 60.0 sec  
Selected RT: 19.7 min

Relative RT: No

nt. Type:	valley
Station Time:	19.7 min
Age:	5.79±005 counts
Height:	1.2±004 cps
Set Time:	18.8 min
Time:	22.8 min

\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

after Jan 4/23/10



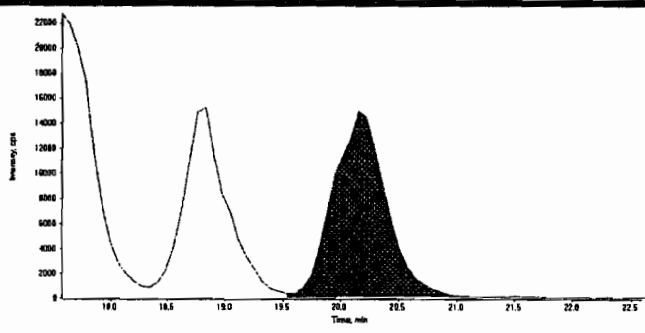
\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

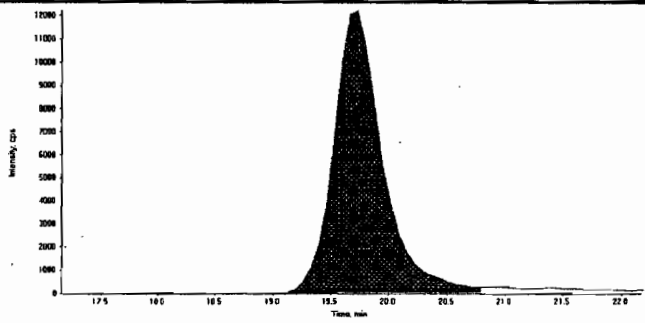
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

Data File	EXP0415056.wiff	Acquisition Date	4/16/2010 9:54:54 AM
Sample Name	WXX100415-56CCV	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control

	Compound Name:	3-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	20.1
	Actual RT:	20.2
	Area Counts:	4.81e+005
	Manual Modification	No
	Amount:	648. (ng/mL)
	% Accuracy:	108.00

	Compound Name:	PETN (361.1/62.0 amu)
	Expected RT:	19.7
	Actual RT:	19.7
	Area Counts:	3.65e+005
	Manual Modification	Yes
	Amount:	719. (ng/mL)
	% Accuracy:	120.00

GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis 04/16/10  
 Time of Injection 0954  
 Standard Number WXX100415-56CCV  
 Data File EXP0415056a

HMX	110.0
RDX	117.0
135-Trinitrobenzene	106.0
13-Dinitrobenzene	93.4
Tetryl	112.0
246-Trinitrotoluene	103.0
Nitrobenzene	95.5
34-dinitrotoluene	97.4
26-dinitrotoluene	98.1
24-dinitrotoluene	104.0
4-Amino-26-dinitrotoluene	114.0
2-Amino-46-dinitrotoluene	105.0
2-Nitrotoluene	108.0
4-Nitrotoluene	116.0
3-Nitrotoluene	108.0
PETN	120.0

TOTAL

✓ 1707.4

*4/16/10*

AVERAGE

✓ 106.7

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

*See 4/16/10*

7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2199

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0415058.wiff

Analysis Date: 16-APR-10 10:46

LCMSMS ID: 1189

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	36	90	
2,4,6-Trinitrotoluene	40	42.2	106	
2,4-Dinitrotoluene	40	37.3	93	
2,6-Dinitrotoluene	40	37.8	95	
2-Amino-4,6-dinitrotoluene	40	37.3	93	
3,4-Dinitrotoluene	20	21.6	108	
4-Amino-2,6-dinitrotoluene	40	39.7	99	
HMX	40	46.5	116	
Nitrobenzene	40	47.9	120	
PETN	40	41.4	103	
RDX	40	43.1	108	
Tetryl	40	40.4	101	
m-Dinitrobenzene	40	42.3	106	
m-Nitrotoluene	40	42	105	
o-Nitrotoluene	40	46.5	116	
p-Nitrotoluene	40	49	123	

Recovery Limits:

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

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

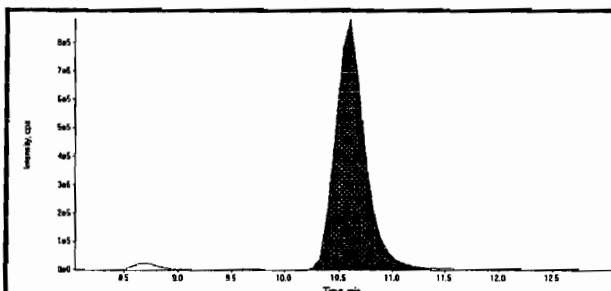
\* Value outside of Recovery Limits



GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

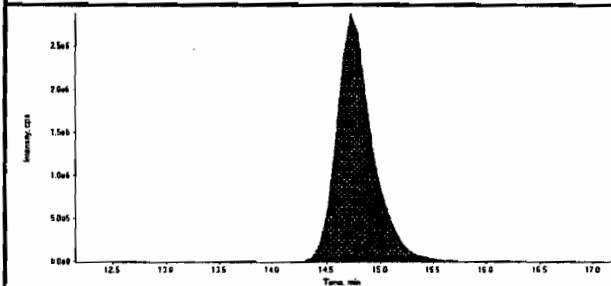
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

Data File	EXP0415058.wiff	Acquisition Date	4/16/2010 10:46:59 AM
Sample Name	WXX100415-57CRI	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



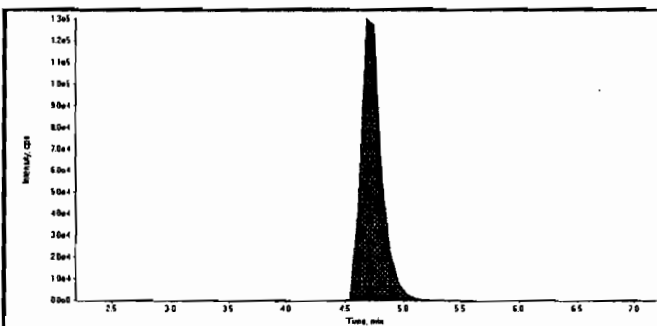
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.50
Actual RT:	10.60
Area Counts:	16900000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries

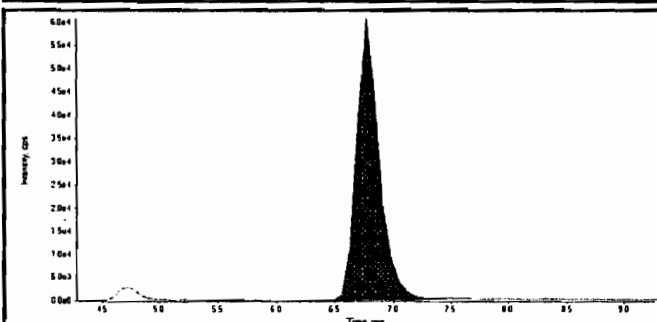


Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.60
Actual RT:	14.70
Area Counts:	67100000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.67
Actual RT:	4.67
Area Counts:	1.66e+006
Manual Modification	No
Amount:	46.5 (ng/mL)
% Accuracy:	116.00



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.77
Actual RT:	6.77
Area Counts:	8.30e+005
Manual Modification	No
Amount:	43.1 (ng/mL)
% Accuracy:	108.00

*Handwritten:*  
Hmw 04/23/10  
Jaw 4/23/10

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415058.wiff	<b>Acquisition Date</b>	4/16/2010 10:46:59 AM
<b>Sample Name</b>	WXX100415-57CRI	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	<b>Expected RT:</b>	9.00
	<b>Actual RT:</b>	9.00
	<b>Area Counts:</b>	9.81e+006
	<b>Manual Modification</b>	No
	<b>Amount:</b>	36.0 (ng/mL)
	<b>% Accuracy:</b>	90.00

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	<b>Expected RT:</b>	10.7
	<b>Actual RT:</b>	10.7
	<b>Area Counts:</b>	4.08e+006
	<b>Manual Modification</b>	No
	<b>Amount:</b>	42.3 (ng/mL)
	<b>% Accuracy:</b>	106.00

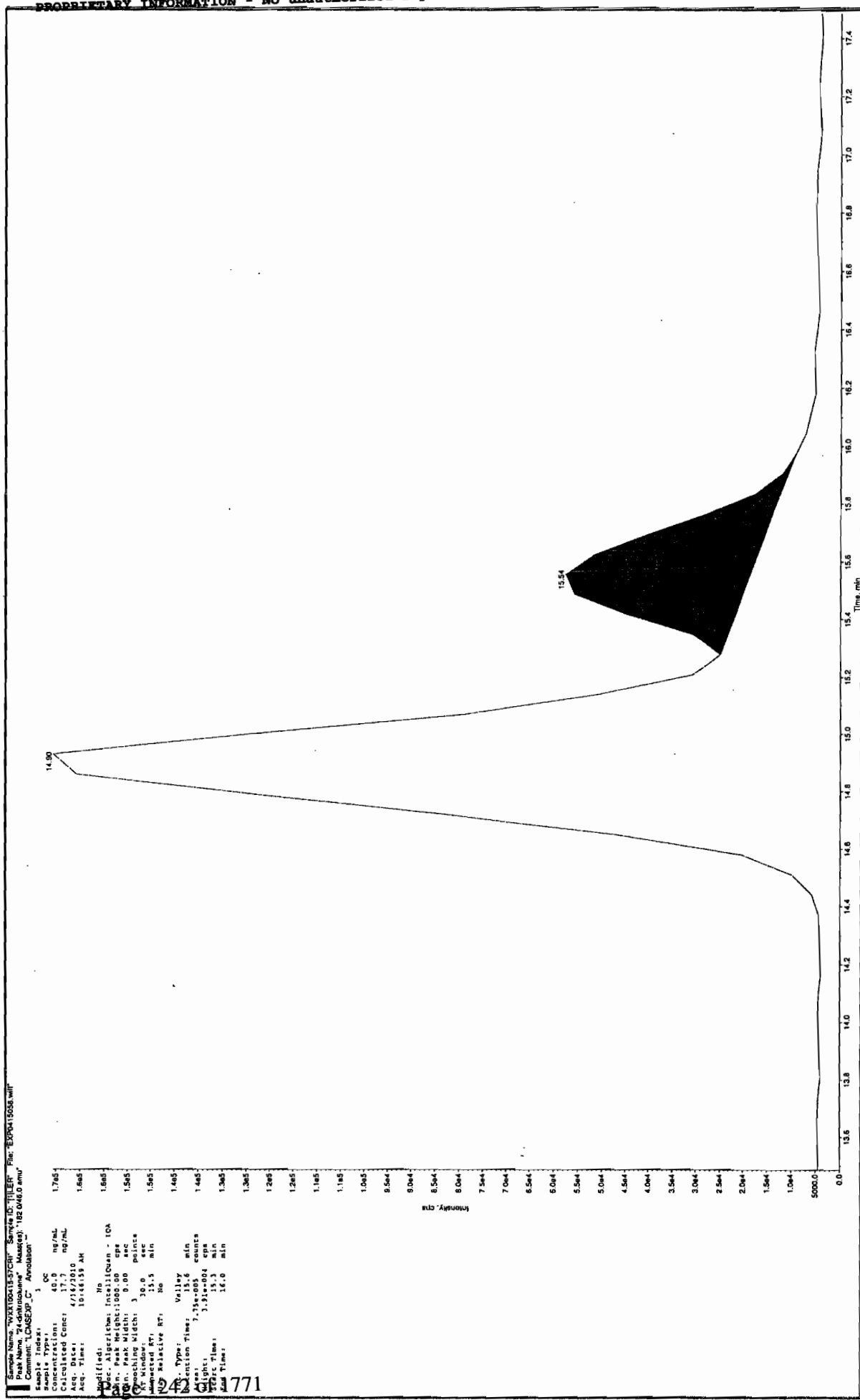
  

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	<b>Expected RT:</b>	10.7
	<b>Actual RT:</b>	10.7
	<b>Area Counts:</b>	3.11e+006
	<b>Manual Modification</b>	No
	<b>Amount:</b>	40.4 (ng/mL)
	<b>% Accuracy:</b>	101.00

	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	<b>Expected RT:</b>	13.1
	<b>Actual RT:</b>	13.2
	<b>Area Counts:</b>	1.91e+007
	<b>Manual Modification</b>	No
	<b>Amount:</b>	42.2 (ng/mL)
	<b>% Accuracy:</b>	106.00

Before Jan 4/23/10

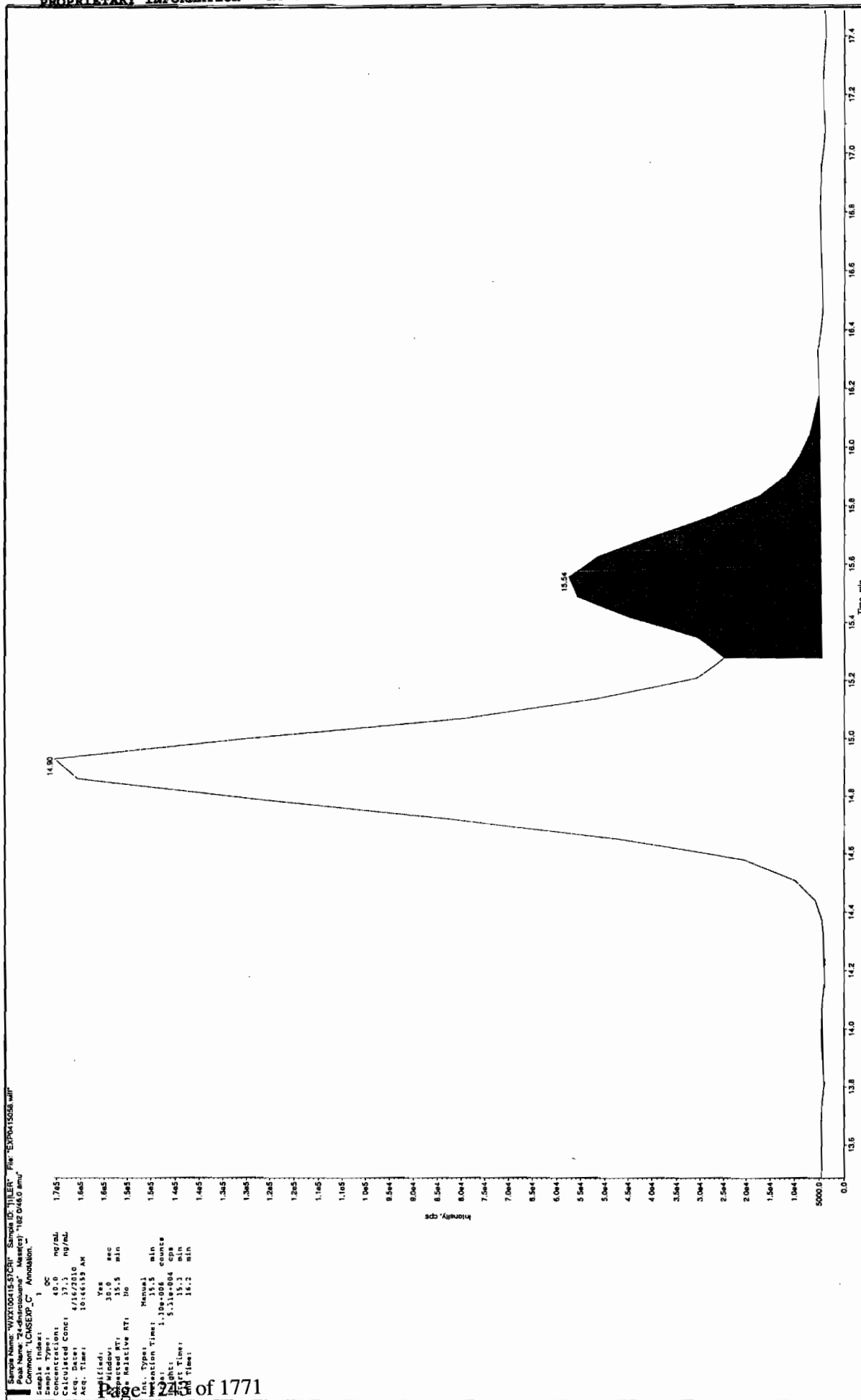


Sample Name: "202100115500" Sample ID: "11550" File: "EXP01155500.wiff"  
Peak Name: "21-dihydroquinone" Masses: "182.046.6 amu"  
Comment: "LCMS-EXP\_C" Annotation: ""

Sample Index: 1  
Sample Type: GC  
Concentration: 40.0 ng/mL  
Calculated Conc: 17.7 ng/mL  
Acq. Date: 4/16/2010  
Acq. Time: 10:46:53 AM  
Modified: No  
Dec. Algorithm: IntelliQuan - ICA  
Min. Peak Height: 100.00 cps  
Min. Peak Width: 3.00 points  
Window: 30.0 sec  
Acquired RT: 15.5 min  
Relative RT: No  
Type: Valley  
Retention Time: 15.6 min  
Area: 7.75e+005 counts  
Height: 3.71e+004 cps  
Width: 15.3 min  
Acid Time: 16.0 min

\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

after Jan 4/23/10



Sample Name: WXX10015-57C1P Sample ID: WXX1P File: E:\P015556.wif  
 Sample Type: OC  
 Concentration: 17.3 ng/mL  
 Collection Date: 4/16/2010  
 Acq. Date: 10/16/10 AM  
 Acq. Time: 10:46:19 AM  
 Modified: Yes  
 Window: 30.0 sec  
 Connected RT: 15.5 min  
 Relative RT: No  
 Unit Type: Manual  
 Integration Time: 15.5 min  
 Integration: 1.10e-006 counts  
 Peak RT: 15.54 min  
 Peak Time: 15.2 min

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415058.wiff	<b>Acquisition Date</b>	4/16/2010 10:46:59 AM
<b>Sample Name</b>	WXX100415-57CRI	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	11.8
	Actual RT:	11.8
	Area Counts:	1.49e+005
	Manual Modification	No
	Amount:	47.9 (ng/mL)
	% Accuracy:	120.00

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.0
	Actual RT:	12.1
	Area Counts:	2.28e+006
	Manual Modification	No
	Amount:	21.6 (ng/mL)
	% Accuracy:	108.00

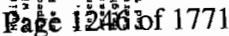
	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	14.8
	Actual RT:	14.9
	Area Counts:	3.63e+006
	Manual Modification	No
	Amount:	37.8 (ng/mL)
	% Accuracy:	94.50

	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.5
	Actual RT:	15.5
	Area Counts:	1.30e+006
	Manual Modification	Yes
	Amount:	37.3 (ng/mL)
	% Accuracy:	93.30

Before Dec 4/73/w





\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415058.wiff	<b>Acquisition Date</b>	4/16/2010 10:46:59 AM
<b>Sample Name</b>	WXX100415-57CRI	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.1
	Actual RT:	13.2
	Area Counts:	2.62e+006
	Manual Modification	No
	Amount:	39.7 (ng/mL)
	% Accuracy:	99.40

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.1
	Actual RT:	14.2
	Area Counts:	9.36e+004
	Manual Modification	Yes
	Amount:	37.3 (ng/mL)
	% Accuracy:	93.40

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	17.6
	Actual RT:	17.7
	Area Counts:	4.82e+004
	Manual Modification	No
	Amount:	46.5 (ng/mL)
	% Accuracy:	116.00

	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	18.8
	Actual RT:	18.9
	Area Counts:	2.70e+004
	Manual Modification	No
	Amount:	49.0 (ng/mL)
	% Accuracy:	123.00

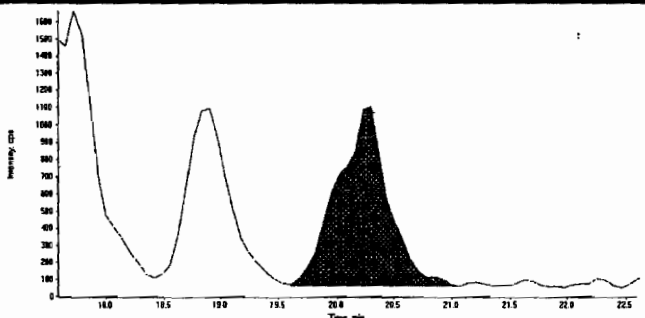


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GEL SOP GL-OA-E-056, Method 8321A-Modified

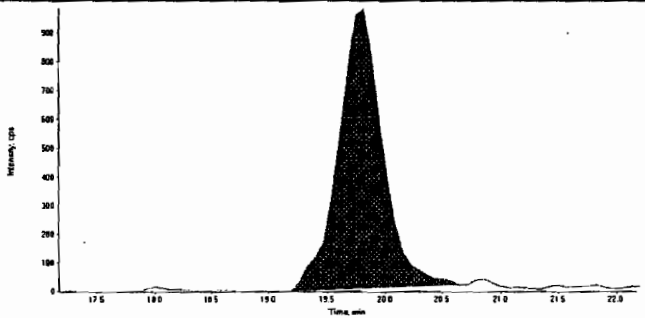
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415058.wiff	<b>Acquisition Date</b>	4/16/2010 10:46:59 AM
<b>Sample Name</b>	WXX100415-57CRI	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	20.1
	<b>Actual RT:</b>	20.3
	<b>Area Counts:</b>	3.32e+004
	<b>Manual Modification</b>	No
	<b>Amount:</b>	42.0 (ng/mL)
	<b>% Accuracy:</b>	105.00

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	<b>Expected RT:</b>	19.7
	<b>Actual RT:</b>	19.8
	<b>Area Counts:</b>	2.65e+004
	<b>Manual Modification</b>	No
	<b>Amount:</b>	41.4 (ng/mL)
	<b>% Accuracy:</b>	103.00

# GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis 04/16/10  
 Time of Injection 1046  
 Standard Number WXX100415-57CRI  
 Data File EXP0415058a

HMX	116.0
RDX	108.0
135-Trinitrobenzene	90.0
13-Dinitrobenzene	106.0
Tetryl	101.0
246-Trinitrotoluene	106.0
Nitrobenzene	120.0
34-dinitrotoluene	108.0
26-dinitrotoluene	94.5
24-dinitrotoluene	93.3
4-Amino-26-dinitrotoluene	99.4
2-Amino-46-dinitrotoluene	93.4
2-Nitrotoluene	116.0
4-Nitrotoluene	123.0
3-Nitrotoluene	105.0
PETN	103.0

TOTAL

✓ 1682.6

*Handwritten signature*

AVERAGE

✓ 105.2

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

*Handwritten signature*

7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2199

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0415063.wiff

Analysis Date: 16-APR-10 12:57

LCMSMS ID: 1189

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	644	107	
2,4,6-Trinitrotoluene	600	631	105	
2,4-Dinitrotoluene	600	610	102	
2,6-Dinitrotoluene	600	642	107	
2-Amino-4,6-dinitrotoluene	600	580	97	
3,4-Dinitrotoluene	300	239	80	
4-Amino-2,6-dinitrotoluene	600	605	101	
HMX	600	646	108	
Nitrobenzene	600	579	97	
PETN	600	710	118	
RDX	600	748	125	
Tetryl	600	587	98	
m-Dinitrobenzene	600	564	94	
m-Nitrotoluene	600	606	101	
o-Nitrotoluene	600	538	90	
p-Nitrotoluene	600	610	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%

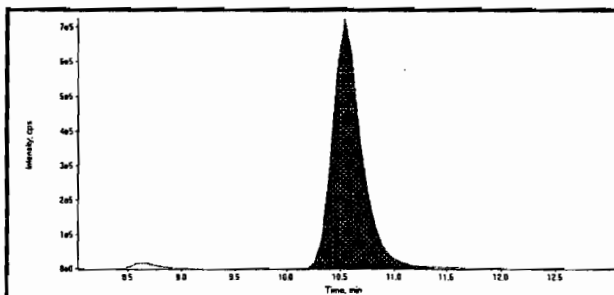
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

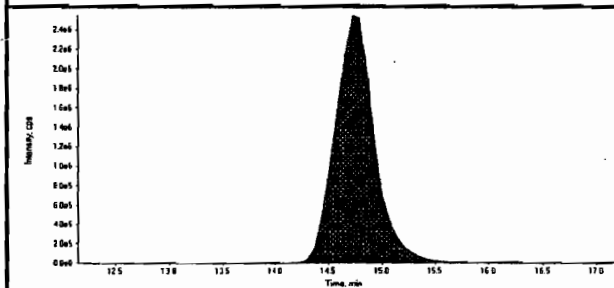
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

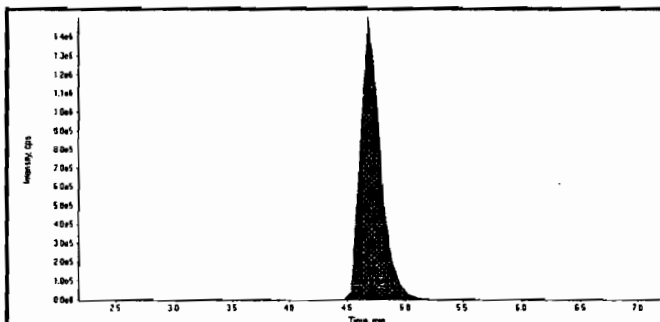
Data File	EXP0415063.wiff	Acquisition Date	4/16/2010 12:57:07 PM
Sample Name	WXX100415-56CCV	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



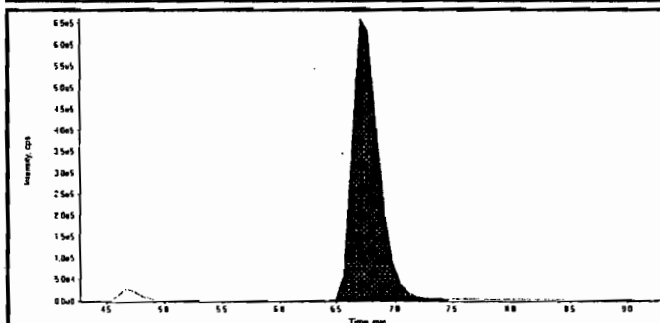
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.50
Actual RT:	10.50
Area Counts:	13700000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.60
Actual RT:	14.70
Area Counts:	66000000.00
Manual Modification	Yes
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.67
Actual RT:	4.67
Area Counts:	1.80e+007
Manual Modification	No
Amount:	646. (ng/mL)
% Accuracy:	108.00

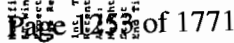


Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.77
Actual RT:	6.70
Area Counts:	1.06e+007
Manual Modification	No
Amount:	748. (ng/mL)
% Accuracy:	125.00

*See*  
4/23/10

*thm*  
04/23/10





GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415063.wiff	<b>Acquisition Date</b>	4/16/2010 12:57:07 PM
<b>Sample Name</b>	WXX100415-56CCV	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	<b>Expected RT:</b>	9.00
	<b>Actual RT:</b>	9.00
	<b>Area Counts:</b>	1.03e+008
	<b>Manual Modification</b>	No
	<b>Amount:</b>	644. (ng/mL)
	<b>% Accuracy:</b>	107.00

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	<b>Expected RT:</b>	10.7
	<b>Actual RT:</b>	10.7
	<b>Area Counts:</b>	4.18e+007
	<b>Manual Modification</b>	No
	<b>Amount:</b>	564. (ng/mL)
	<b>% Accuracy:</b>	93.90

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	<b>Expected RT:</b>	10.7
	<b>Actual RT:</b>	10.7
	<b>Area Counts:</b>	3.70e+007
	<b>Manual Modification</b>	No
	<b>Amount:</b>	587. (ng/mL)
	<b>% Accuracy:</b>	97.90

	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	<b>Expected RT:</b>	13.1
	<b>Actual RT:</b>	13.2
	<b>Area Counts:</b>	1.81e+008
	<b>Manual Modification</b>	Yes
	<b>Amount:</b>	631. (ng/mL)
	<b>% Accuracy:</b>	105.00

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415063.wiff	<b>Acquisition Date</b>	4/16/2010 12:57:07 PM
<b>Sample Name</b>	WXX100415-56CCV	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	<b>Expected RT:</b>	11.8
	<b>Actual RT:</b>	11.9
	<b>Area Counts:</b>	1.62e+006
	<b>Manual Modification</b>	No
	<b>Amount:</b>	579. (ng/mL)
	<b>% Accuracy:</b>	96.50

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	<b>Expected RT:</b>	12.0
	<b>Actual RT:</b>	12.1
	<b>Area Counts:</b>	2.08e+007
	<b>Manual Modification</b>	No
	<b>Amount:</b>	239. (ng/mL)
	<b>% Accuracy:</b>	79.80

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	<b>Expected RT:</b>	14.8
	<b>Actual RT:</b>	14.9
	<b>Area Counts:</b>	4.49e+007
	<b>Manual Modification</b>	No
	<b>Amount:</b>	642. (ng/mL)
	<b>% Accuracy:</b>	107.00

	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	<b>Expected RT:</b>	15.5
	<b>Actual RT:</b>	15.5
	<b>Area Counts:</b>	1.65e+007
	<b>Manual Modification</b>	No
	<b>Amount:</b>	610. (ng/mL)
	<b>% Accuracy:</b>	102.00



Before Jan 4/23/10

Sample Name: WXX100415-56CCV Sample ID: TILER File: EXP0415053.wif

Peak Name: 2-Amino-4-ethylphenol Mass(es): 197.0/180.0 amu

Comment: LCMS-EXP\_C Annotation -

Acq. Time: 12/19/09 PM

Concentration: 600. ng/mL

Calculated Conc: 465. ng/mL

Acq. Date: 12/19/09

Acq. Time: 12/19/09 PM

Acq. Time: 12/19/09 PM

Acq. Time: 12/19/09 PM

Acq. Time: 12/19/09 PM

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Acq. Time: 12/19/09 PM

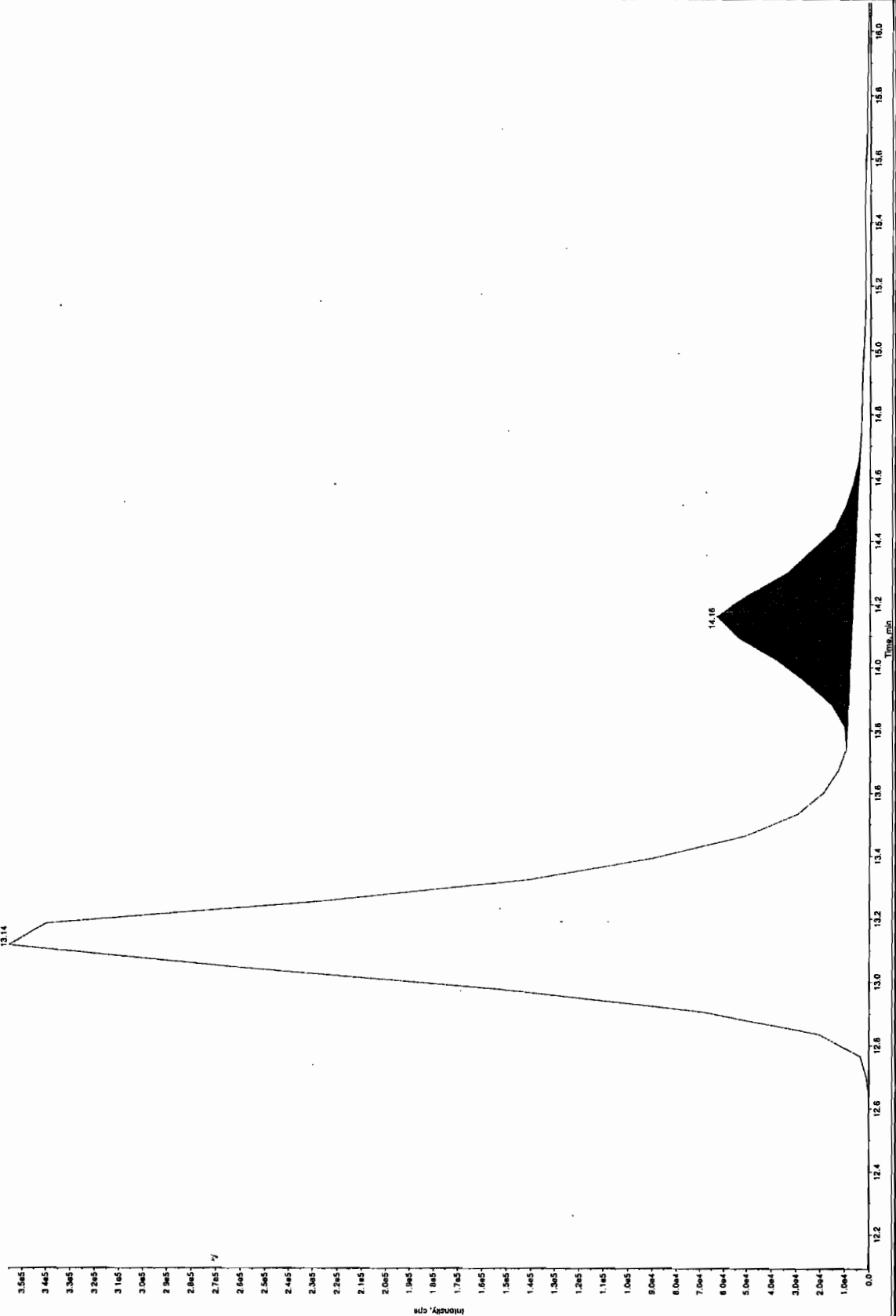
Acq. Time: 12/19/09 PM

Acq. Time: 12/19/09 PM

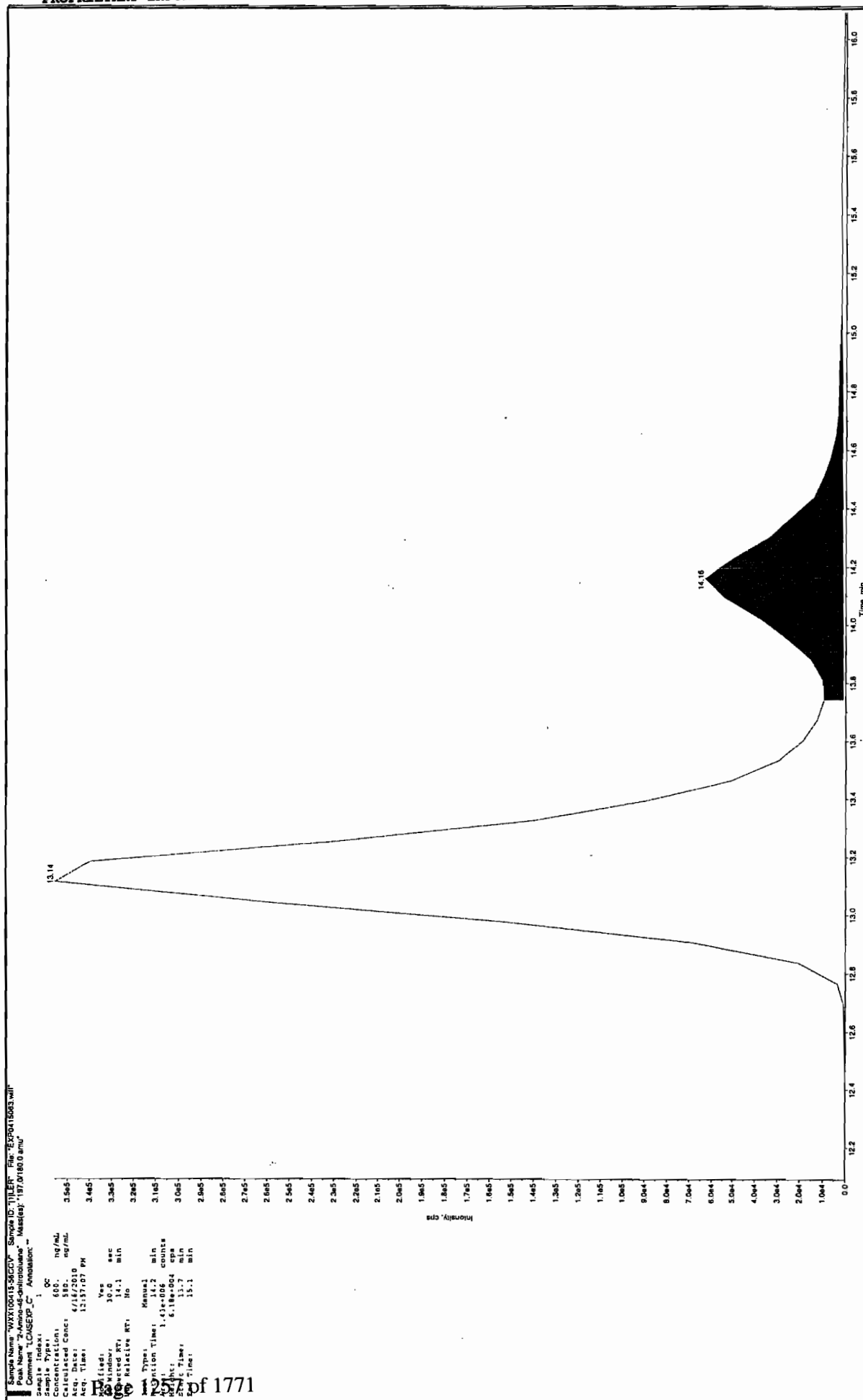
Acq. Time: 12/19/09 PM

13.14

14.16



after run 4/23/10



Sample Name: "WXX100415-56.GV" Sample ID: "111.EP" File: "EX20415063.wif"

Peak Name: "2-Amino-4,6-dinitrophenol" Mass(es): "197.0180.0 amu"

Comment: "LC/MS/MS C" Annotation: "

Sample Type: 1 QC

Concentration: 600. ng/mL

Calculated Conc: 580. ng/mL

Acq. Date: 4/12/2010

Acq. Time: 12:13:10 PM

Injection Volume: 10.0 µL

Injection Temp: 10.0 min

Injection Pressure: 10.0 min

Injection Flow: 10.0 min

Injection Rate: 10.0 min

Injection Volume: 10.0 min

Injection Temp: 10.0 min

Injection Pressure: 10.0 min

Injection Flow: 10.0 min

Injection Rate: 10.0 min

Injection Volume: 10.0 min

Injection Temp: 10.0 min

Injection Pressure: 10.0 min

Injection Flow: 10.0 min

Injection Rate: 10.0 min

Injection Volume: 10.0 min

Injection Temp: 10.0 min

Injection Pressure: 10.0 min

Injection Flow: 10.0 min

Injection Rate: 10.0 min

Injection Volume: 10.0 min

Injection Temp: 10.0 min

Injection Pressure: 10.0 min

Injection Flow: 10.0 min

Injection Rate: 10.0 min

Injection Volume: 10.0 min

Injection Temp: 10.0 min

Injection Pressure: 10.0 min

Injection Flow: 10.0 min

Injection Rate: 10.0 min

Injection Volume: 10.0 min

Injection Temp: 10.0 min

Injection Pressure: 10.0 min

Injection Flow: 10.0 min

Injection Rate: 10.0 min

Injection Volume: 10.0 min

Injection Temp: 10.0 min

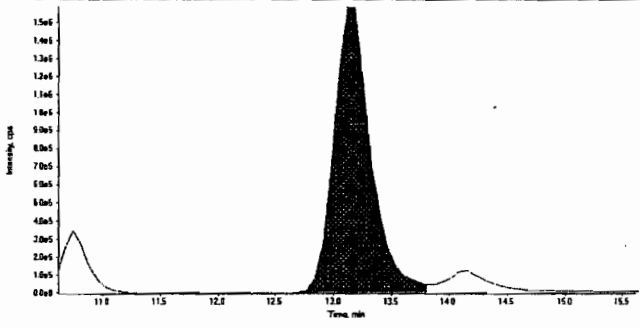
\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

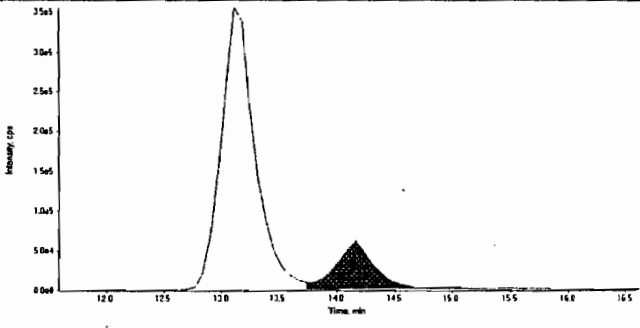
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415063.wiff	<b>Acquisition Date</b>	4/16/2010 12:57:07 PM
<b>Sample Name</b>	WXX100415-56CCV	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

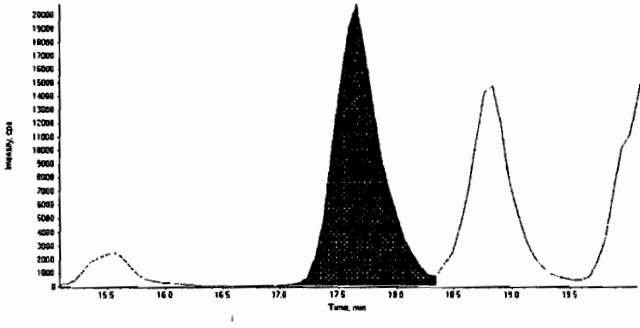
  

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.1
	Actual RT:	13.1
	Area Counts:	3.56e+007
	Manual Modification	No
	Amount:	605. (ng/mL)
	% Accuracy:	101.00

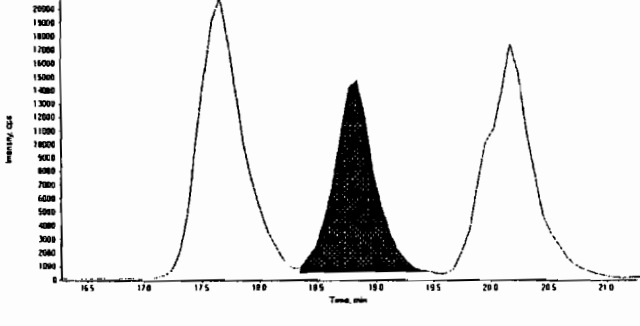
  

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.1
	Actual RT:	14.2
	Area Counts:	1.43e+006
	Manual Modification	Yes
	Amount:	580. (ng/mL)
	% Accuracy:	96.60

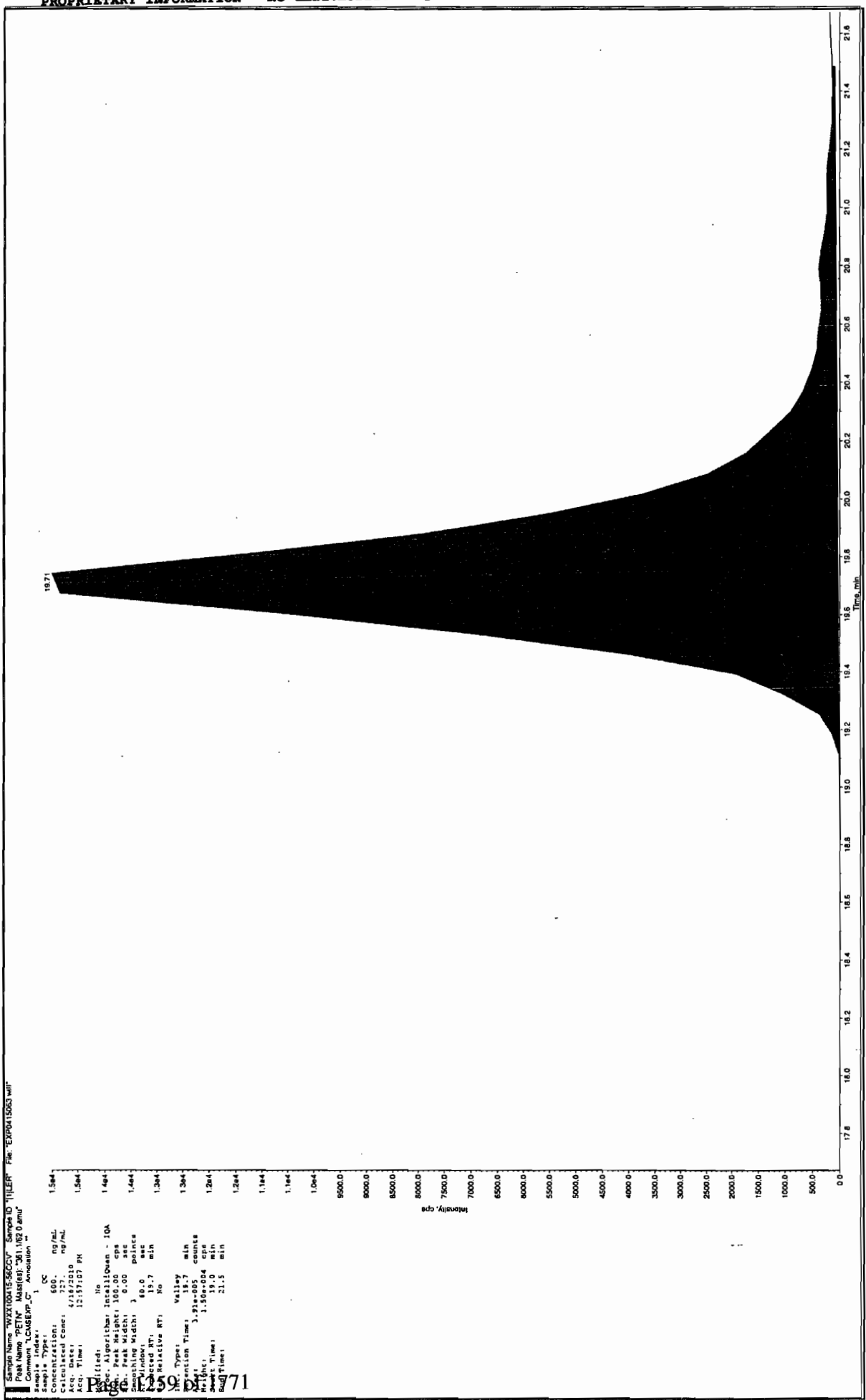
  

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	17.6
	Actual RT:	17.6
	Area Counts:	5.63e+005
	Manual Modification	No
	Amount:	538. (ng/mL)
	% Accuracy:	89.60

	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	18.8
	Actual RT:	18.8
	Area Counts:	3.43e+005
	Manual Modification	No
	Amount:	610. (ng/mL)
	% Accuracy:	102.00

Before Jan 4/23/10



Sample Name: WXX100415-5600V Sample ID: 11111111 File: EXP041503.wif

Peak Name: PETN Masses: 101.102 0.00  
 Concentration: 600.0 ng/mL  
 Acquired Conc: 4/18/2010  
 Acq. Time: 12:57:07 PM  
 Sample Index: 1  
 Sample Type: GC  
 Peak Height: 100.00 cps  
 Peak Width: 0.00 sec  
 Peak Area: 10.0 points  
 Peak Area: 10.0 sec  
 Peak Area: 19.7 min  
 Relative RT: No  
 Type: Valley  
 Retention Time: 19.71 min  
 Height: 1400 cps  
 Width: 1.50e-004 cps  
 Area: 10.0 min  
 Time: 21.5 min

\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

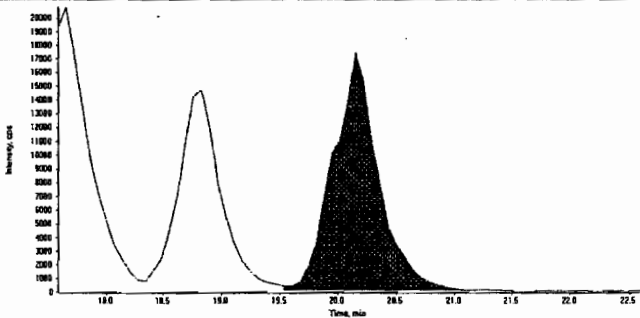


GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

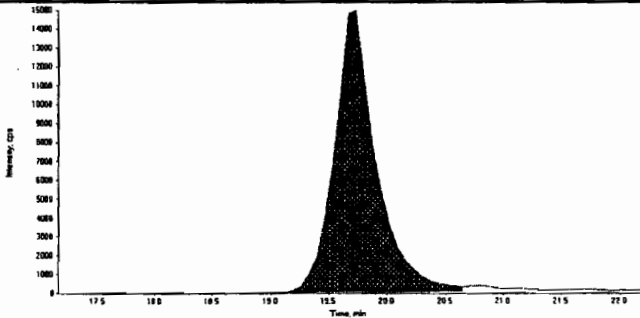
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415063.wiff	<b>Acquisition Date</b>	4/16/2010 12:57:07 PM
<b>Sample Name</b>	WXX100415-56CCV	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	20.1
	<b>Actual RT:</b>	20.2
	<b>Area Counts:</b>	4.76e+005
	<b>Manual Modification</b>	No
	<b>Amount:</b>	606. (ng/mL)
	<b>% Accuracy:</b>	101.00

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	<b>Expected RT:</b>	19.7
	<b>Actual RT:</b>	19.7
	<b>Area Counts:</b>	3.82e+005
	<b>Manual Modification</b>	Yes
	<b>Amount:</b>	710. (ng/mL)
	<b>% Accuracy:</b>	118.00

GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis 04/16/10  
 Time of Injection 1257  
 Standard Number WXX100415-56CCV  
 Data File EXP0415063a

HMX	108.0
RDX	125.0
135-Trinitrobenzene	107.0
13-Dinitrobenzene	93.9
Tetryl	97.9
246-Trinitrotoluene	105.0
Nitrobenzene	96.5
34-dinitrotoluene	79.8
26-dinitrotoluene	107.0
24-dinitrotoluene	102.0
4-Amino-26-dinitrotoluene	101.0
2-Amino-46-dinitrotoluene	96.6
2-Nitrotoluene	89.6
4-Nitrotoluene	102.0
3-Nitrotoluene	101.0
PETN	118.0

TOTAL

1630.3

*done 04/27/10*

AVERAGE

101.9

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

*Jan 4/27/10*

7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2199

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0415065.wiff

Analysis Date: 16-APR-10 13:49

LCMSMS ID: 1189

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	32.3	81	
2,4,6-Trinitrotoluene	40	30.6	77	
2,4-Dinitrotoluene	40	28.5	71	
2,6-Dinitrotoluene	40	35.4	89	
2-Amino-4,6-dinitrotoluene	40	36.8	92	
3,4-Dinitrotoluene	20	15.1	75	
4-Amino-2,6-dinitrotoluene	40	30.4	76	
HMX	40	45.5	114	
Nitrobenzene	40	37.4	93	
PETN	40	32.2	81	
RDX	40	38.2	96	
Tetryl	40	34.3	86	
m-Dinitrobenzene	40	38.8	97	
m-Nitrotoluene	40	38.9	97	
o-Nitrotoluene	40	36.2	91	
p-Nitrotoluene	40	46.3	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

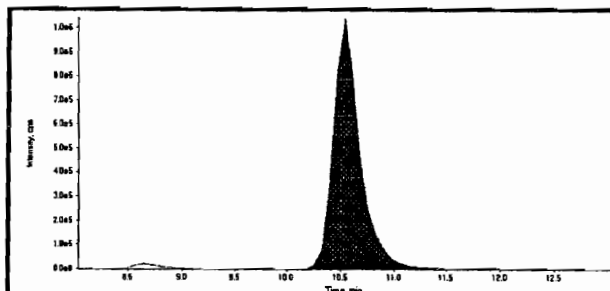
\* Value outside of Recovery Limits



GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

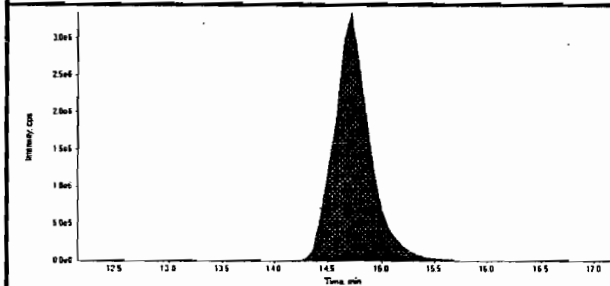
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

Data File	EXP0415065.wiff	Acquisition Date	4/16/2010 1:49:00 PM
Sample Name	WXX100415-57CRI	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



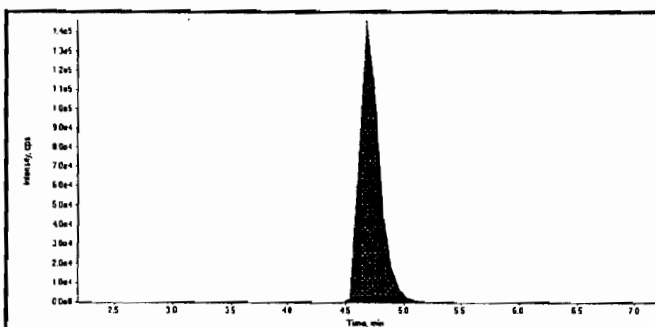
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.50
Actual RT:	10.50
Area Counts:	17800000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries

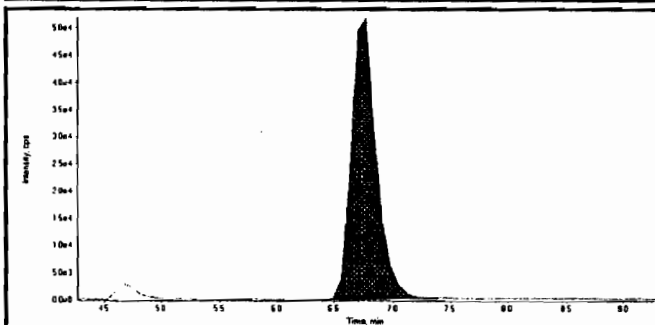


Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.60
Actual RT:	14.70
Area Counts:	76300000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.67
Actual RT:	4.67
Area Counts:	1.71e+006
Manual Modification	No
Amount:	45.5 (ng/mL)
% Accuracy:	114.00



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.77
Actual RT:	6.77
Area Counts:	7.84e+005
Manual Modification	No
Amount:	38.2 (ng/mL)
% Accuracy:	95.60

*Handwritten signature and date:*  
4/23/10 Hnm 04/23/10

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415065.wiff	<b>Acquisition Date</b>	4/16/2010 1:49:00 PM
<b>Sample Name</b>	WXX100415-57CRI	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	<b>Expected RT:</b>	9.00
	<b>Actual RT:</b>	9.00
	<b>Area Counts:</b>	9.33e+006
	<b>Manual Modification</b>	No
	<b>Amount:</b>	32.3 (ng/mL)
	<b>% Accuracy:</b>	80.80

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	<b>Expected RT:</b>	10.7
	<b>Actual RT:</b>	10.7
	<b>Area Counts:</b>	3.90e+006
	<b>Manual Modification</b>	No
	<b>Amount:</b>	38.8 (ng/mL)
	<b>% Accuracy:</b>	96.90

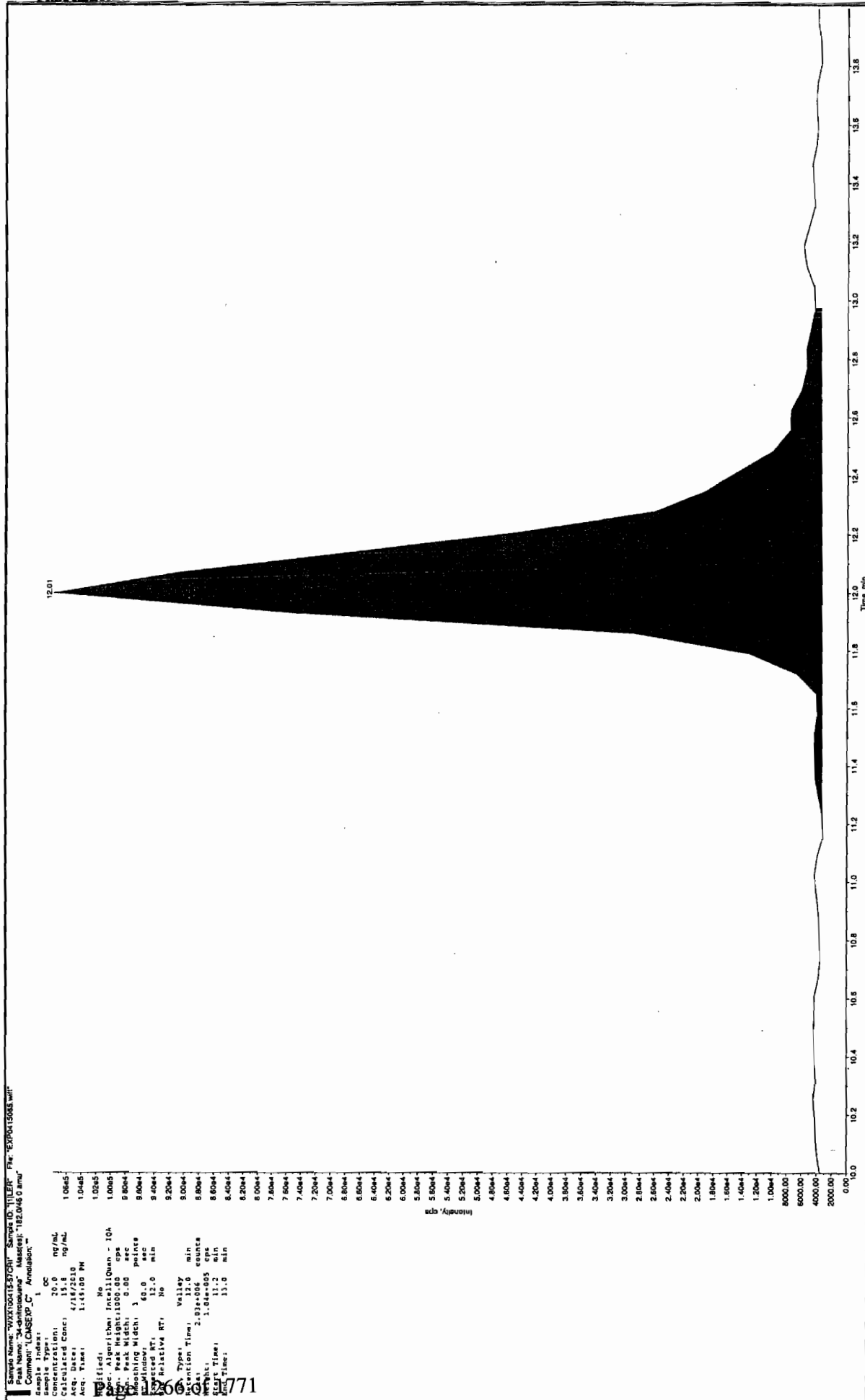
  

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	<b>Expected RT:</b>	10.7
	<b>Actual RT:</b>	10.7
	<b>Area Counts:</b>	2.72e+006
	<b>Manual Modification</b>	No
	<b>Amount:</b>	34.3 (ng/mL)
	<b>% Accuracy:</b>	85.70

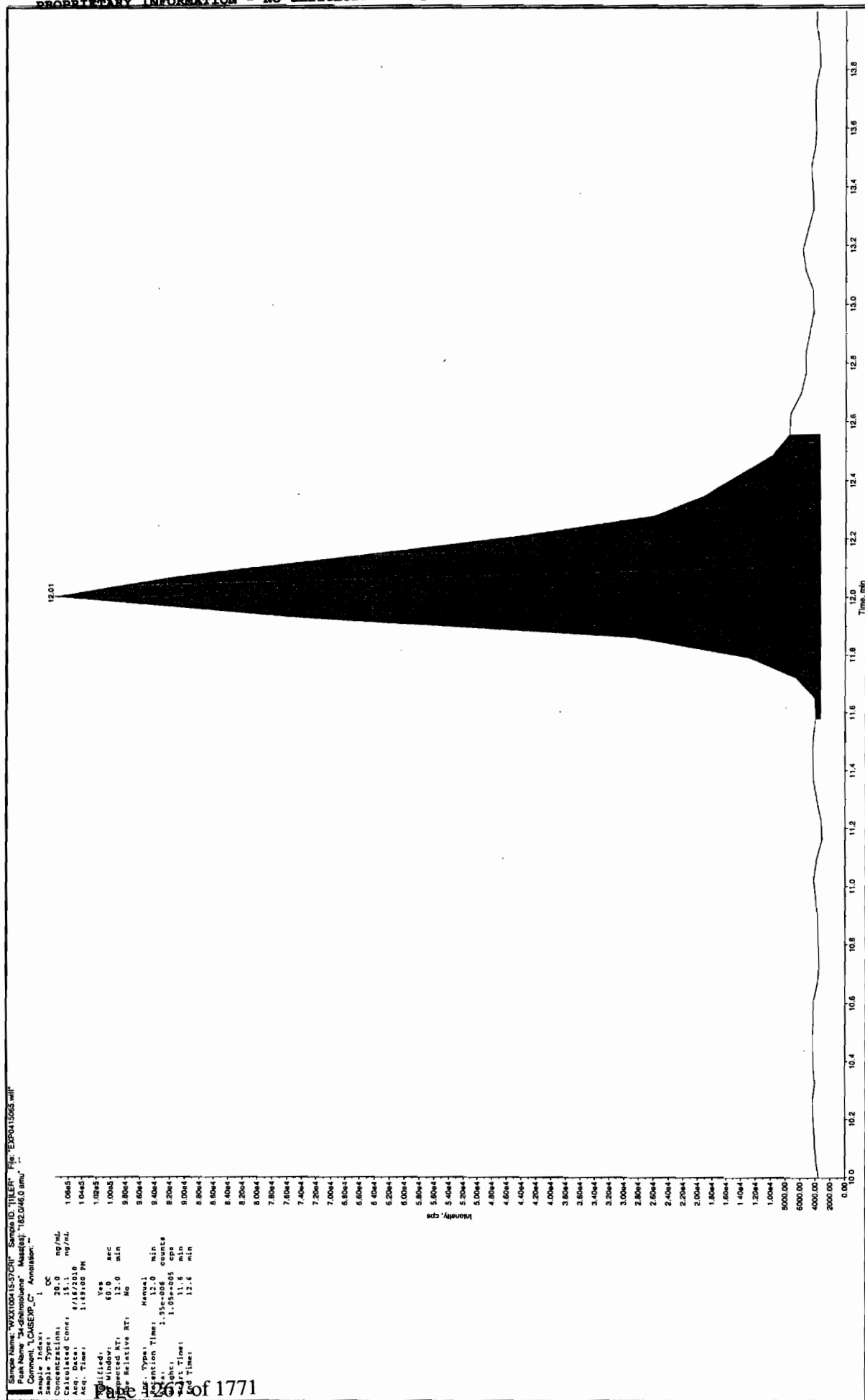
	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	<b>Expected RT:</b>	13.1
	<b>Actual RT:</b>	13.1
	<b>Area Counts:</b>	1.67e+007
	<b>Manual Modification</b>	No
	<b>Amount:</b>	30.6 (ng/mL)
	<b>% Accuracy:</b>	76.50

Before Jan 4/23/10



\*GEL SOP GL-0A-E-056, Method 8321A-Modified LCMSMS#3

after Oker 4/23/10



Sample Name: "XXXX100415-5701" Sample ID: "TILER" File: "EXP015063.will"

Peak Name: "4-Chlorobenzene" Mass(es): "162.046.0 amu"

Concentration: "1.000000" Acquisition: "1.000000"

Sample Type: "OC" Sample Index: "1"

Concentration: "20.0" ng/mL

Calculated Conc: "4/16/2010" ng/mL

Acq. Time: "1:19:00 PM"

Acq. Time: "1:19:00 PM"

Yes

Window: "40.0" sec

Window: "12.0" min

Yes

Window: "40.0" sec

Window: "12.0" min

Yes

Window: "40.0" sec

Window: "12.0" min

Yes

Window: "40.0" sec

Window: "12.0" min

Yes

Window: "40.0" sec

Window: "12.0" min

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Window: "40.0" sec

Window: "12.0" min

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Window: "40.0" sec

Window: "12.0" min

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Window: "40.0" sec

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Window: "40.0" sec

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Window: "40.0" sec

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Window: "40.0" sec

Window: "12.0" min

Yes

Window: "40.0" sec

Window: "12.0" min

Yes

Window: "40.0" sec

Window: "12.0" min

Yes

Window: "40.0" sec

Window: "12.0" min

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415065.wiff	<b>Acquisition Date</b>	4/16/2010 1:49:00 PM
<b>Sample Name</b>	WXX100415-57CRI	<b>Acquisition Method</b>	8321.dam
<b>Batch/Dilution/Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	11.8
	Actual RT:	11.8
	Area Counts:	1.18e+005
	Manual Modification	No
	Amount:	37.4 (ng/mL)
	% Accuracy:	93.40

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.0
	Actual RT:	12.0
	Area Counts:	1.95e+006
	Manual Modification	Yes
	Amount:	15.1 (ng/mL)
	% Accuracy:	75.30

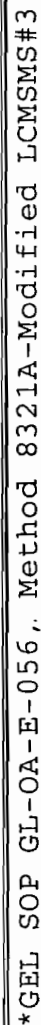
  

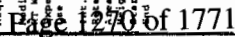
	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	14.8
	Actual RT:	14.8
	Area Counts:	3.94e+006
	Manual Modification	No
	Amount:	35.4 (ng/mL)
	% Accuracy:	88.60

	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.5
	Actual RT:	15.5
	Area Counts:	1.22e+006
	Manual Modification	No
	Amount:	28.5 (ng/mL)
	% Accuracy:	71.40

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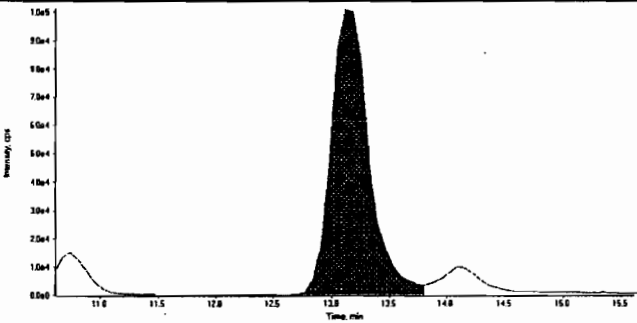


GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

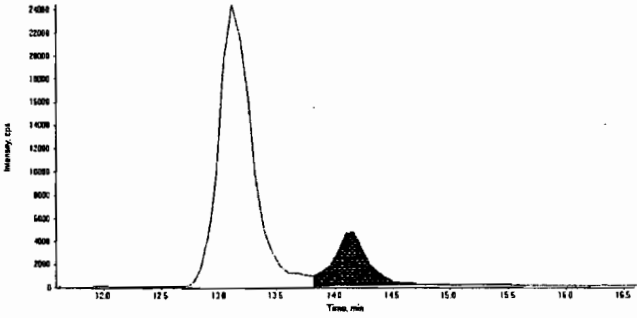
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415065.wiff	<b>Acquisition Date</b>	4/16/2010 1:49:00 PM
<b>Sample Name</b>	WXX100415-57CRI	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

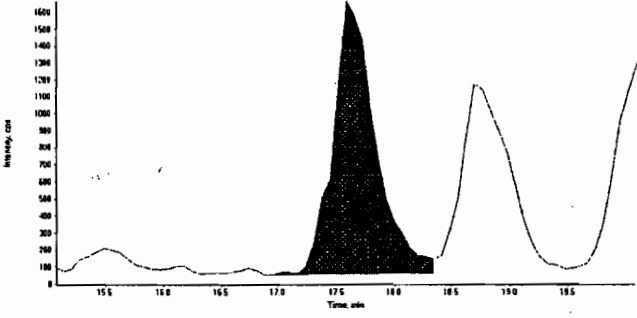
  

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.1
	Actual RT:	13.1
	Area Counts:	2.35e+006
	Manual Modification	No
	Amount:	30.4 (ng/mL)
	% Accuracy:	75.90

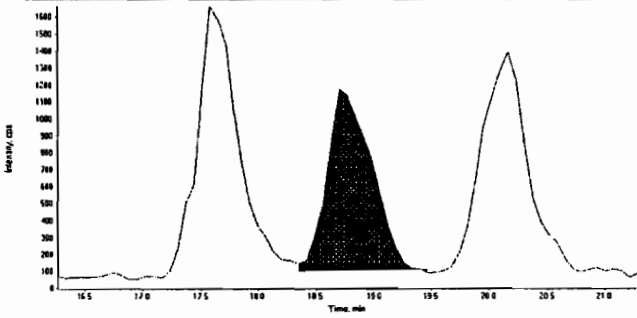
  

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.1
	Actual RT:	14.1
	Area Counts:	1.05e+005
	Manual Modification	Yes
	Amount:	36.8 (ng/mL)
	% Accuracy:	92.10

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	17.6
	Actual RT:	17.6
	Area Counts:	4.20e+004
	Manual Modification	No
	Amount:	36.2 (ng/mL)
	% Accuracy:	90.50

	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	18.8
	Actual RT:	18.7
	Area Counts:	2.89e+004
	Manual Modification	No
	Amount:	46.3 (ng/mL)
	% Accuracy:	116.00



Before Jan 4/23/10

Sample Name: W2X100115-57CR Sample ID: TILIER File: EXP0415083.wif

Peak Name: TILIER  
Conc: 1.00E+000

Sample Index: OC  
Concentration: 40.0 ng/mL

Acq. Date: 4/15/2010  
Acq. Time: 1:45:08 PM

Modified: No  
Peak: 1.00E+000

Peak Name: TILIER  
Conc: 1.00E+000

Sample Index: OC  
Concentration: 40.0 ng/mL

Acq. Date: 4/15/2010  
Acq. Time: 1:45:08 PM

Modified: No  
Peak: 1.00E+000

Peak Name: TILIER  
Conc: 1.00E+000

Sample Index: OC  
Concentration: 40.0 ng/mL

Acq. Date: 4/15/2010  
Acq. Time: 1:45:08 PM

Modified: No  
Peak: 1.00E+000

Peak Name: TILIER  
Conc: 1.00E+000

Sample Index: OC  
Concentration: 40.0 ng/mL

Acq. Date: 4/15/2010  
Acq. Time: 1:45:08 PM

Modified: No  
Peak: 1.00E+000

Peak Name: TILIER  
Conc: 1.00E+000

Sample Index: OC  
Concentration: 40.0 ng/mL

Acq. Date: 4/15/2010  
Acq. Time: 1:45:08 PM

Modified: No  
Peak: 1.00E+000

Peak Name: TILIER  
Conc: 1.00E+000

Sample Index: OC  
Concentration: 40.0 ng/mL

Acq. Date: 4/15/2010  
Acq. Time: 1:45:08 PM

Modified: No  
Peak: 1.00E+000

Peak Name: TILIER  
Conc: 1.00E+000

Sample Index: OC  
Concentration: 40.0 ng/mL

Acq. Date: 4/15/2010  
Acq. Time: 1:45:08 PM

Modified: No  
Peak: 1.00E+000

Peak Name: TILIER  
Conc: 1.00E+000

Sample Index: OC  
Concentration: 40.0 ng/mL

Acq. Date: 4/15/2010  
Acq. Time: 1:45:08 PM

Modified: No  
Peak: 1.00E+000

Peak Name: TILIER  
Conc: 1.00E+000

Sample Index: OC  
Concentration: 40.0 ng/mL

Acq. Date: 4/15/2010  
Acq. Time: 1:45:08 PM

Modified: No  
Peak: 1.00E+000

Peak Name: TILIER  
Conc: 1.00E+000

Sample Index: OC  
Concentration: 40.0 ng/mL

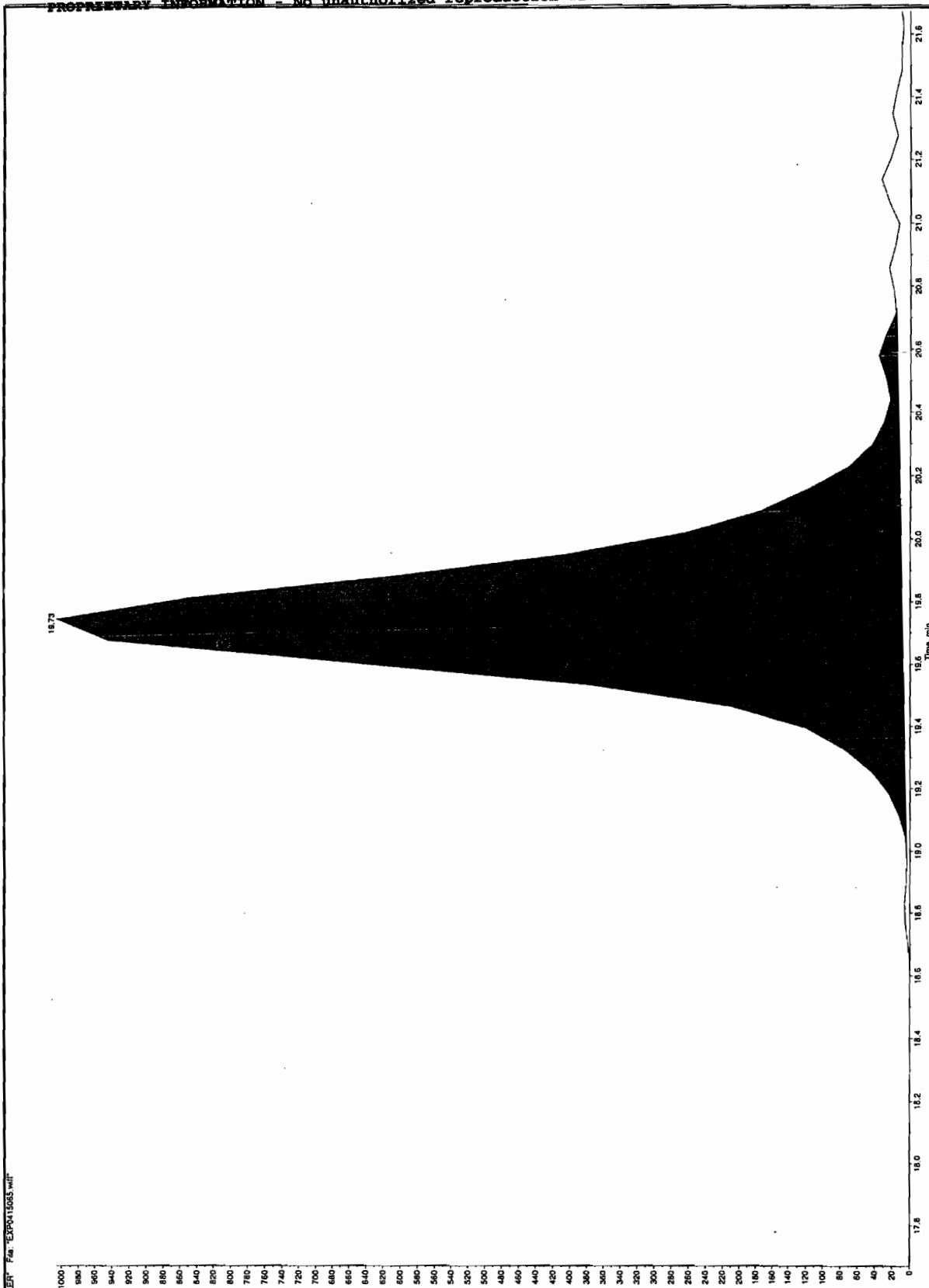
Acq. Date: 4/15/2010  
Acq. Time: 1:45:08 PM

Modified: No  
Peak: 1.00E+000

Peak Name: TILIER  
Conc: 1.00E+000

Sample Index: OC  
Concentration: 40.0 ng/mL

Acq. Date: 4/15/2010  
Acq. Time: 1:45:08 PM



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

after Jan 4/23/10

Sample Name: WAX1001537201 Sample ID: 11111111 File: E00410083.wif

Peak Name: PETN Mass(es): 341.1482.0 amu

Comment: LCMSMS\_C Association: -

Sample Type: 1 QC

Concentration: 40.0 ng/mL

Calculated Conc: 32.2 ng/mL

Acq. Time: 1.45:00 PM

Modified: Yes

RT Window: 10.0 sec

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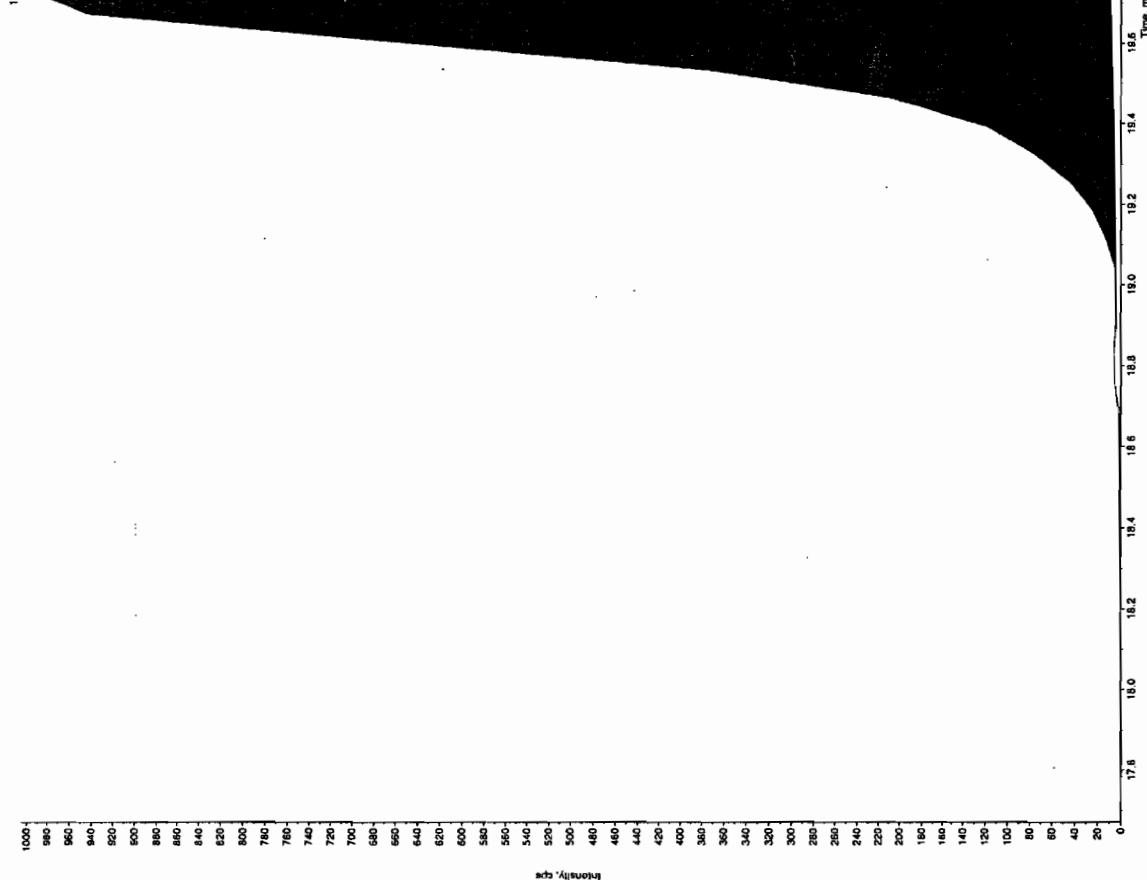
Offset: 10.0 min

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Offset: 10.0 min

Offset: 10.0 min

19.73



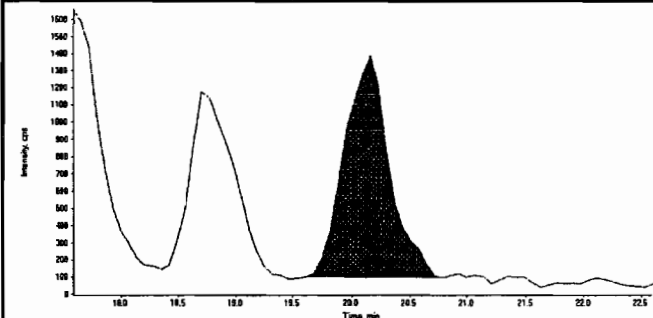
\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

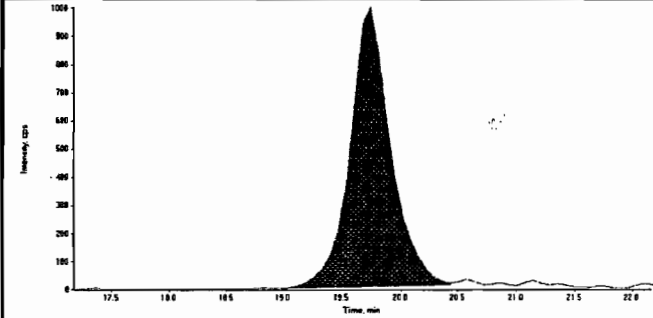
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415065.wiff	<b>Acquisition Date</b>	4/16/2010 1:49:00 PM
<b>Sample Name</b>	WXX100415-57CRI	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	20.1
	Actual RT:	20.2
	Area Counts:	3.51e+004
	Manual Modification	No
	Amount:	38.9 (ng/mL)
	% Accuracy:	97.30

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	Expected RT:	19.7
	Actual RT:	19.7
	Area Counts:	2.45e+004
	Manual Modification	Yes
	Amount:	32.2 (ng/mL)
	% Accuracy:	80.60

GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis 04/16/10  
 Time of Injection 1349  
 Standard Number WXX100415-57CRI  
 Data File EXP0415065a

HMX	114.0
RDX	95.6
135-Trinitrobenzene	80.8
13-Dinitrobenzene	96.9
Tetryl	85.7
246-Trinitrotoluene	76.5
Nitrobenzene	93.4
34-dinitrotoluene	75.3
26-dinitrotoluene	88.6
24-dinitrotoluene	71.4
4-Amino-26-dinitrotoluene	75.9
2-Amino-46-dinitrotoluene	92.1
2-Nitrotoluene	90.5
4-Nitrotoluene	116.0
3-Nitrotoluene	97.3
PETN	80.6

TOTAL

1430.6

AVERAGE

89.4

*Handwritten:* HMX 04/23/10

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

*Handwritten:* Jar 4/23/10

7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2199

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0415076.wiff

Analysis Date: 16-APR-10 18:34

LCMSMS ID: 1189

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	522	87	
2,4,6-Trinitrotoluene	600	541	90	
2,4-Dinitrotoluene	600	623	104	
2,6-Dinitrotoluene	600	565	94	
2-Amino-4,6-dinitrotoluene	600	609	102	
3,4-Dinitrotoluene	300	258	86	
4-Amino-2,6-dinitrotoluene	600	554	92	
HMX	600	545	91	
Nitrobenzene	600	584	97	
PETN	600	631	105	
RDX	600	518	86	
Tetryl	600	518	86	
m-Dinitrobenzene	600	506	84	
m-Nitrotoluene	600	652	109	
o-Nitrotoluene	600	575	96	
p-Nitrotoluene	600	665	111	

Recovery Limits:

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

Other Target Analytes 80-120%

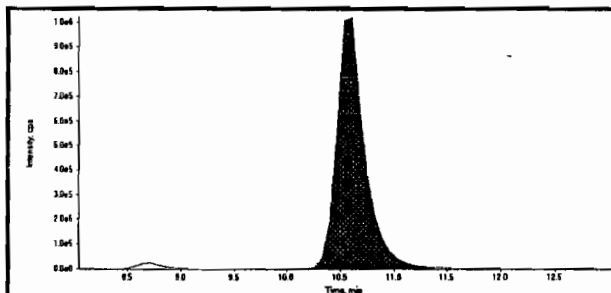
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

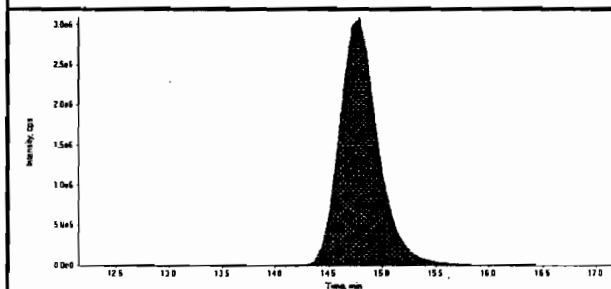
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

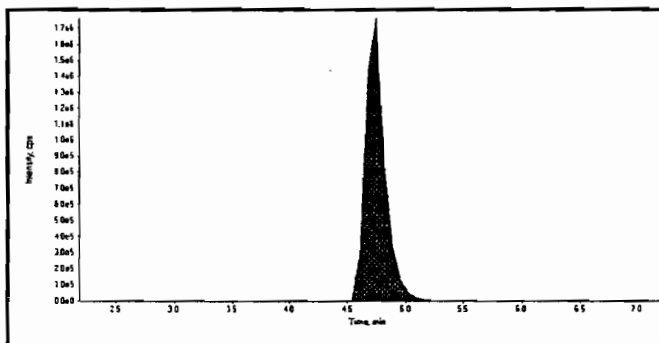
Data File	EXP0415076.wiff	Acquisition Date	4/16/2010 6:34:58 PM
Sample Name	WXX100416-56CCV	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



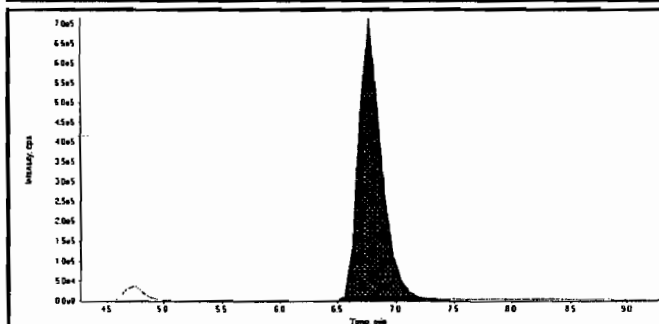
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.50
Actual RT:	10.60
Area Counts:	18600000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.60
Actual RT:	14.80
Area Counts:	77800000.00
Manual Modification	Yes
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.67
Actual RT:	4.74
Area Counts:	2.07e+007
Manual Modification	No
Amount:	545. (ng/mL)
% Accuracy:	90.80



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.77
Actual RT:	6.77
Area Counts:	9.96e+006
Manual Modification	No
Amount:	518. (ng/mL)
% Accuracy:	86.30

*Handwritten:*  
4/16/2010  
LER  
4/16/2010

Before Jan 4/23/10

Sample Name: "VXX100410-SEC01" Sample ID: "JILR" File: "EXP0415076.wif"  
 Peak Name: "246-7-Phthalimide" Mass(es): "227.1209.8 amu"  
 Concentration: "LCMS-EXP-C" Annotation: "227.1209.8 amu"

Sample Type: 1 CC  
 Concentration: 600. ng/mL  
 Calculated Conc: 475. ng/mL  
 Calc. Time: 6.134158 PM  
 Acq. Time: 7.449

Modified: 6.134158 PM  
 Peak Name: "246-7-Phthalimide" In: 10A  
 Peak Height: 1000.00 cps  
 Peak Width: 0.00 sec  
 Baseline Width: 1.00 sec  
 Baseline Height: 10.0 cps  
 Baseline Width: 1.00 sec  
 Baseline Height: 10.0 cps  
 Baseline Width: 1.00 sec  
 Baseline Height: 10.0 cps

Relative RT: 13.1 min  
 Relative RT: 13.1 min  
 Relative RT: 13.1 min  
 Relative RT: 13.1 min  
 Relative RT: 13.1 min  
 Relative RT: 13.1 min

Peak Type: Valley  
 Peak Time: 13.1 min  
 Peak Height: 1000.00 counts  
 Peak Width: 0.00 sec  
 Peak Height: 1000.00 counts  
 Peak Width: 0.00 sec

Peak Time: 13.1 min  
 Peak Height: 1000.00 counts  
 Peak Width: 0.00 sec  
 Peak Height: 1000.00 counts  
 Peak Width: 0.00 sec  
 Peak Height: 1000.00 counts

Peak Time: 13.1 min  
 Peak Height: 1000.00 counts  
 Peak Width: 0.00 sec  
 Peak Height: 1000.00 counts  
 Peak Width: 0.00 sec  
 Peak Height: 1000.00 counts

Peak Time: 13.1 min  
 Peak Height: 1000.00 counts  
 Peak Width: 0.00 sec  
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 Peak Height: 1000.00 counts

Peak Time: 13.1 min  
 Peak Height: 1000.00 counts  
 Peak Width: 0.00 sec  
 Peak Height: 1000.00 counts  
 Peak Width: 0.00 sec  
 Peak Height: 1000.00 counts

Peak Time: 13.1 min  
 Peak Height: 1000.00 counts  
 Peak Width: 0.00 sec  
 Peak Height: 1000.00 counts  
 Peak Width: 0.00 sec  
 Peak Height: 1000.00 counts

Peak Time: 13.1 min  
 Peak Height: 1000.00 counts  
 Peak Width: 0.00 sec  
 Peak Height: 1000.00 counts  
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Peak Time: 13.1 min  
 Peak Height: 1000.00 counts  
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 Peak Height: 1000.00 counts  
 Peak Width: 0.00 sec  
 Peak Height: 1000.00 counts

Peak Time: 13.1 min  
 Peak Height: 1000.00 counts  
 Peak Width: 0.00 sec  
 Peak Height: 1000.00 counts  
 Peak Width: 0.00 sec  
 Peak Height: 1000.00 counts

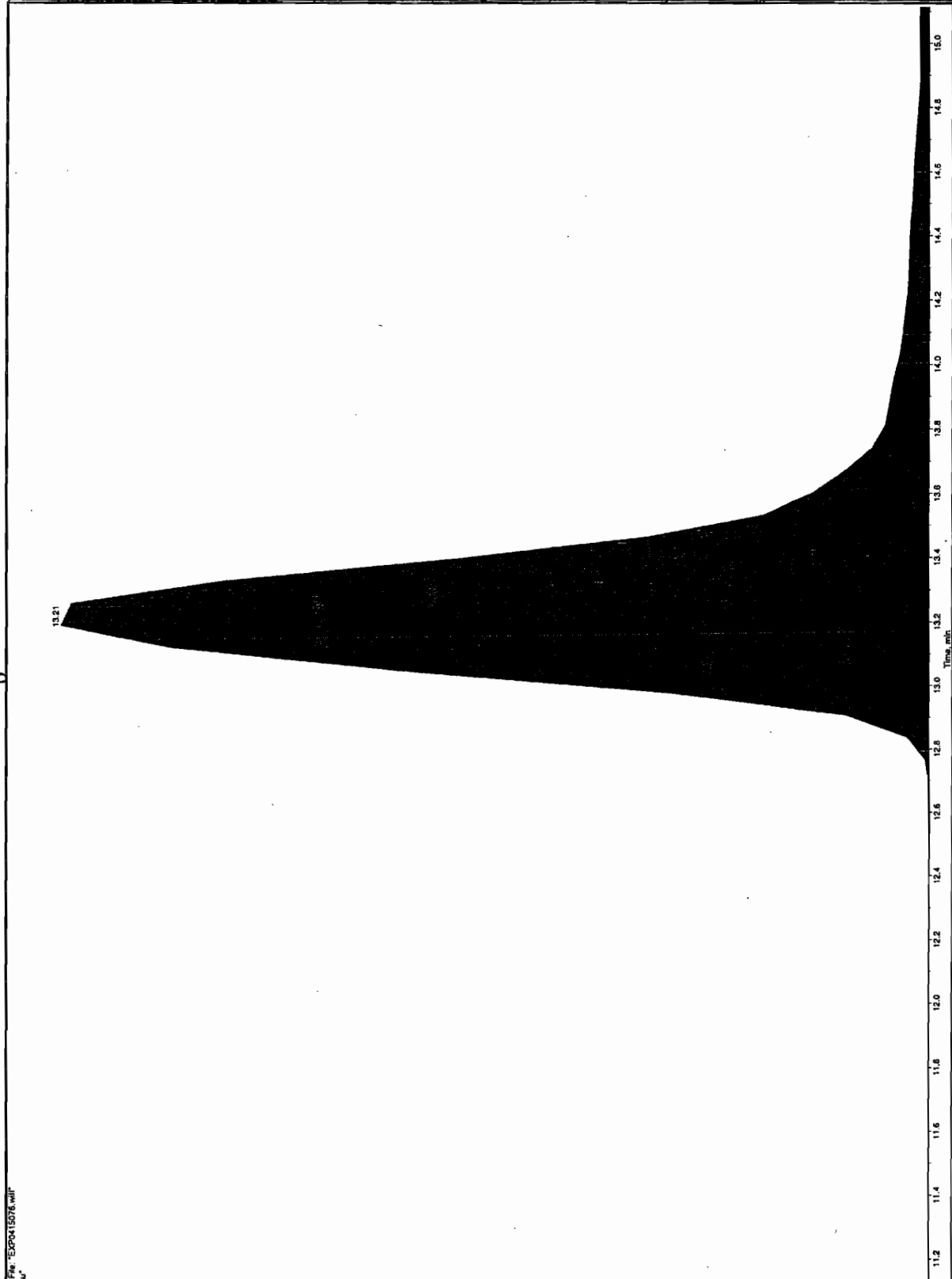
Peak Time: 13.1 min  
 Peak Height: 1000.00 counts  
 Peak Width: 0.00 sec  
 Peak Height: 1000.00 counts  
 Peak Width: 0.00 sec  
 Peak Height: 1000.00 counts

Peak Time: 13.1 min  
 Peak Height: 1000.00 counts  
 Peak Width: 0.00 sec  
 Peak Height: 1000.00 counts  
 Peak Width: 0.00 sec  
 Peak Height: 1000.00 counts

Peak Time: 13.1 min  
 Peak Height: 1000.00 counts  
 Peak Width: 0.00 sec  
 Peak Height: 1000.00 counts  
 Peak Width: 0.00 sec  
 Peak Height: 1000.00 counts

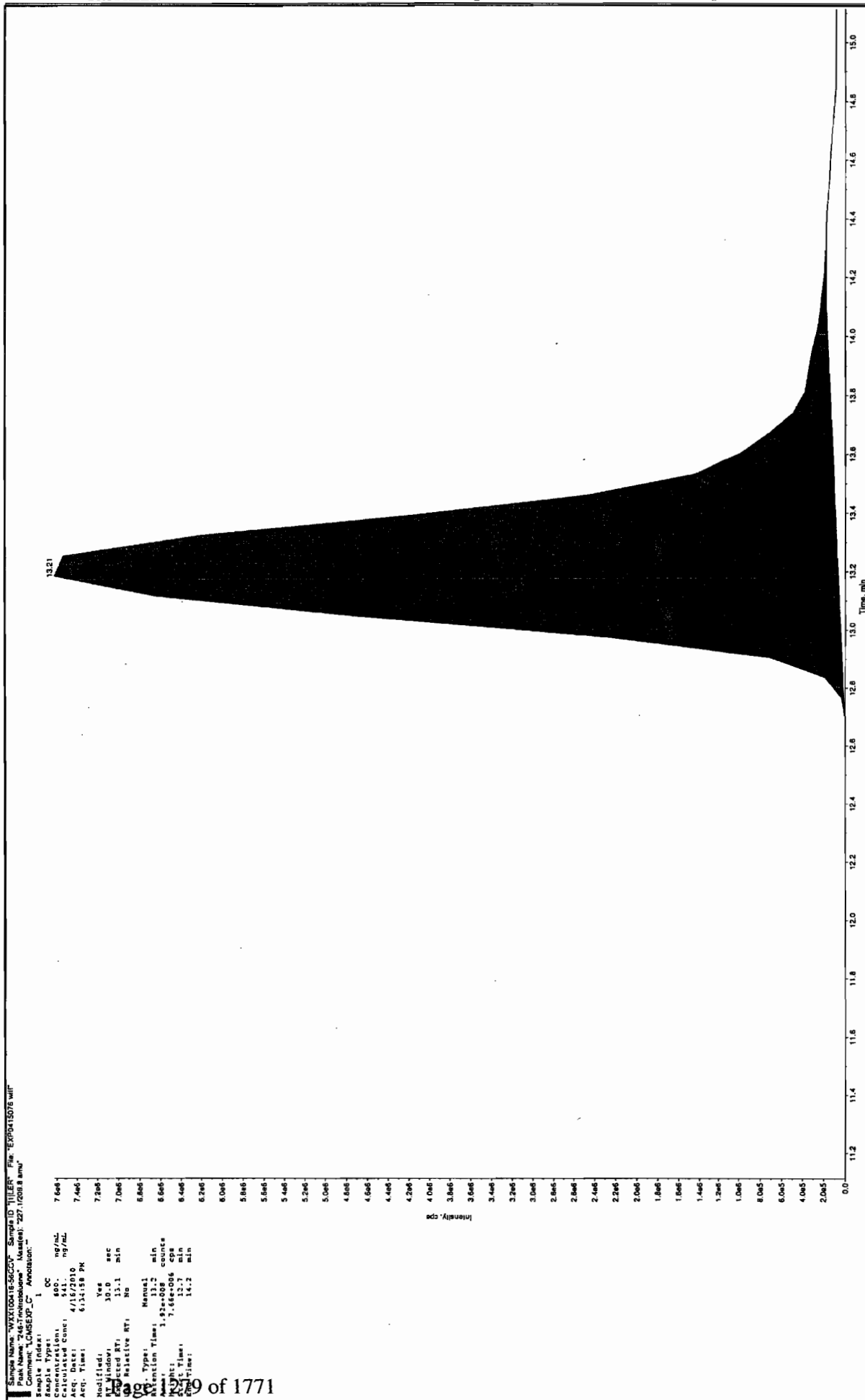
Peak Time: 13.1 min  
 Peak Height: 1000.00 counts  
 Peak Width: 0.00 sec  
 Peak Height: 1000.00 counts  
 Peak Width: 0.00 sec  
 Peak Height: 1000.00 counts

Peak Time: 13.1 min  
 Peak Height: 1000.00 counts  
 Peak Width: 0.00 sec  
 Peak Height: 1000.00 counts  
 Peak Width: 0.00 sec  
 Peak Height: 1000.00 counts



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

after Jan 4/23/10



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

Sample Name: "WV20015-5000" Sample ID: "11115" File: "EXP015076.wif"  
 Peak Name: "4457-unknown" Mass(es): 227.17038 amu  
 Comment: "LCMS-EXP-C" Annotation: --

Sample Index: 1  
 Sample Type: 600  
 Calculated Conc: 541. ng/mL  
 Acq. Date: 4/16/2010  
 Acq. Time: 6:34:58 PM  
 Modified: Yes  
 RT Window: 10.0 sec  
 Expected RT: 13.1 min  
 Relative RT: No  
 Acquisition Type: Manual  
 Acquisition Time: 13.2 min  
 Name: 1.32e005 counts  
 Peak RT: 13.2 min  
 Peak Time: 14.2 min  
 Peak Time: 14.2 min



GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415076.wiff	<b>Acquisition Date</b>	4/16/2010 6:34:58 PM
<b>Sample Name</b>	WXX100416-56CCV	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	Expected RT:	9.00
	Actual RT:	9.07
	Area Counts:	1.20e+008
	Manual Modification	No
	Amount:	522. (ng/mL)
	% Accuracy:	86.90

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	Expected RT:	10.7
	Actual RT:	10.7
	Area Counts:	5.18e+007
	Manual Modification	No
	Amount:	506. (ng/mL)
	% Accuracy:	84.40

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	Expected RT:	10.7
	Actual RT:	10.7
	Area Counts:	4.48e+007
	Manual Modification	No
	Amount:	518. (ng/mL)
	% Accuracy:	86.40

	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	Expected RT:	13.1
	Actual RT:	13.2
	Area Counts:	1.92e+008
	Manual Modification	Yes
	Amount:	541. (ng/mL)
	% Accuracy:	90.20

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415076.wiff	<b>Acquisition Date</b>	4/16/2010 6:34:58 PM
<b>Sample Name</b>	WXX100416-56CCV	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	11.8
	Actual RT:	11.9
	Area Counts:	2.22e+006
	Manual Modification	No
	Amount:	584. (ng/mL)
	% Accuracy:	97.40

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.0
	Actual RT:	12.1
	Area Counts:	2.63e+007
	Manual Modification	No
	Amount:	258. (ng/mL)
	% Accuracy:	85.90

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	14.8
	Actual RT:	14.9
	Area Counts:	4.67e+007
	Manual Modification	No
	Amount:	565. (ng/mL)
	% Accuracy:	94.10

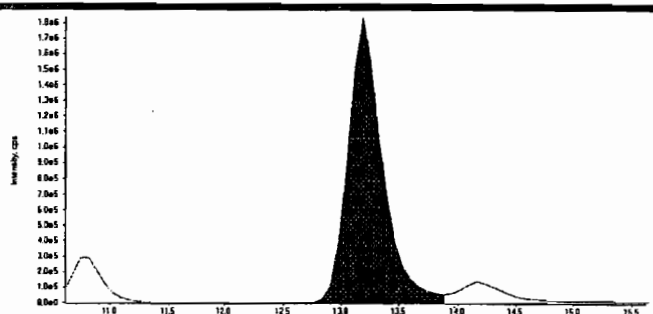
  

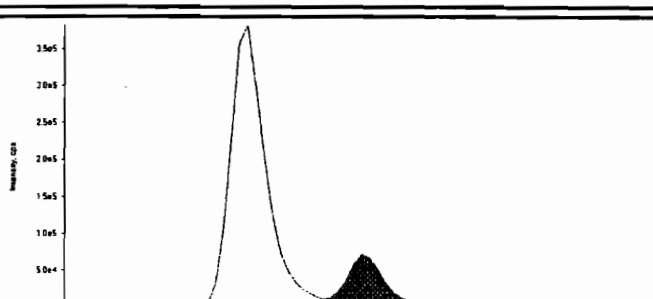
	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.5
	Actual RT:	15.6
	Area Counts:	1.98e+007
	Manual Modification	No
	Amount:	623. (ng/mL)
	% Accuracy:	104.00

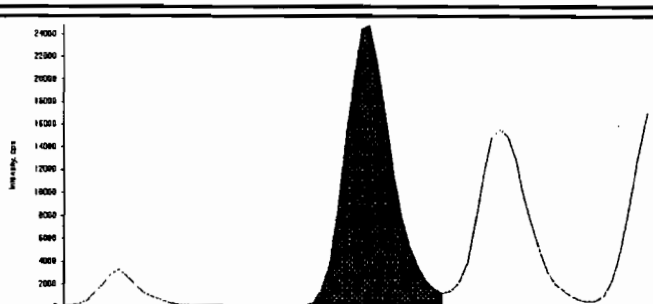
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

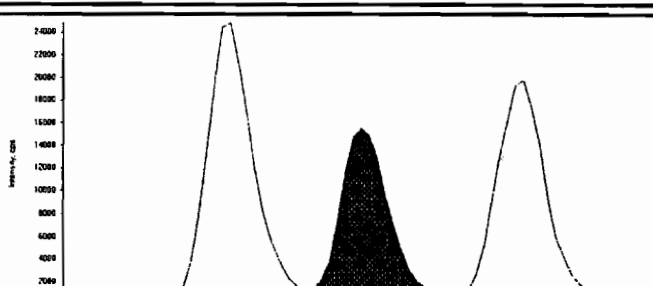
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LCMSMS#3

Data File	EXP0415076.wiff	Acquisition Date	4/16/2010 6:34:58 PM
Sample Name	WXX100416-56CCV	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control

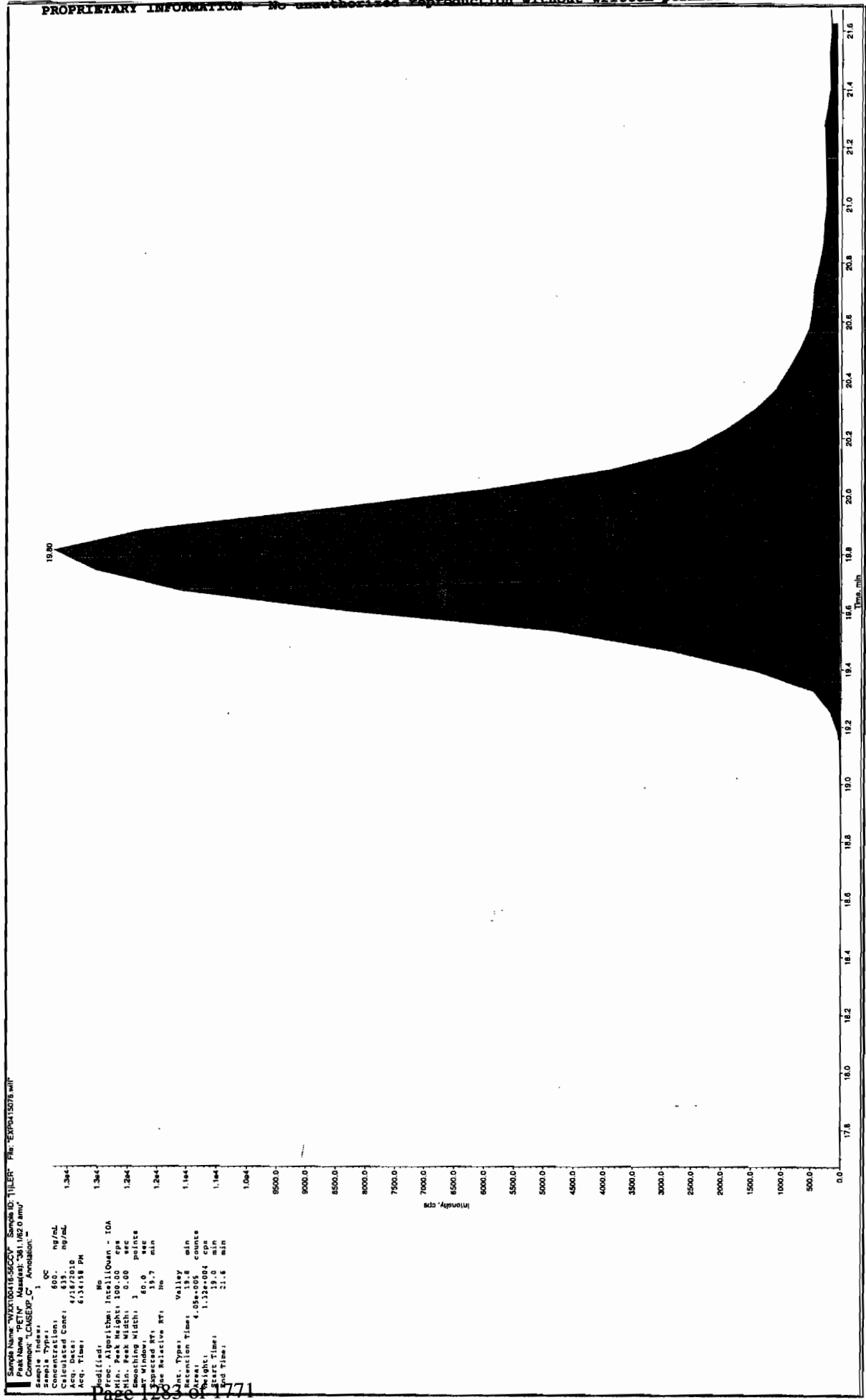
	Compound Name:	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.1
	Actual RT:	13.2
	Area Counts:	3.84e+007
	Manual Modification	No
	Amount:	554. (ng/mL)
	% Accuracy:	92.40

	Compound Name:	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.1
	Actual RT:	14.2
	Area Counts:	1.77e+006
	Manual Modification	No
	Amount:	609. (ng/mL)
	% Accuracy:	102.00

	Compound Name:	2-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	17.6
	Actual RT:	17.7
	Area Counts:	7.07e+005
	Manual Modification	No
	Amount:	575. (ng/mL)
	% Accuracy:	95.80

	Compound Name:	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	18.8
	Actual RT:	18.8
	Area Counts:	4.36e+005
	Manual Modification	No
	Amount:	665. (ng/mL)
	% Accuracy:	111.00

Before Jan 4/23/10



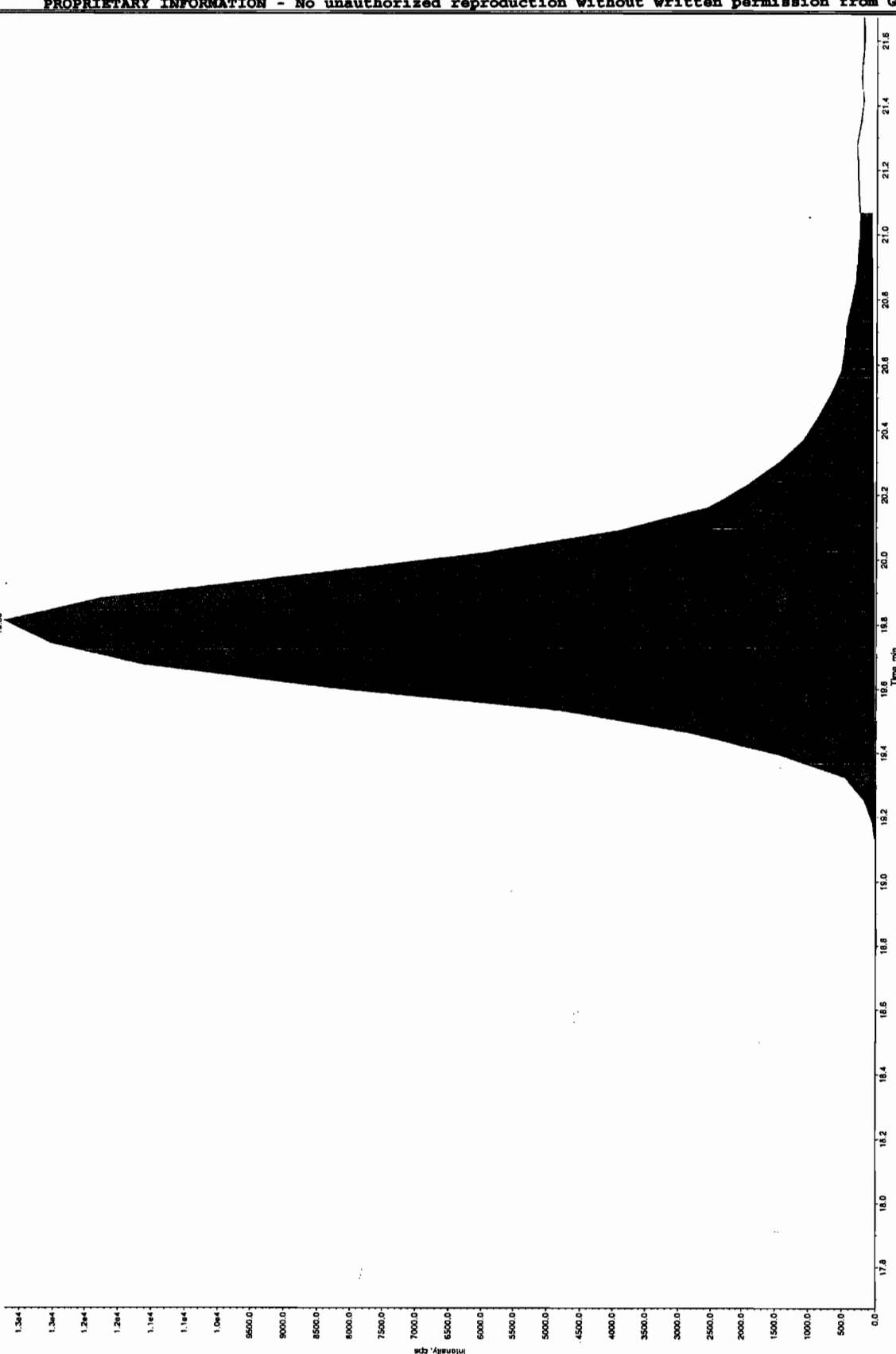
\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

after decr 4/23/10

Sample Name: "LUMINEX 18.6250" Sample ID: "LUMINEX 18.6250" File: "EXP0118078.wif"  
 Plate Name: "PRTN" Method: "M11.882.0" Comment: "LUMINEX 18.6250" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Calculated Conc: 631.0 ng/mL  
 Acq. Date: 4/16/2010  
 Acq. Time: 6:16:58 PM  
 Modified: Yes  
 RT Window: 60.0 sec  
 Expected RT: 19.7 min  
 RT Relative RT: No  
 Sample Type: Manual  
 Retention Time: 19.8 min  
 Peak: 4.00e+005 counts  
 Peak Area: 1.14e+004  
 Peak Time: 19.1 min  
 Peak Width: 21.1 min

19.80

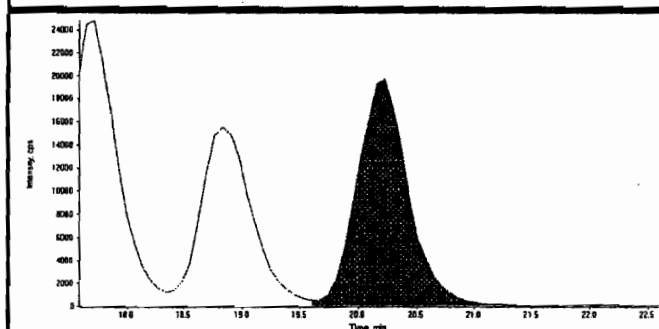


\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

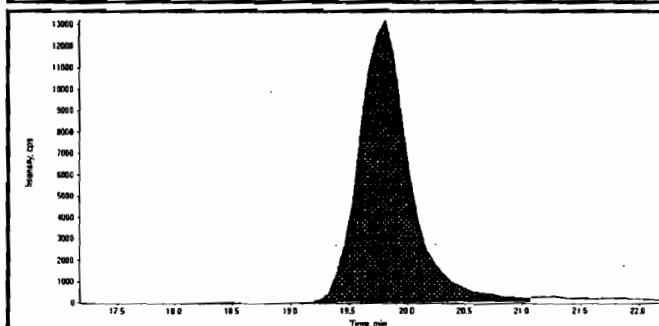
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

Data File	EXP0415076.wiff	Acquisition Date	4/16/2010 6:34:58 PM
Sample Name	WXX100416-56CCV	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



Compound Name:	3-Nitrotoluene (137.0/46.0 amu)
Expected RT:	20.1
Actual RT:	20.2
Area Counts:	6.05e+005
Manual Modification	No
Amount:	652. (ng/mL)
% Accuracy:	109.00



Compound Name:	PETN (361.1/62.0 amu)
Expected RT:	19.7
Actual RT:	19.8
Area Counts:	4.00e+005
Manual Modification	Yes
Amount:	631. (ng/mL)
% Accuracy:	105.00

GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis 04/16/10  
 Time of Injection 1834  
 Standard Number WXX100416-56CCV  
 Data File EXP0415076a

HMX	90.8
RDX	86.3
135-Trinitrobenzene	86.9
13-Dinitrobenzene	84.4
Tetryl	86.4
246-Trinitrotoluene	90.2
Nitrobenzene	97.4
34-dinitrotoluene	85.9
26-dinitrotoluene	94.1
24-dinitrotoluene	104.0
4-Amino-26-dinitrotoluene	92.4
2-Amino-46-dinitrotoluene	102.0
2-Nitrotoluene	95.8
4-Nitrotoluene	111.0
3-Nitrotoluene	109.0
PETN	105.0

TOTAL

1521.6

*Handwritten signature*

AVERAGE

✓ 95.1

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

*Handwritten signature*

7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2199

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0415078.wiff

Analysis Date: 16-APR-10 19:26

LCMSMS ID: 1189

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	39.3	98	
2,4,6-Trinitrotoluene	40	42.4	106	
2,4-Dinitrotoluene	40	34.6	86	
2,6-Dinitrotoluene	40	31.9	80	
2-Amino-4,6-dinitrotoluene	40	36.5	91	
3,4-Dinitrotoluene	20	19.5	98	
4-Amino-2,6-dinitrotoluene	40	42.6	107	
HMX	40	45	113	
Nitrobenzene	40	47.9	120	
PETN	40	49.4	124	
RDX	40	51.4	128	
Tetryl	40	36.7	92	
m-Dinitrobenzene	40	40.8	102	
m-Nitrotoluene	40	44.8	112	
o-Nitrotoluene	40	34.2	86	
p-Nitrotoluene	40	35.1	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

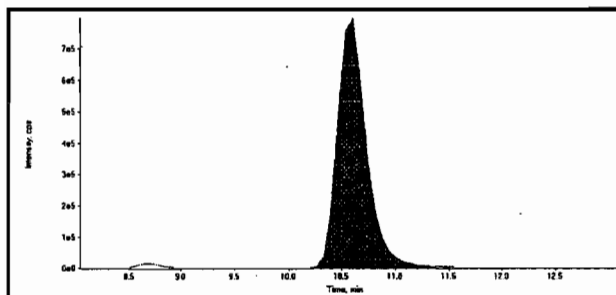
\* Value outside of Recovery Limits



GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

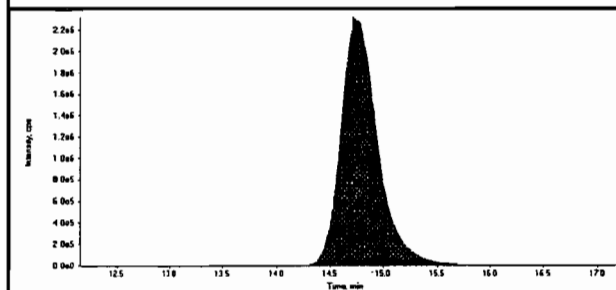
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LCMSMS#3

Data File	EXP0415078.wiff	Acquisition Date	4/16/2010 7:26:48 PM
Sample Name	WXX100416-57CRI	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



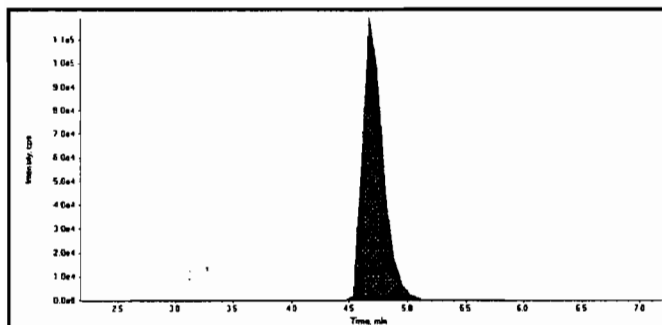
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.50
Actual RT:	10.60
Area Counts:	15300000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries

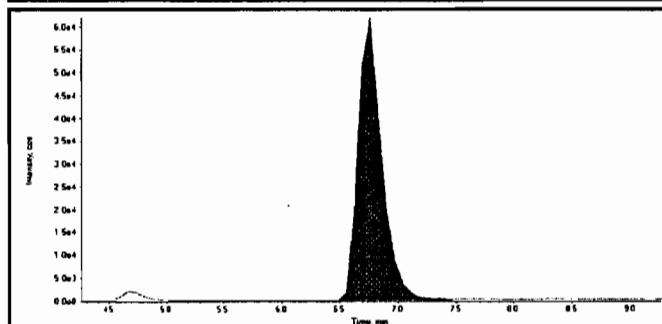


Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.60
Actual RT:	14.70
Area Counts:	55600000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.67
Actual RT:	4.67
Area Counts:	1.45e+006
Manual Modification	No
Amount:	45.0 (ng/mL)
% Accuracy:	113.00



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.77
Actual RT:	6.77
Area Counts:	8.79e+005
Manual Modification	No
Amount:	51.4 (ng/mL)
% Accuracy:	128.00

*Handwritten signatures and dates:*  
 04/23/10  
 4/23/10

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415078.wiff	<b>Acquisition Date</b>	4/16/2010 7:26:48 PM
<b>Sample Name</b>	WXX100416-57CRI	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	<b>Expected RT:</b>	9.00
	<b>Actual RT:</b>	9.00
	<b>Area Counts:</b>	9.60e+006
	<b>Manual Modification</b>	No
	<b>Amount:</b>	39.3 (ng/mL)
	<b>% Accuracy:</b>	98.20

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	<b>Expected RT:</b>	10.7
	<b>Actual RT:</b>	10.7
	<b>Area Counts:</b>	3.54e+006
	<b>Manual Modification</b>	No
	<b>Amount:</b>	40.8 (ng/mL)
	<b>% Accuracy:</b>	102.00

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	<b>Expected RT:</b>	10.7
	<b>Actual RT:</b>	10.7
	<b>Area Counts:</b>	2.52e+006
	<b>Manual Modification</b>	No
	<b>Amount:</b>	36.7 (ng/mL)
	<b>% Accuracy:</b>	91.70

	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	<b>Expected RT:</b>	13.1
	<b>Actual RT:</b>	13.2
	<b>Area Counts:</b>	1.58e+007
	<b>Manual Modification</b>	No
	<b>Amount:</b>	42.4 (ng/mL)
	<b>% Accuracy:</b>	106.00

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415078.wiff	<b>Acquisition Date</b>	4/16/2010 7:26:48 PM
<b>Sample Name</b>	WXX100416-57CRI	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	11.8
	Actual RT:	11.9
	Area Counts:	1.34e+005
	Manual Modification	No
	Amount:	47.9 (ng/mL)
	% Accuracy:	120.00

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.0
	Actual RT:	12.1
	Area Counts:	1.74e+006
	Manual Modification	No
	Amount:	19.5 (ng/mL)
	% Accuracy:	97.70

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	14.8
	Actual RT:	14.9
	Area Counts:	2.66e+006
	Manual Modification	No
	Amount:	31.9 (ng/mL)
	% Accuracy:	79.70

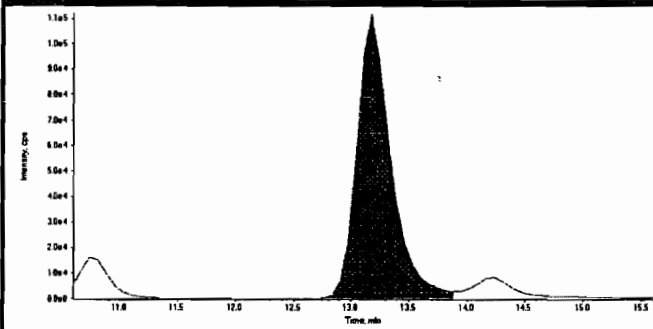
	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.5
	Actual RT:	15.5
	Area Counts:	1.02e+006
	Manual Modification	No
	Amount:	34.6 (ng/mL)
	% Accuracy:	86.40

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

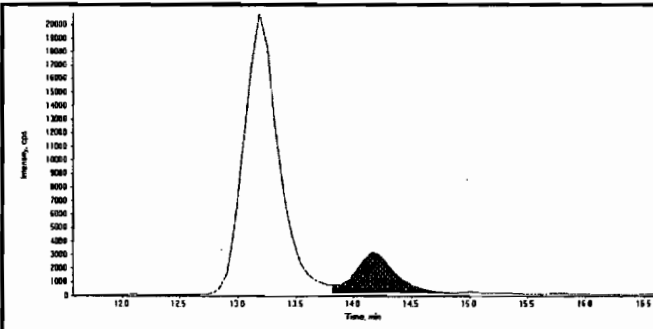
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415078.wiff	<b>Acquisition Date</b>	4/16/2010 7:26:48 PM
<b>Sample Name</b>	WXX100416-57CRI	<b>Acquisition Method</b>	8321.dam
<b>Batch/Dilution/Analyst</b>	1 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

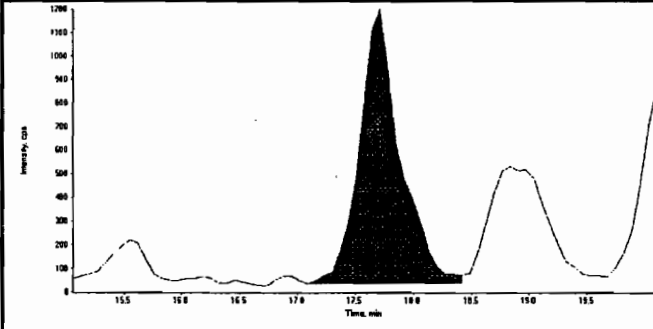
  

	<b>Compound Name:</b>	4-Amino-2,6-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.1
	Actual RT:	13.2
	Area Counts:	2.31e+006
	Manual Modification	No
	Amount:	42.6 (ng/mL)
	% Accuracy:	107.00

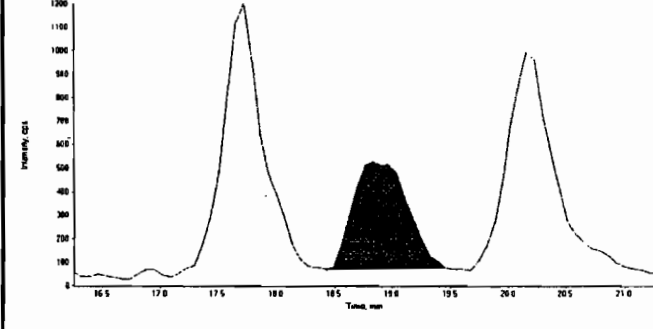
  

	<b>Compound Name:</b>	2-Amino-4,6-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.1
	Actual RT:	14.2
	Area Counts:	7.58e+004
	Manual Modification	No
	Amount:	36.5 (ng/mL)
	% Accuracy:	91.20

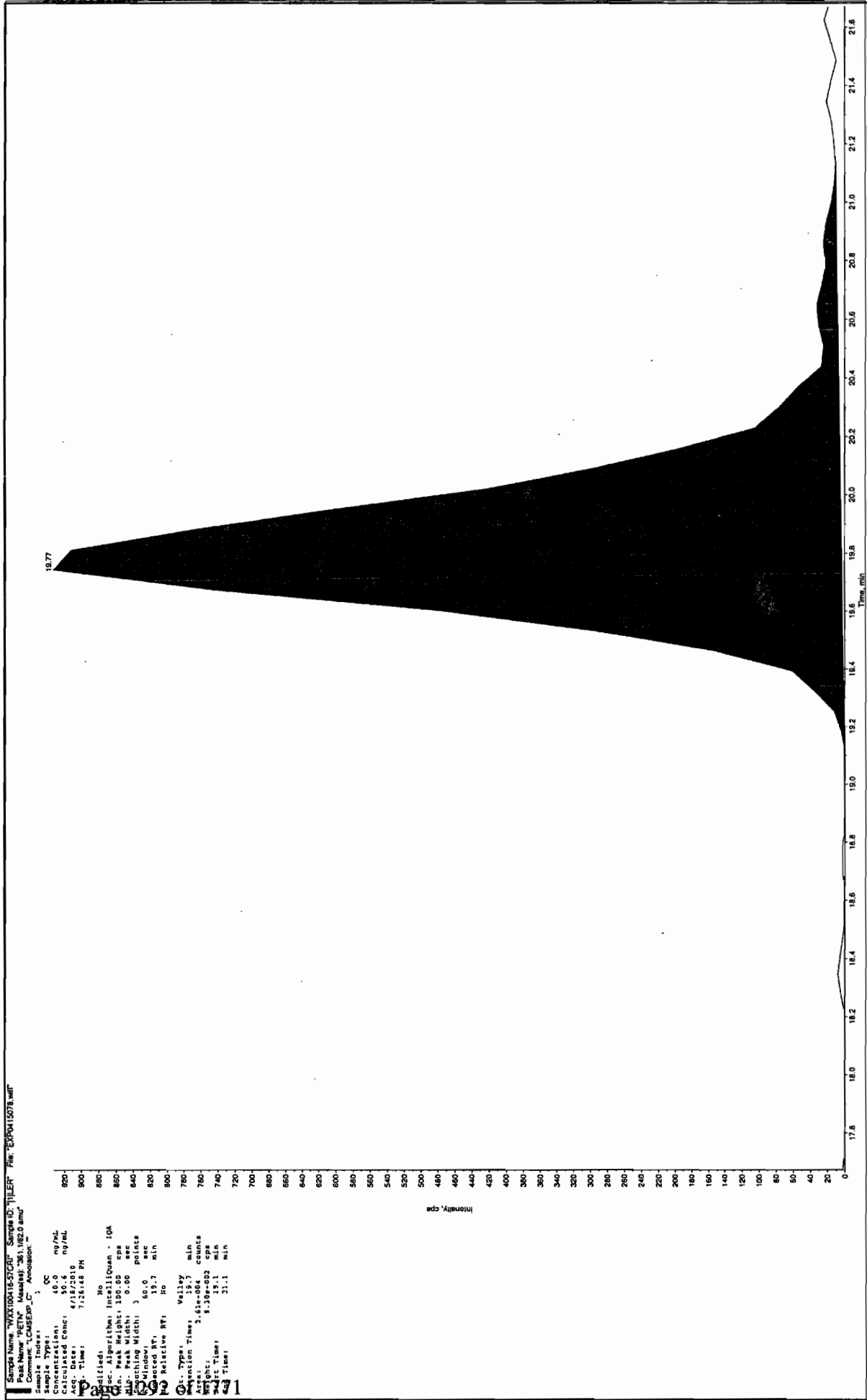
  

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	17.6
	Actual RT:	17.7
	Area Counts:	2.87e+004
	Manual Modification	No
	Amount:	34.2 (ng/mL)
	% Accuracy:	85.50

	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	18.8
	Actual RT:	18.8
	Area Counts:	1.52e+004
	Manual Modification	No
	Amount:	35.1 (ng/mL)
	% Accuracy:	87.80

Before Jan 4/23/10



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

after Jan 4/23/10

Sample Name: "WAX100416-57081" Sample ID: "TLER" File: "EXP0415078.wif"

Peak Name: "Peak 1" Retention Time: 18.11 min

Sample Index: 1

Sample Type: OC

Concentration: 40.5 ng/mL

Acq. Date: 4/16/2010

Acq. Time: 7:26:48 PM

Peak 1

Ret. Time: 18.11 min

Area: 15.7

Area %: 100.0

Height: 5.47e+002

Width: 0.15

Width %: 0.83

Area %: 100.0

Area %: 100.0

Area %: 100.0

Area %: 100.0

Area %: 100.0

Area %: 100.0

Area %: 100.0

Area %: 100.0

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0.1

0.0

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880

860

840

820

800

780

760

740

720

700

680

660

640

620

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

Data File	EXP0415078.wiff	Acquisition Date	4/16/2010 7:26:48 PM
Sample Name	WXX100416-57CRI	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	041510.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control

	Compound Name:	3-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	20.1
	Actual RT:	20.2
	Area Counts:	2.93e+004
	Manual Modification	No
	Amount:	44.8 (ng/mL)
	% Accuracy:	112.00

	Compound Name:	PETN (361.1/62.0 amu)
	Expected RT:	19.7
	Actual RT:	19.8
	Area Counts:	2.56e+004
	Manual Modification	Yes
	Amount:	49.4 (ng/mL)
	% Accuracy:	124.00

GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis 04/16/10  
 Time of Injection 1926  
 Standard Number WXX100416-57CRI  
 Data File EXP0415078a

HMX	113.0
RDX	128.0
135-Trinitrobenzene	98.2
13-Dinitrobenzene	102.0
Tetryl	91.7
246-Trinitrotoluene	106.0
Nitrobenzene	120.0
34-dinitrotoluene	97.7
26-dinitrotoluene	79.7
24-dinitrotoluene	86.4
4-Amino-26-dinitrotoluene	107.0
2-Amino-46-dinitrotoluene	91.2
2-Nitrotoluene	85.5
4-Nitrotoluene	87.8
3-Nitrotoluene	112.0
PETN	124.0

TOTAL

✓ 1630.2

*Ammonia*

AVERAGE

✓ 101.9

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

*Lar*  
*4/20/10*



7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2199

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0420012.wiff

Analysis Date: 20-APR-10 19:04

LCMSMS ID: 1189

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	39.6	99	
2,4,6-Trinitrotoluene	40	42.4	106	
2,4-Dinitrotoluene	40	44.7	112	
2,6-Dinitrotoluene	40	41.2	103	
2-Amino-4,6-dinitrotoluene	40	31.5	79	
3,4-Dinitrotoluene	20	15.8	79	
4-Amino-2,6-dinitrotoluene	40	35.5	89	
HMX	40	46.2	115	
Nitrobenzene	40	33.7	84	
PETN	40	54.2	136	
RDX	40	43.8	109	
Tetryl	40	46.1	115	
m-Dinitrobenzene	40	42.3	106	
m-Nitrotoluene	40	41.3	103	
o-Nitrotoluene	40	51.9	130	
p-Nitrotoluene	40	38.8	97	

Recovery Limits:

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

Other Target Analytes 70-130%

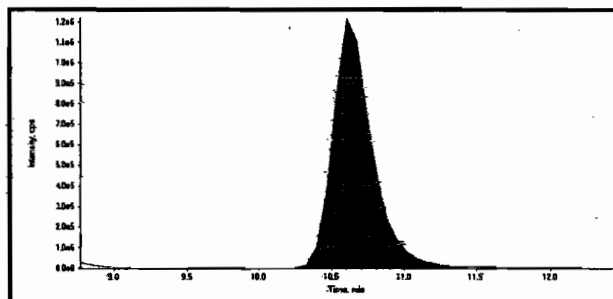
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

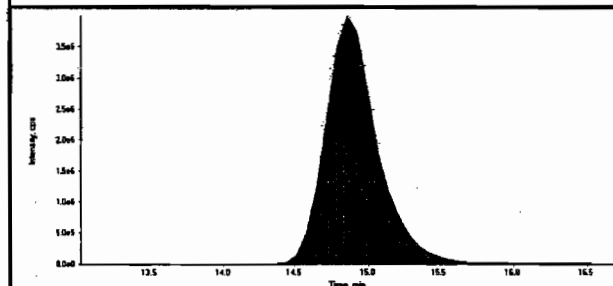
Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

Data File	EXP0420012.wiff	Acquisition Date	4/20/2010 7:04:13 PM
Sample Name	WXX100420-57CRI	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	042010.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



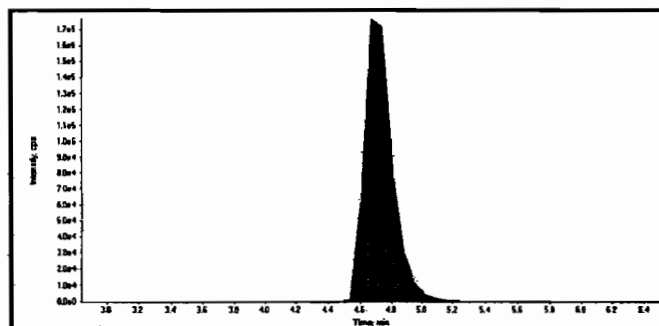
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.60
Actual RT:	10.60
Area Counts:	22900000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries

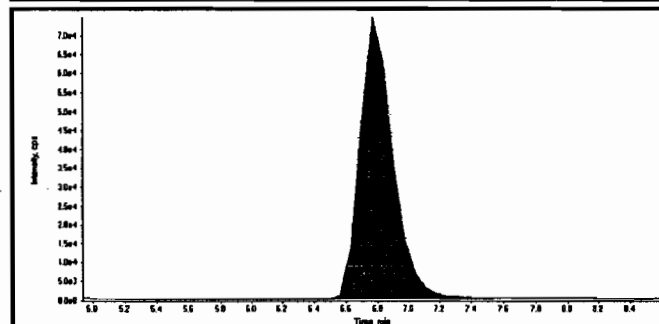


Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.90
Actual RT:	14.90
Area Counts:	99300000.00
Manual Modification	Yes
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.67
Actual RT:	4.67
Area Counts:	2.27e+006
Manual Modification	No
Amount:	46.2 (ng/mL)
% Accuracy:	115.00



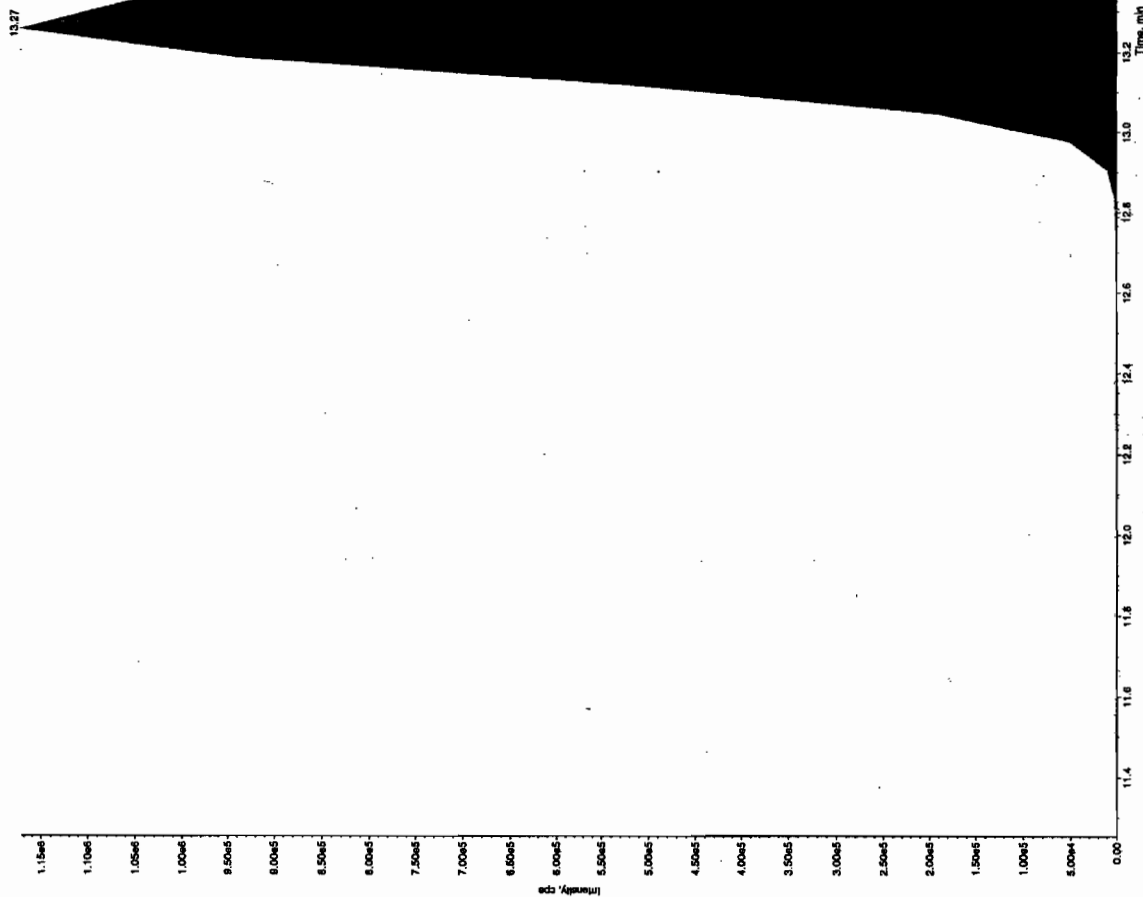
Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.77
Actual RT:	6.77
Area Counts:	1.11e+006
Manual Modification	No
Amount:	43.8 (ng/mL)
% Accuracy:	109.00

*Law  
4/29/10 thine  
04/29/10*

Beyan-Lan 4/28/10

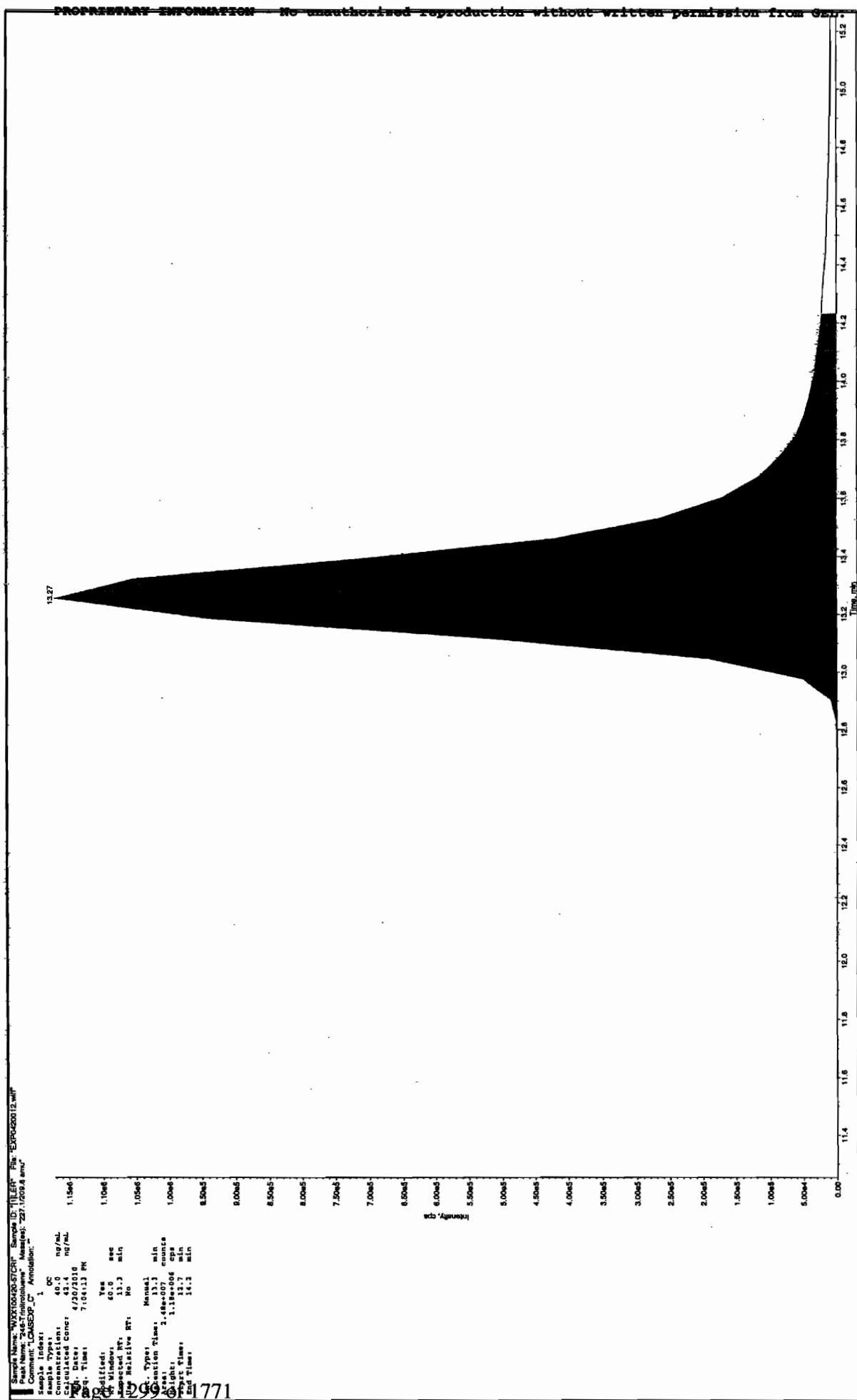
Sample Name: W210420-57037 Sample ID: T1127 File: EXP042012.wif  
 Sample Path: \\msdpc01\msdpc01\data\2010\04\28\W210420-57037  
 Comment: LCMS02\_C1 Annotation: 1

Sample Index: 1  
 Sample Type: QC  
 Concentration: 44.2 ug/mL  
 Calculated Conc: 44.2 ug/mL  
 Acq. Date: 4/28/2010  
 Acq. Time: 7:04:13 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 1000.00 cps  
 Min. Peak Width: 0.00 sec  
 Max. Peak Width: 3.00 sec  
 Min. Retention: 10.00 min  
 Max. Retention: 16.00 min  
 Retention Window: 60.0 sec  
 Expected RT: 13.3 min  
 RT Tolerance: No  
 RT Type: Valley  
 Retention Time: 13.3 min  
 Peak Area: 2.59e+007 counts  
 Peak Height: 1.17e+006 cps  
 Peak Width: 12.8 min  
 Peak Time: 16.5 min



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

after dec 4/28/10



Sample Name: XXX100426-5701 Sample ID: 111511 File: EXP000112.wif

Peak Name: 246-Tetrakisamine Masses: 227.1209.4 amu

Comment: "LCMS-EXP\_C" Annotation: "

Sample Index: 1

Sample Name: 1

Concentration: 40.0 ng/mL

Calculated Conc: 43.4 ng/mL

70 Date: 4/20/2010

70 Date: 7/04/11 PM

70 Date: 7/04/11 PM

70 Date: 7/04/11 PM

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\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0420012.wiff	<b>Acquisition Date</b>	4/20/2010 7:04:13 PM
<b>Sample Name</b>	WXX100420-57CRI	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	042010.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	<b>Expected RT:</b>	9.07
	<b>Actual RT:</b>	9.07
	<b>Area Counts:</b>	1.36e+007
	<b>Manual Modification</b>	No
	<b>Amount:</b>	39.6 (ng/mL)
	<b>% Accuracy:</b>	99.00

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	<b>Expected RT:</b>	10.7
	<b>Actual RT:</b>	10.7
	<b>Area Counts:</b>	4.98e+006
	<b>Manual Modification</b>	No
	<b>Amount:</b>	42.3 (ng/mL)
	<b>% Accuracy:</b>	106.00

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	<b>Expected RT:</b>	10.8
	<b>Actual RT:</b>	10.8
	<b>Area Counts:</b>	4.39e+006
	<b>Manual Modification</b>	No
	<b>Amount:</b>	46.1 (ng/mL)
	<b>% Accuracy:</b>	115.00

	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	<b>Expected RT:</b>	13.3
	<b>Actual RT:</b>	13.3
	<b>Area Counts:</b>	2.48e+007
	<b>Manual Modification</b>	Yes
	<b>Amount:</b>	42.4 (ng/mL)
	<b>% Accuracy:</b>	106.00

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0420012.wiff	<b>Acquisition Date</b>	4/20/2010 7:04:13 PM
<b>Sample Name</b>	WXX100420-57CRI	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	042010.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	<b>Expected RT:</b>	11.9
	<b>Actual RT:</b>	11.9
	<b>Area Counts:</b>	1.71e+005
	<b>Manual Modification</b>	No
	<b>Amount:</b>	33.7 (ng/mL)
	<b>% Accuracy:</b>	84.30

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	<b>Expected RT:</b>	12.1
	<b>Actual RT:</b>	12.1
	<b>Area Counts:</b>	2.69e+006
	<b>Manual Modification</b>	No
	<b>Amount:</b>	15.8 (ng/mL)
	<b>% Accuracy:</b>	79.00

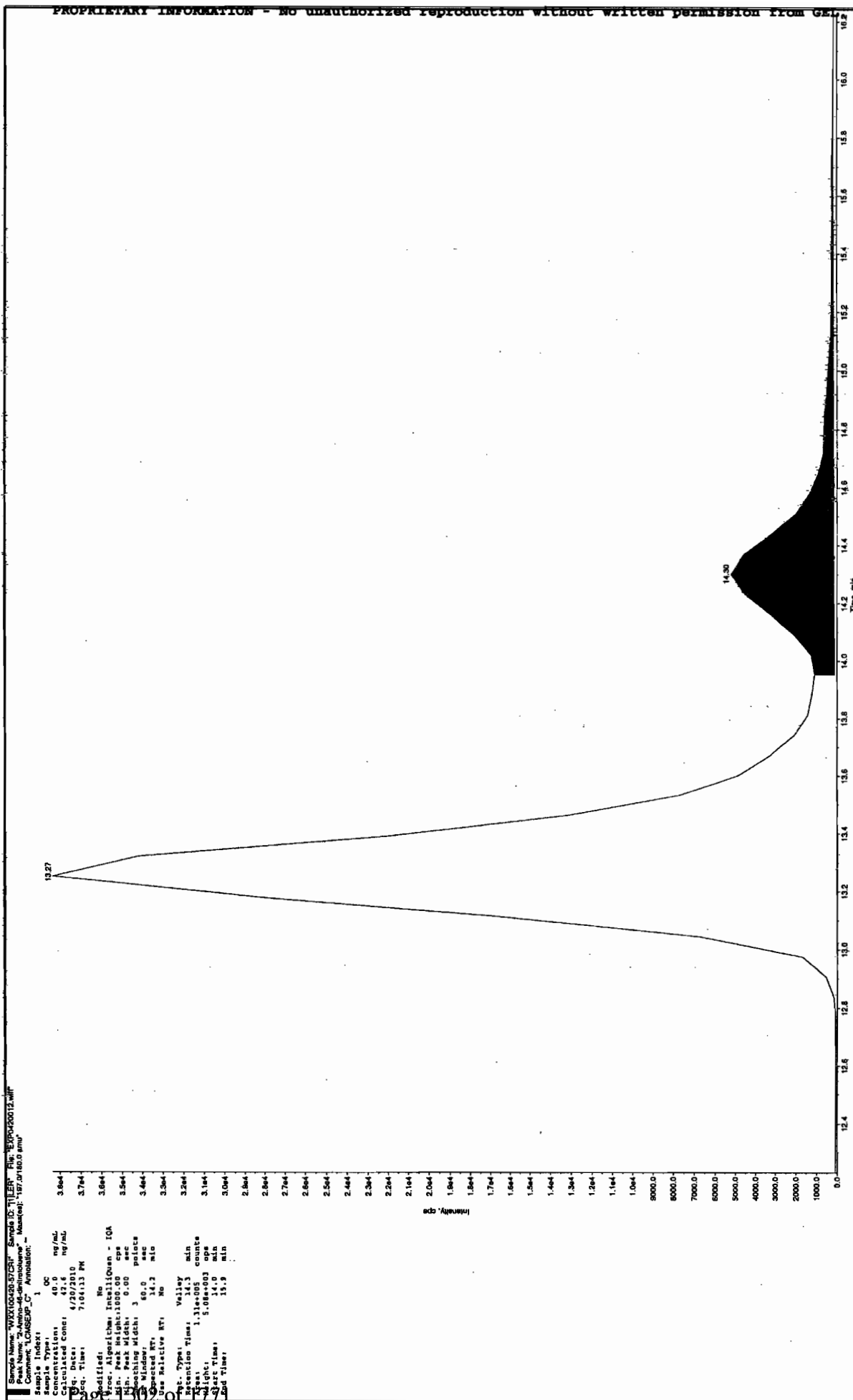
  

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	<b>Expected RT:</b>	14.9
	<b>Actual RT:</b>	15.0
	<b>Area Counts:</b>	5.12e+006
	<b>Manual Modification</b>	No
	<b>Amount:</b>	41.2 (ng/mL)
	<b>% Accuracy:</b>	103.00

	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	<b>Expected RT:</b>	15.6
	<b>Actual RT:</b>	15.6
	<b>Area Counts:</b>	1.82e+006
	<b>Manual Modification</b>	No
	<b>Amount:</b>	44.7 (ng/mL)
	<b>% Accuracy:</b>	112.00

Before Jan 4/28/10



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

after Dec 4/28/10

Sample Name: W10100426-57CR Sample ID: T11ER File: EXP0426012.wiff

Peak Name: 2-Amino-4C-dihydroquinoline base(mz): 197.07180.0 amu

Sample Index: 1

Concentration: 40.0 ng/ml

Calculated Conc: 31.5 ng/ml

Retention Time: 14.2 min

Peak Time: 14.2 min

Peak Relative RT: 14.2 min

Peak Type: Manual

Peak Count: 9,698,004 counts

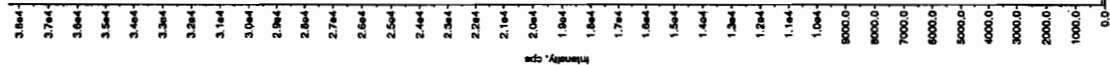
Peak Height: 4.67e+003 cps

Peak Width: 14.0 min

Peak Area: 14.7 min

13.27

14.20



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

Pat 3308041771

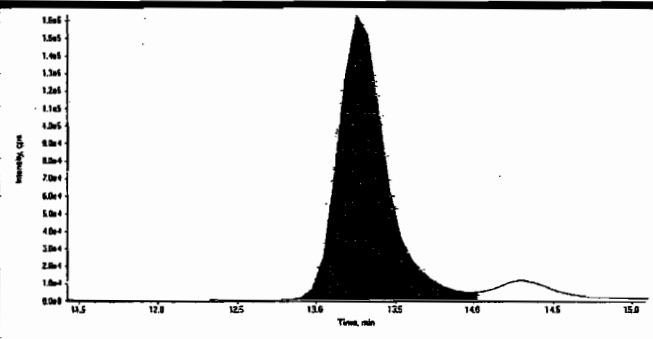


GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

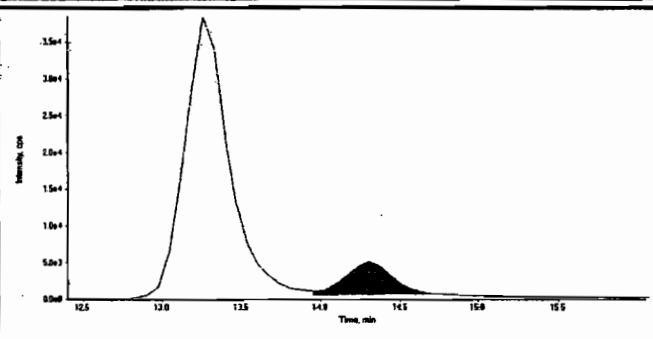
Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0420012.wiff	<b>Acquisition Date</b>	4/20/2010 7:04:13 PM
<b>Sample Name</b>	WXX100420-57CRI	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	042010.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

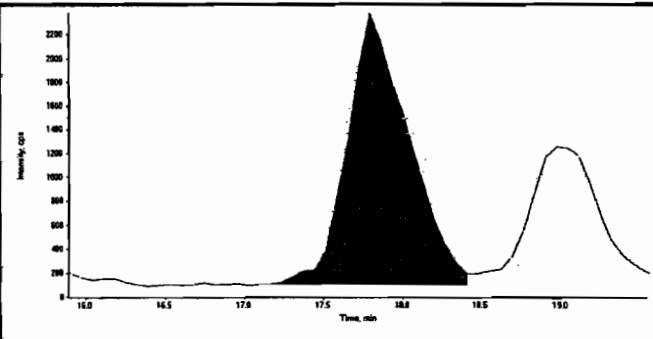
  

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.3
	Actual RT:	13.3
	Area Counts:	3.46e+006
	Manual Modification	No
	Amount:	35.5 (ng/mL)
	% Accuracy:	88.70

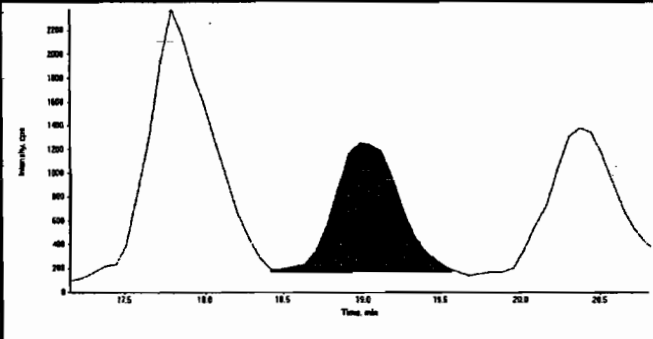
  

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.2
	Actual RT:	14.3
	Area Counts:	9.69e+004
	Manual Modification	Yes
	Amount:	31.5 (ng/mL)
	% Accuracy:	78.80

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	17.7
	Actual RT:	17.8
	Area Counts:	6.28e+004
	Manual Modification	No
	Amount:	51.9 (ng/mL)
	% Accuracy:	130.00

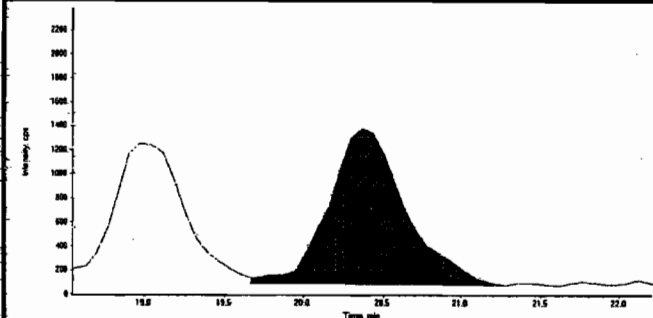
	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	19.0
	Actual RT:	19.0
	Area Counts:	3.17e+004
	Manual Modification	No
	Amount:	38.8 (ng/mL)
	% Accuracy:	97.00

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

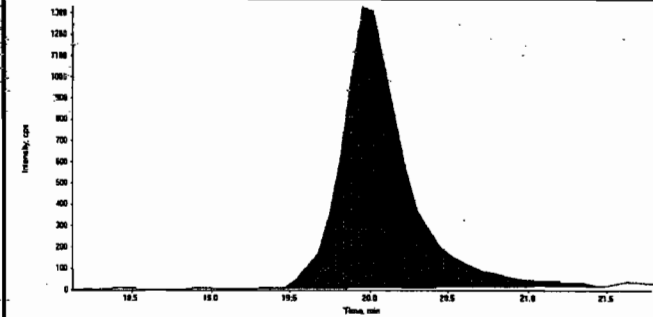
Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0420012.wiff	<b>Acquisition Date</b>	4/20/2010 7:04:13 PM
<b>Sample Name</b>	WXX100420-57CRI	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	042010.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	20.4
	<b>Actual RT:</b>	20.4
	<b>Area Counts:</b>	4.44e+004
	<b>Manual Modification</b>	No
	<b>Amount:</b>	41.3 (ng/mL)
	<b>% Accuracy:</b>	103.00

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	<b>Expected RT:</b>	20.0
	<b>Actual RT:</b>	20.0
	<b>Area Counts:</b>	3.75e+004
	<b>Manual Modification</b>	No
	<b>Amount:</b>	54.2 (ng/mL)
	<b>% Accuracy:</b>	136.00

GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis 04/20/10  
 Time of Injection 1904  
 Standard Number WXX100420-57CRI  
 Data File EXP0420012a

HMX	115.0
RDX	109.0
135-Trinitrobenzene	99.0
13-Dinitrobenzene	106.0
Tetryl	115.0
246-Trinitrotoluene	106.0
Nitrobenzene	84.3
34-dinitrotoluene	79.0
26-dinitrotoluene	103.0
24-dinitrotoluene	112.0
4-Amino-26-dinitrotoluene	88.7
2-Amino-46-dinitrotoluene	78.8
2-Nitrotoluene	130.0
4-Nitrotoluene	97.0
3-Nitrotoluene	103.0
PETN	136.0

TOTAL

1661.8

*Amn 04/29/10*

AVERAGE

103.9

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

*See  
4/28/10*

7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2199

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0420023.wiff

Analysis Date: 20-APR-10 23:49

LCMSMS ID: 1189

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	631	105	
2,4,6-Trinitrotoluene	600	567	95	
2,4-Dinitrotoluene	600	595	99	
2,6-Dinitrotoluene	600	555	93	
2-Amino-4,6-dinitrotoluene	600	603	101	
3,4-Dinitrotoluene	300	288	96	
4-Amino-2,6-dinitrotoluene	600	694	116	
HMX	600	610	102	
Nitrobenzene	600	650	108	
PETN	600	624	104	
RDX	600	748	125	
Tetryl	600	664	111	
m-Dinitrobenzene	600	599	100	
m-Nitrotoluene	600	528	88	
o-Nitrotoluene	600	583	97	
p-Nitrotoluene	600	573	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%

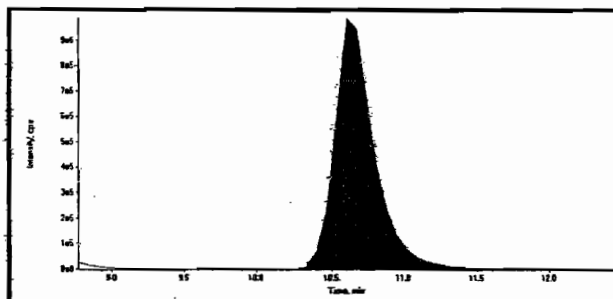
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

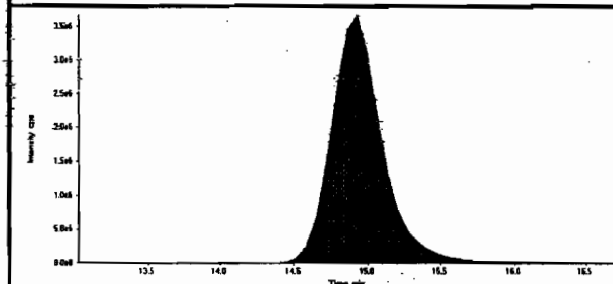
Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

Data File	EXP0420023.wiff	Acquisition Date	4/20/2010 11:49:37 PM
Sample Name	WXX100420-56CCV	Acquisition Method	8321.dam
Batch/Dilution/Analyst	1 LER	Result Table	042010.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



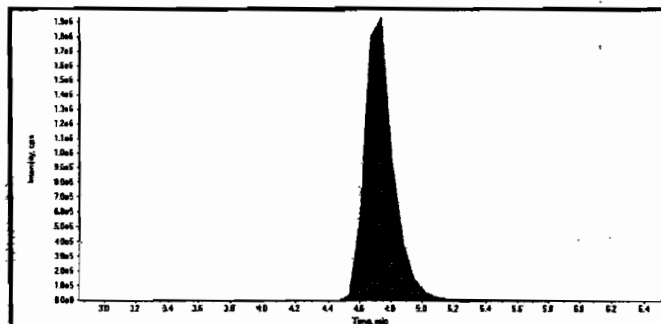
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.60
Actual RT:	10.60
Area Counts:	19000000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries

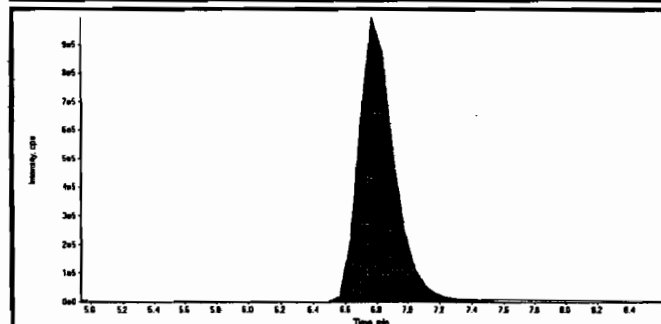


Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.90
Actual RT:	14.90
Area Counts:	89500000.00
Manual Modification	Yes
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries



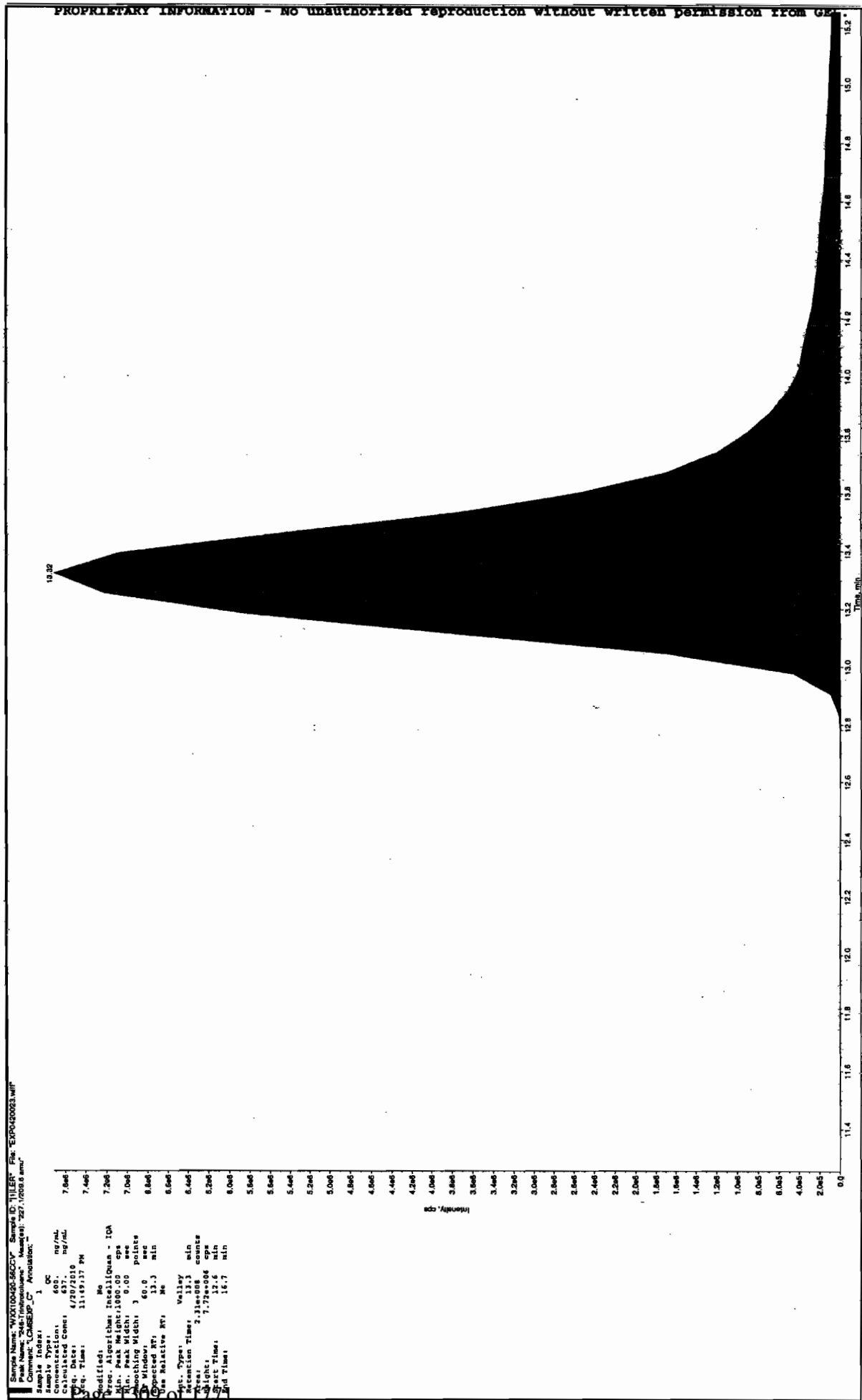
Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.67
Actual RT:	4.74
Area Counts:	2.48e+007
Manual Modification	No
Amount:	610. (ng/mL)
% Accuracy:	102.00



Compound Name:	RDY (267.0/46.1 amu)
Expected RT:	6.77
Actual RT:	6.77
Area Counts:	1.57e+007
Manual Modification	No
Amount:	748. (ng/mL)
% Accuracy:	125.00

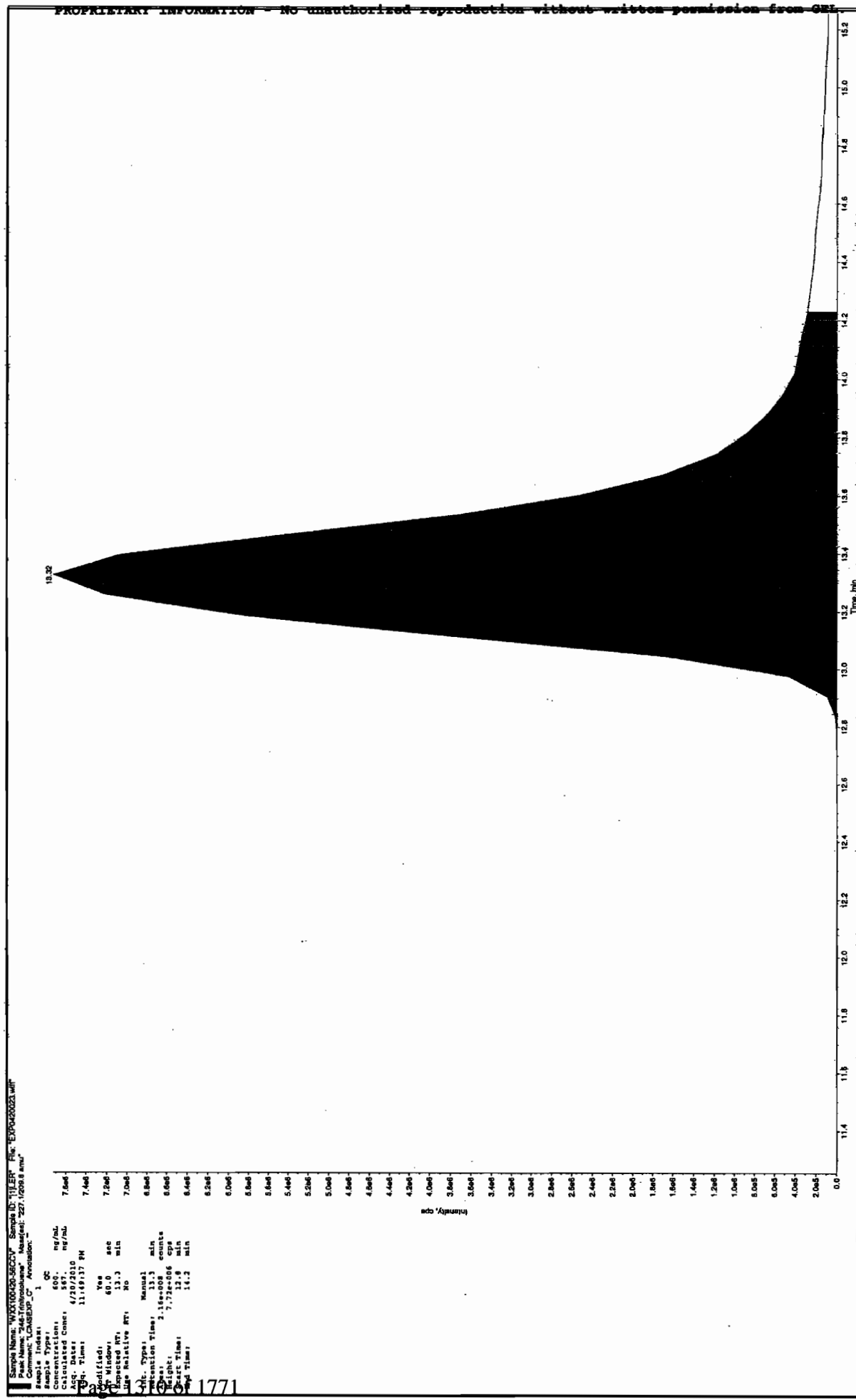
*Jan 4/29/10*  
*4/29/10*

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\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

after Jan 4/28/10



Sample Name: W00100205-56207 Sample ID: 11111111 File: E004202023.wiff  
 Acquisition Date: 4/20/2010 Acquisition Time: 11:49:37 AM  
 Comment: LCMS/MS C7 Analysis: 1

Sample Index: 1  
 Sample Type: QC  
 Sample Concentration: 500.00 ng/mL  
 Sample Volume: 50.00 µL  
 Acq. Date: 4/20/2010  
 Acq. Time: 11:49:37 AM  
 Modified: Yes  
 Inj. Volume: 5.00 µL  
 Inj. Concentration: 100.00 ng/mL  
 Expected RT: 13.3 min  
 Observed RT: 13.32 min  
 Retention Time: 13.32 min  
 Peak Width: 0.10 min  
 Peak Area: 1.1e+006 counts  
 Peak Height: 6.5e+004 cps  
 Peak Time: 13.32 min  
 Peak Width: 0.10 min

\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0420023.wiff	<b>Acquisition Date</b>	4/20/2010 11:49:37 PM
<b>Sample Name</b>	WXX100420-56CCV	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	042010.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	<b>Expected RT:</b>	9.07
	<b>Actual RT:</b>	9.07
	<b>Area Counts:</b>	1.32e+008
	<b>Manual Modification</b>	No
	<b>Amount:</b>	631. (ng/mL)
	<b>% Accuracy:</b>	105.00

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	<b>Expected RT:</b>	10.7
	<b>Actual RT:</b>	10.7
	<b>Area Counts:</b>	5.85e+007
	<b>Manual Modification</b>	No
	<b>Amount:</b>	599. (ng/mL)
	<b>% Accuracy:</b>	99.80

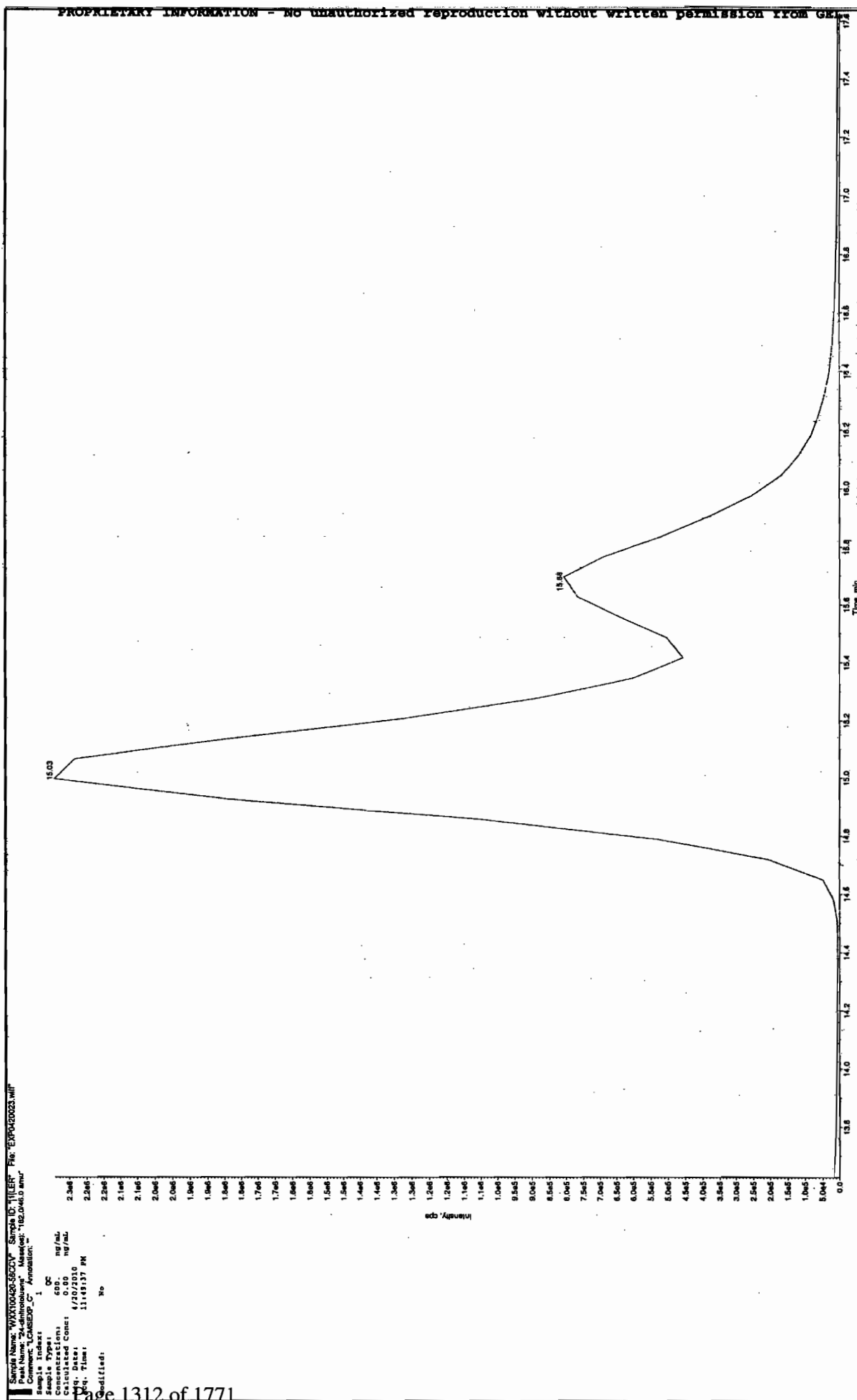
	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	<b>Expected RT:</b>	10.8
	<b>Actual RT:</b>	10.8
	<b>Area Counts:</b>	5.25e+007
	<b>Manual Modification</b>	No
	<b>Amount:</b>	664. (ng/mL)
	<b>% Accuracy:</b>	111.00

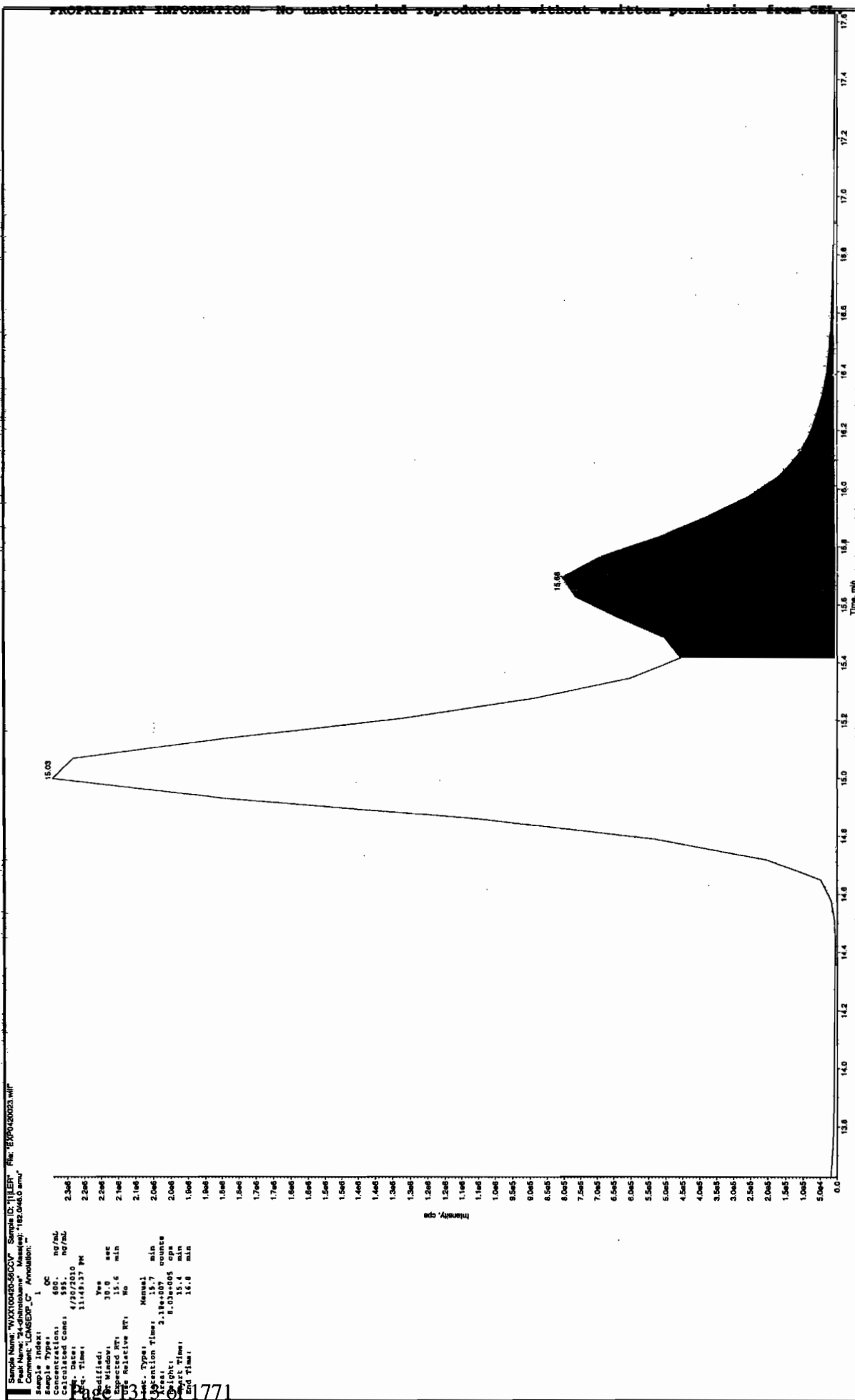
	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	<b>Expected RT:</b>	13.3
	<b>Actual RT:</b>	13.3
	<b>Area Counts:</b>	2.16e+008
	<b>Manual Modification</b>	Yes
	<b>Amount:</b>	567. (ng/mL)
	<b>% Accuracy:</b>	94.50



Before Jan 4/28/10



after Jan 4/28/10



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0420023.wiff	<b>Acquisition Date</b>	4/20/2010 11:49:37 PM
<b>Sample Name</b>	WXX100420-56CCV	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	042010.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	11.9
	Actual RT:	11.9
	Area Counts:	2.75e+006
	Manual Modification	No
	Amount:	650. (ng/mL)
	% Accuracy:	108.00

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.1
	Actual RT:	12.2
	Area Counts:	3.45e+007
	Manual Modification	No
	Amount:	288. (ng/mL)
	% Accuracy:	95.80

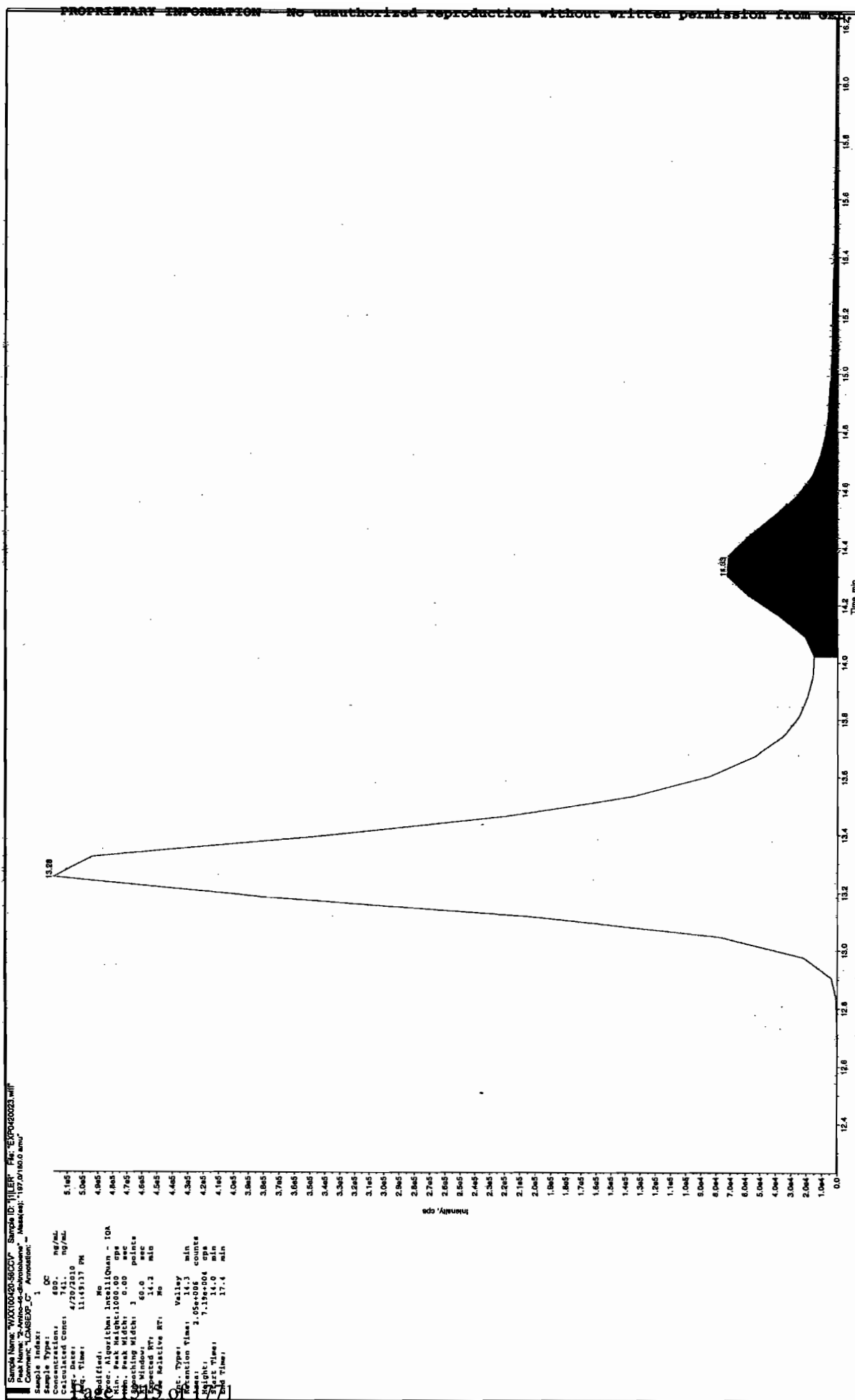
  

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	14.9
	Actual RT:	15.0
	Area Counts:	5.45e+007
	Manual Modification	No
	Amount:	555. (ng/mL)
	% Accuracy:	92.50

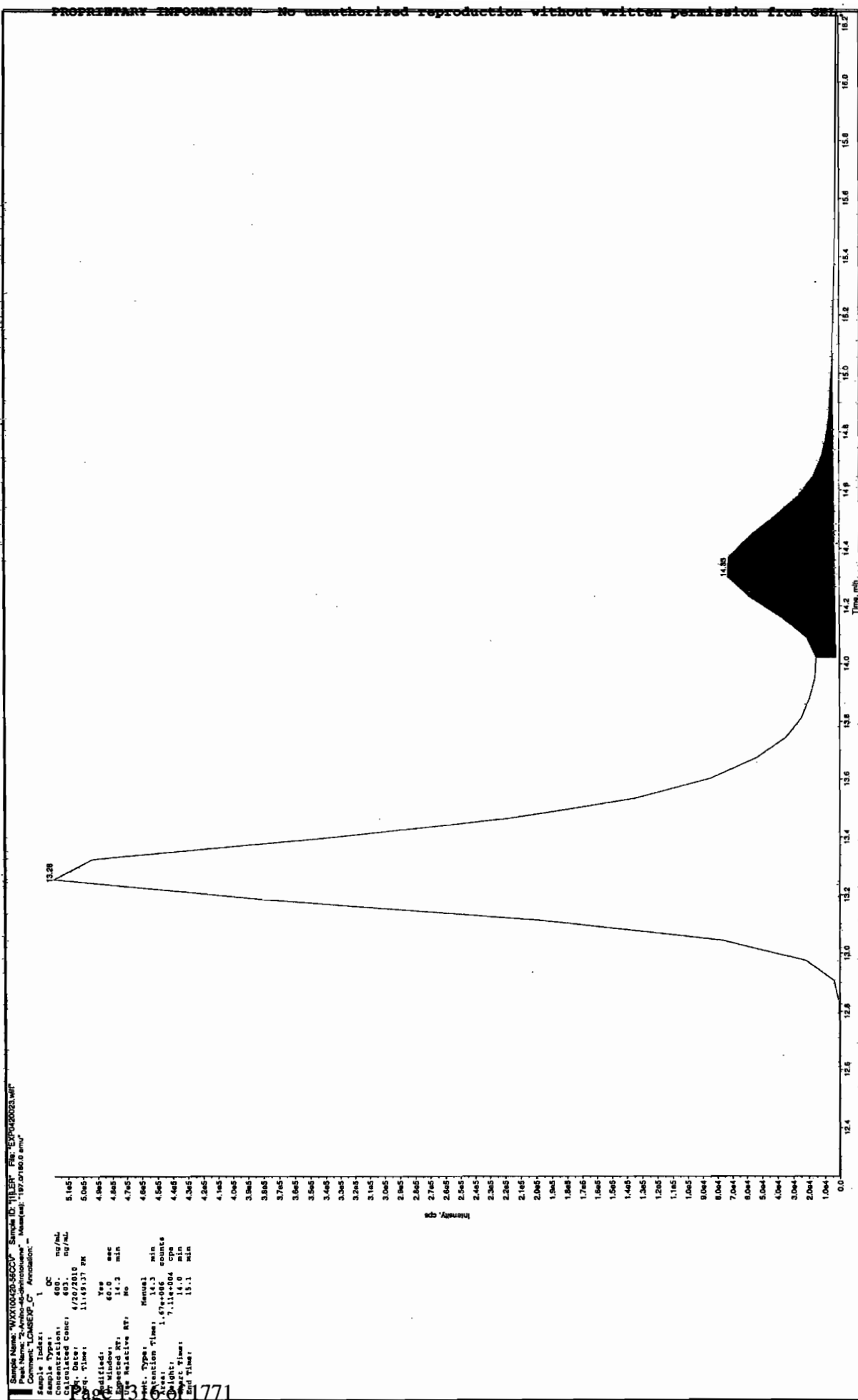
	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.6
	Actual RT:	15.7
	Area Counts:	2.18e+007
	Manual Modification	Yes
	Amount:	595. (ng/mL)
	% Accuracy:	99.10

Before Jan 4/28/10



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

after Jan 4/28/10



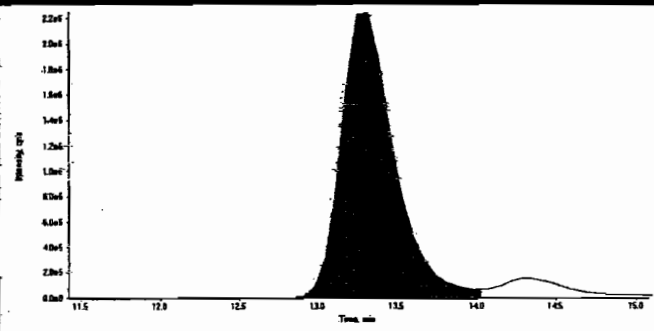
\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

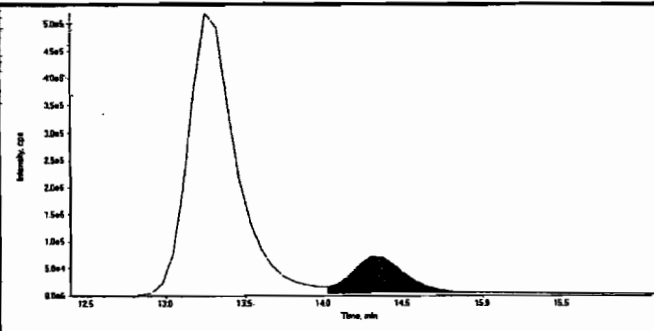
Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0420023.wiff	<b>Acquisition Date</b>	4/20/2010 11:49:37 PM
<b>Sample Name</b>	WXX100420-56CCV	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 1 LER	<b>Result Table</b>	042010.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

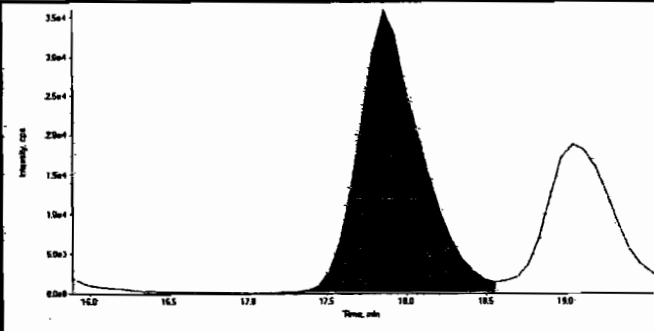
  

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.3
	Actual RT:	13.3
	Area Counts:	5.29e+007
	Manual Modification	No
	Amount:	694. (ng/mL)
	% Accuracy:	116.00

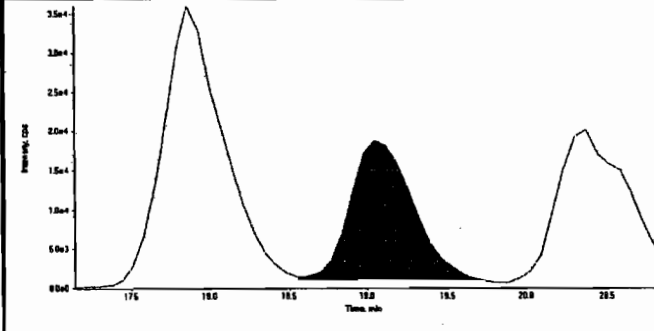
  

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.2
	Actual RT:	14.3
	Area Counts:	1.67e+006
	Manual Modification	Yes
	Amount:	603. (ng/mL)
	% Accuracy:	101.00

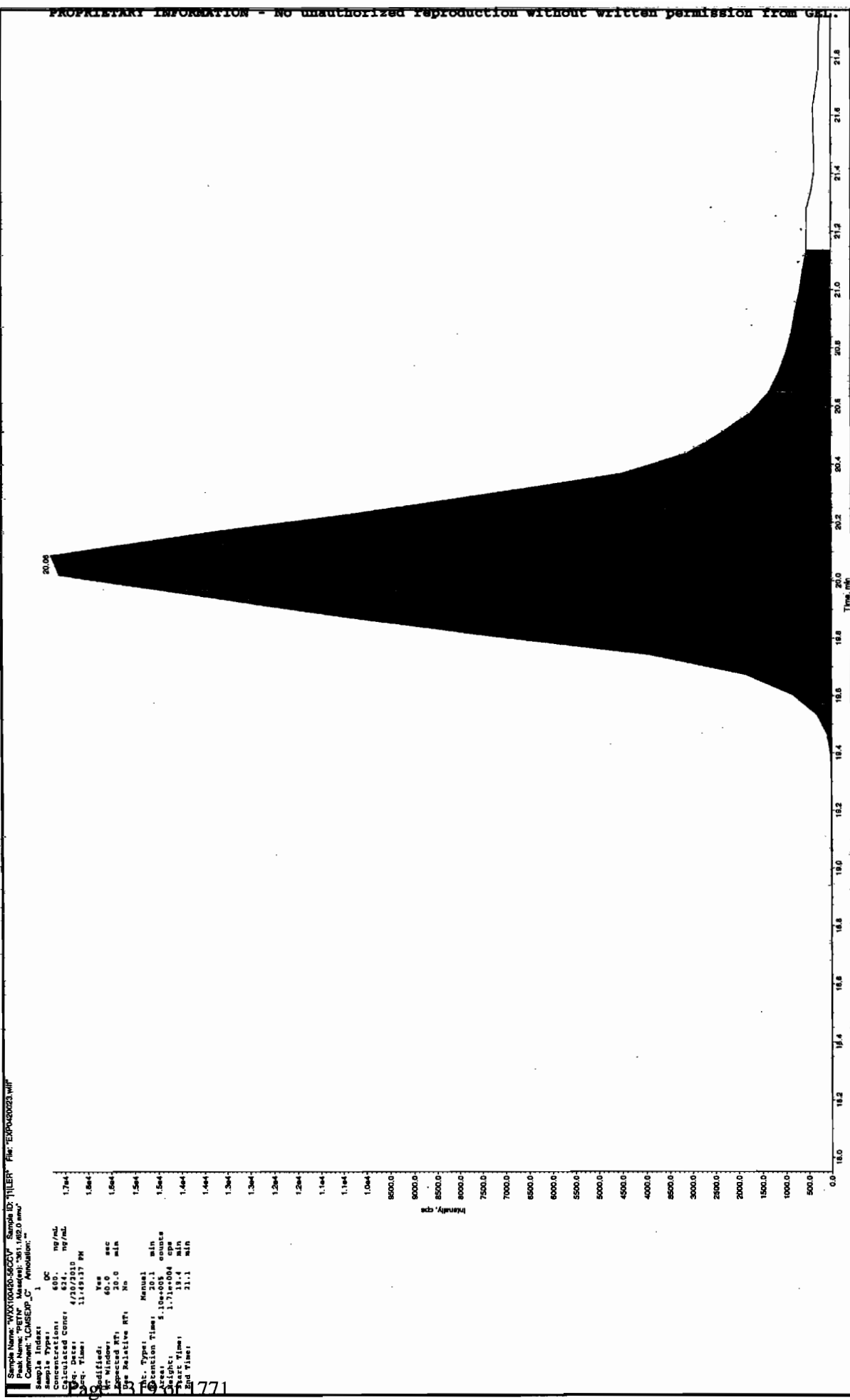
	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	17.7
	Actual RT:	17.9
	Area Counts:	9.70e+005
	Manual Modification	No
	Amount:	583. (ng/mL)
	% Accuracy:	97.10

	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	19.0
	Actual RT:	19.0
	Area Counts:	4.88e+005
	Manual Modification	No
	Amount:	573. (ng/mL)
	% Accuracy:	95.50



after den 4/19/10



Sample Name: WXX100420-5602V Sample ID: TILLER File: EXP042023.wif

Peak Name: "PRTM" Mass(es): 361.162.0 amu

Comment: LCMSMS\_C Annotation:

Sample Name: WXX100420-5602V

Sample Type: 1 QC

Concentration: 600. ng/mL

Calculated Conc: 624. ng/mL

Acq. Date: 4/19/2010

Acq. Time: 11:49:17 PM

Modified: Yes

Acquisition Time: 60.0 sec

Expected RT: 20.0 min

Use Relative RT: No

Alt. Type: Manual

Acquisition Time: 1.564 min

Area: 5.10e+005 counts

Height: 1.71e+004 cps

Start Time: 18.4 min

End Time: 21.1 min

\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

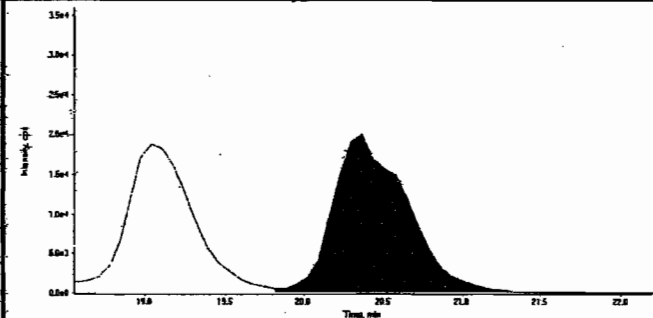


GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

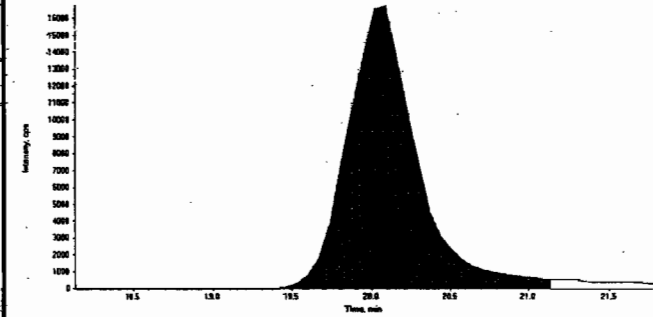
Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0420023.wiff	<b>Acquisition Date</b>	4/20/2010 11:49:37 PM
<b>Sample Name</b>	WXX100420-56CCV	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	042010.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	20.4
	<b>Actual RT:</b>	20.4
	<b>Area Counts:</b>	6.50e+005
	<b>Manual Modification</b>	No
	<b>Amount:</b>	528. (ng/mL)
	<b>% Accuracy:</b>	88.00

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	<b>Expected RT:</b>	20.0
	<b>Actual RT:</b>	20.1
	<b>Area Counts:</b>	5.10e+005
	<b>Manual Modification</b>	Yes
	<b>Amount:</b>	624. (ng/mL)
	<b>% Accuracy:</b>	104.00

# GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis 04/20/10  
 Time of Injection 2349  
 Standard Number WXX100420-56CCV  
 Data File EXP0420023a

HMX	102.0
RDX	125.0
135-Trinitrobenzene	105.0
13-Dinitrobenzene	99.8
Tetryl	111.0
246-Trinitrotoluene	94.5
Nitrobenzene	108.0
34-dinitrotoluene	95.8
26-dinitrotoluene	92.5
24-dinitrotoluene	99.1
4-Amino-26-dinitrotoluene	116.0
2-Amino-46-dinitrotoluene	101.0
2-Nitrotoluene	97.1
4-Nitrotoluene	95.5
3-Nitrotoluene	88.0
PETN	104.0

TOTAL

1634.3

dhm 04/29/10

AVERAGE

102.1

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

Jan  
4/28/10

7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2199

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0420025.wiff

Analysis Date: 21-APR-10 00:41

LCMSMS ID: 1189

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	40.3	101	
2,4,6-Trinitrotoluene	40	40.1	100	
2,4-Dinitrotoluene	40	38.9	97	
2,6-Dinitrotoluene	40	37.2	93	
2-Amino-4,6-dinitrotoluene	40	38.7	97	
3,4-Dinitrotoluene	20	15.7	79	
4-Amino-2,6-dinitrotoluene	40	40	100	
HMX	40	46.7	117	
Nitrobenzene	40	35.1	88	
PETN	40	56.8	142	
RDX	40	50.2	126	
Tetryl	40	49.5	124	
m-Dinitrobenzene	40	41.7	104	
m-Nitrotoluene	40	42.4	106	
o-Nitrotoluene	40	51	127	
p-Nitrotoluene	40	39.3	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%

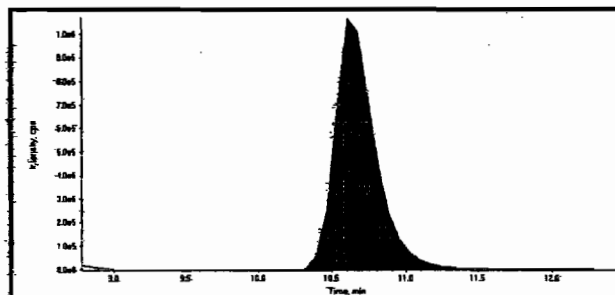
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

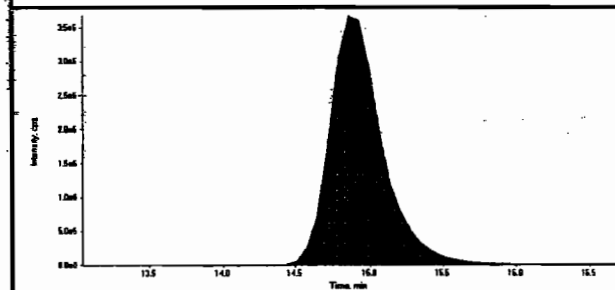
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

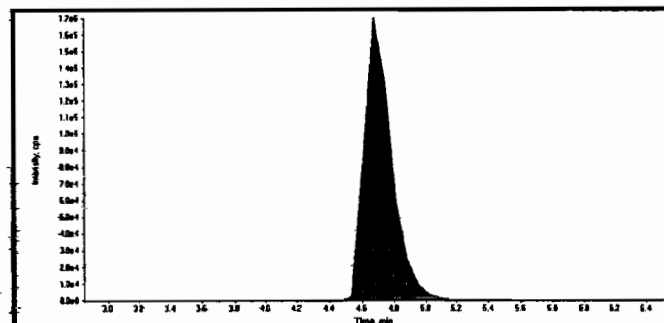
Data File	EXP0420025.wiff	Acquisition Date	4/21/2010 12:41:22 AM
Sample Name	WXX100420-57CRI	Acquisition Method	8321.dam
Batch Dilution Analyst	1 LER	Result Table	042010.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



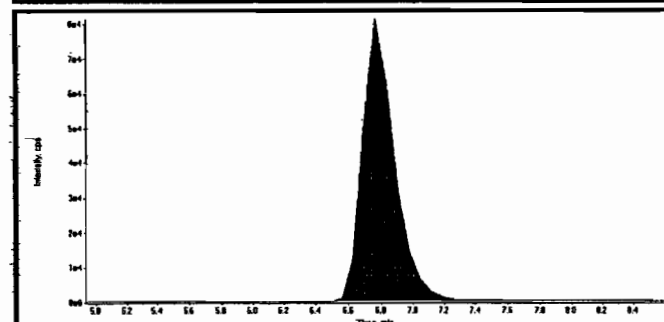
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.60
Actual RT:	10.60
Area Counts:	20300000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.90
Actual RT:	14.90
Area Counts:	90500000.00
Manual Modification	Yes
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



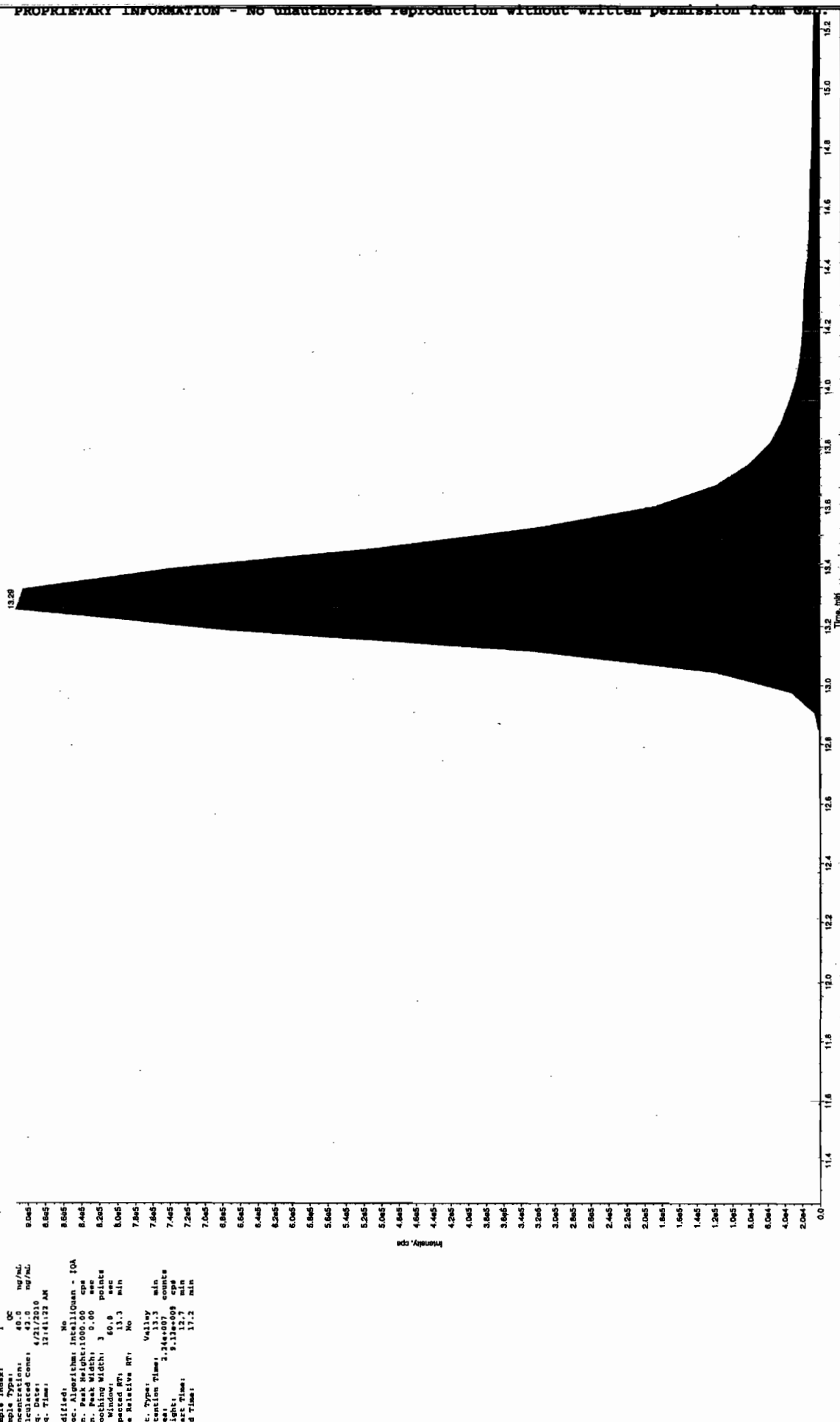
Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.67
Actual RT:	4.67
Area Counts:	2.03e+006
Manual Modification	No
Amount:	46.7 (ng/mL)
% Accuracy:	117.00



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.77
Actual RT:	6.77
Area Counts:	1.13e+006
Manual Modification	No
Amount:	50.2 (ng/mL)
% Accuracy:	126.00

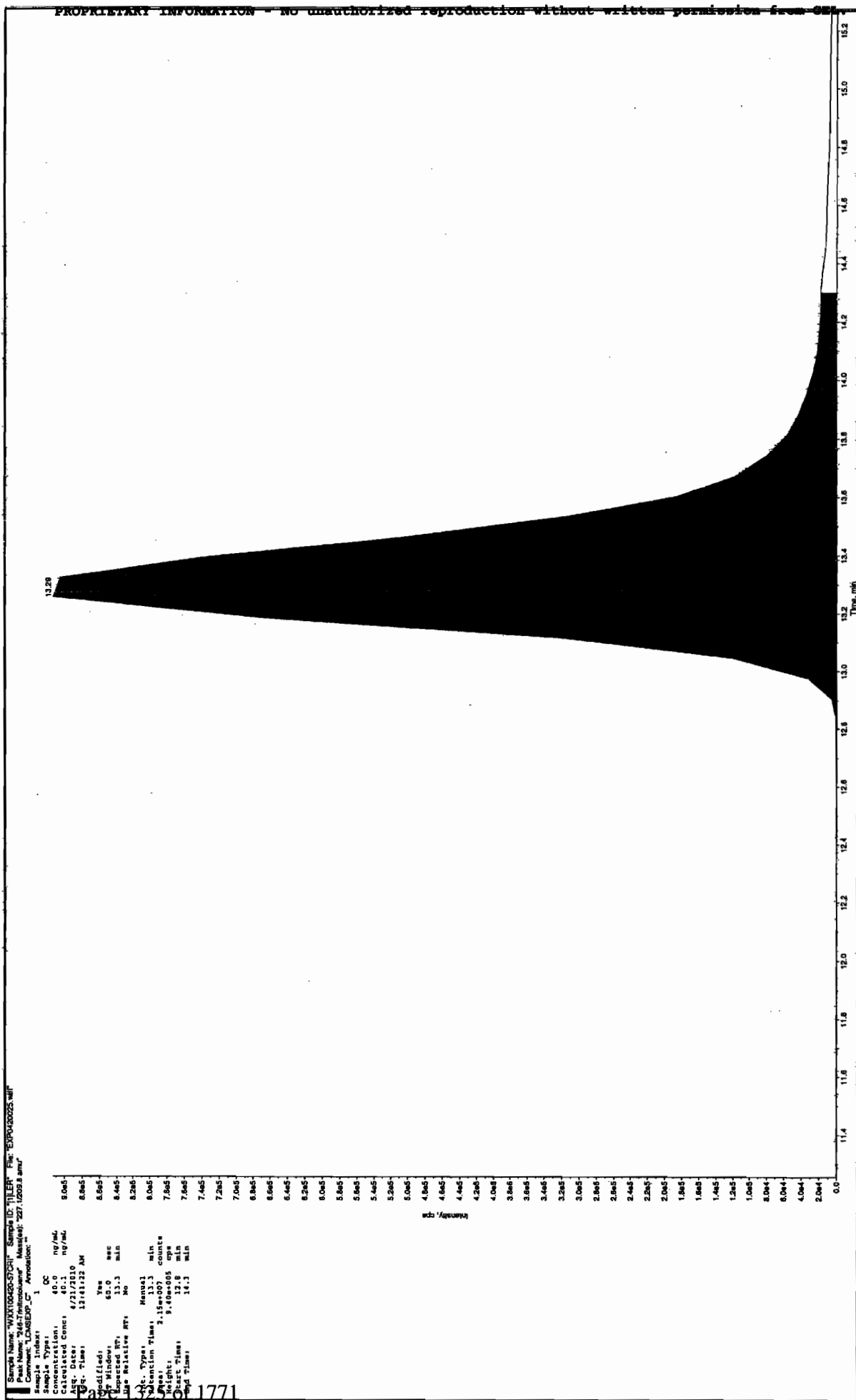
*Handwritten:* JLR 4/29/10  
HMX 04/29/10

Sample Name: "WXX100420-57CA1" Sample ID: "11LER" File: "EXP0420025.wif"  
Peak Name: "248-Trinitroluene" Mass(es): "227.1/208.8 amu"



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

after Jan 4/28/10



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0420025.wiff	<b>Acquisition Date</b>	4/21/2010 12:41:22 AM
<b>Sample Name</b>	WXX100420-57CRI	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	042010.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	<b>Expected RT:</b>	9.07
	<b>Actual RT:</b>	9.07
	<b>Area Counts:</b>	1.22e+007
	<b>Manual Modification</b>	No
	<b>Amount:</b>	40.3 (ng/mL)
	<b>% Accuracy:</b>	101.00

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	<b>Expected RT:</b>	10.7
	<b>Actual RT:</b>	10.7
	<b>Area Counts:</b>	4.35e+006
	<b>Manual Modification</b>	No
	<b>Amount:</b>	41.7 (ng/mL)
	<b>% Accuracy:</b>	104.00

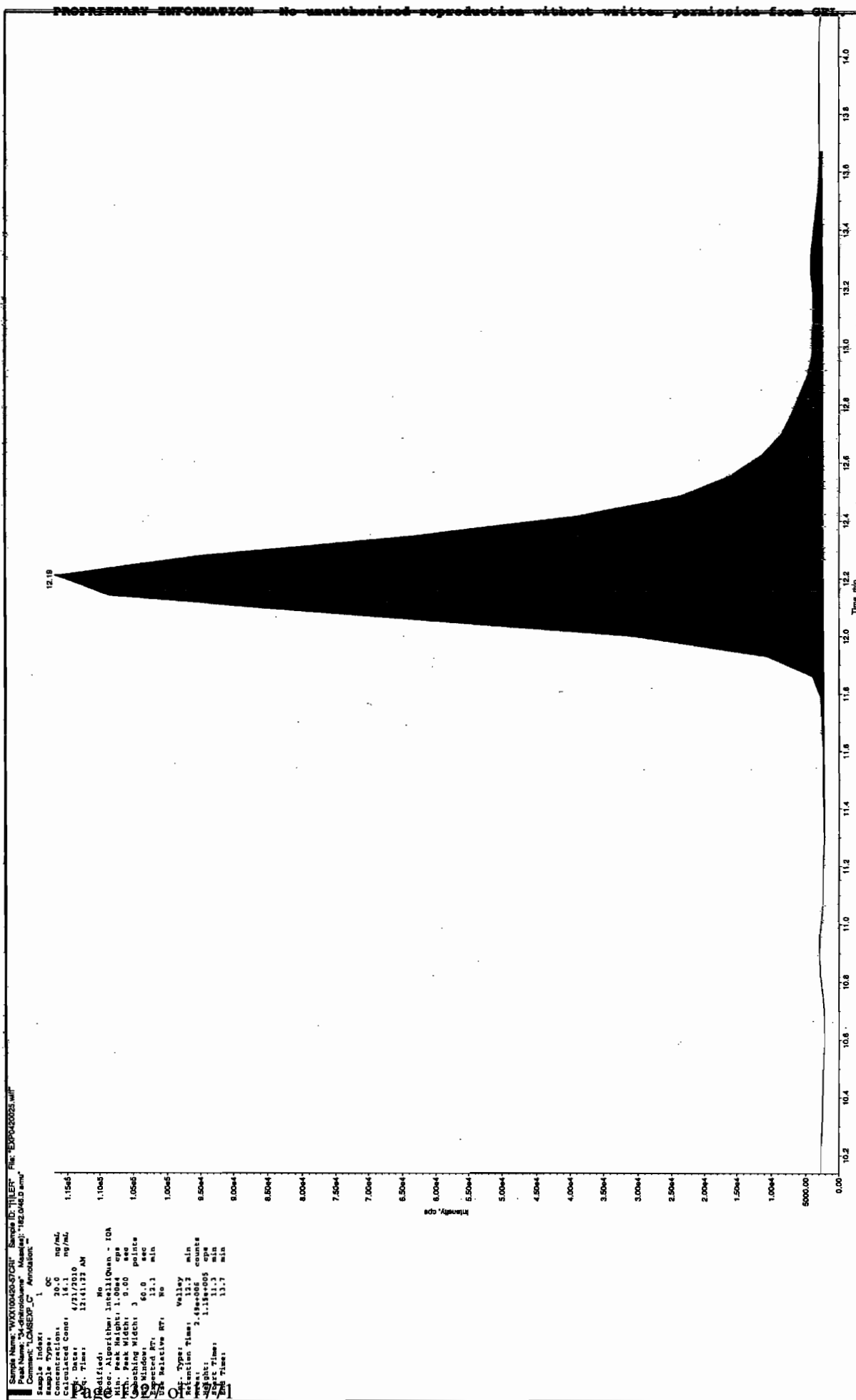
  

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	<b>Expected RT:</b>	10.8
	<b>Actual RT:</b>	10.9
	<b>Area Counts:</b>	4.18e+006
	<b>Manual Modification</b>	No
	<b>Amount:</b>	49.5 (ng/mL)
	<b>% Accuracy:</b>	124.00

	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	<b>Expected RT:</b>	13.3
	<b>Actual RT:</b>	13.3
	<b>Area Counts:</b>	2.15e+007
	<b>Manual Modification</b>	Yes
	<b>Amount:</b>	40.1 (ng/mL)
	<b>% Accuracy:</b>	100.00

Before Scan 42810



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3



Sample Name: "WXX100420-57CR1" Sample ID: "11LER" File: "EXP0420025.wit"  
Peak Name: "34-dinitroisug" Mass(es): "162.046 0 amu"  
Comment: "LCMSEXP\_C Annotation"

Sample Name: "WXX100420-57C1" Sample ID: "11ER"  
Peak Name: "34-dinitrotoluene" Mass(es): "162.0/46.0 amu"  
Comment: "LCM5EXP\_C" Annotation: "

Sample Index:	1	QC
Sample Type:		
Concentration:	20.0	ng/ml

Concentration:	15.7	ng/mL
Calculated Conc:	15.7	ng/mL
Lab. Date:	4/21/2010	

Req. Time:	12:41:22 AM
Modified:	Yes 1:10:5-

RT Window:	60.0 sec
Expected RT:	12.1 min

Use Relative NTI	NO	Manual
3		
Rel. Type:		Manual
		1.05e5

```

Retention time: 12.2 min
Area: 7.44e+006 counts
Height: 1.15e+005 cps
1.00e5

```

Start Time:	11.6 min
End Time:	13.1 min

77 9.50e4

19.0004

1  
2  
3  
4

1000

8.00e4

10

1.000

7,000-

Concentration of inhibitor	Rate of polymerization
0	0.50
0.001	0.35
0.002	0.25
0.003	0.20
0.004	0.15

5

temp, °C	viscosity, cp
20	~1000
40	~2000
60	~3000
70	~8000
80	~14000
90	~14000
100	~14000

Intensity

---

5.00e4

4.50e4

1

4,000

3.50e4

3.6e4

1

2.50e4

2.00e4

1

1.50e4

1

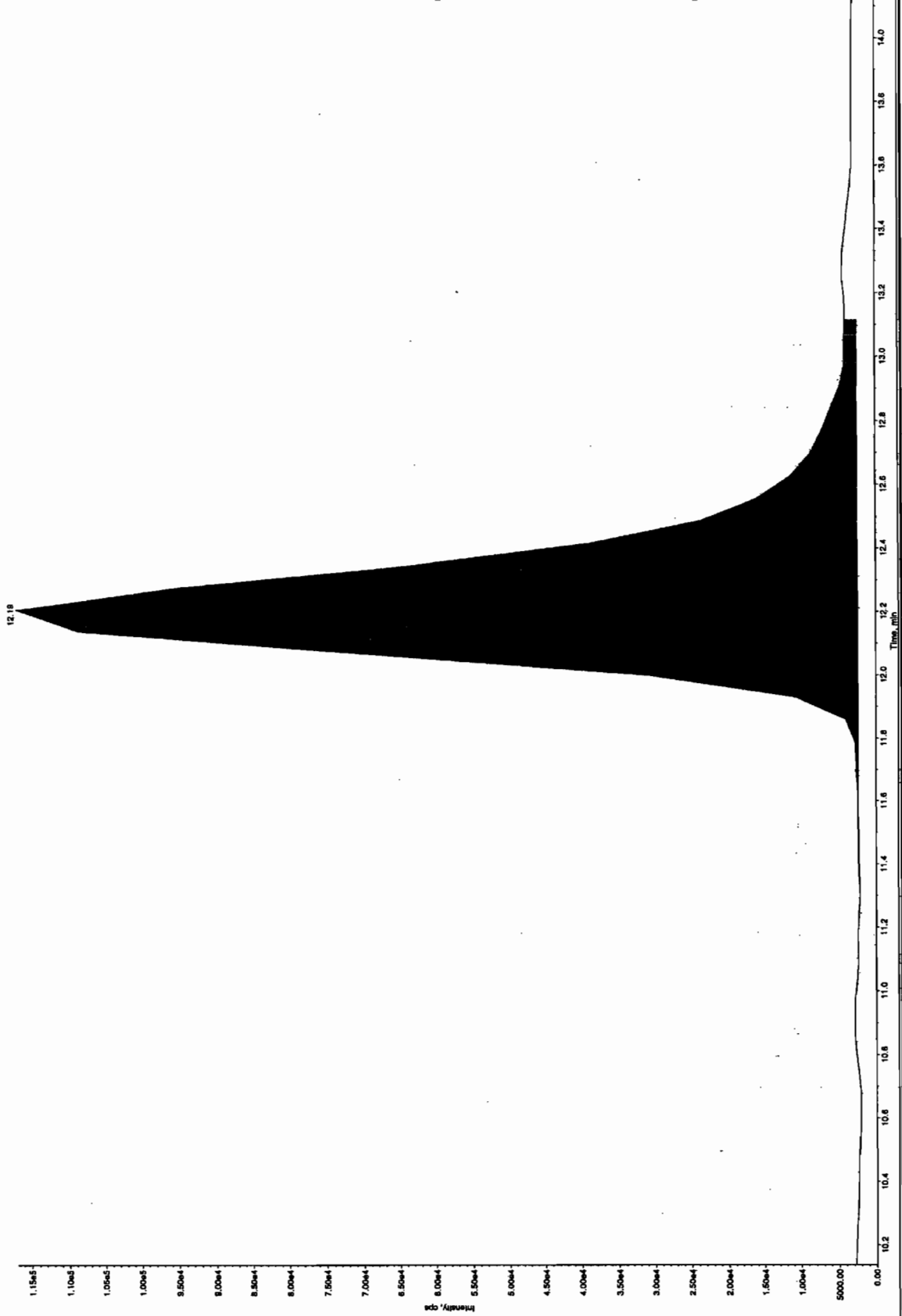
5000.00

Group	Percentage (%)
All respondents	8.5
Non-unionized workers	9.5
Unionized workers	7.5
Self-employed	10.0

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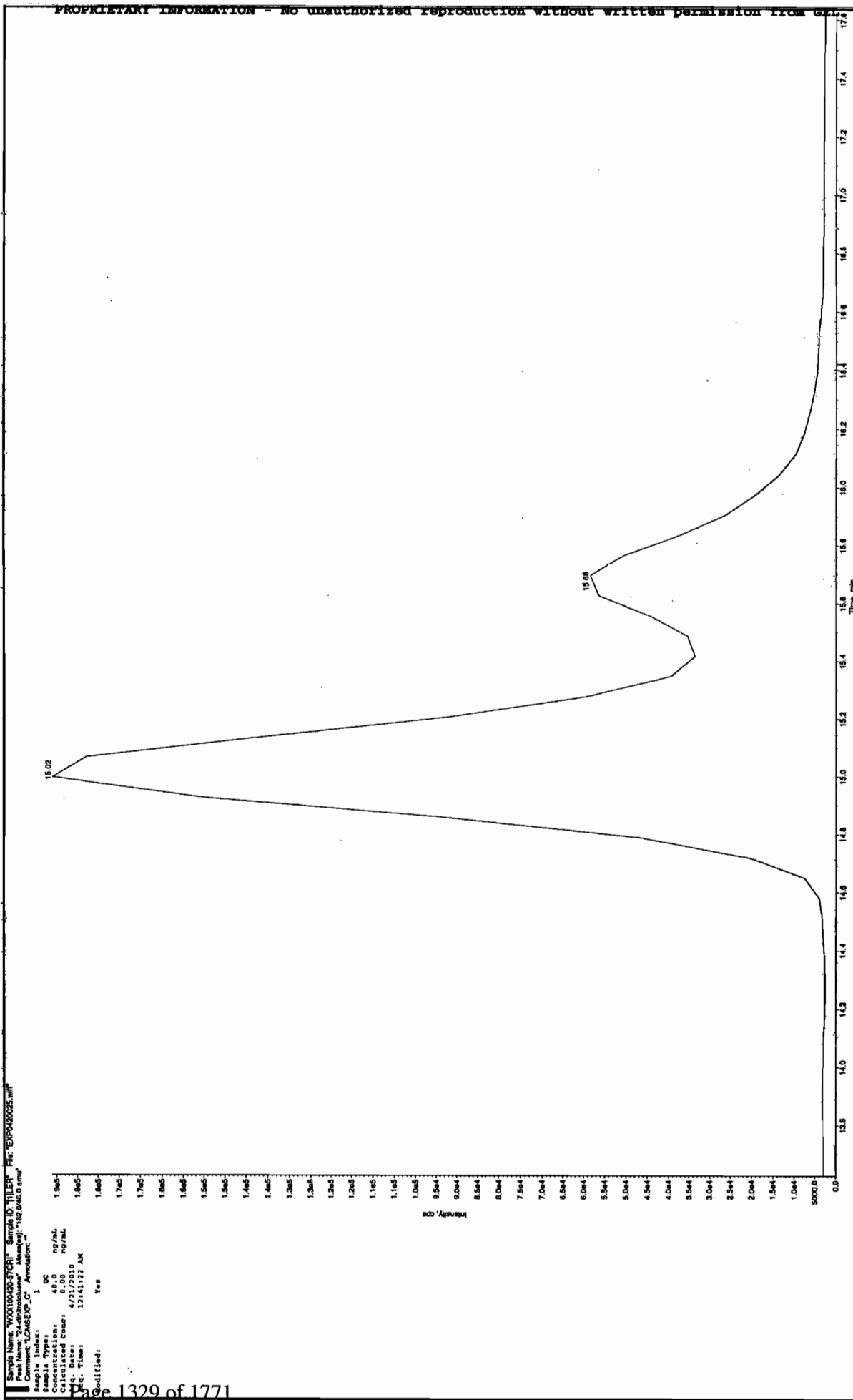
\*GEL SOP GL-OA-E:

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

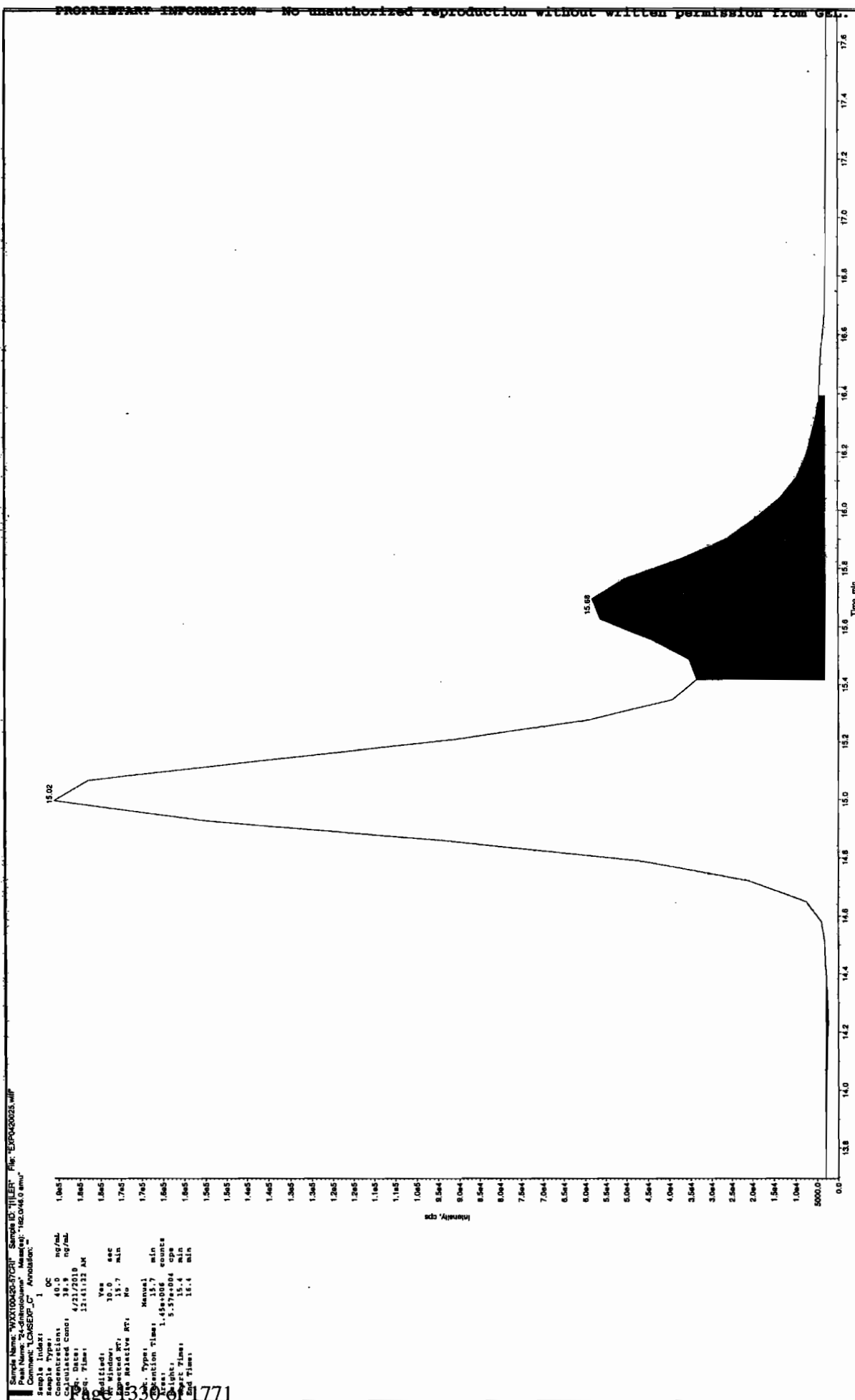


\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

Before Jan 4/8/10



after dec 4/28/10



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0420025.wiff	<b>Acquisition Date</b>	4/21/2010 12:41:22 AM
<b>Sample Name</b>	WXX100420-57CRI	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	042010.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	11.9
	Actual RT:	11.9
	Area Counts:	1.58e+005
	Manual Modification	No
	Amount:	35.1 (ng/mL)
	% Accuracy:	87.90

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.1
	Actual RT:	12.2
	Area Counts:	2.44e+006
	Manual Modification	Yes
	Amount:	15.7 (ng/mL)
	% Accuracy:	78.60

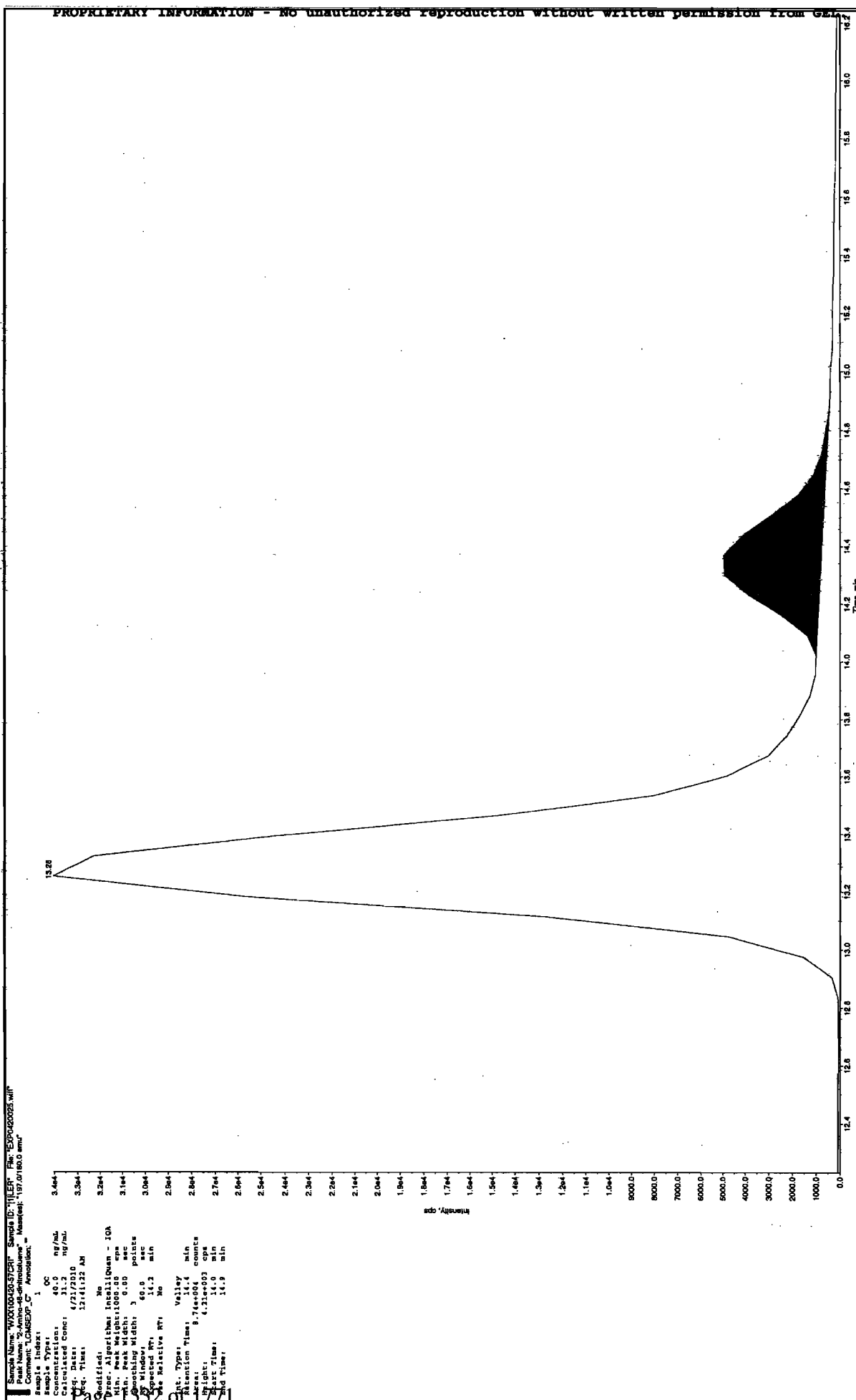
  

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	14.9
	Actual RT:	15.0
	Area Counts:	4.23e+006
	Manual Modification	No
	Amount:	37.2 (ng/mL)
	% Accuracy:	92.90

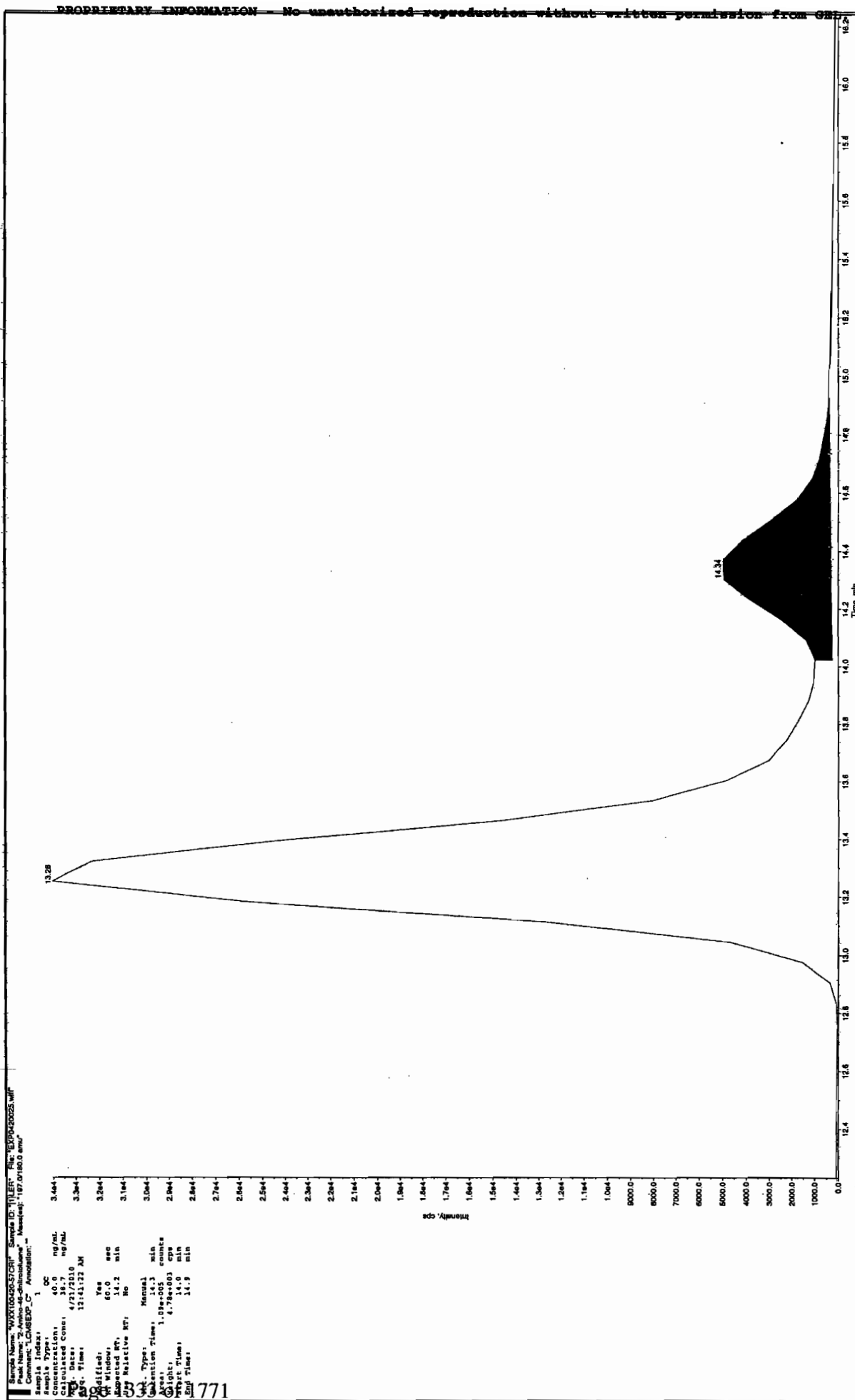
	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.7
	Actual RT:	15.7
	Area Counts:	1.45e+006
	Manual Modification	Yes
	Amount:	38.9 (ng/mL)
	% Accuracy:	97.30

Before Sea 4/28/00



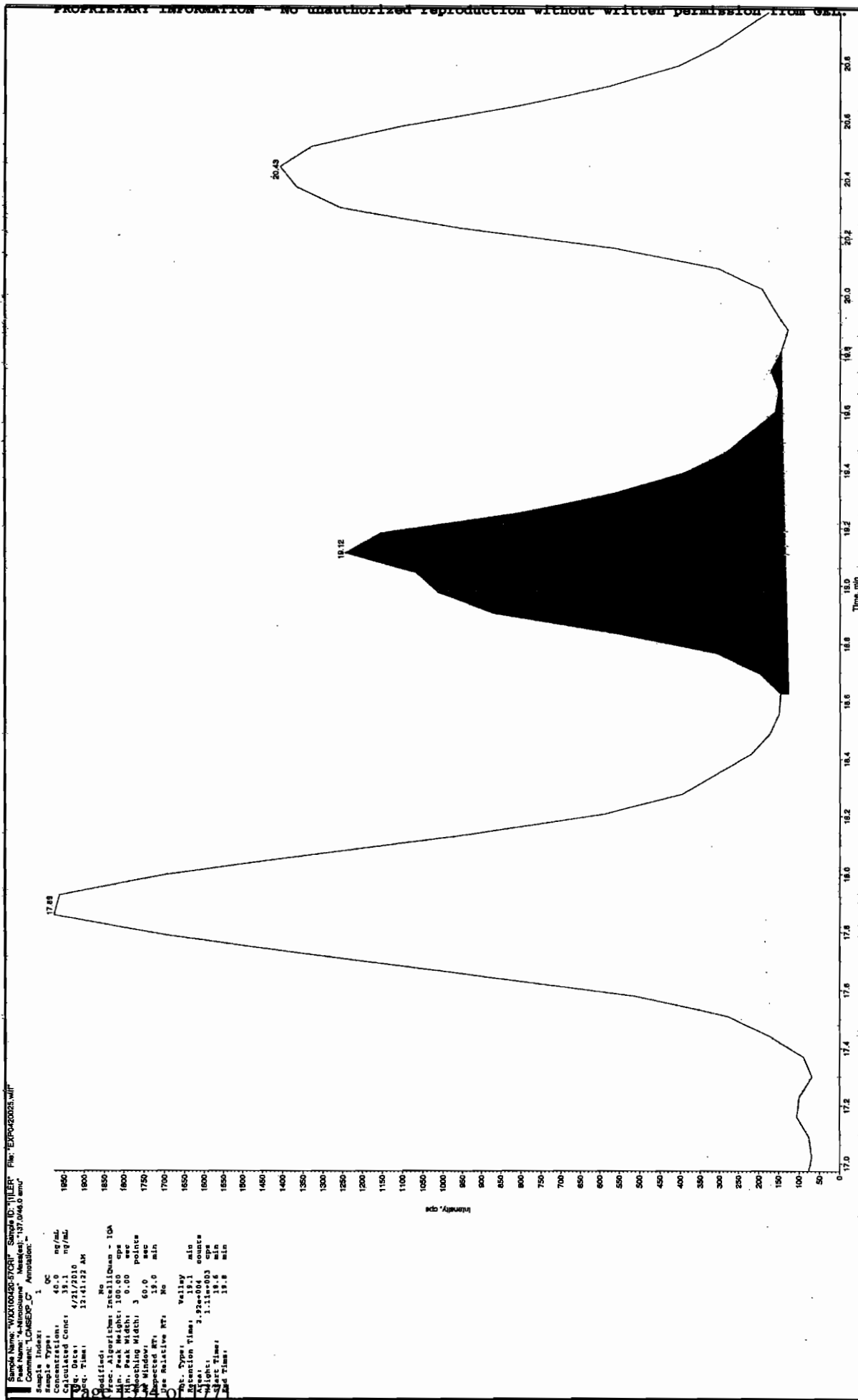
\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

after Jan 4/12/10



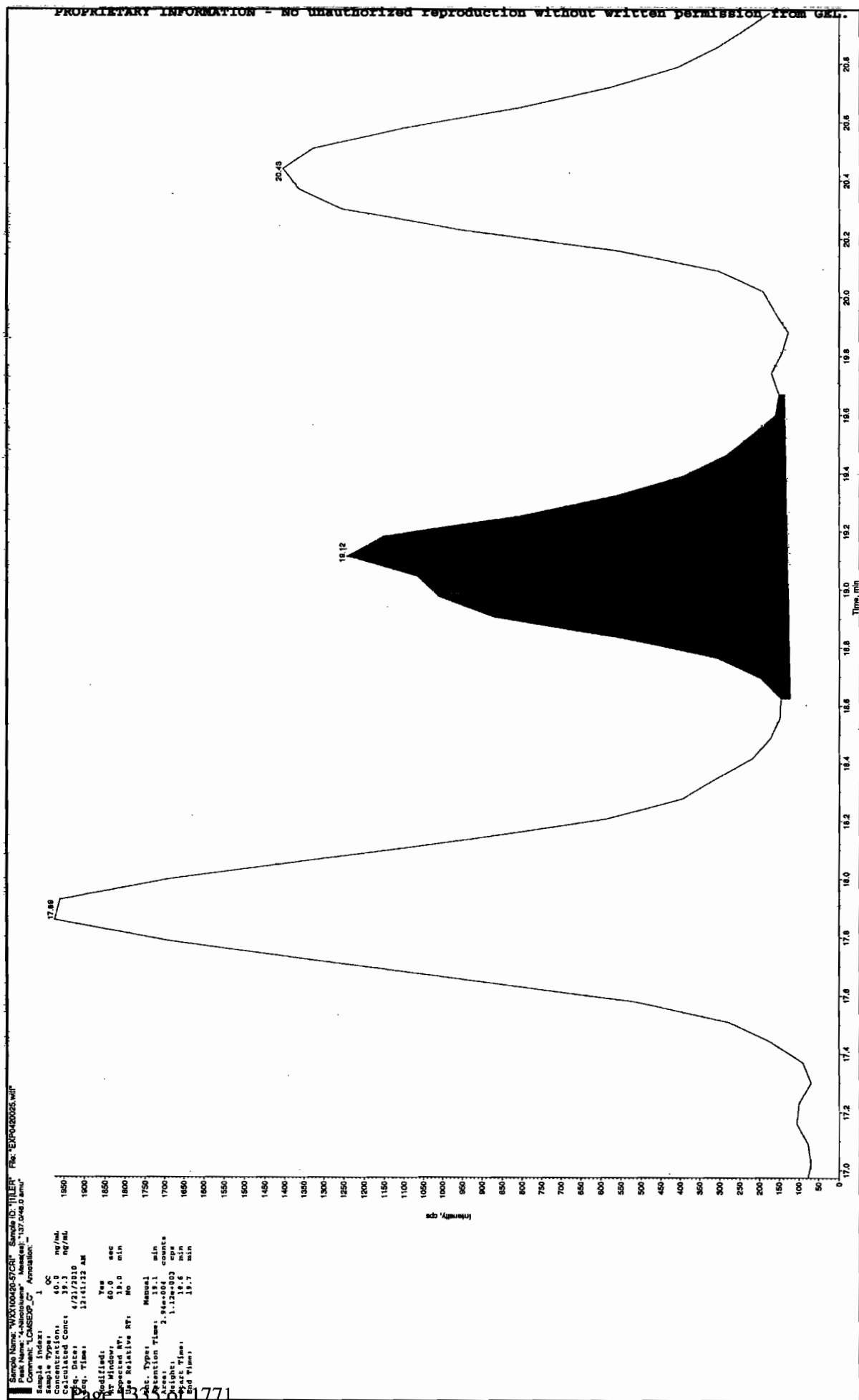
\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

Before Dec 4/28/10



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

after 4/12/10



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3



GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0420025.wiff	<b>Acquisition Date</b>	4/21/2010 12:41:22 AM
<b>Sample Name</b>	WXX100420-57CRI	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	042010.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	4-Amino-2,6-dinitrotoluene (197.0/167.0 amu)
	<b>Expected RT:</b>	13.3
	<b>Actual RT:</b>	13.3
	<b>Area Counts:</b>	3.51e+006
	<b>Manual Modification</b>	No
	<b>Amount:</b>	40.0 (ng/mL)
	<b>% Accuracy:</b>	100.00

	<b>Compound Name:</b>	2-Amino-4,6-dinitrotoluene (197.0/180.0 amu)
	<b>Expected RT:</b>	14.2
	<b>Actual RT:</b>	14.3
	<b>Area Counts:</b>	1.09e+005
	<b>Manual Modification</b>	Yes
	<b>Amount:</b>	38.7 (ng/mL)
	<b>% Accuracy:</b>	96.90

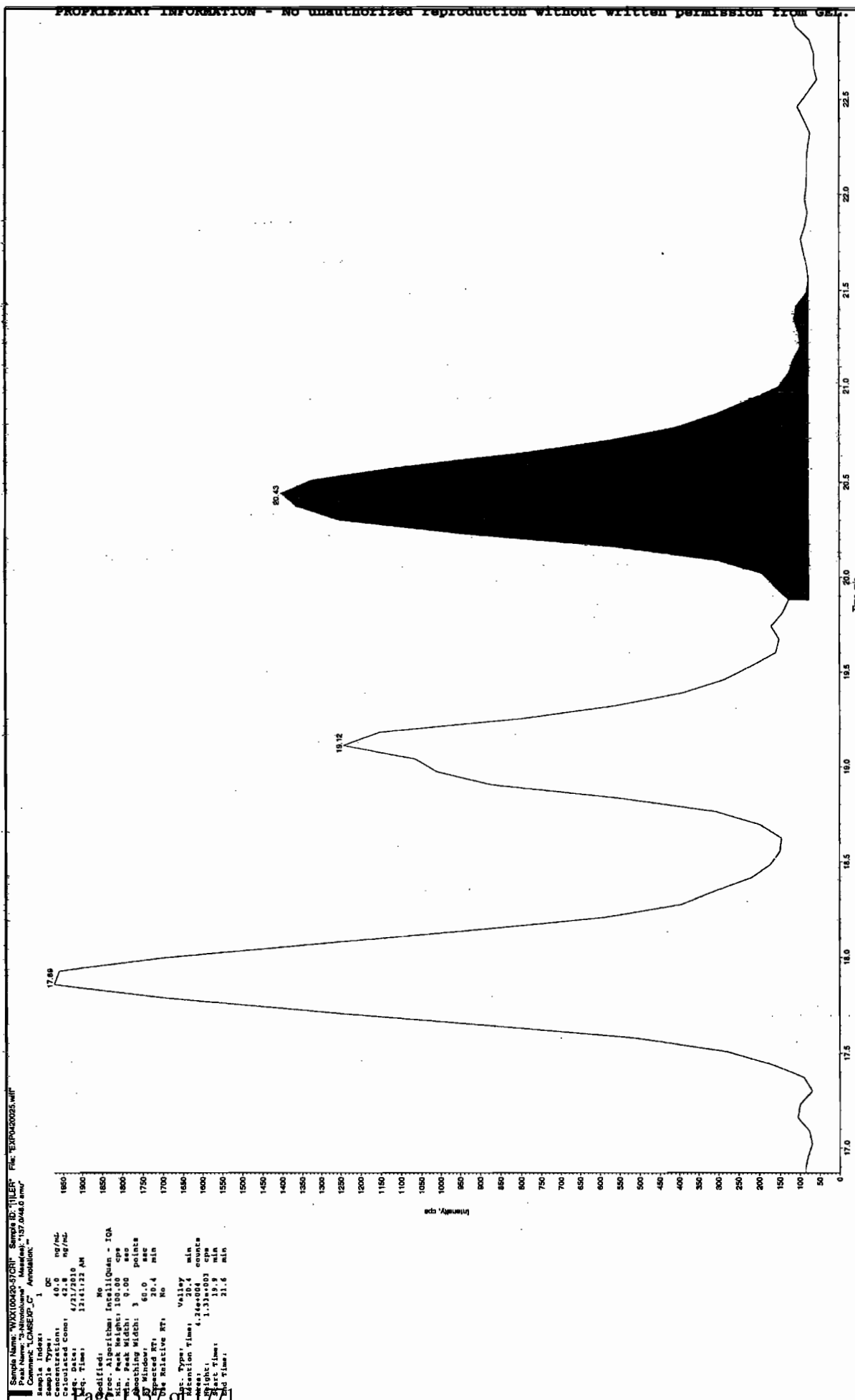
  

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	17.7
	<b>Actual RT:</b>	17.9
	<b>Area Counts:</b>	5.58e+004
	<b>Manual Modification</b>	No
	<b>Amount:</b>	51.0 (ng/mL)
	<b>% Accuracy:</b>	127.00

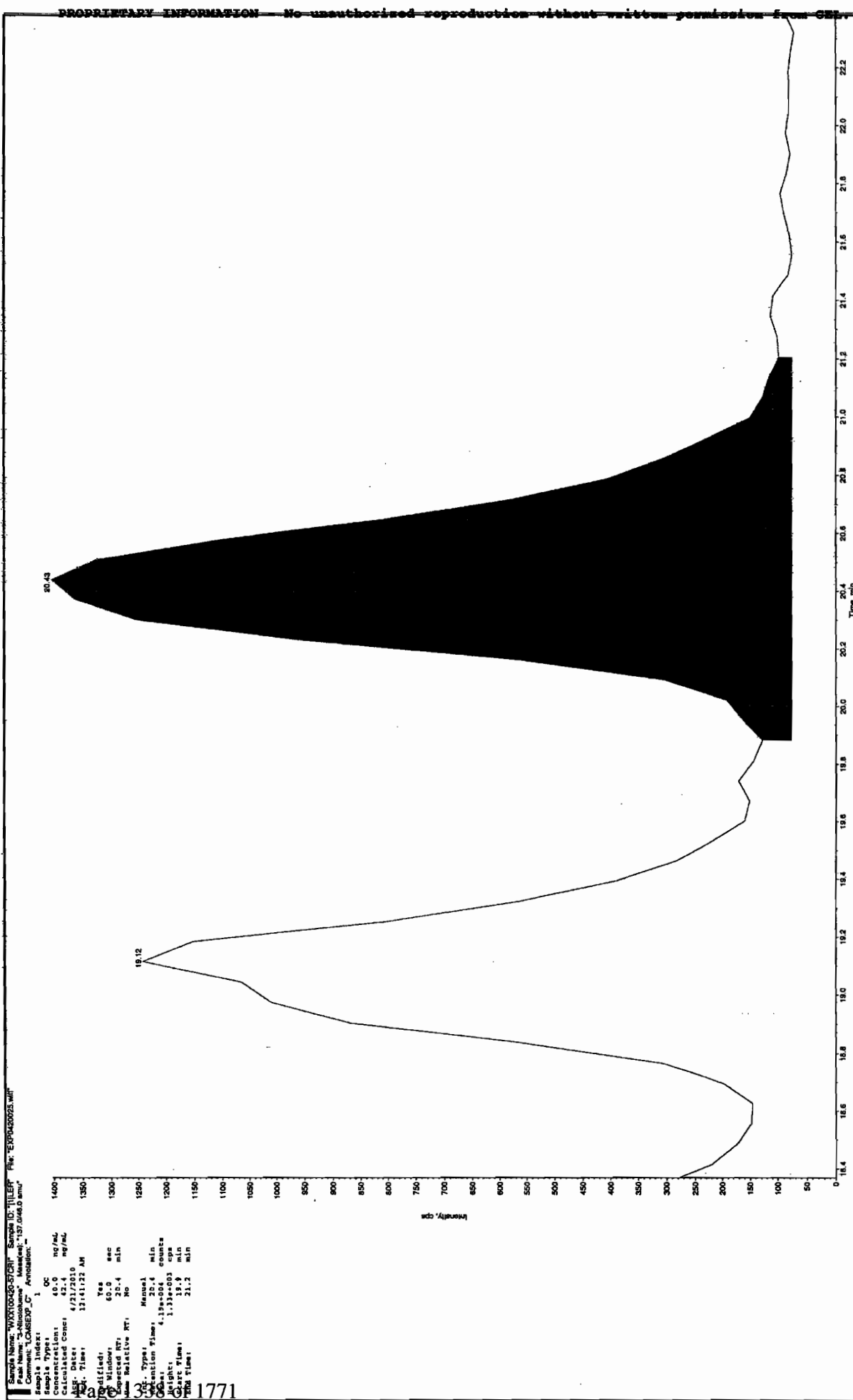
	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	19.0
	<b>Actual RT:</b>	19.1
	<b>Area Counts:</b>	2.94e+004
	<b>Manual Modification</b>	Yes
	<b>Amount:</b>	39.3 (ng/mL)
	<b>% Accuracy:</b>	98.20

Before Scan 4128110



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

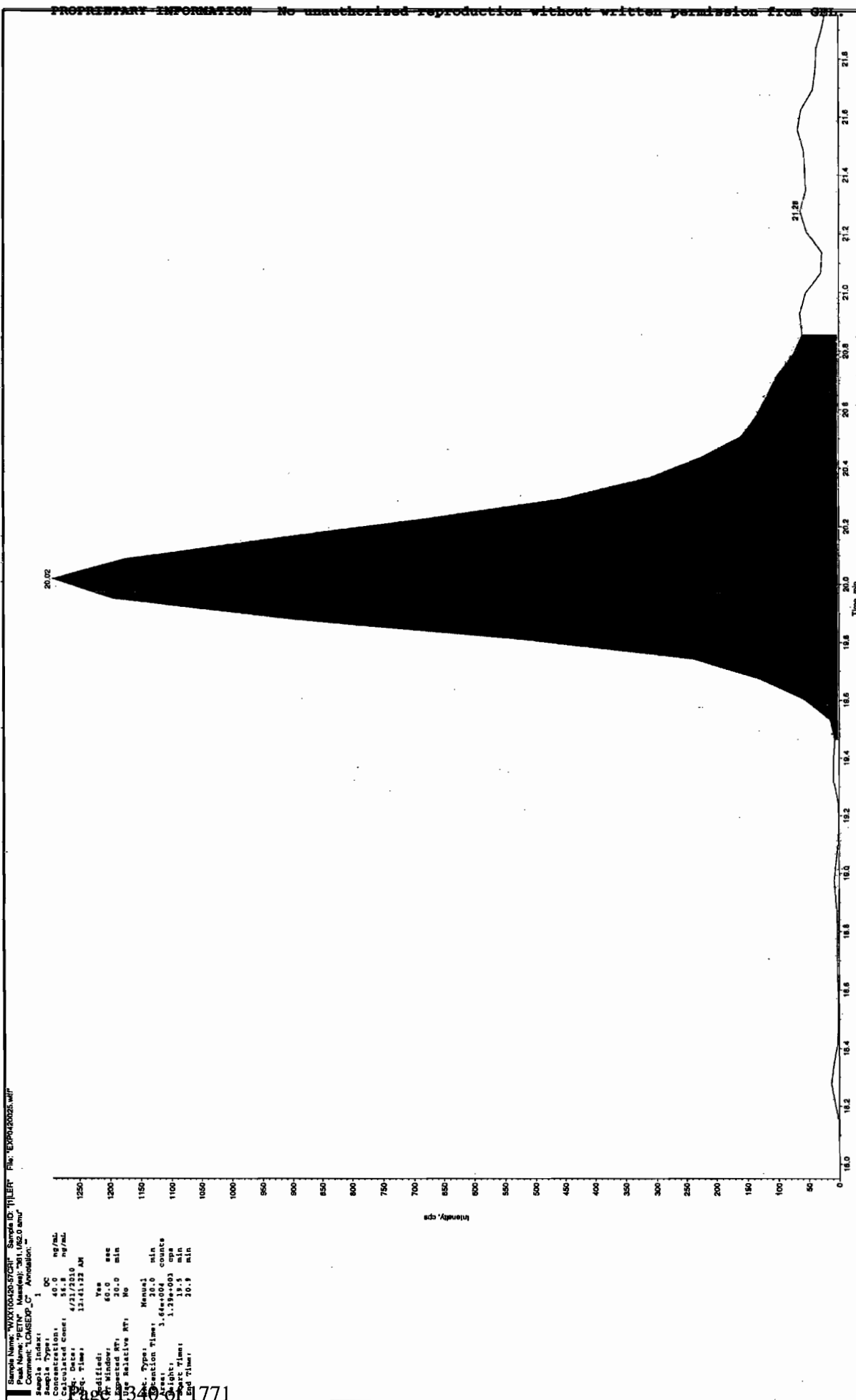
after den 4/29/10



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3



after den 4/19/10



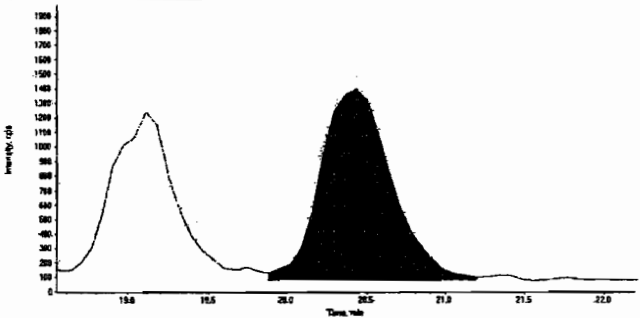
\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

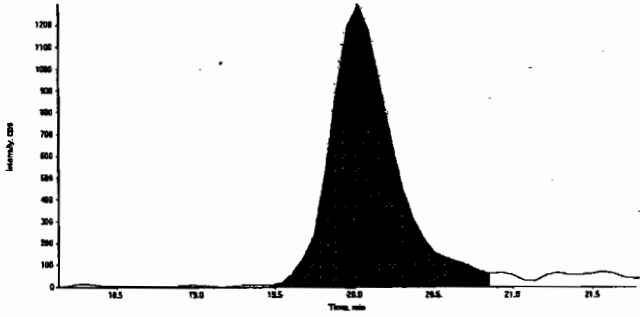
Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0420025.wiff	<b>Acquisition Date</b>	4/21/2010 12:41:22 AM
<b>Sample Name</b>	WXX100420-57CRI	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	042010.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	20.4
	<b>Actual RT:</b>	20.4
	<b>Area Counts:</b>	4.19e+004
	<b>Manual Modification</b>	Yes
	<b>Amount:</b>	42.4 (ng/mL)
	<b>% Accuracy:</b>	106.00

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	<b>Expected RT:</b>	20.0
	<b>Actual RT:</b>	20.0
	<b>Area Counts:</b>	3.64e+004
	<b>Manual Modification</b>	Yes
	<b>Amount:</b>	56.8 (ng/mL)
	<b>% Accuracy:</b>	142.00

GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis 04/21/10  
 Time of Injection 0041  
 Standard Number WXX100420-57CRI  
 Data File EXP0420025a

HMX	117.0
RDX	126.0
135-Trinitrobenzene	101.0
13-Dinitrobenzene	104.0
Tetryl	124.0
246-Trinitrotoluene	100.0
Nitrobenzene	87.9
34-dinitrotoluene	78.6
26-dinitrotoluene	92.9
24-dinitrotoluene	97.3
4-Amino-26-dinitrotoluene	100.0
2-Amino-46-dinitrotoluene	96.9
2-Nitrotoluene	127.0
4-Nitrotoluene	98.2
3-Nitrotoluene	106.0
PETN	142.0

TOTAL

✓ 1698.8

AVERAGE

✓ 106.2

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

*Lar*  
4/28/10

*Am*  
4/29/10

7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2199

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS04090013.wiff

Analysis Date: 09-APR-10 10:23

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	98	98	
2,6-Diamino-4-nitrotoluene	100	83.7	84	
3,4-Dinitrotoluene	50	49	98	
3,5-Dinitroaniline	100	102	102	
TATB	100	102	102	
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



Jan 4/12/10

PROPRIETARY INFORMATION No unauthorized reproduction without written permission from GEL

Sample Name: "WXX100409-27C01" Sample ID: "111ER" File: "EXS04090013.wif"

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

Comment: "LCMSEXP\_C" Annotation: "

Sample Index: 1 QC

Concentration: 100. ng/mL

Calculated Conc: 102. ng/mL

Acq. Date: 4/9/2010

Acq. Time: 10:23:17 AM

Modified: No

Proc. Algorithm: IntelliQuan - IQA

Min. Peak Height: 2000.00 cps

Min. Peak Width: 0.00 sec

Smoother Width: 3 points

RT Window: 15.0 sec

Expected RT: 8.14 min

Use Relative RT: No

Int. Type: Valley

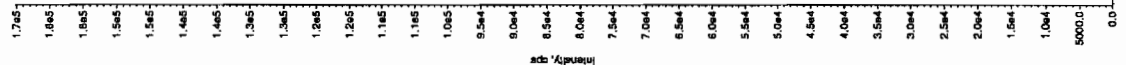
Retention Time: 8.13 min

Area: 6.91e+003 counts

Height: 165135.025 cps

Start Time: 8.03 min

End Time: 8.26 min



Sample Name: "WXX100409-27C01" Sample ID: "111ER" File: "EXS04090013.wif"

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

Comment: "LCMSEXP\_C" Annotation: "

Sample Index: 1 QC

Concentration: 100. ng/mL

Calculated Conc: 102. ng/mL

Acq. Date: 4/9/2010

Acq. Time: 10:23:17 AM

Modified: No

Proc. Algorithm: IntelliQuan - IQA

Min. Peak Height: 2500.00 cps

Min. Peak Width: 0.00 sec

Smoother Width: 3 points

RT Window: 30.0 sec

Expected RT: 6.90 min

Use Relative RT: No

Int. Type: Valley

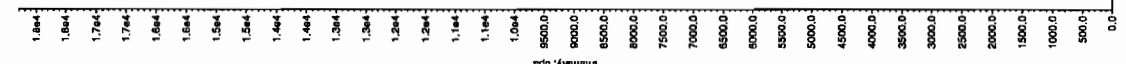
Retention Time: 6.90 min

Area: 7.77e+004 counts

Height: 18280.220 cps

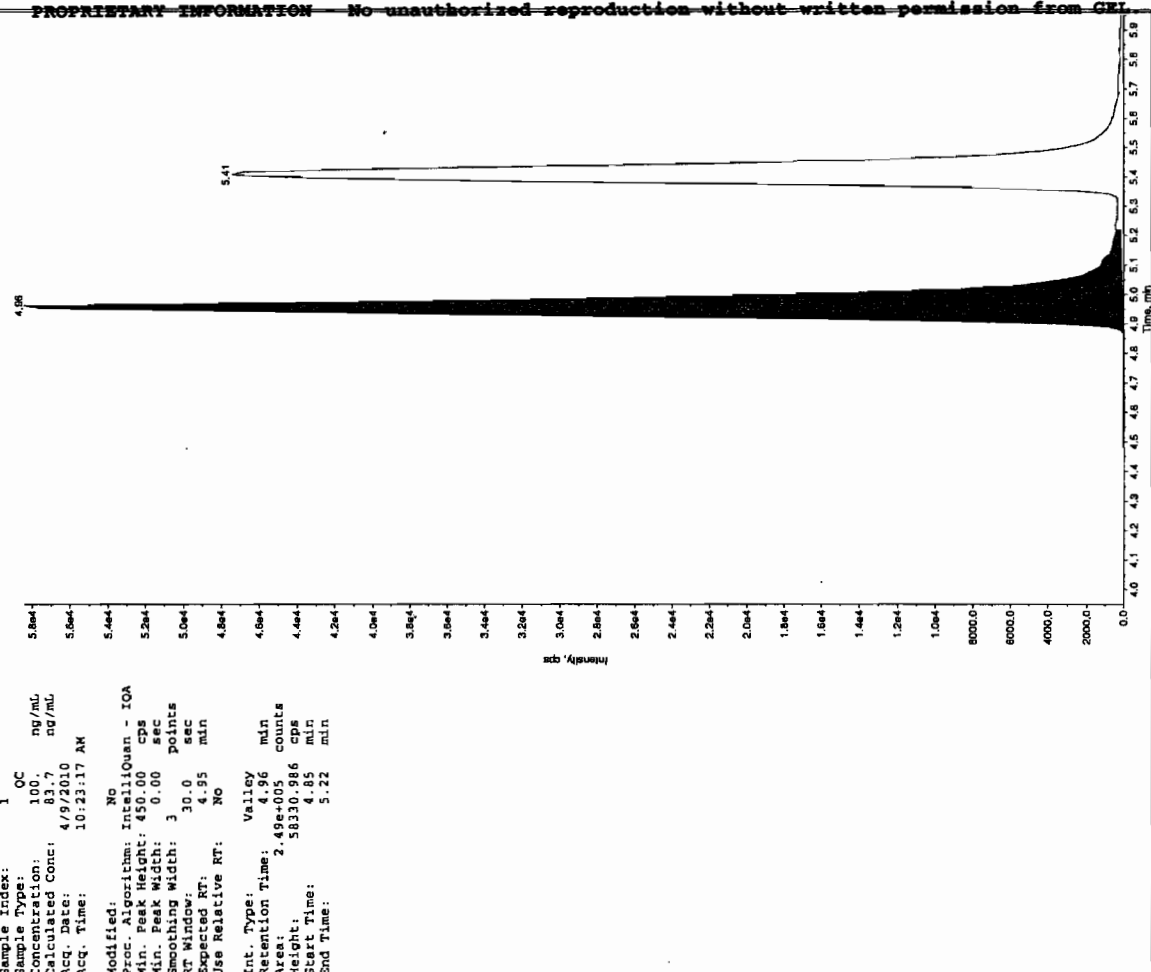
Start Time: 6.82 min

End Time: 7.20 min

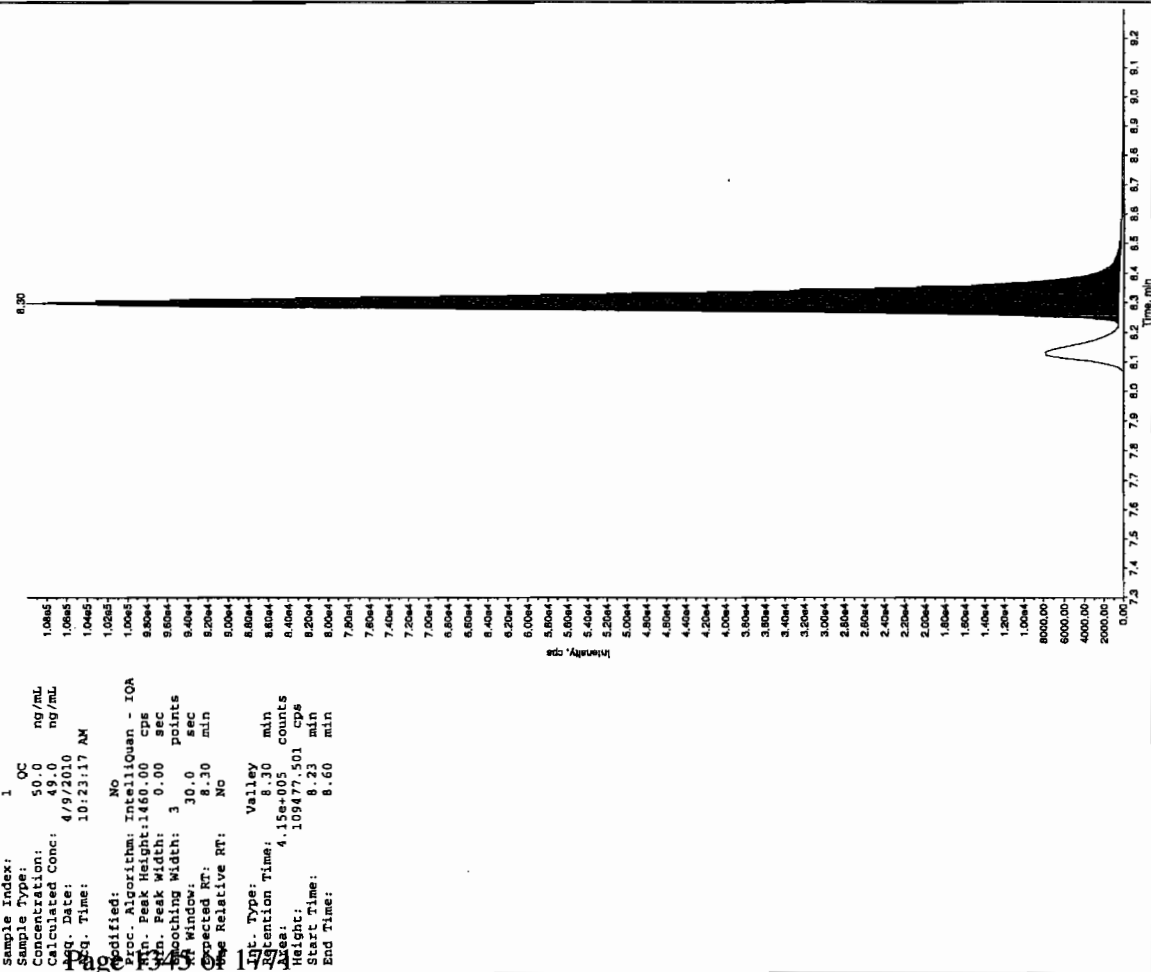


Jan 4/12/10

Sample Name: "WXX100409-27.CRI" Sample ID: "111ER" File: "EXS04090013.wif"  
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "186.0/46.0 amu"  
Comment: "LCMSEXP\_C" Annotation: "

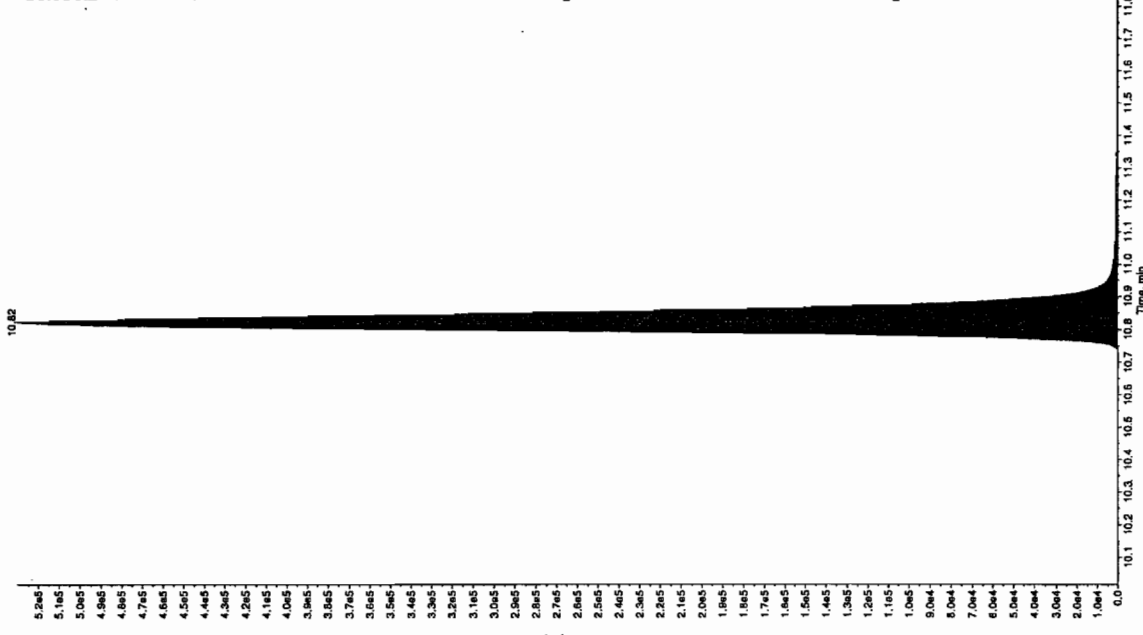


Sample Name: "WXX100409-27.CRI" Sample ID: "111ER" File: "EXS04090013.wif"  
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"  
Comment: "LCMSEXP\_C" Annotation: "



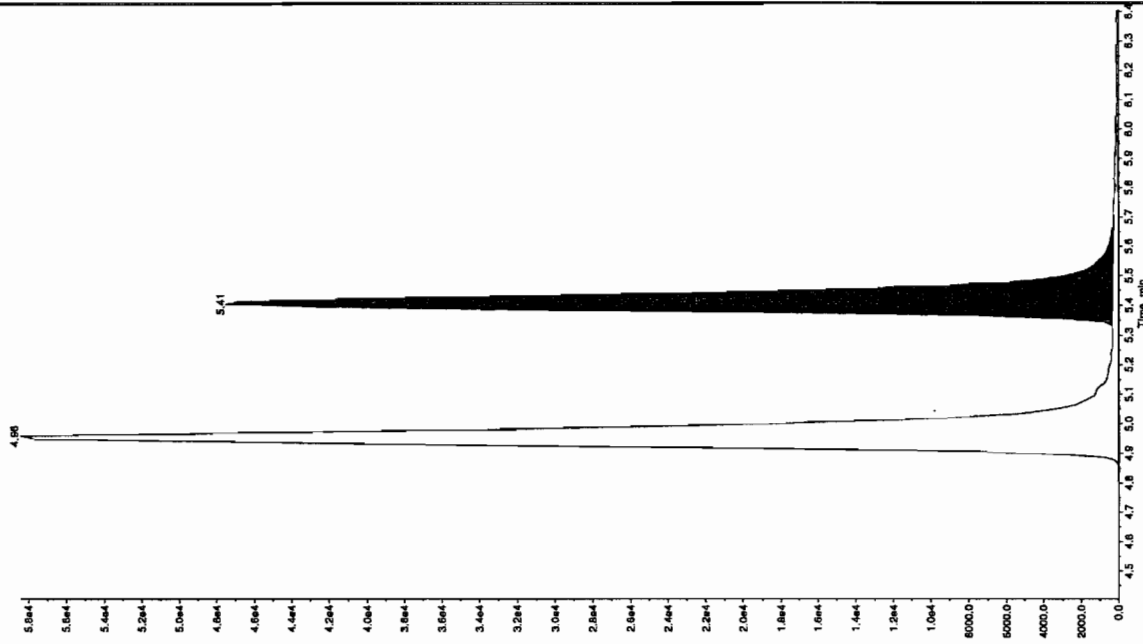
Sample Name: "WXX100095-27CR" Sample ID: "11LER" File: "EXS04090013.wif"  
Peak Name: "Ins(p-cresyl) phosphate" Mass(es): "369.1/91.0 amu"  
Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
Sample Type: QC  
Concentration: 100. ng/mL  
Calculated Conc: 104. ng/mL  
Acq. Date: 4/9/2010  
Acq. Time: 10:23:17 AM  
Modified: No  
Proc. Algorithm: IntelliQuan - IOA  
Min. Peak Height: 8000.00 cps  
Min. Peak Width: 3.00 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: 2.13e+006 counts  
Height: 529692.078 cps  
Start Time: 10.7 min  
End Time: 11.2 min



Sample Name: "WXX100095-27CR" Sample ID: "11LER" File: "EXS04090013.wif"  
Peak Name: "24-Diamino-6-ethylthiouracil" Mass(es): "166.0/46.0 amu"  
Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
Sample Type: QC  
Concentration: 100. ng/mL  
Calculated Conc: 98.0 ng/mL  
Acq. Date: 4/9/2010  
Acq. Time: 10:23:17 AM  
Modified: No  
Proc. Algorithm: IntelliQuan - IOA  
Min. Peak Height: 350.00 cps  
Min. Peak Width: 3.00 sec  
Smoothing Width: 3 points  
RT Window: 30.0 sec  
Expected RT: 5.40 min  
Use Relative RT: No  
Int. Type: Valley  
Retention Time: 5.41 min  
Area: 2.07e+005 counts  
Height: 47109.501 cps  
Start Time: 5.31 min  
End Time: 5.68 min



7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2199

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS04090024.wiff

Analysis Date: 09-APR-10 13:16

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	489	98	
2,6-Diamino-4-nitrotoluene	500	521	104	
3,4-Dinitrotoluene	250	232	93	
3,5-Dinitroaniline	500	500	100	
TATB	500	508	102	
tris(o-cresyl) phosphate	500	507	101	

Recovery Limits:

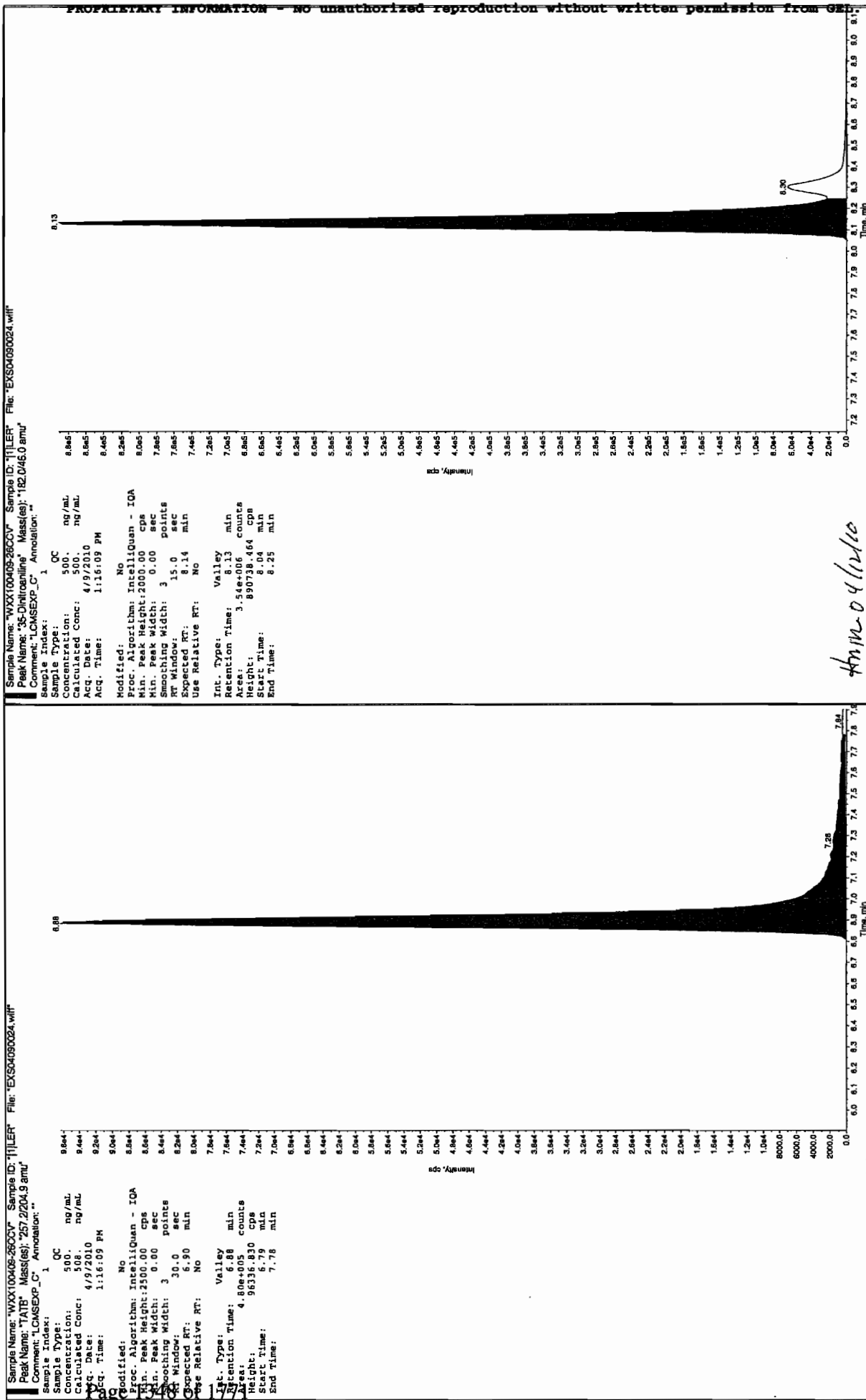
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

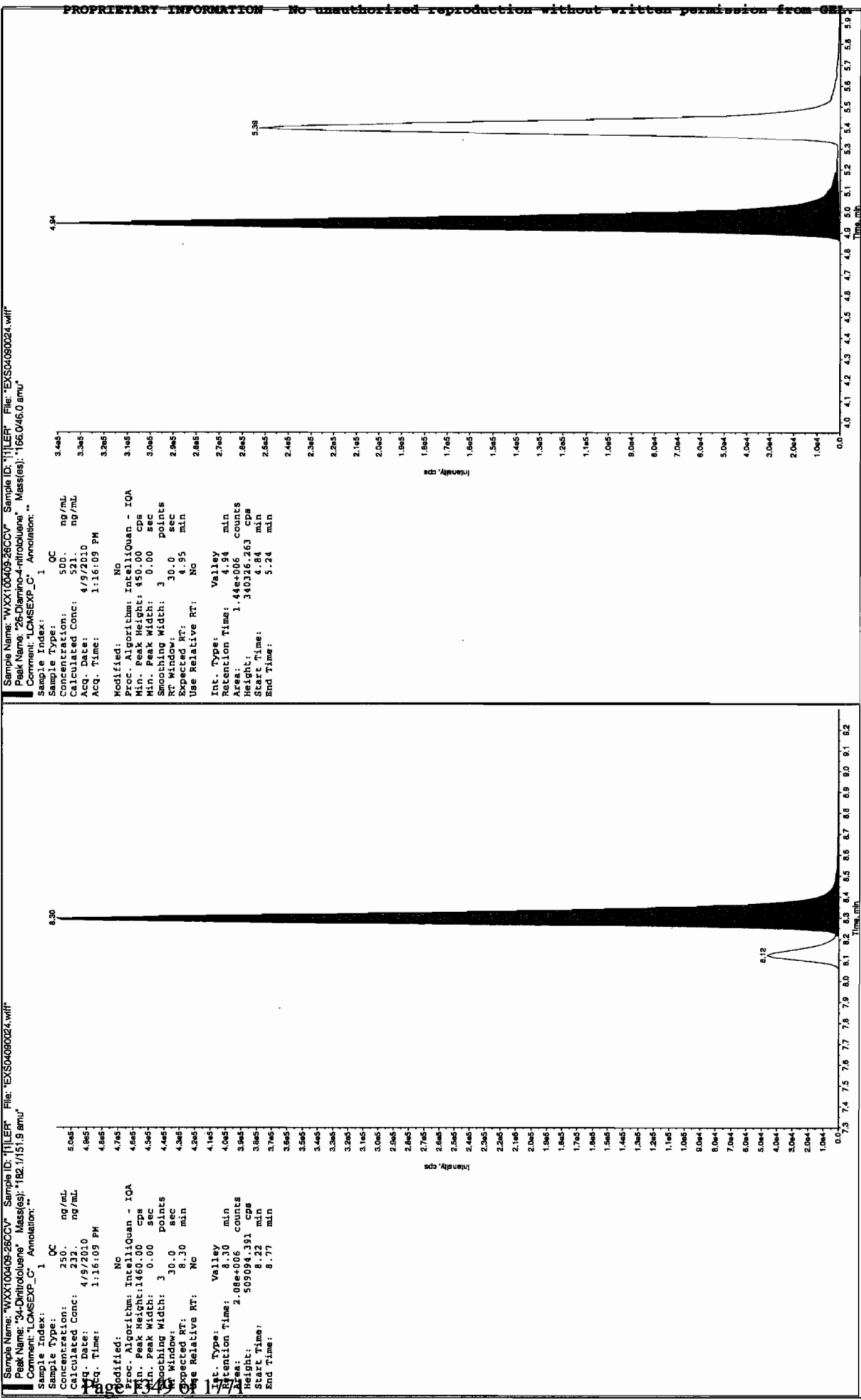
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

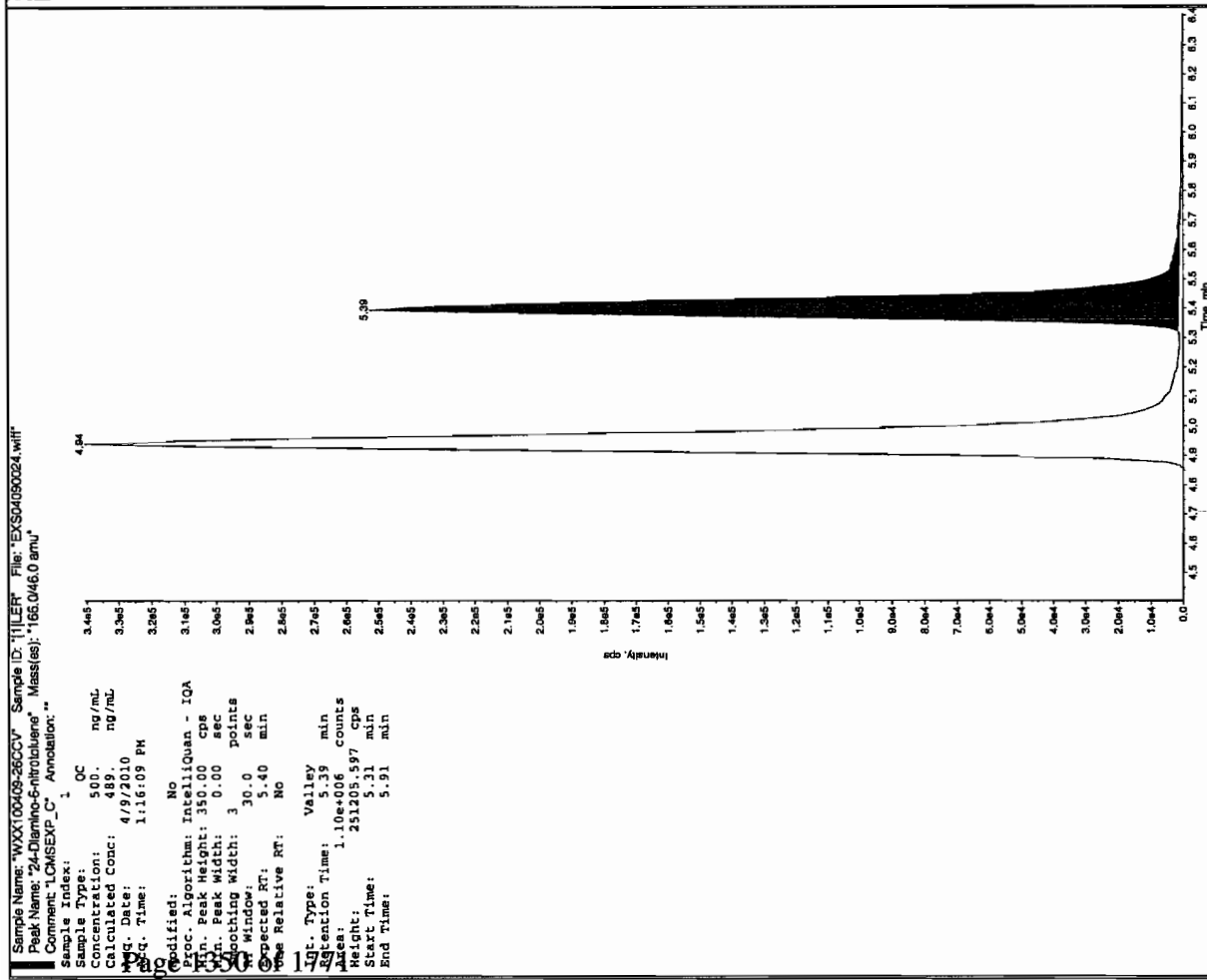
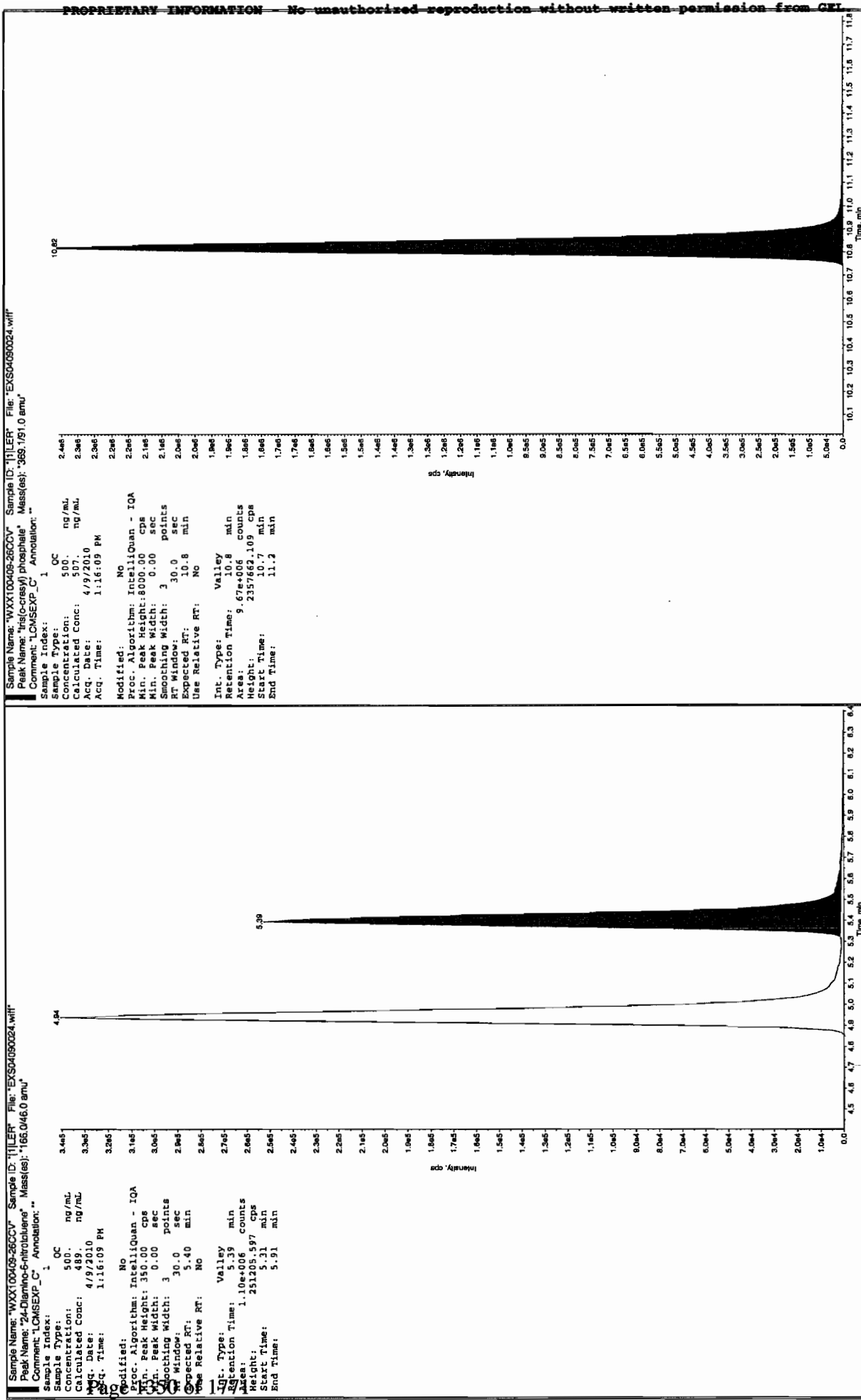
Jan 4/12/10



Jan 4/12/10



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



7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2199

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS04090026.wiff

Analysis Date: 09-APR-10 13:47

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	84.4	84	
3,4-Dinitrotoluene	50	50.1	100	
3,5-Dinitroaniline	100	103	103	
TATB	100	106	106	
tris(o-cresyl) phosphate	100	103	103	

Recovery Limits:

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

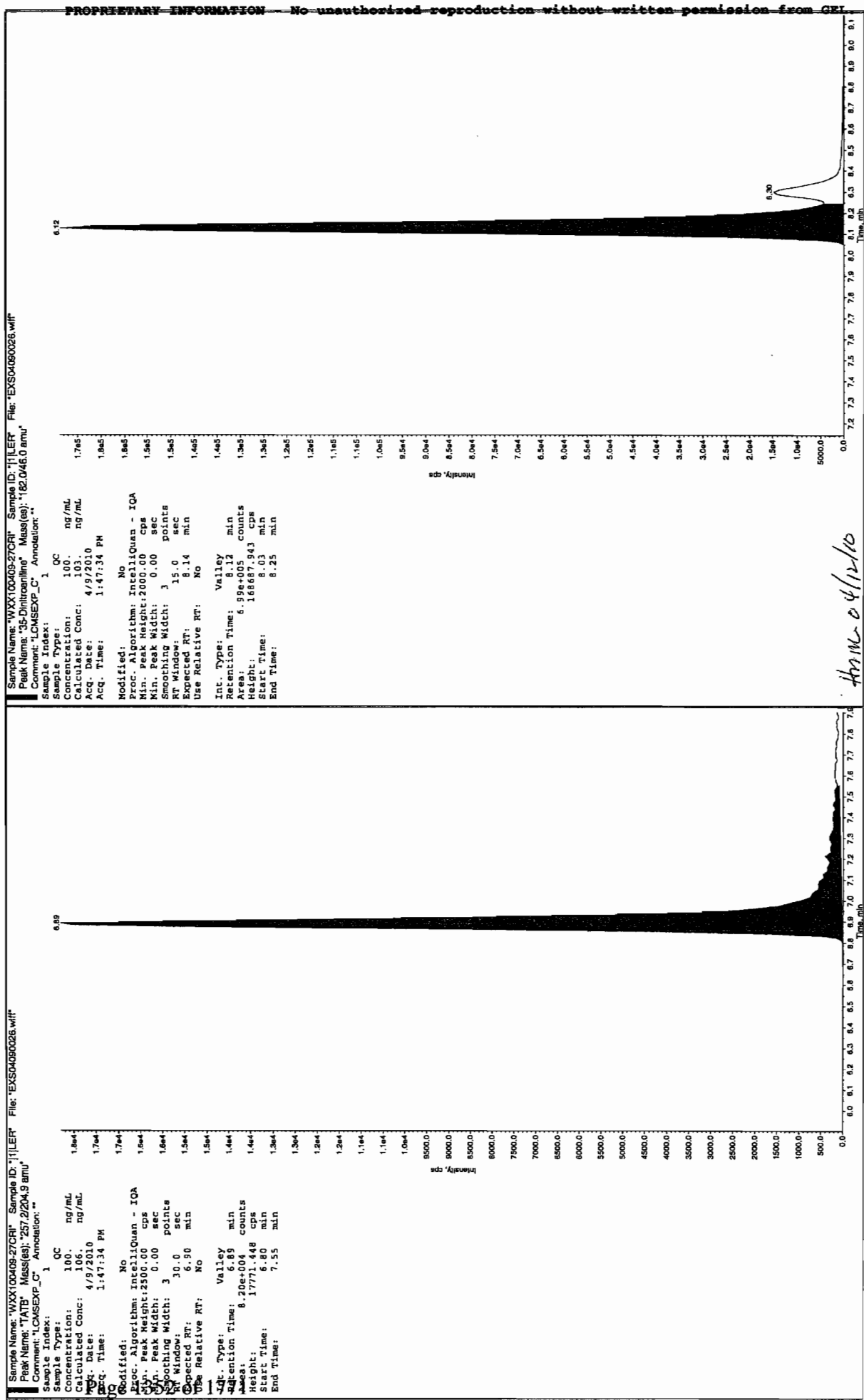
Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits



Alan 4/12/10



Alan 4/12/10

Sample Name: 'WXX100409-27CR' Sample ID: '11LER' File: 'EXS04090026.wif'  
Peak Name: '34-Dinitrotoluene' Mass(es): '182.1/151.9 amu'  
Comment: 'LCMSEXP\_C' Annotation: ''

Sample Index: 1

Sample Type: OC  
Concentration: 50.0 ng/mL  
Calculated Conc: 49.72010  
Acq. Date: 4/9/2010  
Acq. Time: 1:47:34 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: 30.0 sec  
Expected RT: 8.30 min  
Use Relative RT: No

Int. Type: Valley  
Retention Time: 8.29 min  
Area: 4.25e+005 counts  
Height: 106659.401 cps  
Start Time: 8.22 min  
End Time: 8.38 min



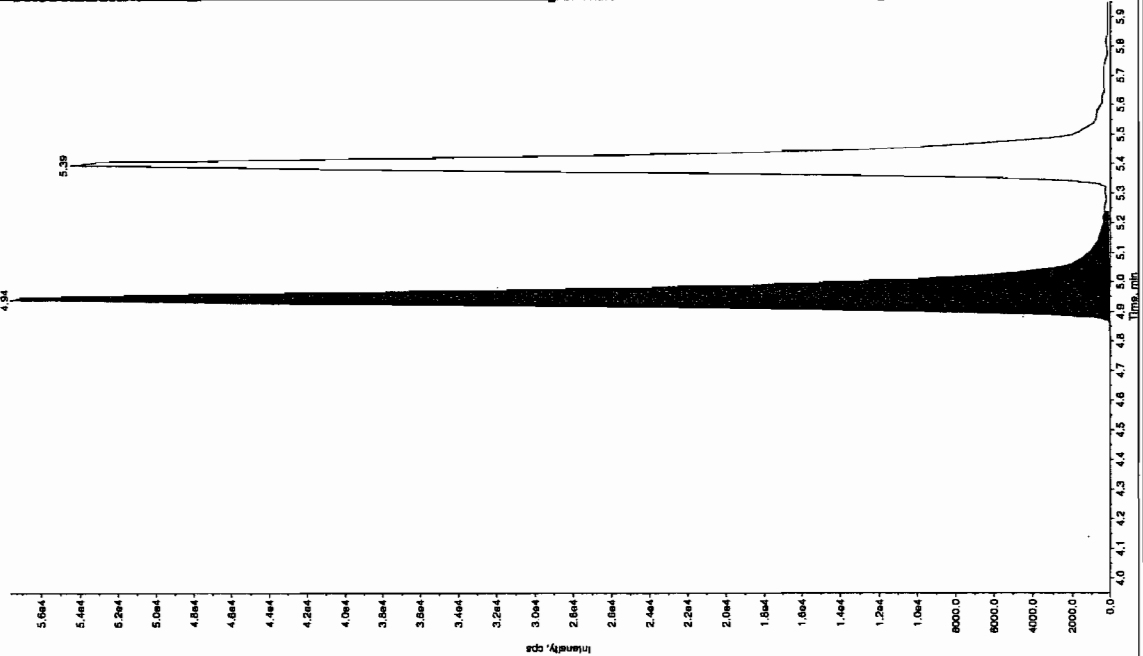
Sample Name: 'WXX100409-27CR' Sample ID: '11LER' File: 'EXS04090026.wif'  
Peak Name: '26-Dinitro-4-nitrotoluene' Mass(es): '166.0/146.0 amu'  
Comment: 'LCMSEXP\_C' Annotation: ''

Sample Index: 1

Sample Type: OC  
Concentration: 100.0 ng/mL  
Calculated Conc: 84.4 ng/mL  
Acq. Date: 4/9/2010  
Acq. Time: 1:47:34 PM

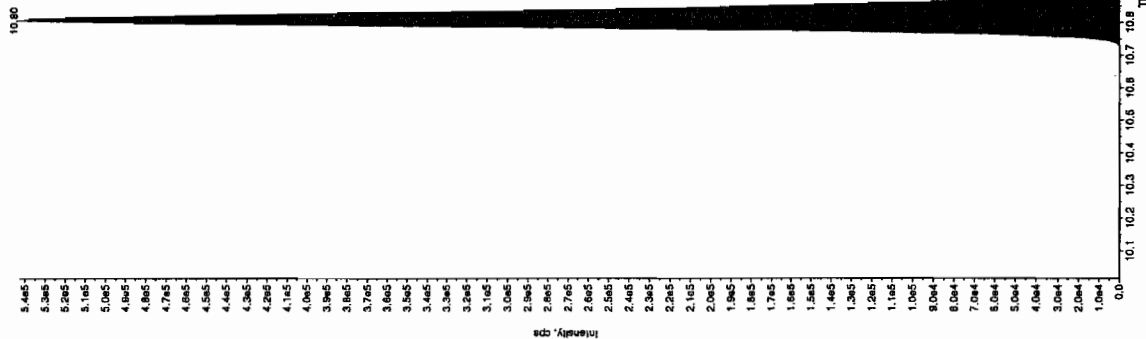
Modified: No  
Proc. Algorithm: IntelliQuan - IQA  
Min. Peak Height: 450.00 cps  
Min. Peak Width: 0.00 sec  
Smoothing Width: 3 points  
RT Window: 30.0 sec  
Expected RT: 4.95 min  
Use Relative RT: No

Int. Type: Valley  
Retention Time: 4.94 min  
Area: 2.51e+007 counts  
Height: 57584.732 cps  
Start Time: 4.82 min  
End Time: 5.24 min



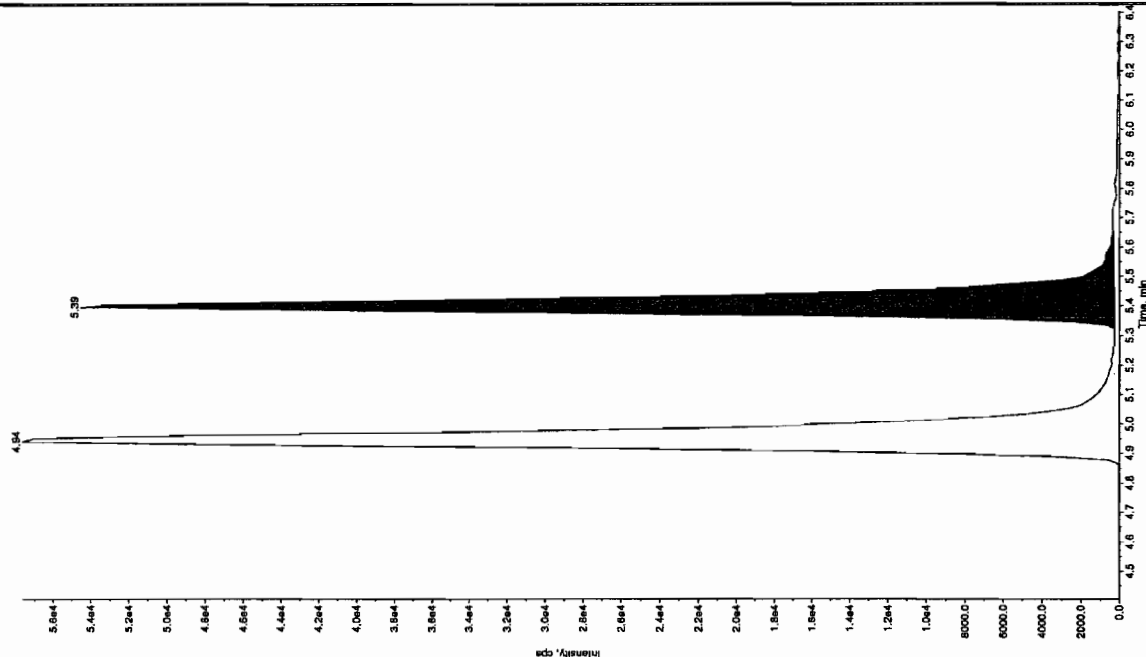
Sample Name: "WXX100408-270RI" Sample ID: "11ER" File: "EXS04080026.wif"  
 Peak Name: "bis(O-nonyl) phosphite" Mass(es): "369.101.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: "

Sample Index: 1 QC  
 Sample Type: Concentration: 100 ng/mL  
 Calculated Conc: 103 ng/mL  
 Acq. Date: 4/9/2010  
 Acq. Time: 1:47:34 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 8000.00 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: 2.11e+006 counts  
 Height: 542095.947 cps  
 Start Time: 10.7 min  
 End Time: 11.1 min



Sample Name: "WXX100408-270RI" Sample ID: "11ER" File: "EXS04080026.wif"  
 Peak Name: "24-Dinitro-6-nitrofluorene" Mass(es): "166.046.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: "

Sample Index: 1 QC  
 Sample Type: Concentration: 100 ng/mL  
 Calculated Conc: 101 ng/mL  
 Acq. Date: 4/9/2010  
 Acq. Time: 1:47:34 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: 5.40 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.39 min  
 Area: 2.15e+007 counts  
 Height: 592330.807 cps  
 Start Time: 5.28 min  
 End Time: 5.65 min



7A

Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2199

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS04090037.wiff

Analysis Date: 09-APR-10 16:40

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	489	98	
2,6-Diamino-4-nitrotoluene	500	476	95	
3,4-Dinitrotoluene	250	234	94	
3,5-Dinitroaniline	500	483	97	
TATB	500	490	98	
tris(o-cresyl) phosphate	500	499	100	

Recovery Limits:

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

Other Target Analytes 80-120%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

See 4/12/10

PROPRIETARY INFORMATION No unauthorized reproduction without written permission from GEL

Sample Name: "WXX100409-26CCV" Sample ID: "HILER" File: "EXS04090037.wif"

Peak Name: "TATB" Mass(es): "257.2/204.9 amu"

Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1

Sample Type: QC

Concentration: 500. ng/mL

Calculated Conc: 490. ng/mL

Acq. Date: 4/9/2010

Acq. Time: 4:40:18 PM

Modified: No

Proc. Algorithm: IntelliQuan - IOA

Min. Peak Height: 2500.00 cps

Min. Peak Width: 0.00 sec

Smoothing Width: 3 points

RT Window: 30.0 sec

Expected RT: 6.30 min

Use Relative RT: No

Int. Type: Valley

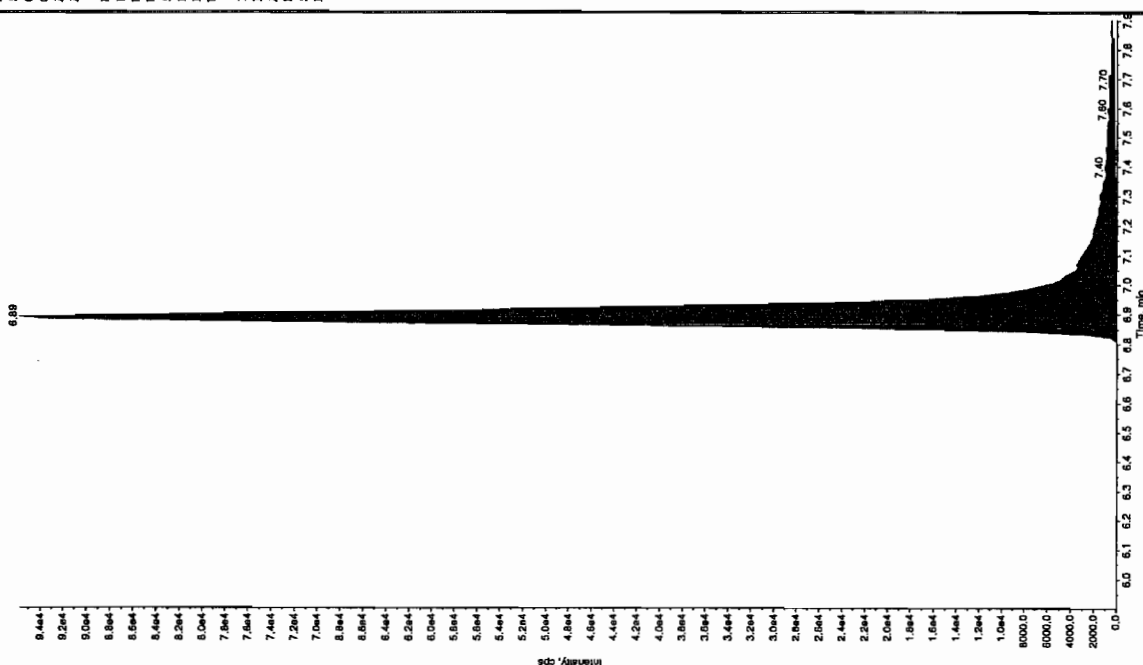
Retention Time: 6.89 min

Area: 4.63e+005 counts

Height: 95550.513 cps

Start Time: 6.79 min

End Time: 7.84 min



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

Sample Name: "WXX100409-26CCV" Sample ID: "HILER" File: "EXS04090037.wif"

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

Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1

Sample Type: QC

Concentration: 500. ng/mL

Calculated Conc: 483. ng/mL

Acq. Date: 4/9/2010

Acq. Time: 4:40:18 PM

Modified: No

Proc. Algorithm: IntelliQuan - IOA

Min. Peak Height: 2000.00 cps

Min. Peak Width: 0.00 sec

Smoothing Width: 3 points

RT Window: 15.0 sec

Expected RT: 8.14 min

Use Relative RT: No

Int. Type: Valley

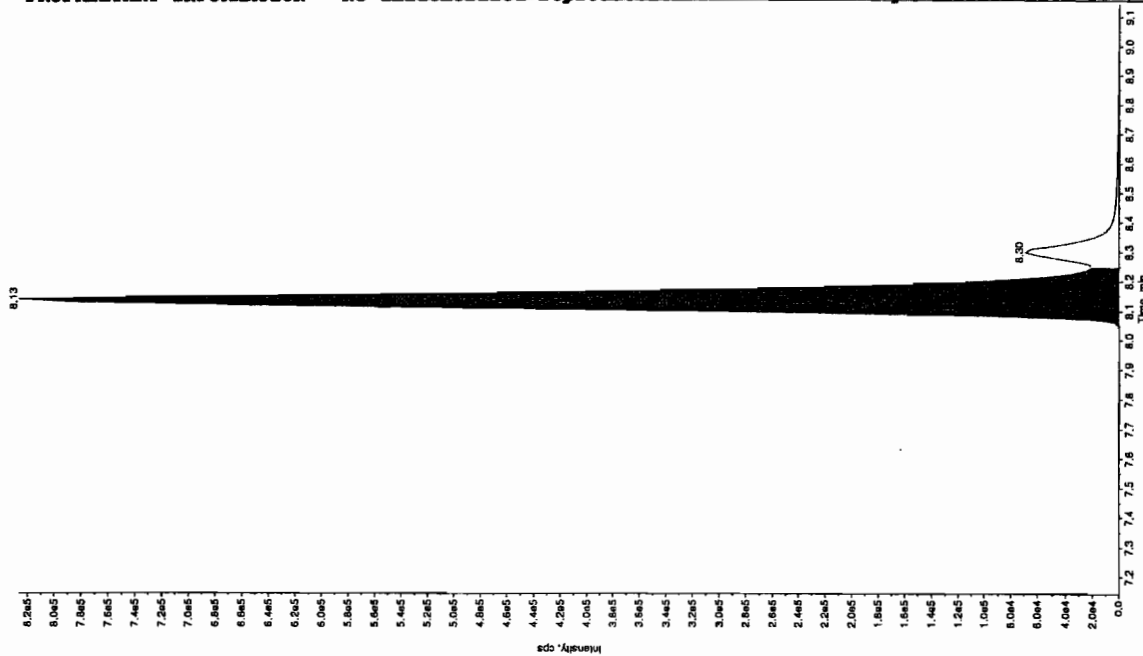
Retention Time: 8.13 min

Area: 3.43e+006 counts

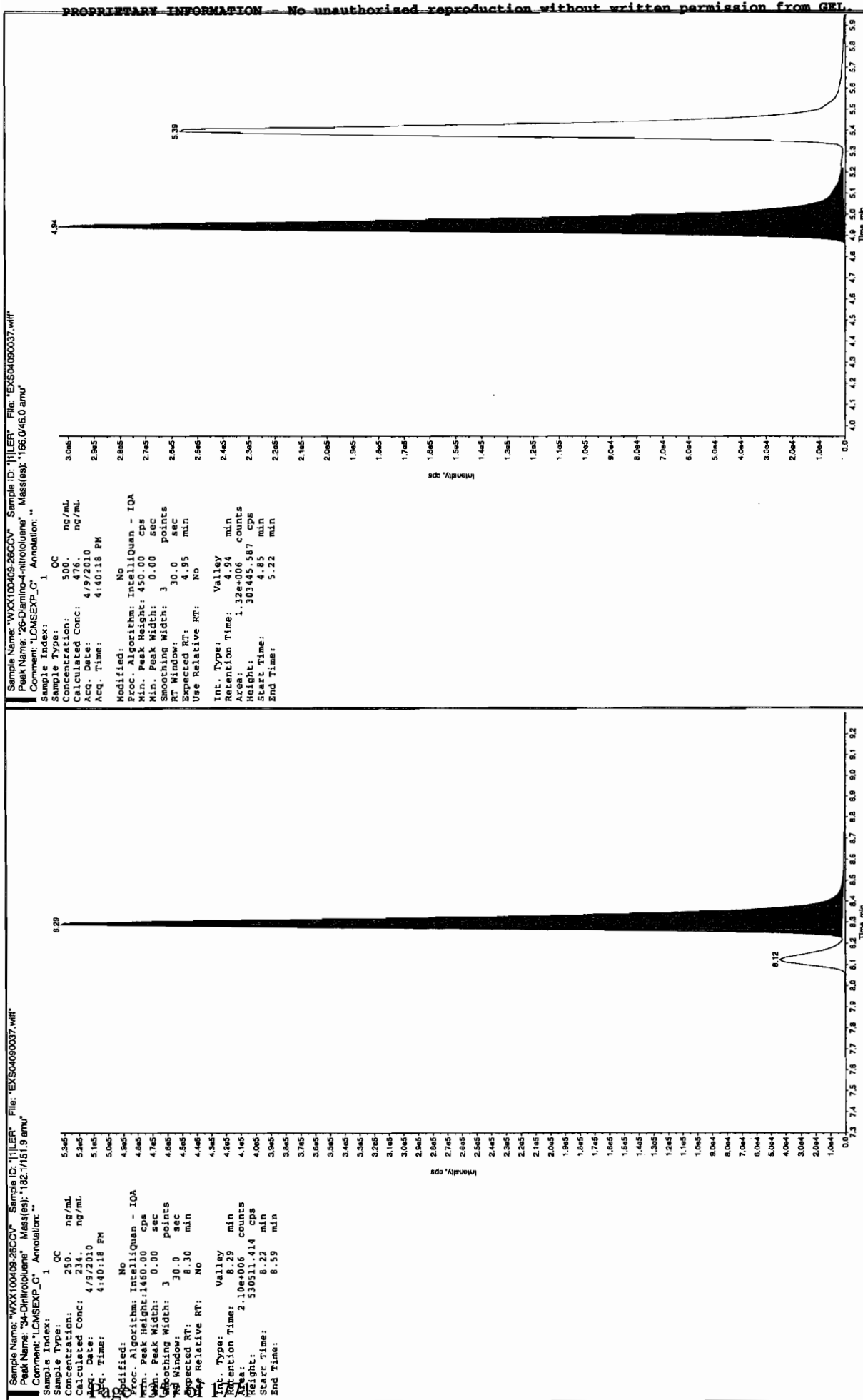
Height: 825812.988 cps

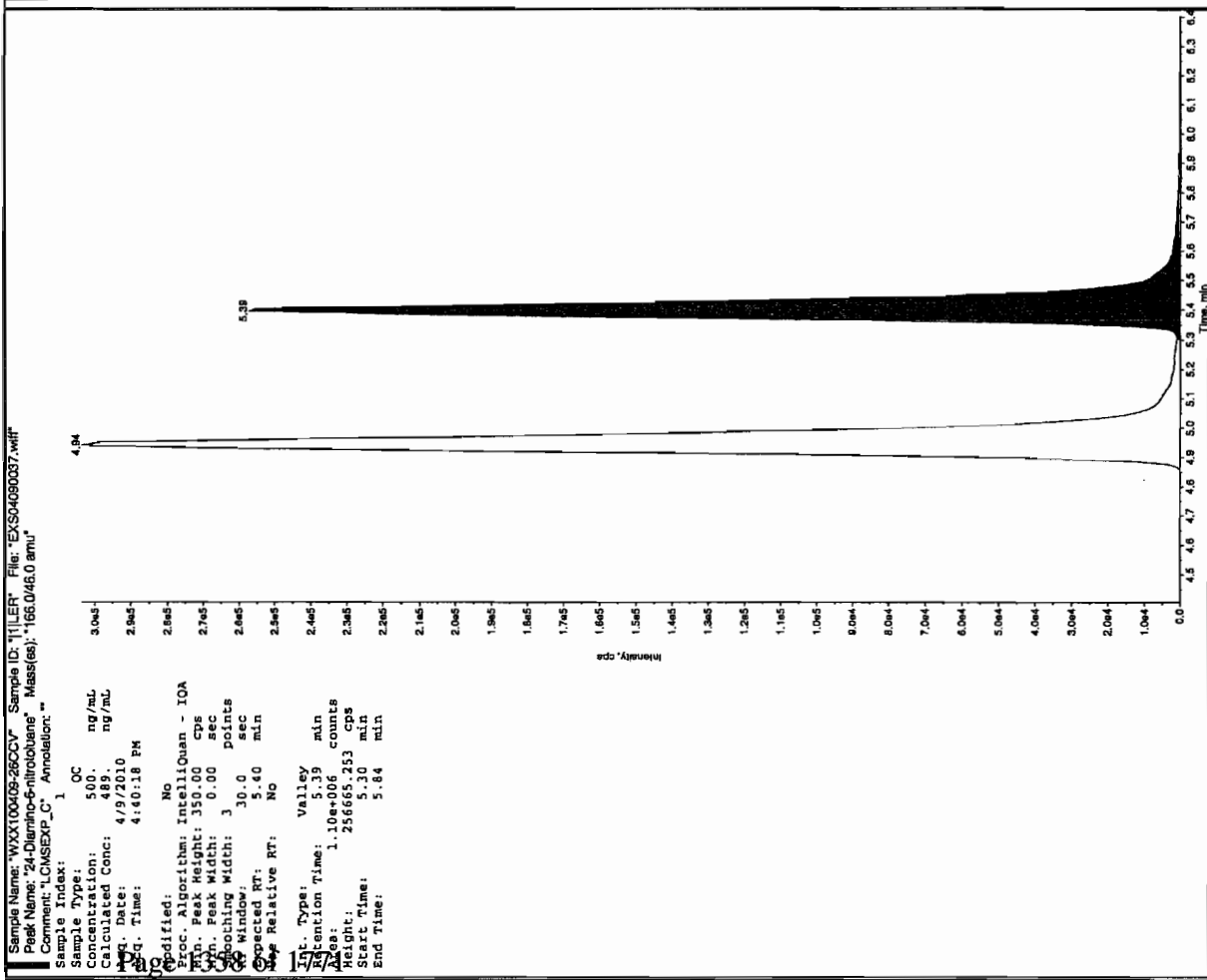
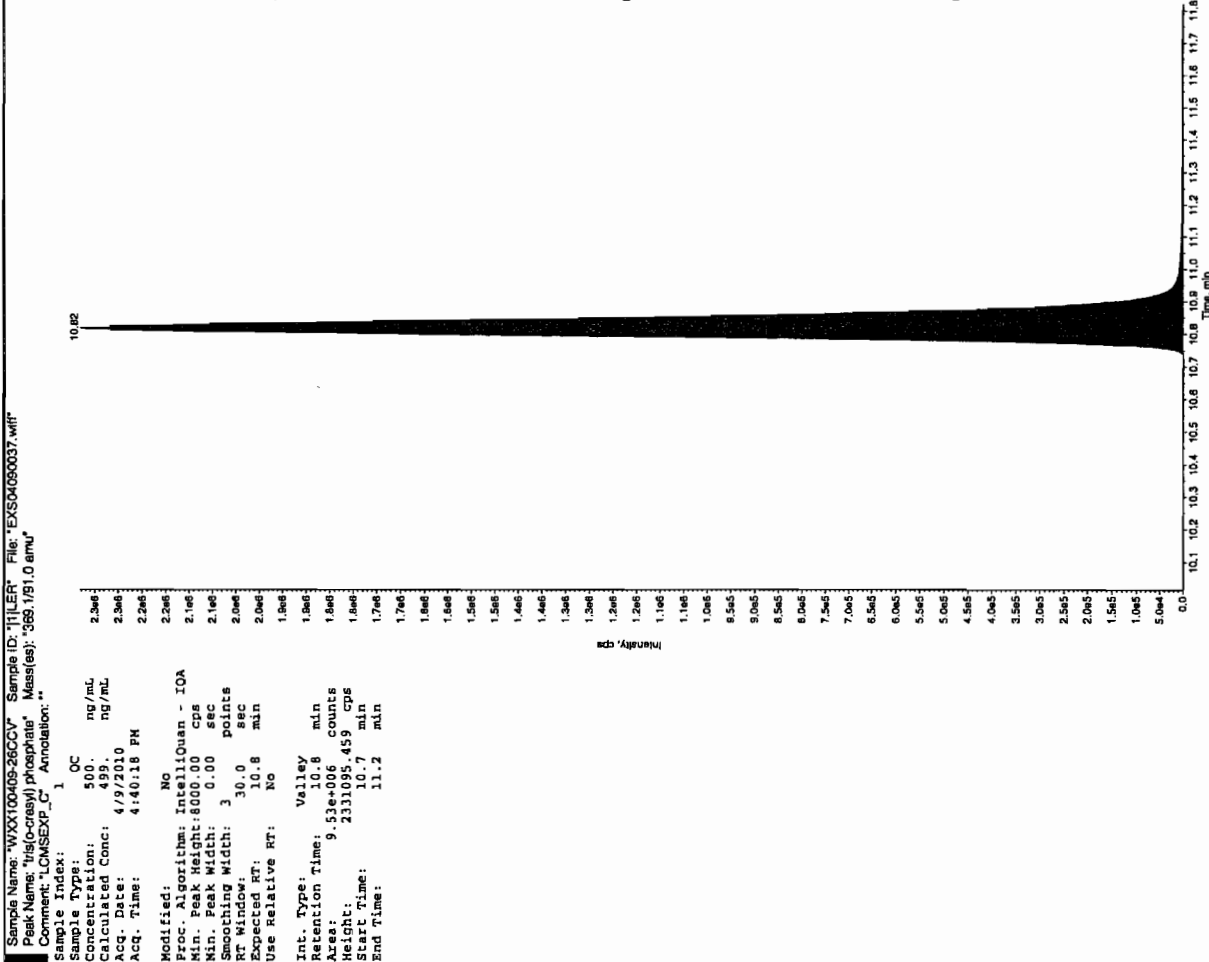
Start Time: 8.03 min

End Time: 8.25 min



See 4/12/10





7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2199

Lab Code: GEI

GEL Sample ID: WXXCRI

GEL Data File EXS04090039.wiff

Analysis Date: 09-APR-10 17:11

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	100	100	
2,6-Diamino-4-nitrotoluene	100	93.3	93	
3,4-Dinitrotoluene	50	49.5	99	
3,5-Dinitroaniline	100	108	108	
TATB	100	105	105	
tris(o-cresyl) phosphate	100	102	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%

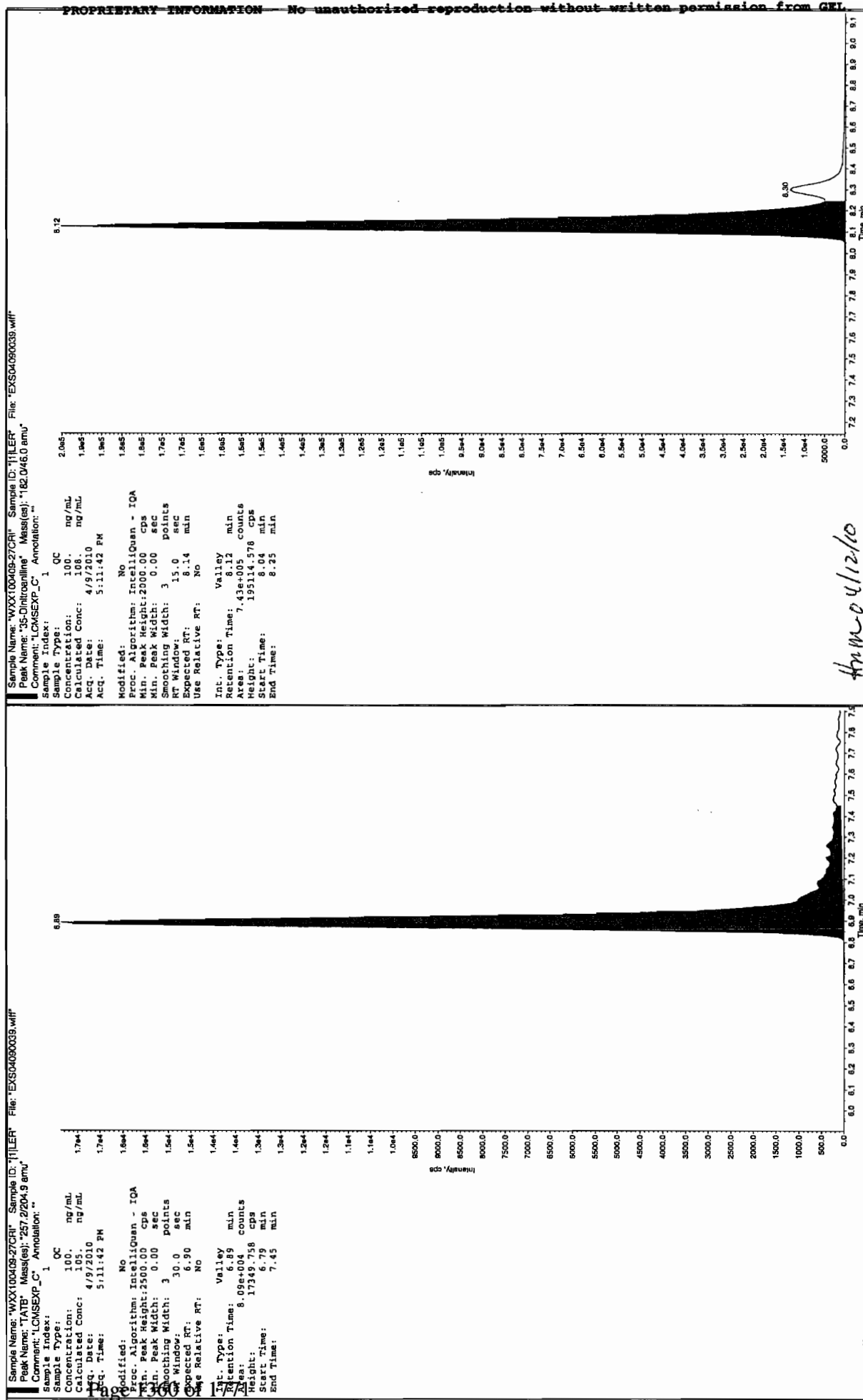
Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

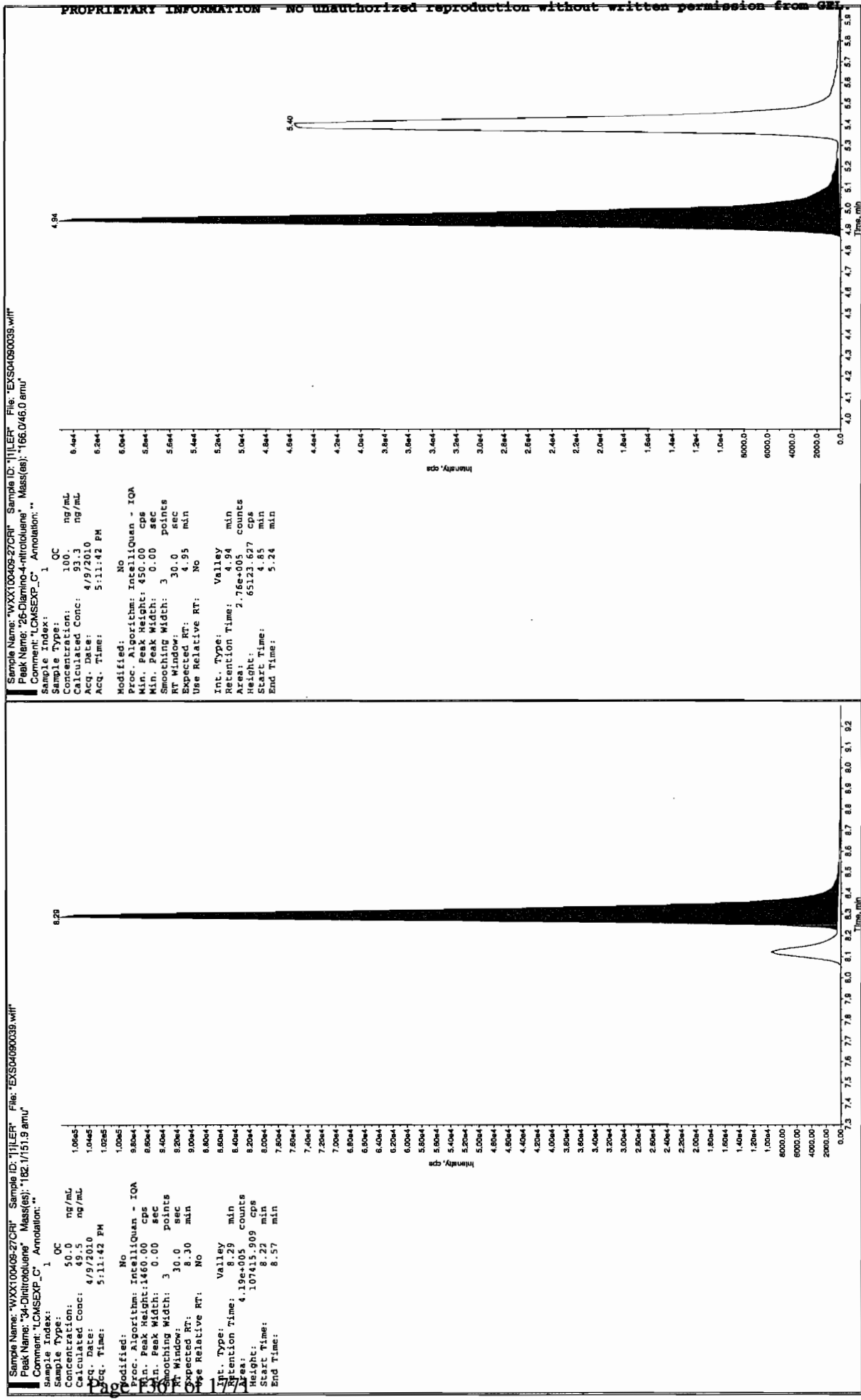
\* Value outside of Recovery Limits



San 4/12/10

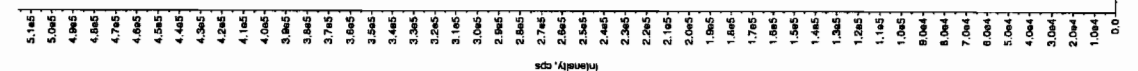


San 4/12/10



Sample Name: "WXX100409-27C01" Sample ID: "111LER" File: "EXSD04090039.wif"  
 Peak Name: "tris(o-cresyl) phosphata" Mass(es): "369.171.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 100. ng/mL  
 Calculated Conc: 102. ng/mL  
 Acq. Date: 4/9/2010  
 Acq. Time: 5:11:42 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 8000.00 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: 2.08e+006 counts  
 Height: 515762.024 cps  
 Start Time: 10.7 min  
 End Time: 11.2 min



Sample Name: "WXX100409-27C01" Sample ID: "111LER" File: "EXSD04090039.wif"  
 Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.046.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 100. ng/mL  
 Calculated Conc: 100. ng/mL  
 Acq. Date: 4/9/2010  
 Acq. Time: 5:11:42 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: 5.40 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.40 min  
 Area: 2.12e+005 counts  
 Height: 45472.290 cps  
 Start Time: 5.31 min  
 End Time: 5.82 min



7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2199

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS04090050.wiff

Analysis Date: 09-APR-10 20:04

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	565	113	
2,6-Diamino-4-nitrotoluene	500	531	106	
3,4-Dinitrotoluene	250	242	97	
3,5-Dinitroaniline	500	520	104	
TATB	500	503	101	
tris(o-cresyl) phosphate	500	507	101	

Recovery Limits:

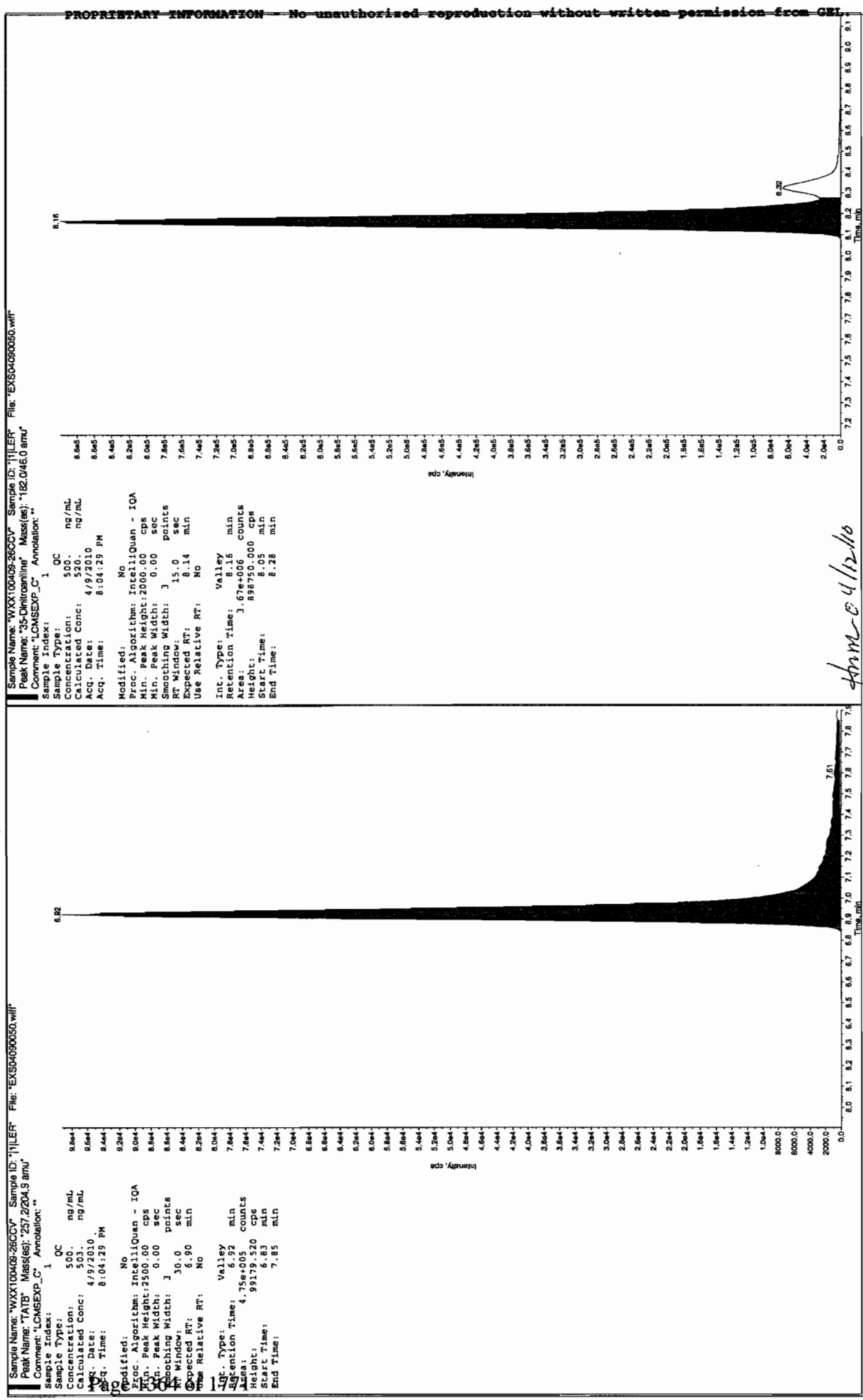
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

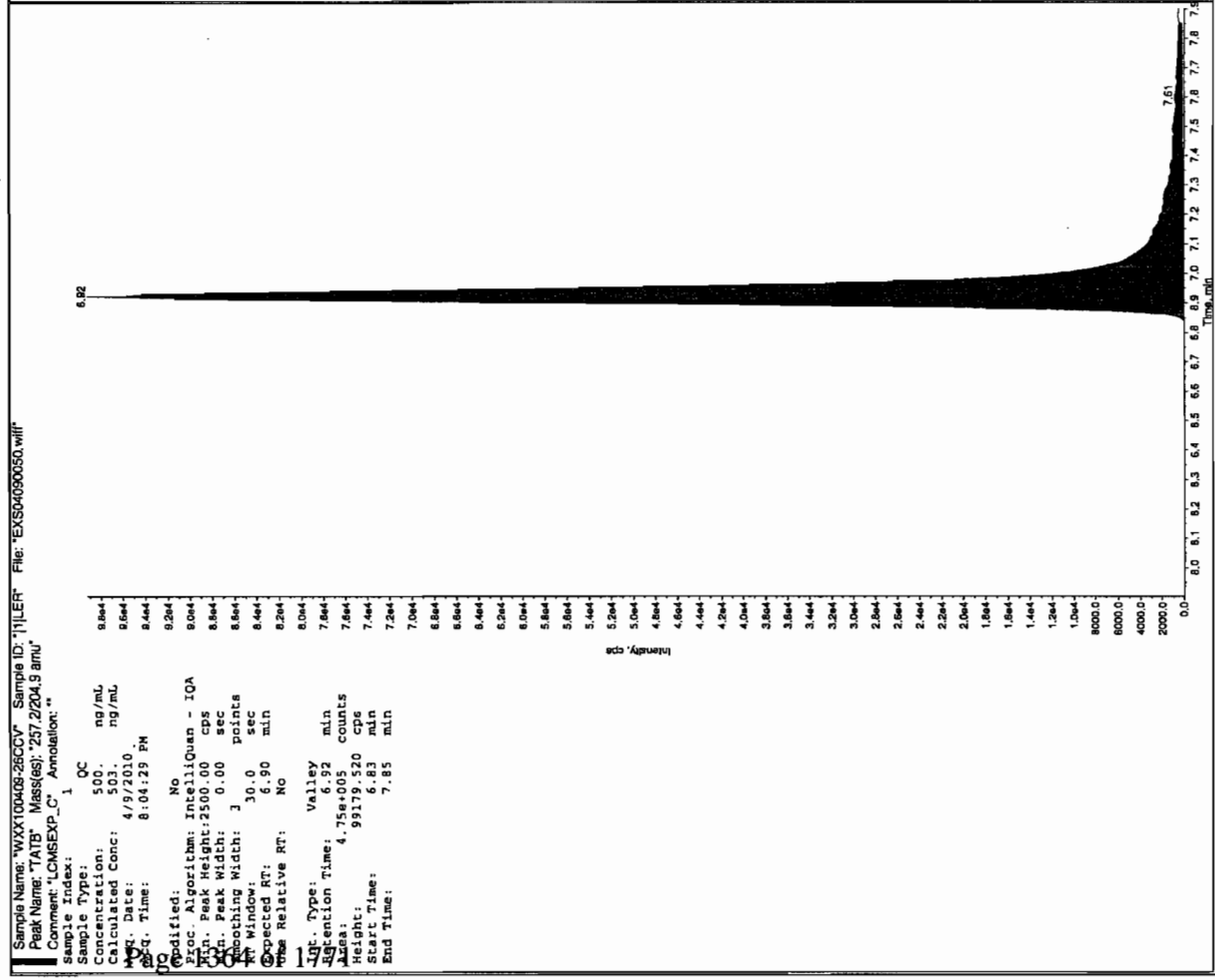
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

See 4/12/10

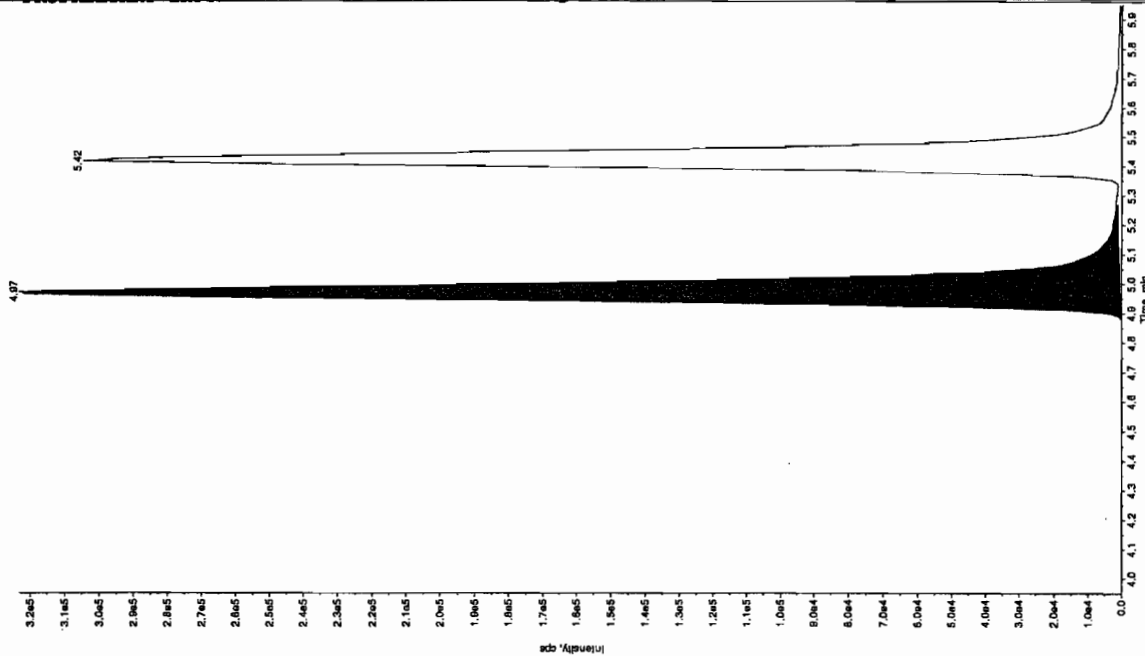


See 4/12/10



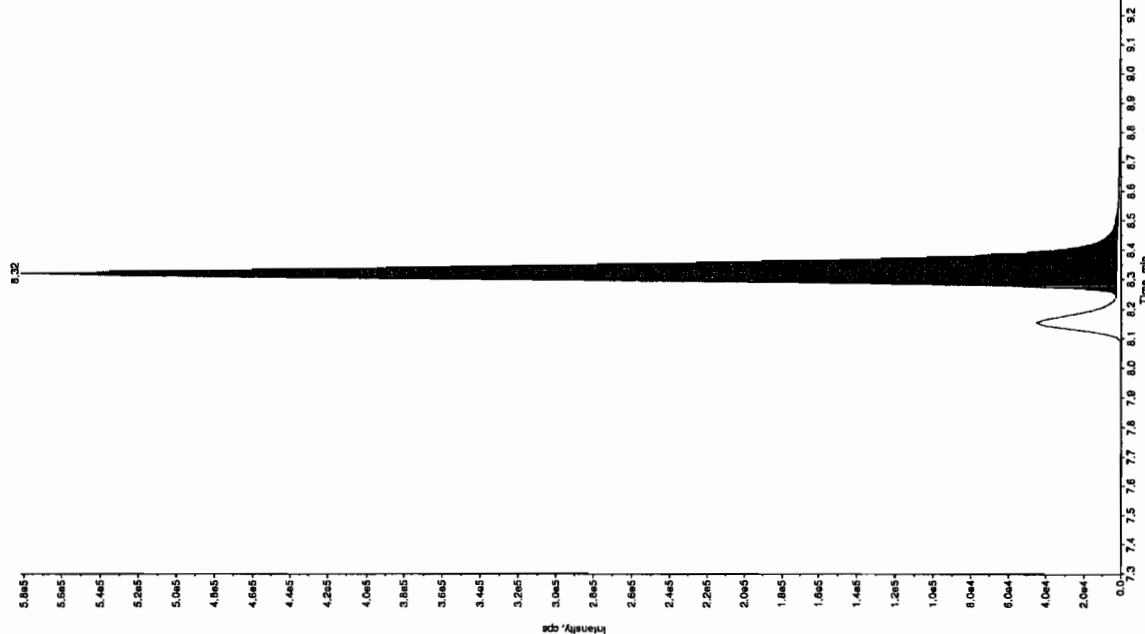
Sample Name: WXX100408-26CCV Sample ID: 111ER File: EXS04090050.wiff  
 Peak Name: 25-Dinitro-4-nitrofluorene Mass(es): 166.0460 amu  
 Comment: LCMSEXP\_C Amulation:

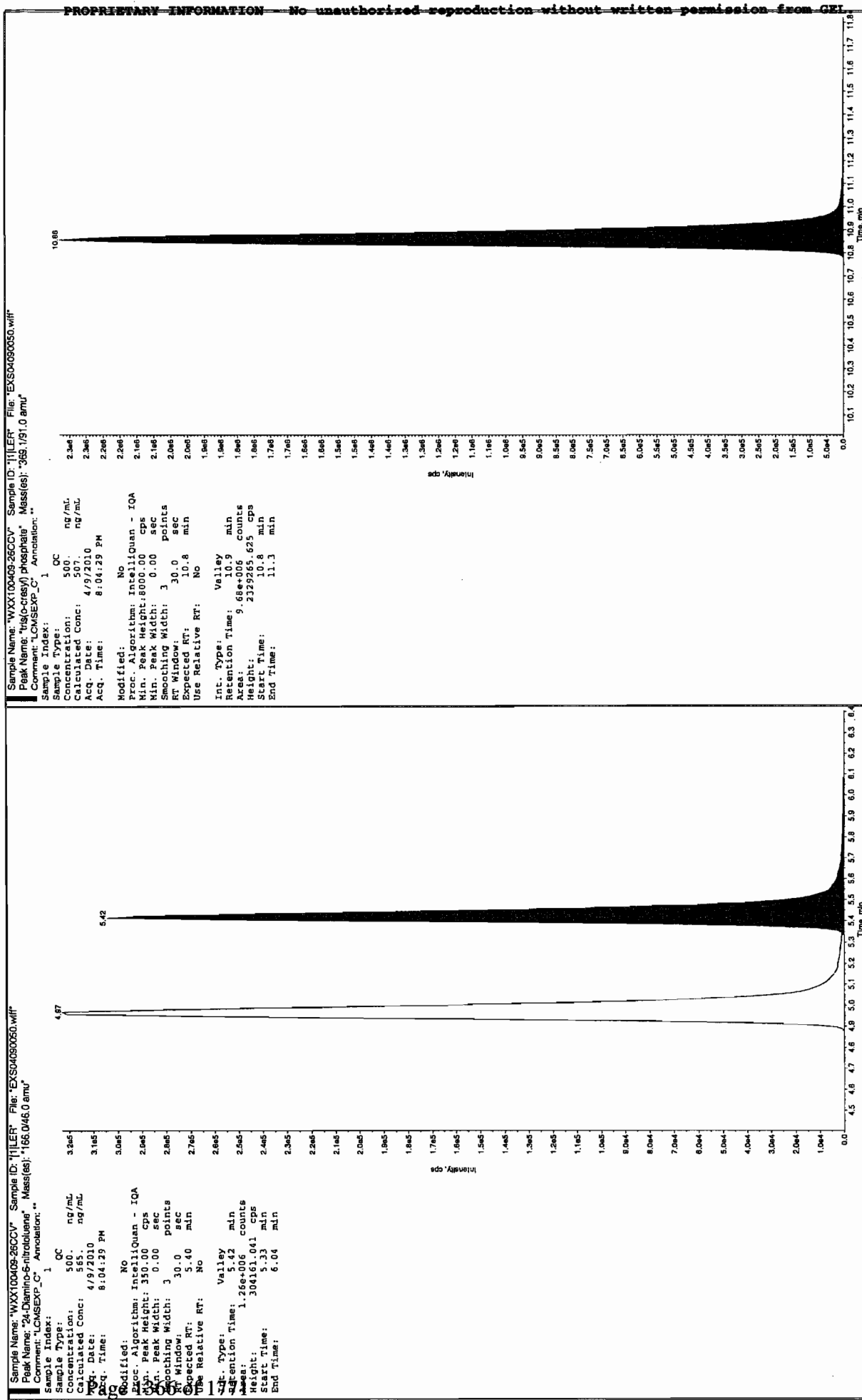
Sample Index: 1  
 Sample Type: QC  
 Concentration: 500 ng/mL  
 Calculated Conc: 531 ng/mL  
 Acq. Date: 4/9/2010  
 Acq. Time: 8:04:29 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 450.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 4.95 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 4.97 min  
 Area: 1.46e+006 counts  
 Height: 322816.928 cps  
 Start Time: 4.57 min  
 End Time: 5.27 min



Sample Name: WXX100408-26CCV Sample ID: 111ER File: EXS04090050.wiff  
 Peak Name: 34-Dinitrofluorene Mass(es): 182.17151 amu  
 Comment: LCMSEXP\_C Amulation:

Sample Index: 1  
 Sample Type: QC  
 Concentration: 250 ng/mL  
 Calculated Conc: 250 ng/mL  
 Acq. Date: 4/9/2010  
 Acq. Time: 8:04:29 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: 30.0 sec  
 Expected RT: 8.30 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.32 min  
 Area: 2.17e+006 counts  
 Height: 578844.971 cps  
 Start Time: 8.23 min  
 End Time: 8.67 min





7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2199

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS04090052.wiff

Analysis Date: 09-APR-10 20:35

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	94.7	95	
3,4-Dinitrotoluene	50	50.3	101	
3,5-Dinitroaniline	100	105	105	
TATB	100	109	109	
tris(o-cresyl) phosphate	100	102	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%

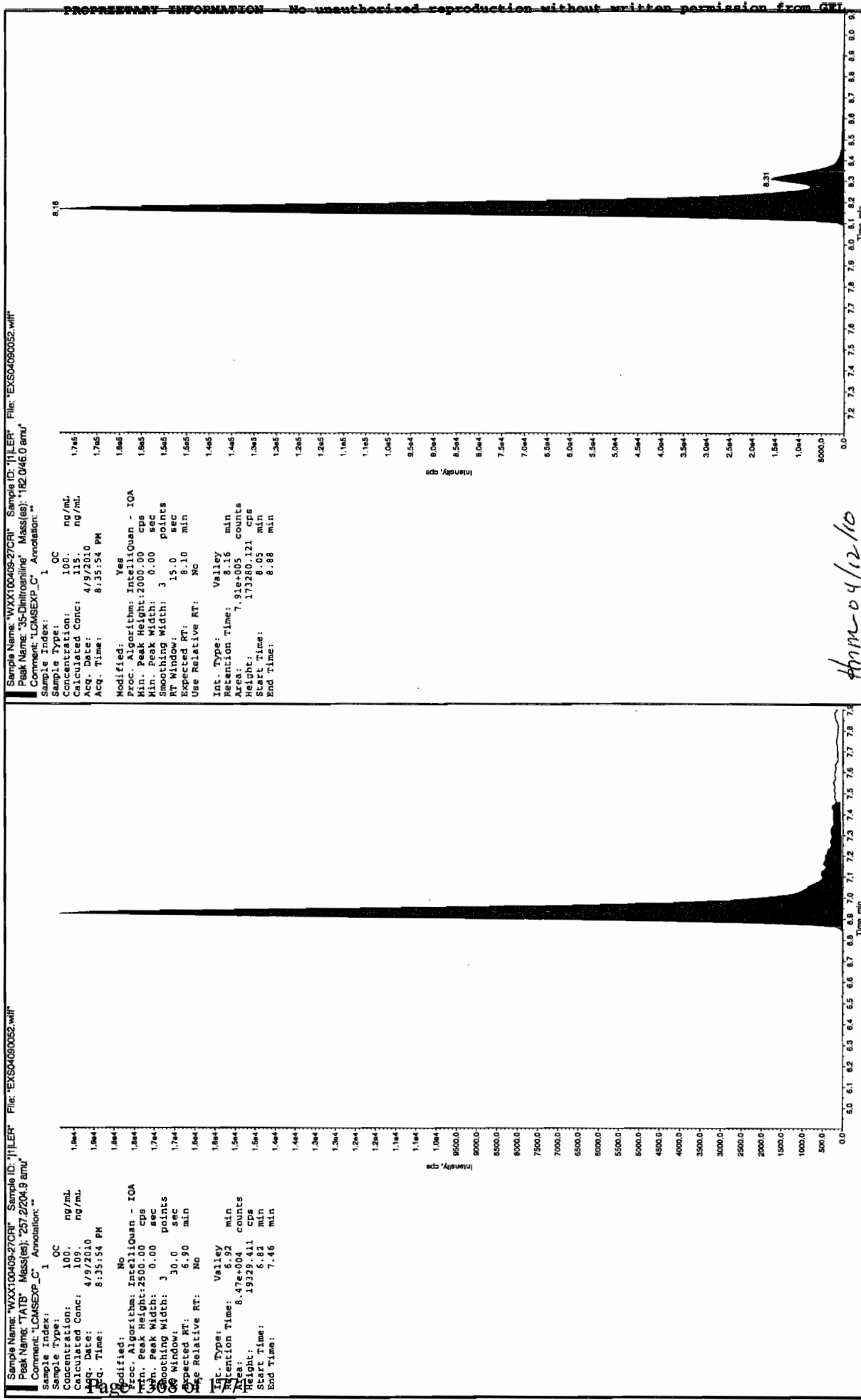
Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

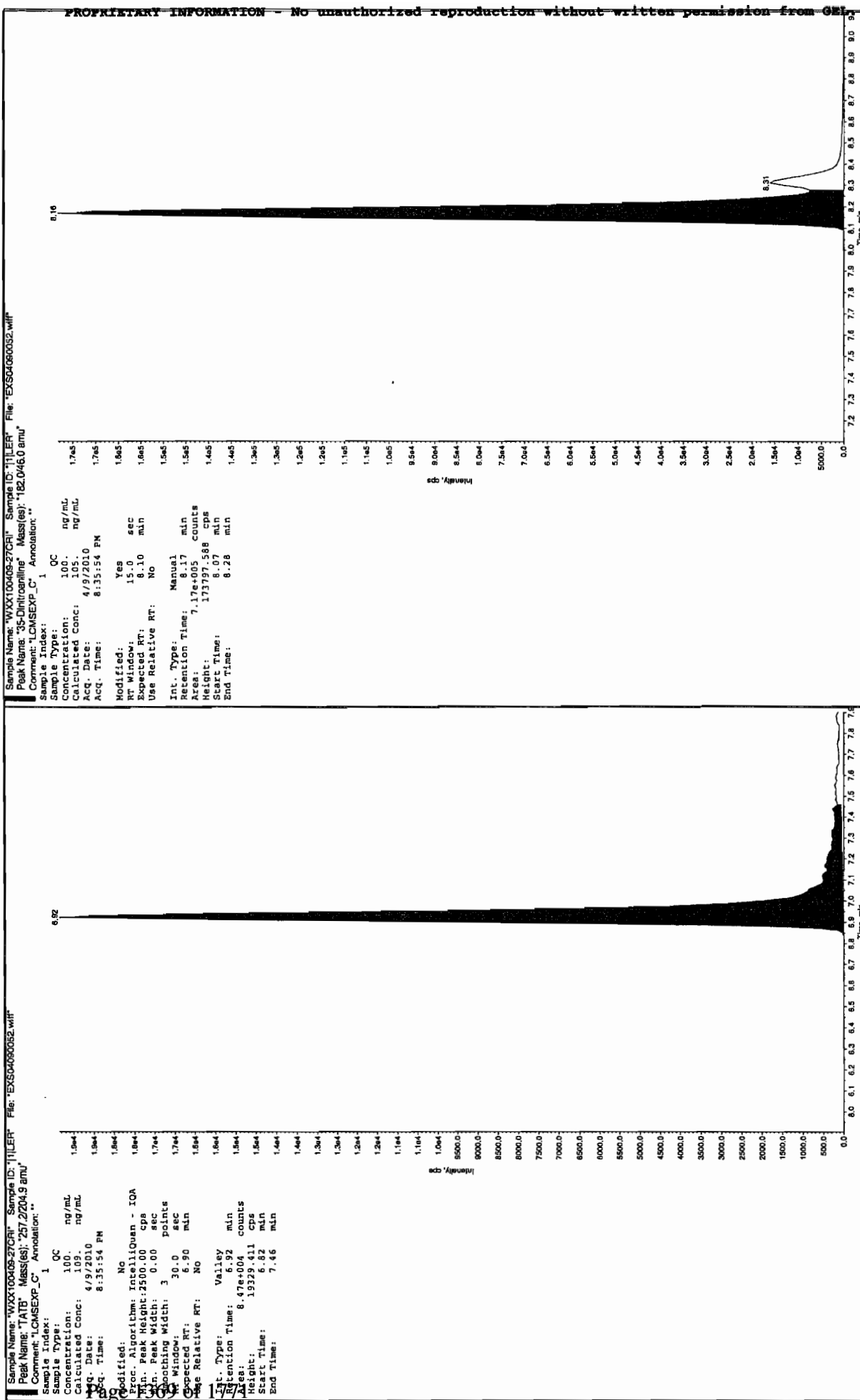


Before Jan 4/12/10



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

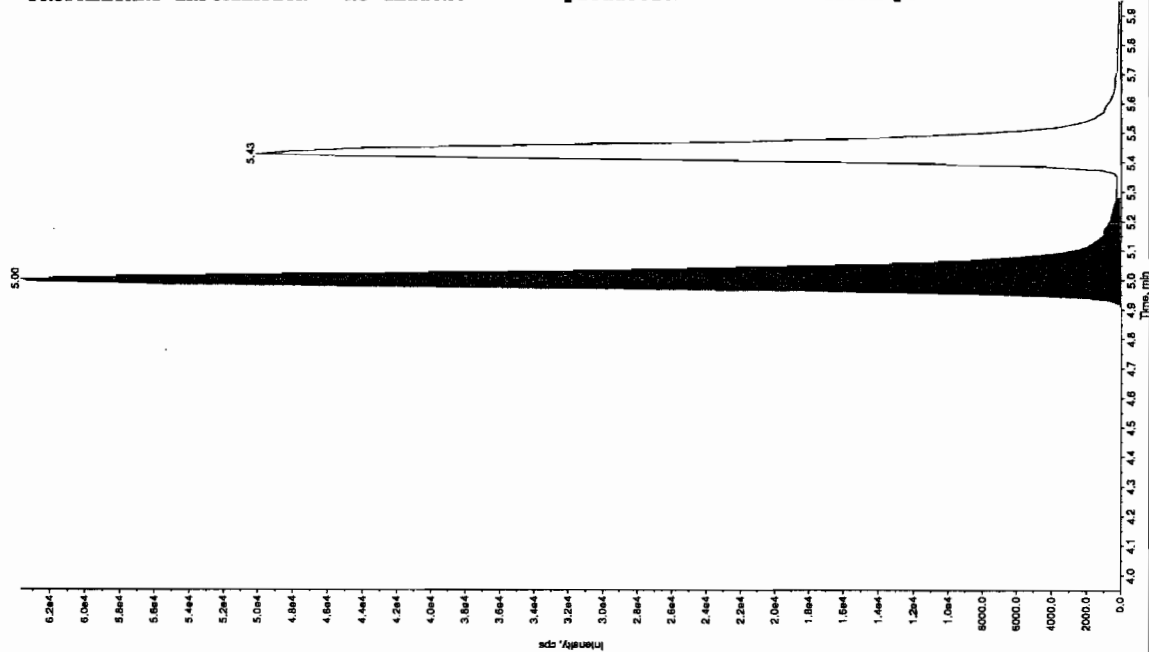
After Jan 4/12/10



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

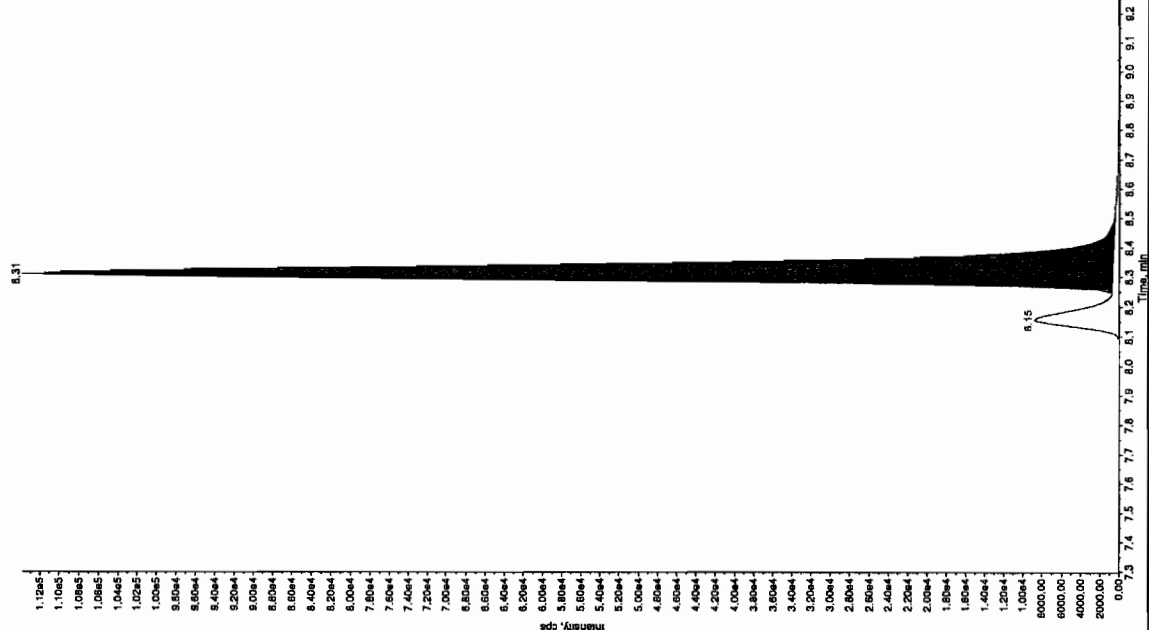
Sample Name: "WXX10406-27C1" Sample ID: "111ER" File: "EXS0409052.wif"  
 Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.046.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: "

Sample Index: 1 QC  
 Sample Type: 100. ng/mL  
 Concentration: 94.7 ng/mL  
 Calculated Conc: 4/9/2010  
 Acq. Date: 8:35:54 PM  
 Acq. Time: 8:35:54 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: 4.95 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.00 min  
 Area: 2.80e+005 counts  
 Height: 63629.404 cps  
 Start Time: 4.90 min  
 End Time: 5.28 min



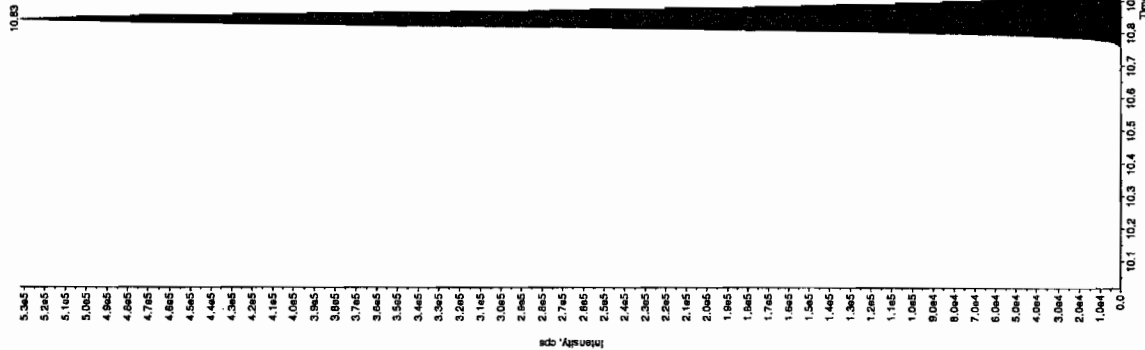
Sample Name: "WXX10406-27C1" Sample ID: "111ER" File: "EXS0409052.wif"  
 Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"  
 Comment: "LCMSEXP\_C" Annotation: "

Sample Index: 1 QC  
 Sample Type: 50.0 ng/mL  
 Concentration: 50.3 ng/mL  
 Calculated Conc: 4/9/2010  
 Acq. Date: 8:35:54 PM  
 Acq. Time: 8:35:54 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: 30.0 sec  
 Expected RT: 8.30 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.31 min  
 Area: 4.27e+005 counts  
 Height: 113157.799 cps  
 Start Time: 8.25 min  
 End Time: 8.56 min



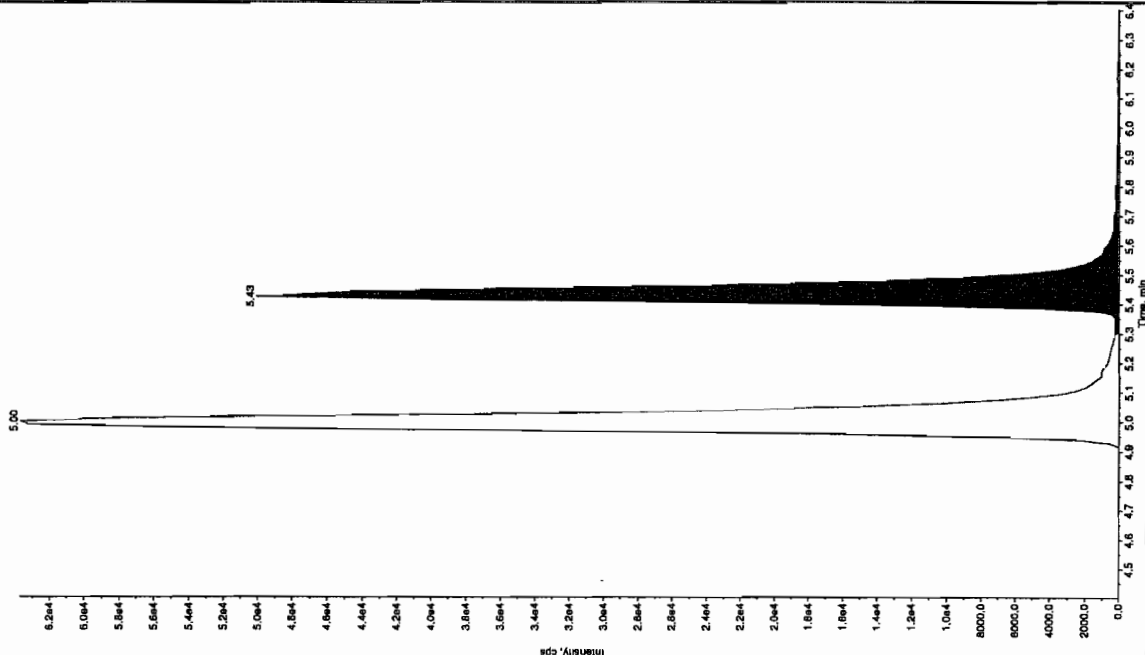
Sample Name: "WXX100405-27CRI" Sample ID: "11LER" File: "EXS04080052.wif"  
 Peak Name: "tris(2-cresyl) phosphate" Mass(es): "359.1/91.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: "

Sample Index: 1  
 Sample Type: QC  
 Concentration: 100. ng/mL  
 Calculated Conc: 102. ng/mL  
 Acq. Date: 4/9/2010  
 Acq. Time: 8:35:54 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 8000.00 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: 2.09e+006 counts  
 Height: 531803.162 cps  
 Start Time: 10.7 min  
 End Time: 11.2 min



Sample Name: "WXX100405-27CRI" Sample ID: "11LER" File: "EXS04080052.wif"  
 Peak Name: "24-Diimino-6-nitrotoluene" Mass(es): "166.048.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: "

Sample Index: 1  
 Sample Type: QC  
 Concentration: 100. ng/mL  
 Calculated Conc: 101. ng/mL  
 Acq. Date: 4/9/2010  
 Acq. Time: 8:35:54 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: 5.40 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.43 min  
 Area: 2.14e+005 counts  
 Height: 49977.051 cps  
 Start Time: 5.30 min  
 End Time: 5.98 min



7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2199

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS04090063.wiff

Analysis Date: 09-APR-10 23:28

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	458	92	
2,6-Diamino-4-nitrotoluene	500	485	97	
3,4-Dinitrotoluene	250	227	91	
3,5-Dinitroaniline	500	437	87	
TATB	500	458	92	
tris(o-cresyl) phosphate	500	502	100	

Recovery Limits:

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

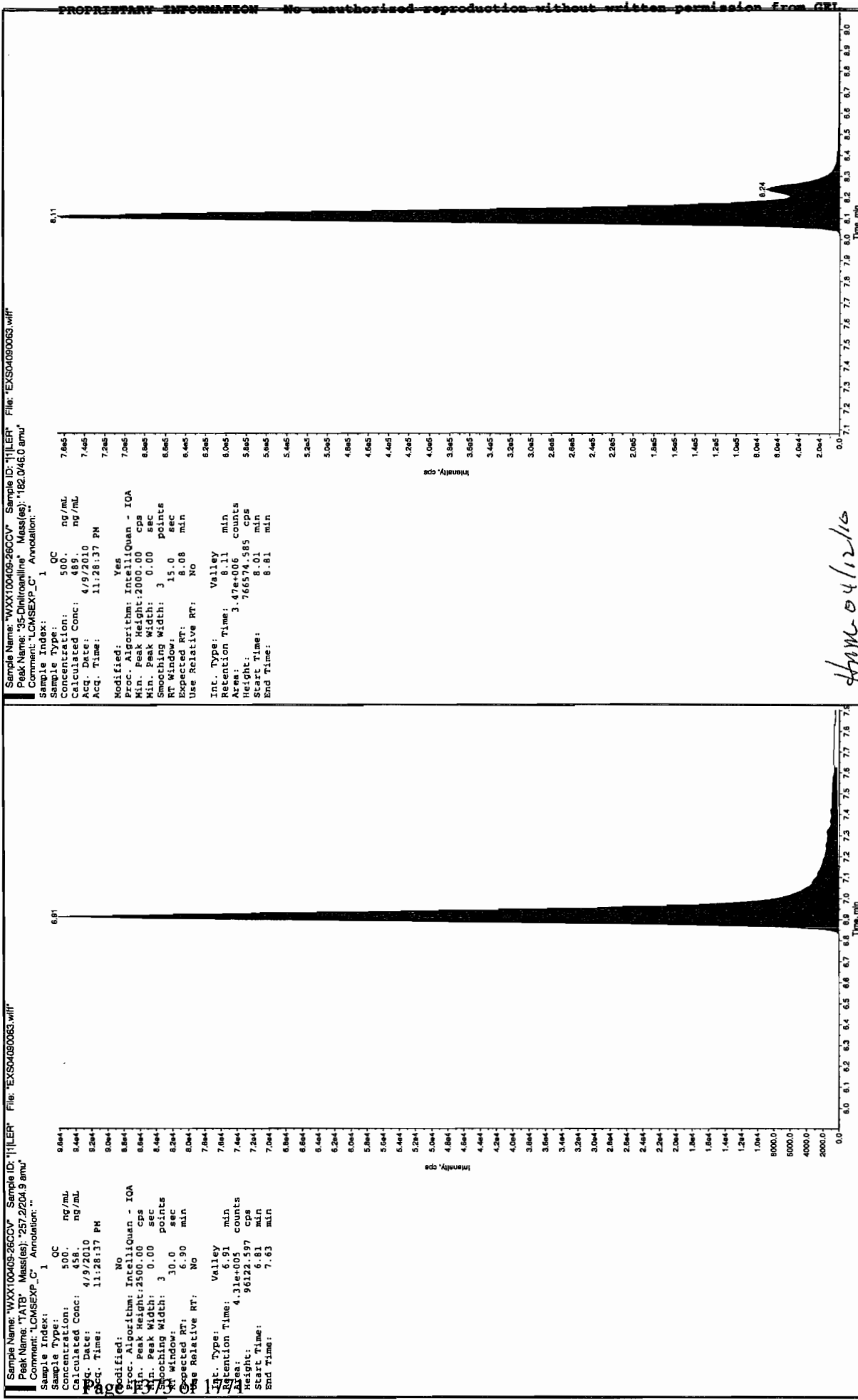
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

# Column used to flag Recovery outside of Limits

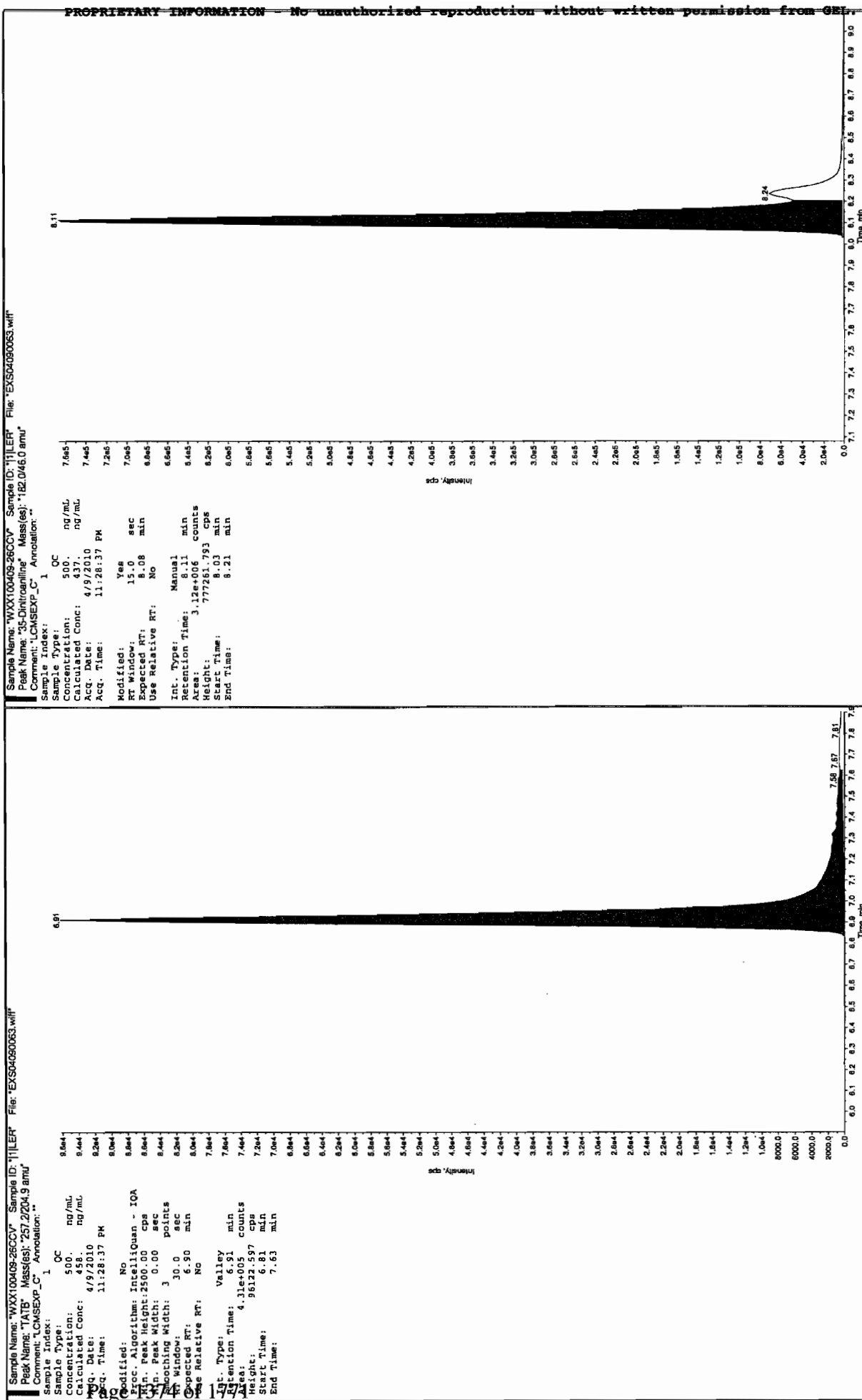
\* Value outside of Recovery Limits

Before den 4/12/10



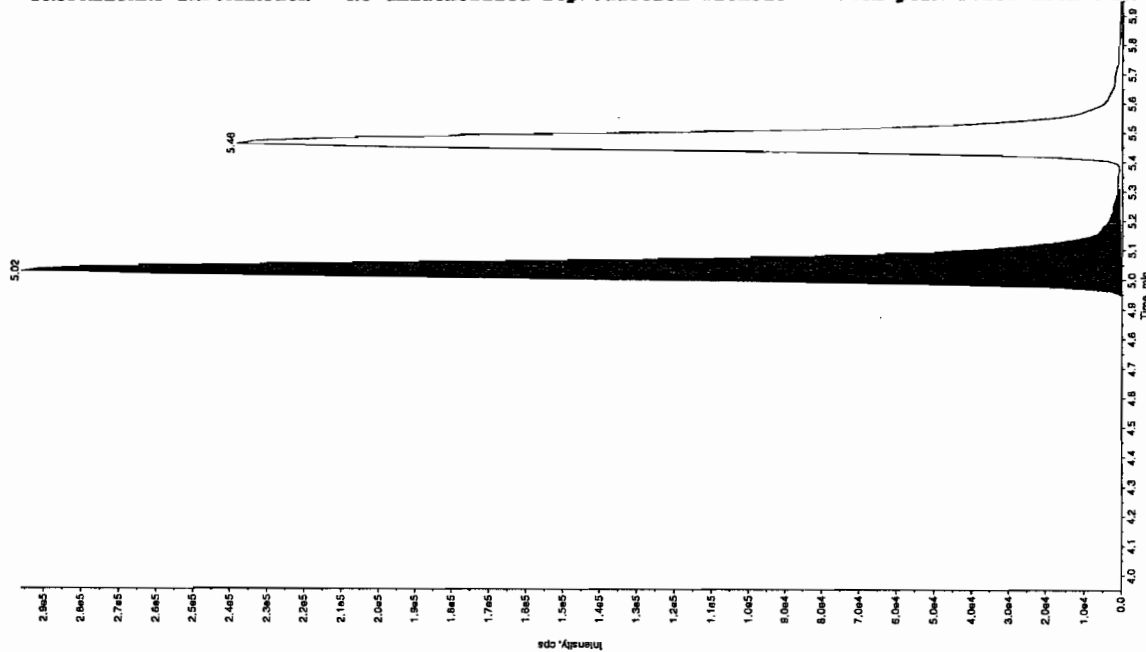
\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

after Jan 4/12/10



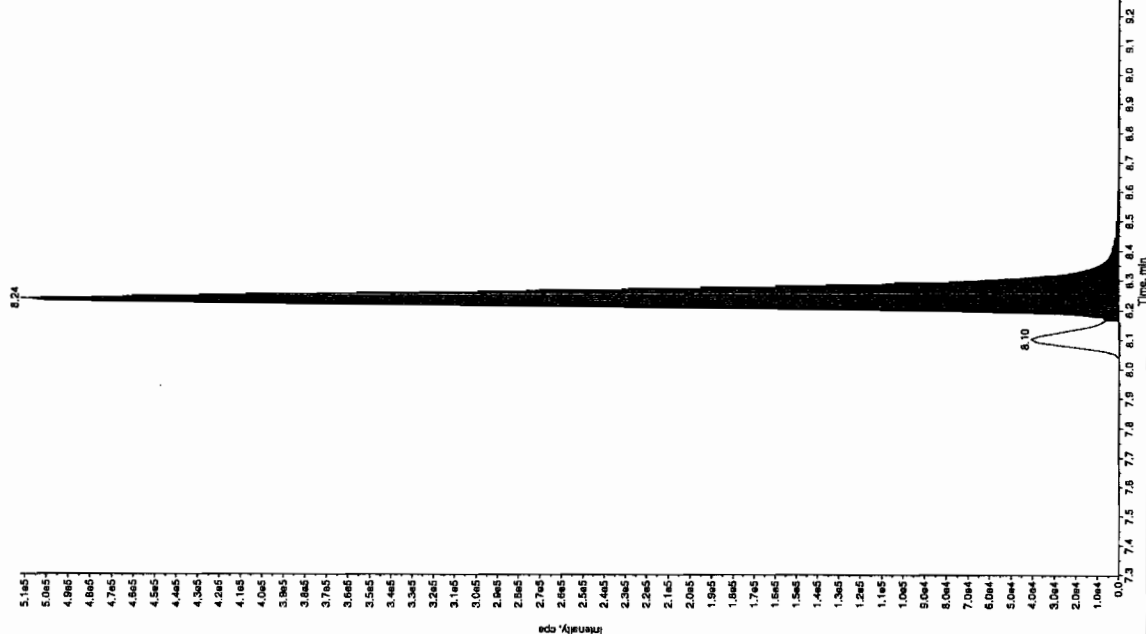
Sample Name: "WXX100409-260CV" Sample ID: "111LER" File: "EX504090063.wif"  
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.046.0 amu"  
Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
Sample Type: QC  
Concentration: 500. ng/mL  
Calculated Conc: 485. ng/mL  
Acq. Date: 4/9/2010  
Acq. Time: 11:28:37 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: 30.0 sec  
Expected RT: 4.95 min  
Use Relative RT: No  
Int. Type: Valley  
Retention Time: 5.02 min  
Area: 1.14e+006 counts  
Height: 295689.270 cps  
Start Time: 4.93 min  
End Time: 5.31 min

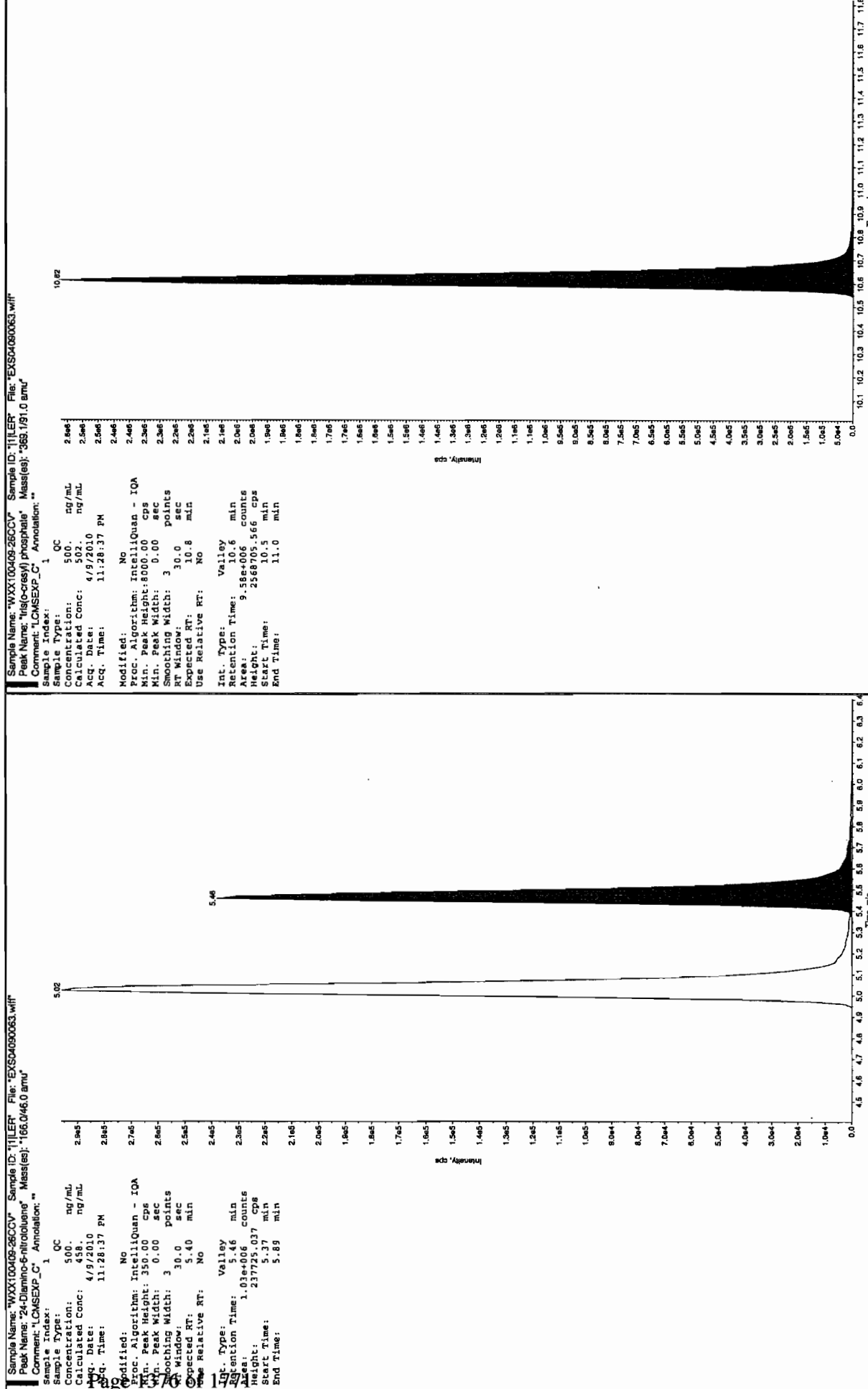


Sample Name: "WXX100409-260CV" Sample ID: "111LER" File: "EX504090063.wif"  
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1751.9 amu"  
Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
Sample Type: QC  
Concentration: 250. ng/mL  
Calculated Conc: 227. ng/mL  
Acq. Date: 4/9/2010  
Acq. Time: 11:28:37 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: 30.0 sec  
Expected RT: 8.30 min  
Use Relative RT: No  
Int. Type: Valley  
Retention Time: 8.24 min  
Area: 2.03e+006 counts  
Height: 511593.784 cps  
Start Time: 8.16 min  
End Time: 8.76 min







7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2199

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS04090065.wiff

Analysis Date: 10-APR-10 00:00

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	96.4	96	
2,6-Diamino-4-nitrotoluene	100	85.8	86	
3,4-Dinitrotoluene	50	46.7	93	
3,5-Dinitroaniline	100	92.4	92	
TATB	100	98	98	
tris(o-cresyl) phosphate	100	107	107	

Recovery Limits:

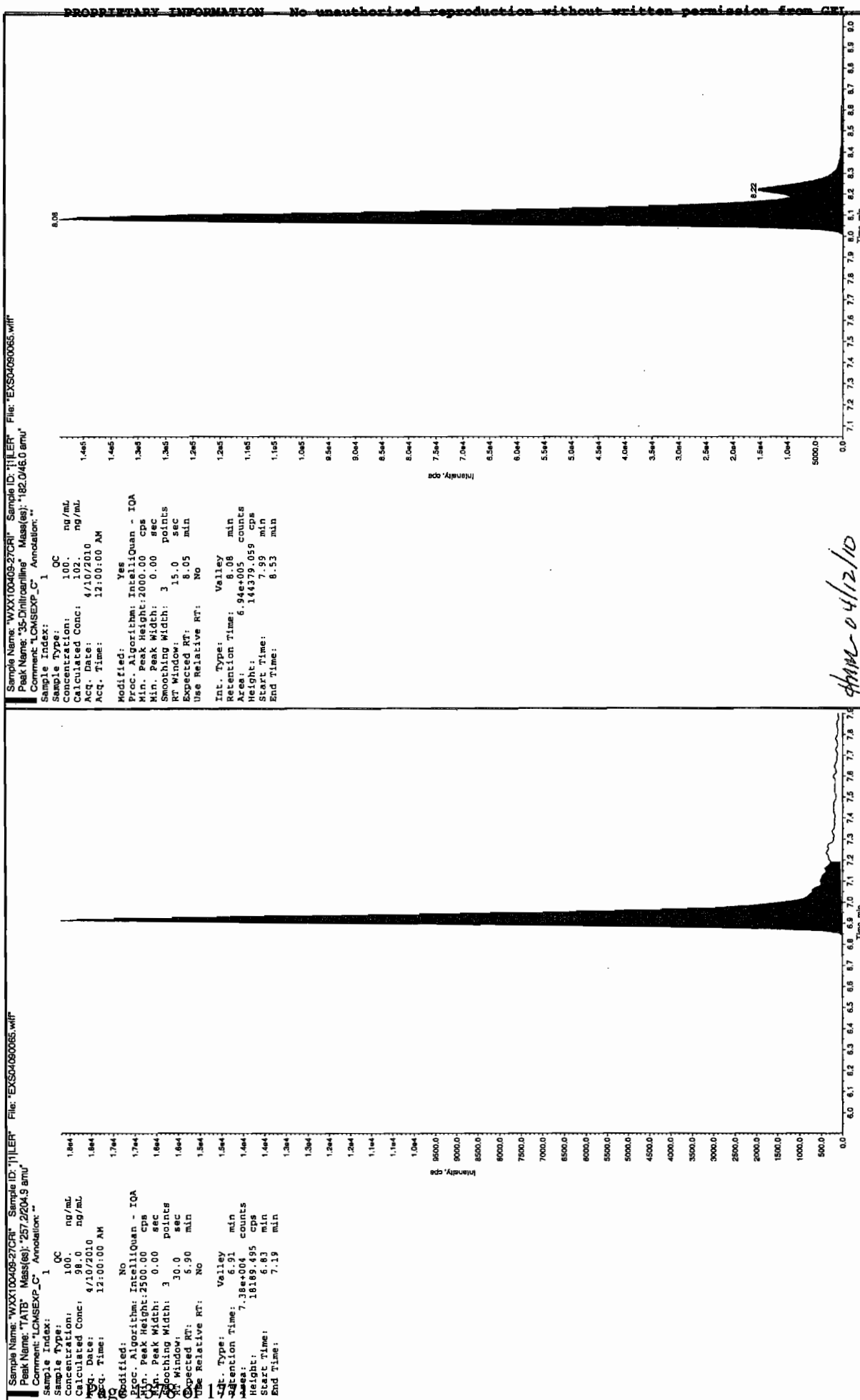
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

Before Jan 4/12/10



After Jan 4/12/10

after Jan 4/12/10

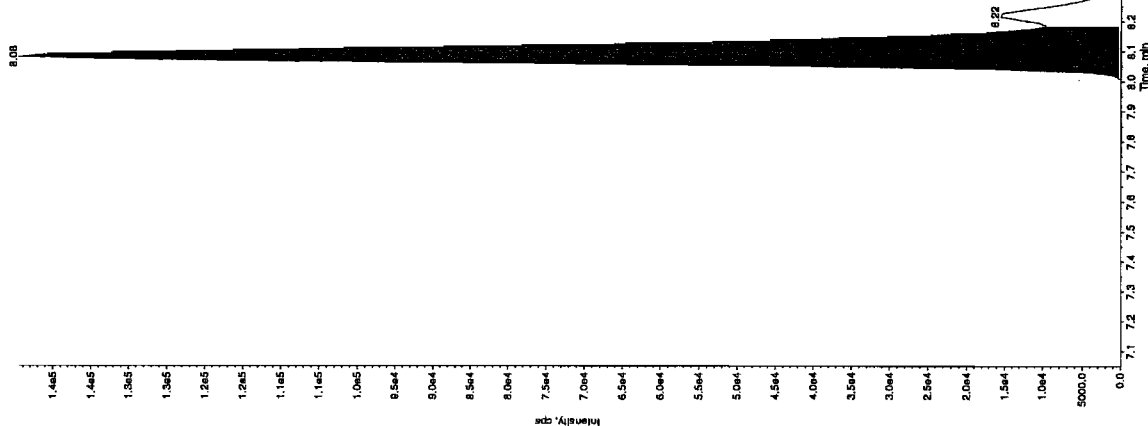
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Sample Name: 'WXX100409-27.CRI' Sample ID: '111LER' File: 'EXS04090065.wif'

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

Comment: 'LCMSEXP\_C' Annotation: ''

Sample Index: 1 QC  
Sample Type: 100 ng/mL  
Concentration: 100 ng/mL  
Calculated Conc: 92.4 ng/mL  
Acq. Date: 4/10/2010  
Acq. Time: 12:00:00 AM  
Modified: Yes  
RT Window: 15.0 sec  
Expected RT: 8.05 min  
Use Relative RT: No  
Int. Type: Manual  
Retention Time: 8.09 min  
Area: 6,218,095 counts  
Height: 14532096 cps  
Start Time: 8.01 min  
End Time: 8.19 min

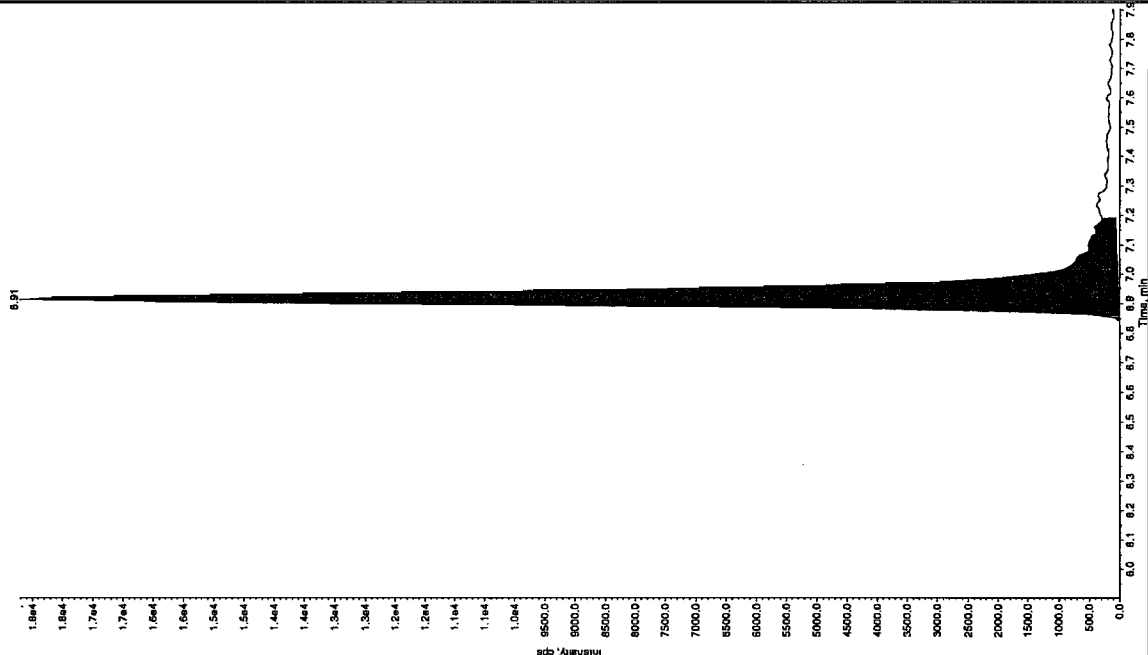


Sample Name: 'WXX100409-27.CRI' Sample ID: '111LER' File: 'EXS04090065.wif'

Peak Name: 'TATB' Mass(es): '237.2204.9 amu'

Comment: 'LCMSEXP\_C' Annotation: ''

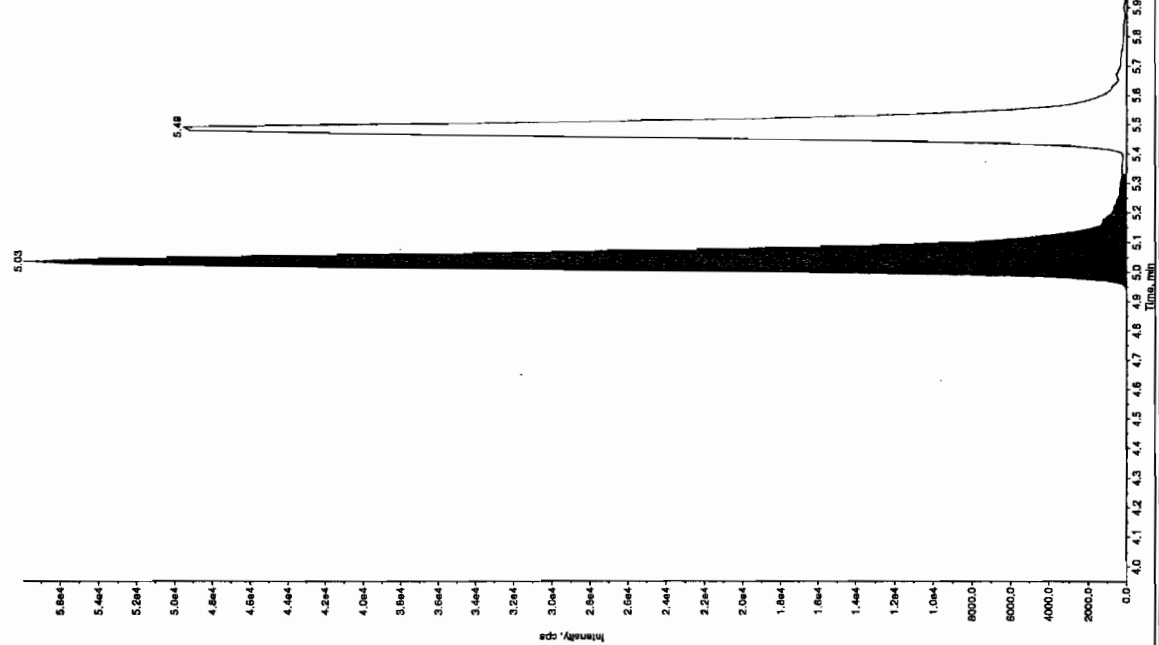
Sample Index: 1 QC  
Sample Type: 100 ng/mL  
Concentration: 100 ng/mL  
Calculated Conc: 98.0 ng/mL  
Acq. Date: 4/10/2010  
Acq. Time: 12:00:00 AM  
Modified: No  
Proc. Algorithm: IntelliQuan - IQA  
Min. Peak Height: 2500.00 cps  
Min. Peak Width: 0.00 sec  
Smoothing Width: 3 points  
RT Window: 30.0 sec  
Expected RT: 6.90 min  
Use Relative RT: No  
Int. Type: Valley  
Retention Time: 7.38 min  
Area: 7,386,004 counts  
Height: 18189495 cps  
Start Time: 6.83 min  
End Time: 7.19 min



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

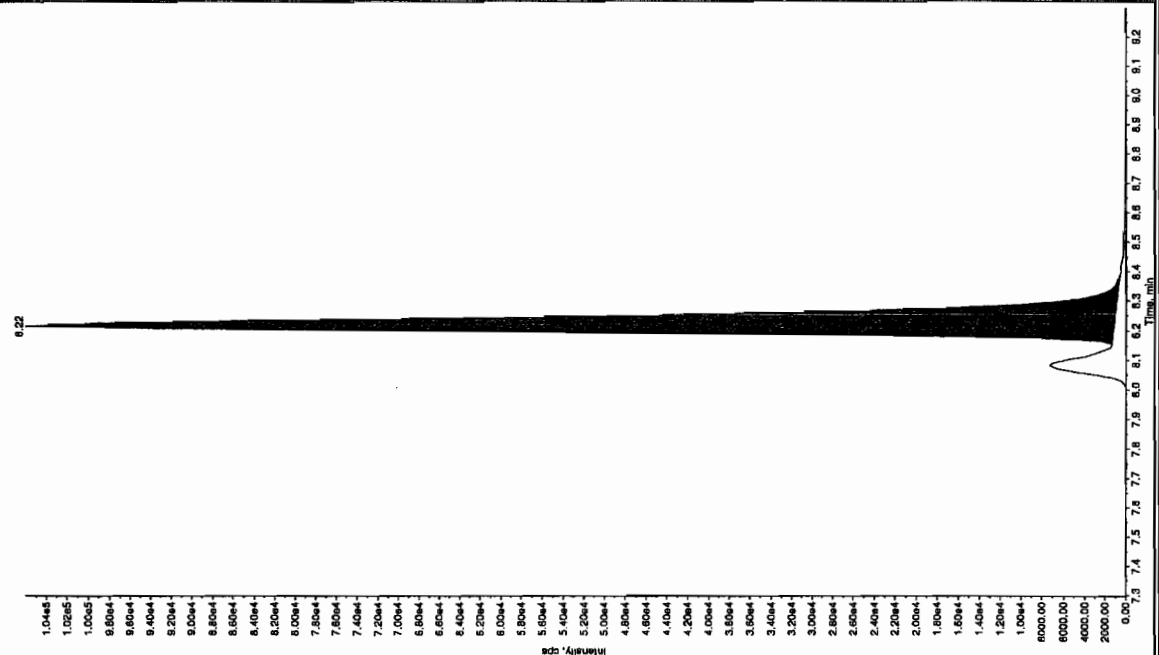
Sample Name: "WXX100408-27.CRI" Sample ID: "11LER" File: "EXS04090065.wif"  
Peak Name: "34-Dinitrofluorene" Mass(es): "166.046.0 amu"  
Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
Sample Name: "WXX100408-27.CRI" Sample ID: "11LER" File: "EXS04090065.wif"  
Sample Type: 1  
Concentration: 100. ng/mL  
Calculated Conc: 85.8 ng/mL  
Acq. Date: 4/10/2010  
Acq. Time: 12:00:00 AM  
Modified: No  
Proc. Algorithm: IntelliQuan - IQA  
Min. Peak Height: 450.00 cps  
Min. Peak Width: 0.00 sec  
Smoothing Width: 3 points  
RT Window: 30.0 sec  
Expected RT: 4.95 min  
Use Relative RT: No  
Int. Type: Valley  
Retention Time: 5.03 min  
Area: 2.55e+03 counts  
Height: 57897380 cps  
Start Time: 4.88 min  
End Time: 5.33 min



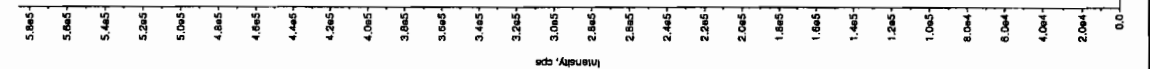
Sample Name: "WXX100408-27.CRI" Sample ID: "11LER" File: "EXS04090065.wif"  
Peak Name: "34-Dinitrofluorene" Mass(es): "162.1715.9 amu"  
Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
Sample Name: "WXX100408-27.CRI" Sample ID: "11LER" File: "EXS04090065.wif"  
Sample Type: 1  
Concentration: 50. ng/mL  
Calculated Conc: 46.7 ng/mL  
Acq. Date: 4/10/2010  
Acq. Time: 12:00:00 AM  
Modified: No  
Proc. Algorithm: IntelliQuan - IQA  
Min. Peak Height: 1460.00 cps  
Min. Peak Width: 0.00 sec  
Smoothing Width: 3 points  
RT Window: 30.0 sec  
Expected RT: 8.30 min  
Use Relative RT: No  
Int. Type: Valley  
Retention Time: 8.22 min  
Area: 3.93e+005 counts  
Height: 106849785 cps  
Start Time: 8.15 min  
End Time: 8.39 min



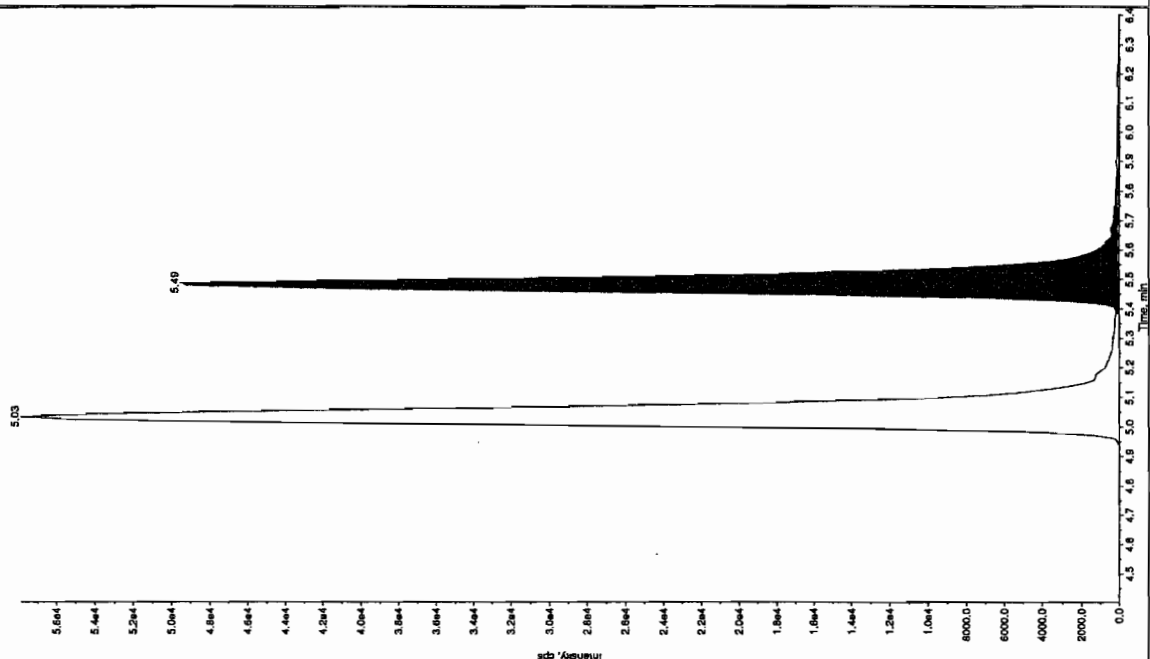
Sample Name: "WXX100408-27CPI" Sample ID: "11LER" File: "EXS04090065.wif"  
 Peak Name: "1,3-Dinitro-5-nitrofluorene" Mass(es): 385.191.0 amu  
 Comment: "LCMS-EXP-C" Annotation: "

Sample Index: 1  
 Sample Type: QC  
 Concentration: 100. ng/mL  
 Calculated Conc: 107. ng/mL  
 Acq. Date: 4/10/2010  
 Acq. Time: 12:00:00 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 8000.00 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: 2.18e+006 counts  
 Height: 585400.098 cps  
 Start Time: 11.5 min  
 End Time: 11.0 min



Sample Name: "WXX100408-27CPI" Sample ID: "11LER" File: "EXS04090065.wif"  
 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: 96.4 ng/mL  
 Acq. Date: 4/10/2010  
 Acq. Time: 12:00:00 AM  
 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: 5.40 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.49 min  
 Area: 2.03e+005 counts  
 Height: 49435.459 cps  
 Start Time: 5.38 min  
 End Time: 5.87 min



7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2199

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS04090071.wiff

Analysis Date: 10-APR-10 01:34

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	442	88	
2,6-Diamino-4-nitrotoluene	500	436	87	
3,4-Dinitrotoluene	250	202	81	
3,5-Dinitroaniline	500	447	89	
TATB	500	491	98	
tris(o-cresyl) phosphate	500	509	102	

Recovery Limits:

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

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

Other Target Analytes 80-120%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

See 4/12/10

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Sample Name: "WXX100409-26CCV" Sample ID: "H1LER" File: "EXS04090071.wif"

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

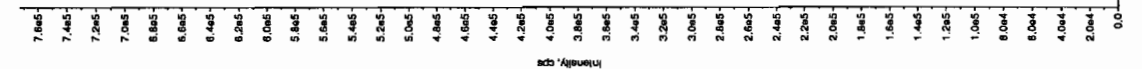
Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1

Sample Type: QC  
Concentration: 500. ng/mL  
Calculated Conc: 447. ng/mL  
Acq. Date: 4/10/2010  
Acq. Time: 1:34:16 AM

Modified: No  
Proc. Algorithm: IntelliQuan - IQA  
Min. Peak Height: 2000.00 cps  
Min. Peak Width: 3.00 sec  
Smoothing Width: 3 points  
RT Window: 15.0 sec  
Expected RT: 8.14 min  
Use Relative RT: No

Int. Type: Valley  
Retention Time: 8.17 min  
Area: 3.18e+006 counts  
Height: 772719.971 cps  
Start Time: 8.07 min  
End Time: 8.27 min



Sample Name: "WXX100409-26CCV" Sample ID: "H1LER" File: "EXS04090071.wif"

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

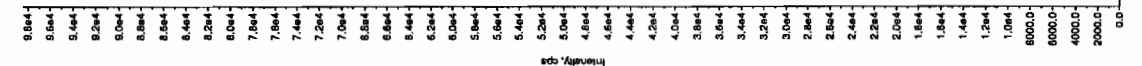
Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1

Sample Type: QC  
Concentration: 500. ng/mL  
Calculated Conc: 491. ng/mL  
Acq. Date: 4/10/2010  
Acq. Time: 1:34:16 AM

Modified: No  
Proc. Algorithm: IntelliQuan - IQA  
Min. Peak Height: 2500.00 cps  
Min. Peak Width: 3.00 sec  
Smoothing Width: 3 points  
RT Window: 30.0 sec  
Expected RT: 6.90 min  
Use Relative RT: No

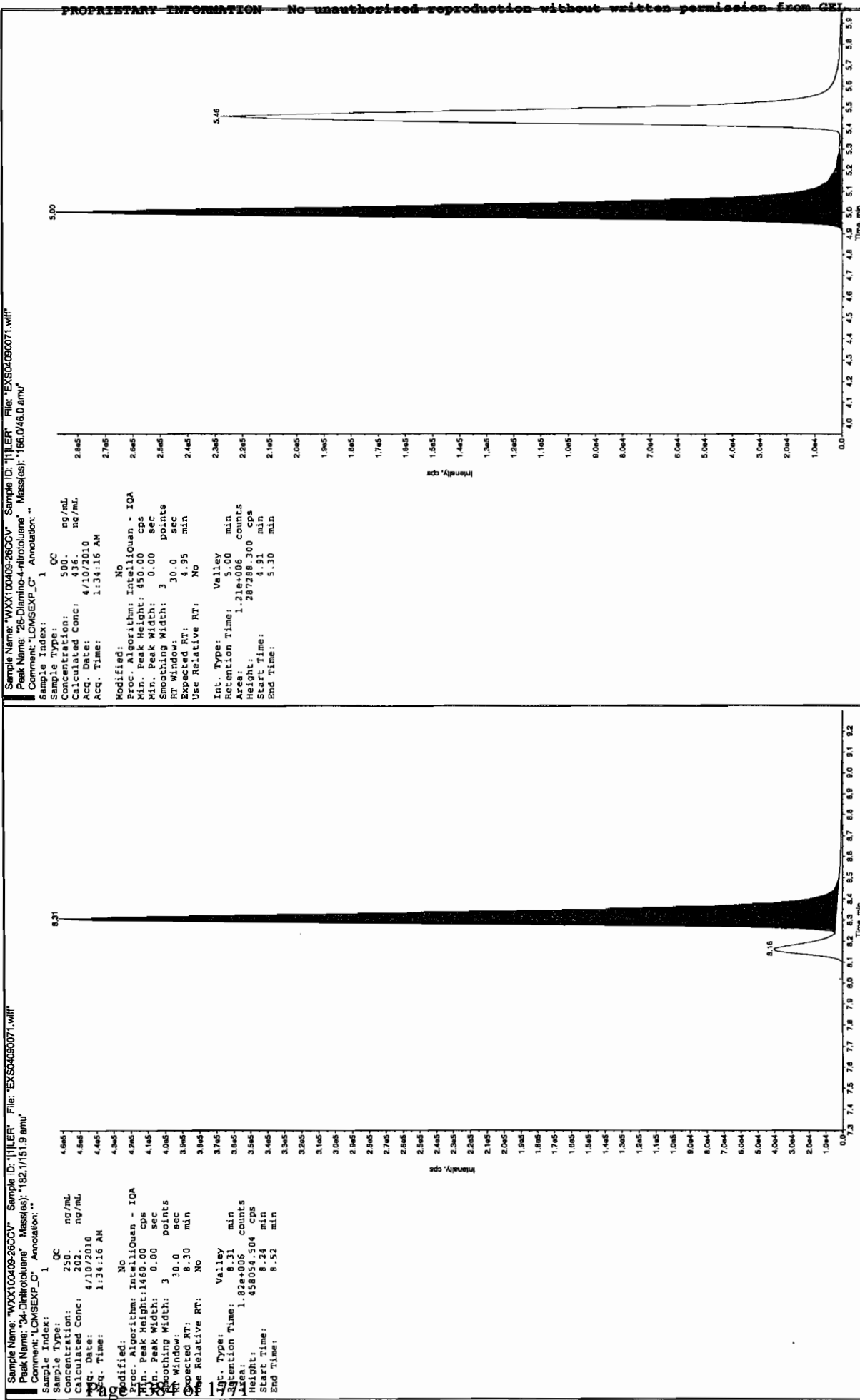
Int. Type: Valley  
Retention Time: 6.94 min  
Area: 4.64e+005 counts  
Height: 98341.179 cps  
Start Time: 6.83 min  
End Time: 7.71 min



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

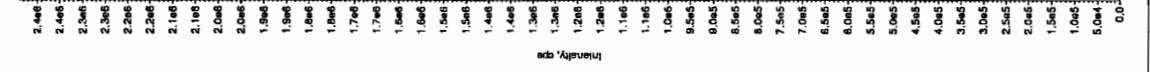
See 4/12/10





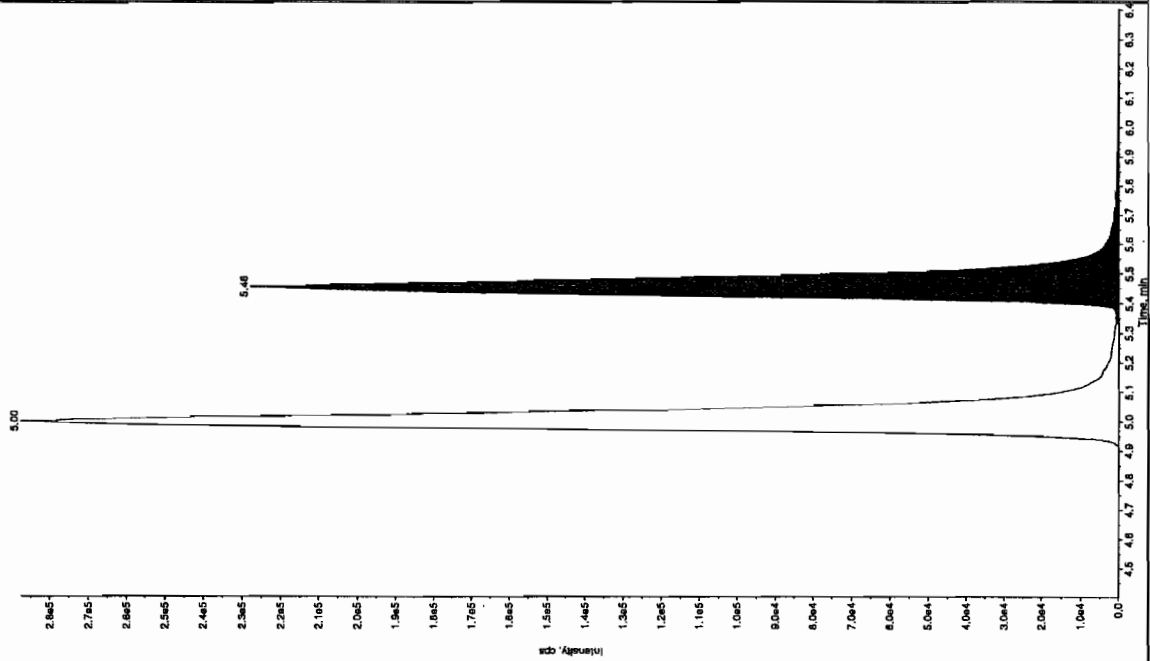
Sample Name: "WXX100409-26CCV" Sample ID: "111LRF" File: "EX504090071.wif"  
 Peak Name: "tris(2-chlorophenyl) phosphite" Mass(es): "369.191.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500 ng/mL  
 Calculated Conc: 509 ng/mL  
 Acq. Date: 4/10/2010  
 Acq. Time: 1:34:16 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 8000.00 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: 9.70e+006 counts  
 Height: 243923.342 cps  
 Start Time: 10.7 min  
 End Time: 11.2 min



Sample Name: "WXX100409-26CCV" Sample ID: "111LRF" File: "EX504090071.wif"  
 Peak Name: "2a-Diamino-6-nitrofluorene" Mass(es): "166.046.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500 ng/mL  
 Calculated Conc: 442 ng/mL  
 Acq. Date: 4/10/2010  
 Acq. Time: 1:34:16 AM  
 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: 5.40 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.46 min  
 Area: 9.92e+005 counts  
 Height: 227511.795 cps  
 Start Time: 5.33 min  
 End Time: 6.18 min



7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-2199

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS04090073.wiff

Analysis Date: 10-APR-10 02:05

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	100	100	
2,6-Diamino-4-nitrotoluene	100	78	78	
3,4-Dinitrotoluene	50	47.5	95	
3,5-Dinitroaniline	100	96.6	97	
TATB	100	107	107	
tris(o-cresyl) phosphate	100	104	104	

Recovery Limits:

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

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

Other Target Analytes 70-130%

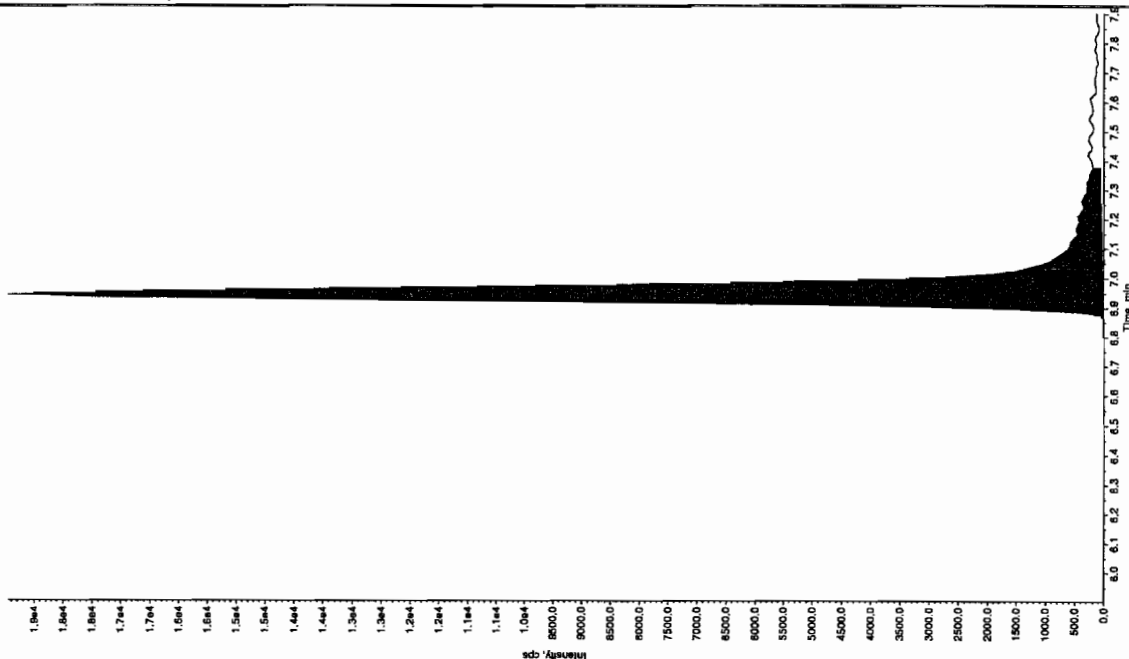
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

Before Star 4/12/10

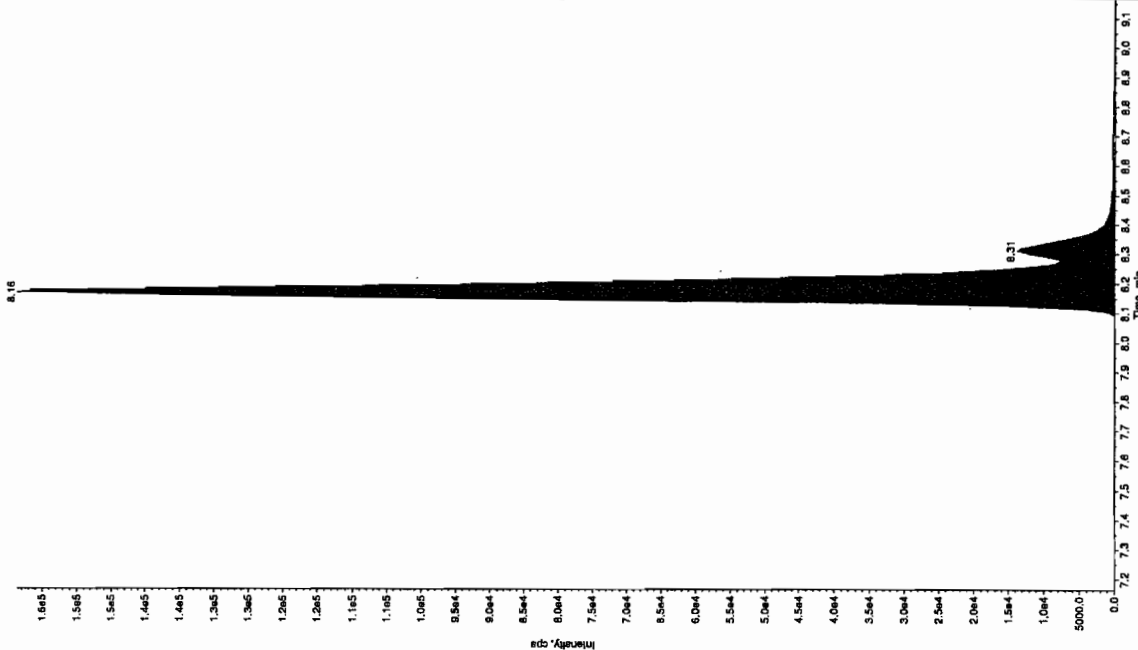
Sample Name: "WXX100409-27C1" Sample ID: "111LER" File: "EXS04090073.wif"  
Peak Name: "TATB" Mass(es): "257.2204.3 amu"  
Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
Sample Type: OC  
Concentration: 100. ng/mL  
Calculated Conc: 4/10/2010  
Acq. Date: 4/10/2010  
Acq. Time: 2:03:40 AM  
Modified: No  
Proc. Algorithm: IntelliQuan - IOA  
Min. Peak Height: 2500.00 cps  
Min. Peak Width: 0.00 sec  
Smoothing Width: 30.0 points  
RT Window: 30.0 sec  
Expected RT: 6.90 min  
Use Relative RT: No  
Int. Type: Valley  
Retention Time: 6.94 min  
Area: 8.25e+004 counts  
Height: 18936.459 cps  
Start Time: 6.83 min  
End Time: 7.38 min



Sample Name: "WXX100409-27C1" Sample ID: "111LER" File: "EXS04090073.wif"  
Peak Name: "3S-Dinitroaniline" Mass(es): "182.046.0 amu"  
Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
Sample Type: OC  
Concentration: 100. ng/mL  
Calculated Conc: 4/10/2010  
Acq. Date: 4/10/2010  
Acq. Time: 2:05:40 AM  
Modified: Yes  
Proc. Algorithm: IntelliQuan - IOA  
Min. Peak Height: 2000.00 cps  
Min. Peak Width: 0.00 sec  
Smoothing Width: 3 points  
RT Window: 15.0 sec  
Expected RT: 8.16 min  
Use Relative RT: No  
Int. Type: Valley  
Retention Time: 8.16 min  
Area: 7.19e+005 counts  
Height: 158605.713 cps  
Start Time: 8.06 min  
End Time: 8.63 min



After 4/12/10

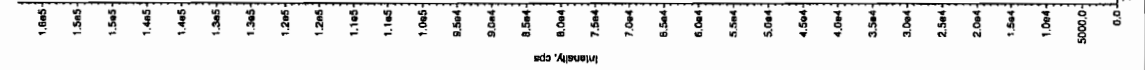
after scan 4/14/10

Sample Name: "WXX100409-27CR1" Sample ID: "J1LER" File: "EXS04090073.wif"

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

Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
Sample Type: OC  
Concentration: 100. ng/mL  
Calculated Conc: 89. ng/mL  
Acq. Date: 4/10/2010  
Acq. Time: 2:05:40 AM  
Modified: Yes  
RT Window: 15.0 sec  
Expected RT: 8.16 min  
Use Relative RT: No  
Int. Type: Manual  
Retention Time: 8.17 min  
Area: 6.52e+005 counts  
Height: 160848.041 cps  
Start Time: 8.08 min  
End Time: 8.28 min

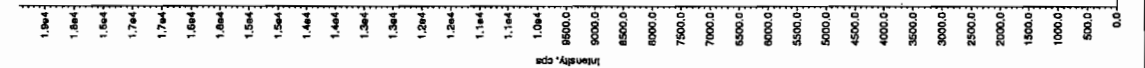


Sample Name: "WXX100409-27CR1" Sample ID: "J1LER" File: "EXS04090073.wif"

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

Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
Sample Type: OC  
Concentration: 100. ng/mL  
Calculated Conc: 107. ng/mL  
Acq. Date: 4/10/2010  
Acq. Time: 2:05:40 AM  
Modified: No  
Proc. Algorithm: IntelliQuan - IQA  
RT Window: 30.0 sec  
Expected RT: 6.90 min  
Use Relative RT: No  
Int. Type: Valley  
Retention Time: 6.94 min  
Area: 8.25e+004 counts  
Height: 18936.459 cps  
Start Time: 6.83 min  
End Time: 7.38 min



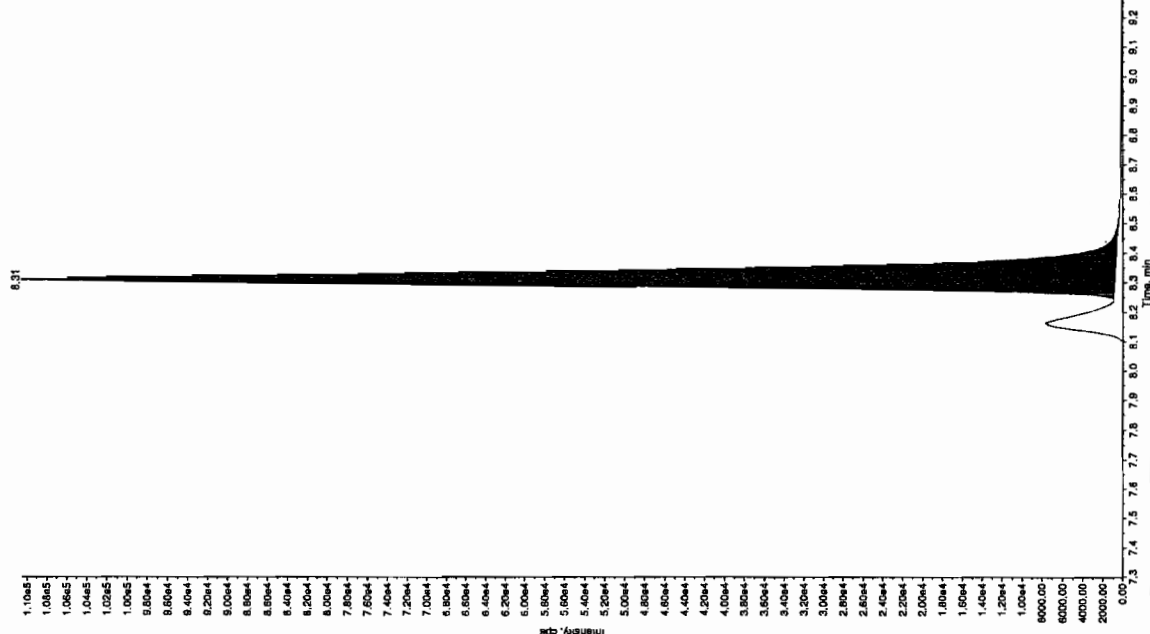
Sample Name: "WXX100409-27CR" Sample ID: "J1LER" File: "EXS04090073.wif"  
Peak Name: "34-Dinitrofluorene" Mass(es): "182.1/151.9 amu"

Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
Sample Type: QC  
Concentration: 50.0 ng/mL  
Calculated Conc: 47.5 ng/mL  
Acq. Date: 4/10/2010  
Acq. Time: 2:05:40 AM

Modified: No  
Proc. Algorithm: IntelliQuan - IOA  
Min. Peak Height: 1460.00 cps  
Min. Peak Width: 0.00 sec  
Smoothing Width: 3 points  
RT Window: 30.0 sec  
Expected RT: 8.30 min  
Use Relative RT: No

Int. Type: Valley  
Retention Time: 8.31 min  
Height: 4,018,000 counts  
Start Time: 8.24 min  
End Time: 8.52 min



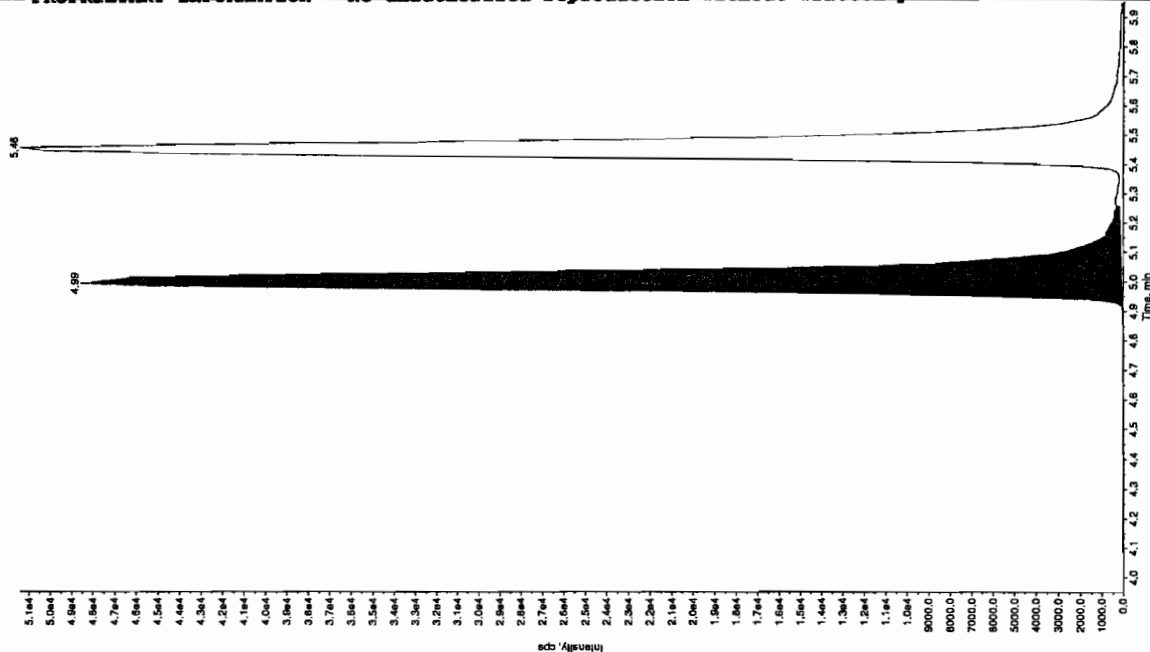
Sample Name: "WXX100409-27CR" Sample ID: "J1LER" File: "EXS04090073.wif"  
Peak Name: "26-Diamino-4-nitrofluorene" Mass(es): "166.0/46.0 amu"

Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
Sample Type: QC  
Concentration: 100. ng/mL  
Calculated Conc: 78.0 ng/mL  
Acq. Date: 4/10/2010  
Acq. Time: 2:05:40 AM

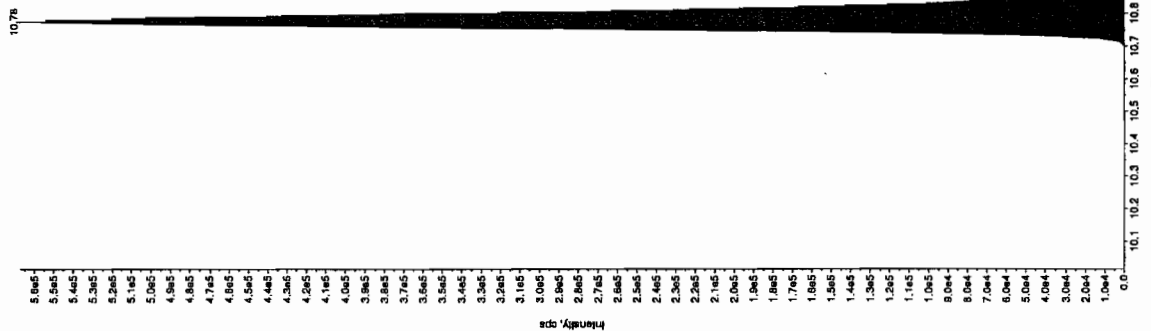
Modified: No  
Proc. Algorithm: IntelliQuan - IOA  
Min. Peak Height: 450.00 cps  
Min. Peak Width: 0.00 sec  
Smoothing Width: 3 points  
RT Window: 30.0 sec  
Expected RT: 4.95 min  
Use Relative RT: No

Int. Type: Valley  
Retention Time: 4.99 min  
Height: 2,134,000 counts  
Start Time: 4.85 min  
End Time: 5.26 min



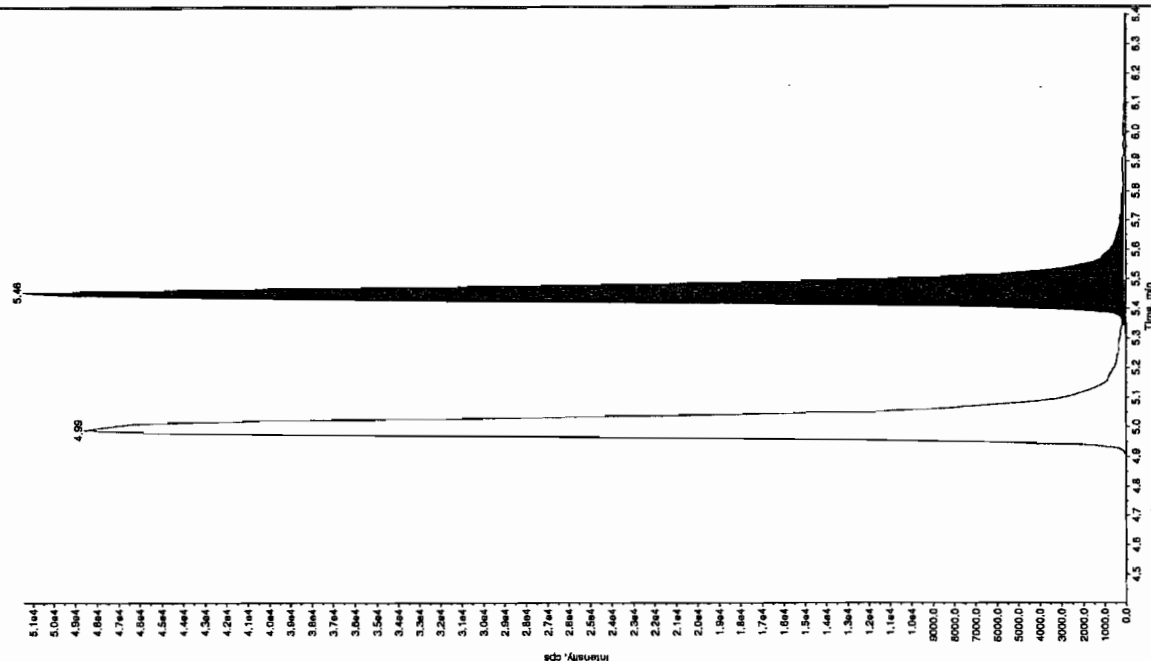
Sample Name: "WXX100405-27C1" Sample ID: "111ER" File: "EXS04080073.wif"  
 Peak Name: "tris(2-chloroethyl) phosphate" Mass(es): "389.1/91.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 100. ng/mL  
 Calculated Conc: 104. ng/mL  
 Acq. Date: 4/10/2010  
 Acq. Time: 2:05:40 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 8000.00 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: 2.13e+006 counts  
 Height: 56694.653 cps  
 Start Time: 10.7 min  
 End Time: 11.2 min



Sample Name: "WXX100405-27C1" Sample ID: "111ER" File: "EXS04080073.wif"  
 Peak Name: "24-Diamino-6-nitroclonidine" Mass(es): "166.046.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 100. ng/mL  
 Calculated Conc: 100. ng/mL  
 Acq. Date: 4/10/2010  
 Acq. Time: 2:05:40 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: 5.40 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.46 min  
 Area: 2.13e+005 counts  
 Height: 51318.535 cps  
 Start Time: 5.34 min  
 End Time: 5.83 min



# QUALITY CONTROL DATA



1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: MB for batch 961016

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 1202061319

Sample Amount 2

Moisture:

Amount Units g

Date Received: 04-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0415066.wiff

Date Analyzed: 16-APR-10 14:15

Units: ug/kg

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

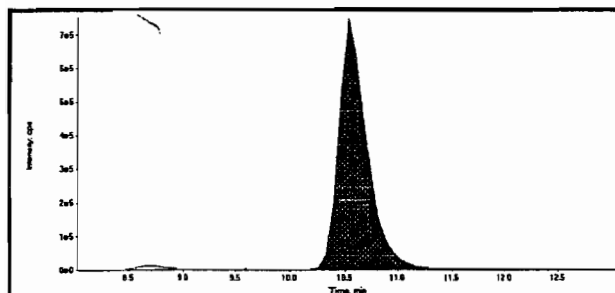
\*Concentration =

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

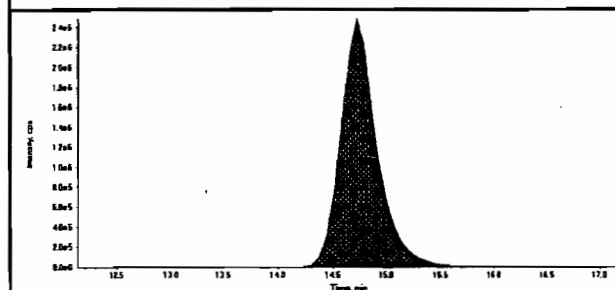
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

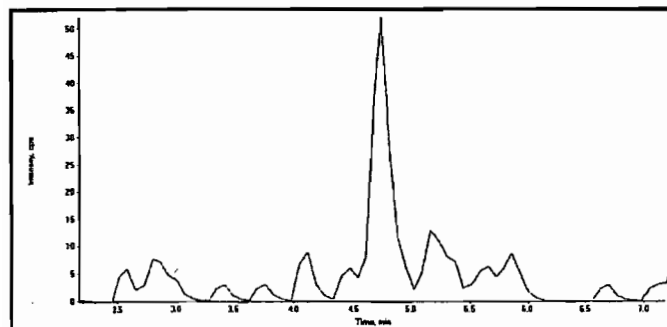
Data File	EXP0415066.wiff	Acquisition Date	4/16/2010 2:15:06 PM
Sample Name	1202061319	Acquisition Method	8321.dam
Batch Dilution Analyst	961033 2 LER	Result Table	041510.rdb
Procedure Code	LCX8321_S	Sample Type	Unknown



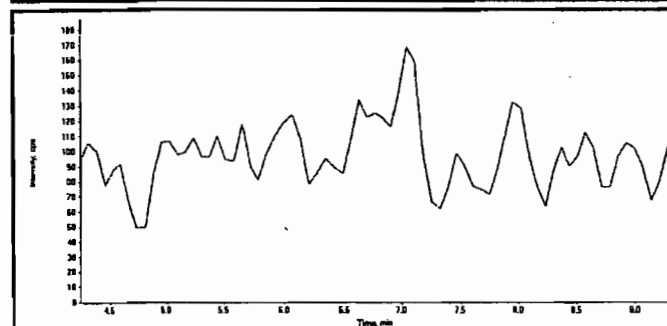
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.50
Actual RT:	10.50
Area Counts:	13900000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.60
Actual RT:	14.70
Area Counts:	59200000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.67
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.77
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

*OK*  
*4/23/10*  
*Hinc*  
*04/23/10*

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415066.wiff	<b>Acquisition Date</b>	4/16/2010 2:15:06 PM
<b>Sample Name</b>	1202061319	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	961033 2 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	Expected RT:	9.00
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	Expected RT:	10.7
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	Expected RT:	10.7
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

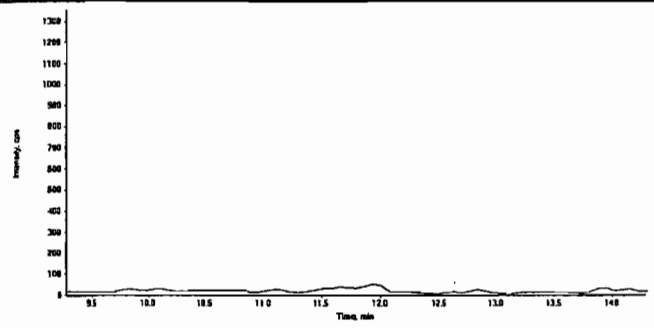
	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	Expected RT:	13.1
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

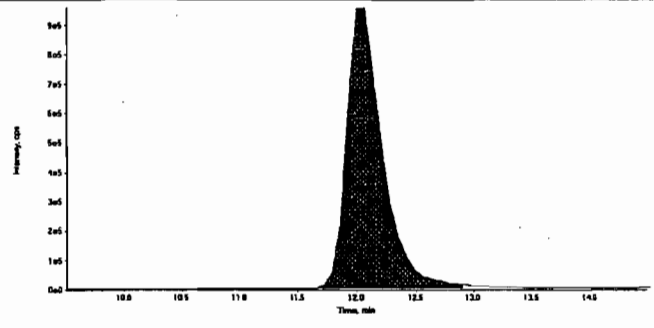
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415066.wiff	<b>Acquisition Date</b>	4/16/2010 2:15:06 PM
<b>Sample Name</b>	1202061319	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	961033 2 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

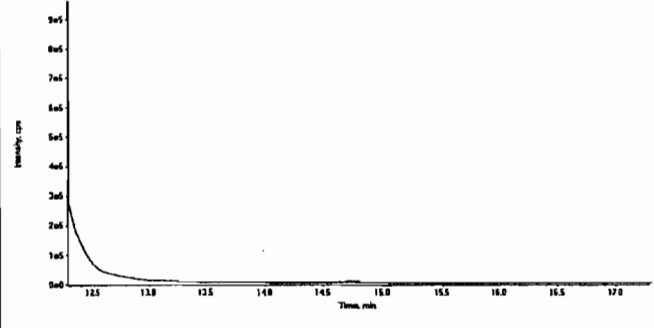
  

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	11.8
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

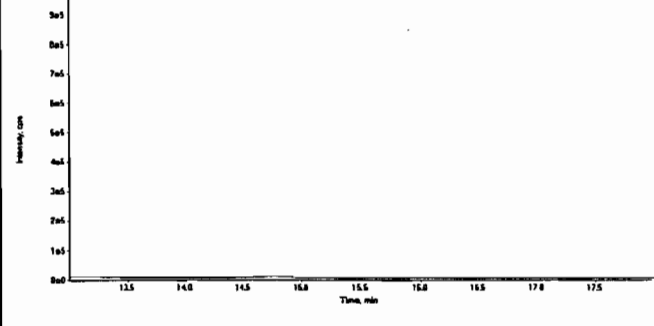
  

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.0
	Actual RT:	12.1
	Area Counts:	2.03e+007
	Manual Modification	No
	Amount:	261. (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	14.8
	Actual RT:	14.7
	Area Counts:	1.55e+005
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

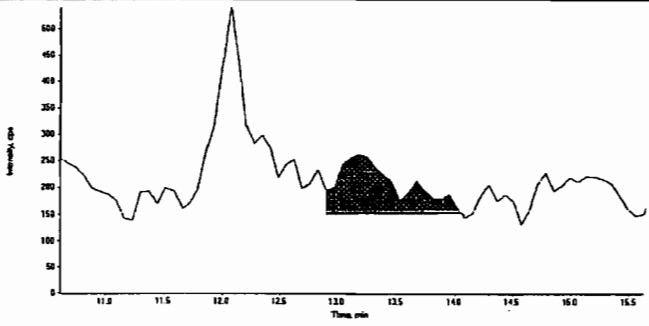
	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.5
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

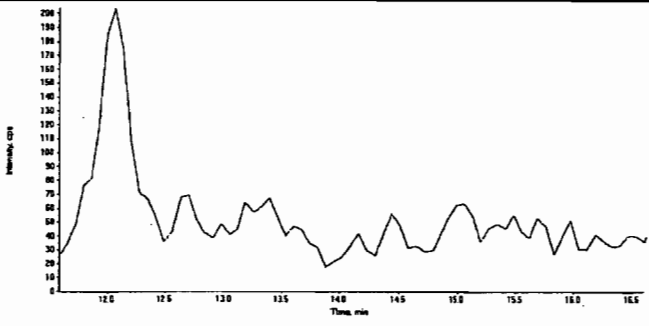
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415066.wiff	<b>Acquisition Date</b>	4/16/2010 2:15:06 PM
<b>Sample Name</b>	1202061319	<b>Acquisition Method</b>	8321.dam
<b>Batch/Dilution/Analyst</b>	961033 2 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

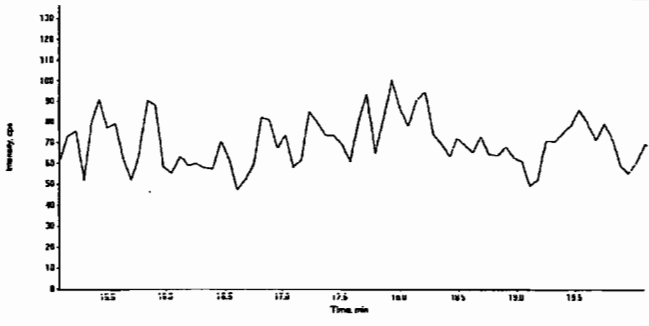
  

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.1
	Actual RT:	13.2
	Area Counts:	4.19e+003
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

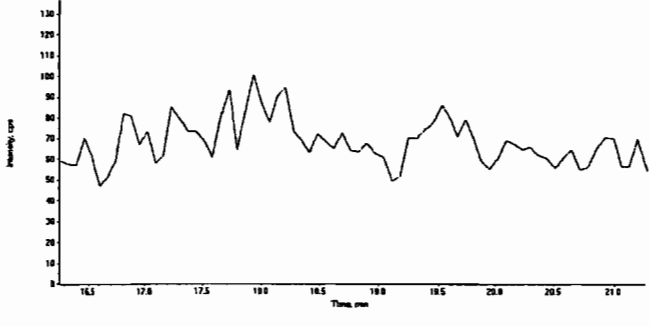
  

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.1
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	17.6
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

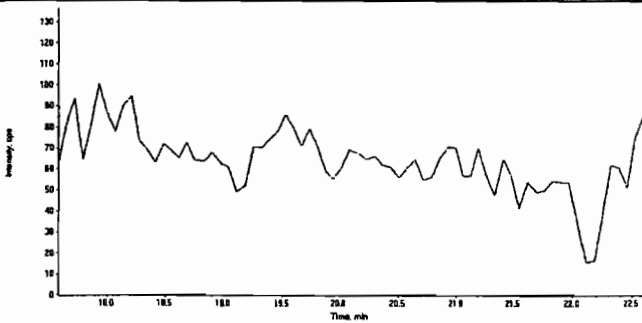
	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	18.8
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

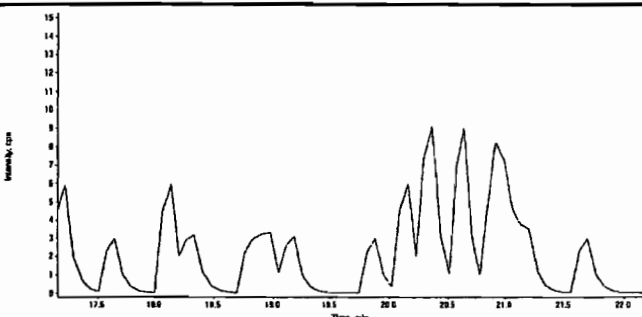
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415066.wiff	<b>Acquisition Date</b>	4/16/2010 2:15:06 PM
<b>Sample Name</b>	1202061319	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	961033 2 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	20.1
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	<b>Expected RT:</b>	19.7
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: MB for batch 961016

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 1202061319

Sample Amount 2

Moisture:

Amount Units g

Date Received: 04-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04090045.wiff

Date Analyzed: 09-APR-10 18:45

Units: ug/kg

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

\*Concentration =

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

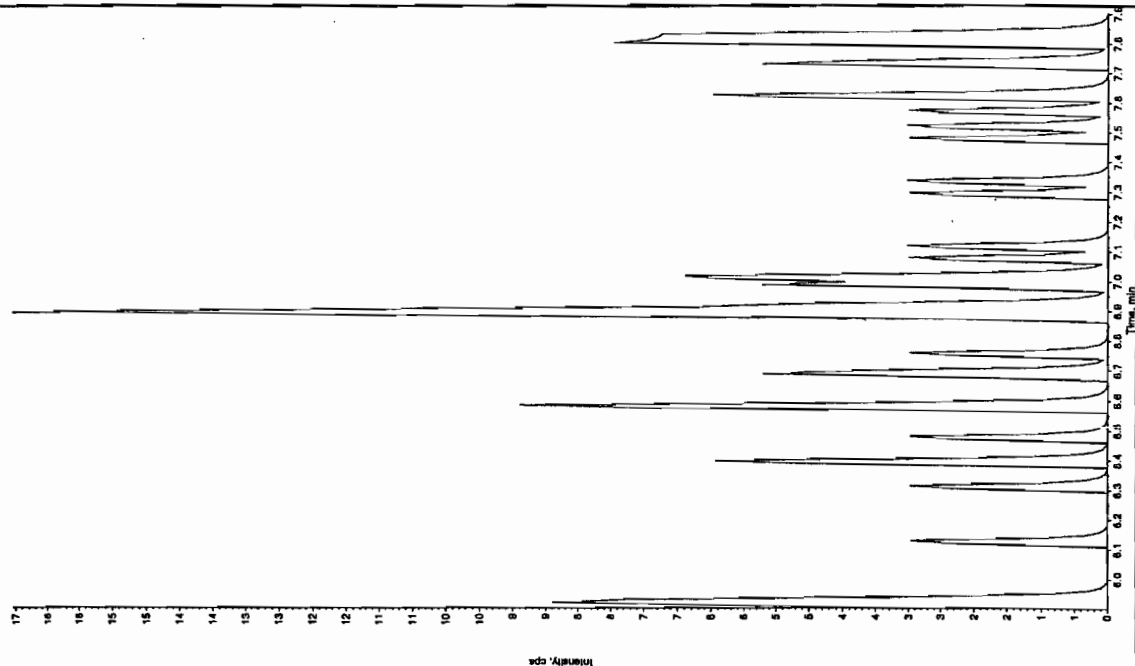
Run 4/12/10

Sample Name: "1202061319" Sample ID: "96103321ER" File: "EXS04090045.wiff"

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

Comment: "LC832125" Annotation: "1"

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 ACQ. DATE: 4/9/2010  
 ACQ. TIME: 6:45:58 PM  
 Modified: No

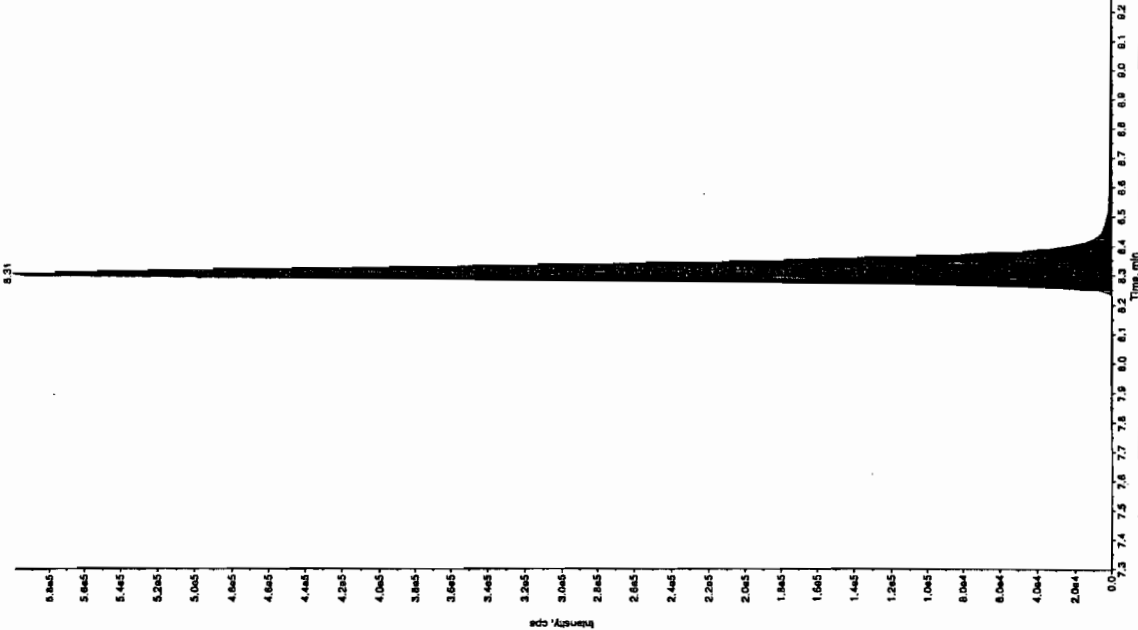


\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



Sample Name: "1202061319" Sample ID: "96103321ER" File: "EXS04080045.wif"  
 Peak Name: "34-Dinitrofluorene" Mass(es): "166.046.0 amu"  
 Comment: "LCX832125" Annotation: "A"

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Acq. Date: 4/9/2010  
 Acq. Time: 6:45:58 PM  
 Modified: No

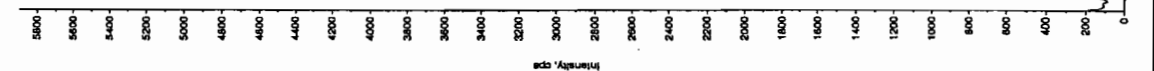


Sample Name: "1202061319" Sample ID: "96103321ER" File: "EXS04080045.wif"  
 Peak Name: "34-Dinitrofluorene" Mass(es): "162.17151.9 amu"  
 Comment: "LCX832125" Annotation: "A"

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Acq. Date: 4/9/2010  
 Acq. Time: 6:45:58 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Peak Height: 1460.00 cps  
 Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 Window: 30.0 sec  
 Expected RT: 8.30 min  
 Obs. Relative RT: No  
 The Type: Valley  
 Retention Time: 8.31 min  
 Area: 2.41e+006 counts  
 Height: 599680.359 cps  
 Start Time: 8.21 min  
 End Time: 8.83 min

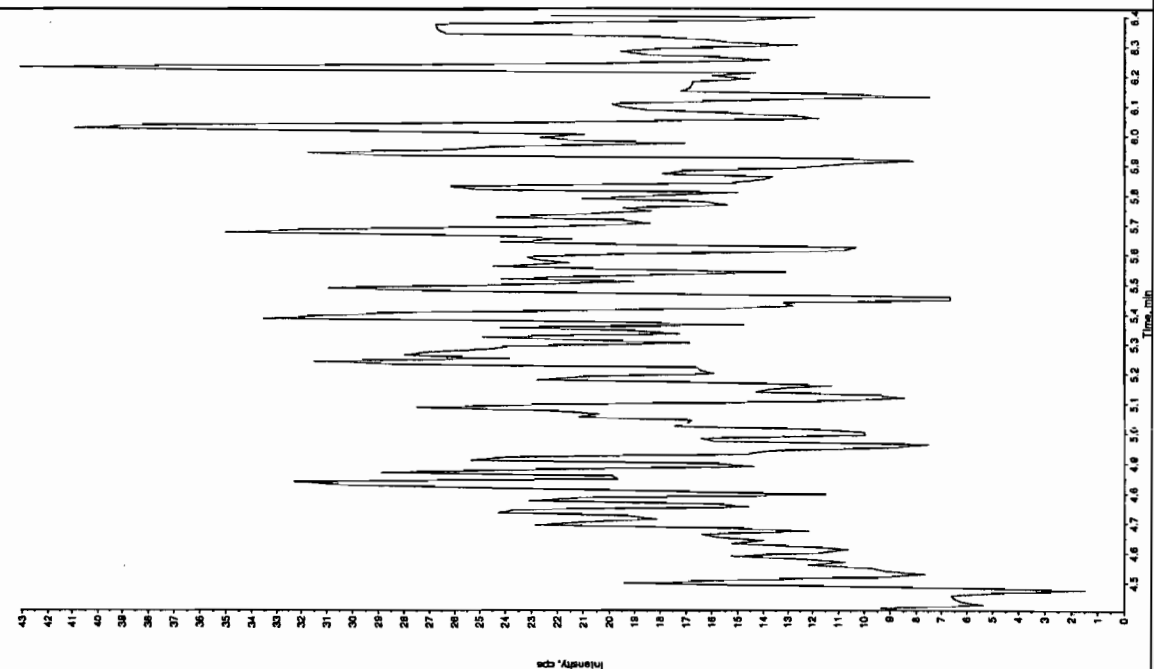
Sample Name: "1202061319" Sample ID: "96103321ER" File: "EXS04090045.wif"  
 Peak Name: "tris(2-cresyl) phosphate" Mass(es): "358.1/91.0 amu"  
 Comment: "LCX832125" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A ng/mL  
 Calculated Conc: 0.00  
 Acq. Date: 4/9/2010  
 Acq. Time: 6:45:58 PM  
 Modified: No



Sample Name: "1202061319" Sample ID: "96103321ER" File: "EXS04090045.wif"  
 Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.046.0 amu"  
 Comment: "LCX832125" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A ng/mL  
 Calculated Conc: 0.00  
 Acq. Date: 4/9/2010  
 Acq. Time: 6:45:58 PM  
 Modified: No



1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: LCS for batch 961016

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 1202061320

Sample Amount 2

Moisture:

Amount Units g

Date Received: 04-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0415067.wiff

Date Analyzed: 16-APR-10 14:41

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	4030	
121-14-2	2,4-Dinitrotoluene	4770	
121-82-4	RDX	6110	
19406-51-0	4-Amino-2,6-dinitrotoluene	3920	
2691-41-0	HMX	4990	
35572-78-2	2-Amino-4,6-dinitrotoluene	4000	
479-45-8	Tetryl	204	J
606-20-2	2,6-Dinitrotoluene	4230	
78-11-5	PETN	5320	
88-72-2	o-Nitrotoluene	5170	
98-95-3	Nitrobenzene	4530	
99-08-1	m-Nitrotoluene	4880	
99-35-4	1,3,5-Trinitrobenzene	3530	
99-65-0	m-Dinitrobenzene	5290	
99-99-0	p-Nitrotoluene	4920	

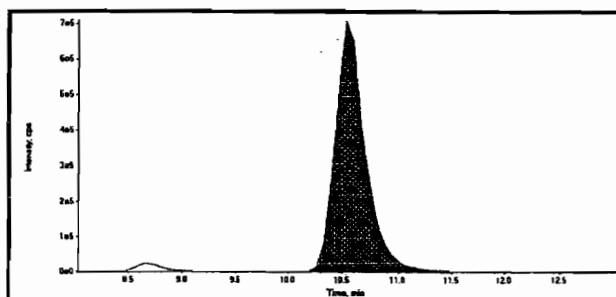
\*Concentration =

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

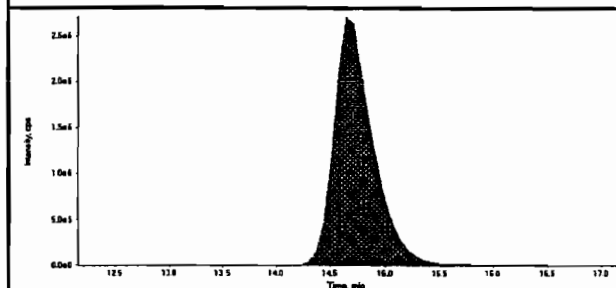
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

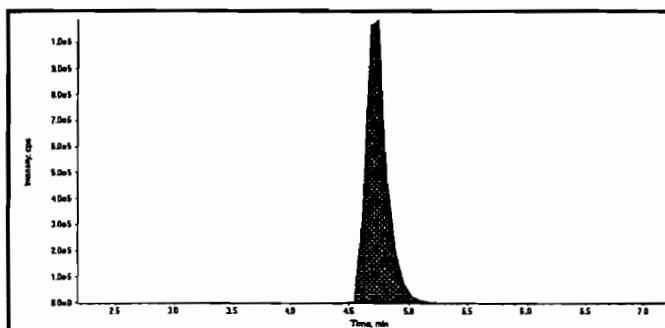
Data File	EXP0415067.wiff	Acquisition Date	4/16/2010 2:41:01 PM
Sample Name	1202061320	Acquisition Method	8321.dam
Batch/Dilution/Analyst	961033 2 LER	Result Table	041510.rdb
Procedure Code	LCX8321_S	Sample Type	Unknown



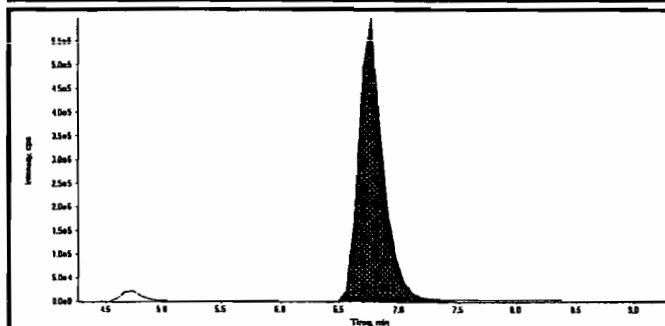
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.50
Actual RT:	10.50
Area Counts:	13600000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.60
Actual RT:	14.60
Area Counts:	67200000.00
Manual Modification	Yes
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.67
Actual RT:	4.74
Area Counts:	1.39e+007
Manual Modification	No
Amount:	499. (ng/mL)
% Accuracy:	N/A



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.77
Actual RT:	6.77
Area Counts:	8.58e+006
Manual Modification	No
Amount:	611. (ng/mL)
% Accuracy:	N/A

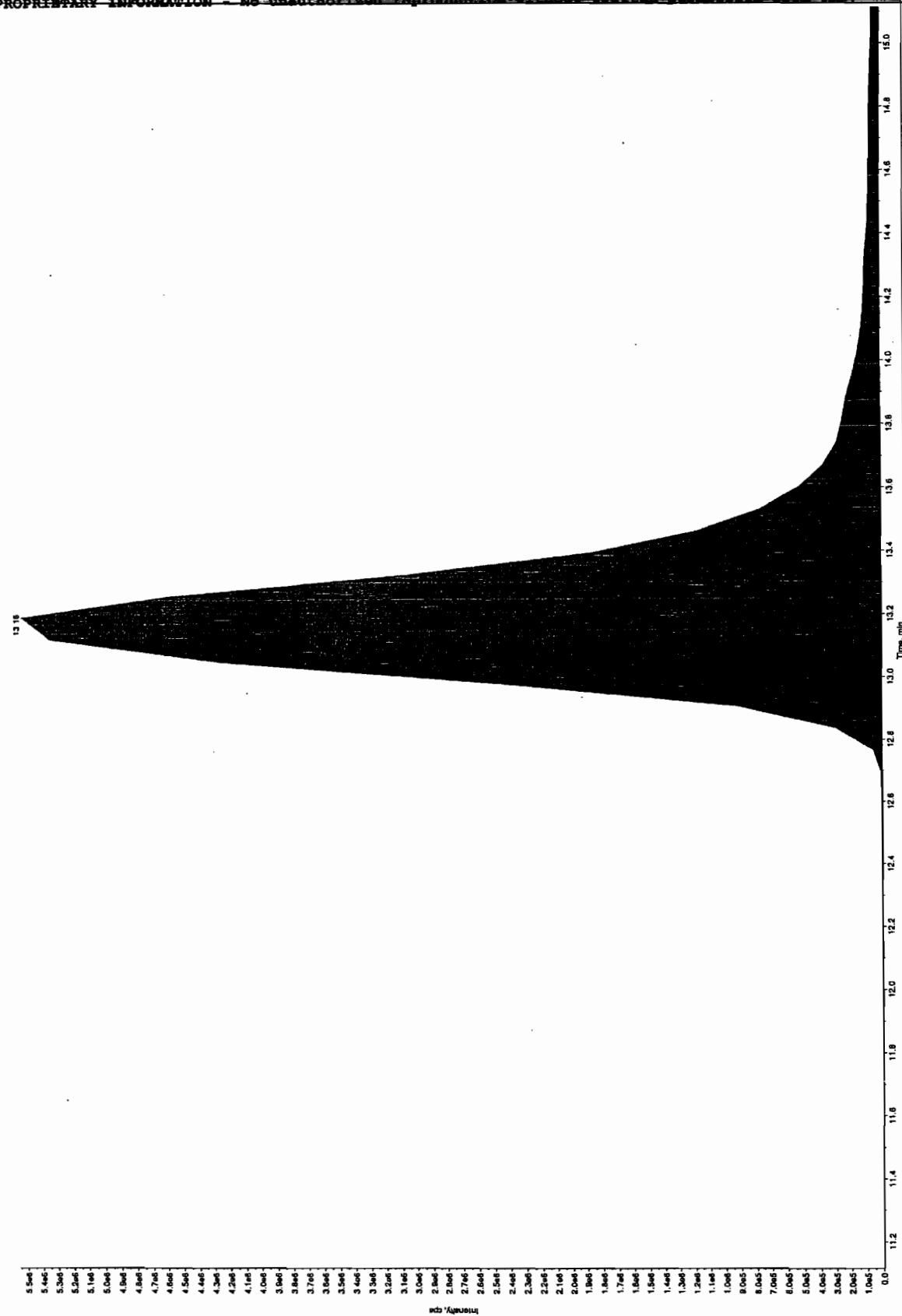
*Lar*  
*4/23/10*

*hine*  
*04/23/10*

Before Jan 4/2-3/10

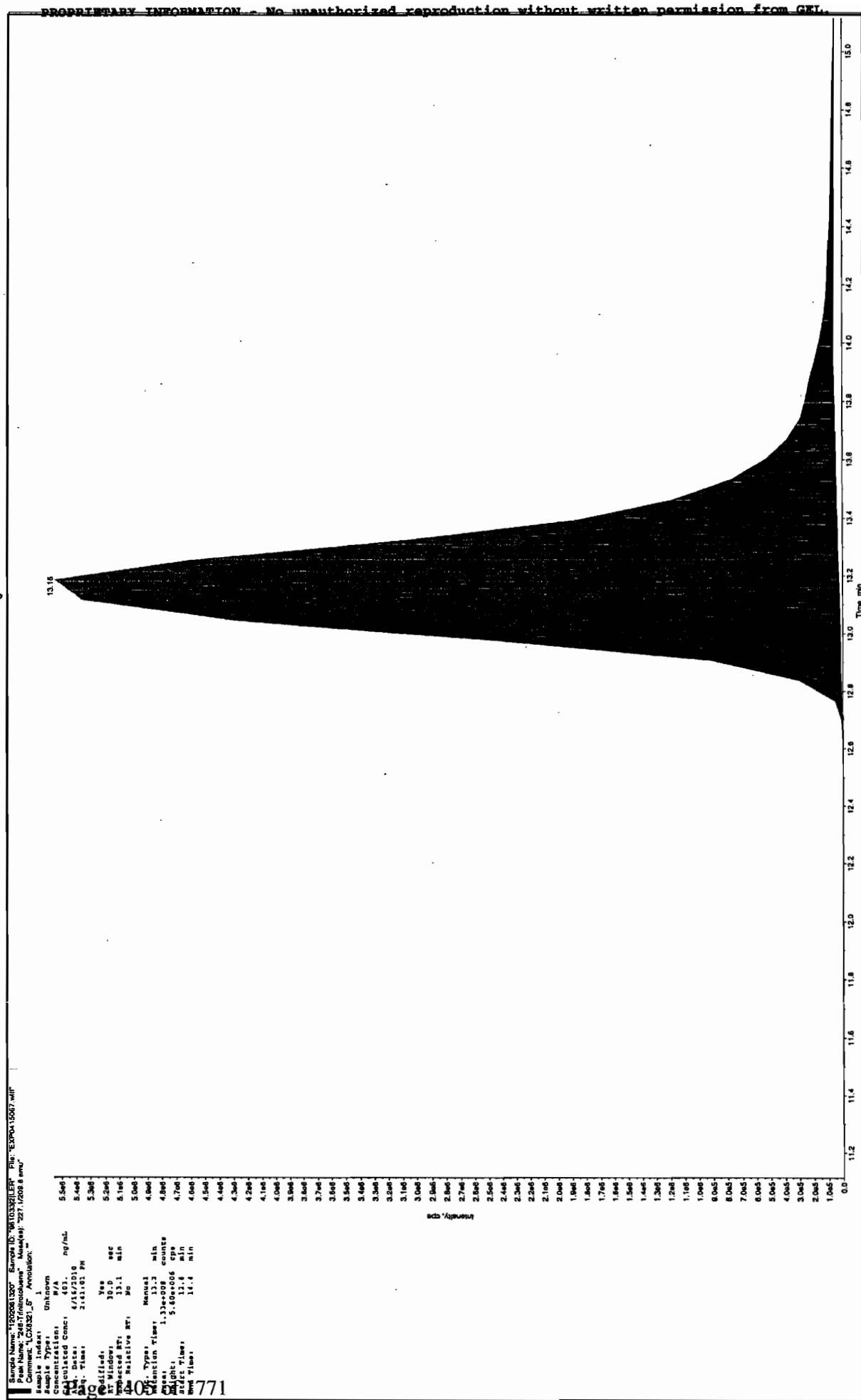
Sample Name: 8321A-056  
 Sample ID: 8321A-056  
 Project: 8321A-056  
 Method: 8321A-056  
 Comment: LC8321A-056

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 40.0 ng/mL  
 Date: 4/15/2010  
 Time: 2:41:01 PM  
 Qualified: No  
 Appr. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 1000.00 cps  
 Min. Peak Width: 0.05 sec  
 Retention Time: 13.1 min  
 Expected RT: 13.1 min  
 Observed RT: 13.1 min  
 RT Type: Valley  
 Retention Time: 13.1 min  
 Height: 5.56e+006 counts  
 Width: 12.6 min  
 End Time: 13.2 min



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

after Jan 4/23/10



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415067.wiff	<b>Acquisition Date</b>	4/16/2010 2:41:01 PM
<b>Sample Name</b>	1202061320	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	961033 2 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	Expected RT:	9.00
	Actual RT:	9.00
	Area Counts:	6.42e+007
	Manual Modification	No
	Amount:	353. (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	Expected RT:	10.7
	Actual RT:	10.7
	Area Counts:	3.93e+007
	Manual Modification	No
	Amount:	529. (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	Expected RT:	10.7
	Actual RT:	10.7
	Area Counts:	1.13e+006
	Manual Modification	No
	Amount:	20.4 (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	Expected RT:	13.1
	Actual RT:	13.2
	Area Counts:	1.33e+008
	Manual Modification	Yes
	Amount:	403. (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415067.wiff	<b>Acquisition Date</b>	4/16/2010 2:41:01 PM
<b>Sample Name</b>	1202061320	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	961033 2 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	11.8
	Actual RT:	11.8
	Area Counts:	1.25e+006
	Manual Modification	No
	Amount:	453. (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.0
	Actual RT:	12.1
	Area Counts:	1.85e+007
	Manual Modification	No
	Amount:	209. (ng/mL)
	% Accuracy:	N/A

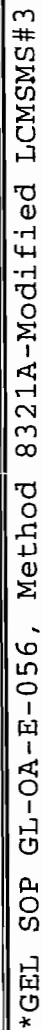
	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	14.8
	Actual RT:	14.9
	Area Counts:	3.05e+007
	Manual Modification	No
	Amount:	423. (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.5
	Actual RT:	15.5
	Area Counts:	1.32e+007
	Manual Modification	No
	Amount:	477. (ng/mL)
	% Accuracy:	N/A







GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415067.wiff	<b>Acquisition Date</b>	4/16/2010 2:41:01 PM
<b>Sample Name</b>	1202061320	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	961033 2 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	4-Amino-2,6-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.1
	Actual RT:	13.1
	Area Counts:	2.36e+007
	Manual Modification	No
	Amount:	392. (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	2-Amino-4,6-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.1
	Actual RT:	14.1
	Area Counts:	1.01e+006
	Manual Modification	Yes
	Amount:	400. (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	17.6
	Actual RT:	17.7
	Area Counts:	5.51e+005
	Manual Modification	No
	Amount:	517. (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	18.8
	Actual RT:	18.8
	Area Counts:	2.86e+005
	Manual Modification	No
	Amount:	492. (ng/mL)
	% Accuracy:	N/A

Before Jan 4/23/10

Sample Name: 1220612207 Sample ID: 981032911.171 File: E:\PDU15267.wif

Peak Name: "PETN" Mass(es): 261.16520 amu

Comment: "LCMS21.S" Annotation: =

Sample Type: Unknown

Concentration: 543.0 ng/mL

Acq. Date: 4/15/2010

Acq. Time: 21:11:21 PM

Modified: No

Proc. Algorithm: IncaliQuin - ICA

Peak Width: 10.00 sec

Min. Peak Width: 0.00 sec

Smoothing Width: 3 points

Window: 60.0 sec

Expected RT: 19.7 min

Obs. Relative RT: 20

Int. Type: Valley

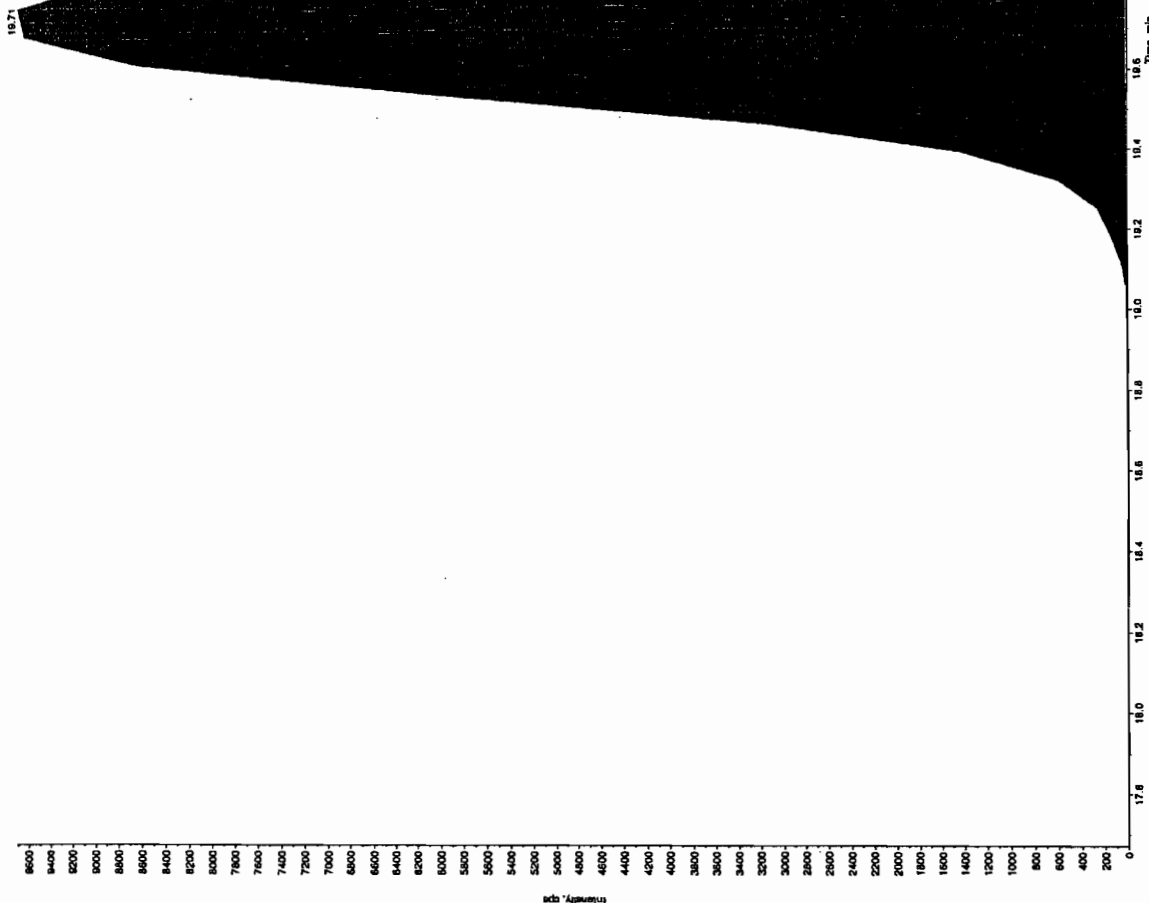
Retention Time: 19.7 min

Height: 3,864,000 counts

Area: 2,641,000 counts

Start Time: 18.9 min

End Time: 21.6 min



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

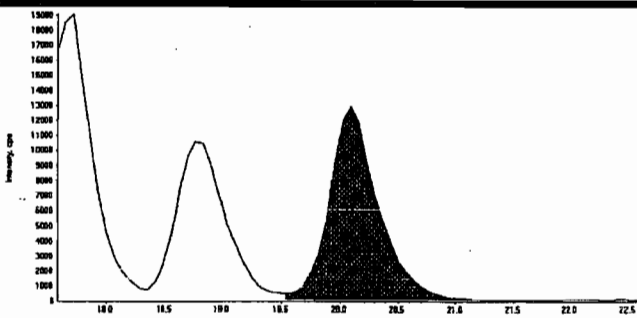


GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

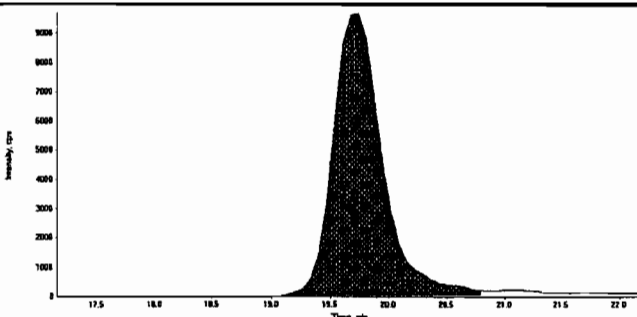
Printed: 22/04/2010 4:04:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0415067.wiff	<b>Acquisition Date</b>	4/16/2010 2:41:01 PM
<b>Sample Name</b>	1202061320	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	961033 2 LER	<b>Result Table</b>	041510.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	20.1
	<b>Actual RT:</b>	20.1
	<b>Area Counts:</b>	3.89e+005
	<b>Manual Modification</b>	No
	<b>Amount:</b>	488. (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	<b>Expected RT:</b>	19.7
	<b>Actual RT:</b>	19.7
	<b>Area Counts:</b>	2.92e+005
	<b>Manual Modification</b>	Yes
	<b>Amount:</b>	532. (ng/mL)
	<b>% Accuracy:</b>	N/A

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: LCS for batch 961016

Lab Code: GEL

GEL Job No (SDG) 10-2199

Matrix: SOIL

GEL Sample ID: 1202061320

Sample Amount 2

Moisture:

Amount Units g

Date Received: 04-MAR-10

Extraction Type Sonication

Extraction Batch ID: 961016

Concentrated Extract Volume (mL) 10

Date Extracted: 10-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04090046.wiff

Date Analyzed: 09-APR-10 19:01

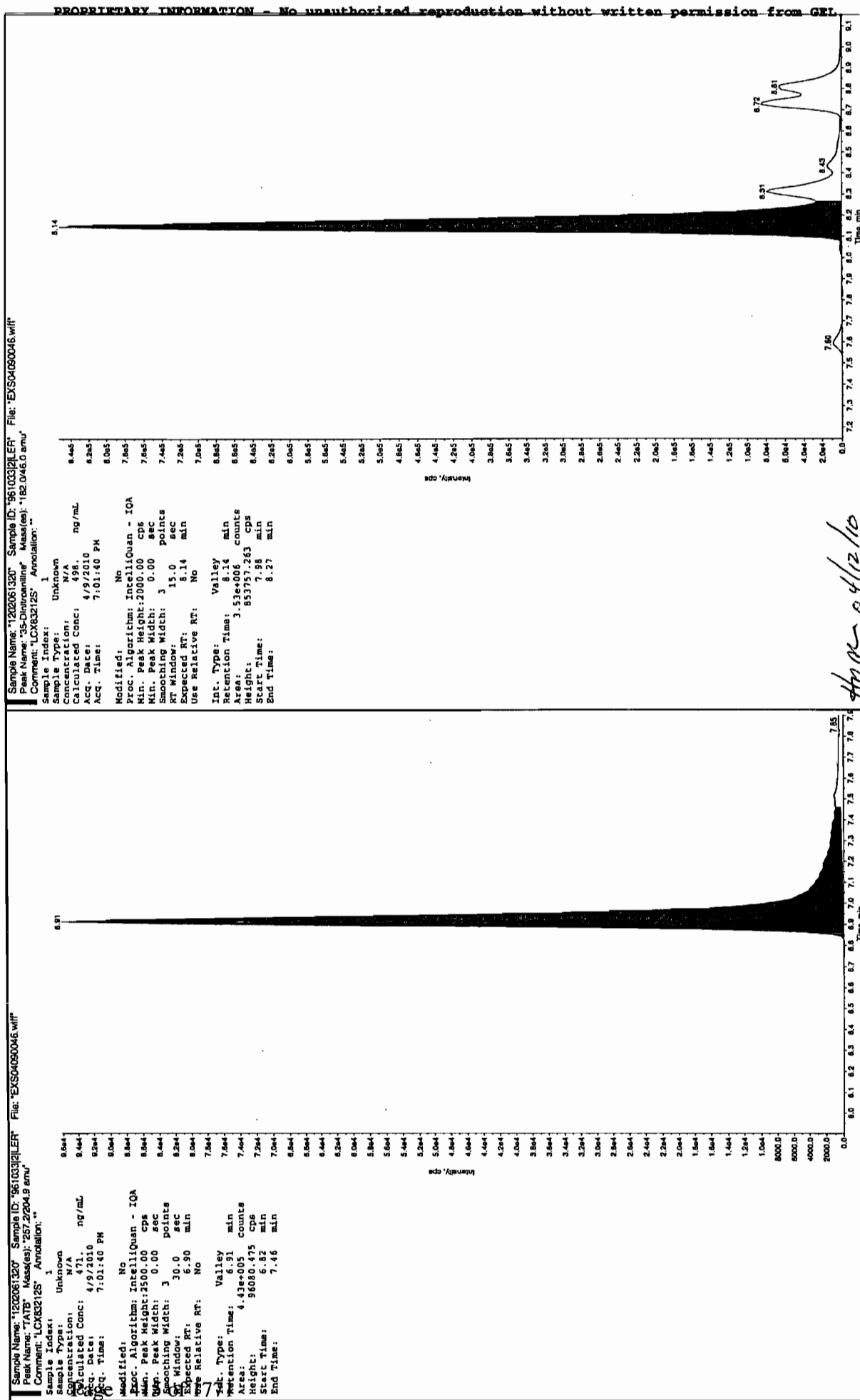
Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	4710	
59229-75-3	2,6-Diamino-4-nitrotoluene	5090	
618-87-1	3,5-Dinitroaniline	4980	
6629-29-4	2,4-Diamino-6-nitrotoluene	4790	
78-30-8	tris(o-cresyl) phosphate	4920	

\*Concentration =

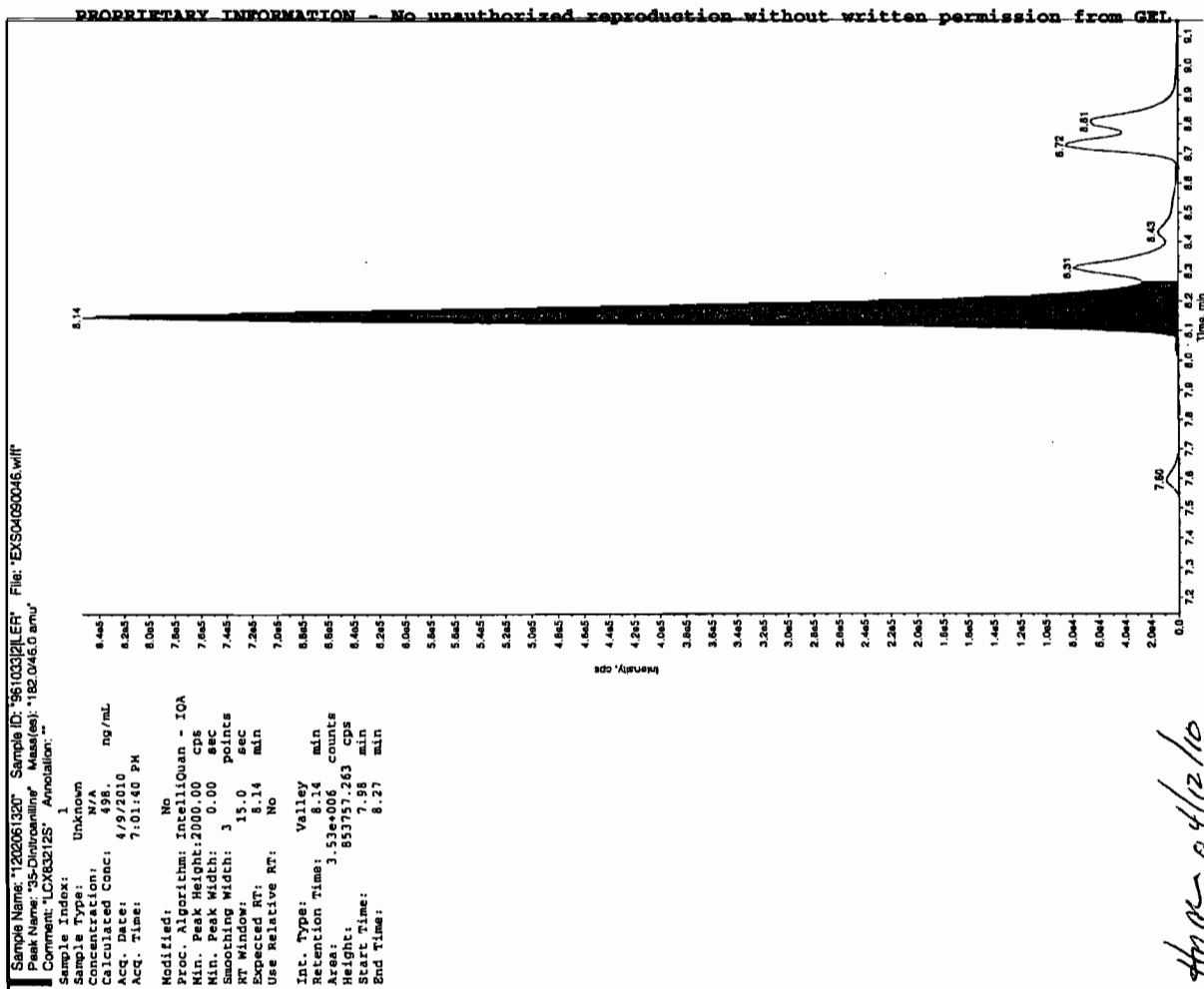
Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

Run 4/12/10



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

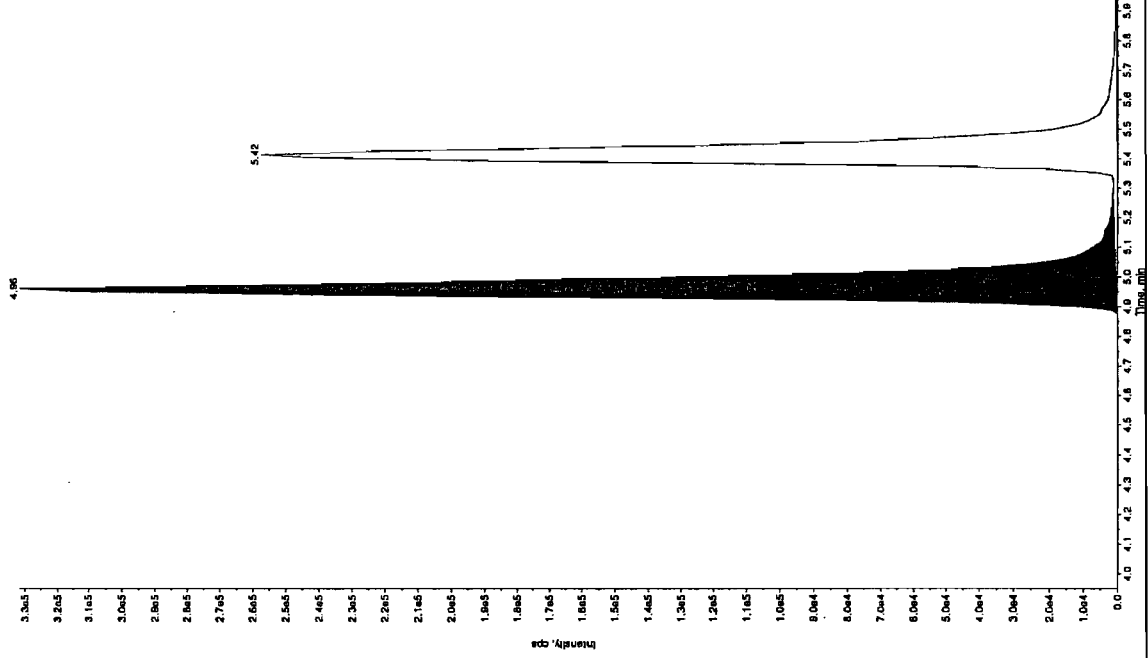
Run 4/12/10





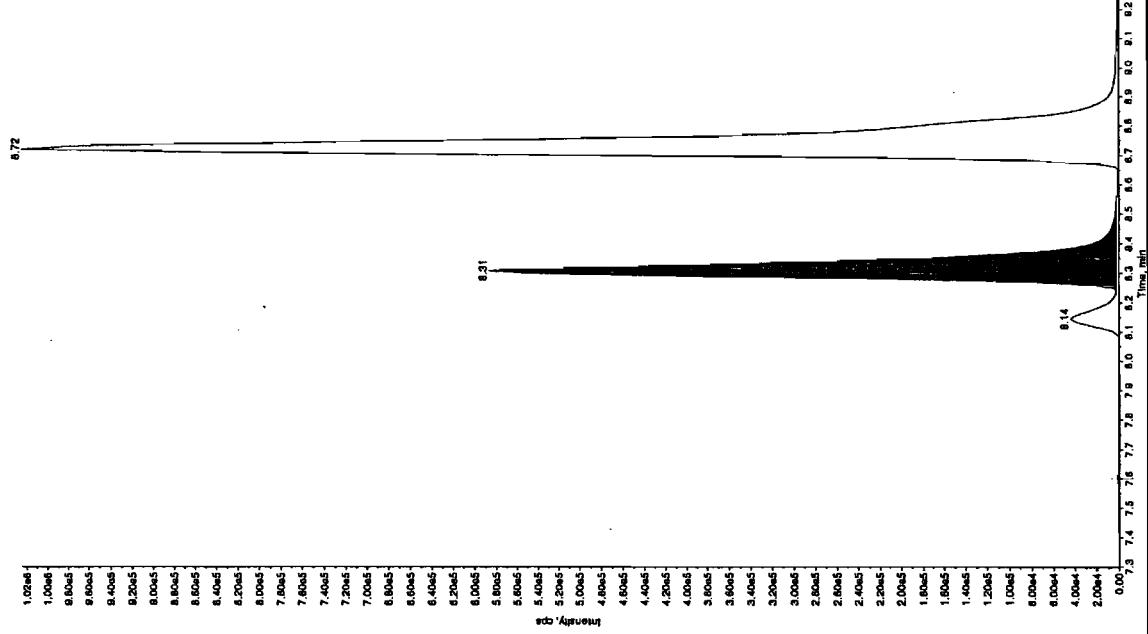
Sample Name: "1202061320" Sample ID: "96103321ER" File: "EXS04080046.wif"  
 Peak Name: "26-Diamino-4-nitrodiene" Mass(es): "166.046.0 amu"  
 Comment: "LCX832125" Annotation: ""

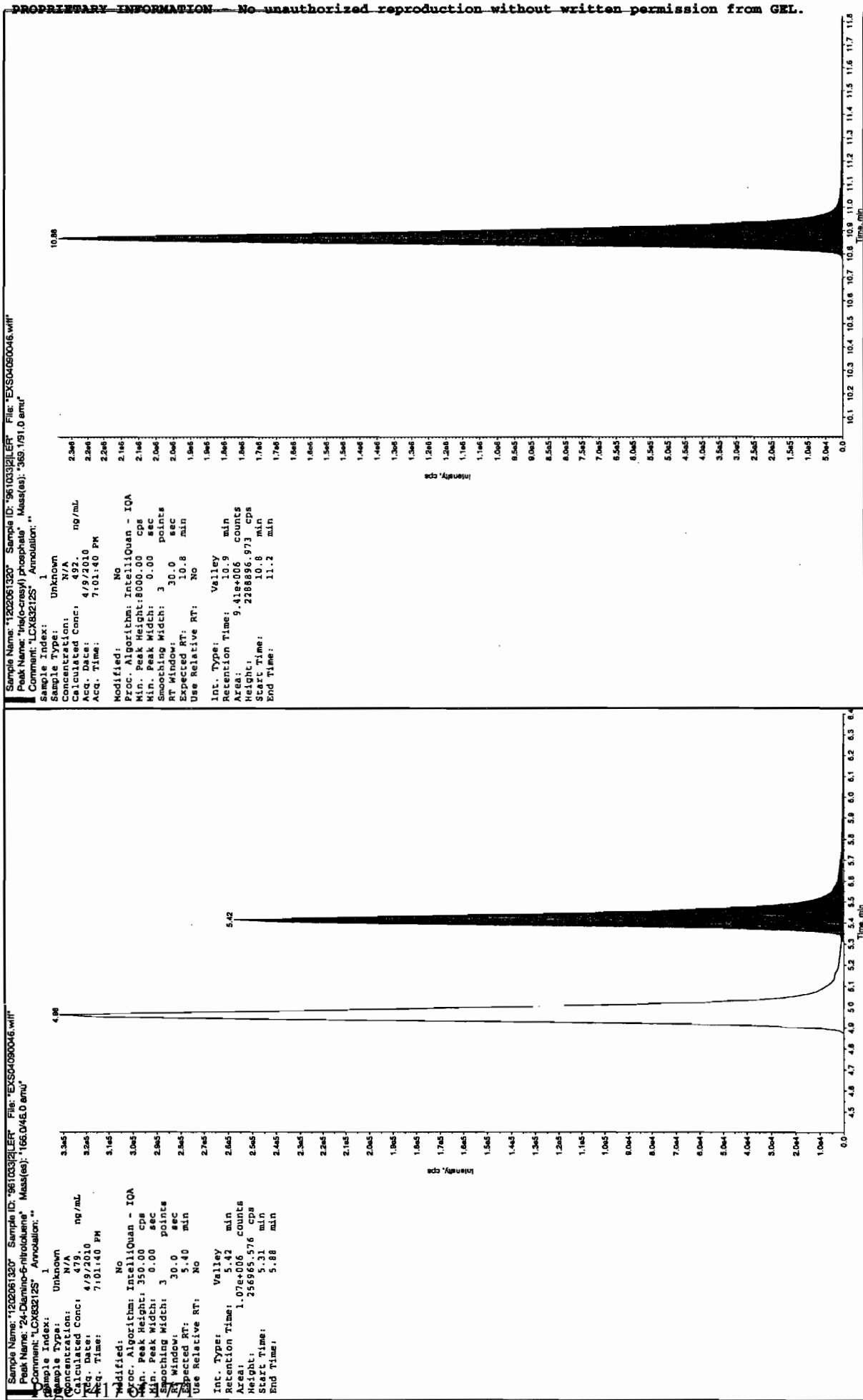
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 4.9/2010 ng/mL  
 Acq. Date: 4/9/2010  
 Acq. Time: 7:01:40 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 450.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 4.95 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 4.96 min  
 Area: 1.40e+006 counts  
 Height: 331345.154 cps  
 Start Time: 4.86 min  
 End Time: 5.26 min



Sample Name: "1202061320" Sample ID: "96103321ER" File: "EXS04080046.wif"  
 Peak Name: "34-Dinitrodiene" Mass(es): "182.17151.9 amu"  
 Comment: "LCX832125" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 4.9/2010 ng/mL  
 Acq. Date: 4/9/2010  
 Acq. Time: 7:01:40 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: 30.0 sec  
 Expected RT: 8.30 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.31 min  
 Area: 2.22e+006 counts  
 Height: 563529.846 cps  
 Start Time: 8.24 min  
 End Time: 8.55 min





# MISCELLANEOUS DATA

# Prep Logbook

## Nitroaromatics and Nitramines by High Performance Liquid Chromatography (HPLC)

Batch ID: 961016 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)
1202061319 MB	10-MAR-2010 20:36:00	2	10	5
1202061320 LCS	10-MAR-2010 20:36:00	2	10	5
248514001	10-MAR-2010 20:36:00	2	10	5
248514002	10-MAR-2010 20:36:00	2	10	5
248514003	10-MAR-2010 20:36:00	2	10	5
248517001	10-MAR-2010 20:36:00	2	10	5
248519001	10-MAR-2010 20:36:00	2	10	5
248519002	10-MAR-2010 20:36:00	2	10	5
248519003	10-MAR-2010 20:36:00	2	10	5
248519004	10-MAR-2010 20:36:00	2	10	5
248519005	10-MAR-2010 20:36:00	2	10	5
248519006	10-MAR-2010 20:36:00	2	10	5
248519007	10-MAR-2010 20:36:00	2	10	5
248519008	10-MAR-2010 20:36:00	2	10	5
248519009	10-MAR-2010 20:36:00	2	10	5
248519010	10-MAR-2010 20:36:00	2	10	5
248519011	10-MAR-2010 20:36:00	2	10	5
248526001	10-MAR-2010 20:36:00	2	10	5
1202061321 MS (248526001)	10-MAR-2010 20:36:00	2	10	5
1202061322 MSD (248526001)	10-MAR-2010 20:36:00	2	10	5

Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:
LCS	1202061320	8321 Explosives LCS	DXC100225-03	.1	mL	Final Solvent: ACN
LCS	1202061320	8321 LANL Explosives Mix 10mg/L	UXX100223-02.03	1	mL	
MS	1202061321	8321 Explosives LCS	DXC100225-03	.1	mL	
MS	1202061321	8321 LANL Explosives Mix 10mg/L	UXX100223-02.03	1	mL	
MSD	1202061322	8321 Explosives LCS	DXC100225-03	.1	mL	
MSD	1202061322	8321 LANL Explosives Mix 10mg/L	UXX100223-02.03	1	mL	
SURR	All	3,4-Dinitrotoluene (8330 Sur.) 100ppm	DXP100309-02	.05	mL	

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS#3

Date: 4/15/10

Extr. Injection Volume: 10uL

Sequence Number: 041510

Initial Calibration Date: 041510 Standard-Samp Reagent Lot#: 1293274, 1299881

Method: 8321A-Modified

Int. Std.: UXX100324-02.3

Mobile Phase Lot#: 1301905, 1297752

Reviewed BY: *John M*

Date: *04/23/10*

SOP: GL-OA-E-056 Rev.12

Alt Check Std. ID: WXX100415-56

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC Flag
EXP0415001.wiff	XIBLK01	LER	4/15/2010 10:07			1		USE	B
EXP0415002.wiff	XIBLK01	LER	4/15/2010 10:33			1		USE	B
EXP0415003.wiff	WXXICAL-50	LER	4/15/2010 10:59			1		USE	I
EXP0415004.wiff	WXXICAL-51	LER	4/15/2010 11:25			1		USE	I
EXP0415005.wiff	WXXICAL-52	LER	4/15/2010 11:51			1		USE	I
EXP0415006.wiff	WXXICAL-53	LER	4/15/2010 12:17			1		USE	I
EXP0415007.wiff	WXXICAL-54	LER	4/15/2010 12:43			1		USE	I
EXP0415008.wiff	WXXICAL-55	LER	4/15/2010 13:09			1		USE	I
EXP0415009.wiff	XIBLK02	LER	4/15/2010 13:35			1		USE	B
EXP0415010.wiff	WXXICV	LER	4/15/2010 14:01			1		USE	C
EXP0415011.wiff	XIBLK03	LER	4/15/2010 14:27			1		USE	B
EXP0415012.wiff	WXXCRI	LER	4/15/2010 14:53			1		USE	C
EXP0415013.wiff	1202045807	LER	4/15/2010 15:19	954365	10-1872	2	LANL	USE	S
EXP0415014.wiff	247200001	LER	4/15/2010 15:45	954365	10-1872	20	LANL	USE	S
EXP0415015.wiff	XIBLK04	LER	4/15/2010 16:10			1		USE	B
EXP0415016.wiff	247200002	LER	4/15/2010 16:36	954365	10-1872	20	LANL	USE	S
EXP0415017.wiff	XIBLK05	LER	4/15/2010 17:02			1		USE	B
EXP0415018.wiff	247200006	LER	4/15/2010 17:28	954365	10-1872	20	LANL	USE	S
EXP0415019.wiff	XIBLK06	LER	4/15/2010 17:54			1		USE	B
EXP0415020.wiff	247200007	LER	4/15/2010 18:20	954365	10-1872	2	LANL	USE	S
EXP0415021.wiff	XIBLK07	LER	4/15/2010 18:46			1		USE	B
EXP0415022.wiff	1202055010	LER	4/15/2010 19:12	958251	10-2065	2	LANL	USE	S
EXP0415023.wiff	WXXCCV	LER	4/15/2010 19:38			1		USE	C
EXP0415024.wiff	XIBLK08	LER	4/15/2010 20:04			1		USE	B
EXP0415025.wiff	WXXCRI	LER	4/15/2010 20:30			1		USE	C
EXP0415026.wiff	248048017	LER	4/15/2010 20:56	958251	10-2065	2	LANL	USE	S
EXP0415027.wiff	248048018	LER	4/15/2010 21:22	958251	10-2065	2	LANL	USE	S
EXP0415028.wiff	248048019	LER	4/15/2010 21:47	958251	10-2065	2	LANL	USE	S
EXP0415029.wiff	248048020	LER	4/15/2010 22:13	958251	10-2065	2	LANL	USE	S
EXP0415030.wiff	WXXCCV	LER	4/15/2010 22:39			1		USE	C

EXP0415031.wiff	XIBLK09	LER	4/15/2010 23:05	1	USE	B
EXP0415032.wiff	WXXCRI	LER	4/15/2010 23:31	1	USE	C
EXP0415033.wiff	1202061204	LER	4/15/2010 23:57	2	USE	S
EXP0415034.wiff	1202061205	LER	4/16/2010 0:23	2	DUSE-RA	S
EXP0415035.wiff	248506001	LER	4/16/2010 0:49	2	USE	S
EXP0415036.wiff	1202061206	LER	4/16/2010 1:15	2	DUSE-RA	S
EXP0415037.wiff	1202061207	LER	4/16/2010 1:41	2	DUSE-RA	S
EXP0415038.wiff	248506002	LER	4/16/2010 2:07	2	USE	S
EXP0415039.wiff	248506003	LER	4/16/2010 2:33	2	USE	S
EXP0415040.wiff	248506004	LER	4/16/2010 2:59	2	USE	S
EXP0415041.wiff	248506005	LER	4/16/2010 3:25	2	USE	S
EXP0415042.wiff	248506006	LER	4/16/2010 3:51	2	USE	S
EXP0415043.wiff	WXXCVC	LER	4/16/2010 4:17	1	USE	C
EXP0415044.wiff	XIBLK10	LER	4/16/2010 4:43	1	USE	B
EXP0415045.wiff	WXXCRI	LER	4/16/2010 5:09	1	USE	C
EXP0415046.wiff	248506007	LER	4/16/2010 5:35	2	USE	S
EXP0415047.wiff	248506008	LER	4/16/2010 6:01	2	USE	S
EXP0415048.wiff	248506009	LER	4/16/2010 6:27	2	USE	S
EXP0415049.wiff	248506010	LER	4/16/2010 6:53	2	USE	S
EXP0415050.wiff	248506011	LER	4/16/2010 7:19	2	USE	S
EXP0415051.wiff	248506012	LER	4/16/2010 7:45	2	USE	S
EXP0415052.wiff	248506013	LER	4/16/2010 8:11	2	USE	S
EXP0415053.wiff	248506014	LER	4/16/2010 8:37	2	USE	S
EXP0415054.wiff	248506015	LER	4/16/2010 9:02	2	USE	S
EXP0415055.wiff	248506016	LER	4/16/2010 9:28	2	USE	S
EXP0415056.wiff	WXXCVC	LER	4/16/2010 9:54	1	USE	C
EXP0415057.wiff	XIBLK11	LER	4/16/2010 10:20	1	USE	B
EXP0415058.wiff	WXXCRI	LER	4/16/2010 10:46	1	USE	C
EXP0415059.wiff	248506017	LER	4/16/2010 11:13	2	USE	S
EXP0415060.wiff	248506018	LER	4/16/2010 11:39	2	USE	S
EXP0415061.wiff	248506019	LER	4/16/2010 12:05	2	USE	S
EXP0415062.wiff	248506020	LER	4/16/2010 12:31	2	USE	S
EXP0415063.wiff	WXXCVC	LER	4/16/2010 12:57	1	USE	C
EXP0415064.wiff	XIBLK12	LER	4/16/2010 13:23	1	USE	B
EXP0415065.wiff	WXXCRI	LER	4/16/2010 13:49	1	USE	C
EXP0415066.wiff	1202061319	LER	4/16/2010 14:15	2	USE	S
EXP0415067.wiff	1202061320	LER	4/16/2010 14:41	2	USE	S

EXP0415068.wiff	248514001	LER	4/16/2010 15:06	961033	10-2196	2	LANL	USE	S
EXP0415069.wiff	248514002	LER	4/16/2010 15:32	961033	10-2196	2	LANL	USE	S
EXP0415070.wiff	248514003	LER	4/16/2010 15:58	961033	10-2196	2	LANL	USE	S
EXP0415071.wiff	248517001	LER	4/16/2010 16:24	961033	10-2198	2	LANL	USE	S
EXP0415072.wiff	248519001	LER	4/16/2010 16:50	961033	10-2199	2	LANL	USE	S
EXP0415073.wiff	248519002	LER	4/16/2010 17:17	961033	10-2199	2	LANL	USE	S
EXP0415074.wiff	248519003	LER	4/16/2010 17:43	961033	10-2199	2	LANL	USE	S
EXP0415075.wiff	248519004	LER	4/16/2010 18:08	961033	10-2199	2	LANL	USE	S
EXP0415076.wiff	WXXCCV	LER	4/16/2010 18:34			1		USE	C
EXP0415077.wiff	XIBLK13	LER	4/16/2010 19:00			1		USE	B
EXP0415078.wiff	WXXCRI	LER	4/16/2010 19:26			1		USE	C
EXP0415079.wiff	248519005	LER	4/16/2010 19:52	961033	10-2199	2	LANL	DUSE-RA	S
EXP0415080.wiff	248519006	LER	4/16/2010 20:18	961033	10-2199	2	LANL	DUSE-RA	S
EXP0415081.wiff	248519007	LER	4/16/2010 20:44	961033	10-2199	2	LANL	DUSE-RA	S
EXP0415082.wiff	248519008	LER	4/16/2010 21:10	961033	10-2199	2	LANL	DUSE-RA	S
EXP0415083.wiff	248519009	LER	4/16/2010 21:36	961033	10-2199	2	LANL	DUSE-RA	S
EXP0415084.wiff	248519010	LER	4/16/2010 22:02	961033	10-2199	2	LANL	DUSE-RA	S
EXP0415085.wiff	248519011	LER	4/16/2010 22:28	961033	10-2199	2	LANL	DUSE-RA	S
EXP0415086.wiff	248526001	LER	4/16/2010 22:54	961033	10-2202	2	LANL	DUSE-RA	S
EXP0415087.wiff	1202061321	LER	4/16/2010 23:20	961033	10-2202	2	LANL	DUSE-RA	S
EXP0415088.wiff	1202061322	LER	4/16/2010 23:46	961033	10-2202	2	LANL	DUSE-RA	S
EXP0415089.wiff	WXXCCV	LER	4/17/2010 0:12			1		DUSE	C
EXP0415090.wiff	XIBLK14	LER	4/17/2010 0:38			1		DUSE	B
EXP0415091.wiff	WXXCRI	LER	4/17/2010 1:04			1		DUSE	C
EXP0415092.wiff	248048006	LER	4/17/2010 1:30	958251	10-2065	2	LANL	DUSE-RA	S
EXP0415093.wiff	248048011	LER	4/17/2010 1:56	958251	10-2065	20	LANL	DUSE-RA	S
EXP0415094.wiff	XIBLK15	LER	4/17/2010 2:22			1		DUSE	B
EXP0415095.wiff	248048012	LER	4/17/2010 2:48	958251	10-2065	2	LANL	DUSE-RA	S
EXP0415096.wiff	WXXCCV	LER	4/17/2010 3:14			1		DUSE	C
EXP0415097.wiff	XIBLK16	LER	4/17/2010 3:40			1		DUSE	B
EXP0415098.wiff	WXXCRI	LER	4/17/2010 4:06			1		DUSE	C
EXP0415099.wiff	1202061439	LER	4/17/2010 4:32	961091	VARIOUS	2	LANL	DUSE-RA	S
EXP0415100.wiff	1202061440	LER	4/17/2010 4:58	961091	VARIOUS	2	LANL	DUSE-RA	S
EXP0415101.wiff	248542003	LER	4/17/2010 5:24	961091	10-2225	2	LANL	DUSE-RA	S
EXP0415102.wiff	248546004	LER	4/17/2010 5:50	961091	10-2219	2	LANL	DUSE-RA	S
EXP0415103.wiff	1202061441	LER	4/17/2010 6:16	961091	10-2219	2	LANL	DUSE-RA	S
EXP0415104.wiff	1202061442	LER	4/17/2010 6:42	961091	10-2219	2	LANL	DUSE-RA	S

EXP0415105.wiff	248546009	LER	4/17/2010 7:08	961091	10-2219	2	LANL	DUSE-RA	S
EXP0415106.wiff	WXXCCV	LER	4/17/2010 7:34			1		USE	C
EXP0415107.wiff	XIBLK17	LER	4/17/2010 8:00			1		USE	B
EXP0415108.wiff	WXXCRI	LER	4/17/2010 8:26			1		USE	C
EXP0415109.wiff	1202057288	LER	4/17/2010 8:52	959257	10-2128	2	LANL	USE	S
EXP0415110.wiff	1202057289	LER	4/17/2010 9:18	959257	10-2128	2	LANL	USE	S
EXP0415111.wiff	248232001	LER	4/17/2010 9:44	959257	10-2128	2	LANL	USE	S
EXP0415112.wiff	1202057290	LER	4/17/2010 10:10	959257	10-2128	2	LANL	USE	S
EXP0415113.wiff	1202057291	LER	4/17/2010 10:36	959257	10-2128	2	LANL	USE	S
EXP0415114.wiff	248232002	LER	4/17/2010 11:01	959257	10-2128	2	LANL	USE	S
EXP0415115.wiff	248232003	LER	4/17/2010 11:27	959257	10-2128	2	LANL	USE	S
EXP0415116.wiff	248232004	LER	4/17/2010 11:53	959257	10-2128	2	LANL	USE	S
EXP0415117.wiff	248232005	LER	4/17/2010 12:19	959257	10-2128	2	LANL	USE	S
EXP0415118.wiff	248232006	LER	4/17/2010 12:45	959257	10-2128	2	LANL	USE	S
EXP0415119.wiff	WXXCCV	LER	4/17/2010 13:11			1		USE	C
EXP0415120.wiff	XIBLK18	LER	4/17/2010 13:37			1		USE	B
EXP0415121.wiff	WXXCRI	LER	4/17/2010 14:03			1		USE	C
EXP0415122.wiff	248232007	LER	4/17/2010 14:29	959257	10-2128	2	LANL	DUSE-RA	S
EXP0415123.wiff	248232008	LER	4/17/2010 14:55	959257	10-2128	2	LANL	DUSE-RA	S
EXP0415124.wiff	248232009	LER	4/17/2010 15:21	959257	10-2128	2	LANL	DUSE-RA	S
EXP0415125.wiff	248232010	LER	4/17/2010 15:47	959257	10-2128	2	LANL	DUSE-RA	S
EXP0415126.wiff	248232011	LER	4/17/2010 16:13	959257	10-2128	2	LANL	DUSE-RA	S
EXP0415127.wiff	248232012	LER	4/17/2010 16:39	959257	10-2128	2	LANL	DUSE-RA	S
EXP0415128.wiff	248232013	LER	4/17/2010 17:05	959257	10-2128	2	LANL	DUSE-RA	S
EXP0415129.wiff	248232014	LER	4/17/2010 17:31	959257	10-2128	2	LANL	DUSE-RA	S
EXP0415130.wiff	248232015	LER	4/17/2010 17:57	959257	10-2128	2	LANL	DUSE-RA	S
EXP0415131.wiff	248232016	LER	4/17/2010 18:23	959257	10-2128	2	LANL	DUSE-RA	S
EXP0415132.wiff	WXXCCV	LER	4/17/2010 18:49			1		DUSE	C
EXP0415133.wiff	XIBLK19	LER	4/17/2010 19:15			1		DUSE	B
EXP0415134.wiff	WXXCRI	LER	4/17/2010 19:40			1		DUSE	C
EXP0415135.wiff	248232017	LER	4/17/2010 20:07	959257	10-2128	2	LANL	DUSE-RA	S
EXP0415136.wiff	248232018	LER	4/17/2010 20:33	959257	10-2128	2	LANL	DUSE-RA	S
EXP0415137.wiff	248232019	LER	4/17/2010 20:59	959257	10-2128	2	LANL	DUSE-RA	S
EXP0415138.wiff	248232020	LER	4/17/2010 21:24	959257	10-2128	2	LANL	DUSE-RA	S
EXP0415139.wiff	WXXCCV	LER	4/17/2010 21:50			1		DUSE	C
EXP0415140.wiff	XIBLK20	LER	4/17/2010 22:16			1		DUSE	B
EXP0415141.wiff	WXXCRI	LER	4/17/2010 22:42			1		DUSE	C



GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS#3

Date: 4/20/10  
 Extr. Injection Volume: 10uL  
 Sequence Number: 042010  
 Initial Calibration Date: 042010  
 Method: 8321A-Modified  
 Int. Std.: UXX100412-01.1  
 Mobile Phase Lot#: 1301905, 1297752  
 Standard-Samp Reagent Lot#: 1299881, 1293274

Reviewed BY: *hmc*  
 Date: *4/29/10*  
 SOP: GL-OA-E-056 Rev.12  
 Alt Check Std. ID: WXX100420-56

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC Flag
EXP0420001.wiff	XIBLK01	LER	4/20/2010 14:19			1		USE	B
EXP0420002.wiff	XIBLK01	LER	4/20/2010 14:44			1		USE	B
EXP0420003.wiff	WXXICAL-50	LER	4/20/2010 15:10			1		USE	I
EXP0420004.wiff	WXXICAL-51	LER	4/20/2010 15:36			1		USE	I
EXP0420005.wiff	WXXICAL-52	LER	4/20/2010 16:02			1		USE	I
EXP0420006.wiff	WXXICAL-53	LER	4/20/2010 16:28			1		USE	I
EXP0420007.wiff	WXXICAL-54	LER	4/20/2010 16:54			1		USE	I
EXP0420008.wiff	WXXICAL-55	LER	4/20/2010 17:20			1		USE	I
EXP0420009.wiff	XIBLK02	LER	4/20/2010 17:46			1		USE	B
EXP0420010.wiff	WXXICV	LER	4/20/2010 18:12			1		USE	C
EXP0420011.wiff	XIBLK03	LER	4/20/2010 18:38			1		USE	B
EXP0420012.wiff	WXXCRI	LER	4/20/2010 19:04			1		USE	C
EXP0420013.wiff	248519005	LER	4/20/2010 19:30	961033	10-2199	2	LANL	USE	S
EXP0420014.wiff	248519006	LER	4/20/2010 19:56	961033	10-2199	2	LANL	USE	S
EXP0420015.wiff	248519007	LER	4/20/2010 20:22	961033	10-2199	2	LANL	USE	S
EXP0420016.wiff	248519008	LER	4/20/2010 20:48	961033	10-2199	2	LANL	USE	S
EXP0420017.wiff	248519009	LER	4/20/2010 21:13	961033	10-2199	2	LANL	USE	S
EXP0420018.wiff	248519010	LER	4/20/2010 21:39	961033	10-2199	2	LANL	USE	S
EXP0420019.wiff	248519011	LER	4/20/2010 22:05	961033	10-2199	2	LANL	USE	S
EXP0420020.wiff	248526001	LER	4/20/2010 22:31	961033	10-2202	2	LANL	USE	S
EXP0420021.wiff	1202061321	LER	4/20/2010 22:57	961033	10-2202	2	LANL	USE	S
EXP0420022.wiff	1202061322	LER	4/20/2010 23:23	961033	10-2202	2	LANL	USE	S
EXP0420023.wiff	WXXCCV	LER	4/20/2010 23:49			1		USE	C
EXP0420024.wiff	XIBLK04	LER	4/21/2010 0:15			1		USE	B
EXP0420025.wiff	WXXCRI	LER	4/21/2010 0:41			1		USE	C
EXP0420026.wiff	248048006	LER	4/21/2010 1:07	958251	10-2065	2	LANL	USE	S
EXP0420027.wiff	248048011	LER	4/21/2010 1:33	958251	10-2065	20	LANL	USE	S
EXP0420028.wiff	XIBLK05	LER	4/21/2010 1:59			1		USE	B
EXP0420029.wiff	248048012	LER	4/21/2010 2:25	958251	10-2065	2	LANL	USE	S
EXP0420030.wiff	1202061439	LER	4/21/2010 2:51	961091	VARIOUS	2	LANL	USE	S

EXP0420031.wiff	1202061440	LER	4/21/2010 3:17	961091	VARIOUS	2	LANL	USE	S
EXP0420032.wiff	248542003	LER	4/21/2010 3:43	961091	10-2225	2	LANL	USE	S
EXP0420033.wiff	248546004	LER	4/21/2010 4:08	961091	10-2219	2	LANL	USE	S
EXP0420034.wiff	1202061441	LER	4/21/2010 4:34	961091	10-2219	2	LANL	USE	S
EXP0420035.wiff	1202061442	LER	4/21/2010 5:00	961091	10-2219	2	LANL	USE	S
EXP0420036.wiff	WXXCCV	LER	4/21/2010 5:26			1		USE	C
EXP0420037.wiff	XIBLK06	LER	4/21/2010 5:52			1		USE	B
EXP0420038.wiff	WXXCRI	LER	4/21/2010 6:18			1		USE	C
EXP0420039.wiff	248546009	LER	4/21/2010 6:44	961091	10-2219	2	LANL	USE	S
EXP0420040.wiff	248232007	LER	4/21/2010 7:10	959257	10-2128	2	LANL	USE	S
EXP0420041.wiff	248232008	LER	4/21/2010 7:36	959257	10-2128	2	LANL	USE	S
EXP0420042.wiff	248232009	LER	4/21/2010 8:02	959257	10-2128	2	LANL	USE	S
EXP0420043.wiff	248232010	LER	4/21/2010 8:28	959257	10-2128	2	LANL	USE	S
EXP0420044.wiff	248232011	LER	4/21/2010 8:54	959257	10-2128	2	LANL	USE	S
EXP0420045.wiff	248232012	LER	4/21/2010 9:20	959257	10-2128	2	LANL	USE	S
EXP0420046.wiff	248232013	LER	4/21/2010 9:46	959257	10-2128	2	LANL	USE	S
EXP0420047.wiff	248232014	LER	4/21/2010 10:12	959257	10-2128	2	LANL	USE	S
EXP0420048.wiff	248232015	LER	4/21/2010 10:38	959257	10-2128	2	LANL	USE	S
EXP0420049.wiff	WXXCCV	LER	4/21/2010 11:04			1		USE	C
EXP0420050.wiff	XIBLK07	LER	4/21/2010 11:30			1		USE	B
EXP0420051.wiff	WXXCRI	LER	4/21/2010 11:56			1		USE	C
EXP0420052.wiff	248232016	LER	4/21/2010 12:22	959257	10-2128	2	LANL	USE	S
EXP0420053.wiff	248232017	LER	4/21/2010 12:48	959257	10-2128	2	LANL	USE	S
EXP0420054.wiff	248232018	LER	4/21/2010 13:14	959257	10-2128	2	LANL	USE	S
EXP0420055.wiff	248232019	LER	4/21/2010 13:39	959257	10-2128	2	LANL	USE	S
EXP0420056.wiff	248232020	LER	4/21/2010 14:05	959257	10-2128	2	LANL	USE	S
EXP0420057.wiff	WXXCCV	LER	4/21/2010 14:31			1		USE	C
EXP0420058.wiff	XIBLK08	LER	4/21/2010 14:57			1		USE	B
EXP0420059.wiff	WXXCRI	LER	4/21/2010 15:23			1		USE	C
EXP0420060.wiff	1202064978	LER	4/21/2010 15:49	962559	10-2248	2	LANL	DUSE-RA	S
EXP0420061.wiff	1202064979	LER	4/21/2010 16:15	962559	10-2248	2	LANL	DUSE-RA	S
EXP0420062.wiff	1202066190	LER	4/21/2010 16:41	962559	10-2248	2	LANL	USE	S
EXP0420063.wiff	248664002	LER	4/21/2010 17:07	962559	10-2248	2	LANL	USE	S
EXP0420064.wiff	248664007	LER	4/21/2010 17:33	962559	10-2248	2	LANL	DUSE-RA	S
EXP0420065.wiff	248664012	LER	4/21/2010 17:59	962559	10-2248	2	LANL	USE	S
EXP0420066.wiff	248664018	LER	4/21/2010 18:25	962559	10-2248	2	LANL	USE	S
EXP0420067.wiff	WXXCCV	LER	4/21/2010 18:51			1		USE	C

EXP0420068.wiff	XIBLK09	LER	4/21/2010 19:17				1	USE	B
EXP0420069.wiff	WXXCRI	LER	4/21/2010 19:43				1	USE	C
EXP0420070.wiff	1202064537	LER	4/21/2010 20:09	962415	10-2233		2	LANL	S
EXP0420071.wiff	1202064538	LER	4/21/2010 20:35	962415	10-2233		2	LANL	S
EXP0420072.wiff	248628002	LER	4/21/2010 21:01	962415	10-2233		2	LANL	S
EXP0420073.wiff	1202064539	LER	4/21/2010 21:27	962415	10-2233		2	LANL	S
EXP0420074.wiff	1202064540	LER	4/21/2010 21:53	962415	10-2233		2	LANL	S
EXP0420075.wiff	248628003	LER	4/21/2010 22:19	962415	10-2233		2	LANL	S
EXP0420076.wiff	248628004	LER	4/21/2010 22:45	962415	10-2233		2	LANL	S
EXP0420077.wiff	248628005	LER	4/21/2010 23:11	962415	10-2233		2	LANL	S
EXP0420078.wiff	248628006	LER	4/21/2010 23:36	962415	10-2233		2	LANL	S
EXP0420079.wiff	248628007	LER	4/22/2010 0:02	962415	10-2233		2	LANL	S
EXP0420080.wiff	WXXCCV	LER	4/22/2010 0:28				1	USE	C
EXP0420081.wiff	XIBLK10	LER	4/22/2010 0:54				1	USE	B
EXP0420082.wiff	WXXCRI	LER	4/22/2010 1:20				1	USE	C
EXP0420083.wiff	248628008	LER	4/22/2010 1:46	962415	10-2233		2	LANL	S
EXP0420084.wiff	248628009	LER	4/22/2010 2:12	962415	10-2233		2	LANL	S
EXP0420085.wiff	248628010	LER	4/22/2010 2:38	962415	10-2233		2	LANL	S
EXP0420086.wiff	248628011	LER	4/22/2010 3:04	962415	10-2233		2	LANL	S
EXP0420087.wiff	248628012	LER	4/22/2010 3:30	962415	10-2233		2	LANL	S
EXP0420088.wiff	248628013	LER	4/22/2010 3:56	962415	10-2233		2	LANL	S
EXP0420089.wiff	248628014	LER	4/22/2010 4:22	962415	10-2233		2	LANL	S
EXP0420090.wiff	248628015	LER	4/22/2010 4:48	962415	10-2233		2	LANL	S
EXP0420091.wiff	WXXCCV	LER	4/22/2010 5:14				1	USE	C
EXP0420092.wiff	XIBLK11	LER	4/22/2010 5:40				1	USE	B
EXP0420093.wiff	WXXCRI	LER	4/22/2010 6:06				1	USE	C
EXP0420094.wiff	1202061205	LER	4/22/2010 6:32	960986	10-2193		2	LANL	S
EXP0420095.wiff	1202061206	LER	4/22/2010 6:58	960986	10-2193		2	LANL	S
EXP0420096.wiff	1202061207	LER	4/22/2010 7:24	960986	10-2193		2	LANL	S
EXP0420097.wiff	1202057290	LER	4/22/2010 7:50	959257	10-2128		2	LANL	S
EXP0420098.wiff	248232020	LER	4/22/2010 8:16	959257	10-2128		20	LANL	S
EXP0420099.wiff	WXXCCV	LER	4/22/2010 8:42				1	USE	C
EXP0420100.wiff	XIBLK12	LER	4/22/2010 9:08				1	USE	B
EXP0420101.wiff	WXXCRI	LER	4/22/2010 9:34				1	USE	C
EXP0420102.wiff	1202064978	LER	4/22/2010 10:00	962559	10-2248		2	LANL	S
EXP0420103.wiff	1202064979	LER	4/22/2010 10:26	962559	10-2248		2	LANL	S
EXP0420104.wiff	248664007	LER	4/22/2010 10:52	962559	10-2248		2	LANL	S

EXP0420105.wiff	1202064538	LER	4/22/2010 11:18	962415	10-2233	2	LANL	DUSE-MISC	S
EXP0420106.wiff	248628006	LER	4/22/2010 11:44	962415	10-2233	2	LANL	USE	S
EXP0420107.wiff	WXXCCV	LER	4/22/2010 12:10			1		USE	C
EXP0420108.wiff	XIBLK13	LER	4/22/2010 12:36			1		USE	B
EXP0420109.wiff	WXXCRI	LER	4/22/2010 13:02			1		USE	C

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCM SMS4

Date: 04/09/10

Extr. Injection Volume: 10uL

Sequence Number: 040910exs

Initial Calibration Date: 040910 Standard-Samp Reagent Lot#: 1292884, 1284736

Method: 8321A-Modified

Int. Std.: N/A

Mobile Phase Lot#: 1269686, 1293224

Reviewed By: *thmc*

Date: *04/12/10*

SOP: GL-OA-E-056 Rev.12

Alt Check Std. ID: WXX100409-26

*Z*

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC Flag
EXS04090001.wiff	XIBLK01	LER	4/9/2010 7:14			1		USE	B
EXS04090002.wiff	XIBLK01	LER	4/9/2010 7:30			1		USE	B
EXS04090003.wiff	WXXICAL-19	LER	4/9/2010 7:46			1		USE	I
EXS04090004.wiff	WXXICAL-20	LER	4/9/2010 8:01			1		USE	I
EXS04090005.wiff	WXXICAL-21	LER	4/9/2010 8:17			1		USE	I
EXS04090006.wiff	WXXICAL-22	LER	4/9/2010 8:33			1		USE	I
EXS04090007.wiff	WXXICAL-23	LER	4/9/2010 8:49			1		USE	I
EXS04090008.wiff	WXXICAL-24	LER	4/9/2010 9:04			1		USE	I
EXS04090009.wiff	WXXICAL-25	LER	4/9/2010 9:20			1		USE	I
EXS04090010.wiff	XIBLK02	LER	4/9/2010 9:36			1		USE	B
EXS04090011.wiff	WXXICV	LER	4/9/2010 9:51			1		USE	C
EXS04090012.wiff	XIBLK03	LER	4/9/2010 10:07			1		USE	B
EXS04090013.wiff	WXXCRI	LER	4/9/2010 10:23			1		USE	C
EXS04090014.wiff	1202061204	LER	4/9/2010 10:39	960986	10-2193	2	LANL	USE	S
EXS04090015.wiff	1202061205	LER	4/9/2010 10:54	960986	10-2193	2	LANL	USE	S
EXS04090016.wiff	248506001	LER	4/9/2010 11:10	960986	10-2193	2	LANL	USE	S
EXS04090017.wiff	1202061206	LER	4/9/2010 11:26	960986	10-2193	2	LANL	USE	S
EXS04090018.wiff	1202061207	LER	4/9/2010 11:41	960986	10-2193	2	LANL	USE	S
EXS04090019.wiff	248506002	LER	4/9/2010 11:57	960986	10-2193	2	LANL	USE	S
EXS04090020.wiff	248506003	LER	4/9/2010 12:13	960986	10-2193	2	LANL	USE	S
EXS04090021.wiff	248506004	LER	4/9/2010 12:29	960986	10-2193	2	LANL	USE	S
EXS04090022.wiff	248506005	LER	4/9/2010 12:44	960986	10-2193	2	LANL	USE	S
EXS04090023.wiff	248506006	LER	4/9/2010 13:00	960986	10-2193	2	LANL	USE	S
EXS04090024.wiff	WXXCCV	LER	4/9/2010 13:16			1		USE	C
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EXS04090026.wiff	WXXCRI	LER	4/9/2010 13:47			1		USE	C
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EXS04090028.wiff	248506008	LER	4/9/2010 14:18	960986	10-2193	2	LANL	USE	S
EXS04090029.wiff	248506009	LER	4/9/2010 14:34	960986	10-2193	2	LANL	USE	S
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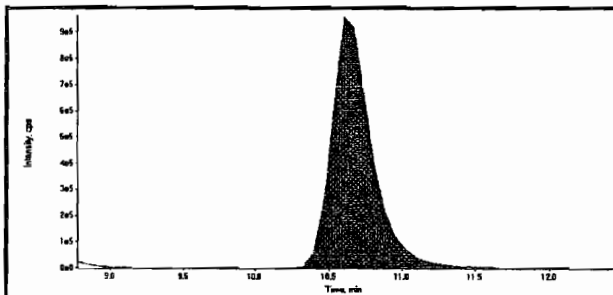
EXS040900031.wiff	248506011	LER	4/9/2010 15:06	960986	10-2193	2	LANL	USE	S
EXS040900032.wiff	248506012	LER	4/9/2010 15:21	960986	10-2193	2	LANL	USE	S
EXS040900033.wiff	248506013	LER	4/9/2010 15:37	960986	10-2193	2	LANL	USE	S
EXS040900034.wiff	248506014	LER	4/9/2010 15:53	960986	10-2193	2	LANL	USE	S
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EXS040900039.wiff	WXXCRI	LER	4/9/2010 17:11			1		USE	C
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EXS040900041.wiff	248506018	LER	4/9/2010 17:43	960986	10-2193	2	LANL	USE	S
EXS040900042.wiff	248506019	LER	4/9/2010 17:58	960986	10-2193	2	LANL	USE	S
EXS040900043.wiff	248506020	LER	4/9/2010 18:14	960986	10-2193	2	LANL	USE	S
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EXS040900045.wiff	1202061319	LER	4/9/2010 18:45	961033	VARIOUS	2	LANL	USE	S
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EXS040900047.wiff	248514001	LER	4/9/2010 19:17	961033	10-2196	2	LANL	USE	S
EXS040900048.wiff	248514002	LER	4/9/2010 19:33	961033	10-2196	2	LANL	USE	S
EXS040900049.wiff	248514003	LER	4/9/2010 19:48	961033	10-2196	2	LANL	USE	S
EXS040900050.wiff	WXXCCV	LER	4/9/2010 20:04			1		USE	C
EXS040900051.wiff	XIBLK07	LER	4/9/2010 20:20			1		USE	B
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EXS040900055.wiff	248519002	LER	4/9/2010 21:23	961033	10-2199	2	LANL	USE	S
EXS040900056.wiff	248519003	LER	4/9/2010 21:38	961033	10-2199	2	LANL	USE	S
EXS040900057.wiff	248519004	LER	4/9/2010 21:54	961033	10-2199	2	LANL	USE	S
EXS040900058.wiff	248519005	LER	4/9/2010 22:10	961033	10-2199	2	LANL	USE	S
EXS040900059.wiff	248519006	LER	4/9/2010 22:25	961033	10-2199	2	LANL	USE	S
EXS040900060.wiff	248519007	LER	4/9/2010 22:41	961033	10-2199	2	LANL	USE	S
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EXS040900062.wiff	248519009	LER	4/9/2010 23:12	961033	10-2199	2	LANL	USE	S
EXS040900063.wiff	WXXCCV	LER	4/9/2010 23:28			1		USE	C
EXS040900064.wiff	XIBLK08	LER	4/9/2010 23:44			1		USE	B
EXS040900065.wiff	WXXCRI	LER	4/10/2010 0:00			1		USE	C
EXS040900066.wiff	248519010	LER	4/10/2010 0:15	961033	10-2199	2	LANL	USE	S
EXS040900067.wiff	248519011	LER	4/10/2010 0:31	961033	10-2199	2	LANL	USE	S

EXS04090068.wiff	248526001	LER	4/10/2010 0:47	961033	10-2202	2	LANL	USE	S
EXS04090069.wiff	1202061321	LER	4/10/2010 1:02	961033	10-2202	2	LANL	USE	S
EXS04090070.wiff	1202061322	LER	4/10/2010 1:18	961033	10-2202	2	LANL	USE	S
EXS04090071.wiff	WXXCCV	LER	4/10/2010 1:34			1		USE	C
EXS04090072.wiff	XIBLK09	LER	4/10/2010 1:49			1		USE	B
EXS04090073.wiff	WXXCRI	LER	4/10/2010 2:05			1		USE	C

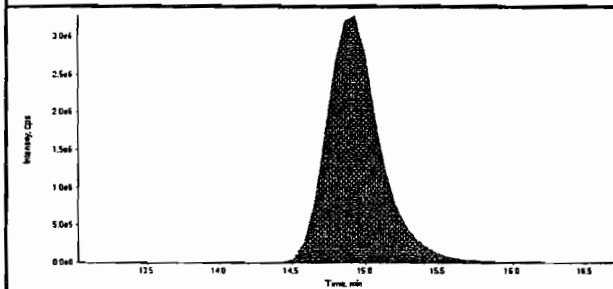
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

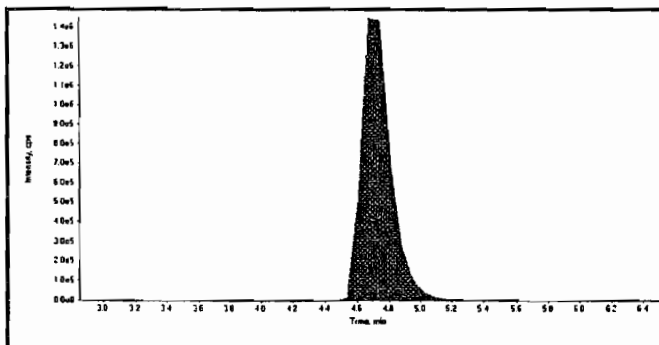
Data File	EXP0420021.wiff	Acquisition Date	4/20/2010 10:57:42 PM
Sample Name	1202061321	Acquisition Method	8321.dam
Batch Dilution Analyst	961033 2 LER	Result Table	042010.rdb
Procedure Code	LCX8321_S	Sample Type	Unknown



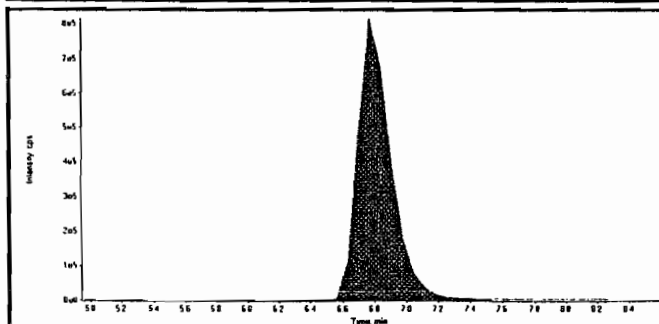
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.60
Actual RT:	10.60
Area Counts:	18400000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.90
Actual RT:	14.90
Area Counts:	84100000.00
Manual Modification	Yes
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.67
Actual RT:	4.67
Area Counts:	1.91e+007
Manual Modification	No
Amount:	482. (ng/mL)
% Accuracy:	N/A



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.77
Actual RT:	6.77
Area Counts:	1.20e+007
Manual Modification	No
Amount:	588. (ng/mL)
% Accuracy:	N/A

*Jan 4/29/10*

*Amu 4/29/10*



Before Jan 4/88/10

Sample Name: "130208 131" Sample ID: "44 033011.EPR" File: "EPR0420021.wit"

Peak Name: "246.7 (nitrobenzene)" Mass(es): "227 1209.8 amu"

Concent: "LC63321\_S" Annotation: "

Sample Index: 1

Sample Type: Unknown

Concentration: 573. ng/mL

Acq. Date: 4/20/2010

Acq. Time: 10:57:42 PM

Modified: He

File: Algorithm: Intelligence - IQA

Peak Weight: 1000.00 cps

Peak Width: 1.00 points

Resolving Width: 1.00 points

Resolving Width: 60.0 sec

Resolving Width: 13.3 min

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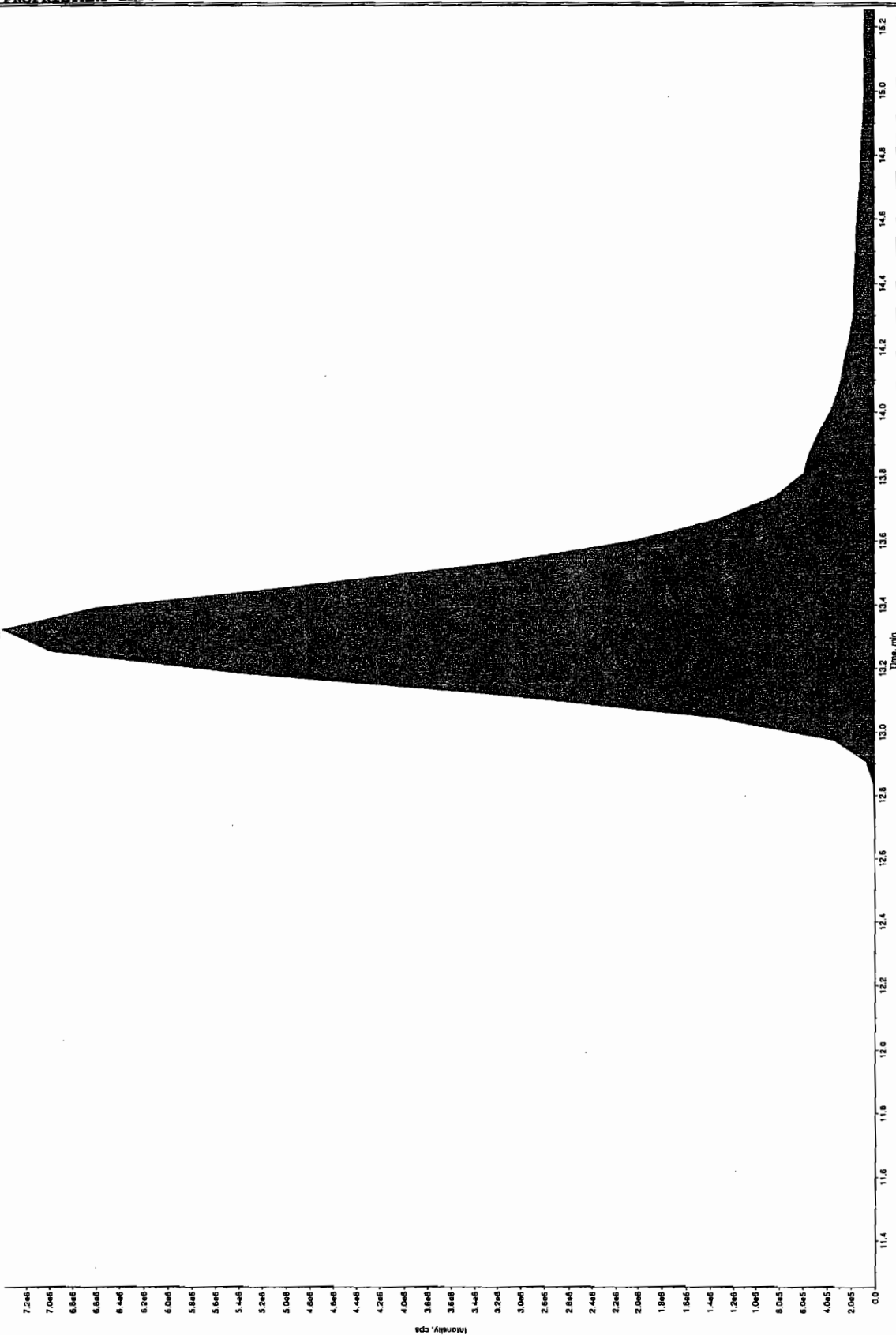
Resolving Width: 13.3 min

Resolving Width: 13.3 min

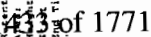
Resolving Width: 13.3 min

Resolving Width: 13.3 min

13.21



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0420021.wiff	<b>Acquisition Date</b>	4/20/2010 10:57:42 PM
<b>Sample Name</b>	1202061321	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	961033 2 LER	<b>Result Table</b>	042010.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	<b>Expected RT:</b>	9.07
	<b>Actual RT:</b>	9.07
	<b>Area Counts:</b>	1.12e+008
	<b>Manual Modification</b>	No
	<b>Amount:</b>	552. (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	<b>Expected RT:</b>	10.7
	<b>Actual RT:</b>	10.7
	<b>Area Counts:</b>	5.08e+007
	<b>Manual Modification</b>	No
	<b>Amount:</b>	535. (ng/mL)
	<b>% Accuracy:</b>	N/A

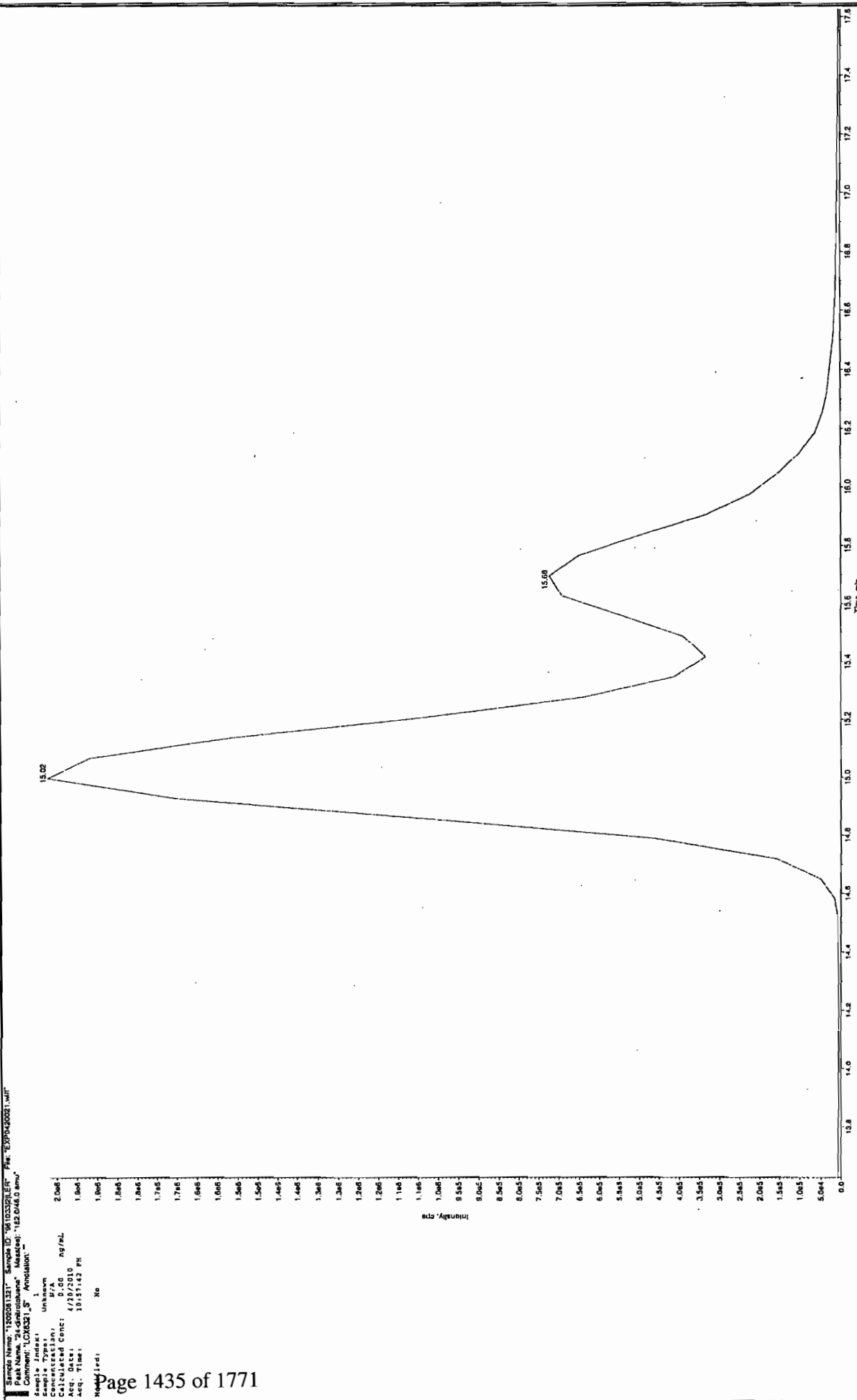
  

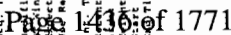
	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	<b>Expected RT:</b>	10.8
	<b>Actual RT:</b>	10.8
	<b>Area Counts:</b>	3.84e+007
	<b>Manual Modification</b>	No
	<b>Amount:</b>	501. (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	<b>Expected RT:</b>	13.3
	<b>Actual RT:</b>	13.3
	<b>Area Counts:</b>	1.93e+008
	<b>Manual Modification</b>	Yes
	<b>Amount:</b>	519. (ng/mL)
	<b>% Accuracy:</b>	N/A

Before Jan 4/28/10





\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0420021.wiff	<b>Acquisition Date</b>	4/20/2010 10:57:42 PM
<b>Sample Name</b>	1202061321	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	961033 2 LER	<b>Result Table</b>	042010.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	11.9
	Actual RT:	11.9
	Area Counts:	1.85e+006
	Manual Modification	No
	Amount:	451. (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.1
	Actual RT:	12.2
	Area Counts:	2.68e+007
	Manual Modification	No
	Amount:	237. (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	14.9
	Actual RT:	15.0
	Area Counts:	4.61e+007
	Manual Modification	No
	Amount:	493. (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.6
	Actual RT:	15.7
	Area Counts:	1.90e+007
	Manual Modification	Yes
	Amount:	550. (ng/mL)
	% Accuracy:	N/A

Before Dec 4/28/10

Sample Name: 1202081217 Sample ID: 9810330217 File: E:\P0400021.mlf  
Peak Name: 2-Amino-46-dihydroquinoline Mass(es): 187.07160 0 amu  
Comment: LCMS321\_F Annotation: -

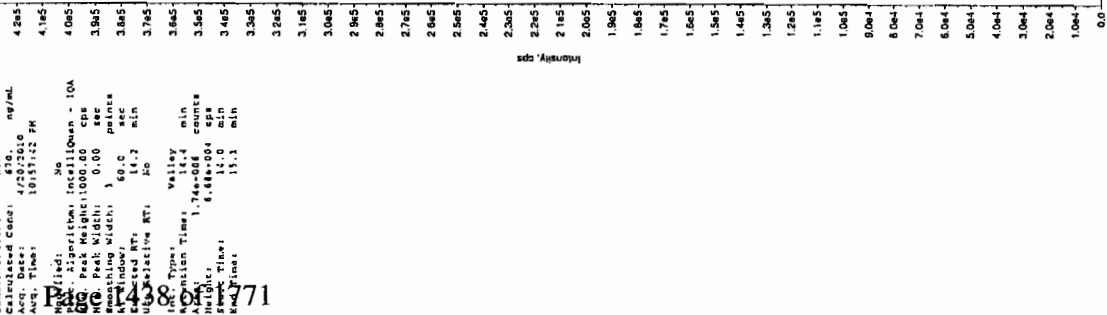
Sample Index: 1  
Unit: ng/mL  
Concentration: 2/1A  
Acq. Date: 4/25/2010  
Acq. Time: 10:11:12 PM

Method: No  
Injection: 10A  
Peak Weight: 1000.00 cps  
Peak Width: 0.100 minutes  
Acquisition: 60.0 sec  
Selected RT: 14.2 min  
UG Activation RT: 14.2 min

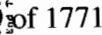
Injection Type: Valley  
Acquisition Time: 14.4 min  
Acquisition: 1.74e+008 counts  
Peak Width: 0.100 minutes  
Peak Time: 14.0 min  
Mass Time: 15.1 min

13.27

14.35



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCM SMS#3



GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

Data File	EXP0420021.wiff	Acquisition Date	4/20/2010 10:57:42 PM
Sample Name	1202061321	Acquisition Method	8321.dam
Batch Dilution Analyst	961033 2 LER	Result Table	042010.rdb
Procedure Code	LCX8321_S	Sample Type	Unknown

	Compound Name:	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.3
	Actual RT:	13.3
	Area Counts:	4.10e+007
	Manual Modification	No
	Amount:	571. (ng/mL)
	% Accuracy:	N/A

	Compound Name:	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.2
	Actual RT:	14.4
	Area Counts:	1.39e+006
	Manual Modification	Yes
	Amount:	536. (ng/mL)
	% Accuracy:	N/A

	Compound Name:	2-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	17.7
	Actual RT:	17.9
	Area Counts:	7.30e+005
	Manual Modification	No
	Amount:	471. (ng/mL)
	% Accuracy:	N/A

	Compound Name:	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	19.0
	Actual RT:	19.0
	Area Counts:	3.48e+005
	Manual Modification	No
	Amount:	436. (ng/mL)
	% Accuracy:	N/A

Before 8/4/2010

Sample Name: "20081201" Sample ID: "48103301" File: "E:\PSI\20081201\1.w" Peak Name: "PEP" Mass(es): "351.182.0 amu"

Comment: "LC8321\_S" Annotation: ""

Sample Index: 1

Concentration: 552.0 ng/mL

Acq. Date: 4/20/2010

Acq. Time: 10:15:12 PM

Method: Modified

Int. Type: Valley

Int. Time: 20.0 min

Peak Width: 100.00 cps

Peak Height: 100.00 cps

Peak Area: 100.00 cps

Peak Width: 100.00 cps

Peak Height: 100.00 cps

Peak Area: 100.00 cps

Peak Width: 100.00 cps

Peak Height: 100.00 cps

Peak Area: 100.00 cps

Peak Width: 100.00 cps

Peak Height: 100.00 cps

Peak Area: 100.00 cps

Peak Width: 100.00 cps

Peak Height: 100.00 cps

Peak Area: 100.00 cps

Peak Width: 100.00 cps

Peak Height: 100.00 cps

Peak Area: 100.00 cps

Peak Width: 100.00 cps

Peak Height: 100.00 cps

Peak Area: 100.00 cps

Peak Width: 100.00 cps

Peak Height: 100.00 cps

Peak Area: 100.00 cps

Peak Width: 100.00 cps

Peak Height: 100.00 cps

Peak Area: 100.00 cps

Peak Width: 100.00 cps

Peak Height: 100.00 cps

Peak Area: 100.00 cps

Peak Width: 100.00 cps

Peak Height: 100.00 cps

Peak Area: 100.00 cps

Peak Width: 100.00 cps

Peak Height: 100.00 cps

Peak Area: 100.00 cps

Peak Width: 100.00 cps

Peak Height: 100.00 cps

Peak Area: 100.00 cps

Peak Width: 100.00 cps

Peak Height: 100.00 cps

Peak Area: 100.00 cps

Peak Width: 100.00 cps

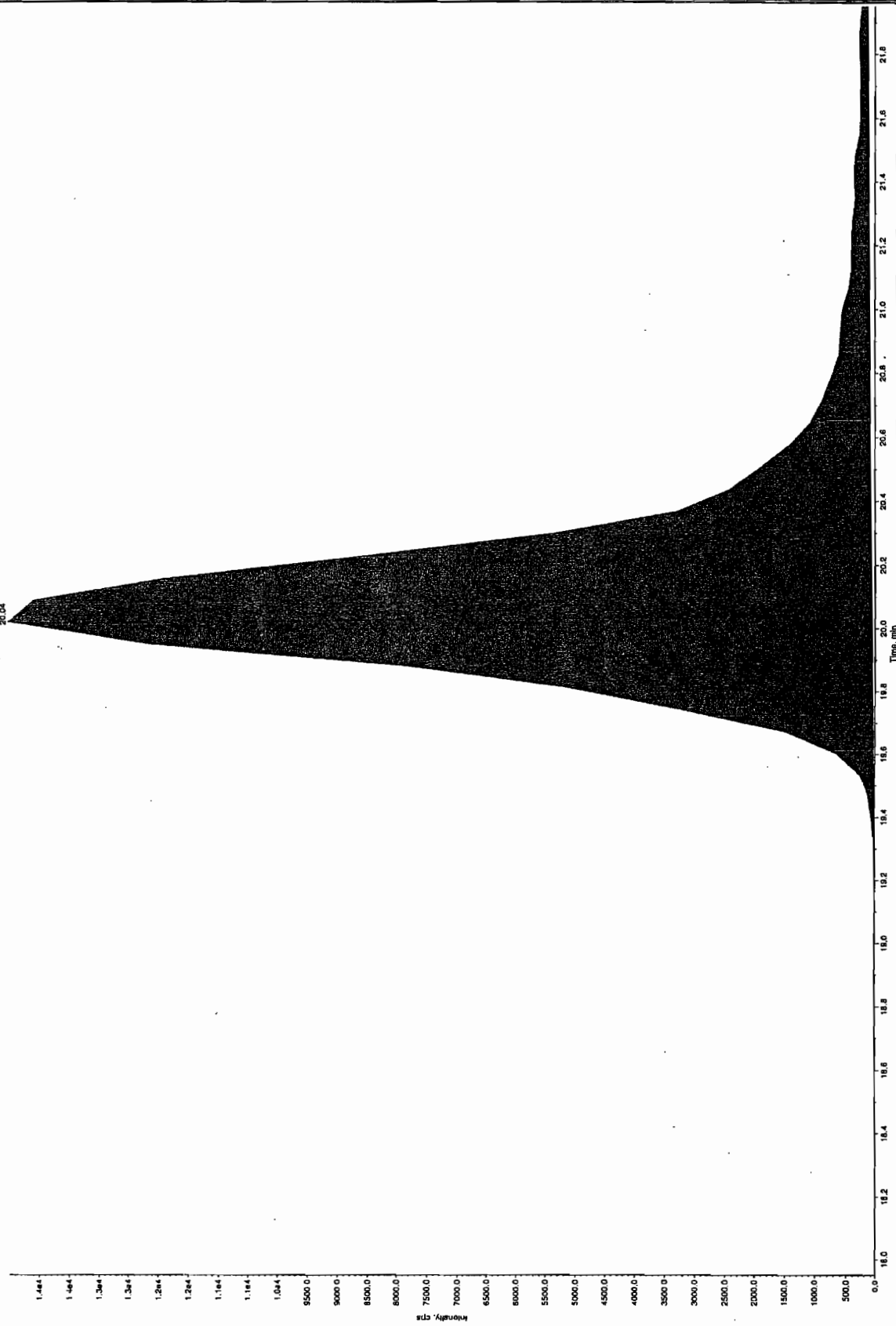
Peak Height: 100.00 cps

Peak Area: 100.00 cps

Peak Width: 100.00 cps

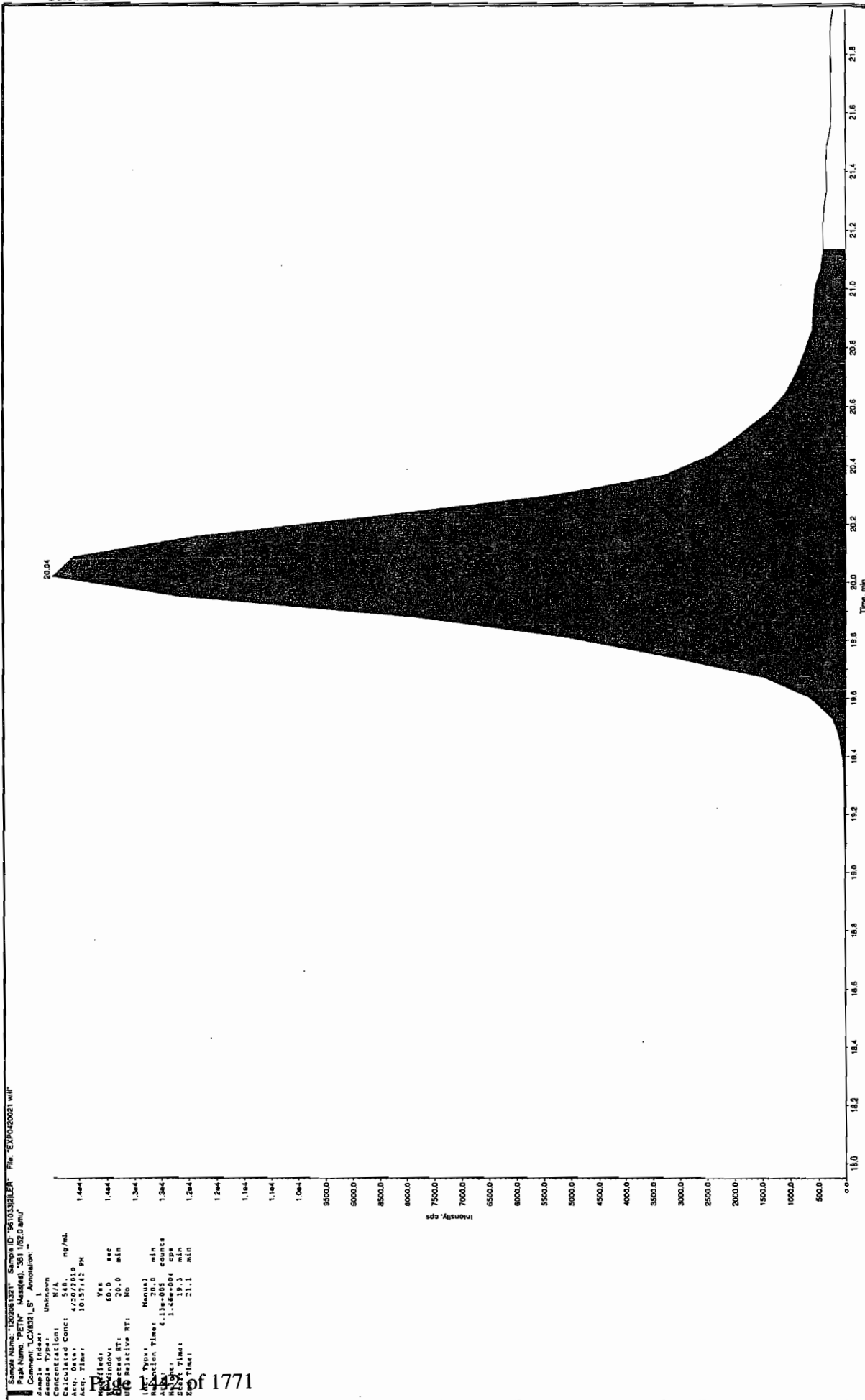
Peak Height: 100.00 cps

Peak Area: 100.00 cps



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

after Dec 4/19/10



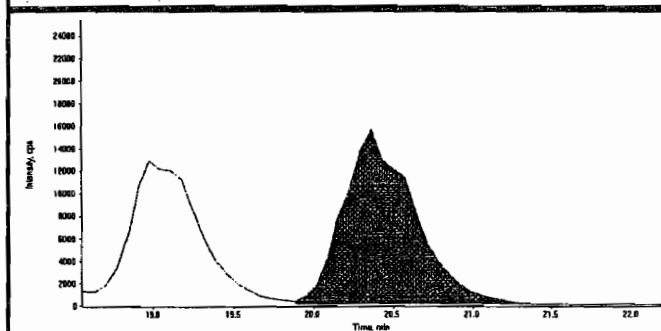
Sample Name: "120205131" Sample ID: "6103321" File: "EXP040021.w"
   
Peak Name: "PEAK" Mass(es): "561.162.0 amu"
   
Comment: "LC8321A" Annotation: "1"

Sample Type: Unknown
   
Concentration: N/A
   
Calculated Conc: 4.70/20.0 mg/mL
   
Acq. Time: 10:57:42 PM
   
Method:
   
Mod: 60.0 sec
   
Acq. Time: 20.0 min
   
UF Relative RT: No
   
Injection Time: 20.0 min
   
Acq. Time: 20.0 min
   
Counts: 4.11e+005 counts
   
Height: 1.46e+004 cps
   
Peak Time: 20.0 min
   
End Time: 21.1 min

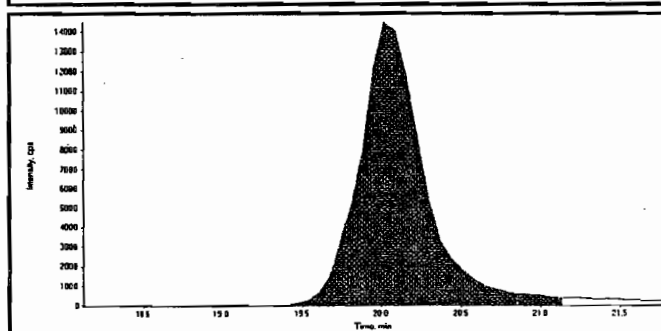
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

Data File	EXP0420021.wiff	Acquisition Date	4/20/2010 10:57:42 PM
Sample Name	1202061321	Acquisition Method	8321.dam
Batch Dilution Analyst	961033 2 LER	Result Table	042010.rdb
Procedure Code	LCX8321_S	Sample Type	Unknown



Compound Name:	3-Nitrotoluene (137.0/46.0 amu)
Expected RT:	20.4
Actual RT:	20.4
Area Counts:	4.85e+005
Manual Modification	No
Amount:	421. (ng/mL)
% Accuracy:	N/A



Compound Name:	PETN (361.1/62.0 amu)
Expected RT:	20.0
Actual RT:	20.0
Area Counts:	4.13e+005
Manual Modification	Yes
Amount:	540. (ng/mL)
% Accuracy:	N/A

Before Scan 4/12/10

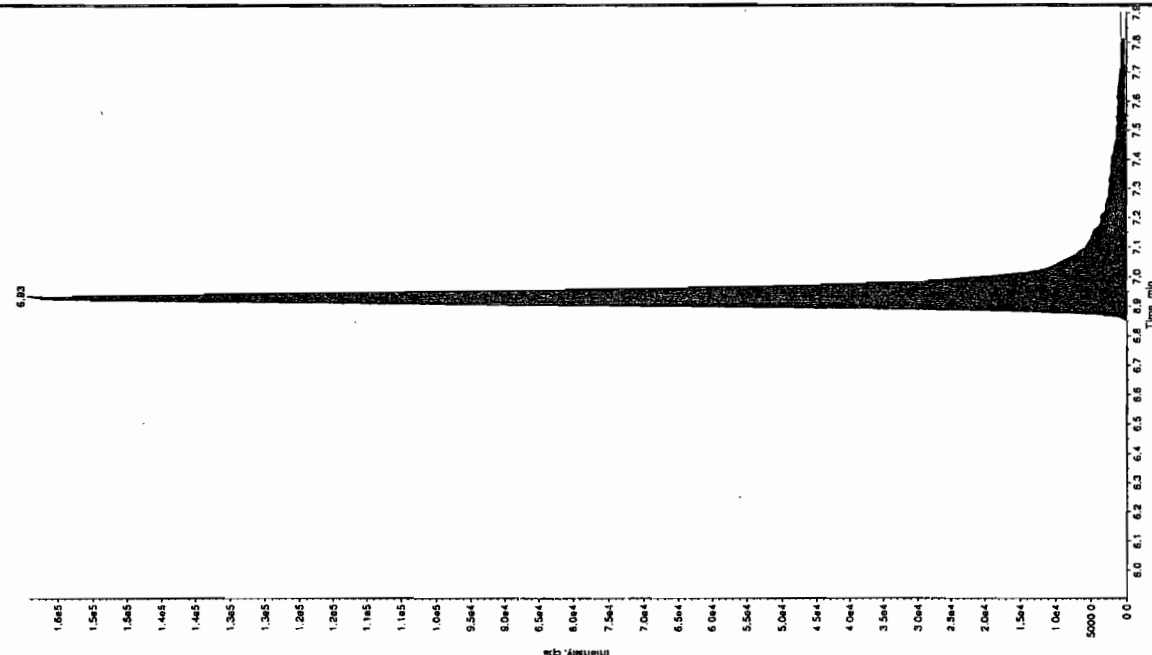
Sample Name: "1202061321" Sample ID: "9610332121" File: "EXS04090069.wif"

Peak Name: "TATP" Mass(es): "257.2204.8 amu" Comment: "LCX83212S" Annotation: ""

Sample Index: 1  
Sample Type: Unknown  
Concentration: 804. ng/mL  
Acq. Date: 4/10/2010  
Acq. Time: 1:02:51 AM

Modified: No  
Peak Algorithm: IntelliQuan - IOA  
Min. Peak Height: 2500.00 cps  
Min. Peak Width: 3.00 sec  
Smoothing Width: 30.0 points  
Expected RT: 6.90 min  
Use Relative RT: No

Int. Type: Valley  
Retention Time: 6.93 min  
Area: 7.71e+005 counts  
Height: 159381.454 cps  
Start Time: 6.83 min  
End Time: 7.01 min



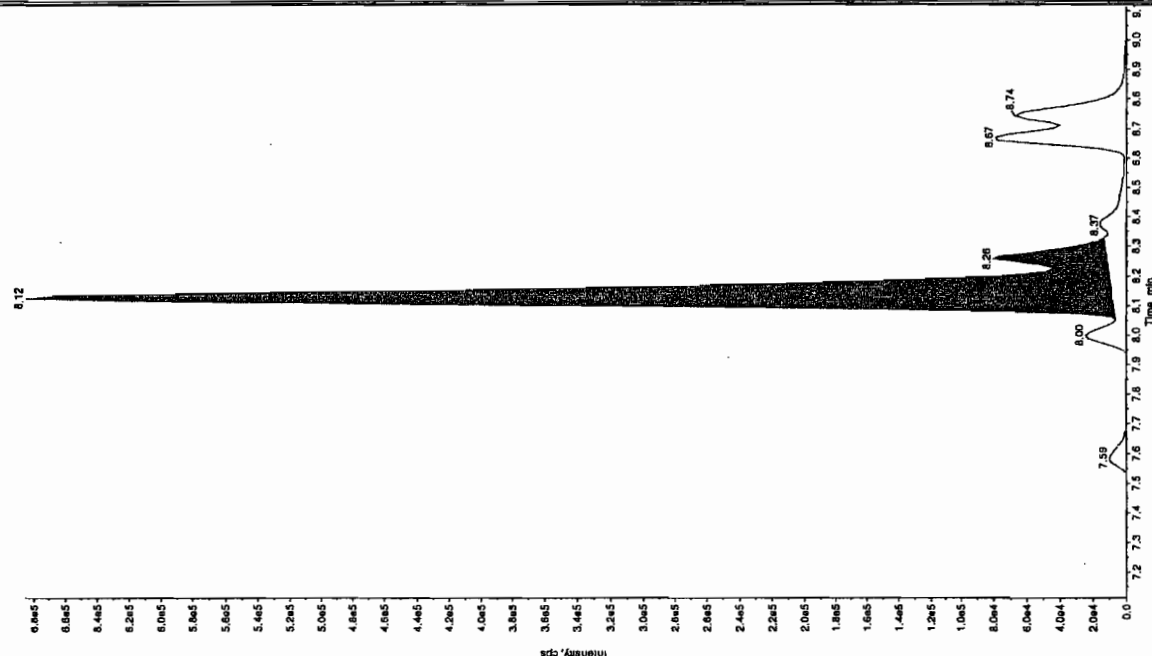
Sample Name: "1202061321" Sample ID: "9610332121" File: "EXS04090069.wif"

Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu" Comment: "LCX83212S" Annotation: ""

Sample Index: 1  
Sample Type: Unknown  
Concentration: N/A  
Acq. Date: 4/10/2010  
Acq. Time: 1:02:51 AM

Modified: Yes  
Peak Algorithm: IntelliQuan - IOA  
Min. Peak Height: 2000.00 cps  
Min. Peak Width: 0.00 sec  
Smoothing Width: 15.0 points  
Expected RT: 8.11 min  
Use Relative RT: No

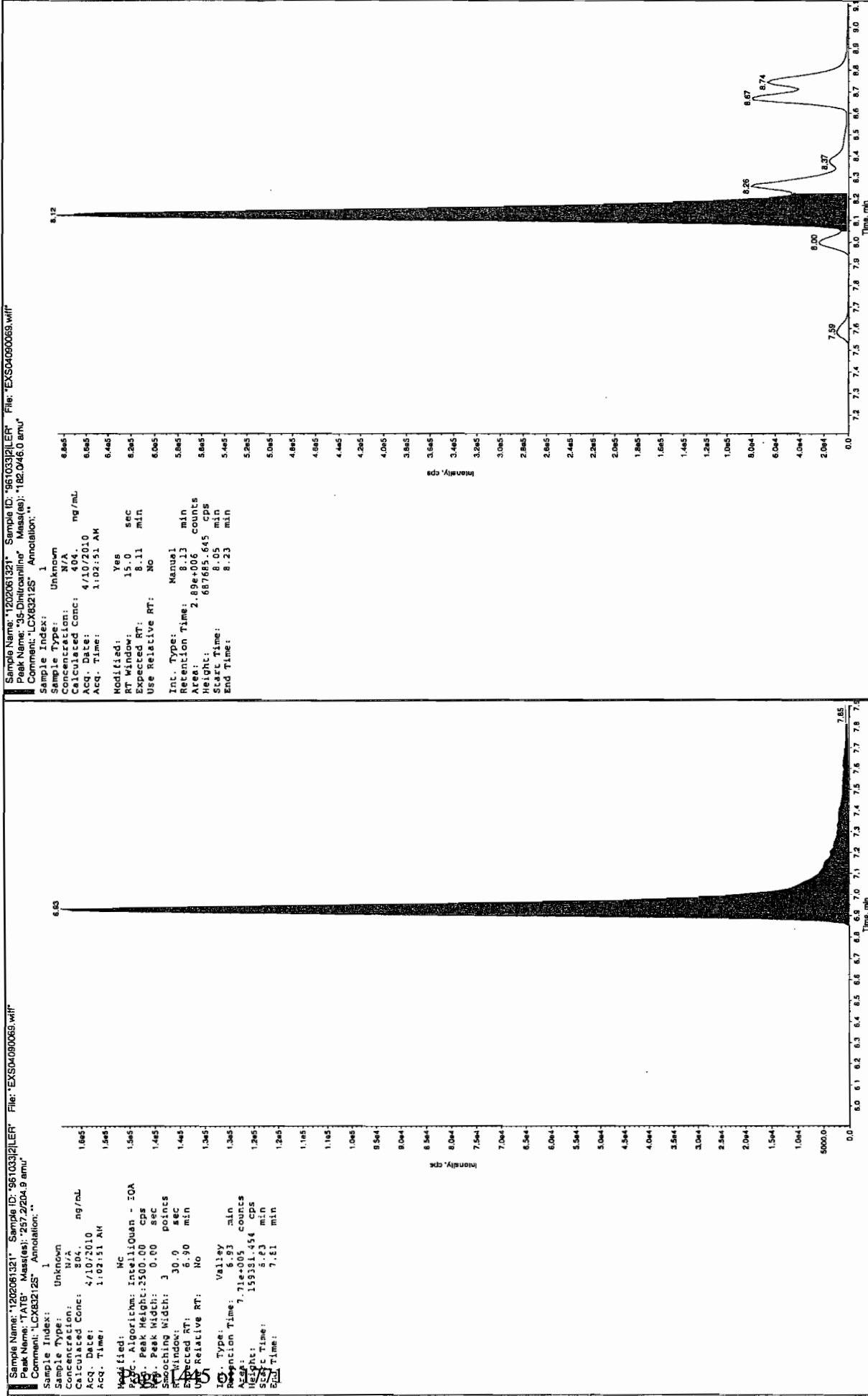
Int. Type: Valley  
Retention Time: 8.12 min  
Area: 3.05e+006 counts  
Height: 678054.382 cps  
Start Time: 8.05 min  
End Time: 8.33 min



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

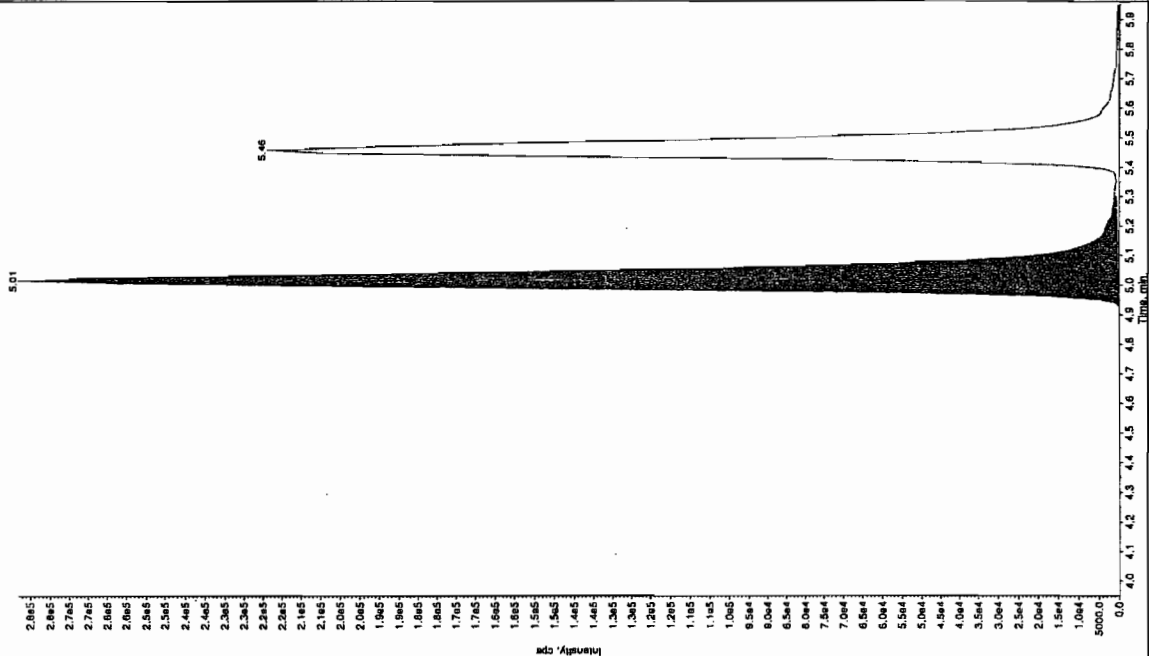
After Scan 4/12/10

after Kcen 4/12/10



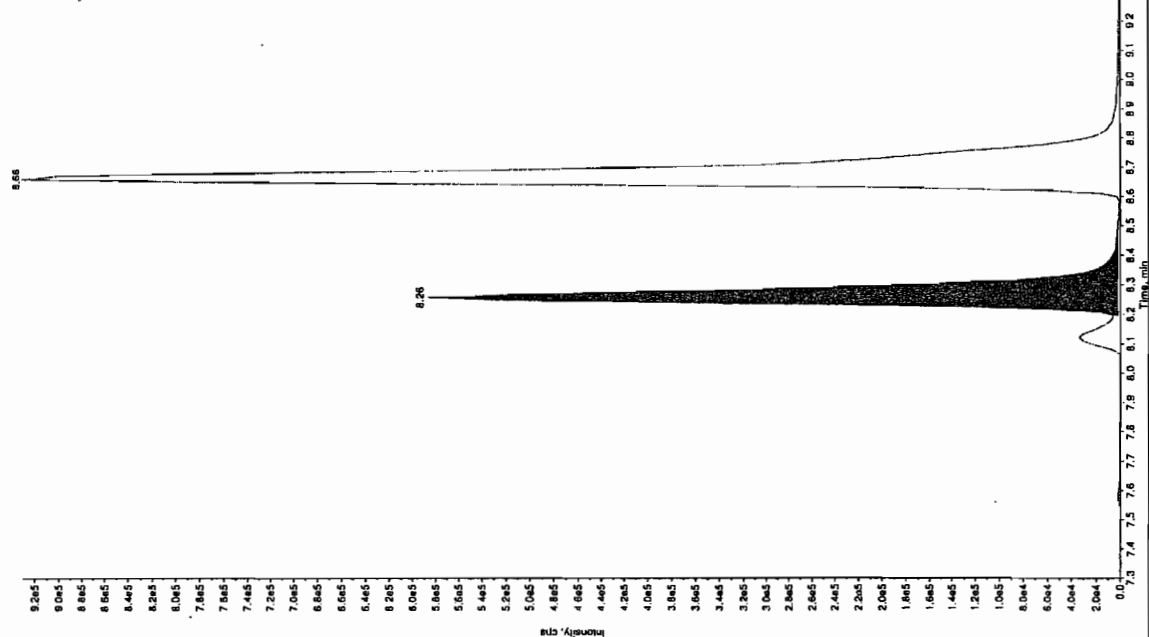
Sample Name: "1202061321" Sample ID: "96103321ER" File: "EX504080063.wif"  
 Peak Name: "26-Dianthol-4-nitrobenzene" Mass(es): "166.0/46.0 amu"  
 Comment: "LCX832125" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A ng/mL  
 Calculated Conc: 434.  
 Acq. Date: 4/10/2010  
 Acq. Time: 1:02:51 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 450.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 30.0 points  
 RI Window: 30.0 sec  
 Expected RT: 4.95 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.01 min  
 Area: 1.21e+006 counts  
 Height: 282709.717 cps  
 Start Time: 4.92 min  
 End Time: 5.30 min



Sample Name: "1202061321" Sample ID: "96103321ER" File: "EX504080063.wif"  
 Peak Name: "34-Dinitrobenzene" Mass(es): "182.1/151.9 amu"  
 Comment: "LCX832125" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A ng/mL  
 Calculated Conc: 241.  
 Acq. Date: 4/10/2010  
 Acq. Time: 1:02:51 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 1450.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 30.0 points  
 RI Window: 30.0 sec  
 Expected RT: 8.30 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.26 min  
 Area: 1.5e+006 counts  
 Height: 385498.718 cps  
 Start Time: 8.20 min  
 End Time: 8.50 min



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

Sample Name: 1202061321 Sample ID: 96103321.ER File: EX504080069.wif

Peak Name: tri-(o-cresyl) phosphate Mass(es): 369.1/91.0 amu

Comment: LCX832125 Annotation: "

Sample Index: 1

Sample Type: Unknown

Concentration: 517 ng/mL

Acq. Date: 4/10/2010

Acq. Time: 1:02:51 AM

Modified: No

Proc. Algorithm: IntelliQuan - IQA

Min. Peak Height: 8000.00 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

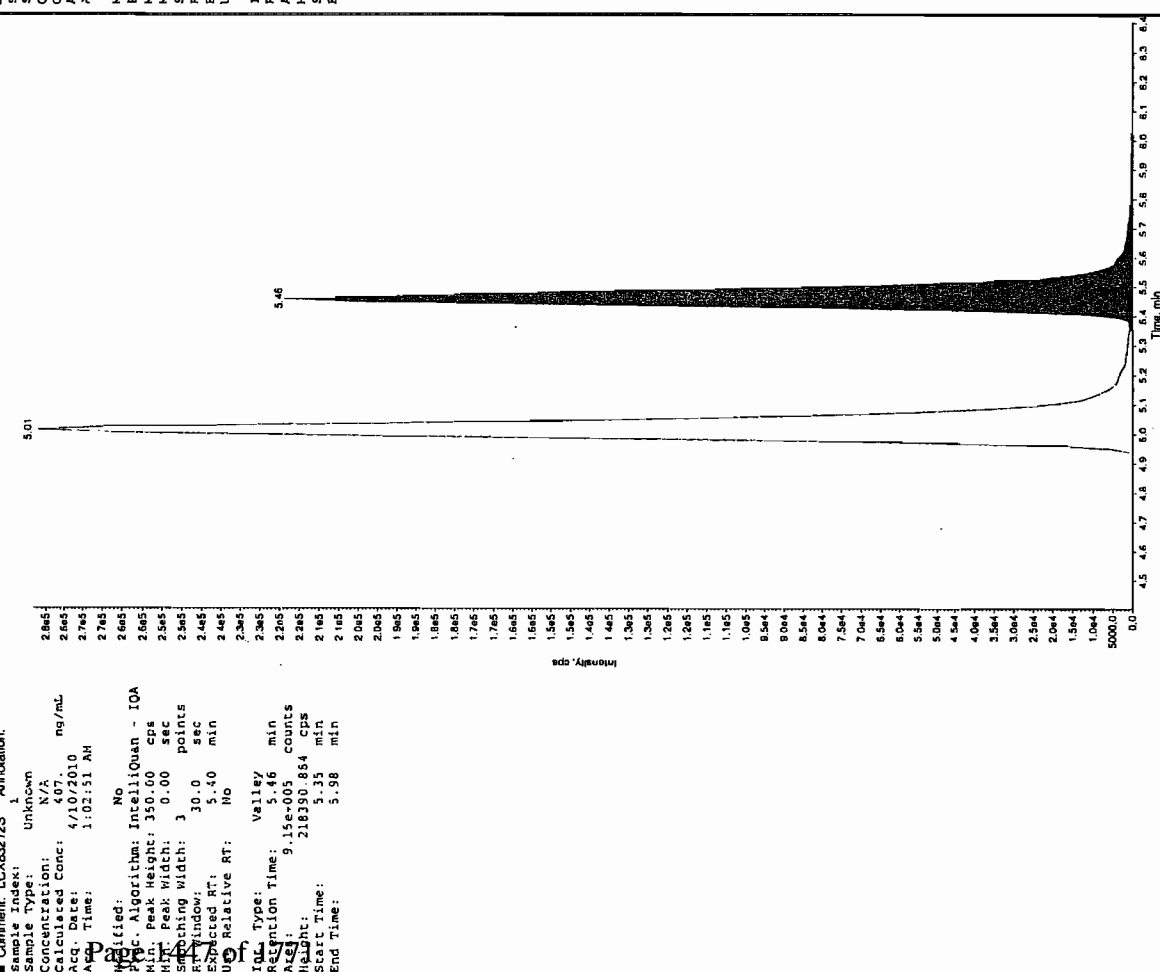
Retention Time: 10.6 min

Area: 9.85e+006 counts

Height: 247429.199 cps

Start Time: 10.5 min

End Time: 11.0 min



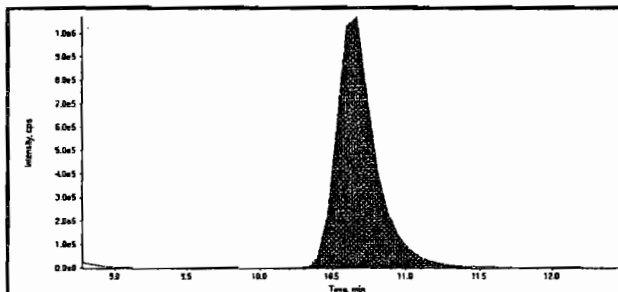
\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



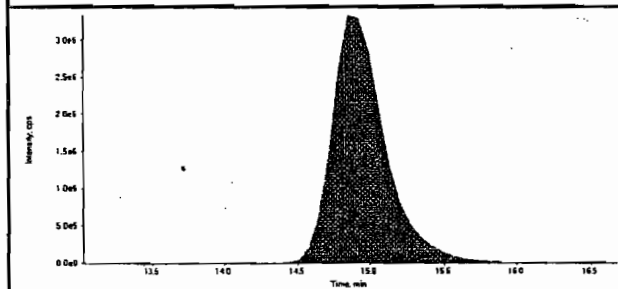
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

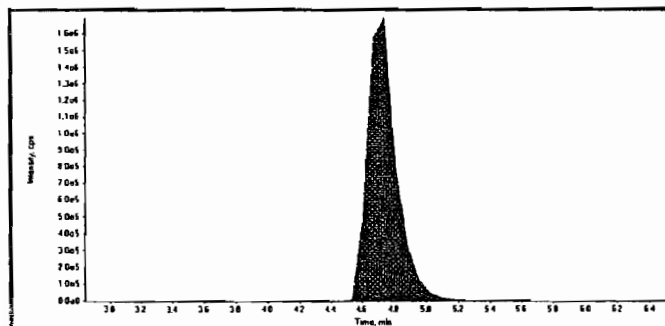
Data File	EXP0420022.wiff	Acquisition Date	4/20/2010 11:23:37 PM
Sample Name	1202061322	Acquisition Method	8321.dam
Batch Dilution Analyst	961033 2 LER	Result Table	042010.rdb
Procedure Code	LCX8321_S	Sample Type	Unknown



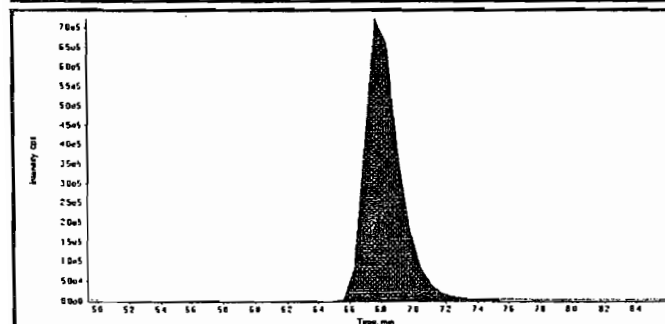
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.60
Actual RT:	10.70
Area Counts:	19900000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.90
Actual RT:	14.90
Area Counts:	85300000.00
Manual Modification	Yes
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.67
Actual RT:	4.74
Area Counts:	2.14e+007
Manual Modification	No
Amount:	502. (ng/mL)
% Accuracy:	N/A

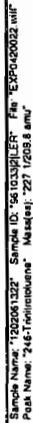


Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.77
Actual RT:	6.77
Area Counts:	1.09e+007
Manual Modification	No
Amount:	498. (ng/mL)
% Accuracy:	N/A

*Jan 4/20/10*

*4/20/10*





\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0420022.wiff	<b>Acquisition Date</b>	4/20/2010 11:23:37 PM
<b>Sample Name</b>	1202061322	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	961033 2 LER	<b>Result Table</b>	042010.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	<b>Expected RT:</b>	9.07
	<b>Actual RT:</b>	9.07
	<b>Area Counts:</b>	1.10e+008
	<b>Manual Modification</b>	No
	<b>Amount:</b>	501. (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	<b>Expected RT:</b>	10.7
	<b>Actual RT:</b>	10.8
	<b>Area Counts:</b>	5.05e+007
	<b>Manual Modification</b>	No
	<b>Amount:</b>	493. (ng/mL)
	<b>% Accuracy:</b>	N/A

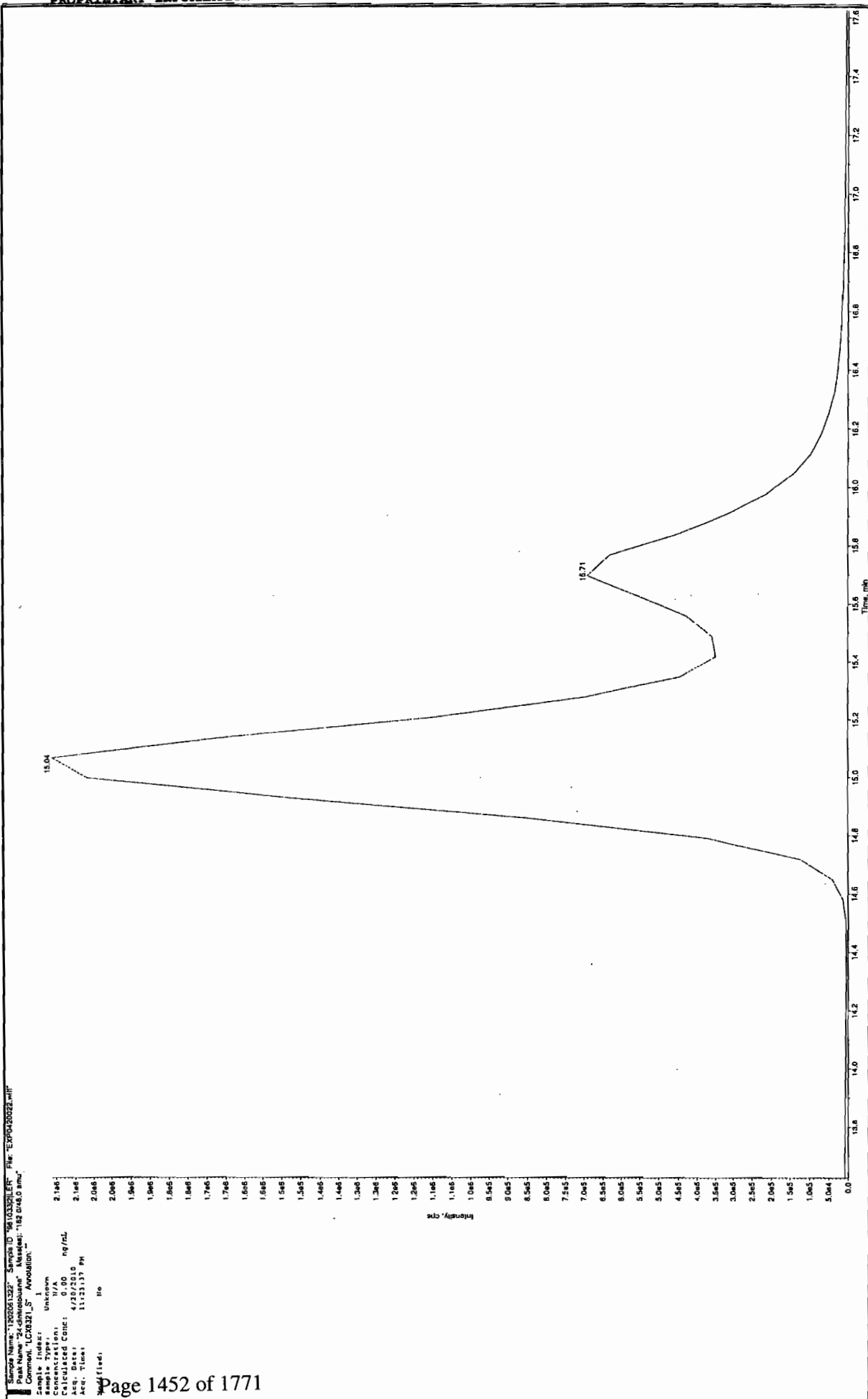
  

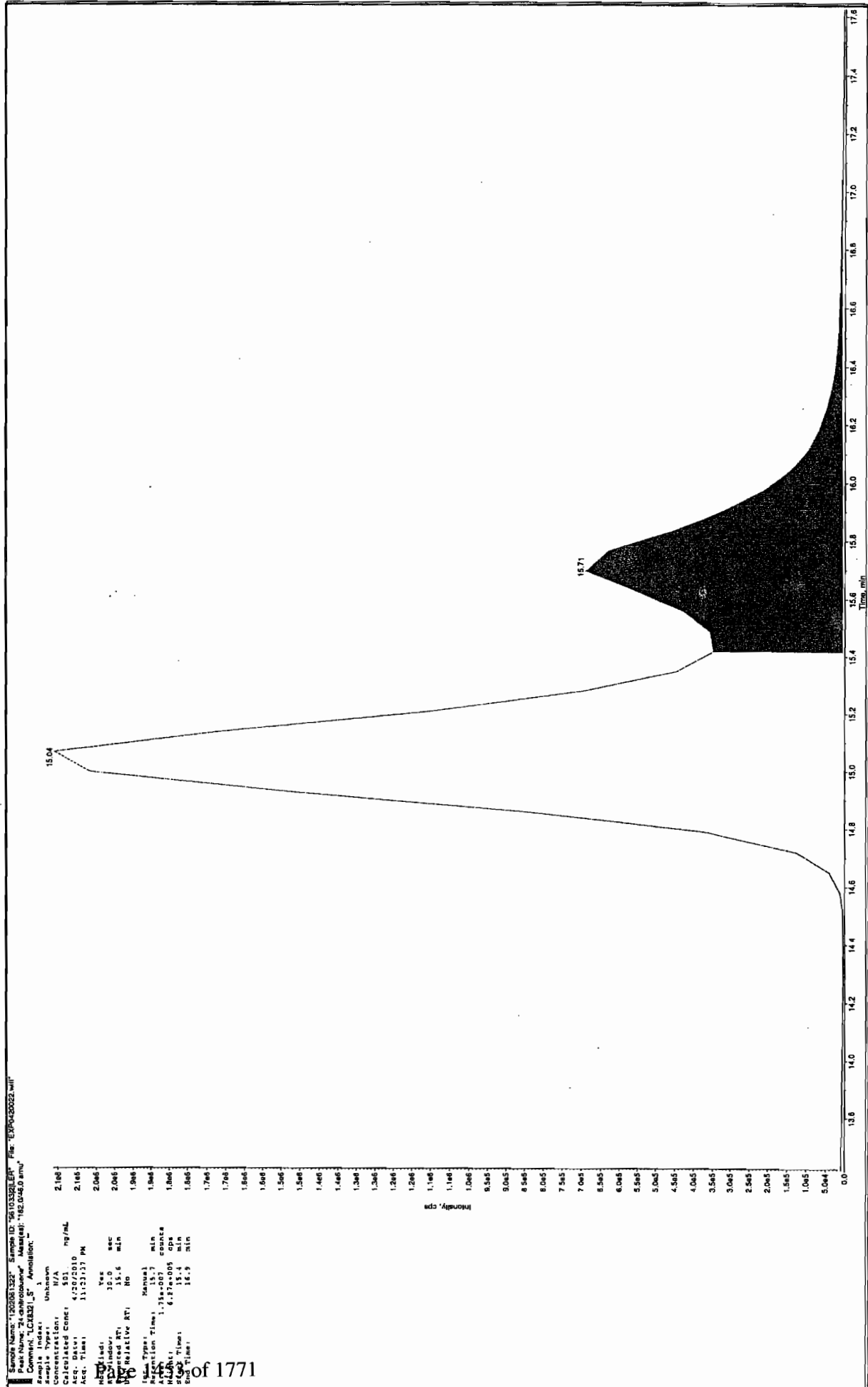
	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	<b>Expected RT:</b>	10.8
	<b>Actual RT:</b>	10.9
	<b>Area Counts:</b>	3.44e+007
	<b>Manual Modification</b>	No
	<b>Amount:</b>	416. (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	<b>Expected RT:</b>	13.3
	<b>Actual RT:</b>	13.3
	<b>Area Counts:</b>	1.86e+008
	<b>Manual Modification</b>	Yes
	<b>Amount:</b>	481. (ng/mL)
	<b>% Accuracy:</b>	N/A

Before Jan 4/28/10





GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0420022.wiff	<b>Acquisition Date</b>	4/20/2010 11:23:37 PM
<b>Sample Name</b>	1202061322	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	961033 2 LER	<b>Result Table</b>	042010.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	11.9
	Actual RT:	11.9
	Area Counts:	2.07e+006
	Manual Modification	No
	Amount:	466. (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.1
	Actual RT:	12.2
	Area Counts:	2.94e+007
	Manual Modification	No
	Amount:	256. (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	14.9
	Actual RT:	15.1
	Area Counts:	4.67e+007
	Manual Modification	No
	Amount:	492. (ng/mL)
	% Accuracy:	N/A

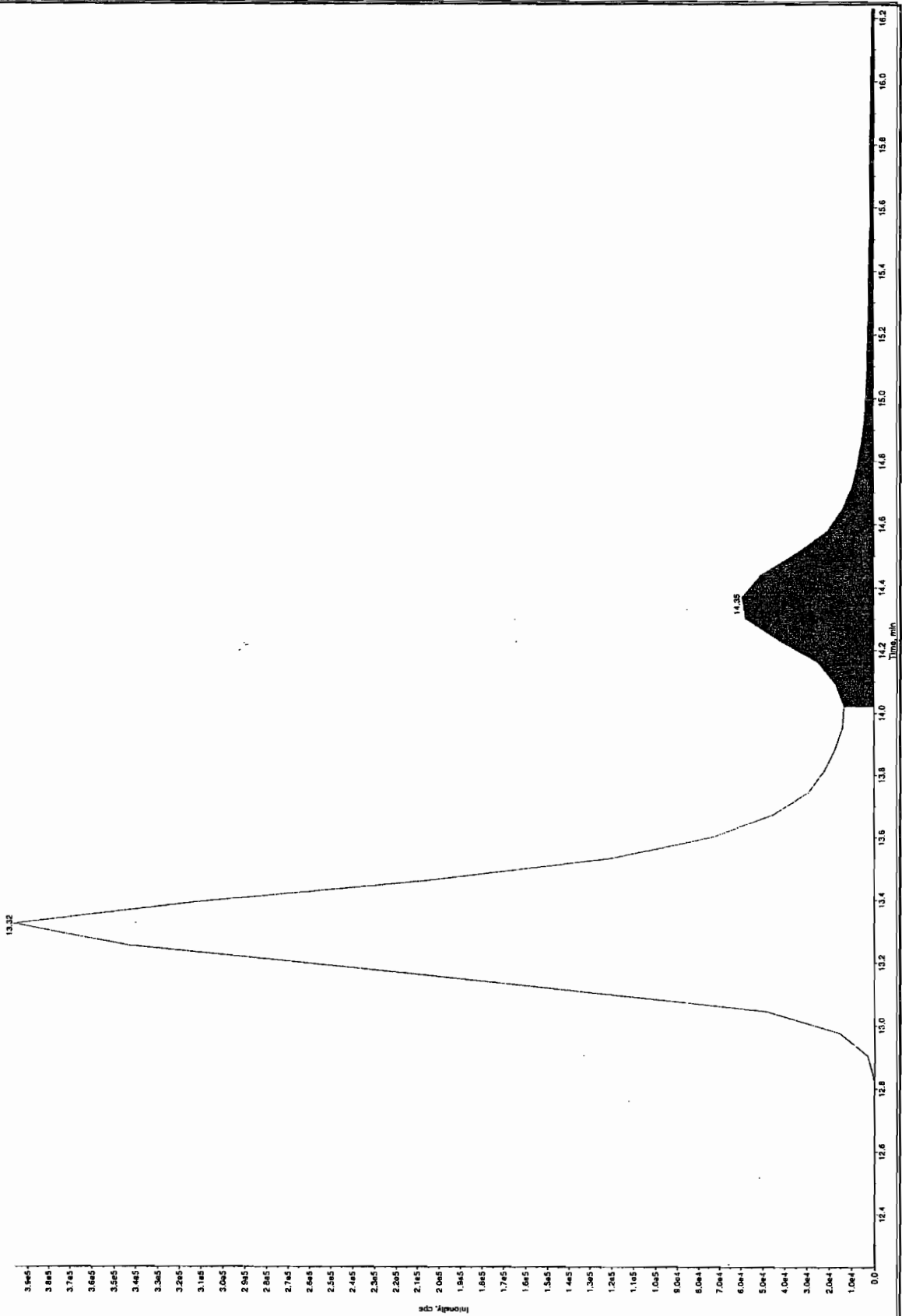
	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.6
	Actual RT:	15.7
	Area Counts:	1.75e+007
	Manual Modification	Yes
	Amount:	501. (ng/mL)
	% Accuracy:	N/A

Before Jan 4/28/10

Sample Name: 120001227 Sample ID: 90103721.E57 File: EPO-02022.mlf  
 Acquisition: 120001227 Date: 11/21/09 Time: 11:21:37 PM  
 Comment: LC8321.S Acquisition.

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 3000  
 Acquisition Date: 11/21/09  
 Acq. Time: 11:21:37 PM

Method: No  
 Peak Height: 1000.00 cps  
 Peak Width: 0.00 sec  
 Retention Time: 13.32 min  
 Relative RT: 11.2 min  
 Unlabeled RT: No  
 Method: Valley  
 Retention Time: 13.32 min  
 Peak Height: 1000.00 cps  
 Peak Width: 0.00 sec  
 Retention Time: 13.32 min



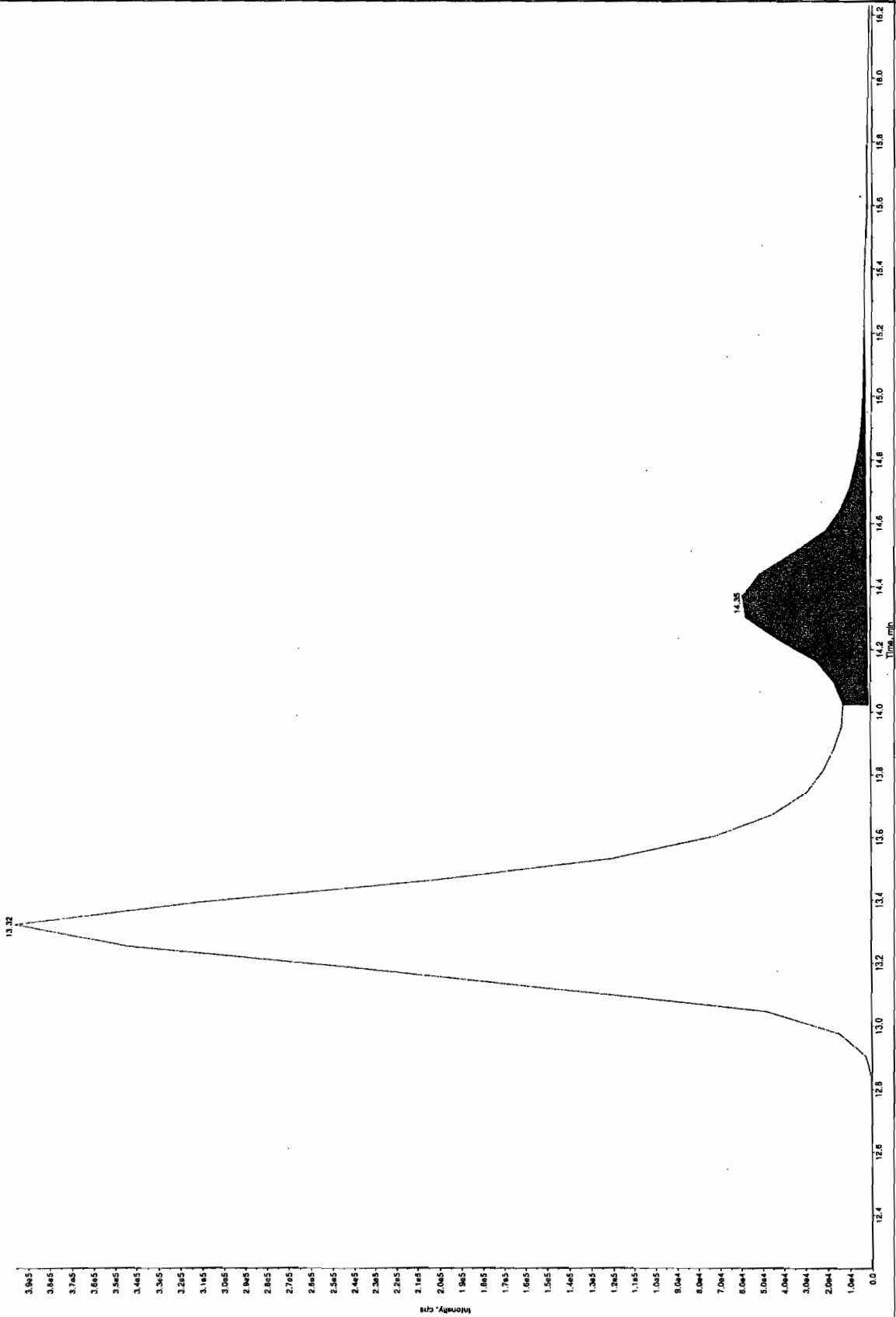
\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3



after Dec. 4/28/10

Sample Name: 720061322 Sample ID: 981023101 File: E:\P04\20022.wif  
 Path: C:\Program Files\Agilent\ChemStation\MSDCHEM\10101800.d  
 Comment: LC16321\_S7 Annotation: -

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 515 ng/mL  
 Acq. Date: 4/20/2010  
 Acq. Time: 11:23:37 PM  
 Inj. Volume: 40.0 µL  
 Inj. Port: 1  
 Inj. Valve: 14.2 min  
 Inj. Pressure: 14.2 min  
 Inj. Flow: 15.0 min  
 Inj. Temp: 15.0 min  
 Inj. Time: 15.0 min  
 Inj. Type: Manual  
 Inj. Retention Time: 14.3 min  
 Inj. Weight: 1.41e+08 counts  
 Inj. Weight: 5.82e+04 cps  
 Inj. Weight: 14.0 min  
 Inj. Weight: 15.0 min  
 Inj. Weight: 15.0 min



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0420022.wiff	<b>Acquisition Date</b>	4/20/2010 11:23:37 PM
<b>Sample Name</b>	1202061322	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	961033 2 LER	<b>Result Table</b>	042010.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.3
	Actual RT:	13.3
	Area Counts:	4.14e+007
	Manual Modification	No
	Amount:	568. (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.2
	Actual RT:	14.3
	Area Counts:	1.41e+006
	Manual Modification	Yes
	Amount:	535. (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	17.7
	Actual RT:	17.9
	Area Counts:	7.36e+005
	Manual Modification	No
	Amount:	468. (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	19.0
	Actual RT:	19.0
	Area Counts:	3.77e+005
	Manual Modification	No
	Amount:	464. (ng/mL)
	% Accuracy:	N/A

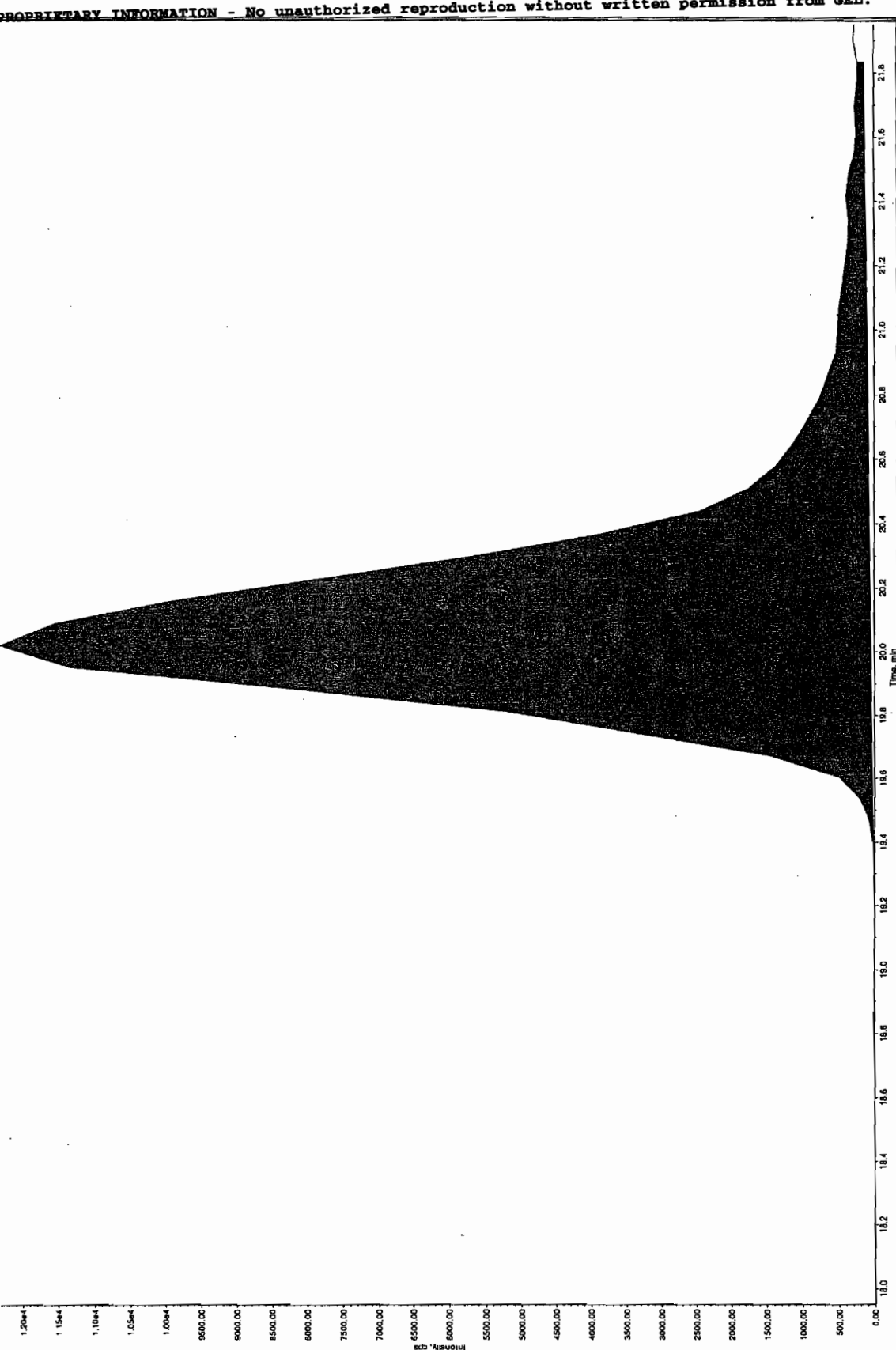
Before Jan 4/19/10

Sample Name: 1202041327 Sample ID: 98103381ER File: EXP400022.mpl  
Peak Name: PEAK1 Retention: 20.1162.0 min  
Concentration: 1.2044  
Sample Index: 1  
Sample Type: Unknown  
Concentration: N/A  
Acquired Date: 4/20/2010  
Acq. Time: 11:23:17 PM

Peak 1  
Peak Height: 100.00 cps  
Peak Width: 0.00 sec  
Smoothing Width: 5.00 points  
Peak Width: 50.0 sec  
Peak Retention: 20.0 min  
Peak Relative RT: 10.544

Peak 2  
Peak Height: 100.00 cps  
Peak Width: 0.00 sec  
Smoothing Width: 5.00 points  
Peak Width: 50.0 sec  
Peak Retention: 20.0 min  
Peak Relative RT: 10.544

20.02



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

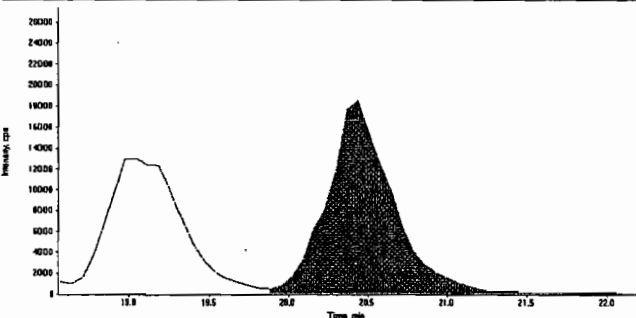


GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

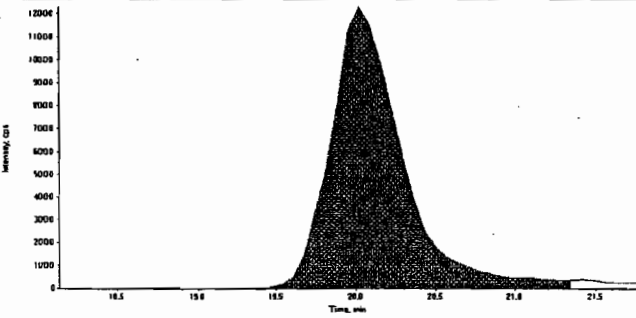
Printed: 28/04/2010 4:35:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0420022.wiff	<b>Acquisition Date</b>	4/20/2010 11:23:37 PM
<b>Sample Name</b>	1202061322	<b>Acquisition Method</b>	8321.dam
<b>Batch Dilution Analyst</b>	961033 2 LER	<b>Result Table</b>	042010.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

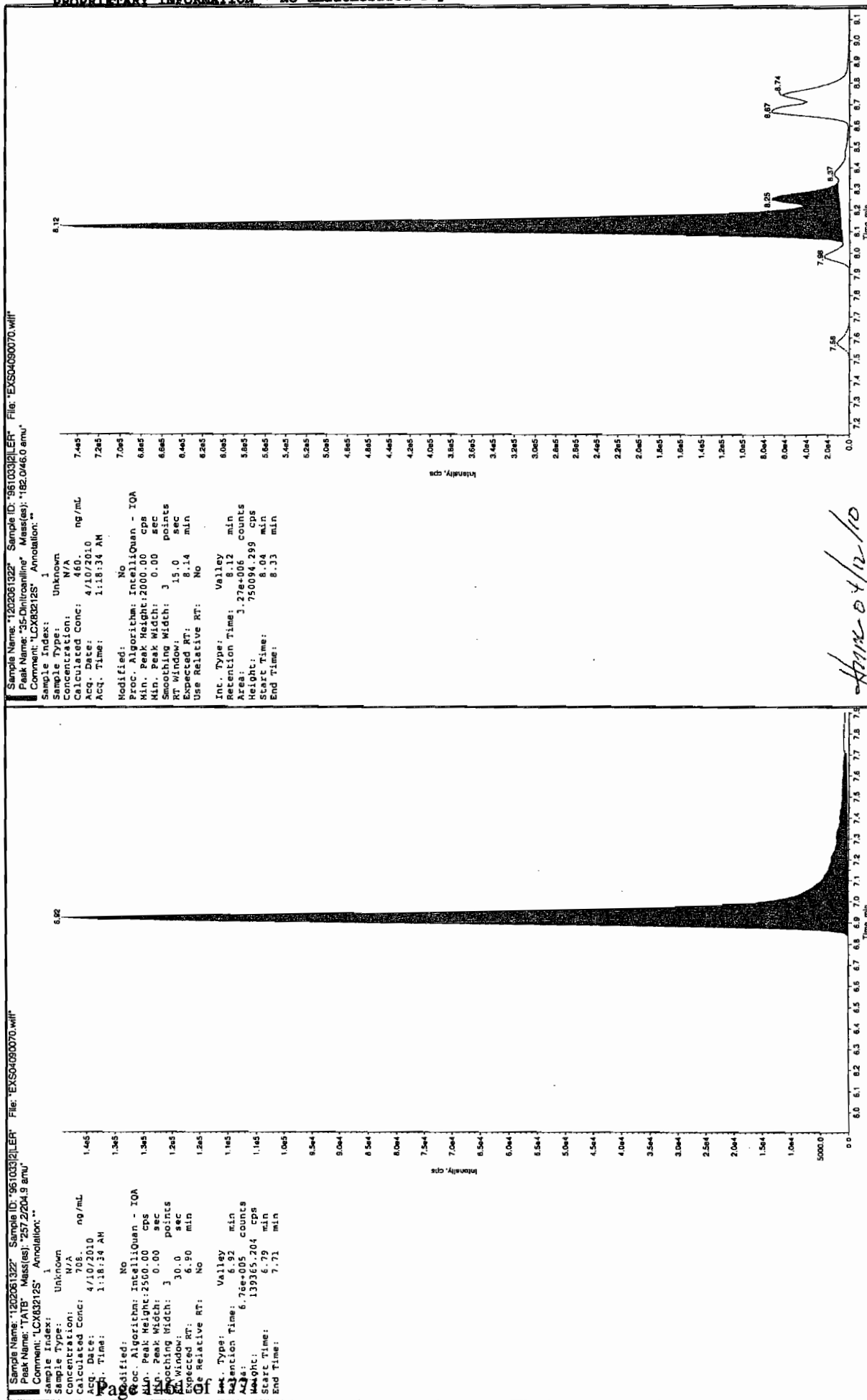
  

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	20.4
	<b>Actual RT:</b>	20.4
	<b>Area Counts:</b>	5.27e+005
	<b>Manual Modification</b>	No
	<b>Amount:</b>	450. (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	<b>Expected RT:</b>	20.0
	<b>Actual RT:</b>	20.0
	<b>Area Counts:</b>	3.89e+005
	<b>Manual Modification</b>	Yes
	<b>Amount:</b>	502. (ng/mL)
	<b>% Accuracy:</b>	N/A

Before Jan 4/12/10

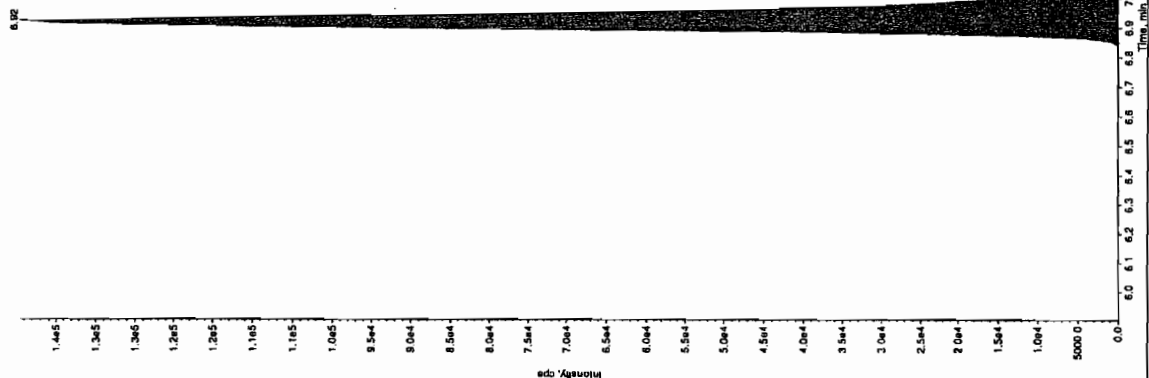
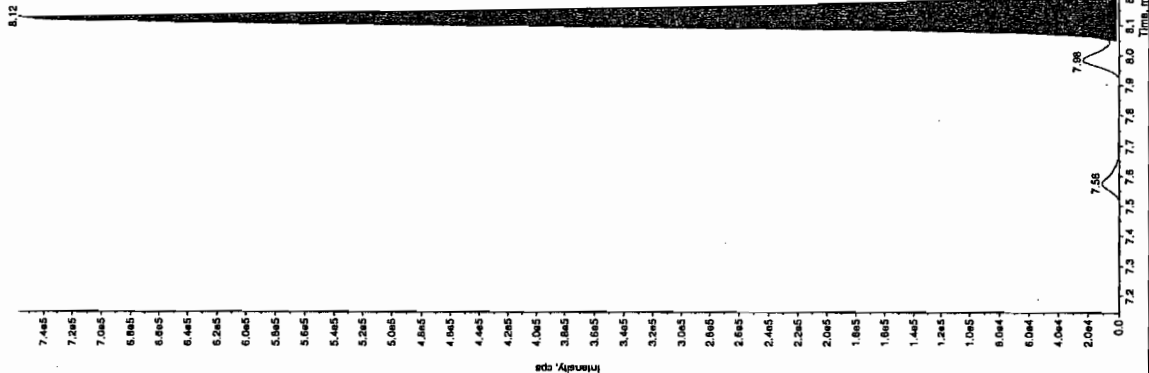


Sample Name: "1202061322" Sample ID: "961033121.ER" File: "EXS04090070.wif"

Peak Name: "TATB" Mass(es): "257.2704.9 amu"

Comment: "LCX83212S" Annotation: ""

Sample Index: 1  
Sample Type: Unknown  
Concentration: N/A  
Calculated Conc: 433. ng/mL  
Acq. Date: 4/10/2010  
Acq. Time: 1:18:34 AM  
Modified: Yes  
RT Window: 15.0 sec  
Expected RT: 8.14 min  
Use Relative RT: No  
Int. Type: Manual  
Retention Time: 8.12 min  
Area: 3.09e+006 counts  
Height: 763170.628 cps  
Start Time: 8.05 min  
End Time: 8.22 min



Proc. Algorithm: IntelliQuan - 10A  
Ap. Peak Height: 2500.00 cps  
Ap. Peak Width: 0.00 sec  
Sweeping Width: 3.00 points  
RT Window: 30.0 sec  
Expected RT: 6.90 min  
Use Relative RT: No  
Int. Type: Valley  
Retention Time: 6.92 min  
Area: 6.76e+005 counts  
Height: 139365.204 cps  
Start Time: 6.79 min  
End Time: 7.71 min

Sample Name: "1202061322" Sample ID: "96103321LER" File: "EXS04080070.wif"

Peak Name: "26-Diamino-4-Hitobluene" Mass(es): "186.046.0 amu"

Comment: "LCX832125" Annotation: "

Sample Index: 1

Sample Type: Unknown

Concentration: N/A ng/mL

Calculated Conc: 4/10/2010

Acq. Date: 1:18:34 AM

Acq. Time: 2:05

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: 4.95 min

Use Relative RT: No

Int. Type: Valley

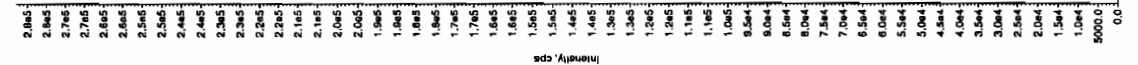
Retention Time: 5.02 min

Area: 1.21e+006 counts

Height: 282724.379 cps

Start Time: 4.32 min

End Time: 5.30 min



Sample Name: "1202061322" Sample ID: "96103321LER" File: "EXS04080070.wif"

Peak Name: "34-Dinitrofluorene" Mass(es): "182.1151.9 amu"

Comment: "LCX832125" Annotation: "

Sample Index: 1

Sample Type: Unknown

Concentration: N/A ng/mL

Calculated Conc: 240.

Acq. Date: 4/10/2010

Acq. Time: 1:18:34 AM

Modified: No

Proc. Algorithm: IntelliQuan - IOA

Min. Peak Height: 140.00 cps

Min. Peak Width: 0.00 sec

Smoothing Width: 3 points

RT Window: 30.0 sec

Expected RT: 8.30 min

Use Relative RT: No

Int. Type: Valley

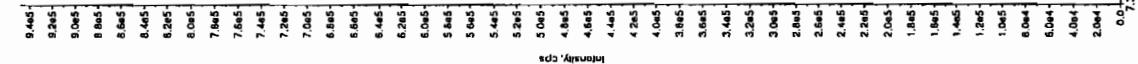
Retention Time: 8.25 min

Area: 2.16e+006 counts

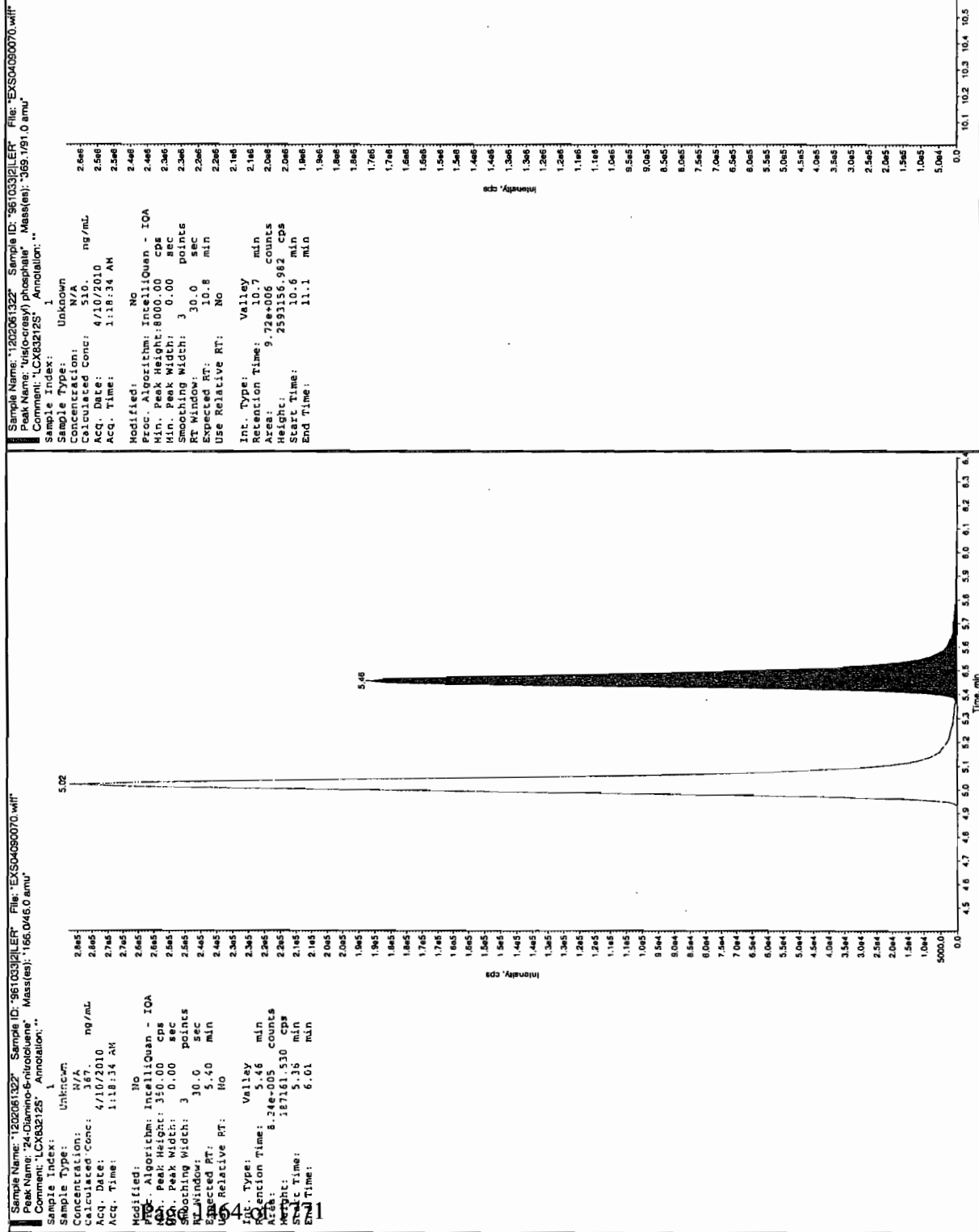
Height: 583145.560 cps

Start Time: 8.18 min

End Time: 8.47 min







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

GEL Laboratories LLC  
Form GEL-DER

DER Report No.: 822434

Revision No.: 1

### DATA EXCEPTION REPORT

<b>Mo.Day Yr.</b> 29-APR-10	<b>Division:</b> Industrial	<b>Quality Criteria:</b> Specifications	<b>Type:</b> Process
<b>Instrument Type:</b> LC-MS/MS	<b>Test / Method:</b> SW846 8321A Modified	<b>Matrix Type:</b> Solid	<b>Client Code:</b> LANL
<b>Batch ID:</b> 961033	<b>Sample Numbers:</b> See Below		
<b>Potentially affected work order(s)(SDG):</b> 248514(10-2196),248517(10-2198),248519(10-2199),248526(10-2202) <b>Application Issues:</b> Sample Analyzed out of Holding Failed Recovery for LCS/LCSD			
<b>Specification and Requirements</b>		<b>DER Disposition:</b>	
<b>Exception Description:</b>			
1. The analytical holding times for the following samples were exceeded due to limitations of instrument capacity: 248519005, 248519006, 248519007, 248519008, 248519009, 248519010, 248519011, 248526001, 1202061321(MS), and 1202061322(MSD).  2. The LCS(1202061320) did not meet acceptance criteria for the recovery of multiple spiked analytes. Please refer to Form 3 of the data package for a list of recoveries.  3. The MS(1202061321) did not meet acceptance criteria for the recovery of TATB at 161%. The limits are 29-155%.		1. These samples were analyzed within two times the analytical holding time of the method. The client was notified of this situation and is in agreement to receive these qualified data. The discrepancy is noted in the case narrative.  2. The MS(1202061321) and MSD(1202061322) had passing recoveries for these analytes. The data are reported.  3. The LCS(1202061320) and the MSD(1202061322) had passing criteria for TATB. TATB was not detected in the parent sample. The data are considered unaffected and are reported.	

**Originator's Name:**

Lynne Russell 29-APR-10

**Data Validator/Group Leader:**

Herbert Maier 29-APR-10

GC  
SEMIVOLATILE  
PCB  
ANALYSIS

**PCB Case Narrative  
Los Alamos National Laboratory (LANL)  
SDG 10-2199**

**Method/Analysis Information**

**Procedure:** Analysis of Polychlorinated Biphenyls by ECD  
**Analytical Method:** SW846 8082  
**Prep Method:** SW846 3550B  
**Analytical Batch Number:** 966420, 967817  
**Prep Batch Number:** 966418, 967813

**Sample Analysis**

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

<b>Sample ID</b>	<b>Client ID</b>
248519001	RE36-10-8288
248519003	RE36-10-8277
248519005	RE36-10-8278
248519006	RE36-10-8274
248519007	RE36-10-8291
248519008	RE36-10-8287
248519009	RE36-10-8273
248519010	RE36-10-8275
248519011	RE36-10-8276
1202073937	Method Blank (MB) (Batch 966420)
1202073938	Laboratory Control Sample (LCS) (Batch 966420)
1202073939	248526001(RE36-10-8466) Matrix Spike (MS) (Batch 966420)
1202073940	248526001(RE36-10-8466) Matrix Spike Duplicate (MSD) (Batch 966420)
248519002	RE36-10-8279
248519004	RE36-10-8280
1202077508	Method Blank (MB) (Batch 967817)
1202077509	Laboratory Control Sample (LCS) (Batch 967817)
1202077510	Laboratory Control Sample Duplicate (LCSD) (Batch 967817)

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# 15.

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 calibration verification standards (CVS, ICV, or CCV) requirements have been met for this SDG.

One of five peaks failed in the Aroclor-1016 and Aroclor-1260 standards bracketing the samples in this SDG; however, the average concentration of the five quantitated peaks met the acceptance criteria.

Surrogate recovery did not meet the acceptance criteria in the standards bracketing the samples in this SDG; however, this non-compliance has no adverse effects on the data.

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

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

**Surrogate Recoveries**

Samples 248519002 (RE36-10-8279) and 248519004 (RE36-10-8280) did not meet the surrogate recovery acceptance criteria and were re-extracted within the holding time. The re-extractions met the surrogate recovery acceptance criteria and will be reported. See DER #807691 located in the Miscellaneous Data section.

**Laboratory Control Sample (LCS) Recovery**

The LCS spike recoveries met the acceptance limits.

**Laboratory Control Sample Duplicate (LCSD) Recovery**

The LCSD spike recoveries met the acceptance limits.

**LCS/LCSD Relative Percent Difference (RPD) Statement**

The RPD(s) between the LCS and LCSD met the acceptance limits.

**QC Sample Designation**

A LANL sample of similar matrix associated with another SDG (#10-2202) was selected for the matrix spike and matrix spike duplicate analysis in batch 966420. A Form III and QC raw data are included in the package summarizing the results.

The matrix spike and matrix spike duplicate analysis was not performed for batch 96781. The LCS and LCSD analysis was performed to measure the precision and accuracy for this batch.

**Matrix Spike (MS) Recovery Statement**

The MS recovery for this SDG was within the established acceptance limits.

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

The MSD recovery for this SDG was not within the established acceptance limits due to dilution.

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

The RPD between the MS and MSD did not meet the acceptance limits due to dilution.

## **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**

Samples 248519002 (RE36-10-8279) and 248519004 (RE36-10-8280) were re-extracted within the holding time due to surrogate failure. The re-extractions passed surrogate and will be reported.

## **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. DER # 807691 was generated for this SDG. A copy is included in the Miscellaneous Data section of this package.

### **Manual Integrations**

Certain standards and samples may have required manual integration to correctly position the baseline as set in the calibration standard injections. If manual integration was performed, copies of all manual integration peak profiles are included in the raw data section of this PCB fraction.

### **Additional Comments**

The additional comments field is used to address special issues associated with each analysis, clarify method/contractual issues pertaining to the analysis, and to list any report documents generated as a result of sample analysis or review. The following additional comments were required:

The higher results from either column have been chosen and reported in the data package for the client samples, MB and LCS. data reported for the LCSD is from the same analytical column as the 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>
ECD8A.I_1	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP I	30m x 0.25mm, 0.25um (Rtx-CLPesticide I)
ECD8A.I_2	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP II	30m x 0.25mm, 0.20um (Rtx-CLPesticide II)

#### **Certification Statement**

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

**Review Validation**

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

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

Reviewer: Andy Whitlock

Date: 3-29-2010



## Roadmap for LANL 10-2199 PCB

This roadmap was analyzed by jen01212 on 03-24-2010, 09:55.

This roadmap was packaged by yml on 03-29-2010, 15:50.

This roadmap was validated by rob01090 on 03-29-2010, 20:14.

Front Sample Column

exclude	manual	datafile	stupid	sampletype	indate	inftime	sublist	clientid	dilution	prepbatchid	comment
<input type="checkbox"/>	N	/chem/ecdfba.i031910.b038f3801.d	248519001	sample	19-MAR-2010	14:55	10-2199.sub	RE36-10-8288	1.00000	966420	UPLOAD BOTH, USE HIGHER
<input checked="" type="checkbox"/>	N	/chem/ecdfba.i031910.b039f3901.d	248519002	sample	19-MAR-2010	15:08	10-2199.sub	RE36-10-8279	1.00000	966420	DUSE: SENT FOR RE DUE TO LOW 4CMX: UPLOAD BOTH, USE HIGHER
<input type="checkbox"/>	N	/chem/ecdfba.i032310.b017f1701.d	248519002	sample	23-MAR-2010	11:27	10-2199.sub	RE36-10-8279	1.00000	967817	UPLOAD BOTH, USE HIGHER: DOESN'T CONFIRM \$FAILURE
<input type="checkbox"/>	N	/chem/ecdfba.i031910.b040f4001.d	248519003	sample	19-MAR-2010	15:20	10-2199.sub	RE36-10-8277	1.00000	966420	UPLOAD BOTH, USE HIGHER
<input checked="" type="checkbox"/>	N	/chem/ecdfba.i031910.b041f4101.d	248519004	sample	19-MAR-2010	15:32	10-2199.sub	RE36-10-8280	1.00000	966420	DUSE: SENT FOR RE DUE TO LOW 4CMX: UPLOAD BOTH, USE HIGHER
<input type="checkbox"/>	N	/chem/ecdfba.i032310.b018f1801.d	248519004	sample	23-MAR-2010	11:43	10-2199.sub	RE36-10-8280	1.00000	967817	UPLOAD BOTH, USE HIGHER: DOESN'T CONFIRM \$FAILURE
<input type="checkbox"/>	N	/chem/ecdfba.i031910.b042f4201.d	248519005	sample	19-MAR-2010	15:45	10-2199.sub	RE36-10-8278	1.00000	966420	UPLOAD BOTH, USE HIGHER
<input type="checkbox"/>	N	/chem/ecdfba.i031910.b043f4301.d	248519006	sample	19-MAR-2010	15:57	10-2199.sub	RE36-10-8274	1.00000	966420	UPLOAD BOTH, USE HIGHER
<input type="checkbox"/>	N	/chem/ecdfba.i031910.b044f4401.d	248519007	sample	19-MAR-2010	16:09	10-2199.sub	RE36-10-8291	1.00000	966420	UPLOAD BOTH, USE HIGHER
<input type="checkbox"/>	N	/chem/ecdfba.i031910.b045f4501.d	248519008	sample	19-MAR-2010	16:22	10-2199.sub	RE36-10-8287	1.00000	966420	UPLOAD BOTH, USE HIGHER
<input type="checkbox"/>	N	/chem/ecdfba.i031910.b046f4601.d	248519009	sample	19-MAR-2010	16:34	10-2199.sub	RE36-10-8273	1.00000	966420	UPLOAD BOTH, USE HIGHER
<input type="checkbox"/>	N	/chem/ecdfba.i031910.b047f4701.d	248519010	sample	19-MAR-2010	16:46	10-2199.sub	RE36-10-8275	1.00000	966420	UPLOAD BOTH, USE HIGHER
<input type="checkbox"/>	N	/chem/ecdfba.i031910.b050f5001.d	248519011	sample	19-MAR-2010	17:28	10-2199.sub	RE36-10-8276	1.00000	966420	UPLOAD BOTH, USE HIGHER

Back Sample Column

exclude	manual	datafile	stupid	sampletype	indate	inftime	sublist	clientid	dilution	prepbatchid	comment
<input type="checkbox"/>	N	/chem/ecdfba.i031910.b038f3801.d	248519001	sample	19-MAR-2010	14:55	10-2199.sub	RE36-10-8288	1.00000	966420	UPLOAD BOTH, USE HIGHER
<input checked="" type="checkbox"/>	N	/chem/ecdfba.i031910.b039f3901.d	248519002	sample	19-MAR-2010	15:08	10-2199.sub	RE36-10-8279	1.00000	966420	DUSE: SENT FOR RE DUE TO LOW 4CMX: UPLOAD BOTH, USE HIGHER
<input type="checkbox"/>	N	/chem/ecdfba.i032310.b017f1701.d	248519002	sample	23-MAR-2010	11:27	10-2199.sub	RE36-10-8279	1.00000	967817	UPLOAD BOTH, USE HIGHER: DOESN'T CONFIRM \$FAILURE
<input type="checkbox"/>	N	/chem/ecdfba.i031910.b040f4001.d	248519003	sample	19-MAR-2010	15:20	10-2199.sub	RE36-10-8277	1.00000	966420	UPLOAD BOTH, USE HIGHER
<input checked="" type="checkbox"/>	N	/chem/ecdfba.i031910.b041f4101.d	248519004	sample	19-MAR-2010	15:32	10-2199.sub	RE36-10-8280	1.00000	966420	DUSE: SENT FOR RE DUE TO LOW 4CMX: UPLOAD BOTH, USE HIGHER
<input type="checkbox"/>	N	/chem/ecdfba.i032310.b018f1801.d	248519004	sample	23-MAR-2010	11:43	10-2199.sub	RE36-10-8280	1.00000	967817	UPLOAD BOTH, USE HIGHER: DOESN'T CONFIRM \$FAILURE
<input type="checkbox"/>	N	/chem/ecdfba.i031910.b042f4201.d	248519005	sample	19-MAR-2010	15:45	10-2199.sub	RE36-10-8278	1.00000	966420	UPLOAD BOTH, USE HIGHER
<input type="checkbox"/>	N	/chem/ecdfba.i031910.b043f4301.d	248519006	sample	19-MAR-2010	15:57	10-2199.sub	RE36-10-8274	1.00000	966420	UPLOAD BOTH, USE HIGHER
<input type="checkbox"/>	N	/chem/ecdfba.i031910.b044f4401.d	248519007	sample	19-MAR-2010	16:09	10-2199.sub	RE36-10-8291	1.00000	966420	UPLOAD BOTH, USE HIGHER
<input type="checkbox"/>	N	/chem/ecdfba.i031910.b045f4501.d	248519008	sample	19-MAR-2010	16:22	10-2199.sub	RE36-10-8287	1.00000	966420	UPLOAD BOTH, USE HIGHER
<input type="checkbox"/>	N	/chem/ecdfba.i031910.b046f4601.d	248519009	sample	19-MAR-2010	16:34	10-2199.sub	RE36-10-8273	1.00000	966420	UPLOAD BOTH, USE HIGHER
<input type="checkbox"/>	N	/chem/ecdfba.i031910.b047f4701.d	248519010	sample	19-MAR-2010	16:46	10-2199.sub	RE36-10-8275	1.00000	966420	UPLOAD BOTH, USE HIGHER
<input type="checkbox"/>	N	/chem/ecdfba.i031910.b050f5001.d	248519011	sample	19-MAR-2010	17:28	10-2199.sub	RE36-10-8276	1.00000	966420	UPLOAD BOTH, USE HIGHER

Front QC Sample Column

exclude	manual	datafile	smgid	sampletype	injdate	injtime	sublist	clientid	dilution	prebatchid	comment
<input type="checkbox"/>	N	/chem/ecd8a.i/031910.b/026f2601-3.d	1202073937	mb	19-MAR-2010	12:23	10-2199.sub	PBLK01	1.00000	966420	<input type="text"/>
<input type="checkbox"/>	N	/chem/ecd8a.i/032310.b/012f1201-2.d	1202077508	mb	23-MAR-2010	10:25	10-2199.sub	PBLK02	1.00000	967817	<input type="text"/>
<input type="checkbox"/>	N	/chem/ecd8a.i/031910.b/027f2701-3.d	1202073938	lcs	19-MAR-2010	12:35	10-2168.sub	PBLK01LCS	1.00000	966420	<input type="text"/>
<input type="checkbox"/>	N	/chem/ecd8a.i/032310.b/013f1301-2.d	1202077509	lcs	23-MAR-2010	10:37	10-2199.sub	PBLK02LCS	1.00000	967817	<input type="text"/>
<input type="checkbox"/>	N	/chem/ecd8a.i/032310.b/014f1401-2.d	1202077510	lcsd	23-MAR-2010	10:50	10-2199.sub	PBLK02LCSD	1.00000	967817	<input type="text"/>

Back QC Sample Column

exclude	manual	datafile	smgid	sampletype	injdate	injtime	sublist	clientid	dilution	prebatchid	comment
<input type="checkbox"/>	N	/chem/ecd8a.i/031910.b/026b2601-3.d	1202073937	mb	19-MAR-2010	12:23	10-2199.sub	PBLK01	1.00000	966420	<input type="text"/>
<input type="checkbox"/>	N	/chem/ecd8a.i/032310.b/012b1201-2.d	1202077508	mb	23-MAR-2010	10:25	10-2199.sub	PBLK02	1.00000	967817	<input type="text"/>
<input type="checkbox"/>	N	/chem/ecd8a.i/031910.b/027b2701-3.d	1202073938	lcs	19-MAR-2010	12:35	10-2199.sub	PBLK01LCS	1.00000	966420	<input type="text"/>
<input type="checkbox"/>	N	/chem/ecd8a.i/032310.b/013b1301-2.d	1202077509	lcs	23-MAR-2010	10:37	10-2199.sub	PBLK02LCS	1.00000	967817	<input type="text"/>
<input type="checkbox"/>	N	/chem/ecd8a.i/032310.b/014b1401-2.d	1202077510	lcsd	23-MAR-2010	10:50	10-2199.sub	PBLK02LCSD	1.00000	967817	<input type="text"/>

# SAMPLE DATA SUMMARY

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

SDG Number: 10-2199  
Lab Sample ID: 248519009

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8082  
Inst: ECD8A.I  
Analyst: JAOC  
Aliquot: 30.09 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
%Moisture: 29  
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	4.68	ug/kg	1.56	4.68	1
11104-28-2	Aroclor-1221	U	4.68	ug/kg	1.56	4.68	1
11141-16-5	Aroclor-1232	U	4.68	ug/kg	1.56	4.68	1
53469-21-9	Aroclor-1242	U	4.68	ug/kg	1.56	4.68	1
12672-29-6	Aroclor-1248	U	4.68	ug/kg	1.56	4.68	1
11097-69-1	Aroclor-1254	JP	4.42	ug/kg	1.56	4.68	1
11096-82-5	Aroclor-1260	U	4.68	ug/kg	1.56	4.68	1

## PCB

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Certificate of Analysis  
Sample Summary

SDG Number: 10-2199  
Lab Sample ID: 248519006

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8082  
Inst: ECD8A.I  
Analyst: JAOC  
Aliquot: 30.01 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
%Moisture: 10.2  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE36-10-8274  
Batch ID: 966420  
Run Date: 03/19/2010 15:57  
Prep Date: 03/18/2010 10:57  
Data File: 043f4301.d  
043b4301.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.71	ug/kg	1.24	3.71	1
11104-28-2	Aroclor-1221	U	3.71	ug/kg	1.24	3.71	1
11141-16-5	Aroclor-1232	U	3.71	ug/kg	1.24	3.71	1
53469-21-9	Aroclor-1242	U	3.71	ug/kg	1.24	3.71	1
12672-29-6	Aroclor-1248	U	3.71	ug/kg	1.24	3.71	1
11097-69-1	Aroclor-1254	U	3.71	ug/kg	1.24	3.71	1
11096-82-5	Aroclor-1260	U	3.71	ug/kg	1.24	3.71	1

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

SDG Number: 10-2199  
Lab Sample ID: 248519010

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8082  
Inst: ECD8A.I  
Analyst: JAOC  
Aliquot: 30.02 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
%Moisture: 40.1  
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	5.57	ug/kg	1.85	5.57	1
11104-28-2	Aroclor-1221	U	5.57	ug/kg	1.85	5.57	1
11141-16-5	Aroclor-1232	U	5.57	ug/kg	1.85	5.57	1
53469-21-9	Aroclor-1242	U	5.57	ug/kg	1.85	5.57	1
12672-29-6	Aroclor-1248	U	5.57	ug/kg	1.85	5.57	1
11097-69-1	Aroclor-1254	U	5.57	ug/kg	1.85	5.57	1
11096-82-5	Aroclor-1260	U	5.57	ug/kg	1.85	5.57	1

## PCB

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Certificate of Analysis  
Sample SummarySDG Number: 10-2199  
Lab Sample ID: 248519011Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8082  
Inst: ECD8A.I  
Analyst: JAOC  
Aliquot: 30.01 g  
Column: 1 CLP1  
2 CLP2Matrix: R  
% Moisture: 14.6  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

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

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

SDG Number: 10-2199  
Lab Sample ID: 248519003

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8082  
Inst: ECD8A.I  
Analyst: JAOC  
Aliquot: 30 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
% Moisture: 25.4  
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	4.47	ug/kg	1.49	4.47	1
11104-28-2	Aroclor-1221	U	4.47	ug/kg	1.49	4.47	1
11141-16-5	Aroclor-1232	U	4.47	ug/kg	1.49	4.47	1
53469-21-9	Aroclor-1242	U	4.47	ug/kg	1.49	4.47	1
12672-29-6	Aroclor-1248	U	4.47	ug/kg	1.49	4.47	1
11097-69-1	Aroclor-1254	U	4.47	ug/kg	1.49	4.47	1
11096-82-5	Aroclor-1260	U	4.47	ug/kg	1.49	4.47	1



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

SDG Number: 10-2199  
Lab Sample ID: 248519005

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8082  
Inst: ECD8A.I  
Analyst: JAOC  
Aliquot: 30.03 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
% Moisture: 6.4  
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	3.56	ug/kg	1.18	3.56	1
11104-28-2	Aroclor-1221	U	3.56	ug/kg	1.18	3.56	1
11141-16-5	Aroclor-1232	U	3.56	ug/kg	1.18	3.56	1
53469-21-9	Aroclor-1242	U	3.56	ug/kg	1.18	3.56	1
12672-29-6	Aroclor-1248	U	3.56	ug/kg	1.18	3.56	1
11097-69-1	Aroclor-1254	U	3.56	ug/kg	1.18	3.56	1
11096-82-5	Aroclor-1260	U	3.56	ug/kg	1.18	3.56	1

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

SDG Number: 10-2199  
Lab Sample ID: 248519002

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8082  
Inst: ECD8A.I  
Analyst: JAOC  
Aliquot: 30.12 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
% Moisture: 7.1  
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	3.57	ug/kg	1.19	3.57	1
11104-28-2	Aroclor-1221	U	3.57	ug/kg	1.19	3.57	1
11141-16-5	Aroclor-1232	U	3.57	ug/kg	1.19	3.57	1
53469-21-9	Aroclor-1242	U	3.57	ug/kg	1.19	3.57	1
12672-29-6	Aroclor-1248	U	3.57	ug/kg	1.19	3.57	1
11097-69-1	Aroclor-1254		31.5	ug/kg	1.19	3.57	2
11096-82-5	Aroclor-1260		17.6	ug/kg	1.19	3.57	2

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

SDG Number: 10-2199  
Lab Sample ID: 248519004

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8082  
Inst: ECD8A.I  
Analyst: JAOC  
Aliquot: 30.14 g  
Column: 1 CLP1  
2 CLP2

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

CAS No.	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		65.5	ug/kg	1.22	3.66	2
11096-82-5	Aroclor-1260		36.9	ug/kg	1.22	3.66	2

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

SDG Number: 10-2199  
Lab Sample ID: 248519008

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8082  
Inst: ECD8A.I  
Analyst: JAOC  
Aliquot: 30 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
% Moisture: 32.9  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.97	ug/kg	1.66	4.97	1
11104-28-2	Aroclor-1221	U	4.97	ug/kg	1.66	4.97	1
11141-16-5	Aroclor-1232	U	4.97	ug/kg	1.66	4.97	1
53469-21-9	Aroclor-1242	U	4.97	ug/kg	1.66	4.97	1
12672-29-6	Aroclor-1248	U	4.97	ug/kg	1.66	4.97	1
11097-69-1	Aroclor-1254	U	4.97	ug/kg	1.66	4.97	1
11096-82-5	Aroclor-1260	U	4.97	ug/kg	1.66	4.97	1

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

SDG Number: 10-2199  
Lab Sample ID: 248519001

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8082  
Inst: ECD8A.I  
Analyst: JAOC  
Aliquot: 30.09 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
%Moisture: 16.4  
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	3.98	ug/kg	1.32	3.98	1
11104-28-2	Aroclor-1221	U	3.98	ug/kg	1.32	3.98	1
11141-16-5	Aroclor-1232	U	3.98	ug/kg	1.32	3.98	1
53469-21-9	Aroclor-1242	U	3.98	ug/kg	1.32	3.98	1
12672-29-6	Aroclor-1248	U	3.98	ug/kg	1.32	3.98	1
11097-69-1	Aroclor-1254	U	3.98	ug/kg	1.32	3.98	1
11096-82-5	Aroclor-1260	U	3.98	ug/kg	1.32	3.98	1

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

<b>SDG Number:</b> 10-2199	<b>Date Collected:</b> 02/25/2010 12:00	<b>Matrix:</b> R
<b>Lab Sample ID:</b> 248519007	<b>Date Received:</b> 03/03/2010 08:50	<b>% Moisture:</b> 28.9
<b>Client ID:</b> RE36-10-8291	<b>Client:</b> LANL010	<b>Project:</b> LANL01004
<b>Batch ID:</b> 966420	<b>Method:</b> SW846 8082	<b>SOP Ref:</b> GL-OA-E-040
<b>Run Date:</b> 03/19/2010 16:09	<b>Inst:</b> ECD8A.I	<b>Dilution:</b> 1
<b>Prep Date:</b> 03/18/2010 10:57	<b>Analyst:</b> JAOC	<b>Inj. Vol:</b> 1 uL
<b>Data File:</b> 044f4401.d	<b>Aliquot:</b> 30.05 g	<b>Final Volume:</b> 1 mL
	<b>Column:</b> 1 CLP1	<b>Level:</b> LOW
	2 CLP2	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.68	ug/kg	1.56	4.68	1
11104-28-2	Aroclor-1221	U	4.68	ug/kg	1.56	4.68	1
11141-16-5	Aroclor-1232	U	4.68	ug/kg	1.56	4.68	1
53469-21-9	Aroclor-1242	U	4.68	ug/kg	1.56	4.68	1
12672-29-6	Aroclor-1248	U	4.68	ug/kg	1.56	4.68	1
11097-69-1	Aroclor-1254	JP	4.60	ug/kg	1.56	4.68	1
11096-82-5	Aroclor-1260	U	4.68	ug/kg	1.56	4.68	1

# QUALITY CONTROL SUMMARY

**PCB**  
**Surrogate Recovery Report**

Page 1 of 1

SDG Number: 10-2199

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 #
1202073937	MB for batch 966418	71	75	94	98
1202073938	LCS for batch 966418	76	80	97	103
248519001	RE36-10-8288	52	54	57	58
248519003	RE36-10-8277	44	43	40	38
248519005	RE36-10-8278	56	58	64	62
248519006	RE36-10-8274	51	53	55	55
248519007	RE36-10-8291	40	39	41	43
248519008	RE36-10-8287	58	59	63	64
248519009	RE36-10-8273	38	39	37	42
248519010	RE36-10-8275	44	45	50	50
248519011	RE36-10-8276	60	62	67	72
1202077508	MB for batch 967813	86	93	98	104
1202077509	LCS for batch 967813	90	96	102	110
1202077510	LCSD for batch 967813	89	96	98	105
248519002	RE36-10-8279	33	33	38	42
248519004	RE36-10-8280	56	56	71	66

**Surrogate**

4CMX = 4cmx

DCB = Decachlorobiphenyl

\* Recovery outside Acceptance Limits

# Column to be used to flag recovery values

D Sample Diluted

**Acceptance Limits**

(32%-120%)

(30%-116%)



PCB

Page 1 of 1

**Quality Control Summary  
Spike Recovery Report**

SDG Number: 10-2199

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 966418

Matrix: SOIL

Lab Sample ID: 1202073938

Instrument: ECD8A.I

Analysis Date: 03/19/2010 12:35

Dilution: 1

Analyst: JAOC

Prep Batch ID: 966418

Inj. Vol: 1 uL

Batch ID: 966420

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	25.5	77	39-102
11096-82-5	LCS Aroclor-1260	33.3	0.0	31.1	93	45-118

PCB

Page 1 of 2

**Quality Control Summary  
Spike Recovery Report**

SDG Number: 10-2199

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 967813

Matrix: SOIL

Lab Sample ID:1202077509

Instrument: ECD8A.I

Analysis Date: 03/23/2010 10:37

Dilution: 1

Analyst: JAOC

Prep Batch ID: 967813

Inj. Vol: 1 uL

Batch ID: 967817

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	29.4	88	39-102
11096-82-5	LCS Aroclor-1260	33.3	0.0	34.8	104	45-118

PCB

Page 2 of 2

Quality Control Summary  
Spike Recovery Report

SDG Number: 10-2199

Sample Type: Laboratory Control Sample Duplicate

Client ID: LCSD for batch 967813

Matrix: SOIL

Lab Sample ID: 1202077510

Instrument: ECD8A.I

Analysis Date: 03/23/2010 10:50

Dilution: 1

Analyst: JAOC

Prep Batch ID: 967813

Inj. Vol: 1 uL

Batch ID: 967817

CAS No	Parname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
12674-11-2	LCSD Aroclor-1016	33.3	0.0	29.1	87	39-102	1	0-21
11096-82-5	LCSD Aroclor-1260	33.3	0.0	33.5	101	45-118	4	0-22

PCB

Page 1 of 2

Quality Control Summary  
Spike Recovery Report

SDG Number: 10-2202

Client ID: RE36-10-8466MS

Lab Sample ID: 1202073939

Instrument: ECD8A.I

Analyst: JAOC

Inj. Vol: 1 uL

Sample Type: Matrix Spike

Matrix: R

%Moisture: 12.4

Analysis Date: 03/19/2010 17:52

Dilution: 10

Prep Batch ID: 966418

Batch ID: 966420

CAS No	Paramname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
12674-11-2	MS Aroclor-1016	38.0	0.00 U	17.9	47	23-119
11096-82-5	MS Aroclor-1260	38.0	0.00 U	17.6	46	28-124

## PCB

Page 2 of 2

Quality Control Summary  
Spike Recovery Report

SDG Number: 10-2202

Sample Type: Matrix Spike Duplicate

Client ID: RE36-10-8466MSD

Matrix: R

Lab Sample ID: 1202073940

%Moisture: 12.4

Instrument: ECD8A.I

Analysis Date: 03/19/2010 18:05

Dilution: 10

Analyst: JAOC

Prep Batch ID: 966418

Inj. Vol: 1 uL

Batch ID: 966420

CAS No	Paramname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits	Acceptance RPD	Acceptance Limits
12674-11-2	MSD Aroclor-1016	38.0	0.00	U	0.00	0 *	23-119	200 *
11096-82-5	MSD Aroclor-1260	38.0	0.00	U	0.00	0 *	28-124	200 *

## Method Blank Summary

Page 1 of 1

SDG Number:	10-2199	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 966418	Instrument ID:	ECD8A.J_2	Data File:	026b2601-1.d
Lab Sample ID:	1202073937		ECD8A.J_1		026f2601-1.d
Column:	CLP2	Prep Date:	03/18/2010 10:57	Analyzed:	03/19/10 12:23
	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 966418	1202073938	027f2701-1.d 027b2701-1.d	03/19/10	1235
02 RE36-10-8288	248519001	038f3801.d 038b3801.d	03/19/10	1455
03 RE36-10-8277	248519003	040f4001.d 040b4001.d	03/19/10	1520
04 RE36-10-8278	248519005	042f4201.d 042b4201.d	03/19/10	1545
05 RE36-10-8274	248519006	043f4301.d 043b4301.d	03/19/10	1557
06 RE36-10-8291	248519007	044f4401.d 044b4401.d	03/19/10	1609
07 RE36-10-8287	248519008	045f4501.d 045b4501.d	03/19/10	1622
08 RE36-10-8273	248519009	046f4601.d 046b4601.d	03/19/10	1634
09 RE36-10-8275	248519010	047f4701.d 047b4701.d	03/19/10	1646
10 RE36-10-8276	248519011	050f5001.d 050b5001.d	03/19/10	1728

## Method Blank Summary

Page 1 of 1

SDG Number:	10-2199	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 967813	Instrument ID:	ECD8A.I_2	Data File:	012b1201-1.d
Lab Sample ID:	1202077508		ECD8A.I_1		012f1201-1.d
Column:	CLP2	Prep Date:	03/22/2010 21:20	Analyzed:	03/23/10 10:25
	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 967813	1202077509	013f1301-1.d 013b1301-1.d	03/23/10	1037
02 LCSD for batch 967813	1202077510	014f1401-1.d 014b1401-1.d	03/23/10	1050
03 RE36-10-8279	248519002	017f1701.d 017b1701.d	03/23/10	1127
04 RE36-10-8280	248519004	018f1801.d 018b1801.d	03/23/10	1143

SAMPLE  
DATA



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

SDG Number: 10-2199  
Lab Sample ID: 248519009

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8082  
Inst: ECD8A.I  
Analyst: JAOC  
Aliquot: 30.09 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
%Moisture: 29  
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	4.68	ug/kg	1.56	4.68	1
11104-28-2	Aroclor-1221	U	4.68	ug/kg	1.56	4.68	1
11141-16-5	Aroclor-1232	U	4.68	ug/kg	1.56	4.68	1
53469-21-9	Aroclor-1242	U	4.68	ug/kg	1.56	4.68	1
12672-29-6	Aroclor-1248	U	4.68	ug/kg	1.56	4.68	1
11097-69-1	Aroclor-1254	JP	4.42	ug/kg	1.56	4.68	1
11096-82-5	Aroclor-1260	U	4.68	ug/kg	1.56	4.68	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/031910.b/046f4601.d

Lab Smp Id: 248519009

Client Smp ID: RE36-10-8273

Inj Date : 19-MAR-2010 16:34

Operator : JAOC

Inst ID: ecd8a.i

Smp Info : |248519009|1|

Misc Info : |ECD82P\_1S|966420|SVA|LANL|SOIL|RE36-10-8273|||

Comment :

Method : /chem/ecd8a.i/031910.b/ECD8-F-8082-031810.m

Meth Date : 22-Mar-2010 08:33 jen01212 Quant Type: ESTD

Cal Date : 23-FEB-2010 11:32

Cal File: 017f1701.d

Als bottle: 46

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: 10-2199.sub

Target Version: 3.50

Sample Matrix: Soil

Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.09000	Weight of sample extracted (g)
M	29.03790	% 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		
2.249	2.248	0.001	9393052	75.1676	3.5	80.00- 120.00	100.00
-----							
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.238	6.239	-0.001	6075736	73.7785	3.4	80.00- 120.00	100.00
-----							
6 Aroclor-1254					CAS #: 11097-69-1		
3.830	3.831	-0.001	205365	47.3851	2.2	80.00- 120.00	100.00 (aM)
4.017	4.018	-0.001	236113	40.9454	1.9	114.41- 154.41	114.97
4.224	4.214	0.010	1308100	293.393	13.7	84.15- 124.15	636.96
4.299	4.301	-0.002	368556	49.0001	2.3	155.56- 195.56	179.46

CONCENTRATIONS						
			ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
6 Aroclor-1254 (continued)						
4.493	4.496	-0.003	210772	36.6611	1.7 113.29- 153.29	102.63
Average of Peak Concentrations =				4.4		

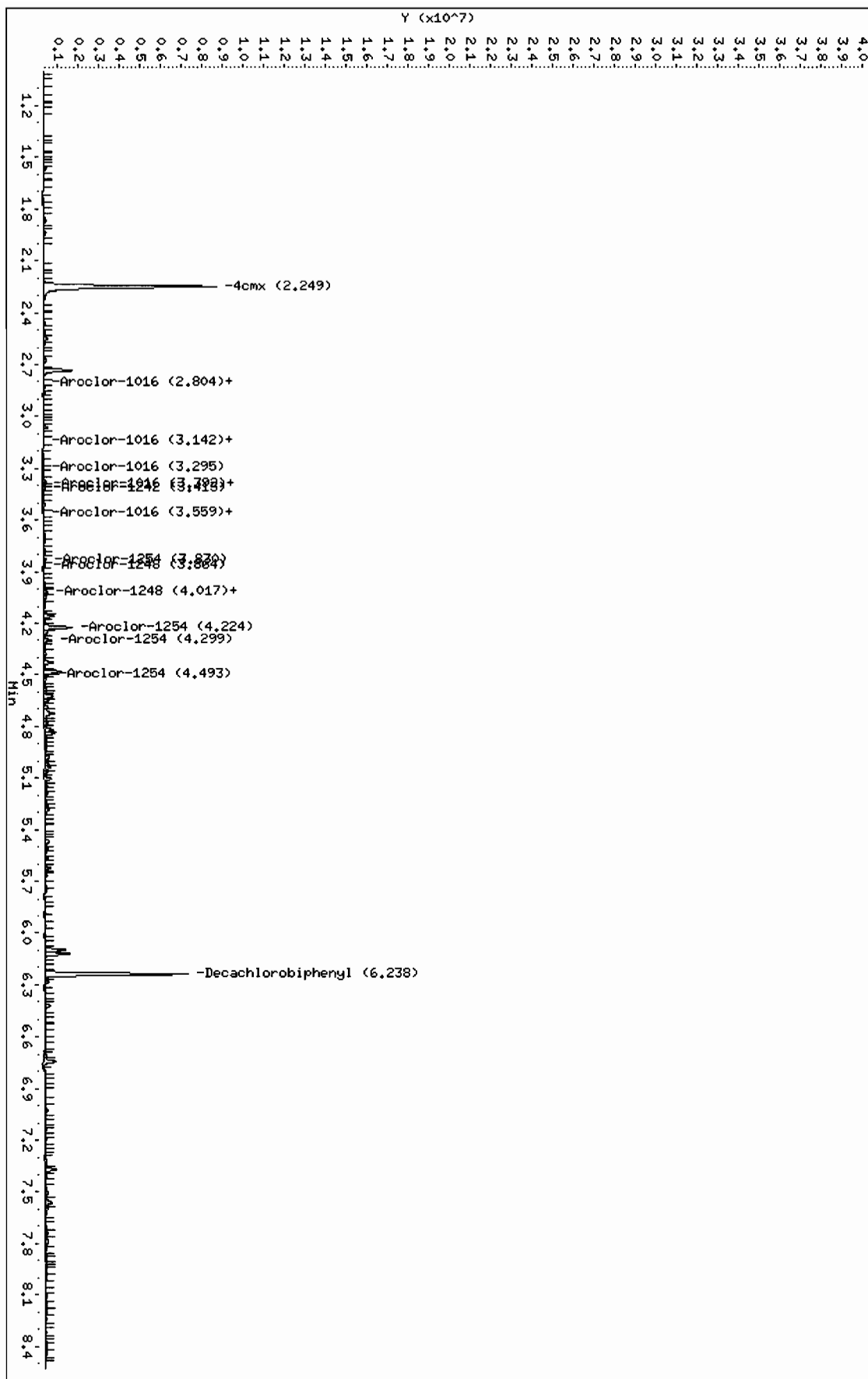
QC Flag Legend

- a - Target compound detected but, quantitated amount  
Below Limit Of Quantitation(BLOQ).
- M - Compound response manually integrated.

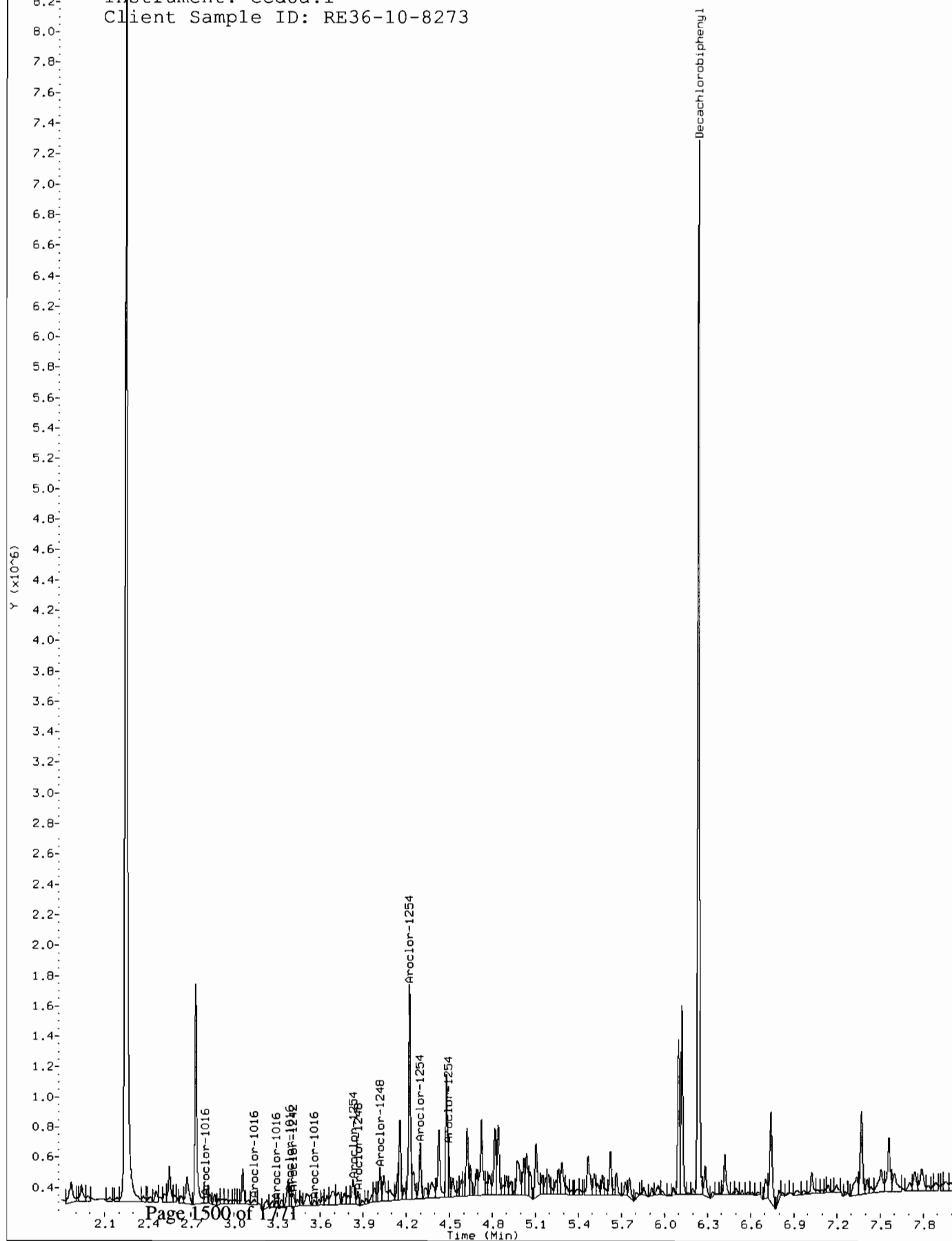
Data File: /chem/ecdb8a.i/031910.b/046f4601.d  
Date : 19-MAR-2010 16:34  
Client ID: REC6-10-8273  
Sample Info: 1248519009111  
Volume Injected (uL): 1.0  
Column phase: CLP1

Instrument: ecdb8a.i  
Operator: JADC  
Column diameter: 0.25

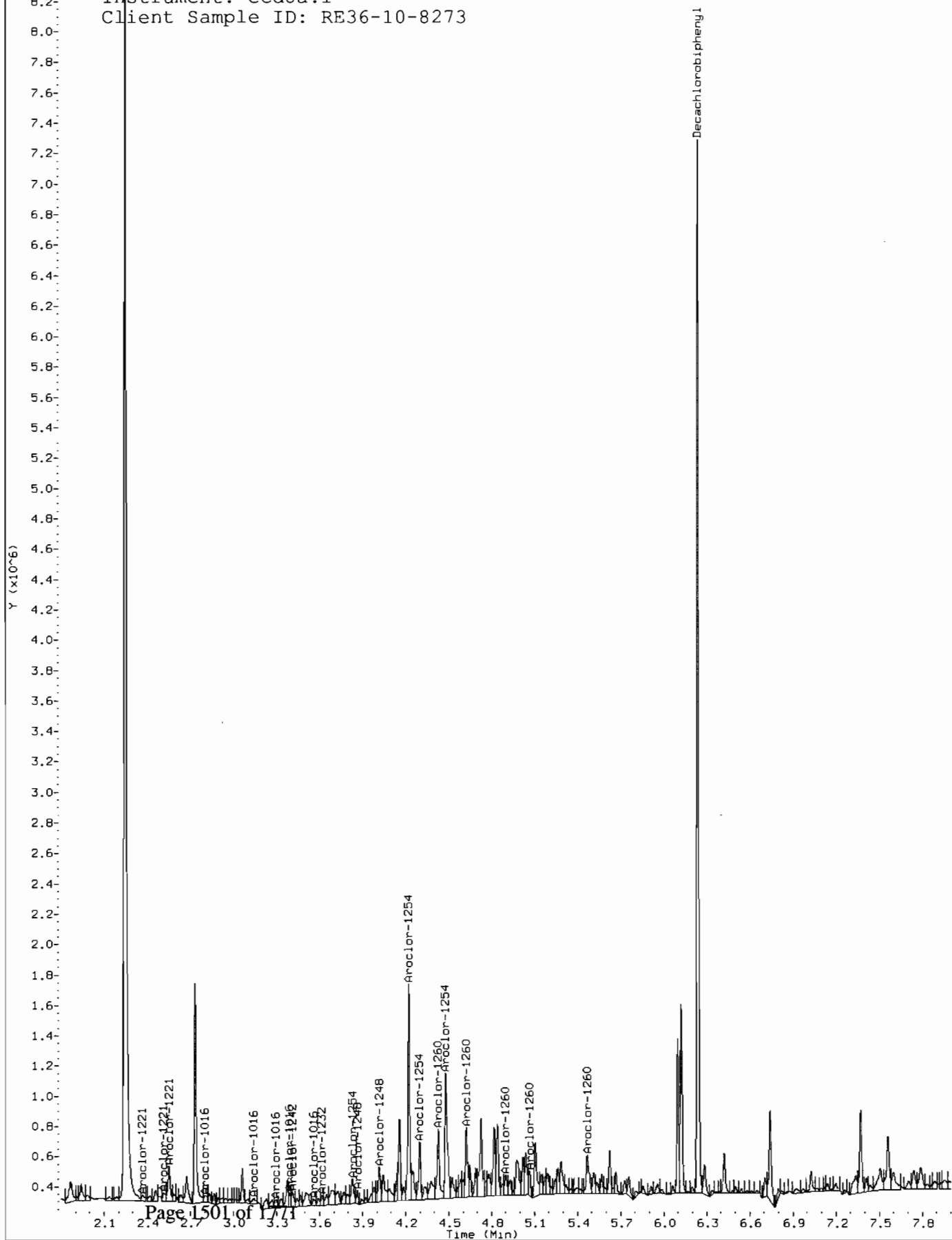
/chem/ecdb8a.i/031910.b/046f4601.d



Comment: Manually Integrated  
Data File: /chem/ecd8a.i/031910.b/046f4601.d  
Operator: JAOC  
Injection Date: 19-MAR-2010 16:34  
Instrument: ecd8a.i  
Client Sample ID: RE36-10-8273



Comment: Before manual integration  
Data File: /chem/ecd8a.i/031910.b/orig-046f4601.d  
Operator: JAOC  
Injection Date: 19-MAR-2010 16:34  
Instrument: ecd8a.i  
Client Sample ID: RE36-10-8273



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL  
 Data file : /chem/ecd8a.i/031910.b/046b4601.d  
 Lab Smp Id: 248519009 Client Smp ID: RE36-10-8273  
 Inj Date : 19-MAR-2010 16:34  
 Operator : JAOC Inst ID: ecd8a.i  
 Smp Info : |248519009|1|  
 Misc Info : |ECD82P\_1S|966420|SVA|LANL|SOIL|RE36-10-8273|  
 Comment :  
 Method : /chem/ecd8a.i/031910.b/ECD8-B-8082-031810.m  
 Meth Date : 22-Mar-2010 07:51 jen01212 Quant Type: ESTD  
 Cal Date : 23-FEB-2010 11:32 Cal File: 017b1701.d  
 Als bottle: 46  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: 10-2199.sub  
 Target Version: 3.50 Sample Matrix: Soil

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.09000	Weight of sample extracted (g)
M	29.03790	% 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	
2.478	2.477	0.001	6454239	77.2203	3.6 80.00- 120.00	100.00
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3	
6.824	6.824	0.000	4952645	83.5854	3.9 80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1	
4.302	4.302	0.000	140203	44.9850	2.1 80.00- 120.00	100.00 (aM)
4.441	4.441	0.000	152709	43.9054	2.0 92.05- 132.05	108.92
4.769	4.770	-0.001	251563	52.0615	2.4 138.74- 178.74	179.43
4.932	4.931	0.001	148194	42.4132	2.0 94.11- 134.11	105.70
5.057	5.057	0.000	229353	104.171	4.9 51.28- 91.28	163.59
Average of Peak Concentrations =				2.7		

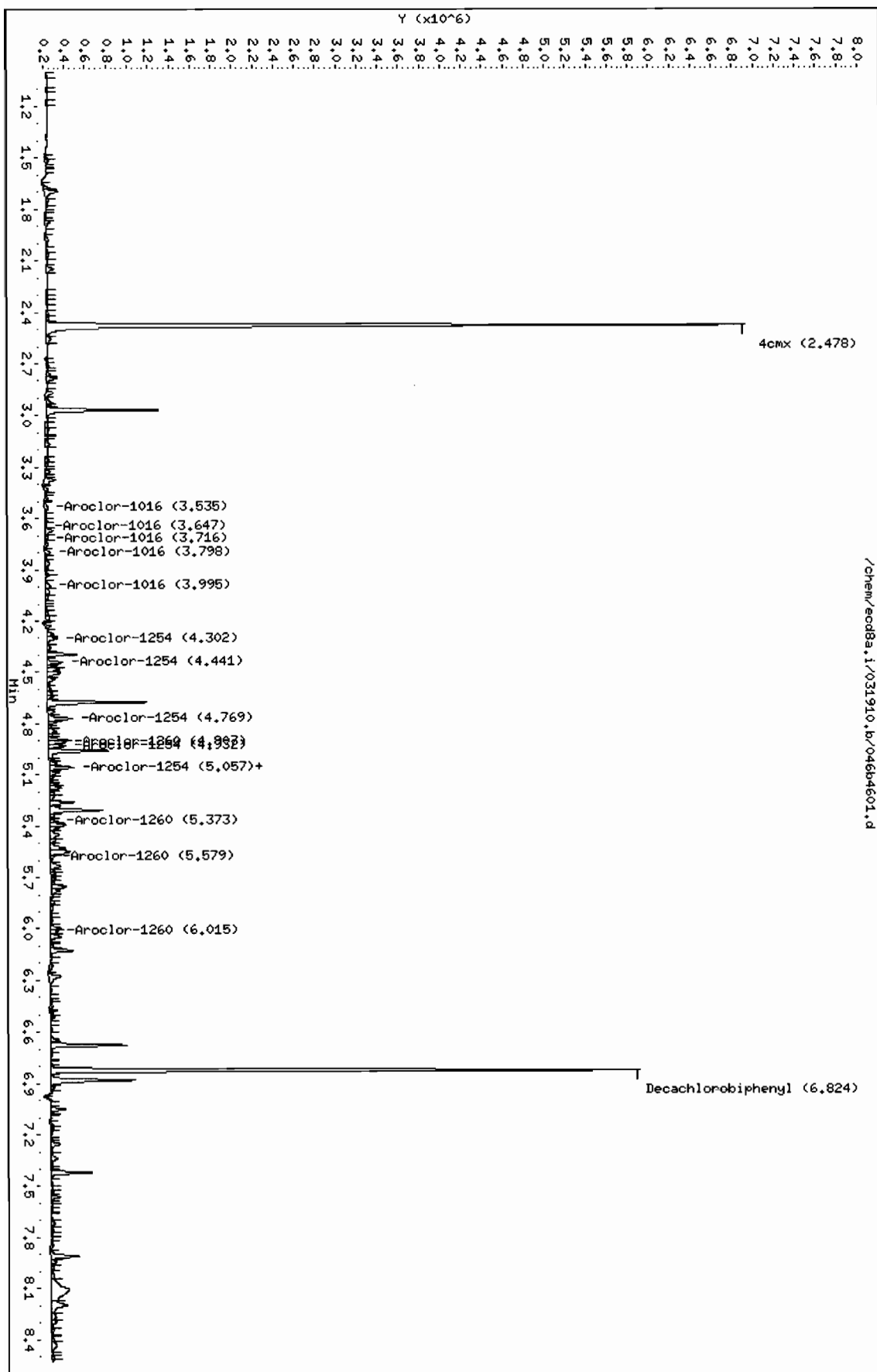
QC Flag Legend

- a - Target compound detected but, quantitated amount  
Below Limit Of Quantitation(BLOQ).
- M - Compound response manually integrated.

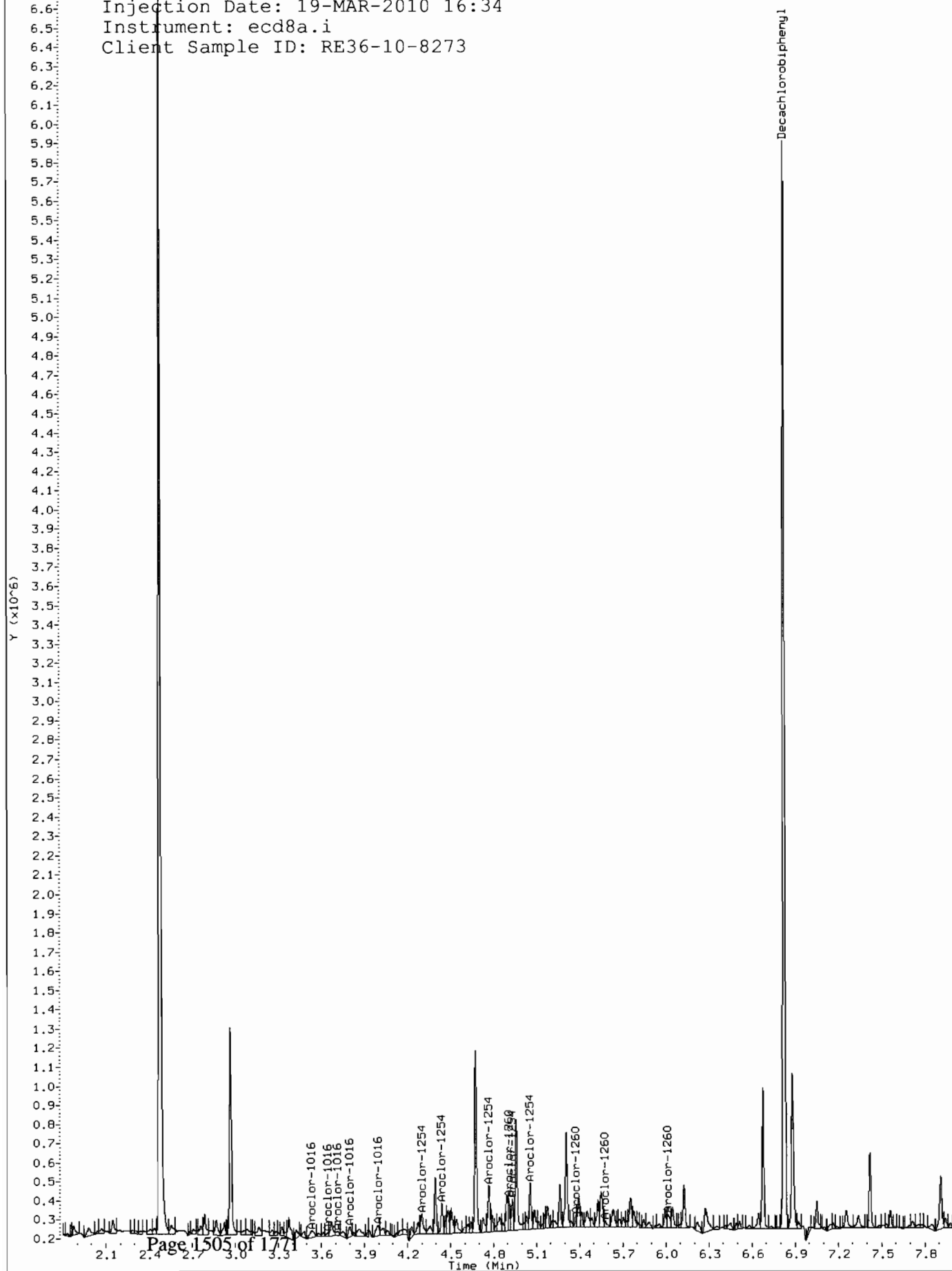


Data File: /chem/ecdb8a.i/031910.b/046b4601.d  
Date : 19-MAR-2010 16:34  
Client ID: RE36-10-8273  
Sample Info: 1248519009111  
Volume Injected (uL): 1.0  
Column phase: CLP2

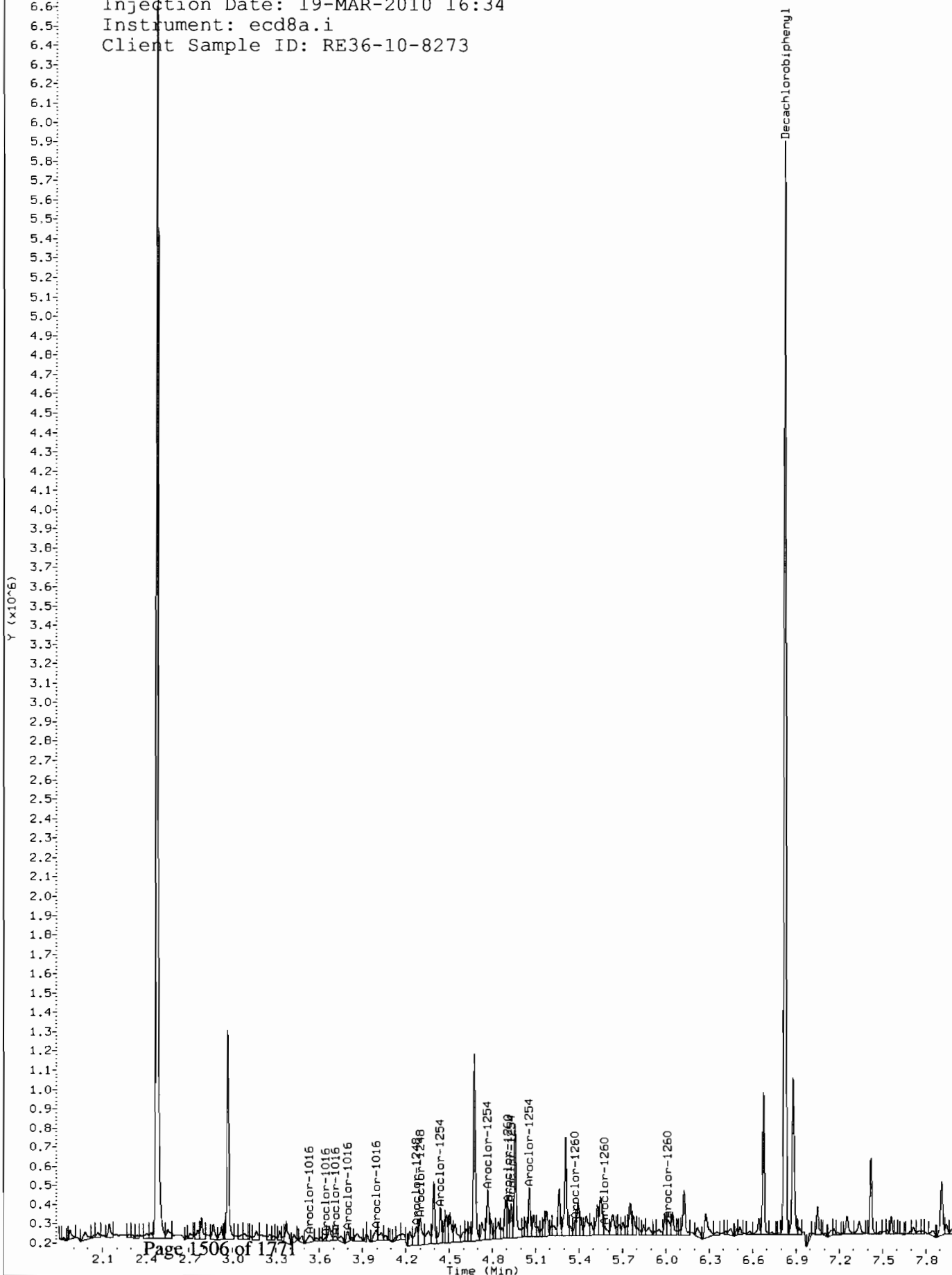
Instrument: ecdb8a.i  
Operator: JHOC  
Column diameter: 0.25



Comment: Manually Integrated  
Data File: /chem/ecd8a.i/031910.b/046b4601.d  
Operator: JAOC  
Injection Date: 19-MAR-2010 16:34  
Instrument: ecd8a.i  
Client Sample ID: RE36-10-8273



Comment: Before manual integration  
Data File: /chem/ecd8a.i/031910.b/orig-046b4601.d  
Operator: JAOC  
Injection Date: 19-MAR-2010 16:34  
Instrument: ecd8a.i  
Client Sample ID: RE36-10-8273



## PCB

Page 1 of 1

## Certificate of Analysis

## Sample Summary

SDG Number: 10-2199  
Lab Sample ID: 248519006

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8082  
Inst: ECD8A.I  
Analyst: JAOC  
Aliquot: 30.01 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
%Moisture: 10.2  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.71	ug/kg	1.24	3.71	1
11104-28-2	Aroclor-1221	U	3.71	ug/kg	1.24	3.71	1
11141-16-5	Aroclor-1232	U	3.71	ug/kg	1.24	3.71	1
53469-21-9	Aroclor-1242	U	3.71	ug/kg	1.24	3.71	1
12672-29-6	Aroclor-1248	U	3.71	ug/kg	1.24	3.71	1
11097-69-1	Aroclor-1254	U	3.71	ug/kg	1.24	3.71	1
11096-82-5	Aroclor-1260	U	3.71	ug/kg	1.24	3.71	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/031910.b/043f4301.d  
Lab Smp Id: 248519006 Client Smp ID: RE36-10-8274  
Inj Date : 19-MAR-2010 15:57  
Operator : JAOC Inst ID: ecd8a.i  
Smp Info : |248519006|1|  
Misc Info : |ECD82P\_1S|966420|SVA|LANL|SOIL|RE36-10-8274|||  
Comment :  
Method : /chem/ecd8a.i/031910.b/ECD8-F-8082-031810.m  
Meth Date : 22-Mar-2010 08:33 jen01212 Quant Type: ESTD  
Cal Date : 23-FEB-2010 11:32 Cal File: 017f1701.d  
Als bottle: 43  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-2199.sub  
Target Version: 3.50 Sample Matrix: Soil

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.01000	Weight of sample extracted (g)
M	10.21610	% Moisture

Cpnd Variable Local Compound Variable

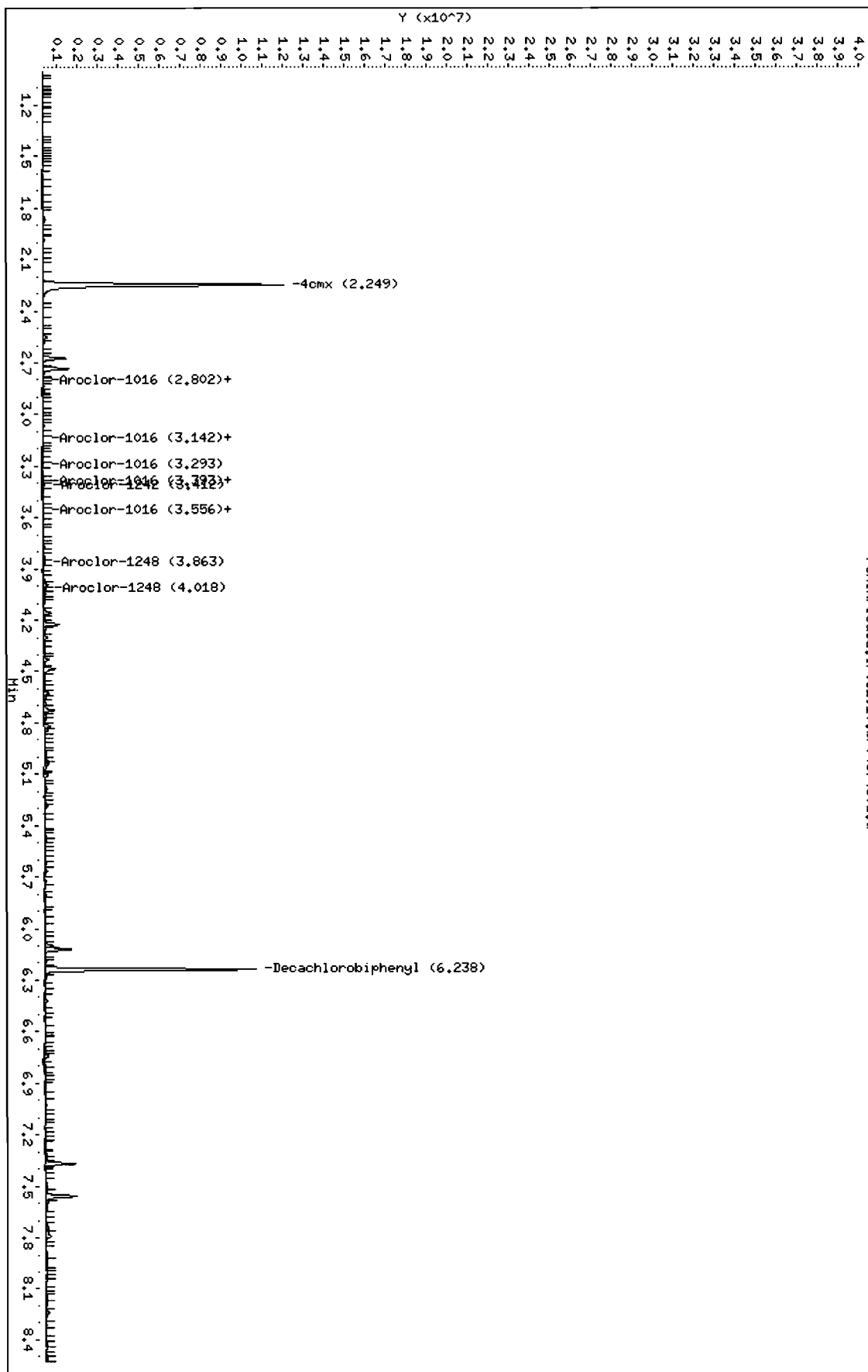
CONCENTRATIONS

RT	EXP RT	DLT RT	RESPONSE ( ug/L)	ON-COL	FINAL	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====	=====
\$ 11 4cmx						CAS #: 877-09-8	
2.249	2.248	0.001	12775023	102.232	3.8	80.00- 120.00	100.00
-----							
\$ 12 Decachlorobiphenyl						CAS #: 2051-24-3	
6.238	6.239	-0.001	8997725	109.261	4.0	80.00- 120.00	100.00
-----							

Data File: /chem/ecod8a.i/031910.b/043f4301.d  
Date : 19-MAR-2010 15:57  
Client ID: RE36-10-8274  
Sample Info: 1248519006111  
Volume Injected (uL): 1.0  
Column phase: CLP1

Instrument: ecod8a.i  
Operator: JHDC  
Column diameter: 0.25

/chem/ecod8a.i/031910.b/043f4301.d



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL  
Data file : /chem/ecd8a.i/031910.b/043b4301.d  
Lab Smp Id: 248519006 Client Smp ID: RE36-10-8274  
Inj Date : 19-MAR-2010 15:57  
Operator : JAOC Inst ID: ecd8a.i  
Smp Info : |248519006|1|  
Misc Info : |ECD82P\_1S|966420|SVA|LANL|SOIL|RE36-10-8274|||  
Comment :  
Method : /chem/ecd8a.i/031910.b/ECD8-B-8082-031810.m  
Meth Date : 22-Mar-2010 07:51 jen01212 Quant Type: ESTD  
Cal Date : 23-FEB-2010 11:32 Cal File: 017b1701.d  
Als bottle: 43  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-2199.sub  
Target Version: 3.50 Sample Matrix: Soil

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

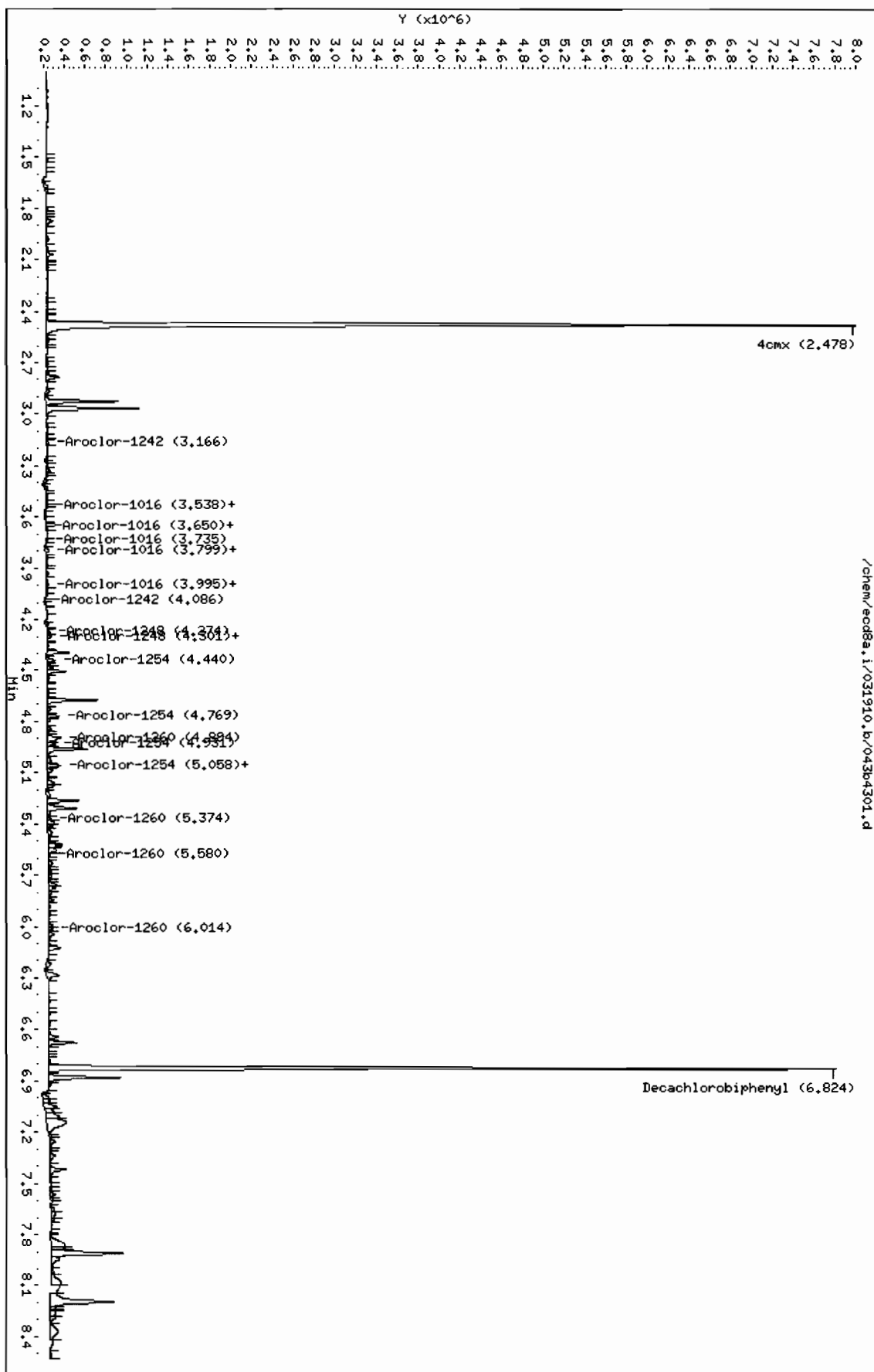
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.01000	Weight of sample extracted (g)
M	10.21610	% Moisture

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	
2.478	2.477	0.001	8839643	105.760	3.9 80.00- 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3	
6.824	6.824	0.000	6504501	109.776	4.1 80.00- 120.00	100.00
-----						

Data File: /chem/ecd8a.i/031910.b/043b4301.d  
Date : 19-MAR-2010 15:57  
Client ID: RE36-10-8274  
Sample Info: 124851900611  
Volume Injected (uL): 1.0  
Column phase: CLP2

Instrument: ecd8a.i  
Operator: JAO  
Column diameter: 0.25





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

SDG Number: 10-2199  
Lab Sample ID: 248519010

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8082  
Inst: ECD8A.I  
Analyst: JAOC  
Aliquot: 30.02 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
%Moisture: 40.1  
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	5.57	ug/kg	1.85	5.57	1
11104-28-2	Aroclor-1221	U	5.57	ug/kg	1.85	5.57	1
11141-16-5	Aroclor-1232	U	5.57	ug/kg	1.85	5.57	1
53469-21-9	Aroclor-1242	U	5.57	ug/kg	1.85	5.57	1
12672-29-6	Aroclor-1248	U	5.57	ug/kg	1.85	5.57	1
11097-69-1	Aroclor-1254	U	5.57	ug/kg	1.85	5.57	1
11096-82-5	Aroclor-1260	U	5.57	ug/kg	1.85	5.57	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/031910.b/047f4701.d  
Lab Smp Id: 248519010 Client Smp ID: RE36-10-8275  
Inj Date : 19-MAR-2010 16:46  
Operator : JAOC Inst ID: ecd8a.i  
Smp Info : |248519010|1|  
Misc Info : |ECD82P\_1S|966420|SVA|LANL|SOIL|RE36-10-8275|||  
Comment :  
Method : /chem/ecd8a.i/031910.b/ECD8-F-8082-031810.m  
Meth Date : 22-Mar-2010 08:33 jen01212 Quant Type: ESTD  
Cal Date : 23-FEB-2010 11:32 Cal File: 017f1701.d  
Als bottle: 47  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-2199.sub  
Target Version: 3.50 Sample Matrix: Soil

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.02000	Weight of sample extracted (g)
M	40.14950	% Moisture

Cpnd Variable Local Compound Variable

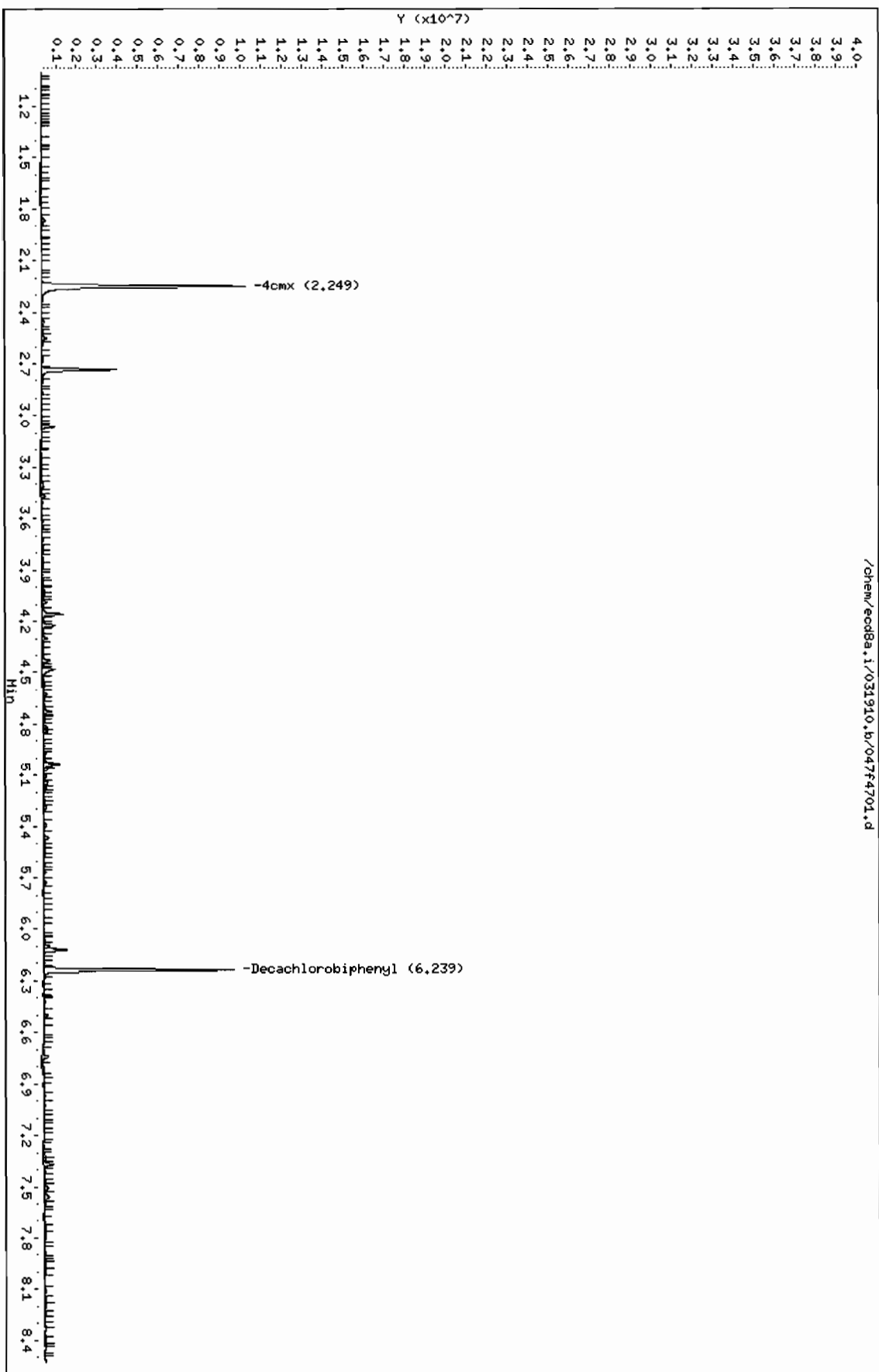
CONCENTRATIONS

RT	EXP RT	DLT RT	ON-COL	FINAL	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
\$ 11 4cmx							CAS #: 877-09-8	
2.249	2.248	0.001	10963380	87.7341	4.9	80.00- 120.00	100.00	
\$ 12 Decachlorobiphenyl							CAS #: 2051-24-3	
6.239	6.239	0.000	8167212	99.1756	5.5	80.00- 120.00	100.00	

Data File: /chem/ecod8a.i/031910.b/0474701.d  
Date: 19-MAR-2010 16:46  
Client ID: REC6-10-8275  
Sample Info: 124851901011  
Volume Injected (uL): 1.0  
Column phase: CLP1

Instrument: ecod8a.i  
Operator: JMO  
Column diameter: 0.25

Page 1



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL  
Data file : /chem/ecd8a.i/031910.b/047b4701.d  
Lab Smp Id: 248519010 Client Smp ID: RE36-10-8275  
Inj Date : 19-MAR-2010 16:46  
Operator : JAOC Inst ID: ecd8a.i  
Smp Info : |248519010|1|  
Misc Info : |ECD82P\_1S|966420|SVA|LANL|SOIL|RE36-10-8275|||  
Comment :  
Method : /chem/ecd8a.i/031910.b/ECD8-B-8082-031810.m  
Meth Date : 22-Mar-2010 07:51 jen01212 Quant Type: ESTD  
Cal Date : 23-FEB-2010 11:32 Cal File: 017b1701.d  
Als bottle: 47  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-2199.sub  
Target Version: 3.50 Sample Matrix: Soil

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

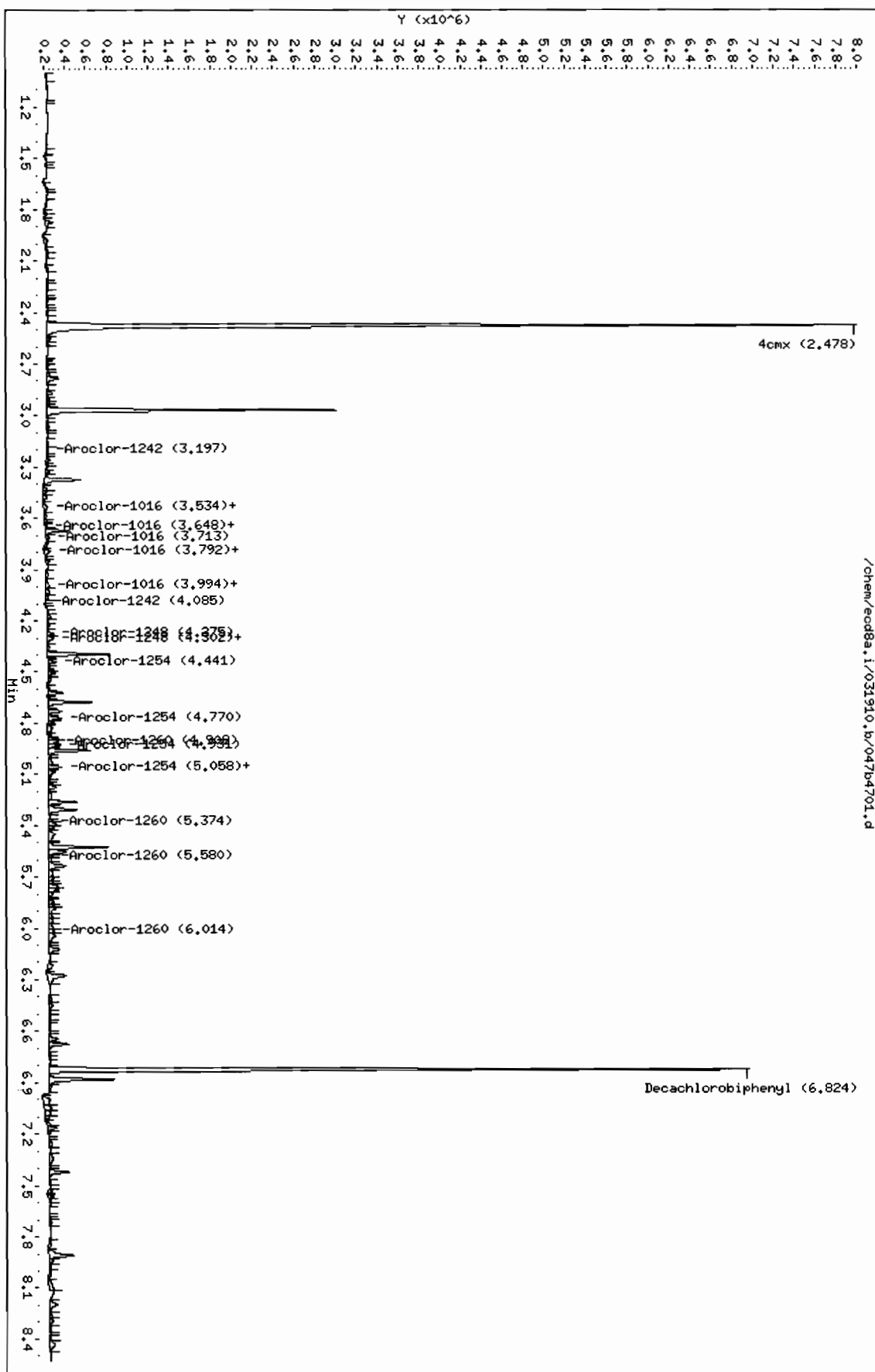
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.02000	Weight of sample extracted (g)
M	40.14950	% Moisture

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						
2.478	2.477	0.001	7532440 90.1203	5.0	80.00- 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl CAS #: 2051-24-3						
6.824	6.824	0.000	5937641 100.209	5.6	80.00- 120.00	100.00
-----						

Data File: /chem/ecod8a.i/031910.b/047b4701.d  
 Date : 19-MAR-2010 16:46  
 Client ID: RE36-10-8275  
 Sample Info: 124851901011  
 Volume Injected (uL): 1.0  
 Column phase: CLP2

Instrument: ecod8a.i  
 Operator: JHOC  
 Column diameter: 0.25



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

Page 1 of 1

SDG Number: 10-2199  
Lab Sample ID: 248519011

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8082  
Inst: ECD8A.I  
Analyst: JAOC  
Aliquot: 30.01 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
%Moisture: 14.6  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE36-10-8276  
Batch ID: 966420  
Run Date: 03/19/2010 17:28  
Prep Date: 03/18/2010 10:57  
Data File: 050f5001.d  
050b5001.d

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

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/031910.b/050f5001.d

Lab Smp Id: 248519011

Client Smp ID: RE36-10-8276

Inj Date : 19-MAR-2010 17:28

Operator : JAOC

Inst ID: ecd8a.i

Smp Info : |248519011|1|

Misc Info : |ECD82P\_1S|966420|SVA|LANL|SOIL|RE36-10-8276|||

Comment :

Method : /chem/ecd8a.i/031910.b/ECD8-F-8082-031810.m

Meth Date : 22-Mar-2010 08:33 jen01212 Quant Type: ESTD

Cal Date : 23-FEB-2010 11:32

Cal File: 017f1701.d

Als bottle: 50

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: 10-2199.sub

Target Version: 3.50

Sample Matrix: Soil

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.01000	Weight of sample extracted (g)
M	14.63520	% Moisture

Cpnd Variable

Local Compound Variable

CONCENTRATIONS

ON-COL FINAL

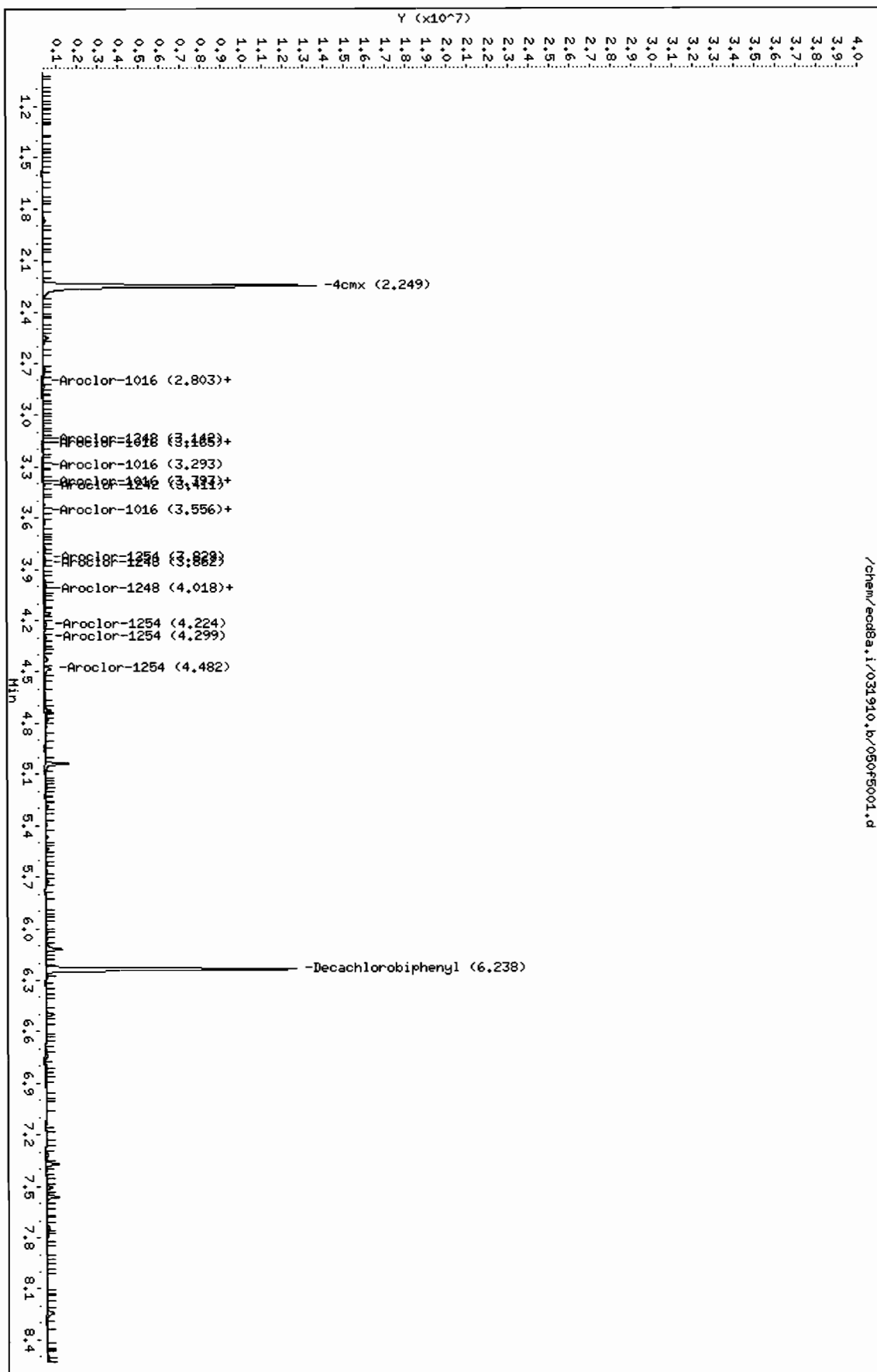
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====

\$ 11 4cmx					CAS #: 877-09-8	
2.249	2.248	0.001	15115772	120.964	4.7 80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3	
6.238	6.239	-0.001	11088210	134.646	5.2 80.00- 120.00	100.00

Data File: /chem/ecdb8a.i/031910.b/050f5001.d  
Date: 19-MAR-2010 17:28  
Client ID: RE36-10-8276  
Sample Info: 124851901111  
Volume Injected (uL): 1.0  
Column phase: CLP1

Instrument: ecdb8a.i  
Operator: JHOC  
Column diameter: 0.25





GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL  
Data file : /chem/ecd8a.i/031910.b/050b5001.d  
Lab Smp Id: 248519011 Client Smp ID: RE36-10-8276  
Inj Date : 19-MAR-2010 17:28  
Operator : JAOC Inst ID: ecd8a.i  
Smp Info : |248519011|1|  
Misc Info : |ECD82P\_1S|966420|SVA|LANL|SOIL|RE36-10-8276|||  
Comment :  
Method : /chem/ecd8a.i/031910.b/ECD8-B-8082-031810.m  
Meth Date : 22-Mar-2010 07:51 jen01212 Quant Type: ESTD  
Cal Date : 23-FEB-2010 11:32 Cal File: 017b1701.d  
Als bottle: 50  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-2199.sub  
Target Version: 3.50 Sample Matrix: Soil

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

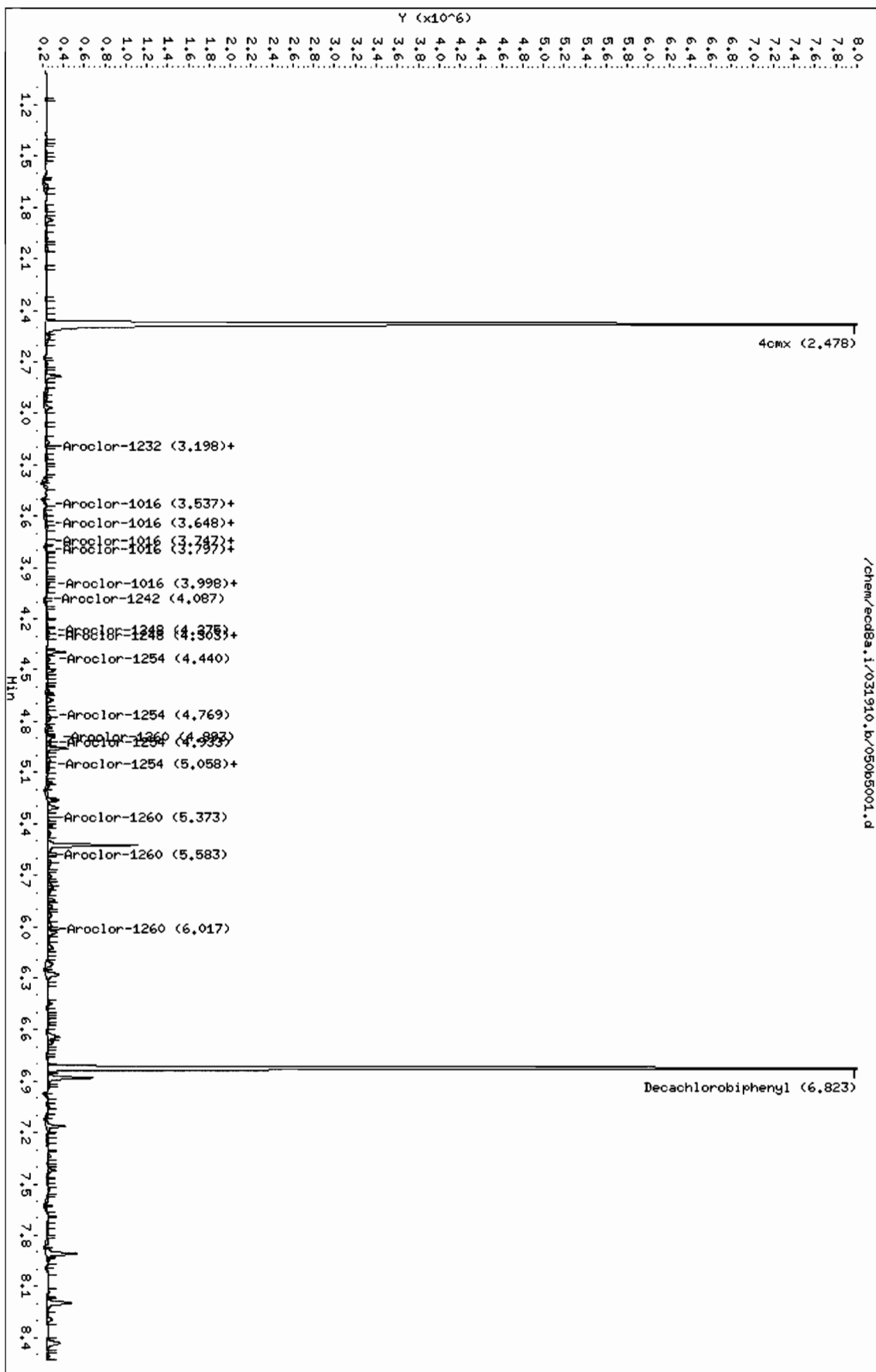
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.01000	Weight of sample extracted (g)
M	14.63520	% Moisture

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	
2.478	2.477	0.001	10338795	123.696	4.8 80.00- 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3	
6.823	6.824	-0.001	8516814	143.738	5.6 80.00- 120.00	100.00
-----						

Data File: /chem/ecdb8a.i/031910.b/050b5001.d  
 Date : 19-MAR-2010 17:28  
 Client ID: RE36-10-8276  
 Sample Info: 124851901111  
 Volume Injected (uL): 1.0  
 Column phase: CLP2

Instrument: ecdb8a.i  
 Operator: JADC  
 Column diameter: 0.25



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

Page 1 of 1

SDG Number: 10-2199  
Lab Sample ID: 248519003

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8082  
Inst: ECD8A.I  
Analyst: JAOC  
Aliquot: 30 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
%Moisture: 25.4  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE36-10-8277  
Batch ID: 966420  
Run Date: 03/19/2010 15:20  
Prep Date: 03/18/2010 10:57  
Data File: 040f4001.d  
040b4001.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.47	ug/kg	1.49	4.47	1
11104-28-2	Aroclor-1221	U	4.47	ug/kg	1.49	4.47	1
11141-16-5	Aroclor-1232	U	4.47	ug/kg	1.49	4.47	1
53469-21-9	Aroclor-1242	U	4.47	ug/kg	1.49	4.47	1
12672-29-6	Aroclor-1248	U	4.47	ug/kg	1.49	4.47	1
11097-69-1	Aroclor-1254	U	4.47	ug/kg	1.49	4.47	1
11096-82-5	Aroclor-1260	U	4.47	ug/kg	1.49	4.47	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/031910.b/040f4001.d

Lab Smp Id: 248519003

Client Smp ID: RE36-10-8277

Inj Date : 19-MAR-2010 15:20

Operator : JAOC

Inst ID: ecd8a.i

Smp Info : |248519003|1|

Misc Info : |ECD82P\_1S|966420|SVA|LANL|SOIL|RE36-10-8277|||

Comment :

Method : /chem/ecd8a.i/031910.b/ECD8-F-8082-031810.m

Meth Date : 22-Mar-2010 08:33 jen01212 Quant Type: ESTD

Cal Date : 23-FEB-2010 11:32

Cal File: 017f1701.d

Als bottle: 40

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: 10-2199.sub

Target Version: 3.50

Sample Matrix: Soil

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	25.40910	% Moisture

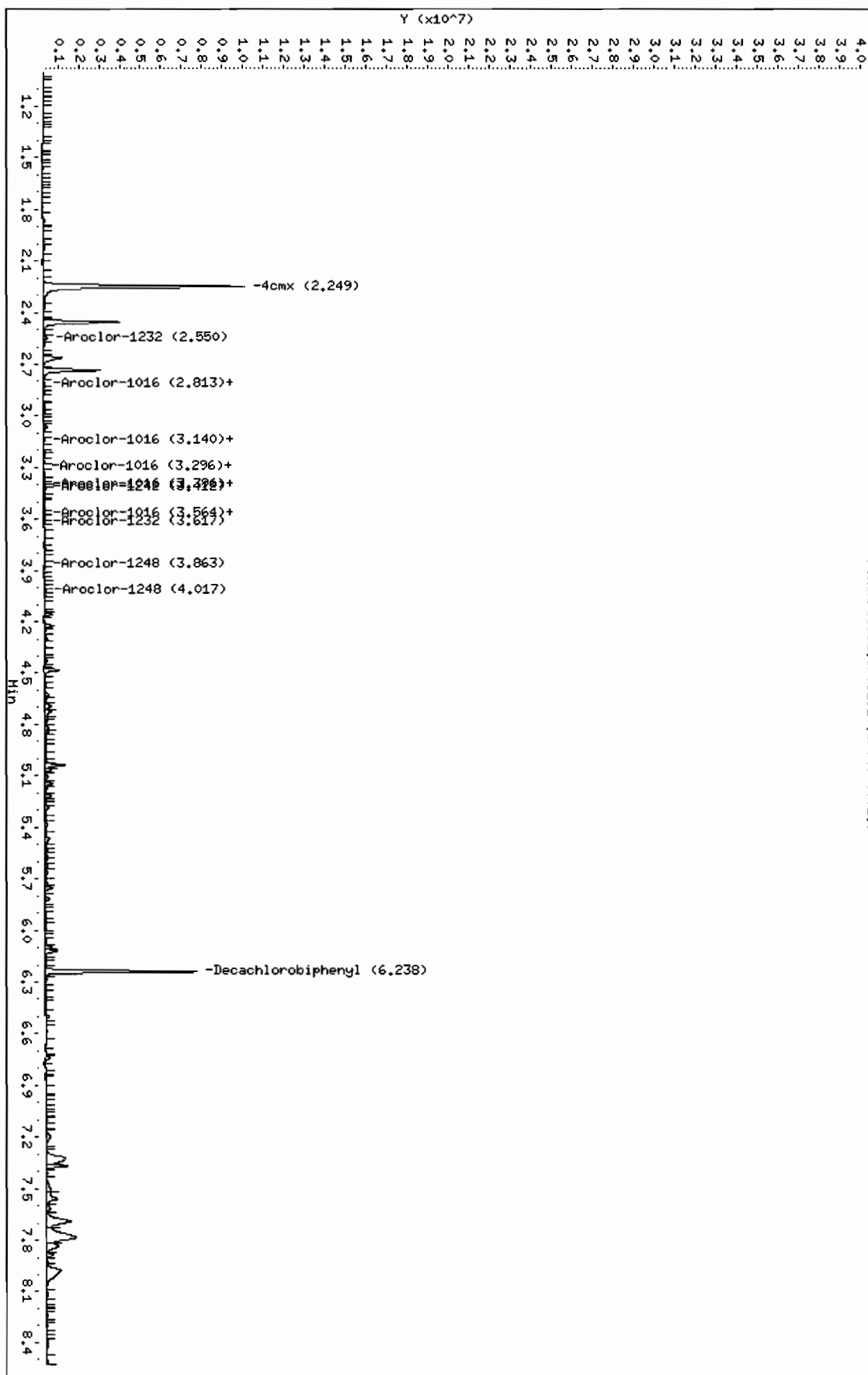
Cpnd Variable Local Compound Variable

CONCENTRATIONS						
			ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
\$ 11 4cmx				CAS #: 877-09-8		
2.249	2.248	0.001	10963314 87.7336	3.9	80.00- 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3		
6.238	6.239	-0.001	6522436 79.2028	3.5	80.00- 120.00	100.00
-----						

Data File: /chem/ecdb8a.i/031910.b/040f4001.d  
Date : 19-MAR-2010 15:20  
Client ID: RE36-10-8277  
Sample Info: 1248519003141  
Volume Injected (uL): 1.0  
Column phase: CLP1

Instrument: ecdb8a.i  
Operator: JADG  
Column diameter: 0.25

/chem/ecdb8a.i/031910.b/040f4001.d



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL  
Data file : /chem/ecd8a.i/031910.b/040b4001.d  
Lab Smp Id: 248519003 Client Smp ID: RE36-10-8277  
Inj Date : 19-MAR-2010 15:20  
Operator : JAOC Inst ID: ecd8a.i  
Smp Info : |248519003|1|  
Misc Info : |ECD82P\_1S|966420|SVA|LANL|SOIL|RE36-10-8277|||  
Comment :  
Method : /chem/ecd8a.i/031910.b/ECD8-B-8082-031810.m  
Meth Date : 22-Mar-2010 07:51 jen01212 Quant Type: ESTD  
Cal Date : 23-FEB-2010 11:32 Cal File: 017b1701.d  
Als bottle: 40  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-2199.sub  
Target Version: 3.50 Sample Matrix: Soil

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

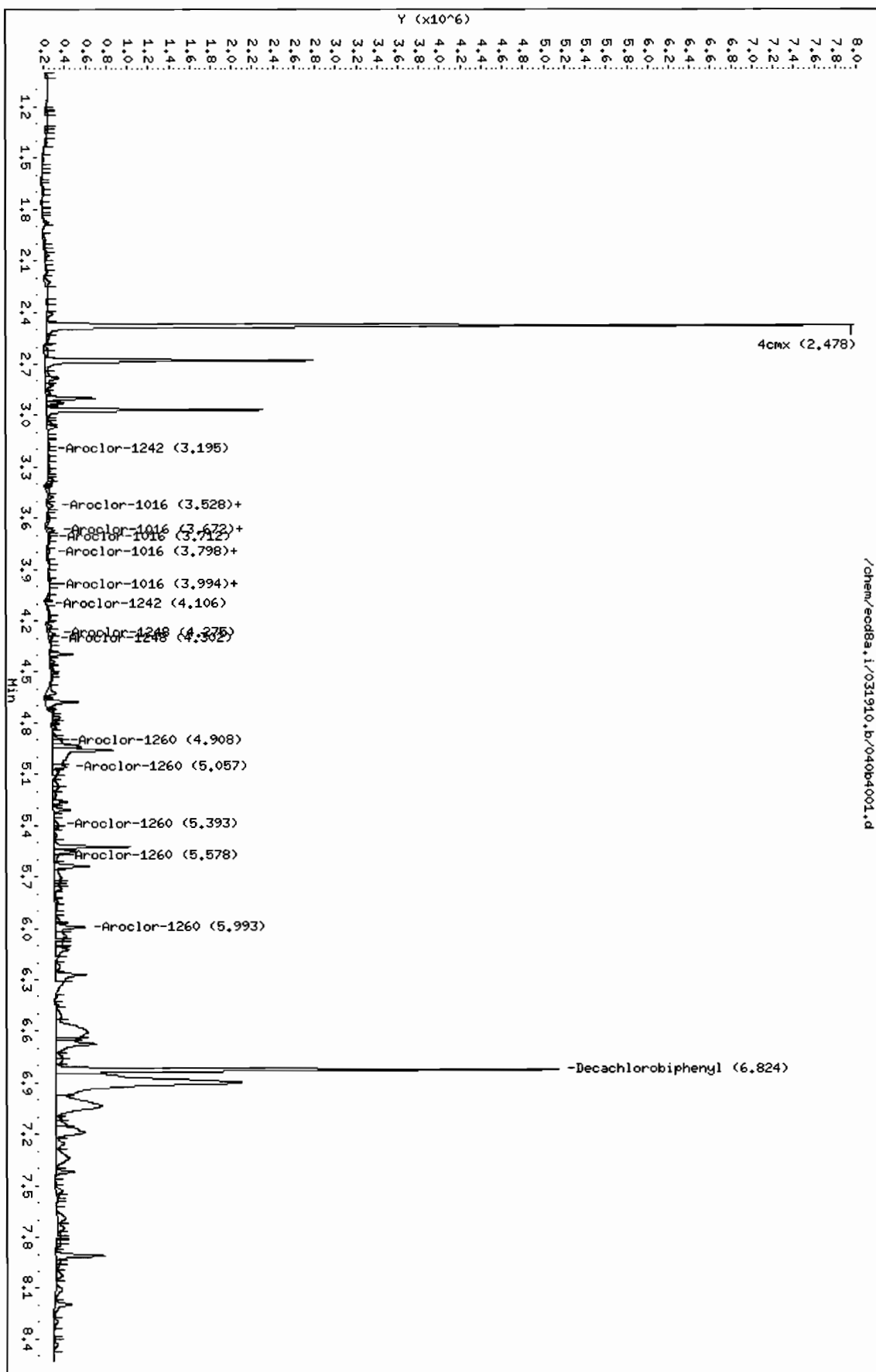
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	25.40910	% Moisture

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	
2.478	2.477	0.001	7163610 85.7075	3.8	80.00- 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3	
6.824	6.824	0.000	4558450 76.9326	3.4	80.00- 120.00	100.00
-----						

Data File: /chem/ecdb8a,i/031910,b/040b4001.d  
Date : 19-MAR-2010 15:20  
Client ID: RE36-10-8277  
Sample Info: 124851900311  
Volume Injected (uL): 1.0  
Column phase: CLP2

Instrument: ecdb8a,i  
Operator: JADC  
Column diameter: 0.25



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

SDG Number: 10-2199  
Lab Sample ID: 248519005

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8082  
Inst: ECD8A.I  
Analyst: JAOC  
Aliquot: 30.03 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
%Moisture: 6.4  
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	3.56	ug/kg	1.18	3.56	1
11104-28-2	Aroclor-1221	U	3.56	ug/kg	1.18	3.56	1
11141-16-5	Aroclor-1232	U	3.56	ug/kg	1.18	3.56	1
53469-21-9	Aroclor-1242	U	3.56	ug/kg	1.18	3.56	1
12672-29-6	Aroclor-1248	U	3.56	ug/kg	1.18	3.56	1
11097-69-1	Aroclor-1254	U	3.56	ug/kg	1.18	3.56	1
11096-82-5	Aroclor-1260	U	3.56	ug/kg	1.18	3.56	1



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/031910.b/042f4201.d

Lab Smp Id: 248519005

Client Smp ID: RE36-10-8278

Inj Date : 19-MAR-2010 15:45

Operator : JAOC

Inst ID: ecd8a.i

Smp Info : |248519005|1|

Misc Info : |ECD82P\_1S|966420|SVA|LANL|SOIL|RE36-10-8278|||

Comment :

Method : /chem/ecd8a.i/031910.b/ECD8-F-8082-031810.m

Meth Date : 22-Mar-2010 08:33 jen01212 Quant Type: ESTD

Cal Date : 23-FEB-2010 11:32

Cal File: 017f1701.d

Als bottle: 42

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: 10-2199.sub

Target Version: 3.50

Sample Matrix: Soil

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.03000	Weight of sample extracted (g)
M	6.35440	% Moisture

Cpnd Variable

Local Compound Variable

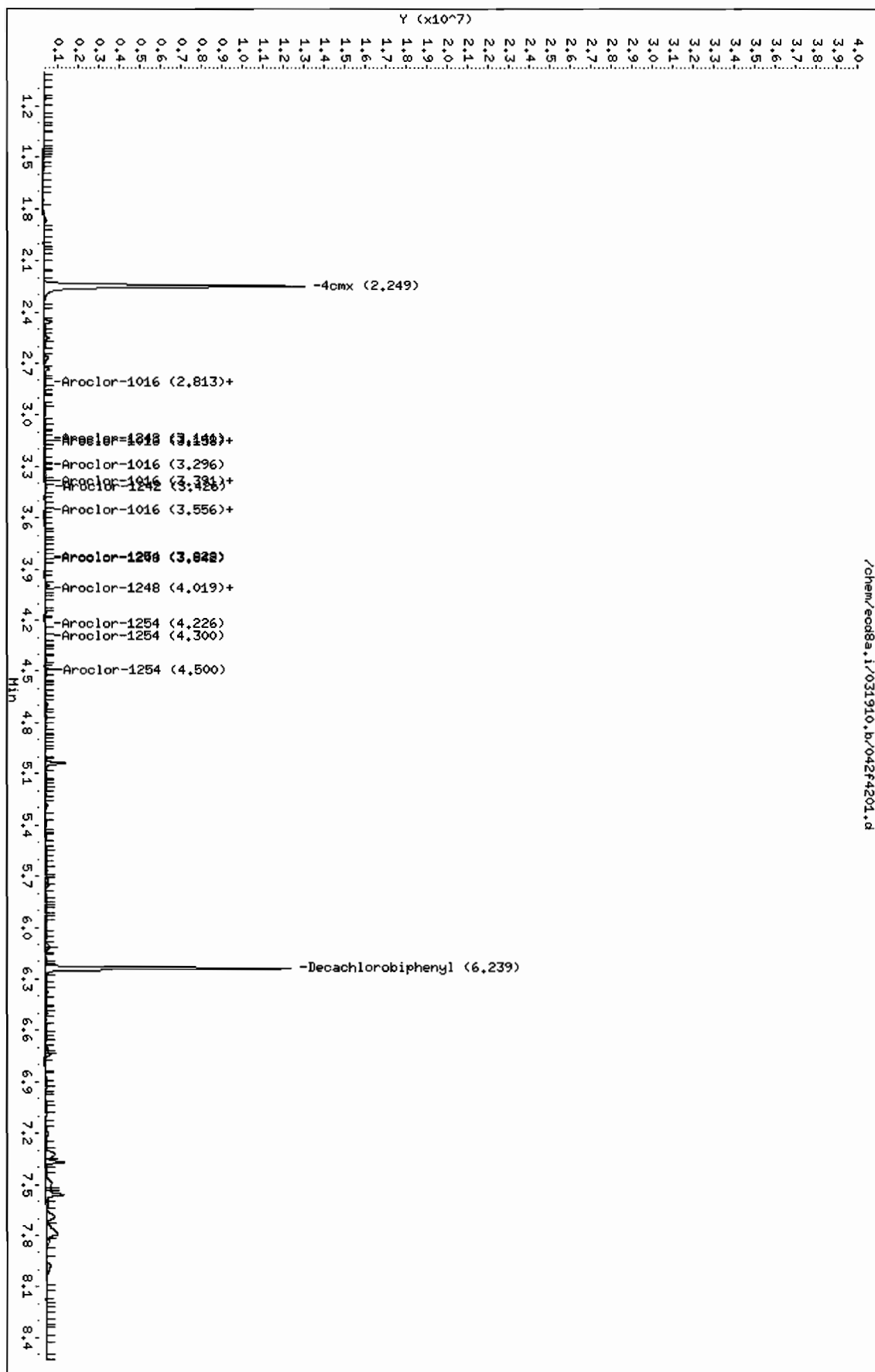
CONCENTRATIONS

ON-COL FINAL

RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
\$ 11 4cmx			CAS #: 877-09-8			
2.249	2.248	0.001	14080210	112.676	4.0 80.00- 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl			CAS #: 2051-24-3			
6.239	6.239	0.000	10569266	128.344	4.6 80.00- 120.00	100.00
-----						

Data File: /chem/ecod8a.i/031910.b/042f4201.d  
Date : 19-MAR-2010 15:45  
Client ID: RE36-10-8278  
Sample Info: 124851900511  
Volume Injected (uL): 1.0  
Column phase: CLP1

Instrument: ecod8a.i  
Operator: JHOC  
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL  
Data file : /chem/ecd8a.i/031910.b/042b4201.d  
Lab Smp Id: 248519005 Client Smp ID: RE36-10-8278  
Inj Date : 19-MAR-2010 15:45  
Operator : JAOC Inst ID: ecd8a.i  
Smp Info : |248519005|1|  
Misc Info : |ECD82P\_1S|966420|SVA|LANL|SOIL|RE36-10-8278|||  
Comment :  
Method : /chem/ecd8a.i/031910.b/ECD8-B-8082-031810.m  
Meth Date : 22-Mar-2010 07:51 jen01212 Quant Type: ESTD  
Cal Date : 23-FEB-2010 11:32 Cal File: 017b1701.d  
Als bottle: 42  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-2199.sub  
Target Version: 3.50 Sample Matrix: Soil

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

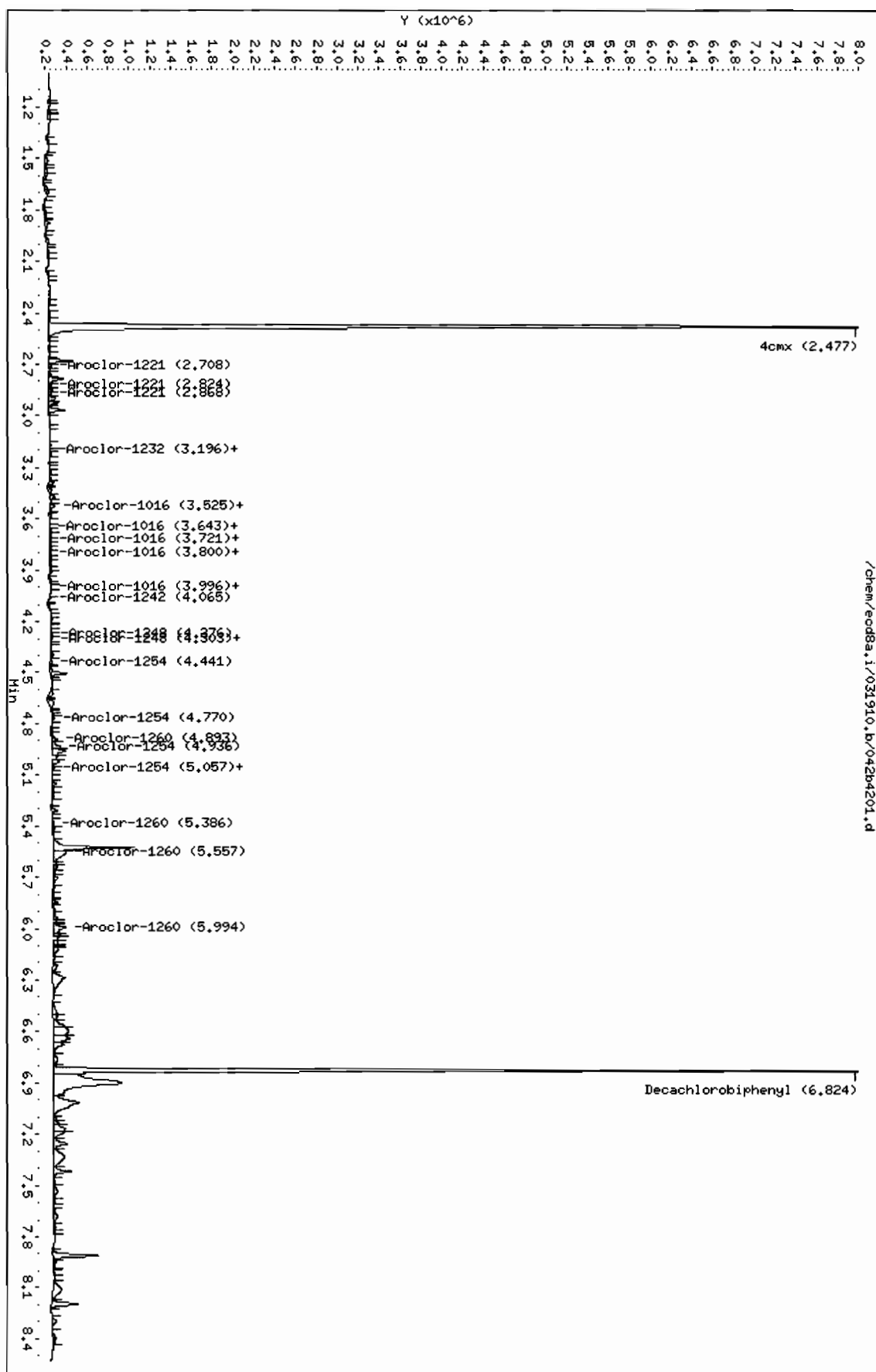
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.03000	Weight of sample extracted (g)
M	6.35440	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS						
			ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
CAS #: 877-09-8						
\$ 11 4cmx	2.477	2.477	0.000	9676815 115.776	4.1 80.00- 120.00	100.00
-----						
CAS #: 2051-24-3						
\$ 12 Decachlorobiphenyl	6.824	6.824	0.000	7402780 124.936	4.4 80.00- 120.00	100.00
-----						

Data File: /chem/ecod8a.i/031910.b/042p4201.d  
Date : 19-MAR-2010 15:45  
Client ID: RE36-10-8278  
Sample Info: 124851900511  
Volume Injected (uL): 1.0  
Column Phase: CLP2

Instrument: ecod8a.i  
Operator: JAC  
Column diameter: 0.25



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

Page 1 of 1

**SDG Number:** 10-2199  
**Lab Sample ID:** 248519002

**Date Collected:** 02/25/2010 12:00  
**Date Received:** 03/03/2010 08:50  
**Client:** LANL010  
**Method:** SW846 8082  
**Inst:** ECD8A.I  
**Analyst:** JAOC  
**Aliquot:** 30.12 g  
**Column:** 1 CLP1  
2 CLP2

**Matrix:** R  
**% Moisture:** 7.1  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-040  
**Dilution:** 1  
**Inj. Vol:** 1 uL  
**Final Volume:** 1 mL  
**Level:** LOW

**Client ID:** RE36-10-8279  
**Batch ID:** 967817  
**Run Date:** 03/23/2010 11:27  
**Prep Date:** 03/22/2010 21:20  
**Data File:** 017f1701.d  
017b1701.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.57	ug/kg	1.19	3.57	1
11104-28-2	Aroclor-1221	U	3.57	ug/kg	1.19	3.57	1
11141-16-5	Aroclor-1232	U	3.57	ug/kg	1.19	3.57	1
53469-21-9	Aroclor-1242	U	3.57	ug/kg	1.19	3.57	1
12672-29-6	Aroclor-1248	U	3.57	ug/kg	1.19	3.57	1
11097-69-1	Aroclor-1254		31.5	ug/kg	1.19	3.57	2
11096-82-5	Aroclor-1260		17.6	ug/kg	1.19	3.57	2

Data File: /chem/ecd8a.i/032310.b/017f1701.d  
Report Date: 23-Mar-2010 15:04

Page 1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/032310.b/017f1701.d  
Lab Smp Id: 248519002 Client Smp ID: RE36-10-8279  
Inj Date : 23-MAR-2010 11:27  
Operator : JAOC Inst ID: ecd8a.i  
Smp Info : |248519002|1|  
Misc Info : |ECD82P\_1S|967817|SVA|LANL|SOIL|RE36-10-8279|||  
Comment :  
Method : /chem/ecd8a.i/032310.b/ECD8-F-8082-031810.m  
Meth Date : 23-Mar-2010 14:48 jen01212 Quant Type: ESTD  
Cal Date : 23-FEB-2010 11:32 Cal File: 017f1701.d  
Als bottle: 17  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-2199.sub  
Target Version: 3.50 Sample Matrix: Soil

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.12000	Weight of sample extracted (g)
M	7.10180	% 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							
2.249	2.248	0.001	8305803 66.4669	2.4	80.00- 120.00	100.00	
CAS #: 2051-24-3							
6.238	6.240	-0.002	6244965 75.8335	2.7	80.00- 120.00	100.00 (M)	
CAS #: 11097-69-1							
3.829	3.830	-0.001	1755305 405.012	14.5	80.00- 120.00	100.00 (M)	
4.016	4.017	-0.001	3325695 576.723	20.6	114.64- 154.64	189.47	
4.211	4.213	-0.002	3135235 703.200	25.1	84.93- 124.93	178.61	
4.297	4.300	-0.003	5280587 702.062	25.1	156.79- 196.79	300.84	
4.494	4.496	-0.002	5265150 915.805	32.7	114.19- 154.19	299.96	
Average of Peak Concentrations =				23.6			

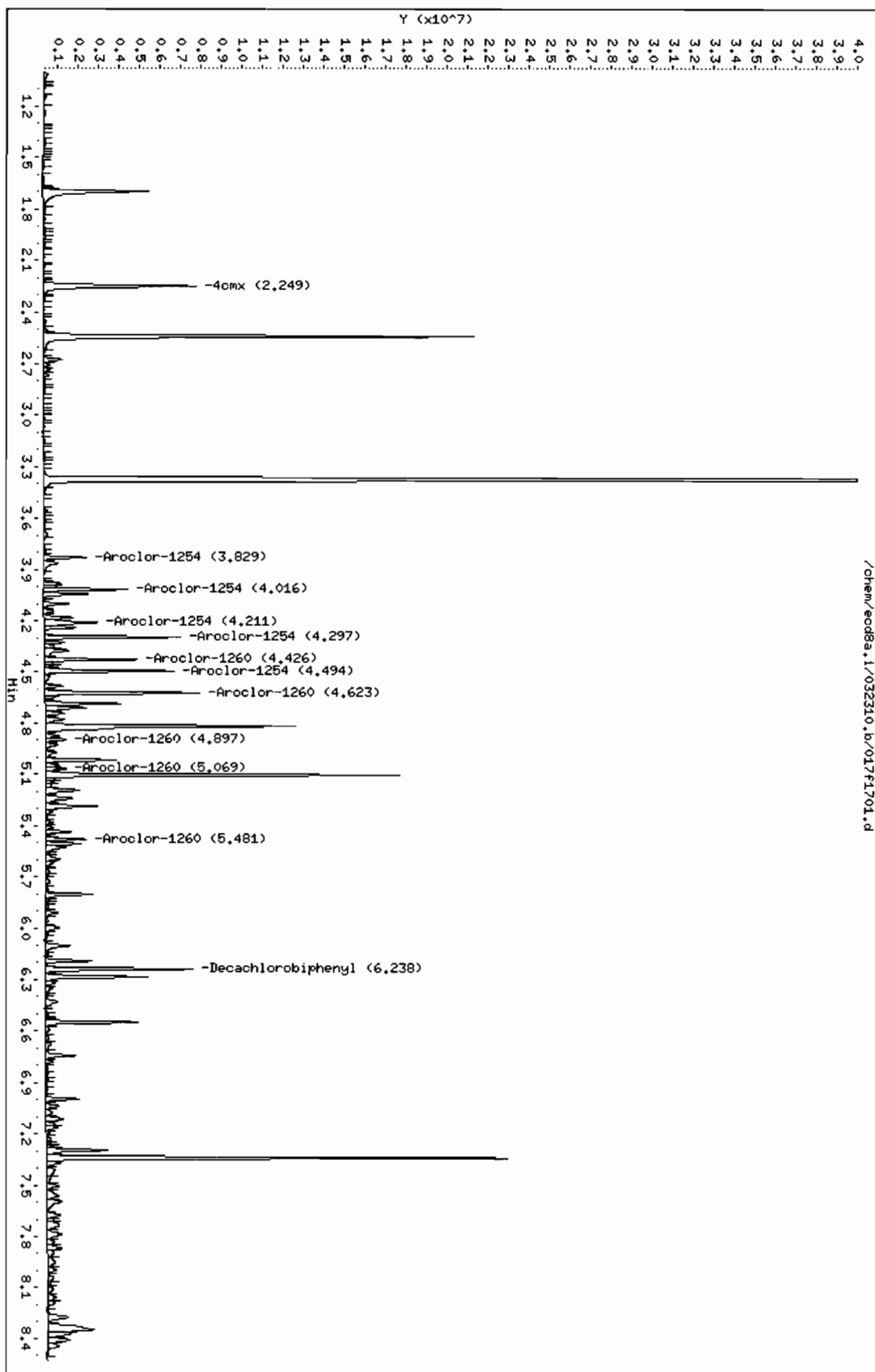
CONCENTRATIONS									
			ON-COL		FINAL				
RT	EXP RT	DLT RT	RESPONSE ( ug/L)		(ug/Kg)		TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	=====	=====	=====
7 Aroclor-1260					CAS #: 11096-82-5				
4.426	4.429	-0.003	3673308	623.645	22.3	80.00-	120.00	100.00	(M)
4.623	4.625	-0.002	6603111	777.268	27.8	127.89-	167.89	179.76	
4.897	4.900	-0.003	942255	185.986	6.6	67.46-	107.46	25.65	
5.069	5.072	-0.003	908845	170.546	6.1	74.45-	114.45	24.74	
5.481	5.483	-0.002	1708056	302.794	10.8	83.28-	123.28	46.50	
Average of Peak Concentrations =					14.7				

QC Flag Legend

M - Compound response manually integrated.

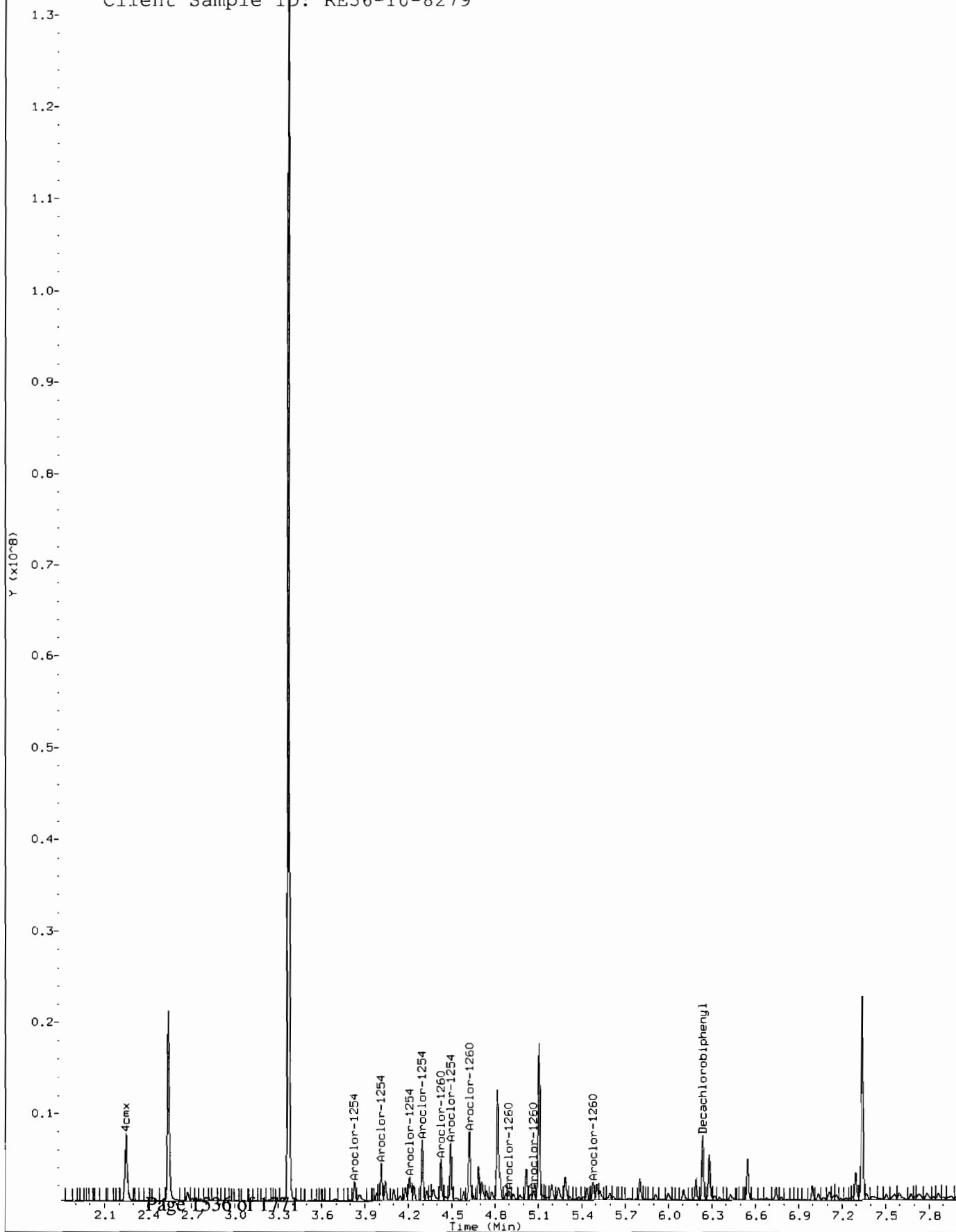
Data File: /chem/ecdb8a.i/032310.b/017f1701.d  
Date: 23-MAR-2010 11:27  
Client ID: RE36-10-8279  
Sample Info: 1248519002141  
Volume Injected (uL): 1.0  
Column phase: CLP1

Instrument: ecdb8a.i  
Operator: JAOC  
Column diameter: 0.25

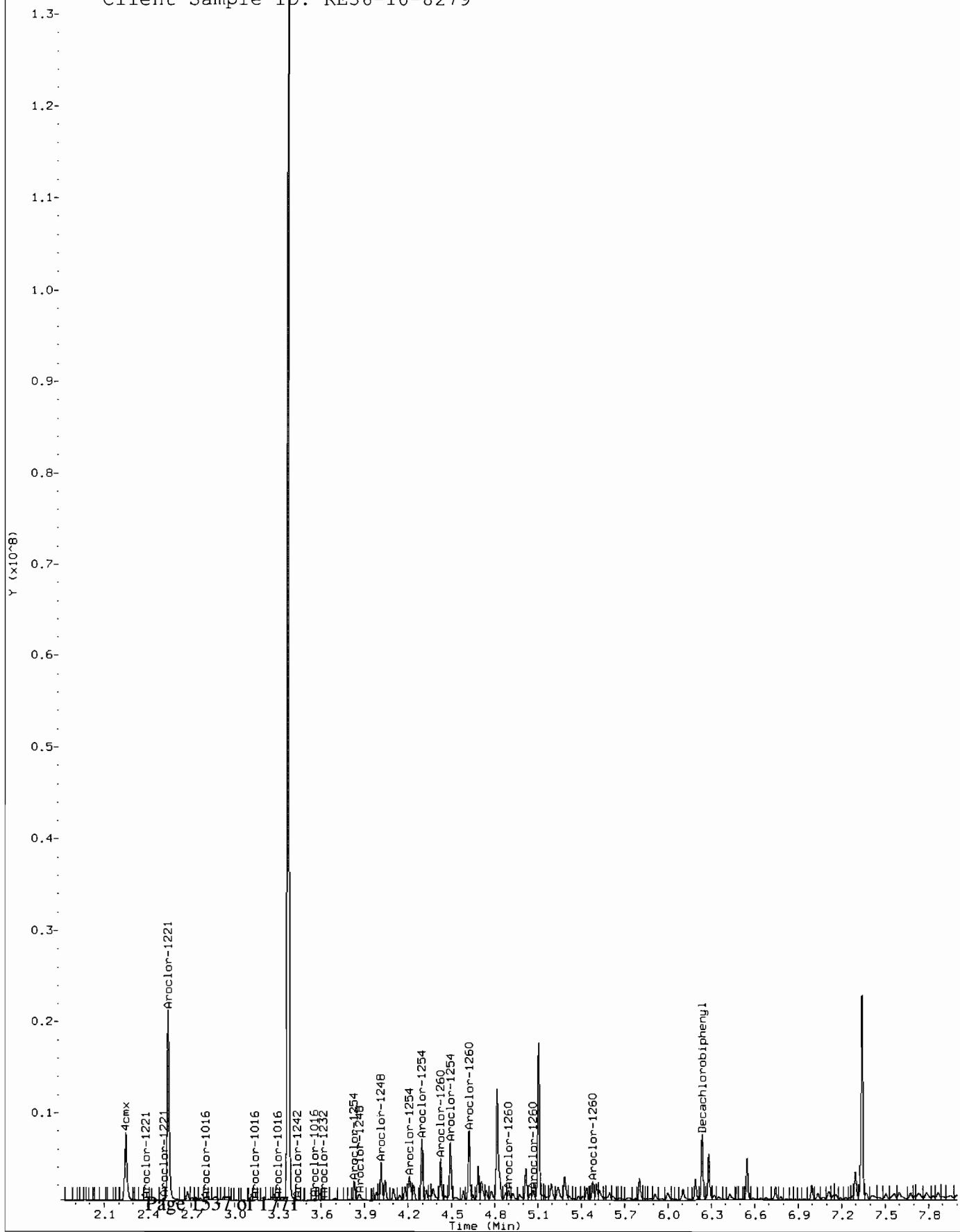




Comment: Manually Integrated  
Data File: /chem/ecd8a.i/032310.b/017f1701.d  
Operator: JAOC  
Injection Date: 23-MAR-2010 11:27  
Instrument: ecd8a.i  
Client Sample ID: RE36-10-8279



Comment: Before manual integration  
Data File: /chem/ecd8a.i/032310.b/orig-017f1701.d  
Operator: JAOC  
Injection Date: 23-MAR-2010 11:27  
Instrument: ecd8a.i  
Client Sample ID: RE36-10-8279



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL  
 Data file : /chem/ecd8a.i/032310.b/017b1701.d  
 Lab Smp Id: 248519002 Client Smp ID: RE36-10-8279  
 Inj Date : 23-MAR-2010 11:27  
 Operator : JAOC Inst ID: ecd8a.i  
 Smp Info : |248519002|1|  
 Misc Info : |ECD82P\_1S|967817|SVA|LANL|SOIL|RE36-10-8279|||  
 Comment :  
 Method : /chem/ecd8a.i/032310.b/ECD8-B-8082-031810.m  
 Meth Date : 23-Mar-2010 14:47 jen01212 Quant Type: ESTD  
 Cal Date : 23-FEB-2010 11:32 Cal File: 017b1701.d  
 Als bottle: 17  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: 10-2199.sub  
 Target Version: 3.50 Sample Matrix: Soil

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.12000	Weight of sample extracted (g)
M	7.10180	% 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	
2.477	2.476	0.001	5562630	66.5529	2.4 80.00- 120.00	100.00
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3	
6.822	6.824	-0.002	4982576	84.0906	3.0 80.00- 120.00	100.00(M)
6 Aroclor-1254					CAS #: 11097-69-1	
4.301	4.301	0.000	1270297	407.583	14.6 80.00- 120.00	100.00(M)
4.440	4.440	0.000	2280467	655.657	23.4 91.97- 131.97	179.52
4.768	4.769	-0.001	4205177	870.270	31.1 138.62- 178.62	331.04
4.931	4.931	0.000	3000850	858.845	30.7 93.56- 133.56	236.23
5.056	5.057	-0.001	3555829	1615.04	57.7 51.06- 91.06	279.92
Average of Peak Concentrations =				31.5		

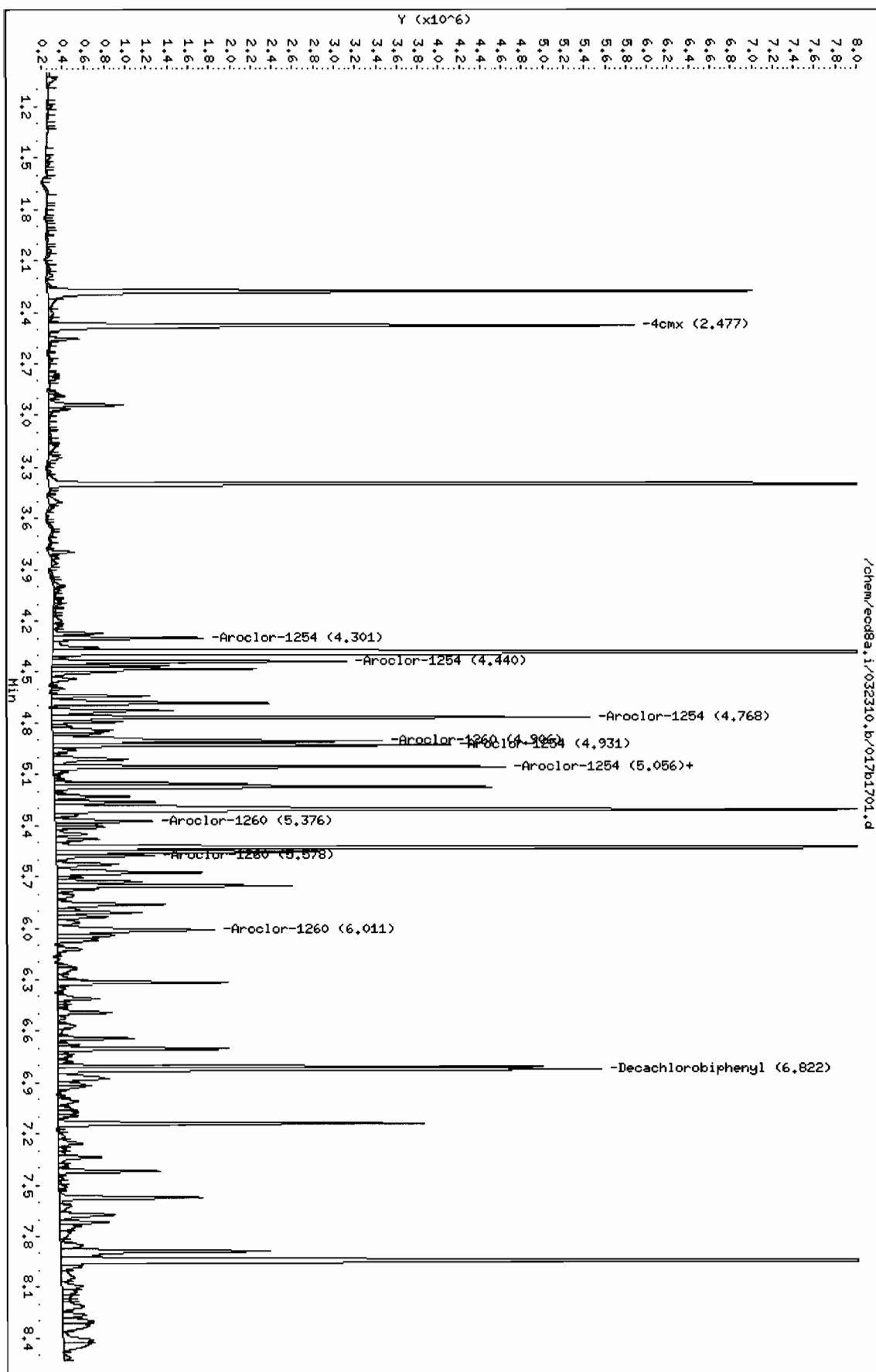
CONCENTRATIONS									
			ON-COL		FINAL				
RT	EXP RT	DLT RT	RT	RESPONSE	( ug/L)	(ug/Kg)	TARGET	RANGE	RATIO
==	=====	=====		=====	=====	=====	=====	=====	=====
7 Aroclor-1260						CAS #: 11096-82-5			
4.906	4.907	-0.001		3287991	834.832	29.8	80.00-	120.00	100.00 (M)
5.056	5.056	0.000		3555829	751.685	26.9	102.06-	142.06	108.15
5.376	5.373	0.003		1062040	296.109	10.6	71.87-	111.87	32.30
5.578	5.580	-0.002		881863	237.556	8.5	75.74-	115.74	26.82
6.011	6.011	0.000		2001011	342.561	12.2	133.68-	173.68	60.86
Average of Peak Concentrations =						17.6			

#### QC Flag Legend

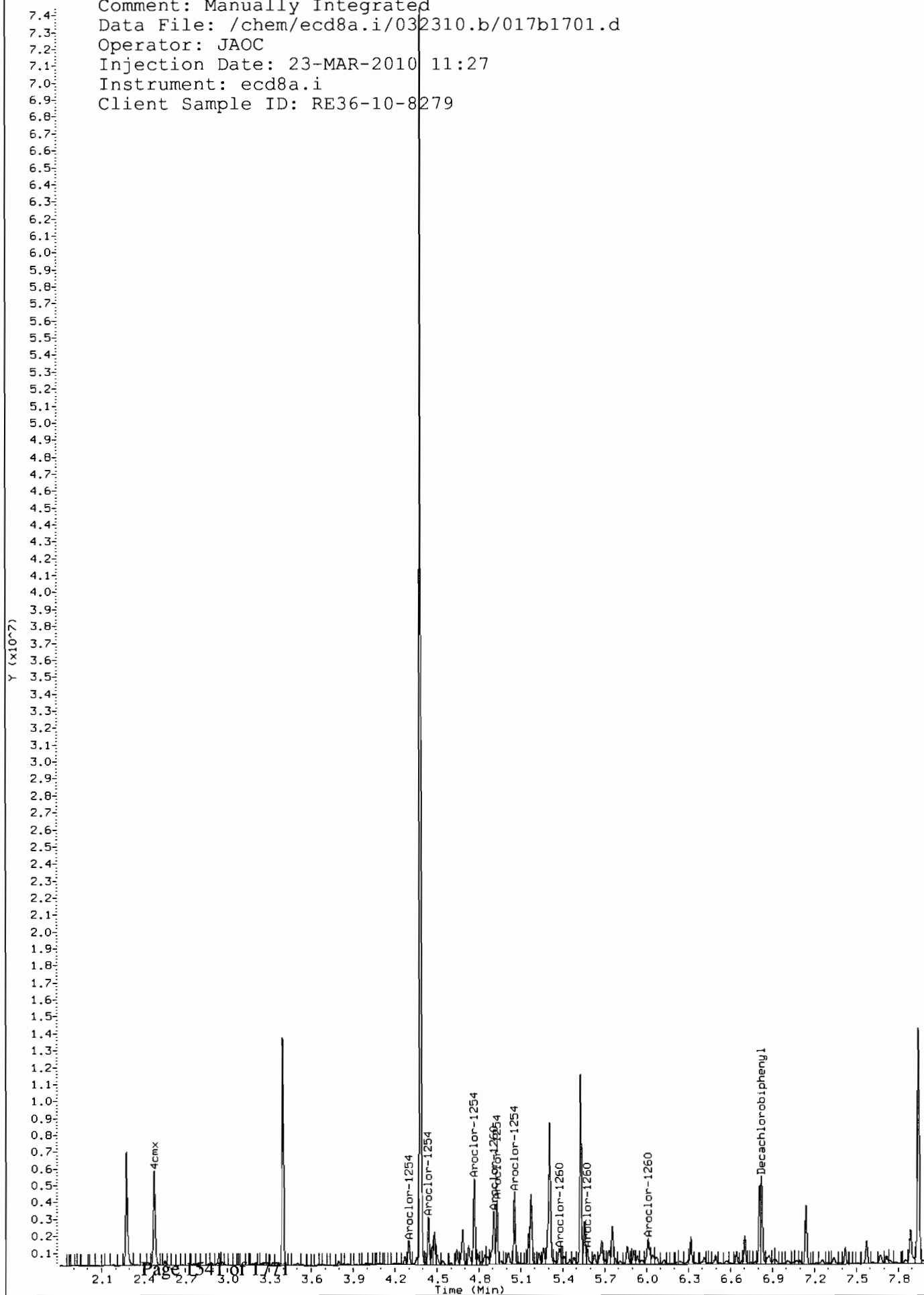
M - Compound response manually integrated.

Data File: /chem/ecod8a.i/032310.b/017b1701.d  
Date: 23-MAR-2010 11:27  
Client ID: RE36-10-8279  
Sample Info: 124851900211  
Volume Injected (uL): 1.0  
Column phase: CLP2

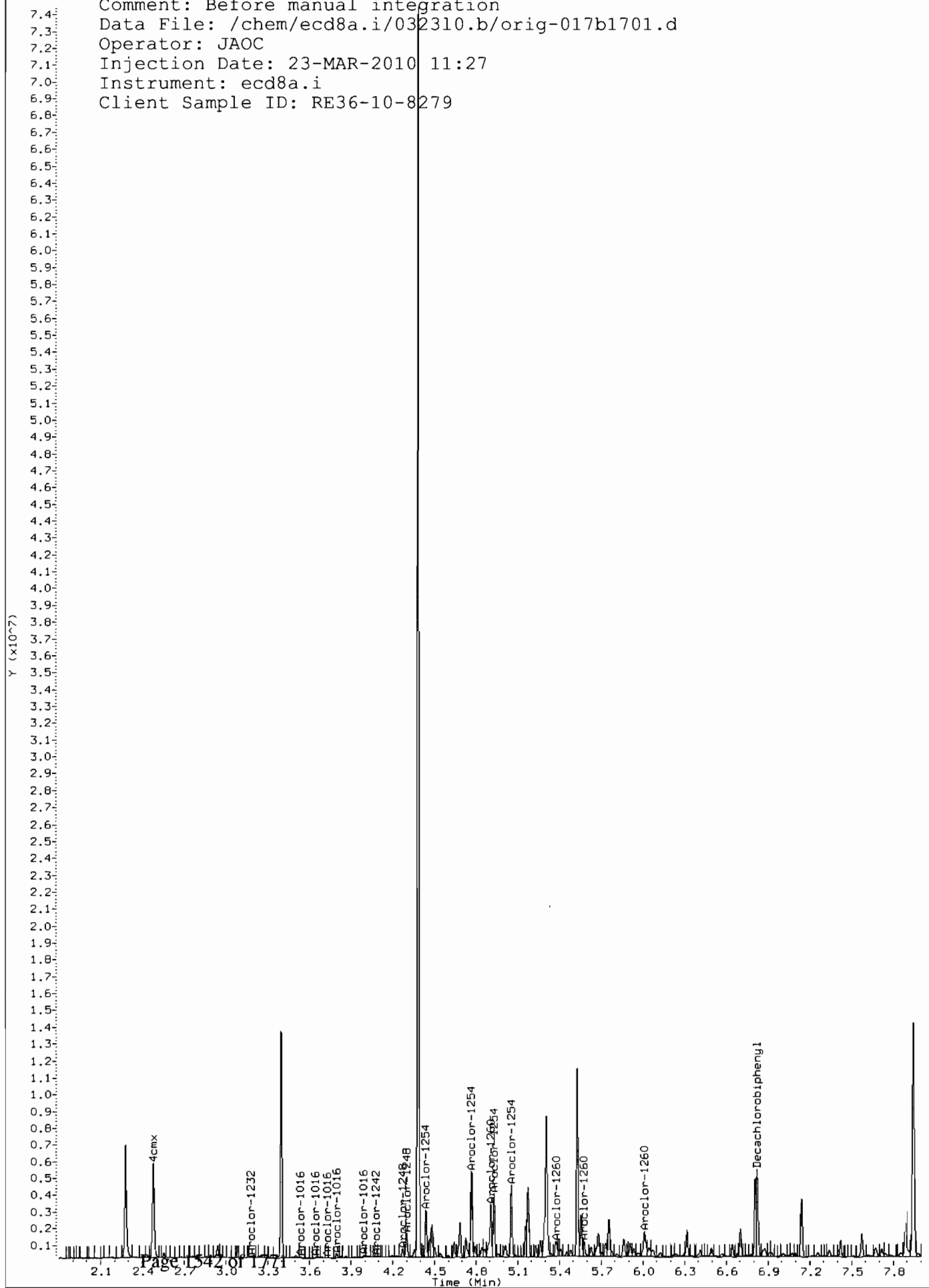
Instrument: ecod8a.i  
Operator: JHOC  
Column diameter: 0.25



Comment: Manually Integrated  
Data File: /chem/ecd8a.i/032310.b/017b1701.d  
Operator: JAOC  
Injection Date: 23-MAR-2010 11:27  
Instrument: ecd8a.i  
Client Sample ID: RE36-10-8279



Comment: Before manual integration  
Data File: /chem/ecd8a.i/032310.b/orig-017b1701.d  
Operator: JAOC  
Injection Date: 23-MAR-2010 11:27  
Instrument: ecd8a.i  
Client Sample ID: RE36-10-8279



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

SDG Number: 10-2199  
Lab Sample ID: 248519004

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8082  
Inst: ECD8A.I  
Analyst: JAOC  
Aliquot: 30.14 g  
Column: 1 CLP1  
2 CLP2

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

CAS No.	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		65.5	ug/kg	1.22	3.66	2
11096-82-5	Aroclor-1260		36.9	ug/kg	1.22	3.66	2



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/032310.b/018f1801.d  
Lab Smp Id: 248519004 Client Smp ID: RE36-10-8280  
Inj Date : 23-MAR-2010 11:43  
Operator : JAOC Inst ID: ecd8a.i  
Smp Info : |248519004|1|  
Misc Info : |ECD82P\_1S|967817|SVA|LANL|SOIL|RE36-10-8280|||  
Comment :  
Method : /chem/ecd8a.i/032310.b/ECD8-F-8082-031810.m  
Meth Date : 23-Mar-2010 14:48 jen01212 Quant Type: ESTD  
Cal Date : 23-FEB-2010 11:32 Cal File: 017f1701.d  
Als bottle: 18  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-2199.sub  
Target Version: 3.50 Sample Matrix: Soil

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.14000	Weight of sample extracted (g)
M	9.45610	% 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							
2.248	2.248	0.000	14009394	112.110	4.1	80.00- 120.00	100.00 (M)
CAS #: 2051-24-3							
6.237	6.240	-0.003	11623390	141.144	5.2	80.00- 120.00	100.00 (M)
CAS #: 11097-69-1							
3.827	3.830	-0.003	2993476	690.702	25.3	80.00- 120.00	100.00 (M)
4.015	4.017	-0.002	6297435	1092.07	40.0	114.64- 154.64	210.37
4.210	4.213	-0.003	6452817	1447.30	53.0	84.93- 124.93	215.56
4.295	4.300	-0.005	10987270	1460.77	53.5	156.79- 196.79	367.04
4.492	4.496	-0.004	10897651	1895.51	69.4	114.19- 154.19	364.05
Average of Peak Concentrations =				48.2			

				CONCENTRATIONS					
				ON-COL	FINAL				
RT	EXP RT	DLT RT	RESPONSE	( ug/L)	(ug/Kg)	TARGET	RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	=====	=====	=====
7 Aroclor-1260					CAS #: 11096-82-5				
4.425	4.429	-0.004	6379812	1083.15	39.7	80.00-	120.00	100.00 (M)	
4.621	4.625	-0.004	13010977	1531.55	56.1	127.89-	167.89	203.94	
4.896	4.900	-0.004	1582483	312.357	11.4	67.46-	107.46	24.80	
5.066	5.072	-0.006	1974800	370.575	13.6	74.45-	114.45	30.95	
5.479	5.483	-0.004	3553281	629.905	23.1	83.28-	123.28	55.70	
Average of Peak Concentrations =					28.8				

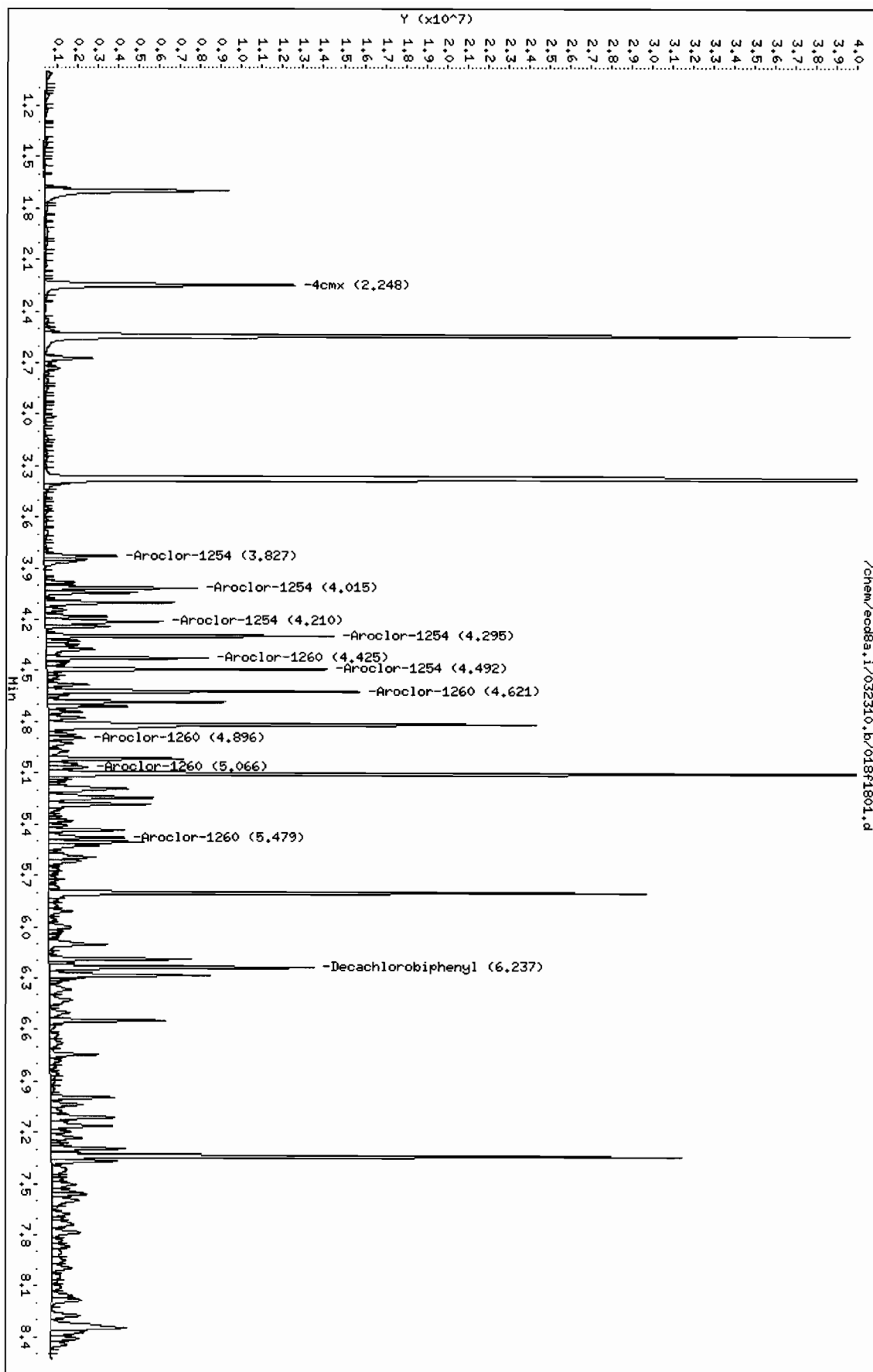
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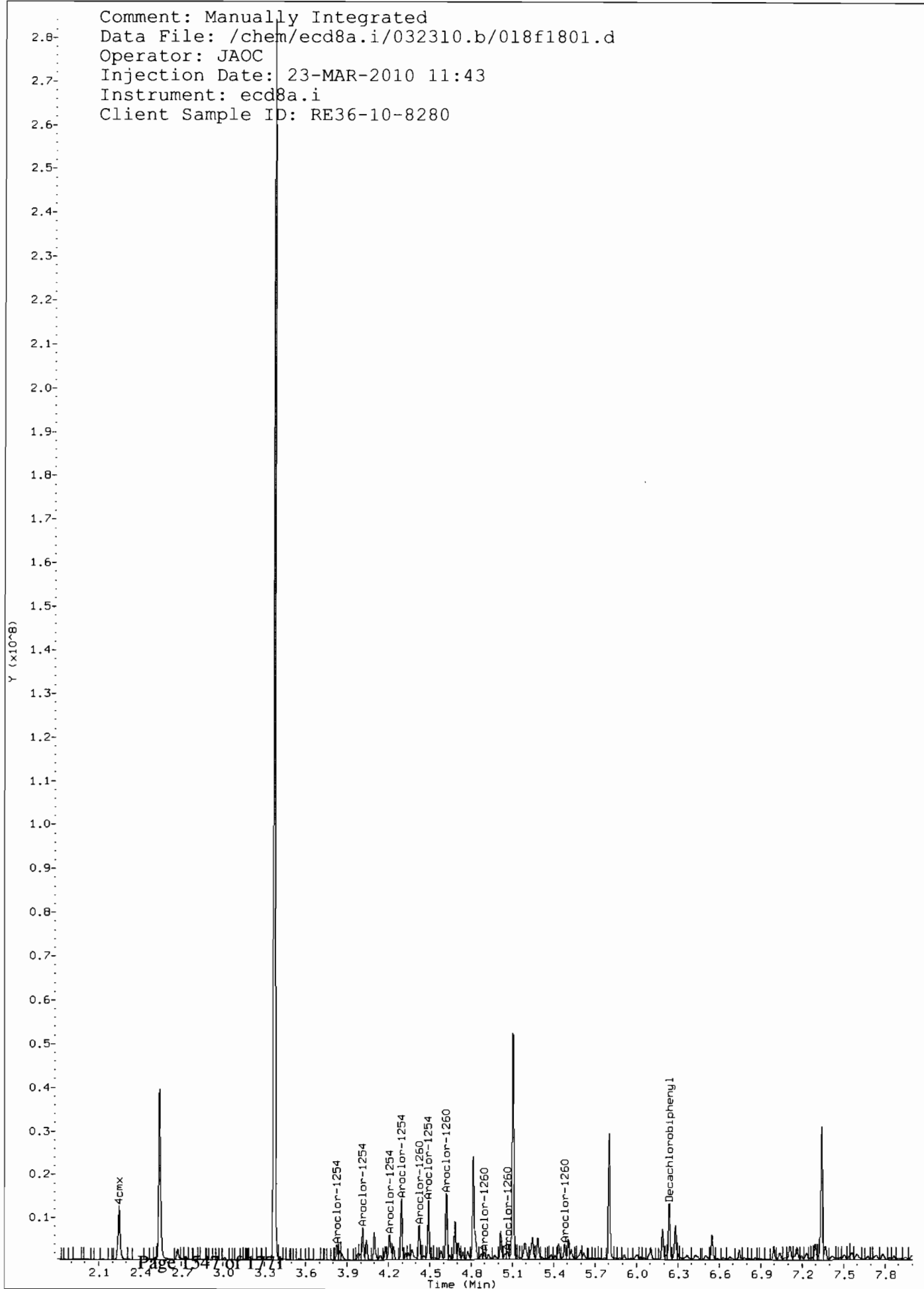
M - Compound response manually integrated.

Data File: /chem/ecod8a.i/032310.b/018f1801.d  
Date : 23-MAR-2010 11:43  
Client ID: RE36-10-8280  
Sample Info: 124851900411  
Volume Injected (uL): 1.0  
Column phase: CLP1

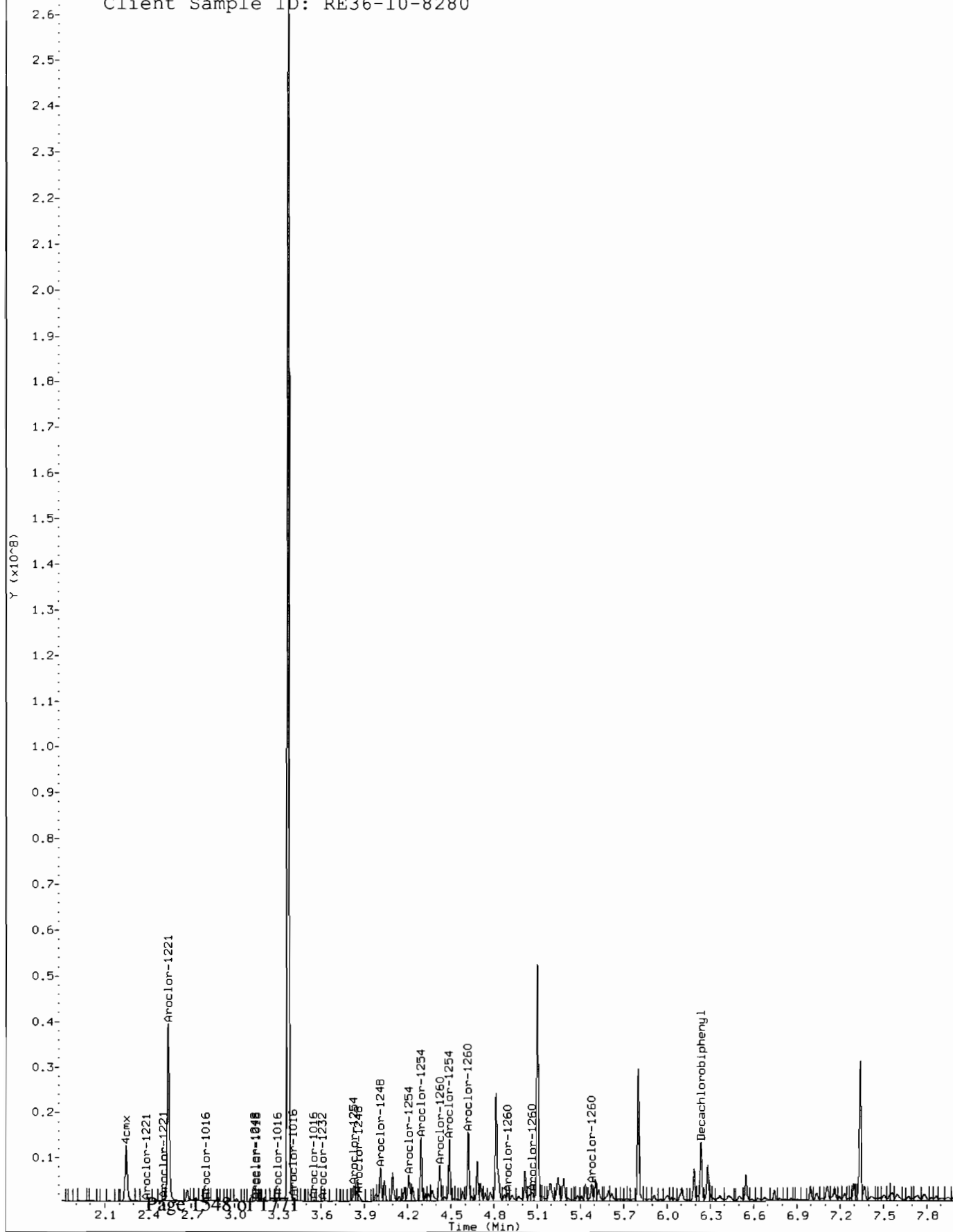
Instrument: ecod8a.i  
Operator: JHQC  
Column diameter: 0.25

Page 1



$\gamma \times 10^8$ 

Comment: Before manual integration  
Data File: /chem/ecd8a.i/032310.b/orig-018f1801.d  
Operator: JAOC  
Injection Date: 23-MAR-2010 11:43  
Instrument: ecd8a.i  
Client Sample ID: RE36-10-8280



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL  
 Data file : /chem/ecd8a.i/032310.b/018b1801.d  
 Lab Smp Id: 248519004 Client Smp ID: RE36-10-8280  
 Inj Date : 23-MAR-2010 11:43  
 Operator : JAOC Inst ID: ecd8a.i  
 Smp Info : |248519004|1|  
 Misc Info : |ECD82P\_1S|967817|SVA|LANL|SOIL|RE36-10-8280|||  
 Comment :  
 Method : /chem/ecd8a.i/032310.b/ECD8-B-8082-031810.m  
 Meth Date : 23-Mar-2010 14:47 jen01212 Quant Type: ESTD  
 Cal Date : 23-FEB-2010 11:32 Cal File: 017b1701.d  
 Als bottle: 18  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: 10-2199.sub  
 Target Version: 3.50 Sample Matrix: Soil

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.14000	Weight of sample extracted (g)
M	9.45610	% 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			
2.476	2.476	0.000	9384474	112.279	4.1	80.00- 120.00	100.00
-----							
\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3			
6.822	6.824	-0.002	7810232	131.813	4.8	80.00- 120.00	100.00
-----							
6 Aroclor-1254				CAS #: 11097-69-1			
4.300	4.301	-0.001	2477959	795.069	29.1	80.00- 120.00	100.00
4.439	4.440	-0.001	4547969	1307.59	47.9	91.97- 131.97	183.54
4.766	4.769	-0.003	8169250	1690.64	62.0	138.62- 178.62	329.68
4.929	4.931	-0.002	6818469	1951.45	71.5	93.56- 133.56	275.16
5.055	5.057	-0.002	7044326	3199.50	117	51.06- 91.06	284.28
Average of Peak Concentrations =				65.5			
-----							

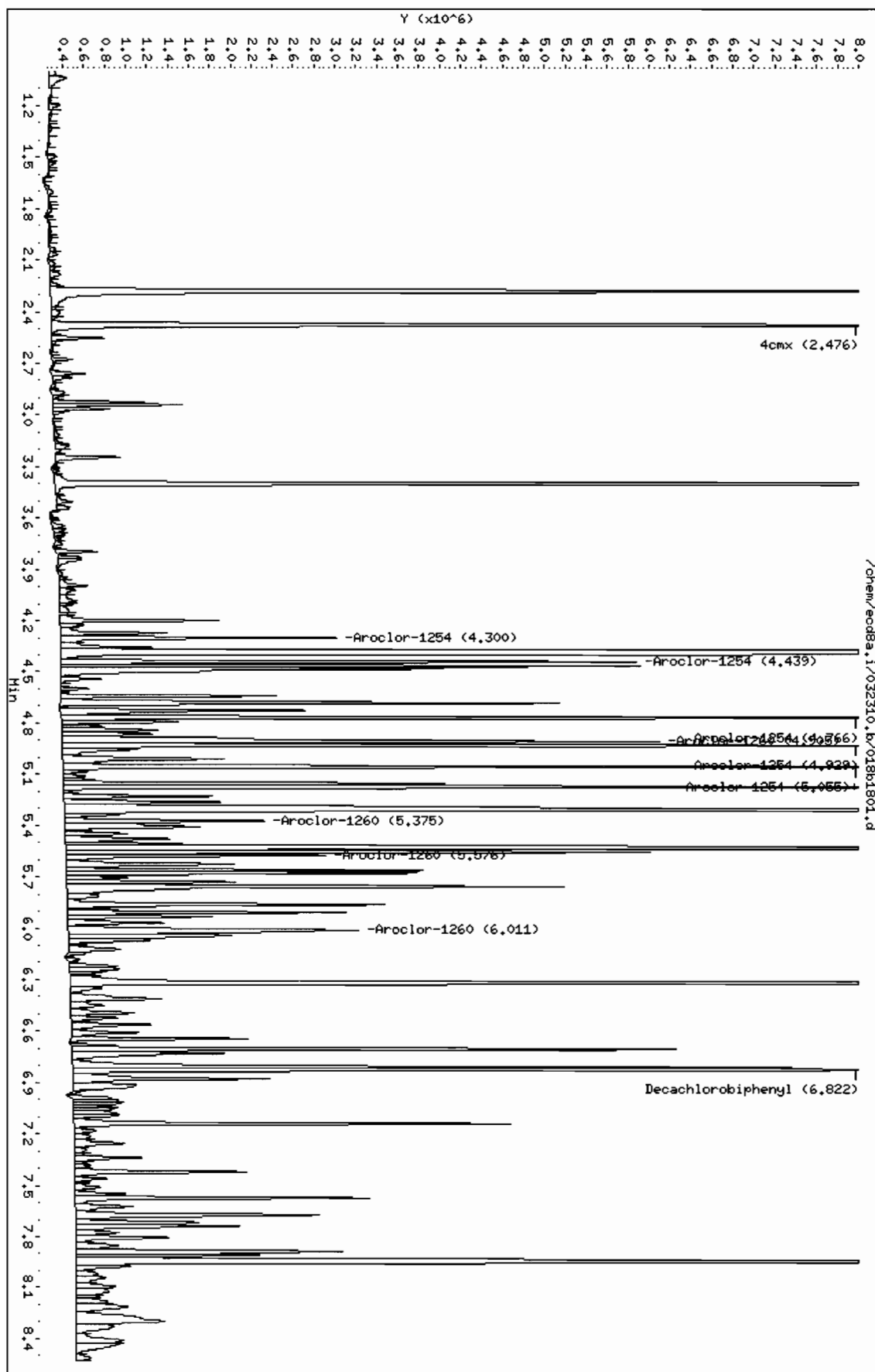
CONCENTRATIONS							
		ON-COL		FINAL			
RT	EXP RT	DLT RT	RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====		=====	=====	=====	=====
7 Aroclor-1260				CAS #: 11096-82-5			
4.905	4.907	-0.002		6363999 1615.84	59.2	80.00- 120.00	100.00
5.055	5.056	-0.001		7044326 1489.14	54.6	102.06- 142.06	110.69
5.375	5.373	0.002		2150749 599.654	22.0	71.87- 111.87	33.80
5.576	5.580	-0.004		2373298 639.317	23.4	75.74- 115.74	37.29
6.011	6.011	0.000		4026245 689.268	25.2	133.68- 173.68	63.27
Average of Peak Concentrations =				36.9			

-----

Data File: /chem/ecod8a.i/032310.b/018b1801.d  
 Date : 23-MAR-2010 11:43  
 Client ID: REC6-10-8280  
 Sample Info: 124851900411  
 Volume Injected (uL): 1.0  
 Column phase: CLP2

Instrument: ecod8a.i  
 Operator: JADC  
 Column diameter: 0.25

Page 1





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

SDG Number: 10-2199  
Lab Sample ID: 248519008

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8082  
Inst: ECD8A.I  
Analyst: JAOC  
Aliquot: 30 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
%Moisture: 32.9  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.97	ug/kg	1.66	4.97	1
11104-28-2	Aroclor-1221	U	4.97	ug/kg	1.66	4.97	1
11141-16-5	Aroclor-1232	U	4.97	ug/kg	1.66	4.97	1
53469-21-9	Aroclor-1242	U	4.97	ug/kg	1.66	4.97	1
12672-29-6	Aroclor-1248	U	4.97	ug/kg	1.66	4.97	1
11097-69-1	Aroclor-1254	U	4.97	ug/kg	1.66	4.97	1
11096-82-5	Aroclor-1260	U	4.97	ug/kg	1.66	4.97	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/031910.b/045f4501.d  
Lab Smp Id: 248519008 Client Smp ID: RE36-10-8287  
Inj Date : 19-MAR-2010 16:22  
Operator : JAOC Inst ID: ecd8a.i  
Smp Info : |248519008|1|  
Misc Info : |ECD82P\_1S|966420|SVA|LANL|SOIL|RE36-10-8287|||  
Comment :  
Method : /chem/ecd8a.i/031910.b/ECD8-F-8082-031810.m  
Meth Date : 22-Mar-2010 08:33 jen01212 Quant Type: ESTD  
Cal Date : 23-FEB-2010 11:32 Cal File: 017f1701.d  
Als bottle: 45  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-2199.sub  
Target Version: 3.50 Sample Matrix: Soil

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	32.94800	% Moisture

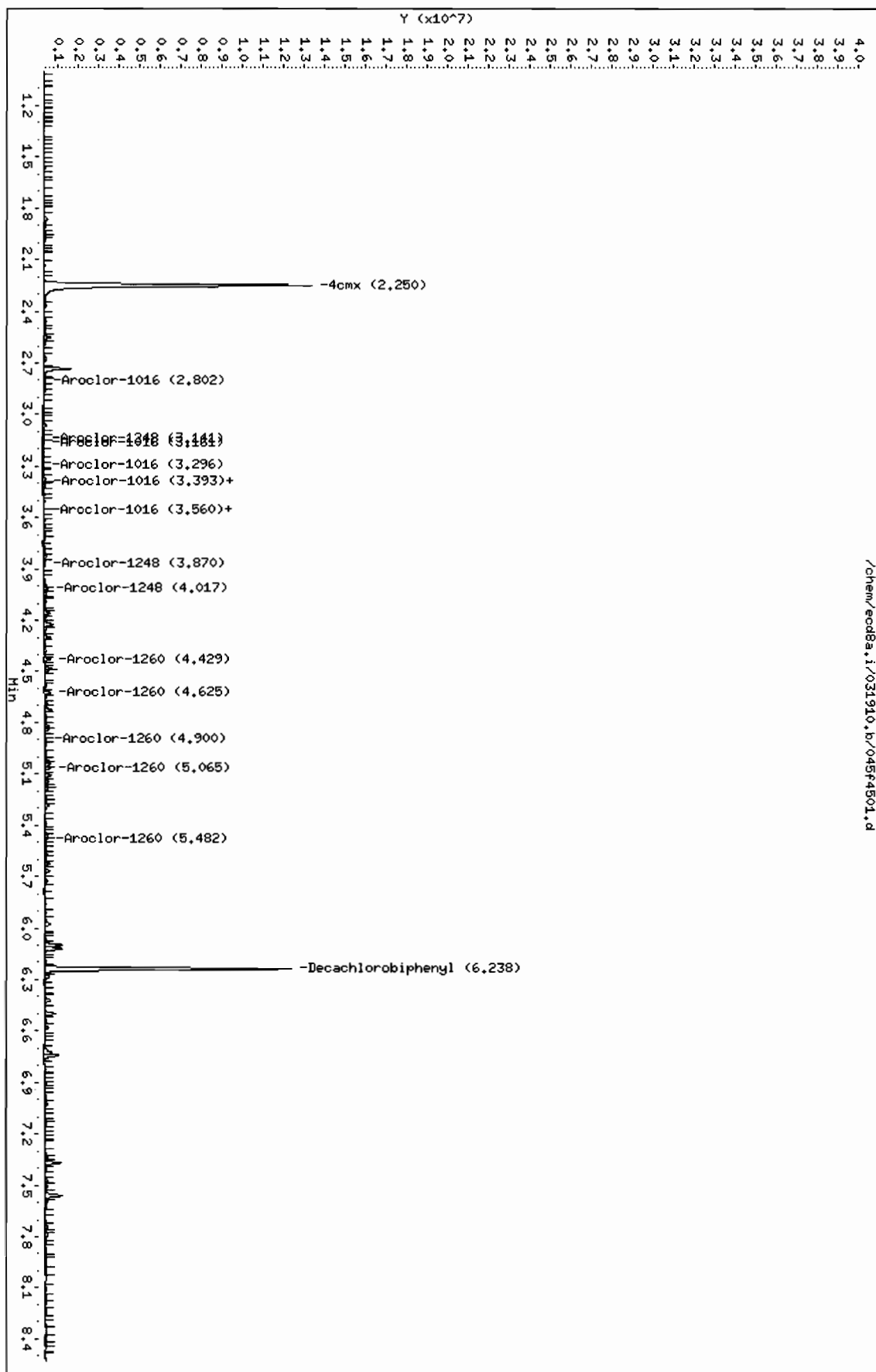
Cpnd Variable Local Compound Variable

CONCENTRATIONS							
			ON-COL	FINAL			
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	
					CAS #: 877-09-8		
\$ 11 4cmx	2.250	2.248	0.002	14462060 115.732	5.8 80.00- 120.00	100.00	
-----							
					CAS #: 2051-24-3		
\$ 12 Decachlorobiphenyl	6.238	6.239	-0.001	10414569 126.466	6.3 80.00- 120.00	100.00	
-----							

Data File: /chem/ecob8a.i/031910.b/045f4501.d  
Date : 19-MAR-2010 16:22  
Client ID: RE36-10-8287  
Sample Info: 124851900811  
Volume Injected (uL): 1.0  
Column phase: CLP1

Instrument: ecob8a.i  
Operator: JHOC  
Column diameter: 0.25

/chem/ecob8a.i/031910.b/045f4501.d



Data File: /chem/ecd8a.i/031910.b/045b4501.d  
Report Date: 22-Mar-2010 13:27

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL  
Data file : /chem/ecd8a.i/031910.b/045b4501.d  
Lab Smp Id: 248519008 Client Smp ID: RE36-10-8287  
Inj Date : 19-MAR-2010 16:22  
Operator : JAOC Inst ID: ecd8a.i  
Smp Info : |248519008|1|  
Misc Info : |ECD82P\_1S|966420|SVA|LANL|SOIL|RE36-10-8287|||  
Comment :  
Method : /chem/ecd8a.i/031910.b/ECD8-B-8082-031810.m  
Meth Date : 22-Mar-2010 07:51 jen01212 Quant Type: ESTD  
Cal Date : 23-FEB-2010 11:32 Cal File: 017b1701.d  
Als bottle: 45  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-2199.sub  
Target Version: 3.50 Sample Matrix: Soil

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

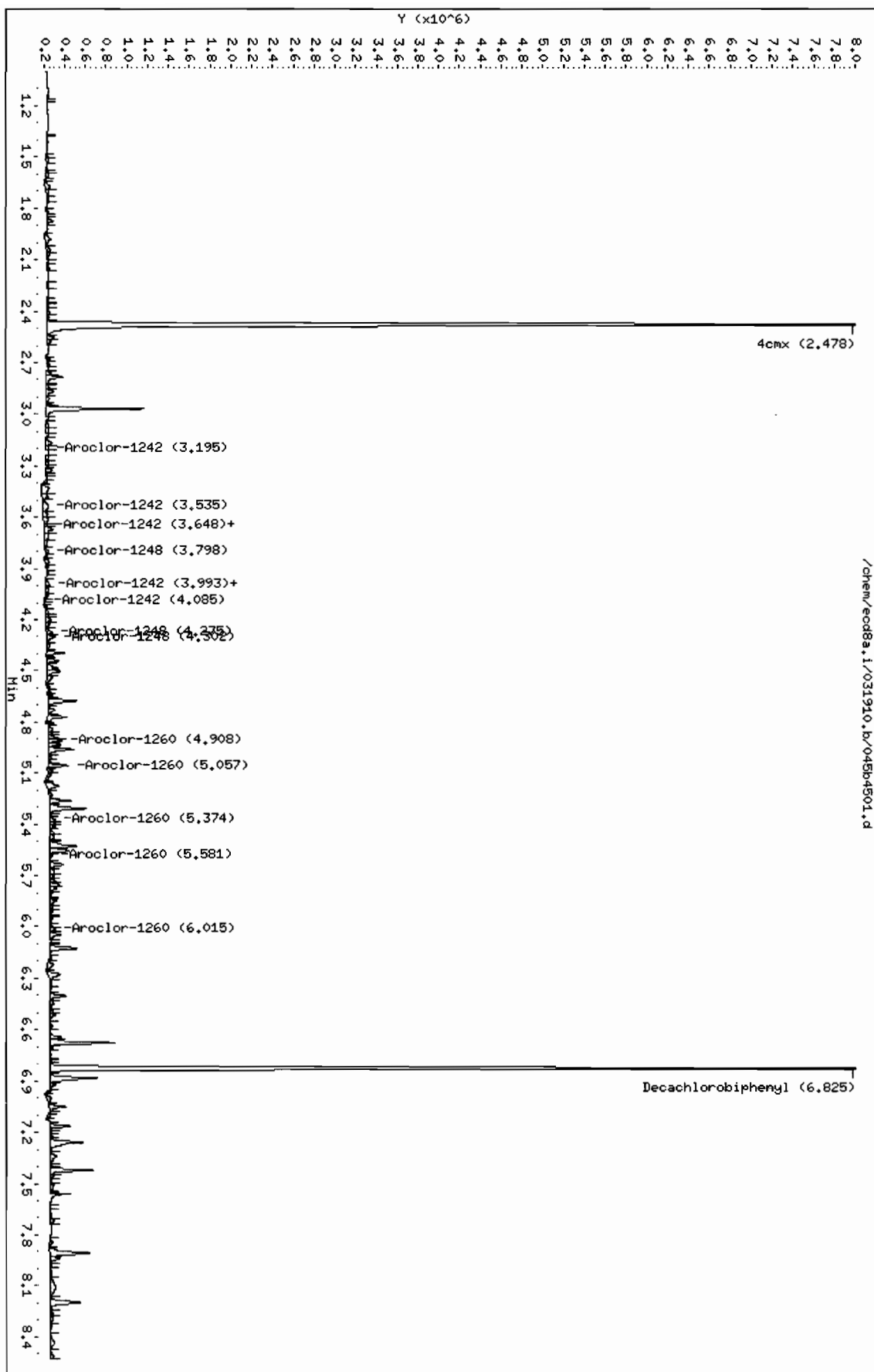
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	32.94800	% Moisture

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		
2.478	2.477	0.001	9792137 117.156	5.8	80.00- 120.00	100.00	
-----							
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.825	6.824	0.001	7572315 127.797	6.4	80.00- 120.00	100.00	
-----							

Data File: /chem/ecd8a.i/031910.b/045b4501.d  
Date: 19-MAR-2010 16:22  
Client ID: RE36-10-8287  
Sample Info: 124851900811  
Volume Injected (uL): 1.0  
Column Phase: CLP2

Instrument: ecd8a.i  
Operator: JAO  
Column diameter: 0.25



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

Page 1 of 1

SDG Number:	10-2199	Date Collected:	02/25/2010 12:00	Matrix:	R
Lab Sample ID:	248519001	Date Received:	03/03/2010 08:50	%Moisture:	16.4
Client ID:	RE36-10-8288	Client:	LANL010	Project:	LANL01004
Batch ID:	966420	Method:	SW846 8082	SOP Ref:	GL-OA-E-040
Run Date:	03/19/2010 14:55	Inst:	ECD8A.I	Dilution:	1
Prep Date:	03/18/2010 10:57	Analyst:	JAOC	Inj. Vol:	1 uL
Data File:	038f3801.d	Aliquot:	30.09 g	Final Volume:	1 mL
	038b3801.d	Column:	1 CLP1	Level:	LOW
			2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.98	ug/kg	1.32	3.98	1
11104-28-2	Aroclor-1221	U	3.98	ug/kg	1.32	3.98	1
11141-16-5	Aroclor-1232	U	3.98	ug/kg	1.32	3.98	1
53469-21-9	Aroclor-1242	U	3.98	ug/kg	1.32	3.98	1
12672-29-6	Aroclor-1248	U	3.98	ug/kg	1.32	3.98	1
11097-69-1	Aroclor-1254	U	3.98	ug/kg	1.32	3.98	1
11096-82-5	Aroclor-1260	U	3.98	ug/kg	1.32	3.98	1

Data File: /chem/ecd8a.i/031910.b/038f3801.d  
Report Date: 22-Mar-2010 13:21

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/031910.b/038f3801.d

Lab Smp Id: 248519001

Client Smp ID: RE36-10-8288

Inj Date : 19-MAR-2010 14:55

Operator : JAOC

Inst ID: ecd8a.i

Smp Info : |248519001|1|

Misc Info : |ECD82P\_1S|966420|SVA|LANL|SOIL|RE36-10-8288|1|

Comment :

Method : /chem/ecd8a.i/031910.b/ECD8-F-8082-031810.m

Meth Date : 22-Mar-2010 08:33 jen01212 Quant Type: ESTD

Cal Date : 23-FEB-2010 11:32

Cal File: 017f1701.d

Als bottle: 38

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: 10-2199.sub

Target Version: 3.50

Sample Matrix: Soil

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.09000	Weight of sample extracted (g)
M	16.44340	% Moisture

Cpnd Variable

Local Compound Variable

CONCENTRATIONS

ON-COL FINAL

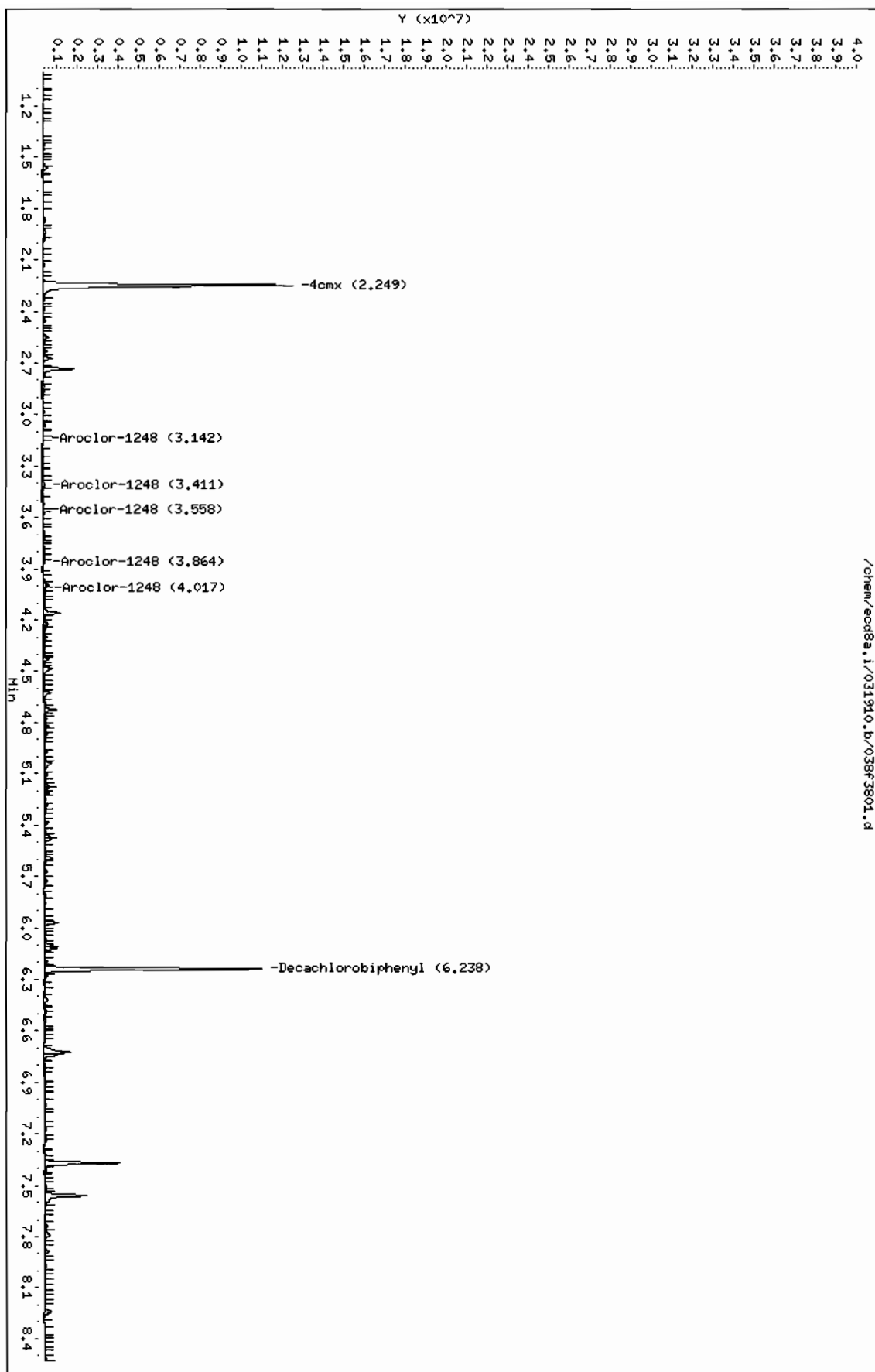
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
----	--------	--------	------------------	---------	--------------	-------

\$ 11 4cmx					CAS #: 877-09-8	
2.249	2.248	0.001	12904575 103.268	4.1	80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3	
6.238	6.239	-0.001	9396240 114.100	4.5	80.00- 120.00	100.00

Data File: /chem/ecd8a.i/031910.b/038f3801.d  
 Date : 19-MAR-2010 14:55  
 Client ID: RE36-10-8288  
 Sample Info: 124851900111  
 Volume Injected (uL): 1.0  
 Column phase: CLP1

Instrument: ecd8a.i  
 Operator: JHOC  
 Column diameter: 0.25





GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL  
 Data file : /chem/ecd8a.i/031910.b/038b3801.d  
 Lab Smp Id: 248519001 Client Smp ID: RE36-10-8288  
 Inj Date : 19-MAR-2010 14:55  
 Operator : JAOC Inst ID: ecd8a.i  
 Smp Info : |248519001|1|  
 Misc Info : |ECD82P\_1S|966420|SVA|LANL|SOIL|RE36-10-8288|||  
 Comment :  
 Method : /chem/ecd8a.i/031910.b/ECD8-B-8082-031810.m  
 Meth Date : 22-Mar-2010 07:51 jen01212 Quant Type: ESTD  
 Cal Date : 23-FEB-2010 11:32 Cal File: 017b1701.d  
 Als bottle: 38  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: 10-2199.sub  
 Target Version: 3.50 Sample Matrix: Soil

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

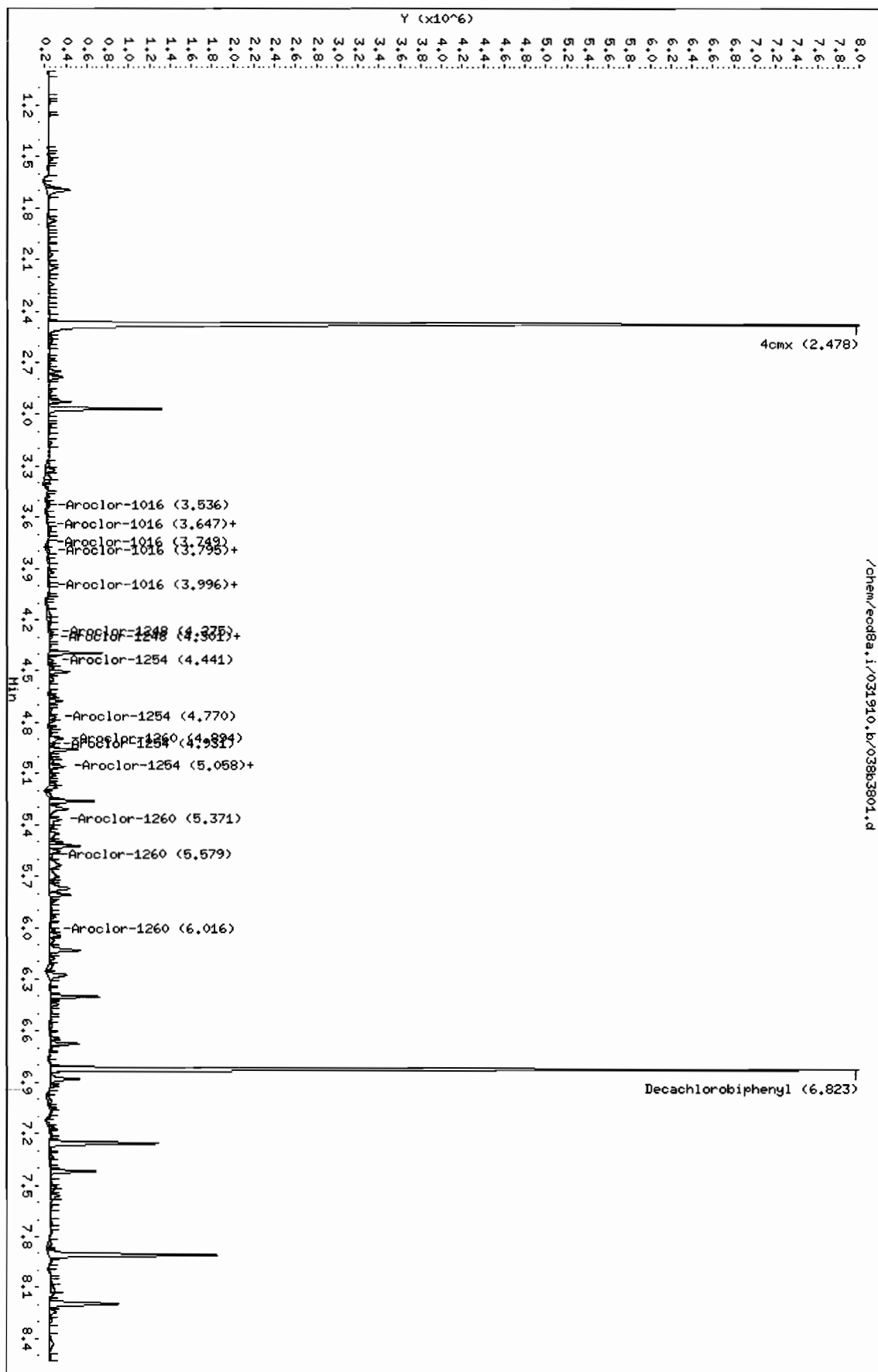
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.09000	Weight of sample extracted (g)
M	16.44340	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS						
			ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
=====						
\$ 11 4cmx				CAS #: 877-09-8		
2.478	2.477	0.001	9020005 107.918	4.3	80.00- 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3		
6.823	6.824	-0.001	6825179 115.188	4.6	80.00- 120.00	100.00
-----						

Data File: /chem/ecdb8a.i/031910.b/038b3801.d  
Date : 19-MAR-2010 14:55  
Client ID: RE36-10-8288  
Sample Info: 124851900111  
Volume Injected (uL): 1.0  
Column phase: CLP2

Instrument: ecdb8a.i  
Operator: JADC  
Column diameter: 0.25



## PCB

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## Certificate of Analysis

## Sample Summary

SDG Number: 10-2199  
Lab Sample ID: 248519007

Date Collected: 02/25/2010 12:00  
Date Received: 03/03/2010 08:50  
Client: LANL010  
Method: SW846 8082  
Inst: ECD8A.I  
Analyst: JAOC  
Aliquot: 30.05 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
%Moisture: 28.9  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE36-10-8291  
Batch ID: 966420  
Run Date: 03/19/2010 16:09  
Prep Date: 03/18/2010 10:57  
Data File: 044f4401.d  
044b4401.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.68	ug/kg	1.56	4.68	1
11104-28-2	Aroclor-1221	U	4.68	ug/kg	1.56	4.68	1
11141-16-5	Aroclor-1232	U	4.68	ug/kg	1.56	4.68	1
53469-21-9	Aroclor-1242	U	4.68	ug/kg	1.56	4.68	1
12672-29-6	Aroclor-1248	U	4.68	ug/kg	1.56	4.68	1
11097-69-1	Aroclor-1254	JP	4.60	ug/kg	1.56	4.68	1
11096-82-5	Aroclor-1260	U	4.68	ug/kg	1.56	4.68	1

Data File: /chem/ecd8a.i/031910.b/044f4401.d  
Report Date: 23-Mar-2010 08:15

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/031910.b/044f4401.d

Lab Smp Id: 248519007

Client Smp ID: RE36-10-8291

Inj Date : 19-MAR-2010 16:09

Operator : JAOC

Inst ID: ecd8a.i

Smp Info : |248519007|1|

Misc Info : |ECD82P\_1S|966420|SVA|LANL|SOIL|RE36-10-8291|||

Comment :

Method : /chem/ecd8a.i/031910.b/ECD8-F-8082-031810.m

Meth Date : 22-Mar-2010 08:33 jen01212 Quant Type: ESTD

Cal Date : 23-FEB-2010 11:32

Cal File: 017f1701.d

Als bottle: 44

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: 10-2199.sub

Target Version: 3.50

Sample Matrix: Soil

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.05000	Weight of sample extracted (g)
M	28.94070	% 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		
2.249	2.248	0.001	9960340 79.7073	3.7	80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3		
6.238	6.239	-0.001	6826166 82.8911	3.9	80.00- 120.00	100.00

6 Aroclor-1254				CAS #: 11097-69-1		
3.829	3.831	-0.002	227896 52.5838	2.5	80.00- 120.00	100.00 (aM)
4.017	4.018	-0.001	247968 43.0012	2.0	114.41- 154.41	108.81
4.224	4.214	0.010	1359148 304.843	14.3	84.15- 124.15	596.39
4.299	4.301	-0.002	359235 47.7609	2.2	155.56- 195.56	157.63
4.491	4.496	-0.005	246458 42.8682	2.0	113.29- 153.29	108.14

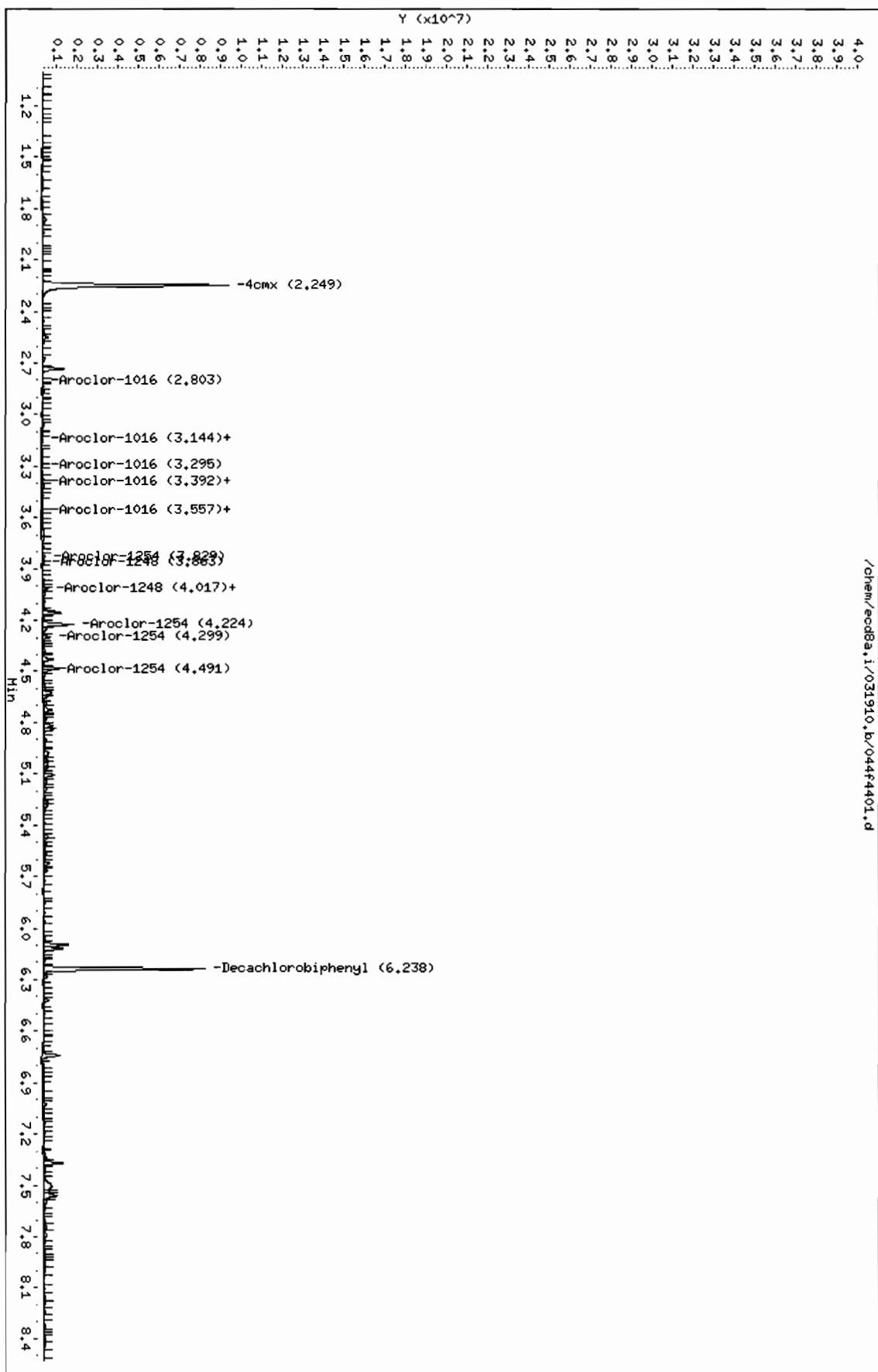
Average of Peak Concentrations = 4.6

QC Flag Legend

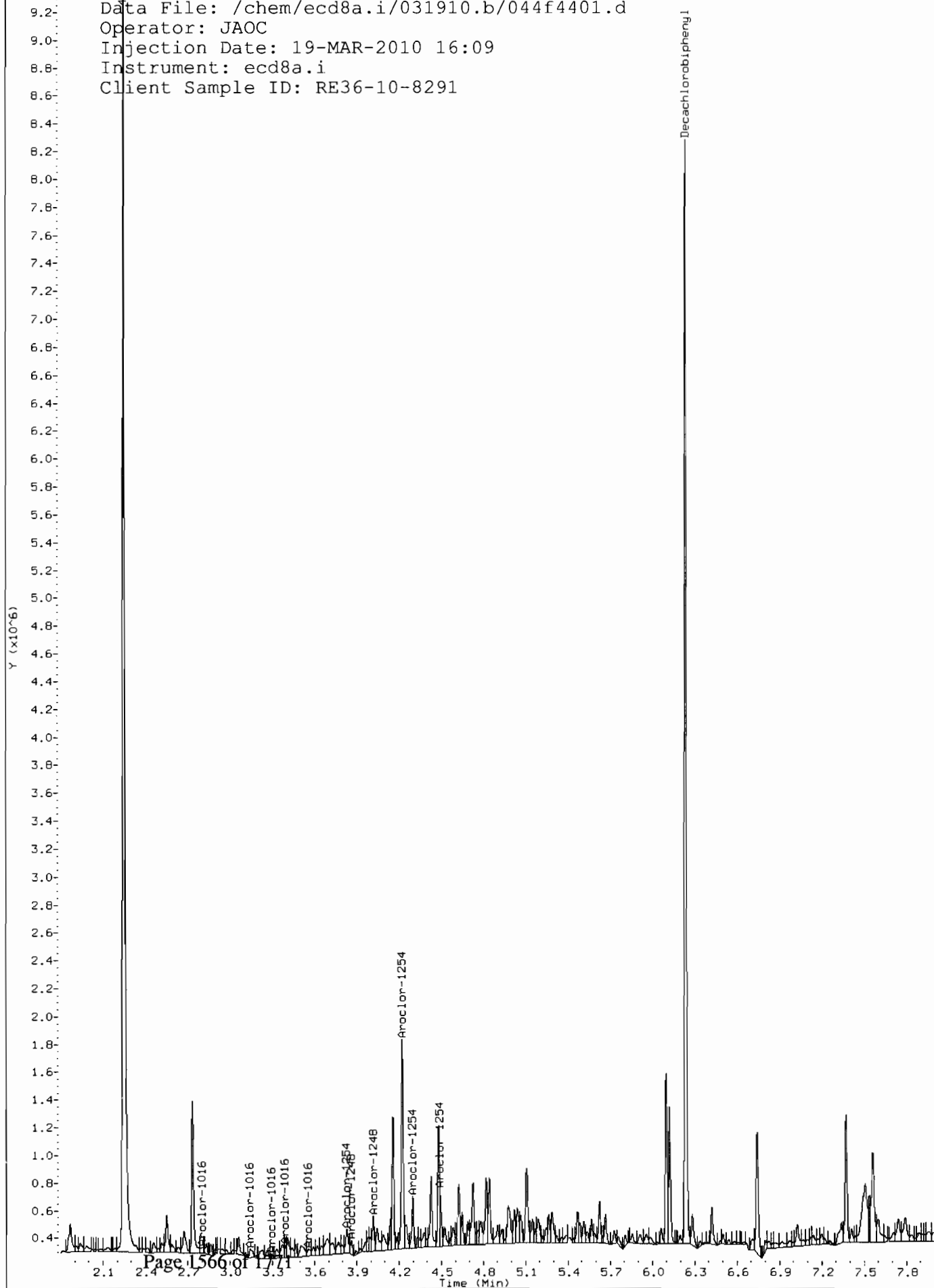
- a - Target compound detected but, quantitated amount  
Below Limit Of Quantitation(BLOQ).
- M - Compound response manually integrated.

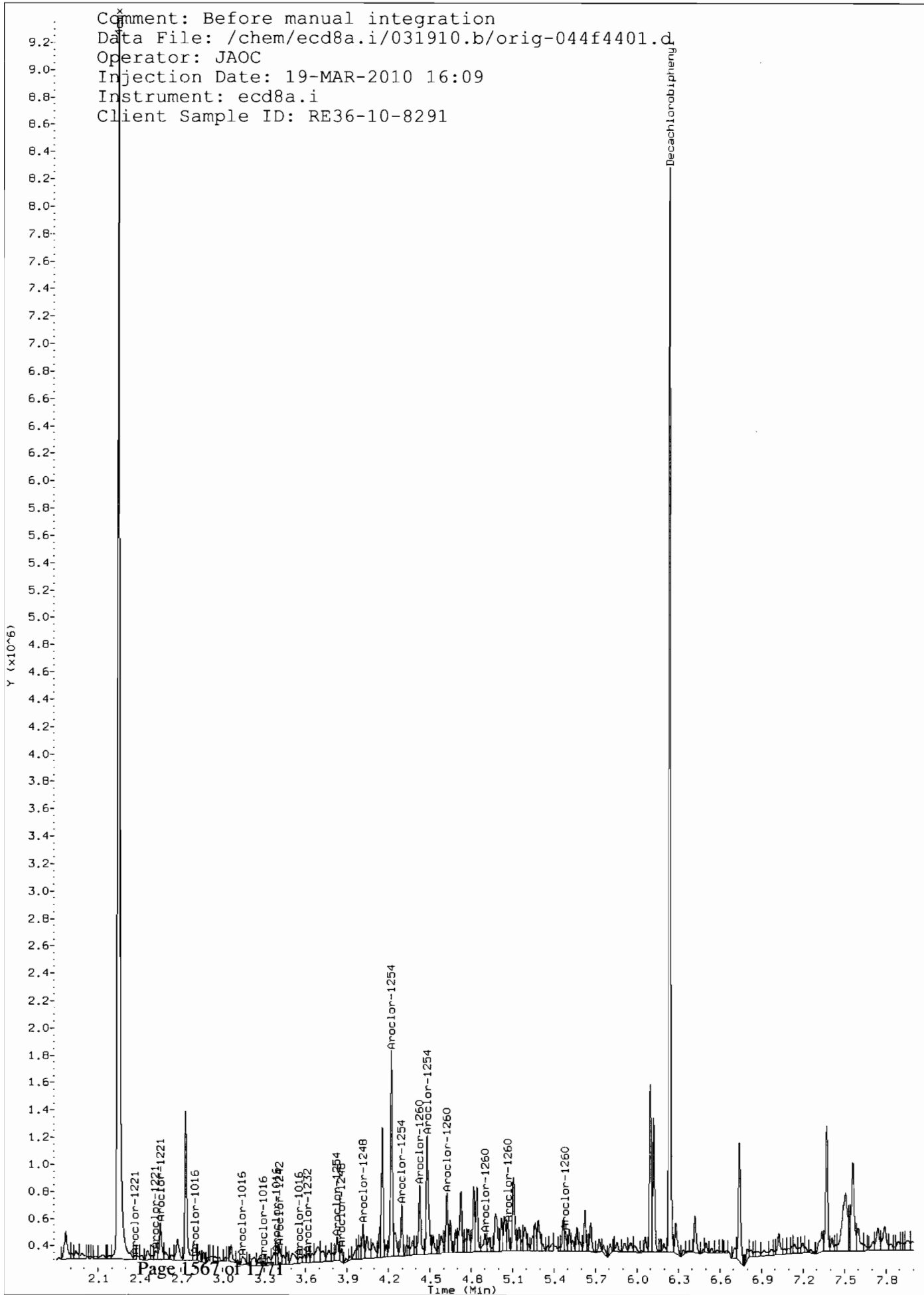
Data File: /chem/ecob8a.i/031910.b/0444401.d  
Date: 19-MAR-2010 16:09  
Client ID: REC6-10-8291  
Sample Info: 1248519007111  
Volume Injected (uL): 1.0  
Column phase: CLP1

Instrument: ecob8a.i  
Operator: JHOC  
Column diameter: 0.25



Comment: Manually Integrated  
Data File: /chem/ecd8a.i/031910.b/044f4401.d  
Operator: JAOC  
Injection Date: 19-MAR-2010 16:09  
Instrument: ecd8a.i  
Client Sample ID: RE36-10-8291



$Y \text{ (}\times 10^6\text{)}$ 



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL  
 Data file : /chem/ecd8a.i/031910.b/044b4401.d  
 Lab Smp Id: 248519007 Client Smp ID: RE36-10-8291  
 Inj Date : 19-MAR-2010 16:09  
 Operator : JAOC Inst ID: ecd8a.i  
 Smp Info : |248519007|1|  
 Misc Info : |ECD82P\_1S|966420|SVA|LANL|SOIL|RE36-10-8291|||  
 Comment :  
 Method : /chem/ecd8a.i/031910.b/ECD8-B-8082-031810.m  
 Meth Date : 22-Mar-2010 07:51 jen01212 Quant Type: ESTD  
 Cal Date : 23-FEB-2010 11:32 Cal File: 017b1701.d  
 Als bottle: 44  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: 10-2199.sub  
 Target Version: 3.50 Sample Matrix: Soil

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.05000	Weight of sample extracted (g)
M	28.94070	% Moisture

Cpnd Variable Local Compound Variable

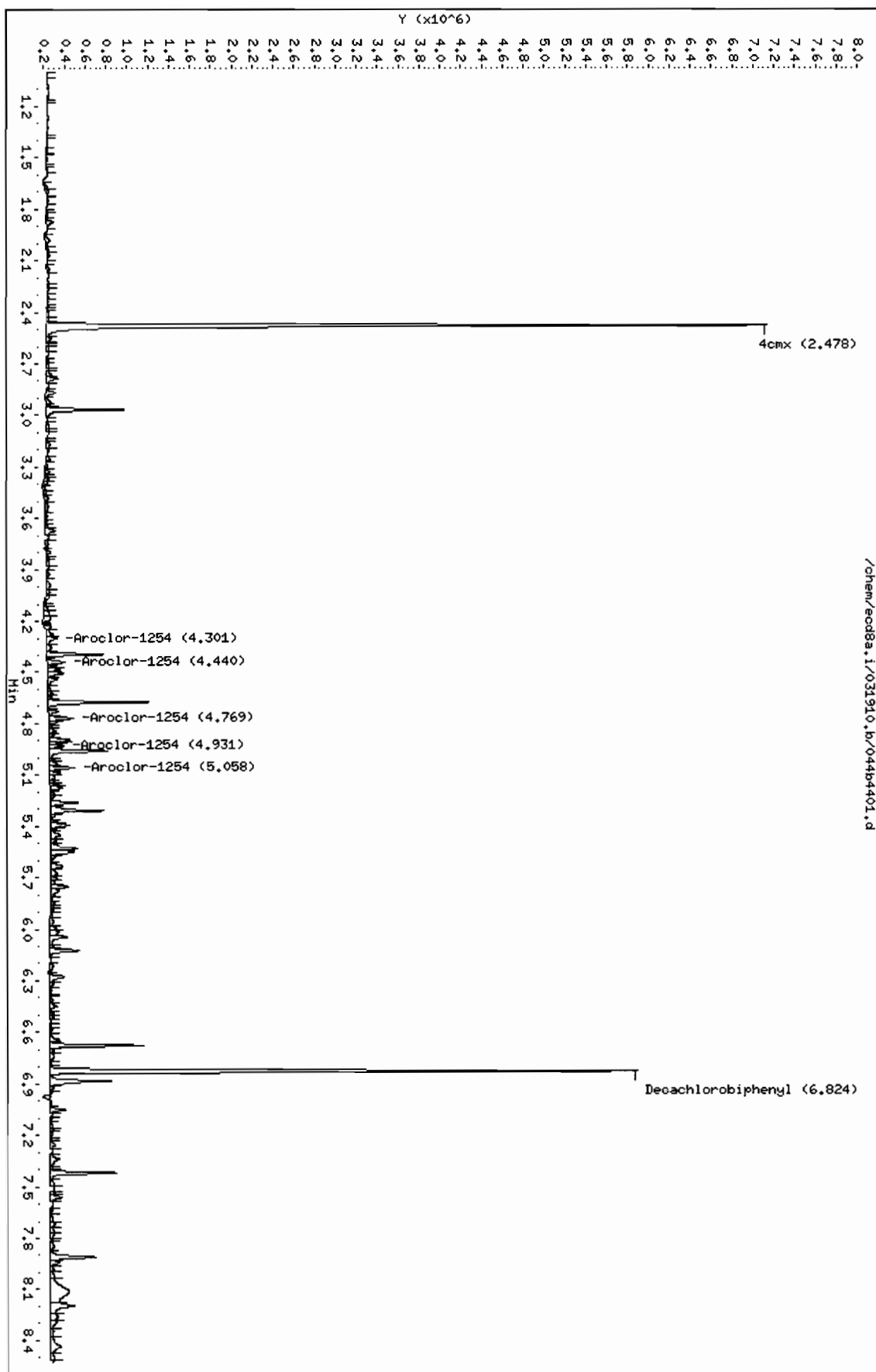
CONCENTRATIONS						
RT	EXP RT	DLT RT	ON-COL	FINAL	TARGET RANGE	RATIO
==	=====	=====	RESPONSE ( ug/L)	(ug/Kg)	=====	=====
CAS #: 877-09-8						
\$ 11 4cmx	2.478	2.477	0.001	6571151 78.6191	3.7 80.00- 120.00	100.00
CAS #: 2051-24-3						
\$ 12 Decachlorobiphenyl	6.824	6.824	0.000	5039880 85.0577	4.0 80.00- 120.00	100.00 (M)
CAS #: 11097-69-1						
6 Aroclor-1254	4.301	4.302	-0.001	151648 48.6572	2.3 80.00- 120.00	100.00 (aM)
	4.440	4.441	-0.001	177582 51.0566	2.4 92.05- 132.05	117.10
	4.769	4.770	-0.001	250504 51.8423	2.4 138.74- 178.74	165.19
	4.931	4.931	0.000	128996 36.9187	1.7 94.11- 134.11	85.06
	5.058	5.057	0.001	221161 100.450	4.7 51.28- 91.28	145.84
Average of Peak Concentrations =				2.7		

QC Flag Legend

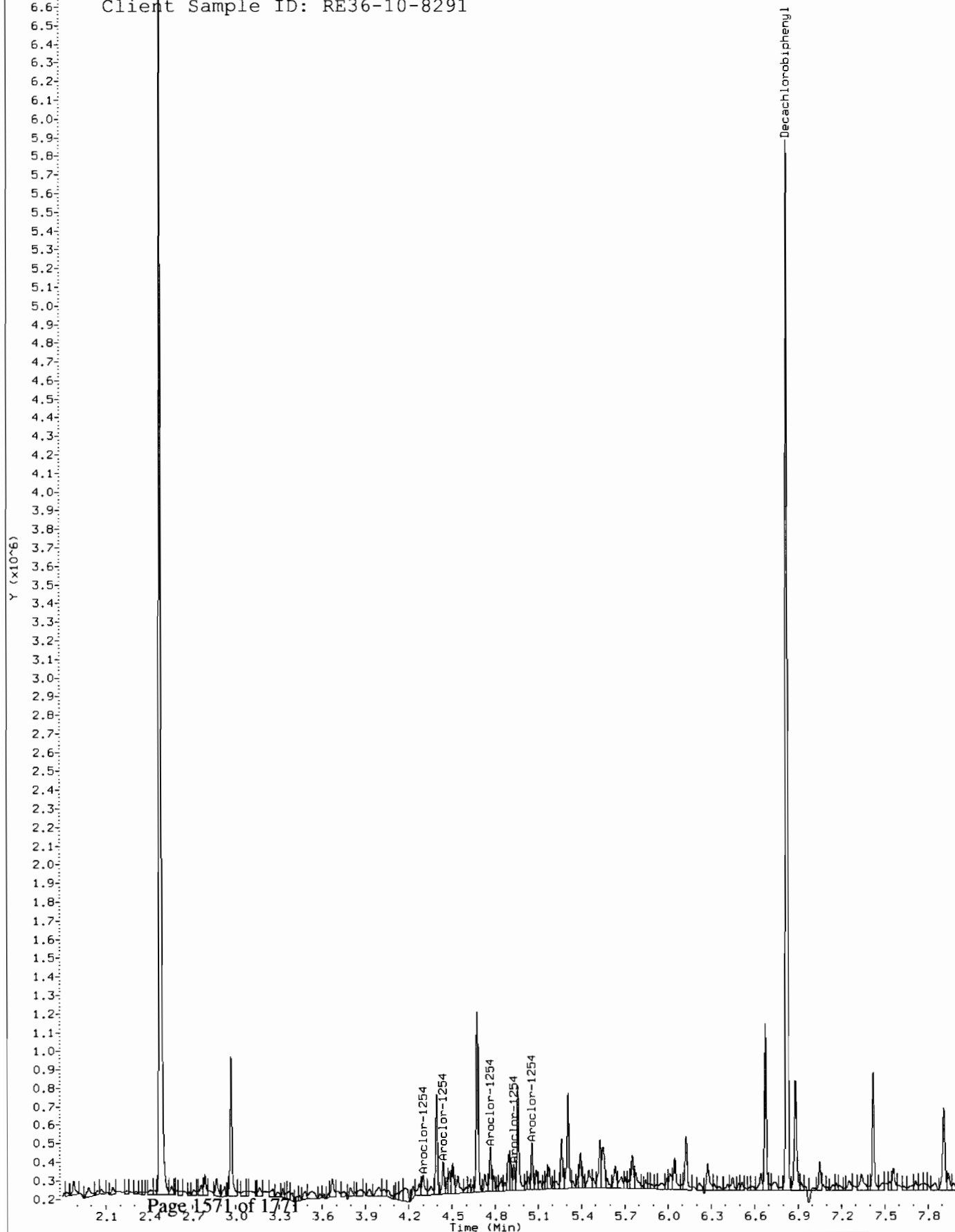
- a - Target compound detected but, quantitated amount  
Below Limit Of Quantitation(BLOQ).
- M - Compound response manually integrated.

Data File: /chem/ecd8a.i/031910.b/044b4401.d  
Date: 19-MAR-2010 16:09  
Client ID: RE36-10-8291  
Sample Info: 1248519007111  
Volume Injected (uL): 1.0  
Column phase: CLP2

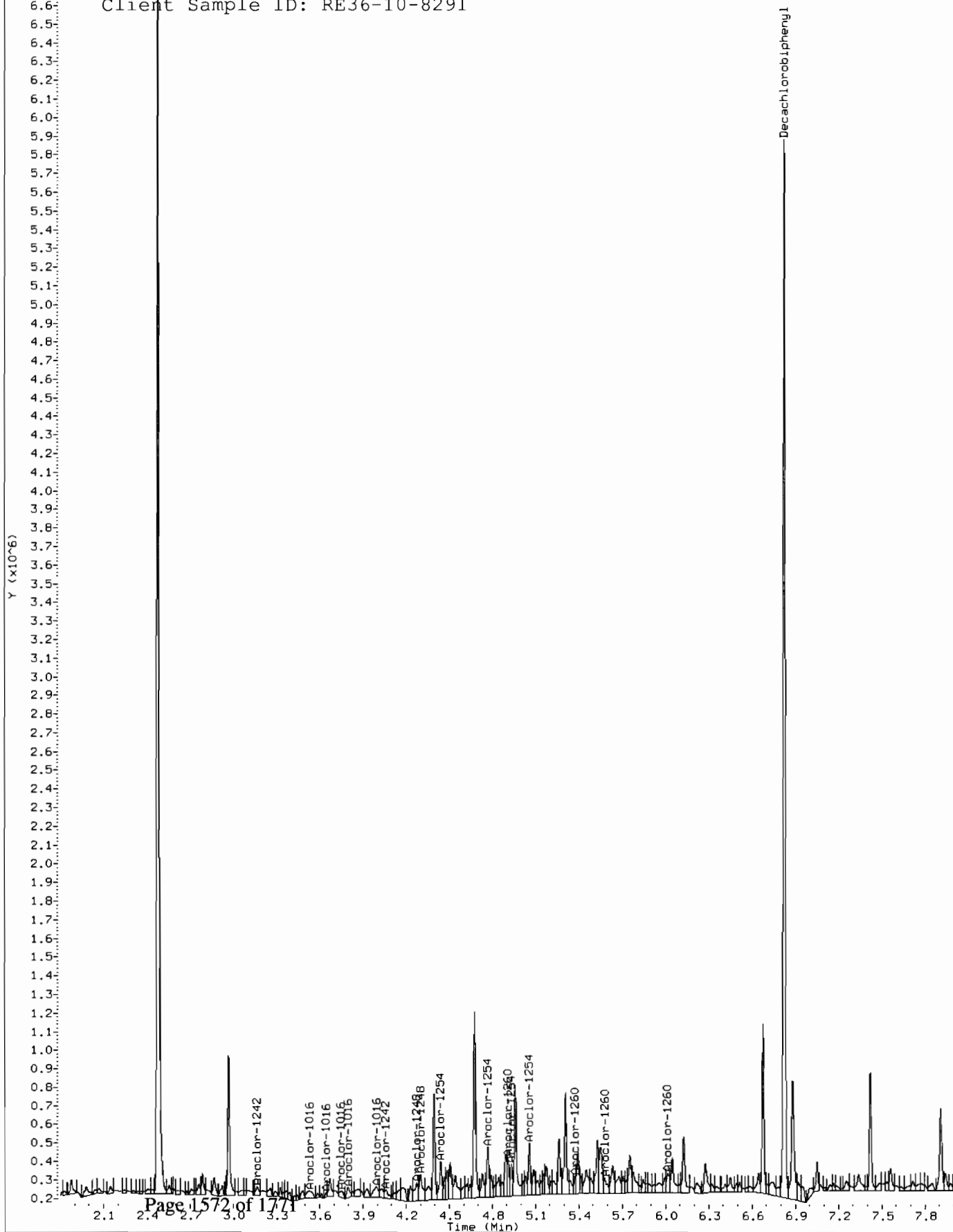
Instrument: ecd8a.i  
Operator: JHOC  
Column diameter: 0.25



Comment: Manually Integrated  
Data File: /chem/ecd8a.i/031910.b/044b4401.d  
Operator: JAOC  
Injection Date: 19-MAR-2010 16:09  
Instrument: ecd8a.i  
Client Sample ID: RE36-10-8291



Comment: Before manual integration  
Data File: /chem/ecd8a.i/031910.b/orig-044b4401.d  
Operator: JAOC  
Injection Date: 19-MAR-2010 16:09  
Instrument: ecd8a.i  
Client Sample ID: RE36-10-8291



# STANDARDS DATA

Report Date: 19-Mar-2010 11:23

### Calibration History

Method : /chem/ecd8a.i/031910.b/ECD8-F-8082-031810.m  
Start Cal Date: 03-FEB-2010 10:24  
End Cal Date : 18-MAR-2010 07:15

#### Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
23-FEB-2010 10:43	AR1221	/chem/ecd8a.i/022310.b/013f1301.d
03-FEB-2010 15:46	AR1262	/chem/ecd8a.i/020310a.b/028f2801.d
09-MAR-2010 10:41	AR1248	/chem/ecd8a.i/030910.b/013f1301.d
03-FEB-2010 12:53	AR1242	/chem/ecd8a.i/020310a.b/014f1401.d
09-MAR-2010 09:27	AR1254	/chem/ecd8a.i/030910.b/007f0701.d
18-MAR-2010 06:25	AR1660	/chem/ecd8a.i/031810.b/002f0201.d

Cal Level: 2 , Cal Amount: 250.00000		
23-FEB-2010 10:55	AR1221	/chem/ecd8a.i/022310.b/014f1401.d
03-FEB-2010 15:58	AR1262	/chem/ecd8a.i/020310a.b/029f2901.d
09-MAR-2010 10:53	AR1248	/chem/ecd8a.i/030910.b/014f1401.d
03-FEB-2010 13:05	AR1242	/chem/ecd8a.i/020310a.b/015f1501.d
09-MAR-2010 09:39	AR1254	/chem/ecd8a.i/030910.b/008f0801.d
18-MAR-2010 06:38	AR1660	/chem/ecd8a.i/031810.b/003f0301.d

Cal Level: 3 , Cal Amount: 500.00000		
23-FEB-2010 11:07	AR1221	/chem/ecd8a.i/022310.b/015f1501.d
03-FEB-2010 16:11	AR1262	/chem/ecd8a.i/020310a.b/030f3001.d
09-MAR-2010 11:05	AR1248	/chem/ecd8a.i/030910.b/015f1501.d
03-FEB-2010 13:18	AR1242	/chem/ecd8a.i/020310a.b/016f1601.d
09-MAR-2010 09:51	AR1254	/chem/ecd8a.i/030910.b/009f0901.d
18-MAR-2010 06:50	AR1660	/chem/ecd8a.i/031810.b/004f0401.d

Cal Level: 4 , Cal Amount: 1000.00000		
03-FEB-2010 17:25	DDT	/chem/ecd8a.i/020310a.b/036f3601.d
03-FEB-2010 17:00	AR1268	/chem/ecd8a.i/020310a.b/034f3401.d
03-FEB-2010 16:23	AR1262	/chem/ecd8a.i/020310a.b/031f3101.d
23-FEB-2010 11:20	AR1221	/chem/ecd8a.i/022310.b/016f1601.d
03-FEB-2010 15:21	AR1232	/chem/ecd8a.i/020310a.b/026f2601.d
09-MAR-2010 11:18	AR1248	/chem/ecd8a.i/030910.b/016f1601.d
03-FEB-2010 13:30	AR1242	/chem/ecd8a.i/020310a.b/017f1701.d
09-MAR-2010 10:04	AR1254	/chem/ecd8a.i/030910.b/010f1001.d
18-MAR-2010 07:02	AR1660	/chem/ecd8a.i/031810.b/005f0501.d

Cal Level: 5 , Cal Amount: 4000.00000		
23-FEB-2010 11:32	AR1221	/chem/ecd8a.i/022310.b/017f1701.d
03-FEB-2010 16:36	AR1262	/chem/ecd8a.i/020310a.b/032f3201.d
09-MAR-2010 11:30	AR1248	/chem/ecd8a.i/030910.b/017f1701.d

03-FEB-2010 13:42	AR1242	/chem/ecd8a.i/020310a.b/018f1801.d
09-MAR-2010 10:16	AR1254	/chem/ecd8a.i/030910.b/011f1101.d
18-MAR-2010 07:15	AR1660	/chem/ecd8a.i/031810.b/006f0601.d

Continuing Calibration  
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 1000		
19-MAR-2010 10:52	AR1660	/chem/ecd8a.i/031910.b/021f2101.d
Ccal Level: 4 , Ccal Amount: 1000		
19-MAR-2010 09:54	AR1660	/chem/ecd8a.i/031910.b/017f1701.d
Ccal Level: 4 , Ccal Amount: 1000		
19-MAR-2010 09:20	AR1660	/chem/ecd8a.i/031910.b/015f1501.d
Ccal Level: 4 , Ccal Amount: 1000		
19-MAR-2010 08:18	AR1268	/chem/ecd8a.i/031910.b/010f1001.d
Ccal Level: 4 , Ccal Amount: 1000		
19-MAR-2010 08:05	AR1262	/chem/ecd8a.i/031910.b/009f0901.d
Ccal Level: 4 , Ccal Amount: 1000		
19-MAR-2010 07:53	AR1221	/chem/ecd8a.i/031910.b/008f0801.d
Ccal Level: 4 , Ccal Amount: 1000		
19-MAR-2010 07:41	AR1242	/chem/ecd8a.i/031910.b/007f0701.d
Ccal Level: 4 , Ccal Amount: 1000		
19-MAR-2010 07:28	AR1232	/chem/ecd8a.i/031910.b/006f0601.d
Ccal Level: 4 , Ccal Amount: 1000		
19-MAR-2010 07:16	AR1248	/chem/ecd8a.i/031910.b/005f0501.d
Ccal Level: 4 , Ccal Amount: 1000		
19-MAR-2010 07:03	AR1242	/chem/ecd8a.i/031910.b/004f0401.d
Ccal Level: 4 , Ccal Amount: 1000		
19-MAR-2010 06:39	AR1660	/chem/ecd8a.i/031910.b/002f0201.d
Ccal Level: 4 , Ccal Amount: 1000		
19-MAR-2010 06:51	AR1254	/chem/ecd8a.i/031910.b/003f0301.d



Report Date: 19-Mar-2010 11:23

### Calibration History

Method : /chem/ecd8a.i/031910.b/ECD8-B-8082-031810.m  
Start Cal Date: 03-FEB-2010 10:24  
End Cal Date : 18-MAR-2010 07:15

#### Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
23-FEB-2010 10:43	AR1221	/chem/ecd8a.i/022310.b/013b1301.d
03-FEB-2010 15:46	AR1262	/chem/ecd8a.i/020310a.b/028b2801.d
09-MAR-2010 10:41	AR1248	/chem/ecd8a.i/030910.b/013b1301.d
03-FEB-2010 12:53	AR1242	/chem/ecd8a.i/020310a.b/014b1401.d
09-MAR-2010 09:27	AR1254	/chem/ecd8a.i/030910.b/007b0701.d
18-MAR-2010 06:25	AR1660	/chem/ecd8a.i/031810.b/002b0201.d
Cal Level: 2 , Cal Amount: 250.00000		
23-FEB-2010 10:55	AR1221	/chem/ecd8a.i/022310.b/014b1401.d
03-FEB-2010 15:58	AR1262	/chem/ecd8a.i/020310a.b/029b2901.d
09-MAR-2010 10:53	AR1248	/chem/ecd8a.i/030910.b/014b1401.d
03-FEB-2010 13:05	AR1242	/chem/ecd8a.i/020310a.b/015b1501.d
09-MAR-2010 09:39	AR1254	/chem/ecd8a.i/030910.b/008b0801.d
18-MAR-2010 06:38	AR1660	/chem/ecd8a.i/031810.b/003b0301.d
Cal Level: 3 , Cal Amount: 500.00000		
23-FEB-2010 11:07	AR1221	/chem/ecd8a.i/022310.b/015b1501.d
03-FEB-2010 16:11	AR1262	/chem/ecd8a.i/020310a.b/030b3001.d
09-MAR-2010 11:05	AR1248	/chem/ecd8a.i/030910.b/015b1501.d
03-FEB-2010 13:18	AR1242	/chem/ecd8a.i/020310a.b/016b1601.d
09-MAR-2010 09:51	AR1254	/chem/ecd8a.i/030910.b/009b0901.d
18-MAR-2010 06:50	AR1660	/chem/ecd8a.i/031810.b/004b0401.d
Cal Level: 4 , Cal Amount: 1000.00000		
03-FEB-2010 17:25	DDT	/chem/ecd8a.i/020310a.b/036b3601.d
03-FEB-2010 17:00	AR1268	/chem/ecd8a.i/020310a.b/034b3401.d
03-FEB-2010 16:23	AR1262	/chem/ecd8a.i/020310a.b/031b3101.d
23-FEB-2010 11:20	AR1221	/chem/ecd8a.i/022310.b/016b1601.d
03-FEB-2010 15:21	AR1232	/chem/ecd8a.i/020310a.b/026b2601.d
09-MAR-2010 11:18	AR1248	/chem/ecd8a.i/030910.b/016b1601.d
03-FEB-2010 13:30	AR1242	/chem/ecd8a.i/020310a.b/017b1701.d
09-MAR-2010 10:04	AR1254	/chem/ecd8a.i/030910.b/010b1001.d
18-MAR-2010 07:02	AR1660	/chem/ecd8a.i/031810.b/005b0501.d
Cal Level: 5 , Cal Amount: 4000.00000		
23-FEB-2010 11:32	AR1221	/chem/ecd8a.i/022310.b/017b1701.d
03-FEB-2010 16:36	AR1262	/chem/ecd8a.i/020310a.b/032b3201.d
09-MAR-2010 11:30	AR1248	/chem/ecd8a.i/030910.b/017b1701.d
03-FEB-2010 13:42	AR1242	/chem/ecd8a.i/020310a.b/018b1801.d
09-MAR-2010 10:16	AR1254	/chem/ecd8a.i/030910.b/011b1101.d
18-MAR-2010 07:15	AR1660	/chem/ecd8a.i/031810.b/006b0601.d

Continuing Calibration  
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 1000	
19-MAR-2010 10:52  AR1660	/chem/ecd8a.i/031910.b/021b2101.d
Ccal Level: 4 , Ccal Amount: 1000	
19-MAR-2010 09:54  AR1660	/chem/ecd8a.i/031910.b/017b1701.d
Ccal Level: 4 , Ccal Amount: 1000	
19-MAR-2010 09:20  AR1660	/chem/ecd8a.i/031910.b/015b1501.d
Ccal Level: 4 , Ccal Amount: 1000	
19-MAR-2010 08:18  AR1268	/chem/ecd8a.i/031910.b/010b1001.d
Ccal Level: 4 , Ccal Amount: 1000	
19-MAR-2010 08:05  AR1262	/chem/ecd8a.i/031910.b/009b0901.d
Ccal Level: 4 , Ccal Amount: 1000	
19-MAR-2010 07:53  AR1221	/chem/ecd8a.i/031910.b/008b0801.d
Ccal Level: 4 , Ccal Amount: 1000	
19-MAR-2010 07:41  AR1242	/chem/ecd8a.i/031910.b/007b0701.d
Ccal Level: 4 , Ccal Amount: 1000	
19-MAR-2010 07:28  AR1232	/chem/ecd8a.i/031910.b/006b0601.d
Ccal Level: 4 , Ccal Amount: 1000	
19-MAR-2010 07:16  AR1248	/chem/ecd8a.i/031910.b/005b0501.d
Ccal Level: 4 , Ccal Amount: 1000	
19-MAR-2010 07:03  AR1242	/chem/ecd8a.i/031910.b/004b0401.d
Ccal Level: 4 , Ccal Amount: 1000	
19-MAR-2010 06:51  AR1254	/chem/ecd8a.i/031910.b/003b0301.d
Ccal Level: 4 , Ccal Amount: 1000	
19-MAR-2010 06:39  AR1660	/chem/ecd8a.i/031910.b/002b0201.d

## GEL Laboratories LLC

## COMPOUND LISTING

Method file : /chem/ecd8a.i/031910.b/ECD8-F-8082-031810.m  
 Quant Method : ESTD Target Version : 3.50  
 Last Update : 19-Mar-2010 11:00 Number of Cpnds : 15  
 Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events Values

```

-----
Initial:Start Threshold 758.000000
Initial:End Threshold   379.000000
Initial:Area Threshold  734.000000
Initial:P-P Resolution  1.000000
Initial:Bunch Factor    2.000000
Initial:Negative Peaks  OFF
Initial:Tension         1.500000
   6.500:Bunch Factor   2.000000
  
```

Compound	RT	RT Window	RF
1 Aroclor-1016	2.806	2.776-2.836	4.772e+03
	3.157	3.127-3.187	5.397e+03
	3.300	3.270-3.330	2.352e+03
	3.392	3.362-3.422	2.192e+03
	3.555	3.525-3.585	3.079e+03
2 Aroclor-1221	2.389	2.359-2.419	1.568e+03
	2.504	2.474-2.534	9.154e+02
	2.535	2.505-2.565	3.573e+03
3 Aroclor-1232	2.535	2.505-2.565	2.601e+03
	2.806	2.776-2.836	2.261e+03
	3.301	3.271-3.331	1.243e+03
	3.555	3.525-3.585	1.479e+03
4 Aroclor-1242	3.617	3.587-3.647	9.227e+02
	2.806	2.776-2.836	3.974e+03
	3.158	3.128-3.188	4.796e+03
	3.393	3.363-3.423	1.805e+03
	3.410	3.380-3.440	1.889e+03
5 Aroclor-1248	3.555	3.525-3.585	2.645e+03
	3.143	3.113-3.173	2.721e+03
	3.393	3.363-3.423	3.402e+03
	3.555	3.525-3.585	4.371e+03
	3.861	3.831-3.891	5.250e+03
	4.020	3.990-4.050	4.212e+03

## GEL Laboratories LLC

## COMPOUND LISTING

Method file : /chem/ecd8a.i/031910.b/ECD8-F-8082-031810.m

Compound	RT	RT Window	RF
6 Aroclor-1254	3.831	3.801-3.861	4.334e+03
	4.018	3.988-4.048	5.767e+03
	4.214	4.184-4.244	4.459e+03
	4.301	4.271-4.331	7.522e+03
	4.496	4.466-4.526	5.749e+03
7 Aroclor-1260	4.429	4.399-4.459	5.890e+03
	4.625	4.595-4.655	8.495e+03
	4.900	4.870-4.930	5.066e+03
	5.072	5.042-5.102	5.329e+03
	5.483	5.453-5.513	5.641e+03
8 Aroclor-1262	4.331	4.301-4.361	3.367e+03
	4.429	4.399-4.459	5.243e+03
	4.625	4.595-4.655	7.103e+03
	4.901	4.871-4.931	8.580e+03
	5.073	5.043-5.103	7.966e+03
9 Aroclor-1268	5.507	5.477-5.537	1.632e+04
	5.534	5.504-5.564	1.572e+04
	5.667	5.637-5.697	1.207e+04
	5.914	5.884-5.944	6.023e+03
	6.110	6.080-6.140	3.601e+04
M 10 Aroclor-Total	1.000	0.980-1.020	
\$ 11 4cmx	2.248	2.218-2.278	1.250e+05
\$ 12 Decachlorobiphenyl	6.239	6.209-6.269	8.235e+04
13 4,4'-DDT	4.852	4.832-4.872	2.393e+04
14 4,4'-DDD	4.658	4.638-4.678	1.570e+05
15 4,4'-DDE	4.234	4.214-4.254	1.340e+05

## GEL Laboratories LLC

## COMPOUND LISTING

Method file : /chem/ecd8a.i/031910.b/ECD8-B-8082-031810.m  
 Quant Method : ESTD Target Version : 3.50  
 Last Update : 19-Mar-2010 11:01 Number of Cpnds : 15  
 Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events Values

```

-----
Initial:Start Threshold 733.000000
Initial:End Threshold   366.500000
Initial:Area Threshold  522.000000
Initial:P-P Resolution  0.000000
Initial:Bunch Factor    2.000000
Initial:Negative Peaks  OFF
Initial:Tension         2.000000
  9.000:Bunch Factor    2.000000
  
```

Compound	RT	RT Window	RF
1 Aroclor-1016	3.548	3.518-3.578	3.678e+03
	3.648	3.618-3.678	2.551e+03
	3.724	3.694-3.754	1.492e+03
	3.799	3.769-3.829	1.478e+03
	3.995	3.965-4.025	2.025e+03
2 Aroclor-1221	2.718	2.688-2.748	9.481e+02
	2.831	2.801-2.861	5.911e+02
	2.878	2.848-2.908	2.179e+03
3 Aroclor-1232	3.196	3.166-3.226	1.515e+03
	3.550	3.520-3.580	1.744e+03
	3.649	3.619-3.679	1.176e+03
	3.725	3.695-3.755	7.101e+02
4 Aroclor-1242	3.800	3.770-3.830	6.182e+02
	3.196	3.166-3.226	2.677e+03
	3.549	3.519-3.579	3.126e+03
	3.648	3.618-3.678	2.127e+03
	3.996	3.966-4.026	1.703e+03
5 Aroclor-1248	4.085	4.055-4.115	1.567e+03
	3.647	3.617-3.677	1.329e+03
	3.799	3.769-3.829	2.249e+03
	3.995	3.965-4.025	2.790e+03
	4.274	4.244-4.304	3.273e+03
	4.305	4.275-4.335	3.592e+03

## GEL Laboratories LLC

## COMPOUND LISTING

Method file : /chem/ecd8a.i/031910.b/ECD8-B-8082-031810.m

Compound	RT	RT Window	RF
6 Aroclor-1254	4.302	4.272-4.332	3.117e+03
	4.441	4.411-4.471	3.478e+03
	4.770	4.740-4.800	4.832e+03
	4.931	4.901-4.961	3.494e+03
	5.057	5.027-5.087	2.202e+03
7 Aroclor-1260	4.908	4.878-4.938	3.939e+03
	5.057	5.027-5.087	4.730e+03
	5.374	5.344-5.404	3.587e+03
	5.581	5.551-5.611	3.712e+03
	6.012	5.982-6.042	5.841e+03
8 Aroclor-1262	4.909	4.879-4.939	3.276e+03
	5.058	5.028-5.088	3.827e+03
	5.374	5.344-5.404	5.446e+03
	5.582	5.552-5.612	5.047e+03
	6.010	5.980-6.040	7.196e+03
9 Aroclor-1268	6.008	5.978-6.038	1.138e+04
	6.040	6.011-6.070	1.041e+04
	6.219	6.189-6.249	8.192e+03
	6.415	6.386-6.446	4.057e+03
	6.645	6.615-6.675	2.464e+04
M 10 Aroclor-Total	1.000	0.980-1.020	
\$ 11 4cmx	2.477	2.447-2.507	8.358e+04
\$ 12 Decachlorobiphenyl	6.824	6.794-6.854	5.925e+04
13 4,4'-DDT	5.323	5.303-5.343	1.460e+04
14 4,4'-DDD	5.102	5.082-5.122	1.001e+05
15 4,4'-DDE	4.691	4.671-4.711	8.898e+04

GEL Laboratories LLC  
INITIAL CALIBRATION DATA

Start Cal Date : 03-FEB-2010 10:24  
 End Cal Date : 18-MAR-2010 07:15  
 Quant Method : ESTD  
 Origin : Disabled  
 Target Version : 3.50  
 Integrator : Falcon  
 Method file : /chem/ecd8a.i/031910.b/ECD8-F-8082-031810.m  
 Cal Date : 19-Mar-2010 11:00 jam00798  
 Curve Type : Average

## Calibration File Names:

Level 1: /chem/ecd8a.i/022310.b/013f1301.d  
 Level 2: /chem/ecd8a.i/022310.b/014f1401.d  
 Level 3: /chem/ecd8a.i/022310.b/015f1501.d  
 Level 4: /chem/ecd8a.i/020310a.b/036f3601.d  
 Level 5: /chem/ecd8a.i/022310.b/017f1701.d

Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
1 Aroclor-1016(1)	5919	5050	4827	4394	3671	4772	17.374
(2)	6305	5464	5600	5079	4539	5397	12.103
(3)	2780	2401	2389	2196	1992	2352	12.417
(4)	2749	2248	2191	2001	1769	2192	16.589
(5)	3808	3166	3086	2824	2511	3079	15.627
2 Aroclor-1221(1)	1843	1746	1580	1468	1203	1568	15.964
(2)	1118	1046	917	835	660	915	19.675
(3)	4334	3992	3544	3325	2672	3573	17.859
3 Aroclor-1232(1)	++++	++++	++++	2601	++++	2601	0.000
(2)	++++	++++	++++	2261	++++	2261	0.000
(3)	++++	++++	++++	1243	++++	1243	0.000
(4)	++++	++++	++++	1479	++++	1479	0.000
(5)	++++	++++	++++	923	++++	923	0.000
4 Aroclor-1242(1)	4726	4372	4070	3706	2998	3974	16.680
(2)	5172	5152	4949	4680	4027	4796	9.873
(3)	2139	1968	1820	1683	1417	1805	15.251
(4)	2229	2050	1908	1759	1500	1889	14.735
(5)	3065	2855	2678	2500	2127	2645	13.507
5 Aroclor-1248(1)	3009	2847	2875	2619	2254	2721	10.891
(2)	3979	3666	3503	3232	2633	3402	14.930
(3)	4974	4644	4593	4148	3497	4371	13.049
(4)	5772	5534	5553	5051	4341	5250	10.905
(5)	4772	4453	4399	4004	3430	4212	12.231
6 Aroclor-1254(1)	4848	4583	4256	4143	3840	4334	9.026
(2)	6355	6045	5692	5573	5168	5767	7.878
(3)	4755	4649	4399	4320	4170	4459	5.382
(4)	7994	7880	7432	7366	6934	7522	5.676
(5)	6153	6013	5632	5615	5334	5749	5.750

GEL Laboratories LLC  
INITIAL CALIBRATION DATA

Start Cal Date : 03-FEB-2010 10:24  
 End Cal Date : 18-MAR-2010 07:15  
 Quant Method : ESTD  
 Origin : Disabled  
 Target Version : 3.50  
 Integrator : Falcon  
 Method file : /chem/ecd8a.i/031910.b/ECD8-F-8082-031810.m  
 Cal Date : 19-Mar-2010 11:00 jam00798  
 Curve Type : Average

Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
7 Aroclor-1260(1)	7147	5970	6060	5488	4785	5890	14.695
(2)	10103	8518	8810	7994	7052	8495	13.185
(3)	6142	5086	5206	4683	4213	5066	14.134
(4)	6261	5444	5587	4872	4481	5329	12.849
(5)	6525	5540	5787	5277	5076	5641	9.964
8 Aroclor-1262(1)	3851	3558	3311	3256	2859	3367	10.954
(2)	5935	5551	5239	5102	4386	5243	10.995
(3)	7996	7523	7022	6963	6012	7103	10.414
(4)	9555	9028	8567	8433	7318	8580	9.694
(5)	8875	8357	7946	7802	6850	7966	9.421
9 Aroclor-1268(1)	++++	++++	++++	16324	++++	16324	0.000
(2)	++++	++++	++++	15723	++++	15723	0.000
(3)	++++	++++	++++	12075	++++	12075	0.000
(4)	++++	++++	++++	6023	++++	6023	0.000
(5)	++++	++++	++++	36012	++++	36012	0.000
IM 10 Aroclor-Total	++++	++++	++++	++++	++++	++++	++++
13 4,4'-DDT	++++	++++	++++	23929	++++	23929	0.000
14 4,4'-DDD	++++	++++	++++	157020	++++	157020	0.000
15 4,4'-DDE	++++	++++	++++	133975	++++	133975	0.000
11 4cmx	136153	126431	127871	122774	111579	124961	7.155
12 Decachlorobiphenyl	95355	82633	85082	76716	71970	82351	10.796



GEL Laboratories LLC  
INITIAL CALIBRATION DATA

Start Cal Date : 03-FEB-2010 10:24  
 End Cal Date : 18-MAR-2010 07:15  
 Quant Method : ESTD  
 Origin : Disabled  
 Target Version : 3.50  
 Integrator : Falcon  
 Method file : /chem/ecd8a.i/031910.b/ECD8-B-8082-031810.m  
 Cal Date : 19-Mar-2010 11:01 jam00798  
 Curve Type : Average

## Calibration File Names:

Level 1: /chem/ecd8a.i/022310.b/013b1301.d  
 Level 2: /chem/ecd8a.i/022310.b/014b1401.d  
 Level 3: /chem/ecd8a.i/022310.b/015b1501.d  
 Level 4: /chem/ecd8a.i/020310a.b/036b3601.d  
 Level 5: /chem/ecd8a.i/022310.b/017b1701.d

Compound	100.000	250.000	500.000	1000.000	4000.000	RRF	% RSD
Level 1	Level 2	Level 3	Level 4	Level 5			
1 Aroclor-1016(1)	3858	3610	3858	3627	3436	3678	4.905
(2)	2824	2559	2590	2465	2318	2551	7.270
(3)	1619	1461	1511	1446	1422	1492	5.243
(4)	1671	1484	1494	1405	1335	1478	8.500
(5)	2238	2022	2057	1951	1857	2025	6.982
2 Aroclor-1221(1)	1008	1017	964	925	826	948	8.179
(2)	642	644	604	571	494	591	10.518
(3)	2384	2349	2220	2116	1827	2179	10.256
3 Aroclor-1232(1)	++++	++++	++++	1515	++++	1515	0.000
(2)	++++	++++	++++	1744	++++	1744	0.000
(3)	++++	++++	++++	1176	++++	1176	0.000
(4)	++++	++++	++++	710	++++	710	0.000
(5)	++++	++++	++++	618	++++	618	0.000
4 Aroclor-1242(1)	2949	2857	2758	2609	2213	2677	10.779
(2)	3213	3196	3180	3232	2808	3126	5.721
(3)	2287	2232	2178	2099	1842	2127	8.178
(4)	1820	1782	1741	1678	1497	1703	7.463
(5)	1675	1595	1607	1522	1434	1567	5.872
5 Aroclor-1248(1)	1413	1408	1337	1299	1188	1329	6.944
(2)	2387	2358	2277	2198	2024	2249	6.480
(3)	2920	2903	2849	2753	2523	2790	5.825
(4)	3350	3368	3334	3259	3054	3273	3.955
(5)	3677	3689	3657	3584	3353	3592	3.894
6 Aroclor-1254(1)	3242	3137	3080	3079	3045	3117	2.483
(2)	3591	3494	3433	3454	3418	3478	1.994
(3)	4854	4823	4800	4853	4830	4832	0.471
(4)	3516	3466	3440	3510	3538	3494	1.145
(5)	2281	2214	2159	2166	2188	2202	2.240

GEL Laboratories LLC  
INITIAL CALIBRATION DATA

Start Cal Date : 03-FEB-2010 10:24  
 End Cal Date : 18-MAR-2010 07:15  
 Quant Method : ESTD  
 Origin : Disabled  
 Target Version : 3.50  
 Integrator : Falcon  
 Method file : /chem/ecd8a.i/031910.b/ECD8-B-8082-031810.m  
 Cal Date : 19-Mar-2010 11:01 jam00798  
 Curve Type : Average

	100.000	250.000	500.000	1000.000	4000.000		
Compound	Level 1	Level 2	Level 3	Level 4	Level 5	RRF	% RSD
7 Aroclor-1260(1)	4310	3885	4025	3827	3646	3939	6.300
(2)	5135	4638	4867	4591	4421	4730	5.847
(3)	3916	3515	3674	3464	3365	3587	5.999
(4)	4033	3615	3813	3590	3510	3712	5.689
(5)	6224	5645	6036	5678	5624	5841	4.664
8 Aroclor-1262(1)	3545	3367	3269	3249	2948	3276	6.635
(2)	4038	3929	3844	3825	3498	3827	5.277
(3)	5683	5613	5515	5463	4958	5446	5.255
(4)	5266	5178	5090	5067	4633	5047	4.838
(5)	7327	7356	7286	7270	6740	7196	3.572
9 Aroclor-1268(1)	++++	++++	++++	11384	++++	11384	0.000
(2)	++++	++++	++++	10412	++++	10412	0.000
(3)	++++	++++	++++	8192	++++	8192	0.000
(4)	++++	++++	++++	4057	++++	4057	0.000
(5)	++++	++++	++++	24640	++++	24640	0.000
10 Aroclor-Total	++++	++++	++++	++++	++++	++++	++++
13 4,4'-DDT	++++	++++	++++	14596	++++	14596	0.000
14 4,4'-DDD	++++	++++	++++	100145	++++	100145	0.000
15 4,4'-DDE	++++	++++	++++	88982	++++	88982	0.000
11 4cmx	83925	81585	84996	84651	82754	83582	1.685
12 Decachlorobiphenyl	64763	57453	61017	56769	56260	59252	6.076

Report Date: 24-Mar-2010 09:23

### Calibration History

Method : /chem/ecd8a.i/032310.b/ECD8-F-8082-031810.m  
Start Cal Date: 03-FEB-2010 10:24  
End Cal Date : 18-MAR-2010 07:15

#### Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
23-FEB-2010 10:43	AR1221	/chem/ecd8a.i/022310.b/013f1301.d
03-FEB-2010 15:46	AR1262	/chem/ecd8a.i/020310a.b/028f2801.d
09-MAR-2010 10:41	AR1248	/chem/ecd8a.i/030910.b/013f1301.d
03-FEB-2010 12:53	AR1242	/chem/ecd8a.i/020310a.b/014f1401.d
09-MAR-2010 09:27	AR1254	/chem/ecd8a.i/030910.b/007f0701.d
18-MAR-2010 06:25	AR1660	/chem/ecd8a.i/031810.b/002f0201.d

Cal Level: 2 , Cal Amount: 250.00000		
23-FEB-2010 10:55	AR1221	/chem/ecd8a.i/022310.b/014f1401.d
03-FEB-2010 15:58	AR1262	/chem/ecd8a.i/020310a.b/029f2901.d
09-MAR-2010 10:53	AR1248	/chem/ecd8a.i/030910.b/014f1401.d
03-FEB-2010 13:05	AR1242	/chem/ecd8a.i/020310a.b/015f1501.d
09-MAR-2010 09:39	AR1254	/chem/ecd8a.i/030910.b/008f0801.d
18-MAR-2010 06:38	AR1660	/chem/ecd8a.i/031810.b/003f0301.d

Cal Level: 3 , Cal Amount: 500.00000		
23-FEB-2010 11:07	AR1221	/chem/ecd8a.i/022310.b/015f1501.d
03-FEB-2010 16:11	AR1262	/chem/ecd8a.i/020310a.b/030f3001.d
09-MAR-2010 11:05	AR1248	/chem/ecd8a.i/030910.b/015f1501.d
03-FEB-2010 13:18	AR1242	/chem/ecd8a.i/020310a.b/016f1601.d
09-MAR-2010 09:51	AR1254	/chem/ecd8a.i/030910.b/009f0901.d
18-MAR-2010 06:50	AR1660	/chem/ecd8a.i/031810.b/004f0401.d

Cal Level: 4 , Cal Amount: 1000.00000		
03-FEB-2010 17:25	DDT	/chem/ecd8a.i/020310a.b/036f3601.d
03-FEB-2010 17:00	AR1268	/chem/ecd8a.i/020310a.b/034f3401.d
03-FEB-2010 16:23	AR1262	/chem/ecd8a.i/020310a.b/031f3101.d
23-FEB-2010 11:20	AR1221	/chem/ecd8a.i/022310.b/016f1601.d
03-FEB-2010 15:21	AR1232	/chem/ecd8a.i/020310a.b/026f2601.d
09-MAR-2010 11:18	AR1248	/chem/ecd8a.i/030910.b/016f1601.d
03-FEB-2010 13:30	AR1242	/chem/ecd8a.i/020310a.b/017f1701.d
09-MAR-2010 10:04	AR1254	/chem/ecd8a.i/030910.b/010f1001.d
18-MAR-2010 07:02	AR1660	/chem/ecd8a.i/031810.b/005f0501.d

Cal Level: 5 , Cal Amount: 4000.00000		
23-FEB-2010 11:32	AR1221	/chem/ecd8a.i/022310.b/017f1701.d
03-FEB-2010 16:36	AR1262	/chem/ecd8a.i/020310a.b/032f3201.d
09-MAR-2010 11:30	AR1248	/chem/ecd8a.i/030910.b/017f1701.d
03-FEB-2010 13:42	AR1242	/chem/ecd8a.i/020310a.b/018f1801.d
09-MAR-2010 10:16	AR1254	/chem/ecd8a.i/030910.b/011f1101.d
18-MAR-2010 07:15	AR1660	/chem/ecd8a.i/031810.b/006f0601.d

Continuing Calibration  
Ccal Level Mode: GLOBAL LEVEL 4

+-----+-----+-----+		
Ccal Level: 4 , Ccal Amount: 1000		
+=====+		
23-MAR-2010 17:56  AR1660	/chem/ecd8a.i/032310.b/046f4601.d	
+-----+-----+-----+		
Ccal Level: 4 , Ccal Amount: 1000		
+=====+		
23-MAR-2010 17:15  AR1660	/chem/ecd8a.i/032310.b/043f4301.d	
+-----+-----+-----+		
Ccal Level: 4 , Ccal Amount: 1000		
+=====+		
23-MAR-2010 14:38  AR1660	/chem/ecd8a.i/032310.b/031f3101.d	
+-----+-----+-----+		
Ccal Level: 4 , Ccal Amount: 1000		
+=====+		
23-MAR-2010 08:46  AR1242	/chem/ecd8a.i/032310.b/004f0401.d	
+-----+-----+-----+		
Ccal Level: 4 , Ccal Amount: 1000		
+=====+		
23-MAR-2010 12:01  AR1660	/chem/ecd8a.i/032310.b/019f1901.d	
+-----+-----+-----+		
Ccal Level: 4 , Ccal Amount: 1000		
+=====+		
23-MAR-2010 09:48  AR1268	/chem/ecd8a.i/032310.b/009f0901.d	
+-----+-----+-----+		
Ccal Level: 4 , Ccal Amount: 1000		
+=====+		
23-MAR-2010 09:36  AR1262	/chem/ecd8a.i/032310.b/008f0801.d	
+-----+-----+-----+		
Ccal Level: 4 , Ccal Amount: 1000		
+=====+		
23-MAR-2010 09:23  AR1221	/chem/ecd8a.i/032310.b/007f0701.d	
+-----+-----+-----+		
Ccal Level: 4 , Ccal Amount: 1000		
+=====+		
23-MAR-2010 09:11  AR1232	/chem/ecd8a.i/032310.b/006f0601.d	
+-----+-----+-----+		
Ccal Level: 4 , Ccal Amount: 1000		
+=====+		
23-MAR-2010 08:59  AR1248	/chem/ecd8a.i/032310.b/005f0501.d	
+-----+-----+-----+		
Ccal Level: 4 , Ccal Amount: 1000		
+=====+		
23-MAR-2010 08:34  AR1254	/chem/ecd8a.i/032310.b/003f0301.d	
+-----+-----+-----+		
Ccal Level: 4 , Ccal Amount: 1000		
+=====+		
23-MAR-2010 08:22  AR1660	/chem/ecd8a.i/032310.b/002f0201.d	
+-----+-----+-----+		

Report Date: 24-Mar-2010 09:23

### Calibration History

Method : /chem/ecd8a.i/032310.b/ECD8-B-8082-031810.m  
Start Cal Date: 03-FEB-2010 10:24  
End Cal Date : 18-MAR-2010 07:15

#### Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
23-FEB-2010 10:43	AR1221	/chem/ecd8a.i/022310.b/013b1301.d
03-FEB-2010 15:46	AR1262	/chem/ecd8a.i/020310a.b/028b2801.d
09-MAR-2010 10:41	AR1248	/chem/ecd8a.i/030910.b/013b1301.d
03-FEB-2010 12:53	AR1242	/chem/ecd8a.i/020310a.b/014b1401.d
09-MAR-2010 09:27	AR1254	/chem/ecd8a.i/030910.b/007b0701.d
18-MAR-2010 06:25	AR1660	/chem/ecd8a.i/031810.b/002b0201.d
Cal Level: 2 , Cal Amount: 250.00000		
23-FEB-2010 10:55	AR1221	/chem/ecd8a.i/022310.b/014b1401.d
03-FEB-2010 15:58	AR1262	/chem/ecd8a.i/020310a.b/029b2901.d
09-MAR-2010 10:53	AR1248	/chem/ecd8a.i/030910.b/014b1401.d
03-FEB-2010 13:05	AR1242	/chem/ecd8a.i/020310a.b/015b1501.d
09-MAR-2010 09:39	AR1254	/chem/ecd8a.i/030910.b/008b0801.d
18-MAR-2010 06:38	AR1660	/chem/ecd8a.i/031810.b/003b0301.d
Cal Level: 3 , Cal Amount: 500.00000		
23-FEB-2010 11:07	AR1221	/chem/ecd8a.i/022310.b/015b1501.d
03-FEB-2010 16:11	AR1262	/chem/ecd8a.i/020310a.b/030b3001.d
09-MAR-2010 11:05	AR1248	/chem/ecd8a.i/030910.b/015b1501.d
03-FEB-2010 13:18	AR1242	/chem/ecd8a.i/020310a.b/016b1601.d
09-MAR-2010 09:51	AR1254	/chem/ecd8a.i/030910.b/009b0901.d
18-MAR-2010 06:50	AR1660	/chem/ecd8a.i/031810.b/004b0401.d
Cal Level: 4 , Cal Amount: 1000.00000		
03-FEB-2010 17:25	DDT	/chem/ecd8a.i/020310a.b/036b3601.d
03-FEB-2010 17:00	AR1268	/chem/ecd8a.i/020310a.b/034b3401.d
03-FEB-2010 16:23	AR1262	/chem/ecd8a.i/020310a.b/031b3101.d
23-FEB-2010 11:20	AR1221	/chem/ecd8a.i/022310.b/016b1601.d
03-FEB-2010 15:21	AR1232	/chem/ecd8a.i/020310a.b/026b2601.d
09-MAR-2010 11:18	AR1248	/chem/ecd8a.i/030910.b/016b1601.d
03-FEB-2010 13:30	AR1242	/chem/ecd8a.i/020310a.b/017b1701.d
09-MAR-2010 10:04	AR1254	/chem/ecd8a.i/030910.b/010b1001.d
18-MAR-2010 07:02	AR1660	/chem/ecd8a.i/031810.b/005b0501.d
Cal Level: 5 , Cal Amount: 4000.00000		
23-FEB-2010 11:32	AR1221	/chem/ecd8a.i/022310.b/017b1701.d
03-FEB-2010 16:36	AR1262	/chem/ecd8a.i/020310a.b/032b3201.d
09-MAR-2010 11:30	AR1248	/chem/ecd8a.i/030910.b/017b1701.d
03-FEB-2010 13:42	AR1242	/chem/ecd8a.i/020310a.b/018b1801.d
09-MAR-2010 10:16	AR1254	/chem/ecd8a.i/030910.b/011b1101.d
18-MAR-2010 07:15	AR1660	/chem/ecd8a.i/031810.b/006b0601.d

## Continuing Calibration

Ccal Level Mode: GLOBAL LEVEL 4

+-----+-----+-----+		
Ccal Level: 4 , Ccal Amount: 1000		
+=====+		
23-MAR-2010 17:56  AR1660	/chem/ecd8a.i/032310.b/046b4601.d	
+-----+-----+-----+		
Ccal Level: 4 , Ccal Amount: 1000		
+=====+		
23-MAR-2010 17:15  AR1660	/chem/ecd8a.i/032310.b/043b4301.d	
+-----+-----+-----+		
Ccal Level: 4 , Ccal Amount: 1000		
+=====+		
23-MAR-2010 14:38  AR1660	/chem/ecd8a.i/032310.b/031b3101.d	
+-----+-----+-----+		
Ccal Level: 4 , Ccal Amount: 1000		
+=====+		
23-MAR-2010 12:01  AR1660	/chem/ecd8a.i/032310.b/019b1901.d	
+-----+-----+-----+		
Ccal Level: 4 , Ccal Amount: 1000		
+=====+		
23-MAR-2010 09:48  AR1268	/chem/ecd8a.i/032310.b/009b0901.d	
+-----+-----+-----+		
Ccal Level: 4 , Ccal Amount: 1000		
+=====+		
23-MAR-2010 09:36  AR1262	/chem/ecd8a.i/032310.b/008b0801.d	
+-----+-----+-----+		
Ccal Level: 4 , Ccal Amount: 1000		
+=====+		
23-MAR-2010 09:23  AR1221	/chem/ecd8a.i/032310.b/007b0701.d	
+-----+-----+-----+		
Ccal Level: 4 , Ccal Amount: 1000		
+=====+		
23-MAR-2010 09:11  AR1232	/chem/ecd8a.i/032310.b/006b0601.d	
+-----+-----+-----+		
Ccal Level: 4 , Ccal Amount: 1000		
+=====+		
23-MAR-2010 08:59  AR1248	/chem/ecd8a.i/032310.b/005b0501.d	
+-----+-----+-----+		
Ccal Level: 4 , Ccal Amount: 1000		
+=====+		
23-MAR-2010 08:46  AR1242	/chem/ecd8a.i/032310.b/004b0401.d	
+-----+-----+-----+		
Ccal Level: 4 , Ccal Amount: 1000		
+=====+		
23-MAR-2010 08:34  AR1254	/chem/ecd8a.i/032310.b/003b0301.d	
+-----+-----+-----+		
Ccal Level: 4 , Ccal Amount: 1000		
+=====+		
23-MAR-2010 08:22  AR1660	/chem/ecd8a.i/032310.b/002b0201.d	
+-----+-----+-----+		

## GEL Laboratories LLC

## COMPOUND LISTING

Method file : /chem/ecd8a.i/032310.b/ECD8-F-8082-031810.m  
 Quant Method : ESTD Target Version : 3.50  
 Last Update : 24-Mar-2010 08:51 Number of Cpnds : 15  
 Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events Values

```

-----
Initial:Start Threshold 758.000000
Initial:End Threshold   379.000000
Initial:Area Threshold  734.000000
Initial:P-P Resolution  1.000000
Initial:Bunch Factor     2.000000
Initial:Negative Peaks   OFF
Initial:Tension          1.500000
   6.500:Bunch Factor    2.000000
  
```

Compound	RT	RT Window	RF
1 Aroclor-1016	2.806	2.776-2.836	4.772e+03
	3.157	3.127-3.187	5.397e+03
	3.301	3.271-3.331	2.352e+03
	3.393	3.363-3.423	2.192e+03
	3.555	3.525-3.585	3.079e+03
2 Aroclor-1221	2.389	2.359-2.419	1.568e+03
	2.503	2.473-2.533	9.154e+02
	2.534	2.504-2.564	3.573e+03
3 Aroclor-1232	2.535	2.505-2.565	2.601e+03
	2.806	2.776-2.836	2.261e+03
	3.301	3.271-3.331	1.243e+03
	3.555	3.525-3.585	1.479e+03
4 Aroclor-1242	3.617	3.587-3.647	9.227e+02
	2.806	2.776-2.836	3.974e+03
	3.157	3.127-3.187	4.796e+03
	3.393	3.363-3.423	1.805e+03
	3.410	3.380-3.440	1.889e+03
5 Aroclor-1248	3.556	3.526-3.586	2.645e+03
	3.143	3.113-3.173	2.721e+03
	3.392	3.362-3.422	3.402e+03
	3.555	3.525-3.585	4.371e+03
	3.860	3.830-3.890	5.250e+03
	4.020	3.990-4.050	4.212e+03

## GEL Laboratories LLC

## COMPOUND LISTING

Method file : /chem/ecd8a.i/032310.b/ECD8-F-8082-031810.m

Compound	RT	RT Window	RF
6 Aroclor-1254	3.830	3.800-3.860	4.334e+03
	4.017	3.987-4.047	5.767e+03
	4.213	4.183-4.243	4.459e+03
	4.300	4.270-4.330	7.522e+03
7 Aroclor-1260	4.496	4.466-4.526	5.749e+03
	4.429	4.399-4.459	5.890e+03
	4.625	4.595-4.655	8.495e+03
	4.900	4.870-4.930	5.066e+03
8 Aroclor-1262	5.072	5.042-5.102	5.329e+03
	5.483	5.453-5.513	5.641e+03
	4.331	4.301-4.361	3.367e+03
	4.429	4.399-4.459	5.243e+03
9 Aroclor-1268	4.624	4.594-4.654	7.103e+03
	4.900	4.870-4.930	8.580e+03
	5.071	5.041-5.101	7.966e+03
	5.507	5.477-5.537	1.632e+04
M 10 Aroclor-Total	5.534	5.504-5.564	1.572e+04
	5.668	5.638-5.698	1.207e+04
	5.913	5.883-5.943	6.023e+03
	6.110	6.080-6.140	3.601e+04
\$ 11 4cmx	1.000	0.980-1.020	
\$ 12 Decachlorobiphenyl	2.248	2.218-2.278	1.250e+05
13 4,4'-DDT	6.240	6.210-6.270	8.235e+04
14 4,4'-DDD	4.852	4.832-4.872	2.393e+04
15 4,4'-DDE	4.658	4.638-4.678	1.570e+05
	4.234	4.214-4.254	1.340e+05



## GEL Laboratories LLC

## COMPOUND LISTING

Method file : /chem/ecd8a.i/032310.b/ECD8-B-8082-031810.m  
 Quant Method : ESTD Target Version : 3.50  
 Last Update : 24-Mar-2010 08:39 Number of Cpnds : 15  
 Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events Values

```

-----
Initial:Start Threshold 733.000000
Initial:End Threshold   366.500000
Initial:Area Threshold  522.000000
Initial:P-P Resolution  0.000000
Initial:Bunch Factor    2.000000
Initial:Negative Peaks  OFF
Initial:Tension         2.000000
  9.000:Bunch Factor    2.000000
  
```

Compound	RT	RT Window	RF
1 Aroclor-1016	3.548	3.518-3.578	3.678e+03
	3.647	3.617-3.677	2.551e+03
	3.723	3.693-3.753	1.492e+03
	3.799	3.769-3.829	1.478e+03
	3.995	3.965-4.025	2.025e+03
2 Aroclor-1221	2.717	2.687-2.747	9.481e+02
	2.829	2.799-2.859	5.911e+02
	2.877	2.847-2.907	2.179e+03
3 Aroclor-1232	3.195	3.165-3.225	1.515e+03
	3.548	3.518-3.578	1.744e+03
	3.648	3.618-3.678	1.176e+03
	3.723	3.693-3.753	7.101e+02
4 Aroclor-1242	3.798	3.768-3.828	6.182e+02
	3.196	3.166-3.226	2.677e+03
	3.548	3.518-3.578	3.126e+03
	3.648	3.618-3.678	2.127e+03
	3.995	3.965-4.025	1.703e+03
5 Aroclor-1248	4.084	4.054-4.114	1.567e+03
	3.646	3.616-3.676	1.329e+03
	3.798	3.768-3.828	2.249e+03
	3.994	3.964-4.024	2.790e+03
	4.272	4.242-4.302	3.273e+03
	4.305	4.275-4.335	3.592e+03

## GEL Laboratories LLC

## COMPOUND LISTING

Method file : /chem/ecd8a.i/032310.b/ECD8-B-8082-031810.m

Compound	RT	RT Window	RF
6 Aroclor-1254	4.301	4.271-4.331	3.117e+03
	4.440	4.410-4.470	3.478e+03
	4.769	4.739-4.799	4.832e+03
	4.931	4.901-4.961	3.494e+03
	5.057	5.027-5.087	2.202e+03
7 Aroclor-1260	4.907	4.877-4.937	3.939e+03
	5.056	5.026-5.086	4.730e+03
	5.373	5.343-5.403	3.587e+03
	5.580	5.550-5.610	3.712e+03
	6.011	5.981-6.041	5.841e+03
8 Aroclor-1262	4.907	4.877-4.937	3.276e+03
	5.056	5.026-5.086	3.827e+03
	5.373	5.343-5.403	5.446e+03
	5.580	5.550-5.610	5.047e+03
	6.008	5.978-6.038	7.196e+03
9 Aroclor-1268	6.006	5.976-6.036	1.138e+04
	6.039	6.009-6.069	1.041e+04
	6.217	6.187-6.247	8.192e+03
	6.414	6.384-6.444	4.057e+03
	6.643	6.613-6.673	2.464e+04
M 10 Aroclor-Total	1.000	0.980-1.020	
\$ 11 4cmx	2.476	2.446-2.506	8.358e+04
\$ 12 Decachlorobiphenyl	6.824	6.794-6.854	5.925e+04
13 4,4'-DDT	5.323	5.303-5.343	1.460e+04
14 4,4'-DDD	5.102	5.082-5.122	1.001e+05
15 4,4'-DDE	4.691	4.671-4.711	8.898e+04

GEL Laboratories LLC  
INITIAL CALIBRATION DATA

Start Cal Date : 03-FEB-2010 10:24  
 End Cal Date : 18-MAR-2010 07:15  
 Quant Method : ESTD  
 Origin : Disabled  
 Target Version : 3.50  
 Integrator : Falcon  
 Method file : /chem/ecd8a.i/032310.b/ECD8-F-8082-031810.m  
 Cal Date : 24-Mar-2010 08:51 jen01212  
 Curve Type : Average

## Calibration File Names:

Level 1: /chem/ecd8a.i/022310.b/013f1301.d  
 Level 2: /chem/ecd8a.i/022310.b/014f1401.d  
 Level 3: /chem/ecd8a.i/022310.b/015f1501.d  
 Level 4: /chem/ecd8a.i/020310a.b/036f3601.d  
 Level 5: /chem/ecd8a.i/022310.b/017f1701.d

Compound	100.000	250.000	500.000	1000.000	4000.000	RRF	% RSD
Level 1	Level 2	Level 3	Level 4	Level 5			
1 Aroclor-1016(1)	5919	5050	4827	4394	3671	4772	17.374
(2)	6305	5464	5600	5079	4539	5397	12.103
(3)	2780	2401	2389	2196	1992	2352	12.417
(4)	2749	2248	2191	2001	1769	2192	16.589
(5)	3808	3166	3086	2824	2511	3079	15.627
2 Aroclor-1221(1)	1843	1746	1580	1468	1203	1568	15.964
(2)	1118	1046	917	835	660	915	19.675
(3)	4334	3992	3544	3325	2672	3573	17.859
3 Aroclor-1232(1)	+++++	+++++	+++++	2601	+++++	2601	0.000
(2)	+++++	+++++	+++++	2261	+++++	2261	0.000
(3)	+++++	+++++	+++++	1243	+++++	1243	0.000
(4)	+++++	+++++	+++++	1479	+++++	1479	0.000
(5)	+++++	+++++	+++++	923	+++++	923	0.000
4 Aroclor-1242(1)	4726	4372	4070	3706	2998	3974	16.680
(2)	5172	5152	4949	4680	4027	4796	9.873
(3)	2139	1968	1820	1683	1417	1805	15.251
(4)	2229	2050	1908	1759	1500	1889	14.735
(5)	3065	2855	2678	2500	2127	2645	13.507
5 Aroclor-1248(1)	3009	2847	2875	2619	2254	2721	10.891
(2)	3979	3666	3503	3232	2633	3402	14.930
(3)	4974	4644	4593	4148	3497	4371	13.049
(4)	5772	5534	5553	5051	4341	5250	10.905
(5)	4772	4453	4399	4004	3430	4212	12.231
6 Aroclor-1254(1)	4848	4583	4256	4143	3840	4334	9.026
(2)	6355	6045	5692	5573	5168	5767	7.878
(3)	4755	4649	4399	4320	4170	4459	5.382
(4)	7994	7880	7432	7366	6934	7522	5.676
(5)	6153	6013	5632	5615	5334	5749	5.750

GEL Laboratories LLC  
INITIAL CALIBRATION DATA

Start Cal Date : 03-FEB-2010 10:24  
 End Cal Date : 18-MAR-2010 07:15  
 Quant Method : ESTD  
 Origin : Disabled  
 Target Version : 3.50  
 Integrator : Falcon  
 Method file : /chem/ecd8a.i/032310.b/ECD8-F-8082-031810.m  
 Cal Date : 24-Mar-2010 08:51 jen01212  
 Curve Type : Average

	100.000	250.000	500.000	1000.000	4000.000		
Compound	Level 1	Level 2	Level 3	Level 4	Level 5	RRF	% RSD
=====							
7 Aroclor-1260(1)	7147	5970	6060	5488	4785	5890	14.695
(2)	10103	8518	8810	7994	7052	8495	13.185
(3)	6142	5086	5206	4683	4213	5066	14.134
(4)	6261	5444	5587	4872	4481	5329	12.849
(5)	6525	5540	5787	5277	5076	5641	9.964
8 Aroclor-1262(1)	3851	3558	3311	3256	2859	3367	10.954
(2)	5935	5551	5239	5102	4386	5243	10.995
(3)	7996	7523	7022	6963	6012	7103	10.414
(4)	9555	9028	8567	8433	7318	8580	9.694
(5)	8875	8357	7946	7802	6850	7966	9.421
9 Aroclor-1268(1)	++++	++++	++++	16324	++++	16324	0.000
(2)	++++	++++	++++	15723	++++	15723	0.000
(3)	++++	++++	++++	12075	++++	12075	0.000
(4)	++++	++++	++++	6023	++++	6023	0.000
(5)	++++	++++	++++	36012	++++	36012	0.000
M 10 Aroclor-Total	++++	++++	++++	++++	++++	++++	++++
13 4,4'-DDT	++++	++++	++++	23929	++++	23929	0.000
14 4,4'-DDD	++++	++++	++++	157020	++++	157020	0.000
15 4,4'-DDE	++++	++++	++++	133975	++++	133975	0.000
=====							
\$ 11 4cmx	136153	126431	127871	122774	111579	124961	7.155
\$ 12 Decachlorobiphenyl	95355	82633	85082	76716	71970	82351	10.796
=====							

GEL Laboratories LLC  
INITIAL CALIBRATION DATA

Start Cal Date : 03-FEB-2010 10:24  
End Cal Date : 18-MAR-2010 07:15  
Quant Method : ESTD  
Origin : Disabled  
Target Version : 3.50  
Integrator : Falcon  
Method file : /chem/ecd8a.i/032310.b/ECD8-B-8082-031810.m  
Cal Date : 24-Mar-2010 08:39 jen01212  
Curve Type : Average

## Calibration File Names:

Level 1: /chem/ecd8a.i/022310.b/013b1301.d  
Level 2: /chem/ecd8a.i/022310.b/014b1401.d  
Level 3: /chem/ecd8a.i/022310.b/015b1501.d  
Level 4: /chem/ecd8a.i/020310a.b/036b3601.d  
Level 5: /chem/ecd8a.i/022310.b/017b1701.d

Compound	100.000	250.000	500.000	1000.000	4000.000	RRF	% RSD
Level 1	Level 2	Level 3	Level 4	Level 5			
1 Aroclor-1016(1)	3858	3610	3858	3627	3436	3678	4.905
(2)	2824	2559	2590	2465	2318	2551	7.270
(3)	1619	1461	1511	1446	1422	1492	5.243
(4)	1671	1484	1494	1405	1335	1478	8.500
(5)	2238	2022	2057	1951	1857	2025	6.982
2 Aroclor-1221(1)	1008	1017	964	925	826	948	8.179
(2)	642	644	604	571	494	591	10.518
(3)	2384	2349	2220	2116	1827	2179	10.256
3 Aroclor-1232(1)	++++	++++	++++	1515	++++	1515	0.000
(2)	++++	++++	++++	1744	++++	1744	0.000
(3)	++++	++++	++++	1176	++++	1176	0.000
(4)	++++	++++	++++	710	++++	710	0.000
(5)	++++	++++	++++	618	++++	618	0.000
4 Aroclor-1242(1)	2949	2857	2758	2609	2213	2677	10.779
(2)	3213	3196	3180	3232	2808	3126	5.721
(3)	2287	2232	2178	2099	1842	2127	8.178
(4)	1820	1782	1741	1678	1497	1703	7.463
(5)	1675	1595	1607	1522	1434	1567	5.872
5 Aroclor-1248(1)	1413	1408	1337	1299	1188	1329	6.944
(2)	2387	2358	2277	2198	2024	2249	6.480
(3)	2920	2903	2849	2753	2523	2790	5.825
(4)	3350	3368	3334	3259	3054	3273	3.955
(5)	3677	3689	3657	3584	3353	3592	3.894
6 Aroclor-1254(1)	3242	3137	3080	3079	3045	3117	2.483
(2)	3591	3494	3433	3454	3418	3478	1.994
(3)	4854	4823	4800	4853	4830	4832	0.471
(4)	3516	3466	3440	3510	3538	3494	1.145
(5)	2281	2214	2159	2166	2188	2202	2.240

GEL Laboratories LLC  
INITIAL CALIBRATION DATA

Start Cal Date : 03-FEB-2010 10:24  
 End Cal Date : 18-MAR-2010 07:15  
 Quant Method : ESTD  
 Origin : Disabled  
 Target Version : 3.50  
 Integrator : Falcon  
 Method file : /chem/ecd8a.i/032310.b/ECD8-B-8082-031810.m  
 Cal Date : 24-Mar-2010 08:39 jen01212  
 Curve Type : Average

Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
7 Aroclor-1260(1)	4310	3885	4025	3827	3646	3939	6.300
(2)	5135	4638	4867	4591	4421	4730	5.847
(3)	3916	3515	3674	3464	3365	3587	5.999
(4)	4033	3615	3813	3590	3510	3712	5.689
(5)	6224	5645	6036	5678	5624	5841	4.664
8 Aroclor-1262(1)	3545	3367	3269	3249	2948	3276	6.635
(2)	4038	3929	3844	3825	3498	3827	5.277
(3)	5683	5613	5515	5463	4958	5446	5.255
(4)	5266	5178	5090	5067	4633	5047	4.838
(5)	7327	7356	7286	7270	6740	7196	3.572
9 Aroclor-1268(1)	++++	++++	++++	11384	++++	11384	0.000
(2)	++++	++++	++++	10412	++++	10412	0.000
(3)	++++	++++	++++	8192	++++	8192	0.000
(4)	++++	++++	++++	4057	++++	4057	0.000
(5)	++++	++++	++++	24640	++++	24640	0.000
10 Aroclor-Total	++++	++++	++++	++++	++++	++++	++++
13 4,4'-DDT	++++	++++	++++	14596	++++	14596	0.000
14 4,4'-DDD	++++	++++	++++	100145	++++	100145	0.000
15 4,4'-DDE	++++	++++	++++	88982	++++	88982	0.000
11 4cmx	83925	81585	84996	84651	82754	83582	1.685
12 Decachlorobiphenyl	64763	57453	61017	56769	56260	59252	6.076

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.: 10-2199  
 Instrument ID: ECD8A Calibration Date: 03/19/10 Time: 0639  
 Lab File ID: 002F0201 Init. Calib. Date(s): 03/18/10 03/18/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 0625 0715  
 GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
=====	=====	=====	=====	=====	=====
Aroclor-1016	4772.270	4286.357	0.01	-10.2	15.0
(2)	5397.398	5060.097	0.01	-6.2	15.0
(3)	2351.643	2193.525	0.01	-6.7	15.0
(4)	2191.567	1985.533	0.01	-9.4	15.0
(5)	3078.945	2834.632	0.01	-7.9	15.0
Aroclor-1260	5890.060	5979.285	0.01	1.5	15.0
(2)	8495.287	8802.241	0.01	3.6	15.0
(3)	5066.269	5196.891	0.01	2.6	15.0
(4)	5329.016	5493.408	0.01	3.1	15.0
(5)	5640.982	6142.364	0.01	8.9	15.0
=====	=====	=====	=====	=====	=====
4cmx	124961.40	128759.27	0.01	3.0	15.0
Decachlorobiphenyl	82351.042	90323.340	0.01	9.7	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.: 10-2199  
 Instrument ID: ECD8A Calibration Date: 03/19/10 Time: 0639  
 Lab File ID: 002B0201 Init. Calib. Date(s): 03/18/10 03/18/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 0625 0715  
 GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
=====	=====	=====	=====	=====	=====
Aroclor-1016	3677.771	3917.511	0.01	6.5	15.0
(2)	2551.186	2562.521	0.01	0.4	15.0
(3)	1492.032	1521.811	0.01	2.0	15.0
(4)	1477.704	1479.544	0.01	0.1	15.0
(5)	2024.804	2055.367	0.01	1.5	15.0
Aroclor-1260	3938.505	4402.018	0.01	11.8	15.0
(2)	4730.476	5307.034	0.01	12.2	15.0
(3)	3586.650	4021.025	0.01	12.1	15.0
(4)	3712.238	4180.664	0.01	12.6	15.0
(5)	5841.333	6615.558	0.01	13.2	15.0
=====	=====	=====	=====	=====	=====
4cmx	83582.102	91464.330	0.01	9.4	15.0
Decachlorobiphenyl	59252.492	66216.290	0.01	11.8	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.: 10-2199  
 Instrument ID: ECD8A Calibration Date: 03/19/10 Time: 0651  
 Lab File ID: 003F0301 Init. Calib. Date(s): 03/09/10 03/09/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 0927 1016  
 GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1254	4333.962	4222.328	0.01	-2.6	15.0
(2)	5766.534	5675.120	0.01	-1.6	15.0
(3)	4458.524	4397.426	0.01	-1.4	15.0
(4)	7521.536	7412.798	0.01	-1.4	15.0
(5)	5749.206	5627.866	0.01	-2.1	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.: 10-2199  
 Instrument ID: ECD8A Calibration Date: 03/19/10 Time: 0651  
 Lab File ID: 003B0301 Init. Calib. Date(s): 03/09/10 03/09/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 0927 1016  
 GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1254	3116.660	3335.653	0.01	7.0	15.0
(2)	3478.140	3737.474	0.01	7.4	15.0
(3)	4832.039	5294.975	0.01	9.6	15.0
(4)	3494.052	3806.287	0.01	8.9	15.0
(5)	2201.695	2377.635	0.01	8.0	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.: 10-2199  
 Instrument ID: ECD8A Calibration Date: 03/19/10 Time: 1157  
 Lab File ID: 024F2401 Init. Calib. Date(s): 03/18/10 03/18/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 0625 0715  
 GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
=====	=====	=====	=====	=====	=====
Aroclor-1016	4772.270	4613.032	0.01	-3.3	15.0
(2)	5397.398	5689.003	0.01	5.4	15.0
(3)	2351.643	2400.712	0.01	2.1	15.0
(4)	2191.567	2129.382	0.01	-2.8	15.0
(5)	3078.945	3082.144	0.01	0.1	15.0
Aroclor-1260	5890.060	6070.707	0.01	3.1	15.0
(2)	8495.287	9081.858	0.01	6.9	15.0
(3)	5066.269	5383.035	0.01	6.2	15.0
(4)	5329.016	5825.588	0.01	9.3	15.0
(5)	5640.982	6272.339	0.01	11.2	15.0
=====	=====	=====	=====	=====	=====
4cmx	124961.40	127278.54	0.01	1.8	15.0
Decachlorobiphenyl	82351.042	92907.720	0.01	12.8	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.: 10-2199  
 Instrument ID: ECD8A Calibration Date: 03/19/10 Time: 1157  
 Lab File ID: 024B2401 Init. Calib. Date(s): 03/18/10 03/18/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 0625 0715  
 GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
=====	=====	=====	=====	=====	=====
Aroclor-1016	3677.771	4146.365	0.01	12.7	15.0
(2)	2551.186	2710.579	0.01	6.2	15.0
(3)	1492.032	1633.422	0.01	9.5	15.0
(4)	1477.704	1564.141	0.01	5.8	15.0
(5)	2024.804	2157.573	0.01	6.6	15.0
Aroclor-1260	3938.505	4320.885	0.01	9.7	15.0
(2)	4730.476	5302.606	0.01	12.1	15.0
(3)	3586.650	4026.732	0.01	12.3	15.0
(4)	3712.238	4203.569	0.01	13.2	15.0
(5)	5841.333	6810.024	0.01	16.6	15.0
=====	=====	=====	=====	=====	=====
4cmx	83582.102	88663.400	0.01	6.1	15.0
Decachlorobiphenyl	59252.492	68871.140	0.01	16.2	15.0
=====	=====	=====	=====	=====	=====

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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.: 10-2199  
 Instrument ID: ECD8A Calibration Date: 03/19/10 Time: 1430  
 Lab File ID: 036F3601 Init. Calib. Date(s): 03/18/10 03/18/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 0625 0715  
 GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
=====	=====	=====	=====	=====	=====
Aroclor-1016	4772.270	4393.749	0.01	-7.9	15.0
(2)	5397.398	5655.854	0.01	4.8	15.0
(3)	2351.643	2318.726	0.01	-1.4	15.0
(4)	2191.567	2099.361	0.01	-4.2	15.0
(5)	3078.945	2945.368	0.01	-4.3	15.0
Aroclor-1260	5890.060	6182.312	0.01	5.0	15.0
(2)	8495.287	9152.196	0.01	7.7	15.0
(3)	5066.269	5366.905	0.01	5.9	15.0
(4)	5329.016	5687.866	0.01	6.7	15.0
(5)	5640.982	6481.184	0.01	14.9	15.0
=====	=====	=====	=====	=====	=====
4cmx	124961.40	129714.87	0.01	3.8	15.0
Decachlorobiphenyl	82351.042	89775.020	0.01	9.0	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.: 10-2199  
 Instrument ID: ECD8A Calibration Date: 03/19/10 Time: 1430  
 Lab File ID: 036B3601 Init. Calib. Date(s): 03/18/10 03/18/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 0625 0715  
 GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
=====	=====	=====	=====	=====	=====
Aroclor-1016	3677.771	4101.482	0.01	11.5	15.0
(2)	2551.186	2598.717	0.01	1.9	15.0
(3)	1492.032	1573.071	0.01	5.4	15.0
(4)	1477.704	1509.674	0.01	2.2	15.0
(5)	2024.804	2093.298	0.01	3.4	15.0
Aroclor-1260	3938.505	4433.168	0.01	12.6	15.0
(2)	4730.476	5413.639	0.01	14.4	15.0
(3)	3586.650	4096.662	0.01	14.2	15.0
(4)	3712.238	4259.720	0.01	14.7	15.0
(5)	5841.333	6923.268	0.01	18.5	15.0
=====	=====	=====	=====	=====	=====
4cmx	83582.102	91365.090	0.01	9.3	15.0
Decachlorobiphenyl	59252.492	66844.160	0.01	12.8	15.0

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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.: 10-2199  
 Instrument ID: ECD8A Calibration Date: 03/19/10 Time: 1703  
 Lab File ID: 048F4801 Init. Calib. Date(s): 03/18/10 03/18/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 0625 0715  
 GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
=====	=====	=====	=====	=====	=====
Aroclor-1016	4772.270	4919.988	0.01	3.1	15.0
(2)	5397.398	6253.825	0.01	15.9	15.0
(3)	2351.643	2597.185	0.01	10.4	15.0
(4)	2191.567	2256.649	0.01	3.0	15.0
(5)	3078.945	3339.276	0.01	8.4	15.0
Aroclor-1260	5890.060	6625.955	0.01	12.5	15.0
(2)	8495.287	9733.923	0.01	14.6	15.0
(3)	5066.269	5620.449	0.01	10.9	15.0
(4)	5329.016	5975.042	0.01	12.1	15.0
(5)	5640.982	6404.791	0.01	13.5	15.0
=====	=====	=====	=====	=====	=====
4cmx	124961.40	134454.97	0.01	7.6	15.0
Decachlorobiphenyl	82351.042	91335.550	0.01	10.9	15.0
=====	=====	=====	=====	=====	=====

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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.: 10-2199  
 Instrument ID: ECD8A Calibration Date: 03/19/10 Time: 1703  
 Lab File ID: 048B4801 Init. Calib. Date(s): 03/18/10 03/18/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 0625 0715  
 GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D	
Aroclor-1016	3677.771	4261.247	0.01	15.9	15.0	<-
(2)	2551.186	2769.533	0.01	8.6	15.0	
(3)	1492.032	1666.368	0.01	11.7	15.0	
(4)	1477.704	1602.179	0.01	8.4	15.0	
(5)	2024.804	2204.154	0.01	8.8	15.0	
Aroclor-1260	3938.505	4380.301	0.01	11.2	15.0	
(2)	4730.476	5335.273	0.01	12.8	15.0	
(3)	3586.650	4010.468	0.01	11.8	15.0	
(4)	3712.238	4181.377	0.01	12.6	15.0	
(5)	5841.333	6690.190	0.01	14.5	15.0	
4cmx	83582.102	90993.540	0.01	8.9	15.0	
Decachlorobiphenyl	59252.492	67095.470	0.01	13.2	15.0	

FORM VII PEST



FORM 7  
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-2199  
 Instrument ID: ECD8A Calibration Date: 03/19/10 Time: 1821  
 Lab File ID: 054F5401 Init. Calib. Date(s): 03/18/10 03/18/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 0625 0715  
 GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
=====	=====	=====	=====	=====	=====
Aroclor-1016	4772.270	4640.111	0.01	-2.8	15.0
(2)	5397.398	5770.150	0.01	6.9	15.0
(3)	2351.643	2421.038	0.01	3.0	15.0
(4)	2191.567	2147.981	0.01	-2.0	15.0
(5)	3078.945	3106.921	0.01	0.9	15.0
Aroclor-1260	5890.060	5905.953	0.01	0.3	15.0
(2)	8495.287	8659.979	0.01	1.9	15.0
(3)	5066.269	5035.438	0.01	-0.6	15.0
(4)	5329.016	5362.367	0.01	0.6	15.0
(5)	5640.982	5723.029	0.01	1.4	15.0
=====	=====	=====	=====	=====	=====
4cmx	124961.40	127229.77	0.01	1.8	15.0
Decachlorobiphenyl	82351.042	82834.340	0.01	0.6	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.: 10-2199  
 Instrument ID: ECD8A Calibration Date: 03/19/10 Time: 1821  
 Lab File ID: 054B5401 Init. Calib. Date(s): 03/18/10 03/18/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 0625 0715  
 GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	3677.771	3960.984	0.01	7.7	15.0
(2)	2551.186	2591.174	0.01	1.6	15.0
(3)	1492.032	1565.318	0.01	4.9	15.0
(4)	1477.704	1507.216	0.01	2.0	15.0
(5)	2024.804	2095.085	0.01	3.5	15.0
Aroclor-1260	3938.505	4074.457	0.01	3.4	15.0
(2)	4730.476	4935.213	0.01	4.3	15.0
(3)	3586.650	3709.523	0.01	3.4	15.0
(4)	3712.238	3853.997	0.01	3.8	15.0
(5)	5841.333	6125.578	0.01	4.9	15.0
4cmx	83582.102	86657.550	0.01	3.7	15.0
Decachlorobiphenyl	59252.492	60434.140	0.01	2.0	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.: 10-2199  
 Instrument ID: ECD8A Calibration Date: 03/23/10 Time: 0822  
 Lab File ID: 002F0201 Init. Calib. Date(s): 03/18/10 03/18/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 0625 0715  
 GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	4772.270	4356.912	0.01	-8.7	15.0
(2)	5397.398	5314.052	0.01	-1.5	15.0
(3)	2351.643	2244.950	0.01	-4.5	15.0
(4)	2191.567	2026.561	0.01	-7.5	15.0
(5)	3078.945	2883.384	0.01	-6.4	15.0
Aroclor-1260	5890.060	5924.060	0.01	0.6	15.0
(2)	8495.287	8697.557	0.01	2.4	15.0
(3)	5066.269	5099.908	0.01	0.7	15.0
(4)	5329.016	5481.293	0.01	2.8	15.0
(5)	5640.982	5903.839	0.01	4.6	15.0
4cmx	124961.40	128432.09	0.01	2.8	15.0
Decachlorobiphenyl	82351.042	86595.090	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.: 10-2199  
 Instrument ID: ECD8A Calibration Date: 03/23/10 Time: 0822  
 Lab File ID: 002B0201 Init. Calib. Date(s): 03/18/10 03/18/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 0625 0715  
 GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	3677.771	3813.714	0.01	3.7	15.0
(2)	2551.186	2498.966	0.01	-2.0	15.0
(3)	1492.032	1490.552	0.01	-0.1	15.0
(4)	1477.704	1447.833	0.01	-2.0	15.0
(5)	2024.804	2010.893	0.01	-0.7	15.0
Aroclor-1260	3938.505	4265.170	0.01	8.3	15.0
(2)	4730.476	5176.085	0.01	9.4	15.0
(3)	3586.650	3889.009	0.01	8.4	15.0
(4)	3712.238	4037.036	0.01	8.7	15.0
(5)	5841.333	6431.111	0.01	10.1	15.0
4cmx	83582.102	90007.610	0.01	7.7	15.0
Decachlorobiphenyl	59252.492	64417.740	0.01	8.7	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.: 10-2199  
 Instrument ID: ECD8A Calibration Date: 03/23/10 Time: 0834  
 Lab File ID: 003F0301 Init. Calib. Date(s): 03/09/10 03/09/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 0927 1016  
 GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1254	4333.962	4170.264	0.01	-3.8	15.0
(2)	5766.534	5614.913	0.01	-2.6	15.0
(3)	4458.524	4376.011	0.01	-1.8	15.0
(4)	7521.536	7372.606	0.01	-2.0	15.0
(5)	5749.206	5596.135	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.: 10-2199  
 Instrument ID: ECD8A Calibration Date: 03/23/10 Time: 0834  
 Lab File ID: 003B0301 Init. Calib. Date(s): 03/09/10 03/09/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 0927 1016  
 GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
=====	=====	=====	=====	=====	=====
Aroclor-1254	3116.660	3312.879	0.01	6.3	15.0
(2)	3478.140	3709.562	0.01	6.6	15.0
(3)	4832.039	5255.007	0.01	8.8	15.0
(4)	3494.052	3762.160	0.01	7.7	15.0
(5)	2201.695	2353.978	0.01	6.9	15.0

FORM VII PEST

FORM 7  
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-2199  
 Instrument ID: ECD8A Calibration Date: 03/23/10 Time: 1201  
 Lab File ID: 019F1901 Init. Calib. Date(s): 03/18/10 03/18/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 0625 0715  
 GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
=====	=====	=====	=====	=====	=====
Aroclor-1016	4772.270	4188.230	0.01	-12.2	15.0
(2)	5397.398	5213.562	0.01	-3.4	15.0
(3)	2351.643	2188.215	0.01	-6.9	15.0
(4)	2191.567	1921.201	0.01	-12.3	15.0
(5)	3078.945	2770.682	0.01	-10.0	15.0
Aroclor-1260	5890.060	5694.698	0.01	-3.3	15.0
(2)	8495.287	8561.344	0.01	0.8	15.0
(3)	5066.269	5038.763	0.01	-0.5	15.0
(4)	5329.016	5300.445	0.01	-0.5	15.0
(5)	5640.982	5859.339	0.01	3.9	15.0
=====	=====	=====	=====	=====	=====
4cmx	124961.40	125576.24	0.01	0.5	15.0
Decachlorobiphenyl	82351.042	84887.520	0.01	3.1	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.: 10-2199  
 Instrument ID: ECD8A Calibration Date: 03/23/10 Time: 1201  
 Lab File ID: 019B1901 Init. Calib. Date(s): 03/18/10 03/18/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 0625 0715  
 GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	3677.771	3750.070	0.01	2.0	15.0
(2)	2551.186	2478.563	0.01	-2.8	15.0
(3)	1492.032	1508.121	0.01	1.1	15.0
(4)	1477.704	1443.862	0.01	-2.3	15.0
(5)	2024.804	1995.748	0.01	-1.4	15.0
Aroclor-1260	3938.505	4152.360	0.01	5.4	15.0
(2)	4730.476	5056.096	0.01	6.9	15.0
(3)	3586.650	3778.164	0.01	5.3	15.0
(4)	3712.238	4002.290	0.01	7.8	15.0
(5)	5841.333	6250.416	0.01	7.0	15.0
4cmx	83582.102	89527.720	0.01	7.1	15.0
Decachlorobiphenyl	59252.492	61113.380	0.01	3.1	15.0

FORM VII PEST



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/031910.b/002f0201.d

Lab Smp Id: WAR100224-60 01 Client Smp ID: AR166001

Inj Date : 19-MAR-2010 06:39

Operator : JAOC Inst ID: ecd8a.i

Smp Info : |WAR100224-60 01

Misc Info : |1660

Comment :

Method : /chem/ecd8a.i/031910.b/ECD8-F-8082-031810.m

Meth Date : 19-Mar-2010 09:16 jam00798 Quant Type: ESTD

Cal Date : 23-FEB-2010 11:32 Cal File: 017f1701.d

Als bottle: 2 Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon Compound Sublist: AR1660.sub

Target Version: 3.50 Sample Matrix: None

AMOUNTS

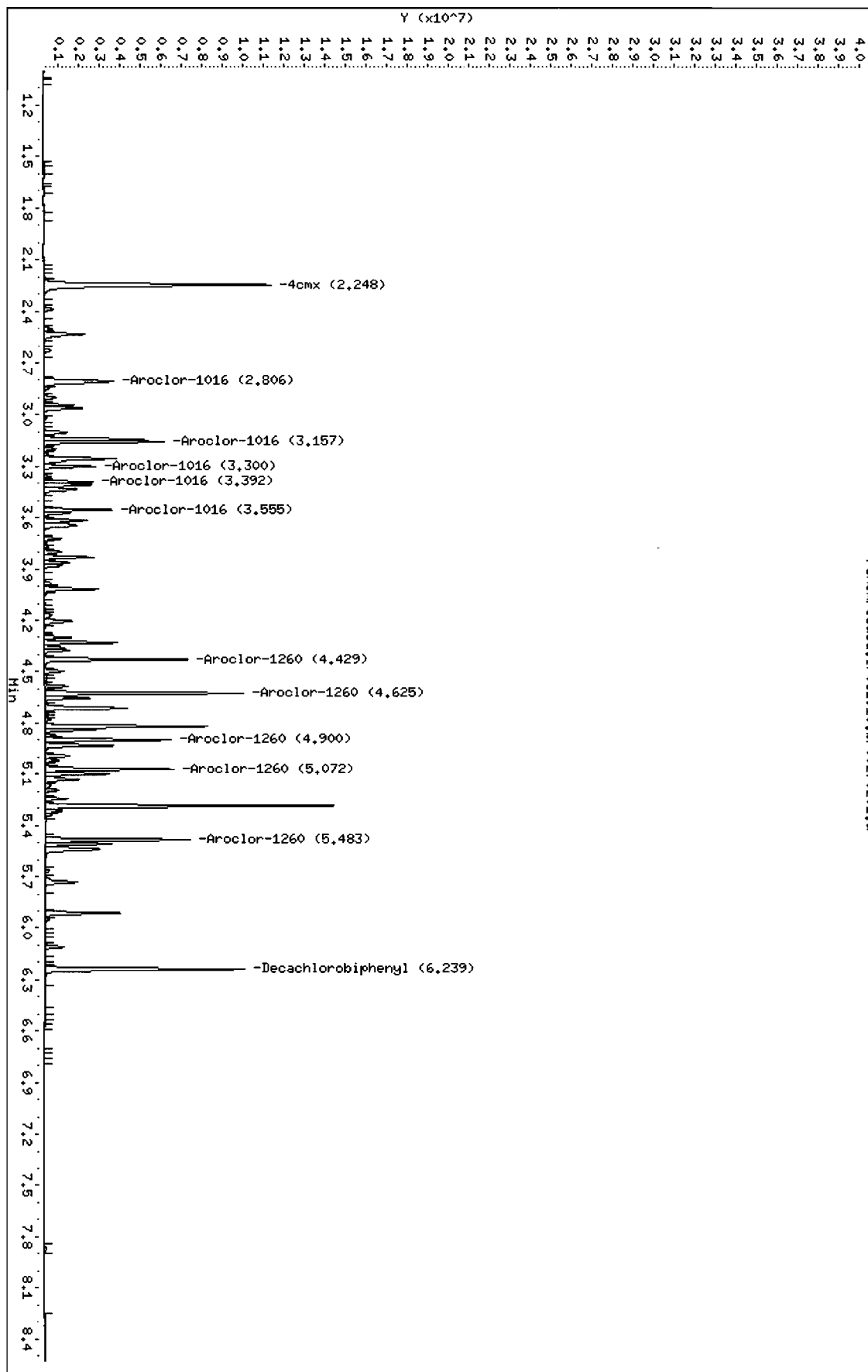
			CAL-AMT		ON-COL			
RT	EXP RT	DLT RT	RESPONSE	( ug/L)	( ug/L)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	=====	
-----								
\$ 11 4cmx					CAS #: 877-09-8			
2.248	2.248	0.000	12875927	100.000	103	80.00- 120.00	100.00	
-----								
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3			
6.239	6.239	0.000	9032334	100.000	110	80.00- 120.00	100.00	
-----								
1 Aroclor-1016					CAS #: 12674-11-2			
2.806	2.806	0.000	4286357	1000.00	898	80.00- 120.00	100.00	
3.157	3.157	0.000	5060097	1000.00	938	98.05- 138.05	118.05	
3.300	3.300	0.000	2193525	1000.00	933	31.17- 71.17	51.17	
3.392	3.392	0.000	1985533	1000.00	906	26.32- 66.32	46.32	
3.555	3.555	0.000	2834632	1000.00	921	46.13- 86.13	66.13	
Average of Peak Amounts =					919			
-----								
7 Aroclor-1260					CAS #: 11096-82-5			
4.429	4.429	0.000	5979285	1000.00	1020	80.00- 120.00	100.00	
4.625	4.625	0.000	8802240	1000.00	1040	127.21- 167.21	147.21	
4.900	4.900	0.000	5196891	1000.00	1020	66.91- 106.91	86.91	
5.072	5.072	0.000	5493407	1000.00	1030	71.87- 111.87	91.87	
5.483	5.483	0.000	6142364	1000.00	1090	82.73- 122.73	102.73	
Average of Peak Amounts =					1.04e+03			
-----								

Data File: /chem/ecdb8a.i/031910.b/002f0201.d  
Date : 19-MAR-2010 06:39  
Client ID: AR166001  
Sample Info: IMAR100224-60 01

Column phase: CLP1

Instrument: ecdb8a.i  
Operator: JAOC  
Column diameter: 0.25

/chem/ecdb8a.i/031910.b/002f0201.d



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/031910.b/002b0201.d

Lab Smp Id: WAR100224-60 01 Client Smp ID: AR166001

Inj Date : 19-MAR-2010 06:39

Operator : JAOC Inst ID: ecd8a.i

Smp Info : |WAR100224-60 01

Misc Info : |1660

Comment :

Method : /chem/ecd8a.i/031910.b/ECD8-B-8082-031810.m

Meth Date : 19-Mar-2010 09:16 jam00798 Quant Type: ESTD

Cal Date : 23-FEB-2010 11:32 Cal File: 017b1701.d

Als bottle: 2 Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon Compound Sublist: AR1660.sub

Target Version: 3.50 Sample Matrix: None

AMOUNTS

			CAL-AMT		ON-COL			
RT	EXP RT	DLT RT	RESPONSE	( ug/L)	( ug/L)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	=====	
-----								
\$ 11 4cmx					CAS #: 877-09-8			
2.477	2.477	0.000	9146433	100.000	109	80.00- 120.00	100.00	
-----								
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3			
6.824	6.824	0.000	6621629	100.000	112	80.00- 120.00	100.00	
-----								
1 Aroclor-1016					CAS #: 12674-11-2			
3.548	3.548	0.000	3917511	1000.00	1060	80.00- 120.00	100.00	
3.648	3.648	0.000	2562521	1000.00	1000	45.41- 85.41	65.41	
3.724	3.724	0.000	1521811	1000.00	1020	18.85- 58.85	38.85	
3.799	3.799	0.000	1479544	1000.00	1000	17.77- 57.77	37.77	
3.995	3.995	0.000	2055367	1000.00	1020	32.47- 72.47	52.47	
Average of Peak Amounts =					1.02e+03			
-----								
7 Aroclor-1260					CAS #: 11096-82-5			
4.908	4.908	0.000	4402018	1000.00	1120	80.00- 120.00	100.00	
5.057	5.057	0.000	5307034	1000.00	1120	100.56- 140.56	120.56	
5.374	5.374	0.000	4021024	1000.00	1120	71.35- 111.35	91.35	
5.581	5.581	0.000	4180664	1000.00	1130	74.97- 114.97	94.97	
6.012	6.012	0.000	6615557	1000.00	1130	130.28- 170.28	150.28	
Average of Peak Amounts =					1.12e+03			
-----								

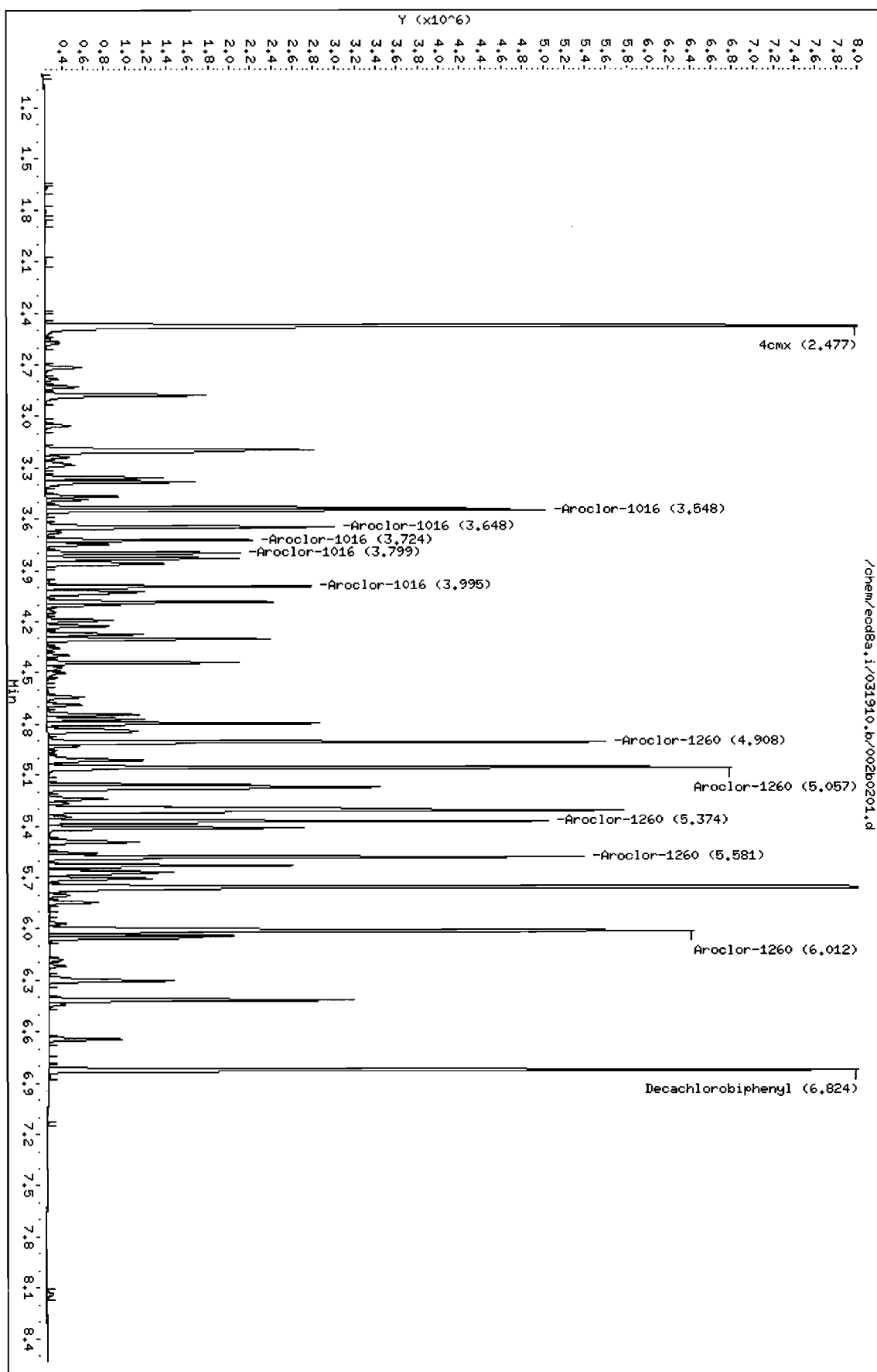
Data File: /chem/ecdb8a.i/031910.b/002b0201.d  
Date : 19-MAR-2010 06:39  
Client ID: AR166001  
Sample Info: 14MR100224-60 01

Instrument: ecdb8a.i

Page 1

Column phase: CLP2

Operator: JADC  
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/031910.b/003f0301.d

Lab Smp Id: WAR100201-54

Client Smp ID: AR125401

Inj Date : 19-MAR-2010 06:51

Operator : JAOC

Inst ID: ecd8a.i

Smp Info : |WAR100201-54

Misc Info : |1254

Comment :

Method : /chem/ecd8a.i/031910.b/ECD8-F-8082-031810.m

Meth Date : 19-Mar-2010 09:16 jam00798

Quant Type: ESTD

Cal Date : 23-FEB-2010 11:32

Cal File: 017f1701.d

Als bottle: 3

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1254.sub

Target Version: 3.50

Sample Matrix: None

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ug/L)	ON-COL ( ug/L)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
6 Aroclor-1254			CAS #: 11097-69-1			
3.831	3.831	0.000	4222327 1000.00	974 80.00-	120.00	100.00
4.018	4.018	0.000	5675120 1000.00	984 114.41-	154.41	134.41
4.214	4.214	0.000	4397426 1000.00	986 84.15-	124.15	104.15
4.301	4.301	0.000	7412798 1000.00	986 155.56-	195.56	175.56
4.496	4.496	0.000	5627866 1000.00	979 113.29-	153.29	133.29
Average of Peak Amounts =				982		

Data File: /chem/ecd8a.i/031910.b/003f0301.d

Date: 19-MAR-2010 06:51

Client ID: AR125401

Sample Info: 1MAR100201-54

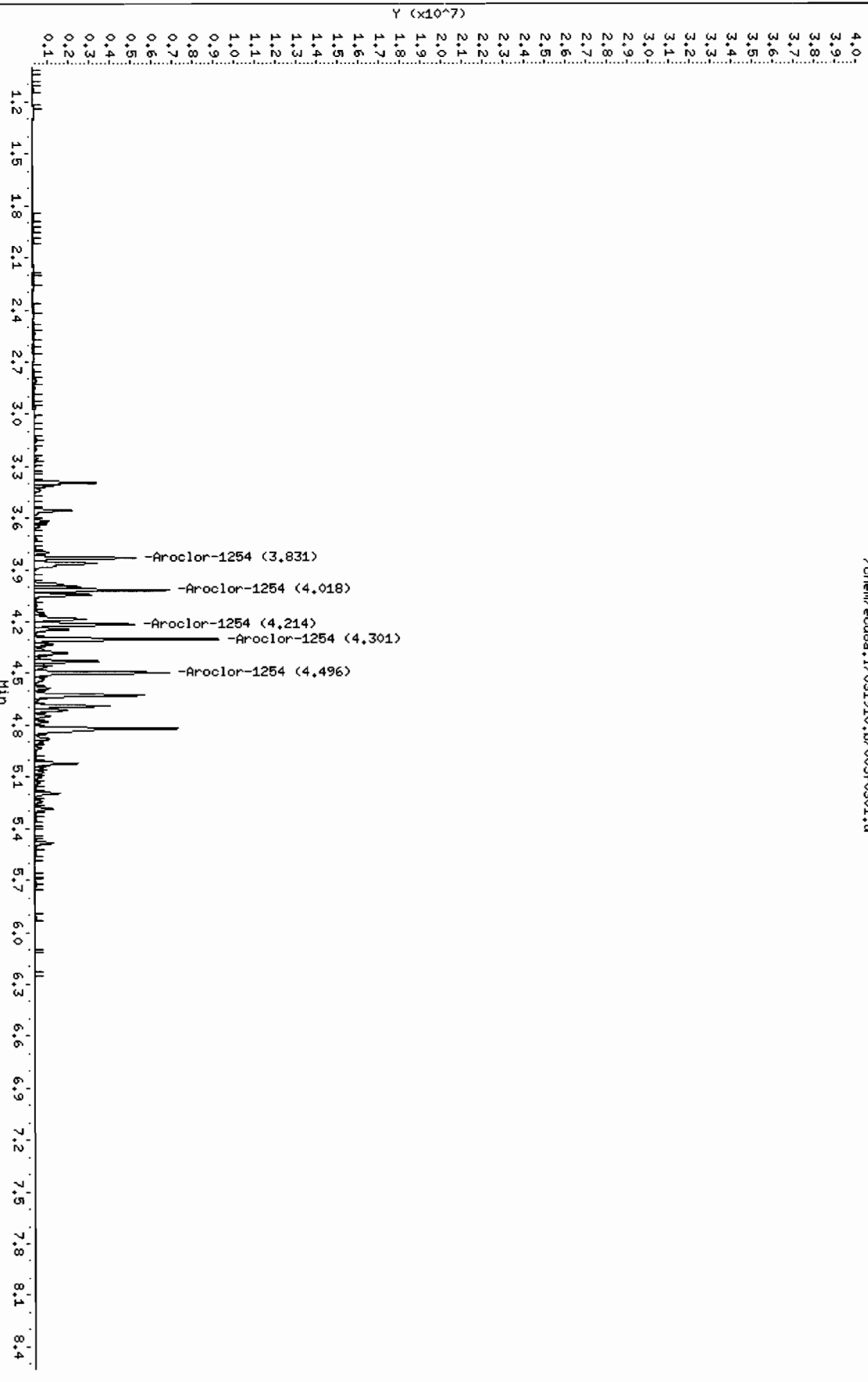
Column phase: CLP1

Instrument: ecd8a.i

Operator: JHOC

Column diameter: 0.25

/chem/ecd8a.i/031910.b/003f0301.d



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/031910.b/003b0301.d

Lab Smp Id: WAR100201-54

Client Smp ID: AR125401

Inj Date : 19-MAR-2010 06:51

Operator : JAOC

Inst ID: ecd8a.i

Smp Info : |WAR100201-54

Misc Info : |1254

Comment :

Method : /chem/ecd8a.i/031910.b/ECD8-B-8082-031810.m

Meth Date : 19-Mar-2010 09:16 jam00798 Quant Type: ESTD

Cal Date : 23-FEB-2010 11:32

Cal File: 017b1701.d

Als bottle: 3

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1254.sub

Target Version: 3.50

Sample Matrix: None

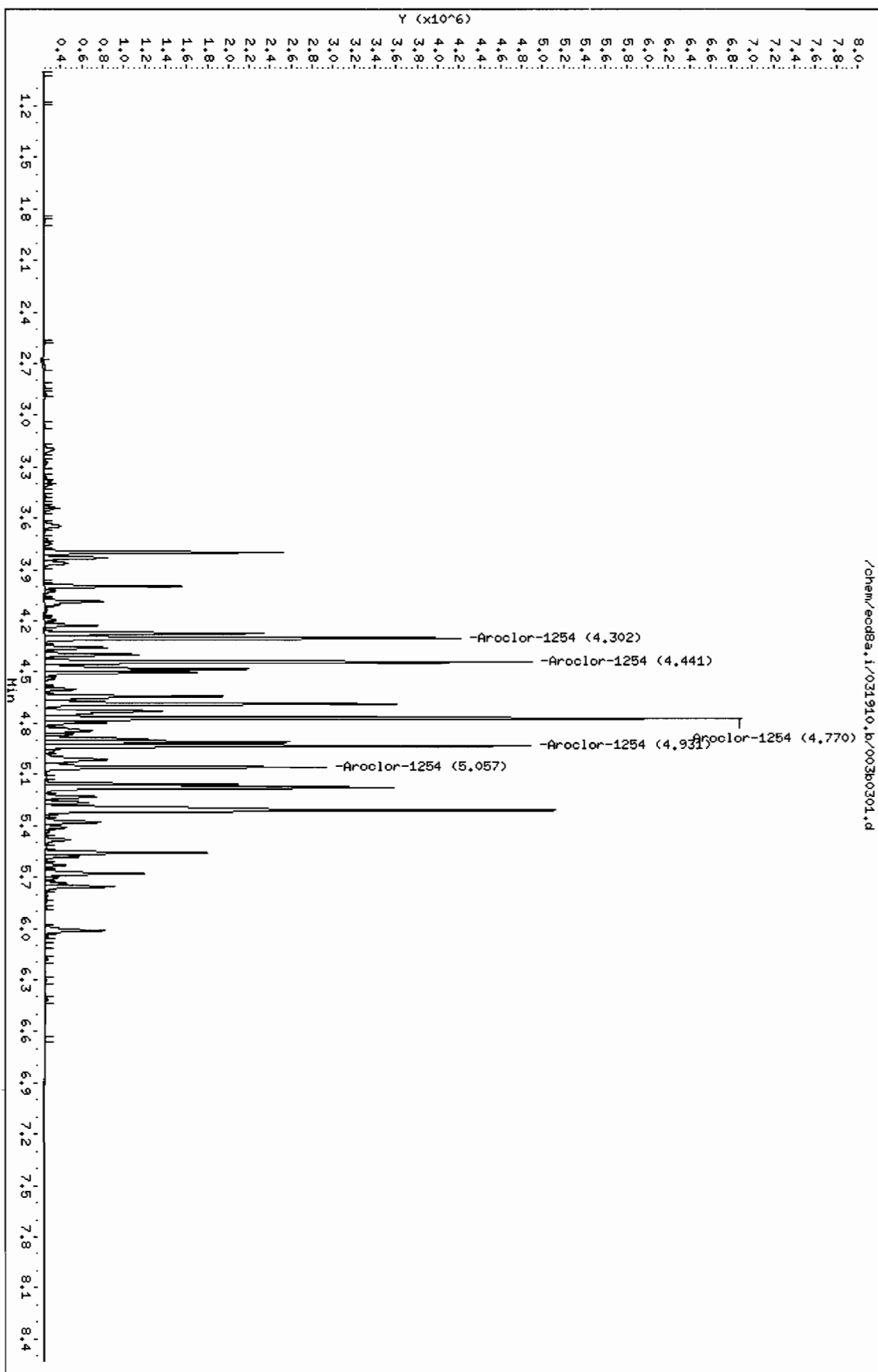
AMOUNTS

			CAL-AMT		ON-COL			
RT	EXP RT	DLT RT	RESPONSE	( ug/L)	( ug/L)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	=====	
6 Aroclor-1254					CAS #: 11097-69-1			
4.302	4.302	0.000	3335653	1000.00	1070	80.00- 120.00	100.00	
4.441	4.441	0.000	3737473	1000.00	1070	92.05- 132.05	112.05	
4.770	4.770	0.000	5294975	1000.00	1100	138.74- 178.74	158.74	
4.931	4.931	0.000	3806287	1000.00	1090	94.11- 134.11	114.11	
5.057	5.057	0.000	2377634	1000.00	1080	51.28- 91.28	71.28	
Average of Peak Amounts =					1.08e+03			

Data File: /chem/ecdb8a.i/031910.b/003b0301.d  
Date : 19-MAR-2010 06:51  
Client ID: AR125401  
Sample Info: 1MAR100201-54

Column phase: CLP2

Instrument: ecdb8a.i  
Operator: JADG  
Column diameter: 0.25





GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/031910.b/005f0501.d

Lab Smp Id: WAR091217-48

Client Smp ID: AR124801

Inj Date : 19-MAR-2010 07:16

Operator : JAOC

Inst ID: ecd8a.i

Smp Info : |WAR091217-48

Misc Info : |1248

Comment :

Method : /chem/ecd8a.i/031910.b/ECD8-F-8082-031810.m

Meth Date : 19-Mar-2010 09:16 jam00798

Quant Type: ESTD

Cal Date : 23-FEB-2010 11:32

Cal File: 017f1701.d

Als bottle: 5

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1248.sub

Target Version: 3.50

Sample Matrix: None

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT		ON-COL		TARGET RANGE	RATIO
			RESPONSE	( ug/L)	( ug/L)			
==	=====	=====	=====	=====	=====	=====	=====	=====
5 Aroclor-1248			CAS #: 12672-29-6					
3.143	3.143	0.000	2752075	1000.00	1010	80.00- 120.00	100.00	
3.393	3.393	0.000	3438089	1000.00	1010	104.93- 144.93	124.93	
3.555	3.555	0.000	4535331	1000.00	1040	144.80- 184.80	164.80	
3.861	3.861	0.000	5414118	1000.00	1030	176.73- 216.73	196.73	
4.020	4.020	0.000	4303271	1000.00	1020	136.36- 176.36	156.36	
Average of Peak Amounts =			1.02e+03					

Data File: /chem/ecdb8a.i/031910.b/005f0501.d

Date : 19-MAR-2010 07:16

Client ID: AR124801

Sample Info: IMAR091217-48

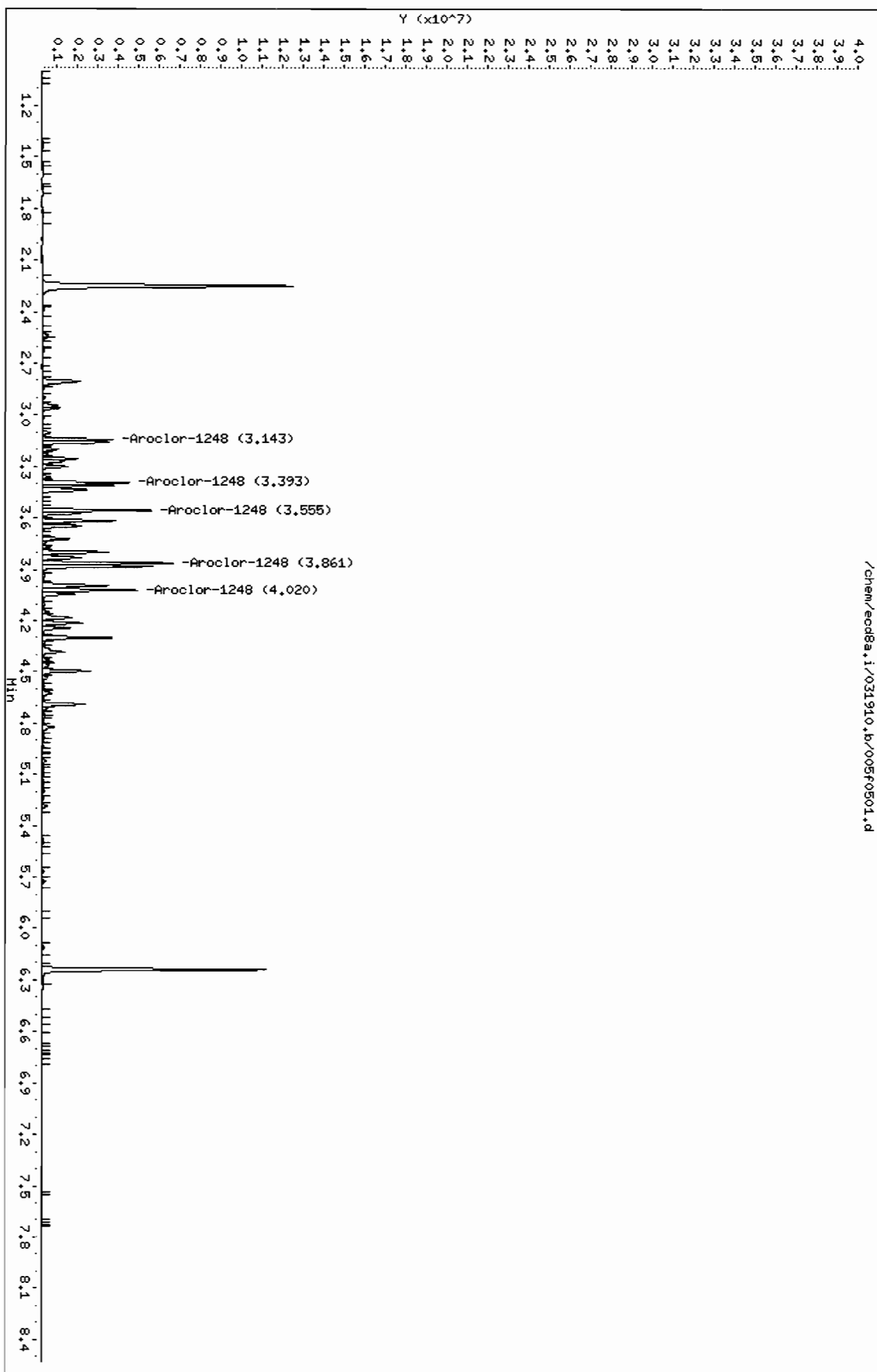
Column phase: CLP1

Instrument: ecdb8a.i

Operator: JHOC

Column diameter: 0.25

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL  
 Data file : /chem/ecd8a.i/031910.b/005b0501.d  
 Lab Smp Id: WAR091217-48 Client Smp ID: AR124801  
 Inj Date : 19-MAR-2010 07:16  
 Operator : JAOC Inst ID: ecd8a.i  
 Smp Info : |WAR091217-48  
 Misc Info : |1248  
 Comment :  
 Method : /chem/ecd8a.i/031910.b/ECD8-B-8082-031810.m  
 Meth Date : 19-Mar-2010 09:16 jam00798 Quant Type: ESTD  
 Cal Date : 23-FEB-2010 11:32 Cal File: 017b1701.d  
 Als bottle: 5 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: AR1248.sub  
 Target Version: 3.50 Sample Matrix: None

AMOUNTS									
			CAL-AMT		ON-COL				
RT	EXP RT	DLT RT	RESPONSE	( ug/L)	( ug/L)	TARGET	RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	=====	=====	
5 Aroclor-1248					CAS #: 12672-29-6				
3.647	3.647	0.000	1420732	1000.00	1070	80.00-	120.00	100.00	
3.799	3.799	0.000	2480367	1000.00	1100	154.58-	194.58	174.58	
3.995	3.995	0.000	3136554	1000.00	1120	200.77-	240.77	220.77	
4.274	4.274	0.000	3630907	1000.00	1110	235.57-	275.57	255.57	
4.305	4.305	0.000	4010605	1000.00	1120	262.29-	302.29	282.29	
Average of Peak Amounts =					1.1e+03				

Data File: /chem/ecdb8a.i/031910.b/005b0501.d

Date: 19-MAR-2010 07:16

Client ID: AR124801

Sample Info: 1MAR091217-48

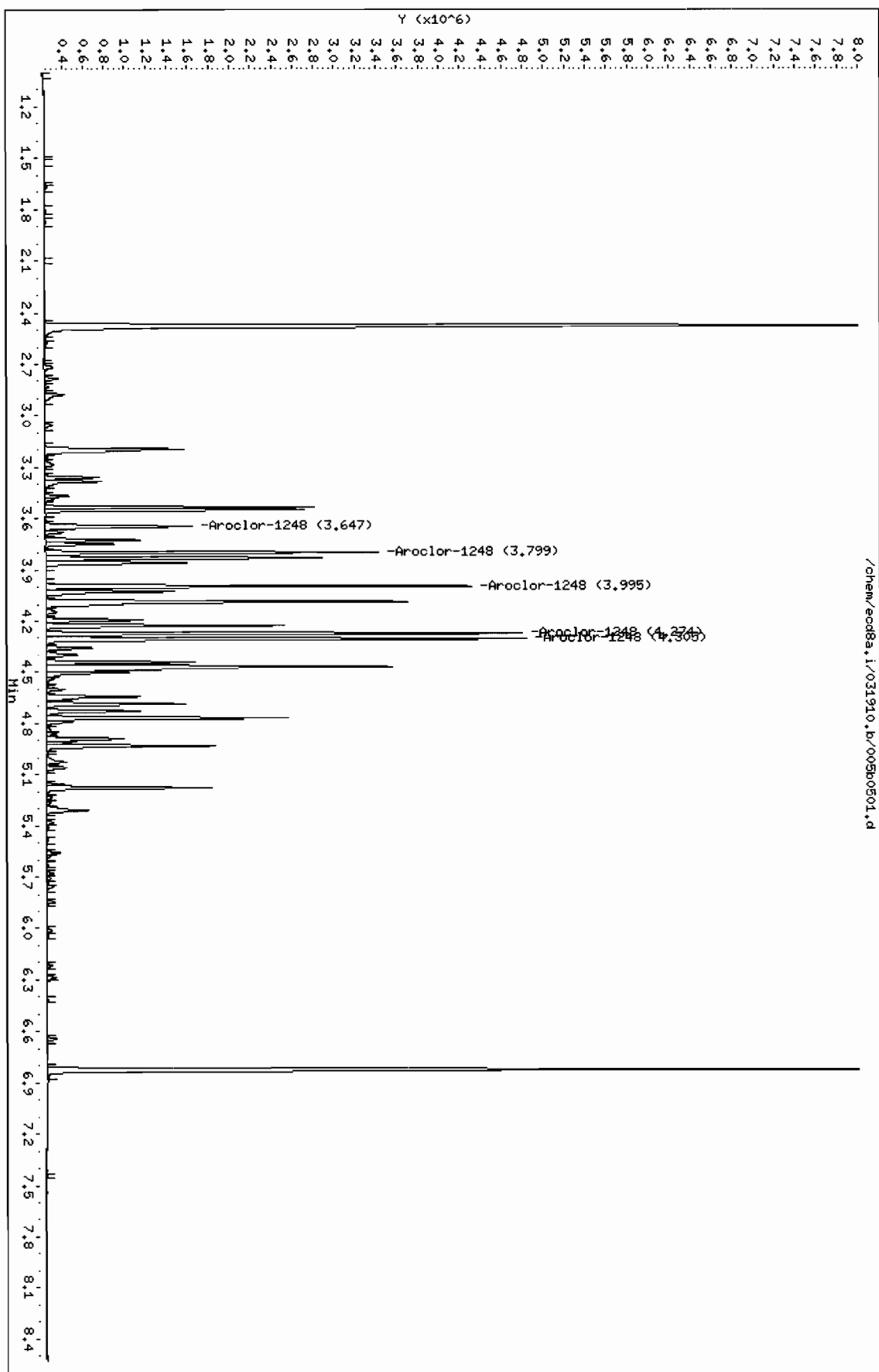
Page 1

Column phase: CLP2

Instrument: ecdb8a.i

Operator: JHOC

Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/031910.b/006f0601.d

Lab Smp Id: WAR100104-32

Client Smp ID: AR123201

Inj Date : 19-MAR-2010 07:28

Operator : JAOC

Inst ID: ecd8a.i

Smp Info : |WAR100104-32

Misc Info : |1232

Comment :

Method : /chem/ecd8a.i/031910.b/ECD8-F-8082-031810.m

Meth Date : 19-Mar-2010 09:16 jam00798

Quant Type: ESTD

Cal Date : 23-FEB-2010 11:32

Cal File: 017f1701.d

Als bottle: 6

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1232.sub

Target Version: 3.50

Sample Matrix: None

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT		ON-COL		TARGET RANGE	RATIO
			RESPONSE	( ug/L)	( ug/L)			
2.535	2.535	0.000	2583412	1000.00	993	80.00- 120.00	100.00	
2.806	2.806	0.000	2297626	1000.00	1020	68.94- 108.94	88.94	
3.301	3.301	0.000	1209423	1000.00	973	26.81- 66.81	46.81	
3.555	3.555	0.000	1469653	1000.00	994	36.89- 76.89	56.89	
3.617	3.617	0.000	892726	1000.00	968	14.56- 54.56	34.56	
Average of Peak Amounts =					989			

Data File: /chem/ecod8a.i/031910.b/006f0601.d

Date: 19-MAR-2010 07:28

Client ID: AR123201

Sample Info: 1MAR100104-32

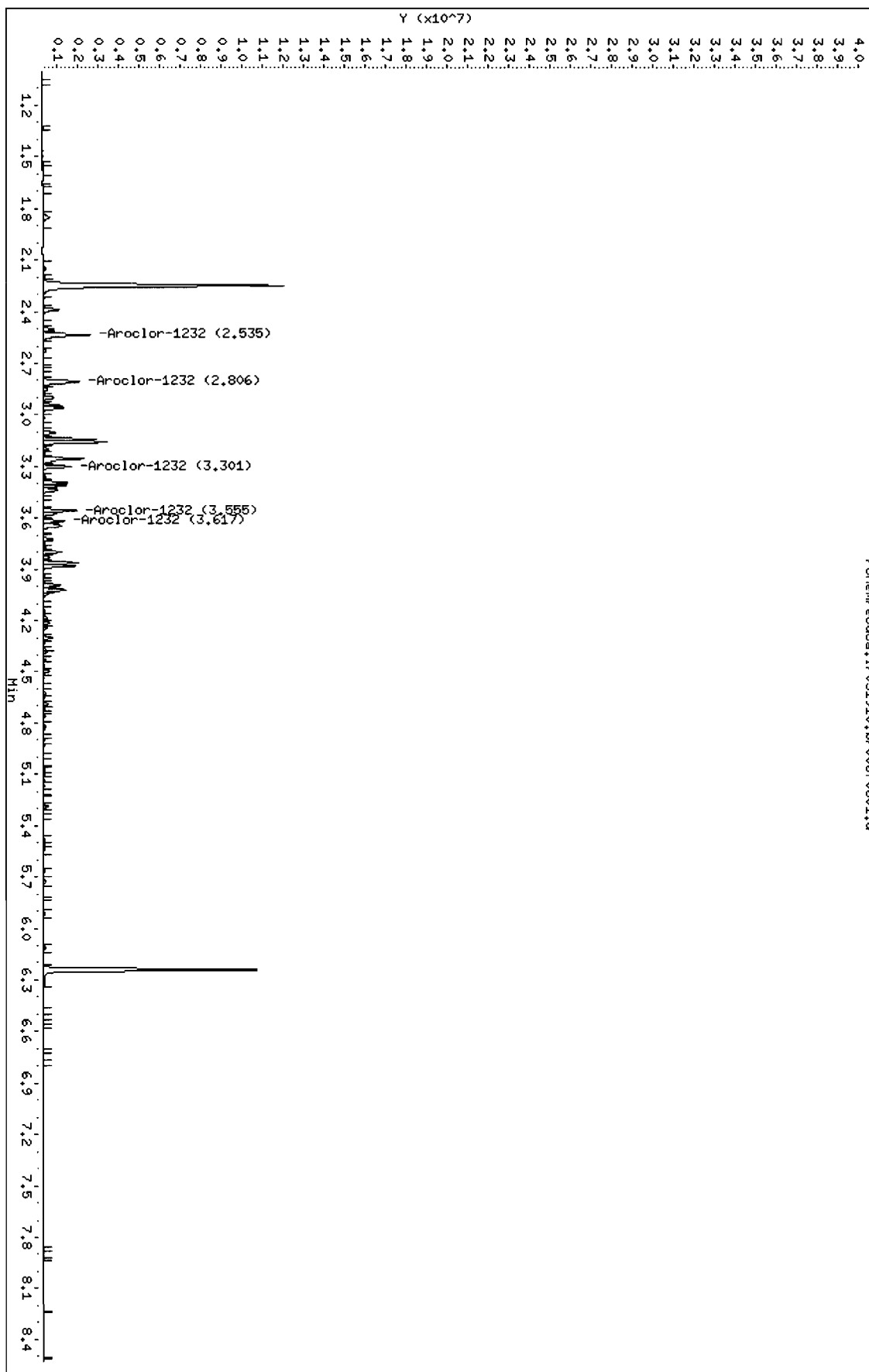
Column phase: CLP1

Instrument: ecod8a.i

Operator: JADC

Column diameter: 0.25

/chem/ecod8a.i/031910.b/006f0601.d



Data File: /chem/ecd8a.i/031910.b/006b0601.d  
Report Date: 19-Mar-2010 09:24

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/031910.b/006b0601.d

Lab Smp Id: WAR100104-32

Client Smp ID: AR123201

Inj Date : 19-MAR-2010 07:28

Operator : JAOC

Inst ID: ecd8a.i

Smp Info : |WAR100104-32

Misc Info : |1232

Comment :

Method : /chem/ecd8a.i/031910.b/ECD8-B-8082-031810.m

Meth Date : 19-Mar-2010 09:16 jam00798 Quant Type: ESTD

Cal Date : 23-FEB-2010 11:32 Cal File: 017b1701.d

Als bottle: 6 Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1232.sub

Target Version: 3.50

Sample Matrix: None

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ug/L)	ON-COL ( ug/L)	TARGET RANGE	RATIO
3.196	3.196	0.000	1644508 1000.00	1080	80.00- 120.00	100.00
3.550	3.550	0.000	1853071 1000.00	1060	92.68- 132.68	112.68
3.649	3.649	0.000	1276686 1000.00	1080	57.63- 97.63	77.63
3.725	3.725	0.000	764238 1000.00	1080	26.47- 66.47	46.47
3.800	3.800	0.000	661174 1000.00	1070	20.20- 60.20	40.20

Average of Peak Amounts = 1.08e+03

Data File: /chem/ecdb8a.i/031910.b/006b0601.d

Date: 19-MAR-2010 07:28

Client ID: AR123201

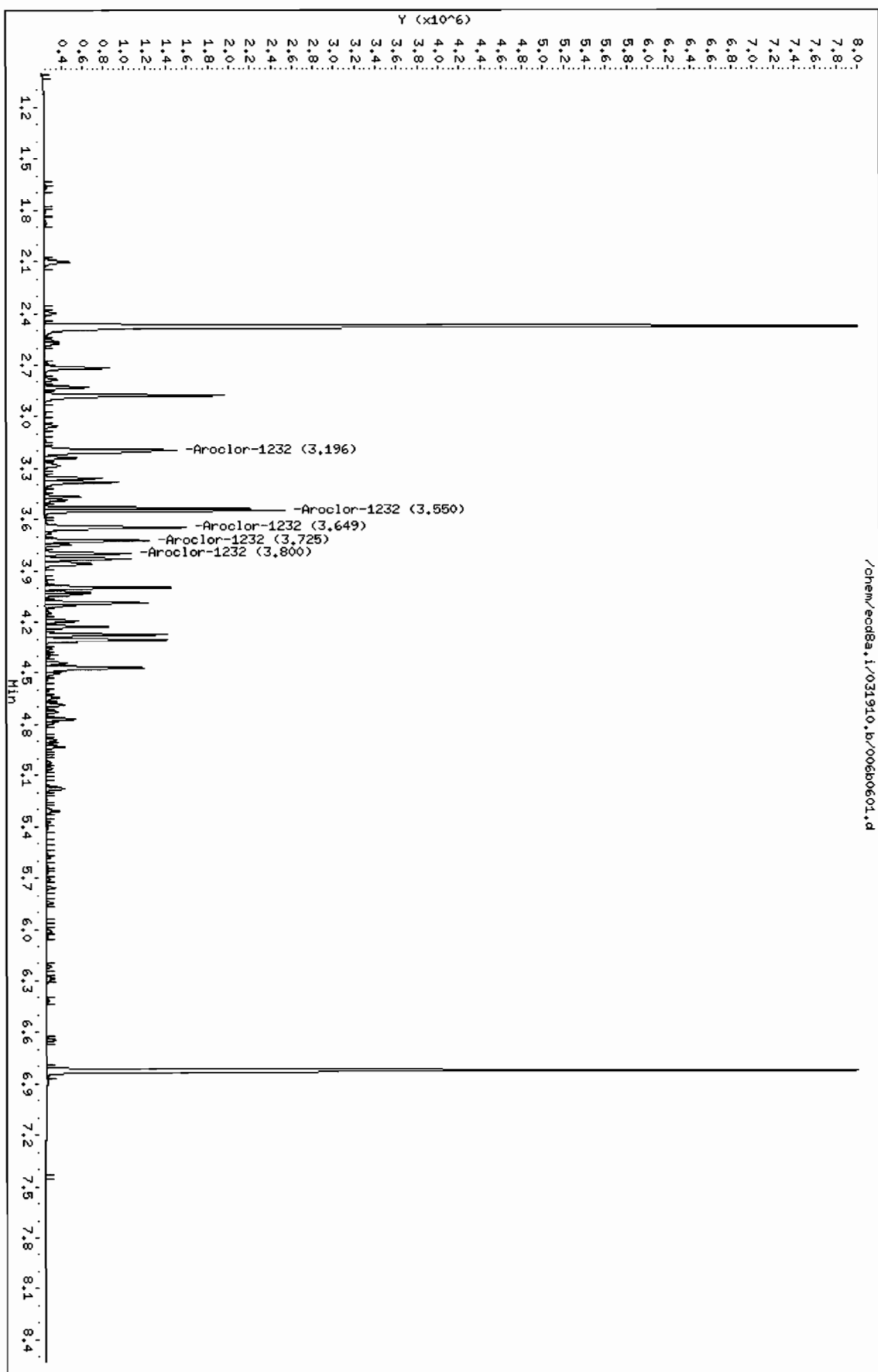
Sample Info: IMA100104-32

Column phase: CLP2

Instrument: ecdb8a.i

Operator: JADC

Column diameter: 0.25





GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/031910.b/007f0701.d

Lab Smp Id: WAR091217-42

Client Smp ID: AR124201

Inj Date : 19-MAR-2010 07:41

Operator : JAOC

Inst ID: ecd8a.i

Smp Info : |WAR091217-42

Misc Info : |1242

Comment :

Method : /chem/ecd8a.i/031910.b/ECD8-F-8082-031810.m

Meth Date : 19-Mar-2010 09:16 jam00798 Quant Type: ESTD

Cal Date : 23-FEB-2010 11:32

Cal File: 017f1701.d

Als bottle: 7

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1242.sub

Target Version: 3.50

Sample Matrix: None

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT		ON-COL	TARGET RANGE	RATIO
			RESPONSE ( ug/L)	( ug/L)			
4	Aroclor-1242				CAS #:	53469-21-9	
2.806	2.806	0.000	3922702	1000.00	987	80.00- 120.00	100.00
3.158	3.158	0.000	4754360	1000.00	991	101.20- 141.20	121.20
3.393	3.393	0.000	1772243	1000.00	982	25.18- 65.18	45.18
3.410	3.410	0.000	1842315	1000.00	975	26.97- 66.97	46.97
3.555	3.555	0.000	2638042	1000.00	997	47.25- 87.25	67.25
Average of Peak Amounts =					986		

Data File: /chem/ecod8a.i/031910.b/007f0701.d

Date : 19-MAR-2010 07:41

Client ID: AR124201

Sample Info: 1MAR091217-42

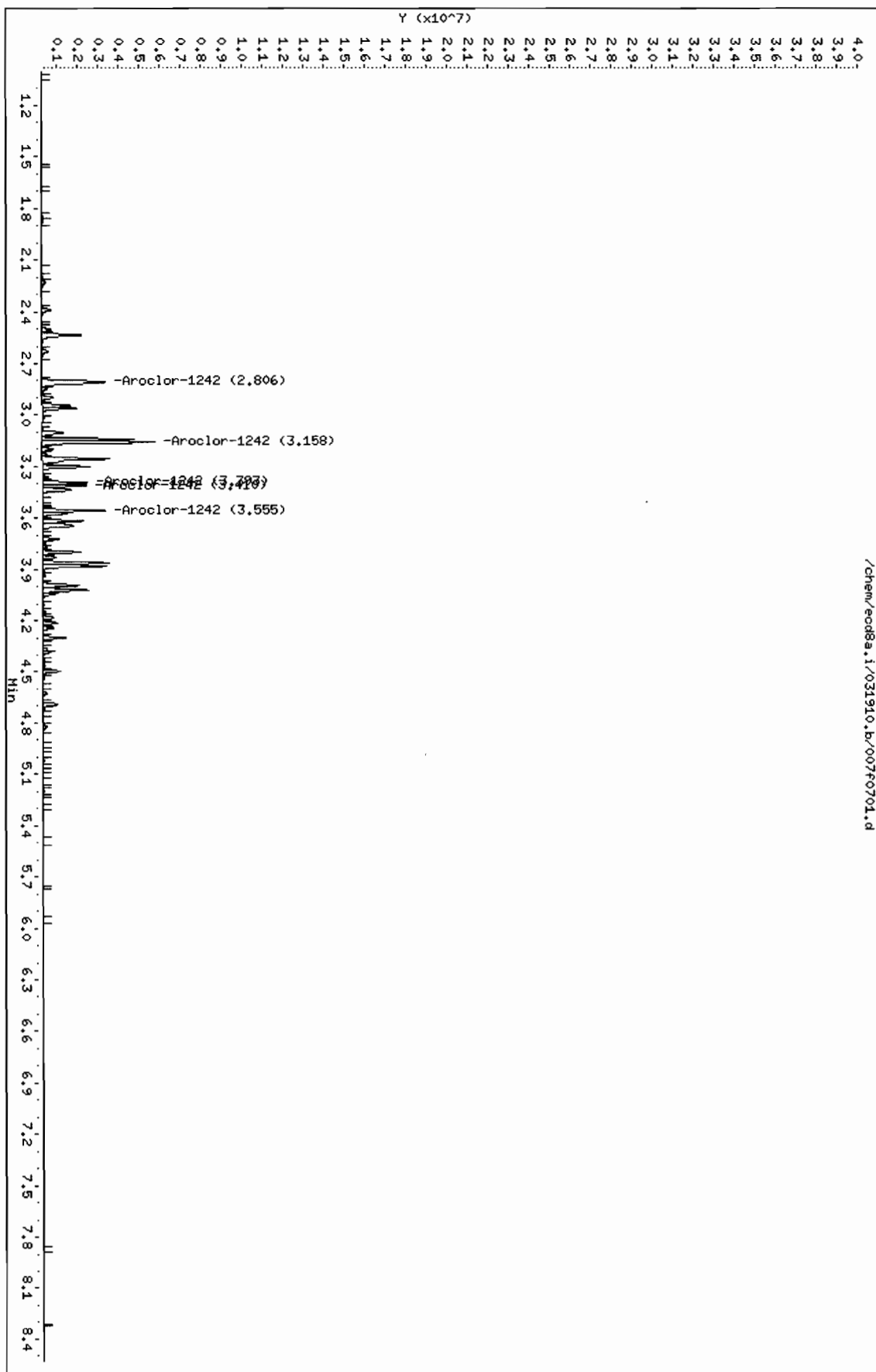
Column phase: CLP1

Instrument: ecod8a.i

Operator: JHDC

Column diameter: 0.25

/chem/ecod8a.i/031910.b/007f0701.d



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/031910.b/007b0701.d

Lab Smp Id: WAR091217-42

Client Smp ID: AR124201

Inj Date : 19-MAR-2010 07:41

Operator : JAOC

Inst ID: ecd8a.i

Smp Info : |WAR091217-42

Misc Info : |1242

Comment :

Method : /chem/ecd8a.i/031910.b/ECD8-B-8082-031810.m

Meth Date : 19-Mar-2010 09:16 jam00798 Quant Type: ESTD

Cal Date : 23-FEB-2010 11:32 Cal File: 017b1701.d

Als bottle: 7 Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1242.sub

Target Version: 3.50

Sample Matrix: None

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT		ON-COL		TARGET RANGE	RATIO
			RESPONSE ( ug/L)	( ug/L)	( ug/L)	( ug/L)		
4.196	3.196	0.000	2778356	1000.00	1040	80.00- 120.00	100.00	
3.549	3.549	0.000	3284736	1000.00	1050	98.23- 138.23	118.23	
3.648	3.648	0.000	2222554	1000.00	1040	60.00- 100.00	80.00	
3.996	3.996	0.000	1787089	1000.00	1050	44.32- 84.32	64.32	
4.085	4.085	0.000	1667701	1000.00	1060	40.02- 80.02	60.02	
Average of Peak Amounts =			1.05e+03					

Data File: /chem/ecdb8.i/031910.b/007b0701.d

Date : 19-MAR-2010 07:41

Client ID: 0R124201

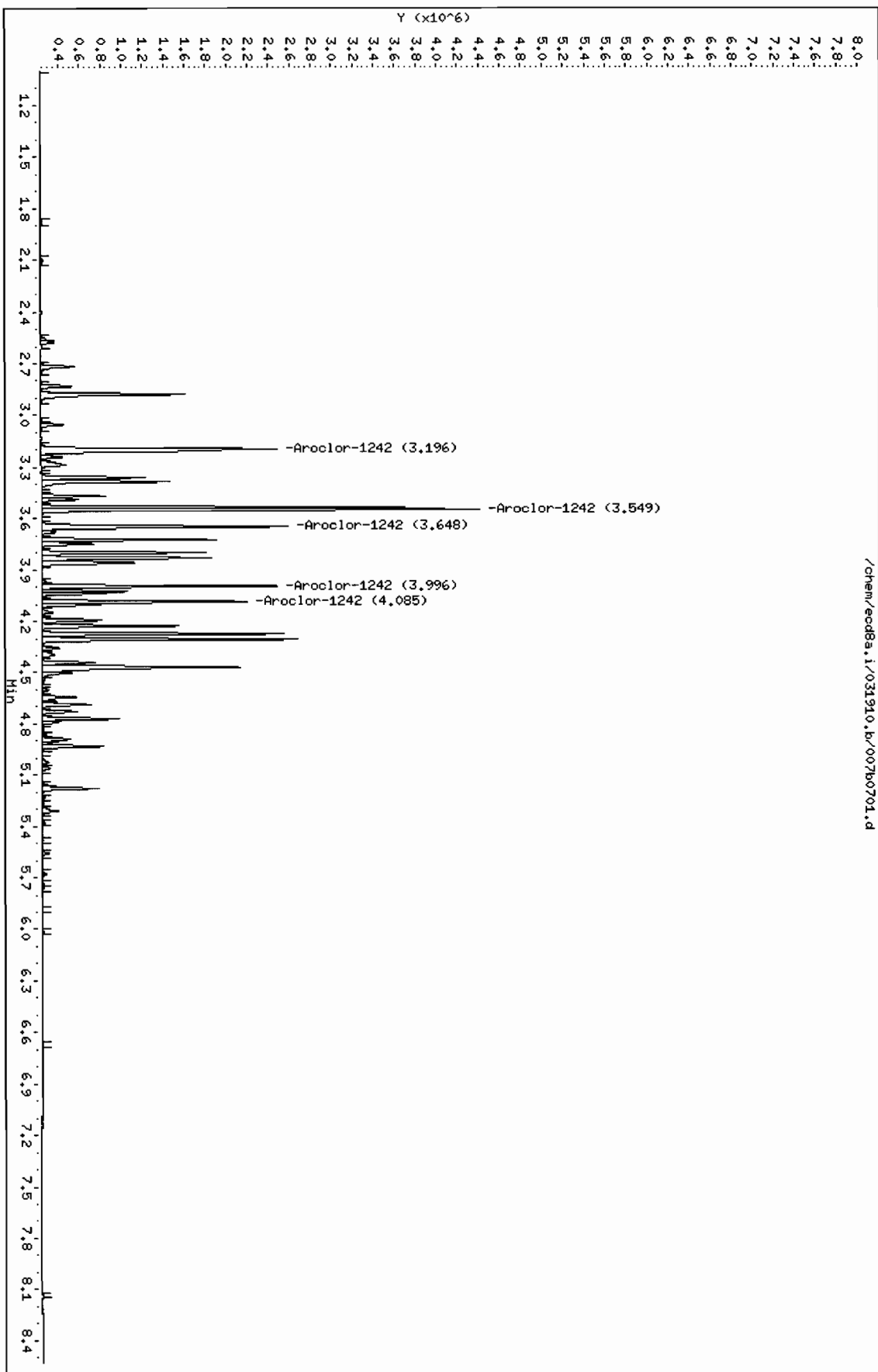
Sample Info: 1MR091217-42

Column phase: CLP2

Instrument: ecdb8.i

Operator: JADG

Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/031910.b/008f0801.d

Lab Smp Id: WAR100104-21

Client Smp ID: AR122101

Inj Date : 19-MAR-2010 07:53

Operator : JAOC

Inst ID: ecd8a.i

Smp Info : |WAR100104-21

Misc Info : |1221

Comment :

Method : /chem/ecd8a.i/031910.b/ECD8-F-8082-031810.m

Meth Date : 19-Mar-2010 09:16 jam00798

Quant Type: ESTD

Cal Date : 23-FEB-2010 11:32

Cal File: 017f1701.d

Als bottle: 8

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1221.sub

Target Version: 3.50

Sample Matrix: None

AMOUNTS

			CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	( ug/L)	TARGET RANGE	RATIO	
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Data File: /chem/ecdb8a.i/031910.b/008f0801.d

Date: 19-MAR-2010 07:53

Client ID: AR122101

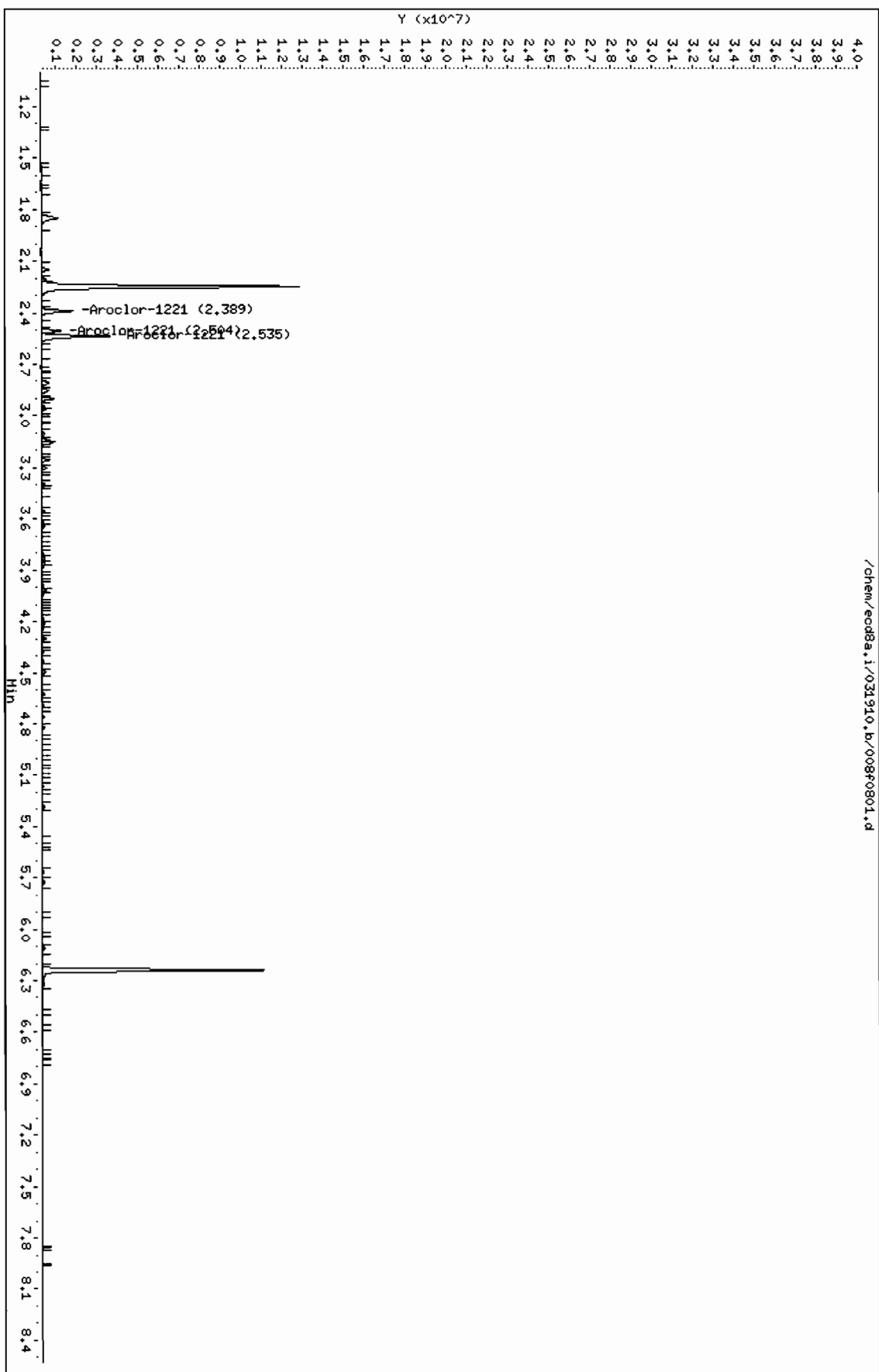
Sample Info: 1MAR100104-21

Column Phase: CLP1

Instrument: ecdb8a.i

Operator: JADC

Column diameter: 0.25



Data File: /chem/ecd8a.i/031910.b/008b0801.d  
Report Date: 19-Mar-2010 09:24

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/031910.b/008b0801.d

Lab Smp Id: WAR100104-21

Client Smp ID: AR122101

Inj Date : 19-MAR-2010 07:53

Operator : JAOC

Inst ID: ecd8a.i

Smp Info : |WAR100104-21

Misc Info : |1221

Comment :

Method : /chem/ecd8a.i/031910.b/ECD8-B-8082-031810.m

Meth Date : 19-Mar-2010 09:16 jam00798 Quant Type: ESTD

Cal Date : 23-FEB-2010 11:32 Cal File: 017b1701.d

Als bottle: 8 Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1221.sub

Target Version: 3.50

Sample Matrix: None

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ug/L)	ON-COL ( ug/L)	TARGET RANGE	RATIO
2.718	2.718	0.000	1062381	1120	80.00- 120.00	100.00
2.831	2.831	0.000	641378	1080	40.37- 80.37	60.37
2.878	2.878	0.000	2339109	1070	200.18- 240.18	220.18

Average of Peak Amounts = 1.09e+03

Data File: /chem/ecd8a.i/031910.b/008b0801.d

Date : 19-MAR-2010 07:53

Client ID: AR122101

Sample Info: 1MAR100104-21

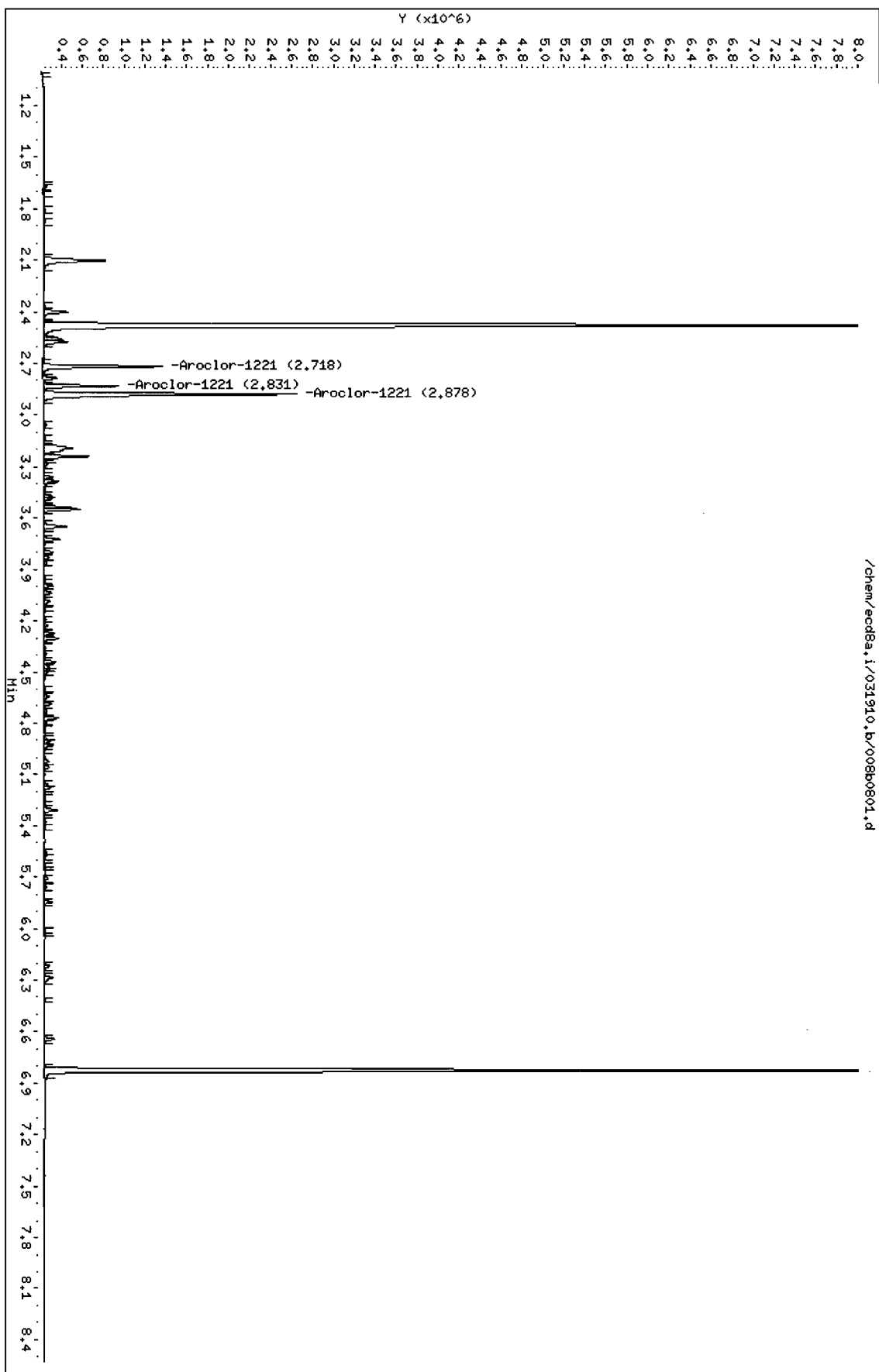
Page 1

Instrument: ecd8a.i

Column phase: CLP2

Operator: JHOC

Column diameter: 0.25





GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/031910.b/024f2401.d

Lab Smp Id: WAR100319-60

Client Smp ID: AR166006

Inj Date : 19-MAR-2010 11:57

Operator : JAOC

Inst ID: ecd8a.i

Smp Info : |WAR100319-60

Misc Info :

Comment :

Method : /chem/ecd8a.i/031910.b/ECD8-F-8082-031810.m

Meth Date : 22-Mar-2010 08:33 jen01212 Quant Type: ESTD

Cal Date : 23-FEB-2010 11:32

Cal File: 017f1701.d

Als bottle: 24

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1660.sub

Target Version: 3.50

Sample Matrix: None

AMOUNTS

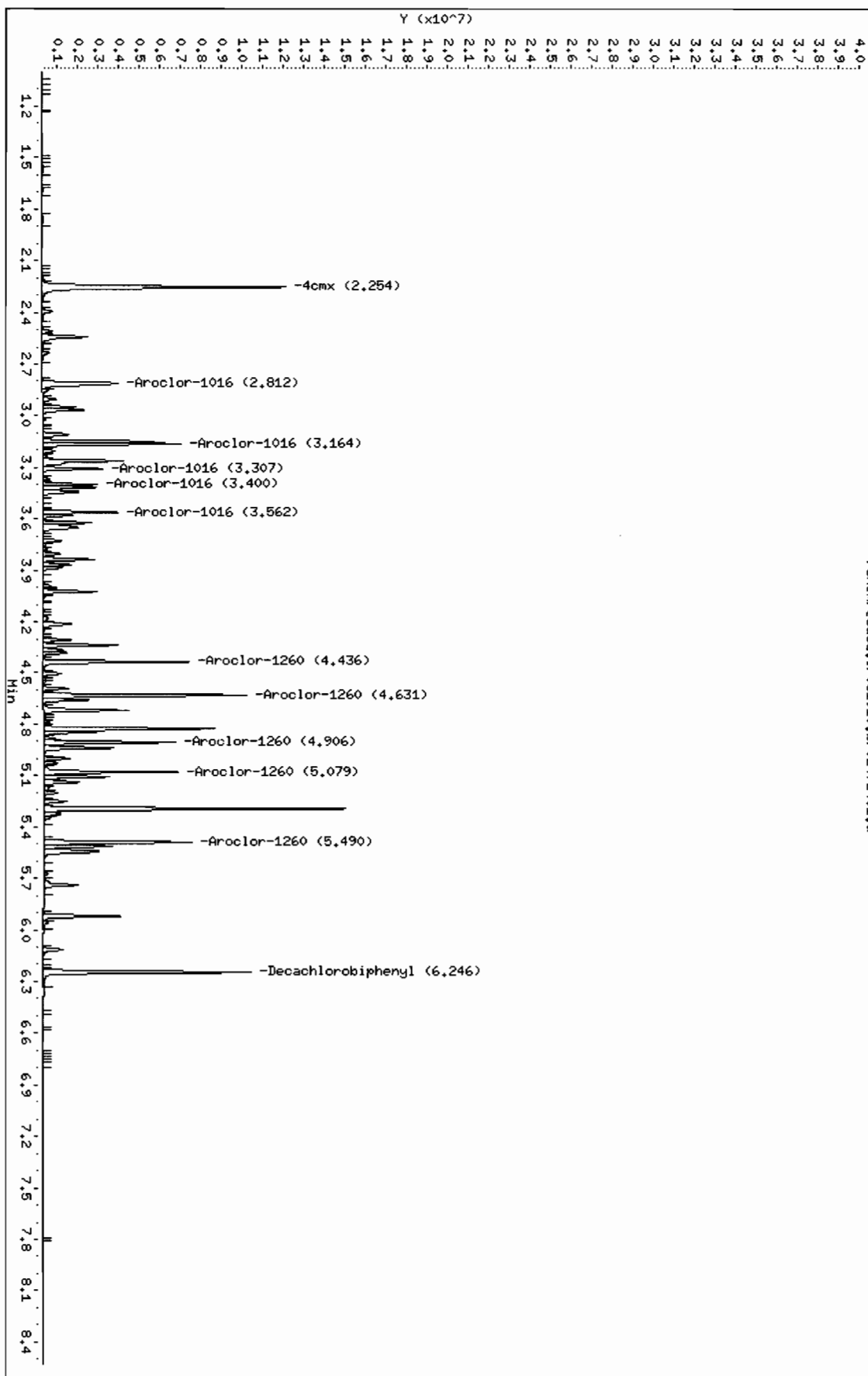
			CAL-AMT		ON-COL			
RT	EXP RT	DLT RT	RESPONSE	( ug/L)	( ug/L)	TARGET RANGE	RATIO	
---	-----	-----	-----	-----	-----	-----	-----	
\$ 11 4cmx					CAS #: 877-09-8			
2.254	2.248	0.006	12727854	100.000	102	80.00- 120.00	100.00	
-----								
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3			
6.246	6.239	0.007	9290772	100.000	113	80.00- 120.00	100.00	
-----								
1 Aroclor-1016					CAS #: 12674-11-2			
2.812	2.806	0.006	4613032	1000.00	967	80.00- 120.00	100.00	
3.164	3.157	0.007	5689003	1000.00	1050	107.11- 147.11	123.32	
3.307	3.300	0.007	2400712	1000.00	1020	32.79- 72.79	52.04	
3.400	3.392	0.008	2129382	1000.00	972	25.87- 65.87	46.16	
3.562	3.555	0.007	3082144	1000.00	1000	47.87- 87.87	66.81	
Average of Peak Amounts =					1e+03			
-----								
7 Aroclor-1260					CAS #: 11096-82-5			
4.436	4.429	0.007	6070707	1000.00	1030	80.00- 120.00	100.00	
4.631	4.625	0.006	9081858	1000.00	1070	126.91- 166.91	149.60	
4.906	4.900	0.006	5383035	1000.00	1060	64.82- 104.82	88.67	
5.079	5.072	0.007	5825588	1000.00	1090	70.18- 110.18	95.96	
5.490	5.483	0.007	6272339	1000.00	1110	76.66- 116.66	103.32	
Average of Peak Amounts =					1.07e+03			

Data File: /chem/ecdb8a.i/031910.b/024f2401.d  
Date: 19-MAR-2010 11:57  
Client ID: AR166006  
Sample Info: 1MAR100319-60

Column phase: CLP1

Instrument: ecdb8a.i  
Operator: JADC  
Column diameter: 0.25

/chem/ecdb8a.i/031910.b/024f2401.d



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/031910.b/024b2401.d

Lab Smp Id: WAR100319-60

Client Smp ID: AR166006

Inj Date : 19-MAR-2010 11:57

Operator : JAOC

Inst ID: ecd8a.i

Smp Info : |WAR100319-60

Misc Info :

Comment :

Method : /chem/ecd8a.i/031910.b/ECD8-B-8082-031810.m

Meth Date : 22-Mar-2010 07:51 jen01212 Quant Type: ESTD

Cal Date : 23-FEB-2010 11:32 Cal File: 017b1701.d

Als bottle: 24 Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1660.sub

Target Version: 3.50

Sample Matrix: None

AMOUNTS

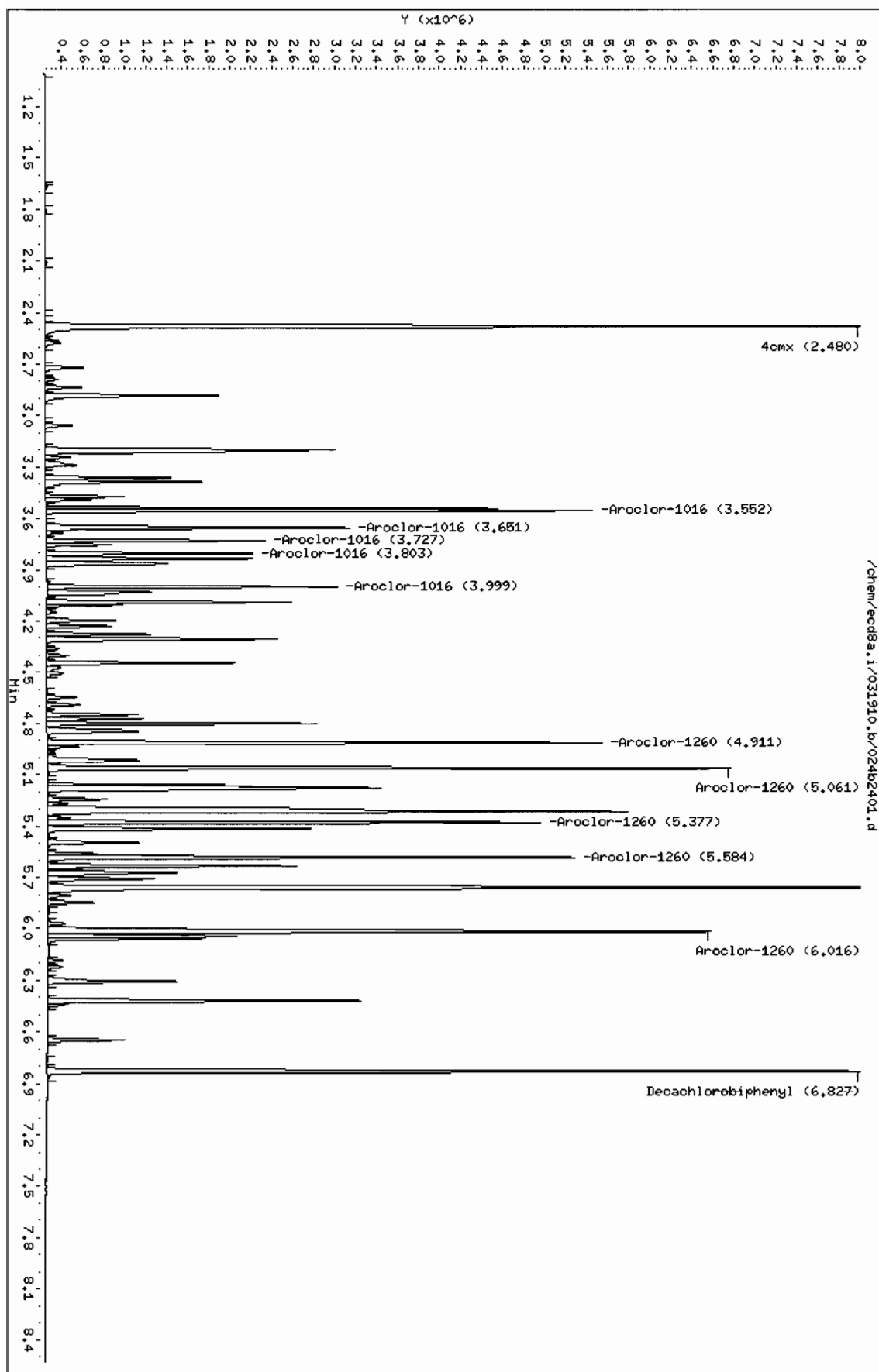
			CAL-AMT		ON-COL			
RT	EXP RT	DLT RT	RESPONSE	( ug/L)	( ug/L)	TARGET RANGE	RATIO	
<hr/>								
\$ 11 4cmx					CAS #: 877-09-8			
2.480	2.477	0.003	8866340	100.000	106	80.00- 120.00	100.00	
<hr/>								
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3			
6.827	6.824	0.003	6887114	100.000	116	80.00- 120.00	100.00	
<hr/>								
1 Aroclor-1016					CAS #: 12674-11-2			
3.552	3.548	0.004	4146365	1000.00	1130	80.00- 120.00	100.00	
3.651	3.648	0.003	2710579	1000.00	1060	44.99- 84.99	65.37	
3.727	3.724	0.003	1633422	1000.00	1090	19.11- 59.11	39.39	
3.803	3.799	0.004	1564141	1000.00	1060	17.60- 57.60	37.72	
3.999	3.995	0.004	2157573	1000.00	1060	31.73- 71.73	52.04	
Average of Peak Amounts =					1.08e+03			
<hr/>								
7 Aroclor-1260					CAS #: 11096-82-5			
4.911	4.908	0.003	4320885	1000.00	1100	80.00- 120.00	100.00	
5.061	5.057	0.004	5302606	1000.00	1120	101.80- 141.80	122.72	
5.377	5.374	0.003	4026732	1000.00	1120	71.56- 111.56	93.19	
5.584	5.581	0.003	4203569	1000.00	1130	75.46- 115.46	97.28	
6.016	6.012	0.004	6810024	1000.00	1160	132.73- 172.73	157.61	
Average of Peak Amounts =					1.13e+03			

Data File: /chem/ecdb8a.i/031910.b/024b2401.d  
Date : 19-MAR-2010 11:57  
Client ID: AR166006  
Sample Info: 1MAR100319-60

Column phase: CLP2

Instrument: ecdb8a.i  
Operator: JADC  
Column diameter: 0.25

Page 1



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/031910.b/036f3601.d

Lab Smp Id: WAR100319-60 07

Client Smp ID: AR166007

Inj Date : 19-MAR-2010 14:30

Operator : JAOC

Inst ID: ecd8a.i

Smp Info : |WAR100319-60 07

Misc Info : |1660

Comment :

Method : /chem/ecd8a.i/031910.b/ECD8-F-8082-031810.m

Meth Date : 22-Mar-2010 08:33 jen01212 Quant Type: ESTD

Cal Date : 23-FEB-2010 11:32

Cal File: 017f1701.d

Als bottle: 36

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1660.sub

Target Version: 3.50

Sample Matrix: None

AMOUNTS

			CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	( ug/L)	TARGET RANGE	RATIO	
<hr/>							
\$ 11 4cmx				CAS #: 877-09-8			
2.248	2.248	0.000	12971487 100.000	104	80.00- 120.00	100.00	
<hr/>							
\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3			
6.237	6.239	-0.002	8977502 100.000	109	80.00- 120.00	100.00	
<hr/>							
1 Aroclor-1016				CAS #: 12674-11-2			
2.805	2.806	-0.001	4393749 1000.00	921	80.00- 120.00	100.00 (M)	
3.156	3.157	-0.001	5655854 1000.00	1050	107.11- 147.11	128.73	
3.299	3.300	-0.001	2318726 1000.00	986	32.79- 72.79	52.77	
3.391	3.392	-0.001	2099361 1000.00	958	25.87- 65.87	47.78	
3.554	3.555	-0.001	2945368 1000.00	957	47.87- 87.87	67.04	
Average of Peak Amounts =				974			
<hr/>							
7 Aroclor-1260				CAS #: 11096-82-5			
4.427	4.429	-0.002	6182312 1000.00	1050	80.00- 120.00	100.00 (M)	
4.623	4.625	-0.002	9152196 1000.00	1080	126.91- 166.91	148.04	
4.898	4.900	-0.002	5366905 1000.00	1060	64.82- 104.82	86.81	
5.070	5.072	-0.002	5687866 1000.00	1070	70.18- 110.18	92.00	
5.481	5.483	-0.002	6481184 1000.00	1150	76.66- 116.66	104.83	
Average of Peak Amounts =				1.08e+03			

Data File: /chem/ecd8a.i/031910.b/036f3601.d  
Report Date: 22-Mar-2010 13:16

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#### QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecdb8a.i/031910.b/036f3601.d

Date: 19-MAR-2010 14:30

Client ID: AR166007

Sample Info: IMAR100319-60 07

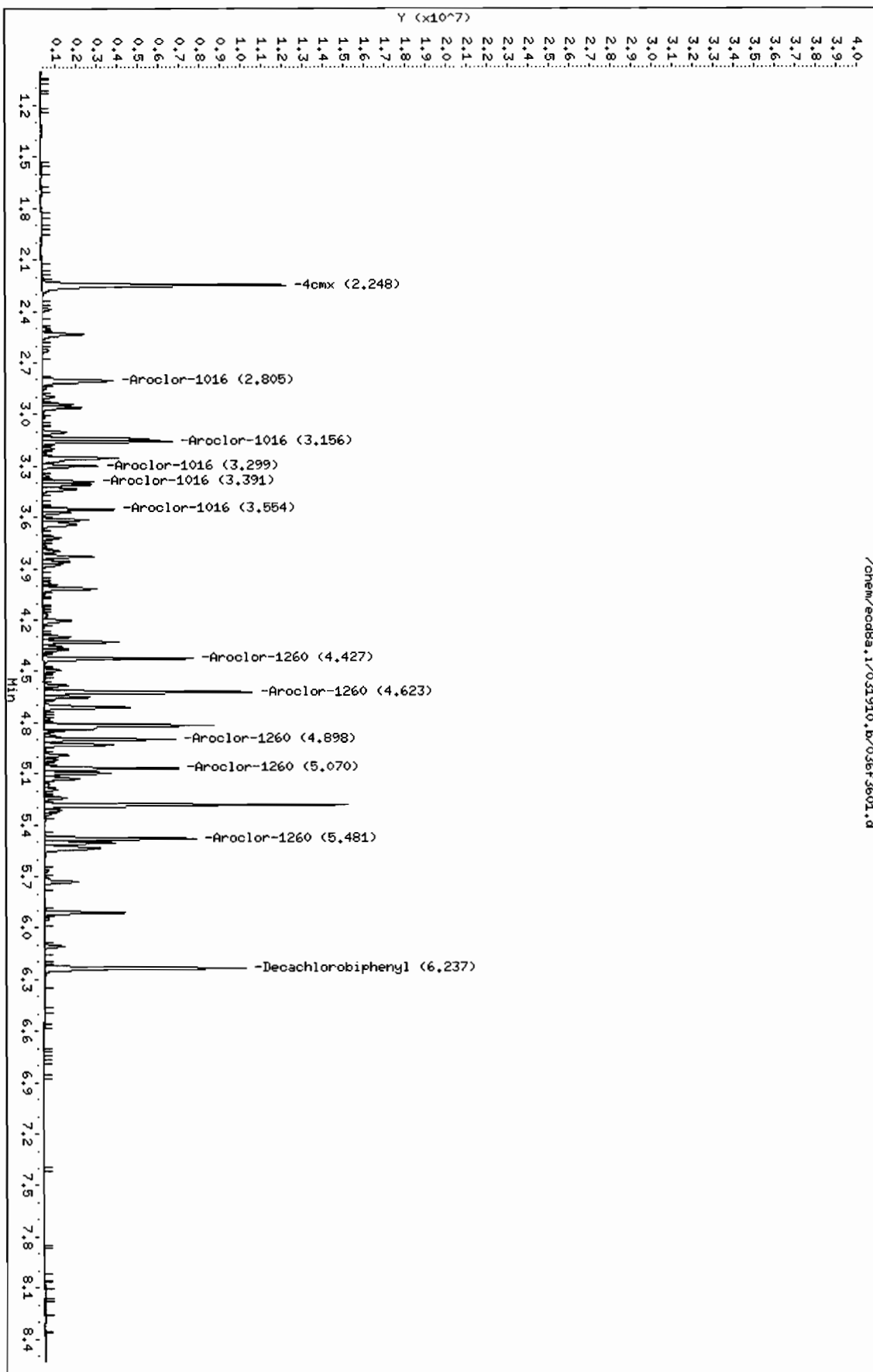
Column phase: CLP1

Instrument: ecdb8a.i

Operator: JHOC

Column diameter: 0.25

/chem/ecdb8a.i/031910.b/036f3601.d



Comment: Manually Integrated

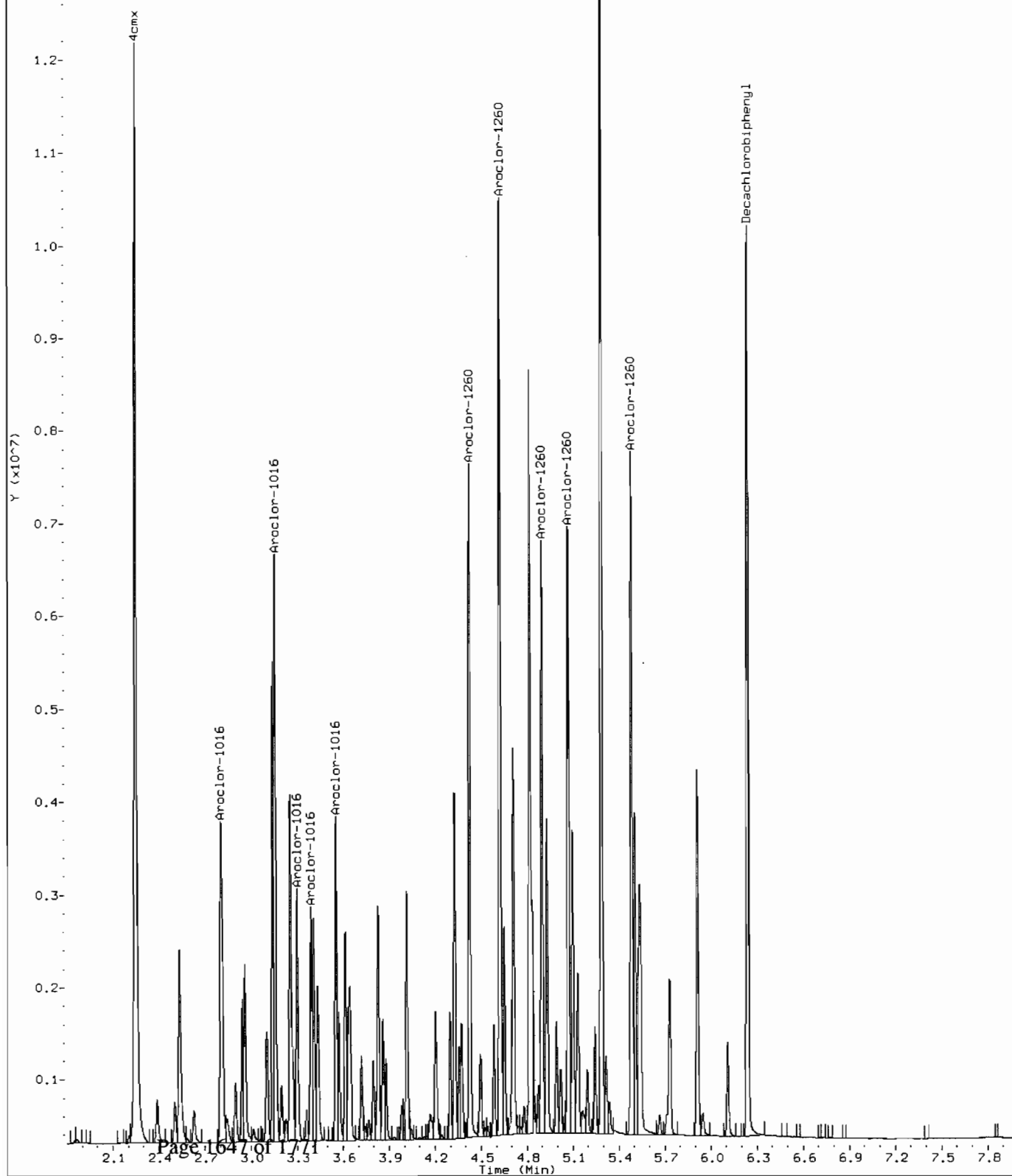
1.5- Data File: /chem/ecd8a.i/031910.b/03613601.d

Operator: JAOC

Injection Date: 19-MAR-2010 14:30

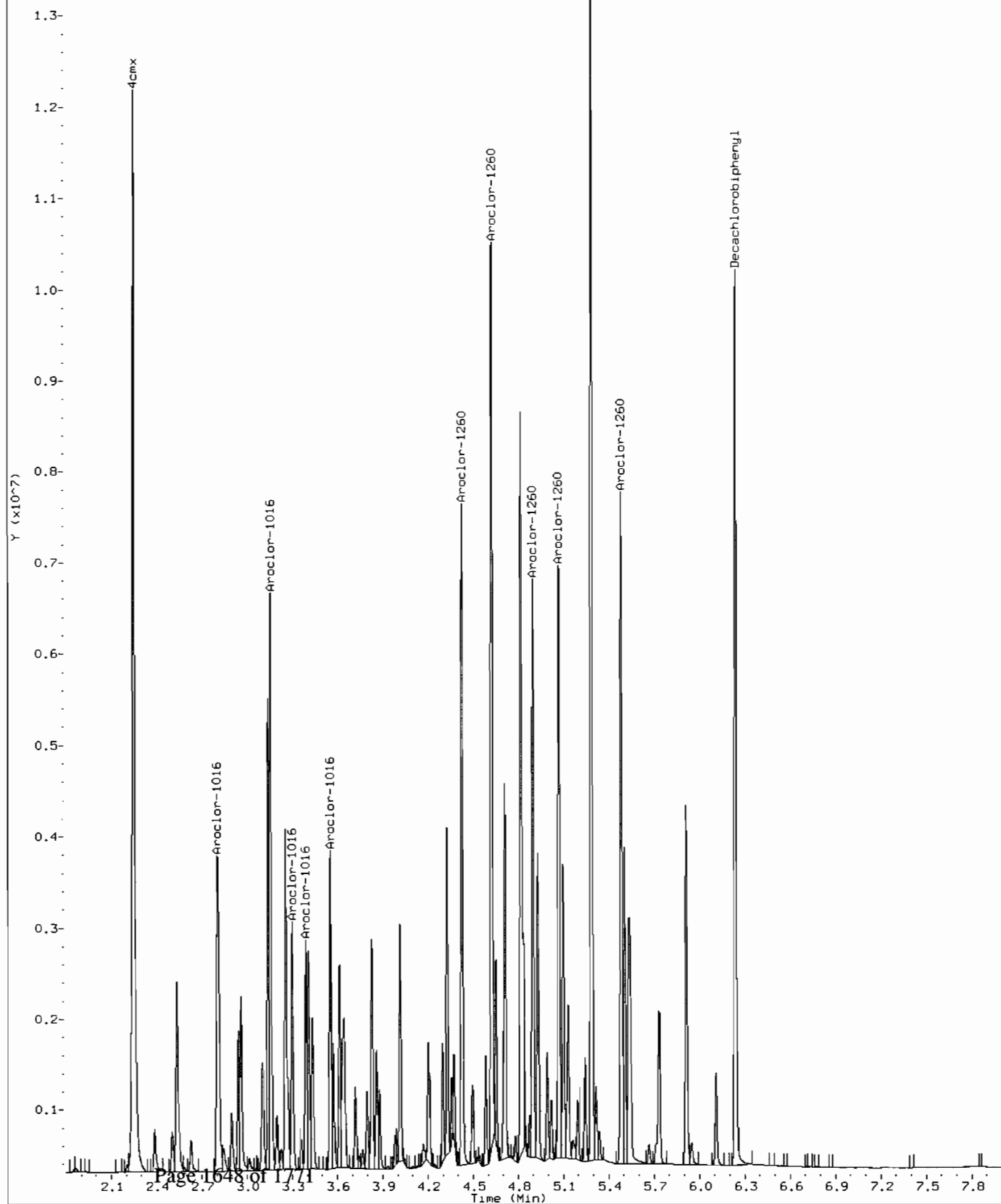
Instrument: ecd8a.i

1.4- Client Sample ID: AR166007





Comment: Before manual integration  
Data File: /chem/ecd8a.i/031910.b/orig-036f3601.d  
Operator: JAOC  
Injection Date: 19-MAR-2010 14:30  
Instrument: ecd8a.i  
Client Sample ID: AR166007



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL  
Data file : /chem/ecd8a.i/031910.b/036b3601.d  
Lab Smp Id: WAR100319-60 07 Client Smp ID: AR166007  
Inj Date : 19-MAR-2010 14:30  
Operator : JAOC Inst ID: ecd8a.i  
Smp Info : |WAR100319-60 07  
Misc Info : |1660  
Comment :  
Method : /chem/ecd8a.i/031910.b/ECD8-B-8082-031810.m  
Meth Date : 22-Mar-2010 07:51 jen01212 Quant Type: ESTD  
Cal Date : 23-FEB-2010 11:32 Cal File: 017b1701.d  
Als bottle: 36 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: AR1660.sub  
Target Version: 3.50 Sample Matrix: None

AMOUNTS							
			CAL-AMT		ON-COL		
RT	EXP RT	DLT RT	RESPONSE	( ug/L)	( ug/L)	TARGET RANGE	RATIO
-----							
\$ 11 4cmx					CAS #: 877-09-8		
2.477	2.477	0.000	9136509	100.000	109	80.00~ 120.00	100.00
-----							
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.822	6.824	-0.002	6684416	100.000	113	80.00~ 120.00	100.00
-----							
1 Aroclor-1016					CAS #: 12674-11-2		
3.548	3.548	0.000	4101482	1000.00	1120	80.00~ 120.00	100.00 (M)
3.647	3.648	-0.001	2598717	1000.00	1020	44.99~ 84.99	63.36
3.723	3.724	-0.001	1573071	1000.00	1050	19.11~ 59.11	38.35
3.798	3.799	-0.001	1509674	1000.00	1020	17.60~ 57.60	36.81
3.995	3.995	0.000	2093298	1000.00	1030	31.73~ 71.73	51.04
Average of Peak Amounts =					1.05e+03		
-----							
7 Aroclor-1260					CAS #: 11096-82-5		
4.907	4.908	-0.001	4433168	1000.00	1120	80.00~ 120.00	100.00 (M)
5.056	5.057	-0.001	5413639	1000.00	1140	101.80~ 141.80	122.12
5.371	5.374	-0.003	4096662	1000.00	1140	71.56~ 111.56	92.41
5.579	5.581	-0.002	4259720	1000.00	1150	75.46~ 115.46	96.09
6.011	6.012	-0.001	6923268	1000.00	1180	132.73~ 172.73	156.17
Average of Peak Amounts =					1.15e+03		

Data File: /chem/ecd8a.i/031910.b/036b3601.d  
Report Date: 22-Mar-2010 13:16

Page 2

#### QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecdb8a.i/031910.b/036b3601.d

Date: 19-MAR-2010 14:30

Client ID: AR166007

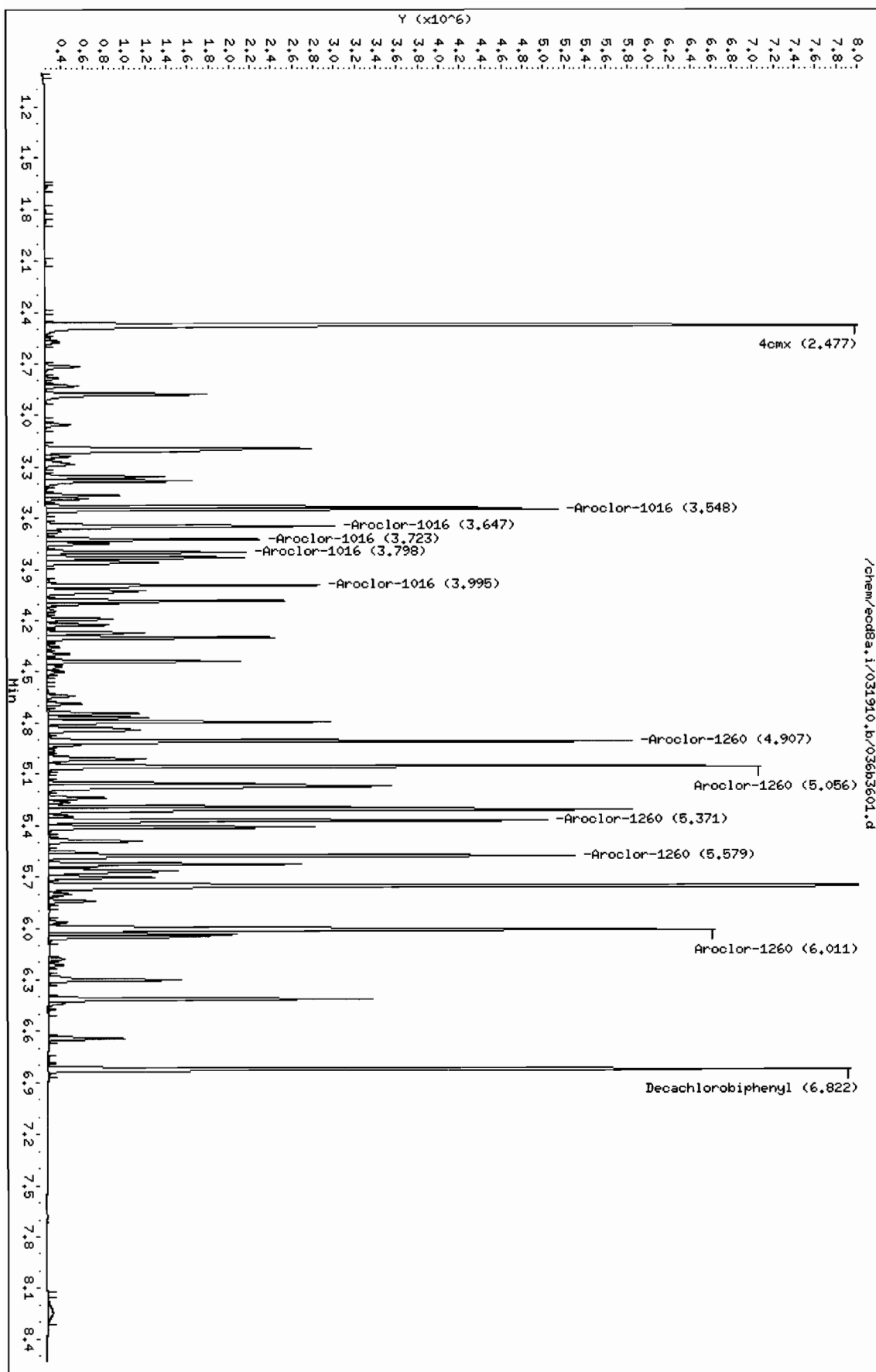
Sample Info: IMAR100319-60 07

Column phase: CLP2

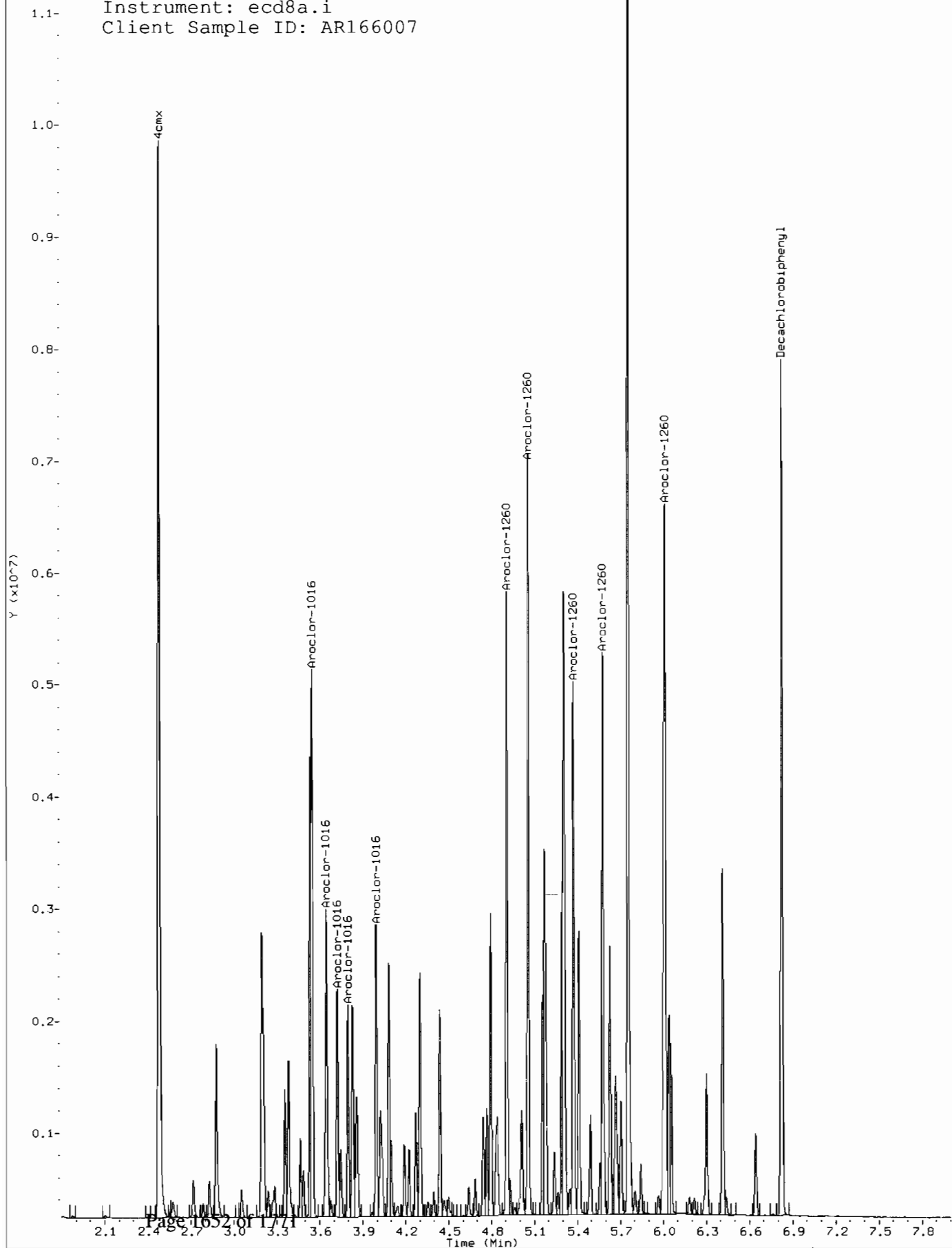
Instrument: ecdb8a.i

Operator: JHQC

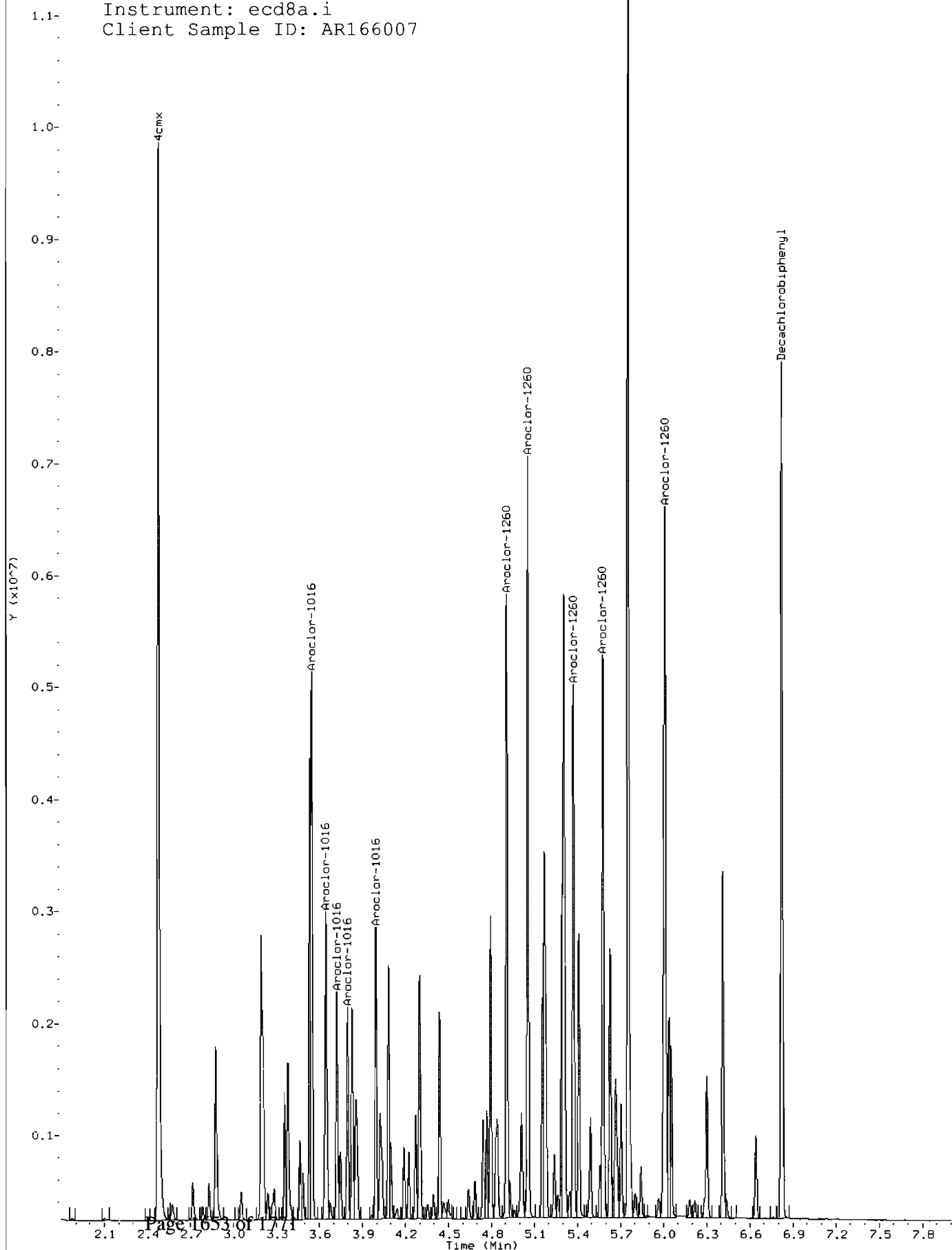
Column diameter: 0.25



Comment: Manually Integrated  
Data File: /chem/ecd8a.i/031910.b/036b3601.d  
Operator: JAOC  
Injection Date: 19-MAR-2010 14:30  
Instrument: ecd8a.i  
Client Sample ID: AR166007



Comment: Before manual integration  
Data File: /chem/ecd8a.i/031910.b/orig-036b3601.d  
Operator: JAOC  
Injection Date: 19-MAR-2010 14:30  
Instrument: ecd8a.i  
Client Sample ID: AR166007



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/031910.b/048f4801.d

Lab Smp Id: WAR100319-60 08

Client Smp ID: AR166008

Inj Date : 19-MAR-2010 17:03

Operator : JAOC

Inst ID: ecd8a.i

Smp Info : |WAR100319-60 08

Misc Info : |1660

Comment :

Method : /chem/ecd8a.i/031910.b/ECD8-F-8082-031810.m

Meth Date : 22-Mar-2010 08:33 jen01212 Quant Type: ESTD

Cal Date : 23-FEB-2010 11:32

Cal File: 017f1701.d

Als bottle: 48

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1660.sub

Target Version: 3.50

Sample Matrix: None

AMOUNTS

			CAL-AMT		ON-COL			
RT	EXP RT	DLT RT	RESPONSE ( ug/L)		( ug/L)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	=====	=====
-----								
\$ 11 4cmx					CAS #: 877-09-8			
2.248	2.248	0.000	13445497	100.000	108	80.00-	120.00	100.00
-----								
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3			
6.238	6.239	-0.001	9133555	100.000	111	80.00-	120.00	100.00
-----								
1 Aroclor-1016					CAS #: 12674-11-2			
2.805	2.806	-0.001	4919988	1000.00	1030	80.00-	120.00	100.00 (M)
3.156	3.157	-0.001	6253825	1000.00	1160	107.11-	147.11	127.11
3.299	3.300	-0.001	2597185	1000.00	1100	32.79-	72.79	52.79
3.391	3.392	-0.001	2256649	1000.00	1030	25.87-	65.87	45.87
3.554	3.555	-0.001	3339276	1000.00	1080	47.87-	87.87	67.87
Average of Peak Amounts =					1.08e+03			
-----								
7 Aroclor-1260					CAS #: 11096-82-5			
4.427	4.429	-0.002	6625955	1000.00	1120	80.00-	120.00	100.00 (M)
4.623	4.625	-0.002	9733923	1000.00	1140	126.91-	166.91	146.91
4.898	4.900	-0.002	5620449	1000.00	1110	64.82-	104.82	84.82
5.071	5.072	-0.001	5975042	1000.00	1120	70.18-	110.18	90.18
5.482	5.483	-0.001	6404791	1000.00	1140	76.66-	116.66	96.66
Average of Peak Amounts =					1.13e+03			

Data File: /chem/ecd8a.i/031910.b/048f4801.d  
Report Date: 22-Mar-2010 13:18

Page 2

#### QC Flag Legend

M - Compound response manually integrated.



Data File: /chem/ecdb8a.i/031910.b/048f4801.d

Date : 19-MAR-2010 17:03

Client ID: AR166008

Sample Info: IMAR100319-60 08

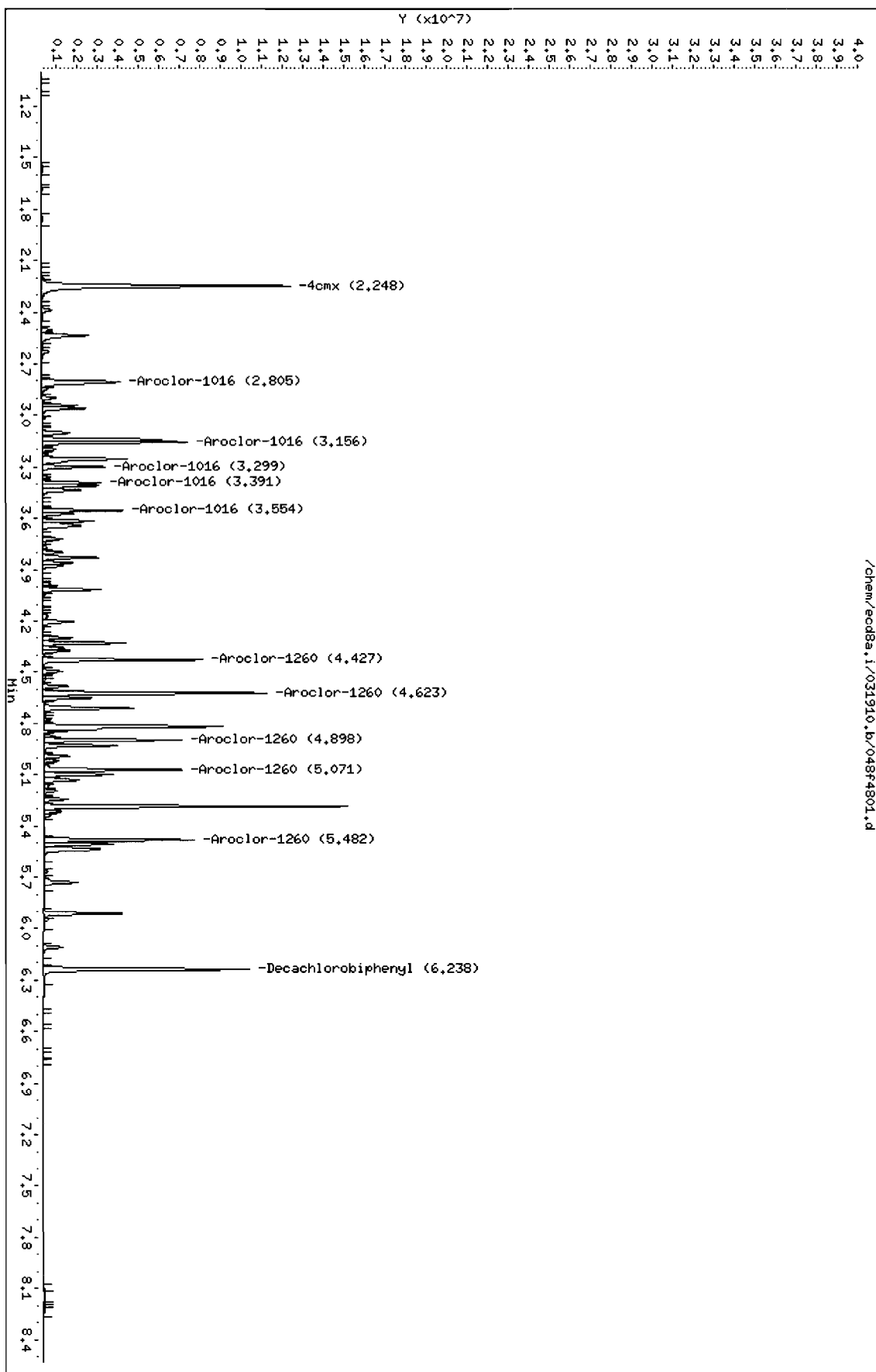
Column phase: CLP1

Instrument: ecdb8a.i

Operator: JHOC

Column diameter: 0.25

/chem/ecdb8a.i/031910.b/048f4801.d



Comment: Manually Integrated

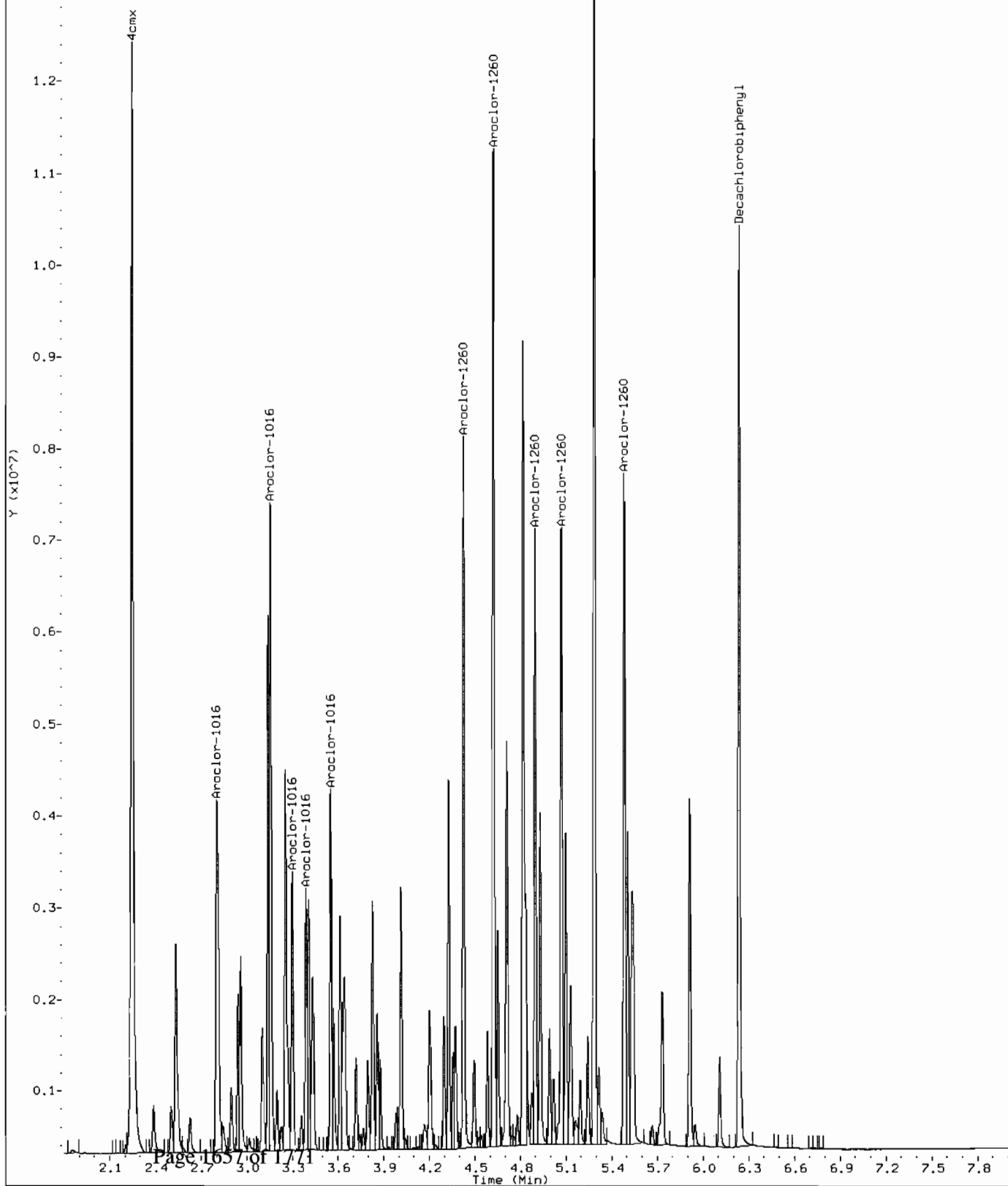
Data File: /chem/ecd8a.i/031910.b/048f4801.d

Operator: JAOC

Injection Date: 19-MAR-2010 17:03

Instrument: ecd8a.i

Client Sample ID: AR166008



Comment: Before manual integration

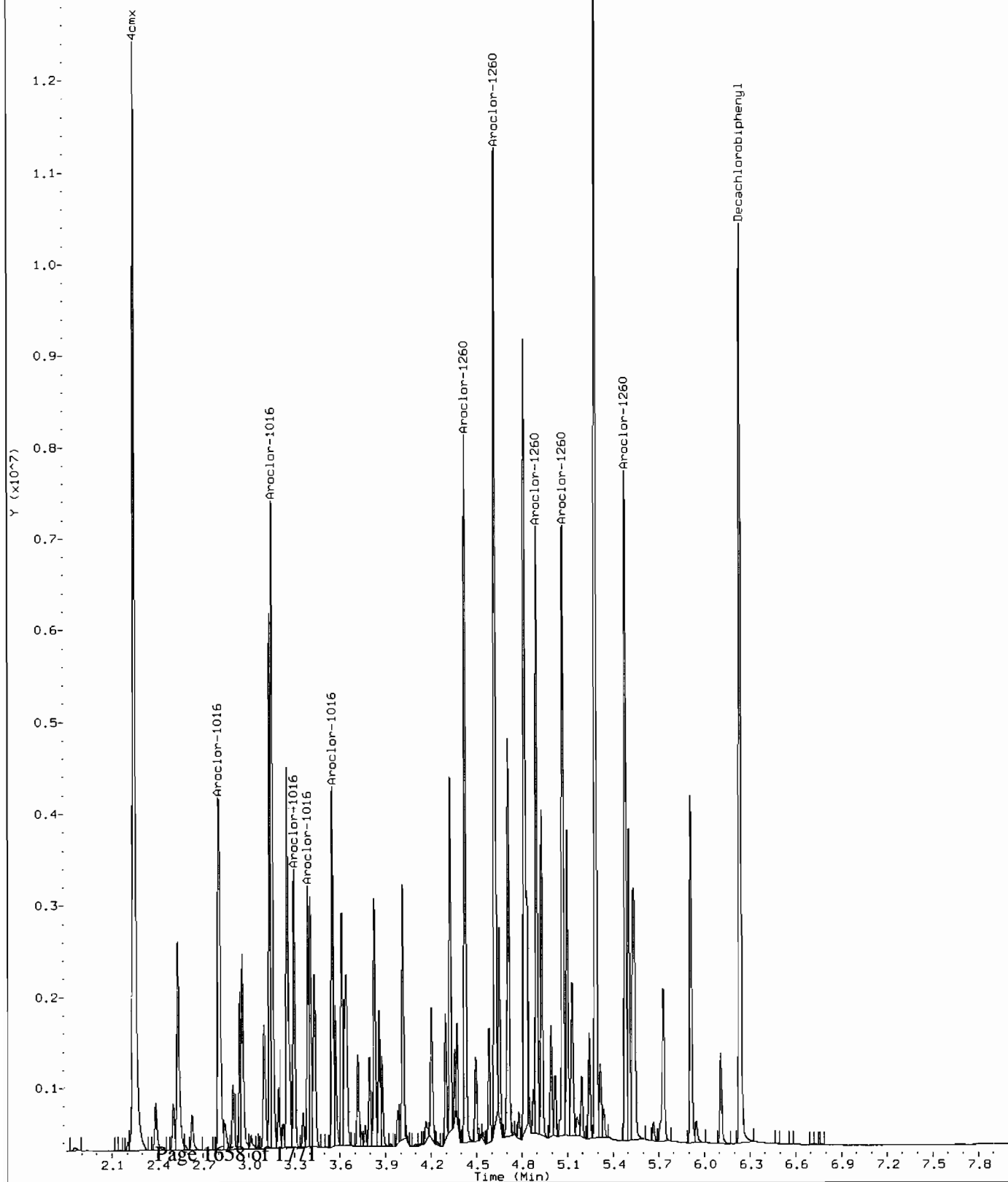
Data File: /chem/ecd8a.i/031910.b/orig-048f4801.d

Operator: JAOC

Injection Date: 19-MAR-2010 17:03

Instrument: ecd8a.i

Client Sample ID: AR166008



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL  
Data file : /chem/ecd8a.i/031910.b/048b4801.d  
Lab Smp Id: WAR100319-60 08 Client Smp ID: AR166008  
Inj Date : 19-MAR-2010 17:03  
Operator : JAOC Inst ID: ecd8a.i  
Smp Info : |WAR100319-60 08  
Misc Info : |1660  
Comment :  
Method : /chem/ecd8a.i/031910.b/ECD8-B-8082-031810.m  
Meth Date : 22-Mar-2010 07:51 jen01212 Quant Type: ESTD  
Cal Date : 23-FEB-2010 11:32 Cal File: 017b1701.d  
Als bottle: 48 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: AR1660.sub  
Target Version: 3.50 Sample Matrix: None

AMOUNTS									
			CAL-AMT		ON-COL				
RT	EXP RT	DLT RT	RESPONSE	( ug/L)	( ug/L)	TARGET RANGE	RATIO		
==	=====	=====	=====	=====	=====	=====	=====		
\$ 11 4cmx					CAS #: 877-09-8				
2.477	2.477	0.000	9099354	100.000	109	80.00- 120.00	100.00		
-----									
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3				
6.824	6.824	0.000	6709547	100.000	113	80.00- 120.00	100.00		
-----									
1 Aroclor-1016					CAS #: 12674-11-2				
3.548	3.548	0.000	4261246	1000.00	1160	80.00- 120.00	100.00		
3.647	3.648	-0.001	2769533	1000.00	1080	44.99- 84.99	64.99		
3.723	3.724	-0.001	1666367	1000.00	1120	19.11- 59.11	39.11		
3.798	3.799	-0.001	1602178	1000.00	1080	17.60- 57.60	37.60		
3.995	3.995	0.000	2204153	1000.00	1090	31.73- 71.73	51.73		
Average of Peak Amounts =					1.11e+03				
-----									
7 Aroclor-1260					CAS #: 11096-82-5				
4.907	4.908	-0.001	4380300	1000.00	1110	80.00- 120.00	100.00		
5.056	5.057	-0.001	5335272	1000.00	1130	101.80- 141.80	121.80		
5.373	5.374	-0.001	4010468	1000.00	1120	71.56- 111.56	91.56		
5.580	5.581	-0.001	4181376	1000.00	1130	75.46- 115.46	95.46		
6.011	6.012	-0.001	6690189	1000.00	1140	132.73- 172.73	152.73		
Average of Peak Amounts =					1.13e+03				

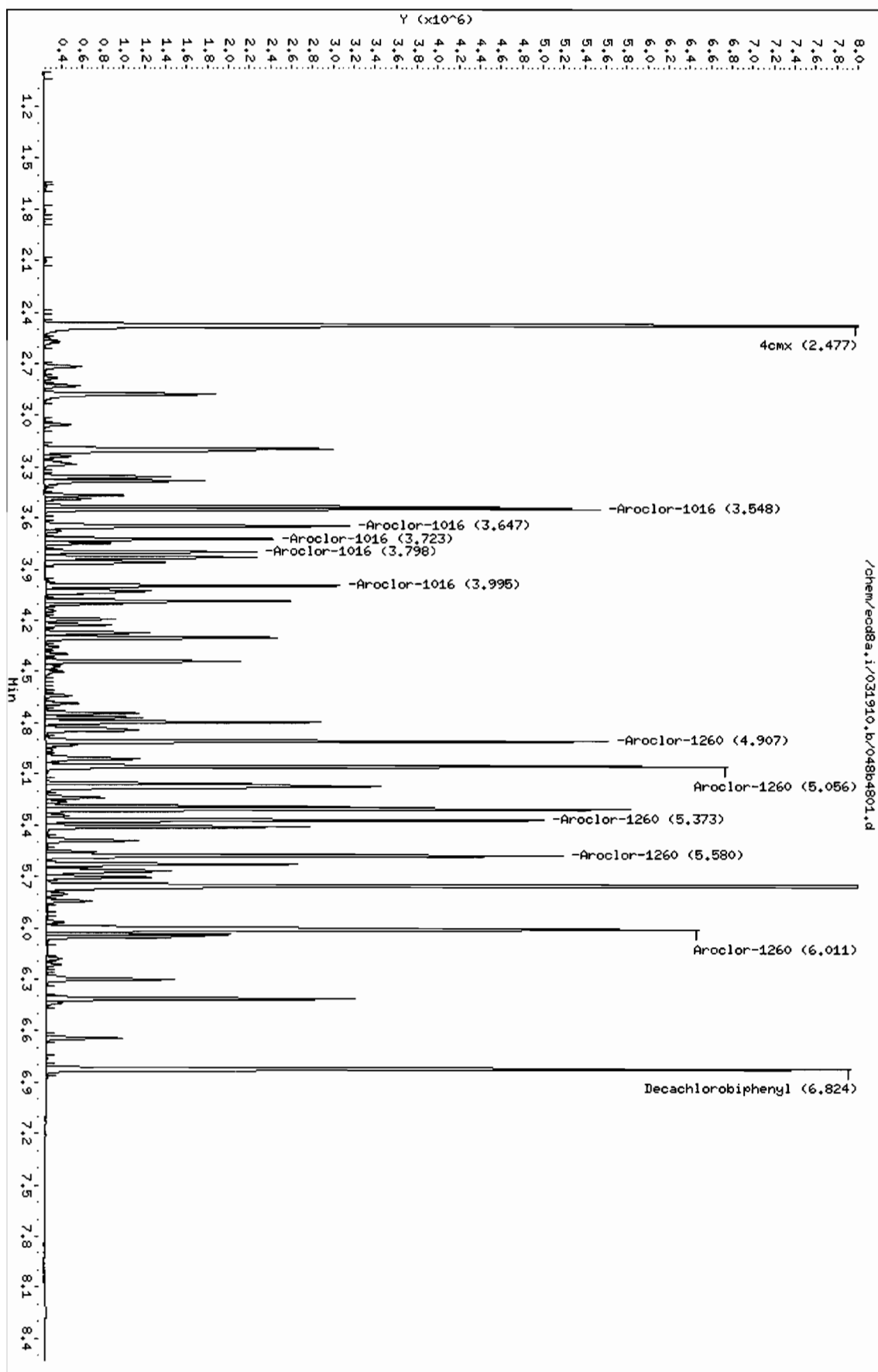
Data File: /chem/ecdb8a.i/031910.b/048b4801.d  
Date : 19-MAR-2010 17:03  
Client ID: AR166008  
Sample Info: 14MR100319-60 08

Instrument: ecdb8a.i

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Column phase: CLP2

Operator: JADC  
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/031910.b/054f5401.d

Lab Smp Id: WAR100319-60 09

Client Smp ID: AR166009

Inj Date : 19-MAR-2010 18:21

Operator : JAOC

Inst ID: ecd8a.i

Smp Info : |WAR100319-60 09

Misc Info : |1660

Comment :

Method : /chem/ecd8a.i/031910.b/ECD8-F-8082-031810.m

Meth Date : 22-Mar-2010 08:33 jen01212 Quant Type: ESTD

Cal Date : 23-FEB-2010 11:32 Cal File: 017f1701.d

Als bottle: 54 Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1660.sub

Target Version: 3.50

Sample Matrix: None

AMOUNTS

			CAL-AMT		ON-COL			
RT	EXP RT	DLT RT	RESPONSE ( ug/L)		( ug/L)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	=====	
S 11 4cmx					CAS #: 877-09-8			
2.247	2.248	-0.001	12722977	100.000	102	80.00- 120.00	100.00	
-----								
S 12 Decachlorobiphenyl					CAS #: 2051-24-3			
6.238	6.239	-0.001	8283434	100.000	100	80.00- 120.00	100.00	
-----								
1 Aroclor-1016					CAS #: 12674-11-2			
2.805	2.806	-0.001	4640111	1000.00	972	80.00- 120.00	100.00	
3.156	3.157	-0.001	5770150	1000.00	1070	107.11- 147.11	124.35	
3.299	3.300	-0.001	2421037	1000.00	1030	32.79- 72.79	52.18	
3.391	3.392	-0.001	2147980	1000.00	980	25.87- 65.87	46.29	
3.554	3.555	-0.001	3106920	1000.00	1010	47.87- 87.87	66.96	
Average of Peak Amounts =					1.01e+03			
-----								
7 Aroclor-1260					CAS #: 11096-82-5			
4.427	4.429	-0.002	5905952	1000.00	1000	80.00- 120.00	100.00	
4.623	4.625	-0.002	8659978	1000.00	1020	126.91- 166.91	146.63	
4.898	4.900	-0.002	5035438	1000.00	994	64.82- 104.82	85.26	
5.071	5.072	-0.001	5362366	1000.00	1010	70.18- 110.18	90.80	
5.482	5.483	-0.001	5723029	1000.00	1010	76.66- 116.66	96.90	
Average of Peak Amounts =					1.01e+03			

Data File: /chem/ecdb8a,i/031910,b/054f5401.d

Date: 19-MAR-2010 18:21

Client ID: AR166009

Sample Info: 1MAR100319-60 09

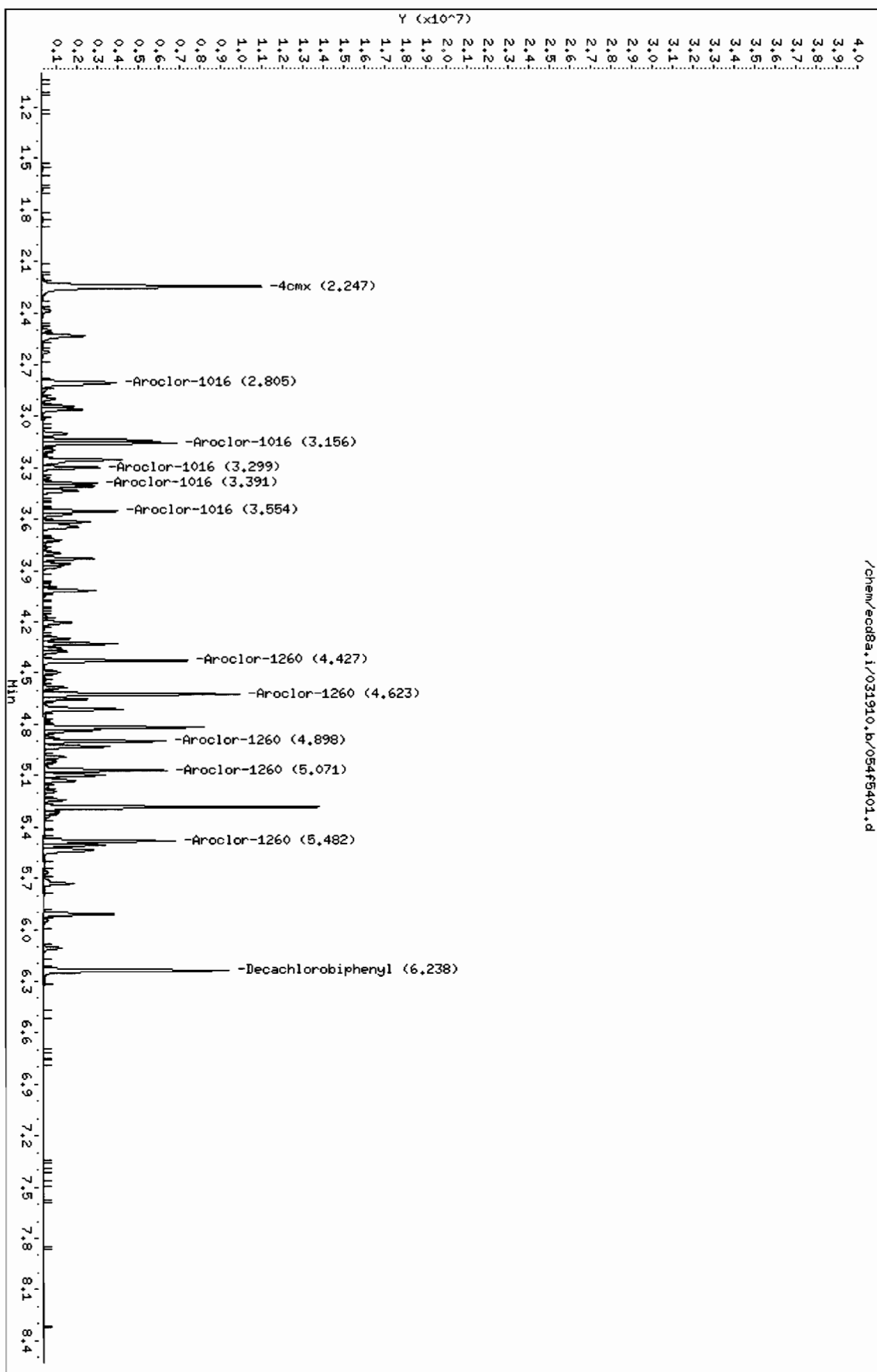
Page 1

Instrument: ecdb8a,i

Operator: JADG

Column diameter: 0.25

Column phase: CLP1



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/031910.b/054b5401.d

Lab Smp Id: WAR100319-60 09

Client Smp ID: AR166009

Inj Date : 19-MAR-2010 18:21

Operator : JAOC

Inst ID: ecd8a.i

Smp Info : |WAR100319-60 09

Misc Info : |1660

Comment :

Method : /chem/ecd8a.i/031910.b/ECD8-B-8082-031810.m

Meth Date : 22-Mar-2010 07:51 jen01212 Quant Type: ESTD

Cal Date : 23-FEB-2010 11:32

Cal File: 017b1701.d

Als bottle: 54

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1660.sub

Target Version: 3.50

Sample Matrix: None

AMOUNTS

			CAL-AMT		ON-COL			
RT	EXP RT	DLT RT	RESPONSE	( ug/L)	( ug/L)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	=====	
\$ 11 4cmx					CAS #: 877-09-8			
2.477	2.477	0.000	8665755	100.000	104	80.00- 120.00	100.00	
-----								
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3			
6.823	6.824	-0.001	6043414	100.000	102	80.00- 120.00	100.00	
-----								
1 Aroclor-1016					CAS #: 12674-11-2			
3.548	3.548	0.000	3960983	1000.00	1080	80.00- 120.00	100.00	
3.647	3.648	-0.001	2591174	1000.00	1020	44.99- 84.99	65.42	
3.723	3.724	-0.001	1565317	1000.00	1050	19.11- 59.11	39.52	
3.798	3.799	-0.001	1507216	1000.00	1020	17.60- 57.60	38.05	
3.994	3.995	-0.001	2095085	1000.00	1030	31.73- 71.73	52.89	
Average of Peak Amounts =					1.04e+03			
-----								
7 Aroclor-1260					CAS #: 11096-82-5			
4.907	4.908	-0.001	4074457	1000.00	1030	80.00- 120.00	100.00	
5.056	5.057	-0.001	4935213	1000.00	1040	101.80- 141.80	121.13	
5.372	5.374	-0.002	3709523	1000.00	1030	71.56- 111.56	91.04	
5.579	5.581	-0.002	3853997	1000.00	1040	75.46- 115.46	94.59	
6.011	6.012	-0.001	6125578	1000.00	1050	132.73- 172.73	150.34	
Average of Peak Amounts =					1.04e+03			



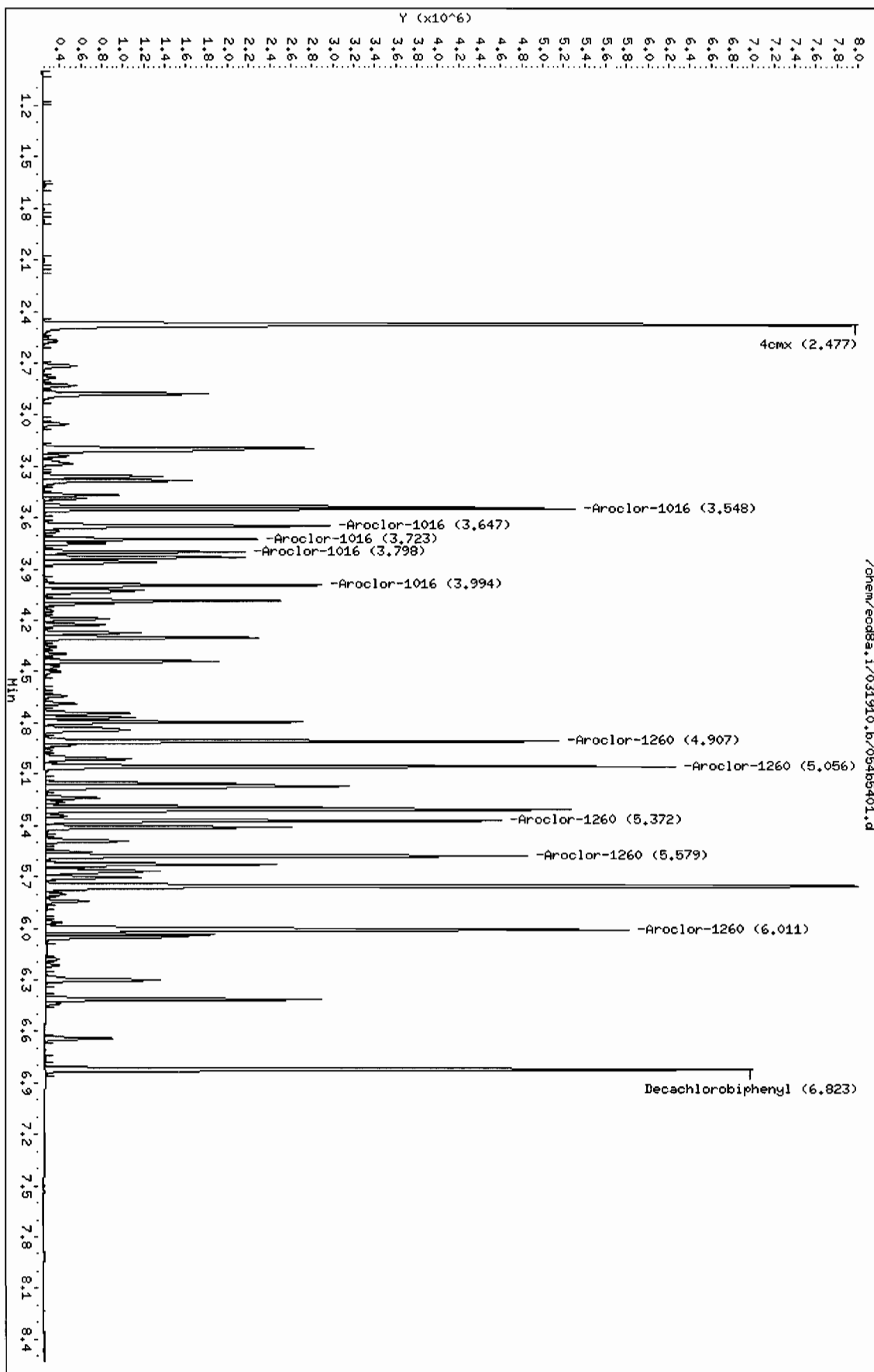
Data File: /chem/ecdb8a.i/031910.b/054b5401.d  
Date : 19-MAR-2010 18:21  
Client ID: AR166009  
Sample Info: IMR100319-60 09

Instrument: ecdb8a.i

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Column phase: CLP2

Operator: JADC  
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/032310.b/002f0201.d

Lab Smp Id: WAR100224-60 01 Client Smp ID: AR166001

Inj Date : 23-MAR-2010 08:22

Operator : JAOC

Inst ID: ecd8a.i

Smp Info : |WAR100224-60 01

Misc Info : |1660

Comment :

Method : /chem/ecd8a.i/032310.b/ECD8-F-8082-031810.m

Meth Date : 23-Mar-2010 12:11 jen01212 Quant Type: ESTD

Cal Date : 23-FEB-2010 11:32 Cal File: 017f1701.d

Als bottle: 2 Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1660.sub

Target Version: 3.50

Sample Matrix: None

AMOUNTS

			CAL-AMT		ON-COL			
RT	EXP RT	DLT RT	RESPONSE	( ug/L)	( ug/L)	TARGET	RANGE	RATIO
==	=====	=====	=====	=====	=====	=====	=====	=====
<hr/>								
\$ 11 4cmx					CAS #: 877-09-8			
2.248	2.248	0.000	12843209	100.000	103	80.00-	120.00	100.00
<hr/>								
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3			
6.240	6.240	0.000	8659509	100.000	105	80.00-	120.00	100.00
<hr/>								
1 Aroclor-1016					CAS #: 12674-11-2			
2.806	2.806	0.000	4356912	1000.00	913	80.00-	120.00	100.00 (M)
3.157	3.157	0.000	5314052	1000.00	984	104.48-	144.48	121.97
3.301	3.301	0.000	2244950	1000.00	955	32.25-	72.25	51.53
3.393	3.393	0.000	2026561	1000.00	925	25.87-	65.87	46.51
3.555	3.555	0.000	2883384	1000.00	936	46.15-	86.15	66.18
Average of Peak Amounts =					943			
<hr/>								
7 Aroclor-1260					CAS #: 11096-82-5			
4.429	4.429	0.000	5924060	1000.00	1000	80.00-	120.00	100.00 (M)
4.625	4.625	0.000	8697557	1000.00	1020	130.34-	170.34	146.82
4.900	4.900	0.000	5099908	1000.00	1010	68.48-	108.48	86.09
5.072	5.072	0.000	5481293	1000.00	1030	73.68-	113.08	92.53
5.483	5.483	0.000	5903839	1000.00	1050	82.89-	122.89	99.66
Average of Peak Amounts =					1.02e+03			

Data File: /chem/ecd8a.i/032310.b/002f0201.d  
Report Date: 23-Mar-2010 13:16

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#### QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecob8a.i/032310.b/002f0201.d

Date: 23-MAR-2010 08:22

Client ID: AR166001

Sample Info: 1MAR100224-60 01

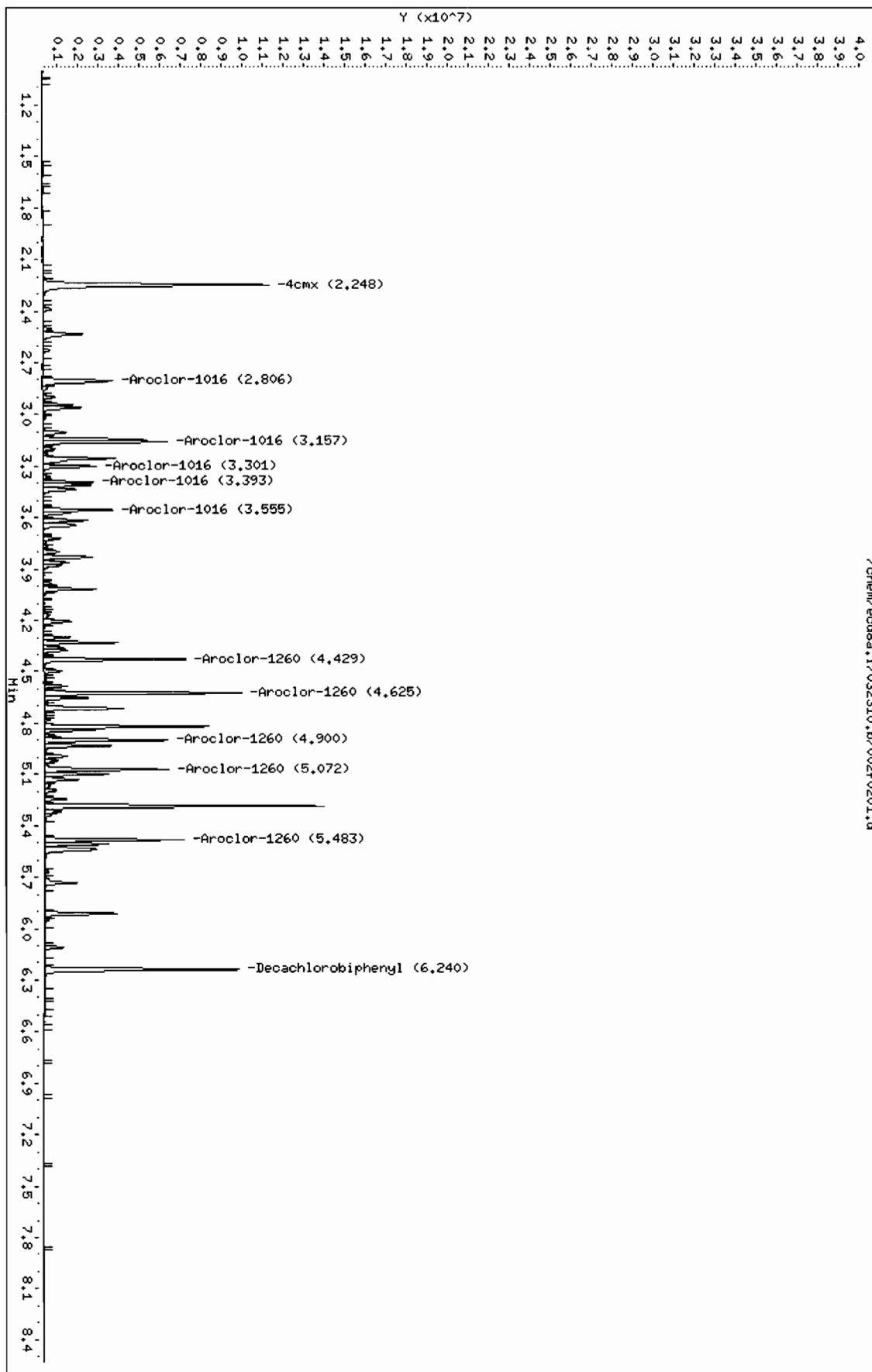
Column Phase: CLP1

Instrument: ecob8a.i

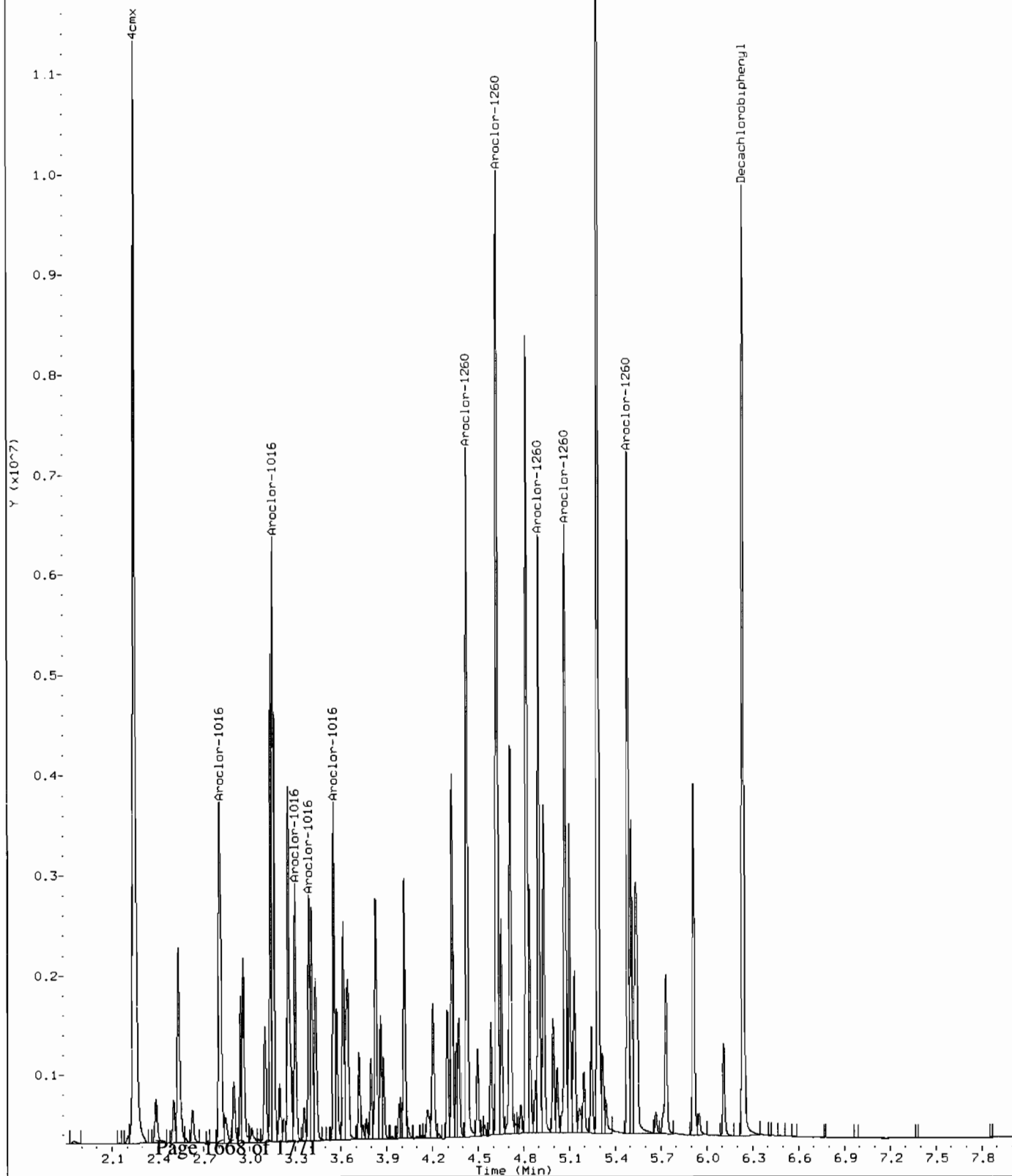
Operator: JHOC

Column diameter: 0.25

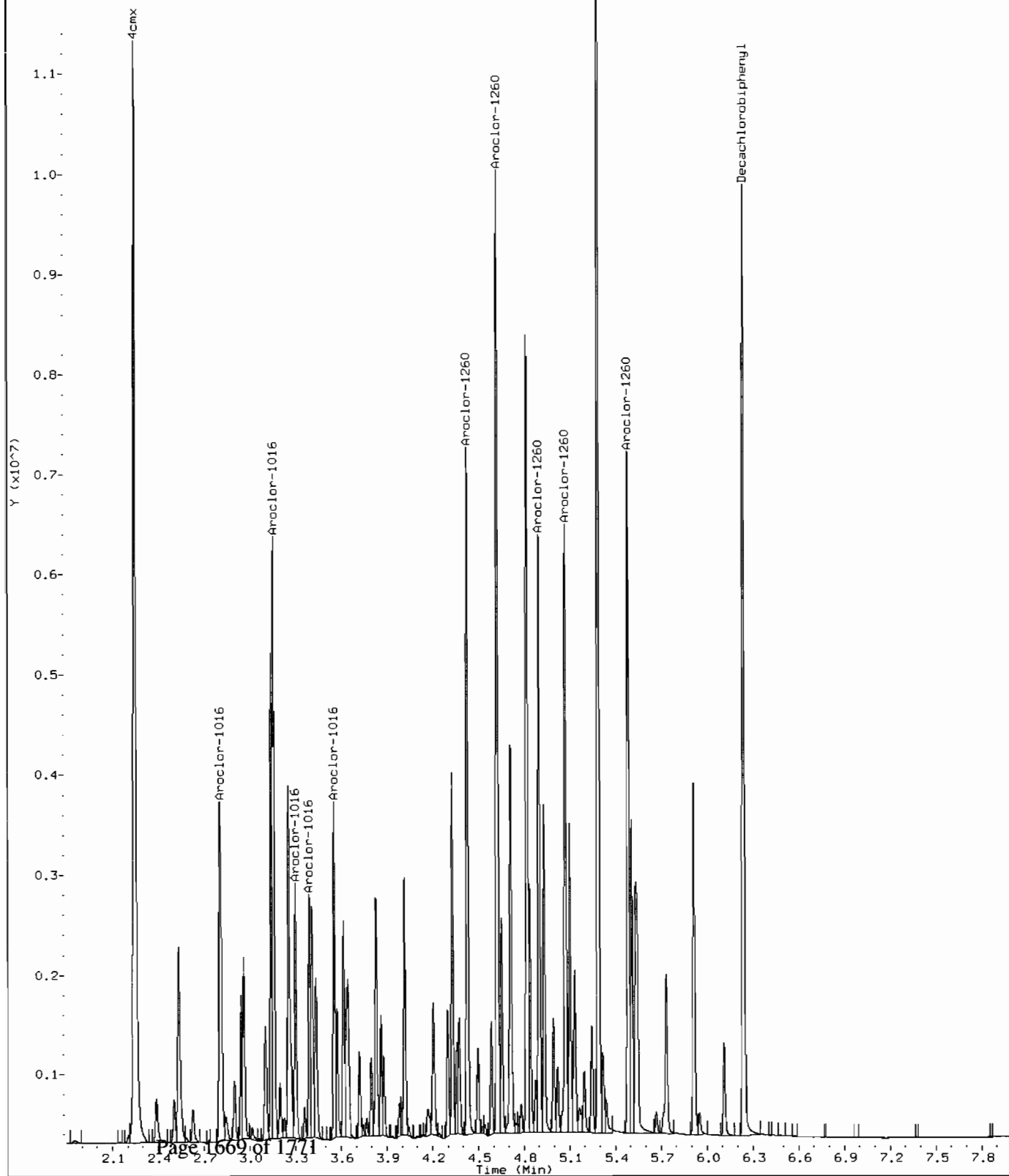
/chem/ecob8a.i/032310.b/002f0201.d



Comment: Manually Integrated  
Data File: /chem/ecd8a.i/032310.b/002f0201.d  
Operator: JAOC  
Injection Date: 23-MAR-2010 08:22  
Instrument: ecd8a.i  
Client Sample ID: AR166001



Comment: Before manual integration  
Data File: /chem/ecd8a.i/032310.b/orig-002f0201.d  
Operator: JAOC  
Injection Date: 23-MAR-2010 08:22  
Instrument: ecd8a.i  
Client Sample ID: AR166001



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/032310.b/002b0201.d

Lab Smp Id: WAR100224-60 01 Client Smp ID: AR166001

Inj Date : 23-MAR-2010 08:22

Operator : JAOC Inst ID: ecd8a.i

Smp Info : |WAR100224-60 01

Misc Info : |1660

Comment :

Method : /chem/ecd8a.i/032310.b/ECD8-B-8082-031810.m

Meth Date : 23-Mar-2010 12:10 jen01212 Quant Type: ESTD

Cal Date : 23-FEB-2010 11:32 Cal File: 017b1701.d

Als bottle: 2 Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon Compound Sublist: AR1660.sub

Target Version: 3.50 Sample Matrix: None

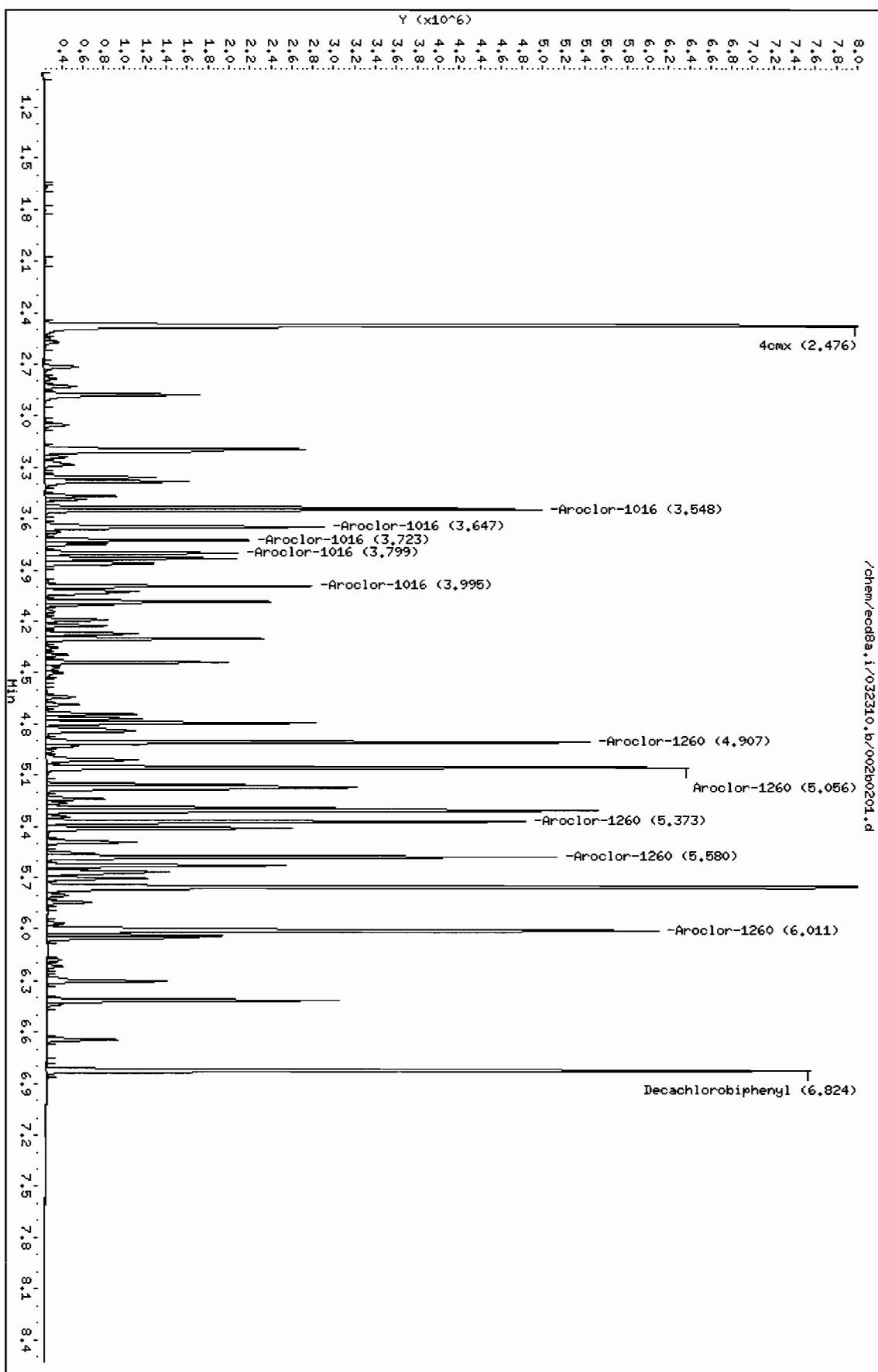
AMOUNTS

			CAL-AMT		ON-COL			
RT	EXP RT	DLT RT	RESPONSE	( ug/L)	( ug/L)	TARGET RANGE	RATIO	
=====	=====	=====	=====	=====	=====	=====	=====	
\$ 11 4cmx					CAS #: 877-09-8			
2.476	2.476	0.000	9000761	100.000	108	80.00- 120.00	100.00	
-----								
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3			
6.824	6.824	0.000	6441774	100.000	109	80.00- 120.00	100.00	
-----								
1 Aroclor-1016					CAS #: 12674-11-2			
3.548	3.548	0.000	3813713	1000.00	1040	80.00- 120.00	100.00	
3.647	3.647	0.000	2498965	1000.00	980	46.09- 86.09	65.53	
3.723	3.723	0.000	1490551	1000.00	999	20.22- 60.22	39.08	
3.799	3.799	0.000	1447833	1000.00	980	18.50- 58.50	37.96	
3.995	3.995	0.000	2010893	1000.00	993	33.22- 73.22	52.73	
Average of Peak Amounts =					998			
-----								
7 Aroclor-1260					CAS #: 11096-82-5			
4.907	4.907	0.000	4265170	1000.00	1080	80.00- 120.00	100.00	
5.056	5.056	0.000	5176085	1000.00	1090	101.76- 141.76	121.36	
5.373	5.373	0.000	3889008	1000.00	1080	70.99- 110.99	91.18	
5.580	5.580	0.000	4037036	1000.00	1090	76.39- 116.39	94.65	
6.011	6.011	0.000	6431111	1000.00	1100	130.53- 170.53	150.78	
Average of Peak Amounts =					1.09e+03			
-----								

Data File: /chem/ecdb8a.i/032310.b/002b0201.d  
Date: 23-MAR-2010 08:22  
Client ID: AR166001  
Sample Info: 1MAR100224-60 01

Column phase: CLP2

Instrument: ecdb8a.i  
Operator: JADC  
Column diameter: 0.25





GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/032310.b/003f0301.d

Lab Smp Id: WAR100219-54

Client Smp ID: AR125401

Inj Date : 23-MAR-2010 08:34

Operator : JAOC

Inst ID: ecd8a.i

Smp Info : |WAR100219-54

Misc Info : |1254

Comment :

Method : /chem/ecd8a.i/032310.b/ECD8-F-8082-031810.m

Meth Date : 23-Mar-2010 12:11 jen01212 Quant Type: ESTD

Cal Date : 23-FEB-2010 11:32 Cal File: 017f1701.d

Als bottle: 3 Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1254.sub

Target Version: 3.50

Sample Matrix: None

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ug/L)	ON-COL ( ug/L)	TARGET RANGE	RATIO
6 Aroclor-1254					CAS #: 11097-69-1	
3.830	3.830	0.000	4170263 1000.00	962	80.00- 120.00	100.00
4.017	4.017	0.000	5614912 1000.00	974	114.64- 154.64	134.64
4.213	4.213	0.000	4376010 1000.00	981	84.93- 124.93	104.93
4.300	4.300	0.000	7372606 1000.00	980	156.79- 196.79	176.79
4.496	4.496	0.000	5596134 1000.00	973	114.19- 154.19	134.19
Average of Peak Amounts =				974		

Data File: /chem/ecod8a.i/032310.b/003f0301.d  
Date : 23-MAR-2010 08:34  
Client ID: 6R125401  
Sample Info: 1M6R100219-54

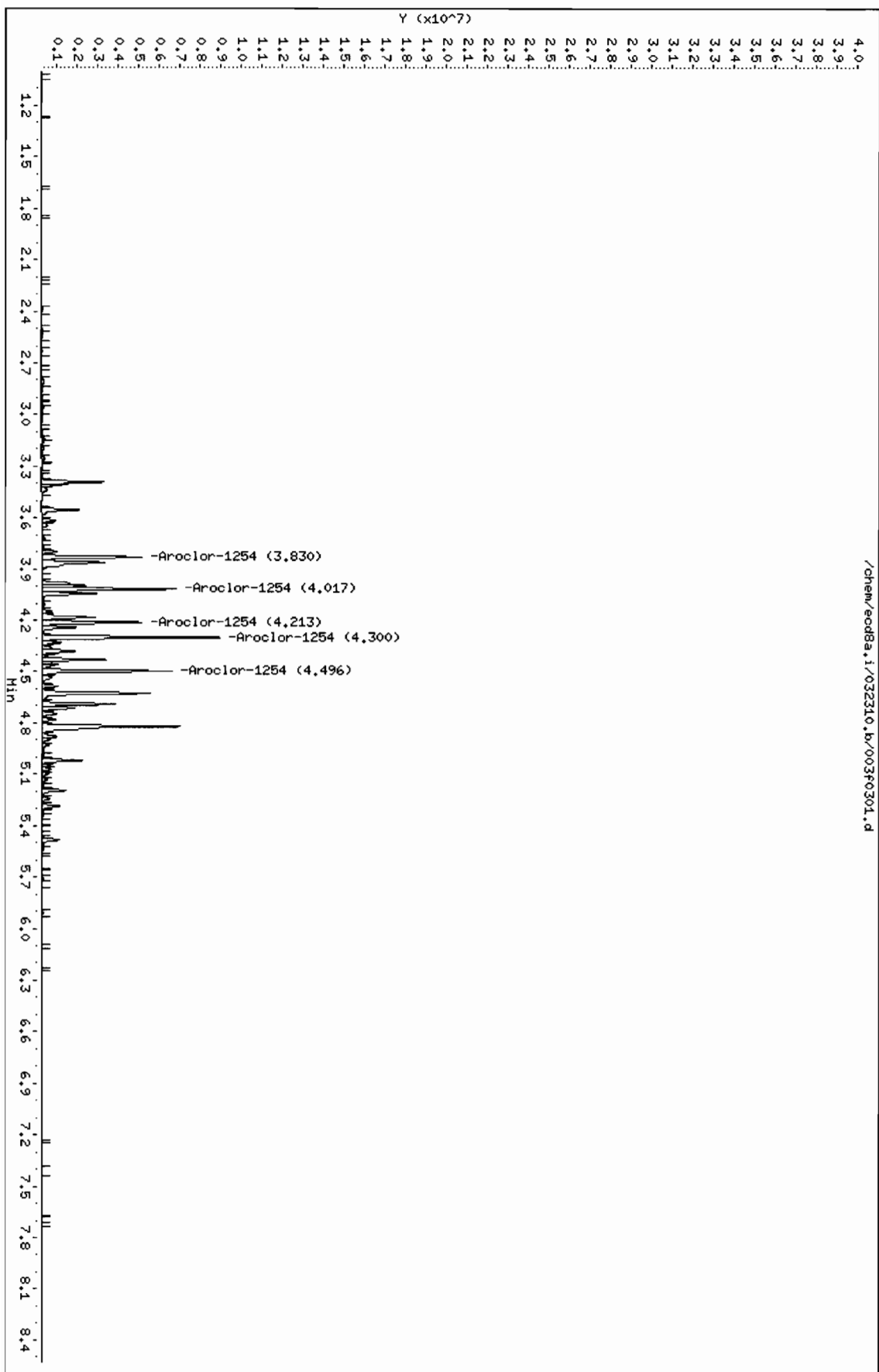
Instrument: ecod8a.i

Page 1

Column phase: CLP1

Operator: JHOC  
Column diameter: 0.25

/chem/ecod8a.i/032310.b/003f0301.d



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/032310.b/003b0301.d

Lab Smp Id: WAR100219-54

Client Smp ID: AR125401

Inj Date : 23-MAR-2010 08:34

Operator : JAOC

Inst ID: ecd8a.i

Smp Info : |WAR100219-54

Misc Info : |1254

Comment :

Method : /chem/ecd8a.i/032310.b/ECD8-B-8082-031810.m

Meth Date : 23-Mar-2010 12:10 jen01212 Quant Type: ESTD

Cal Date : 23-FEB-2010 11:32 Cal File: 017b1701.d

Als bottle: 3 Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1254.sub

Target Version: 3.50

Sample Matrix: None

AMOUNTS

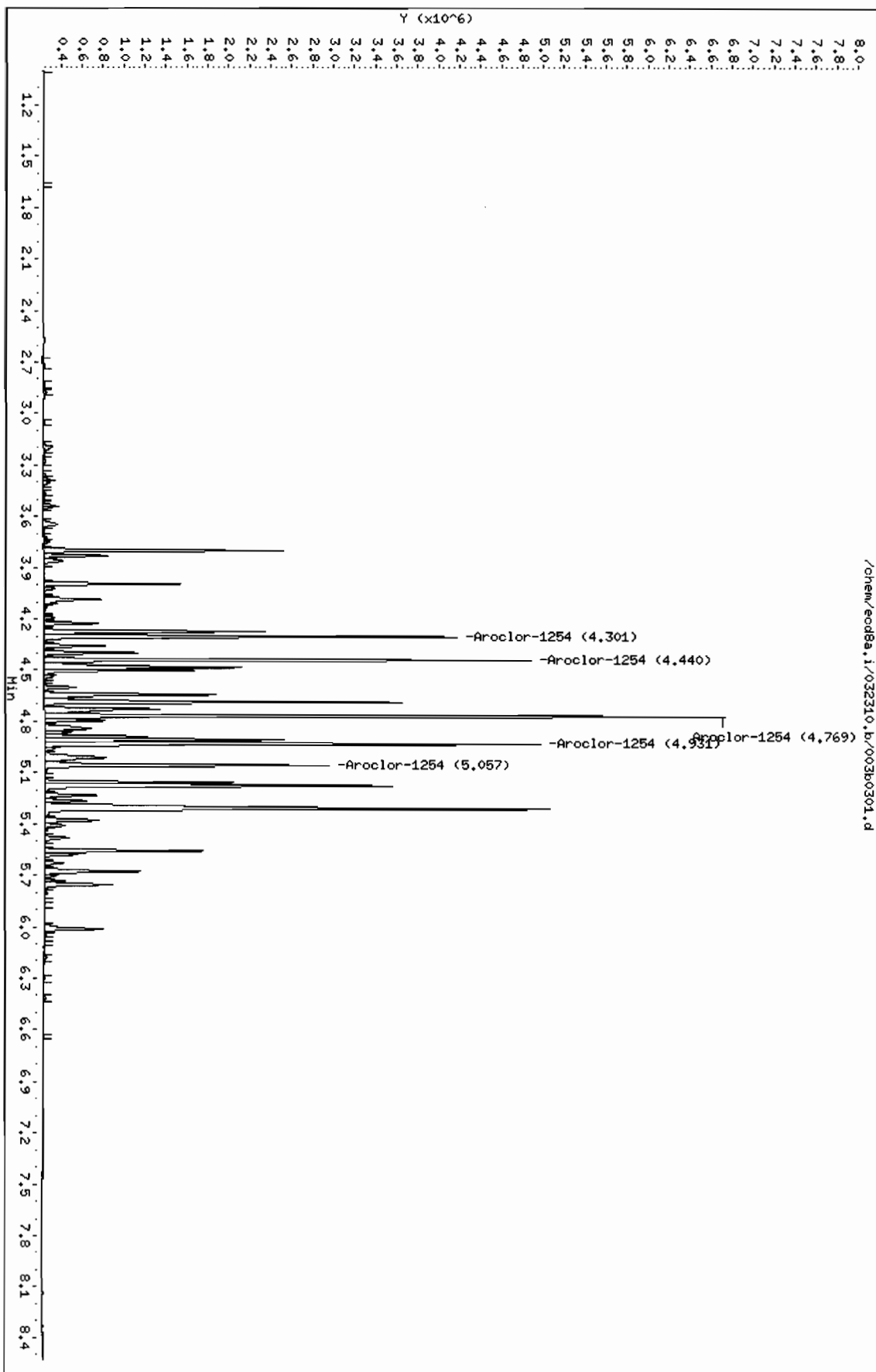
			CAL-AMT		ON-COL			
RT	EXP RT	DLT RT	RESPONSE	( ug/L)	( ug/L)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	=====	
6 Aroclor-1254					CAS #: 11097-69-1			
4.301	4.301	0.000	3312879	1000.00	1060	80.00- 120.00	100.00	
4.440	4.440	0.000	3709561	1000.00	1070	91.97- 131.97	111.97	
4.769	4.769	0.000	5255007	1000.00	1090	138.62- 178.62	158.62	
4.931	4.931	0.000	3762160	1000.00	1080	93.56- 133.56	113.56	
5.057	5.057	0.000	2353978	1000.00	1070	51.06- 91.06	71.06	
Average of Peak Amounts =					1.07e+03			

Data File: /chem/ecdb8a.i/032310.b/003b0301.d  
Date : 23-MAR-2010 08:34  
Client ID: AR125401  
Sample Info: IMAR100219-54

Column phase: CLP2

Instrument: ecdb8a.i  
Operator: JADG  
Column diameter: 0.25

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/032310.b/004f0401.d

Lab Smp Id: WAR091217-42

Client Smp ID: AR124201

Inj Date : 23-MAR-2010 08:46

Operator : JAOC

Inst ID: ecd8a.i

Smp Info : |WAR091217-42

Misc Info : |1242

Comment :

Method : /chem/ecd8a.i/032310.b/ECD8-F-8082-031810.m

Meth Date : 23-Mar-2010 14:46 jen01212 Quant Type: ESTD

Cal Date : 23-FEB-2010 11:32

Cal File: 017f1701.d

Als bottle: 4

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1242.sub

Target Version: 3.50

Sample Matrix: None

Processing Host: hpclp1

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT		ON-COL		TARGET RANGE	RATIO
			RESPONSE ( ug/L)	( ug/L)				
4	Aroclor-1242						CAS #: 53469-21-9	
2.806	2.806	0.000	3840147	1000.00	966	80.00-	120.00	100.00
3.157	3.157	0.000	4639711	1000.00	967	100.82-	140.82	120.82
3.393	3.393	0.000	1693716	1000.00	938	24.11-	64.11	44.11
3.410	3.410	0.000	1789282	1000.00	947	26.59-	66.59	46.59
3.556	3.556	0.000	2521270	1000.00	953	45.66-	85.66	65.66
Average of Peak Amounts =					954			

Data File: /chem/ecdb8a.i/032310.b/004f0401.d

Date : 23-MAR-2010 08:46

Client ID: AR124201

Sample Info: 1MAR091247-42

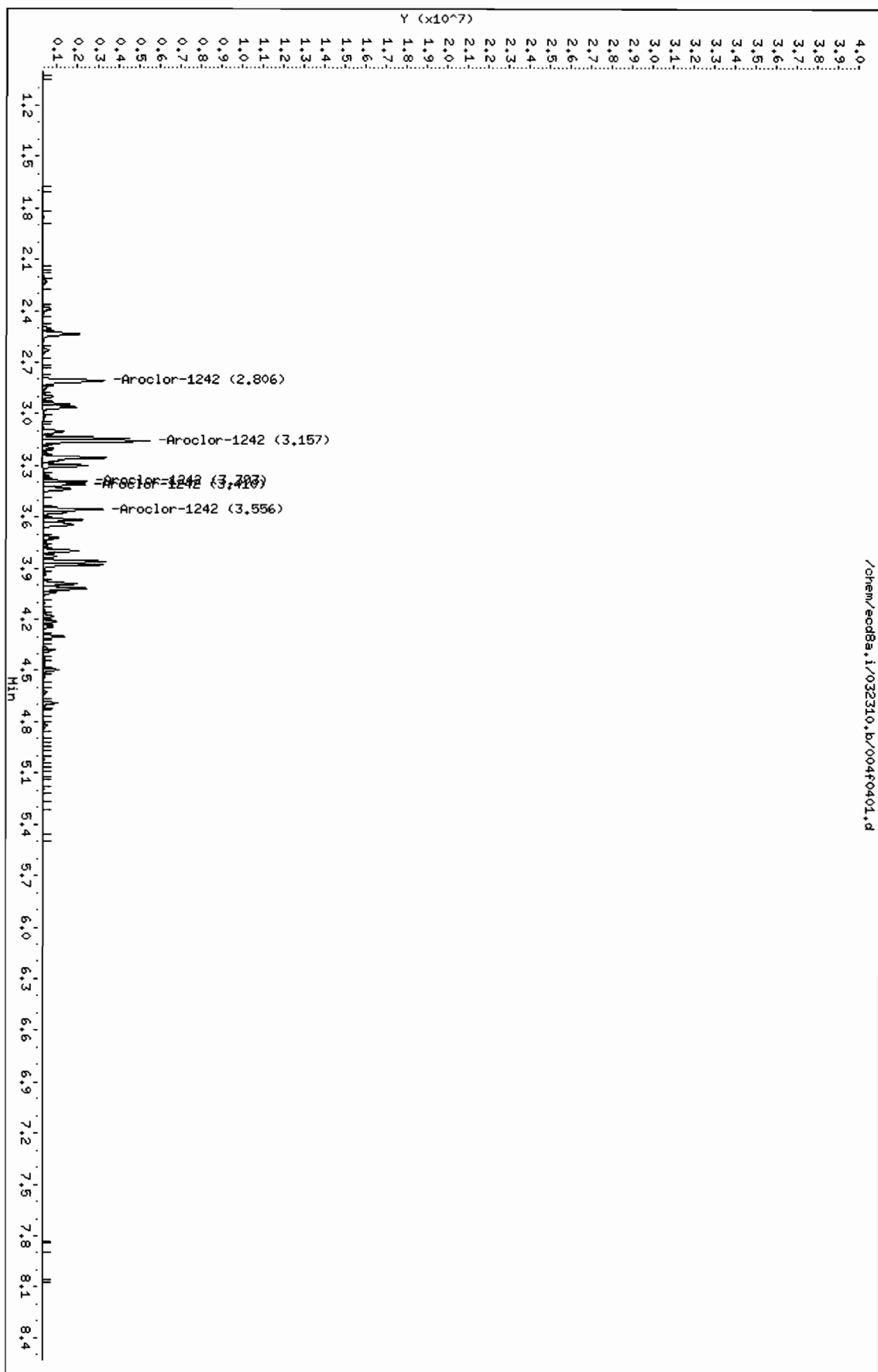
Column phase: CLP1

Instrument: ecdb8a.i

Operator: JHDC

Column diameter: 0.25

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/032310.b/004b0401.d

Lab Smp Id: WAR091217-42

Client Smp ID: AR124201

Inj Date : 23-MAR-2010 08:46

Operator : JAOC

Inst ID: ecd8a.i

Smp Info : |WAR091217-42

Misc Info : |1242

Comment :

Method : /chem/ecd8a.i/032310.b/ECD8-B-8082-031810.m

Meth Date : 23-Mar-2010 12:10 jen01212 Quant Type: ESTD

Cal Date : 23-FEB-2010 11:32

Cal File: 017b1701.d

Als bottle: 4

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1242.sub

Target Version: 3.50

Sample Matrix: None

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT		ON-COL	TARGET RANGE	RATIO
			RESPONSE	( ug/L)	( ug/L)		
4	Aroclor-1242				CAS #:	53469-21-9	
3.196	3.196	0.000	2760376	1000.00	1030	80.00- 120.00	100.00
3.548	3.548	0.000	3278645	1000.00	1050	98.78- 138.78	118.78
3.648	3.648	0.000	2184772	1000.00	1030	59.15- 99.15	79.15
3.995	3.995	0.000	1734065	1000.00	1020	42.82- 82.82	62.82
4.084	4.084	0.000	1612745	1000.00	1030	38.42- 78.42	58.42
Average of Peak Amounts =			1.03e+03				

Data File: /chem/ecdb8a.i/032310.b/004b0401.d

Date : 23-MAR-2010 08:46

Client ID: AR124201

Sample Info: 1MAR091217-42

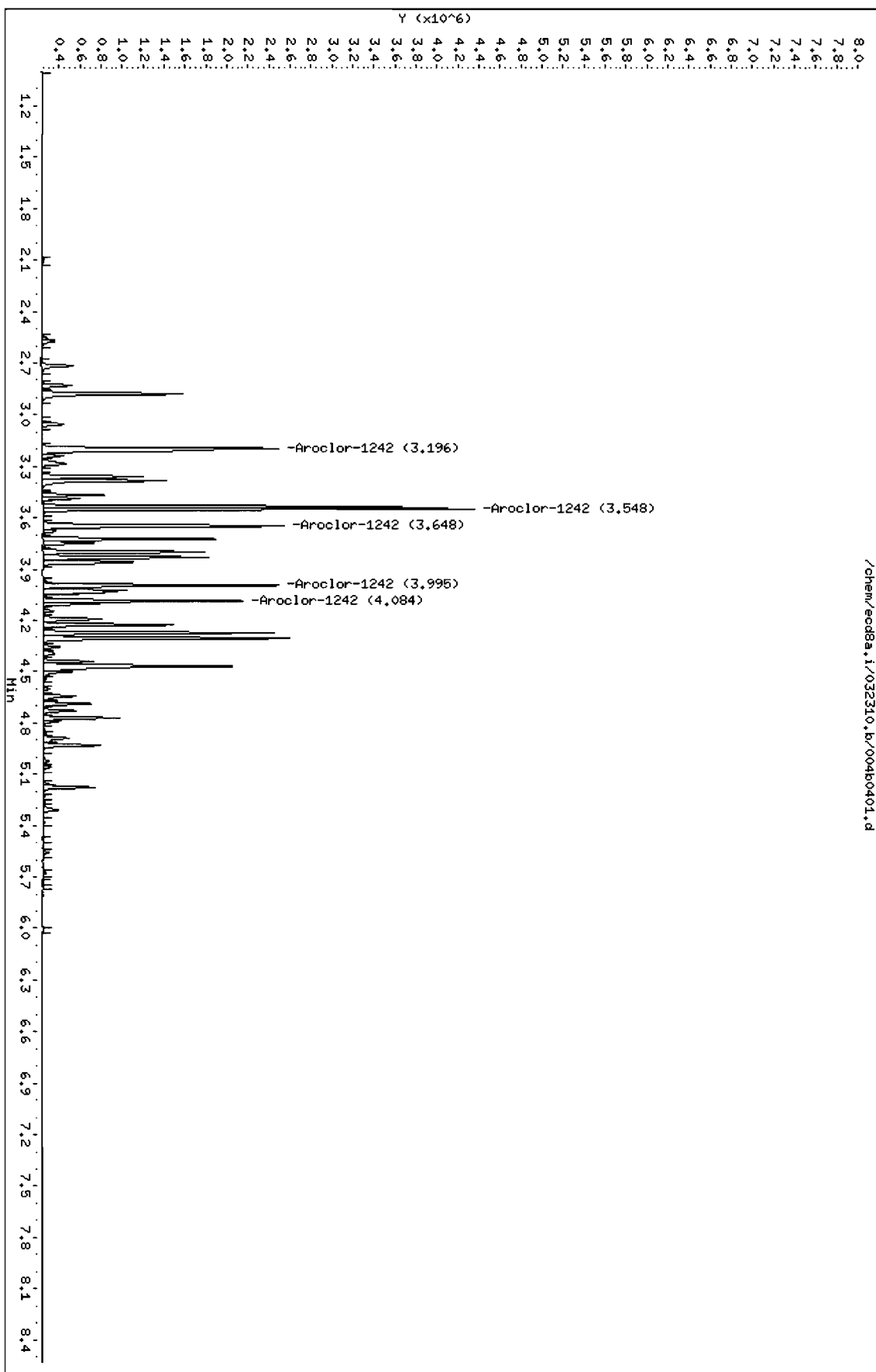
Column phase: CLP2

Instrument: ecdb8a.i

Operator: JADC

Column diameter: 0.25

/chem/ecdb8a.i/032310.b/004b0401.d





GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/032310.b/005f0501.d

Lab Smp Id: WAR100223-48

Client Smp ID: AR124801

Inj Date : 23-MAR-2010 08:59

Operator : JAOC

Inst ID: ecd8a.i

Smp Info : |WAR100223-48

Misc Info : |1248

Comment :

Method : /chem/ecd8a.i/032310.b/ECD8-F-8082-031810.m

Meth Date : 23-Mar-2010 12:11 jen01212 Quant Type: ESTD

Cal Date : 23-FEB-2010 11:32

Cal File: 017f1701.d

Als bottle: 5

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1248.sub

Target Version: 3.50

Sample Matrix: None

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT		ON-COL		TARGET RANGE	RATIO
			RESPONSE ( ug/L)	( ug/L)				
5	Aroclor-1248						CAS #: 12672-29-6	
3.143	3.143	0.000	2512808	1000.00	924	80.00-	120.00	100.00
3.392	3.392	0.000	3268730	1000.00	961	110.08-	150.08	130.08
3.555	3.555	0.000	4190216	1000.00	959	146.75-	186.75	166.75
3.860	3.860	0.000	5007690	1000.00	954	179.29-	219.29	199.29
4.020	4.020	0.000	3933750	1000.00	934	136.55-	176.55	156.55
Average of Peak Amounts =					946			

Data File: /chem/ecdb8a.i/032310.b/005f0501.d

Date : 23-MAR-2010 08:59

Client ID: AR124801

Sample Info: IWR100223-48

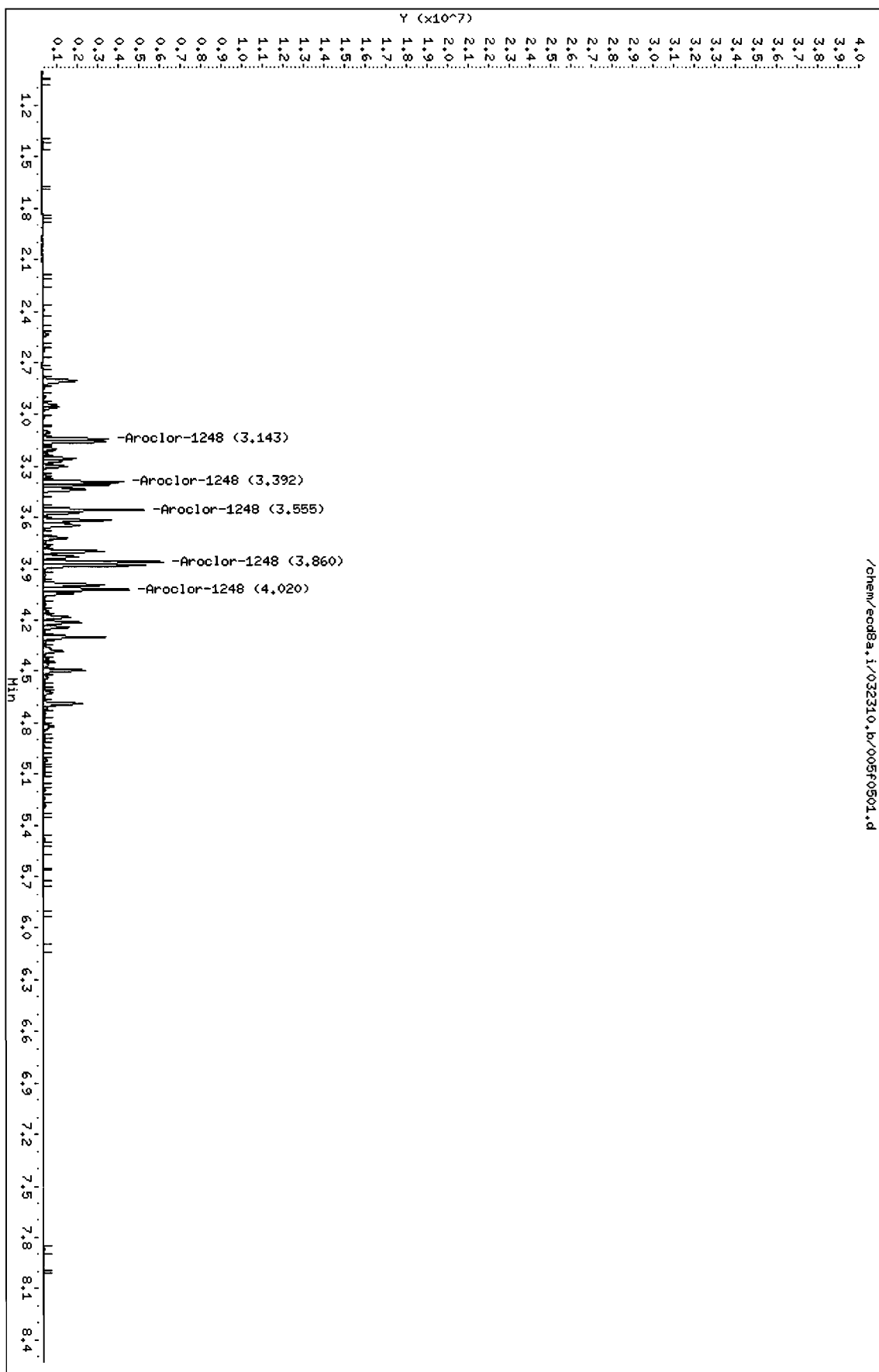
Page 1

Instrument: ecdb8a.i

Operator: JADC

Column diameter: 0.25

Column phase: CLP1



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/032310.b/005b0501.d

Lab Smp Id: WAR100223-48

Client Smp ID: AR124801

Inj Date : 23-MAR-2010 08:59

Operator : JAOC

Inst ID: ecd8a.i

Smp Info : |WAR100223-48

Misc Info : |1248

Comment :

Method : /chem/ecd8a.i/032310.b/ECD8-B-8082-031810.m

Meth Date : 23-Mar-2010 12:10 jen01212 Quant Type: ESTD

Cal Date : 23-FEB-2010 11:32 Cal File: 017b1701.d

Als bottle: 5 Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1248.sub

Target Version: 3.50

Sample Matrix: None

AMOUNTS

			CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	( ug/L)	TARGET RANGE	RATIO
<hr/>						
5 Aroclor-1248			CAS #: 12672-29-6			
3.646	3.646	0.000	1335703	1000.00	1000 80.00- 120.00	100.00
3.798	3.798	0.000	2421805	1000.00	1080 161.31- 201.31	181.31
3.994	3.994	0.000	3054451	1000.00	1090 208.68- 248.68	228.68
4.272	4.272	0.000	3538646	1000.00	1080 244.93- 284.93	264.93
4.305	4.305	0.000	3916908	1000.00	1090 273.25- 313.25	293.25
Average of Peak Amounts =			1.07e+03			

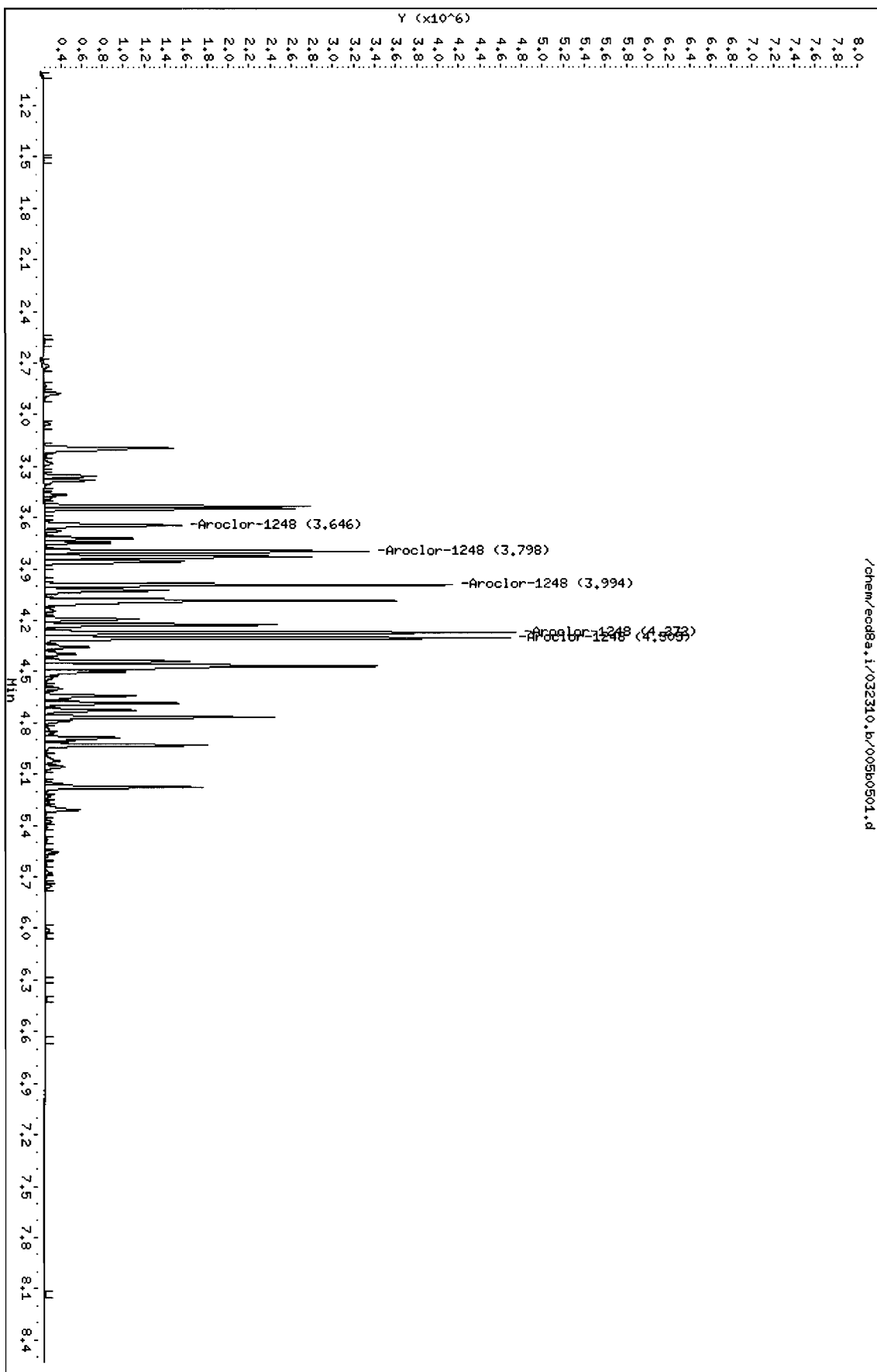
Data File: /chem/ecob8a.i/032310.b/005b0501.d  
Date : 23-MAR-2010 08:59  
Client ID: AR124801  
Sample Info: IMA100223-48

Instrument: ecob8a.i

Page 1

Column phase: CLP2

Operator: JHOC  
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL  
Data file : /chem/ecd8a.i/032310.b/006f0601.d  
Lab Smp Id: WAR100104-32 Client Smp ID: AR123201  
Inj Date : 23-MAR-2010 09:11  
Operator : JAOC Inst ID: ecd8a.i  
Smp Info : |WAR100104-32  
Misc Info : |1232  
Comment :  
Method : /chem/ecd8a.i/032310.b/ECD8-F-8082-031810.m  
Meth Date : 23-Mar-2010 12:11 jen01212 Quant Type: ESTD  
Cal Date : 23-FEB-2010 11:32 Cal File: 017f1701.d  
Als bottle: 6 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: AR1232.sub  
Target Version: 3.50 Sample Matrix: None

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ug/L)	ON-COL ( ug/L)	TARGET RANGE	RATIO
3	Aroclor-1232				CAS #: 11141-16-5	
2.535	2.535	0.000	2708474 1000.00	1040	80.00- 120.00	100.00
2.806	2.806	0.000	2297537 1000.00	1020	64.83- 104.83	84.83
3.301	3.301	0.000	1211921 1000.00	975	24.75- 64.75	44.75
3.555	3.555	0.000	1456816 1000.00	985	33.79- 73.79	53.79
3.617	3.617	0.000	882284 1000.00	956	12.57- 52.57	32.57
Average of Peak Amounts =				995		

Data File: /chem/ecod8a.i/032310.b/006f0601.d

Date : 23-MAR-2010 09:11

Client ID: MR123201

Sample Info: IMR100104-32

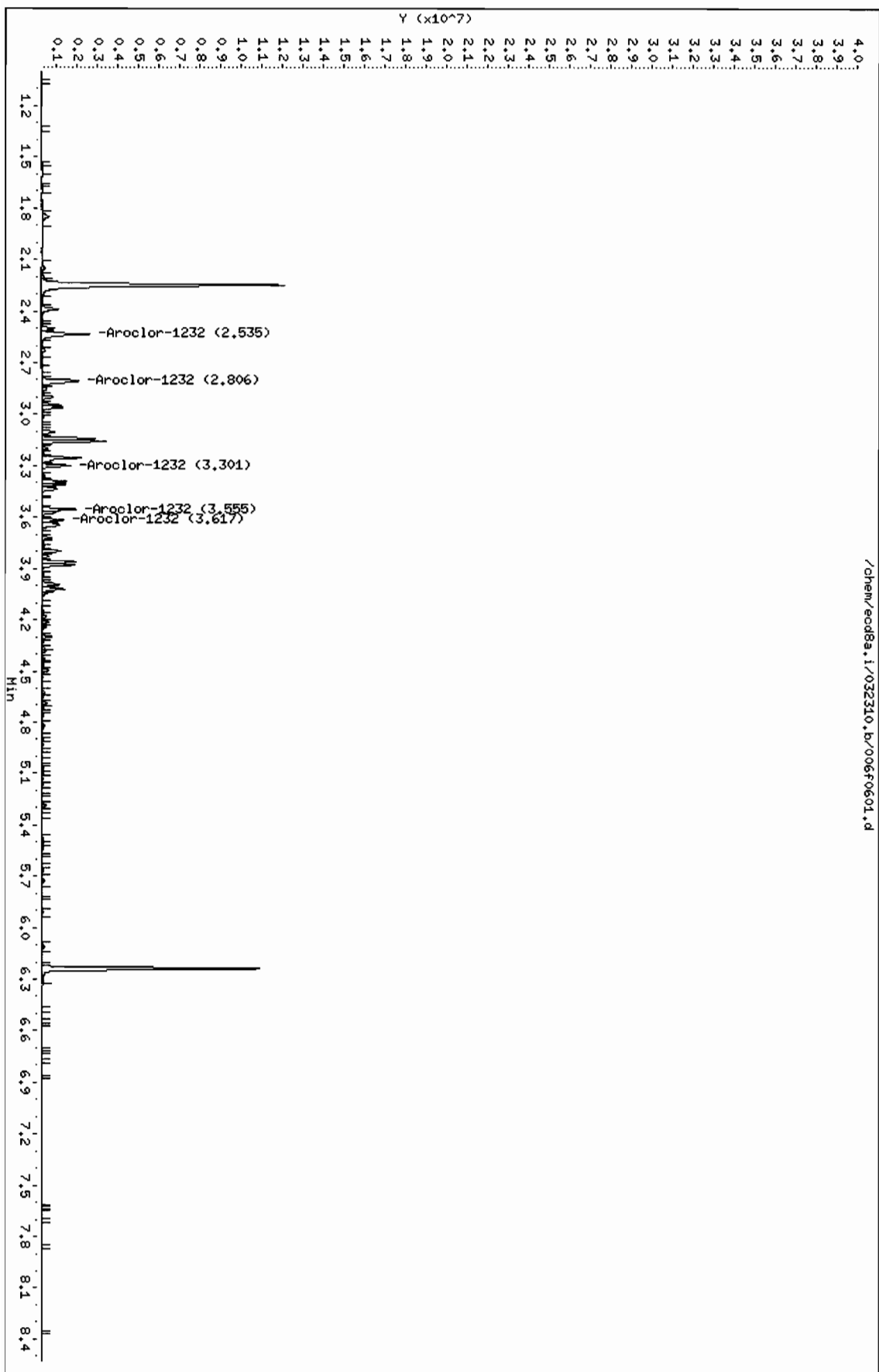
Column phase: CLP1

Instrument: ecod8a.i

Operator: JHOC

Column diameter: 0.25

/chem/ecod8a.i/032310.b/006f0601.d



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/032310.b/006b0601.d

Lab Smp Id: WAR100104-32

Client Smp ID: AR123201

Inj Date : 23-MAR-2010 09:11

Operator : JAOC

Inst ID: ecd8a.i

Smp Info : |WAR100104-32

Misc Info : |1232

Comment :

Method : /chem/ecd8a.i/032310.b/ECD8-B-8082-031810.m

Meth Date : 23-Mar-2010 12:10 jen01212 Quant Type: ESTD

Cal Date : 23-FEB-2010 11:32

Cal File: 017b1701.d

Als bottle: 6

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1232.sub

Target Version: 3.50

Sample Matrix: None

AMOUNTS

			CAL-AMT		ON-COL			
RT	EXP RT	DLT RT	RESPONSE	( ug/L)	( ug/L)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	=====	
3 Aroclor-1232					CAS #: 11141-16-5			
3.195	3.195	0.000	1702408	1000.00	1120	80.00- 120.00	100.00	
3.548	3.548	0.000	1923574	1000.00	1100	92.99- 132.99	112.99	
3.648	3.648	0.000	1312323	1000.00	1120	57.09- 97.09	77.09	
3.723	3.723	0.000	788615	1000.00	1110	26.32- 66.32	46.32	
3.798	3.798	0.000	681169	1000.00	1100	20.01- 60.01	40.01	
Average of Peak Amounts =					1.11e+03			

Data File: /chem/ecdb8a.i/032310.b/006b0601.d

Date: 23-MAR-2010 09:11

Client ID: AR123201

Sample Info: IWAR100104-32

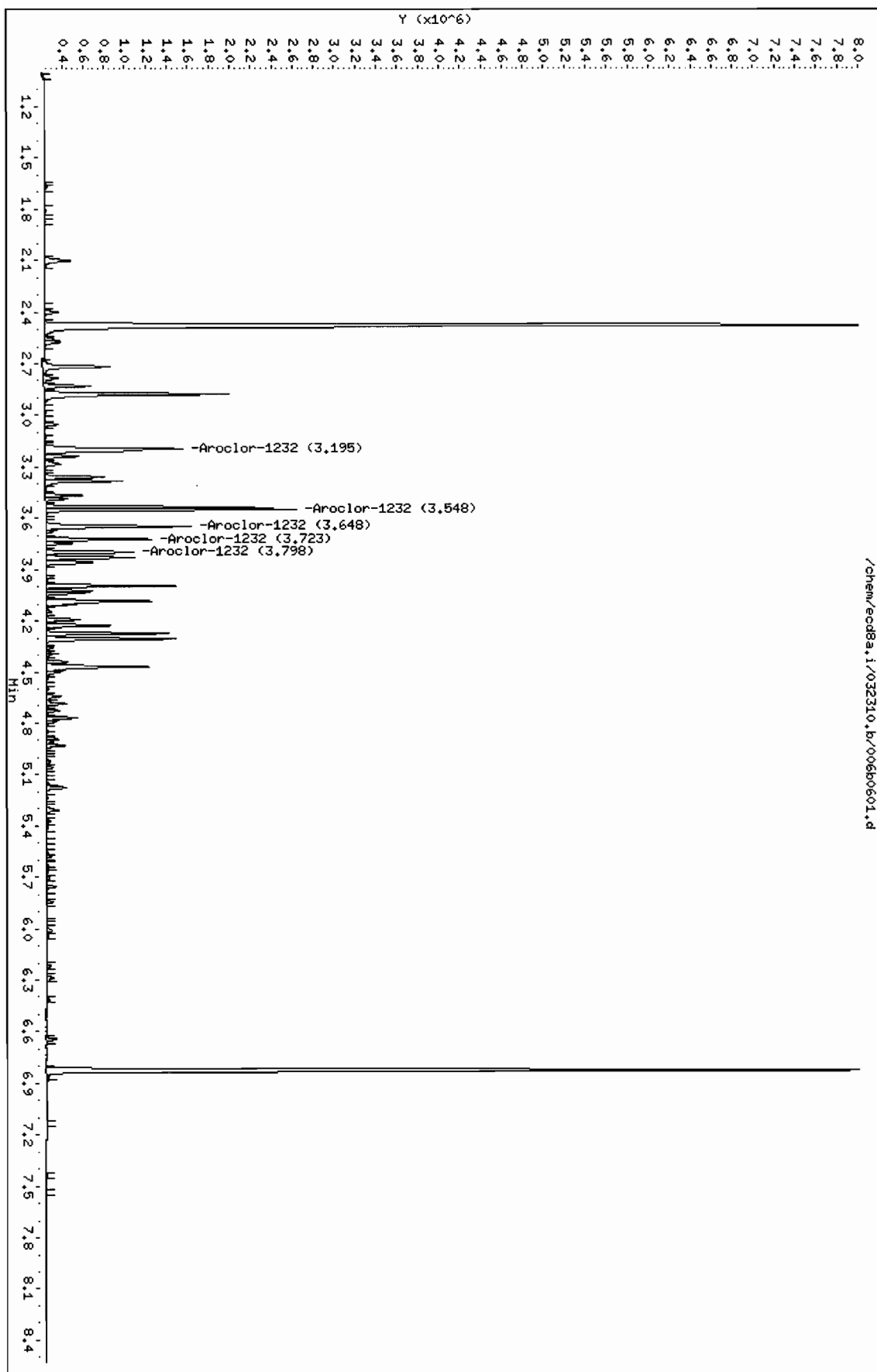
Page 1

Column Phase: CLP2

Instrument: ecdb8a.i

Operator: JHOC

Column diameter: 0.25





GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL  
Data file : /chem/ecd8a.i/032310.b/007f0701.d  
Lab Smp Id: WAR100104-21 Client Smp ID: AR122101  
Inj Date : 23-MAR-2010 09:23  
Operator : JAOC Inst ID: ecd8a.i  
Smp Info : |WAR100104-21  
Misc Info : |1221  
Comment :  
Method : /chem/ecd8a.i/032310.b/ECD8-F-8082-031810.m  
Meth Date : 23-Mar-2010 12:11 jen01212 Quant Type: ESTD  
Cal Date : 23-FEB-2010 11:32 Cal File: 017f1701.d  
Als bottle: 7 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: AR1221.sub  
Target Version: 3.50 Sample Matrix: None

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ug/L)	ON-COL ( ug/L)	TARGET RANGE	RATIO
2 Aroclor-1221					CAS #: 11104-28-2	
2.389	2.389	0.000	1570477 1000.00	1000	80.00- 120.00	100.00
2.503	2.503	0.000	909439 1000.00	993	37.91- 77.91	57.91
2.534	2.534	0.000	3510933 1000.00	982	203.56- 243.56	223.56
Average of Peak Amounts =				993		

Data File: /chem/ecod8a.i/032310.b/0070701.d

Date : 23-MAR-2010 09:23

Client ID: AR122101

Sample Info: 1MAR100104-21

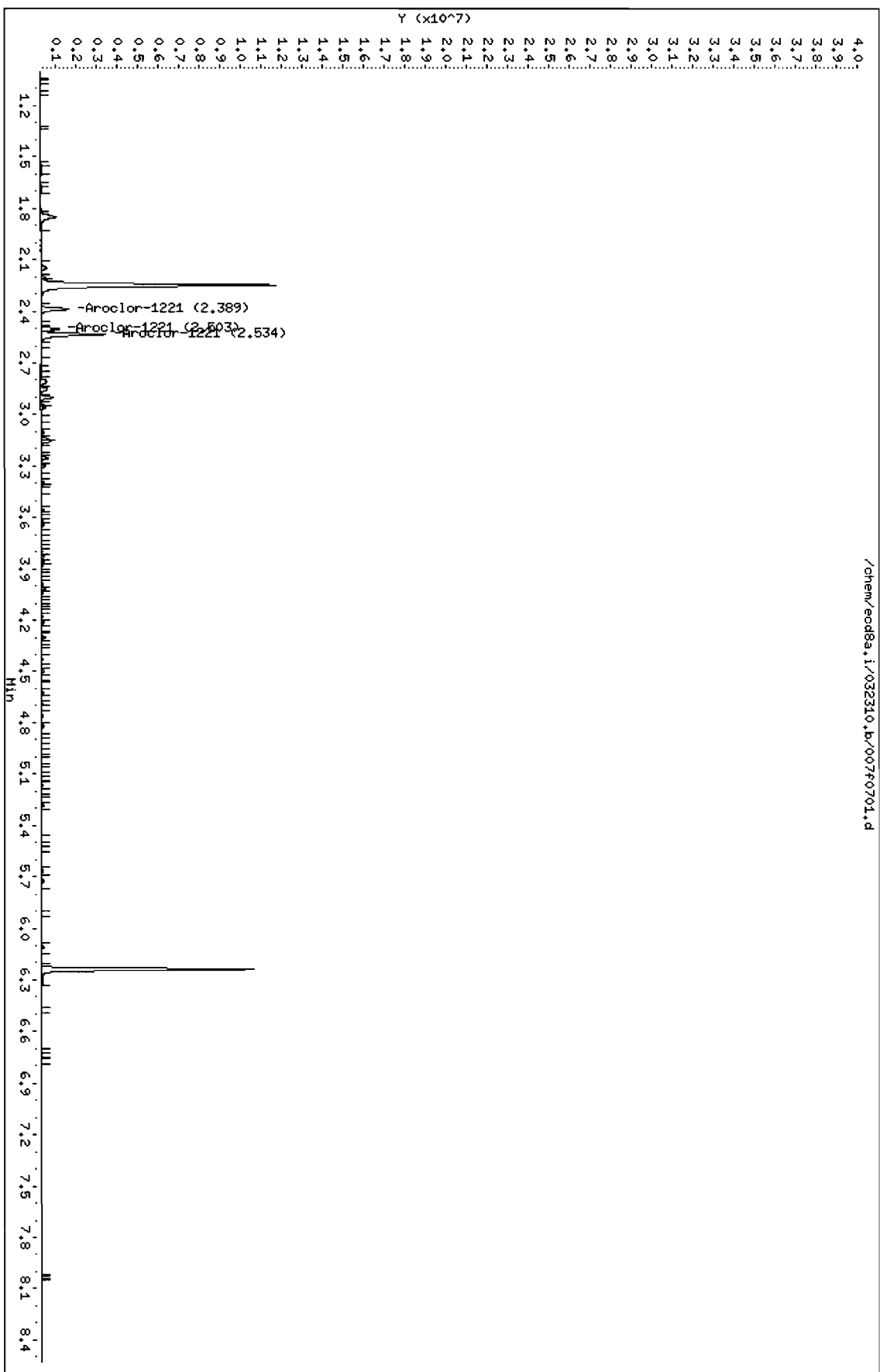
Column phase: CLP1

Instrument: ecod8a.i

Operator: JROC

Column diameter: 0.25

/chem/ecod8a.i/032310.b/0070701.d



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/032310.b/007b0701.d

Lab Smp Id: WAR100104-21

Client Smp ID: AR122101

Inj Date : 23-MAR-2010 09:23

Operator : JAOC

Inst ID: ecd8a.i

Smp Info : |WAR100104-21

Misc Info : |1221

Comment :

Method : /chem/ecd8a.i/032310.b/ECD8-B-8082-031810.m

Meth Date : 23-Mar-2010 12:10 jen01212 Quant Type: ESTD

Cal Date : 23-FEB-2010 11:32

Cal File: 017b1701.d

Als bottle: 7

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1221.sub

Target Version: 3.50

Sample Matrix: None

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ug/L)	ON-COL ( ug/L)	TARGET RANGE	RATIO
2 Aroclor-1221						
2.717	2.717	0.000	1097982 1000.00	1160	80.00- 120.00	100.00
2.829	2.829	0.000	655989 1000.00	1110	39.74- 79.74	59.74
2.877	2.877	0.000	2379444 1000.00	1090	196.71- 236.71	216.71
Average of Peak Amounts =			1.12e+03			

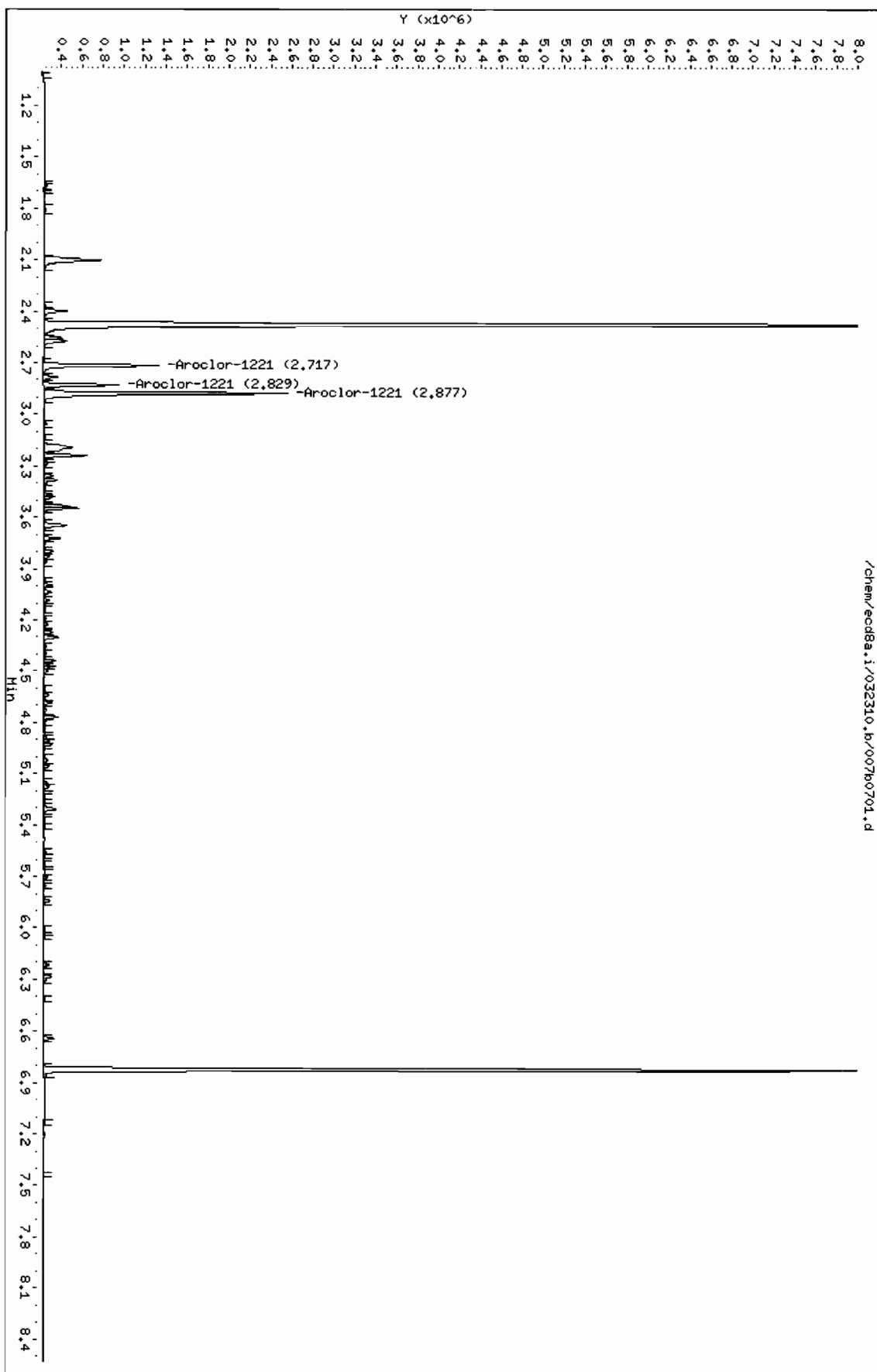
Data File: /chem/ecdb8a.i/032310.b/007b0701.d  
Date : 23-MAR-2010 09:23  
Client ID: AR122101  
Sample Info: 1MAR100104-21

Instrument: ecdb8a.i

Page 1

Column phase: CLP2

Operator: JHOC  
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL  
 Data file : /chem/ecd8a.i/032310.b/019f1901.d  
 Lab Smp Id: WAR100224-60 02 Client Smp ID: AR166002  
 Inj Date : 23-MAR-2010 12:01  
 Operator : JAOC Inst ID: ecd8a.i  
 Smp Info : |WAR100224-60 02  
 Misc Info : |1660  
 Comment :  
 Method : /chem/ecd8a.i/032310.b/ECD8-F-8082-031810.m  
 Meth Date : 23-Mar-2010 12:11 jen01212 Quant Type: ESTD  
 Cal Date : 23-FEB-2010 11:32 Cal File: 017f1701.d  
 Als bottle: 19 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: AR1660.sub  
 Target Version: 3.50 Sample Matrix: None

AMOUNTS								
			CAL-AMT		ON-COL			
RT	EXP RT	DLT RT	RESPONSE	( ug/L)	( ug/L)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	=====	=====
\$ 11 4cmx					CAS #: 877-09-8			
2.250	2.248	0.002	12557624	100.000	100	80.00-	120.00	100.00
-----								
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3			
6.240	6.240	0.000	8488752	100.000	103	80.00-	120.00	100.00
-----								
1 Aroclor-1016					CAS #: 12674-11-2			
2.806	2.806	0.000	4188230	1000.00	878	80.00-	120.00	100.00
3.158	3.157	0.001	5213561	1000.00	966	104.48-	144.48	124.48
3.301	3.301	0.000	2188215	1000.00	930	32.25-	72.25	52.25
3.394	3.393	0.001	1921200	1000.00	877	25.87-	65.87	45.87
3.555	3.555	0.000	2770682	1000.00	900	46.15-	86.15	66.15
Average of Peak Amounts =					910			
-----								
7 Aroclor-1260					CAS #: 11096-82-5			
4.430	4.429	0.001	5694698	1000.00	967	80.00-	120.00	100.00
4.625	4.625	0.000	8561344	1000.00	1010	130.34-	170.34	150.34
4.901	4.900	0.001	5038762	1000.00	994	68.48-	108.48	88.48
5.073	5.072	0.001	5300444	1000.00	995	73.08-	113.08	93.08
5.485	5.483	0.002	5859338	1000.00	1040	82.89-	122.89	102.89
Average of Peak Amounts =					1e+03			

Data File: /chem/ecdb8a.i/032310.b/019f1901.d

Date: 23-MAR-2010 12:01

Client ID: AR166002

Sample Info: IMA100224-60 02

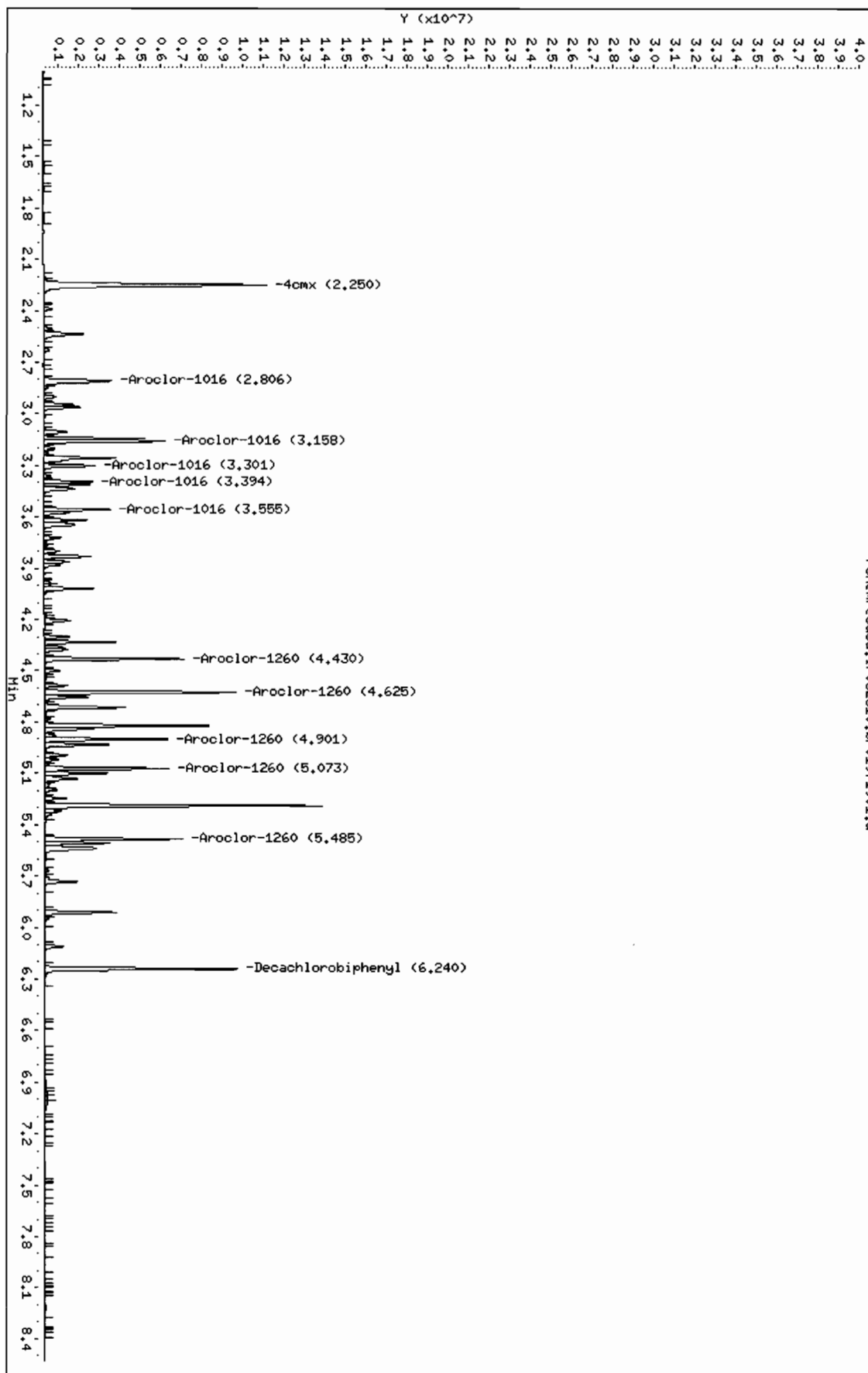
Column phase: CLP1

Instrument: ecdb8a.i

Operator: JHOC

Column diameter: 0.25

/chem/ecdb8a.i/032310.b/019f1901.d



GEL Laboratories LLC

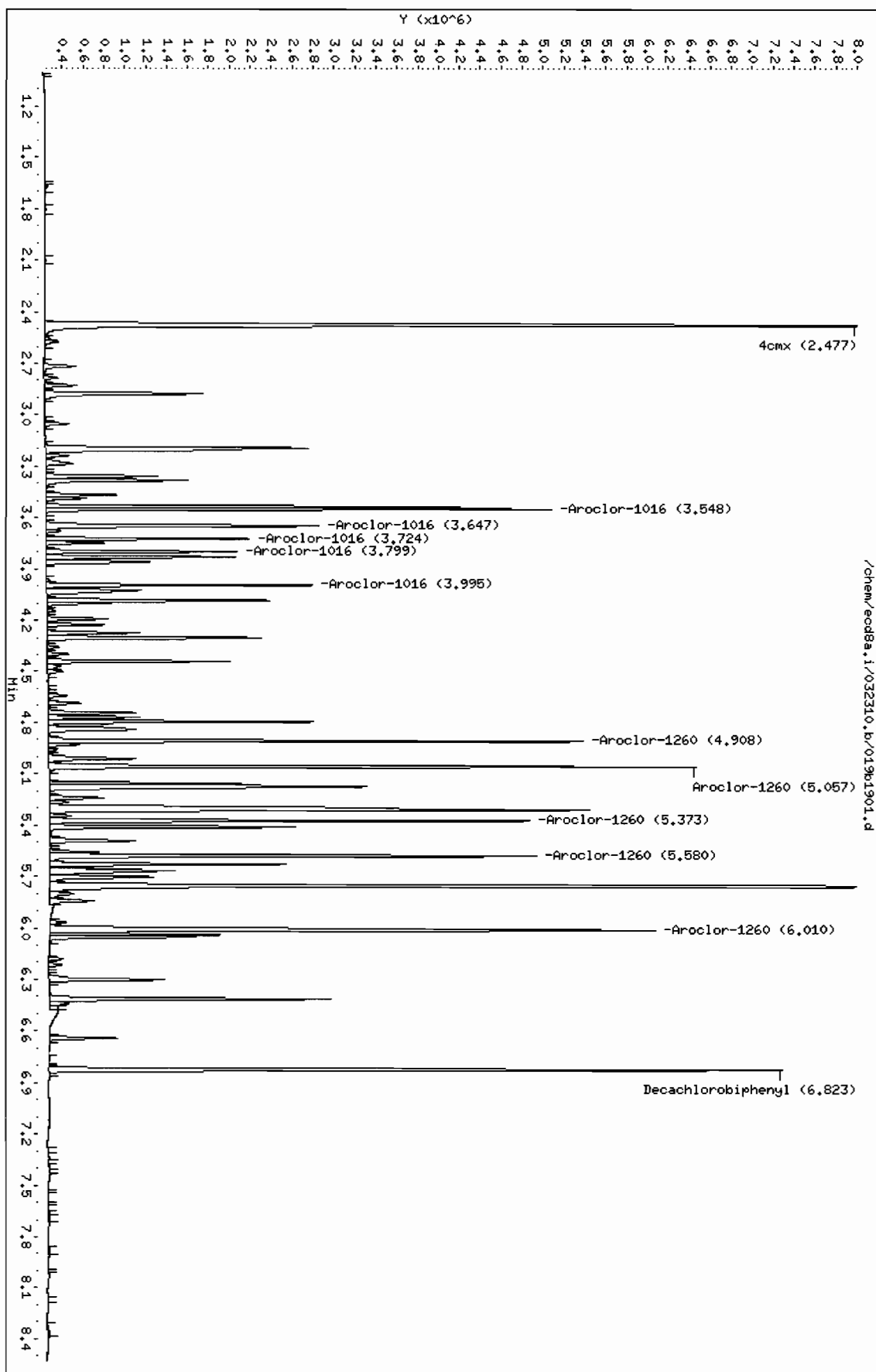
RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL  
 Data file : /chem/ecd8a.i/032310.b/019b1901.d  
 Lab Smp Id: WAR100224-60 02 Client Smp ID: AR166002  
 Inj Date : 23-MAR-2010 12:01  
 Operator : JAOC Inst ID: ecd8a.i  
 Smp Info : |WAR100224-60 02  
 Misc Info : |1660  
 Comment :  
 Method : /chem/ecd8a.i/032310.b/ECD8-B-8082-031810.m  
 Meth Date : 23-Mar-2010 12:10 jen01212 Quant Type: ESTD  
 Cal Date : 23-FEB-2010 11:32 Cal File: 017b1701.d  
 Als bottle: 19 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: AR1660.sub  
 Target Version: 3.50 Sample Matrix: None

AMOUNTS						
			CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	( ug/L)	TARGET RANGE	RATIO
-----						
\$ 11 4cmx				CAS #: 877-09-8		
2.477	2.476	0.001	8952772 100.000	107	80.00- 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3		
6.823	6.824	-0.001	6111338 100.000	103	80.00- 120.00	100.00
-----						
1 Aroclor-1016				CAS #: 12674-11-2		
3.548	3.548	0.000	3750070 1000.00	1020	80.00- 120.00	100.00
3.647	3.647	0.000	2478563 1000.00	972	46.09- 86.09	66.09
3.724	3.723	0.001	1508121 1000.00	1010	20.22- 60.22	40.22
3.799	3.799	0.000	1443861 1000.00	977	18.50- 58.50	38.50
3.995	3.995	0.000	1995747 1000.00	986	33.22- 73.22	53.22
Average of Peak Amounts =				993		
-----						
7 Aroclor-1260				CAS #: 11096-82-5		
4.908	4.907	0.001	4152359 1000.00	1050	80.00- 120.00	100.00
5.057	5.056	0.001	5056096 1000.00	1070	101.76- 141.76	121.76
5.373	5.373	0.000	3778164 1000.00	1050	70.99- 110.99	90.99
5.580	5.580	0.000	4002289 1000.00	1080	76.39- 116.39	96.39
6.010	6.011	-0.001	6250415 1000.00	1070	130.53- 170.53	150.53
Average of Peak Amounts =				1.06e+03		
-----						

Data File: /chem/ecdb8a.i/032310.b/019b1901.d  
Date : 23-MAR-2010 12:01  
Client ID: AR166002  
Sample Info: 1MAR100224-60 02

Column phase: CLP2

Instrument: ecdb8a.i  
Operator: JHOC  
Column diameter: 0.25





8D  
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-2199

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 03/09/10 03/09/10

Instrument ID: ECD8A

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION						
S1 : 2.25			DCB: 6.25			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #	
01	PIBLK01	WAR100219-99	03/09/10	0759	2.25	6.24
02	ZZZZZ	ZZZZZ	03/09/10	0811	2.25	6.24
03	ZZZZZ	ZZZZZ	03/09/10	0824		
04	AR124201	WAR091217-42	03/09/10	0836		
05	ZZZZZ	ZZZZZ	03/09/10	0848		
06	AR166001	WAR100309-60	03/09/10	0908	2.25	6.24
07	AR125401	WAR100309-05	03/09/10	0927		
08	AR125402	WAR100309-06	03/09/10	0939		
09	AR125403	WAR100309-07	03/09/10	0951		
10	AR125404	WAR100309-08	03/09/10	1004		
11	AR125405	IAR100219-02	03/09/10	1016		
12	AR125401	WAR100201-54	03/09/10	1029		
13	AR124801	WAR100309-09	03/09/10	1041		
14	AR124802	WAR100309-10	03/09/10	1053		
15	AR124803	WAR100309-11	03/09/10	1105		
16	AR124804	WAR100309-12	03/09/10	1118		
17	AR124805	IAR100211-01	03/09/10	1130		
18	AR124801	WAR091217-48	03/09/10	1143		
19	AR123201	WAR100104-32	03/09/10	1155		
20	AR122101	WAR100104-21	03/09/10	1207		
21	AR126201	WAR100104-62	03/09/10	1220		
22	AR126801	WAR100107-68	03/09/10	1232		
23	DDTANALOGSTD	WAR091219-DD	03/09/10	1244		
24	PIBLK02	WAR100219-99	03/09/10	1257	2.25	6.24
25	ZZZZZ	ZZZZZ	03/09/10	1309	2.25	6.24
26	AR166002	WAR100309-60	03/09/10	1322	2.25	6.24
27						
28						
29						
30						
31						
32						

QC LIMITS

S1 = 4cmx (+/- 0.03 MINUTES)

DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

# Column used to flag retention time values with an asterisk.  
\* Values outside of QC limits.

8D  
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-2199

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 03/09/10 03/09/10

Instrument ID: ECD8A

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION						
S1 : 2.48			DCB: 6.83			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #	
01	PIBLK01	WAR100219-99	03/09/10	0759	2.48	6.83
02	ZZZZZ	ZZZZZ	03/09/10	0811	2.48	6.83
03	ZZZZZ	ZZZZZ	03/09/10	0824		
04	AR124201	WAR091217-42	03/09/10	0836		
05	ZZZZZ	ZZZZZ	03/09/10	0848		
06	AR166001	WAR100309-60	03/09/10	0908	2.48	6.83
07	AR125401	WAR100309-05	03/09/10	0927		
08	AR125402	WAR100309-06	03/09/10	0939		
09	AR125403	WAR100309-07	03/09/10	0951		
10	AR125404	WAR100309-08	03/09/10	1004		
11	AR125405	IAR100219-02	03/09/10	1016		
12	AR125401	WAR100201-54	03/09/10	1029		
13	AR124801	WAR100309-09	03/09/10	1041		
14	AR124802	WAR100309-10	03/09/10	1053		
15	AR124803	WAR100309-11	03/09/10	1105		
16	AR124804	WAR100309-12	03/09/10	1118		
17	AR124805	IAR100211-01	03/09/10	1130		
18	AR124801	WAR091217-48	03/09/10	1143		
19	AR123201	WAR100104-32	03/09/10	1155		
20	AR122101	WAR100104-21	03/09/10	1207		
21	AR126201	WAR100104-62	03/09/10	1220		
22	AR126801	WAR100107-68	03/09/10	1232		
23	DDTANALOGSTD	WAR091219-DD	03/09/10	1244		
24	PIBLK02	WAR100219-99	03/09/10	1257	2.48	6.83
25	ZZZZZ	ZZZZZ	03/09/10	1309	2.48	6.83
26	AR166002	WAR100309-60	03/09/10	1322	2.48	6.83
27						
28						
29						
30						
31						
32						

QC LIMITS  
S1 = 4cmx (+/- 0.03 MINUTES)  
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

# Column used to flag retention time values with an asterisk.  
\* Values outside of QC limits.

8D  
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-2199

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 03/18/10 03/18/10

Instrument ID: ECD8A

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION						
S1 : 2.25			DCB: 6.24			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #	
01	PIBLK01	WAR100219-99	03/18/10	0613	2.25	6.24
02	AR166001	WAR100317-01	03/18/10	0625	2.25	6.24
03	AR166002	WAR100317-02	03/18/10	0638	2.25	6.24
04	AR166003	WAR100317-03	03/18/10	0650	2.25	6.24
05	AR166004	WAR100317-04	03/18/10	0702	2.25	6.24
06	AR166005	IAR100311-01	03/18/10	0715	2.25	6.24
07	AR166001	WAR100224-60	03/18/10	0727	2.25	6.24
08	AR125401	WAR100201-54	03/18/10	0739		
09	AR124201	WAR091217-42	03/18/10	0752		
10	AR124801	WAR091217-48	03/18/10	0804		
11	AR123201	WAR100104-32	03/18/10	0817		
12	AR122101	WAR100104-21	03/18/10	0829		
13	AR126201	WAR100104-62	03/18/10	0841		
14	AR126801	WAR100107-68	03/18/10	0854		
15	DDTANALOGSTD	WAR091219-DD	03/18/10	0906		
16	PIBLK02	WAR100219-99	03/18/10	0919	2.25	6.24
17	ZZZZZ	ZZZZZ	03/18/10	0931	2.25	6.24
18	ZZZZZ	ZZZZZ	03/18/10	0943	2.25	6.24
19	ZZZZZ	ZZZZZ	03/18/10	0955	2.25	6.24
20	ZZZZZ	ZZZZZ	03/18/10	1008	2.25	6.24
21	ZZZZZ	ZZZZZ	03/18/10	1020	2.25	6.24
22	ZZZZZ	ZZZZZ	03/18/10	1033	2.25	6.25
23	ZZZZZ	ZZZZZ	03/18/10	1045	2.25	6.24
24	ZZZZZ	ZZZZZ	03/18/10	1057	2.25	6.24
25	ZZZZZ	ZZZZZ	03/18/10	1110	2.25	6.24
26	ZZZZZ	ZZZZZ	03/18/10	1122	2.25	6.25
27	AR166002	WAR100224-60	03/18/10	1139	2.25	6.24
28	PIBLK03	WAR100219-99	03/18/10	1151	2.25	6.24
29	ZZZZZ	ZZZZZ	03/18/10	1203	2.25	6.24
30	ZZZZZ	ZZZZZ	03/18/10	1216	2.25	6.29*
31	ZZZZZ	ZZZZZ	03/18/10	1228	2.25	6.26
32	ZZZZZ	ZZZZZ	03/18/10	1240	2.25	6.24

S1 = 4cmx  
DCB = Decachlorobiphenyl

QC LIMITS  
(+/- 0.03 MINUTES)  
(+/- 0.03 MINUTES)

# Column used to flag retention time values with an asterisk.  
\* Values outside of QC limits.

8D  
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-2199

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 03/18/10 03/18/10

Instrument ID: ECD8A

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION							
S1 : 2.48				DCB: 6.83			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT	#	DCB RT	#
01	PIBLK01	WAR100219-99	03/18/10	0613	2.48	6.82	
02	AR166001	WAR100317-01	03/18/10	0625	2.48	6.83	
03	AR166002	WAR100317-02	03/18/10	0638	2.48	6.83	
04	AR166003	WAR100317-03	03/18/10	0650	2.48	6.83	
05	AR166004	WAR100317-04	03/18/10	0702	2.48	6.83	
06	AR166005	IAR100311-01	03/18/10	0715	2.48	6.83	
07	AR166001	WAR100224-60	03/18/10	0727	2.48	6.83	
08	AR125401	WAR100201-54	03/18/10	0739			
09	AR124201	WAR091217-42	03/18/10	0752			
10	AR124801	WAR091217-48	03/18/10	0804			
11	AR123201	WAR100104-32	03/18/10	0817			
12	AR122101	WAR100104-21	03/18/10	0829			
13	AR126201	WAR100104-62	03/18/10	0841			
14	AR126801	WAR100107-68	03/18/10	0854			
15	DDTANALOGSTD	WAR091219-DD	03/18/10	0906			
16	PIBLK02	WAR100219-99	03/18/10	0919	2.48	6.83	
17	ZZZZZ	ZZZZZ	03/18/10	0931	2.48	6.83	
18	ZZZZZ	ZZZZZ	03/18/10	0943	2.48	6.82	
19	ZZZZZ	ZZZZZ	03/18/10	0955	2.48	6.82	
20	ZZZZZ	ZZZZZ	03/18/10	1008	2.48	6.83	
21	ZZZZZ	ZZZZZ	03/18/10	1020	2.48	6.83	
22	ZZZZZ	ZZZZZ	03/18/10	1033	2.48	6.83	
23	ZZZZZ	ZZZZZ	03/18/10	1045	2.48	6.83	
24	ZZZZZ	ZZZZZ	03/18/10	1057	2.48	6.83	
25	ZZZZZ	ZZZZZ	03/18/10	1110	2.48	6.83	
26	ZZZZZ	ZZZZZ	03/18/10	1122	2.48	6.83	
27	AR166002	WAR100224-60	03/18/10	1139	2.48	6.82	
28	PIBLK03	WAR100219-99	03/18/10	1151	2.48	6.83	
29	ZZZZZ	ZZZZZ	03/18/10	1203	2.48	6.83	
30	ZZZZZ	ZZZZZ	03/18/10	1216	2.48	6.86*	
31	ZZZZZ	ZZZZZ	03/18/10	1228	2.48	6.84	
32	ZZZZZ	ZZZZZ	03/18/10	1240	2.48	6.83	

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.: 10-2199

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 03/09/10 03/18/10

Instrument ID: ECD8A

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION							
S1 : 2.25 DCB: 6.24							
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT	#	DCB RT	#
01	PIBLK01	WAR100219-99	03/19/10	0626	2.25	6.24	
02	AR166001	WAR100224-60	03/19/10	0639	2.25	6.24	
03	AR125401	WAR100201-54	03/19/10	0651			
04	ZZZZZ	ZZZZZ	03/19/10	0703			
05	AR124801	WAR091217-48	03/19/10	0716			
06	AR123201	WAR100104-32	03/19/10	0728			
07	AR124201	WAR091217-42	03/19/10	0741			
08	AR122101	WAR100104-21	03/19/10	0753			
09	AR126201	WAR100104-62	03/19/10	0805			
10	AR126801	WAR100107-68	03/19/10	0818			
11	DDTANALOGSTD	WAR091219-DD	03/19/10	0830			
12	PIBLK02	WAR100219-99	03/19/10	0843	2.25	6.24	
13	ZZZZZ	ZZZZZ	03/19/10	0855	2.25	6.24	
14	ZZZZZ	ZZZZZ	03/19/10	0907	2.25	6.24	
15	AR166002	WAR100224-60	03/19/10	0920	2.25	6.24	
16	PIBLK03	WAR100219-99	03/19/10	0932	2.25	6.24	
17	AR166003	WAR100224-60	03/19/10	0954	2.25	6.24	
18	PIBLK04	WAR100219-99	03/19/10	1007	2.25	6.24	
19	ZZZZZ	ZZZZZ	03/19/10	1019	2.25	6.24	
20	ZZZZZ	ZZZZZ	03/19/10	1036	2.25	6.24	
21	AR166004	WAR100224-60	03/19/10	1052	2.25	6.24	
22	PIBLK05	WAR100219-99	03/19/10	1121	2.26	6.25	
23	AR166005	WAR100224-60	03/19/10	1133	2.25	6.24	
24	AR166006	WAR100319-60	03/19/10	1157	2.25	6.25	
25	PIBLK06	WAR100219-99	03/19/10	1210	2.25	6.24	
26	PBLK01	1202073937	03/19/10	1223	2.25	6.24	
27	PBLK01LCS	1202073938	03/19/10	1235	2.25	6.24	
28	ZZZZZ	ZZZZZ	03/19/10	1247	2.25	6.24	
29	ZZZZZ	ZZZZZ	03/19/10	1300	2.25	6.24	
30	ZZZZZ	ZZZZZ	03/19/10	1312	2.25	6.24	
31	ZZZZZ	ZZZZZ	03/19/10	1324	2.25	6.24	
32	ZZZZZ	ZZZZZ	03/19/10	1337	2.25	6.24	

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.: 10-2199

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 03/09/10 03/18/10

Instrument ID: ECD8A

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION							
S1 : 2.25				DCB: 6.24			
EPA	LAB	DATE	TIME	S1	DCB		
SAMPLE NO.	SAMPLE ID	ANALYZED	ANALYZED	RT	#	RT	#
01	ZZZZZ	ZZZZZ	03/19/10	1349	2.25	6.24	
02	ZZZZZ	ZZZZZ	03/19/10	1402	2.25	6.24	
03	ZZZZZ	ZZZZZ	03/19/10	1414	2.25	6.24	
04	AR166007	WAR100319-60	03/19/10	1430	2.25	6.24	
05	PIBLK08	WAR100219-99	03/19/10	1443	2.25	6.24	
06	RE36-10-8288	248519001	03/19/10	1455	2.25	6.24	
07	ZZZZZ	ZZZZZ	03/19/10	1508	2.25	6.24	
08	RE36-10-8277	248519003	03/19/10	1520	2.25	6.24	
09	ZZZZZ	ZZZZZ	03/19/10	1532	2.25	6.24	
10	RE36-10-8278	248519005	03/19/10	1545	2.25	6.24	
11	RE36-10-8274	248519006	03/19/10	1557	2.25	6.24	
12	RE36-10-8291	248519007	03/19/10	1609	2.25	6.24	
13	RE36-10-8287	248519008	03/19/10	1622	2.25	6.24	
14	RE36-10-8273	248519009	03/19/10	1634	2.25	6.24	
15	RE36-10-8275	248519010	03/19/10	1646	2.25	6.24	
16	AR166008	WAR100319-60	03/19/10	1703	2.25	6.24	
17	PIBLK09	WAR100219-99	03/19/10	1715	2.25	6.24	
18	RE36-10-8276	248519011	03/19/10	1728	2.25	6.24	
19	ZZZZZ	ZZZZZ	03/19/10	1740	2.25	6.24	
20	ZZZZZ	ZZZZZ	03/19/10	1752	2.25	6.24	
21	ZZZZZ	ZZZZZ	03/19/10	1805	2.25	6.24	
22	AR166009	WAR100319-60	03/19/10	1821	2.25	6.24	
23	PIBLK10	WAR100219-99	03/19/10	1834	2.25	6.24	
24							
25							
26							
27							
28							
29							
30							
31							
32							

QC LIMITS

S1 = 4cmx (+/- 0.03 MINUTES)

DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

# Column used to flag retention time values with an asterisk.  
\* Values outside of QC limits.

8D  
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-2199

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 03/09/10 03/18/10

Instrument ID: ECD8A

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION						
S1 : 2.48			DCB: 6.82			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #	
01	PIBLK01	WAR100219-99	03/19/10	0626	2.48	6.82
02	AR166001	WAR100224-60	03/19/10	0639	2.48	6.82
03	AR125401	WAR100201-54	03/19/10	0651		
04	ZZZZZ	ZZZZZ	03/19/10	0703		
05	AR124801	WAR091217-48	03/19/10	0716		
06	AR123201	WAR100104-32	03/19/10	0728		
07	AR124201	WAR091217-42	03/19/10	0741		
08	AR122101	WAR100104-21	03/19/10	0753		
09	AR126201	WAR100104-62	03/19/10	0805		
10	AR126801	WAR100107-68	03/19/10	0818		
11	DDTANALOGSTD	WAR091219-DD	03/19/10	0830		
12	PIBLK02	WAR100219-99	03/19/10	0843	2.48	6.82
13	ZZZZZ	ZZZZZ	03/19/10	0855	2.48	6.82
14	ZZZZZ	ZZZZZ	03/19/10	0907	2.48	6.82
15	AR166002	WAR100224-60	03/19/10	0920	2.48	6.82
16	PIBLK03	WAR100219-99	03/19/10	0932	2.48	6.82
17	AR166003	WAR100224-60	03/19/10	0954	2.48	6.83
18	PIBLK04	WAR100219-99	03/19/10	1007	2.48	6.83
19	ZZZZZ	ZZZZZ	03/19/10	1019	2.48	6.82
20	ZZZZZ	ZZZZZ	03/19/10	1036	2.48	6.82
21	AR166004	WAR100224-60	03/19/10	1052	2.48	6.82
22	PIBLK05	WAR100219-99	03/19/10	1121	2.48	6.83
23	AR166005	WAR100224-60	03/19/10	1133	2.48	6.82
24	AR166006	WAR100319-60	03/19/10	1157	2.48	6.83
25	PIBLK06	WAR100219-99	03/19/10	1210	2.48	6.82
26	PBLK01	1202073937	03/19/10	1223	2.48	6.82
27	PBLK01LCS	1202073938	03/19/10	1235	2.48	6.82
28	ZZZZZ	ZZZZZ	03/19/10	1247	2.48	6.82
29	ZZZZZ	ZZZZZ	03/19/10	1300	2.48	6.82
30	ZZZZZ	ZZZZZ	03/19/10	1312	2.48	6.82
31	ZZZZZ	ZZZZZ	03/19/10	1324	2.48	6.82
32	ZZZZZ	ZZZZZ	03/19/10	1337	2.48	6.82

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.: 10-2199

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 03/09/10 03/18/10

Instrument ID: ECD8A

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION							
S1 : 2.48				DCB: 6.82			
EPA	LAB	DATE	TIME	S1	DCB		
SAMPLE NO.	SAMPLE ID	ANALYZED	ANALYZED	RT	RT	#	#
01	ZZZZZ	ZZZZZ	03/19/10	1349	2.48	6.82	
02	ZZZZZ	ZZZZZ	03/19/10	1402	2.48	6.82	
03	ZZZZZ	ZZZZZ	03/19/10	1414	2.48	6.82	
04	AR166007	WAR100319-60	03/19/10	1430	2.48	6.82	
05	PIBLK08	WAR100219-99	03/19/10	1443	2.48	6.82	
06	RE36-10-8288	248519001	03/19/10	1455	2.48	6.82	
07	ZZZZZ	ZZZZZ	03/19/10	1508	2.48	6.82	
08	RE36-10-8277	248519003	03/19/10	1520	2.48	6.82	
09	ZZZZZ	ZZZZZ	03/19/10	1532	2.48	6.82	
10	RE36-10-8278	248519005	03/19/10	1545	2.48	6.82	
11	RE36-10-8274	248519006	03/19/10	1557	2.48	6.82	
12	RE36-10-8291	248519007	03/19/10	1609	2.48	6.82	
13	RE36-10-8287	248519008	03/19/10	1622	2.48	6.82	
14	RE36-10-8273	248519009	03/19/10	1634	2.48	6.82	
15	RE36-10-8275	248519010	03/19/10	1646	2.48	6.82	
16	AR166008	WAR100319-60	03/19/10	1703	2.48	6.82	
17	PIBLK09	WAR100219-99	03/19/10	1715	2.48	6.82	
18	RE36-10-8276	248519011	03/19/10	1728	2.48	6.82	
19	ZZZZZ	ZZZZZ	03/19/10	1740	2.48	6.82	
20	ZZZZZ	ZZZZZ	03/19/10	1752	2.48	6.82	
21	ZZZZZ	ZZZZZ	03/19/10	1805	2.48	6.82	
22	AR166009	WAR100319-60	03/19/10	1821	2.48	6.82	
23	PIBLK10	WAR100219-99	03/19/10	1834	2.48	6.82	
24							
25							
26							
27							
28							
29							
30							
31							
32							

QC LIMITS

S1 = 4cmx (+/- 0.03 MINUTES)

DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

# Column used to flag retention time values with an asterisk.  
\* Values outside of QC limits.



8D  
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-2199

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 03/09/10 03/18/10

Instrument ID: ECD8A

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION						
S1 : 2.25			DCB: 6.24			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT	#	DCB RT
01	PIBLK01	WAR100219-99	03/23/10	0809	2.25	6.24
02	AR166001	WAR100224-60	03/23/10	0822	2.25	6.24
03	AR125401	WAR100219-54	03/23/10	0834		
04	AR124201	WAR091217-42	03/23/10	0846		
05	AR124801	WAR100223-48	03/23/10	0859		
06	AR123201	WAR100104-32	03/23/10	0911		
07	AR122101	WAR100104-21	03/23/10	0923		
08	AR126201	WAR100104-62	03/23/10	0936		
09	AR126801	WAR100107-68	03/23/10	0948		
10	DDTANALOGSTD	WAR091219-DD	03/23/10	1000		
11	PIBLK02	WAR100219-99	03/23/10	1013	2.25	6.24
12	PBLK02	1202077508	03/23/10	1025	2.25	6.24
13	PBLK02LCS	1202077509	03/23/10	1037	2.25	6.24
14	PBLK02LCSD	1202077510	03/23/10	1050	2.25	6.24
15	ZZZZZ	ZZZZZ	03/23/10	1102	2.25	6.24
16	ZZZZZ	ZZZZZ	03/23/10	1114	2.25	6.24
17	RE36-10-8279	248519002	03/23/10	1127	2.25	6.24
18	RE36-10-8280	248519004	03/23/10	1143	2.25	6.24
19	AR166002	WAR100224-60	03/23/10	1201	2.25	6.24
20	PIBLK03	WAR100219-99	03/23/10	1214	2.25	6.24
21	ZZZZZ	ZZZZZ	03/23/10	1226	2.25	6.24
22	ZZZZZ	ZZZZZ	03/23/10	1238	2.25	6.24
23	ZZZZZ	ZZZZZ	03/23/10	1251	2.25	6.24
24	ZZZZZ	ZZZZZ	03/23/10	1303	2.25	6.24
25	ZZZZZ	ZZZZZ	03/23/10	1315	2.25	6.24
26	ZZZZZ	ZZZZZ	03/23/10	1328	2.25	6.24
27	ZZZZZ	ZZZZZ	03/23/10	1340	2.25	6.24
28	ZZZZZ	ZZZZZ	03/23/10	1352	2.25	6.24
29	ZZZZZ	ZZZZZ	03/23/10	1405	2.25	6.24
30	ZZZZZ	ZZZZZ	03/23/10	1421	2.25	6.24
31	AR166003	WAR100224-60	03/23/10	1438	2.25	6.24
32	PIBLK04	WAR100219-99	03/23/10	1450	2.25	6.24

S1 = 4cmx  
DCB = Decachlorobiphenyl

QC LIMITS  
(+/- 0.03 MINUTES)  
(+/- 0.03 MINUTES)

# Column used to flag retention time values with an asterisk.  
\* Values outside of QC limits.

8D  
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-2199

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 03/09/10 03/18/10

Instrument ID: ECD8A

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION						
S1 : 2.48			DCB: 6.82			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #	
01	PIBLK01	WAR100219-99	03/23/10	0809	2.48	6.82
02	AR166001	WAR100224-60	03/23/10	0822	2.48	6.82
03	AR125401	WAR100219-54	03/23/10	0834		
04	AR124201	WAR091217-42	03/23/10	0846		
05	AR124801	WAR100223-48	03/23/10	0859		
06	AR123201	WAR100104-32	03/23/10	0911		
07	AR122101	WAR100104-21	03/23/10	0923		
08	AR126201	WAR100104-62	03/23/10	0936		
09	AR126801	WAR100107-68	03/23/10	0948		
10	DDTANALOGSTD	WAR091219-DD	03/23/10	1000		
11	PIBLK02	WAR100219-99	03/23/10	1013	2.48	6.82
12	PBLK02	1202077508	03/23/10	1025	2.48	6.82
13	PBLK02LCS	1202077509	03/23/10	1037	2.48	6.82
14	PBLK02LCSD	1202077510	03/23/10	1050	2.48	6.82
15	ZZZZZ	ZZZZZ	03/23/10	1102	2.48	6.82
16	ZZZZZ	ZZZZZ	03/23/10	1114	2.48	6.82
17	RE36-10-8279	248519002	03/23/10	1127	2.48	6.82
18	RE36-10-8280	248519004	03/23/10	1143	2.48	6.82
19	AR166002	WAR100224-60	03/23/10	1201	2.48	6.82
20	PIBLK03	WAR100219-99	03/23/10	1214	2.48	6.82
21	ZZZZZ	ZZZZZ	03/23/10	1226	2.48	6.82
22	ZZZZZ	ZZZZZ	03/23/10	1238	2.48	6.82
23	ZZZZZ	ZZZZZ	03/23/10	1251	2.48	6.82
24	ZZZZZ	ZZZZZ	03/23/10	1303	2.48	6.82
25	ZZZZZ	ZZZZZ	03/23/10	1315	2.48	6.82
26	ZZZZZ	ZZZZZ	03/23/10	1328	2.48	6.82
27	ZZZZZ	ZZZZZ	03/23/10	1340	2.48	6.82
28	ZZZZZ	ZZZZZ	03/23/10	1352	2.48	6.82
29	ZZZZZ	ZZZZZ	03/23/10	1405	2.48	6.82
30	ZZZZZ	ZZZZZ	03/23/10	1421	2.48	6.82
31	AR166003	WAR100224-60	03/23/10	1438	2.48	6.82
32	PIBLK04	WAR100219-99	03/23/10	1450	2.48	6.82

S1 = 4cmx  
DCB = Decachlorobiphenyl

QC LIMITS  
(+/- 0.03 MINUTES)  
(+/- 0.03 MINUTES)

# Column used to flag retention time values with an asterisk.  
\* Values outside of QC limits.

## Identification Summary

Page 1 of 1

SDG Number: 10-2199

Client ID: LCS for batch 966418

Lab Sample ID: 1202073938

Data File: 027f2701.d

Data File: 027b2701.d

Inst: ECD8A.I\_1

Inst: ECD8A.I\_2

Column: CLP1

Column: CLP2

Analyzed: 19-MAR-10 12:35

Analyzed: 19-MAR-10 12:35

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor-1016							3.62
Column 1	1	2.81	2.78 – 2.84	23.3		ug/kg	
	2	3.16	3.13 – 3.19	25.9		ug/kg	
	3	3.3	3.27 – 3.33	24.8		ug/kg	
	4	3.39	3.36 – 3.42	24.3		ug/kg	
	5	3.55	3.52 – 3.58	24.6		ug/kg	
					24.6		
Column 2	1	3.55	3.52 – 3.58	26		ug/kg	
	2	3.65	3.62 – 3.68	25.1		ug/kg	
	3	3.72	3.69 – 3.75	25.4		ug/kg	
	4	3.8	3.77 – 3.83	25.3		ug/kg	
	5	4	3.96 – 4.02	25.5		ug/kg	
					25.5		
Aroclor-1260							4.73
Column 1	1	4.43	4.4 – 4.46	28.3		ug/kg	
	2	4.62	4.59 – 4.65	29.5		ug/kg	
	3	4.9	4.87 – 4.93	29.4		ug/kg	
	4	5.07	5.04 – 5.1	29.4		ug/kg	
	5	5.48	5.45 – 5.51	31.6		ug/kg	
					29.7		
Column 2	1	4.91	4.88 – 4.94	29.6		ug/kg	
	2	5.06	5.03 – 5.09	30.6		ug/kg	
	3	5.37	5.34 – 5.4	31		ug/kg	
	4	5.58	5.55 – 5.61	31.1		ug/kg	
	5	6.01	5.98 – 6.04	33.2		ug/kg	
					31.1		

## Identification Summary

Page 1 of 1

SDG Number: 10-2199

Client ID: LCS for batch 967813

Lab Sample ID: 1202077509

Data File: 013f1301.d

Data File: 013b1301.d

Inst: ECD8A.I\_1

Inst: ECD8A.I\_2

Column: CLP1

Column: CLP2

Analyzed: 23-MAR-10 10:37

Analyzed: 23-MAR-10 10:37

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor-1016							3.58
Column 1	1	2.8	2.78 – 2.84	27.4		ug/kg	
	2	3.16	3.13 – 3.19	29.1		ug/kg	
	3	3.3	3.27 – 3.33	29		ug/kg	
	4	3.39	3.36 – 3.42	28.2		ug/kg	
	5	3.55	3.52 – 3.58	28		ug/kg	
					28.3		
Column 2	1	3.55	3.52 – 3.58	30.2		ug/kg	
	2	3.65	3.62 – 3.68	28.9		ug/kg	
	3	3.72	3.69 – 3.75	29.1		ug/kg	
	4	3.8	3.77 – 3.83	29.3		ug/kg	
	5	3.99	3.96 – 4.02	29.3		ug/kg	
					29.4		
Aroclor-1260							5.03
Column 1	1	4.43	4.4 – 4.46	32.5		ug/kg	
	2	4.62	4.59 – 4.65	32.8		ug/kg	
	3	4.9	4.87 – 4.93	32.7		ug/kg	
	4	5.07	5.04 – 5.1	32.8		ug/kg	
	5	5.48	5.45 – 5.51	34.5		ug/kg	
					33.1		
Column 2	1	4.91	4.88 – 4.94	33.6		ug/kg	
	2	5.06	5.03 – 5.09	34.4		ug/kg	
	3	5.37	5.34 – 5.4	34.7		ug/kg	
	4	5.58	5.55 – 5.61	34.8		ug/kg	
	5	6.01	5.98 – 6.04	36.3		ug/kg	
					34.8		

## Identification Summary

Page 1 of 1

SDG Number: 10-2199  
 Lab Sample ID: 1202077510

Client ID: LCSD for batch 967813

Data File: 014f1401.d  
 Inst: ECD8A.I\_1  
 Column: CLP1  
 Analyzed: 23-MAR-10 10:50

Data File: 014b1401.d  
 Inst: ECD8A.I\_2  
 Column: CLP2  
 Analyzed: 23-MAR-10 10:50

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
<b>Aroclor-1016</b>							7.06
Column 1	1	2.81	2.78 – 2.84	26.3		ug/kg	
	2	3.16	3.13 – 3.19	28.6		ug/kg	
	3	3.3	3.27 – 3.33	27.5		ug/kg	
	4	3.39	3.36 – 3.42	26.4		ug/kg	
	5	3.55	3.52 – 3.58	26.6		ug/kg	
					27.1		
Column 2	1	3.55	3.52 – 3.58	30.1		ug/kg	
	2	3.65	3.62 – 3.68	28.5		ug/kg	
	3	3.72	3.69 – 3.75	28.8		ug/kg	
	4	3.8	3.77 – 3.83	29		ug/kg	
	5	3.99	3.96 – 4.02	29		ug/kg	
					29.1		
<b>Aroclor-1260</b>							5.66
Column 1	1	4.43	4.4 – 4.46	31		ug/kg	
	2	4.62	4.59 – 4.65	31.8		ug/kg	
	3	4.9	4.87 – 4.93	31.6		ug/kg	
	4	5.07	5.04 – 5.1	31.3		ug/kg	
	5	5.48	5.45 – 5.51	32.5		ug/kg	
					31.6		
Column 2	1	4.91	4.88 – 4.94	32.8		ug/kg	
	2	5.06	5.03 – 5.09	33.2		ug/kg	
	3	5.37	5.34 – 5.4	33.8		ug/kg	
	4	5.58	5.55 – 5.61	32.9		ug/kg	
	5	6.01	5.98 – 6.04	34.7		ug/kg	
					33.5		

## Identification Summary

Page 1 of 1

SDG Number: 10-2199

Client ID: RE36-10-8273

Lab Sample ID: 248519009

Data File: 046f4601.d

Data File: 046b4601.d

Inst: ECD8A.I\_1

Inst: ECD8A.I\_2

Column: CLP1

Column: CLP2

Analyzed: 19-MAR-10 16:34

Analyzed: 19-MAR-10 16:34

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor-1254							47.6
Column 1	1	3.83	3.8 – 3.86	2.22		ug/kg	
	2	4.02	3.99 – 4.05	1.92		ug/kg	
	3	4.22	4.18 – 4.24	13.7		ug/kg	
	4	4.3	4.27 – 4.33	2.29		ug/kg	
	5	4.49	4.47 – 4.53	1.72		ug/kg	
					4.38		
Column 2	1	4.3	4.27 – 4.33	2.11		ug/kg	
	2	4.44	4.41 – 4.47	2.06		ug/kg	
	3	4.77	4.74 – 4.8	2.44		ug/kg	
	4	4.93	4.9 – 4.96	1.99		ug/kg	
	5	5.06	5.03 – 5.09	4.88		ug/kg	
					2.69		

## Identification Summary

Page 1 of 1

SDG Number: 10-2199

Client ID: RE36-10-8279

Lab Sample ID: 248519002

Data File: 017f1701.d

Data File: 017b1701.d

Inst: ECD8A.I\_1

Inst: ECD8A.I\_2

Column: CLP1

Column: CLP2

Analyzed: 23-MAR-10 11:27

Analyzed: 23-MAR-10 11:27

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor-1254							28.7
Column 1	1	3.83	3.8 – 3.86	14.5		ug/kg	
	2	4.02	3.99 – 4.05	20.6		ug/kg	
	3	4.21	4.18 – 4.24	25.1		ug/kg	
	4	4.3	4.27 – 4.33	25.1		ug/kg	
	5	4.49	4.47 – 4.53	32.7		ug/kg	
					23.6		
Column 2	1	4.3	4.27 – 4.33	14.6		ug/kg	
	2	4.44	4.41 – 4.47	23.4		ug/kg	
	3	4.77	4.74 – 4.8	31.1		ug/kg	
	4	4.93	4.9 – 4.96	30.7		ug/kg	
	5	5.06	5.03 – 5.09	57.7		ug/kg	
					31.5		
Aroclor-1260							17.8
Column 1	1	4.43	4.4 – 4.46	22.3		ug/kg	
	2	4.62	4.59 – 4.65	27.8		ug/kg	
	3	4.9	4.87 – 4.93	6.65		ug/kg	
	4	5.07	5.04 – 5.1	6.1		ug/kg	
	5	5.48	5.45 – 5.51	10.8		ug/kg	
					14.7		
Column 2	1	4.91	4.88 – 4.94	29.8		ug/kg	
	2	5.06	5.03 – 5.09	26.9		ug/kg	
	3	5.38	5.34 – 5.4	10.6		ug/kg	
	4	5.58	5.55 – 5.61	8.49		ug/kg	
	5	6.01	5.98 – 6.04	12.2		ug/kg	
					17.6		

## Identification Summary

Page 1 of 1

SDG Number: 10-2199

Client ID: RE36-10-8280

Lab Sample ID: 248519004

Data File: 018f1801.d

Data File: 018b1801.d

Inst: ECD8AJ\_1

Inst: ECD8AJ\_2

Column: CLP1

Column: CLP2

Analyzed: 23-MAR-10 11:43

Analyzed: 23-MAR-10 11:43

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor-1254							30.4
Column 1	1	3.83	3.8 – 3.86	25.3		ug/kg	
	2	4.02	3.99 – 4.05	40		ug/kg	
	3	4.21	4.18 – 4.24	53		ug/kg	
	4	4.3	4.27 – 4.33	53.5		ug/kg	
	5	4.49	4.47 – 4.53	69.5		ug/kg	
					48.3		
Column 2	1	4.3	4.27 – 4.33	29.1		ug/kg	
	2	4.44	4.41 – 4.47	47.9		ug/kg	
	3	4.77	4.74 – 4.8	62		ug/kg	
	4	4.93	4.9 – 4.96	71.5		ug/kg	
	5	5.05	5.03 – 5.09	117		ug/kg	
					65.6		
Aroclor-1260							24.7
Column 1	1	4.43	4.4 – 4.46	39.7		ug/kg	
	2	4.62	4.59 – 4.65	56.1		ug/kg	
	3	4.9	4.87 – 4.93	11.4		ug/kg	
	4	5.07	5.04 – 5.1	13.6		ug/kg	
	5	5.48	5.45 – 5.51	23.1		ug/kg	
					28.8		
Column 2	1	4.91	4.88 – 4.94	59.2		ug/kg	
	2	5.05	5.03 – 5.09	54.6		ug/kg	
	3	5.37	5.34 – 5.4	22		ug/kg	
	4	5.58	5.55 – 5.61	23.4		ug/kg	
	5	6.01	5.98 – 6.04	25.3		ug/kg	
					36.9		



## Identification Summary

Page 1 of 1

SDG Number: 10-2199

Client ID: RE36-10-8291

Lab Sample ID: 248519007

Data File: 044f4401.d

Data File: 044b4401.d

Inst: ECD8A.I\_1

Inst: ECD8A.I\_2

Column: CLP1

Column: CLP2

Analyzed: 19-MAR-10 16:09

Analyzed: 19-MAR-10 16:09

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor-1254							51.8
Column 1	1	3.83	3.8 – 3.86	2.46		ug/kg	
	2	4.02	3.99 – 4.05	2.01		ug/kg	
	3	4.22	4.18 – 4.24	14.3		ug/kg	
	4	4.3	4.27 – 4.33	2.24		ug/kg	
	5	4.49	4.47 – 4.53	2.01		ug/kg	
					4.6		
Column 2	1	4.3	4.27 – 4.33	2.28		ug/kg	
	2	4.44	4.41 – 4.47	2.39		ug/kg	
	3	4.77	4.74 – 4.8	2.43		ug/kg	
	4	4.93	4.9 – 4.96	1.73		ug/kg	
	5	5.06	5.03 – 5.09	4.7		ug/kg	
					2.71		

# QUALITY CONTROL DATA

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

Page 1 of 1

SDG Number: 10-2199

Lab Sample ID: 1202073937

Client Sample: QC for batch 966418

Client ID: MB for batch 966418

Batch ID: 966420

Run Date: 03/19/2010 12:23

Prep Date: 03/18/2010 10:57

Data File: 026f2601-1.d

026b2601-1.d

Client: LANL010

Method: SW846 8082

Inst: ECD8A.I

Analyst: JAOC

Aliquot: 30 g

Column: 1 CLP1

2 CLP2

Matrix: SOIL

Project: QC

SOP Ref: GL-OA-E-040

Dilution: 1

Inj. Vol: 1 uL

Final Volume: 1 mL

Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.33	ug/kg	1.11	3.33	1
11104-28-2	Aroclor-1221	U	3.33	ug/kg	1.11	3.33	1
11141-16-5	Aroclor-1232	U	3.33	ug/kg	1.11	3.33	1
53469-21-9	Aroclor-1242	U	3.33	ug/kg	1.11	3.33	1
12672-29-6	Aroclor-1248	U	3.33	ug/kg	1.11	3.33	1
11097-69-1	Aroclor-1254	U	3.33	ug/kg	1.11	3.33	1
11096-82-5	Aroclor-1260	U	3.33	ug/kg	1.11	3.33	1

Data File: /chem/ecd8a.i/031910.b/026f2601-3.d  
Report Date: 22-Mar-2010 13:52

Page 1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/031910.b/026f2601-3.d  
Lab Smp Id: 1202073937 Client Smp ID: PBLK01  
Inj Date : 19-MAR-2010 12:23  
Operator : JAOC Inst ID: ecd8a.i  
Smp Info : |1202073937|1|  
Misc Info : |ECD82P\_1S|966420|SVA|QC A|SOIL|MB|||  
Comment :  
Method : /chem/ecd8a.i/031910.b/ECD8-F-8082-031810.m  
Meth Date : 22-Mar-2010 08:33 jen01212 Quant Type: ESTD  
Cal Date : 23-FEB-2010 11:32 Cal File: 017f1701.d  
Als bottle: 26 QC Sample: BLANK  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-2199.sub  
Target Version: 3.50 Sample Matrix: Soil  
Processing Host: hpclp1

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

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

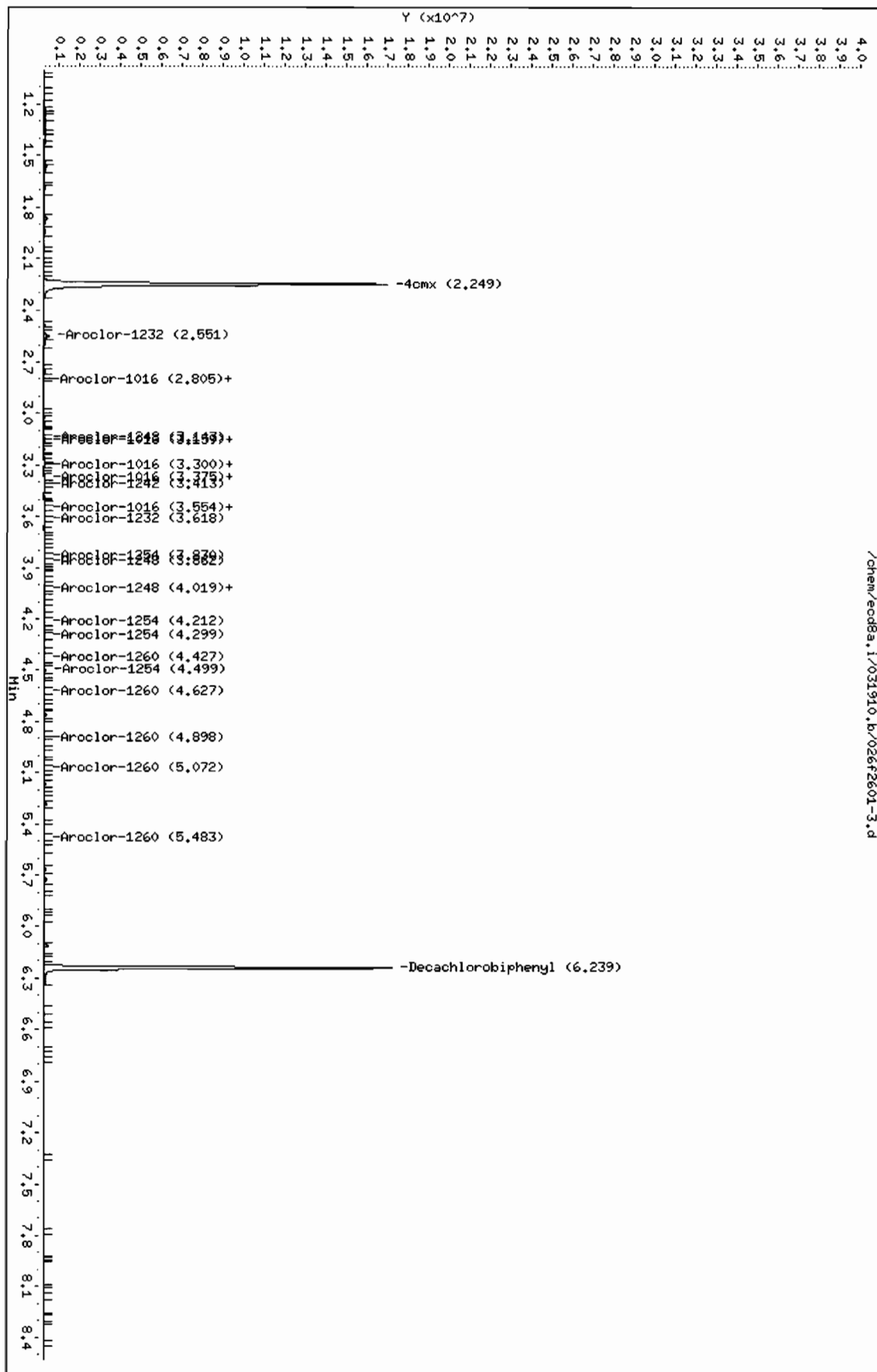
Cpnd Variable Local Compound Variable

CONCENTRATIONS

RT	EXP RT	DLT RT	ON-COL	FINAL	TARGET RANGE	RATIO
==	=====	=====	RESPONSE ( ug/L)	(ug/Kg)	=====	=====
CAS #: 877-09-8						
2.249	2.248	0.001	17709306	141.718	4.7 80.00- 120.00	100.00
CAS #: 2051-24-3						
6.239	6.239	0.000	15414750	187.183	6.2 80.00- 120.00	100.00

Data File: /chem/ecdb8.i/031910.b/026f2601-3.d  
Date: 19-MAR-2010 12:23  
Client ID: PBLK01  
Sample Info: 1A202073937111  
Volume Injected (uL): 1.0  
Column phase: CLP1

Instrument: ecdb8.i  
Operator: JHOC  
Column diameter: 0.25



Data File: /chem/ecd8a.i/031910.b/026b2601-3.d  
Report Date: 22-Mar-2010 13:50

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL  
Data file : /chem/ecd8a.i/031910.b/026b2601-3.d  
Lab Smp Id: 1202073937 Client Smp ID: PBLK01  
Inj Date : 19-MAR-2010 12:23  
Operator : JAOC Inst ID: ecd8a.i  
Smp Info : |1202073937|1|  
Misc Info : |ECD82P\_1S|966420|SVA|QC A|SOIL|MB|||  
Comment :  
Method : /chem/ecd8a.i/031910.b/ECD8-B-8082-031810.m  
Meth Date : 22-Mar-2010 07:51 jen01212 Quant Type: ESTD  
Cal Date : 23-FEB-2010 11:32 Cal File: 017b1701.d  
Als bottle: 26 QC Sample: BLANK  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-2199.sub  
Target Version: 3.50 Sample Matrix: Soil  
Processing Host: hpc1pl

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

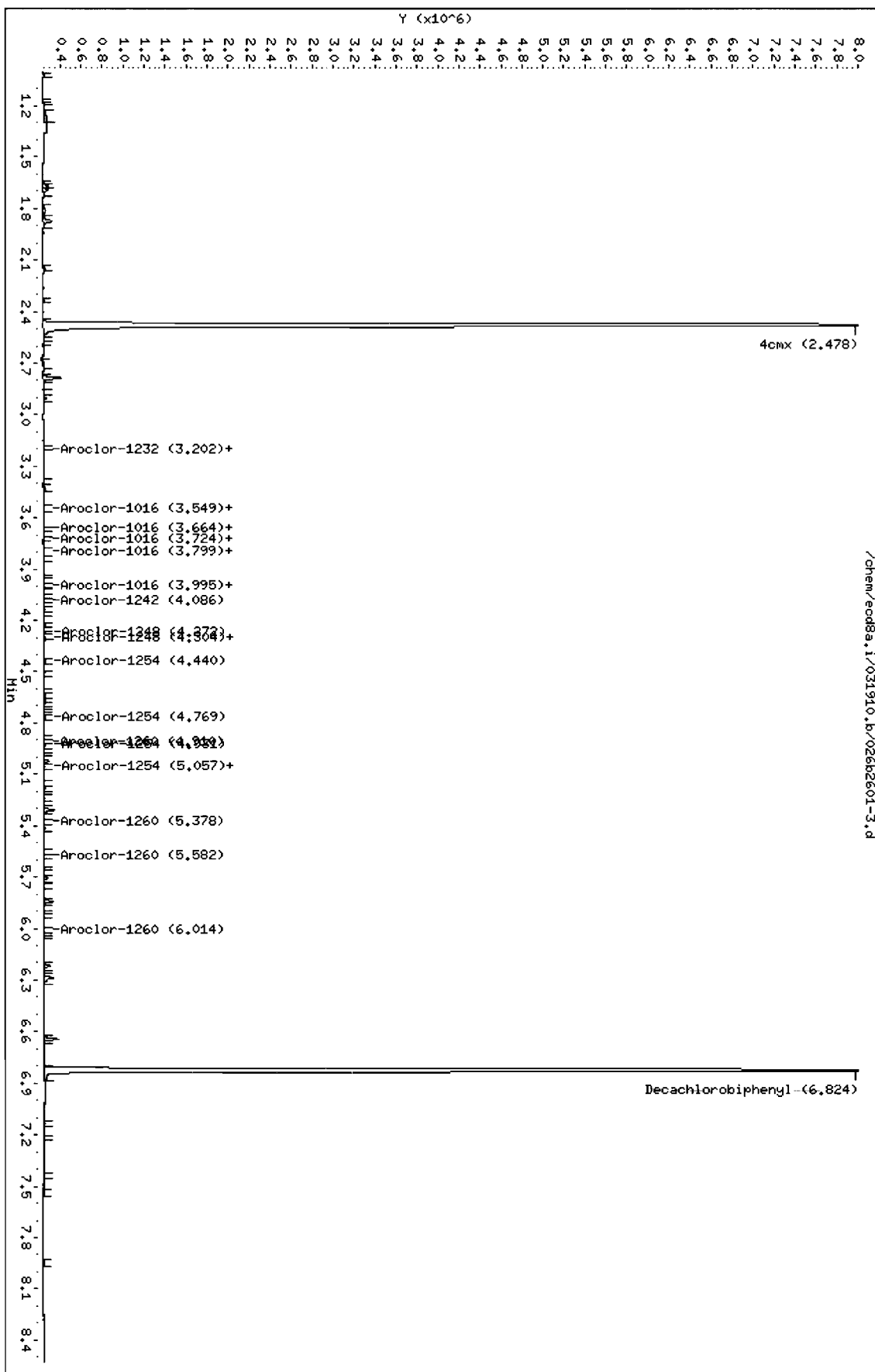
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS						
			ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
\$ 11 4cmx CAS #: 877-09-8						
2.478	2.477	0.001	12608587 150.853	5.0	80.00- 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl CAS #: 2051-24-3						
6.824	6.824	0.000	11617484 196.067	6.5	80.00- 120.00	100.00
-----						

Data File: /chem/ecod8a.i/031910.b/026b2601-3.d  
 Date: 19-MAR-2010 12:23  
 Client ID: PLK01  
 Sample Info: 1120207393711  
 Volume Injected (uL): 1.0  
 Column phase: CLP2

Instrument: ecod8a.i  
 Operator: JHOC  
 Column diameter: 0.25



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

Page 1 of 1

SDG Number: 10-2199

Lab Sample ID: 1202077508

Client Sample: QC for batch 967813

Client ID: MB for batch 967813

Batch ID: 967817

Run Date: 03/23/2010 10:25

Prep Date: 03/22/2010 21:20

Data File: 012f1201-1.d

Client: LANL010

Method: SW846 8082

Inst: ECD8A.I

Analyst: JAOC

Aliquot: 30 g

Column: 1 CLP1

2 CLP2

Matrix: SOIL

Project: QC

SOP Ref: GL-OA-E-040

Dilution: 1

Inj. Vol: 1 uL

Final Volume: 1 mL

Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.33	ug/kg	1.11	3.33	1
11104-28-2	Aroclor-1221	U	3.33	ug/kg	1.11	3.33	1
11141-16-5	Aroclor-1232	U	3.33	ug/kg	1.11	3.33	1
53469-21-9	Aroclor-1242	U	3.33	ug/kg	1.11	3.33	1
12672-29-6	Aroclor-1248	U	3.33	ug/kg	1.11	3.33	1
11097-69-1	Aroclor-1254	U	3.33	ug/kg	1.11	3.33	1
11096-82-5	Aroclor-1260	U	3.33	ug/kg	1.11	3.33	1



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL  
Data file : /chem/ecd8a.i/032310.b/012f1201-2.d  
Lab Smp Id: 1202077508 Client Smp ID: PBLK02  
Inj Date : 23-MAR-2010 10:25  
Operator : JAOC Inst ID: ecd8a.i  
Smp Info : |1202077508|1|  
Misc Info : |ECD82P\_1S|967817|SVA|QC A|SOIL|MB|||  
Comment :  
Method : /chem/ecd8a.i/032310.b/ECD8-F-8082-031810.m  
Meth Date : 24-Mar-2010 08:51 jen01212 Quant Type: ESTD  
Cal Date : 23-FEB-2010 11:32 Cal File: 017f1701.d  
Als bottle: 12 QC Sample: BLANK  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-2199.sub  
Target Version: 3.50 Sample Matrix: Soil  
Processing Host: hpc1pl

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

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

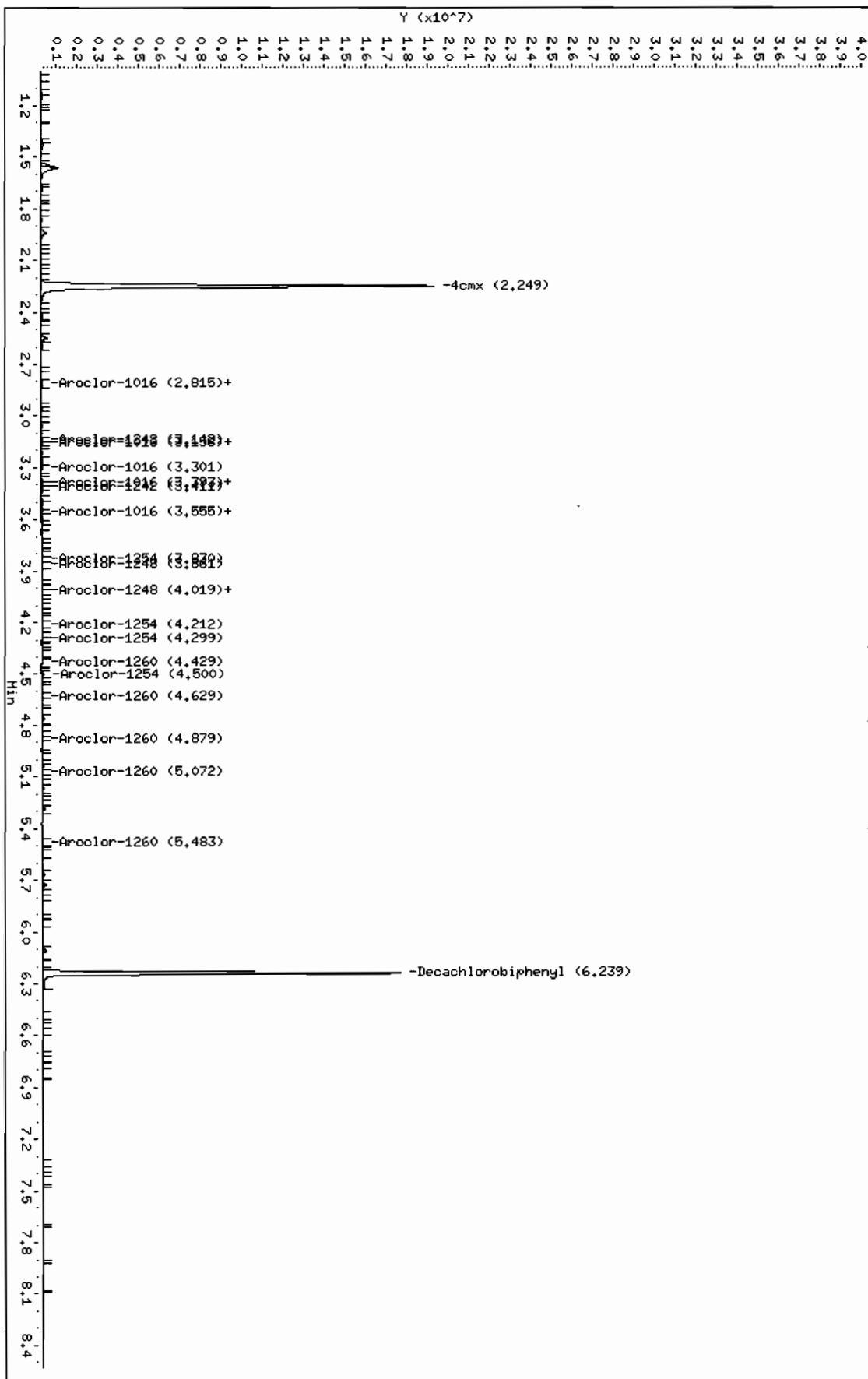
Cpnd Variable Local Compound Variable

CONCENTRATIONS							
			ON-COL	FINAL			
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	
					CAS #: 877-09-8		
\$ 11 4cmx	2.249	2.248	0.001	21594346 172.808	5.8	80.00- 120.00	100.00
-----							
					CAS #: 2051-24-3		
\$ 12 Decachlorobiphenyl	6.239	6.240	-0.001	16163230 196.272	6.5	80.00- 120.00	100.00
-----							

Data File: /chem/ecd8a.i/032310.b/012f1201-2.d  
Date: 23-MAR-2010 10:25  
Client ID: PBLK02  
Sample Info: 14202077508111  
Volume Injected (uL): 1.0  
Column Phase: CLP1

Instrument: ecd8a.i  
Operator: JHOC  
Column diameter: 0.25

/chem/ecd8a.i/032310.b/012f1201-2.d



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL  
 Data file : /chem/ecd8a.i/032310.b/012b1201-2.d  
 Lab Smp Id: 1202077508 Client Smp ID: PBLK02  
 Inj Date : 23-MAR-2010 10:25  
 Operator : JAOC Inst ID: ecd8a.i  
 Smp Info : |1202077508|1|  
 Misc Info : |ECD82P\_1S|967817|SVA|QC A|SOIL|MB|||  
 Comment :  
 Method : /chem/ecd8a.i/032310.b/ECD8-B-8082-031810.m  
 Meth Date : 24-Mar-2010 08:39 jen01212 Quant Type: ESTD  
 Cal Date : 23-FEB-2010 11:32 Cal File: 017b1701.d  
 Als bottle: 12 QC Sample: BLANK  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: 10-2199.sub  
 Target Version: 3.50 Sample Matrix: Soil  
 Processing Host: hpclp1

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

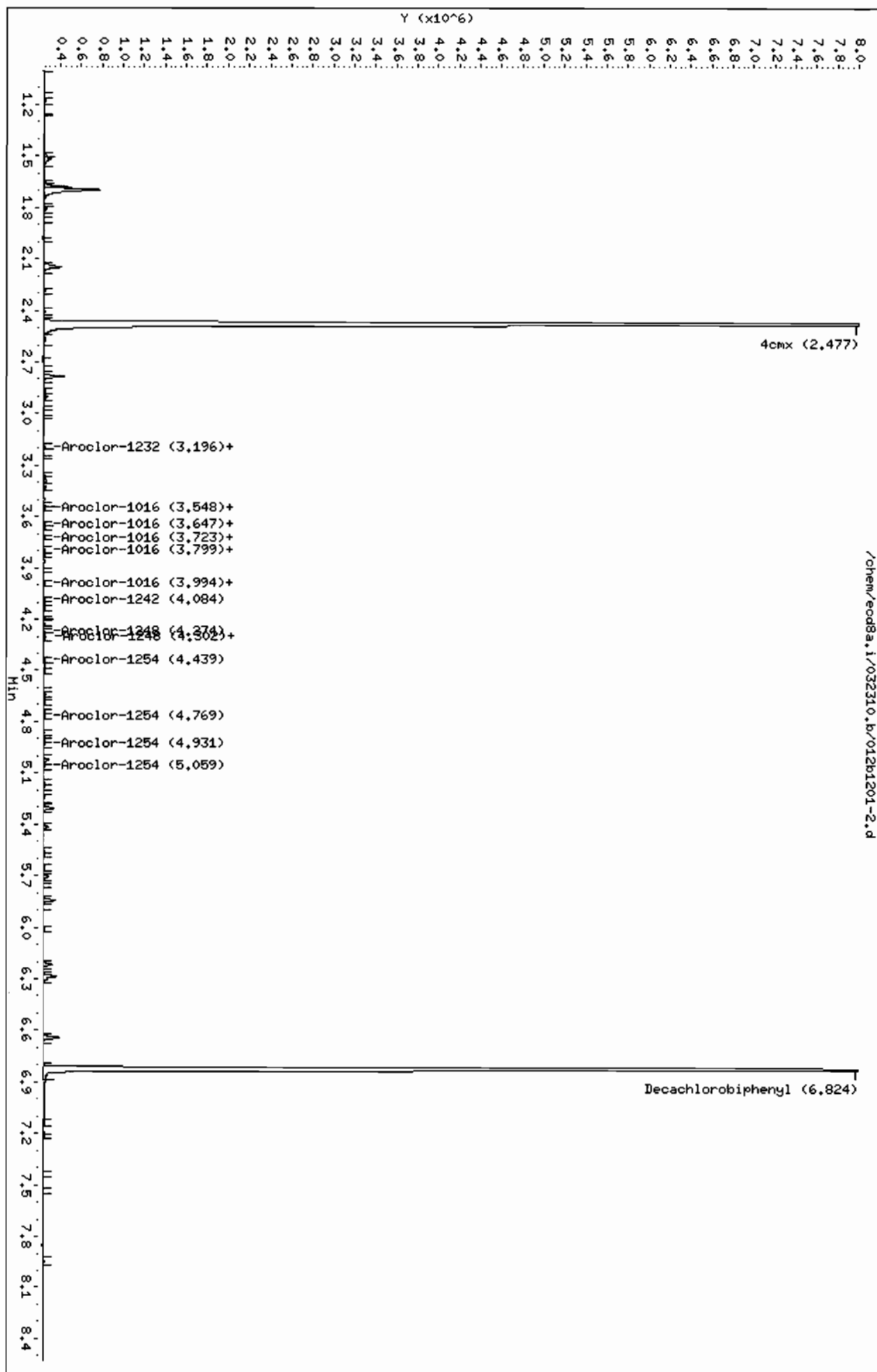
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

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		
2.477	2.476	0.001	15550026 186.045	6.2	80.00- 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3		
6.824	6.824	0.000	12326009 208.025	6.9	80.00- 120.00	100.00
-----						

Data File: /chem/ecod8a.i/032310.b/012b1201-2.d  
Date: 23-MAR-2010 10:25  
Client ID: PBLK02  
Sample Info: 1120207750811  
Volume Injected (uL): 1.0  
Column phase: CLP2

Instrument: ecod8a.i  
Operator: JHOC  
Column diameter: 0.25



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

SDG Number: 10-2199  
 Lab Sample ID: 1202073938  
 Client Sample: QC for batch 966418  
 Client ID: LCS for batch 966418  
 Batch ID: 966420  
 Run Date: 03/19/2010 12:35  
 Prep Date: 03/18/2010 10:57  
 Data File: 027f2701-1.d  
 027b2701-1.d

Client: LANL010  
 Method: SW846 8082  
 Inst: ECD8A.I  
 Analyst: JAOC  
 Aliquot: 30 g  
 Column: 1 CLP1  
 2 CLP2

Matrix: SOIL  
 Project: QC  
 SOP Ref: GL-OA-E-040  
 Dilution: 1  
 Inj. Vol: 1 uL  
 Final Volume: 1 mL  
 Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016		25.5	ug/kg	1.11	3.33	2
11104-28-2	Aroclor-1221	U	3.33	ug/kg	1.11	3.33	1
11141-16-5	Aroclor-1232	U	3.33	ug/kg	1.11	3.33	1
53469-21-9	Aroclor-1242	U	3.33	ug/kg	1.11	3.33	1
12672-29-6	Aroclor-1248	U	3.33	ug/kg	1.11	3.33	1
11097-69-1	Aroclor-1254	U	3.33	ug/kg	1.11	3.33	1
11096-82-5	Aroclor-1260		31.1	ug/kg	1.11	3.33	2

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RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/031910.b/027f2701-3.d  
Lab Smp Id: 1202073938 Client Smp ID: PBLK01LCS  
Inj Date : 19-MAR-2010 12:35  
Operator : JAOC Inst ID: ecd8a.i  
Smp Info : |1202073938|1|  
Misc Info : |ECD82P\_1S|966420|SVA|QC A|SOIL|LCS|||  
Comment :  
Method : /chem/ecd8a.i/031910.b/ECD8-F-8082-031810.m  
Meth Date : 22-Mar-2010 08:33 jen01212 Quant Type: ESTD  
Cal Date : 23-FEB-2010 11:32 Cal File: 017f1701.d  
Als bottle: 27 QC Sample: LCS  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-2168.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	RESPONSE	ON-COL ( ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
\$ 11 4cmx						CAS #: 877-09-8	
2.249	2.248	0.001	18913488	151.355	5.0	80.00- 120.00	100.00
\$ 12 Decachlorobiphenyl						CAS #: 2051-24-3	
6.239	6.239	0.000	16027251	194.621	6.5	80.00- 120.00	100.00
1 Aroclor-1016						CAS #: 12674-11-2	
2.806	2.806	0.000	3337373	699.326	23.3	80.00- 120.00	100.00 (M)
3.157	3.157	0.000	4193623	776.971	25.9	107.11- 147.11	125.66
3.301	3.300	0.001	1746826	742.811	24.8	32.79- 72.79	52.34
3.393	3.392	0.001	1598213	729.256	24.3	25.87- 65.87	47.89

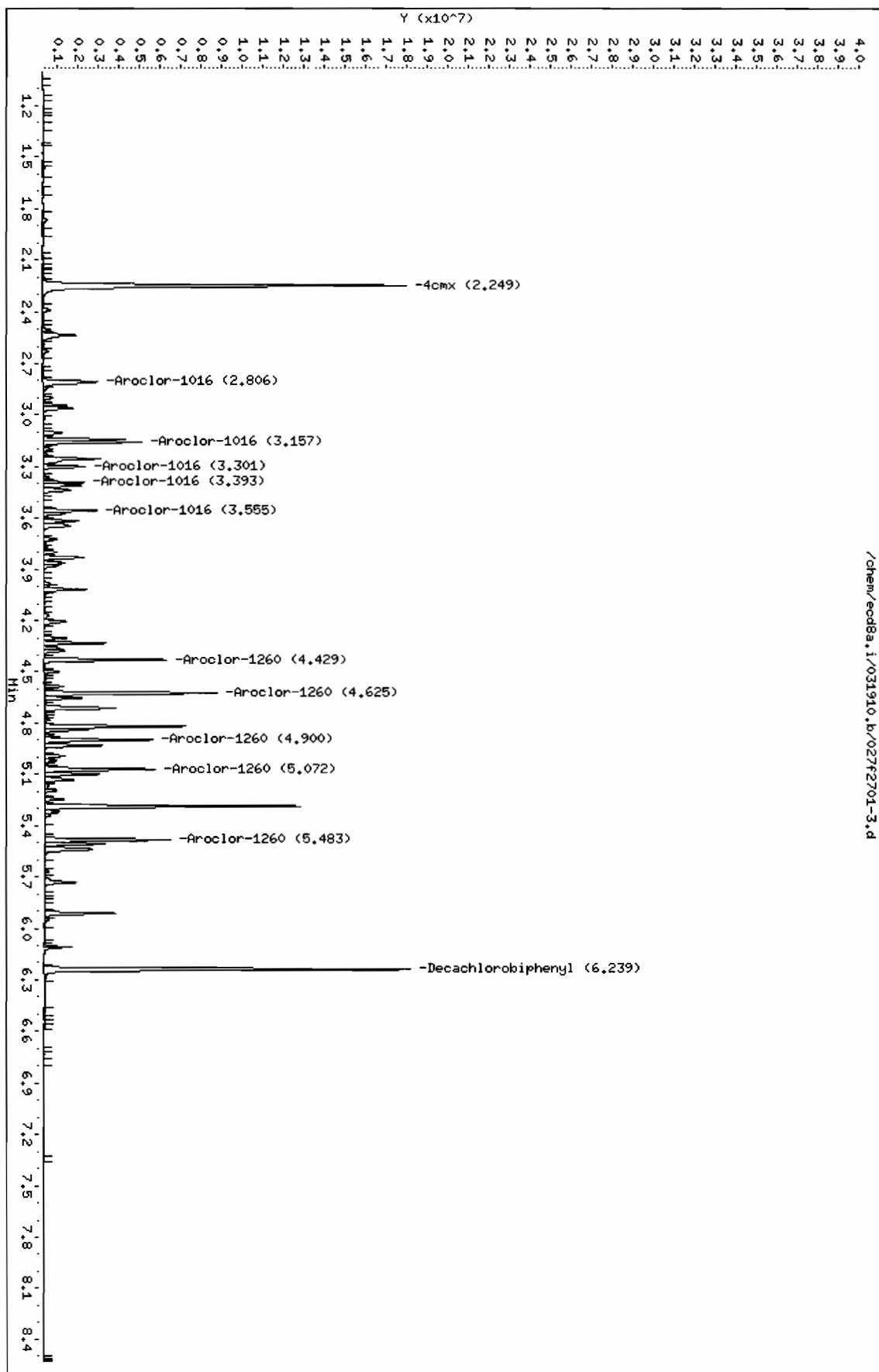
CONCENTRATIONS									
			ON-COL		FINAL				
RT	EXP RT	DLT RT	RESPONSE ( ug/L)		(ug/Kg)	TARGET RANGE		RATIO	
==	=====	=====	=====	=====	=====	=====	=====	=====	=====
1 Aroclor-1016 (continued)									
3.555	3.555	0.000	2269537	737.115	24.6	47.87-	87.87	68.00	
Average of Peak Concentrations =					24.6				
-----									
7 Aroclor-1260					CAS #: 11096-82-5				
4.429	4.429	0.000	5008165	850.274	28.3	80.00-	120.00	100.00 (M)	
4.625	4.625	0.000	7527530	886.083	29.5	126.91-	166.91	150.31	
4.900	4.900	0.000	4466852	881.685	29.4	64.82-	104.82	89.19	
5.072	5.072	0.000	4696880	881.378	29.4	70.18-	110.18	93.78	
5.483	5.483	0.000	5354130	949.149	31.6	76.66-	116.66	106.91	
Average of Peak Concentrations =					29.6				

#### QC Flag Legend

M - Compound response manually integrated.

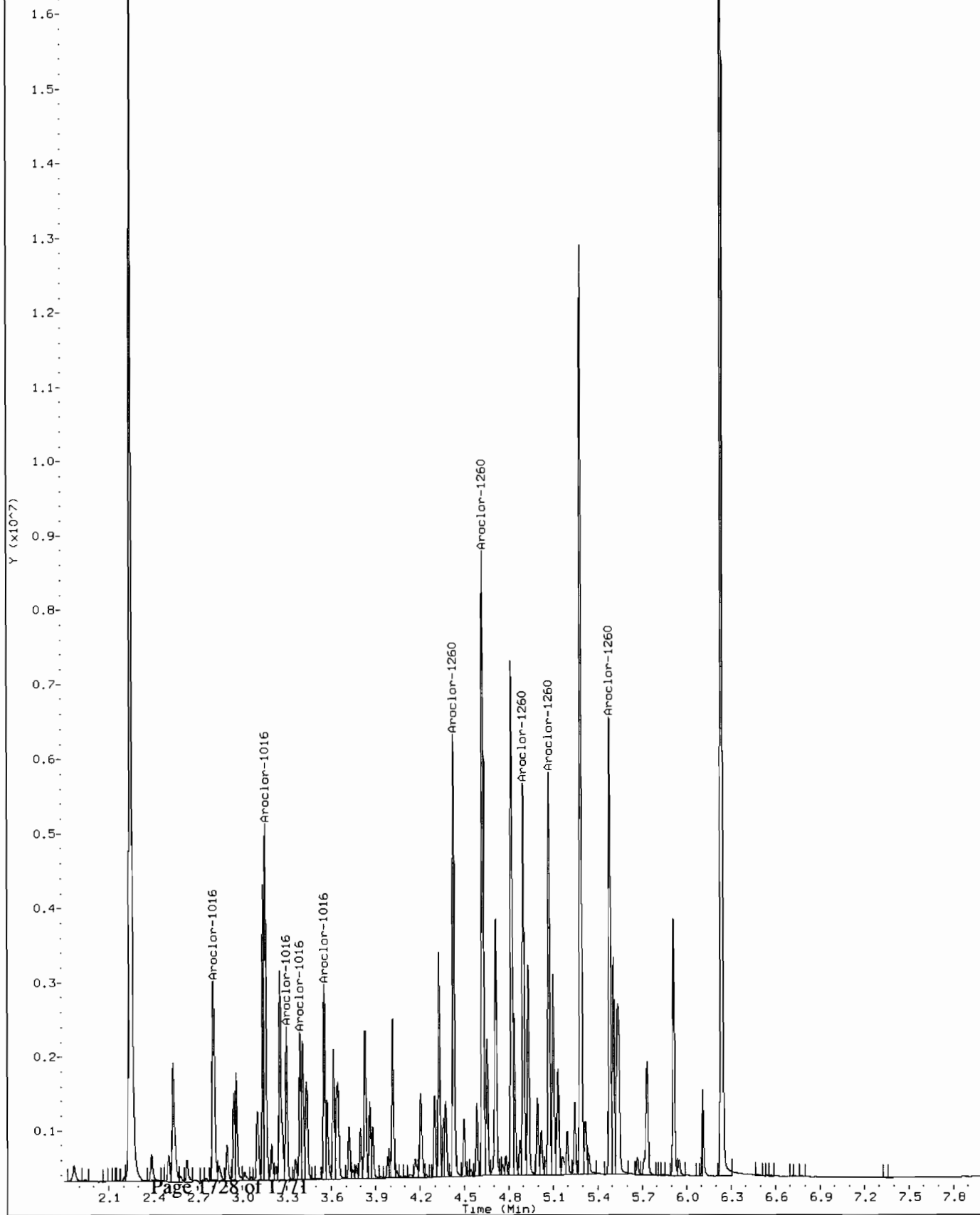
Data File: /chem/ecdb8a.i/031910.b/027f2701-3.d  
Date : 19-MAR-2010 12:35  
Client ID: PBLKO1LCS  
Sample Info: 11202073938111  
Volume Injected (uL): 1.0  
Column phase: CLP1

Instrument: ecdb8a.i  
Operator: JHOC  
Column diameter: 0.25





Comment: Manually Integrated  
Data File: /chem/ecd8a.i/031910.b/027f2701-3.d  
Operator: JAOC  
Injection Date: 19-MAR-2010 12:35  
Instrument: ecd8a.i  
Client Sample ID: PBLK01LCS





Data File: /chem/ecd8a.i/031910.b/027b2701-3.d  
 Report Date: 22-Mar-2010 13:51

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL  
 Data file : /chem/ecd8a.i/031910.b/027b2701-3.d  
 Lab Smp Id: 1202073938 Client Smp ID: PBLK01LCS  
 Inj Date : 19-MAR-2010 12:35  
 Operator : JAOC Inst ID: ecd8a.i  
 Smp Info : |1202073938|1|  
 Misc Info : |ECD82P\_1S|966420|SVA|QC A|SOIL|LCS|||  
 Comment :  
 Method : /chem/ecd8a.i/031910.b/ECD8-B-8082-031810.m  
 Meth Date : 22-Mar-2010 07:51 jen01212 Quant Type: ESTD  
 Cal Date : 23-FEB-2010 11:32 Cal File: 017b1701.d  
 Als bottle: 27 QC Sample: LCS  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: 10-2199.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

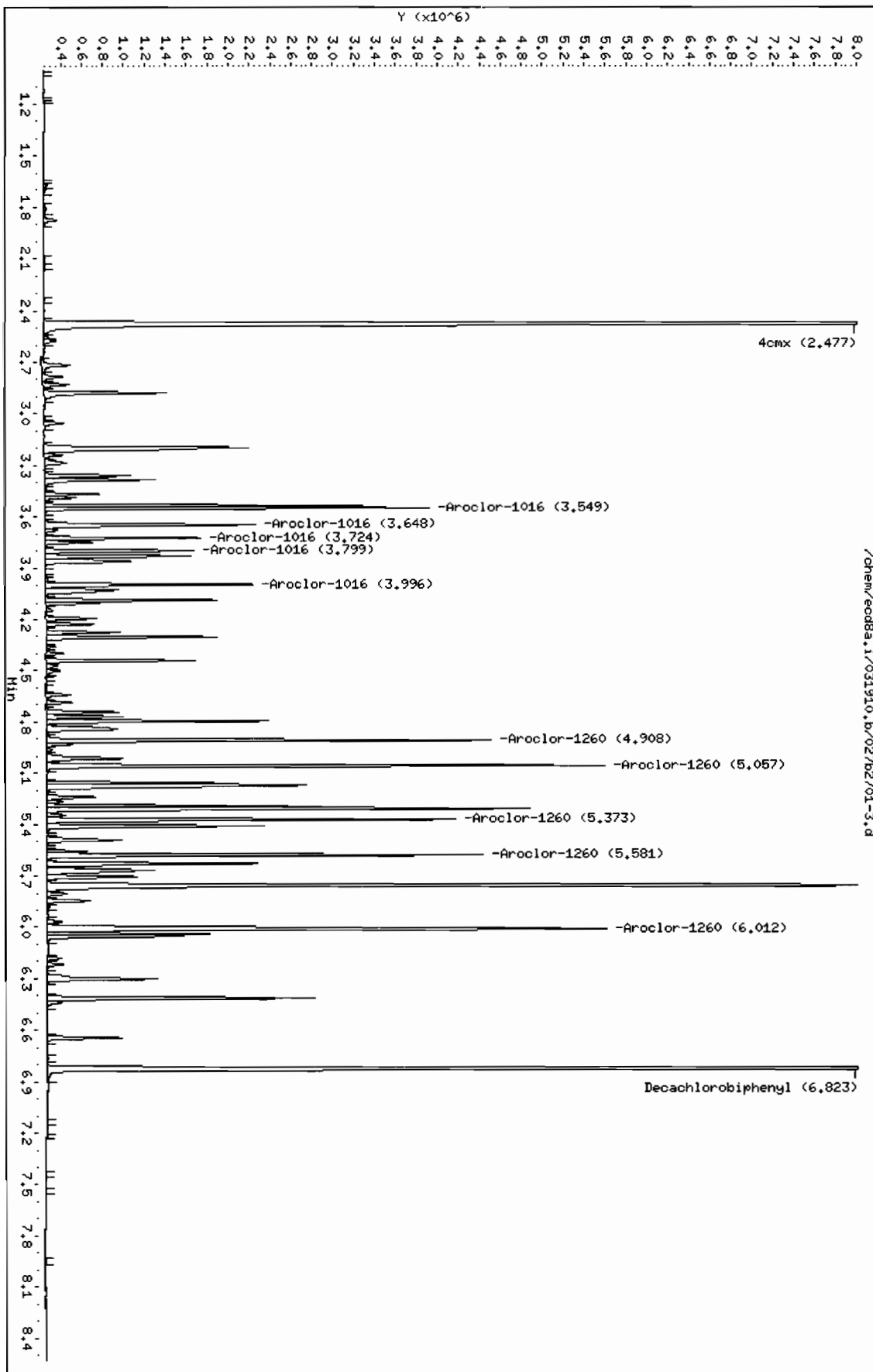
Cpnd Variable Local Compound Variable

CONCENTRATIONS						
			ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
\$ 11 4cmx CAS #: 877-09-8						
2.477	2.477	0.000	13425786 160.630	5.4	80.00- 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl CAS #: 2051-24-3						
6.823	6.824	-0.001	12244077 206.642	6.9	80.00- 120.00	100.00
-----						
1 Aroclor-1016 CAS #: 12674-11-2						
3.549	3.548	0.001	2870350 780.459	26.0	80.00- 120.00	100.00
3.648	3.648	0.000	1922394 753.529	25.1	44.99- 84.99	66.97
3.724	3.724	0.000	1135883 761.299	25.4	19.11- 59.11	39.57
3.799	3.799	0.000	1122576 759.676	25.3	17.60- 57.60	39.11

CONCENTRATIONS								
			ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE ( ug/L)		(ug/Kg)	TARGET	RANGE	RATIO
==	=====	=====	=====	=====	=====	=====	=====	=====
1 Aroclor-1016 (continued)								
3.996	3.995	0.001	1551449	766.222	25.5	31.73-	71.73	54.05
Average of Peak Concentrations =					25.5			
-----								
7 Aroclor-1260					CAS #: 11096-82-5			
4.908	4.908	0.000	3496632	887.807	29.6	80.00-	120.00	100.00
5.057	5.057	0.000	4343829	918.265	30.6	101.80-	141.80	124.23
5.373	5.374	-0.001	3336144	930.156	31.0	71.56-	111.56	95.41
5.581	5.581	0.000	3463152	932.901	31.1	75.46-	115.46	99.04
6.012	6.012	0.000	5812568	995.076	33.2	132.73-	172.73	166.23
Average of Peak Concentrations =					31.1			
-----								

Data File: /chem/ecod8a.i/031910.b/027b2701-3.d  
Date: 19-MAR-2010 12:35  
Client ID: PBLK01LCS  
Sample Info: 1420207393811  
Volume Injected (uL): 1.0  
Column phase: CLP2

Instrument: ecod8a.i  
Operator: JHOC  
Column diameter: 0.25



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

Page 1 of 1

SDG Number: 10-2199

Lab Sample ID: 1202077509

Client Sample: QC for batch 967813

Client ID: LCS for batch 967813

Batch ID: 967817

Run Date: 03/23/2010 10:37

Prep Date: 03/22/2010 21:20

Data File: 013f1301-1.d

013b1301-1.d

Client: LANL010

Method: SW846 8082

Inst: ECD8A.I

Analyst: JAOC

Aliquot: 30 g

Column: 1 CLP1

2 CLP2

Matrix: SOIL

Project: QC

SOP Ref: GL-OA-E-040

Dilution: 1

Inj. Vol: 1 uL

Final Volume: 1 mL

Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016		29.4	ug/kg	1.11	3.33	2
11104-28-2	Aroclor-1221	U	3.33	ug/kg	1.11	3.33	1
11141-16-5	Aroclor-1232	U	3.33	ug/kg	1.11	3.33	1
53469-21-9	Aroclor-1242	U	3.33	ug/kg	1.11	3.33	1
12672-29-6	Aroclor-1248	U	3.33	ug/kg	1.11	3.33	1
11097-69-1	Aroclor-1254	U	3.33	ug/kg	1.11	3.33	1
11096-82-5	Aroclor-1260		34.8	ug/kg	1.11	3.33	2

Data File: /chem/ecd8a.i/032310.b/013f1301-2.d  
Report Date: 24-Mar-2010 09:17

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL  
Data file : /chem/ecd8a.i/032310.b/013f1301-2.d  
Lab Smp Id: 1202077509 Client Smp ID: PBLK02LCS  
Inj Date : 23-MAR-2010 10:37  
Operator : JAOC Inst ID: ecd8a.i  
Smp Info : |1202077509|1|  
Misc Info : |ECD82P\_1S|967817|SVA|QC A|SOIL|LCS|1|1|  
Comment :  
Method : /chem/ecd8a.i/032310.b/ECD8-F-8082-031810.m  
Meth Date : 24-Mar-2010 08:51 jen01212 Quant Type: ESTD  
Cal Date : 23-FEB-2010 11:32 Cal File: 017f1701.d  
Als bottle: 13 QC Sample: LCS  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-2199.sub  
Target Version: 3.50 Sample Matrix: Soil  
Processing Host: hpc1p1

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

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

Cpnd Variable Local Compound Variable

CONCENTRATIONS							
			ON-COL	FINAL			
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	
\$ 11 4cmx					CAS #: 877-09-8		
2.248	2.248	0.000	22512097 180.152	6.0	80.00- 120.00	100.00	
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.238	6.240	-0.002	16820251 204.251	6.8	80.00- 120.00	100.00	
1 Aroclor-1016					CAS #: 12674-11-2		
2.805	2.806	-0.001	3924725 822.402	27.4	80.00- 120.00	100.00	
3.156	3.157	-0.001	4714277 873.435	29.1	106.71- 146.71	120.12	
3.301	3.301	0.000	2046483 870.235	29.0	32.91- 72.91	52.14	
3.392	3.393	-0.001	1853169 845.591	28.2	26.61- 66.61	47.22	

CONCENTRATIONS

ON-COL FINAL

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

1 Aroclor-1016 (continued)

3.555	3.555	0.000	2584917	839.546	28.0	47.49- 87.49	65.86
Average of Peak Concentrations =					28.3		

7 Aroclor-1260

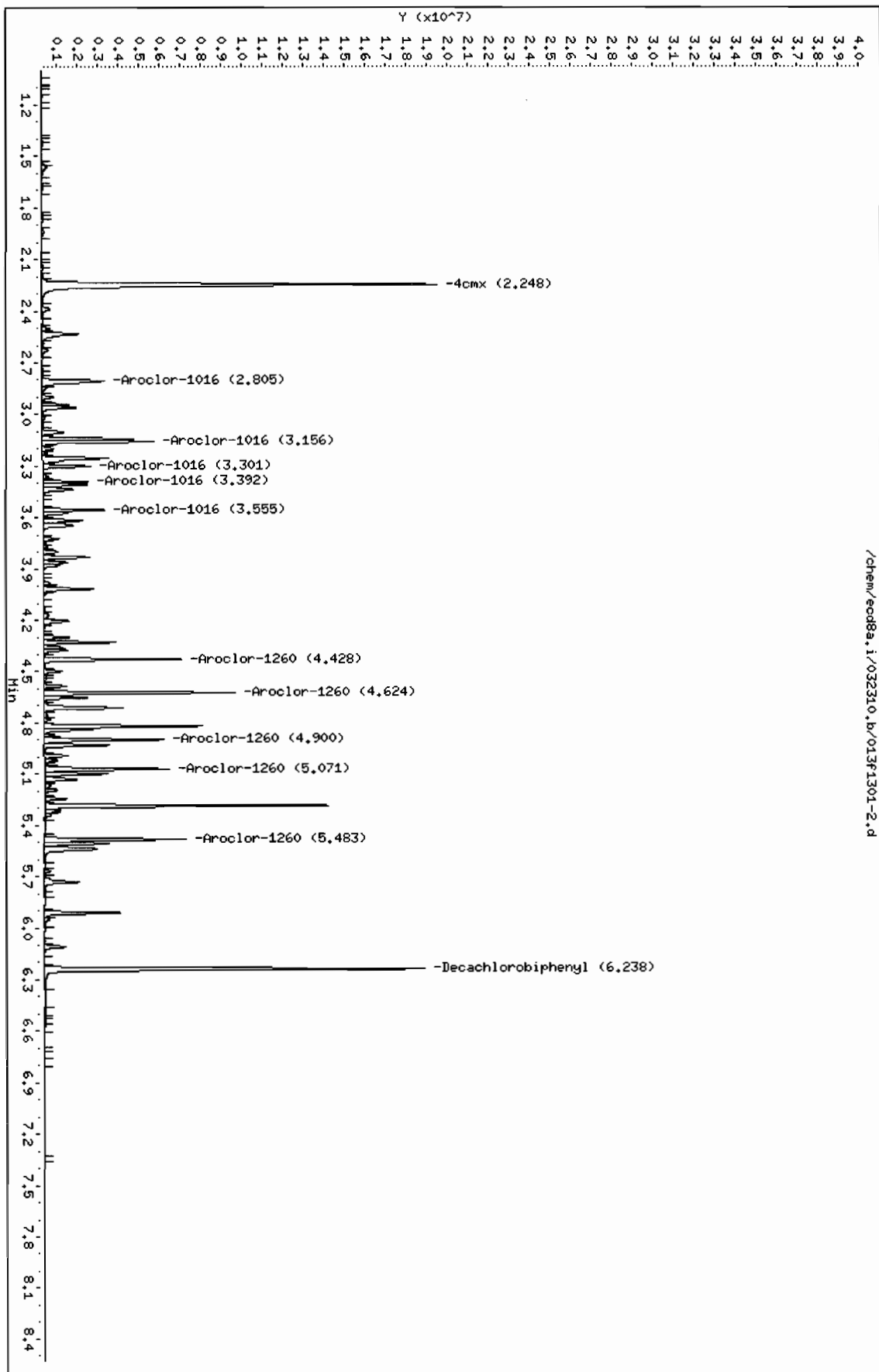
CAS #: 11096-82-5

4.428	4.429	-0.001	5741360	974.754	32.5	80.00- 120.00	100.00
4.624	4.625	-0.001	8355694	983.568	32.8	127.82- 167.82	145.54
4.900	4.900	0.000	4965399	980.090	32.7	67.21- 107.21	86.48
5.071	5.072	-0.001	5241195	983.520	32.8	73.14- 113.14	91.29
5.483	5.483	0.000	5846168	1036.37	34.5	79.68- 119.68	101.83
Average of Peak Concentrations =					33.1		



Data File: /chem/ecod8a.i/032310.b/013F1301-2.d  
Date : 23-MAR-2010 10:37  
Client ID: PBLK02LCS  
Sample Info: 11202077509111  
Volume Injected (uL): 1.0  
Column phase: CLP1

Instrument: ecod8a.i  
Operator: JHOC  
Column diameter: 0.25



Data File: /chem/ecd8a.i/032310.b/013b1301-2.d  
 Report Date: 24-Mar-2010 09:14

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL  
 Data file : /chem/ecd8a.i/032310.b/013b1301-2.d  
 Lab Smp Id: 1202077509 Client Smp ID: PBLK02LCS  
 Inj Date : 23-MAR-2010 10:37  
 Operator : JAOC Inst ID: ecd8a.i  
 Smp Info : |1202077509|1|  
 Misc Info : |ECD82P\_1S|967817|SVA|QC A|SOIL|LCS|||  
 Comment :  
 Method : /chem/ecd8a.i/032310.b/ECD8-B-8082-031810.m  
 Meth Date : 24-Mar-2010 08:39 jen01212 Quant Type: ESTD  
 Cal Date : 23-FEB-2010 11:32 Cal File: 017b1701.d  
 Als bottle: 13 QC Sample: LCS  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: 10-2199.sub  
 Target Version: 3.50 Sample Matrix: Soil  
 Processing Host: hpc1p1

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

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

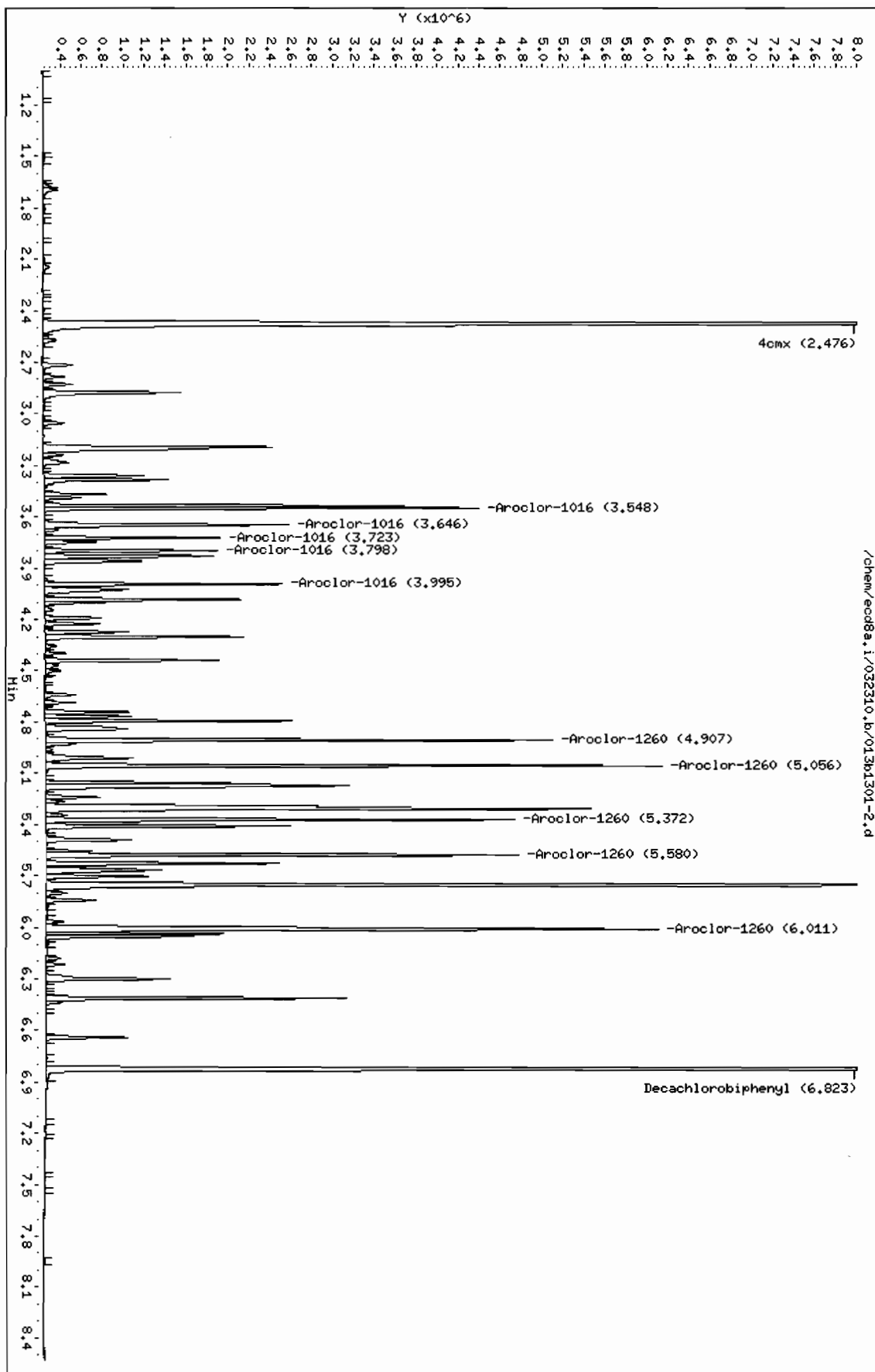
Cpnd Variable Local Compound Variable

CONCENTRATIONS							
			ON-COL	FINAL			
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
-----							
\$ 11 4cmx					CAS #: 877-09-8		
2.476	2.476	0.000	16082714	192.418	6.4 80.00- 120.00	100.00	
-----							
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.823	6.824	-0.001	13094728	220.999	7.4 80.00- 120.00	100.00	
-----							
1 Aroclor-1016					CAS #: 12674-11-2		
3.548	3.548	0.000	3337450	907.465	30.2 80.00- 120.00	100.00	
3.646	3.647	-0.001	2210630	866.511	28.9 44.17- 84.17	66.24	
3.723	3.723	0.000	1304750	874.479	29.1 19.13- 59.13	39.09	
3.798	3.799	-0.001	1297647	878.151	29.3 17.45- 57.45	38.88	

CONCENTRATIONS								
			ON-COL	FINAL				
RT	EXP RT	DLT RT	RESPONSE	( ug/L)	(ug/Kg)	TARGET	RANGE	RATIO
==	=====	=====	=====	=====	=====	=====	=====	=====
1 Aroclor-1016 (continued)								
3.995	3.995	0.000	1781227	879.703	29.3	31.97-	71.97	53.37
Average of Peak Concentrations =					29.4			
-----								
7 Aroclor-1260					CAS #: 11096-82-5			
4.907	4.907	0.000	3968859	1007.71	33.6	80.00-	120.00	100.00
5.056	5.056	0.000	4879619	1031.53	34.4	102.64-	142.64	122.95
5.372	5.373	-0.001	3737341	1042.01	34.7	72.26-	112.26	94.17
5.580	5.580	0.000	3873572	1043.46	34.8	76.20-	116.20	97.60
6.011	6.011	0.000	6363744	1089.43	36.3	134.50-	174.50	160.34
Average of Peak Concentrations =					34.8			
-----								

Data File: /chem/ecdb8a.i/032310.b/013b1301-2.d  
Date : 23-MAR-2010 10:37  
Client ID: PBLK02LCS  
Sample Info: 11202077509111  
Volume Injected (uL): 1.0  
Column phase: CLP2

Instrument: ecdb8a.i  
Operator: JHDC  
Column diameter: 0.25



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

Page 1 of 1

SDG Number: 10-2199

Matrix: SOIL

Lab Sample ID: 1202077510

Client Sample: QC for batch 967813

Client: LANL010

Project: QC

Client ID: LCSD for batch 967813

Method: SW846 8082

SOP Ref: GL-OA-E-040

Batch ID: 967817

Inst: ECD8A.I

Dilution: 1

Run Date: 03/23/2010 10:50

Analyst: JAOC

Inj. Vol: 1 uL

Prep Date: 03/22/2010 21:20

Aliquot: 30 g

Final Volume: 1 mL

Data File: 014f1401-1.d

Column: 1 CLP1

Level: LOW

014b1401-1.d

2 CLP2

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016		29.1	ug/kg	1.11	3.33	2
11104-28-2	Aroclor-1221	U	3.33	ug/kg	1.11	3.33	1
11141-16-5	Aroclor-1232	U	3.33	ug/kg	1.11	3.33	1
53469-21-9	Aroclor-1242	U	3.33	ug/kg	1.11	3.33	1
12672-29-6	Aroclor-1248	U	3.33	ug/kg	1.11	3.33	1
11097-69-1	Aroclor-1254	U	3.33	ug/kg	1.11	3.33	1
11096-82-5	Aroclor-1260		33.5	ug/kg	1.11	3.33	2

Data File: /chem/ecd8a.i/032310.b/014f1401-2.d  
Report Date: 24-Mar-2010 09:17

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL  
Data file : /chem/ecd8a.i/032310.b/014f1401-2.d  
Lab Smp Id: 1202077510 Client Smp ID: PBLK02LCSD  
Inj Date : 23-MAR-2010 10:50  
Operator : JAOC Inst ID: ecd8a.i  
Smp Info : |1202077510|1|  
Misc Info : |ECD82P\_1S|967817|SVA|QC A|SOIL|LCSD|||  
Comment :  
Method : /chem/ecd8a.i/032310.b/ECD8-F-8082-031810.m  
Meth Date : 24-Mar-2010 08:51 jen01212 Quant Type: ESTD  
Cal Date : 23-FEB-2010 11:32 Cal File: 017f1701.d  
Als bottle: 14 QC Sample: LCSD  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-2199.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	RESPONSE ( ug/L)	ON-COL	FINAL	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====	=====
\$ 11 4cmx CAS #: 877-09-8							
2.249	2.248	0.001	22309601	178.532	6.0	80.00- 120.00	100.00
-----							
\$ 12 Decachlorobiphenyl CAS #: 2051-24-3							
6.239	6.240	-0.001	16120841	195.758	6.5	80.00- 120.00	100.00
-----							
1 Aroclor-1016 CAS #: 12674-11-2							
2.805	2.806	-0.001	3766786	789.307	26.3	80.00- 120.00	100.00
3.157	3.157	0.000	4638772	859.446	28.6	106.71- 146.71	123.15
3.300	3.301	-0.001	1939455	824.723	27.5	32.91- 72.91	51.49
3.392	3.393	-0.001	1734887	791.619	26.4	26.61- 66.61	46.06

CONCENTRATIONS

ON-COL FINAL

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

1 Aroclor-1016 (continued)

3.554	3.555	-0.001	2460631	799.180	26.6	47.49- 87.49	65.32
Average of Peak Concentrations =				27.1			

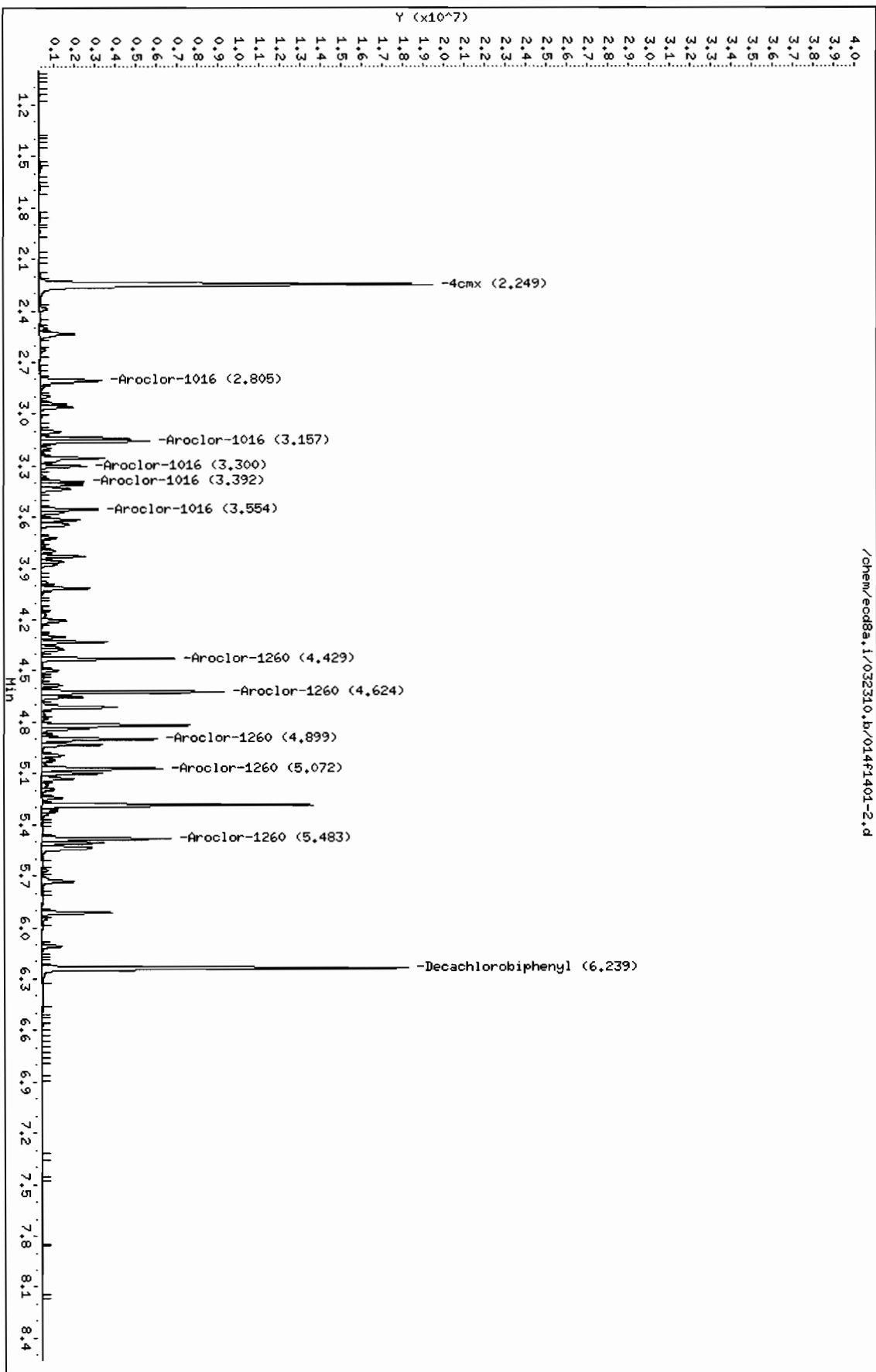
7 Aroclor-1260

CAS #: 11096-82-5

4.429	4.429	0.000	5485810	931.367	31.0	80.00- 120.00	100.00
4.624	4.625	-0.001	8095752	952.970	31.8	127.82- 167.82	147.58
4.899	4.900	-0.001	4802391	947.915	31.6	67.21- 107.21	87.54
5.072	5.072	0.000	4997890	937.864	31.3	73.14- 113.14	91.11
5.483	5.483	0.000	5505739	976.025	32.5	79.68- 119.68	100.36
Average of Peak Concentrations =				31.6			

Data File: /chem/eod8a.i/032310.b/014f1401-2.d  
Date: 23-MAR-2010 10:50  
Client ID: PBLK02LCSD  
Sample Info: 1120207751011  
Volume Injected (uL): 1.0  
Column phase: CLP1

Instrument: eod8a.i  
Operator: JROC  
Column diameter: 0.25





Data File: /chem/ecd8a.i/032310.b/014b1401-2.d  
Report Date: 24-Mar-2010 09:14

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL  
Data file : /chem/ecd8a.i/032310.b/014b1401-2.d  
Lab Smp Id: 1202077510 Client Smp ID: PBLK02LCSD  
Inj Date : 23-MAR-2010 10:50  
Operator : JAOC Inst ID: ecd8a.i  
Smp Info : |1202077510|1|  
Misc Info : |ECD82P\_1S|967817|SVA|QC A|SOIL|LCSD|||  
Comment :  
Method : /chem/ecd8a.i/032310.b/ECD8-B-8082-031810.m  
Meth Date : 24-Mar-2010 08:39 jen01212 Quant Type: ESTD  
Cal Date : 23-FEB-2010 11:32 Cal File: 017b1701.d  
Als bottle: 14 QC Sample: LCSD  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-2199.sub  
Target Version: 3.50 Sample Matrix: Soil  
Processing Host: hpc1p1

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

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

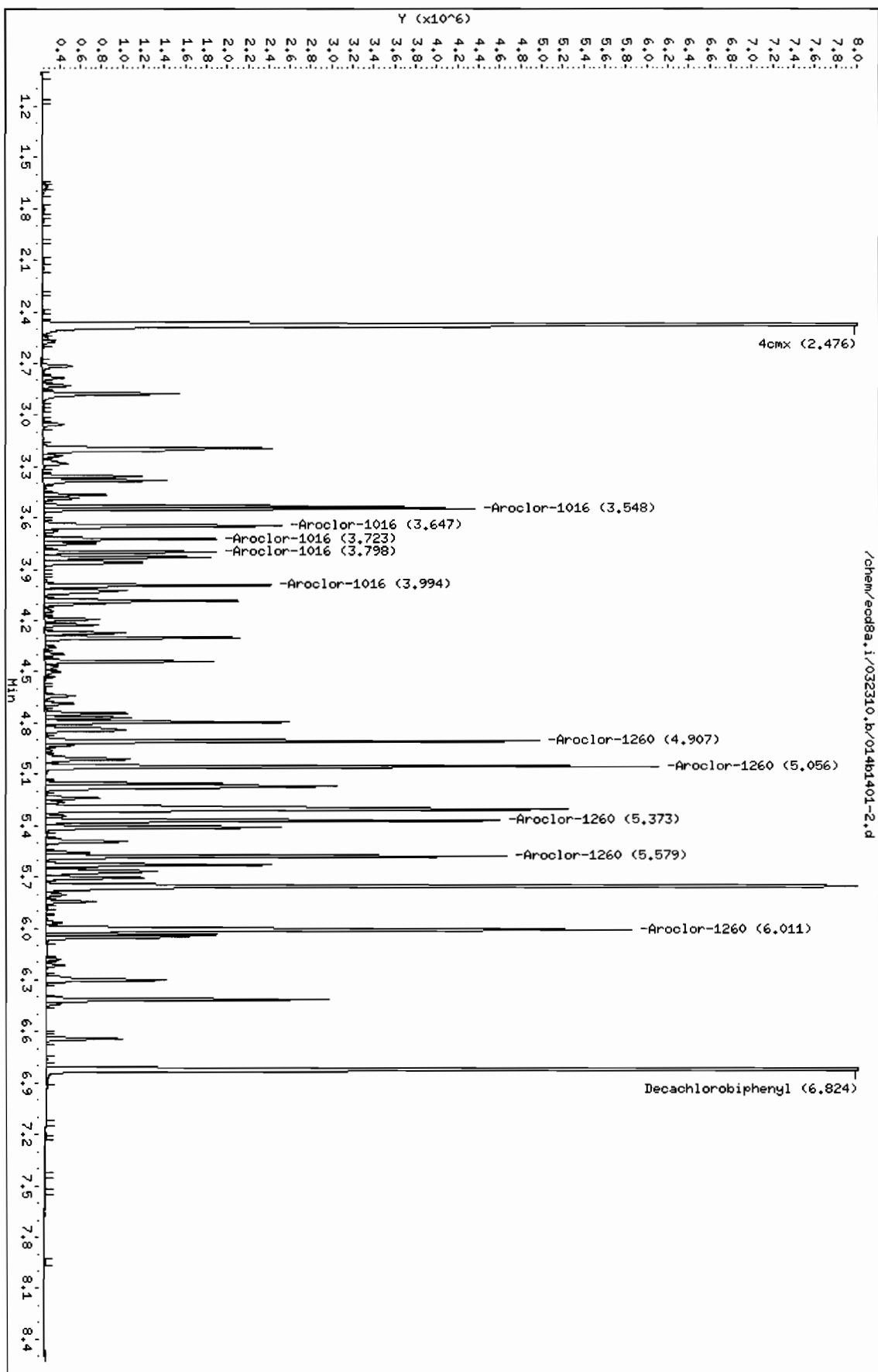
Cpnd Variable Local Compound Variable

CONCENTRATIONS						
			ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
\$ 11 4cmx CAS #: 877-09-8						
2.476	2.476	0.000	16091636 192.525	6.4	80.00- 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl CAS #: 2051-24-3						
6.824	6.824	0.000	12411705 209.471	7.0	80.00- 120.00	100.00
-----						
1 Aroclor-1016 CAS #: 12674-11-2						
3.548	3.548	0.000	3319079 902.470	30.1	80.00- 120.00	100.00
3.647	3.647	0.000	2180417 854.668	28.5	44.17- 84.17	65.69
3.723	3.723	0.000	1288904 863.858	28.8	19.13- 59.13	38.83
3.798	3.799	-0.001	1286006 870.273	29.0	17.45- 57.45	38.75

CONCENTRATIONS									
			ON-COL		FINAL				
RT	EXP RT	DLT RT	RESPONSE ( ug/L)		(ug/Kg)	TARGET	RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	=====	=====	
1 Aroclor-1016 (continued)									
3.994	3.995	-0.001	1762263 870.338		29.0	31.97-	71.97	53.09	
Average of Peak Concentrations =					29.1				
-----									
7 Aroclor-1260					CAS #: 11096-82-5				
4.907	4.907	0.000	3880417 985.251		32.8	80.00-	120.00	100.00	
5.056	5.056	0.000	4708892 995.437		33.2	102.64-	142.64	121.35	
5.373	5.373	0.000	3632741 1012.85		33.8	72.26-	112.26	93.62	
5.579	5.580	-0.001	3669832 988.577		33.0	76.20-	116.20	94.57	
6.011	6.011	0.000	6078066 1040.53		34.7	134.50-	174.50	156.63	
Average of Peak Concentrations =					33.5				

Data File: /chem/eod8a.i/032310.b/014b1401-2.d  
Date: 23-MAR-2010 10:50  
Client ID: PBLK02LCSJ  
Sample Info: 1120207510111  
Volume Injected (uL): 1.0  
Column phase: CLP2

Instrument: eod8a.i  
Operator: JHOC  
Column diameter: 0.25



# MISCELLANEOUS DATA

## GEL ORGANIC RUN LOG

INST'RUMENT' ID: ECD8

DATE: 03/09/2010 METHOD: ECD8-F-8082-020310a.m OPERATOR:JAOC REVIEWED BY: \_\_\_\_\_  
DATE: \_\_\_\_\_HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT DA699  
ALUMINA LOT 1240553-A  
COPPER LOT 236547-A

## Calibration &amp; QC Information

Initial Calibration Dates: See Calibration History and Standards Log

Initial Calibration Std ID's: See Calibration History and Standards Log

GEL SOP GL-OA-E-040

EPA Method: 8082 Polychlorinated Biphenyls PCBs by Gas Chromatography

Sequence Number: /chem/ecd8a.i/030910.b Injection Volume: 1.0 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WAR100219-99 01	JAOC	09-MAR-2010 07:59		030910	1.0l	CLEAN	
002f0201.d	WAR100225-60 01	JAOC	09-MAR-2010 08:11		030910	1.0l	DUSE	
003f0301.d	WAR100201-54	JAOC	09-MAR-2010 08:24		030910	1.0l	DUSE	
004f0401.d	WAR091217-42	JAOC	09-MAR-2010 08:36		030910	1.0l	PASSES BOTH COLUMNS	
005f0501.d	WAR091217-48	JAOC	09-MAR-2010 08:48		030910	1.0l	DUSE	
006f0601.d	WAR100309-60 01	JAOC	09-MAR-2010 09:08		030910	1.0l	PASSES BOTH COLUMNS	
007f0701.d	WAR100309-05 54	JAOC	09-MAR-2010 09:27		030910	1.0l	1254 LEVEL 1	
008f0801.d	WAR100309-06 54	JAOC	09-MAR-2010 09:39		030910	1.0l	1254 LEVEL 2	
009f0901.d	WAR100309-07 54	JAOC	09-MAR-2010 09:51		030910	1.0l	1254 LEVEL 3	
010f1001.d	WAR100309-08 54	JAOC	09-MAR-2010 10:04		030910	1.0l	1254 LEVEL 4	
011f1101.d	WAR100219-02 54	JAOC	09-MAR-2010 10:16		030910	1.0l	1254 LEVEL 5	
012f1201.d	WAR100201-54	JAOC	09-MAR-2010 10:29		030910	1.0l	PASSES BOTH COLUMNS	
013f1301.d	WAR100309-09 48	JAOC	09-MAR-2010 10:41		030910	1.0l	1248 LEVEL 1	
014f1401.d	WAR100309-10 48	JAOC	09-MAR-2010 10:53		030910	1.0l	1248 LEVEL 2	
015f1501.d	WAR100309-11 48	JAOC	09-MAR-2010 11:05		030910	1.0l	1248 LEVEL 3	

Instrument Batch: /chem/ecd8a.i/030910.b

Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	WAR100309-12 48	JAOC	09-MAR-2010 11:18		030910	1.0l	1248 LEVEL 4	
017f1701.d	WAR100211-01 48	JAOC	09-MAR-2010 11:30		030910	1.0l	1248 LEVEL 5	

018f1801.d	WAR091217-48	JAO	09-MAR-2010 11:43		030910	1.0	PASSES BOTH COLUMNS
019f1901.d	WAR100104-32	JAO	09-MAR-2010 11:55		030910	1.0	PATTERN ONLY
020f2001.d	WAR100104-21	JAO	09-MAR-2010 12:07		030910	1.0	PATTERN ONLY
021f2101.d	WAR100104-62	JAO	09-MAR-2010 12:20		030910	1.0	PATTERN ONLY
022f2201.d	WAR100107-68	JAO	09-MAR-2010 12:32		030910	1.0	PATTERN ONLY
023f2301.d	WAR091219-DDT	JAO	09-MAR-2010 12:44		030910	1.0	DDT
024f2401.d	WAR100219-99 02	JAO	09-MAR-2010 12:57		030910	1.0	CLEAN
025f2501.d	248545006	JAO	09-MAR-2010 13:09	961905	10-2213	1.0	LANL UPLOAD BOTH, USE HIGHER
026f2601.d	WAR100309-60 02	JAO	09-MAR-2010 13:22		030910	1.0	PASSES BOTH COLUMNS

## GEL ORGANIC RUN LOG

INSTRUMENT ID: ECD8

DATE: 03/19/2010 METHOD: ECD8-F-8082-031810.m OPERATOR: JAOB REVIEWED BY: \_\_\_\_\_  
DATE: \_\_\_\_\_HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT DA699  
ALUMINA LOT 1281992-A  
COPPER LOT 1249397-A

Calibration &amp; QC Information

Initial Calibration Dates: See Calibration History and Standards Log

Initial Calibration Std ID's: See Calibration History and Standards Log

GEL SOP GL-OA-E-040

EPA Method: 8082 Polychlorinated Biphenyls PCBs by Gas Chromatography

Sequence Number: /chem/ecd8a.i/031810.b Injection Volume: 1.0 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WAR100219-99 01	JAOB	18-MAR-2010 06:13		031810	1.0l	CLEAN	
002f0201.d	WAR100317-01 60	JAOB	18-MAR-2010 06:25		031810	1.0l	1660 LEVEL 1	
003f0301.d	WAR100317-02 60	JAOB	18-MAR-2010 06:38		031810	1.0l	1660 LEVEL 2	
004f0401.d	WAR100317-03 60	JAOB	18-MAR-2010 06:50		031810	1.0l	1660 LEVEL 3	
005f0501.d	WAR100317-04 60	JAOB	18-MAR-2010 07:02		031810	1.0l	1660 LEVEL 4	
006f0601.d	WAR100317-01 60	JAOB	18-MAR-2010 07:15		031810	1.0l	1660 LEVEL 5	
007f0701.d	WAR100224-60 01	JAOB	18-MAR-2010 07:27		031810	1.0l	PASSES BOTH COLUMNS	
008f0801.d	WAR1002201-54	JAOB	18-MAR-2010 07:39		031810	1.0l	PASSES BOTH COLUMNS	
009f0901.d	WAR091217-42	JAOB	18-MAR-2010 07:52		031810	1.0l	PASSES BOTH COLUMNS	
010f1001.d	WAR091217-48	JAOB	18-MAR-2010 08:04		031810	1.0l	PASSES BOTH COLUMNS	
011f1101.d	WAR100104-32	JAOB	18-MAR-2010 08:17		031810	1.0l	PATTERN ONLY	
012f1201.d	WAR100104-21	JAOB	18-MAR-2010 08:29		031810	1.0l	PATTERN ONLY	
013f1301.d	WAR100104-62	JAOB	18-MAR-2010 08:41		031810	1.0l	PATTERN ONLY	
014f1401.d	WAR100107-68	JAOB	18-MAR-2010 08:54		031810	1.0l	PATTERN ONLY	
015f1501.d	WAR091219-DDT	JAOB	18-MAR-2010 09:06		031810	1.0l	DDT	

Instrument Batch: /chem/ecd8a.i/031810.b

Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	WAR100219-99 02	JAOB	18-MAR-2010 09:19		031810	1.0l	CLEAN	
017f1701.d	1202073907	JAOB	18-MAR-2010 09:31	1966402	10033	1.0l	QC A	UPLOAD BOTH, USE HIGHER

018f1801.d	1202073908	JAOC	18-MAR-2010 09:43	966402	10033	1.0	QC A	1	UPLOAD BOTH, USE HIGHER
019f1901.d	1202073909	JAOC	18-MAR-2010 09:55	966402	10033	1.0	QC A	1	UPLOAD BOTH, USE HIGHER
020f2001.d	1248554001	JAOC	18-MAR-2010 10:08	966402	10033	1.0	WSRS	1	UPLOAD BOTH, USE HIGHER
021f2101.d	1248554002	JAOC	18-MAR-2010 10:20	966402	10033	1.0	WSRS	1	UPLOAD BOTH, USE HIGHER
022f2201.d	1248554003	JAOC	18-MAR-2010 10:33	966402	10033	1.0	WSRS	1	UPLOAD BOTH, USE HIGHER
023f2301.d	1248554004	JAOC	18-MAR-2010 10:45	966402	10033	1.0	WSRS	1	UPLOAD BOTH, USE HIGHER
024f2401.d	1248554005	JAOC	18-MAR-2010 10:57	966402	10033	1.0	WSRS	1	UPLOAD BOTH, USE HIGHER
025f2501.d	1248554006	JAOC	18-MAR-2010 11:10	966402	10033	1.0	WSRS	1	UPLOAD BOTH, USE HIGHER
026f2601.d	1248554007	JAOC	18-MAR-2010 11:22	966402	10033	5.0	WSRS	1	UPLOAD BOTH, USE HIGHER
027f2701.d	WAR100224-60 02	JAOC	18-MAR-2010 11:39	1	031810	1.0		1	PASSES BOTH COLUMNS
028f2801.d	WAR100219-99 03	JAOC	18-MAR-2010 11:51	1	031810	1.0		1	CLEAN
029f2901.d	1248554008	JAOC	18-MAR-2010 12:03	966402	10033	5.0	WSRS	1	UPLOAD BOTH, USE HIGHER
030f3001.d	1248554009	JAOC	18-MAR-2010 12:16	966402	10033	1.0	WSRS	1	UPLOAD BOTH, USE HIGHER
031f3101.d	1248554010	JAOC	18-MAR-2010 12:28	966402	10033	1.0	WSRS	1	UPLOAD BOTH, USE HIGHER
032f3201.d	1248554011	JAOC	18-MAR-2010 12:40	966402	10033	1.0	WSRS	1	UPLOAD BOTH, USE HIGHER
033f3301.d	1248554012	JAOC	18-MAR-2010 12:53	966402	10033	1.0	WSRS	1	DUSE, 5X RERUN END SEQUENCE
034f3401.d	1248554013	JAOC	18-MAR-2010 13:05	966402	10033	1.0	WSRS	1	DUSE, AFTER OVERRANGE RERUN END SEQUENCE
035f3501.d	1248554014	JAOC	18-MAR-2010 13:17	966402	10033	1.0	WSRS	1	UPLOAD BOTH, USE HIGHER

Instrument Batch: /chem/ecd8a.i/031810.b

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036f3601.d	1248554015	JAOC	18-MAR-2010 13:30	966402	10033	1.0	WSRS	1	UPLOAD BOTH, USE HIGHER
037f3701.d	1248554016	JAOC	18-MAR-2010 13:42	966402	10033	1.0	WSRS	1	UPLOAD BOTH, USE HIGHER
038f3801.d	1248554017	JAOC	18-MAR-2010 13:54	966402	10033	1.0	WSRS	1	UPLOAD BOTH, USE HIGHER
039f3901.d	WAR100224-60 03	JAOC	18-MAR-2010 14:11	1	031810	1.0		1	PASSES BOTH COLUMNS
040f4001.d	WAR100219-99 04	JAOC	18-MAR-2010 14:23	1	031810	1.0		1	CLEAN
041f4101.d	1248554018	JAOC	18-MAR-2010 14:36	966402	10033	1.0	WSRS	1	DUSE, 5X RERUN 031910



1042f4201.d	1248554019	JAO	18-MAR-2010 14:48	1966402	110033	1	1.01WSRS	1	DUSE, AFTER OVERRANGE	RERUN 031910	+
1043f4301.d	1248554020	JAO	18-MAR-2010 15:01	1966402	110033	1	1.01WSRS	1	UPLOAD BOTH, USE HIGHER		+
1044f4401.d	1248554012	JAO	18-MAR-2010 15:13	1966402	110033	1	5.01WSRS	1	UPLOAD BOTH, USE HIGHER		+
1045f4501.d	1248554013	JAO	18-MAR-2010 15:25	1966402	110033	1	1.01WSRS	1	UPLOAD BOTH, USE HIGHER		+
1046f4601.d	1WARI00224-60 04	JAO	18-MAR-2010 15:38	1	1031810	1	1.01	1	PASSES BOTH COLUMNS		+
1047f4701.d	1WARI00219-99 05	JAO	18-MAR-2010 15:50	1	1031810	1	1.01	1	CLEAN		+

## GEL ORGANIC RUN LOG

INSTRUMENT ID: ECD8

DATE: 03/22/2010 METHOD: ECD8-F-8082-031810.m OPERATOR: JAOC REVIEWED BY: \_\_\_\_\_  
DATE: \_\_\_\_\_HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT DA699  
ALUMINA LOT 1281992-A  
COPPER LOT 1249397-ACalibration & QC Information  
Initial Calibration Dates: See Calibration History and Standards Log  
Initial Calibration Std ID's: See Calibration History and Standards Log  
GEL SOP GL-OA-E-040EPA Method: 8082 Polychlorinated Biphenyls PCBs by Gas Chromatography  
Sequence Number: /chem/ecd8a.i/031910.b Injection Volume: 1.0 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WAR100219-99 01	JAOC	19-MAR-2010 06:26		031910	1.0l		CLEAN
002f0201.d	WAR100224-60 01	JAOC	19-MAR-2010 06:39		031910	1.0l		PASSES BOTH COLUMNS
003f0301.d	WAR100201-54	JAOC	19-MAR-2010 06:51		031910	1.0l		PASSES BOTH COLUMNS
004f0401.d	WAR091217-42	JAOC	19-MAR-2010 07:03		031910	1.0l		DUSE
005f0501.d	WAR091217-48	JAOC	19-MAR-2010 07:16		031910	1.0l		PASSES BOTH COLUMNS
006f0601.d	WAR100104-32	JAOC	19-MAR-2010 07:28		031910	1.0l		PATTERN ONLY
007f0701.d	WAR091217-42	JAOC	19-MAR-2010 07:41		031910	1.0l		PASSES BOTH COLUMNS
008f0801.d	WAR100104-21	JAOC	19-MAR-2010 07:53		031910	1.0l		PATTERN ONLY
009f0901.d	WAR100104-62	JAOC	19-MAR-2010 08:05		031910	1.0l		PATTERN ONLY
010f1001.d	WAR100107-68	JAOC	19-MAR-2010 08:18		031910	1.0l		PATTERN ONLY
011f1101.d	WAR091219-DDT	JAOC	19-MAR-2010 08:30		031910	1.0l		DDT
012f1201.d	WAR100219-99 02	JAOC	19-MAR-2010 08:43		031910	1.0l		CLEAN
013f1301.d	248554018	JAOC	19-MAR-2010 08:55	1966402	10033	5.0l	WSRS	DUSE, CHECK OVER 20%
014f1401.d	248554019	JAOC	19-MAR-2010 09:07	1966402	10033	1.0l	WSRS	DUSE, CHECK OVER 20%
015f1501.d	WAR100224-60 02	JAOC	19-MAR-2010 09:20		031910	1.0l		CHECK FAILS HIGH

Instrument Batch: /chem/ecd8a.i/031910.b

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Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	WAR100219-99 03	JAOC	19-MAR-2010 09:32		031910	1.0l		CLEAN
017f1701.d	WAR100224-60 03	JAOC	19-MAR-2010 09:54		031910	1.0l		PASSES ALL PEAKS 20%

018f1801.d	WAR100219-99 04	JAO	19-MAR-2010 10:07		031910		1.0		CLEAN	
019f1901.d	248554018	JAO	19-MAR-2010 10:19	966402	10033		5.0 WSRS		UPLOAD BOTH, USE HIGHER	
020f2001.d	248554019	JAO	19-MAR-2010 10:36	966402	10033		1.0 WSRS		UPLOAD BOTH, USE HIGHER	
021f2101.d	WAR100224-60 04	JAO	19-MAR-2010 10:52		031910		1.0		PASSES ALL PEAKS 20%	
022f2201.d	WAR100219-99 05	JAO	19-MAR-2010 11:21		031910		1.0		CLEAN	
023f2301.d	WAR100224-60	JAO	19-MAR-2010 11:33		031910		1.0		DUSE	
024f2401.d	WAR100319-60	JAO	19-MAR-2010 11:57		031910		1.0		PASSES AVG 15%	
025f2501.d	WAR100219-99 06	JAO	19-MAR-2010 12:10		031910		1.0		CLEAN	
026f2601.d	1202073937	JAO	19-MAR-2010 12:23	966420	10-2168		1.0 QC A		UPLOAD BOTH, USE HIGHER	
027f2701.d	1202073938	JAO	19-MAR-2010 12:35	966420	10-2168		1.0 QC A		UPLOAD BOTH, USE HIGHER	
028f2801.d	248394001	JAO	19-MAR-2010 12:47	966420	10-2168		1.0 LANL		UPLOAD BOTH, USE HIGHER	
029f2901.d	248394002	JAO	19-MAR-2010 13:00	966420	10-2168		1.0 LANL		UPLOAD BOTH, USE HIGHER	
030f3001.d	248394003	JAO	19-MAR-2010 13:12	966420	10-2168		1.0 LANL		UPLOAD BOTH, USE HIGHER	
031f3101.d	248394004	JAO	19-MAR-2010 13:24	966420	10-2168		1.0 LANL		UPLOAD BOTH, USE HIGHER	
032f3201.d	248394006	JAO	19-MAR-2010 13:37	966420	10-2168		1.0 LANL		DUSE: SENT FOR RE DUE TO LOW 4CMX: UPLOAD BOTH, USE HIGHER	
033f3301.d	248514002	JAO	19-MAR-2010 13:49	966420	10-2196		1.0 LANL		DUSE: SENT FOR RE DUE TO LOW \$s: UPLOAD BOTH, USE HIGHER	
034f3401.d	248514003	JAO	19-MAR-2010 14:02	966420	10-2196		1.0 LANL		UPLOAD BOTH, USE HIGHER	
035f3501.d	248517001	JAO	19-MAR-2010 14:14	966420	10-2198		1.0 LANL		UPLOAD BOTH, USE HIGHER	

Instrument Batch: /chem/ecd8a.i/031910.b

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Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	WAR100319-60 07	JAO	19-MAR-2010 14:30		031910		1.0	PASSES AVG 15%
037f3701.d	WAR100219-99 08	JAO	19-MAR-2010 14:43		031910		1.0	CLEAN
038f3801.d	248519001	JAO	19-MAR-2010 14:55	966420	10-2199		1.0 LANL	UPLOAD BOTH, USE HIGHER
039f3901.d	248519002	JAO	19-MAR-2010 15:08	966420	10-2199		1.0 LANL	DUSE: SENT FOR RE DUE TO LOW 4CMX: UPLOAD BOTH, USE HIGHER
040f4001.d	248519003	JAO	19-MAR-2010 15:20	966420	10-2199		1.0 LANL	UPLOAD BOTH, USE HIGHER
041f4101.d	248519004	JAO	19-MAR-2010 15:32	966420	10-2199		1.0 LANL	DUSE: SENT FOR RE DUE TO LOW 4CMX: UPLOAD BOTH, USE HIGHER

042f4201.d	1248519005	JAO	19-MAR-2010	15:45	966420	10-2199	1.0	LANL	UPLOAD BOTH, USE HIGHER	+
043f4301.d	1248519006	JAO	19-MAR-2010	15:57	966420	10-2199	1.0	LANL	UPLOAD BOTH, USE HIGHER	+
044f4401.d	1248519007	JAO	19-MAR-2010	16:09	966420	10-2199	1.0	LANL	UPLOAD BOTH, USE HIGHER	+
045f4501.d	1248519008	JAO	19-MAR-2010	16:22	966420	10-2199	1.0	LANL	UPLOAD BOTH, USE HIGHER	+
046f4601.d	1248519009	JAO	19-MAR-2010	16:34	966420	10-2199	1.0	LANL	UPLOAD BOTH, USE HIGHER	+
047f4701.d	1248519010	JAO	19-MAR-2010	16:46	966420	10-2199	1.0	LANL	UPLOAD BOTH, USE HIGHER	+
048f4801.d	1248519011	JAO	19-MAR-2010	17:03	966420	10-2199	1.0	LANL	UPLOAD BOTH, USE HIGHER	+
049f4901.d	1248519012	JAO	19-MAR-2010	17:15	966420	10-2199	1.0	LANL	UPLOAD BOTH, USE HIGHER	+
050f5001.d	1248519013	JAO	19-MAR-2010	17:28	966420	10-2199	1.0	LANL	UPLOAD BOTH, USE HIGHER	+
051f5101.d	1248519014	JAO	19-MAR-2010	17:40	966420	10-2199	1.0	LANL	UPLOAD BOTH, USE HIGHER	+
052f5201.d	1248519015	JAO	19-MAR-2010	17:52	966420	10-2199	1.0	LANL	UPLOAD BOTH, USE HIGHER	+
053f5301.d	1248519016	JAO	19-MAR-2010	18:05	966420	10-2199	1.0	LANL	UPLOAD BOTH, USE HIGHER	+
054f5401.d	1248519017	JAO	19-MAR-2010	18:17	966420	10-2199	1.0	LANL	UPLOAD BOTH, USE HIGHER	+
055f5501.d	1248519018	JAO	19-MAR-2010	18:30	966420	10-2199	1.0	LANL	UPLOAD BOTH, USE HIGHER	+

# GEL ORGANIC RUN LOG

INSTRUMENT ID: ECD8

DATE: 03/24/2010 METHOD: ECD8-F-8082-031810.m OPERATOR: JAOB REVIEWED BY: \_\_\_\_\_  
DATE: \_\_\_\_\_

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT DA699  
ALUMINA LOT 1281992-A  
COPPER LOT 1249397-A

Calibration & QC Information  
Initial Calibration Dates: See Calibration History and Standards Log  
Initial Calibration Std ID's: See Calibration History and Standards Log  
GEL SOP GL-OA-E-040

EPA Method: 8082 Polychlorinated Biphenyls PCBs by Gas Chromatography  
Sequence Number: /chem/ecd8a.i/032310.b Injection Volume: 1.0 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WAR100219-99 01	JAOB	23-MAR-2010 08:09		032310	1.0l	CLEAN	
002f0201.d	WAR100224-60 01	JAOB	23-MAR-2010 08:22		032310	1.0l	PASSES BOTH COLUMNS	
003f0301.d	WAR100219-54	JAOB	23-MAR-2010 08:34		032310	1.0l	PASSES BOTH COLUMNS	
004f0401.d	WAR091217-42	JAOB	23-MAR-2010 08:46		032310	1.0l	PASSES BOTH COLUMNS	
005f0501.d	WAR100223-48	JAOB	23-MAR-2010 08:59		032310	1.0l	PASSES BOTH COLUMNS	
006f0601.d	WAR100104-32	JAOB	23-MAR-2010 09:11		032310	1.0l	PATTERN ONLY	
007f0701.d	WAR100104-21	JAOB	23-MAR-2010 09:23		032310	1.0l	PATTERN ONLY	
008f0801.d	WAR100104-62	JAOB	23-MAR-2010 09:36		032310	1.0l	PATTERN ONLY	
009f0901.d	WAR100107-68	JAOB	23-MAR-2010 09:48		032310	1.0l	PATTERN ONLY	
010f1001.d	WAR091219-DDT	JAOB	23-MAR-2010 10:00		032310	1.0l	DDT	
011f1101.d	WAR100219-99 02	JAOB	23-MAR-2010 10:13		032310	1.0l	CLEAN	
012f1201.d	11202077508	JAOB	23-MAR-2010 10:25	967817	10-2168	1.0l	QC A	UPLOAD BOTH, USE HIGHER
013f1301.d	11202077509	JAOB	23-MAR-2010 10:37	967817	10-2168	1.0l	QC A	UPLOAD BOTH, USE HIGHER
014f1401.d	11202077510	JAOB	23-MAR-2010 10:50	967817	10-2168	1.0l	QC A	UPLOAD BOTH, USE HIGHER
015f1501.d	1248394006	JAOB	23-MAR-2010 11:02	967817	10-2168	1.0l	LANL	UPLOAD BOTH, USE HIGHER: DOESN'T CONFIRM \$FAILURE

Instrument Batch: /chem/ecd8a.i/032310.b

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Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	1248514002	JAOB	23-MAR-2010 11:14	967817	10-2196	1.0l	LANL	UPLOAD BOTH, USE HIGHER: DOESN'T CONFIRM \$FAILURE
017f1701.d	1248519002	JAOB	23-MAR-2010 11:27	967817	10-2199	1.0l	LANL	UPLOAD BOTH, USE HIGHER: DOESN'T CONFIRM \$FAILURE

											+
018f1801.d	248519004	JAOC	23-MAR-2010 11:43	967817	10-2199		1.0 LANL		UPLOAD BOTH, USE HIGHER: DOESN'T CONFIRM \$FAILURE		+
											+
019f1901.d	WARI00224-60 02	JAOC	23-MAR-2010 12:01		032310		1.0		PASSES BOTH COLUMNS		+
											+
020f2001.d	WARI00219-99 03	JAOC	23-MAR-2010 12:14		032310		1.0		CLEAN		+
											+
021f2101.d	1202077524	JAOC	23-MAR-2010 12:26	967824	10-2412		1.0 QC A		UPLOAD BOTH, USE HIGHER		+
											+
022f2201.d	1202077525	JAOC	23-MAR-2010 12:38	967824	10-2412		1.0 QC A		UPLOAD BOTH, USE HIGHER		+
											+
023f2301.d	249244001	JAOC	23-MAR-2010 12:51	967824	10-2412		10.0 LANL		UPLOAD BOTH, USE HIGHER		+
											+
024f2401.d	249244002	JAOC	23-MAR-2010 13:03	967824	10-2412		5.0 LANL		UPLOAD BOTH, USE HIGHER		+
											+
025f2501.d	249244003	JAOC	23-MAR-2010 13:15	967824	10-2412		1.0 LANL		UPLOAD BOTH, USE HIGHER		+
											+
026f2601.d	249244004	JAOC	23-MAR-2010 13:28	967824	10-2412		1.0 LANL		UPLOAD BOTH, USE HIGHER		+
											+
027f2701.d	249244005	JAOC	23-MAR-2010 13:40	967824	10-2412		5.0 LANL		UPLOAD BOTH, USE HIGHER		+
											+
028f2801.d	249244006	JAOC	23-MAR-2010 13:52	967824	10-2412		10.0 LANL		UPLOAD BOTH, USE HIGHER		+
											+
029f2901.d	249329001	JAOC	23-MAR-2010 14:05	967824	10-2430		5.0 LANL		UPLOAD BOTH, USE HIGHER		+
											+
030f3001.d	249329002	JAOC	23-MAR-2010 14:21	967824	10-2430		5.0 LANL		UPLOAD BOTH, USE HIGHER		+
											+
031f3101.d	WARI00224-60 03	JAOC	23-MAR-2010 14:38		032310		1.0		PASSES BOTH COLUMNS		+
											+
032f3201.d	WARI00219-99 04	JAOC	23-MAR-2010 14:50		032310		1.0		CLEAN		+
											+
033f3301.d	249329003	JAOC	23-MAR-2010 15:03	967824	10-2430		5.0 LANL		UPLOAD BOTH, USE HIGHER		+
											+
034f3401.d	249329004	JAOC	23-MAR-2010 15:15	967824	10-2430		5.0 LANL		UPLOAD BOTH, USE HIGHER		+
											+
035f3501.d	249335002	JAOC	23-MAR-2010 15:27	967824	10-2436		1.0 LANL		UPLOAD BOTH, USE HIGHER		+
											+

Instrument Batch: /chem/ecd8a.i/032310.b

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Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	1202077526	JAOC	23-MAR-2010 15:40	967824	10-2436	1.0 QC A		UPLOAD BOTH, USE HIGHER
037f3701.d	1202077527	JAOC	23-MAR-2010 15:52	967824	10-2436	1.0 QC A		UPLOAD BOTH, USE HIGHER
038f3801.d	249335003	JAOC	23-MAR-2010 16:04	967824	10-2436	5.0 LANL		UPLOAD BOTH, USE HIGHER
039f3901.d	249335004	JAOC	23-MAR-2010 16:17	967824	10-2436	5.0 LANL		UPLOAD BOTH, USE HIGHER
040f4001.d	249335005	JAOC	23-MAR-2010 16:29	967824	10-2436	5.0 LANL		UPLOAD BOTH, USE HIGHER
041f4101.d	249335006	JAOC	23-MAR-2010 16:42	967824	10-2436	5.0 LANL		UPLOAD BOTH, USE HIGHER

1042f4201.d	1249335007	IJAOC	123-MAR-2010	16:58	967824	110-2436	20.0	LANL	UPLOAD BOTH, USE HIGHER	
1043f4301.d	1WAR100224-60 04	IJAOC	123-MAR-2010	17:15		032310	1.0		FRONT PASSING ALL PEAKS, BACK PASSING AVG	
1044f4401.d	1WAR100219-99 05	IJAOC	123-MAR-2010	17:27		032310	1.0		CLEAN	
1045f4501.d	1249335008	IJAOC	123-MAR-2010	17:39	967824	110-2436	20.0	LANL	UPLOAD BOTH, USE HIGHER	
1046f4601.d	1WAR100224-60 05	IJAOC	123-MAR-2010	17:56		032310	1.0		BACK FAILS HIGH 1260 AND DCB, FRONT PASSING AVG	
1047f4701.d	1WAR100219-99 06	IJAOC	123-MAR-2010	18:08		032310	1.0		CLEAN	

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL  
 Data file : /chem/ecd8a.i/031910.b/052b5201.d  
 Lab Smp Id: 1202073939 Client Smp ID: RE36-10-8466MS  
 Inj Date : 19-MAR-2010 17:52  
 Operator : JAOC Inst ID: ecd8a.i  
 Smp Info : |1202073939|10|  
 Misc Info : |ECD82P\_1S|966420|SVA|QC A|SOIL|MS|||  
 Comment :  
 Method : /chem/ecd8a.i/031910.b/ECD8-B-8082-031810.m  
 Meth Date : 22-Mar-2010 07:51 jen01212 Quant Type: ESTD  
 Cal Date : 23-FEB-2010 11:32 Cal File: 017b1701.d  
 Als bottle: 52 QC Sample: MS  
 Dil Factor: 10.00000  
 Integrator: Falcon Compound Sublist: 10-2202.sub  
 Target Version: 3.50 Sample Matrix: Soil

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

Name	Value	Description
DF	10.00000	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	12.38630	% 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				
2.477	2.477	0.000	554084 6.62922	2.5	80.00- 120.00	100.00		
-----								
\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3				
6.824	6.824	0.000	428531 7.23229	2.8	80.00- 120.00	100.00 (M)		
-----								
1 Aroclor-1016				CAS #: 12674-11-2				
3.548	3.548	0.000	143472 39.0106	14.8	80.00- 120.00	100.00 (aM)		
3.647	3.648	-0.001	105634 41.4058	15.8	44.99- 84.99	73.63		
3.724	3.724	0.000	56132 37.6212	14.3	19.11- 59.11	39.12		
3.799	3.799	0.000	64193 43.4411	16.5	17.60- 57.60	44.74		
3.996	3.995	0.001	84078 41.5240	15.8	31.73- 71.73	58.60		
Average of Peak Concentrations =				15.4				



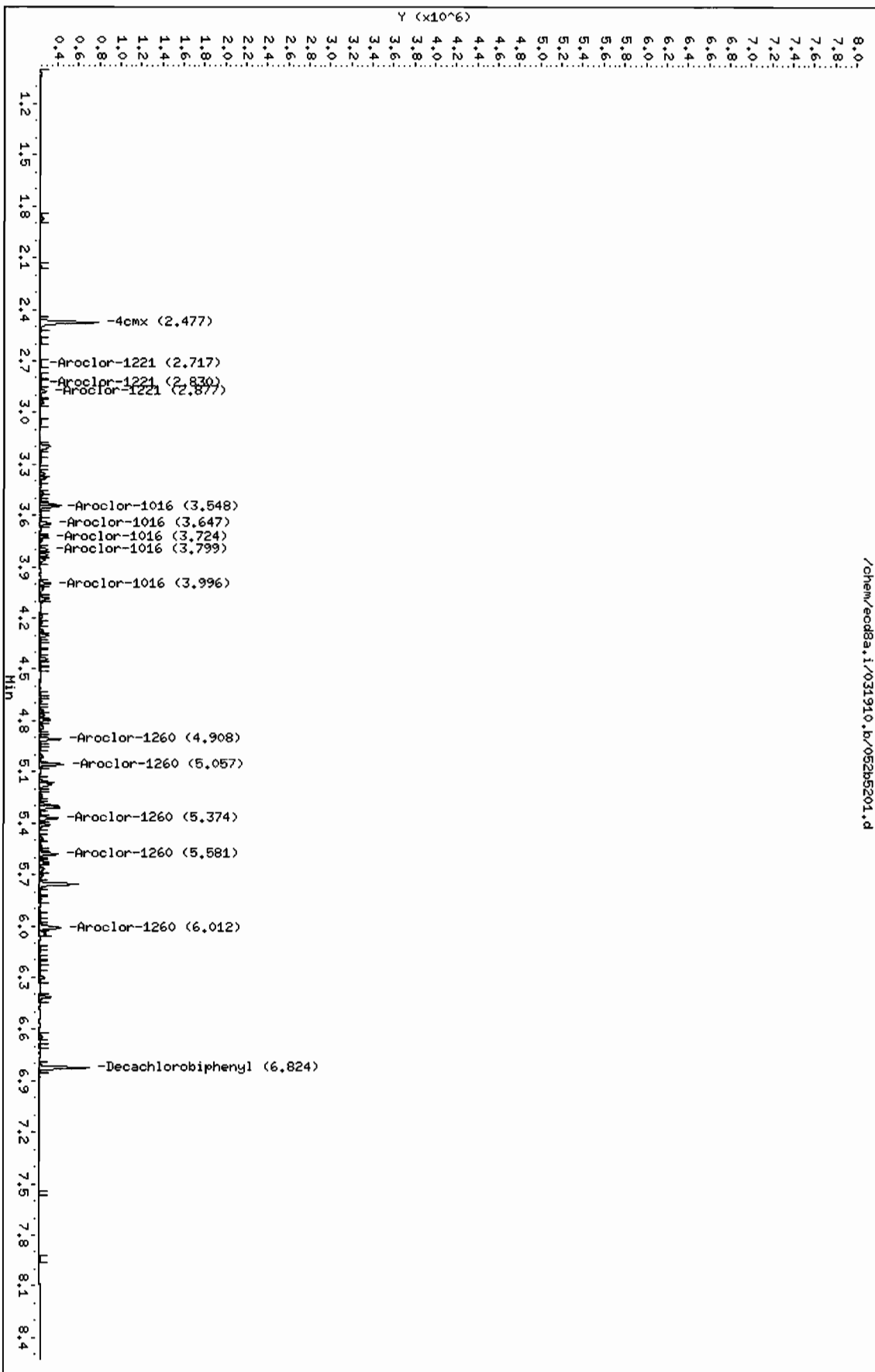
CONCENTRATIONS								
			ON-COL		FINAL			
RT	EXP RT	DLT RT	RT	RESPONSE	( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====		=====	=====	=====	=====	=====
7 Aroclor-1260					CAS #: 11096-82-5			
4.908	4.908	0.000		179585	45.5972	17.3	80.00- 120.00	100.00 (aM)
5.057	5.057	0.000		197222	41.6918	15.9	101.80- 141.80	109.82
5.374	5.374	0.000		148408	41.3779	15.7	71.56- 111.56	82.64
5.581	5.581	0.000		149595	40.2978	15.3	75.46- 115.46	83.30
6.012	6.012	0.000		229875	39.3532	15.0	132.73- 172.73	128.00
Average of Peak Concentrations =						15.8		

QC Flag Legend

- a - Target compound detected but, quantitated amount  
Below Limit Of Quantitation(BLOQ).
- M - Compound response manually integrated.

Data File: /chem/ecd8a.i/031910.b/052b5201.d  
Date : 19-MAR-2010 17:52  
Client ID: RE36-10-846MS  
Sample Info: 112020739391101  
Volume Injected (uL): 1.0  
Column phase: CLP2

Instrument: ecd8a.i  
Operator: JHOC  
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL  
 Data file : /chem/ecd8a.i/031910.b/052f5201.d  
 Lab Smp Id: 1202073939 Client Smp ID: RE36-10-8466MS  
 Inj Date : 19-MAR-2010 17:52  
 Operator : JAOC Inst ID: ecd8a.i  
 Smp Info : |1202073939|10|  
 Misc Info : |ECD82P\_1S|966420|SVA|QC A|SOIL|MS|||  
 Comment :  
 Method : /chem/ecd8a.i/031910.b/ECD8-F-8082-031810.m  
 Meth Date : 22-Mar-2010 08:33 jen01212 Quant Type: ESTD  
 Cal Date : 23-FEB-2010 11:32 Cal File: 017f1701.d  
 Als bottle: 52 QC Sample: MS  
 Dil Factor: 10.00000  
 Integrator: Falcon Compound Sublist: 10-2202.sub  
 Target Version: 3.50 Sample Matrix: Soil

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

Name	Value	Description
DF	10.00000	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	12.38630	% 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				
2.249	2.248	0.001	920868	7.36922	2.8	80.00-	120.00	100.00
-----								
\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3				
6.239	6.239	0.000	610614	7.41477	2.8	80.00-	120.00	100.00
-----								
1 Aroclor-1016				CAS #: 12674-11-2				
2.806	2.806	0.000	216335	45.3317	17.2	80.00-	120.00	100.00 (a)
3.157	3.157	0.000	239729	44.4157	16.9	107.11-	147.11	110.81
3.301	3.300	0.001	109446	46.5402	17.7	32.79-	72.79	50.59
3.393	3.392	0.001	115807	52.6421	20.1	25.87-	65.87	53.53
3.556	3.555	0.001	144487	46.9274	17.8	47.87-	87.87	66.79
Average of Peak Concentrations =				17.9				
-----								

CONCENTRATIONS						
			ON-COL		FINAL	
RT	EXP RT	DLT RT	RESPONSE	( ug/L)	(ug/Kg)	TARGET RANGE RATIO
==	=====	=====	=====	=====	=====	=====
7 Aroclor-1260			CAS #: 11096-82-5			
4.428	4.429	-0.001	281357	47.7681	18.2	80.00- 120.00 100.00(a)
4.625	4.625	0.000	398648	46.9258	17.8	126.91- 166.91 141.69
4.900	4.900	0.000	237607	46.8998	17.8	64.82- 104.82 84.45
5.072	5.072	0.000	234013	43.9130	16.7	70.18- 110.18 83.17
5.483	5.483	0.000	262568	46.5465	17.7	76.66- 116.66 93.32
Average of Peak Concentrations =			17.6			

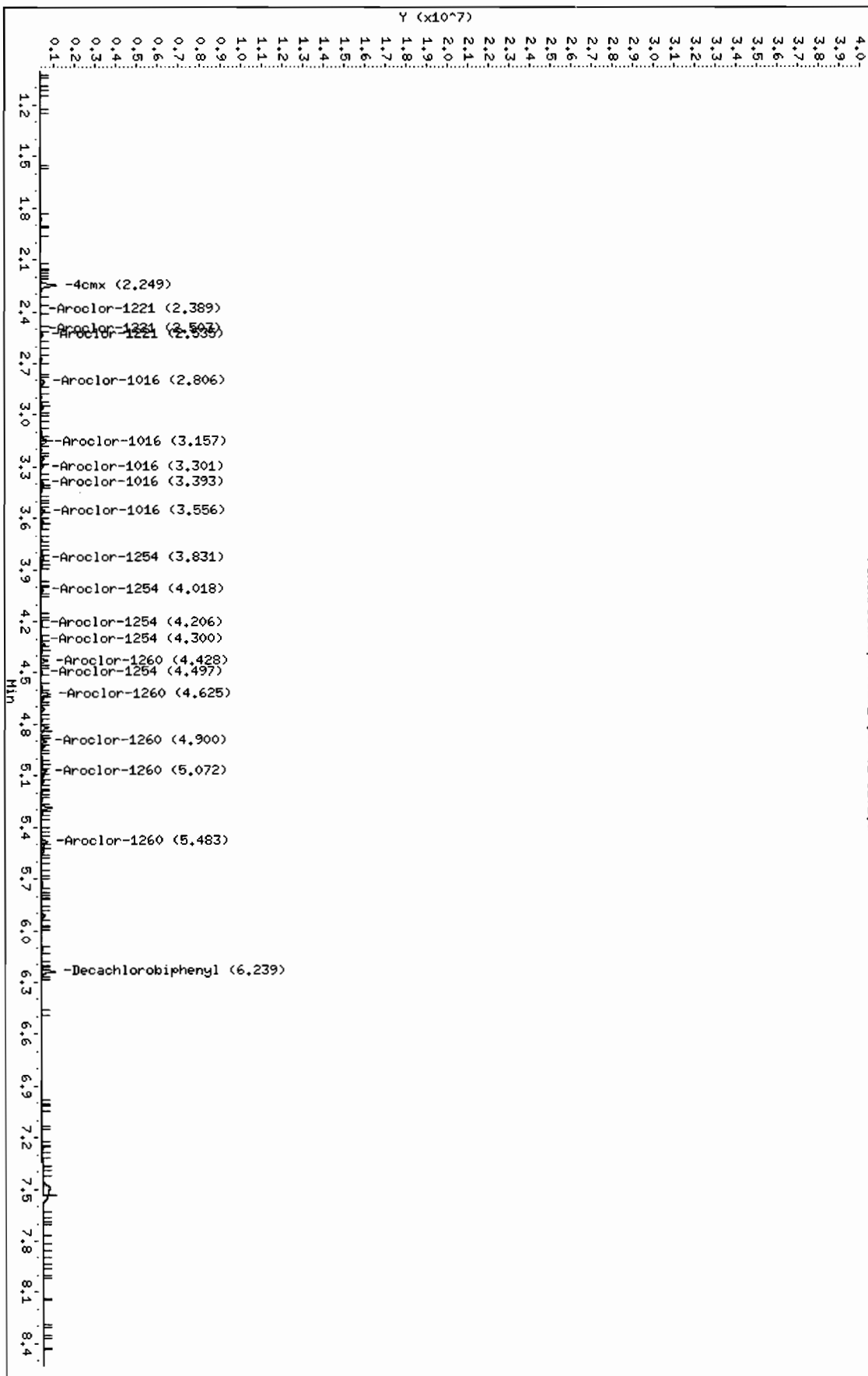
#### QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).

Data File: /chem/ecob8a.i/031910.b/052f5201.d  
 Date: 19-MAR-2010 17:52  
 Client ID: RES6-10-846MS  
 Sample Info: 112020739391101  
 Volume Injected (uL): 1.0  
 Column Phase: CLP1

Instrument: ecob8a.i  
 Operator: JHOC  
 Column diameter: 0.25

/chem/ecob8a.i/031910.b/052f5201.d



Data File: /chem/ecd8a.i/031910.b/053b5301.d  
Report Date: 22-Mar-2010 13:30

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL  
Data file : /chem/ecd8a.i/031910.b/053b5301.d  
Lab Smp Id: 1202073940 Client Smp ID: RE36-10-8466MSD  
Inj Date : 19-MAR-2010 18:05  
Operator : JAOC Inst ID: ecd8a.i  
Smp Info : |1202073940|10|  
Misc Info : |ECD82P\_1S|966420|SVA|QC A|SOIL|MSD|||  
Comment :  
Method : /chem/ecd8a.i/031910.b/ECD8-B-8082-031810.m  
Meth Date : 22-Mar-2010 07:51 jen01212 Quant Type: ESTD  
Cal Date : 23-FEB-2010 11:32 Cal File: 017b1701.d  
Als bottle: 53 QC Sample: MSD  
Dil Factor: 10.00000  
Integrator: Falcon Compound Sublist: 10-2202.sub  
Target Version: 3.50 Sample Matrix: Soil

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

Name	Value	Description
DF	10.00000	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	12.38630	% 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						
2.478	2.477	0.001	429232 5.13545	2.0	80.00- 120.00	100.00 (RM)
-----						
\$ 12 Decachlorobiphenyl CAS #: 2051-24-3						
6.824	6.824	0.000	342485 5.78009	2.2	80.00- 120.00	100.00 (RM)
-----						

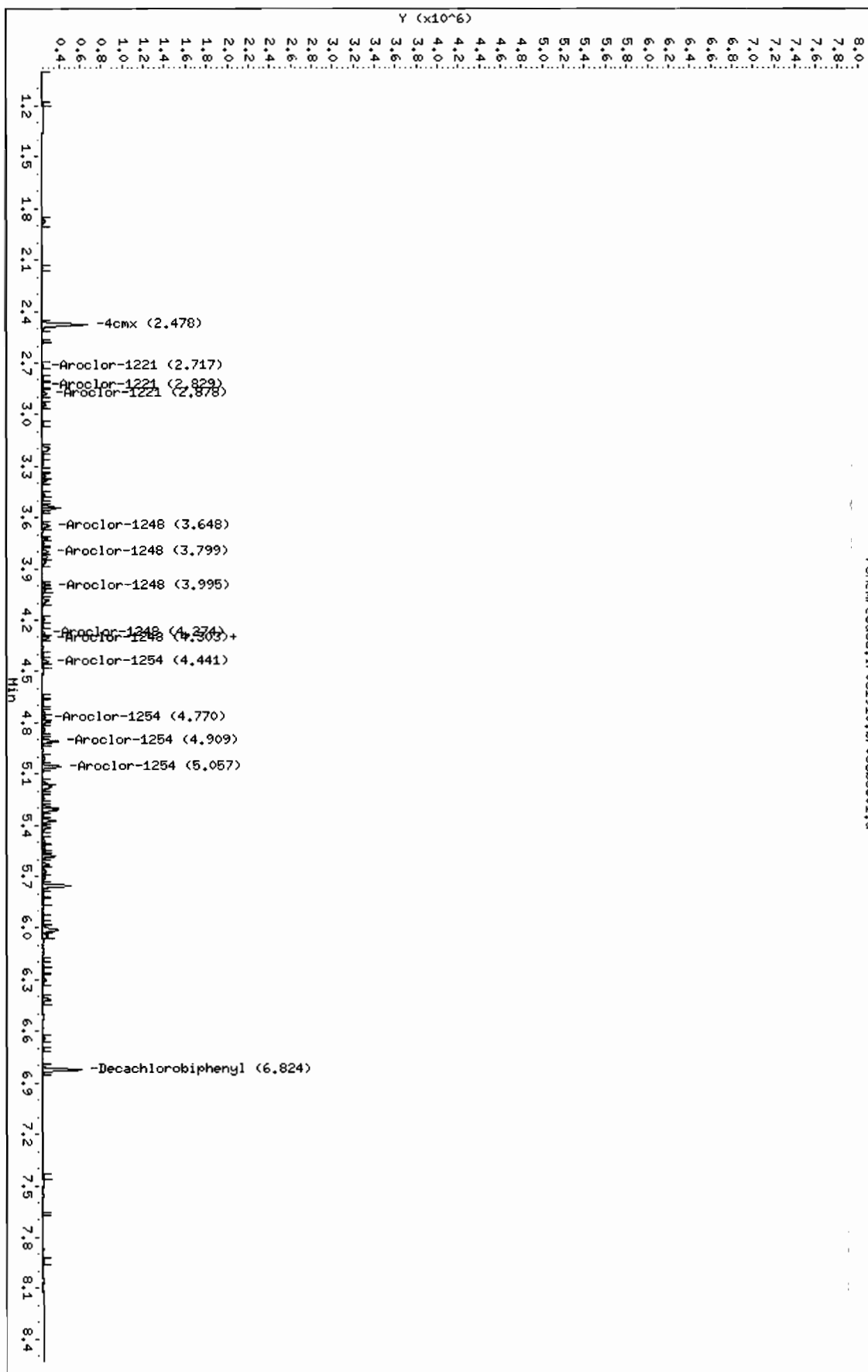
QC Flag Legend

R - Spike/Surrogate failed recovery limits.  
M - Compound response manually integrated.

Data File: /chem/ecdb8a.i/031910.b/053b5301.d  
Date: 19-Mar-2010 18:05  
Client ID: RE36-10-846HSD  
Sample Info: 112020739401101  
Volume Injected (uL): 1.0  
Column Phase: CLP2

Instrument: ecdb8a.i  
Operator: JAO  
Column diameter: 0.25

/chem/ecdb8a.i/031910.b/053b5301.d



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL  
 Data file : /chem/ecd8a.i/031910.b/053f5301.d  
 Lab Smp Id: 1202073940 Client Smp ID: RE36-10-8466MSD  
 Inj Date : 19-MAR-2010 18:05  
 Operator : JAOC Inst ID: ecd8a.i  
 Smp Info : |1202073940|10|  
 Misc Info : |ECD82P\_1S|966420|SVA|QC A|SOIL|MSD|||  
 Comment :  
 Method : /chem/ecd8a.i/031910.b/ECD8-F-8082-031810.m  
 Meth Date : 22-Mar-2010 08:33 jen01212 Quant Type: ESTD  
 Cal Date : 23-FEB-2010 11:32 Cal File: 017f1701.d  
 Als bottle: 53 QC Sample: MSD  
 Dil Factor: 10.00000  
 Integrator: Falcon Compound Sublist: 10-2202.sub  
 Target Version: 3.50 Sample Matrix: Soil

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

Name	Value	Description
DF	10.00000	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	12.38630	% 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	
2.249	2.248	0.001	727827 5.82441	2.2	80.00- 120.00	100.00 (RM)
-----						
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3	
6.239	6.239	0.000	508340 6.17284	2.3	80.00- 120.00	100.00 (M)
-----						

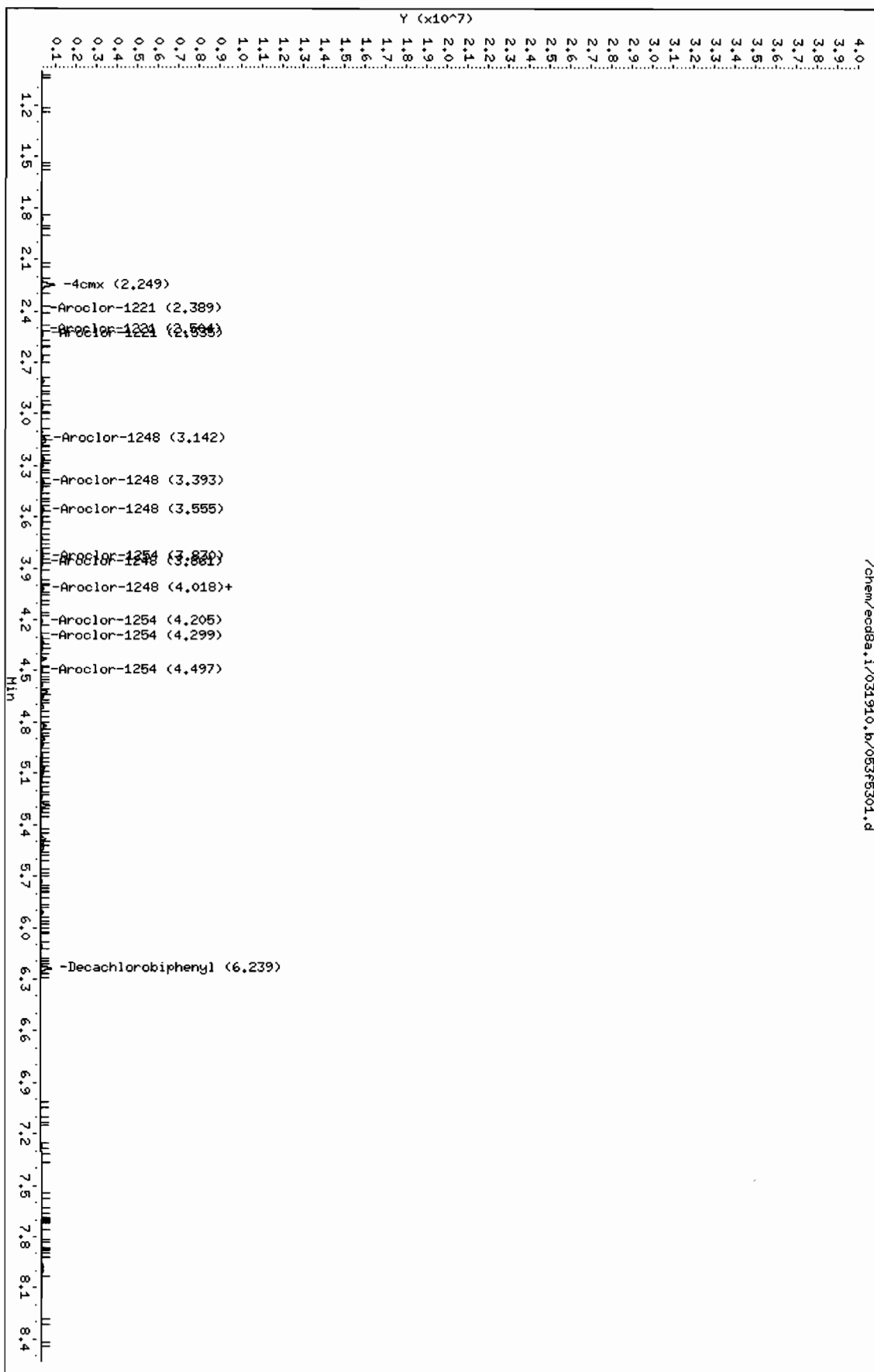
QC Flag Legend

R - Spike/Surrogate failed recovery limits.  
 M - Compound response manually integrated.



Data File: /chem/ecdb8a.i/031910.b/053f5301.d  
 Date: 19-MAR-2010 18:05  
 Client ID: RE36-10-846MSD  
 Sample Info: 112020739401101  
 Volume Injected (uL): 1.0  
 Column Phase: CLP1

Instrument: ecdb8a.i  
 Operator: JROC  
 Column diameter: 0.25



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

Batch ID: 966418  
 Analyst: Robin Hunt  
 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)
1202073937 MB	18-MAR-2010 10:57:00	30	H2SO4/KMnI	1	8	1	0.03333	
1202073938 LCS	18-MAR-2010 10:57:00	30	H2SO4/KMnI	1	8	1	0.03333	
248394001	18-MAR-2010 10:57:00	30.01	H2SO4/KMnI	1	8	1	0.03332	
248394002	18-MAR-2010 10:57:00	30.01	H2SO4/KMnI	1	8	1	0.03332	
248394003	18-MAR-2010 10:57:00	30.04	H2SO4/KMnI	1	8	1	0.03329	
248394004	18-MAR-2010 10:57:00	30	H2SO4/KMnI	1	8	1	0.03333	
248394006	18-MAR-2010 10:57:00	30	H2SO4/KMnI	1	8	1	0.03333	
248514002	18-MAR-2010 10:57:00	30.08	H2SO4/KMnI	1	8	1	0.03324	
248514003	18-MAR-2010 10:57:00	30.03	H2SO4/KMnI	1	8	1	0.0333	
248517001	18-MAR-2010 10:57:00	30.02	H2SO4/KMnI	1	8	1	0.03331	
248519001	18-MAR-2010 10:57:00	30.09	H2SO4/KMnI	1	8	1	0.03323	
248519002	18-MAR-2010 10:57:00	30	H2SO4/KMnI	1	8	1	0.03333	
248519003	18-MAR-2010 10:57:00	30	H2SO4/KMnI	1	8	1	0.03333	
248519004	18-MAR-2010 10:57:00	30.01	H2SO4/KMnI	1	8	1	0.03332	
248519005	18-MAR-2010 10:57:00	30.03	H2SO4/KMnI	1	8	1	0.0333	
248519006	18-MAR-2010 10:57:00	30.01	H2SO4/KMnI	1	8	1	0.03328	
248519007	18-MAR-2010 10:57:00	30.05	H2SO4/KMnI	1	8	1	0.03333	
248519008	18-MAR-2010 10:57:00	30	H2SO4/KMnI	1	8	1	0.03323	
248519009	18-MAR-2010 10:57:00	30.09	H2SO4/KMnI	1	8	1	0.03331	
248519010	18-MAR-2010 10:57:00	30.02	H2SO4/KMnI	1	8	1	0.03332	
248519011	18-MAR-2010 10:57:00	30.01	H2SO4/KMnI	1	8	1	0.03332	
248526001	18-MAR-2010 10:57:00	30.01	H2SO4/KMnI	1	8	1	0.03333	
1202073939 MS (248526001)	18-MAR-2010 10:57:00	30	H2SO4/KMnI	1	8	1	0.03333	
1202073940 MSD (248526001)	18-MAR-2010 10:57:00	30	H2SO4/KMnI	1	8	1	0.03333	
Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:		
LCS	1202073938	PCB Laboratory Control	WE100311-07	1	mL	Clean up Date: 03/18/2010		
MS	1202073939	PCB Laboratory Control	WE100311-07	1	mL	Clean up Initials: RWH		
MSD	1202073940	PCB Laboratory Control	WE100311-07	1	mL	Verified By: JAM		
SURR	All	PEST LOW LEVEL SURROGATE 200 UG/L	UE100310-16	1	mL	Final Solvent: Hexane		
REGNT	All	1:1 sulfuric acid	1260695a	5	mL	Clean Up SOP: GL-OA-E-037		
REGNT	All	Acetone	1273739-B1	150	mL			
REGNT	All	Hexane	1279341-B2	150	mL			
REGNT	All	5% Potassium Permanganate	B1275177-F	5	mL			
SOURC	All	SODIUM SULFATE	1274910	30	g			

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

Batch ID: 967813      Verified by: \_\_\_\_\_

Analyst: Andrew Schwenin

Method: SW846 3550B

Lab SOP: GL-OA-E-010 REV# 18

Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Clean Up	Prior to Clean up (mL)	Amount Cleaned (mL)	After Clean up (mL)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1202077508 MB	22-MAR-2010 21:20:00	30	H2SO4/KM2	2	9	1	0.03333	
1202077509 LCS	22-MAR-2010 21:20:00	30	H2SO4/KM2	2	9	1	0.03333	
1202077510 LCS	22-MAR-2010 21:20:00	30	H2SO4/KM2	2	9	1	0.03333	
248394006 - 2	22-MAR-2010 21:20:00	30.04	H2SO4/KM2	2	9	1	0.03329	
248514002 - 2	22-MAR-2010 21:20:00	30.18	H2SO4/KM2	2	9	1	0.03313	
248519002 - 2	22-MAR-2010 21:20:00	30.12	H2SO4/KM2	2	9	1	0.0332	
248519004 - 2	22-MAR-2010 21:20:00	30.14	H2SO4/KM2	2	9	1	0.03318	
Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:		
LCS	1202077509	PCB Laboratory Control	WE100311-07	1	mL	Clean up Date: 3/22/10		
LCS	1202077510	PCB Laboratory Control	WE100311-07	1	mL	Clean up Initials: AJS		
SURR	All	PEST LOW LEVEL SURROGATE 200 UG/L	UE100310-16	1	mL	Verified By: AV		
REGNT	All	1:1 sulfuric acid	1260695a	5	mL	Final Solvent: Hexane		
REGNT	All	Acetone	1289815-B1	150	mL	Clean Up SOP: GL-OA-E-037		
REGNT	All	Hexane	1289823-B2	150	mL			
REGNT	All	5% Potassium Permanganate	B1275177-F	5	mL			
SOURC	All	SODIUM SULFATE	1274910	30	g			

### DATA EXCEPTION REPORT

<b>Mo.Day Yr.</b> 22-MAR-10	<b>Division:</b> Industrial	<b>Quality Criteria:</b> Specifications	<b>Type:</b> Process
<b>Instrument Type:</b> GC/ECD	<b>Test / Method:</b> SW846 8082	<b>Matrix Type:</b> Solid	<b>Client Code:</b> LANL
<b>Batch ID:</b> 966420	<b>Sample Numbers:</b> See Below		
<b>Potentially affected work order(s)(SDG):</b> 248394(10-2168),248514(10-2196),248517(10-2198),248519(10-2199),248526(10-2202) <b>Application Issues:</b> Failed Recovery for MSD/PSD Failed RPD for MS/MSD, or PS/PSD Failed Yield for Surrogates			
<b>Specification and Requirements Exception Description:</b>		<b>DER Disposition:</b>	
1. 1202073939MS and 1202073940MSD did not meet RPD requirements. 2. 1202073940MSD did not meet spike recovery limits. 3. Samples 248394006, 248514002, -003, 248519002, -004, 248526001, and 1202073940MSD did not meet surrogate recovery limits.		1,2. The MS and MSD have similar recoveries; however, the MSD recoveries were lower relative to the MS (below the MDL). The parent sample and the MS/MSD were analyzed at a 1:10 dilution due to matrix interference. The data were reported. 3. Samples 248394006, 248514002, 248519002, and -004 were re-extracted. The re-extraction results did not confirm. The re-extracted batch was reported. Sample 248514003 failed to meet the SPC limits for DCB on one column. There were no detects of target analytes in the sample. The data were reported. Sample 248526001 and its MSD failed surrogate recovery due to matrix interference and dilution. The data were reported.	

**Originator's Name:**  
Jennifer Criscione 22-MAR-10

**Data Validator/Group Leader:**  
Cameron Bearden 25-MAR-10